

Pantheon Report

Generated at 2019-01-03 02:13:26 (UTC).

Data path: AWS India 1 on `ens5` (*local*) → India on `em1` (*remote*).

Repeated the test of 19 congestion control schemes 5 times.

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

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

System info:

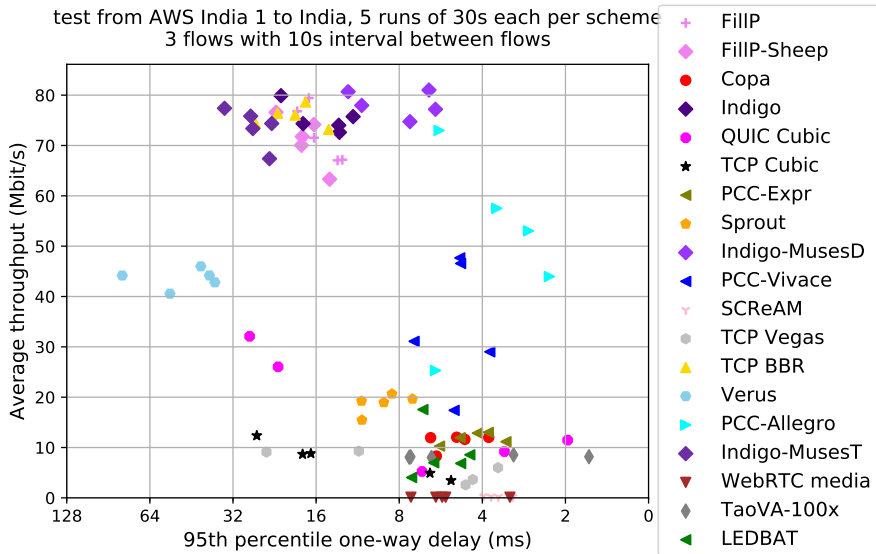
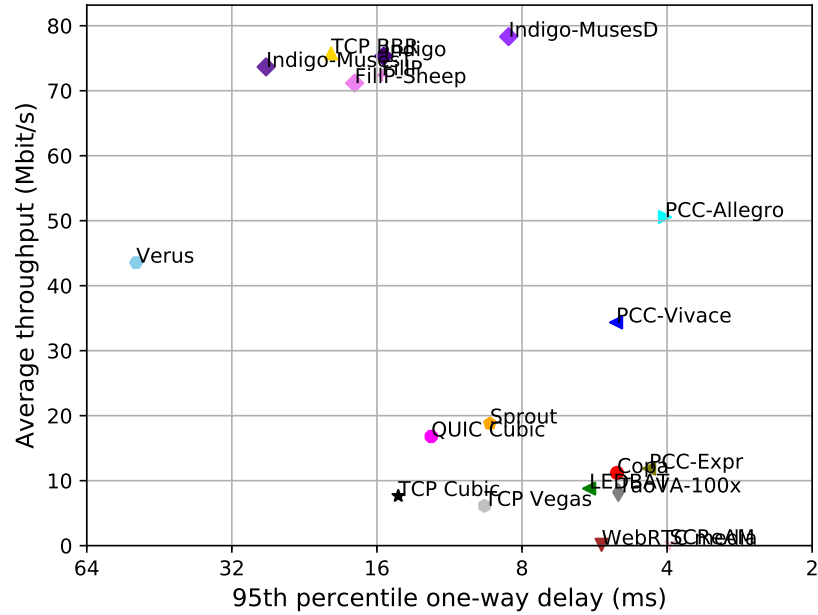
```
Linux 4.15.0-1029-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

```
branch: muses @ c654af0b7d59d4ef4b914cfac404e1fc2e96dc68
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 65ac1b19bbefed0c6349ae986009b4fa8643c40a
third_party/muses-refactored @ 31f8f0ba8ef8b1da76c2bc0cd0a7850c33ff64fb
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 1 to India, 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	43.39	36.41	25.76	14.32	24.94	19.67	15.91	18.39	18.24
Copa	5	6.95	5.28	2.16	5.15	5.12	4.97	75.46	72.78	83.82
TCP Cubic	5	4.05	2.78	5.27	17.32	4.56	10.23	6.44	2.34	4.50
FillP	5	40.67	34.61	26.35	15.40	18.11	11.77	29.84	37.99	42.18
FillP-Sheep	5	40.53	33.69	24.98	16.81	19.41	17.24	18.16	22.05	22.57
Indigo	5	42.46	36.65	27.06	14.79	16.30	15.43	29.38	28.14	55.05
Indigo-MusesD	5	74.87	4.27	1.93	8.58	7.64	6.89	31.45	53.65	67.15
Indigo-MusesT	5	43.20	35.98	22.22	25.08	28.05	32.65	18.54	20.91	23.03
LEDBAT	5	3.96	4.66	5.23	5.66	5.84	5.86	2.04	1.58	1.57
PCC-Allegro	5	40.23	13.68	3.79	4.03	4.08	4.54	11.24	12.00	12.25
PCC-Expr	5	6.64	5.45	4.80	4.36	4.35	4.39	35.08	32.79	33.06
QUIC Cubic	5	8.41	7.63	10.12	10.91	9.52	13.39	4.85	4.53	4.74
SCReAM	5	0.11	0.11	0.15	3.75	3.86	3.84	2.22	2.85	2.68
Sprout	5	9.95	9.00	8.65	9.09	9.43	9.89	4.31	5.55	6.30
TaoVA-100x	5	0.00	8.85	6.96	4.88	6.17	4.88	95.92	68.09	67.80
TCP Vegas	5	3.26	3.14	2.30	7.22	13.18	4.35	2.85	3.44	2.51
Verus	5	25.26	20.60	18.37	37.86	35.29	56.98	60.99	44.47	56.98
PCC-Vivace	5	26.33	10.02	4.15	5.09	5.12	4.99	8.10	8.42	8.16
WebRTC media	5	0.05	0.04	0.05	5.42	5.31	5.58	11.46	6.20	4.00

Run 1: Statistics of TCP BBR

Start at: 2019-01-03 00:14:18

End at: 2019-01-03 00:14:48

Local clock offset: 0.87 ms

Remote clock offset: 2.99 ms

Below is generated by plot.py at 2019-01-03 02:07:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.04 Mbit/s

95th percentile per-packet one-way delay: 19.067 ms

Loss rate: 13.90%

-- Flow 1:

Average throughput: 54.21 Mbit/s

95th percentile per-packet one-way delay: 18.561 ms

Loss rate: 13.89%

-- Flow 2:

Average throughput: 33.05 Mbit/s

95th percentile per-packet one-way delay: 20.648 ms

Loss rate: 14.01%

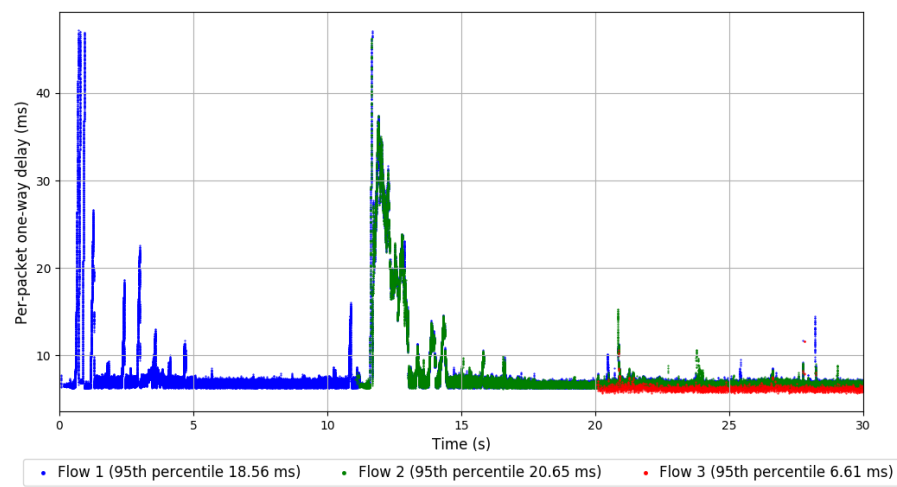
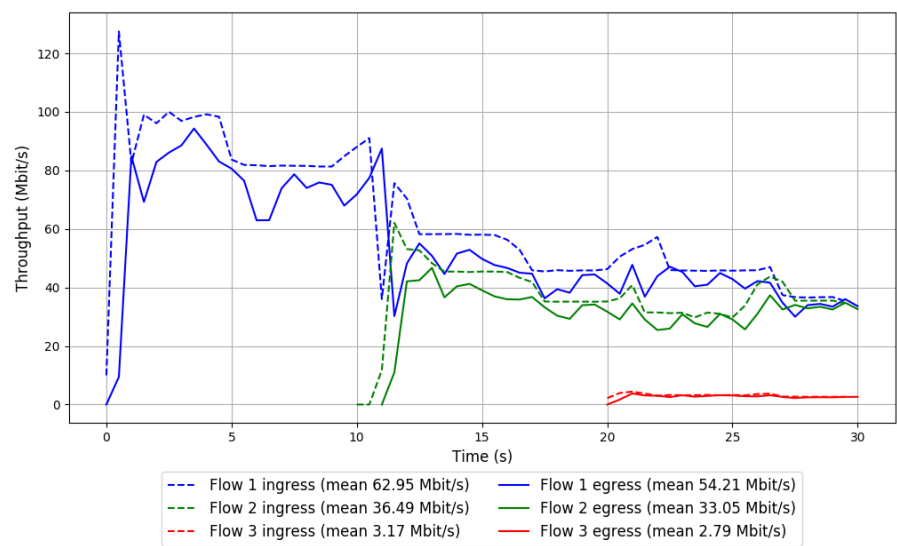
-- Flow 3:

Average throughput: 2.79 Mbit/s

95th percentile per-packet one-way delay: 6.609 ms

Loss rate: 11.97%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2019-01-03 00:39:34

End at: 2019-01-03 00:40:04

Local clock offset: -0.759 ms

Remote clock offset: 2.465 ms

Below is generated by plot.py at 2019-01-03 02:07:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.41 Mbit/s

95th percentile per-packet one-way delay: 22.060 ms

Loss rate: 18.33%

-- Flow 1:

Average throughput: 37.12 Mbit/s

95th percentile per-packet one-way delay: 13.035 ms

Loss rate: 14.58%

-- Flow 2:

Average throughput: 38.06 Mbit/s

95th percentile per-packet one-way delay: 31.153 ms

Loss rate: 20.76%

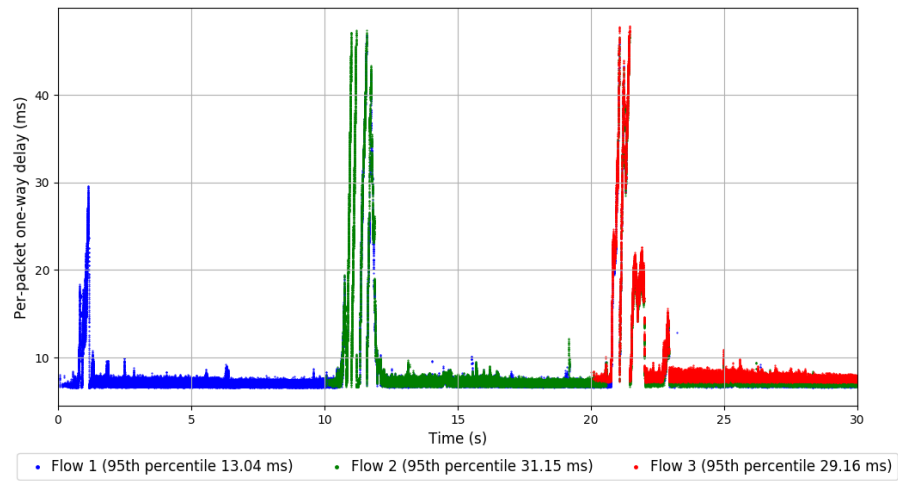
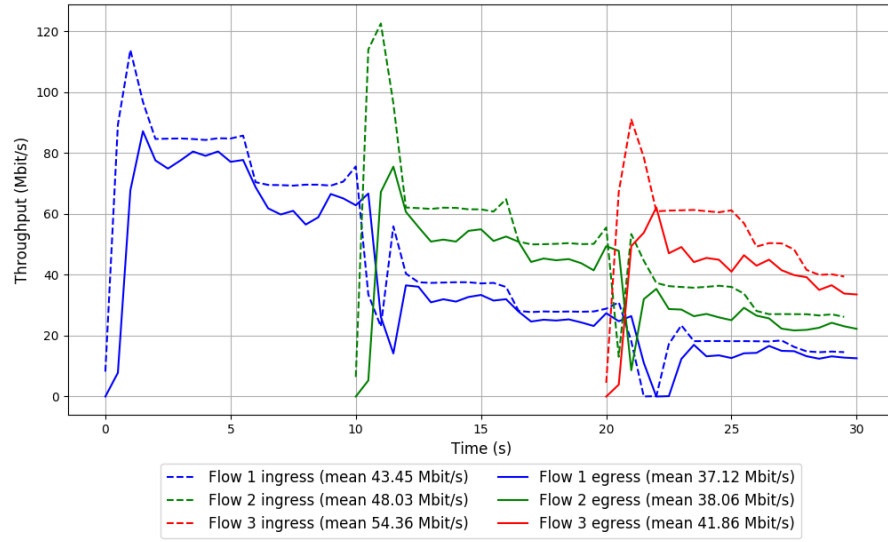
-- Flow 3:

Average throughput: 41.86 Mbit/s

95th percentile per-packet one-way delay: 29.162 ms

Loss rate: 23.01%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2019-01-03 01:04:03

End at: 2019-01-03 01:04:33

Local clock offset: 1.822 ms

Remote clock offset: 2.685 ms

Below is generated by plot.py at 2019-01-03 02:07:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.19 Mbit/s

95th percentile per-packet one-way delay: 14.407 ms

Loss rate: 18.18%

-- Flow 1:

Average throughput: 40.80 Mbit/s

95th percentile per-packet one-way delay: 8.580 ms

Loss rate: 17.82%

-- Flow 2:

Average throughput: 46.28 Mbit/s

95th percentile per-packet one-way delay: 20.411 ms

Loss rate: 18.78%

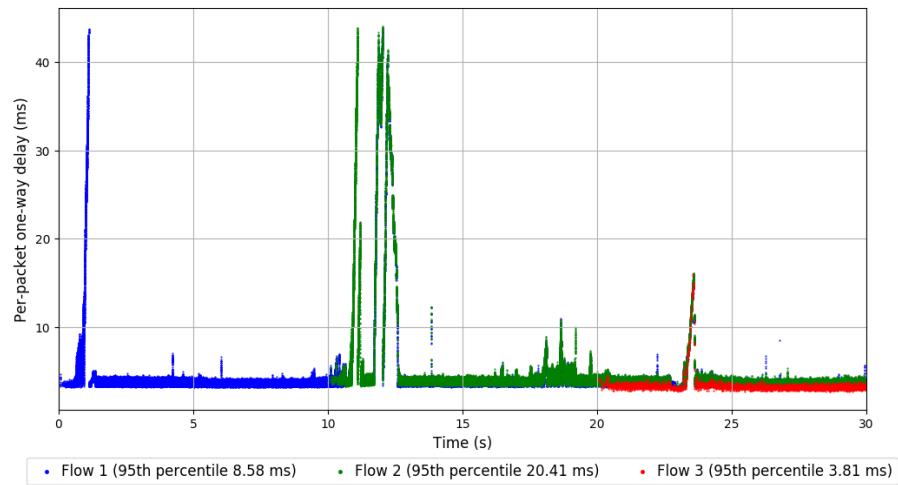
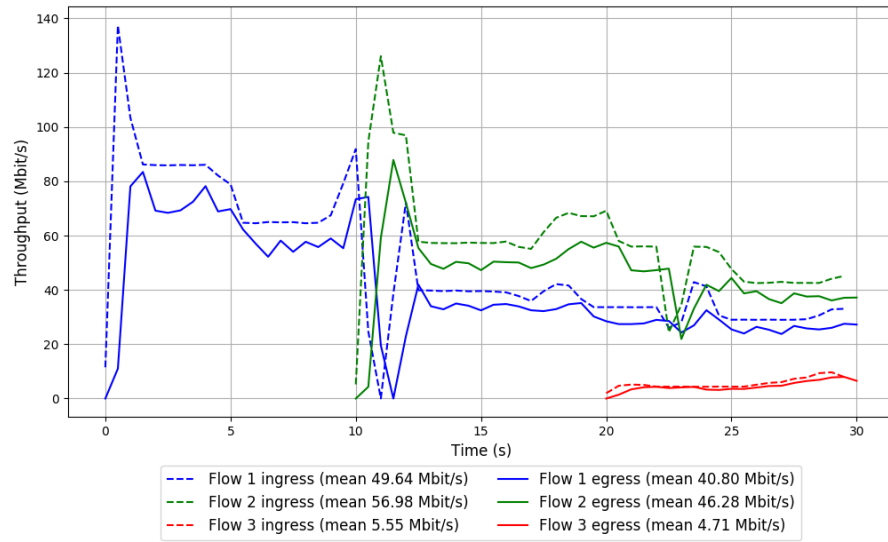
-- Flow 3:

Average throughput: 4.71 Mbit/s

95th percentile per-packet one-way delay: 3.814 ms

Loss rate: 15.24%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2019-01-03 01:28:16

End at: 2019-01-03 01:28:46

Local clock offset: 0.377 ms

Remote clock offset: 2.344 ms

Below is generated by plot.py at 2019-01-03 02:08:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.64 Mbit/s

95th percentile per-packet one-way delay: 17.464 ms

Loss rate: 18.29%

-- Flow 1:

Average throughput: 47.53 Mbit/s

95th percentile per-packet one-way delay: 14.756 ms

Loss rate: 16.44%

-- Flow 2:

Average throughput: 24.66 Mbit/s

95th percentile per-packet one-way delay: 21.251 ms

Loss rate: 19.40%

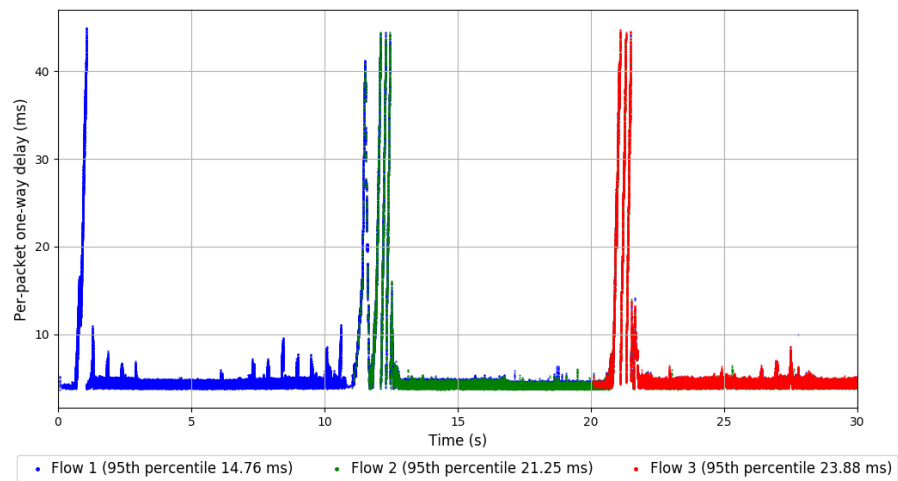
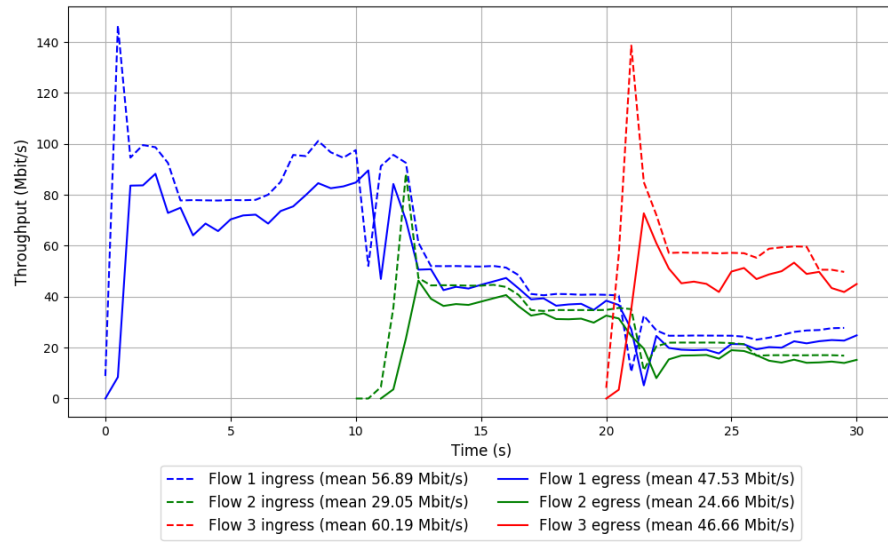
-- Flow 3:

Average throughput: 46.66 Mbit/s

95th percentile per-packet one-way delay: 23.882 ms

Loss rate: 22.48%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2019-01-03 01:52:11

End at: 2019-01-03 01:52:41

Local clock offset: -1.911 ms

Remote clock offset: 1.693 ms

Below is generated by plot.py at 2019-01-03 02:08:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.44 Mbit/s

95th percentile per-packet one-way delay: 26.586 ms

Loss rate: 17.86%

-- Flow 1:

Average throughput: 37.29 Mbit/s

95th percentile per-packet one-way delay: 16.665 ms

Loss rate: 16.82%

-- Flow 2:

Average throughput: 40.02 Mbit/s

95th percentile per-packet one-way delay: 31.227 ms

Loss rate: 19.01%

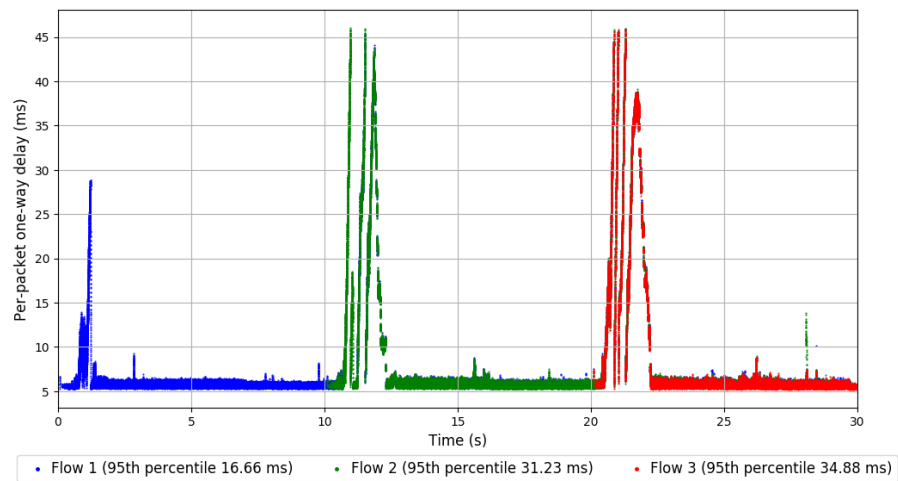
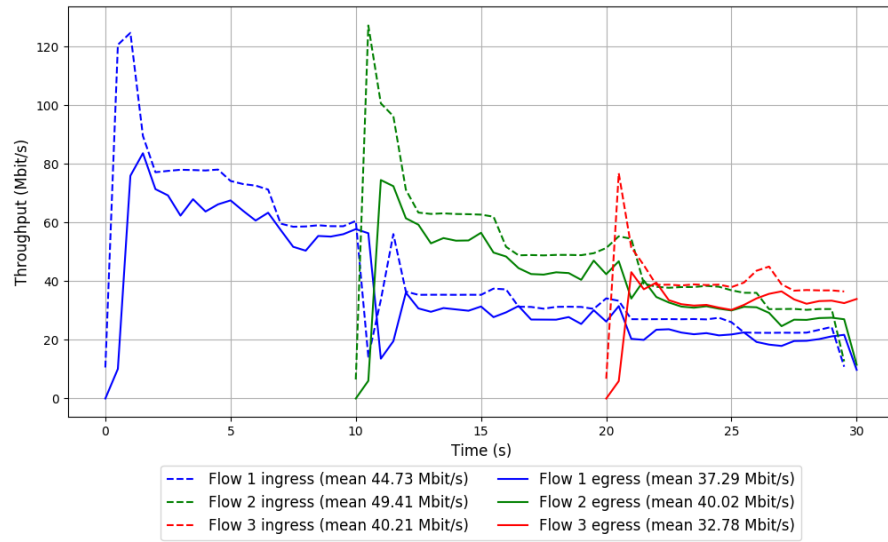
-- Flow 3:

Average throughput: 32.78 Mbit/s

95th percentile per-packet one-way delay: 34.882 ms

Loss rate: 18.49%

Run 5: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2019-01-03 00:05:43

End at: 2019-01-03 00:06:13

Local clock offset: 0.661 ms

Remote clock offset: 1.603 ms

Below is generated by plot.py at 2019-01-03 02:08:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.30 Mbit/s

95th percentile per-packet one-way delay: 5.867 ms

Loss rate: 71.22%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 5.991 ms

Loss rate: 98.60%

-- Flow 2:

Average throughput: 9.46 Mbit/s

95th percentile per-packet one-way delay: 6.646 ms

Loss rate: 71.23%

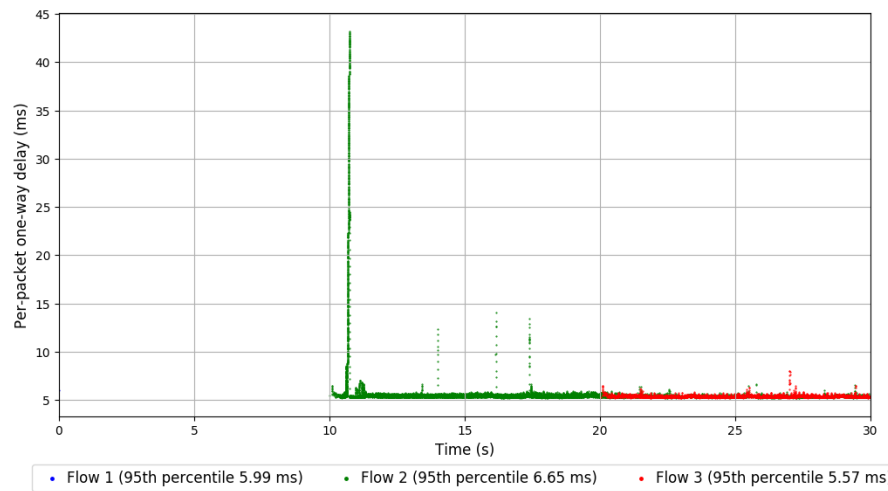
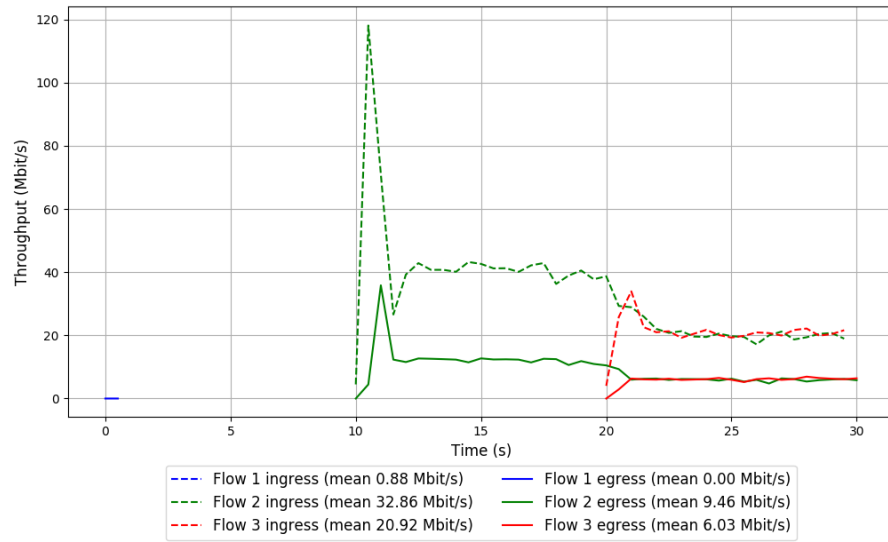
-- Flow 3:

Average throughput: 6.03 Mbit/s

95th percentile per-packet one-way delay: 5.569 ms

Loss rate: 71.17%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2019-01-03 00:30:36

End at: 2019-01-03 00:31:06

Local clock offset: 1.766 ms

Remote clock offset: 2.034 ms

Below is generated by plot.py at 2019-01-03 02:08:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.04 Mbit/s

95th percentile per-packet one-way delay: 4.956 ms

Loss rate: 70.76%

-- Flow 1:

Average throughput: 9.62 Mbit/s

95th percentile per-packet one-way delay: 4.994 ms

Loss rate: 69.00%

-- Flow 2:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 4.845 ms

Loss rate: 74.02%

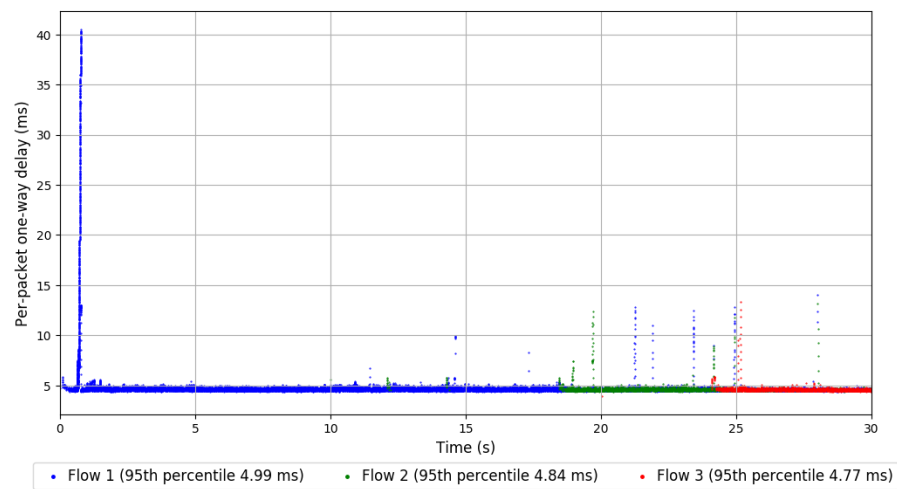
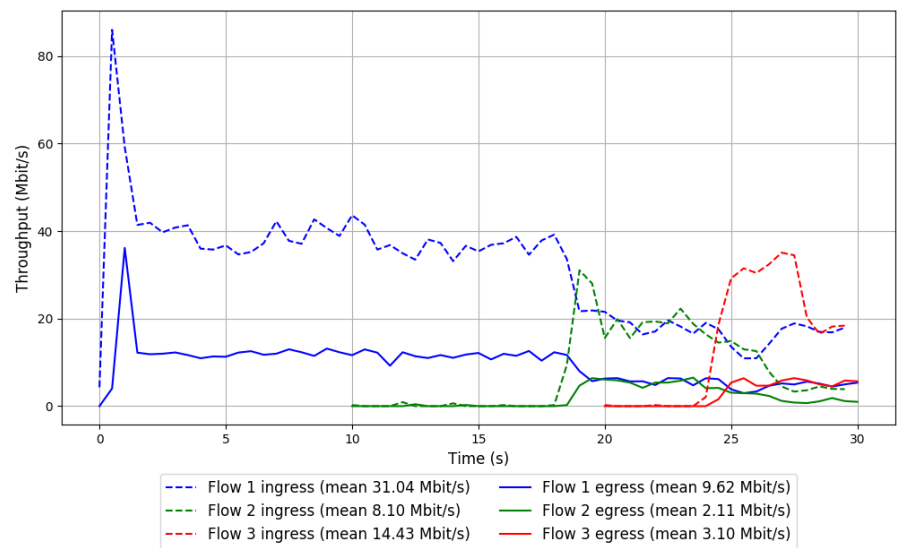
-- Flow 3:

Average throughput: 3.10 Mbit/s

95th percentile per-packet one-way delay: 4.771 ms

Loss rate: 78.50%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2019-01-03 00:55:30

End at: 2019-01-03 00:56:00

Local clock offset: 0.403 ms

Remote clock offset: 2.514 ms

Below is generated by plot.py at 2019-01-03 02:08:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.96 Mbit/s

95th percentile per-packet one-way delay: 6.157 ms

Loss rate: 71.16%

-- Flow 1:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 6.221 ms

Loss rate: 68.45%

-- Flow 2:

Average throughput: 5.26 Mbit/s

95th percentile per-packet one-way delay: 6.058 ms

Loss rate: 74.27%

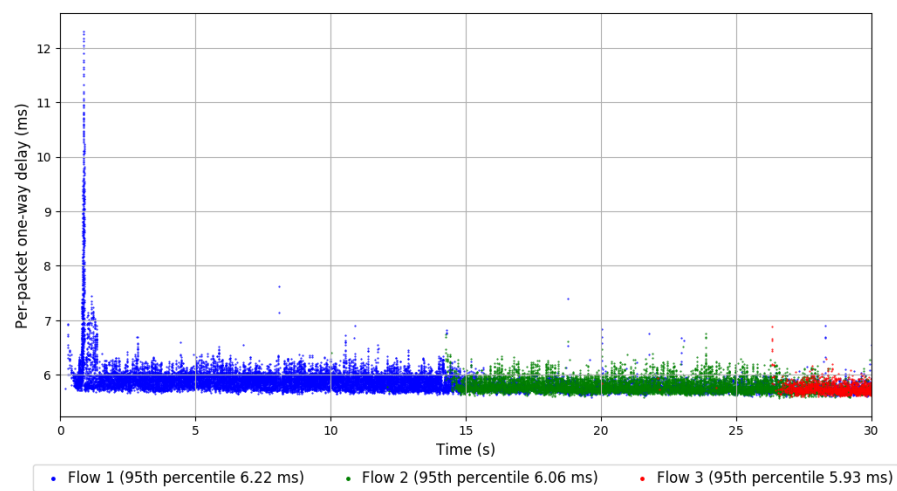
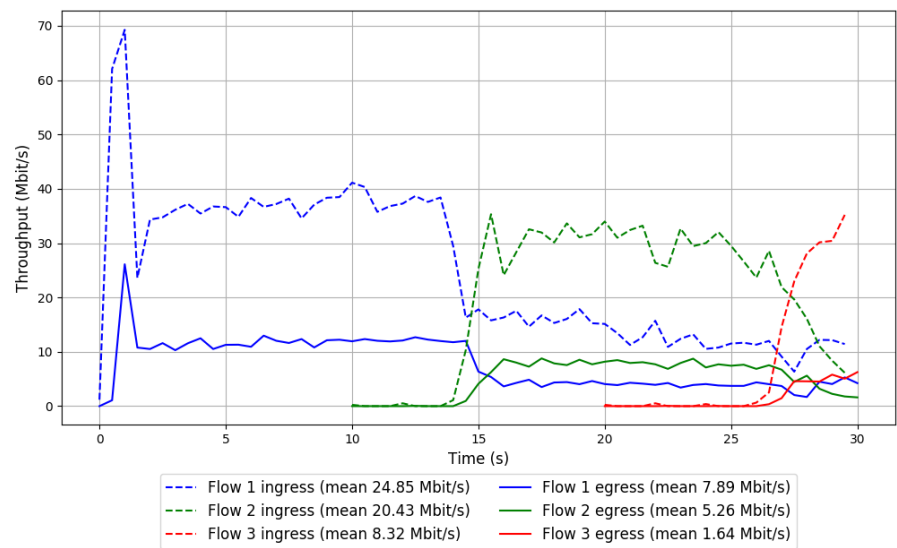
-- Flow 3:

Average throughput: 1.64 Mbit/s

95th percentile per-packet one-way delay: 5.928 ms

Loss rate: 80.27%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2019-01-03 01:19:42

End at: 2019-01-03 01:20:12

Local clock offset: 0.132 ms

Remote clock offset: 2.527 ms

Below is generated by plot.py at 2019-01-03 02:08:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.62 Mbit/s

95th percentile per-packet one-way delay: 4.627 ms

Loss rate: 70.50%

-- Flow 1:

Average throughput: 7.80 Mbit/s

95th percentile per-packet one-way delay: 4.684 ms

Loss rate: 69.86%

-- Flow 2:

Average throughput: 5.74 Mbit/s

95th percentile per-packet one-way delay: 4.487 ms

Loss rate: 71.70%

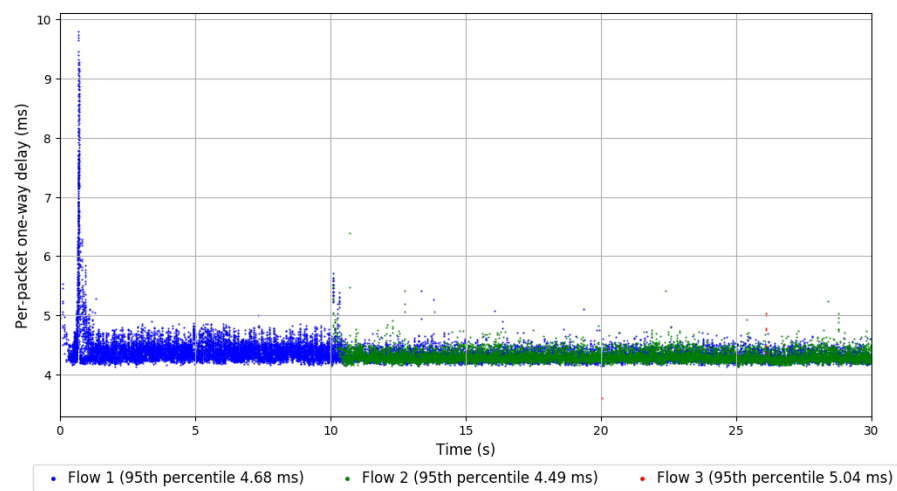
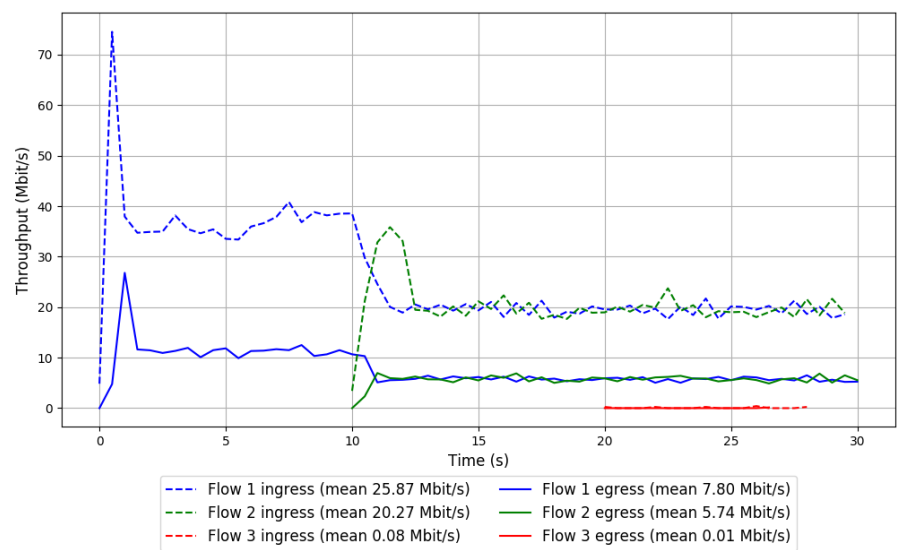
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 5.036 ms

Loss rate: 89.34%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2019-01-03 01:43:33

End at: 2019-01-03 01:44:03

Local clock offset: 0.067 ms

Remote clock offset: 1.666 ms

Below is generated by plot.py at 2019-01-03 02:08:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.01 Mbit/s

95th percentile per-packet one-way delay: 3.792 ms

Loss rate: 71.68%

-- Flow 1:

Average throughput: 9.45 Mbit/s

95th percentile per-packet one-way delay: 3.866 ms

Loss rate: 71.37%

-- Flow 2:

Average throughput: 3.85 Mbit/s

95th percentile per-packet one-way delay: 3.557 ms

Loss rate: 72.70%

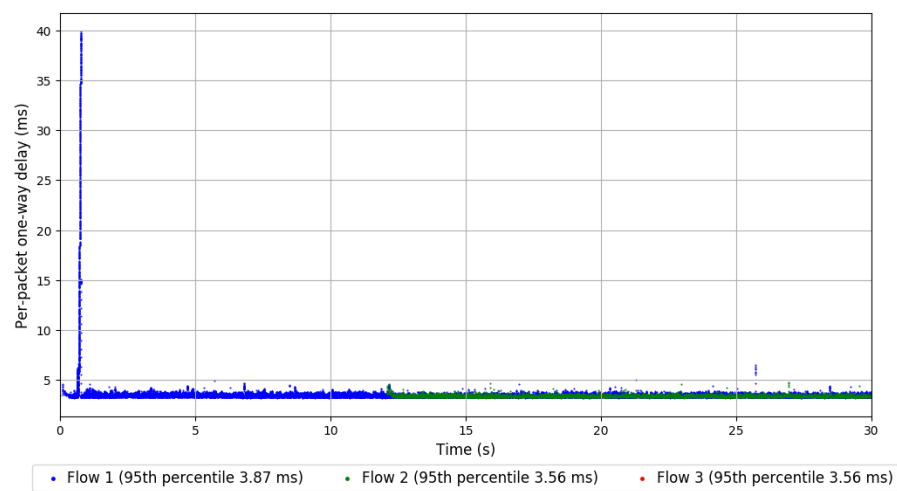
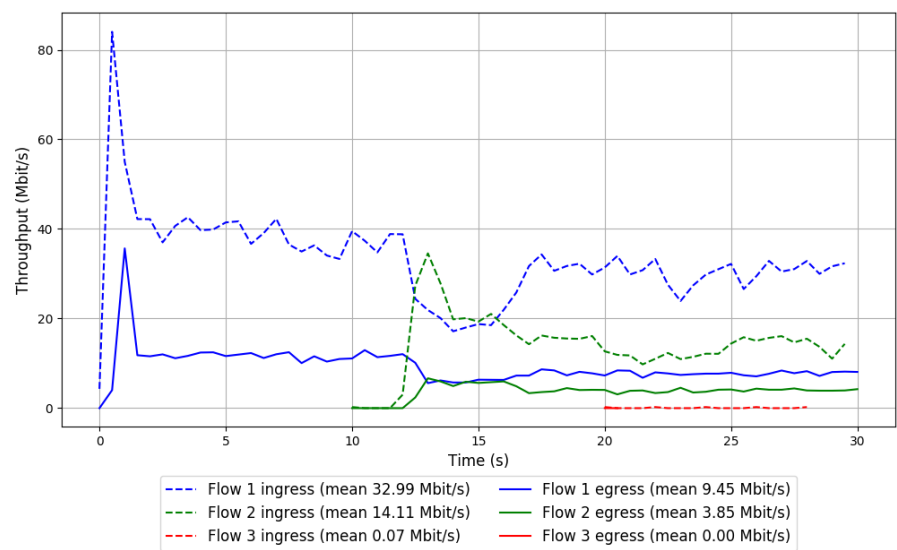
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 3.560 ms

Loss rate: 99.83%

Run 5: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2019-01-03 00:11:56

End at: 2019-01-03 00:12:26

Local clock offset: 4.201 ms

Remote clock offset: 2.615 ms

Below is generated by plot.py at 2019-01-03 02:08:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.81 Mbit/s

95th percentile per-packet one-way delay: 16.716 ms

Loss rate: 5.05%

-- Flow 1:

Average throughput: 5.54 Mbit/s

95th percentile per-packet one-way delay: 24.379 ms

Loss rate: 7.30%

-- Flow 2:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 2.586 ms

Loss rate: 1.04%

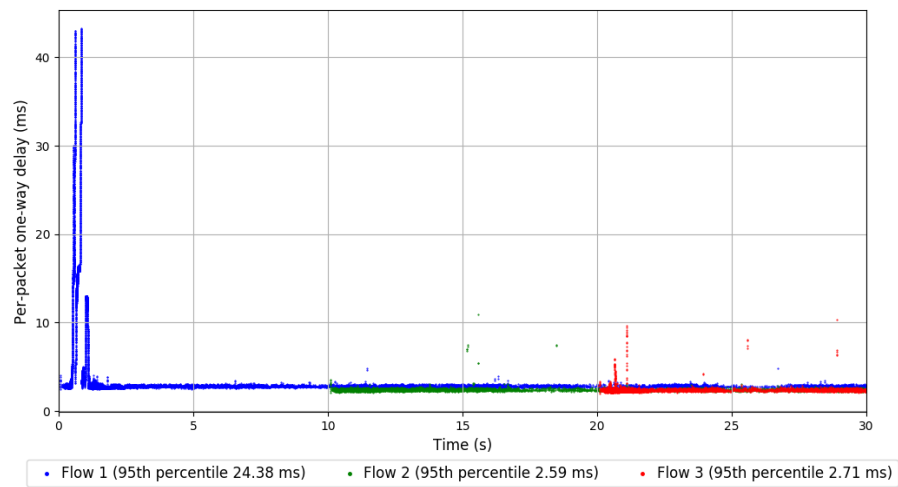
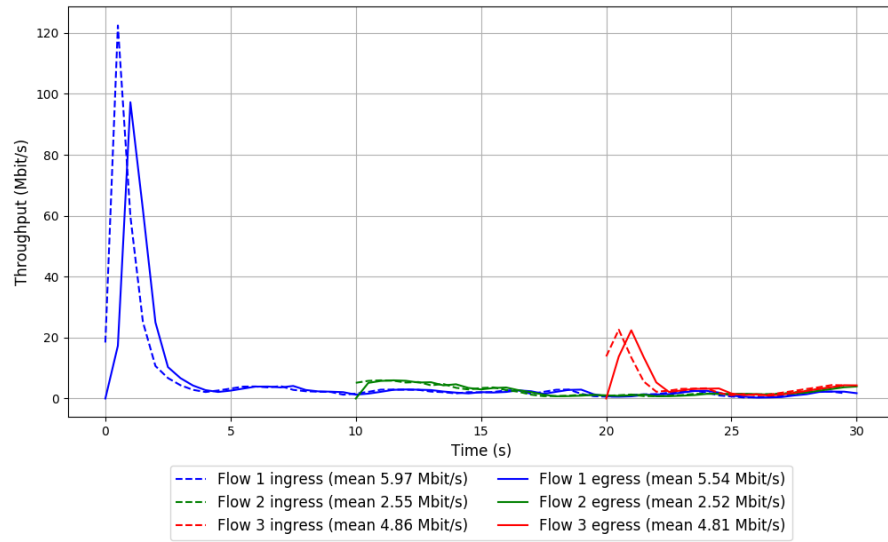
-- Flow 3:

Average throughput: 4.81 Mbit/s

95th percentile per-packet one-way delay: 2.705 ms

Loss rate: 0.97%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2019-01-03 00:37:06

End at: 2019-01-03 00:37:36

Local clock offset: 1.815 ms

Remote clock offset: 2.563 ms

Below is generated by plot.py at 2019-01-03 02:08:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.36 Mbit/s

95th percentile per-packet one-way delay: 26.240 ms

Loss rate: 8.17%

-- Flow 1:

Average throughput: 6.00 Mbit/s

95th percentile per-packet one-way delay: 25.201 ms

Loss rate: 8.53%

-- Flow 2:

Average throughput: 3.42 Mbit/s

95th percentile per-packet one-way delay: 5.183 ms

Loss rate: 2.87%

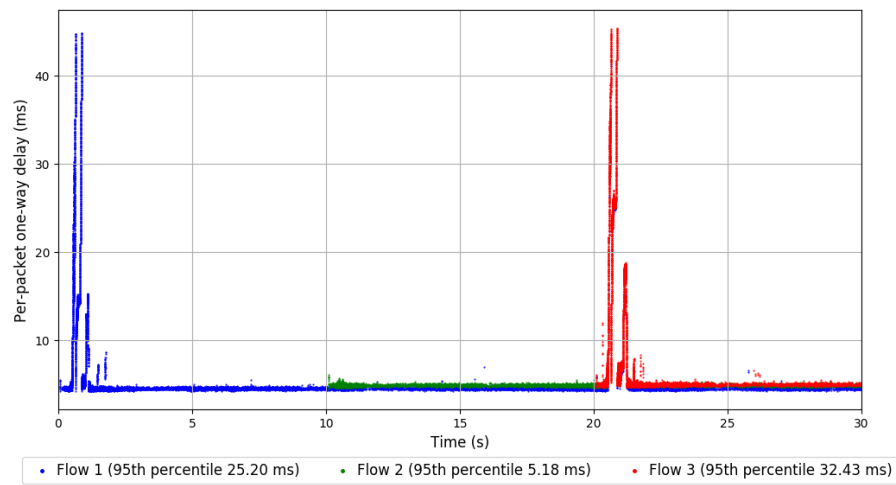
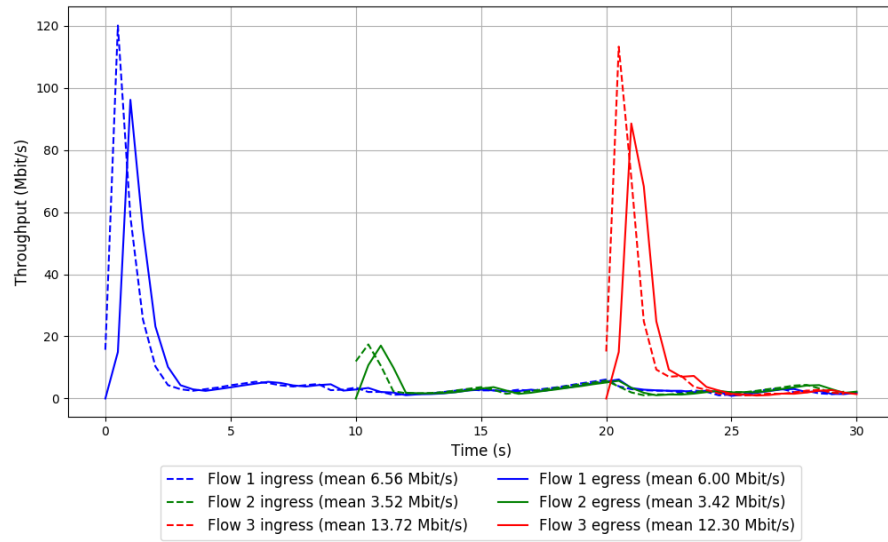
-- Flow 3:

Average throughput: 12.30 Mbit/s

95th percentile per-packet one-way delay: 32.434 ms

Loss rate: 10.38%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2019-01-03 01:01:43

End at: 2019-01-03 01:02:13

Local clock offset: 1.23 ms

Remote clock offset: 2.735 ms

Below is generated by plot.py at 2019-01-03 02:08:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.68 Mbit/s

95th percentile per-packet one-way delay: 17.911 ms

Loss rate: 5.99%

-- Flow 1:

Average throughput: 5.61 Mbit/s

95th percentile per-packet one-way delay: 25.582 ms

Loss rate: 7.92%

-- Flow 2:

Average throughput: 3.27 Mbit/s

95th percentile per-packet one-way delay: 4.229 ms

Loss rate: 2.54%

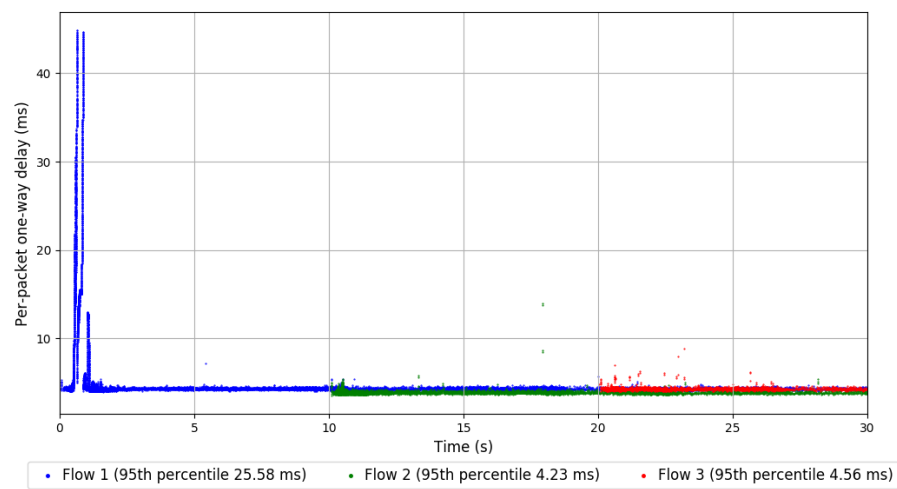
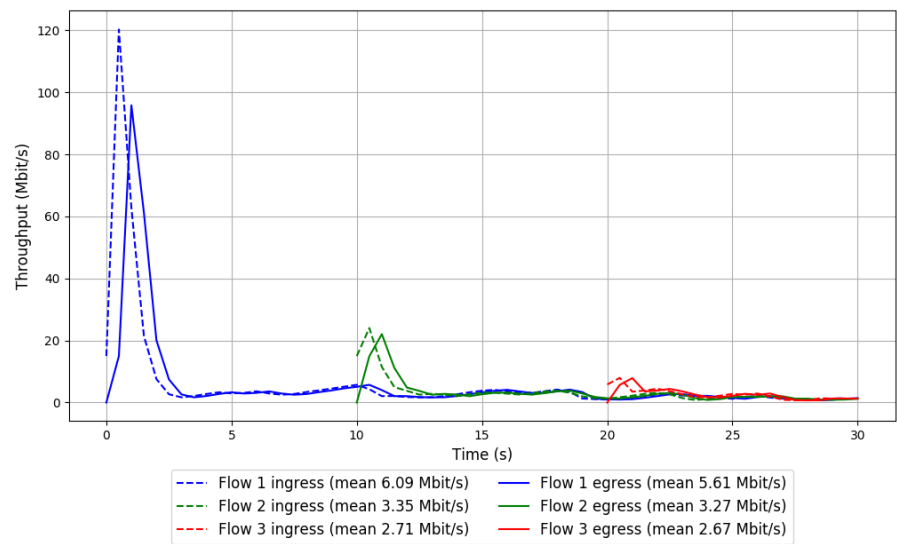
-- Flow 3:

Average throughput: 2.67 Mbit/s

95th percentile per-packet one-way delay: 4.560 ms

Loss rate: 1.46%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2019-01-03 01:25:56

End at: 2019-01-03 01:26:26

Local clock offset: -1.245 ms

Remote clock offset: 1.652 ms

Below is generated by plot.py at 2019-01-03 02:08:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.45 Mbit/s

95th percentile per-packet one-way delay: 5.193 ms

Loss rate: 5.59%

-- Flow 1:

Average throughput: 1.52 Mbit/s

95th percentile per-packet one-way delay: 5.198 ms

Loss rate: 6.11%

-- Flow 2:

Average throughput: 1.67 Mbit/s

95th percentile per-packet one-way delay: 5.119 ms

Loss rate: 3.31%

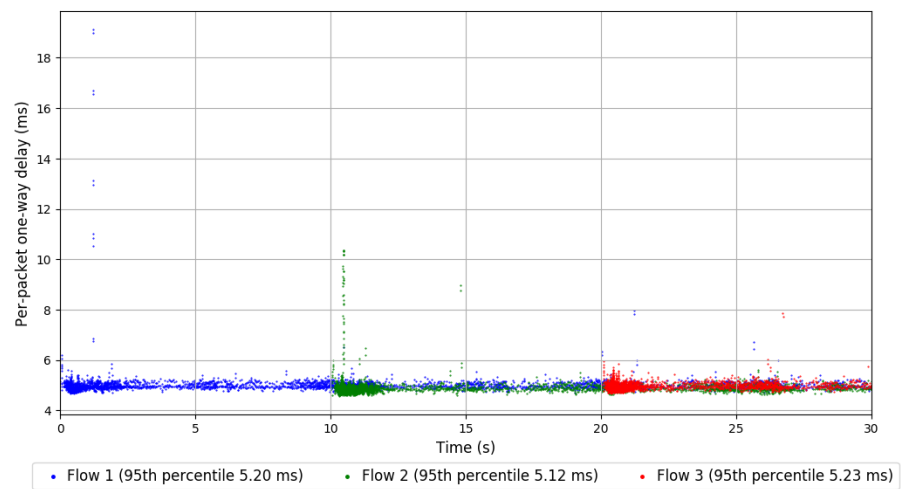
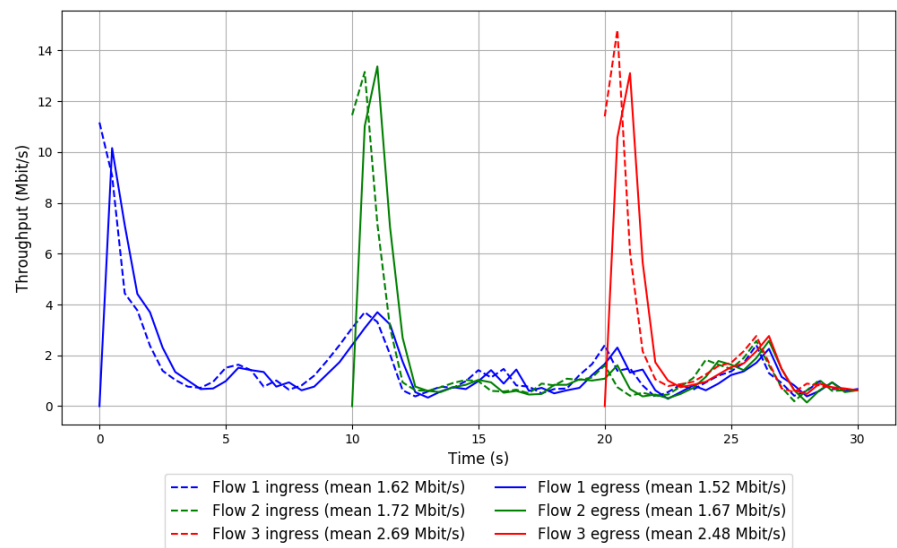
-- Flow 3:

Average throughput: 2.48 Mbit/s

95th percentile per-packet one-way delay: 5.226 ms

Loss rate: 7.57%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2019-01-03 01:49:49

End at: 2019-01-03 01:50:19

Local clock offset: -1.673 ms

Remote clock offset: 2.384 ms

Below is generated by plot.py at 2019-01-03 02:08:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.92 Mbit/s

95th percentile per-packet one-way delay: 6.190 ms

Loss rate: 2.12%

-- Flow 1:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 6.260 ms

Loss rate: 2.32%

-- Flow 2:

Average throughput: 3.00 Mbit/s

95th percentile per-packet one-way delay: 5.686 ms

Loss rate: 1.94%

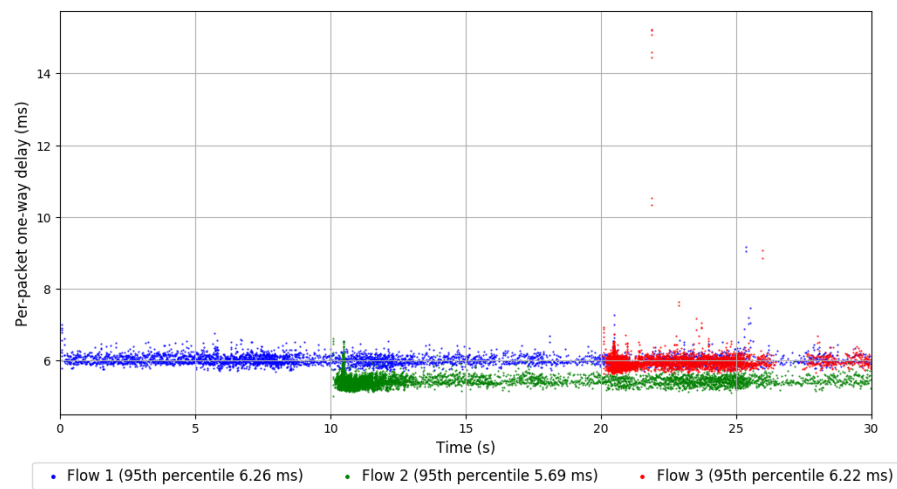
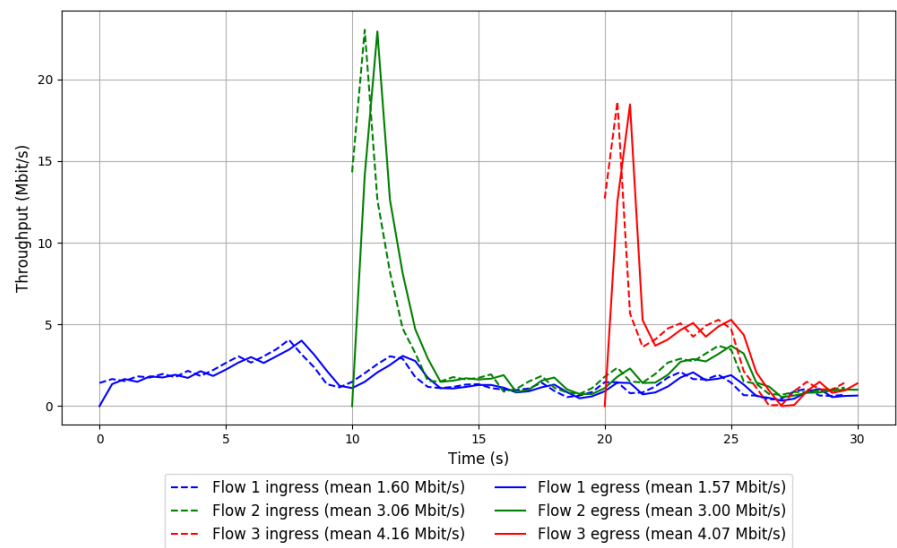
-- Flow 3:

Average throughput: 4.07 Mbit/s

95th percentile per-packet one-way delay: 6.225 ms

Loss rate: 2.14%

Run 5: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2019-01-03 00:04:21

End at: 2019-01-03 00:04:51

Local clock offset: 3.715 ms

Remote clock offset: 1.365 ms

Below is generated by plot.py at 2019-01-03 02:08:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.05 Mbit/s

95th percentile per-packet one-way delay: 13.372 ms

Loss rate: 36.24%

-- Flow 1:

Average throughput: 36.25 Mbit/s

95th percentile per-packet one-way delay: 13.050 ms

Loss rate: 32.05%

-- Flow 2:

Average throughput: 34.08 Mbit/s

95th percentile per-packet one-way delay: 16.890 ms

Loss rate: 40.21%

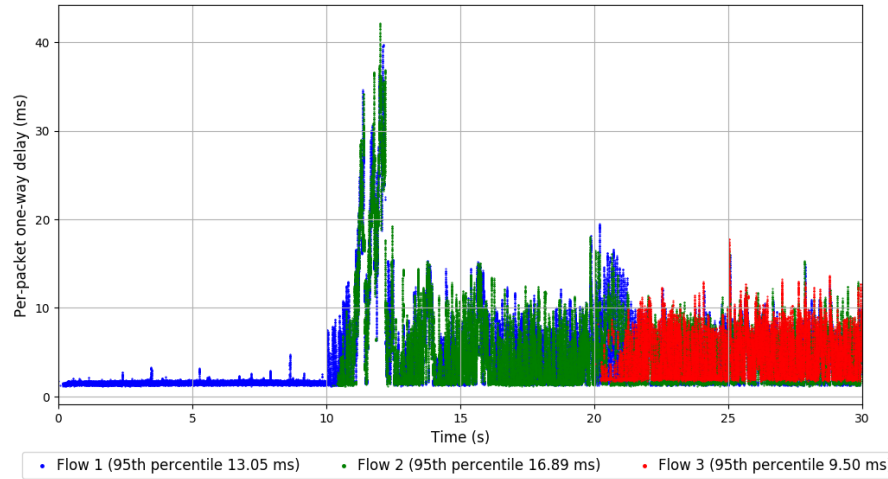
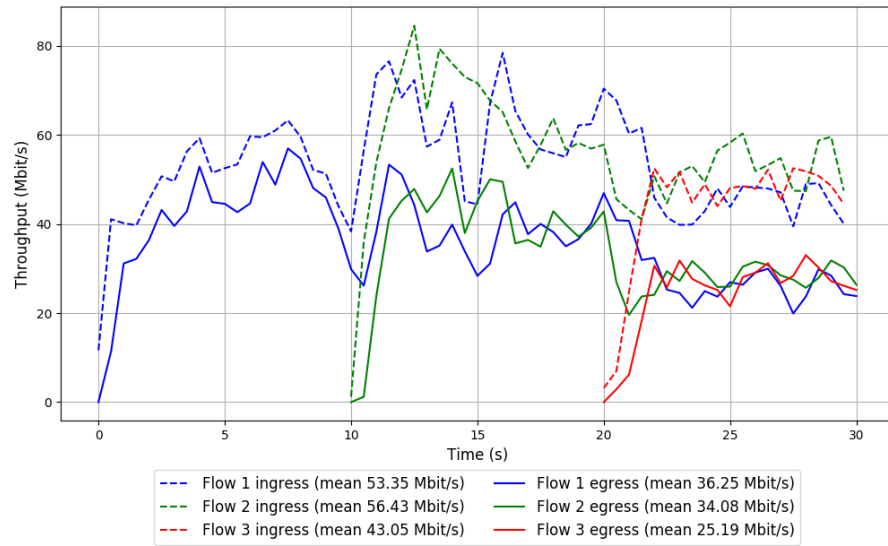
-- Flow 3:

Average throughput: 25.19 Mbit/s

95th percentile per-packet one-way delay: 9.500 ms

Loss rate: 41.47%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2019-01-03 00:29:12

End at: 2019-01-03 00:29:42

Local clock offset: 1.722 ms

Remote clock offset: 1.845 ms

Below is generated by plot.py at 2019-01-03 02:08:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.53 Mbit/s

95th percentile per-packet one-way delay: 16.272 ms

Loss rate: 33.94%

-- Flow 1:

Average throughput: 39.73 Mbit/s

95th percentile per-packet one-way delay: 16.798 ms

Loss rate: 28.65%

-- Flow 2:

Average throughput: 34.57 Mbit/s

95th percentile per-packet one-way delay: 17.037 ms

Loss rate: 38.28%

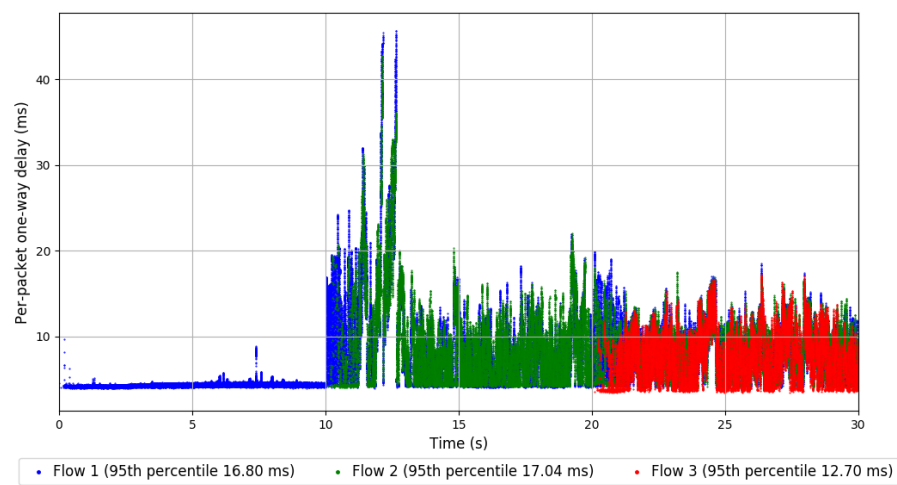
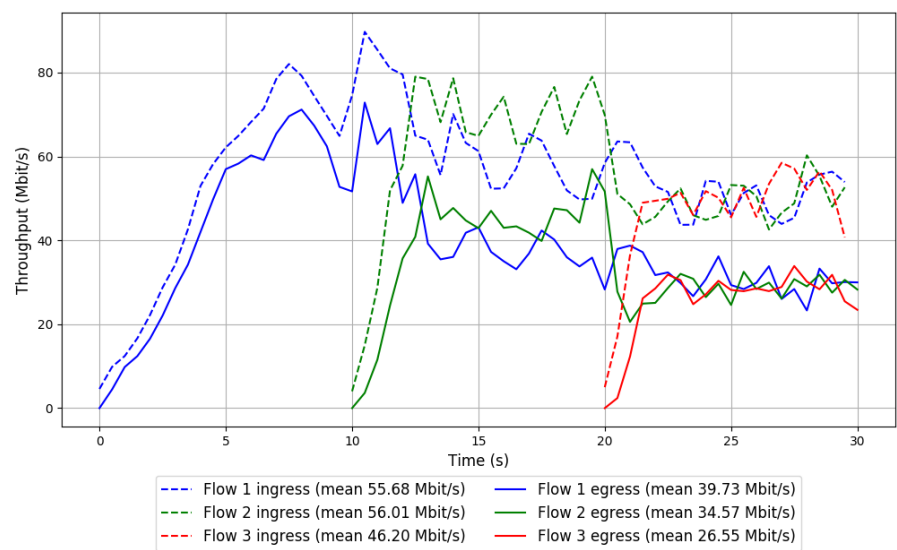
-- Flow 3:

Average throughput: 26.55 Mbit/s

95th percentile per-packet one-way delay: 12.701 ms

Loss rate: 42.55%

Run 2: Report of FillP — Data Link

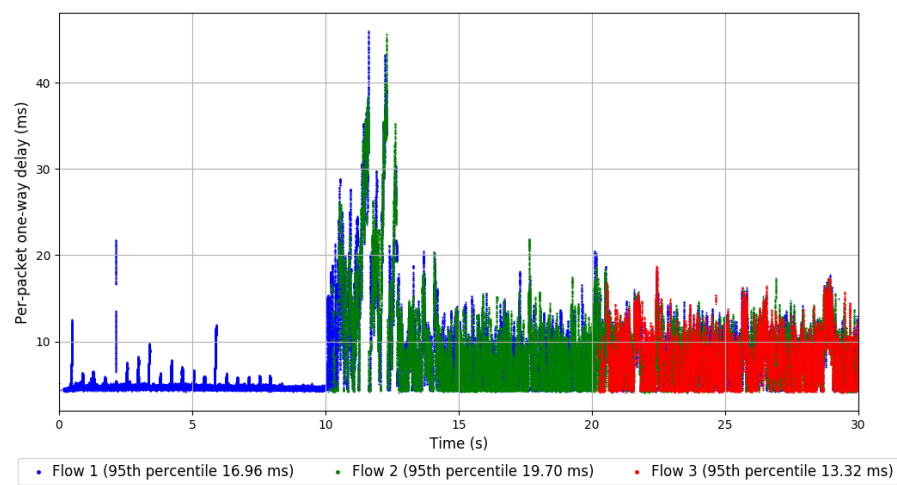
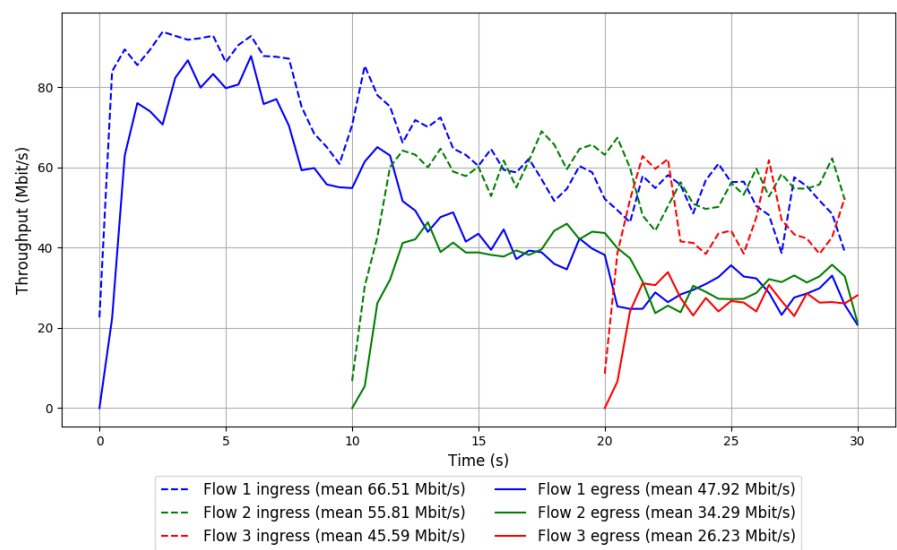


Run 3: Statistics of FillP

Start at: 2019-01-03 00:54:10
End at: 2019-01-03 00:54:40
Local clock offset: 1.801 ms
Remote clock offset: 2.403 ms

Below is generated by plot.py at 2019-01-03 02:08:53
Datalink statistics
-- Total of 3 flows:
Average throughput: 79.42 Mbit/s
95th percentile per-packet one-way delay: 17.002 ms
Loss rate: 33.11%
-- Flow 1:
Average throughput: 47.92 Mbit/s
95th percentile per-packet one-way delay: 16.958 ms
Loss rate: 27.95%
-- Flow 2:
Average throughput: 34.29 Mbit/s
95th percentile per-packet one-way delay: 19.697 ms
Loss rate: 38.56%
-- Flow 3:
Average throughput: 26.23 Mbit/s
95th percentile per-packet one-way delay: 13.325 ms
Loss rate: 42.46%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2019-01-03 01:18:17

End at: 2019-01-03 01:18:47

Local clock offset: 1.6 ms

Remote clock offset: 2.625 ms

Below is generated by plot.py at 2019-01-03 02:09:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.17 Mbit/s

95th percentile per-packet one-way delay: 12.855 ms

Loss rate: 34.75%

-- Flow 1:

Average throughput: 35.40 Mbit/s

95th percentile per-packet one-way delay: 12.700 ms

Loss rate: 30.87%

-- Flow 2:

Average throughput: 34.15 Mbit/s

95th percentile per-packet one-way delay: 14.035 ms

Loss rate: 37.12%

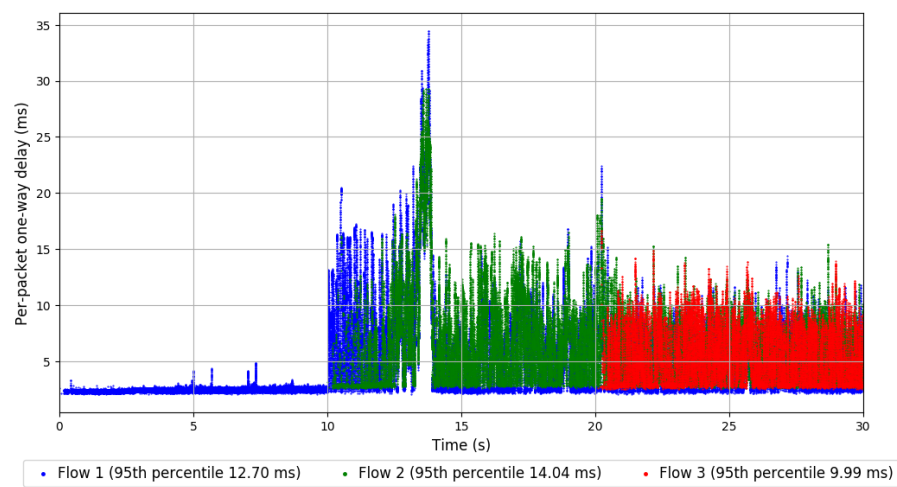
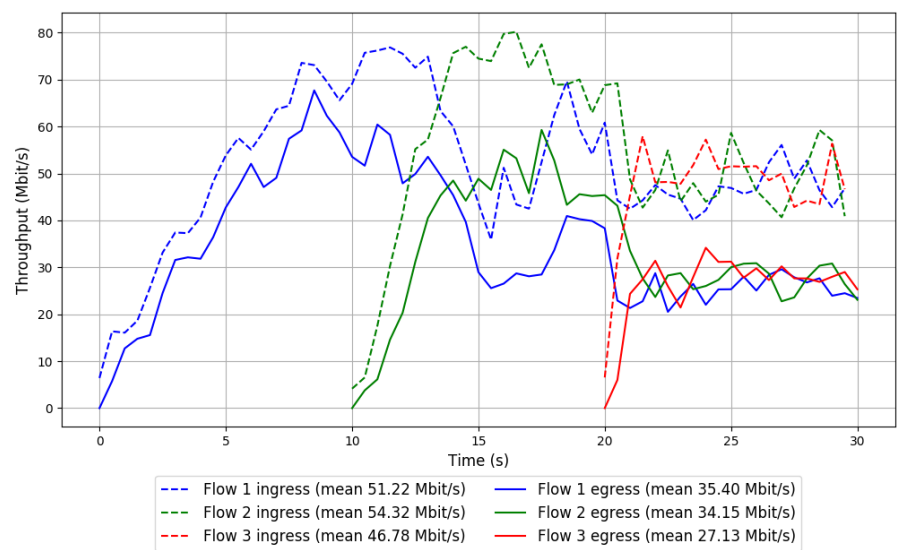
-- Flow 3:

Average throughput: 27.13 Mbit/s

95th percentile per-packet one-way delay: 9.991 ms

Loss rate: 42.01%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2019-01-03 01:42:17

End at: 2019-01-03 01:42:47

Local clock offset: -1.73 ms

Remote clock offset: 2.017 ms

Below is generated by plot.py at 2019-01-03 02:09:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.79 Mbit/s

95th percentile per-packet one-way delay: 18.726 ms

Loss rate: 33.35%

-- Flow 1:

Average throughput: 44.03 Mbit/s

95th percentile per-packet one-way delay: 17.511 ms

Loss rate: 29.66%

-- Flow 2:

Average throughput: 35.96 Mbit/s

95th percentile per-packet one-way delay: 22.874 ms

Loss rate: 35.80%

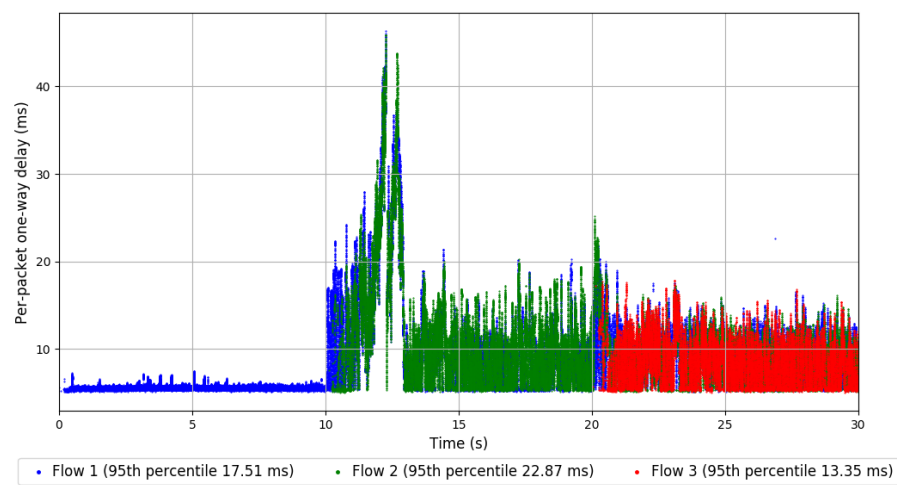
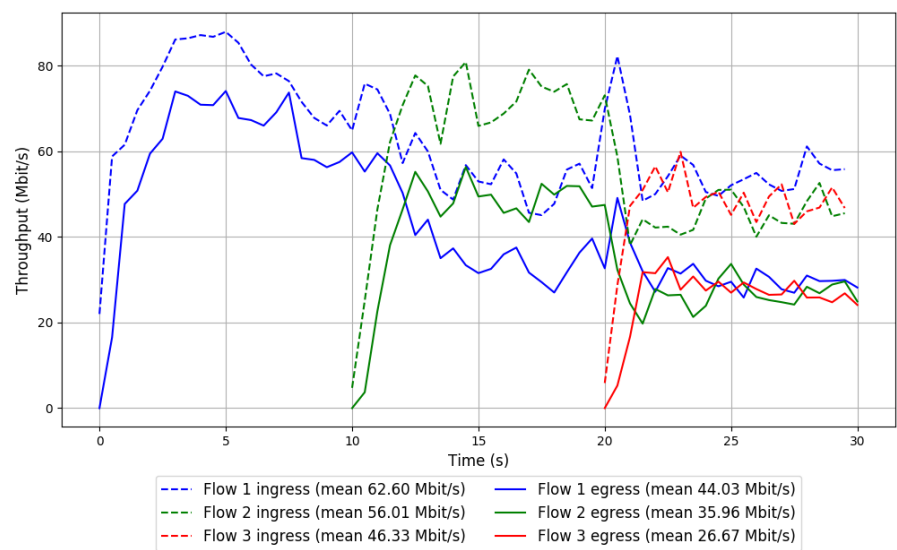
-- Flow 3:

Average throughput: 26.67 Mbit/s

95th percentile per-packet one-way delay: 13.351 ms

Loss rate: 42.43%

Run 5: Report of FillP — Data Link



Run 1: Statistics of FillP-Sheep

Start at: 2019-01-03 00:27:51

End at: 2019-01-03 00:28:21

Local clock offset: 0.345 ms

Remote clock offset: 1.951 ms

Below is generated by plot.py at 2019-01-03 02:09:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.77 Mbit/s

95th percentile per-packet one-way delay: 17.955 ms

Loss rate: 20.01%

-- Flow 1:

Average throughput: 42.96 Mbit/s

95th percentile per-packet one-way delay: 17.692 ms

Loss rate: 18.16%

-- Flow 2:

Average throughput: 30.59 Mbit/s

95th percentile per-packet one-way delay: 18.266 ms

Loss rate: 22.77%

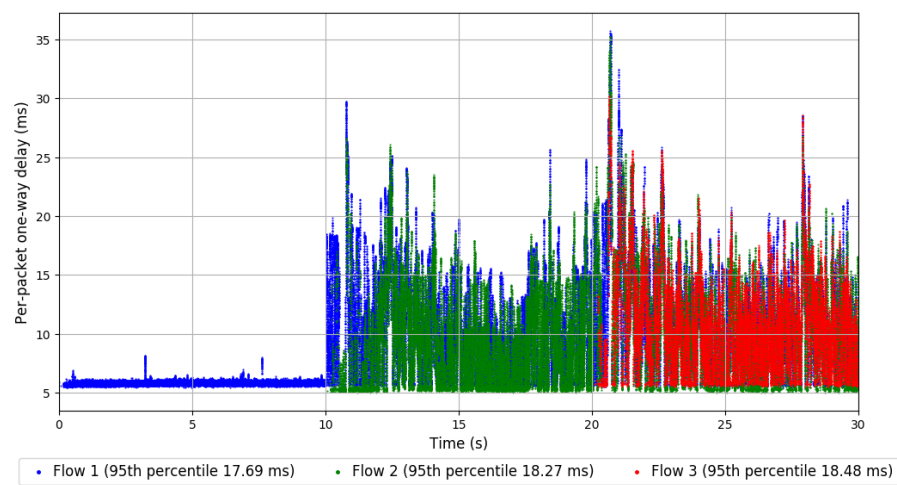
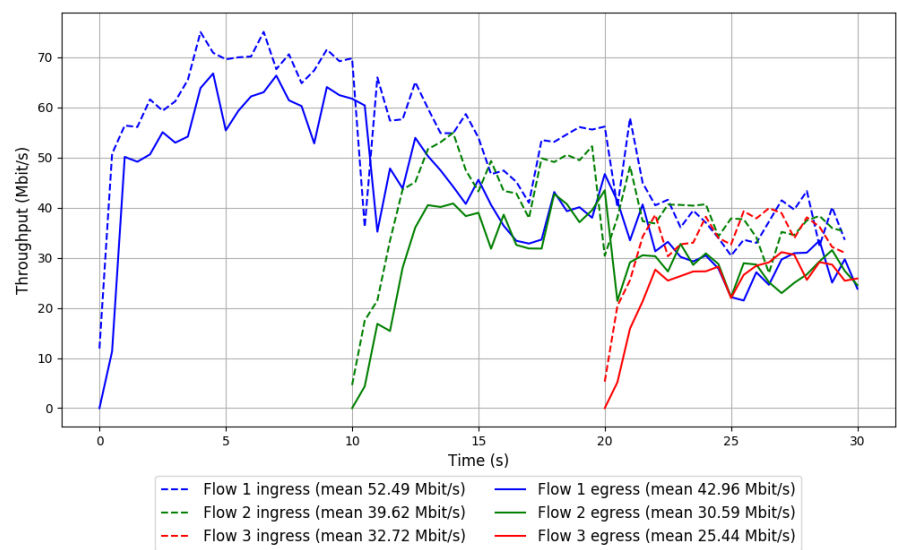
-- Flow 3:

Average throughput: 25.44 Mbit/s

95th percentile per-packet one-way delay: 18.477 ms

Loss rate: 22.24%

Run 1: Report of FillP-Sheep — Data Link



Run 2: Statistics of FillP-Sheep

Start at: 2019-01-03 00:52:48

End at: 2019-01-03 00:53:18

Local clock offset: 4.507 ms

Remote clock offset: 2.343 ms

Below is generated by plot.py at 2019-01-03 02:09:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.17 Mbit/s

95th percentile per-packet one-way delay: 16.309 ms

Loss rate: 19.12%

-- Flow 1:

Average throughput: 44.18 Mbit/s

95th percentile per-packet one-way delay: 15.249 ms

Loss rate: 17.24%

-- Flow 2:

Average throughput: 34.72 Mbit/s

95th percentile per-packet one-way delay: 18.804 ms

Loss rate: 22.12%

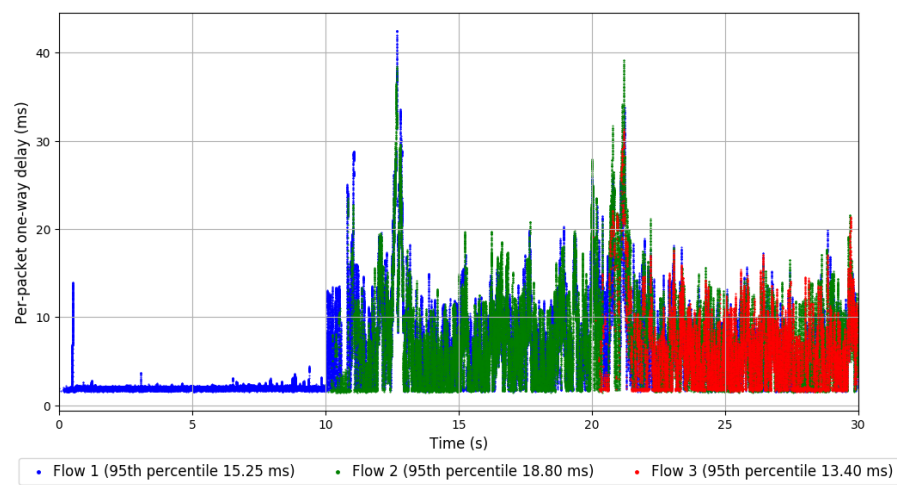
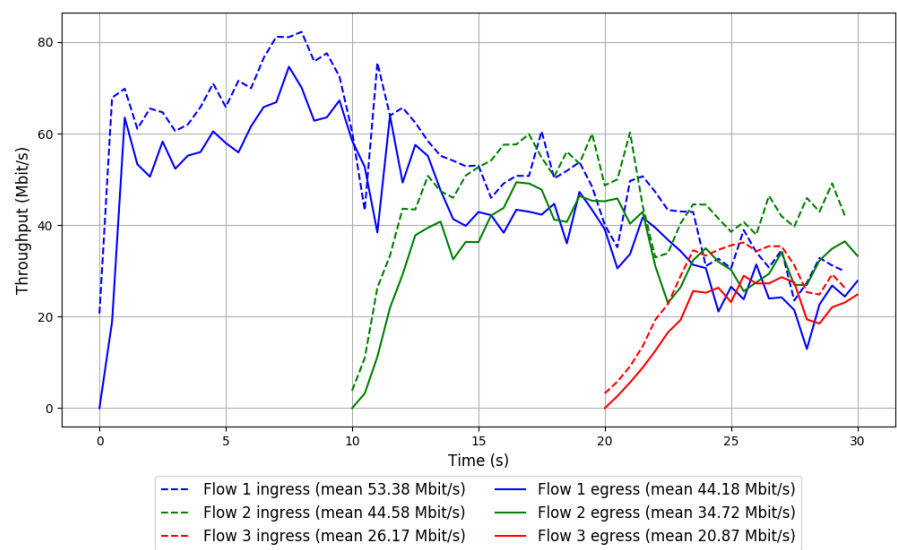
-- Flow 3:

Average throughput: 20.87 Mbit/s

95th percentile per-packet one-way delay: 13.396 ms

Loss rate: 20.38%

Run 2: Report of FillP-Sheep — Data Link



Run 3: Statistics of FillP-Sheep

Start at: 2019-01-03 01:16:59

End at: 2019-01-03 01:17:29

Local clock offset: 1.681 ms

Remote clock offset: 2.183 ms

Below is generated by plot.py at 2019-01-03 02:09:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 63.30 Mbit/s

95th percentile per-packet one-way delay: 14.296 ms

Loss rate: 21.64%

-- Flow 1:

Average throughput: 31.62 Mbit/s

95th percentile per-packet one-way delay: 13.665 ms

Loss rate: 19.22%

-- Flow 2:

Average throughput: 34.68 Mbit/s

95th percentile per-packet one-way delay: 15.359 ms

Loss rate: 23.08%

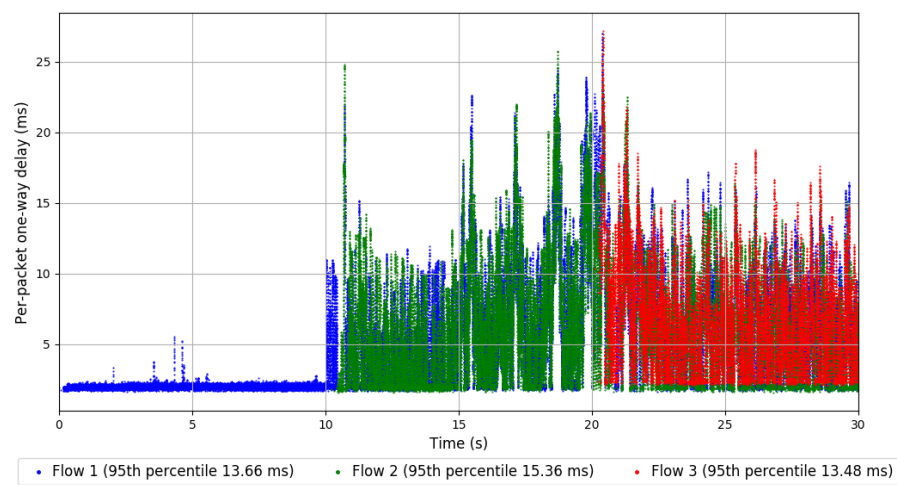
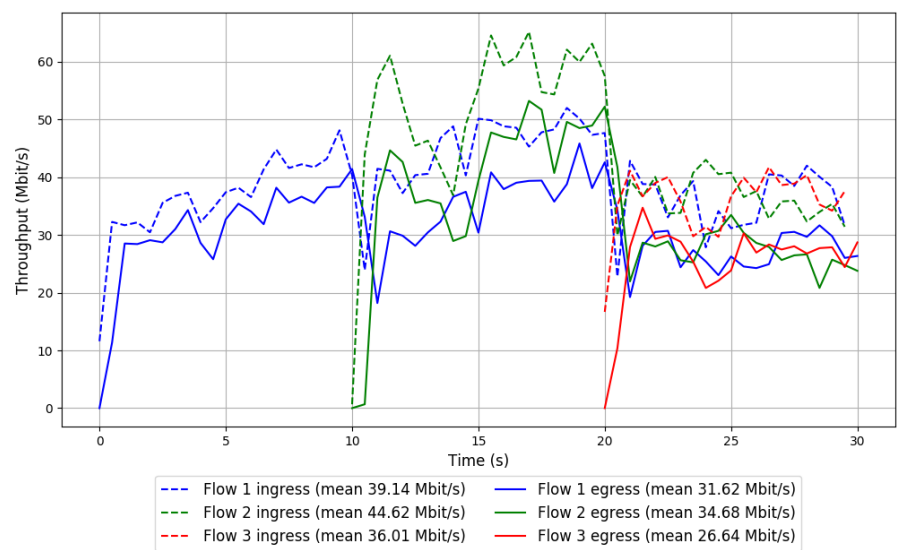
-- Flow 3:

Average throughput: 26.64 Mbit/s

95th percentile per-packet one-way delay: 13.479 ms

Loss rate: 26.00%

Run 3: Report of FillP-Sheep — Data Link

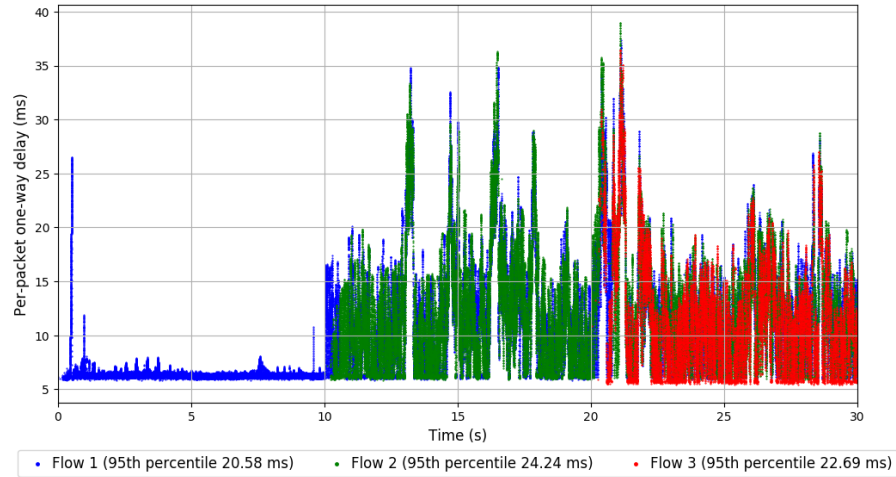
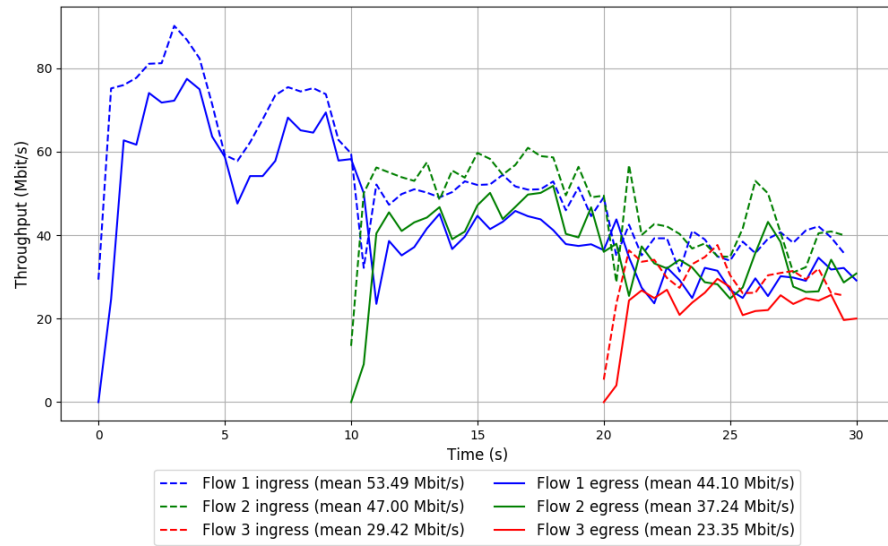


Run 4: Statistics of FillP-Sheep

Start at: 2019-01-03 01:41:01
End at: 2019-01-03 01:41:31
Local clock offset: -2.188 ms
Remote clock offset: 2.34 ms

Below is generated by plot.py at 2019-01-03 02:09:49
Datalink statistics
-- Total of 3 flows:
Average throughput: 76.61 Mbit/s
95th percentile per-packet one-way delay: 22.348 ms
Loss rate: 18.92%
-- Flow 1:
Average throughput: 44.10 Mbit/s
95th percentile per-packet one-way delay: 20.583 ms
Loss rate: 17.53%
-- Flow 2:
Average throughput: 37.24 Mbit/s
95th percentile per-packet one-way delay: 24.240 ms
Loss rate: 20.77%
-- Flow 3:
Average throughput: 23.35 Mbit/s
95th percentile per-packet one-way delay: 22.686 ms
Loss rate: 20.67%

Run 4: Report of FillP-Sheep — Data Link



Run 5: Statistics of FillP-Sheep

Start at: 2019-01-03 02:05:19

End at: 2019-01-03 02:05:49

Local clock offset: 1.35 ms

Remote clock offset: 1.996 ms

Below is generated by plot.py at 2019-01-03 02:09:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.03 Mbit/s

95th percentile per-packet one-way delay: 18.078 ms

Loss rate: 20.21%

-- Flow 1:

Average throughput: 39.79 Mbit/s

95th percentile per-packet one-way delay: 16.872 ms

Loss rate: 18.66%

-- Flow 2:

Average throughput: 31.22 Mbit/s

95th percentile per-packet one-way delay: 20.387 ms

Loss rate: 21.52%

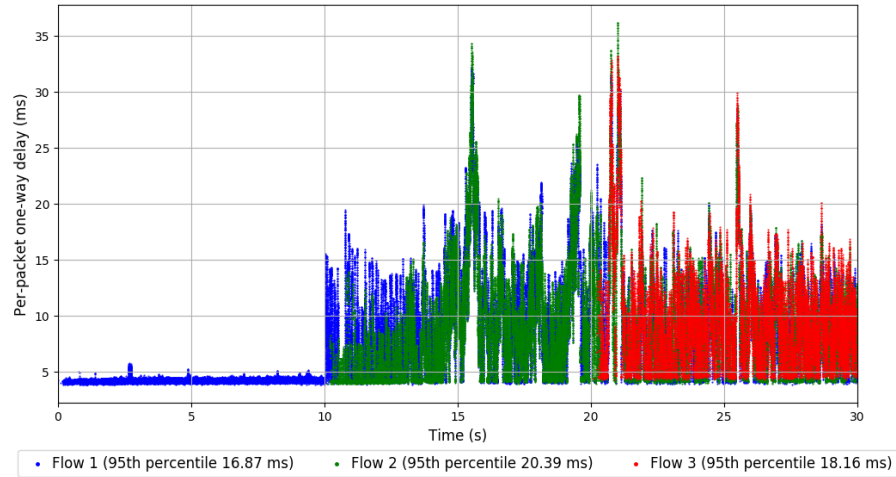
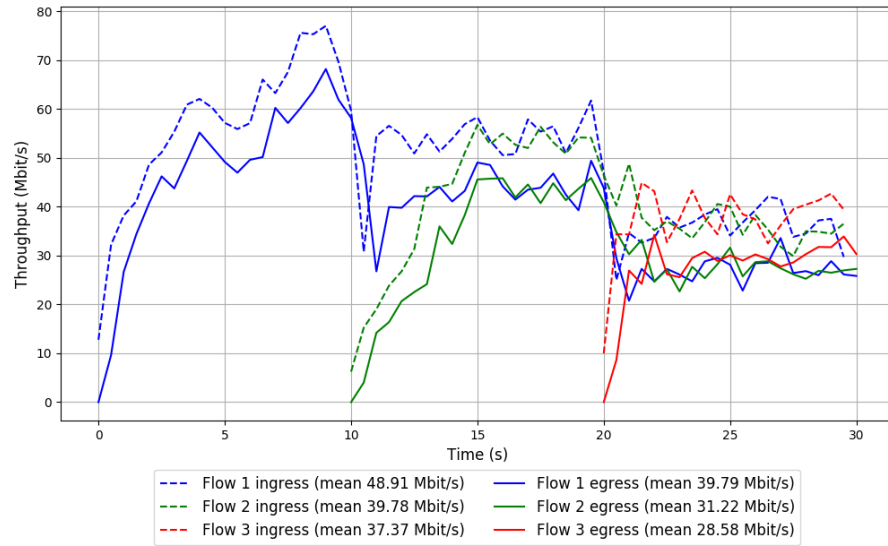
-- Flow 3:

Average throughput: 28.58 Mbit/s

95th percentile per-packet one-way delay: 18.158 ms

Loss rate: 23.55%

Run 5: Report of FillP-Sheep — Data Link



Run 1: Statistics of Indigo

Start at: 2019-01-03 00:10:28

End at: 2019-01-03 00:10:58

Local clock offset: 1.995 ms

Remote clock offset: 2.184 ms

Below is generated by plot.py at 2019-01-03 02:09:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 72.61 Mbit/s

95th percentile per-packet one-way delay: 13.175 ms

Loss rate: 38.28%

-- Flow 1:

Average throughput: 38.71 Mbit/s

95th percentile per-packet one-way delay: 12.919 ms

Loss rate: 34.65%

-- Flow 2:

Average throughput: 42.59 Mbit/s

95th percentile per-packet one-way delay: 13.861 ms

Loss rate: 29.87%

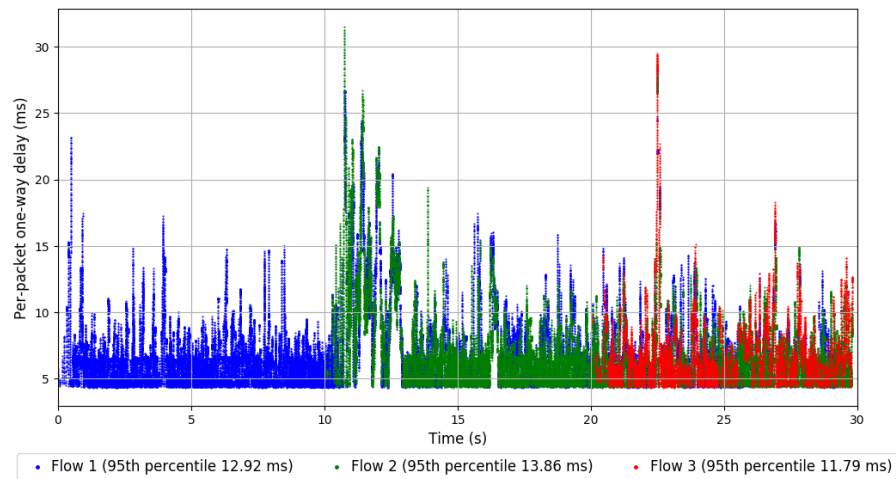
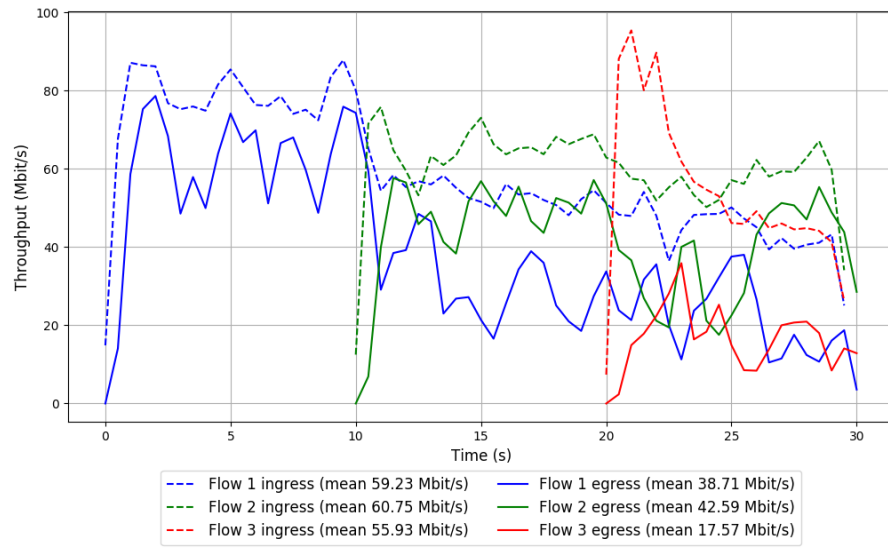
-- Flow 3:

Average throughput: 17.57 Mbit/s

95th percentile per-packet one-way delay: 11.790 ms

Loss rate: 68.58%

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2019-01-03 00:35:25

End at: 2019-01-03 00:35:56

Local clock offset: 0.64 ms

Remote clock offset: 2.524 ms

Below is generated by plot.py at 2019-01-03 02:10:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.90 Mbit/s

95th percentile per-packet one-way delay: 21.444 ms

Loss rate: 33.15%

-- Flow 1:

Average throughput: 40.30 Mbit/s

95th percentile per-packet one-way delay: 21.104 ms

Loss rate: 32.65%

-- Flow 2:

Average throughput: 43.70 Mbit/s

95th percentile per-packet one-way delay: 22.613 ms

Loss rate: 25.76%

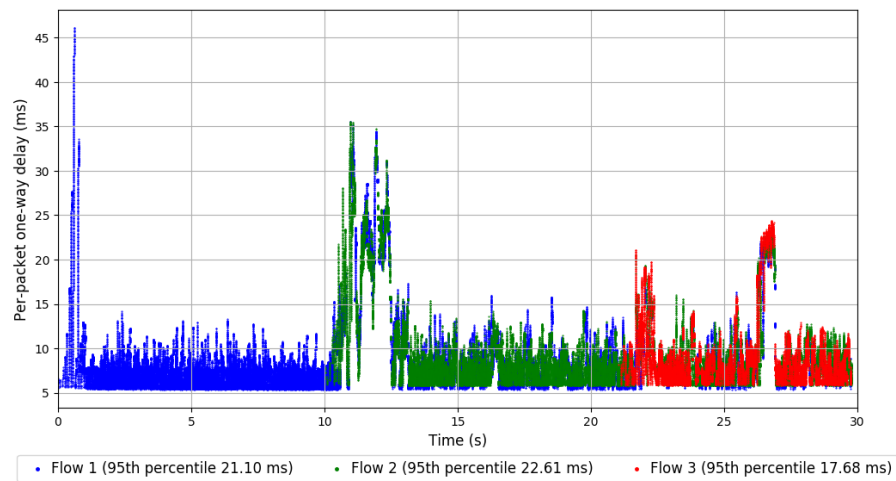
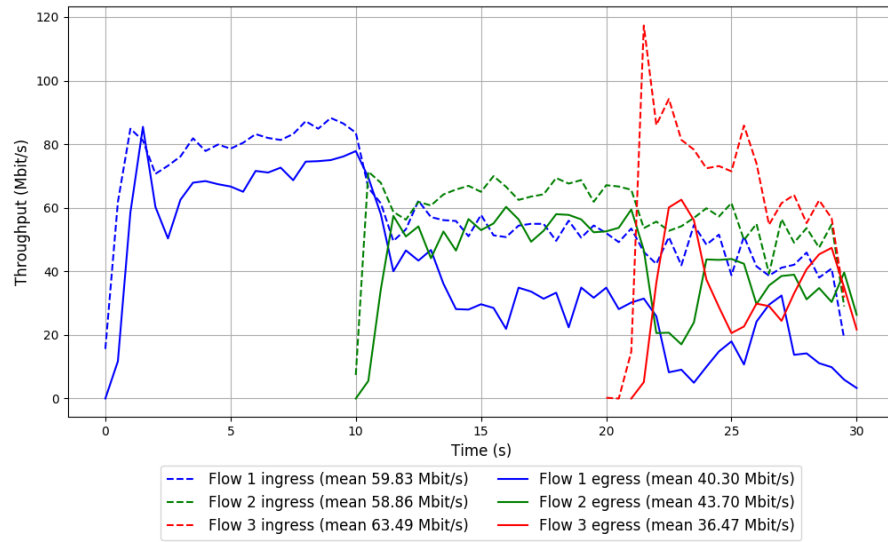
-- Flow 3:

Average throughput: 36.47 Mbit/s

95th percentile per-packet one-way delay: 17.678 ms

Loss rate: 48.49%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2019-01-03 01:00:18

End at: 2019-01-03 01:00:48

Local clock offset: -0.14 ms

Remote clock offset: 2.201 ms

Below is generated by plot.py at 2019-01-03 02:10:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.74 Mbit/s

95th percentile per-packet one-way delay: 11.752 ms

Loss rate: 25.87%

-- Flow 1:

Average throughput: 44.76 Mbit/s

95th percentile per-packet one-way delay: 11.595 ms

Loss rate: 26.21%

-- Flow 2:

Average throughput: 33.95 Mbit/s

95th percentile per-packet one-way delay: 11.800 ms

Loss rate: 20.54%

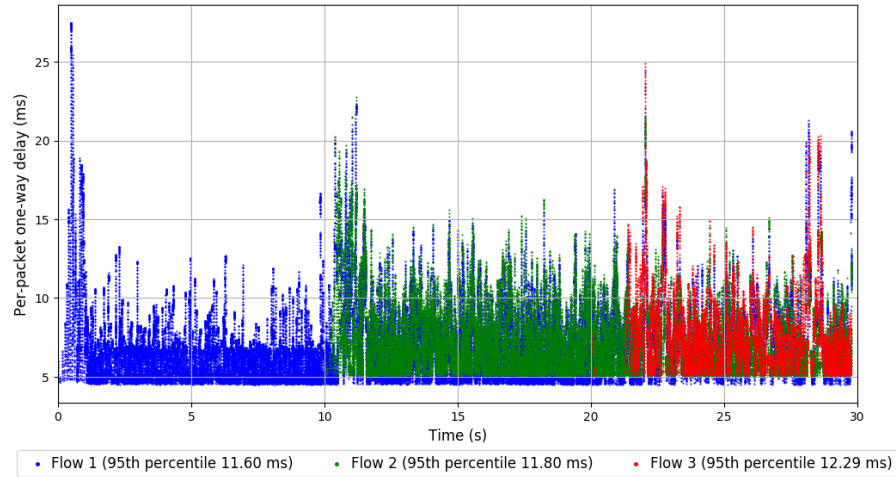
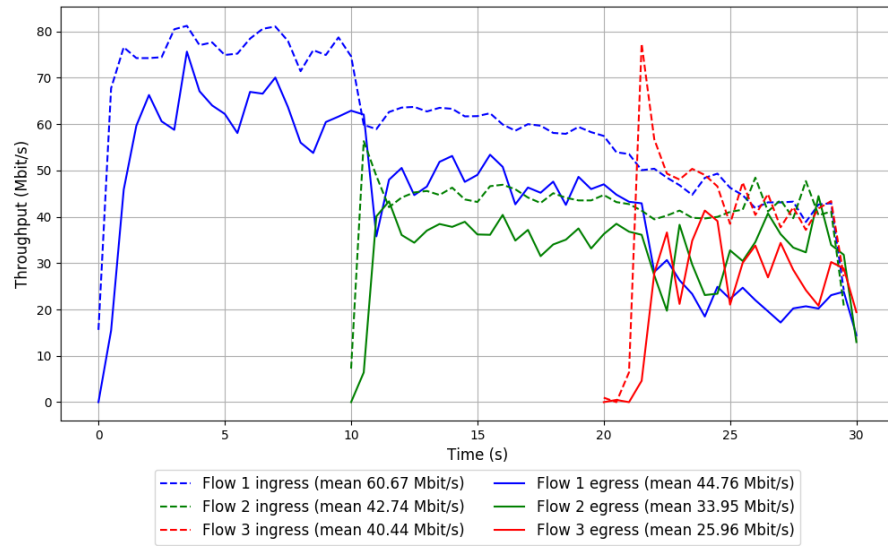
-- Flow 3:

Average throughput: 25.96 Mbit/s

95th percentile per-packet one-way delay: 12.290 ms

Loss rate: 35.79%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2019-01-03 01:24:29

End at: 2019-01-03 01:24:59

Local clock offset: 0.932 ms

Remote clock offset: 2.254 ms

Below is generated by plot.py at 2019-01-03 02:10:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.02 Mbit/s

95th percentile per-packet one-way delay: 13.246 ms

Loss rate: 42.69%

-- Flow 1:

Average throughput: 37.05 Mbit/s

95th percentile per-packet one-way delay: 11.915 ms

Loss rate: 33.88%

-- Flow 2:

Average throughput: 40.68 Mbit/s

95th percentile per-packet one-way delay: 13.409 ms

Loss rate: 28.57%

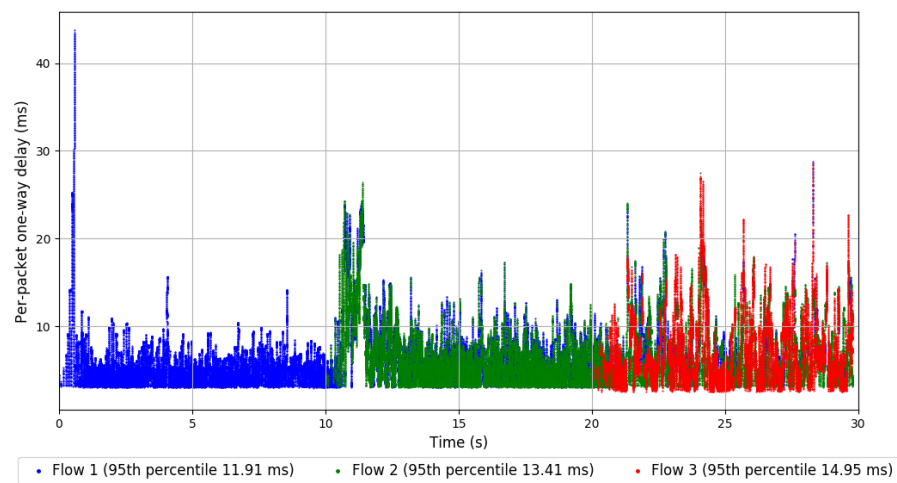
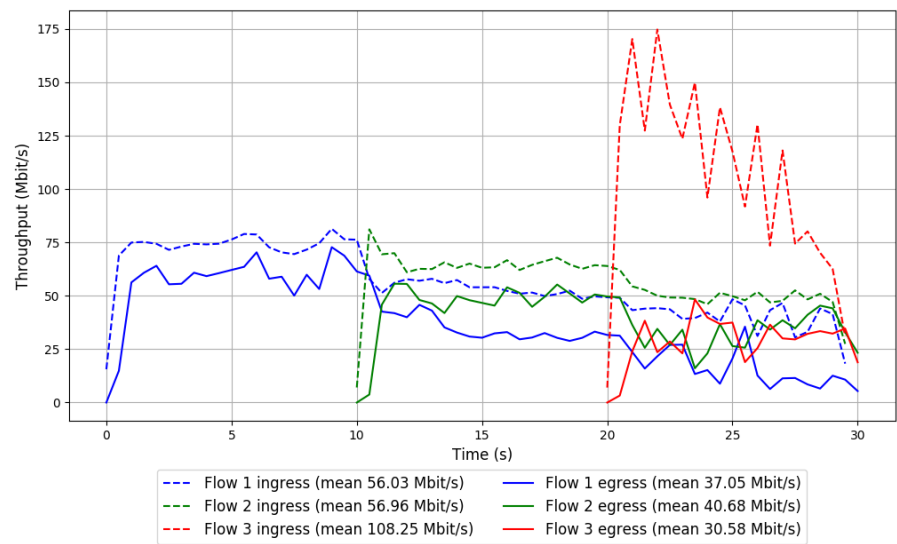
-- Flow 3:

Average throughput: 30.58 Mbit/s

95th percentile per-packet one-way delay: 14.953 ms

Loss rate: 71.74%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2019-01-03 01:48:17

End at: 2019-01-03 01:48:47

Local clock offset: -5.116 ms

Remote clock offset: 2.823 ms

Below is generated by plot.py at 2019-01-03 02:10:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.33 Mbit/s

95th percentile per-packet one-way delay: 17.836 ms

Loss rate: 28.10%

-- Flow 1:

Average throughput: 51.47 Mbit/s

95th percentile per-packet one-way delay: 16.434 ms

Loss rate: 19.49%

-- Flow 2:

Average throughput: 22.31 Mbit/s

95th percentile per-packet one-way delay: 19.832 ms

Loss rate: 35.98%

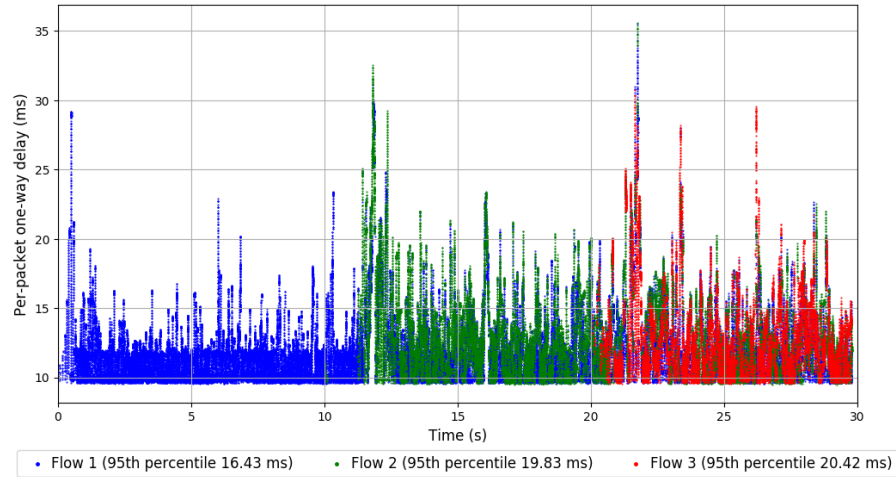
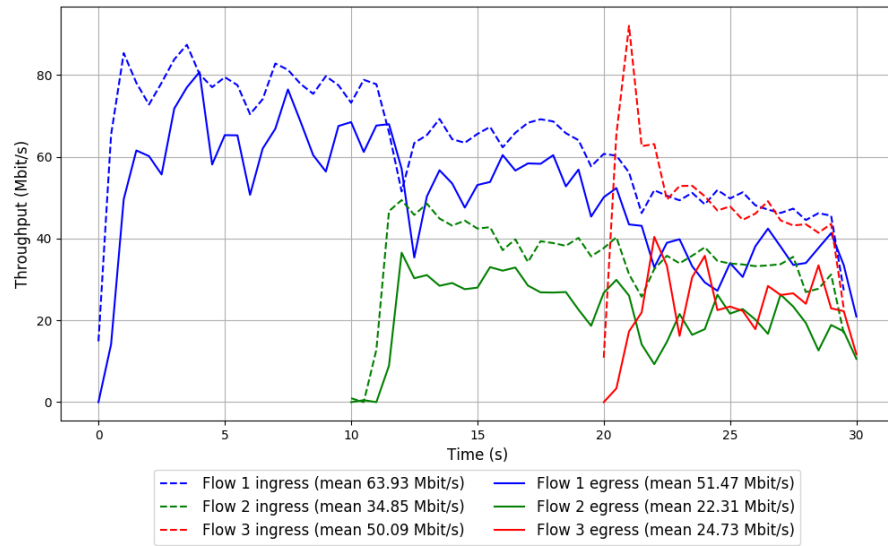
-- Flow 3:

Average throughput: 24.73 Mbit/s

95th percentile per-packet one-way delay: 20.422 ms

Loss rate: 50.63%

Run 5: Report of Indigo — Data Link



Run 1: Statistics of Indigo-MusesD

Start at: 2019-01-03 00:19:25

End at: 2019-01-03 00:19:55

Local clock offset: 0.971 ms

Remote clock offset: 2.178 ms

Below is generated by plot.py at 2019-01-03 02:10:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.96 Mbit/s

95th percentile per-packet one-way delay: 10.934 ms

Loss rate: 29.58%

-- Flow 1:

Average throughput: 69.53 Mbit/s

95th percentile per-packet one-way delay: 11.106 ms

Loss rate: 26.89%

-- Flow 2:

Average throughput: 10.93 Mbit/s

95th percentile per-packet one-way delay: 8.781 ms

Loss rate: 44.82%

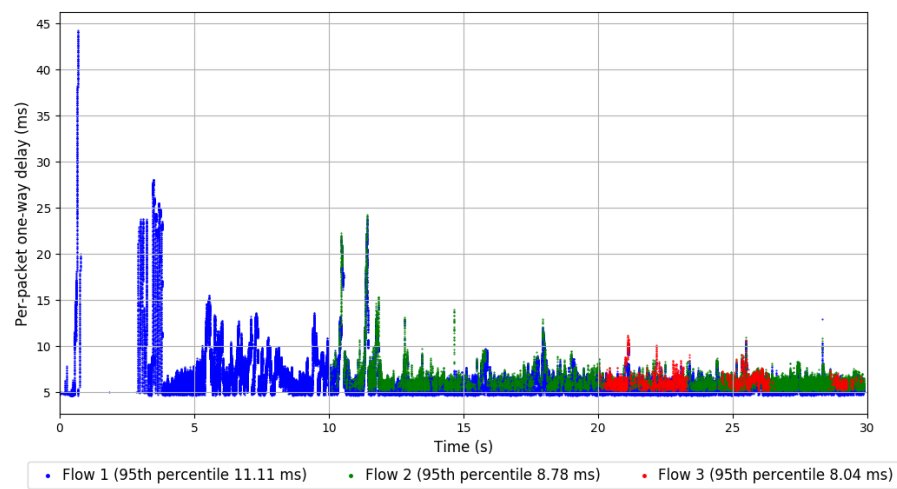
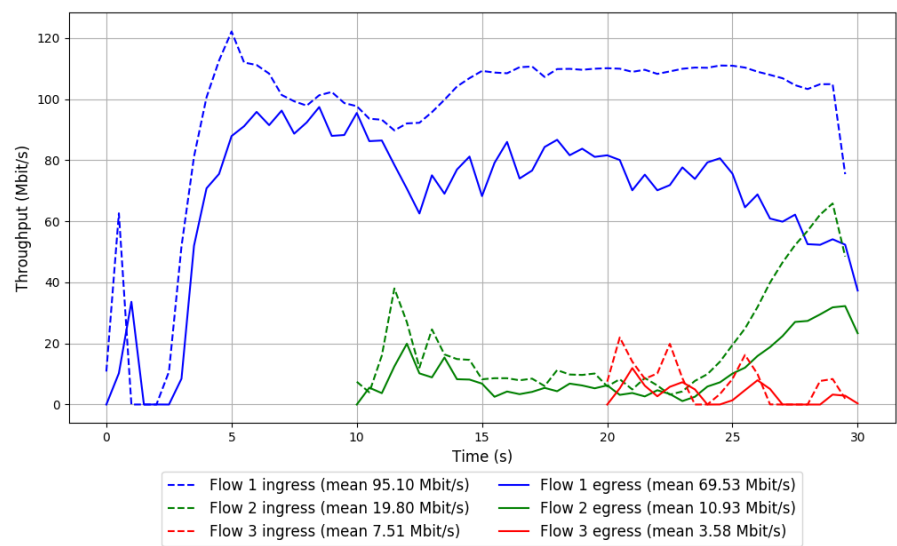
-- Flow 3:

Average throughput: 3.58 Mbit/s

95th percentile per-packet one-way delay: 8.040 ms

Loss rate: 52.38%

Run 1: Report of Indigo-MusesD — Data Link



Run 2: Statistics of Indigo-MusesD

Start at: 2019-01-03 00:44:42

End at: 2019-01-03 00:45:12

Local clock offset: 2.34 ms

Remote clock offset: 1.978 ms

Below is generated by plot.py at 2019-01-03 02:10:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.01 Mbit/s

95th percentile per-packet one-way delay: 6.243 ms

Loss rate: 30.03%

-- Flow 1:

Average throughput: 78.75 Mbit/s

95th percentile per-packet one-way delay: 6.222 ms

Loss rate: 28.96%

-- Flow 2:

Average throughput: 3.42 Mbit/s

95th percentile per-packet one-way delay: 6.563 ms

Loss rate: 53.62%

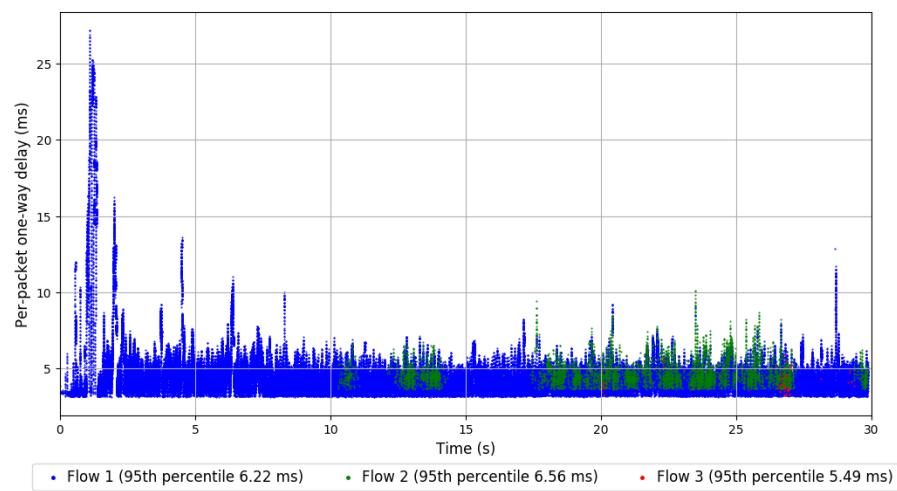
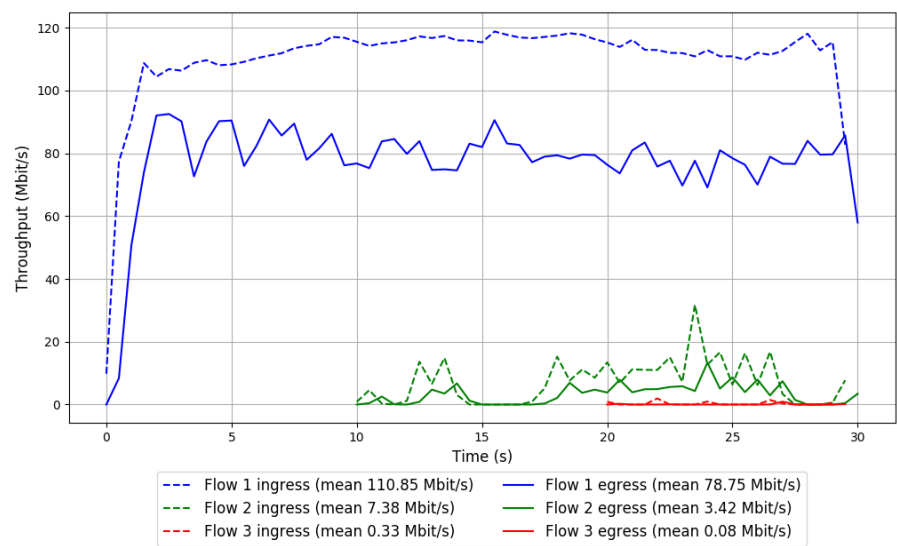
-- Flow 3:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 5.489 ms

Loss rate: 74.98%

Run 2: Report of Indigo-MusesD — Data Link



Run 3: Statistics of Indigo-MusesD

Start at: 2019-01-03 01:09:10

End at: 2019-01-03 01:09:40

Local clock offset: 0.336 ms

Remote clock offset: 2.356 ms

Below is generated by plot.py at 2019-01-03 02:10:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.74 Mbit/s

95th percentile per-packet one-way delay: 7.315 ms

Loss rate: 36.13%

-- Flow 1:

Average throughput: 73.16 Mbit/s

95th percentile per-packet one-way delay: 7.352 ms

Loss rate: 35.25%

-- Flow 2:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 5.639 ms

Loss rate: 60.03%

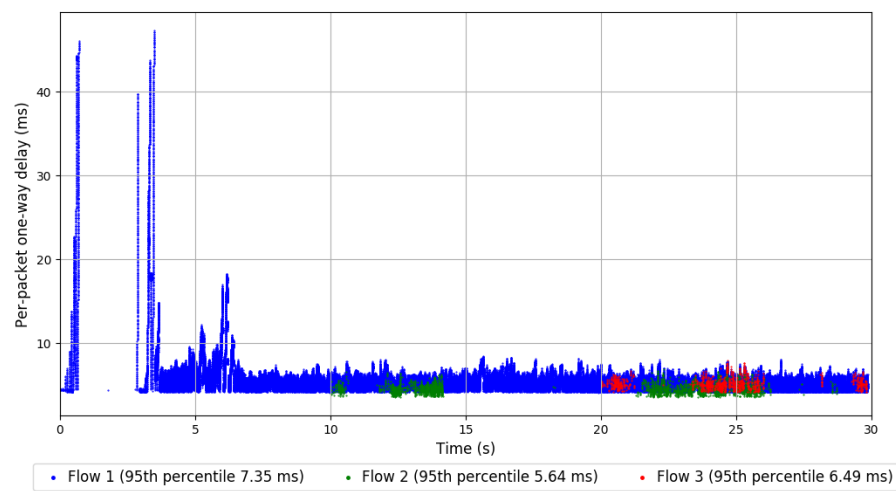
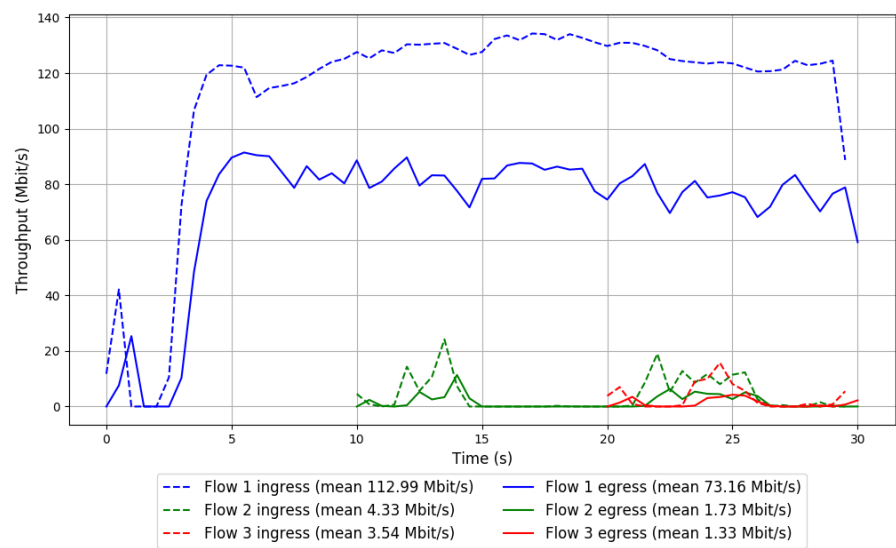
-- Flow 3:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 6.493 ms

Loss rate: 62.58%

Run 3: Report of Indigo-MusesD — Data Link



Run 4: Statistics of Indigo-MusesD

Start at: 2019-01-03 01:33:25

End at: 2019-01-03 01:33:55

Local clock offset: -2.774 ms

Remote clock offset: 2.66 ms

Below is generated by plot.py at 2019-01-03 02:10:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.69 Mbit/s

95th percentile per-packet one-way delay: 12.245 ms

Loss rate: 29.44%

-- Flow 1:

Average throughput: 77.64 Mbit/s

95th percentile per-packet one-way delay: 12.330 ms

Loss rate: 28.07%

-- Flow 2:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 10.557 ms

Loss rate: 51.64%

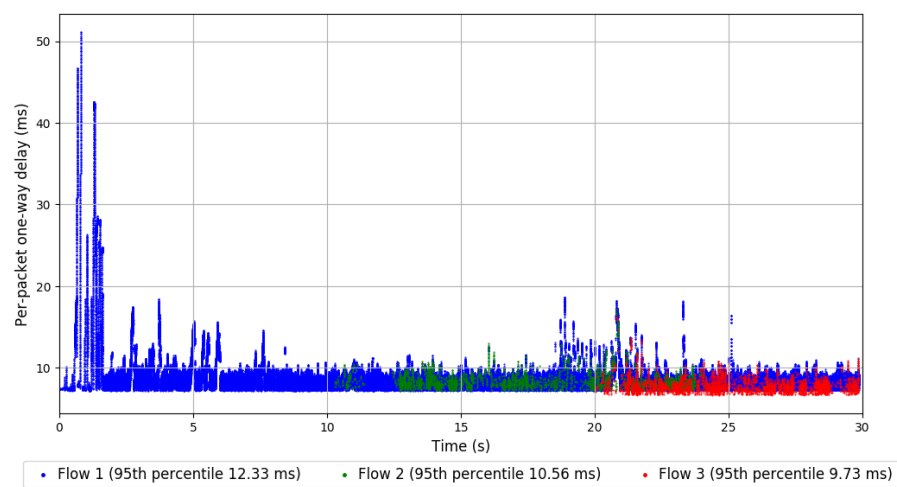
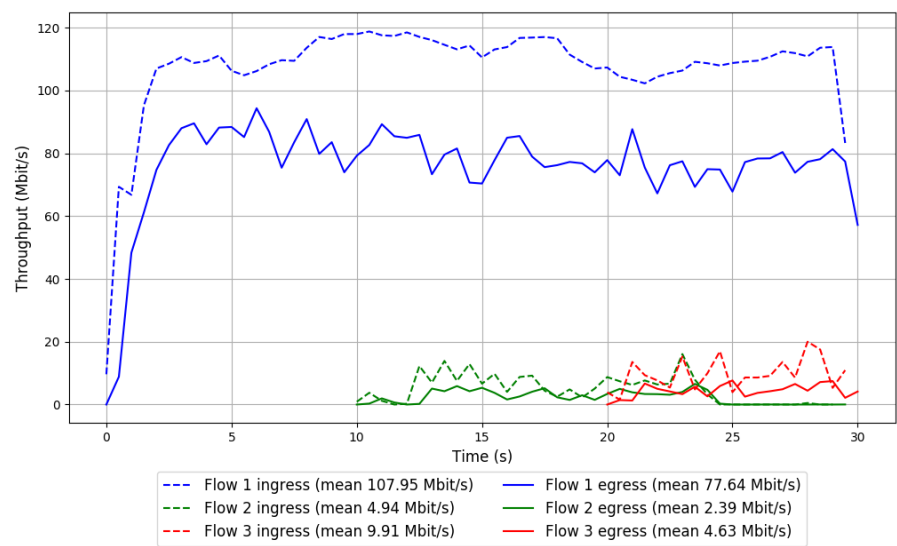
-- Flow 3:

Average throughput: 4.63 Mbit/s

95th percentile per-packet one-way delay: 9.731 ms

Loss rate: 53.30%

Run 4: Report of Indigo-MusesD — Data Link



Run 5: Statistics of Indigo-MusesD

Start at: 2019-01-03 01:57:13

End at: 2019-01-03 01:57:43

Local clock offset: 0.495 ms

Remote clock offset: 1.765 ms

Below is generated by plot.py at 2019-01-03 02:11:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.19 Mbit/s

95th percentile per-packet one-way delay: 5.913 ms

Loss rate: 38.84%

-- Flow 1:

Average throughput: 75.26 Mbit/s

95th percentile per-packet one-way delay: 5.880 ms

Loss rate: 38.07%

-- Flow 2:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 6.664 ms

Loss rate: 58.15%

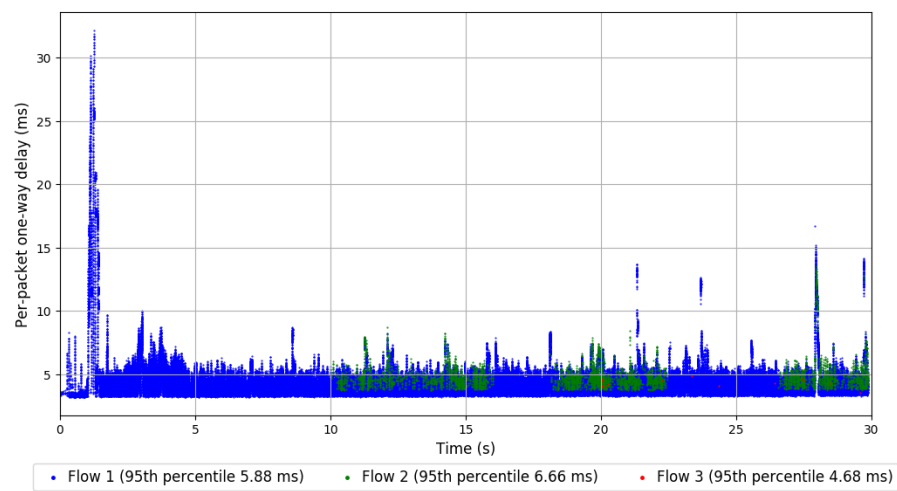
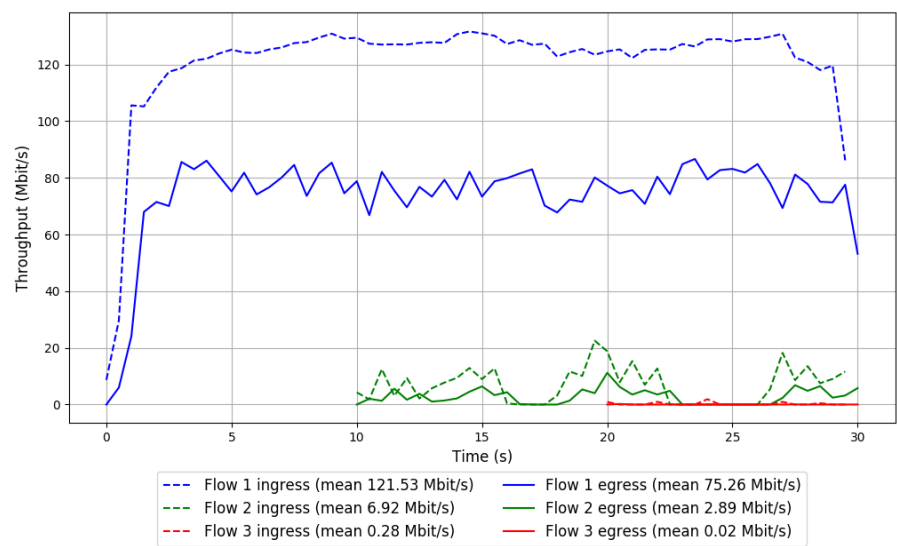
-- Flow 3:

Average throughput: 0.02 Mbit/s

95th percentile per-packet one-way delay: 4.685 ms

Loss rate: 92.52%

Run 5: Report of Indigo-MusesD — Data Link



Run 1: Statistics of Indigo-MusesT

Start at: 2019-01-03 00:23:45

End at: 2019-01-03 00:24:15

Local clock offset: -1.452 ms

Remote clock offset: 2.44 ms

Below is generated by plot.py at 2019-01-03 02:11:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.39 Mbit/s

95th percentile per-packet one-way delay: 34.343 ms

Loss rate: 15.02%

-- Flow 1:

Average throughput: 47.61 Mbit/s

95th percentile per-packet one-way delay: 32.735 ms

Loss rate: 13.12%

-- Flow 2:

Average throughput: 40.80 Mbit/s

95th percentile per-packet one-way delay: 35.938 ms

Loss rate: 17.53%

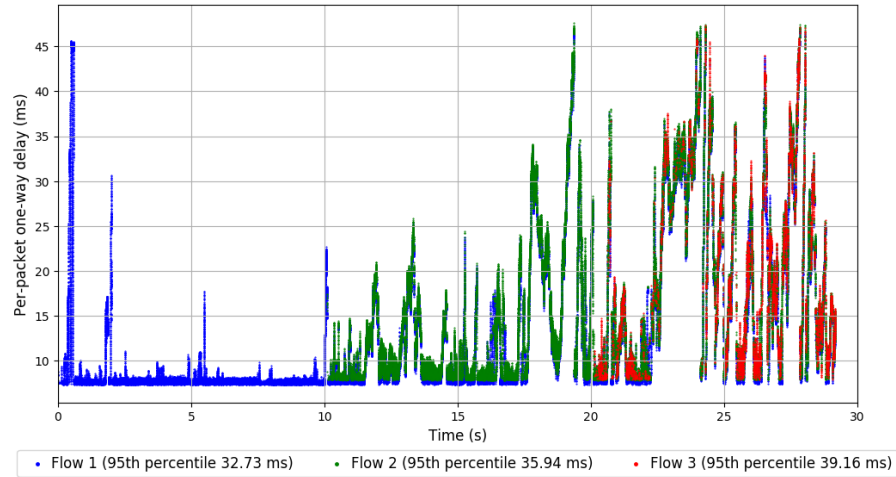
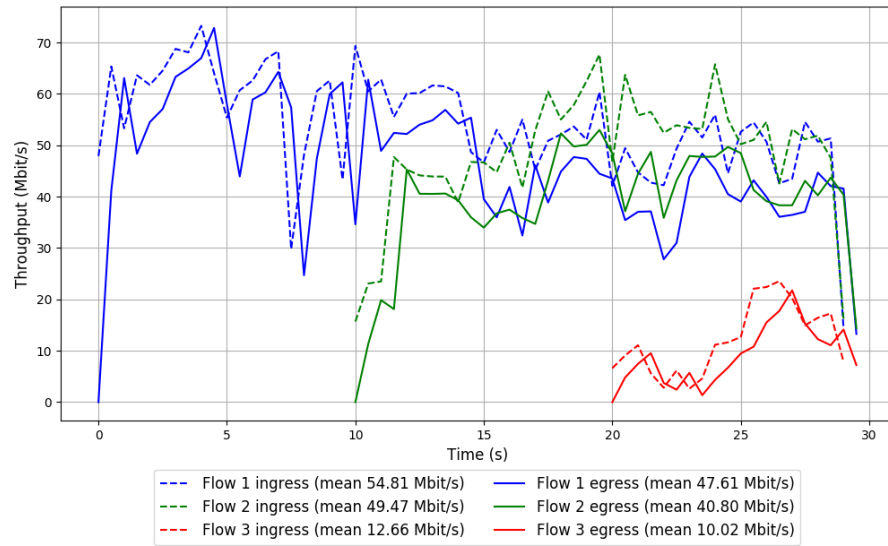
-- Flow 3:

Average throughput: 10.02 Mbit/s

95th percentile per-packet one-way delay: 39.162 ms

Loss rate: 20.76%

Run 1: Report of Indigo-MusesT — Data Link



Run 2: Statistics of Indigo-MusesT

Start at: 2019-01-03 00:48:52

End at: 2019-01-03 00:49:22

Local clock offset: 3.763 ms

Remote clock offset: 2.345 ms

Below is generated by plot.py at 2019-01-03 02:11:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.83 Mbit/s

95th percentile per-packet one-way delay: 27.610 ms

Loss rate: 22.89%

-- Flow 1:

Average throughput: 44.77 Mbit/s

95th percentile per-packet one-way delay: 25.421 ms

Loss rate: 22.82%

-- Flow 2:

Average throughput: 35.79 Mbit/s

95th percentile per-packet one-way delay: 27.678 ms

Loss rate: 22.30%

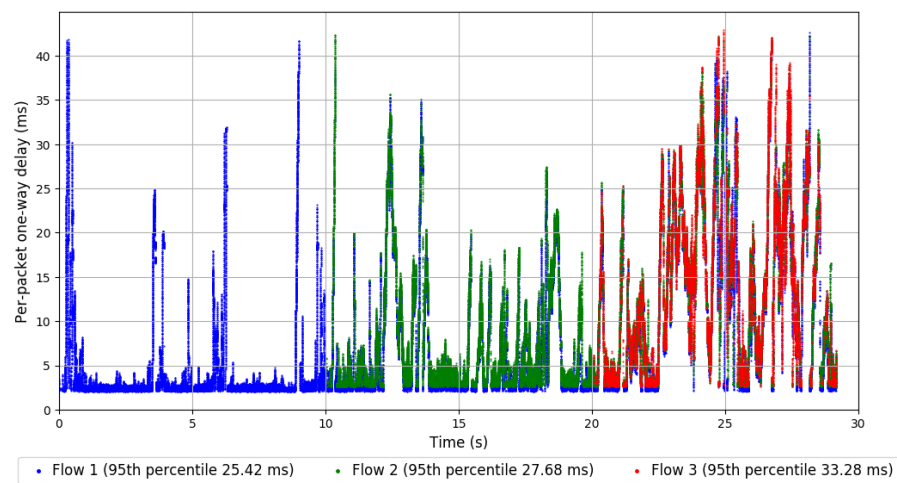
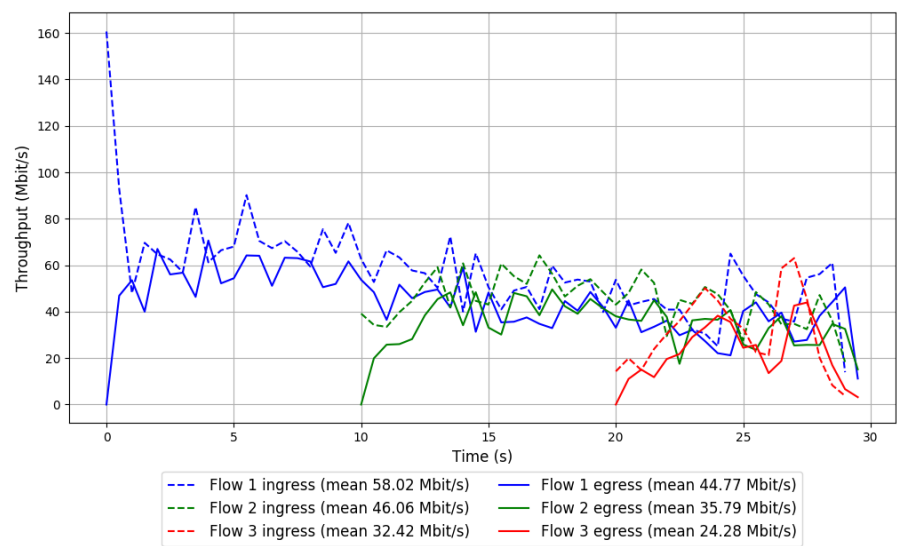
-- Flow 3:

Average throughput: 24.28 Mbit/s

95th percentile per-packet one-way delay: 33.277 ms

Loss rate: 25.08%

Run 2: Report of Indigo-MusesT — Data Link



Run 3: Statistics of Indigo-MusesT

Start at: 2019-01-03 01:13:03

End at: 2019-01-03 01:13:33

Local clock offset: 1.507 ms

Remote clock offset: 2.453 ms

Below is generated by plot.py at 2019-01-03 02:11:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.37 Mbit/s

95th percentile per-packet one-way delay: 27.120 ms

Loss rate: 20.22%

-- Flow 1:

Average throughput: 40.07 Mbit/s

95th percentile per-packet one-way delay: 24.181 ms

Loss rate: 19.79%

-- Flow 2:

Average throughput: 37.17 Mbit/s

95th percentile per-packet one-way delay: 28.944 ms

Loss rate: 20.23%

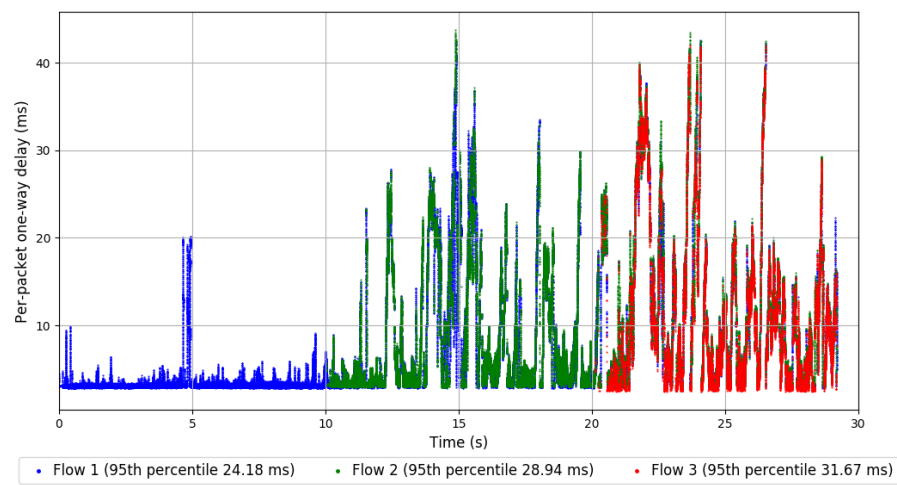
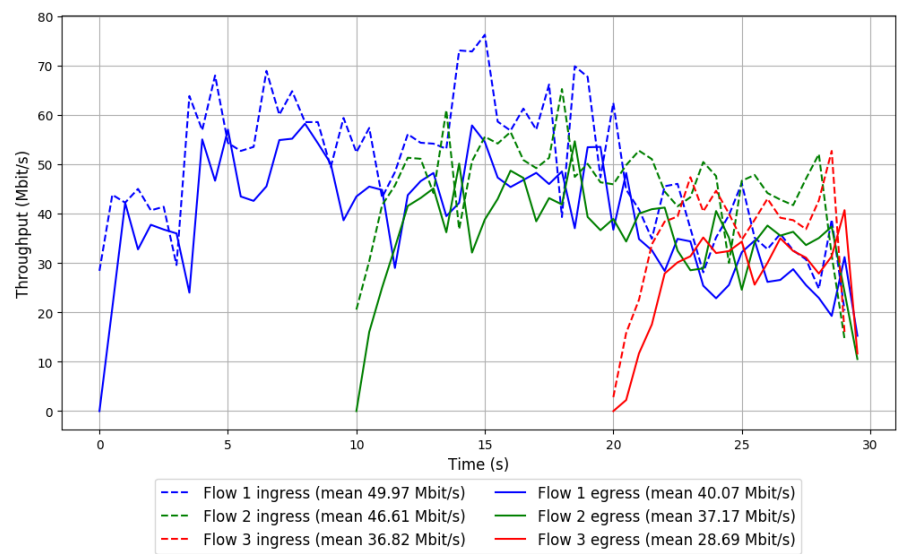
-- Flow 3:

Average throughput: 28.69 Mbit/s

95th percentile per-packet one-way delay: 31.674 ms

Loss rate: 22.05%

Run 3: Report of Indigo-MusesT — Data Link

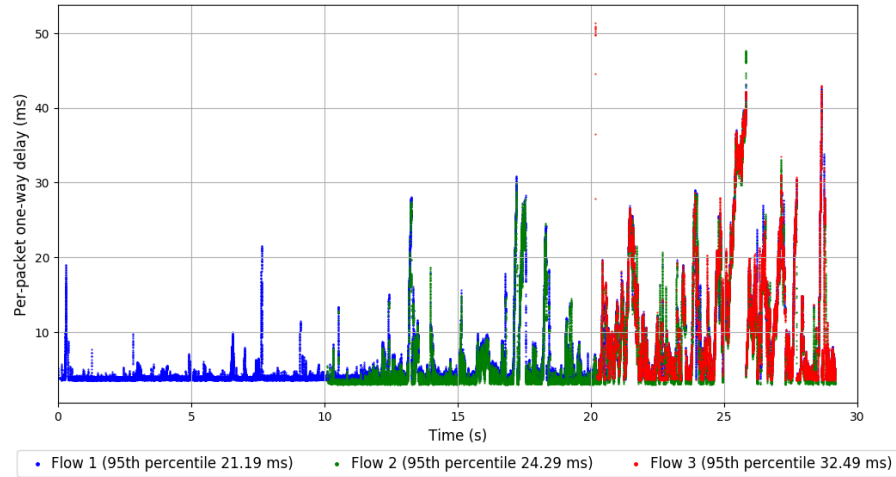
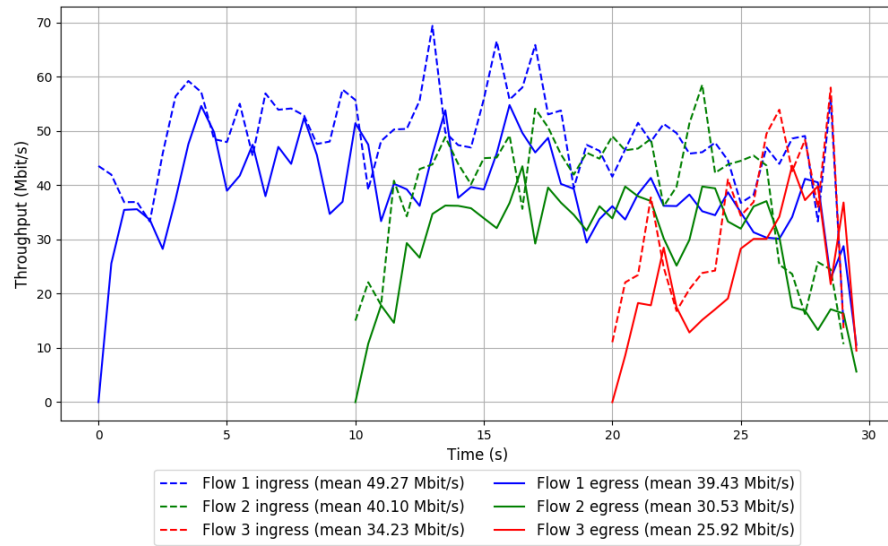


Run 4: Statistics of Indigo-MusesT

Start at: 2019-01-03 01:37:19
End at: 2019-01-03 01:37:49
Local clock offset: 0.058 ms
Remote clock offset: 1.912 ms

Below is generated by plot.py at 2019-01-03 02:11:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 67.38 Mbit/s
95th percentile per-packet one-way delay: 23.600 ms
Loss rate: 21.75%
-- Flow 1:
Average throughput: 39.43 Mbit/s
95th percentile per-packet one-way delay: 21.189 ms
Loss rate: 19.99%
-- Flow 2:
Average throughput: 30.53 Mbit/s
95th percentile per-packet one-way delay: 24.287 ms
Loss rate: 23.88%
-- Flow 3:
Average throughput: 25.92 Mbit/s
95th percentile per-packet one-way delay: 32.493 ms
Loss rate: 24.68%

Run 4: Report of Indigo-MusesT — Data Link

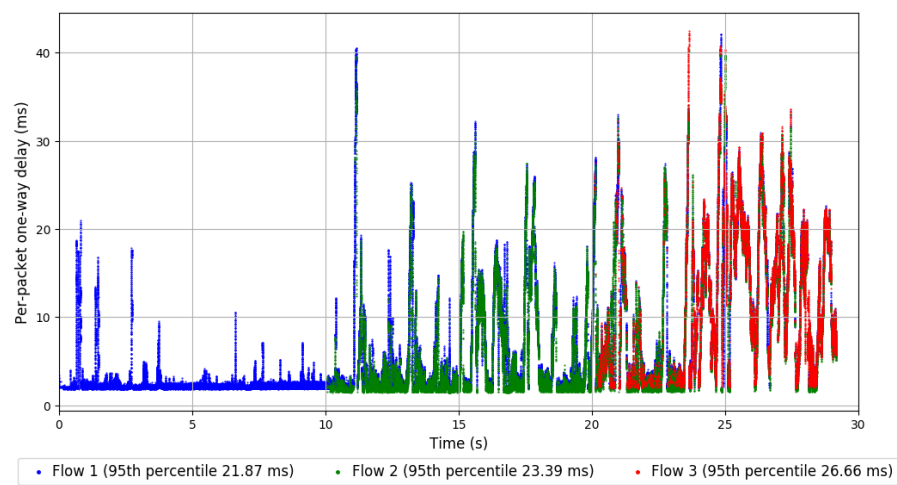
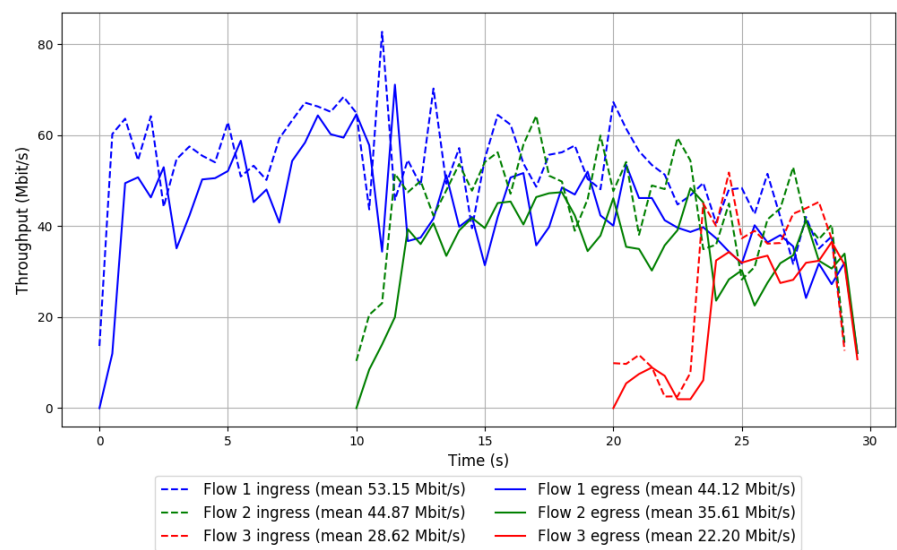


Run 5: Statistics of Indigo-MusesT

Start at: 2019-01-03 02:01:17
End at: 2019-01-03 02:01:47
Local clock offset: -4.728 ms
Remote clock offset: -6.038 ms

Below is generated by plot.py at 2019-01-03 02:12:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 74.36 Mbit/s
95th percentile per-packet one-way delay: 23.168 ms
Loss rate: 18.70%
-- Flow 1:
Average throughput: 44.12 Mbit/s
95th percentile per-packet one-way delay: 21.871 ms
Loss rate: 16.98%
-- Flow 2:
Average throughput: 35.61 Mbit/s
95th percentile per-packet one-way delay: 23.386 ms
Loss rate: 20.61%
-- Flow 3:
Average throughput: 22.20 Mbit/s
95th percentile per-packet one-way delay: 26.663 ms
Loss rate: 22.59%

Run 5: Report of Indigo-MusesT — Data Link

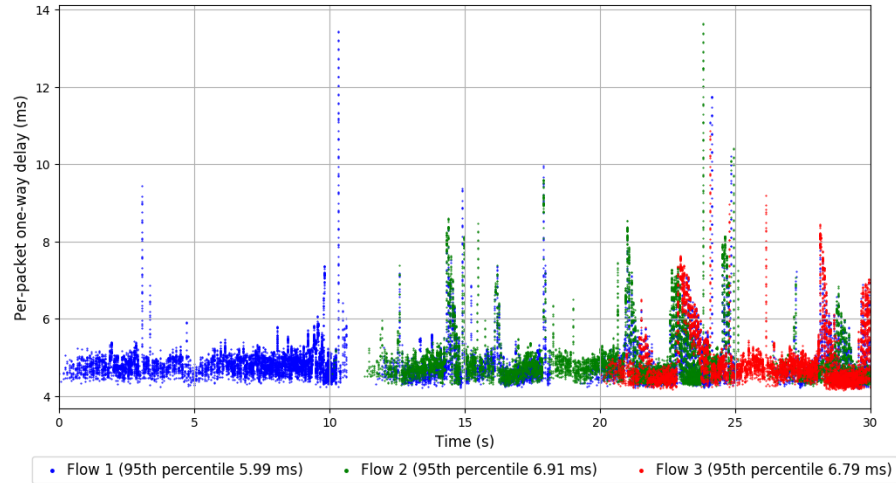
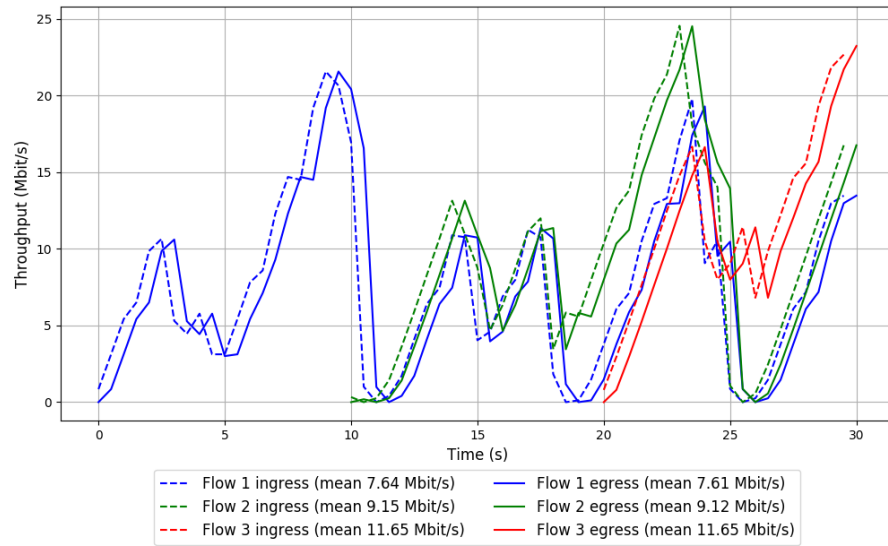



```
Run 1: Statistics of LEDBAT

Start at: 2019-01-03 00:22:31
End at: 2019-01-03 00:23:01
Local clock offset: 1.778 ms
Remote clock offset: 2.085 ms

# Below is generated by plot.py at 2019-01-03 02:12:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.55 Mbit/s
95th percentile per-packet one-way delay: 6.568 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 7.61 Mbit/s
95th percentile per-packet one-way delay: 5.992 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 9.12 Mbit/s
95th percentile per-packet one-way delay: 6.914 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 11.65 Mbit/s
95th percentile per-packet one-way delay: 6.789 ms
Loss rate: 0.03%
```

Run 1: Report of LEDBAT — Data Link

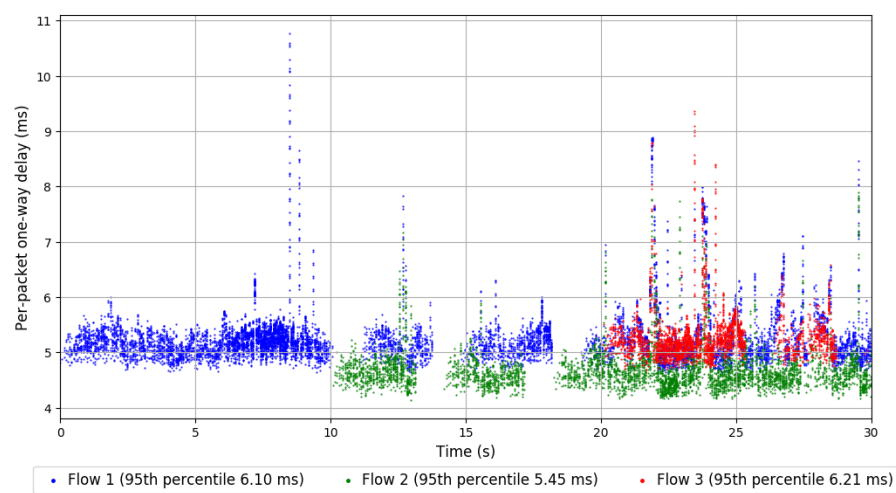
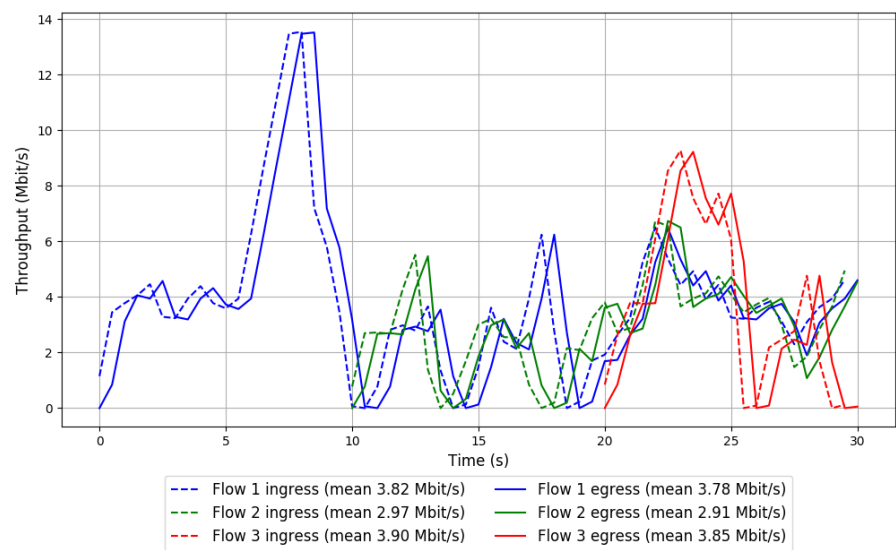


Run 2: Statistics of LEDBAT

Start at: 2019-01-03 00:47:41
End at: 2019-01-03 00:48:11
Local clock offset: 1.167 ms
Remote clock offset: 1.893 ms

Below is generated by plot.py at 2019-01-03 02:12:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 6.97 Mbit/s
95th percentile per-packet one-way delay: 6.000 ms
Loss rate: 1.62%
-- Flow 1:
Average throughput: 3.78 Mbit/s
95th percentile per-packet one-way delay: 6.102 ms
Loss rate: 1.23%
-- Flow 2:
Average throughput: 2.91 Mbit/s
95th percentile per-packet one-way delay: 5.452 ms
Loss rate: 2.10%
-- Flow 3:
Average throughput: 3.85 Mbit/s
95th percentile per-packet one-way delay: 6.215 ms
Loss rate: 2.04%

Run 2: Report of LEDBAT — Data Link

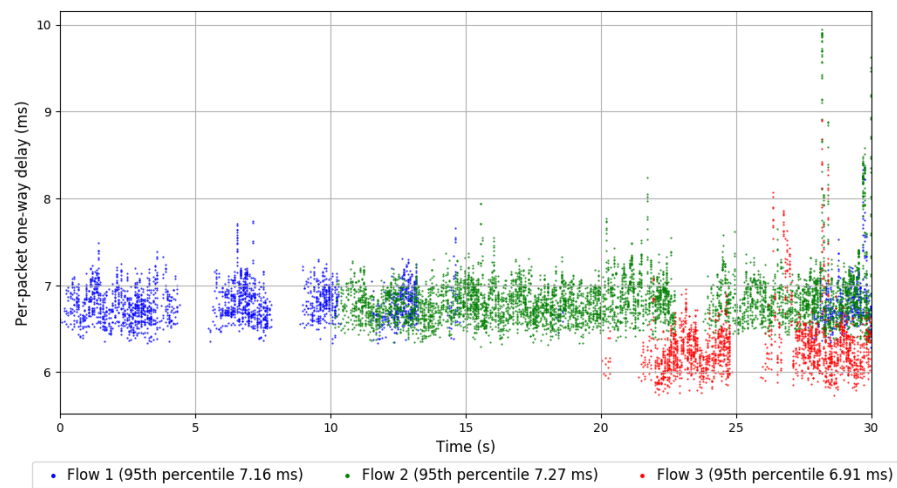
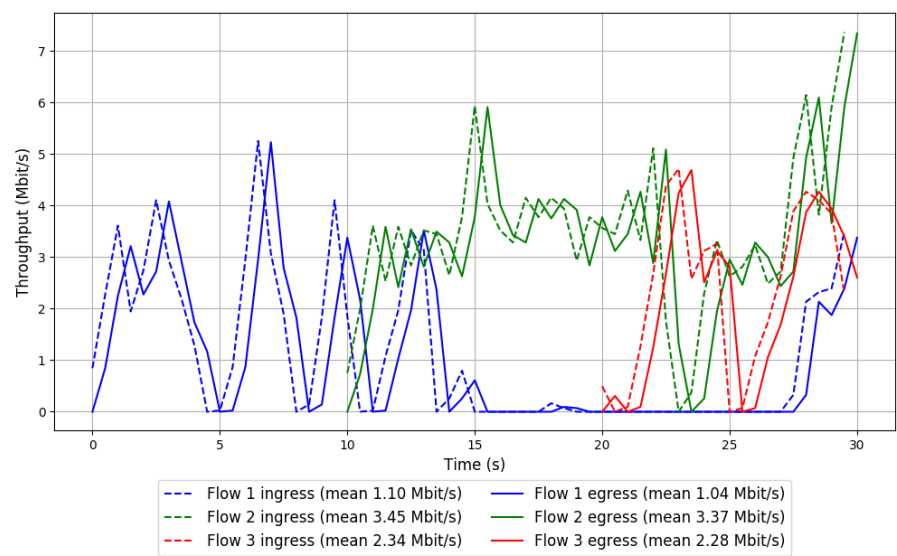


Run 3: Statistics of LEDBAT

Start at: 2019-01-03 01:11:54
End at: 2019-01-03 01:12:24
Local clock offset: -1.7 ms
Remote clock offset: 2.557 ms

Below is generated by plot.py at 2019-01-03 02:12:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 4.04 Mbit/s
95th percentile per-packet one-way delay: 7.216 ms
Loss rate: 3.06%
-- Flow 1:
Average throughput: 1.04 Mbit/s
95th percentile per-packet one-way delay: 7.160 ms
Loss rate: 4.79%
-- Flow 2:
Average throughput: 3.37 Mbit/s
95th percentile per-packet one-way delay: 7.273 ms
Loss rate: 2.33%
-- Flow 3:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 6.911 ms
Loss rate: 2.77%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2019-01-03 01:36:09

End at: 2019-01-03 01:36:39

Local clock offset: 0.917 ms

Remote clock offset: 2.248 ms

Below is generated by plot.py at 2019-01-03 02:12:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.54 Mbit/s

95th percentile per-packet one-way delay: 4.441 ms

Loss rate: 1.32%

-- Flow 1:

Average throughput: 4.44 Mbit/s

95th percentile per-packet one-way delay: 4.029 ms

Loss rate: 1.12%

-- Flow 2:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 4.756 ms

Loss rate: 1.70%

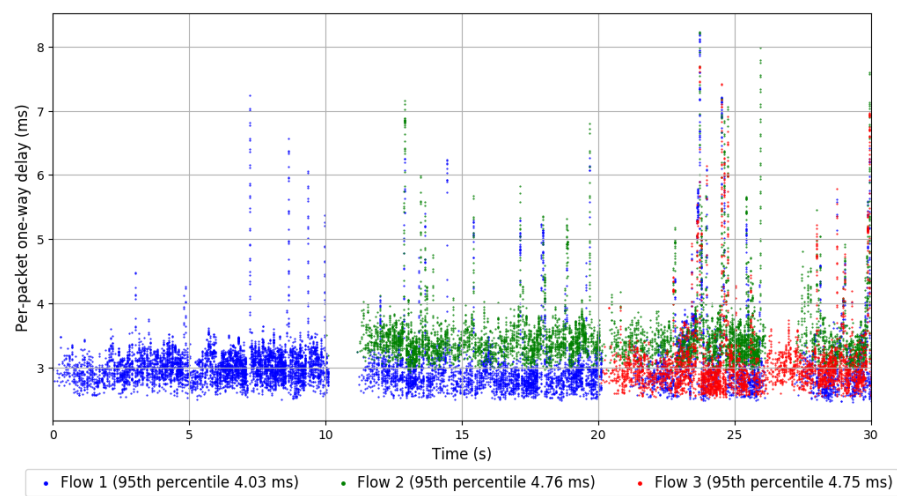
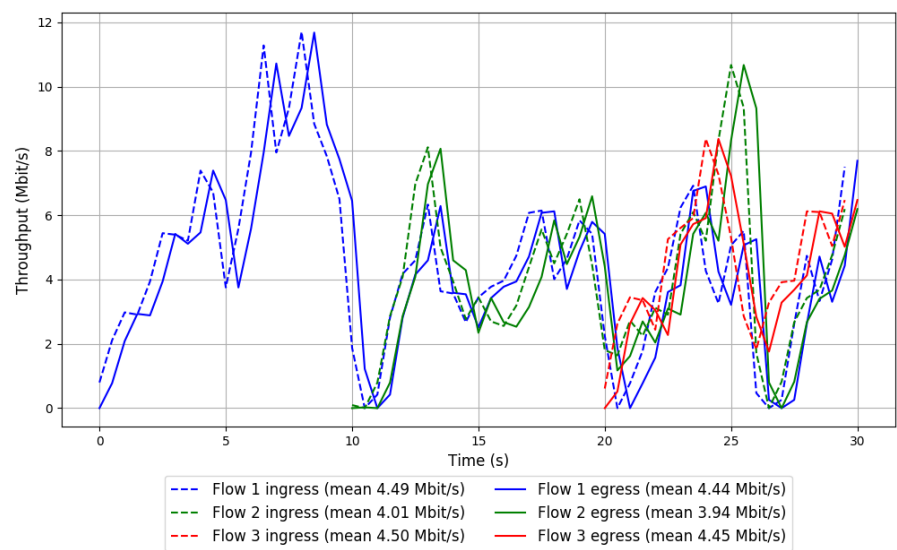
-- Flow 3:

Average throughput: 4.45 Mbit/s

95th percentile per-packet one-way delay: 4.752 ms

Loss rate: 1.23%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2019-01-03 02:00:08

End at: 2019-01-03 02:00:38

Local clock offset: 1.301 ms

Remote clock offset: 1.545 ms

Below is generated by plot.py at 2019-01-03 02:12:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.84 Mbit/s

95th percentile per-packet one-way delay: 4.794 ms

Loss rate: 2.02%

-- Flow 1:

Average throughput: 2.92 Mbit/s

95th percentile per-packet one-way delay: 4.993 ms

Loss rate: 2.68%

-- Flow 2:

Average throughput: 3.95 Mbit/s

95th percentile per-packet one-way delay: 4.782 ms

Loss rate: 1.40%

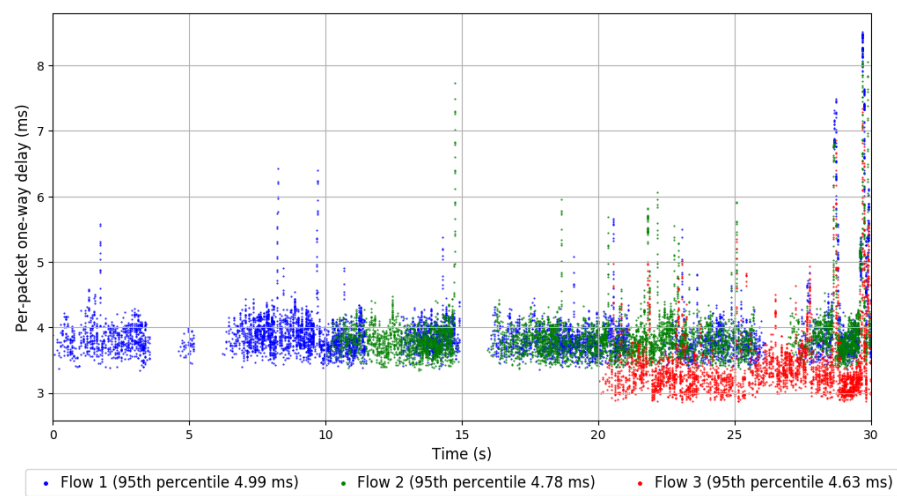
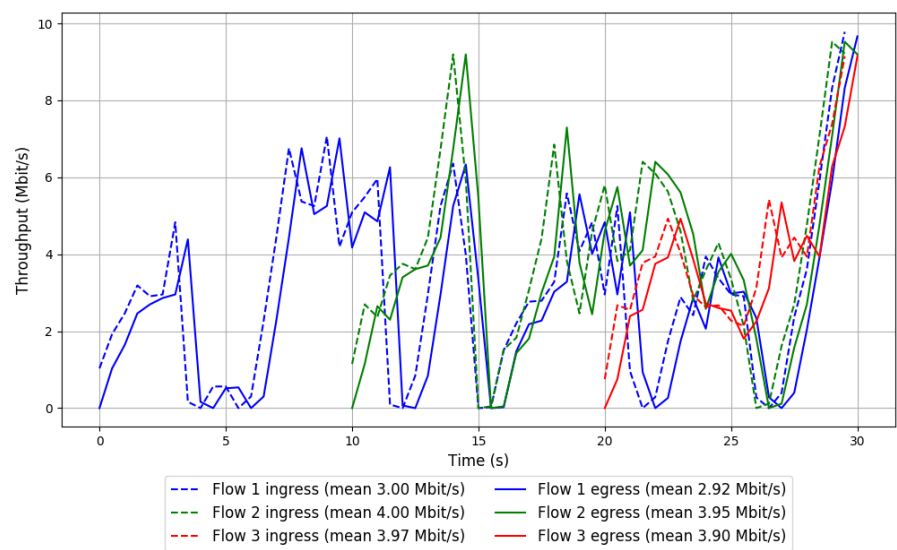
-- Flow 3:

Average throughput: 3.90 Mbit/s

95th percentile per-packet one-way delay: 4.629 ms

Loss rate: 1.78%

Run 5: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2019-01-03 00:18:02

End at: 2019-01-03 00:18:32

Local clock offset: 2.283 ms

Remote clock offset: 2.088 ms

Below is generated by plot.py at 2019-01-03 02:12:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.00 Mbit/s

95th percentile per-packet one-way delay: 5.736 ms

Loss rate: 14.85%

-- Flow 1:

Average throughput: 71.16 Mbit/s

95th percentile per-packet one-way delay: 5.712 ms

Loss rate: 14.85%

-- Flow 2:

Average throughput: 1.82 Mbit/s

95th percentile per-packet one-way delay: 5.860 ms

Loss rate: 14.72%

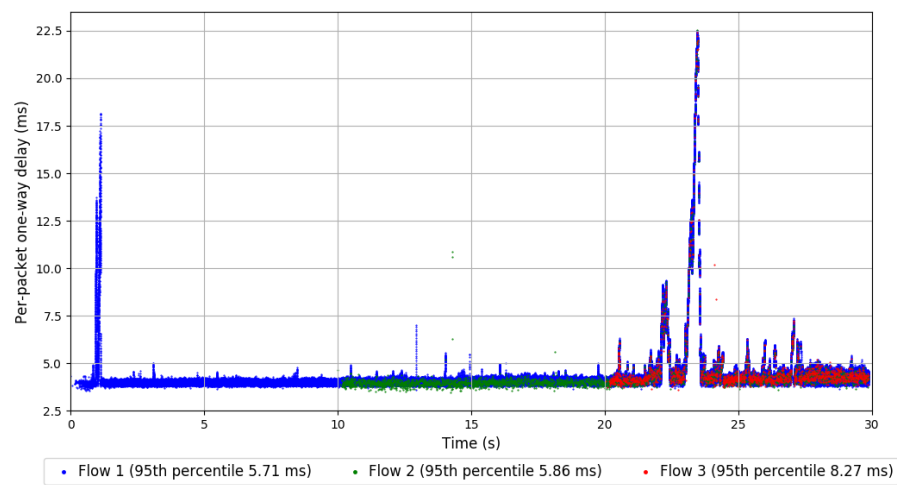
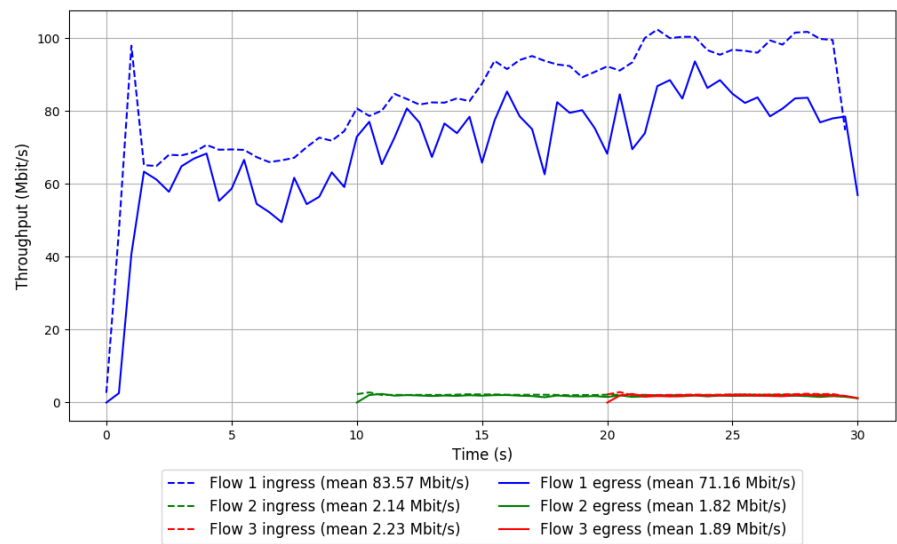
-- Flow 3:

Average throughput: 1.89 Mbit/s

95th percentile per-packet one-way delay: 8.273 ms

Loss rate: 15.26%

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2019-01-03 00:43:20

End at: 2019-01-03 00:43:50

Local clock offset: 3.909 ms

Remote clock offset: 1.811 ms

Below is generated by plot.py at 2019-01-03 02:12:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 43.97 Mbit/s

95th percentile per-packet one-way delay: 2.288 ms

Loss rate: 14.00%

-- Flow 1:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 2.250 ms

Loss rate: 9.96%

-- Flow 2:

Average throughput: 53.34 Mbit/s

95th percentile per-packet one-way delay: 2.297 ms

Loss rate: 14.85%

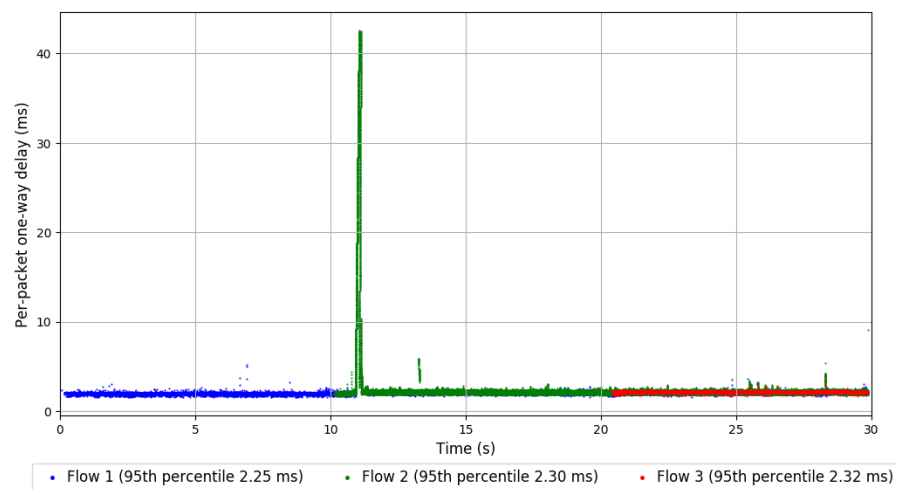
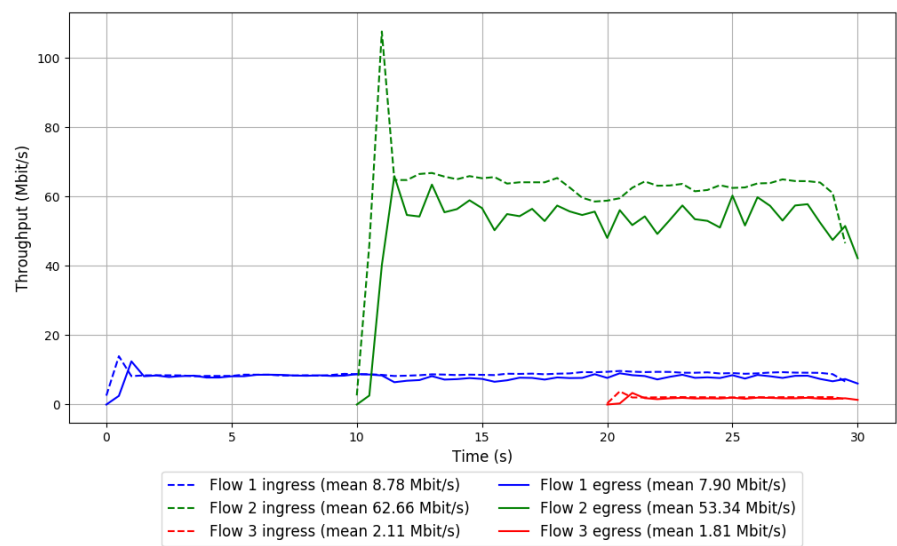
-- Flow 3:

Average throughput: 1.81 Mbit/s

95th percentile per-packet one-way delay: 2.316 ms

Loss rate: 14.36%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2019-01-03 01:07:55

End at: 2019-01-03 01:08:25

Local clock offset: -0.398 ms

Remote clock offset: 3.005 ms

Below is generated by plot.py at 2019-01-03 02:12:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 25.30 Mbit/s

95th percentile per-packet one-way delay: 5.912 ms

Loss rate: 6.77%

-- Flow 1:

Average throughput: 21.27 Mbit/s

95th percentile per-packet one-way delay: 5.906 ms

Loss rate: 6.58%

-- Flow 2:

Average throughput: 2.34 Mbit/s

95th percentile per-packet one-way delay: 5.949 ms

Loss rate: 7.75%

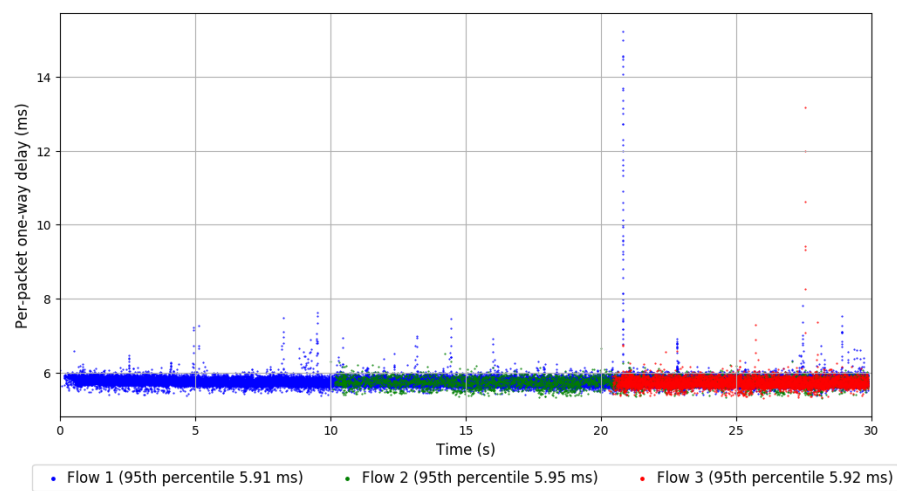
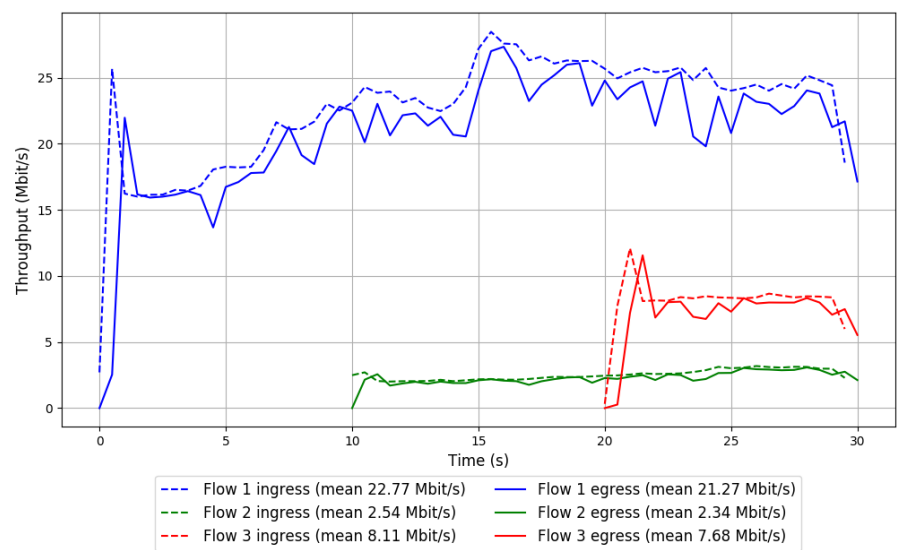
-- Flow 3:

Average throughput: 7.68 Mbit/s

95th percentile per-packet one-way delay: 5.921 ms

Loss rate: 7.78%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2019-01-03 01:32:05

End at: 2019-01-03 01:32:35

Local clock offset: 1.029 ms

Remote clock offset: 2.254 ms

Below is generated by plot.py at 2019-01-03 02:12:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 57.52 Mbit/s

95th percentile per-packet one-way delay: 3.549 ms

Loss rate: 11.11%

-- Flow 1:

Average throughput: 53.87 Mbit/s

95th percentile per-packet one-way delay: 3.555 ms

Loss rate: 11.17%

-- Flow 2:

Average throughput: 3.66 Mbit/s

95th percentile per-packet one-way delay: 3.513 ms

Loss rate: 10.00%

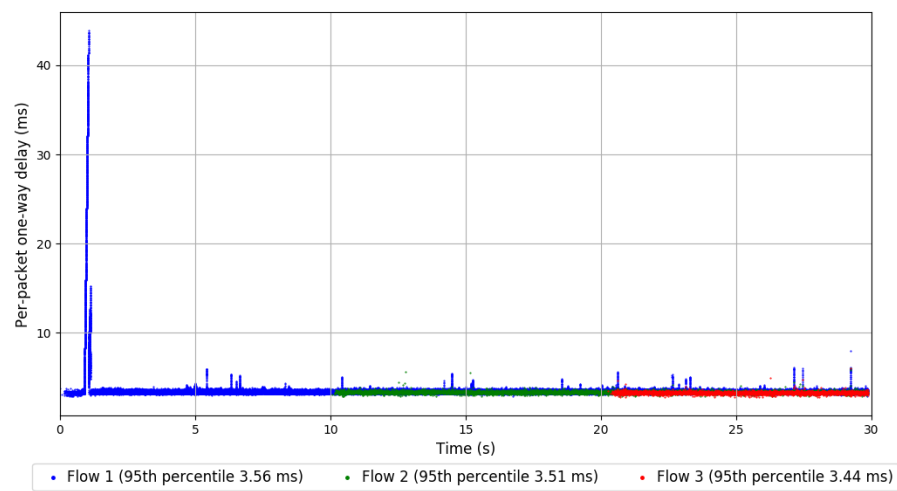
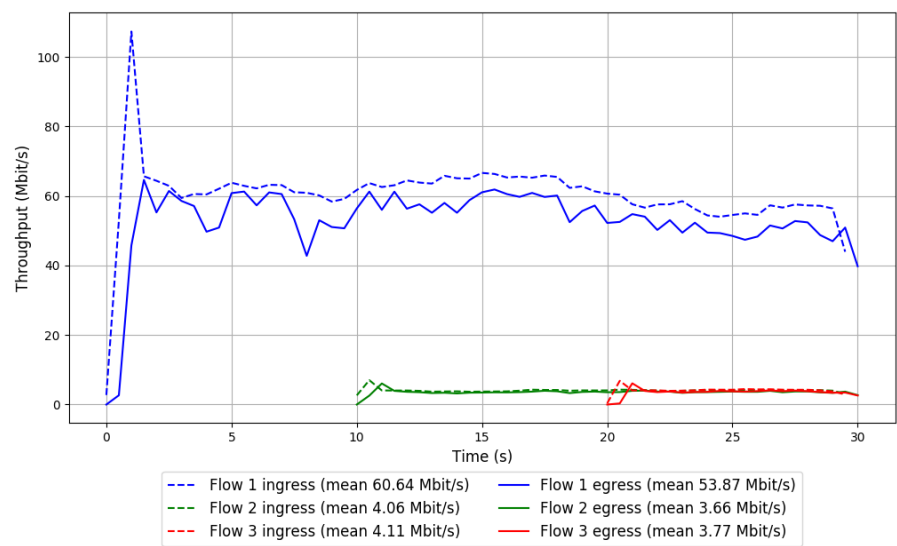
-- Flow 3:

Average throughput: 3.77 Mbit/s

95th percentile per-packet one-way delay: 3.443 ms

Loss rate: 10.57%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

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

End at: 2019-01-03 01:56:25

Local clock offset: 1.284 ms

Remote clock offset: 1.325 ms

Below is generated by plot.py at 2019-01-03 02:12:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 53.05 Mbit/s

95th percentile per-packet one-way delay: 2.721 ms

Loss rate: 13.57%

-- Flow 1:

Average throughput: 46.96 Mbit/s

95th percentile per-packet one-way delay: 2.711 ms

Loss rate: 13.66%

-- Flow 2:

Average throughput: 7.26 Mbit/s

95th percentile per-packet one-way delay: 2.756 ms

Loss rate: 12.67%

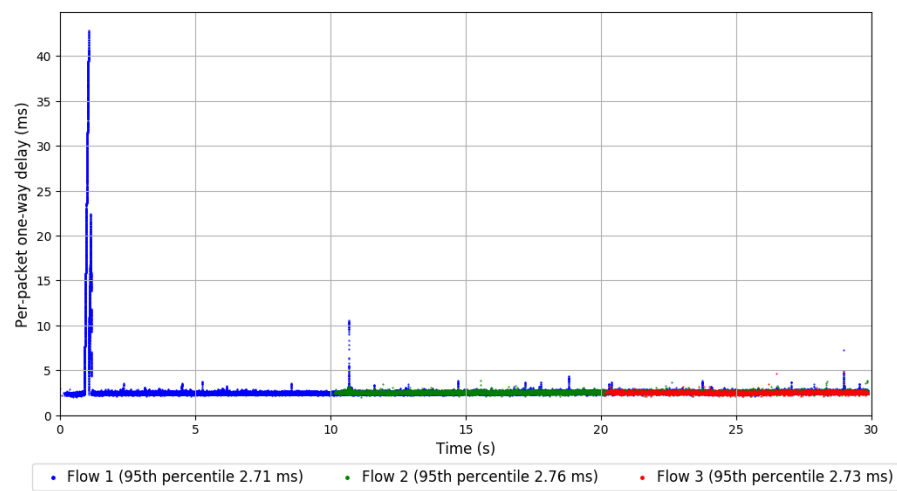
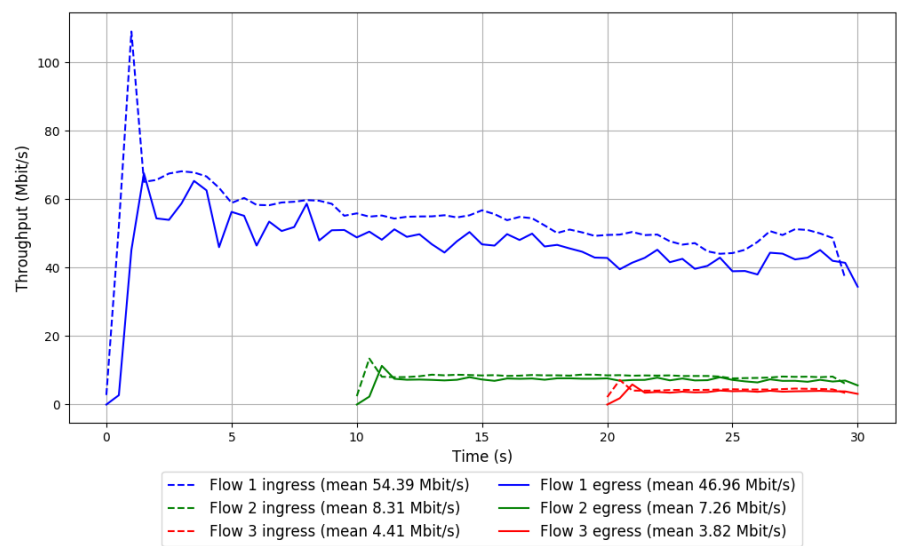
-- Flow 3:

Average throughput: 3.82 Mbit/s

95th percentile per-packet one-way delay: 2.734 ms

Loss rate: 13.29%

Run 5: Report of PCC-Allegro — Data Link

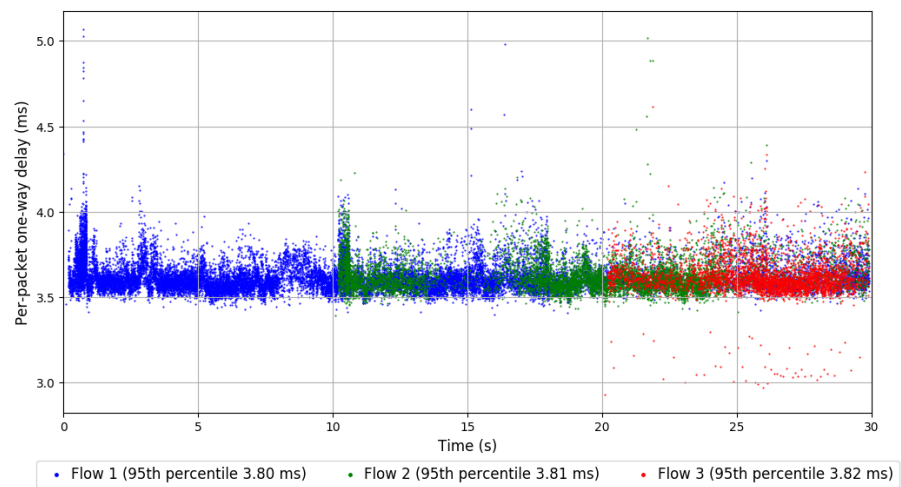
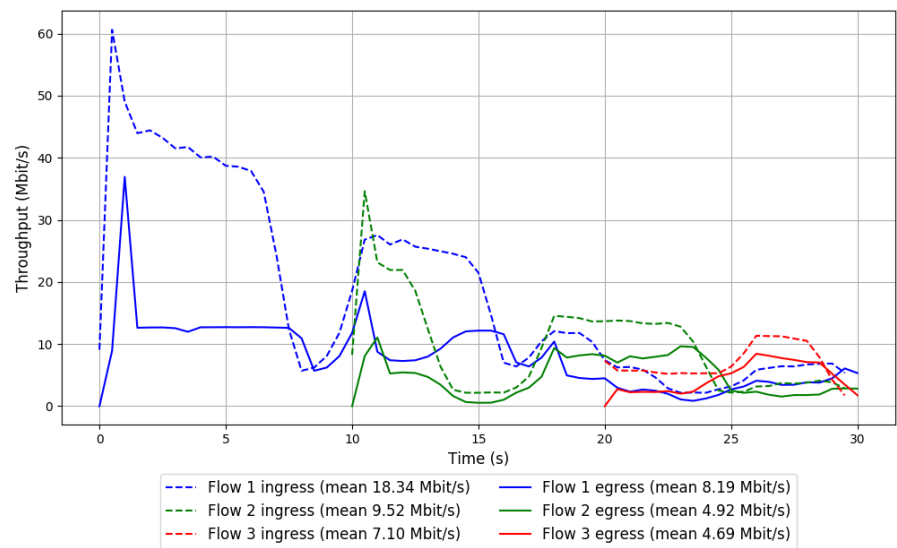


```
Run 1: Statistics of PCC-Expr

Start at: 2019-01-03 00:08:07
End at: 2019-01-03 00:08:37
Local clock offset: 3.057 ms
Remote clock offset: 2.253 ms

# Below is generated by plot.py at 2019-01-03 02:12:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.01 Mbit/s
95th percentile per-packet one-way delay: 3.807 ms
Loss rate: 51.84%
-- Flow 1:
Average throughput: 8.19 Mbit/s
95th percentile per-packet one-way delay: 3.804 ms
Loss rate: 55.34%
-- Flow 2:
Average throughput: 4.92 Mbit/s
95th percentile per-packet one-way delay: 3.807 ms
Loss rate: 48.33%
-- Flow 3:
Average throughput: 4.69 Mbit/s
95th percentile per-packet one-way delay: 3.817 ms
Loss rate: 33.92%
```

Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

Start at: 2019-01-03 00:33:05

End at: 2019-01-03 00:33:35

Local clock offset: 2.4 ms

Remote clock offset: 2.154 ms

Below is generated by plot.py at 2019-01-03 02:12:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.86 Mbit/s

95th percentile per-packet one-way delay: 4.170 ms

Loss rate: 51.60%

-- Flow 1:

Average throughput: 7.25 Mbit/s

95th percentile per-packet one-way delay: 4.170 ms

Loss rate: 53.29%

-- Flow 2:

Average throughput: 5.47 Mbit/s

95th percentile per-packet one-way delay: 4.160 ms

Loss rate: 44.54%

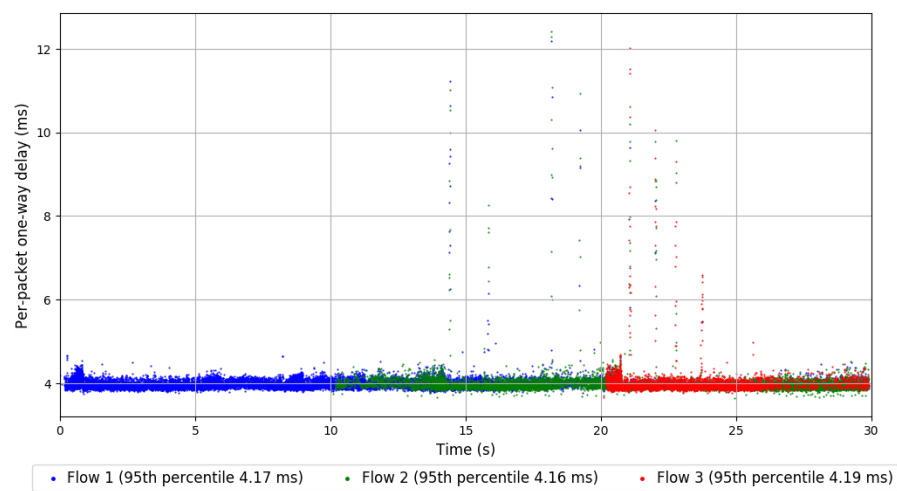
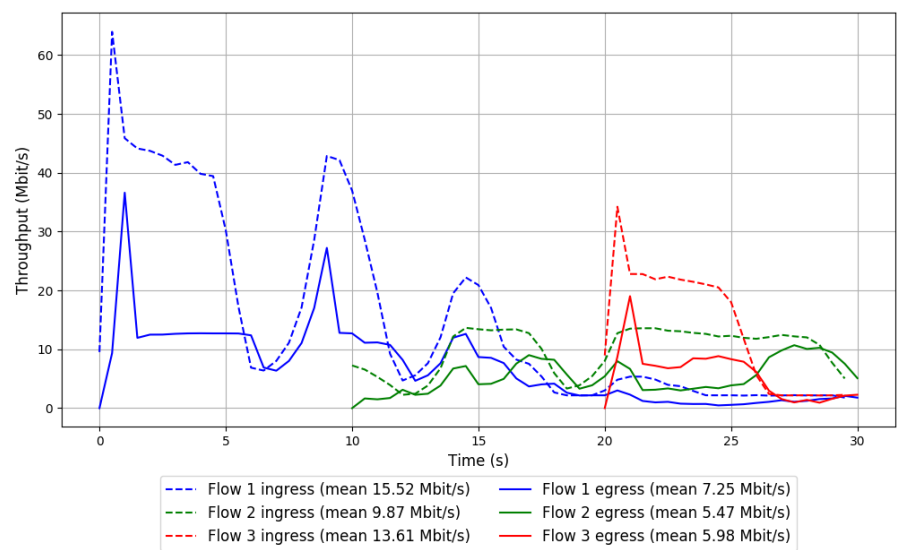
-- Flow 3:

Average throughput: 5.98 Mbit/s

95th percentile per-packet one-way delay: 4.188 ms

Loss rate: 56.07%

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2019-01-03 00:57:54

End at: 2019-01-03 00:58:24

Local clock offset: 1.259 ms

Remote clock offset: 2.652 ms

Below is generated by plot.py at 2019-01-03 02:12:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.95 Mbit/s

95th percentile per-packet one-way delay: 4.815 ms

Loss rate: 21.96%

-- Flow 1:

Average throughput: 6.96 Mbit/s

95th percentile per-packet one-way delay: 4.809 ms

Loss rate: 21.08%

-- Flow 2:

Average throughput: 5.34 Mbit/s

95th percentile per-packet one-way delay: 4.809 ms

Loss rate: 22.98%

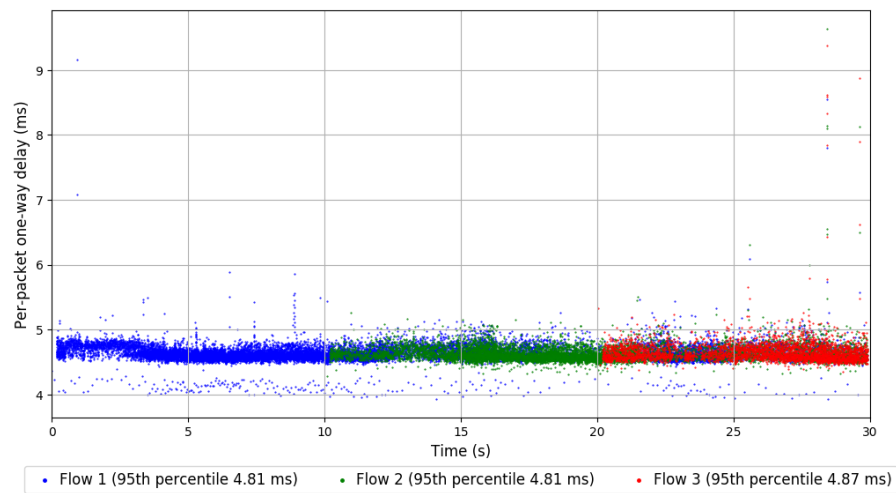
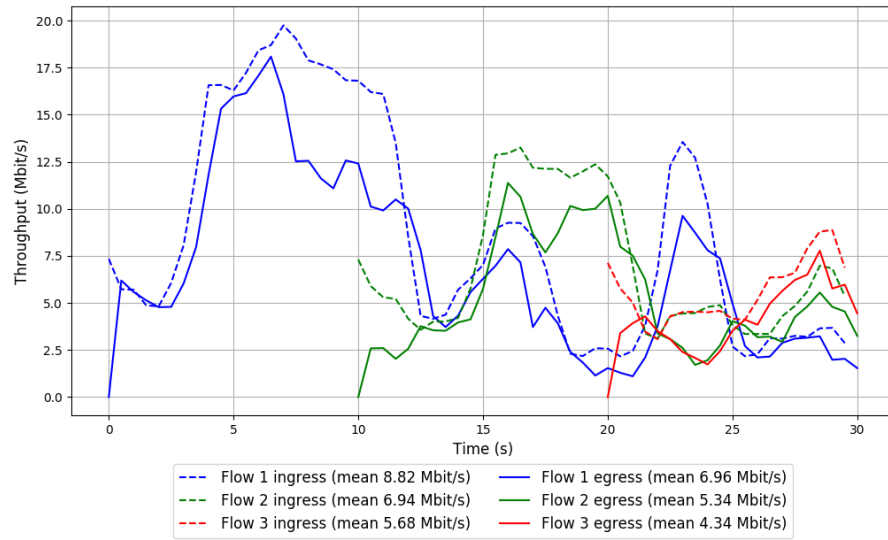
-- Flow 3:

Average throughput: 4.34 Mbit/s

95th percentile per-packet one-way delay: 4.873 ms

Loss rate: 23.62%

Run 3: Report of PCC-Expr — Data Link

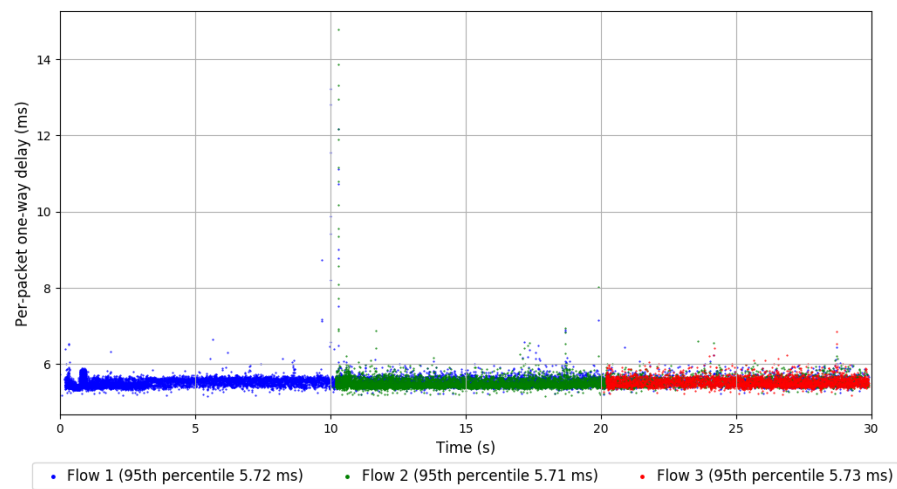
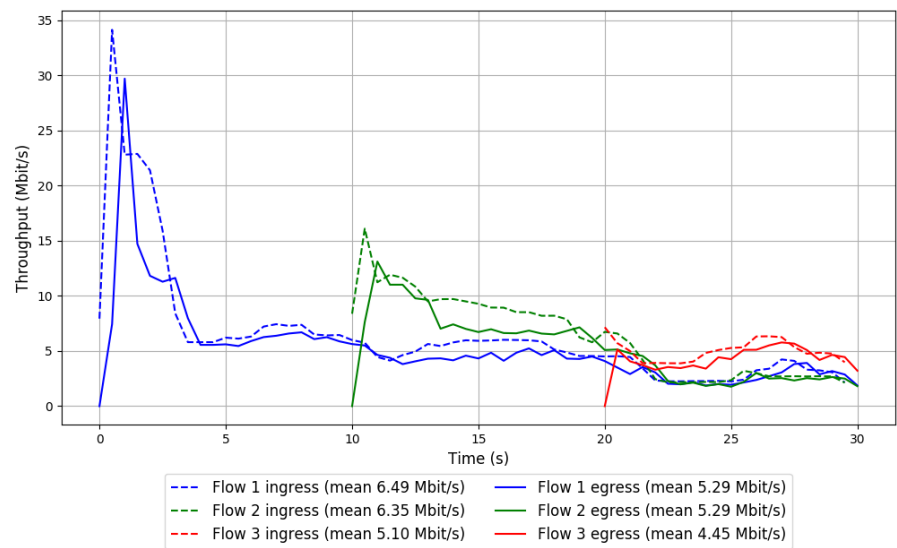


```
Run 4: Statistics of PCC-Expr

Start at: 2019-01-03 01:22:08
End at: 2019-01-03 01:22:38
Local clock offset: -0.973 ms
Remote clock offset: 2.598 ms

# Below is generated by plot.py at 2019-01-03 02:12:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.28 Mbit/s
95th percentile per-packet one-way delay: 5.716 ms
Loss rate: 17.06%
-- Flow 1:
Average throughput: 5.29 Mbit/s
95th percentile per-packet one-way delay: 5.716 ms
Loss rate: 18.43%
-- Flow 2:
Average throughput: 5.29 Mbit/s
95th percentile per-packet one-way delay: 5.708 ms
Loss rate: 16.68%
-- Flow 3:
Average throughput: 4.45 Mbit/s
95th percentile per-packet one-way delay: 5.732 ms
Loss rate: 12.79%
```

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2019-01-03 01:45:55

End at: 2019-01-03 01:46:25

Local clock offset: 0.23 ms

Remote clock offset: 1.492 ms

Below is generated by plot.py at 2019-01-03 02:12:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.16 Mbit/s

95th percentile per-packet one-way delay: 3.286 ms

Loss rate: 30.59%

-- Flow 1:

Average throughput: 5.52 Mbit/s

95th percentile per-packet one-way delay: 3.285 ms

Loss rate: 27.26%

-- Flow 2:

Average throughput: 6.22 Mbit/s

95th percentile per-packet one-way delay: 3.276 ms

Loss rate: 31.40%

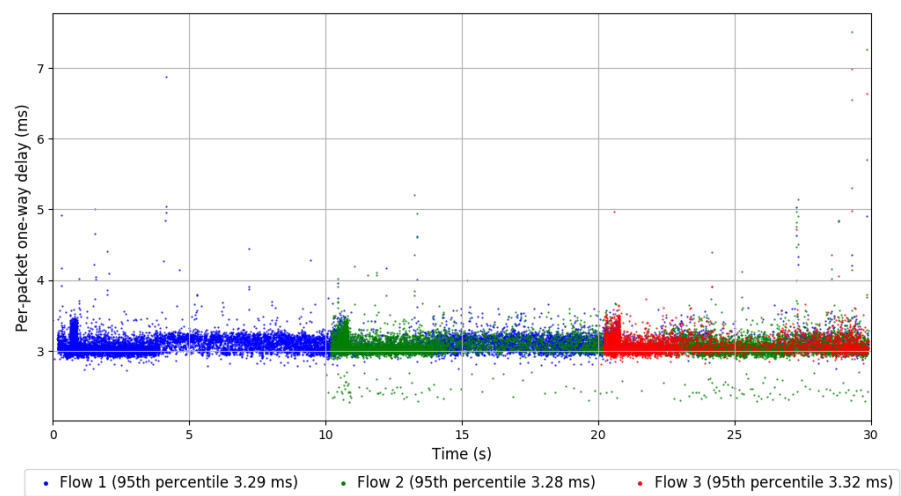
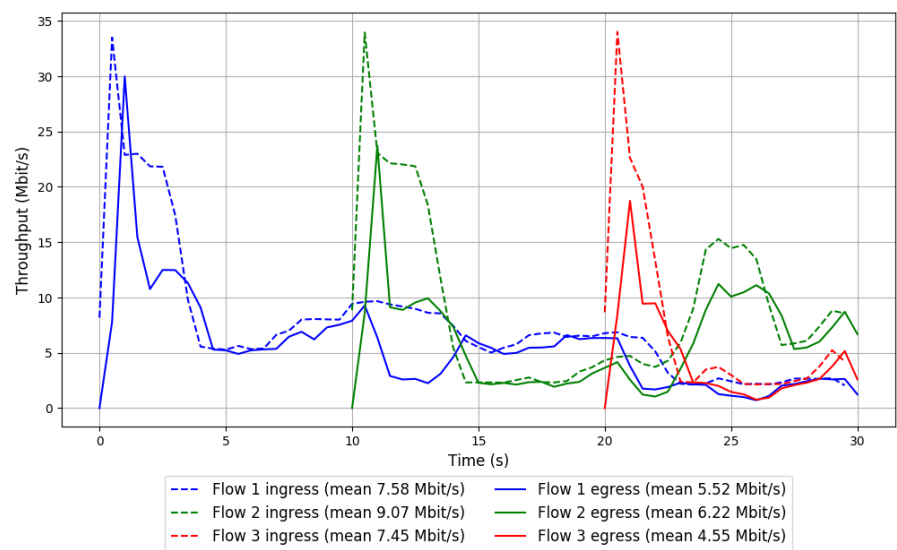
-- Flow 3:

Average throughput: 4.55 Mbit/s

95th percentile per-packet one-way delay: 3.322 ms

Loss rate: 38.89%

Run 5: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2019-01-03 00:06:53

End at: 2019-01-03 00:07:23

Local clock offset: 2.862 ms

Remote clock offset: 2.114 ms

Below is generated by plot.py at 2019-01-03 02:12:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 26.03 Mbit/s

95th percentile per-packet one-way delay: 21.968 ms

Loss rate: 7.93%

-- Flow 1:

Average throughput: 10.74 Mbit/s

95th percentile per-packet one-way delay: 14.702 ms

Loss rate: 7.49%

-- Flow 2:

Average throughput: 12.63 Mbit/s

95th percentile per-packet one-way delay: 20.062 ms

Loss rate: 8.43%

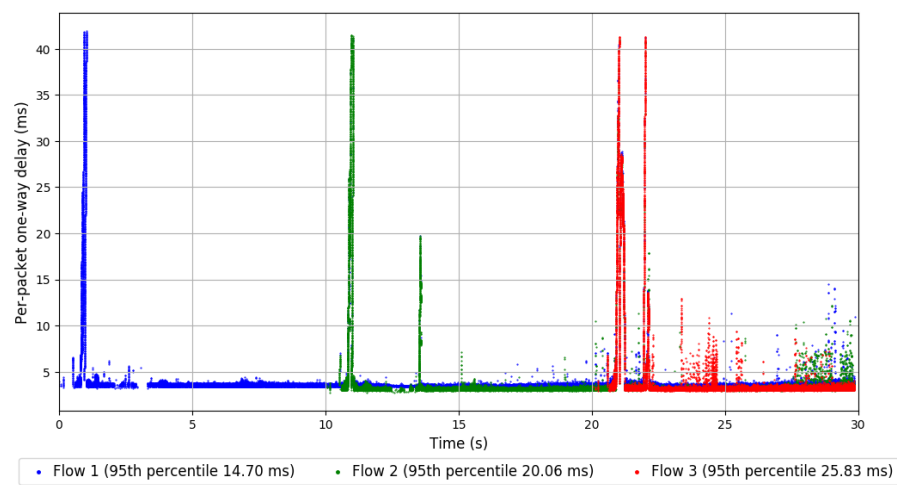
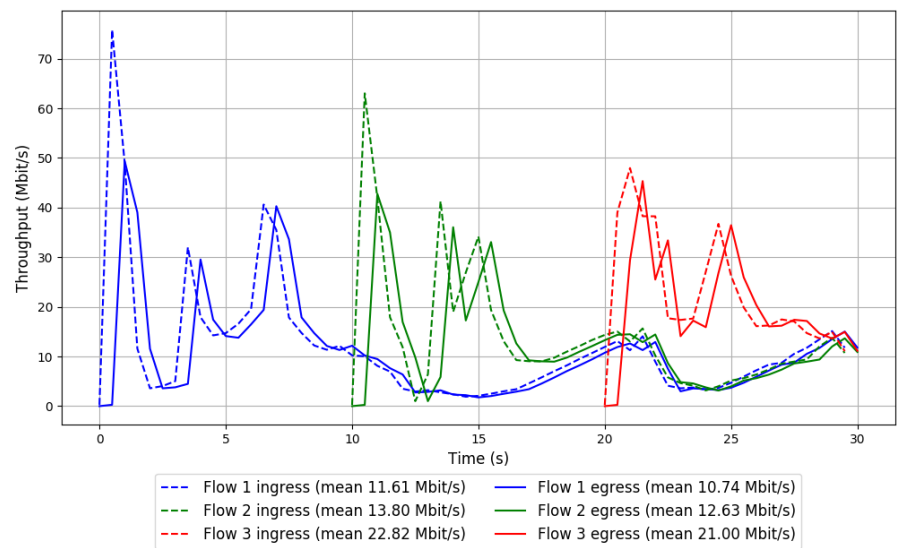
-- Flow 3:

Average throughput: 21.00 Mbit/s

95th percentile per-packet one-way delay: 25.827 ms

Loss rate: 8.00%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2019-01-03 00:31:49

End at: 2019-01-03 00:32:19

Local clock offset: -0.648 ms

Remote clock offset: 2.214 ms

Below is generated by plot.py at 2019-01-03 02:12:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 32.09 Mbit/s

95th percentile per-packet one-way delay: 27.856 ms

Loss rate: 4.95%

-- Flow 1:

Average throughput: 17.02 Mbit/s

95th percentile per-packet one-way delay: 27.932 ms

Loss rate: 6.01%

-- Flow 2:

Average throughput: 14.50 Mbit/s

95th percentile per-packet one-way delay: 16.081 ms

Loss rate: 2.62%

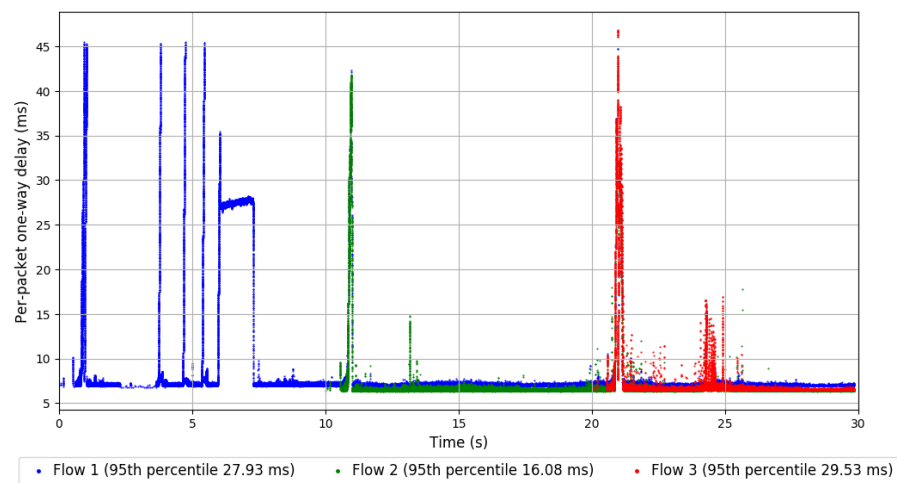
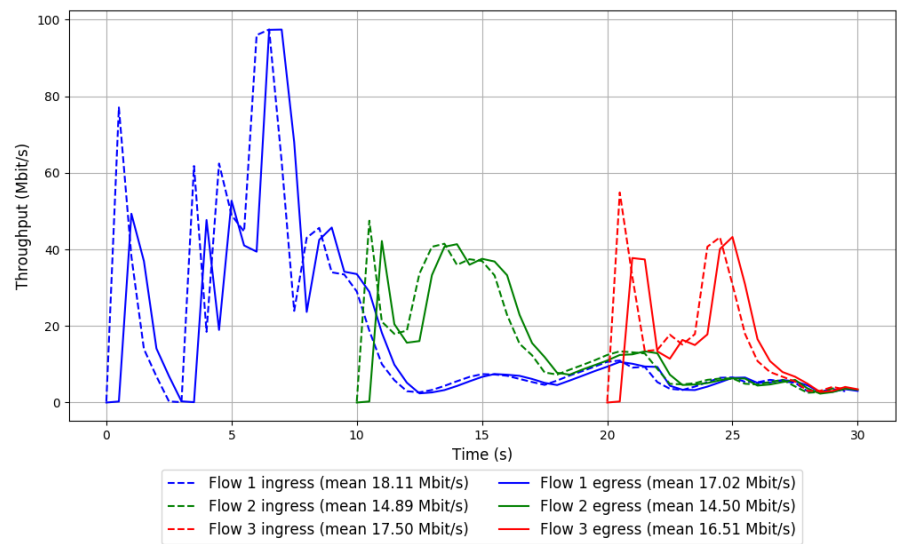
-- Flow 3:

Average throughput: 16.51 Mbit/s

95th percentile per-packet one-way delay: 29.532 ms

Loss rate: 5.65%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2019-01-03 00:56:43

End at: 2019-01-03 00:57:13

Local clock offset: 3.379 ms

Remote clock offset: 2.242 ms

Below is generated by plot.py at 2019-01-03 02:12:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.46 Mbit/s

95th percentile per-packet one-way delay: 1.948 ms

Loss rate: 2.42%

-- Flow 1:

Average throughput: 7.21 Mbit/s

95th percentile per-packet one-way delay: 1.958 ms

Loss rate: 1.95%

-- Flow 2:

Average throughput: 3.64 Mbit/s

95th percentile per-packet one-way delay: 1.880 ms

Loss rate: 3.40%

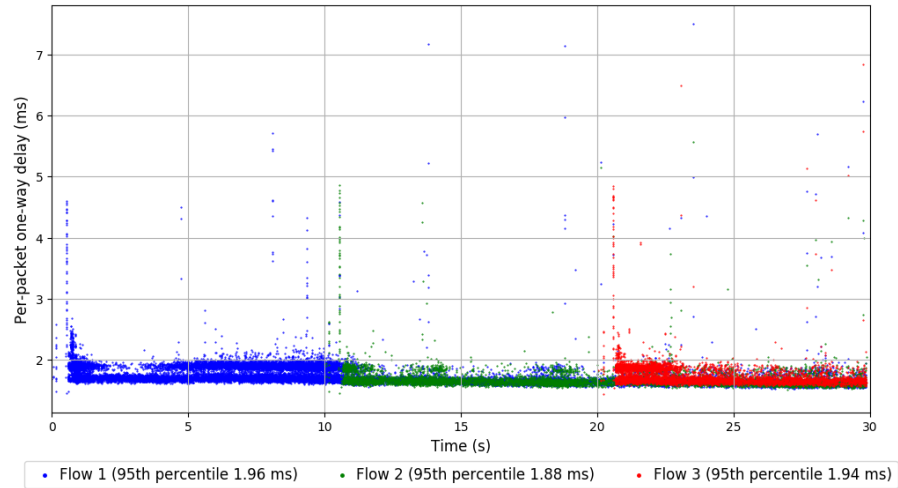
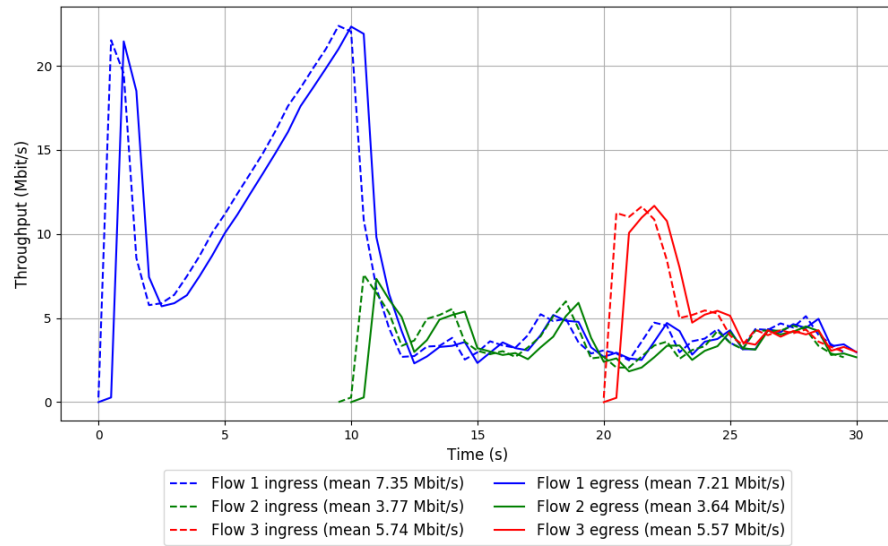
-- Flow 3:

Average throughput: 5.57 Mbit/s

95th percentile per-packet one-way delay: 1.942 ms

Loss rate: 2.93%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2019-01-03 01:20:54

End at: 2019-01-03 01:21:24

Local clock offset: -2.6 ms

Remote clock offset: 2.032 ms

Below is generated by plot.py at 2019-01-03 02:12:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.24 Mbit/s

95th percentile per-packet one-way delay: 6.616 ms

Loss rate: 5.10%

-- Flow 1:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 6.638 ms

Loss rate: 6.00%

-- Flow 2:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 6.643 ms

Loss rate: 4.84%

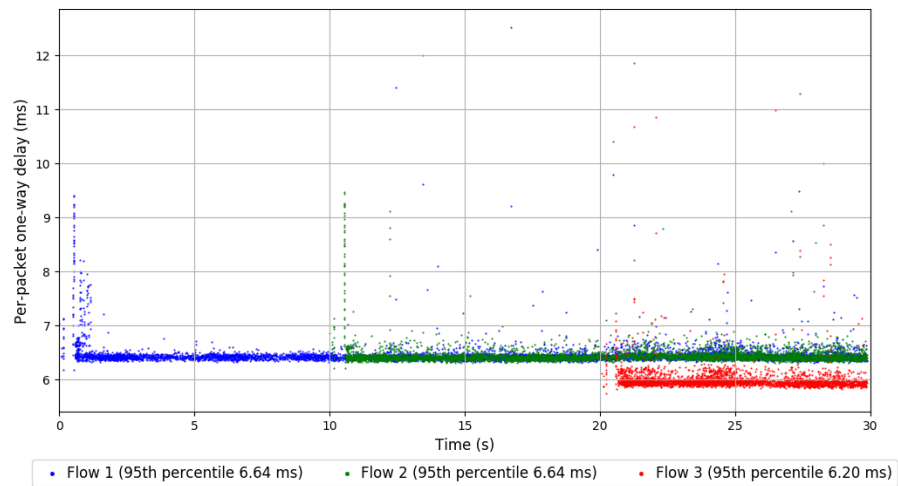
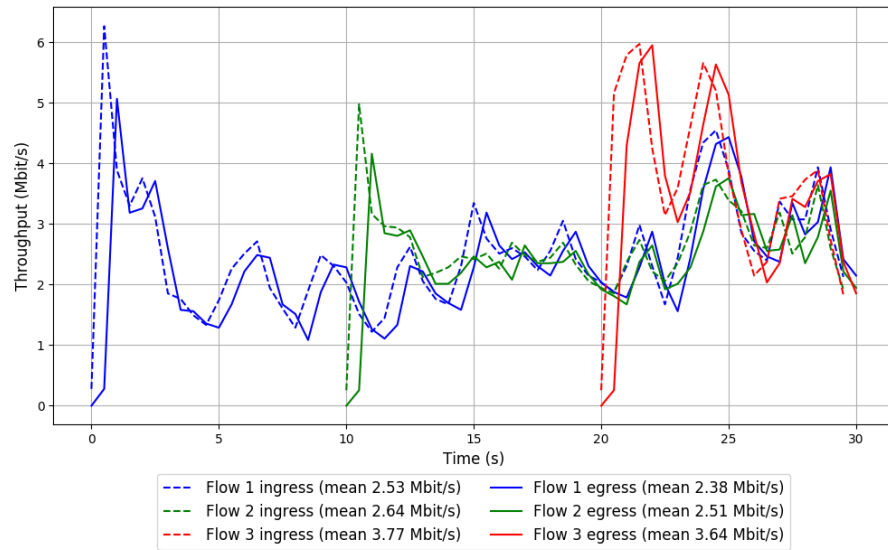
-- Flow 3:

Average throughput: 3.64 Mbit/s

95th percentile per-packet one-way delay: 6.196 ms

Loss rate: 3.61%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2019-01-03 01:44:44

End at: 2019-01-03 01:45:14

Local clock offset: 0.475 ms

Remote clock offset: 1.958 ms

Below is generated by plot.py at 2019-01-03 02:12:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 9.19 Mbit/s

95th percentile per-packet one-way delay: 3.326 ms

Loss rate: 3.10%

-- Flow 1:

Average throughput: 4.68 Mbit/s

95th percentile per-packet one-way delay: 3.330 ms

Loss rate: 2.81%

-- Flow 2:

Average throughput: 4.87 Mbit/s

95th percentile per-packet one-way delay: 2.915 ms

Loss rate: 3.34%

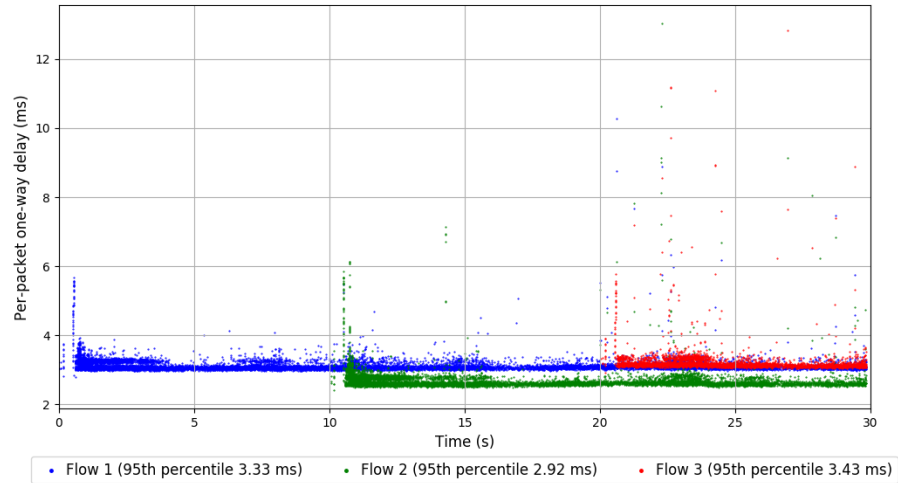
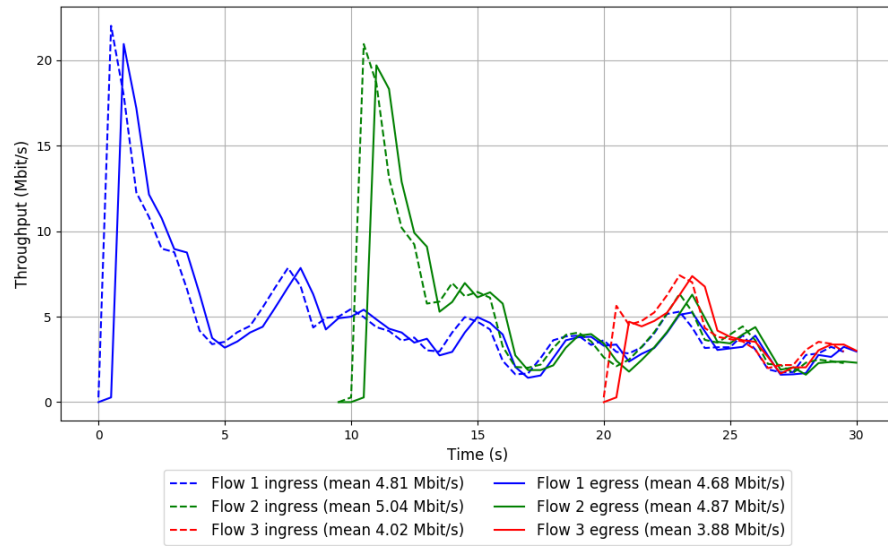
-- Flow 3:

Average throughput: 3.88 Mbit/s

95th percentile per-packet one-way delay: 3.431 ms

Loss rate: 3.50%

Run 5: Report of QUIC Cubic — Data Link



Run 1: Statistics of SCReAM

Start at: 2019-01-03 00:15:45

End at: 2019-01-03 00:16:15

Local clock offset: 0.861 ms

Remote clock offset: 2.167 ms

Below is generated by plot.py at 2019-01-03 02:12:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.24 Mbit/s

95th percentile per-packet one-way delay: 5.481 ms

Loss rate: 1.83%

-- Flow 1:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 5.010 ms

Loss rate: 1.42%

-- Flow 2:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 5.555 ms

Loss rate: 1.96%

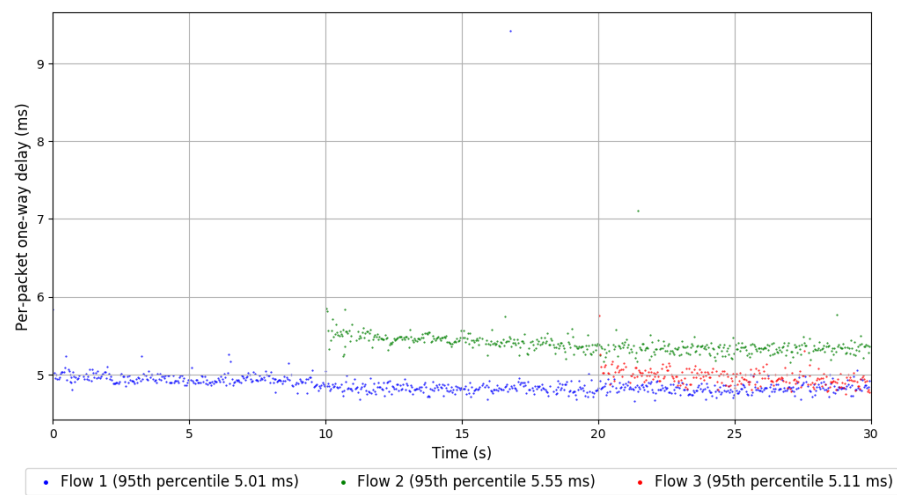
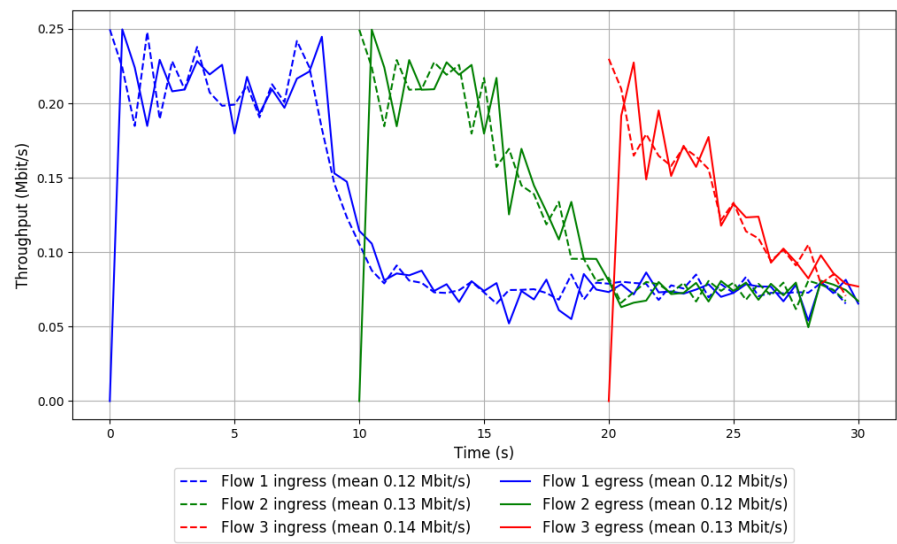
-- Flow 3:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 5.111 ms

Loss rate: 2.68%

Run 1: Report of SReAM — Data Link

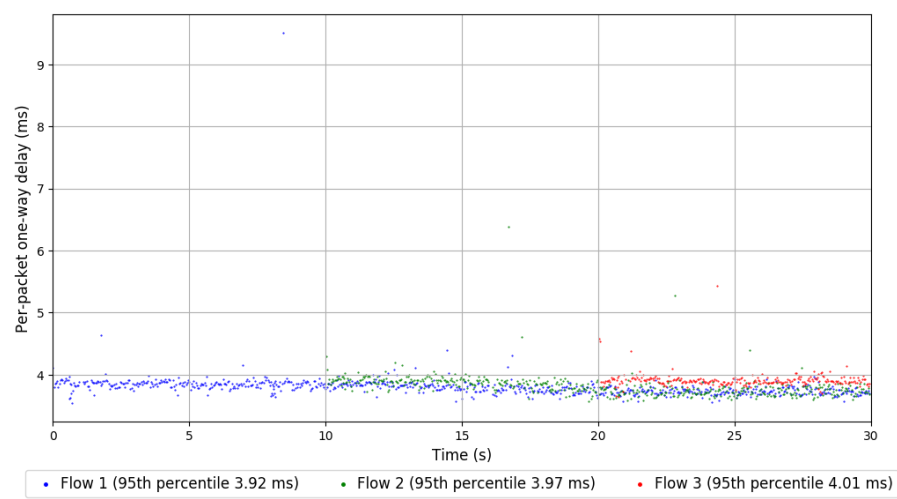
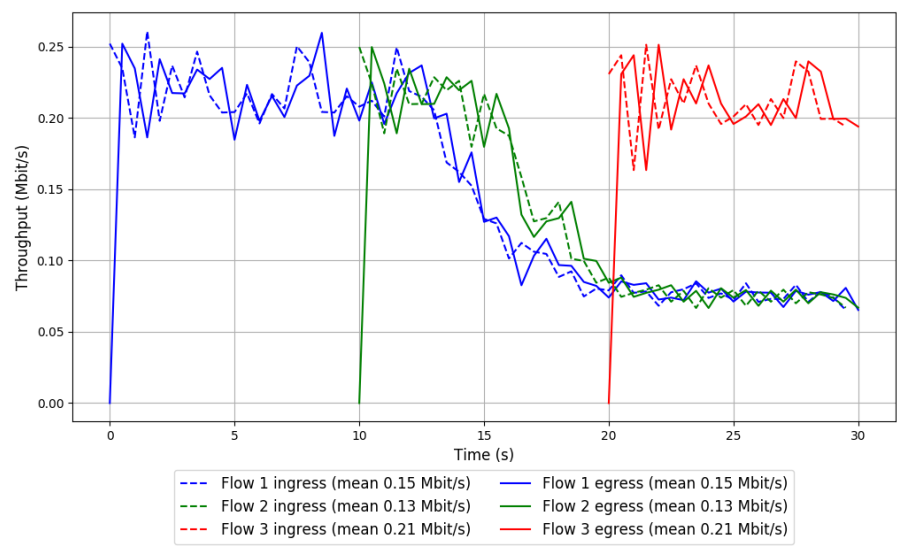


Run 2: Statistics of SCReAM

Start at: 2019-01-03 00:41:03
End at: 2019-01-03 00:41:33
Local clock offset: 2.504 ms
Remote clock offset: 2.368 ms

Below is generated by plot.py at 2019-01-03 02:12:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 3.965 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 3.916 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 3.971 ms
Loss rate: 1.90%
-- Flow 3:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 4.006 ms
Loss rate: 0.00%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2019-01-03 01:05:39

End at: 2019-01-03 01:06:09

Local clock offset: 1.58 ms

Remote clock offset: 2.795 ms

Below is generated by plot.py at 2019-01-03 02:12:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.23 Mbit/s

95th percentile per-packet one-way delay: 3.717 ms

Loss rate: 2.62%

-- Flow 1:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 3.711 ms

Loss rate: 1.78%

-- Flow 2:

Average throughput: 0.10 Mbit/s

95th percentile per-packet one-way delay: 3.705 ms

Loss rate: 3.29%

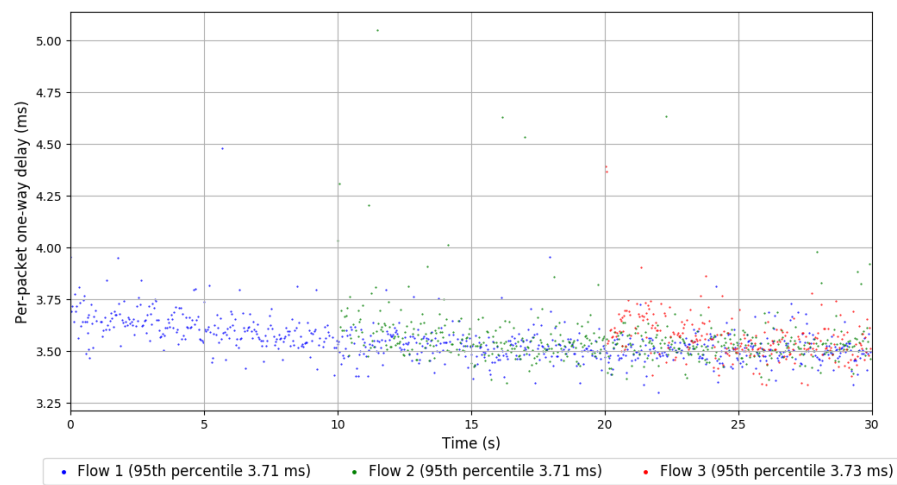
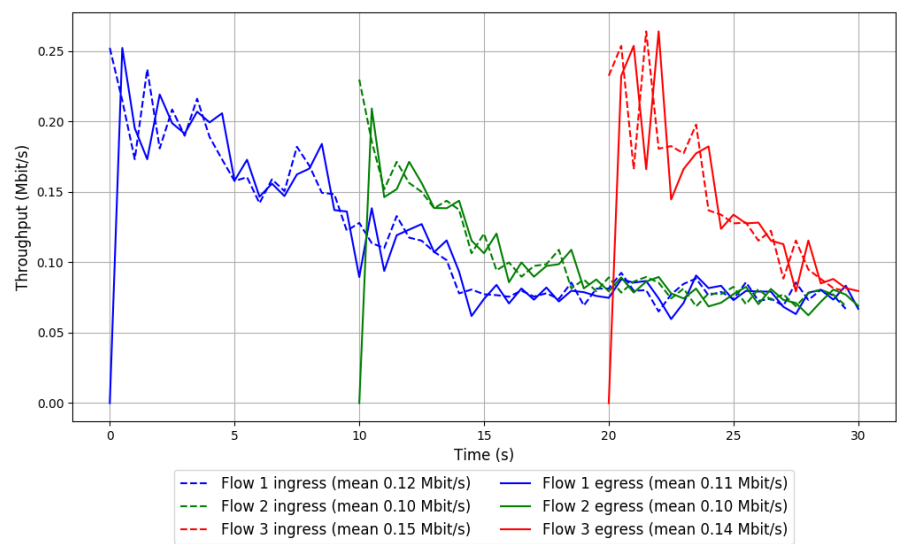
-- Flow 3:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 3.729 ms

Loss rate: 3.69%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2019-01-03 01:29:48

End at: 2019-01-03 01:30:18

Local clock offset: 1.486 ms

Remote clock offset: 2.551 ms

Below is generated by plot.py at 2019-01-03 02:12:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 3.096 ms

Loss rate: 3.89%

-- Flow 1:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 2.580 ms

Loss rate: 3.88%

-- Flow 2:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 2.621 ms

Loss rate: 3.80%

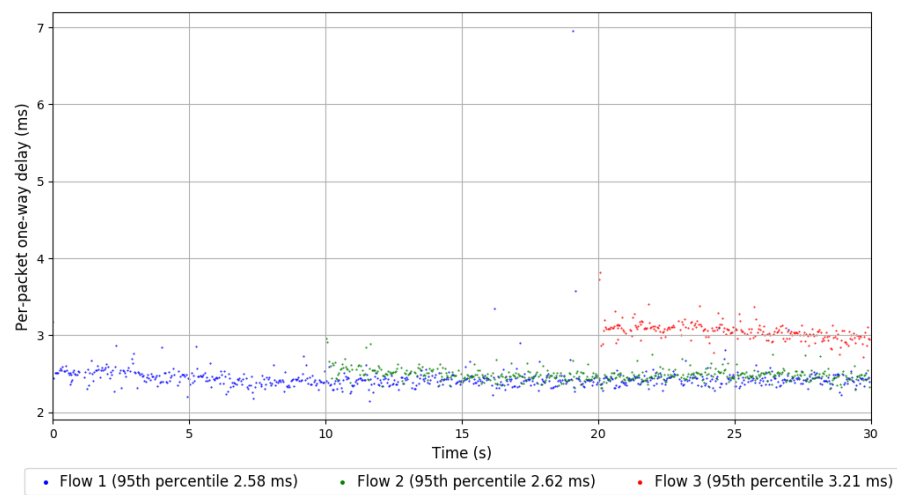
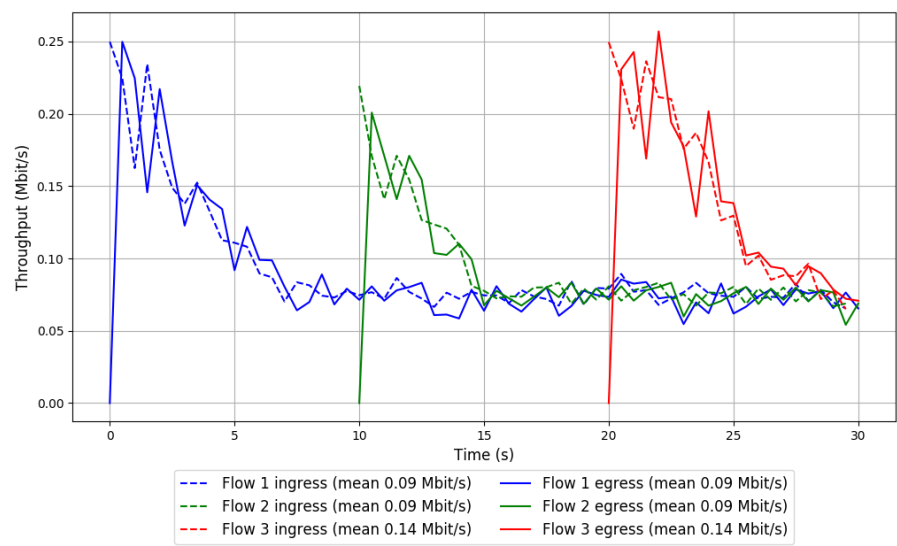
-- Flow 3:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 3.211 ms

Loss rate: 4.02%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2019-01-03 01:53:35

End at: 2019-01-03 01:54:05

Local clock offset: 0.824 ms

Remote clock offset: 2.486 ms

Below is generated by plot.py at 2019-01-03 02:12:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 3.498 ms

Loss rate: 3.21%

-- Flow 1:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 3.534 ms

Loss rate: 3.25%

-- Flow 2:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 3.461 ms

Loss rate: 3.31%

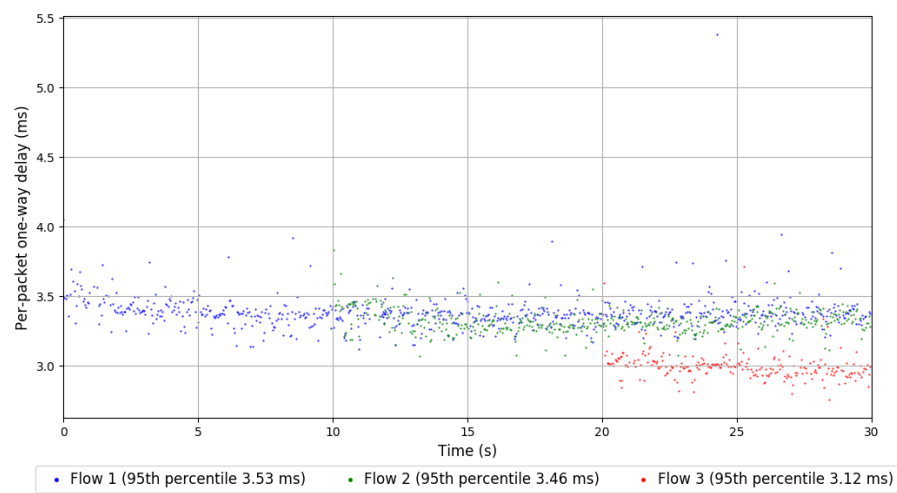
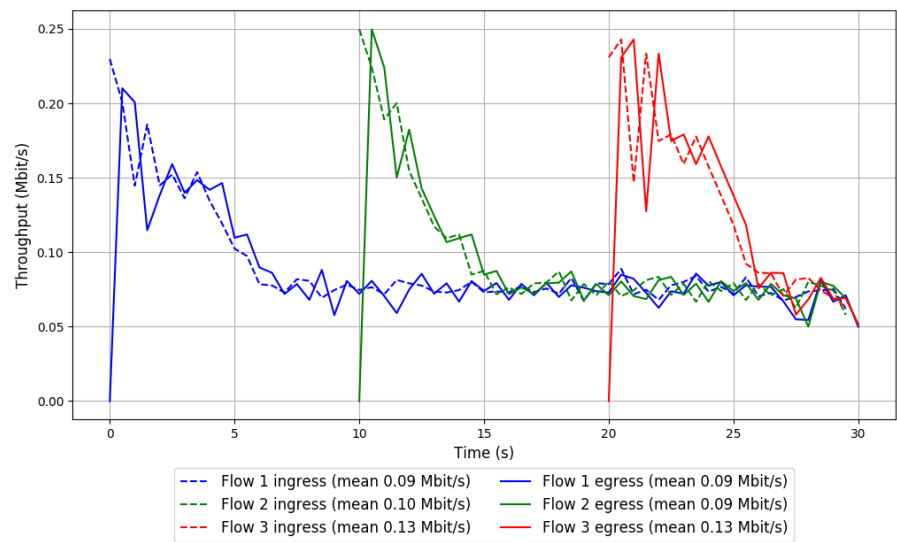
-- Flow 3:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 3.124 ms

Loss rate: 2.99%

Run 5: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2019-01-03 00:13:07

End at: 2019-01-03 00:13:37

Local clock offset: 0.204 ms

Remote clock offset: 2.238 ms

Below is generated by plot.py at 2019-01-03 02:12:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 19.24 Mbit/s

95th percentile per-packet one-way delay: 10.952 ms

Loss rate: 3.30%

-- Flow 1:

Average throughput: 11.20 Mbit/s

95th percentile per-packet one-way delay: 10.674 ms

Loss rate: 1.85%

-- Flow 2:

Average throughput: 8.19 Mbit/s

95th percentile per-packet one-way delay: 11.374 ms

Loss rate: 4.48%

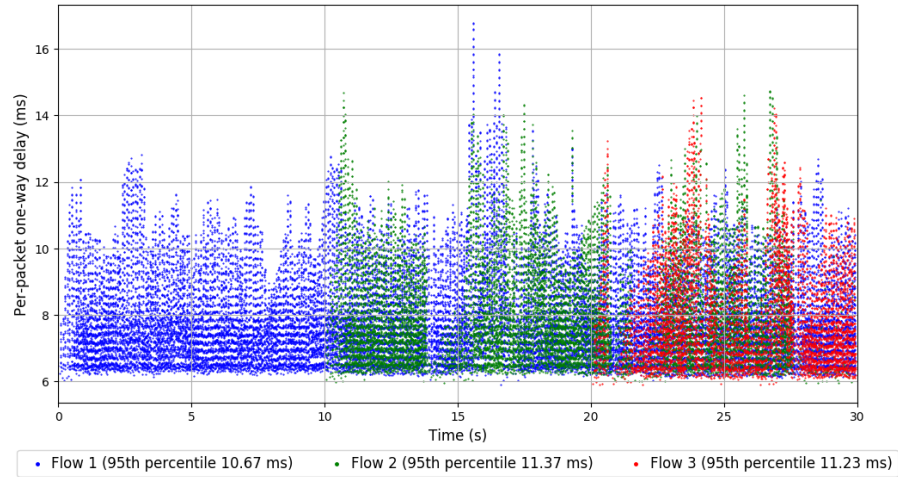
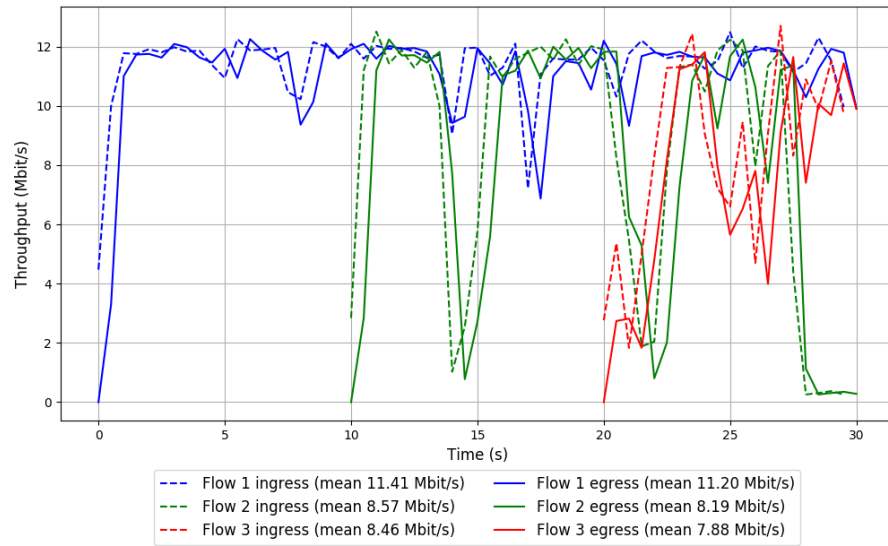
-- Flow 3:

Average throughput: 7.88 Mbit/s

95th percentile per-packet one-way delay: 11.230 ms

Loss rate: 6.81%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2019-01-03 00:38:18

End at: 2019-01-03 00:38:48

Local clock offset: 2.22 ms

Remote clock offset: 2.082 ms

Below is generated by plot.py at 2019-01-03 02:12:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 20.66 Mbit/s

95th percentile per-packet one-way delay: 8.500 ms

Loss rate: 4.17%

-- Flow 1:

Average throughput: 10.40 Mbit/s

95th percentile per-packet one-way delay: 7.731 ms

Loss rate: 4.04%

-- Flow 2:

Average throughput: 10.40 Mbit/s

95th percentile per-packet one-way delay: 9.158 ms

Loss rate: 4.38%

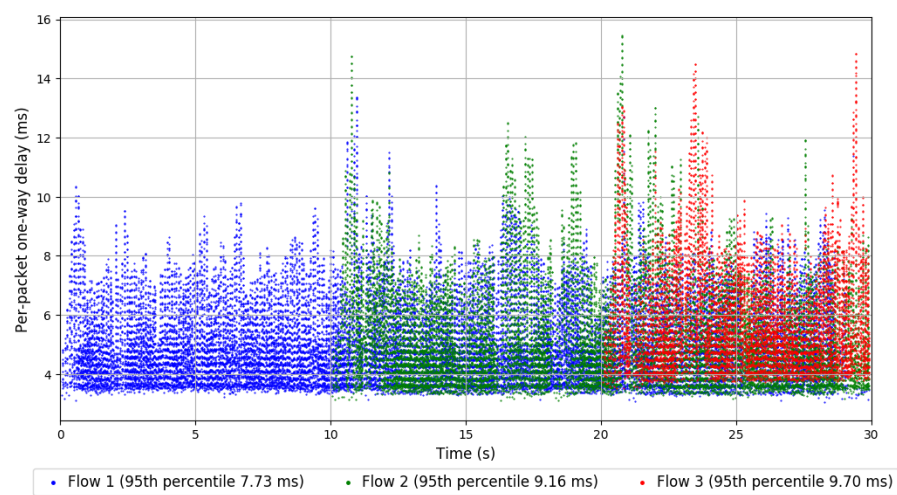
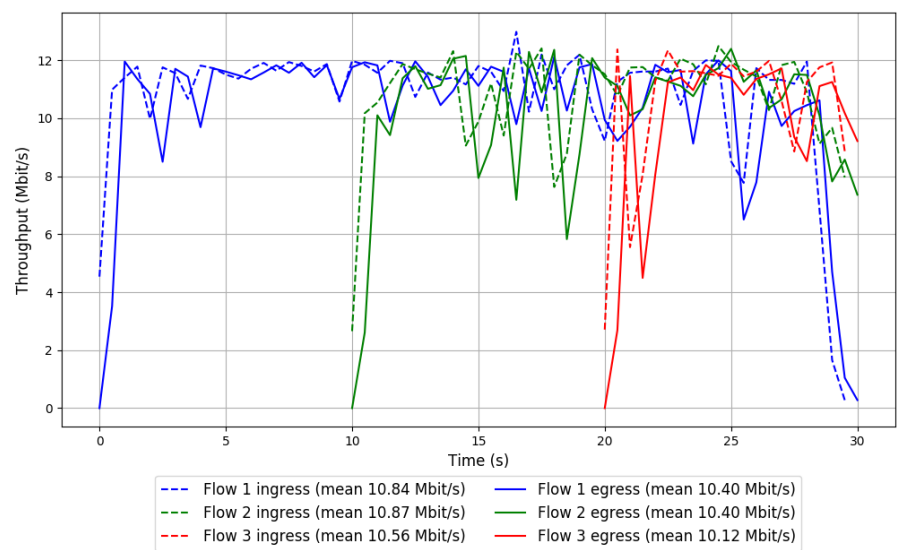
-- Flow 3:

Average throughput: 10.12 Mbit/s

95th percentile per-packet one-way delay: 9.701 ms

Loss rate: 4.15%

Run 2: Report of Sprout — Data Link

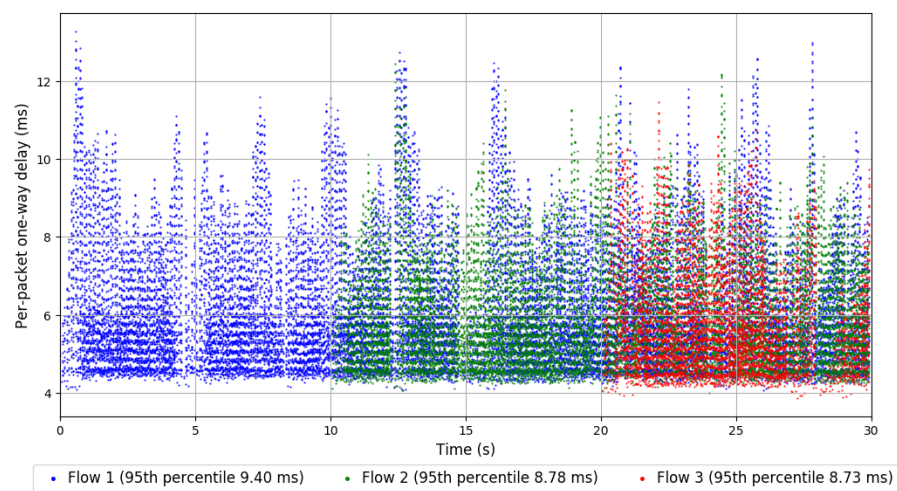
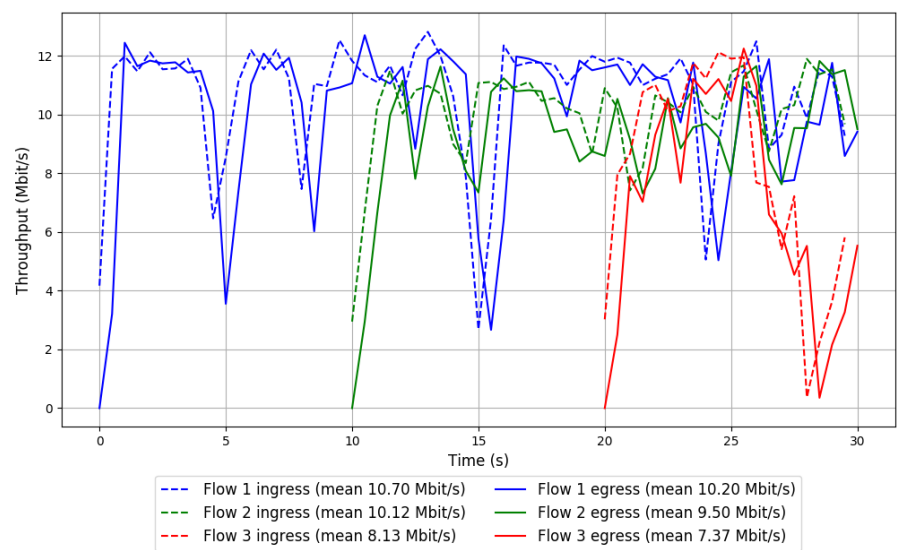


Run 3: Statistics of Sprout

Start at: 2019-01-03 01:02:53
End at: 2019-01-03 01:03:23
Local clock offset: 0.679 ms
Remote clock offset: 2.387 ms

```
# Below is generated by plot.py at 2019-01-03 02:12:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.95 Mbit/s
95th percentile per-packet one-way delay: 9.096 ms
Loss rate: 5.75%
-- Flow 1:
Average throughput: 10.20 Mbit/s
95th percentile per-packet one-way delay: 9.396 ms
Loss rate: 4.67%
-- Flow 2:
Average throughput: 9.50 Mbit/s
95th percentile per-packet one-way delay: 8.776 ms
Loss rate: 6.06%
-- Flow 3:
Average throughput: 7.37 Mbit/s
95th percentile per-packet one-way delay: 8.730 ms
Loss rate: 9.32%
```

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2019-01-03 01:27:06

End at: 2019-01-03 01:27:36

Local clock offset: -1.936 ms

Remote clock offset: 2.033 ms

Below is generated by plot.py at 2019-01-03 02:12:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.47 Mbit/s

95th percentile per-packet one-way delay: 10.917 ms

Loss rate: 7.40%

-- Flow 1:

Average throughput: 8.45 Mbit/s

95th percentile per-packet one-way delay: 10.721 ms

Loss rate: 7.66%

-- Flow 2:

Average throughput: 6.43 Mbit/s

95th percentile per-packet one-way delay: 10.741 ms

Loss rate: 8.11%

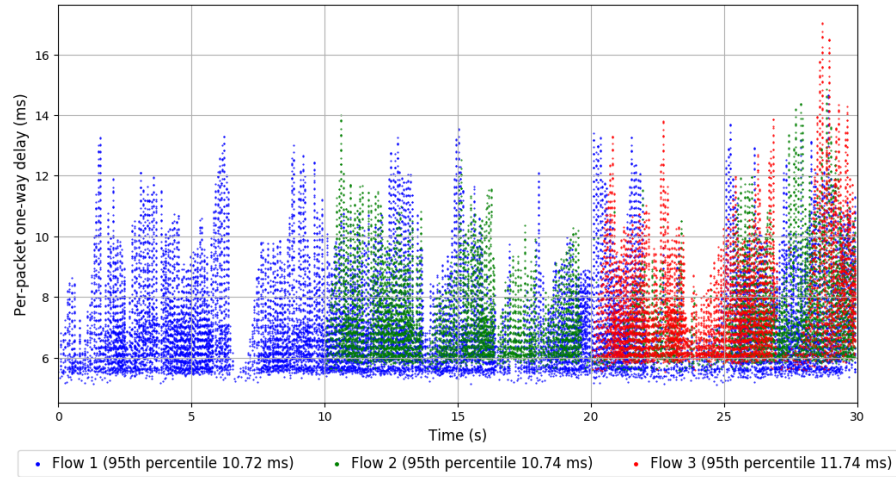
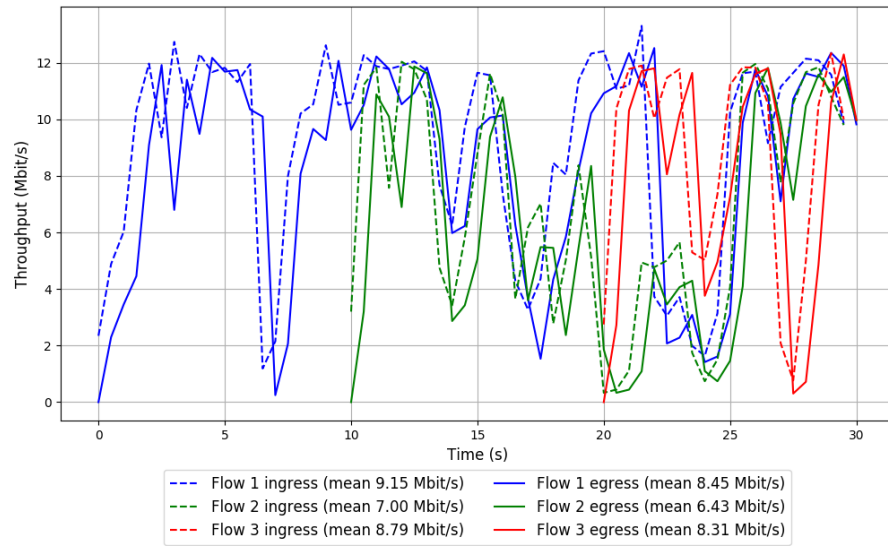
-- Flow 3:

Average throughput: 8.31 Mbit/s

95th percentile per-packet one-way delay: 11.742 ms

Loss rate: 5.42%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2019-01-03 01:50:58

End at: 2019-01-03 01:51:28

Local clock offset: 0.54 ms

Remote clock offset: 1.73 ms

Below is generated by plot.py at 2019-01-03 02:12:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 19.66 Mbit/s

95th percentile per-packet one-way delay: 7.163 ms

Loss rate: 4.23%

-- Flow 1:

Average throughput: 9.52 Mbit/s

95th percentile per-packet one-way delay: 6.942 ms

Loss rate: 3.35%

-- Flow 2:

Average throughput: 10.48 Mbit/s

95th percentile per-packet one-way delay: 7.124 ms

Loss rate: 4.70%

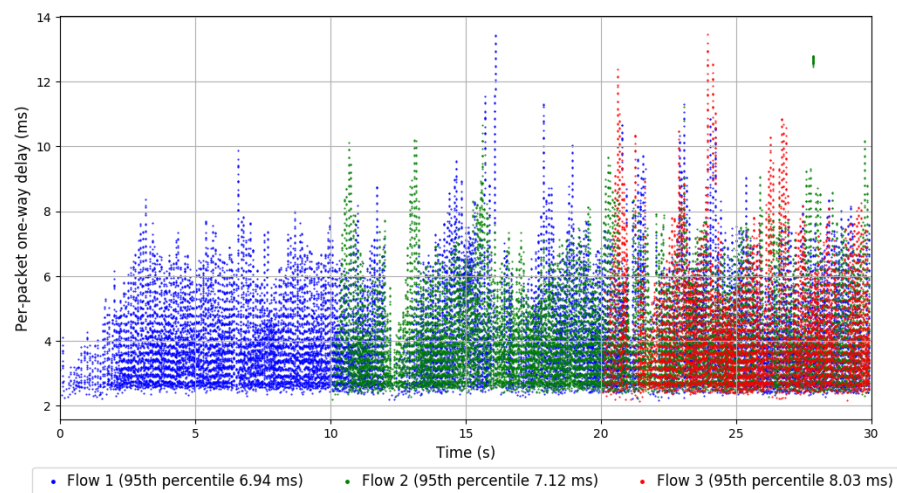
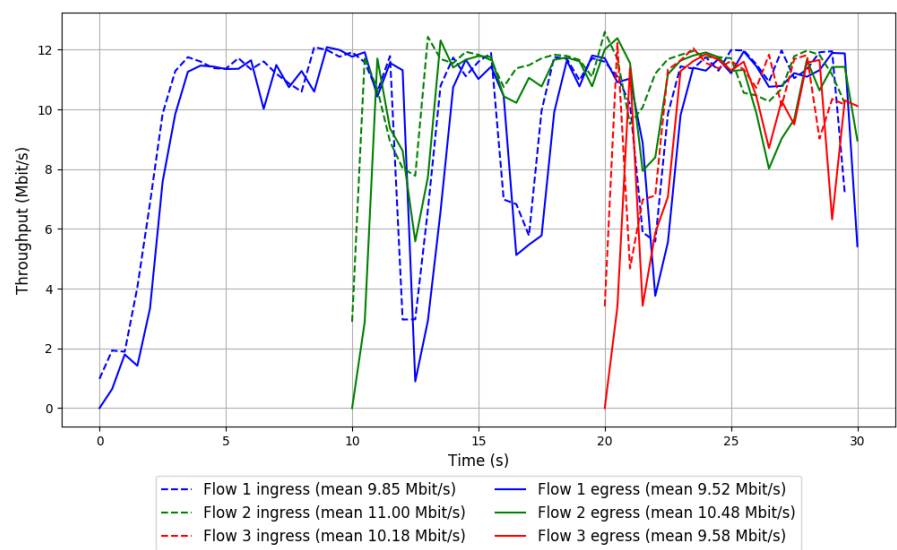
-- Flow 3:

Average throughput: 9.58 Mbit/s

95th percentile per-packet one-way delay: 8.031 ms

Loss rate: 5.81%

Run 5: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2019-01-03 00:25:13

End at: 2019-01-03 00:25:43

Local clock offset: 3.815 ms

Remote clock offset: 2.379 ms

Below is generated by plot.py at 2019-01-03 02:12:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.55 Mbit/s

95th percentile per-packet one-way delay: 3.083 ms

Loss rate: 88.94%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 2.772 ms

Loss rate: 95.92%

-- Flow 2:

Average throughput: 8.31 Mbit/s

95th percentile per-packet one-way delay: 4.822 ms

Loss rate: 34.66%

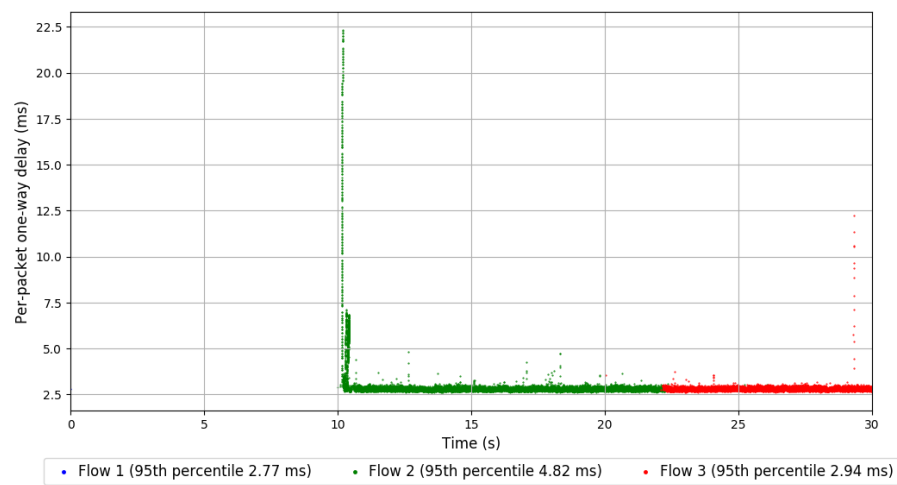
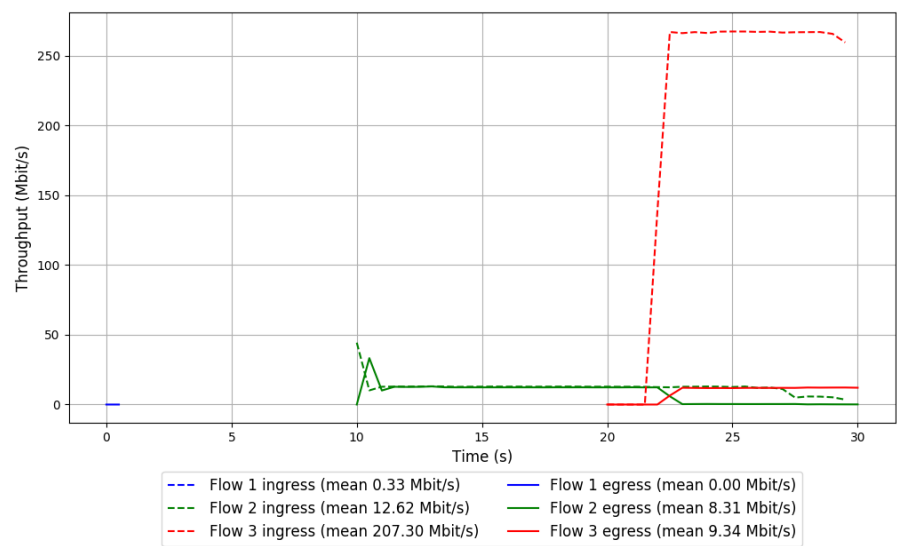
-- Flow 3:

Average throughput: 9.34 Mbit/s

95th percentile per-packet one-way delay: 2.942 ms

Loss rate: 95.49%

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



Run 2: Statistics of TaoVA-100x

Start at: 2019-01-03 00:50:17

End at: 2019-01-03 00:50:47

Local clock offset: 4.598 ms

Remote clock offset: 1.629 ms

Below is generated by plot.py at 2019-01-03 02:12:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.18 Mbit/s

95th percentile per-packet one-way delay: 1.434 ms

Loss rate: 84.30%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 1.267 ms

Loss rate: 95.92%

-- Flow 2:

Average throughput: 10.35 Mbit/s

95th percentile per-packet one-way delay: 1.437 ms

Loss rate: 86.36%

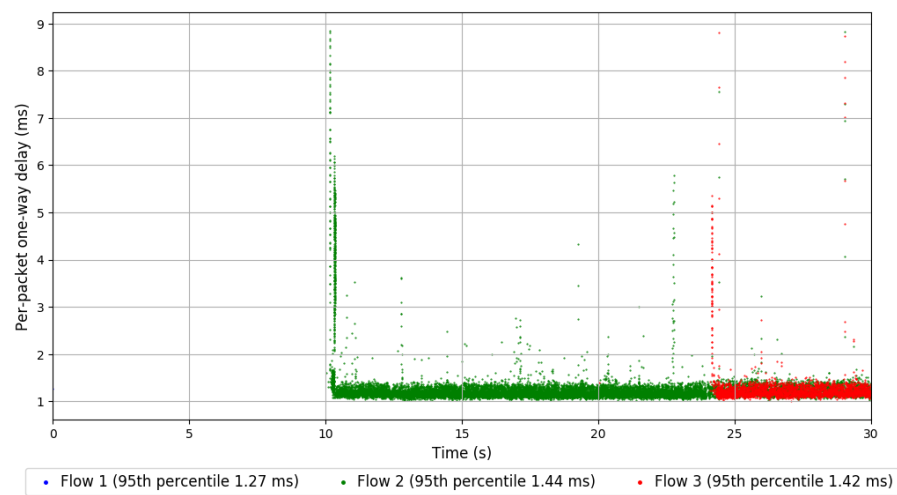
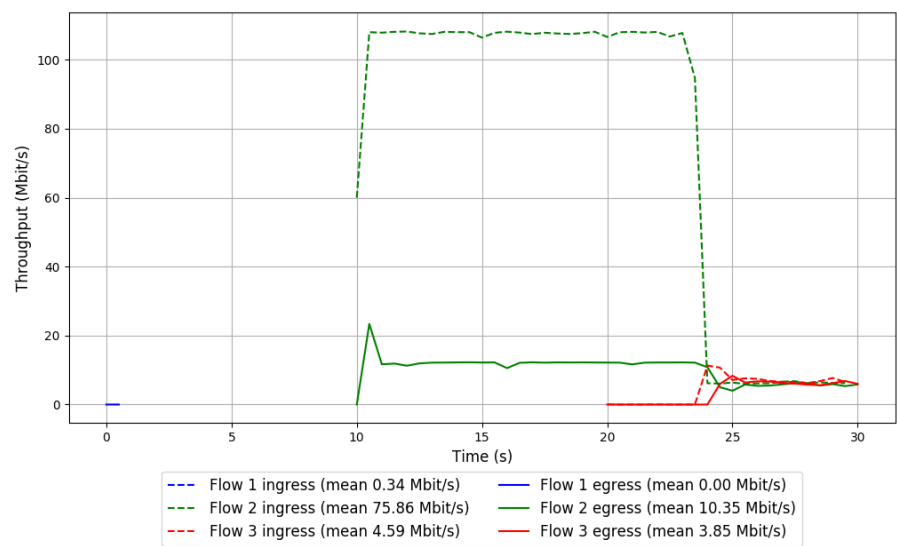
-- Flow 3:

Average throughput: 3.85 Mbit/s

95th percentile per-packet one-way delay: 1.419 ms

Loss rate: 16.14%

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



Run 3: Statistics of TaoVA-100x

Start at: 2019-01-03 01:14:30

End at: 2019-01-03 01:15:00

Local clock offset: -0.991 ms

Remote clock offset: 2.42 ms

Below is generated by plot.py at 2019-01-03 02:12:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.01 Mbit/s

95th percentile per-packet one-way delay: 6.112 ms

Loss rate: 84.71%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 5.727 ms

Loss rate: 95.92%

-- Flow 2:

Average throughput: 10.16 Mbit/s

95th percentile per-packet one-way delay: 6.519 ms

Loss rate: 86.58%

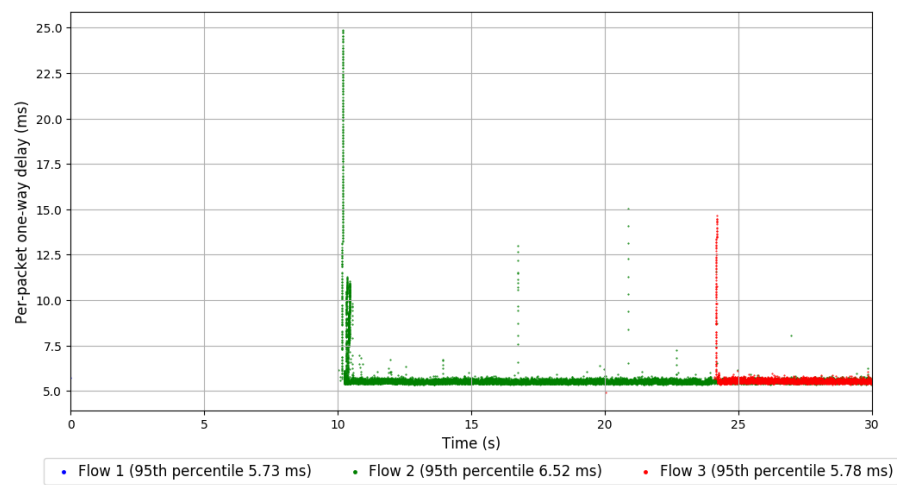
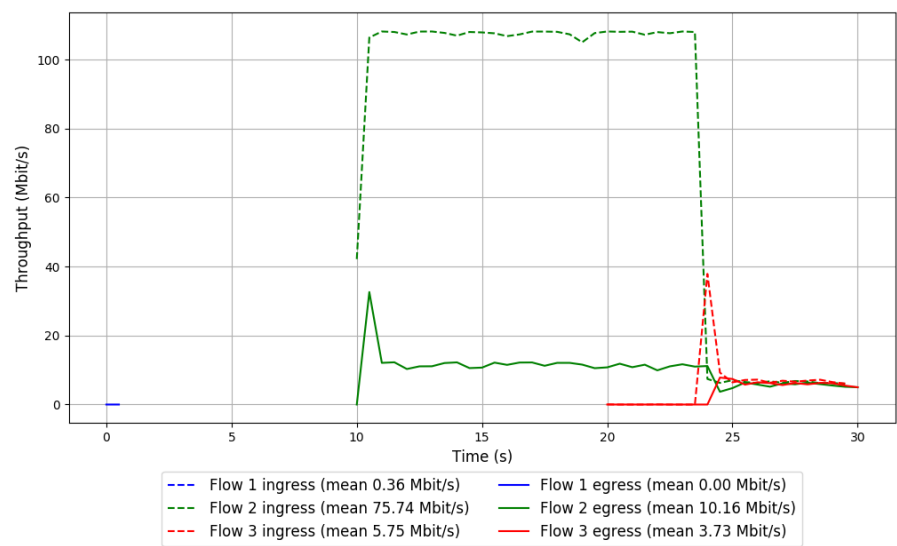
-- Flow 3:

Average throughput: 3.73 Mbit/s

95th percentile per-packet one-way delay: 5.779 ms

Loss rate: 35.13%

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



Run 4: Statistics of TaoVA-100x

Start at: 2019-01-03 01:38:37

End at: 2019-01-03 01:39:07

Local clock offset: -2.577 ms

Remote clock offset: 2.513 ms

Below is generated by plot.py at 2019-01-03 02:12:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.15 Mbit/s

95th percentile per-packet one-way delay: 7.270 ms

Loss rate: 89.50%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 7.460 ms

Loss rate: 95.92%

-- Flow 2:

Average throughput: 7.74 Mbit/s

95th percentile per-packet one-way delay: 8.922 ms

Loss rate: 40.08%

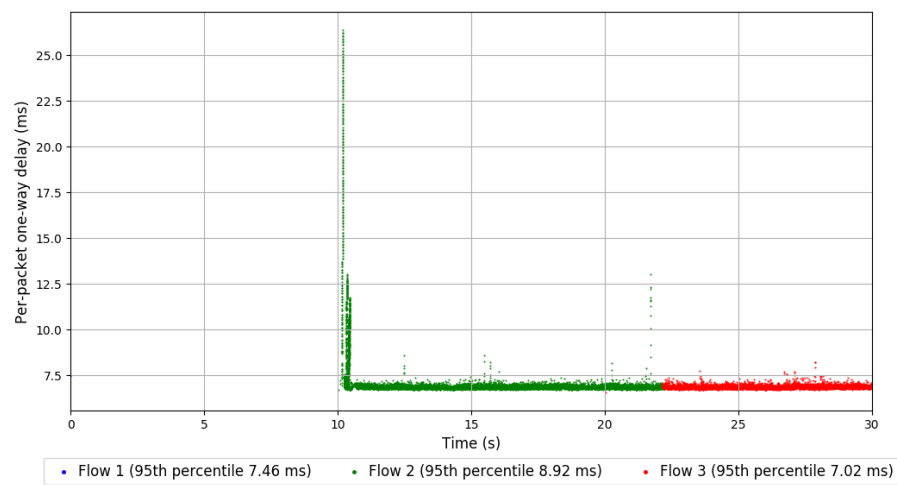
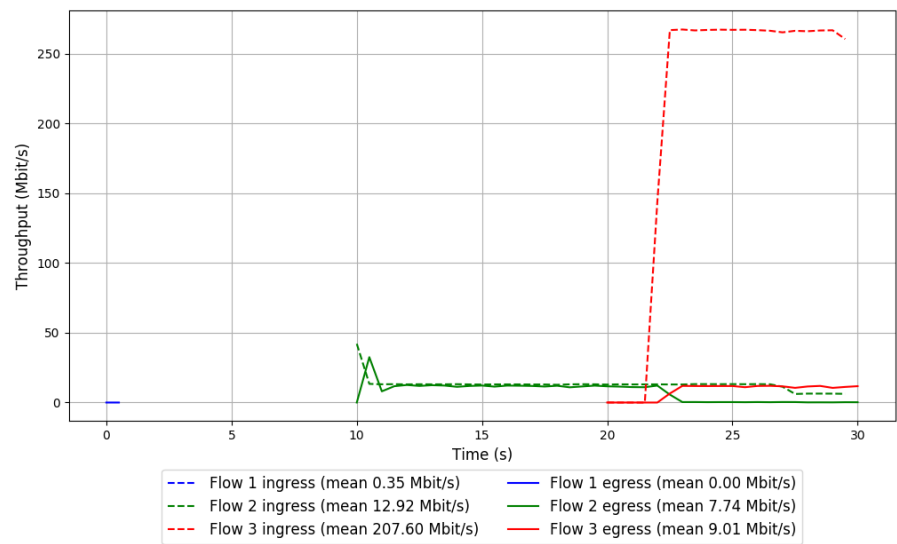
-- Flow 3:

Average throughput: 9.01 Mbit/s

95th percentile per-packet one-way delay: 7.022 ms

Loss rate: 95.66%

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



Run 5: Statistics of TaoVA-100x

Start at: 2019-01-03 02:02:45

End at: 2019-01-03 02:03:15

Local clock offset: -1.159 ms

Remote clock offset: 2.162 ms

Below is generated by plot.py at 2019-01-03 02:12:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.08 Mbit/s

95th percentile per-packet one-way delay: 7.352 ms

Loss rate: 94.85%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 7.188 ms

Loss rate: 95.92%

-- Flow 2:

Average throughput: 7.70 Mbit/s

95th percentile per-packet one-way delay: 9.130 ms

Loss rate: 92.77%

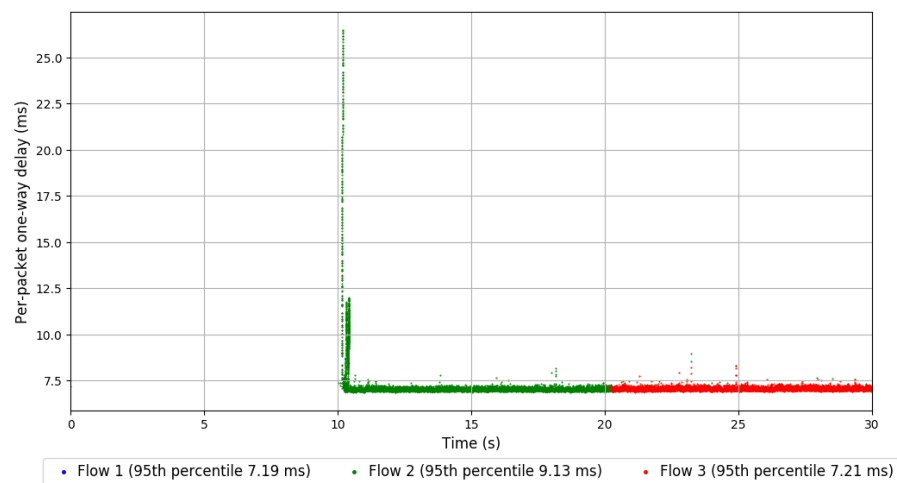
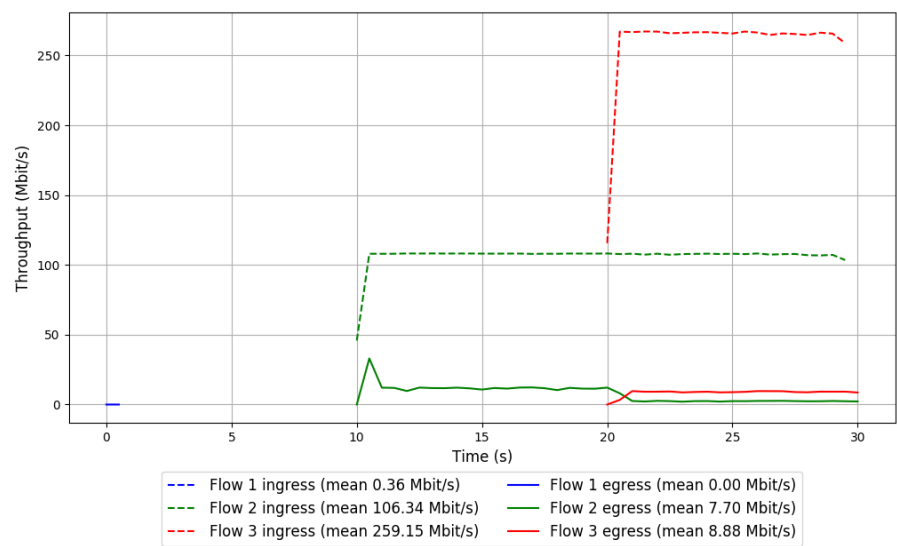
-- Flow 3:

Average throughput: 8.88 Mbit/s

95th percentile per-packet one-way delay: 7.213 ms

Loss rate: 96.57%

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



Run 1: Statistics of TCP Vegas

Start at: 2019-01-03 00:09:19

End at: 2019-01-03 00:09:49

Local clock offset: 1.388 ms

Remote clock offset: 1.715 ms

Below is generated by plot.py at 2019-01-03 02:12:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 9.10 Mbit/s

95th percentile per-packet one-way delay: 24.205 ms

Loss rate: 3.79%

-- Flow 1:

Average throughput: 5.41 Mbit/s

95th percentile per-packet one-way delay: 19.787 ms

Loss rate: 5.22%

-- Flow 2:

Average throughput: 3.88 Mbit/s

95th percentile per-packet one-way delay: 30.858 ms

Loss rate: 1.75%

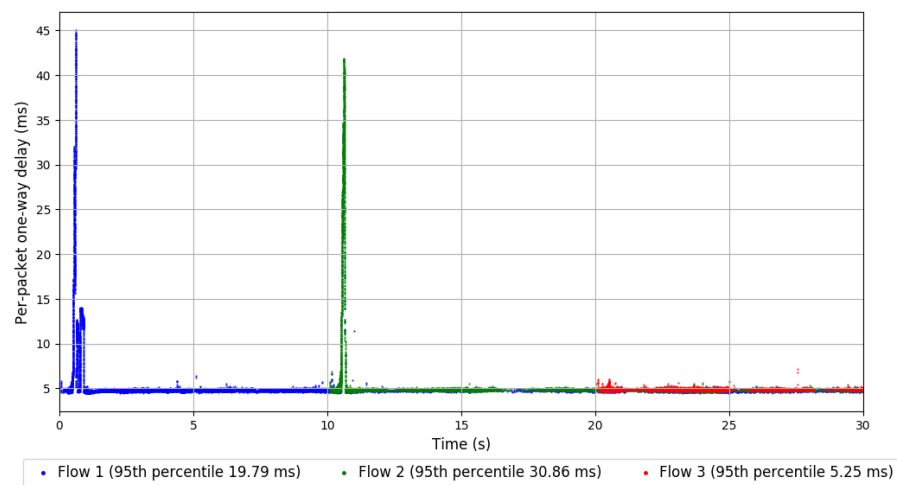
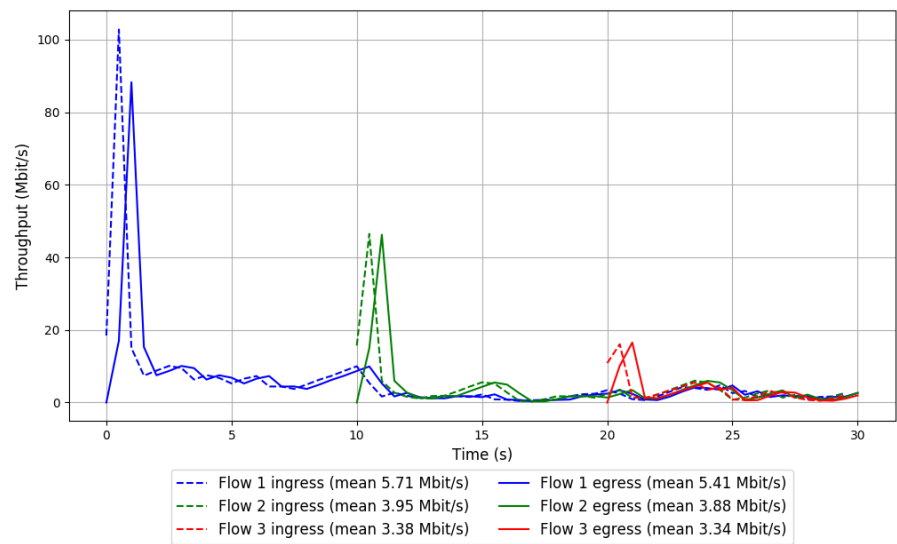
-- Flow 3:

Average throughput: 3.34 Mbit/s

95th percentile per-packet one-way delay: 5.246 ms

Loss rate: 1.32%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2019-01-03 00:34:16

End at: 2019-01-03 00:34:46

Local clock offset: 2.692 ms

Remote clock offset: 2.232 ms

Below is generated by plot.py at 2019-01-03 02:12:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 9.28 Mbit/s

95th percentile per-packet one-way delay: 11.207 ms

Loss rate: 3.95%

-- Flow 1:

Average throughput: 4.95 Mbit/s

95th percentile per-packet one-way delay: 4.293 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 5.42 Mbit/s

95th percentile per-packet one-way delay: 23.069 ms

Loss rate: 8.05%

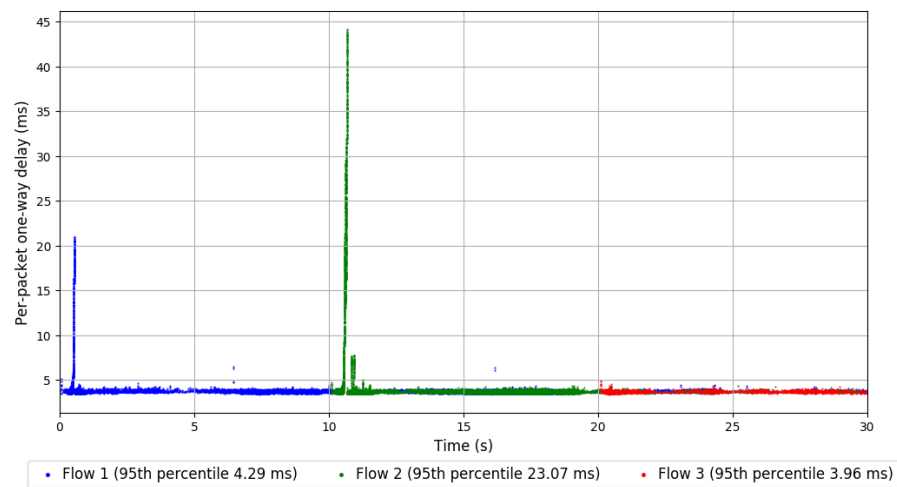
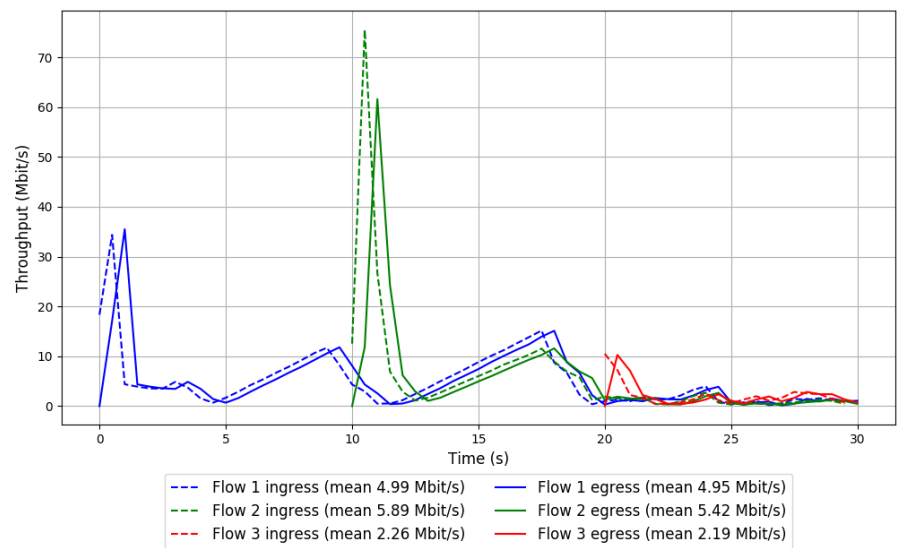
-- Flow 3:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 3.956 ms

Loss rate: 2.88%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2019-01-03 00:59:07

End at: 2019-01-03 00:59:37

Local clock offset: 2.513 ms

Remote clock offset: 2.671 ms

Below is generated by plot.py at 2019-01-03 02:12:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.98 Mbit/s

95th percentile per-packet one-way delay: 3.509 ms

Loss rate: 1.25%

-- Flow 1:

Average throughput: 2.59 Mbit/s

95th percentile per-packet one-way delay: 3.458 ms

Loss rate: 1.40%

-- Flow 2:

Average throughput: 3.47 Mbit/s

95th percentile per-packet one-way delay: 3.548 ms

Loss rate: 1.30%

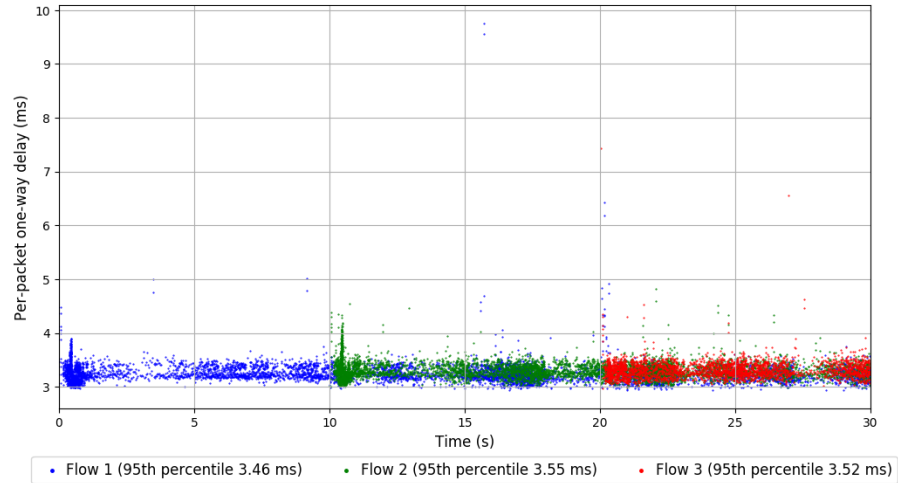
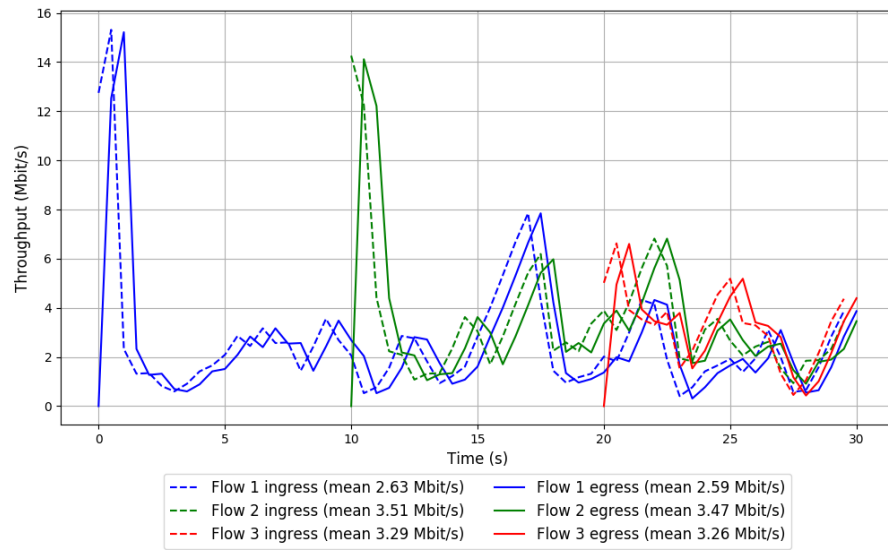
-- Flow 3:

Average throughput: 3.26 Mbit/s

95th percentile per-packet one-way delay: 3.522 ms

Loss rate: 0.77%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2019-01-03 01:23:20

End at: 2019-01-03 01:23:50

Local clock offset: 0.254 ms

Remote clock offset: 2.701 ms

Below is generated by plot.py at 2019-01-03 02:12:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.59 Mbit/s

95th percentile per-packet one-way delay: 4.598 ms

Loss rate: 3.84%

-- Flow 1:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 4.141 ms

Loss rate: 4.07%

-- Flow 2:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 4.599 ms

Loss rate: 3.17%

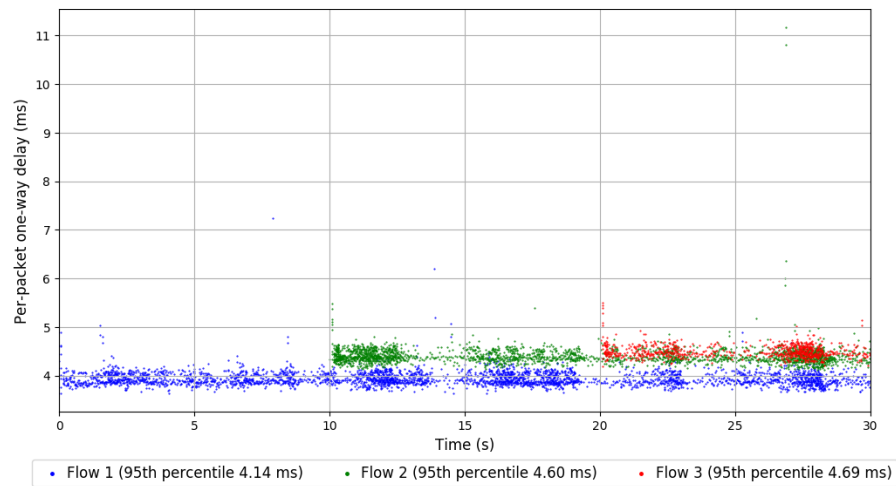
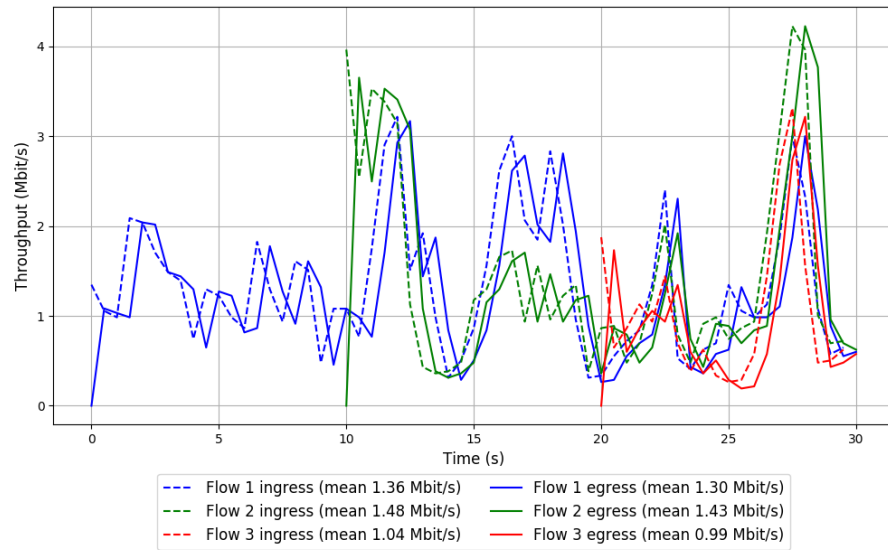
-- Flow 3:

Average throughput: 0.99 Mbit/s

95th percentile per-packet one-way delay: 4.694 ms

Loss rate: 4.88%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2019-01-03 01:47:08

End at: 2019-01-03 01:47:38

Local clock offset: 0.273 ms

Remote clock offset: 2.437 ms

Below is generated by plot.py at 2019-01-03 02:12:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.64 Mbit/s

95th percentile per-packet one-way delay: 4.333 ms

Loss rate: 2.75%

-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 4.432 ms

Loss rate: 2.67%

-- Flow 2:

Average throughput: 1.51 Mbit/s

95th percentile per-packet one-way delay: 3.807 ms

Loss rate: 2.93%

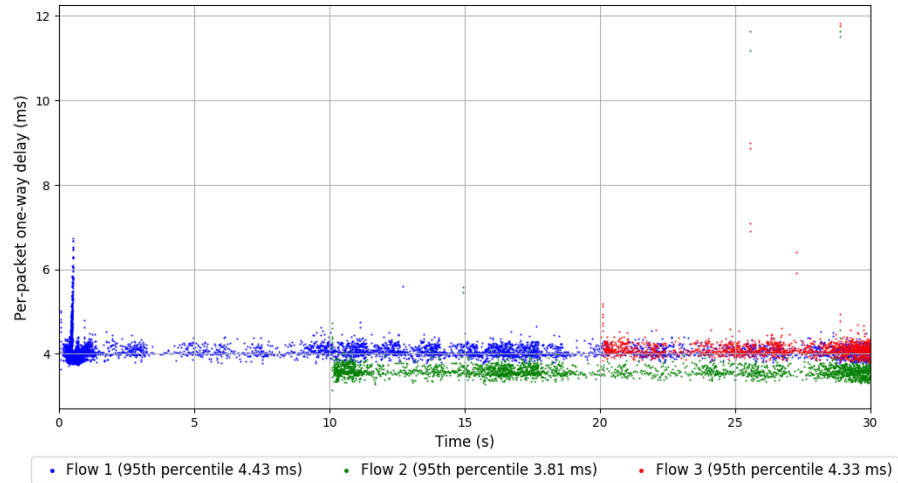
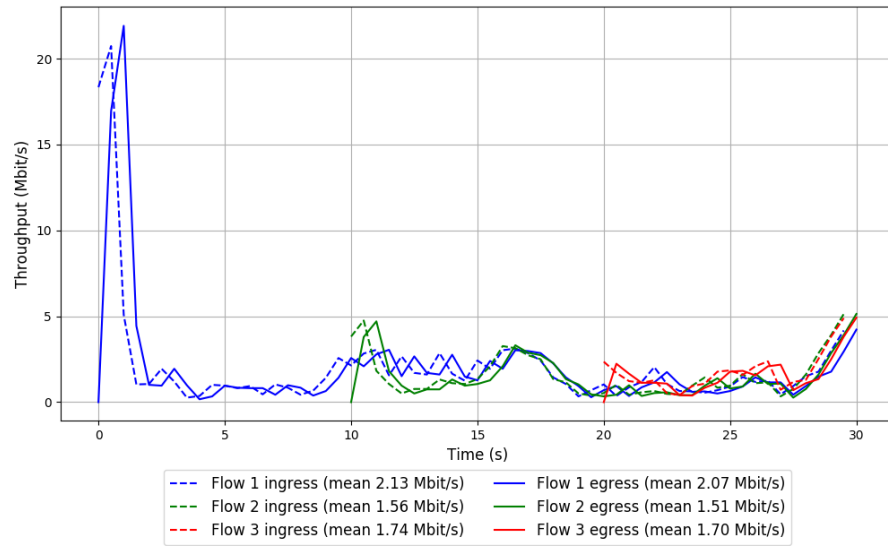
-- Flow 3:

Average throughput: 1.70 Mbit/s

95th percentile per-packet one-way delay: 4.333 ms

Loss rate: 2.70%

Run 5: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2019-01-03 00:21:05

End at: 2019-01-03 00:21:35

Local clock offset: 2.194 ms

Remote clock offset: 2.303 ms

Below is generated by plot.py at 2019-01-03 02:13:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 45.99 Mbit/s

95th percentile per-packet one-way delay: 41.838 ms

Loss rate: 74.33%

-- Flow 1:

Average throughput: 29.03 Mbit/s

95th percentile per-packet one-way delay: 42.956 ms

Loss rate: 81.28%

-- Flow 2:

Average throughput: 29.00 Mbit/s

95th percentile per-packet one-way delay: 38.095 ms

Loss rate: 29.75%

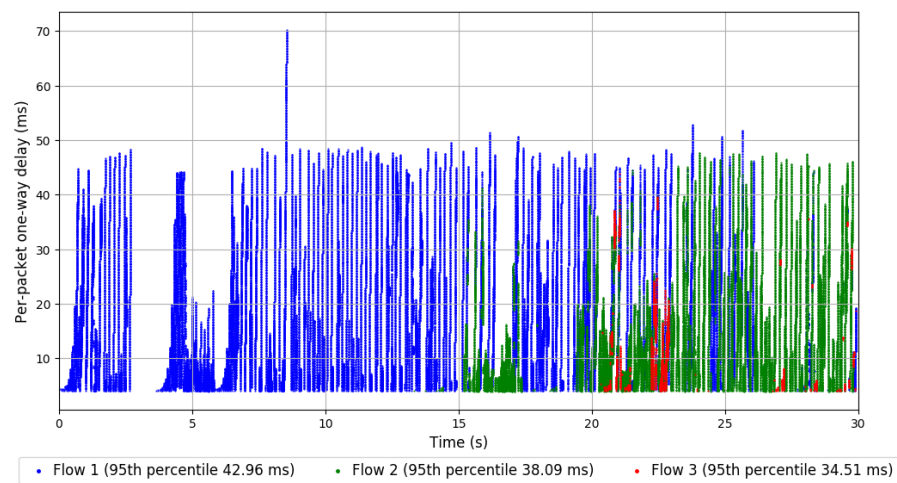
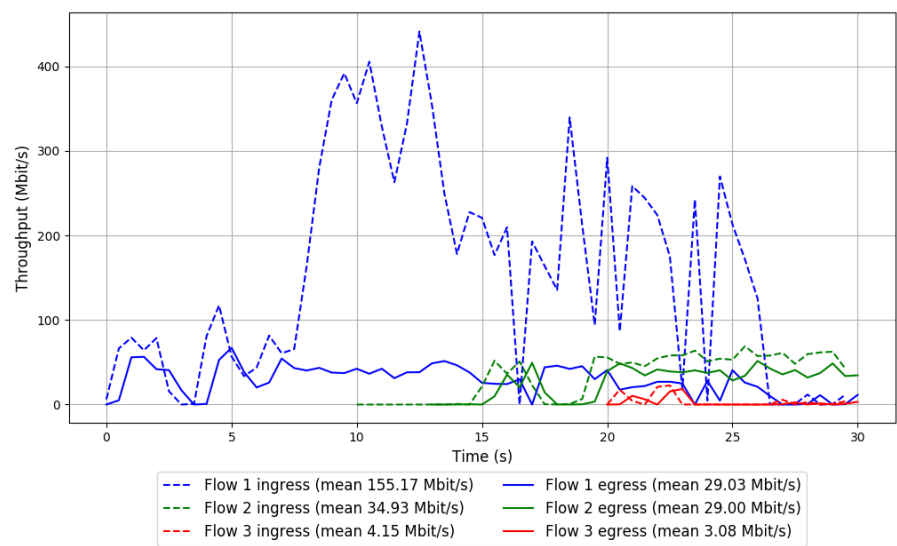
-- Flow 3:

Average throughput: 3.08 Mbit/s

95th percentile per-packet one-way delay: 34.514 ms

Loss rate: 25.56%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2019-01-03 00:46:16

End at: 2019-01-03 00:46:46

Local clock offset: 1.418 ms

Remote clock offset: 2.423 ms

Below is generated by plot.py at 2019-01-03 02:13:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 44.18 Mbit/s

95th percentile per-packet one-way delay: 38.943 ms

Loss rate: 66.23%

-- Flow 1:

Average throughput: 25.92 Mbit/s

95th percentile per-packet one-way delay: 39.932 ms

Loss rate: 71.74%

-- Flow 2:

Average throughput: 19.82 Mbit/s

95th percentile per-packet one-way delay: 36.957 ms

Loss rate: 56.39%

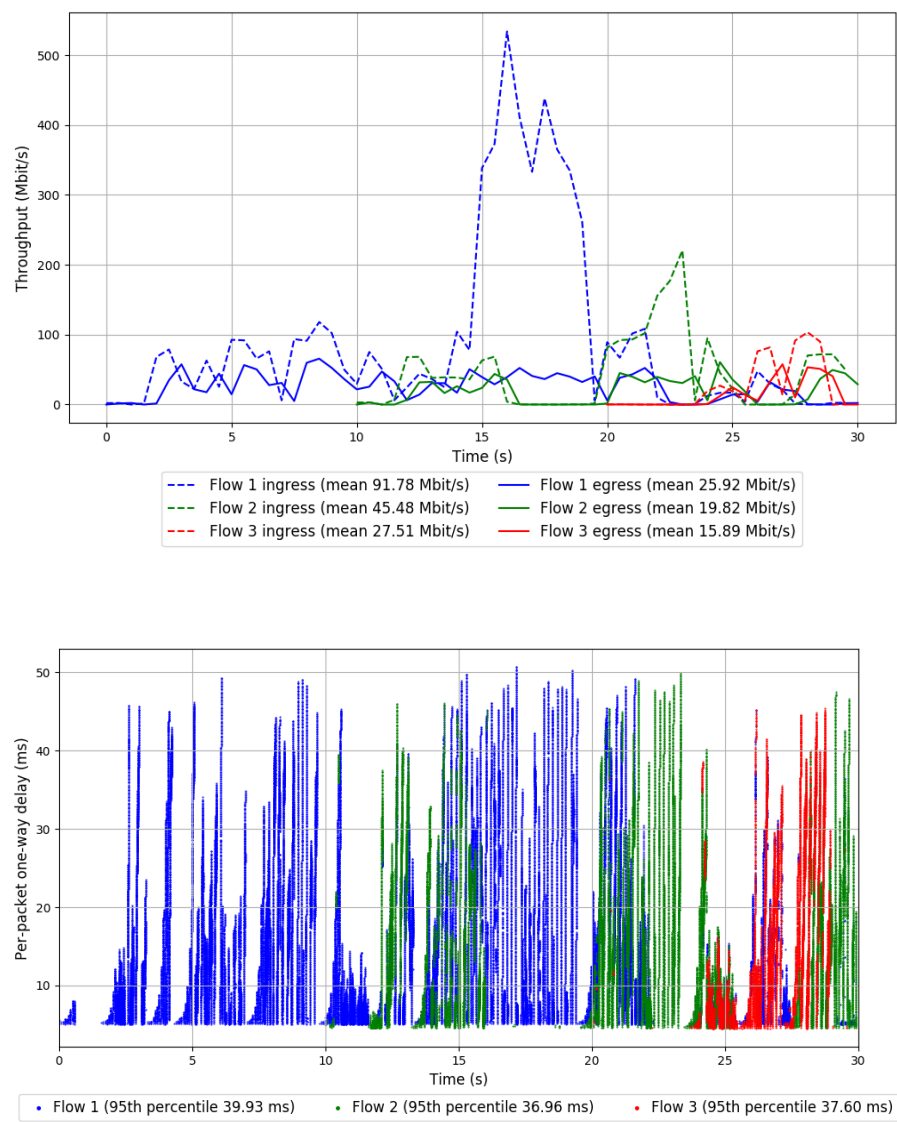
-- Flow 3:

Average throughput: 15.89 Mbit/s

95th percentile per-packet one-way delay: 37.598 ms

Loss rate: 42.69%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2019-01-03 01:10:34

End at: 2019-01-03 01:11:04

Local clock offset: 2.754 ms

Remote clock offset: 2.662 ms

Below is generated by plot.py at 2019-01-03 02:13:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 44.17 Mbit/s

95th percentile per-packet one-way delay: 80.581 ms

Loss rate: 76.96%

-- Flow 1:

Average throughput: 15.18 Mbit/s

95th percentile per-packet one-way delay: 32.345 ms

Loss rate: 36.60%

-- Flow 2:

Average throughput: 30.13 Mbit/s

95th percentile per-packet one-way delay: 43.754 ms

Loss rate: 75.59%

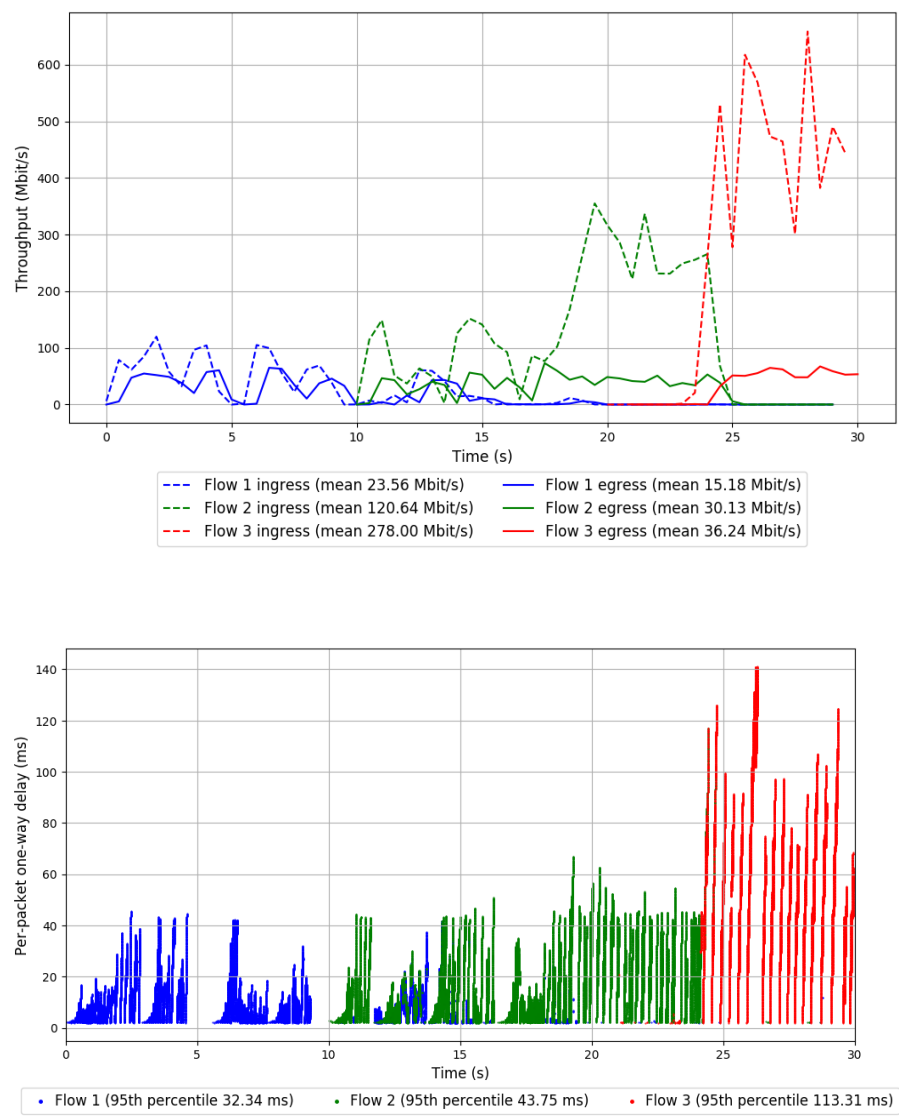
-- Flow 3:

Average throughput: 36.24 Mbit/s

95th percentile per-packet one-way delay: 113.309 ms

Loss rate: 88.24%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2019-01-03 01:34:50

End at: 2019-01-03 01:35:20

Local clock offset: 0.631 ms

Remote clock offset: 2.021 ms

Below is generated by plot.py at 2019-01-03 02:13:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 40.56 Mbit/s

95th percentile per-packet one-way delay: 54.118 ms

Loss rate: 71.41%

-- Flow 1:

Average throughput: 18.96 Mbit/s

95th percentile per-packet one-way delay: 36.215 ms

Loss rate: 49.69%

-- Flow 2:

Average throughput: 17.01 Mbit/s

95th percentile per-packet one-way delay: 30.349 ms

Loss rate: 36.50%

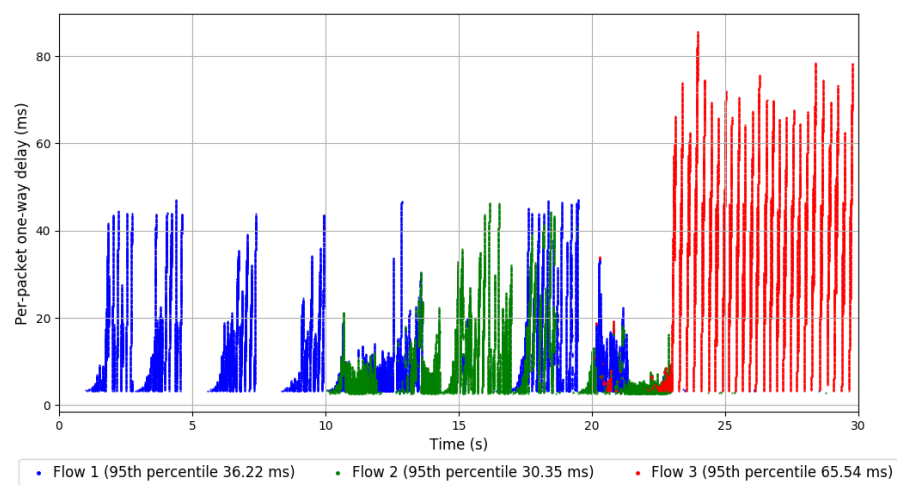
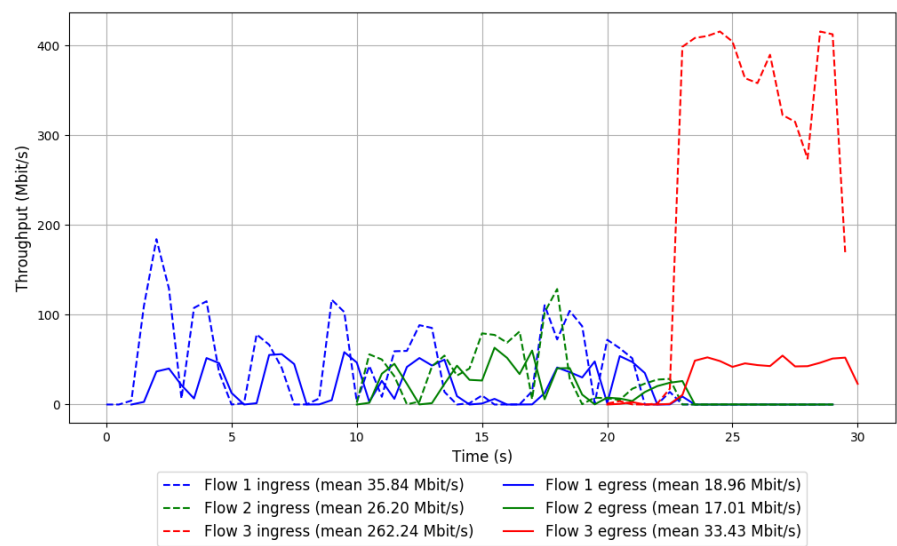
-- Flow 3:

Average throughput: 33.43 Mbit/s

95th percentile per-packet one-way delay: 65.544 ms

Loss rate: 87.17%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2019-01-03 01:58:48

End at: 2019-01-03 01:59:18

Local clock offset: 1.756 ms

Remote clock offset: 1.564 ms

Below is generated by plot.py at 2019-01-03 02:13:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 42.82 Mbit/s

95th percentile per-packet one-way delay: 37.219 ms

Loss rate: 63.09%

-- Flow 1:

Average throughput: 37.19 Mbit/s

95th percentile per-packet one-way delay: 37.872 ms

Loss rate: 65.62%

-- Flow 2:

Average throughput: 7.02 Mbit/s

95th percentile per-packet one-way delay: 27.291 ms

Loss rate: 24.12%

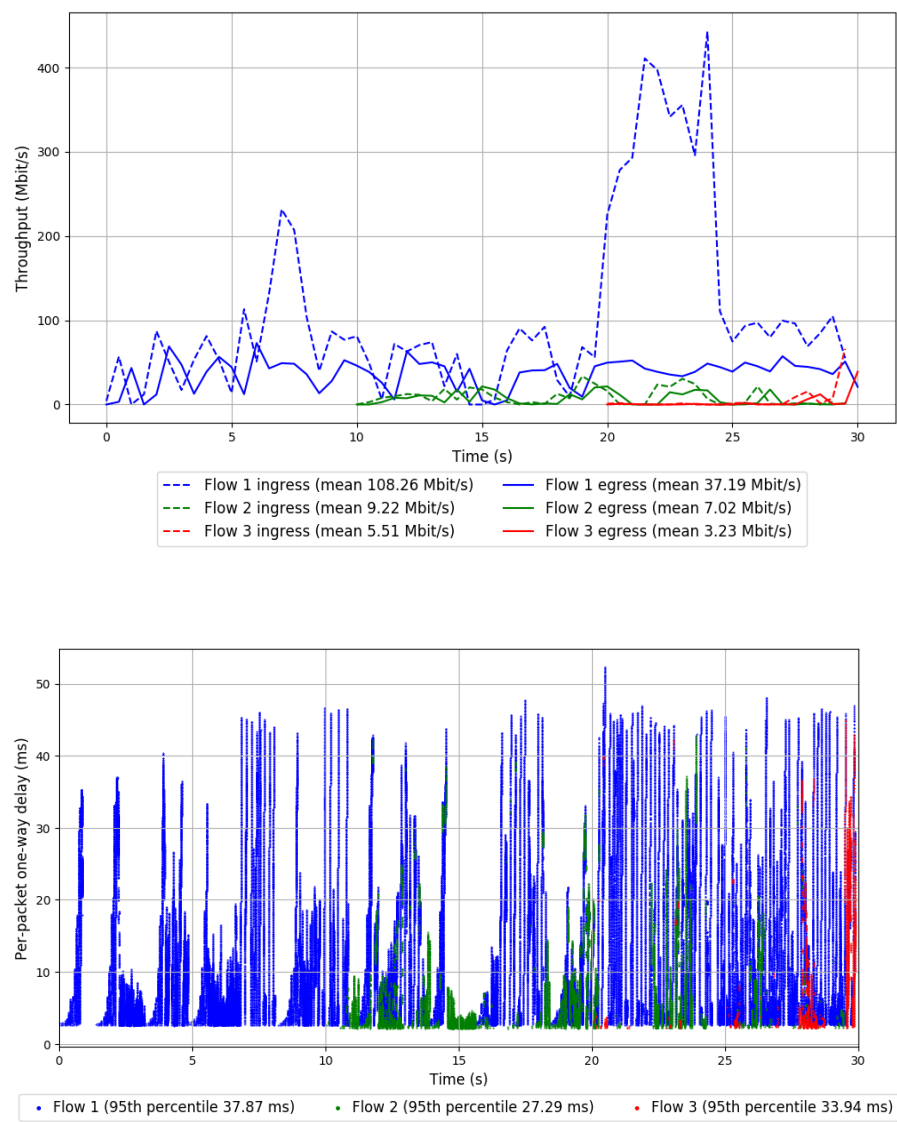
-- Flow 3:

Average throughput: 3.23 Mbit/s

95th percentile per-packet one-way delay: 33.937 ms

Loss rate: 41.23%

Run 5: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2019-01-03 00:26:25

End at: 2019-01-03 00:26:55

Local clock offset: 1.287 ms

Remote clock offset: 1.581 ms

Below is generated by plot.py at 2019-01-03 02:13:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 46.57 Mbit/s

95th percentile per-packet one-way delay: 4.796 ms

Loss rate: 7.48%

-- Flow 1:

Average throughput: 37.33 Mbit/s

95th percentile per-packet one-way delay: 4.811 ms

Loss rate: 7.55%

-- Flow 2:

Average throughput: 12.17 Mbit/s

95th percentile per-packet one-way delay: 4.770 ms

Loss rate: 7.23%

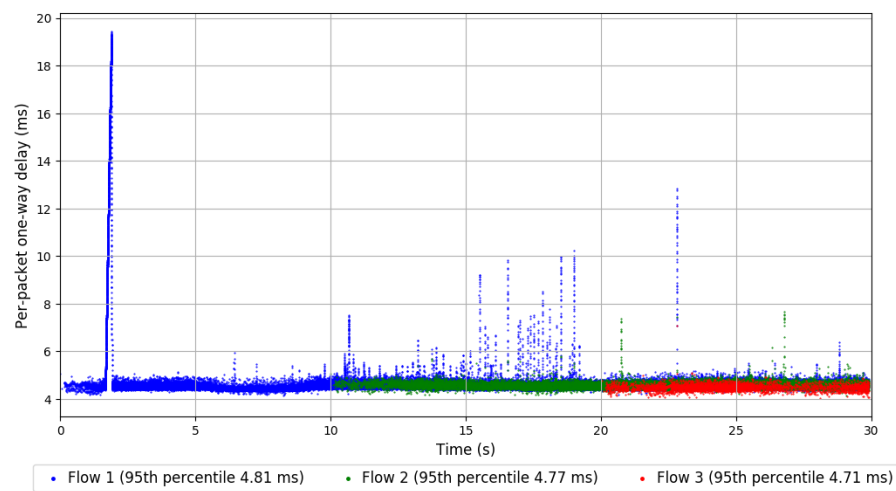
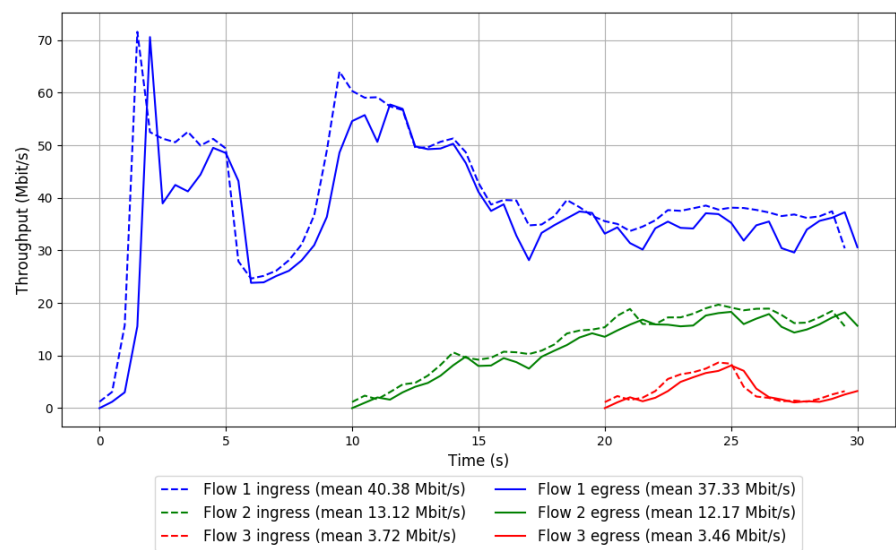
-- Flow 3:

Average throughput: 3.46 Mbit/s

95th percentile per-packet one-way delay: 4.710 ms

Loss rate: 7.18%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2019-01-03 00:51:28

End at: 2019-01-03 00:51:58

Local clock offset: -0.228 ms

Remote clock offset: 2.574 ms

Below is generated by plot.py at 2019-01-03 02:13:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 31.09 Mbit/s

95th percentile per-packet one-way delay: 7.070 ms

Loss rate: 9.06%

-- Flow 1:

Average throughput: 22.90 Mbit/s

95th percentile per-packet one-way delay: 7.066 ms

Loss rate: 8.76%

-- Flow 2:

Average throughput: 9.86 Mbit/s

95th percentile per-packet one-way delay: 7.080 ms

Loss rate: 10.01%

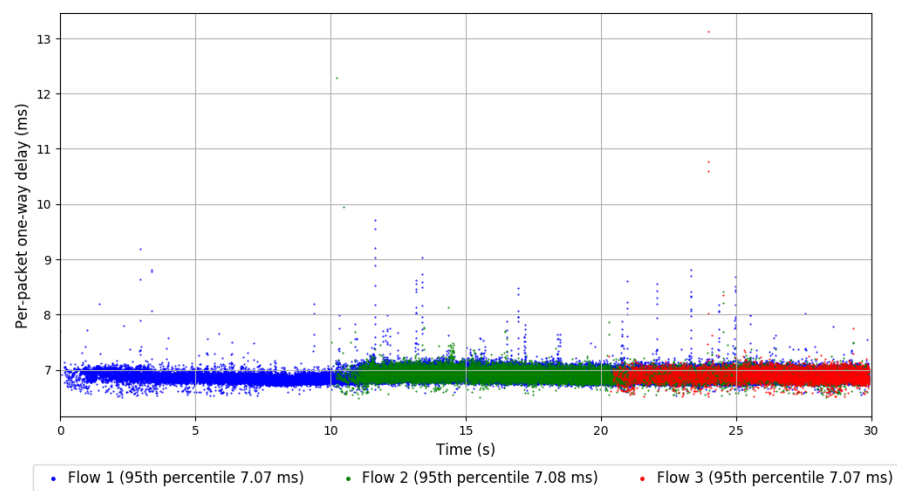
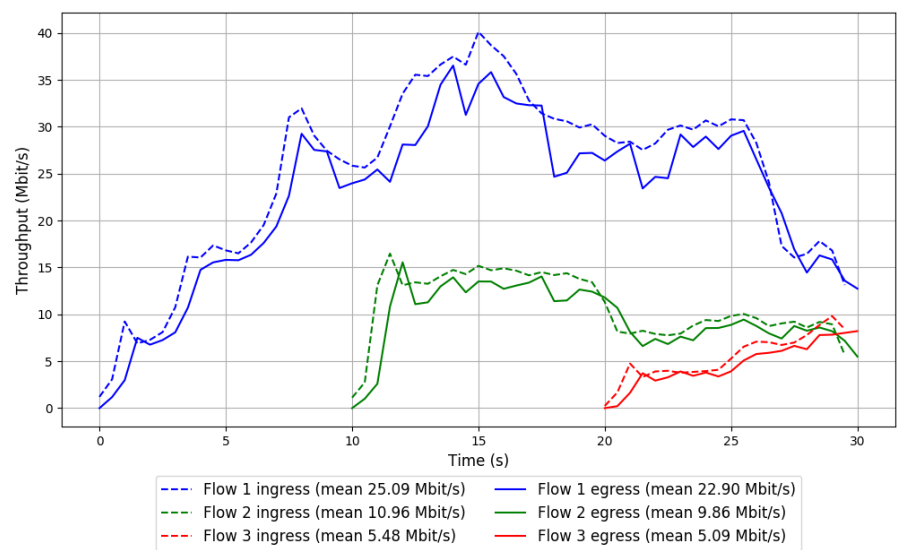
-- Flow 3:

Average throughput: 5.09 Mbit/s

95th percentile per-packet one-way delay: 7.071 ms

Loss rate: 9.49%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2019-01-03 01:15:41

End at: 2019-01-03 01:16:11

Local clock offset: -0.052 ms

Remote clock offset: 2.83 ms

Below is generated by plot.py at 2019-01-03 02:13:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.39 Mbit/s

95th percentile per-packet one-way delay: 5.063 ms

Loss rate: 9.39%

-- Flow 1:

Average throughput: 8.92 Mbit/s

95th percentile per-packet one-way delay: 5.049 ms

Loss rate: 9.30%

-- Flow 2:

Average throughput: 11.20 Mbit/s

95th percentile per-packet one-way delay: 5.064 ms

Loss rate: 9.44%

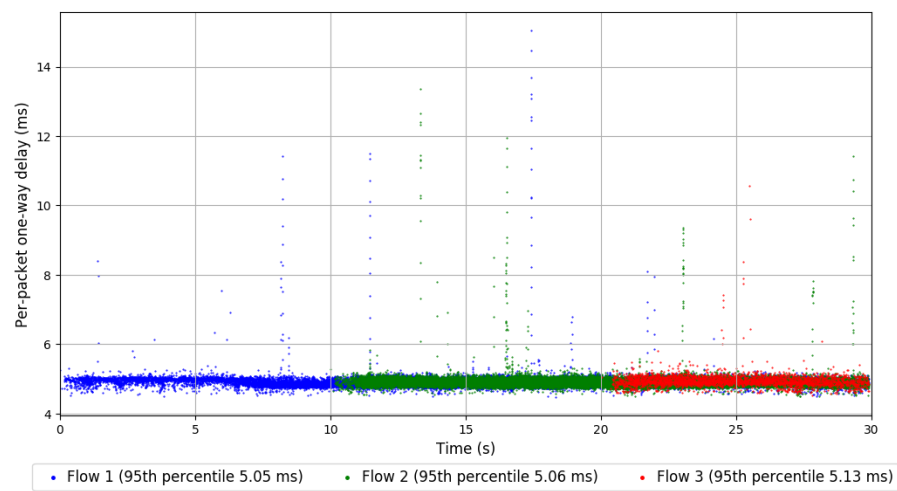
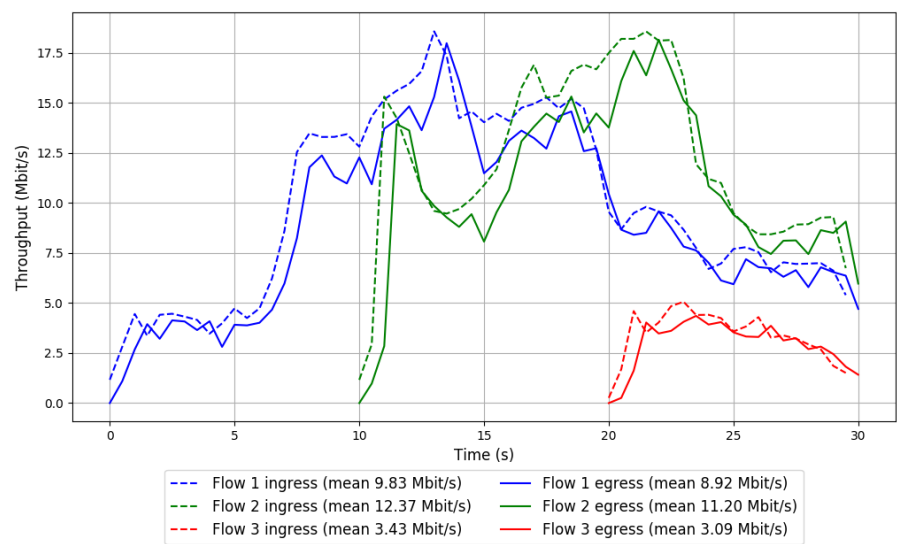
-- Flow 3:

Average throughput: 3.09 Mbit/s

95th percentile per-packet one-way delay: 5.132 ms

Loss rate: 9.83%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2019-01-03 01:39:47

End at: 2019-01-03 01:40:17

Local clock offset: 0.269 ms

Remote clock offset: 2.163 ms

Below is generated by plot.py at 2019-01-03 02:13:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 29.01 Mbit/s

95th percentile per-packet one-way delay: 3.759 ms

Loss rate: 7.74%

-- Flow 1:

Average throughput: 24.45 Mbit/s

95th percentile per-packet one-way delay: 3.765 ms

Loss rate: 7.69%

-- Flow 2:

Average throughput: 4.81 Mbit/s

95th percentile per-packet one-way delay: 3.735 ms

Loss rate: 7.99%

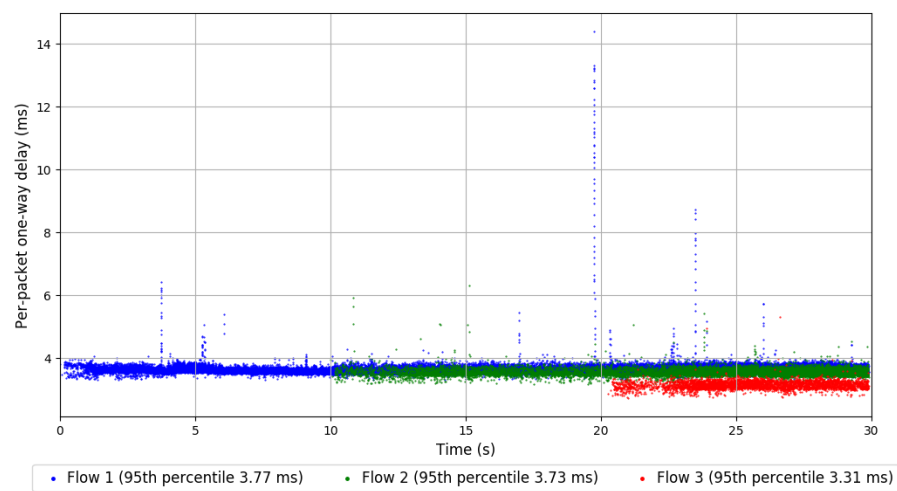
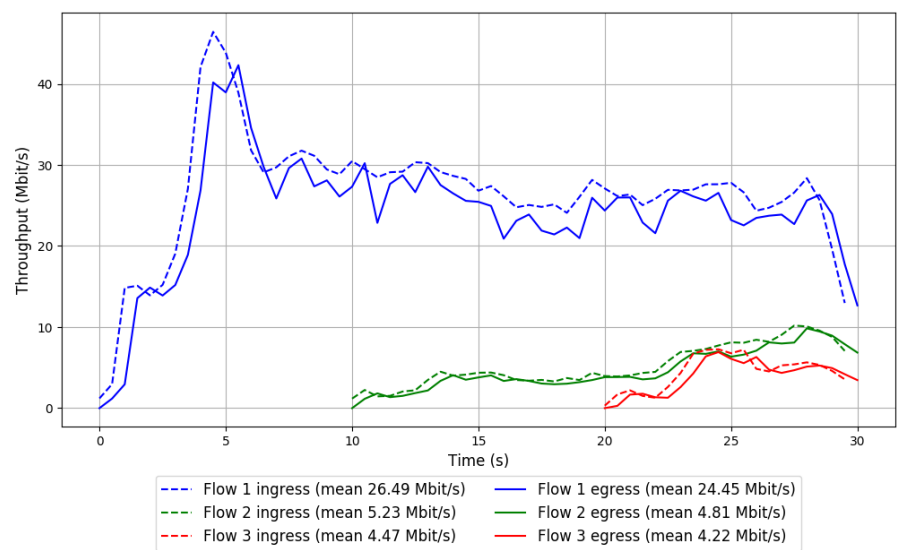
-- Flow 3:

Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 3.309 ms

Loss rate: 7.98%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2019-01-03 02:03:58

End at: 2019-01-03 02:04:28

Local clock offset: 1.294 ms

Remote clock offset: 1.918 ms

Below is generated by plot.py at 2019-01-03 02:13:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 47.67 Mbit/s

95th percentile per-packet one-way delay: 4.829 ms

Loss rate: 7.19%

-- Flow 1:

Average throughput: 38.05 Mbit/s

95th percentile per-packet one-way delay: 4.763 ms

Loss rate: 7.18%

-- Flow 2:

Average throughput: 12.04 Mbit/s

95th percentile per-packet one-way delay: 4.965 ms

Loss rate: 7.45%

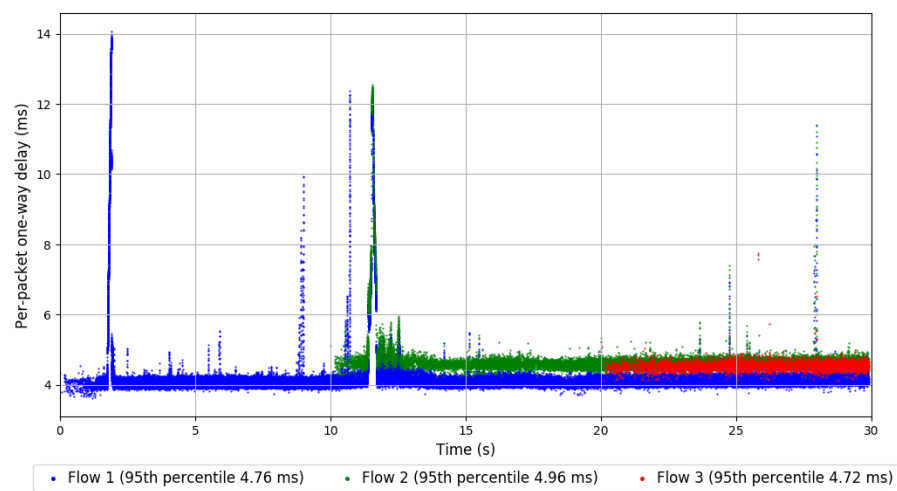
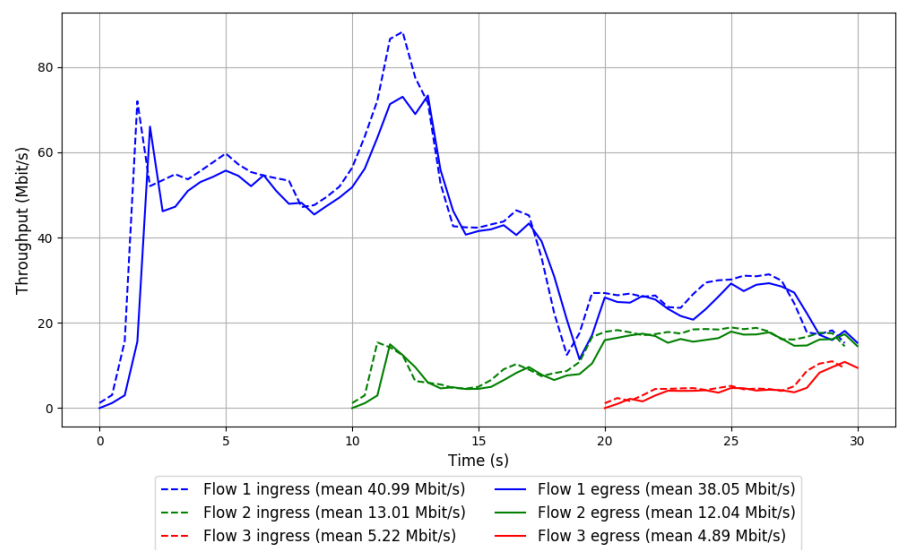
-- Flow 3:

Average throughput: 4.89 Mbit/s

95th percentile per-packet one-way delay: 4.717 ms

Loss rate: 6.32%

Run 5: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2019-01-03 00:16:53

End at: 2019-01-03 00:17:23

Local clock offset: 1.047 ms

Remote clock offset: 1.883 ms

Below is generated by plot.py at 2019-01-03 02:13:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 5.594 ms

Loss rate: 13.97%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 5.580 ms

Loss rate: 26.28%

-- Flow 2:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 5.248 ms

Loss rate: 11.00%

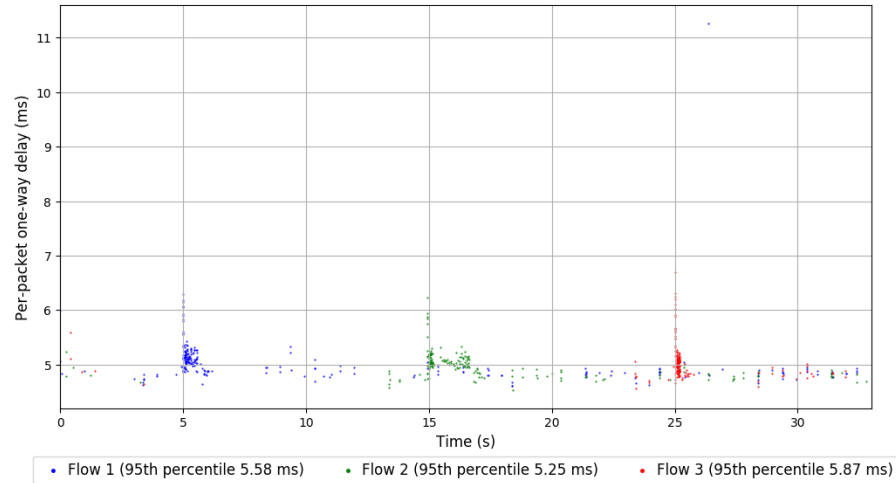
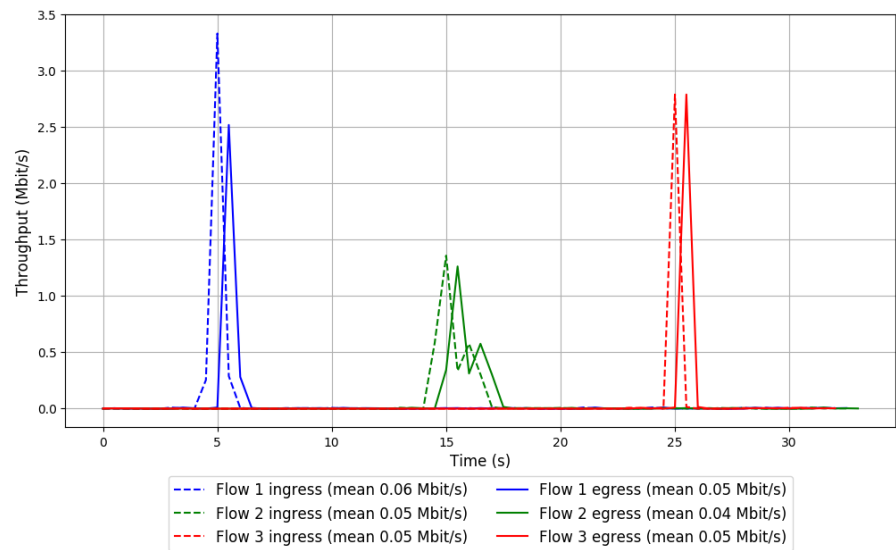
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 5.873 ms

Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2019-01-03 00:42:12

End at: 2019-01-03 00:42:42

Local clock offset: 1.191 ms

Remote clock offset: 1.985 ms

Below is generated by plot.py at 2019-01-03 02:13:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 5.431 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 5.472 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 5.164 ms

Loss rate: 0.00%

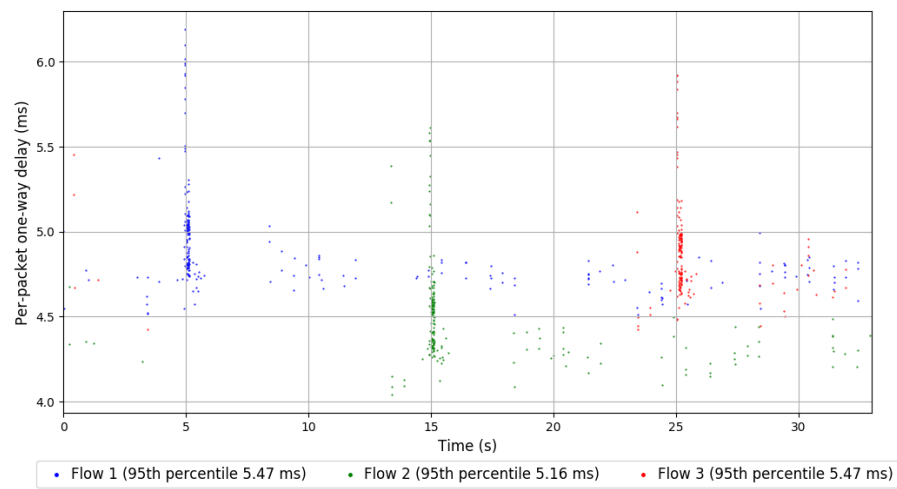
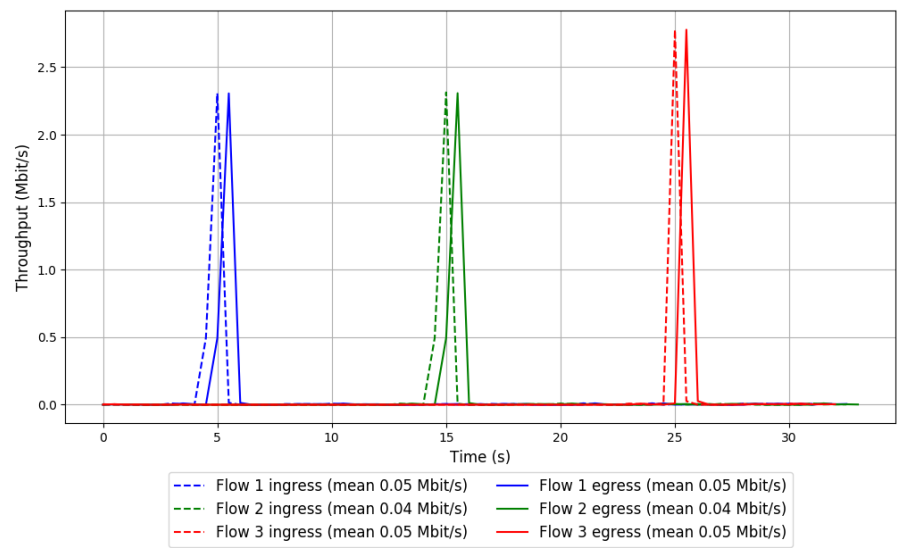
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 5.471 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2019-01-03 01:06:47

End at: 2019-01-03 01:07:17

Local clock offset: -1.772 ms

Remote clock offset: 2.581 ms

Below is generated by plot.py at 2019-01-03 02:13:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 7.256 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 7.436 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 7.431 ms

Loss rate: 0.82%

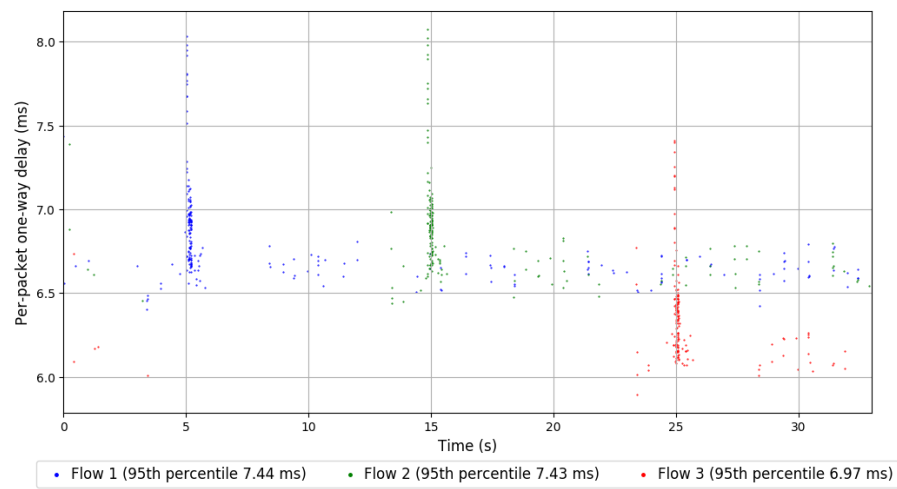
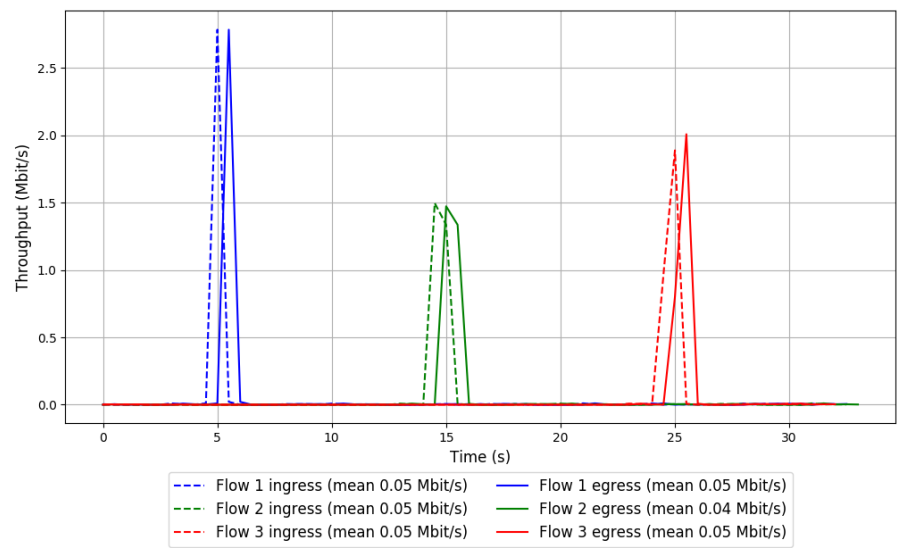
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 6.974 ms

Loss rate: 1.65%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2019-01-03 01:30:56

End at: 2019-01-03 01:31:26

Local clock offset: 1.299 ms

Remote clock offset: 2.121 ms

Below is generated by plot.py at 2019-01-03 02:13:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 3.177 ms

Loss rate: 12.36%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 2.726 ms

Loss rate: 13.29%

-- Flow 2:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 3.085 ms

Loss rate: 18.12%

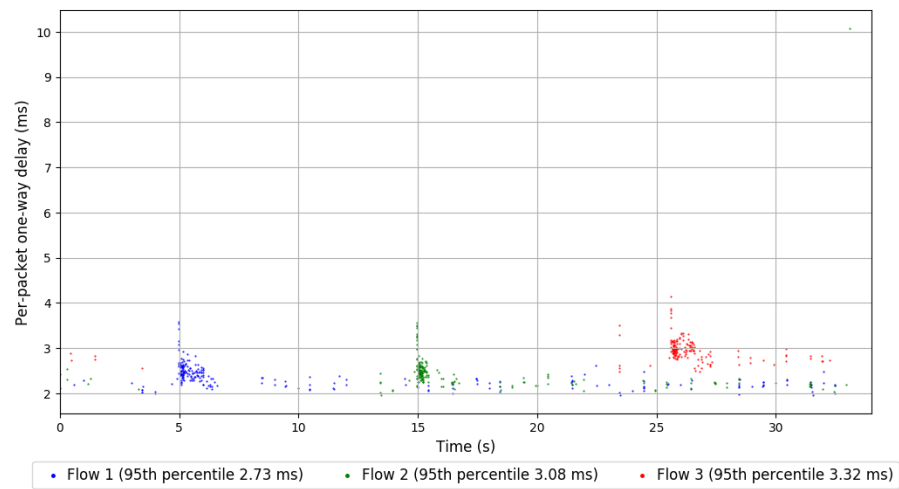
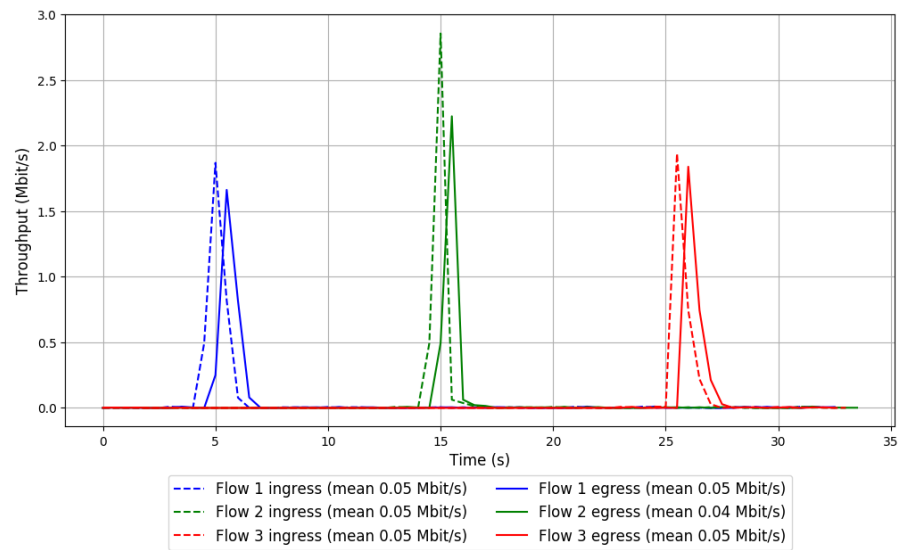
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 3.321 ms

Loss rate: 4.45%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-01-03 01:54:45

End at: 2019-01-03 01:55:15

Local clock offset: -1.482 ms

Remote clock offset: 1.77 ms

Below is generated by plot.py at 2019-01-03 02:13:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 5.896 ms

Loss rate: 11.42%

-- Flow 1:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 5.910 ms

Loss rate: 17.59%

-- Flow 2:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 5.607 ms

Loss rate: 1.05%

-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 6.237 ms

Loss rate: 13.88%

Run 5: Report of WebRTC media — Data Link

