

## Pantheon Report

Generated at 2017-12-01 02:02:48 (UTC).

Data path: Brazil Ethernet (*remote*) → AWS Brazil 1 Ethernet (*local*).

Repeated the test of 14 congestion control schemes 10 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).

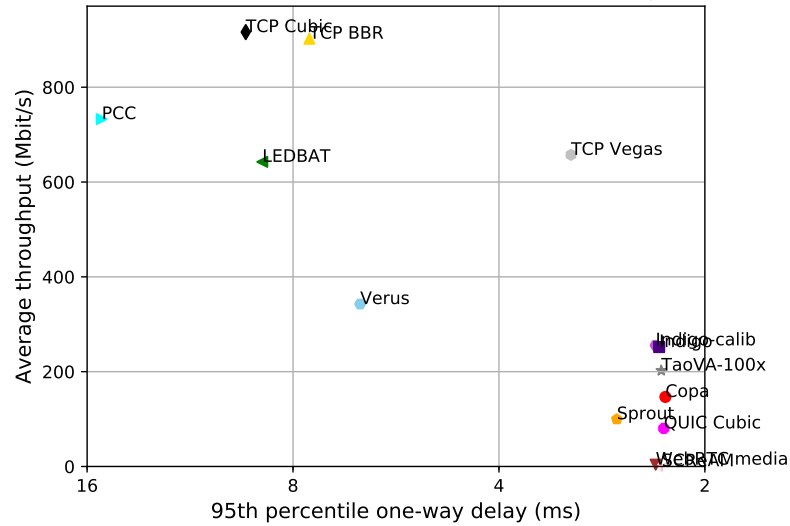
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo\_fast**).

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

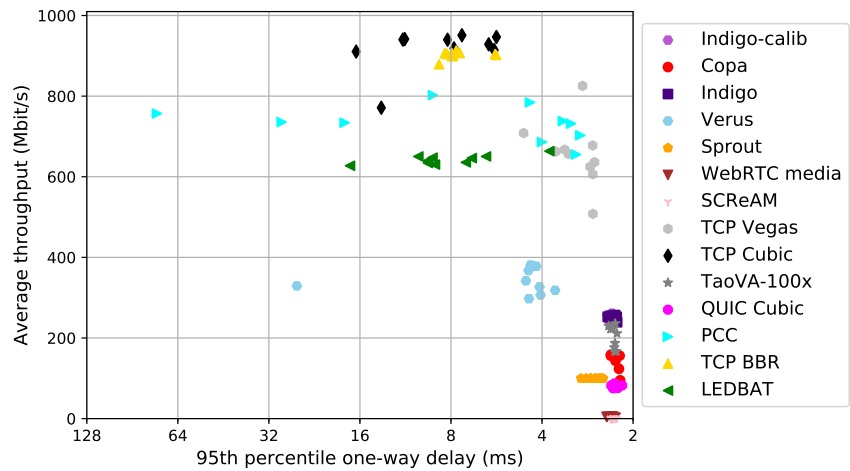
Git summary:

```
branch: indigos @ e3a57ad5ac5cfcaca0e3f983c8dd4cc3509e0262
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fabb936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
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/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

test from Brazil Ethernet to AWS Brazil 1 Ethernet, 10 runs of 30s each per scheme  
3 flows with 10s interval between flows (mean of all runs by scheme)



test from Brazil Ethernet to AWS Brazil 1 Ethernet, 10 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	10	519.60	412.99	324.43	7.78	5.67	5.69	0.02	0.03	0.07
TCP Cubic	10	538.48	404.83	326.12	9.62	7.78	5.67	0.03	0.06	0.17
LEDBAT	10	380.81	281.64	227.86	9.27	6.34	7.82	0.01	0.03	0.05
PCC	10	587.53	159.95	118.35	25.22	3.19	2.94	0.67	0.03	0.06
QUIC Cubic	10	13.63	80.48	78.63	2.75	2.29	2.30	0.00	0.02	0.05
SCReAM	10	0.22	0.22	0.22	2.31	2.30	2.31	0.00	0.16	0.00
WebRTC media	10	1.89	1.41	0.65	2.36	2.37	2.37	0.00	0.05	0.22
Sprout	10	50.11	50.00	49.69	2.63	2.72	2.81	0.01	0.05	0.01
TaoVA-100x	9	117.50	92.54	86.11	2.31	2.32	2.33	0.01	0.02	0.05
TCP Vegas	10	322.24	339.66	328.39	3.40	3.37	3.06	0.01	0.02	0.05
Verus	10	198.52	153.98	128.33	4.16	18.77	3.79	0.04	0.27	0.04
Copa	10	84.55	67.33	73.51	2.28	2.30	2.30	0.01	0.02	0.03
Indigo	10	141.47	123.65	87.13	2.32	2.35	2.35	0.02	0.02	0.04
Indigo-calib	10	143.80	119.67	99.08	2.34	2.39	2.41	0.01	0.03	0.04

Run 1: Statistics of TCP BBR

Start at: 2017-11-30 18:07:55

End at: 2017-11-30 18:08:25

Local clock offset: -0.362 ms

Remote clock offset: 0.002 ms

# Below is generated by plot.py at 2017-12-01 00:36:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 913.14 Mbit/s

95th percentile per-packet one-way delay: 7.691 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 532.98 Mbit/s

95th percentile per-packet one-way delay: 7.878 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 412.13 Mbit/s

95th percentile per-packet one-way delay: 5.681 ms

Loss rate: 0.03%

-- Flow 3:

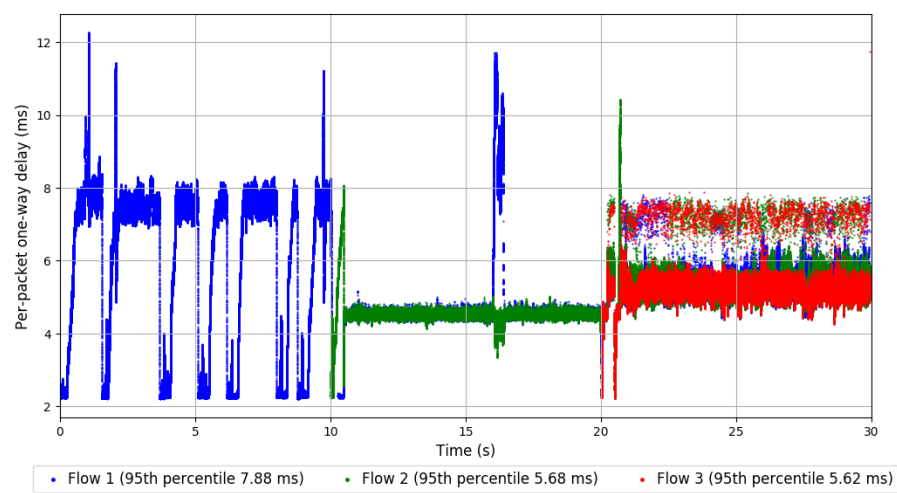
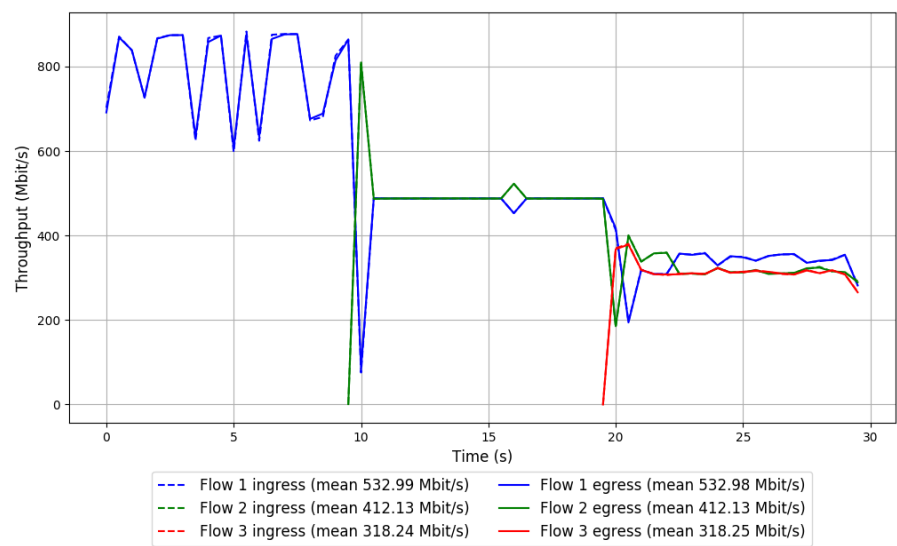
Average throughput: 318.25 Mbit/s

95th percentile per-packet one-way delay: 5.625 ms

Loss rate: 0.07%



Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-11-30 18:26:39

End at: 2017-11-30 18:27:09

Local clock offset: -0.257 ms

Remote clock offset: 0.442 ms

# Below is generated by plot.py at 2017-12-01 00:36:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 906.92 Mbit/s

95th percentile per-packet one-way delay: 7.483 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 526.65 Mbit/s

95th percentile per-packet one-way delay: 7.658 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 407.66 Mbit/s

95th percentile per-packet one-way delay: 5.659 ms

Loss rate: 0.04%

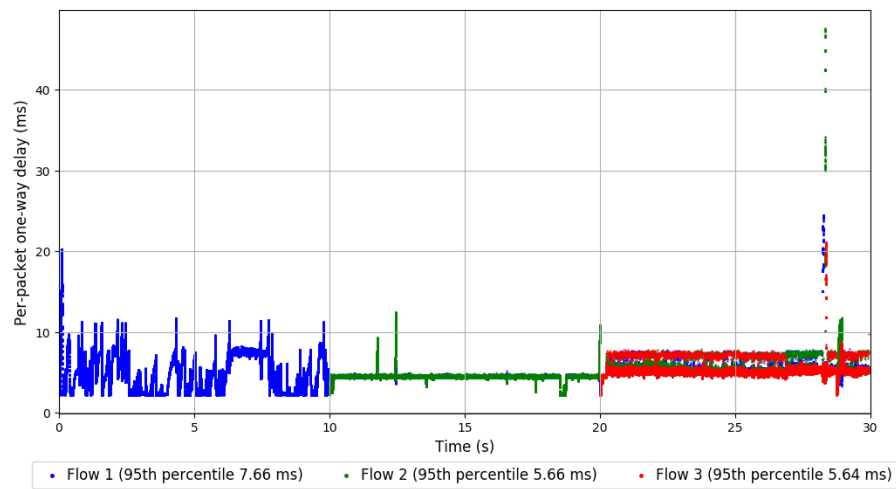
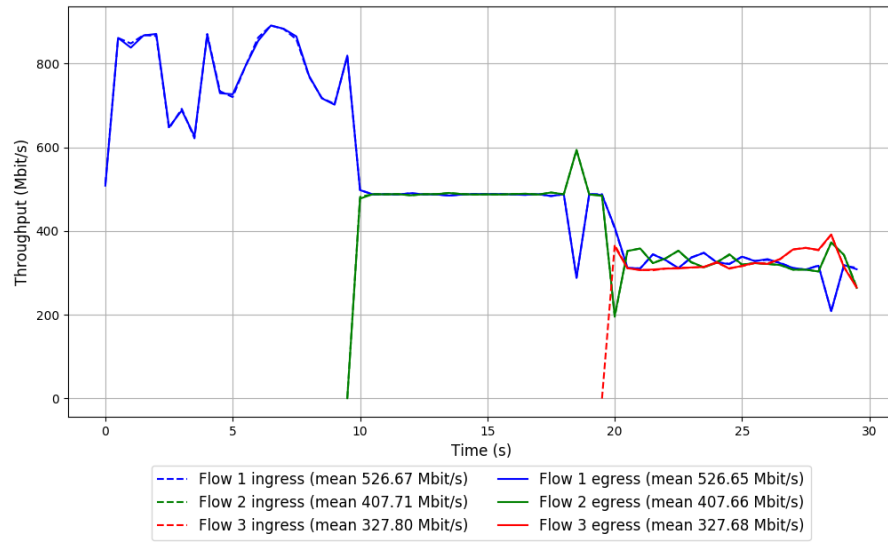
-- Flow 3:

Average throughput: 327.68 Mbit/s

95th percentile per-packet one-way delay: 5.645 ms

Loss rate: 0.07%

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



Run 3: Statistics of TCP BBR

Start at: 2017-11-30 18:45:31

End at: 2017-11-30 18:46:01

Local clock offset: -0.156 ms

Remote clock offset: 0.513 ms

# Below is generated by plot.py at 2017-12-01 00:36:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 906.78 Mbit/s

95th percentile per-packet one-way delay: 7.950 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 525.55 Mbit/s

95th percentile per-packet one-way delay: 8.080 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 412.09 Mbit/s

95th percentile per-packet one-way delay: 5.767 ms

Loss rate: 0.03%

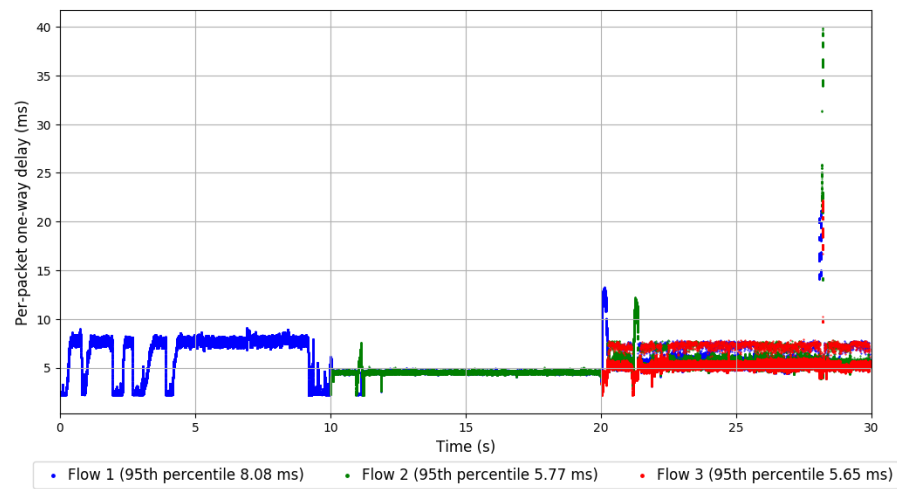
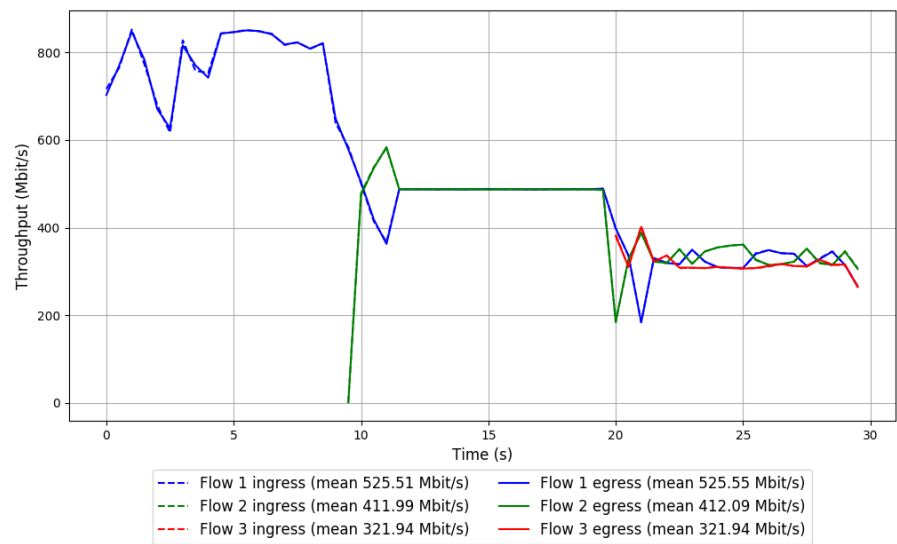
-- Flow 3:

Average throughput: 321.94 Mbit/s

95th percentile per-packet one-way delay: 5.652 ms

Loss rate: 0.07%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-11-30 19:04:08

End at: 2017-11-30 19:04:38

Local clock offset: -0.124 ms

Remote clock offset: 0.388 ms

# Below is generated by plot.py at 2017-12-01 00:36:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 904.46 Mbit/s

95th percentile per-packet one-way delay: 8.235 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 520.68 Mbit/s

95th percentile per-packet one-way delay: 8.633 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 413.36 Mbit/s

95th percentile per-packet one-way delay: 5.813 ms

Loss rate: 0.03%

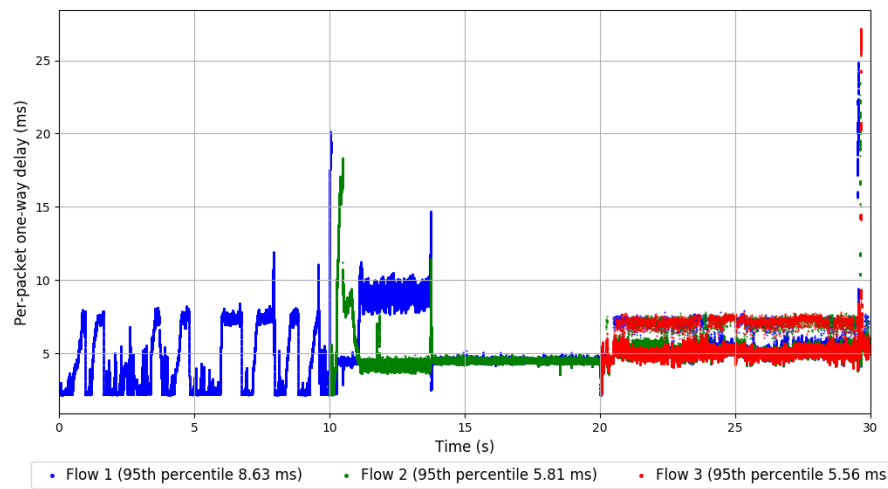
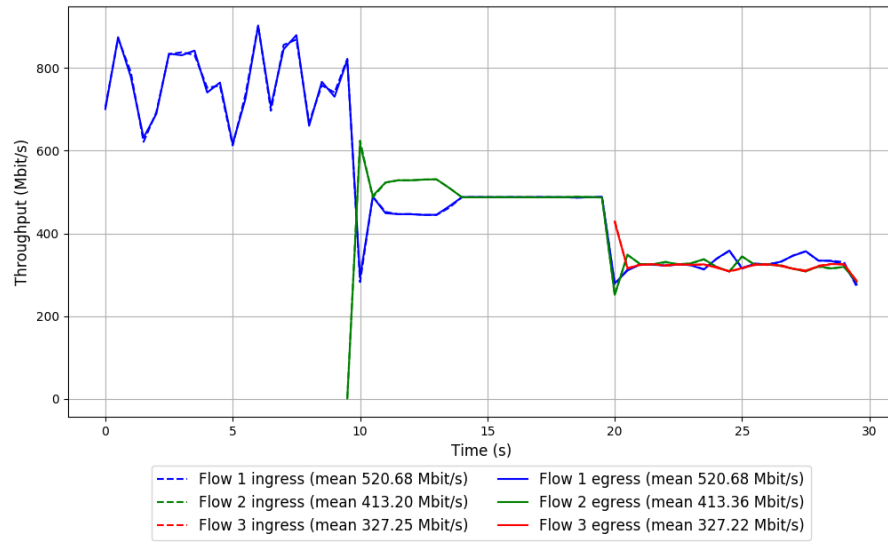
-- Flow 3:

Average throughput: 327.22 Mbit/s

95th percentile per-packet one-way delay: 5.556 ms

Loss rate: 0.08%

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



Run 5: Statistics of TCP BBR

Start at: 2017-11-30 19:23:00

End at: 2017-11-30 19:23:30

Local clock offset: 0.024 ms

Remote clock offset: 0.508 ms

# Below is generated by plot.py at 2017-12-01 00:36:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 899.81 Mbit/s

95th percentile per-packet one-way delay: 7.955 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 522.33 Mbit/s

95th percentile per-packet one-way delay: 8.134 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 404.00 Mbit/s

95th percentile per-packet one-way delay: 5.494 ms

Loss rate: 0.03%

-- Flow 3:

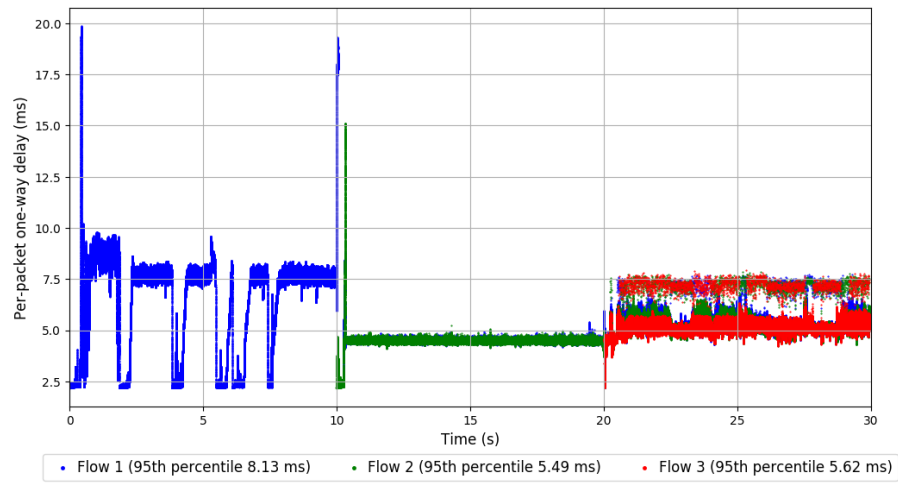
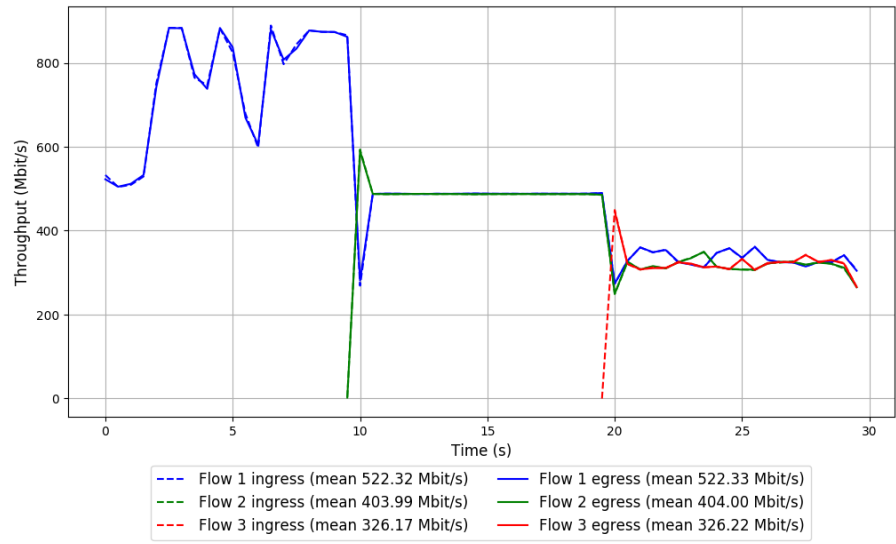
Average throughput: 326.22 Mbit/s

95th percentile per-packet one-way delay: 5.617 ms

Loss rate: 0.07%



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



Run 6: Statistics of TCP BBR

Start at: 2017-11-30 19:41:48

End at: 2017-11-30 19:42:18

Local clock offset: 0.038 ms

Remote clock offset: 0.372 ms

# Below is generated by plot.py at 2017-12-01 00:36:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 879.07 Mbit/s

95th percentile per-packet one-way delay: 8.760 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 491.49 Mbit/s

95th percentile per-packet one-way delay: 9.069 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 423.76 Mbit/s

95th percentile per-packet one-way delay: 5.551 ms

Loss rate: 0.04%

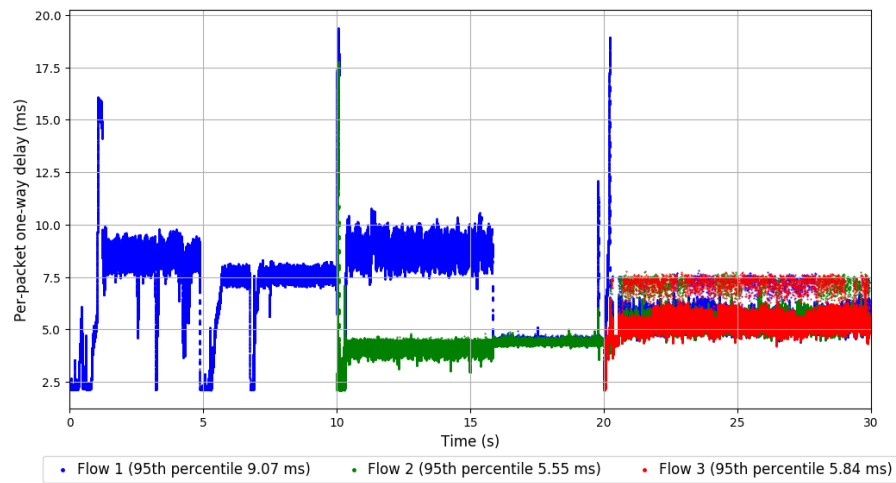
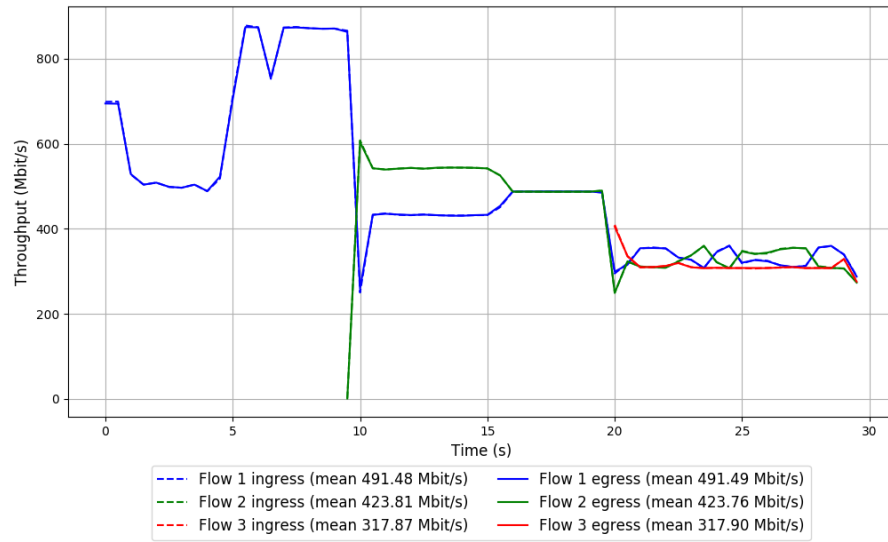
-- Flow 3:

Average throughput: 317.90 Mbit/s

95th percentile per-packet one-way delay: 5.842 ms

Loss rate: 0.08%

# Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-11-30 20:00:29

End at: 2017-11-30 20:00:59

Local clock offset: 0.229 ms

Remote clock offset: 0.309 ms

# Below is generated by plot.py at 2017-12-01 00:36:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 904.24 Mbit/s

95th percentile per-packet one-way delay: 5.717 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 513.21 Mbit/s

95th percentile per-packet one-way delay: 5.654 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 426.26 Mbit/s

95th percentile per-packet one-way delay: 5.828 ms

Loss rate: 0.03%

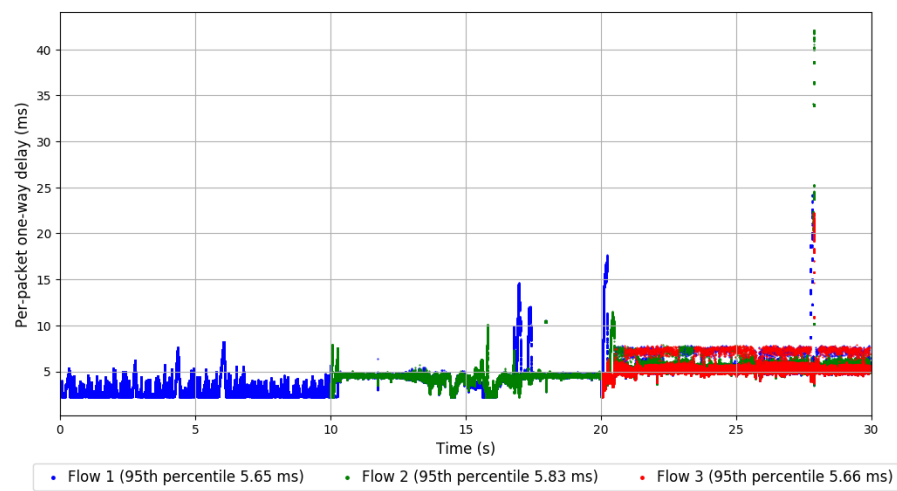
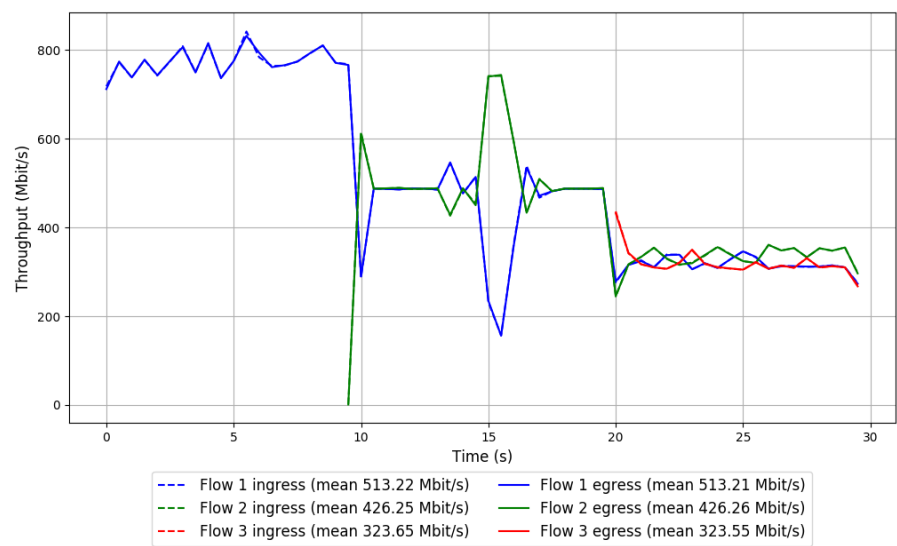
-- Flow 3:

Average throughput: 323.55 Mbit/s

95th percentile per-packet one-way delay: 5.662 ms

Loss rate: 0.08%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-11-30 20:19:09

End at: 2017-11-30 20:19:39

Local clock offset: 0.319 ms

Remote clock offset: 0.302 ms

# Below is generated by plot.py at 2017-12-01 00:36:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 902.11 Mbit/s

95th percentile per-packet one-way delay: 5.673 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 511.51 Mbit/s

95th percentile per-packet one-way delay: 5.693 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 421.82 Mbit/s

95th percentile per-packet one-way delay: 5.704 ms

Loss rate: 0.03%

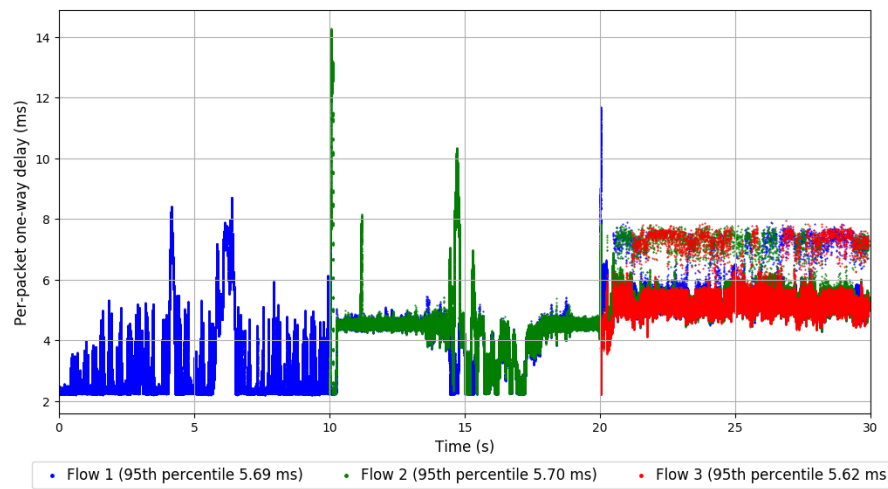
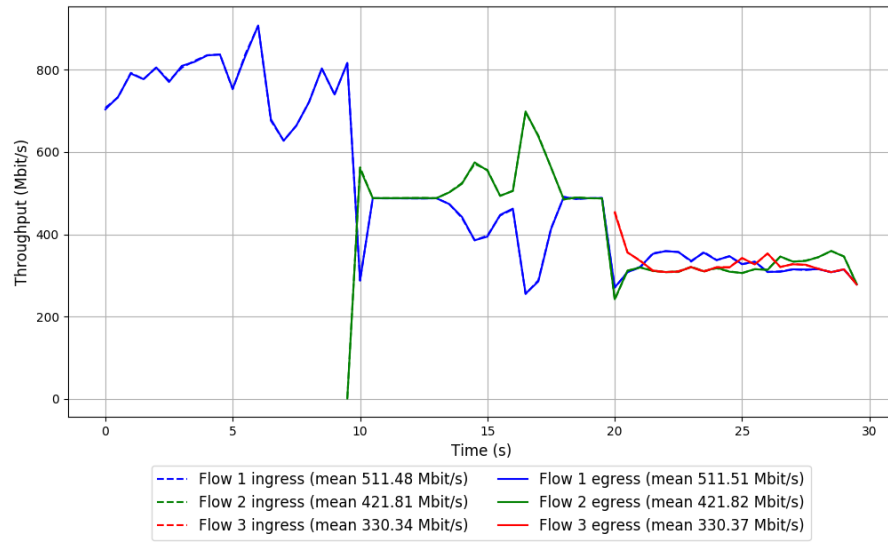
-- Flow 3:

Average throughput: 330.37 Mbit/s

95th percentile per-packet one-way delay: 5.624 ms

Loss rate: 0.07%

# Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-11-30 20:37:58

End at: 2017-11-30 20:38:28

Local clock offset: 0.427 ms

Remote clock offset: 0.205 ms

# Below is generated by plot.py at 2017-12-01 00:48:56

# Datalink statistics

-- Total of 3 flows:

Average throughput: 899.55 Mbit/s

95th percentile per-packet one-way delay: 7.868 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 523.49 Mbit/s

95th percentile per-packet one-way delay: 8.037 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 402.72 Mbit/s

95th percentile per-packet one-way delay: 5.679 ms

Loss rate: 0.04%

-- Flow 3:

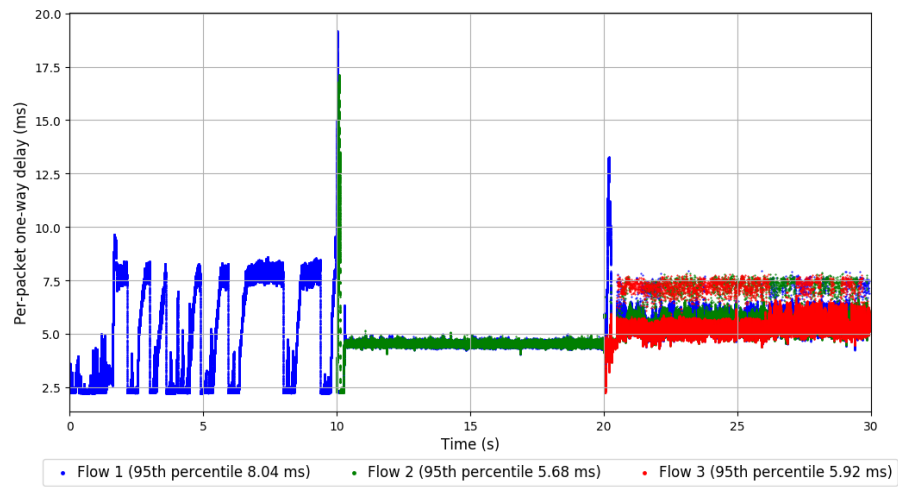
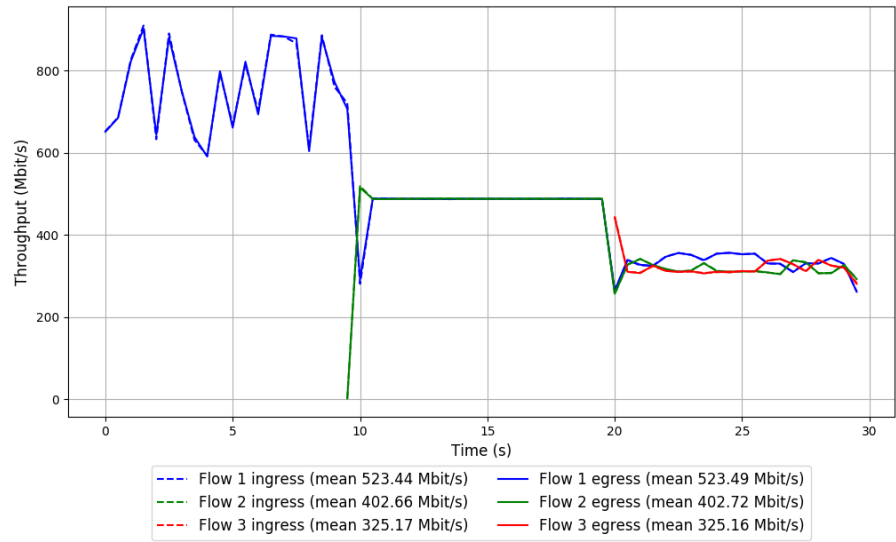
Average throughput: 325.16 Mbit/s

95th percentile per-packet one-way delay: 5.922 ms

Loss rate: 0.08%



### Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-11-30 20:57:24

End at: 2017-11-30 20:57:54

Local clock offset: 0.346 ms

Remote clock offset: 0.165 ms

# Below is generated by plot.py at 2017-12-01 00:49:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 906.66 Mbit/s

95th percentile per-packet one-way delay: 8.381 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 528.07 Mbit/s

95th percentile per-packet one-way delay: 8.987 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 406.08 Mbit/s

95th percentile per-packet one-way delay: 5.556 ms

Loss rate: 0.05%

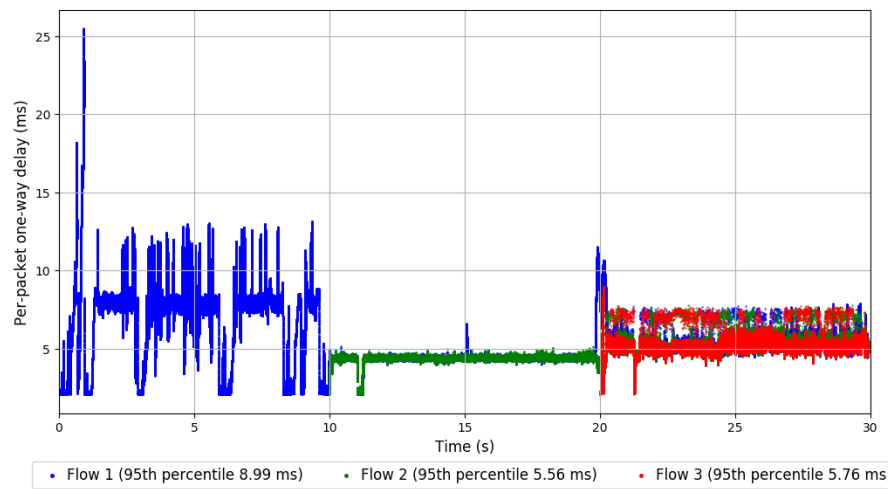
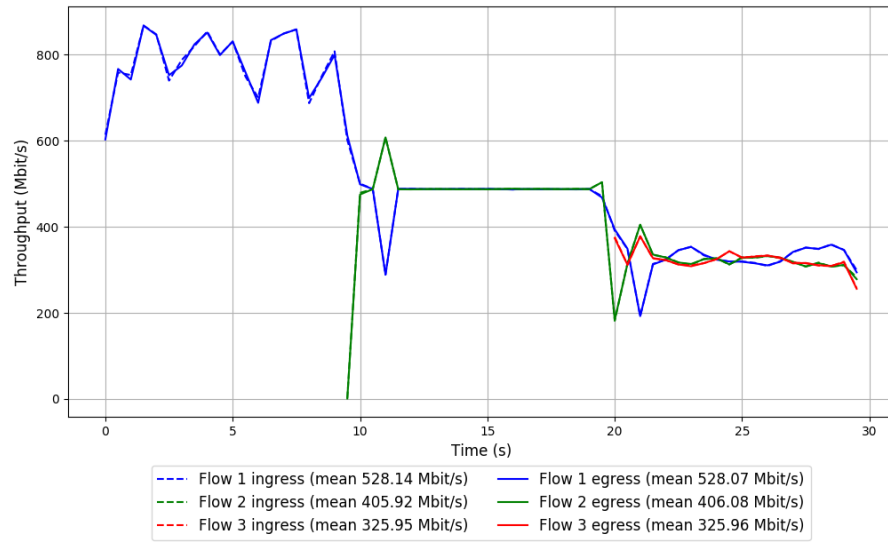
-- Flow 3:

Average throughput: 325.96 Mbit/s

95th percentile per-packet one-way delay: 5.759 ms

Loss rate: 0.08%

# Run 10: Report of TCP BBR — Data Link

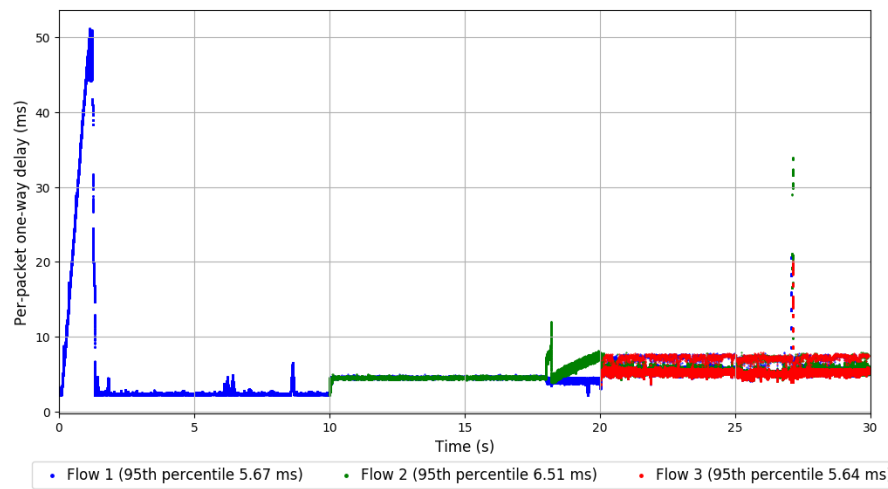
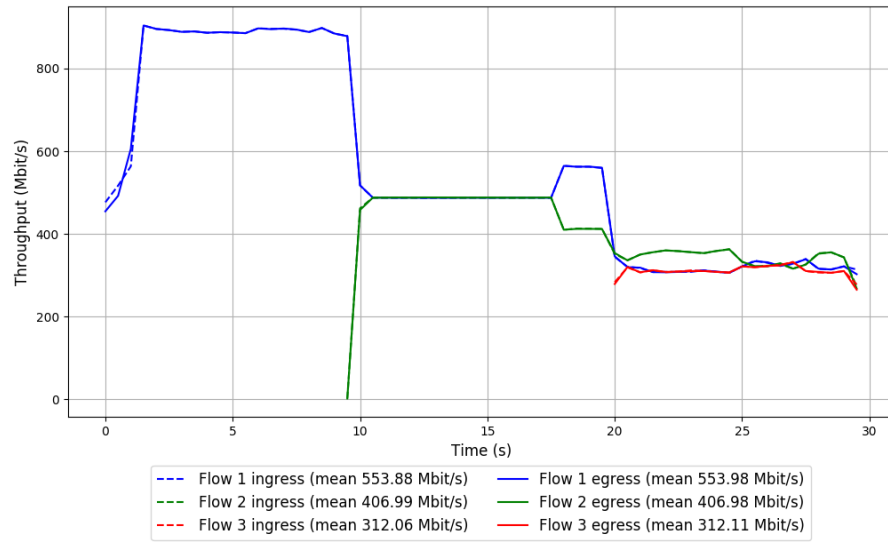


Run 1: Statistics of TCP Cubic

Start at: 2017-11-30 18:02:26  
End at: 2017-11-30 18:02:56  
Local clock offset: -0.409 ms  
Remote clock offset: -0.155 ms

# Below is generated by plot.py at 2017-12-01 00:49:48  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 928.58 Mbit/s  
95th percentile per-packet one-way delay: 6.004 ms  
Loss rate: 0.07%  
-- Flow 1:  
Average throughput: 553.98 Mbit/s  
95th percentile per-packet one-way delay: 5.675 ms  
Loss rate: 0.05%  
-- Flow 2:  
Average throughput: 406.98 Mbit/s  
95th percentile per-packet one-way delay: 6.513 ms  
Loss rate: 0.05%  
-- Flow 3:  
Average throughput: 312.11 Mbit/s  
95th percentile per-packet one-way delay: 5.644 ms  
Loss rate: 0.24%

# Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-11-30 18:21:16

End at: 2017-11-30 18:21:46

Local clock offset: -0.291 ms

Remote clock offset: 0.262 ms

# Below is generated by plot.py at 2017-12-01 00:50:05

# Datalink statistics

-- Total of 3 flows:

Average throughput: 951.04 Mbit/s

95th percentile per-packet one-way delay: 7.361 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 571.20 Mbit/s

95th percentile per-packet one-way delay: 7.765 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 410.52 Mbit/s

95th percentile per-packet one-way delay: 5.759 ms

Loss rate: 0.09%

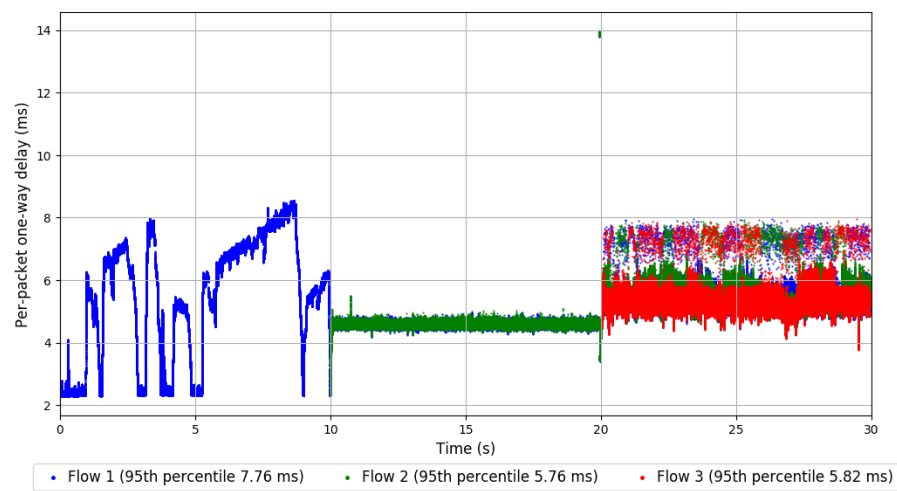
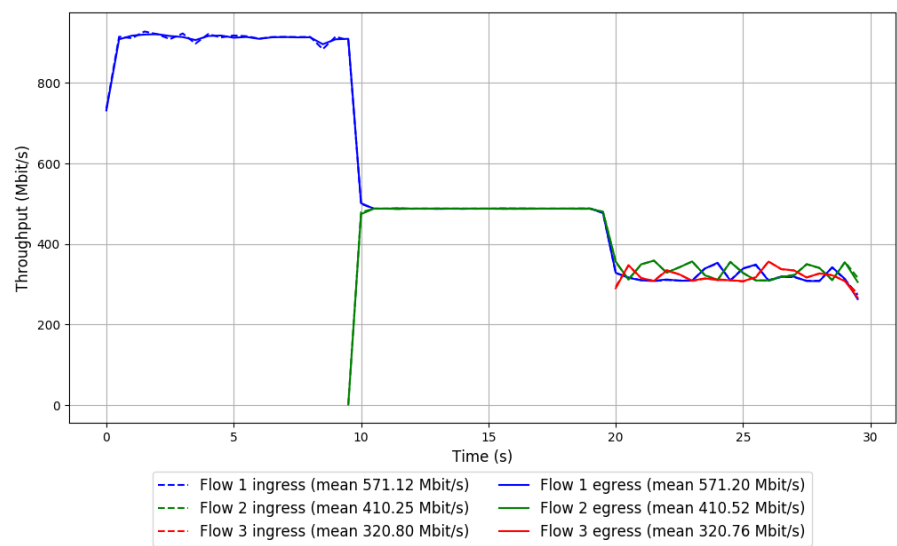
-- Flow 3:

Average throughput: 320.76 Mbit/s

95th percentile per-packet one-way delay: 5.817 ms

Loss rate: 0.23%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-11-30 18:39:58

End at: 2017-11-30 18:40:28

Local clock offset: -0.198 ms

Remote clock offset: 0.536 ms

# Below is generated by plot.py at 2017-12-01 00:50:05

# Datalink statistics

-- Total of 3 flows:

Average throughput: 940.24 Mbit/s

95th percentile per-packet one-way delay: 11.540 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 637.83 Mbit/s

95th percentile per-packet one-way delay: 11.765 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 267.68 Mbit/s

95th percentile per-packet one-way delay: 5.330 ms

Loss rate: 0.04%

-- Flow 3:

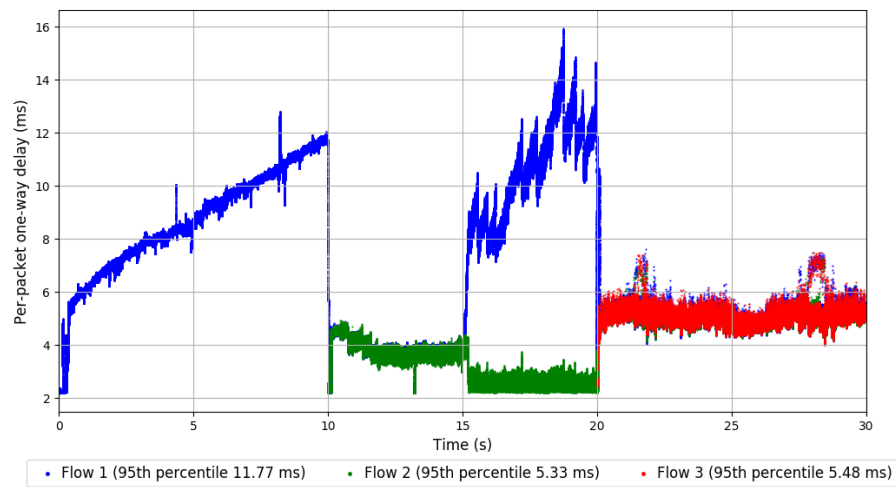
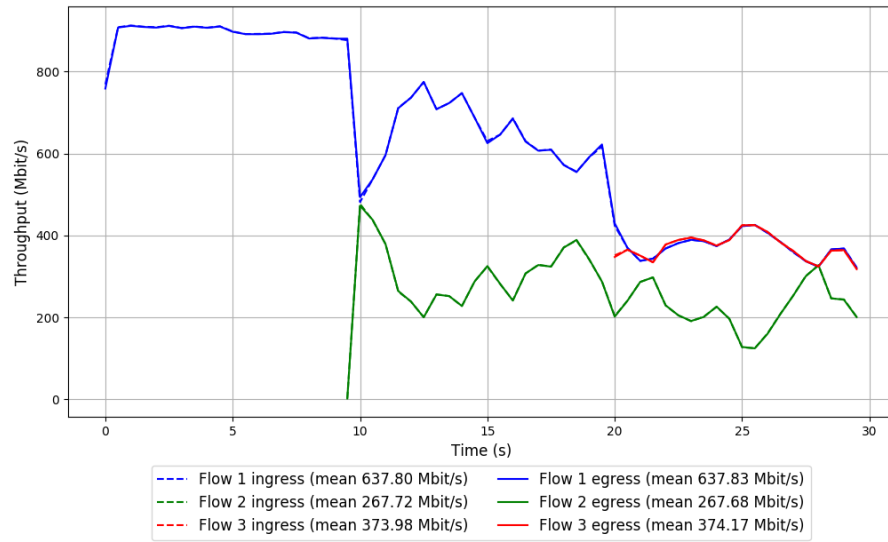
Average throughput: 374.17 Mbit/s

95th percentile per-packet one-way delay: 5.480 ms

Loss rate: 0.08%



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

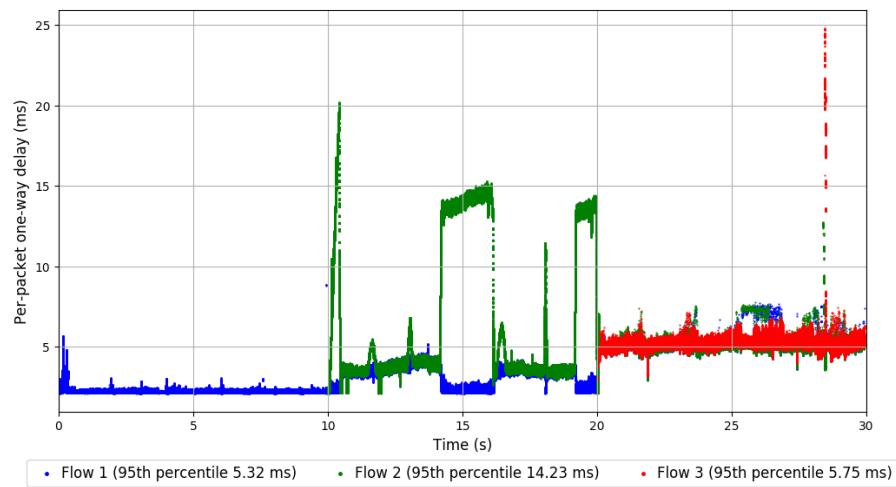
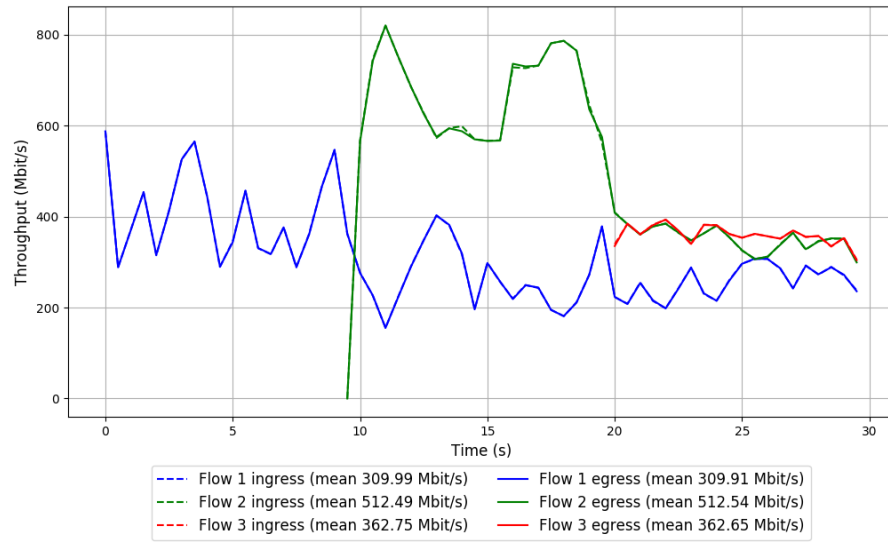


Run 4: Statistics of TCP Cubic

Start at: 2017-11-30 18:58:44  
End at: 2017-11-30 18:59:14  
Local clock offset: -0.159 ms  
Remote clock offset: 0.418 ms

# Below is generated by plot.py at 2017-12-01 00:50:05  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 771.22 Mbit/s  
95th percentile per-packet one-way delay: 13.599 ms  
Loss rate: 0.03%  
-- Flow 1:  
Average throughput: 309.91 Mbit/s  
95th percentile per-packet one-way delay: 5.317 ms  
Loss rate: 0.03%  
-- Flow 2:  
Average throughput: 512.54 Mbit/s  
95th percentile per-packet one-way delay: 14.228 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 362.65 Mbit/s  
95th percentile per-packet one-way delay: 5.747 ms  
Loss rate: 0.07%

# Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-11-30 19:17:30

End at: 2017-11-30 19:18:00

Local clock offset: 0.035 ms

Remote clock offset: 0.446 ms

# Below is generated by plot.py at 2017-12-01 00:50:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 946.76 Mbit/s

95th percentile per-packet one-way delay: 5.661 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 568.82 Mbit/s

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

Loss rate: 0.04%

-- Flow 2:

Average throughput: 406.65 Mbit/s

95th percentile per-packet one-way delay: 5.688 ms

Loss rate: 0.09%

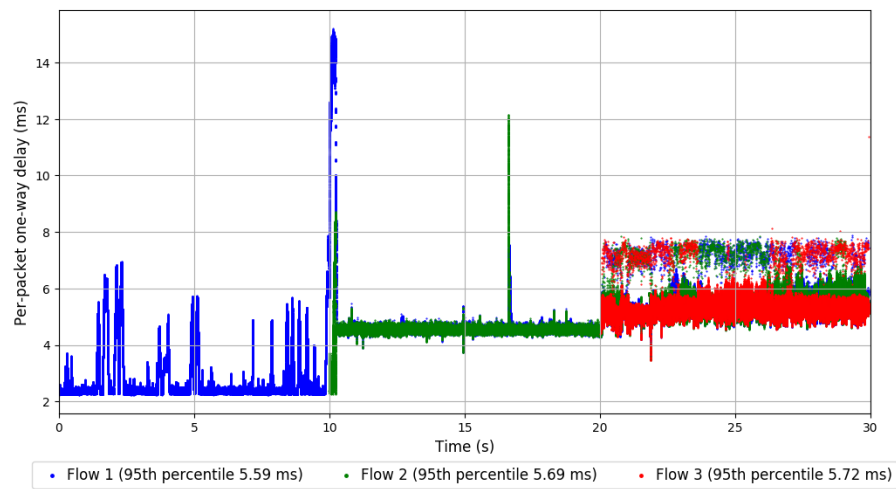
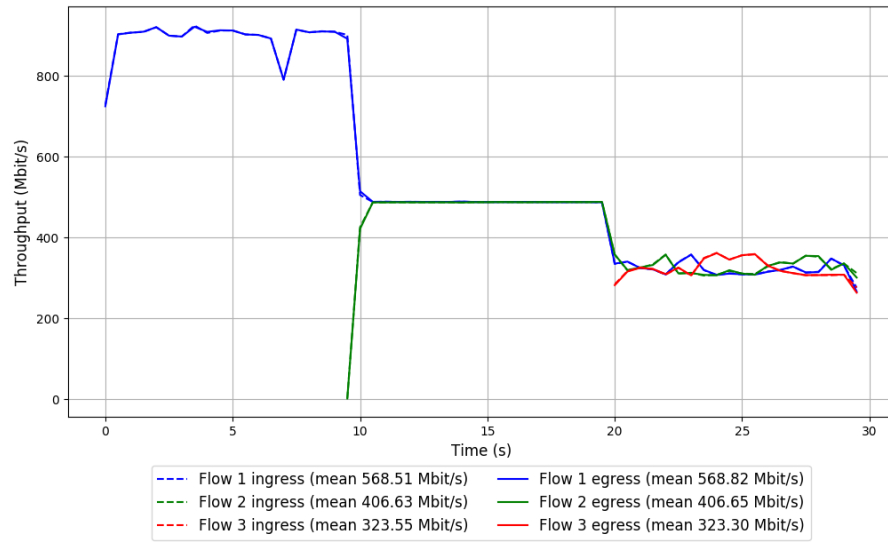
-- Flow 3:

Average throughput: 323.30 Mbit/s

95th percentile per-packet one-way delay: 5.722 ms

Loss rate: 0.24%

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



Run 6: Statistics of TCP Cubic

Start at: 2017-11-30 19:36:18

End at: 2017-11-30 19:36:48

Local clock offset: -0.003 ms

Remote clock offset: 0.412 ms

# Below is generated by plot.py at 2017-12-01 00:50:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 910.53 Mbit/s

95th percentile per-packet one-way delay: 16.468 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 536.11 Mbit/s

95th percentile per-packet one-way delay: 5.510 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 407.85 Mbit/s

95th percentile per-packet one-way delay: 17.378 ms

Loss rate: 0.08%

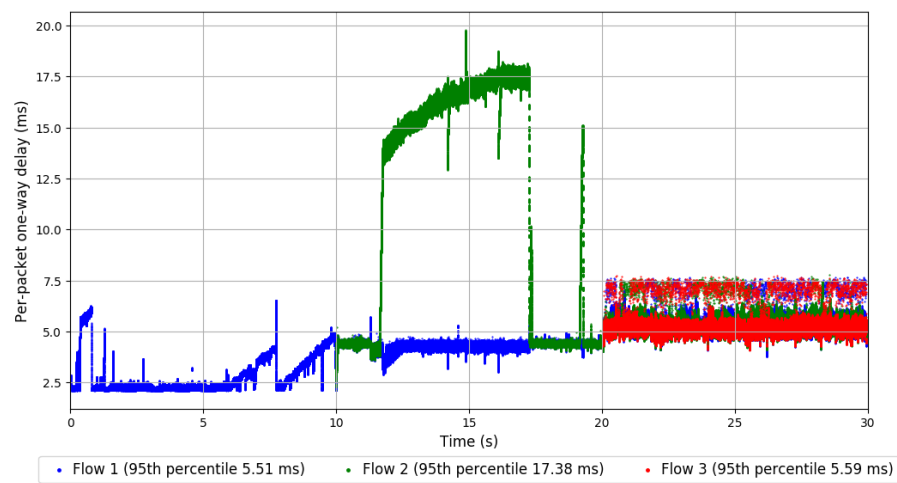
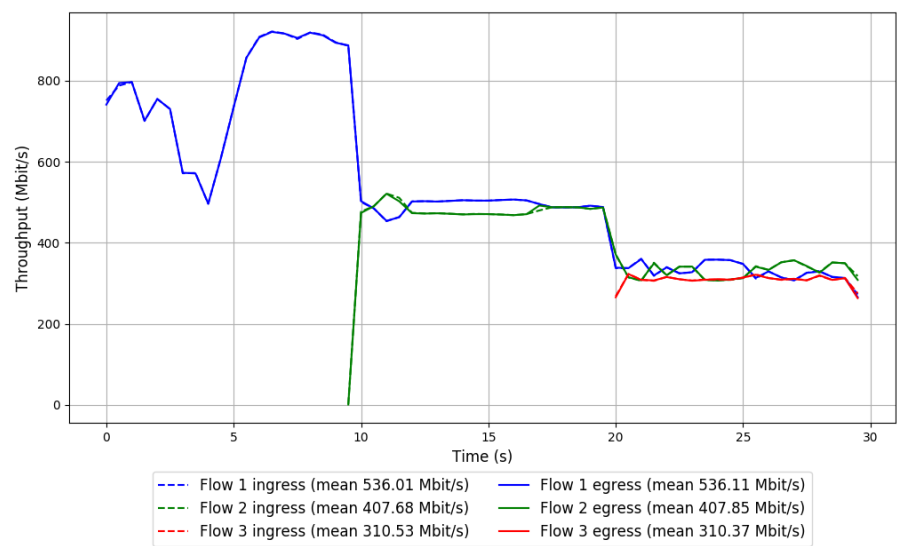
-- Flow 3:

Average throughput: 310.37 Mbit/s

95th percentile per-packet one-way delay: 5.587 ms

Loss rate: 0.24%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-11-30 19:55:05

End at: 2017-11-30 19:55:35

Local clock offset: 0.173 ms

Remote clock offset: 0.318 ms

# Below is generated by plot.py at 2017-12-01 01:00:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 914.31 Mbit/s

95th percentile per-packet one-way delay: 5.760 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 532.46 Mbit/s

95th percentile per-packet one-way delay: 10.162 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 415.40 Mbit/s

95th percentile per-packet one-way delay: 5.633 ms

Loss rate: 0.03%

-- Flow 3:

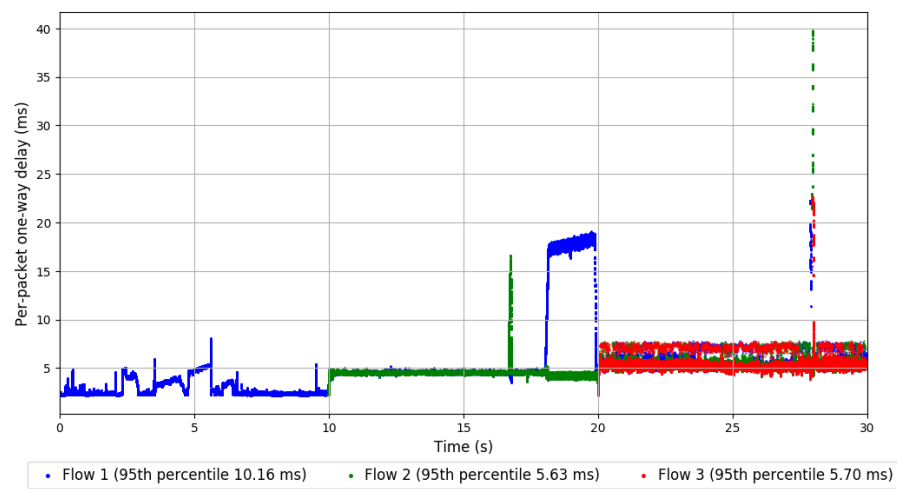
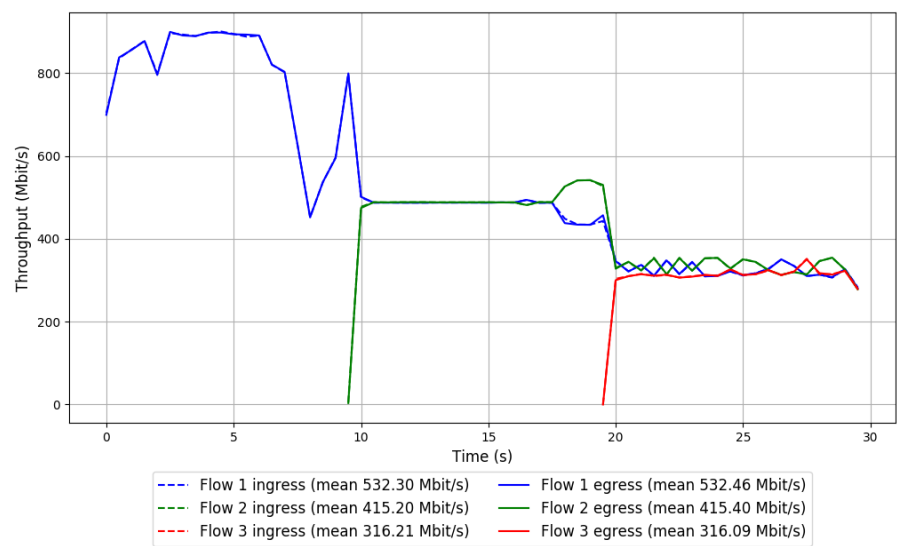
Average throughput: 316.09 Mbit/s

95th percentile per-packet one-way delay: 5.700 ms

Loss rate: 0.09%



Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-11-30 20:13:43

End at: 2017-11-30 20:14:13

Local clock offset: 0.173 ms

Remote clock offset: 0.249 ms

# Below is generated by plot.py at 2017-12-01 01:02:01

# Datalink statistics

-- Total of 3 flows:

Average throughput: 918.46 Mbit/s

95th percentile per-packet one-way delay: 7.819 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 546.69 Mbit/s

95th percentile per-packet one-way delay: 8.194 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 399.38 Mbit/s

95th percentile per-packet one-way delay: 5.758 ms

Loss rate: 0.08%

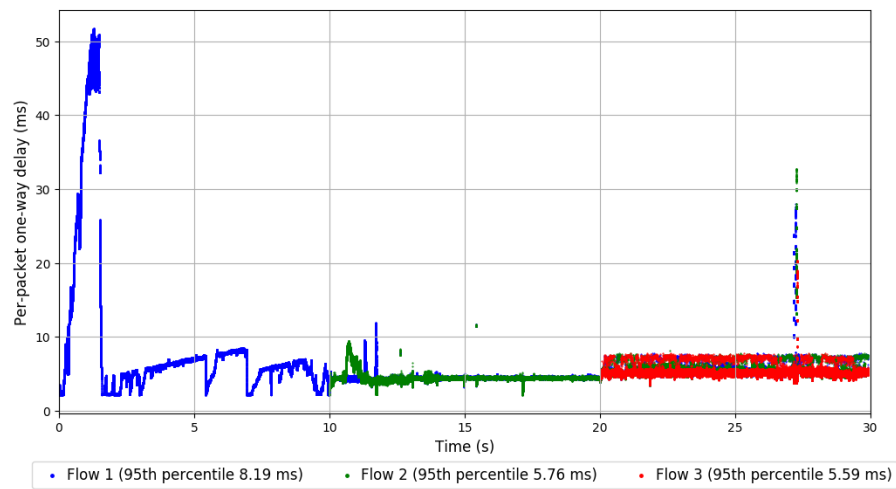
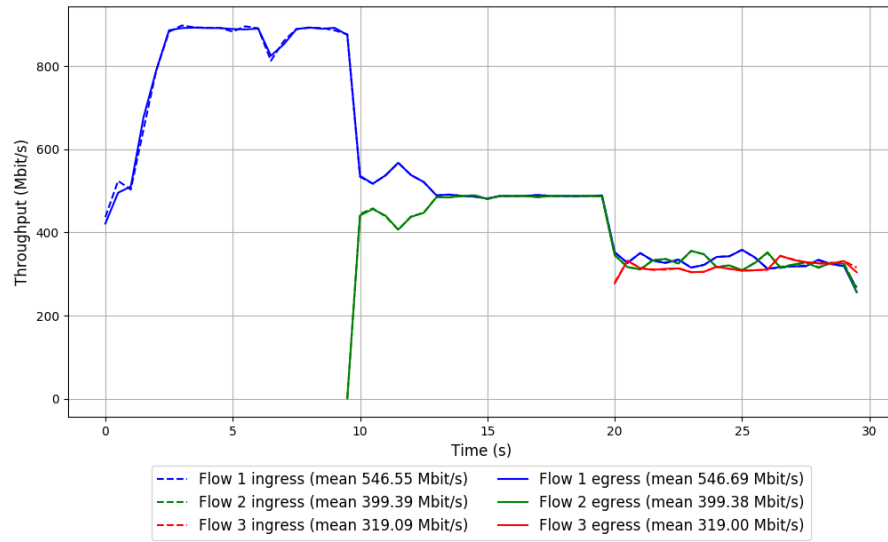
-- Flow 3:

Average throughput: 319.00 Mbit/s

95th percentile per-packet one-way delay: 5.590 ms

Loss rate: 0.24%

## Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-11-30 20:32:26

End at: 2017-11-30 20:32:56

Local clock offset: 0.394 ms

Remote clock offset: 0.166 ms

# Below is generated by plot.py at 2017-12-01 01:02:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 939.89 Mbit/s

95th percentile per-packet one-way delay: 8.212 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 561.08 Mbit/s

95th percentile per-packet one-way delay: 24.554 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 413.42 Mbit/s

95th percentile per-packet one-way delay: 5.744 ms

Loss rate: 0.03%

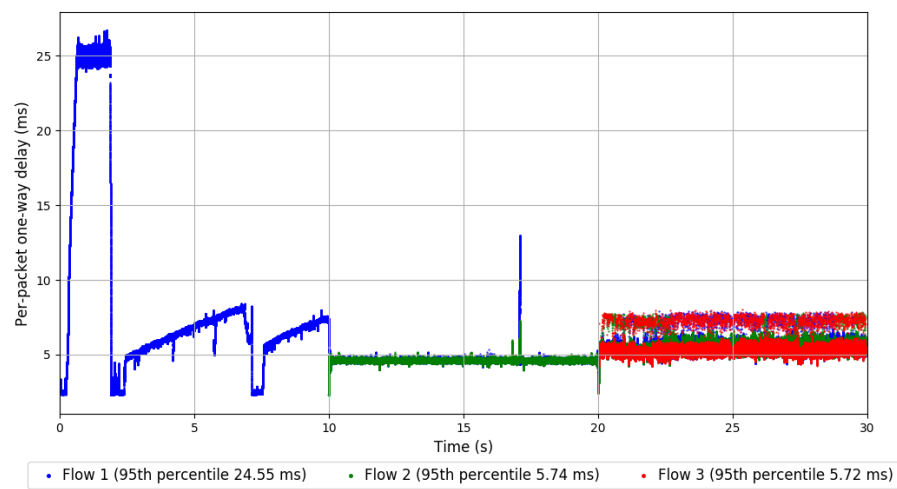
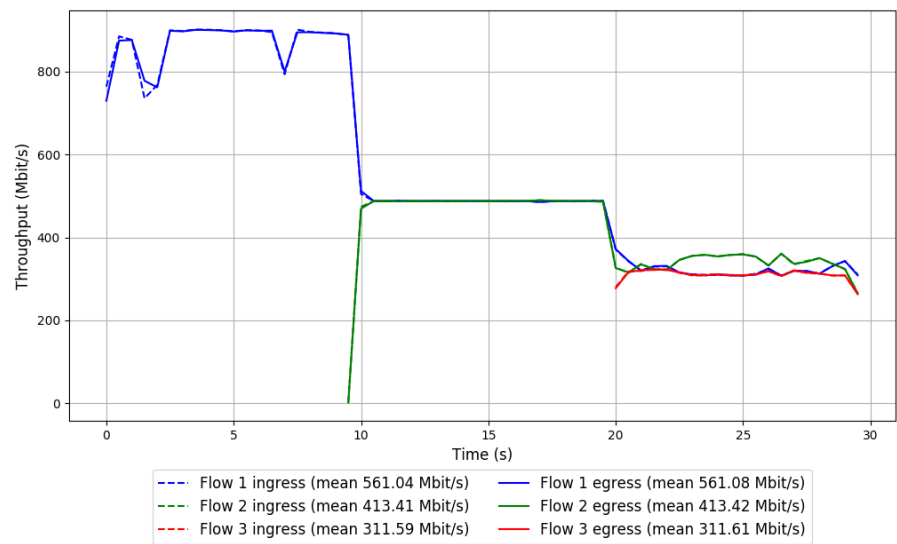
-- Flow 3:

Average throughput: 311.61 Mbit/s

95th percentile per-packet one-way delay: 5.717 ms

Loss rate: 0.07%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-11-30 20:51:17

End at: 2017-11-30 20:51:47

Local clock offset: 0.487 ms

Remote clock offset: 0.179 ms

# Below is generated by plot.py at 2017-12-01 01:02:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 941.58 Mbit/s

95th percentile per-packet one-way delay: 11.377 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 566.75 Mbit/s

95th percentile per-packet one-way delay: 11.701 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 407.89 Mbit/s

95th percentile per-packet one-way delay: 5.781 ms

Loss rate: 0.09%

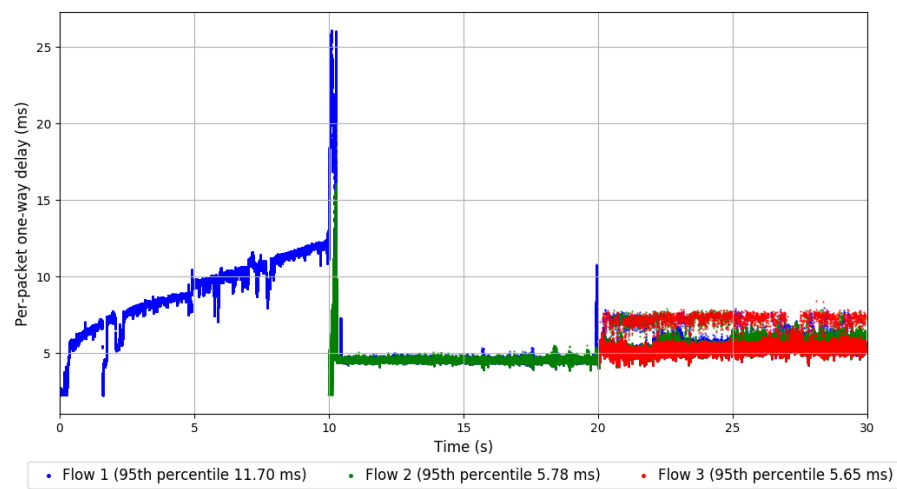
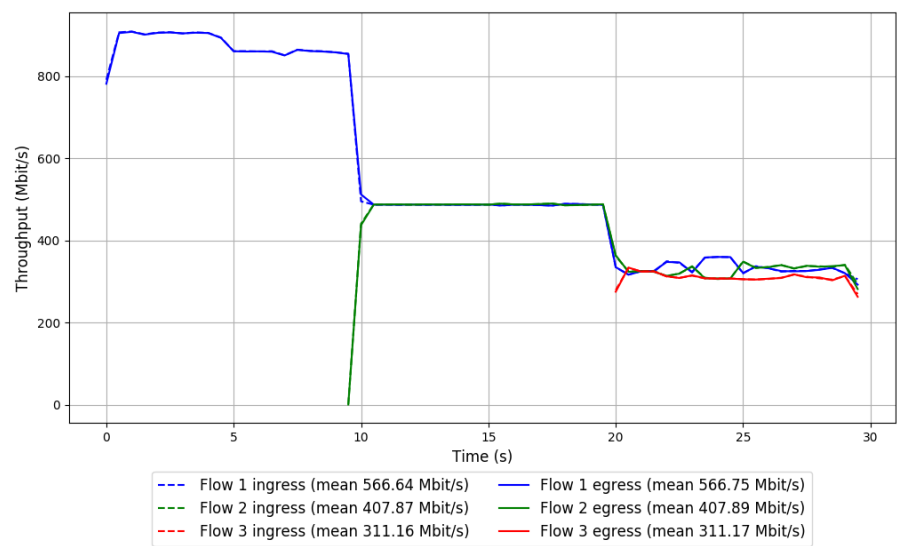
-- Flow 3:

Average throughput: 311.17 Mbit/s

95th percentile per-packet one-way delay: 5.653 ms

Loss rate: 0.16%

Run 10: Report of TCP Cubic — Data Link



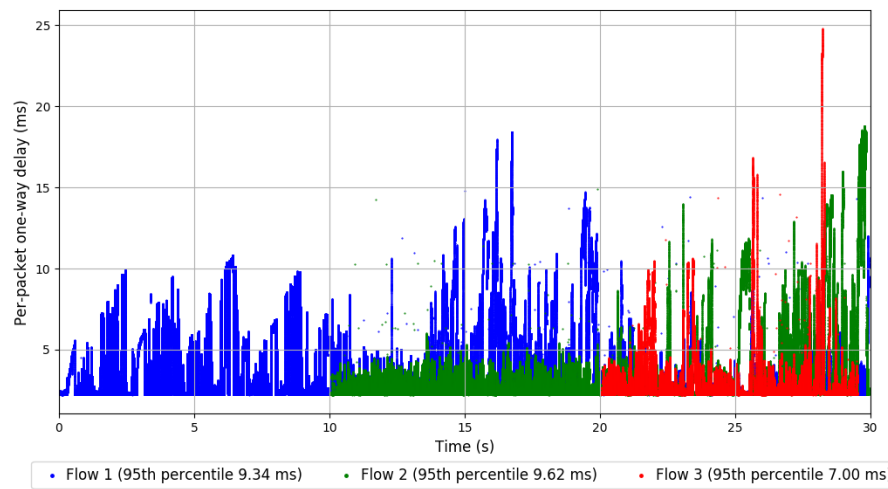
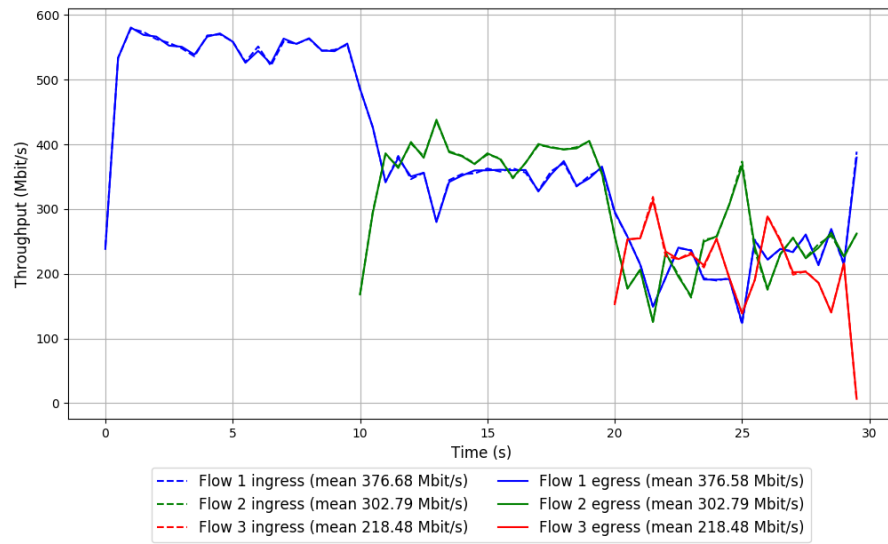
Run 1: Statistics of LEDBAT

Start at: 2017-11-30 17:56:51  
End at: 2017-11-30 17:57:21  
Local clock offset: -0.398 ms  
Remote clock offset: -0.292 ms

# Below is generated by plot.py at 2017-12-01 01:02:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 647.34 Mbit/s  
95th percentile per-packet one-way delay: 9.210 ms  
Loss rate: 0.03%  
-- Flow 1:  
Average throughput: 376.58 Mbit/s  
95th percentile per-packet one-way delay: 9.336 ms  
Loss rate: 0.04%  
-- Flow 2:  
Average throughput: 302.79 Mbit/s  
95th percentile per-packet one-way delay: 9.616 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 218.48 Mbit/s  
95th percentile per-packet one-way delay: 7.002 ms  
Loss rate: 0.00%



## Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-11-30 18:15:48

End at: 2017-11-30 18:16:18

Local clock offset: -0.327 ms

Remote clock offset: 0.174 ms

# Below is generated by plot.py at 2017-12-01 01:02:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 634.23 Mbit/s

95th percentile per-packet one-way delay: 9.537 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 377.13 Mbit/s

95th percentile per-packet one-way delay: 9.679 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 262.77 Mbit/s

95th percentile per-packet one-way delay: 10.662 ms

Loss rate: 0.03%

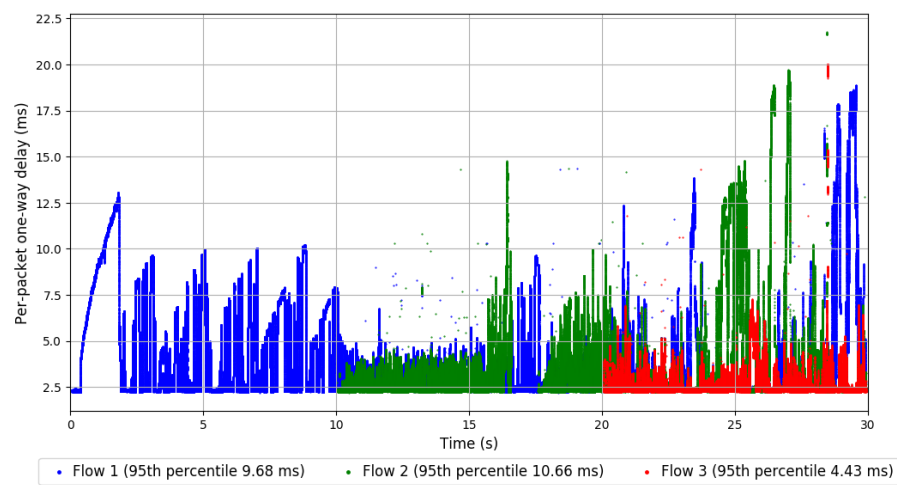
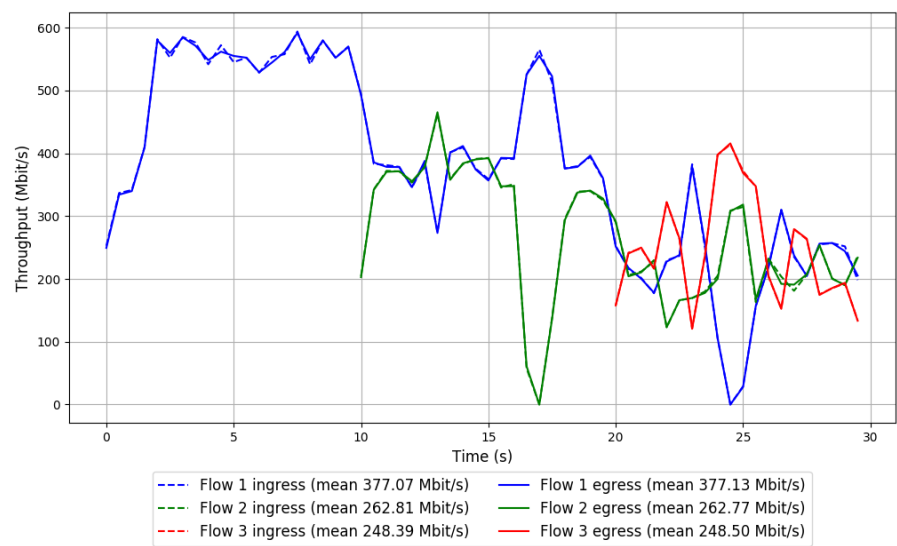
-- Flow 3:

Average throughput: 248.50 Mbit/s

95th percentile per-packet one-way delay: 4.433 ms

Loss rate: 0.02%

Run 2: Report of LEDBAT — Data Link

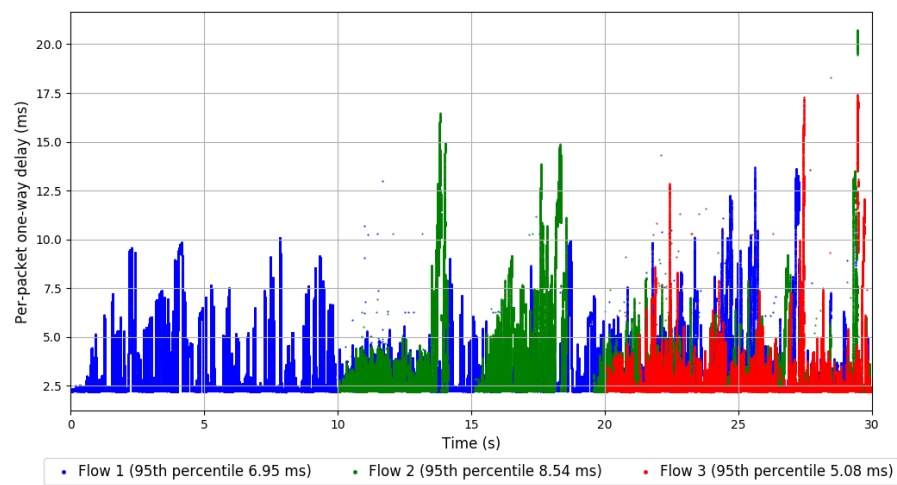
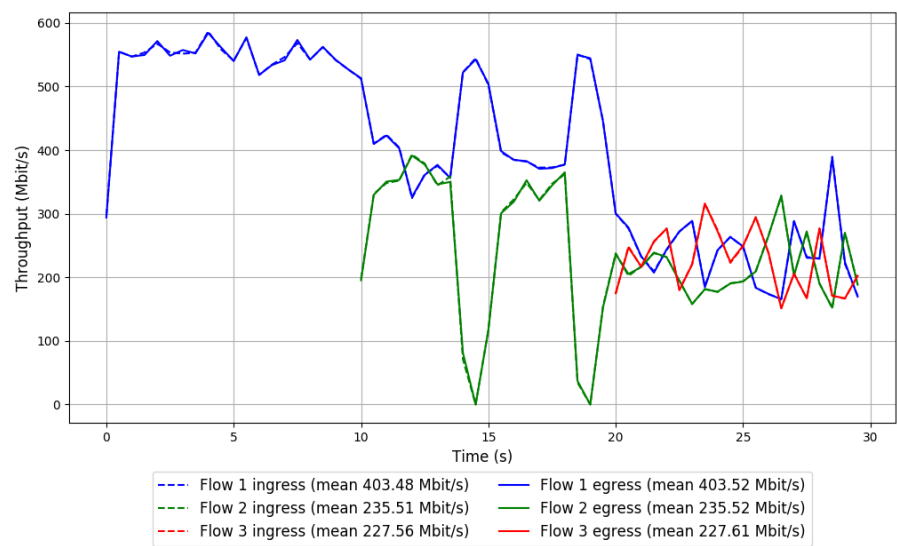


Run 3: Statistics of LEDBAT

Start at: 2017-11-30 18:34:30  
End at: 2017-11-30 18:35:00  
Local clock offset: -0.228 ms  
Remote clock offset: 0.501 ms

# Below is generated by plot.py at 2017-12-01 01:02:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 635.61 Mbit/s  
95th percentile per-packet one-way delay: 7.146 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 403.52 Mbit/s  
95th percentile per-packet one-way delay: 6.949 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 235.52 Mbit/s  
95th percentile per-packet one-way delay: 8.543 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 227.61 Mbit/s  
95th percentile per-packet one-way delay: 5.083 ms  
Loss rate: 0.02%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-11-30 18:53:18

End at: 2017-11-30 18:53:48

Local clock offset: -0.122 ms

Remote clock offset: 0.462 ms

# Below is generated by plot.py at 2017-12-01 01:02:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 663.60 Mbit/s

95th percentile per-packet one-way delay: 3.783 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 385.52 Mbit/s

95th percentile per-packet one-way delay: 3.661 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 301.80 Mbit/s

95th percentile per-packet one-way delay: 4.070 ms

Loss rate: 0.02%

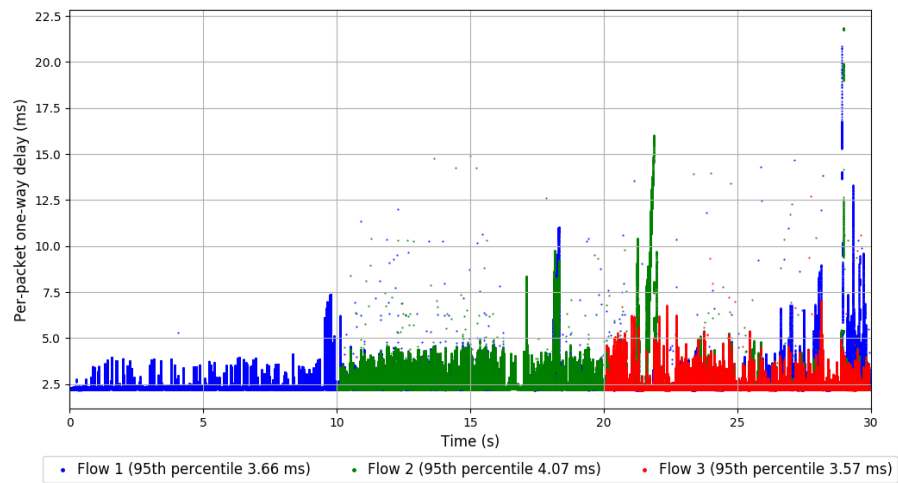
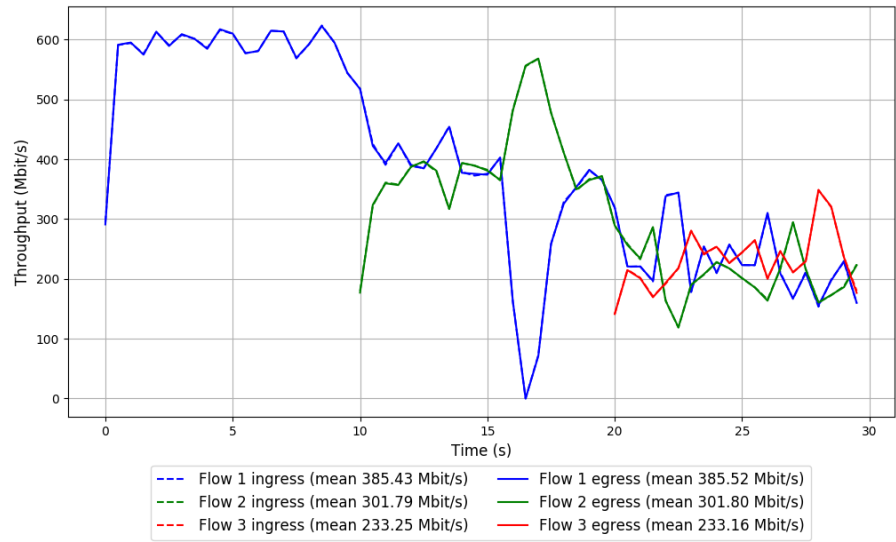
-- Flow 3:

Average throughput: 233.16 Mbit/s

95th percentile per-packet one-way delay: 3.566 ms

Loss rate: 0.10%

# Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-11-30 19:11:59

End at: 2017-11-30 19:12:29

Local clock offset: -0.004 ms

Remote clock offset: 0.333 ms

# Below is generated by plot.py at 2017-12-01 01:08:14

# Datalink statistics

-- Total of 3 flows:

Average throughput: 639.80 Mbit/s

95th percentile per-packet one-way delay: 9.538 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 379.02 Mbit/s

95th percentile per-packet one-way delay: 9.777 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 285.60 Mbit/s

95th percentile per-packet one-way delay: 4.209 ms

Loss rate: 0.03%

-- Flow 3:

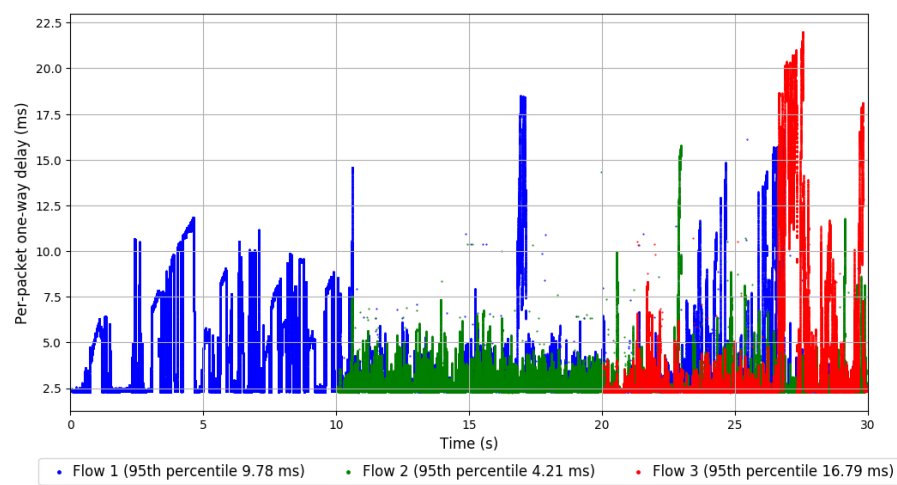
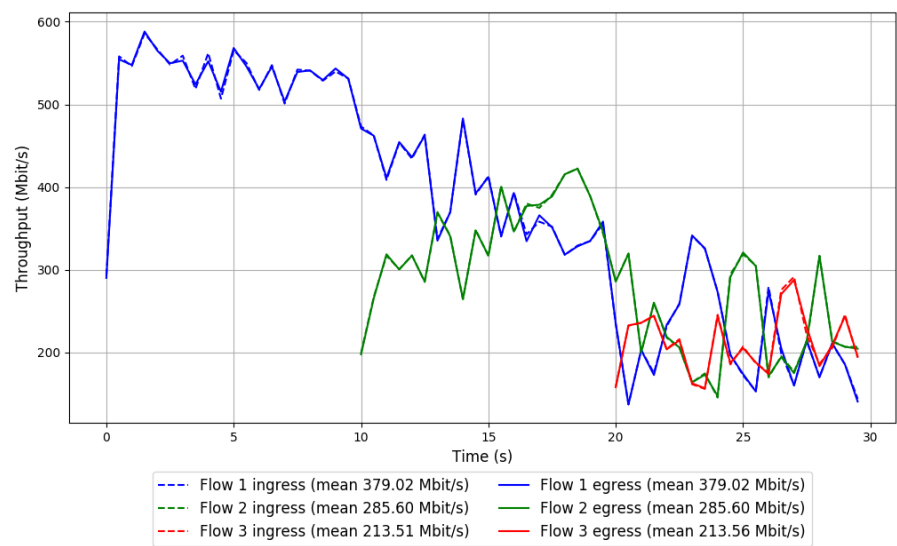
Average throughput: 213.56 Mbit/s

95th percentile per-packet one-way delay: 16.794 ms

Loss rate: 0.03%



Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-11-30 19:30:51

End at: 2017-11-30 19:31:21

Local clock offset: 0.069 ms

Remote clock offset: 0.408 ms

# Below is generated by plot.py at 2017-12-01 01:08:14

# Datalink statistics

-- Total of 3 flows:

Average throughput: 627.28 Mbit/s

95th percentile per-packet one-way delay: 17.260 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 354.62 Mbit/s

95th percentile per-packet one-way delay: 18.976 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 295.58 Mbit/s

95th percentile per-packet one-way delay: 4.424 ms

Loss rate: 0.05%

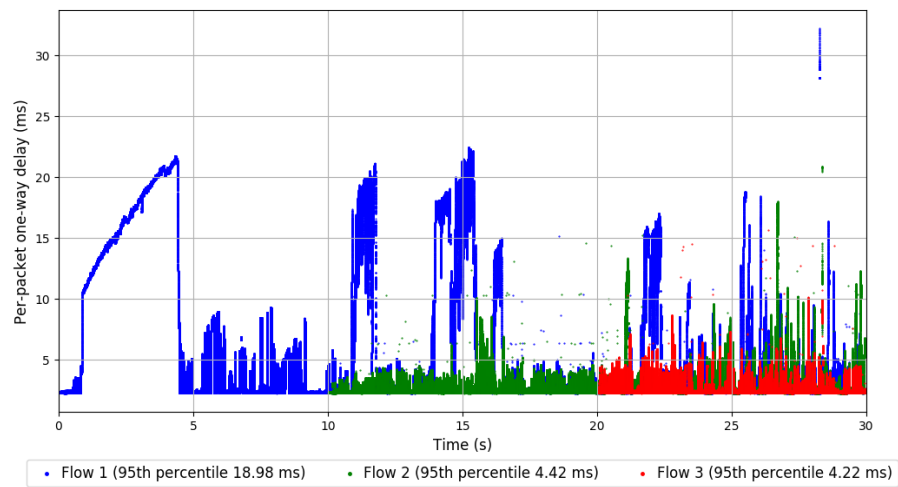
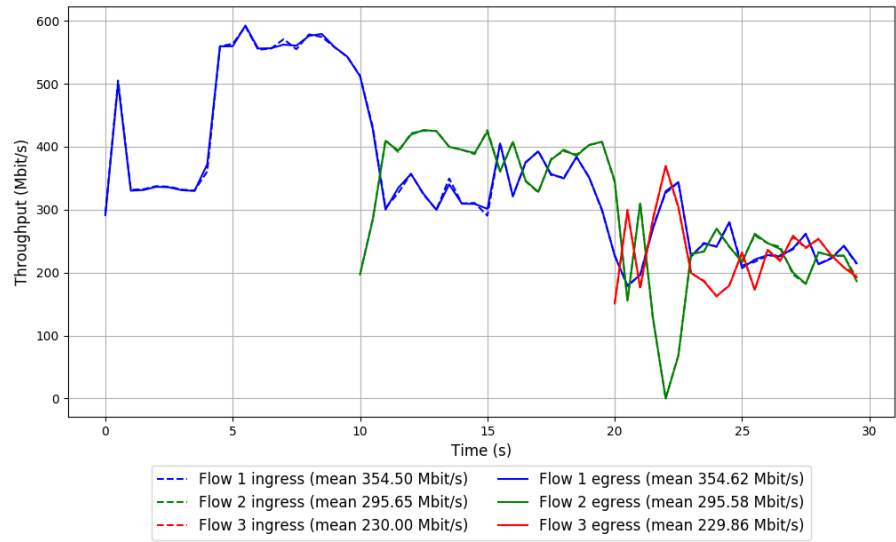
-- Flow 3:

Average throughput: 229.86 Mbit/s

95th percentile per-packet one-way delay: 4.216 ms

Loss rate: 0.10%

## Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-11-30 19:49:39

End at: 2017-11-30 19:50:09

Local clock offset: 0.177 ms

Remote clock offset: 0.339 ms

# Below is generated by plot.py at 2017-12-01 01:08:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 630.25 Mbit/s

95th percentile per-packet one-way delay: 9.038 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 357.73 Mbit/s

95th percentile per-packet one-way delay: 10.678 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 311.57 Mbit/s

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

Loss rate: 0.00%

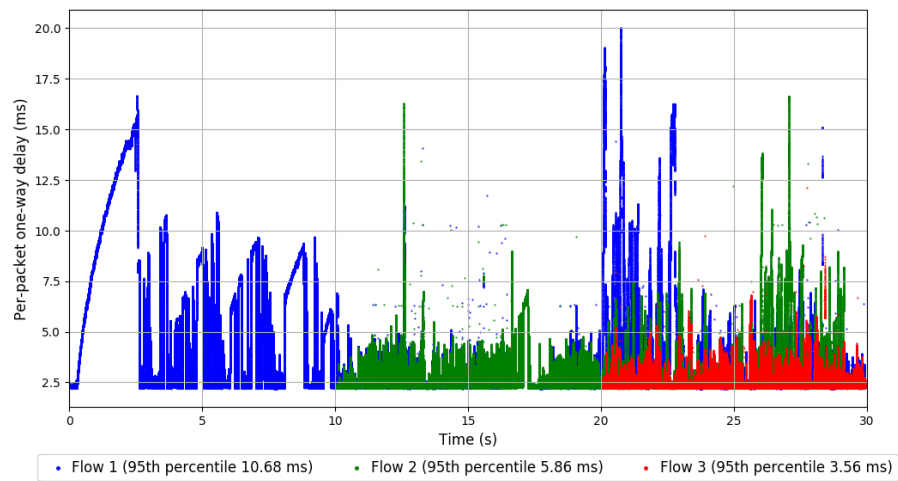
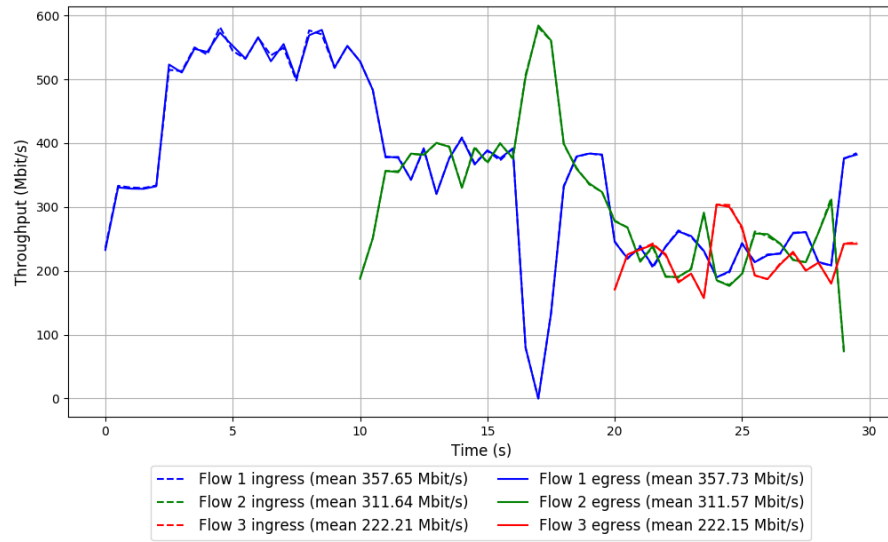
-- Flow 3:

Average throughput: 222.15 Mbit/s

95th percentile per-packet one-way delay: 3.559 ms

Loss rate: 0.08%

# Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-11-30 20:08:22

End at: 2017-11-30 20:08:52

Local clock offset: 0.259 ms

Remote clock offset: 0.223 ms

# Below is generated by plot.py at 2017-12-01 01:08:57

# Datalink statistics

-- Total of 3 flows:

Average throughput: 650.40 Mbit/s

95th percentile per-packet one-way delay: 6.128 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 386.81 Mbit/s

95th percentile per-packet one-way delay: 8.056 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 285.10 Mbit/s

95th percentile per-packet one-way delay: 4.462 ms

Loss rate: 0.01%

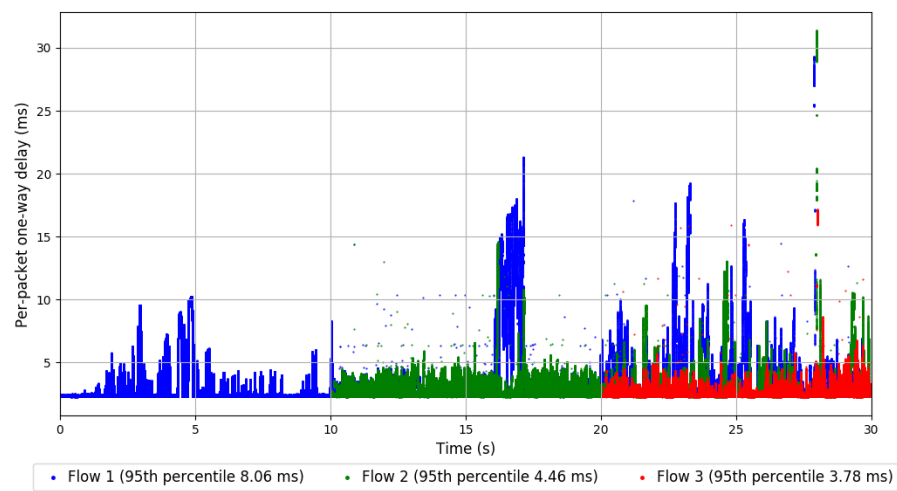
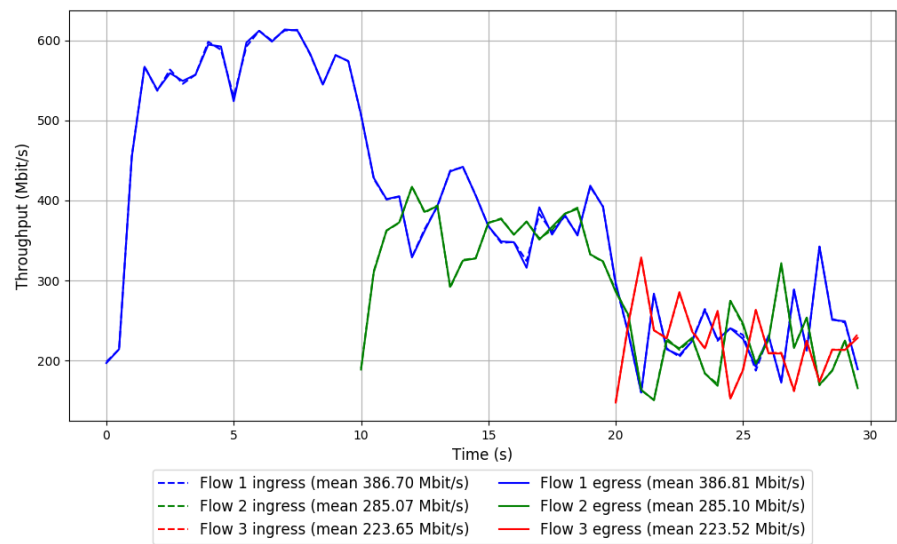
-- Flow 3:

Average throughput: 223.52 Mbit/s

95th percentile per-packet one-way delay: 3.776 ms

Loss rate: 0.12%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-11-30 20:26:59

End at: 2017-11-30 20:27:29

Local clock offset: 0.339 ms

Remote clock offset: 0.278 ms

# Below is generated by plot.py at 2017-12-01 01:09:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 646.19 Mbit/s

95th percentile per-packet one-way delay: 6.829 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 384.08 Mbit/s

95th percentile per-packet one-way delay: 5.724 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 283.01 Mbit/s

95th percentile per-packet one-way delay: 7.930 ms

Loss rate: 0.12%

-- Flow 3:

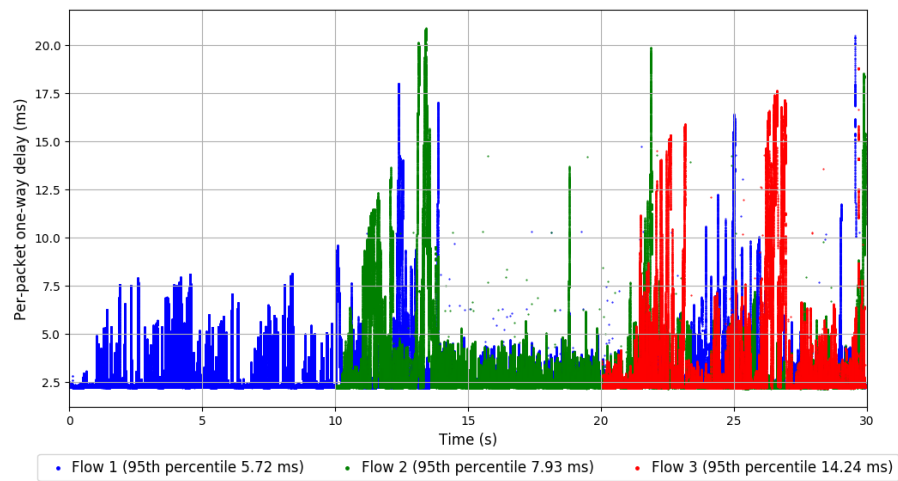
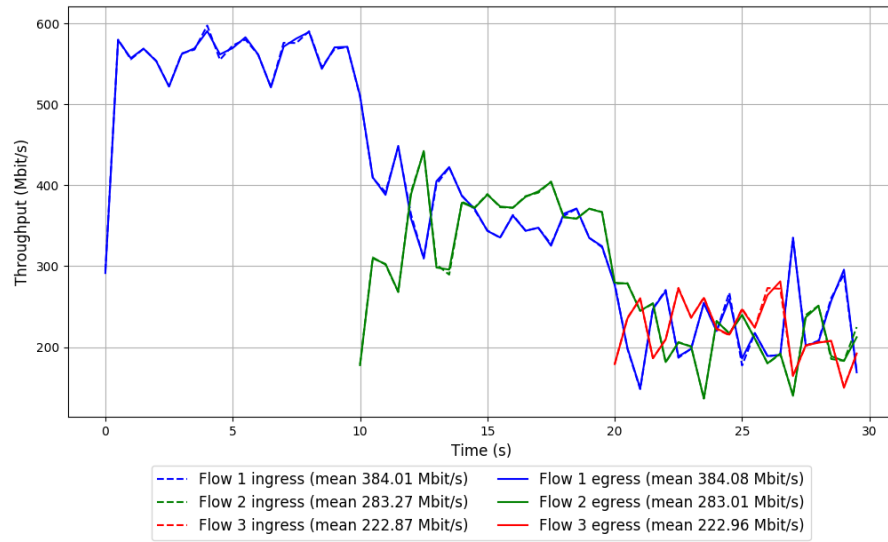
Average throughput: 222.96 Mbit/s

95th percentile per-packet one-way delay: 14.245 ms

Loss rate: 0.01%



## Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-11-30 20:45:49

End at: 2017-11-30 20:46:19

Local clock offset: 0.468 ms

Remote clock offset: 0.196 ms

# Below is generated by plot.py at 2017-12-01 01:11:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 650.30 Mbit/s

95th percentile per-packet one-way delay: 10.259 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 403.11 Mbit/s

95th percentile per-packet one-way delay: 9.842 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 252.62 Mbit/s

95th percentile per-packet one-way delay: 3.599 ms

Loss rate: 0.01%

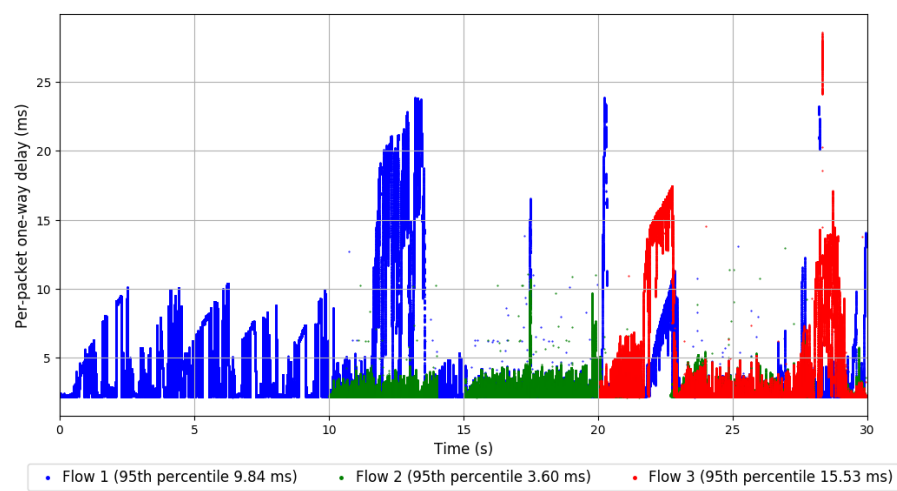
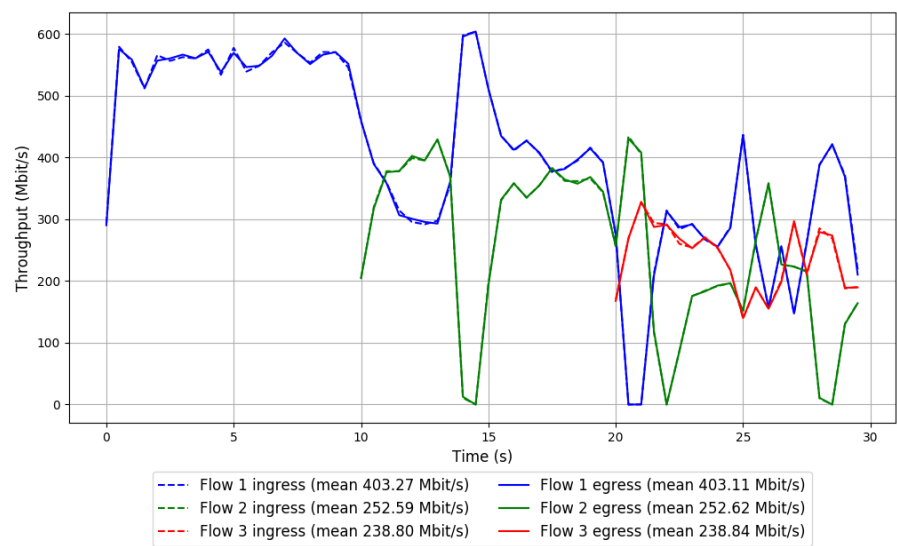
-- Flow 3:

Average throughput: 238.84 Mbit/s

95th percentile per-packet one-way delay: 15.530 ms

Loss rate: 0.02%

Run 10: Report of LEDBAT — Data Link

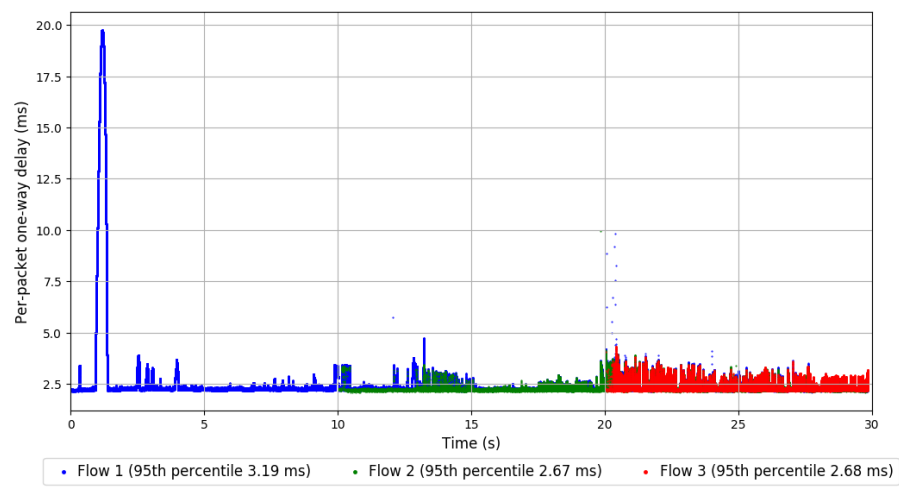
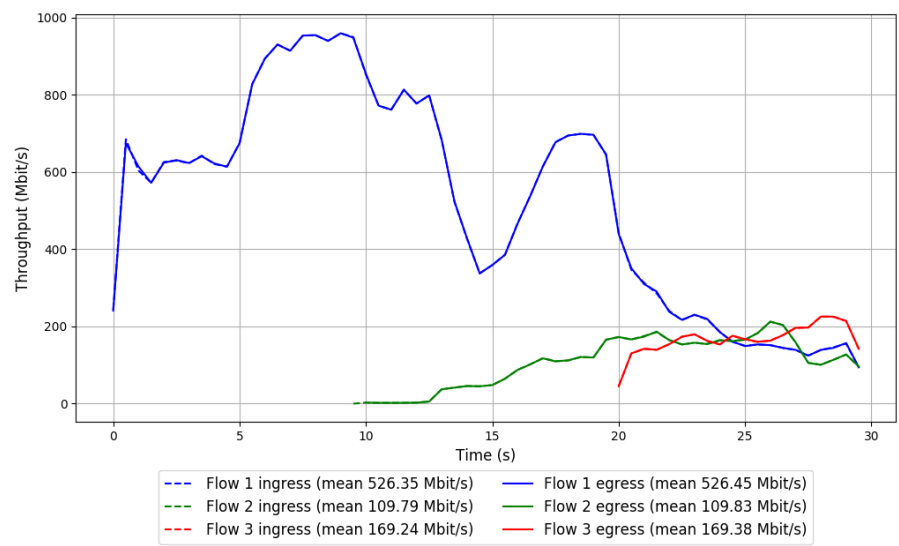


Run 1: Statistics of PCC

Start at: 2017-11-30 17:54:12  
End at: 2017-11-30 17:54:42  
Local clock offset: -0.469 ms  
Remote clock offset: -0.377 ms

# Below is generated by plot.py at 2017-12-01 01:12:06  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 655.16 Mbit/s  
95th percentile per-packet one-way delay: 3.086 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 526.45 Mbit/s  
95th percentile per-packet one-way delay: 3.194 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 109.83 Mbit/s  
95th percentile per-packet one-way delay: 2.675 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 169.38 Mbit/s  
95th percentile per-packet one-way delay: 2.678 ms  
Loss rate: 0.00%

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-11-30 18:13:06

End at: 2017-11-30 18:13:36

Local clock offset: -0.36 ms

Remote clock offset: 0.103 ms

# Below is generated by plot.py at 2017-12-01 01:13:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 735.72 Mbit/s

95th percentile per-packet one-way delay: 29.027 ms

Loss rate: 1.39%

-- Flow 1:

Average throughput: 590.24 Mbit/s

95th percentile per-packet one-way delay: 87.208 ms

Loss rate: 1.72%

-- Flow 2:

Average throughput: 199.73 Mbit/s

95th percentile per-packet one-way delay: 3.441 ms

Loss rate: 0.03%

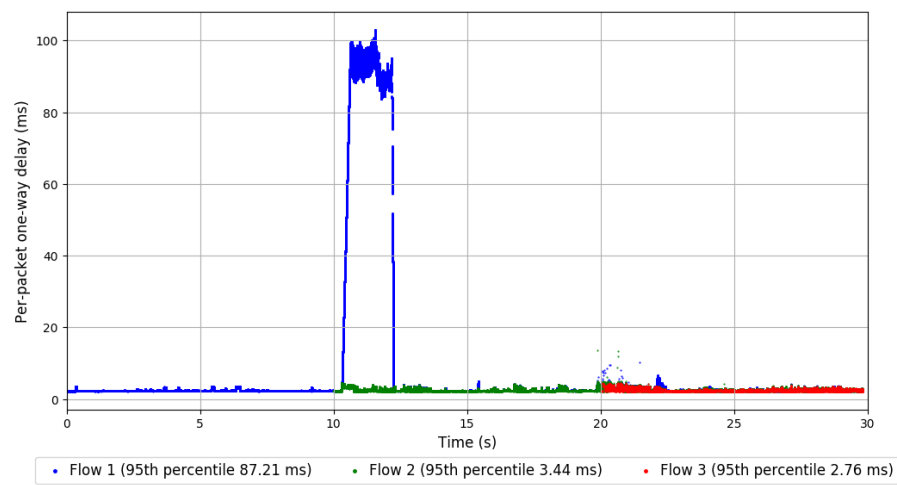
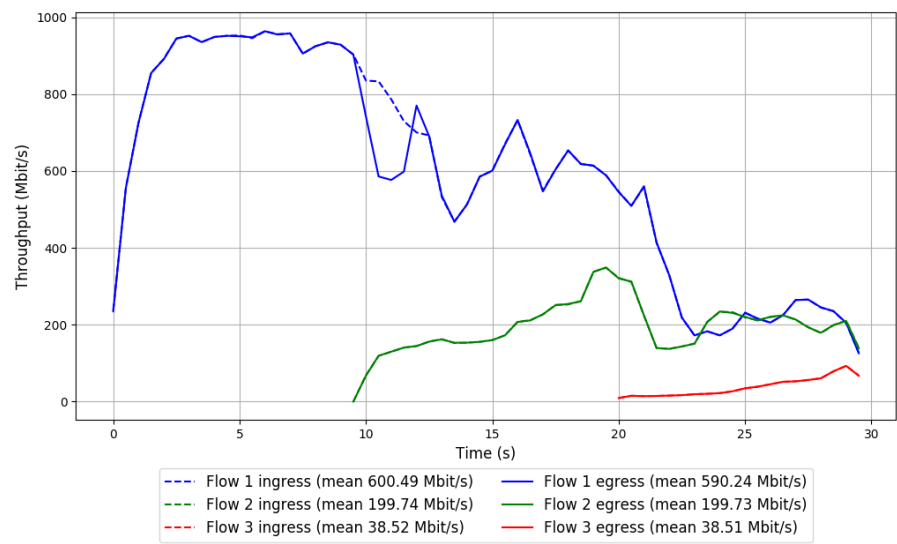
-- Flow 3:

Average throughput: 38.51 Mbit/s

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

Loss rate: 0.11%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-11-30 18:31:50

End at: 2017-11-30 18:32:20

Local clock offset: -0.224 ms

Remote clock offset: 0.519 ms

# Below is generated by plot.py at 2017-12-01 01:19:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 802.39 Mbit/s

95th percentile per-packet one-way delay: 9.175 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 609.44 Mbit/s

95th percentile per-packet one-way delay: 18.626 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 188.93 Mbit/s

95th percentile per-packet one-way delay: 3.921 ms

Loss rate: 0.02%

-- Flow 3:

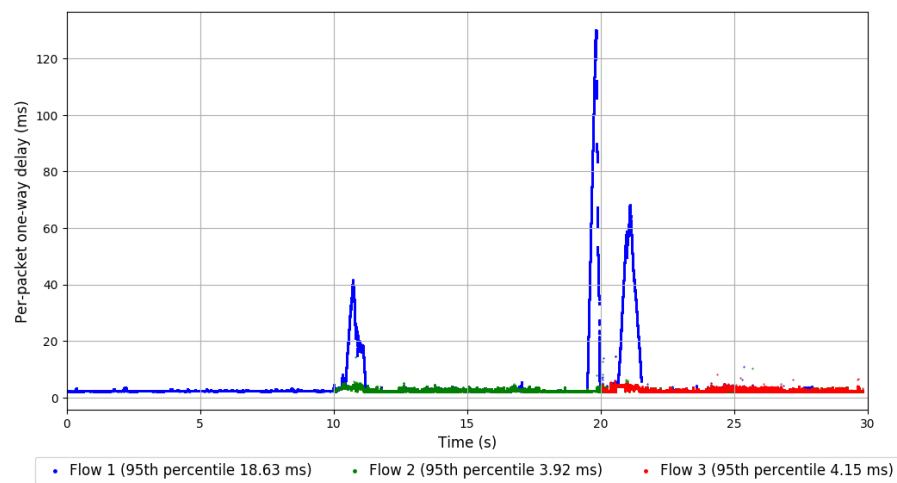
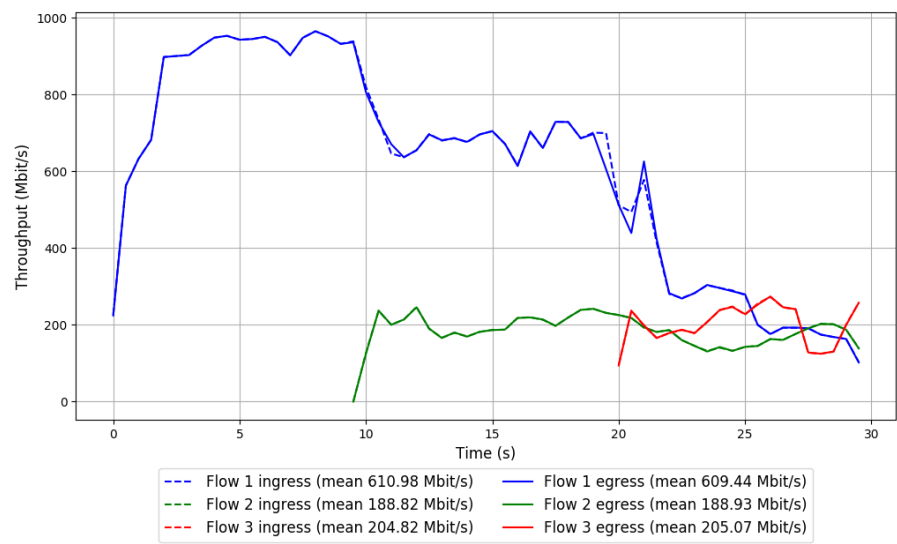
Average throughput: 205.07 Mbit/s

95th percentile per-packet one-way delay: 4.146 ms

Loss rate: 0.04%



Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-11-30 18:50:42

End at: 2017-11-30 18:51:12

Local clock offset: -0.104 ms

Remote clock offset: 0.495 ms

# Below is generated by plot.py at 2017-12-01 01:19:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 734.08 Mbit/s

95th percentile per-packet one-way delay: 17.977 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 637.88 Mbit/s

95th percentile per-packet one-way delay: 34.781 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 40.56 Mbit/s

95th percentile per-packet one-way delay: 2.766 ms

Loss rate: 0.10%

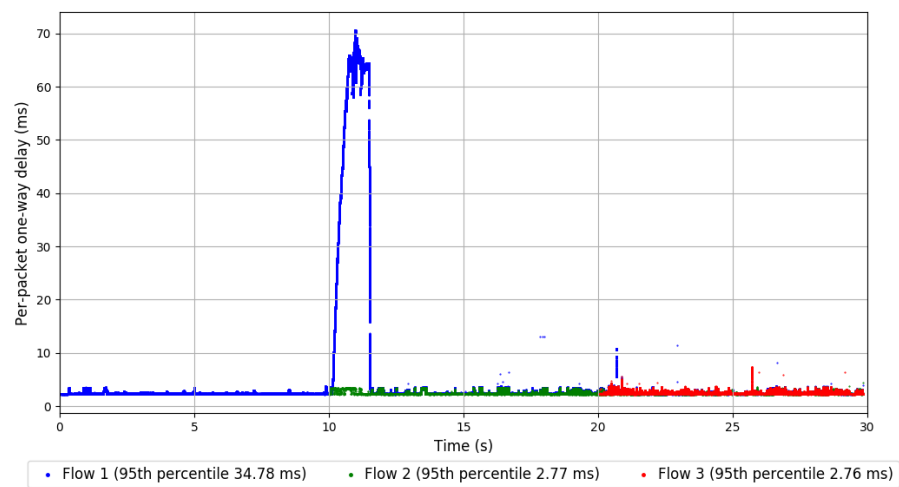
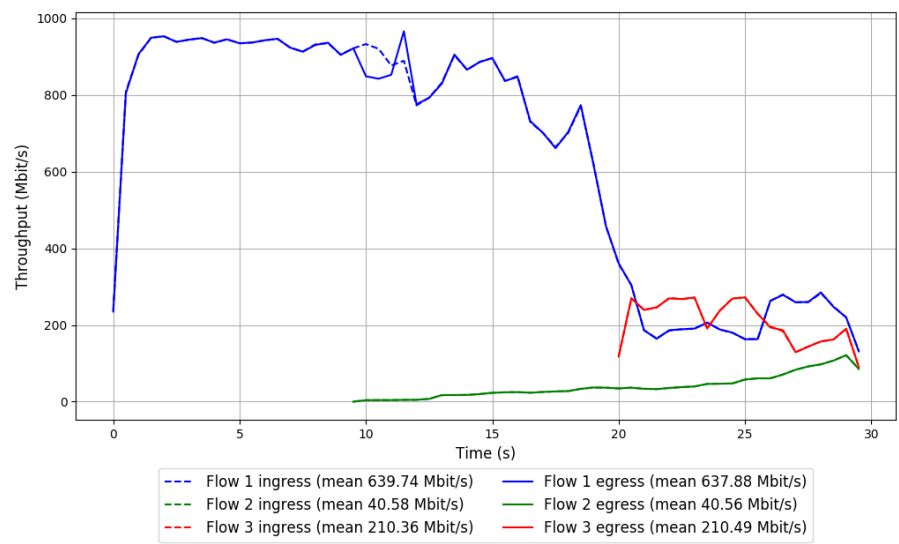
-- Flow 3:

Average throughput: 210.49 Mbit/s

95th percentile per-packet one-way delay: 2.759 ms

Loss rate: 0.03%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-11-30 19:09:18

End at: 2017-11-30 19:09:48

Local clock offset: -0.043 ms

Remote clock offset: 0.389 ms

# Below is generated by plot.py at 2017-12-01 01:19:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 702.81 Mbit/s

95th percentile per-packet one-way delay: 2.990 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 597.27 Mbit/s

95th percentile per-packet one-way delay: 3.032 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 155.81 Mbit/s

95th percentile per-packet one-way delay: 2.753 ms

Loss rate: 0.04%

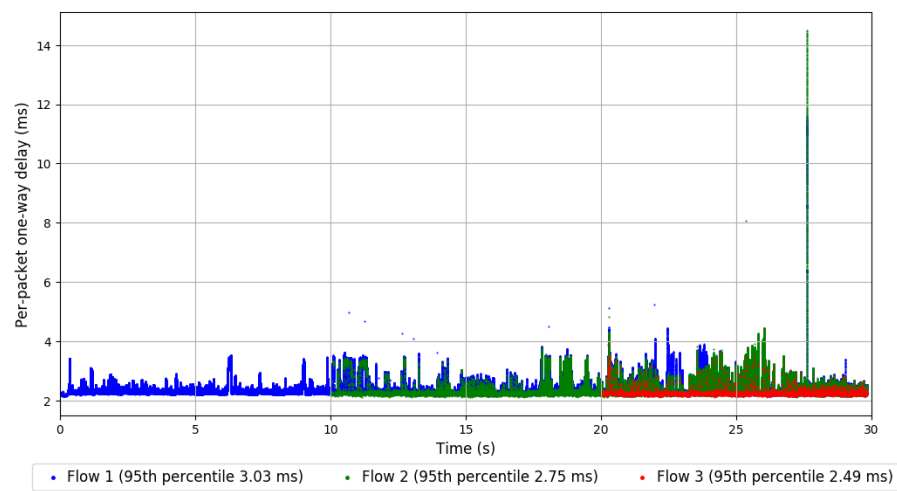
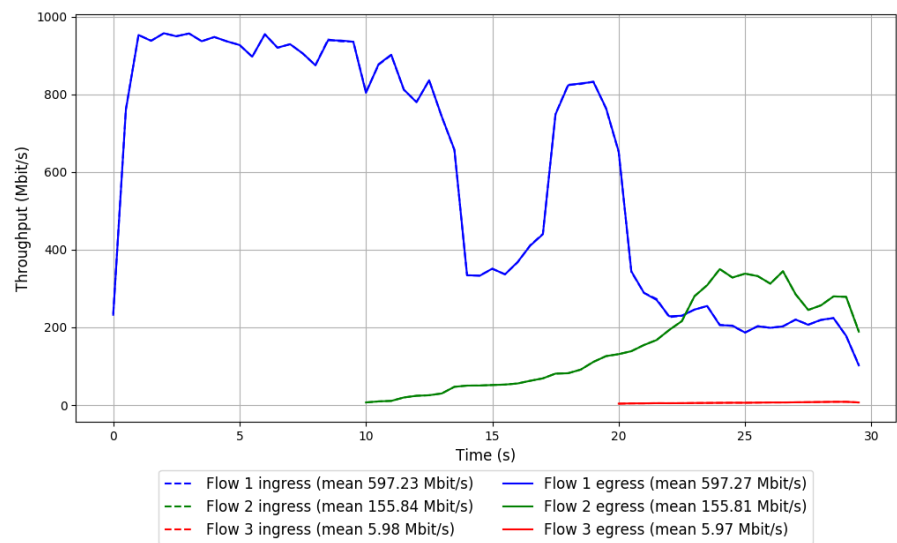
-- Flow 3:

Average throughput: 5.97 Mbit/s

95th percentile per-packet one-way delay: 2.491 ms

Loss rate: 0.08%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-11-30 19:28:10

End at: 2017-11-30 19:28:40

Local clock offset: 0.073 ms

Remote clock offset: 0.451 ms

# Below is generated by plot.py at 2017-12-01 01:19:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 731.89 Mbit/s

95th percentile per-packet one-way delay: 3.208 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 663.04 Mbit/s

95th percentile per-packet one-way delay: 3.185 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 26.73 Mbit/s

95th percentile per-packet one-way delay: 2.735 ms

Loss rate: 0.07%

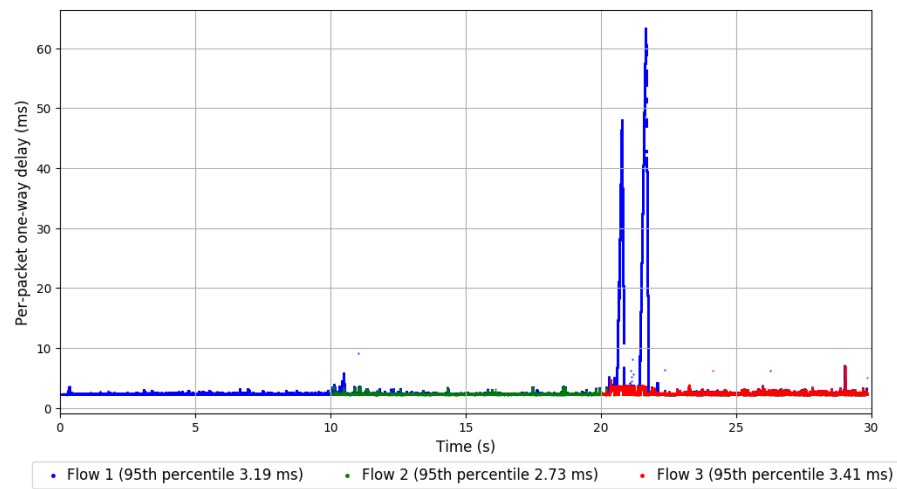
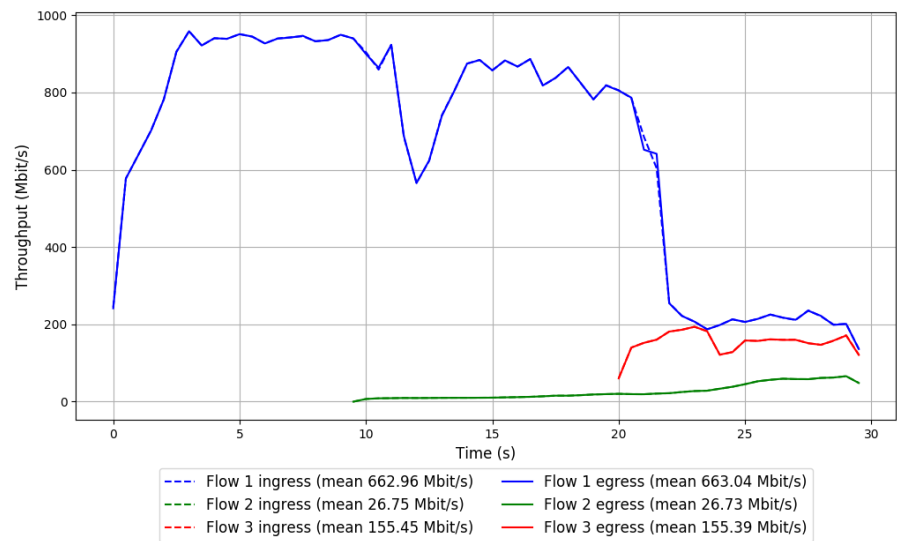
-- Flow 3:

Average throughput: 155.39 Mbit/s

95th percentile per-packet one-way delay: 3.406 ms

Loss rate: 0.08%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-11-30 19:46:58

End at: 2017-11-30 19:47:28

Local clock offset: 0.133 ms

Remote clock offset: 0.351 ms

# Below is generated by plot.py at 2017-12-01 01:21:13

# Datalink statistics

-- Total of 3 flows:

Average throughput: 756.86 Mbit/s

95th percentile per-packet one-way delay: 75.043 ms

Loss rate: 1.94%

-- Flow 1:

Average throughput: 643.96 Mbit/s

95th percentile per-packet one-way delay: 75.565 ms

Loss rate: 2.27%

-- Flow 2:

Average throughput: 153.93 Mbit/s

95th percentile per-packet one-way delay: 2.852 ms

Loss rate: 0.02%

-- Flow 3:

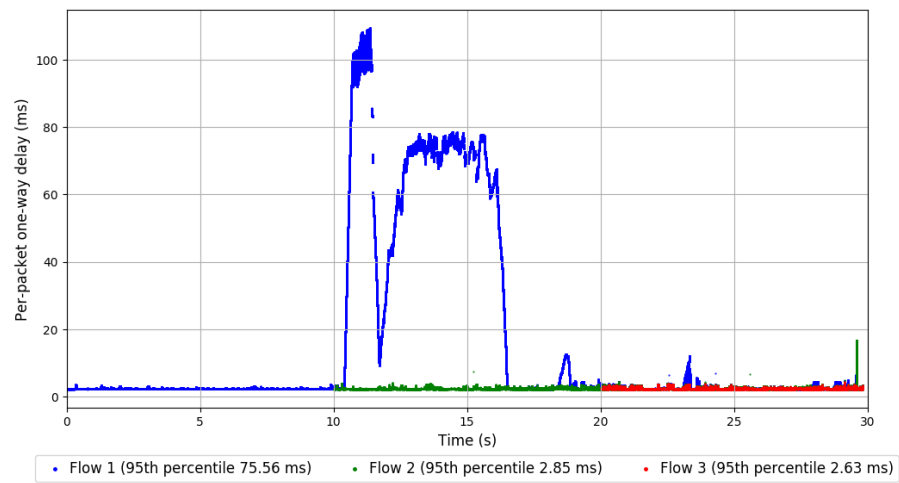
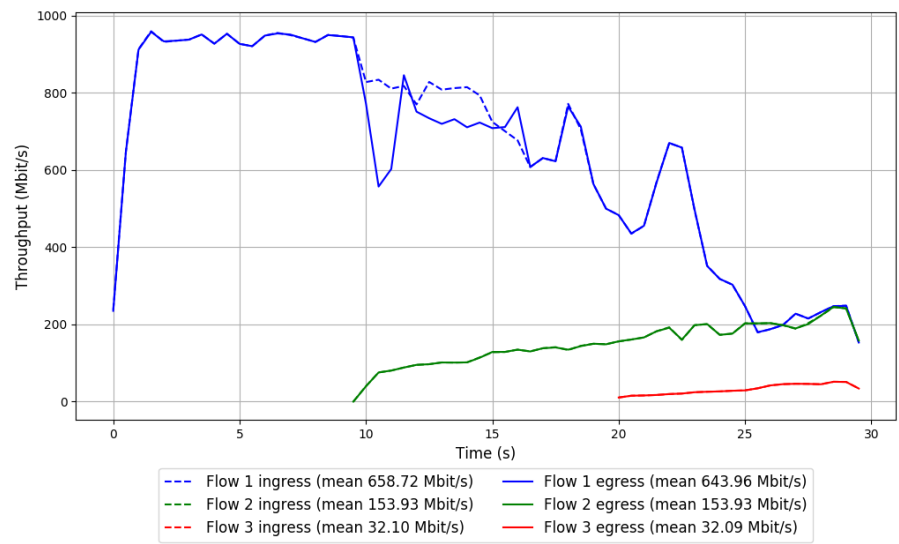
Average throughput: 32.09 Mbit/s

95th percentile per-packet one-way delay: 2.626 ms

Loss rate: 0.06%



Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-11-30 20:05:41

End at: 2017-11-30 20:06:11

Local clock offset: 0.219 ms

Remote clock offset: 0.29 ms

# Below is generated by plot.py at 2017-12-01 01:23:48

# Datalink statistics

-- Total of 3 flows:

Average throughput: 784.41 Mbit/s

95th percentile per-packet one-way delay: 4.383 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 500.85 Mbit/s

95th percentile per-packet one-way delay: 4.380 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 353.80 Mbit/s

95th percentile per-packet one-way delay: 4.404 ms

Loss rate: 0.01%

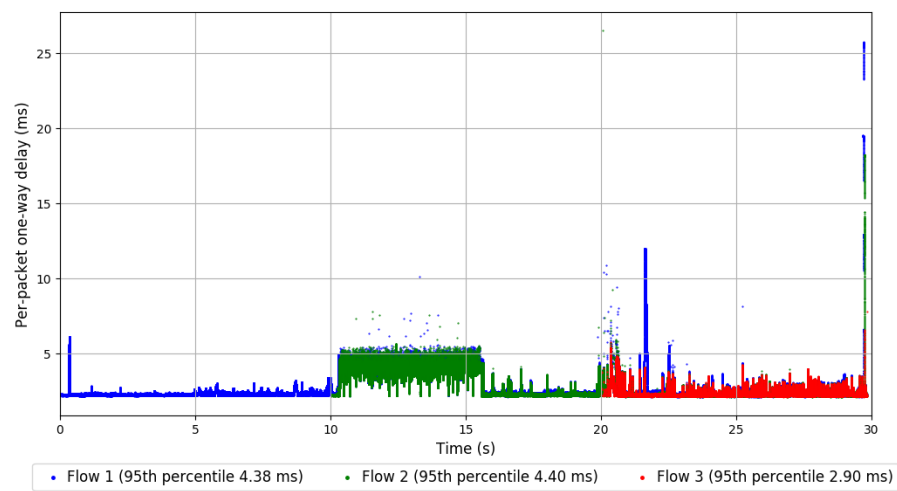
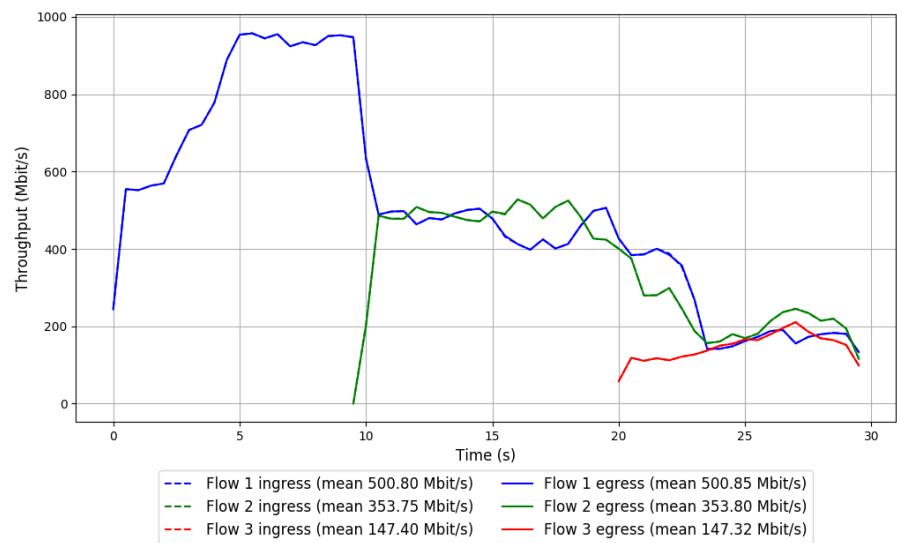
-- Flow 3:

Average throughput: 147.32 Mbit/s

95th percentile per-packet one-way delay: 2.902 ms

Loss rate: 0.04%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-11-30 20:24:18

End at: 2017-11-30 20:24:48

Local clock offset: 0.33 ms

Remote clock offset: 0.226 ms

# Below is generated by plot.py at 2017-12-01 01:23:48

# Datalink statistics

-- Total of 3 flows:

Average throughput: 738.12 Mbit/s

95th percentile per-packet one-way delay: 3.412 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 574.39 Mbit/s

95th percentile per-packet one-way delay: 3.406 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 232.65 Mbit/s

95th percentile per-packet one-way delay: 3.474 ms

Loss rate: 0.02%

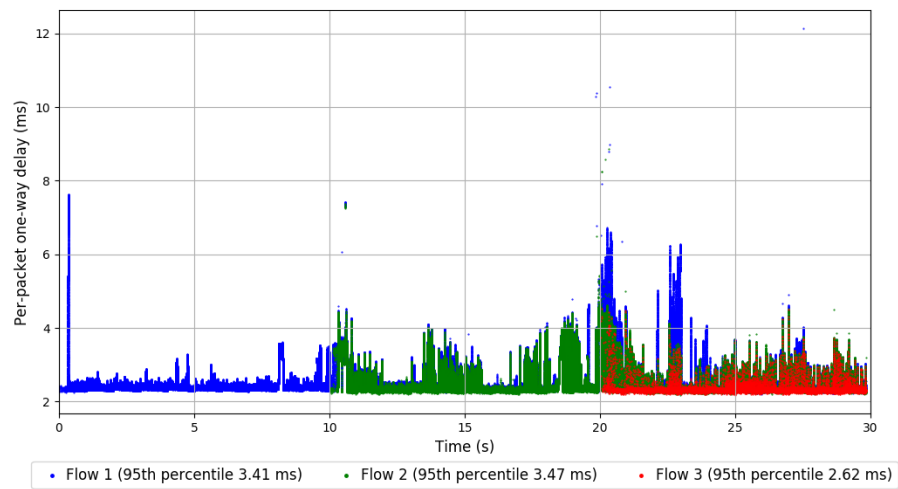
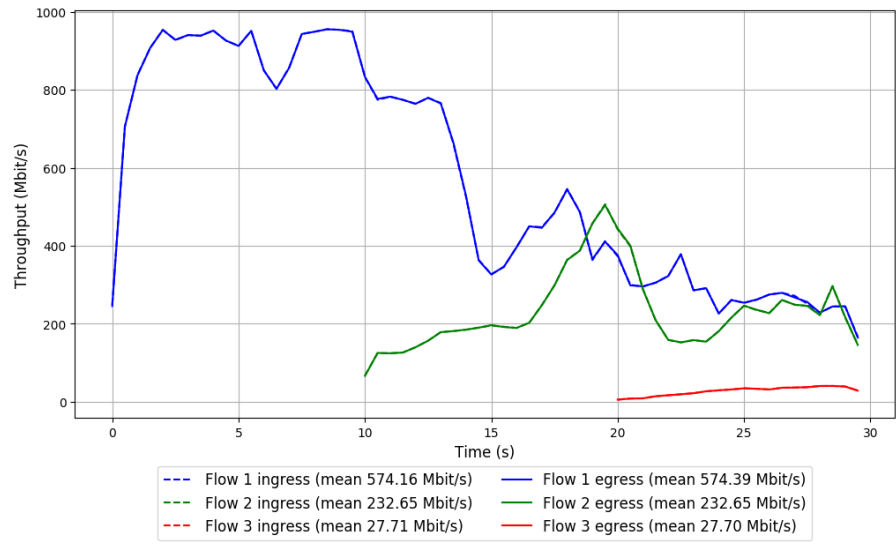
-- Flow 3:

Average throughput: 27.70 Mbit/s

95th percentile per-packet one-way delay: 2.622 ms

Loss rate: 0.08%

## Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-11-30 20:43:09

End at: 2017-11-30 20:43:39

Local clock offset: 0.386 ms

Remote clock offset: 0.183 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 686.04 Mbit/s

95th percentile per-packet one-way delay: 4.001 ms

Loss rate: 1.63%

-- Flow 1:

Average throughput: 531.75 Mbit/s

95th percentile per-packet one-way delay: 18.805 ms

Loss rate: 2.08%

-- Flow 2:

Average throughput: 137.50 Mbit/s

95th percentile per-packet one-way delay: 2.920 ms

Loss rate: 0.03%

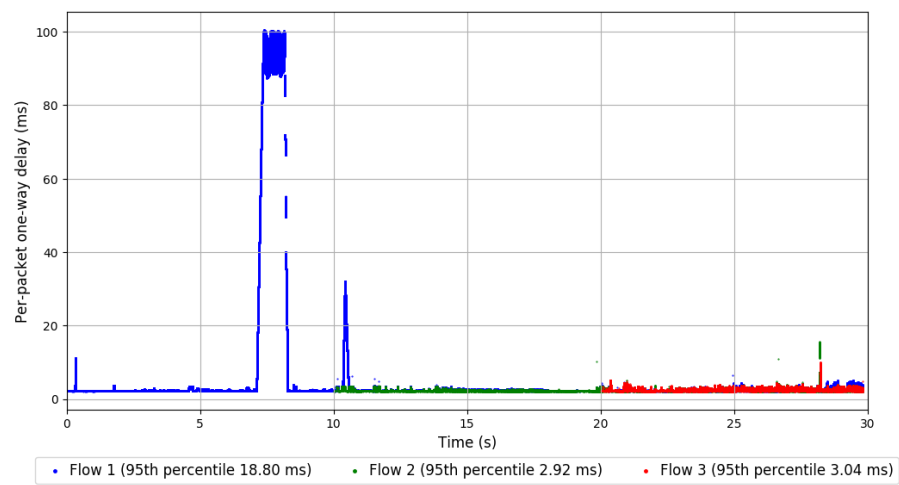
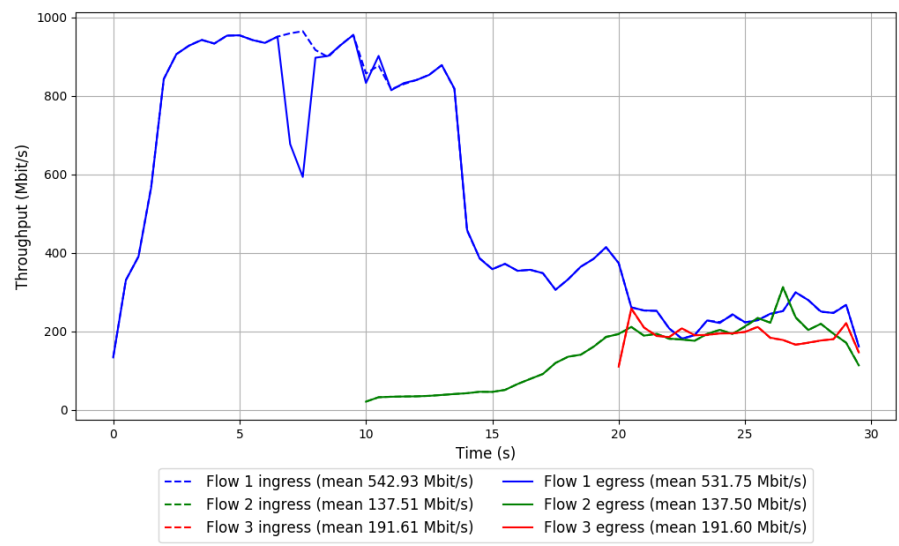
-- Flow 3:

Average throughput: 191.60 Mbit/s

95th percentile per-packet one-way delay: 3.044 ms

Loss rate: 0.03%

Run 10: Report of PCC — Data Link



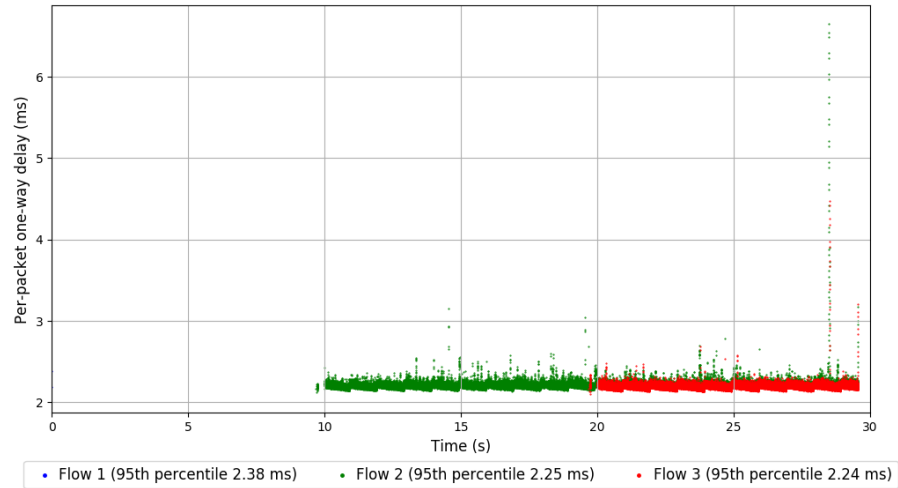
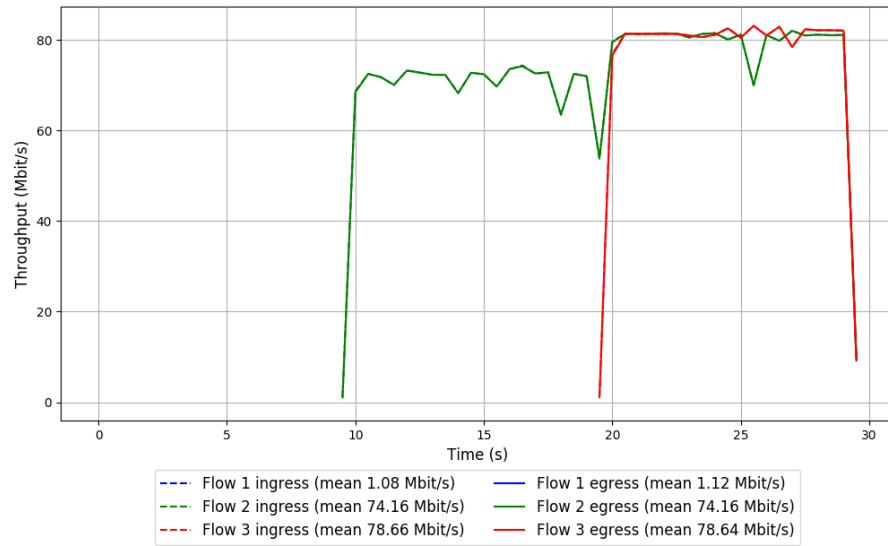
Run 1: Statistics of QUIC Cubic

Start at: 2017-11-30 17:52:01  
End at: 2017-11-30 17:52:31  
Local clock offset: -0.482 ms  
Remote clock offset: -0.411 ms

# Below is generated by plot.py at 2017-12-01 01:24:24  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 76.16 Mbit/s  
95th percentile per-packet one-way delay: 2.243 ms  
Loss rate: 0.03%  
-- Flow 1:  
Average throughput: 1.12 Mbit/s  
95th percentile per-packet one-way delay: 2.377 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 74.16 Mbit/s  
95th percentile per-packet one-way delay: 2.247 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 78.64 Mbit/s  
95th percentile per-packet one-way delay: 2.237 ms  
Loss rate: 0.05%



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



Run 2: Statistics of QUIC Cubic

Start at: 2017-11-30 18:10:55

End at: 2017-11-30 18:11:25

Local clock offset: -0.339 ms

Remote clock offset: 0.057 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 75.21 Mbit/s

95th percentile per-packet one-way delay: 2.329 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 0.88 Mbit/s

95th percentile per-packet one-way delay: 2.453 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 74.66 Mbit/s

95th percentile per-packet one-way delay: 2.326 ms

Loss rate: 0.03%

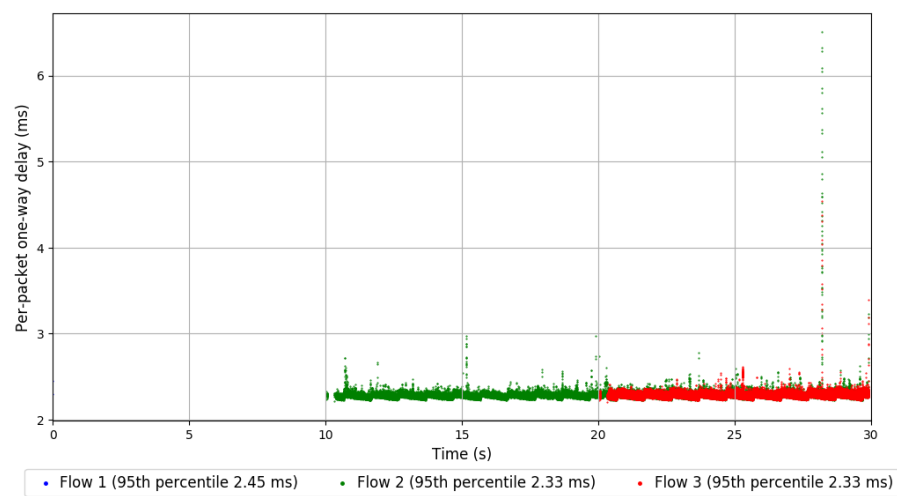
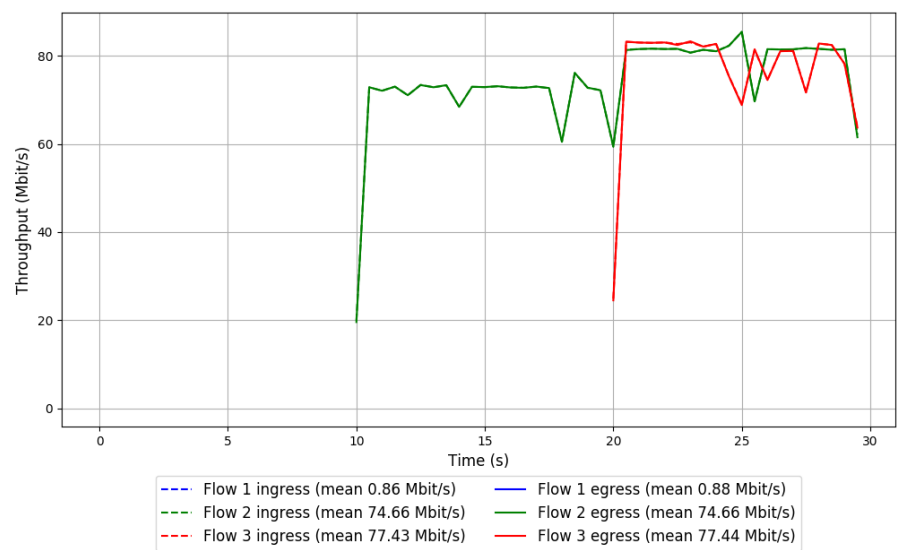
-- Flow 3:

Average throughput: 77.44 Mbit/s

95th percentile per-packet one-way delay: 2.332 ms

Loss rate: 0.05%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-11-30 18:29:38

End at: 2017-11-30 18:30:08

Local clock offset: -0.268 ms

Remote clock offset: 0.439 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 80.60 Mbit/s

95th percentile per-packet one-way delay: 2.337 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 1.14 Mbit/s

95th percentile per-packet one-way delay: 2.774 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 82.07 Mbit/s

95th percentile per-packet one-way delay: 2.337 ms

Loss rate: 0.03%

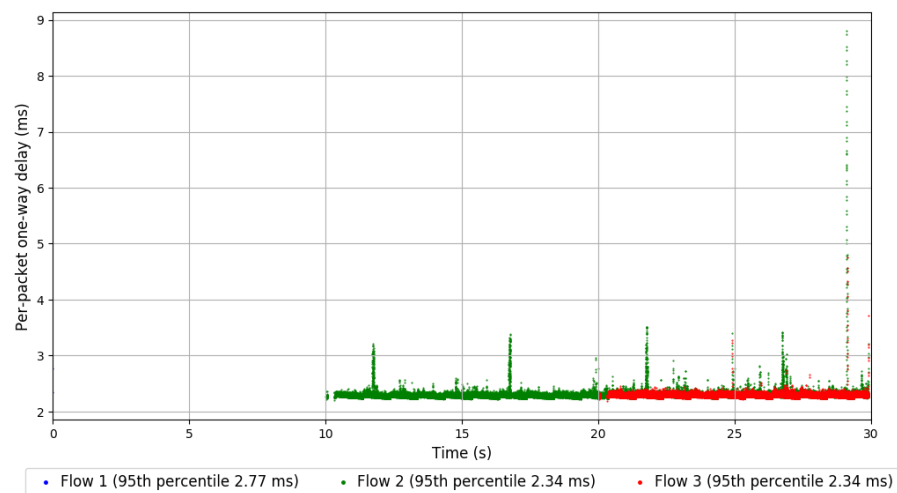
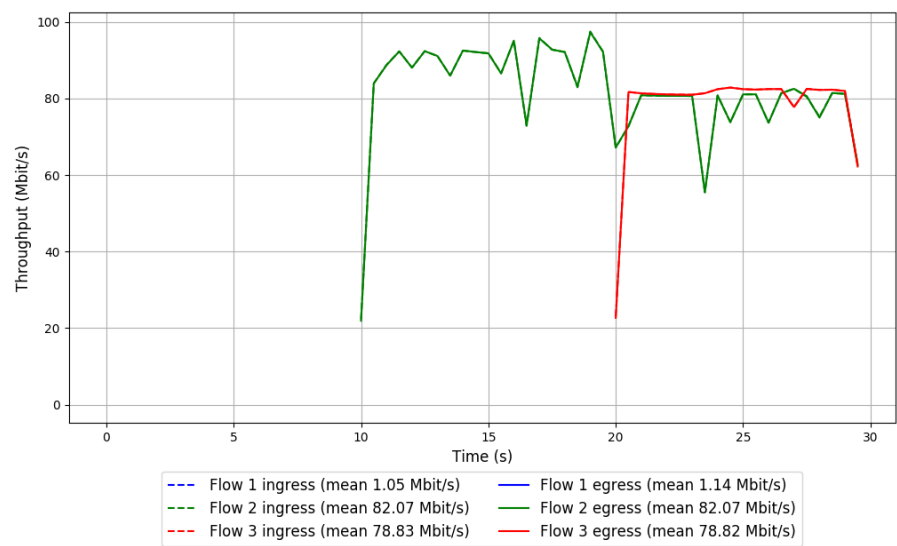
-- Flow 3:

Average throughput: 78.82 Mbit/s

95th percentile per-packet one-way delay: 2.337 ms

Loss rate: 0.04%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-11-30 18:48:30

End at: 2017-11-30 18:49:00

Local clock offset: -0.14 ms

Remote clock offset: 0.435 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 80.53 Mbit/s

95th percentile per-packet one-way delay: 2.348 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 2.379 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 81.76 Mbit/s

95th percentile per-packet one-way delay: 2.342 ms

Loss rate: 0.02%

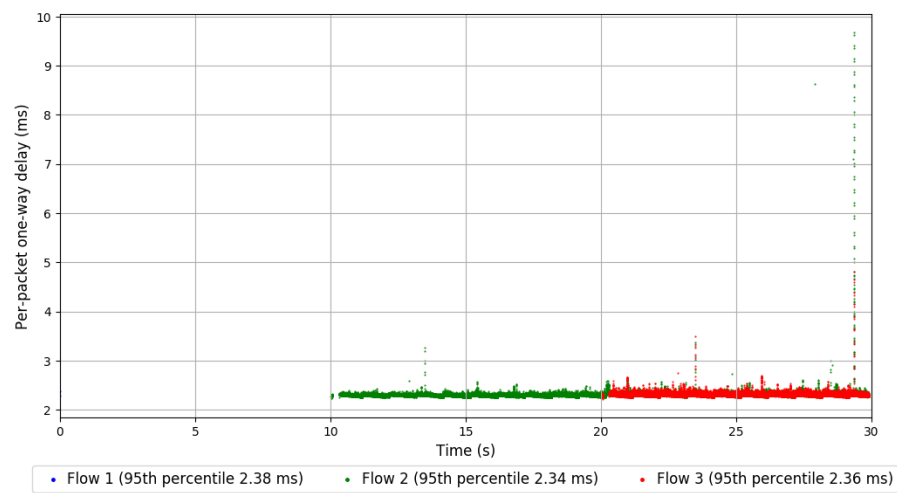
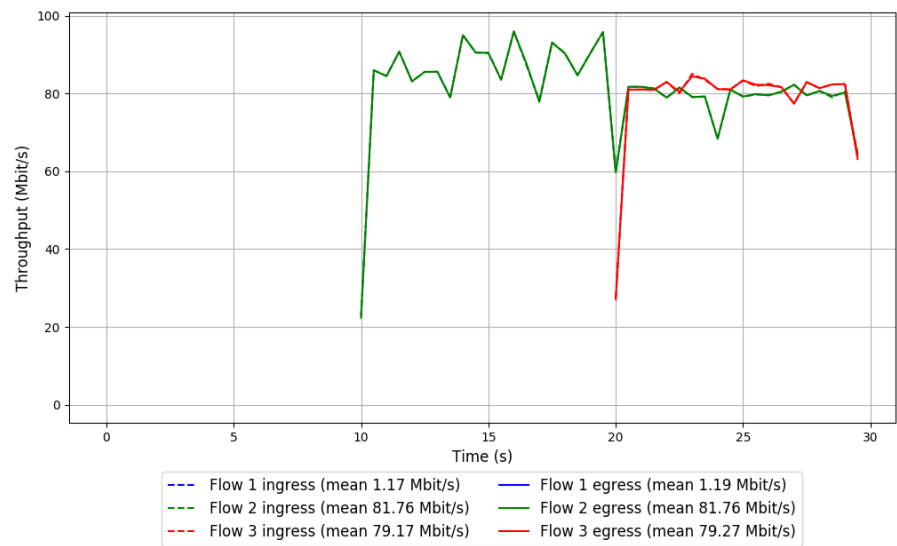
-- Flow 3:

Average throughput: 79.27 Mbit/s

95th percentile per-packet one-way delay: 2.356 ms

Loss rate: 0.04%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-11-30 19:07:07

End at: 2017-11-30 19:07:37

Local clock offset: -0.112 ms

Remote clock offset: 0.319 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 82.43 Mbit/s

95th percentile per-packet one-way delay: 2.278 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 1.17 Mbit/s

95th percentile per-packet one-way delay: 2.368 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 84.92 Mbit/s

95th percentile per-packet one-way delay: 2.275 ms

Loss rate: 0.02%

-- Flow 3:

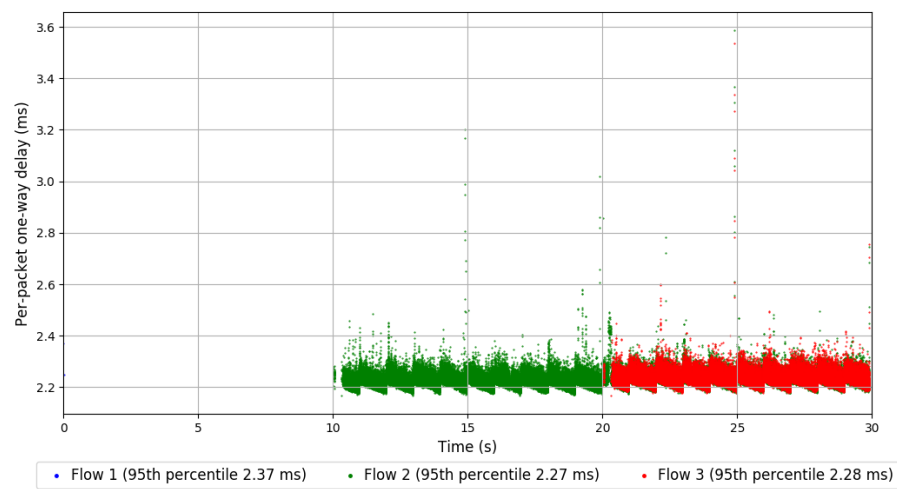
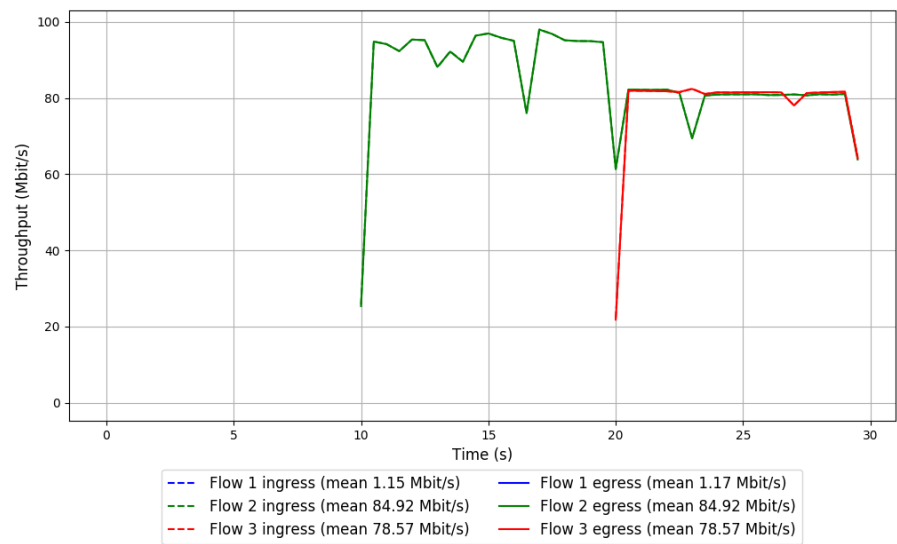
Average throughput: 78.57 Mbit/s

95th percentile per-packet one-way delay: 2.282 ms

Loss rate: 0.05%



Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-11-30 19:25:59

End at: 2017-11-30 19:26:29

Local clock offset: 0.042 ms

Remote clock offset: 0.545 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 75.90 Mbit/s

95th percentile per-packet one-way delay: 2.269 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 1.13 Mbit/s

95th percentile per-packet one-way delay: 2.448 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 75.02 Mbit/s

95th percentile per-packet one-way delay: 2.262 ms

Loss rate: 0.03%

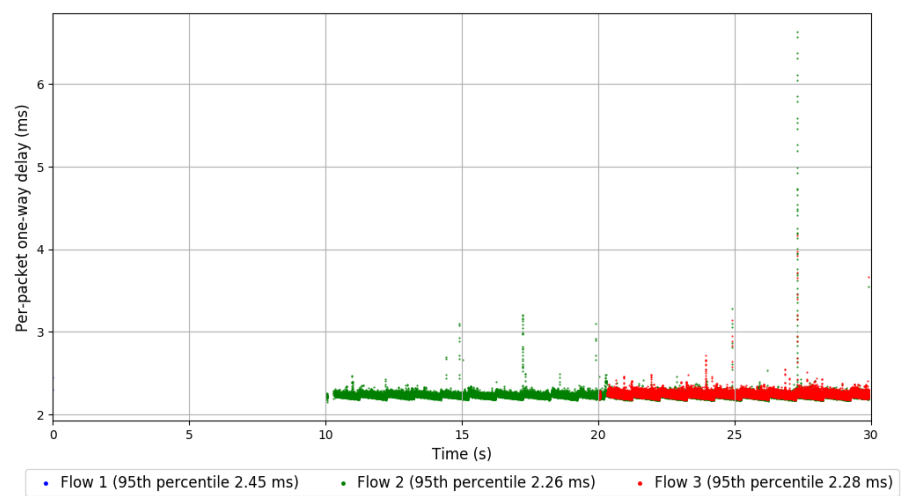
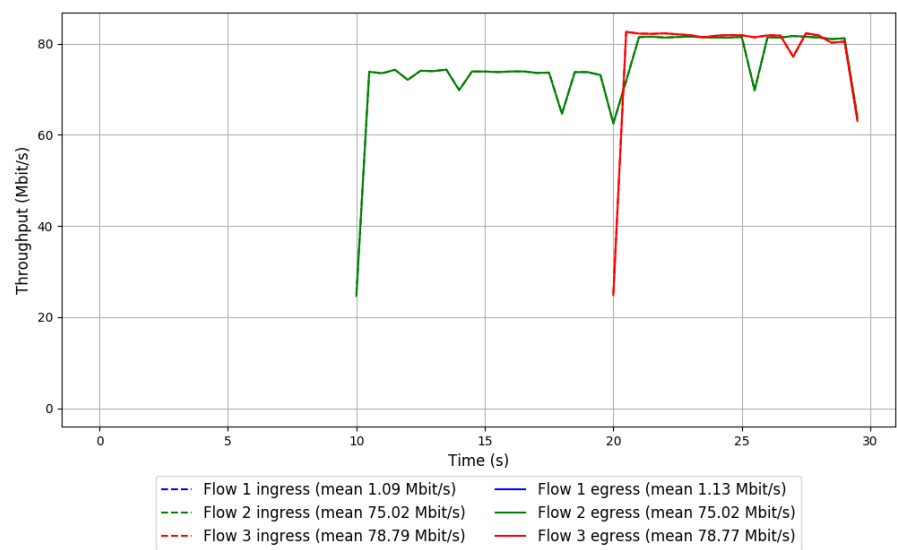
-- Flow 3:

Average throughput: 78.77 Mbit/s

95th percentile per-packet one-way delay: 2.279 ms

Loss rate: 0.05%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-11-30 19:44:46

End at: 2017-11-30 19:45:16

Local clock offset: 0.149 ms

Remote clock offset: 0.351 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 87.52 Mbit/s

95th percentile per-packet one-way delay: 2.303 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 126.19 Mbit/s

95th percentile per-packet one-way delay: 2.225 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 81.06 Mbit/s

95th percentile per-packet one-way delay: 2.302 ms

Loss rate: 0.03%

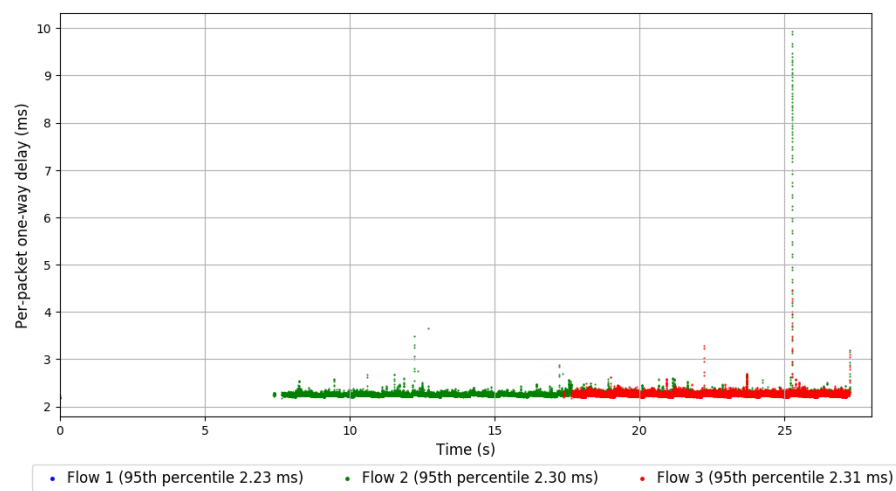
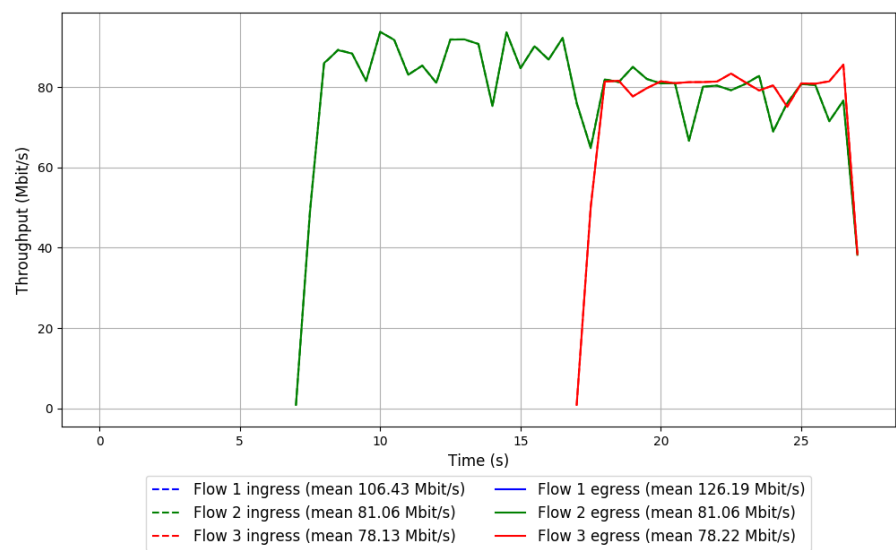
-- Flow 3:

Average throughput: 78.22 Mbit/s

95th percentile per-packet one-way delay: 2.305 ms

Loss rate: 0.05%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-11-30 20:03:29

End at: 2017-11-30 20:03:59

Local clock offset: 0.247 ms

Remote clock offset: 0.291 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 80.47 Mbit/s

95th percentile per-packet one-way delay: 2.322 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 2.532 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 81.60 Mbit/s

95th percentile per-packet one-way delay: 2.322 ms

Loss rate: 0.02%

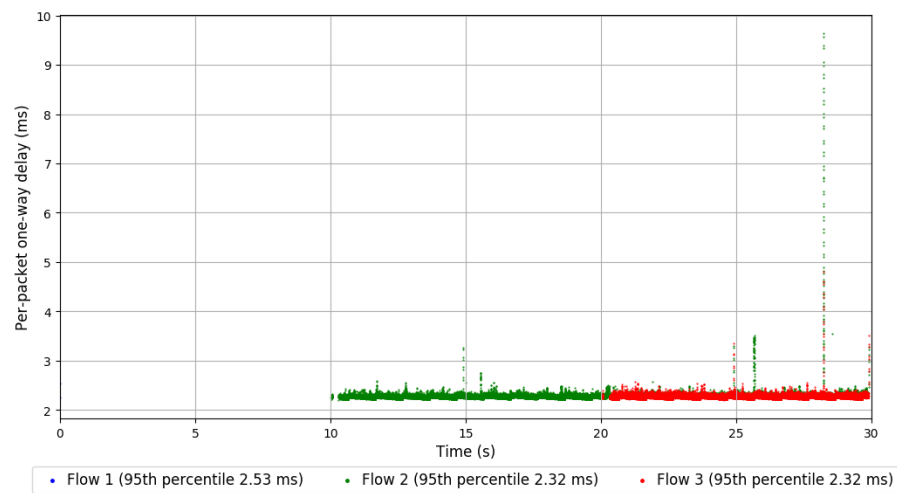
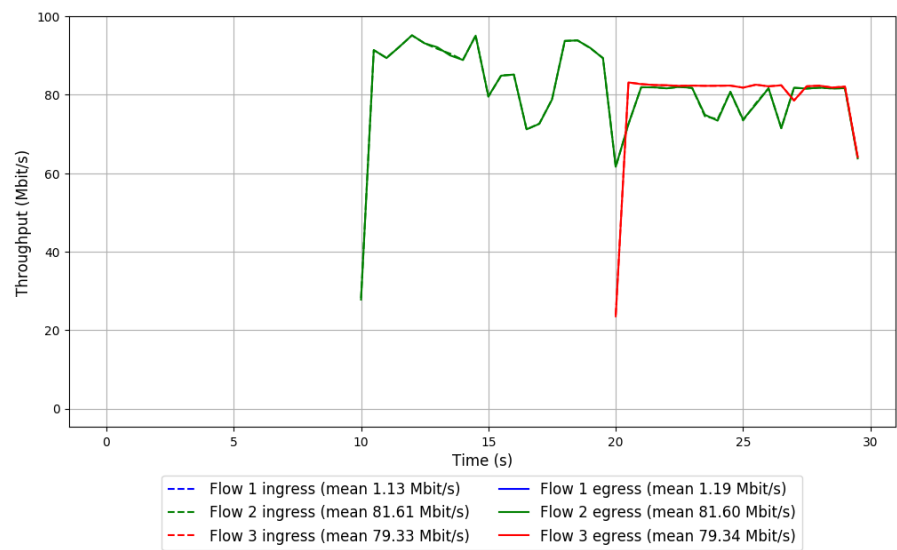
-- Flow 3:

Average throughput: 79.34 Mbit/s

95th percentile per-packet one-way delay: 2.321 ms

Loss rate: 0.03%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-11-30 20:22:07

End at: 2017-11-30 20:22:37

Local clock offset: 0.338 ms

Remote clock offset: 0.24 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 82.30 Mbit/s

95th percentile per-packet one-way delay: 2.362 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 1.14 Mbit/s

95th percentile per-packet one-way delay: 2.566 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 84.71 Mbit/s

95th percentile per-packet one-way delay: 2.359 ms

Loss rate: 0.02%

-- Flow 3:

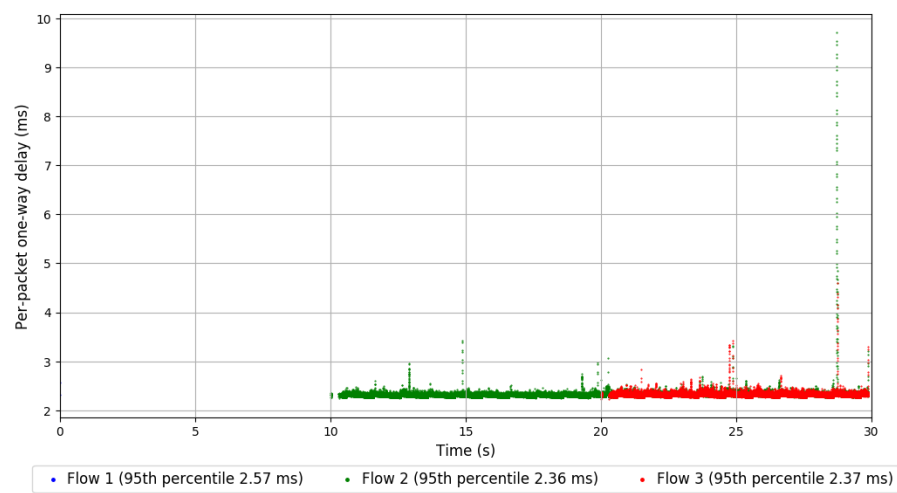
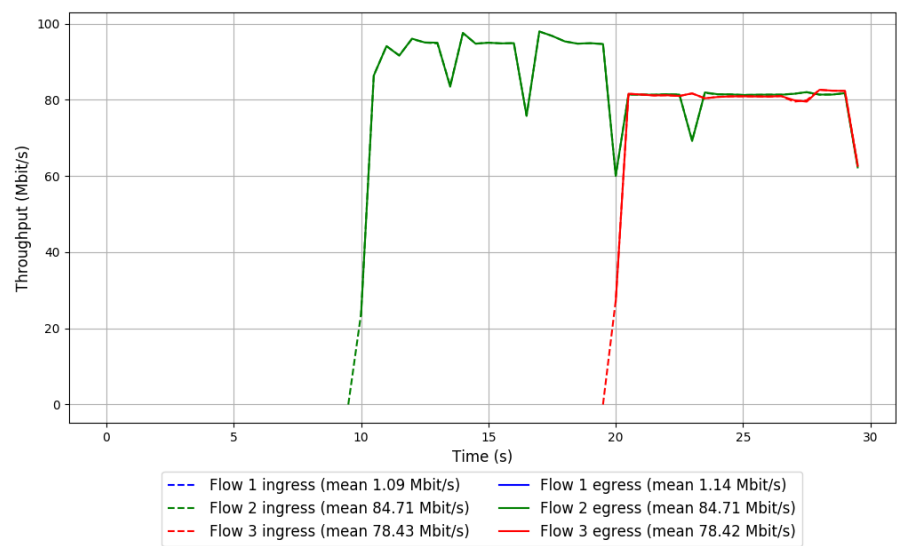
Average throughput: 78.42 Mbit/s

95th percentile per-packet one-way delay: 2.368 ms

Loss rate: 0.05%



Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-11-30 20:40:58

End at: 2017-11-30 20:41:28

Local clock offset: 0.372 ms

Remote clock offset: 0.239 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 82.46 Mbit/s

95th percentile per-packet one-way delay: 2.173 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 1.18 Mbit/s

95th percentile per-packet one-way delay: 5.369 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 84.85 Mbit/s

95th percentile per-packet one-way delay: 2.168 ms

Loss rate: 0.02%

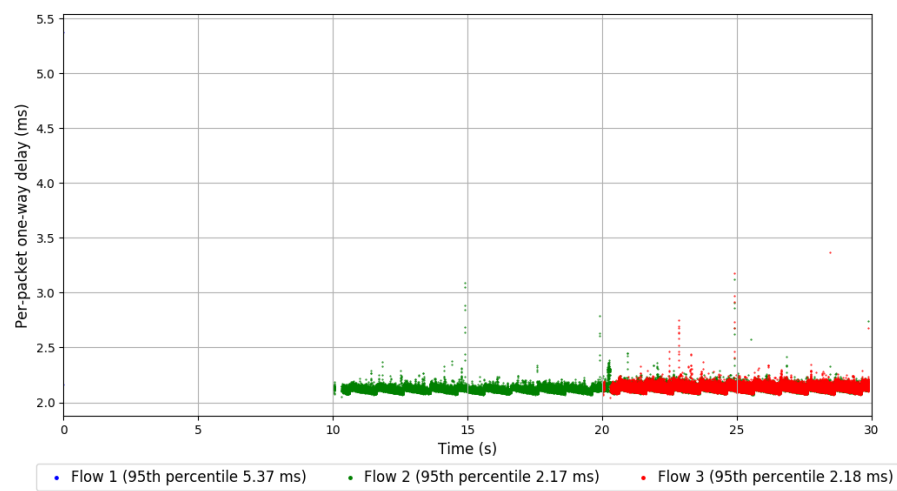
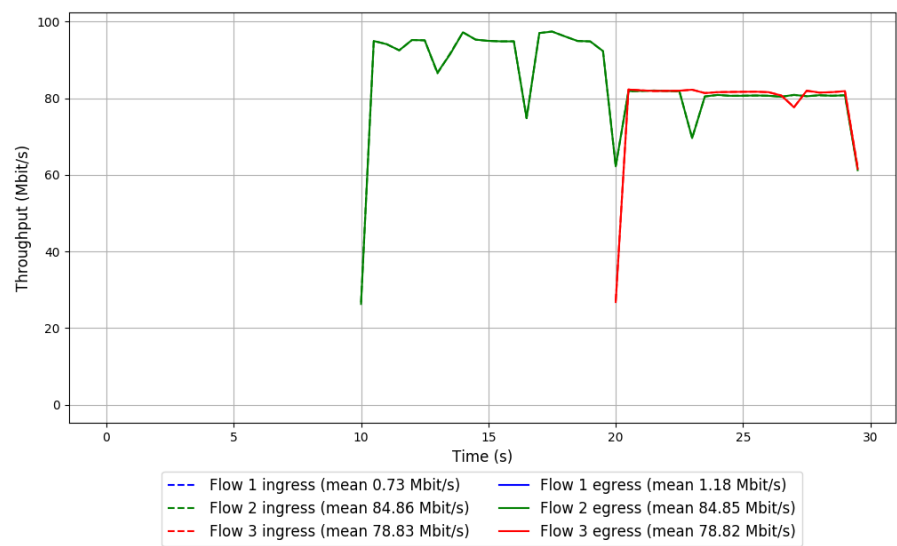
-- Flow 3:

Average throughput: 78.82 Mbit/s

95th percentile per-packet one-way delay: 2.180 ms

Loss rate: 0.05%

Run 10: Report of QUIC Cubic — Data Link

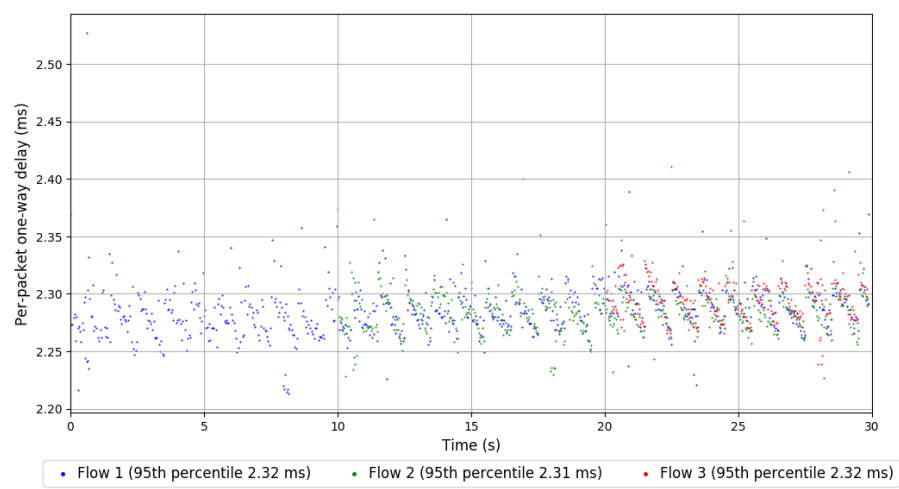
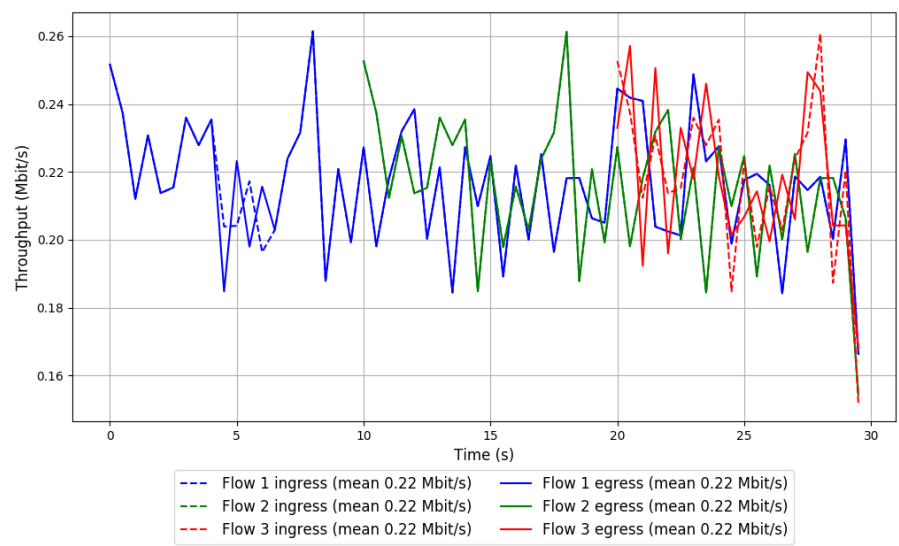


Run 1: Statistics of SReAM

Start at: 2017-11-30 17:58:27  
End at: 2017-11-30 17:58:57  
Local clock offset: -0.429 ms  
Remote clock offset: -0.324 ms

# Below is generated by plot.py at 2017-12-01 01:24:24  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 2.319 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 2.319 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 2.314 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 2.323 ms  
Loss rate: 0.00%

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SReAM

Start at: 2017-11-30 18:17:23

End at: 2017-11-30 18:17:53

Local clock offset: -0.337 ms

Remote clock offset: 0.218 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 2.324 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.329 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.313 ms

Loss rate: 0.00%

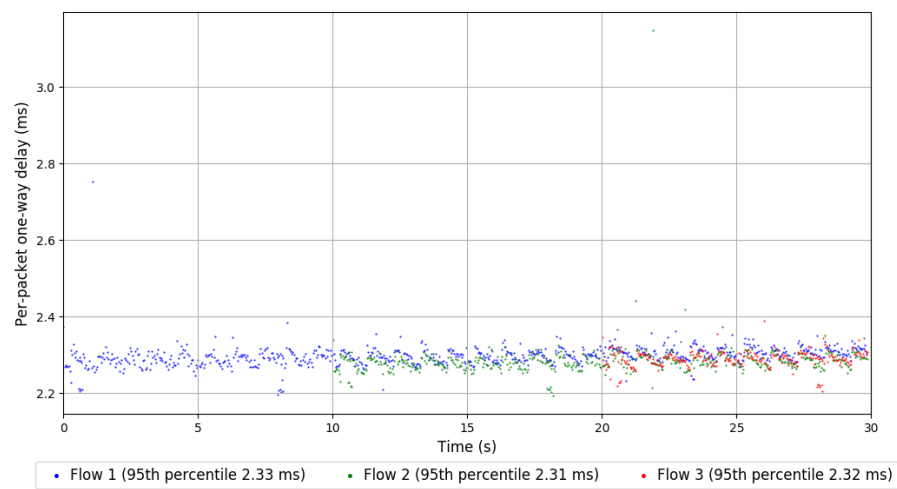
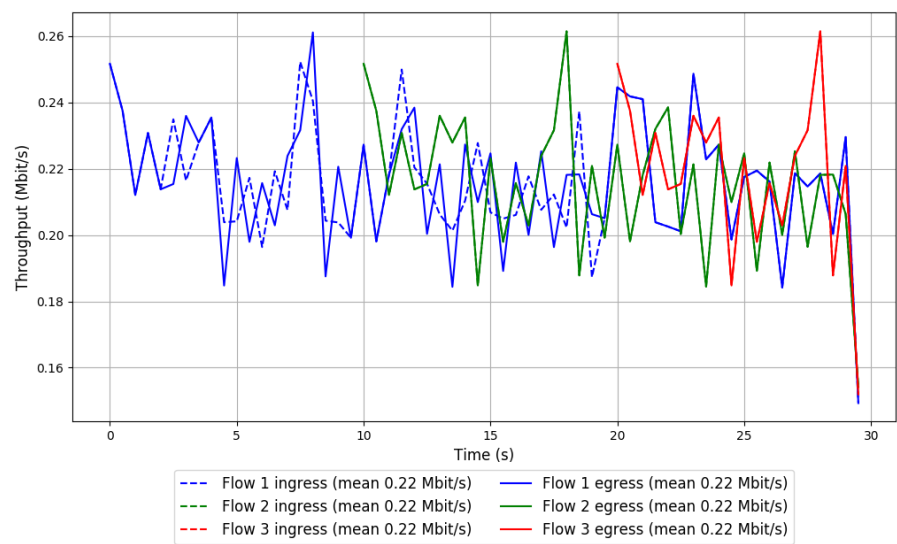
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.319 ms

Loss rate: 0.00%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SReAM

Start at: 2017-11-30 18:36:06

End at: 2017-11-30 18:36:36

Local clock offset: -0.203 ms

Remote clock offset: 0.474 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 2.377 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.374 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.380 ms

Loss rate: 0.20%

-- Flow 3:

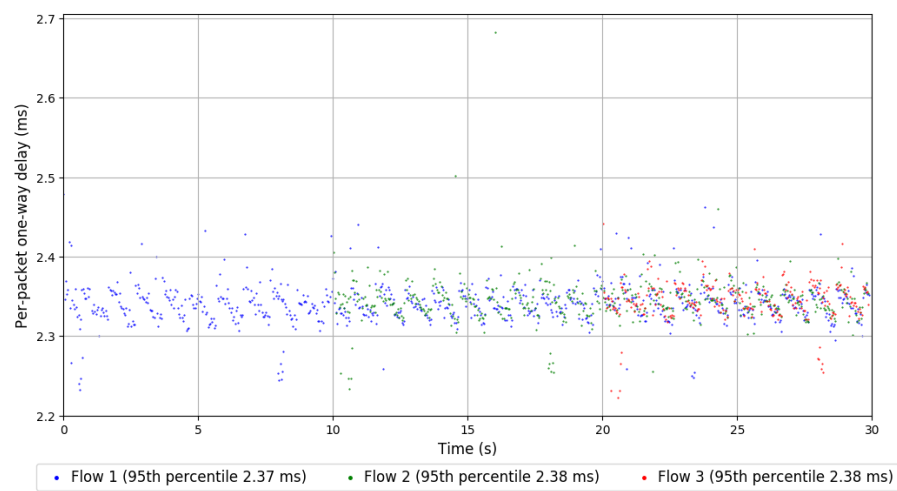
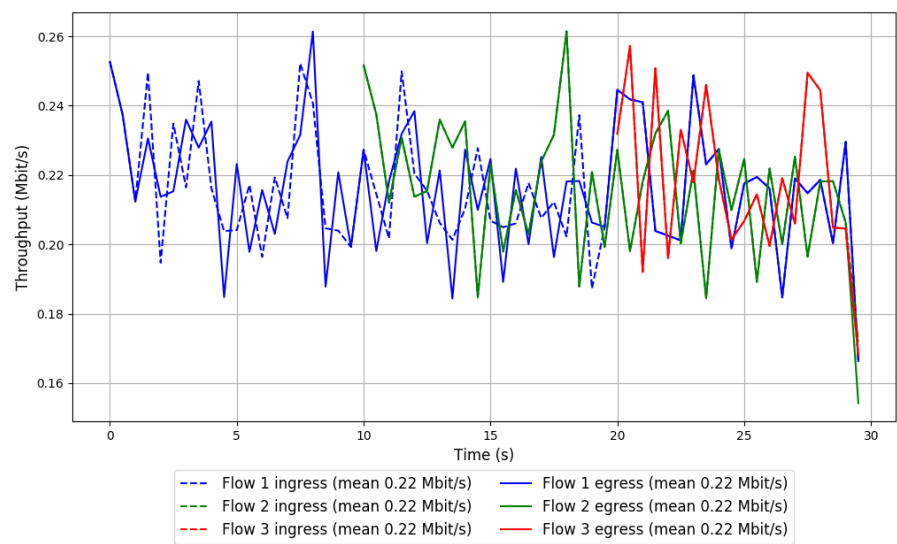
Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.378 ms

Loss rate: 0.00%



Run 3: Report of SReAM — Data Link



Run 4: Statistics of SReAM

Start at: 2017-11-30 18:54:52

End at: 2017-11-30 18:55:22

Local clock offset: -0.15 ms

Remote clock offset: 0.46 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 2.271 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.266 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.257 ms

Loss rate: 0.20%

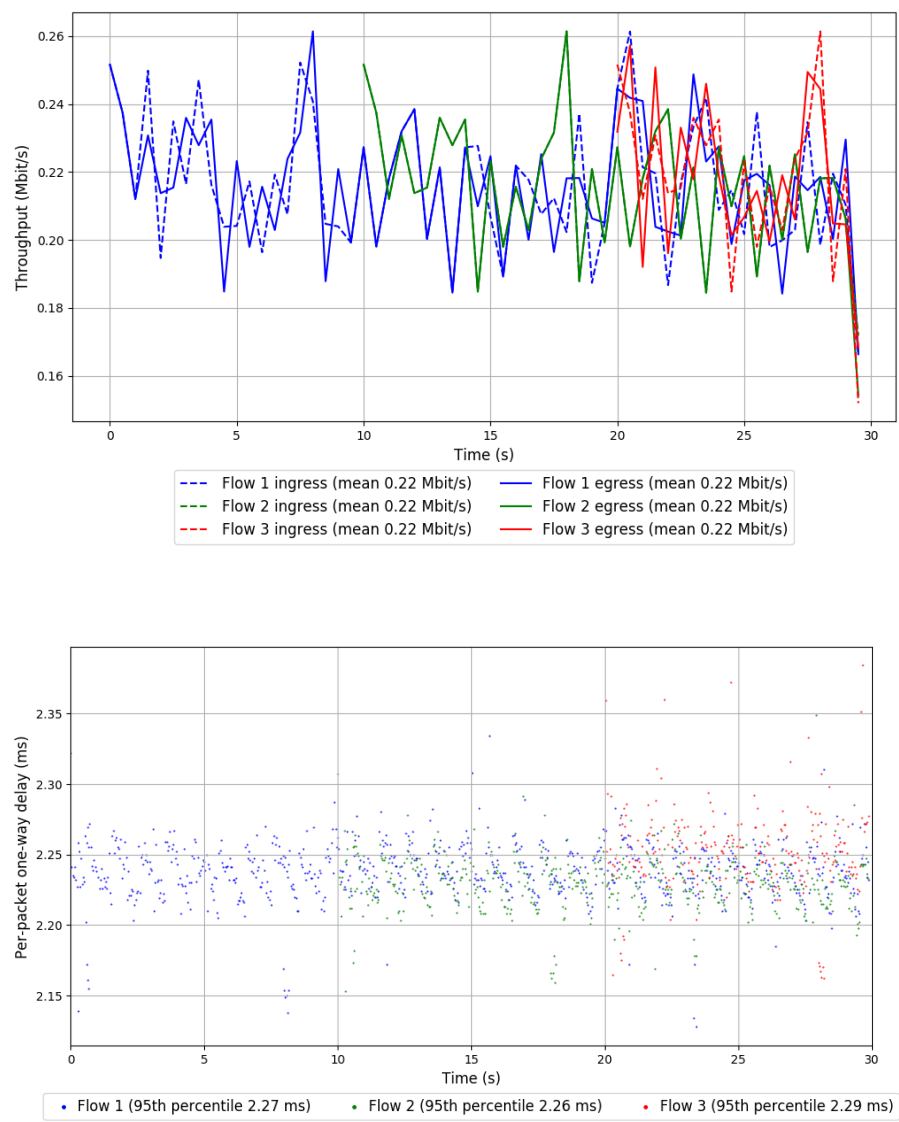
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.292 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2017-11-30 19:13:35

End at: 2017-11-30 19:14:05

Local clock offset: -0.0 ms

Remote clock offset: 0.419 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 2.337 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.346 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.296 ms

Loss rate: 0.20%

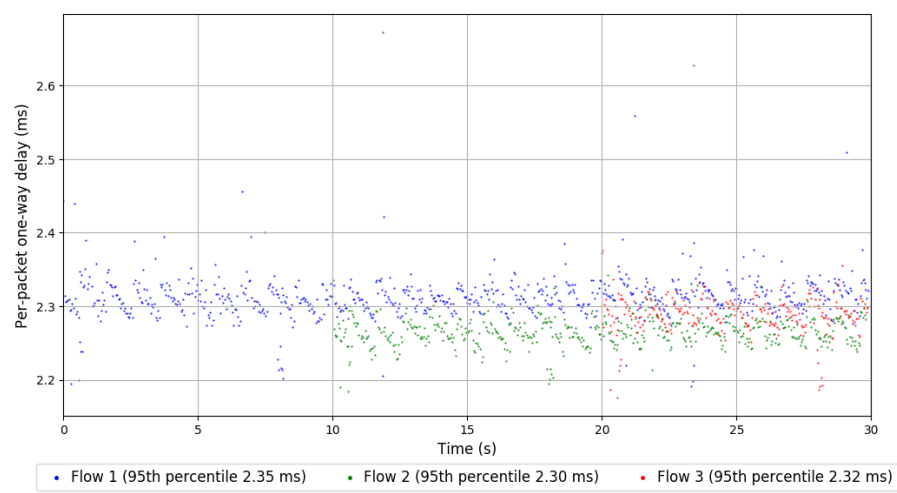
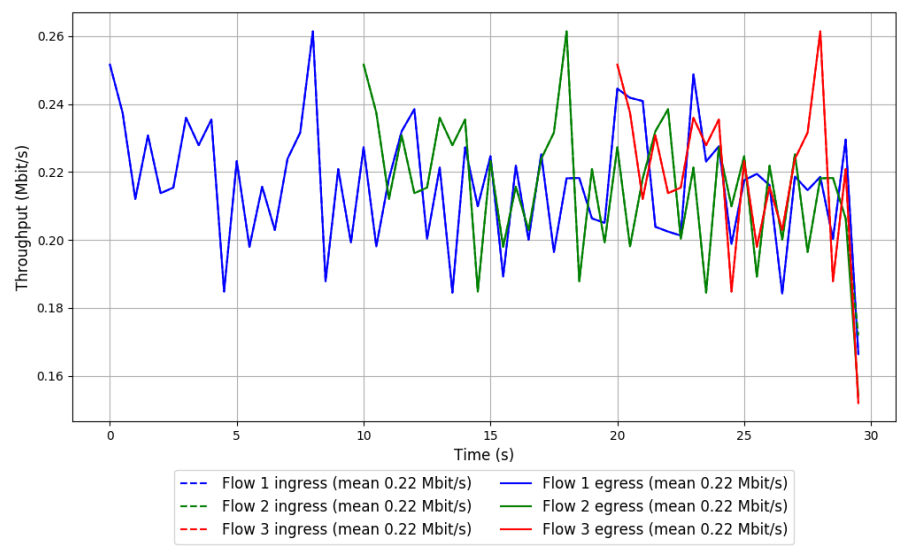
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.320 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2017-11-30 19:32:25

End at: 2017-11-30 19:32:55

Local clock offset: 0.064 ms

Remote clock offset: 0.431 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 2.275 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.282 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.270 ms

Loss rate: 0.20%

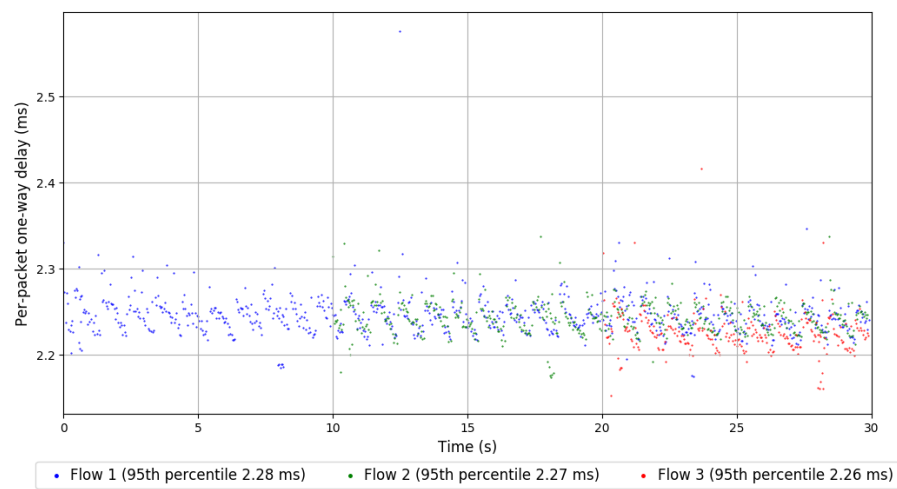
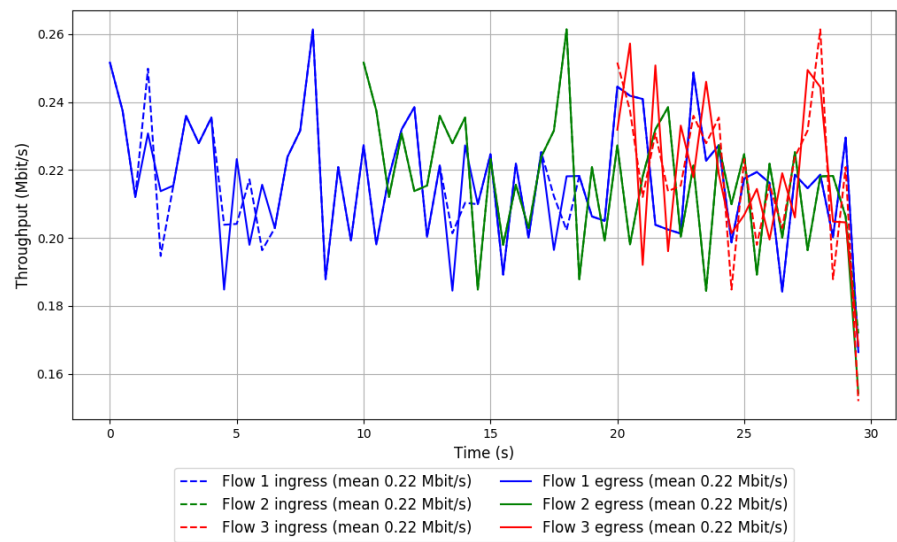
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.261 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SReAM

Start at: 2017-11-30 19:51:15

End at: 2017-11-30 19:51:45

Local clock offset: 0.165 ms

Remote clock offset: 0.325 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 2.300 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.21%

-- Flow 3:

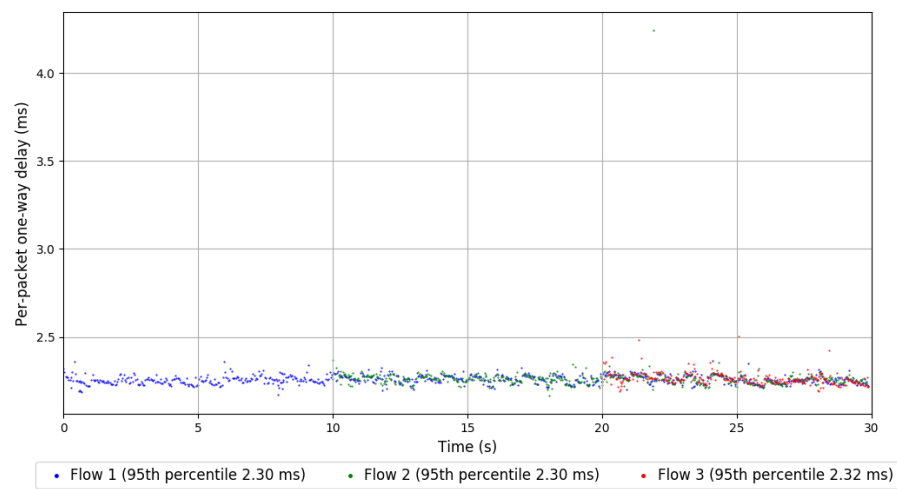
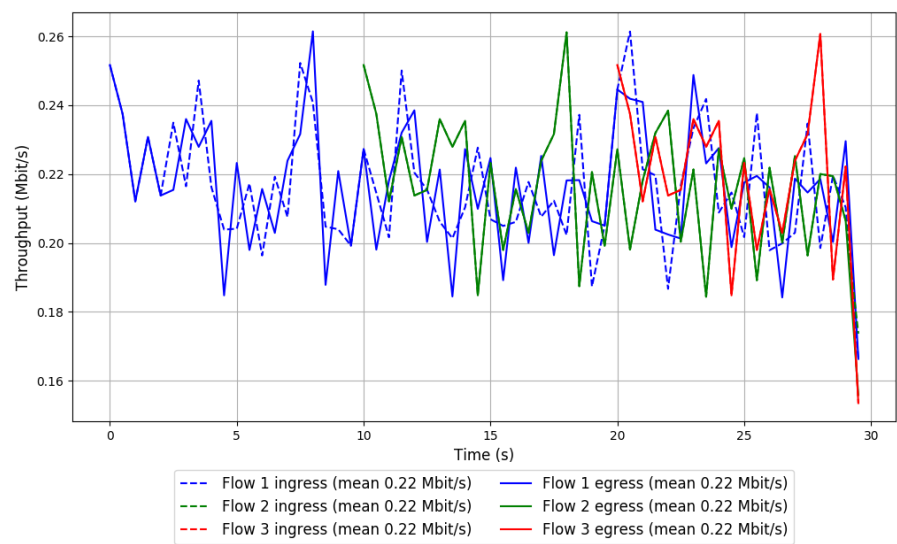
Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%



Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2017-11-30 20:09:57

End at: 2017-11-30 20:10:27

Local clock offset: 0.244 ms

Remote clock offset: 0.286 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 2.314 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.307 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.317 ms

Loss rate: 0.20%

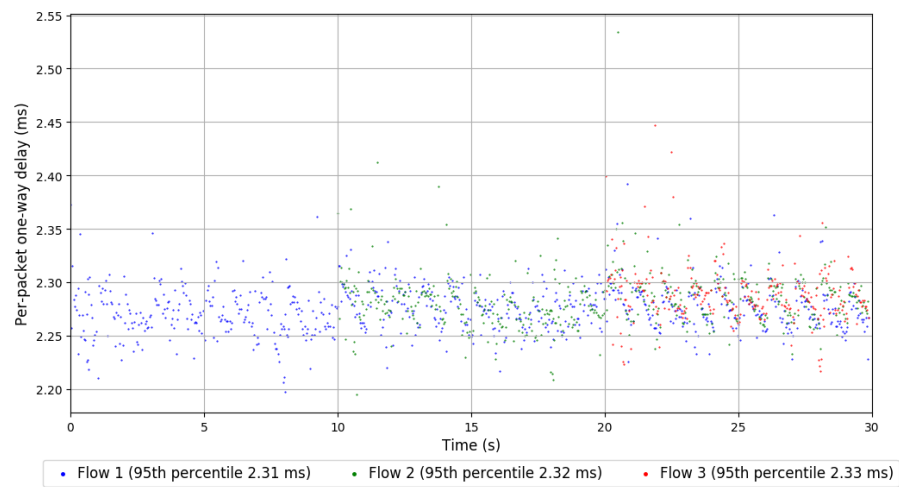
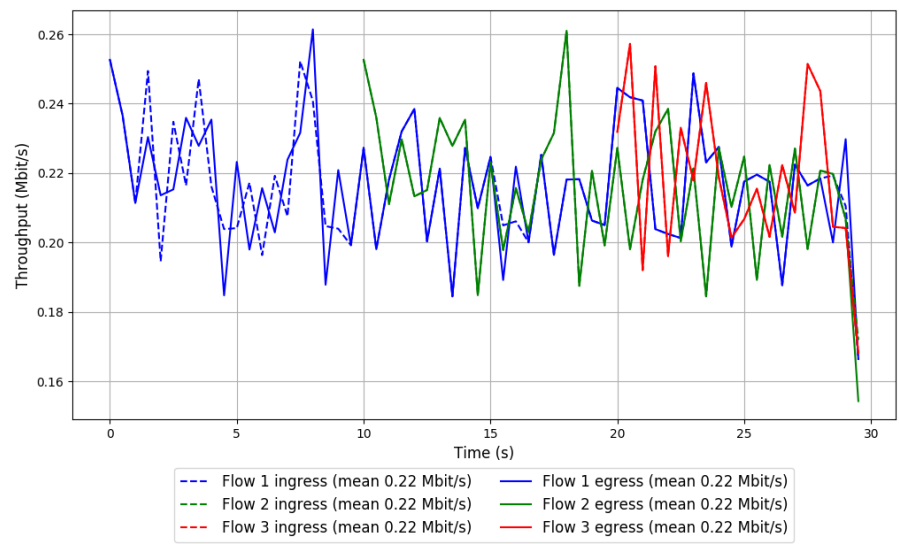
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.327 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2017-11-30 20:28:35

End at: 2017-11-30 20:29:05

Local clock offset: 0.303 ms

Remote clock offset: 0.255 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 2.266 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.271 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.262 ms

Loss rate: 0.20%

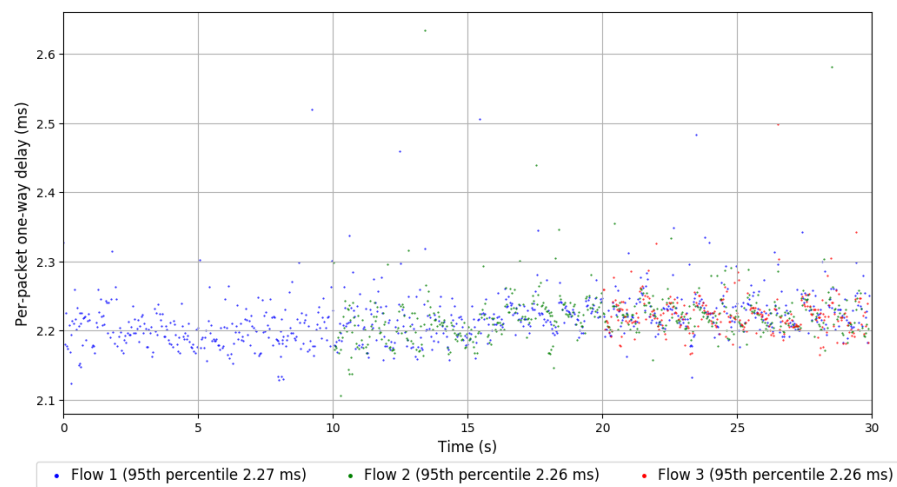
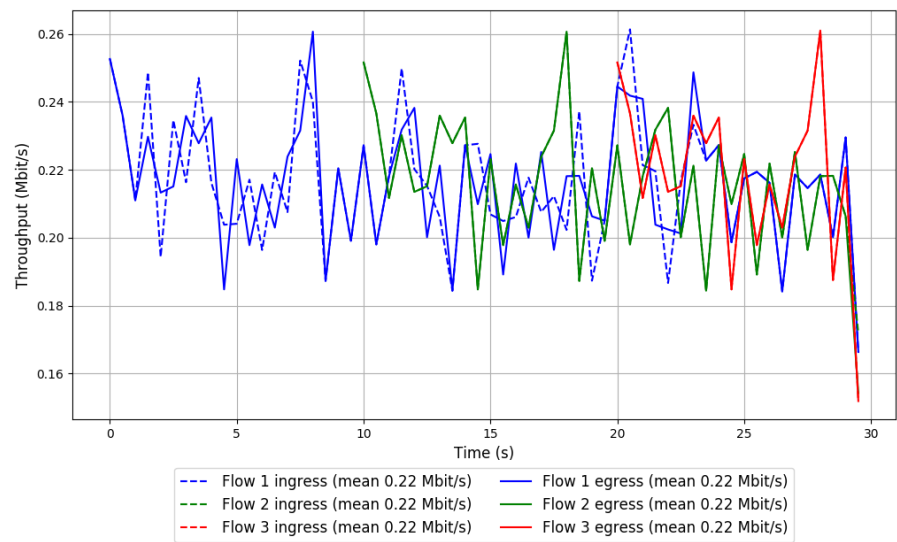
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.263 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-11-30 20:47:25

End at: 2017-11-30 20:47:55

Local clock offset: 0.489 ms

Remote clock offset: 0.173 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 2.338 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.334 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.340 ms

Loss rate: 0.20%

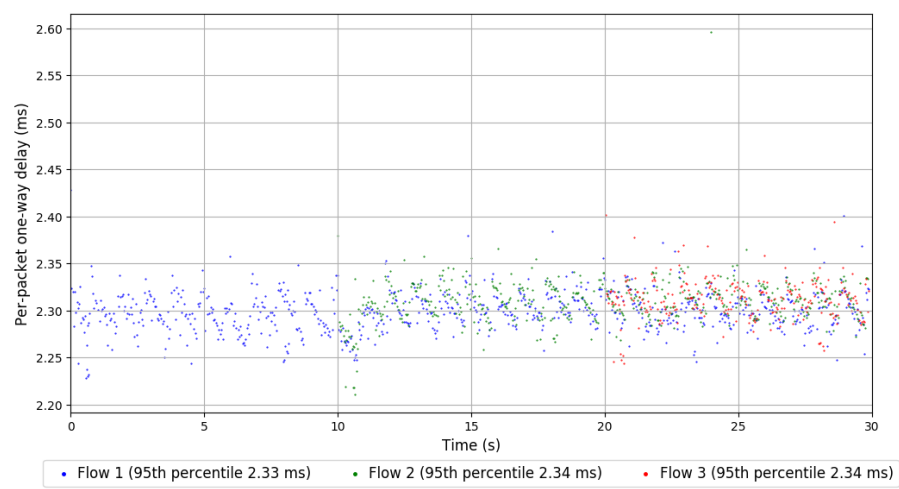
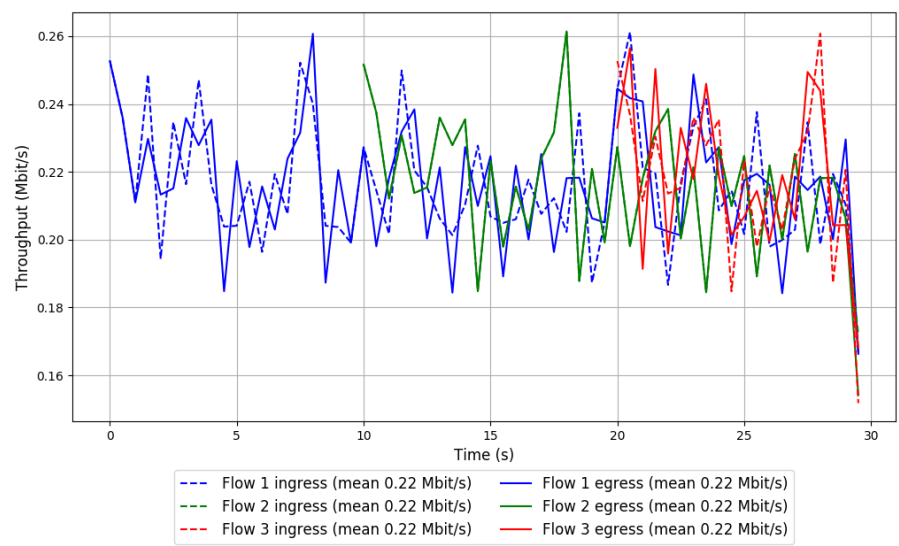
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.340 ms

Loss rate: 0.00%

Run 10: Report of SCRaM — Data Link



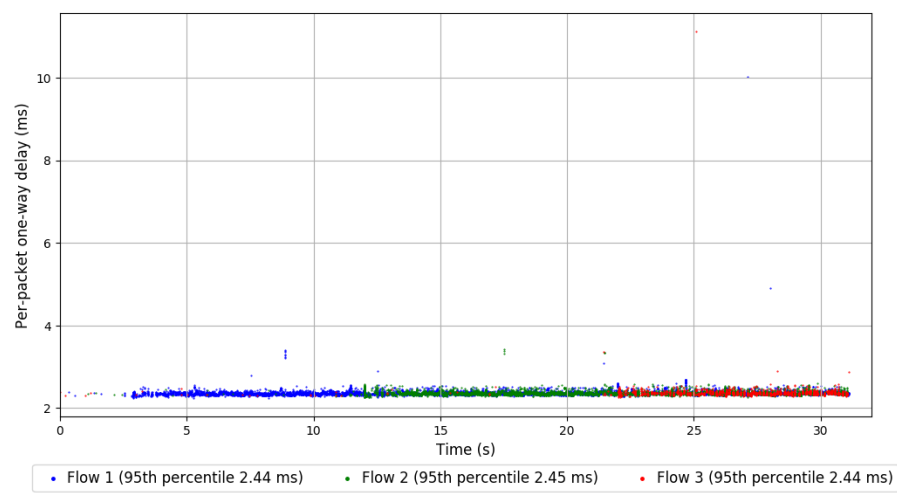
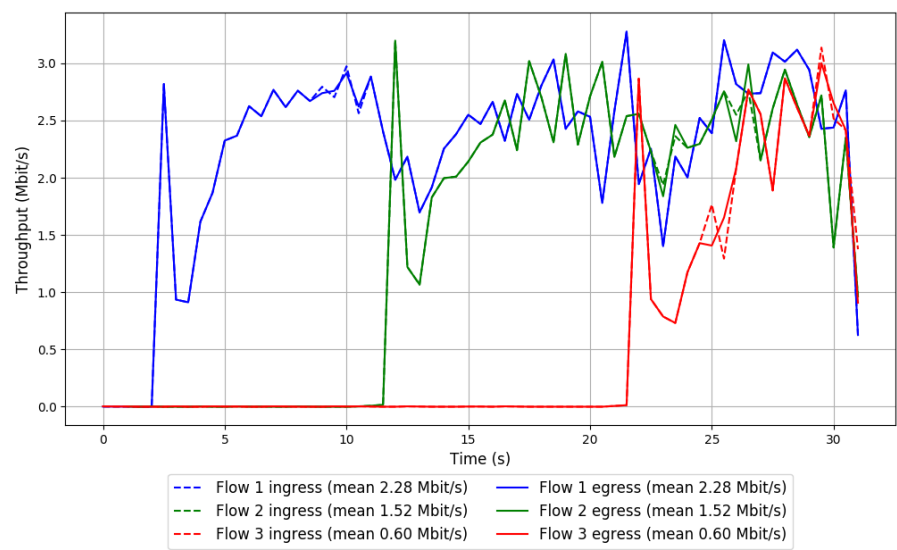
Run 1: Statistics of WebRTC media

Start at: 2017-11-30 17:53:08  
End at: 2017-11-30 17:53:38  
Local clock offset: -0.4 ms  
Remote clock offset: -0.462 ms

# Below is generated by plot.py at 2017-12-01 01:24:24  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 4.32 Mbit/s  
95th percentile per-packet one-way delay: 2.446 ms  
Loss rate: 0.17%  
-- Flow 1:  
Average throughput: 2.28 Mbit/s  
95th percentile per-packet one-way delay: 2.443 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.52 Mbit/s  
95th percentile per-packet one-way delay: 2.452 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.60 Mbit/s  
95th percentile per-packet one-way delay: 2.444 ms  
Loss rate: 1.24%



Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-11-30 18:12:02

End at: 2017-11-30 18:12:32

Local clock offset: -0.373 ms

Remote clock offset: 0.006 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.44 Mbit/s

95th percentile per-packet one-way delay: 2.440 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 2.35 Mbit/s

95th percentile per-packet one-way delay: 2.435 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.48 Mbit/s

95th percentile per-packet one-way delay: 2.453 ms

Loss rate: 0.15%

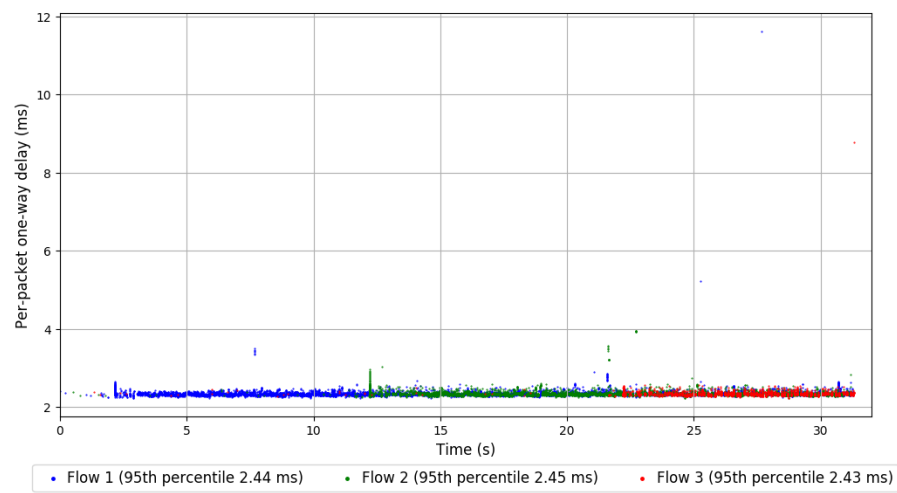
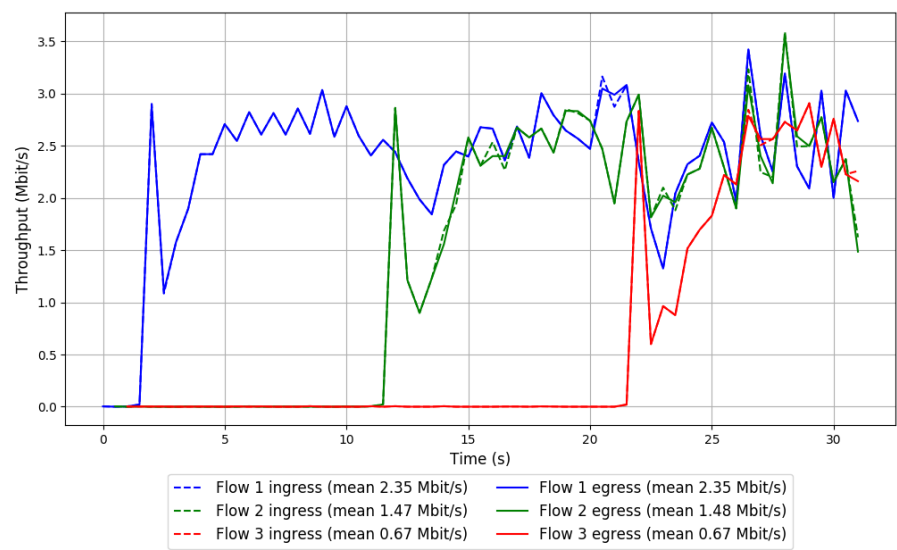
-- Flow 3:

Average throughput: 0.67 Mbit/s

95th percentile per-packet one-way delay: 2.432 ms

Loss rate: 0.24%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-11-30 18:30:46

End at: 2017-11-30 18:31:16

Local clock offset: -0.252 ms

Remote clock offset: 0.491 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.45 Mbit/s

95th percentile per-packet one-way delay: 2.348 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 2.339 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 2.360 ms

Loss rate: 0.02%

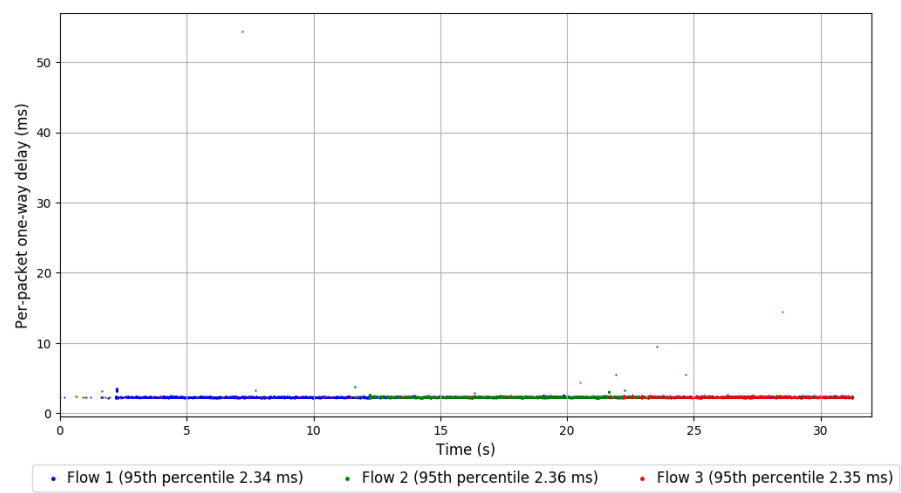
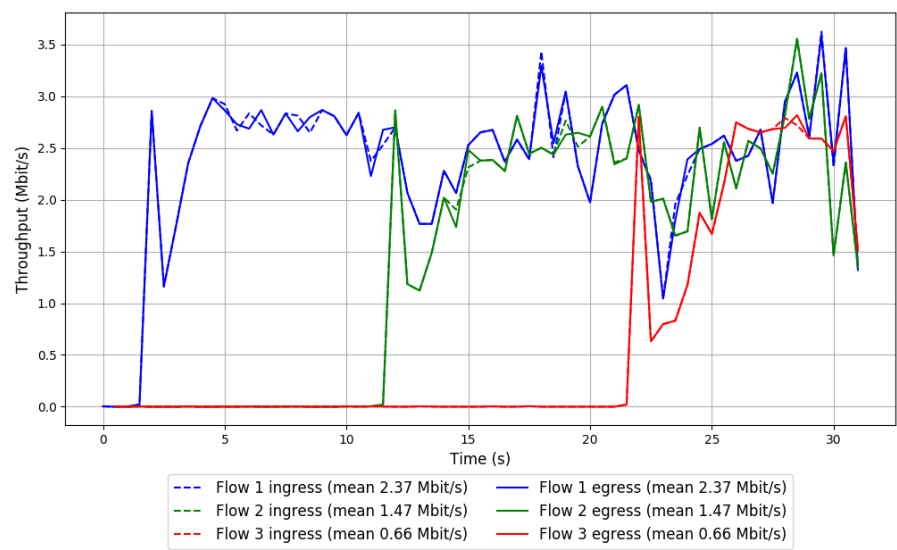
-- Flow 3:

Average throughput: 0.66 Mbit/s

95th percentile per-packet one-way delay: 2.350 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-11-30 18:49:38

End at: 2017-11-30 18:50:08

Local clock offset: -0.123 ms

Remote clock offset: 0.503 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.46 Mbit/s

95th percentile per-packet one-way delay: 2.355 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.40 Mbit/s

95th percentile per-packet one-way delay: 2.340 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.48 Mbit/s

95th percentile per-packet one-way delay: 2.362 ms

Loss rate: 0.00%

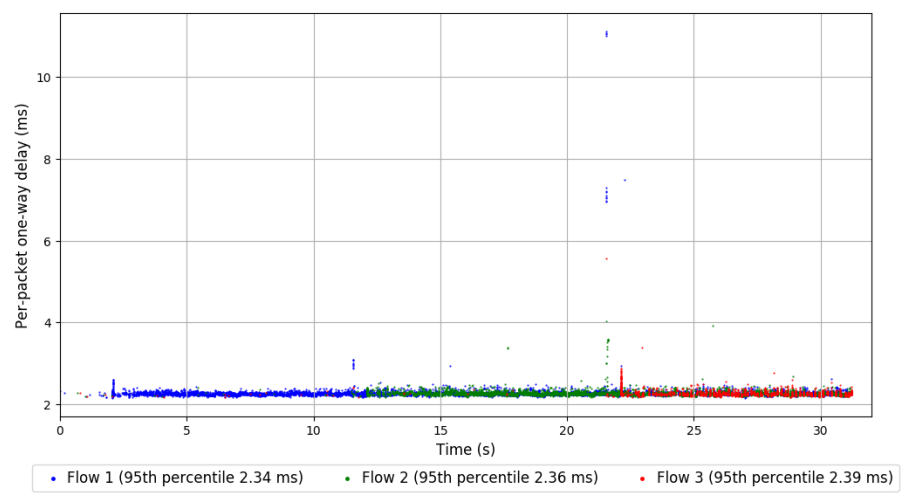
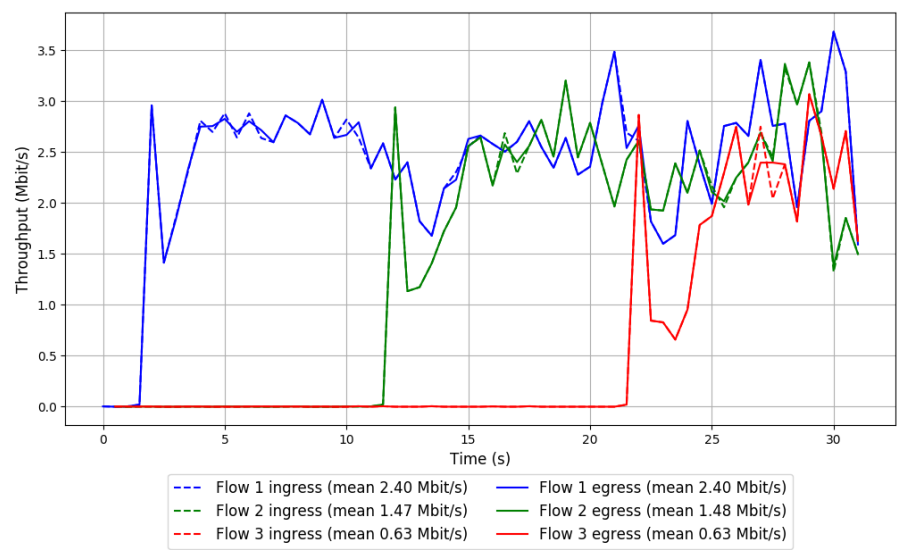
-- Flow 3:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 2.390 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-11-30 19:08:14

End at: 2017-11-30 19:08:44

Local clock offset: -0.053 ms

Remote clock offset: 0.39 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.36 Mbit/s

95th percentile per-packet one-way delay: 2.334 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 2.323 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.48 Mbit/s

95th percentile per-packet one-way delay: 2.346 ms

Loss rate: 0.35%

-- Flow 3:

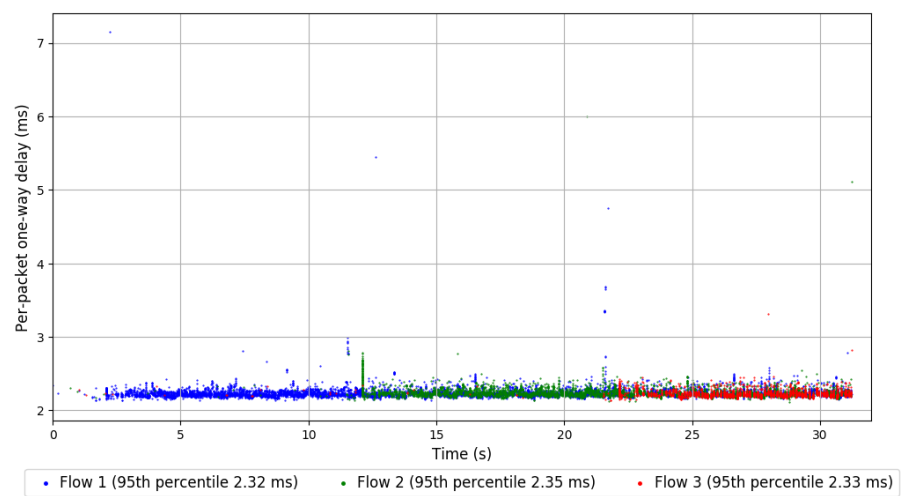
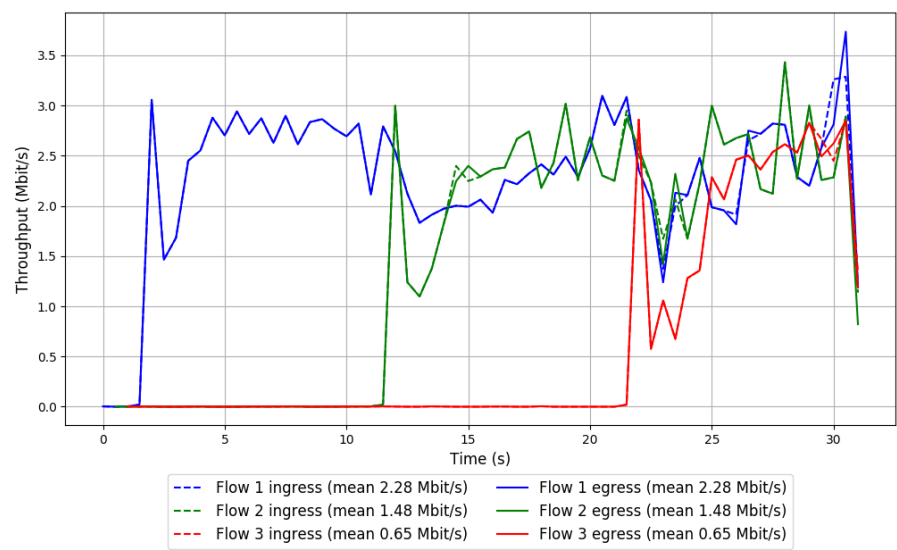
Average throughput: 0.65 Mbit/s

95th percentile per-packet one-way delay: 2.330 ms

Loss rate: 0.40%



Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-11-30 19:27:06

End at: 2017-11-30 19:27:36

Local clock offset: 0.054 ms

Remote clock offset: 0.513 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.54 Mbit/s

95th percentile per-packet one-way delay: 2.367 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 2.363 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.50 Mbit/s

95th percentile per-packet one-way delay: 2.368 ms

Loss rate: 0.02%

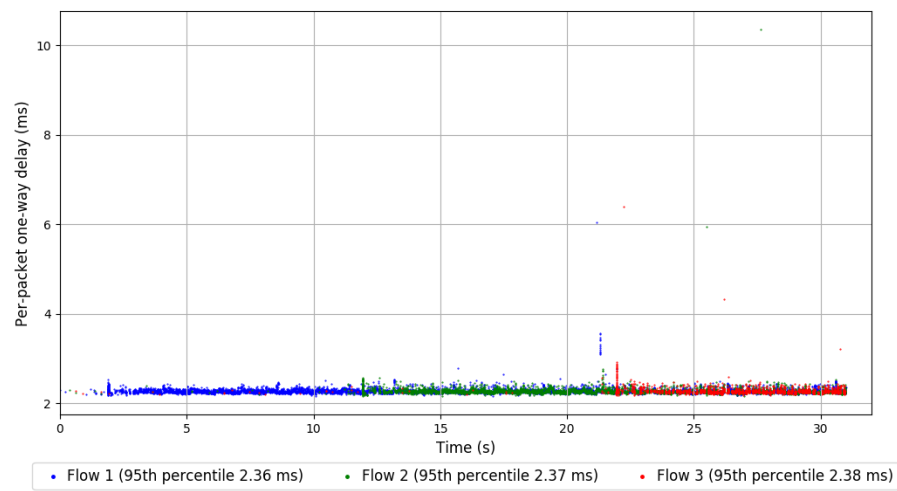
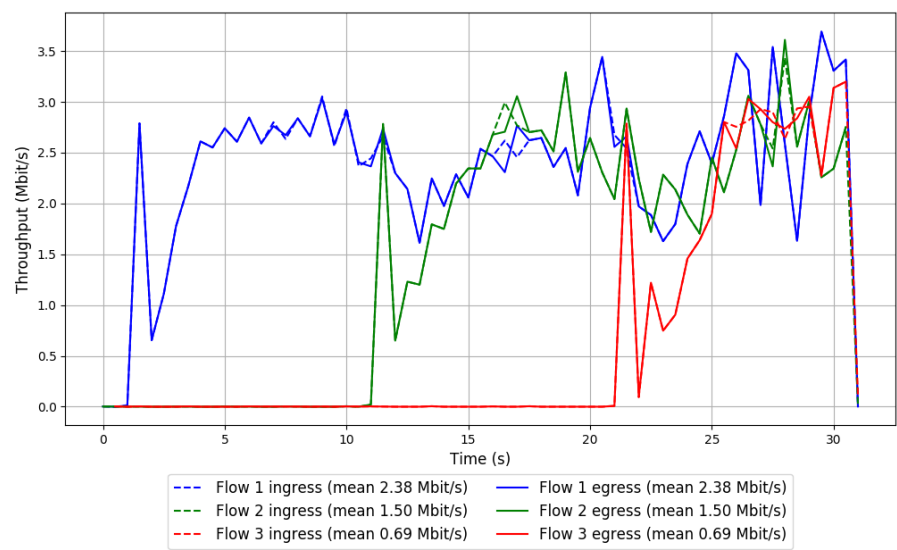
-- Flow 3:

Average throughput: 0.69 Mbit/s

95th percentile per-packet one-way delay: 2.381 ms

Loss rate: 0.28%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-11-30 19:45:53

End at: 2017-11-30 19:46:23

Local clock offset: 0.121 ms

Remote clock offset: 0.343 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.39 Mbit/s

95th percentile per-packet one-way delay: 2.356 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 2.339 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 2.372 ms

Loss rate: 0.00%

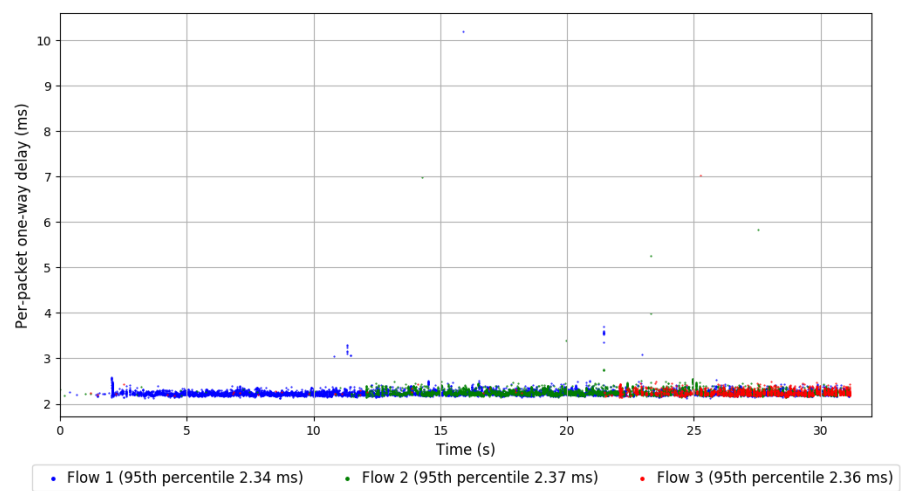
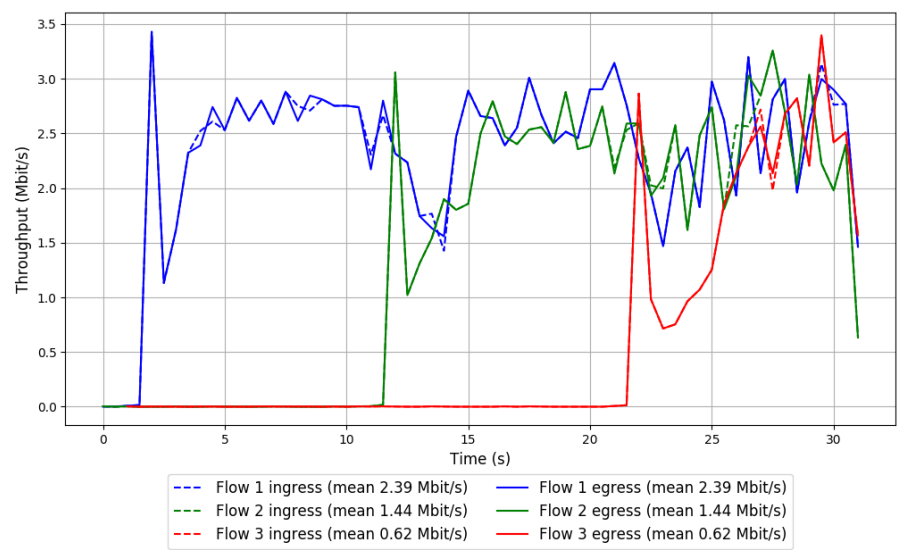
-- Flow 3:

Average throughput: 0.62 Mbit/s

95th percentile per-packet one-way delay: 2.359 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-11-30 20:04:37

End at: 2017-11-30 20:05:07

Local clock offset: 0.157 ms

Remote clock offset: 0.291 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.40 Mbit/s

95th percentile per-packet one-way delay: 2.320 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 2.321 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 2.317 ms

Loss rate: 0.00%

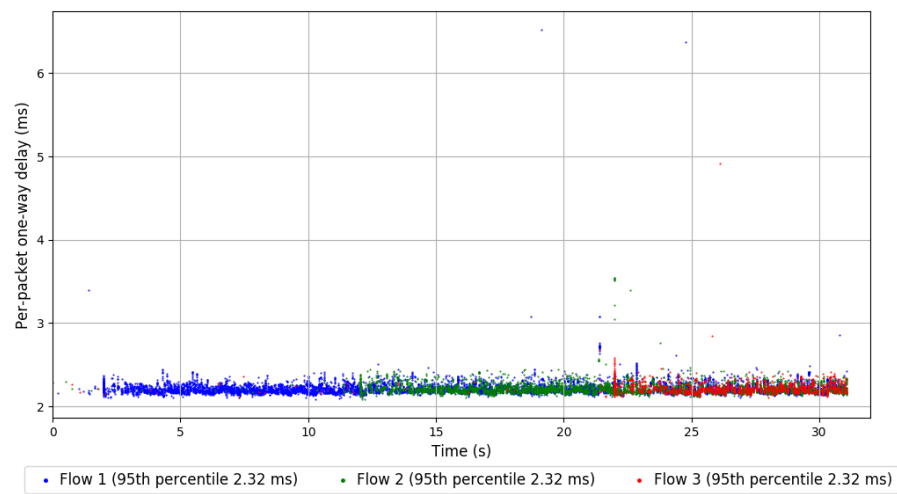
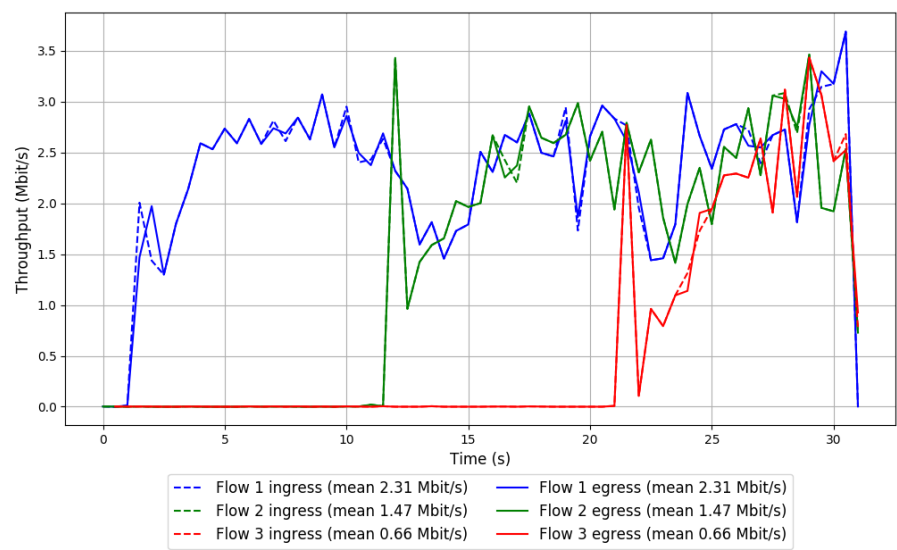
-- Flow 3:

Average throughput: 0.66 Mbit/s

95th percentile per-packet one-way delay: 2.324 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-11-30 20:23:14

End at: 2017-11-30 20:23:44

Local clock offset: 0.318 ms

Remote clock offset: 0.328 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 2.354 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 2.442 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.67 Mbit/s

95th percentile per-packet one-way delay: 2.344 ms

Loss rate: 0.00%

-- Flow 3:

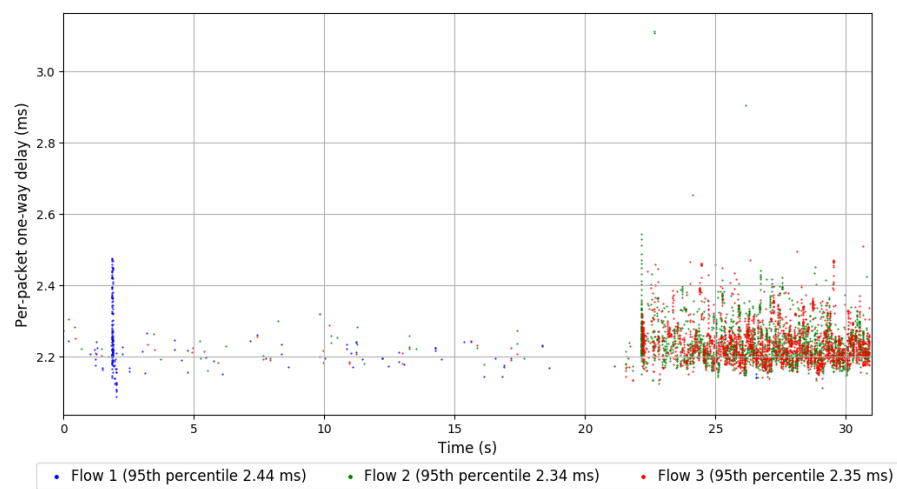
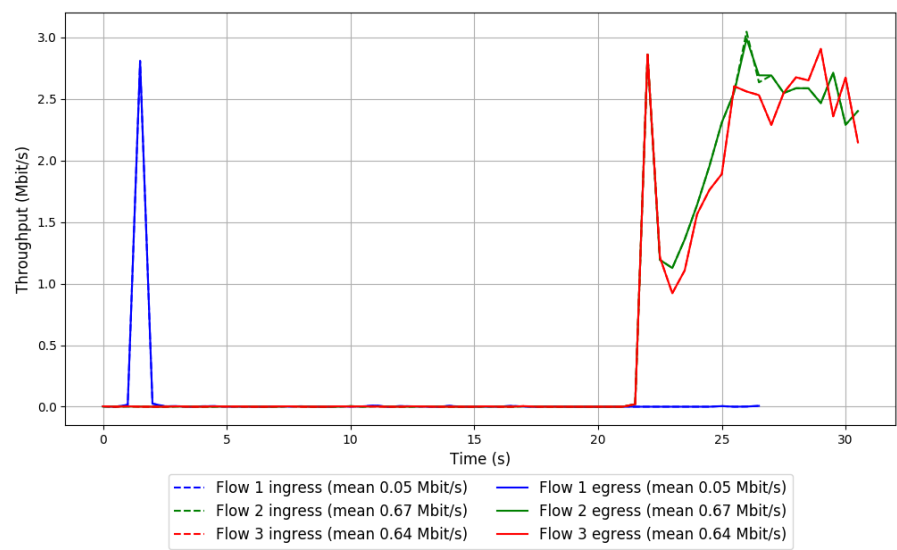
Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 2.351 ms

Loss rate: 0.00%



Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-11-30 20:42:05

End at: 2017-11-30 20:42:35

Local clock offset: 0.36 ms

Remote clock offset: 0.197 ms

# Below is generated by plot.py at 2017-12-01 01:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 2.285 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 2.235 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.55 Mbit/s

95th percentile per-packet one-way delay: 2.283 ms

Loss rate: 0.00%

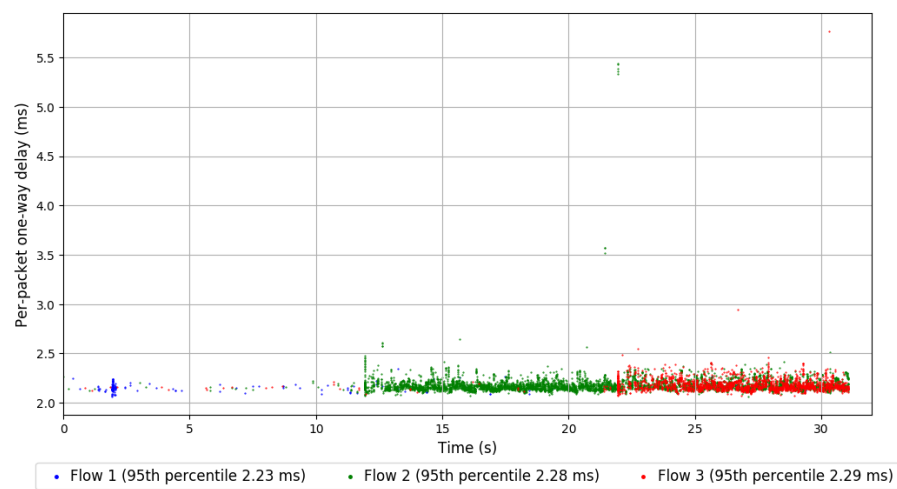
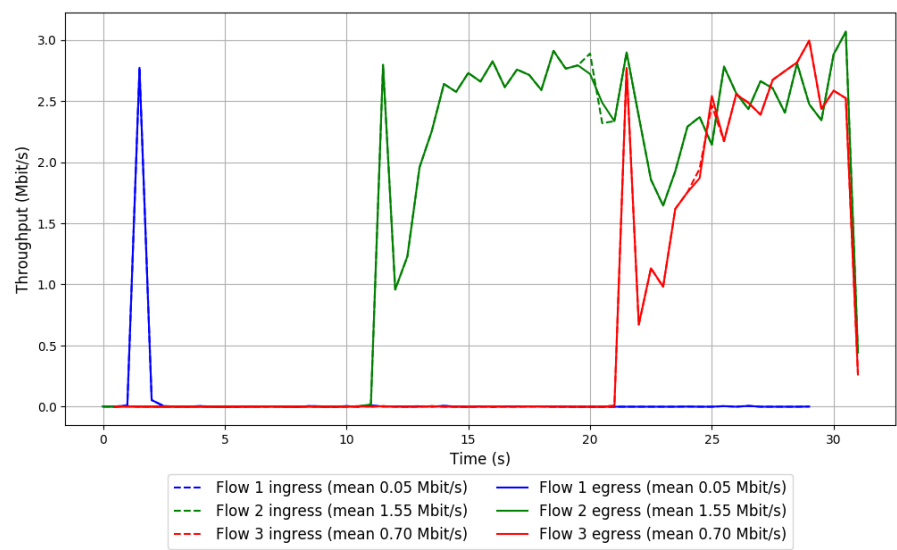
-- Flow 3:

Average throughput: 0.70 Mbit/s

95th percentile per-packet one-way delay: 2.294 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

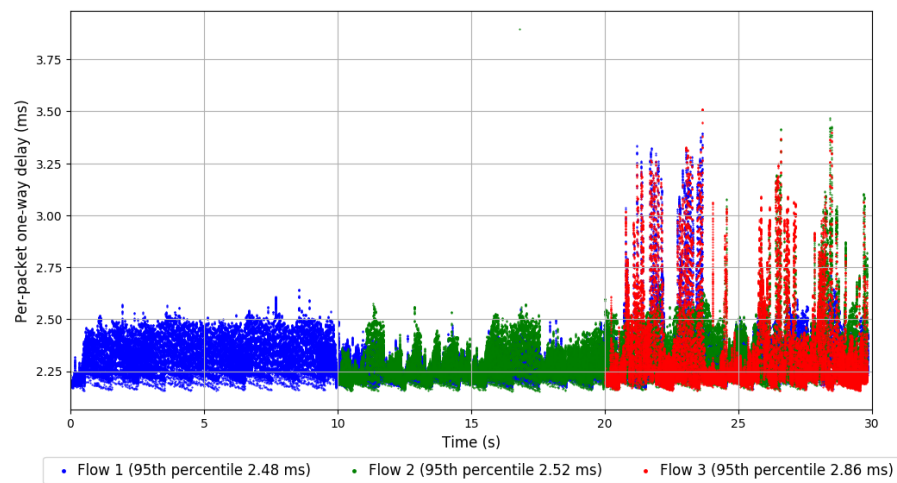
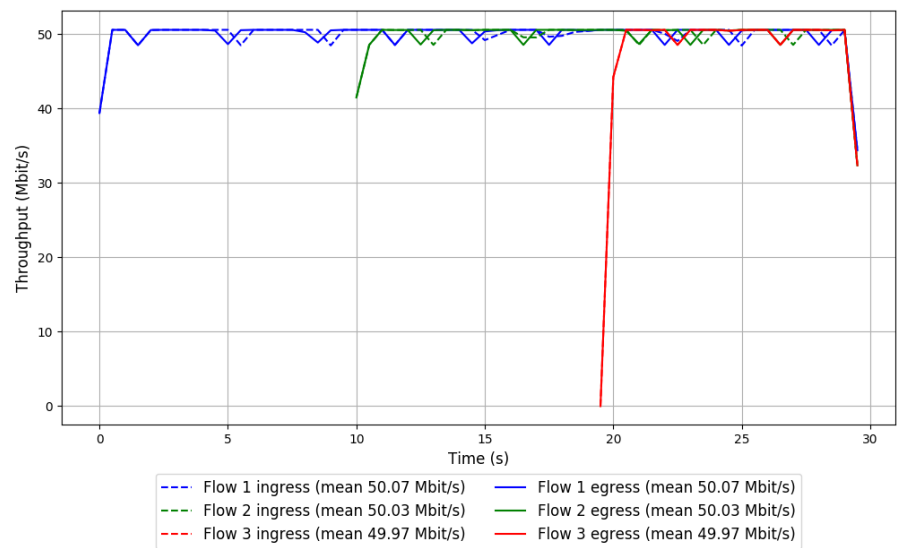


Run 1: Statistics of Sprout

Start at: 2017-11-30 18:05:29  
End at: 2017-11-30 18:05:59  
Local clock offset: -0.404 ms  
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2017-12-01 01:24:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 99.77 Mbit/s  
95th percentile per-packet one-way delay: 2.558 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 50.07 Mbit/s  
95th percentile per-packet one-way delay: 2.483 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 50.03 Mbit/s  
95th percentile per-packet one-way delay: 2.516 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 49.97 Mbit/s  
95th percentile per-packet one-way delay: 2.859 ms  
Loss rate: 0.00%

Run 1: Report of Sprout — Data Link

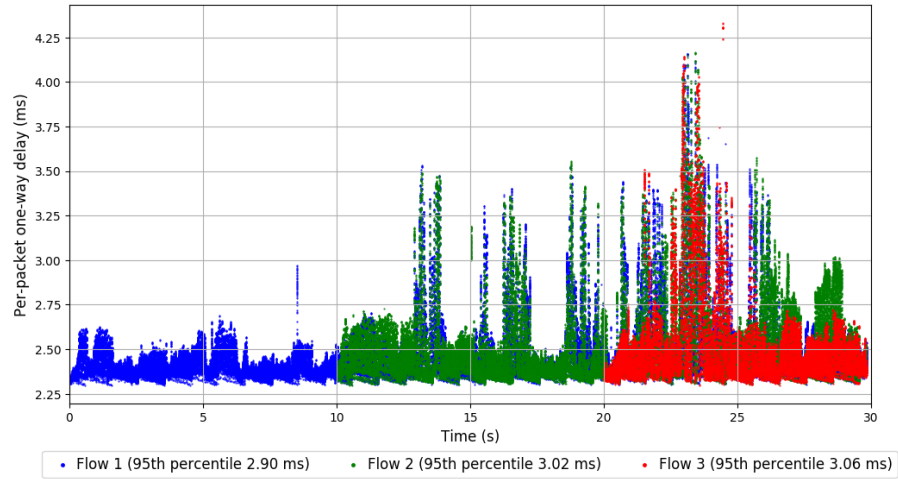
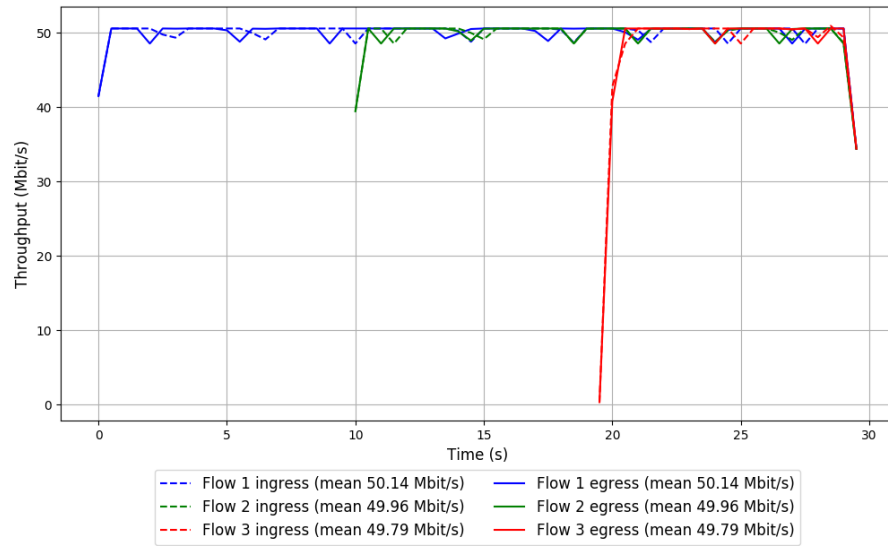


Run 2: Statistics of Sprout

Start at: 2017-11-30 18:24:23  
End at: 2017-11-30 18:24:53  
Local clock offset: -0.285 ms  
Remote clock offset: 0.305 ms

# Below is generated by plot.py at 2017-12-01 01:24:42  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 99.79 Mbit/s  
95th percentile per-packet one-way delay: 2.973 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 50.14 Mbit/s  
95th percentile per-packet one-way delay: 2.903 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 49.96 Mbit/s  
95th percentile per-packet one-way delay: 3.025 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 49.79 Mbit/s  
95th percentile per-packet one-way delay: 3.064 ms  
Loss rate: 0.00%

## Run 2: Report of Sprout — Data Link



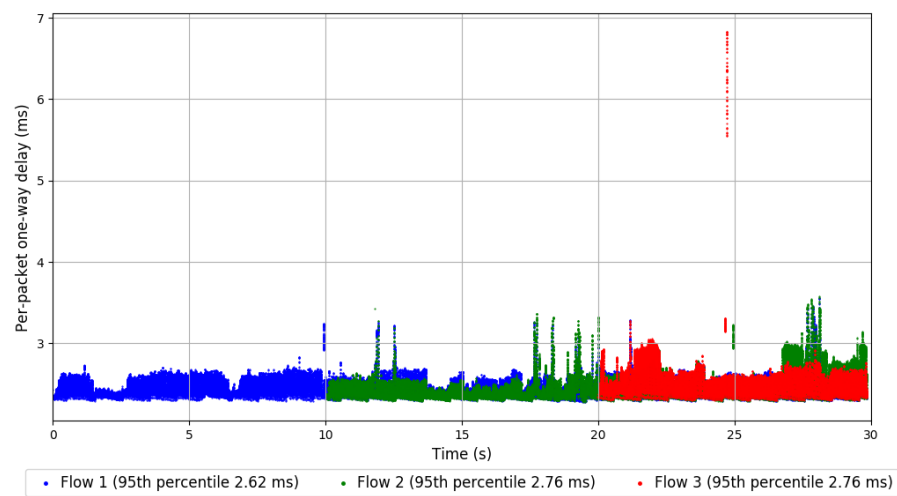
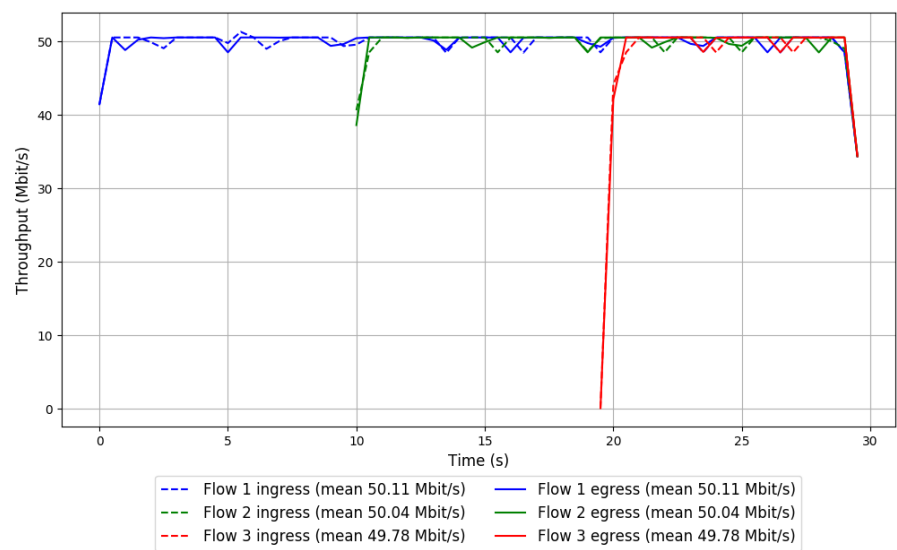
### Run 3: Statistics of Sprout

Start at: 2017-11-30 18:43:05  
End at: 2017-11-30 18:43:35  
Local clock offset: -0.139 ms  
Remote clock offset: 0.484 ms

```
# Below is generated by plot.py at 2017-12-01 01:24:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.81 Mbit/s
95th percentile per-packet one-way delay: 2.675 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.11 Mbit/s
95th percentile per-packet one-way delay: 2.616 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.04 Mbit/s
95th percentile per-packet one-way delay: 2.760 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.78 Mbit/s
95th percentile per-packet one-way delay: 2.761 ms
Loss rate: 0.00%
```



Run 3: Report of Sprout — Data Link

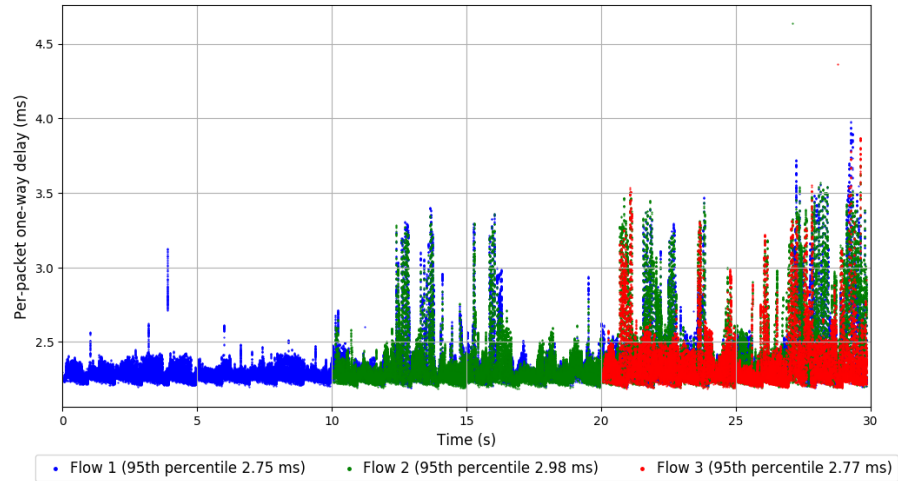
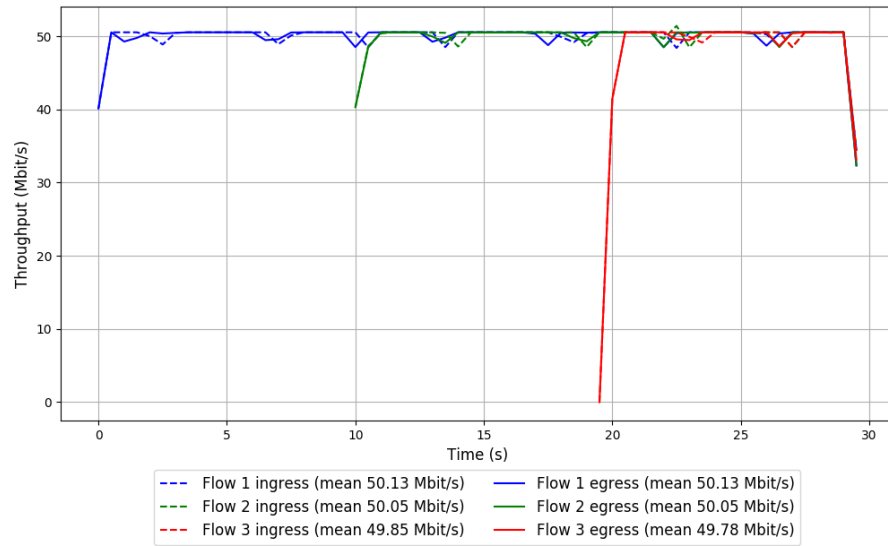


#### Run 4: Statistics of Sprout

Start at: 2017-11-30 19:01:44  
End at: 2017-11-30 19:02:14  
Local clock offset: -0.066 ms  
Remote clock offset: 0.411 ms

```
# Below is generated by plot.py at 2017-12-01 01:24:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.76 Mbit/s
95th percentile per-packet one-way delay: 2.860 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 50.13 Mbit/s
95th percentile per-packet one-way delay: 2.753 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 50.05 Mbit/s
95th percentile per-packet one-way delay: 2.976 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 49.78 Mbit/s
95th percentile per-packet one-way delay: 2.772 ms
Loss rate: 0.13%
```

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



Run 5: Statistics of Sprout

Start at: 2017-11-30 19:20:33

End at: 2017-11-30 19:21:03

Local clock offset: 0.025 ms

Remote clock offset: 0.469 ms

# Below is generated by plot.py at 2017-12-01 01:24:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 99.75 Mbit/s

95th percentile per-packet one-way delay: 2.644 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 50.12 Mbit/s

95th percentile per-packet one-way delay: 2.612 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 49.98 Mbit/s

95th percentile per-packet one-way delay: 2.642 ms

Loss rate: 0.10%

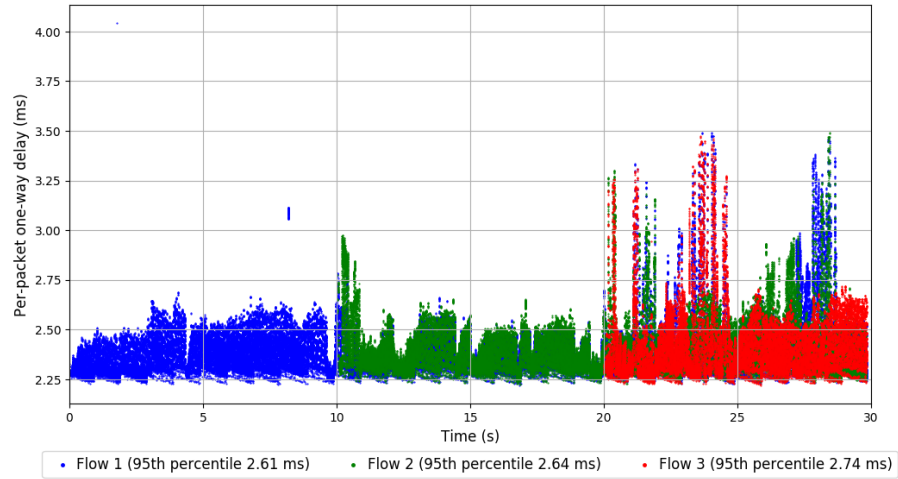
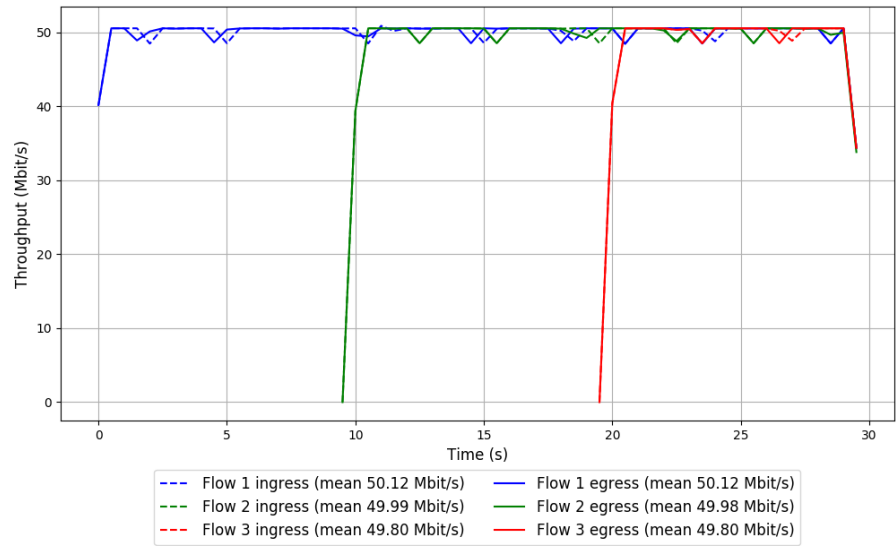
-- Flow 3:

Average throughput: 49.80 Mbit/s

95th percentile per-packet one-way delay: 2.738 ms

Loss rate: 0.00%

## Run 5: Report of Sprout — Data Link

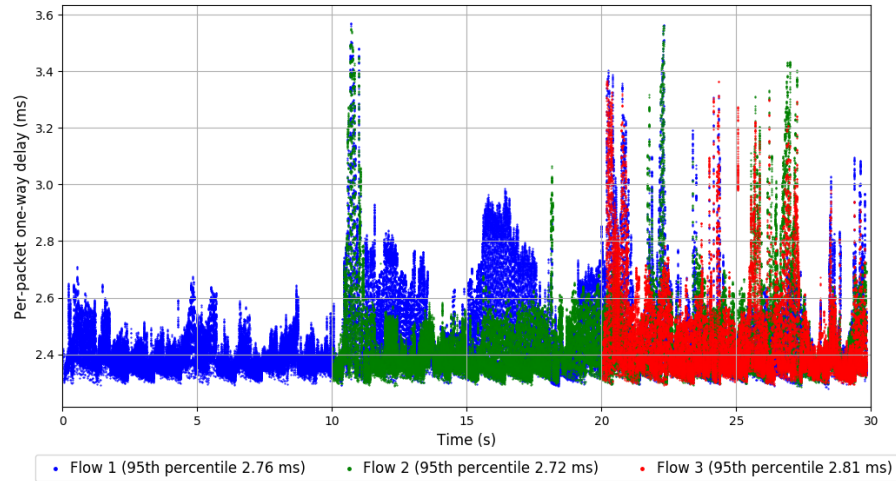
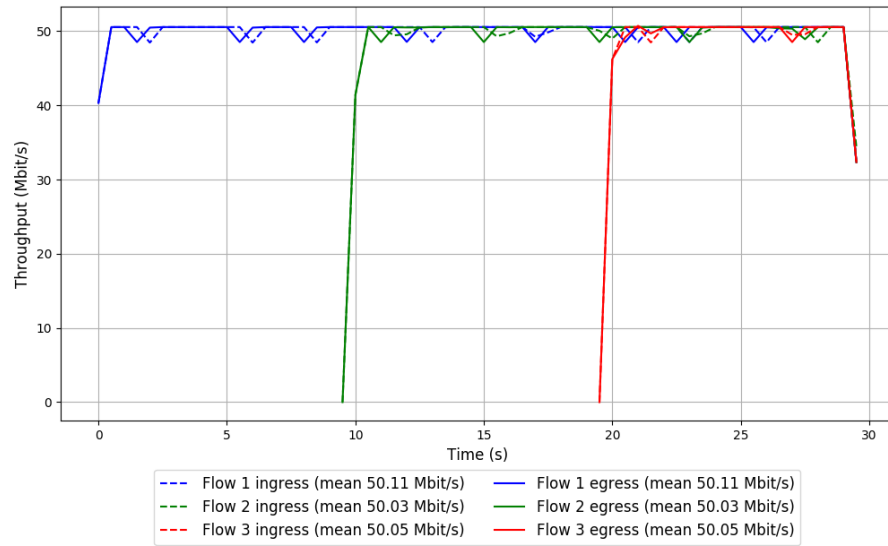


Run 6: Statistics of Sprout

Start at: 2017-11-30 19:39:24  
End at: 2017-11-30 19:39:54  
Local clock offset: 0.104 ms  
Remote clock offset: 0.29 ms

# Below is generated by plot.py at 2017-12-01 01:25:18  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 99.89 Mbit/s  
95th percentile per-packet one-way delay: 2.762 ms  
Loss rate: 0.03%  
-- Flow 1:  
Average throughput: 50.11 Mbit/s  
95th percentile per-packet one-way delay: 2.761 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 50.03 Mbit/s  
95th percentile per-packet one-way delay: 2.721 ms  
Loss rate: 0.10%  
-- Flow 3:  
Average throughput: 50.05 Mbit/s  
95th percentile per-packet one-way delay: 2.811 ms  
Loss rate: 0.00%

## Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-11-30 19:58:07

End at: 2017-11-30 19:58:37

Local clock offset: 0.176 ms

Remote clock offset: 0.312 ms

# Below is generated by plot.py at 2017-12-01 01:25:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 99.79 Mbit/s

95th percentile per-packet one-way delay: 2.592 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 50.06 Mbit/s

95th percentile per-packet one-way delay: 2.488 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 50.01 Mbit/s

95th percentile per-packet one-way delay: 2.707 ms

Loss rate: 0.00%

-- Flow 3:

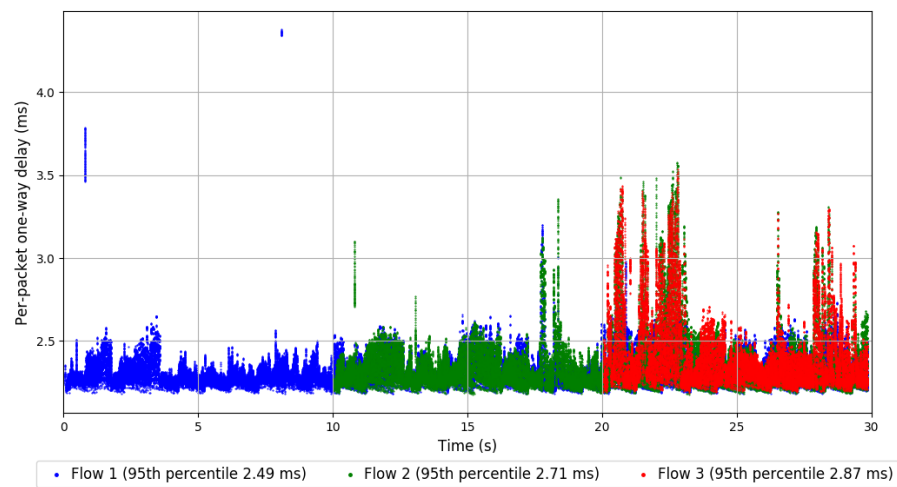
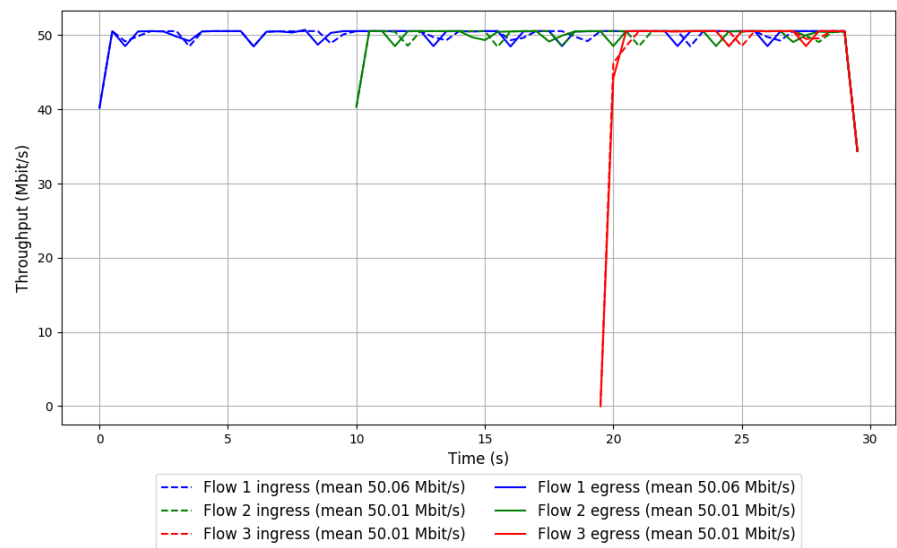
Average throughput: 50.01 Mbit/s

95th percentile per-packet one-way delay: 2.874 ms

Loss rate: 0.00%



Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-11-30 20:16:46

End at: 2017-11-30 20:17:16

Local clock offset: 0.284 ms

Remote clock offset: 0.247 ms

# Below is generated by plot.py at 2017-12-01 01:25:52

# Datalink statistics

-- Total of 3 flows:

Average throughput: 99.74 Mbit/s

95th percentile per-packet one-way delay: 2.764 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 50.08 Mbit/s

95th percentile per-packet one-way delay: 2.611 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.97 Mbit/s

95th percentile per-packet one-way delay: 2.858 ms

Loss rate: 0.00%

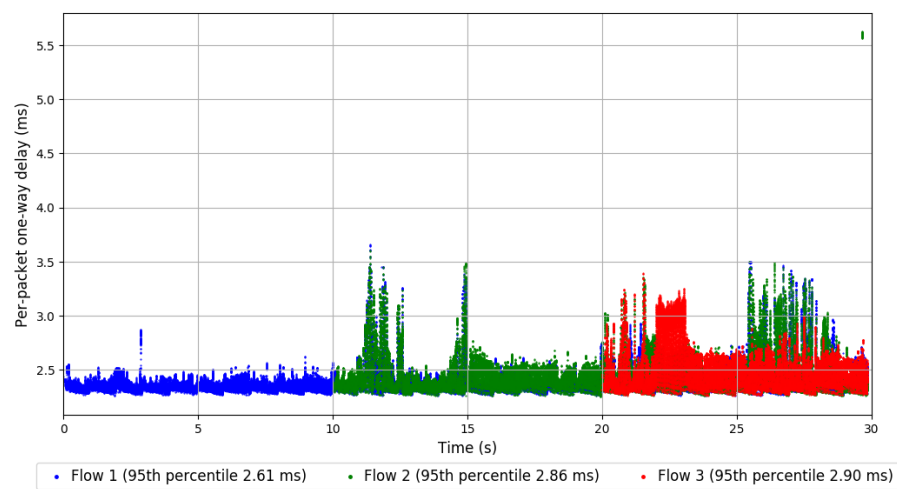
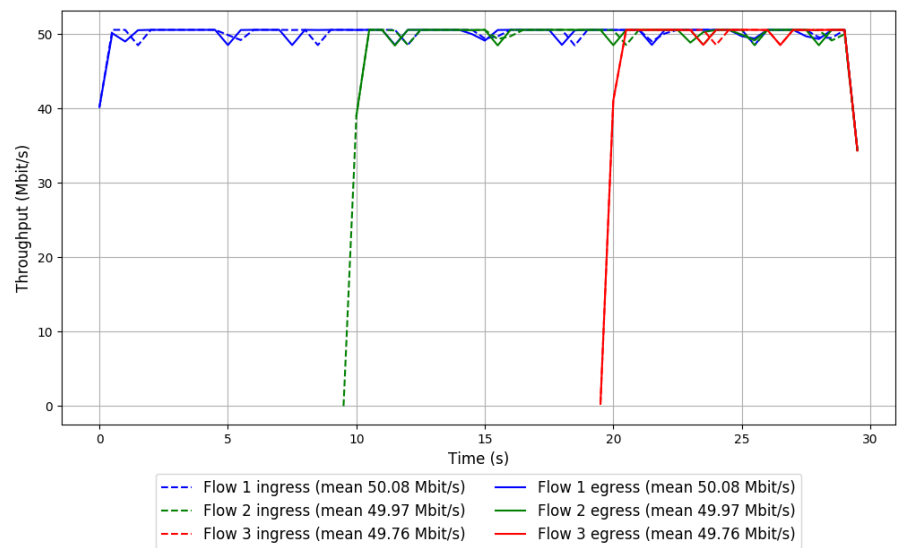
-- Flow 3:

Average throughput: 49.76 Mbit/s

95th percentile per-packet one-way delay: 2.899 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link

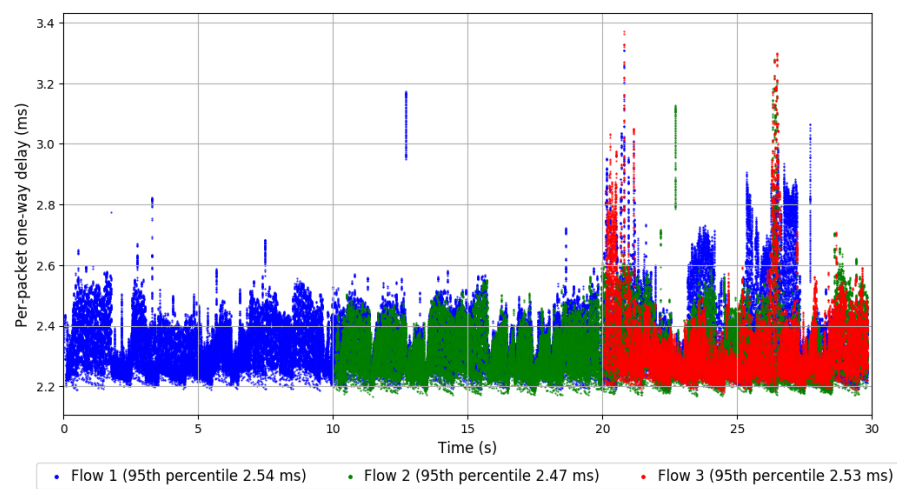
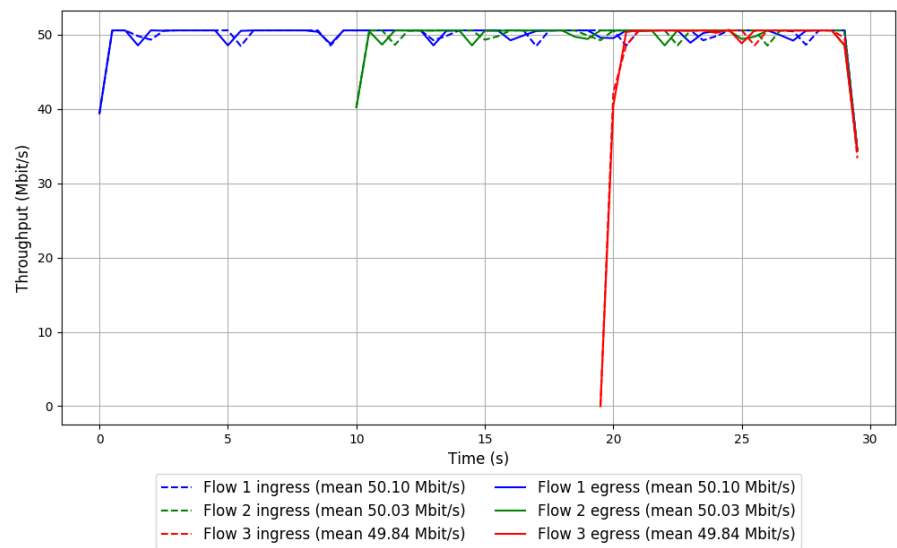


Run 9: Statistics of Sprout

Start at: 2017-11-30 20:35:31  
End at: 2017-11-30 20:36:01  
Local clock offset: 0.389 ms  
Remote clock offset: 0.234 ms

# Below is generated by plot.py at 2017-12-01 01:26:06  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 99.76 Mbit/s  
95th percentile per-packet one-way delay: 2.512 ms  
Loss rate: 0.04%  
-- Flow 1:  
Average throughput: 50.10 Mbit/s  
95th percentile per-packet one-way delay: 2.541 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 50.03 Mbit/s  
95th percentile per-packet one-way delay: 2.473 ms  
Loss rate: 0.11%  
-- Flow 3:  
Average throughput: 49.84 Mbit/s  
95th percentile per-packet one-way delay: 2.533 ms  
Loss rate: 0.00%

Run 9: Report of Sprout — Data Link

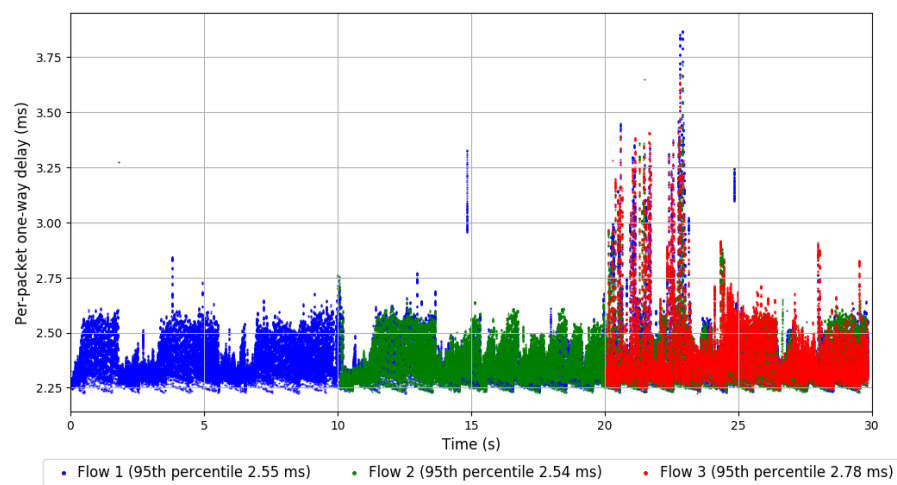
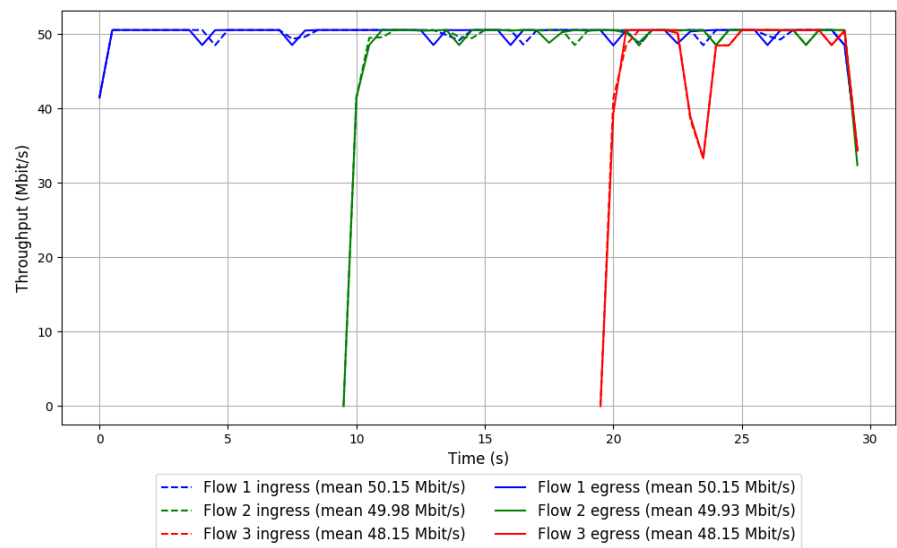


Run 10: Statistics of Sprout

Start at: 2017-11-30 20:55:01  
End at: 2017-11-30 20:55:31  
Local clock offset: 0.483 ms  
Remote clock offset: 0.163 ms

# Below is generated by plot.py at 2017-12-01 01:26:06  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 99.23 Mbit/s  
95th percentile per-packet one-way delay: 2.561 ms  
Loss rate: 0.03%  
-- Flow 1:  
Average throughput: 50.15 Mbit/s  
95th percentile per-packet one-way delay: 2.547 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 49.93 Mbit/s  
95th percentile per-packet one-way delay: 2.540 ms  
Loss rate: 0.10%  
-- Flow 3:  
Average throughput: 48.15 Mbit/s  
95th percentile per-packet one-way delay: 2.776 ms  
Loss rate: 0.00%

Run 10: Report of Sprout — Data Link



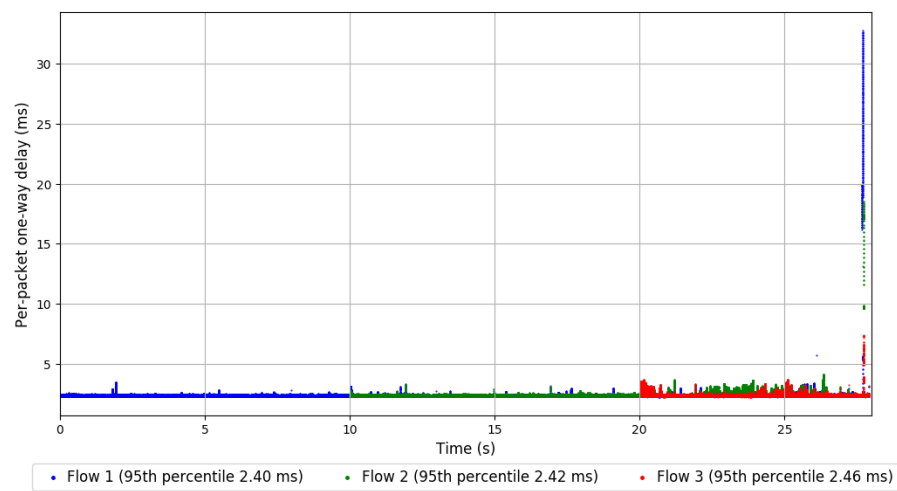
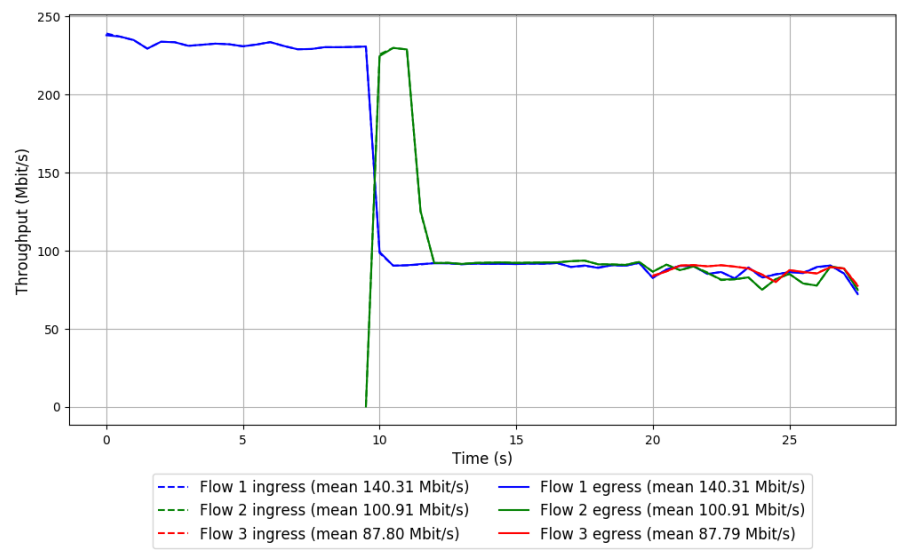
Run 1: Statistics of TaoVA-100x

Start at: 2017-11-30 18:06:35  
End at: 2017-11-30 18:07:05  
Local clock offset: -0.361 ms  
Remote clock offset: -0.111 ms

# Below is generated by plot.py at 2017-12-01 01:30:20  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 229.94 Mbit/s  
95th percentile per-packet one-way delay: 2.409 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 140.31 Mbit/s  
95th percentile per-packet one-way delay: 2.400 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 100.91 Mbit/s  
95th percentile per-packet one-way delay: 2.423 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 87.79 Mbit/s  
95th percentile per-packet one-way delay: 2.455 ms  
Loss rate: 0.06%



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



Run 2: Statistics of TaoVA-100x

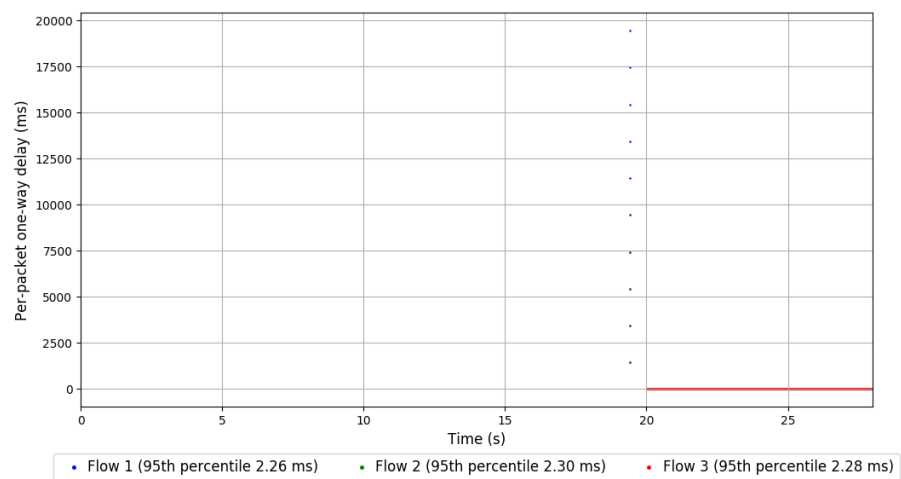
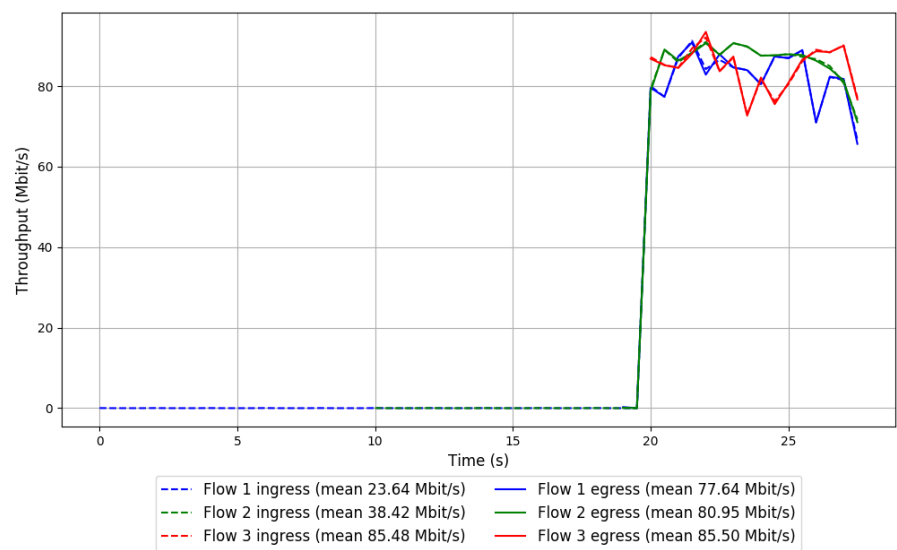
Start at: 2017-11-30 18:25:29

End at: 2017-11-30 18:25:59

Local clock offset: -0.353 ms

Remote clock offset: 0.426 ms

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-11-30 18:44:12

End at: 2017-11-30 18:44:42

Local clock offset: -0.149 ms

Remote clock offset: 0.477 ms

# Below is generated by plot.py at 2017-12-01 01:30:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 222.29 Mbit/s

95th percentile per-packet one-way delay: 2.374 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 139.25 Mbit/s

95th percentile per-packet one-way delay: 2.373 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 91.89 Mbit/s

95th percentile per-packet one-way delay: 2.379 ms

Loss rate: 0.02%

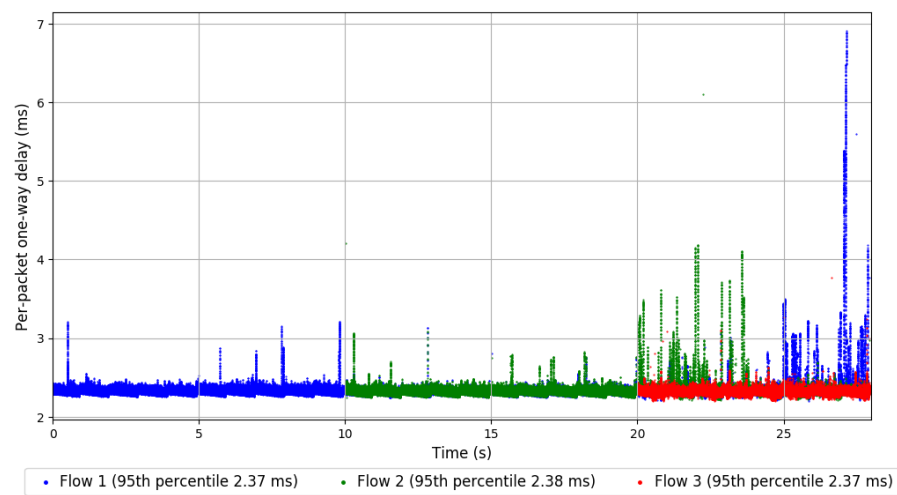
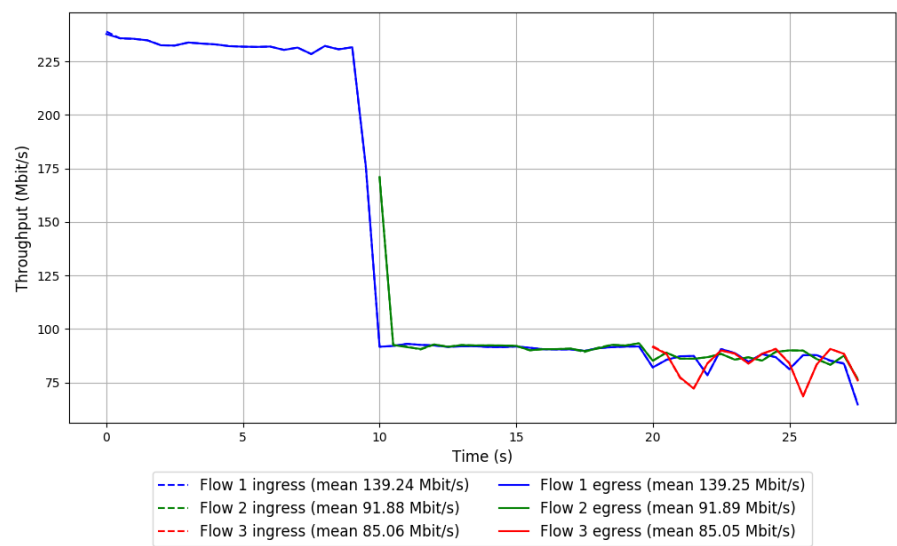
-- Flow 3:

Average throughput: 85.05 Mbit/s

95th percentile per-packet one-way delay: 2.371 ms

Loss rate: 0.06%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-11-30 19:02:50

End at: 2017-11-30 19:03:20

Local clock offset: -0.08 ms

Remote clock offset: 0.391 ms

# Below is generated by plot.py at 2017-12-01 01:30:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 187.51 Mbit/s

95th percentile per-packet one-way delay: 2.295 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 101.94 Mbit/s

95th percentile per-packet one-way delay: 2.289 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 95.20 Mbit/s

95th percentile per-packet one-way delay: 2.302 ms

Loss rate: 0.02%

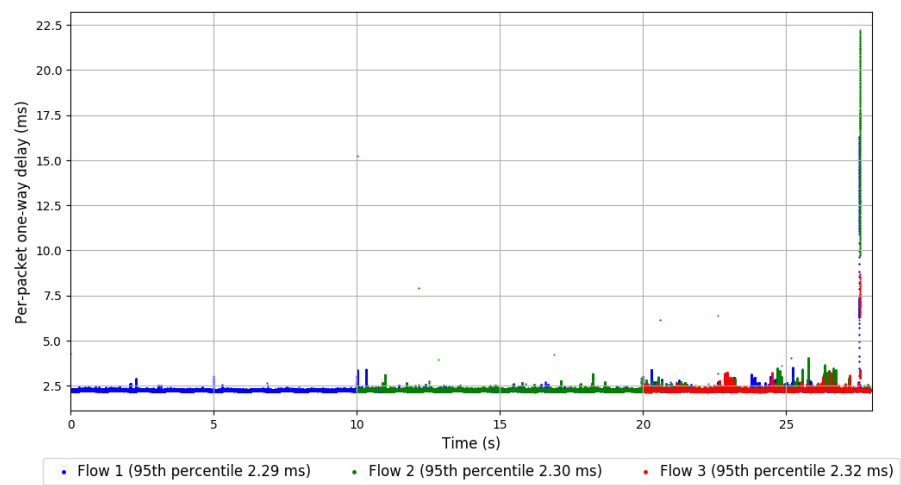
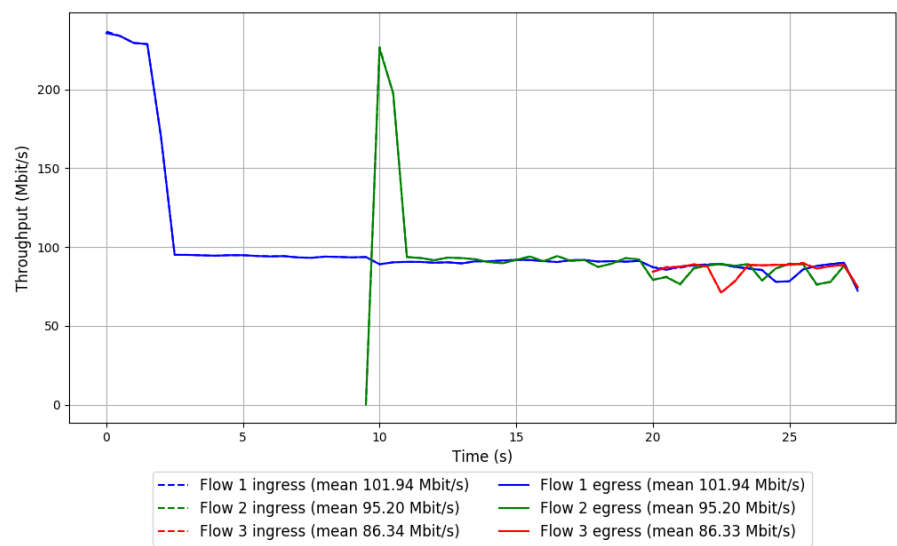
-- Flow 3:

Average throughput: 86.33 Mbit/s

95th percentile per-packet one-way delay: 2.319 ms

Loss rate: 0.06%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-11-30 19:21:40

End at: 2017-11-30 19:22:10

Local clock offset: 0.027 ms

Remote clock offset: 0.482 ms

# Below is generated by plot.py at 2017-12-01 01:30:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 223.57 Mbit/s

95th percentile per-packet one-way delay: 2.333 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 142.15 Mbit/s

95th percentile per-packet one-way delay: 2.325 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 88.06 Mbit/s

95th percentile per-packet one-way delay: 2.364 ms

Loss rate: 0.02%

-- Flow 3:

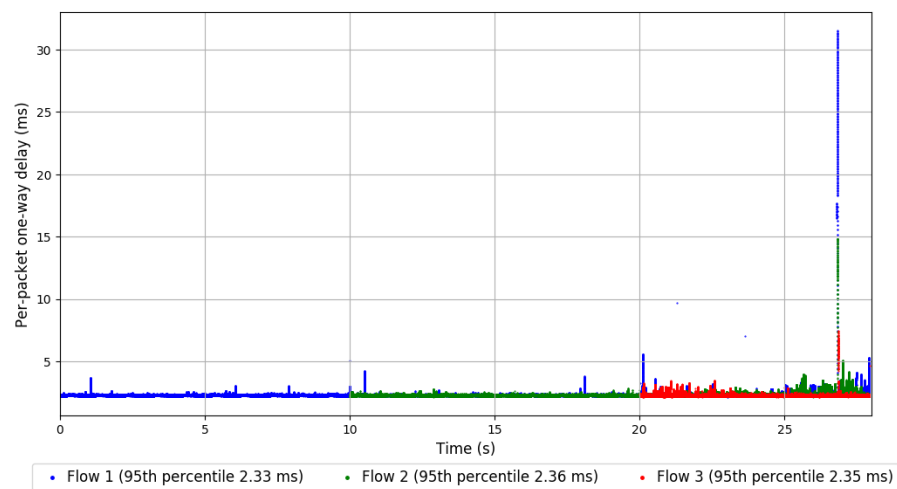
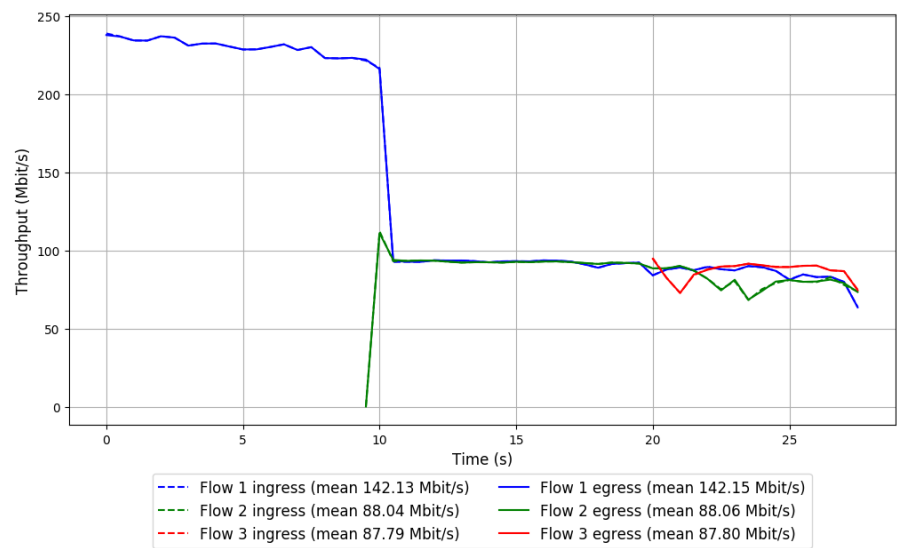
Average throughput: 87.80 Mbit/s

95th percentile per-packet one-way delay: 2.354 ms

Loss rate: 0.06%



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



Run 6: Statistics of TaoVA-100x

Start at: 2017-11-30 19:40:31

End at: 2017-11-30 19:41:01

Local clock offset: 0.068 ms

Remote clock offset: 0.375 ms

# Below is generated by plot.py at 2017-12-01 01:30:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 211.37 Mbit/s

95th percentile per-packet one-way delay: 2.261 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 118.79 Mbit/s

95th percentile per-packet one-way delay: 2.257 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 90.64 Mbit/s

95th percentile per-packet one-way delay: 2.265 ms

Loss rate: 0.02%

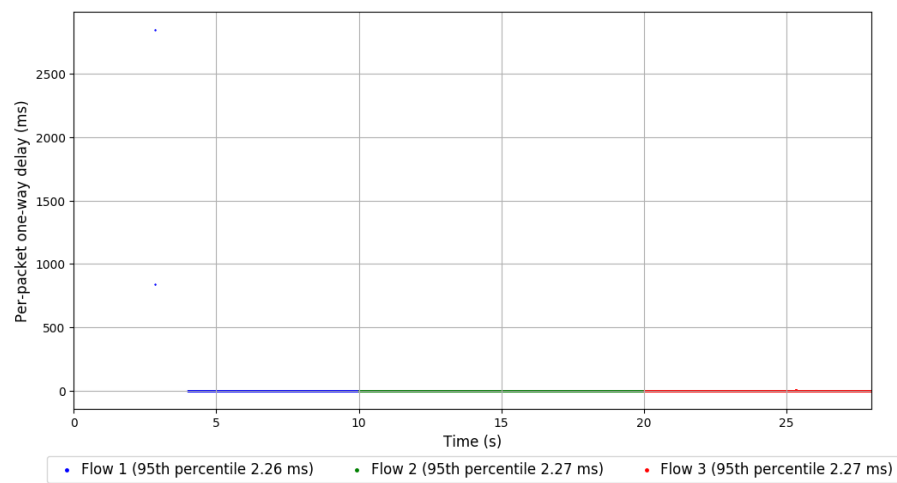
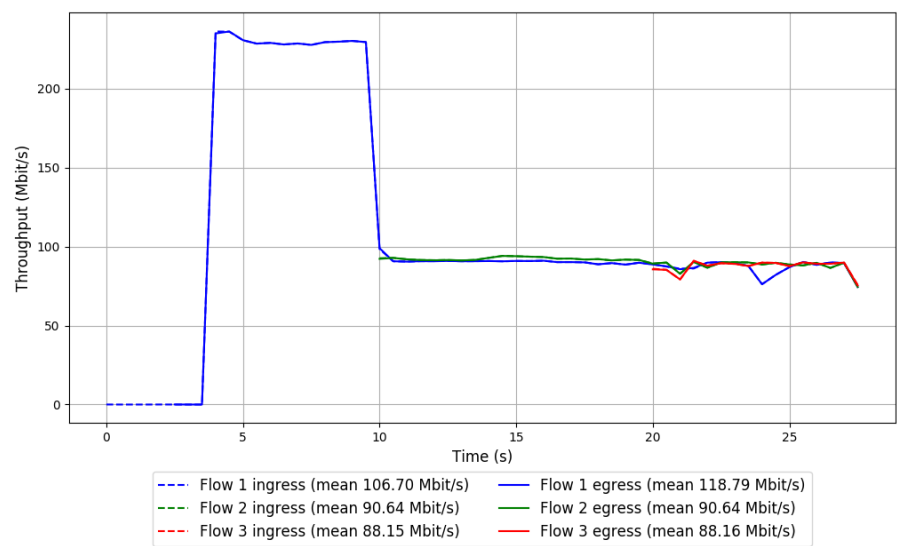
-- Flow 3:

Average throughput: 88.16 Mbit/s

95th percentile per-packet one-way delay: 2.268 ms

Loss rate: 0.05%

Run 6: Report of TaoVA-100x — Data Link



Run 7: Statistics of TaoVA-100x

Start at: 2017-11-30 19:59:13

End at: 2017-11-30 19:59:43

Local clock offset: 0.186 ms

Remote clock offset: 0.313 ms

# Below is generated by plot.py at 2017-12-01 01:30:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 167.03 Mbit/s

95th percentile per-packet one-way delay: 2.303 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 86.93 Mbit/s

95th percentile per-packet one-way delay: 2.311 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 88.32 Mbit/s

95th percentile per-packet one-way delay: 2.296 ms

Loss rate: 0.01%

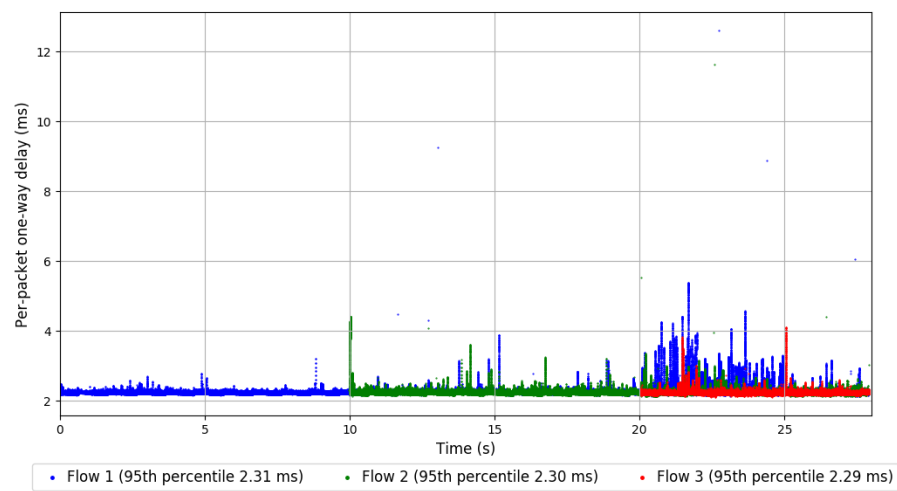
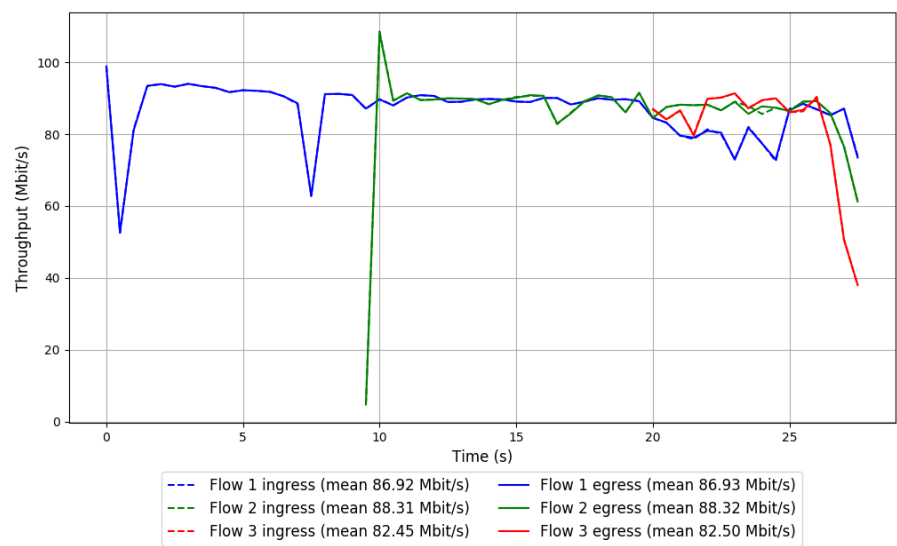
-- Flow 3:

Average throughput: 82.50 Mbit/s

95th percentile per-packet one-way delay: 2.287 ms

Loss rate: 0.03%

Run 7: Report of TaoVA-100x — Data Link



Run 8: Statistics of TaoVA-100x

Start at: 2017-11-30 20:17:53

End at: 2017-11-30 20:18:23

Local clock offset: 0.278 ms

Remote clock offset: 0.319 ms

# Below is generated by plot.py at 2017-12-01 01:30:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 167.04 Mbit/s

95th percentile per-packet one-way delay: 2.271 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 86.79 Mbit/s

95th percentile per-packet one-way delay: 2.273 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 86.90 Mbit/s

95th percentile per-packet one-way delay: 2.267 ms

Loss rate: 0.03%

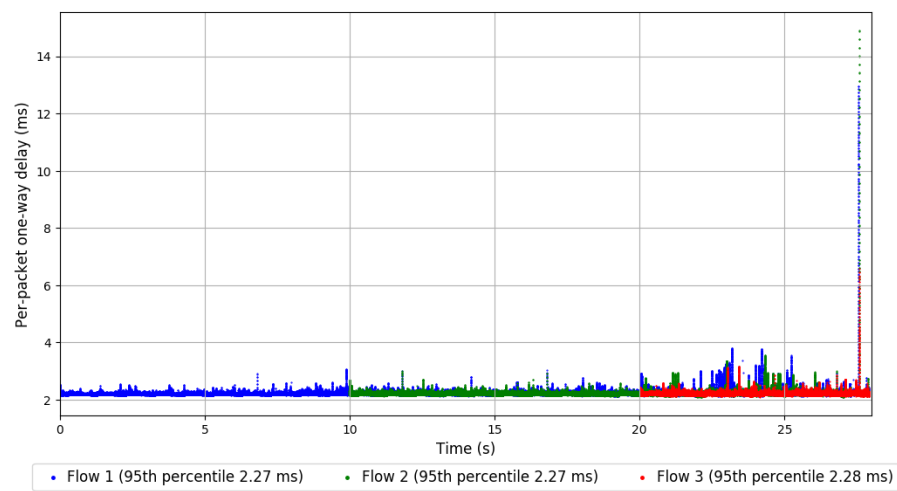
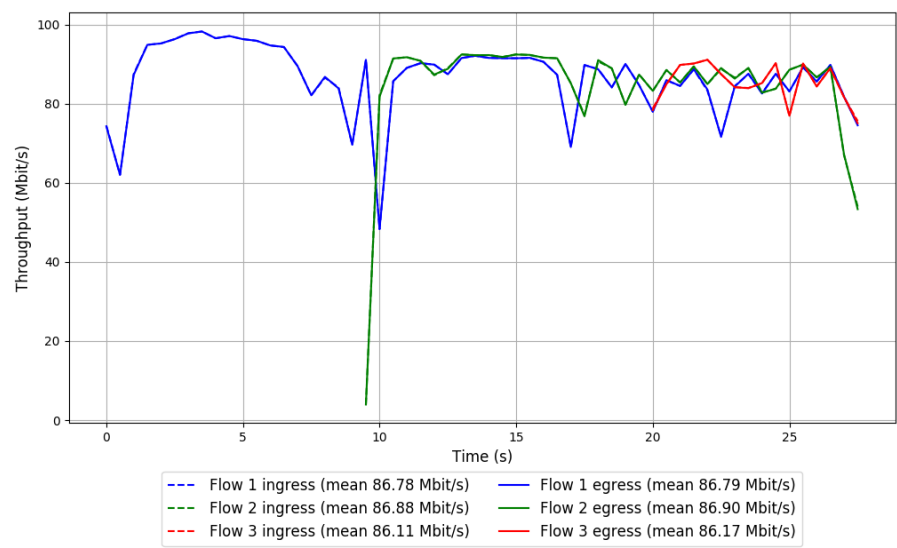
-- Flow 3:

Average throughput: 86.17 Mbit/s

95th percentile per-packet one-way delay: 2.276 ms

Loss rate: 0.07%

Run 8: Report of TaoVA-100x — Data Link



Run 9: Statistics of TaoVA-100x

Start at: 2017-11-30 20:36:37

End at: 2017-11-30 20:37:07

Local clock offset: 0.41 ms

Remote clock offset: 0.237 ms

# Below is generated by plot.py at 2017-12-01 01:32:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 235.95 Mbit/s

95th percentile per-packet one-way delay: 2.290 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 144.08 Mbit/s

95th percentile per-packet one-way delay: 2.279 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 104.78 Mbit/s

95th percentile per-packet one-way delay: 2.301 ms

Loss rate: 0.02%

-- Flow 3:

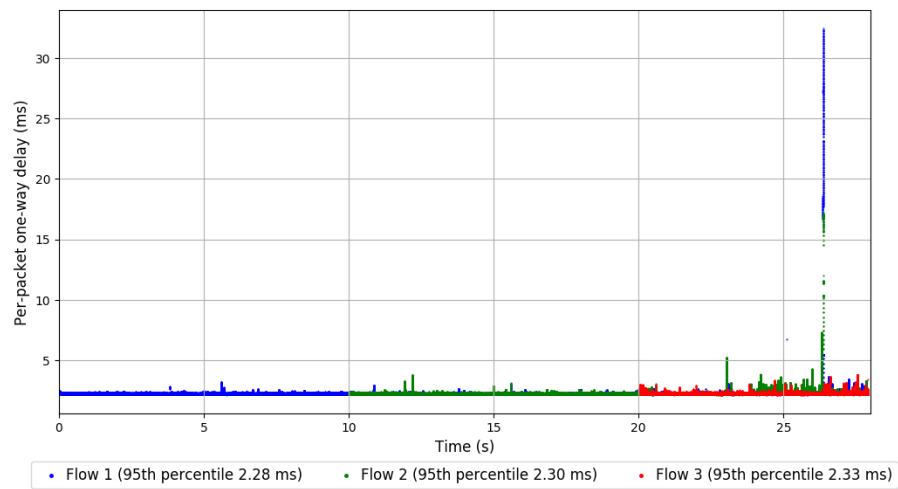
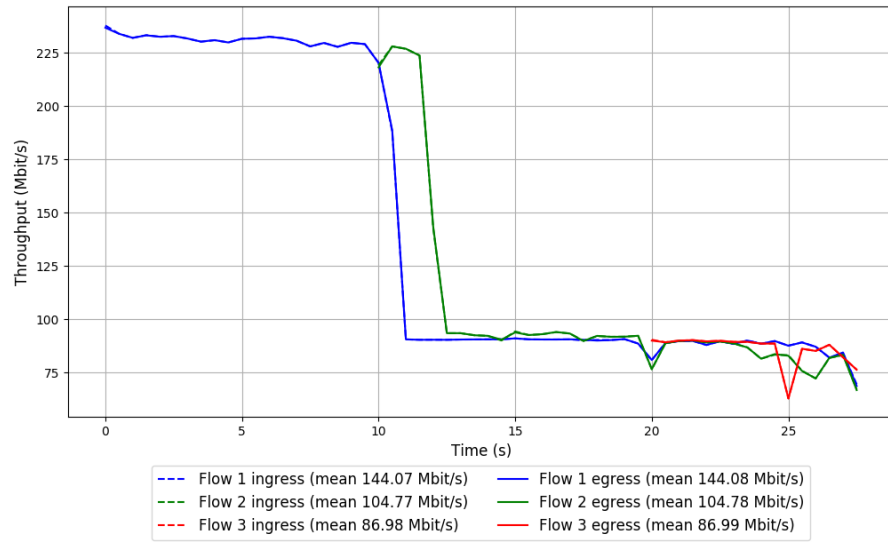
Average throughput: 86.99 Mbit/s

95th percentile per-packet one-way delay: 2.332 ms

Loss rate: 0.03%



## Run 9: Report of TaoVA-100x — Data Link

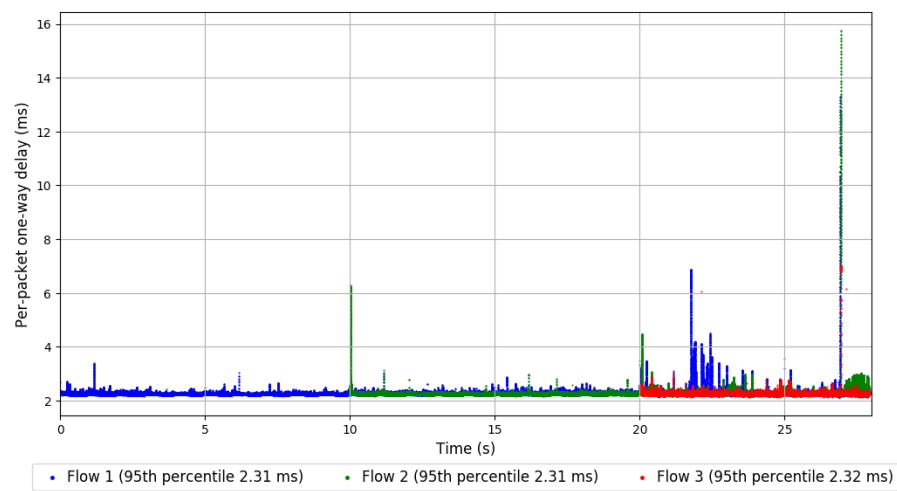
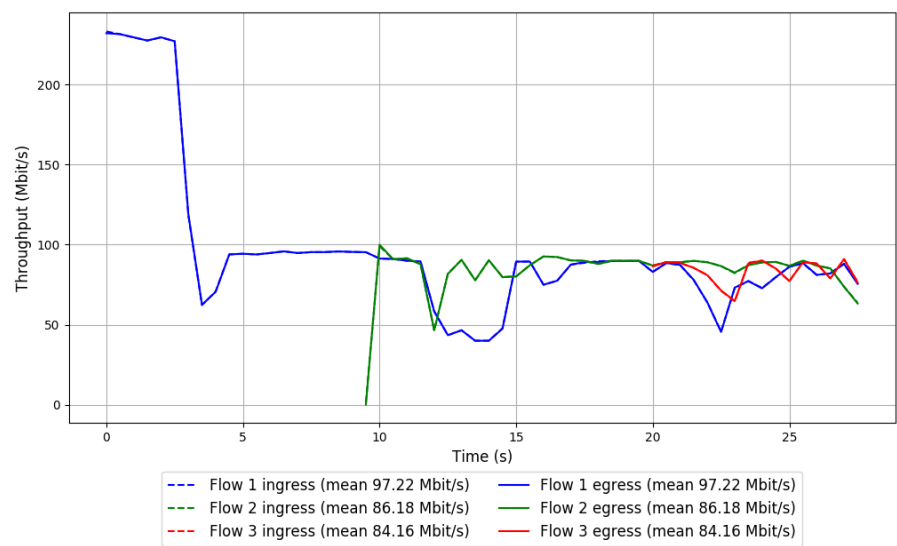


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-11-30 20:56:08
End at: 2017-11-30 20:56:38
Local clock offset: 0.458 ms
Remote clock offset: 0.163 ms

# Below is generated by plot.py at 2017-12-01 01:33:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 176.40 Mbit/s
95th percentile per-packet one-way delay: 2.309 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 97.22 Mbit/s
95th percentile per-packet one-way delay: 2.310 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 86.18 Mbit/s
95th percentile per-packet one-way delay: 2.305 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 84.16 Mbit/s
95th percentile per-packet one-way delay: 2.317 ms
Loss rate: 0.06%
```

Run 10: Report of TaoVA-100x — Data Link

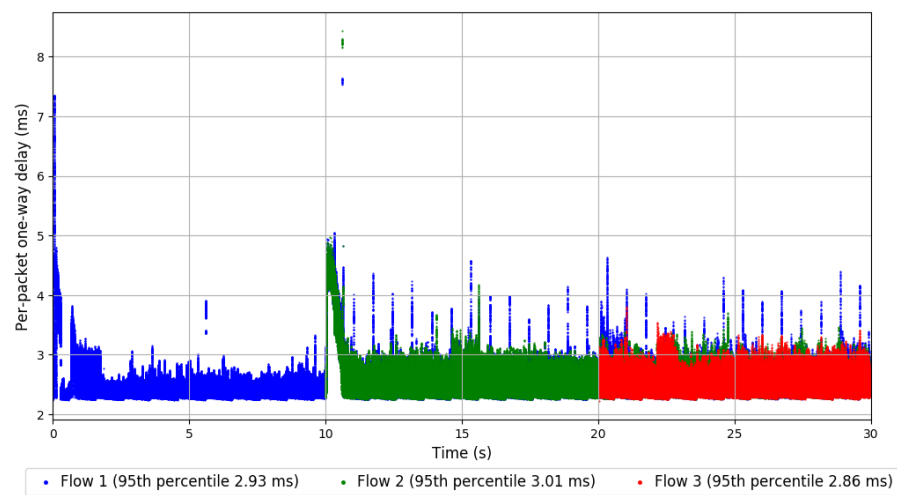
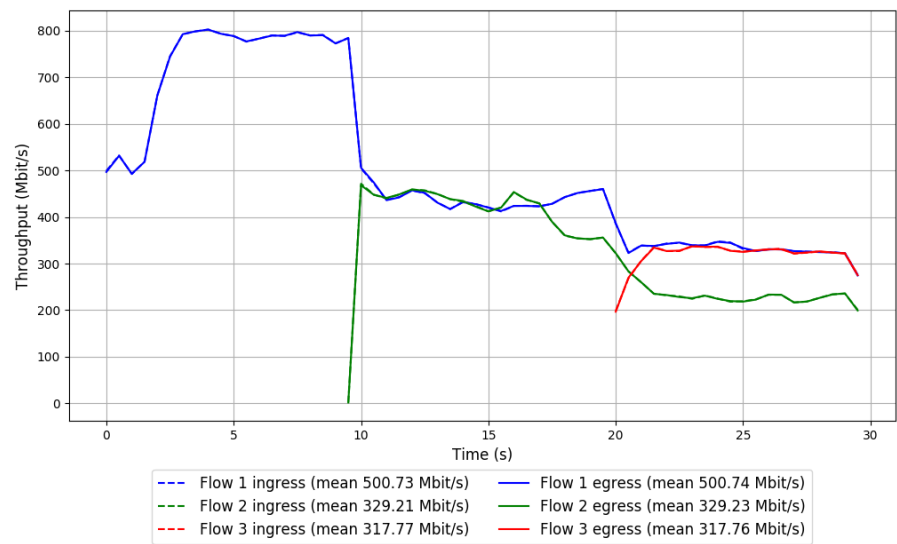


Run 1: Statistics of TCP Vegas

Start at: 2017-11-30 17:59:31  
End at: 2017-11-30 18:00:01  
Local clock offset: -0.399 ms  
Remote clock offset: -0.266 ms

# Below is generated by plot.py at 2017-12-01 01:41:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 825.46 Mbit/s  
95th percentile per-packet one-way delay: 2.937 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 500.74 Mbit/s  
95th percentile per-packet one-way delay: 2.930 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 329.23 Mbit/s  
95th percentile per-packet one-way delay: 3.009 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 317.76 Mbit/s  
95th percentile per-packet one-way delay: 2.856 ms  
Loss rate: 0.05%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-11-30 18:18:27

End at: 2017-11-30 18:18:57

Local clock offset: -0.353 ms

Remote clock offset: 0.24 ms

# Below is generated by plot.py at 2017-12-01 01:41:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 667.20 Mbit/s

95th percentile per-packet one-way delay: 3.368 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 239.42 Mbit/s

95th percentile per-packet one-way delay: 9.479 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 474.64 Mbit/s

95th percentile per-packet one-way delay: 3.273 ms

Loss rate: 0.02%

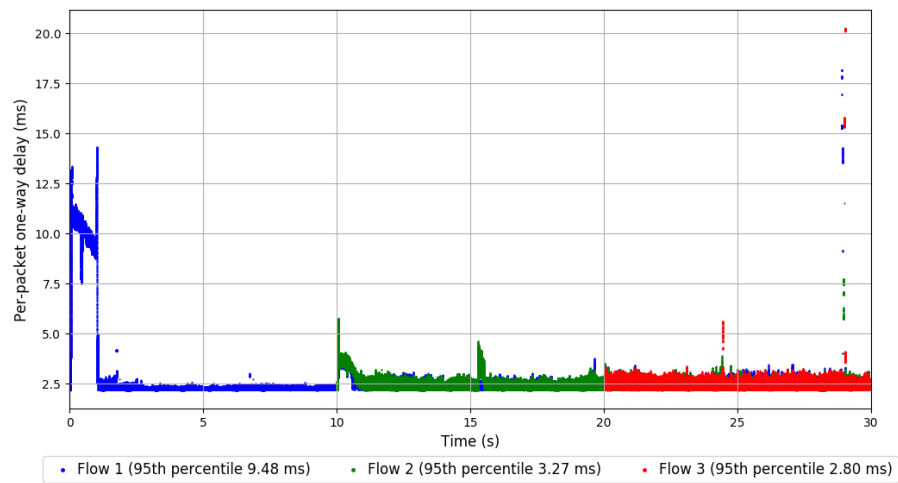
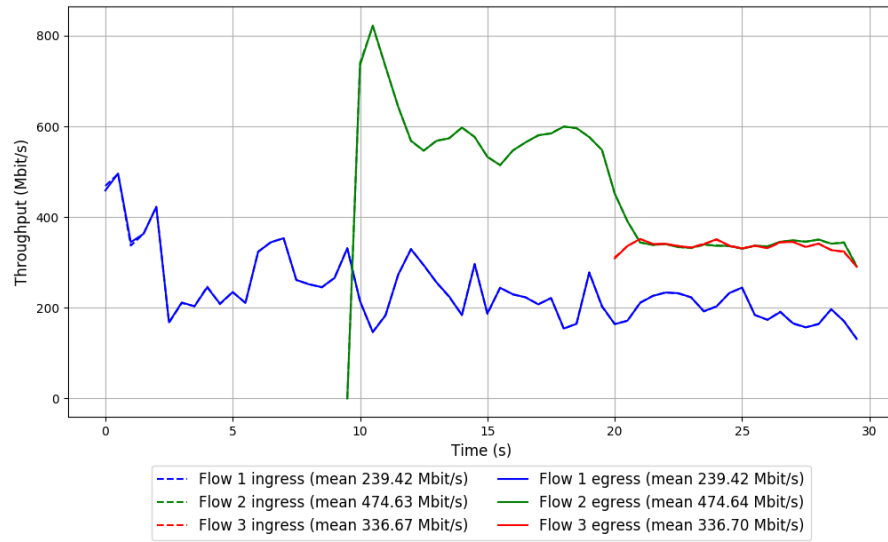
-- Flow 3:

Average throughput: 336.70 Mbit/s

95th percentile per-packet one-way delay: 2.797 ms

Loss rate: 0.04%

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



Run 3: Statistics of TCP Vegas

Start at: 2017-11-30 18:37:10

End at: 2017-11-30 18:37:40

Local clock offset: -0.2 ms

Remote clock offset: 0.516 ms

# Below is generated by plot.py at 2017-12-01 01:41:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 662.58 Mbit/s

95th percentile per-packet one-way delay: 3.602 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 319.18 Mbit/s

95th percentile per-packet one-way delay: 2.746 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 278.08 Mbit/s

95th percentile per-packet one-way delay: 2.847 ms

Loss rate: 0.02%

-- Flow 3:

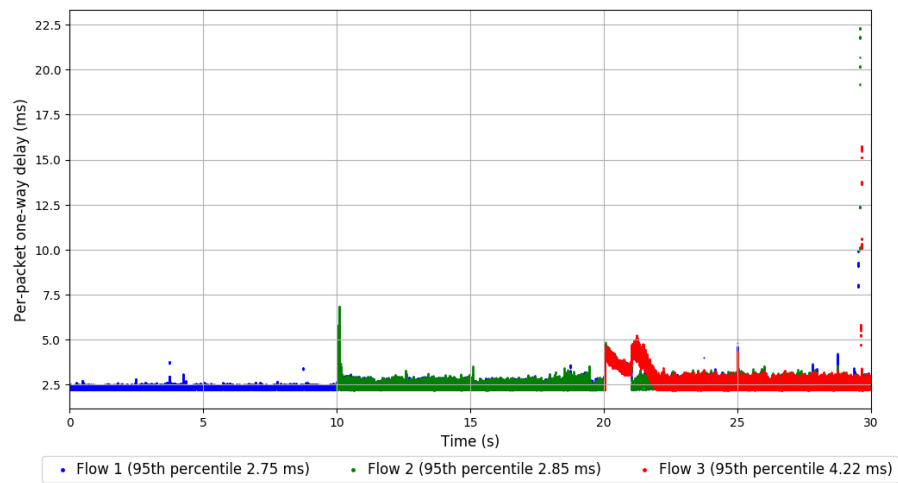
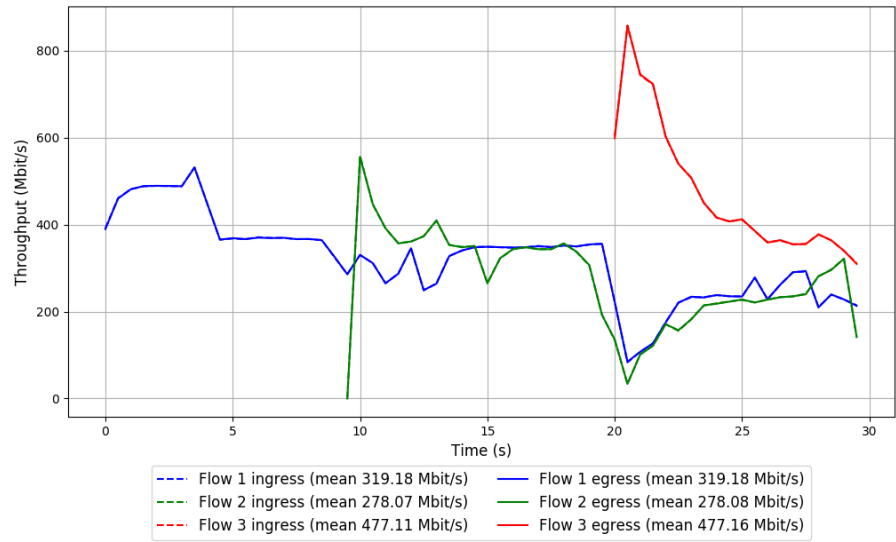
Average throughput: 477.16 Mbit/s

95th percentile per-packet one-way delay: 4.216 ms

Loss rate: 0.04%



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



Run 4: Statistics of TCP Vegas

Start at: 2017-11-30 18:55:56

End at: 2017-11-30 18:56:26

Local clock offset: -0.131 ms

Remote clock offset: 0.366 ms

# Below is generated by plot.py at 2017-12-01 01:41:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 624.95 Mbit/s

95th percentile per-packet one-way delay: 2.774 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 314.34 Mbit/s

95th percentile per-packet one-way delay: 2.729 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 293.87 Mbit/s

95th percentile per-packet one-way delay: 2.793 ms

Loss rate: 0.02%

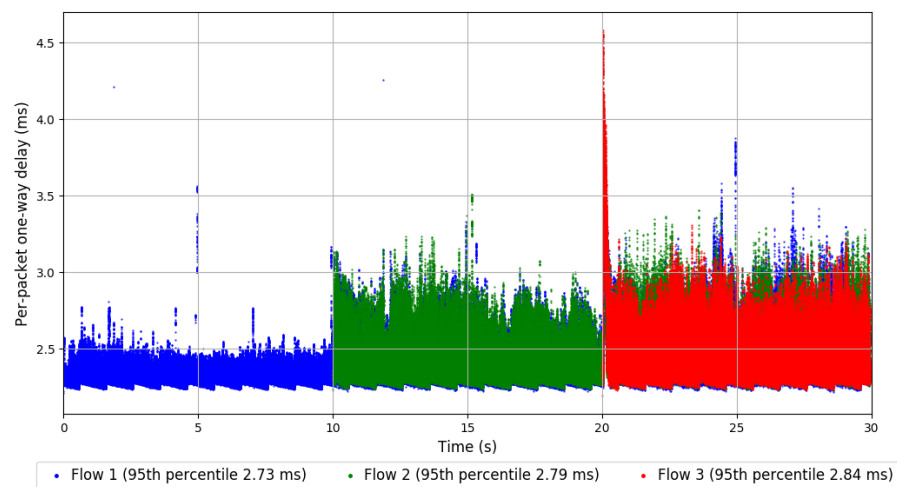
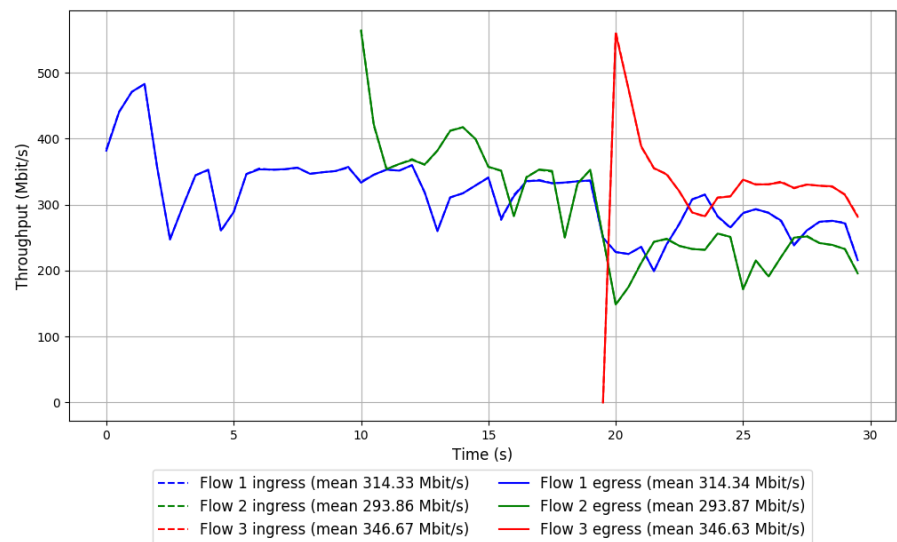
-- Flow 3:

Average throughput: 346.63 Mbit/s

95th percentile per-packet one-way delay: 2.836 ms

Loss rate: 0.05%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-11-30 19:14:39

End at: 2017-11-30 19:15:09

Local clock offset: -0.091 ms

Remote clock offset: 0.369 ms

# Below is generated by plot.py at 2017-12-01 01:41:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 708.24 Mbit/s

95th percentile per-packet one-way delay: 4.602 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 333.31 Mbit/s

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

Loss rate: 0.02%

-- Flow 2:

Average throughput: 378.40 Mbit/s

95th percentile per-packet one-way delay: 7.520 ms

Loss rate: 0.02%

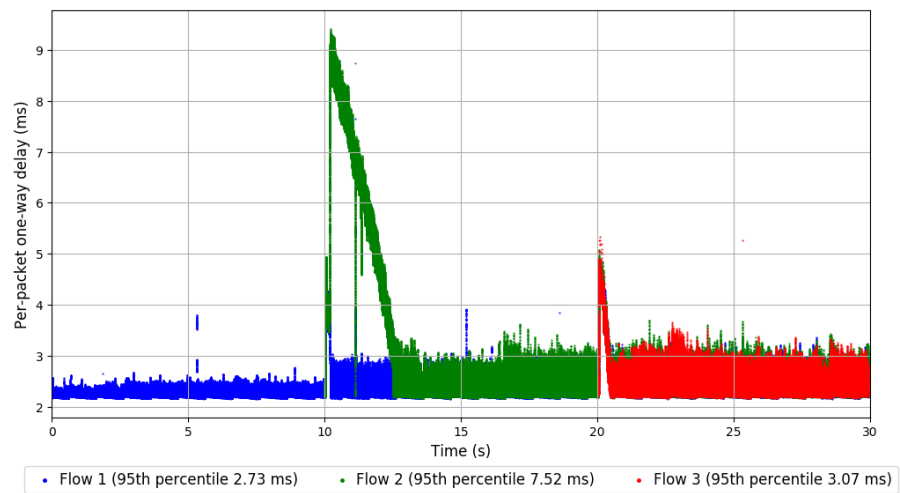
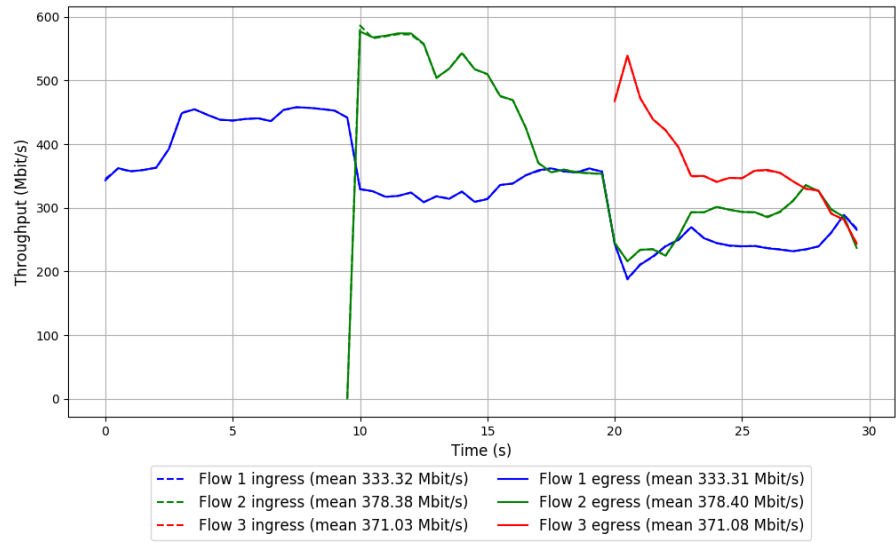
-- Flow 3:

Average throughput: 371.08 Mbit/s

95th percentile per-packet one-way delay: 3.070 ms

Loss rate: 0.03%

# Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-11-30 19:33:29

End at: 2017-11-30 19:33:59

Local clock offset: 0.005 ms

Remote clock offset: 0.427 ms

# Below is generated by plot.py at 2017-12-01 01:41:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 677.59 Mbit/s

95th percentile per-packet one-way delay: 2.720 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 329.03 Mbit/s

95th percentile per-packet one-way delay: 2.664 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 376.34 Mbit/s

95th percentile per-packet one-way delay: 2.768 ms

Loss rate: 0.02%

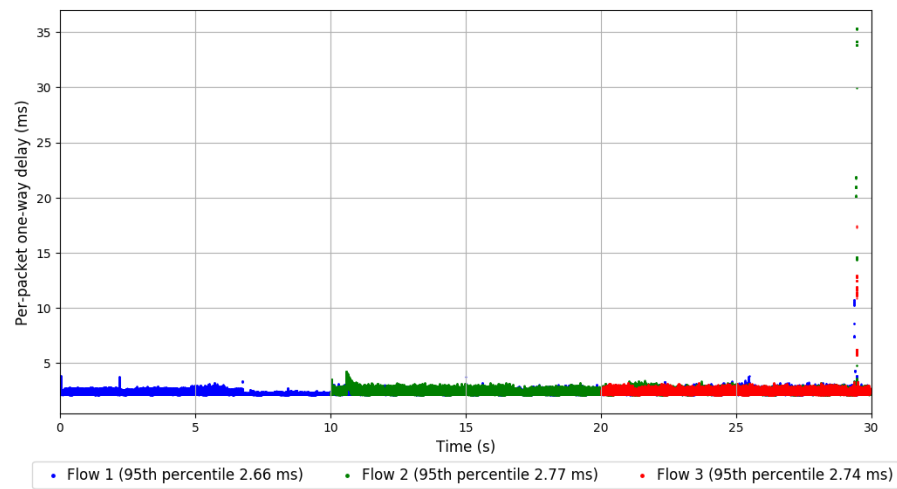
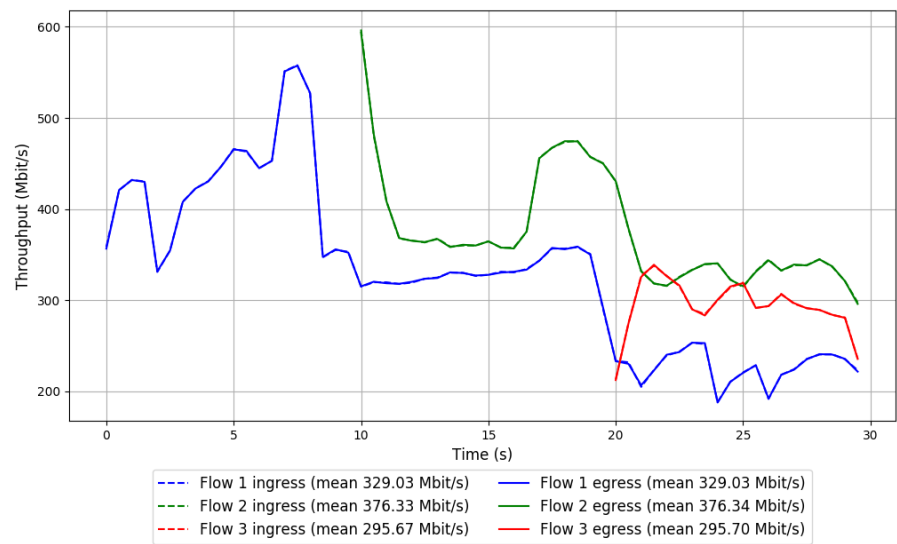
-- Flow 3:

Average throughput: 295.70 Mbit/s

95th percentile per-packet one-way delay: 2.741 ms

Loss rate: 0.03%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-11-30 19:52:19

End at: 2017-11-30 19:52:49

Local clock offset: 0.183 ms

Remote clock offset: 0.323 ms

# Below is generated by plot.py at 2017-12-01 01:41:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 606.28 Mbit/s

95th percentile per-packet one-way delay: 2.717 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 305.61 Mbit/s

95th percentile per-packet one-way delay: 2.712 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 313.68 Mbit/s

95th percentile per-packet one-way delay: 2.712 ms

Loss rate: 0.02%

-- Flow 3:

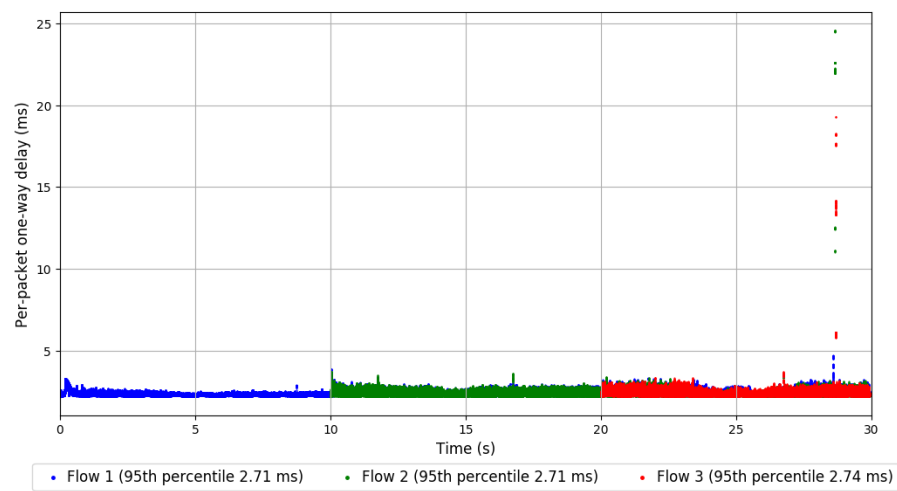
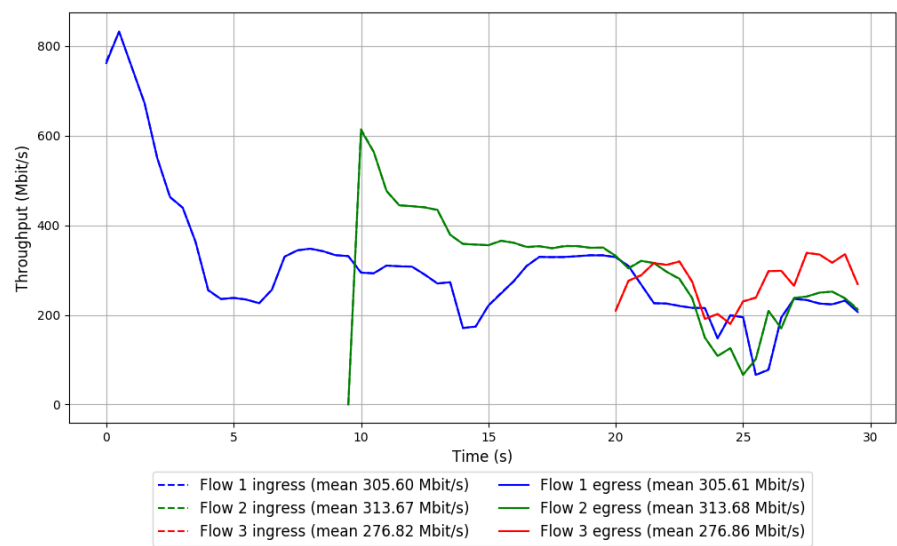
Average throughput: 276.86 Mbit/s

95th percentile per-packet one-way delay: 2.740 ms

Loss rate: 0.03%



Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-11-30 20:11:01

End at: 2017-11-30 20:11:31

Local clock offset: 0.193 ms

Remote clock offset: 0.31 ms

# Below is generated by plot.py at 2017-12-01 01:41:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 507.93 Mbit/s

95th percentile per-packet one-way delay: 2.715 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 278.43 Mbit/s

95th percentile per-packet one-way delay: 2.605 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 273.87 Mbit/s

95th percentile per-packet one-way delay: 3.215 ms

Loss rate: 0.02%

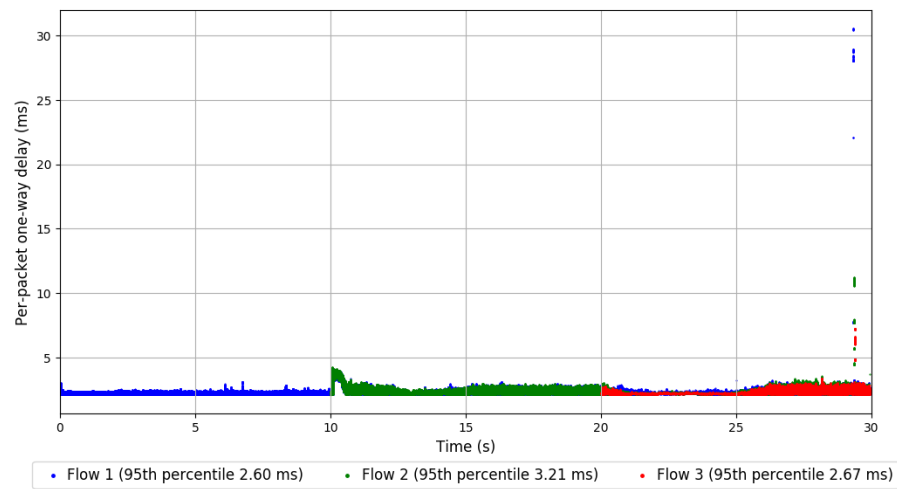
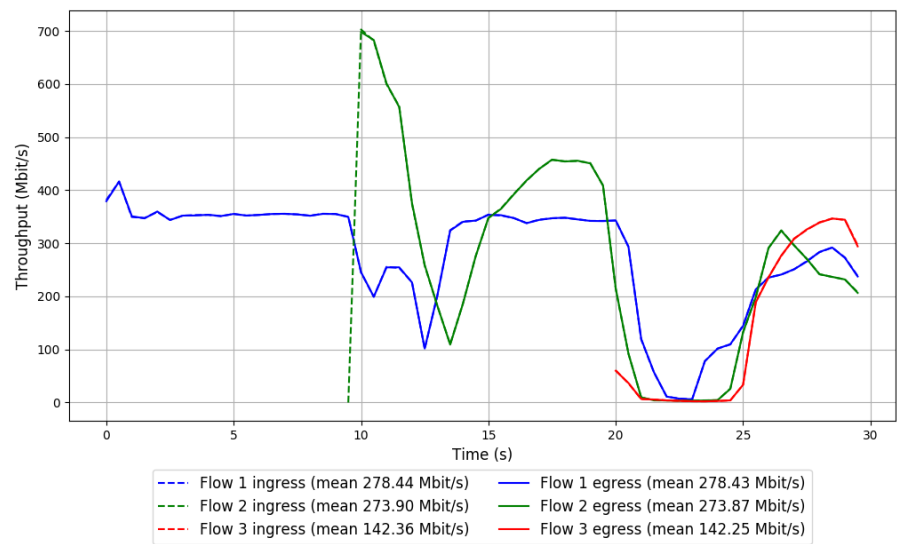
-- Flow 3:

Average throughput: 142.25 Mbit/s

95th percentile per-packet one-way delay: 2.671 ms

Loss rate: 0.12%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-11-30 20:29:39

End at: 2017-11-30 20:30:09

Local clock offset: 0.274 ms

Remote clock offset: 0.205 ms

# Below is generated by plot.py at 2017-12-01 01:48:09

# Datalink statistics

-- Total of 3 flows:

Average throughput: 636.25 Mbit/s

95th percentile per-packet one-way delay: 2.681 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 301.78 Mbit/s

95th percentile per-packet one-way delay: 2.669 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 341.72 Mbit/s

95th percentile per-packet one-way delay: 2.663 ms

Loss rate: 0.02%

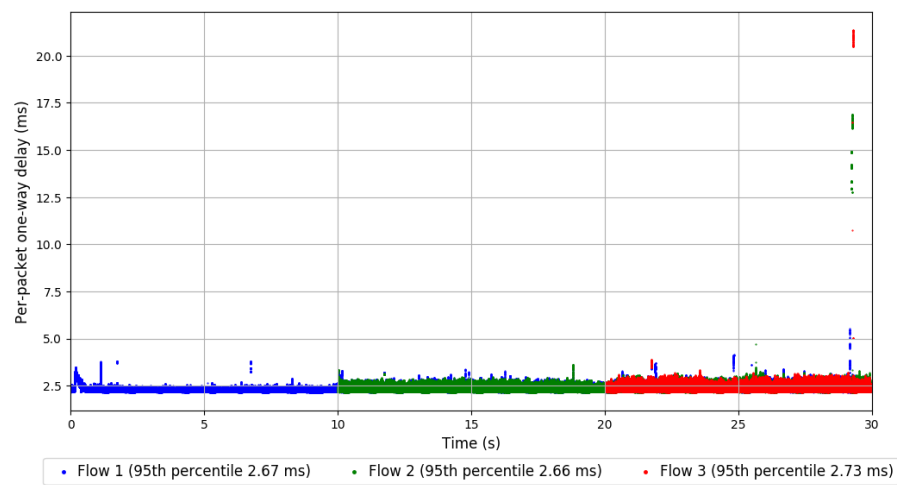
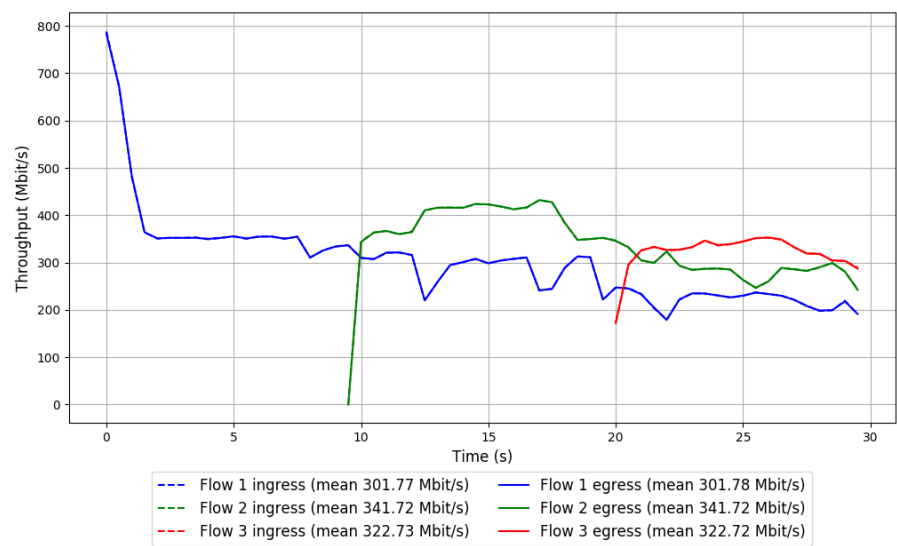
-- Flow 3:

Average throughput: 322.72 Mbit/s

95th percentile per-packet one-way delay: 2.727 ms

Loss rate: 0.05%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-11-30 20:48:29

End at: 2017-11-30 20:48:59

Local clock offset: 0.405 ms

Remote clock offset: 0.174 ms

# Below is generated by plot.py at 2017-12-01 01:48:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 656.63 Mbit/s

95th percentile per-packet one-way delay: 3.271 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 300.52 Mbit/s

95th percentile per-packet one-way delay: 2.696 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 336.78 Mbit/s

95th percentile per-packet one-way delay: 2.872 ms

Loss rate: 0.02%

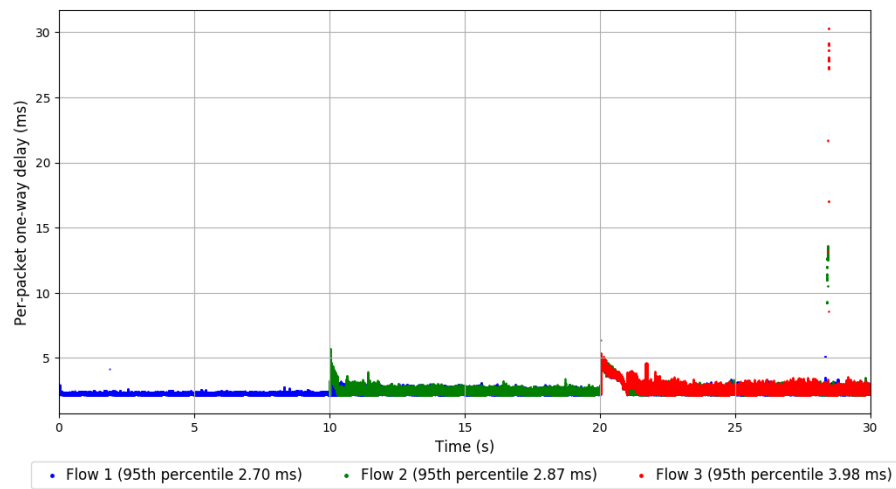
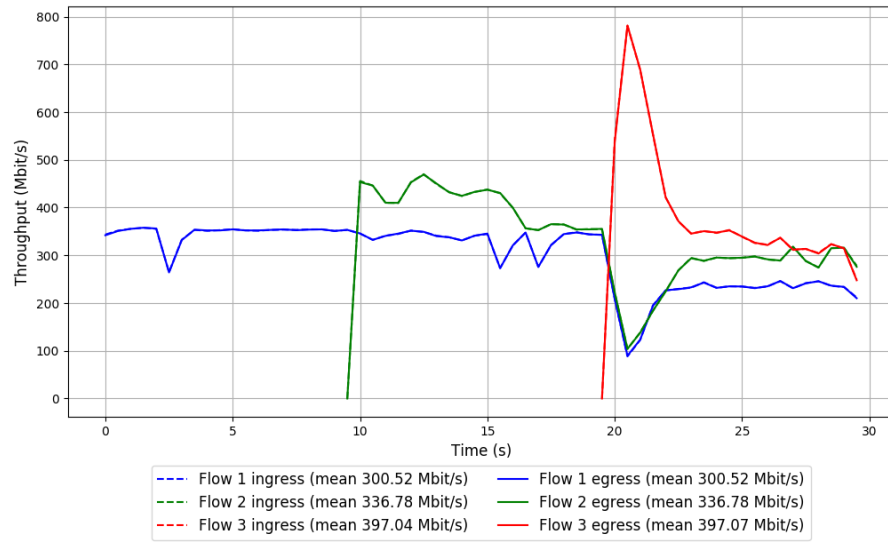
-- Flow 3:

Average throughput: 397.07 Mbit/s

95th percentile per-packet one-way delay: 3.977 ms

Loss rate: 0.04%

# Run 10: Report of TCP Vegas — Data Link



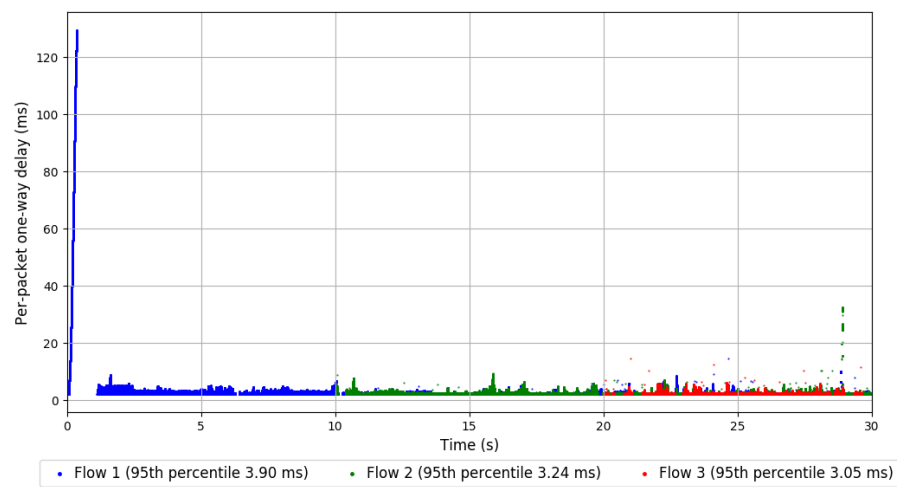
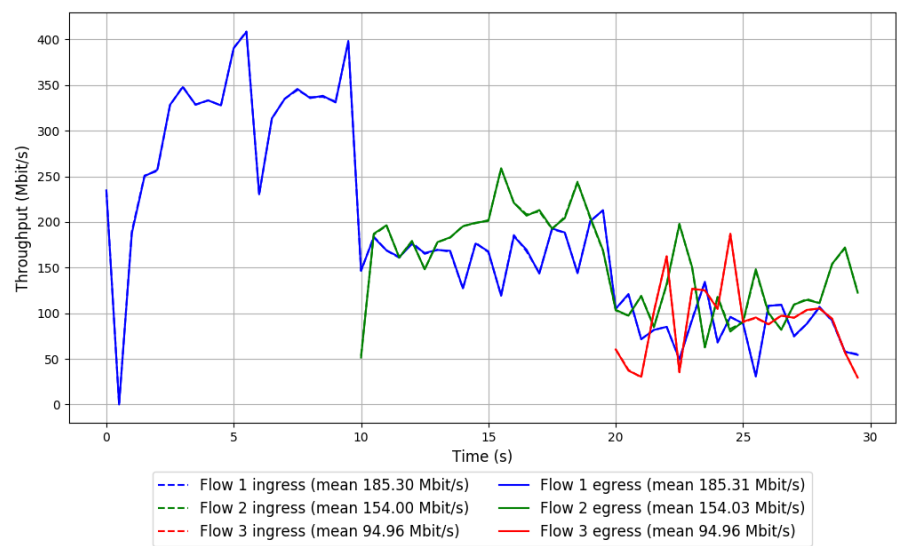
Run 1: Statistics of Verus

Start at: 2017-11-30 18:04:07  
End at: 2017-11-30 18:04:37  
Local clock offset: -0.448 ms  
Remote clock offset: -0.119 ms

# Below is generated by plot.py at 2017-12-01 01:48:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 318.34 Mbit/s  
95th percentile per-packet one-way delay: 3.620 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 185.31 Mbit/s  
95th percentile per-packet one-way delay: 3.896 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 154.03 Mbit/s  
95th percentile per-packet one-way delay: 3.240 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 94.96 Mbit/s  
95th percentile per-packet one-way delay: 3.047 ms  
Loss rate: 0.00%



Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-11-30 18:22:58

End at: 2017-11-30 18:23:28

Local clock offset: -0.315 ms

Remote clock offset: 0.348 ms

# Below is generated by plot.py at 2017-12-01 01:48:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 380.95 Mbit/s

95th percentile per-packet one-way delay: 4.364 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 205.43 Mbit/s

95th percentile per-packet one-way delay: 4.690 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 200.16 Mbit/s

95th percentile per-packet one-way delay: 4.043 ms

Loss rate: 0.01%

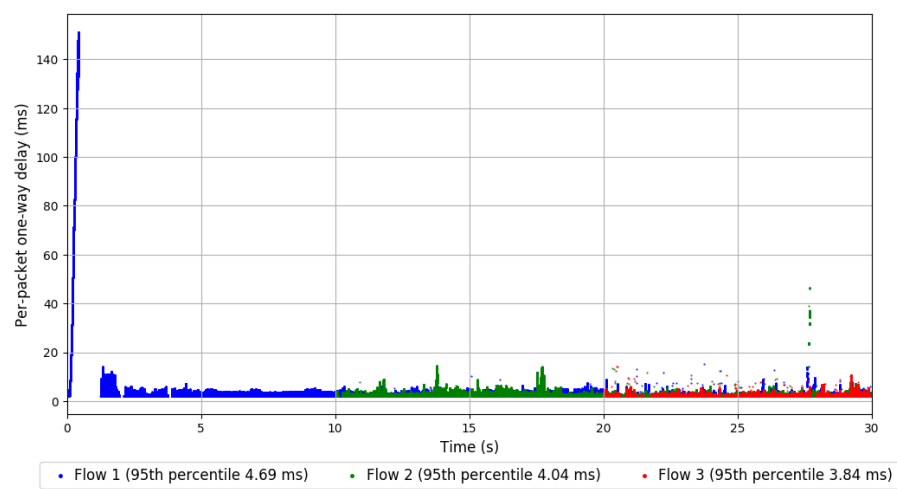
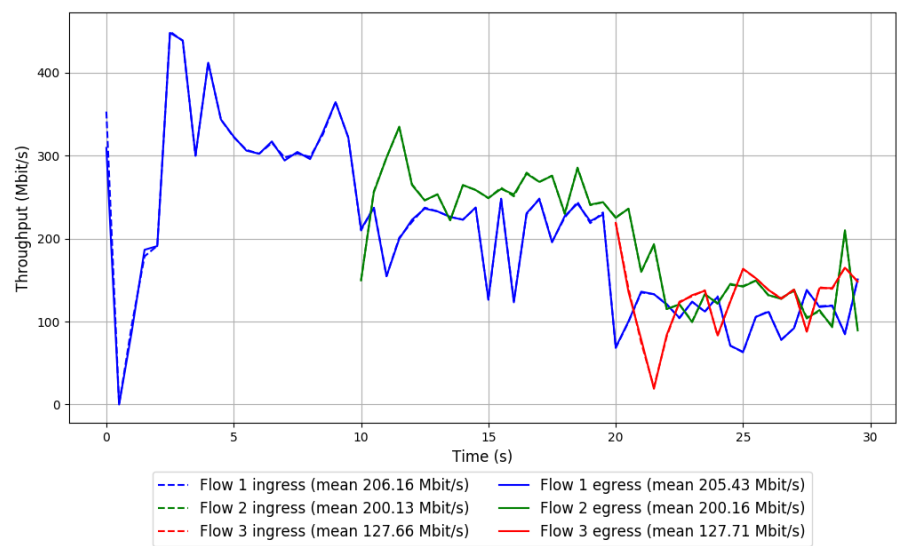
-- Flow 3:

Average throughput: 127.71 Mbit/s

95th percentile per-packet one-way delay: 3.836 ms

Loss rate: 0.02%

Run 2: Report of Verus — Data Link

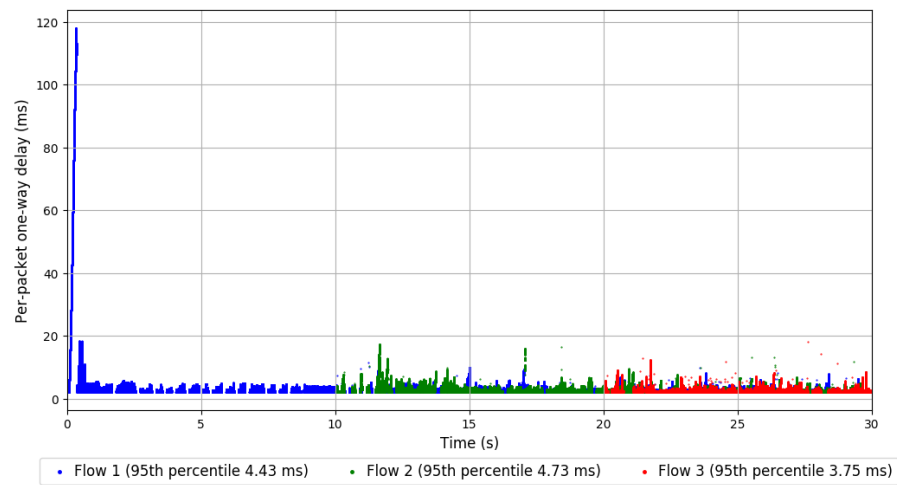
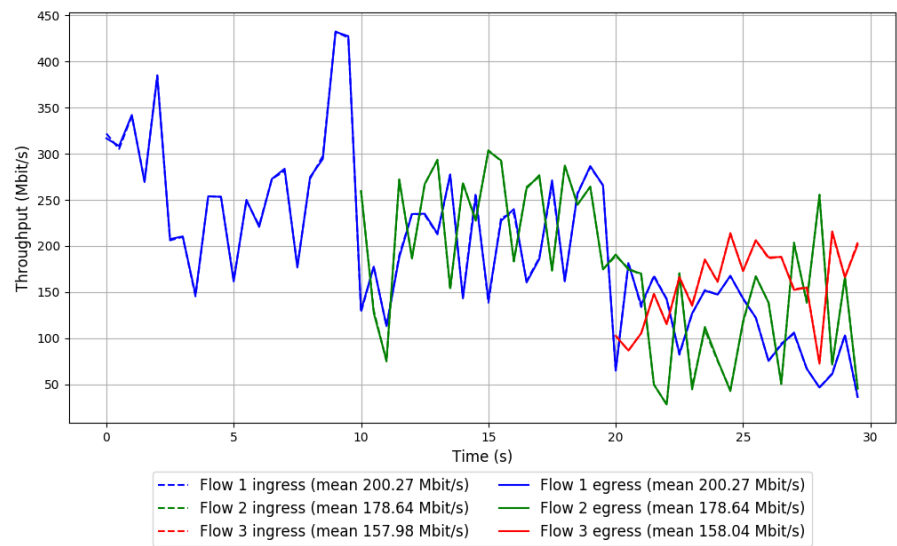


Run 3: Statistics of Verus

Start at: 2017-11-30 18:41:41  
End at: 2017-11-30 18:42:11  
Local clock offset: -0.215 ms  
Remote clock offset: 0.475 ms

# Below is generated by plot.py at 2017-12-01 01:48:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 367.49 Mbit/s  
95th percentile per-packet one-way delay: 4.432 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 200.27 Mbit/s  
95th percentile per-packet one-way delay: 4.434 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 178.64 Mbit/s  
95th percentile per-packet one-way delay: 4.728 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 158.04 Mbit/s  
95th percentile per-packet one-way delay: 3.755 ms  
Loss rate: 0.08%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-11-30 19:00:19

End at: 2017-11-30 19:00:49

Local clock offset: -0.059 ms

Remote clock offset: 0.4 ms

# Below is generated by plot.py at 2017-12-01 01:48:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 379.32 Mbit/s

95th percentile per-packet one-way delay: 4.300 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 217.85 Mbit/s

95th percentile per-packet one-way delay: 4.203 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 192.68 Mbit/s

95th percentile per-packet one-way delay: 4.420 ms

Loss rate: 0.03%

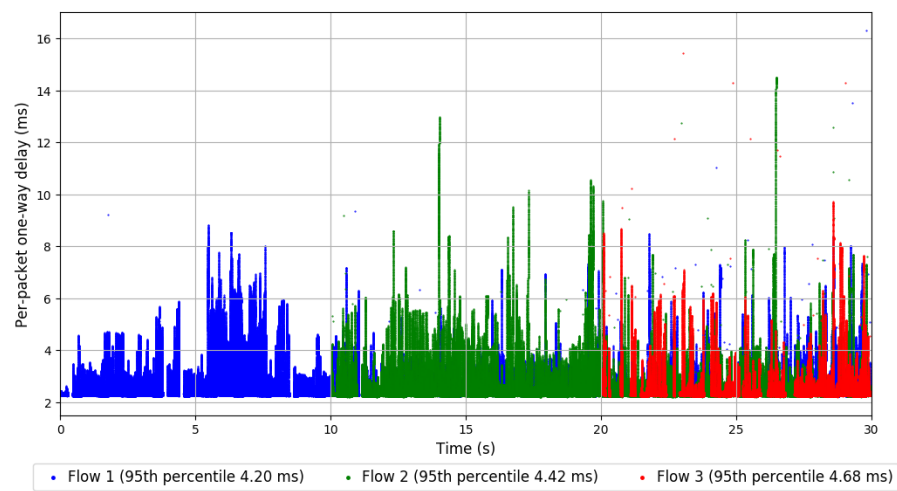
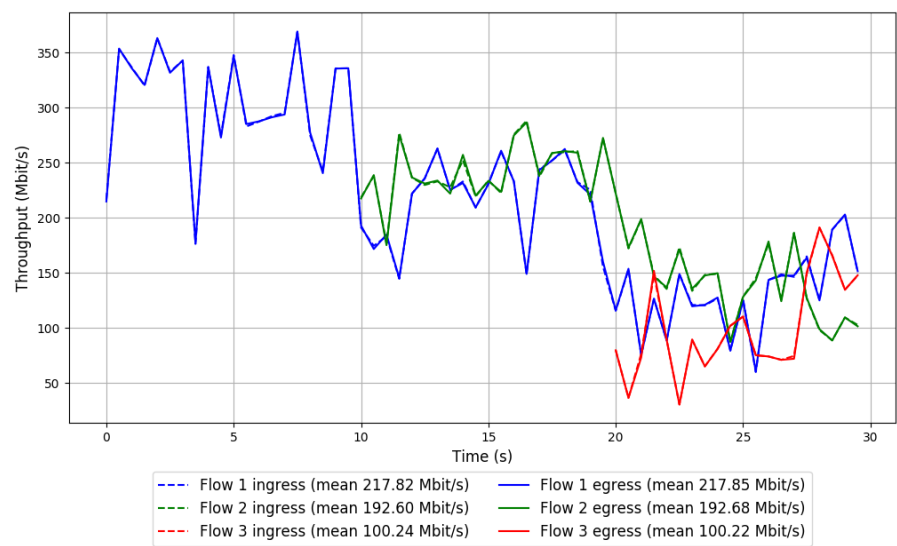
-- Flow 3:

Average throughput: 100.22 Mbit/s

95th percentile per-packet one-way delay: 4.680 ms

Loss rate: 0.07%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-11-30 19:19:12

End at: 2017-11-30 19:19:42

Local clock offset: 0.004 ms

Remote clock offset: 0.472 ms

# Below is generated by plot.py at 2017-12-01 01:48:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 297.44 Mbit/s

95th percentile per-packet one-way delay: 4.419 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 191.11 Mbit/s

95th percentile per-packet one-way delay: 3.901 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 98.29 Mbit/s

95th percentile per-packet one-way delay: 23.912 ms

Loss rate: 0.00%

-- Flow 3:

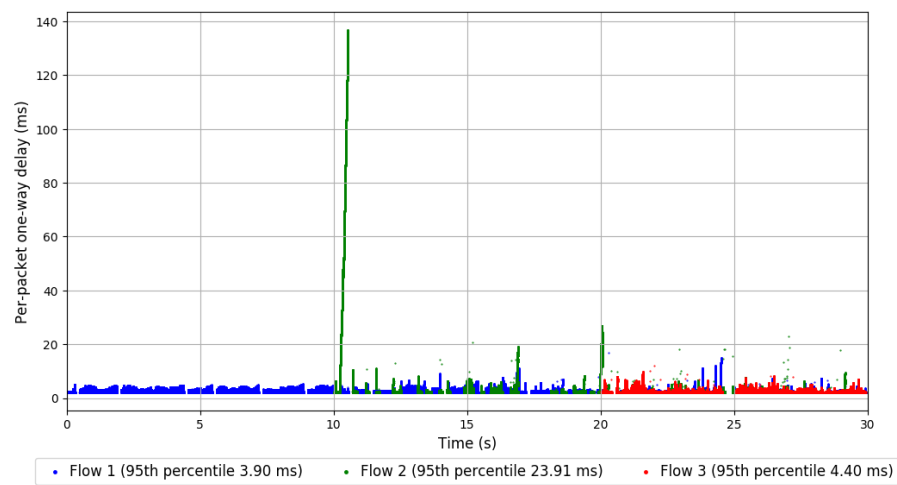
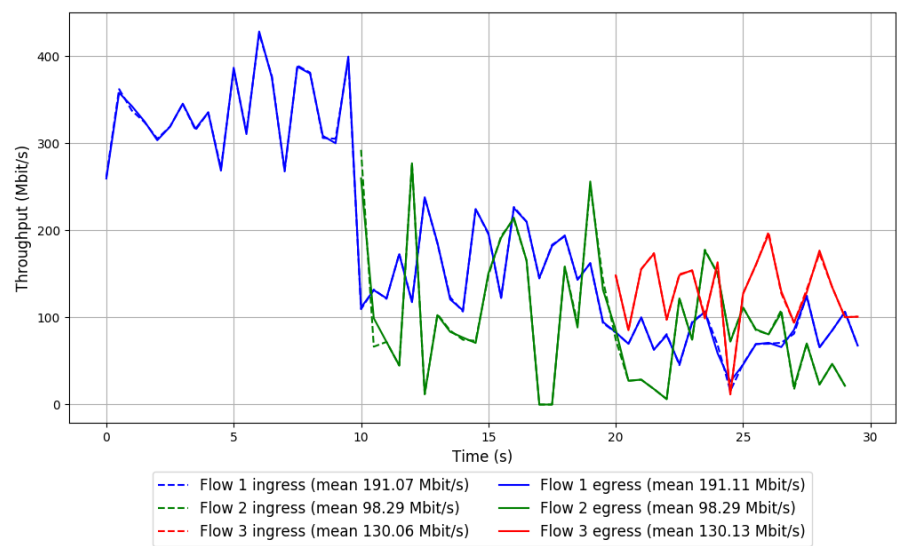
Average throughput: 130.13 Mbit/s

95th percentile per-packet one-way delay: 4.403 ms

Loss rate: 0.00%



Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-11-30 19:38:00

End at: 2017-11-30 19:38:30

Local clock offset: 0.096 ms

Remote clock offset: 0.391 ms

# Below is generated by plot.py at 2017-12-01 01:48:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 377.87 Mbit/s

95th percentile per-packet one-way delay: 4.175 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 210.95 Mbit/s

95th percentile per-packet one-way delay: 4.181 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 177.75 Mbit/s

95th percentile per-packet one-way delay: 4.324 ms

Loss rate: 0.01%

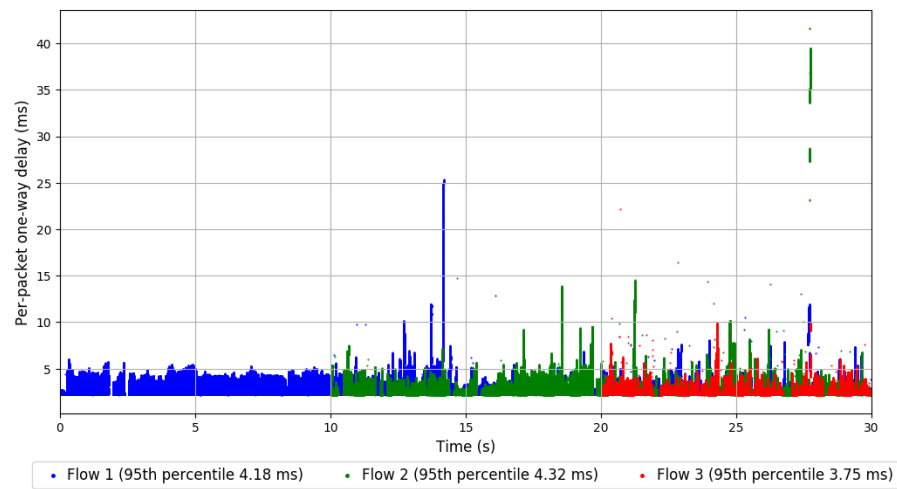
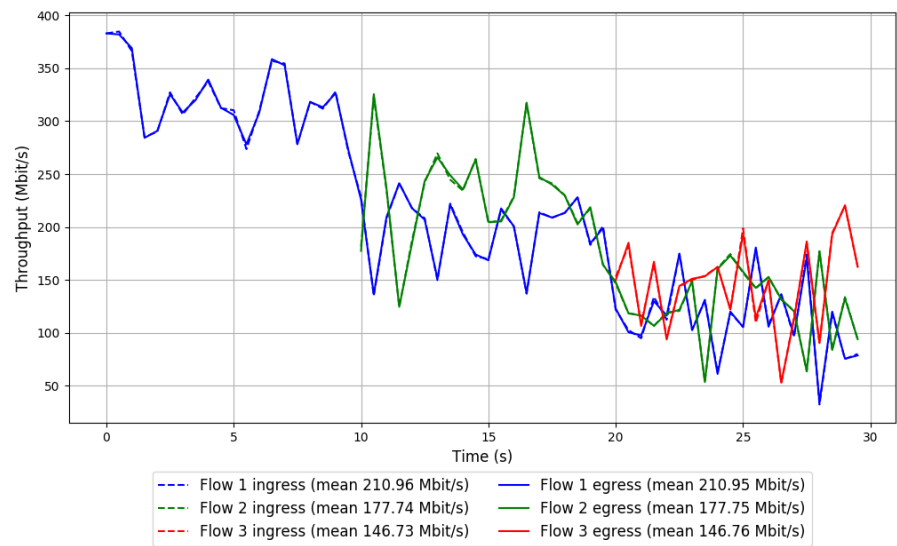
-- Flow 3:

Average throughput: 146.76 Mbit/s

95th percentile per-packet one-way delay: 3.753 ms

Loss rate: 0.03%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-11-30 19:56:46

End at: 2017-11-30 19:57:16

Local clock offset: 0.114 ms

Remote clock offset: 0.305 ms

# Below is generated by plot.py at 2017-12-01 01:48:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 306.58 Mbit/s

95th percentile per-packet one-way delay: 4.045 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 169.28 Mbit/s

95th percentile per-packet one-way delay: 4.318 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 142.59 Mbit/s

95th percentile per-packet one-way delay: 3.698 ms

Loss rate: 0.00%

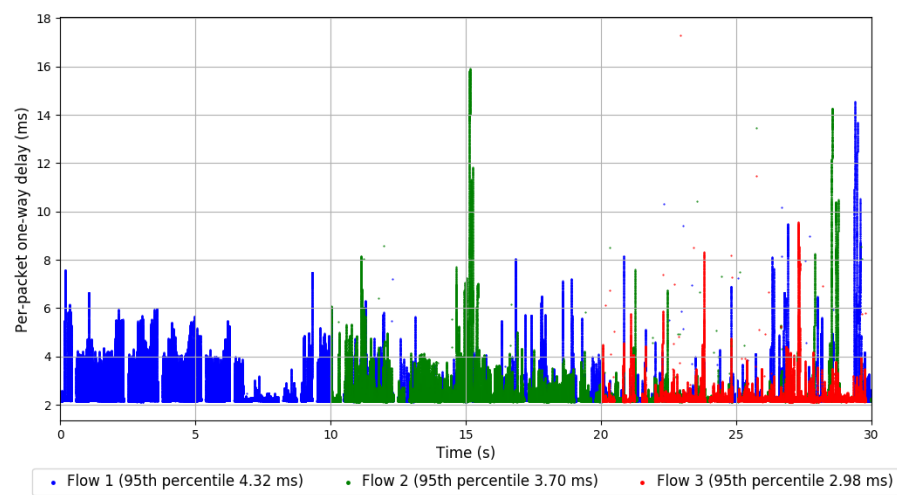
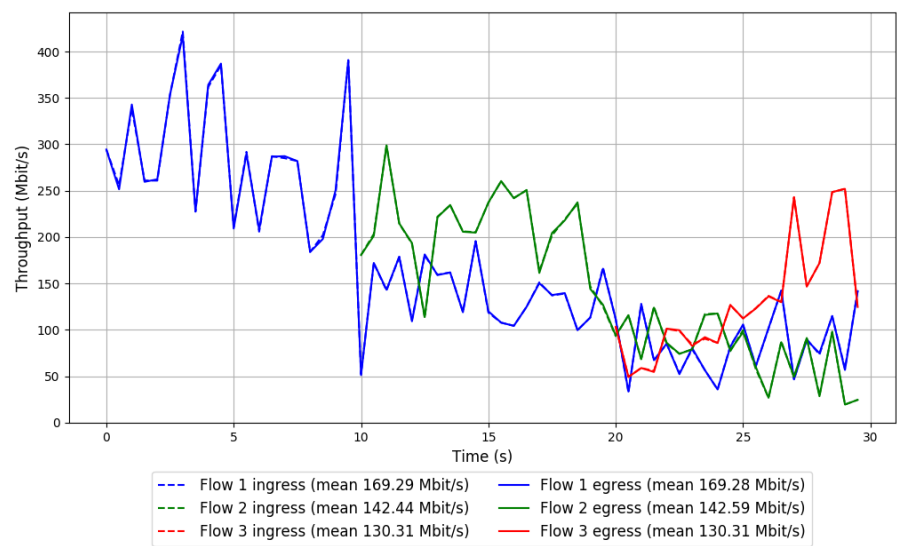
-- Flow 3:

Average throughput: 130.31 Mbit/s

95th percentile per-packet one-way delay: 2.980 ms

Loss rate: 0.00%

Run 7: Report of Verus — Data Link

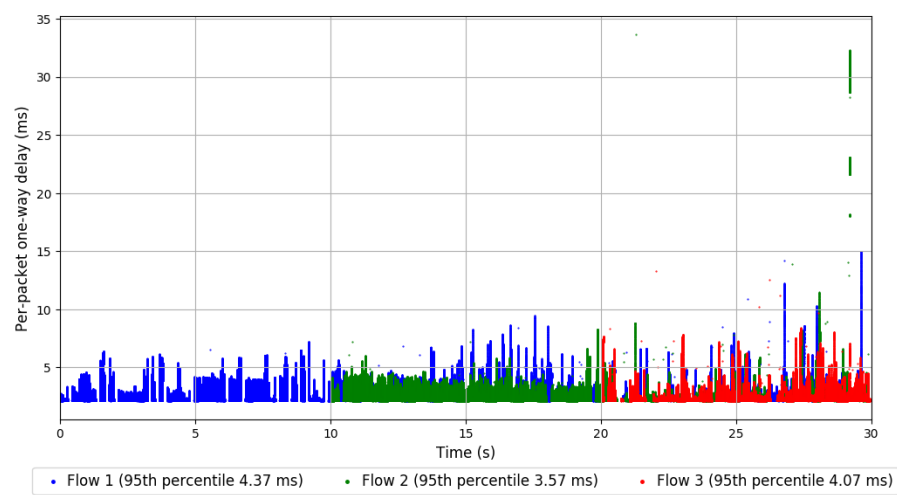
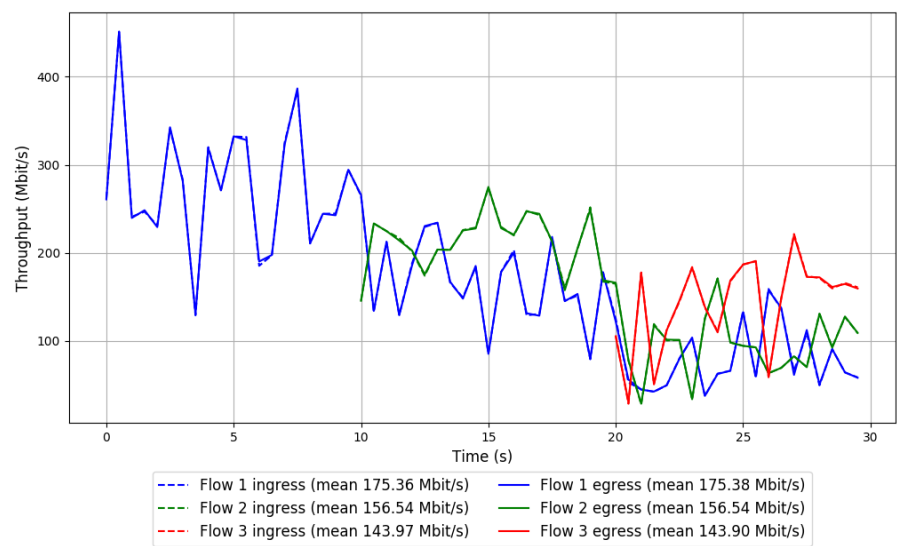


Run 8: Statistics of Verus

Start at: 2017-11-30 20:15:24  
End at: 2017-11-30 20:15:54  
Local clock offset: 0.197 ms  
Remote clock offset: 0.298 ms

# Below is generated by plot.py at 2017-12-01 01:50:28  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 326.94 Mbit/s  
95th percentile per-packet one-way delay: 4.076 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 175.38 Mbit/s  
95th percentile per-packet one-way delay: 4.370 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 156.54 Mbit/s  
95th percentile per-packet one-way delay: 3.574 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 143.90 Mbit/s  
95th percentile per-packet one-way delay: 4.073 ms  
Loss rate: 0.09%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-11-30 20:34:08

End at: 2017-11-30 20:34:38

Local clock offset: 0.38 ms

Remote clock offset: 0.173 ms

# Below is generated by plot.py at 2017-12-01 01:51:09

# Datalink statistics

-- Total of 3 flows:

Average throughput: 341.96 Mbit/s

95th percentile per-packet one-way delay: 4.522 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 206.27 Mbit/s

95th percentile per-packet one-way delay: 4.148 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 139.15 Mbit/s

95th percentile per-packet one-way delay: 30.252 ms

Loss rate: 0.77%

-- Flow 3:

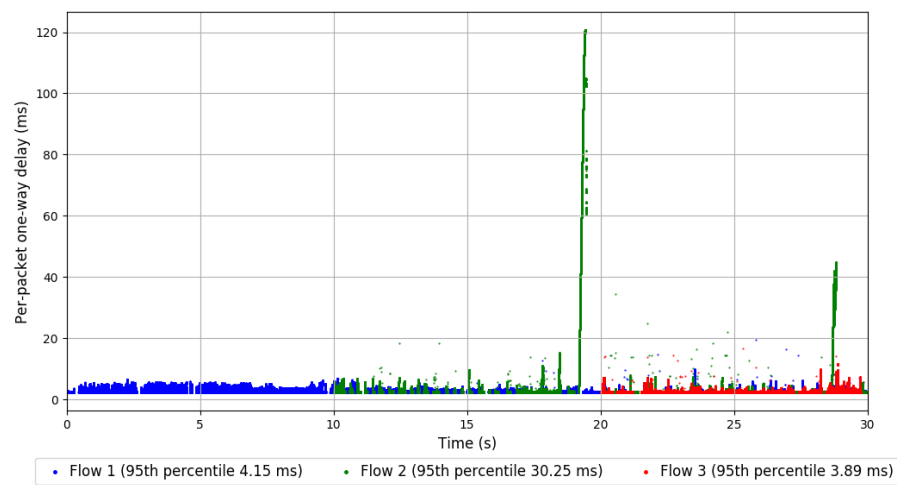
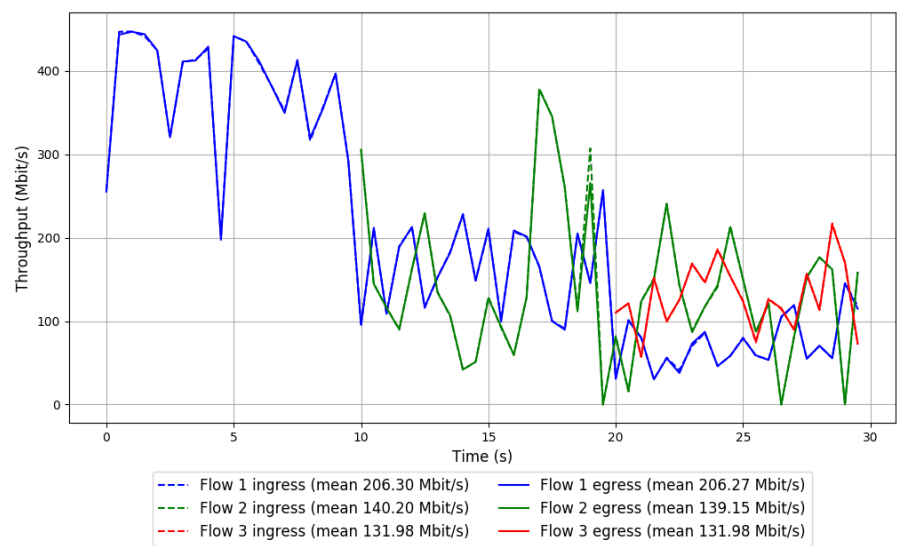
Average throughput: 131.98 Mbit/s

95th percentile per-packet one-way delay: 3.891 ms

Loss rate: 0.00%



Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-11-30 20:53:39

End at: 2017-11-30 20:54:09

Local clock offset: 0.488 ms

Remote clock offset: 0.173 ms

# Below is generated by plot.py at 2017-12-01 01:51:09

# Datalink statistics

-- Total of 3 flows:

Average throughput: 329.24 Mbit/s

95th percentile per-packet one-way delay: 25.870 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 223.34 Mbit/s

95th percentile per-packet one-way delay: 3.476 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 99.92 Mbit/s

95th percentile per-packet one-way delay: 105.548 ms

Loss rate: 1.86%

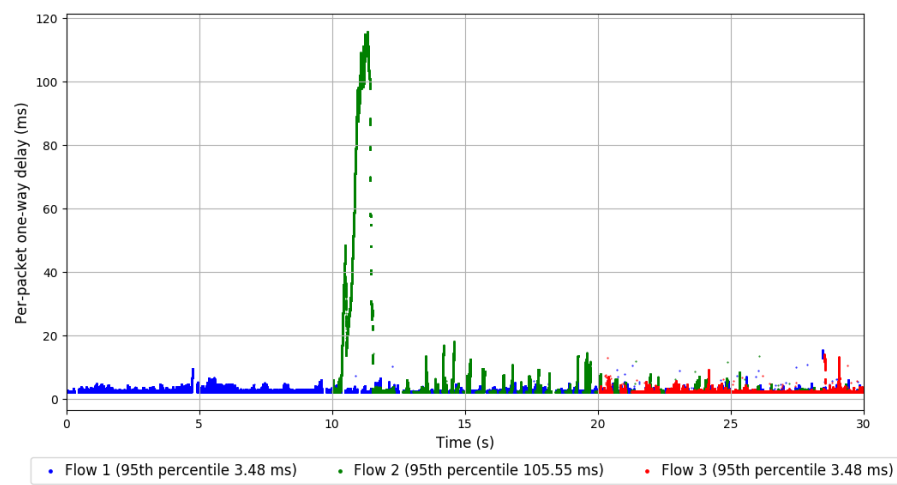
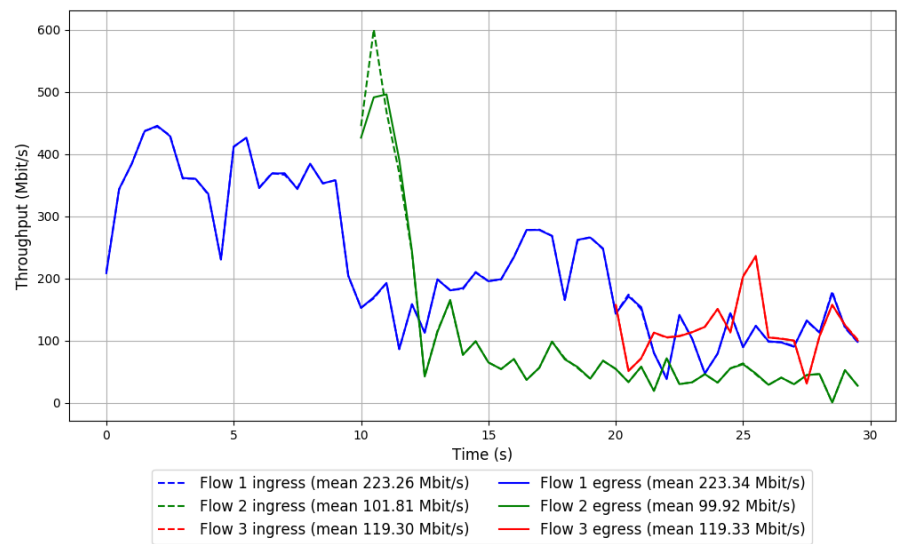
-- Flow 3:

Average throughput: 119.33 Mbit/s

95th percentile per-packet one-way delay: 3.476 ms

Loss rate: 0.06%

Run 10: Report of Verus — Data Link

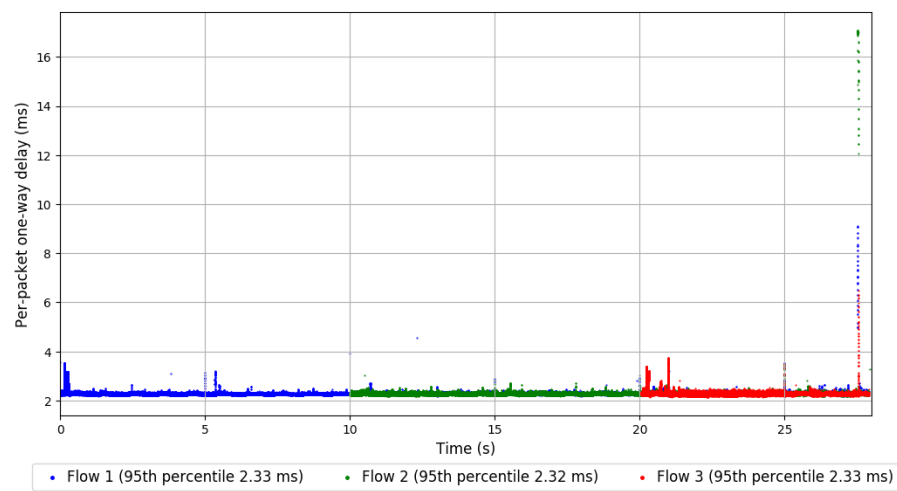
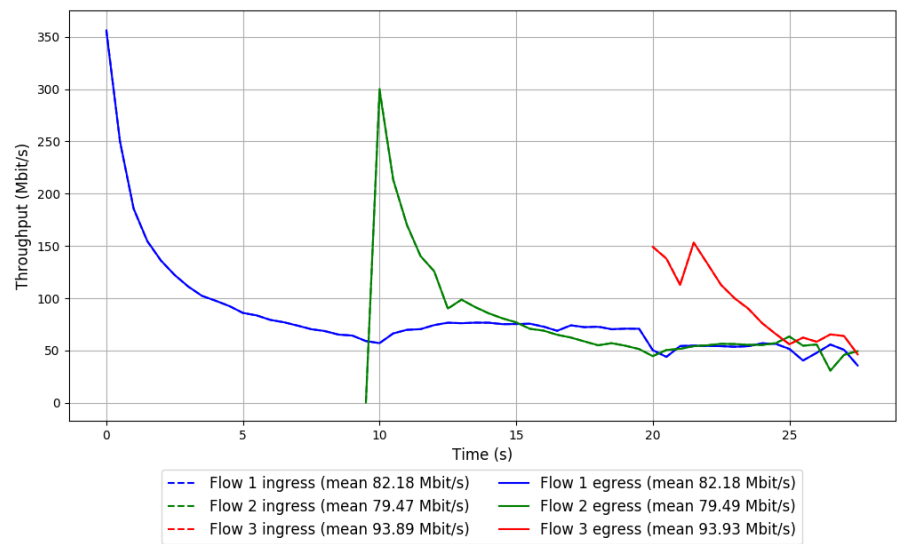


Run 1: Statistics of Copa

Start at: 2017-11-30 17:55:36  
End at: 2017-11-30 17:56:06  
Local clock offset: -0.413 ms  
Remote clock offset: -0.344 ms

# Below is generated by plot.py at 2017-12-01 01:51:09  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 159.75 Mbit/s  
95th percentile per-packet one-way delay: 2.324 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 82.18 Mbit/s  
95th percentile per-packet one-way delay: 2.325 ms  
Loss rate: 0.02%  
-- Flow 2:  
Average throughput: 79.49 Mbit/s  
95th percentile per-packet one-way delay: 2.320 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 93.93 Mbit/s  
95th percentile per-packet one-way delay: 2.331 ms  
Loss rate: 0.04%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-11-30 18:14:32

End at: 2017-11-30 18:15:02

Local clock offset: -0.342 ms

Remote clock offset: 0.148 ms

# Below is generated by plot.py at 2017-12-01 01:51:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 160.03 Mbit/s

95th percentile per-packet one-way delay: 2.319 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 82.18 Mbit/s

95th percentile per-packet one-way delay: 2.323 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 79.82 Mbit/s

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

Loss rate: 0.02%

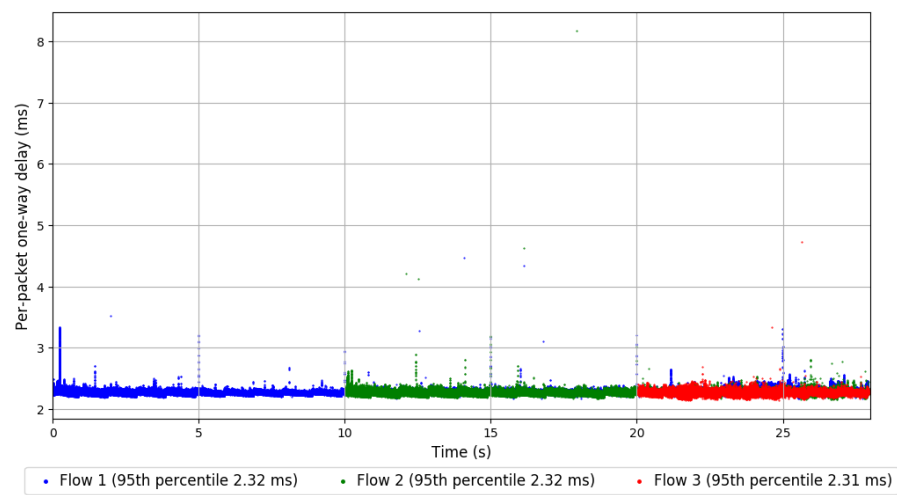
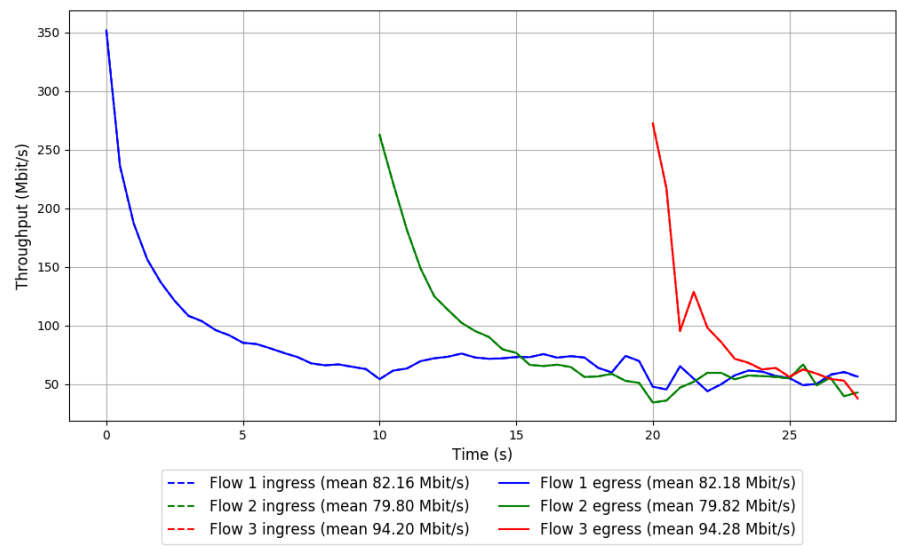
-- Flow 3:

Average throughput: 94.28 Mbit/s

95th percentile per-packet one-way delay: 2.312 ms

Loss rate: 0.04%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-11-30 18:33:18

End at: 2017-11-30 18:33:48

Local clock offset: -0.294 ms

Remote clock offset: 0.493 ms

# Below is generated by plot.py at 2017-12-01 01:51:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 123.58 Mbit/s

95th percentile per-packet one-way delay: 2.227 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 90.84 Mbit/s

95th percentile per-packet one-way delay: 2.225 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 7.44 Mbit/s

95th percentile per-packet one-way delay: 2.264 ms

Loss rate: 0.00%

-- Flow 3:

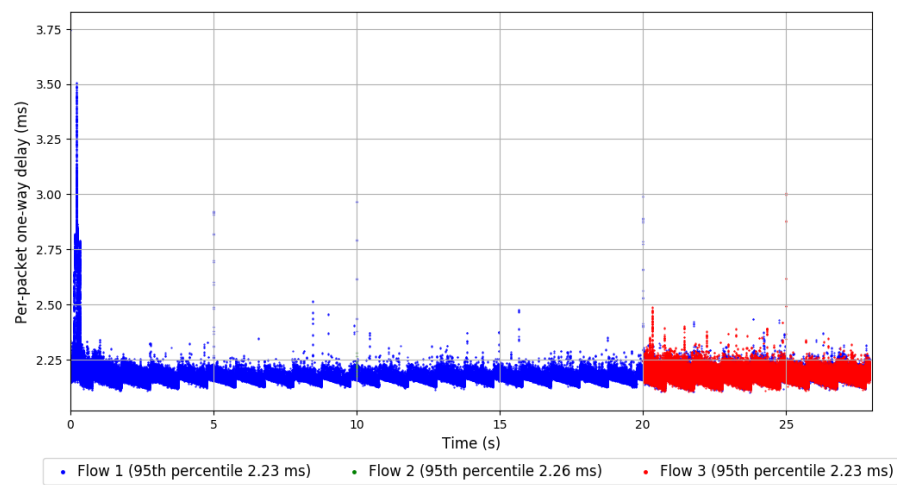
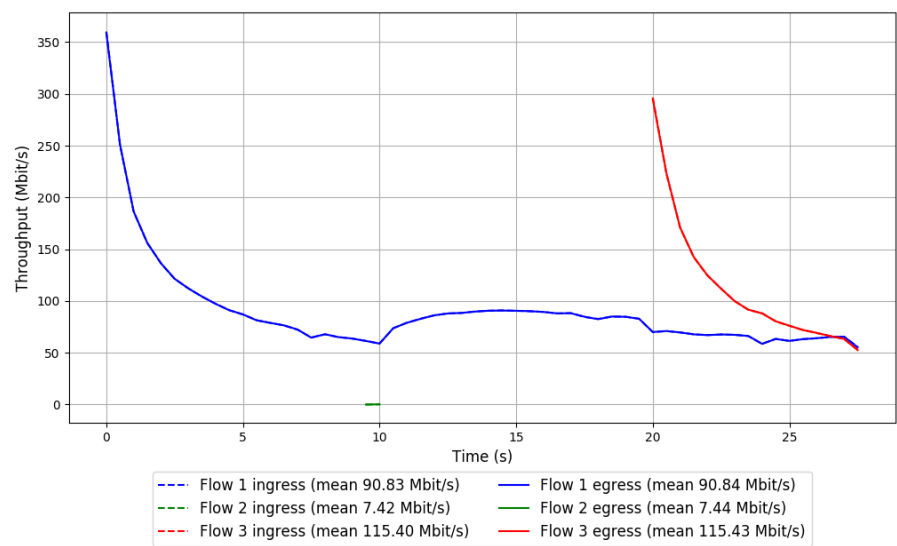
Average throughput: 115.43 Mbit/s

95th percentile per-packet one-way delay: 2.231 ms

Loss rate: 0.03%



Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-11-30 18:52:08

End at: 2017-11-30 18:52:38

Local clock offset: -0.183 ms

Remote clock offset: 0.489 ms

# Below is generated by plot.py at 2017-12-01 01:51:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 95.09 Mbit/s

95th percentile per-packet one-way delay: 2.207 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 95.08 Mbit/s

95th percentile per-packet one-way delay: 2.207 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 12.78 Mbit/s

95th percentile per-packet one-way delay: 2.295 ms

Loss rate: 0.00%

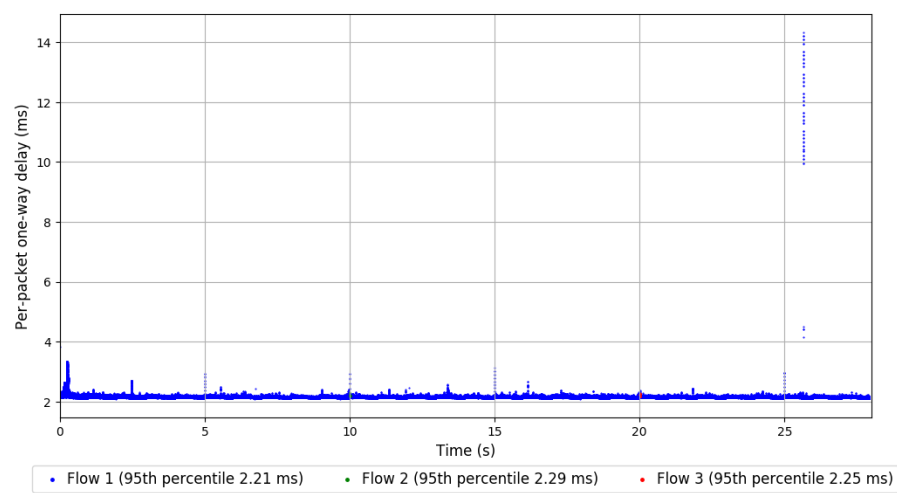
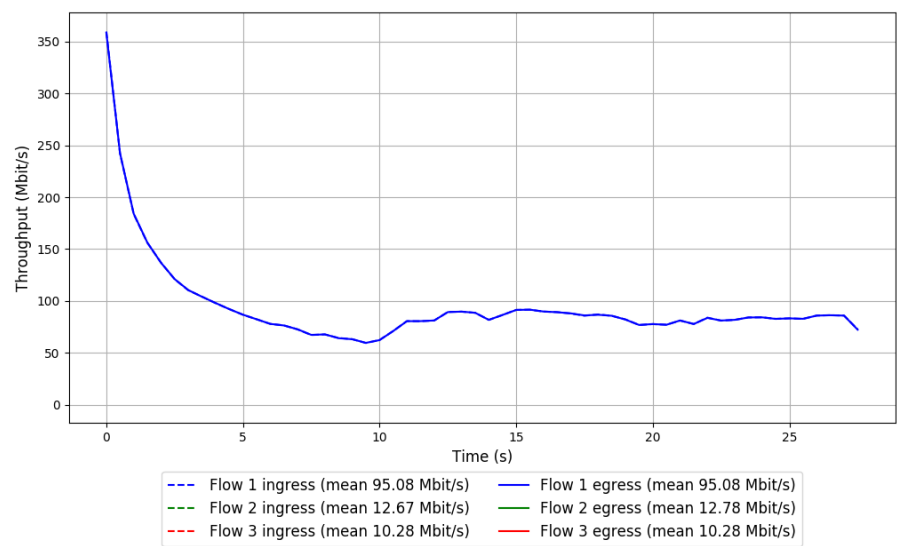
-- Flow 3:

Average throughput: 10.28 Mbit/s

95th percentile per-packet one-way delay: 2.253 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-11-30 19:10:43

End at: 2017-11-30 19:11:13

Local clock offset: -0.028 ms

Remote clock offset: 0.327 ms

# Below is generated by plot.py at 2017-12-01 01:52:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 158.77 Mbit/s

95th percentile per-packet one-way delay: 2.367 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 83.43 Mbit/s

95th percentile per-packet one-way delay: 2.361 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 80.17 Mbit/s

95th percentile per-packet one-way delay: 2.370 ms

Loss rate: 0.02%

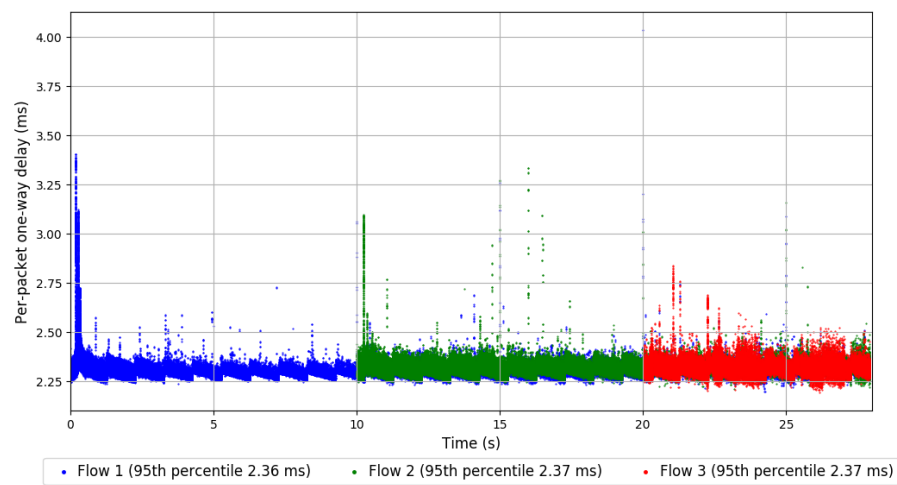
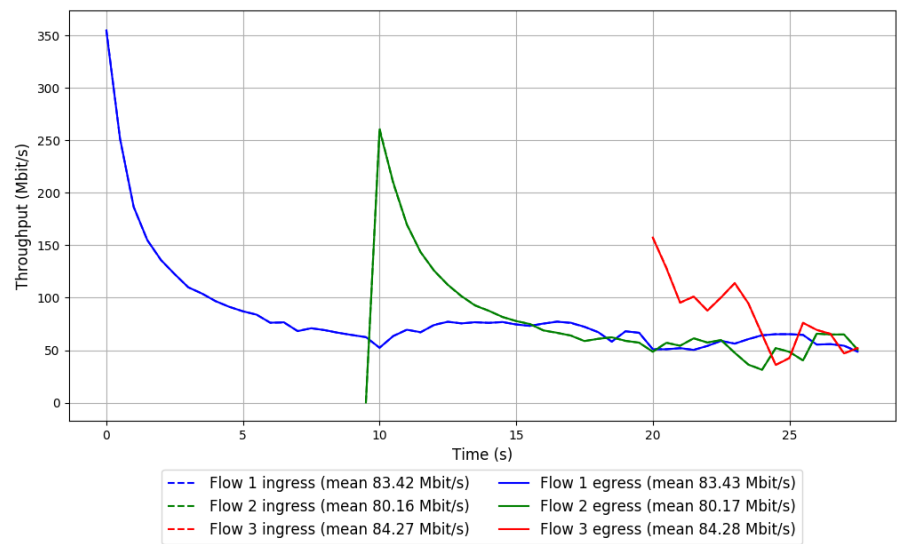
-- Flow 3:

Average throughput: 84.28 Mbit/s

95th percentile per-packet one-way delay: 2.372 ms

Loss rate: 0.04%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-11-30 19:29:36

End at: 2017-11-30 19:30:06

Local clock offset: -0.011 ms

Remote clock offset: 0.486 ms

# Below is generated by plot.py at 2017-12-01 01:54:23

# Datalink statistics

-- Total of 3 flows:

Average throughput: 156.06 Mbit/s

95th percentile per-packet one-way delay: 2.216 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 80.98 Mbit/s

95th percentile per-packet one-way delay: 2.213 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 80.69 Mbit/s

95th percentile per-packet one-way delay: 2.221 ms

Loss rate: 0.02%

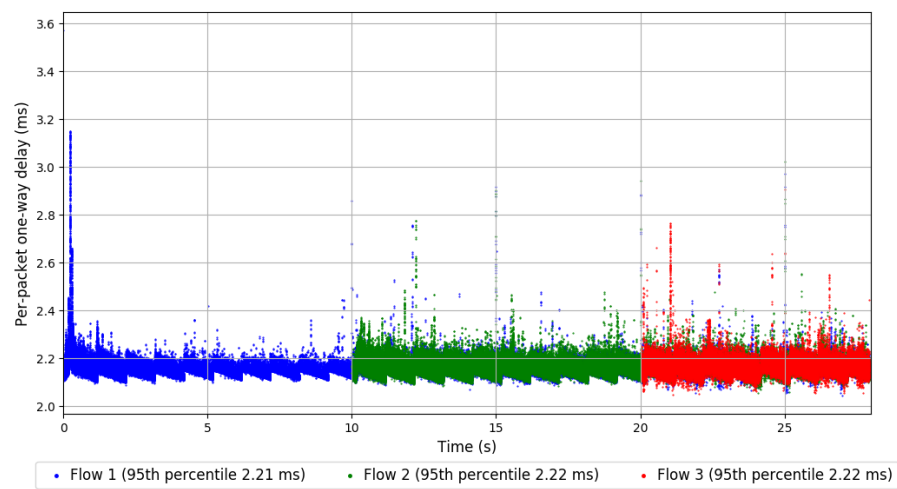
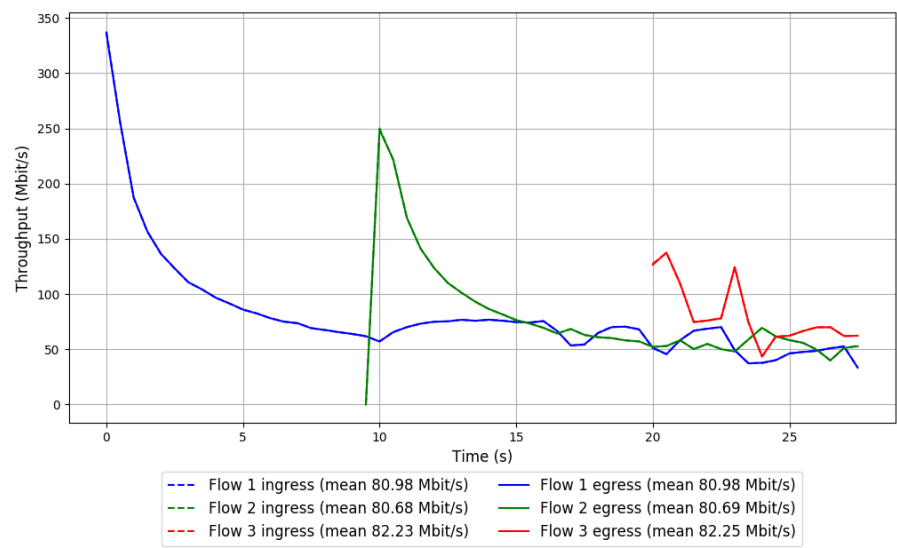
-- Flow 3:

Average throughput: 82.25 Mbit/s

95th percentile per-packet one-way delay: 2.216 ms

Loss rate: 0.03%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-11-30 19:48:24

End at: 2017-11-30 19:48:54

Local clock offset: 0.093 ms

Remote clock offset: 0.343 ms

# Below is generated by plot.py at 2017-12-01 01:54:29

# Datalink statistics

-- Total of 3 flows:

Average throughput: 157.44 Mbit/s

95th percentile per-packet one-way delay: 2.246 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 81.31 Mbit/s

95th percentile per-packet one-way delay: 2.248 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 82.17 Mbit/s

95th percentile per-packet one-way delay: 2.244 ms

Loss rate: 0.02%

-- Flow 3:

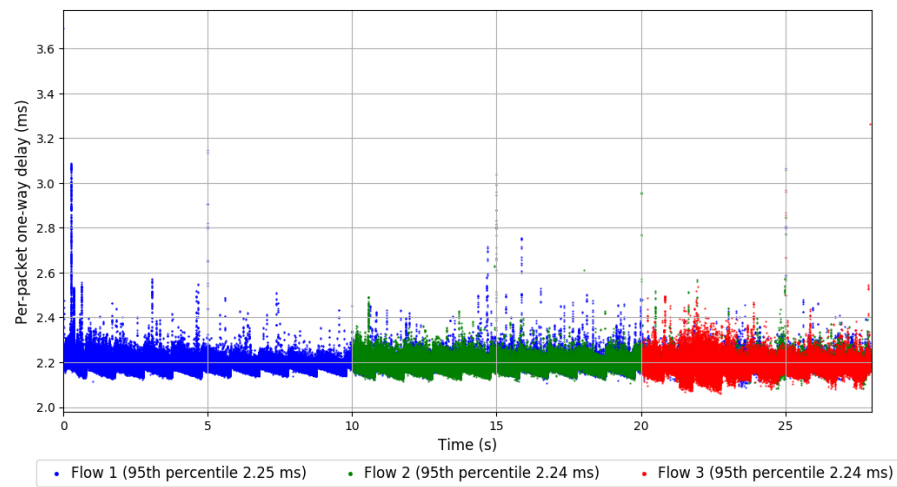
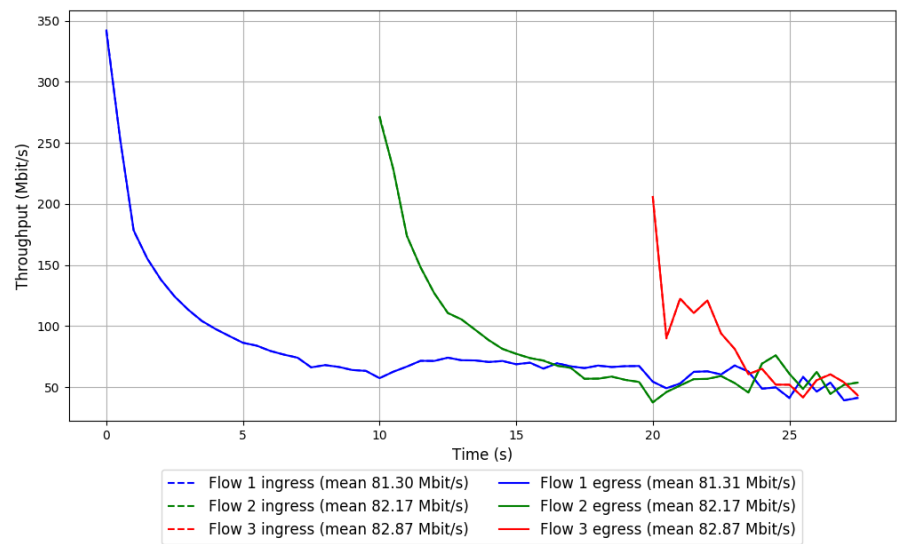
Average throughput: 82.87 Mbit/s

95th percentile per-packet one-way delay: 2.240 ms

Loss rate: 0.05%



Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-11-30 20:07:08

End at: 2017-11-30 20:07:38

Local clock offset: 0.219 ms

Remote clock offset: 0.293 ms

# Below is generated by plot.py at 2017-12-01 01:54:39

# Datalink statistics

-- Total of 3 flows:

Average throughput: 143.40 Mbit/s

95th percentile per-packet one-way delay: 2.286 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 86.01 Mbit/s

95th percentile per-packet one-way delay: 2.287 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 89.38 Mbit/s

95th percentile per-packet one-way delay: 2.285 ms

Loss rate: 0.03%

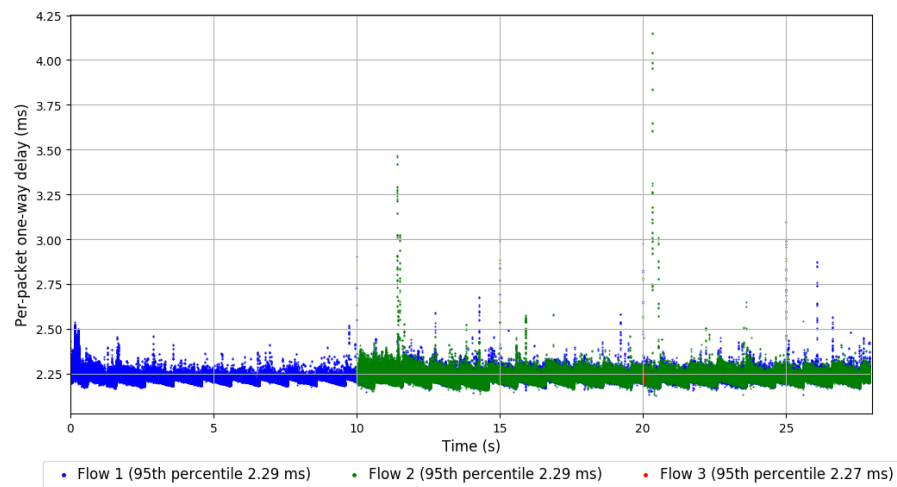
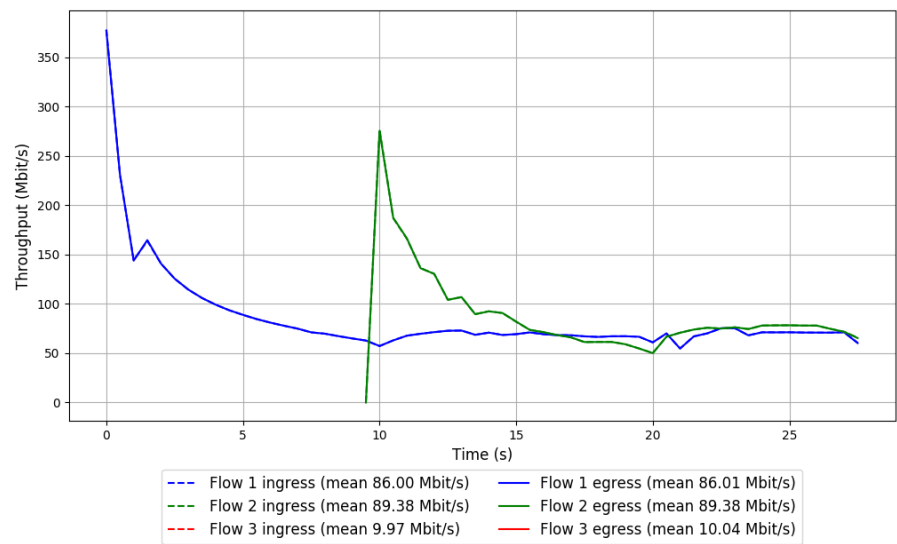
-- Flow 3:

Average throughput: 10.04 Mbit/s

95th percentile per-packet one-way delay: 2.275 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-11-30 20:25:44

End at: 2017-11-30 20:26:14

Local clock offset: 0.337 ms

Remote clock offset: 0.286 ms

# Below is generated by plot.py at 2017-12-01 01:55:02

# Datalink statistics

-- Total of 3 flows:

Average throughput: 156.71 Mbit/s

95th percentile per-packet one-way delay: 2.283 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 82.17 Mbit/s

95th percentile per-packet one-way delay: 2.282 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 79.23 Mbit/s

95th percentile per-packet one-way delay: 2.279 ms

Loss rate: 0.02%

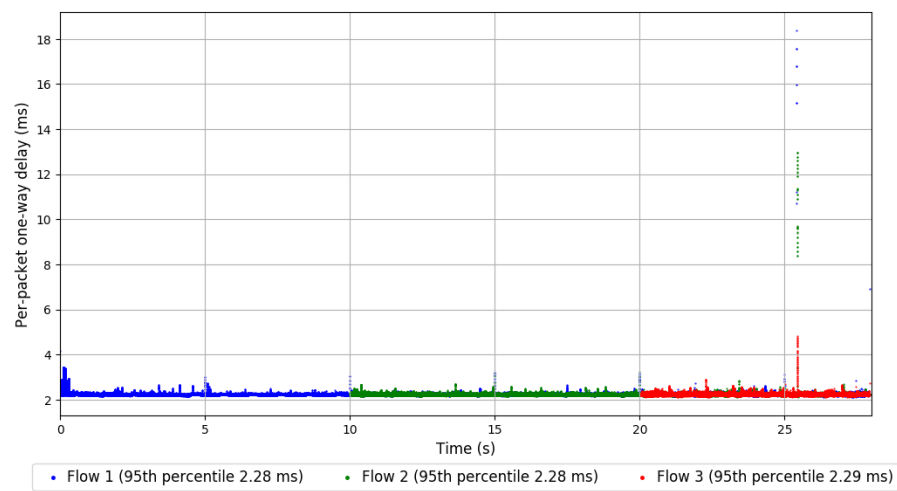
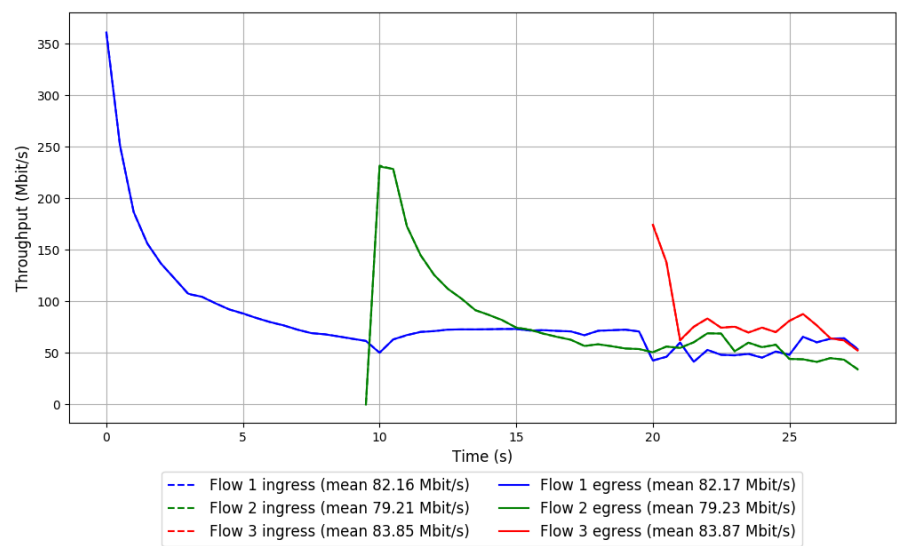
-- Flow 3:

Average throughput: 83.87 Mbit/s

95th percentile per-packet one-way delay: 2.293 ms

Loss rate: 0.02%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-11-30 20:44:34

End at: 2017-11-30 20:45:04

Local clock offset: 0.457 ms

Remote clock offset: 0.114 ms

# Below is generated by plot.py at 2017-12-01 01:55:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 156.06 Mbit/s

95th percentile per-packet one-way delay: 2.369 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 81.30 Mbit/s

95th percentile per-packet one-way delay: 2.357 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 82.12 Mbit/s

95th percentile per-packet one-way delay: 2.372 ms

Loss rate: 0.02%

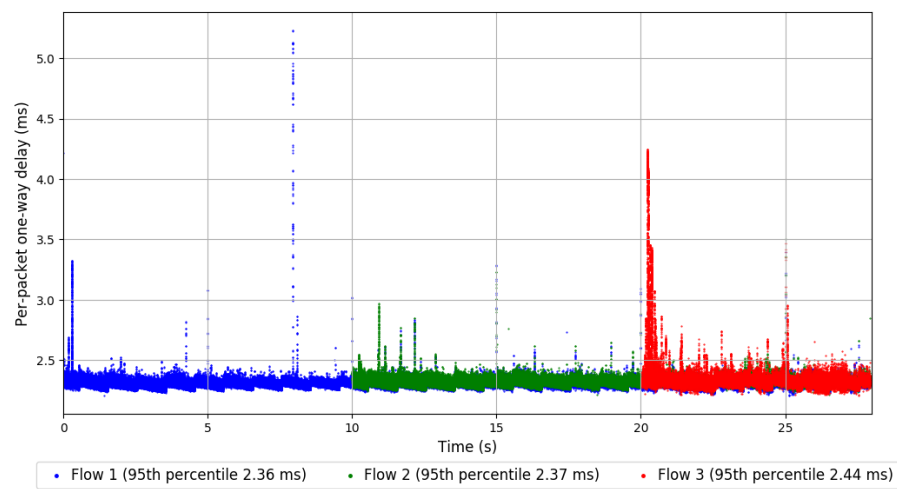
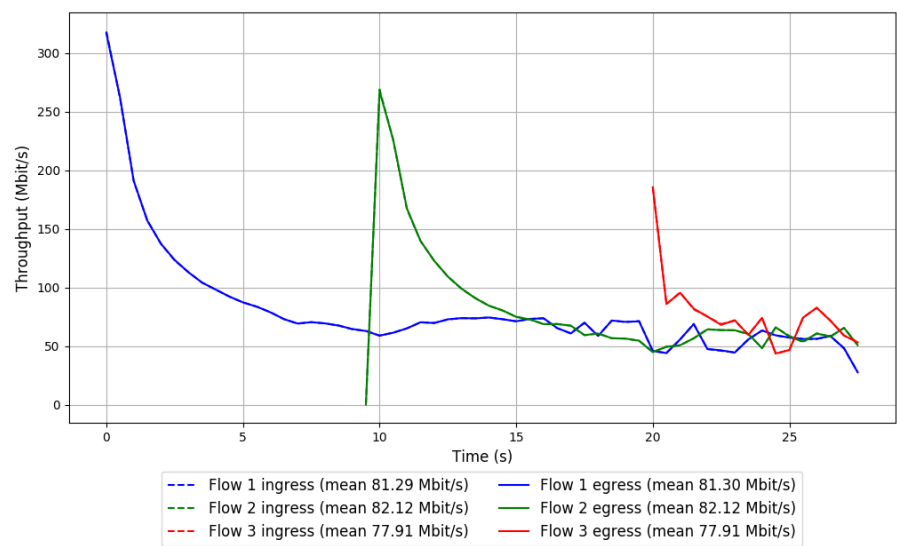
-- Flow 3:

Average throughput: 77.91 Mbit/s

95th percentile per-packet one-way delay: 2.437 ms

Loss rate: 0.05%

Run 10: Report of Copa — Data Link



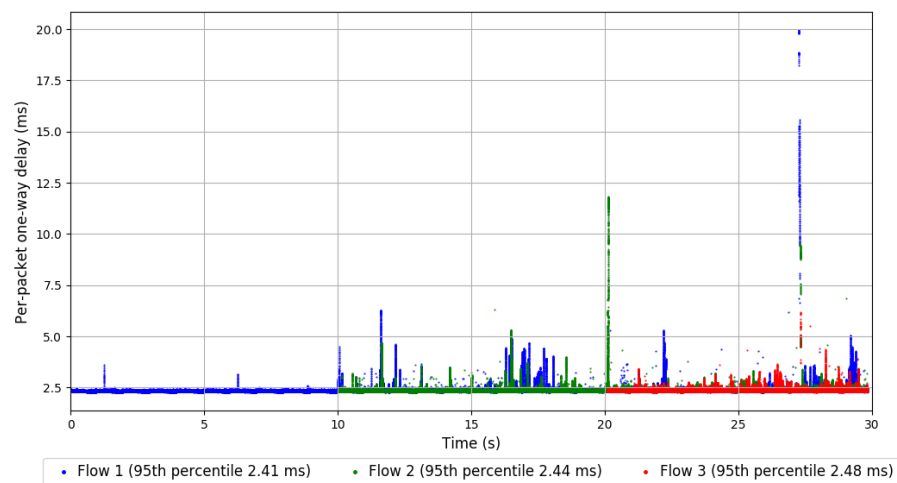
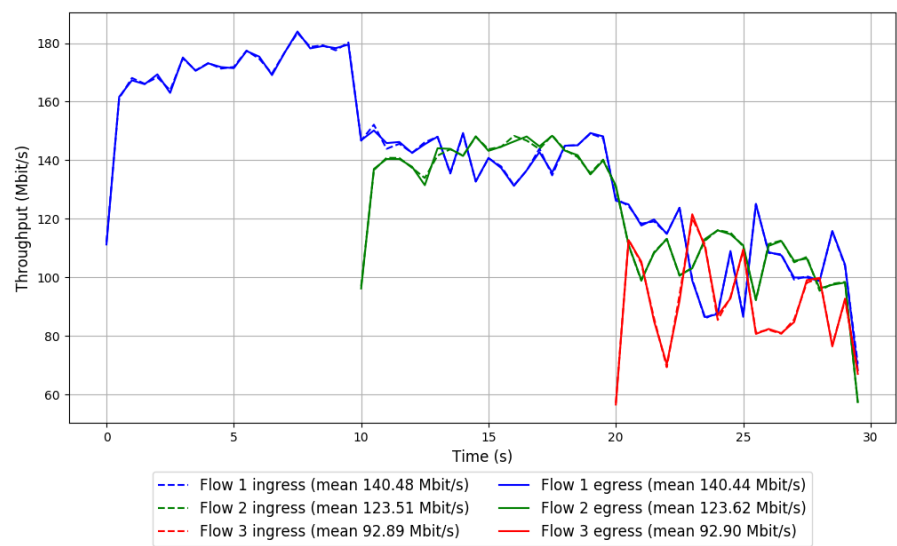
```
Run 1: Statistics of Indigo

Start at: 2017-11-30 18:01:08
End at: 2017-11-30 18:01:38
Local clock offset: -0.403 ms
Remote clock offset: -0.256 ms

# Below is generated by plot.py at 2017-12-01 01:55:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 252.79 Mbit/s
95th percentile per-packet one-way delay: 2.426 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 140.44 Mbit/s
95th percentile per-packet one-way delay: 2.407 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 123.62 Mbit/s
95th percentile per-packet one-way delay: 2.439 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 92.90 Mbit/s
95th percentile per-packet one-way delay: 2.480 ms
Loss rate: 0.05%
```



Run 1: Report of Indigo — Data Link

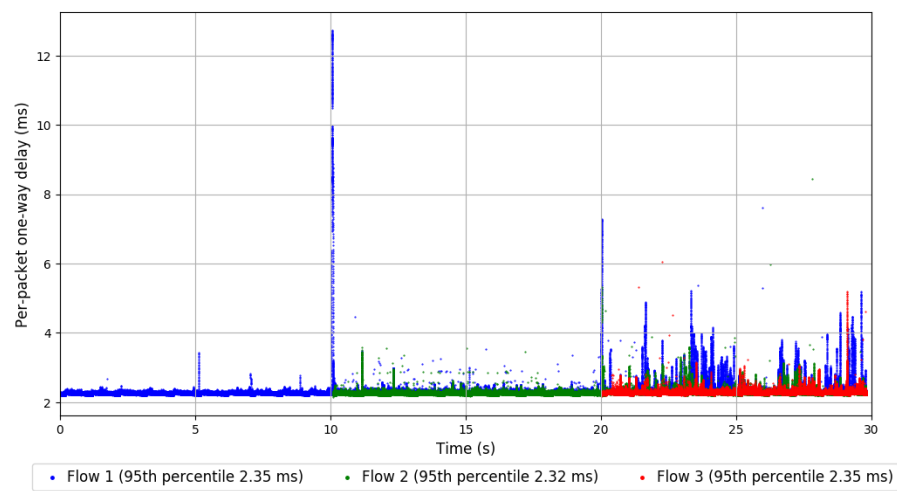
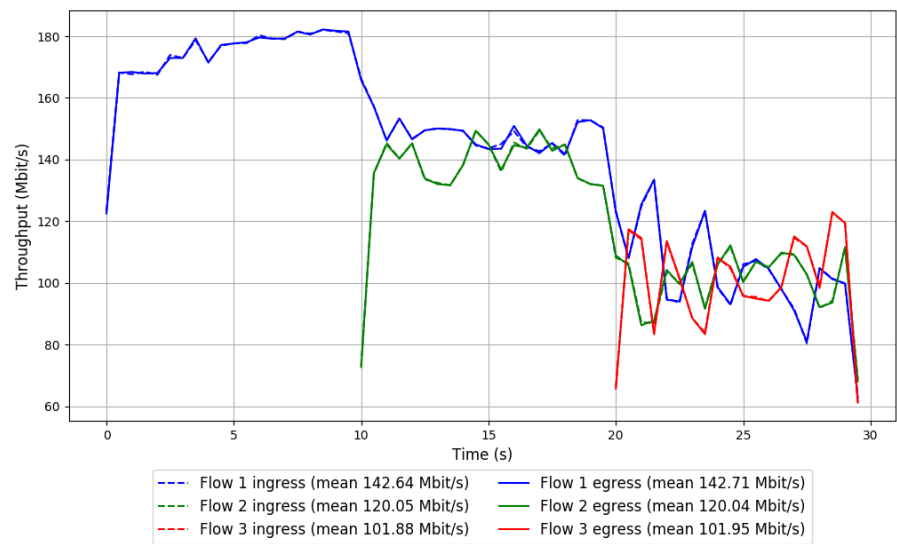


```
Run 2: Statistics of Indigo

Start at: 2017-11-30 18:19:58
End at: 2017-11-30 18:20:28
Local clock offset: -0.322 ms
Remote clock offset: 0.282 ms

# Below is generated by plot.py at 2017-12-01 01:55:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 255.58 Mbit/s
95th percentile per-packet one-way delay: 2.339 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 142.71 Mbit/s
95th percentile per-packet one-way delay: 2.345 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 120.04 Mbit/s
95th percentile per-packet one-way delay: 2.324 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 101.95 Mbit/s
95th percentile per-packet one-way delay: 2.354 ms
Loss rate: 0.03%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-11-30 18:38:40

End at: 2017-11-30 18:39:10

Local clock offset: -0.19 ms

Remote clock offset: 0.526 ms

# Below is generated by plot.py at 2017-12-01 01:56:28

# Datalink statistics

-- Total of 3 flows:

Average throughput: 251.70 Mbit/s

95th percentile per-packet one-way delay: 2.327 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 142.79 Mbit/s

95th percentile per-packet one-way delay: 2.314 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 125.88 Mbit/s

95th percentile per-packet one-way delay: 2.342 ms

Loss rate: 0.01%

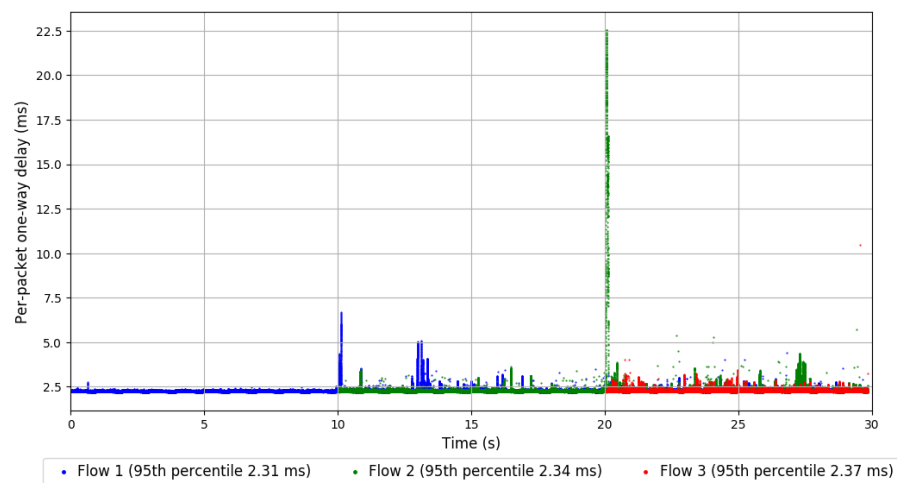
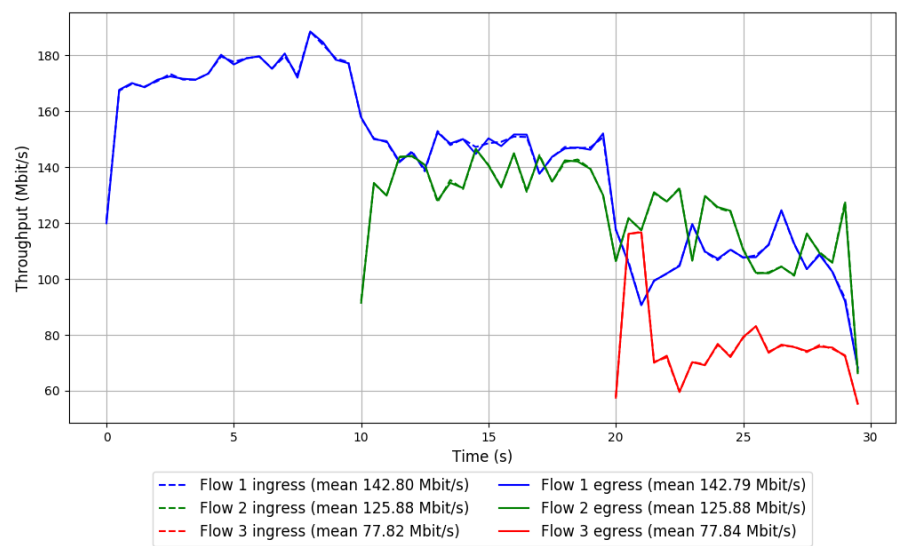
-- Flow 3:

Average throughput: 77.84 Mbit/s

95th percentile per-packet one-way delay: 2.367 ms

Loss rate: 0.01%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-11-30 18:57:26

End at: 2017-11-30 18:57:56

Local clock offset: -0.146 ms

Remote clock offset: 0.416 ms

# Below is generated by plot.py at 2017-12-01 01:58:05

# Datalink statistics

-- Total of 3 flows:

Average throughput: 257.02 Mbit/s

95th percentile per-packet one-way delay: 2.292 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 142.62 Mbit/s

95th percentile per-packet one-way delay: 2.281 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 130.66 Mbit/s

95th percentile per-packet one-way delay: 2.293 ms

Loss rate: 0.02%

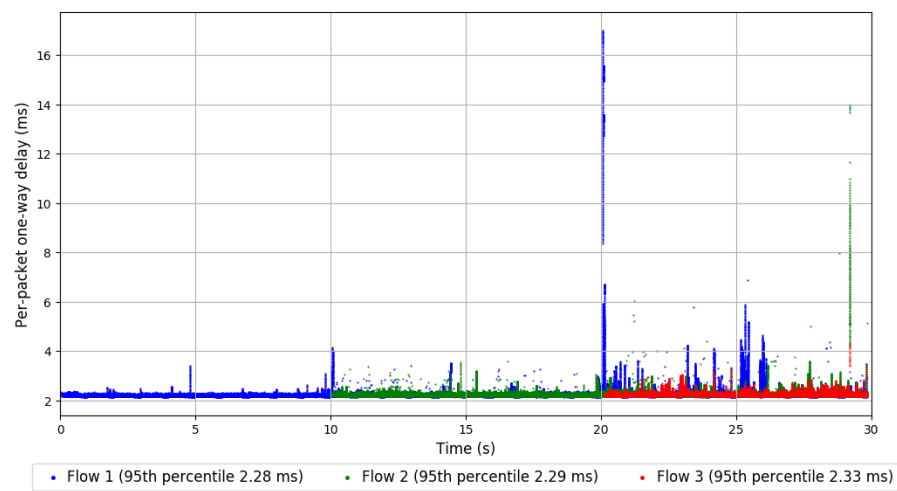
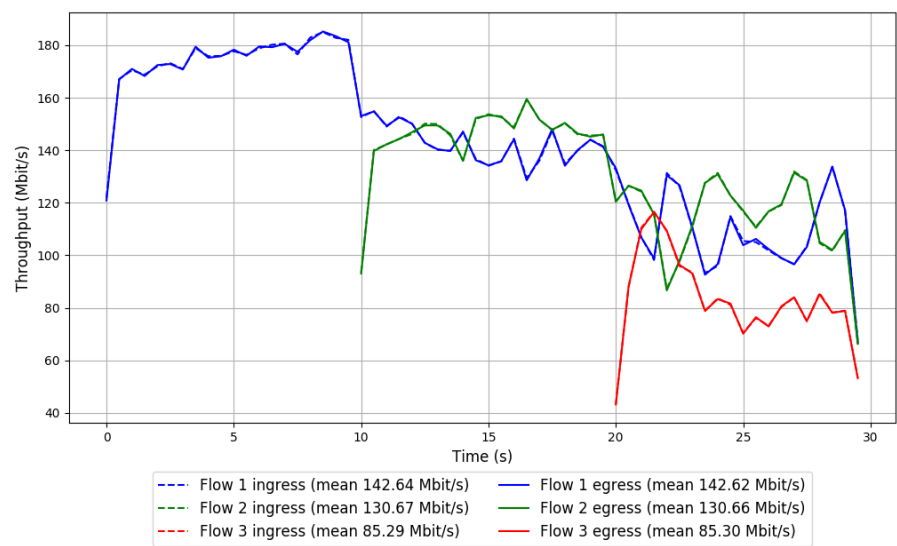
-- Flow 3:

Average throughput: 85.30 Mbit/s

95th percentile per-packet one-way delay: 2.332 ms

Loss rate: 0.04%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-11-30 19:16:12

End at: 2017-11-30 19:16:42

Local clock offset: -0.079 ms

Remote clock offset: 0.454 ms

# Below is generated by plot.py at 2017-12-01 01:58:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 252.46 Mbit/s

95th percentile per-packet one-way delay: 2.265 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 141.75 Mbit/s

95th percentile per-packet one-way delay: 2.272 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 124.82 Mbit/s

95th percentile per-packet one-way delay: 2.268 ms

Loss rate: 0.03%

-- Flow 3:

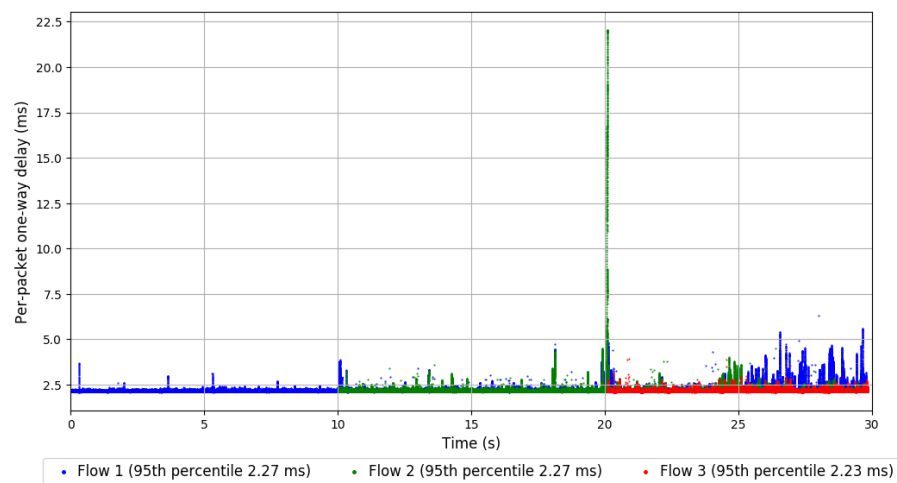
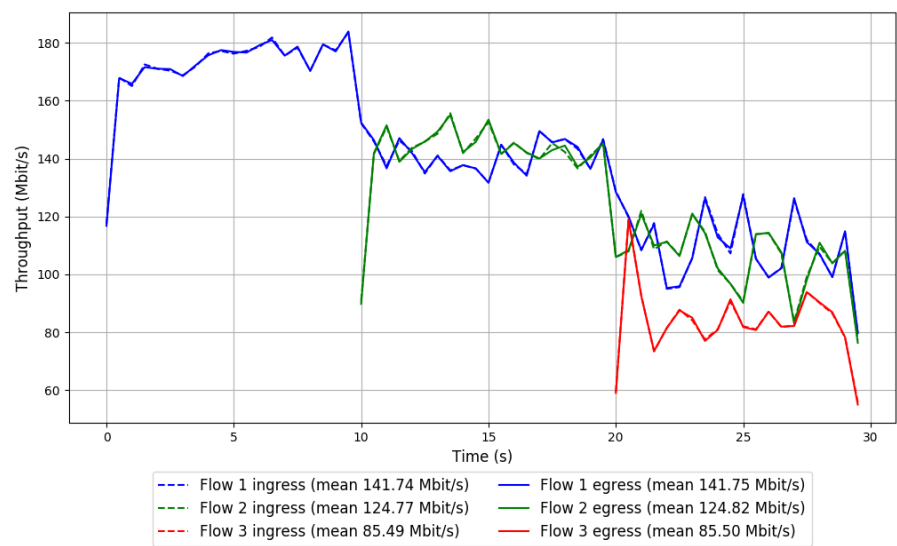
Average throughput: 85.50 Mbit/s

95th percentile per-packet one-way delay: 2.234 ms

Loss rate: 0.05%



Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-11-30 19:35:01

End at: 2017-11-30 19:35:31

Local clock offset: 0.065 ms

Remote clock offset: 0.404 ms

# Below is generated by plot.py at 2017-12-01 01:58:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 252.68 Mbit/s

95th percentile per-packet one-way delay: 2.325 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 144.54 Mbit/s

95th percentile per-packet one-way delay: 2.319 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 119.76 Mbit/s

95th percentile per-packet one-way delay: 2.335 ms

Loss rate: 0.00%

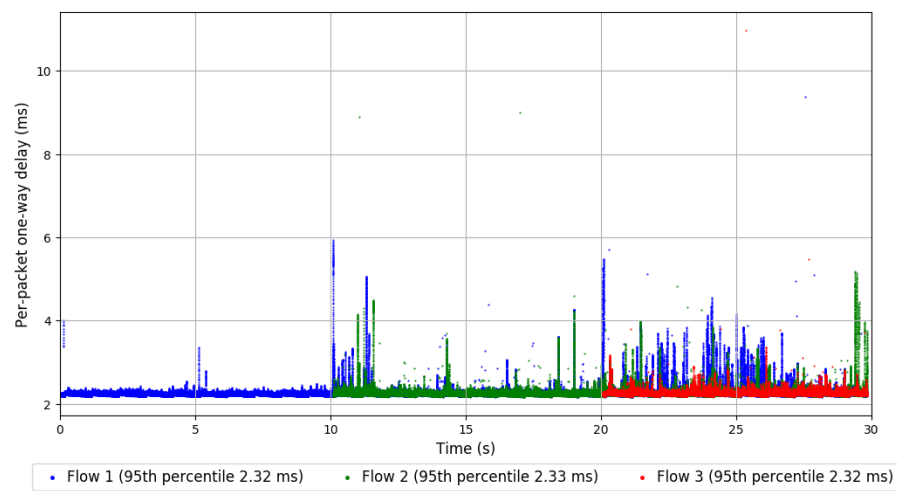
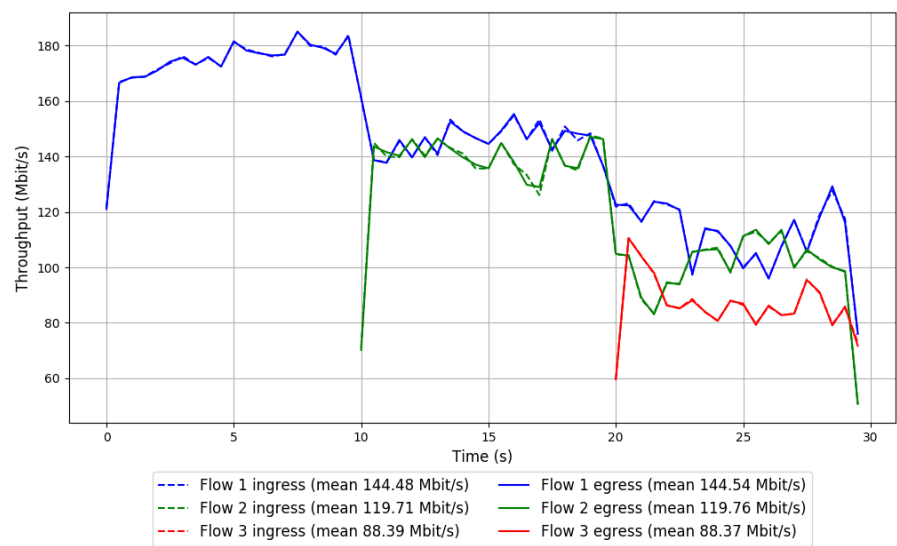
-- Flow 3:

Average throughput: 88.37 Mbit/s

95th percentile per-packet one-way delay: 2.324 ms

Loss rate: 0.07%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-11-30 19:53:47

End at: 2017-11-30 19:54:17

Local clock offset: 0.177 ms

Remote clock offset: 0.328 ms

# Below is generated by plot.py at 2017-12-01 01:58:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 253.17 Mbit/s

95th percentile per-packet one-way delay: 2.369 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 139.87 Mbit/s

95th percentile per-packet one-way delay: 2.357 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 128.73 Mbit/s

95th percentile per-packet one-way delay: 2.421 ms

Loss rate: 0.01%

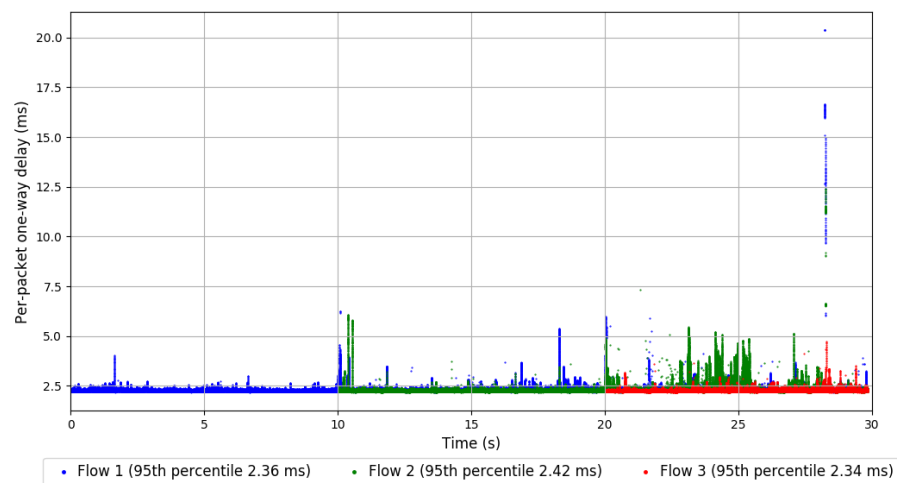
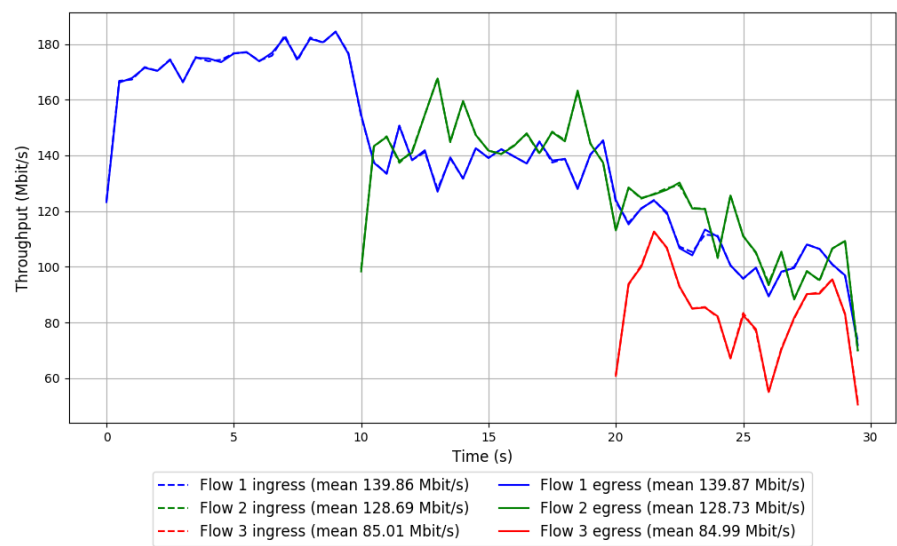
-- Flow 3:

Average throughput: 84.99 Mbit/s

95th percentile per-packet one-way delay: 2.337 ms

Loss rate: 0.07%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-11-30 20:12:26

End at: 2017-11-30 20:12:56

Local clock offset: 0.177 ms

Remote clock offset: 0.296 ms

# Below is generated by plot.py at 2017-12-01 01:58:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 239.11 Mbit/s

95th percentile per-packet one-way delay: 2.258 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 134.60 Mbit/s

95th percentile per-packet one-way delay: 2.236 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 114.62 Mbit/s

95th percentile per-packet one-way delay: 2.285 ms

Loss rate: 0.02%

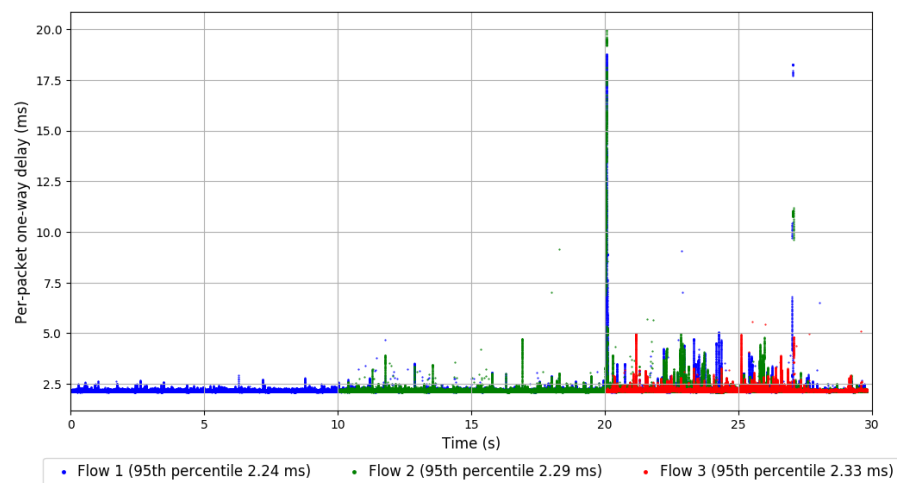
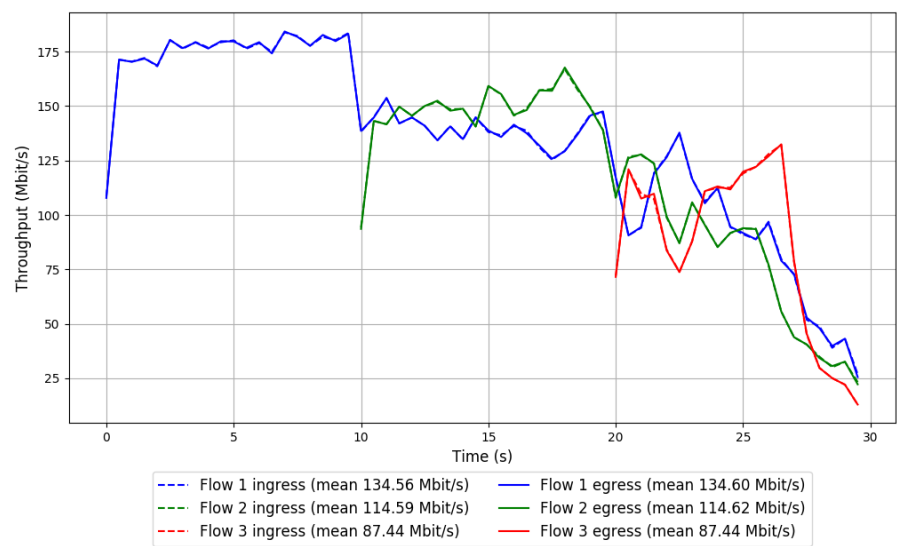
-- Flow 3:

Average throughput: 87.44 Mbit/s

95th percentile per-packet one-way delay: 2.328 ms

Loss rate: 0.01%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-11-30 20:31:09

End at: 2017-11-30 20:31:39

Local clock offset: 0.353 ms

Remote clock offset: 0.253 ms

# Below is generated by plot.py at 2017-12-01 01:58:52

# Datalink statistics

-- Total of 3 flows:

Average throughput: 253.08 Mbit/s

95th percentile per-packet one-way delay: 2.320 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 141.51 Mbit/s

95th percentile per-packet one-way delay: 2.290 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 121.59 Mbit/s

95th percentile per-packet one-way delay: 2.363 ms

Loss rate: 0.01%

-- Flow 3:

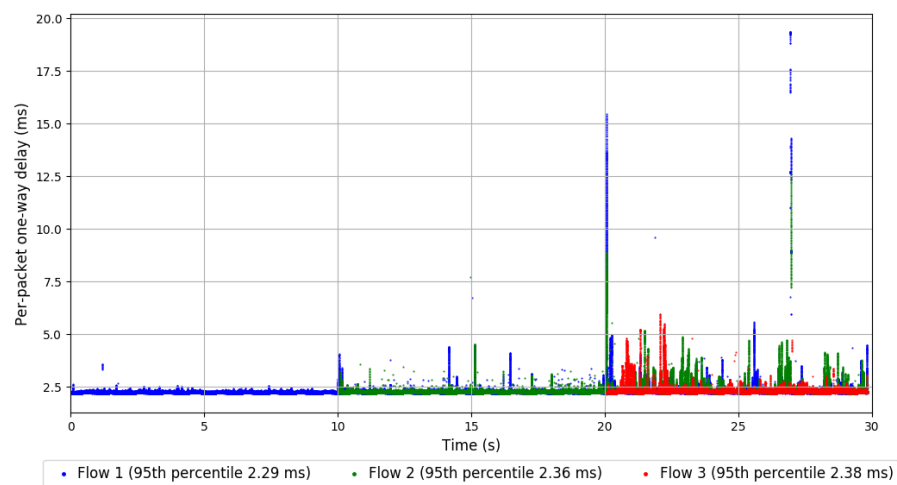
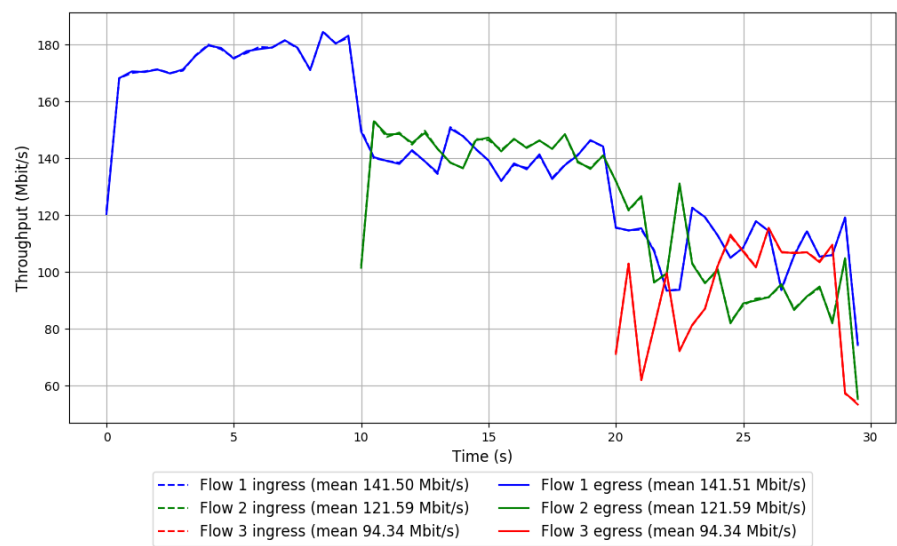
Average throughput: 94.34 Mbit/s

95th percentile per-packet one-way delay: 2.382 ms

Loss rate: 0.05%



Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-11-30 20:49:59

End at: 2017-11-30 20:50:29

Local clock offset: 0.458 ms

Remote clock offset: 0.105 ms

# Below is generated by plot.py at 2017-12-01 01:58:53

# Datalink statistics

-- Total of 3 flows:

Average throughput: 251.30 Mbit/s

95th percentile per-packet one-way delay: 2.407 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 143.92 Mbit/s

95th percentile per-packet one-way delay: 2.411 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 126.77 Mbit/s

95th percentile per-packet one-way delay: 2.404 ms

Loss rate: 0.04%

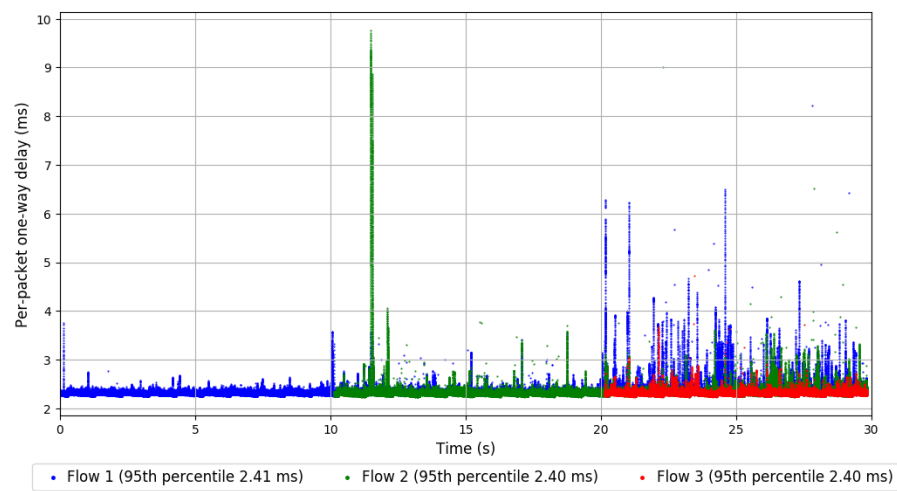
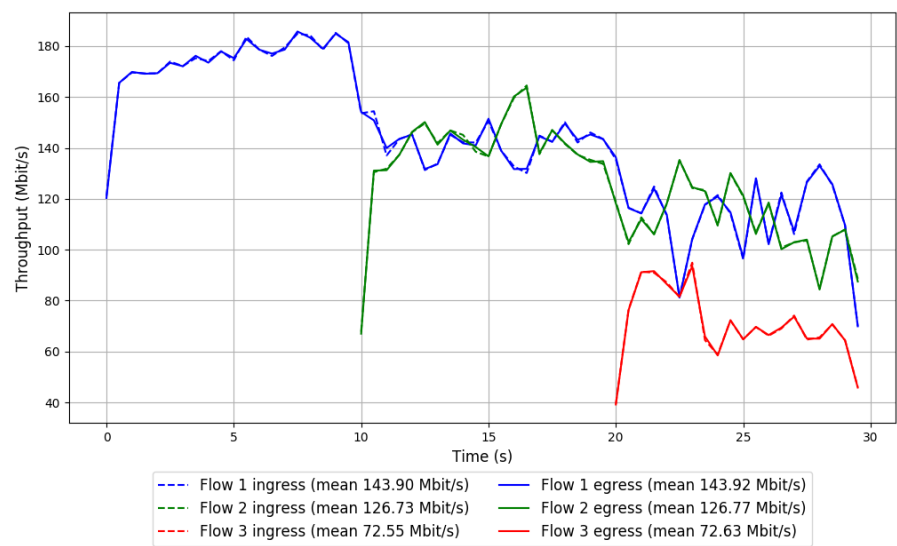
-- Flow 3:

Average throughput: 72.63 Mbit/s

95th percentile per-packet one-way delay: 2.395 ms

Loss rate: 0.05%

Run 10: Report of Indigo — Data Link

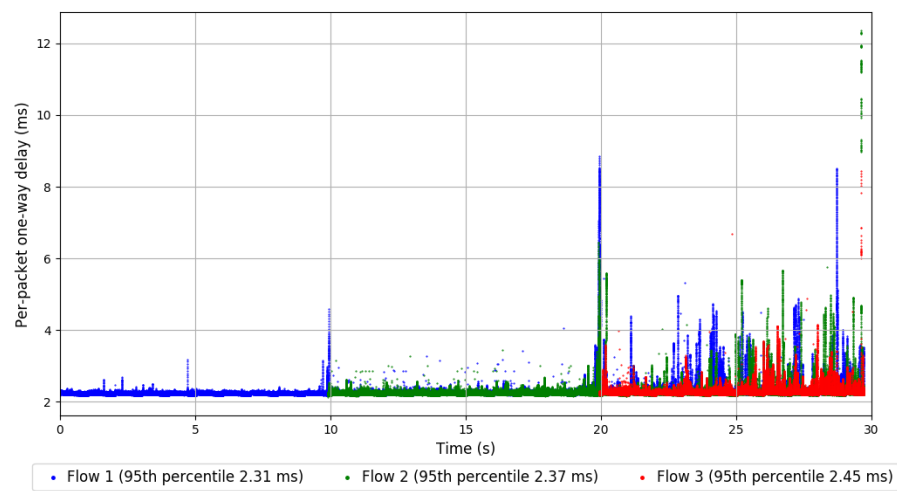
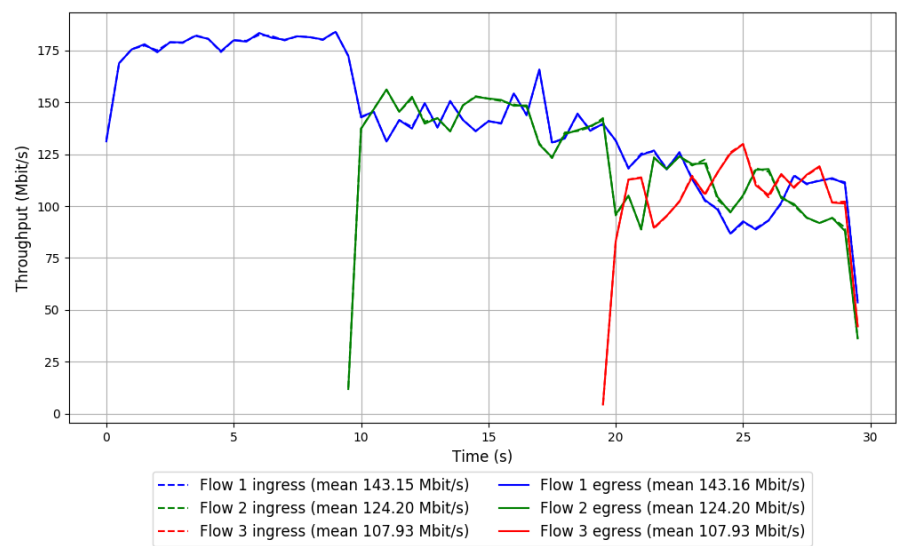


```
Run 1: Statistics of Indigo-calib

Start at: 2017-11-30 17:50:43
End at: 2017-11-30 17:51:13
Local clock offset: -0.484 ms
Remote clock offset: -0.474 ms

# Below is generated by plot.py at 2017-12-01 02:00:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 261.49 Mbit/s
95th percentile per-packet one-way delay: 2.348 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 143.16 Mbit/s
95th percentile per-packet one-way delay: 2.314 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 124.20 Mbit/s
95th percentile per-packet one-way delay: 2.368 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 107.93 Mbit/s
95th percentile per-packet one-way delay: 2.450 ms
Loss rate: 0.04%
```

Run 1: Report of Indigo-calib — Data Link

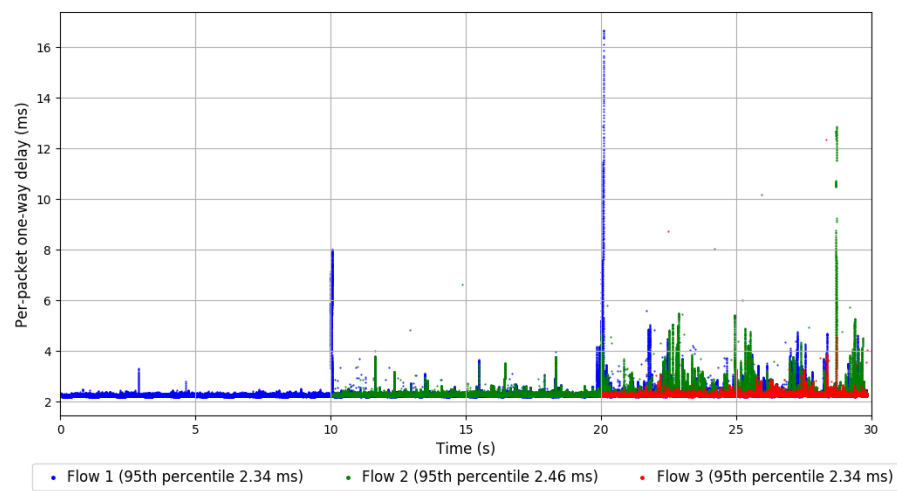
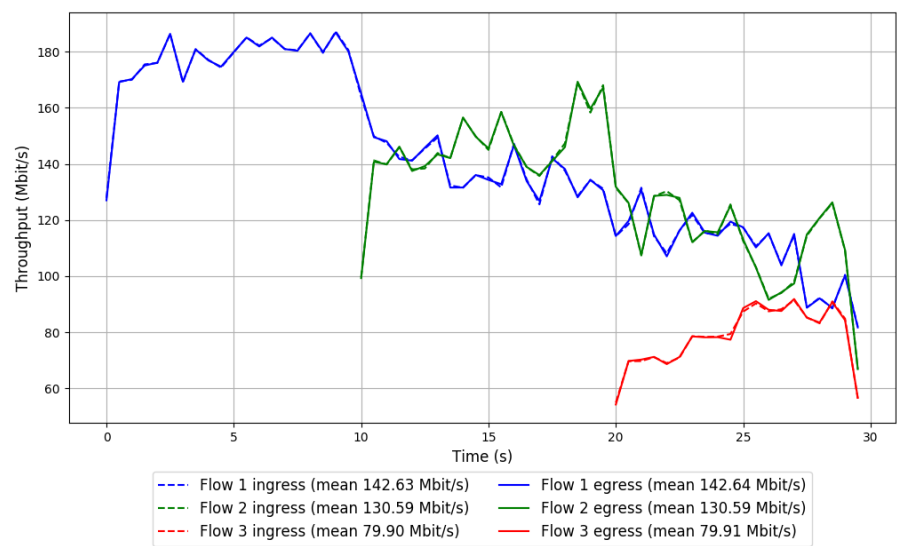


```
Run 2: Statistics of Indigo-calib

Start at: 2017-11-30 18:09:37
End at: 2017-11-30 18:10:07
Local clock offset: -0.387 ms
Remote clock offset: 0.026 ms

# Below is generated by plot.py at 2017-12-01 02:01:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 255.39 Mbit/s
95th percentile per-packet one-way delay: 2.371 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 142.64 Mbit/s
95th percentile per-packet one-way delay: 2.337 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 130.59 Mbit/s
95th percentile per-packet one-way delay: 2.465 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 79.91 Mbit/s
95th percentile per-packet one-way delay: 2.339 ms
Loss rate: 0.03%
```

Run 2: Report of Indigo-calib — Data Link



Run 3: Statistics of Indigo-calib

Start at: 2017-11-30 18:28:20

End at: 2017-11-30 18:28:50

Local clock offset: -0.281 ms

Remote clock offset: 0.484 ms

# Below is generated by plot.py at 2017-12-01 02:01:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 255.91 Mbit/s

95th percentile per-packet one-way delay: 2.320 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 141.58 Mbit/s

95th percentile per-packet one-way delay: 2.303 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 118.75 Mbit/s

95th percentile per-packet one-way delay: 2.329 ms

Loss rate: 0.03%

-- Flow 3:

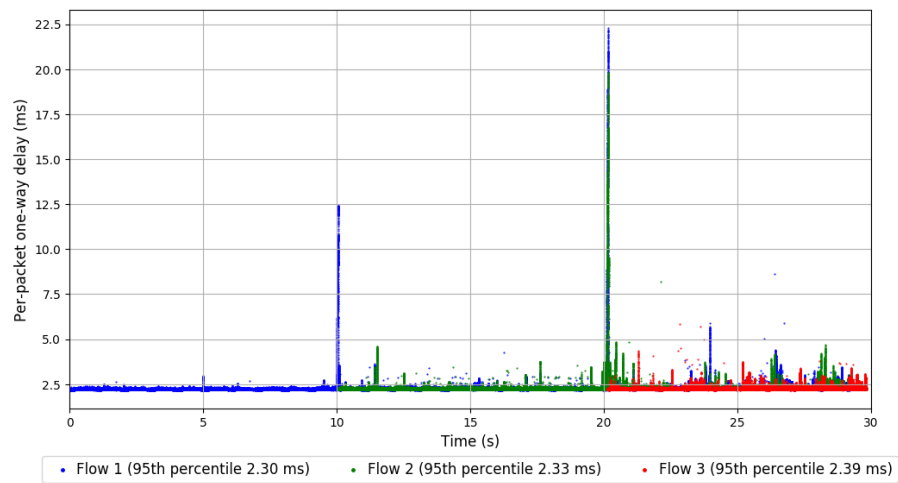
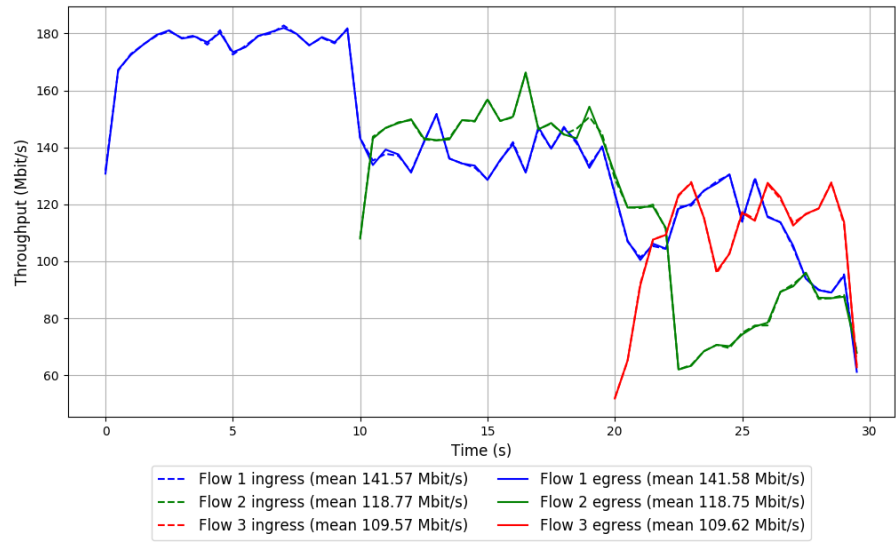
Average throughput: 109.62 Mbit/s

95th percentile per-packet one-way delay: 2.390 ms

Loss rate: 0.04%



### Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-11-30 18:47:13

End at: 2017-11-30 18:47:43

Local clock offset: -0.139 ms

Remote clock offset: 0.435 ms

# Below is generated by plot.py at 2017-12-01 02:02:02

# Datalink statistics

-- Total of 3 flows:

Average throughput: 256.81 Mbit/s

95th percentile per-packet one-way delay: 2.433 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 144.62 Mbit/s

95th percentile per-packet one-way delay: 2.413 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 126.70 Mbit/s

95th percentile per-packet one-way delay: 2.480 ms

Loss rate: 0.02%

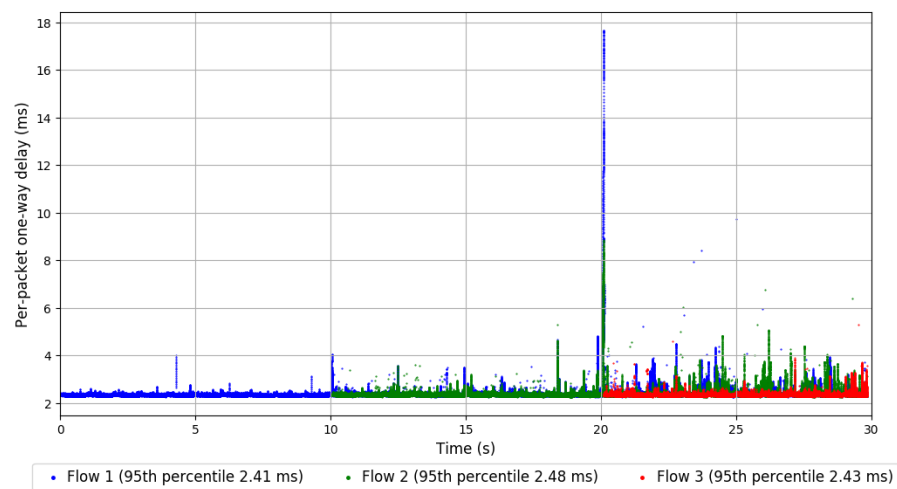
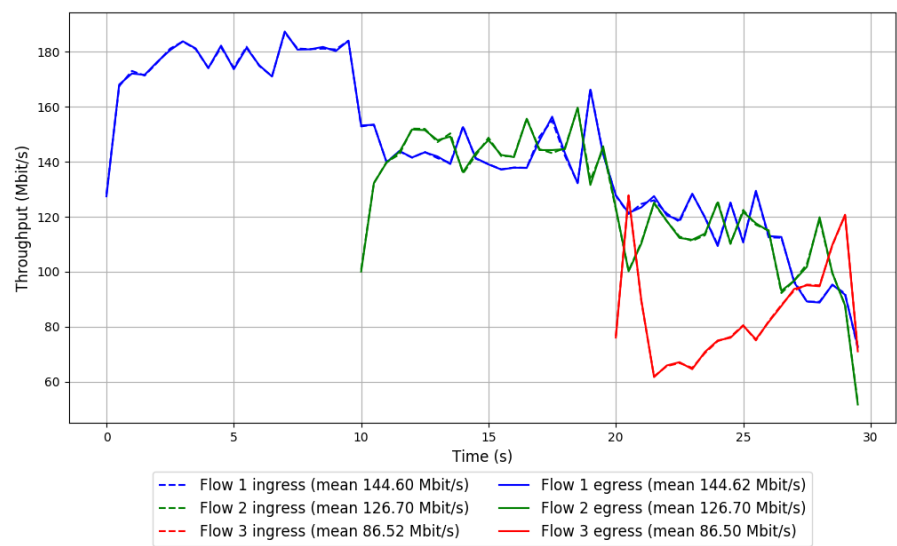
-- Flow 3:

Average throughput: 86.50 Mbit/s

95th percentile per-packet one-way delay: 2.430 ms

Loss rate: 0.06%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-11-30 19:05:49

End at: 2017-11-30 19:06:19

Local clock offset: -0.028 ms

Remote clock offset: 0.384 ms

# Below is generated by plot.py at 2017-12-01 02:02:18

# Datalink statistics

-- Total of 3 flows:

Average throughput: 258.24 Mbit/s

95th percentile per-packet one-way delay: 2.366 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 144.05 Mbit/s

95th percentile per-packet one-way delay: 2.339 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 122.76 Mbit/s

95th percentile per-packet one-way delay: 2.400 ms

Loss rate: 0.04%

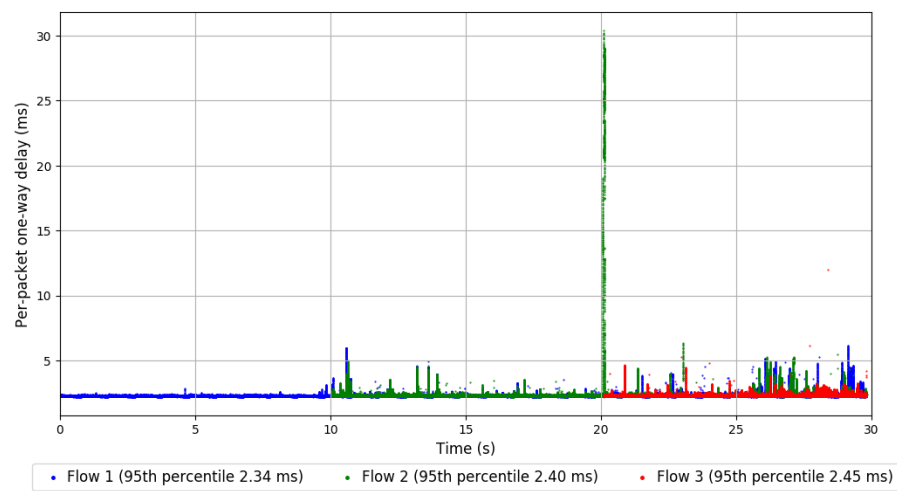
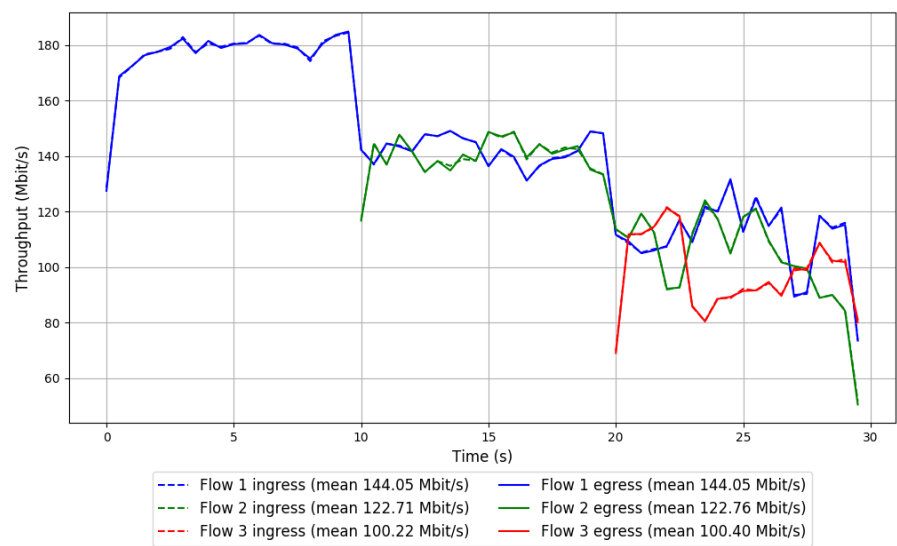
-- Flow 3:

Average throughput: 100.40 Mbit/s

95th percentile per-packet one-way delay: 2.453 ms

Loss rate: 0.00%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-11-30 19:24:41

End at: 2017-11-30 19:25:11

Local clock offset: -0.015 ms

Remote clock offset: 0.46 ms

# Below is generated by plot.py at 2017-12-01 02:02:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 258.67 Mbit/s

95th percentile per-packet one-way delay: 2.354 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 140.76 Mbit/s

95th percentile per-packet one-way delay: 2.324 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 125.09 Mbit/s

95th percentile per-packet one-way delay: 2.399 ms

Loss rate: 0.01%

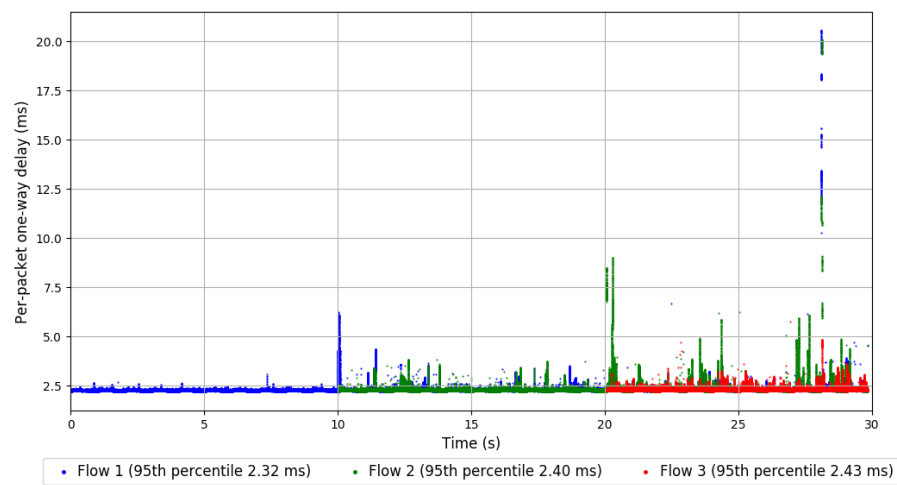
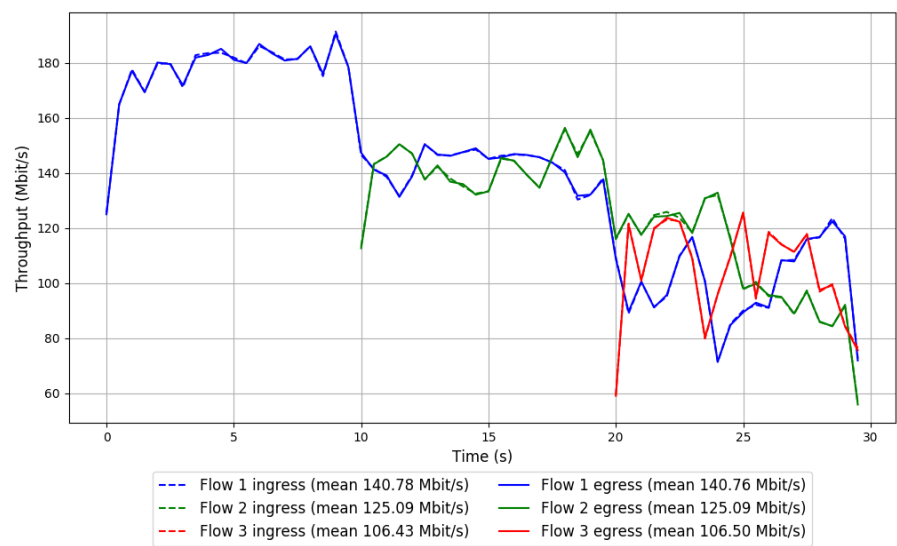
-- Flow 3:

Average throughput: 106.50 Mbit/s

95th percentile per-packet one-way delay: 2.428 ms

Loss rate: 0.07%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-11-30 19:43:28

End at: 2017-11-30 19:43:58

Local clock offset: 0.082 ms

Remote clock offset: 0.359 ms

# Below is generated by plot.py at 2017-12-01 02:02:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 255.78 Mbit/s

95th percentile per-packet one-way delay: 2.278 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 144.55 Mbit/s

95th percentile per-packet one-way delay: 2.274 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 128.90 Mbit/s

95th percentile per-packet one-way delay: 2.284 ms

Loss rate: 0.04%

-- Flow 3:

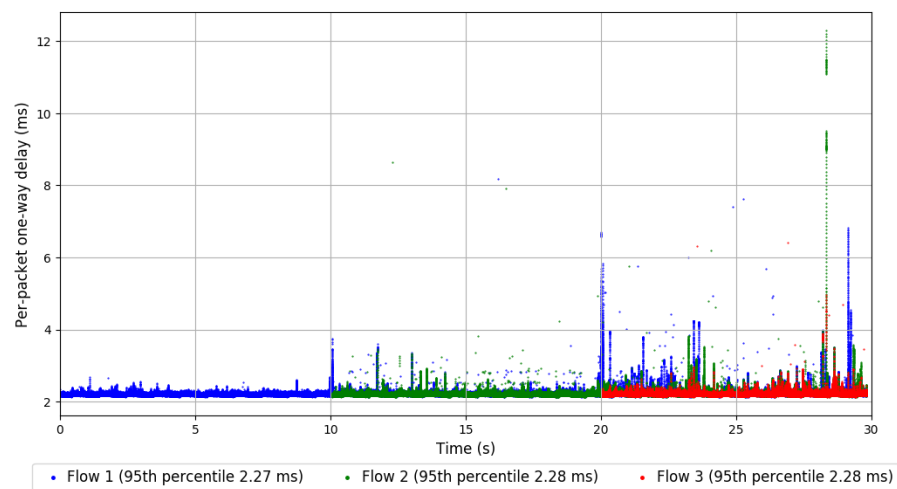
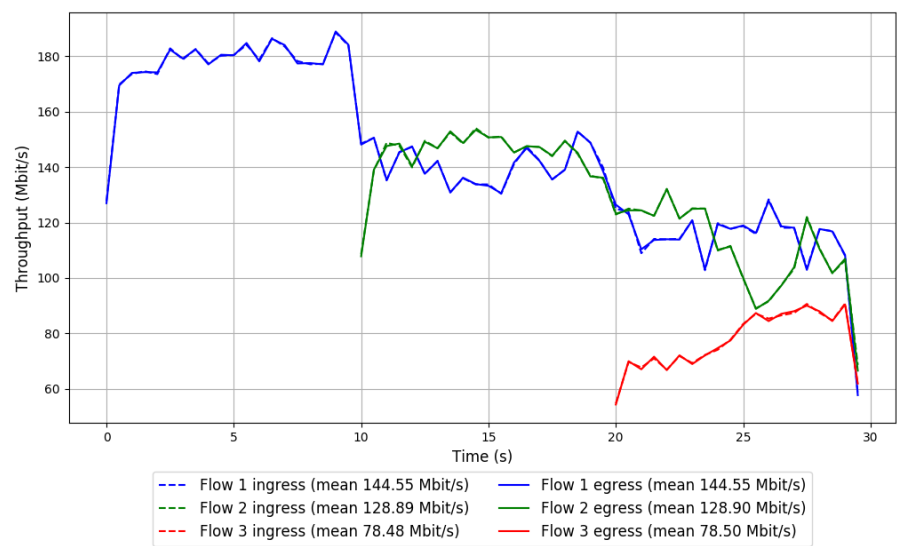
Average throughput: 78.50 Mbit/s

95th percentile per-packet one-way delay: 2.284 ms

Loss rate: 0.04%



Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-11-30 20:02:12

End at: 2017-11-30 20:02:42

Local clock offset: 0.19 ms

Remote clock offset: 0.222 ms

# Below is generated by plot.py at 2017-12-01 02:02:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 257.64 Mbit/s

95th percentile per-packet one-way delay: 2.413 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 139.05 Mbit/s

95th percentile per-packet one-way delay: 2.386 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 122.13 Mbit/s

95th percentile per-packet one-way delay: 2.429 ms

Loss rate: 0.03%

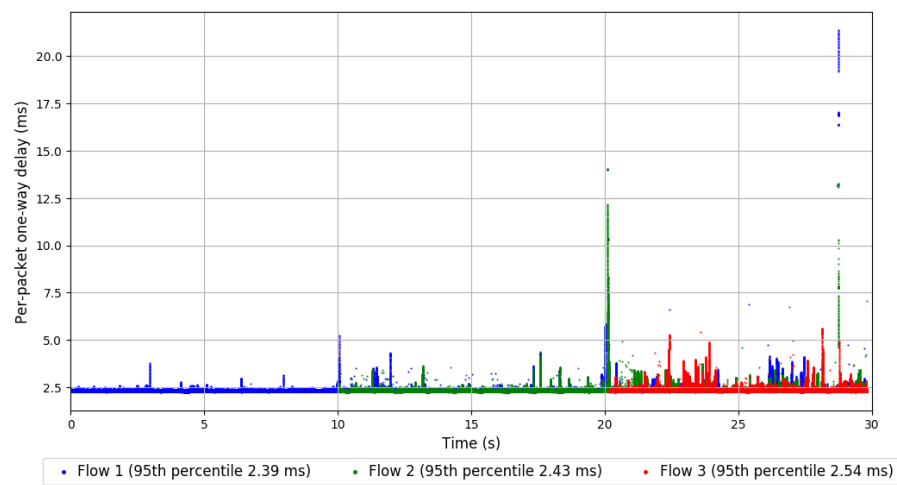
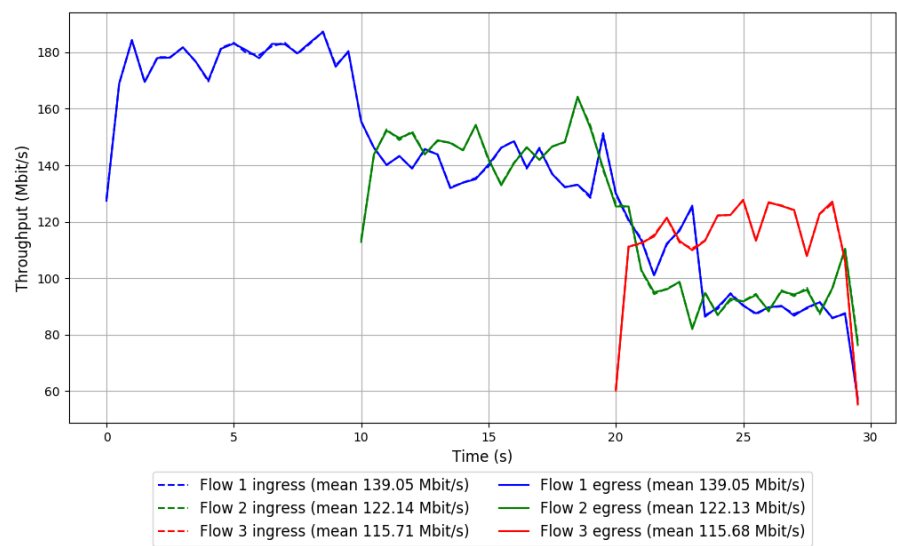
-- Flow 3:

Average throughput: 115.68 Mbit/s

95th percentile per-packet one-way delay: 2.540 ms

Loss rate: 0.02%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-11-30 20:20:50

End at: 2017-11-30 20:21:20

Local clock offset: 0.292 ms

Remote clock offset: 0.235 ms

# Below is generated by plot.py at 2017-12-01 02:02:38

# Datalink statistics

-- Total of 3 flows:

Average throughput: 236.73 Mbit/s

95th percentile per-packet one-way delay: 2.379 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 155.05 Mbit/s

95th percentile per-packet one-way delay: 2.379 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 70.53 Mbit/s

95th percentile per-packet one-way delay: 2.367 ms

Loss rate: 0.02%

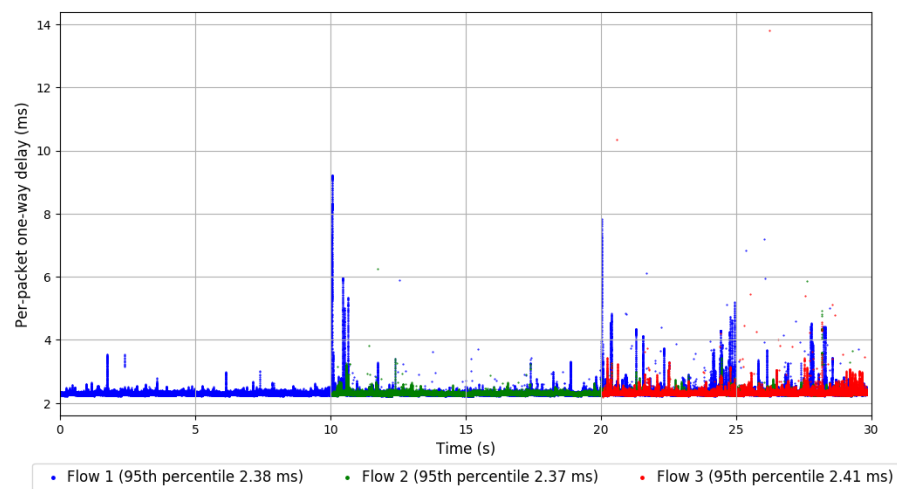
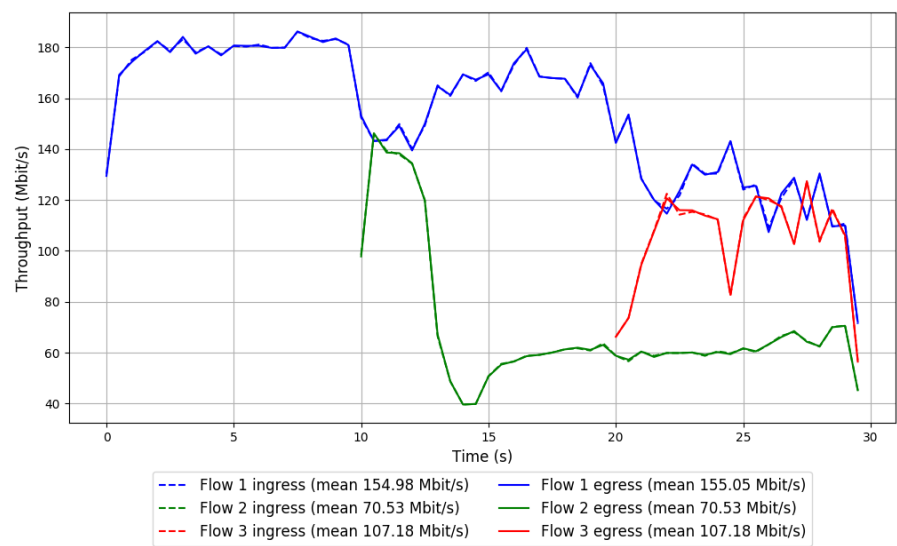
-- Flow 3:

Average throughput: 107.18 Mbit/s

95th percentile per-packet one-way delay: 2.410 ms

Loss rate: 0.03%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-11-30 20:39:40

End at: 2017-11-30 20:40:10

Local clock offset: 0.411 ms

Remote clock offset: 0.173 ms

# Below is generated by plot.py at 2017-12-01 02:02:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 258.98 Mbit/s

95th percentile per-packet one-way delay: 2.349 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 142.52 Mbit/s

95th percentile per-packet one-way delay: 2.342 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 127.06 Mbit/s

95th percentile per-packet one-way delay: 2.350 ms

Loss rate: 0.02%

-- Flow 3:

Average throughput: 98.62 Mbit/s

95th percentile per-packet one-way delay: 2.381 ms

Loss rate: 0.09%

Run 10: Report of Indigo-calib — Data Link

