

## Pantheon Report

Generated at 2018-11-30 10:52:47 (UTC).

Data path: AWS India 2 on **ens5** (*local*) → Saudi Arabia on **enp2s0** (*remote*).

Repeated the test of 19 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 **nets.org.sg** and have been applied to correct the timestamps in logs.

### System info:

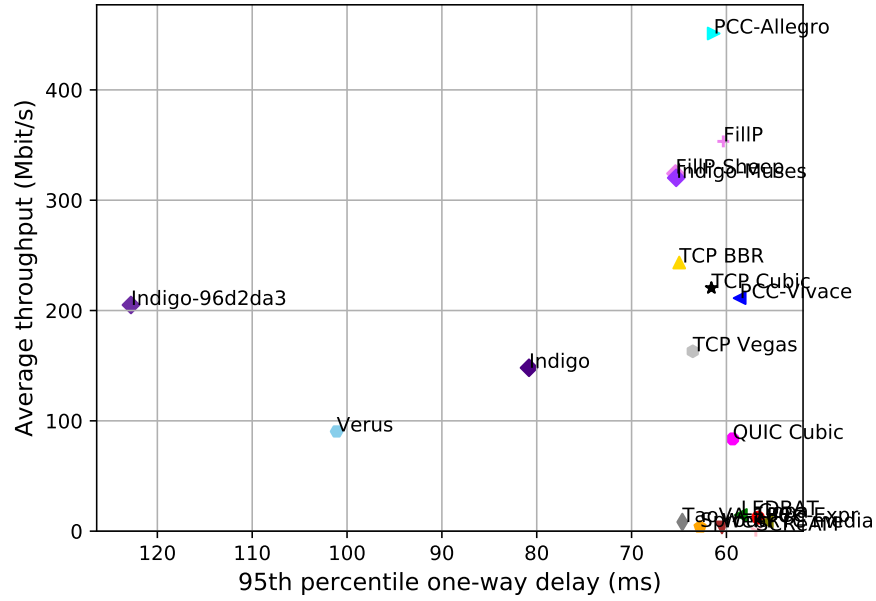
```
Linux 4.15.0-1023-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

### Git summary:

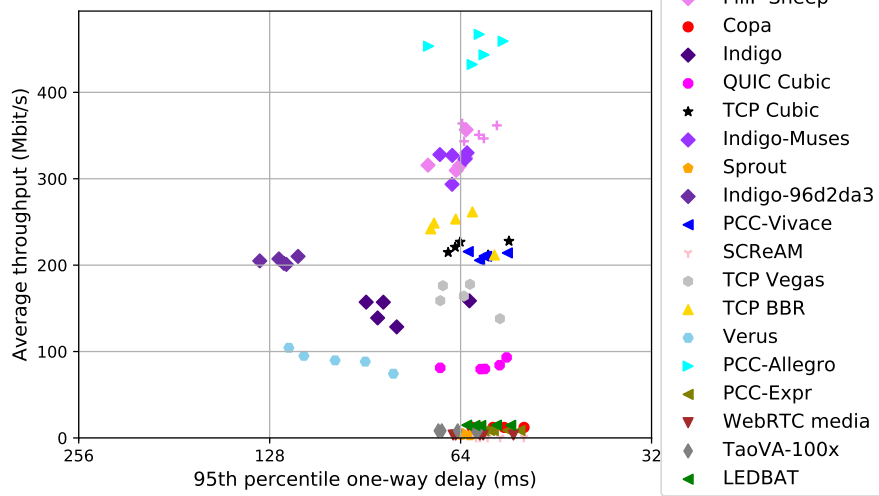
```
branch: muses @ 7b6dad87cde3ab65f7c4052140eb54098aa58e9d
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-96d2da3 @ 8413272d46f8aa0bcb967ed7048b6a8f994abb95
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 65ac1b19bbefed0c6349ae986009b4fa8643c40a
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 AWS India 2 to Saudi Arabia, 5 runs of 30s each per scheme  
 3 flows with 10s interval between flows (mean of all runs by scheme)



test from AWS India 2 to Saudi Arabia, 5 runs of 30s each per scheme  
 3 flows with 10s interval between flows



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	194.09	53.05	43.26	65.96	59.69	60.18	11.59	18.97	22.44
Copa	5	8.52	5.57	0.01	56.89	56.10	57.71	67.58	74.61	92.40
TCP Cubic	5	145.99	65.10	93.33	61.90	59.79	61.34	1.28	1.33	1.72
FillP	5	242.26	120.65	94.27	60.02	59.95	59.99	23.01	23.47	22.30
FillP-Sheep	5	234.69	91.89	85.57	65.17	64.95	66.42	14.30	10.88	10.95
Indigo	5	71.87	84.48	63.82	72.48	85.59	93.90	10.52	19.74	31.54
Indigo-96d2da3	5	119.04	99.80	64.98	124.87	118.42	118.46	41.01	44.95	46.69
LEDBAT	5	9.47	6.28	3.07	58.86	57.39	57.36	0.00	0.00	0.00
Indigo-Muses	5	292.00	28.78	30.98	64.80	65.50	66.64	31.49	46.93	52.29
PCC-Allegro	5	423.20	27.95	28.29	60.95	60.79	60.37	5.08	2.04	2.90
PCC-Expr	5	0.01	10.45	4.79	57.12	55.74	55.75	80.00	34.65	44.43
QUIC Cubic	5	48.43	39.80	26.91	58.79	58.40	61.18	0.00	0.00	0.00
SCReAM	5	0.22	0.22	0.22	56.85	56.39	56.53	0.00	0.00	0.00
Sprout	5	2.18	1.88	1.43	62.51	61.18	62.24	0.00	0.00	0.00
TaoVA-100x	5	0.00	9.02	6.82	59.80	66.58	59.22	95.92	32.10	37.60
TCP Vegas	5	86.56	76.42	76.92	63.48	63.01	64.59	1.66	1.86	2.25
Verus	5	51.68	45.95	29.33	94.87	101.60	94.68	53.29	38.61	41.19
PCC-Vivace	5	187.74	31.22	8.31	58.22	59.09	58.55	1.76	1.77	3.36
WebRTC media	5	1.82	1.16	0.40	59.81	59.20	60.63	0.00	0.00	0.00

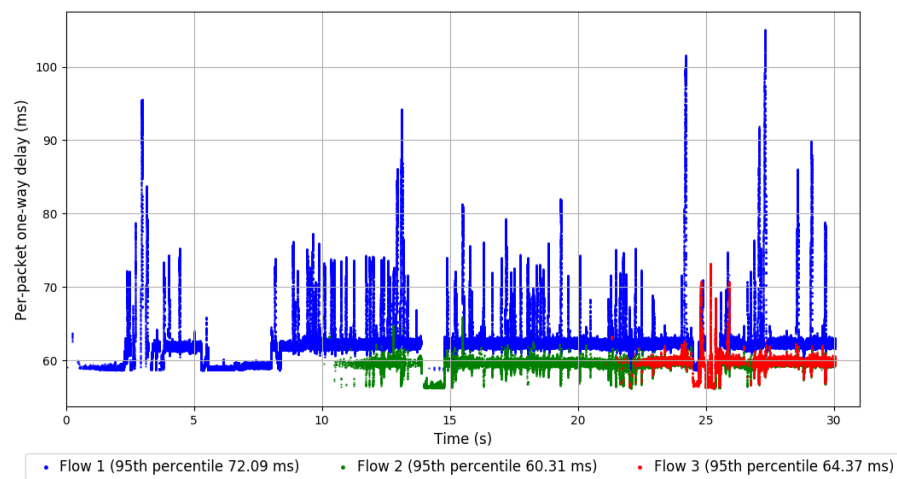
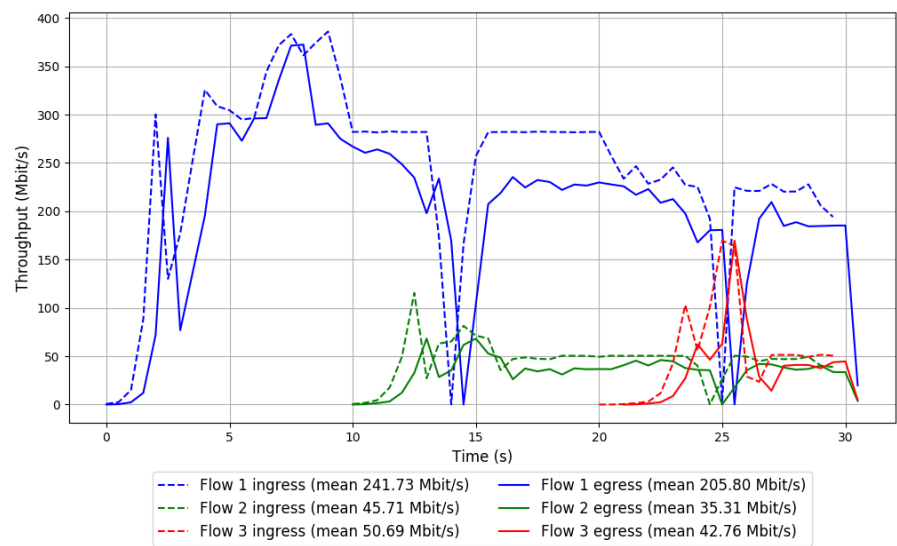


Run 1: Statistics of TCP BBR

Start at: 2018-11-30 07:33:37  
End at: 2018-11-30 07:34:07  
Local clock offset: -1.472 ms  
Remote clock offset: -43.321 ms

# Below is generated by plot.py at 2018-11-30 10:32:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 242.08 Mbit/s  
95th percentile per-packet one-way delay: 71.333 ms  
Loss rate: 16.24%  
-- Flow 1:  
Average throughput: 205.80 Mbit/s  
95th percentile per-packet one-way delay: 72.086 ms  
Loss rate: 14.86%  
-- Flow 2:  
Average throughput: 35.31 Mbit/s  
95th percentile per-packet one-way delay: 60.314 ms  
Loss rate: 22.75%  
-- Flow 3:  
Average throughput: 42.76 Mbit/s  
95th percentile per-packet one-way delay: 64.374 ms  
Loss rate: 24.33%

Run 1: Report of TCP BBR — Data Link

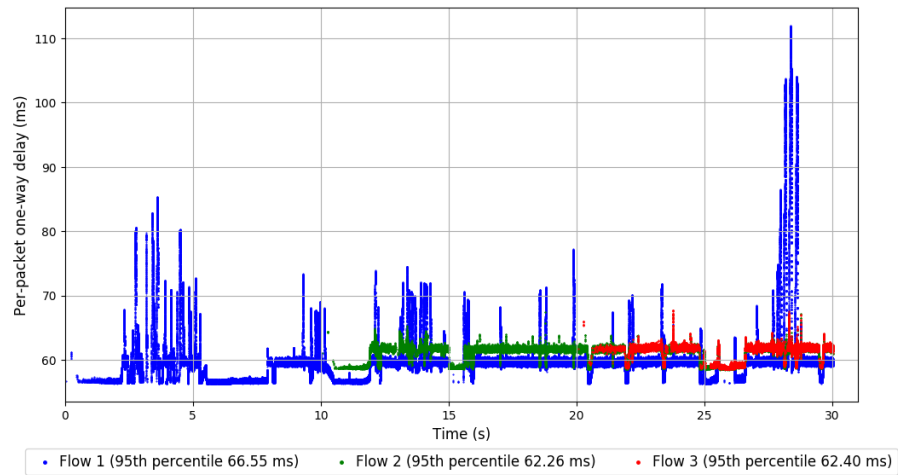
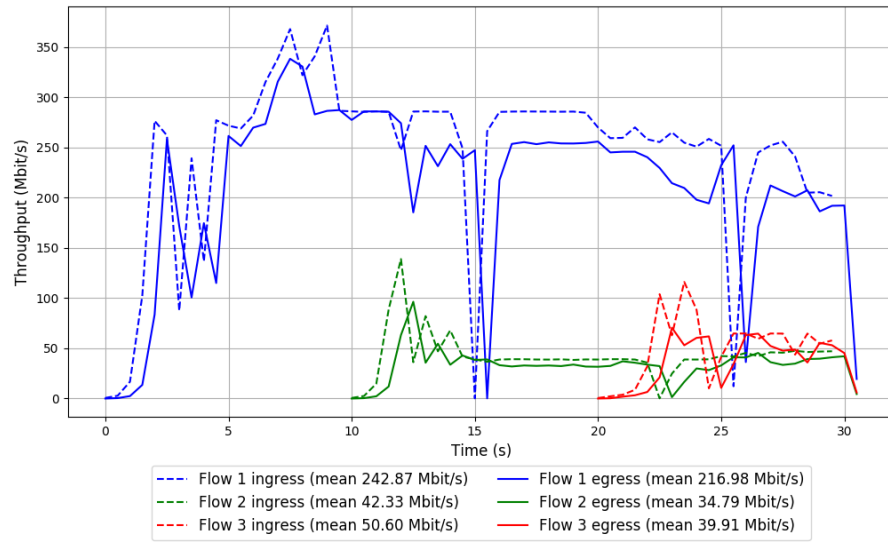


Run 2: Statistics of TCP BBR

Start at: 2018-11-30 08:13:38  
End at: 2018-11-30 08:14:08  
Local clock offset: -2.453 ms  
Remote clock offset: -42.771 ms

# Below is generated by plot.py at 2018-11-30 10:32:19  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 253.41 Mbit/s  
95th percentile per-packet one-way delay: 65.159 ms  
Loss rate: 11.97%  
-- Flow 1:  
Average throughput: 216.98 Mbit/s  
95th percentile per-packet one-way delay: 66.551 ms  
Loss rate: 10.65%  
-- Flow 2:  
Average throughput: 34.79 Mbit/s  
95th percentile per-packet one-way delay: 62.262 ms  
Loss rate: 17.82%  
-- Flow 3:  
Average throughput: 39.91 Mbit/s  
95th percentile per-packet one-way delay: 62.404 ms  
Loss rate: 21.14%

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

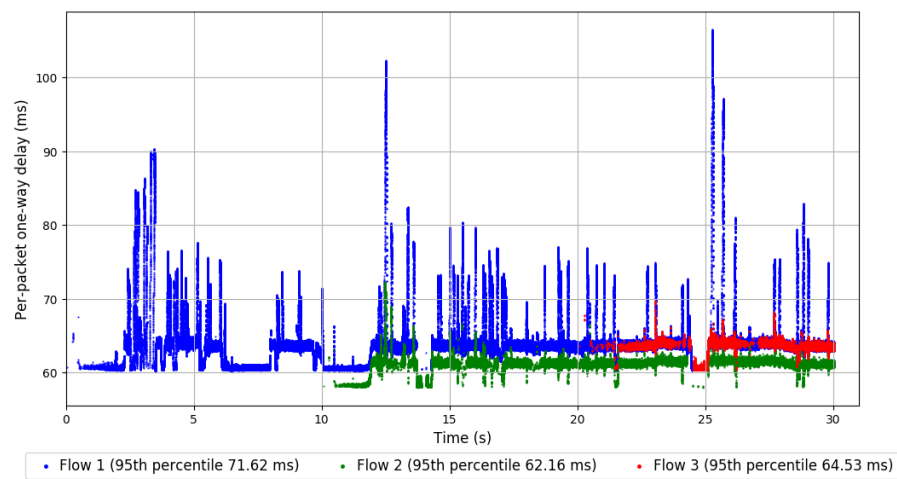
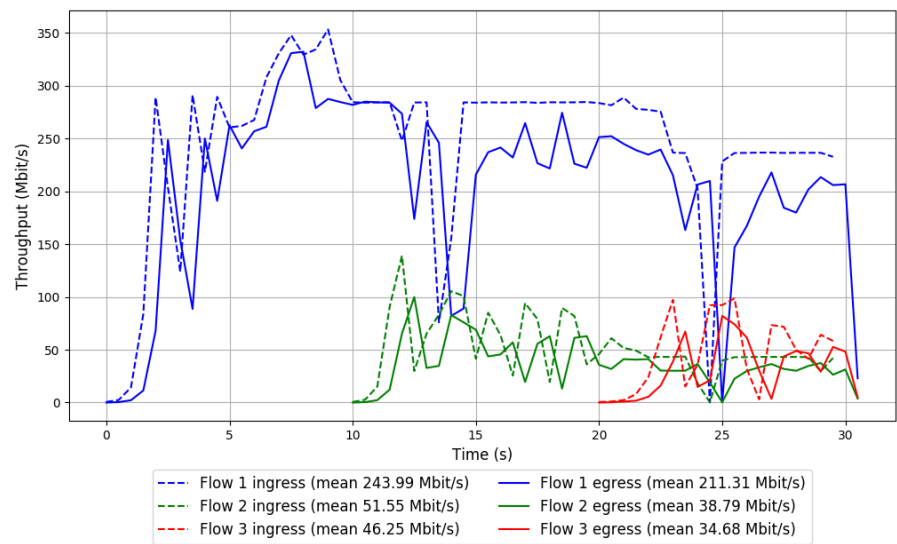


Run 3: Statistics of TCP BBR

Start at: 2018-11-30 08:48:13  
End at: 2018-11-30 08:48:43  
Local clock offset: 2.781 ms  
Remote clock offset: -37.086 ms

# Below is generated by plot.py at 2018-11-30 10:32:19  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 248.69 Mbit/s  
95th percentile per-packet one-way delay: 70.470 ms  
Loss rate: 15.32%  
-- Flow 1:  
Average throughput: 211.31 Mbit/s  
95th percentile per-packet one-way delay: 71.622 ms  
Loss rate: 13.39%  
-- Flow 2:  
Average throughput: 38.79 Mbit/s  
95th percentile per-packet one-way delay: 62.155 ms  
Loss rate: 24.74%  
-- Flow 3:  
Average throughput: 34.68 Mbit/s  
95th percentile per-packet one-way delay: 64.530 ms  
Loss rate: 25.02%

Run 3: Report of TCP BBR — Data Link

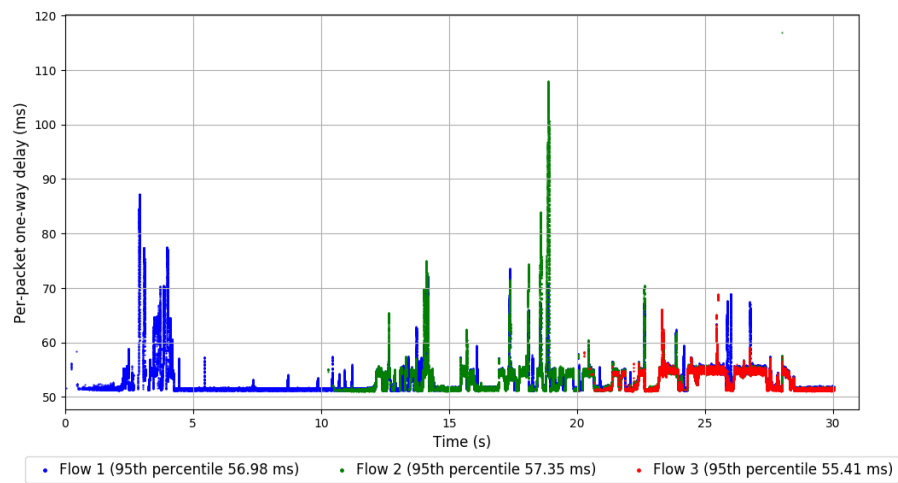
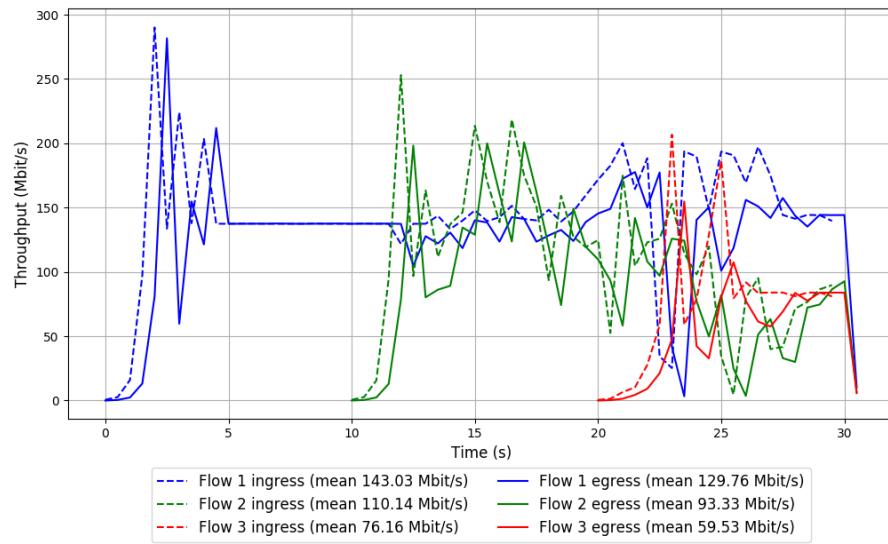


Run 4: Statistics of TCP BBR

Start at: 2018-11-30 09:22:37  
End at: 2018-11-30 09:23:07  
Local clock offset: 0.393 ms  
Remote clock offset: -44.446 ms

# Below is generated by plot.py at 2018-11-30 10:32:19  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 211.71 Mbit/s  
95th percentile per-packet one-way delay: 56.605 ms  
Loss rate: 12.41%  
-- Flow 1:  
Average throughput: 129.76 Mbit/s  
95th percentile per-packet one-way delay: 56.978 ms  
Loss rate: 9.27%  
-- Flow 2:  
Average throughput: 93.33 Mbit/s  
95th percentile per-packet one-way delay: 57.346 ms  
Loss rate: 15.26%  
-- Flow 3:  
Average throughput: 59.53 Mbit/s  
95th percentile per-packet one-way delay: 55.409 ms  
Loss rate: 21.83%

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



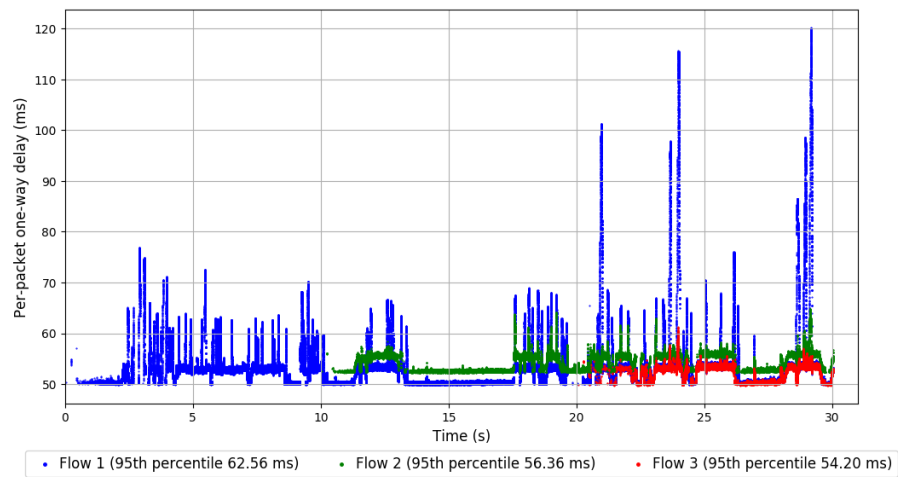
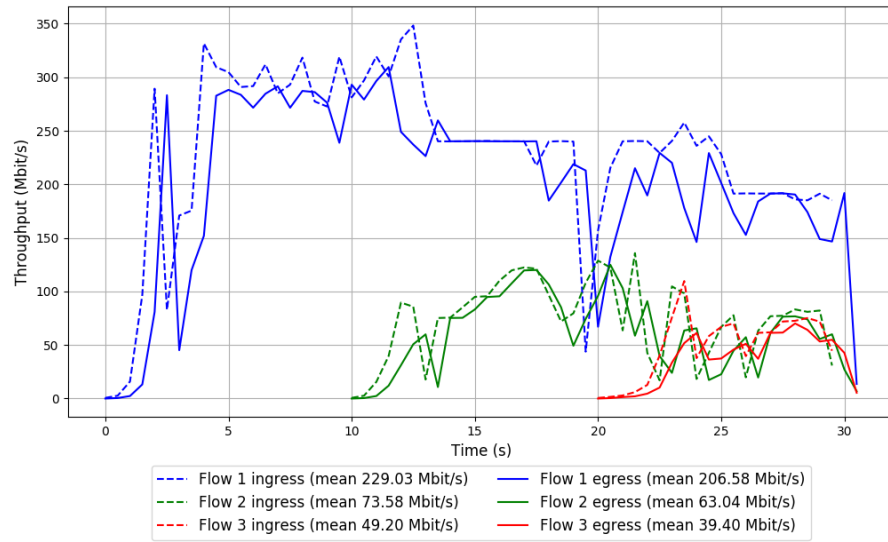


Run 5: Statistics of TCP BBR

Start at: 2018-11-30 10:02:52  
End at: 2018-11-30 10:03:22  
Local clock offset: 1.697 ms  
Remote clock offset: -43.983 ms

# Below is generated by plot.py at 2018-11-30 10:32:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 261.68 Mbit/s  
95th percentile per-packet one-way delay: 61.307 ms  
Loss rate: 11.11%  
-- Flow 1:  
Average throughput: 206.58 Mbit/s  
95th percentile per-packet one-way delay: 62.558 ms  
Loss rate: 9.80%  
-- Flow 2:  
Average throughput: 63.04 Mbit/s  
95th percentile per-packet one-way delay: 56.362 ms  
Loss rate: 14.30%  
-- Flow 3:  
Average throughput: 39.40 Mbit/s  
95th percentile per-packet one-way delay: 54.204 ms  
Loss rate: 19.89%

# Run 5: Report of TCP BBR — Data Link

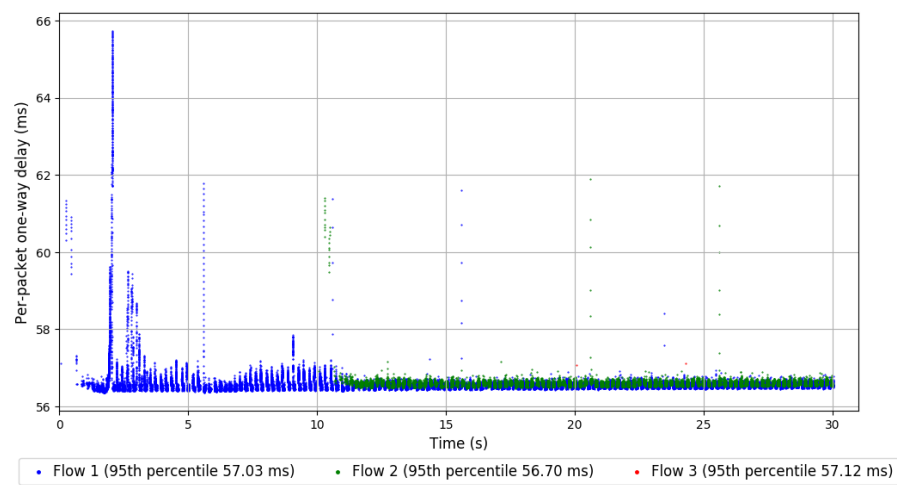
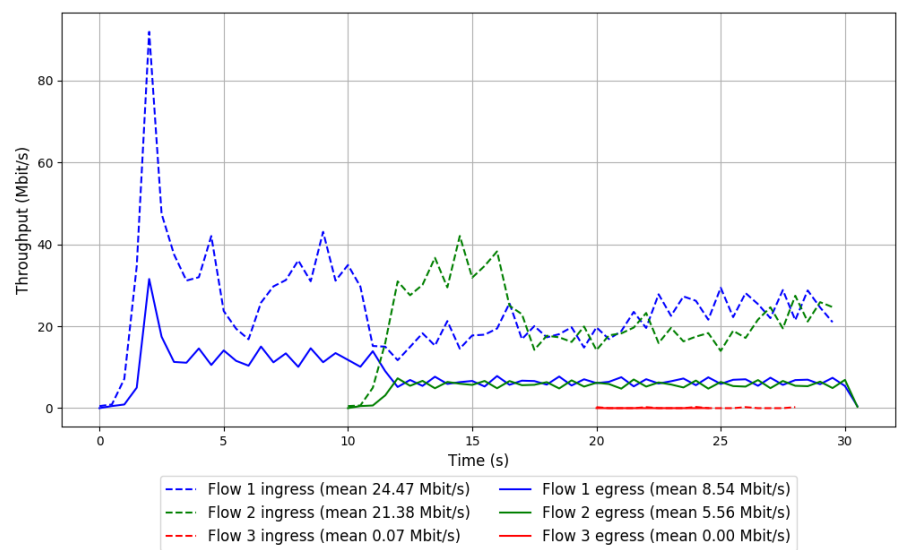


Run 1: Statistics of Copa

Start at: 2018-11-30 07:21:44  
End at: 2018-11-30 07:22:14  
Local clock offset: -1.194 ms  
Remote clock offset: -41.798 ms

# Below is generated by plot.py at 2018-11-30 10:32:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.24 Mbit/s  
95th percentile per-packet one-way delay: 56.892 ms  
Loss rate: 68.40%  
-- Flow 1:  
Average throughput: 8.54 Mbit/s  
95th percentile per-packet one-way delay: 57.032 ms  
Loss rate: 65.12%  
-- Flow 2:  
Average throughput: 5.56 Mbit/s  
95th percentile per-packet one-way delay: 56.702 ms  
Loss rate: 73.98%  
-- Flow 3:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 57.118 ms  
Loss rate: 97.92%

Run 1: Report of Copa — Data Link

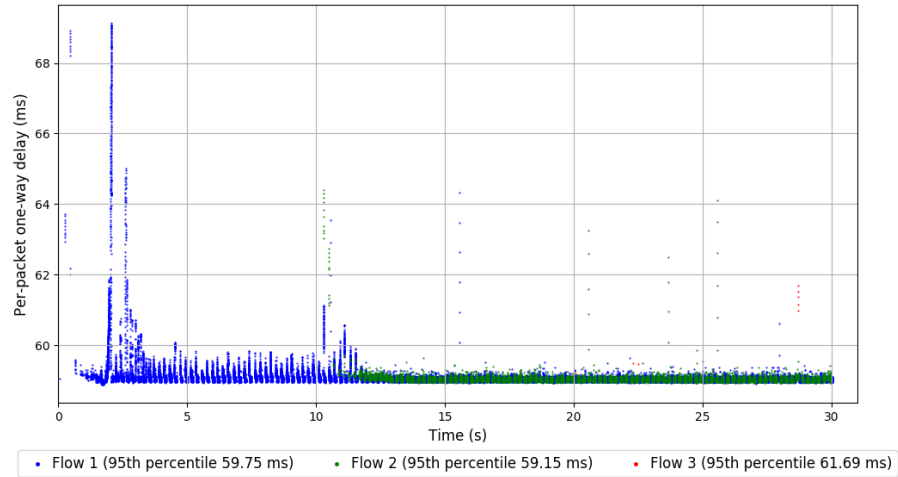
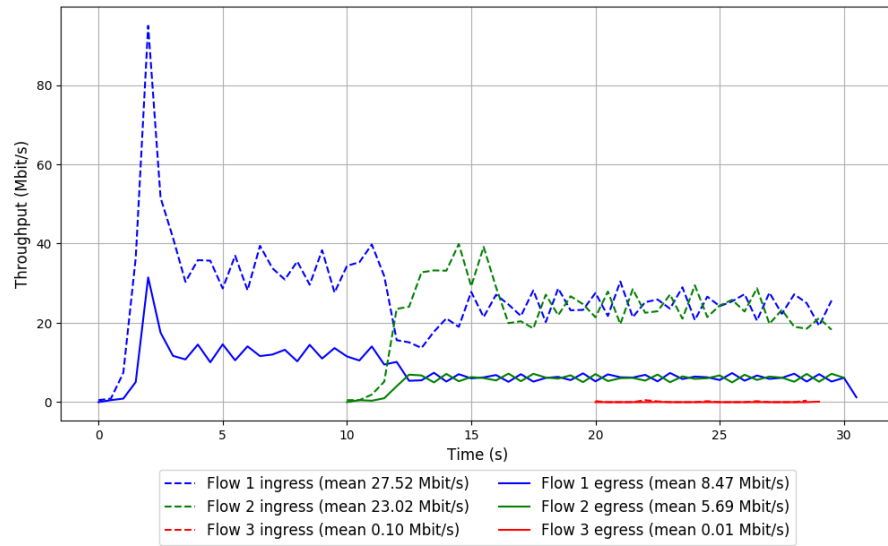


Run 2: Statistics of Copa

Start at: 2018-11-30 08:07:21  
End at: 2018-11-30 08:07:51  
Local clock offset: 1.363 ms  
Remote clock offset: -36.502 ms

# Below is generated by plot.py at 2018-11-30 10:32:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.24 Mbit/s  
95th percentile per-packet one-way delay: 59.544 ms  
Loss rate: 71.40%  
-- Flow 1:  
Average throughput: 8.47 Mbit/s  
95th percentile per-packet one-way delay: 59.746 ms  
Loss rate: 69.23%  
-- Flow 2:  
Average throughput: 5.69 Mbit/s  
95th percentile per-packet one-way delay: 59.153 ms  
Loss rate: 75.27%  
-- Flow 3:  
Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 61.685 ms  
Loss rate: 90.56%

## Run 2: Report of Copa — Data Link

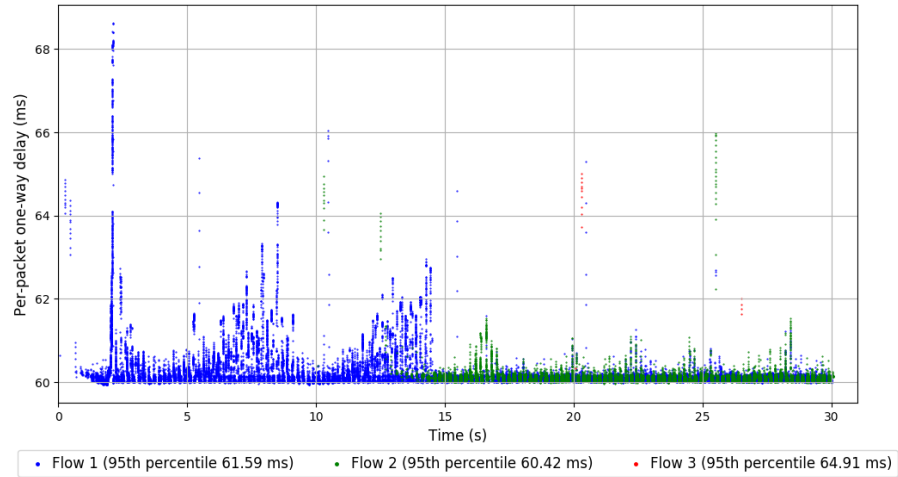
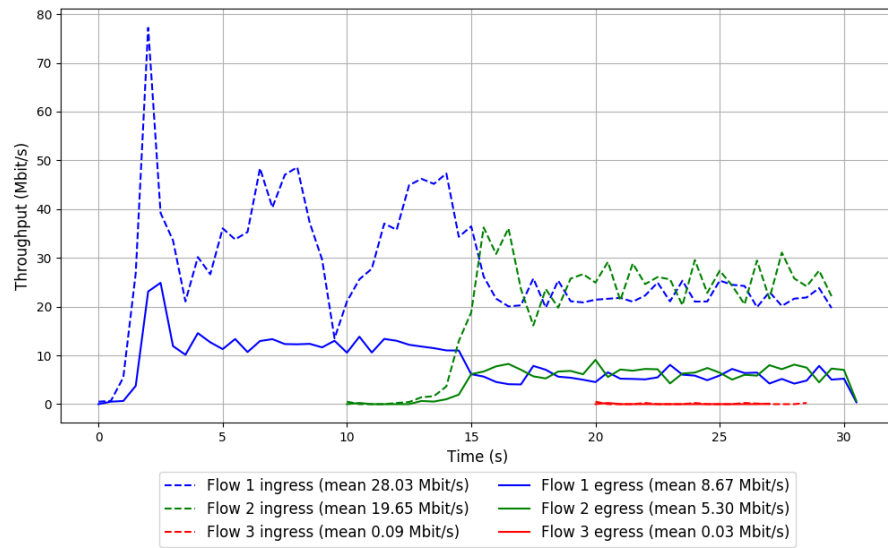


Run 3: Statistics of Copa

Start at: 2018-11-30 08:41:55  
End at: 2018-11-30 08:42:25  
Local clock offset: -24.913 ms  
Remote clock offset: -62.941 ms

# Below is generated by plot.py at 2018-11-30 10:32:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.20 Mbit/s  
95th percentile per-packet one-way delay: 61.386 ms  
Loss rate: 70.34%  
-- Flow 1:  
Average throughput: 8.67 Mbit/s  
95th percentile per-packet one-way delay: 61.586 ms  
Loss rate: 69.07%  
-- Flow 2:  
Average throughput: 5.30 Mbit/s  
95th percentile per-packet one-way delay: 60.425 ms  
Loss rate: 73.03%  
-- Flow 3:  
Average throughput: 0.03 Mbit/s  
95th percentile per-packet one-way delay: 64.906 ms  
Loss rate: 78.69%

### Run 3: Report of Copa — Data Link



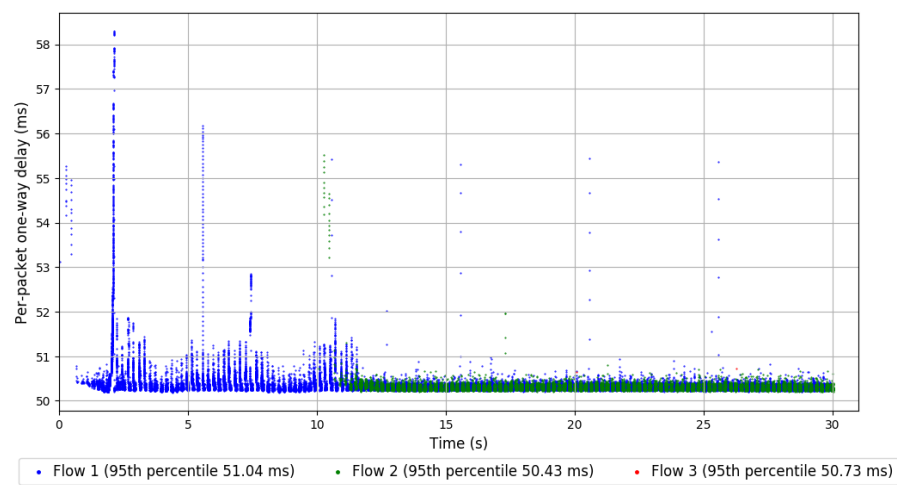
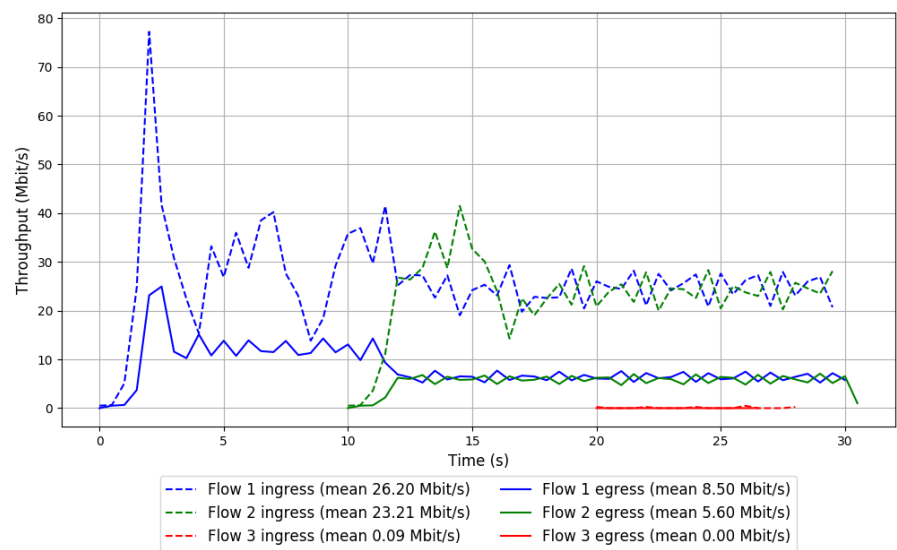


Run 4: Statistics of Copa

Start at: 2018-11-30 09:16:19  
End at: 2018-11-30 09:16:49  
Local clock offset: 0.536 ms  
Remote clock offset: -44.718 ms

# Below is generated by plot.py at 2018-11-30 10:32:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.20 Mbit/s  
95th percentile per-packet one-way delay: 50.831 ms  
Loss rate: 70.67%  
-- Flow 1:  
Average throughput: 8.50 Mbit/s  
95th percentile per-packet one-way delay: 51.041 ms  
Loss rate: 67.58%  
-- Flow 2:  
Average throughput: 5.60 Mbit/s  
95th percentile per-packet one-way delay: 50.431 ms  
Loss rate: 75.86%  
-- Flow 3:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 50.732 ms  
Loss rate: 98.19%

Run 4: Report of Copa — Data Link

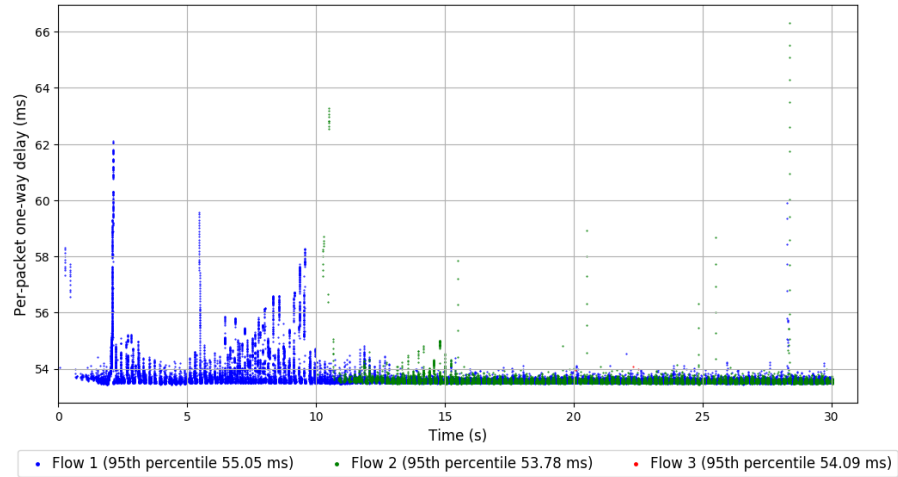
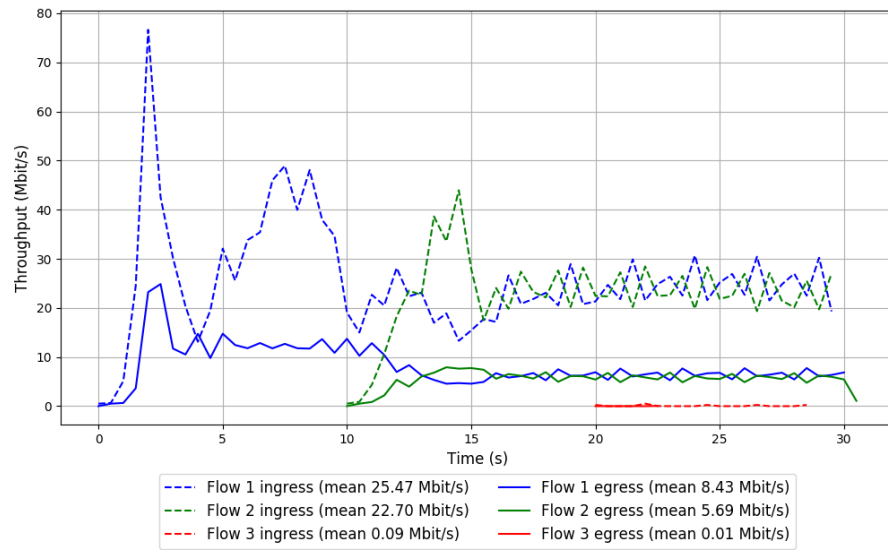


Run 5: Statistics of Copa

Start at: 2018-11-30 09:56:33  
End at: 2018-11-30 09:57:03  
Local clock offset: 2.179 ms  
Remote clock offset: -39.917 ms

# Below is generated by plot.py at 2018-11-30 10:32:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.20 Mbit/s  
95th percentile per-packet one-way delay: 54.651 ms  
Loss rate: 69.92%  
-- Flow 1:  
Average throughput: 8.43 Mbit/s  
95th percentile per-packet one-way delay: 55.049 ms  
Loss rate: 66.91%  
-- Flow 2:  
Average throughput: 5.69 Mbit/s  
95th percentile per-packet one-way delay: 53.779 ms  
Loss rate: 74.93%  
-- Flow 3:  
Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 54.086 ms  
Loss rate: 96.64%

## Run 5: Report of Copa — Data Link

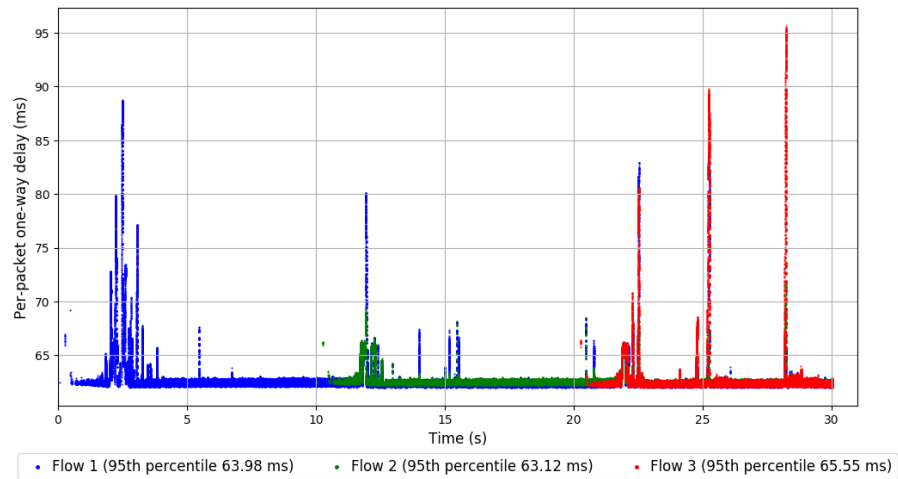
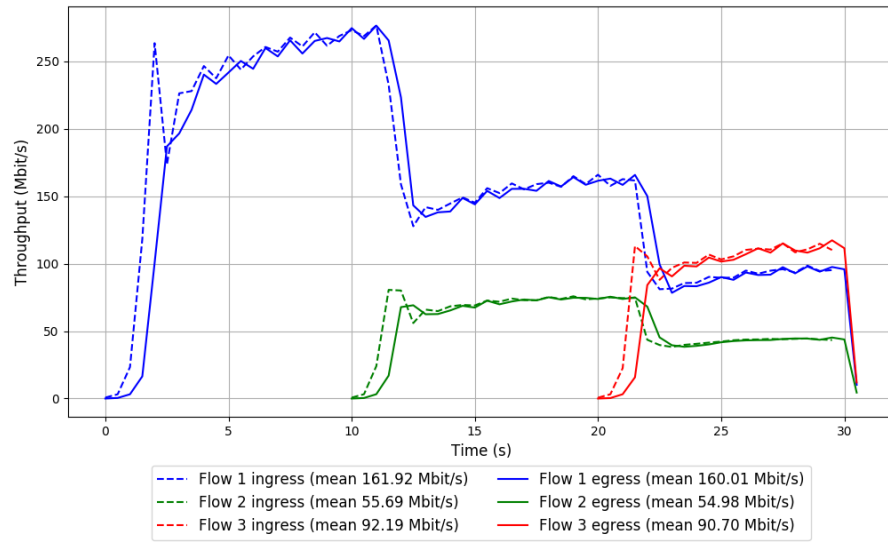


Run 1: Statistics of TCP Cubic

Start at: 2018-11-30 07:56:28  
End at: 2018-11-30 07:56:58  
Local clock offset: 1.476 ms  
Remote clock offset: -33.723 ms

# Below is generated by plot.py at 2018-11-30 10:32:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 226.78 Mbit/s  
95th percentile per-packet one-way delay: 64.104 ms  
Loss rate: 1.25%  
-- Flow 1:  
Average throughput: 160.01 Mbit/s  
95th percentile per-packet one-way delay: 63.980 ms  
Loss rate: 1.18%  
-- Flow 2:  
Average throughput: 54.98 Mbit/s  
95th percentile per-packet one-way delay: 63.120 ms  
Loss rate: 1.26%  
-- Flow 3:  
Average throughput: 90.70 Mbit/s  
95th percentile per-packet one-way delay: 65.553 ms  
Loss rate: 1.61%

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

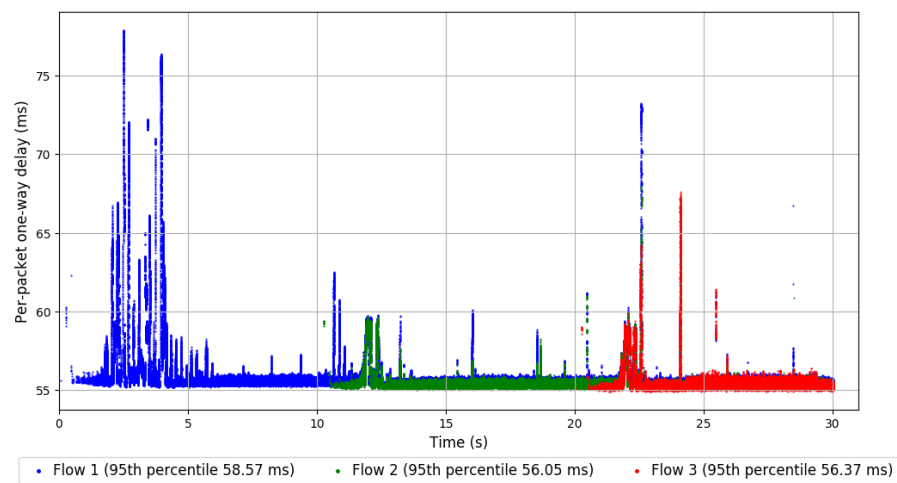
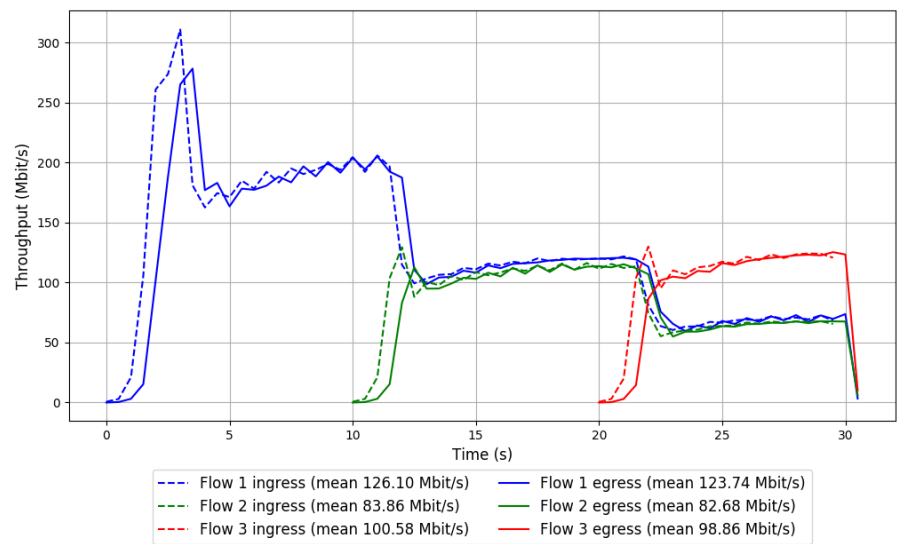


Run 2: Statistics of TCP Cubic

Start at: 2018-11-30 08:31:02  
End at: 2018-11-30 08:31:32  
Local clock offset: -0.22 ms  
Remote clock offset: -45.171 ms

# Below is generated by plot.py at 2018-11-30 10:32:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 211.65 Mbit/s  
95th percentile per-packet one-way delay: 57.908 ms  
Loss rate: 1.73%  
-- Flow 1:  
Average throughput: 123.74 Mbit/s  
95th percentile per-packet one-way delay: 58.566 ms  
Loss rate: 1.87%  
-- Flow 2:  
Average throughput: 82.68 Mbit/s  
95th percentile per-packet one-way delay: 56.045 ms  
Loss rate: 1.40%  
-- Flow 3:  
Average throughput: 98.86 Mbit/s  
95th percentile per-packet one-way delay: 56.369 ms  
Loss rate: 1.71%

Run 2: Report of TCP Cubic — Data Link



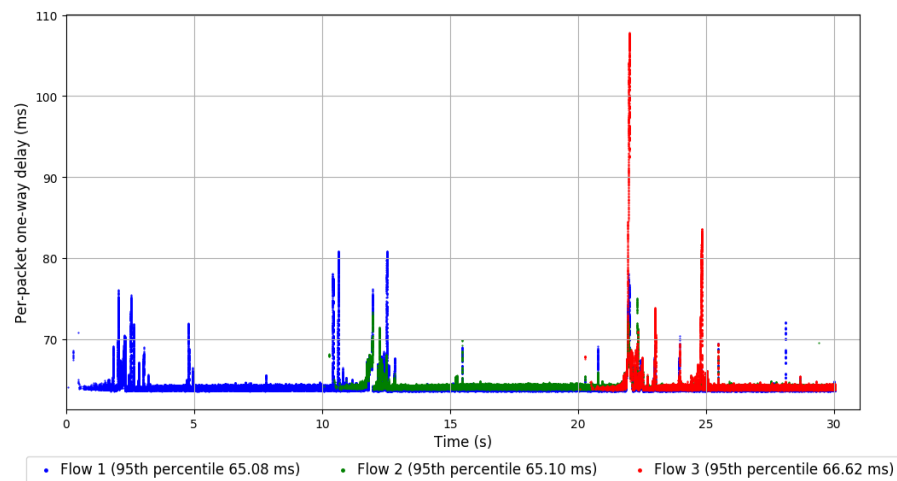
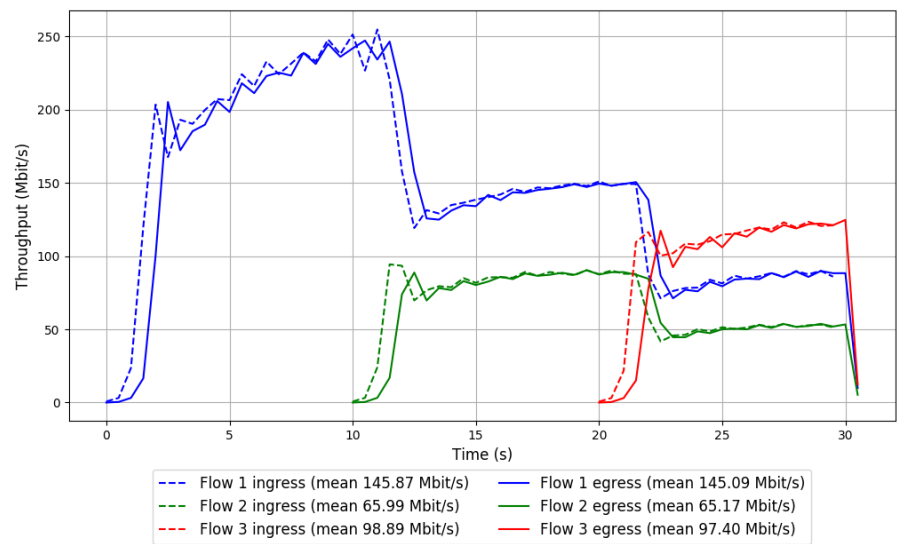


Run 3: Statistics of TCP Cubic

Start at: 2018-11-30 09:05:21  
End at: 2018-11-30 09:05:51  
Local clock offset: -0.424 ms  
Remote clock offset: -32.711 ms

# Below is generated by plot.py at 2018-11-30 10:32:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 220.90 Mbit/s  
95th percentile per-packet one-way delay: 65.261 ms  
Loss rate: 0.82%  
-- Flow 1:  
Average throughput: 145.09 Mbit/s  
95th percentile per-packet one-way delay: 65.082 ms  
Loss rate: 0.54%  
-- Flow 2:  
Average throughput: 65.17 Mbit/s  
95th percentile per-packet one-way delay: 65.098 ms  
Loss rate: 1.25%  
-- Flow 3:  
Average throughput: 97.40 Mbit/s  
95th percentile per-packet one-way delay: 66.618 ms  
Loss rate: 1.50%

Run 3: Report of TCP Cubic — Data Link

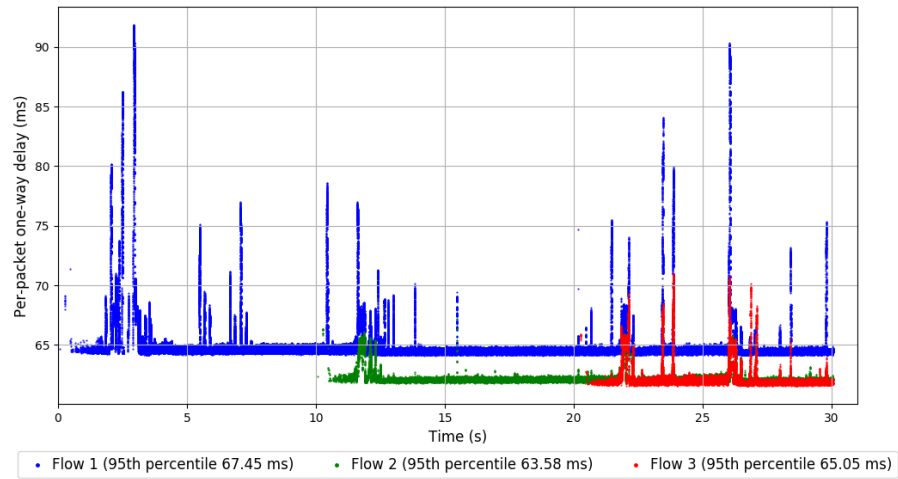
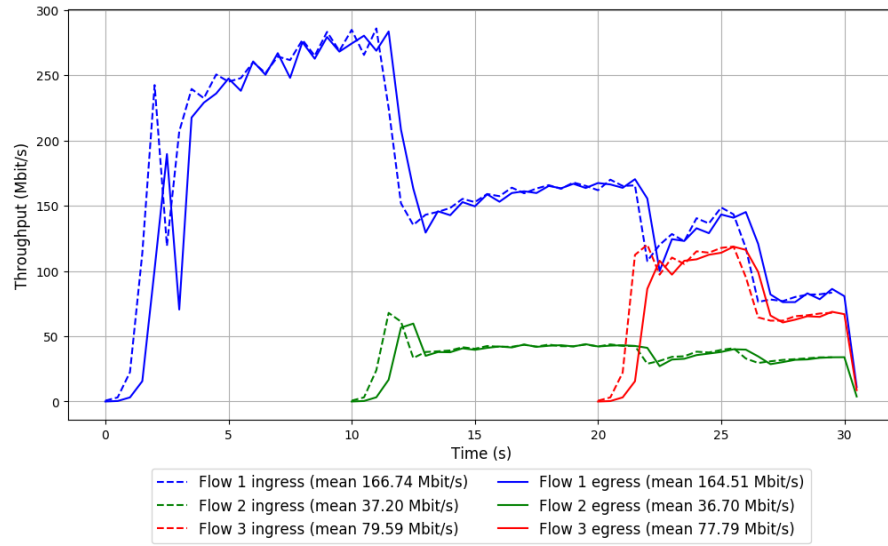


Run 4: Statistics of TCP Cubic

Start at: 2018-11-30 09:45:39  
End at: 2018-11-30 09:46:09  
Local clock offset: 0.06 ms  
Remote clock offset: -34.555 ms

# Below is generated by plot.py at 2018-11-30 10:33:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 214.83 Mbit/s  
95th percentile per-packet one-way delay: 66.954 ms  
Loss rate: 1.45%  
-- Flow 1:  
Average throughput: 164.51 Mbit/s  
95th percentile per-packet one-way delay: 67.454 ms  
Loss rate: 1.34%  
-- Flow 2:  
Average throughput: 36.70 Mbit/s  
95th percentile per-packet one-way delay: 63.580 ms  
Loss rate: 1.35%  
-- Flow 3:  
Average throughput: 77.79 Mbit/s  
95th percentile per-packet one-way delay: 65.052 ms  
Loss rate: 2.26%

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

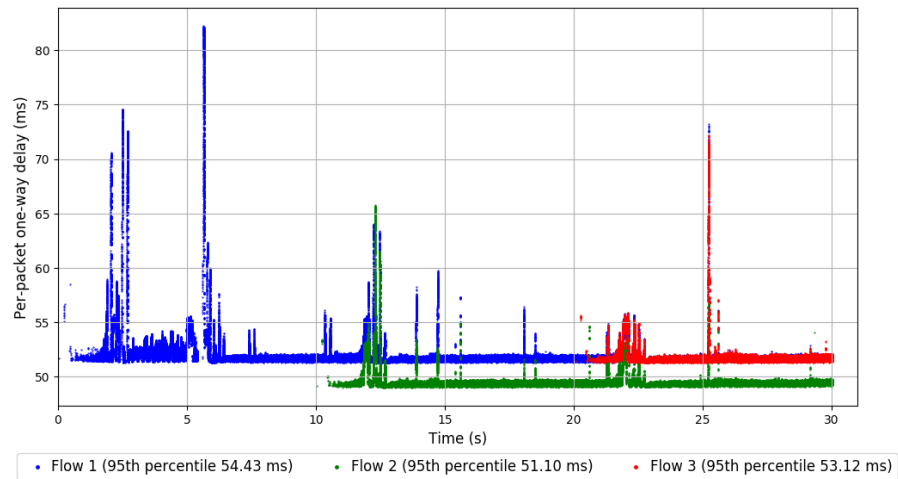
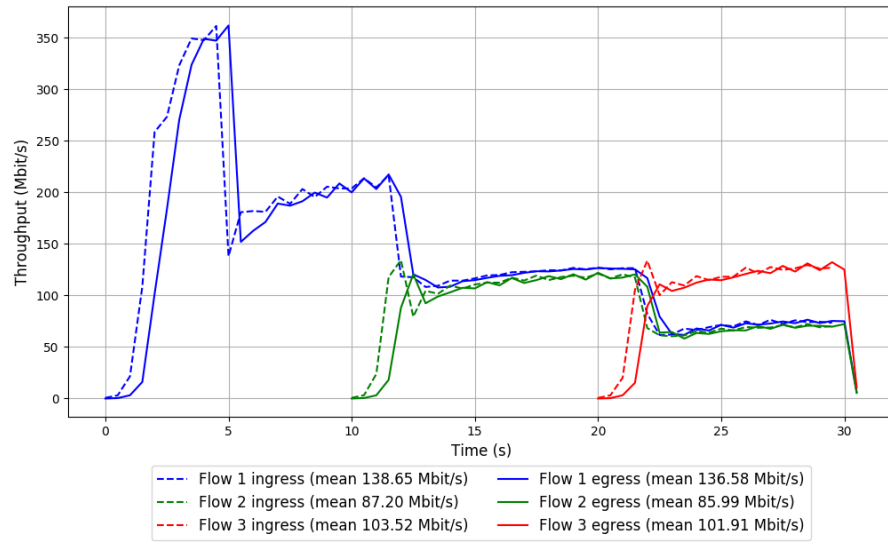


Run 5: Statistics of TCP Cubic

Start at: 2018-11-30 10:20:15  
End at: 2018-11-30 10:20:45  
Local clock offset: 1.268 ms  
Remote clock offset: -45.194 ms

# Below is generated by plot.py at 2018-11-30 10:34:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 227.78 Mbit/s  
95th percentile per-packet one-way delay: 53.697 ms  
Loss rate: 1.47%  
-- Flow 1:  
Average throughput: 136.58 Mbit/s  
95th percentile per-packet one-way delay: 54.428 ms  
Loss rate: 1.49%  
-- Flow 2:  
Average throughput: 85.99 Mbit/s  
95th percentile per-packet one-way delay: 51.097 ms  
Loss rate: 1.38%  
-- Flow 3:  
Average throughput: 101.91 Mbit/s  
95th percentile per-packet one-way delay: 53.116 ms  
Loss rate: 1.54%

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

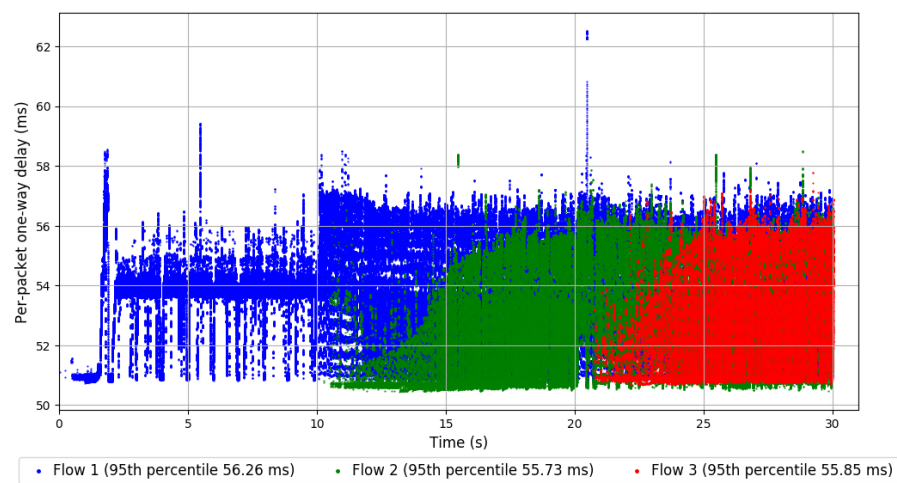
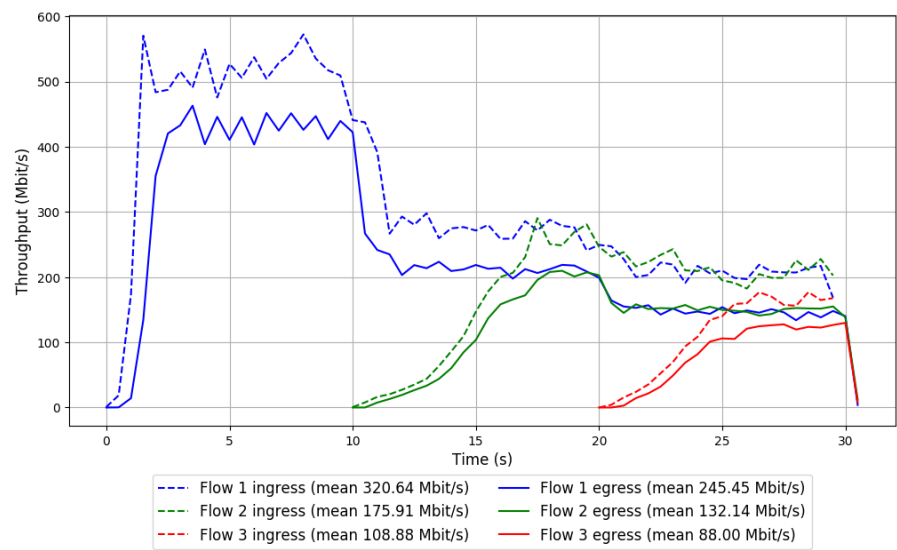


Run 1: Statistics of FillP

Start at: 2018-11-30 07:58:33  
End at: 2018-11-30 07:59:03  
Local clock offset: 0.033 ms  
Remote clock offset: -46.384 ms

# Below is generated by plot.py at 2018-11-30 10:37:23  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 361.78 Mbit/s  
95th percentile per-packet one-way delay: 56.104 ms  
Loss rate: 23.61%  
-- Flow 1:  
Average throughput: 245.45 Mbit/s  
95th percentile per-packet one-way delay: 56.263 ms  
Loss rate: 23.45%  
-- Flow 2:  
Average throughput: 132.14 Mbit/s  
95th percentile per-packet one-way delay: 55.725 ms  
Loss rate: 24.89%  
-- Flow 3:  
Average throughput: 88.00 Mbit/s  
95th percentile per-packet one-way delay: 55.855 ms  
Loss rate: 20.96%

Run 1: Report of FillP — Data Link



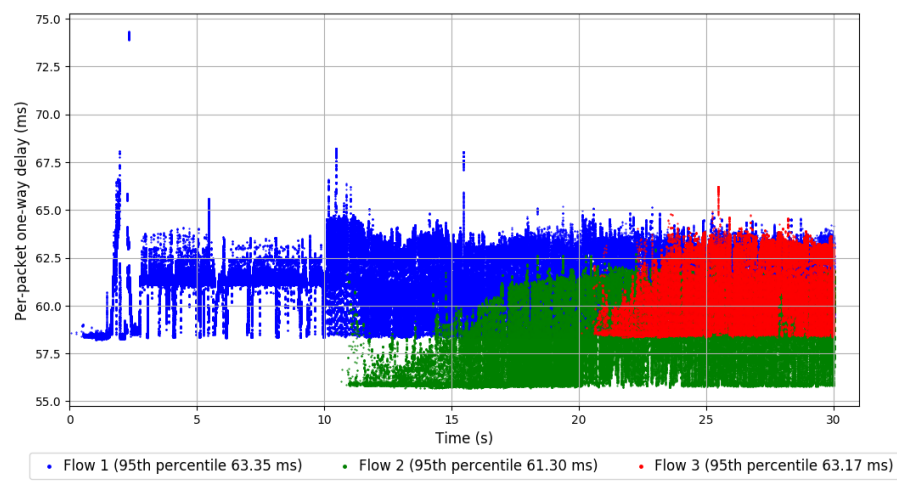
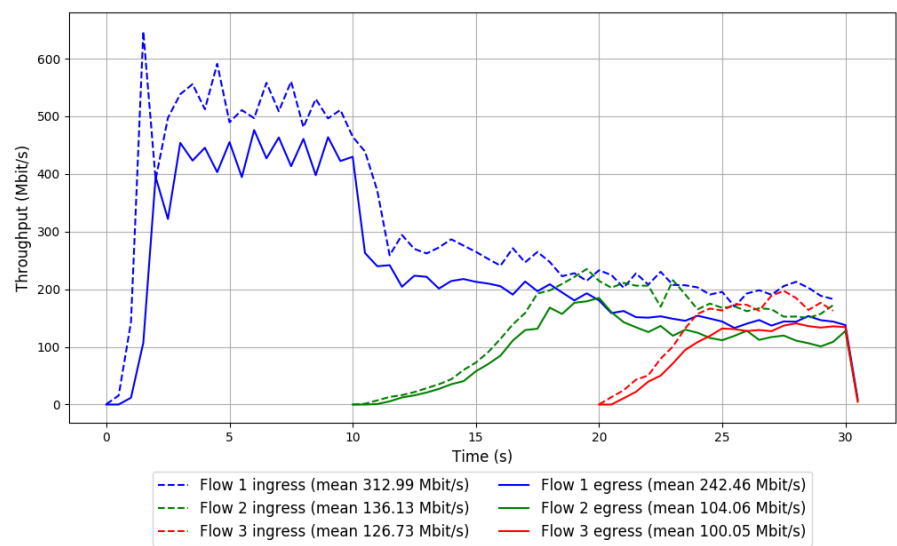


Run 2: Statistics of FillP

Start at: 2018-11-30 08:33:03  
End at: 2018-11-30 08:33:33  
Local clock offset: -0.094 ms  
Remote clock offset: -42.015 ms

# Below is generated by plot.py at 2018-11-30 10:37:23  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 343.40 Mbit/s  
95th percentile per-packet one-way delay: 63.192 ms  
Loss rate: 22.92%  
-- Flow 1:  
Average throughput: 242.46 Mbit/s  
95th percentile per-packet one-way delay: 63.353 ms  
Loss rate: 22.52%  
-- Flow 2:  
Average throughput: 104.06 Mbit/s  
95th percentile per-packet one-way delay: 61.298 ms  
Loss rate: 25.16%  
-- Flow 3:  
Average throughput: 100.05 Mbit/s  
95th percentile per-packet one-way delay: 63.168 ms  
Loss rate: 21.05%

Run 2: Report of FillP — Data Link

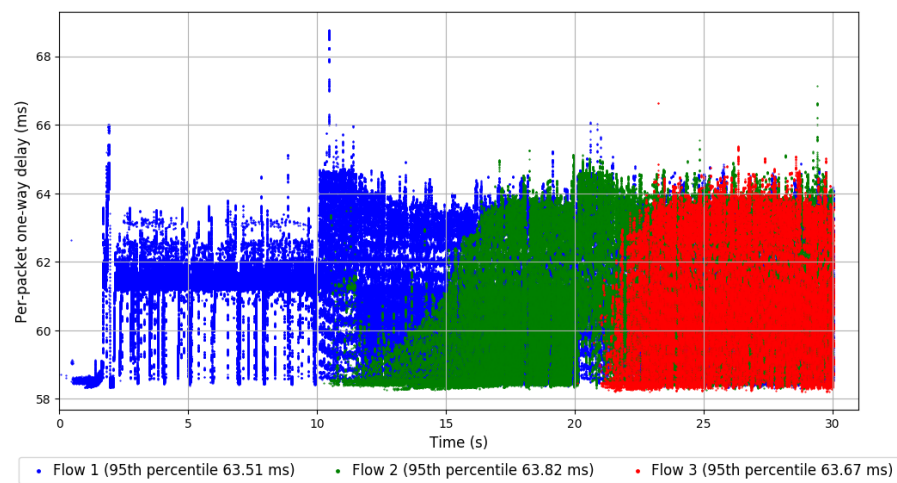
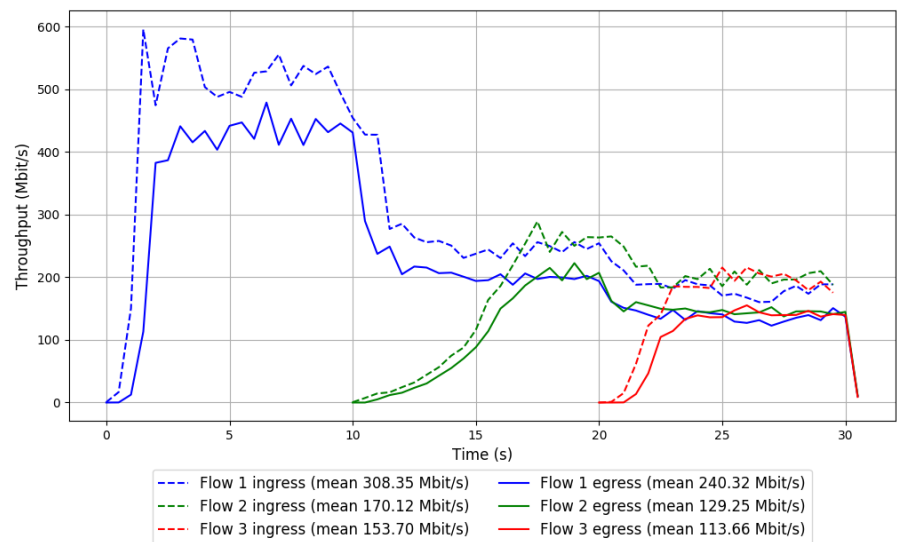


Run 3: Statistics of FillP

Start at: 2018-11-30 09:07:25  
End at: 2018-11-30 09:07:55  
Local clock offset: -1.052 ms  
Remote clock offset: -38.437 ms

# Below is generated by plot.py at 2018-11-30 10:37:37  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 363.94 Mbit/s  
95th percentile per-packet one-way delay: 63.632 ms  
Loss rate: 22.97%  
-- Flow 1:  
Average throughput: 240.32 Mbit/s  
95th percentile per-packet one-way delay: 63.514 ms  
Loss rate: 22.06%  
-- Flow 2:  
Average throughput: 129.25 Mbit/s  
95th percentile per-packet one-way delay: 63.819 ms  
Loss rate: 24.03%  
-- Flow 3:  
Average throughput: 113.66 Mbit/s  
95th percentile per-packet one-way delay: 63.672 ms  
Loss rate: 26.05%

Run 3: Report of FillP — Data Link

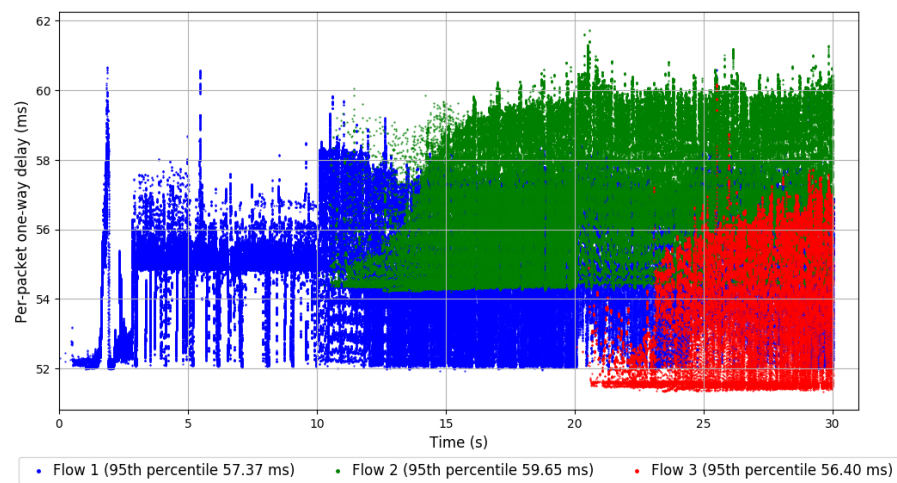
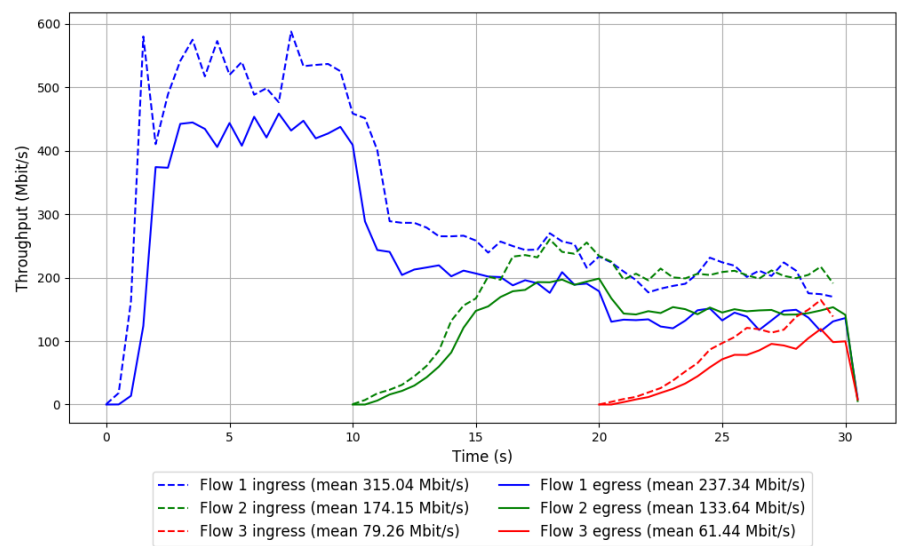


Run 4: Statistics of FillP

Start at: 2018-11-30 09:47:42  
End at: 2018-11-30 09:48:12  
Local clock offset: -0.084 ms  
Remote clock offset: -44.531 ms

# Below is generated by plot.py at 2018-11-30 10:37:37  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 346.63 Mbit/s  
95th percentile per-packet one-way delay: 58.823 ms  
Loss rate: 24.18%  
-- Flow 1:  
Average throughput: 237.34 Mbit/s  
95th percentile per-packet one-way delay: 57.370 ms  
Loss rate: 24.66%  
-- Flow 2:  
Average throughput: 133.64 Mbit/s  
95th percentile per-packet one-way delay: 59.648 ms  
Loss rate: 23.25%  
-- Flow 3:  
Average throughput: 61.44 Mbit/s  
95th percentile per-packet one-way delay: 56.404 ms  
Loss rate: 22.49%

Run 4: Report of FillP — Data Link

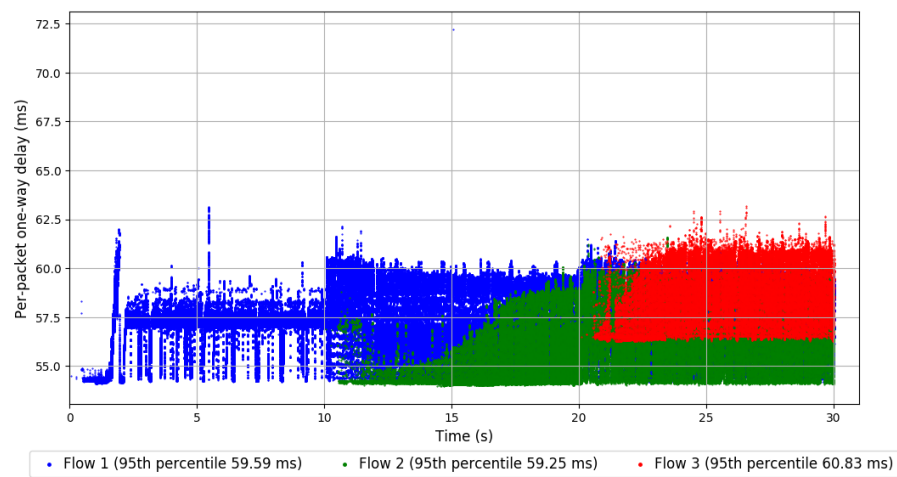
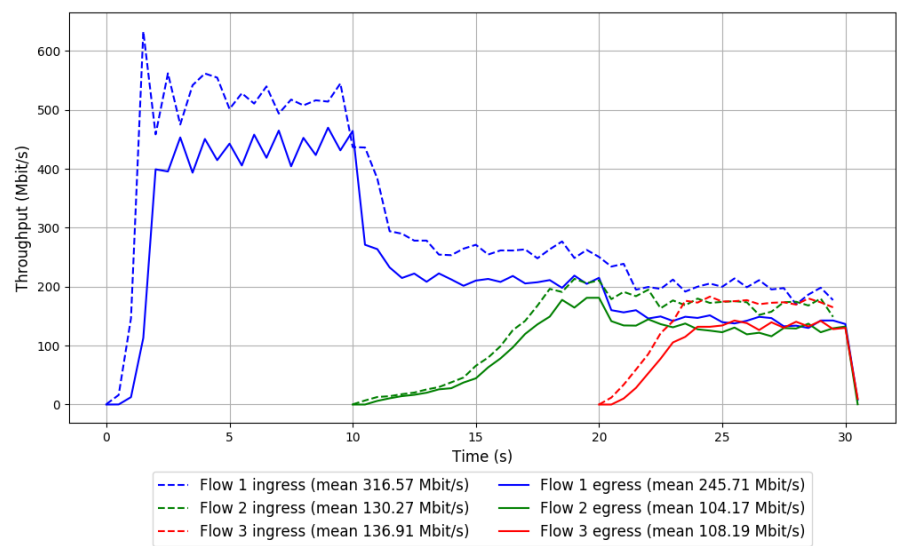


Run 5: Statistics of FillP

Start at: 2018-11-30 10:22:20  
End at: 2018-11-30 10:22:50  
Local clock offset: 1.637 ms  
Remote clock offset: -40.081 ms

# Below is generated by plot.py at 2018-11-30 10:37:37  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 350.82 Mbit/s  
95th percentile per-packet one-way delay: 59.887 ms  
Loss rate: 21.78%  
-- Flow 1:  
Average throughput: 245.71 Mbit/s  
95th percentile per-packet one-way delay: 59.585 ms  
Loss rate: 22.38%  
-- Flow 2:  
Average throughput: 104.17 Mbit/s  
95th percentile per-packet one-way delay: 59.248 ms  
Loss rate: 20.04%  
-- Flow 3:  
Average throughput: 108.19 Mbit/s  
95th percentile per-packet one-way delay: 60.830 ms  
Loss rate: 20.95%

Run 5: Report of FillP — Data Link



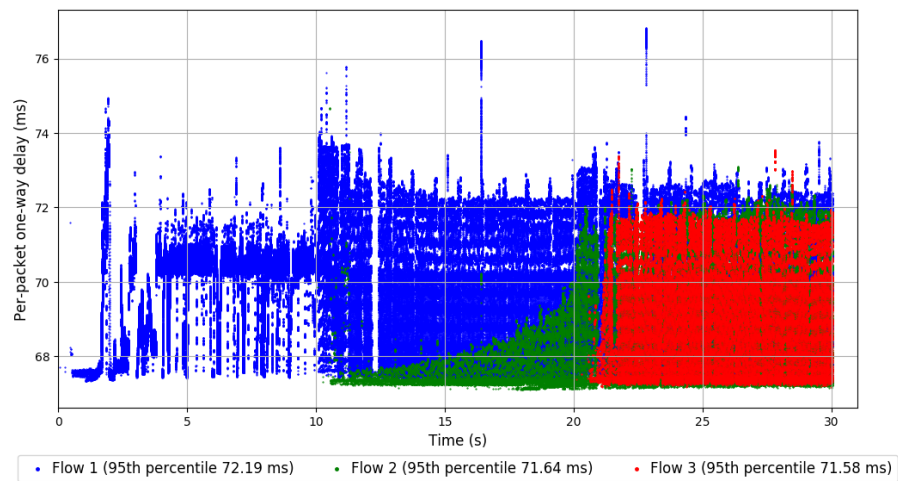
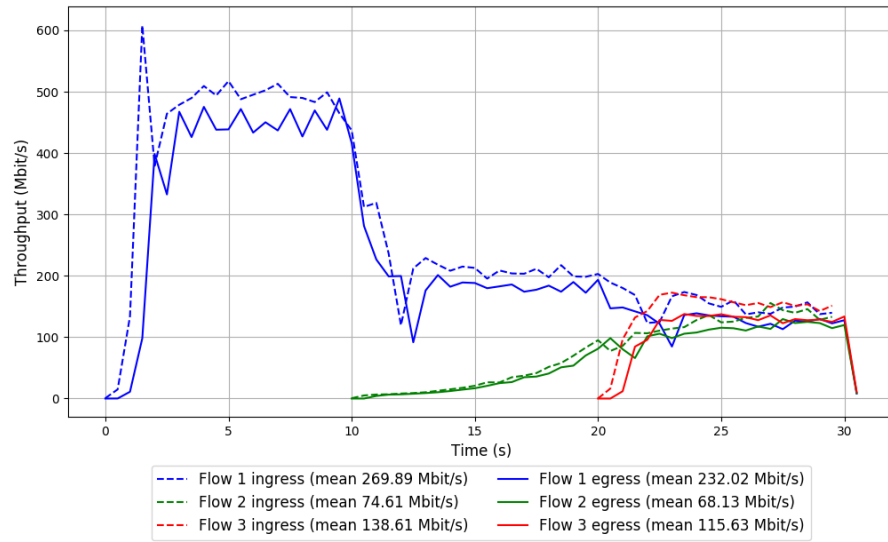


Run 1: Statistics of FillP-Sheep

Start at: 2018-11-30 07:39:43  
End at: 2018-11-30 07:40:13  
Local clock offset: 0.757 ms  
Remote clock offset: -30.258 ms

# Below is generated by plot.py at 2018-11-30 10:37:37  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 315.70 Mbit/s  
95th percentile per-packet one-way delay: 72.032 ms  
Loss rate: 13.64%  
-- Flow 1:  
Average throughput: 232.02 Mbit/s  
95th percentile per-packet one-way delay: 72.185 ms  
Loss rate: 14.02%  
-- Flow 2:  
Average throughput: 68.13 Mbit/s  
95th percentile per-packet one-way delay: 71.635 ms  
Loss rate: 8.70%  
-- Flow 3:  
Average throughput: 115.63 Mbit/s  
95th percentile per-packet one-way delay: 71.577 ms  
Loss rate: 16.72%

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

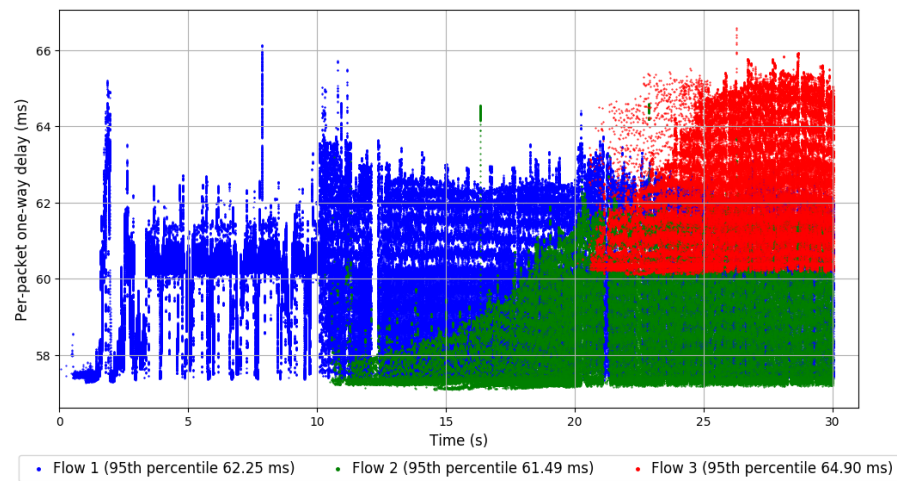
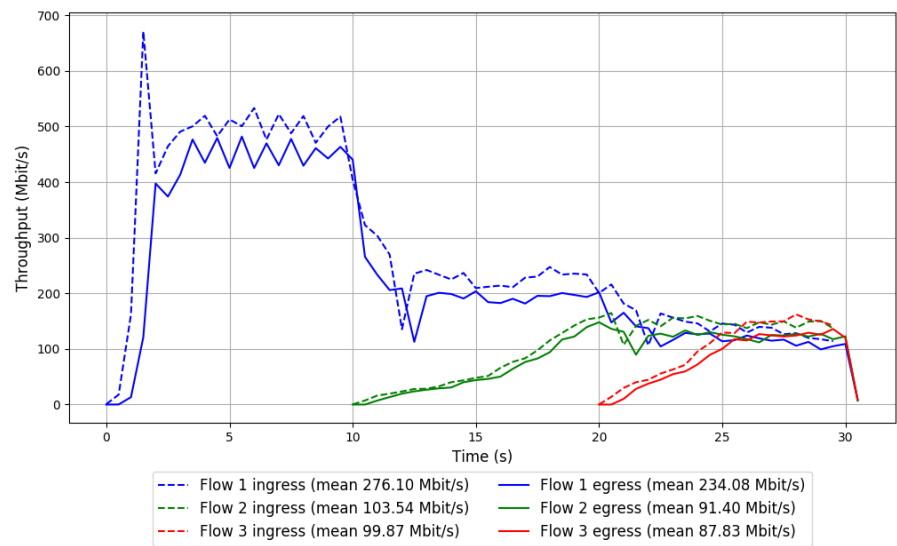


Run 2: Statistics of FillP-Sheep

Start at: 2018-11-30 08:19:43  
End at: 2018-11-30 08:20:13  
Local clock offset: 0.622 ms  
Remote clock offset: -38.77 ms

# Below is generated by plot.py at 2018-11-30 10:38:48  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 324.00 Mbit/s  
95th percentile per-packet one-way delay: 62.841 ms  
Loss rate: 14.30%  
-- Flow 1:  
Average throughput: 234.08 Mbit/s  
95th percentile per-packet one-way delay: 62.250 ms  
Loss rate: 15.22%  
-- Flow 2:  
Average throughput: 91.40 Mbit/s  
95th percentile per-packet one-way delay: 61.495 ms  
Loss rate: 11.73%  
-- Flow 3:  
Average throughput: 87.83 Mbit/s  
95th percentile per-packet one-way delay: 64.902 ms  
Loss rate: 12.02%

Run 2: Report of FillP-Sheep — Data Link

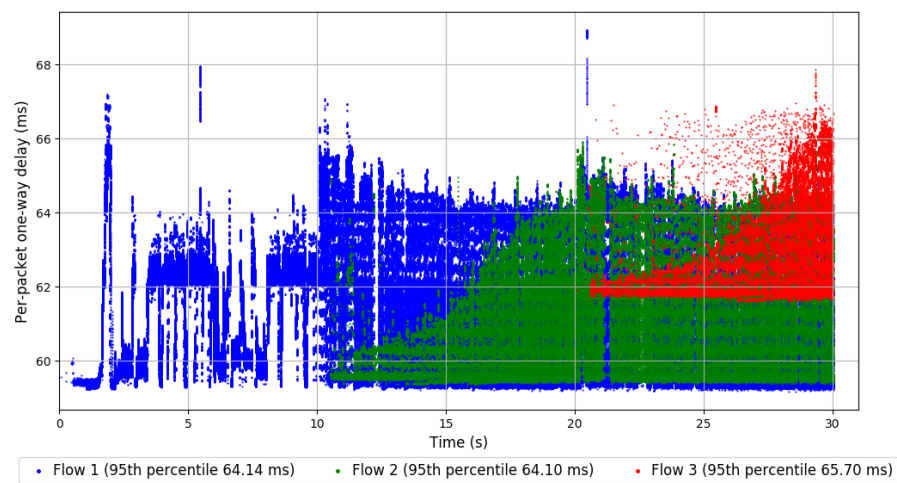
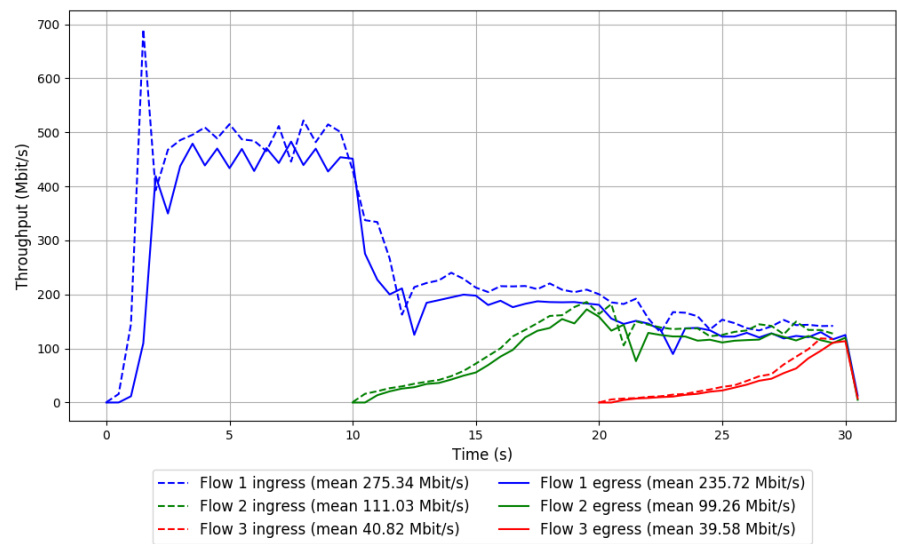


Run 3: Statistics of FillP-Sheep

Start at: 2018-11-30 08:54:20  
End at: 2018-11-30 08:54:50  
Local clock offset: -0.244 ms  
Remote clock offset: -37.845 ms

```
# Below is generated by plot.py at 2018-11-30 10:39:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 314.91 Mbit/s
95th percentile per-packet one-way delay: 64.225 ms
Loss rate: 13.19%
-- Flow 1:
Average throughput: 235.72 Mbit/s
95th percentile per-packet one-way delay: 64.135 ms
Loss rate: 14.39%
-- Flow 2:
Average throughput: 99.26 Mbit/s
95th percentile per-packet one-way delay: 64.103 ms
Loss rate: 10.61%
-- Flow 3:
Average throughput: 39.58 Mbit/s
95th percentile per-packet one-way delay: 65.702 ms
Loss rate: 2.97%
```

Run 3: Report of FillP-Sheep — Data Link

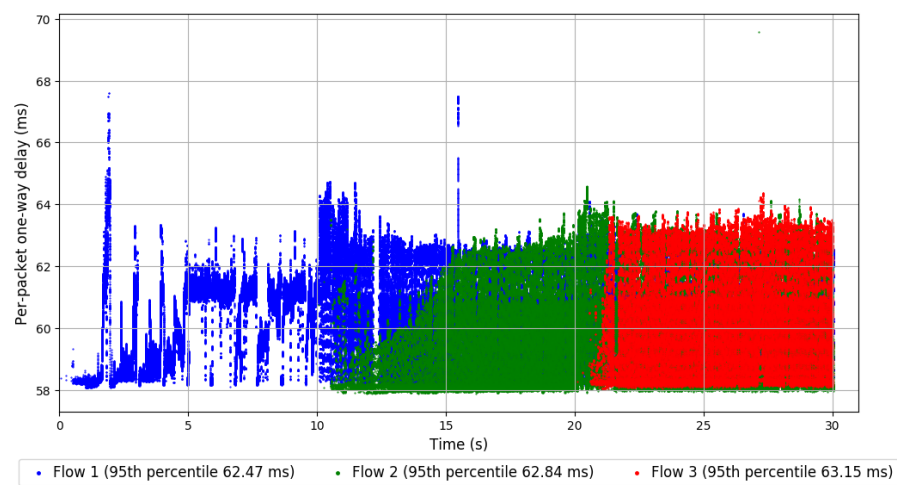
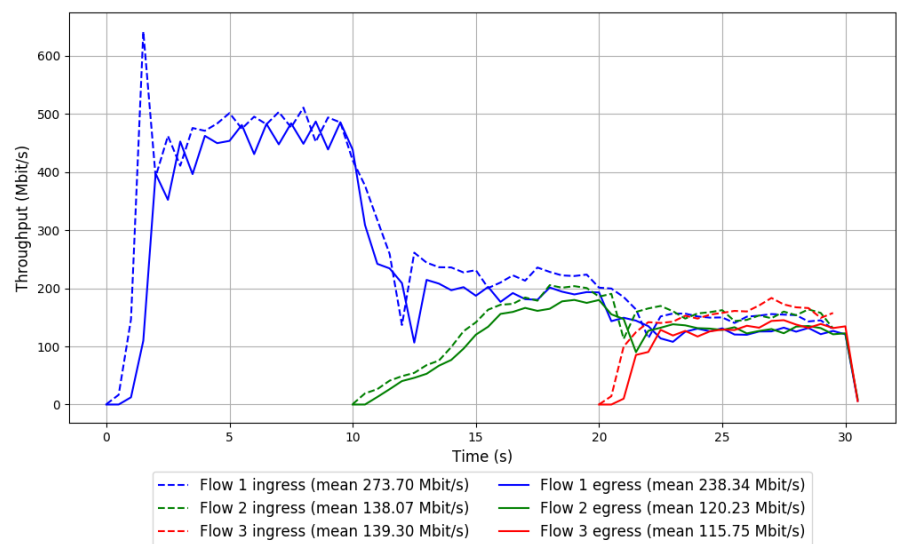


Run 4: Statistics of FillP-Sheep

Start at: 2018-11-30 09:34:09  
End at: 2018-11-30 09:34:39  
Local clock offset: -0.721 ms  
Remote clock offset: -39.047 ms

# Below is generated by plot.py at 2018-11-30 10:41:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 356.66 Mbit/s  
95th percentile per-packet one-way delay: 62.732 ms  
Loss rate: 13.36%  
-- Flow 1:  
Average throughput: 238.34 Mbit/s  
95th percentile per-packet one-way delay: 62.469 ms  
Loss rate: 12.91%  
-- Flow 2:  
Average throughput: 120.23 Mbit/s  
95th percentile per-packet one-way delay: 62.844 ms  
Loss rate: 12.94%  
-- Flow 3:  
Average throughput: 115.75 Mbit/s  
95th percentile per-packet one-way delay: 63.151 ms  
Loss rate: 16.91%

Run 4: Report of FillP-Sheep — Data Link



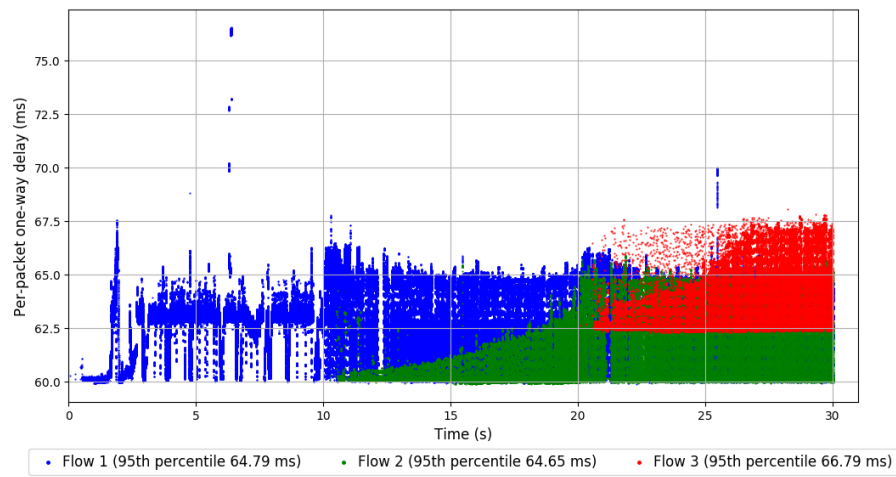
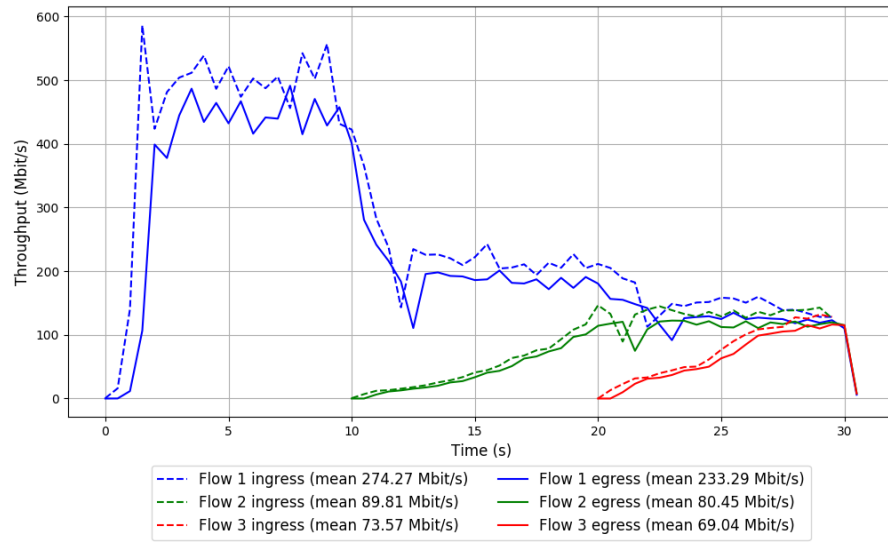


Run 5: Statistics of FillP-Sheep

Start at: 2018-11-30 10:08:54  
End at: 2018-11-30 10:09:24  
Local clock offset: -0.998 ms  
Remote clock offset: -36.025 ms

# Below is generated by plot.py at 2018-11-30 10:41:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 309.67 Mbit/s  
95th percentile per-packet one-way delay: 65.038 ms  
Loss rate: 13.59%  
-- Flow 1:  
Average throughput: 233.29 Mbit/s  
95th percentile per-packet one-way delay: 64.789 ms  
Loss rate: 14.94%  
-- Flow 2:  
Average throughput: 80.45 Mbit/s  
95th percentile per-packet one-way delay: 64.652 ms  
Loss rate: 10.44%  
-- Flow 3:  
Average throughput: 69.04 Mbit/s  
95th percentile per-packet one-way delay: 66.793 ms  
Loss rate: 6.12%

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



Run 1: Statistics of Indigo

Start at: 2018-11-30 07:51:14

End at: 2018-11-30 07:51:44

Local clock offset: 1.481 ms

Remote clock offset: -42.8 ms

# Below is generated by plot.py at 2018-11-30 10:41:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 138.91 Mbit/s

95th percentile per-packet one-way delay: 86.496 ms

Loss rate: 16.55%

-- Flow 1:

Average throughput: 62.52 Mbit/s

95th percentile per-packet one-way delay: 68.543 ms

Loss rate: 9.72%

-- Flow 2:

Average throughput: 94.91 Mbit/s

95th percentile per-packet one-way delay: 94.906 ms

Loss rate: 19.93%

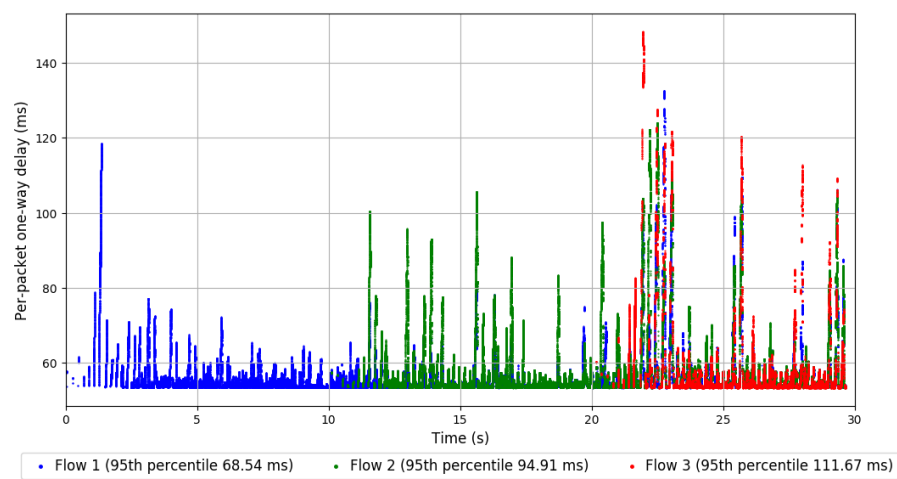
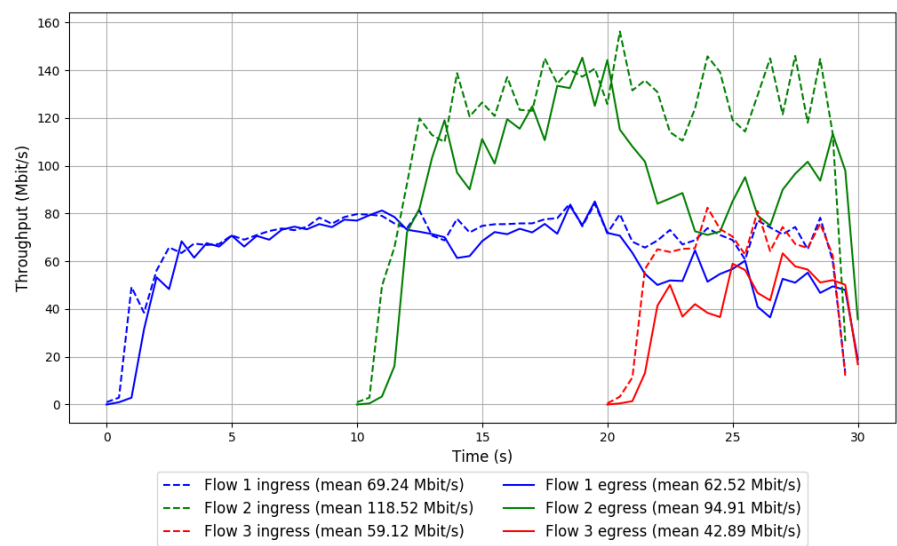
-- Flow 3:

Average throughput: 42.89 Mbit/s

95th percentile per-packet one-way delay: 111.668 ms

Loss rate: 27.51%

Run 1: Report of Indigo — Data Link

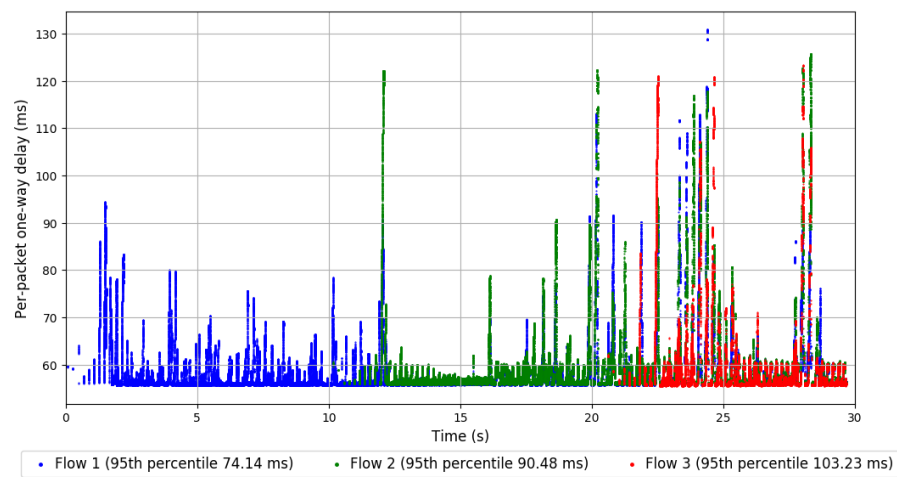
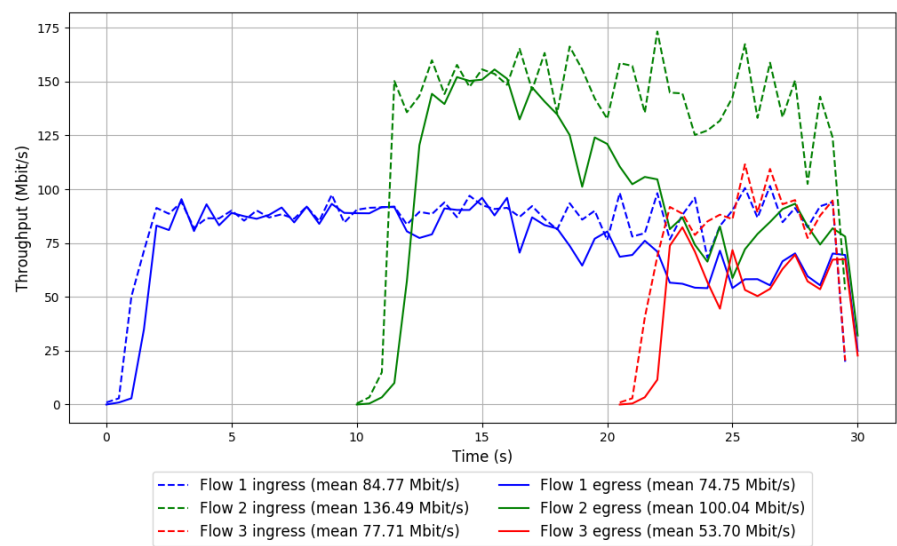


Run 2: Statistics of Indigo

Start at: 2018-11-30 08:25:44  
End at: 2018-11-30 08:26:14  
Local clock offset: 1.586 ms  
Remote clock offset: -40.164 ms

# Below is generated by plot.py at 2018-11-30 10:41:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 157.12 Mbit/s  
95th percentile per-packet one-way delay: 84.715 ms  
Loss rate: 20.87%  
-- Flow 1:  
Average throughput: 74.75 Mbit/s  
95th percentile per-packet one-way delay: 74.141 ms  
Loss rate: 11.83%  
-- Flow 2:  
Average throughput: 100.04 Mbit/s  
95th percentile per-packet one-way delay: 90.476 ms  
Loss rate: 26.72%  
-- Flow 3:  
Average throughput: 53.70 Mbit/s  
95th percentile per-packet one-way delay: 103.233 ms  
Loss rate: 30.94%

Run 2: Report of Indigo — Data Link

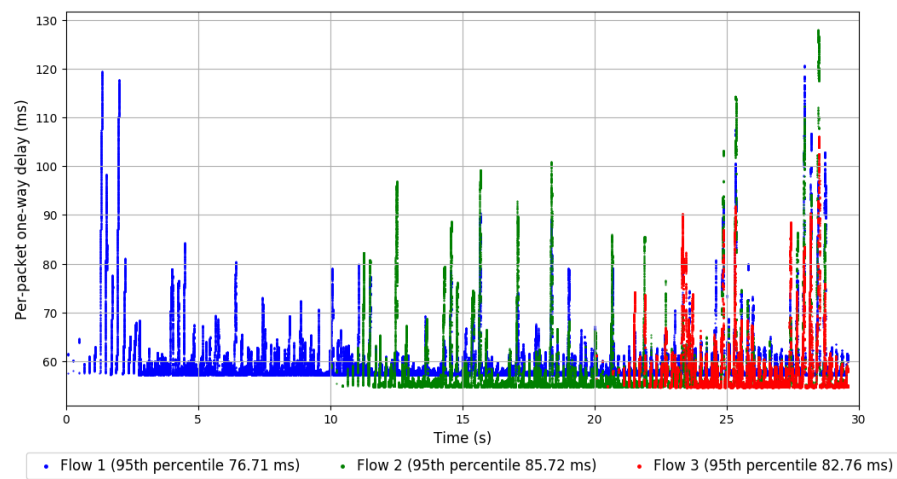
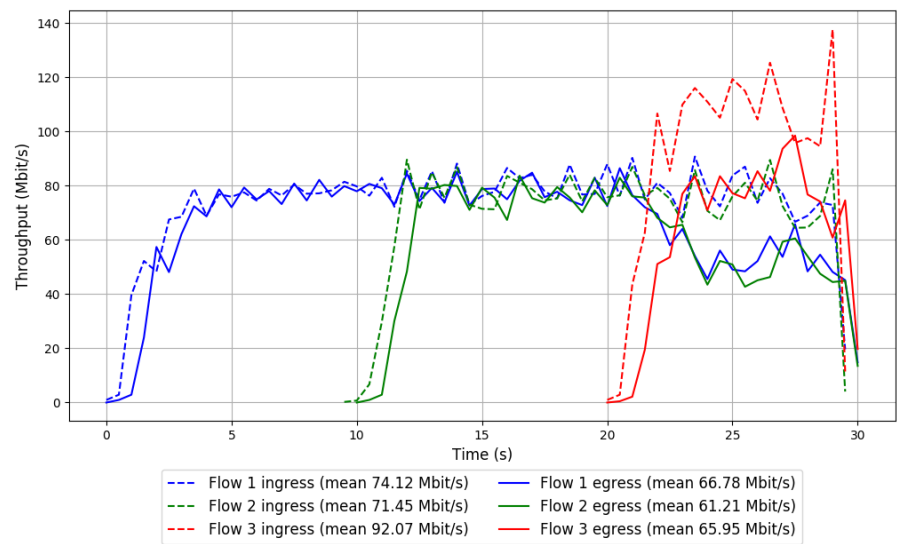


Run 3: Statistics of Indigo

Start at: 2018-11-30 09:00:11  
End at: 2018-11-30 09:00:41  
Local clock offset: -0.596 ms  
Remote clock offset: -42.039 ms

# Below is generated by plot.py at 2018-11-30 10:41:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 128.53 Mbit/s  
95th percentile per-packet one-way delay: 80.709 ms  
Loss rate: 14.91%  
-- Flow 1:  
Average throughput: 66.78 Mbit/s  
95th percentile per-packet one-way delay: 76.711 ms  
Loss rate: 9.89%  
-- Flow 2:  
Average throughput: 61.21 Mbit/s  
95th percentile per-packet one-way delay: 85.716 ms  
Loss rate: 14.33%  
-- Flow 3:  
Average throughput: 65.95 Mbit/s  
95th percentile per-packet one-way delay: 82.759 ms  
Loss rate: 28.38%

Run 3: Report of Indigo — Data Link



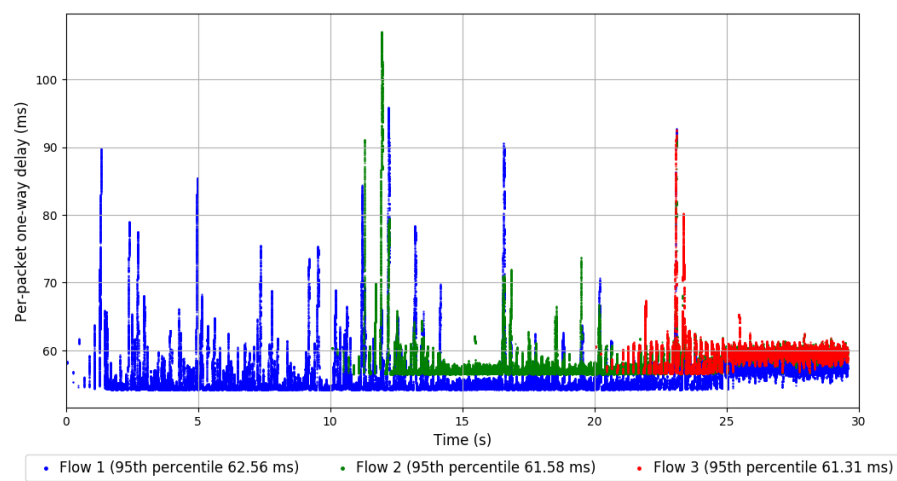
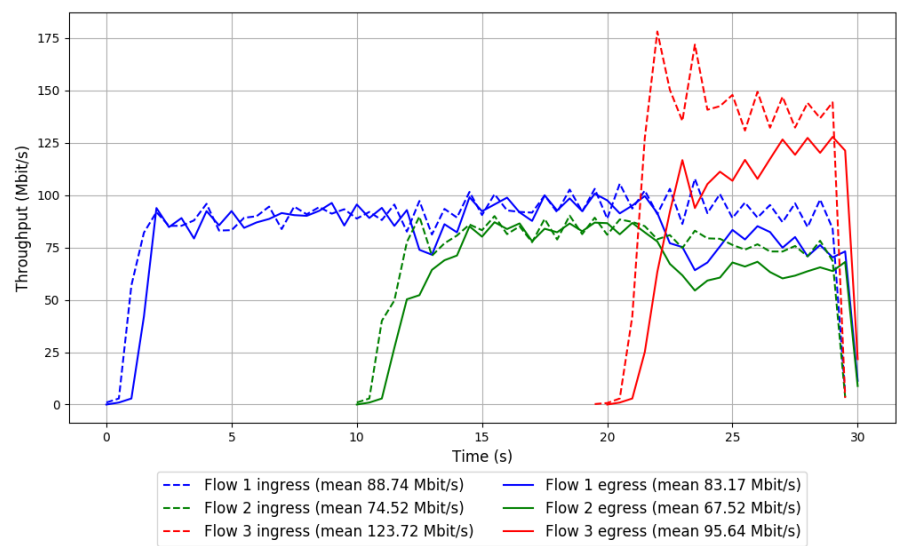


Run 4: Statistics of Indigo

Start at: 2018-11-30 09:40:15  
End at: 2018-11-30 09:40:45  
Local clock offset: -2.297 ms  
Remote clock offset: -44.667 ms

# Below is generated by plot.py at 2018-11-30 10:41:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 158.69 Mbit/s  
95th percentile per-packet one-way delay: 61.982 ms  
Loss rate: 10.83%  
-- Flow 1:  
Average throughput: 83.17 Mbit/s  
95th percentile per-packet one-way delay: 62.562 ms  
Loss rate: 6.28%  
-- Flow 2:  
Average throughput: 67.52 Mbit/s  
95th percentile per-packet one-way delay: 61.582 ms  
Loss rate: 9.40%  
-- Flow 3:  
Average throughput: 95.64 Mbit/s  
95th percentile per-packet one-way delay: 61.315 ms  
Loss rate: 22.70%

Run 4: Report of Indigo — Data Link

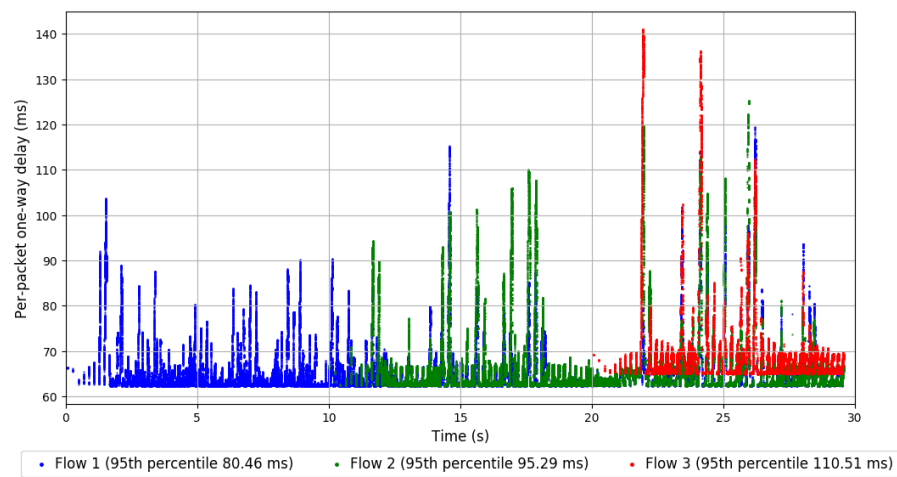
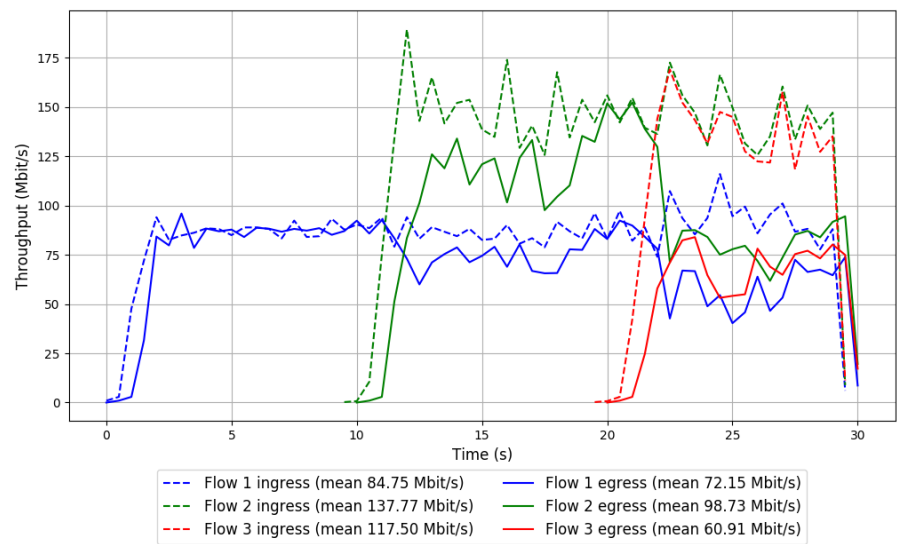


Run 5: Statistics of Indigo

Start at: 2018-11-30 10:14:53  
End at: 2018-11-30 10:15:23  
Local clock offset: 0.812 ms  
Remote clock offset: -31.644 ms

# Below is generated by plot.py at 2018-11-30 10:41:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 157.21 Mbit/s  
95th percentile per-packet one-way delay: 90.165 ms  
Loss rate: 26.52%  
-- Flow 1:  
Average throughput: 72.15 Mbit/s  
95th percentile per-packet one-way delay: 80.460 ms  
Loss rate: 14.87%  
-- Flow 2:  
Average throughput: 98.73 Mbit/s  
95th percentile per-packet one-way delay: 95.287 ms  
Loss rate: 28.34%  
-- Flow 3:  
Average throughput: 60.91 Mbit/s  
95th percentile per-packet one-way delay: 110.514 ms  
Loss rate: 48.17%

Run 5: Report of Indigo — Data Link

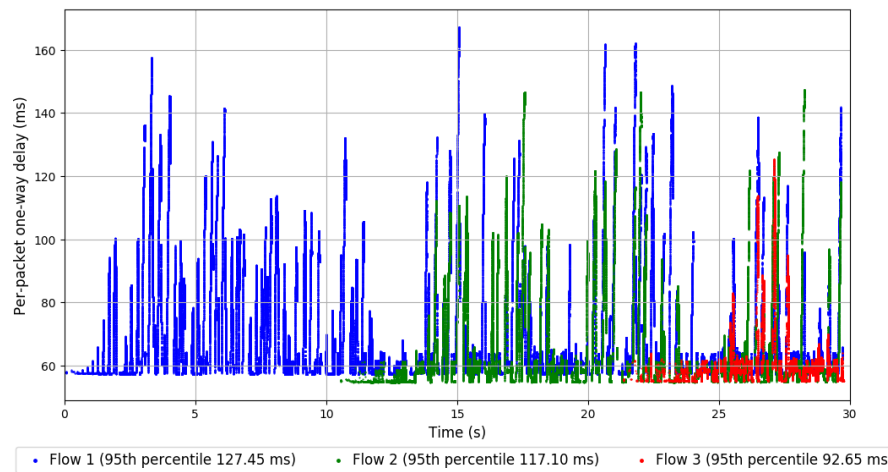
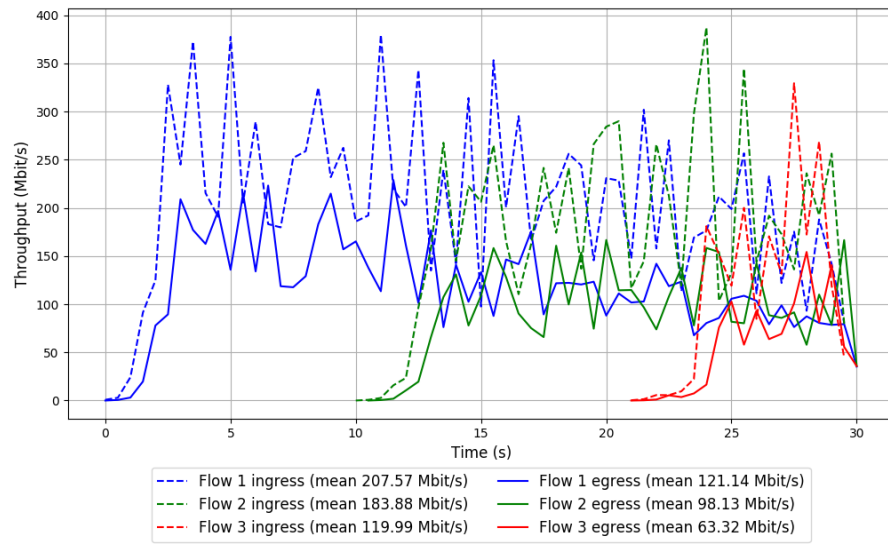


Run 1: Statistics of Indigo-96d2da3

Start at: 2018-11-30 08:00:57  
End at: 2018-11-30 08:01:27  
Local clock offset: -1.278 ms  
Remote clock offset: -43.375 ms

# Below is generated by plot.py at 2018-11-30 10:41:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 201.99 Mbit/s  
95th percentile per-packet one-way delay: 121.526 ms  
Loss rate: 43.75%  
-- Flow 1:  
Average throughput: 121.14 Mbit/s  
95th percentile per-packet one-way delay: 127.453 ms  
Loss rate: 41.62%  
-- Flow 2:  
Average throughput: 98.13 Mbit/s  
95th percentile per-packet one-way delay: 117.097 ms  
Loss rate: 46.47%  
-- Flow 3:  
Average throughput: 63.32 Mbit/s  
95th percentile per-packet one-way delay: 92.646 ms  
Loss rate: 47.23%

# Run 1: Report of Indigo-96d2da3 — Data Link

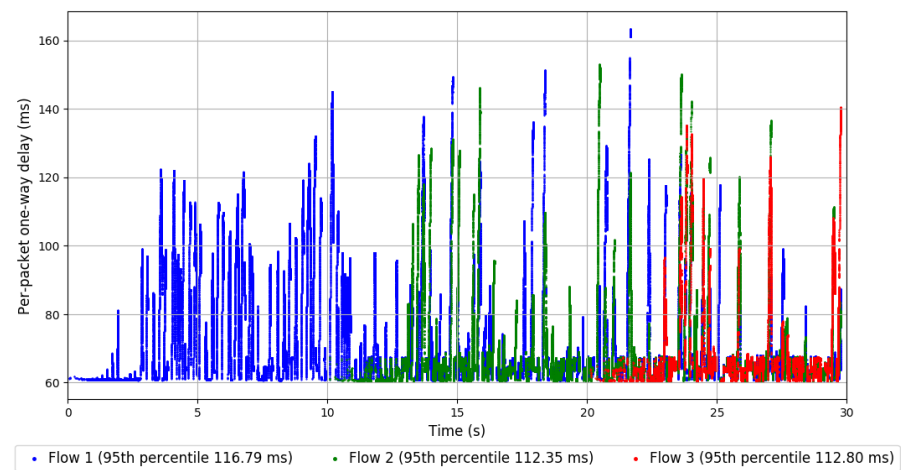
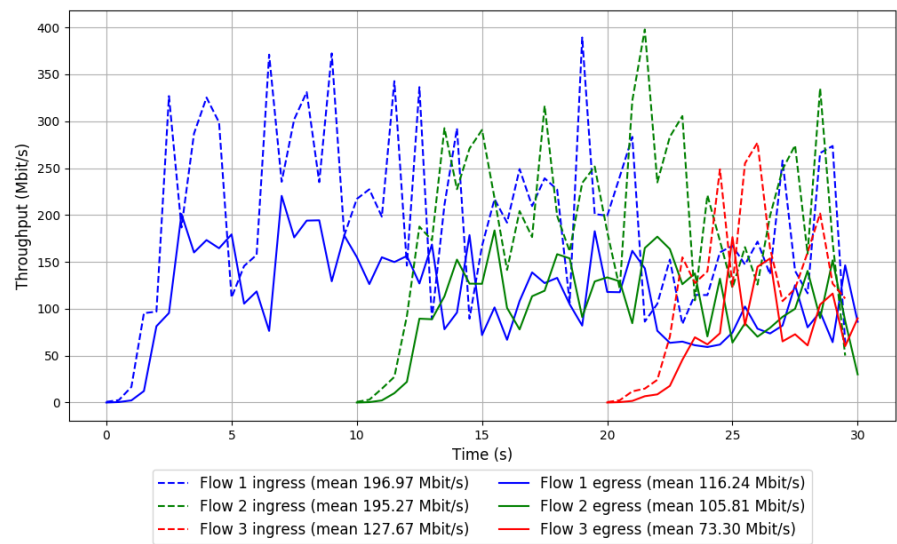


Run 2: Statistics of Indigo-96d2da3

Start at: 2018-11-30 08:35:23  
End at: 2018-11-30 08:35:53  
Local clock offset: 1.234 ms  
Remote clock offset: -36.079 ms

# Below is generated by plot.py at 2018-11-30 10:42:06  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 210.13 Mbit/s  
95th percentile per-packet one-way delay: 115.464 ms  
Loss rate: 42.80%  
-- Flow 1:  
Average throughput: 116.24 Mbit/s  
95th percentile per-packet one-way delay: 116.787 ms  
Loss rate: 40.98%  
-- Flow 2:  
Average throughput: 105.81 Mbit/s  
95th percentile per-packet one-way delay: 112.348 ms  
Loss rate: 45.76%  
-- Flow 3:  
Average throughput: 73.30 Mbit/s  
95th percentile per-packet one-way delay: 112.802 ms  
Loss rate: 42.20%

Run 2: Report of Indigo-96d2da3 — Data Link



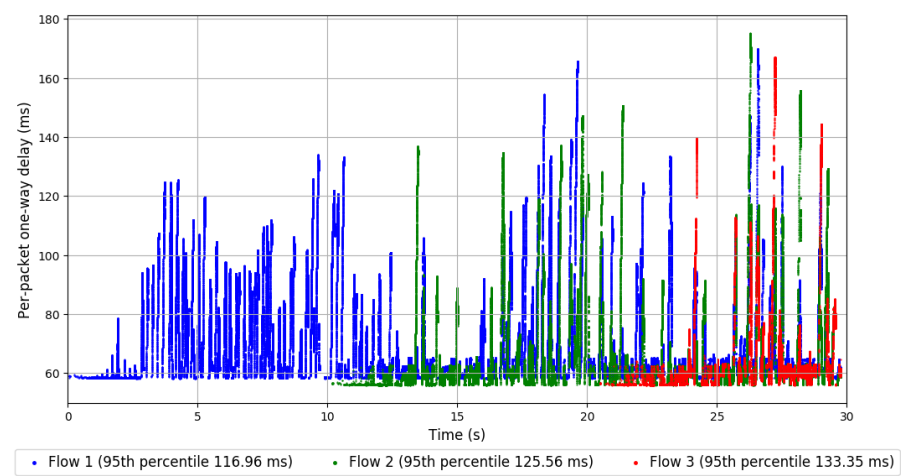
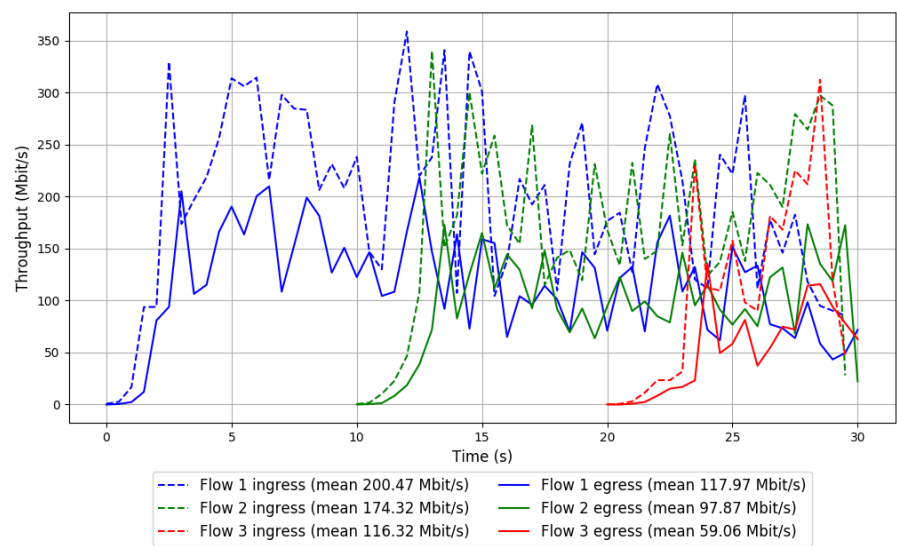


Run 3: Statistics of Indigo-96d2da3

Start at: 2018-11-30 09:09:48  
End at: 2018-11-30 09:10:18  
Local clock offset: -0.992 ms  
Remote clock offset: -40.546 ms

# Below is generated by plot.py at 2018-11-30 10:42:06  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 200.83 Mbit/s  
95th percentile per-packet one-way delay: 120.466 ms  
Loss rate: 42.86%  
-- Flow 1:  
Average throughput: 117.97 Mbit/s  
95th percentile per-packet one-way delay: 116.957 ms  
Loss rate: 41.15%  
-- Flow 2:  
Average throughput: 97.87 Mbit/s  
95th percentile per-packet one-way delay: 125.557 ms  
Loss rate: 43.85%  
-- Flow 3:  
Average throughput: 59.06 Mbit/s  
95th percentile per-packet one-way delay: 133.350 ms  
Loss rate: 49.19%

Run 3: Report of Indigo-96d2da3 — Data Link

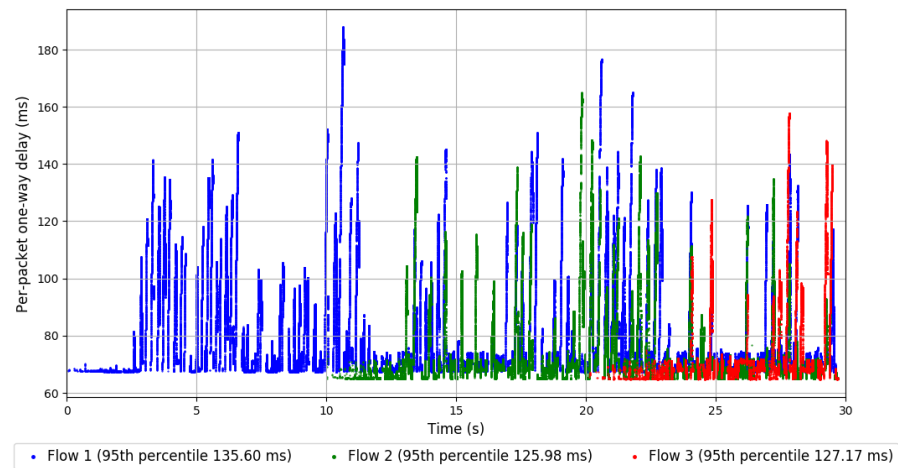
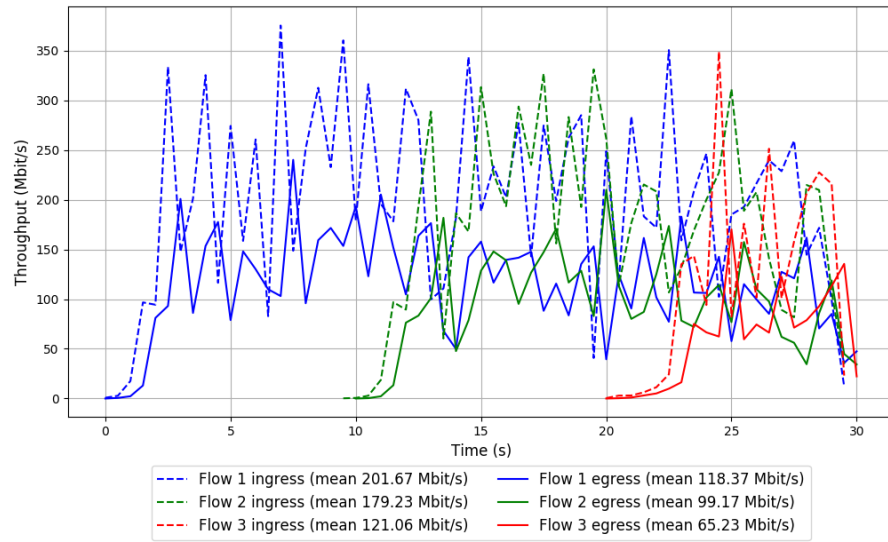


Run 4: Statistics of Indigo-96d2da3

Start at: 2018-11-30 09:50:03  
End at: 2018-11-30 09:50:33  
Local clock offset: 0.378 ms  
Remote clock offset: -30.884 ms

# Below is generated by plot.py at 2018-11-30 10:42:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 204.95 Mbit/s  
95th percentile per-packet one-way delay: 132.687 ms  
Loss rate: 42.94%  
-- Flow 1:  
Average throughput: 118.37 Mbit/s  
95th percentile per-packet one-way delay: 135.598 ms  
Loss rate: 41.30%  
-- Flow 2:  
Average throughput: 99.17 Mbit/s  
95th percentile per-packet one-way delay: 125.980 ms  
Loss rate: 44.67%  
-- Flow 3:  
Average throughput: 65.23 Mbit/s  
95th percentile per-packet one-way delay: 127.174 ms  
Loss rate: 46.12%

#### Run 4: Report of Indigo-96d2da3 — Data Link

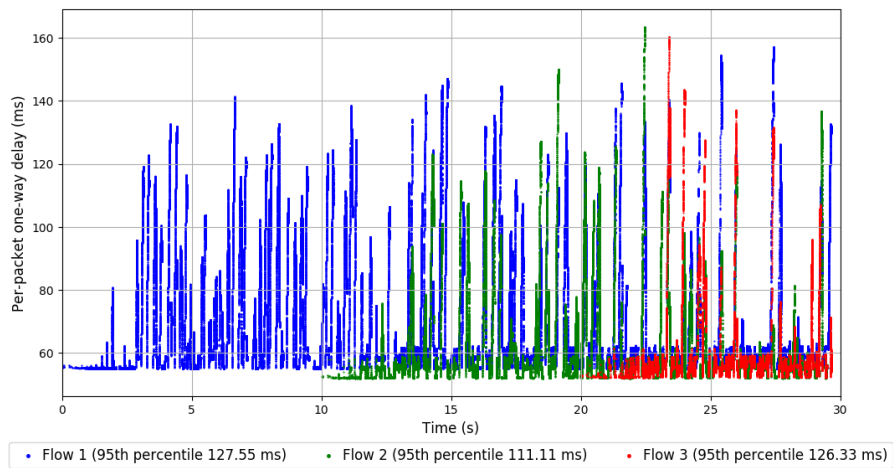
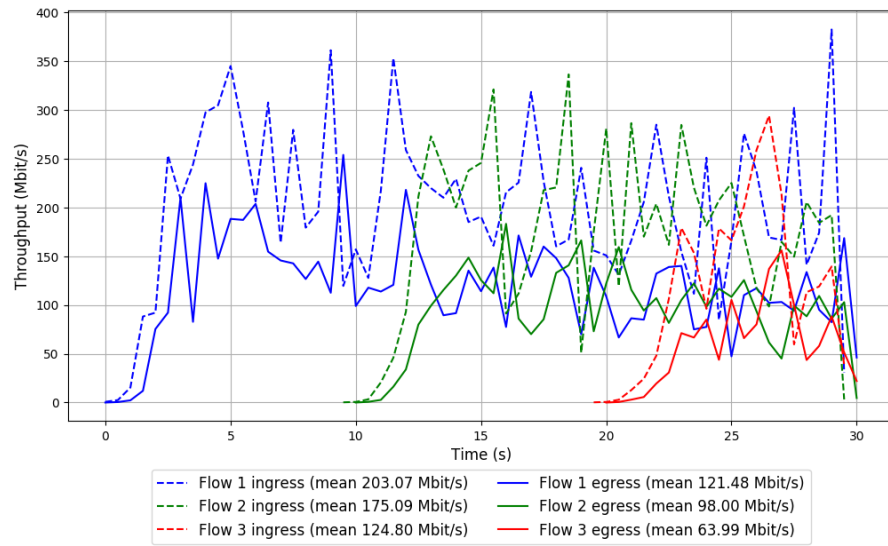


Run 5: Statistics of Indigo-96d2da3

Start at: 2018-11-30 10:24:41  
End at: 2018-11-30 10:25:11  
Local clock offset: -0.244 ms  
Remote clock offset: -44.324 ms

# Below is generated by plot.py at 2018-11-30 10:42:27  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 207.26 Mbit/s  
95th percentile per-packet one-way delay: 123.774 ms  
Loss rate: 42.30%  
-- Flow 1:  
Average throughput: 121.48 Mbit/s  
95th percentile per-packet one-way delay: 127.547 ms  
Loss rate: 40.02%  
-- Flow 2:  
Average throughput: 98.00 Mbit/s  
95th percentile per-packet one-way delay: 111.105 ms  
Loss rate: 44.02%  
-- Flow 3:  
Average throughput: 63.99 Mbit/s  
95th percentile per-packet one-way delay: 126.327 ms  
Loss rate: 48.72%

## Run 5: Report of Indigo-96d2da3 — Data Link

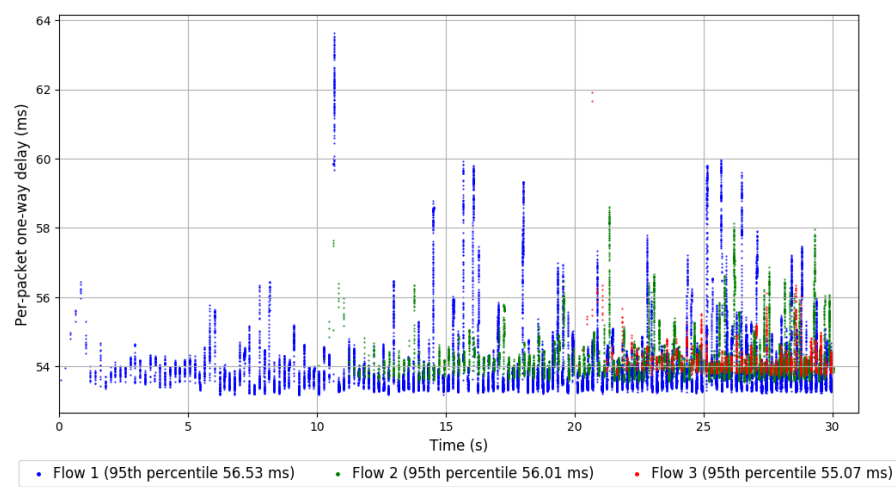
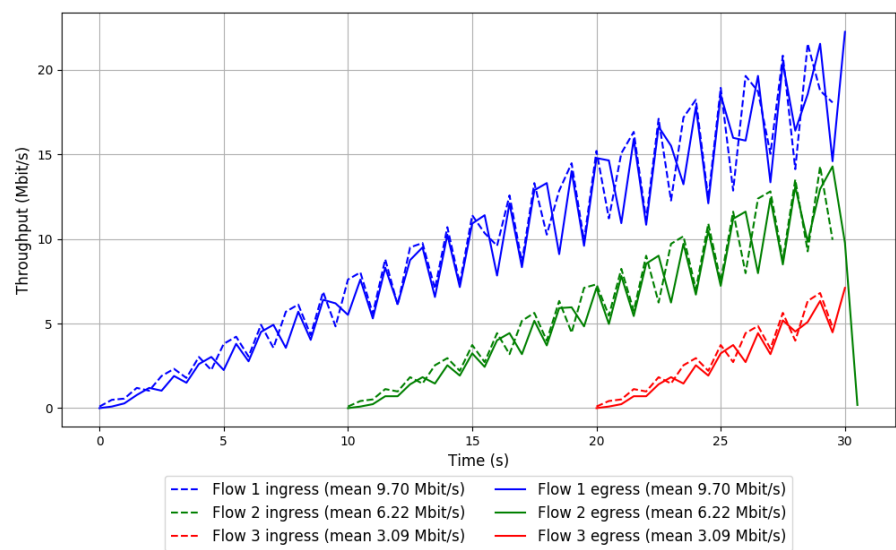


Run 1: Statistics of LEDBAT

Start at: 2018-11-30 07:32:16  
End at: 2018-11-30 07:32:46  
Local clock offset: -0.736 ms  
Remote clock offset: -45.304 ms

# Below is generated by plot.py at 2018-11-30 10:42:27  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 14.84 Mbit/s  
95th percentile per-packet one-way delay: 56.197 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 9.70 Mbit/s  
95th percentile per-packet one-way delay: 56.526 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 6.22 Mbit/s  
95th percentile per-packet one-way delay: 56.010 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 3.09 Mbit/s  
95th percentile per-packet one-way delay: 55.074 ms  
Loss rate: 0.00%

Run 1: Report of LEDBAT — Data Link



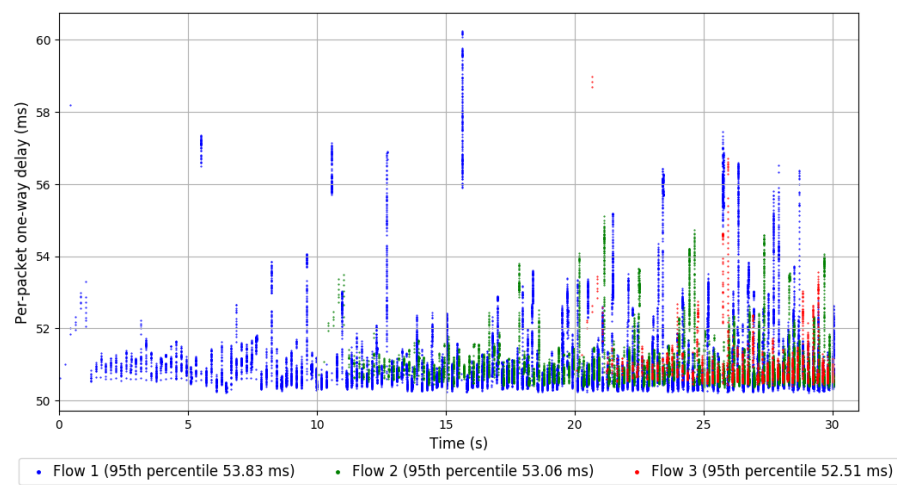
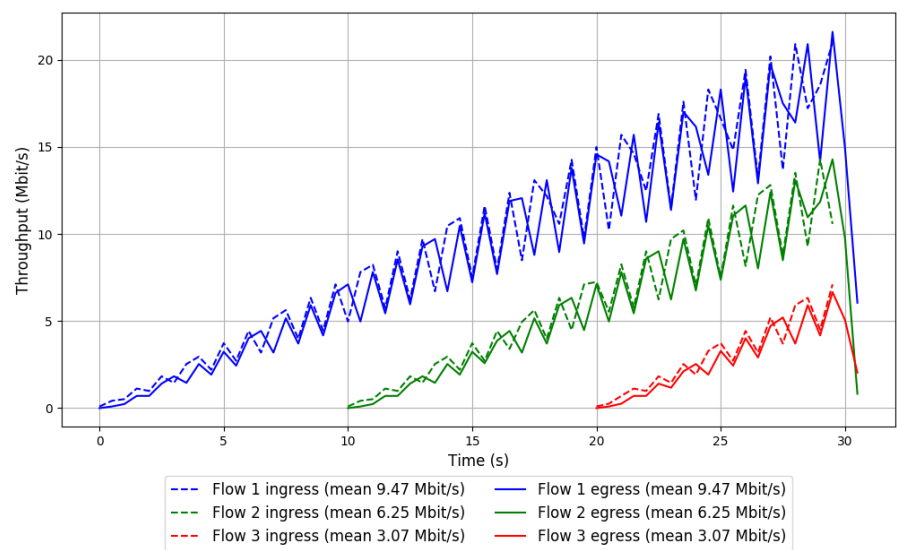


Run 2: Statistics of LEDBAT

Start at: 2018-11-30 08:12:17  
End at: 2018-11-30 08:12:47  
Local clock offset: 0.688 ms  
Remote clock offset: -45.56 ms

# Below is generated by plot.py at 2018-11-30 10:42:27  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 14.65 Mbit/s  
95th percentile per-packet one-way delay: 53.364 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 9.47 Mbit/s  
95th percentile per-packet one-way delay: 53.829 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 6.25 Mbit/s  
95th percentile per-packet one-way delay: 53.061 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 3.07 Mbit/s  
95th percentile per-packet one-way delay: 52.514 ms  
Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link

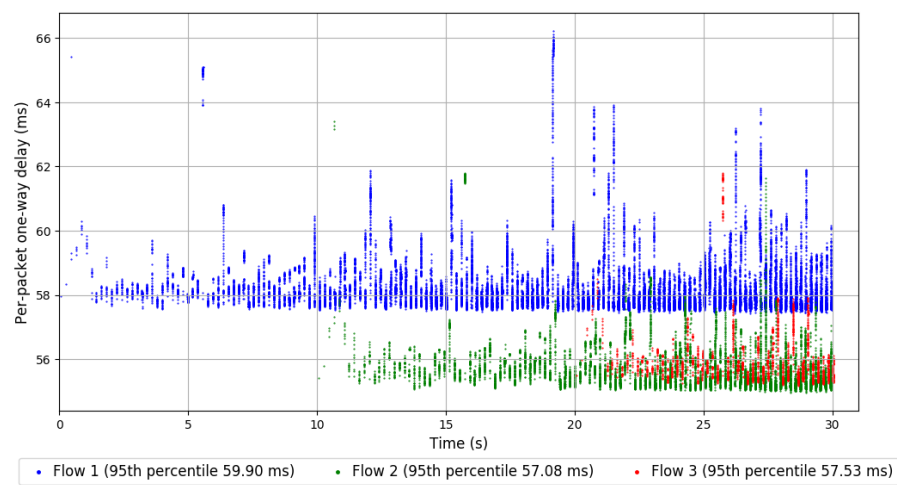
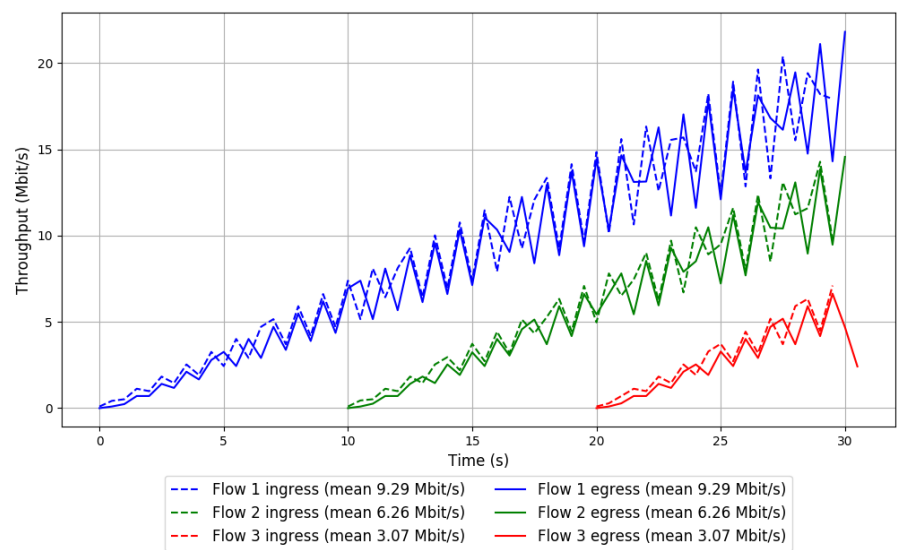


Run 3: Statistics of LEDBAT

Start at: 2018-11-30 08:46:51  
End at: 2018-11-30 08:47:21  
Local clock offset: 3.772 ms  
Remote clock offset: -39.204 ms

# Below is generated by plot.py at 2018-11-30 10:42:27  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 14.44 Mbit/s  
95th percentile per-packet one-way delay: 59.487 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 9.29 Mbit/s  
95th percentile per-packet one-way delay: 59.895 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 6.26 Mbit/s  
95th percentile per-packet one-way delay: 57.080 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 3.07 Mbit/s  
95th percentile per-packet one-way delay: 57.529 ms  
Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link

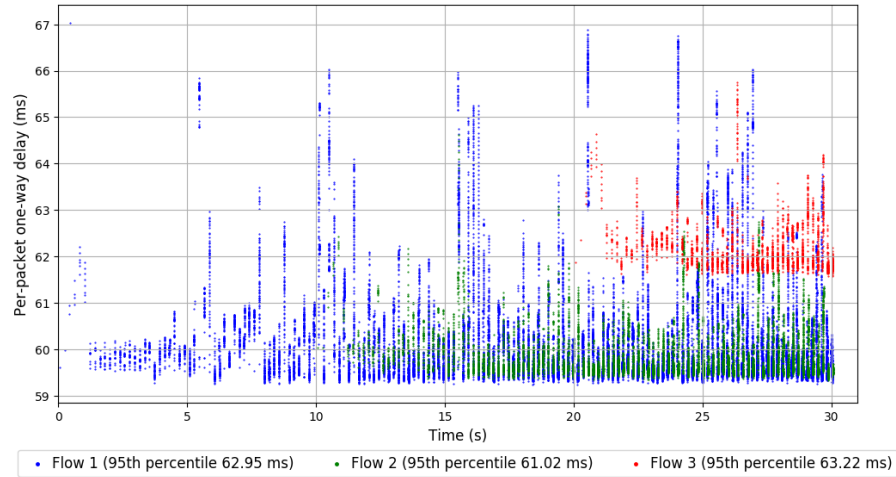
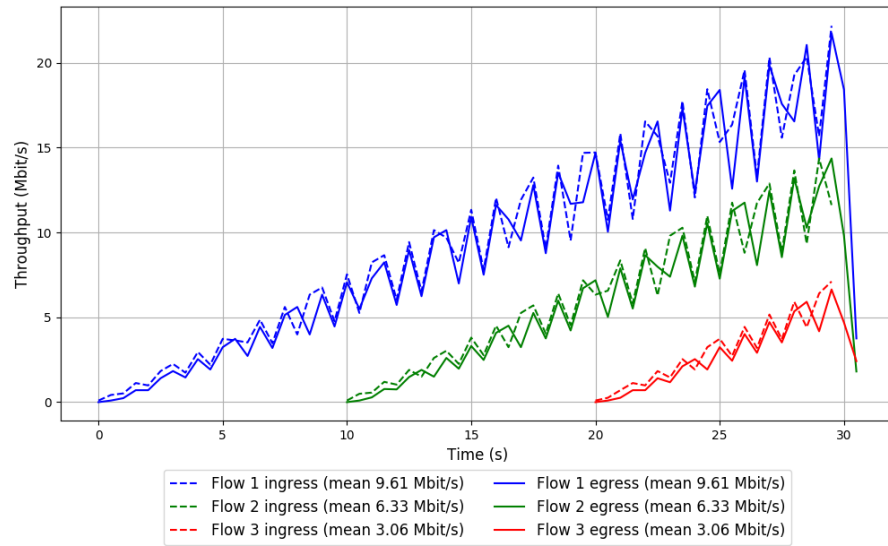


Run 4: Statistics of LEDBAT

Start at: 2018-11-30 09:21:15  
End at: 2018-11-30 09:21:45  
Local clock offset: 0.714 ms  
Remote clock offset: -35.798 ms

# Below is generated by plot.py at 2018-11-30 10:42:27  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 14.84 Mbit/s  
95th percentile per-packet one-way delay: 62.600 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 9.61 Mbit/s  
95th percentile per-packet one-way delay: 62.945 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 6.33 Mbit/s  
95th percentile per-packet one-way delay: 61.015 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 3.06 Mbit/s  
95th percentile per-packet one-way delay: 63.224 ms  
Loss rate: 0.00%

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

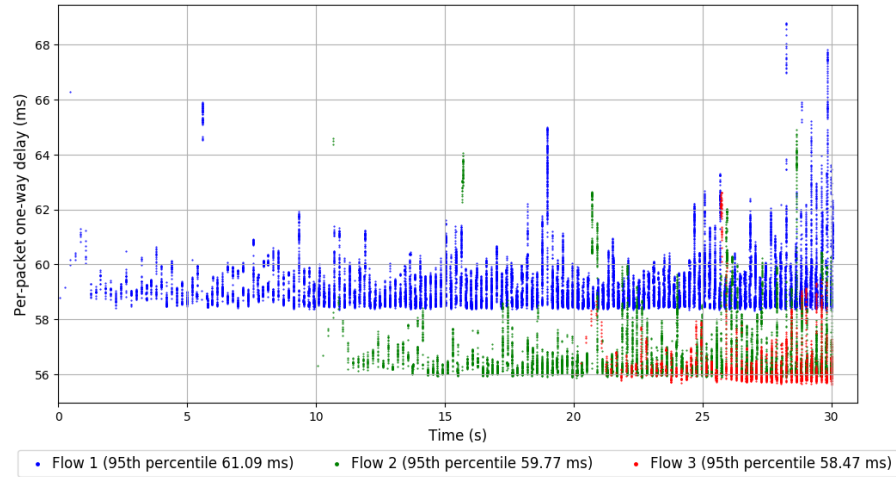
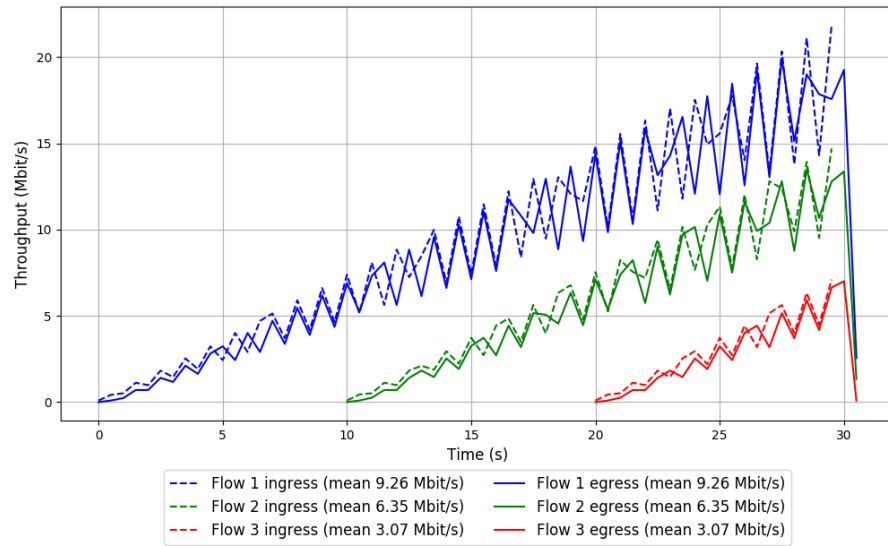


Run 5: Statistics of LEDBAT

Start at: 2018-11-30 10:01:30  
End at: 2018-11-30 10:02:00  
Local clock offset: 1.721 ms  
Remote clock offset: -37.872 ms

# Below is generated by plot.py at 2018-11-30 10:42:27  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 14.50 Mbit/s  
95th percentile per-packet one-way delay: 60.763 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 9.26 Mbit/s  
95th percentile per-packet one-way delay: 61.094 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 6.35 Mbit/s  
95th percentile per-packet one-way delay: 59.766 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 3.07 Mbit/s  
95th percentile per-packet one-way delay: 58.467 ms  
Loss rate: 0.00%

## Run 5: Report of LEDBAT — Data Link



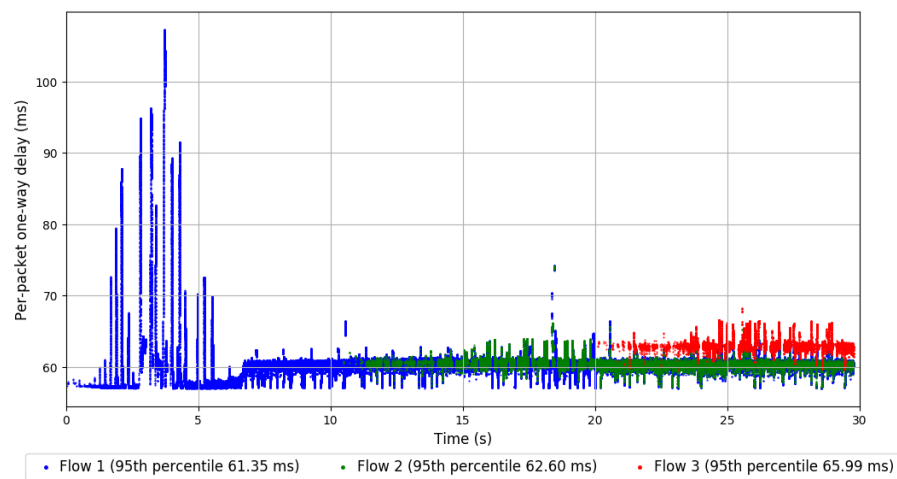
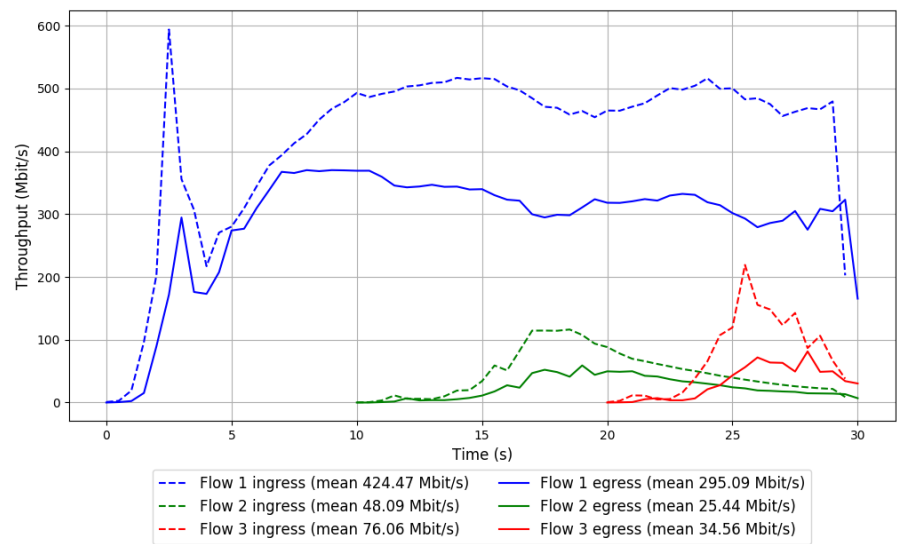


Run 1: Statistics of Indigo-Muses

Start at: 2018-11-30 07:48:48  
End at: 2018-11-30 07:49:18  
Local clock offset: -0.764 ms  
Remote clock offset: -41.844 ms

# Below is generated by plot.py at 2018-11-30 10:45:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 322.81 Mbit/s  
95th percentile per-packet one-way delay: 62.984 ms  
Loss rate: 32.79%  
-- Flow 1:  
Average throughput: 295.09 Mbit/s  
95th percentile per-packet one-way delay: 61.347 ms  
Loss rate: 30.48%  
-- Flow 2:  
Average throughput: 25.44 Mbit/s  
95th percentile per-packet one-way delay: 62.602 ms  
Loss rate: 47.11%  
-- Flow 3:  
Average throughput: 34.56 Mbit/s  
95th percentile per-packet one-way delay: 65.990 ms  
Loss rate: 54.56%

Run 1: Report of Indigo-Muses — Data Link

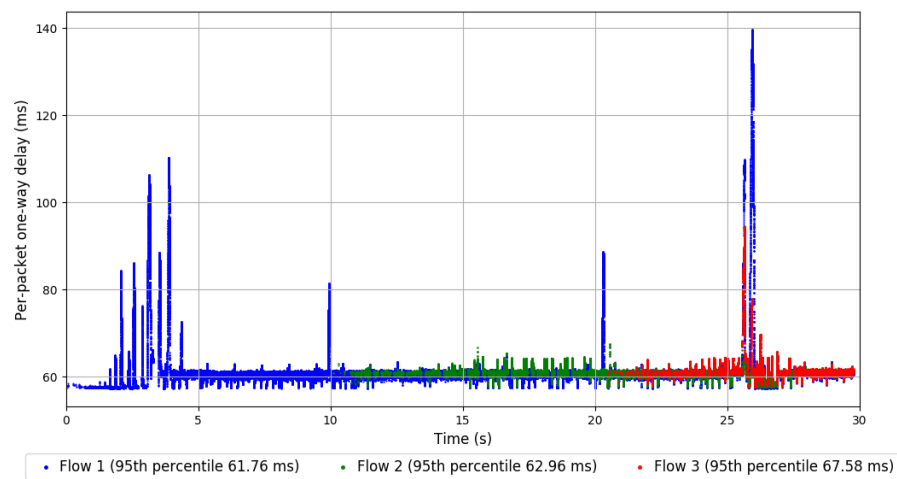
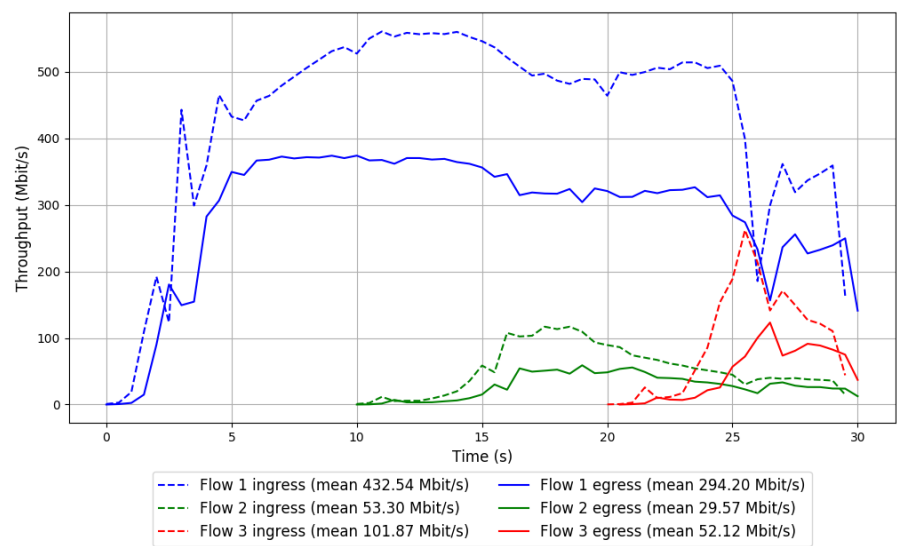


Run 2: Statistics of Indigo-Muses

Start at: 2018-11-30 08:23:16  
End at: 2018-11-30 08:23:46  
Local clock offset: 1.257 ms  
Remote clock offset: -38.385 ms

# Below is generated by plot.py at 2018-11-30 10:46:05  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 330.03 Mbit/s  
95th percentile per-packet one-way delay: 62.518 ms  
Loss rate: 33.93%  
-- Flow 1:  
Average throughput: 294.20 Mbit/s  
95th percentile per-packet one-way delay: 61.761 ms  
Loss rate: 31.97%  
-- Flow 2:  
Average throughput: 29.57 Mbit/s  
95th percentile per-packet one-way delay: 62.960 ms  
Loss rate: 44.56%  
-- Flow 3:  
Average throughput: 52.12 Mbit/s  
95th percentile per-packet one-way delay: 67.578 ms  
Loss rate: 48.82%

Run 2: Report of Indigo-Muses — Data Link

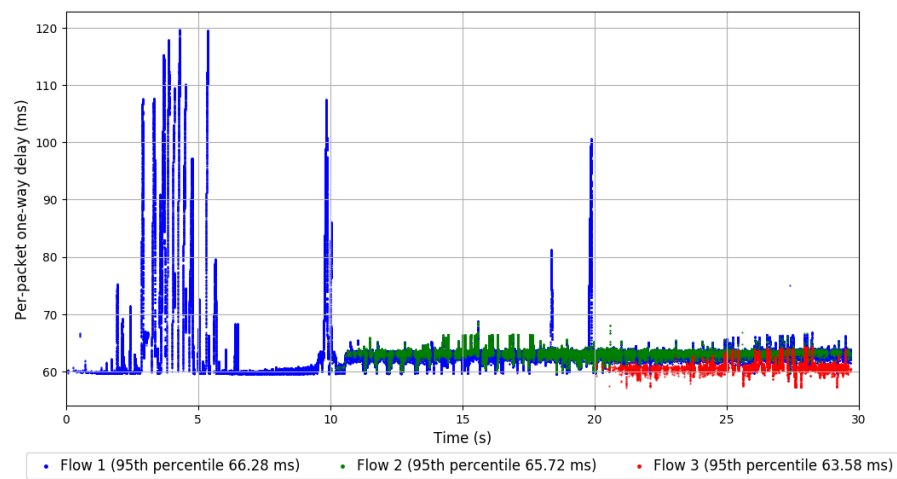
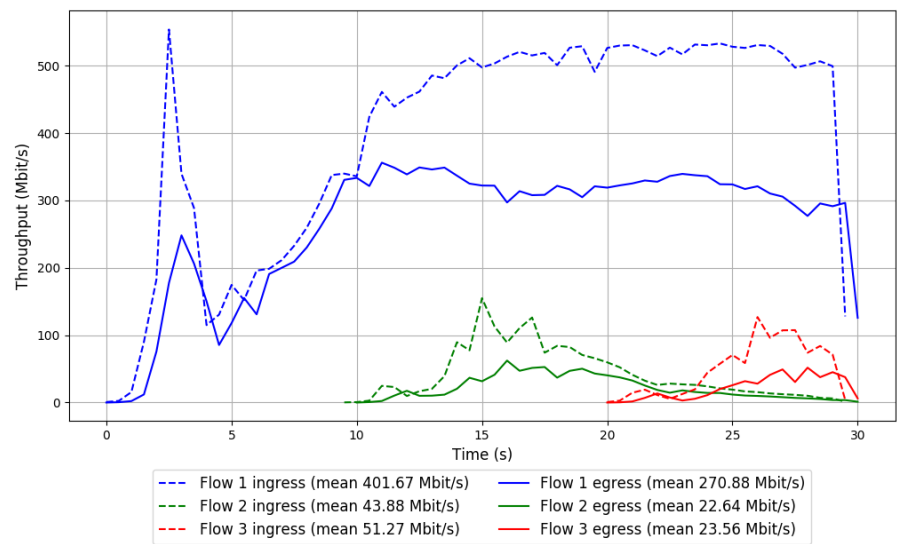


Run 3: Statistics of Indigo-Muses

Start at: 2018-11-30 08:57:52  
End at: 2018-11-30 08:58:22  
Local clock offset: 0.752 ms  
Remote clock offset: -38.501 ms

# Below is generated by plot.py at 2018-11-30 10:46:05  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 293.56 Mbit/s  
95th percentile per-packet one-way delay: 66.008 ms  
Loss rate: 34.39%  
-- Flow 1:  
Average throughput: 270.88 Mbit/s  
95th percentile per-packet one-way delay: 66.275 ms  
Loss rate: 32.55%  
-- Flow 2:  
Average throughput: 22.64 Mbit/s  
95th percentile per-packet one-way delay: 65.716 ms  
Loss rate: 48.40%  
-- Flow 3:  
Average throughput: 23.56 Mbit/s  
95th percentile per-packet one-way delay: 63.576 ms  
Loss rate: 54.05%

Run 3: Report of Indigo-Muses — Data Link

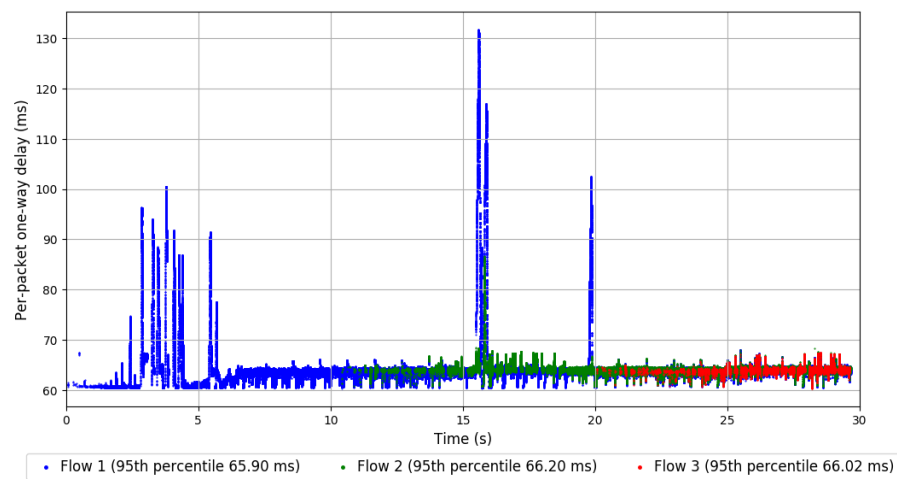
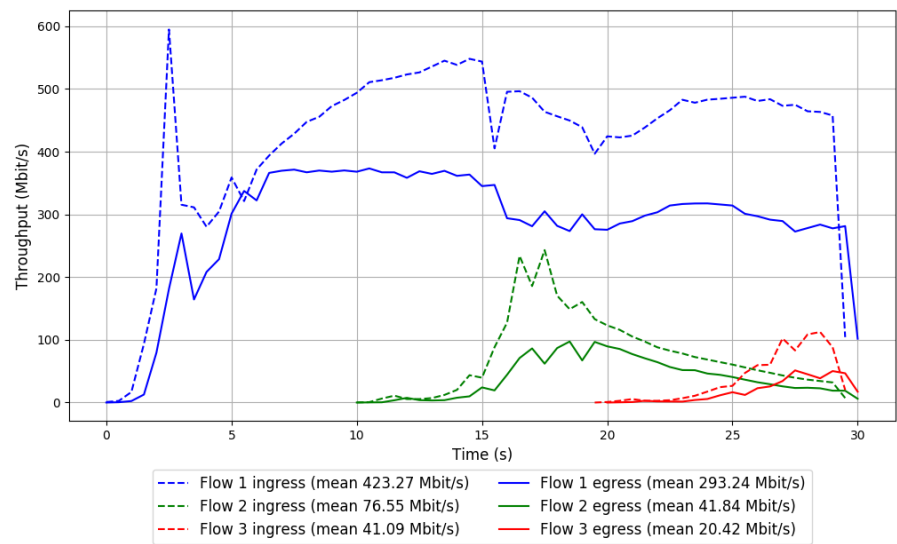


Run 4: Statistics of Indigo-Muses

Start at: 2018-11-30 09:37:48  
End at: 2018-11-30 09:38:18  
Local clock offset: 1.358 ms  
Remote clock offset: -36.969 ms

# Below is generated by plot.py at 2018-11-30 10:46:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 327.03 Mbit/s  
95th percentile per-packet one-way delay: 65.974 ms  
Loss rate: 32.75%  
-- Flow 1:  
Average throughput: 293.24 Mbit/s  
95th percentile per-packet one-way delay: 65.903 ms  
Loss rate: 30.72%  
-- Flow 2:  
Average throughput: 41.84 Mbit/s  
95th percentile per-packet one-way delay: 66.201 ms  
Loss rate: 45.34%  
-- Flow 3:  
Average throughput: 20.42 Mbit/s  
95th percentile per-packet one-way delay: 66.021 ms  
Loss rate: 50.29%

Run 4: Report of Indigo-Muses — Data Link



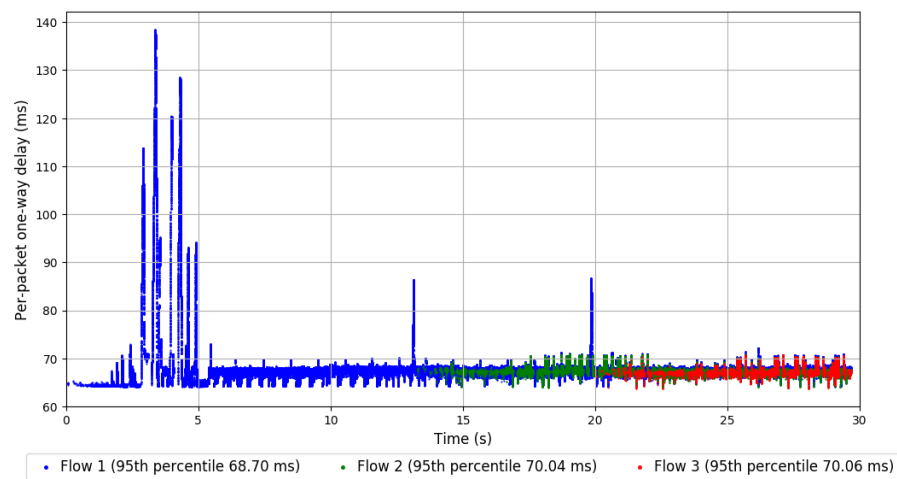
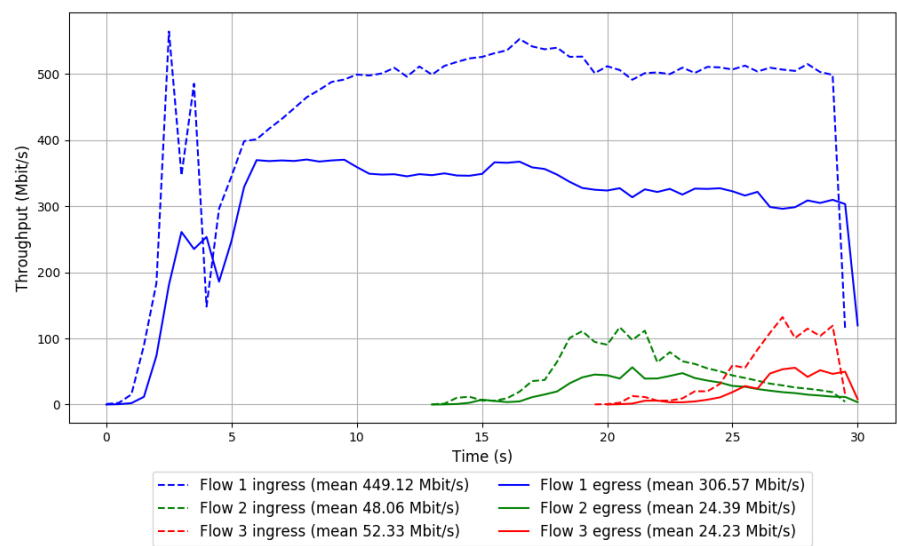


Run 5: Statistics of Indigo-Muses

Start at: 2018-11-30 10:12:26  
End at: 2018-11-30 10:12:56  
Local clock offset: -0.899 ms  
Remote clock offset: -32.015 ms

# Below is generated by plot.py at 2018-11-30 10:46:29  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 327.98 Mbit/s  
95th percentile per-packet one-way delay: 68.999 ms  
Loss rate: 33.44%  
-- Flow 1:  
Average throughput: 306.57 Mbit/s  
95th percentile per-packet one-way delay: 68.700 ms  
Loss rate: 31.73%  
-- Flow 2:  
Average throughput: 24.39 Mbit/s  
95th percentile per-packet one-way delay: 70.041 ms  
Loss rate: 49.25%  
-- Flow 3:  
Average throughput: 24.23 Mbit/s  
95th percentile per-packet one-way delay: 70.057 ms  
Loss rate: 53.72%

Run 5: Report of Indigo-Muses — Data Link

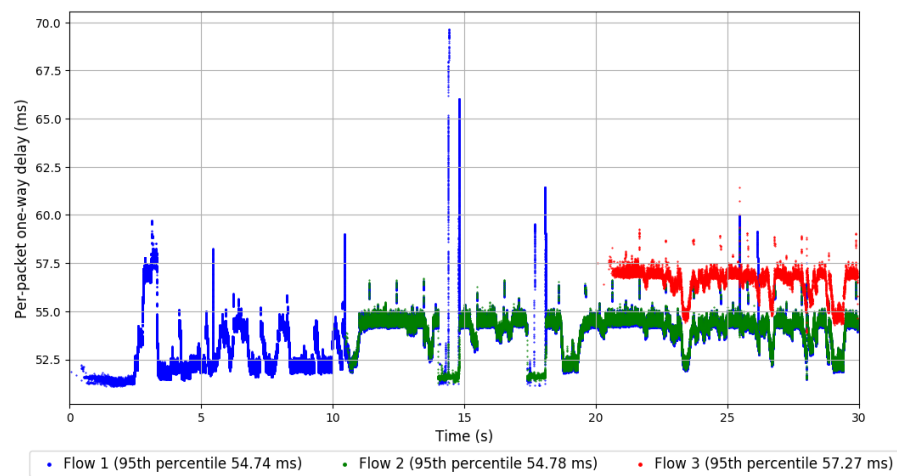
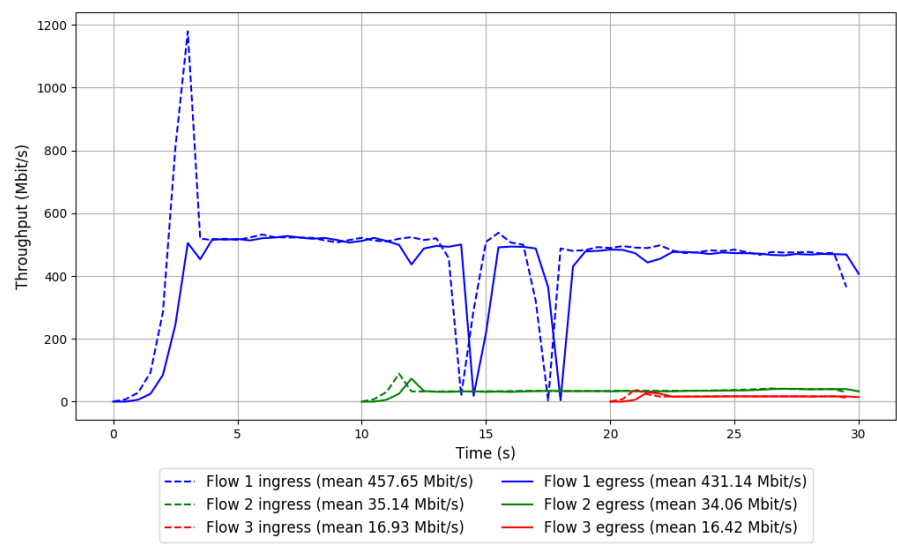


Run 1: Statistics of PCC-Allegro

Start at: 2018-11-30 07:35:59  
End at: 2018-11-30 07:36:29  
Local clock offset: 2.086 ms  
Remote clock offset: -44.89 ms

# Below is generated by plot.py at 2018-11-30 10:47:24  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 459.20 Mbit/s  
95th percentile per-packet one-way delay: 54.855 ms  
Loss rate: 5.62%  
-- Flow 1:  
Average throughput: 431.14 Mbit/s  
95th percentile per-packet one-way delay: 54.742 ms  
Loss rate: 5.79%  
-- Flow 2:  
Average throughput: 34.06 Mbit/s  
95th percentile per-packet one-way delay: 54.776 ms  
Loss rate: 3.06%  
-- Flow 3:  
Average throughput: 16.42 Mbit/s  
95th percentile per-packet one-way delay: 57.272 ms  
Loss rate: 3.06%

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2018-11-30 08:16:01

End at: 2018-11-30 08:16:31

Local clock offset: 1.302 ms

Remote clock offset: -42.464 ms

# Below is generated by plot.py at 2018-11-30 10:47:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 443.46 Mbit/s

95th percentile per-packet one-way delay: 58.783 ms

Loss rate: 4.70%

-- Flow 1:

Average throughput: 427.14 Mbit/s

95th percentile per-packet one-way delay: 58.795 ms

Loss rate: 4.80%

-- Flow 2:

Average throughput: 8.82 Mbit/s

95th percentile per-packet one-way delay: 56.016 ms

Loss rate: 1.18%

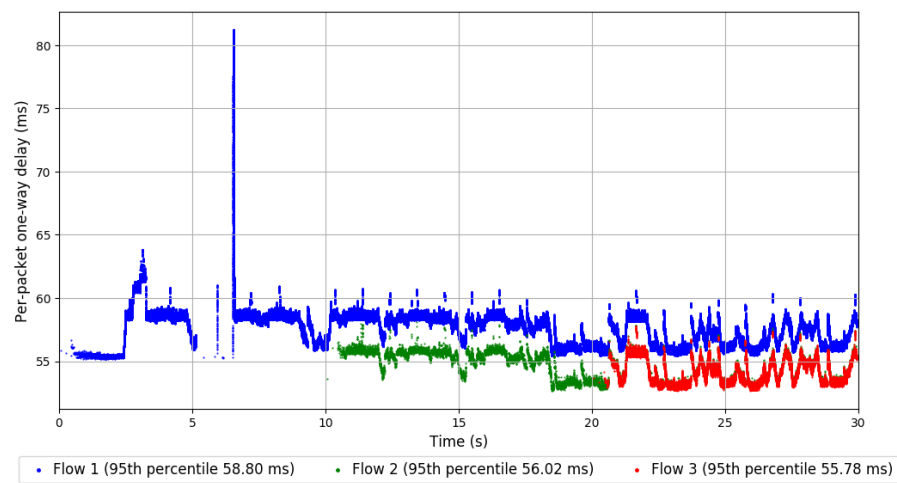
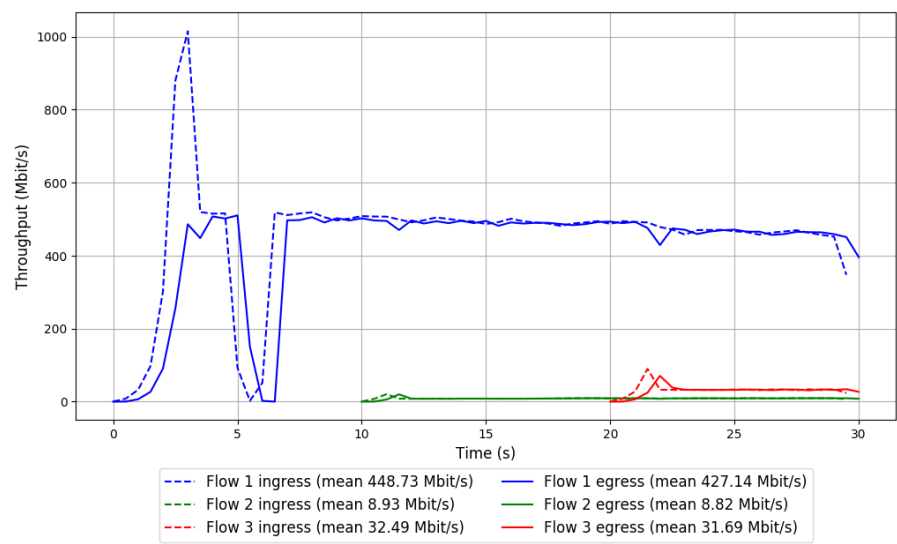
-- Flow 3:

Average throughput: 31.69 Mbit/s

95th percentile per-packet one-way delay: 55.781 ms

Loss rate: 2.45%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2018-11-30 08:50:36

End at: 2018-11-30 08:51:06

Local clock offset: 1.307 ms

Remote clock offset: -29.549 ms

# Below is generated by plot.py at 2018-11-30 10:47:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 453.43 Mbit/s

95th percentile per-packet one-way delay: 71.892 ms

Loss rate: 5.40%

-- Flow 1:

Average throughput: 422.51 Mbit/s

95th percentile per-packet one-way delay: 70.114 ms

Loss rate: 5.57%

-- Flow 2:

Average throughput: 31.67 Mbit/s

95th percentile per-packet one-way delay: 72.608 ms

Loss rate: 2.65%

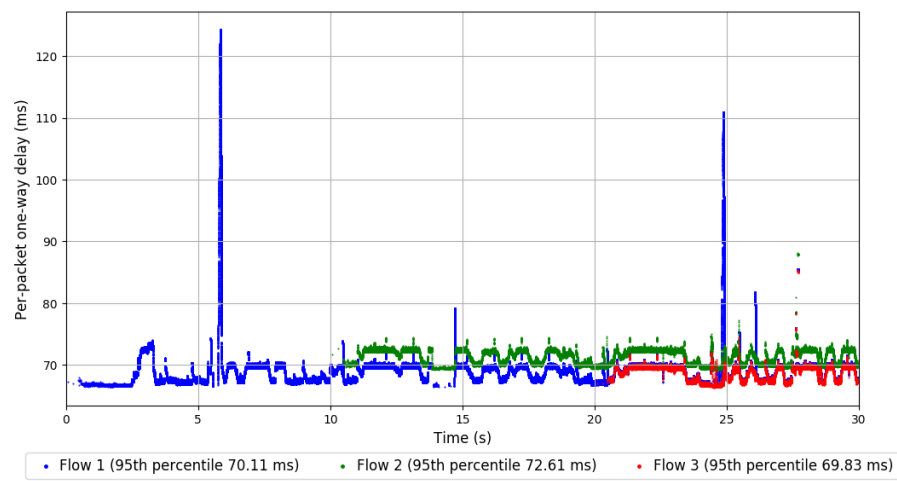
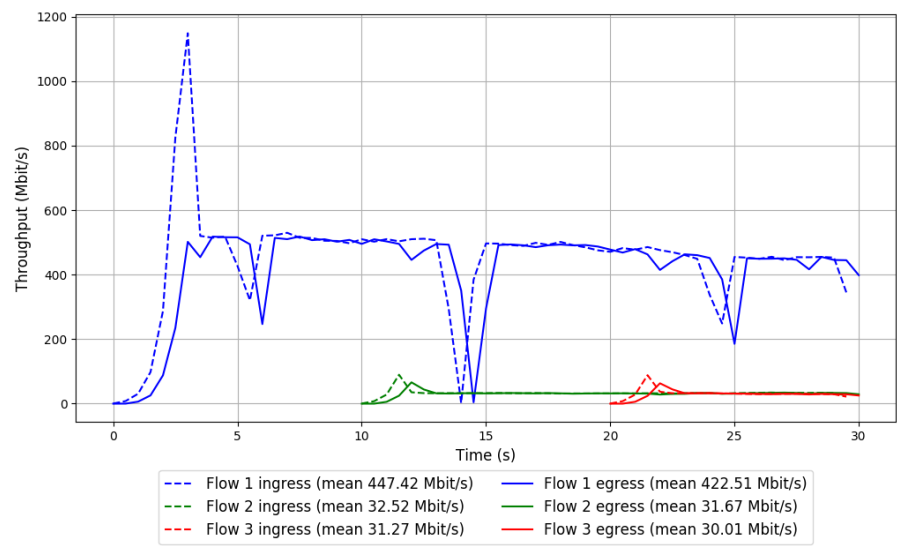
-- Flow 3:

Average throughput: 30.01 Mbit/s

95th percentile per-packet one-way delay: 69.832 ms

Loss rate: 4.02%

Run 3: Report of PCC-Allegro — Data Link





Run 4: Statistics of PCC-Allegro

Start at: 2018-11-30 09:24:46

End at: 2018-11-30 09:25:16

Local clock offset: 0.567 ms

Remote clock offset: -39.091 ms

# Below is generated by plot.py at 2018-11-30 10:51:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 467.13 Mbit/s

95th percentile per-packet one-way delay: 59.829 ms

Loss rate: 4.34%

-- Flow 1:

Average throughput: 434.73 Mbit/s

95th percentile per-packet one-way delay: 59.705 ms

Loss rate: 4.52%

-- Flow 2:

Average throughput: 32.94 Mbit/s

95th percentile per-packet one-way delay: 62.015 ms

Loss rate: 1.62%

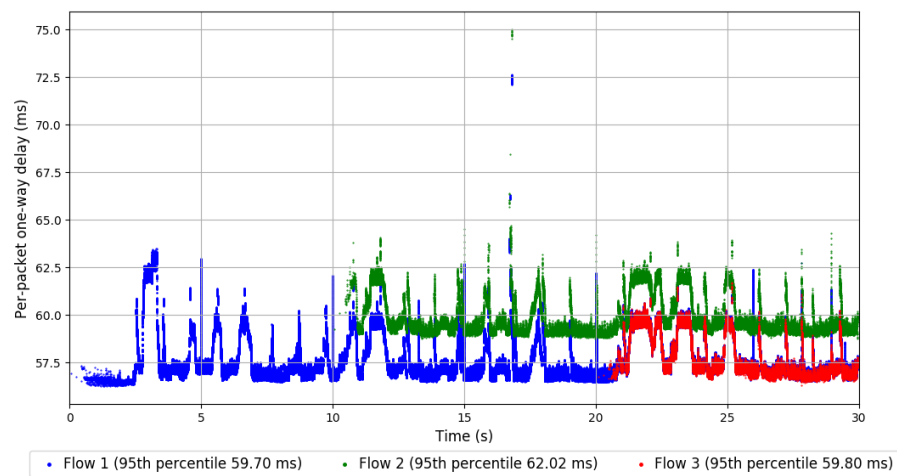
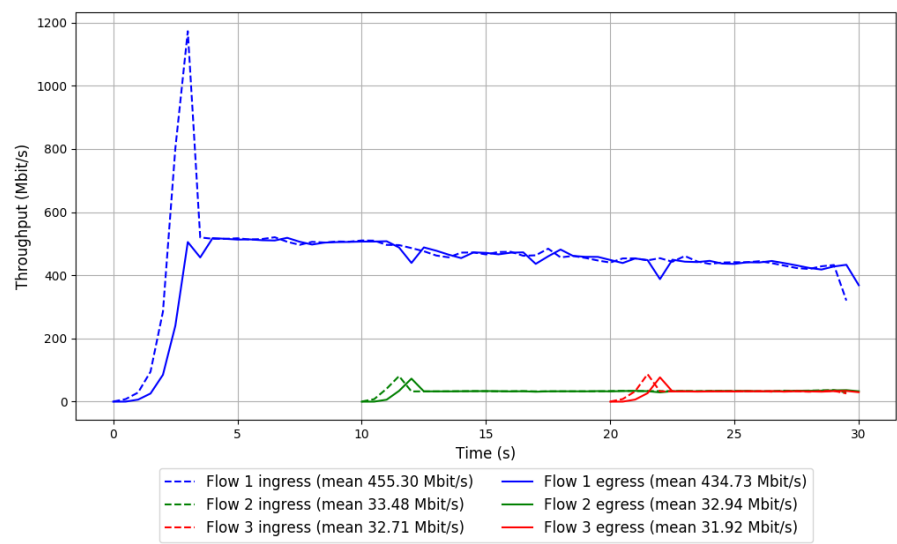
-- Flow 3:

Average throughput: 31.92 Mbit/s

95th percentile per-packet one-way delay: 59.795 ms

Loss rate: 2.40%

Run 4: Report of PCC-Allegro — Data Link

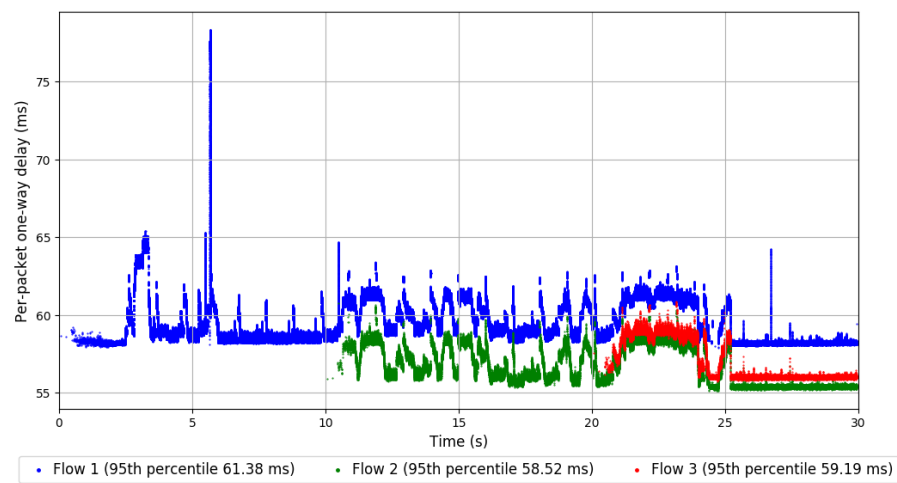
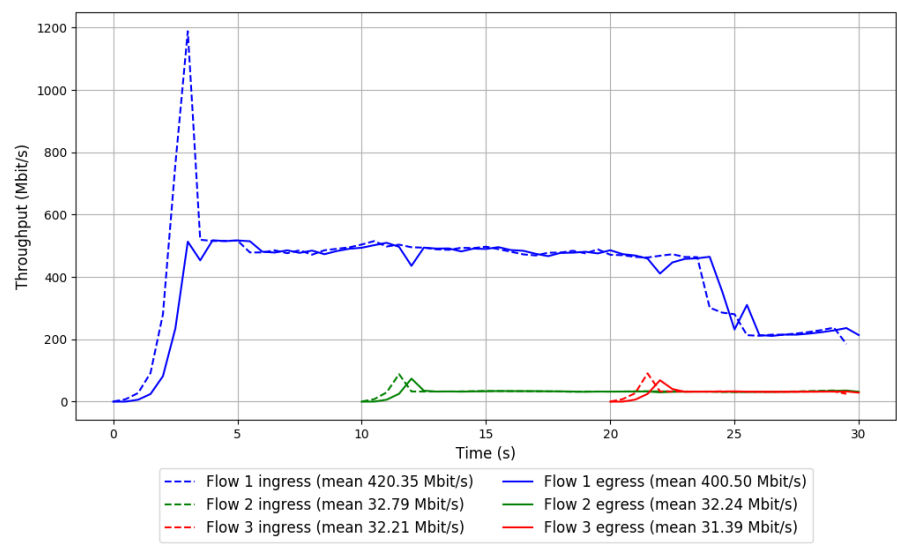


Run 5: Statistics of PCC-Allegro

Start at: 2018-11-30 10:05:14  
End at: 2018-11-30 10:05:44  
Local clock offset: 1.155 ms  
Remote clock offset: -38.395 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 432.29 Mbit/s  
95th percentile per-packet one-way delay: 61.363 ms  
Loss rate: 4.52%  
-- Flow 1:  
Average throughput: 400.50 Mbit/s  
95th percentile per-packet one-way delay: 61.382 ms  
Loss rate: 4.72%  
-- Flow 2:  
Average throughput: 32.24 Mbit/s  
95th percentile per-packet one-way delay: 58.517 ms  
Loss rate: 1.69%  
-- Flow 3:  
Average throughput: 31.39 Mbit/s  
95th percentile per-packet one-way delay: 59.188 ms  
Loss rate: 2.56%

Run 5: Report of PCC-Allegro — Data Link

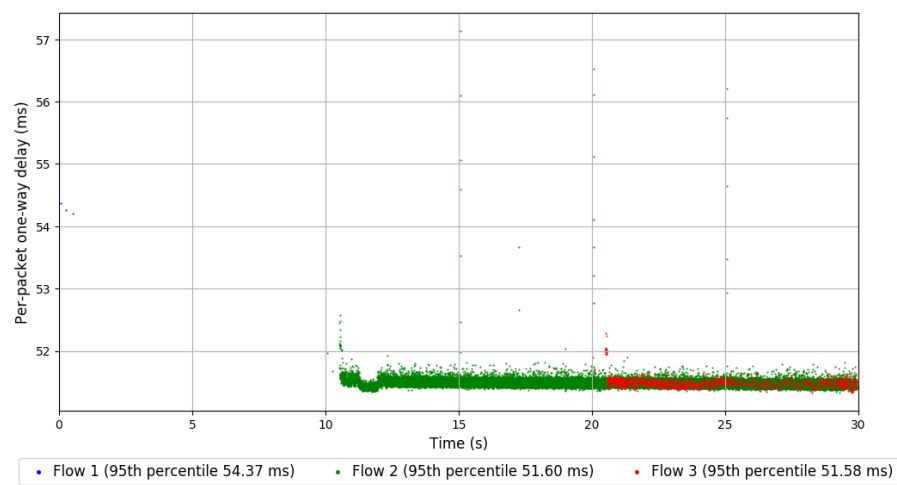
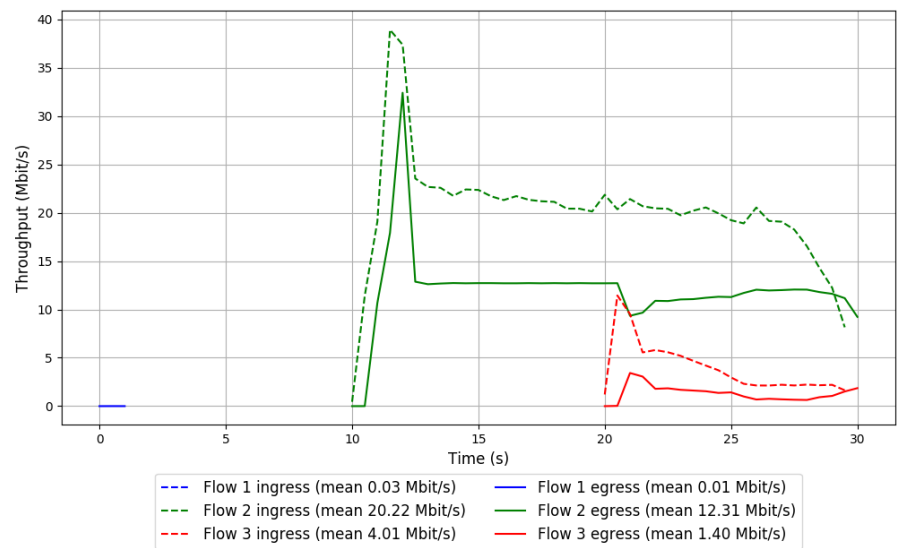


```
Run 1: Statistics of PCC-Expr

Start at: 2018-11-30 07:47:30
End at: 2018-11-30 07:48:00
Local clock offset: 1.062 ms
Remote clock offset: -45.888 ms

# Below is generated by plot.py at 2018-11-30 10:51:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.65 Mbit/s
95th percentile per-packet one-way delay: 51.602 ms
Loss rate: 41.44%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 54.367 ms
Loss rate: 80.00%
-- Flow 2:
Average throughput: 12.31 Mbit/s
95th percentile per-packet one-way delay: 51.602 ms
Loss rate: 39.11%
-- Flow 3:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 51.576 ms
Loss rate: 65.06%
```

Run 1: Report of PCC-Expr — Data Link

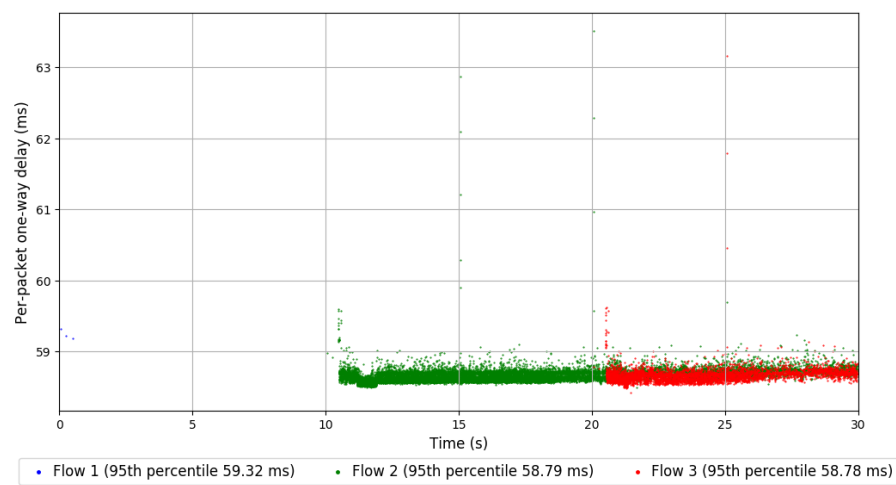
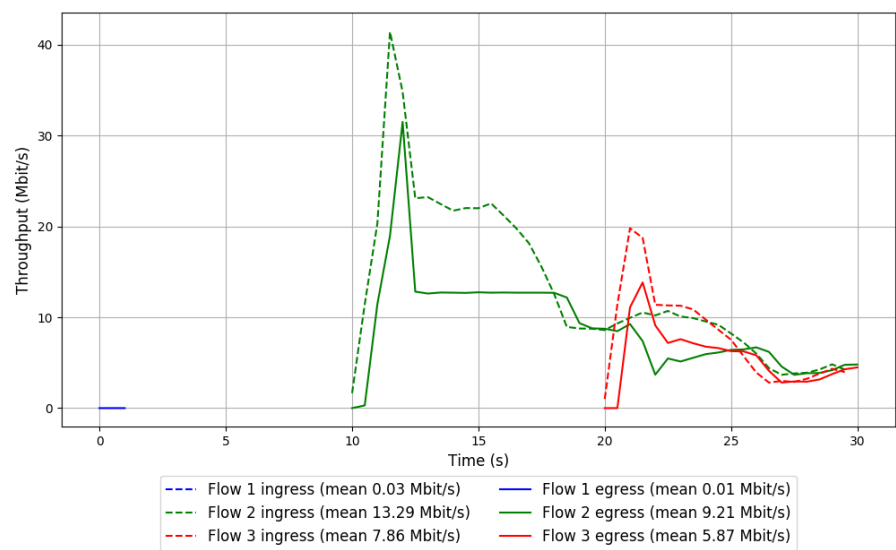


Run 2: Statistics of PCC-Expr

Start at: 2018-11-30 08:21:57  
End at: 2018-11-30 08:22:27  
Local clock offset: 0.009 ms  
Remote clock offset: -38.639 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.07 Mbit/s  
95th percentile per-packet one-way delay: 58.790 ms  
Loss rate: 29.49%  
-- Flow 1:  
Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 59.319 ms  
Loss rate: 80.00%  
-- Flow 2:  
Average throughput: 9.21 Mbit/s  
95th percentile per-packet one-way delay: 58.792 ms  
Loss rate: 30.74%  
-- Flow 3:  
Average throughput: 5.87 Mbit/s  
95th percentile per-packet one-way delay: 58.785 ms  
Loss rate: 25.25%

Run 2: Report of PCC-Expr — Data Link



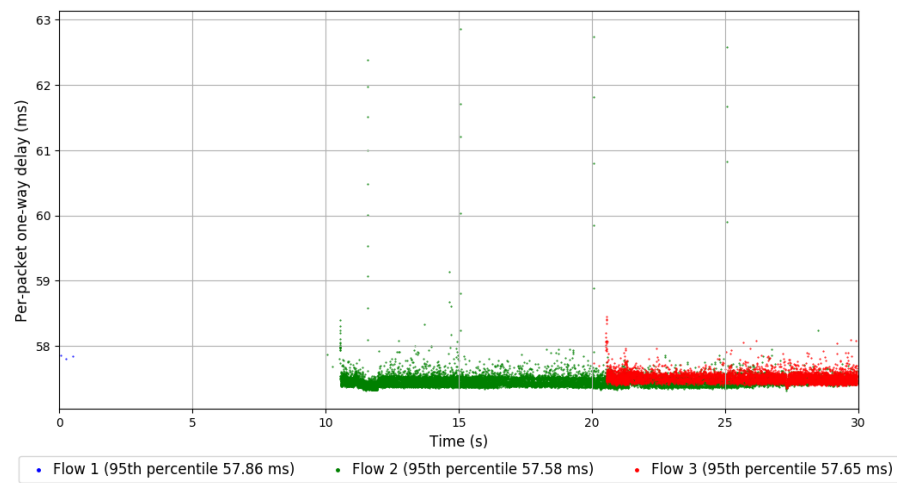
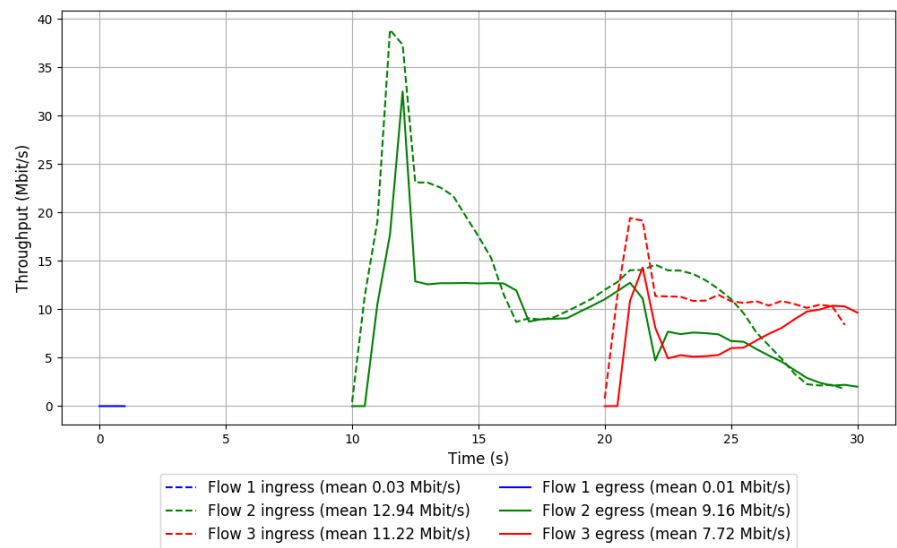


Run 3: Statistics of PCC-Expr

Start at: 2018-11-30 08:56:32  
End at: 2018-11-30 08:57:02  
Local clock offset: -0.942 ms  
Remote clock offset: -40.093 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.64 Mbit/s  
95th percentile per-packet one-way delay: 57.608 ms  
Loss rate: 29.81%  
-- Flow 1:  
Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 57.864 ms  
Loss rate: 80.00%  
-- Flow 2:  
Average throughput: 9.16 Mbit/s  
95th percentile per-packet one-way delay: 57.582 ms  
Loss rate: 29.23%  
-- Flow 3:  
Average throughput: 7.72 Mbit/s  
95th percentile per-packet one-way delay: 57.647 ms  
Loss rate: 31.17%

Run 3: Report of PCC-Expr — Data Link

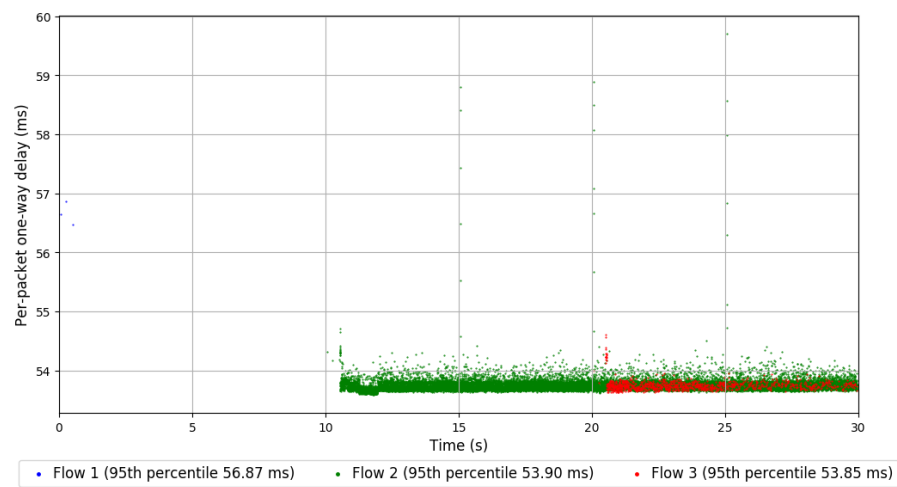
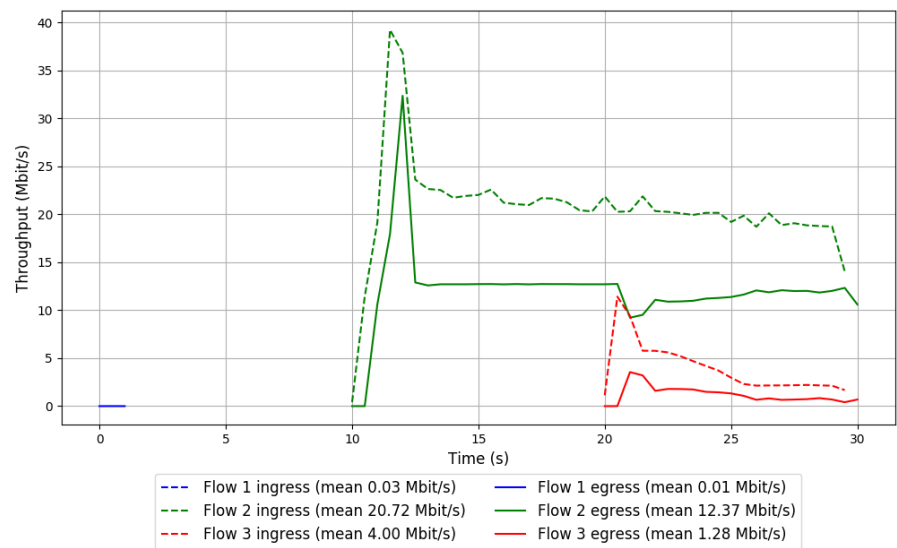


```
Run 4: Statistics of PCC-Expr

Start at: 2018-11-30 09:36:28
End at: 2018-11-30 09:36:58
Local clock offset: -2.095 ms
Remote clock offset: -44.935 ms

# Below is generated by plot.py at 2018-11-30 10:51:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.65 Mbit/s
95th percentile per-packet one-way delay: 53.899 ms
Loss rate: 42.72%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 56.869 ms
Loss rate: 80.00%
-- Flow 2:
Average throughput: 12.37 Mbit/s
95th percentile per-packet one-way delay: 53.900 ms
Loss rate: 40.29%
-- Flow 3:
Average throughput: 1.28 Mbit/s
95th percentile per-packet one-way delay: 53.850 ms
Loss rate: 68.12%
```

Run 4: Report of PCC-Expr — Data Link

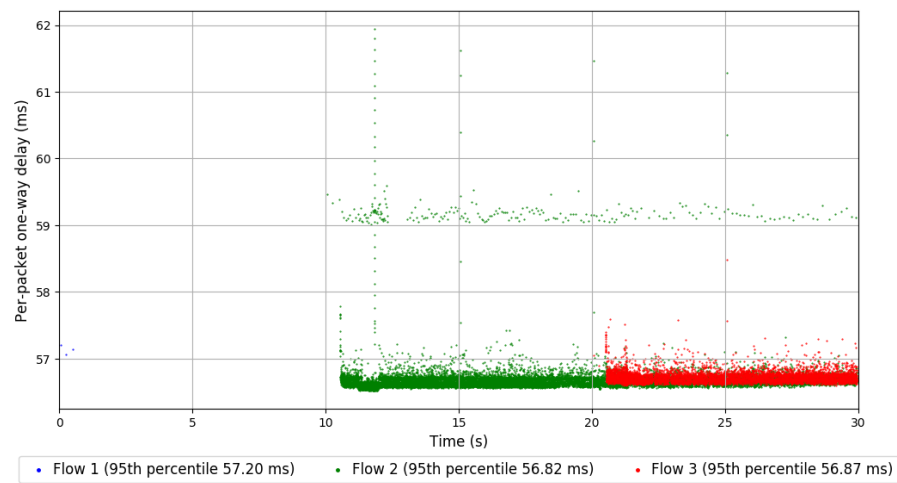
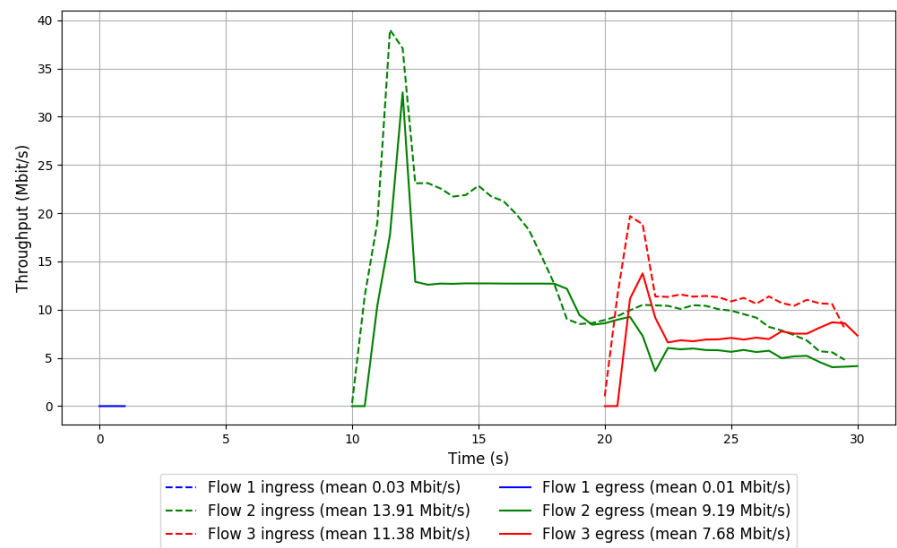


Run 5: Statistics of PCC-Expr

Start at: 2018-11-30 10:11:07  
End at: 2018-11-30 10:11:37  
Local clock offset: -0.713 ms  
Remote clock offset: -39.191 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.65 Mbit/s  
95th percentile per-packet one-way delay: 56.846 ms  
Loss rate: 33.52%  
-- Flow 1:  
Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 57.202 ms  
Loss rate: 80.00%  
-- Flow 2:  
Average throughput: 9.19 Mbit/s  
95th percentile per-packet one-way delay: 56.824 ms  
Loss rate: 33.90%  
-- Flow 3:  
Average throughput: 7.68 Mbit/s  
95th percentile per-packet one-way delay: 56.873 ms  
Loss rate: 32.57%

Run 5: Report of PCC-Expr — Data Link

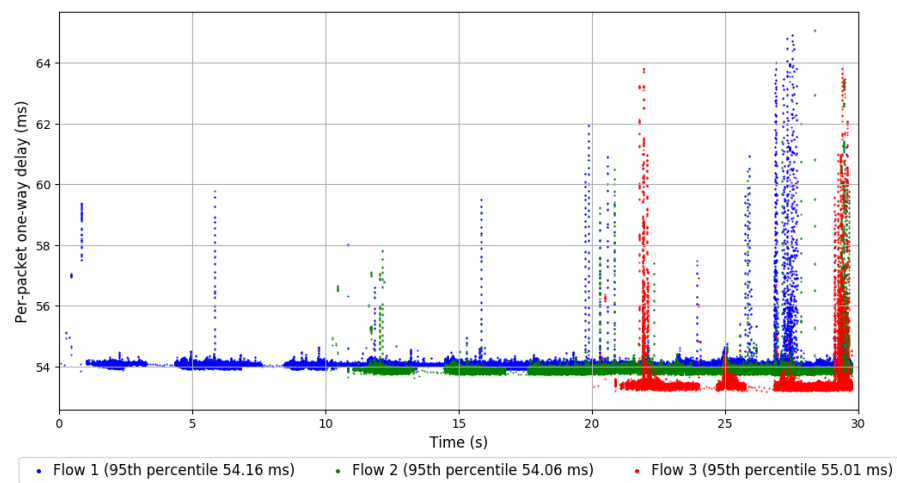
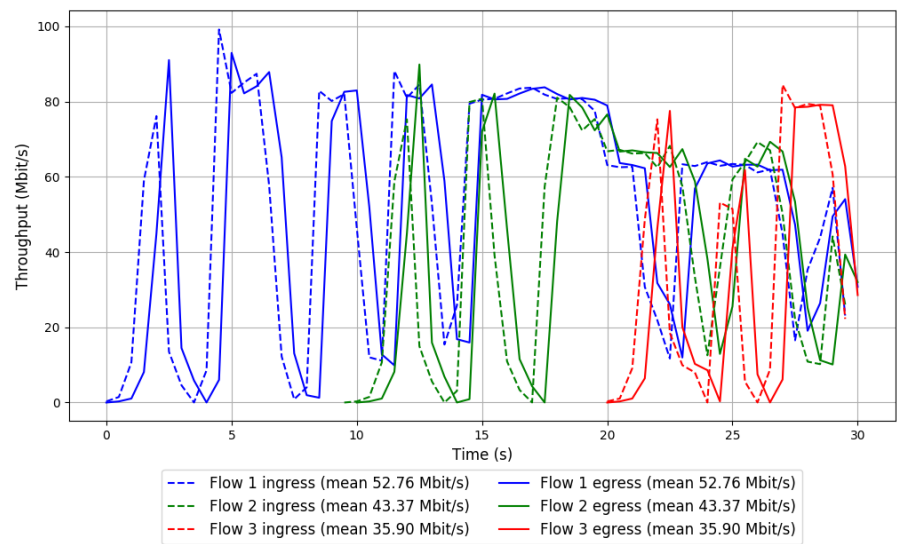


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-11-30 07:53:08
End at: 2018-11-30 07:53:38
Local clock offset: 2.983 ms
Remote clock offset: -40.918 ms

# Below is generated by plot.py at 2018-11-30 10:51:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.21 Mbit/s
95th percentile per-packet one-way delay: 54.154 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.76 Mbit/s
95th percentile per-packet one-way delay: 54.165 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 43.37 Mbit/s
95th percentile per-packet one-way delay: 54.061 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 35.90 Mbit/s
95th percentile per-packet one-way delay: 55.008 ms
Loss rate: 0.00%
```

Run 1: Report of QUIC Cubic — Data Link



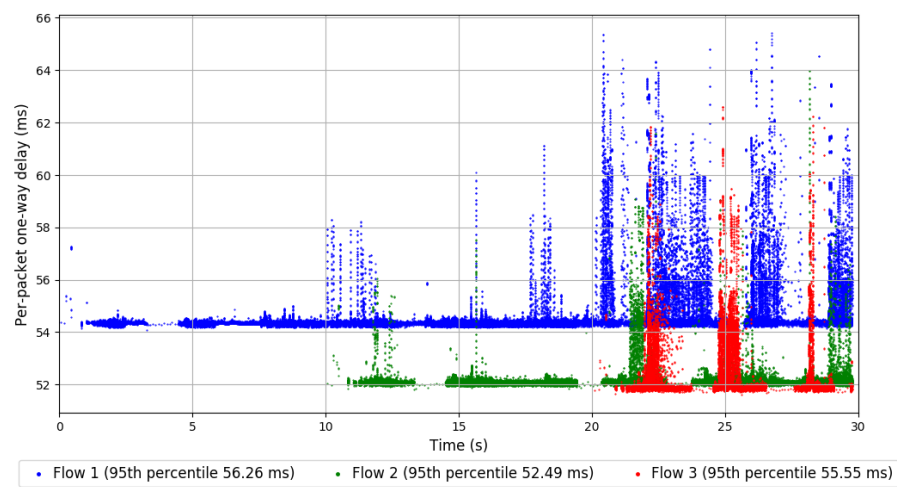
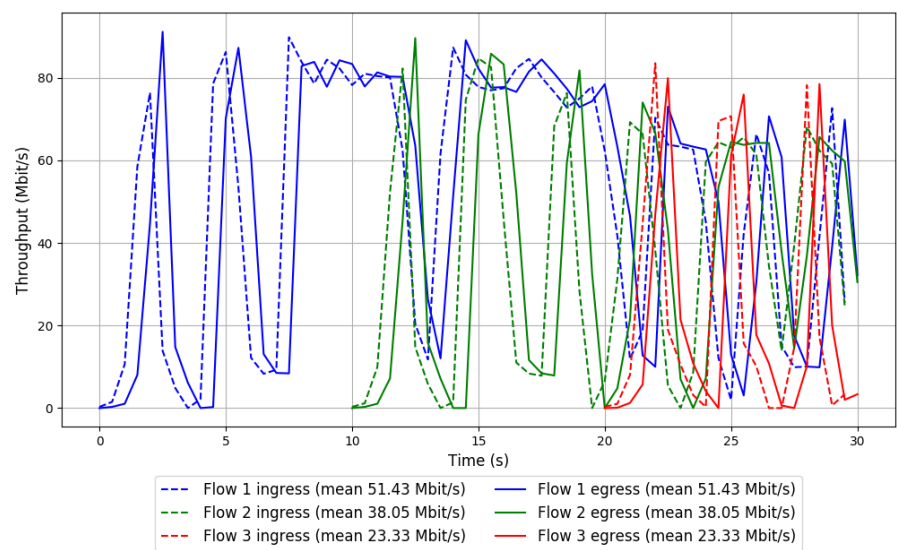


Run 2: Statistics of QUIC Cubic

Start at: 2018-11-30 08:27:43  
End at: 2018-11-30 08:28:13  
Local clock offset: 0.191 ms  
Remote clock offset: -45.478 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 84.22 Mbit/s  
95th percentile per-packet one-way delay: 55.548 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 51.43 Mbit/s  
95th percentile per-packet one-way delay: 56.258 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 38.05 Mbit/s  
95th percentile per-packet one-way delay: 52.487 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 23.33 Mbit/s  
95th percentile per-packet one-way delay: 55.550 ms  
Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link

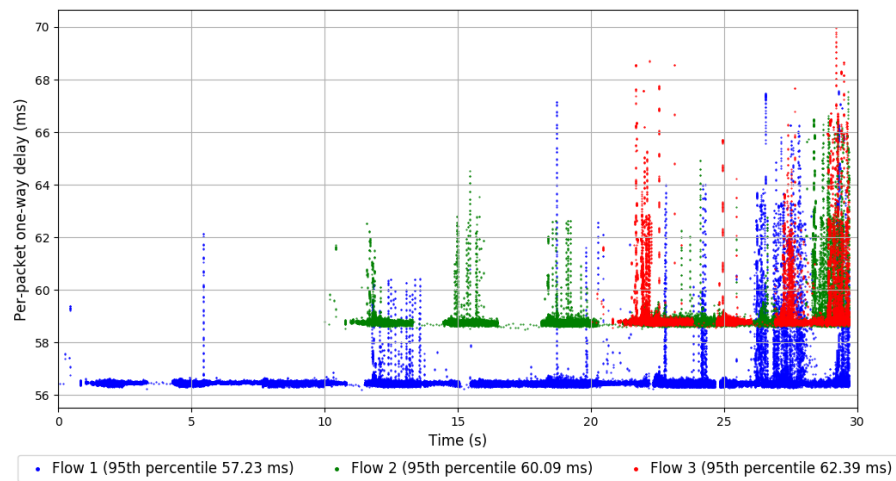
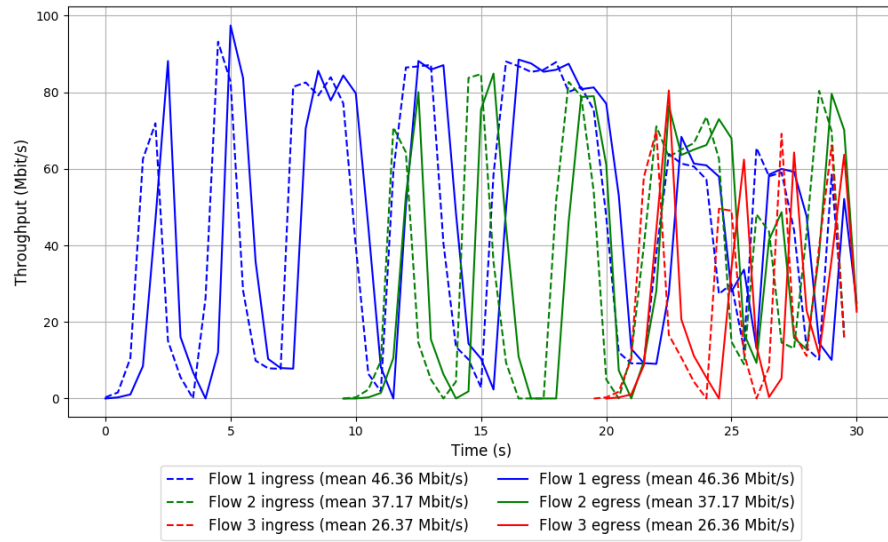


Run 3: Statistics of QUIC Cubic

Start at: 2018-11-30 09:02:03  
End at: 2018-11-30 09:02:33  
Local clock offset: 1.982 ms  
Remote clock offset: -37.818 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 79.64 Mbit/s  
95th percentile per-packet one-way delay: 59.512 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 46.36 Mbit/s  
95th percentile per-packet one-way delay: 57.229 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 37.17 Mbit/s  
95th percentile per-packet one-way delay: 60.094 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 26.36 Mbit/s  
95th percentile per-packet one-way delay: 62.389 ms  
Loss rate: 0.00%

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

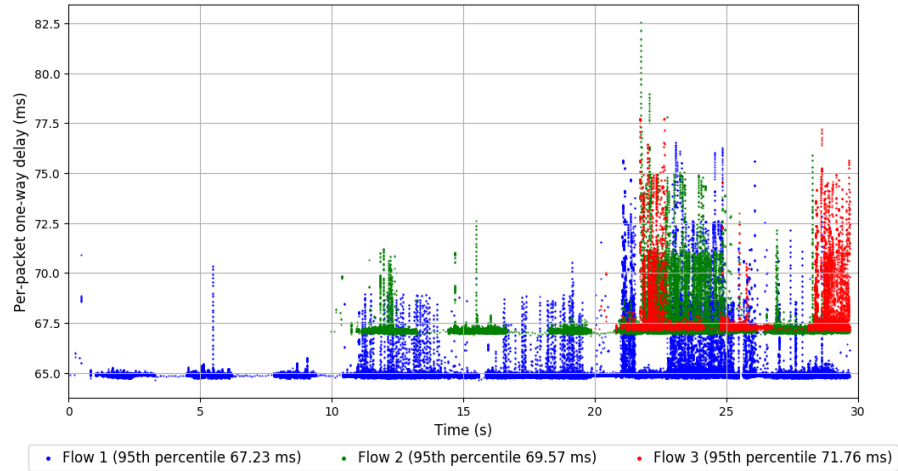
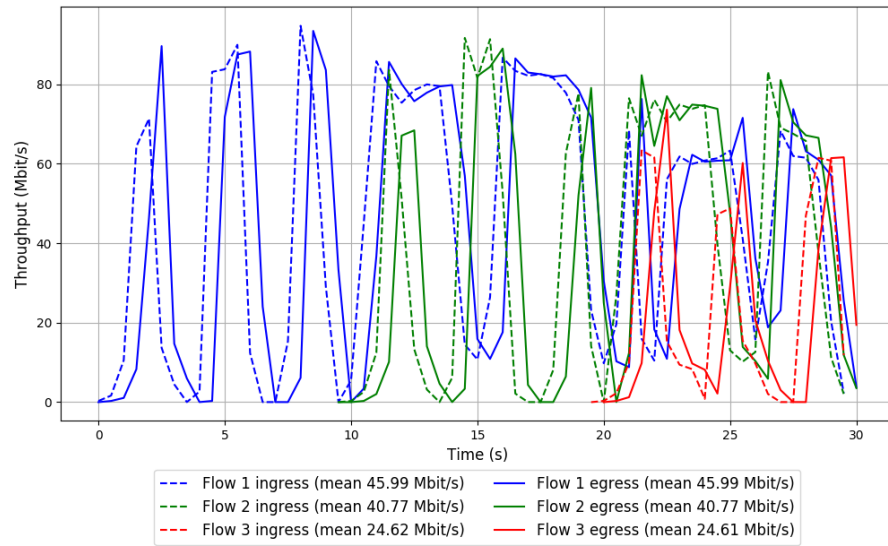


Run 4: Statistics of QUIC Cubic

Start at: 2018-11-30 09:42:15  
End at: 2018-11-30 09:42:45  
Local clock offset: 0.754 ms  
Remote clock offset: -31.126 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 81.16 Mbit/s  
95th percentile per-packet one-way delay: 68.913 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 45.99 Mbit/s  
95th percentile per-packet one-way delay: 67.235 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 40.77 Mbit/s  
95th percentile per-packet one-way delay: 69.568 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 24.61 Mbit/s  
95th percentile per-packet one-way delay: 71.756 ms  
Loss rate: 0.00%

# Run 4: Report of QUIC Cubic — Data Link

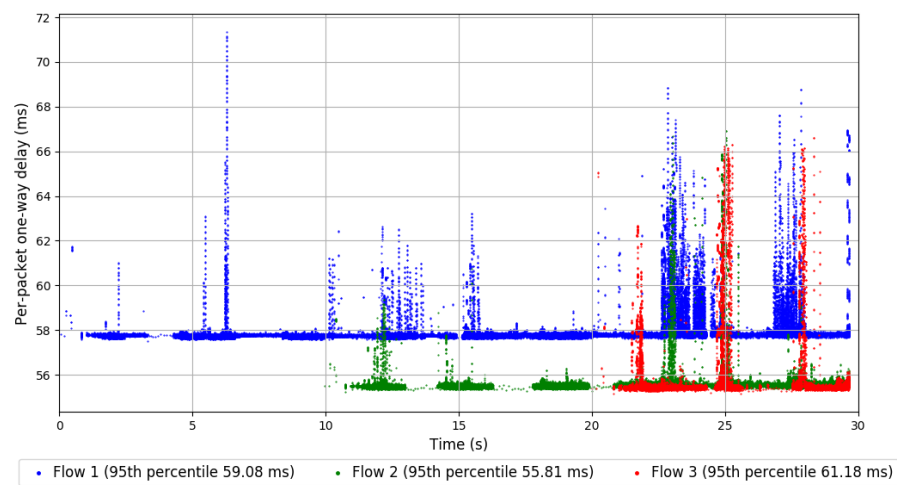
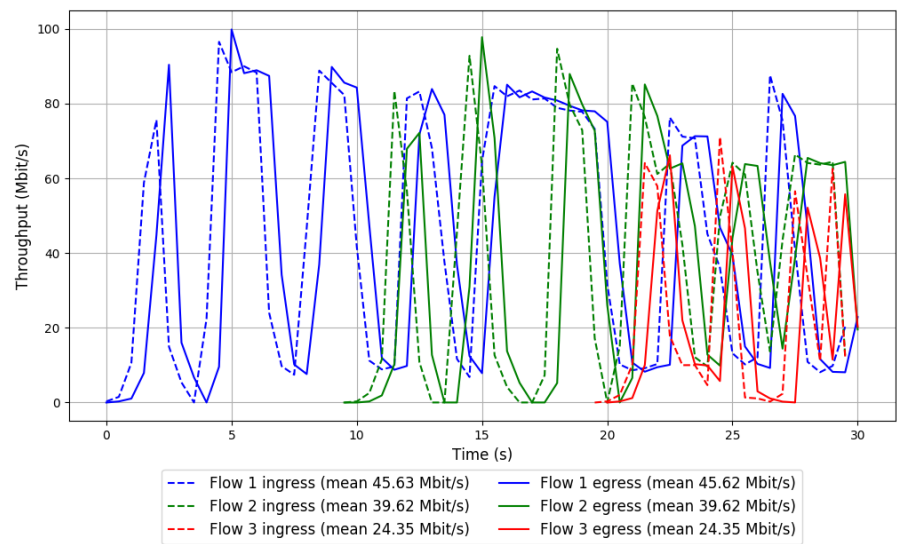


Run 5: Statistics of QUIC Cubic

Start at: 2018-11-30 10:16:54  
End at: 2018-11-30 10:17:24  
Local clock offset: 0.819 ms  
Remote clock offset: -38.789 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 79.90 Mbit/s  
95th percentile per-packet one-way delay: 58.597 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 45.62 Mbit/s  
95th percentile per-packet one-way delay: 59.083 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 39.62 Mbit/s  
95th percentile per-packet one-way delay: 55.806 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 24.35 Mbit/s  
95th percentile per-packet one-way delay: 61.176 ms  
Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



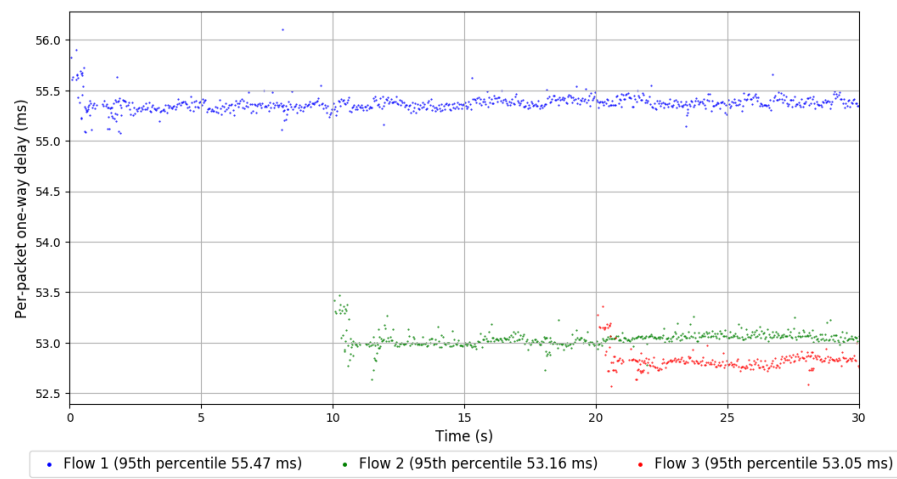
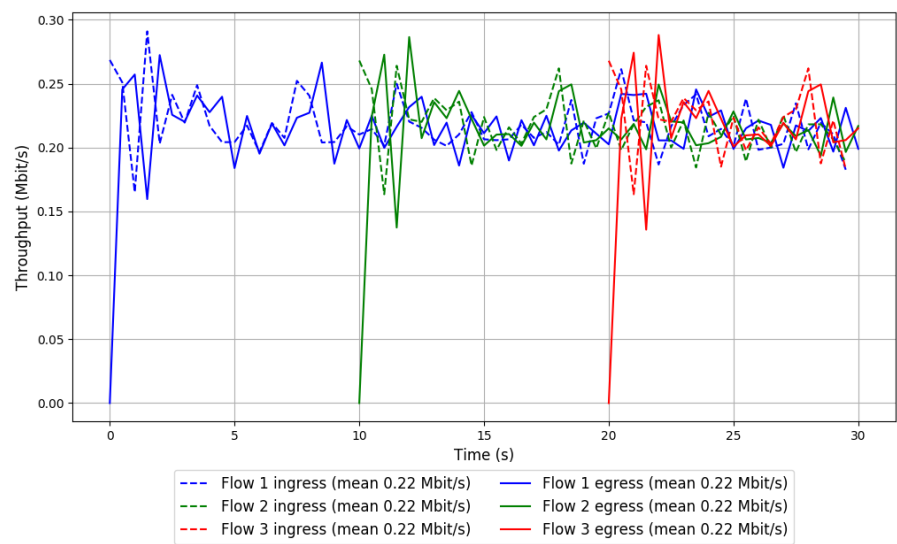


Run 1: Statistics of SReAM

Start at: 2018-11-30 07:20:27  
End at: 2018-11-30 07:20:57  
Local clock offset: -2.185 ms  
Remote clock offset: -46.355 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 55.435 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 55.466 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 53.155 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 53.045 ms  
Loss rate: 0.00%

Run 1: Report of SReAM — Data Link

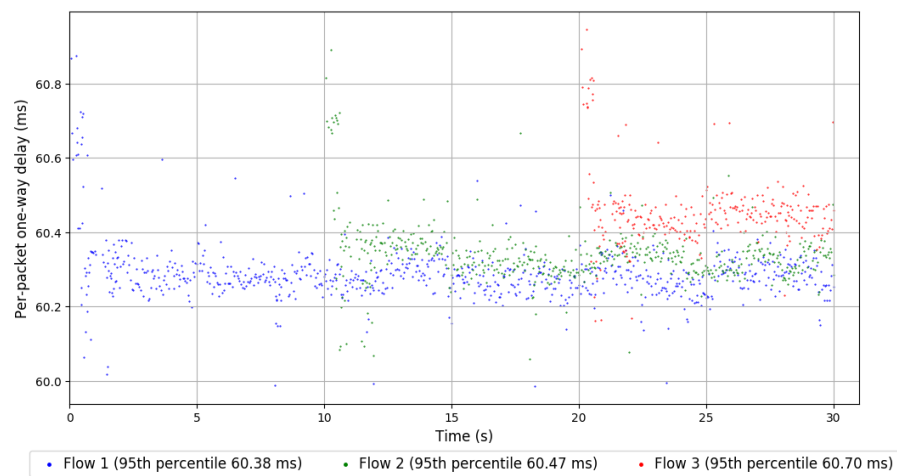
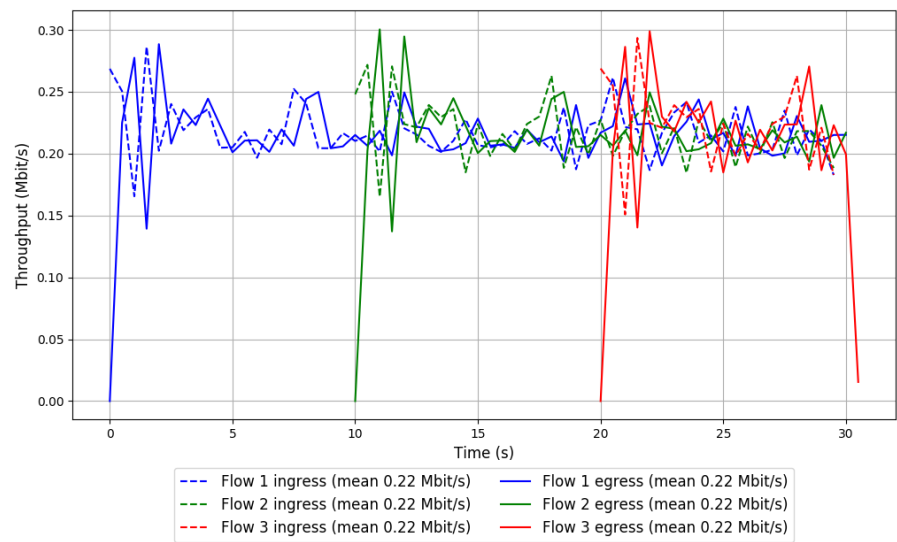


Run 2: Statistics of SReAM

Start at: 2018-11-30 08:06:04  
End at: 2018-11-30 08:06:34  
Local clock offset: -1.029 ms  
Remote clock offset: -40.108 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 60.497 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 60.377 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 60.466 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 60.695 ms  
Loss rate: 0.00%

Run 2: Report of SReAM — Data Link

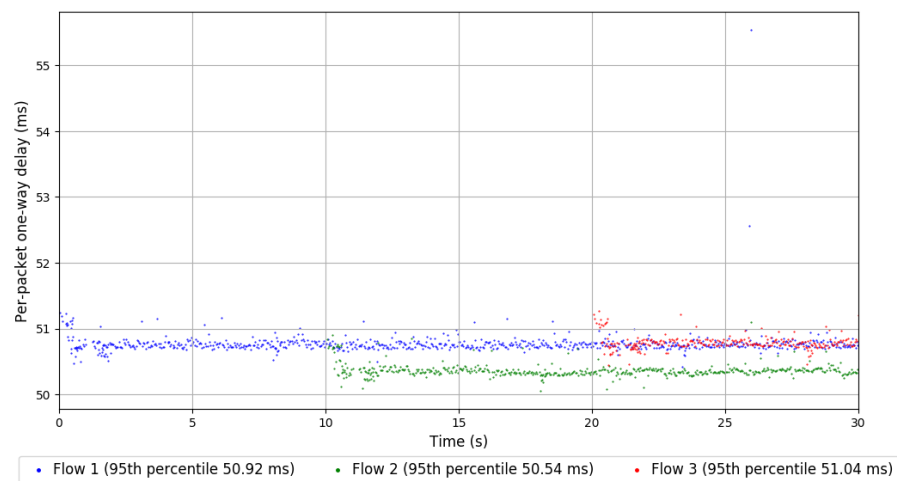
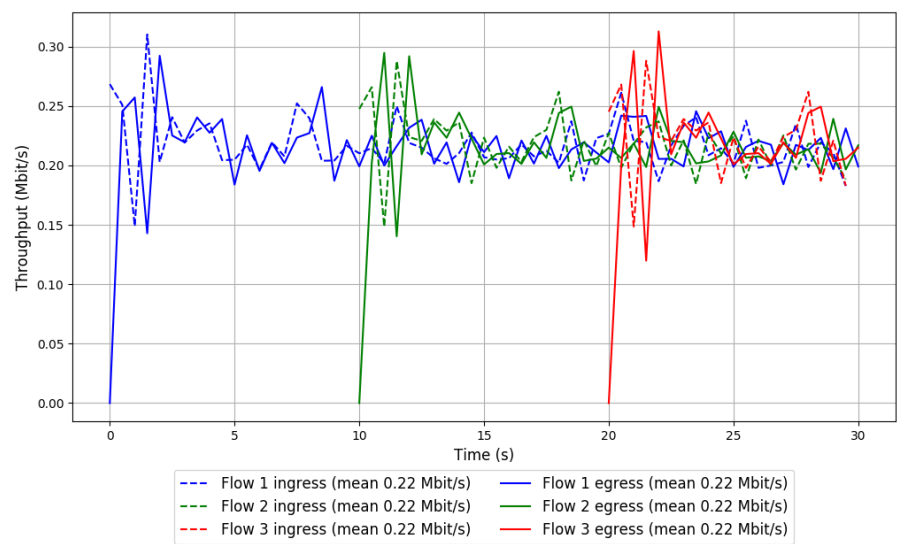


Run 3: Statistics of SReAM

Start at: 2018-11-30 08:40:39  
End at: 2018-11-30 08:41:09  
Local clock offset: -14.822 ms  
Remote clock offset: -62.296 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 50.874 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 50.919 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 50.539 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 51.040 ms  
Loss rate: 0.00%

Run 3: Report of SCReAM — Data Link

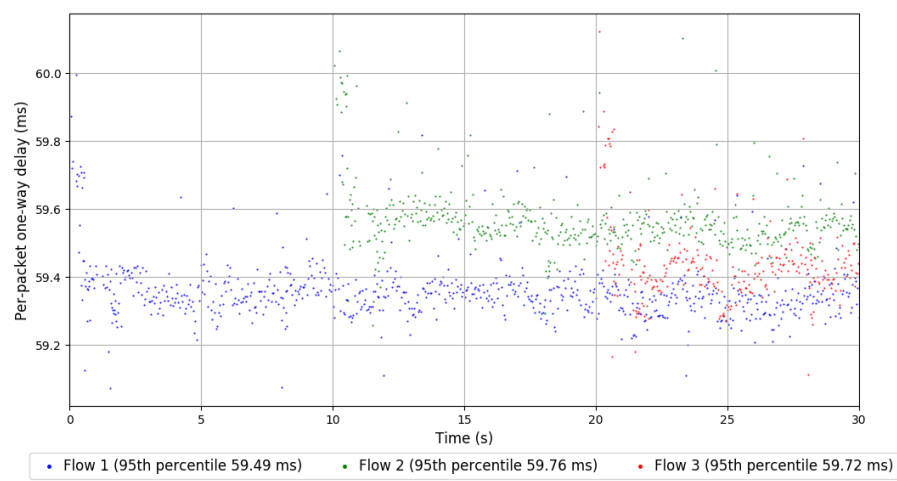
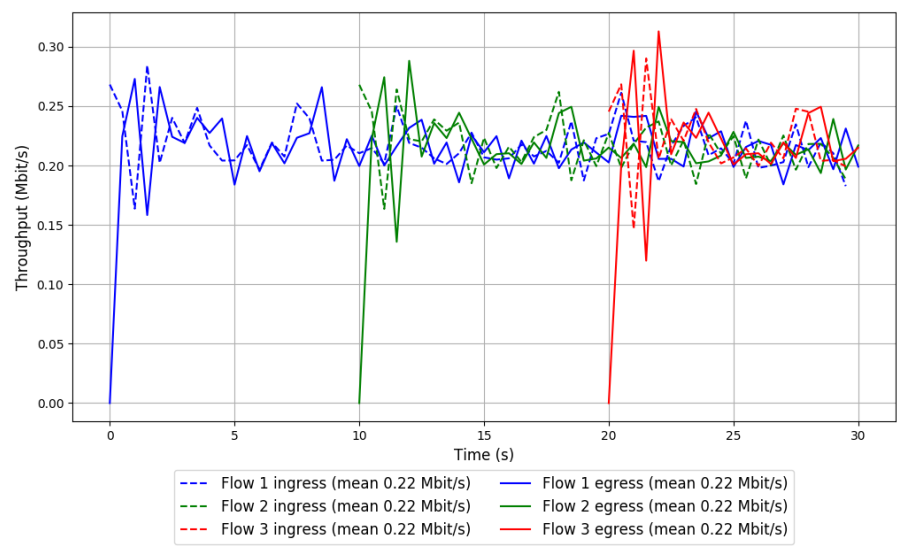


Run 4: Statistics of SReAM

Start at: 2018-11-30 09:15:03  
End at: 2018-11-30 09:15:33  
Local clock offset: 0.603 ms  
Remote clock offset: -35.741 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 59.661 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 59.486 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 59.756 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 59.722 ms  
Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



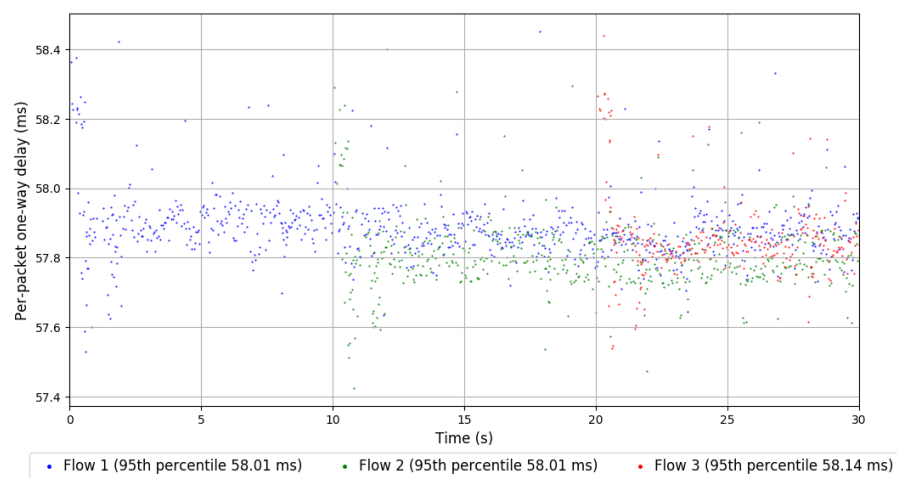
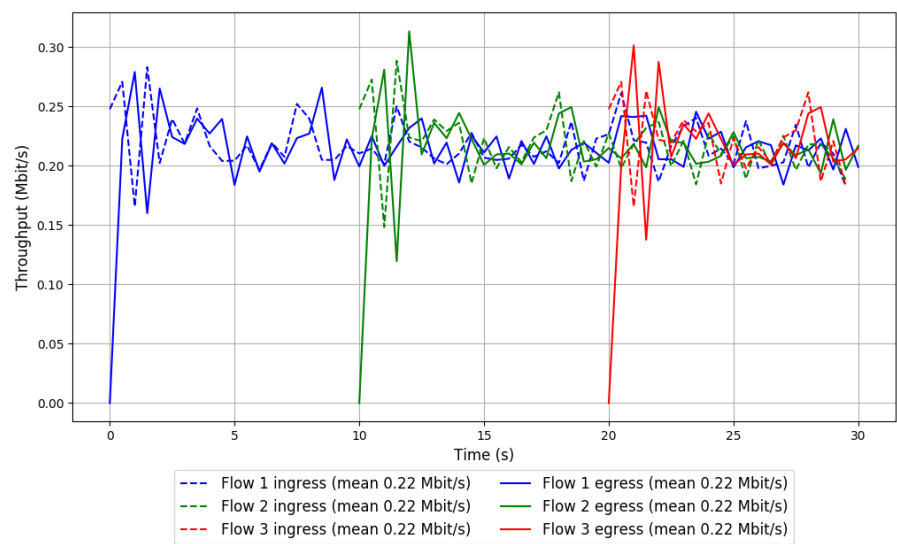


Run 5: Statistics of SReAM

Start at: 2018-11-30 09:55:16  
End at: 2018-11-30 09:55:46  
Local clock offset: -0.761 ms  
Remote clock offset: -38.739 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 58.032 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 58.007 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 58.014 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 58.143 ms  
Loss rate: 0.00%

Run 5: Report of SReAM — Data Link

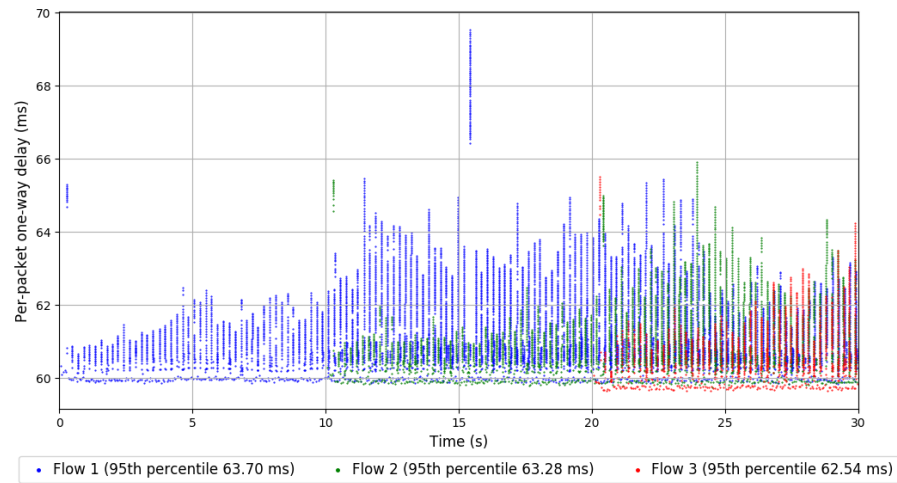
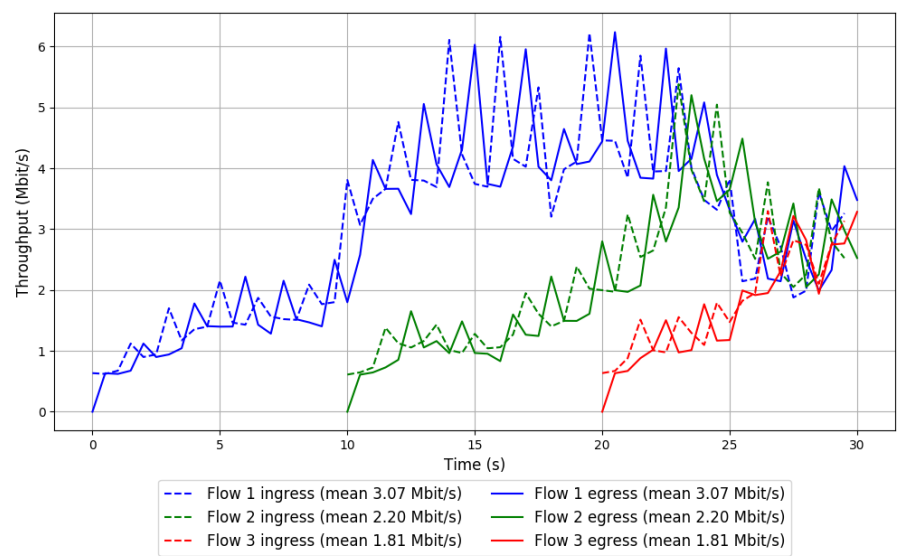


Run 1: Statistics of Sprout

Start at: 2018-11-30 07:38:25  
End at: 2018-11-30 07:38:55  
Local clock offset: 1.777 ms  
Remote clock offset: -36.795 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 5.13 Mbit/s  
95th percentile per-packet one-way delay: 63.513 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 3.07 Mbit/s  
95th percentile per-packet one-way delay: 63.699 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 2.20 Mbit/s  
95th percentile per-packet one-way delay: 63.280 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 1.81 Mbit/s  
95th percentile per-packet one-way delay: 62.544 ms  
Loss rate: 0.00%

Run 1: Report of Sprout — Data Link

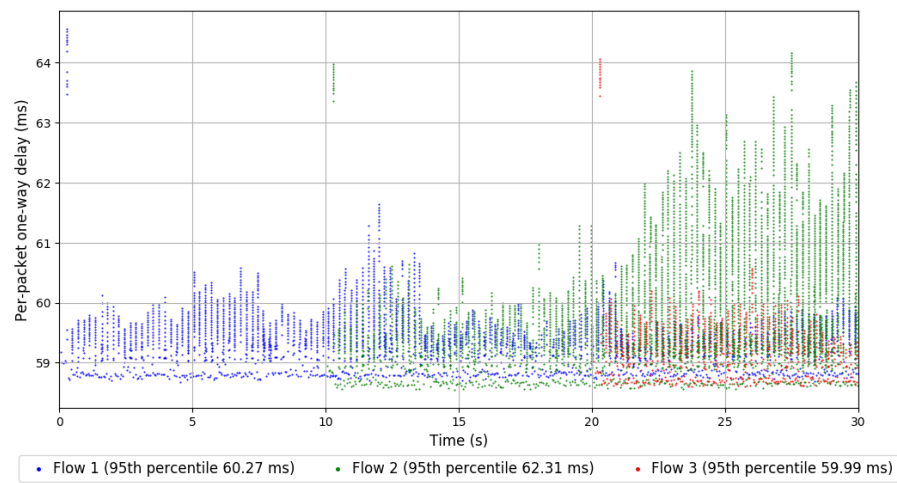
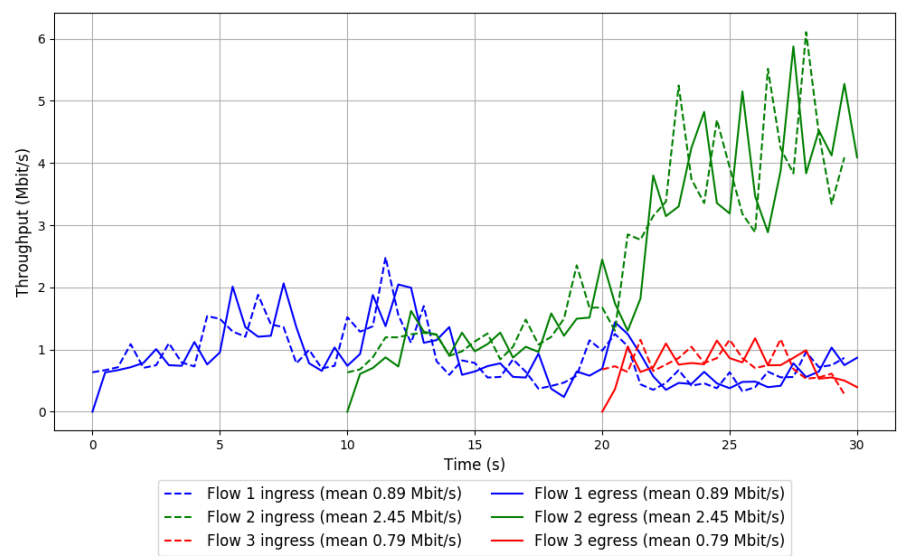


## Run 2: Statistics of Sprout

Start at: 2018-11-30 08:18:26  
End at: 2018-11-30 08:18:56  
Local clock offset: -0.762 ms  
Remote clock offset: -38.74 ms

```
# Below is generated by plot.py at 2018-11-30 10:51:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.78 Mbit/s
95th percentile per-packet one-way delay: 61.891 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.89 Mbit/s
95th percentile per-packet one-way delay: 60.270 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.45 Mbit/s
95th percentile per-packet one-way delay: 62.308 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.79 Mbit/s
95th percentile per-packet one-way delay: 59.986 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link

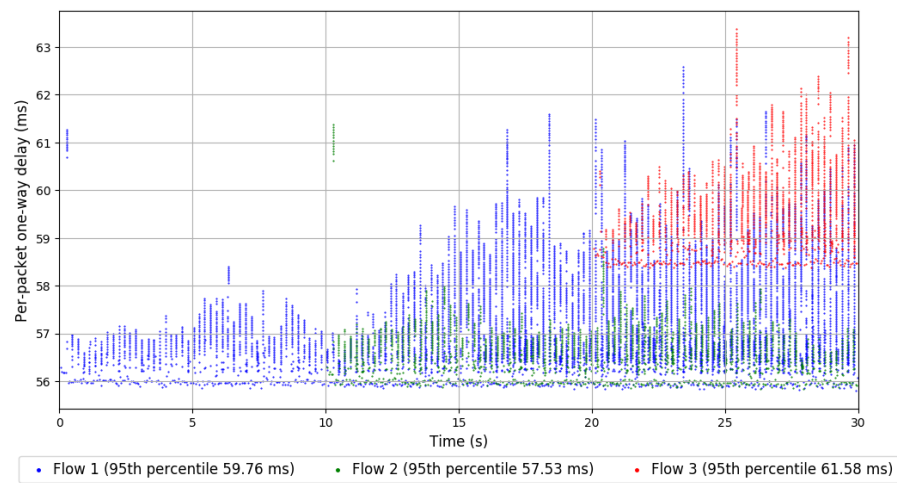
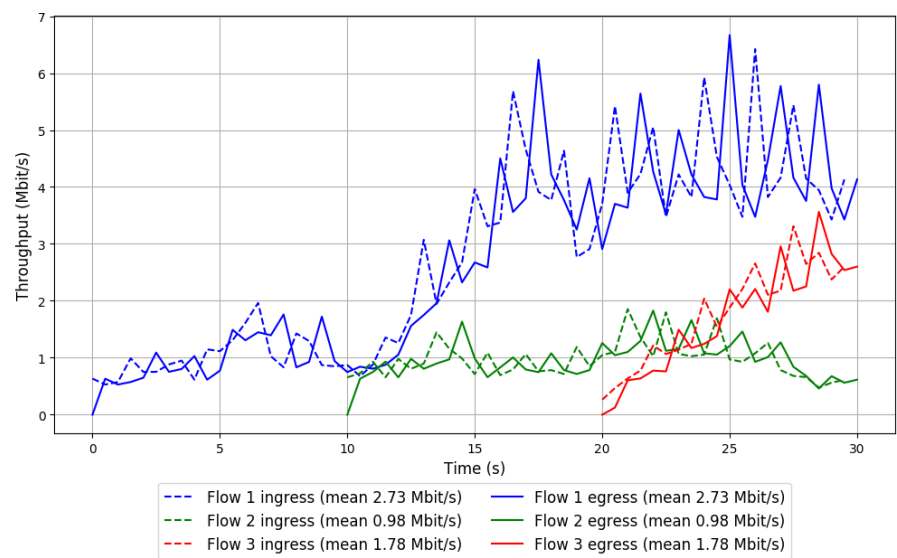


Run 3: Statistics of Sprout

Start at: 2018-11-30 08:53:03  
End at: 2018-11-30 08:53:33  
Local clock offset: 1.473 ms  
Remote clock offset: -39.356 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.97 Mbit/s  
95th percentile per-packet one-way delay: 60.421 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 2.73 Mbit/s  
95th percentile per-packet one-way delay: 59.758 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.98 Mbit/s  
95th percentile per-packet one-way delay: 57.533 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 1.78 Mbit/s  
95th percentile per-packet one-way delay: 61.580 ms  
Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



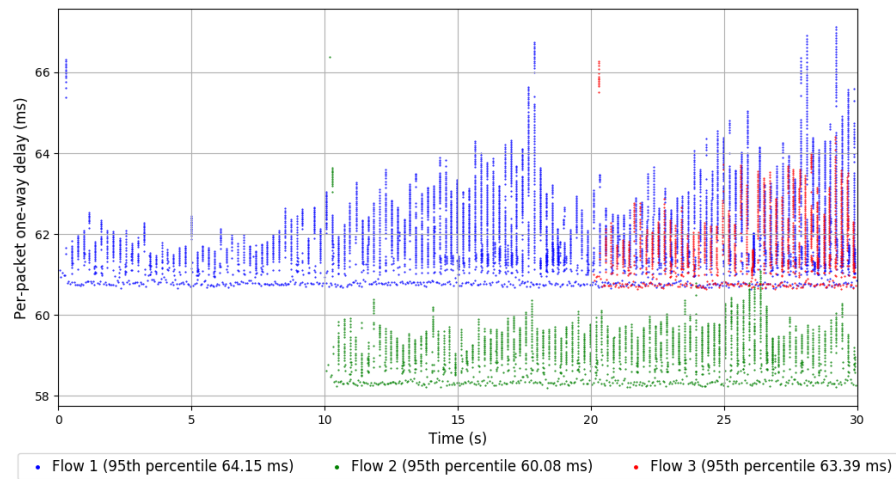
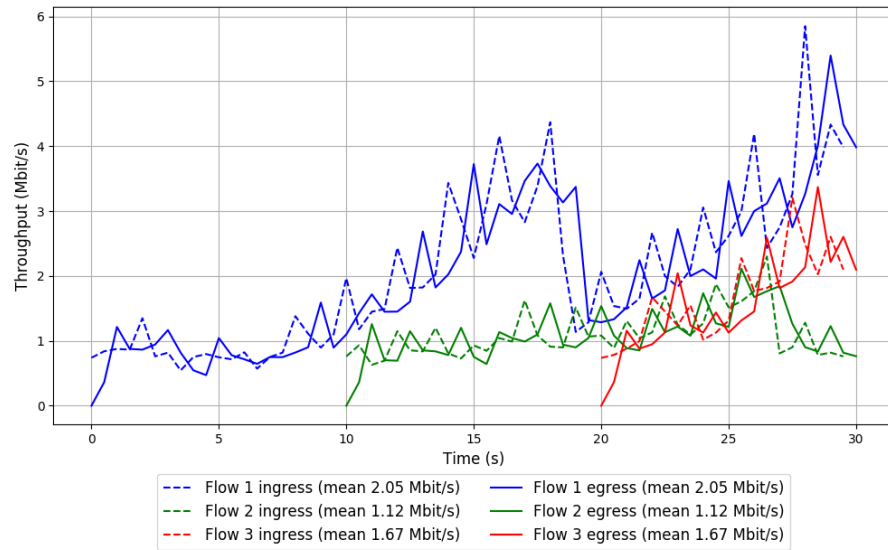


#### Run 4: Statistics of Sprout

Start at: 2018-11-30 09:32:52  
End at: 2018-11-30 09:33:22  
Local clock offset: 0.072 ms  
Remote clock offset: -37.97 ms

```
# Below is generated by plot.py at 2018-11-30 10:51:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.35 Mbit/s
95th percentile per-packet one-way delay: 63.807 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.05 Mbit/s
95th percentile per-packet one-way delay: 64.152 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.12 Mbit/s
95th percentile per-packet one-way delay: 60.075 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.67 Mbit/s
95th percentile per-packet one-way delay: 63.386 ms
Loss rate: 0.00%
```

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

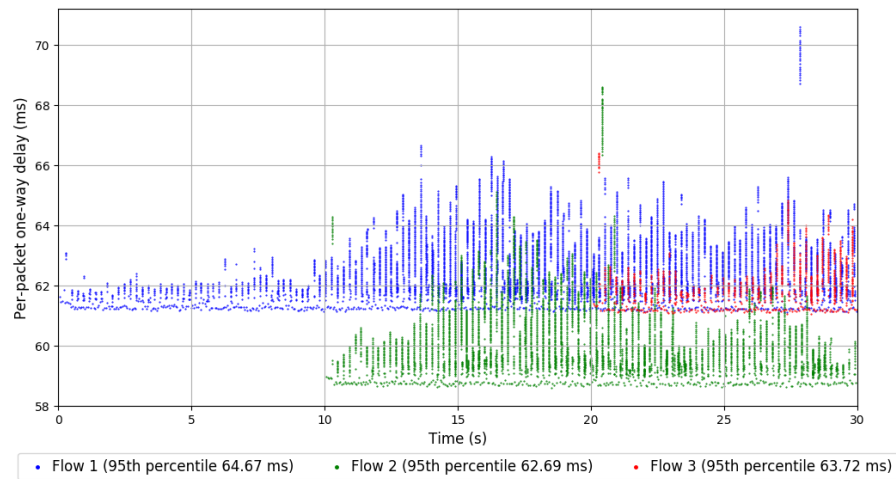
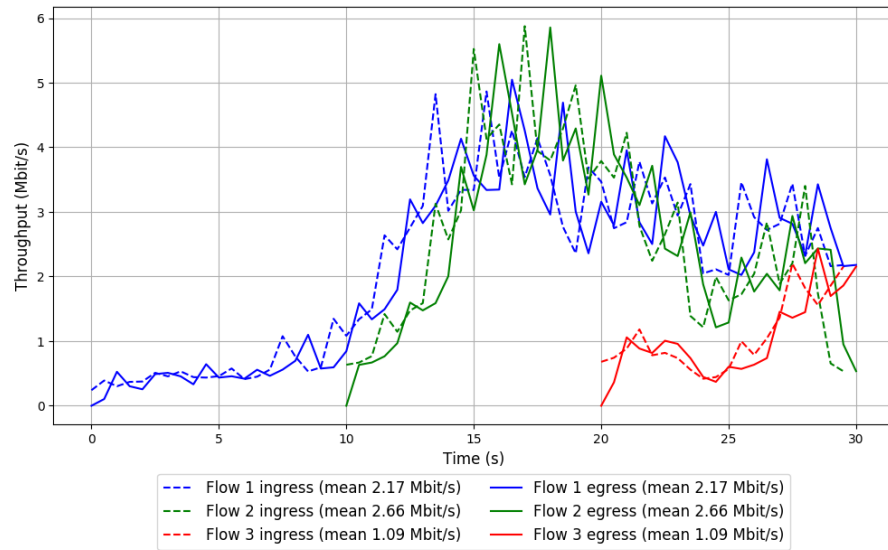


Run 5: Statistics of Sprout

Start at: 2018-11-30 10:07:37  
End at: 2018-11-30 10:08:07  
Local clock offset: 1.128 ms  
Remote clock offset: -35.231 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 4.30 Mbit/s  
95th percentile per-packet one-way delay: 64.248 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 2.17 Mbit/s  
95th percentile per-packet one-way delay: 64.665 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 2.66 Mbit/s  
95th percentile per-packet one-way delay: 62.685 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 1.09 Mbit/s  
95th percentile per-packet one-way delay: 63.716 ms  
Loss rate: 0.00%

## Run 5: Report of Sprout — Data Link

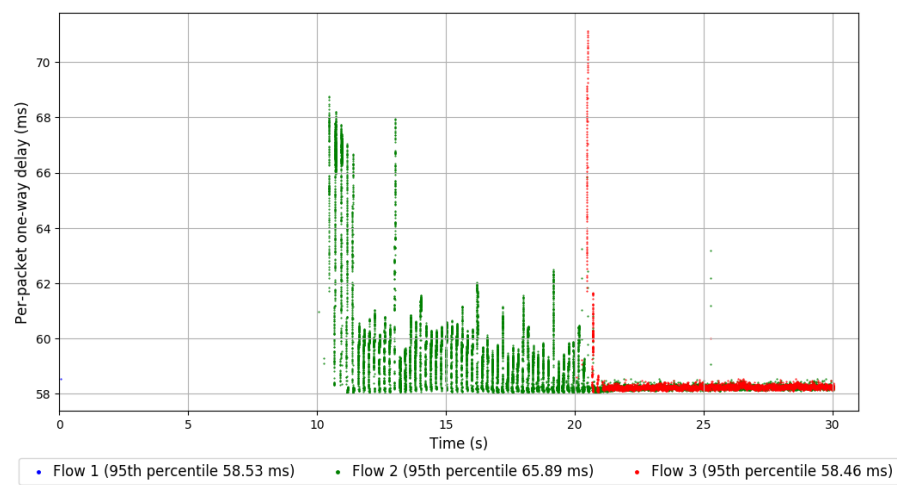
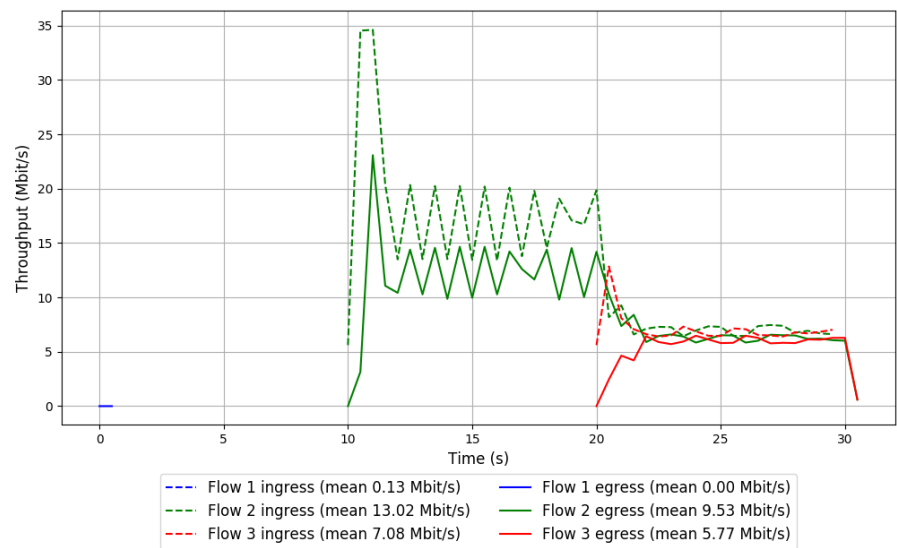


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-11-30 07:19:07
End at: 2018-11-30 07:19:37
Local clock offset: -2.843 ms
Remote clock offset: -41.383 ms

# Below is generated by plot.py at 2018-11-30 10:51:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.27 Mbit/s
95th percentile per-packet one-way delay: 64.686 ms
Loss rate: 25.06%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 58.532 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 9.53 Mbit/s
95th percentile per-packet one-way delay: 65.893 ms
Loss rate: 26.82%
-- Flow 3:
Average throughput: 5.77 Mbit/s
95th percentile per-packet one-way delay: 58.457 ms
Loss rate: 18.53%
```

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

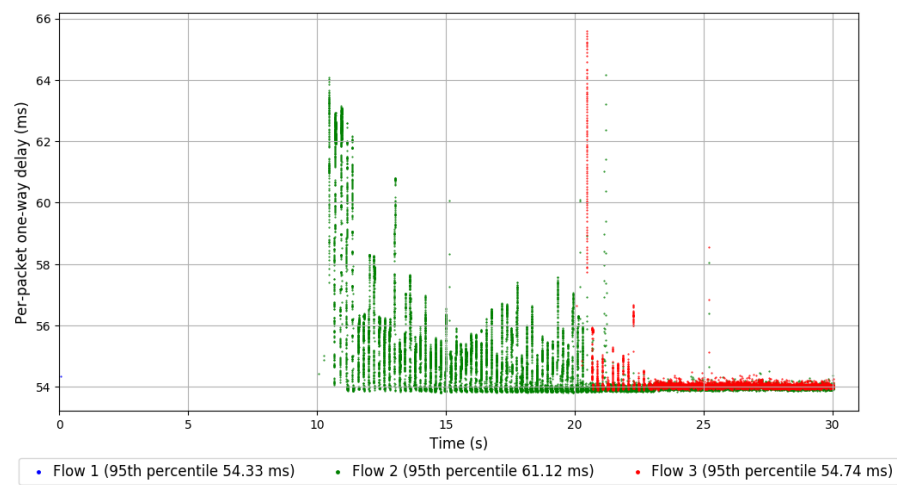
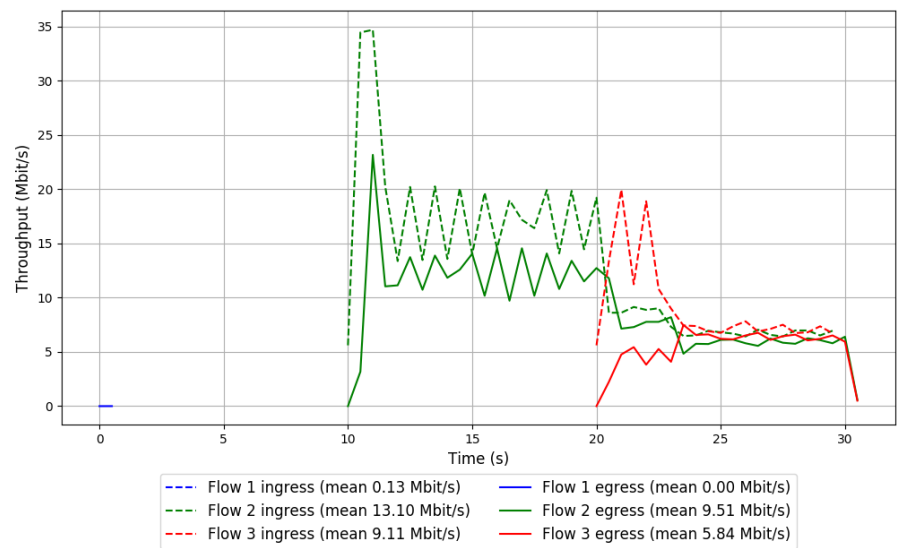


Run 2: Statistics of TaoVA-100x

Start at: 2018-11-30 08:04:45  
End at: 2018-11-30 08:05:15  
Local clock offset: -1.496 ms  
Remote clock offset: -44.481 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.27 Mbit/s  
95th percentile per-packet one-way delay: 60.035 ms  
Loss rate: 29.61%  
-- Flow 1:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 54.333 ms  
Loss rate: 95.92%  
-- Flow 2:  
Average throughput: 9.51 Mbit/s  
95th percentile per-packet one-way delay: 61.125 ms  
Loss rate: 27.40%  
-- Flow 3:  
Average throughput: 5.84 Mbit/s  
95th percentile per-packet one-way delay: 54.736 ms  
Loss rate: 35.95%

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



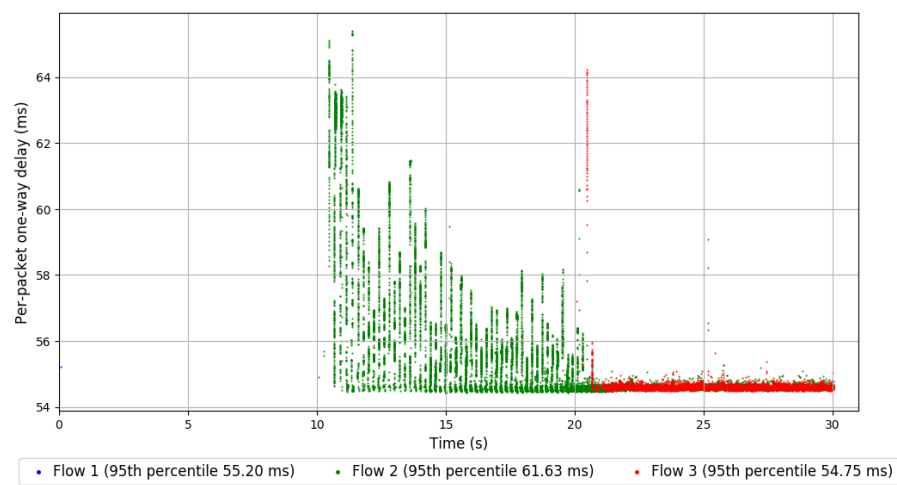
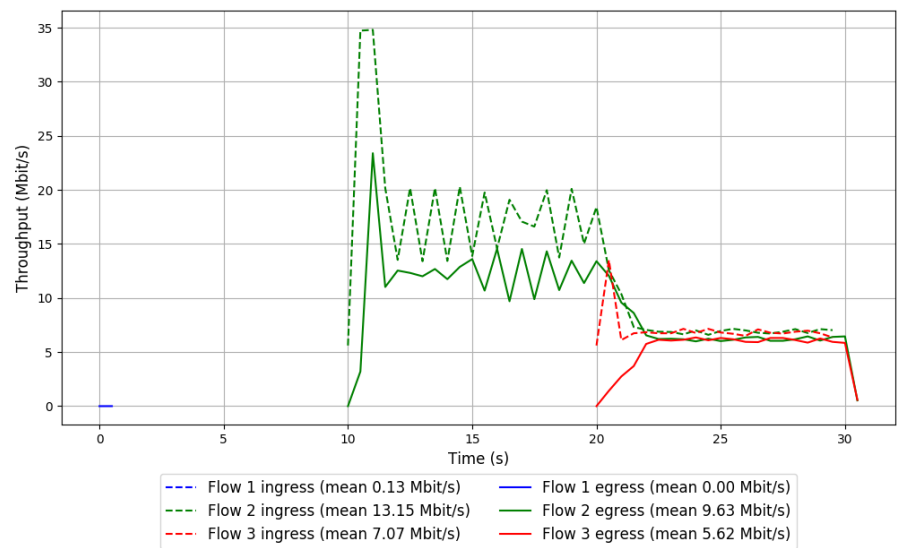


Run 3: Statistics of TaoVA-100x

Start at: 2018-11-30 08:39:19  
End at: 2018-11-30 08:39:49  
Local clock offset: -0.92 ms  
Remote clock offset: -44.356 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.28 Mbit/s  
95th percentile per-packet one-way delay: 60.620 ms  
Loss rate: 25.44%  
-- Flow 1:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 55.202 ms  
Loss rate: 95.92%  
-- Flow 2:  
Average throughput: 9.63 Mbit/s  
95th percentile per-packet one-way delay: 61.634 ms  
Loss rate: 26.75%  
-- Flow 3:  
Average throughput: 5.62 Mbit/s  
95th percentile per-packet one-way delay: 54.749 ms  
Loss rate: 20.52%

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

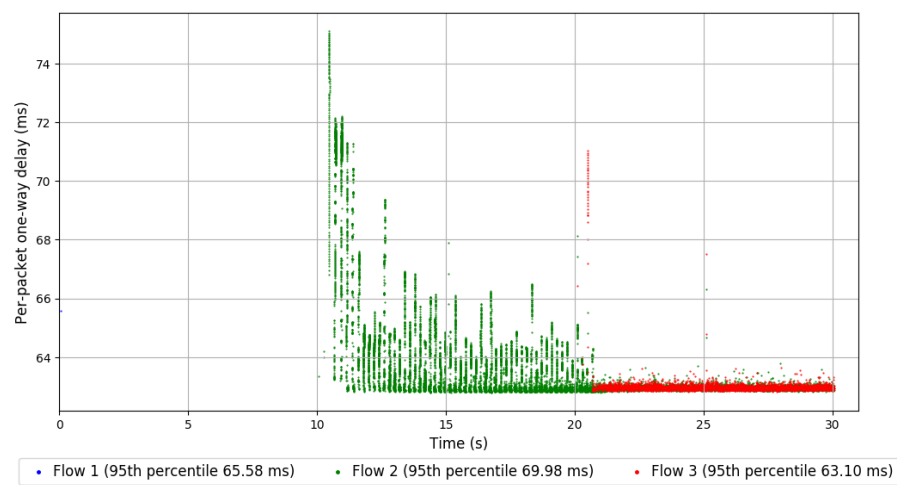
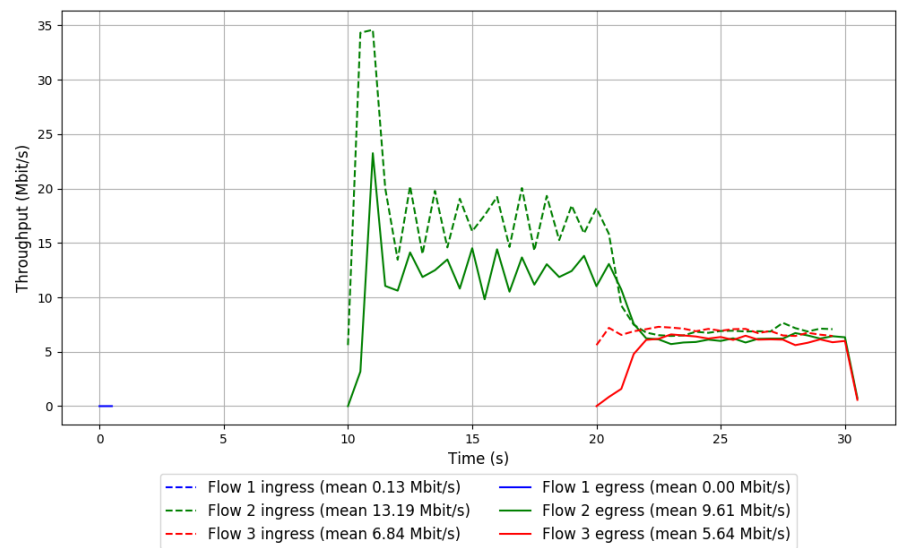


Run 4: Statistics of TaoVA-100x

Start at: 2018-11-30 09:13:43  
End at: 2018-11-30 09:14:13  
Local clock offset: -0.038 ms  
Remote clock offset: -32.766 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.28 Mbit/s  
95th percentile per-packet one-way delay: 68.521 ms  
Loss rate: 25.19%  
-- Flow 1:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 65.584 ms  
Loss rate: 95.92%  
-- Flow 2:  
Average throughput: 9.61 Mbit/s  
95th percentile per-packet one-way delay: 69.977 ms  
Loss rate: 27.17%  
-- Flow 3:  
Average throughput: 5.64 Mbit/s  
95th percentile per-packet one-way delay: 63.105 ms  
Loss rate: 17.51%

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

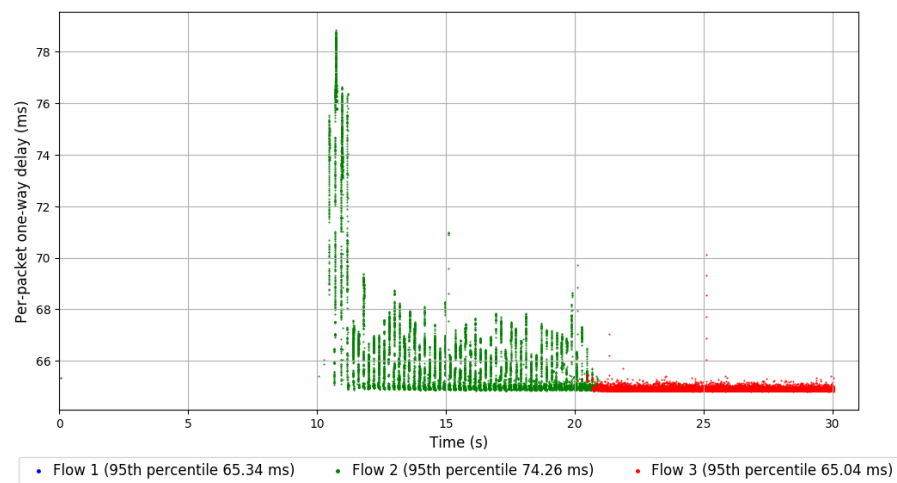
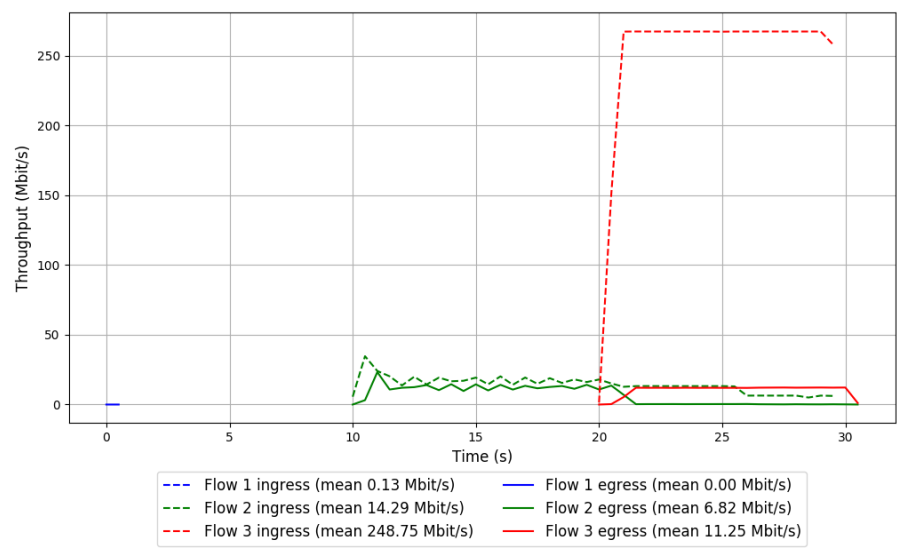


Run 5: Statistics of TaoVA-100x

Start at: 2018-11-30 09:53:56  
End at: 2018-11-30 09:54:26  
Local clock offset: 0.314 ms  
Remote clock offset: -30.527 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.27 Mbit/s  
95th percentile per-packet one-way delay: 69.382 ms  
Loss rate: 91.03%  
-- Flow 1:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 65.338 ms  
Loss rate: 95.92%  
-- Flow 2:  
Average throughput: 6.82 Mbit/s  
95th percentile per-packet one-way delay: 74.260 ms  
Loss rate: 52.35%  
-- Flow 3:  
Average throughput: 11.25 Mbit/s  
95th percentile per-packet one-way delay: 65.038 ms  
Loss rate: 95.48%

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

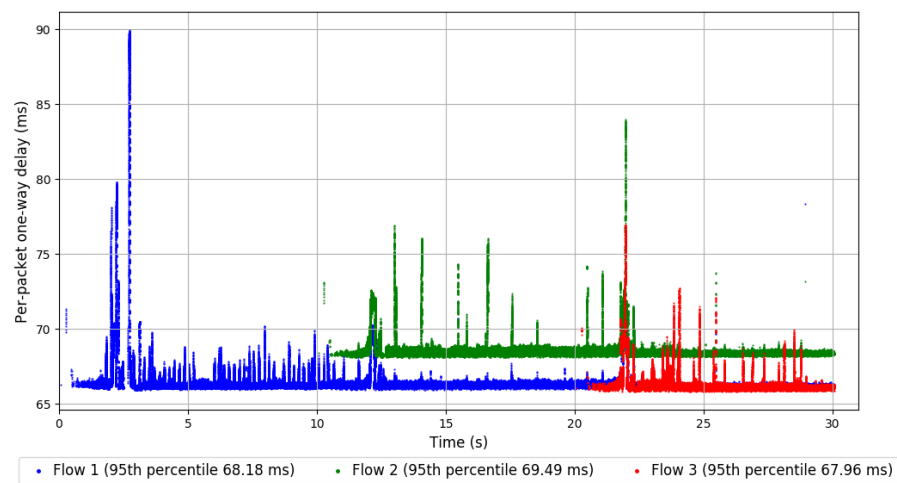
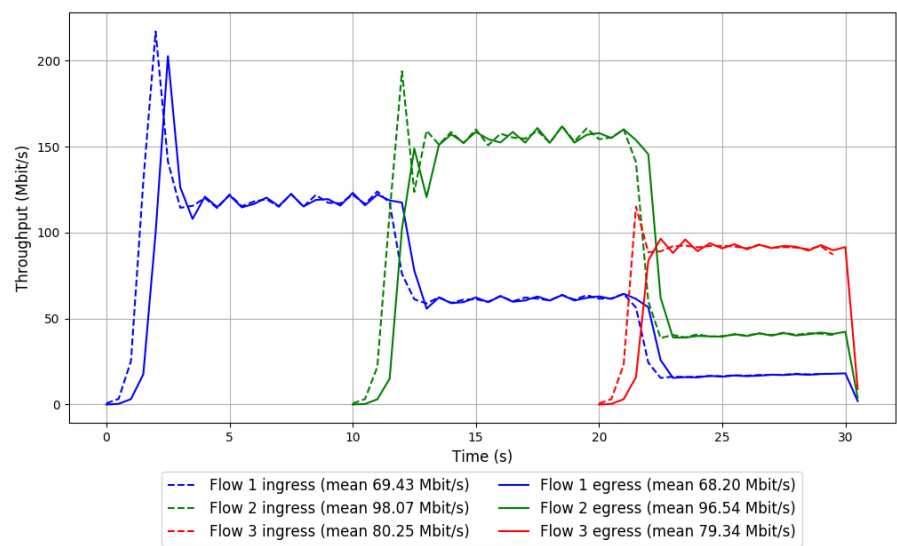


Run 1: Statistics of TCP Vegas

Start at: 2018-11-30 07:17:14  
End at: 2018-11-30 07:17:44  
Local clock offset: -0.636 ms  
Remote clock offset: -30.792 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 158.88 Mbit/s  
95th percentile per-packet one-way delay: 68.903 ms  
Loss rate: 1.58%  
-- Flow 1:  
Average throughput: 68.20 Mbit/s  
95th percentile per-packet one-way delay: 68.180 ms  
Loss rate: 1.78%  
-- Flow 2:  
Average throughput: 96.54 Mbit/s  
95th percentile per-packet one-way delay: 69.491 ms  
Loss rate: 1.57%  
-- Flow 3:  
Average throughput: 79.34 Mbit/s  
95th percentile per-packet one-way delay: 67.956 ms  
Loss rate: 1.13%

Run 1: Report of TCP Vegas — Data Link



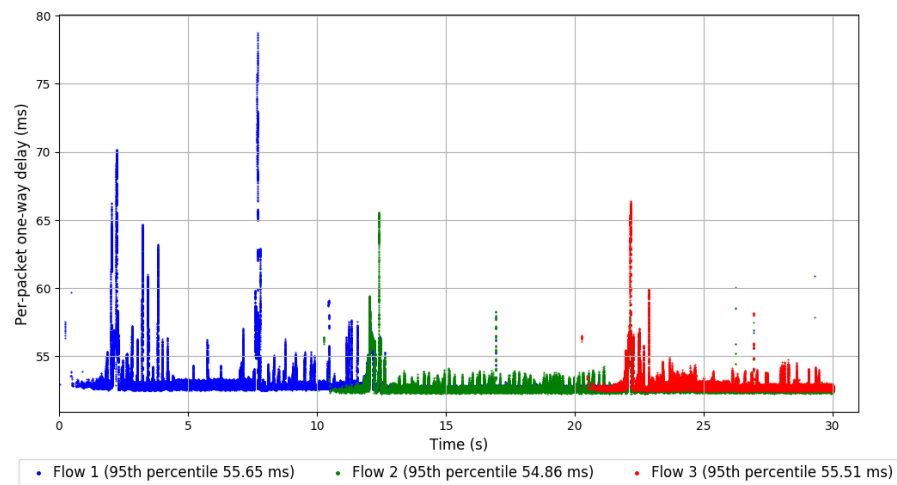
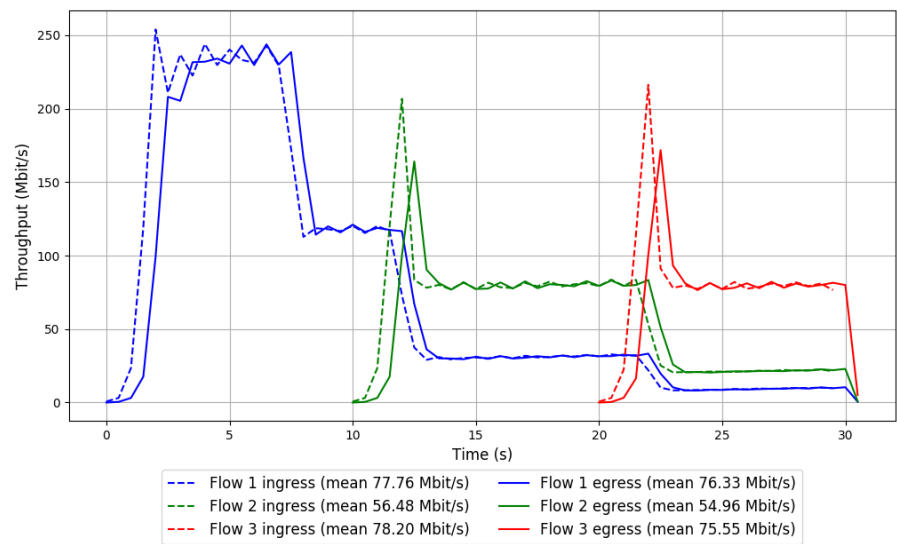


Run 2: Statistics of TCP Vegas

Start at: 2018-11-30 08:02:59  
End at: 2018-11-30 08:03:29  
Local clock offset: 0.99 ms  
Remote clock offset: -43.484 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 138.04 Mbit/s  
95th percentile per-packet one-way delay: 55.488 ms  
Loss rate: 2.35%  
-- Flow 1:  
Average throughput: 76.33 Mbit/s  
95th percentile per-packet one-way delay: 55.648 ms  
Loss rate: 1.84%  
-- Flow 2:  
Average throughput: 54.96 Mbit/s  
95th percentile per-packet one-way delay: 54.863 ms  
Loss rate: 2.69%  
-- Flow 3:  
Average throughput: 75.55 Mbit/s  
95th percentile per-packet one-way delay: 55.507 ms  
Loss rate: 3.39%

Run 2: Report of TCP Vegas — Data Link

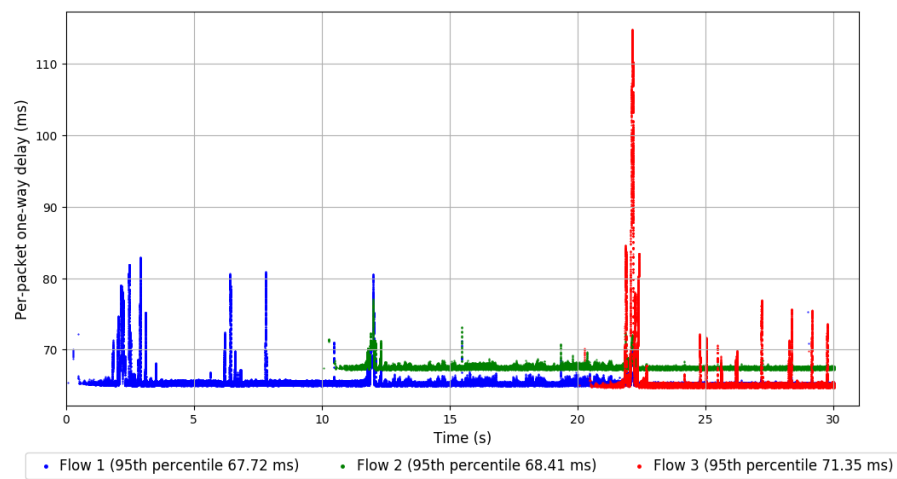
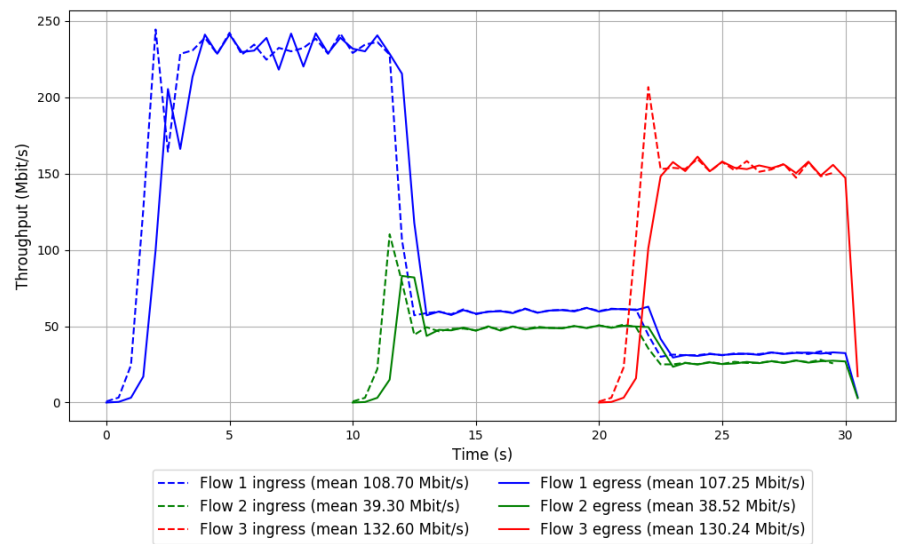


Run 3: Statistics of TCP Vegas

Start at: 2018-11-30 08:37:25  
End at: 2018-11-30 08:37:55  
Local clock offset: -0.096 ms  
Remote clock offset: -33.182 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 176.22 Mbit/s  
95th percentile per-packet one-way delay: 68.253 ms  
Loss rate: 1.53%  
-- Flow 1:  
Average throughput: 107.25 Mbit/s  
95th percentile per-packet one-way delay: 67.716 ms  
Loss rate: 1.33%  
-- Flow 2:  
Average throughput: 38.52 Mbit/s  
95th percentile per-packet one-way delay: 68.408 ms  
Loss rate: 1.97%  
-- Flow 3:  
Average throughput: 130.24 Mbit/s  
95th percentile per-packet one-way delay: 71.346 ms  
Loss rate: 1.77%

Run 3: Report of TCP Vegas — Data Link

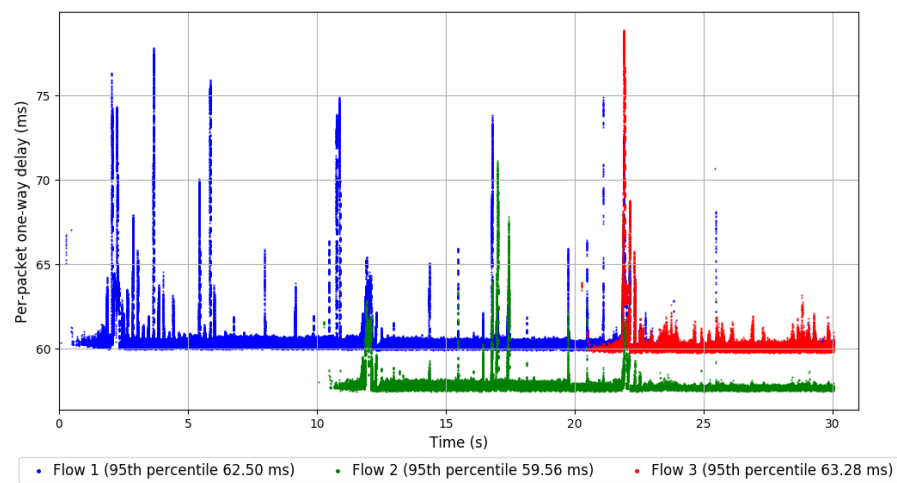
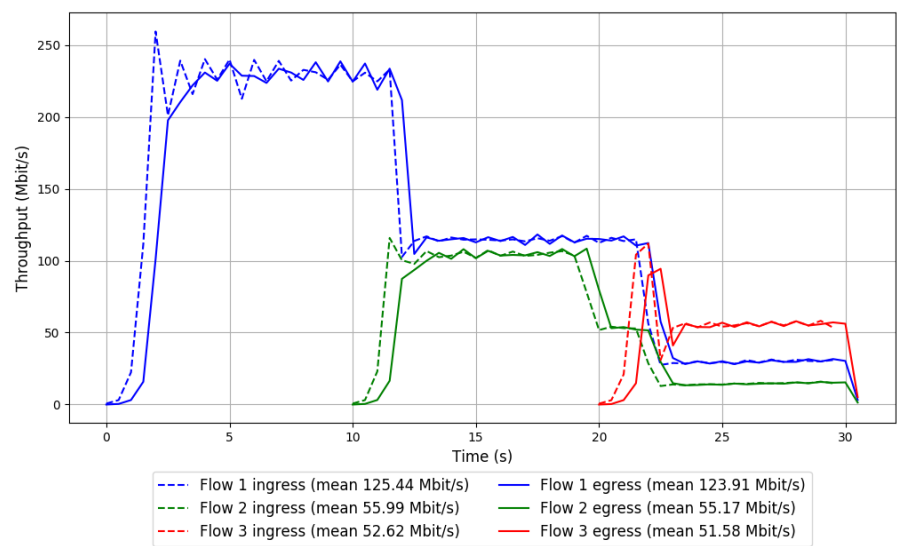


Run 4: Statistics of TCP Vegas

Start at: 2018-11-30 09:11:49  
End at: 2018-11-30 09:12:19  
Local clock offset: -2.681 ms  
Remote clock offset: -40.773 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 177.82 Mbit/s  
95th percentile per-packet one-way delay: 61.858 ms  
Loss rate: 1.34%  
-- Flow 1:  
Average throughput: 123.91 Mbit/s  
95th percentile per-packet one-way delay: 62.503 ms  
Loss rate: 1.21%  
-- Flow 2:  
Average throughput: 55.17 Mbit/s  
95th percentile per-packet one-way delay: 59.564 ms  
Loss rate: 1.46%  
-- Flow 3:  
Average throughput: 51.58 Mbit/s  
95th percentile per-packet one-way delay: 63.285 ms  
Loss rate: 1.97%

Run 4: Report of TCP Vegas — Data Link

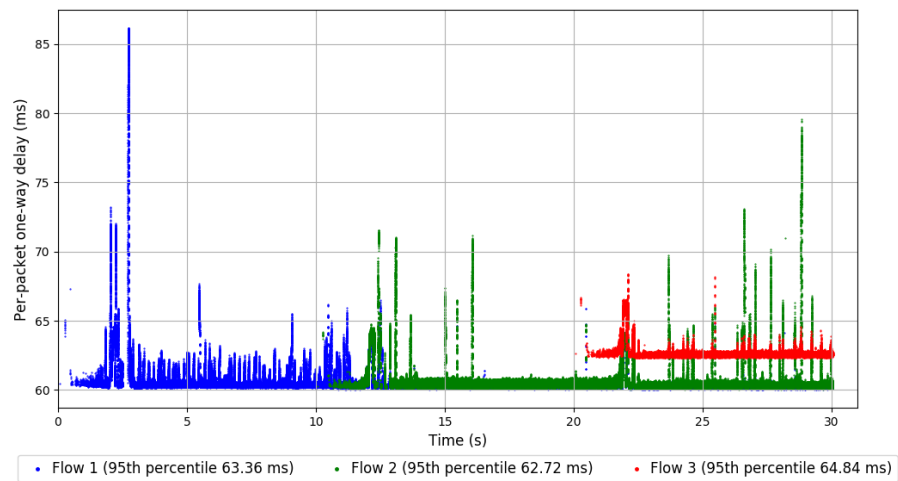
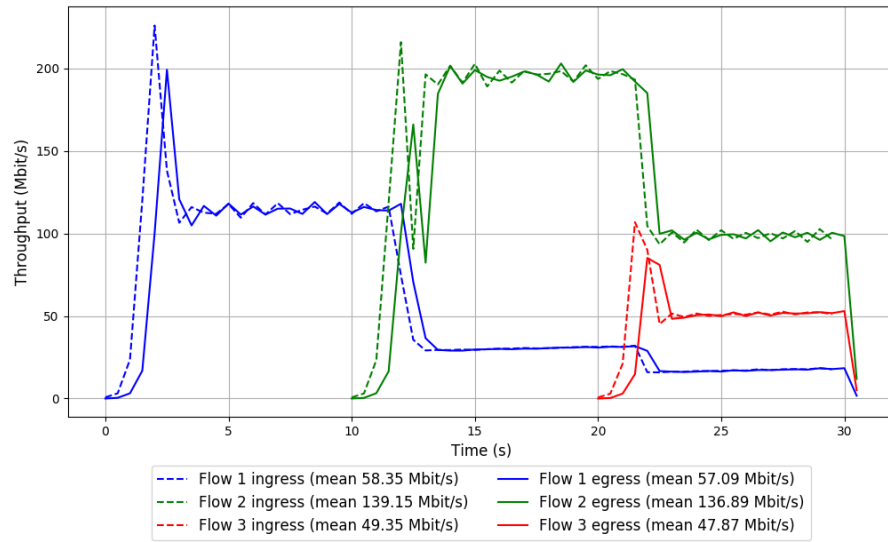


Run 5: Statistics of TCP Vegas

Start at: 2018-11-30 09:52:04  
End at: 2018-11-30 09:52:34  
Local clock offset: 2.832 ms  
Remote clock offset: -32.973 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 164.21 Mbit/s  
95th percentile per-packet one-way delay: 63.246 ms  
Loss rate: 1.94%  
-- Flow 1:  
Average throughput: 57.09 Mbit/s  
95th percentile per-packet one-way delay: 63.358 ms  
Loss rate: 2.15%  
-- Flow 2:  
Average throughput: 136.89 Mbit/s  
95th percentile per-packet one-way delay: 62.718 ms  
Loss rate: 1.62%  
-- Flow 3:  
Average throughput: 47.87 Mbit/s  
95th percentile per-packet one-way delay: 64.842 ms  
Loss rate: 3.00%

# Run 5: Report of TCP Vegas — Data Link



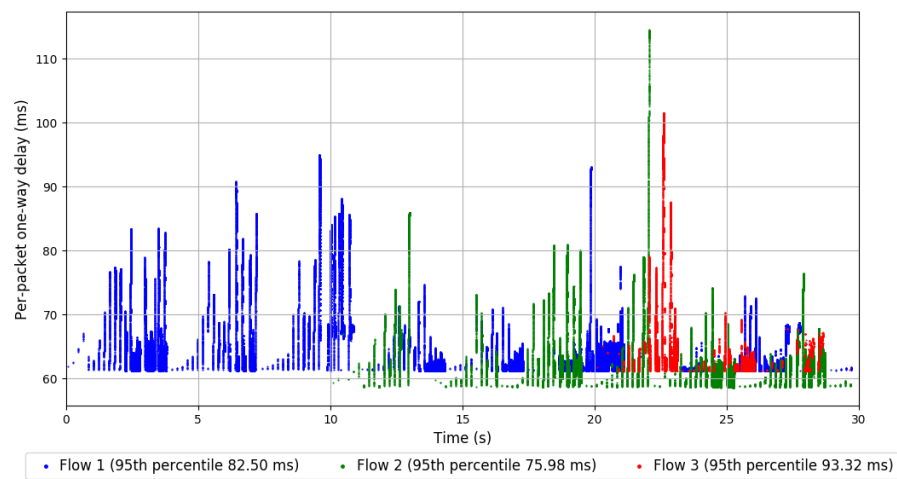
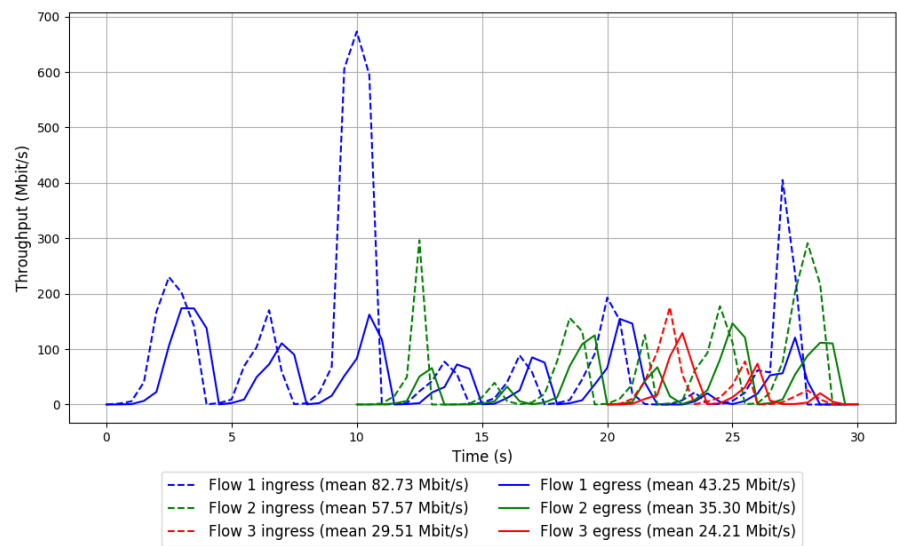


Run 1: Statistics of Verus

Start at: 2018-11-30 07:54:45  
End at: 2018-11-30 07:55:15  
Local clock offset: -1.436 ms  
Remote clock offset: -40.18 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 74.36 Mbit/s  
95th percentile per-packet one-way delay: 81.689 ms  
Loss rate: 42.92%  
-- Flow 1:  
Average throughput: 43.25 Mbit/s  
95th percentile per-packet one-way delay: 82.499 ms  
Loss rate: 47.72%  
-- Flow 2:  
Average throughput: 35.30 Mbit/s  
95th percentile per-packet one-way delay: 75.981 ms  
Loss rate: 38.69%  
-- Flow 3:  
Average throughput: 24.21 Mbit/s  
95th percentile per-packet one-way delay: 93.324 ms  
Loss rate: 17.96%

Run 1: Report of Verus — Data Link

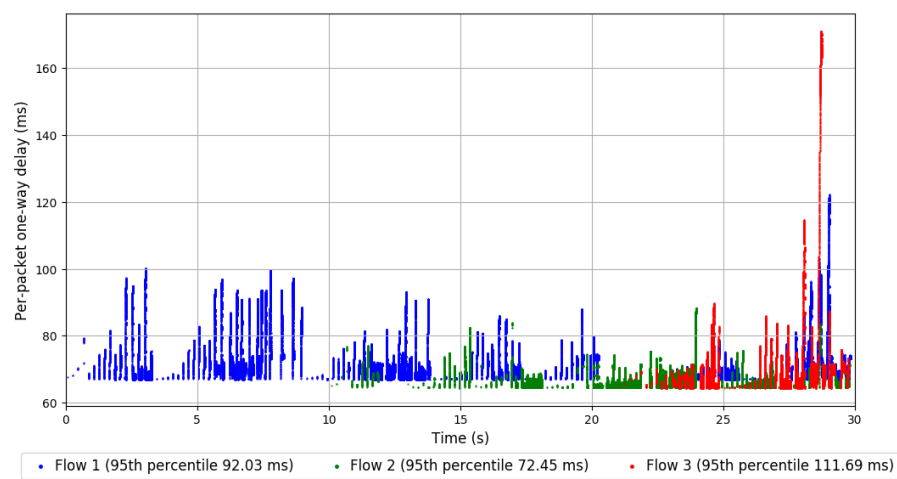
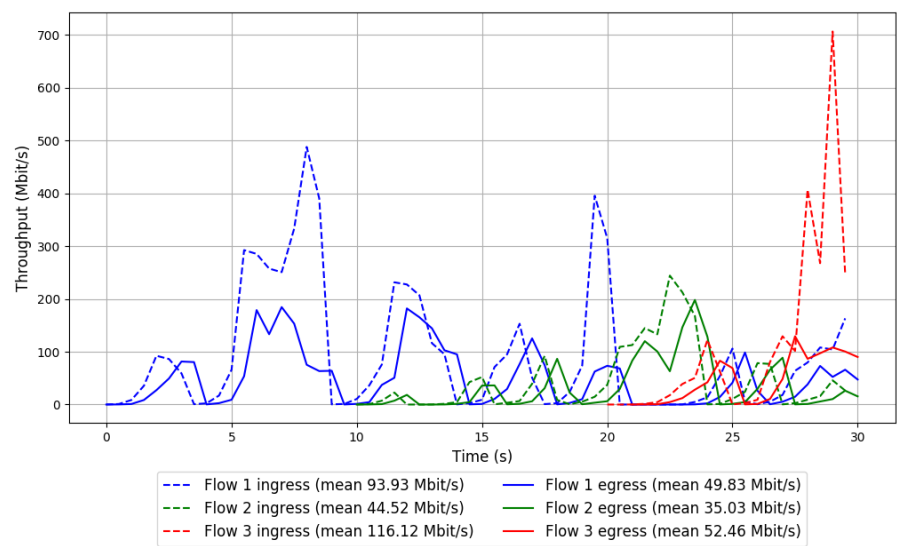


Run 2: Statistics of Verus

Start at: 2018-11-30 08:29:19  
End at: 2018-11-30 08:29:49  
Local clock offset: 1.748 ms  
Remote clock offset: -31.526 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 88.36 Mbit/s  
95th percentile per-packet one-way delay: 90.457 ms  
Loss rate: 45.19%  
-- Flow 1:  
Average throughput: 49.83 Mbit/s  
95th percentile per-packet one-way delay: 92.026 ms  
Loss rate: 46.94%  
-- Flow 2:  
Average throughput: 35.03 Mbit/s  
95th percentile per-packet one-way delay: 72.452 ms  
Loss rate: 21.33%  
-- Flow 3:  
Average throughput: 52.46 Mbit/s  
95th percentile per-packet one-way delay: 111.688 ms  
Loss rate: 59.48%

Run 2: Report of Verus — Data Link

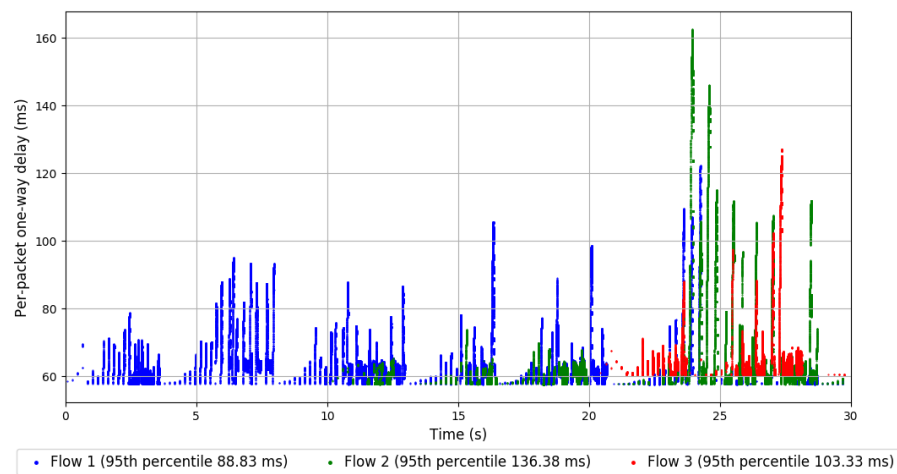
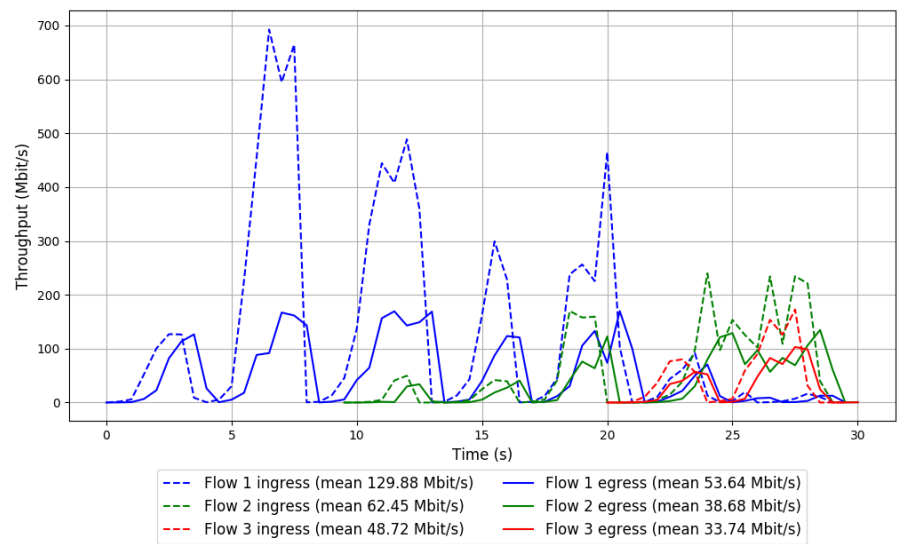


Run 3: Statistics of Verus

Start at: 2018-11-30 09:03:38  
End at: 2018-11-30 09:04:08  
Local clock offset: -0.535 ms  
Remote clock offset: -38.864 ms

# Below is generated by plot.py at 2018-11-30 10:51:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 89.79 Mbit/s  
95th percentile per-packet one-way delay: 100.918 ms  
Loss rate: 51.82%  
-- Flow 1:  
Average throughput: 53.64 Mbit/s  
95th percentile per-packet one-way delay: 88.832 ms  
Loss rate: 58.70%  
-- Flow 2:  
Average throughput: 38.68 Mbit/s  
95th percentile per-packet one-way delay: 136.381 ms  
Loss rate: 38.06%  
-- Flow 3:  
Average throughput: 33.74 Mbit/s  
95th percentile per-packet one-way delay: 103.334 ms  
Loss rate: 30.76%

Run 3: Report of Verus — Data Link

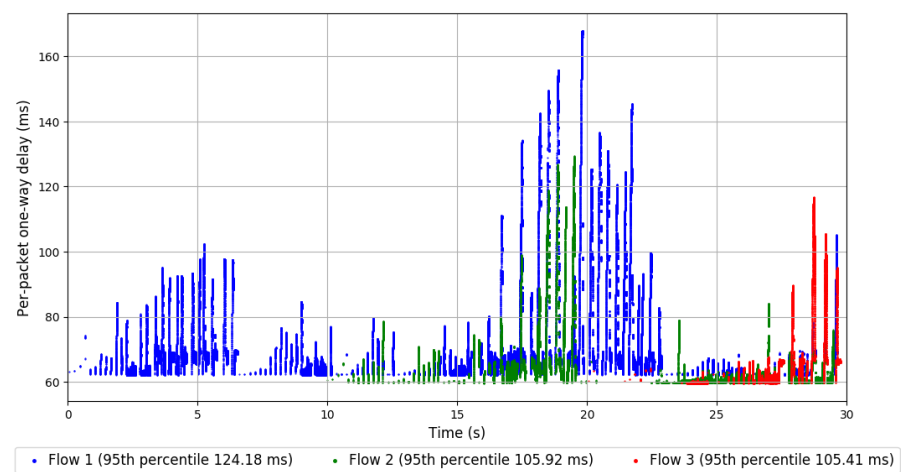
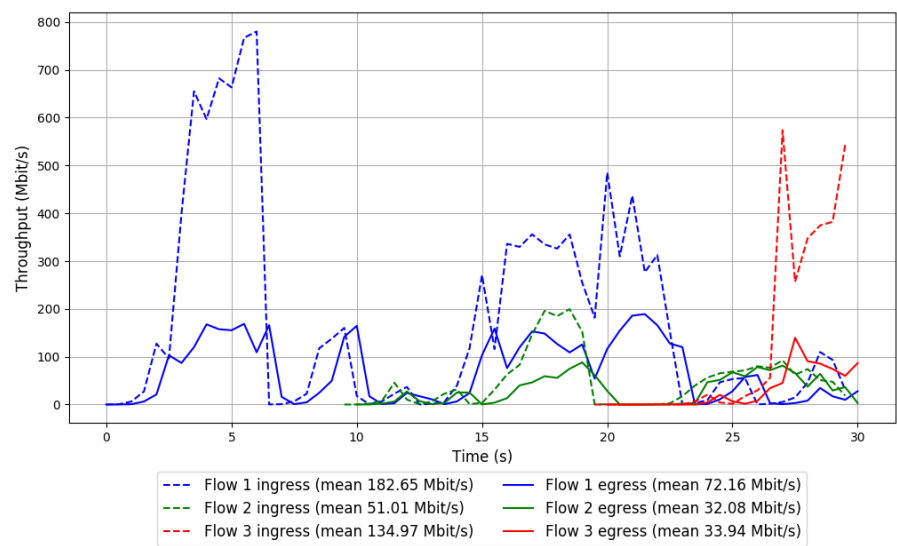


Run 4: Statistics of Verus

Start at: 2018-11-30 09:43:50  
End at: 2018-11-30 09:44:20  
Local clock offset: -0.422 ms  
Remote clock offset: -37.282 ms

# Below is generated by plot.py at 2018-11-30 10:51:29  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 104.32 Mbit/s  
95th percentile per-packet one-way delay: 119.385 ms  
Loss rate: 59.87%  
-- Flow 1:  
Average throughput: 72.16 Mbit/s  
95th percentile per-packet one-way delay: 124.181 ms  
Loss rate: 60.49%  
-- Flow 2:  
Average throughput: 32.08 Mbit/s  
95th percentile per-packet one-way delay: 105.921 ms  
Loss rate: 37.08%  
-- Flow 3:  
Average throughput: 33.94 Mbit/s  
95th percentile per-packet one-way delay: 105.410 ms  
Loss rate: 74.84%

Run 4: Report of Verus — Data Link



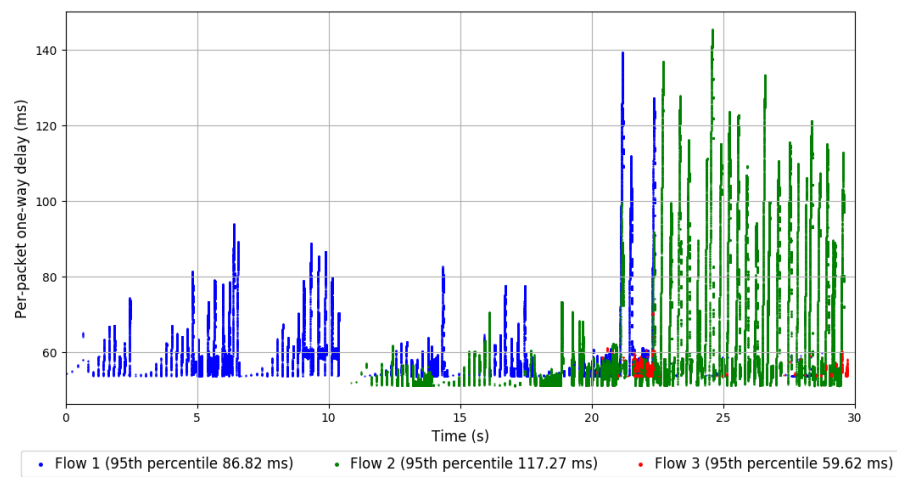
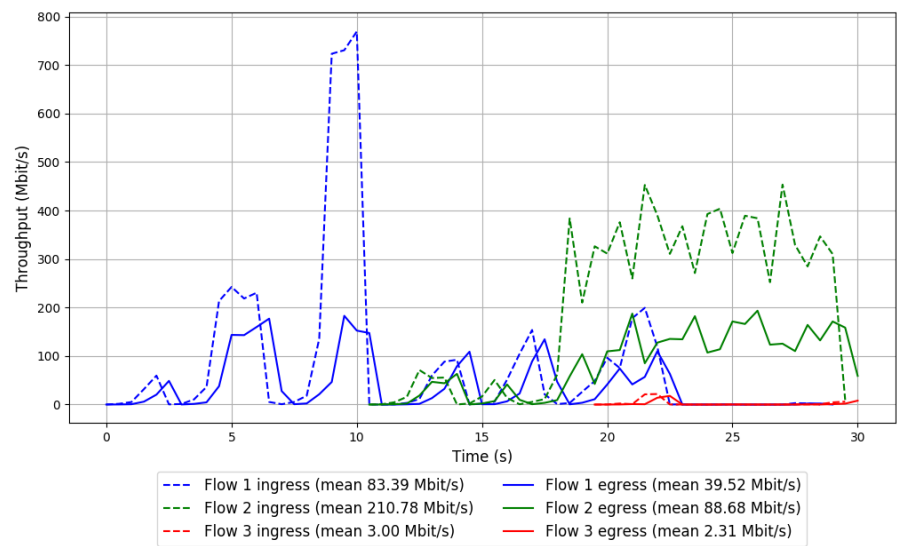


Run 5: Statistics of Verus

Start at: 2018-11-30 10:18:29  
End at: 2018-11-30 10:18:59  
Local clock offset: 0.329 ms  
Remote clock offset: -43.852 ms

# Below is generated by plot.py at 2018-11-30 10:51:30  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 95.06 Mbit/s  
95th percentile per-packet one-way delay: 113.031 ms  
Loss rate: 55.74%  
-- Flow 1:  
Average throughput: 39.52 Mbit/s  
95th percentile per-packet one-way delay: 86.816 ms  
Loss rate: 52.61%  
-- Flow 2:  
Average throughput: 88.68 Mbit/s  
95th percentile per-packet one-way delay: 117.267 ms  
Loss rate: 57.88%  
-- Flow 3:  
Average throughput: 2.31 Mbit/s  
95th percentile per-packet one-way delay: 59.620 ms  
Loss rate: 22.93%

Run 5: Report of Verus — Data Link

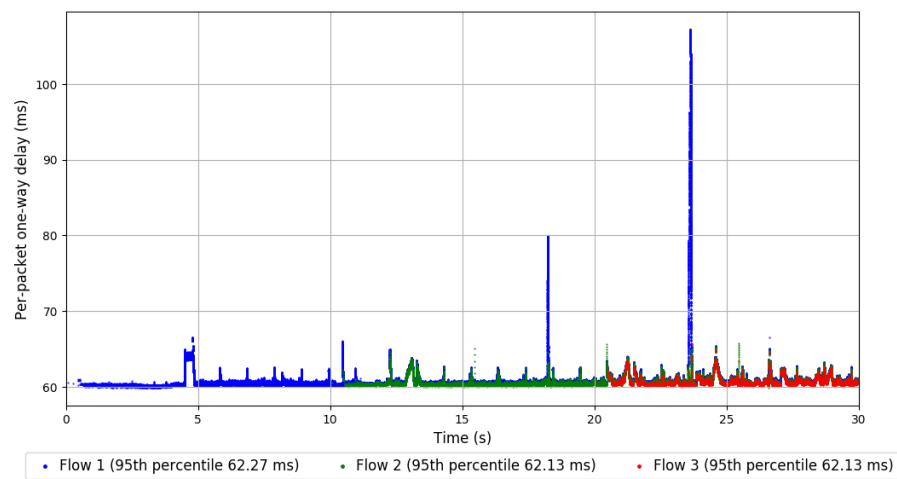
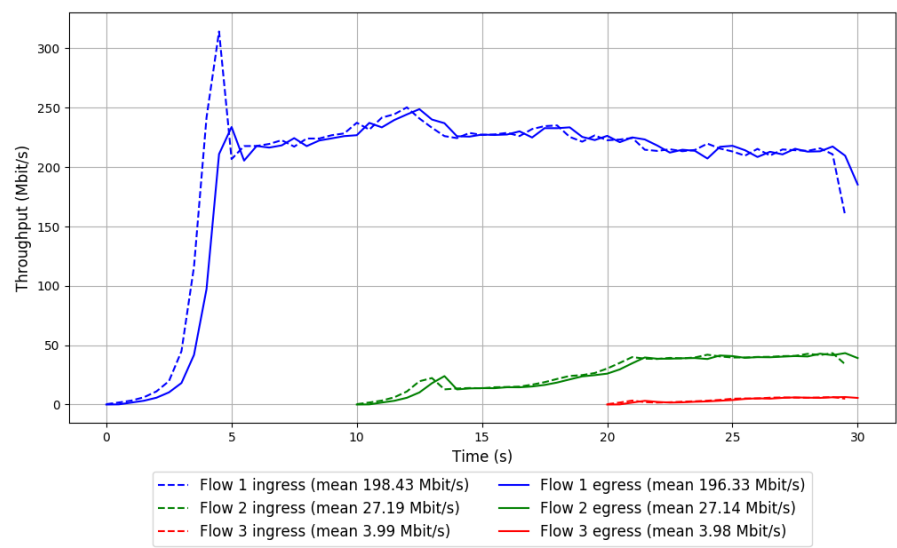


Run 1: Statistics of PCC-Vivace

Start at: 2018-11-30 07:24:22  
End at: 2018-11-30 07:24:52  
Local clock offset: 0.528 ms  
Remote clock offset: -39.232 ms

# Below is generated by plot.py at 2018-11-30 10:52:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 215.70 Mbit/s  
95th percentile per-packet one-way delay: 62.256 ms  
Loss rate: 0.98%  
-- Flow 1:  
Average throughput: 196.33 Mbit/s  
95th percentile per-packet one-way delay: 62.272 ms  
Loss rate: 1.06%  
-- Flow 2:  
Average throughput: 27.14 Mbit/s  
95th percentile per-packet one-way delay: 62.132 ms  
Loss rate: 0.18%  
-- Flow 3:  
Average throughput: 3.98 Mbit/s  
95th percentile per-packet one-way delay: 62.129 ms  
Loss rate: 0.17%

Run 1: Report of PCC-Vivace — Data Link

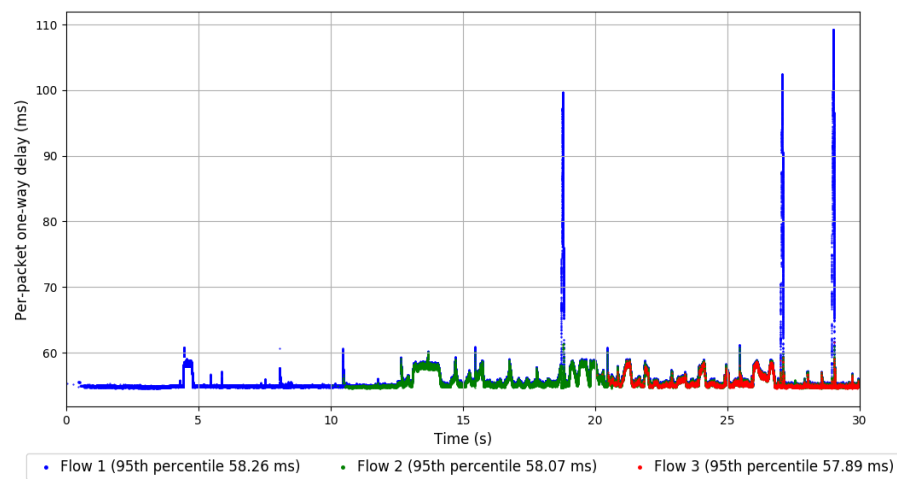
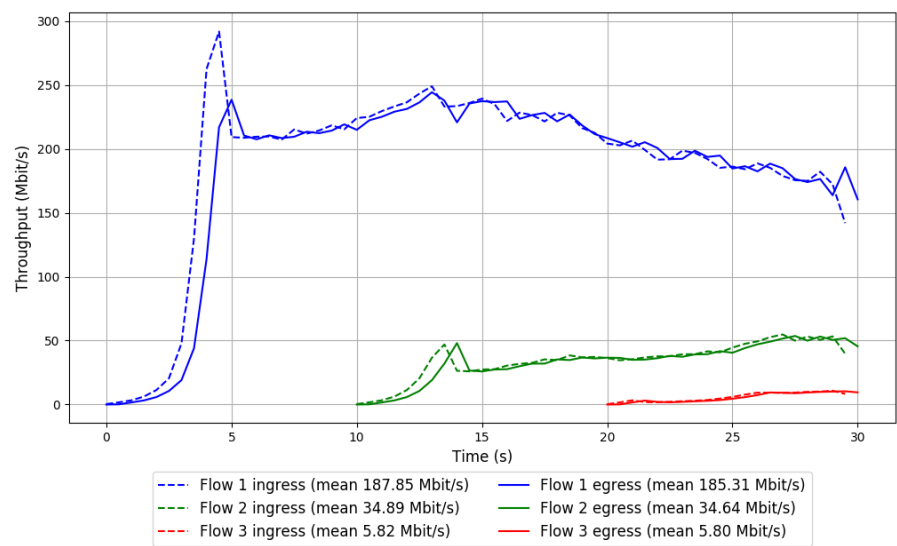


Run 2: Statistics of PCC-Vivace

Start at: 2018-11-30 08:09:59  
End at: 2018-11-30 08:10:29  
Local clock offset: -1.504 ms  
Remote clock offset: -43.442 ms

# Below is generated by plot.py at 2018-11-30 10:52:32  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 210.26 Mbit/s  
95th percentile per-packet one-way delay: 58.237 ms  
Loss rate: 1.28%  
-- Flow 1:  
Average throughput: 185.31 Mbit/s  
95th percentile per-packet one-way delay: 58.262 ms  
Loss rate: 1.35%  
-- Flow 2:  
Average throughput: 34.64 Mbit/s  
95th percentile per-packet one-way delay: 58.070 ms  
Loss rate: 0.72%  
-- Flow 3:  
Average throughput: 5.80 Mbit/s  
95th percentile per-packet one-way delay: 57.888 ms  
Loss rate: 0.50%

Run 2: Report of PCC-Vivace — Data Link

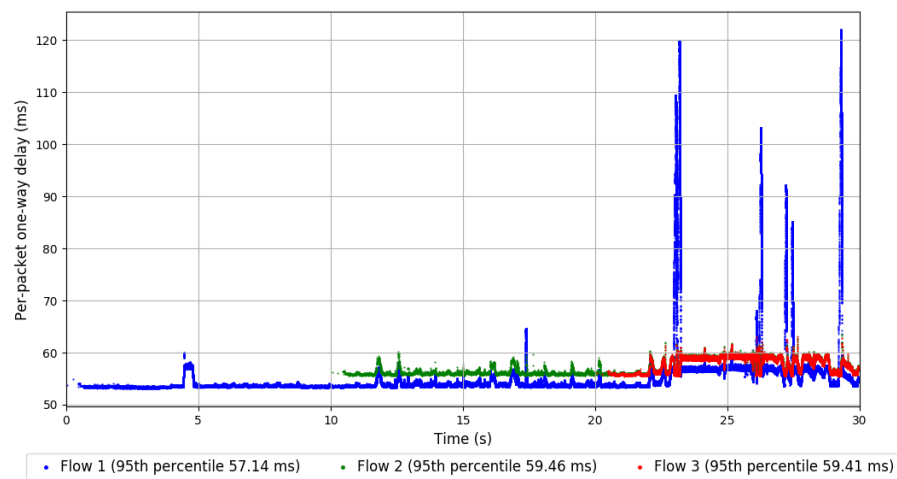
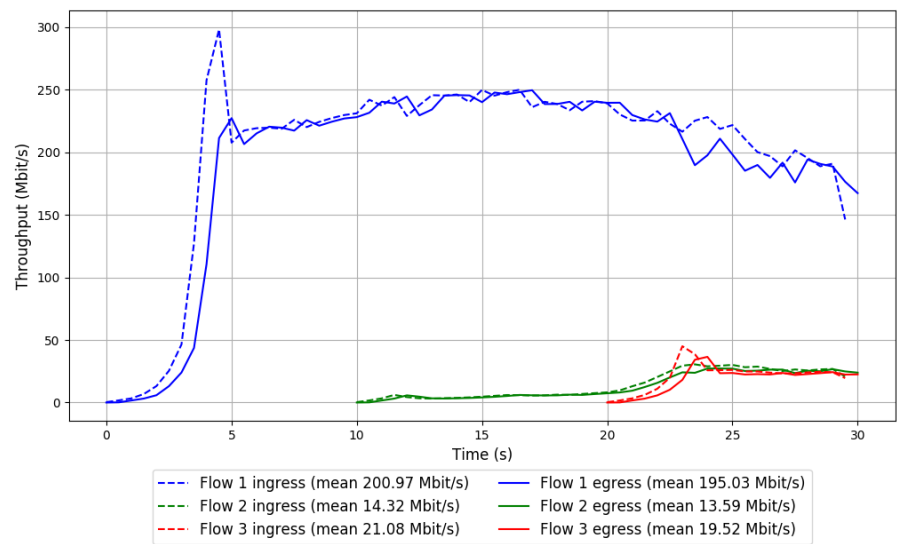


Run 3: Statistics of PCC-Vivace

Start at: 2018-11-30 08:44:33  
End at: 2018-11-30 08:45:03  
Local clock offset: 2.774 ms  
Remote clock offset: -42.181 ms

# Below is generated by plot.py at 2018-11-30 10:52:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 210.51 Mbit/s  
95th percentile per-packet one-way delay: 58.774 ms  
Loss rate: 3.19%  
-- Flow 1:  
Average throughput: 195.03 Mbit/s  
95th percentile per-packet one-way delay: 57.142 ms  
Loss rate: 2.95%  
-- Flow 2:  
Average throughput: 13.59 Mbit/s  
95th percentile per-packet one-way delay: 59.463 ms  
Loss rate: 5.07%  
-- Flow 3:  
Average throughput: 19.52 Mbit/s  
95th percentile per-packet one-way delay: 59.410 ms  
Loss rate: 7.39%

Run 3: Report of PCC-Vivace — Data Link



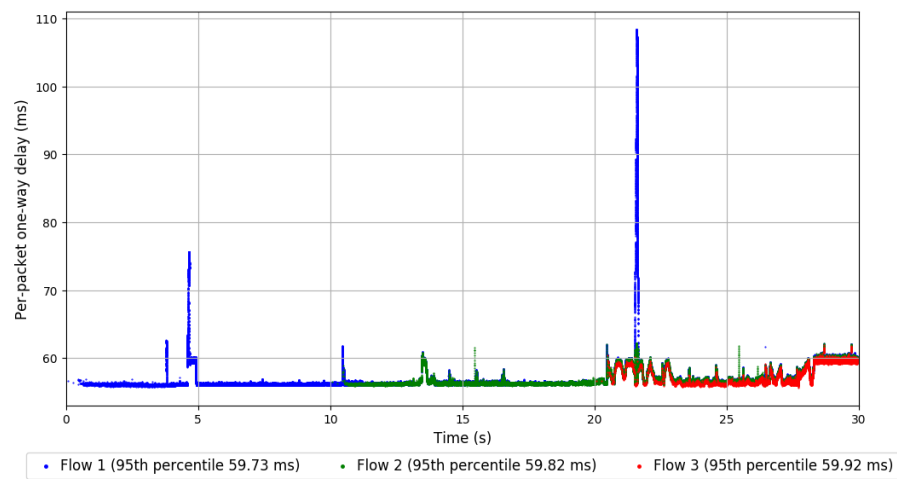
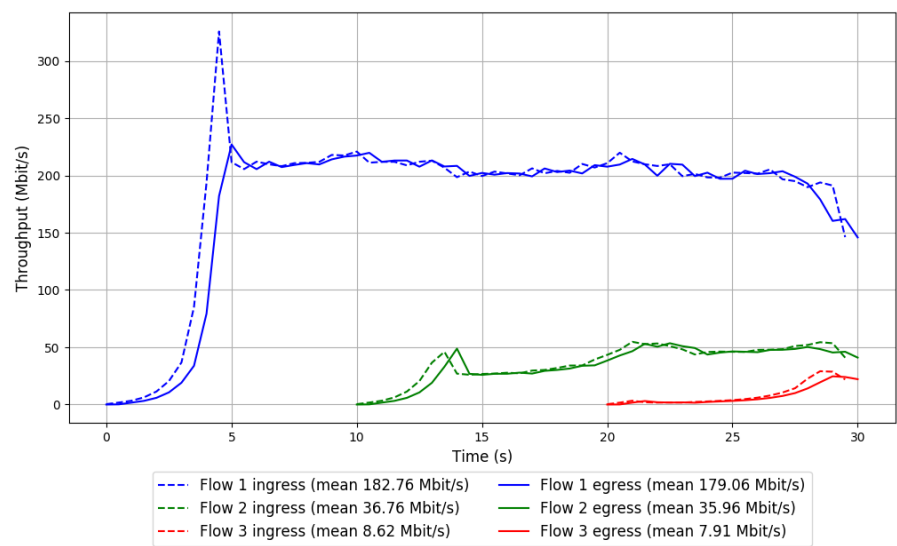


Run 4: Statistics of PCC-Vivace

Start at: 2018-11-30 09:18:58  
End at: 2018-11-30 09:19:28  
Local clock offset: -1.111 ms  
Remote clock offset: -40.908 ms

# Below is generated by plot.py at 2018-11-30 10:52:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 205.59 Mbit/s  
95th percentile per-packet one-way delay: 59.754 ms  
Loss rate: 2.11%  
-- Flow 1:  
Average throughput: 179.06 Mbit/s  
95th percentile per-packet one-way delay: 59.730 ms  
Loss rate: 2.01%  
-- Flow 2:  
Average throughput: 35.96 Mbit/s  
95th percentile per-packet one-way delay: 59.821 ms  
Loss rate: 2.16%  
-- Flow 3:  
Average throughput: 7.91 Mbit/s  
95th percentile per-packet one-way delay: 59.922 ms  
Loss rate: 8.22%

Run 4: Report of PCC-Vivace — Data Link

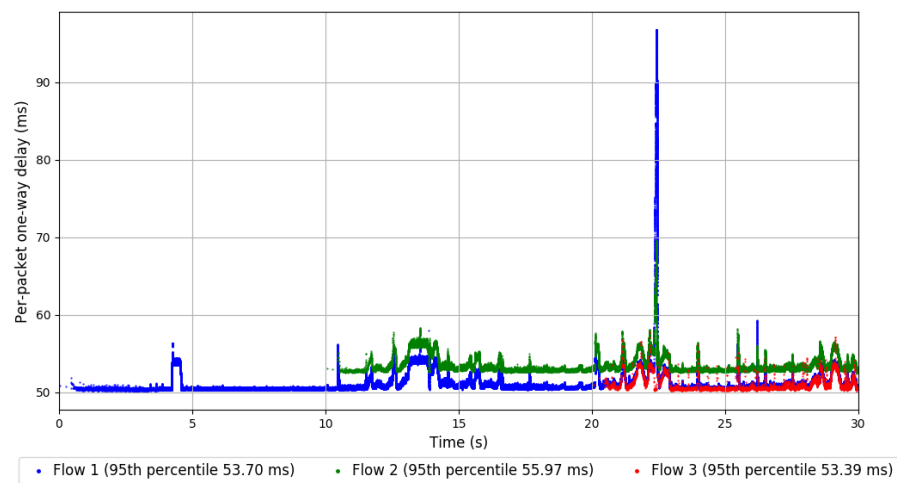
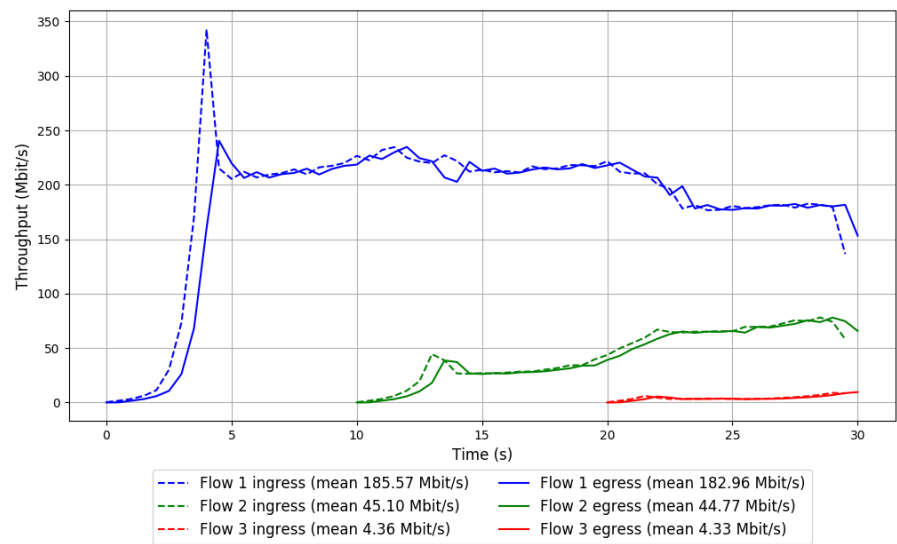


Run 5: Statistics of PCC-Vivace

Start at: 2018-11-30 09:59:11  
End at: 2018-11-30 09:59:41  
Local clock offset: 1.014 ms  
Remote clock offset: -44.178 ms

# Below is generated by plot.py at 2018-11-30 10:52:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 214.15 Mbit/s  
95th percentile per-packet one-way delay: 54.012 ms  
Loss rate: 1.31%  
-- Flow 1:  
Average throughput: 182.96 Mbit/s  
95th percentile per-packet one-way delay: 53.696 ms  
Loss rate: 1.41%  
-- Flow 2:  
Average throughput: 44.77 Mbit/s  
95th percentile per-packet one-way delay: 55.969 ms  
Loss rate: 0.74%  
-- Flow 3:  
Average throughput: 4.33 Mbit/s  
95th percentile per-packet one-way delay: 53.387 ms  
Loss rate: 0.51%

Run 5: Report of PCC-Vivace — Data Link

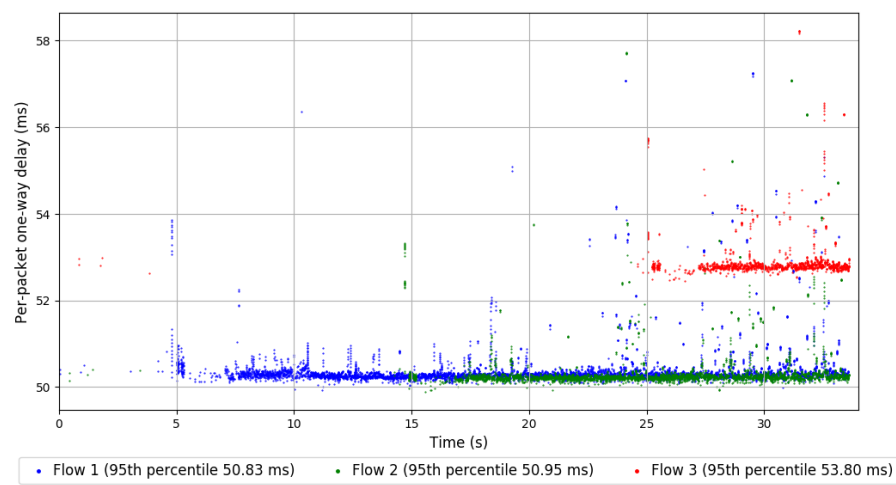
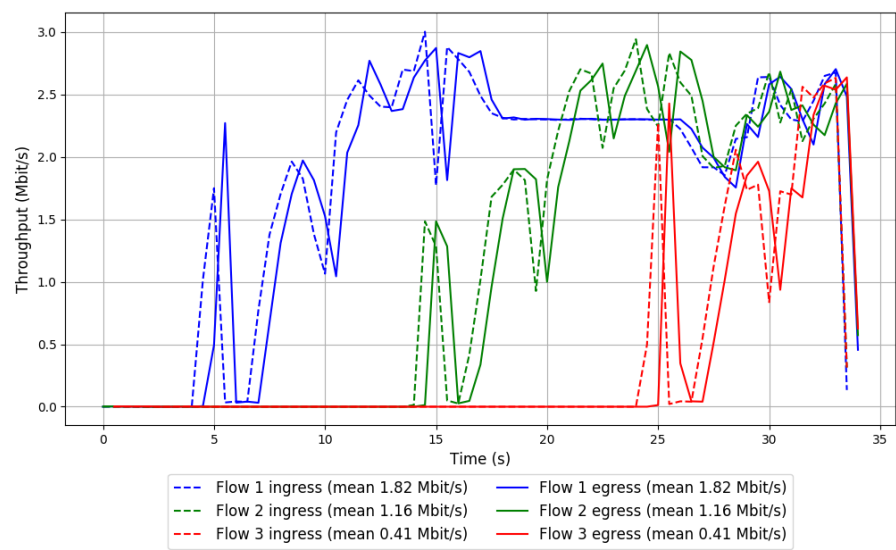


Run 1: Statistics of WebRTC media

Start at: 2018-11-30 07:23:04  
End at: 2018-11-30 07:23:34  
Local clock offset: 1.471 ms  
Remote clock offset: -45.608 ms

# Below is generated by plot.py at 2018-11-30 10:52:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.37 Mbit/s  
95th percentile per-packet one-way delay: 52.826 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 1.82 Mbit/s  
95th percentile per-packet one-way delay: 50.827 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.16 Mbit/s  
95th percentile per-packet one-way delay: 50.945 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.41 Mbit/s  
95th percentile per-packet one-way delay: 53.799 ms  
Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link

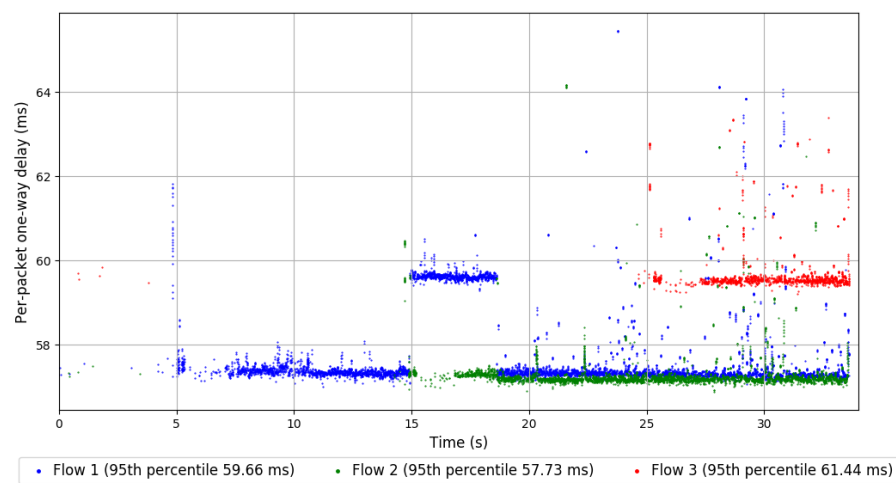
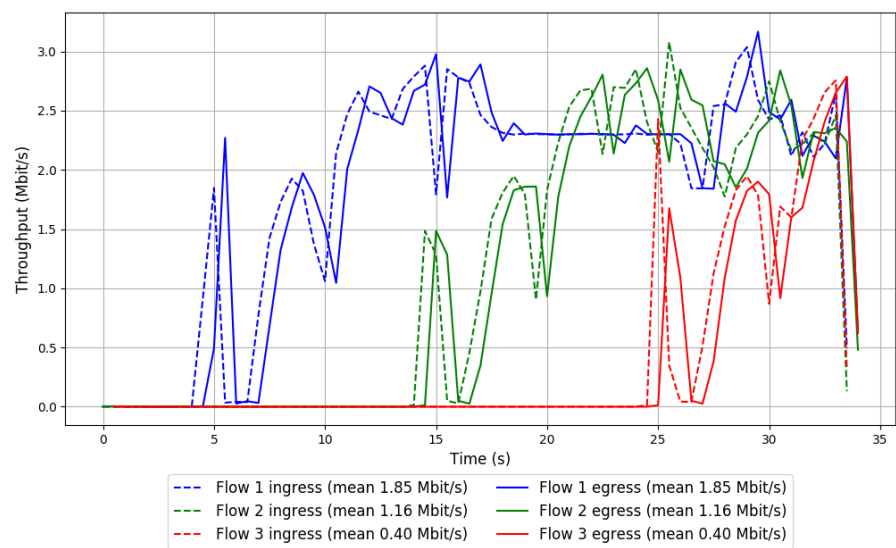


Run 2: Statistics of WebRTC media

Start at: 2018-11-30 08:08:41  
End at: 2018-11-30 08:09:11  
Local clock offset: 1.495 ms  
Remote clock offset: -38.238 ms

# Below is generated by plot.py at 2018-11-30 10:52:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.38 Mbit/s  
95th percentile per-packet one-way delay: 59.662 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 1.85 Mbit/s  
95th percentile per-packet one-way delay: 59.662 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.16 Mbit/s  
95th percentile per-packet one-way delay: 57.735 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.40 Mbit/s  
95th percentile per-packet one-way delay: 61.440 ms  
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



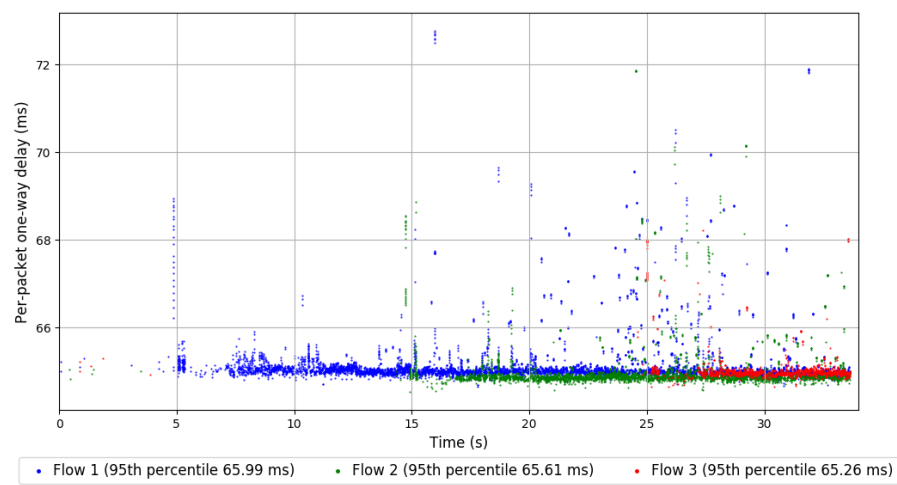
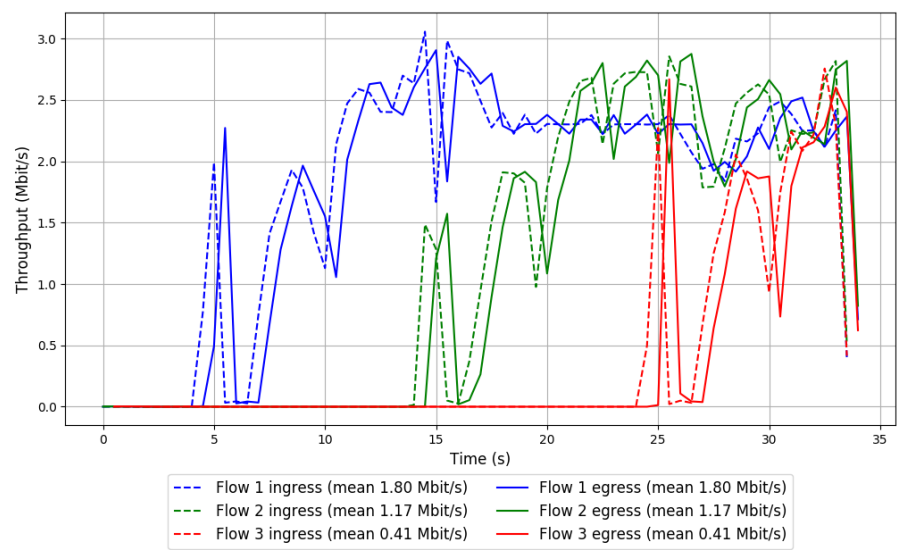


Run 3: Statistics of WebRTC media

Start at: 2018-11-30 08:43:15  
End at: 2018-11-30 08:43:45  
Local clock offset: -19.455 ms  
Remote clock offset: -52.739 ms

# Below is generated by plot.py at 2018-11-30 10:52:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.36 Mbit/s  
95th percentile per-packet one-way delay: 65.747 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 1.80 Mbit/s  
95th percentile per-packet one-way delay: 65.994 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.17 Mbit/s  
95th percentile per-packet one-way delay: 65.614 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.41 Mbit/s  
95th percentile per-packet one-way delay: 65.256 ms  
Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

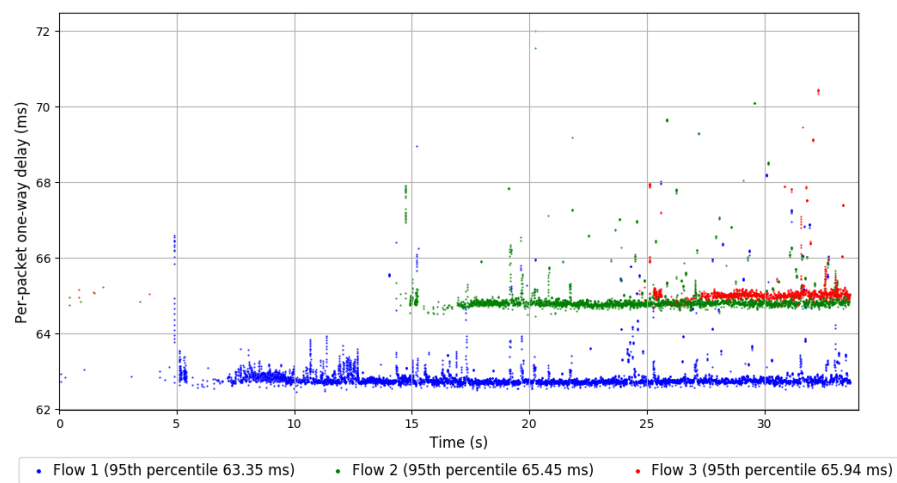
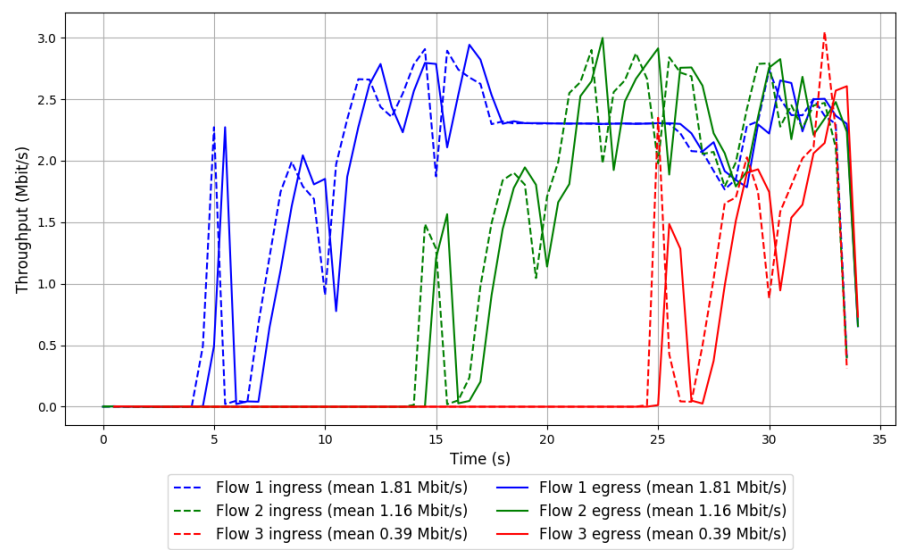


Run 4: Statistics of WebRTC media

Start at: 2018-11-30 09:17:40  
End at: 2018-11-30 09:18:10  
Local clock offset: -2.92 ms  
Remote clock offset: -35.997 ms

# Below is generated by plot.py at 2018-11-30 10:52:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.34 Mbit/s  
95th percentile per-packet one-way delay: 65.167 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 1.81 Mbit/s  
95th percentile per-packet one-way delay: 63.350 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.16 Mbit/s  
95th percentile per-packet one-way delay: 65.451 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.39 Mbit/s  
95th percentile per-packet one-way delay: 65.942 ms  
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-11-30 09:57:53  
End at: 2018-11-30 09:58:23  
Local clock offset: 0.07 ms  
Remote clock offset: -39.511 ms

# Below is generated by plot.py at 2018-11-30 10:52:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.38 Mbit/s  
95th percentile per-packet one-way delay: 58.953 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 1.81 Mbit/s  
95th percentile per-packet one-way delay: 59.205 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.17 Mbit/s  
95th percentile per-packet one-way delay: 56.241 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.41 Mbit/s  
95th percentile per-packet one-way delay: 56.715 ms  
Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

