

## Pantheon Report

Generated at 2019-01-25 04:42:41 (UTC).

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

Repeated the test of 21 congestion control schemes 5 times.

Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.

NTP offsets were measured against **nets.org.sg** and have been applied to correct the timestamps in logs.

### System info:

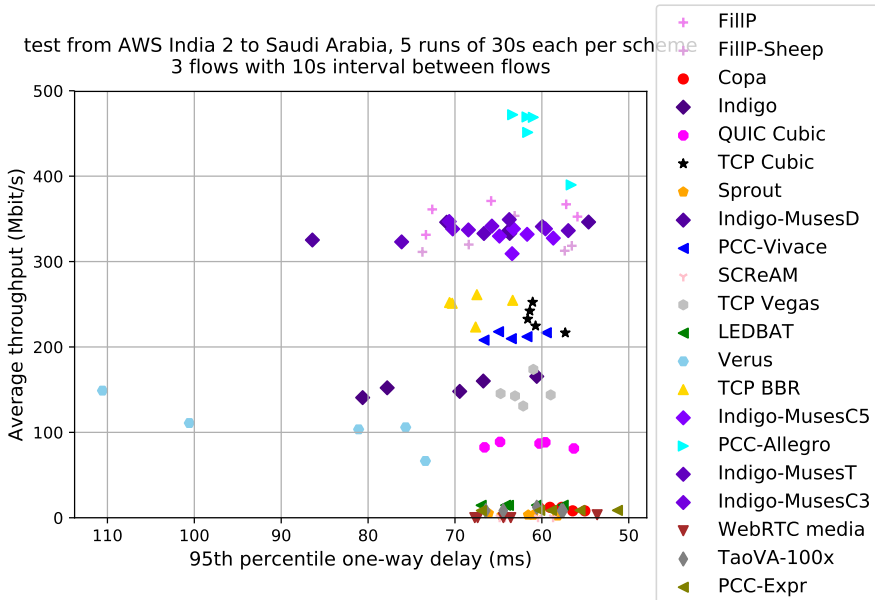
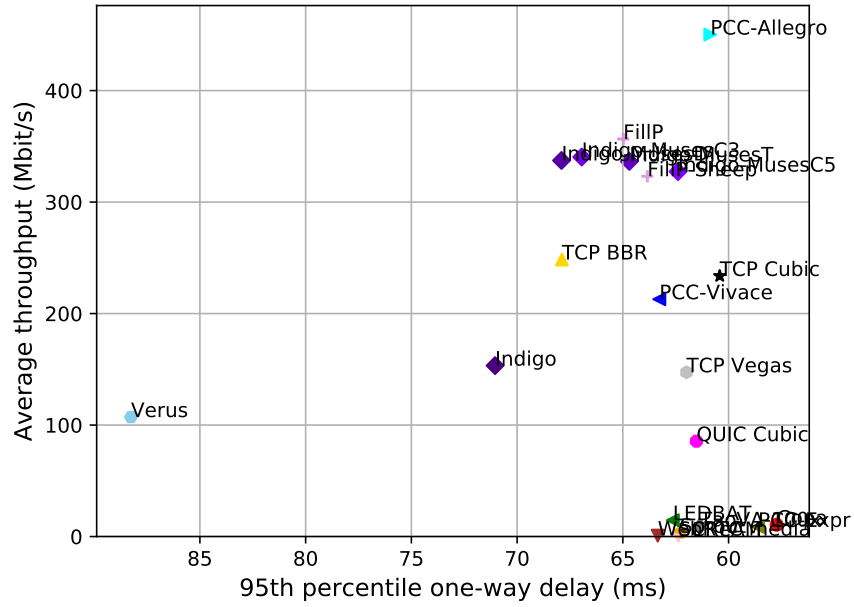
```
Linux 4.15.0-1031-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

### Git summary:

```
branch: muses @ 0b8e9a949603c3842368430acf469eec3b941f9f
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf5e58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ d9c5ea33091330aca25ecd105ab2db6d34d5c40d
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)



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	205.15	43.54	43.84	69.43	64.37	63.75	11.27	16.75	19.45
Copa	5	5.22	7.01	2.10	57.56	57.64	58.95	78.99	72.76	85.57
TCP Cubic	5	157.42	77.53	74.10	60.93	58.64	57.94	1.29	1.02	1.45
FillP	5	239.83	128.26	95.33	64.22	65.54	64.67	22.23	24.52	24.21
FillP-Sheep	5	232.78	84.22	103.67	63.36	63.65	63.55	14.46	10.78	15.23
Indigo	5	84.43	66.24	78.02	70.98	70.58	74.77	6.55	9.88	18.04
Indigo-MusesC3	5	331.25	9.72	9.78	66.60	66.65	67.67	12.53	9.15	8.83
Indigo-MusesC5	5	326.36	0.71	1.70	62.39	60.42	60.45	26.30	31.19	28.33
Indigo-MusesD	5	336.66	0.74	0.64	67.92	62.39	62.39	28.68	32.74	32.09
Indigo-MusesT	5	294.80	43.71	44.04	64.39	64.32	63.93	11.07	9.32	8.60
LEDBAT	5	9.43	6.31	3.07	62.56	61.93	60.55	0.00	0.00	0.00
PCC-Allegro	5	385.87	81.27	31.28	60.89	60.73	60.27	5.55	2.27	3.16
PCC-Expr	5	0.01	9.79	6.39	58.91	58.60	58.61	83.43	31.20	26.36
QUIC Cubic	5	49.92	40.32	27.26	61.02	61.87	64.15	0.00	0.02	0.01
SCReAM	5	0.22	0.22	0.22	61.91	60.60	61.40	0.00	0.00	0.00
Sprout	5	1.73	1.76	1.40	61.70	61.57	62.20	0.08	0.00	0.34
TaoVA-100x	5	1.63	8.78	4.89	58.74	62.47	56.77	82.05	25.47	25.58
TCP Vegas	5	81.70	52.48	92.16	62.18	60.65	62.99	1.43	2.20	2.72
Verus	5	65.19	57.83	11.48	88.89	87.96	64.08	51.16	54.89	37.98
PCC-Vivace	5	185.09	35.18	13.22	63.34	62.16	62.14	1.37	0.91	1.18
WebRTC media	5	0.42	0.28	0.12	63.66	62.97	63.61	0.00	0.00	0.00

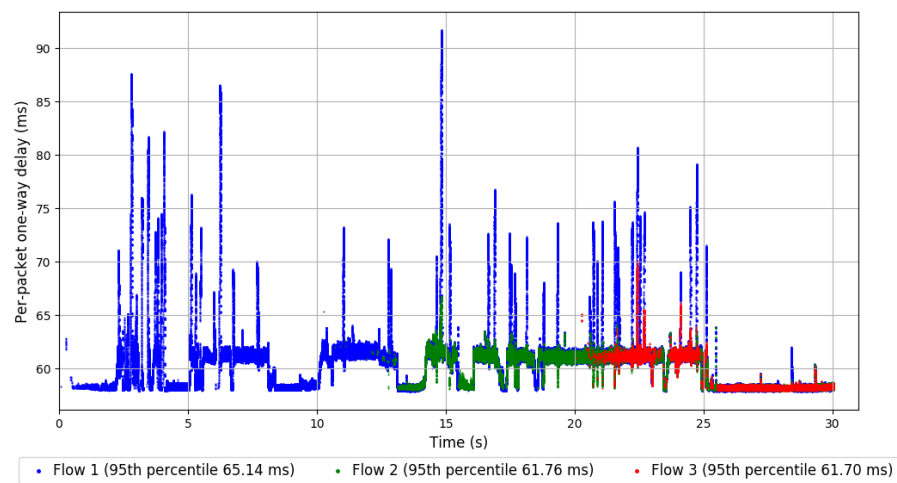
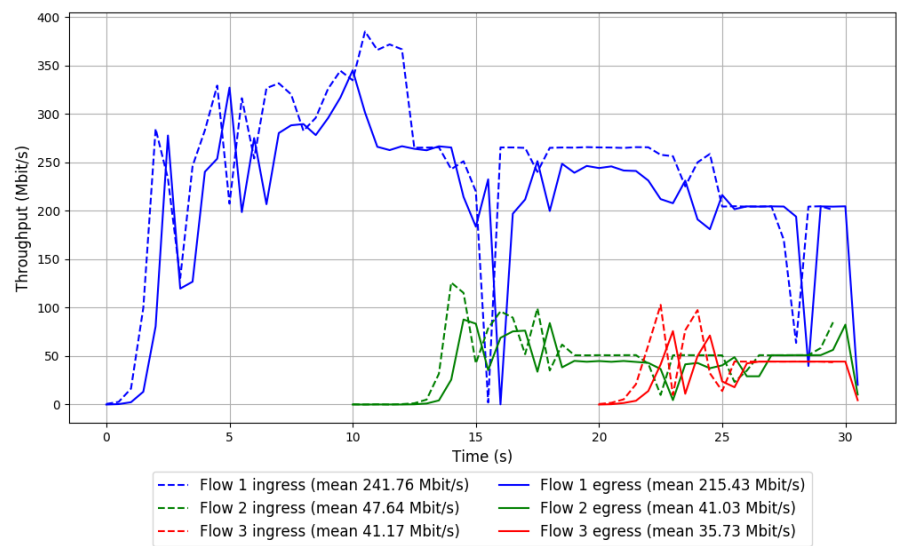


Run 1: Statistics of TCP BBR

Start at: 2019-01-25 01:32:17  
End at: 2019-01-25 01:32:47  
Local clock offset: 0.607 ms  
Remote clock offset: -38.799 ms

# Below is generated by plot.py at 2019-01-25 04:18:48  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 254.64 Mbit/s  
95th percentile per-packet one-way delay: 63.359 ms  
Loss rate: 11.33%  
-- Flow 1:  
Average throughput: 215.43 Mbit/s  
95th percentile per-packet one-way delay: 65.135 ms  
Loss rate: 10.89%  
-- Flow 2:  
Average throughput: 41.03 Mbit/s  
95th percentile per-packet one-way delay: 61.757 ms  
Loss rate: 13.87%  
-- Flow 3:  
Average throughput: 35.73 Mbit/s  
95th percentile per-packet one-way delay: 61.701 ms  
Loss rate: 13.24%

Run 1: Report of TCP BBR — Data Link

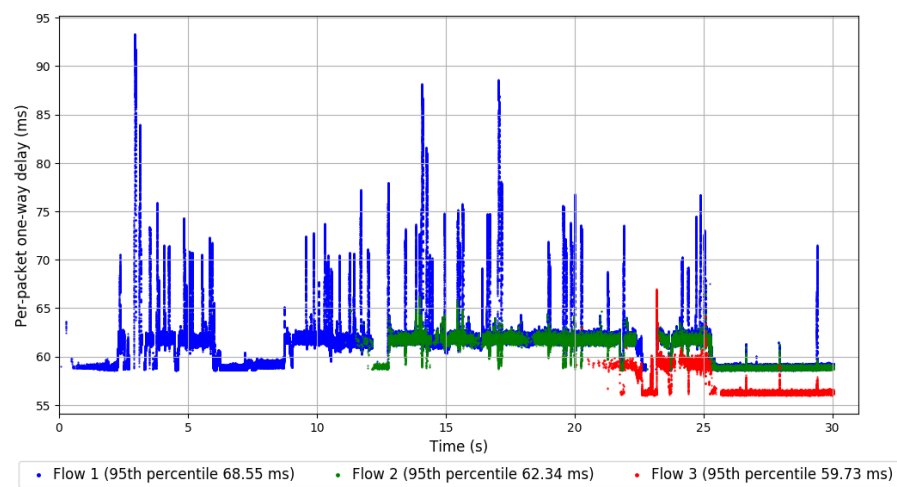
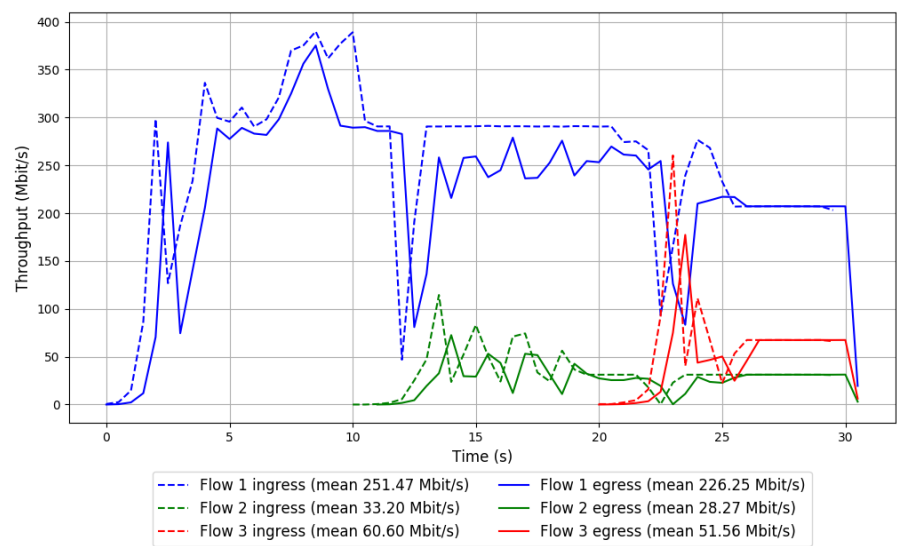


Run 2: Statistics of TCP BBR

Start at: 2019-01-25 02:03:04  
End at: 2019-01-25 02:03:34  
Local clock offset: 0.004 ms  
Remote clock offset: -41.037 ms

# Below is generated by plot.py at 2019-01-25 04:18:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 261.26 Mbit/s  
95th percentile per-packet one-way delay: 67.478 ms  
Loss rate: 11.06%  
-- Flow 1:  
Average throughput: 226.25 Mbit/s  
95th percentile per-packet one-way delay: 68.550 ms  
Loss rate: 10.03%  
-- Flow 2:  
Average throughput: 28.27 Mbit/s  
95th percentile per-packet one-way delay: 62.342 ms  
Loss rate: 19.23%  
-- Flow 3:  
Average throughput: 51.56 Mbit/s  
95th percentile per-packet one-way delay: 59.729 ms  
Loss rate: 14.95%

Run 2: Report of TCP BBR — Data Link

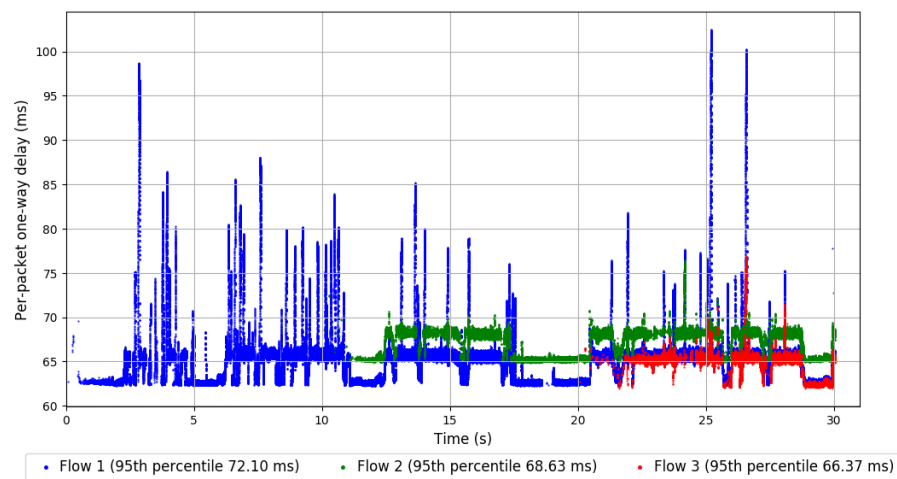
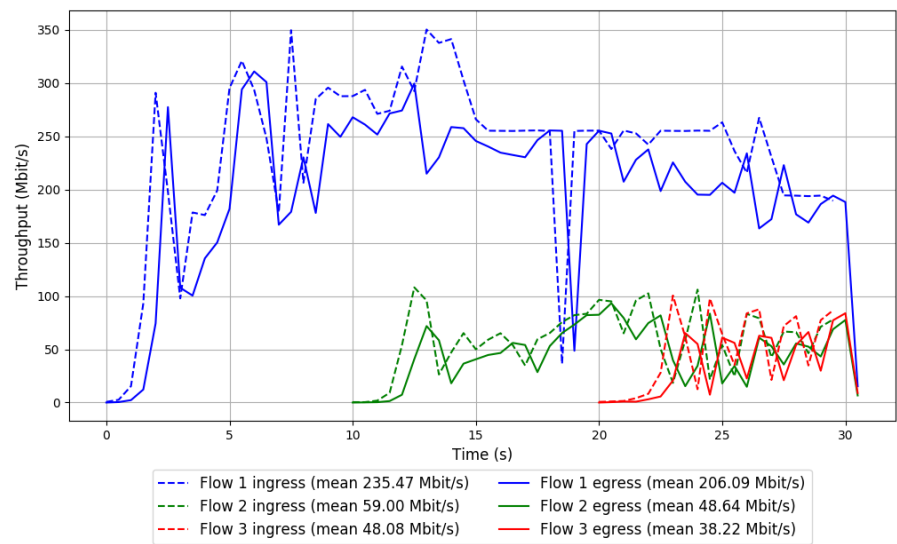


Run 3: Statistics of TCP BBR

Start at: 2019-01-25 02:44:17  
End at: 2019-01-25 02:44:47  
Local clock offset: 1.125 ms  
Remote clock offset: -34.133 ms

# Below is generated by plot.py at 2019-01-25 04:18:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 251.21 Mbit/s  
95th percentile per-packet one-way delay: 70.318 ms  
Loss rate: 13.60%  
-- Flow 1:  
Average throughput: 206.09 Mbit/s  
95th percentile per-packet one-way delay: 72.100 ms  
Loss rate: 12.47%  
-- Flow 2:  
Average throughput: 48.64 Mbit/s  
95th percentile per-packet one-way delay: 68.627 ms  
Loss rate: 17.57%  
-- Flow 3:  
Average throughput: 38.22 Mbit/s  
95th percentile per-packet one-way delay: 66.367 ms  
Loss rate: 20.49%

Run 3: Report of TCP BBR — Data Link

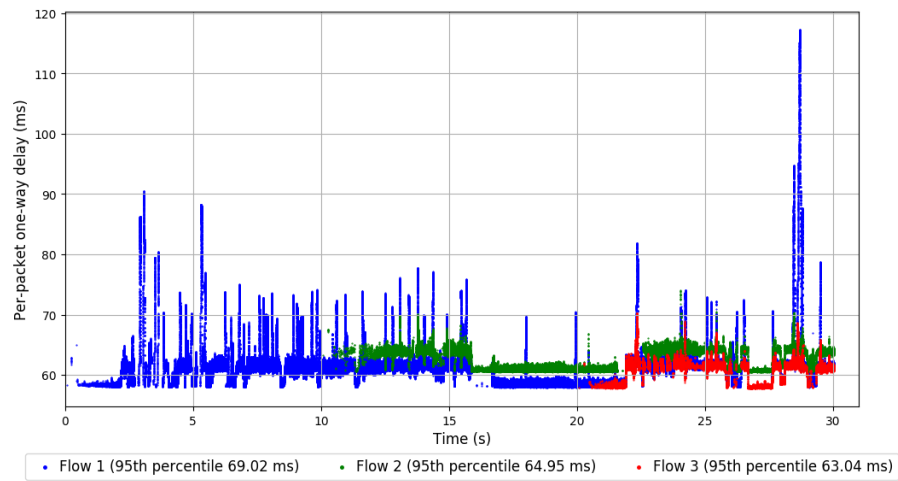
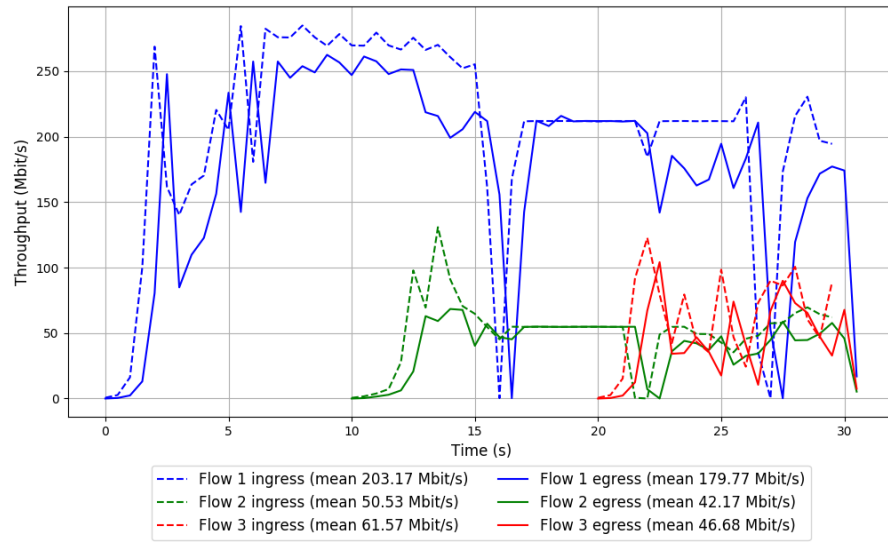


Run 4: Statistics of TCP BBR

Start at: 2019-01-25 03:15:20  
End at: 2019-01-25 03:15:50  
Local clock offset: 0.1 ms  
Remote clock offset: -40.554 ms

# Below is generated by plot.py at 2019-01-25 04:18:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 223.38 Mbit/s  
95th percentile per-packet one-way delay: 67.625 ms  
Loss rate: 13.18%  
-- Flow 1:  
Average throughput: 179.77 Mbit/s  
95th percentile per-packet one-way delay: 69.021 ms  
Loss rate: 11.51%  
-- Flow 2:  
Average throughput: 42.17 Mbit/s  
95th percentile per-packet one-way delay: 64.954 ms  
Loss rate: 16.55%  
-- Flow 3:  
Average throughput: 46.68 Mbit/s  
95th percentile per-packet one-way delay: 63.044 ms  
Loss rate: 24.16%

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



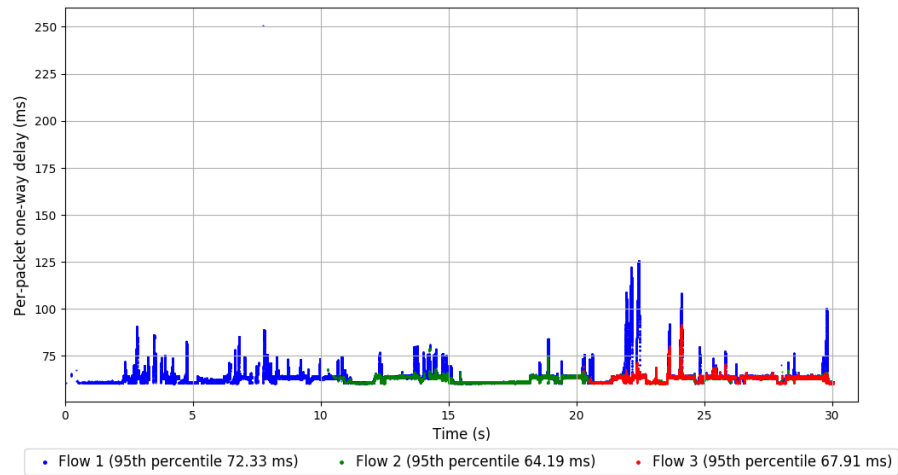
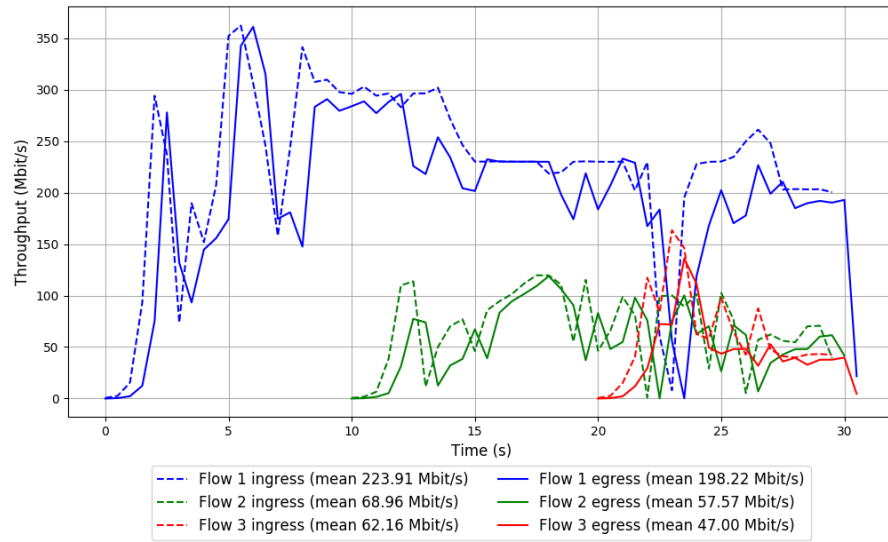


Run 5: Statistics of TCP BBR

Start at: 2019-01-25 04:02:41  
End at: 2019-01-25 04:03:11  
Local clock offset: -2.071 ms  
Remote clock offset: -40.41 ms

# Below is generated by plot.py at 2019-01-25 04:18:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 252.06 Mbit/s  
95th percentile per-packet one-way delay: 70.623 ms  
Loss rate: 13.19%  
-- Flow 1:  
Average throughput: 198.22 Mbit/s  
95th percentile per-packet one-way delay: 72.325 ms  
Loss rate: 11.47%  
-- Flow 2:  
Average throughput: 57.57 Mbit/s  
95th percentile per-packet one-way delay: 64.188 ms  
Loss rate: 16.53%  
-- Flow 3:  
Average throughput: 47.00 Mbit/s  
95th percentile per-packet one-way delay: 67.913 ms  
Loss rate: 24.42%

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

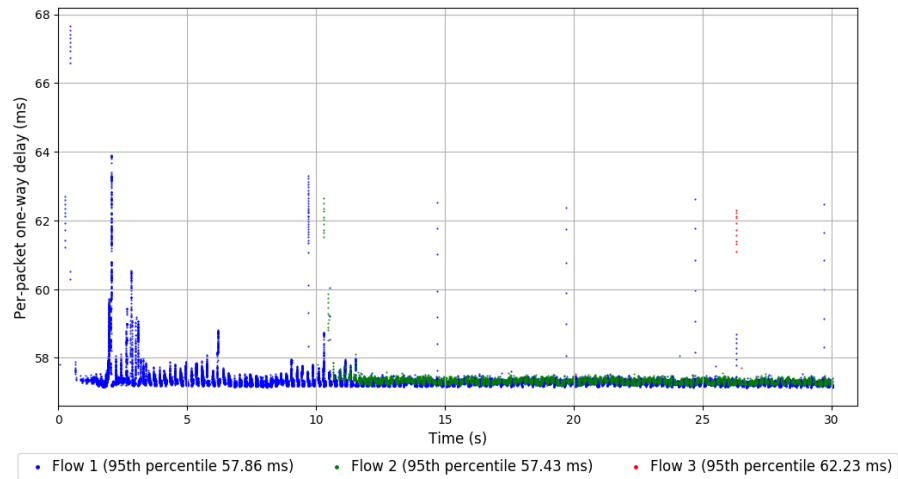
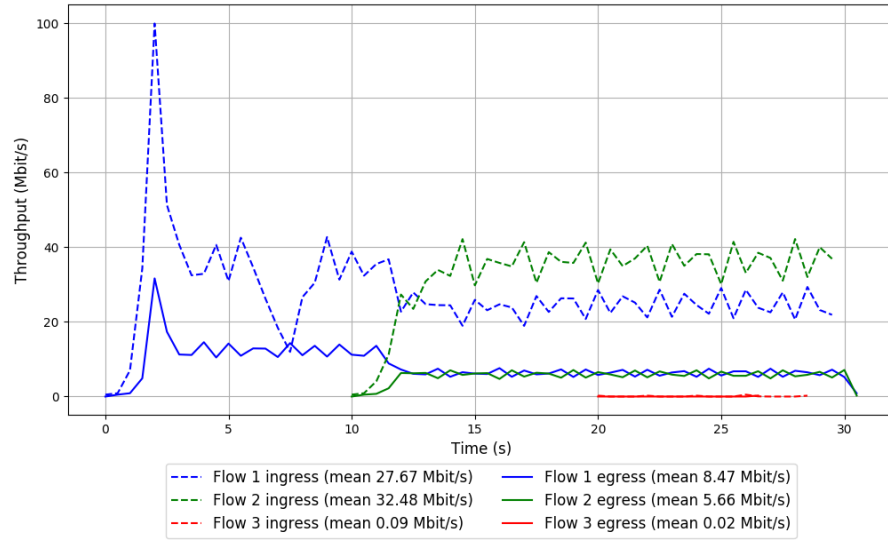


Run 1: Statistics of Copa

Start at: 2019-01-25 01:28:05  
End at: 2019-01-25 01:28:35  
Local clock offset: 0.311 ms  
Remote clock offset: -40.143 ms

# Below is generated by plot.py at 2019-01-25 04:18:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.24 Mbit/s  
95th percentile per-packet one-way delay: 57.710 ms  
Loss rate: 75.17%  
-- Flow 1:  
Average throughput: 8.47 Mbit/s  
95th percentile per-packet one-way delay: 57.856 ms  
Loss rate: 69.39%  
-- Flow 2:  
Average throughput: 5.66 Mbit/s  
95th percentile per-packet one-way delay: 57.426 ms  
Loss rate: 82.56%  
-- Flow 3:  
Average throughput: 0.02 Mbit/s  
95th percentile per-packet one-way delay: 62.234 ms  
Loss rate: 82.43%

# Run 1: Report of Copa — Data Link

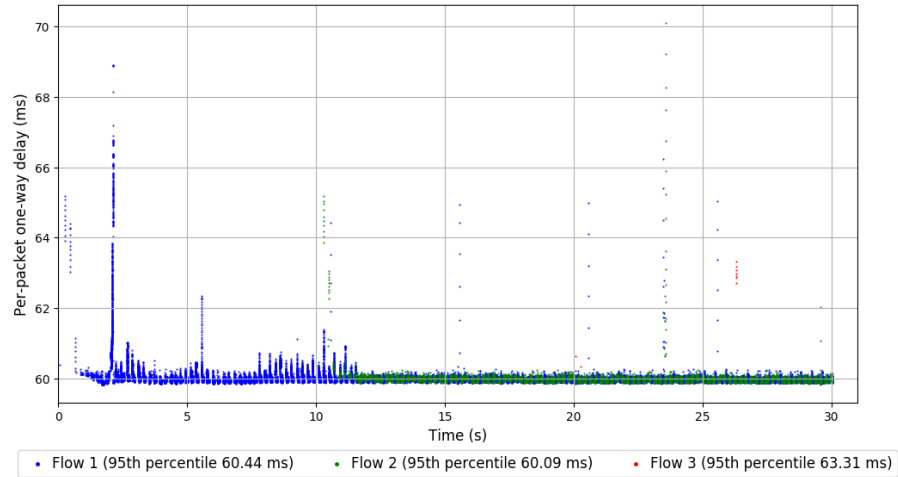
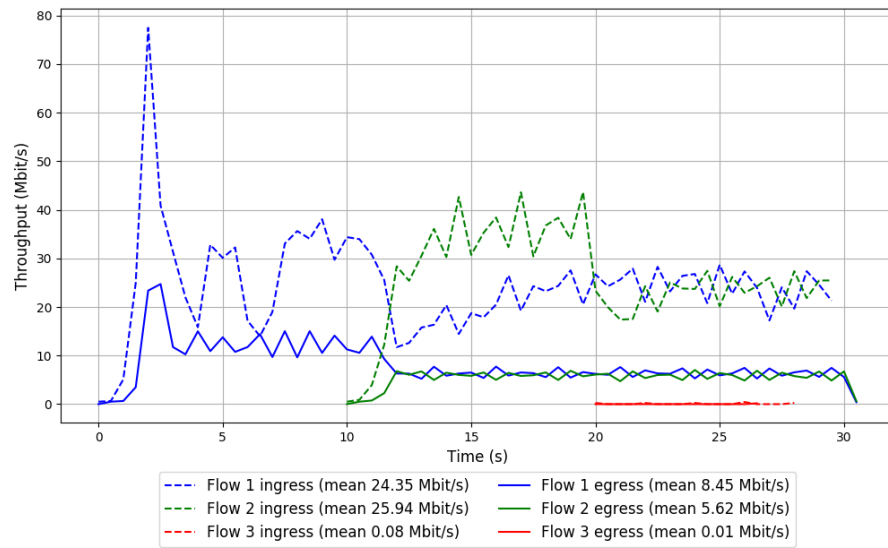


Run 2: Statistics of Copa

Start at: 2019-01-25 01:58:37  
End at: 2019-01-25 01:59:07  
Local clock offset: -2.86 ms  
Remote clock offset: -39.263 ms

# Below is generated by plot.py at 2019-01-25 04:18:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.20 Mbit/s  
95th percentile per-packet one-way delay: 60.340 ms  
Loss rate: 70.71%  
-- Flow 1:  
Average throughput: 8.45 Mbit/s  
95th percentile per-packet one-way delay: 60.441 ms  
Loss rate: 65.29%  
-- Flow 2:  
Average throughput: 5.62 Mbit/s  
95th percentile per-packet one-way delay: 60.091 ms  
Loss rate: 78.34%  
-- Flow 3:  
Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 63.314 ms  
Loss rate: 87.67%

## Run 2: Report of Copa — Data Link

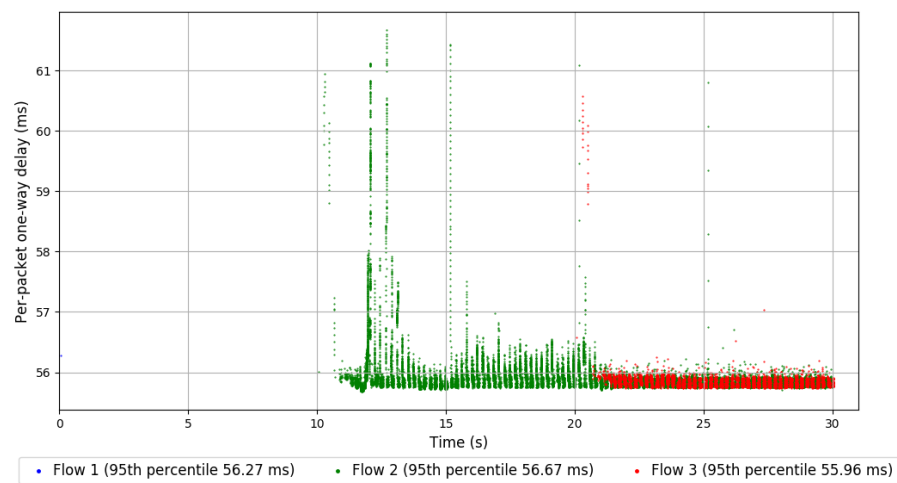
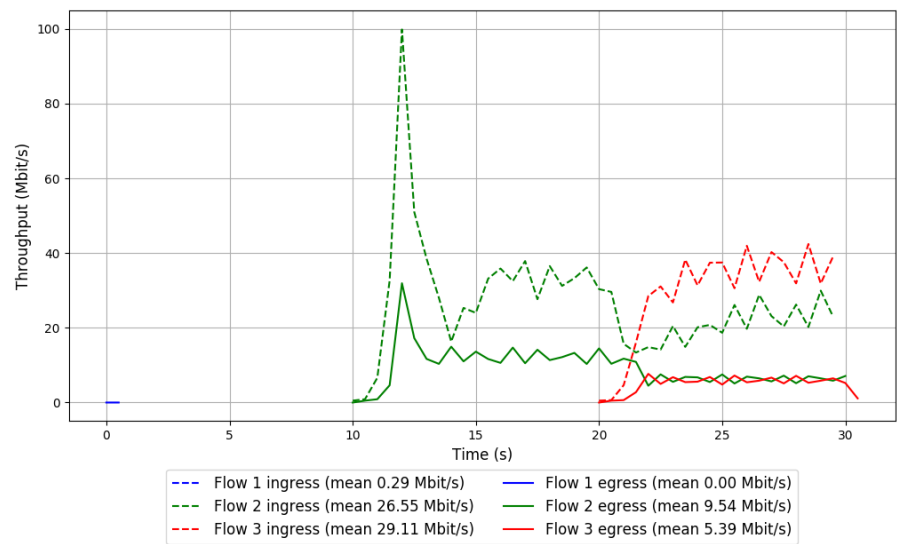


Run 3: Statistics of Copa

Start at: 2019-01-25 02:39:58  
End at: 2019-01-25 02:40:28  
Local clock offset: 0.39 ms  
Remote clock offset: -41.321 ms

# Below is generated by plot.py at 2019-01-25 04:18:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.13 Mbit/s  
95th percentile per-packet one-way delay: 56.452 ms  
Loss rate: 70.25%  
-- Flow 1:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 56.275 ms  
Loss rate: 98.33%  
-- Flow 2:  
Average throughput: 9.54 Mbit/s  
95th percentile per-packet one-way delay: 56.674 ms  
Loss rate: 64.08%  
-- Flow 3:  
Average throughput: 5.39 Mbit/s  
95th percentile per-packet one-way delay: 55.957 ms  
Loss rate: 81.50%

Run 3: Report of Copa — Data Link



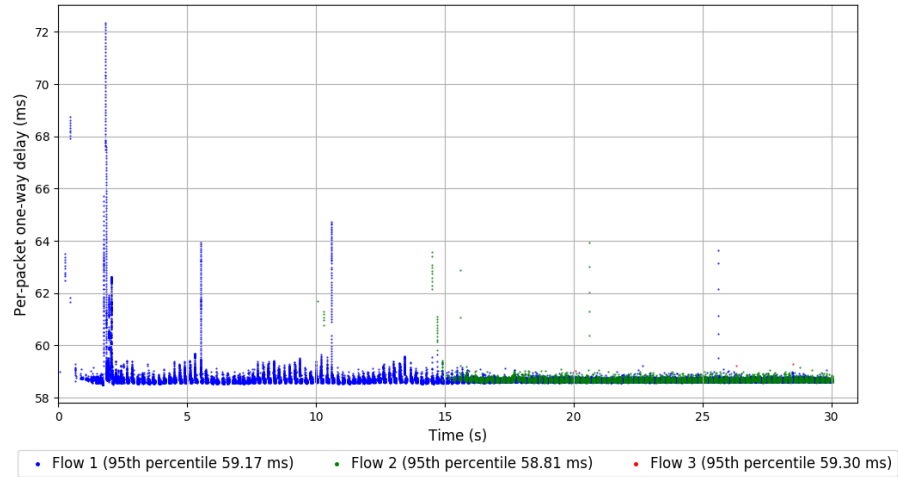
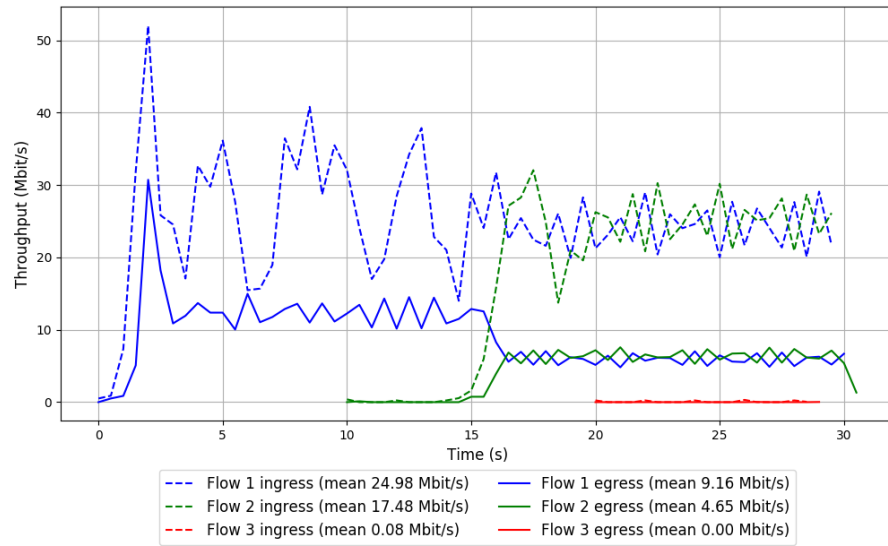


Run 4: Statistics of Copa

Start at: 2019-01-25 03:10:55  
End at: 2019-01-25 03:11:25  
Local clock offset: 1.035 ms  
Remote clock offset: -38.709 ms

# Below is generated by plot.py at 2019-01-25 04:18:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.24 Mbit/s  
95th percentile per-packet one-way delay: 59.070 ms  
Loss rate: 66.55%  
-- Flow 1:  
Average throughput: 9.16 Mbit/s  
95th percentile per-packet one-way delay: 59.171 ms  
Loss rate: 63.34%  
-- Flow 2:  
Average throughput: 4.65 Mbit/s  
95th percentile per-packet one-way delay: 58.807 ms  
Loss rate: 73.37%  
-- Flow 3:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 59.298 ms  
Loss rate: 96.21%

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

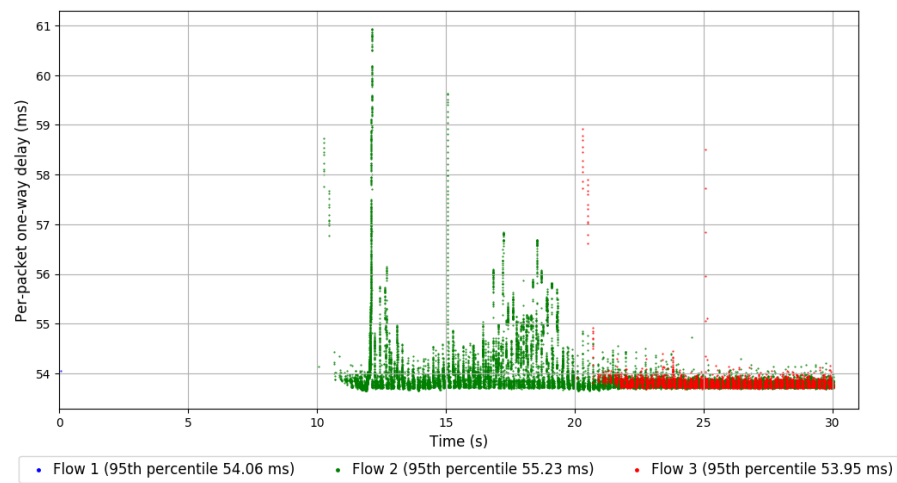
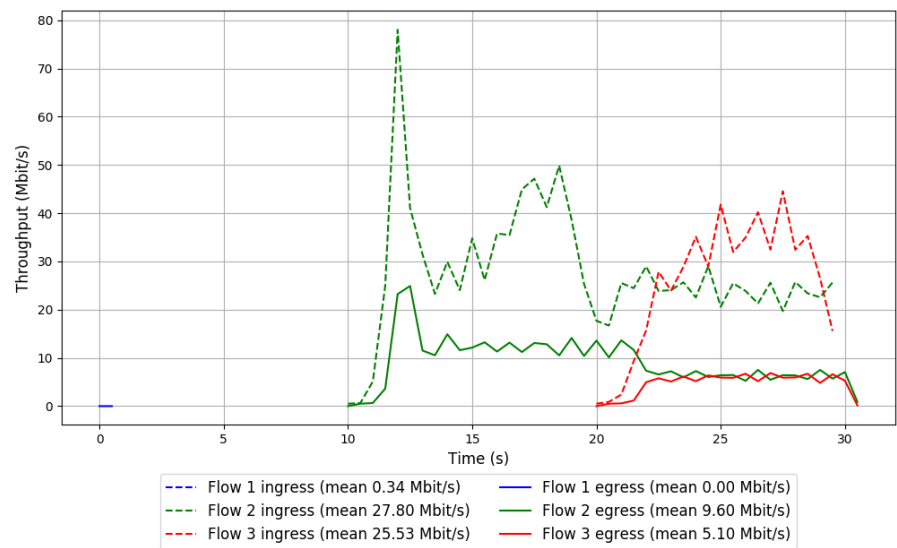


Run 5: Statistics of Copa

Start at: 2019-01-25 03:52:45  
End at: 2019-01-25 03:53:15  
Local clock offset: -0.467 ms  
Remote clock offset: -45.225 ms

# Below is generated by plot.py at 2019-01-25 04:18:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.09 Mbit/s  
95th percentile per-packet one-way delay: 55.048 ms  
Loss rate: 70.04%  
-- Flow 1:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 54.059 ms  
Loss rate: 98.60%  
-- Flow 2:  
Average throughput: 9.60 Mbit/s  
95th percentile per-packet one-way delay: 55.227 ms  
Loss rate: 65.46%  
-- Flow 3:  
Average throughput: 5.10 Mbit/s  
95th percentile per-packet one-way delay: 53.946 ms  
Loss rate: 80.02%

Run 5: Report of Copa — Data Link

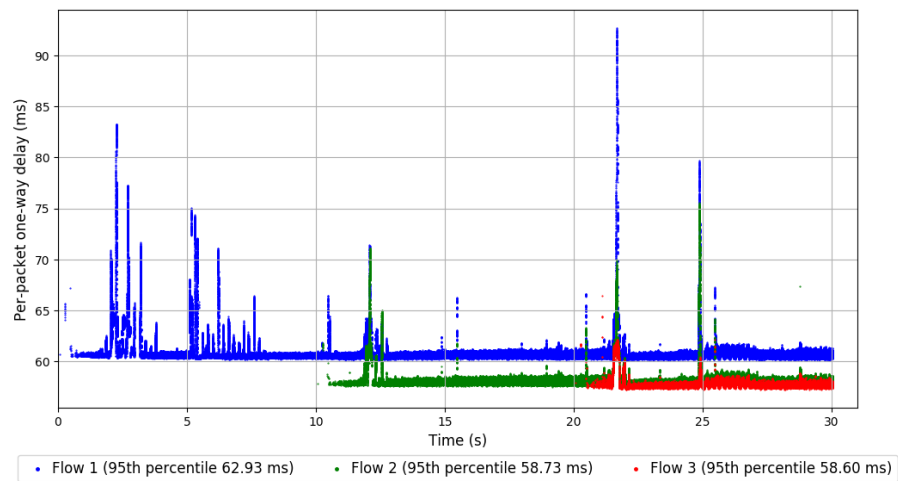
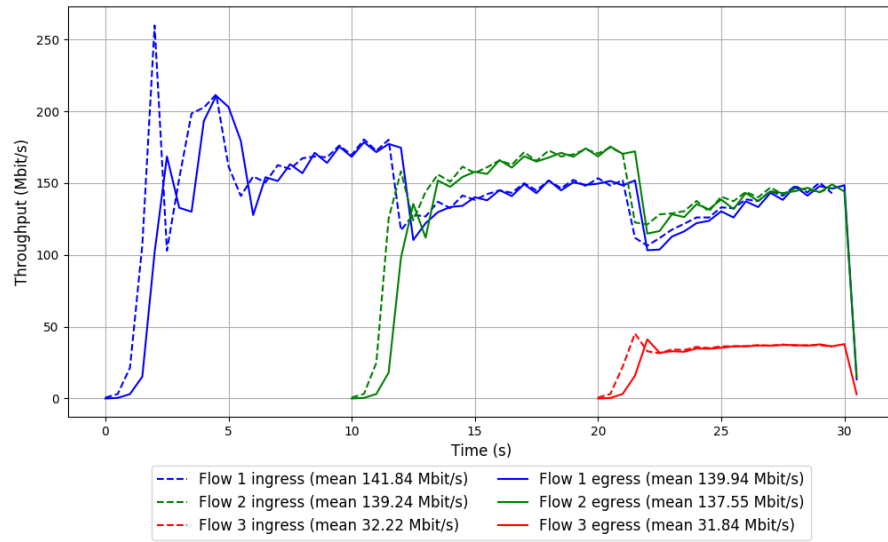


Run 1: Statistics of TCP Cubic

Start at: 2019-01-25 01:14:57  
End at: 2019-01-25 01:15:27  
Local clock offset: 2.418 ms  
Remote clock offset: -39.938 ms

# Below is generated by plot.py at 2019-01-25 04:18:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 242.23 Mbit/s  
95th percentile per-packet one-way delay: 61.383 ms  
Loss rate: 1.29%  
-- Flow 1:  
Average throughput: 139.94 Mbit/s  
95th percentile per-packet one-way delay: 62.933 ms  
Loss rate: 1.35%  
-- Flow 2:  
Average throughput: 137.55 Mbit/s  
95th percentile per-packet one-way delay: 58.728 ms  
Loss rate: 1.22%  
-- Flow 3:  
Average throughput: 31.84 Mbit/s  
95th percentile per-packet one-way delay: 58.602 ms  
Loss rate: 1.16%

# Run 1: Report of TCP Cubic — Data Link

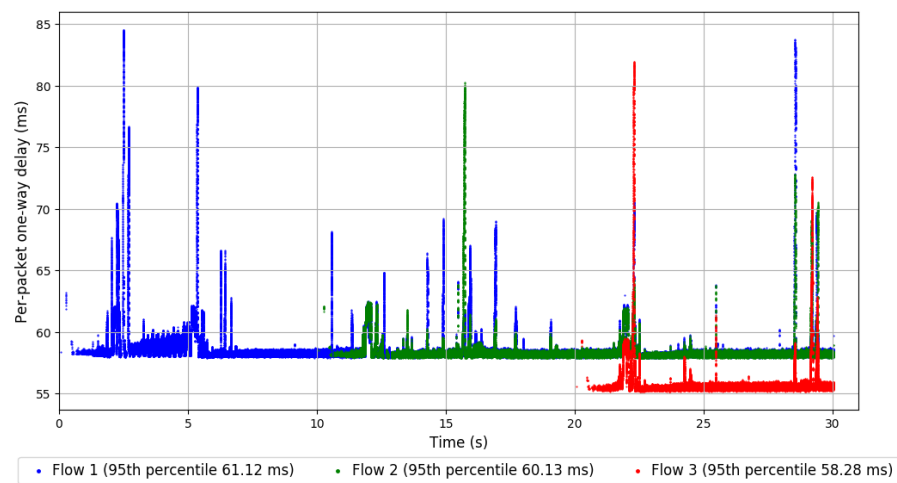
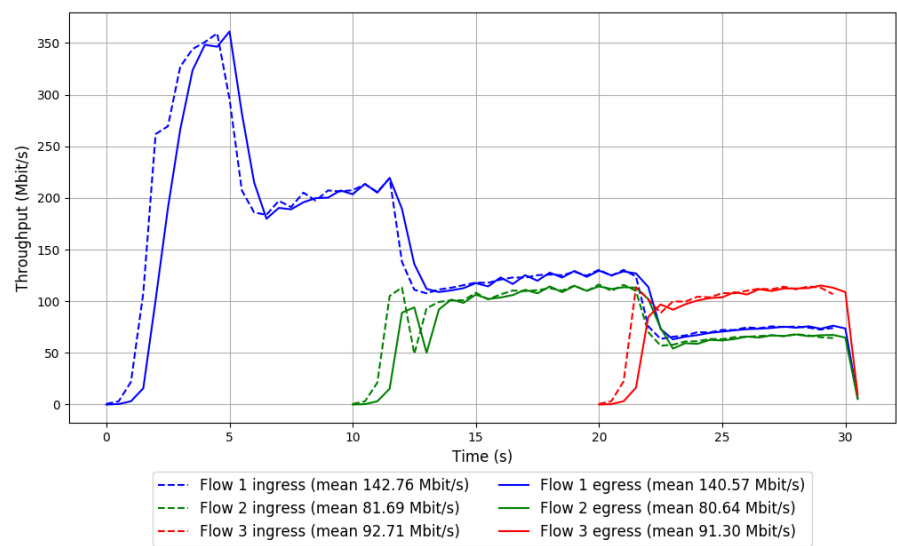


Run 2: Statistics of TCP Cubic

Start at: 2019-01-25 01:45:23  
End at: 2019-01-25 01:45:53  
Local clock offset: -2.099 ms  
Remote clock offset: -43.615 ms

# Below is generated by plot.py at 2019-01-25 04:18:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 224.64 Mbit/s  
95th percentile per-packet one-way delay: 60.725 ms  
Loss rate: 1.47%  
-- Flow 1:  
Average throughput: 140.57 Mbit/s  
95th percentile per-packet one-way delay: 61.121 ms  
Loss rate: 1.53%  
-- Flow 2:  
Average throughput: 80.64 Mbit/s  
95th percentile per-packet one-way delay: 60.134 ms  
Loss rate: 1.29%  
-- Flow 3:  
Average throughput: 91.30 Mbit/s  
95th percentile per-packet one-way delay: 58.278 ms  
Loss rate: 1.51%

Run 2: Report of TCP Cubic — Data Link





Run 3: Statistics of TCP Cubic

Start at: 2019-01-25 02:21:44

End at: 2019-01-25 02:22:14

Local clock offset: -2.17 ms

Remote clock offset: -40.6 ms

# Below is generated by plot.py at 2019-01-25 04:18:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 232.69 Mbit/s

95th percentile per-packet one-way delay: 61.624 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 182.36 Mbit/s

95th percentile per-packet one-way delay: 61.900 ms

Loss rate: 1.15%

-- Flow 2:

Average throughput: 29.41 Mbit/s

95th percentile per-packet one-way delay: 60.105 ms

Loss rate: 0.80%

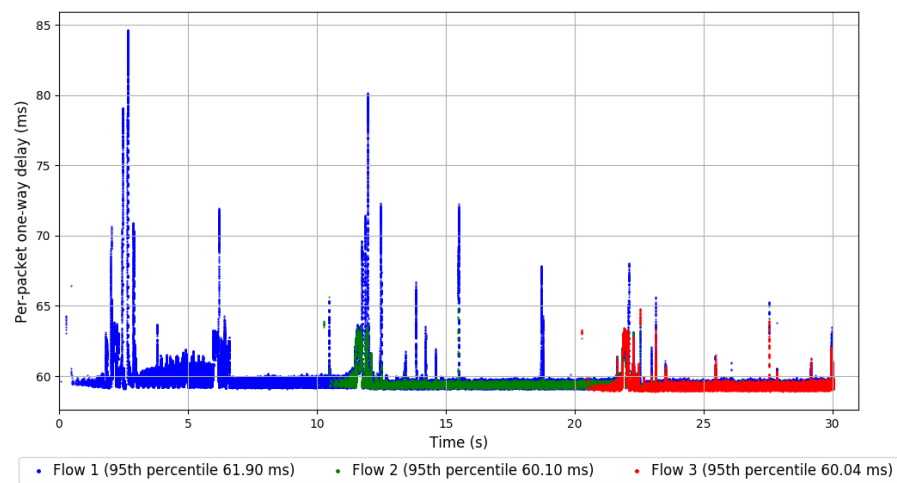
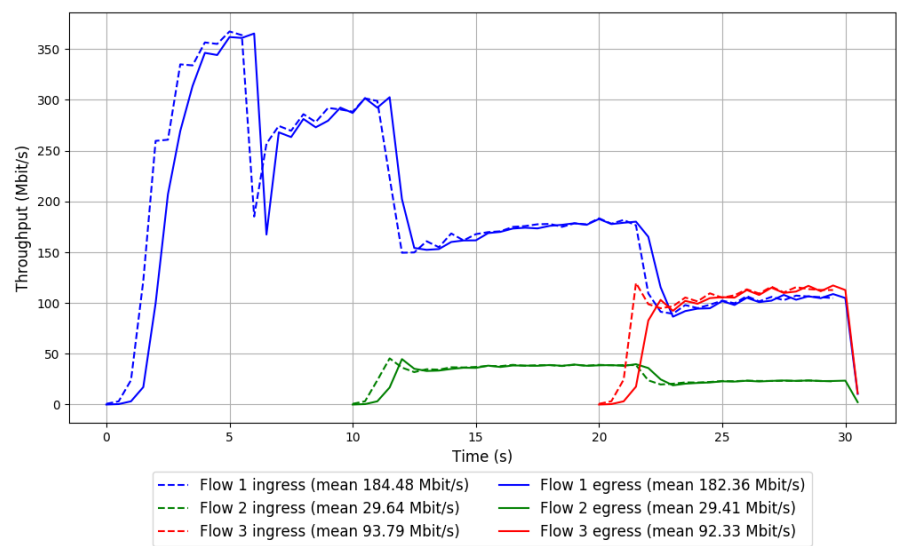
-- Flow 3:

Average throughput: 92.33 Mbit/s

95th percentile per-packet one-way delay: 60.038 ms

Loss rate: 1.56%

Run 3: Report of TCP Cubic — Data Link

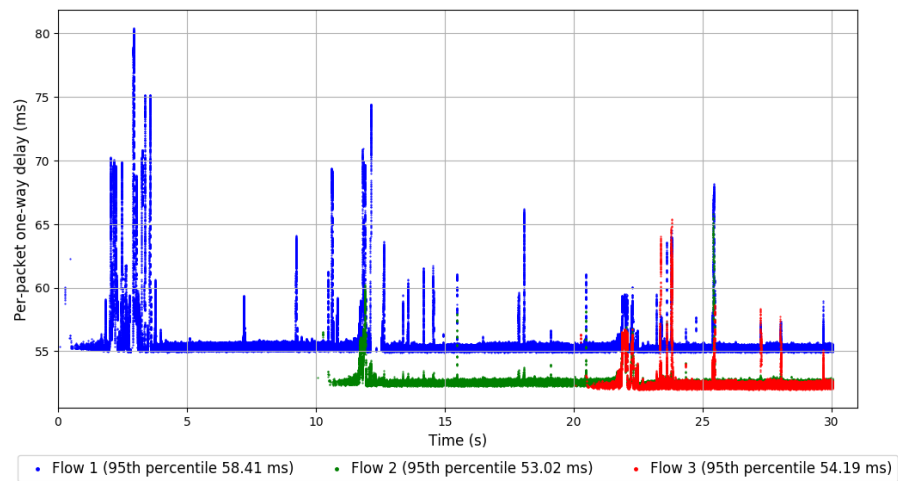
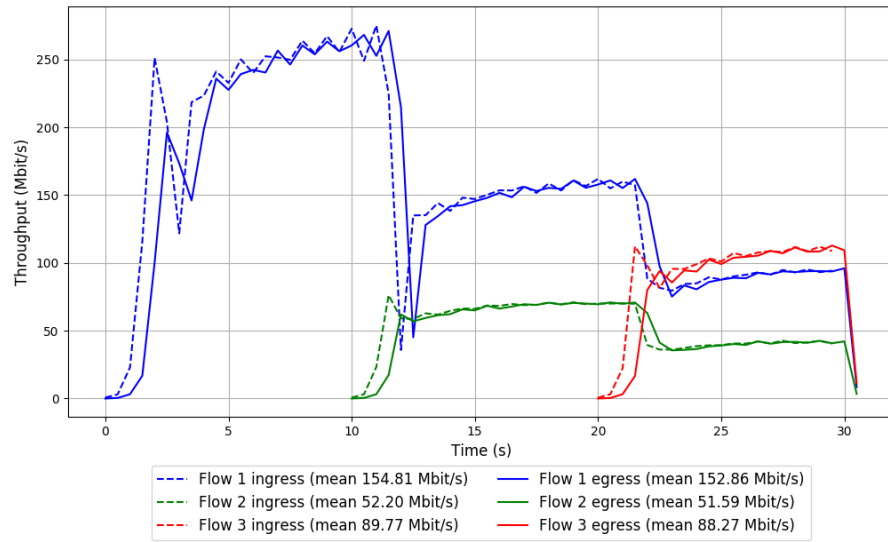


Run 4: Statistics of TCP Cubic

Start at: 2019-01-25 02:57:28  
End at: 2019-01-25 02:57:58  
Local clock offset: -0.294 ms  
Remote clock offset: -45.42 ms

# Below is generated by plot.py at 2019-01-25 04:20:19  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 216.58 Mbit/s  
95th percentile per-packet one-way delay: 57.304 ms  
Loss rate: 1.31%  
-- Flow 1:  
Average throughput: 152.86 Mbit/s  
95th percentile per-packet one-way delay: 58.415 ms  
Loss rate: 1.27%  
-- Flow 2:  
Average throughput: 51.59 Mbit/s  
95th percentile per-packet one-way delay: 53.025 ms  
Loss rate: 1.18%  
-- Flow 3:  
Average throughput: 88.27 Mbit/s  
95th percentile per-packet one-way delay: 54.192 ms  
Loss rate: 1.67%

# Run 4: Report of TCP Cubic — Data Link

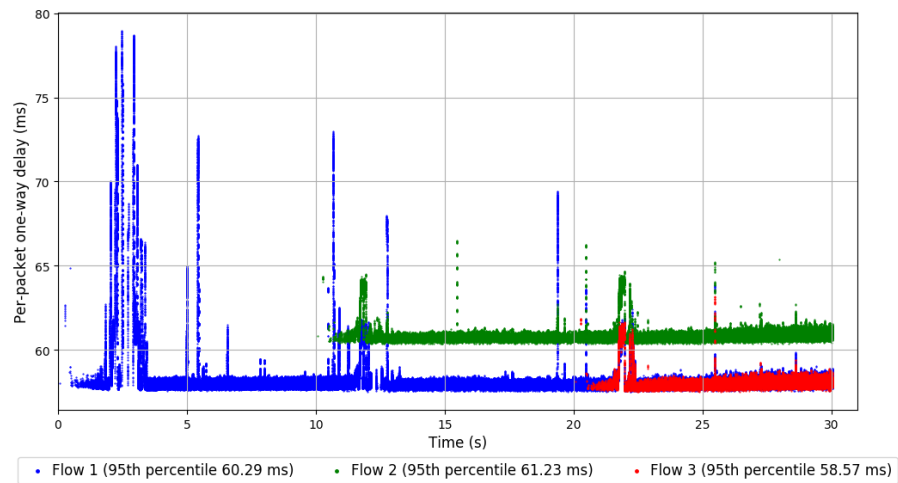
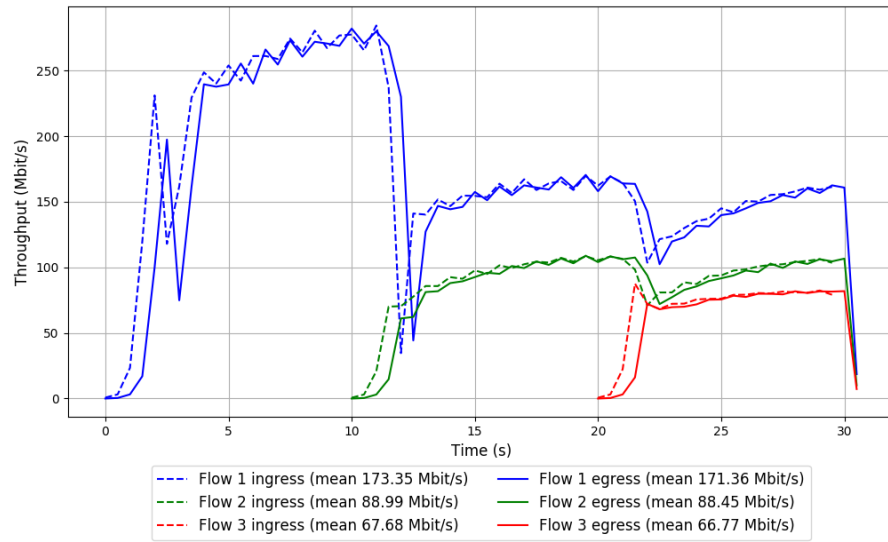


Run 5: Statistics of TCP Cubic

Start at: 2019-01-25 03:28:24  
End at: 2019-01-25 03:28:54  
Local clock offset: -1.083 ms  
Remote clock offset: -42.08 ms

# Below is generated by plot.py at 2019-01-25 04:20:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 252.48 Mbit/s  
95th percentile per-packet one-way delay: 61.061 ms  
Loss rate: 1.04%  
-- Flow 1:  
Average throughput: 171.36 Mbit/s  
95th percentile per-packet one-way delay: 60.286 ms  
Loss rate: 1.15%  
-- Flow 2:  
Average throughput: 88.45 Mbit/s  
95th percentile per-packet one-way delay: 61.231 ms  
Loss rate: 0.62%  
-- Flow 3:  
Average throughput: 66.77 Mbit/s  
95th percentile per-packet one-way delay: 58.573 ms  
Loss rate: 1.34%

# Run 5: Report of TCP Cubic — Data Link

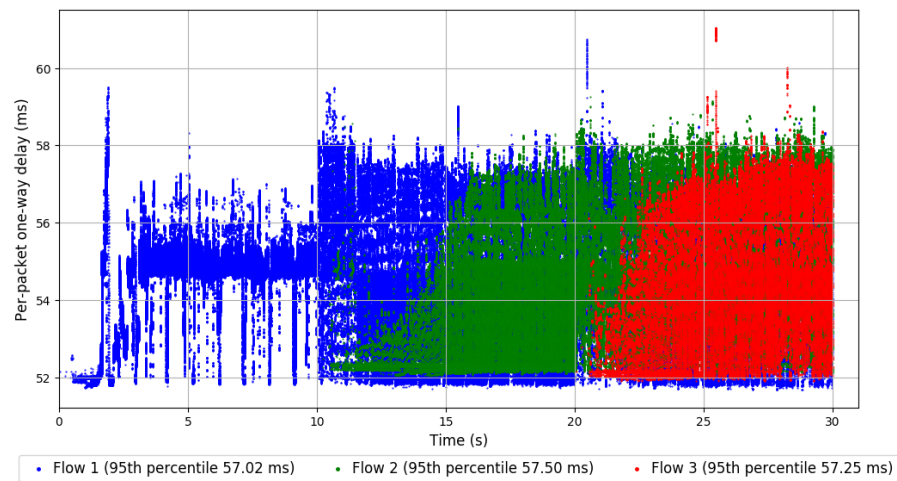
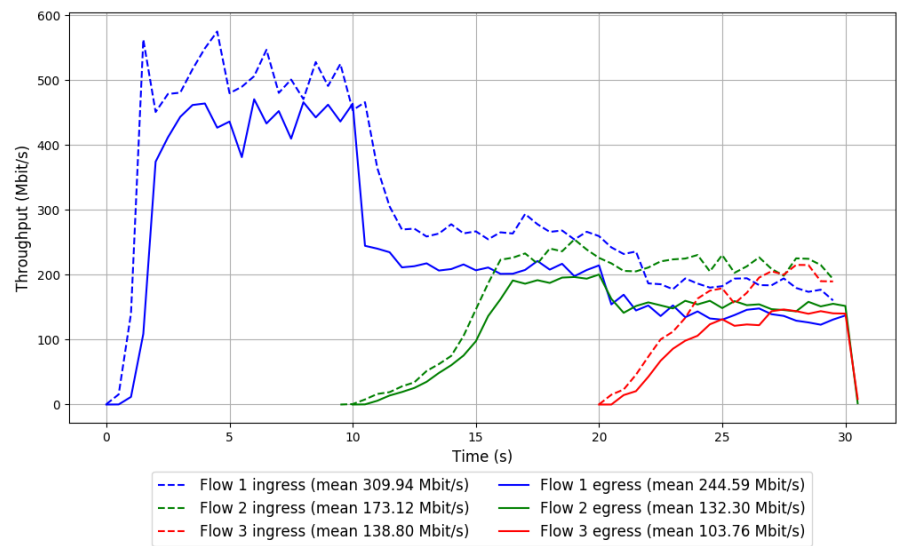


Run 1: Statistics of FillP

Start at: 2019-01-25 01:19:37  
End at: 2019-01-25 01:20:07  
Local clock offset: 2.032 ms  
Remote clock offset: -44.923 ms

# Below is generated by plot.py at 2019-01-25 04:23:34  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 367.03 Mbit/s  
95th percentile per-packet one-way delay: 57.201 ms  
Loss rate: 22.10%  
-- Flow 1:  
Average throughput: 244.59 Mbit/s  
95th percentile per-packet one-way delay: 57.022 ms  
Loss rate: 21.08%  
-- Flow 2:  
Average throughput: 132.30 Mbit/s  
95th percentile per-packet one-way delay: 57.502 ms  
Loss rate: 23.59%  
-- Flow 3:  
Average throughput: 103.76 Mbit/s  
95th percentile per-packet one-way delay: 57.253 ms  
Loss rate: 25.21%

Run 1: Report of FillP — Data Link



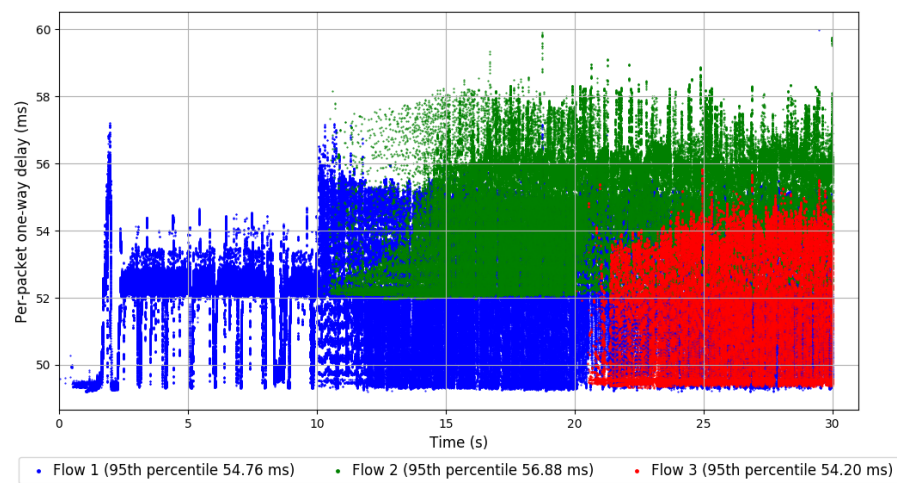
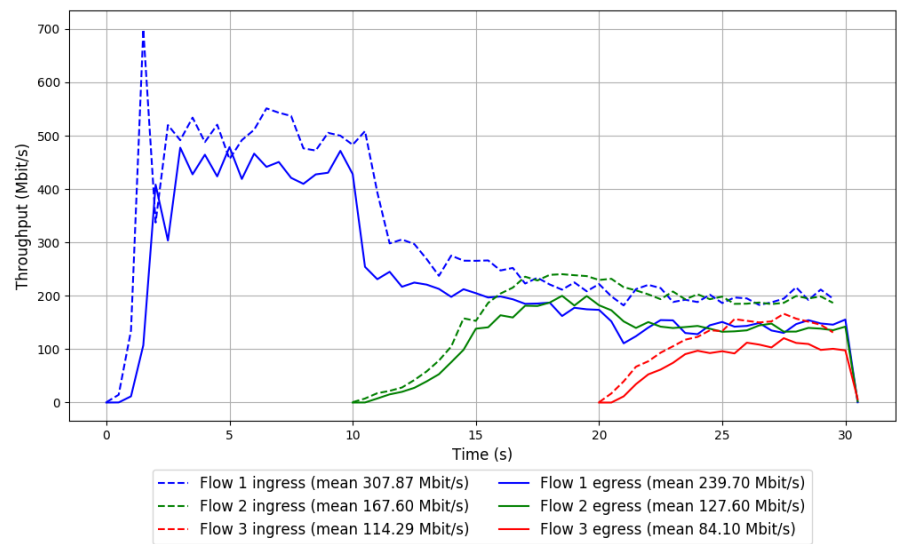


Run 2: Statistics of FillP

Start at: 2019-01-25 01:50:00  
End at: 2019-01-25 01:50:30  
Local clock offset: 0.134 ms  
Remote clock offset: -47.118 ms

# Below is generated by plot.py at 2019-01-25 04:23:34  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 352.56 Mbit/s  
95th percentile per-packet one-way delay: 55.904 ms  
Loss rate: 22.91%  
-- Flow 1:  
Average throughput: 239.70 Mbit/s  
95th percentile per-packet one-way delay: 54.755 ms  
Loss rate: 22.14%  
-- Flow 2:  
Average throughput: 127.60 Mbit/s  
95th percentile per-packet one-way delay: 56.878 ms  
Loss rate: 23.85%  
-- Flow 3:  
Average throughput: 84.10 Mbit/s  
95th percentile per-packet one-way delay: 54.205 ms  
Loss rate: 26.43%

Run 2: Report of FillP — Data Link

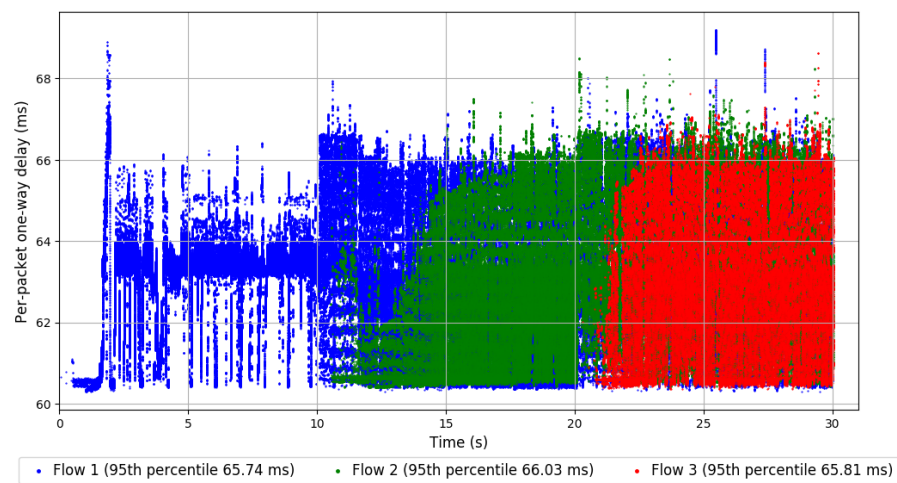
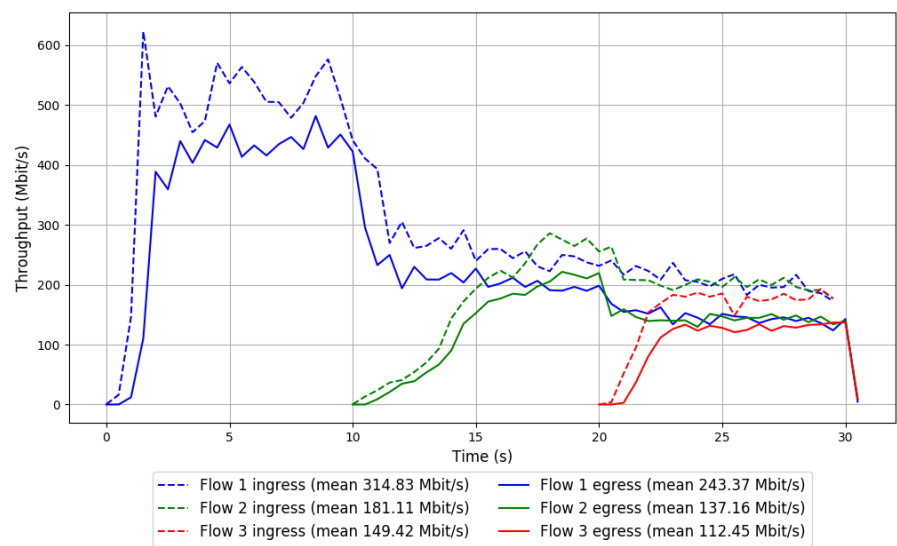


Run 3: Statistics of FillP

Start at: 2019-01-25 02:26:24  
End at: 2019-01-25 02:26:54  
Local clock offset: -0.548 ms  
Remote clock offset: -40.233 ms

# Below is generated by plot.py at 2019-01-25 04:23:38  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 370.97 Mbit/s  
95th percentile per-packet one-way delay: 65.839 ms  
Loss rate: 23.46%  
-- Flow 1:  
Average throughput: 243.37 Mbit/s  
95th percentile per-packet one-way delay: 65.737 ms  
Loss rate: 22.69%  
-- Flow 2:  
Average throughput: 137.16 Mbit/s  
95th percentile per-packet one-way delay: 66.026 ms  
Loss rate: 24.27%  
-- Flow 3:  
Average throughput: 112.45 Mbit/s  
95th percentile per-packet one-way delay: 65.808 ms  
Loss rate: 26.39%

Run 3: Report of FillP — Data Link

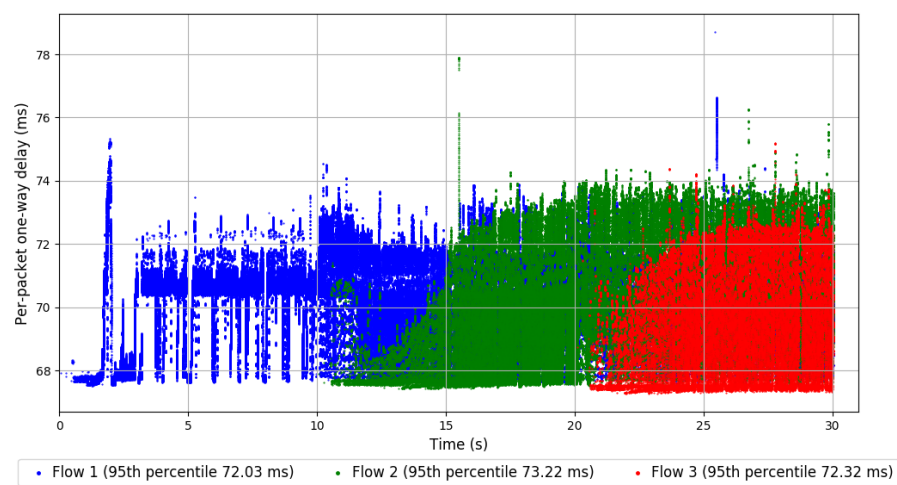
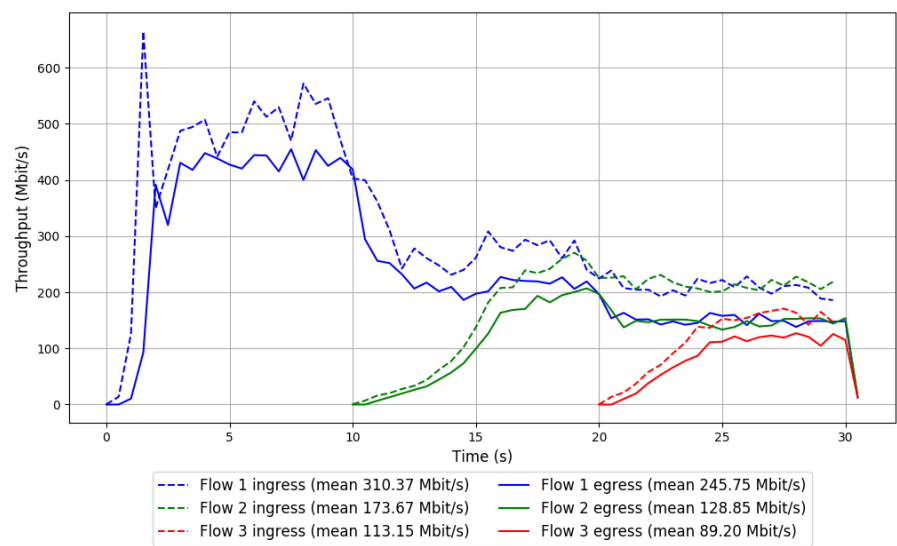


Run 4: Statistics of FillP

Start at: 2019-01-25 03:02:08  
End at: 2019-01-25 03:02:39  
Local clock offset: -2.369 ms  
Remote clock offset: -32.545 ms

# Below is generated by plot.py at 2019-01-25 04:23:38  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 361.08 Mbit/s  
95th percentile per-packet one-way delay: 72.616 ms  
Loss rate: 22.09%  
-- Flow 1:  
Average throughput: 245.75 Mbit/s  
95th percentile per-packet one-way delay: 72.033 ms  
Loss rate: 20.82%  
-- Flow 2:  
Average throughput: 128.85 Mbit/s  
95th percentile per-packet one-way delay: 73.221 ms  
Loss rate: 25.80%  
-- Flow 3:  
Average throughput: 89.20 Mbit/s  
95th percentile per-packet one-way delay: 72.316 ms  
Loss rate: 21.15%

Run 4: Report of FillP — Data Link

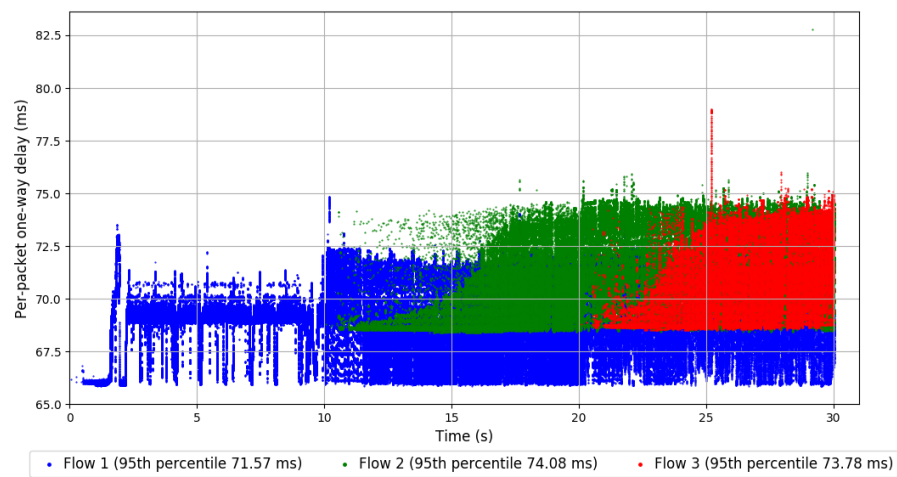
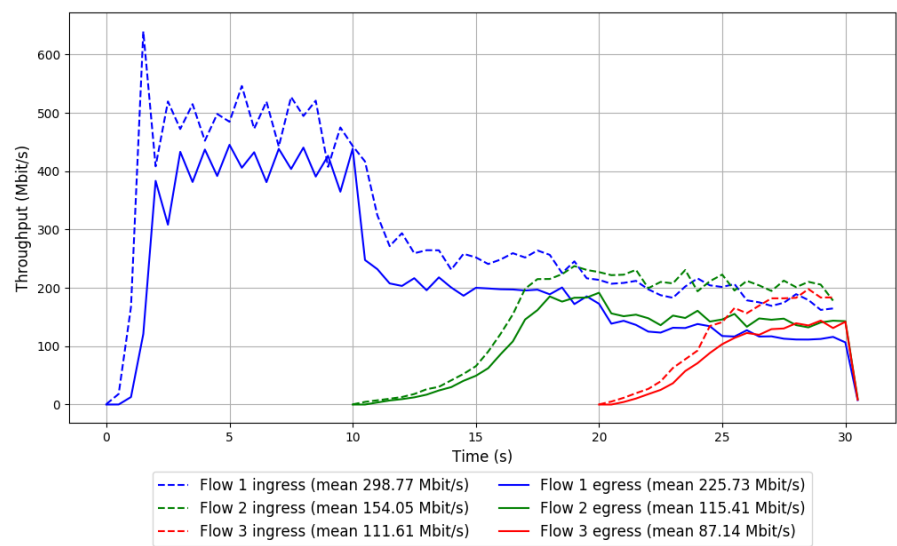


Run 5: Statistics of FillP

Start at: 2019-01-25 03:33:05  
End at: 2019-01-25 03:33:35  
Local clock offset: -1.753 ms  
Remote clock offset: -34.345 ms

# Below is generated by plot.py at 2019-01-25 04:23:38  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 331.33 Mbit/s  
95th percentile per-packet one-way delay: 73.342 ms  
Loss rate: 24.37%  
-- Flow 1:  
Average throughput: 225.73 Mbit/s  
95th percentile per-packet one-way delay: 71.568 ms  
Loss rate: 24.44%  
-- Flow 2:  
Average throughput: 115.41 Mbit/s  
95th percentile per-packet one-way delay: 74.080 ms  
Loss rate: 25.07%  
-- Flow 3:  
Average throughput: 87.14 Mbit/s  
95th percentile per-packet one-way delay: 73.782 ms  
Loss rate: 21.88%

Run 5: Report of FillP — Data Link



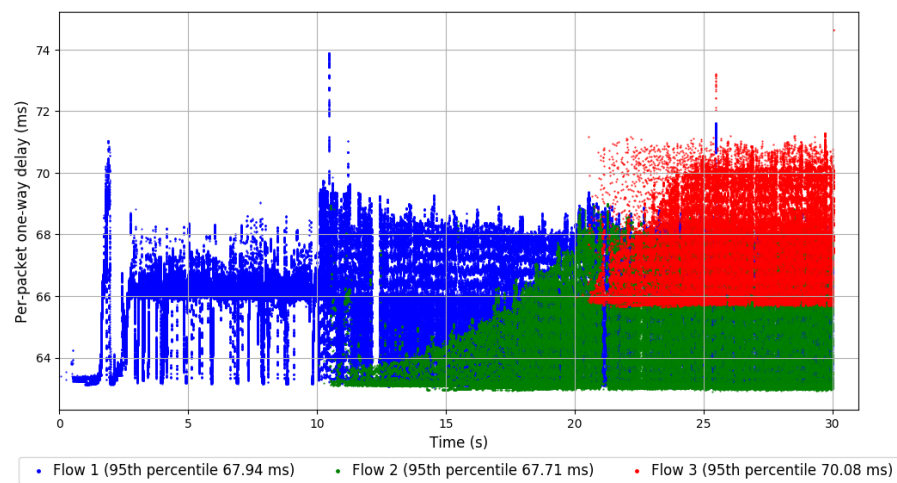
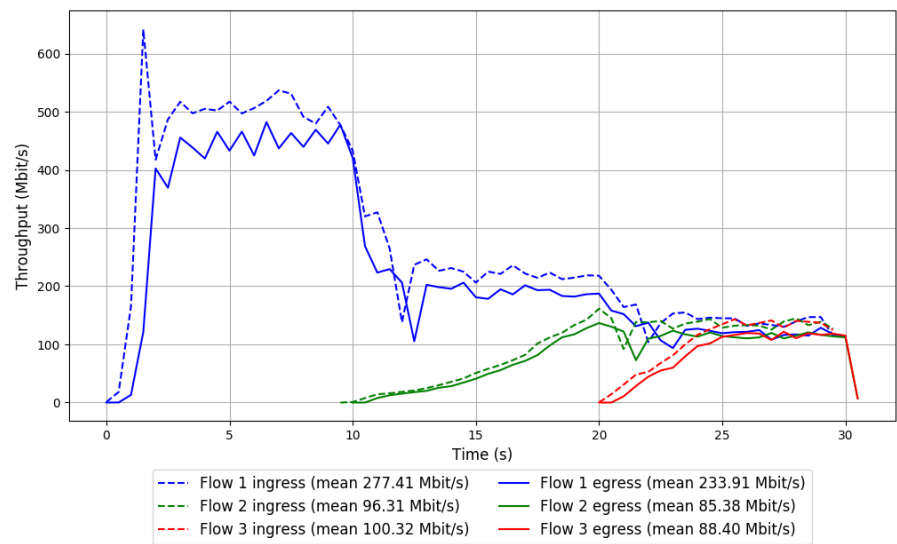


Run 1: Statistics of FillP-Sheep

Start at: 2019-01-25 01:11:51  
End at: 2019-01-25 01:12:21  
Local clock offset: 0.463 ms  
Remote clock offset: -37.332 ms

# Below is generated by plot.py at 2019-01-25 04:23:38  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 319.90 Mbit/s  
95th percentile per-packet one-way delay: 68.413 ms  
Loss rate: 14.60%  
-- Flow 1:  
Average throughput: 233.91 Mbit/s  
95th percentile per-packet one-way delay: 67.935 ms  
Loss rate: 15.68%  
-- Flow 2:  
Average throughput: 85.38 Mbit/s  
95th percentile per-packet one-way delay: 67.708 ms  
Loss rate: 11.35%  
-- Flow 3:  
Average throughput: 88.40 Mbit/s  
95th percentile per-packet one-way delay: 70.077 ms  
Loss rate: 11.83%

Run 1: Report of FillP-Sheep — Data Link

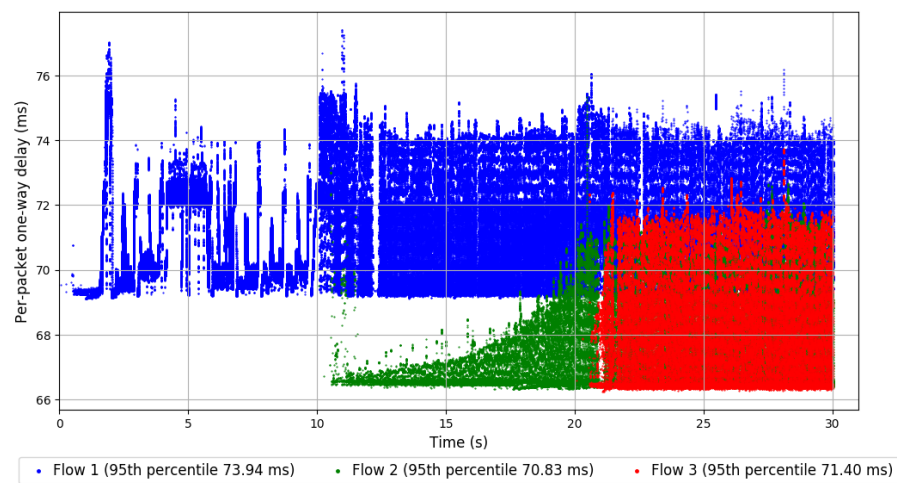
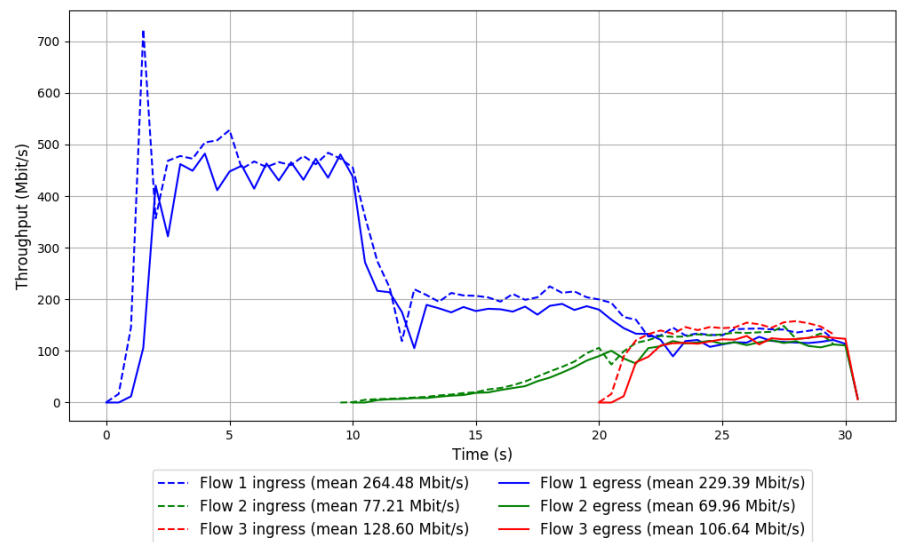


Run 2: Statistics of FillP-Sheep

Start at: 2019-01-25 01:42:16  
End at: 2019-01-25 01:42:46  
Local clock offset: -2.741 ms  
Remote clock offset: -32.932 ms

# Below is generated by plot.py at 2019-01-25 04:24:30  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 311.31 Mbit/s  
95th percentile per-packet one-way delay: 73.746 ms  
Loss rate: 13.16%  
-- Flow 1:  
Average throughput: 229.39 Mbit/s  
95th percentile per-packet one-way delay: 73.943 ms  
Loss rate: 13.26%  
-- Flow 2:  
Average throughput: 69.96 Mbit/s  
95th percentile per-packet one-way delay: 70.829 ms  
Loss rate: 9.40%  
-- Flow 3:  
Average throughput: 106.64 Mbit/s  
95th percentile per-packet one-way delay: 71.404 ms  
Loss rate: 17.08%

Run 2: Report of FillP-Sheep — Data Link

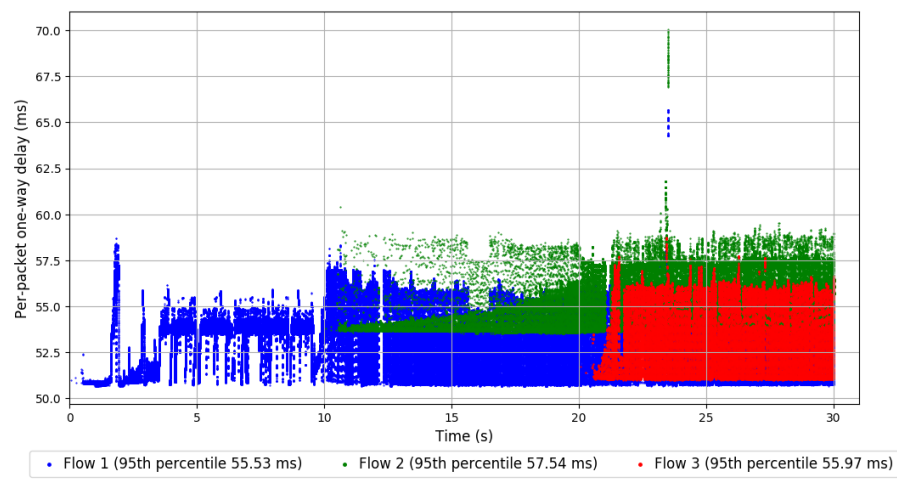
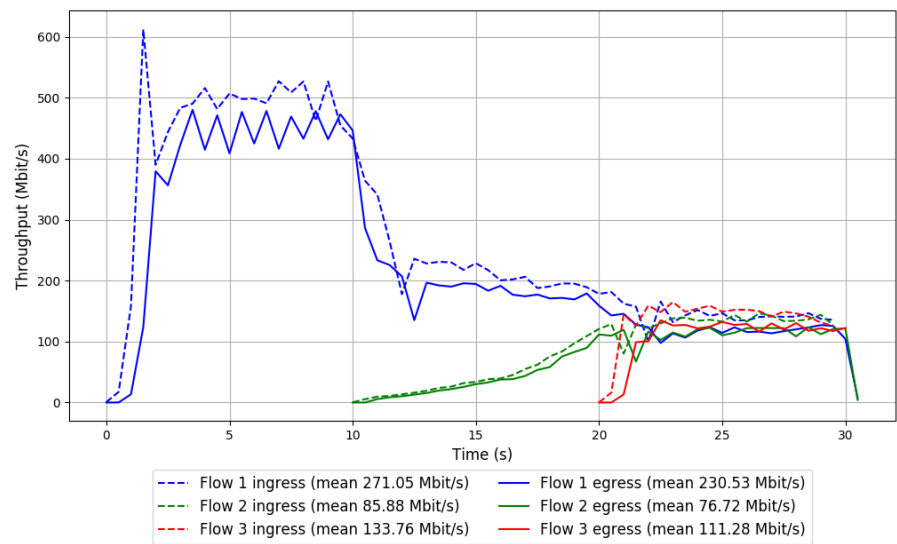


Run 3: Statistics of FillP-Sheep

Start at: 2019-01-25 02:18:36  
End at: 2019-01-25 02:19:06  
Local clock offset: -0.235 ms  
Remote clock offset: -46.977 ms

# Below is generated by plot.py at 2019-01-25 04:25:20  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 318.44 Mbit/s  
95th percentile per-packet one-way delay: 56.553 ms  
Loss rate: 14.52%  
-- Flow 1:  
Average throughput: 230.53 Mbit/s  
95th percentile per-packet one-way delay: 55.529 ms  
Loss rate: 14.95%  
-- Flow 2:  
Average throughput: 76.72 Mbit/s  
95th percentile per-packet one-way delay: 57.537 ms  
Loss rate: 10.68%  
-- Flow 3:  
Average throughput: 111.28 Mbit/s  
95th percentile per-packet one-way delay: 55.969 ms  
Loss rate: 16.80%

Run 3: Report of FillP-Sheep — Data Link

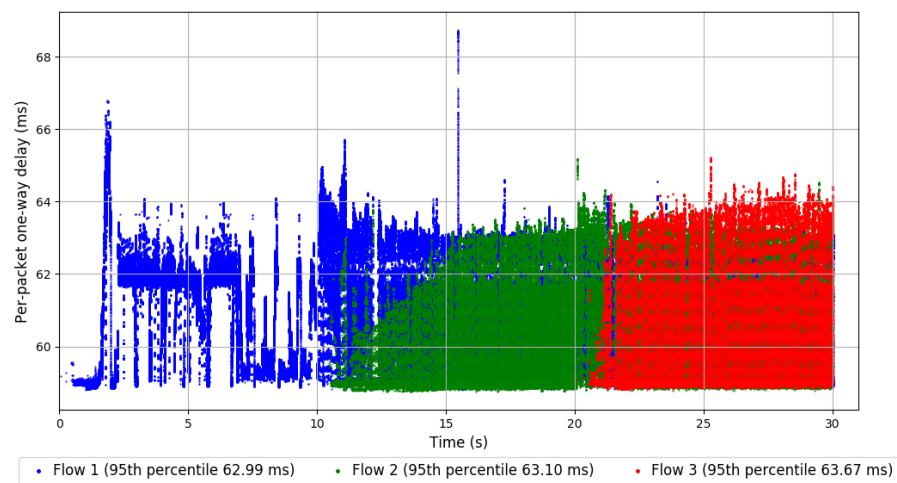
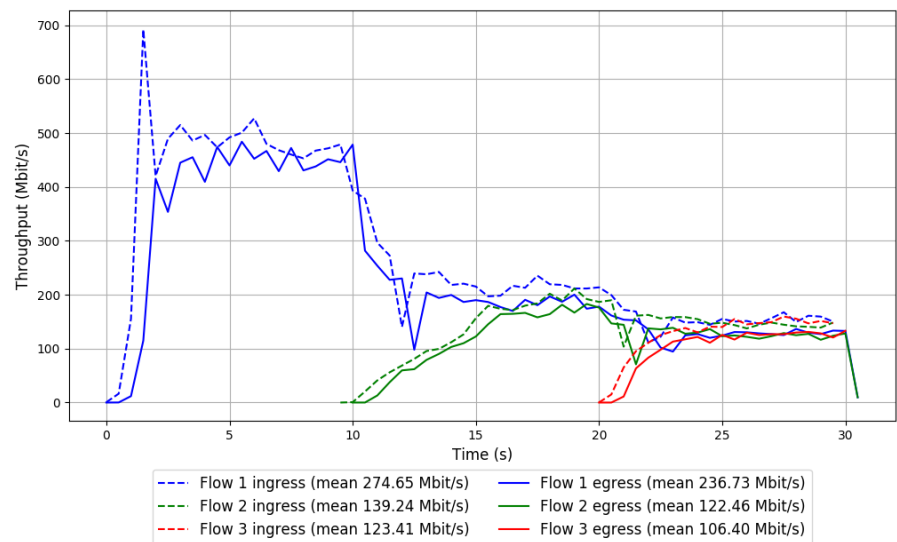


Run 4: Statistics of FillP-Sheep

Start at: 2019-01-25 02:54:18  
End at: 2019-01-25 02:54:48  
Local clock offset: -0.86 ms  
Remote clock offset: -39.26 ms

# Below is generated by plot.py at 2019-01-25 04:27:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 353.54 Mbit/s  
95th percentile per-packet one-way delay: 63.129 ms  
Loss rate: 13.41%  
-- Flow 1:  
Average throughput: 236.73 Mbit/s  
95th percentile per-packet one-way delay: 62.989 ms  
Loss rate: 13.81%  
-- Flow 2:  
Average throughput: 122.46 Mbit/s  
95th percentile per-packet one-way delay: 63.099 ms  
Loss rate: 12.05%  
-- Flow 3:  
Average throughput: 106.40 Mbit/s  
95th percentile per-packet one-way delay: 63.668 ms  
Loss rate: 13.78%

Run 4: Report of FillP-Sheep — Data Link



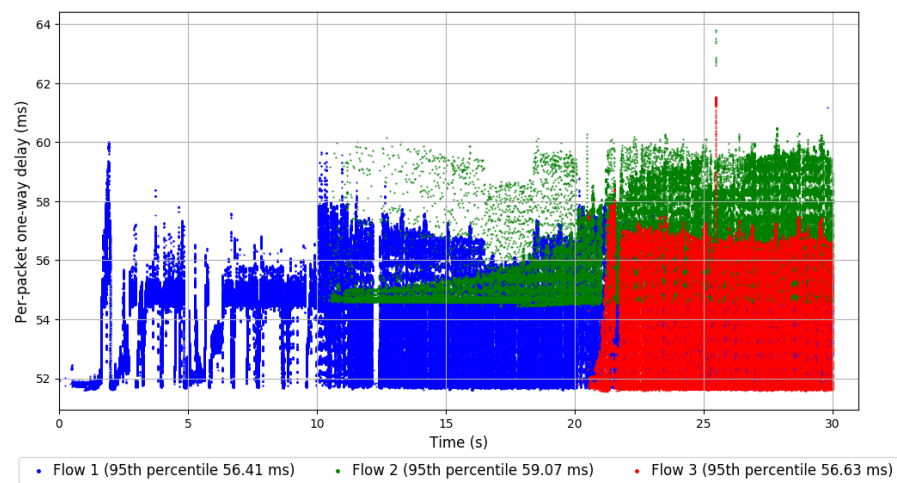
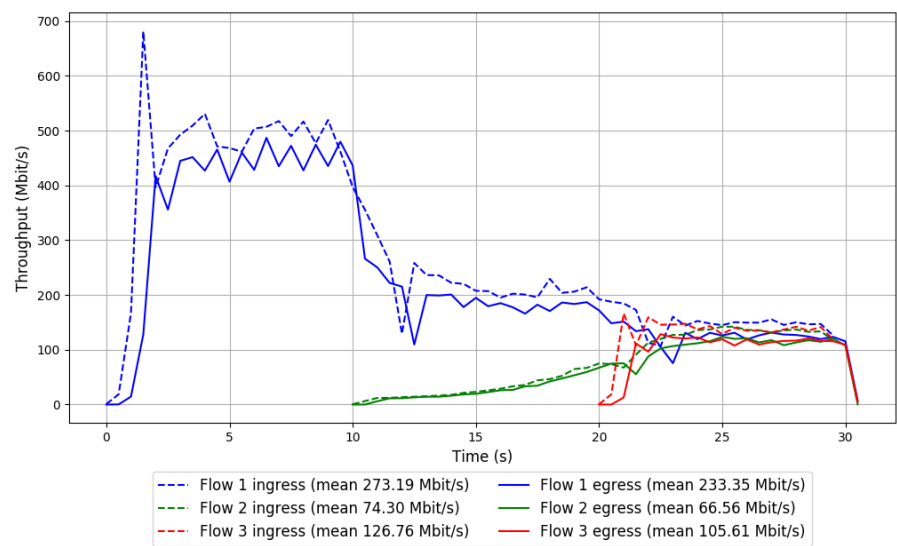


Run 5: Statistics of FillP-Sheep

Start at: 2019-01-25 03:25:17  
End at: 2019-01-25 03:25:47  
Local clock offset: 0.602 ms  
Remote clock offset: -46.12 ms

# Below is generated by plot.py at 2019-01-25 04:27:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 312.64 Mbit/s  
95th percentile per-packet one-way delay: 57.366 ms  
Loss rate: 14.26%  
-- Flow 1:  
Average throughput: 233.35 Mbit/s  
95th percentile per-packet one-way delay: 56.411 ms  
Loss rate: 14.58%  
-- Flow 2:  
Average throughput: 66.56 Mbit/s  
95th percentile per-packet one-way delay: 59.066 ms  
Loss rate: 10.40%  
-- Flow 3:  
Average throughput: 105.61 Mbit/s  
95th percentile per-packet one-way delay: 56.633 ms  
Loss rate: 16.68%

Run 5: Report of FillP-Sheep — Data Link

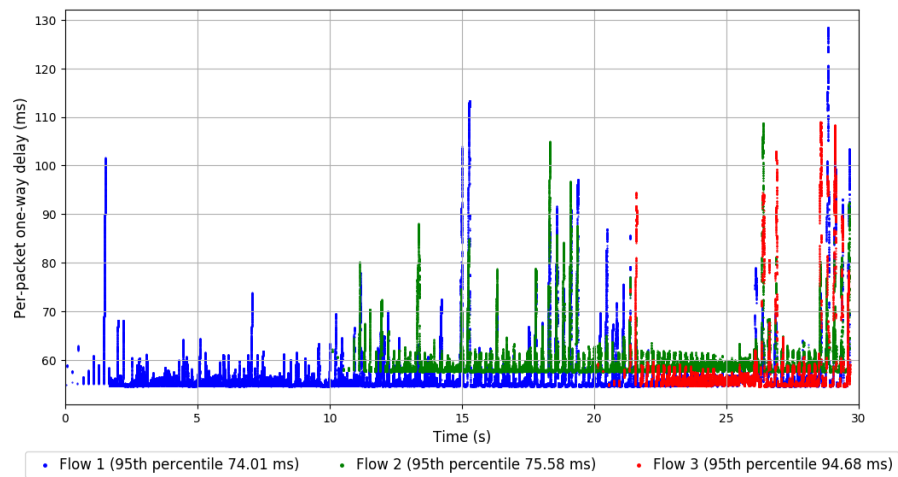
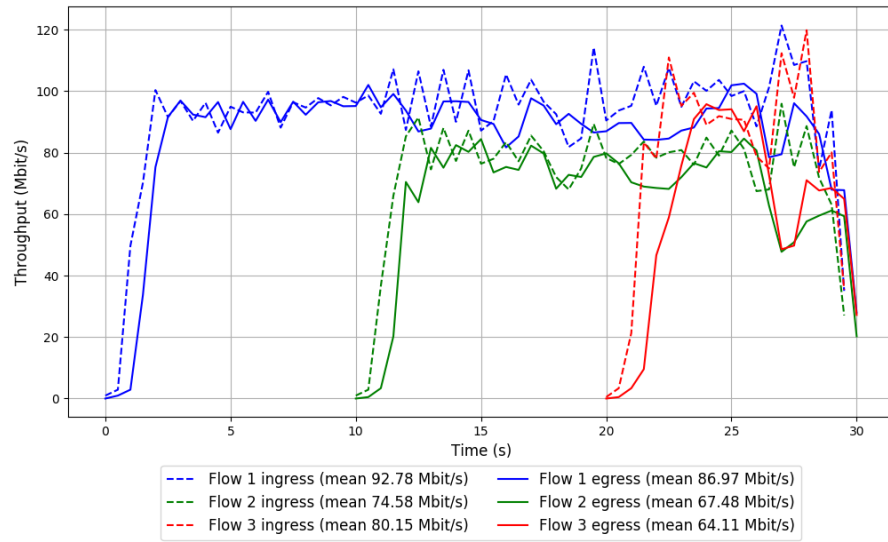


Run 1: Statistics of Indigo

Start at: 2019-01-25 01:29:24  
End at: 2019-01-25 01:29:54  
Local clock offset: -0.853 ms  
Remote clock offset: -43.505 ms

# Below is generated by plot.py at 2019-01-25 04:27:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 152.18 Mbit/s  
95th percentile per-packet one-way delay: 77.801 ms  
Loss rate: 9.32%  
-- Flow 1:  
Average throughput: 86.97 Mbit/s  
95th percentile per-packet one-way delay: 74.010 ms  
Loss rate: 6.24%  
-- Flow 2:  
Average throughput: 67.48 Mbit/s  
95th percentile per-packet one-way delay: 75.577 ms  
Loss rate: 9.51%  
-- Flow 3:  
Average throughput: 64.11 Mbit/s  
95th percentile per-packet one-way delay: 94.680 ms  
Loss rate: 20.01%

## Run 1: Report of Indigo — Data Link

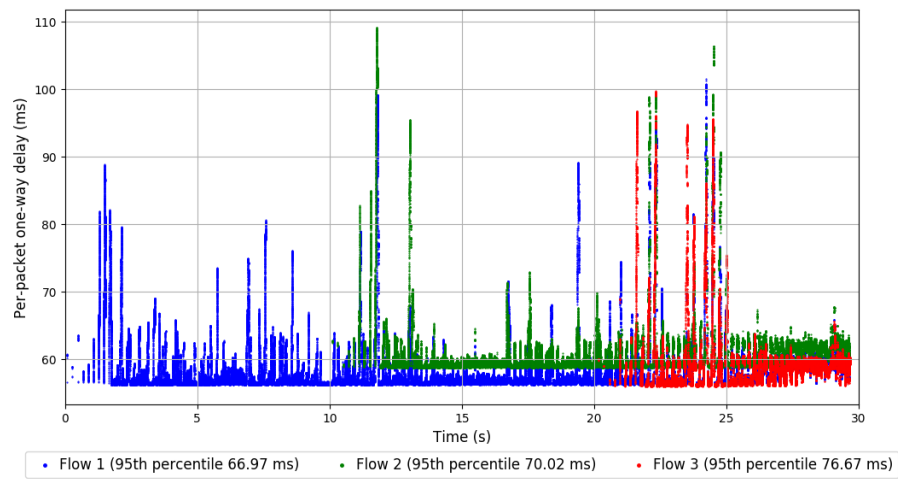
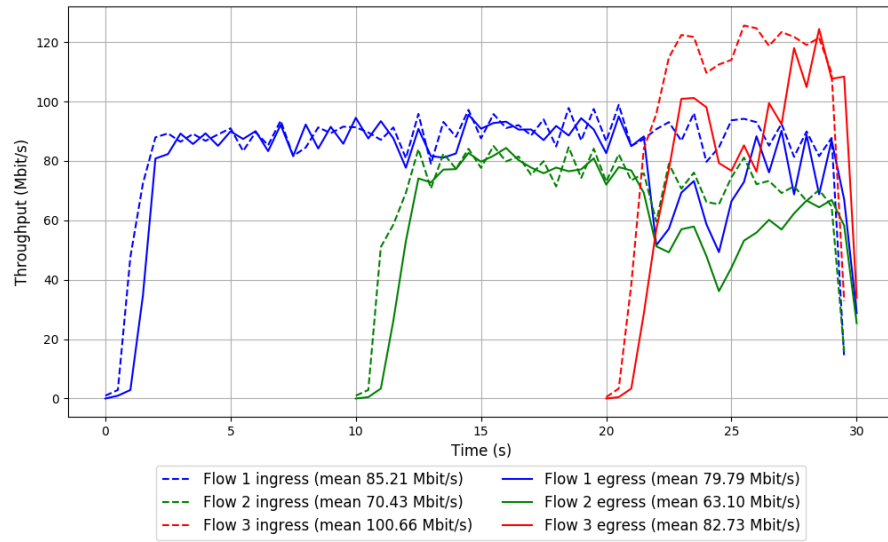


Run 2: Statistics of Indigo

Start at: 2019-01-25 01:59:56  
End at: 2019-01-25 02:00:26  
Local clock offset: -1.984 ms  
Remote clock offset: -42.314 ms

# Below is generated by plot.py at 2019-01-25 04:27:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 147.98 Mbit/s  
95th percentile per-packet one-way delay: 69.455 ms  
Loss rate: 9.76%  
-- Flow 1:  
Average throughput: 79.79 Mbit/s  
95th percentile per-packet one-way delay: 66.965 ms  
Loss rate: 6.35%  
-- Flow 2:  
Average throughput: 63.10 Mbit/s  
95th percentile per-packet one-way delay: 70.022 ms  
Loss rate: 10.41%  
-- Flow 3:  
Average throughput: 82.73 Mbit/s  
95th percentile per-packet one-way delay: 76.671 ms  
Loss rate: 17.82%

## Run 2: Report of Indigo — Data Link

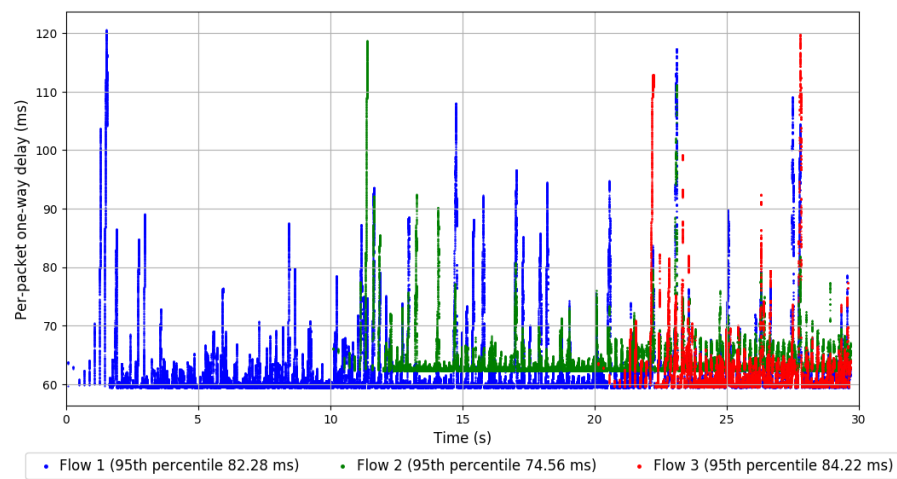
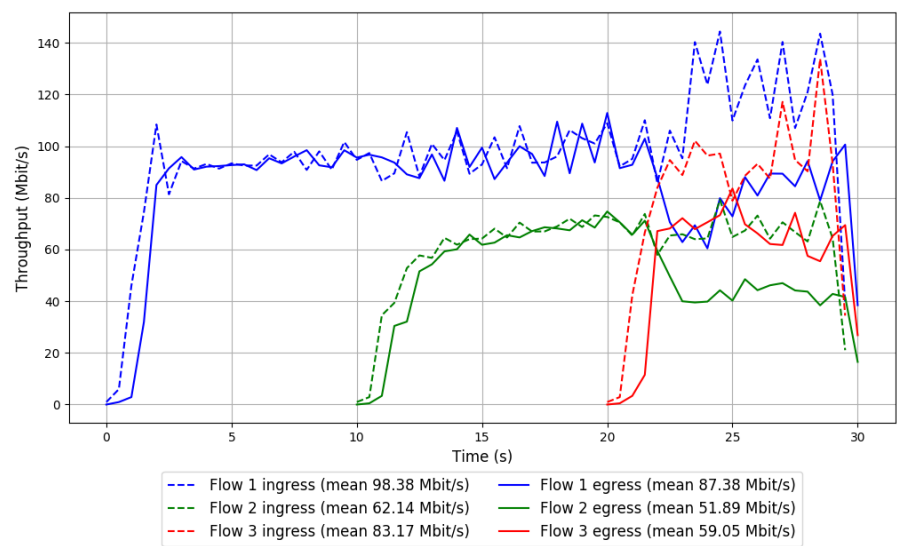


Run 3: Statistics of Indigo

Start at: 2019-01-25 02:41:18  
End at: 2019-01-25 02:41:48  
Local clock offset: -2.466 ms  
Remote clock offset: -40.259 ms

# Below is generated by plot.py at 2019-01-25 04:27:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 140.69 Mbit/s  
95th percentile per-packet one-way delay: 80.626 ms  
Loss rate: 15.37%  
-- Flow 1:  
Average throughput: 87.38 Mbit/s  
95th percentile per-packet one-way delay: 82.277 ms  
Loss rate: 11.18%  
-- Flow 2:  
Average throughput: 51.89 Mbit/s  
95th percentile per-packet one-way delay: 74.561 ms  
Loss rate: 16.50%  
-- Flow 3:  
Average throughput: 59.05 Mbit/s  
95th percentile per-packet one-way delay: 84.218 ms  
Loss rate: 29.01%

Run 3: Report of Indigo — Data Link



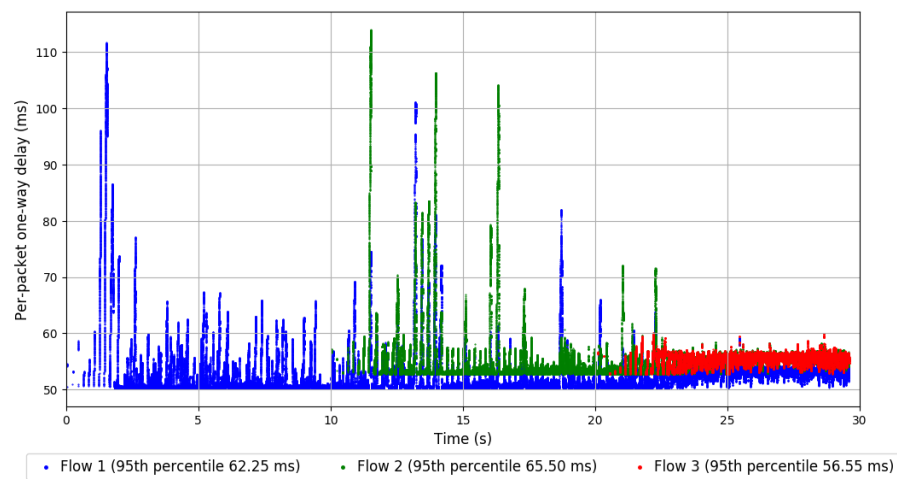
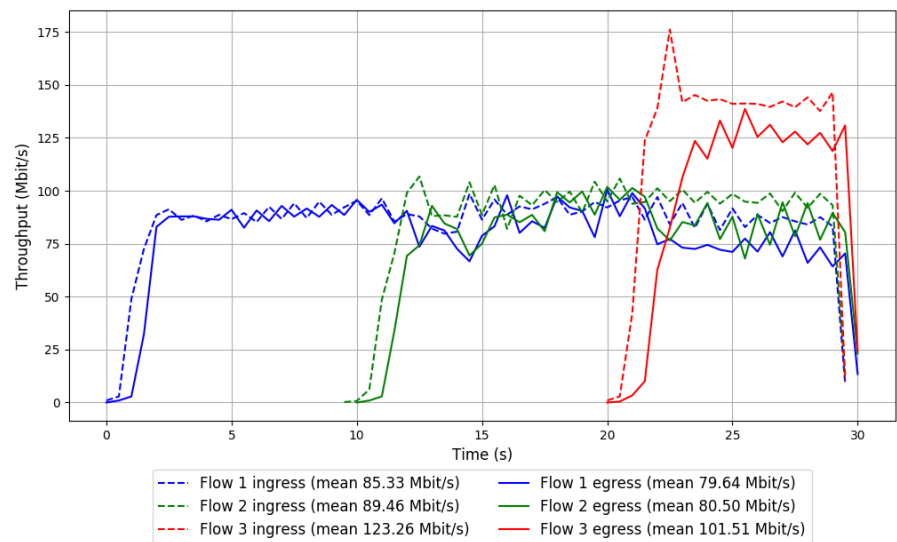


Run 4: Statistics of Indigo

Start at: 2019-01-25 03:12:14  
End at: 2019-01-25 03:12:44  
Local clock offset: 0.925 ms  
Remote clock offset: -47.297 ms

# Below is generated by plot.py at 2019-01-25 04:27:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 165.53 Mbit/s  
95th percentile per-packet one-way delay: 60.589 ms  
Loss rate: 10.11%  
-- Flow 1:  
Average throughput: 79.64 Mbit/s  
95th percentile per-packet one-way delay: 62.250 ms  
Loss rate: 6.66%  
-- Flow 2:  
Average throughput: 80.50 Mbit/s  
95th percentile per-packet one-way delay: 65.501 ms  
Loss rate: 10.01%  
-- Flow 3:  
Average throughput: 101.51 Mbit/s  
95th percentile per-packet one-way delay: 56.545 ms  
Loss rate: 17.67%

Run 4: Report of Indigo — Data Link

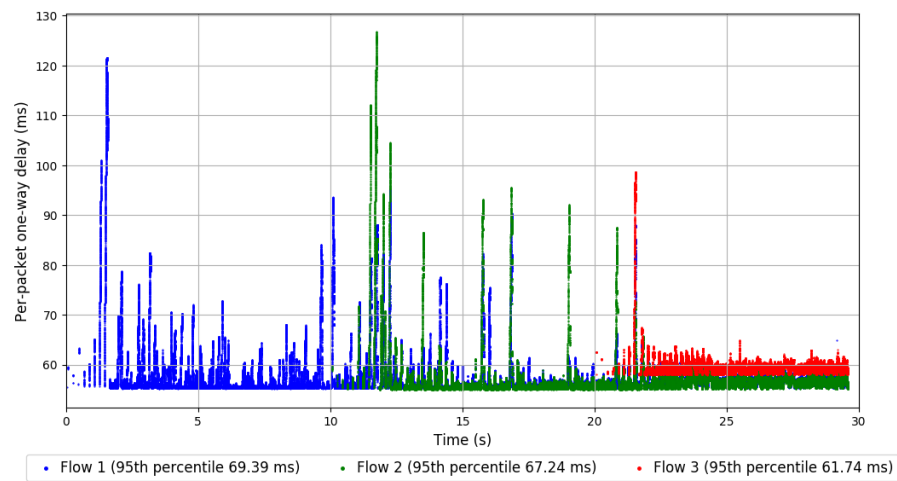
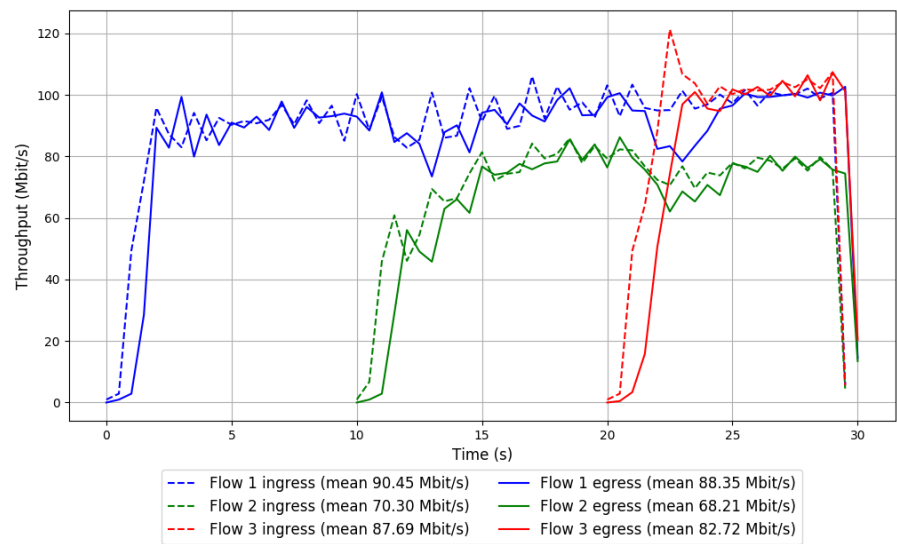


Run 5: Statistics of Indigo

Start at: 2019-01-25 03:59:29  
End at: 2019-01-25 03:59:59  
Local clock offset: -1.66 ms  
Remote clock offset: -45.024 ms

# Below is generated by plot.py at 2019-01-25 04:27:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 160.10 Mbit/s  
95th percentile per-packet one-way delay: 66.739 ms  
Loss rate: 3.07%  
-- Flow 1:  
Average throughput: 88.35 Mbit/s  
95th percentile per-packet one-way delay: 69.386 ms  
Loss rate: 2.31%  
-- Flow 2:  
Average throughput: 68.21 Mbit/s  
95th percentile per-packet one-way delay: 67.244 ms  
Loss rate: 2.98%  
-- Flow 3:  
Average throughput: 82.72 Mbit/s  
95th percentile per-packet one-way delay: 61.736 ms  
Loss rate: 5.67%

Run 5: Report of Indigo — Data Link

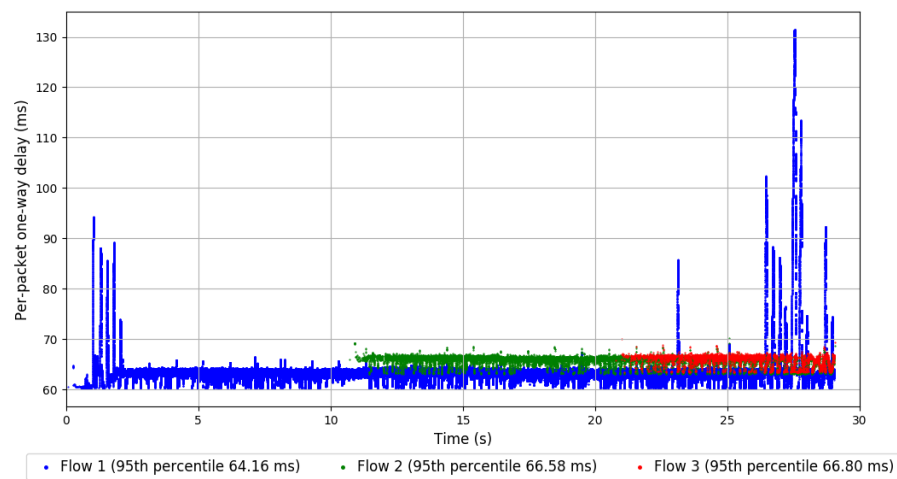
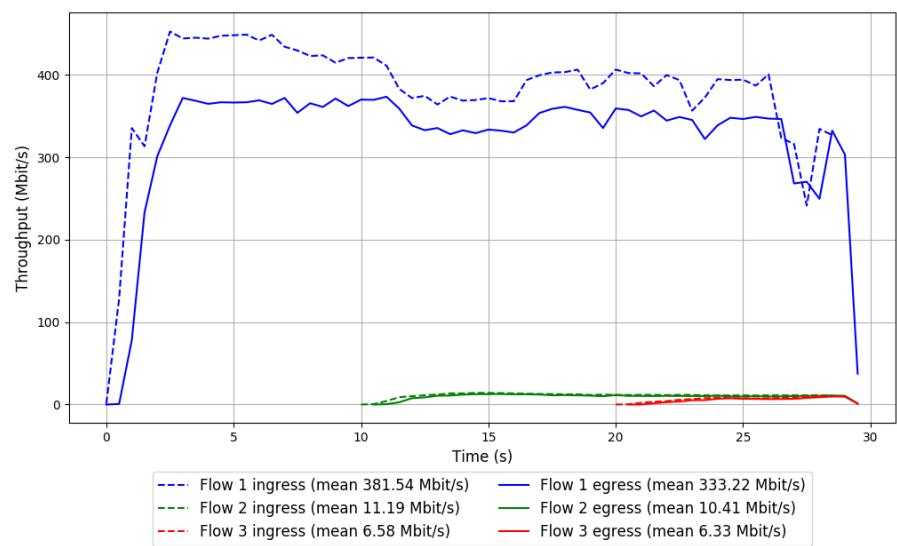


Run 1: Statistics of Indigo-MusesC3

Start at: 2019-01-25 01:33:51  
End at: 2019-01-25 01:34:21  
Local clock offset: -1.32 ms  
Remote clock offset: -38.179 ms

# Below is generated by plot.py at 2019-01-25 04:28:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 341.55 Mbit/s  
95th percentile per-packet one-way delay: 65.753 ms  
Loss rate: 12.58%  
-- Flow 1:  
Average throughput: 333.22 Mbit/s  
95th percentile per-packet one-way delay: 64.155 ms  
Loss rate: 12.65%  
-- Flow 2:  
Average throughput: 10.41 Mbit/s  
95th percentile per-packet one-way delay: 66.584 ms  
Loss rate: 9.40%  
-- Flow 3:  
Average throughput: 6.33 Mbit/s  
95th percentile per-packet one-way delay: 66.795 ms  
Loss rate: 9.22%

Run 1: Report of Indigo-MusesC3 — Data Link

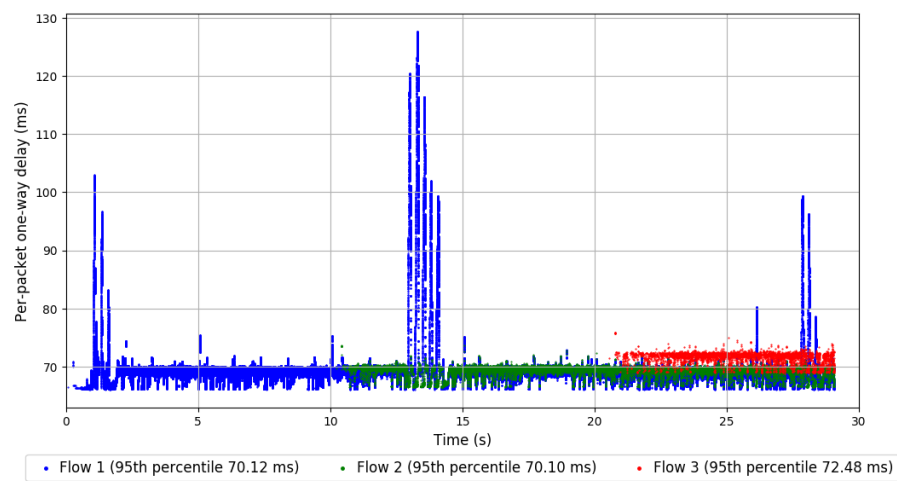
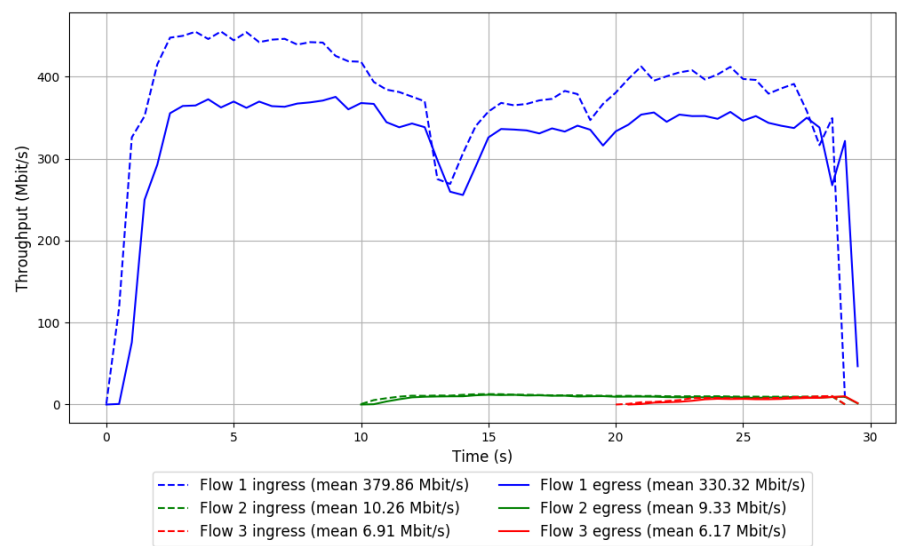


Run 2: Statistics of Indigo-MusesC3

Start at: 2019-01-25 02:10:11  
End at: 2019-01-25 02:10:41  
Local clock offset: -2.531 ms  
Remote clock offset: -33.757 ms

# Below is generated by plot.py at 2019-01-25 04:28:35  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 338.18 Mbit/s  
95th percentile per-packet one-way delay: 70.263 ms  
Loss rate: 12.96%  
-- Flow 1:  
Average throughput: 330.32 Mbit/s  
95th percentile per-packet one-way delay: 70.125 ms  
Loss rate: 13.04%  
-- Flow 2:  
Average throughput: 9.33 Mbit/s  
95th percentile per-packet one-way delay: 70.103 ms  
Loss rate: 9.06%  
-- Flow 3:  
Average throughput: 6.17 Mbit/s  
95th percentile per-packet one-way delay: 72.485 ms  
Loss rate: 10.69%

Run 2: Report of Indigo-MusesC3 — Data Link



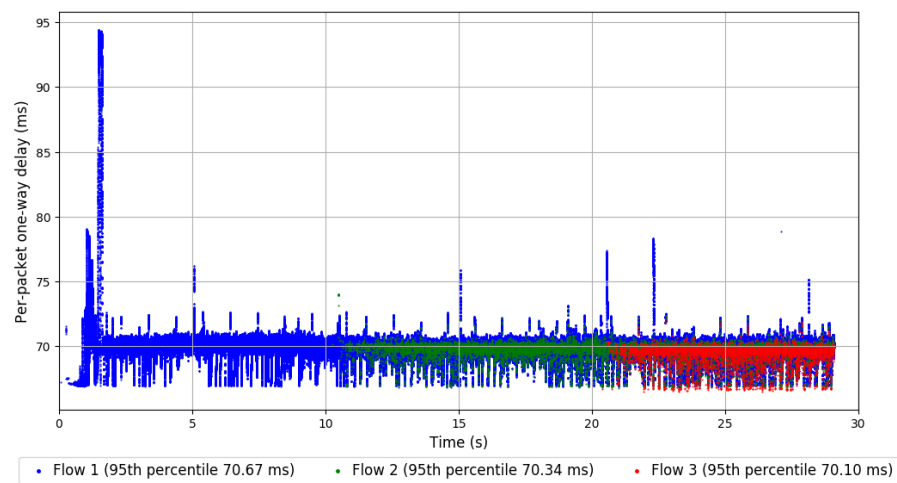
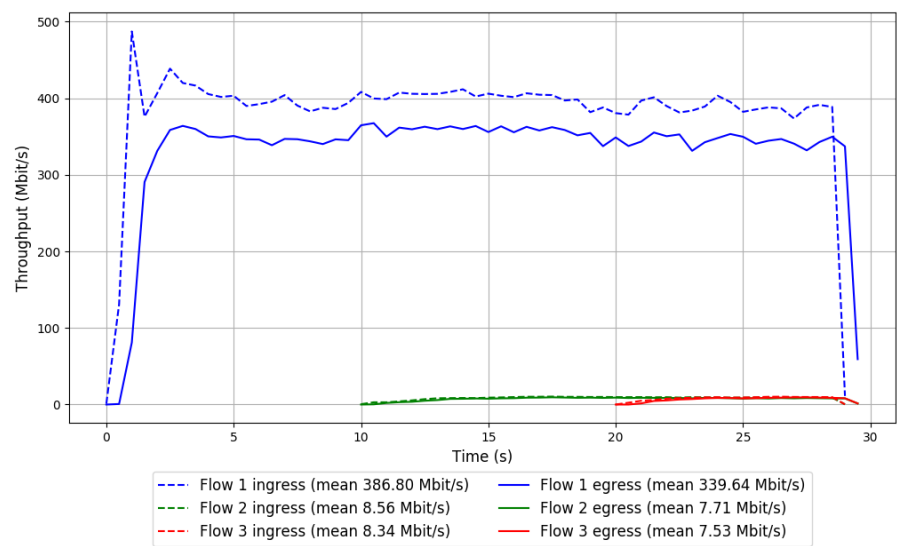


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-01-25 02:45:52  
End at: 2019-01-25 02:46:22  
Local clock offset: -1.521 ms  
Remote clock offset: -32.07 ms

# Below is generated by plot.py at 2019-01-25 04:28:39  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 346.89 Mbit/s  
95th percentile per-packet one-way delay: 70.660 ms  
Loss rate: 12.14%  
-- Flow 1:  
Average throughput: 339.64 Mbit/s  
95th percentile per-packet one-way delay: 70.665 ms  
Loss rate: 12.18%  
-- Flow 2:  
Average throughput: 7.71 Mbit/s  
95th percentile per-packet one-way delay: 70.338 ms  
Loss rate: 9.93%  
-- Flow 3:  
Average throughput: 7.53 Mbit/s  
95th percentile per-packet one-way delay: 70.097 ms  
Loss rate: 9.74%

Run 3: Report of Indigo-MusesC3 — Data Link

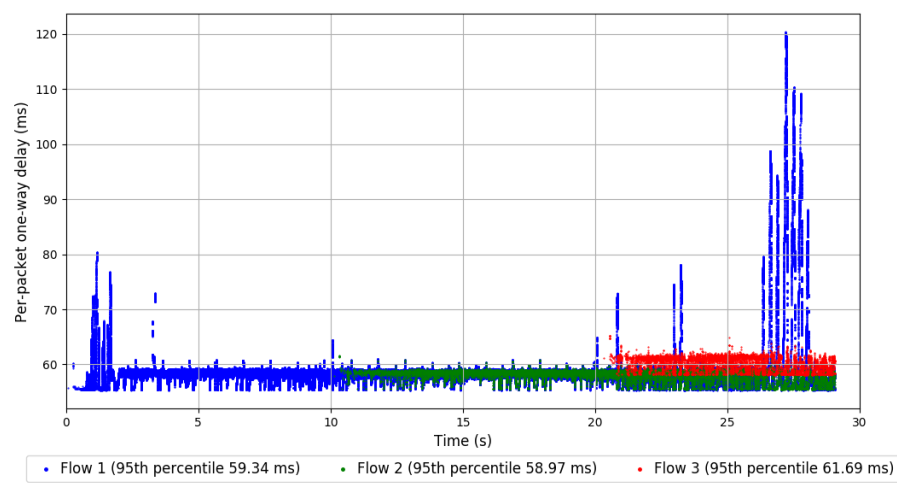
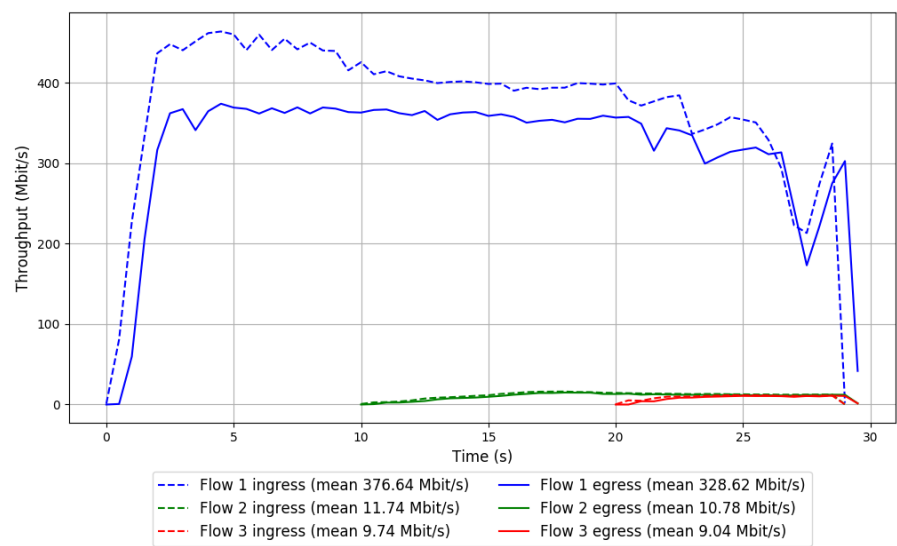


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-01-25 03:16:53  
End at: 2019-01-25 03:17:23  
Local clock offset: -1.606 ms  
Remote clock offset: -44.83 ms

# Below is generated by plot.py at 2019-01-25 04:28:51  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 338.35 Mbit/s  
95th percentile per-packet one-way delay: 59.588 ms  
Loss rate: 12.62%  
-- Flow 1:  
Average throughput: 328.62 Mbit/s  
95th percentile per-packet one-way delay: 59.336 ms  
Loss rate: 12.75%  
-- Flow 2:  
Average throughput: 10.78 Mbit/s  
95th percentile per-packet one-way delay: 58.965 ms  
Loss rate: 8.20%  
-- Flow 3:  
Average throughput: 9.04 Mbit/s  
95th percentile per-packet one-way delay: 61.692 ms  
Loss rate: 7.16%

Run 4: Report of Indigo-MusesC3 — Data Link

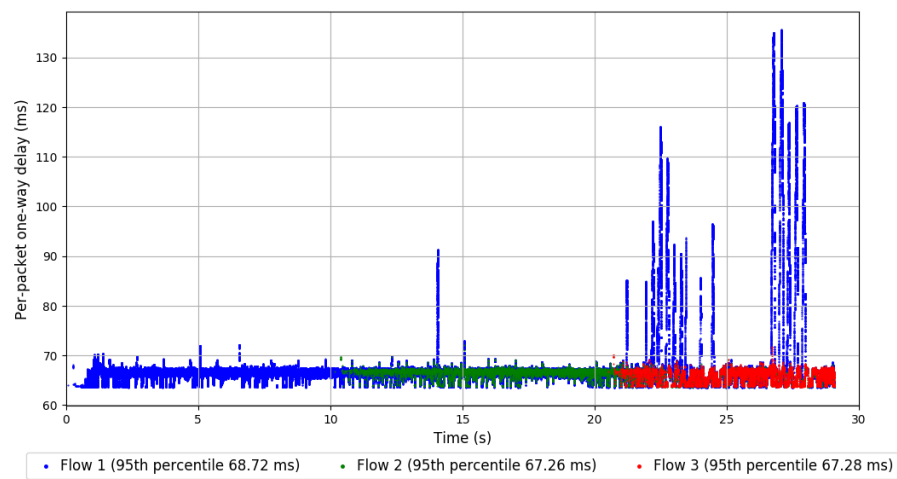
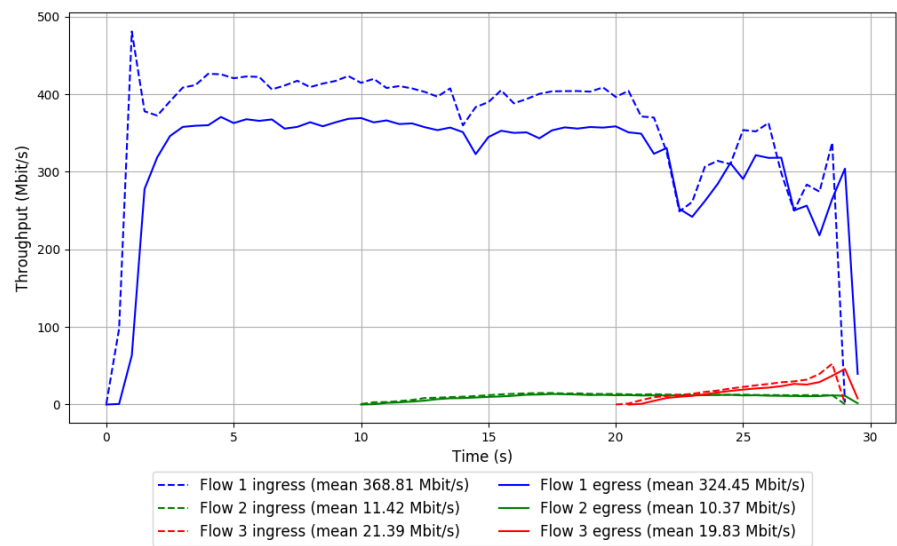


Run 5: Statistics of Indigo-MusesC3

Start at: 2019-01-25 04:09:42  
End at: 2019-01-25 04:10:12  
Local clock offset: -1.579 ms  
Remote clock offset: -36.767 ms

# Below is generated by plot.py at 2019-01-25 04:28:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 337.05 Mbit/s  
95th percentile per-packet one-way delay: 68.453 ms  
Loss rate: 11.89%  
-- Flow 1:  
Average throughput: 324.45 Mbit/s  
95th percentile per-packet one-way delay: 68.715 ms  
Loss rate: 12.02%  
-- Flow 2:  
Average throughput: 10.37 Mbit/s  
95th percentile per-packet one-way delay: 67.260 ms  
Loss rate: 9.16%  
-- Flow 3:  
Average throughput: 19.83 Mbit/s  
95th percentile per-packet one-way delay: 67.279 ms  
Loss rate: 7.32%

Run 5: Report of Indigo-MusesC3 — Data Link

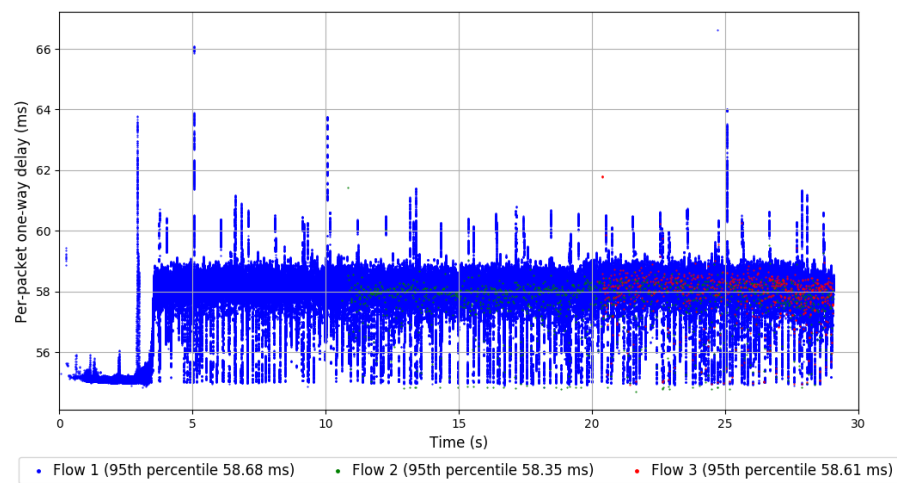
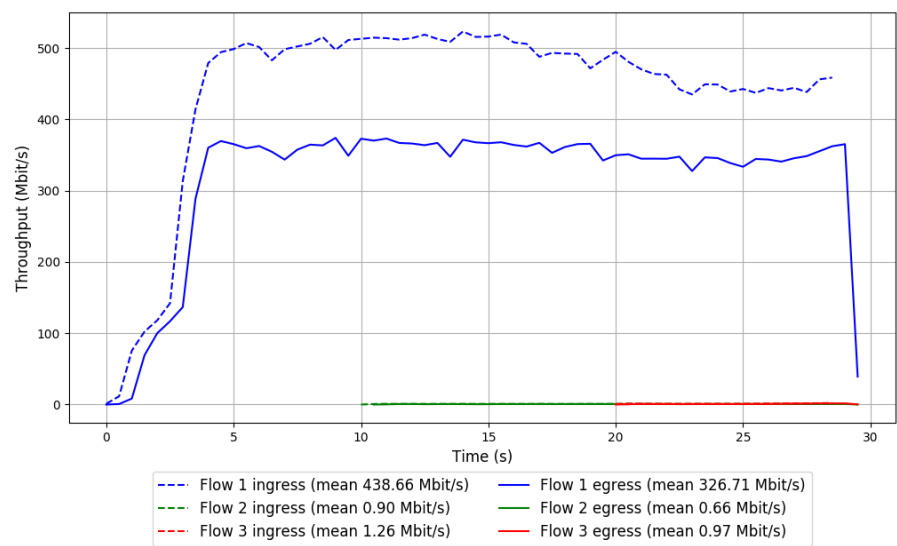


Run 1: Statistics of Indigo-MusesC5

Start at: 2019-01-25 01:25:14  
End at: 2019-01-25 01:25:44  
Local clock offset: -1.546 ms  
Remote clock offset: -44.538 ms

# Below is generated by plot.py at 2019-01-25 04:29:40  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 327.43 Mbit/s  
95th percentile per-packet one-way delay: 58.683 ms  
Loss rate: 25.52%  
-- Flow 1:  
Average throughput: 326.71 Mbit/s  
95th percentile per-packet one-way delay: 58.684 ms  
Loss rate: 25.51%  
-- Flow 2:  
Average throughput: 0.66 Mbit/s  
95th percentile per-packet one-way delay: 58.348 ms  
Loss rate: 28.71%  
-- Flow 3:  
Average throughput: 0.97 Mbit/s  
95th percentile per-packet one-way delay: 58.606 ms  
Loss rate: 23.23%

Run 1: Report of Indigo-MusesC5 — Data Link



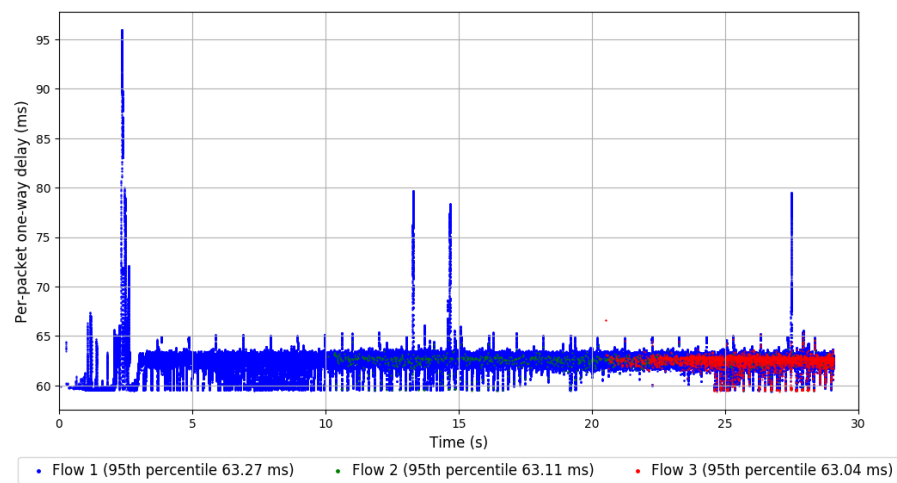
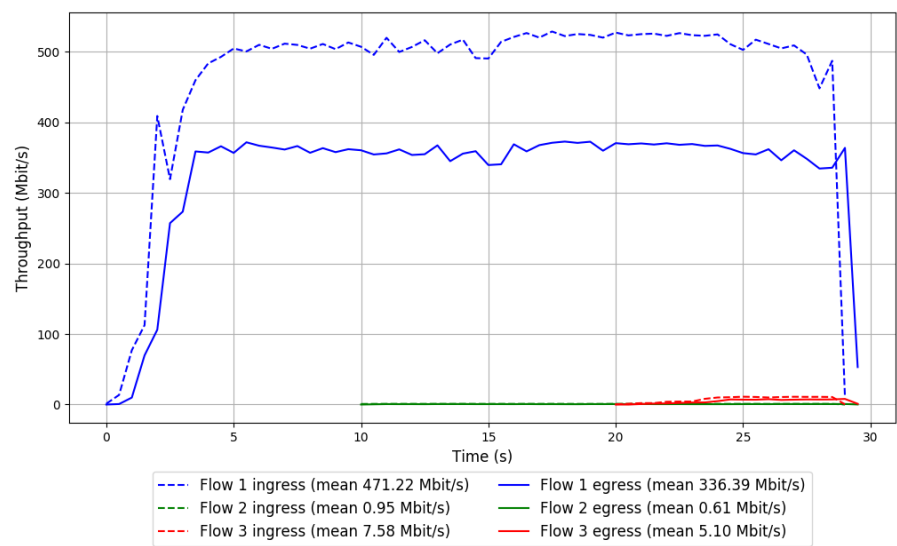


Run 2: Statistics of Indigo-MusesC5

Start at: 2019-01-25 01:55:42  
End at: 2019-01-25 01:56:12  
Local clock offset: -1.513 ms  
Remote clock offset: -38.702 ms

# Below is generated by plot.py at 2019-01-25 04:30:58  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 338.33 Mbit/s  
95th percentile per-packet one-way delay: 63.274 ms  
Loss rate: 28.64%  
-- Flow 1:  
Average throughput: 336.39 Mbit/s  
95th percentile per-packet one-way delay: 63.274 ms  
Loss rate: 28.61%  
-- Flow 2:  
Average throughput: 0.61 Mbit/s  
95th percentile per-packet one-way delay: 63.112 ms  
Loss rate: 35.81%  
-- Flow 3:  
Average throughput: 5.10 Mbit/s  
95th percentile per-packet one-way delay: 63.043 ms  
Loss rate: 32.77%

Run 2: Report of Indigo-MusesC5 — Data Link

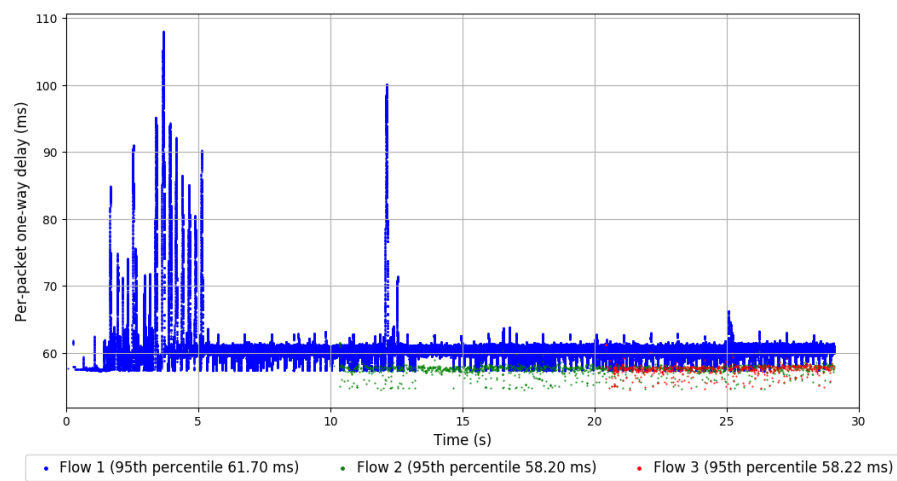
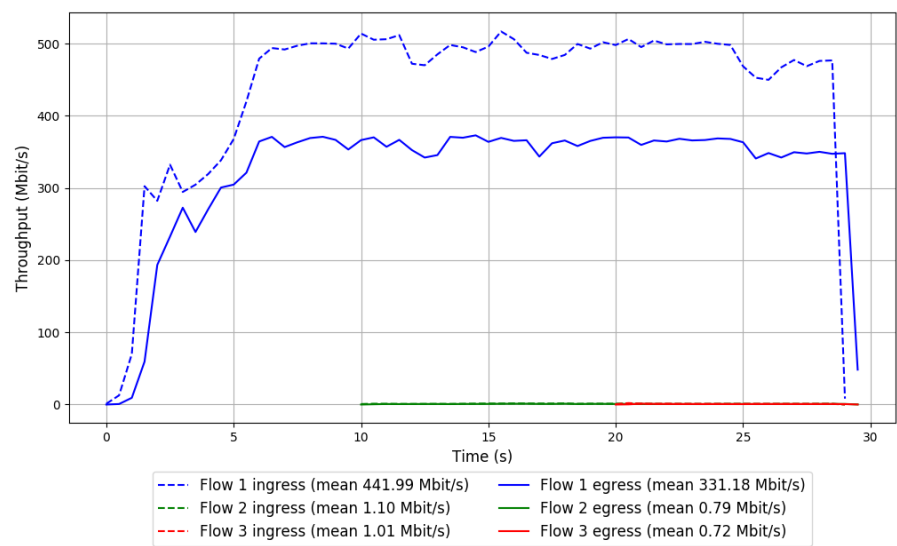


Run 3: Statistics of Indigo-MusesC5

Start at: 2019-01-25 02:31:59  
End at: 2019-01-25 02:32:29  
Local clock offset: 0.379 ms  
Remote clock offset: -42.513 ms

# Below is generated by plot.py at 2019-01-25 04:31:01  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 331.91 Mbit/s  
95th percentile per-packet one-way delay: 61.696 ms  
Loss rate: 25.07%  
-- Flow 1:  
Average throughput: 331.18 Mbit/s  
95th percentile per-packet one-way delay: 61.704 ms  
Loss rate: 25.06%  
-- Flow 2:  
Average throughput: 0.79 Mbit/s  
95th percentile per-packet one-way delay: 58.197 ms  
Loss rate: 27.85%  
-- Flow 3:  
Average throughput: 0.72 Mbit/s  
95th percentile per-packet one-way delay: 58.217 ms  
Loss rate: 28.38%

Run 3: Report of Indigo-MusesC5 — Data Link

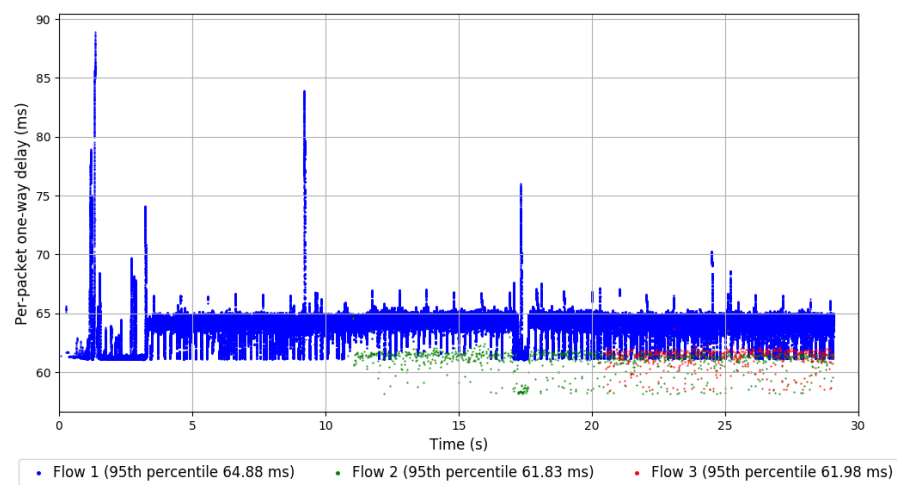
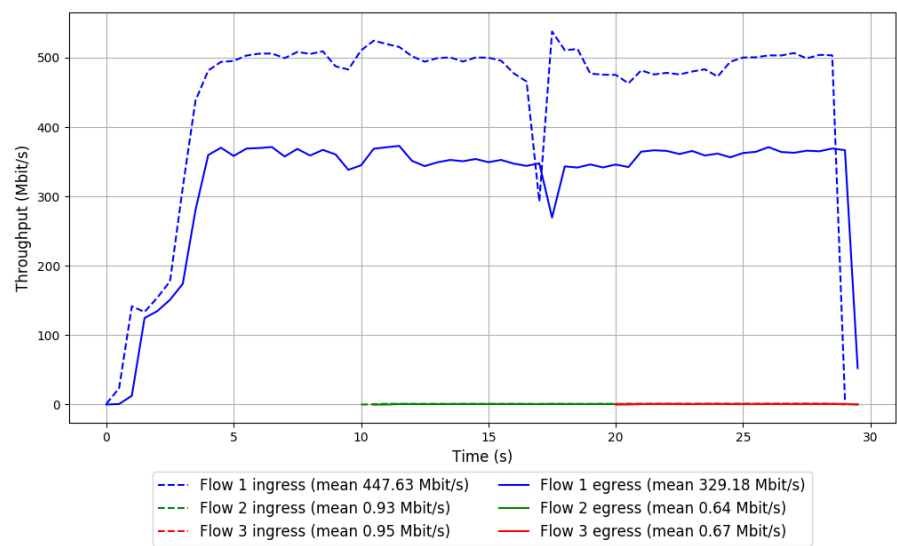


Run 4: Statistics of Indigo-MusesC5

Start at: 2019-01-25 03:08:04  
End at: 2019-01-25 03:08:34  
Local clock offset: 0.354 ms  
Remote clock offset: -39.553 ms

# Below is generated by plot.py at 2019-01-25 04:32:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 329.79 Mbit/s  
95th percentile per-packet one-way delay: 64.881 ms  
Loss rate: 26.47%  
-- Flow 1:  
Average throughput: 329.18 Mbit/s  
95th percentile per-packet one-way delay: 64.881 ms  
Loss rate: 26.46%  
-- Flow 2:  
Average throughput: 0.64 Mbit/s  
95th percentile per-packet one-way delay: 61.825 ms  
Loss rate: 32.35%  
-- Flow 3:  
Average throughput: 0.67 Mbit/s  
95th percentile per-packet one-way delay: 61.980 ms  
Loss rate: 29.87%

Run 4: Report of Indigo-MusesC5 — Data Link

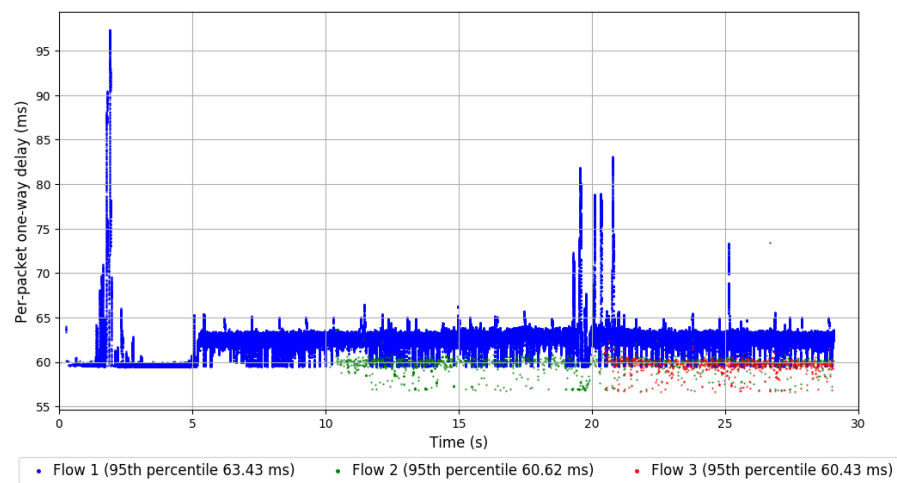
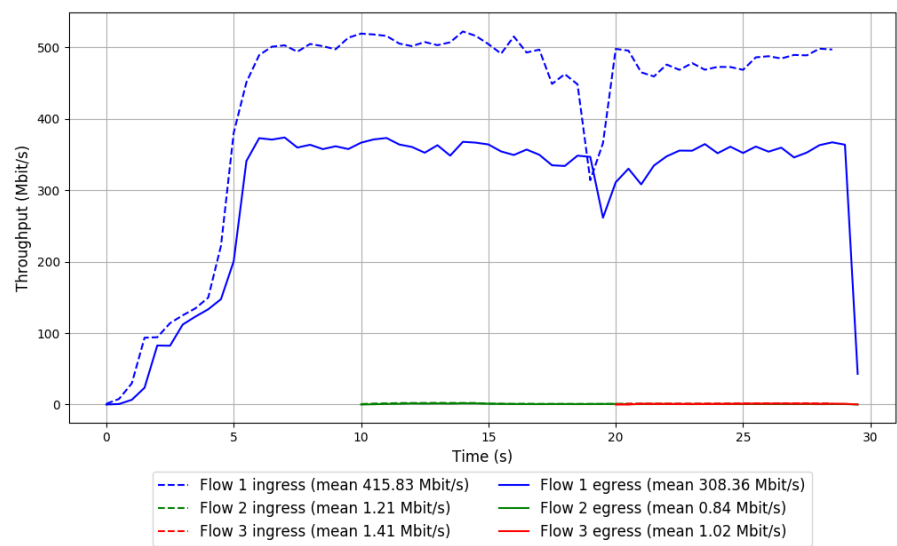


Run 5: Statistics of Indigo-MusesC5

Start at: 2019-01-25 03:49:40  
End at: 2019-01-25 03:50:10  
Local clock offset: -1.106 ms  
Remote clock offset: -42.81 ms

# Below is generated by plot.py at 2019-01-25 04:32:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 309.22 Mbit/s  
95th percentile per-packet one-way delay: 63.425 ms  
Loss rate: 25.85%  
-- Flow 1:  
Average throughput: 308.36 Mbit/s  
95th percentile per-packet one-way delay: 63.426 ms  
Loss rate: 25.84%  
-- Flow 2:  
Average throughput: 0.84 Mbit/s  
95th percentile per-packet one-way delay: 60.621 ms  
Loss rate: 31.21%  
-- Flow 3:  
Average throughput: 1.02 Mbit/s  
95th percentile per-packet one-way delay: 60.427 ms  
Loss rate: 27.40%

Run 5: Report of Indigo-MusesC5 — Data Link



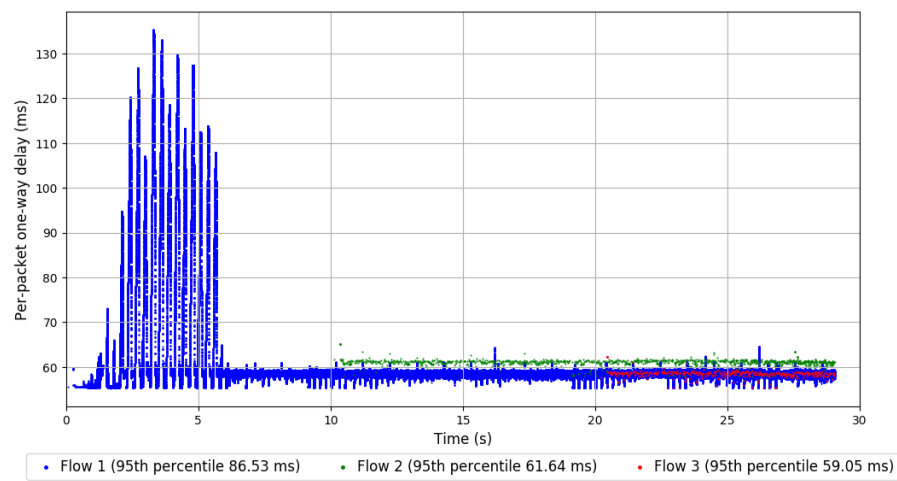
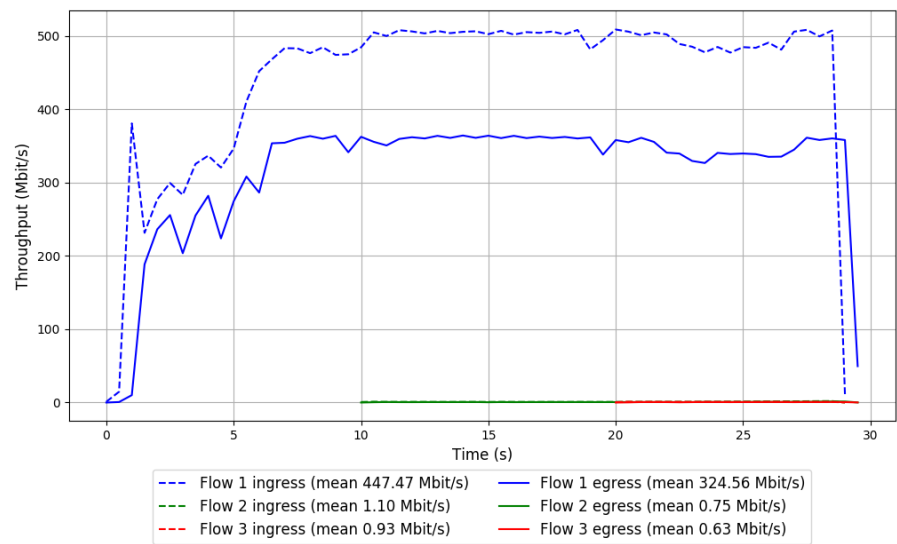


Run 1: Statistics of Indigo-MusesD

Start at: 2019-01-25 01:18:03  
End at: 2019-01-25 01:18:33  
Local clock offset: -0.5 ms  
Remote clock offset: -44.496 ms

# Below is generated by plot.py at 2019-01-25 04:32:18  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 325.25 Mbit/s  
95th percentile per-packet one-way delay: 86.410 ms  
Loss rate: 27.47%  
-- Flow 1:  
Average throughput: 324.56 Mbit/s  
95th percentile per-packet one-way delay: 86.526 ms  
Loss rate: 27.46%  
-- Flow 2:  
Average throughput: 0.75 Mbit/s  
95th percentile per-packet one-way delay: 61.642 ms  
Loss rate: 31.42%  
-- Flow 3:  
Average throughput: 0.63 Mbit/s  
95th percentile per-packet one-way delay: 59.054 ms  
Loss rate: 32.34%

Run 1: Report of Indigo-MusesD — Data Link

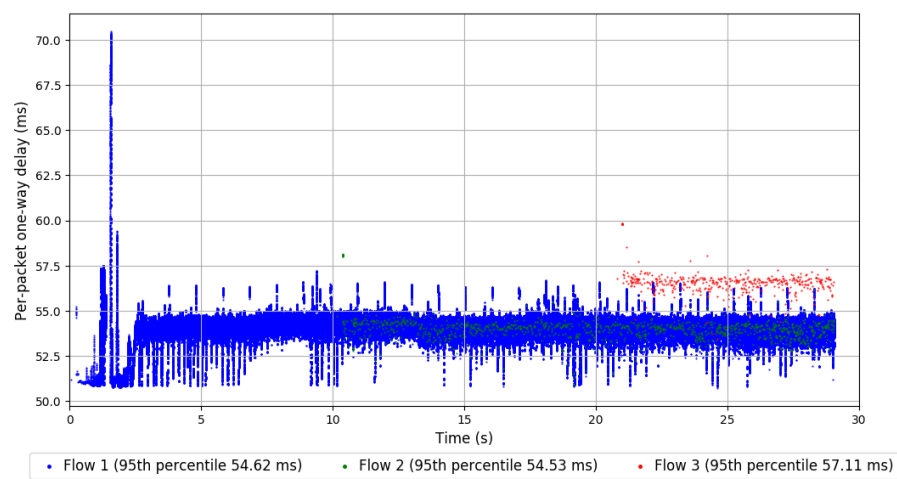
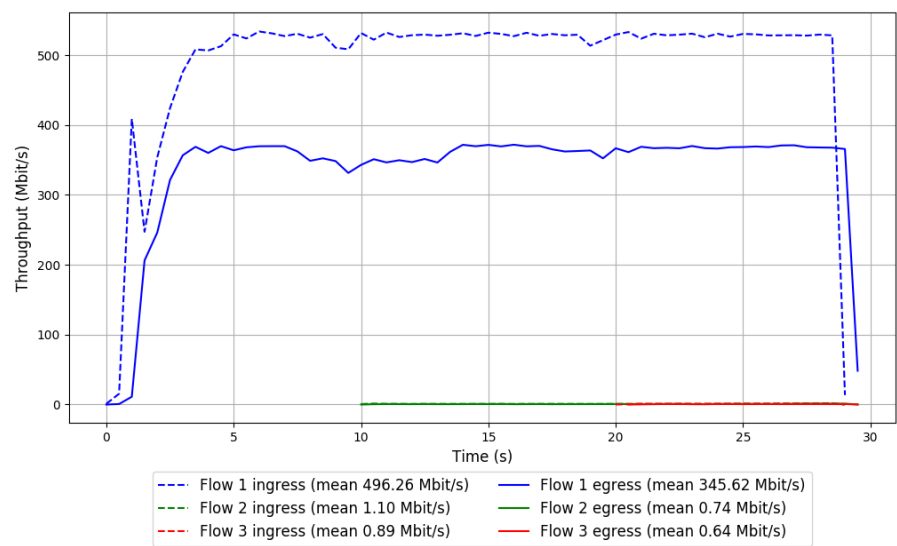


Run 2: Statistics of Indigo-MusesD

Start at: 2019-01-25 01:48:26  
End at: 2019-01-25 01:48:56  
Local clock offset: -0.788 ms  
Remote clock offset: -46.824 ms

# Below is generated by plot.py at 2019-01-25 04:32:51  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 346.28 Mbit/s  
95th percentile per-packet one-way delay: 54.622 ms  
Loss rate: 30.35%  
-- Flow 1:  
Average throughput: 345.62 Mbit/s  
95th percentile per-packet one-way delay: 54.620 ms  
Loss rate: 30.35%  
-- Flow 2:  
Average throughput: 0.74 Mbit/s  
95th percentile per-packet one-way delay: 54.529 ms  
Loss rate: 32.96%  
-- Flow 3:  
Average throughput: 0.64 Mbit/s  
95th percentile per-packet one-way delay: 57.109 ms  
Loss rate: 32.19%

Run 2: Report of Indigo-MusesD — Data Link

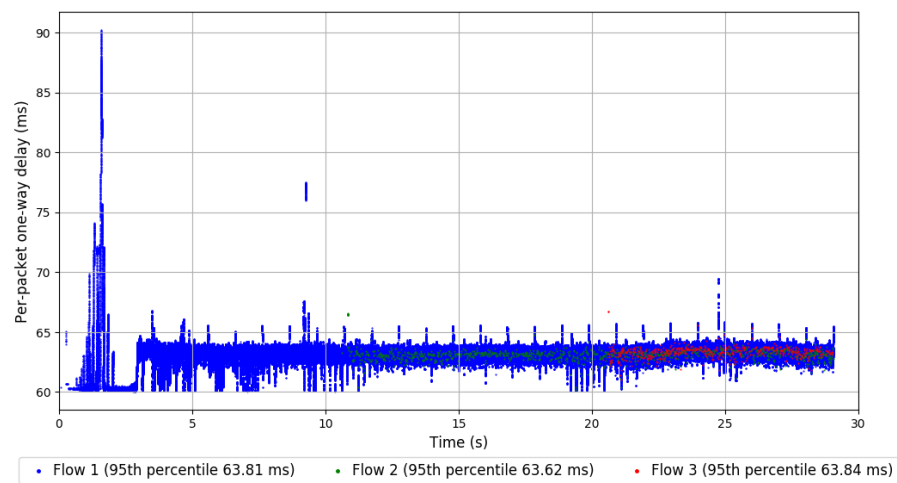
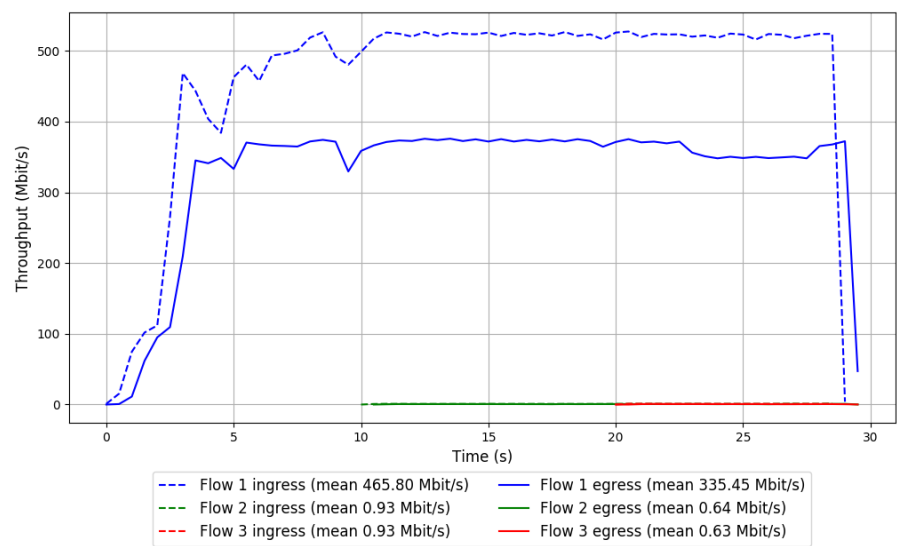


Run 3: Statistics of Indigo-MusesD

Start at: 2019-01-25 02:24:49  
End at: 2019-01-25 02:25:19  
Local clock offset: 0.128 ms  
Remote clock offset: -37.421 ms

# Below is generated by plot.py at 2019-01-25 04:32:51  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 336.04 Mbit/s  
95th percentile per-packet one-way delay: 63.811 ms  
Loss rate: 27.99%  
-- Flow 1:  
Average throughput: 335.45 Mbit/s  
95th percentile per-packet one-way delay: 63.811 ms  
Loss rate: 27.98%  
-- Flow 2:  
Average throughput: 0.64 Mbit/s  
95th percentile per-packet one-way delay: 63.619 ms  
Loss rate: 32.52%  
-- Flow 3:  
Average throughput: 0.63 Mbit/s  
95th percentile per-packet one-way delay: 63.840 ms  
Loss rate: 32.75%

Run 3: Report of Indigo-MusesD — Data Link

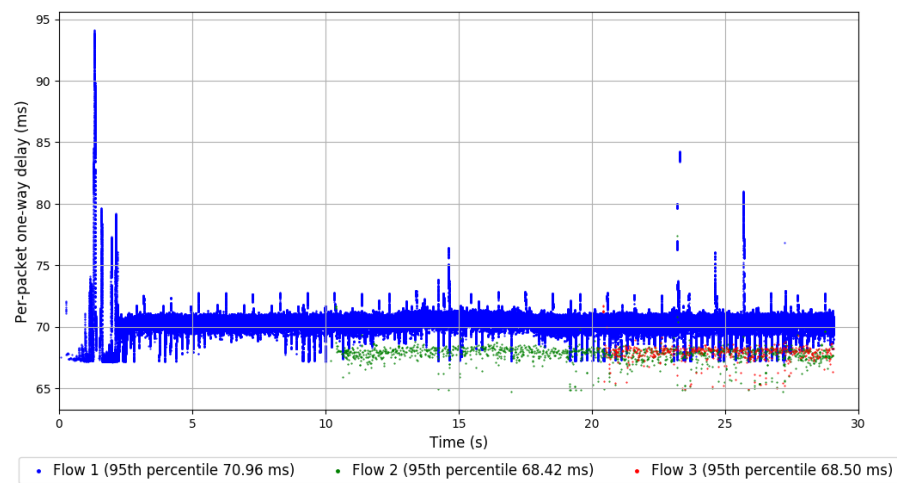
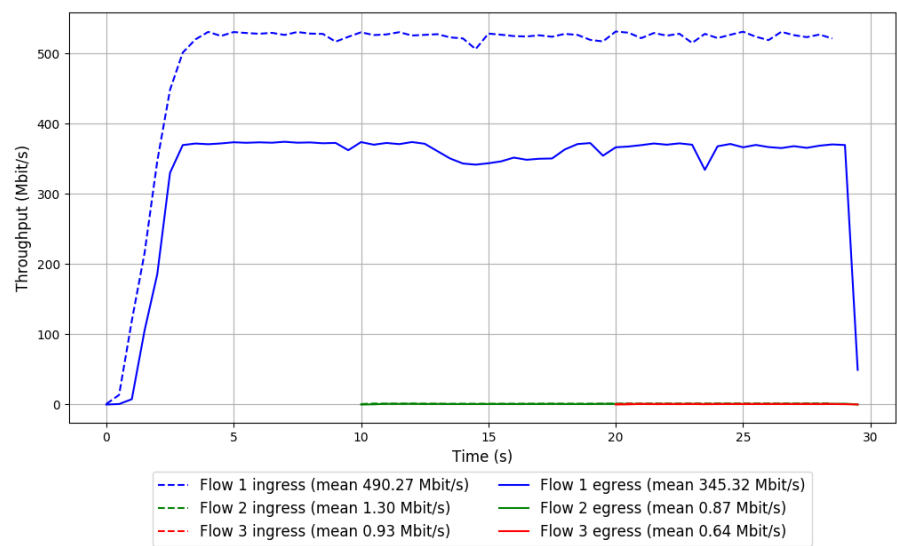


Run 4: Statistics of Indigo-MusesD

Start at: 2019-01-25 03:00:33  
End at: 2019-01-25 03:01:03  
Local clock offset: -0.727 ms  
Remote clock offset: -33.864 ms

# Below is generated by plot.py at 2019-01-25 04:33:42  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 346.08 Mbit/s  
95th percentile per-packet one-way delay: 70.957 ms  
Loss rate: 29.56%  
-- Flow 1:  
Average throughput: 345.32 Mbit/s  
95th percentile per-packet one-way delay: 70.958 ms  
Loss rate: 29.56%  
-- Flow 2:  
Average throughput: 0.87 Mbit/s  
95th percentile per-packet one-way delay: 68.419 ms  
Loss rate: 32.95%  
-- Flow 3:  
Average throughput: 0.64 Mbit/s  
95th percentile per-packet one-way delay: 68.499 ms  
Loss rate: 31.10%

Run 4: Report of Indigo-MusesD — Data Link



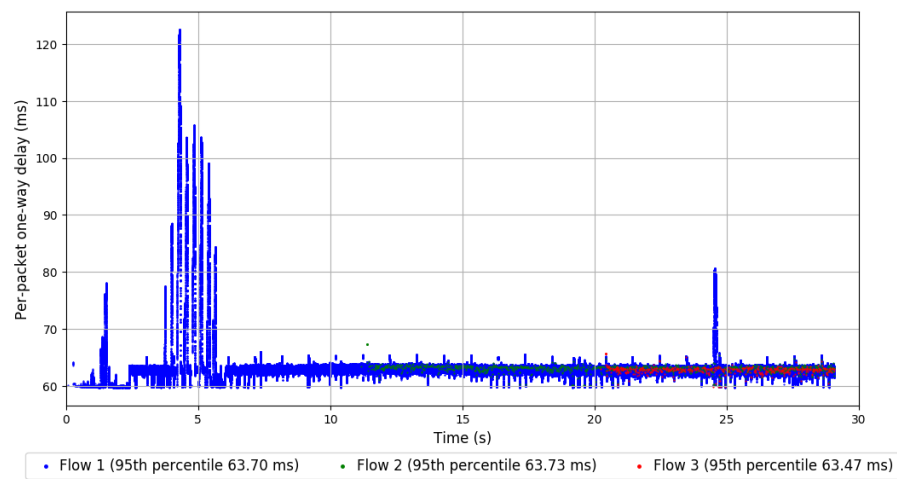
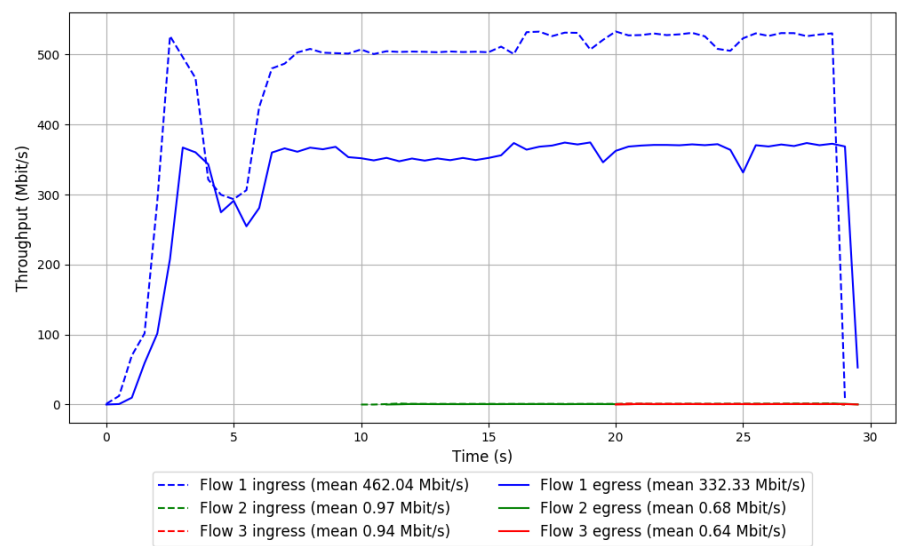


Run 5: Statistics of Indigo-MusesD

Start at: 2019-01-25 03:31:31  
End at: 2019-01-25 03:32:01  
Local clock offset: -1.925 ms  
Remote clock offset: -40.646 ms

# Below is generated by plot.py at 2019-01-25 04:34:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 332.94 Mbit/s  
95th percentile per-packet one-way delay: 63.700 ms  
Loss rate: 28.08%  
-- Flow 1:  
Average throughput: 332.33 Mbit/s  
95th percentile per-packet one-way delay: 63.700 ms  
Loss rate: 28.07%  
-- Flow 2:  
Average throughput: 0.68 Mbit/s  
95th percentile per-packet one-way delay: 63.729 ms  
Loss rate: 33.85%  
-- Flow 3:  
Average throughput: 0.64 Mbit/s  
95th percentile per-packet one-way delay: 63.471 ms  
Loss rate: 32.07%

Run 5: Report of Indigo-MusesD — Data Link

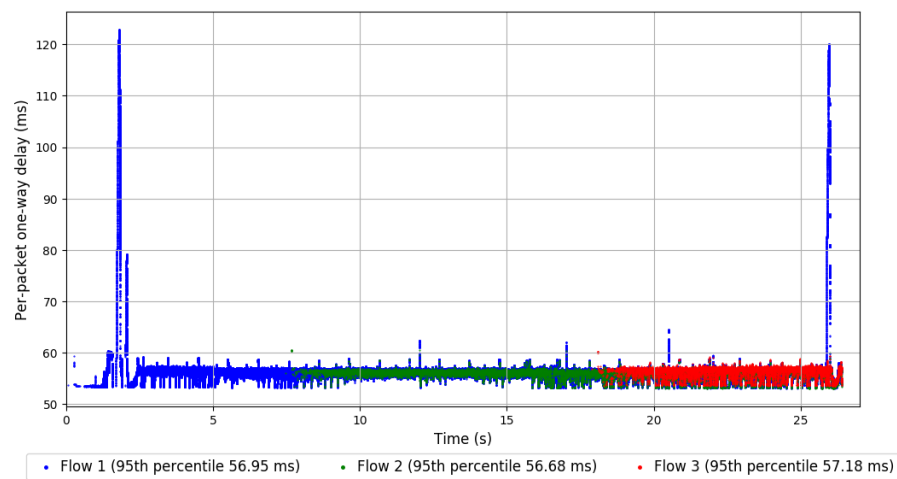
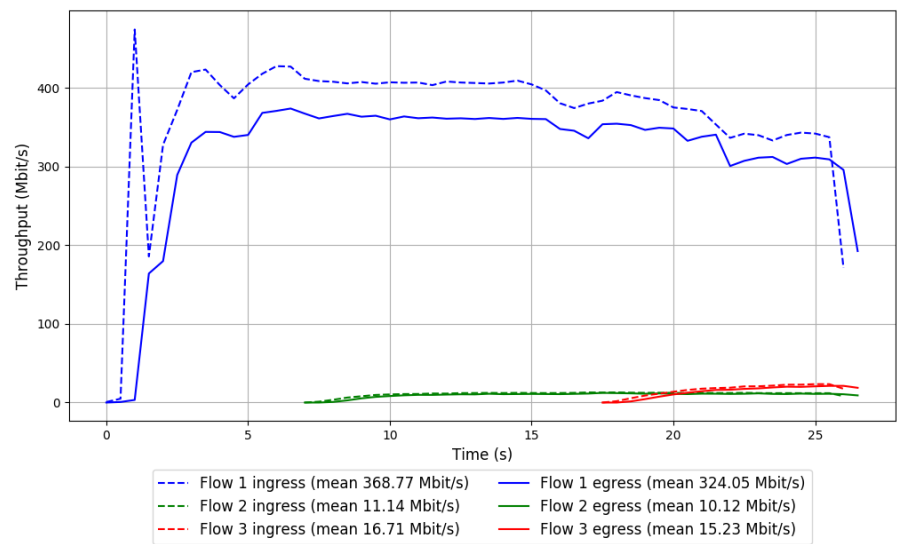


Run 1: Statistics of Indigo-MusesT

Start at: 2019-01-25 01:13:23  
End at: 2019-01-25 01:13:53  
Local clock offset: 2.64 ms  
Remote clock offset: -44.57 ms

# Below is generated by plot.py at 2019-01-25 04:34:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 336.23 Mbit/s  
95th percentile per-packet one-way delay: 56.960 ms  
Loss rate: 12.02%  
-- Flow 1:  
Average throughput: 324.05 Mbit/s  
95th percentile per-packet one-way delay: 56.953 ms  
Loss rate: 12.12%  
-- Flow 2:  
Average throughput: 10.12 Mbit/s  
95th percentile per-packet one-way delay: 56.677 ms  
Loss rate: 9.16%  
-- Flow 3:  
Average throughput: 15.23 Mbit/s  
95th percentile per-packet one-way delay: 57.183 ms  
Loss rate: 8.89%

Run 1: Report of Indigo-MusesT — Data Link

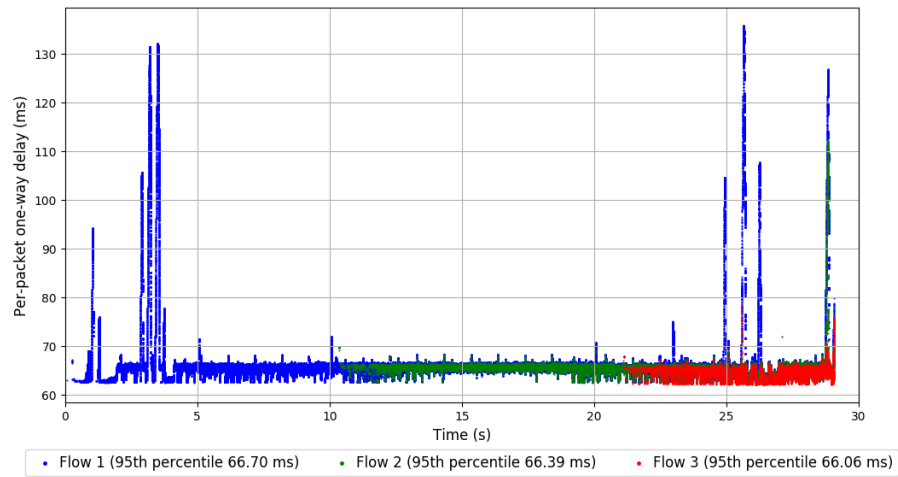
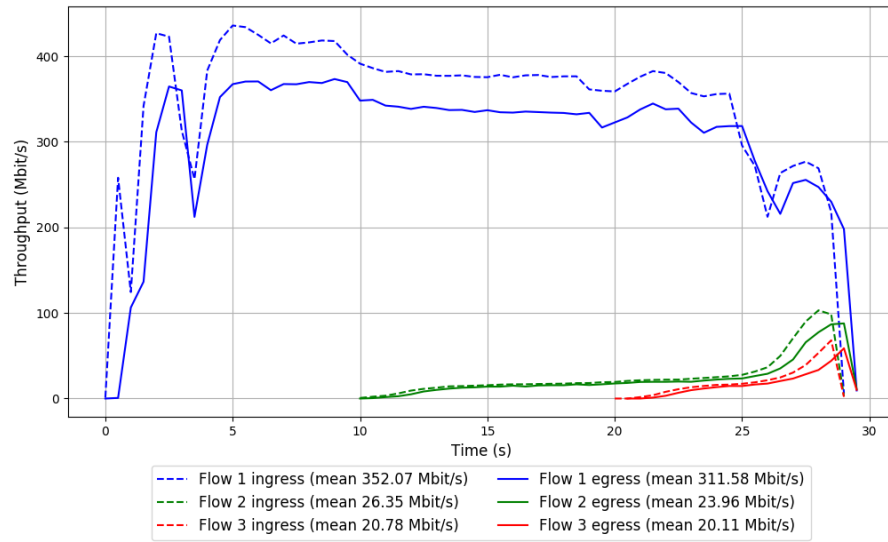


Run 2: Statistics of Indigo-MusesT

Start at: 2019-01-25 01:43:48  
End at: 2019-01-25 01:44:18  
Local clock offset: 0.859 ms  
Remote clock offset: -33.57 ms

# Below is generated by plot.py at 2019-01-25 04:35:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 332.83 Mbit/s  
95th percentile per-packet one-way delay: 66.666 ms  
Loss rate: 11.34%  
-- Flow 1:  
Average throughput: 311.58 Mbit/s  
95th percentile per-packet one-way delay: 66.696 ms  
Loss rate: 11.49%  
-- Flow 2:  
Average throughput: 23.96 Mbit/s  
95th percentile per-packet one-way delay: 66.393 ms  
Loss rate: 9.07%  
-- Flow 3:  
Average throughput: 20.11 Mbit/s  
95th percentile per-packet one-way delay: 66.064 ms  
Loss rate: 8.82%

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

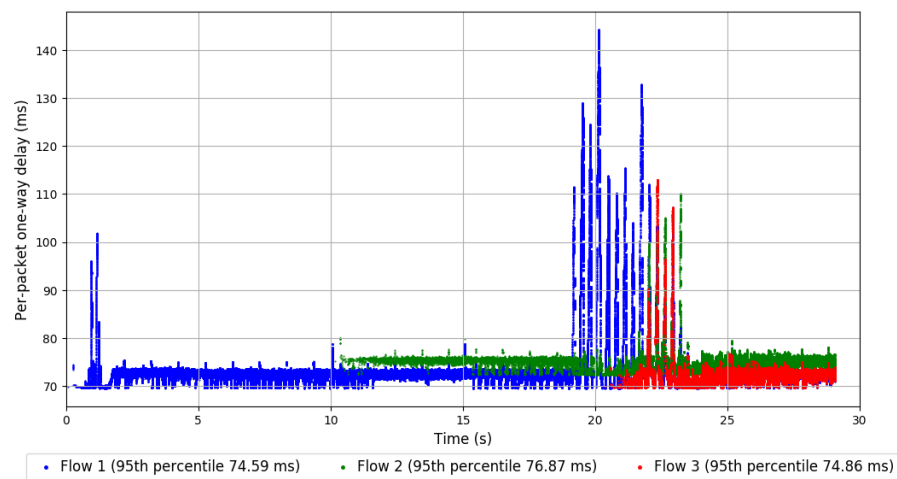
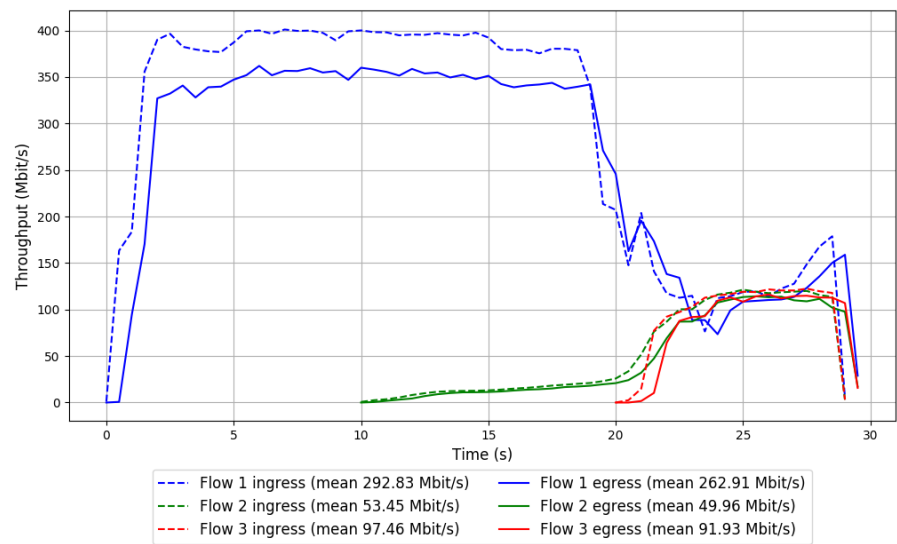


Run 3: Statistics of Indigo-MusesT

Start at: 2019-01-25 02:20:09  
End at: 2019-01-25 02:20:39  
Local clock offset: -6.904 ms  
Remote clock offset: -35.029 ms

# Below is generated by plot.py at 2019-01-25 04:35:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 323.04 Mbit/s  
95th percentile per-packet one-way delay: 76.141 ms  
Loss rate: 9.49%  
-- Flow 1:  
Average throughput: 262.91 Mbit/s  
95th percentile per-packet one-way delay: 74.594 ms  
Loss rate: 10.22%  
-- Flow 2:  
Average throughput: 49.96 Mbit/s  
95th percentile per-packet one-way delay: 76.872 ms  
Loss rate: 6.57%  
-- Flow 3:  
Average throughput: 91.93 Mbit/s  
95th percentile per-packet one-way delay: 74.858 ms  
Loss rate: 5.65%

Run 3: Report of Indigo-MusesT — Data Link



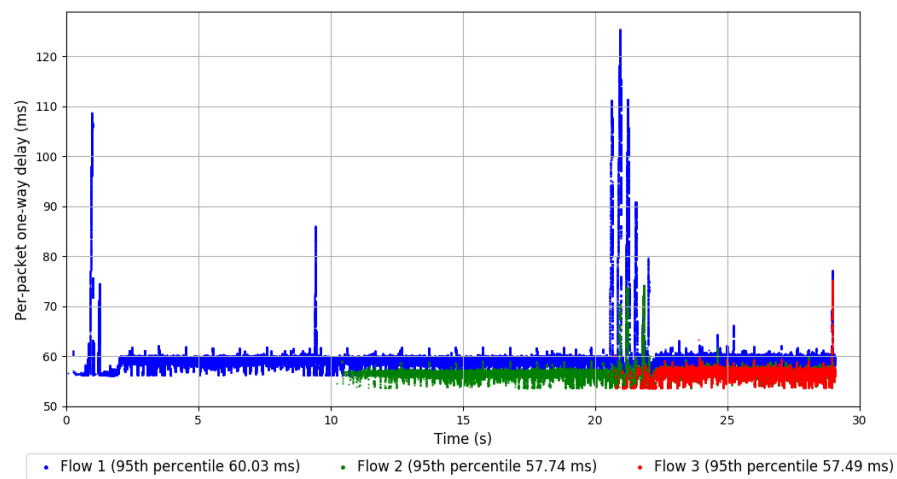
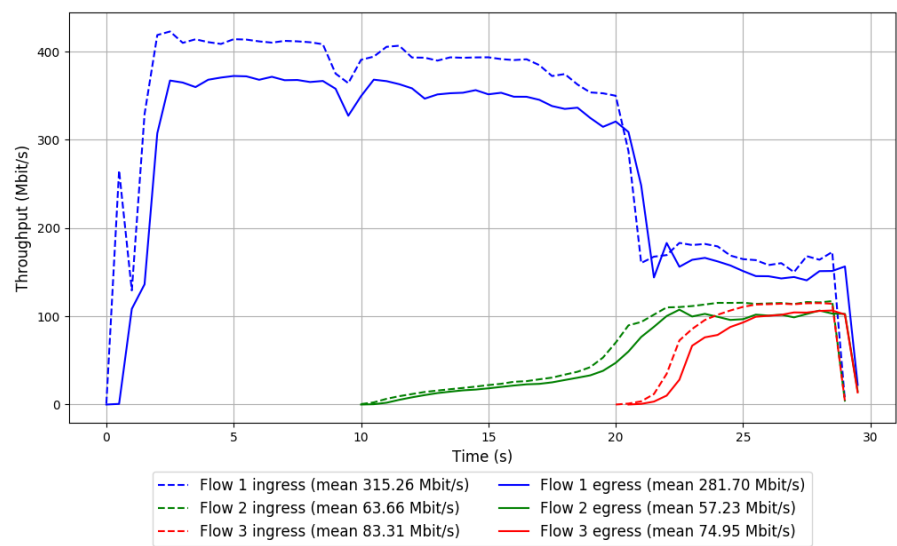


Run 4: Statistics of Indigo-MusesT

Start at: 2019-01-25 02:55:52  
End at: 2019-01-25 02:56:22  
Local clock offset: 0.158 ms  
Remote clock offset: -43.852 ms

# Below is generated by plot.py at 2019-01-25 04:35:50  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 340.97 Mbit/s  
95th percentile per-packet one-way delay: 59.943 ms  
Loss rate: 10.56%  
-- Flow 1:  
Average throughput: 281.70 Mbit/s  
95th percentile per-packet one-way delay: 60.027 ms  
Loss rate: 10.66%  
-- Flow 2:  
Average throughput: 57.23 Mbit/s  
95th percentile per-packet one-way delay: 57.745 ms  
Loss rate: 10.09%  
-- Flow 3:  
Average throughput: 74.95 Mbit/s  
95th percentile per-packet one-way delay: 57.489 ms  
Loss rate: 10.03%

Run 4: Report of Indigo-MusesT — Data Link

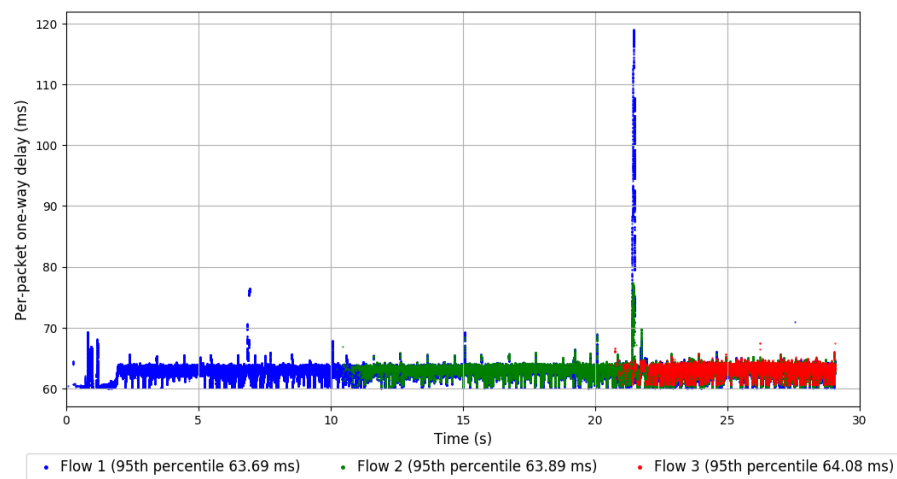
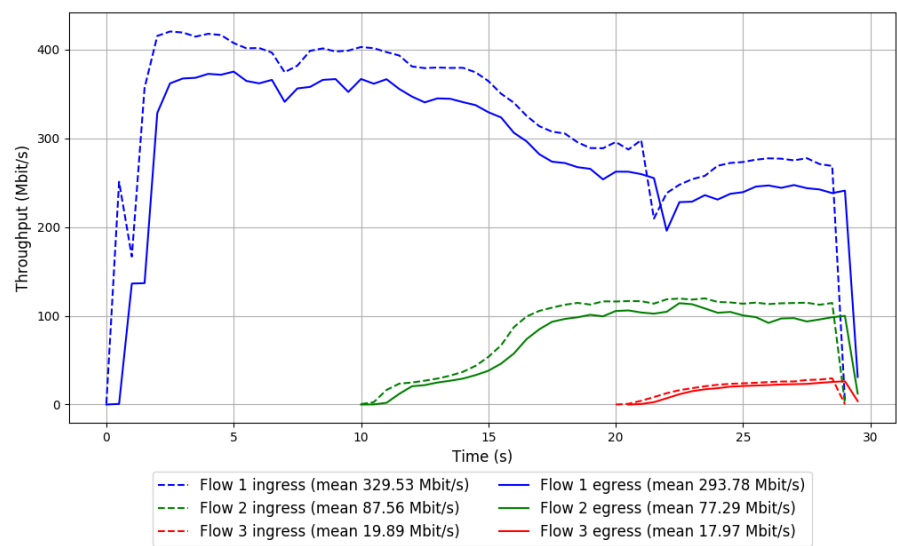


Run 5: Statistics of Indigo-MusesT

Start at: 2019-01-25 03:26:49  
End at: 2019-01-25 03:27:19  
Local clock offset: -0.977 ms  
Remote clock offset: -39.127 ms

# Below is generated by plot.py at 2019-01-25 04:36:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 349.16 Mbit/s  
95th percentile per-packet one-way delay: 63.752 ms  
Loss rate: 10.95%  
-- Flow 1:  
Average throughput: 293.78 Mbit/s  
95th percentile per-packet one-way delay: 63.689 ms  
Loss rate: 10.84%  
-- Flow 2:  
Average throughput: 77.29 Mbit/s  
95th percentile per-packet one-way delay: 63.894 ms  
Loss rate: 11.73%  
-- Flow 3:  
Average throughput: 17.97 Mbit/s  
95th percentile per-packet one-way delay: 64.077 ms  
Loss rate: 9.63%

Run 5: Report of Indigo-MusesT — Data Link

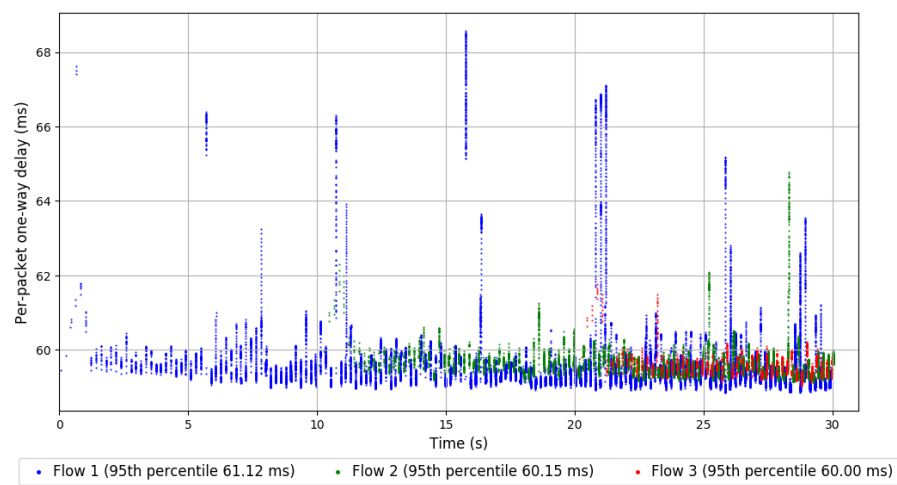
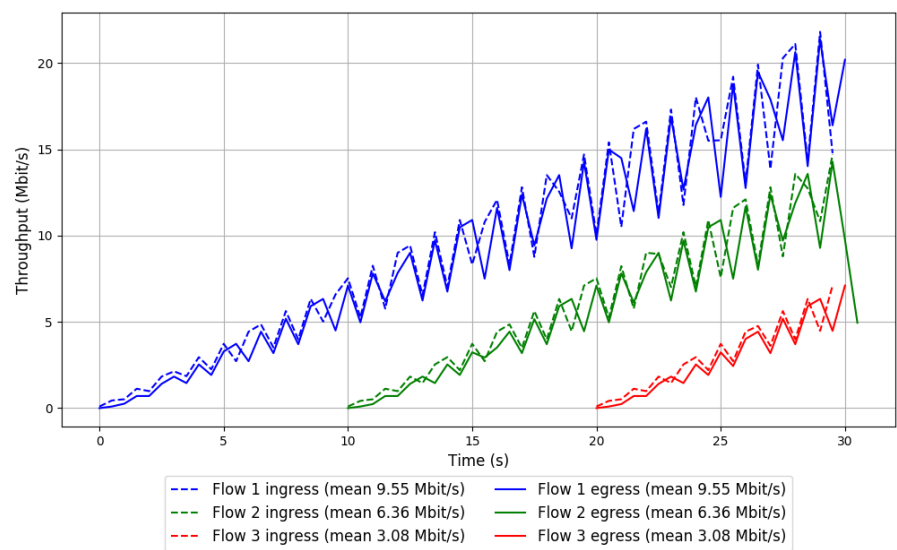


```
Run 1: Statistics of LEDBAT

Start at: 2019-01-25 01:10:31
End at: 2019-01-25 01:11:01
Local clock offset: 3.227 ms
Remote clock offset: -39.031 ms

# Below is generated by plot.py at 2019-01-25 04:36:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.76 Mbit/s
95th percentile per-packet one-way delay: 60.622 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.55 Mbit/s
95th percentile per-packet one-way delay: 61.121 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.36 Mbit/s
95th percentile per-packet one-way delay: 60.154 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.08 Mbit/s
95th percentile per-packet one-way delay: 59.996 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

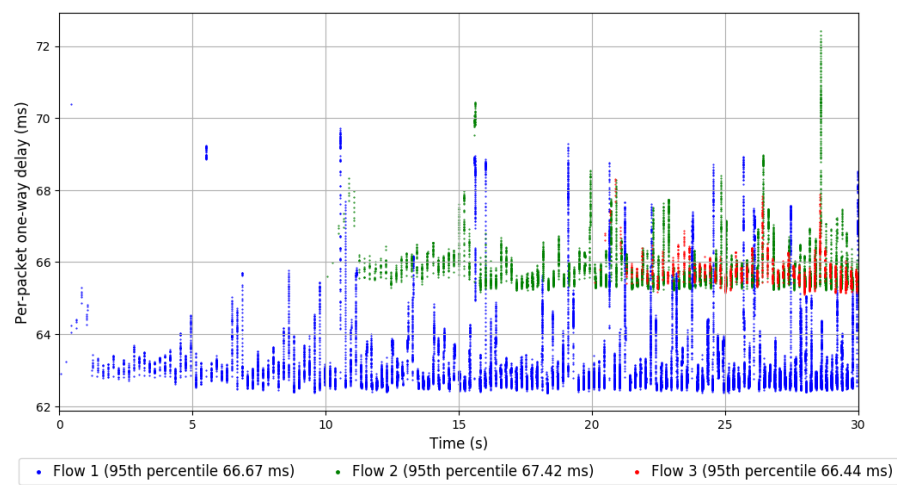
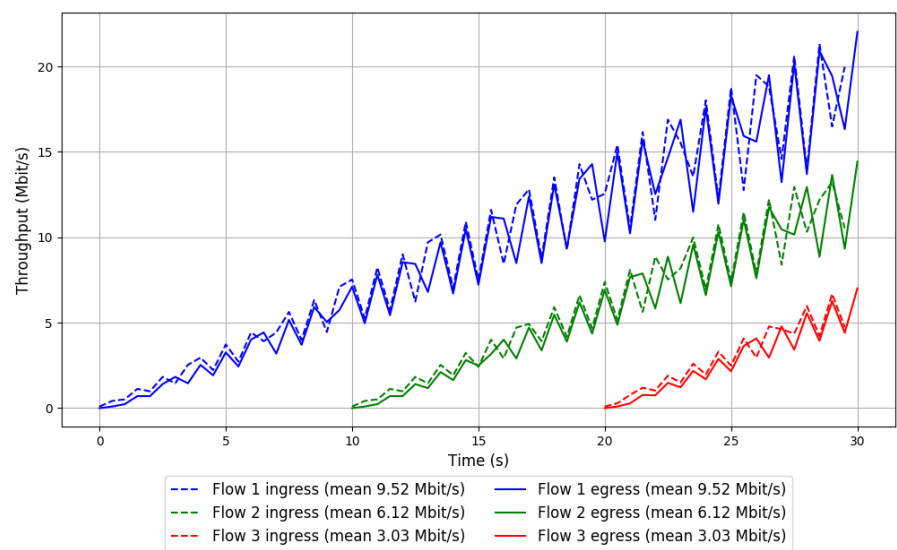


Run 2: Statistics of LEDBAT

Start at: 2019-01-25 01:40:57  
End at: 2019-01-25 01:41:27  
Local clock offset: -2.726 ms  
Remote clock offset: -37.215 ms

# Below is generated by plot.py at 2019-01-25 04:36:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 14.59 Mbit/s  
95th percentile per-packet one-way delay: 66.989 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 9.52 Mbit/s  
95th percentile per-packet one-way delay: 66.675 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 6.12 Mbit/s  
95th percentile per-packet one-way delay: 67.425 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 3.03 Mbit/s  
95th percentile per-packet one-way delay: 66.439 ms  
Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link



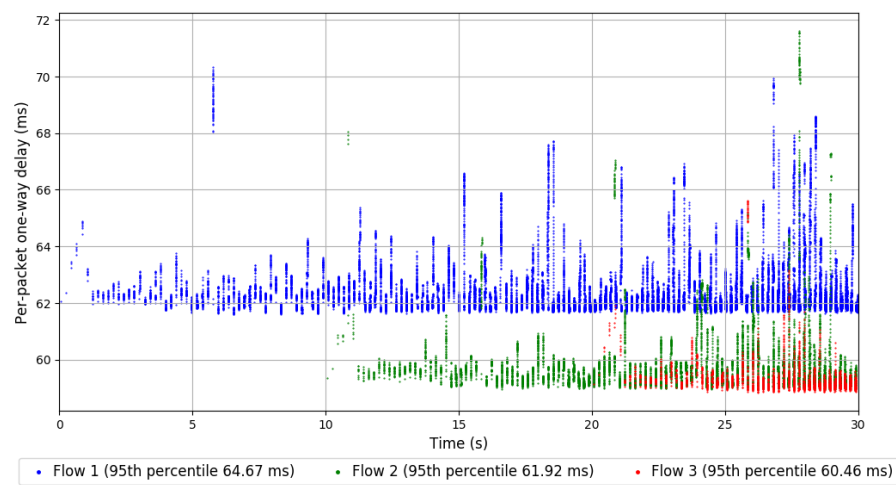
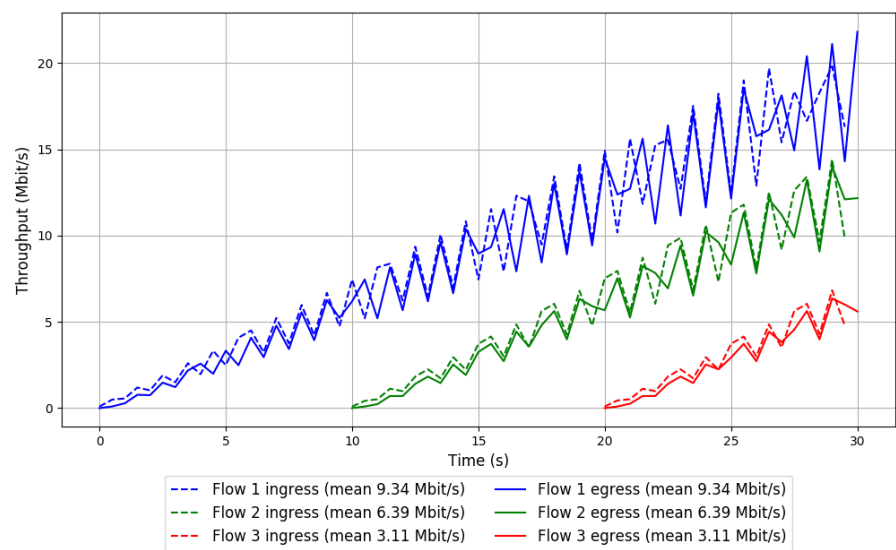


Run 3: Statistics of LEDBAT

Start at: 2019-01-25 02:17:16  
End at: 2019-01-25 02:17:46  
Local clock offset: 0.199 ms  
Remote clock offset: -38.445 ms

# Below is generated by plot.py at 2019-01-25 04:36:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 14.60 Mbit/s  
95th percentile per-packet one-way delay: 64.177 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 9.34 Mbit/s  
95th percentile per-packet one-way delay: 64.671 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 6.39 Mbit/s  
95th percentile per-packet one-way delay: 61.924 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 3.11 Mbit/s  
95th percentile per-packet one-way delay: 60.458 ms  
Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link

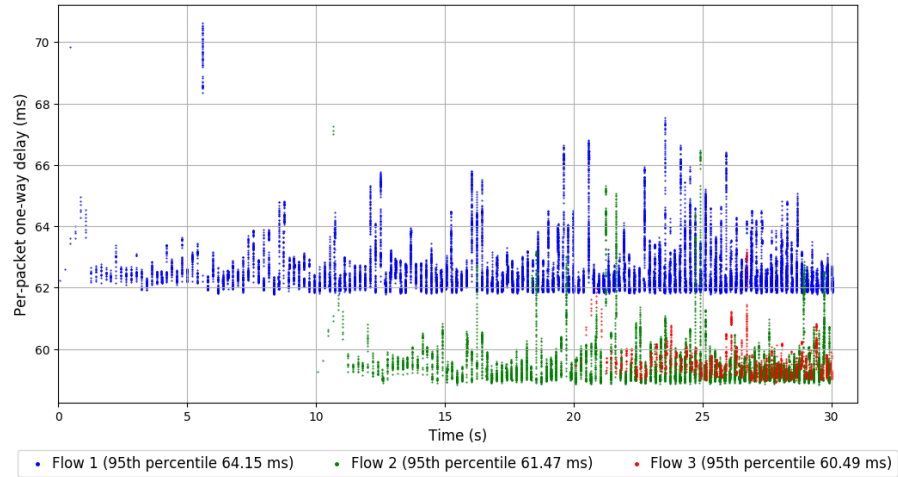
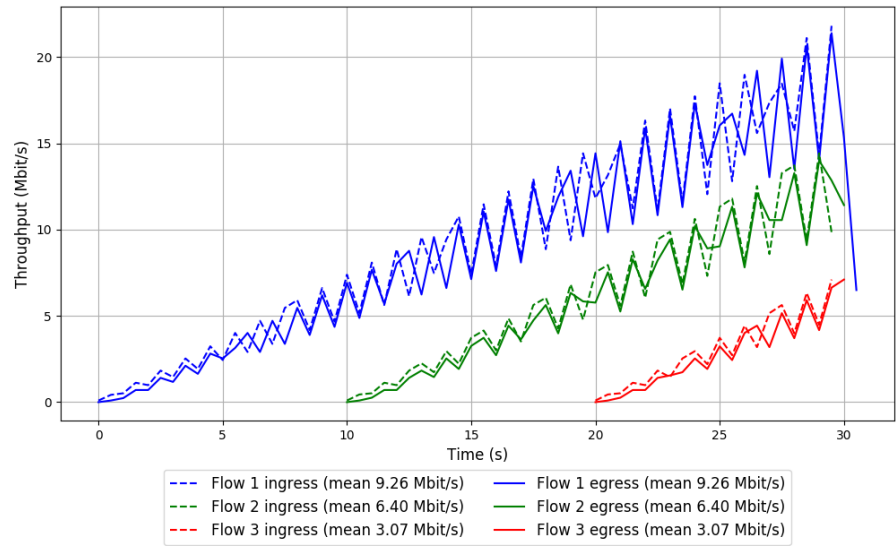


Run 4: Statistics of LEDBAT

Start at: 2019-01-25 02:52:59  
End at: 2019-01-25 02:53:29  
Local clock offset: -0.071 ms  
Remote clock offset: -38.521 ms

# Below is generated by plot.py at 2019-01-25 04:36:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 14.51 Mbit/s  
95th percentile per-packet one-way delay: 63.849 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 9.26 Mbit/s  
95th percentile per-packet one-way delay: 64.149 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 6.40 Mbit/s  
95th percentile per-packet one-way delay: 61.474 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 3.07 Mbit/s  
95th percentile per-packet one-way delay: 60.490 ms  
Loss rate: 0.00%

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

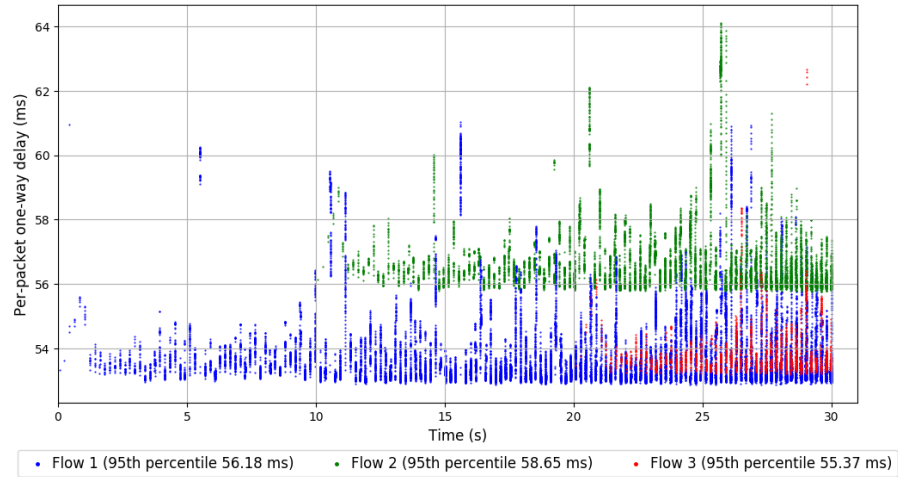
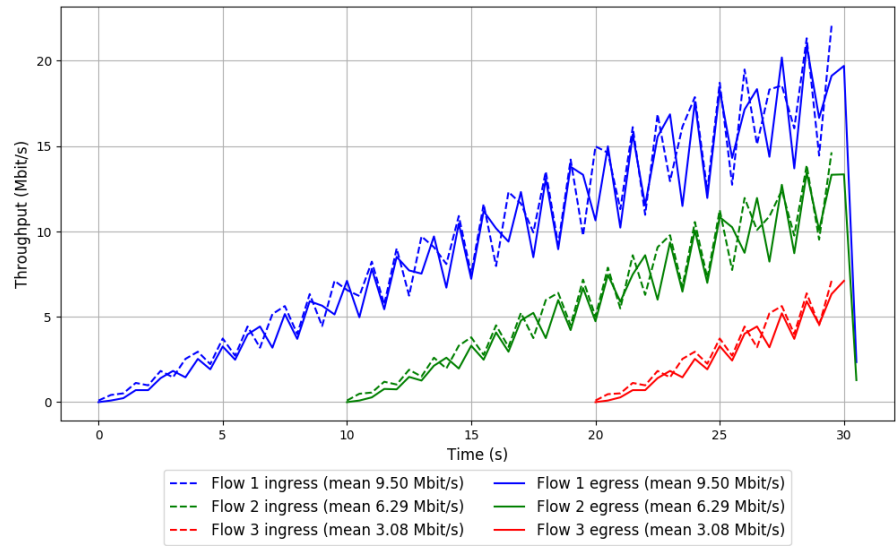


Run 5: Statistics of LEDBAT

Start at: 2019-01-25 03:23:57  
End at: 2019-01-25 03:24:27  
Local clock offset: -1.611 ms  
Remote clock offset: -47.223 ms

# Below is generated by plot.py at 2019-01-25 04:36:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 14.71 Mbit/s  
95th percentile per-packet one-way delay: 57.547 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 9.50 Mbit/s  
95th percentile per-packet one-way delay: 56.182 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 6.29 Mbit/s  
95th percentile per-packet one-way delay: 58.652 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 3.08 Mbit/s  
95th percentile per-packet one-way delay: 55.369 ms  
Loss rate: 0.00%

## Run 5: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2019-01-25 01:16:28

End at: 2019-01-25 01:16:58

Local clock offset: 1.924 ms

Remote clock offset: -40.021 ms

# Below is generated by plot.py at 2019-01-25 04:38:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 468.88 Mbit/s

95th percentile per-packet one-way delay: 60.986 ms

Loss rate: 4.85%

-- Flow 1:

Average throughput: 436.33 Mbit/s

95th percentile per-packet one-way delay: 60.996 ms

Loss rate: 5.01%

-- Flow 2:

Average throughput: 33.30 Mbit/s

95th percentile per-packet one-way delay: 60.804 ms

Loss rate: 2.12%

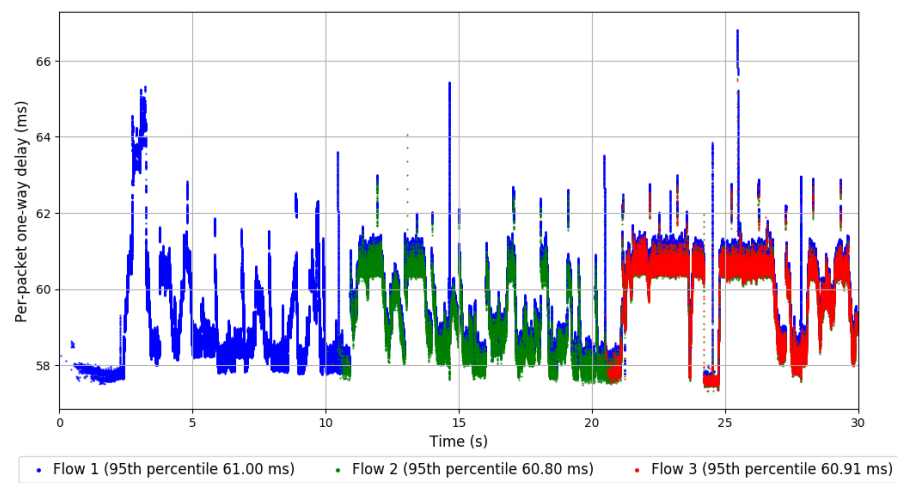
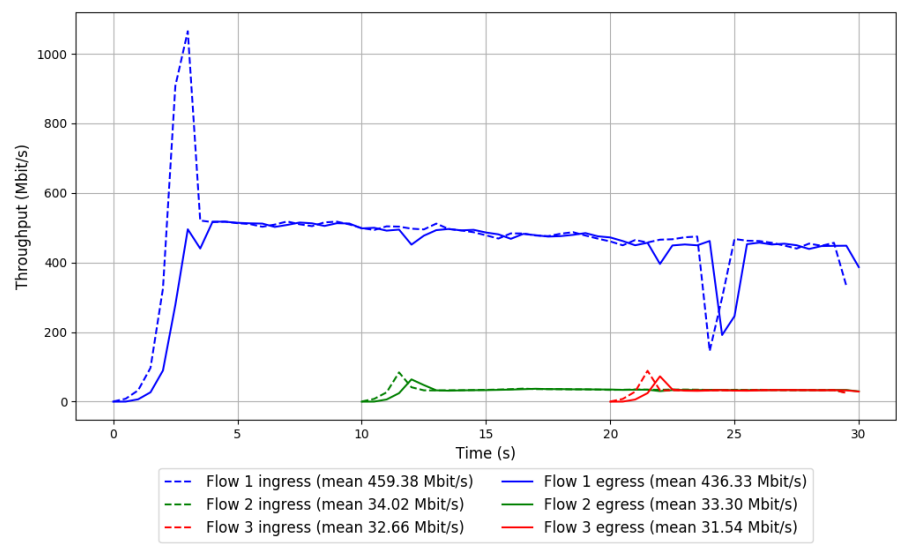
-- Flow 3:

Average throughput: 31.54 Mbit/s

95th percentile per-packet one-way delay: 60.905 ms

Loss rate: 3.43%

Run 1: Report of PCC-Allegro — Data Link



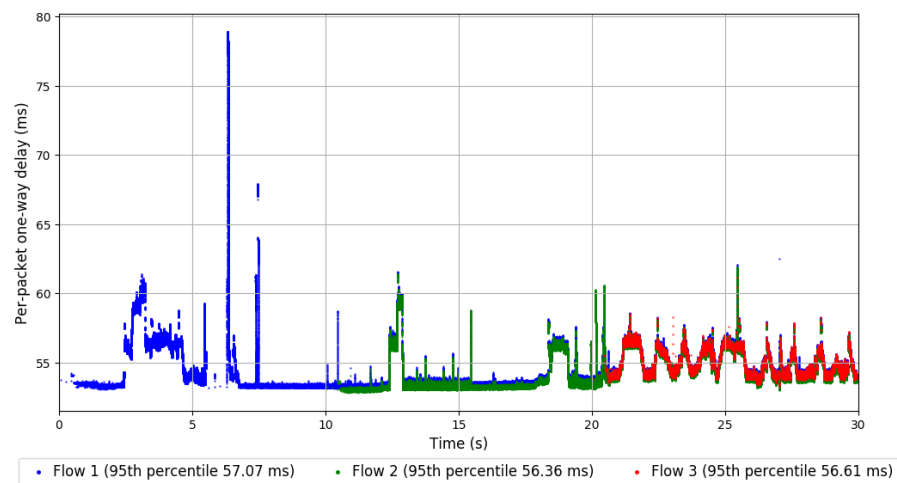
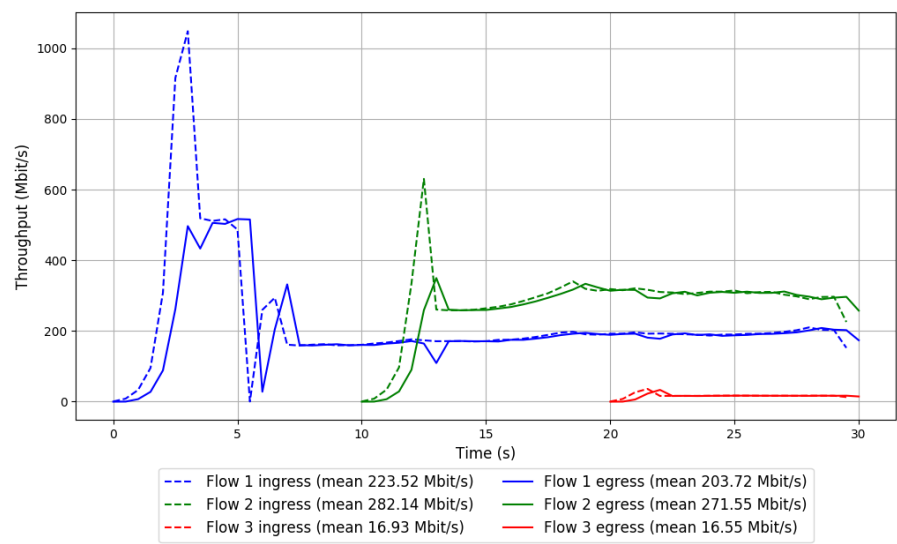


Run 2: Statistics of PCC-Allegro

Start at: 2019-01-25 01:46:53  
End at: 2019-01-25 01:47:23  
Local clock offset: -1.413 ms  
Remote clock offset: -44.99 ms

# Below is generated by plot.py at 2019-01-25 04:38:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 389.76 Mbit/s  
95th percentile per-packet one-way delay: 56.627 ms  
Loss rate: 6.47%  
-- Flow 1:  
Average throughput: 203.72 Mbit/s  
95th percentile per-packet one-way delay: 57.073 ms  
Loss rate: 8.86%  
-- Flow 2:  
Average throughput: 271.55 Mbit/s  
95th percentile per-packet one-way delay: 56.362 ms  
Loss rate: 3.75%  
-- Flow 3:  
Average throughput: 16.55 Mbit/s  
95th percentile per-packet one-way delay: 56.606 ms  
Loss rate: 2.24%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2019-01-25 02:23:14

End at: 2019-01-25 02:23:44

Local clock offset: -0.848 ms

Remote clock offset: -40.089 ms

# Below is generated by plot.py at 2019-01-25 04:39:40

# Datalink statistics

-- Total of 3 flows:

Average throughput: 451.25 Mbit/s

95th percentile per-packet one-way delay: 61.629 ms

Loss rate: 5.21%

-- Flow 1:

Average throughput: 409.28 Mbit/s

95th percentile per-packet one-way delay: 61.623 ms

Loss rate: 5.34%

-- Flow 2:

Average throughput: 33.28 Mbit/s

95th percentile per-packet one-way delay: 61.702 ms

Loss rate: 2.37%

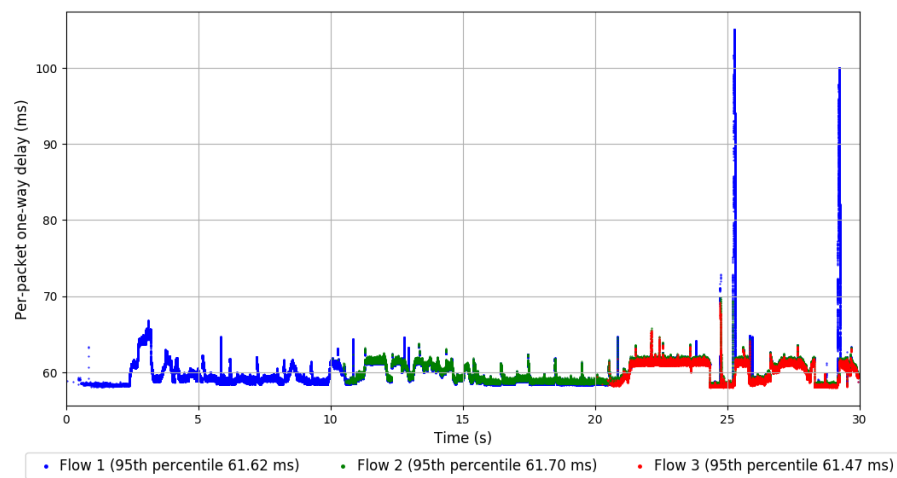
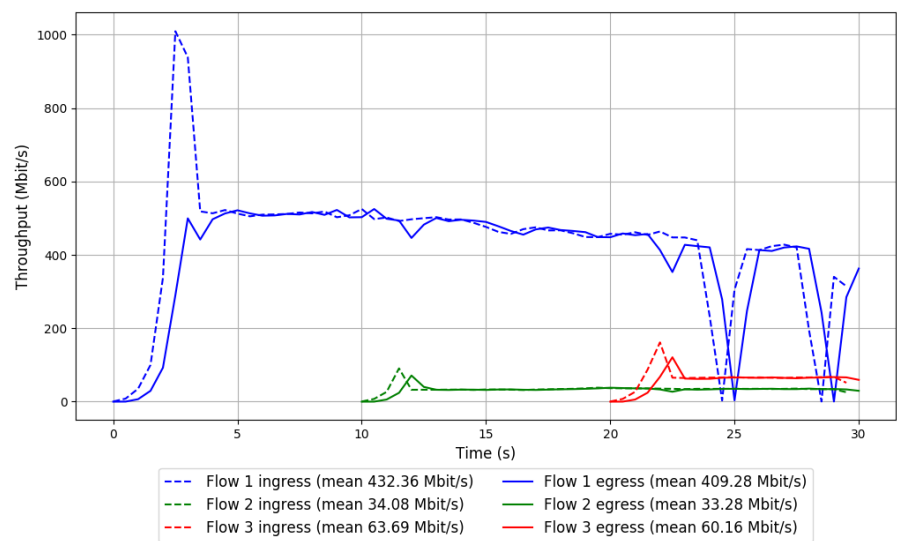
-- Flow 3:

Average throughput: 60.16 Mbit/s

95th percentile per-packet one-way delay: 61.467 ms

Loss rate: 5.55%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2019-01-25 02:58:58

End at: 2019-01-25 02:59:29

Local clock offset: -2.229 ms

Remote clock offset: -43.805 ms

# Below is generated by plot.py at 2019-01-25 04:40:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 469.33 Mbit/s

95th percentile per-packet one-way delay: 61.709 ms

Loss rate: 3.74%

-- Flow 1:

Average throughput: 440.61 Mbit/s

95th percentile per-packet one-way delay: 61.724 ms

Loss rate: 3.89%

-- Flow 2:

Average throughput: 35.00 Mbit/s

95th percentile per-packet one-way delay: 59.106 ms

Loss rate: 1.32%

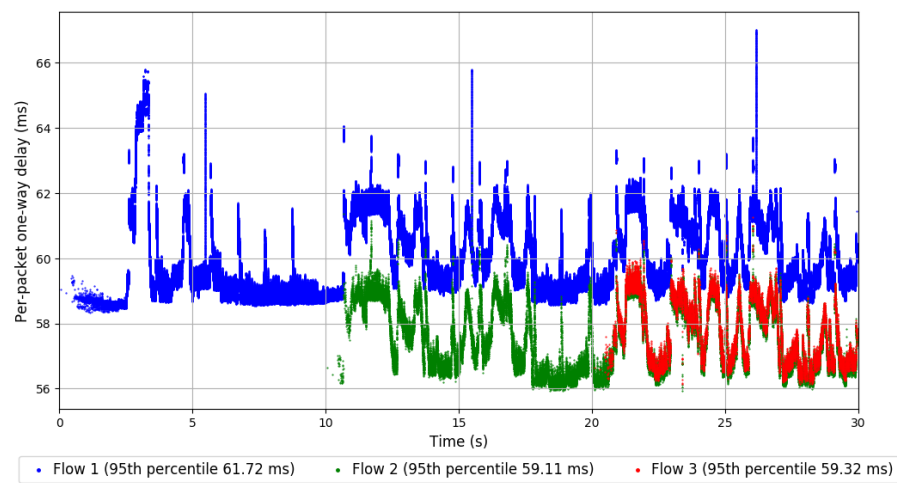
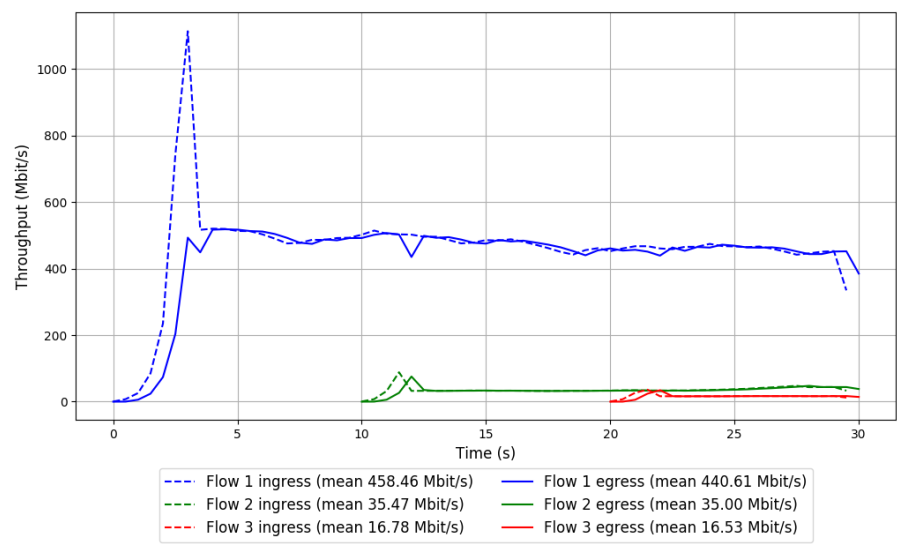
-- Flow 3:

Average throughput: 16.53 Mbit/s

95th percentile per-packet one-way delay: 59.321 ms

Loss rate: 1.48%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2019-01-25 03:29:55

End at: 2019-01-25 03:30:25

Local clock offset: 1.042 ms

Remote clock offset: -37.599 ms

# Below is generated by plot.py at 2019-01-25 04:40:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 471.92 Mbit/s

95th percentile per-packet one-way delay: 63.363 ms

Loss rate: 4.50%

-- Flow 1:

Average throughput: 439.40 Mbit/s

95th percentile per-packet one-way delay: 63.029 ms

Loss rate: 4.66%

-- Flow 2:

Average throughput: 33.24 Mbit/s

95th percentile per-packet one-way delay: 65.699 ms

Loss rate: 1.81%

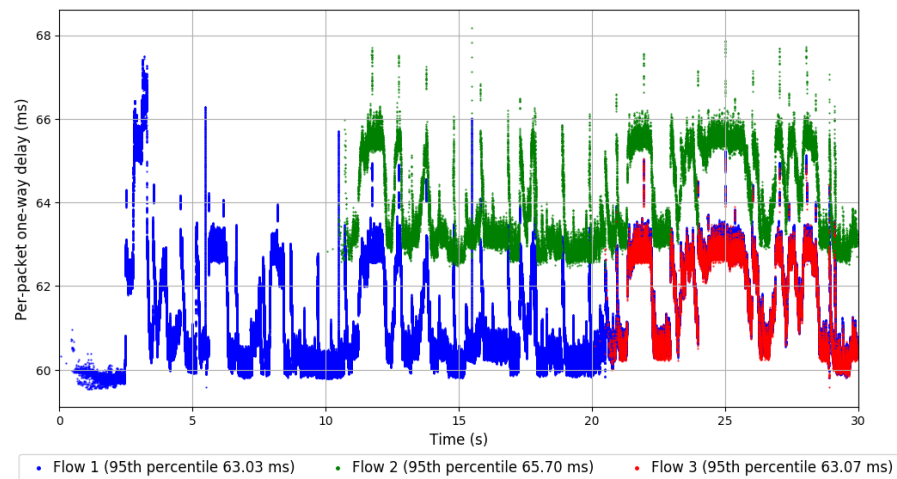
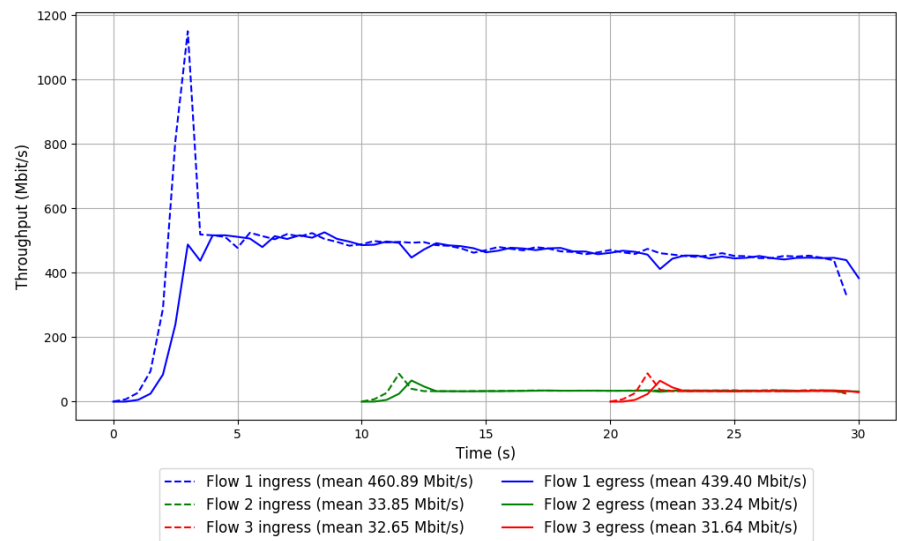
-- Flow 3:

Average throughput: 31.64 Mbit/s

95th percentile per-packet one-way delay: 63.067 ms

Loss rate: 3.09%

Run 5: Report of PCC-Allegro — Data Link



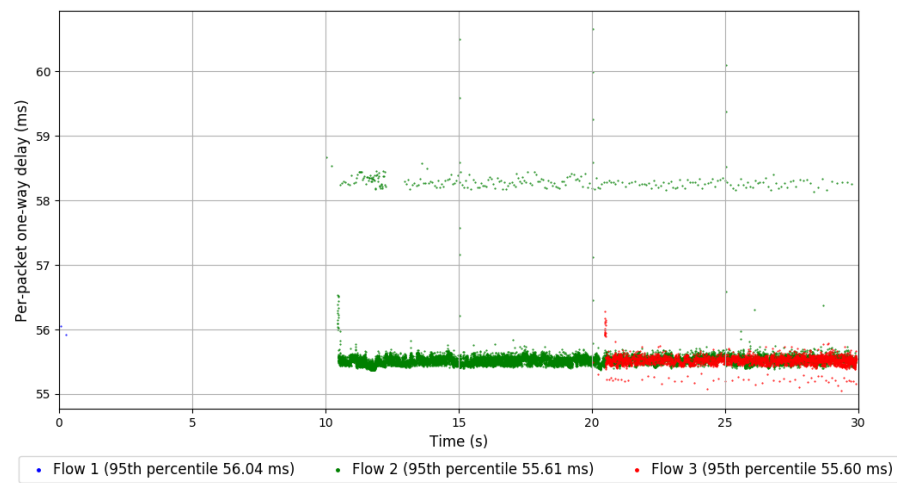
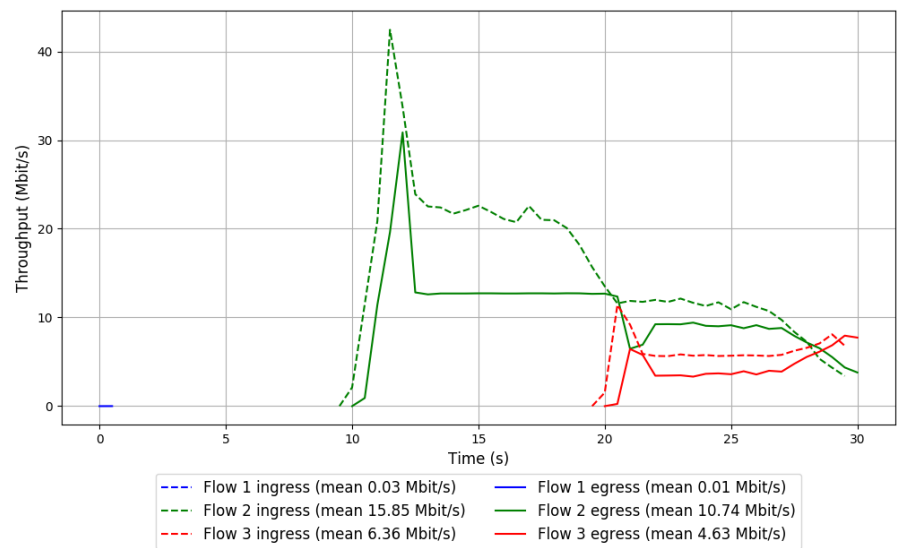


Run 1: Statistics of PCC-Expr

Start at: 2019-01-25 01:21:13  
End at: 2019-01-25 01:21:43  
Local clock offset: 2.48 ms  
Remote clock offset: -40.72 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.68 Mbit/s  
95th percentile per-packet one-way delay: 55.611 ms  
Loss rate: 31.42%  
-- Flow 1:  
Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 56.044 ms  
Loss rate: 85.71%  
-- Flow 2:  
Average throughput: 10.74 Mbit/s  
95th percentile per-packet one-way delay: 55.612 ms  
Loss rate: 32.26%  
-- Flow 3:  
Average throughput: 4.63 Mbit/s  
95th percentile per-packet one-way delay: 55.601 ms  
Loss rate: 27.17%

Run 1: Report of PCC-Expr — Data Link

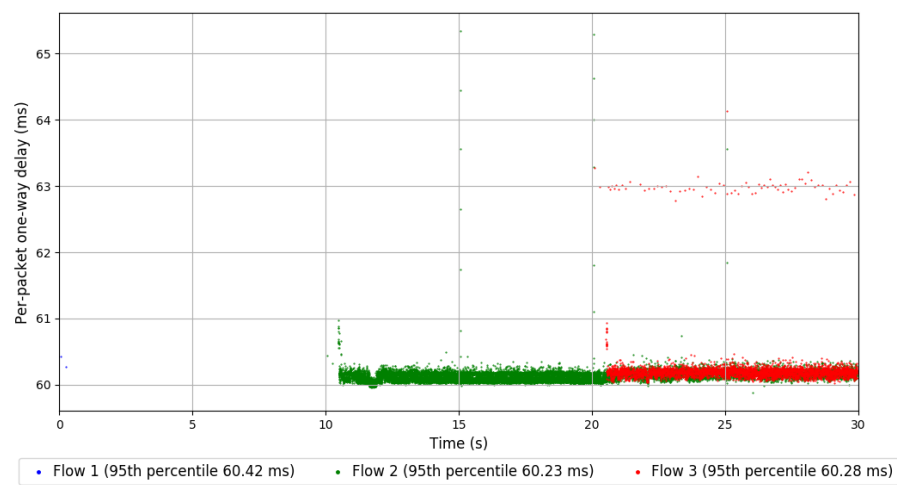
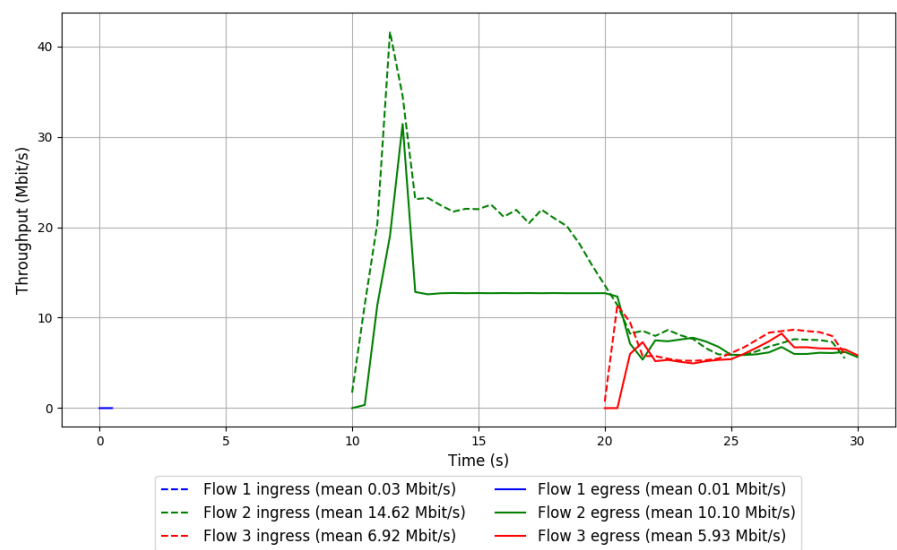


Run 2: Statistics of PCC-Expr

Start at: 2019-01-25 01:51:37  
End at: 2019-01-25 01:52:07  
Local clock offset: -2.101 ms  
Remote clock offset: -38.642 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.68 Mbit/s  
95th percentile per-packet one-way delay: 60.245 ms  
Loss rate: 27.77%  
-- Flow 1:  
Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 60.419 ms  
Loss rate: 85.71%  
-- Flow 2:  
Average throughput: 10.10 Mbit/s  
95th percentile per-packet one-way delay: 60.229 ms  
Loss rate: 30.94%  
-- Flow 3:  
Average throughput: 5.93 Mbit/s  
95th percentile per-packet one-way delay: 60.284 ms  
Loss rate: 14.28%

Run 2: Report of PCC-Expr — Data Link

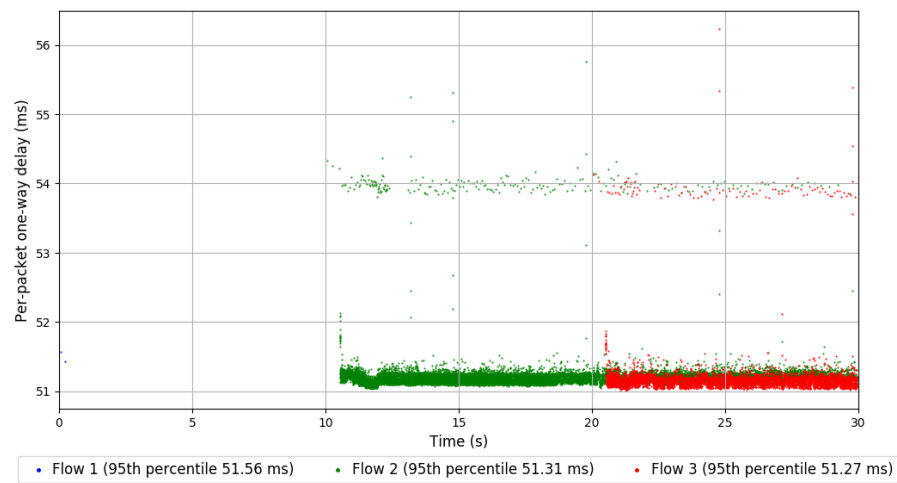
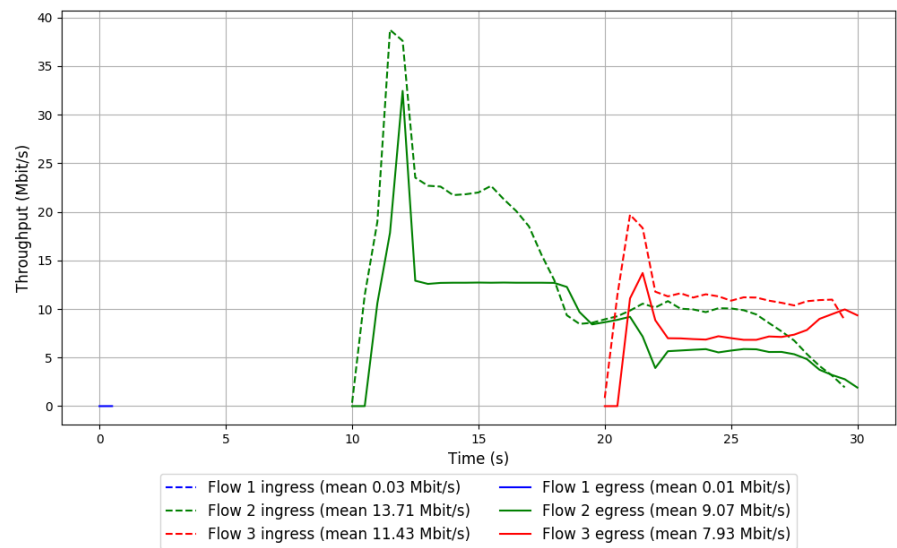


Run 3: Statistics of PCC-Expr

Start at: 2019-01-25 02:28:00  
End at: 2019-01-25 02:28:30  
Local clock offset: 1.09 ms  
Remote clock offset: -45.324 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.65 Mbit/s  
95th percentile per-packet one-way delay: 51.303 ms  
Loss rate: 32.92%  
-- Flow 1:  
Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 51.561 ms  
Loss rate: 85.71%  
-- Flow 2:  
Average throughput: 9.07 Mbit/s  
95th percentile per-packet one-way delay: 51.309 ms  
Loss rate: 33.85%  
-- Flow 3:  
Average throughput: 7.93 Mbit/s  
95th percentile per-packet one-way delay: 51.272 ms  
Loss rate: 30.65%

Run 3: Report of PCC-Expr — Data Link

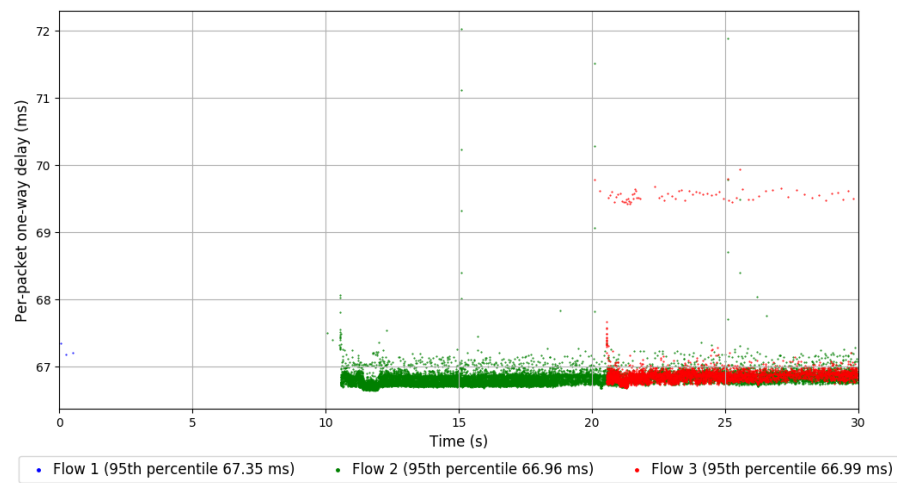
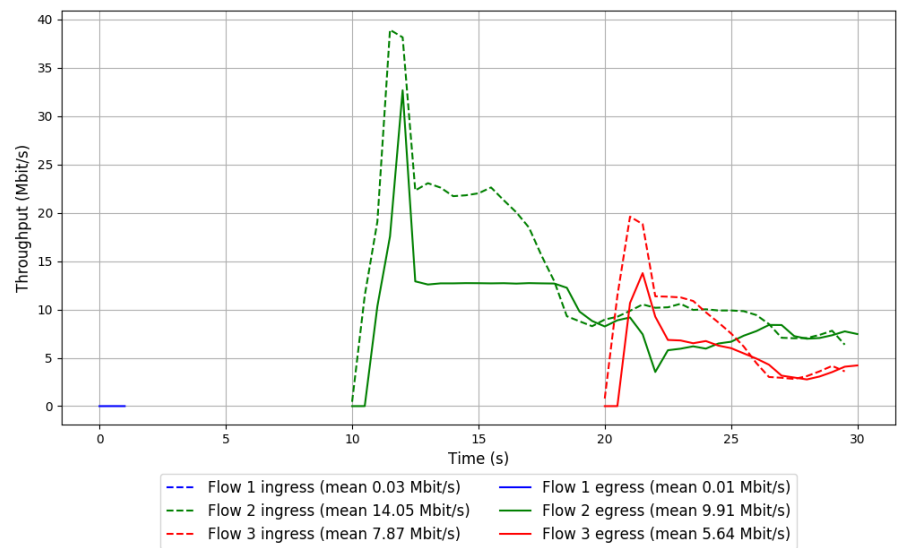


Run 4: Statistics of PCC-Expr

Start at: 2019-01-25 03:03:43  
End at: 2019-01-25 03:04:13  
Local clock offset: -1.254 ms  
Remote clock offset: -32.452 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.45 Mbit/s  
95th percentile per-packet one-way delay: 66.968 ms  
Loss rate: 29.24%  
-- Flow 1:  
Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 67.351 ms  
Loss rate: 80.00%  
-- Flow 2:  
Average throughput: 9.91 Mbit/s  
95th percentile per-packet one-way delay: 66.956 ms  
Loss rate: 29.49%  
-- Flow 3:  
Average throughput: 5.64 Mbit/s  
95th percentile per-packet one-way delay: 66.991 ms  
Loss rate: 28.31%

Run 4: Report of PCC-Expr — Data Link



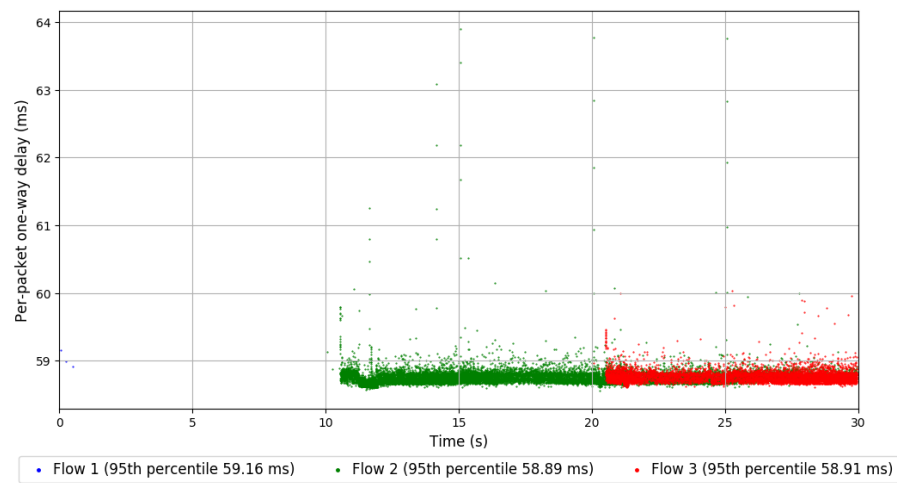
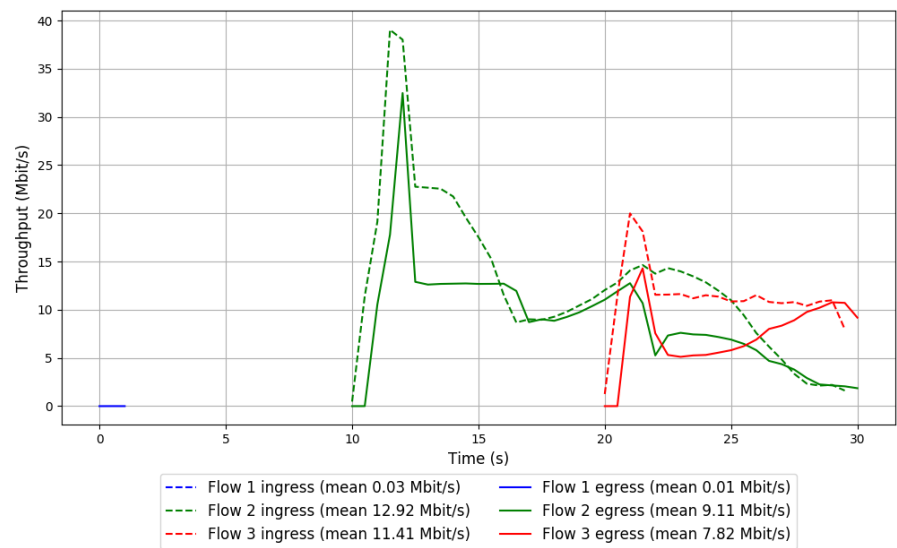


Run 5: Statistics of PCC-Expr

Start at: 2019-01-25 03:40:12  
End at: 2019-01-25 03:40:42  
Local clock offset: 1.134 ms  
Remote clock offset: -38.677 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.64 Mbit/s  
95th percentile per-packet one-way delay: 58.895 ms  
Loss rate: 30.06%  
-- Flow 1:  
Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 59.159 ms  
Loss rate: 80.00%  
-- Flow 2:  
Average throughput: 9.11 Mbit/s  
95th percentile per-packet one-way delay: 58.888 ms  
Loss rate: 29.46%  
-- Flow 3:  
Average throughput: 7.82 Mbit/s  
95th percentile per-packet one-way delay: 58.910 ms  
Loss rate: 31.41%

Run 5: Report of PCC-Expr — Data Link

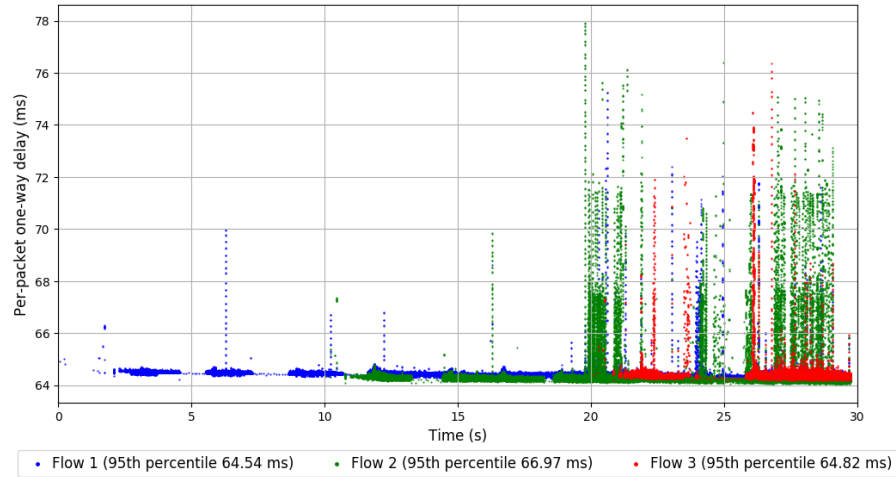
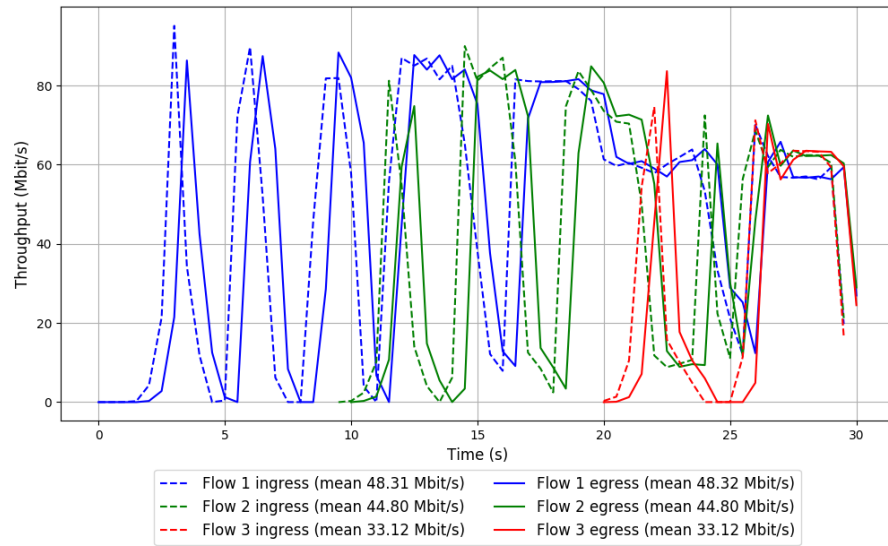


Run 1: Statistics of QUIC Cubic

Start at: 2019-01-25 01:07:29  
End at: 2019-01-25 01:07:59  
Local clock offset: 4.466 ms  
Remote clock offset: -33.918 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 88.84 Mbit/s  
95th percentile per-packet one-way delay: 64.812 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 48.32 Mbit/s  
95th percentile per-packet one-way delay: 64.542 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 44.80 Mbit/s  
95th percentile per-packet one-way delay: 66.969 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 33.12 Mbit/s  
95th percentile per-packet one-way delay: 64.824 ms  
Loss rate: 0.00%

# Run 1: Report of QUIC Cubic — Data Link

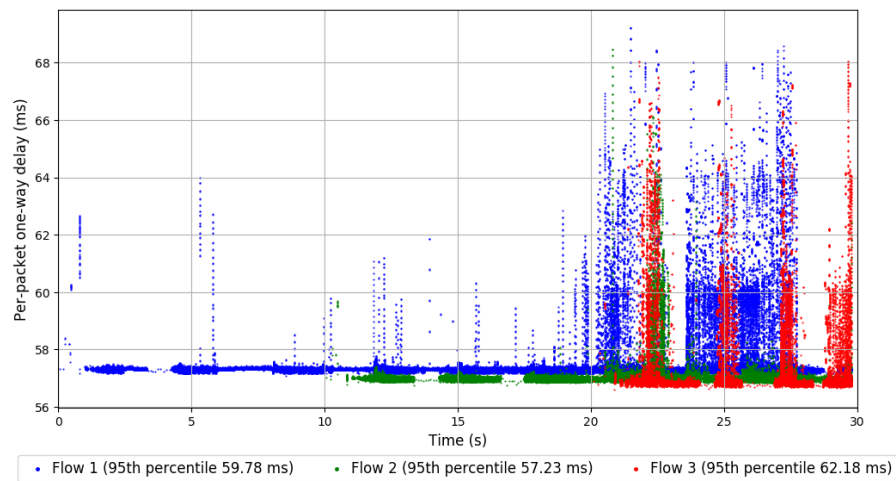
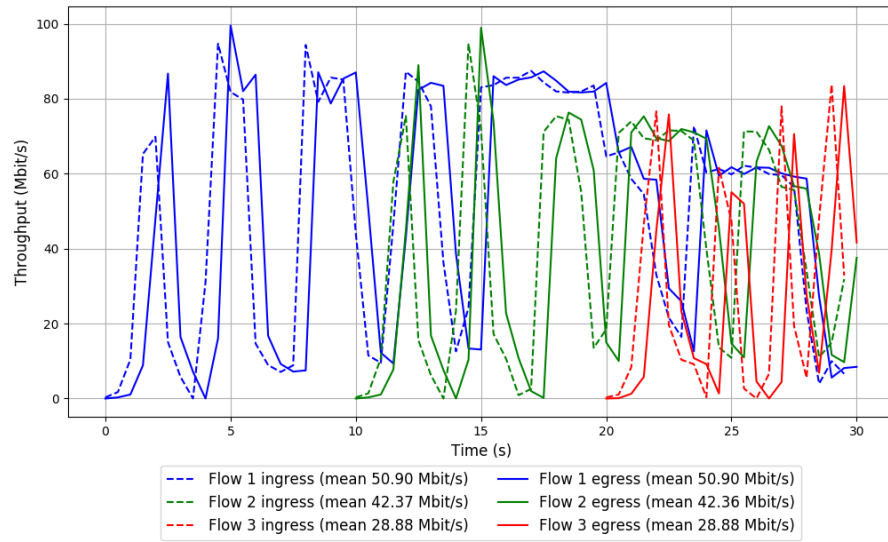


Run 2: Statistics of QUIC Cubic

Start at: 2019-01-25 01:38:01  
End at: 2019-01-25 01:38:31  
Local clock offset: -0.035 ms  
Remote clock offset: -40.1 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 88.36 Mbit/s  
95th percentile per-packet one-way delay: 59.602 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 50.90 Mbit/s  
95th percentile per-packet one-way delay: 59.780 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 42.36 Mbit/s  
95th percentile per-packet one-way delay: 57.226 ms  
Loss rate: 0.04%  
-- Flow 3:  
Average throughput: 28.88 Mbit/s  
95th percentile per-packet one-way delay: 62.178 ms  
Loss rate: 0.00%

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

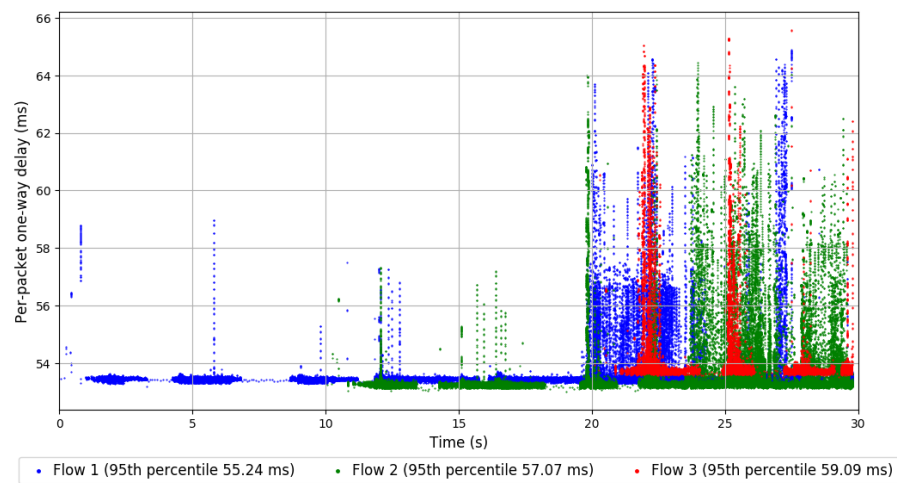
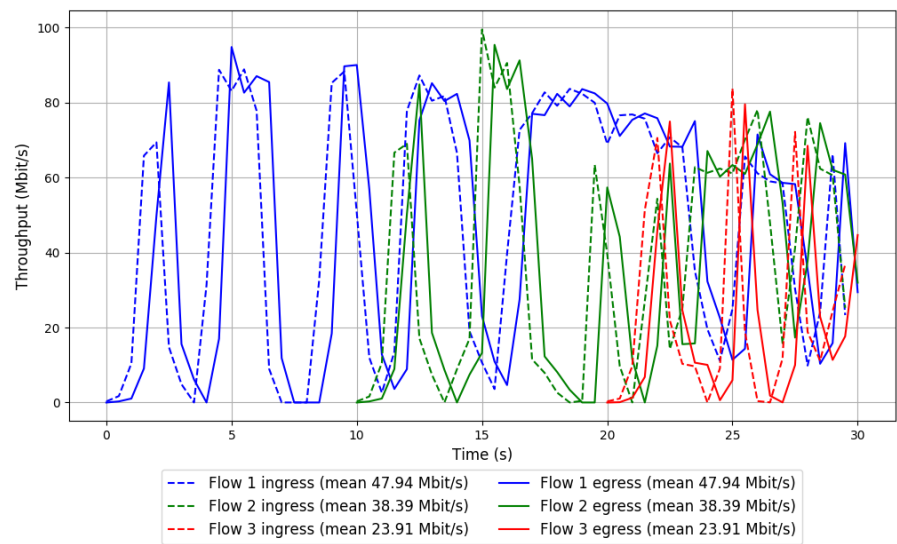


Run 3: Statistics of QUIC Cubic

Start at: 2019-01-25 02:14:21  
End at: 2019-01-25 02:14:51  
Local clock offset: -0.913 ms  
Remote clock offset: -45.096 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 81.16 Mbit/s  
95th percentile per-packet one-way delay: 56.317 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 47.94 Mbit/s  
95th percentile per-packet one-way delay: 55.244 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 38.39 Mbit/s  
95th percentile per-packet one-way delay: 57.066 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 23.91 Mbit/s  
95th percentile per-packet one-way delay: 59.095 ms  
Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



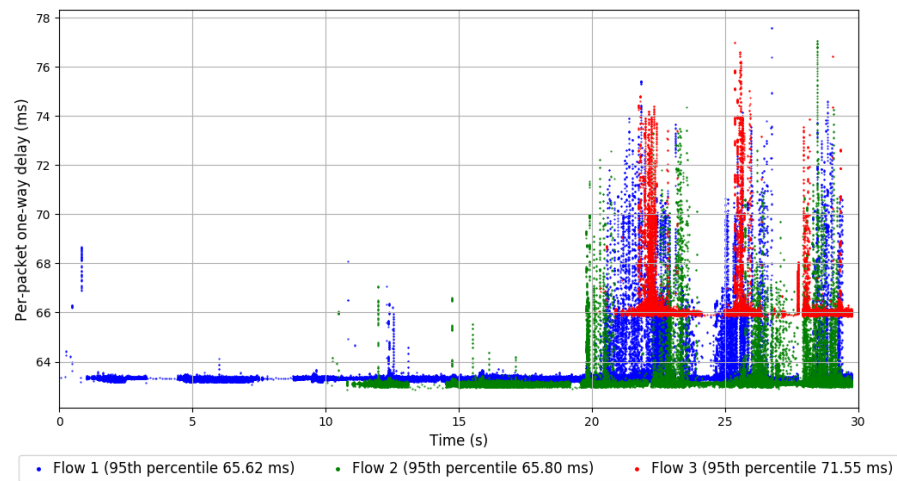
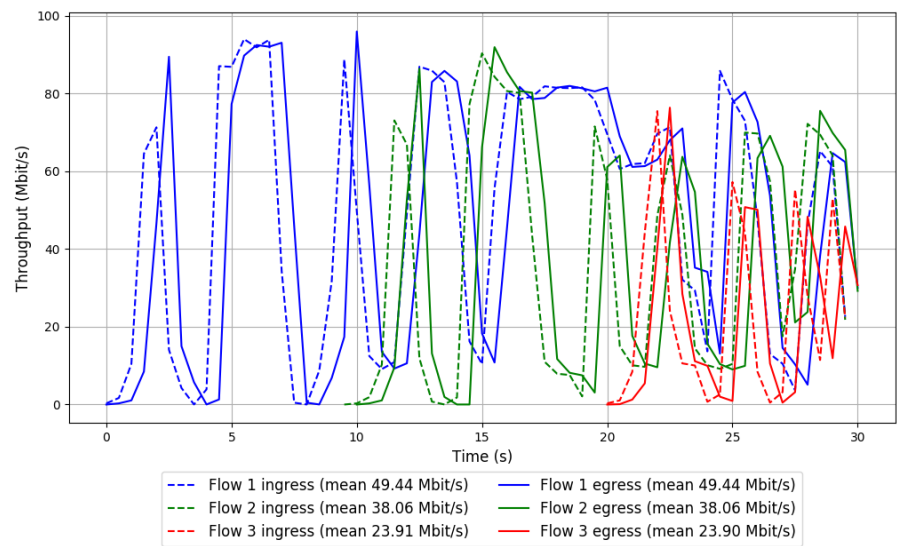


Run 4: Statistics of QUIC Cubic

Start at: 2019-01-25 02:50:02  
End at: 2019-01-25 02:50:32  
Local clock offset: -2.966 ms  
Remote clock offset: -37.209 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 82.44 Mbit/s  
95th percentile per-packet one-way delay: 66.600 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 49.44 Mbit/s  
95th percentile per-packet one-way delay: 65.625 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 38.06 Mbit/s  
95th percentile per-packet one-way delay: 65.804 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 23.90 Mbit/s  
95th percentile per-packet one-way delay: 71.547 ms  
Loss rate: 0.06%

Run 4: Report of QUIC Cubic — Data Link

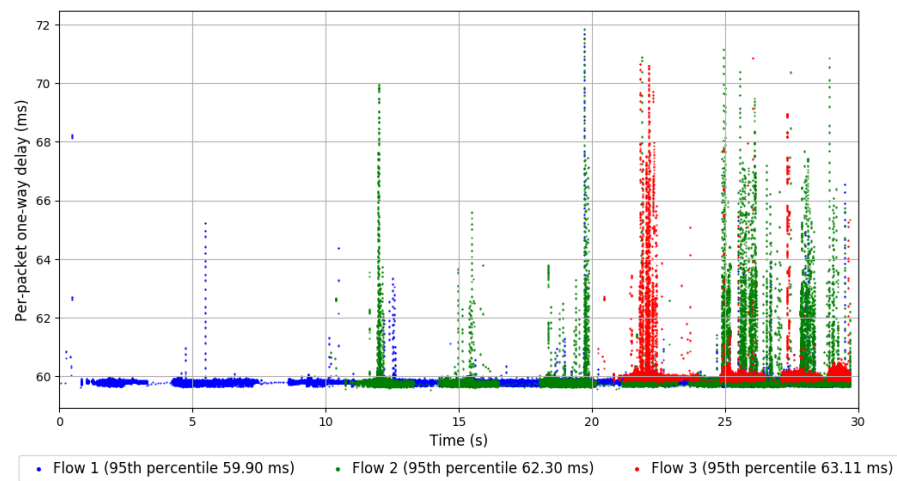
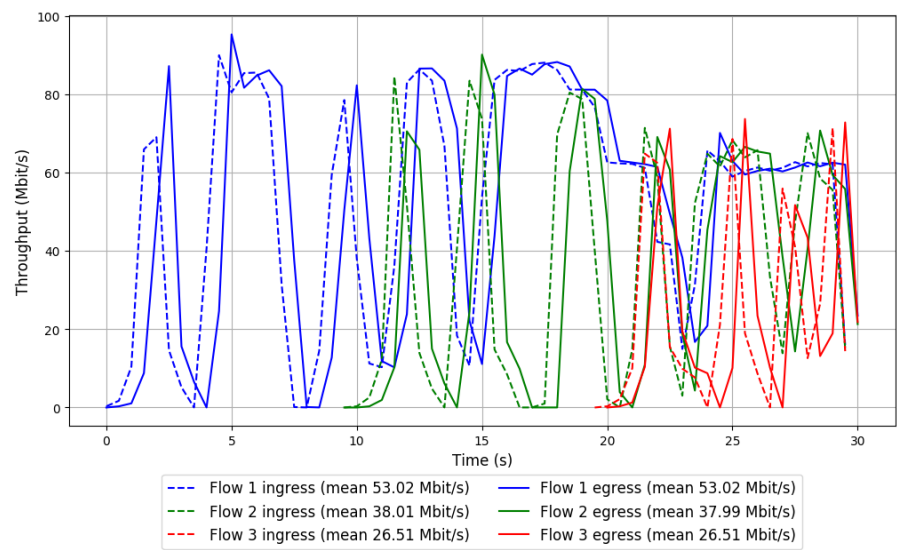


Run 5: Statistics of QUIC Cubic

Start at: 2019-01-25 03:21:02  
End at: 2019-01-25 03:21:32  
Local clock offset: -0.389 ms  
Remote clock offset: -39.179 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 86.91 Mbit/s  
95th percentile per-packet one-way delay: 60.266 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 53.02 Mbit/s  
95th percentile per-packet one-way delay: 59.902 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 37.99 Mbit/s  
95th percentile per-packet one-way delay: 62.304 ms  
Loss rate: 0.04%  
-- Flow 3:  
Average throughput: 26.51 Mbit/s  
95th percentile per-packet one-way delay: 63.113 ms  
Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link

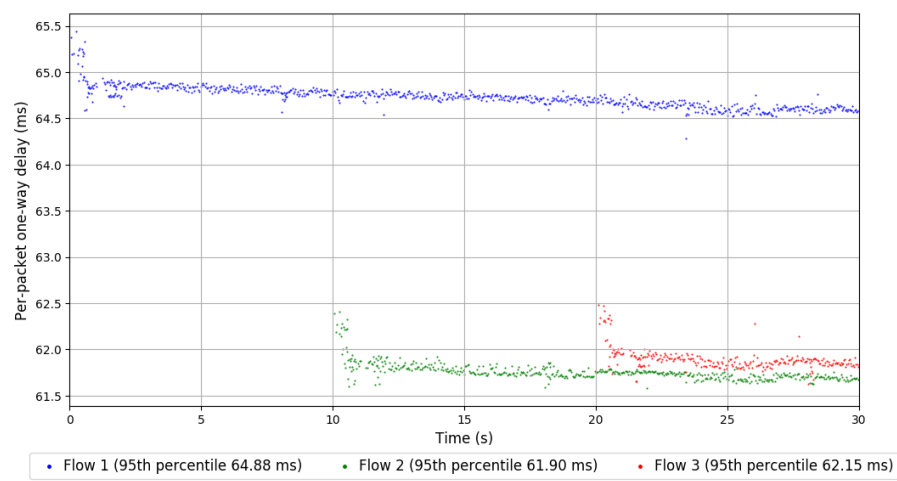
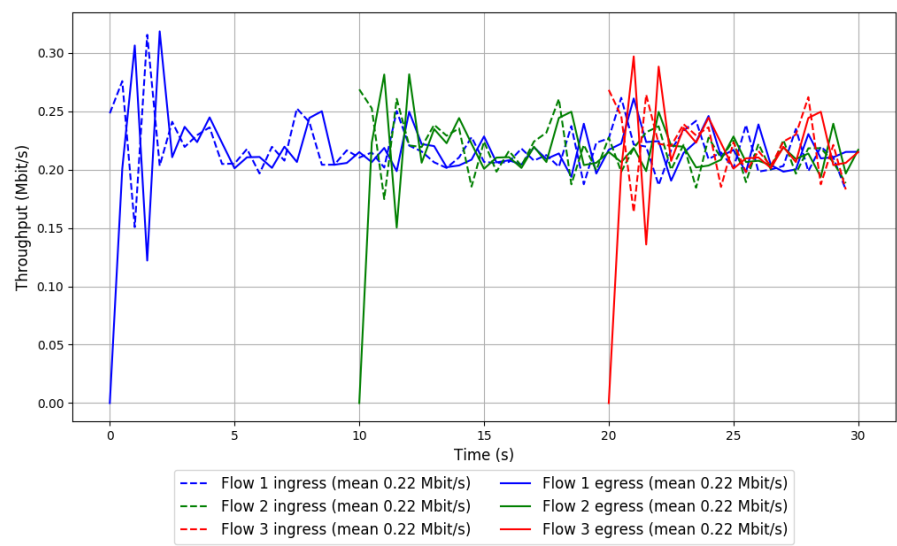


Run 1: Statistics of SReAM

Start at: 2019-01-25 01:06:13  
End at: 2019-01-25 01:06:43  
Local clock offset: 0.288 ms  
Remote clock offset: -41.393 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 64.854 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 64.882 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 61.903 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 62.145 ms  
Loss rate: 0.00%

Run 1: Report of SReAM — Data Link

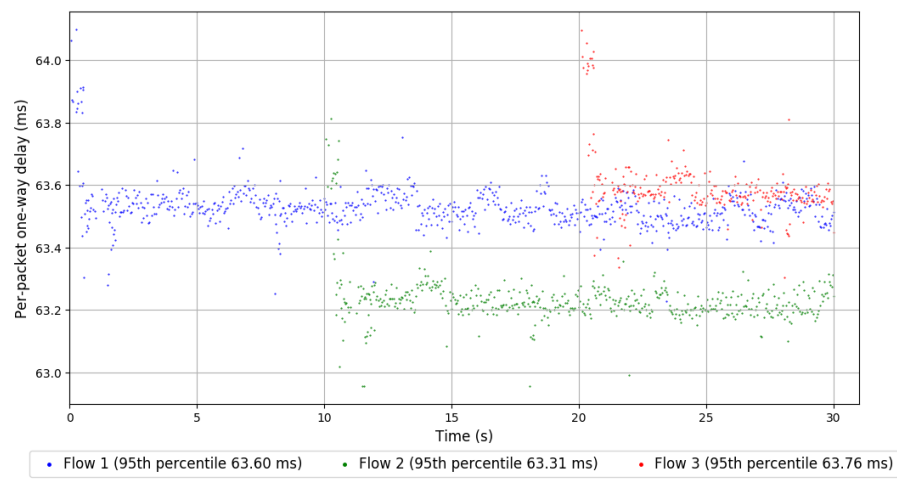
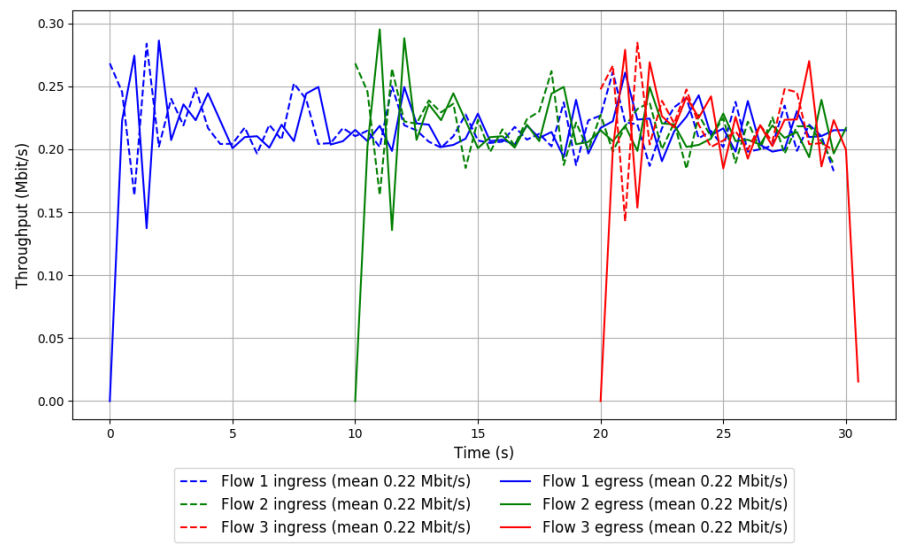


Run 2: Statistics of SReAM

Start at: 2019-01-25 01:36:45  
End at: 2019-01-25 01:37:15  
Local clock offset: 0.135 ms  
Remote clock offset: -33.596 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 63.629 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 63.600 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 63.310 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 63.764 ms  
Loss rate: 0.00%

Run 2: Report of SReAM — Data Link



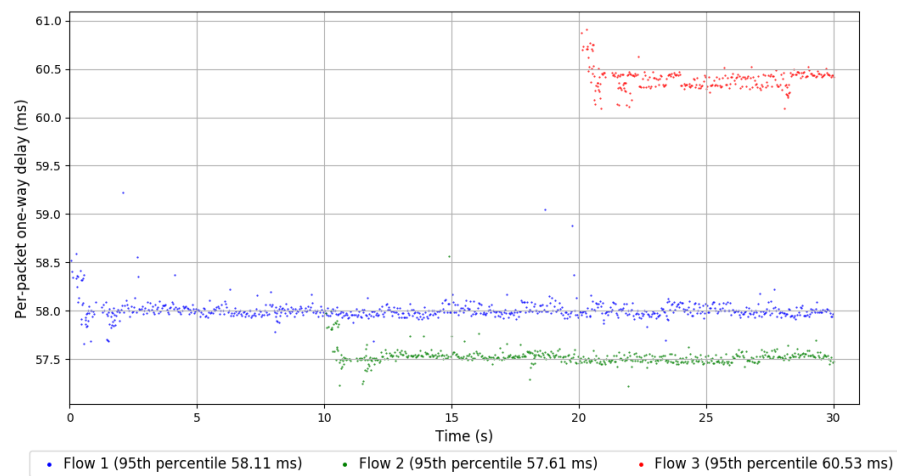
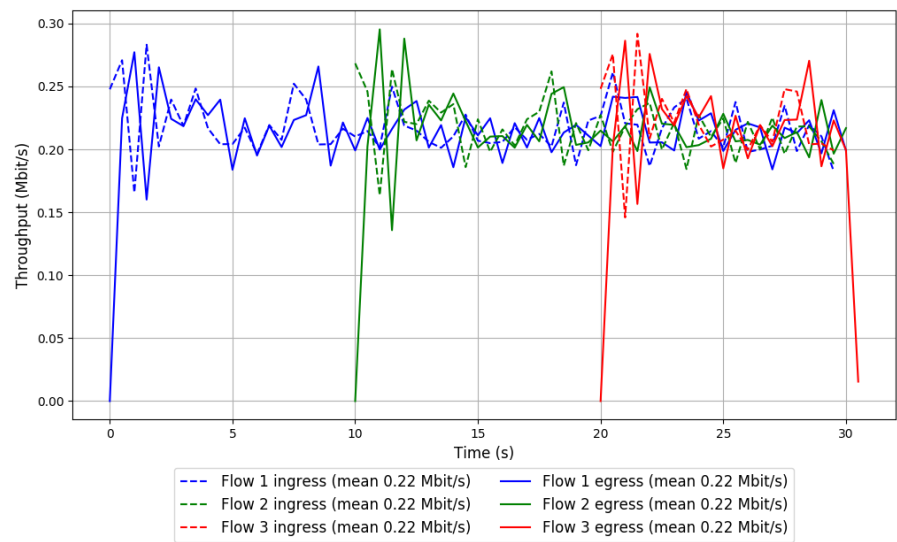


Run 3: Statistics of SReAM

Start at: 2019-01-25 02:13:05  
End at: 2019-01-25 02:13:35  
Local clock offset: -0.687 ms  
Remote clock offset: -40.936 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 60.440 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 58.108 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 57.613 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 60.534 ms  
Loss rate: 0.00%

Run 3: Report of SCRaM — Data Link

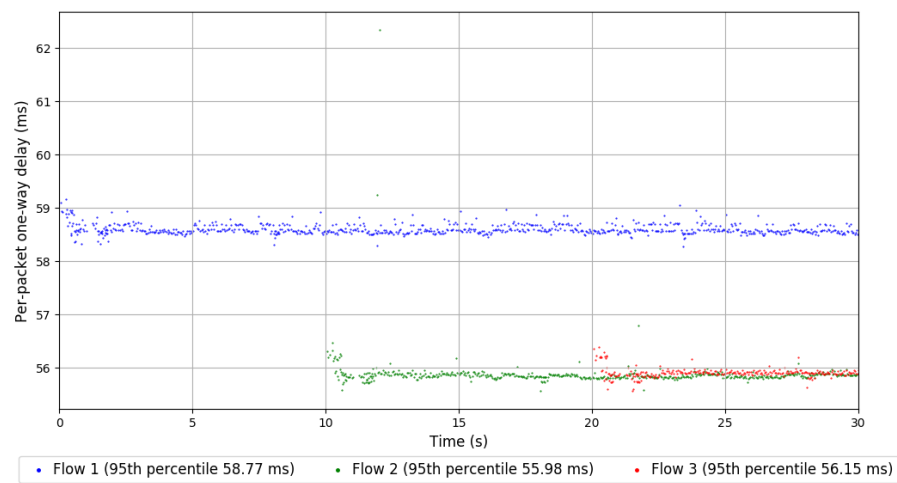
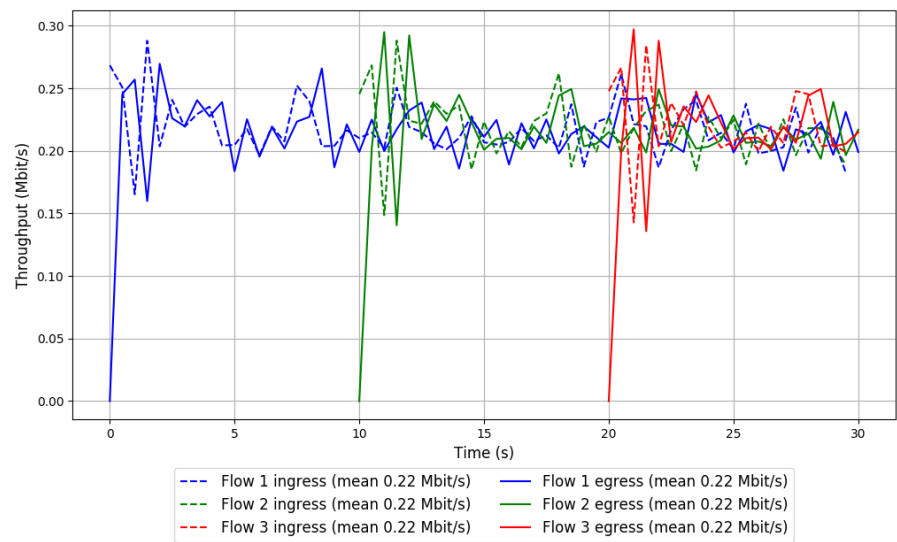


Run 4: Statistics of SReAM

Start at: 2019-01-25 02:48:46  
End at: 2019-01-25 02:49:16  
Local clock offset: -2.566 ms  
Remote clock offset: -44.395 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 58.710 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 58.767 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 55.975 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 56.146 ms  
Loss rate: 0.00%

Run 4: Report of SReAM — Data Link

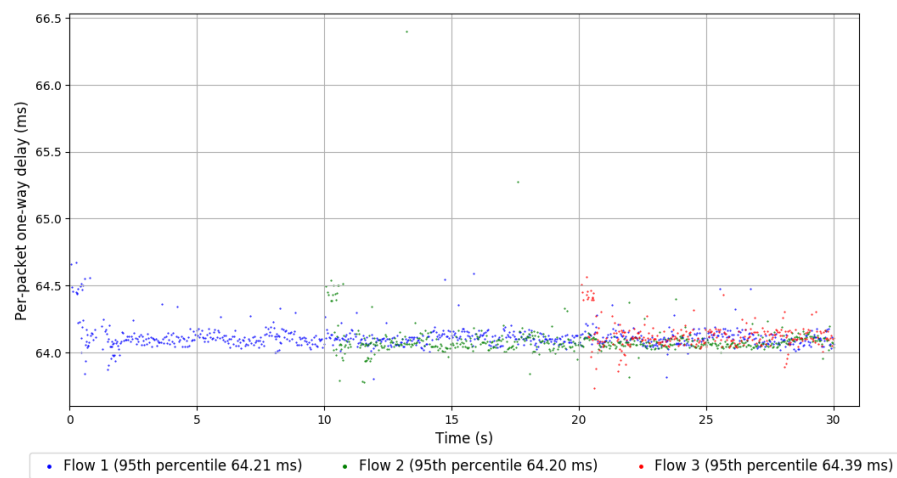
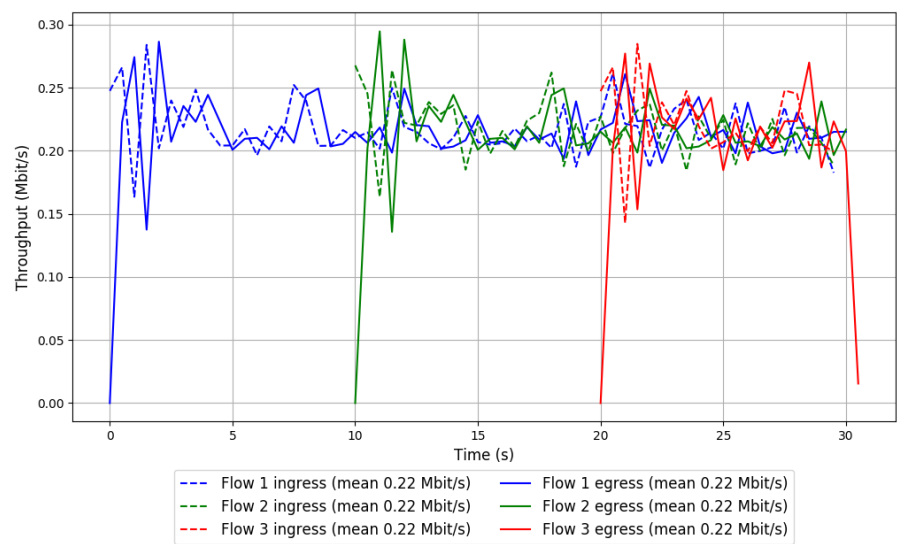


Run 5: Statistics of SReAM

Start at: 2019-01-25 03:19:46  
End at: 2019-01-25 03:20:16  
Local clock offset: 0.693 ms  
Remote clock offset: -34.089 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 64.249 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 64.214 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 64.200 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 64.390 ms  
Loss rate: 0.00%

Run 5: Report of SReAM — Data Link

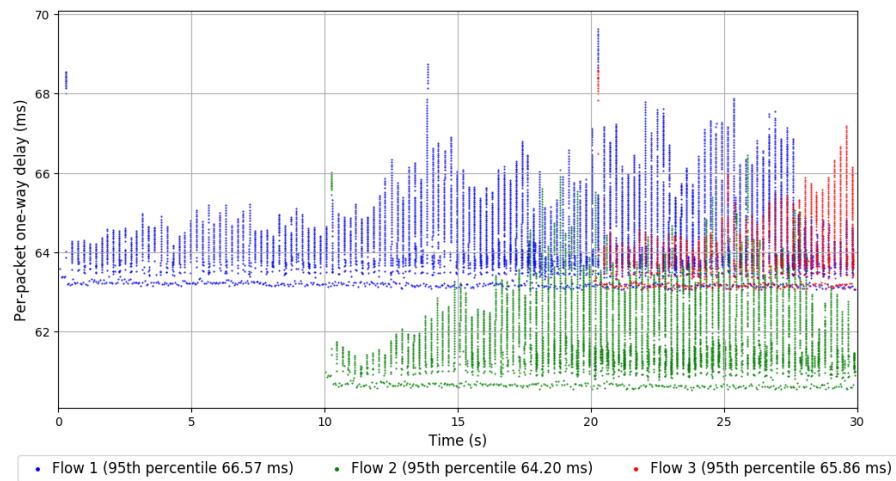
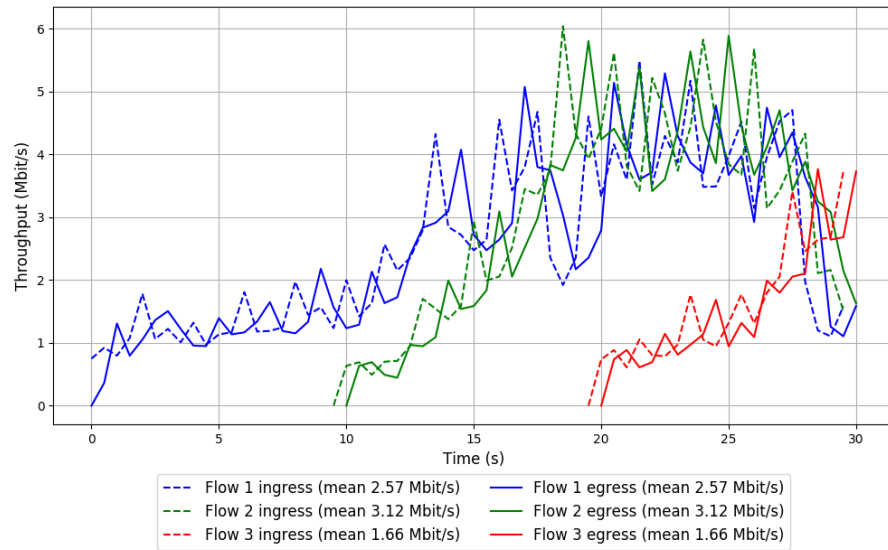


Run 1: Statistics of Sprout

Start at: 2019-01-25 01:26:48  
End at: 2019-01-25 01:27:18  
Local clock offset: -1.999 ms  
Remote clock offset: -39.254 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 5.20 Mbit/s  
95th percentile per-packet one-way delay: 66.132 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 2.57 Mbit/s  
95th percentile per-packet one-way delay: 66.570 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 3.12 Mbit/s  
95th percentile per-packet one-way delay: 64.201 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 1.66 Mbit/s  
95th percentile per-packet one-way delay: 65.857 ms  
Loss rate: 0.00%

## Run 1: Report of Sprout — Data Link



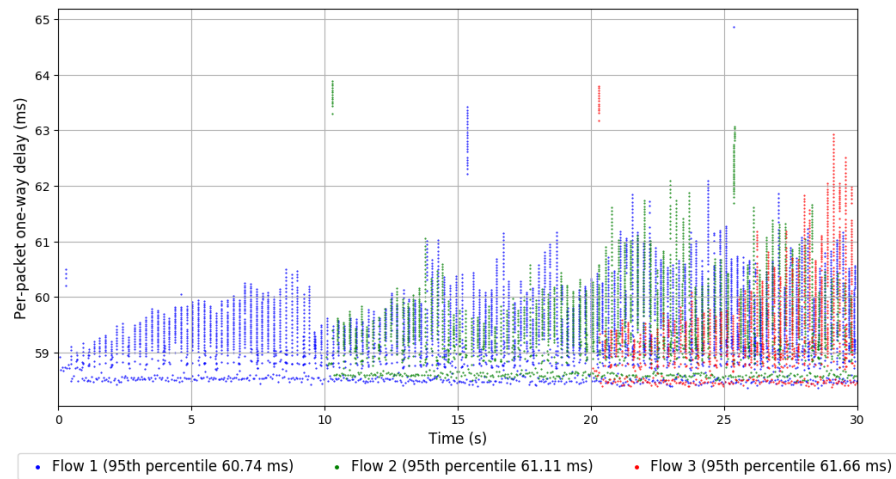
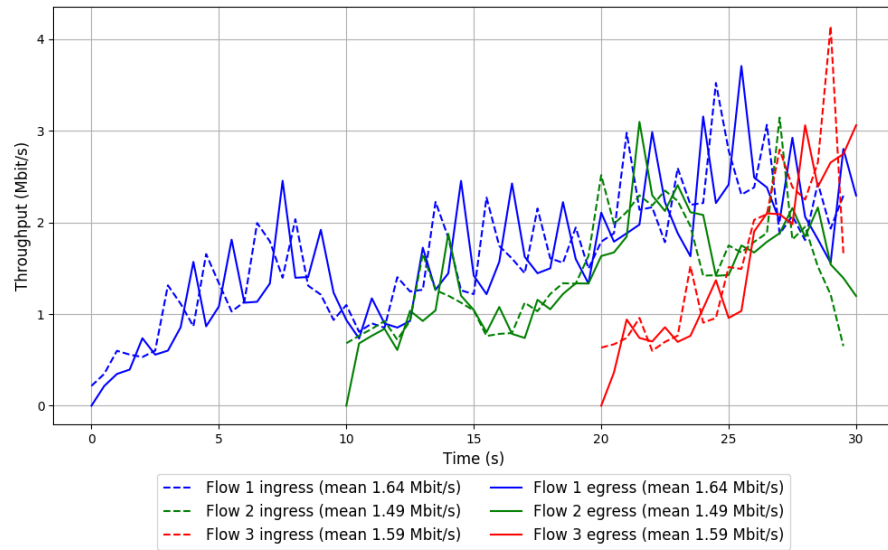


Run 2: Statistics of Sprout

Start at: 2019-01-25 01:57:18  
End at: 2019-01-25 01:57:48  
Local clock offset: -2.501 ms  
Remote clock offset: -40.314 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.15 Mbit/s  
95th percentile per-packet one-way delay: 61.007 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 1.64 Mbit/s  
95th percentile per-packet one-way delay: 60.743 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.49 Mbit/s  
95th percentile per-packet one-way delay: 61.111 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 1.59 Mbit/s  
95th percentile per-packet one-way delay: 61.658 ms  
Loss rate: 0.00%

## Run 2: Report of Sprout — Data Link

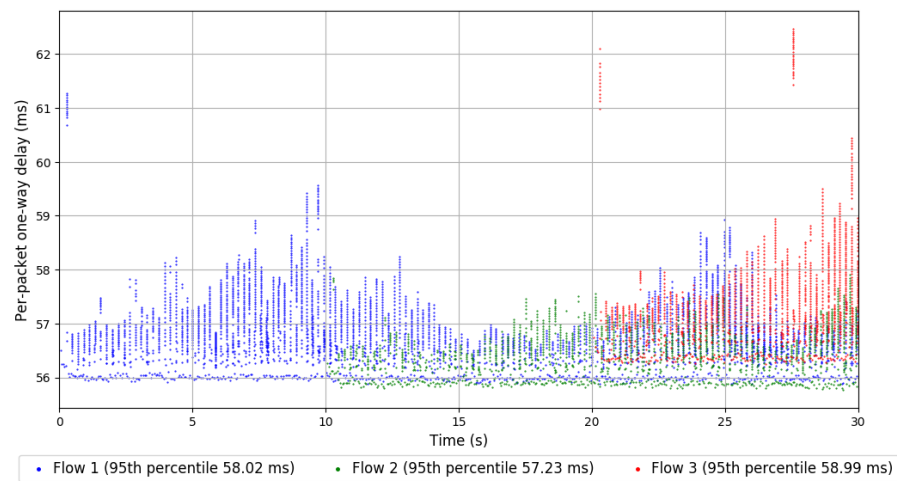
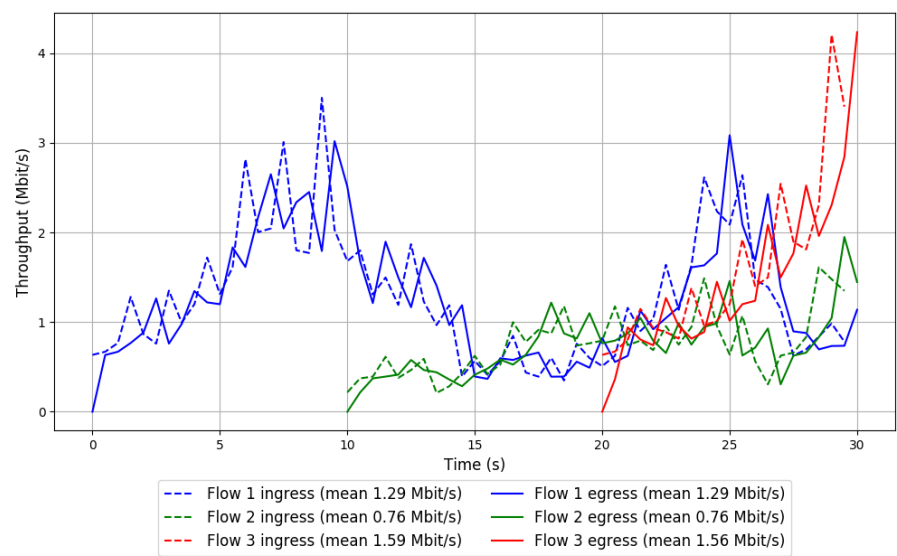


Run 3: Statistics of Sprout

Start at: 2019-01-25 02:33:33  
End at: 2019-01-25 02:34:03  
Local clock offset: -2.099 ms  
Remote clock offset: -43.445 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.31 Mbit/s  
95th percentile per-packet one-way delay: 58.203 ms  
Loss rate: 0.39%  
-- Flow 1:  
Average throughput: 1.29 Mbit/s  
95th percentile per-packet one-way delay: 58.018 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.76 Mbit/s  
95th percentile per-packet one-way delay: 57.226 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 1.56 Mbit/s  
95th percentile per-packet one-way delay: 58.990 ms  
Loss rate: 1.70%

Run 3: Report of Sprout — Data Link

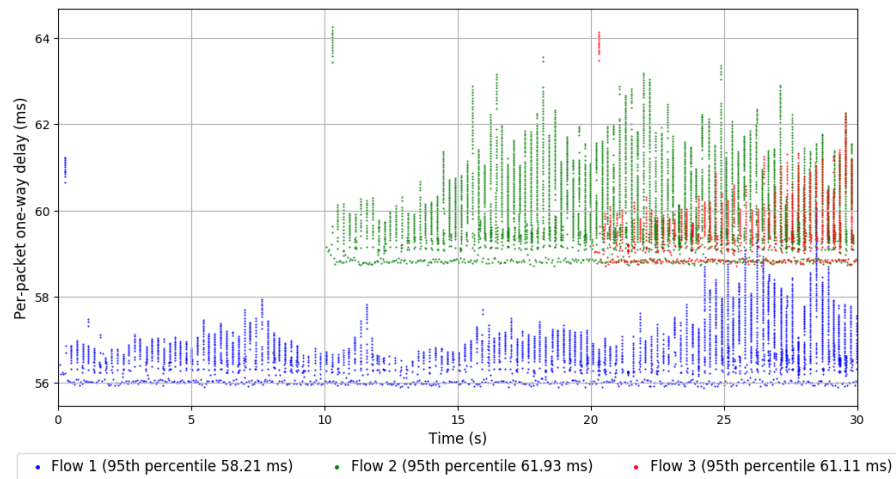
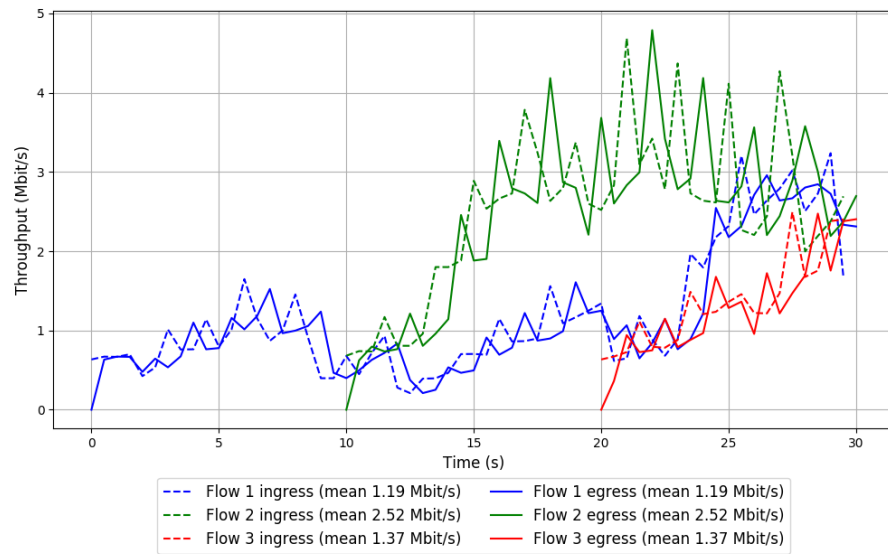


#### Run 4: Statistics of Sprout

Start at: 2019-01-25 03:09:38  
End at: 2019-01-25 03:10:08  
Local clock offset: -0.751 ms  
Remote clock offset: -42.869 ms

```
# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.31 Mbit/s
95th percentile per-packet one-way delay: 61.566 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 1.19 Mbit/s
95th percentile per-packet one-way delay: 58.206 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 2.52 Mbit/s
95th percentile per-packet one-way delay: 61.927 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.37 Mbit/s
95th percentile per-packet one-way delay: 61.107 ms
Loss rate: 0.00%
```

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

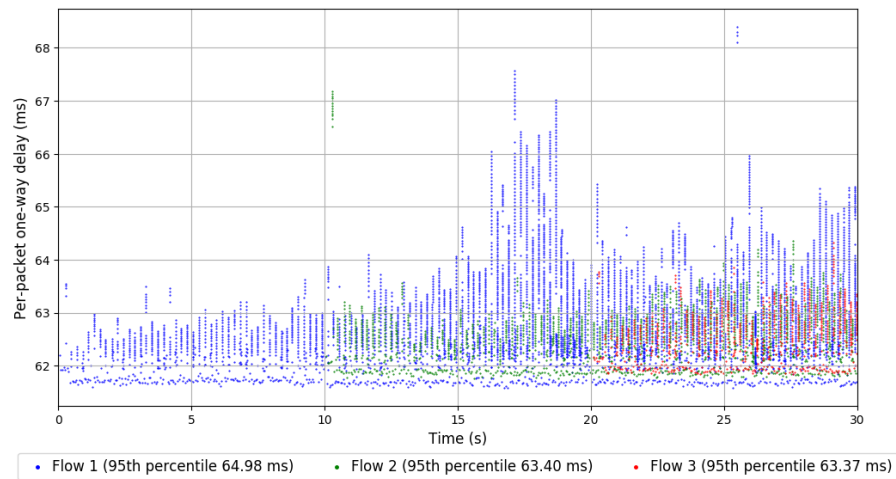
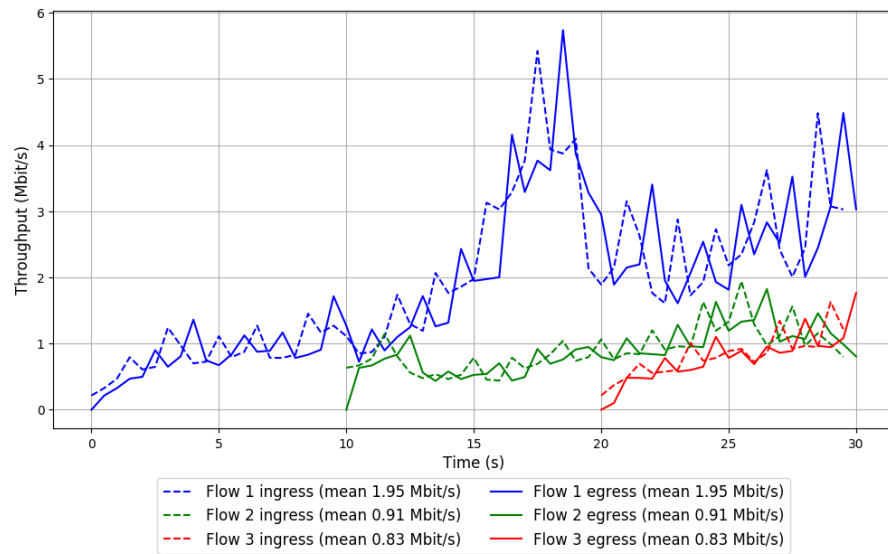


Run 5: Statistics of Sprout

Start at: 2019-01-25 03:51:27  
End at: 2019-01-25 03:51:57  
Local clock offset: -1.163 ms  
Remote clock offset: -37.98 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.83 Mbit/s  
95th percentile per-packet one-way delay: 64.617 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 1.95 Mbit/s  
95th percentile per-packet one-way delay: 64.985 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.91 Mbit/s  
95th percentile per-packet one-way delay: 63.399 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.83 Mbit/s  
95th percentile per-packet one-way delay: 63.368 ms  
Loss rate: 0.00%

# Run 5: Report of Sprout — Data Link



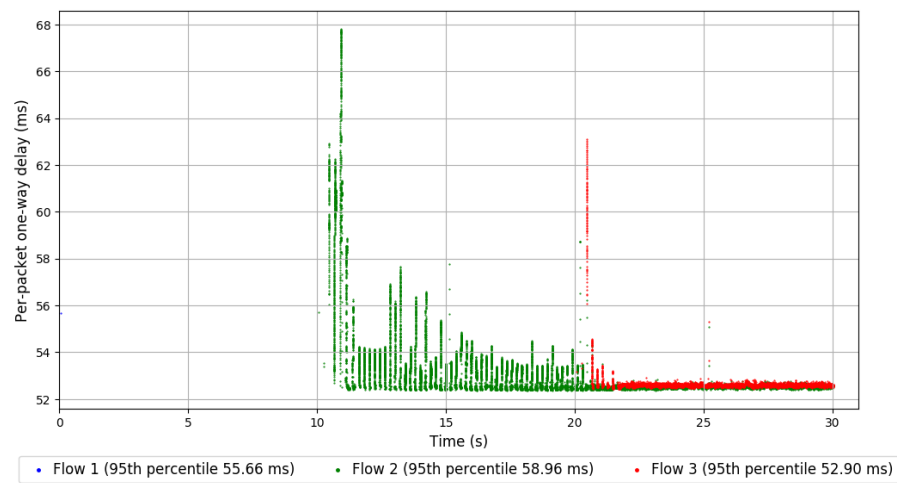
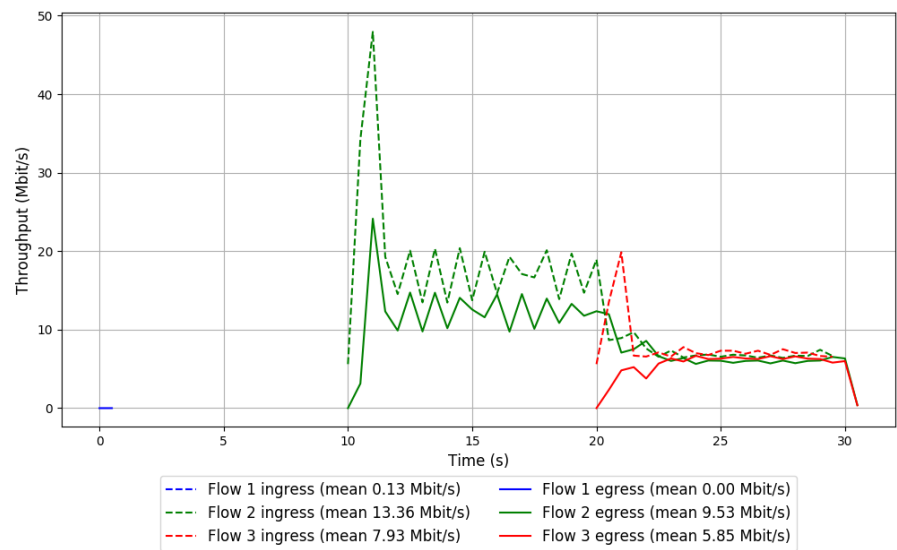


Run 1: Statistics of TaoVA-100x

Start at: 2019-01-25 01:35:25  
End at: 2019-01-25 01:35:55  
Local clock offset: 0.581 ms  
Remote clock offset: -44.17 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.30 Mbit/s  
95th percentile per-packet one-way delay: 57.736 ms  
Loss rate: 28.10%  
-- Flow 1:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 55.655 ms  
Loss rate: 95.92%  
-- Flow 2:  
Average throughput: 9.53 Mbit/s  
95th percentile per-packet one-way delay: 58.956 ms  
Loss rate: 28.68%  
-- Flow 3:  
Average throughput: 5.85 Mbit/s  
95th percentile per-packet one-way delay: 52.899 ms  
Loss rate: 26.15%

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

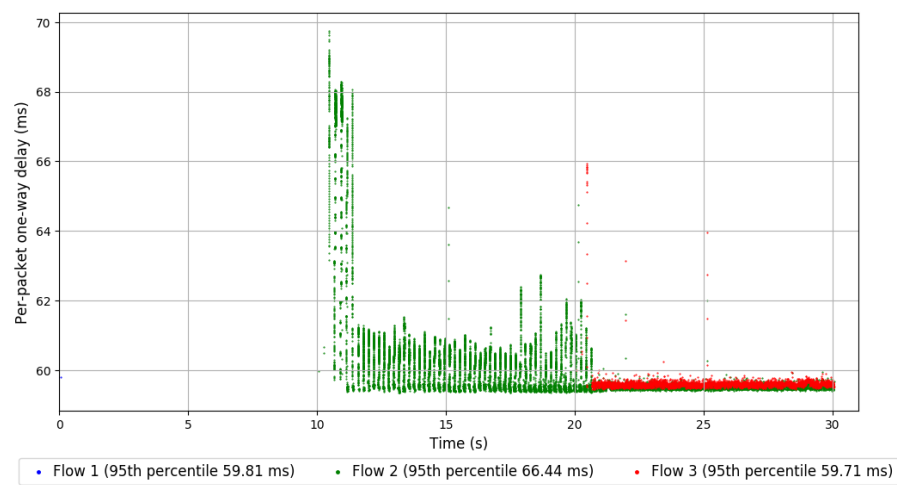
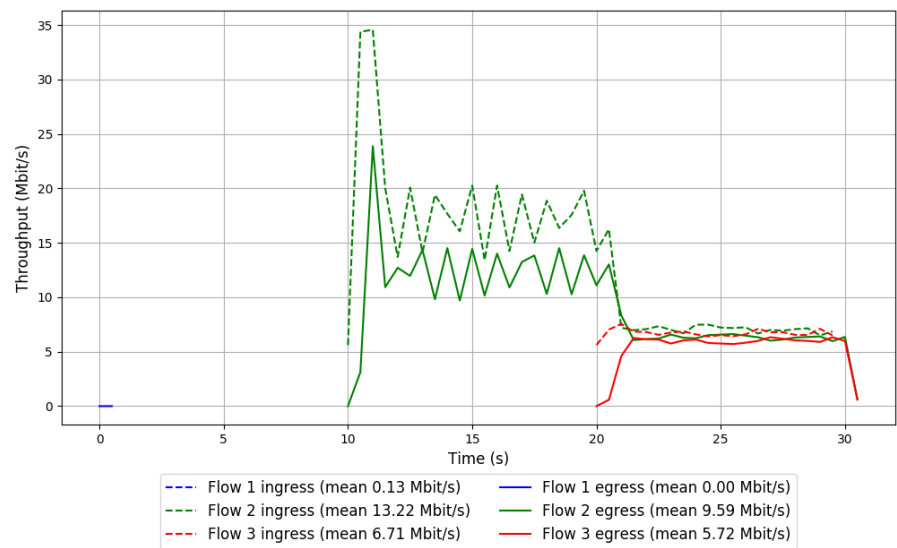


Run 2: Statistics of TaoVA-100x

Start at: 2019-01-25 02:11:46  
End at: 2019-01-25 02:12:16  
Local clock offset: 0.177 ms  
Remote clock offset: -38.054 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.29 Mbit/s  
95th percentile per-packet one-way delay: 64.442 ms  
Loss rate: 24.93%  
-- Flow 1:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 59.812 ms  
Loss rate: 95.92%  
-- Flow 2:  
Average throughput: 9.59 Mbit/s  
95th percentile per-packet one-way delay: 66.435 ms  
Loss rate: 27.48%  
-- Flow 3:  
Average throughput: 5.72 Mbit/s  
95th percentile per-packet one-way delay: 59.707 ms  
Loss rate: 14.85%

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

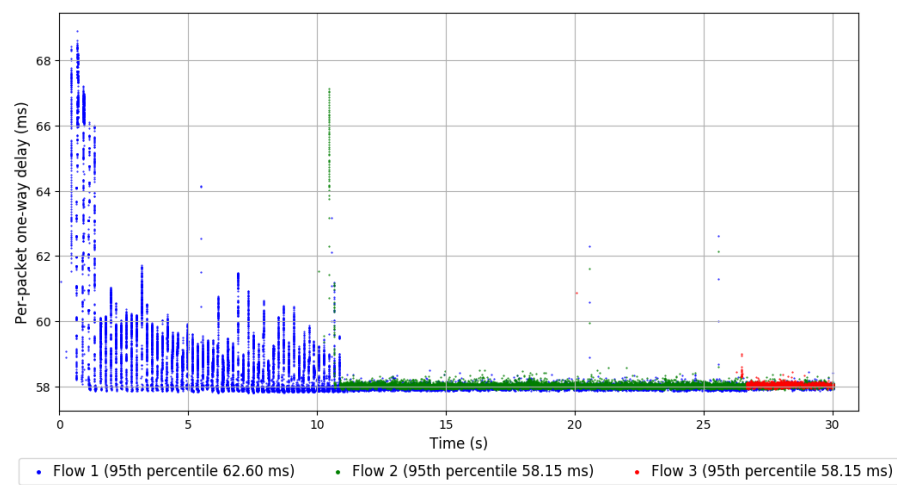
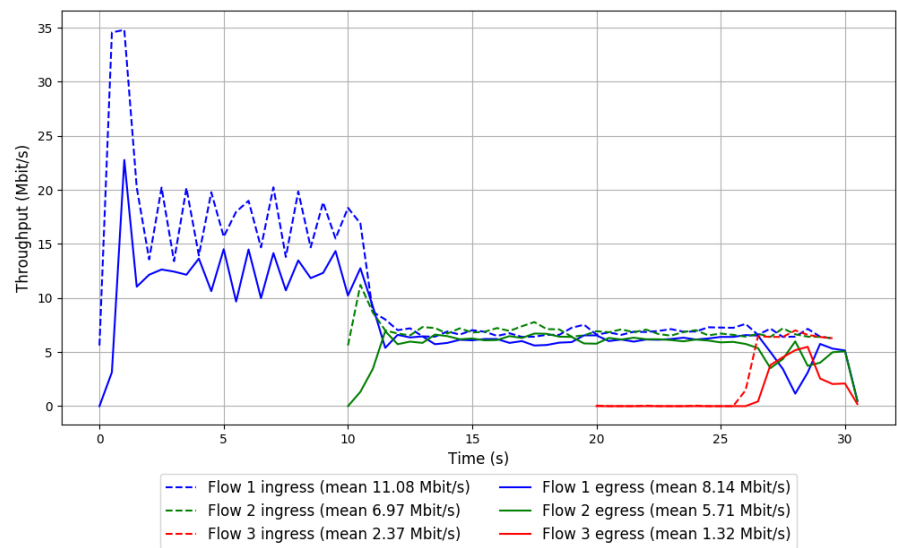


Run 3: Statistics of TaoVA-100x

Start at: 2019-01-25 02:47:27  
End at: 2019-01-25 02:47:57  
Local clock offset: 0.482 ms  
Remote clock offset: -39.049 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.38 Mbit/s  
95th percentile per-packet one-way delay: 60.592 ms  
Loss rate: 25.02%  
-- Flow 1:  
Average throughput: 8.14 Mbit/s  
95th percentile per-packet one-way delay: 62.604 ms  
Loss rate: 26.55%  
-- Flow 2:  
Average throughput: 5.71 Mbit/s  
95th percentile per-packet one-way delay: 58.151 ms  
Loss rate: 18.11%  
-- Flow 3:  
Average throughput: 1.32 Mbit/s  
95th percentile per-packet one-way delay: 58.151 ms  
Loss rate: 44.23%

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



Run 4: Statistics of TaoVA-100x

Start at: 2019-01-25 03:18:27

End at: 2019-01-25 03:18:57

Local clock offset: 0.135 ms

Remote clock offset: -39.1 ms

# Below is generated by plot.py at 2019-01-25 04:40:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 8.28 Mbit/s

95th percentile per-packet one-way delay: 66.458 ms

Loss rate: 27.12%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 59.889 ms

Loss rate: 95.92%

-- Flow 2:

Average throughput: 9.57 Mbit/s

95th percentile per-packet one-way delay: 69.377 ms

Loss rate: 26.89%

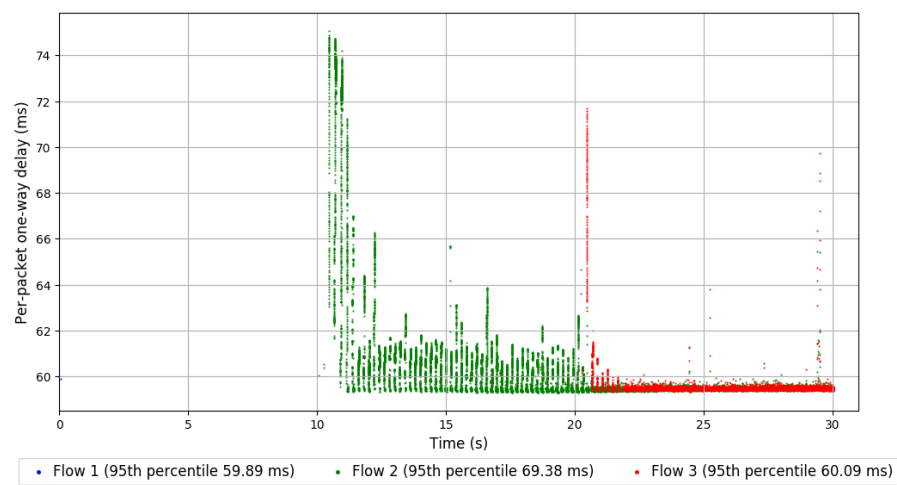
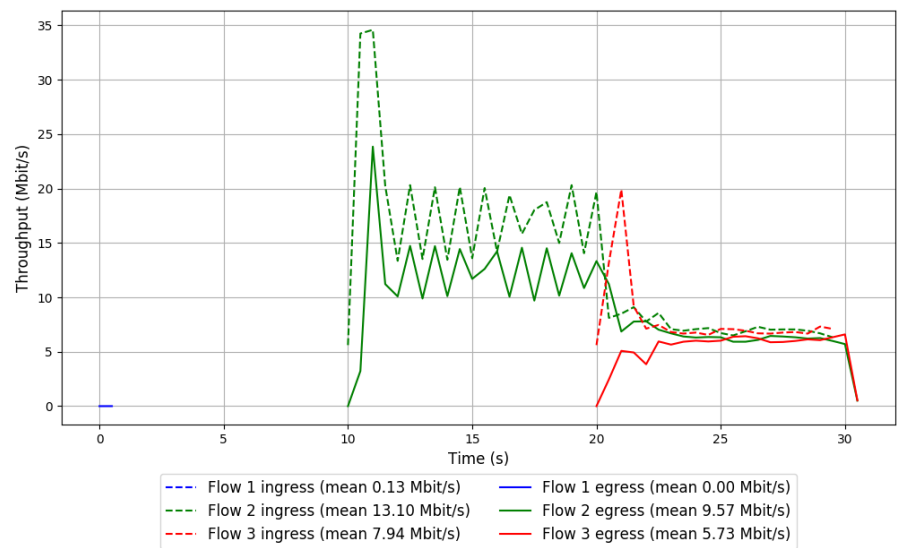
-- Flow 3:

Average throughput: 5.73 Mbit/s

95th percentile per-packet one-way delay: 60.088 ms

Loss rate: 27.84%

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



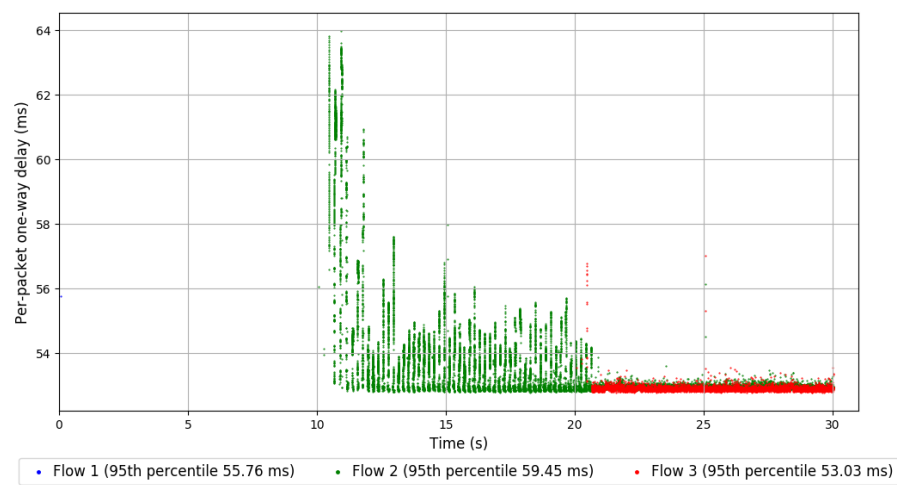
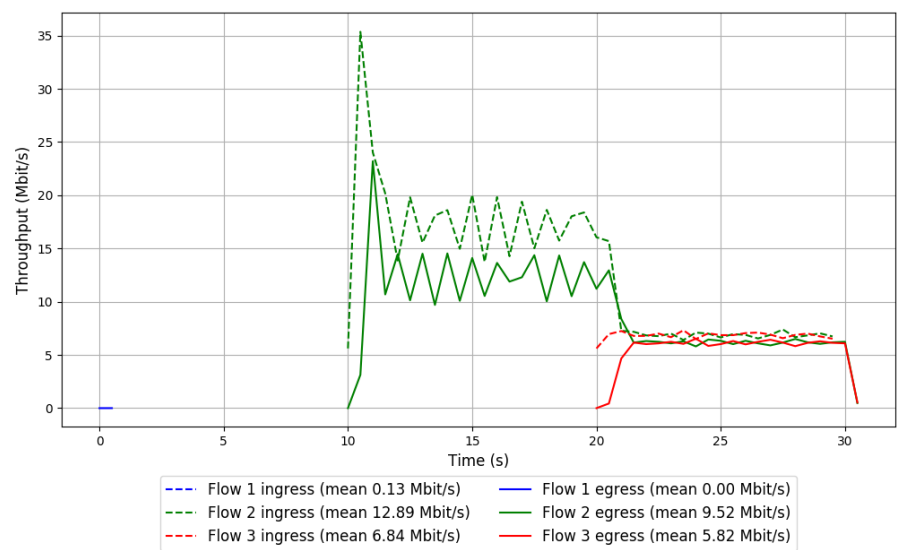


Run 5: Statistics of TaoVA-100x

Start at: 2019-01-25 04:11:26  
End at: 2019-01-25 04:11:56  
Local clock offset: 0.694 ms  
Remote clock offset: -45.483 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.28 Mbit/s  
95th percentile per-packet one-way delay: 57.548 ms  
Loss rate: 23.80%  
-- Flow 1:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 55.761 ms  
Loss rate: 95.92%  
-- Flow 2:  
Average throughput: 9.52 Mbit/s  
95th percentile per-packet one-way delay: 59.449 ms  
Loss rate: 26.17%  
-- Flow 3:  
Average throughput: 5.82 Mbit/s  
95th percentile per-packet one-way delay: 53.029 ms  
Loss rate: 14.84%

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

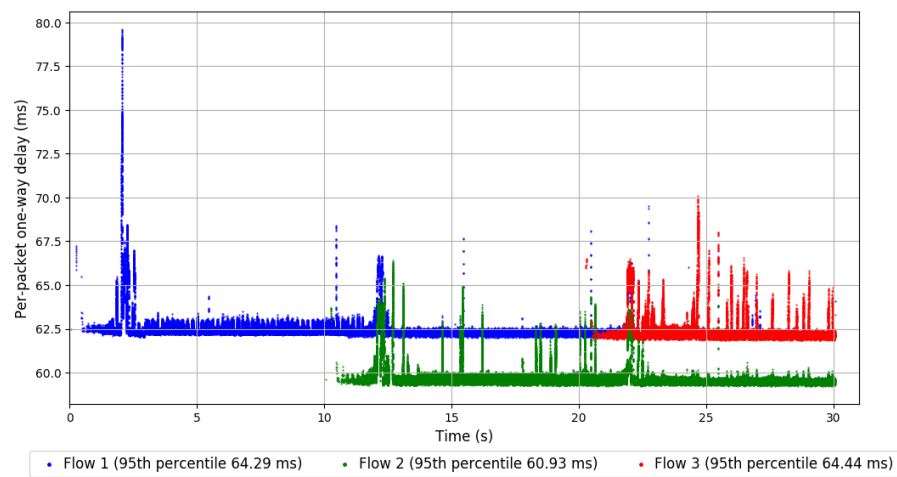
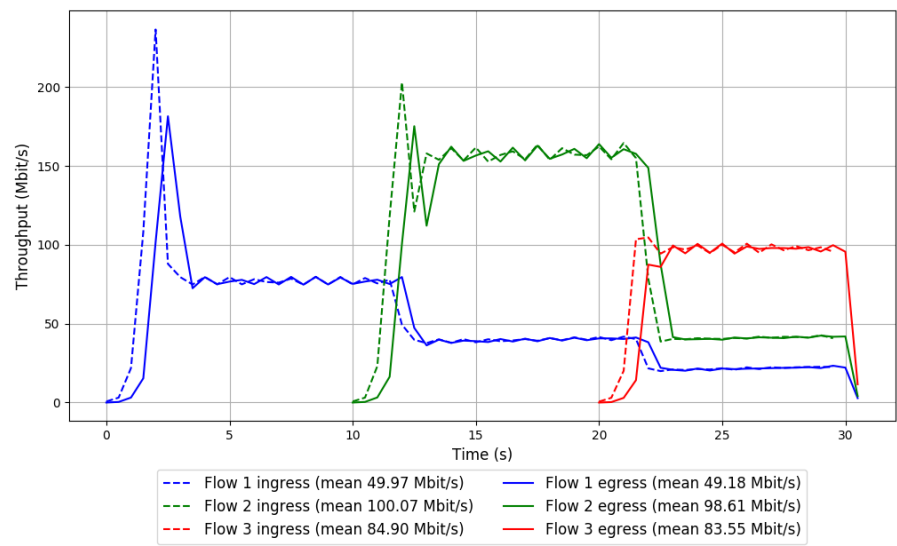


Run 1: Statistics of TCP Vegas

Start at: 2019-01-25 01:23:49  
End at: 2019-01-25 01:24:19  
Local clock offset: 0.495 ms  
Remote clock offset: -38.386 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 142.66 Mbit/s  
95th percentile per-packet one-way delay: 63.090 ms  
Loss rate: 1.53%  
-- Flow 1:  
Average throughput: 49.18 Mbit/s  
95th percentile per-packet one-way delay: 64.286 ms  
Loss rate: 1.59%  
-- Flow 2:  
Average throughput: 98.61 Mbit/s  
95th percentile per-packet one-way delay: 60.933 ms  
Loss rate: 1.46%  
-- Flow 3:  
Average throughput: 83.55 Mbit/s  
95th percentile per-packet one-way delay: 64.436 ms  
Loss rate: 1.59%

Run 1: Report of TCP Vegas — Data Link

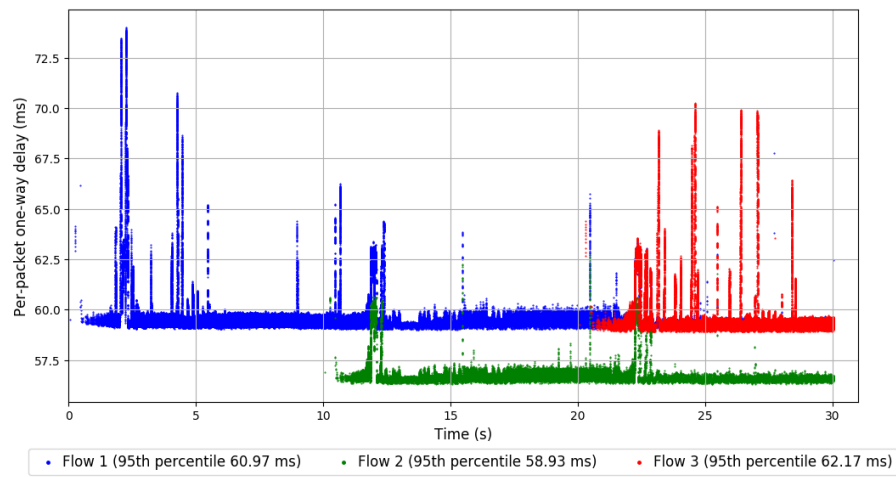
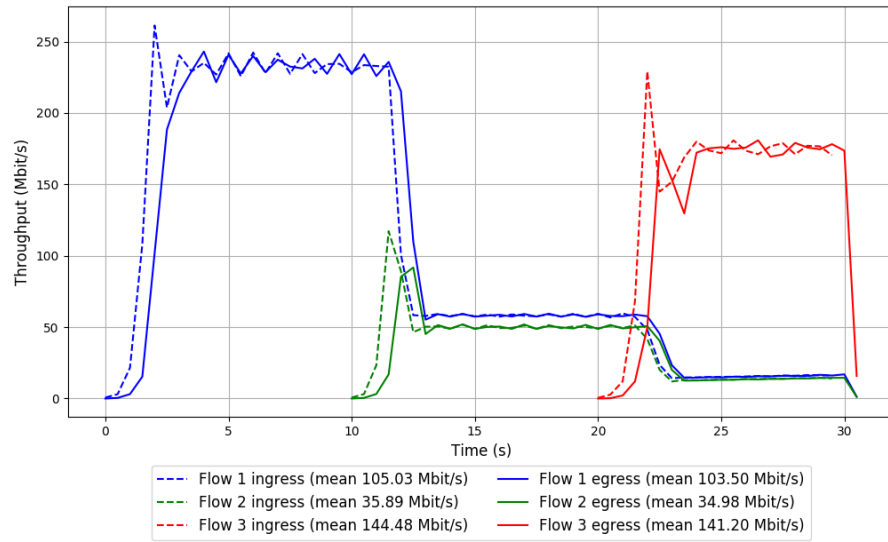


Run 2: Statistics of TCP Vegas

Start at: 2019-01-25 01:54:13  
End at: 2019-01-25 01:54:43  
Local clock offset: -1.387 ms  
Remote clock offset: -41.456 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 173.72 Mbit/s  
95th percentile per-packet one-way delay: 60.981 ms  
Loss rate: 1.83%  
-- Flow 1:  
Average throughput: 103.50 Mbit/s  
95th percentile per-packet one-way delay: 60.965 ms  
Loss rate: 1.45%  
-- Flow 2:  
Average throughput: 34.98 Mbit/s  
95th percentile per-packet one-way delay: 58.934 ms  
Loss rate: 2.54%  
-- Flow 3:  
Average throughput: 141.20 Mbit/s  
95th percentile per-packet one-way delay: 62.174 ms  
Loss rate: 2.29%

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

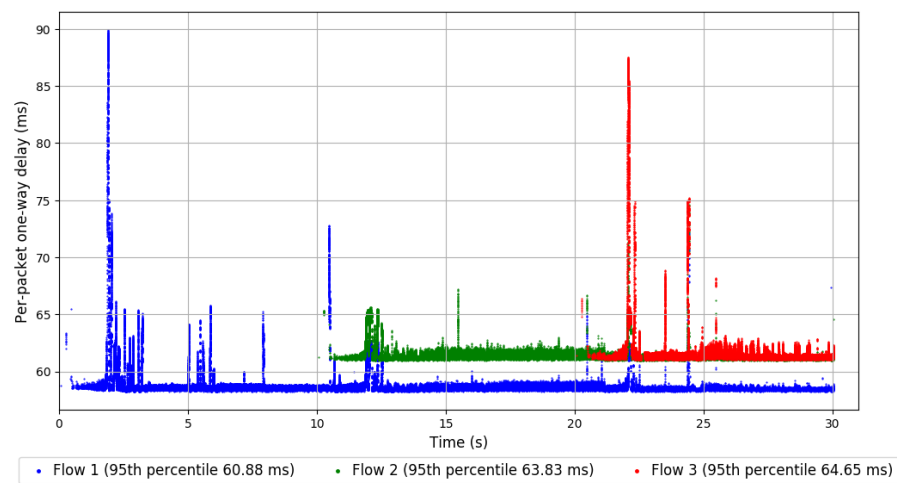
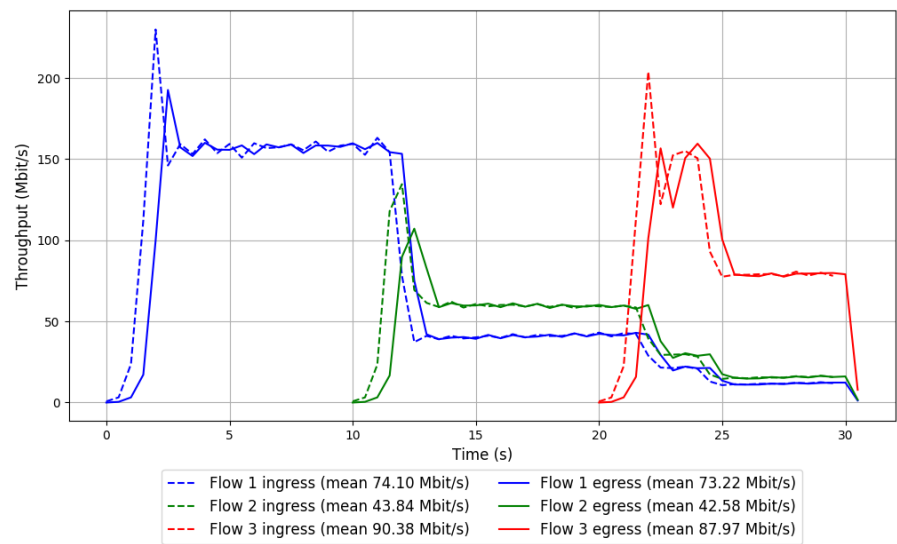


Run 3: Statistics of TCP Vegas

Start at: 2019-01-25 02:30:34  
End at: 2019-01-25 02:31:04  
Local clock offset: 0.279 ms  
Remote clock offset: -38.808 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 130.85 Mbit/s  
95th percentile per-packet one-way delay: 62.146 ms  
Loss rate: 1.89%  
-- Flow 1:  
Average throughput: 73.22 Mbit/s  
95th percentile per-packet one-way delay: 60.880 ms  
Loss rate: 1.18%  
-- Flow 2:  
Average throughput: 42.58 Mbit/s  
95th percentile per-packet one-way delay: 63.826 ms  
Loss rate: 2.87%  
-- Flow 3:  
Average throughput: 87.97 Mbit/s  
95th percentile per-packet one-way delay: 64.652 ms  
Loss rate: 2.69%

Run 3: Report of TCP Vegas — Data Link



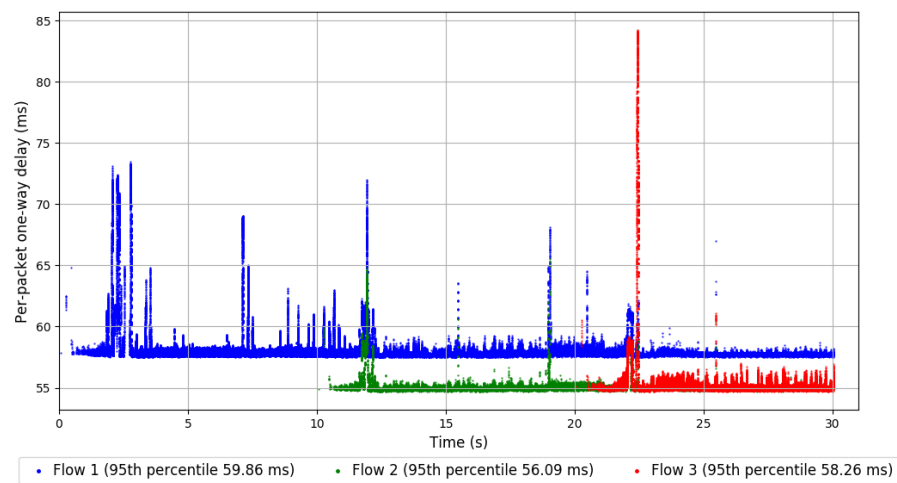
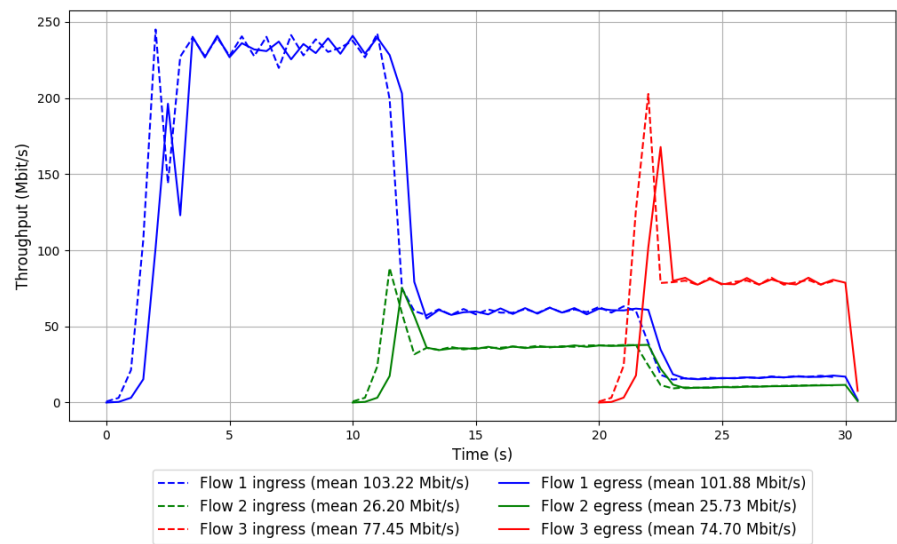


Run 4: Statistics of TCP Vegas

Start at: 2019-01-25 03:06:38  
End at: 2019-01-25 03:07:08  
Local clock offset: 1.329 ms  
Remote clock offset: -42.056 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 143.86 Mbit/s  
95th percentile per-packet one-way delay: 58.982 ms  
Loss rate: 1.75%  
-- Flow 1:  
Average throughput: 101.88 Mbit/s  
95th percentile per-packet one-way delay: 59.860 ms  
Loss rate: 1.29%  
-- Flow 2:  
Average throughput: 25.73 Mbit/s  
95th percentile per-packet one-way delay: 56.087 ms  
Loss rate: 1.79%  
-- Flow 3:  
Average throughput: 74.70 Mbit/s  
95th percentile per-packet one-way delay: 58.257 ms  
Loss rate: 3.56%

Run 4: Report of TCP Vegas — Data Link

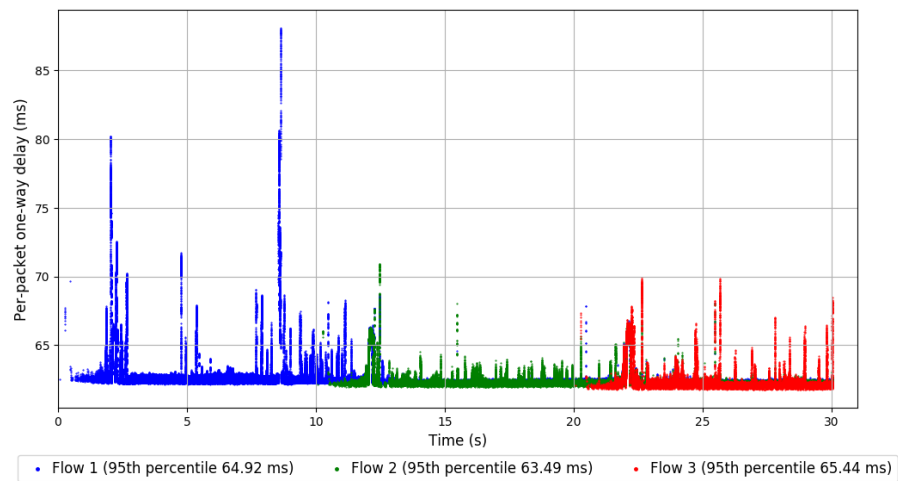
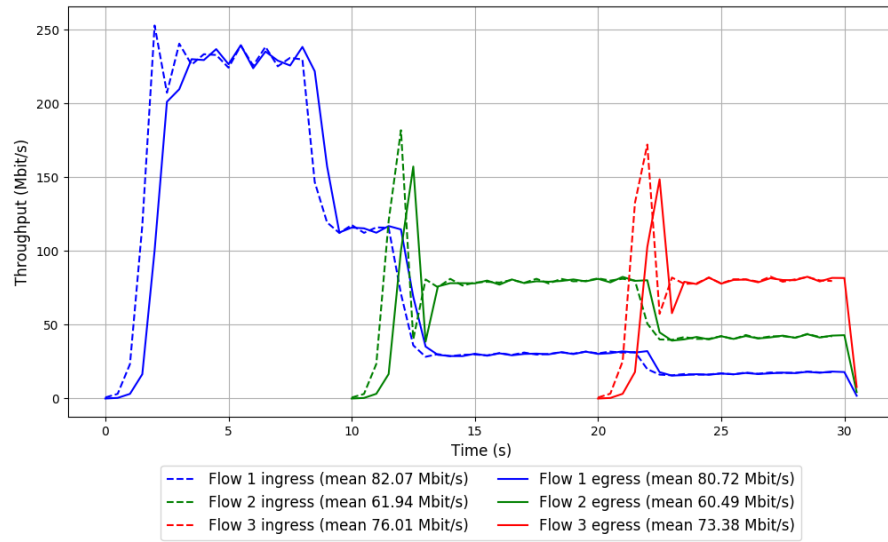


Run 5: Statistics of TCP Vegas

Start at: 2019-01-25 03:42:47  
End at: 2019-01-25 03:43:17  
Local clock offset: -1.389 ms  
Remote clock offset: -37.797 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 145.42 Mbit/s  
95th percentile per-packet one-way delay: 64.747 ms  
Loss rate: 2.15%  
-- Flow 1:  
Average throughput: 80.72 Mbit/s  
95th percentile per-packet one-way delay: 64.919 ms  
Loss rate: 1.64%  
-- Flow 2:  
Average throughput: 60.49 Mbit/s  
95th percentile per-packet one-way delay: 63.491 ms  
Loss rate: 2.34%  
-- Flow 3:  
Average throughput: 73.38 Mbit/s  
95th percentile per-packet one-way delay: 65.435 ms  
Loss rate: 3.46%

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

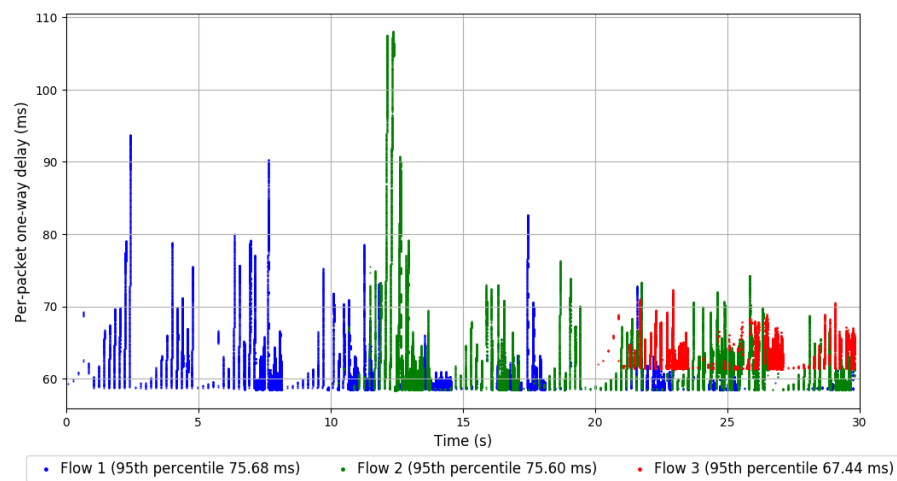
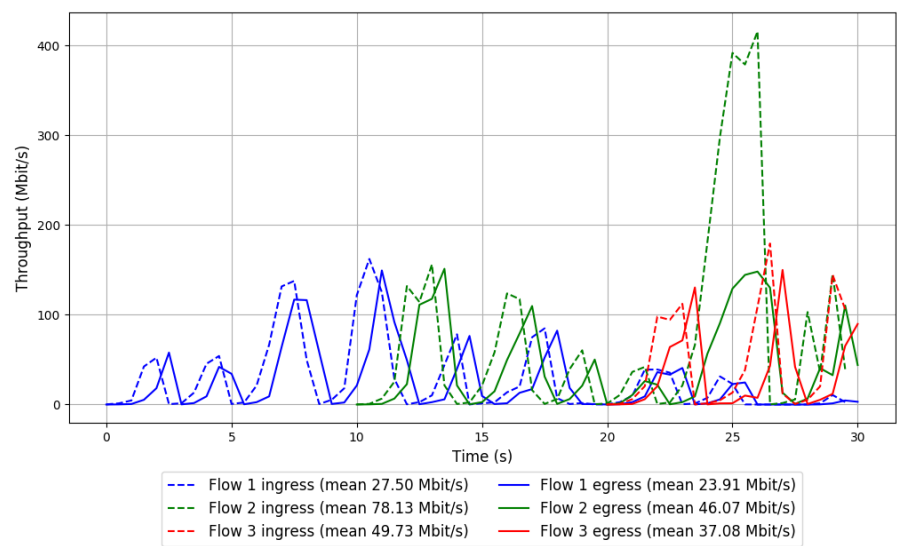


Run 1: Statistics of Verus

Start at: 2019-01-25 01:30:52  
End at: 2019-01-25 01:31:22  
Local clock offset: -1.26 ms  
Remote clock offset: -40.142 ms

# Below is generated by plot.py at 2019-01-25 04:40:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 66.51 Mbit/s  
95th percentile per-packet one-way delay: 73.400 ms  
Loss rate: 30.32%  
-- Flow 1:  
Average throughput: 23.91 Mbit/s  
95th percentile per-packet one-way delay: 75.684 ms  
Loss rate: 13.05%  
-- Flow 2:  
Average throughput: 46.07 Mbit/s  
95th percentile per-packet one-way delay: 75.596 ms  
Loss rate: 41.03%  
-- Flow 3:  
Average throughput: 37.08 Mbit/s  
95th percentile per-packet one-way delay: 67.436 ms  
Loss rate: 25.41%

Run 1: Report of Verus — Data Link

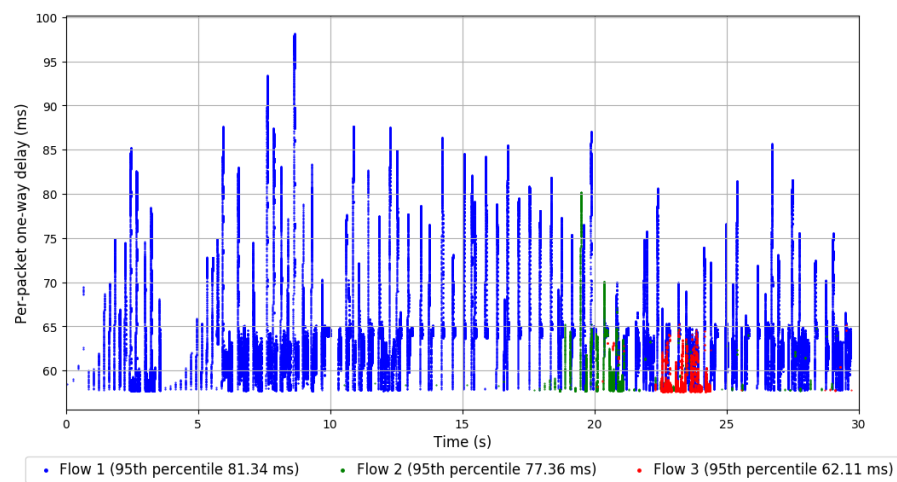
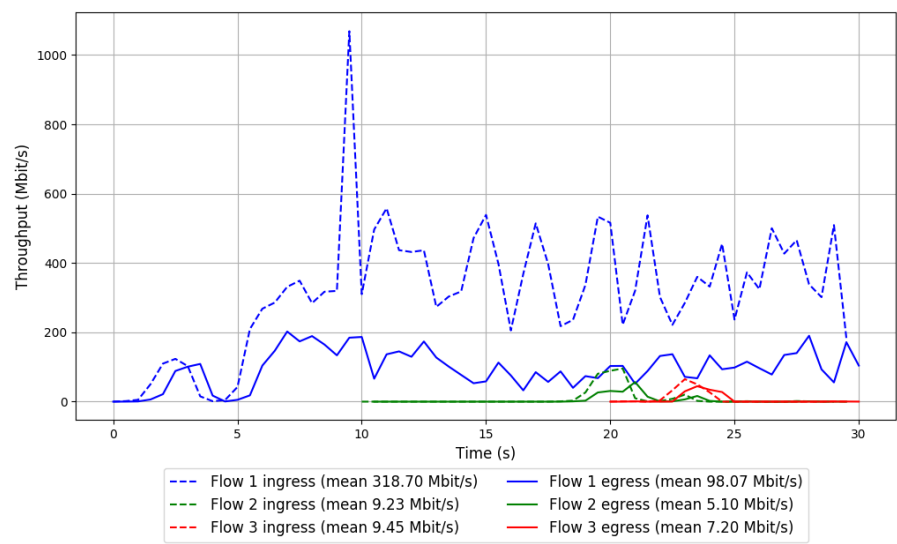


Run 2: Statistics of Verus

Start at: 2019-01-25 02:01:27  
End at: 2019-01-25 02:01:57  
Local clock offset: -2.249 ms  
Remote clock offset: -41.318 ms

# Below is generated by plot.py at 2019-01-25 04:41:21  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 103.53 Mbit/s  
95th percentile per-packet one-way delay: 81.089 ms  
Loss rate: 68.36%  
-- Flow 1:  
Average throughput: 98.07 Mbit/s  
95th percentile per-packet one-way delay: 81.343 ms  
Loss rate: 69.22%  
-- Flow 2:  
Average throughput: 5.10 Mbit/s  
95th percentile per-packet one-way delay: 77.357 ms  
Loss rate: 44.70%  
-- Flow 3:  
Average throughput: 7.20 Mbit/s  
95th percentile per-packet one-way delay: 62.111 ms  
Loss rate: 23.76%

Run 2: Report of Verus — Data Link



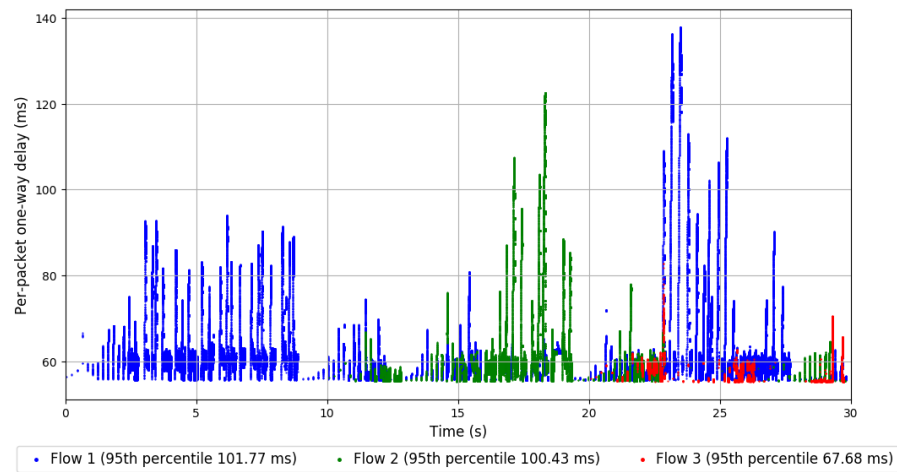
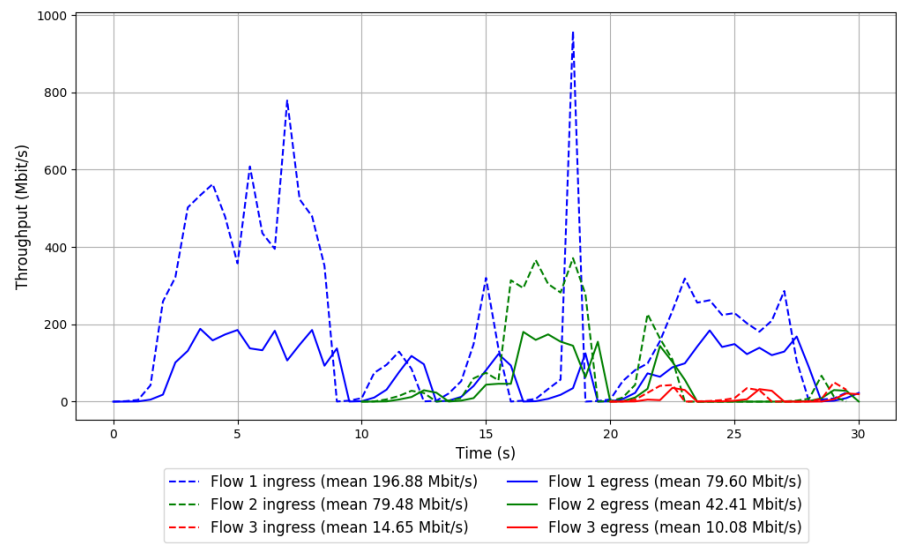


Run 3: Statistics of Verus

Start at: 2019-01-25 02:42:50  
End at: 2019-01-25 02:43:20  
Local clock offset: -2.882 ms  
Remote clock offset: -44.836 ms

# Below is generated by plot.py at 2019-01-25 04:41:21  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 110.93 Mbit/s  
95th percentile per-packet one-way delay: 100.575 ms  
Loss rate: 56.36%  
-- Flow 1:  
Average throughput: 79.60 Mbit/s  
95th percentile per-packet one-way delay: 101.771 ms  
Loss rate: 59.57%  
-- Flow 2:  
Average throughput: 42.41 Mbit/s  
95th percentile per-packet one-way delay: 100.432 ms  
Loss rate: 46.64%  
-- Flow 3:  
Average throughput: 10.08 Mbit/s  
95th percentile per-packet one-way delay: 67.682 ms  
Loss rate: 31.18%

Run 3: Report of Verus — Data Link

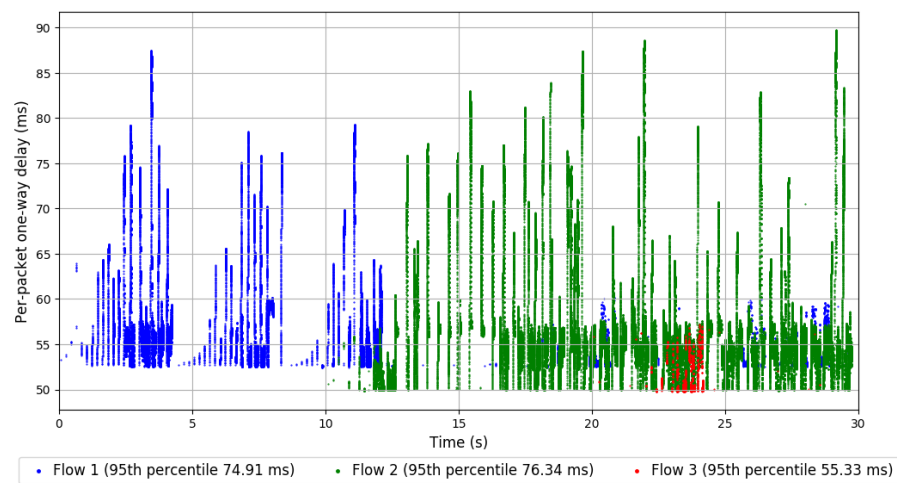
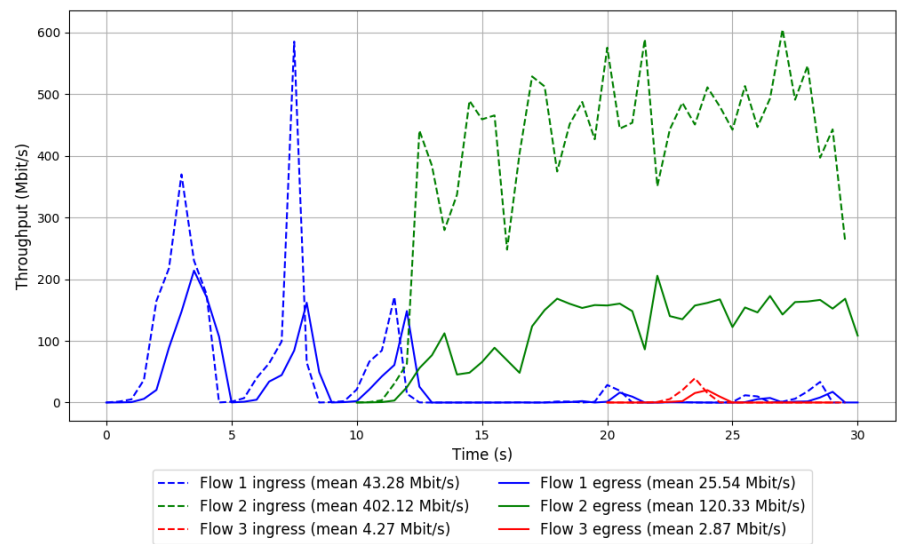


Run 4: Statistics of Verus

Start at: 2019-01-25 03:13:43  
End at: 2019-01-25 03:14:13  
Local clock offset: 1.141 ms  
Remote clock offset: -47.557 ms

# Below is generated by plot.py at 2019-01-25 04:41:28  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 105.93 Mbit/s  
95th percentile per-packet one-way delay: 75.673 ms  
Loss rate: 65.90%  
-- Flow 1:  
Average throughput: 25.54 Mbit/s  
95th percentile per-packet one-way delay: 74.912 ms  
Loss rate: 40.99%  
-- Flow 2:  
Average throughput: 120.33 Mbit/s  
95th percentile per-packet one-way delay: 76.338 ms  
Loss rate: 70.07%  
-- Flow 3:  
Average throughput: 2.87 Mbit/s  
95th percentile per-packet one-way delay: 55.326 ms  
Loss rate: 40.92%

Run 4: Report of Verus — Data Link

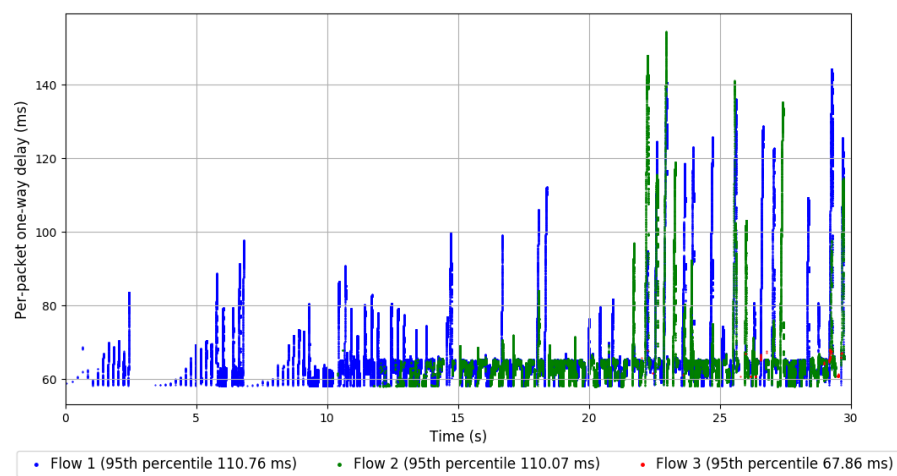
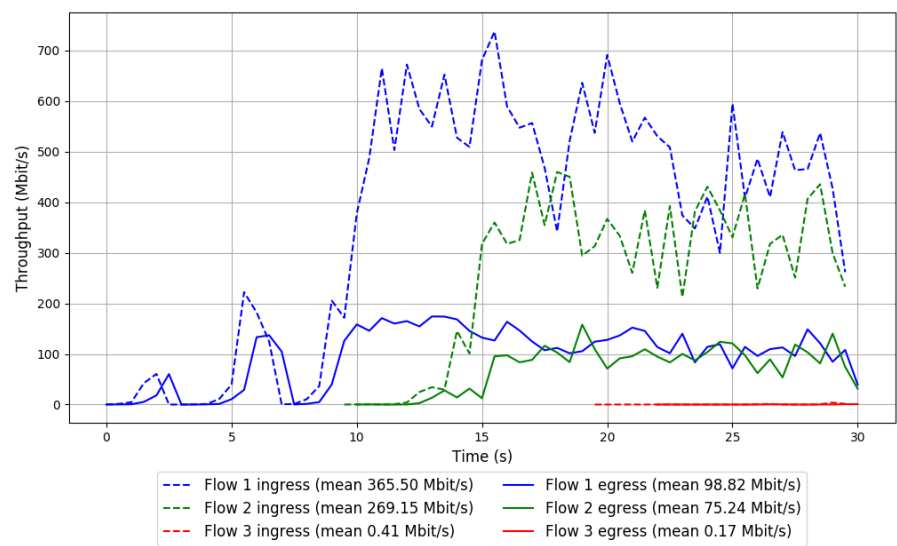


Run 5: Statistics of Verus

Start at: 2019-01-25 04:01:07  
End at: 2019-01-25 04:01:37  
Local clock offset: 0.413 ms  
Remote clock offset: -40.297 ms

# Below is generated by plot.py at 2019-01-25 04:42:33  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 148.89 Mbit/s  
95th percentile per-packet one-way delay: 110.571 ms  
Loss rate: 72.65%  
-- Flow 1:  
Average throughput: 98.82 Mbit/s  
95th percentile per-packet one-way delay: 110.759 ms  
Loss rate: 72.96%  
-- Flow 2:  
Average throughput: 75.24 Mbit/s  
95th percentile per-packet one-way delay: 110.068 ms  
Loss rate: 72.03%  
-- Flow 3:  
Average throughput: 0.17 Mbit/s  
95th percentile per-packet one-way delay: 67.859 ms  
Loss rate: 68.62%

Run 5: Report of Verus — Data Link

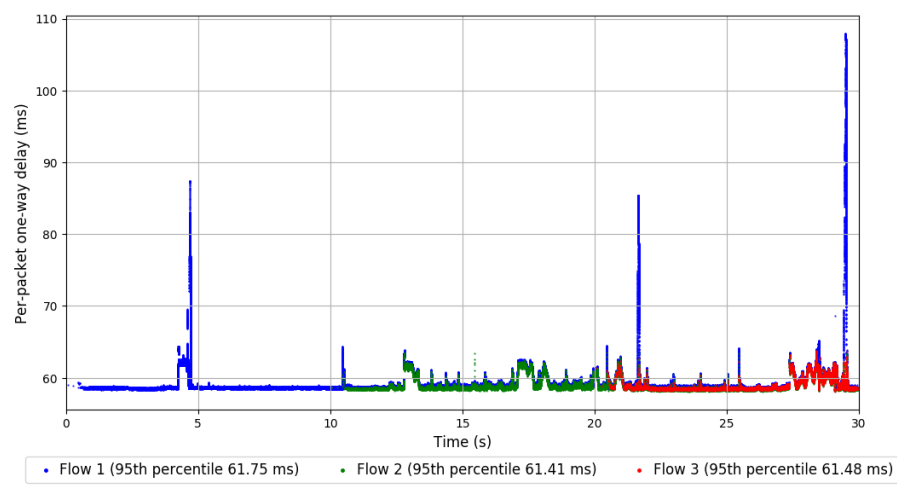
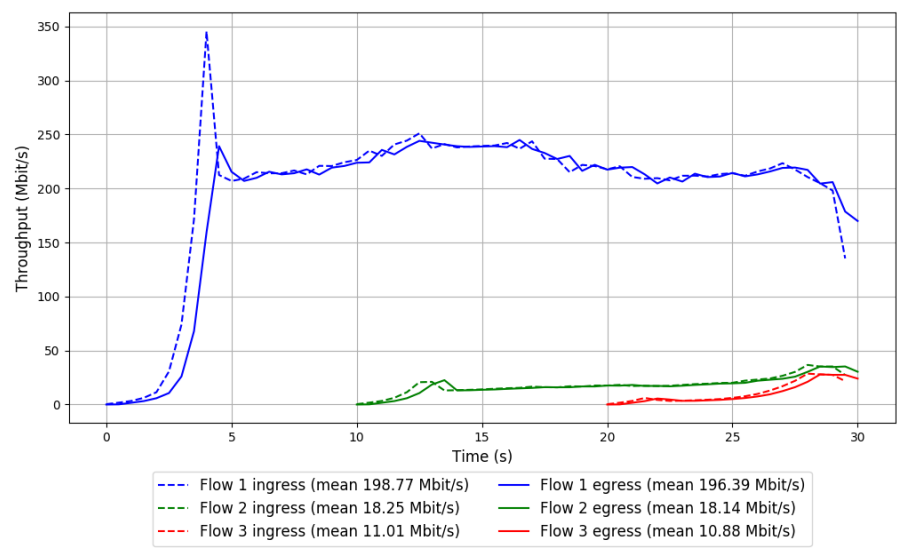


Run 1: Statistics of PCC-Vivace

Start at: 2019-01-25 01:08:58  
End at: 2019-01-25 01:09:28  
Local clock offset: 4.932 ms  
Remote clock offset: -38.809 ms

# Below is generated by plot.py at 2019-01-25 04:42:33  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 212.05 Mbit/s  
95th percentile per-packet one-way delay: 61.716 ms  
Loss rate: 1.17%  
-- Flow 1:  
Average throughput: 196.39 Mbit/s  
95th percentile per-packet one-way delay: 61.746 ms  
Loss rate: 1.20%  
-- Flow 2:  
Average throughput: 18.14 Mbit/s  
95th percentile per-packet one-way delay: 61.412 ms  
Loss rate: 0.59%  
-- Flow 3:  
Average throughput: 10.88 Mbit/s  
95th percentile per-packet one-way delay: 61.477 ms  
Loss rate: 1.17%

Run 1: Report of PCC-Vivace — Data Link



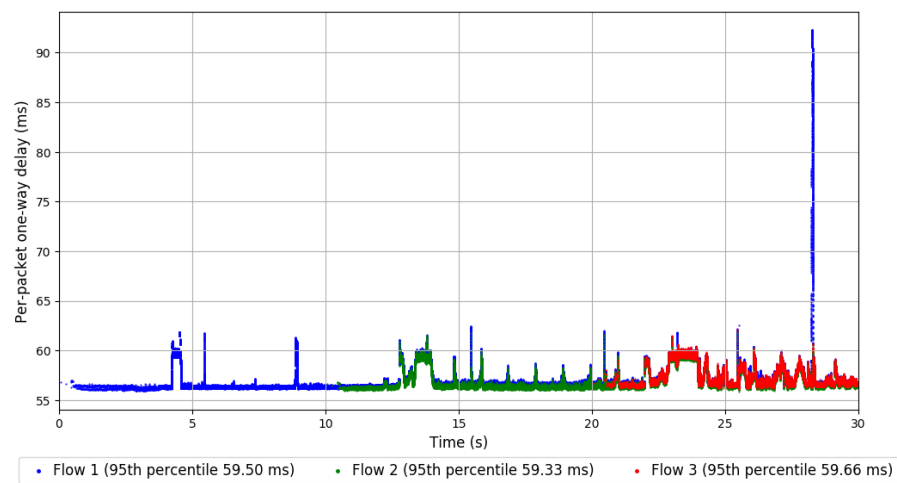
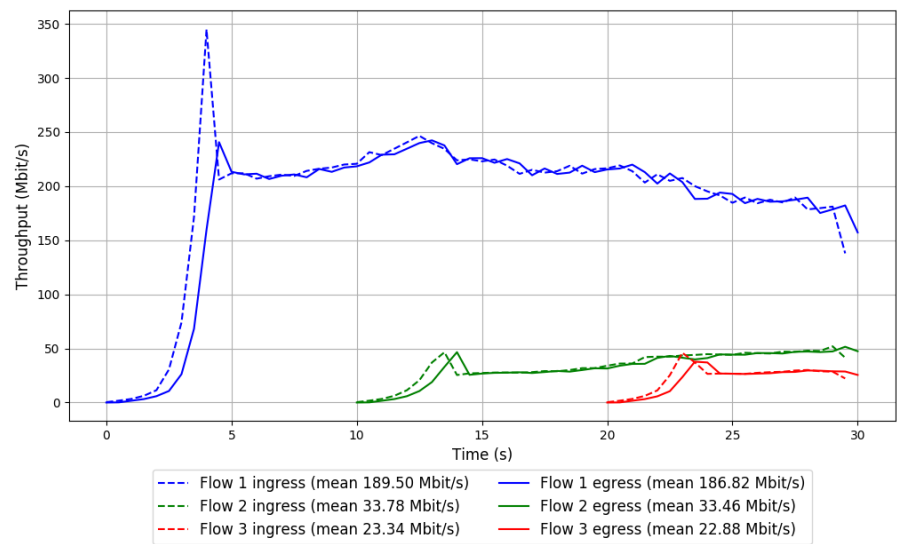


Run 2: Statistics of PCC-Vivace

Start at: 2019-01-25 01:39:24  
End at: 2019-01-25 01:39:54  
Local clock offset: -0.72 ms  
Remote clock offset: -41.465 ms

# Below is generated by plot.py at 2019-01-25 04:42:33  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 216.64 Mbit/s  
95th percentile per-packet one-way delay: 59.491 ms  
Loss rate: 1.39%  
-- Flow 1:  
Average throughput: 186.82 Mbit/s  
95th percentile per-packet one-way delay: 59.497 ms  
Loss rate: 1.41%  
-- Flow 2:  
Average throughput: 33.46 Mbit/s  
95th percentile per-packet one-way delay: 59.332 ms  
Loss rate: 0.94%  
-- Flow 3:  
Average throughput: 22.88 Mbit/s  
95th percentile per-packet one-way delay: 59.660 ms  
Loss rate: 1.99%

Run 2: Report of PCC-Vivace — Data Link

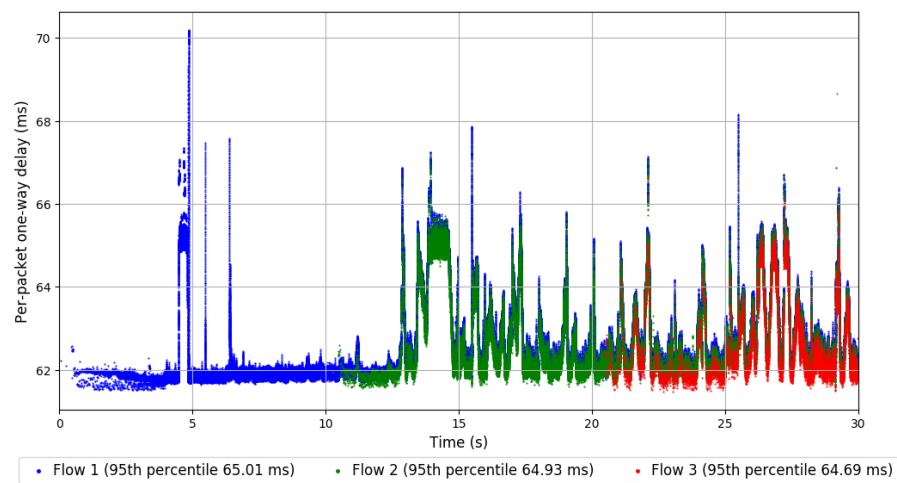
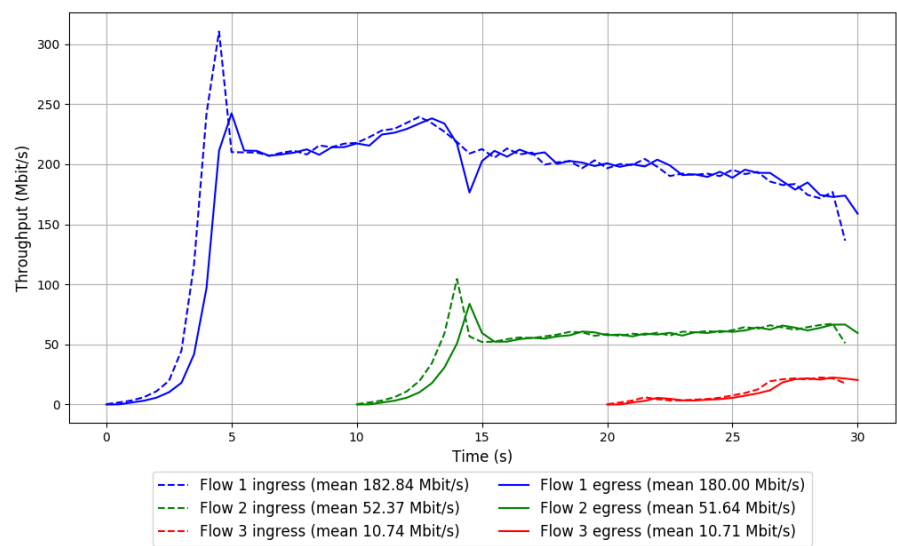


Run 3: Statistics of PCC-Vivace

Start at: 2019-01-25 02:15:43  
End at: 2019-01-25 02:16:13  
Local clock offset: 0.319 ms  
Remote clock offset: -38.467 ms

# Below is generated by plot.py at 2019-01-25 04:42:33  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 217.88 Mbit/s  
95th percentile per-packet one-way delay: 64.990 ms  
Loss rate: 1.52%  
-- Flow 1:  
Average throughput: 180.00 Mbit/s  
95th percentile per-packet one-way delay: 65.007 ms  
Loss rate: 1.56%  
-- Flow 2:  
Average throughput: 51.64 Mbit/s  
95th percentile per-packet one-way delay: 64.930 ms  
Loss rate: 1.41%  
-- Flow 3:  
Average throughput: 10.71 Mbit/s  
95th percentile per-packet one-way delay: 64.687 ms  
Loss rate: 0.31%

Run 3: Report of PCC-Vivace — Data Link

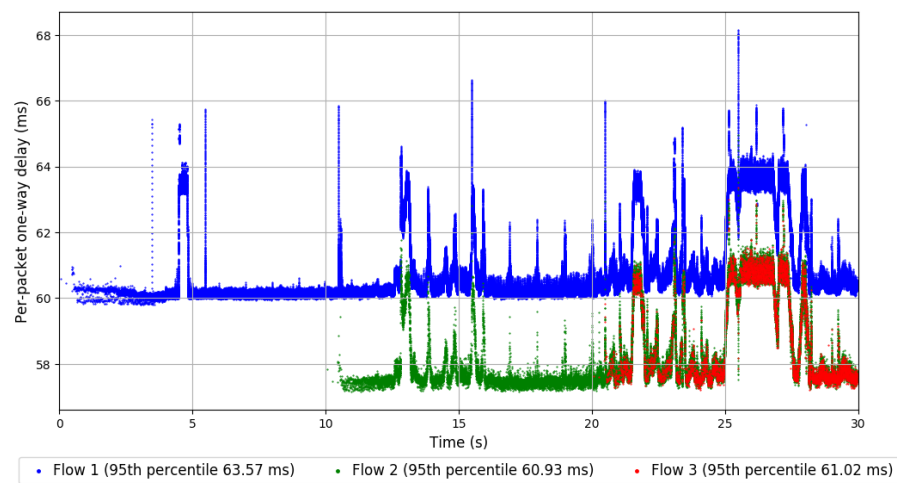
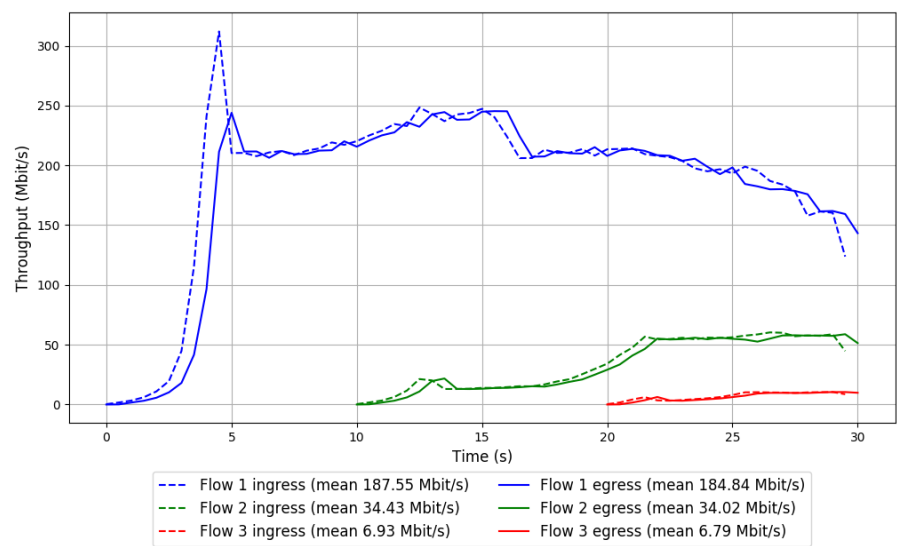


Run 4: Statistics of PCC-Vivace

Start at: 2019-01-25 02:51:25  
End at: 2019-01-25 02:51:55  
Local clock offset: -1.894 ms  
Remote clock offset: -42.052 ms

# Below is generated by plot.py at 2019-01-25 04:42:35  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 209.72 Mbit/s  
95th percentile per-packet one-way delay: 63.520 ms  
Loss rate: 1.43%  
-- Flow 1:  
Average throughput: 184.84 Mbit/s  
95th percentile per-packet one-way delay: 63.566 ms  
Loss rate: 1.45%  
-- Flow 2:  
Average throughput: 34.02 Mbit/s  
95th percentile per-packet one-way delay: 60.927 ms  
Loss rate: 1.21%  
-- Flow 3:  
Average throughput: 6.79 Mbit/s  
95th percentile per-packet one-way delay: 61.018 ms  
Loss rate: 1.93%

Run 4: Report of PCC-Vivace — Data Link

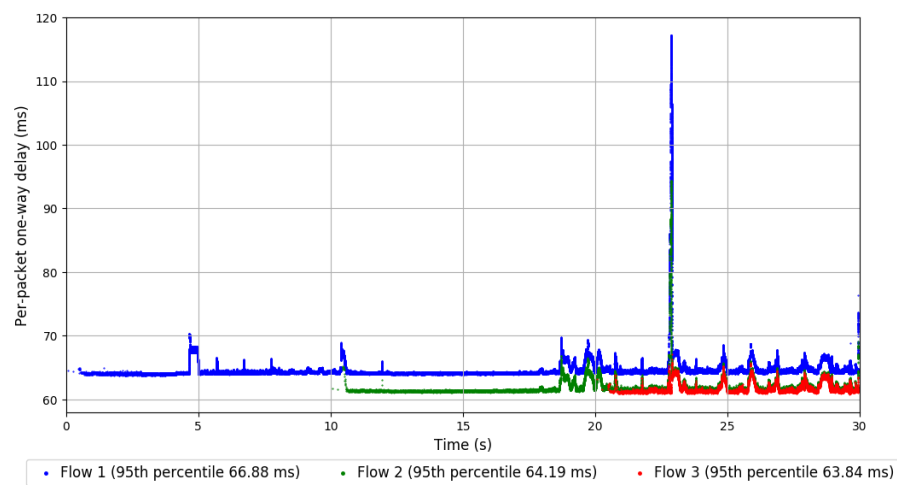
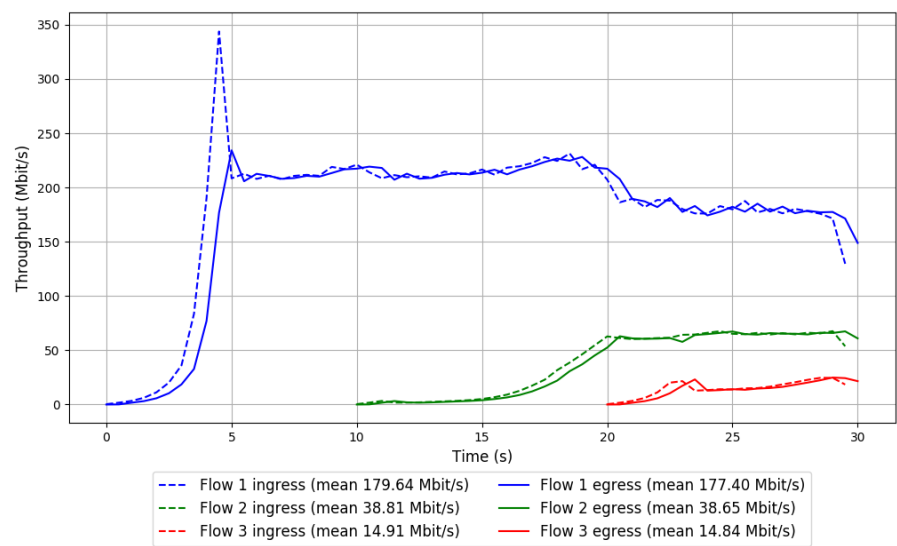


Run 5: Statistics of PCC-Vivace

Start at: 2019-01-25 03:22:24  
End at: 2019-01-25 03:22:54  
Local clock offset: -1.516 ms  
Remote clock offset: -39.084 ms

# Below is generated by plot.py at 2019-01-25 04:42:40  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 208.02 Mbit/s  
95th percentile per-packet one-way delay: 66.659 ms  
Loss rate: 1.12%  
-- Flow 1:  
Average throughput: 177.40 Mbit/s  
95th percentile per-packet one-way delay: 66.879 ms  
Loss rate: 1.24%  
-- Flow 2:  
Average throughput: 38.65 Mbit/s  
95th percentile per-packet one-way delay: 64.186 ms  
Loss rate: 0.40%  
-- Flow 3:  
Average throughput: 14.84 Mbit/s  
95th percentile per-packet one-way delay: 63.835 ms  
Loss rate: 0.48%

Run 5: Report of PCC-Vivace — Data Link



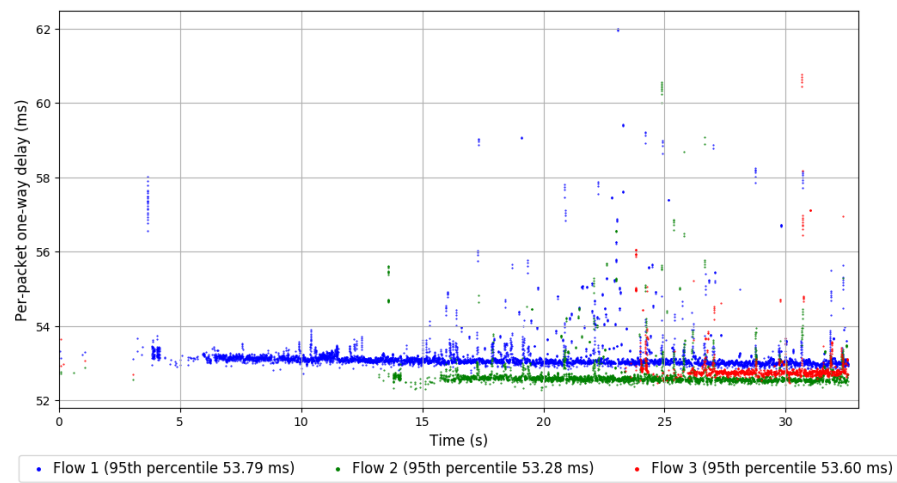
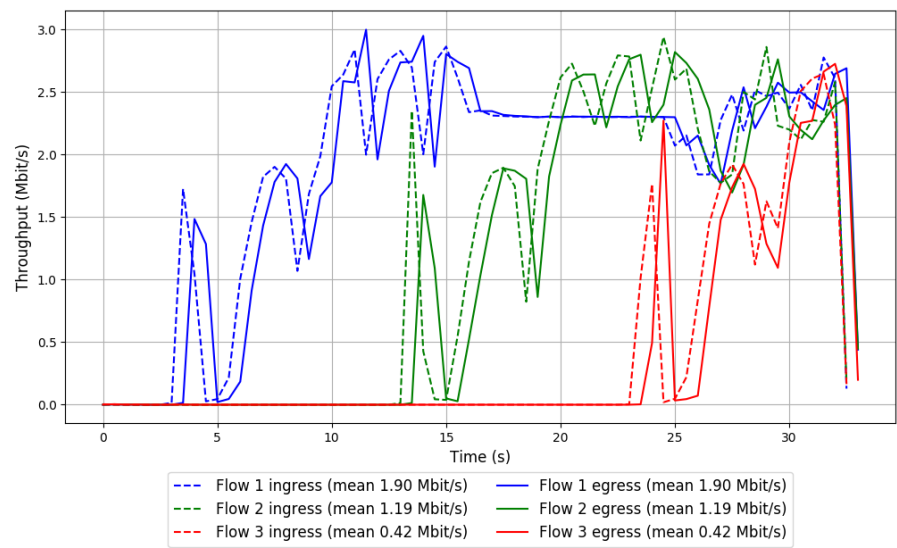


Run 1: Statistics of WebRTC media

Start at: 2019-01-25 01:22:31  
End at: 2019-01-25 01:23:01  
Local clock offset: 0.691 ms  
Remote clock offset: -45.146 ms

# Below is generated by plot.py at 2019-01-25 04:42:40  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.50 Mbit/s  
95th percentile per-packet one-way delay: 53.632 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 1.90 Mbit/s  
95th percentile per-packet one-way delay: 53.791 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.19 Mbit/s  
95th percentile per-packet one-way delay: 53.277 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.42 Mbit/s  
95th percentile per-packet one-way delay: 53.604 ms  
Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link

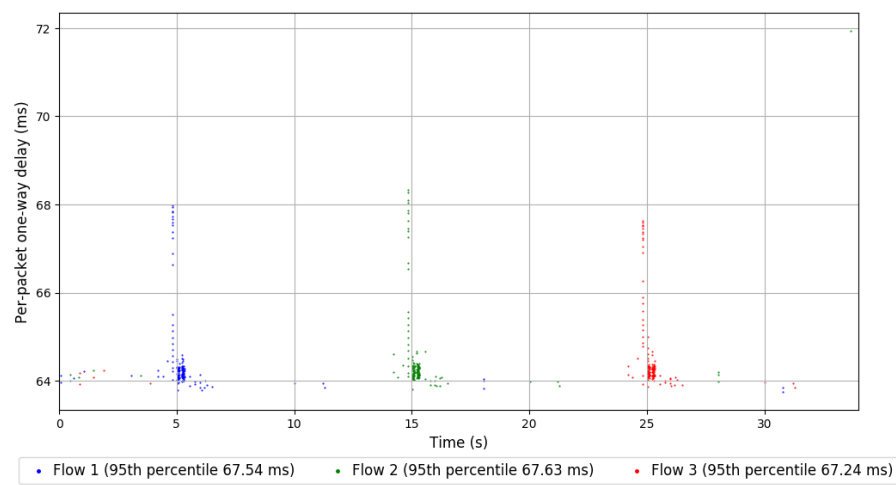
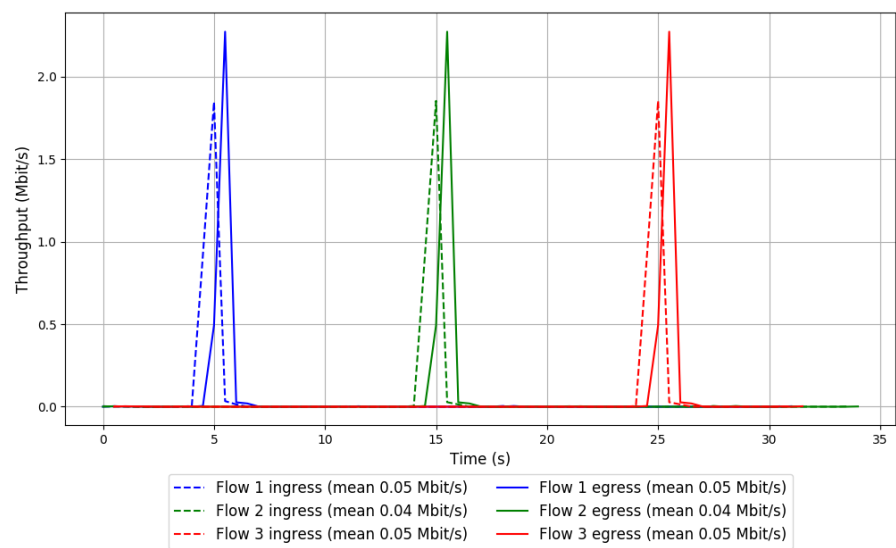


Run 2: Statistics of WebRTC media

Start at: 2019-01-25 01:52:57  
End at: 2019-01-25 01:53:27  
Local clock offset: -0.851 ms  
Remote clock offset: -33.586 ms

# Below is generated by plot.py at 2019-01-25 04:42:40  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.13 Mbit/s  
95th percentile per-packet one-way delay: 67.394 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 67.538 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.04 Mbit/s  
95th percentile per-packet one-way delay: 67.626 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 67.240 ms  
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

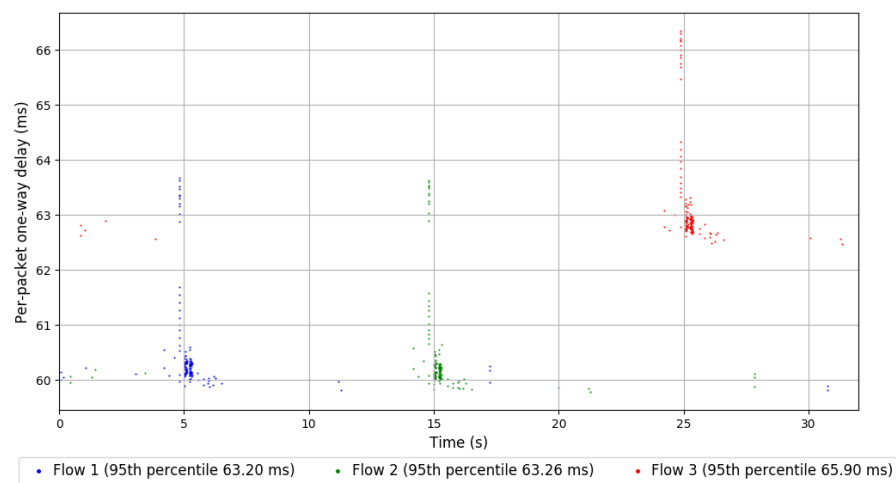
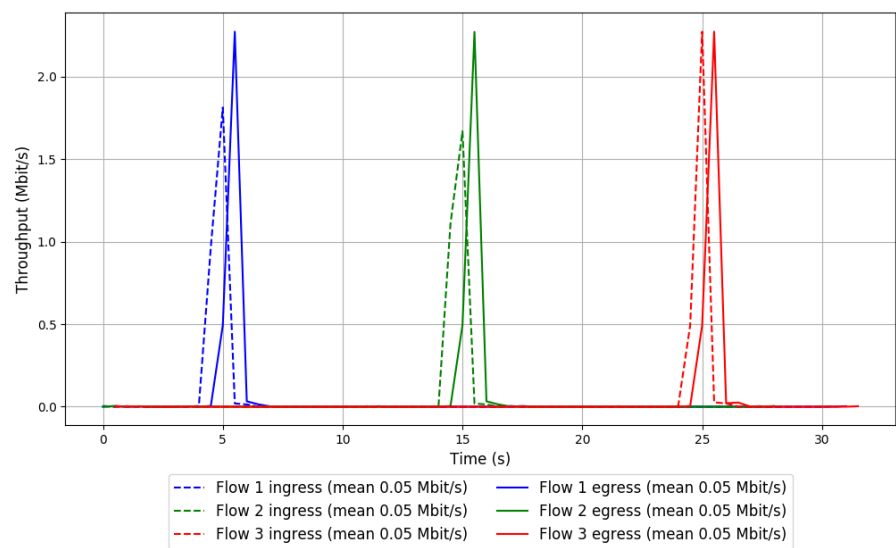


Run 3: Statistics of WebRTC media

Start at: 2019-01-25 02:29:19  
End at: 2019-01-25 02:29:49  
Local clock offset: -2.004 ms  
Remote clock offset: -39.705 ms

# Below is generated by plot.py at 2019-01-25 04:42:40  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.14 Mbit/s  
95th percentile per-packet one-way delay: 63.578 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 63.202 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 63.257 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 65.904 ms  
Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

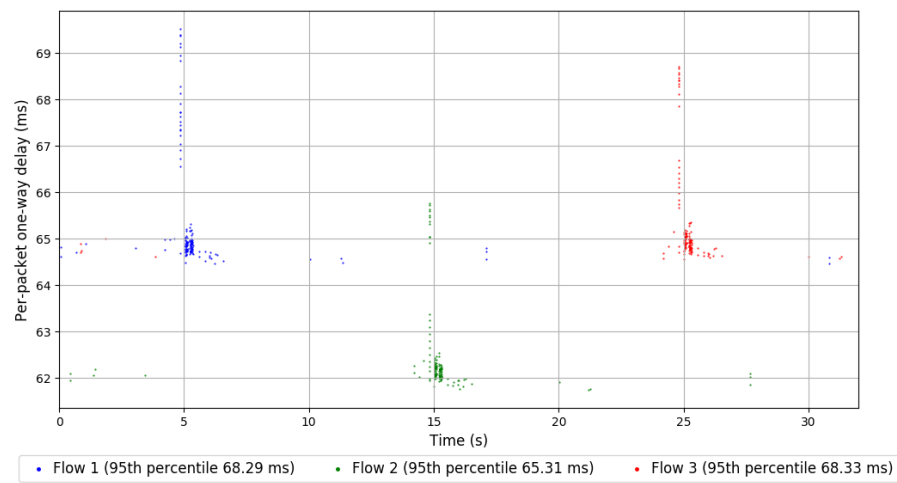
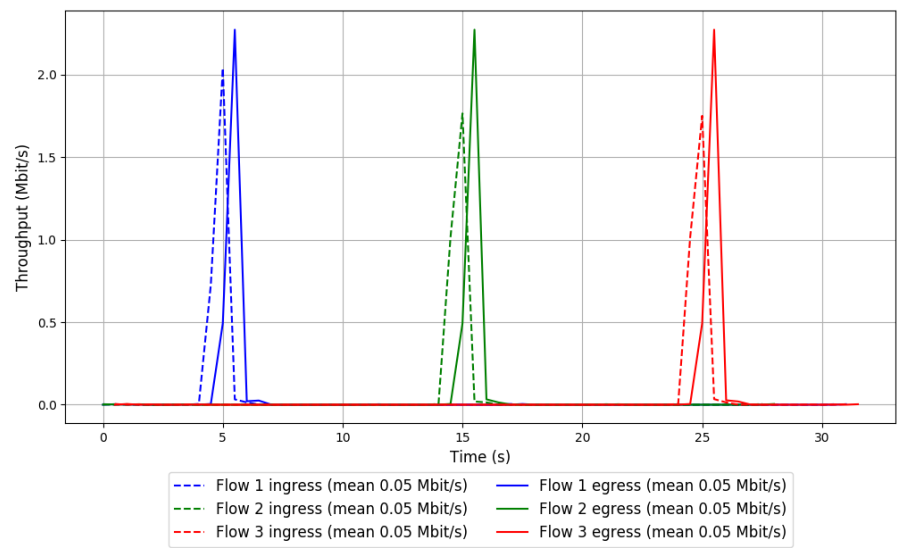


Run 4: Statistics of WebRTC media

Start at: 2019-01-25 03:05:02  
End at: 2019-01-25 03:05:32  
Local clock offset: -1.28 ms  
Remote clock offset: -37.431 ms

# Below is generated by plot.py at 2019-01-25 04:42:40  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.14 Mbit/s  
95th percentile per-packet one-way delay: 67.718 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 68.286 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 65.311 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 68.331 ms  
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link





Run 5: Statistics of WebRTC media

Start at: 2019-01-25 03:41:31  
End at: 2019-01-25 03:42:01  
Local clock offset: -1.544 ms  
Remote clock offset: -40.722 ms

# Below is generated by plot.py at 2019-01-25 04:42:40  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.14 Mbit/s  
95th percentile per-packet one-way delay: 64.428 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 65.462 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 65.368 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 62.989 ms  
Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

