

## Pantheon Report

Generated at 2018-04-17 00:57:07 (UTC).

Data path: India ppp0 (*remote*) → AWS India 1 Ethernet (*local*).

Repeated the test of 16 congestion control schemes 3 times.

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

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

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

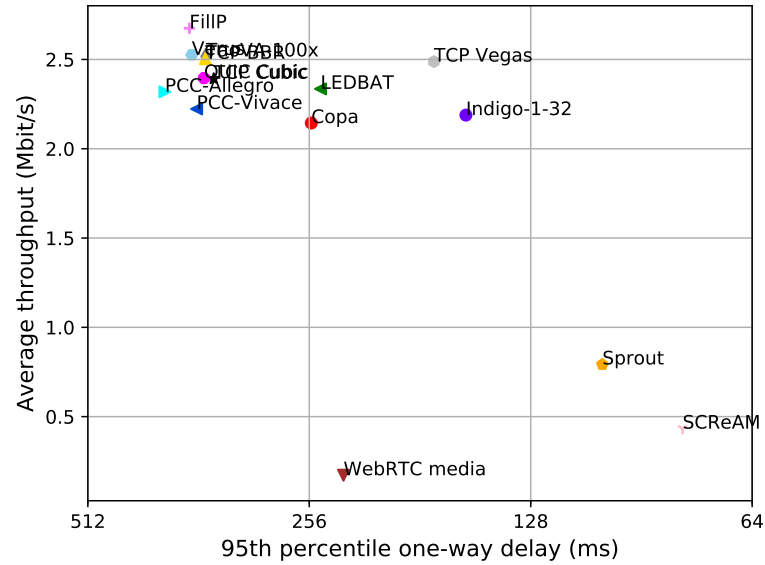
NTP offsets were measured against **nets.org.sg** and have been applied to correct the timestamps in logs.

Git summary:

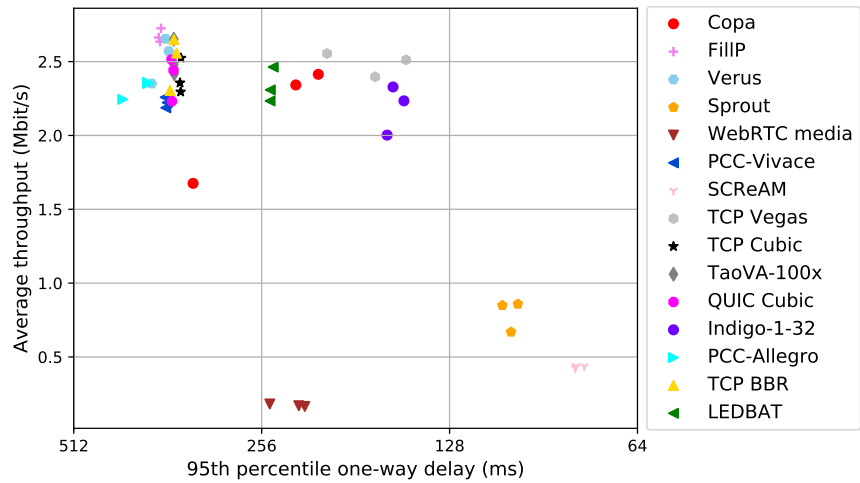
```
branch: master @ b3d6e7098641364fd3a292656a51aa81e316d0b4
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/fillp @ 11f8c46a2bf1dc797253db7e8ca04076272b2a44
third_party/genericCC @ d223989828276fa83a807da6e0341dc0c7b89aec
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
```

third\_party/webrtc @ f271183af822eee5d0031620f4bebf38aedc5581

test from India ppp0 to AWS India 1 Ethernet, 3 runs of 30s each per scheme  
 3 flows with 10s interval between flows (mean of all runs by scheme)



test from India ppp0 to AWS India 1 Ethernet, 3 runs of 30s each per scheme  
 3 flows with 10s interval between flows



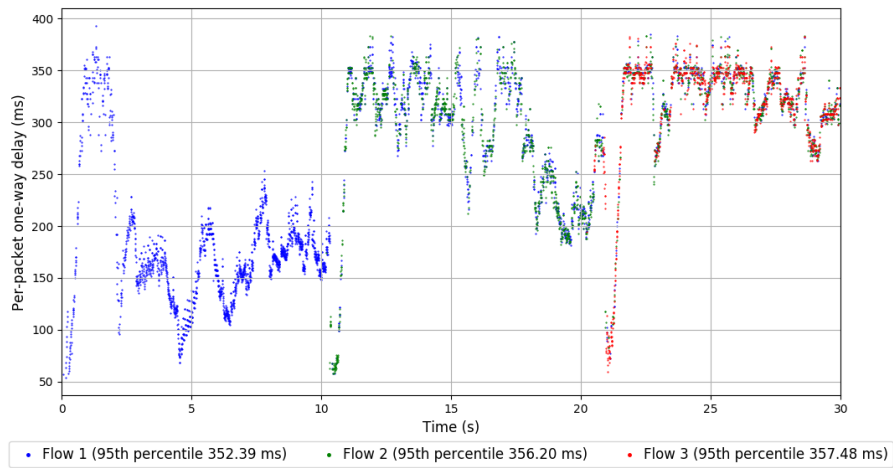
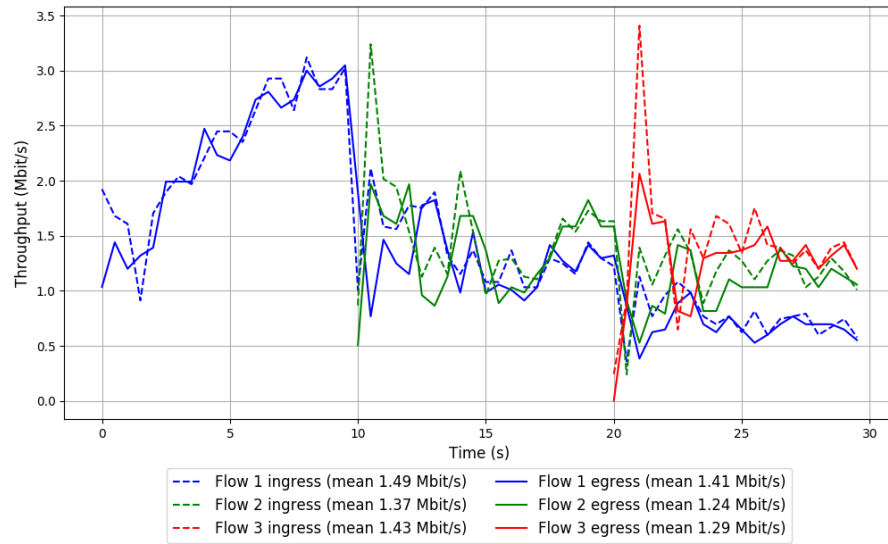


Run 1: Statistics of TCP BBR

Start at: 2018-04-16 23:17:25  
End at: 2018-04-16 23:17:55  
Local clock offset: -6.142 ms  
Remote clock offset: -5.907 ms

# Below is generated by plot.py at 2018-04-17 00:56:28  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.65 Mbit/s  
95th percentile per-packet one-way delay: 353.913 ms  
Loss rate: 8.06%  
-- Flow 1:  
Average throughput: 1.41 Mbit/s  
95th percentile per-packet one-way delay: 352.388 ms  
Loss rate: 5.61%  
-- Flow 2:  
Average throughput: 1.24 Mbit/s  
95th percentile per-packet one-way delay: 356.196 ms  
Loss rate: 10.31%  
-- Flow 3:  
Average throughput: 1.29 Mbit/s  
95th percentile per-packet one-way delay: 357.479 ms  
Loss rate: 11.47%

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

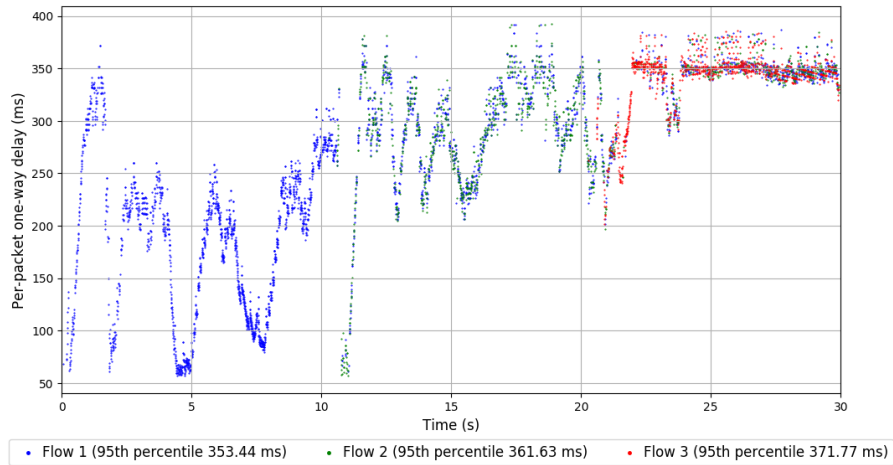
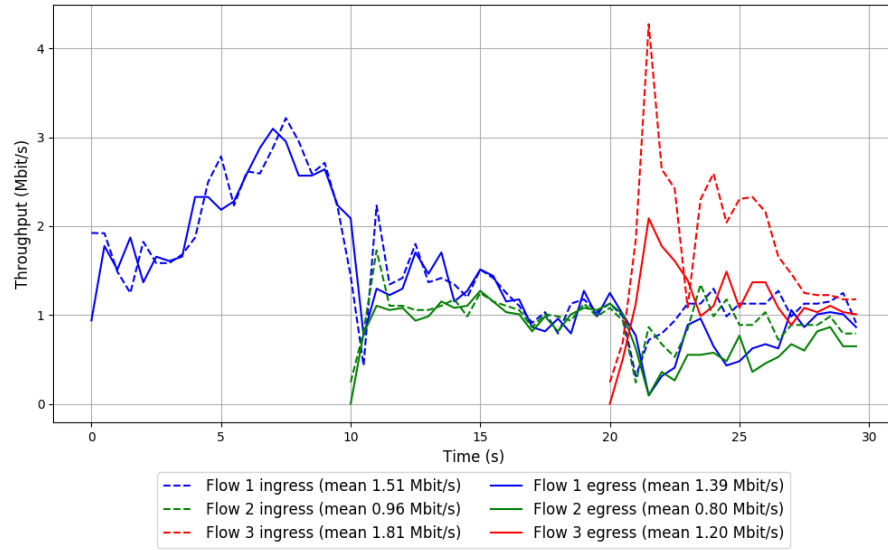


Run 2: Statistics of TCP BBR

Start at: 2018-04-16 23:36:09  
End at: 2018-04-16 23:36:39  
Local clock offset: -8.805 ms  
Remote clock offset: -6.603 ms

# Below is generated by plot.py at 2018-04-17 00:56:28  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.30 Mbit/s  
95th percentile per-packet one-way delay: 359.031 ms  
Loss rate: 16.46%  
-- Flow 1:  
Average throughput: 1.39 Mbit/s  
95th percentile per-packet one-way delay: 353.445 ms  
Loss rate: 8.18%  
-- Flow 2:  
Average throughput: 0.80 Mbit/s  
95th percentile per-packet one-way delay: 361.629 ms  
Loss rate: 17.63%  
-- Flow 3:  
Average throughput: 1.20 Mbit/s  
95th percentile per-packet one-way delay: 371.767 ms  
Loss rate: 35.97%

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



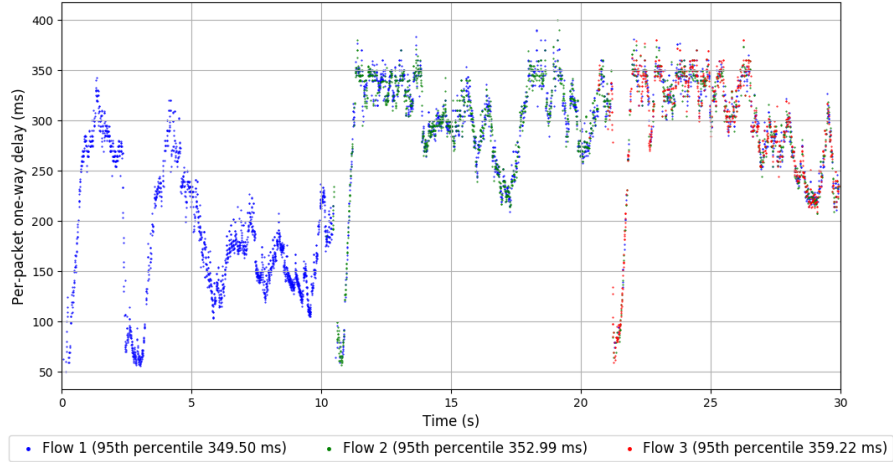
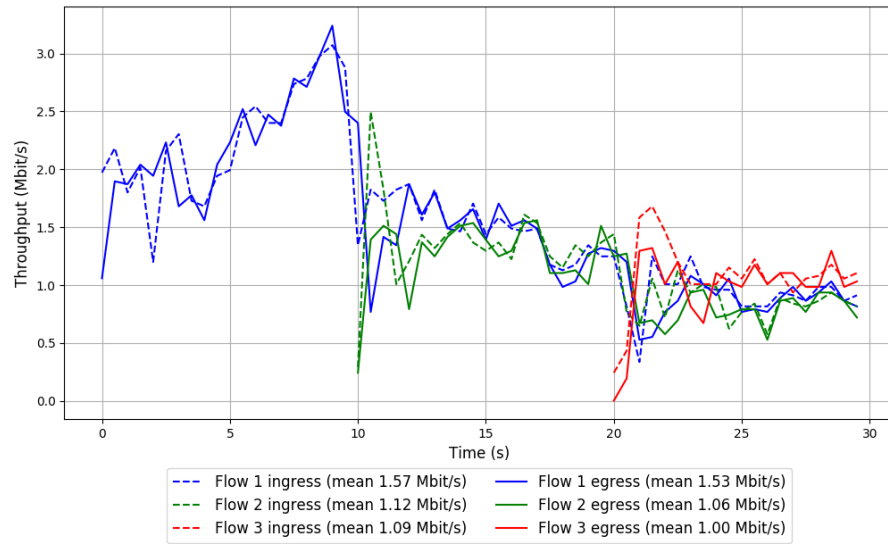


Run 3: Statistics of TCP BBR

Start at: 2018-04-16 23:54:53  
End at: 2018-04-16 23:55:23  
Local clock offset: -9.753 ms  
Remote clock offset: -7.313 ms

# Below is generated by plot.py at 2018-04-17 00:56:28  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.56 Mbit/s  
95th percentile per-packet one-way delay: 350.468 ms  
Loss rate: 4.87%  
-- Flow 1:  
Average throughput: 1.53 Mbit/s  
95th percentile per-packet one-way delay: 349.505 ms  
Loss rate: 2.83%  
-- Flow 2:  
Average throughput: 1.06 Mbit/s  
95th percentile per-packet one-way delay: 352.994 ms  
Loss rate: 6.42%  
-- Flow 3:  
Average throughput: 1.00 Mbit/s  
95th percentile per-packet one-way delay: 359.219 ms  
Loss rate: 10.57%

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



Run 1: Statistics of TCP Cubic

Start at: 2018-04-16 23:16:19

End at: 2018-04-16 23:16:49

Local clock offset: -6.328 ms

Remote clock offset: -5.03 ms

# Below is generated by plot.py at 2018-04-17 00:56:28

# Datalink statistics

-- Total of 3 flows:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 345.987 ms

Loss rate: 2.43%

-- Flow 1:

Average throughput: 1.80 Mbit/s

95th percentile per-packet one-way delay: 341.372 ms

Loss rate: 1.47%

-- Flow 2:

Average throughput: 0.69 Mbit/s

95th percentile per-packet one-way delay: 346.355 ms

Loss rate: 4.44%

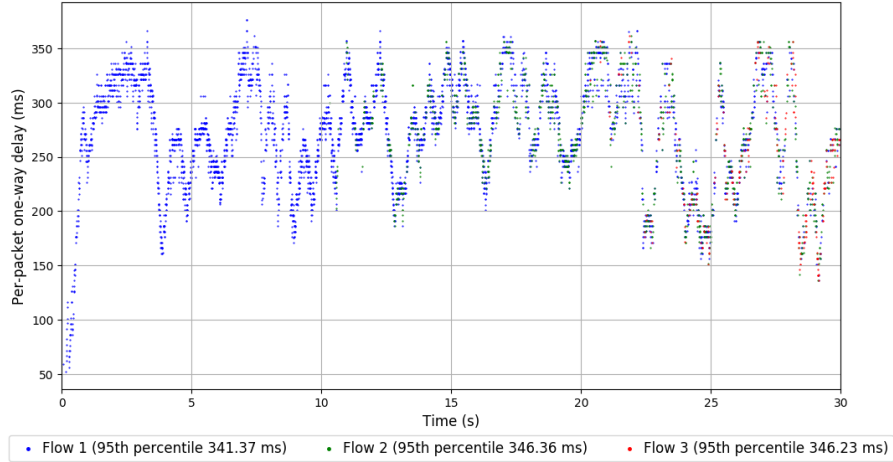
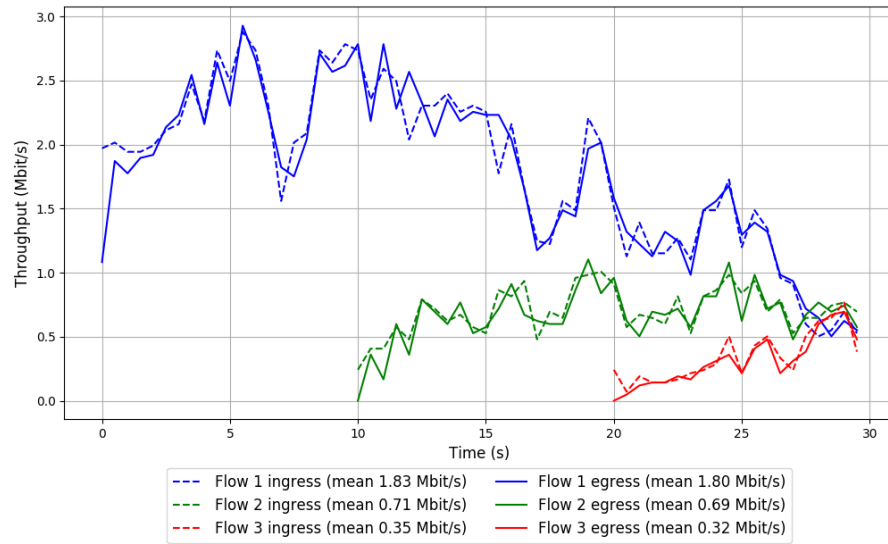
-- Flow 3:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 346.227 ms

Loss rate: 9.44%

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

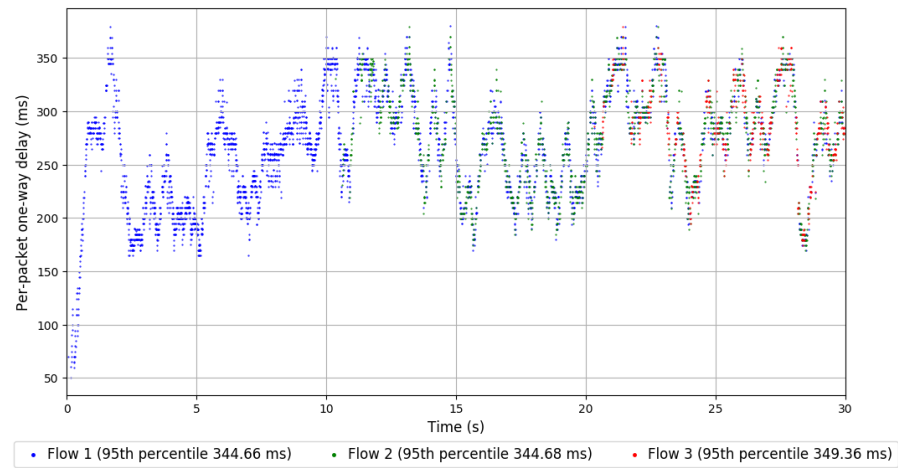
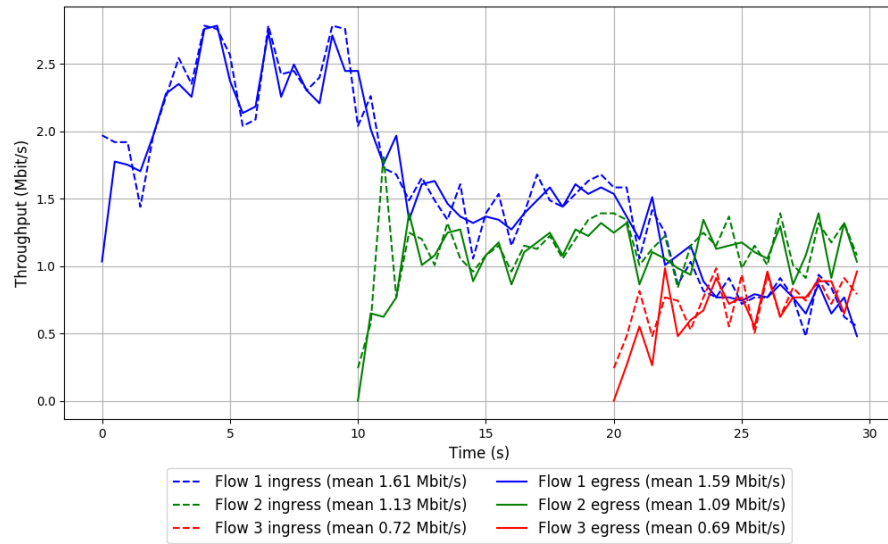


Run 2: Statistics of TCP Cubic

Start at: 2018-04-16 23:35:03  
End at: 2018-04-16 23:35:33  
Local clock offset: -10.249 ms  
Remote clock offset: -5.848 ms

# Below is generated by plot.py at 2018-04-17 00:56:28  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.52 Mbit/s  
95th percentile per-packet one-way delay: 344.721 ms  
Loss rate: 3.22%  
-- Flow 1:  
Average throughput: 1.59 Mbit/s  
95th percentile per-packet one-way delay: 344.664 ms  
Loss rate: 1.82%  
-- Flow 2:  
Average throughput: 1.09 Mbit/s  
95th percentile per-packet one-way delay: 344.675 ms  
Loss rate: 5.00%  
-- Flow 3:  
Average throughput: 0.69 Mbit/s  
95th percentile per-packet one-way delay: 349.358 ms  
Loss rate: 7.06%

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

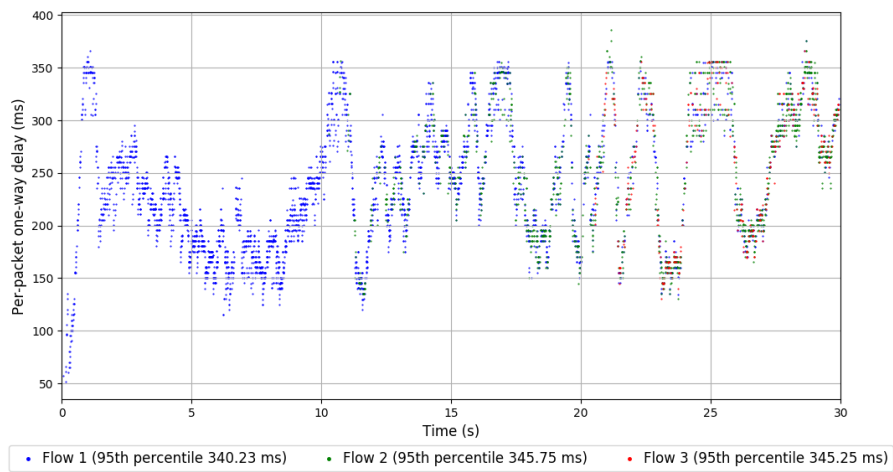
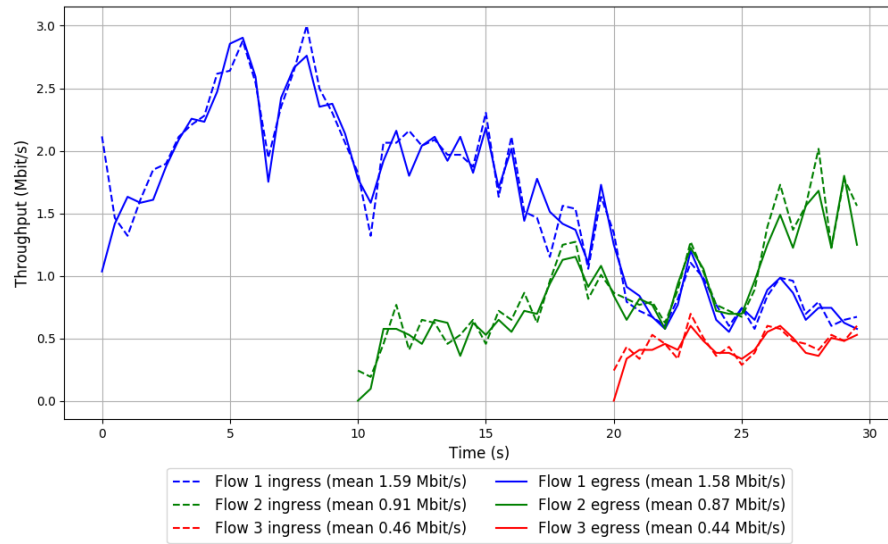


Run 3: Statistics of TCP Cubic

Start at: 2018-04-16 23:53:47  
End at: 2018-04-16 23:54:17  
Local clock offset: -9.714 ms  
Remote clock offset: -7.527 ms

# Below is generated by plot.py at 2018-04-17 00:56:28  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.30 Mbit/s  
95th percentile per-packet one-way delay: 345.157 ms  
Loss rate: 2.76%  
-- Flow 1:  
Average throughput: 1.58 Mbit/s  
95th percentile per-packet one-way delay: 340.232 ms  
Loss rate: 1.28%  
-- Flow 2:  
Average throughput: 0.87 Mbit/s  
95th percentile per-packet one-way delay: 345.754 ms  
Loss rate: 5.68%  
-- Flow 3:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 345.248 ms  
Loss rate: 6.58%

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



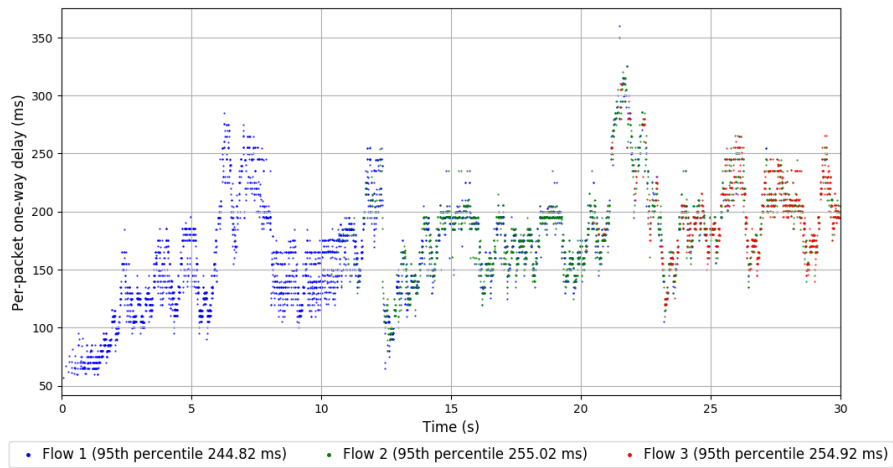
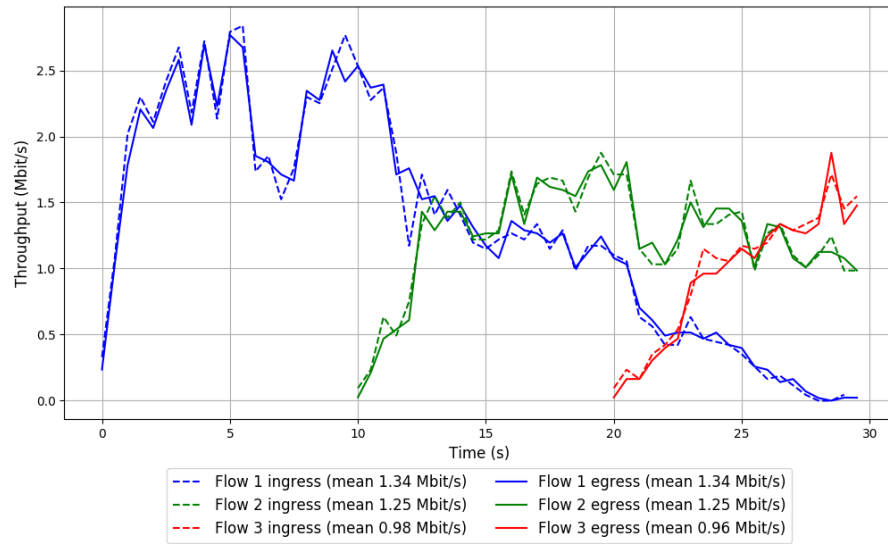


Run 1: Statistics of LEDBAT

Start at: 2018-04-16 23:21:50  
End at: 2018-04-16 23:22:20  
Local clock offset: -7.446 ms  
Remote clock offset: -4.907 ms

# Below is generated by plot.py at 2018-04-17 00:56:28  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.46 Mbit/s  
95th percentile per-packet one-way delay: 245.330 ms  
Loss rate: 0.77%  
-- Flow 1:  
Average throughput: 1.34 Mbit/s  
95th percentile per-packet one-way delay: 244.820 ms  
Loss rate: 0.03%  
-- Flow 2:  
Average throughput: 1.25 Mbit/s  
95th percentile per-packet one-way delay: 255.017 ms  
Loss rate: 0.89%  
-- Flow 3:  
Average throughput: 0.96 Mbit/s  
95th percentile per-packet one-way delay: 254.920 ms  
Loss rate: 3.49%

# Run 1: Report of LEDBAT — Data Link

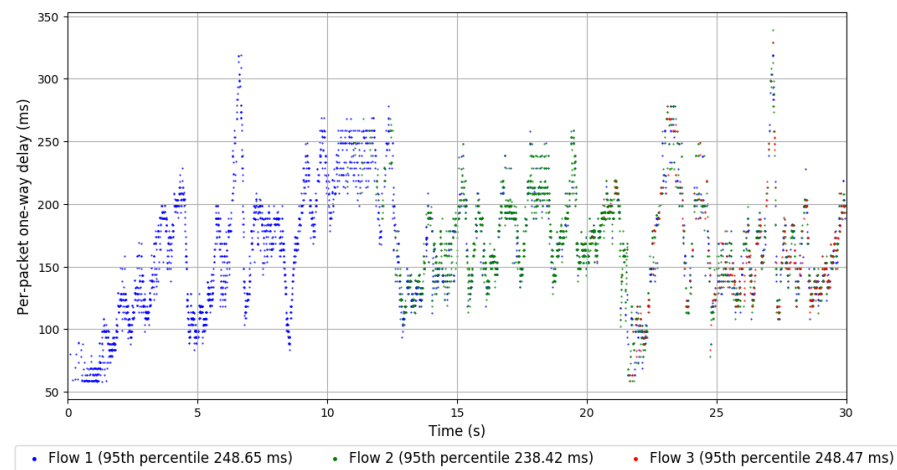
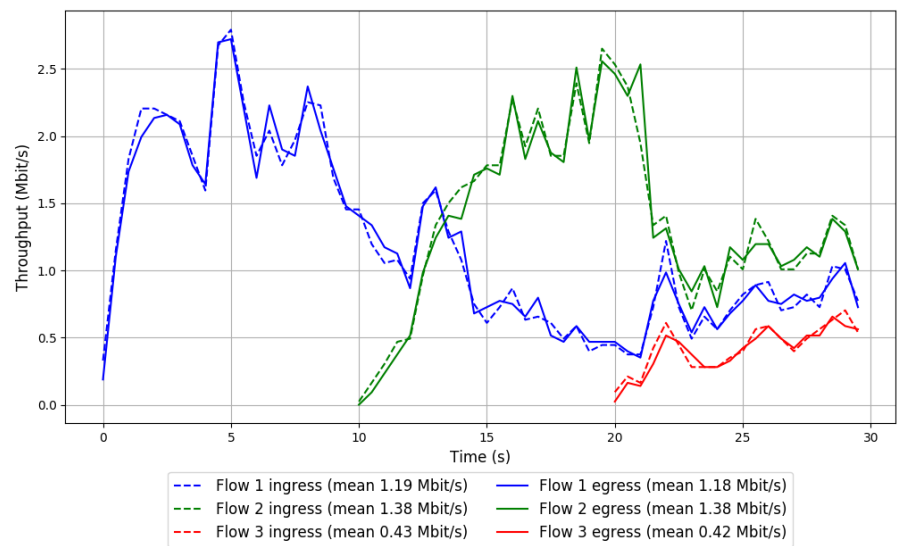


Run 2: Statistics of LEDBAT

Start at: 2018-04-16 23:40:33  
End at: 2018-04-16 23:41:03  
Local clock offset: -10.694 ms  
Remote clock offset: -6.997 ms

# Below is generated by plot.py at 2018-04-17 00:56:28  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.23 Mbit/s  
95th percentile per-packet one-way delay: 248.206 ms  
Loss rate: 0.92%  
-- Flow 1:  
Average throughput: 1.18 Mbit/s  
95th percentile per-packet one-way delay: 248.654 ms  
Loss rate: 0.49%  
-- Flow 2:  
Average throughput: 1.38 Mbit/s  
95th percentile per-packet one-way delay: 238.418 ms  
Loss rate: 0.94%  
-- Flow 3:  
Average throughput: 0.42 Mbit/s  
95th percentile per-packet one-way delay: 248.473 ms  
Loss rate: 4.41%

Run 2: Report of LEDBAT — Data Link

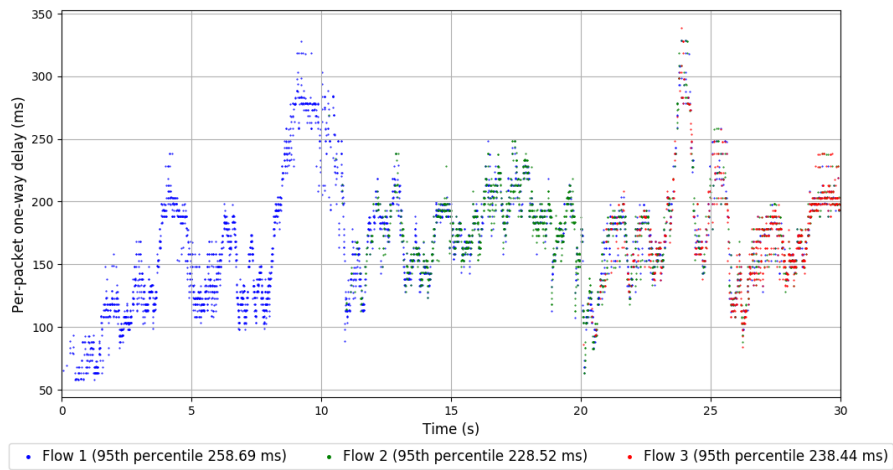
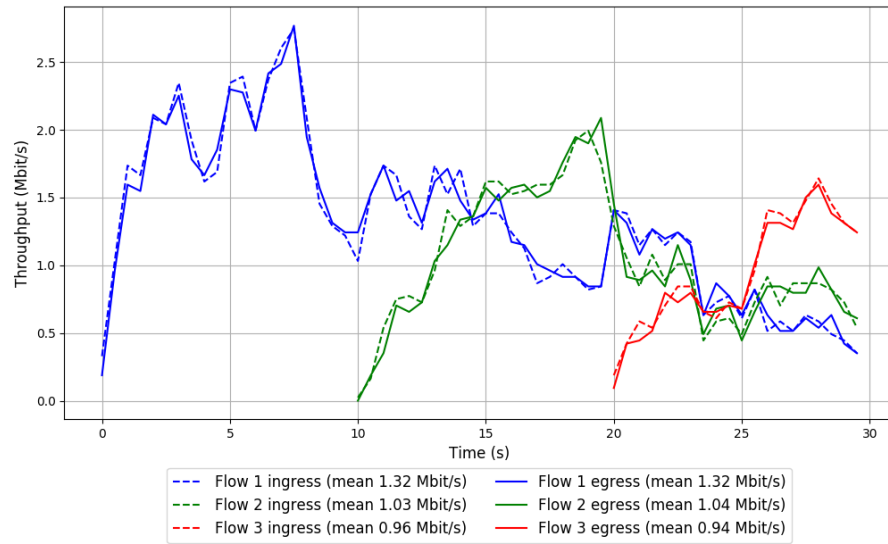


Run 3: Statistics of LEDBAT

Start at: 2018-04-16 23:59:17  
End at: 2018-04-16 23:59:47  
Local clock offset: -10.59 ms  
Remote clock offset: -8.156 ms

# Below is generated by plot.py at 2018-04-17 00:56:30  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.31 Mbit/s  
95th percentile per-packet one-way delay: 247.991 ms  
Loss rate: 0.73%  
-- Flow 1:  
Average throughput: 1.32 Mbit/s  
95th percentile per-packet one-way delay: 258.690 ms  
Loss rate: 0.21%  
-- Flow 2:  
Average throughput: 1.04 Mbit/s  
95th percentile per-packet one-way delay: 228.516 ms  
Loss rate: 0.68%  
-- Flow 3:  
Average throughput: 0.94 Mbit/s  
95th percentile per-packet one-way delay: 238.442 ms  
Loss rate: 2.96%

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

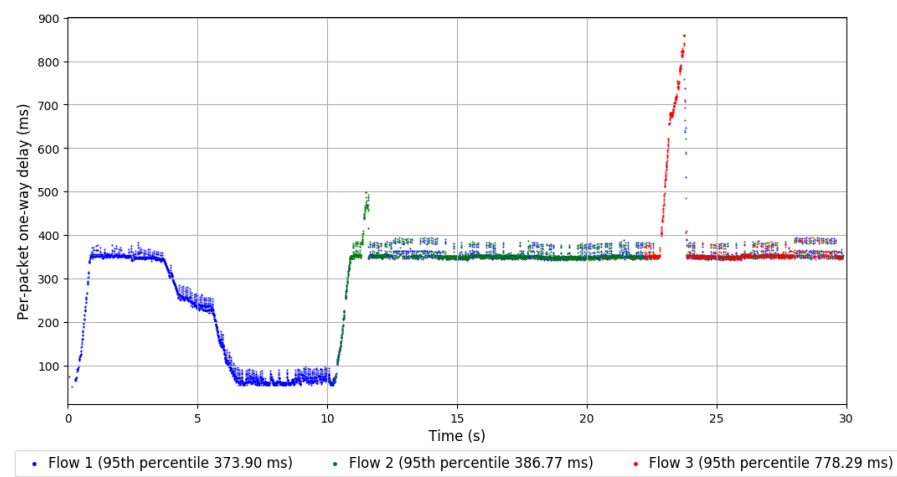
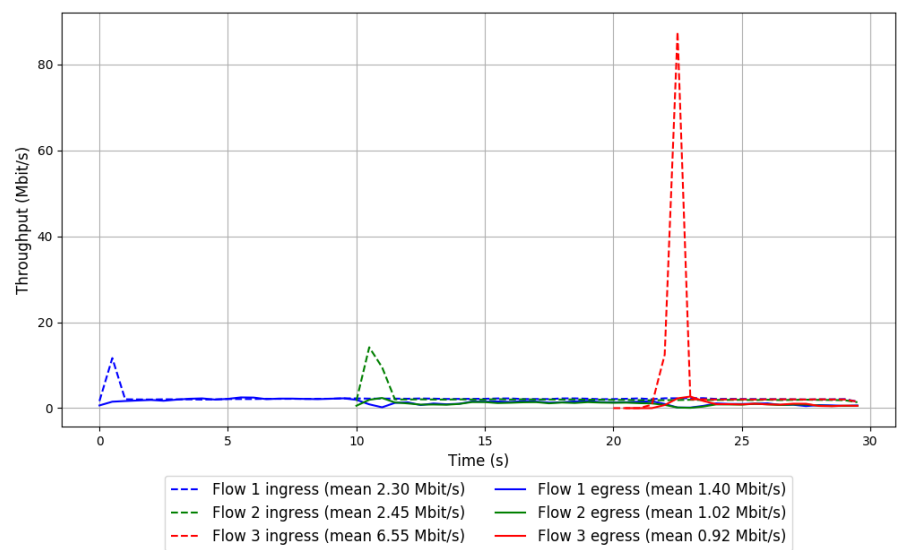


Run 1: Statistics of PCC-Allegro

Start at: 2018-04-16 23:07:28  
End at: 2018-04-16 23:07:58  
Local clock offset: -1.377 ms  
Remote clock offset: -6.717 ms

# Below is generated by plot.py at 2018-04-17 00:56:37  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.36 Mbit/s  
95th percentile per-packet one-way delay: 389.904 ms  
Loss rate: 61.33%  
-- Flow 1:  
Average throughput: 1.40 Mbit/s  
95th percentile per-packet one-way delay: 373.897 ms  
Loss rate: 39.43%  
-- Flow 2:  
Average throughput: 1.02 Mbit/s  
95th percentile per-packet one-way delay: 386.768 ms  
Loss rate: 58.53%  
-- Flow 3:  
Average throughput: 0.92 Mbit/s  
95th percentile per-packet one-way delay: 778.293 ms  
Loss rate: 86.83%

Run 1: Report of PCC-Allegro — Data Link



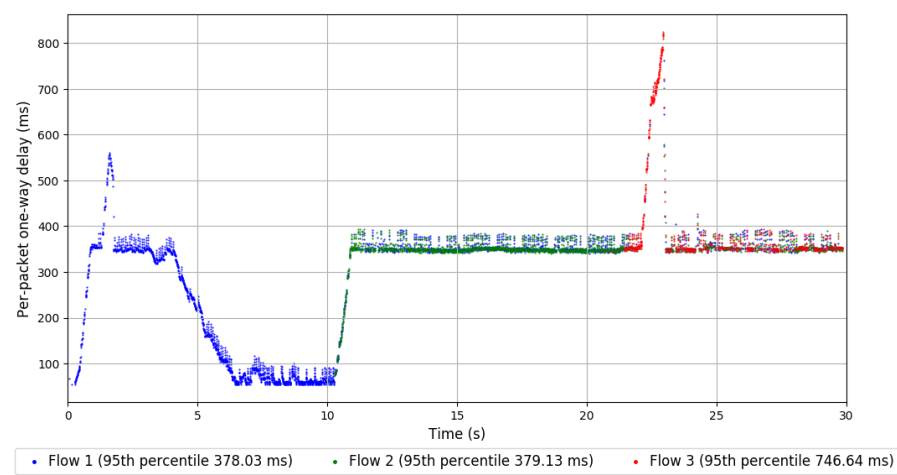
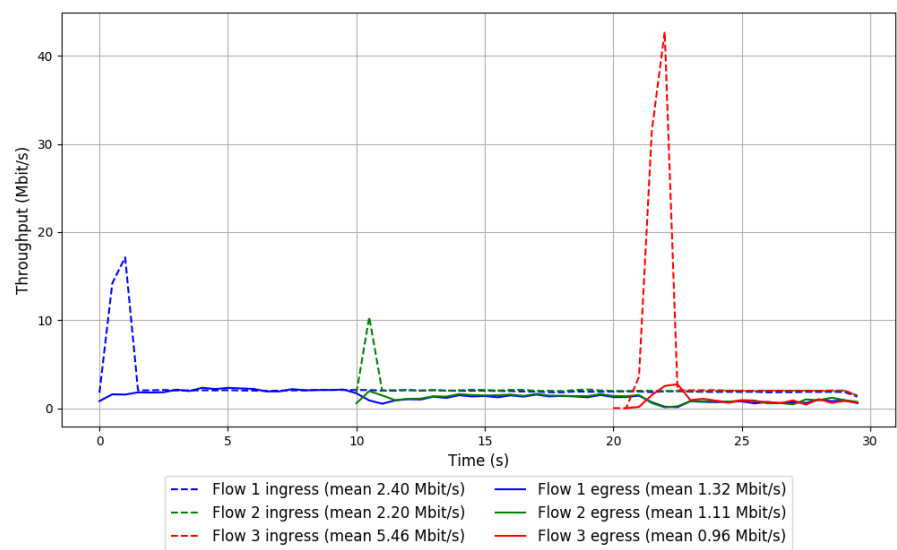


Run 2: Statistics of PCC-Allegro

Start at: 2018-04-16 23:26:14  
End at: 2018-04-16 23:26:45  
Local clock offset: -7.509 ms  
Remote clock offset: -4.336 ms

# Below is generated by plot.py at 2018-04-17 00:56:37  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.35 Mbit/s  
95th percentile per-packet one-way delay: 389.513 ms  
Loss rate: 58.54%  
-- Flow 1:  
Average throughput: 1.32 Mbit/s  
95th percentile per-packet one-way delay: 378.033 ms  
Loss rate: 45.05%  
-- Flow 2:  
Average throughput: 1.11 Mbit/s  
95th percentile per-packet one-way delay: 379.134 ms  
Loss rate: 49.88%  
-- Flow 3:  
Average throughput: 0.96 Mbit/s  
95th percentile per-packet one-way delay: 746.638 ms  
Loss rate: 83.57%

Run 2: Report of PCC-Allegro — Data Link

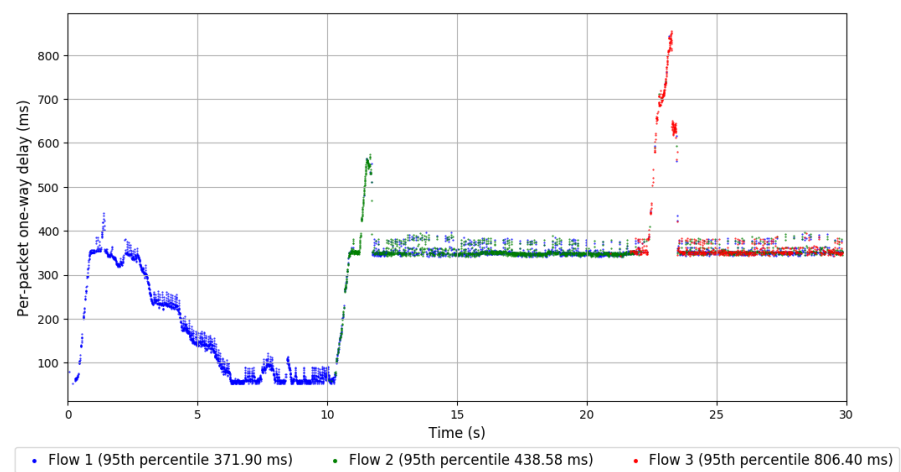
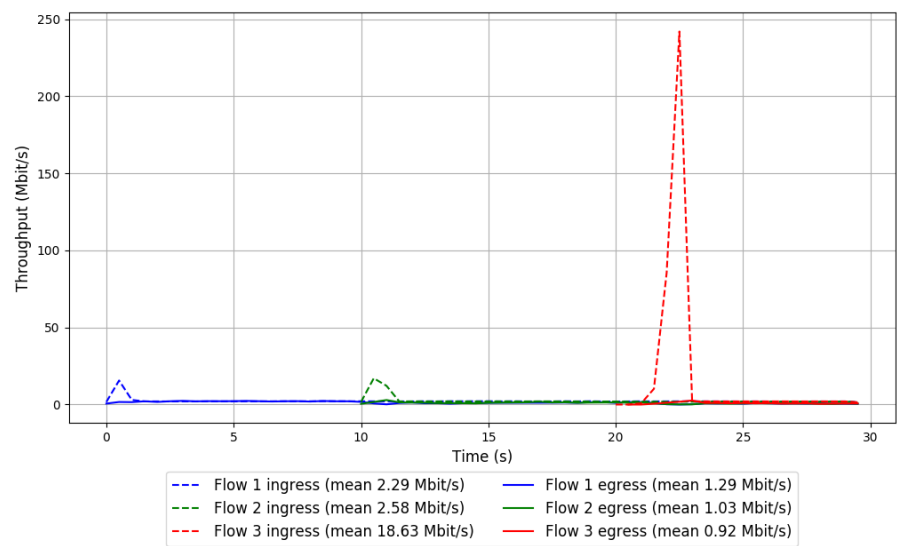


Run 3: Statistics of PCC-Allegro

Start at: 2018-04-16 23:44:58  
End at: 2018-04-16 23:45:28  
Local clock offset: -10.739 ms  
Remote clock offset: -7.518 ms

# Below is generated by plot.py at 2018-04-17 00:56:39  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.24 Mbit/s  
95th percentile per-packet one-way delay: 427.395 ms  
Loss rate: 77.94%  
-- Flow 1:  
Average throughput: 1.29 Mbit/s  
95th percentile per-packet one-way delay: 371.896 ms  
Loss rate: 44.17%  
-- Flow 2:  
Average throughput: 1.03 Mbit/s  
95th percentile per-packet one-way delay: 438.576 ms  
Loss rate: 60.36%  
-- Flow 3:  
Average throughput: 0.92 Mbit/s  
95th percentile per-packet one-way delay: 806.405 ms  
Loss rate: 95.48%

Run 3: Report of PCC-Allegro — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-04-16 23:11:52

End at: 2018-04-16 23:12:22

Local clock offset: -4.338 ms

Remote clock offset: -6.55 ms

# Below is generated by plot.py at 2018-04-17 00:56:39

# Datalink statistics

-- Total of 3 flows:

Average throughput: 2.44 Mbit/s

95th percentile per-packet one-way delay: 354.391 ms

Loss rate: 5.69%

-- Flow 1:

Average throughput: 1.59 Mbit/s

95th percentile per-packet one-way delay: 353.570 ms

Loss rate: 4.23%

-- Flow 2:

Average throughput: 0.74 Mbit/s

95th percentile per-packet one-way delay: 358.629 ms

Loss rate: 7.91%

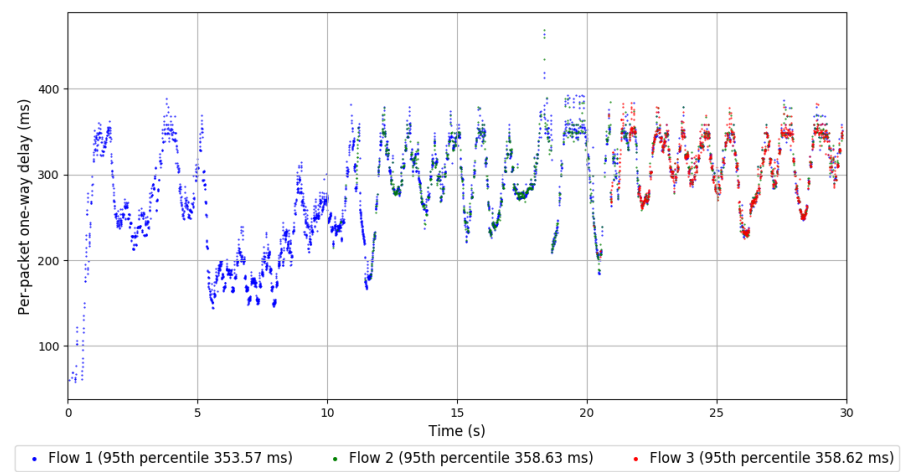
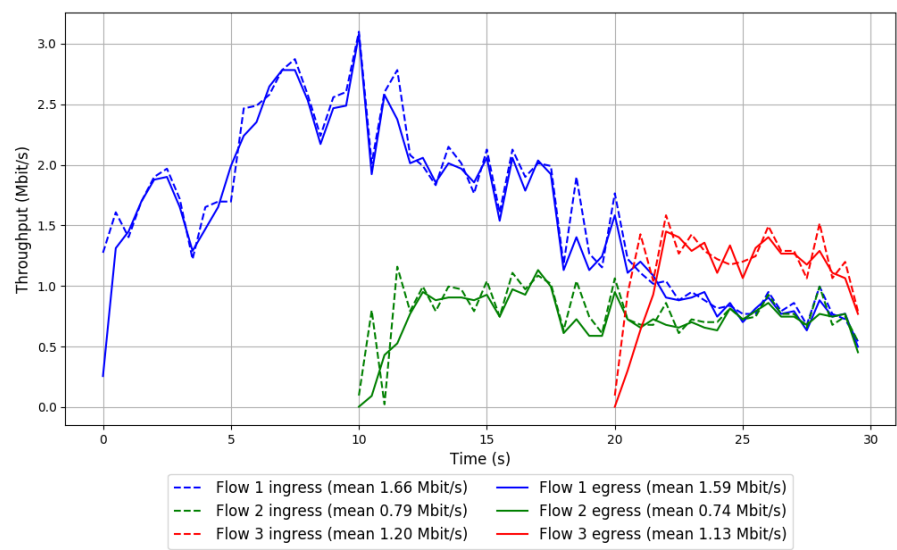
-- Flow 3:

Average throughput: 1.13 Mbit/s

95th percentile per-packet one-way delay: 358.616 ms

Loss rate: 8.81%

Run 1: Report of QUIC Cubic — Data Link

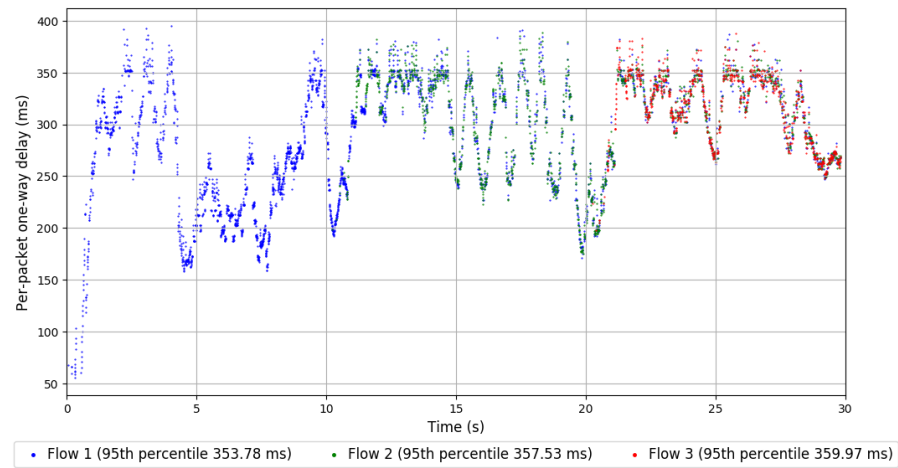
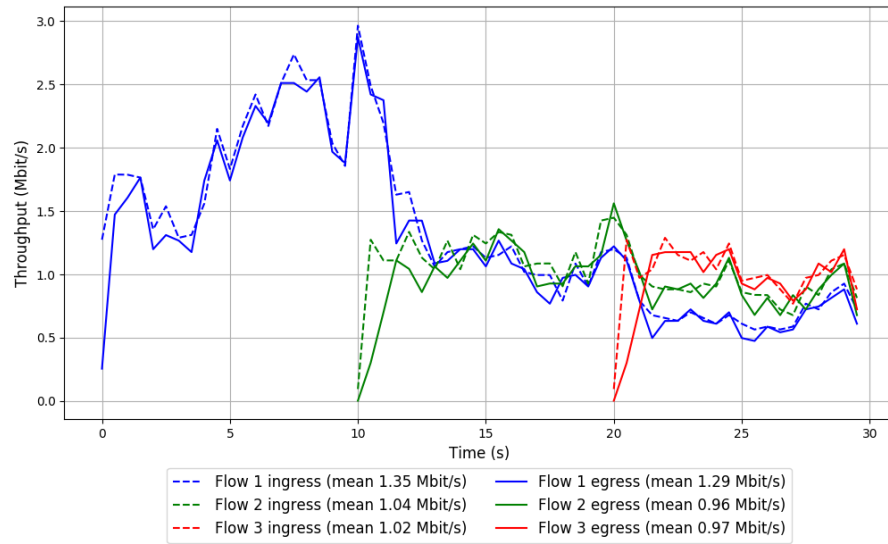


Run 2: Statistics of QUIC Cubic

Start at: 2018-04-16 23:30:39  
End at: 2018-04-16 23:31:09  
Local clock offset: -8.855 ms  
Remote clock offset: -6.005 ms

# Below is generated by plot.py at 2018-04-17 00:56:39  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.23 Mbit/s  
95th percentile per-packet one-way delay: 356.410 ms  
Loss rate: 6.40%  
-- Flow 1:  
Average throughput: 1.29 Mbit/s  
95th percentile per-packet one-way delay: 353.781 ms  
Loss rate: 5.08%  
-- Flow 2:  
Average throughput: 0.96 Mbit/s  
95th percentile per-packet one-way delay: 357.526 ms  
Loss rate: 8.25%  
-- Flow 3:  
Average throughput: 0.97 Mbit/s  
95th percentile per-packet one-way delay: 359.967 ms  
Loss rate: 7.89%

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



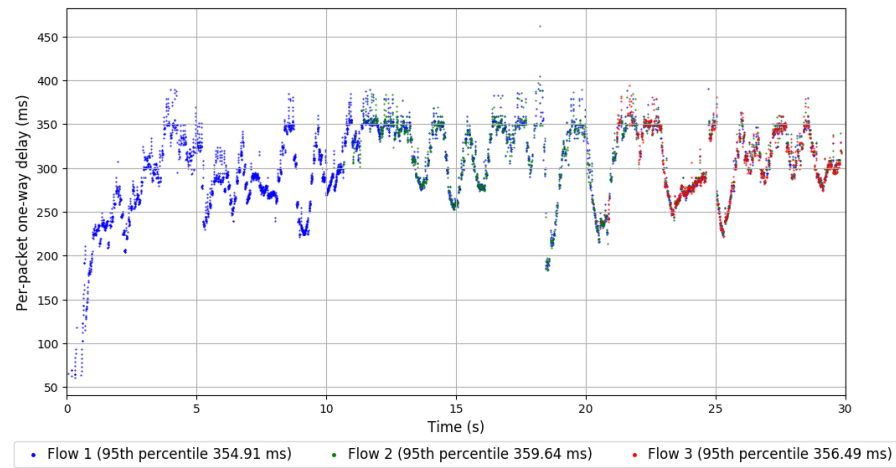
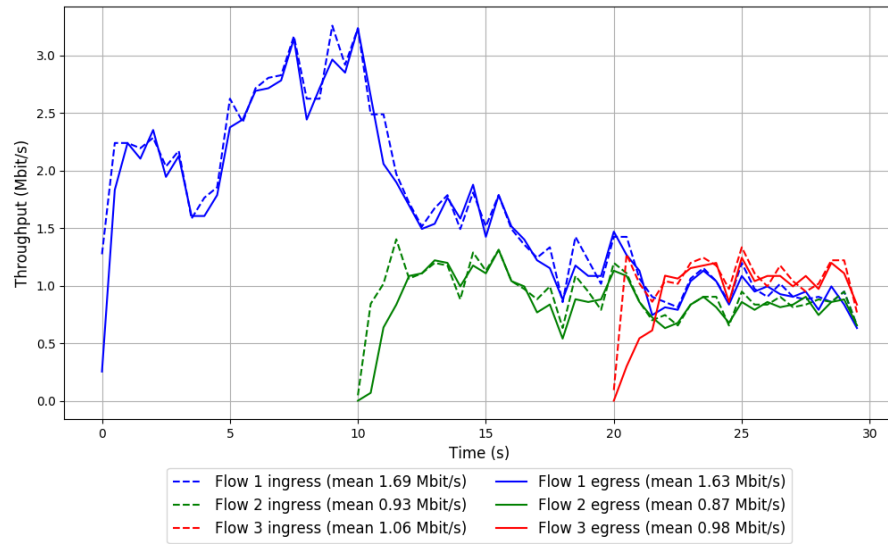


Run 3: Statistics of QUIC Cubic

Start at: 2018-04-16 23:49:23  
End at: 2018-04-16 23:49:53  
Local clock offset: -14.263 ms  
Remote clock offset: -14.935 ms

# Below is generated by plot.py at 2018-04-17 00:56:39  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.51 Mbit/s  
95th percentile per-packet one-way delay: 357.111 ms  
Loss rate: 5.65%  
-- Flow 1:  
Average throughput: 1.63 Mbit/s  
95th percentile per-packet one-way delay: 354.908 ms  
Loss rate: 4.04%  
-- Flow 2:  
Average throughput: 0.87 Mbit/s  
95th percentile per-packet one-way delay: 359.636 ms  
Loss rate: 7.60%  
-- Flow 3:  
Average throughput: 0.98 Mbit/s  
95th percentile per-packet one-way delay: 356.491 ms  
Loss rate: 10.04%

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

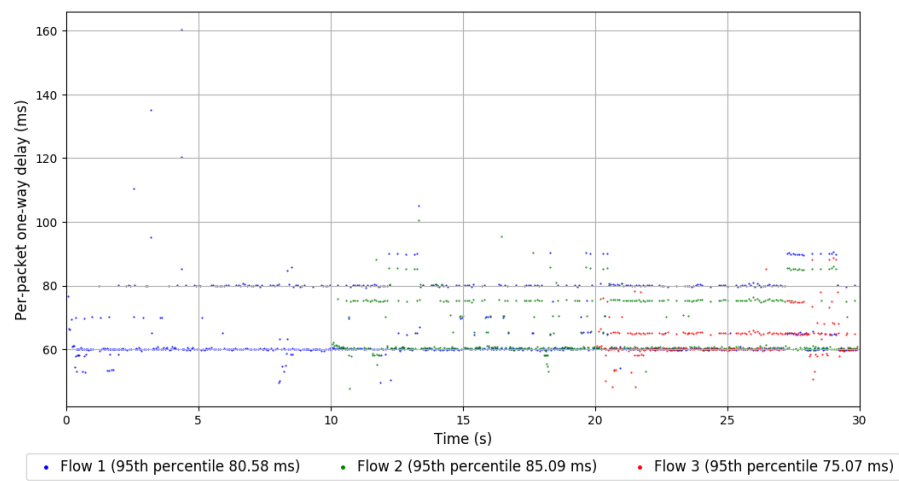
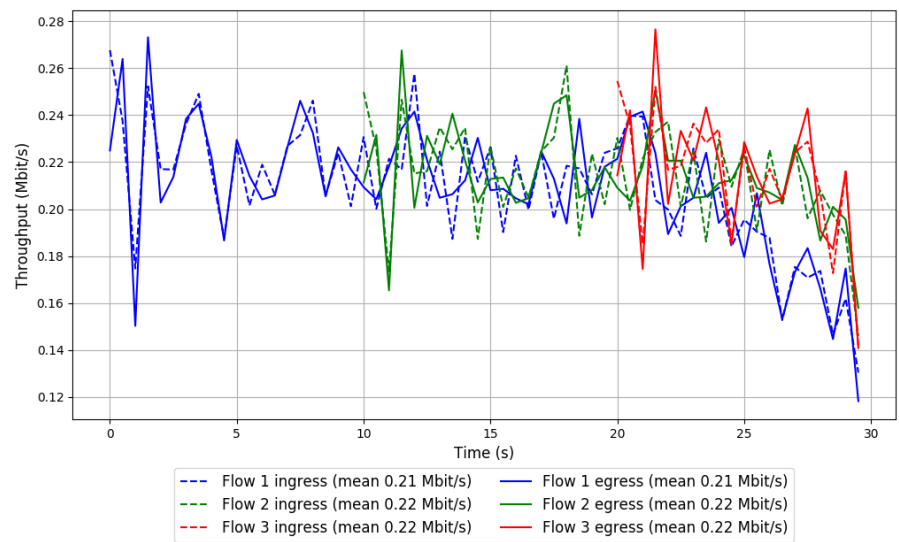


```
Run 1: Statistics of SReAM

Start at: 2018-04-16 23:15:13
End at: 2018-04-16 23:15:43
Local clock offset: -5.277 ms
Remote clock offset: -6.133 ms

# Below is generated by plot.py at 2018-04-17 00:56:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 80.559 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 80.578 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.086 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 75.072 ms
Loss rate: 0.63%
```

Run 1: Report of SReAM — Data Link

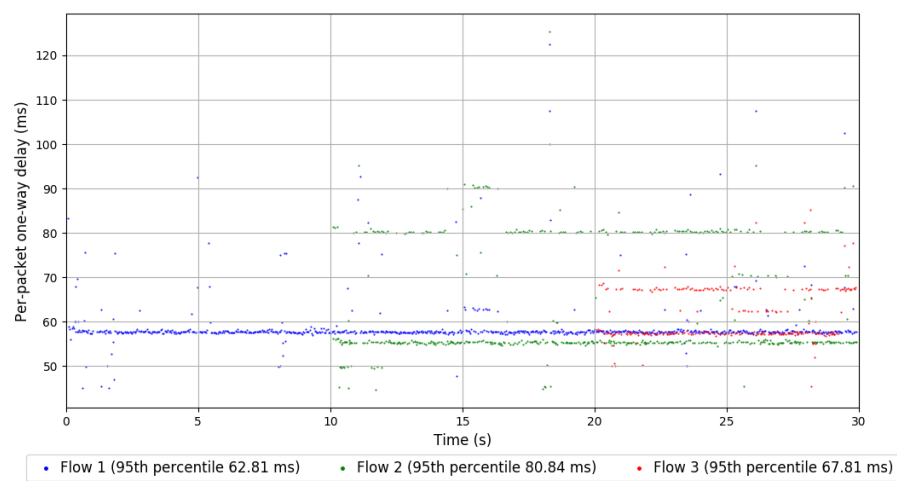
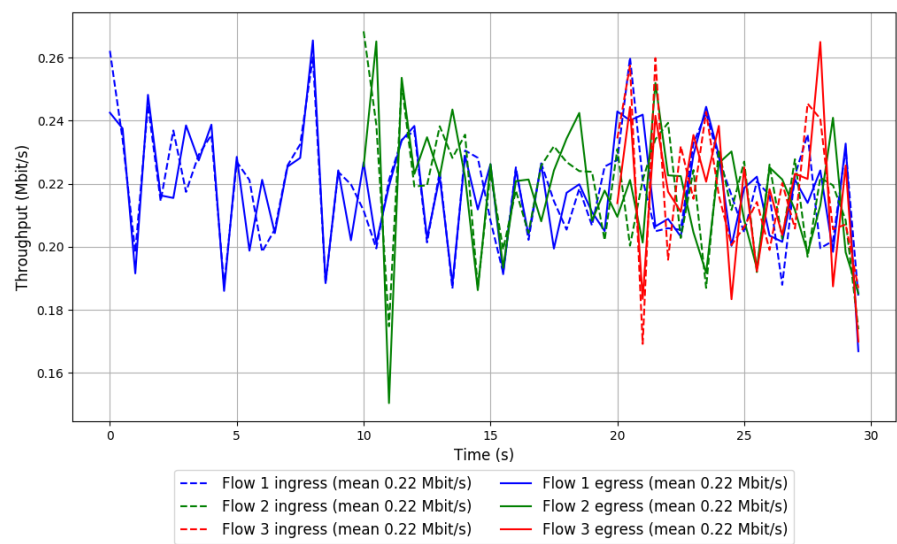


Run 2: Statistics of SReAM

Start at: 2018-04-16 23:33:57  
End at: 2018-04-16 23:34:27  
Local clock offset: -10.112 ms  
Remote clock offset: -5.813 ms

# Below is generated by plot.py at 2018-04-17 00:56:39  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 80.288 ms  
Loss rate: 0.32%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 62.815 ms  
Loss rate: 0.26%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 80.837 ms  
Loss rate: 0.20%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 67.813 ms  
Loss rate: 0.75%

Run 2: Report of SReAM — Data Link

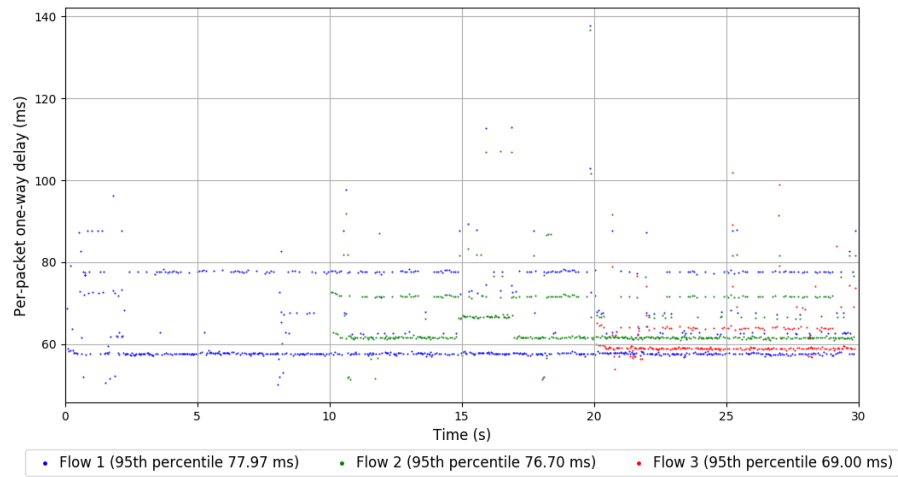
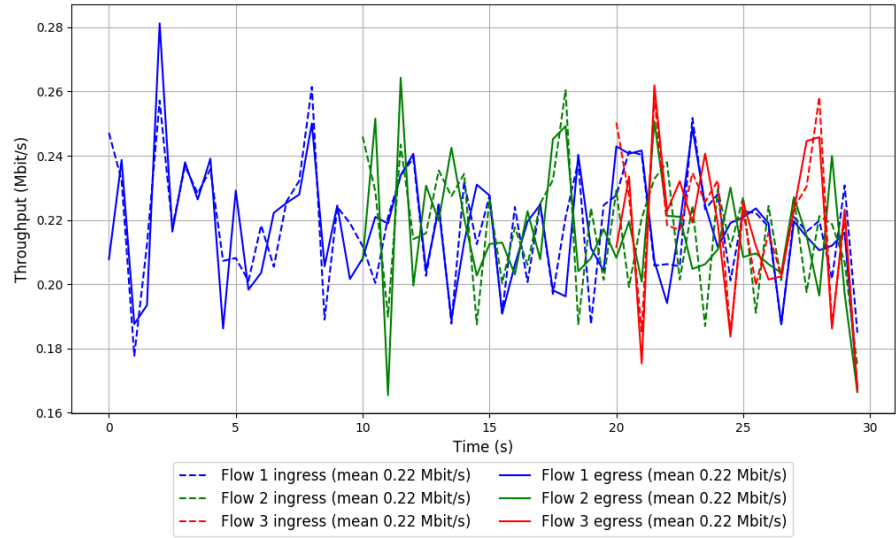


Run 3: Statistics of SReAM

Start at: 2018-04-16 23:52:41  
End at: 2018-04-16 23:53:11  
Local clock offset: -8.867 ms  
Remote clock offset: -7.966 ms

# Below is generated by plot.py at 2018-04-17 00:56:39  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 77.857 ms  
Loss rate: 0.46%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 77.968 ms  
Loss rate: 0.38%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 76.701 ms  
Loss rate: 0.43%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 69.004 ms  
Loss rate: 0.74%

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



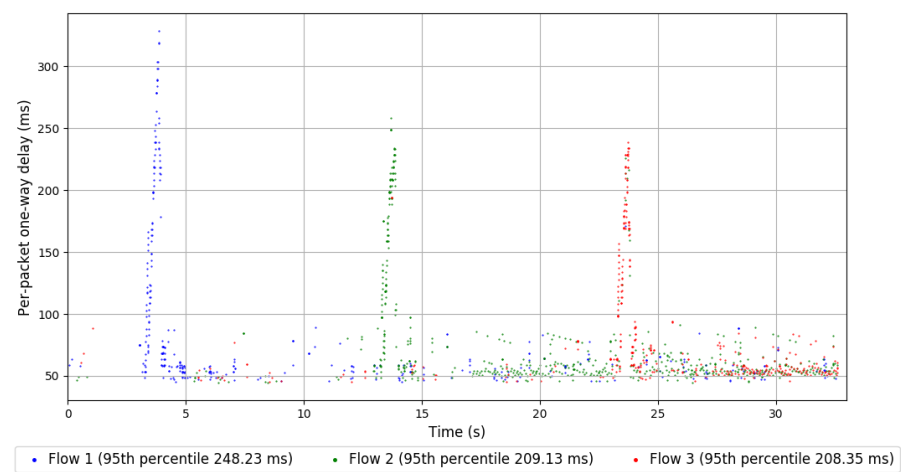
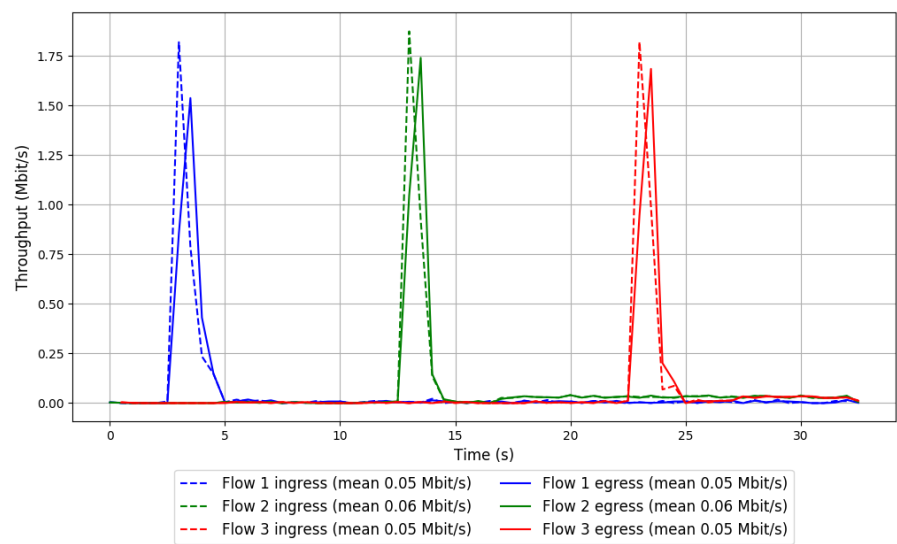


Run 1: Statistics of WebRTC media

Start at: 2018-04-16 23:08:34  
End at: 2018-04-16 23:09:04  
Local clock offset: -2.32 ms  
Remote clock offset: -5.403 ms

# Below is generated by plot.py at 2018-04-17 00:56:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.16 Mbit/s  
95th percentile per-packet one-way delay: 218.354 ms  
Loss rate: 0.53%  
-- Flow 1:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 248.233 ms  
Loss rate: 0.72%  
-- Flow 2:  
Average throughput: 0.06 Mbit/s  
95th percentile per-packet one-way delay: 209.134 ms  
Loss rate: 0.13%  
-- Flow 3:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 208.347 ms  
Loss rate: 0.82%

Run 1: Report of WebRTC media — Data Link

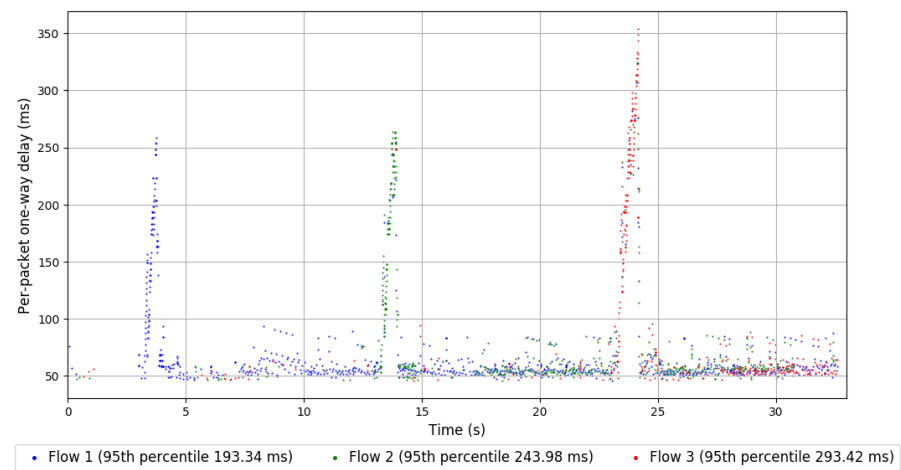
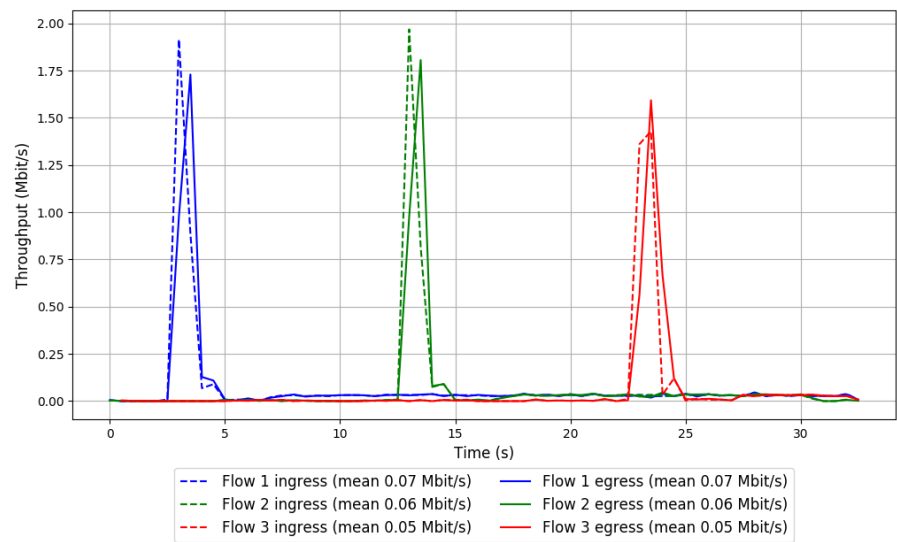


Run 2: Statistics of WebRTC media

Start at: 2018-04-16 23:27:21  
End at: 2018-04-16 23:27:51  
Local clock offset: -8.355 ms  
Remote clock offset: -4.976 ms

# Below is generated by plot.py at 2018-04-17 00:56:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.18 Mbit/s  
95th percentile per-packet one-way delay: 248.460 ms  
Loss rate: 0.26%  
-- Flow 1:  
Average throughput: 0.07 Mbit/s  
95th percentile per-packet one-way delay: 193.338 ms  
Loss rate: 0.58%  
-- Flow 2:  
Average throughput: 0.06 Mbit/s  
95th percentile per-packet one-way delay: 243.976 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 293.420 ms  
Loss rate: 0.12%

Run 2: Report of WebRTC media — Data Link

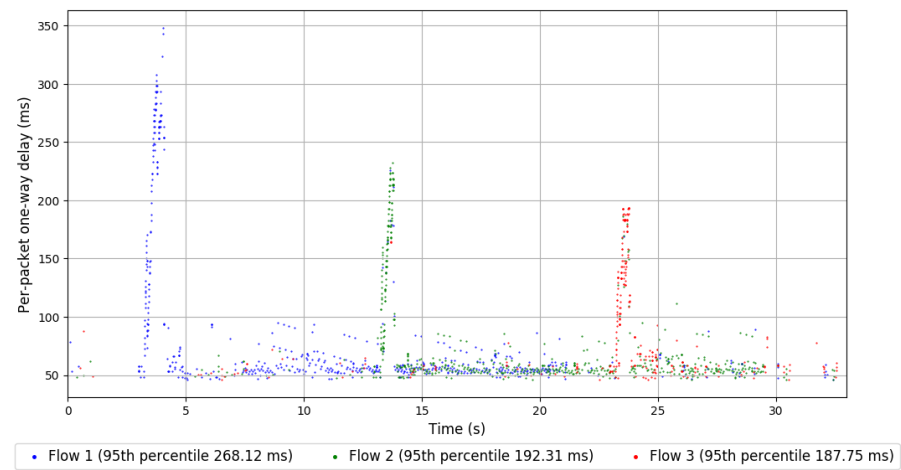
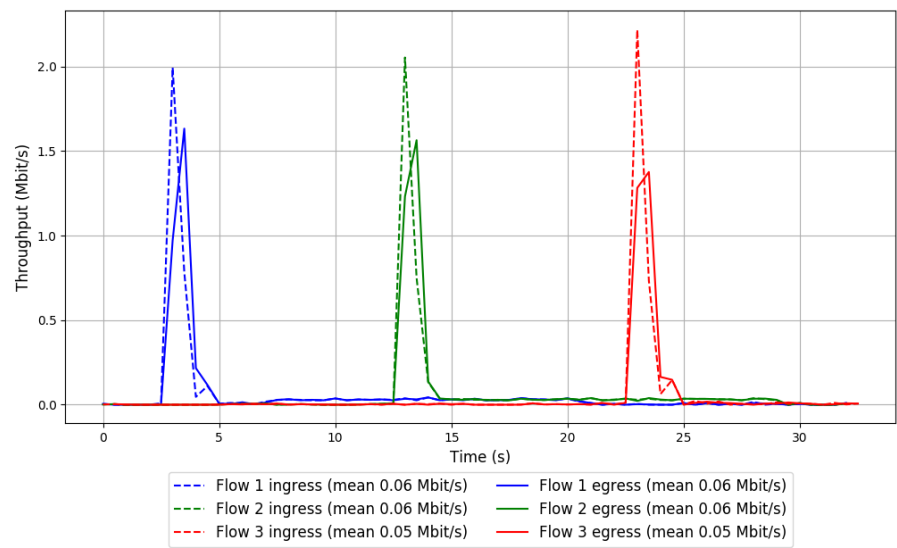


Run 3: Statistics of WebRTC media

Start at: 2018-04-16 23:46:04  
End at: 2018-04-16 23:46:34  
Local clock offset: -9.481 ms  
Remote clock offset: -7.415 ms

# Below is generated by plot.py at 2018-04-17 00:56:42  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.17 Mbit/s  
95th percentile per-packet one-way delay: 223.235 ms  
Loss rate: 1.73%  
-- Flow 1:  
Average throughput: 0.06 Mbit/s  
95th percentile per-packet one-way delay: 268.122 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.06 Mbit/s  
95th percentile per-packet one-way delay: 192.306 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 187.749 ms  
Loss rate: 5.73%

Run 3: Report of WebRTC media — Data Link

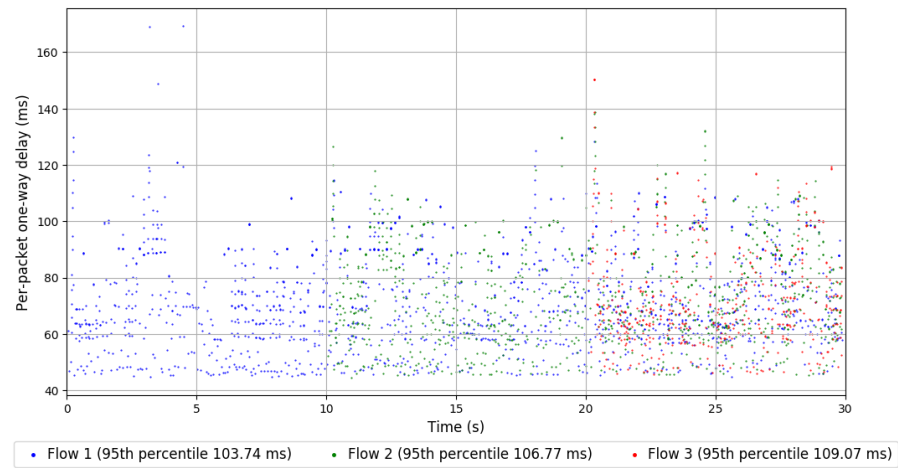
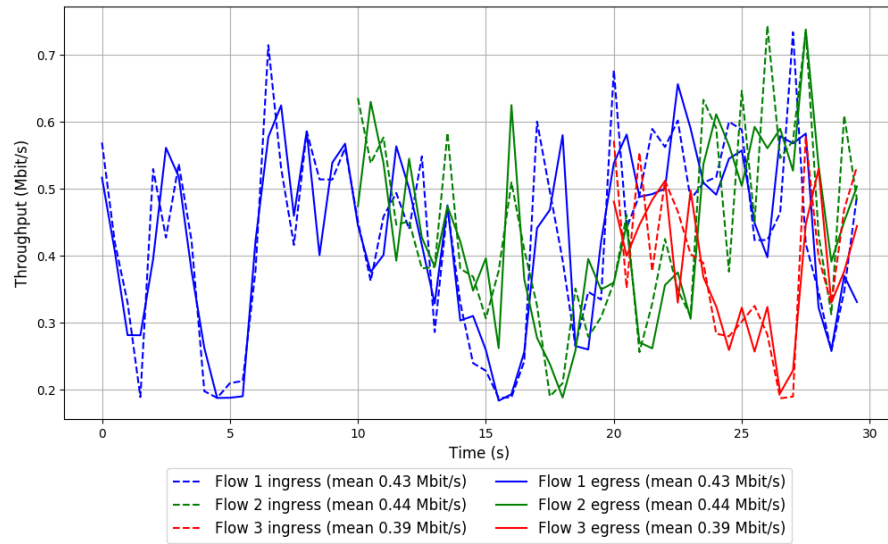


Run 1: Statistics of Sprout

Start at: 2018-04-16 23:19:38  
End at: 2018-04-16 23:20:08  
Local clock offset: -7.354 ms  
Remote clock offset: -4.793 ms

# Below is generated by plot.py at 2018-04-17 00:56:42  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.85 Mbit/s  
95th percentile per-packet one-way delay: 105.336 ms  
Loss rate: 1.11%  
-- Flow 1:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 103.743 ms  
Loss rate: 0.70%  
-- Flow 2:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 106.765 ms  
Loss rate: 0.91%  
-- Flow 3:  
Average throughput: 0.39 Mbit/s  
95th percentile per-packet one-way delay: 109.071 ms  
Loss rate: 2.88%

## Run 1: Report of Sprout — Data Link



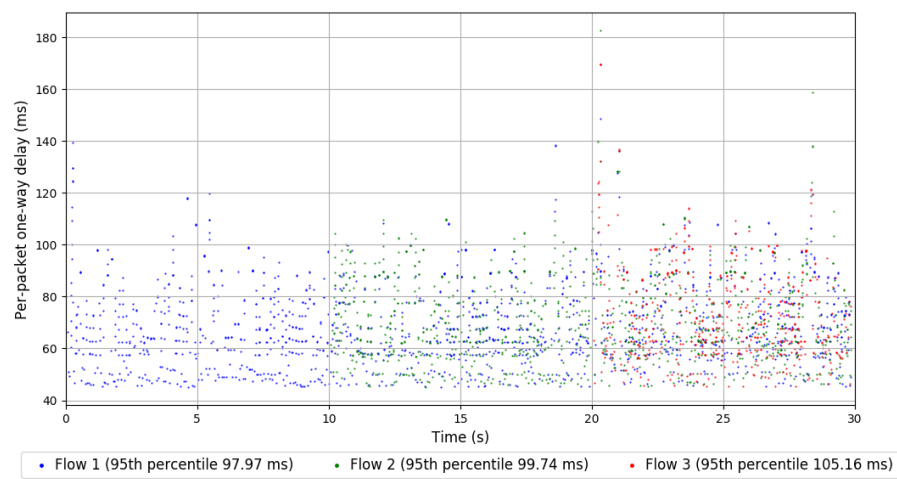
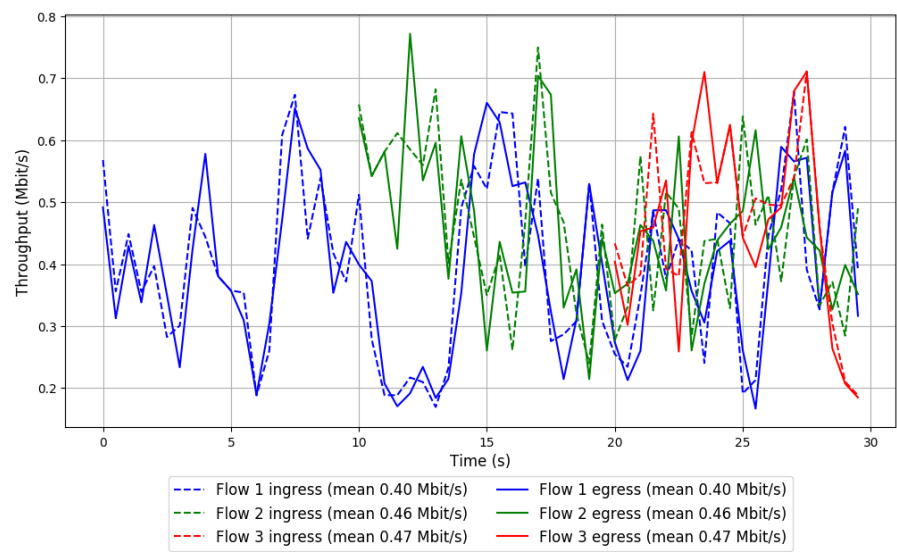


Run 2: Statistics of Sprout

Start at: 2018-04-16 23:38:21  
End at: 2018-04-16 23:38:51  
Local clock offset: -9.968 ms  
Remote clock offset: -6.739 ms

# Below is generated by plot.py at 2018-04-17 00:56:42  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.86 Mbit/s  
95th percentile per-packet one-way delay: 99.494 ms  
Loss rate: 0.71%  
-- Flow 1:  
Average throughput: 0.40 Mbit/s  
95th percentile per-packet one-way delay: 97.970 ms  
Loss rate: 0.57%  
-- Flow 2:  
Average throughput: 0.46 Mbit/s  
95th percentile per-packet one-way delay: 99.736 ms  
Loss rate: 0.87%  
-- Flow 3:  
Average throughput: 0.47 Mbit/s  
95th percentile per-packet one-way delay: 105.157 ms  
Loss rate: 0.75%

Run 2: Report of Sprout — Data Link

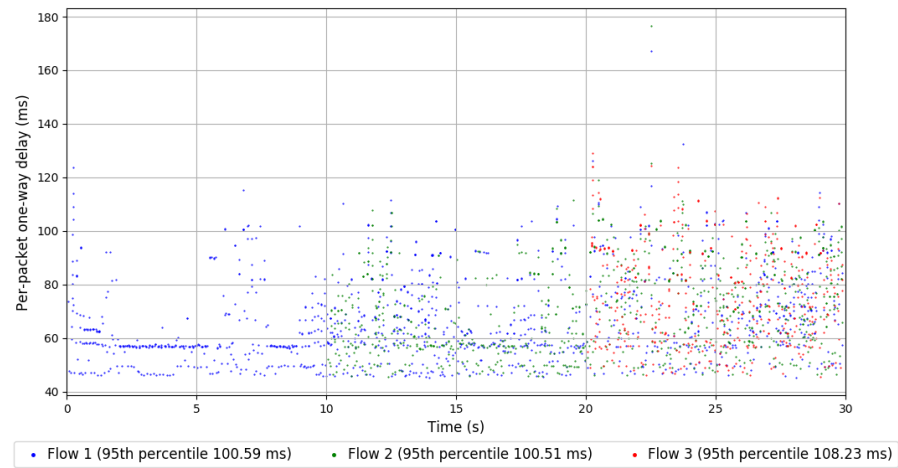
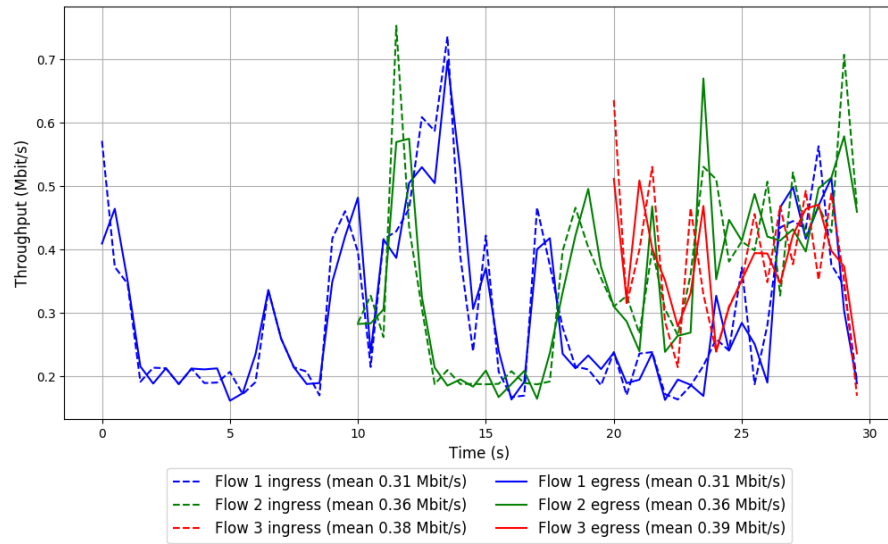


### Run 3: Statistics of Sprout

Start at: 2018-04-16 23:57:05  
End at: 2018-04-16 23:57:35  
Local clock offset: -10.6 ms  
Remote clock offset: -8.144 ms

```
# Below is generated by plot.py at 2018-04-17 00:56:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 102.046 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 100.587 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 100.513 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 108.229 ms
Loss rate: 0.04%
```

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

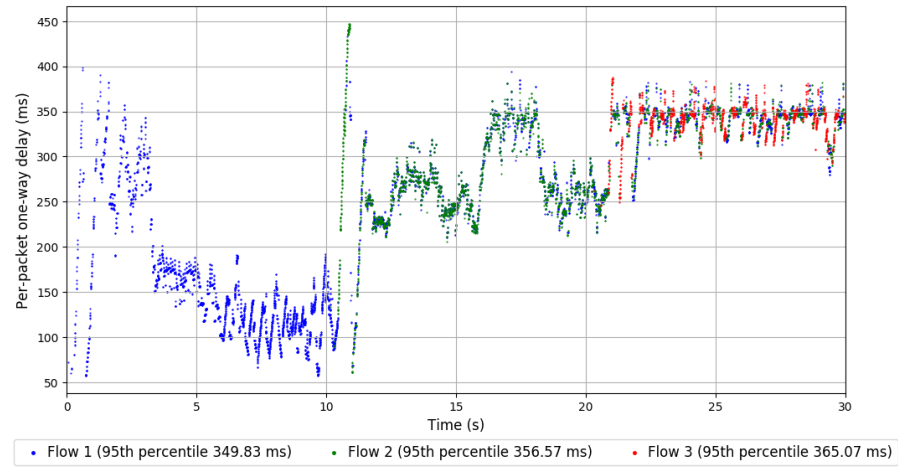
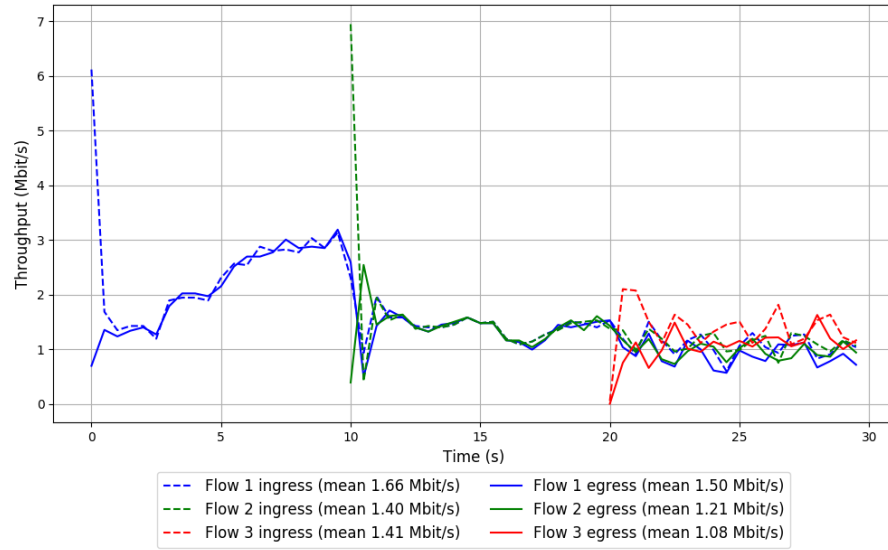


Run 1: Statistics of TaoVA-100x

Start at: 2018-04-16 23:09:40  
End at: 2018-04-16 23:10:10  
Local clock offset: -2.99 ms  
Remote clock offset: -6.551 ms

# Below is generated by plot.py at 2018-04-17 00:56:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.65 Mbit/s  
95th percentile per-packet one-way delay: 353.989 ms  
Loss rate: 13.38%  
-- Flow 1:  
Average throughput: 1.50 Mbit/s  
95th percentile per-packet one-way delay: 349.828 ms  
Loss rate: 10.20%  
-- Flow 2:  
Average throughput: 1.21 Mbit/s  
95th percentile per-packet one-way delay: 356.566 ms  
Loss rate: 14.05%  
-- Flow 3:  
Average throughput: 1.08 Mbit/s  
95th percentile per-packet one-way delay: 365.075 ms  
Loss rate: 23.56%

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-04-16 23:28:27

End at: 2018-04-16 23:28:57

Local clock offset: -7.865 ms

Remote clock offset: -5.51 ms

# Below is generated by plot.py at 2018-04-17 00:56:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 2.48 Mbit/s

95th percentile per-packet one-way delay: 353.928 ms

Loss rate: 16.36%

-- Flow 1:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 349.931 ms

Loss rate: 11.30%

-- Flow 2:

Average throughput: 1.22 Mbit/s

95th percentile per-packet one-way delay: 356.911 ms

Loss rate: 14.73%

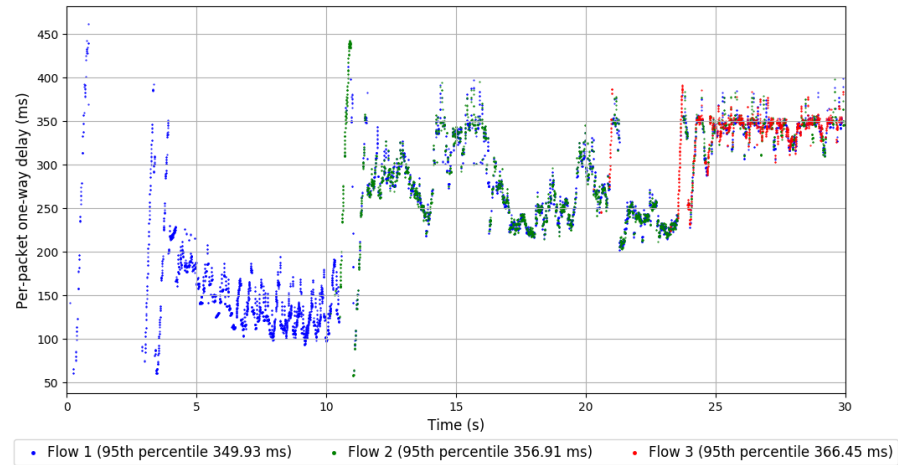
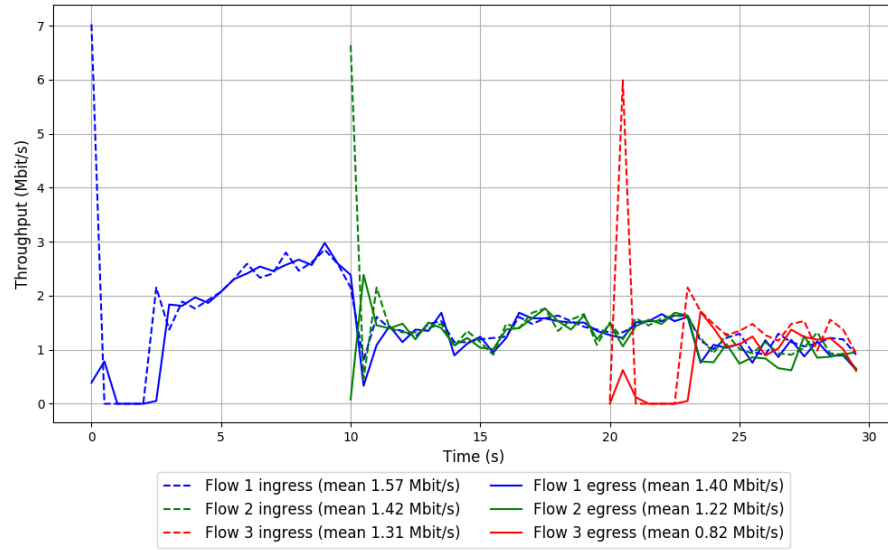
-- Flow 3:

Average throughput: 0.82 Mbit/s

95th percentile per-packet one-way delay: 366.450 ms

Loss rate: 38.48%

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



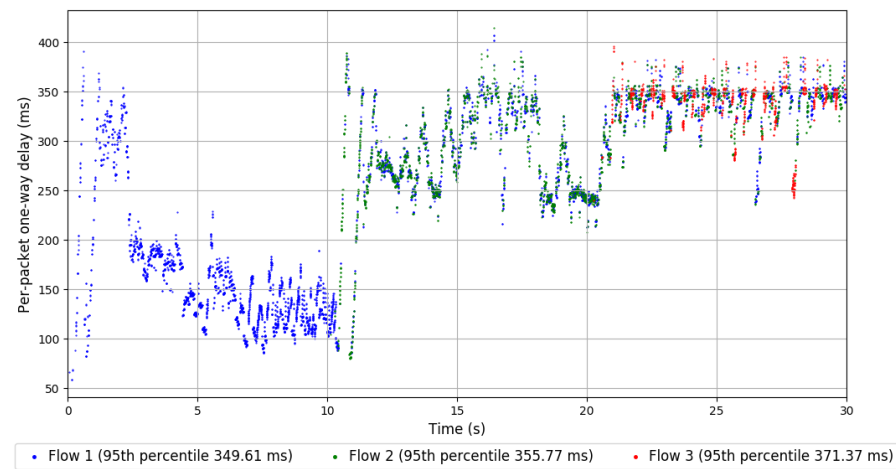
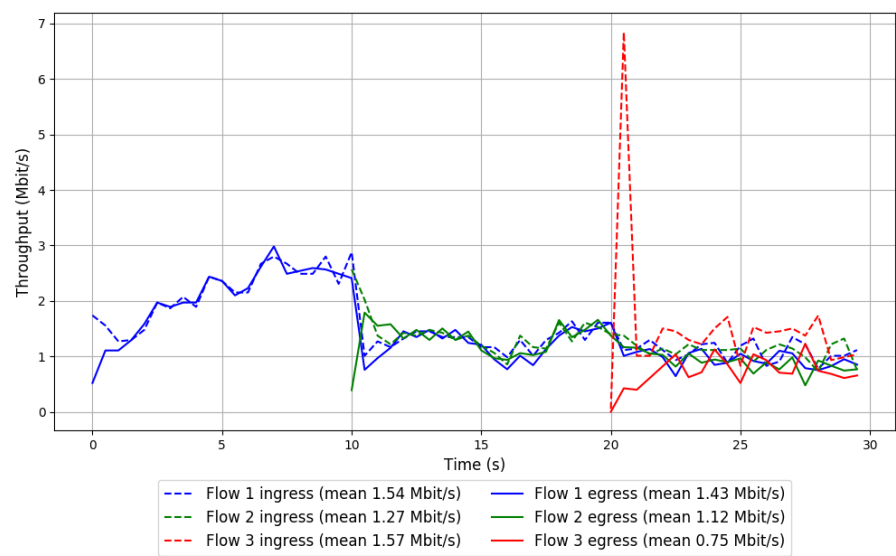


Run 3: Statistics of TaoVA-100x

Start at: 2018-04-16 23:47:10  
End at: 2018-04-16 23:47:40  
Local clock offset: -9.742 ms  
Remote clock offset: -7.422 ms

# Below is generated by plot.py at 2018-04-17 00:56:51  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.42 Mbit/s  
95th percentile per-packet one-way delay: 353.419 ms  
Loss rate: 16.60%  
-- Flow 1:  
Average throughput: 1.43 Mbit/s  
95th percentile per-packet one-way delay: 349.606 ms  
Loss rate: 7.07%  
-- Flow 2:  
Average throughput: 1.12 Mbit/s  
95th percentile per-packet one-way delay: 355.774 ms  
Loss rate: 12.34%  
-- Flow 3:  
Average throughput: 0.75 Mbit/s  
95th percentile per-packet one-way delay: 371.370 ms  
Loss rate: 52.60%

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

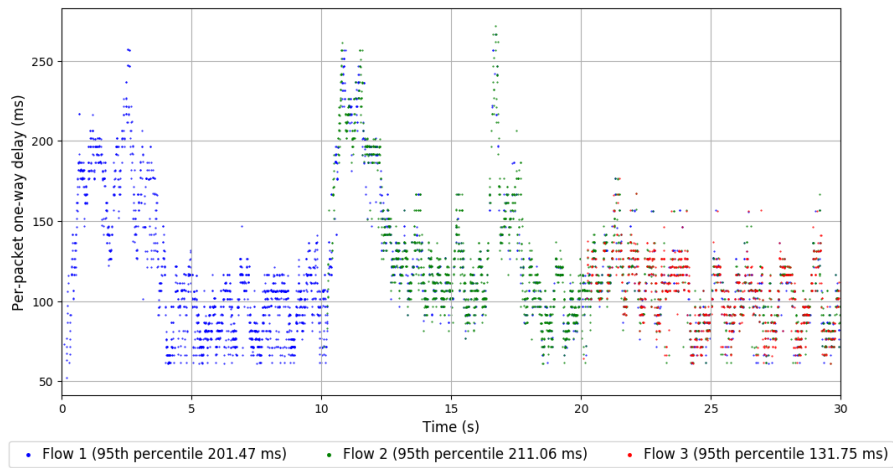
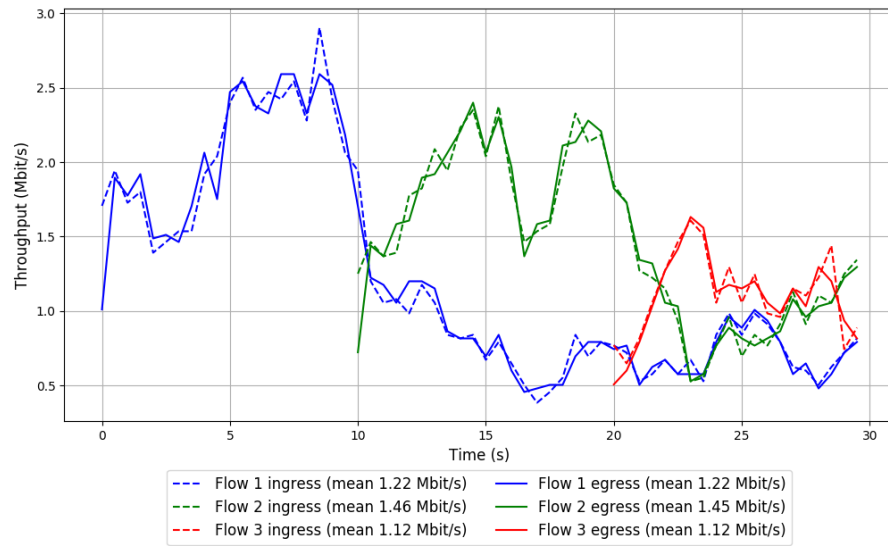


Run 1: Statistics of TCP Vegas

Start at: 2018-04-16 23:04:09  
End at: 2018-04-16 23:04:39  
Local clock offset: -0.667 ms  
Remote clock offset: -6.683 ms

# Below is generated by plot.py at 2018-04-17 00:56:51  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.55 Mbit/s  
95th percentile per-packet one-way delay: 201.112 ms  
Loss rate: 0.59%  
-- Flow 1:  
Average throughput: 1.22 Mbit/s  
95th percentile per-packet one-way delay: 201.474 ms  
Loss rate: 0.30%  
-- Flow 2:  
Average throughput: 1.45 Mbit/s  
95th percentile per-packet one-way delay: 211.064 ms  
Loss rate: 0.58%  
-- Flow 3:  
Average throughput: 1.12 Mbit/s  
95th percentile per-packet one-way delay: 131.755 ms  
Loss rate: 1.61%

# Run 1: Report of TCP Vegas — Data Link

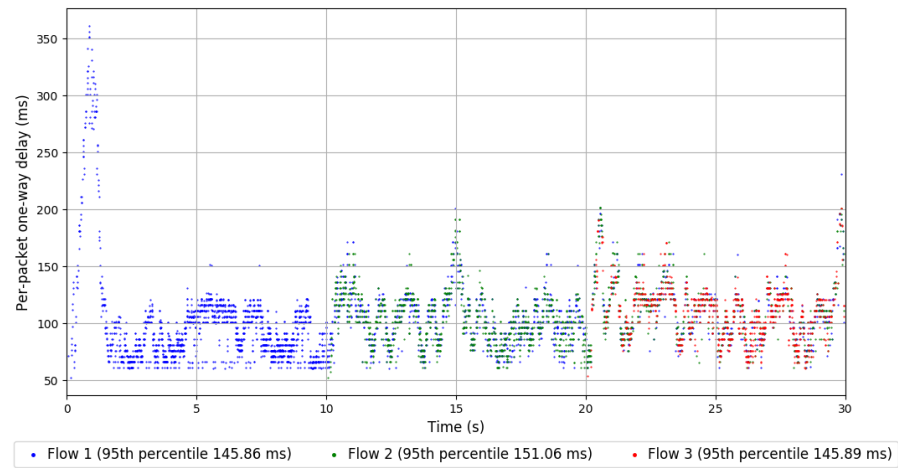
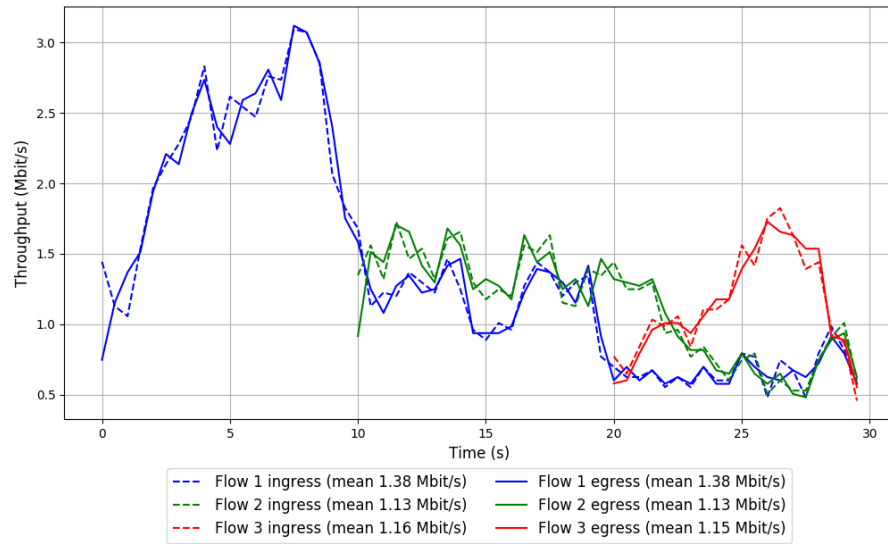


Run 2: Statistics of TCP Vegas

Start at: 2018-04-16 23:22:56  
End at: 2018-04-16 23:23:26  
Local clock offset: -6.803 ms  
Remote clock offset: -5.054 ms

# Below is generated by plot.py at 2018-04-17 00:56:51  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.51 Mbit/s  
95th percentile per-packet one-way delay: 150.284 ms  
Loss rate: 0.54%  
-- Flow 1:  
Average throughput: 1.38 Mbit/s  
95th percentile per-packet one-way delay: 145.863 ms  
Loss rate: 0.43%  
-- Flow 2:  
Average throughput: 1.13 Mbit/s  
95th percentile per-packet one-way delay: 151.063 ms  
Loss rate: 0.58%  
-- Flow 3:  
Average throughput: 1.15 Mbit/s  
95th percentile per-packet one-way delay: 145.891 ms  
Loss rate: 0.84%

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

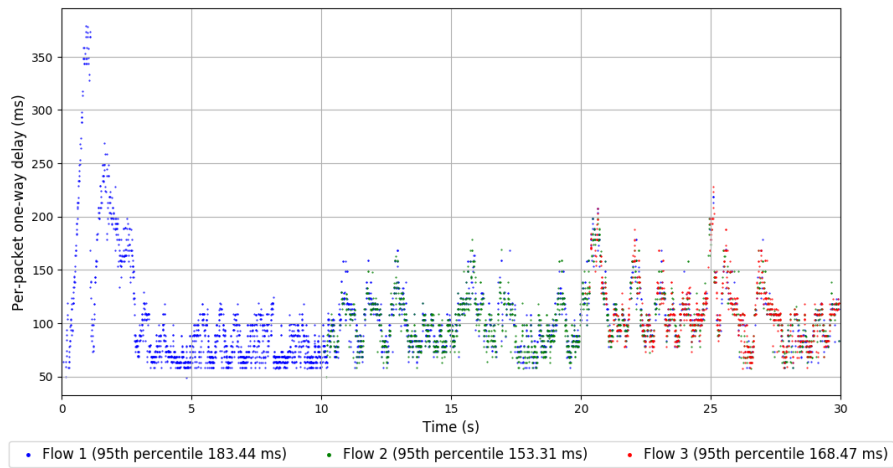
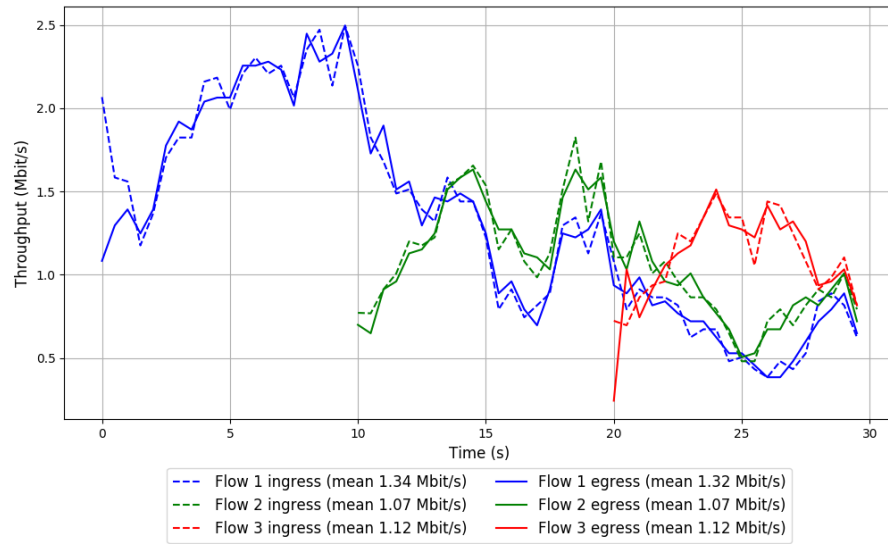


Run 3: Statistics of TCP Vegas

Start at: 2018-04-16 23:41:40  
End at: 2018-04-16 23:42:10  
Local clock offset: -10.866 ms  
Remote clock offset: -7.217 ms

# Below is generated by plot.py at 2018-04-17 00:56:51  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.40 Mbit/s  
95th percentile per-packet one-way delay: 168.440 ms  
Loss rate: 1.16%  
-- Flow 1:  
Average throughput: 1.32 Mbit/s  
95th percentile per-packet one-way delay: 183.438 ms  
Loss rate: 1.35%  
-- Flow 2:  
Average throughput: 1.07 Mbit/s  
95th percentile per-packet one-way delay: 153.311 ms  
Loss rate: 0.68%  
-- Flow 3:  
Average throughput: 1.12 Mbit/s  
95th percentile per-packet one-way delay: 168.467 ms  
Loss rate: 1.41%

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



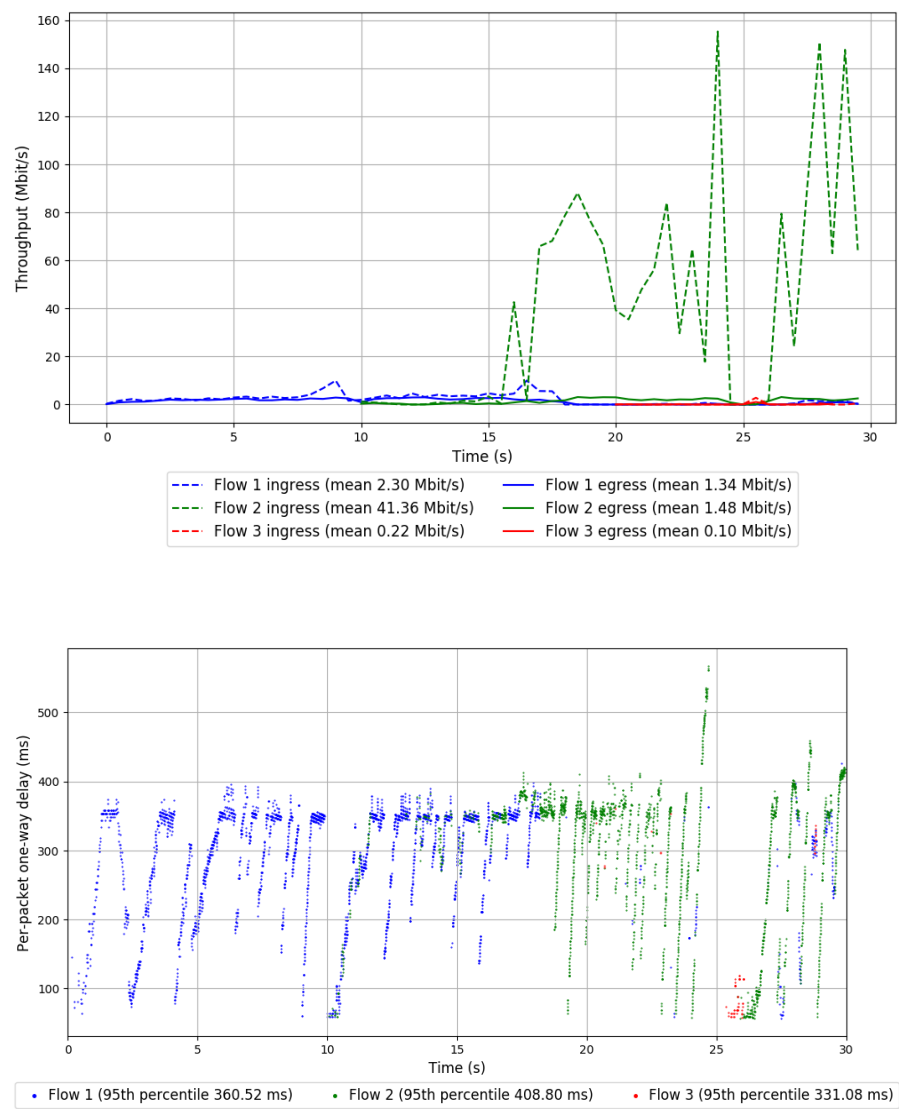


Run 1: Statistics of Verus

Start at: 2018-04-16 23:14:05  
End at: 2018-04-16 23:14:35  
Local clock offset: -5.351 ms  
Remote clock offset: -5.958 ms

# Below is generated by plot.py at 2018-04-17 00:57:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.35 Mbit/s  
95th percentile per-packet one-way delay: 384.050 ms  
Loss rate: 92.17%  
-- Flow 1:  
Average throughput: 1.34 Mbit/s  
95th percentile per-packet one-way delay: 360.519 ms  
Loss rate: 41.27%  
-- Flow 2:  
Average throughput: 1.48 Mbit/s  
95th percentile per-packet one-way delay: 408.799 ms  
Loss rate: 96.44%  
-- Flow 3:  
Average throughput: 0.10 Mbit/s  
95th percentile per-packet one-way delay: 331.079 ms  
Loss rate: 60.96%

Run 1: Report of Verus — Data Link

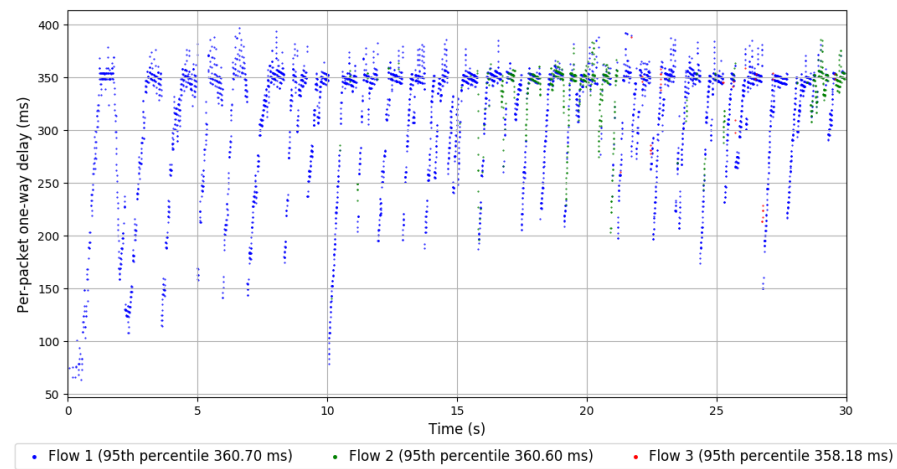
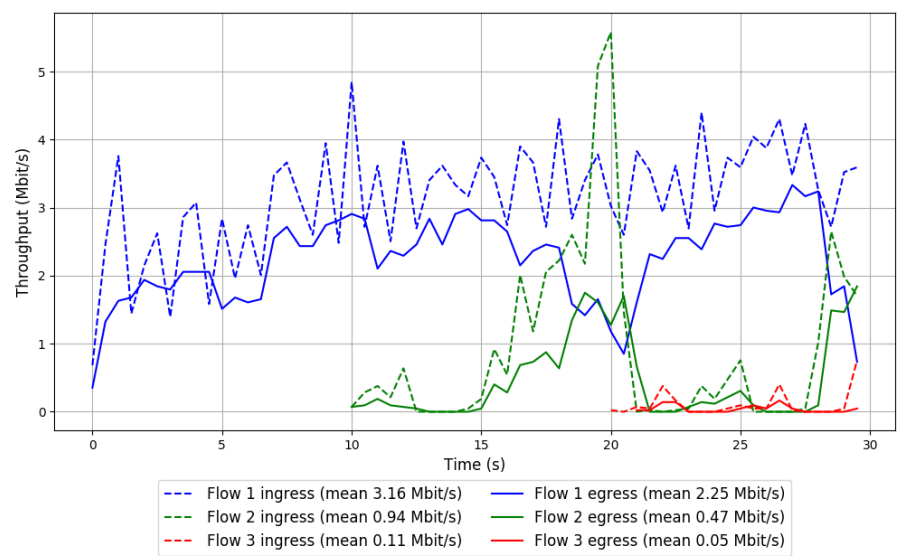


Run 2: Statistics of Verus

Start at: 2018-04-16 23:32:51  
End at: 2018-04-16 23:33:21  
Local clock offset: -8.379 ms  
Remote clock offset: -6.833 ms

# Below is generated by plot.py at 2018-04-17 00:57:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.57 Mbit/s  
95th percentile per-packet one-way delay: 360.695 ms  
Loss rate: 32.82%  
-- Flow 1:  
Average throughput: 2.25 Mbit/s  
95th percentile per-packet one-way delay: 360.704 ms  
Loss rate: 29.08%  
-- Flow 2:  
Average throughput: 0.47 Mbit/s  
95th percentile per-packet one-way delay: 360.603 ms  
Loss rate: 50.16%  
-- Flow 3:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 358.183 ms  
Loss rate: 63.74%

Run 2: Report of Verus — Data Link

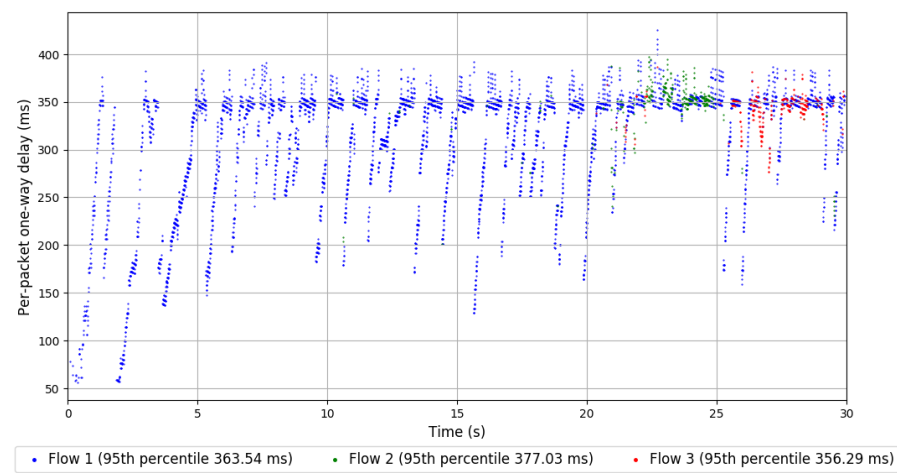
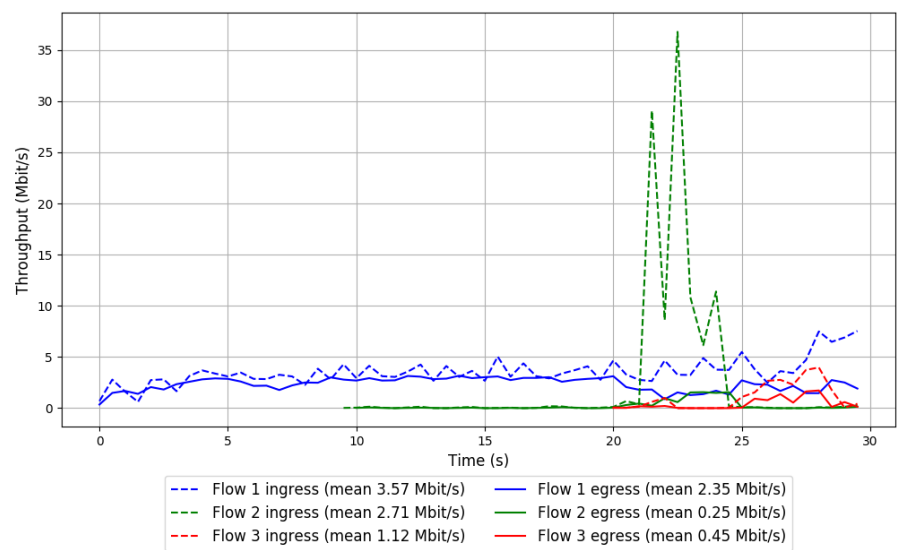


Run 3: Statistics of Verus

Start at: 2018-04-16 23:51:35  
End at: 2018-04-16 23:52:05  
Local clock offset: -10.268 ms  
Remote clock offset: -7.999 ms

# Below is generated by plot.py at 2018-04-17 00:57:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.65 Mbit/s  
95th percentile per-packet one-way delay: 364.850 ms  
Loss rate: 53.68%  
-- Flow 1:  
Average throughput: 2.35 Mbit/s  
95th percentile per-packet one-way delay: 363.537 ms  
Loss rate: 34.31%  
-- Flow 2:  
Average throughput: 0.25 Mbit/s  
95th percentile per-packet one-way delay: 377.030 ms  
Loss rate: 90.92%  
-- Flow 3:  
Average throughput: 0.45 Mbit/s  
95th percentile per-packet one-way delay: 356.286 ms  
Loss rate: 61.81%

Run 3: Report of Verus — Data Link

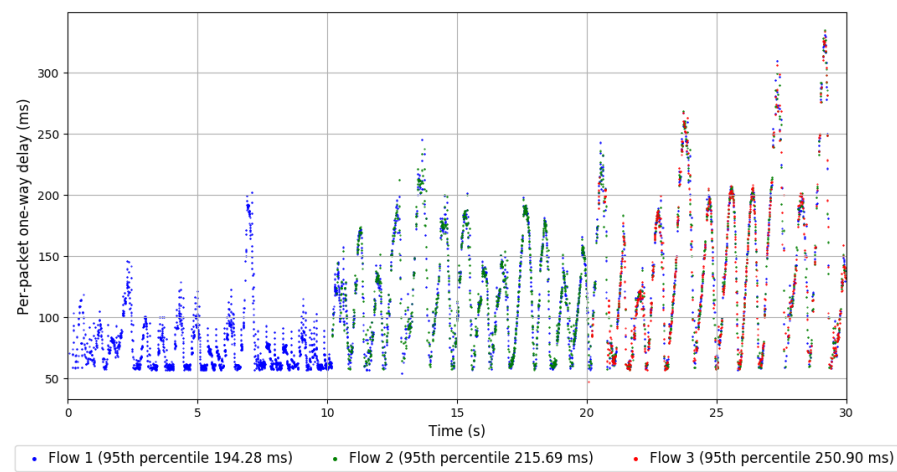
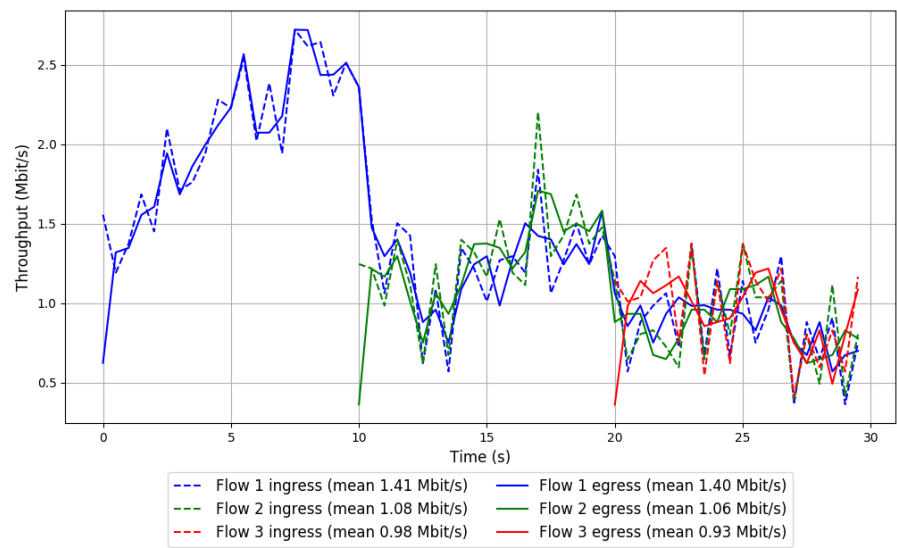


Run 1: Statistics of Copa

Start at: 2018-04-16 23:12:58  
End at: 2018-04-16 23:13:28  
Local clock offset: -4.973 ms  
Remote clock offset: -6.453 ms

# Below is generated by plot.py at 2018-04-17 00:57:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.41 Mbit/s  
95th percentile per-packet one-way delay: 207.756 ms  
Loss rate: 1.65%  
-- Flow 1:  
Average throughput: 1.40 Mbit/s  
95th percentile per-packet one-way delay: 194.278 ms  
Loss rate: 0.96%  
-- Flow 2:  
Average throughput: 1.06 Mbit/s  
95th percentile per-packet one-way delay: 215.693 ms  
Loss rate: 1.70%  
-- Flow 3:  
Average throughput: 0.93 Mbit/s  
95th percentile per-packet one-way delay: 250.898 ms  
Loss rate: 4.60%

Run 1: Report of Copa — Data Link



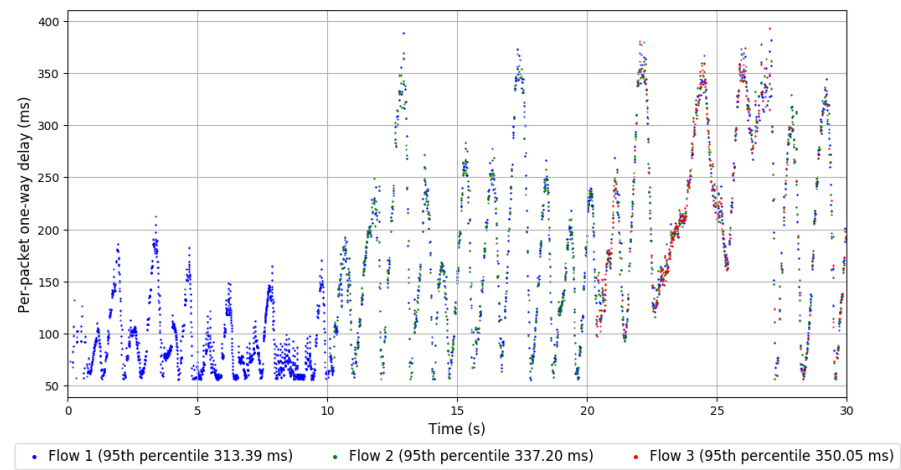
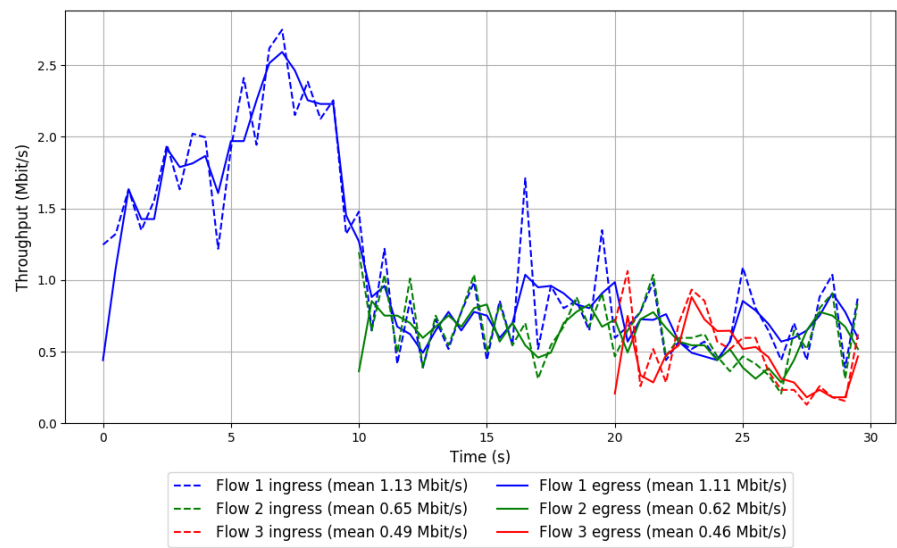


Run 2: Statistics of Copa

Start at: 2018-04-16 23:31:45  
End at: 2018-04-16 23:32:15  
Local clock offset: -9.207 ms  
Remote clock offset: -5.966 ms

# Below is generated by plot.py at 2018-04-17 00:57:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1.68 Mbit/s  
95th percentile per-packet one-way delay: 329.696 ms  
Loss rate: 3.40%  
-- Flow 1:  
Average throughput: 1.11 Mbit/s  
95th percentile per-packet one-way delay: 313.395 ms  
Loss rate: 1.96%  
-- Flow 2:  
Average throughput: 0.62 Mbit/s  
95th percentile per-packet one-way delay: 337.204 ms  
Loss rate: 4.90%  
-- Flow 3:  
Average throughput: 0.46 Mbit/s  
95th percentile per-packet one-way delay: 350.054 ms  
Loss rate: 9.46%

Run 2: Report of Copa — Data Link

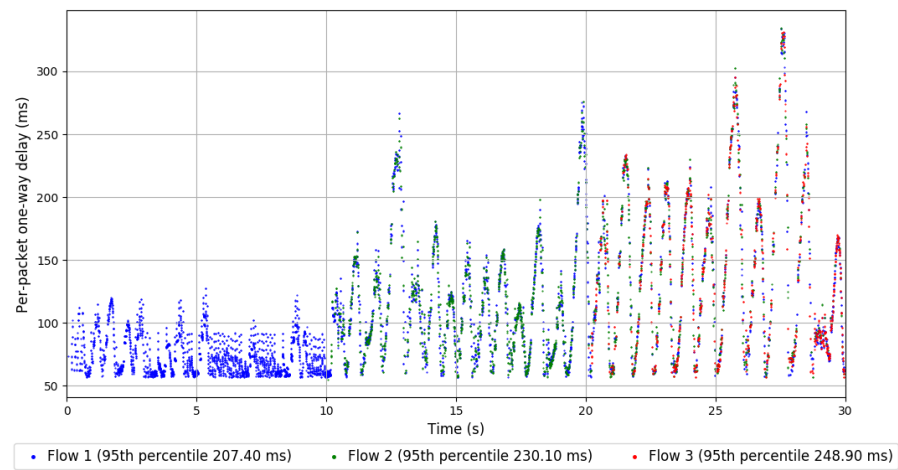
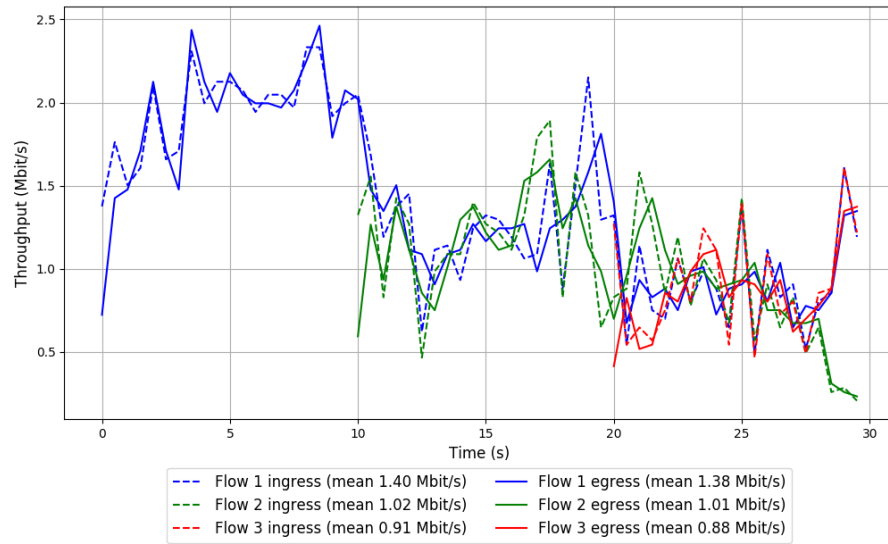


Run 3: Statistics of Copa

Start at: 2018-04-16 23:50:29  
End at: 2018-04-16 23:50:59  
Local clock offset: -9.608 ms  
Remote clock offset: -7.962 ms

# Below is generated by plot.py at 2018-04-17 00:57:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.34 Mbit/s  
95th percentile per-packet one-way delay: 225.701 ms  
Loss rate: 1.83%  
-- Flow 1:  
Average throughput: 1.38 Mbit/s  
95th percentile per-packet one-way delay: 207.402 ms  
Loss rate: 1.24%  
-- Flow 2:  
Average throughput: 1.01 Mbit/s  
95th percentile per-packet one-way delay: 230.103 ms  
Loss rate: 1.80%  
-- Flow 3:  
Average throughput: 0.88 Mbit/s  
95th percentile per-packet one-way delay: 248.900 ms  
Loss rate: 4.62%

### Run 3: Report of Copa — Data Link

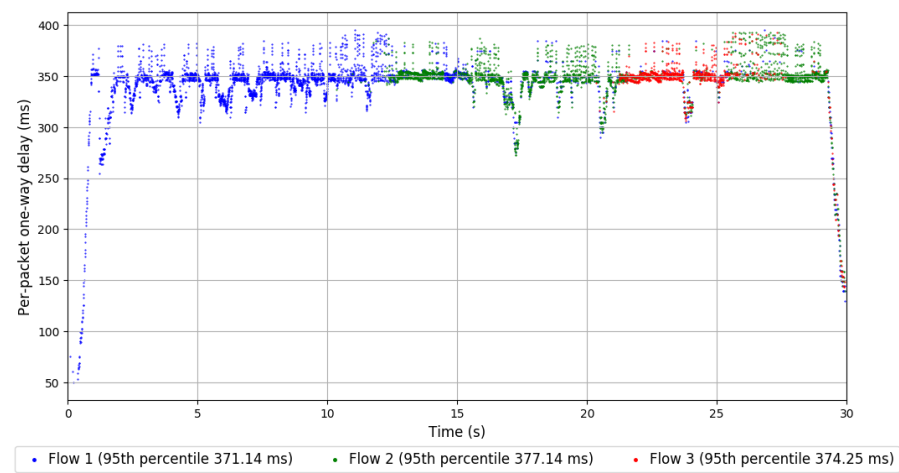
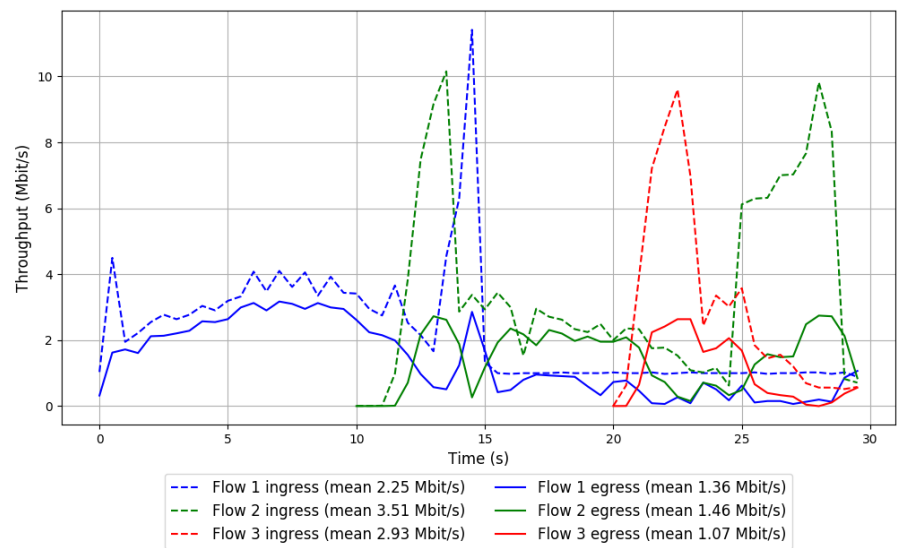


Run 1: Statistics of FillP

Start at: 2018-04-16 23:05:15  
End at: 2018-04-16 23:05:45  
Local clock offset: -1.1 ms  
Remote clock offset: -5.373 ms

# Below is generated by plot.py at 2018-04-17 00:57:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.66 Mbit/s  
95th percentile per-packet one-way delay: 374.256 ms  
Loss rate: 52.22%  
-- Flow 1:  
Average throughput: 1.36 Mbit/s  
95th percentile per-packet one-way delay: 371.144 ms  
Loss rate: 39.68%  
-- Flow 2:  
Average throughput: 1.46 Mbit/s  
95th percentile per-packet one-way delay: 377.139 ms  
Loss rate: 59.07%  
-- Flow 3:  
Average throughput: 1.07 Mbit/s  
95th percentile per-packet one-way delay: 374.252 ms  
Loss rate: 64.75%

Run 1: Report of FillP — Data Link

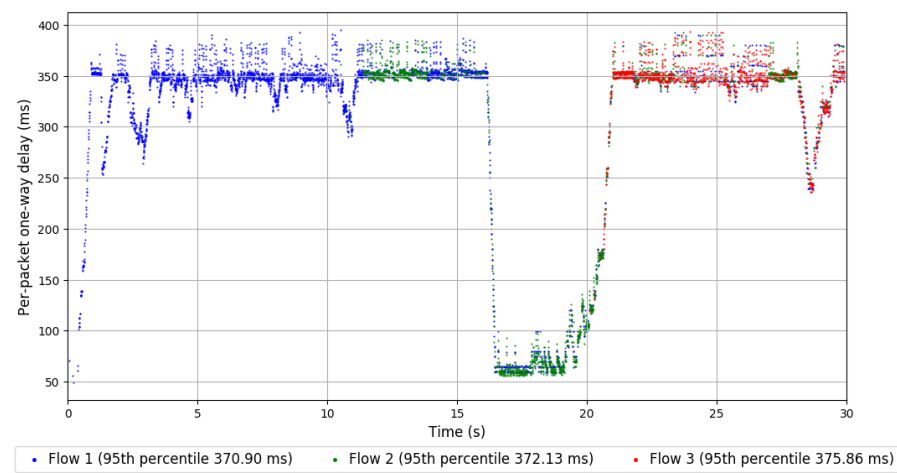
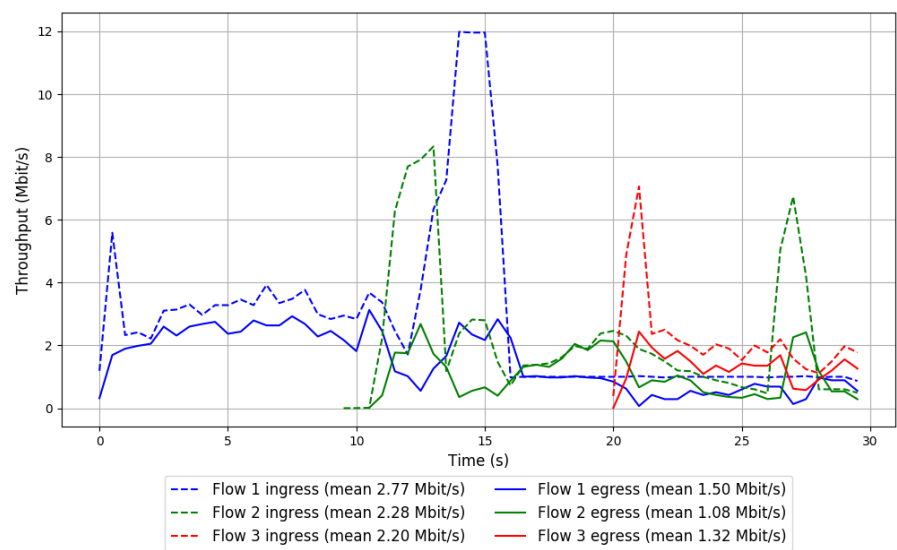


Run 2: Statistics of FillP

Start at: 2018-04-16 23:24:02  
End at: 2018-04-16 23:24:32  
Local clock offset: -7.894 ms  
Remote clock offset: -5.032 ms

# Below is generated by plot.py at 2018-04-17 00:57:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.64 Mbit/s  
95th percentile per-packet one-way delay: 372.484 ms  
Loss rate: 47.62%  
-- Flow 1:  
Average throughput: 1.50 Mbit/s  
95th percentile per-packet one-way delay: 370.896 ms  
Loss rate: 45.99%  
-- Flow 2:  
Average throughput: 1.08 Mbit/s  
95th percentile per-packet one-way delay: 372.126 ms  
Loss rate: 53.79%  
-- Flow 3:  
Average throughput: 1.32 Mbit/s  
95th percentile per-packet one-way delay: 375.860 ms  
Loss rate: 40.98%

Run 2: Report of FillP — Data Link



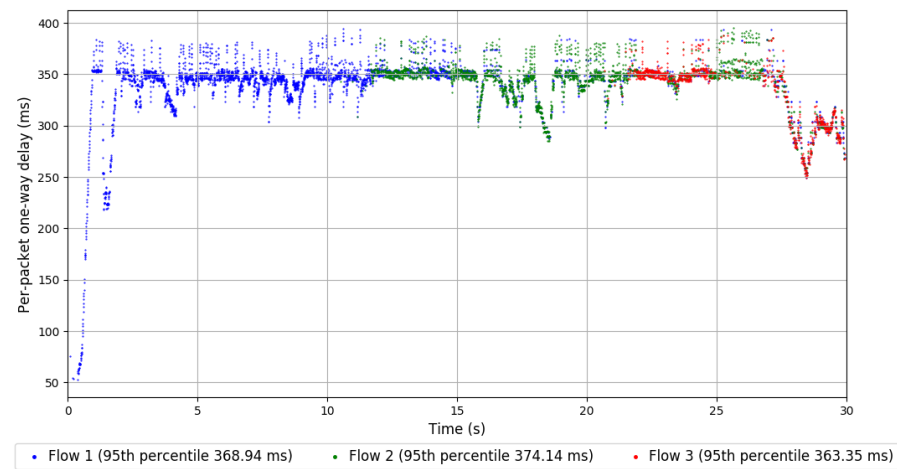
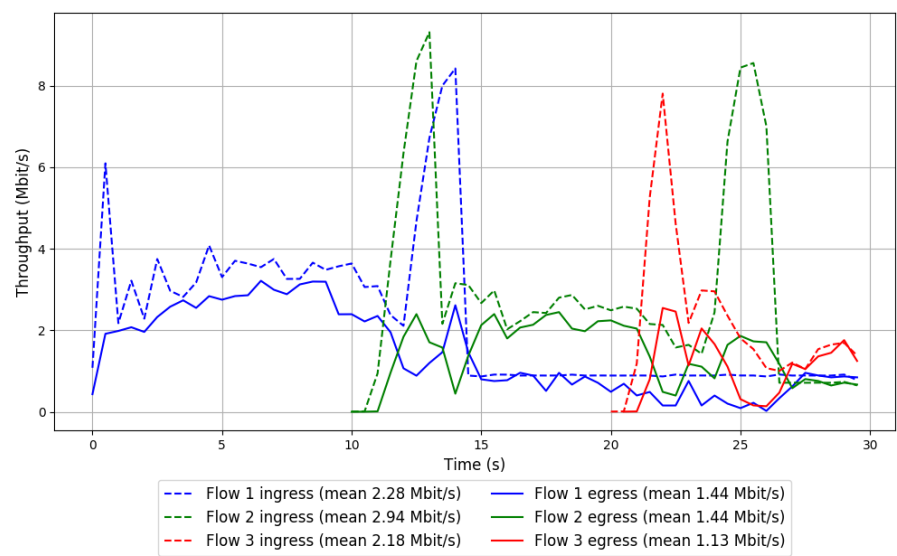


Run 3: Statistics of FillP

Start at: 2018-04-16 23:42:46  
End at: 2018-04-16 23:43:16  
Local clock offset: -10.818 ms  
Remote clock offset: -7.891 ms

# Below is generated by plot.py at 2018-04-17 00:57:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.73 Mbit/s  
95th percentile per-packet one-way delay: 371.068 ms  
Loss rate: 45.25%  
-- Flow 1:  
Average throughput: 1.44 Mbit/s  
95th percentile per-packet one-way delay: 368.936 ms  
Loss rate: 37.05%  
-- Flow 2:  
Average throughput: 1.44 Mbit/s  
95th percentile per-packet one-way delay: 374.137 ms  
Loss rate: 52.38%  
-- Flow 3:  
Average throughput: 1.13 Mbit/s  
95th percentile per-packet one-way delay: 363.348 ms  
Loss rate: 51.75%

Run 3: Report of FillP — Data Link

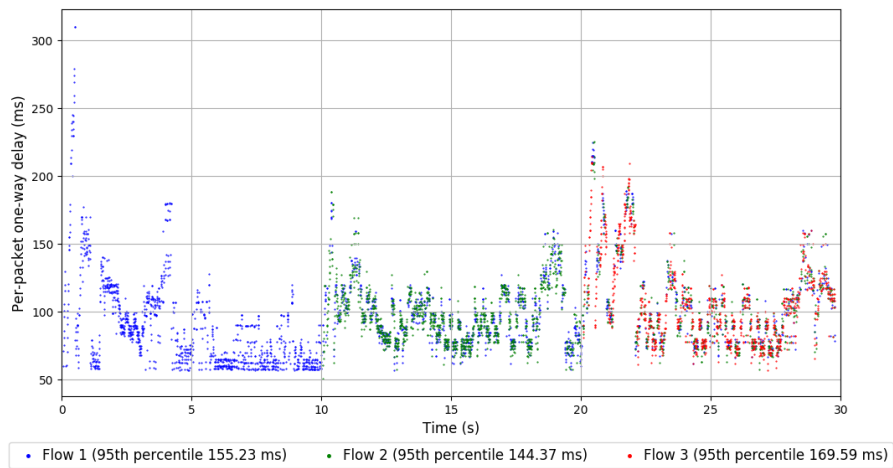
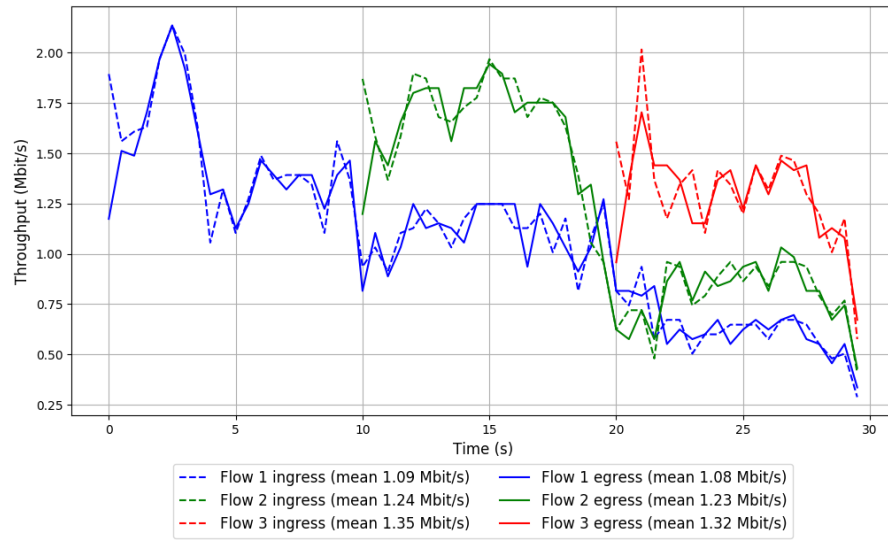


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-04-16 23:06:22
End at: 2018-04-16 23:06:52
Local clock offset: -2.133 ms
Remote clock offset: -6.917 ms

# Below is generated by plot.py at 2018-04-17 00:57:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 157.693 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 1.08 Mbit/s
95th percentile per-packet one-way delay: 155.231 ms
Loss rate: 0.92%
-- Flow 2:
Average throughput: 1.23 Mbit/s
95th percentile per-packet one-way delay: 144.373 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 169.590 ms
Loss rate: 2.20%
```

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

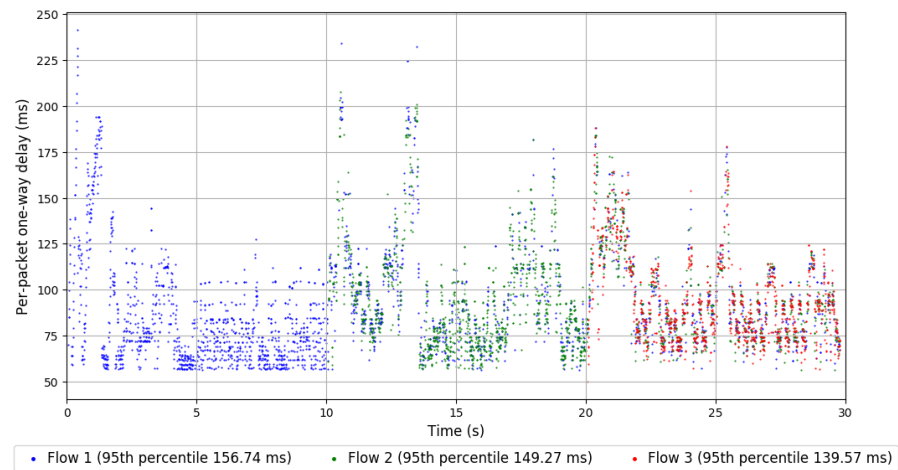
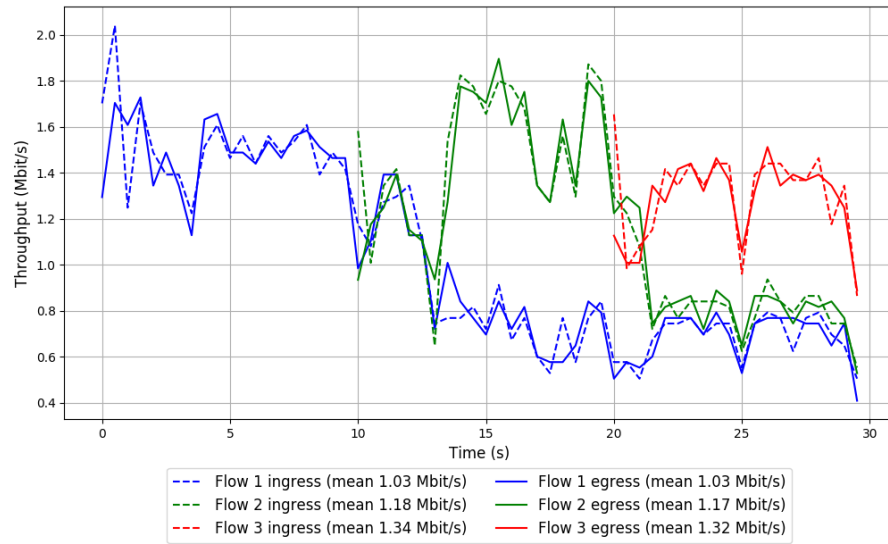


Run 2: Statistics of Indigo-1-32

Start at: 2018-04-16 23:25:08  
End at: 2018-04-16 23:25:38  
Local clock offset: -7.339 ms  
Remote clock offset: -4.349 ms

# Below is generated by plot.py at 2018-04-17 00:57:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.23 Mbit/s  
95th percentile per-packet one-way delay: 151.481 ms  
Loss rate: 0.93%  
-- Flow 1:  
Average throughput: 1.03 Mbit/s  
95th percentile per-packet one-way delay: 156.739 ms  
Loss rate: 0.59%  
-- Flow 2:  
Average throughput: 1.17 Mbit/s  
95th percentile per-packet one-way delay: 149.272 ms  
Loss rate: 0.88%  
-- Flow 3:  
Average throughput: 1.32 Mbit/s  
95th percentile per-packet one-way delay: 139.570 ms  
Loss rate: 1.84%

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

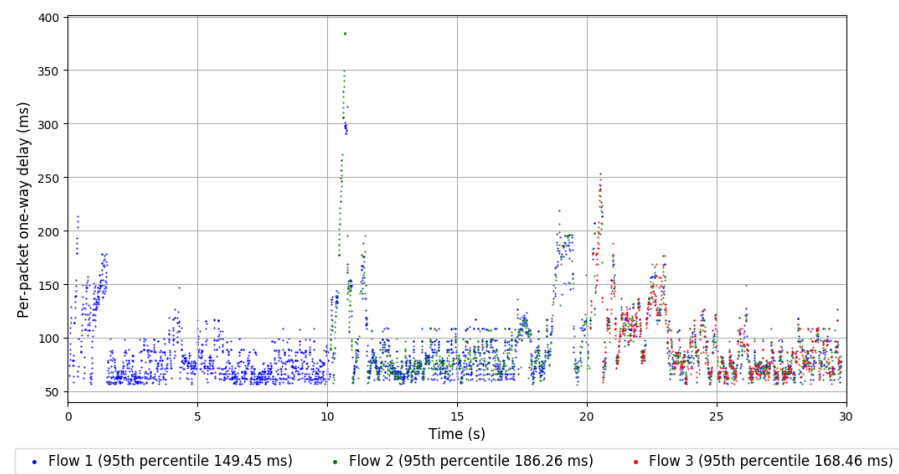
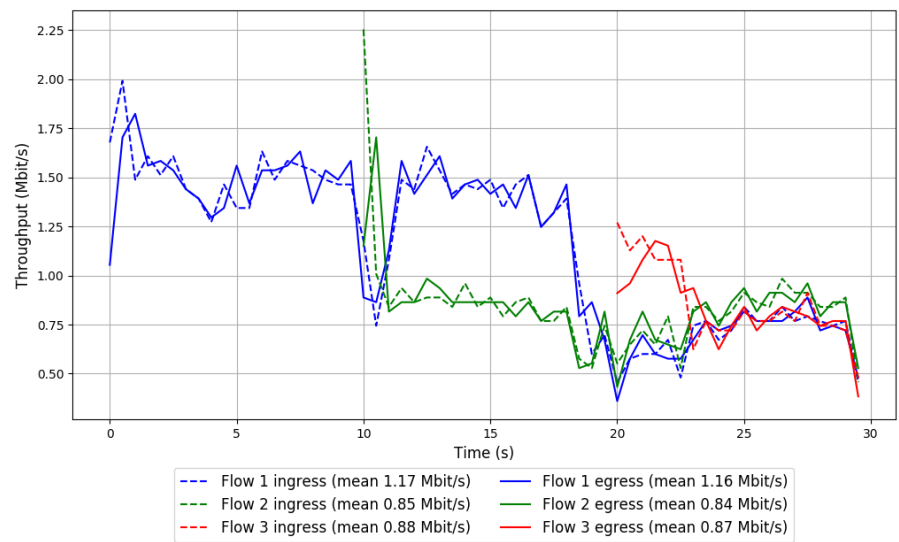


Run 3: Statistics of Indigo-1-32

Start at: 2018-04-16 23:43:52  
End at: 2018-04-16 23:44:22  
Local clock offset: -9.386 ms  
Remote clock offset: -7.257 ms

# Below is generated by plot.py at 2018-04-17 00:57:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.00 Mbit/s  
95th percentile per-packet one-way delay: 161.159 ms  
Loss rate: 1.14%  
-- Flow 1:  
Average throughput: 1.16 Mbit/s  
95th percentile per-packet one-way delay: 149.453 ms  
Loss rate: 0.72%  
-- Flow 2:  
Average throughput: 0.84 Mbit/s  
95th percentile per-packet one-way delay: 186.257 ms  
Loss rate: 1.14%  
-- Flow 3:  
Average throughput: 0.87 Mbit/s  
95th percentile per-packet one-way delay: 168.456 ms  
Loss rate: 2.79%

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



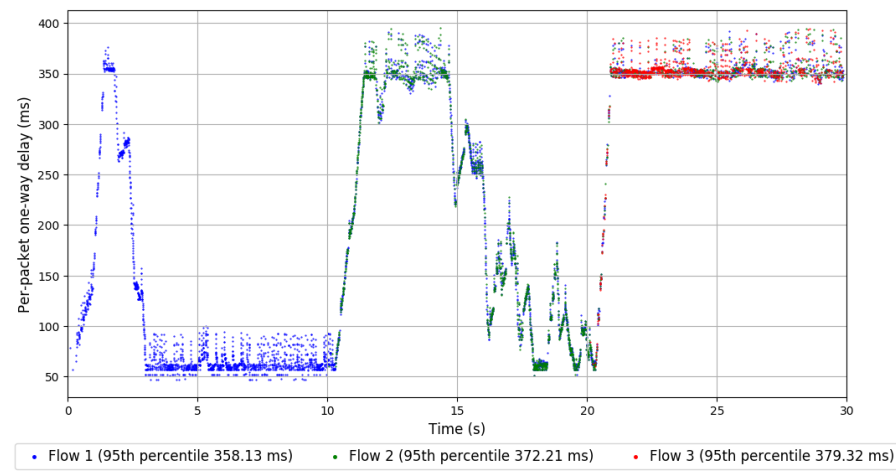
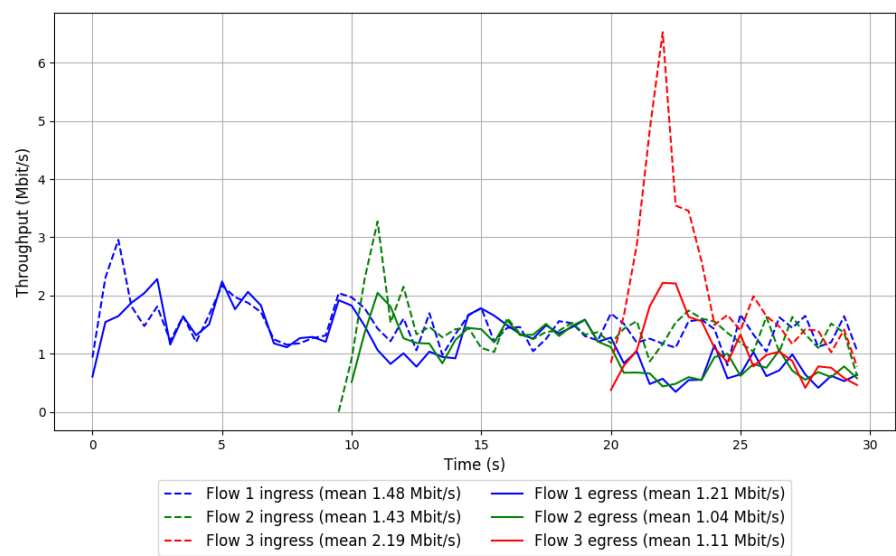


Run 1: Statistics of PCC-Vivace

Start at: 2018-04-16 23:20:44  
End at: 2018-04-16 23:21:14  
Local clock offset: -7.049 ms  
Remote clock offset: -5.739 ms

# Below is generated by plot.py at 2018-04-17 00:57:05  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.26 Mbit/s  
95th percentile per-packet one-way delay: 365.427 ms  
Loss rate: 28.70%  
-- Flow 1:  
Average throughput: 1.21 Mbit/s  
95th percentile per-packet one-way delay: 358.131 ms  
Loss rate: 18.91%  
-- Flow 2:  
Average throughput: 1.04 Mbit/s  
95th percentile per-packet one-way delay: 372.209 ms  
Loss rate: 27.78%  
-- Flow 3:  
Average throughput: 1.11 Mbit/s  
95th percentile per-packet one-way delay: 379.319 ms  
Loss rate: 49.99%

Run 1: Report of PCC-Vivace — Data Link

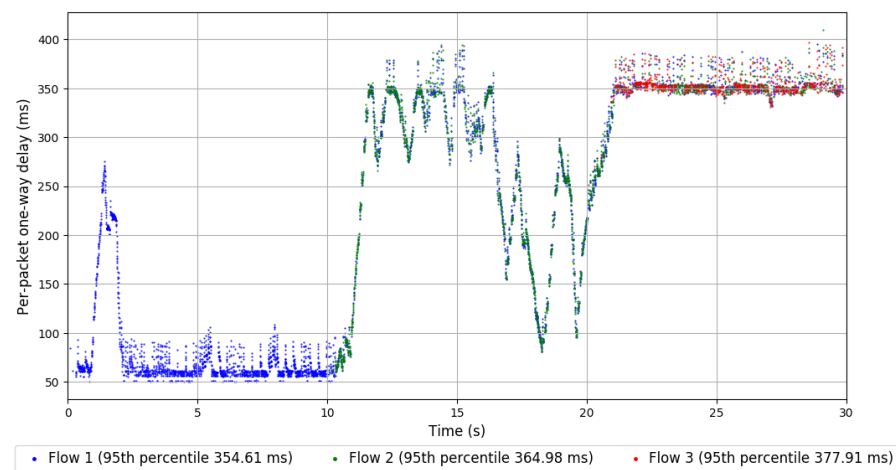
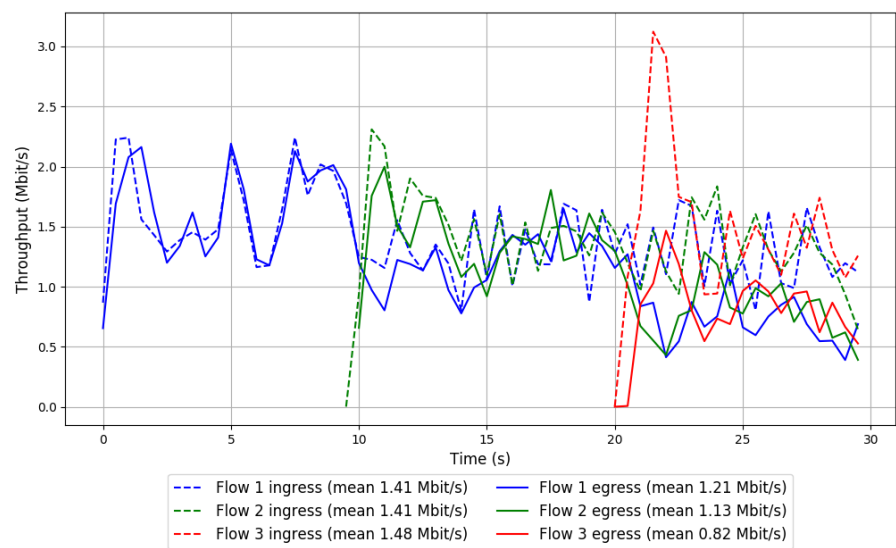


Run 2: Statistics of PCC-Vivace

Start at: 2018-04-16 23:39:27  
End at: 2018-04-16 23:39:57  
Local clock offset: -9.269 ms  
Remote clock offset: -6.937 ms

# Below is generated by plot.py at 2018-04-17 00:57:06  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.22 Mbit/s  
95th percentile per-packet one-way delay: 362.781 ms  
Loss rate: 21.91%  
-- Flow 1:  
Average throughput: 1.21 Mbit/s  
95th percentile per-packet one-way delay: 354.613 ms  
Loss rate: 14.66%  
-- Flow 2:  
Average throughput: 1.13 Mbit/s  
95th percentile per-packet one-way delay: 364.978 ms  
Loss rate: 20.14%  
-- Flow 3:  
Average throughput: 0.82 Mbit/s  
95th percentile per-packet one-way delay: 377.908 ms  
Loss rate: 46.30%

Run 2: Report of PCC-Vivace — Data Link

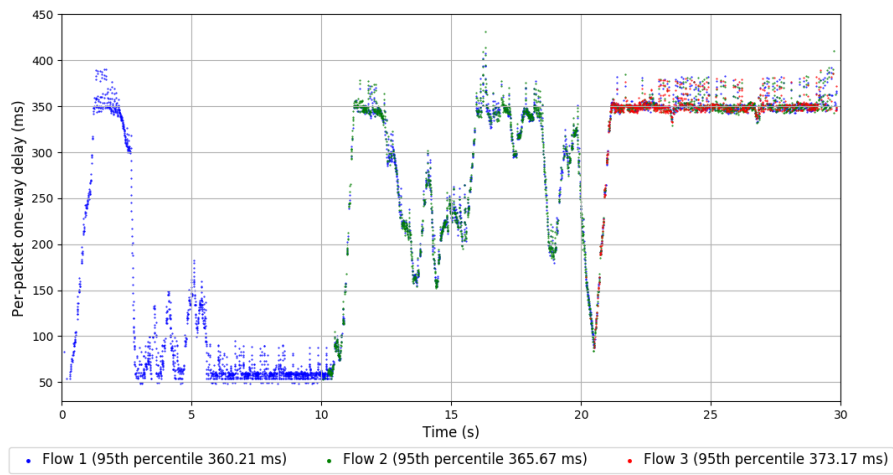
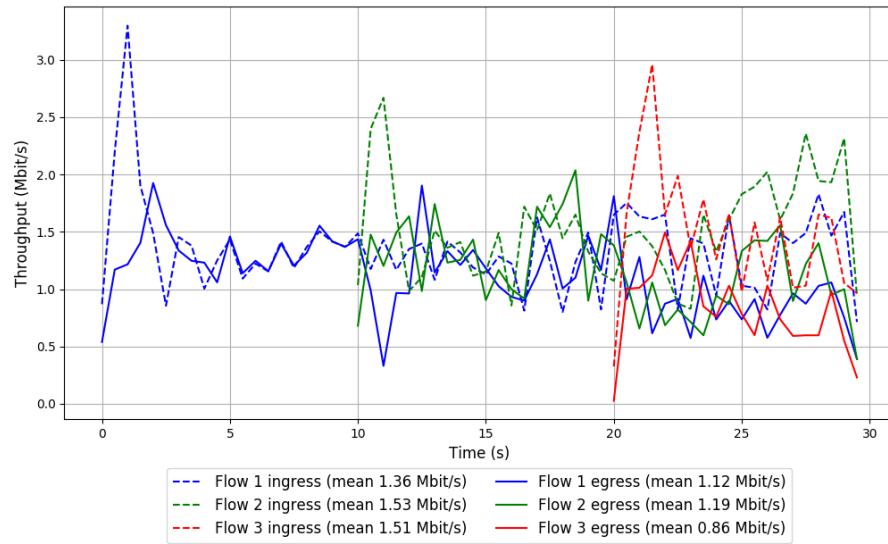


Run 3: Statistics of PCC-Vivace

Start at: 2018-04-16 23:58:11  
End at: 2018-04-16 23:58:41  
Local clock offset: -10.57 ms  
Remote clock offset: -8.078 ms

# Below is generated by plot.py at 2018-04-17 00:57:06  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.19 Mbit/s  
95th percentile per-packet one-way delay: 364.628 ms  
Loss rate: 24.10%  
-- Flow 1:  
Average throughput: 1.12 Mbit/s  
95th percentile per-packet one-way delay: 360.206 ms  
Loss rate: 17.68%  
-- Flow 2:  
Average throughput: 1.19 Mbit/s  
95th percentile per-packet one-way delay: 365.671 ms  
Loss rate: 22.96%  
-- Flow 3:  
Average throughput: 0.86 Mbit/s  
95th percentile per-packet one-way delay: 373.170 ms  
Loss rate: 44.01%

### Run 3: Report of PCC-Vivace — Data Link



Run 1: Statistics of PCC-Expr  
  
Start at: 2018-04-16 23:10:46  
End at: 2018-04-16 23:11:16  
Local clock offset: -3.26 ms  
Remote clock offset: -5.909 ms

Run 1: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing



Run 2: Statistics of PCC-Expr

Start at: 2018-04-16 23:29:33

End at: 2018-04-16 23:30:03

Local clock offset: -8.626 ms

Remote clock offset: -6.188 ms

Run 2: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing

Run 3: Statistics of PCC-Expr

Start at: 2018-04-16 23:48:16

End at: 2018-04-16 23:48:46

Local clock offset: -9.254 ms

Remote clock offset: -8.208 ms

### Run 3: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing