

## Pantheon Report

Generated at 2018-03-05 22:19:55 (UTC).

Data path: Colombia ppp0 (*remote*) → AWS Brazil 2 Ethernet (*local*).

Repeated the test of 17 congestion control schemes 3 times.

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

Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

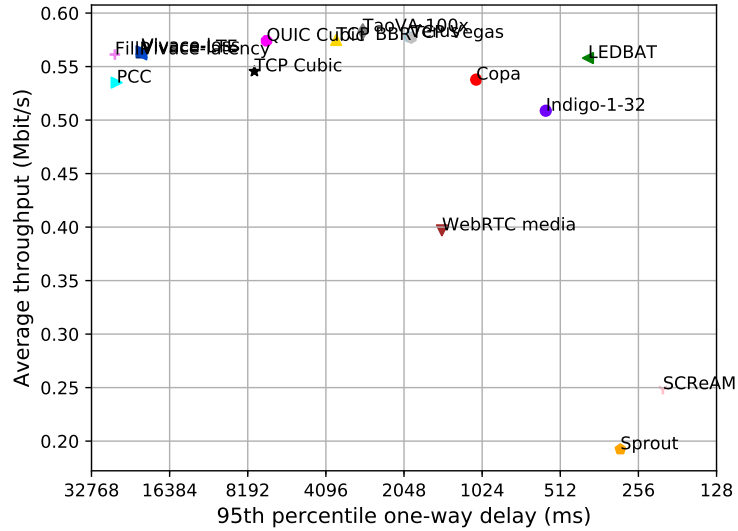
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo\_fast**).

NTP offsets were measured against **gps.ntp.br** and have been applied to correct the timestamps in logs.

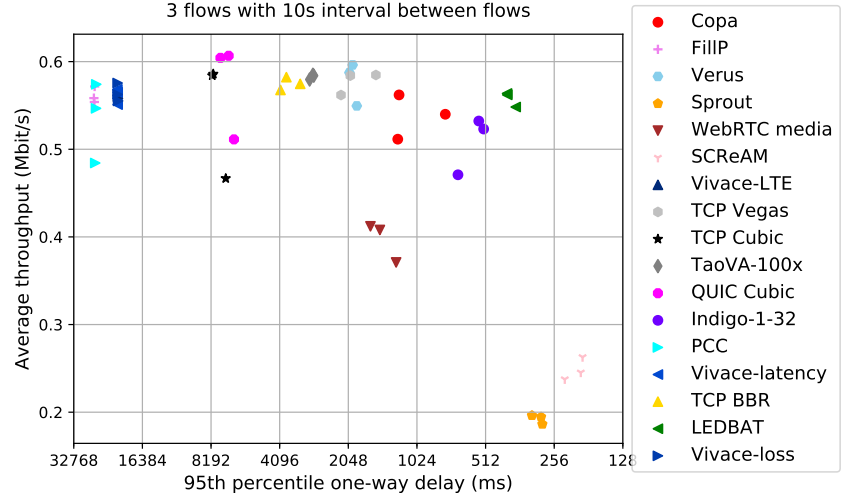
Git summary:

```
branch: master @ f12c42a2c63fdd9a862eefa0468859bf379b6623
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 9249eea3238475c4d8cca1443d28df70bff6c4a2
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
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/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eae30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  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 @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

test from Colombia ppp0 to AWS Brazil 2 Ethernet, 3 runs of 30s each per scheme  
3 flows with 10s interval between flows (mean of all runs by scheme)



test from Colombia ppp0 to AWS Brazil 2 Ethernet, 3 runs of 30s each per scheme  
3 flows with 10s interval between flows



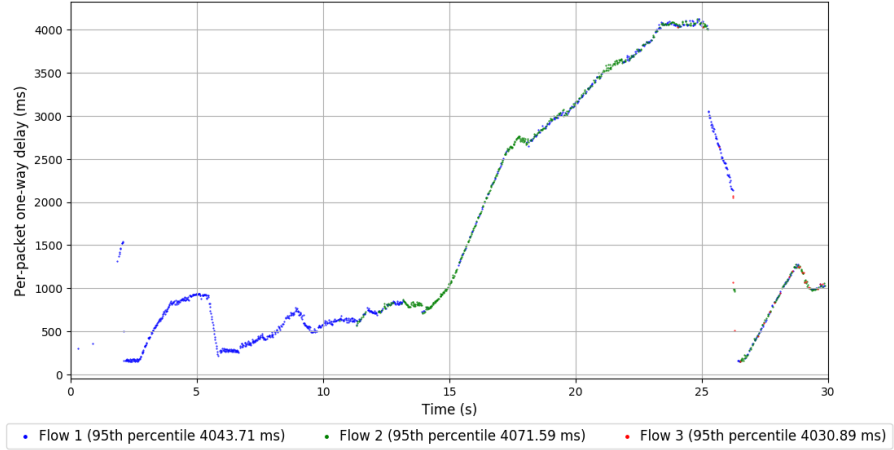
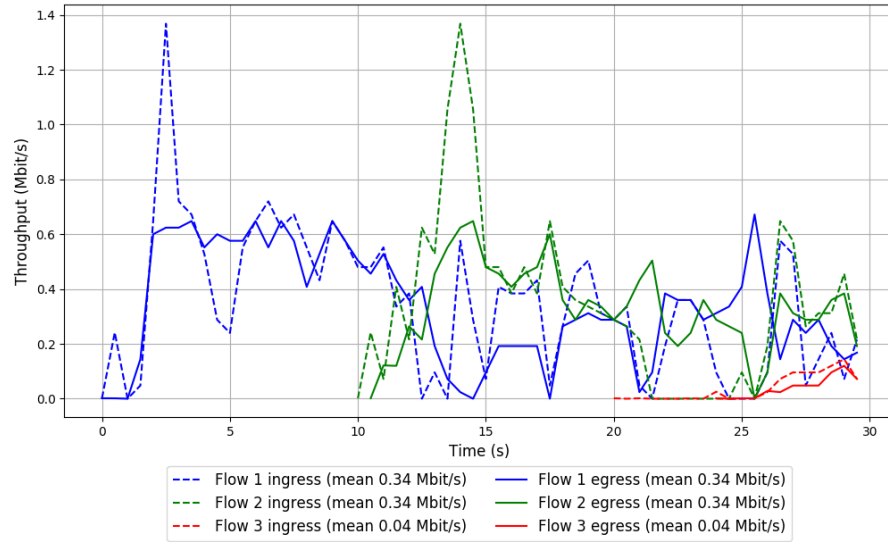
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	3	0.36	0.32	0.03	3700.47	3751.47	3586.53	2.31	5.28	43.81
TCP Cubic	3	0.54	0.02	0.00	7731.27	6084.79	7870.47	31.13	53.03	90.92
LEDBAT	3	0.25	0.35	0.24	344.89	429.78	400.80	0.05	0.90	7.27
PCC	3	0.53	0.00	N/A	26216.11	N/A	N/A	98.50	N/A	N/A
QUIC Cubic	3	0.54	0.06	0.00	6895.60	7010.40	7091.80	24.99	33.17	22.22
SCReAM	3	0.08	0.18	0.13	195.03	213.36	212.95	0.83	0.89	2.01
WebRTC media	3	0.21	0.12	0.06	1485.20	1393.66	1345.52	2.60	5.25	9.19
Sprout	3	0.09	0.10	0.10	622.34	234.53	262.92	1.17	2.06	4.88
TaoVA-100x	3	0.36	0.26	0.20	2444.97	3021.35	3238.72	4.27	17.54	23.20
TCP Vegas	3	0.42	0.21	0.13	1894.76	1970.17	2000.19	3.73	7.49	25.50
Verus	3	0.57	0.01	0.01	1953.86	1896.88	1951.19	5.51	6.36	9.70
Copa	3	0.33	0.23	0.21	1022.28	1086.51	1170.57	4.95	8.69	15.71
FillP	3	0.56	0.00	N/A	26628.93	N/A	N/A	98.73	N/A	N/A
Indigo-1-32	3	0.28	0.21	0.28	538.87	538.38	625.49	1.36	2.59	6.40
Vivace-latency	3	0.56	0.00	N/A	21062.49	N/A	N/A	71.28	N/A	N/A
Vivace-loss	3	0.57	0.00	N/A	21006.69	N/A	N/A	89.18	N/A	N/A
Vivace-LTE	3	0.56	0.00	N/A	21013.75	N/A	N/A	71.67	N/A	N/A

Run 1: Statistics of TCP BBR

Start at: 2018-03-05 20:19:47  
End at: 2018-03-05 20:20:17  
Local clock offset: -6.644 ms  
Remote clock offset: -4.896 ms

# Below is generated by plot.py at 2018-03-05 22:19:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.57 Mbit/s  
95th percentile per-packet one-way delay: 4061.708 ms  
Loss rate: 3.98%  
-- Flow 1:  
Average throughput: 0.34 Mbit/s  
95th percentile per-packet one-way delay: 4043.714 ms  
Loss rate: 1.75%  
-- Flow 2:  
Average throughput: 0.34 Mbit/s  
95th percentile per-packet one-way delay: 4071.591 ms  
Loss rate: 5.61%  
-- Flow 3:  
Average throughput: 0.04 Mbit/s  
95th percentile per-packet one-way delay: 4030.890 ms  
Loss rate: 35.07%

# Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-03-05 20:42:24

End at: 2018-03-05 20:42:55

Local clock offset: -6.093 ms

Remote clock offset: 0.933 ms

# Below is generated by plot.py at 2018-03-05 22:19:13

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 3328.027 ms

Loss rate: 3.28%

-- Flow 1:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 3235.132 ms

Loss rate: 1.41%

-- Flow 2:

Average throughput: 0.31 Mbit/s

95th percentile per-packet one-way delay: 3346.354 ms

Loss rate: 4.67%

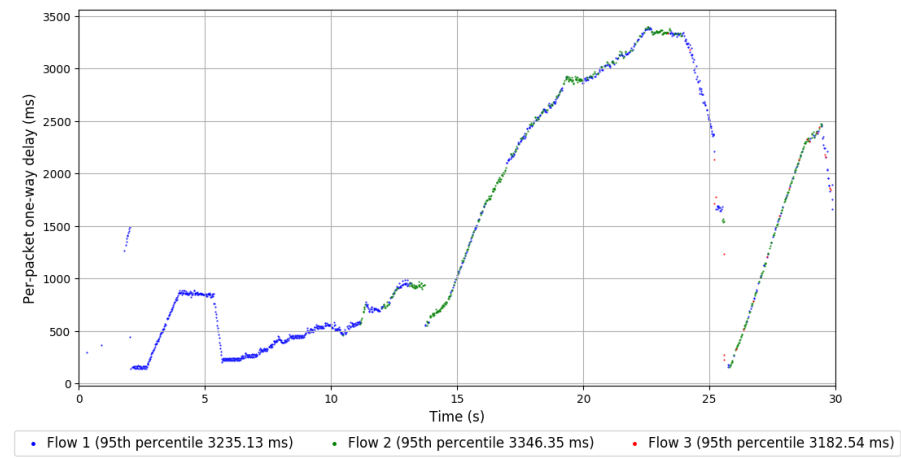
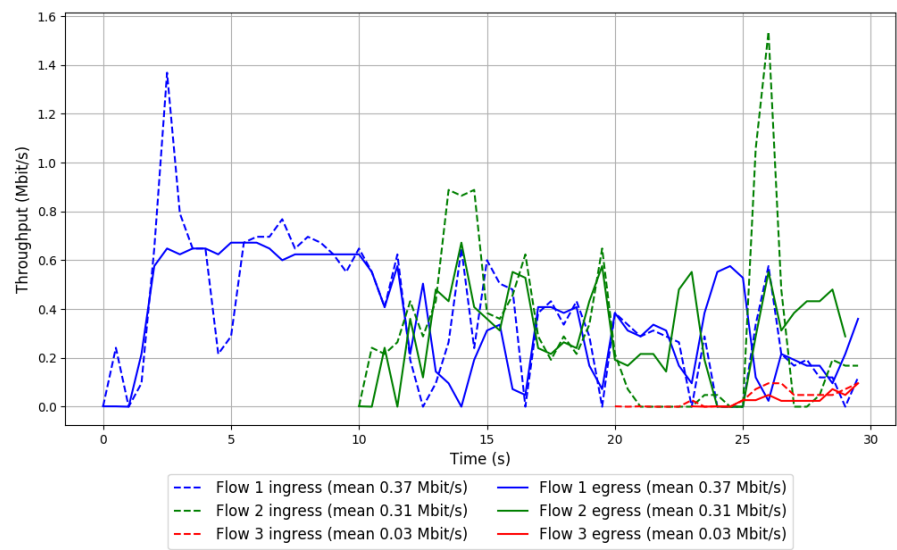
-- Flow 3:

Average throughput: 0.03 Mbit/s

95th percentile per-packet one-way delay: 3182.541 ms

Loss rate: 38.78%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-03-05 21:04:52

End at: 2018-03-05 21:05:22

Local clock offset: -5.79 ms

Remote clock offset: 1.007 ms

# Below is generated by plot.py at 2018-03-05 22:19:13

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 3827.640 ms

Loss rate: 5.03%

-- Flow 1:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 3822.553 ms

Loss rate: 3.78%

-- Flow 2:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 3836.463 ms

Loss rate: 5.55%

-- Flow 3:

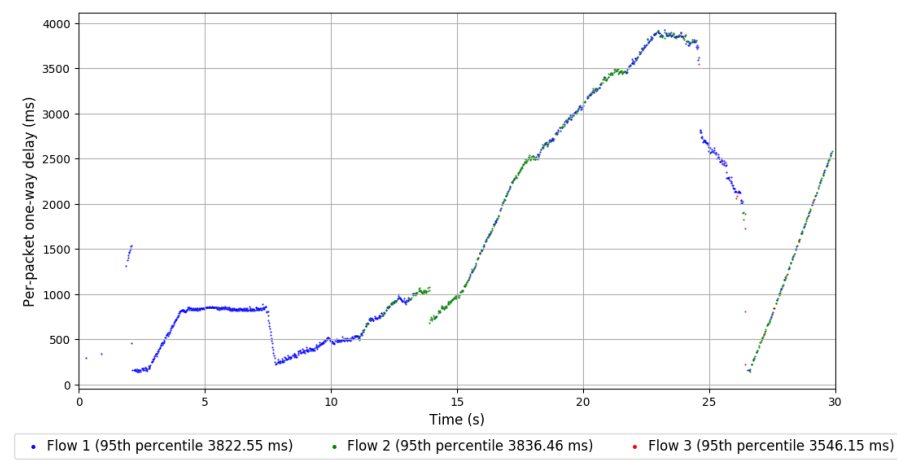
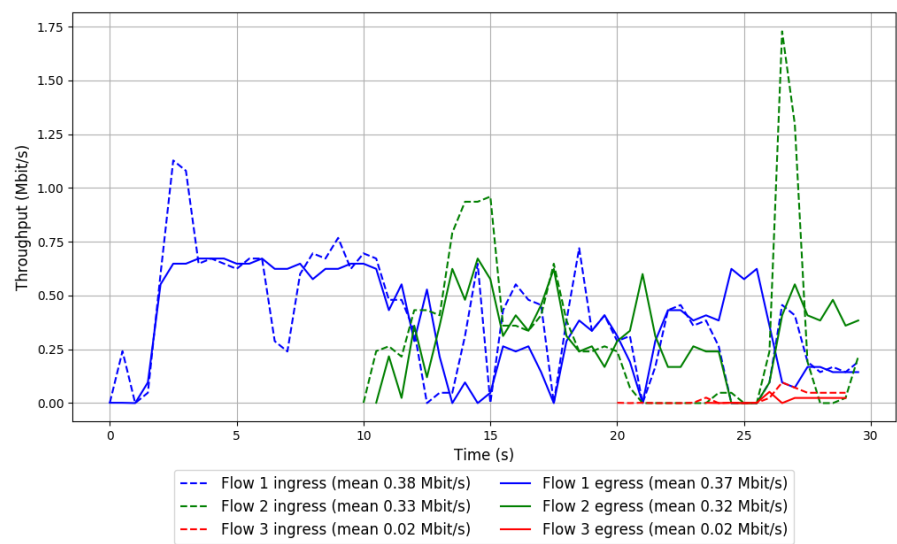
Average throughput: 0.02 Mbit/s

95th percentile per-packet one-way delay: 3546.147 ms

Loss rate: 57.58%



Run 3: Report of TCP BBR — Data Link

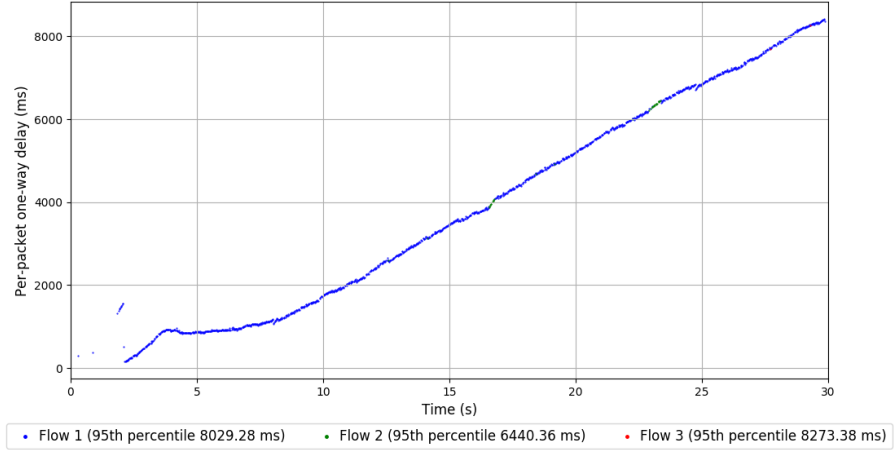
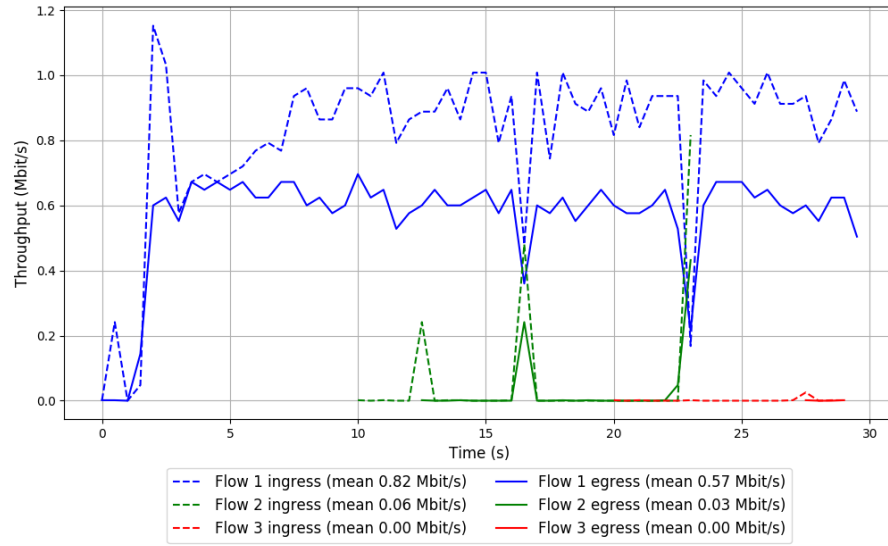


Run 1: Statistics of TCP Cubic

Start at: 2018-03-05 20:26:01  
End at: 2018-03-05 20:26:31  
Local clock offset: -6.641 ms  
Remote clock offset: -5.804 ms

# Below is generated by plot.py at 2018-03-05 22:19:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.59 Mbit/s  
95th percentile per-packet one-way delay: 8009.185 ms  
Loss rate: 31.55%  
-- Flow 1:  
Average throughput: 0.57 Mbit/s  
95th percentile per-packet one-way delay: 8029.276 ms  
Loss rate: 30.84%  
-- Flow 2:  
Average throughput: 0.03 Mbit/s  
95th percentile per-packet one-way delay: 6440.359 ms  
Loss rate: 52.83%  
-- Flow 3:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 8273.381 ms  
Loss rate: 91.06%

# Run 1: Report of TCP Cubic — Data Link

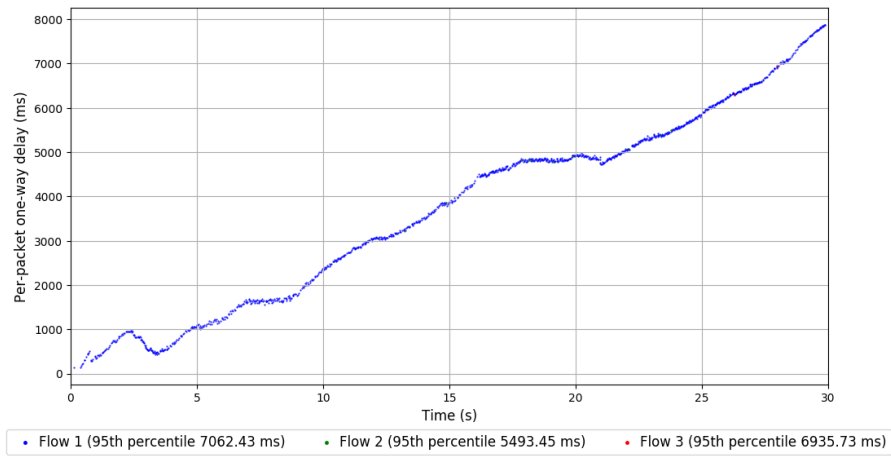
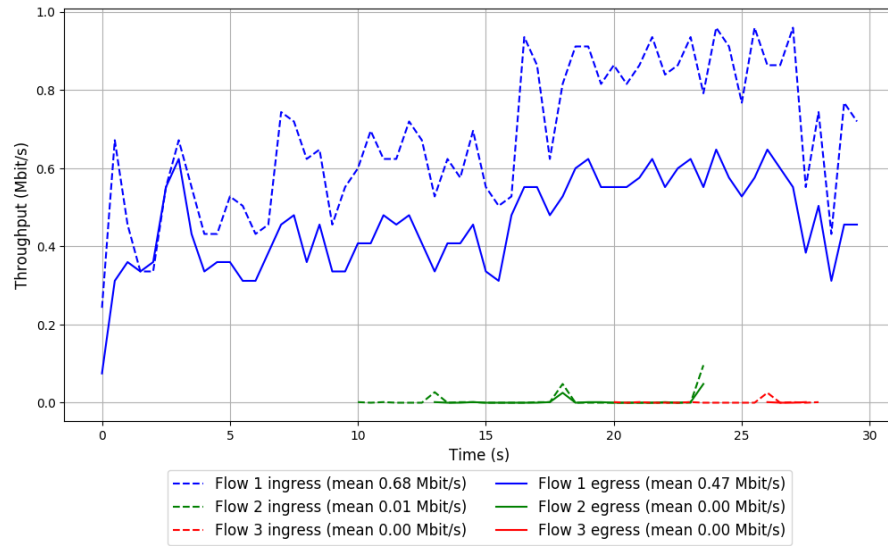


Run 2: Statistics of TCP Cubic

Start at: 2018-03-05 20:48:37  
End at: 2018-03-05 20:49:07  
Local clock offset: -5.983 ms  
Remote clock offset: -5.644 ms

# Below is generated by plot.py at 2018-03-05 22:19:14  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.47 Mbit/s  
95th percentile per-packet one-way delay: 7062.426 ms  
Loss rate: 31.96%  
-- Flow 1:  
Average throughput: 0.47 Mbit/s  
95th percentile per-packet one-way delay: 7062.426 ms  
Loss rate: 31.81%  
-- Flow 2:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 5493.454 ms  
Loss rate: 53.44%  
-- Flow 3:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 6935.731 ms  
Loss rate: 90.64%

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

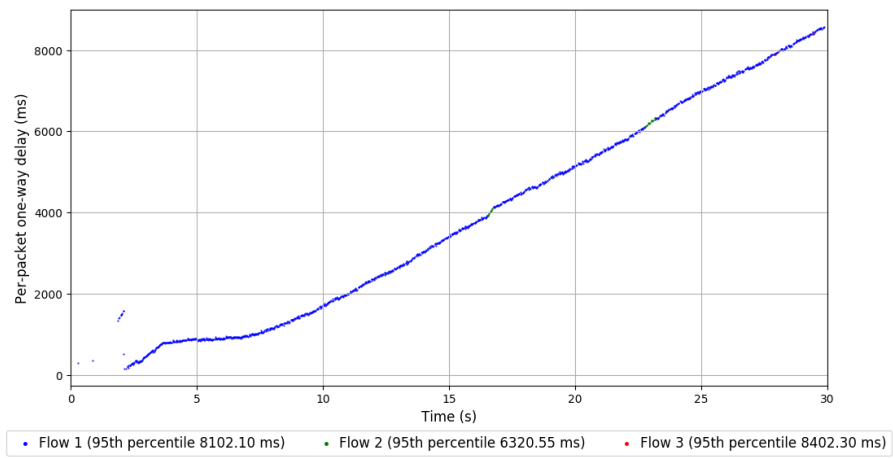
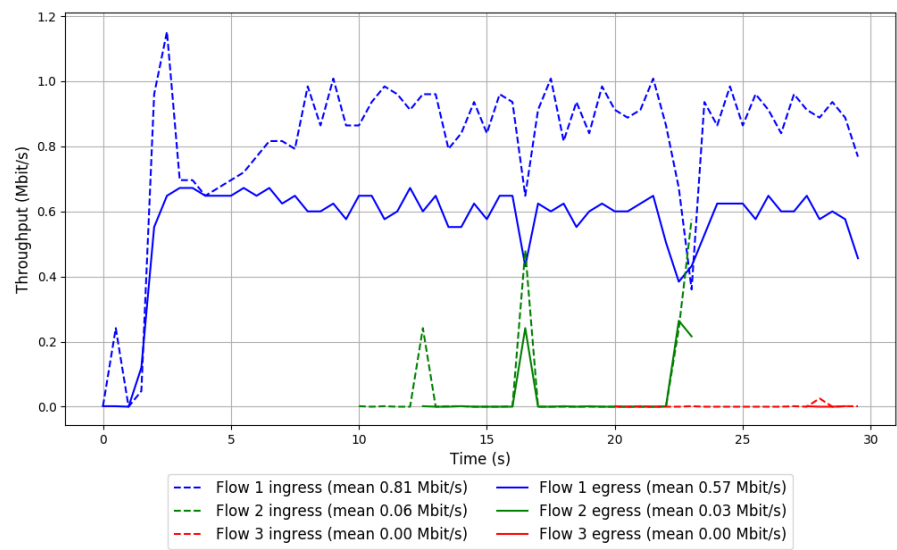


Run 3: Statistics of TCP Cubic

Start at: 2018-03-05 21:11:06  
End at: 2018-03-05 21:11:36  
Local clock offset: -5.74 ms  
Remote clock offset: -4.596 ms

# Below is generated by plot.py at 2018-03-05 22:19:14  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.58 Mbit/s  
95th percentile per-packet one-way delay: 8092.168 ms  
Loss rate: 31.46%  
-- Flow 1:  
Average throughput: 0.57 Mbit/s  
95th percentile per-packet one-way delay: 8102.096 ms  
Loss rate: 30.74%  
-- Flow 2:  
Average throughput: 0.03 Mbit/s  
95th percentile per-packet one-way delay: 6320.548 ms  
Loss rate: 52.83%  
-- Flow 3:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 8402.302 ms  
Loss rate: 91.06%

Run 3: Report of TCP Cubic — Data Link



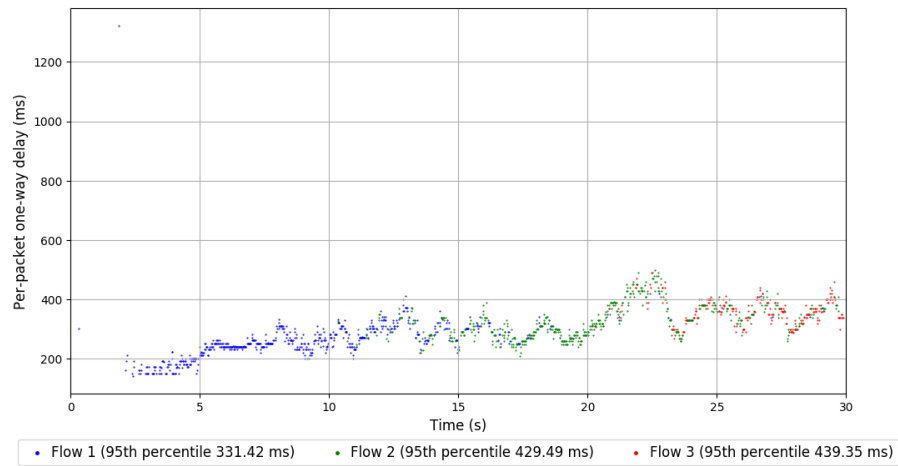
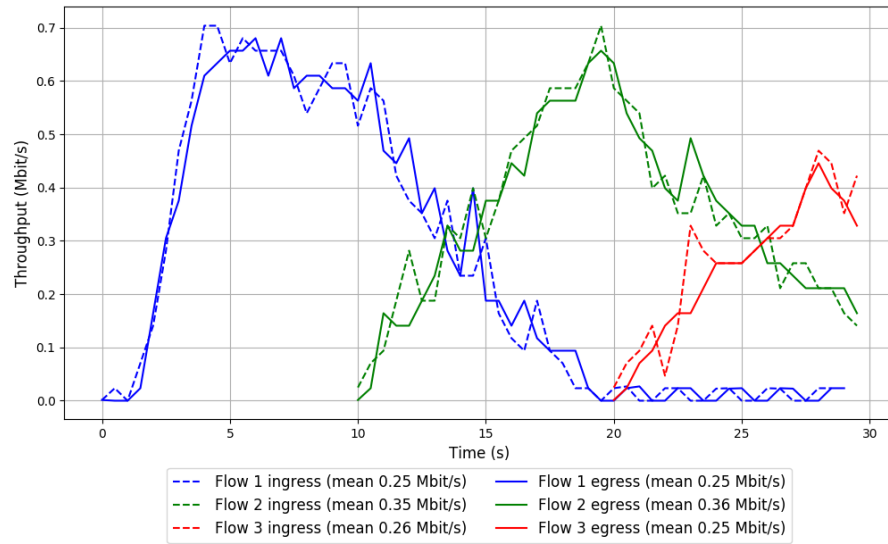
Run 1: Statistics of LEDBAT

Start at: 2018-03-05 20:17:18  
End at: 2018-03-05 20:17:48  
Local clock offset: -6.661 ms  
Remote clock offset: -0.871 ms

# Below is generated by plot.py at 2018-03-05 22:19:14  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.56 Mbit/s  
95th percentile per-packet one-way delay: 411.274 ms  
Loss rate: 1.53%  
-- Flow 1:  
Average throughput: 0.25 Mbit/s  
95th percentile per-packet one-way delay: 331.420 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.36 Mbit/s  
95th percentile per-packet one-way delay: 429.486 ms  
Loss rate: 1.00%  
-- Flow 3:  
Average throughput: 0.25 Mbit/s  
95th percentile per-packet one-way delay: 439.353 ms  
Loss rate: 7.21%



## Run 1: Report of LEDBAT — Data Link

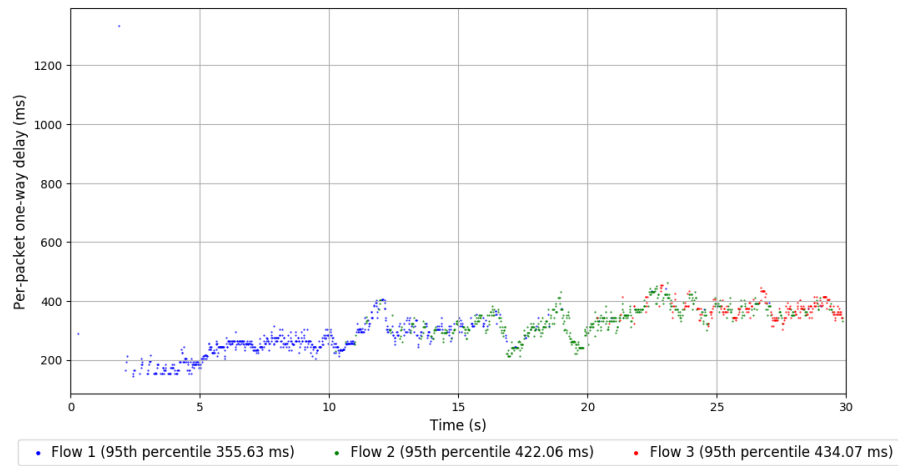
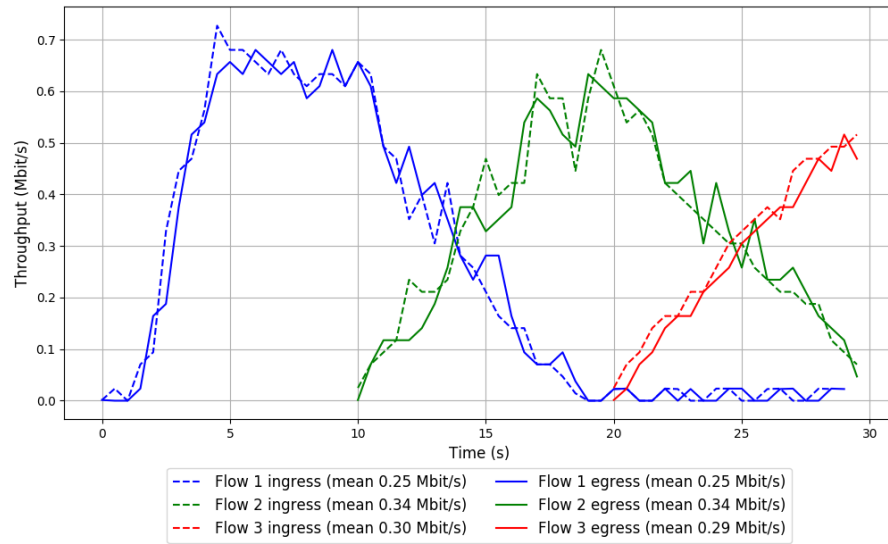


Run 2: Statistics of LEDBAT

Start at: 2018-03-05 20:39:55  
End at: 2018-03-05 20:40:25  
Local clock offset: -6.19 ms  
Remote clock offset: -4.823 ms

# Below is generated by plot.py at 2018-03-05 22:19:14  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.56 Mbit/s  
95th percentile per-packet one-way delay: 412.333 ms  
Loss rate: 1.59%  
-- Flow 1:  
Average throughput: 0.25 Mbit/s  
95th percentile per-packet one-way delay: 355.628 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.34 Mbit/s  
95th percentile per-packet one-way delay: 422.057 ms  
Loss rate: 0.17%  
-- Flow 3:  
Average throughput: 0.29 Mbit/s  
95th percentile per-packet one-way delay: 434.073 ms  
Loss rate: 8.69%

## Run 2: Report of LEDBAT — Data Link

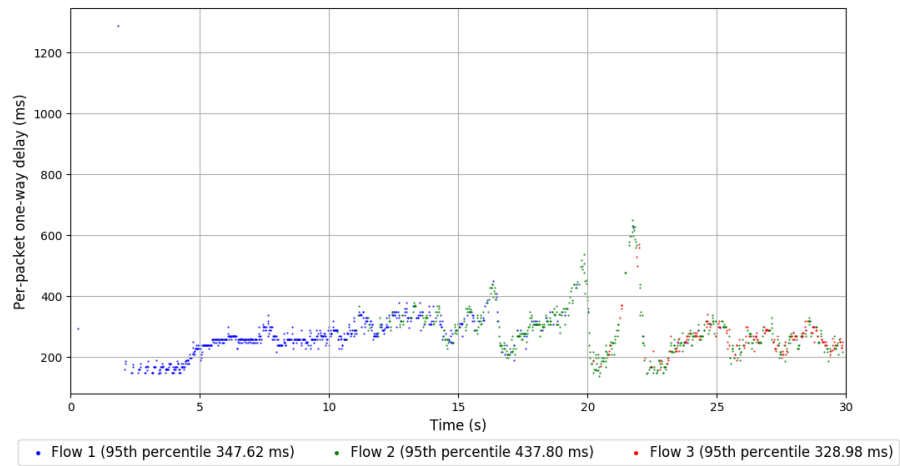
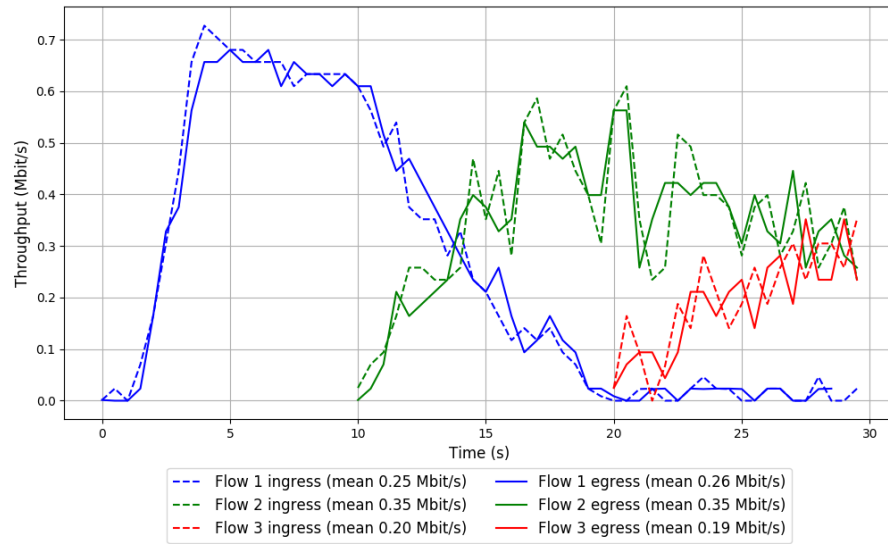


Run 3: Statistics of LEDBAT

Start at: 2018-03-05 21:02:23  
End at: 2018-03-05 21:02:53  
Local clock offset: -5.864 ms  
Remote clock offset: -0.739 ms

# Below is generated by plot.py at 2018-03-05 22:19:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.55 Mbit/s  
95th percentile per-packet one-way delay: 377.826 ms  
Loss rate: 1.43%  
-- Flow 1:  
Average throughput: 0.26 Mbit/s  
95th percentile per-packet one-way delay: 347.624 ms  
Loss rate: 0.16%  
-- Flow 2:  
Average throughput: 0.35 Mbit/s  
95th percentile per-packet one-way delay: 437.804 ms  
Loss rate: 1.52%  
-- Flow 3:  
Average throughput: 0.19 Mbit/s  
95th percentile per-packet one-way delay: 328.982 ms  
Loss rate: 5.92%

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



Run 1: Statistics of PCC

Start at: 2018-03-05 20:14:49

End at: 2018-03-05 20:15:19

Local clock offset: -6.697 ms

Remote clock offset: 0.701 ms

# Below is generated by plot.py at 2018-03-05 22:19:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 26166.757 ms

Loss rate: 98.24%

-- Flow 1:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 26166.757 ms

Loss rate: 98.24%

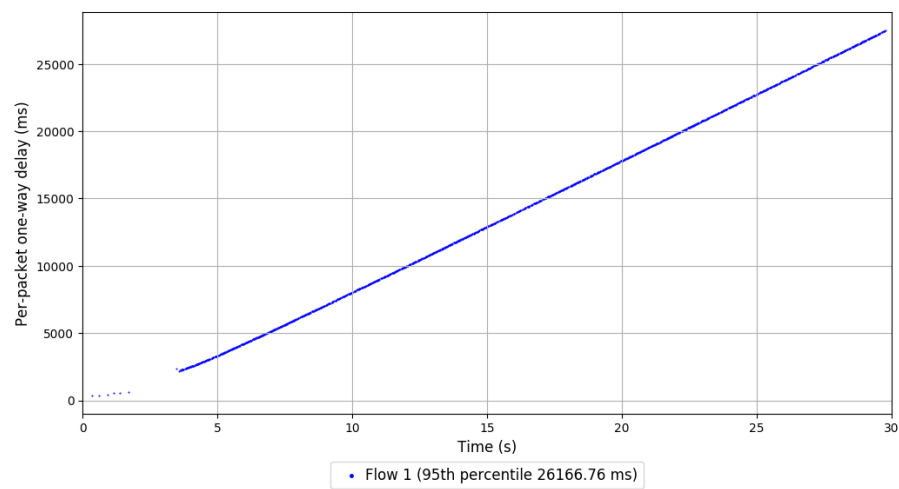
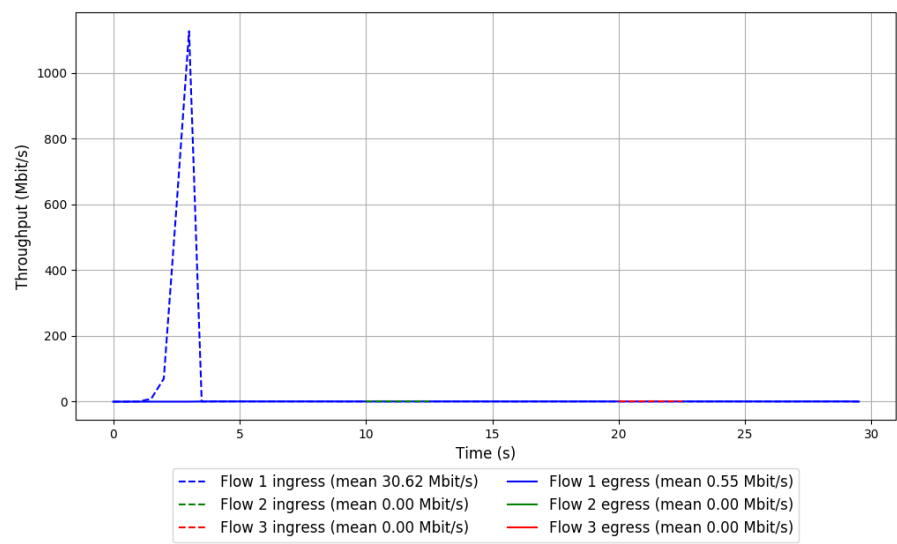
-- Flow 2:

Average throughput: 0.00 Mbit/s

-- Flow 3:

Average throughput: 0.00 Mbit/s

Run 1: Report of PCC — Data Link



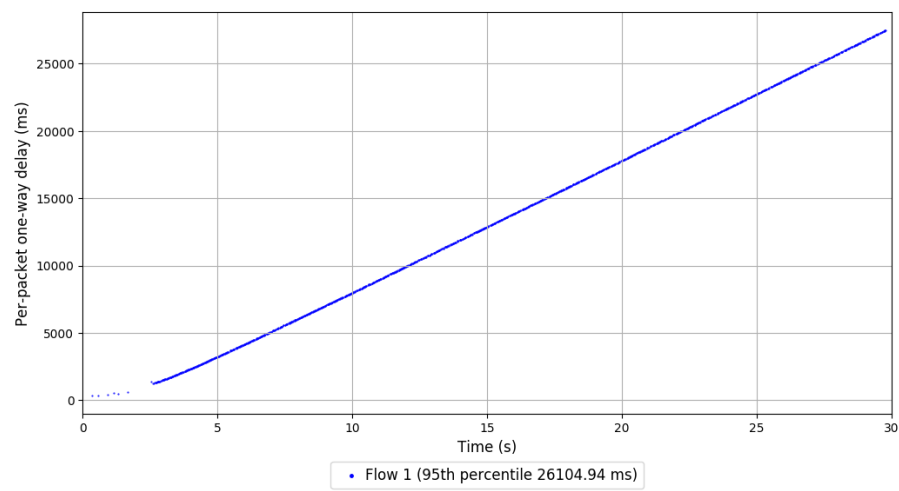
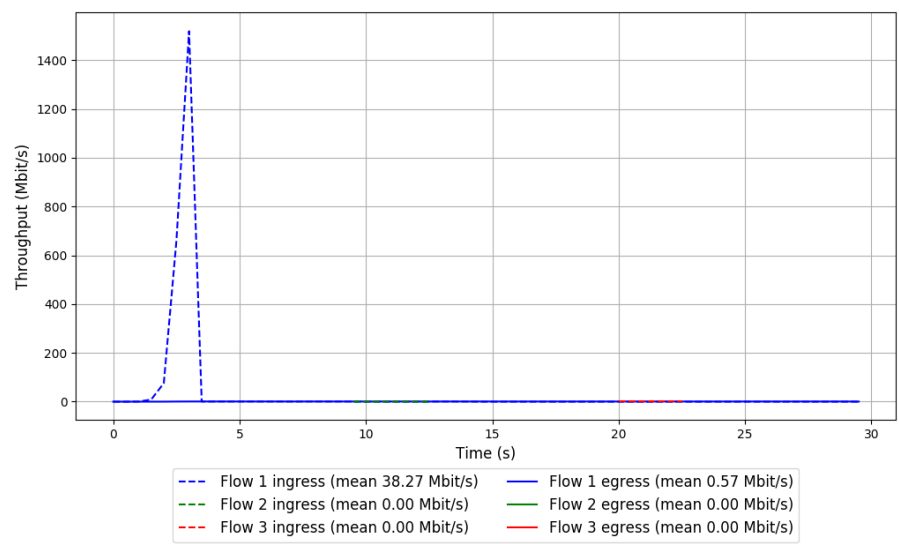
Run 2: Statistics of PCC

Start at: 2018-03-05 20:37:25  
End at: 2018-03-05 20:37:55  
Local clock offset: -6.324 ms  
Remote clock offset: -0.042 ms

# Below is generated by plot.py at 2018-03-05 22:19:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.57 Mbit/s  
95th percentile per-packet one-way delay: 26104.937 ms  
Loss rate: 98.52%  
-- Flow 1:  
Average throughput: 0.57 Mbit/s  
95th percentile per-packet one-way delay: 26104.937 ms  
Loss rate: 98.52%  
-- Flow 2:  
Average throughput: 0.00 Mbit/s  
-- Flow 3:  
Average throughput: 0.00 Mbit/s



Run 2: Report of PCC — Data Link

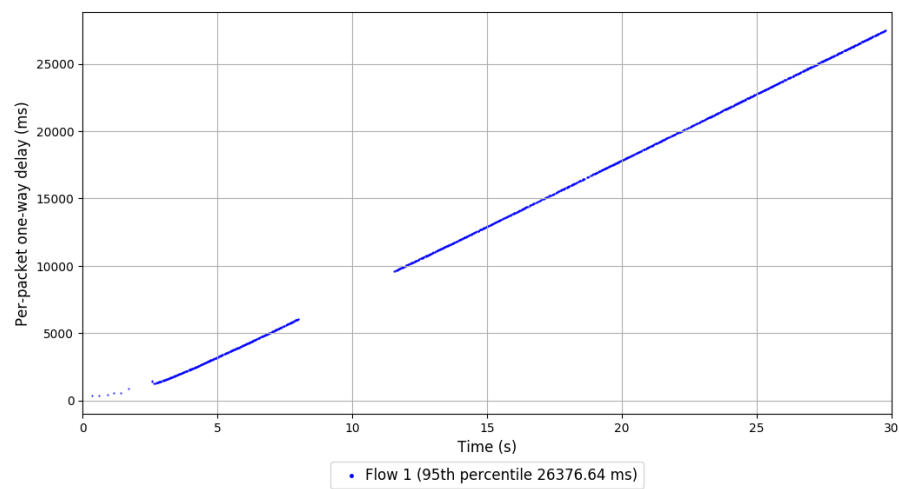
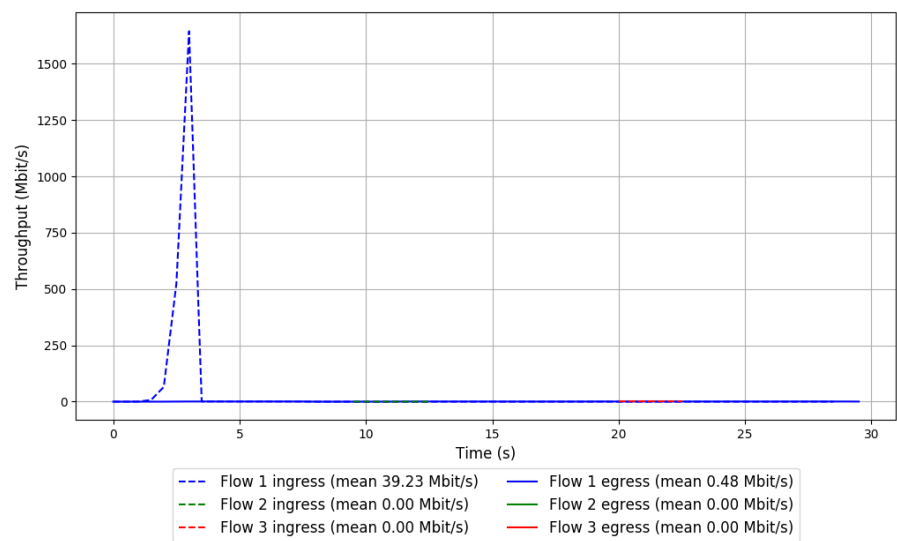


Run 3: Statistics of PCC

Start at: 2018-03-05 20:59:53  
End at: 2018-03-05 21:00:23  
Local clock offset: -5.804 ms  
Remote clock offset: -0.733 ms

# Below is generated by plot.py at 2018-03-05 22:19:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.48 Mbit/s  
95th percentile per-packet one-way delay: 26376.642 ms  
Loss rate: 98.73%  
-- Flow 1:  
Average throughput: 0.48 Mbit/s  
95th percentile per-packet one-way delay: 26376.642 ms  
Loss rate: 98.73%  
-- Flow 2:  
Average throughput: 0.00 Mbit/s  
-- Flow 3:  
Average throughput: 0.00 Mbit/s

Run 3: Report of PCC — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-03-05 20:06:04

End at: 2018-03-05 20:06:34

Local clock offset: -6.825 ms

Remote clock offset: 0.74 ms

# Below is generated by plot.py at 2018-03-05 22:19:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 7449.655 ms

Loss rate: 28.92%

-- Flow 1:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 7386.293 ms

Loss rate: 28.75%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 7629.770 ms

Loss rate: 31.47%

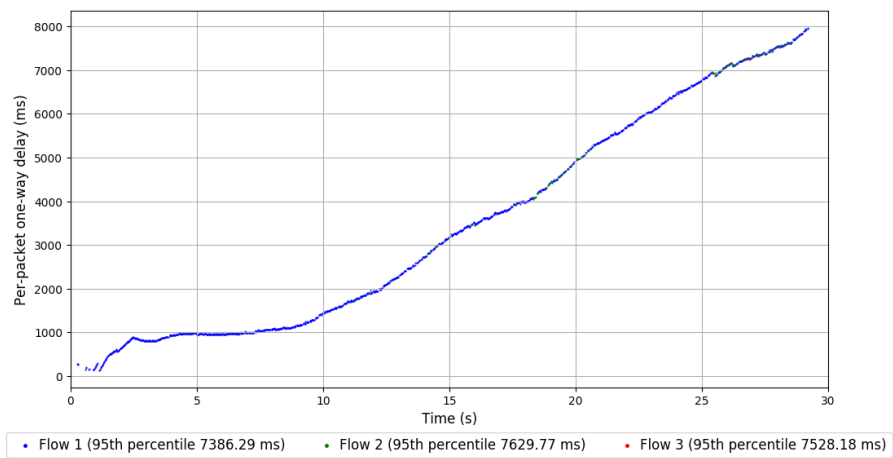
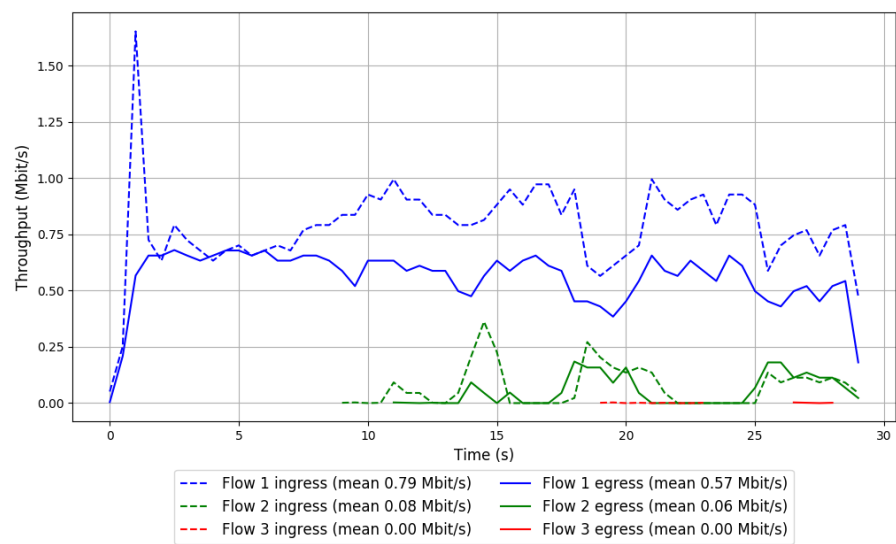
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 7528.178 ms

Loss rate: 33.33%

Run 1: Report of QUIC Cubic — Data Link

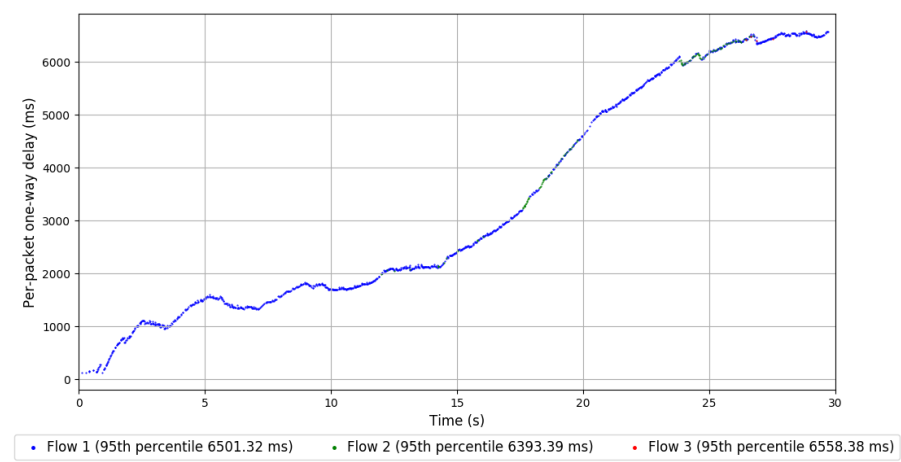
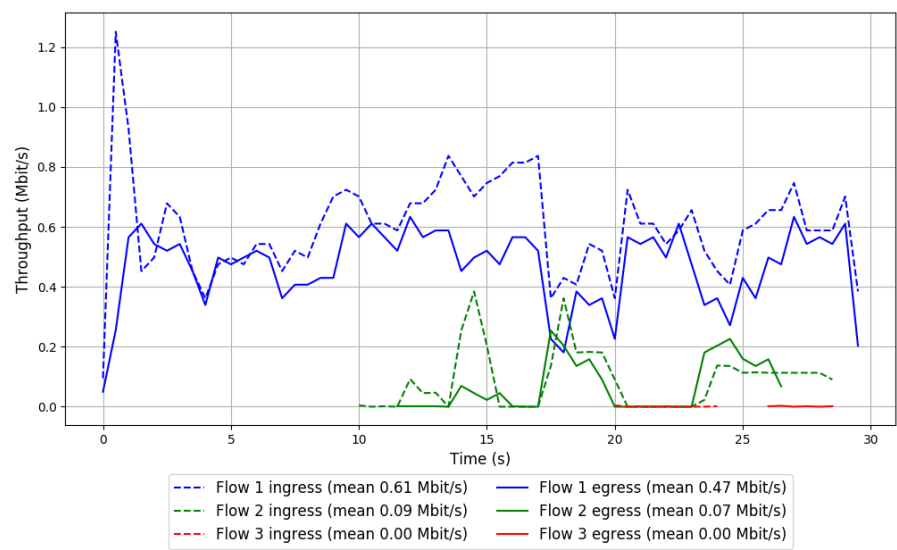


Run 2: Statistics of QUIC Cubic

Start at: 2018-03-05 20:28:41  
End at: 2018-03-05 20:29:11  
Local clock offset: -6.59 ms  
Remote clock offset: -0.879 ms

# Below is generated by plot.py at 2018-03-05 22:19:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.51 Mbit/s  
95th percentile per-packet one-way delay: 6498.177 ms  
Loss rate: 23.40%  
-- Flow 1:  
Average throughput: 0.47 Mbit/s  
95th percentile per-packet one-way delay: 6501.325 ms  
Loss rate: 22.30%  
-- Flow 2:  
Average throughput: 0.07 Mbit/s  
95th percentile per-packet one-way delay: 6393.390 ms  
Loss rate: 35.27%  
-- Flow 3:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 6558.378 ms  
Loss rate: 16.67%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-03-05 20:51:08

End at: 2018-03-05 20:51:38

Local clock offset: -6.005 ms

Remote clock offset: 0.856 ms

# Below is generated by plot.py at 2018-03-05 22:19:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.61 Mbit/s

95th percentile per-packet one-way delay: 6857.323 ms

Loss rate: 24.55%

-- Flow 1:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 6799.193 ms

Loss rate: 23.93%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 7008.038 ms

Loss rate: 32.77%

-- Flow 3:

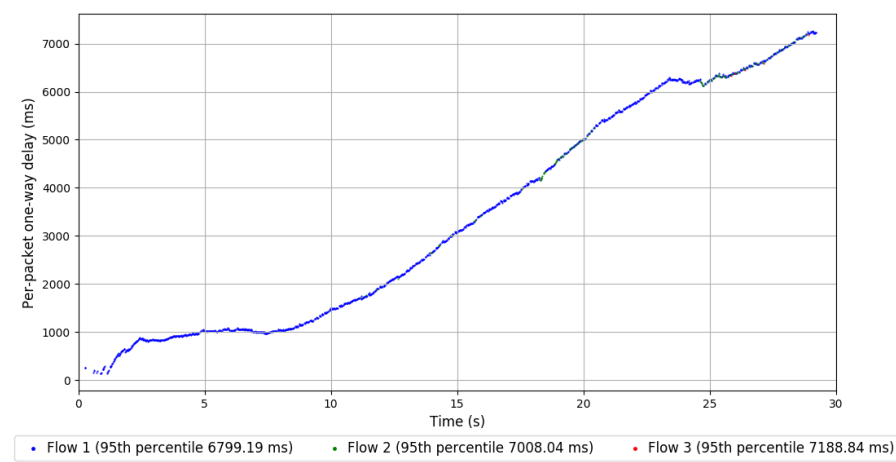
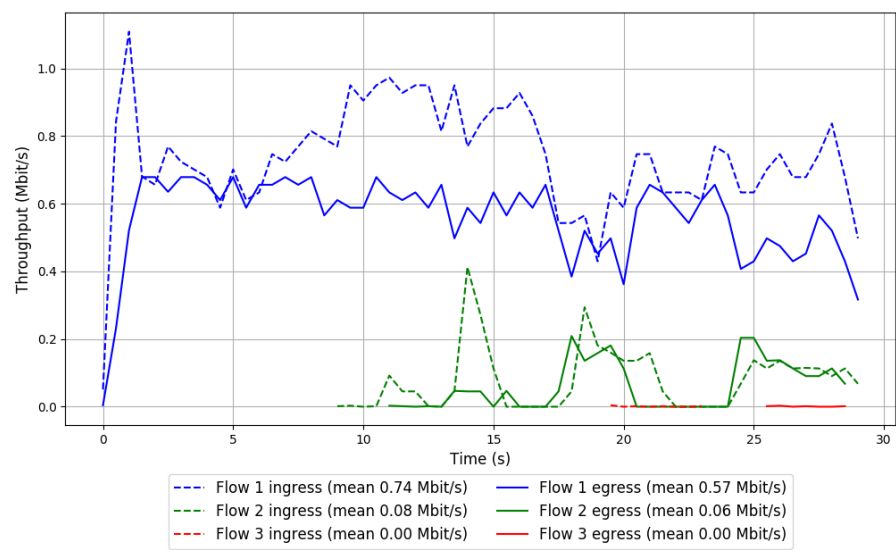
Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 7188.837 ms

Loss rate: 16.67%



Run 3: Report of QUIC Cubic — Data Link

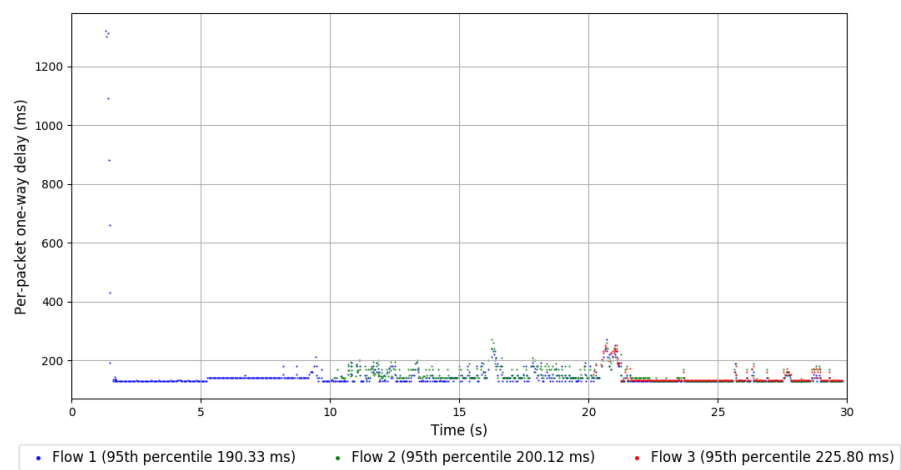
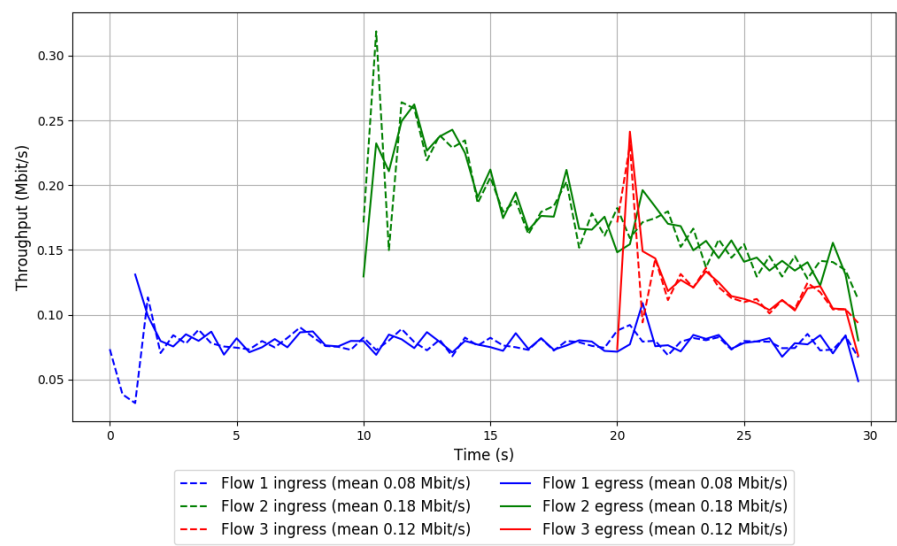


```
Run 1: Statistics of SCReAM

Start at: 2018-03-05 20:23:31
End at: 2018-03-05 20:24:01
Local clock offset: -6.708 ms
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 195.732 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 190.332 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 200.118 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 225.798 ms
Loss rate: 2.06%
```

Run 1: Report of SReAM — Data Link

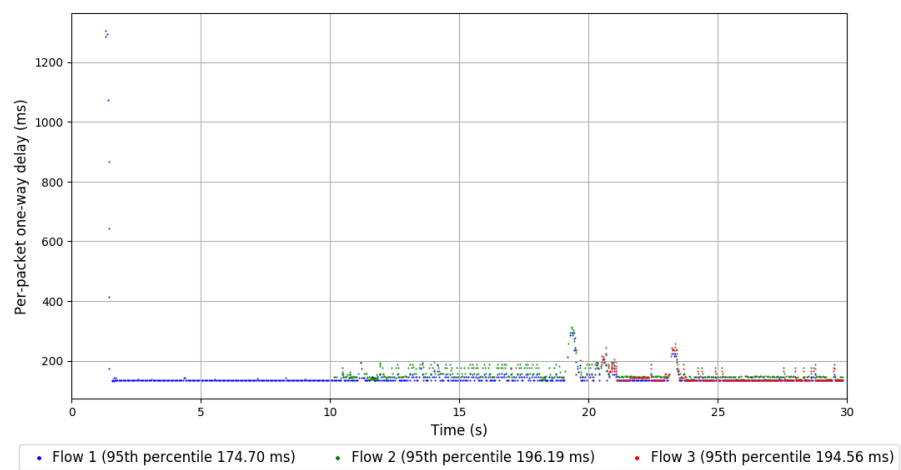
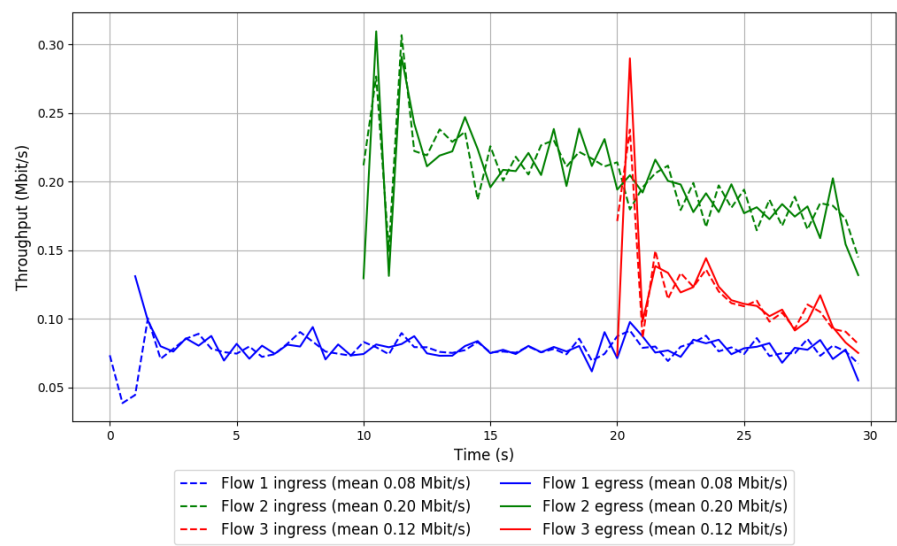


Run 2: Statistics of SCReAM

Start at: 2018-03-05 20:46:08  
End at: 2018-03-05 20:46:38  
Local clock offset: -6.046 ms  
Remote clock offset: -4.807 ms

# Below is generated by plot.py at 2018-03-05 22:19:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.26 Mbit/s  
95th percentile per-packet one-way delay: 192.268 ms  
Loss rate: 0.99%  
-- Flow 1:  
Average throughput: 0.08 Mbit/s  
95th percentile per-packet one-way delay: 174.696 ms  
Loss rate: 0.79%  
-- Flow 2:  
Average throughput: 0.20 Mbit/s  
95th percentile per-packet one-way delay: 196.186 ms  
Loss rate: 0.94%  
-- Flow 3:  
Average throughput: 0.12 Mbit/s  
95th percentile per-packet one-way delay: 194.565 ms  
Loss rate: 1.53%

Run 2: Report of SReAM — Data Link

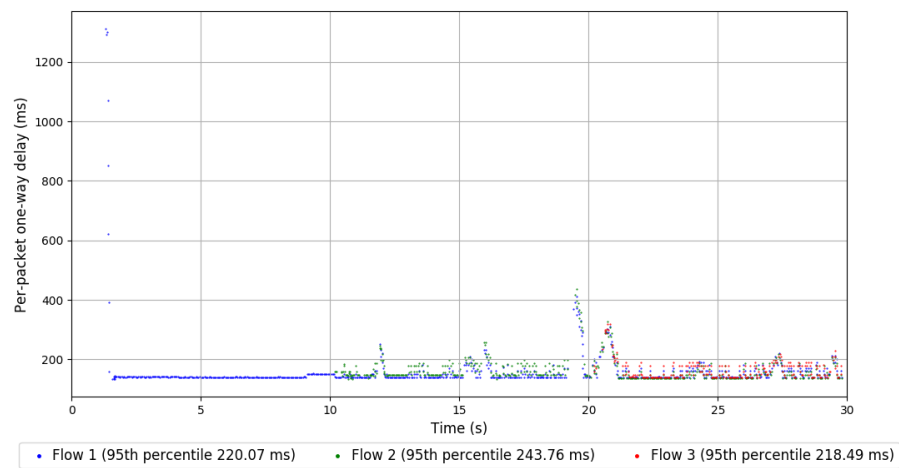
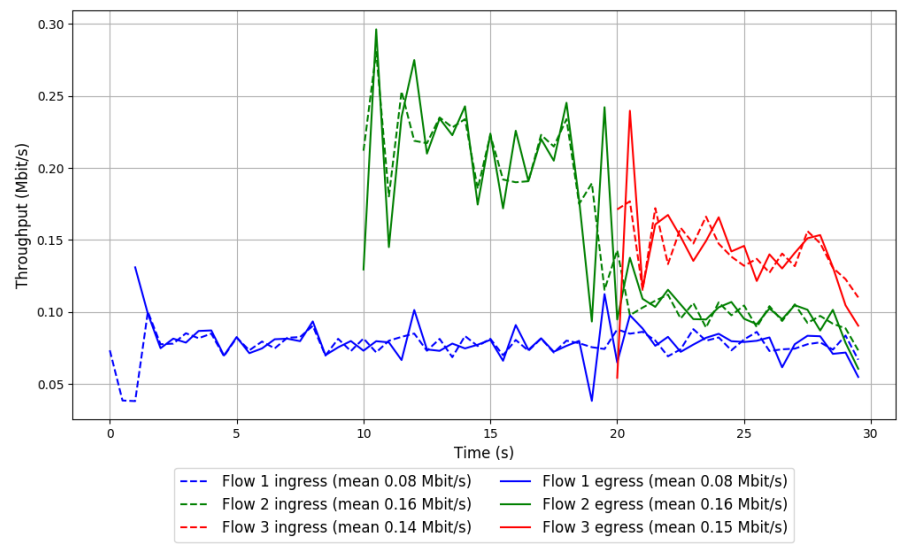


Run 3: Statistics of SCReAM

Start at: 2018-03-05 21:08:36  
End at: 2018-03-05 21:09:06  
Local clock offset: -5.738 ms  
Remote clock offset: -4.693 ms

# Below is generated by plot.py at 2018-03-05 22:19:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.24 Mbit/s  
95th percentile per-packet one-way delay: 230.081 ms  
Loss rate: 1.16%  
-- Flow 1:  
Average throughput: 0.08 Mbit/s  
95th percentile per-packet one-way delay: 220.072 ms  
Loss rate: 0.92%  
-- Flow 2:  
Average throughput: 0.16 Mbit/s  
95th percentile per-packet one-way delay: 243.762 ms  
Loss rate: 0.74%  
-- Flow 3:  
Average throughput: 0.15 Mbit/s  
95th percentile per-packet one-way delay: 218.491 ms  
Loss rate: 2.44%

Run 3: Report of SReAM — Data Link



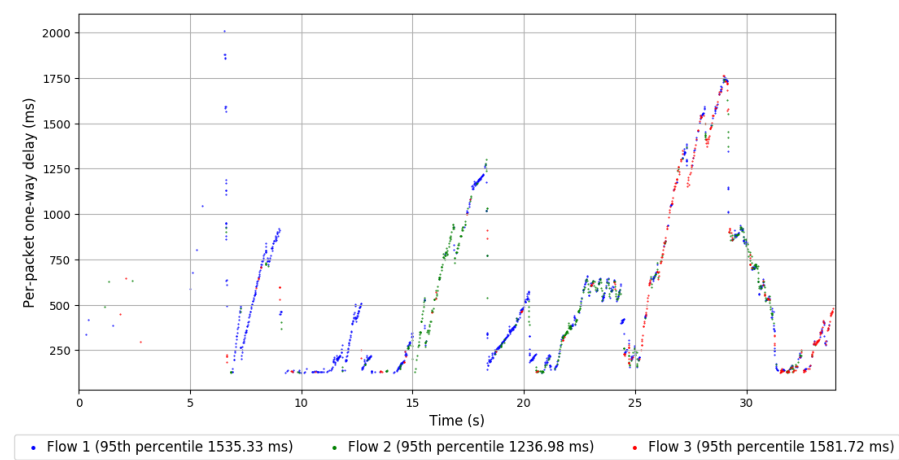
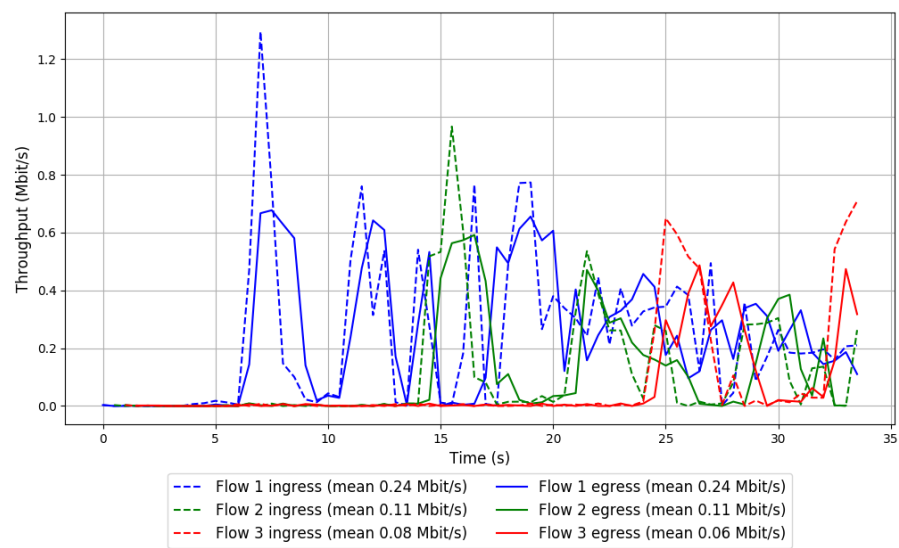
Run 1: Statistics of WebRTC media

Start at: 2018-03-05 20:09:50  
End at: 2018-03-05 20:10:20  
Local clock offset: -6.747 ms  
Remote clock offset: -0.087 ms

# Below is generated by plot.py at 2018-03-05 22:19:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.41 Mbit/s  
95th percentile per-packet one-way delay: 1489.161 ms  
Loss rate: 4.93%  
-- Flow 1:  
Average throughput: 0.24 Mbit/s  
95th percentile per-packet one-way delay: 1535.333 ms  
Loss rate: 1.28%  
-- Flow 2:  
Average throughput: 0.11 Mbit/s  
95th percentile per-packet one-way delay: 1236.977 ms  
Loss rate: 3.58%  
-- Flow 3:  
Average throughput: 0.06 Mbit/s  
95th percentile per-packet one-way delay: 1581.722 ms  
Loss rate: 18.98%



Run 1: Report of WebRTC media — Data Link

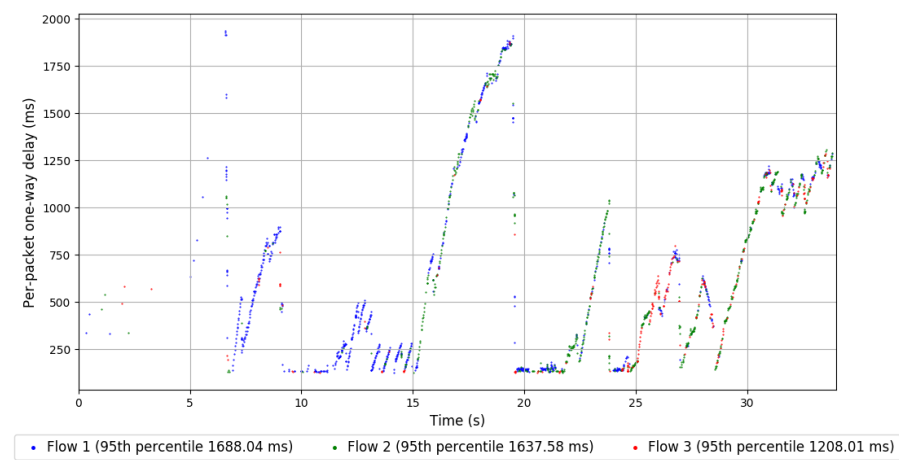
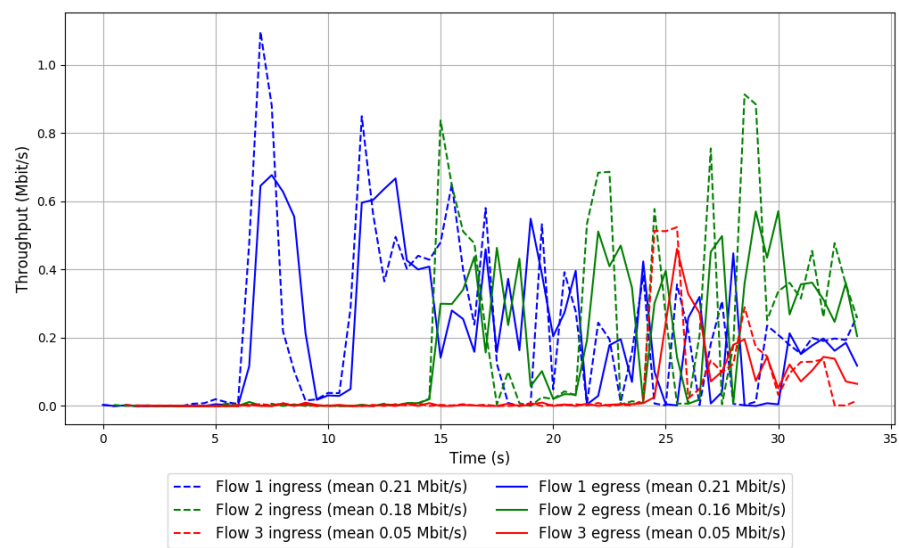


Run 2: Statistics of WebRTC media

Start at: 2018-03-05 20:32:26  
End at: 2018-03-05 20:32:56  
Local clock offset: -6.542 ms  
Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2018-03-05 22:19:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.41 Mbit/s  
95th percentile per-packet one-way delay: 1637.581 ms  
Loss rate: 6.40%  
-- Flow 1:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 1688.035 ms  
Loss rate: 4.26%  
-- Flow 2:  
Average throughput: 0.16 Mbit/s  
95th percentile per-packet one-way delay: 1637.581 ms  
Loss rate: 8.46%  
-- Flow 3:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 1208.010 ms  
Loss rate: 8.36%

Run 2: Report of WebRTC media — Data Link

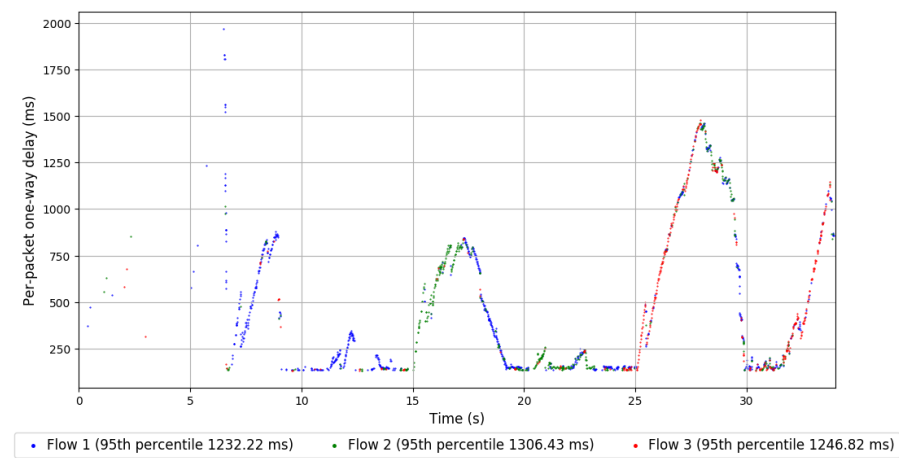
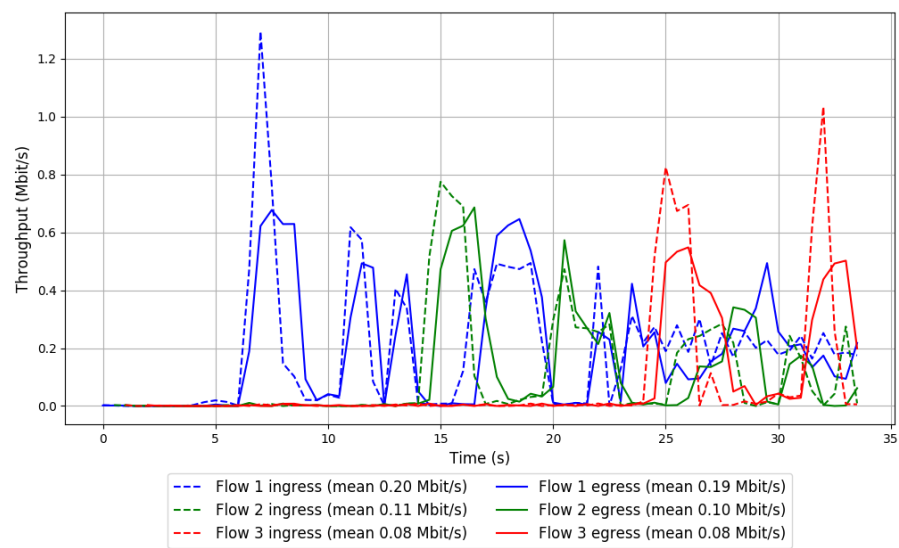


Run 3: Statistics of WebRTC media

Start at: 2018-03-05 20:54:54  
End at: 2018-03-05 20:55:24  
Local clock offset: -5.878 ms  
Remote clock offset: -5.614 ms

# Below is generated by plot.py at 2018-03-05 22:19:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.37 Mbit/s  
95th percentile per-packet one-way delay: 1263.505 ms  
Loss rate: 2.27%  
-- Flow 1:  
Average throughput: 0.19 Mbit/s  
95th percentile per-packet one-way delay: 1232.218 ms  
Loss rate: 2.26%  
-- Flow 2:  
Average throughput: 0.10 Mbit/s  
95th percentile per-packet one-way delay: 1306.432 ms  
Loss rate: 3.72%  
-- Flow 3:  
Average throughput: 0.08 Mbit/s  
95th percentile per-packet one-way delay: 1246.820 ms  
Loss rate: 0.24%

Run 3: Report of WebRTC media — Data Link

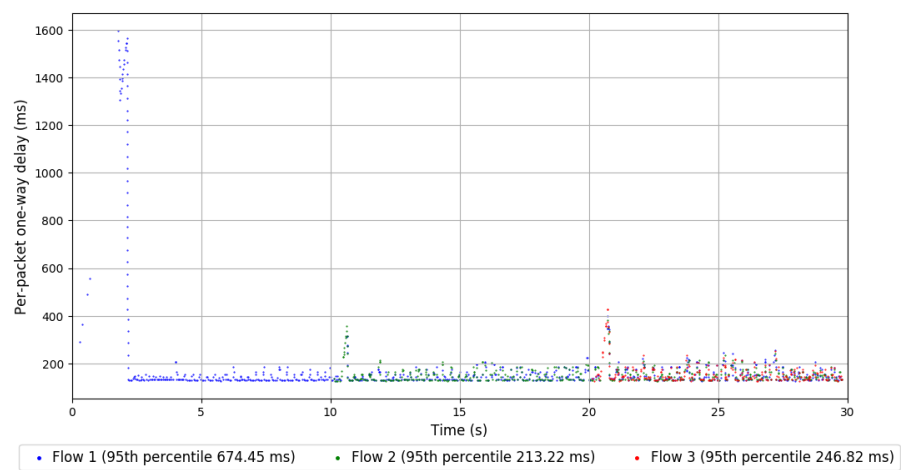
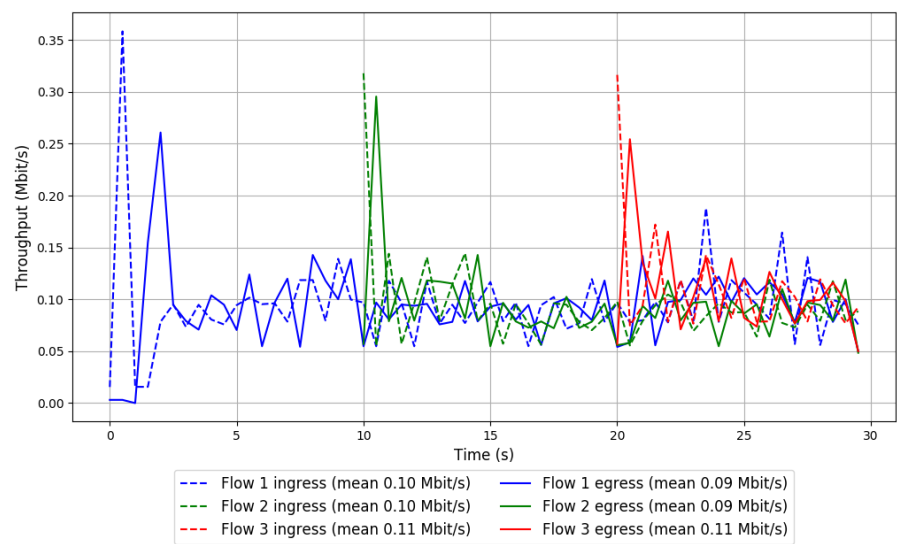


Run 1: Statistics of Sprout

Start at: 2018-03-05 20:21:02  
End at: 2018-03-05 20:21:32  
Local clock offset: -6.615 ms  
Remote clock offset: -0.003 ms

# Below is generated by plot.py at 2018-03-05 22:19:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.19 Mbit/s  
95th percentile per-packet one-way delay: 292.310 ms  
Loss rate: 1.78%  
-- Flow 1:  
Average throughput: 0.09 Mbit/s  
95th percentile per-packet one-way delay: 674.450 ms  
Loss rate: 1.44%  
-- Flow 2:  
Average throughput: 0.09 Mbit/s  
95th percentile per-packet one-way delay: 213.216 ms  
Loss rate: 1.68%  
-- Flow 3:  
Average throughput: 0.11 Mbit/s  
95th percentile per-packet one-way delay: 246.820 ms  
Loss rate: 2.83%

Run 1: Report of Sprout — Data Link



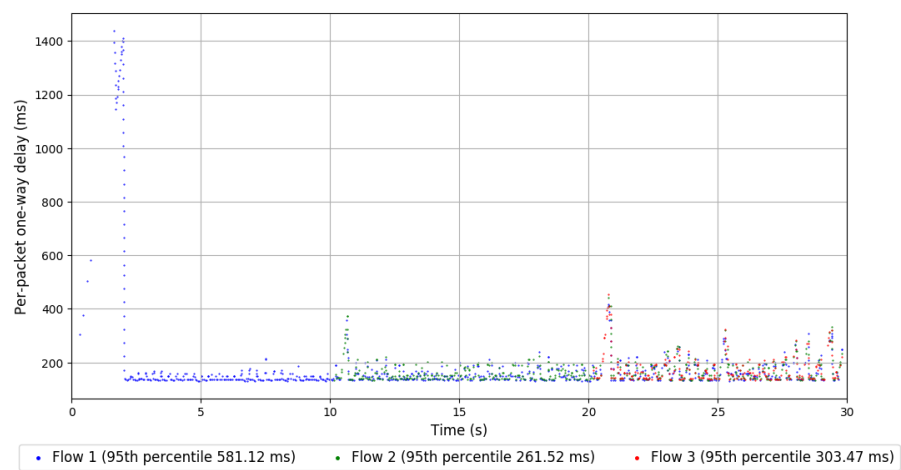
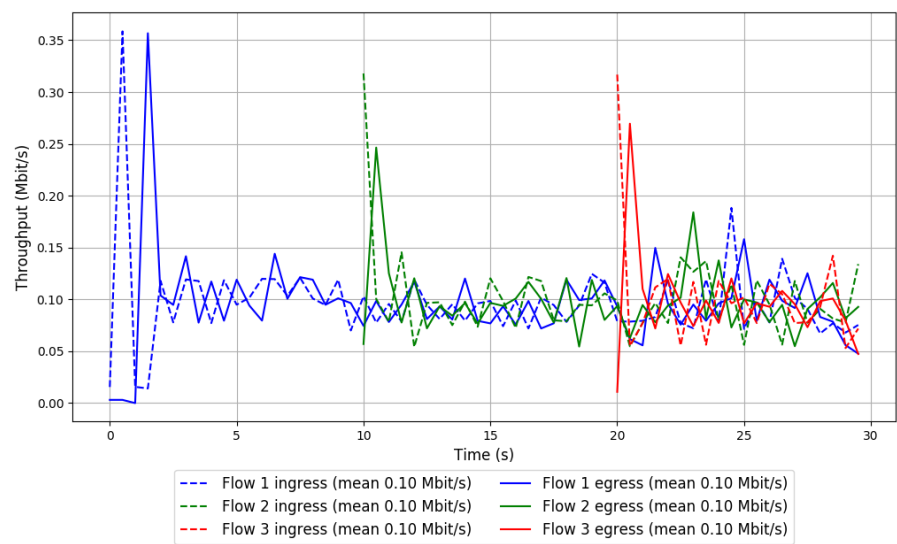
## Run 2: Statistics of Sprout

Start at: 2018-03-05 20:43:39  
End at: 2018-03-05 20:44:09  
Local clock offset: -6.101 ms  
Remote clock offset: -4.793 ms

```
# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 320.559 ms
Loss rate: 2.35%
-- Flow 1:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 581.117 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 261.522 ms
Loss rate: 2.76%
-- Flow 3:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 303.468 ms
Loss rate: 5.59%
```



Run 2: Report of Sprout — Data Link

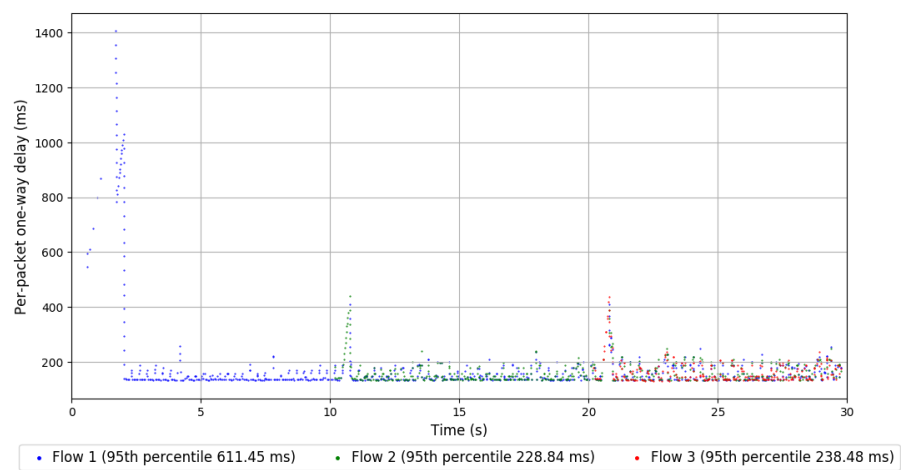
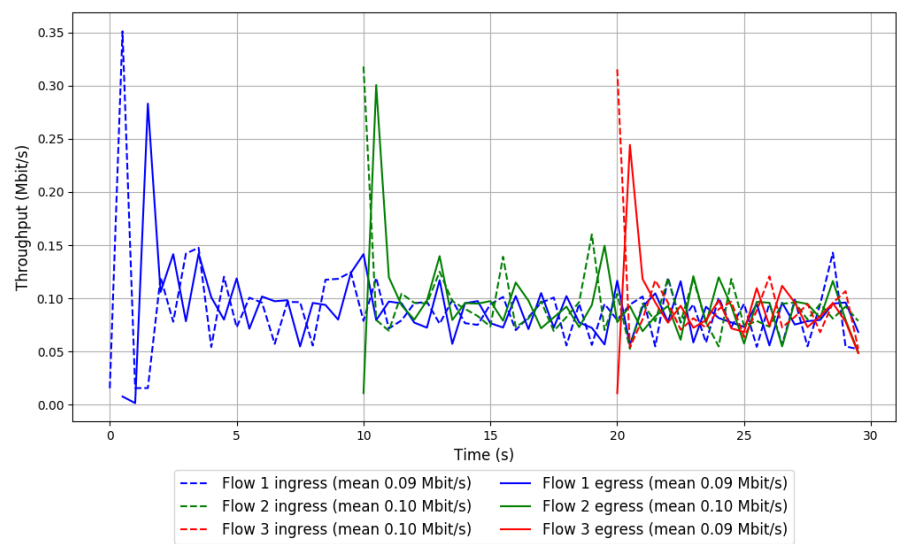


### Run 3: Statistics of Sprout

Start at: 2018-03-05 21:06:07  
End at: 2018-03-05 21:06:37  
Local clock offset: -5.761 ms  
Remote clock offset: -5.506 ms

```
# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 288.599 ms
Loss rate: 2.22%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 611.447 ms
Loss rate: 1.14%
-- Flow 2:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 228.840 ms
Loss rate: 1.73%
-- Flow 3:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 238.482 ms
Loss rate: 6.23%
```

Run 3: Report of Sprout — Data Link

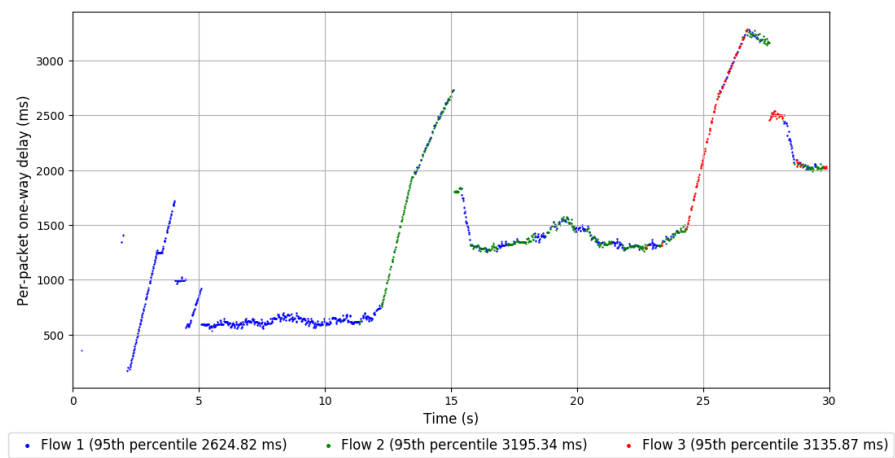
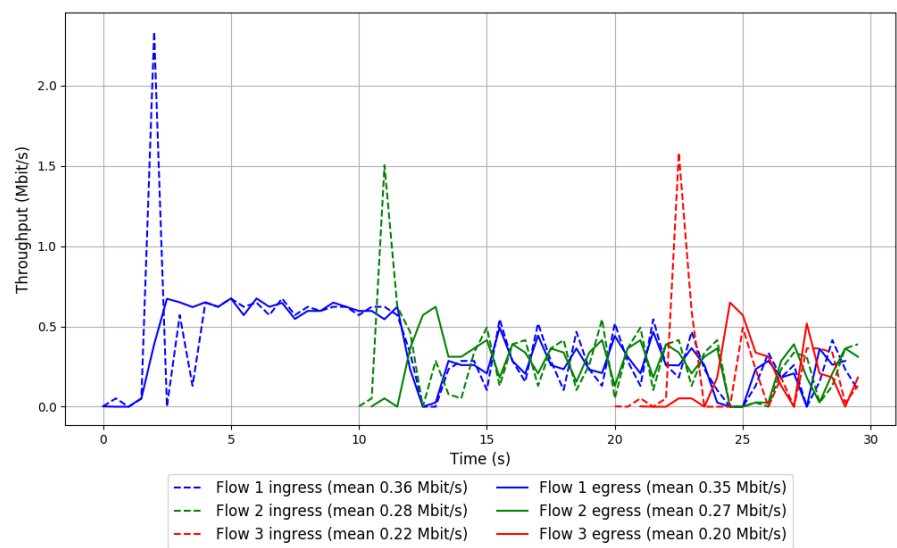


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-03-05 20:22:16
End at: 2018-03-05 20:22:46
Local clock offset: -6.711 ms
Remote clock offset: -5.752 ms

# Below is generated by plot.py at 2018-03-05 22:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 3027.721 ms
Loss rate: 7.69%
-- Flow 1:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 2624.819 ms
Loss rate: 4.22%
-- Flow 2:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 3195.340 ms
Loss rate: 8.14%
-- Flow 3:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 3135.870 ms
Loss rate: 23.52%
```

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

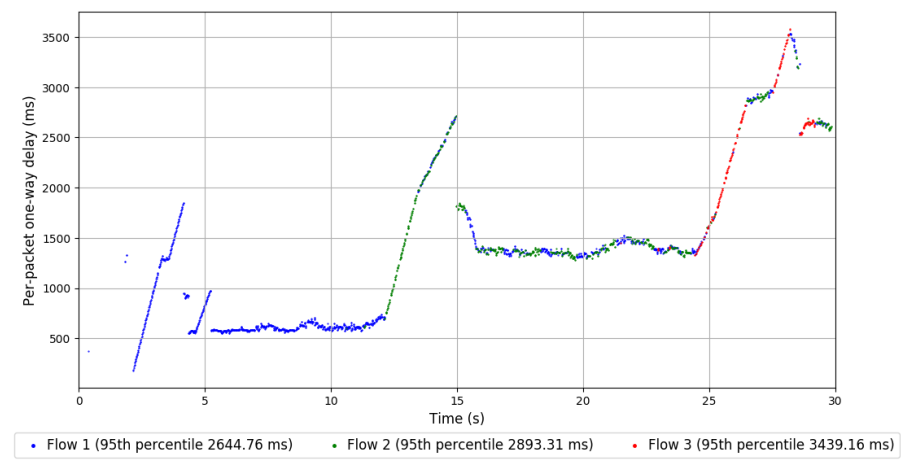
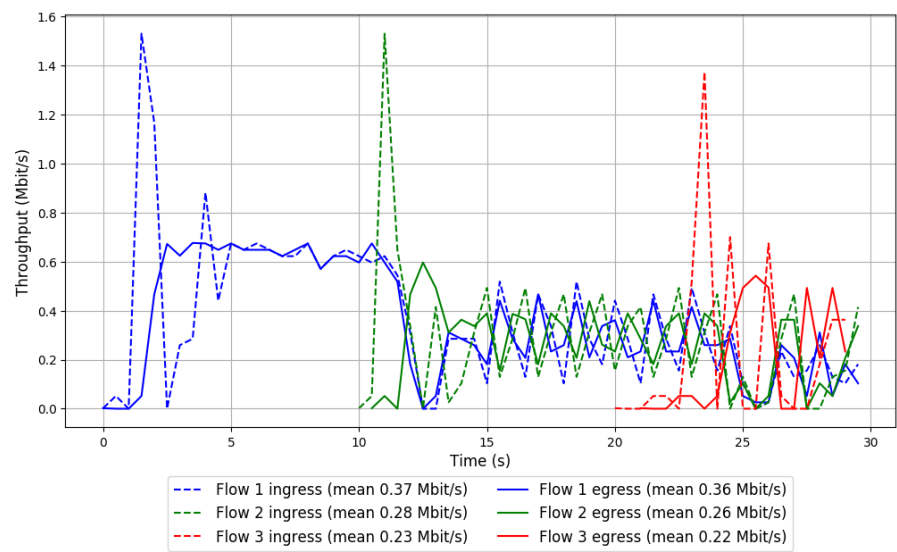


Run 2: Statistics of TaoVA-100x

Start at: 2018-03-05 20:44:54  
End at: 2018-03-05 20:45:24  
Local clock offset: -6.053 ms  
Remote clock offset: -4.728 ms

# Below is generated by plot.py at 2018-03-05 22:19:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.58 Mbit/s  
95th percentile per-packet one-way delay: 2903.279 ms  
Loss rate: 7.46%  
-- Flow 1:  
Average throughput: 0.36 Mbit/s  
95th percentile per-packet one-way delay: 2644.761 ms  
Loss rate: 4.37%  
-- Flow 2:  
Average throughput: 0.26 Mbit/s  
95th percentile per-packet one-way delay: 2893.314 ms  
Loss rate: 8.27%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 3439.161 ms  
Loss rate: 20.95%

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



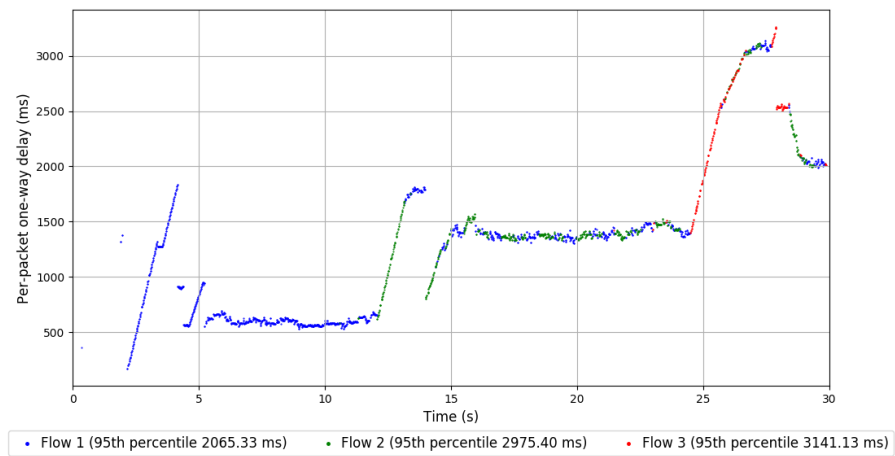
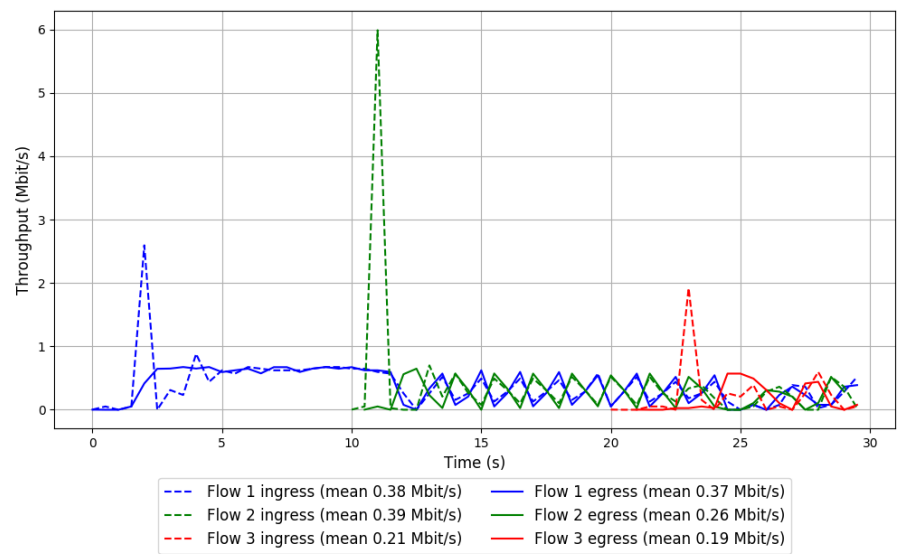
Run 3: Statistics of TaoVA-100x

Start at: 2018-03-05 21:07:21  
End at: 2018-03-05 21:07:51  
Local clock offset: -5.782 ms  
Remote clock offset: -4.525 ms

# Below is generated by plot.py at 2018-03-05 22:19:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.58 Mbit/s  
95th percentile per-packet one-way delay: 2928.715 ms  
Loss rate: 17.86%  
-- Flow 1:  
Average throughput: 0.37 Mbit/s  
95th percentile per-packet one-way delay: 2065.326 ms  
Loss rate: 4.23%  
-- Flow 2:  
Average throughput: 0.26 Mbit/s  
95th percentile per-packet one-way delay: 2975.398 ms  
Loss rate: 36.22%  
-- Flow 3:  
Average throughput: 0.19 Mbit/s  
95th percentile per-packet one-way delay: 3141.127 ms  
Loss rate: 25.14%



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

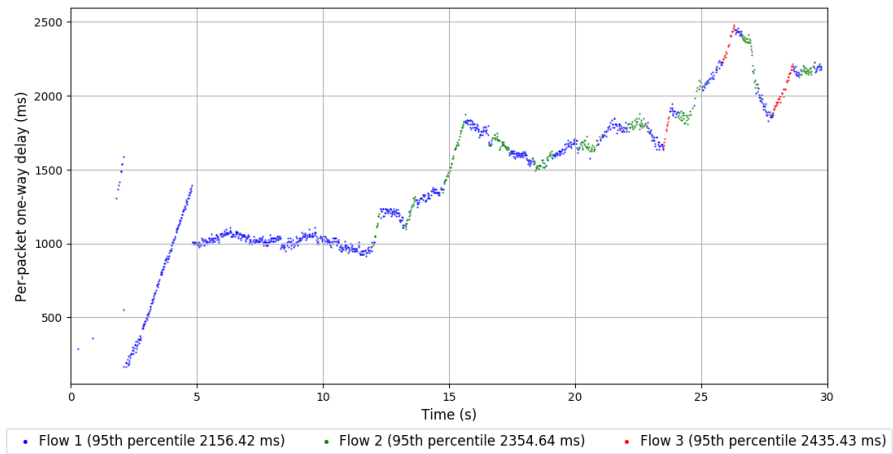
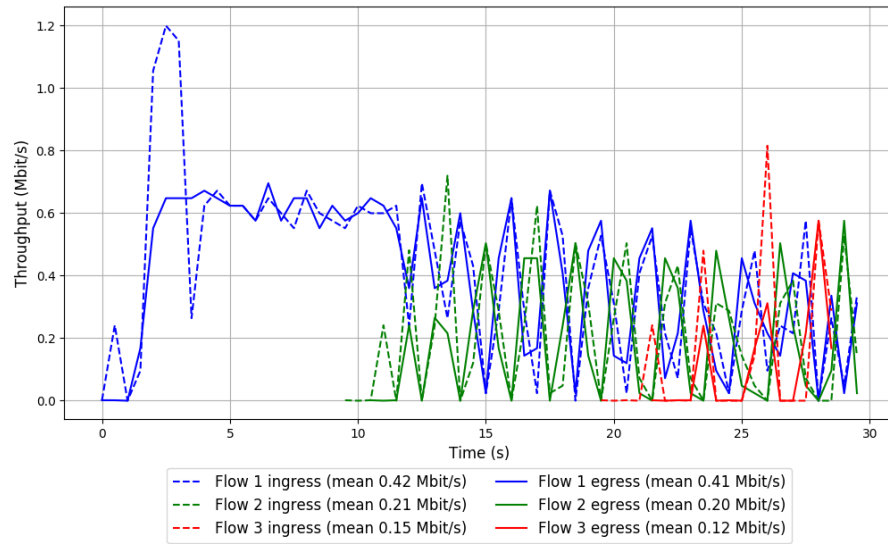


Run 1: Statistics of TCP Vegas

Start at: 2018-03-05 20:08:35  
End at: 2018-03-05 20:09:05  
Local clock offset: -6.803 ms  
Remote clock offset: -0.138 ms

# Below is generated by plot.py at 2018-03-05 22:19:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.56 Mbit/s  
95th percentile per-packet one-way delay: 2204.885 ms  
Loss rate: 7.57%  
-- Flow 1:  
Average throughput: 0.41 Mbit/s  
95th percentile per-packet one-way delay: 2156.420 ms  
Loss rate: 4.41%  
-- Flow 2:  
Average throughput: 0.20 Mbit/s  
95th percentile per-packet one-way delay: 2354.641 ms  
Loss rate: 9.03%  
-- Flow 3:  
Average throughput: 0.12 Mbit/s  
95th percentile per-packet one-way delay: 2435.429 ms  
Loss rate: 33.88%

# Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-03-05 20:31:11

End at: 2018-03-05 20:31:41

Local clock offset: -6.634 ms

Remote clock offset: -5.73 ms

# Below is generated by plot.py at 2018-03-05 22:19:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 1550.090 ms

Loss rate: 4.44%

-- Flow 1:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 1550.090 ms

Loss rate: 3.23%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 1557.711 ms

Loss rate: 5.63%

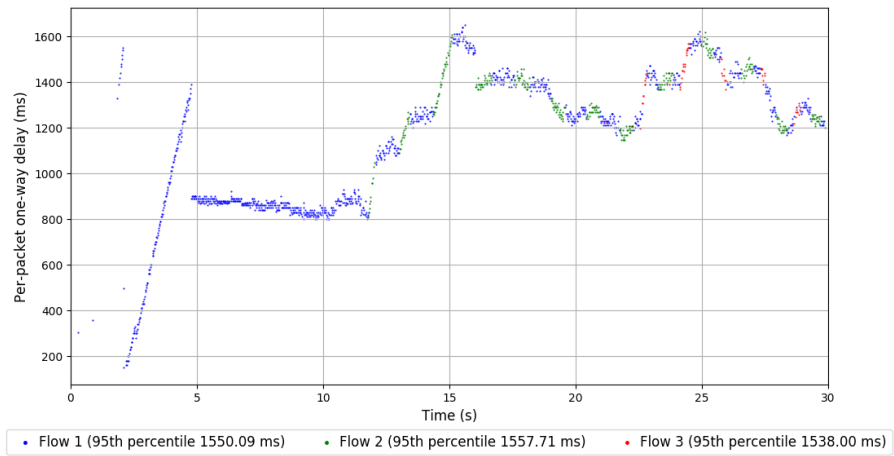
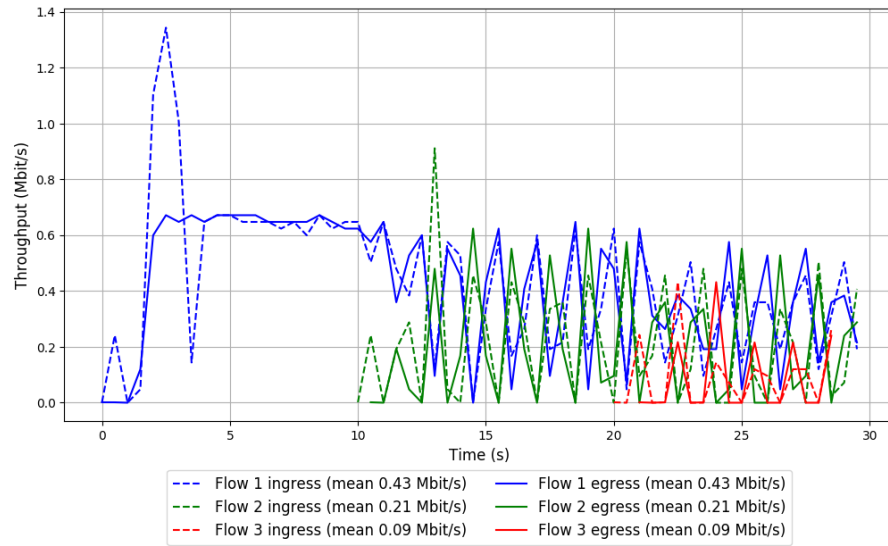
-- Flow 3:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 1538.001 ms

Loss rate: 17.85%

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

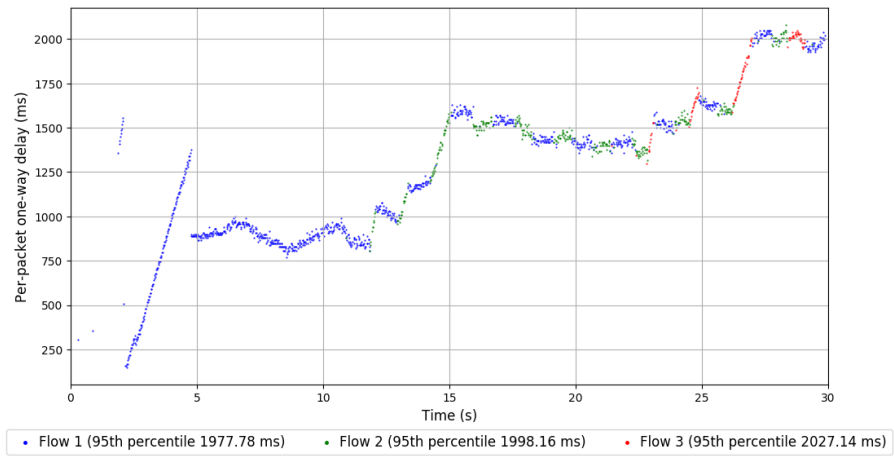
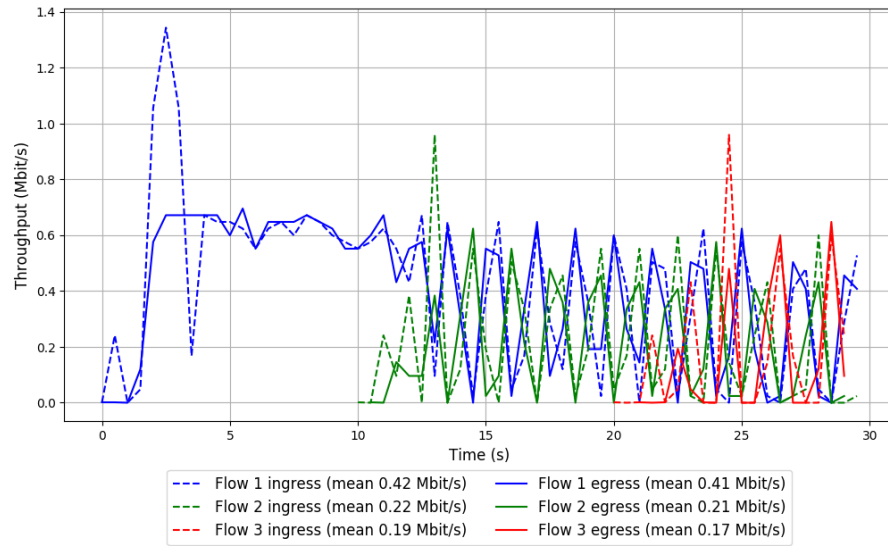


Run 3: Statistics of TCP Vegas

Start at: 2018-03-05 20:53:39  
End at: 2018-03-05 20:54:09  
Local clock offset: -5.929 ms  
Remote clock offset: -5.588 ms

# Below is generated by plot.py at 2018-03-05 22:19:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.58 Mbit/s  
95th percentile per-packet one-way delay: 2006.962 ms  
Loss rate: 6.50%  
-- Flow 1:  
Average throughput: 0.41 Mbit/s  
95th percentile per-packet one-way delay: 1977.784 ms  
Loss rate: 3.56%  
-- Flow 2:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 1998.165 ms  
Loss rate: 7.82%  
-- Flow 3:  
Average throughput: 0.17 Mbit/s  
95th percentile per-packet one-way delay: 2027.143 ms  
Loss rate: 24.78%

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



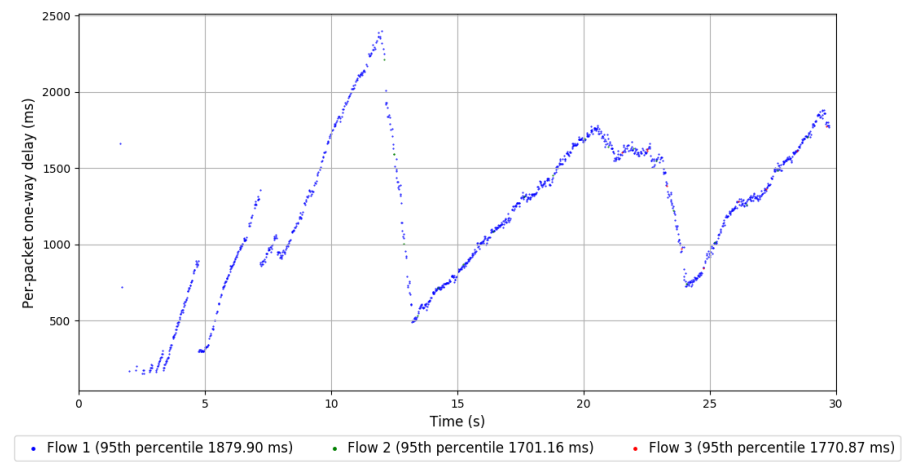
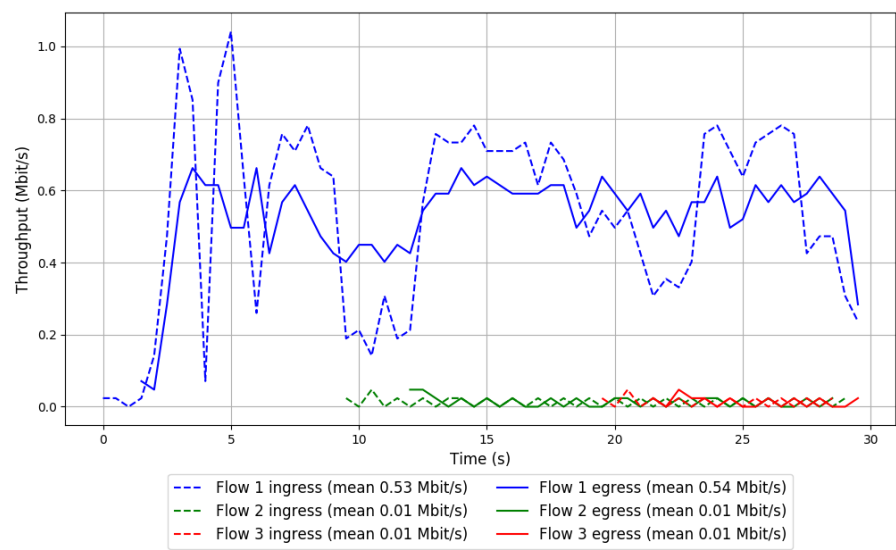
Run 1: Statistics of Verus

Start at: 2018-03-05 20:13:34  
End at: 2018-03-05 20:14:04  
Local clock offset: -6.683 ms  
Remote clock offset: -5.801 ms

# Below is generated by plot.py at 2018-03-05 22:19:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.55 Mbit/s  
95th percentile per-packet one-way delay: 1879.899 ms  
Loss rate: 4.82%  
-- Flow 1:  
Average throughput: 0.54 Mbit/s  
95th percentile per-packet one-way delay: 1879.899 ms  
Loss rate: 4.71%  
-- Flow 2:  
Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 1701.159 ms  
Loss rate: 9.09%  
-- Flow 3:  
Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 1770.868 ms  
Loss rate: 9.09%



Run 1: Report of Verus — Data Link

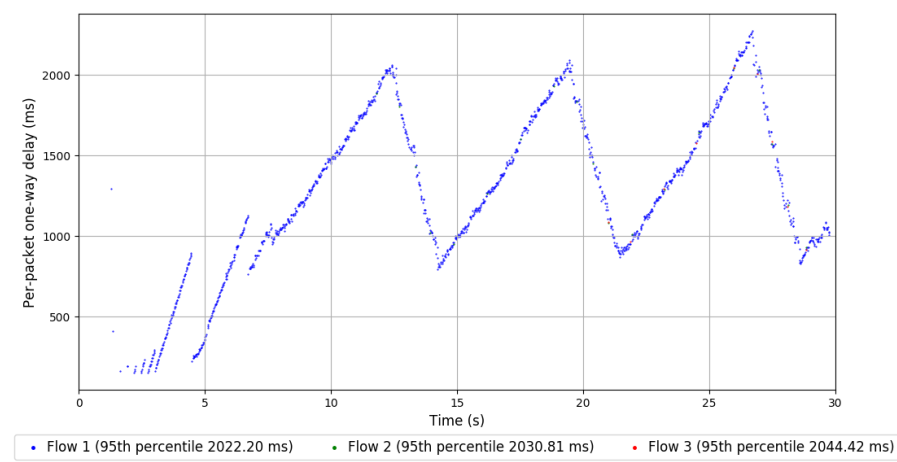
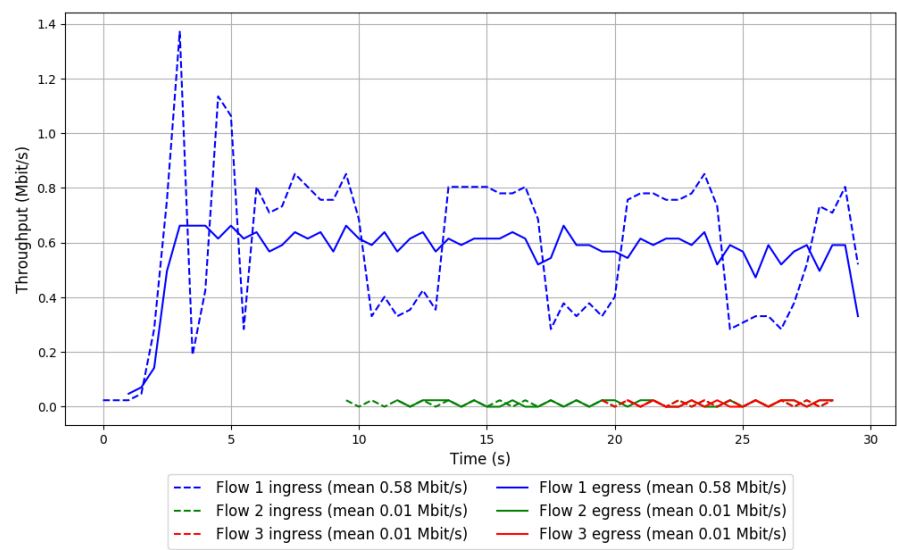


Run 2: Statistics of Verus

Start at: 2018-03-05 20:36:10  
End at: 2018-03-05 20:36:40  
Local clock offset: -6.398 ms  
Remote clock offset: -4.864 ms

# Below is generated by plot.py at 2018-03-05 22:19:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.59 Mbit/s  
95th percentile per-packet one-way delay: 2024.899 ms  
Loss rate: 5.16%  
-- Flow 1:  
Average throughput: 0.58 Mbit/s  
95th percentile per-packet one-way delay: 2022.202 ms  
Loss rate: 5.13%  
-- Flow 2:  
Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 2030.813 ms  
Loss rate: 5.00%  
-- Flow 3:  
Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 2044.417 ms  
Loss rate: 10.00%

Run 2: Report of Verus — Data Link

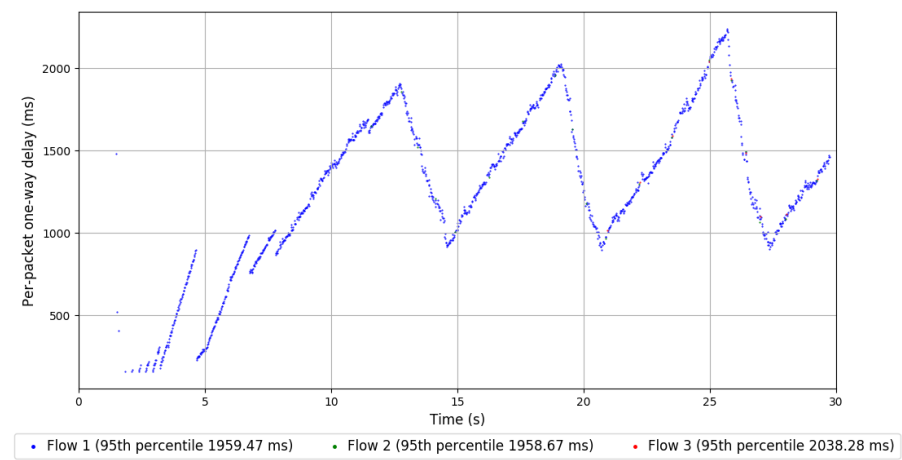
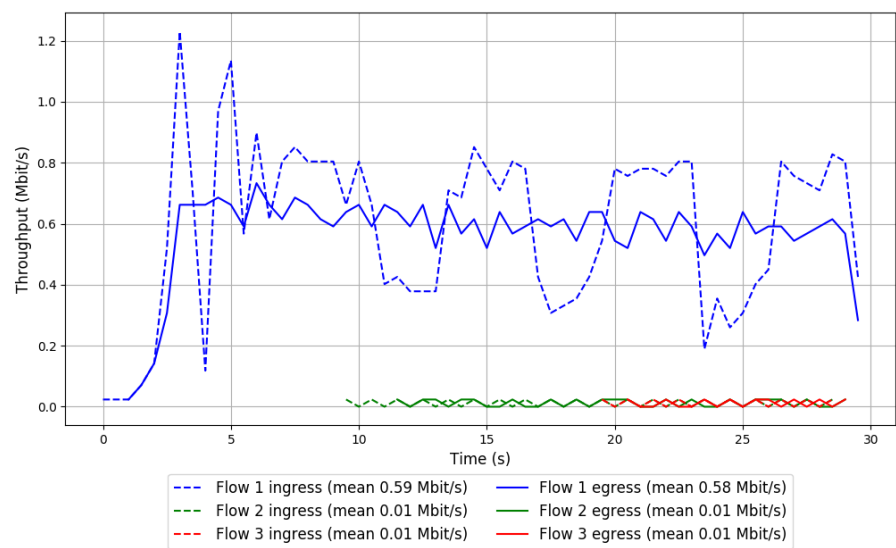


Run 3: Statistics of Verus

Start at: 2018-03-05 20:58:38  
End at: 2018-03-05 20:59:08  
Local clock offset: -5.844 ms  
Remote clock offset: -5.591 ms

# Below is generated by plot.py at 2018-03-05 22:19:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.60 Mbit/s  
95th percentile per-packet one-way delay: 1960.190 ms  
Loss rate: 6.68%  
-- Flow 1:  
Average throughput: 0.58 Mbit/s  
95th percentile per-packet one-way delay: 1959.470 ms  
Loss rate: 6.68%  
-- Flow 2:  
Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 1958.672 ms  
Loss rate: 5.00%  
-- Flow 3:  
Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 2038.275 ms  
Loss rate: 10.00%

Run 3: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-03-05 20:12:20

End at: 2018-03-05 20:12:50

Local clock offset: -6.787 ms

Remote clock offset: -0.19 ms

# Below is generated by plot.py at 2018-03-05 22:19:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 1242.833 ms

Loss rate: 9.86%

-- Flow 1:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 1188.934 ms

Loss rate: 6.08%

-- Flow 2:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 1262.581 ms

Loss rate: 12.27%

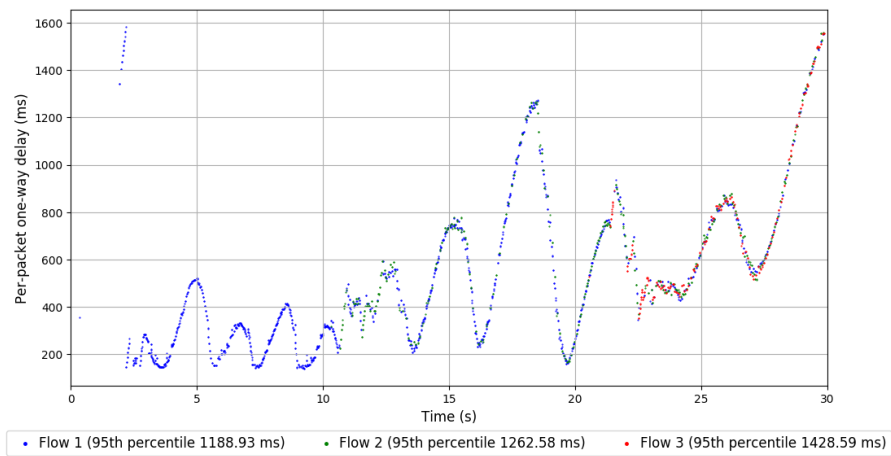
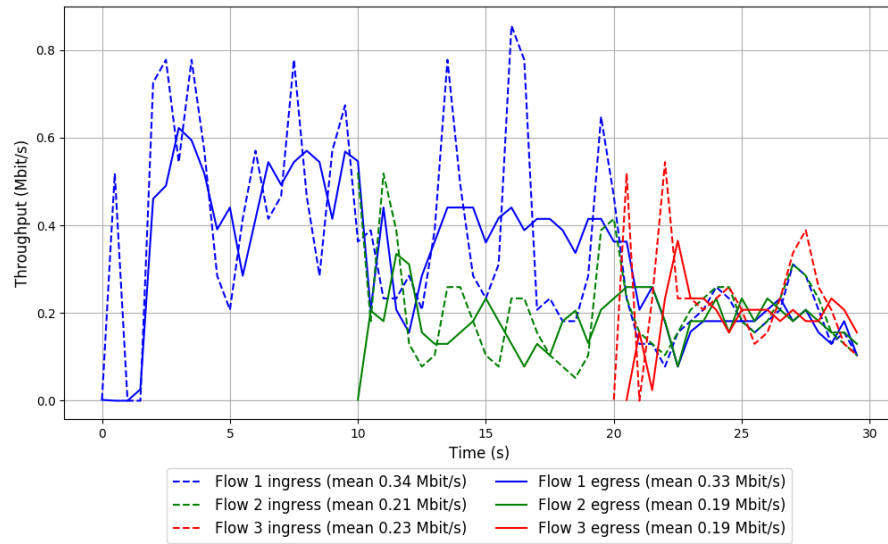
-- Flow 3:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 1428.587 ms

Loss rate: 22.46%

# Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-03-05 20:34:56

End at: 2018-03-05 20:35:26

Local clock offset: -6.376 ms

Remote clock offset: 0.857 ms

# Below is generated by plot.py at 2018-03-05 22:19:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 768.986 ms

Loss rate: 6.75%

-- Flow 1:

Average throughput: 0.30 Mbit/s

95th percentile per-packet one-way delay: 749.569 ms

Loss rate: 5.06%

-- Flow 2:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 770.191 ms

Loss rate: 7.46%

-- Flow 3:

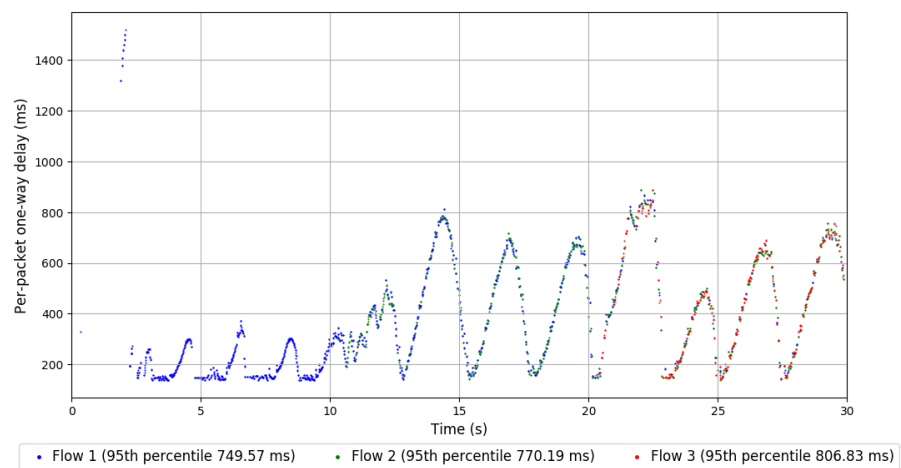
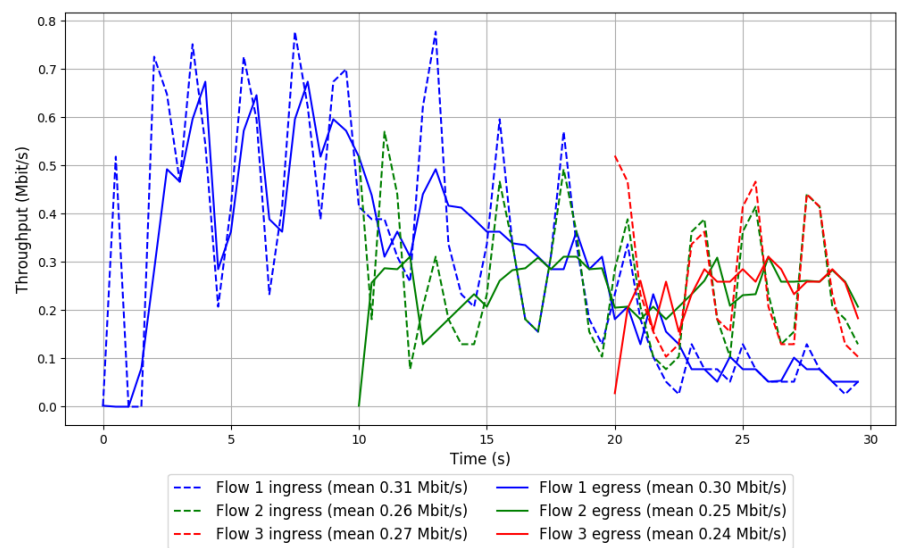
Average throughput: 0.24 Mbit/s

95th percentile per-packet one-way delay: 806.826 ms

Loss rate: 11.22%



Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-03-05 20:57:24

End at: 2018-03-05 20:57:54

Local clock offset: -5.845 ms

Remote clock offset: 0.1 ms

# Below is generated by plot.py at 2018-03-05 22:19:42

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 1226.756 ms

Loss rate: 5.56%

-- Flow 1:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 1128.337 ms

Loss rate: 3.70%

-- Flow 2:

Average throughput: 0.24 Mbit/s

95th percentile per-packet one-way delay: 1226.756 ms

Loss rate: 6.34%

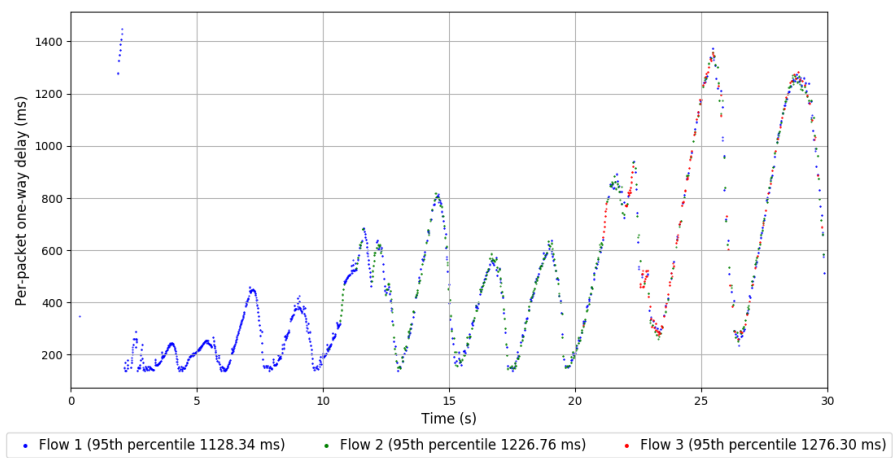
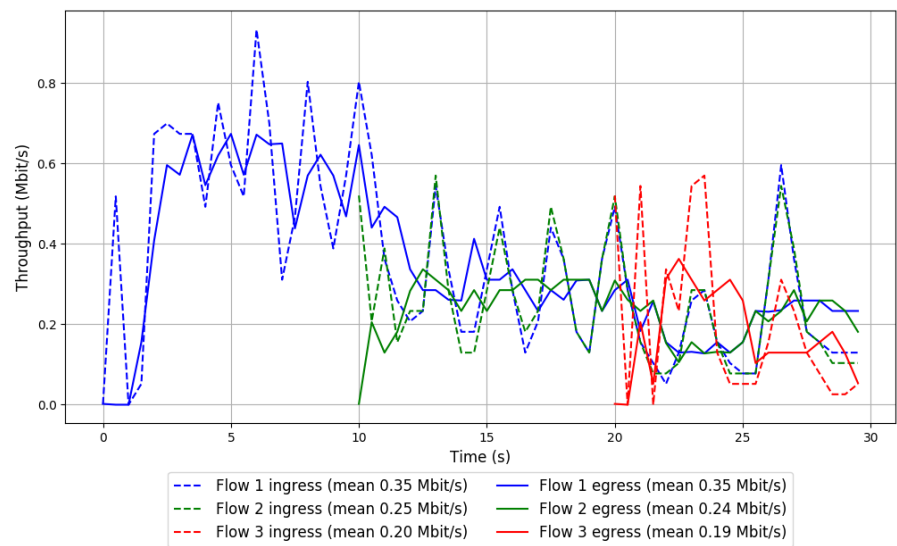
-- Flow 3:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 1276.296 ms

Loss rate: 13.45%

Run 3: Report of Copa — Data Link

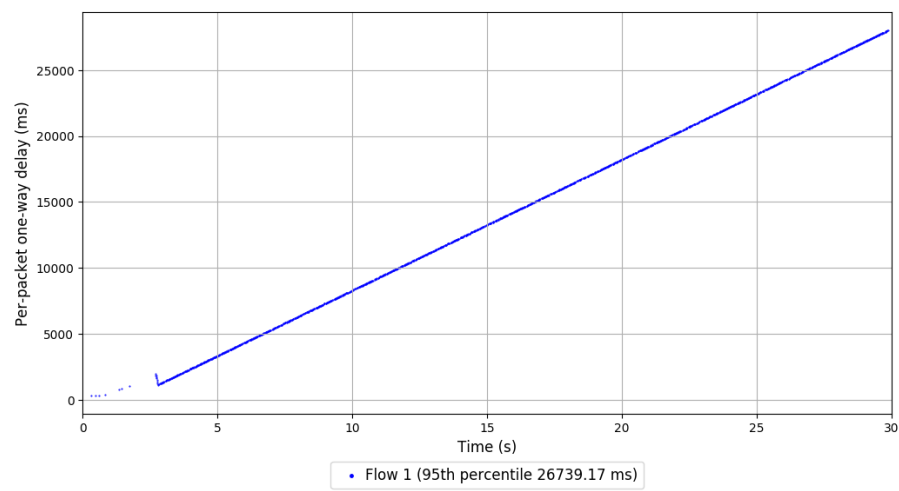
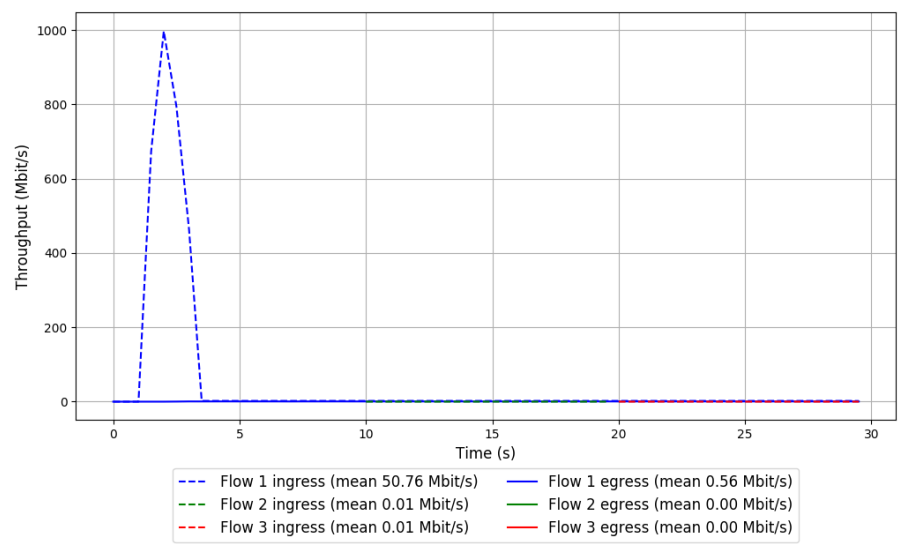


Run 1: Statistics of FillP

Start at: 2018-03-05 20:07:19  
End at: 2018-03-05 20:07:49  
Local clock offset: -6.783 ms  
Remote clock offset: -5.814 ms

# Below is generated by plot.py at 2018-03-05 22:19:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.56 Mbit/s  
95th percentile per-packet one-way delay: 26739.173 ms  
Loss rate: 98.91%  
-- Flow 1:  
Average throughput: 0.56 Mbit/s  
95th percentile per-packet one-way delay: 26739.173 ms  
Loss rate: 98.91%  
-- Flow 2:  
Average throughput: 0.00 Mbit/s  
-- Flow 3:  
Average throughput: 0.00 Mbit/s

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-03-05 20:29:55

End at: 2018-03-05 20:30:25

Local clock offset: -6.614 ms

Remote clock offset: -5.73 ms

# Below is generated by plot.py at 2018-03-05 22:19:52

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 26537.708 ms

Loss rate: 98.28%

-- Flow 1:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 26537.708 ms

Loss rate: 98.28%

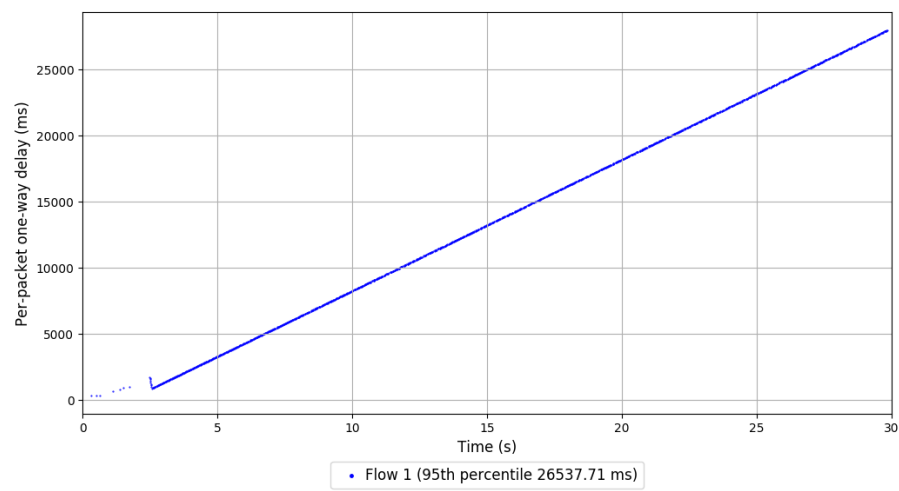
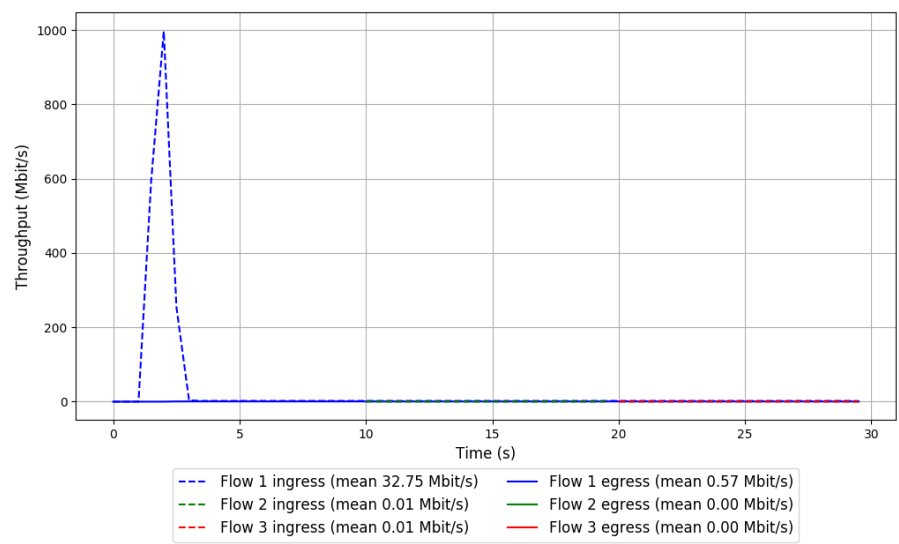
-- Flow 2:

Average throughput: 0.00 Mbit/s

-- Flow 3:

Average throughput: 0.00 Mbit/s

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-03-05 20:52:22

End at: 2018-03-05 20:52:52

Local clock offset: -5.924 ms

Remote clock offset: 0.117 ms

# Below is generated by plot.py at 2018-03-05 22:19:52

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 26609.902 ms

Loss rate: 98.99%

-- Flow 1:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 26609.902 ms

Loss rate: 98.99%

-- Flow 2:

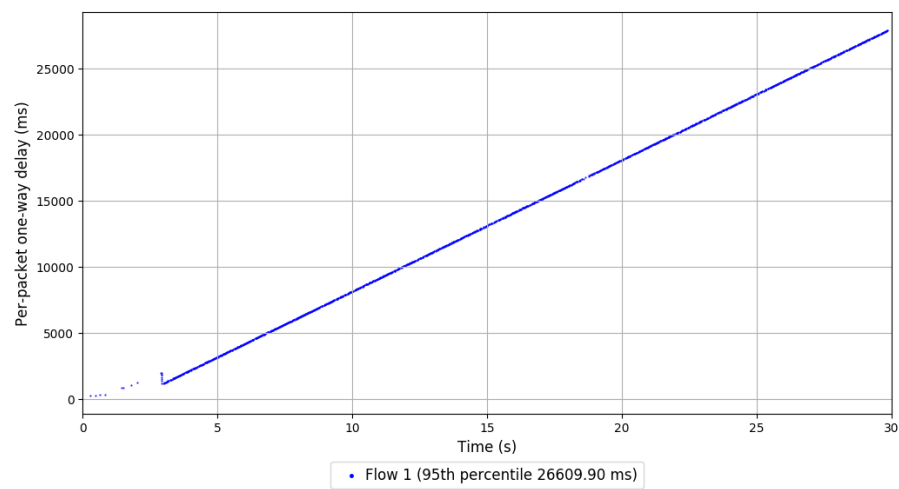
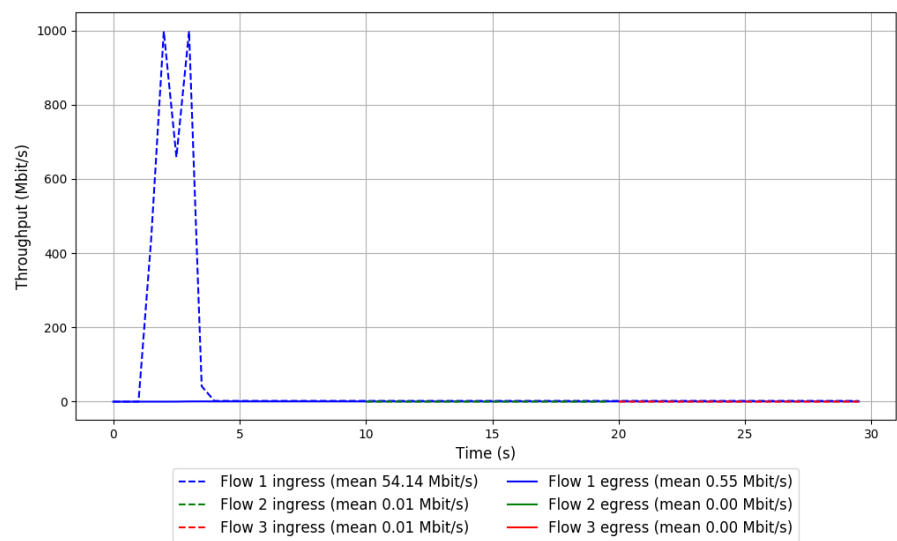
Average throughput: 0.00 Mbit/s

-- Flow 3:

Average throughput: 0.00 Mbit/s



Run 3: Report of FillP — Data Link

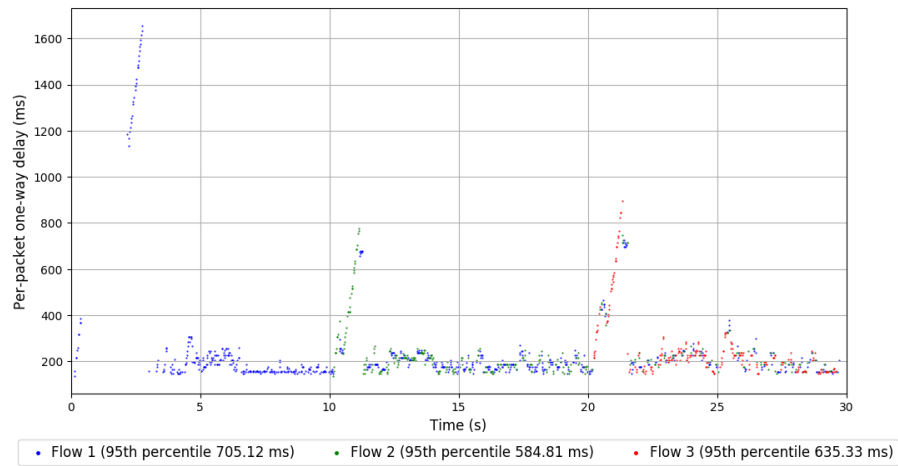
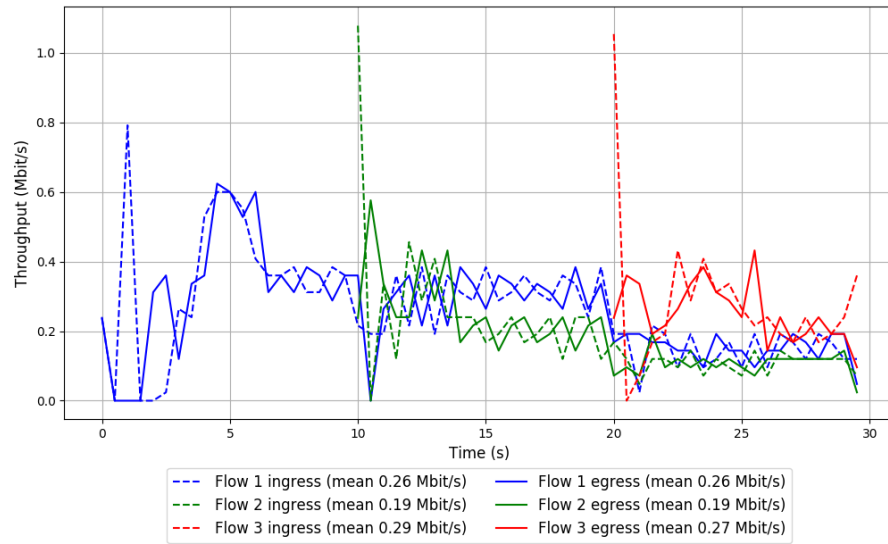


Run 1: Statistics of Indigo-1-32

Start at: 2018-03-05 20:16:04  
End at: 2018-03-05 20:16:34  
Local clock offset: -6.734 ms  
Remote clock offset: -5.736 ms

# Below is generated by plot.py at 2018-03-05 22:19:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.47 Mbit/s  
95th percentile per-packet one-way delay: 676.669 ms  
Loss rate: 3.01%  
-- Flow 1:  
Average throughput: 0.26 Mbit/s  
95th percentile per-packet one-way delay: 705.123 ms  
Loss rate: 1.23%  
-- Flow 2:  
Average throughput: 0.19 Mbit/s  
95th percentile per-packet one-way delay: 584.810 ms  
Loss rate: 2.55%  
-- Flow 3:  
Average throughput: 0.27 Mbit/s  
95th percentile per-packet one-way delay: 635.325 ms  
Loss rate: 8.66%

# Run 1: Report of Indigo-1-32 — Data Link

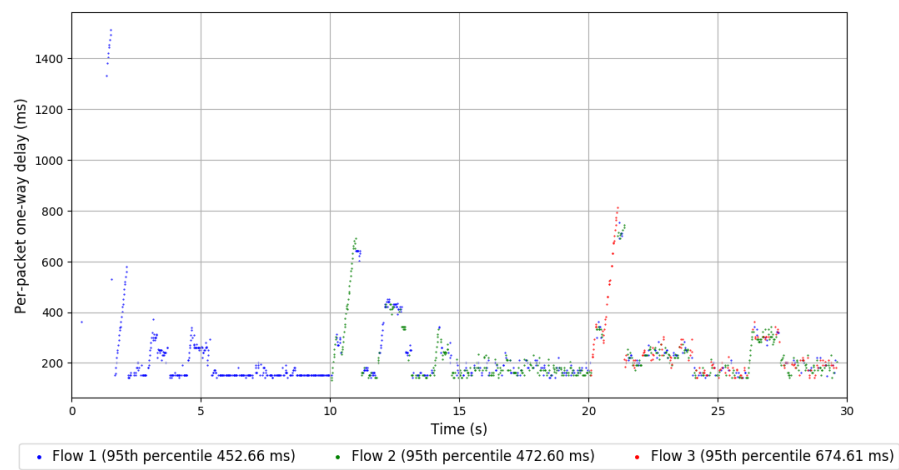
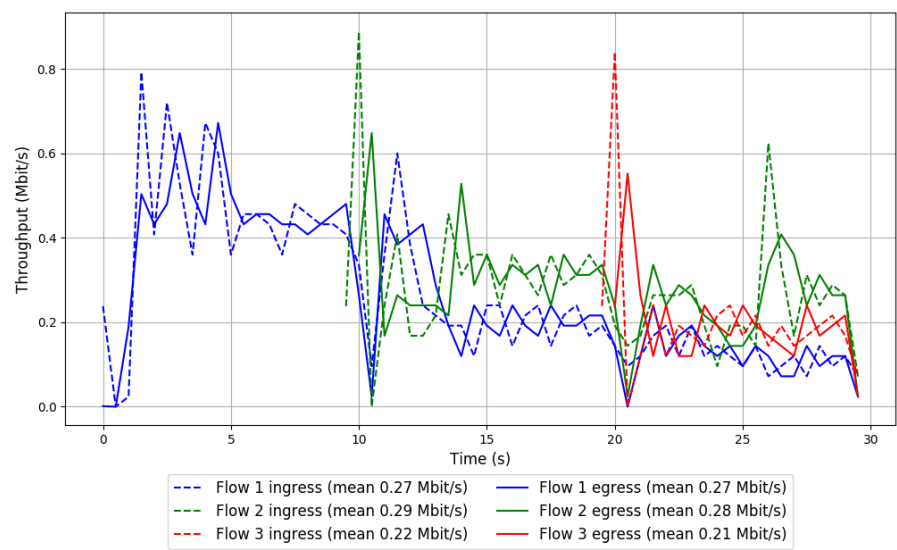


Run 2: Statistics of Indigo-1-32

Start at: 2018-03-05 20:38:41  
End at: 2018-03-05 20:39:11  
Local clock offset: -6.25 ms  
Remote clock offset: -0.869 ms

# Below is generated by plot.py at 2018-03-05 22:19:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.52 Mbit/s  
95th percentile per-packet one-way delay: 522.035 ms  
Loss rate: 2.45%  
-- Flow 1:  
Average throughput: 0.27 Mbit/s  
95th percentile per-packet one-way delay: 452.660 ms  
Loss rate: 1.66%  
-- Flow 2:  
Average throughput: 0.28 Mbit/s  
95th percentile per-packet one-way delay: 472.604 ms  
Loss rate: 2.33%  
-- Flow 3:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 674.606 ms  
Loss rate: 5.72%

Run 2: Report of Indigo-1-32 — Data Link



Run 3: Statistics of Indigo-1-32

Start at: 2018-03-05 21:01:09

End at: 2018-03-05 21:01:39

Local clock offset: -5.812 ms

Remote clock offset: 0.248 ms

# Below is generated by plot.py at 2018-03-05 22:19:52

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 548.411 ms

Loss rate: 2.33%

-- Flow 1:

Average throughput: 0.31 Mbit/s

95th percentile per-packet one-way delay: 458.814 ms

Loss rate: 1.19%

-- Flow 2:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 557.741 ms

Loss rate: 2.88%

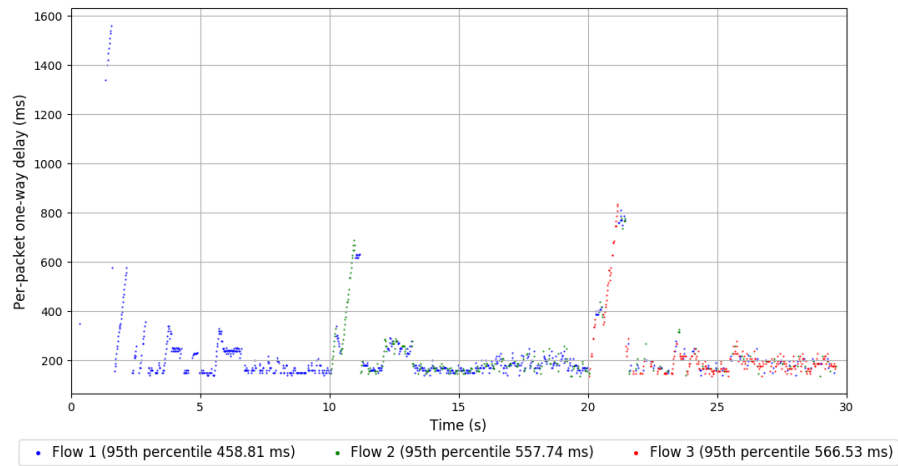
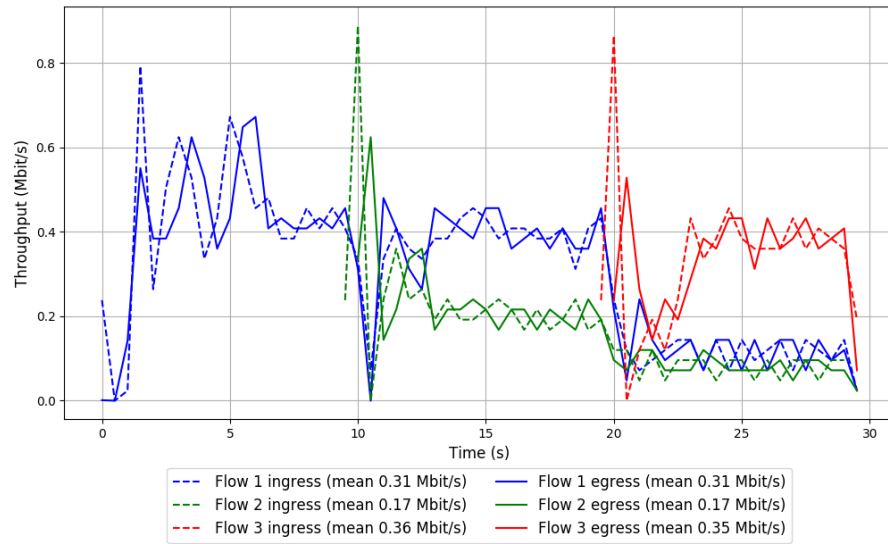
-- Flow 3:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 566.535 ms

Loss rate: 4.81%

### Run 3: Report of Indigo-1-32 — Data Link



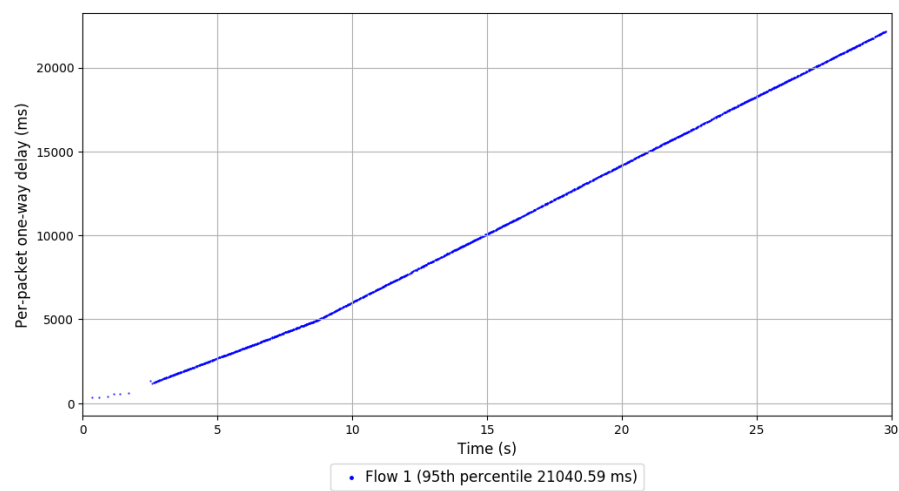
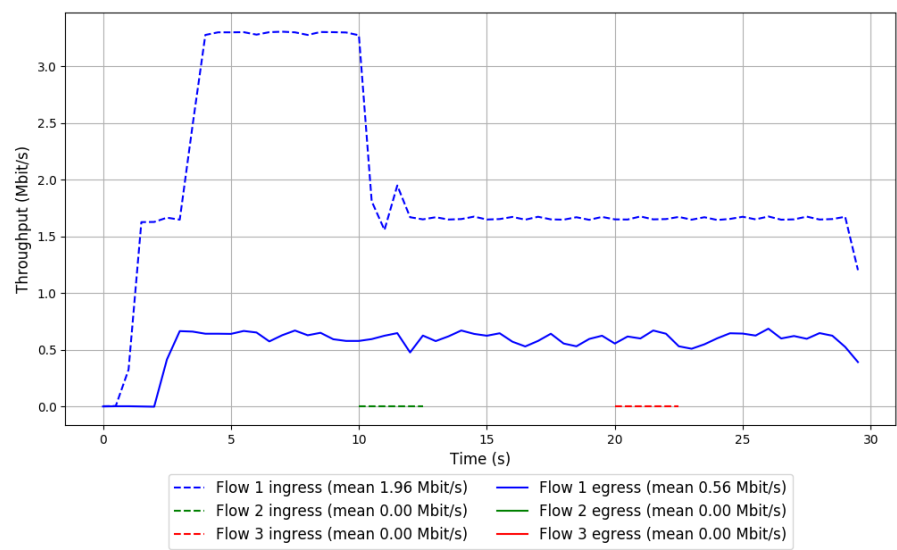
Run 1: Statistics of Vivace-latency

Start at: 2018-03-05 20:24:45  
End at: 2018-03-05 20:25:15  
Local clock offset: -6.638 ms  
Remote clock offset: -0.948 ms

# Below is generated by plot.py at 2018-03-05 22:19:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.56 Mbit/s  
95th percentile per-packet one-way delay: 21040.593 ms  
Loss rate: 71.57%  
-- Flow 1:  
Average throughput: 0.56 Mbit/s  
95th percentile per-packet one-way delay: 21040.593 ms  
Loss rate: 71.55%  
-- Flow 2:  
Average throughput: 0.00 Mbit/s  
-- Flow 3:  
Average throughput: 0.00 Mbit/s



Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-03-05 20:47:23

End at: 2018-03-05 20:47:53

Local clock offset: -6.066 ms

Remote clock offset: 0.951 ms

# Below is generated by plot.py at 2018-03-05 22:19:52

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 21041.896 ms

Loss rate: 71.62%

-- Flow 1:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 21041.896 ms

Loss rate: 71.61%

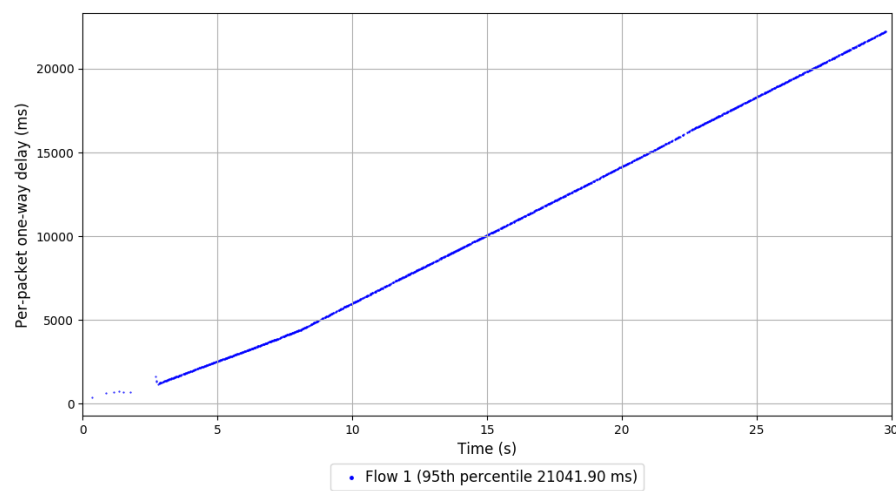
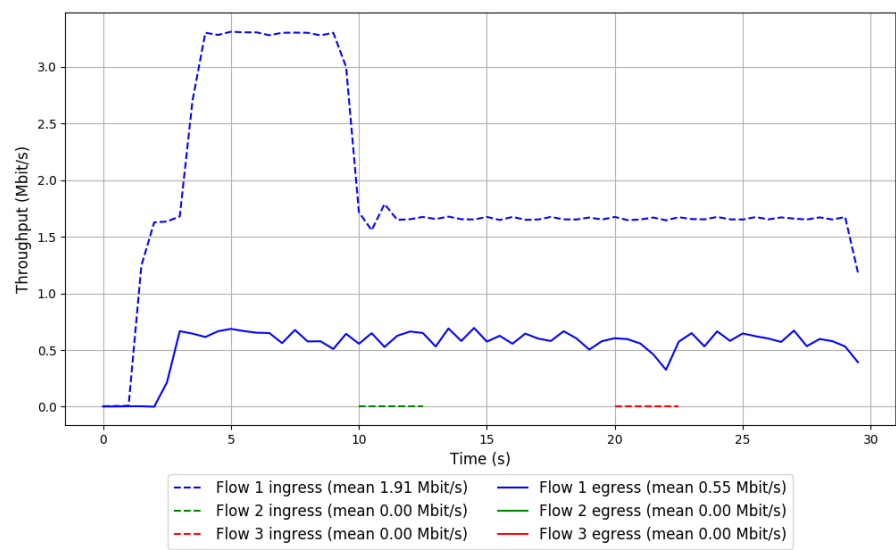
-- Flow 2:

Average throughput: 0.00 Mbit/s

-- Flow 3:

Average throughput: 0.00 Mbit/s

Run 2: Report of Vivace-latency — Data Link

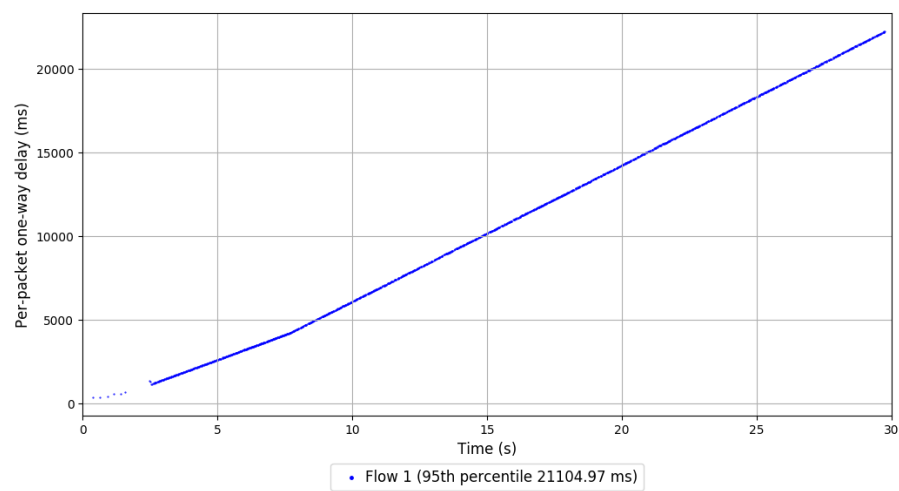
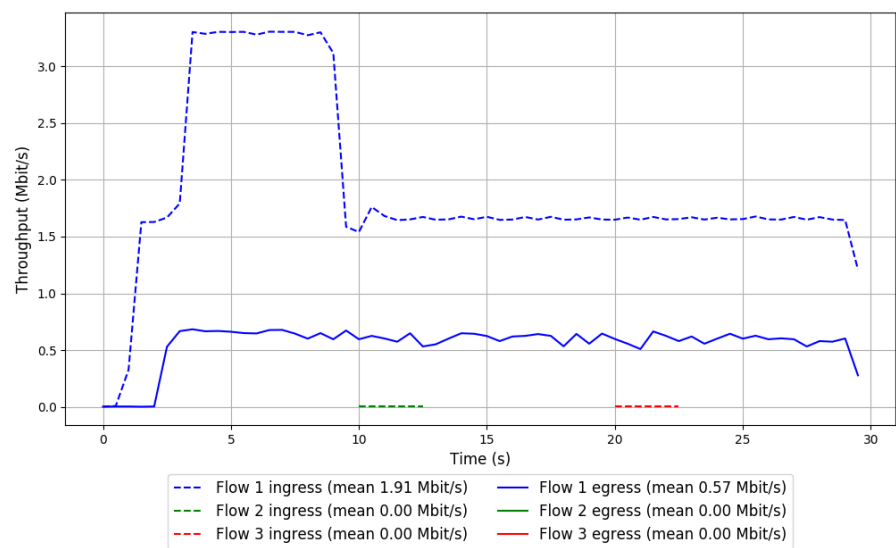


Run 3: Statistics of Vivace-latency

Start at: 2018-03-05 21:09:50  
End at: 2018-03-05 21:10:20  
Local clock offset: -5.808 ms  
Remote clock offset: -4.642 ms

# Below is generated by plot.py at 2018-03-05 22:19:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.57 Mbit/s  
95th percentile per-packet one-way delay: 21104.971 ms  
Loss rate: 70.70%  
-- Flow 1:  
Average throughput: 0.57 Mbit/s  
95th percentile per-packet one-way delay: 21104.971 ms  
Loss rate: 70.68%  
-- Flow 2:  
Average throughput: 0.00 Mbit/s  
-- Flow 3:  
Average throughput: 0.00 Mbit/s

Run 3: Report of Vivace-latency — Data Link

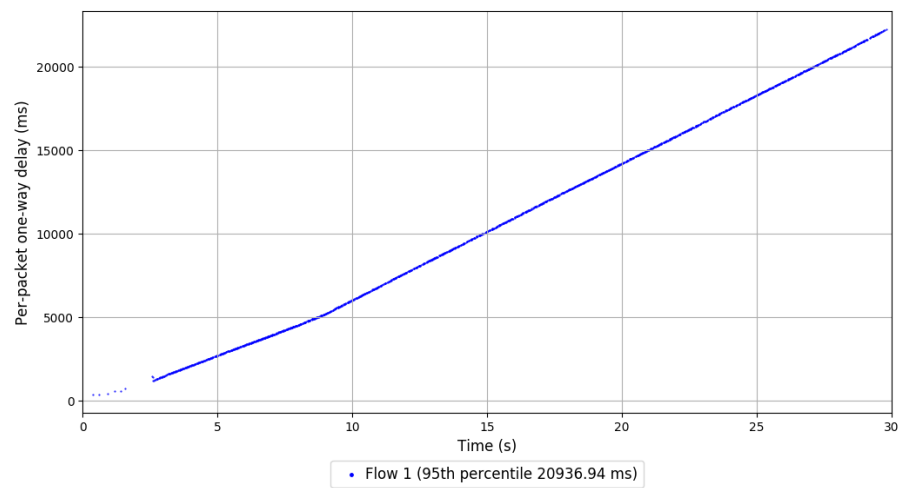
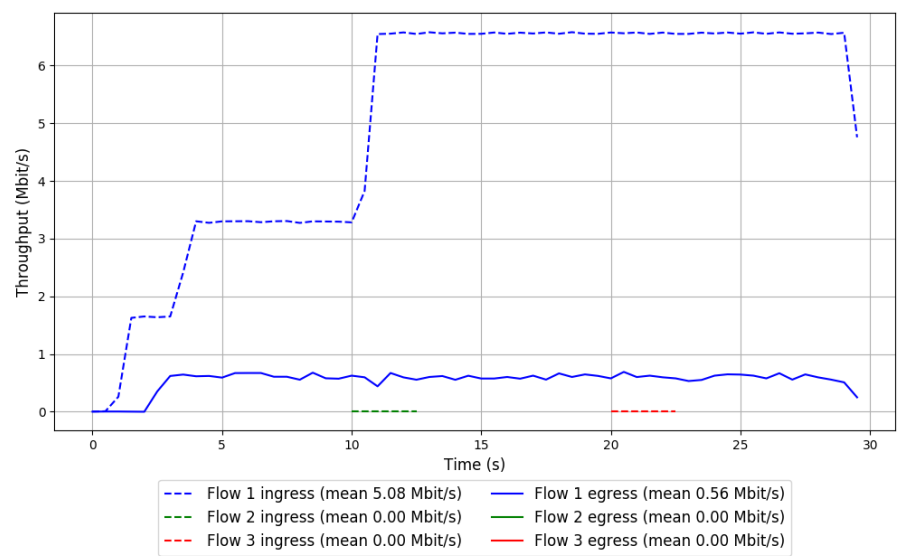


Run 1: Statistics of Vivace-loss

Start at: 2018-03-05 20:11:05  
End at: 2018-03-05 20:11:35  
Local clock offset: -6.747 ms  
Remote clock offset: -5.897 ms

# Below is generated by plot.py at 2018-03-05 22:19:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.56 Mbit/s  
95th percentile per-packet one-way delay: 20936.944 ms  
Loss rate: 89.24%  
-- Flow 1:  
Average throughput: 0.56 Mbit/s  
95th percentile per-packet one-way delay: 20936.944 ms  
Loss rate: 89.23%  
-- Flow 2:  
Average throughput: 0.00 Mbit/s  
-- Flow 3:  
Average throughput: 0.00 Mbit/s

Run 1: Report of Vivace-loss — Data Link



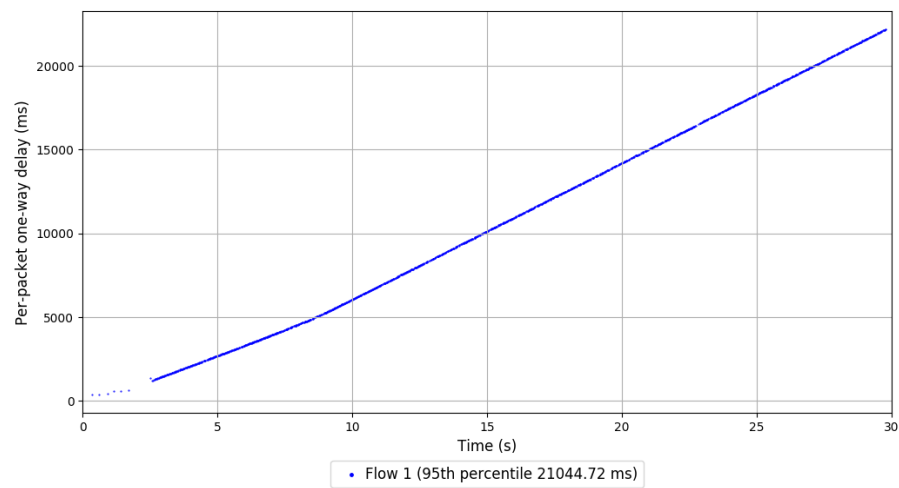
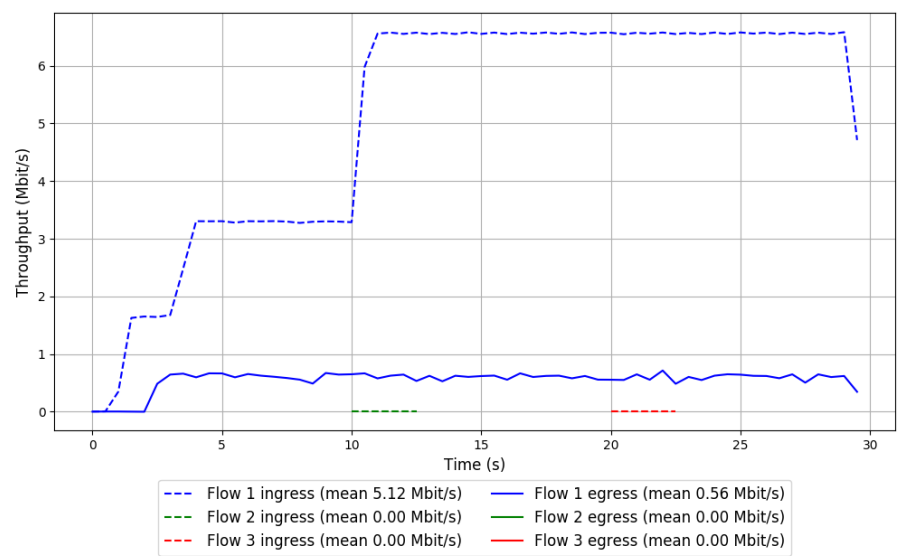
Run 2: Statistics of Vivace-loss

Start at: 2018-03-05 20:33:40  
End at: 2018-03-05 20:34:10  
Local clock offset: -6.529 ms  
Remote clock offset: -0.027 ms

# Below is generated by plot.py at 2018-03-05 22:19:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.56 Mbit/s  
95th percentile per-packet one-way delay: 21044.715 ms  
Loss rate: 89.18%  
-- Flow 1:  
Average throughput: 0.56 Mbit/s  
95th percentile per-packet one-way delay: 21044.715 ms  
Loss rate: 89.18%  
-- Flow 2:  
Average throughput: 0.00 Mbit/s  
-- Flow 3:  
Average throughput: 0.00 Mbit/s



Run 2: Report of Vivace-loss — Data Link

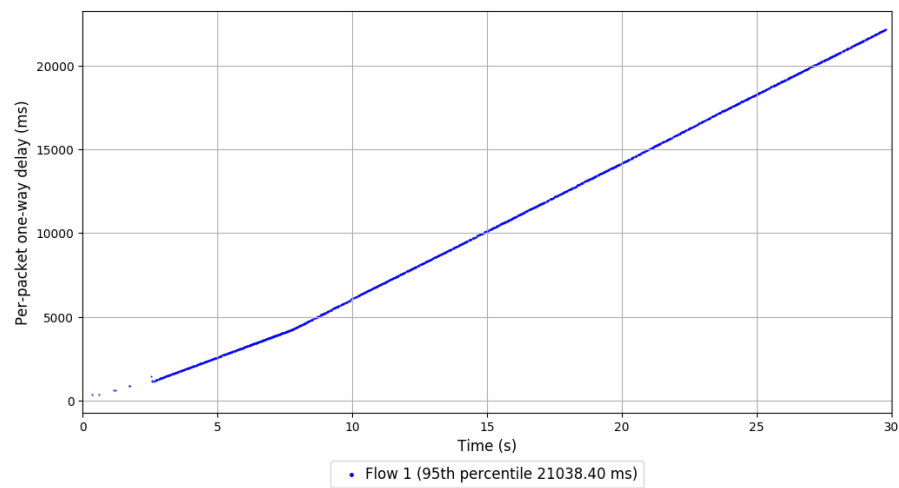
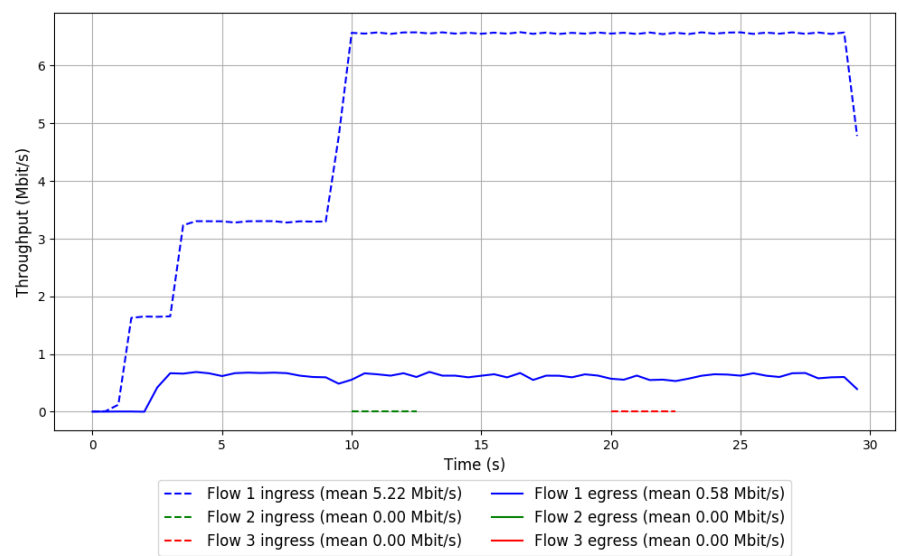


Run 3: Statistics of Vivace-loss

Start at: 2018-03-05 20:56:09  
End at: 2018-03-05 20:56:39  
Local clock offset: -5.873 ms  
Remote clock offset: -4.794 ms

# Below is generated by plot.py at 2018-03-05 22:19:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.58 Mbit/s  
95th percentile per-packet one-way delay: 21038.398 ms  
Loss rate: 89.14%  
-- Flow 1:  
Average throughput: 0.58 Mbit/s  
95th percentile per-packet one-way delay: 21038.398 ms  
Loss rate: 89.14%  
-- Flow 2:  
Average throughput: 0.00 Mbit/s  
-- Flow 3:  
Average throughput: 0.00 Mbit/s

Run 3: Report of Vivace-loss — Data Link

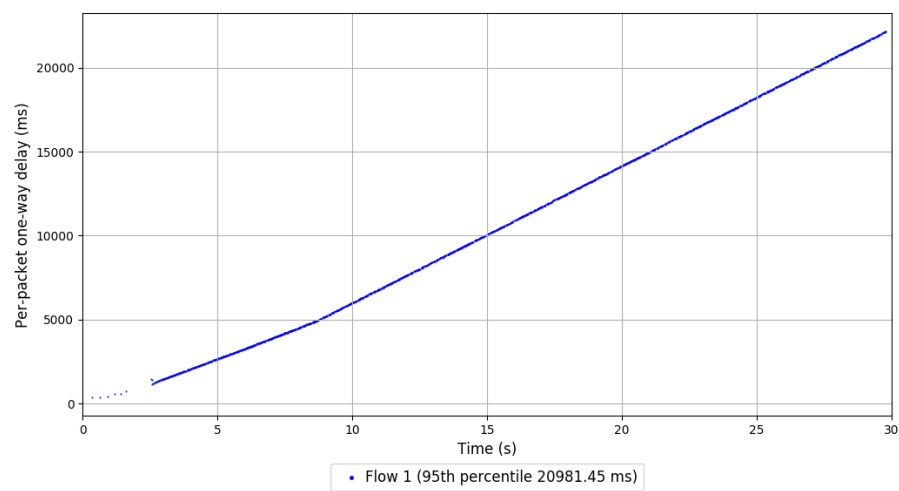
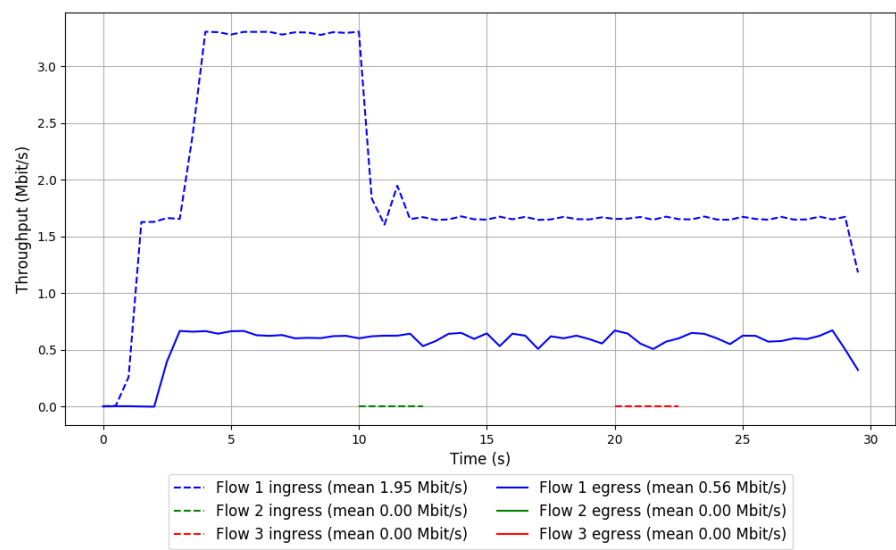


Run 1: Statistics of Vivace-LTE

Start at: 2018-03-05 20:04:49  
End at: 2018-03-05 20:05:19  
Local clock offset: -6.868 ms  
Remote clock offset: -5.001 ms

# Below is generated by plot.py at 2018-03-05 22:19:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.56 Mbit/s  
95th percentile per-packet one-way delay: 20981.451 ms  
Loss rate: 71.62%  
-- Flow 1:  
Average throughput: 0.56 Mbit/s  
95th percentile per-packet one-way delay: 20981.451 ms  
Loss rate: 71.61%  
-- Flow 2:  
Average throughput: 0.00 Mbit/s  
-- Flow 3:  
Average throughput: 0.00 Mbit/s

Run 1: Report of Vivace-LTE — Data Link

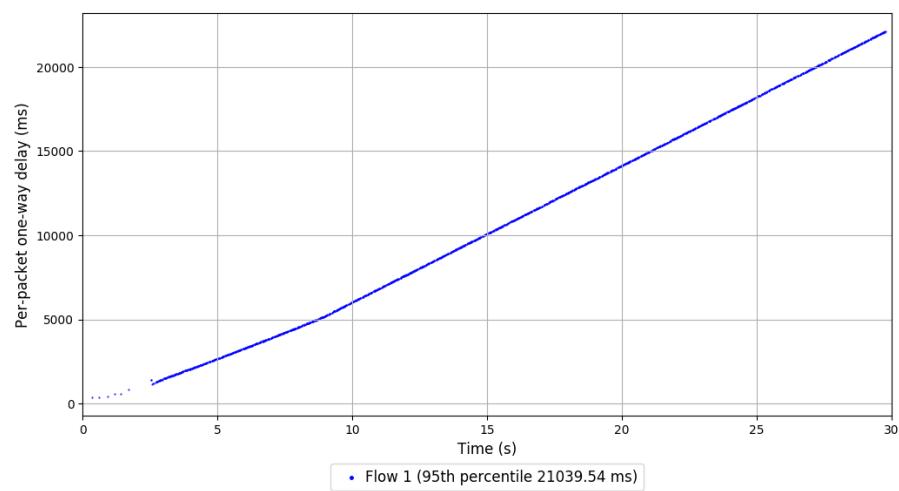
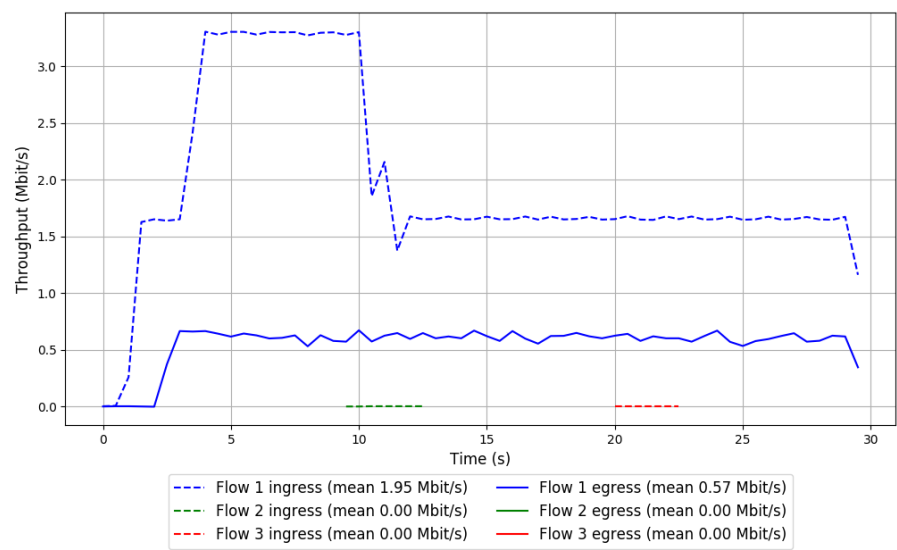


Run 2: Statistics of Vivace-LTE

Start at: 2018-03-05 20:27:16  
End at: 2018-03-05 20:27:46  
Local clock offset: -6.639 ms  
Remote clock offset: -4.918 ms

# Below is generated by plot.py at 2018-03-05 22:19:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.57 Mbit/s  
95th percentile per-packet one-way delay: 21039.538 ms  
Loss rate: 71.47%  
-- Flow 1:  
Average throughput: 0.57 Mbit/s  
95th percentile per-packet one-way delay: 21039.538 ms  
Loss rate: 71.46%  
-- Flow 2:  
Average throughput: 0.00 Mbit/s  
-- Flow 3:  
Average throughput: 0.00 Mbit/s

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-03-05 20:49:52  
End at: 2018-03-05 20:50:22  
Local clock offset: -5.946 ms  
Remote clock offset: -4.754 ms

# Below is generated by plot.py at 2018-03-05 22:19:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.56 Mbit/s  
95th percentile per-packet one-way delay: 21020.252 ms  
Loss rate: 71.96%  
-- Flow 1:  
Average throughput: 0.56 Mbit/s  
95th percentile per-packet one-way delay: 21020.252 ms  
Loss rate: 71.95%  
-- Flow 2:  
Average throughput: 0.00 Mbit/s  
-- Flow 3:  
Average throughput: 0.00 Mbit/s



Run 3: Report of Vivace-LTE — Data Link

