

## Pantheon Report

Generated at 2017-09-08 16:20:27 (UTC).

Data path: GCE London Ethernet (*remote*) → GCE Sydney Ethernet (*local*).

Repeated the test of 15 congestion control schemes 10 times.

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

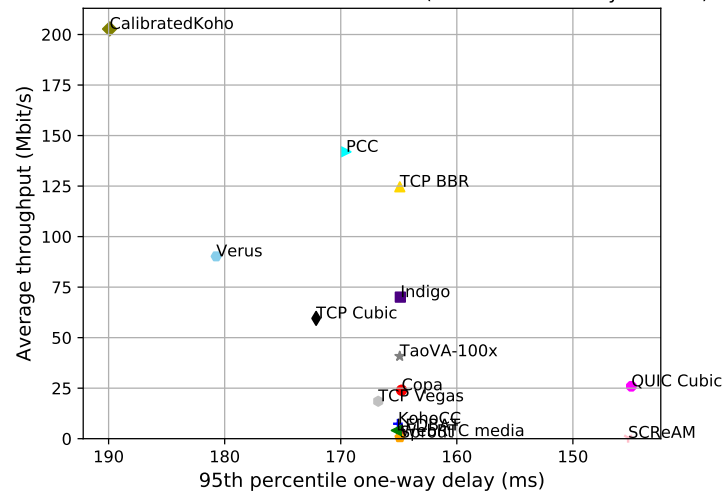
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

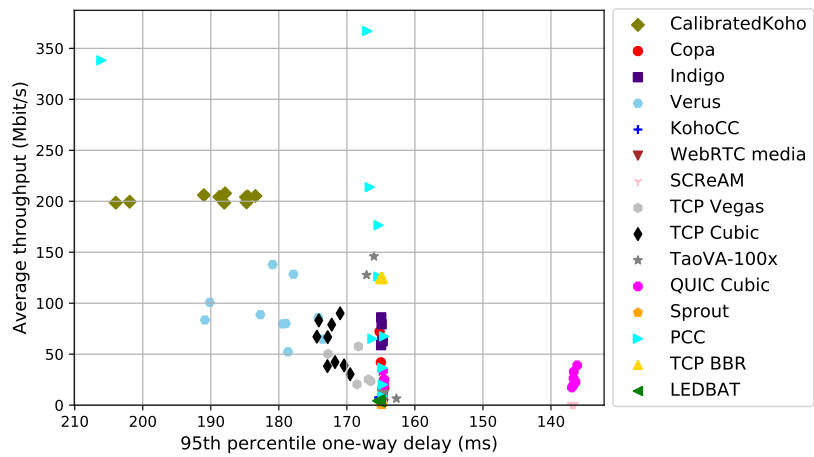
Git summary:

```
branch: master @ 2a98508c2457474d84cd2966a42b80b0bc62ecaf
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
third_party/indigo @ 10192113fb6902d25c86e0e3e4c85d7a05e43d7e
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-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/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

test from GCE London Ethernet to GCE Sydney Ethernet, 10 runs of 30s each per scheme  
3 flows with 10s interval between flows (mean of all runs by scheme)



test from GCE London Ethernet to GCE Sydney 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	65.15	62.36	56.09	164.89	164.92	164.95	0.97	1.76	3.86
CalibratedKoho	10	160.46	60.36	7.01	192.30	181.73	166.94	1.35	4.71	11.06
Copa	10	12.62	14.95	10.43	164.72	164.80	164.77	0.59	1.05	5.68
TCP Cubic	9	35.89	27.21	16.62	497.39	169.31	171.17	1.37	3.46	8.57
Indigo	5	28.02	44.03	34.70	164.80	164.89	164.94	1.37	1.50	4.18
KohoCC	10	3.81	3.73	3.42	165.07	165.07	165.07	1.06	1.61	3.52
LEDBAT	10	2.58	1.82	0.97	165.27	165.12	165.08	2.13	2.82	5.81
PCC	10	69.48	70.50	71.05	170.70	164.83	165.45	0.95	1.34	3.85
QUIC Cubic	10	7.78	20.56	14.01	139.38	141.86	142.09	0.28	1.91	3.78
SCReAM	10	0.22	0.22	0.21	136.42	139.39	144.83	0.87	1.42	2.67
Sprout	10	0.26	0.35	0.33	164.88	164.91	164.87	0.90	1.39	2.93
TaoVA-100x	9	24.43	27.69	11.24	164.62	165.57	164.58	0.70	1.58	4.13
TCP Vegas	10	12.01	5.57	8.80	166.08	165.60	166.38	1.00	1.56	3.04
Verus	10	47.18	51.77	29.27	180.16	194.83	187.24	0.81	1.78	3.59
WebRTC media	9	0.06	1.31	0.18	165.19	143.51	165.25	0.03	1.78	9.41

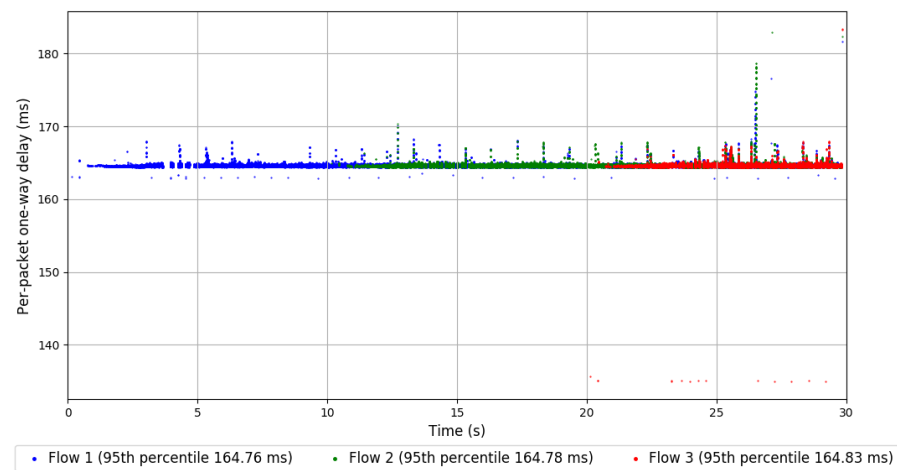
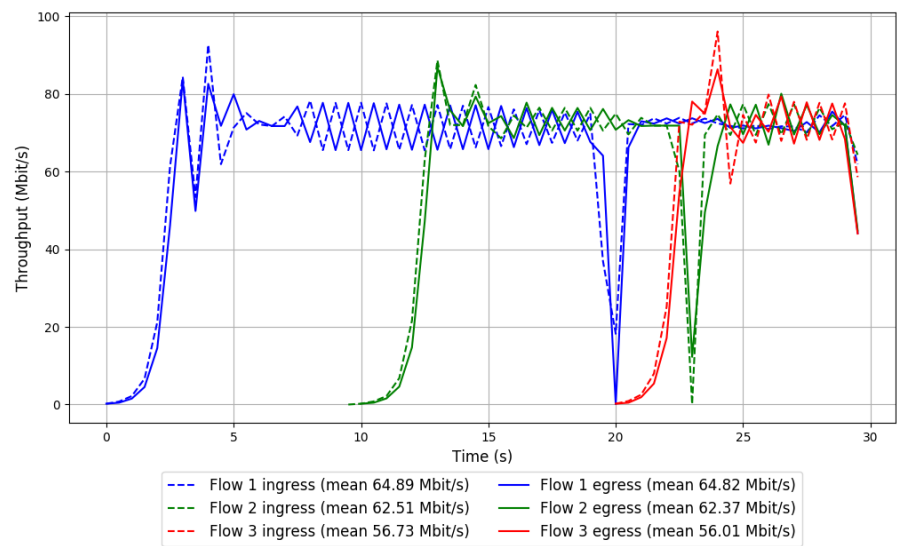
```
Run 1: Statistics of TCP BBR

Start at: 2017-09-08 11:08:58
End at: 2017-09-08 11:09:28

# Below is generated by plot.py at 2017-09-08 16:05:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 124.48 Mbit/s
95th percentile per-packet one-way delay: 164.778 ms
Loss rate: 1.73%
-- Flow 1:
Average throughput: 64.82 Mbit/s
95th percentile per-packet one-way delay: 164.762 ms
Loss rate: 1.11%
-- Flow 2:
Average throughput: 62.37 Mbit/s
95th percentile per-packet one-way delay: 164.781 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 56.01 Mbit/s
95th percentile per-packet one-way delay: 164.832 ms
Loss rate: 3.82%
```



Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-09-08 11:22:57

End at: 2017-09-08 11:23:27

# Below is generated by plot.py at 2017-09-08 16:05:38

# Datalink statistics

-- Total of 3 flows:

Average throughput: 123.70 Mbit/s

95th percentile per-packet one-way delay: 164.790 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 65.45 Mbit/s

95th percentile per-packet one-way delay: 164.785 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.80 Mbit/s

95th percentile per-packet one-way delay: 164.791 ms

Loss rate: 1.77%

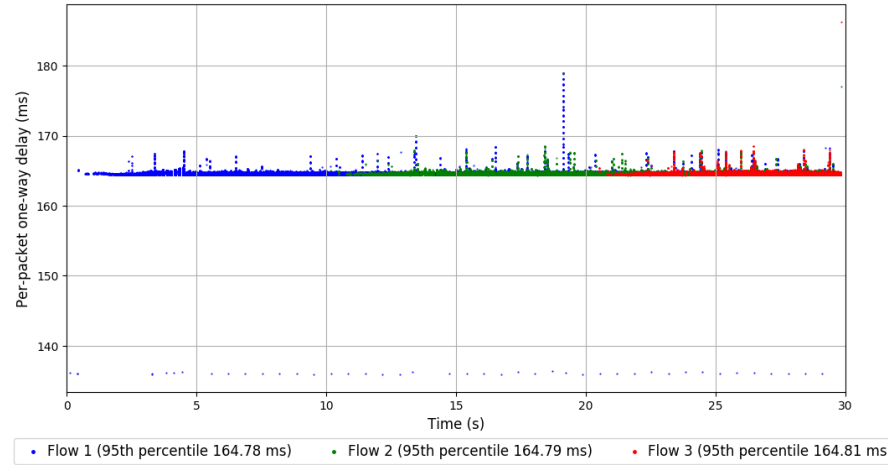
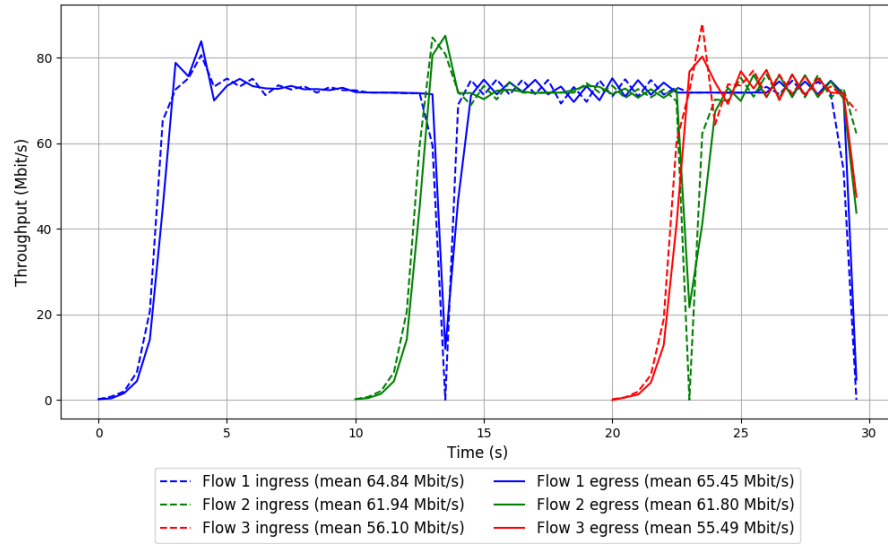
-- Flow 3:

Average throughput: 55.49 Mbit/s

95th percentile per-packet one-way delay: 164.809 ms

Loss rate: 3.90%

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



Run 3: Statistics of TCP BBR

Start at: 2017-09-08 11:36:47

End at: 2017-09-08 11:37:17

# Below is generated by plot.py at 2017-09-08 16:06:01

# Datalink statistics

-- Total of 3 flows:

Average throughput: 125.59 Mbit/s

95th percentile per-packet one-way delay: 164.787 ms

Loss rate: 1.76%

-- Flow 1:

Average throughput: 65.93 Mbit/s

95th percentile per-packet one-way delay: 164.773 ms

Loss rate: 1.07%

-- Flow 2:

Average throughput: 62.54 Mbit/s

95th percentile per-packet one-way delay: 164.800 ms

Loss rate: 1.92%

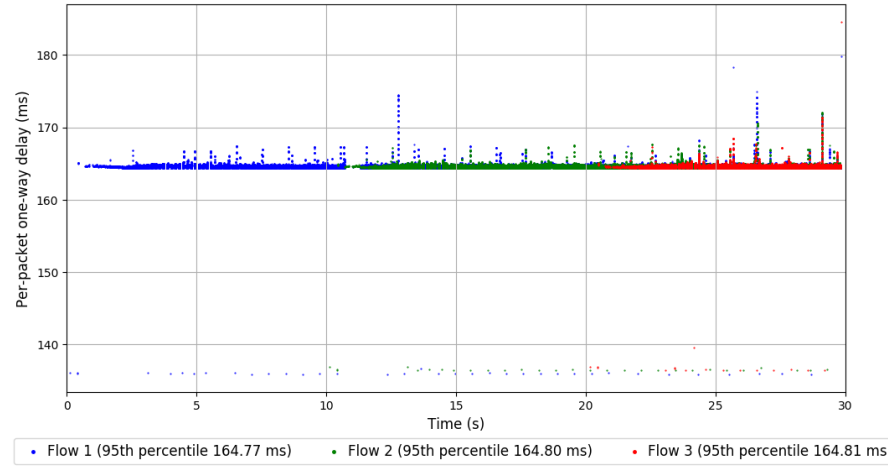
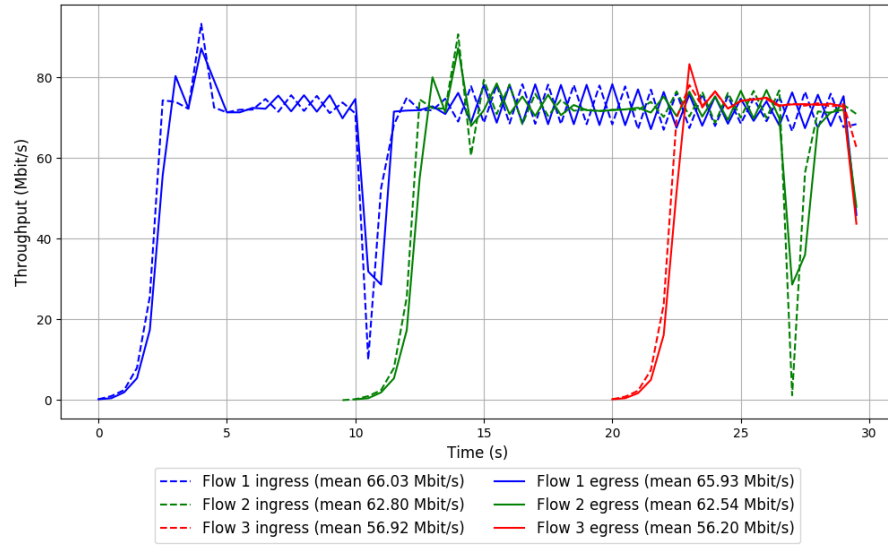
-- Flow 3:

Average throughput: 56.20 Mbit/s

95th percentile per-packet one-way delay: 164.806 ms

Loss rate: 3.82%

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



Run 4: Statistics of TCP BBR

Start at: 2017-09-08 11:50:46

End at: 2017-09-08 11:51:16

# Below is generated by plot.py at 2017-09-08 16:06:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 124.98 Mbit/s

95th percentile per-packet one-way delay: 164.793 ms

Loss rate: 1.70%

-- Flow 1:

Average throughput: 64.78 Mbit/s

95th percentile per-packet one-way delay: 164.752 ms

Loss rate: 1.11%

-- Flow 2:

Average throughput: 63.00 Mbit/s

95th percentile per-packet one-way delay: 164.817 ms

Loss rate: 1.68%

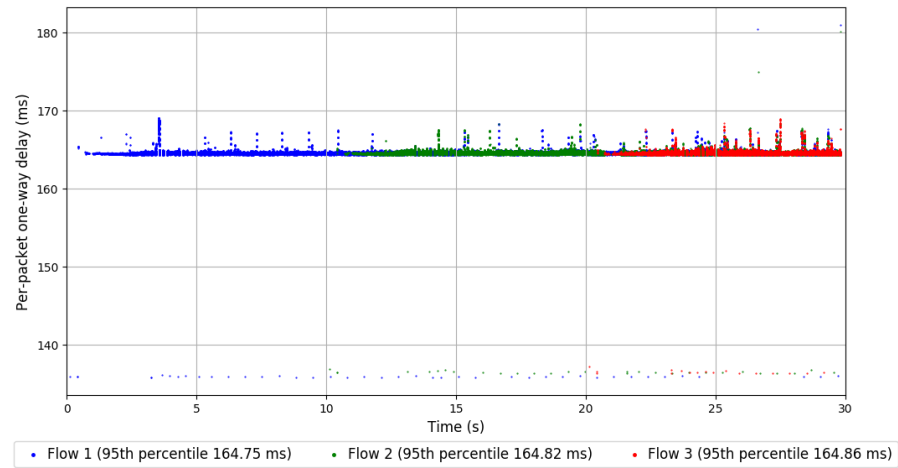
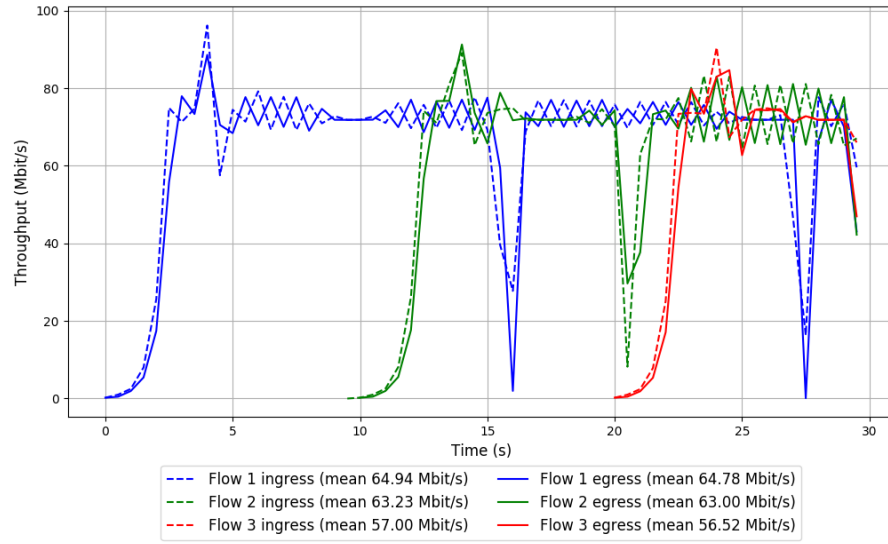
-- Flow 3:

Average throughput: 56.52 Mbit/s

95th percentile per-packet one-way delay: 164.857 ms

Loss rate: 3.79%

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



Run 5: Statistics of TCP BBR

Start at: 2017-09-08 12:04:09

End at: 2017-09-08 12:04:39

# Below is generated by plot.py at 2017-09-08 16:06:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 125.42 Mbit/s

95th percentile per-packet one-way delay: 164.972 ms

Loss rate: 1.50%

-- Flow 1:

Average throughput: 66.00 Mbit/s

95th percentile per-packet one-way delay: 164.958 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 62.16 Mbit/s

95th percentile per-packet one-way delay: 164.980 ms

Loss rate: 1.70%

-- Flow 3:

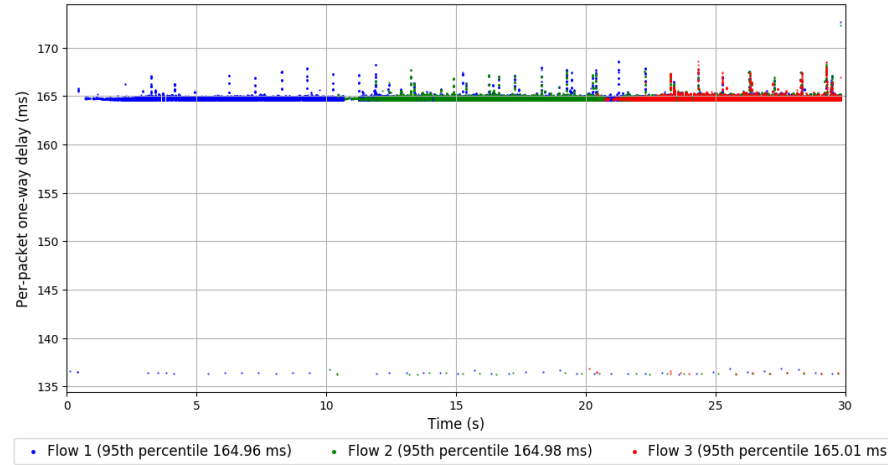
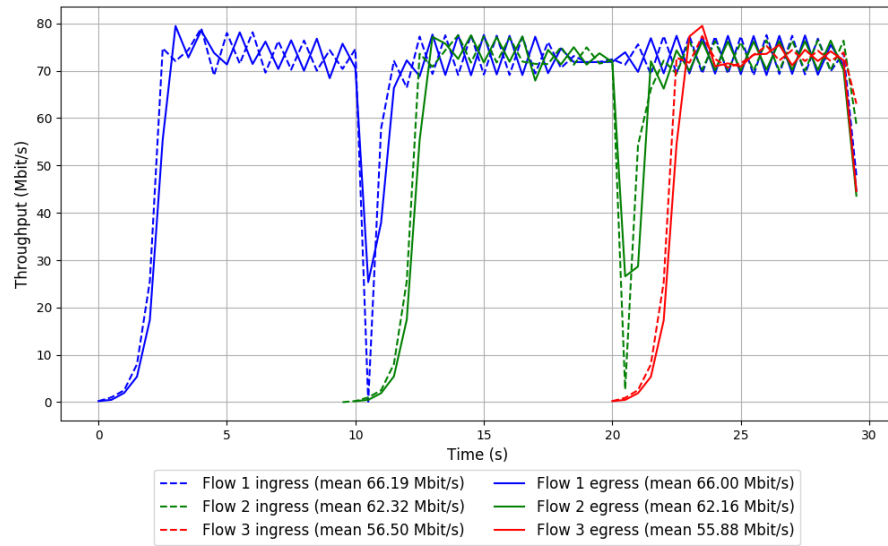
Average throughput: 55.88 Mbit/s

95th percentile per-packet one-way delay: 165.007 ms

Loss rate: 3.83%



# Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-09-08 12:17:18

End at: 2017-09-08 12:17:48

# Below is generated by plot.py at 2017-09-08 16:06:29

# Datalink statistics

-- Total of 3 flows:

Average throughput: 125.30 Mbit/s

95th percentile per-packet one-way delay: 164.992 ms

Loss rate: 1.80%

-- Flow 1:

Average throughput: 65.96 Mbit/s

95th percentile per-packet one-way delay: 164.972 ms

Loss rate: 1.14%

-- Flow 2:

Average throughput: 62.14 Mbit/s

95th percentile per-packet one-way delay: 165.014 ms

Loss rate: 1.84%

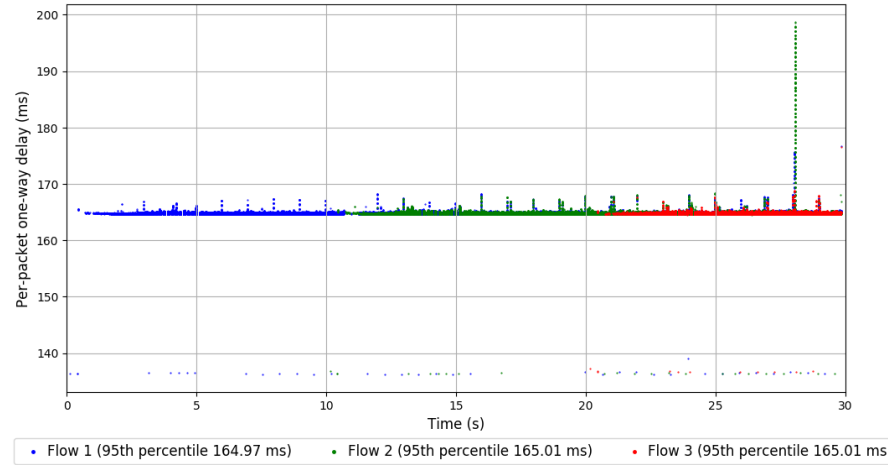
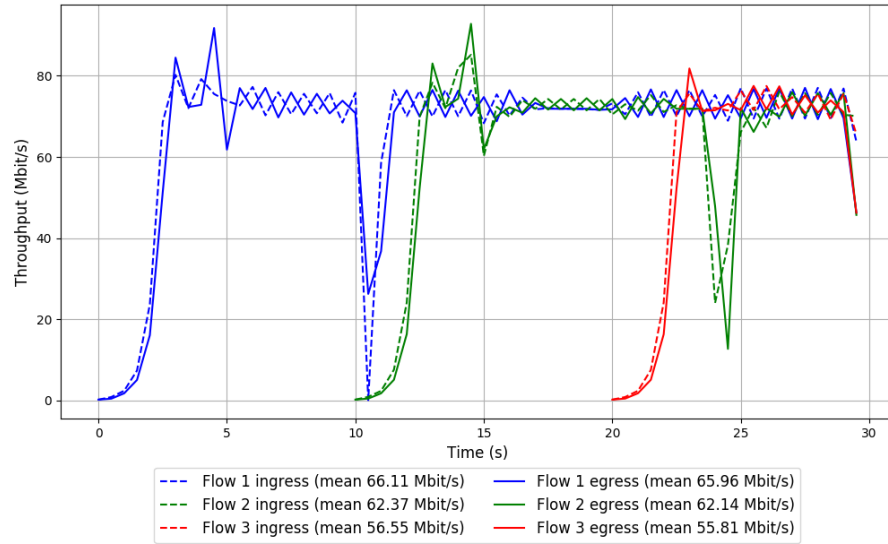
-- Flow 3:

Average throughput: 55.81 Mbit/s

95th percentile per-packet one-way delay: 165.014 ms

Loss rate: 4.05%

## Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-09-08 12:30:37

End at: 2017-09-08 12:31:07

# Below is generated by plot.py at 2017-09-08 16:06:52

# Datalink statistics

-- Total of 3 flows:

Average throughput: 123.82 Mbit/s

95th percentile per-packet one-way delay: 164.987 ms

Loss rate: 1.71%

-- Flow 1:

Average throughput: 64.37 Mbit/s

95th percentile per-packet one-way delay: 164.956 ms

Loss rate: 1.08%

-- Flow 2:

Average throughput: 62.02 Mbit/s

95th percentile per-packet one-way delay: 165.013 ms

Loss rate: 1.73%

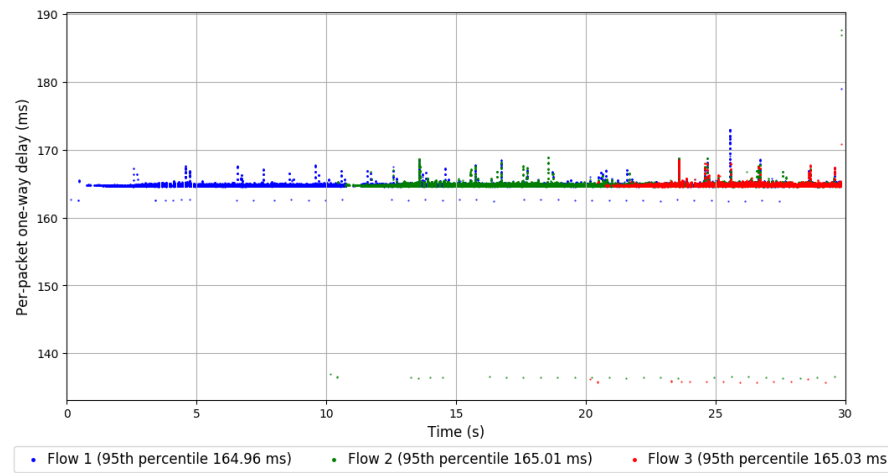
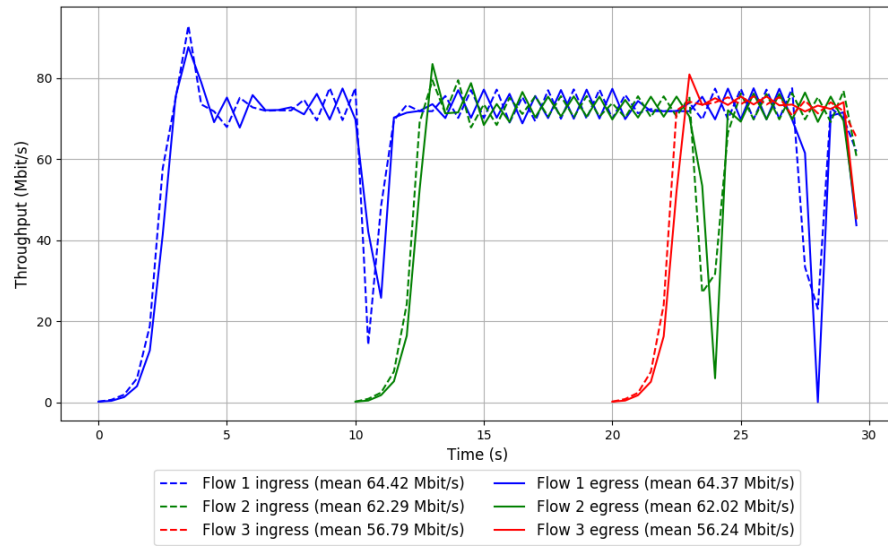
-- Flow 3:

Average throughput: 56.24 Mbit/s

95th percentile per-packet one-way delay: 165.033 ms

Loss rate: 3.80%

## Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-09-08 12:43:58

End at: 2017-09-08 12:44:28

# Below is generated by plot.py at 2017-09-08 16:06:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 123.71 Mbit/s

95th percentile per-packet one-way delay: 164.998 ms

Loss rate: 1.75%

-- Flow 1:

Average throughput: 64.44 Mbit/s

95th percentile per-packet one-way delay: 164.984 ms

Loss rate: 1.11%

-- Flow 2:

Average throughput: 62.15 Mbit/s

95th percentile per-packet one-way delay: 165.012 ms

Loss rate: 1.73%

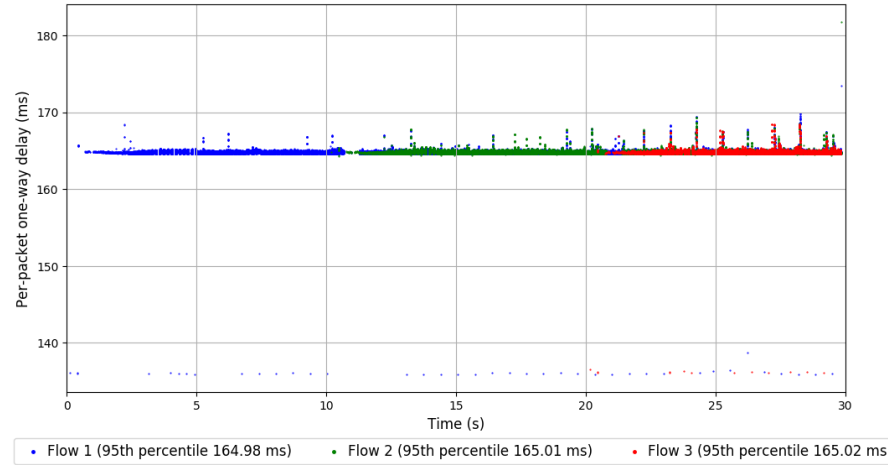
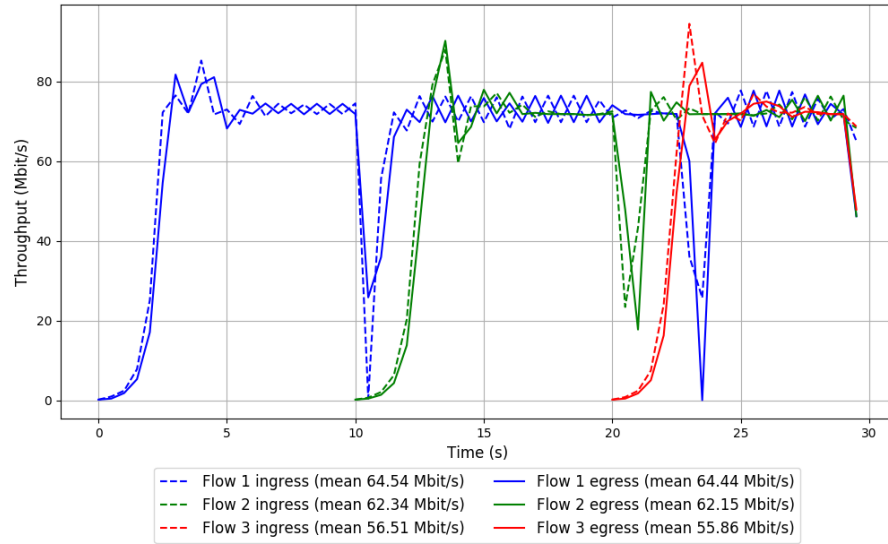
-- Flow 3:

Average throughput: 55.86 Mbit/s

95th percentile per-packet one-way delay: 165.020 ms

Loss rate: 3.99%

# Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-09-08 12:57:23

End at: 2017-09-08 12:57:53

# Below is generated by plot.py at 2017-09-08 16:07:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 124.17 Mbit/s

95th percentile per-packet one-way delay: 165.021 ms

Loss rate: 1.73%

-- Flow 1:

Average throughput: 64.14 Mbit/s

95th percentile per-packet one-way delay: 164.984 ms

Loss rate: 1.12%

-- Flow 2:

Average throughput: 62.83 Mbit/s

95th percentile per-packet one-way delay: 165.025 ms

Loss rate: 1.73%

-- Flow 3:

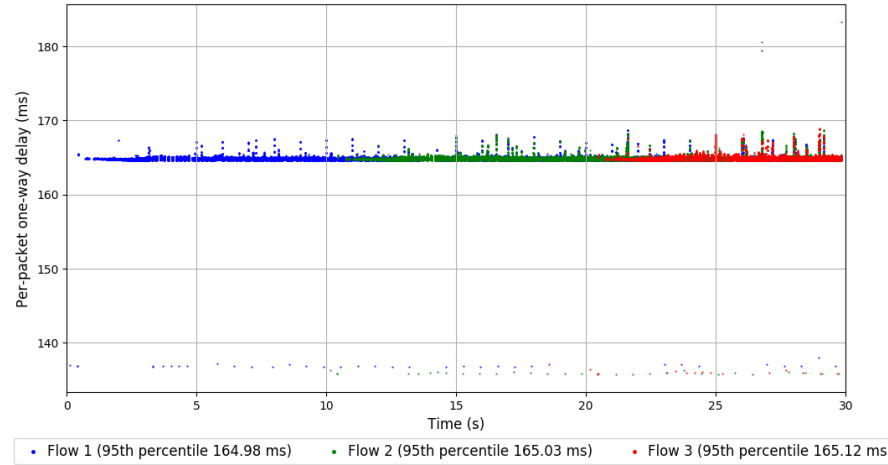
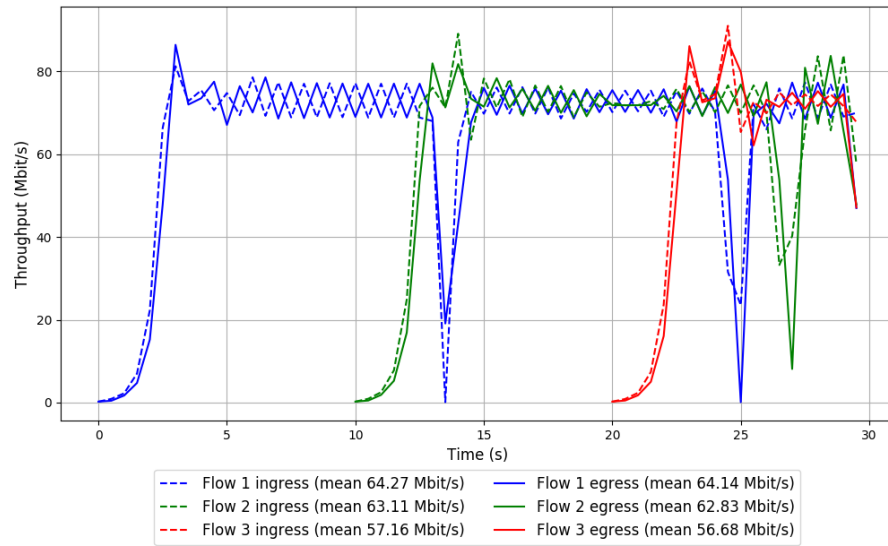
Average throughput: 56.68 Mbit/s

95th percentile per-packet one-way delay: 165.125 ms

Loss rate: 3.79%



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



Run 10: Statistics of TCP BBR

Start at: 2017-09-08 13:10:39

End at: 2017-09-08 13:11:09

# Below is generated by plot.py at 2017-09-08 16:07:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 125.38 Mbit/s

95th percentile per-packet one-way delay: 165.010 ms

Loss rate: 1.77%

-- Flow 1:

Average throughput: 65.65 Mbit/s

95th percentile per-packet one-way delay: 165.008 ms

Loss rate: 1.21%

-- Flow 2:

Average throughput: 62.62 Mbit/s

95th percentile per-packet one-way delay: 165.008 ms

Loss rate: 1.75%

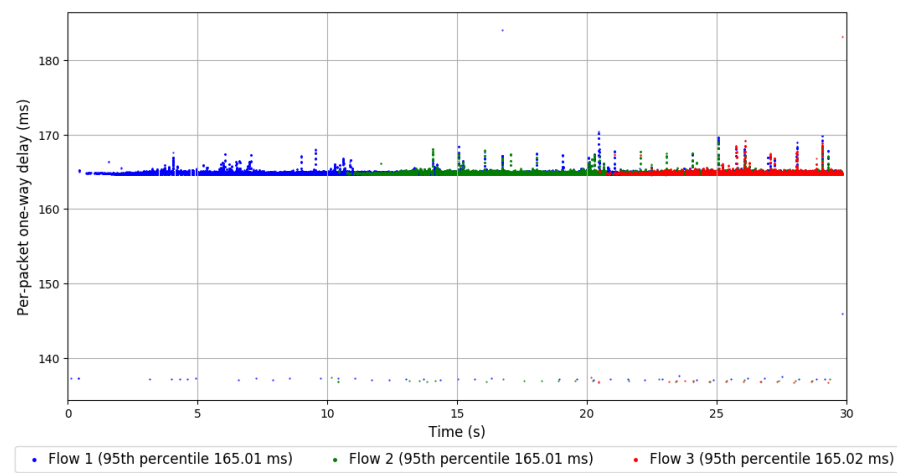
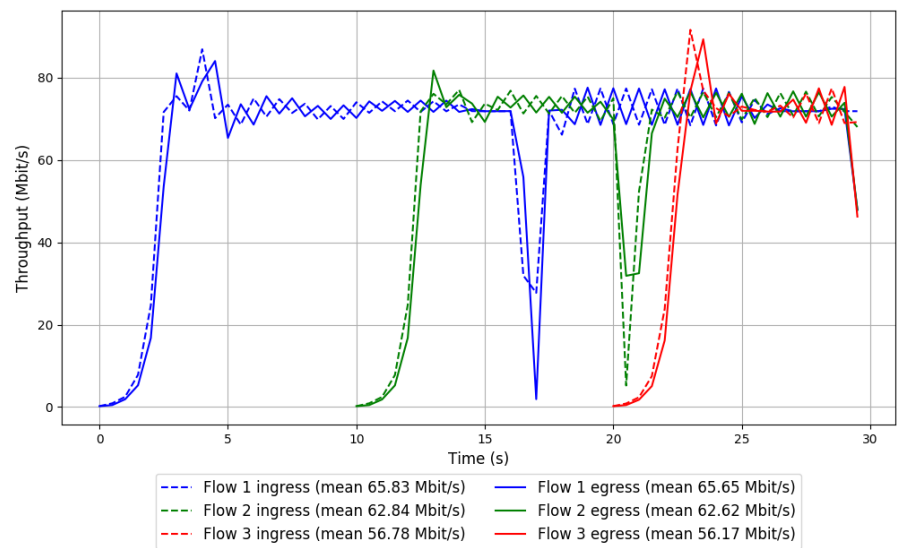
-- Flow 3:

Average throughput: 56.17 Mbit/s

95th percentile per-packet one-way delay: 165.021 ms

Loss rate: 3.78%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-09-08 11:01:36

End at: 2017-09-08 11:02:06

# Below is generated by plot.py at 2017-09-08 16:07:56

# Datalink statistics

-- Total of 3 flows:

Average throughput: 206.02 Mbit/s

95th percentile per-packet one-way delay: 191.017 ms

Loss rate: 2.10%

-- Flow 1:

Average throughput: 162.59 Mbit/s

95th percentile per-packet one-way delay: 193.745 ms

Loss rate: 1.24%

-- Flow 2:

Average throughput: 62.19 Mbit/s

95th percentile per-packet one-way delay: 170.642 ms

Loss rate: 4.80%

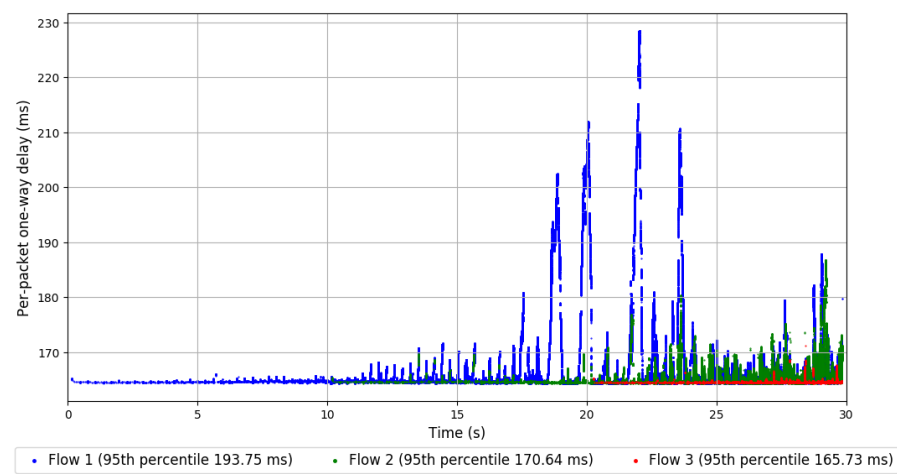
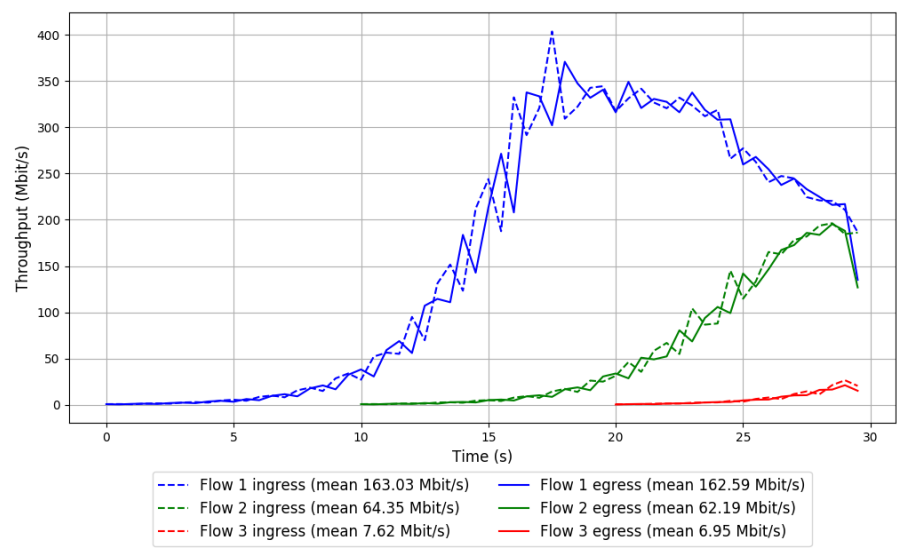
-- Flow 3:

Average throughput: 6.95 Mbit/s

95th percentile per-packet one-way delay: 165.734 ms

Loss rate: 11.54%

Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-09-08 11:15:32

End at: 2017-09-08 11:16:02

# Below is generated by plot.py at 2017-09-08 16:08:02

# Datalink statistics

-- Total of 3 flows:

Average throughput: 207.77 Mbit/s

95th percentile per-packet one-way delay: 187.908 ms

Loss rate: 2.20%

-- Flow 1:

Average throughput: 166.42 Mbit/s

95th percentile per-packet one-way delay: 187.944 ms

Loss rate: 1.60%

-- Flow 2:

Average throughput: 58.98 Mbit/s

95th percentile per-packet one-way delay: 188.414 ms

Loss rate: 4.13%

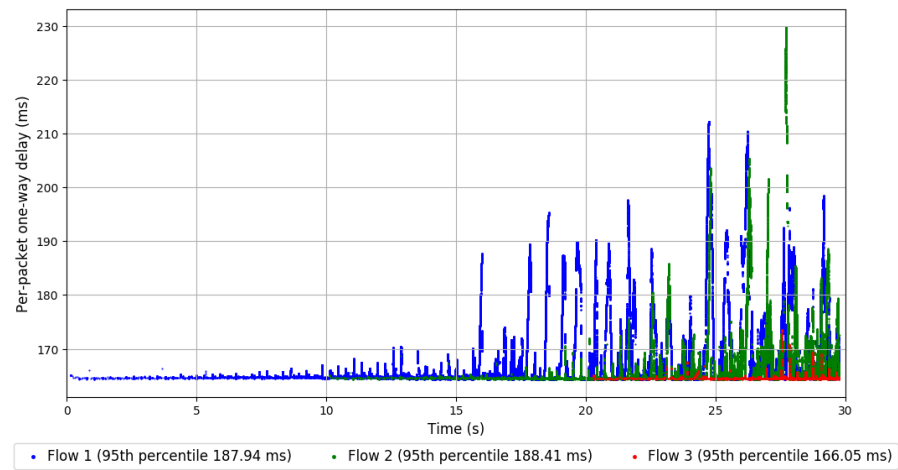
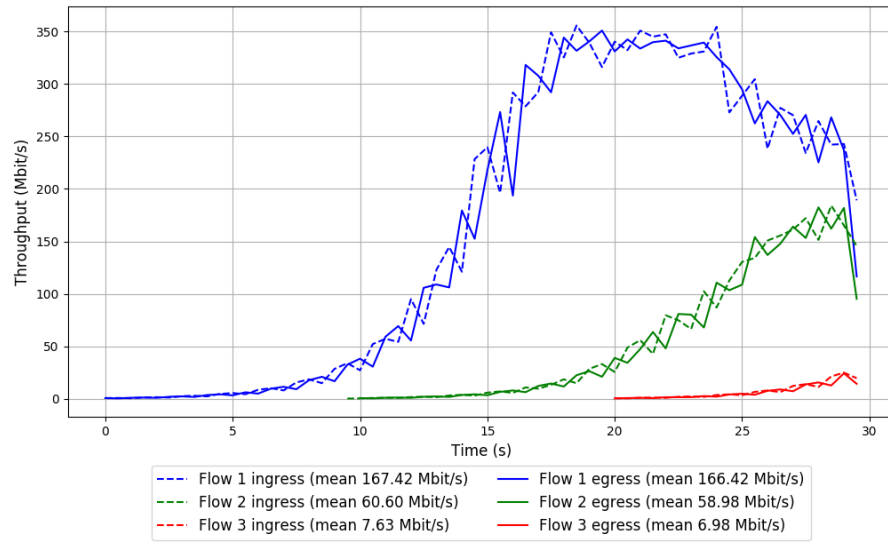
-- Flow 3:

Average throughput: 6.98 Mbit/s

95th percentile per-packet one-way delay: 166.052 ms

Loss rate: 11.27%

## Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-09-08 11:29:30

End at: 2017-09-08 11:30:00

# Below is generated by plot.py at 2017-09-08 16:08:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 204.70 Mbit/s

95th percentile per-packet one-way delay: 184.576 ms

Loss rate: 1.97%

-- Flow 1:

Average throughput: 163.00 Mbit/s

95th percentile per-packet one-way delay: 184.899 ms

Loss rate: 1.17%

-- Flow 2:

Average throughput: 59.41 Mbit/s

95th percentile per-packet one-way delay: 184.373 ms

Loss rate: 4.57%

-- Flow 3:

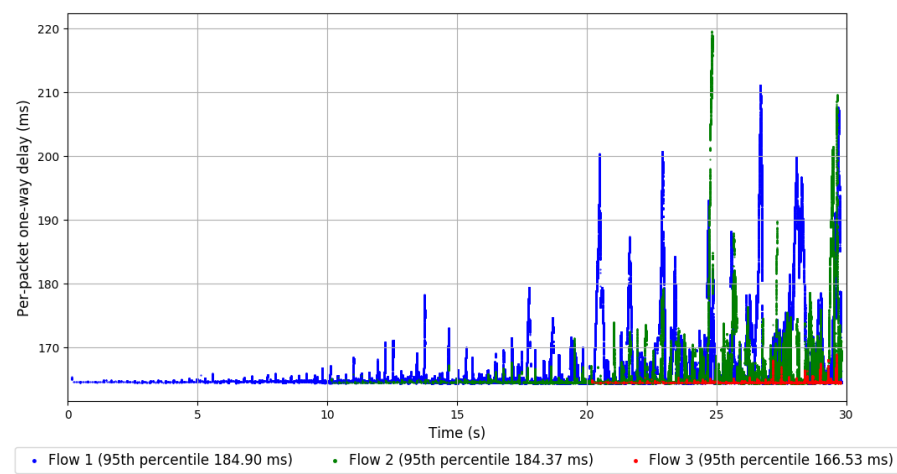
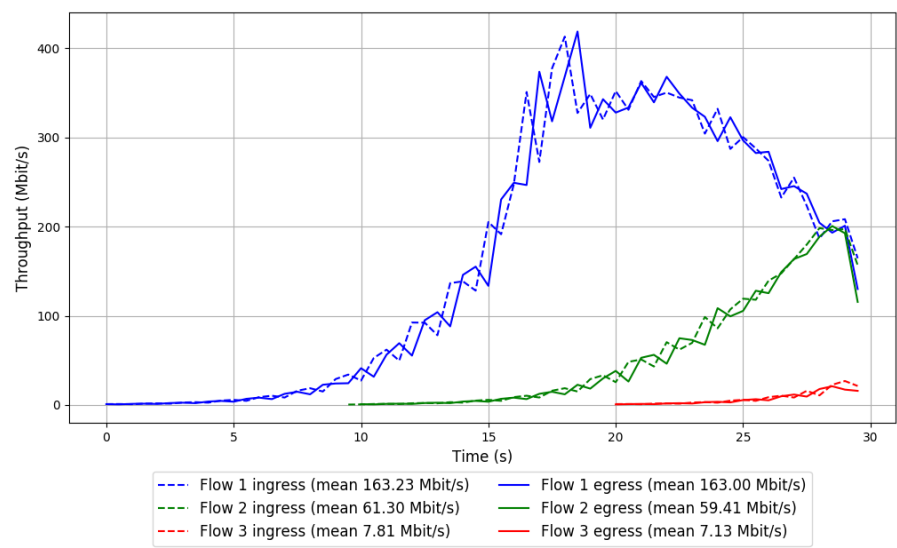
Average throughput: 7.13 Mbit/s

95th percentile per-packet one-way delay: 166.533 ms

Loss rate: 11.50%



Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-09-08 11:43:27

End at: 2017-09-08 11:43:57

# Below is generated by plot.py at 2017-09-08 16:08:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 205.13 Mbit/s

95th percentile per-packet one-way delay: 183.447 ms

Loss rate: 2.10%

-- Flow 1:

Average throughput: 163.39 Mbit/s

95th percentile per-packet one-way delay: 184.585 ms

Loss rate: 1.24%

-- Flow 2:

Average throughput: 59.43 Mbit/s

95th percentile per-packet one-way delay: 178.634 ms

Loss rate: 4.95%

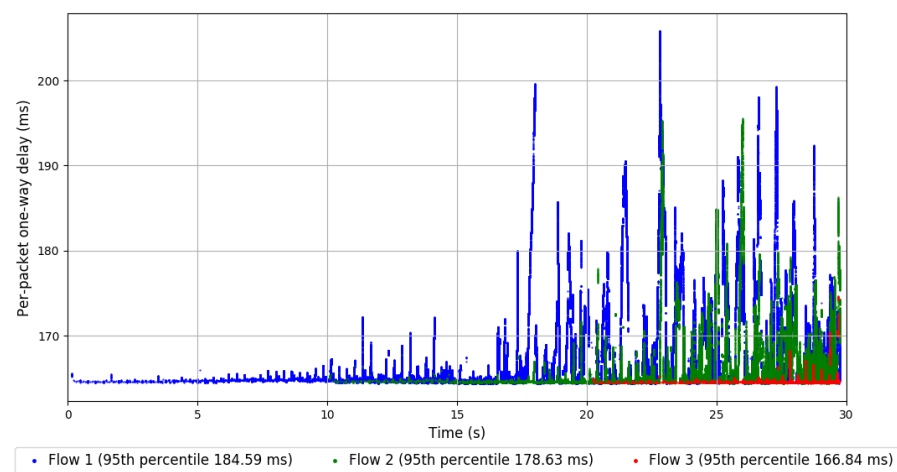
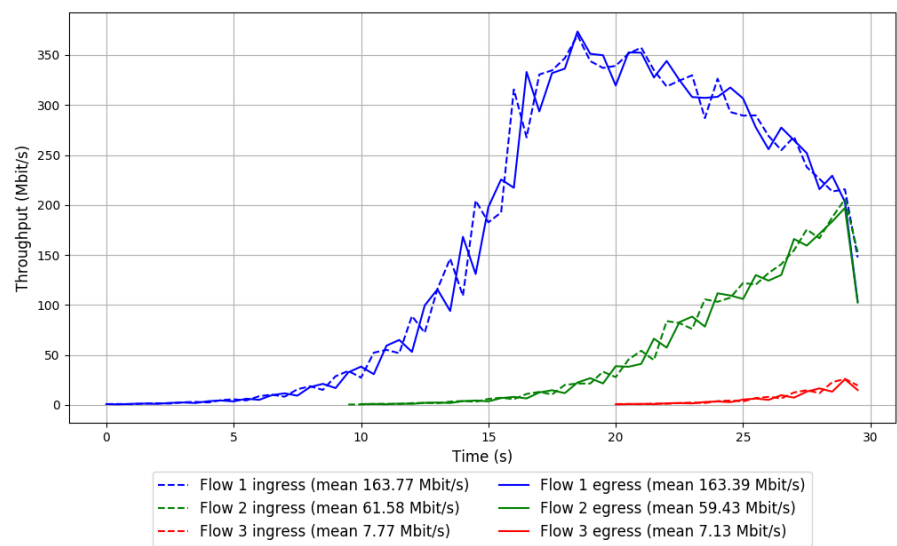
-- Flow 3:

Average throughput: 7.13 Mbit/s

95th percentile per-packet one-way delay: 166.836 ms

Loss rate: 11.01%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-09-08 11:57:03

End at: 2017-09-08 11:57:33

# Below is generated by plot.py at 2017-09-08 16:09:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 199.52 Mbit/s

95th percentile per-packet one-way delay: 201.930 ms

Loss rate: 2.26%

-- Flow 1:

Average throughput: 155.42 Mbit/s

95th percentile per-packet one-way delay: 205.968 ms

Loss rate: 1.45%

-- Flow 2:

Average throughput: 63.16 Mbit/s

95th percentile per-packet one-way delay: 179.982 ms

Loss rate: 4.66%

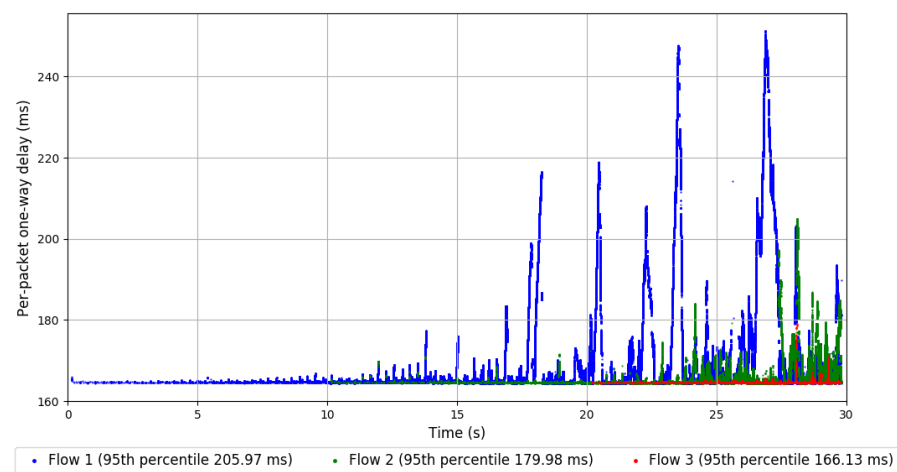
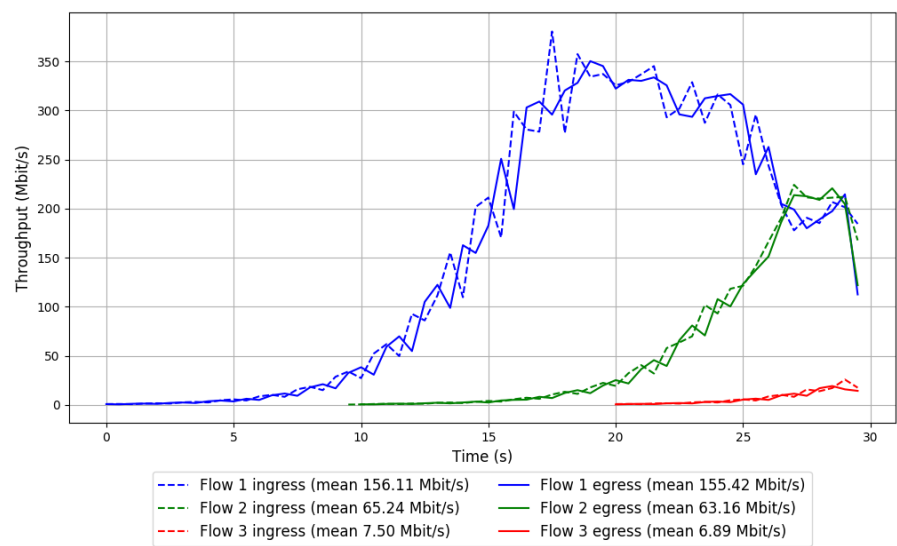
-- Flow 3:

Average throughput: 6.89 Mbit/s

95th percentile per-packet one-way delay: 166.126 ms

Loss rate: 10.94%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-09-08 12:10:18

End at: 2017-09-08 12:10:48

# Below is generated by plot.py at 2017-09-08 16:09:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 204.35 Mbit/s

95th percentile per-packet one-way delay: 188.737 ms

Loss rate: 2.17%

-- Flow 1:

Average throughput: 161.57 Mbit/s

95th percentile per-packet one-way delay: 188.724 ms

Loss rate: 1.49%

-- Flow 2:

Average throughput: 61.01 Mbit/s

95th percentile per-packet one-way delay: 190.042 ms

Loss rate: 4.28%

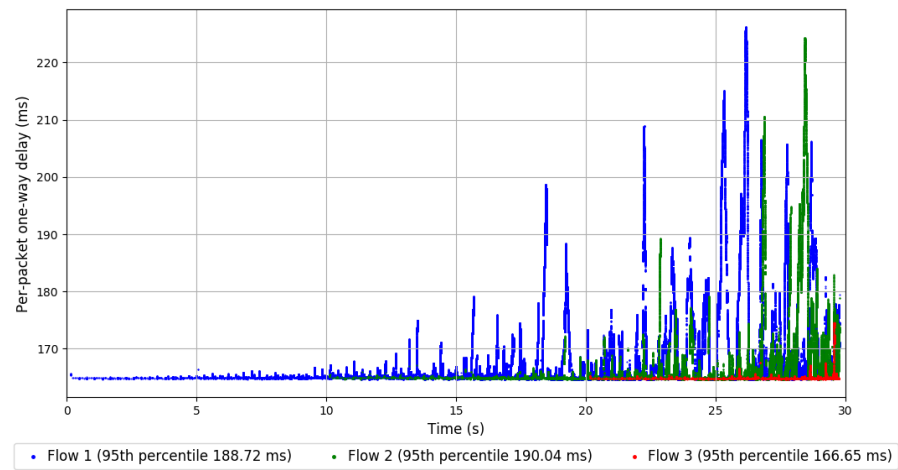
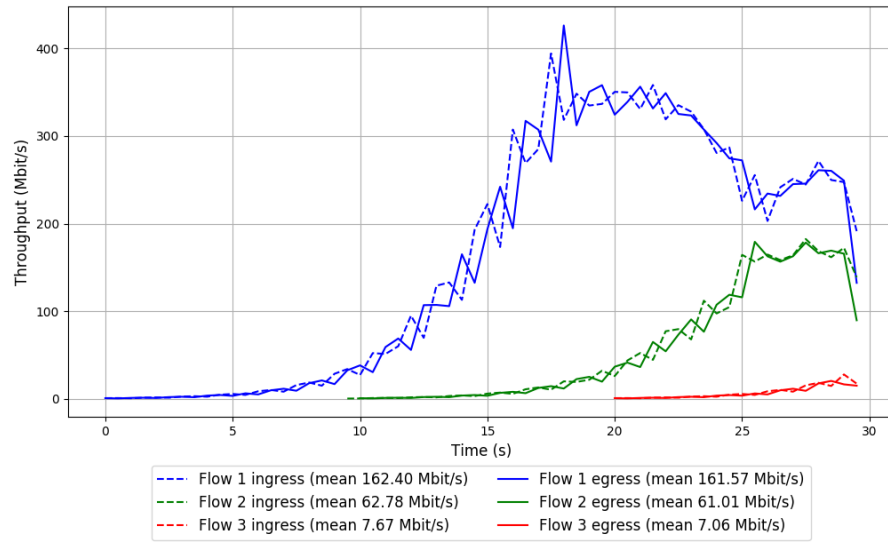
-- Flow 3:

Average throughput: 7.06 Mbit/s

95th percentile per-packet one-way delay: 166.647 ms

Loss rate: 10.80%

## Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-09-08 12:23:32

End at: 2017-09-08 12:24:02

# Below is generated by plot.py at 2017-09-08 16:09:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 198.87 Mbit/s

95th percentile per-packet one-way delay: 184.742 ms

Loss rate: 2.12%

-- Flow 1:

Average throughput: 156.92 Mbit/s

95th percentile per-packet one-way delay: 185.796 ms

Loss rate: 1.35%

-- Flow 2:

Average throughput: 59.96 Mbit/s

95th percentile per-packet one-way delay: 181.965 ms

Loss rate: 4.54%

-- Flow 3:

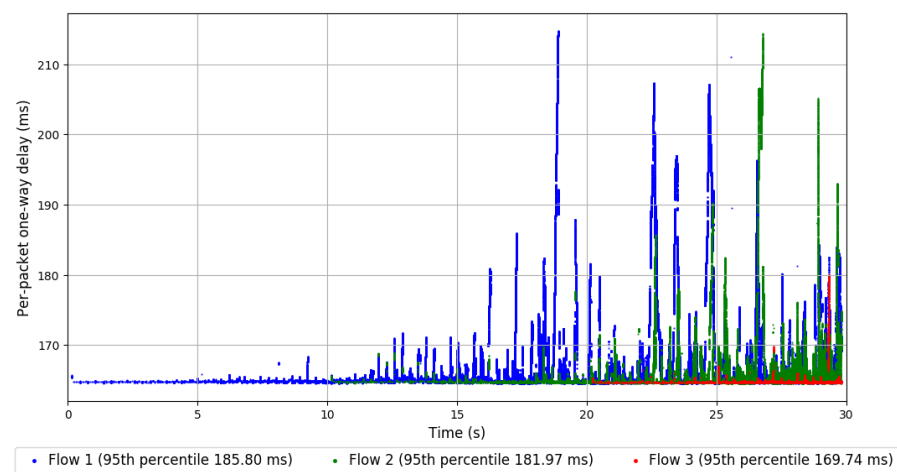
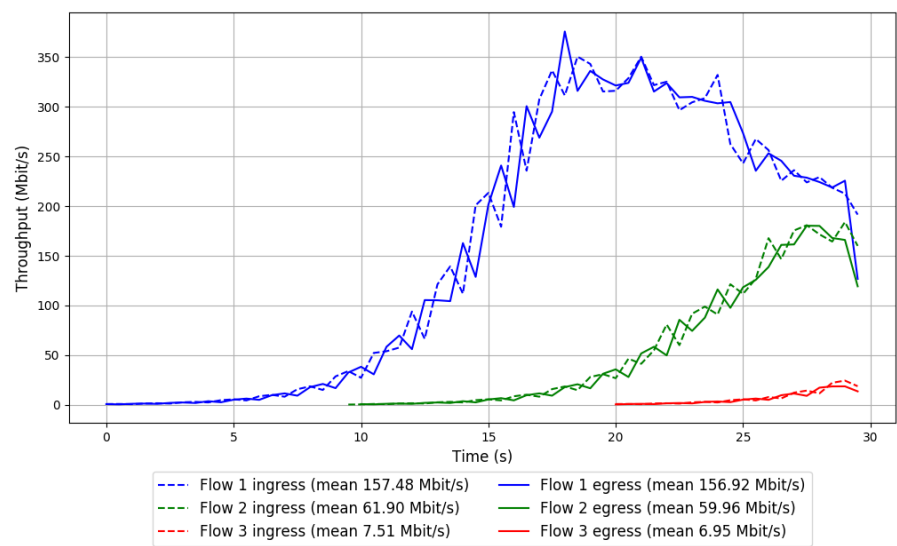
Average throughput: 6.95 Mbit/s

95th percentile per-packet one-way delay: 169.741 ms

Loss rate: 10.36%



Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-09-08 12:36:56

End at: 2017-09-08 12:37:26

# Below is generated by plot.py at 2017-09-08 16:10:06

# Datalink statistics

-- Total of 3 flows:

Average throughput: 198.59 Mbit/s

95th percentile per-packet one-way delay: 203.969 ms

Loss rate: 2.24%

-- Flow 1:

Average throughput: 156.20 Mbit/s

95th percentile per-packet one-way delay: 212.018 ms

Loss rate: 1.42%

-- Flow 2:

Average throughput: 60.47 Mbit/s

95th percentile per-packet one-way delay: 190.337 ms

Loss rate: 4.79%

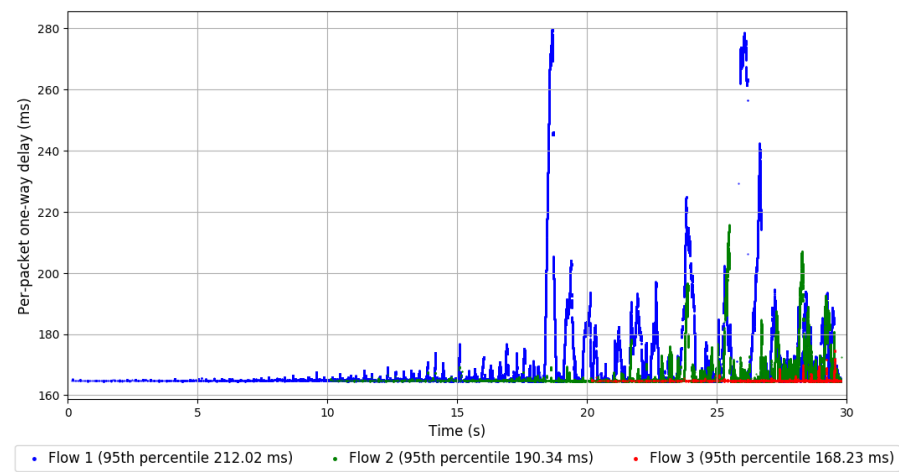
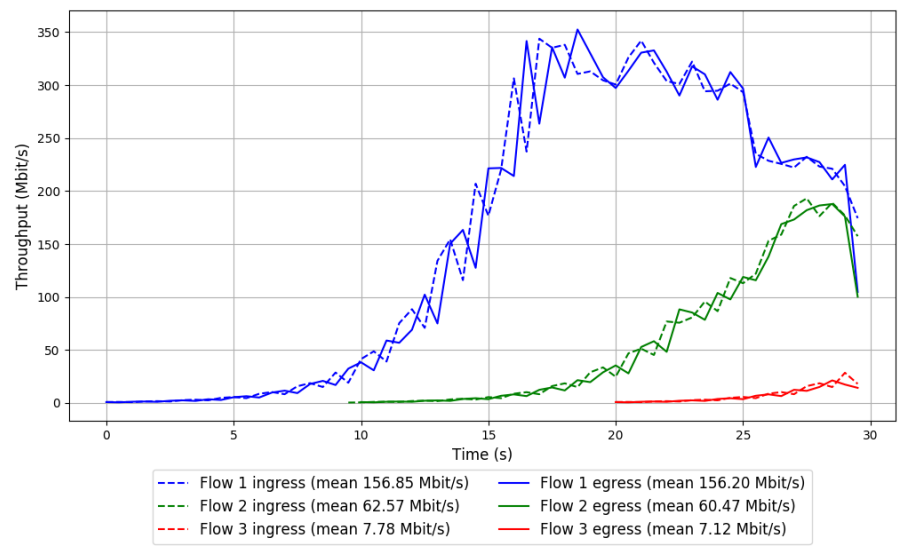
-- Flow 3:

Average throughput: 7.12 Mbit/s

95th percentile per-packet one-way delay: 168.228 ms

Loss rate: 11.18%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-09-08 12:50:15

End at: 2017-09-08 12:50:45

# Below is generated by plot.py at 2017-09-08 16:10:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 203.98 Mbit/s

95th percentile per-packet one-way delay: 184.832 ms

Loss rate: 2.15%

-- Flow 1:

Average throughput: 167.11 Mbit/s

95th percentile per-packet one-way delay: 185.919 ms

Loss rate: 1.24%

-- Flow 2:

Average throughput: 52.25 Mbit/s

95th percentile per-packet one-way delay: 179.299 ms

Loss rate: 5.69%

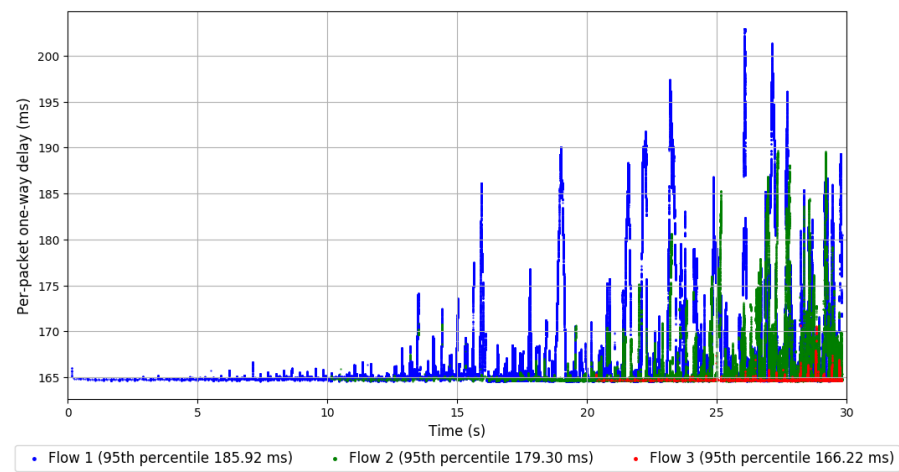
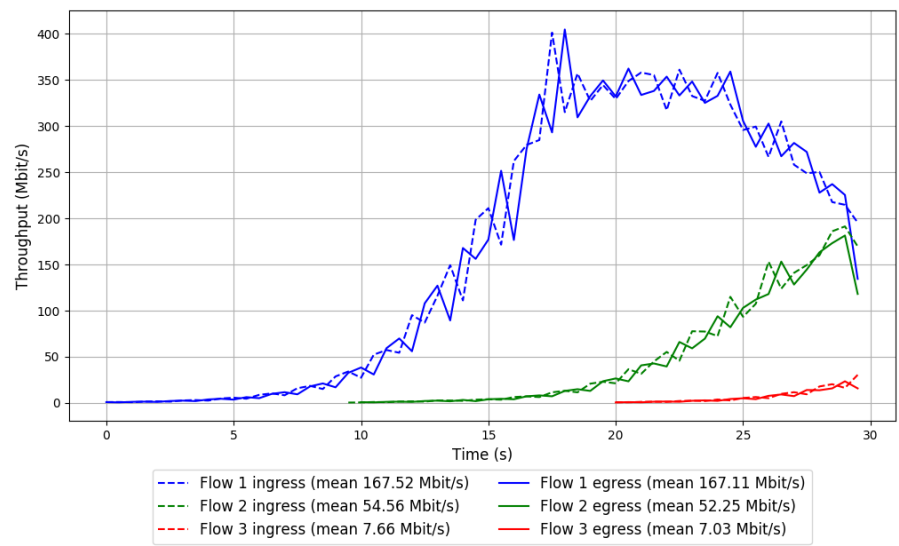
-- Flow 3:

Average throughput: 7.03 Mbit/s

95th percentile per-packet one-way delay: 166.219 ms

Loss rate: 11.16%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: 2017-09-08 13:03:39

End at: 2017-09-08 13:04:09

# Below is generated by plot.py at 2017-09-08 16:10:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 198.55 Mbit/s

95th percentile per-packet one-way delay: 188.020 ms

Loss rate: 2.22%

-- Flow 1:

Average throughput: 152.02 Mbit/s

95th percentile per-packet one-way delay: 193.398 ms

Loss rate: 1.34%

-- Flow 2:

Average throughput: 66.72 Mbit/s

95th percentile per-packet one-way delay: 173.613 ms

Loss rate: 4.66%

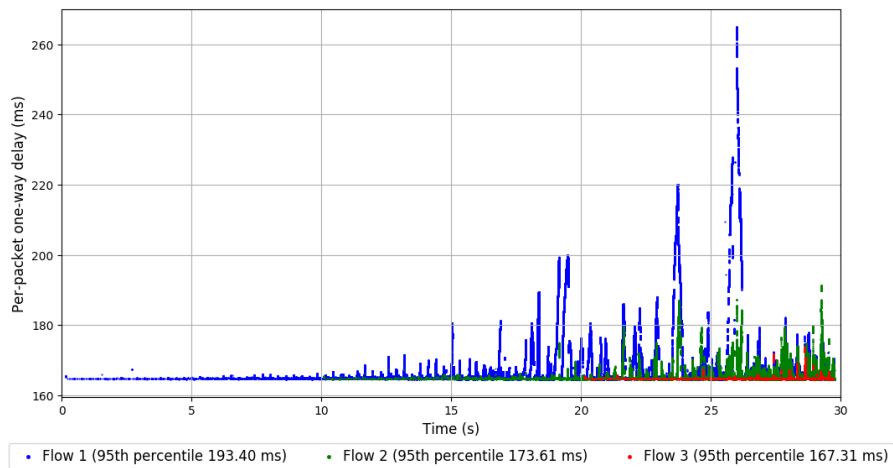
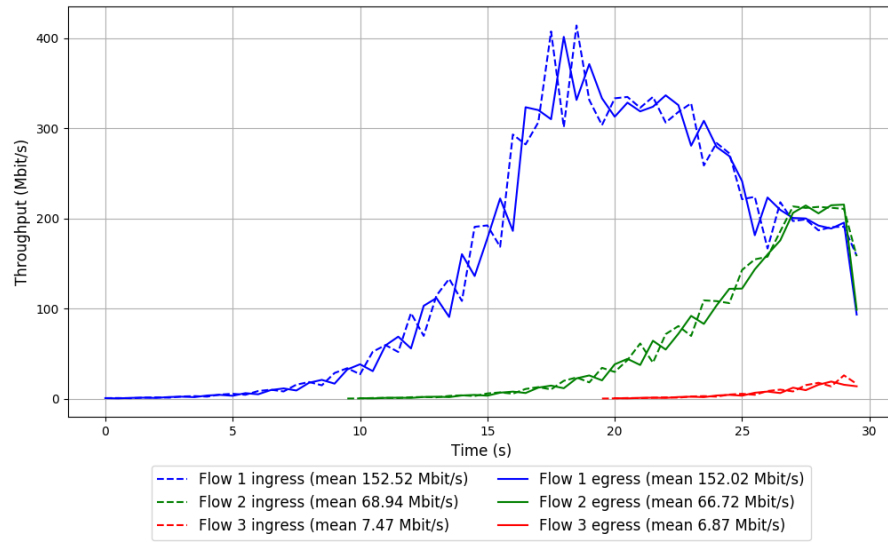
-- Flow 3:

Average throughput: 6.87 Mbit/s

95th percentile per-packet one-way delay: 167.309 ms

Loss rate: 10.89%

## Run 10: Report of CalibratedKoho — Data Link



Run 1: Statistics of Copa

Start at: 2017-09-08 11:07:07

End at: 2017-09-08 11:07:37

# Below is generated by plot.py at 2017-09-08 16:10:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 41.99 Mbit/s

95th percentile per-packet one-way delay: 164.999 ms

Loss rate: 3.10%

-- Flow 1:

Average throughput: 8.17 Mbit/s

95th percentile per-packet one-way delay: 164.522 ms

Loss rate: 1.36%

-- Flow 2:

Average throughput: 41.64 Mbit/s

95th percentile per-packet one-way delay: 164.964 ms

Loss rate: 1.55%

-- Flow 3:

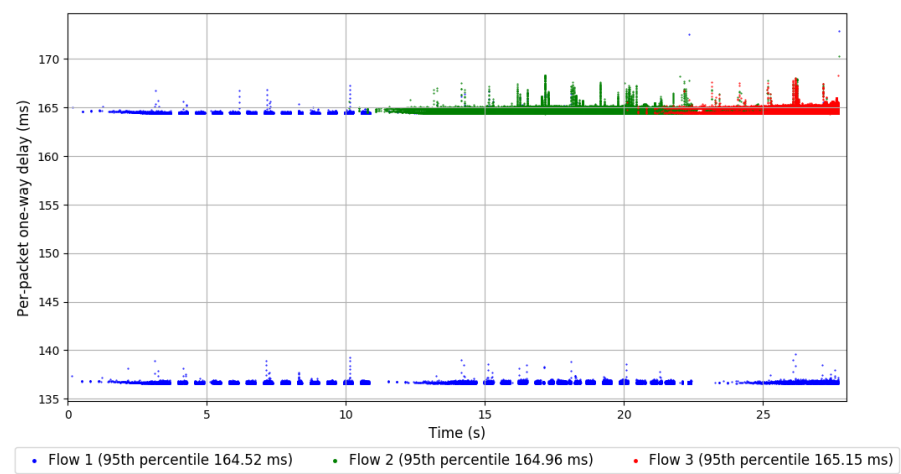
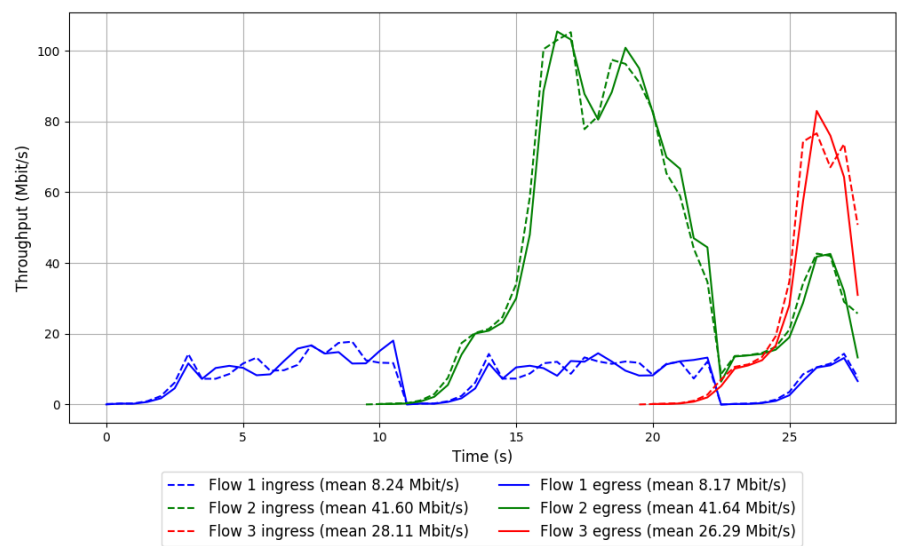
Average throughput: 26.29 Mbit/s

95th percentile per-packet one-way delay: 165.150 ms

Loss rate: 10.11%



Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-09-08 11:21:02

End at: 2017-09-08 11:21:32

# Below is generated by plot.py at 2017-09-08 16:11:10

# Datalink statistics

-- Total of 3 flows:

Average throughput: 72.19 Mbit/s

95th percentile per-packet one-way delay: 165.190 ms

Loss rate: 1.63%

-- Flow 1:

Average throughput: 48.01 Mbit/s

95th percentile per-packet one-way delay: 165.125 ms

Loss rate: 1.26%

-- Flow 2:

Average throughput: 38.20 Mbit/s

95th percentile per-packet one-way delay: 165.273 ms

Loss rate: 2.34%

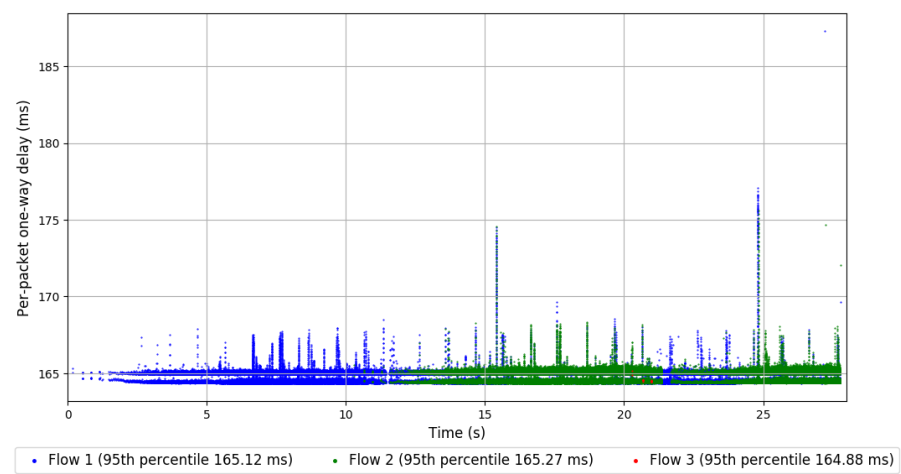
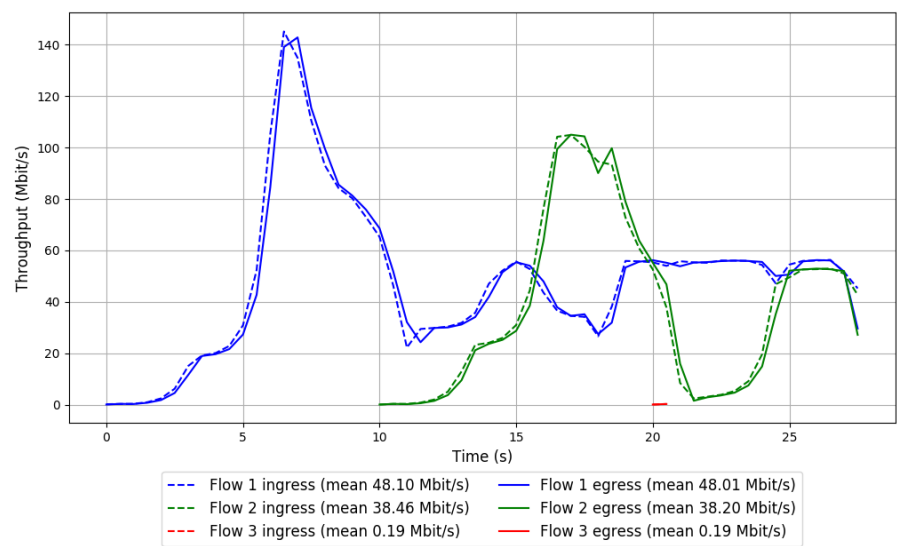
-- Flow 3:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 164.880 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-09-08 11:35:00

End at: 2017-09-08 11:35:30

# Below is generated by plot.py at 2017-09-08 16:11:10

# Datalink statistics

-- Total of 3 flows:

Average throughput: 24.71 Mbit/s

95th percentile per-packet one-way delay: 164.539 ms

Loss rate: 4.03%

-- Flow 1:

Average throughput: 11.49 Mbit/s

95th percentile per-packet one-way delay: 164.503 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 10.87 Mbit/s

95th percentile per-packet one-way delay: 164.533 ms

Loss rate: 3.66%

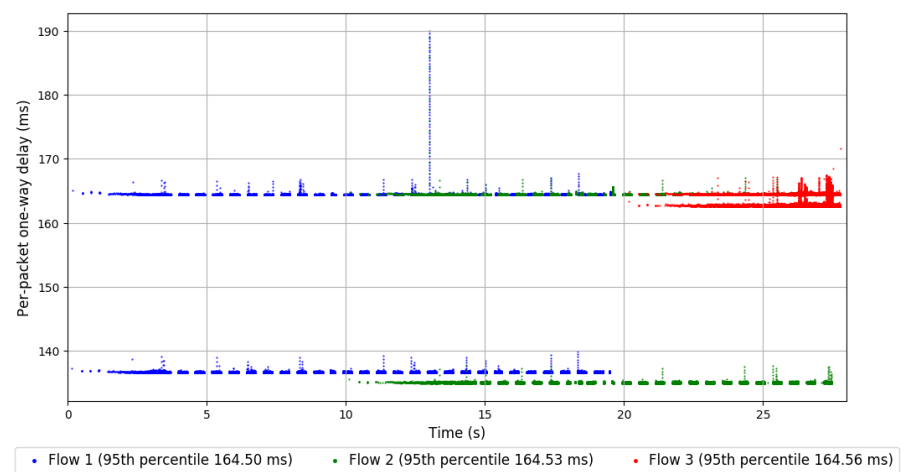
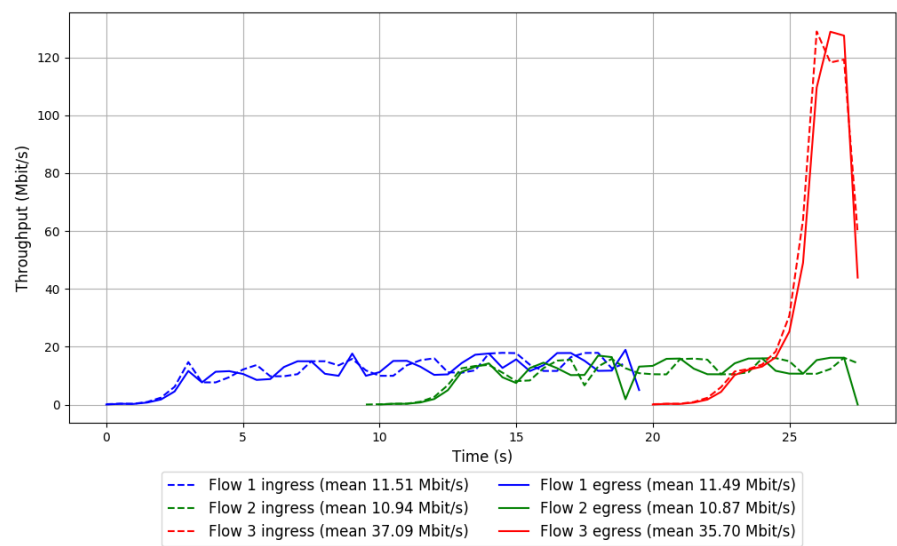
-- Flow 3:

Average throughput: 35.70 Mbit/s

95th percentile per-packet one-way delay: 164.563 ms

Loss rate: 7.34%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-09-08 11:49:02

End at: 2017-09-08 11:49:32

# Below is generated by plot.py at 2017-09-08 16:11:10

# Datalink statistics

-- Total of 3 flows:

Average throughput: 16.63 Mbit/s

95th percentile per-packet one-way delay: 164.512 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 9.36 Mbit/s

95th percentile per-packet one-way delay: 164.492 ms

Loss rate: 0.93%

-- Flow 2:

Average throughput: 8.51 Mbit/s

95th percentile per-packet one-way delay: 164.530 ms

Loss rate: 0.00%

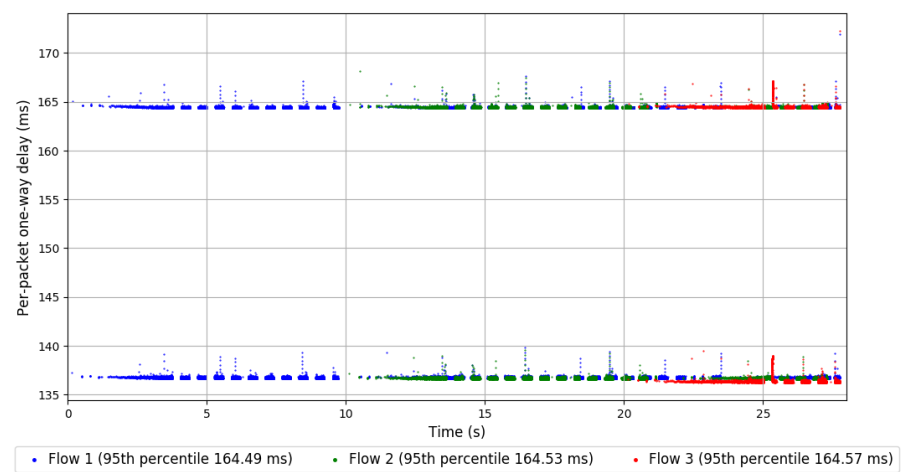
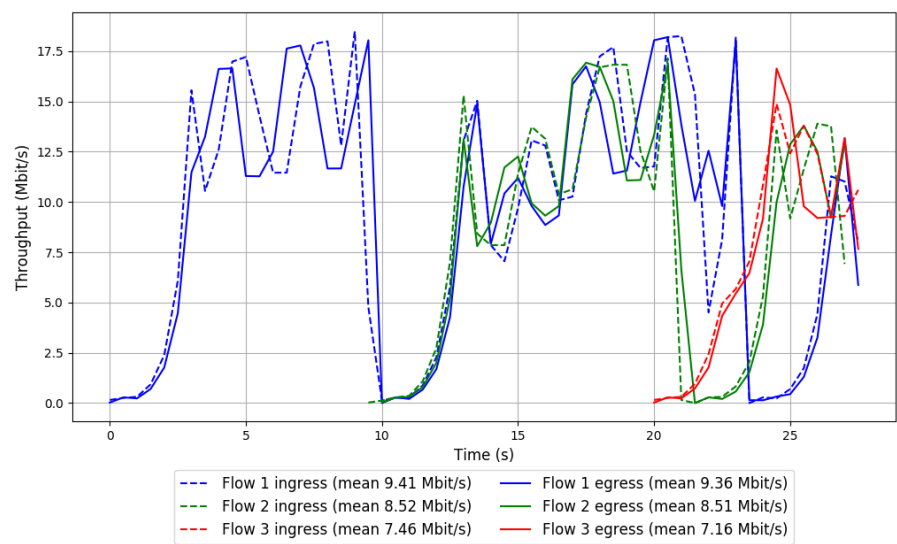
-- Flow 3:

Average throughput: 7.16 Mbit/s

95th percentile per-packet one-way delay: 164.569 ms

Loss rate: 5.45%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-09-08 12:02:26

End at: 2017-09-08 12:02:56

# Below is generated by plot.py at 2017-09-08 16:11:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 16.30 Mbit/s

95th percentile per-packet one-way delay: 164.706 ms

Loss rate: 0.97%

-- Flow 1:

Average throughput: 10.45 Mbit/s

95th percentile per-packet one-way delay: 164.700 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 9.19 Mbit/s

95th percentile per-packet one-way delay: 164.716 ms

Loss rate: 1.74%

-- Flow 3:

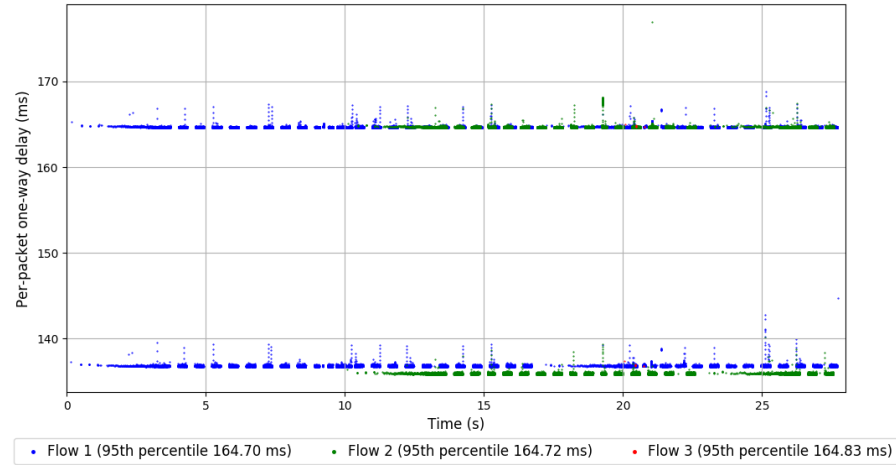
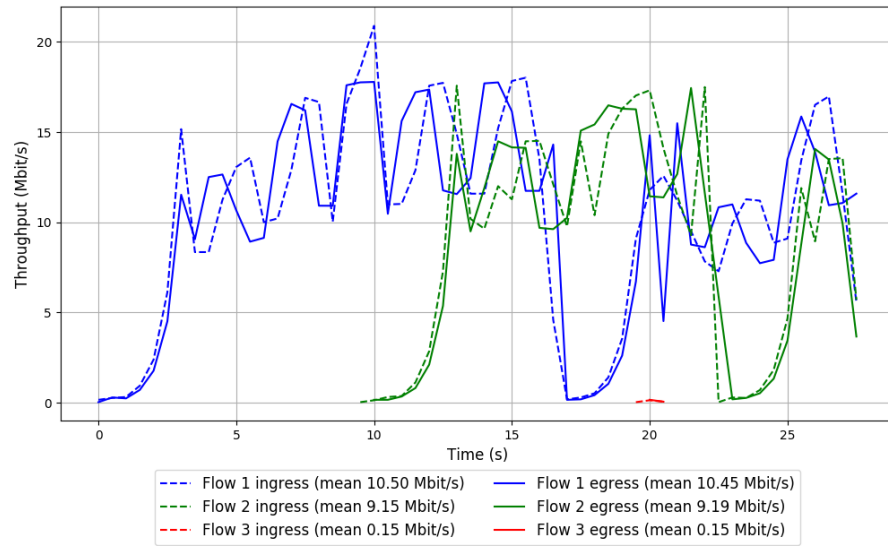
Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 164.831 ms

Loss rate: 0.00%



## Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-09-08 12:15:37

End at: 2017-09-08 12:16:07

# Below is generated by plot.py at 2017-09-08 16:11:18

# Datalink statistics

-- Total of 3 flows:

Average throughput: 16.35 Mbit/s

95th percentile per-packet one-way delay: 164.715 ms

Loss rate: 1.22%

-- Flow 1:

Average throughput: 8.99 Mbit/s

95th percentile per-packet one-way delay: 164.701 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 10.11 Mbit/s

95th percentile per-packet one-way delay: 164.755 ms

Loss rate: 0.00%

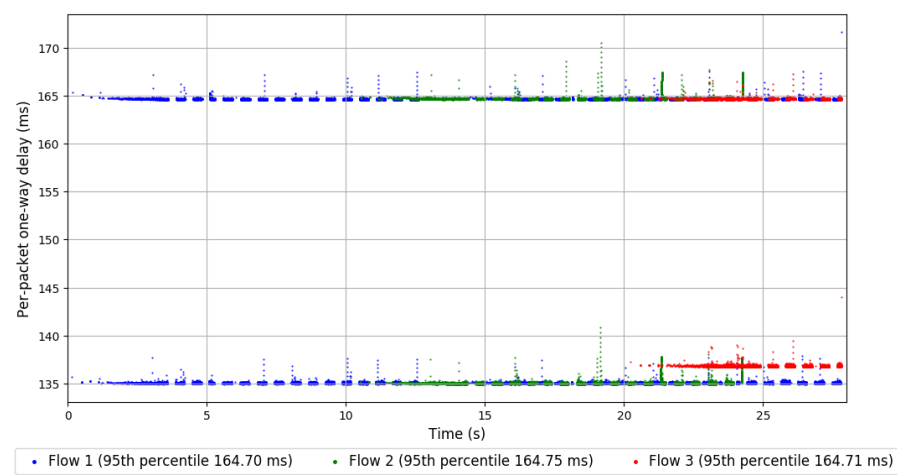
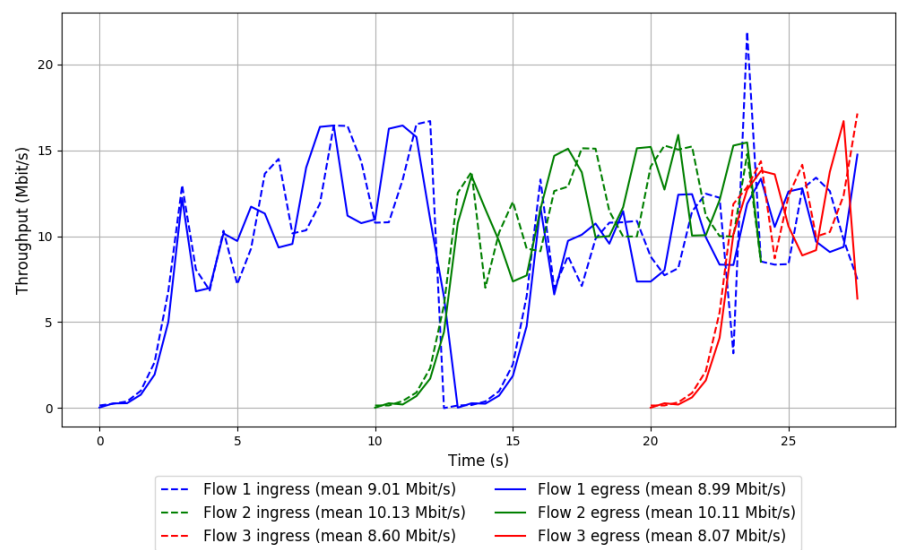
-- Flow 3:

Average throughput: 8.07 Mbit/s

95th percentile per-packet one-way delay: 164.706 ms

Loss rate: 8.08%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-09-08 12:28:57

End at: 2017-09-08 12:29:27

# Below is generated by plot.py at 2017-09-08 16:11:18

# Datalink statistics

-- Total of 3 flows:

Average throughput: 14.99 Mbit/s

95th percentile per-packet one-way delay: 164.712 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 10.66 Mbit/s

95th percentile per-packet one-way delay: 164.708 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 10.18 Mbit/s

95th percentile per-packet one-way delay: 164.725 ms

Loss rate: 0.00%

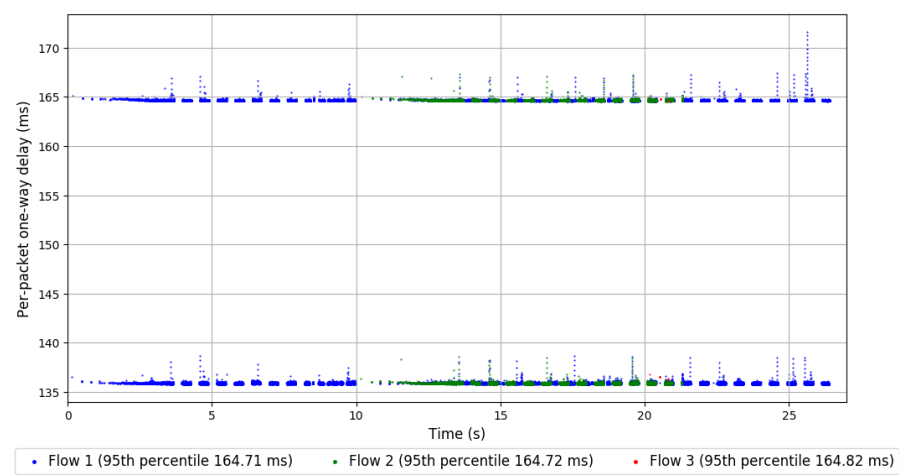
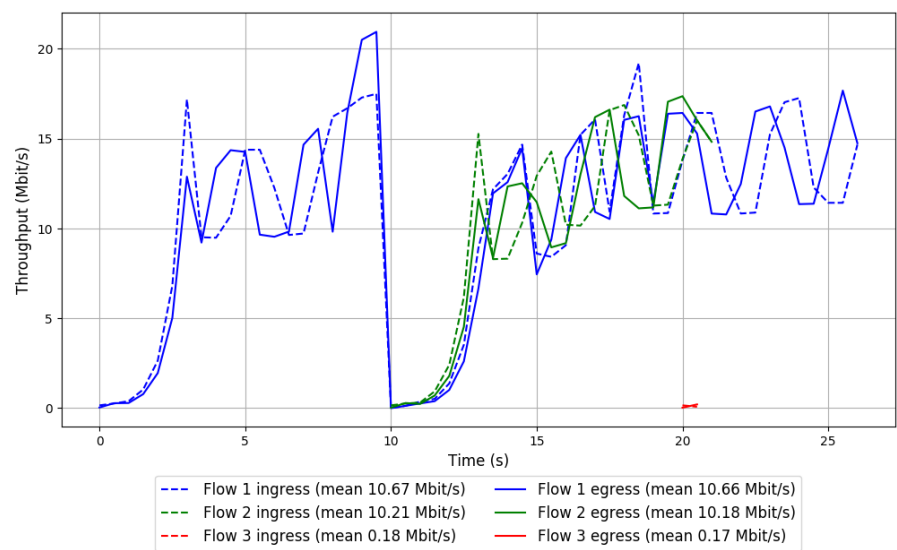
-- Flow 3:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 164.824 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-09-08 12:42:18

End at: 2017-09-08 12:42:48

# Below is generated by plot.py at 2017-09-08 16:11:23

# Datalink statistics

-- Total of 3 flows:

Average throughput: 12.03 Mbit/s

95th percentile per-packet one-way delay: 164.722 ms

Loss rate: 2.10%

-- Flow 1:

Average throughput: 9.56 Mbit/s

95th percentile per-packet one-way delay: 164.719 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 164.829 ms

Loss rate: 0.00%

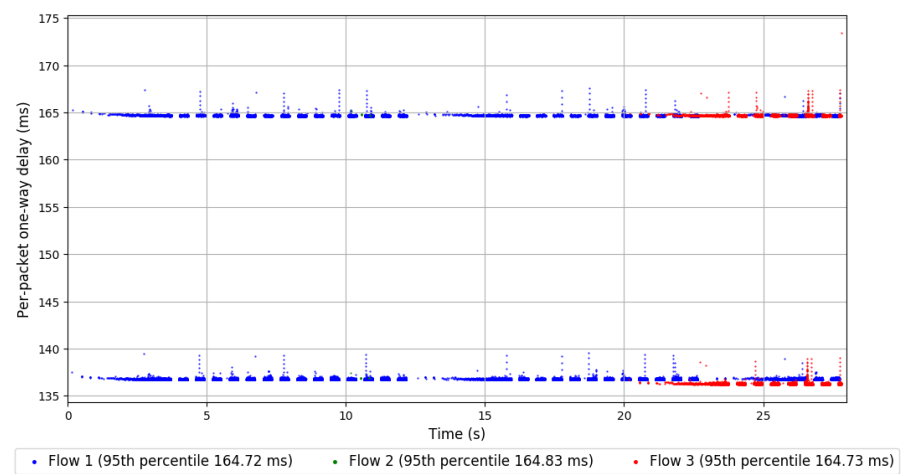
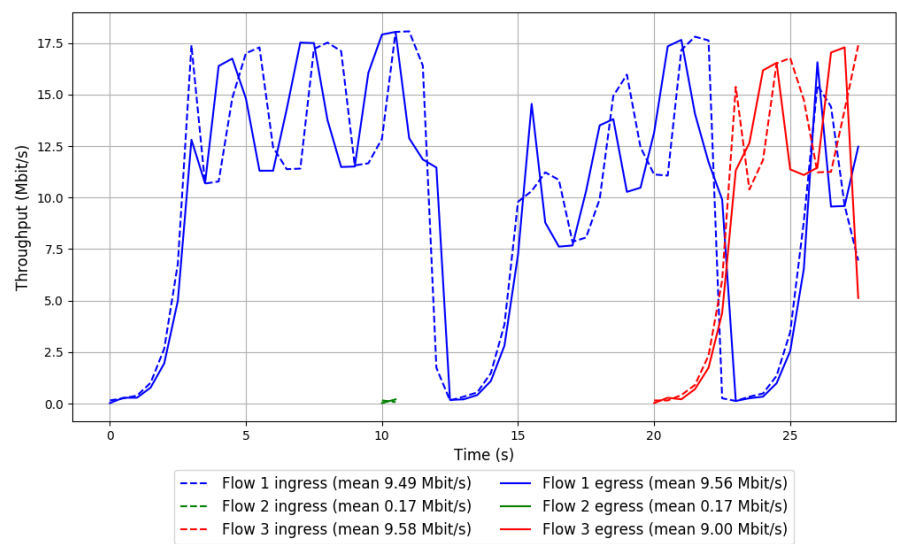
-- Flow 3:

Average throughput: 9.00 Mbit/s

95th percentile per-packet one-way delay: 164.733 ms

Loss rate: 8.19%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-09-08 12:55:41

End at: 2017-09-08 12:56:11

# Below is generated by plot.py at 2017-09-08 16:11:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 15.92 Mbit/s

95th percentile per-packet one-way delay: 164.758 ms

Loss rate: 2.34%

-- Flow 1:

Average throughput: 9.32 Mbit/s

95th percentile per-packet one-way delay: 164.739 ms

Loss rate: 1.36%

-- Flow 2:

Average throughput: 10.90 Mbit/s

95th percentile per-packet one-way delay: 164.979 ms

Loss rate: 0.00%

-- Flow 3:

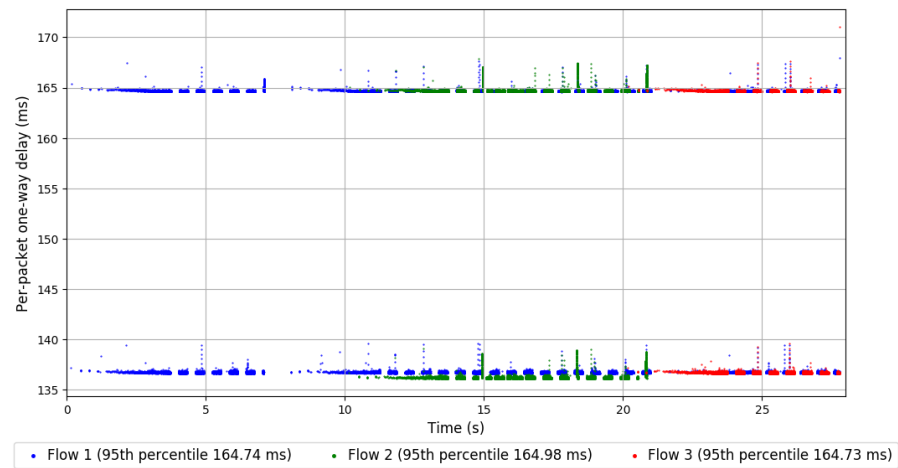
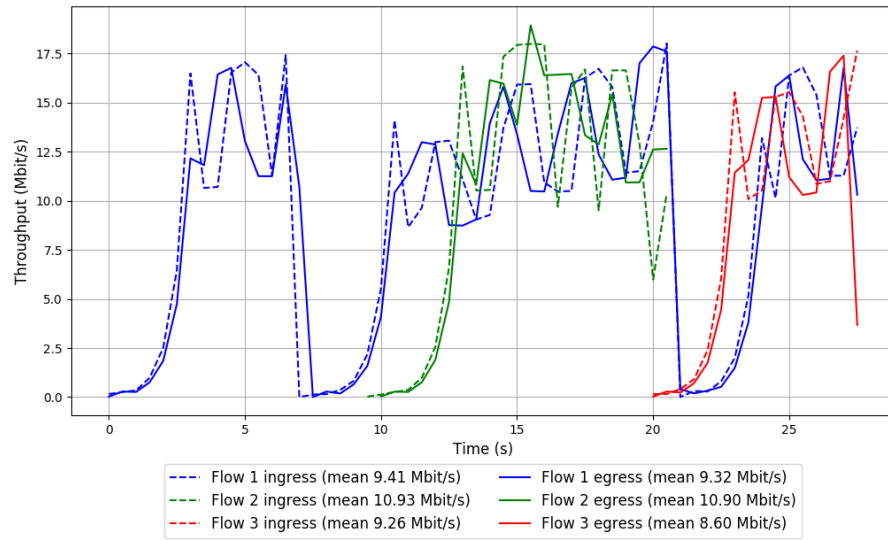
Average throughput: 8.60 Mbit/s

95th percentile per-packet one-way delay: 164.730 ms

Loss rate: 9.64%



## Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-09-08 13:09:00

End at: 2017-09-08 13:09:30

# Below is generated by plot.py at 2017-09-08 16:11:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 8.71 Mbit/s

95th percentile per-packet one-way delay: 164.745 ms

Loss rate: 3.23%

-- Flow 1:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 164.951 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 9.75 Mbit/s

95th percentile per-packet one-way delay: 164.742 ms

Loss rate: 1.22%

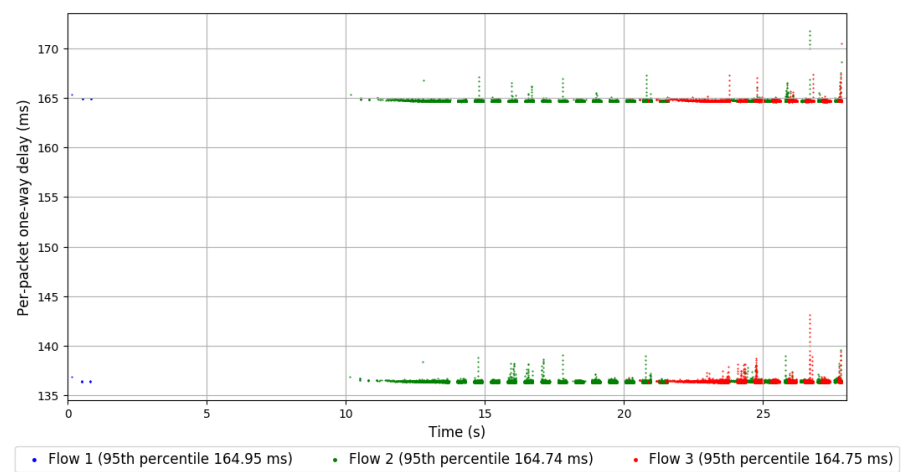
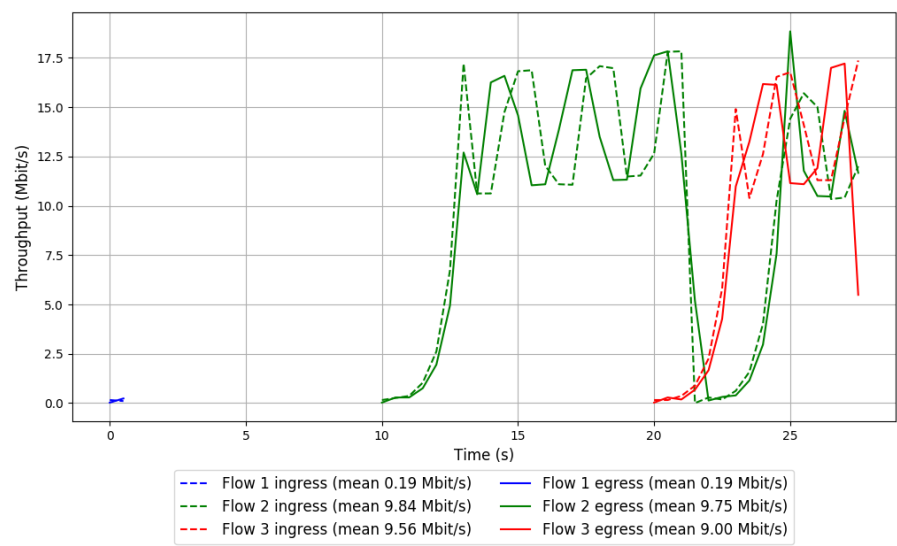
-- Flow 3:

Average throughput: 9.00 Mbit/s

95th percentile per-packet one-way delay: 164.752 ms

Loss rate: 7.95%

Run 10: Report of Copa — Data Link

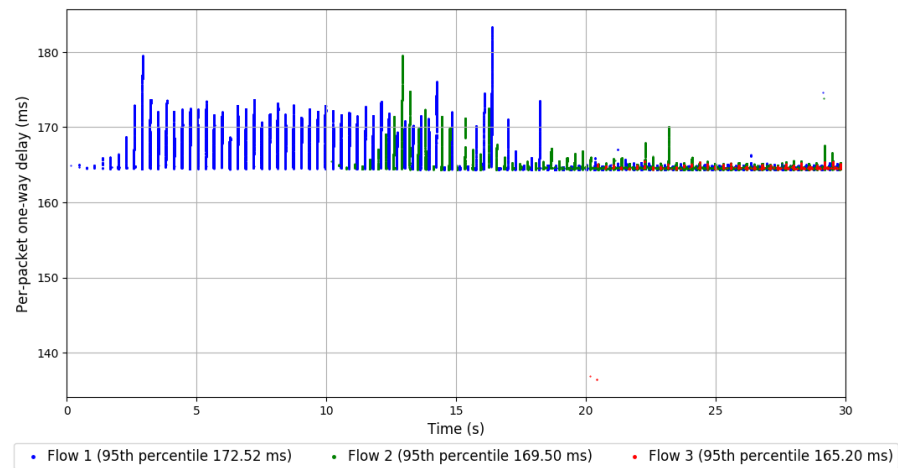
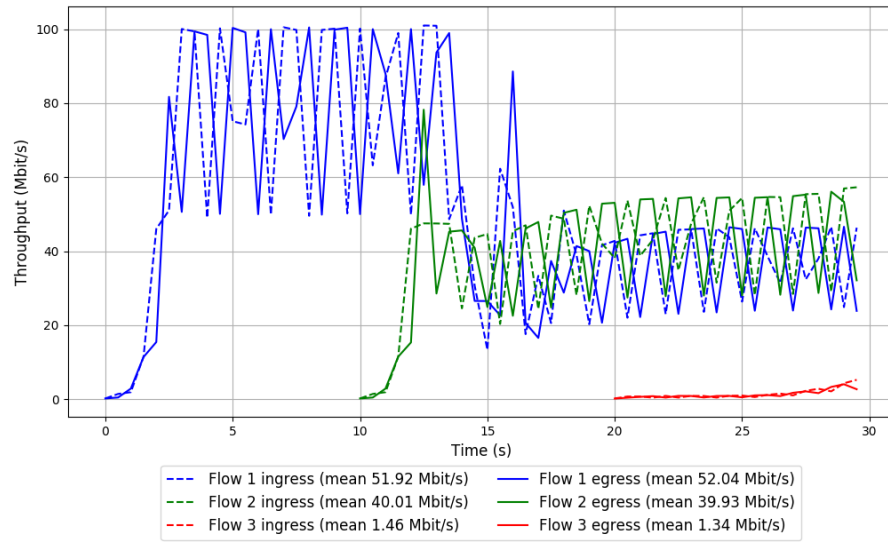


```
Run 1: Statistics of TCP Cubic

Start at: 2017-09-08 11:00:39
End at: 2017-09-08 11:01:09

# Below is generated by plot.py at 2017-09-08 16:11:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.92 Mbit/s
95th percentile per-packet one-way delay: 172.230 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 52.04 Mbit/s
95th percentile per-packet one-way delay: 172.516 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 39.93 Mbit/s
95th percentile per-packet one-way delay: 169.502 ms
Loss rate: 1.83%
-- Flow 3:
Average throughput: 1.34 Mbit/s
95th percentile per-packet one-way delay: 165.197 ms
Loss rate: 10.54%
```

# Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-09-08 11:14:36

End at: 2017-09-08 11:15:06

# Below is generated by plot.py at 2017-09-08 16:11:42

# Datalink statistics

-- Total of 3 flows:

Average throughput: 66.70 Mbit/s

95th percentile per-packet one-way delay: 172.815 ms

Loss rate: 2.91%

-- Flow 1:

Average throughput: 36.59 Mbit/s

95th percentile per-packet one-way delay: 170.192 ms

Loss rate: 1.19%

-- Flow 2:

Average throughput: 14.98 Mbit/s

95th percentile per-packet one-way delay: 168.995 ms

Loss rate: 6.84%

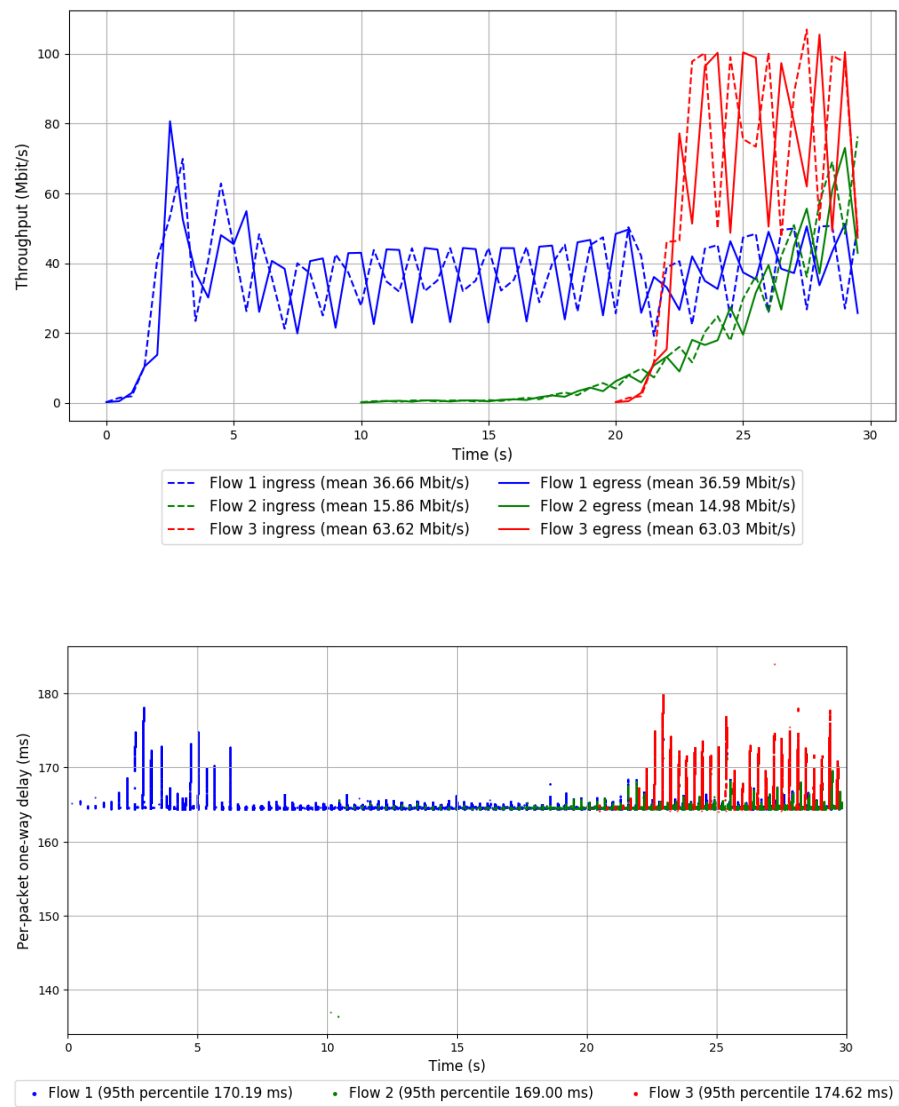
-- Flow 3:

Average throughput: 63.03 Mbit/s

95th percentile per-packet one-way delay: 174.624 ms

Loss rate: 3.94%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-09-08 11:28:36

End at: 2017-09-08 11:29:06

# Below is generated by plot.py at 2017-09-08 16:11:48

# Datalink statistics

-- Total of 3 flows:

Average throughput: 38.27 Mbit/s

95th percentile per-packet one-way delay: 172.857 ms

Loss rate: 2.11%

-- Flow 1:

Average throughput: 31.45 Mbit/s

95th percentile per-packet one-way delay: 172.721 ms

Loss rate: 1.11%

-- Flow 2:

Average throughput: 8.73 Mbit/s

95th percentile per-packet one-way delay: 173.147 ms

Loss rate: 5.63%

-- Flow 3:

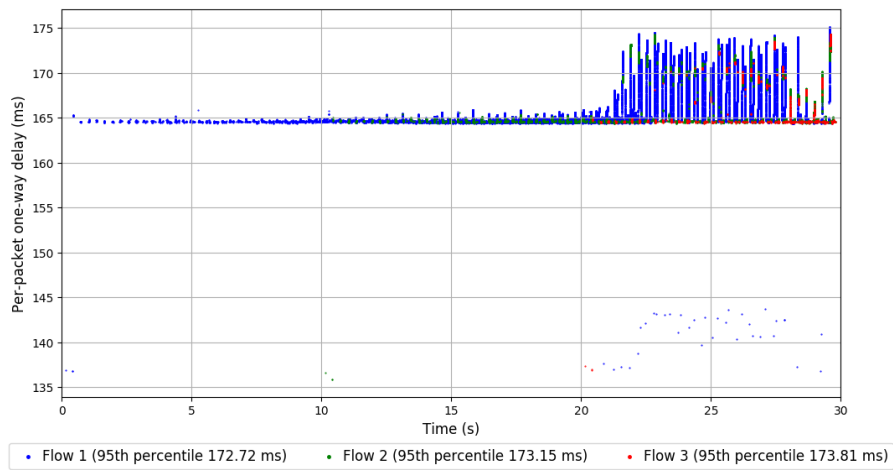
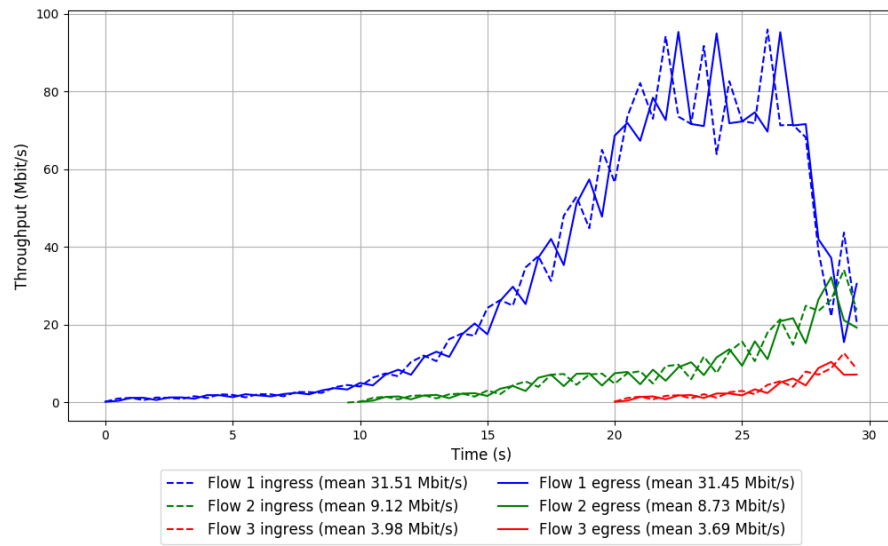
Average throughput: 3.69 Mbit/s

95th percentile per-packet one-way delay: 173.813 ms

Loss rate: 9.83%



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



Run 4: Statistics of TCP Cubic

Start at: 2017-09-08 11:42:31

End at: 2017-09-08 11:43:01

# Below is generated by plot.py at 2017-09-08 16:11:55

# Datalink statistics

-- Total of 3 flows:

Average throughput: 67.14 Mbit/s

95th percentile per-packet one-way delay: 174.412 ms

Loss rate: 2.05%

-- Flow 1:

Average throughput: 42.27 Mbit/s

95th percentile per-packet one-way delay: 174.108 ms

Loss rate: 1.87%

-- Flow 2:

Average throughput: 36.04 Mbit/s

95th percentile per-packet one-way delay: 174.722 ms

Loss rate: 1.94%

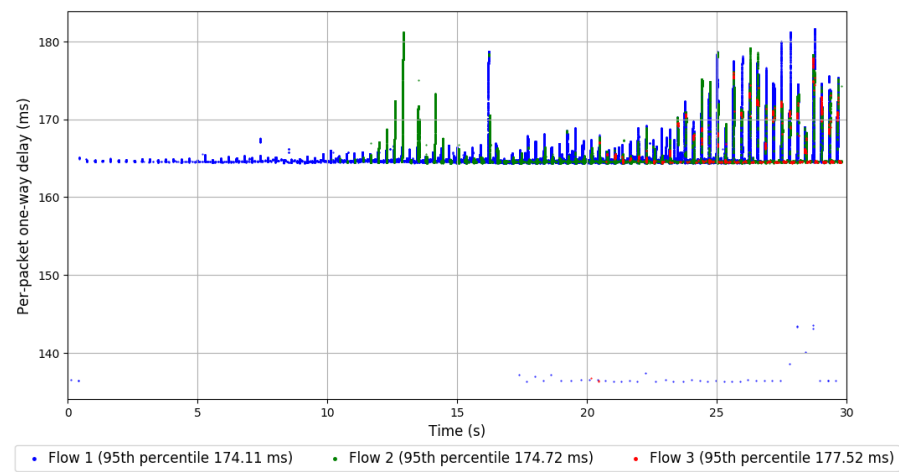
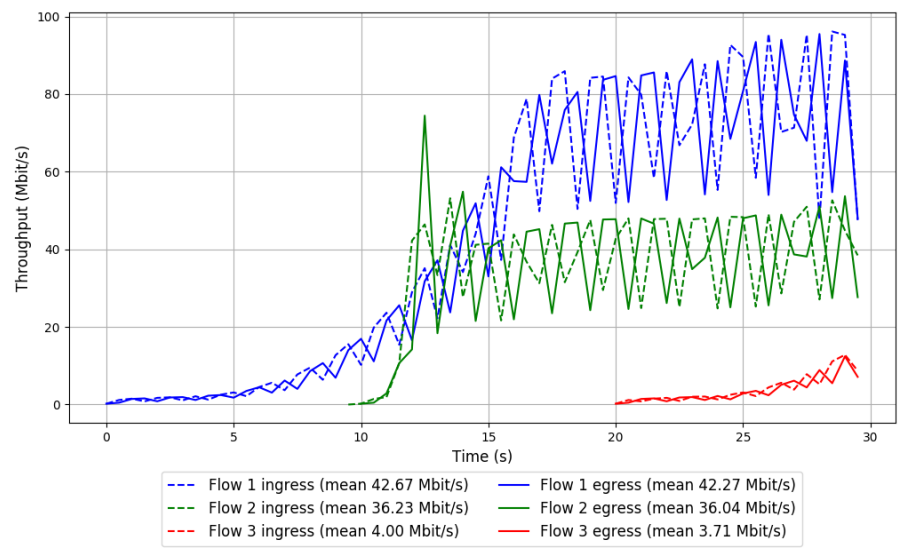
-- Flow 3:

Average throughput: 3.71 Mbit/s

95th percentile per-packet one-way delay: 177.519 ms

Loss rate: 9.82%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-09-08 11:56:11

End at: 2017-09-08 11:56:41

# Below is generated by plot.py at 2017-09-08 16:11:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 42.22 Mbit/s

95th percentile per-packet one-way delay: 171.741 ms

Loss rate: 3.26%

-- Flow 1:

Average throughput: 27.83 Mbit/s

95th percentile per-packet one-way delay: 172.463 ms

Loss rate: 2.86%

-- Flow 2:

Average throughput: 20.23 Mbit/s

95th percentile per-packet one-way delay: 166.850 ms

Loss rate: 3.45%

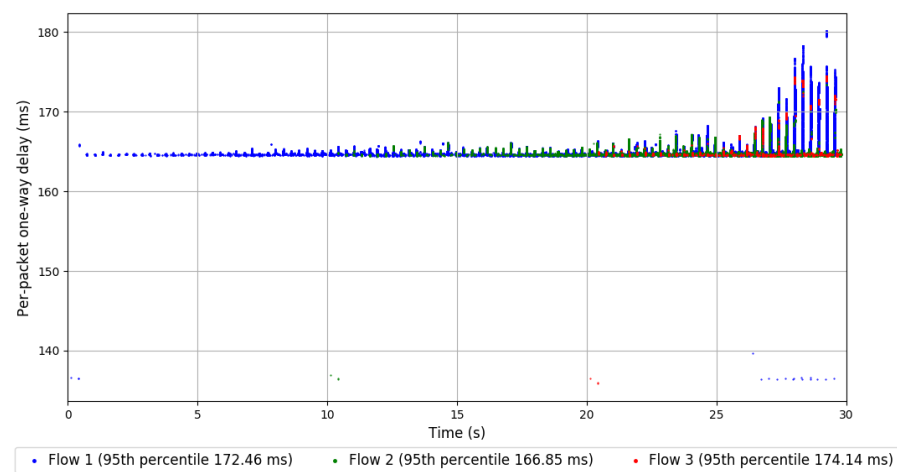
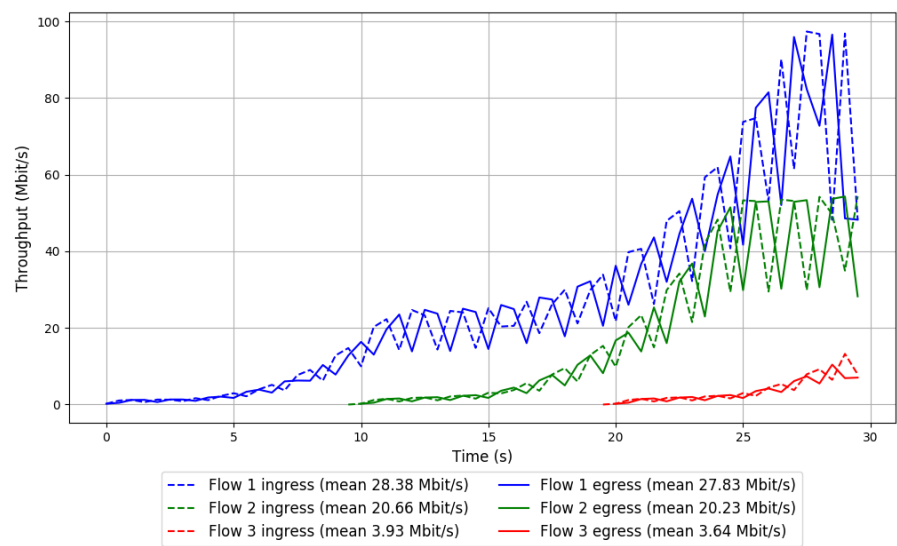
-- Flow 3:

Average throughput: 3.64 Mbit/s

95th percentile per-packet one-way delay: 174.141 ms

Loss rate: 9.86%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-09-08 12:09:23

End at: 2017-09-08 12:09:53

# Below is generated by plot.py at 2017-09-08 16:12:14

# Datalink statistics

-- Total of 3 flows:

Average throughput: 90.05 Mbit/s

95th percentile per-packet one-way delay: 170.987 ms

Loss rate: 1.40%

-- Flow 1:

Average throughput: 56.25 Mbit/s

95th percentile per-packet one-way delay: 171.370 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 49.23 Mbit/s

95th percentile per-packet one-way delay: 167.174 ms

Loss rate: 1.94%

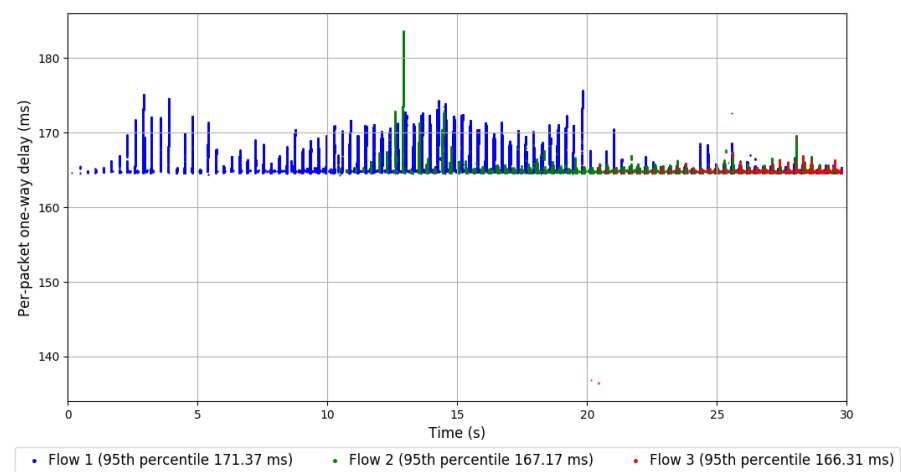
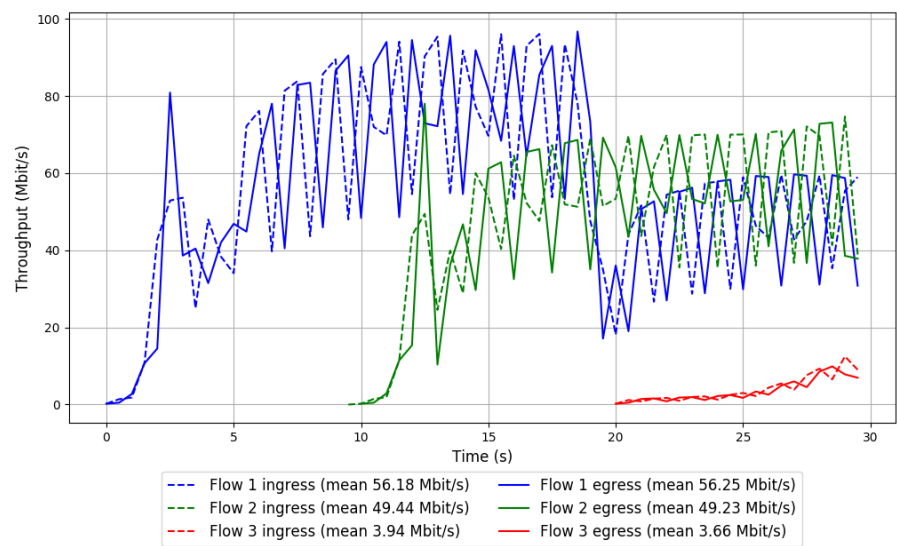
-- Flow 3:

Average throughput: 3.66 Mbit/s

95th percentile per-packet one-way delay: 166.307 ms

Loss rate: 9.77%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-09-08 12:22:41

End at: 2017-09-08 12:23:11

# Below is generated by plot.py at 2017-09-08 16:12:14

# Datalink statistics

-- Total of 3 flows:

Average throughput: 30.36 Mbit/s

95th percentile per-packet one-way delay: 169.518 ms

Loss rate: 3.04%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 3097.949 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 39.50 Mbit/s

95th percentile per-packet one-way delay: 169.622 ms

Loss rate: 2.71%

-- Flow 3:

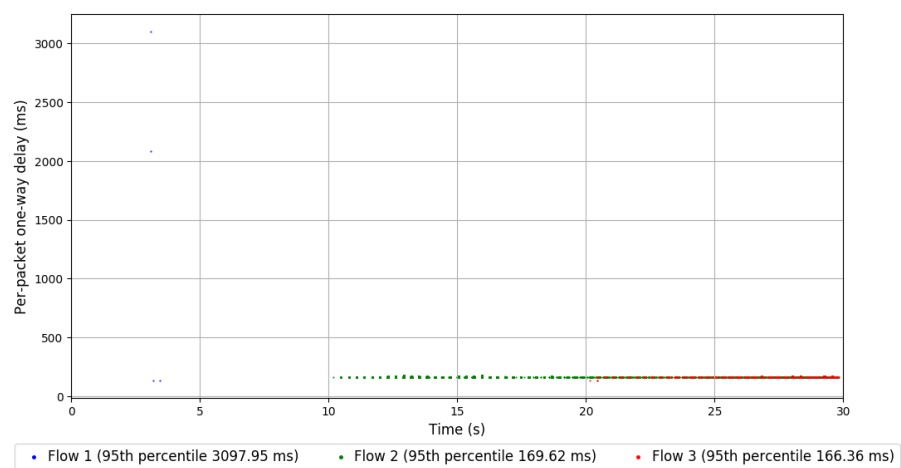
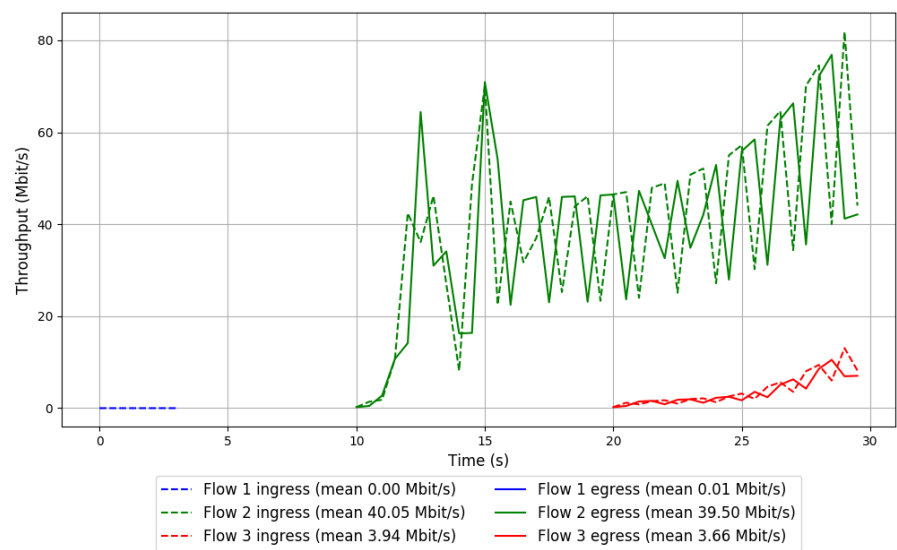
Average throughput: 3.66 Mbit/s

95th percentile per-packet one-way delay: 166.358 ms

Loss rate: 9.71%



Run 7: Report of TCP Cubic — Data Link

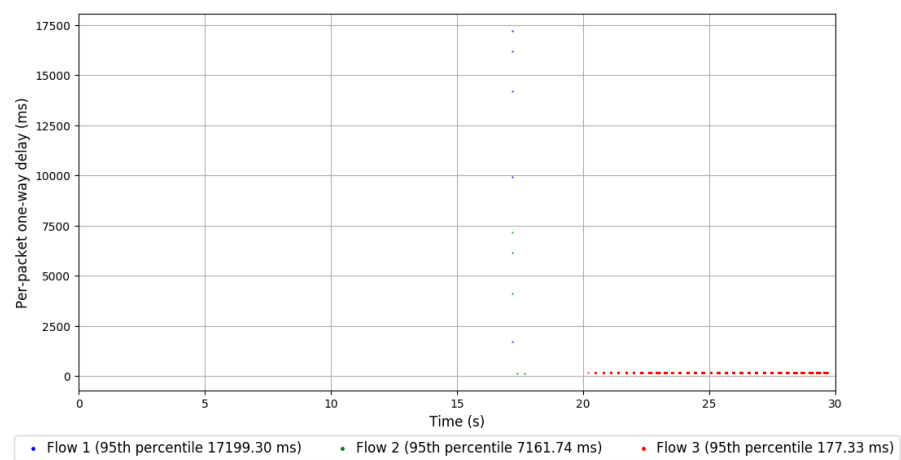
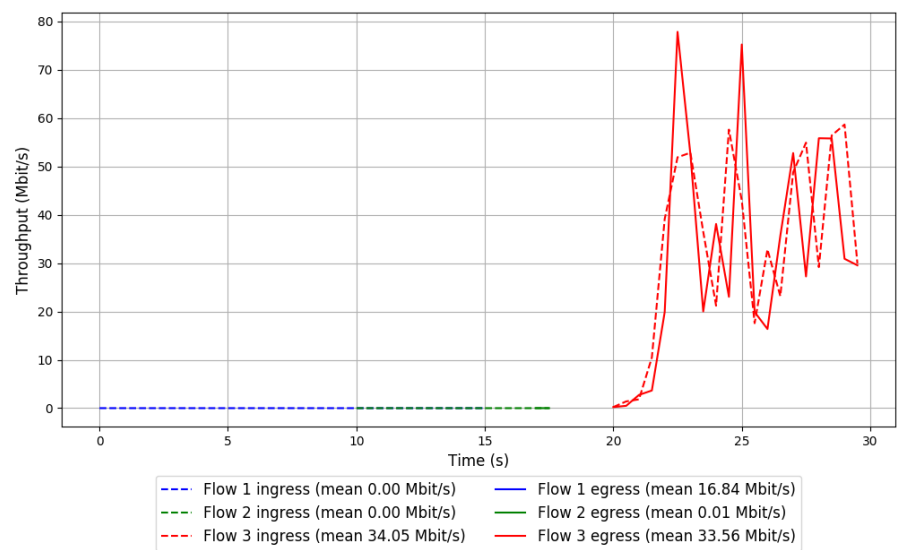


Run 8: Statistics of TCP Cubic

Start at: 2017-09-08 12:36:06

End at: 2017-09-08 12:36:36

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-09-08 12:49:23

End at: 2017-09-08 12:49:53

# Below is generated by plot.py at 2017-09-08 16:12:18

# Datalink statistics

-- Total of 3 flows:

Average throughput: 39.00 Mbit/s

95th percentile per-packet one-way delay: 170.406 ms

Loss rate: 3.12%

-- Flow 1:

Average throughput: 27.80 Mbit/s

95th percentile per-packet one-way delay: 171.126 ms

Loss rate: 2.76%

-- Flow 2:

Average throughput: 15.23 Mbit/s

95th percentile per-packet one-way delay: 166.074 ms

Loss rate: 3.27%

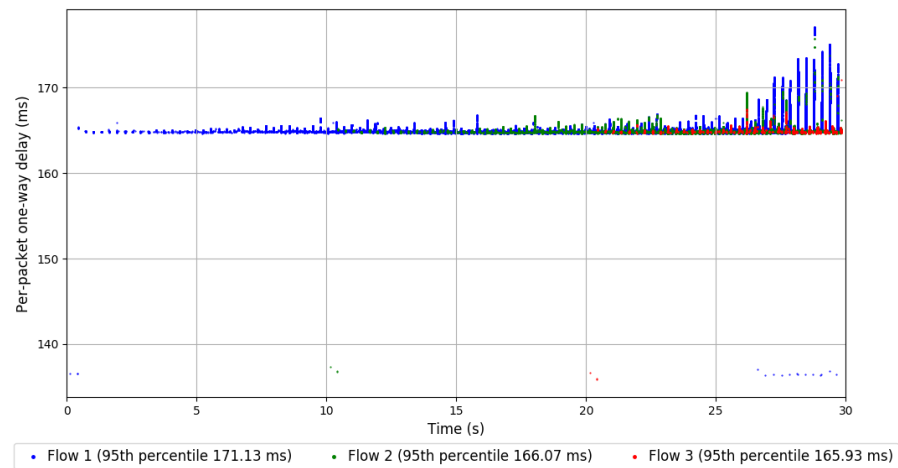
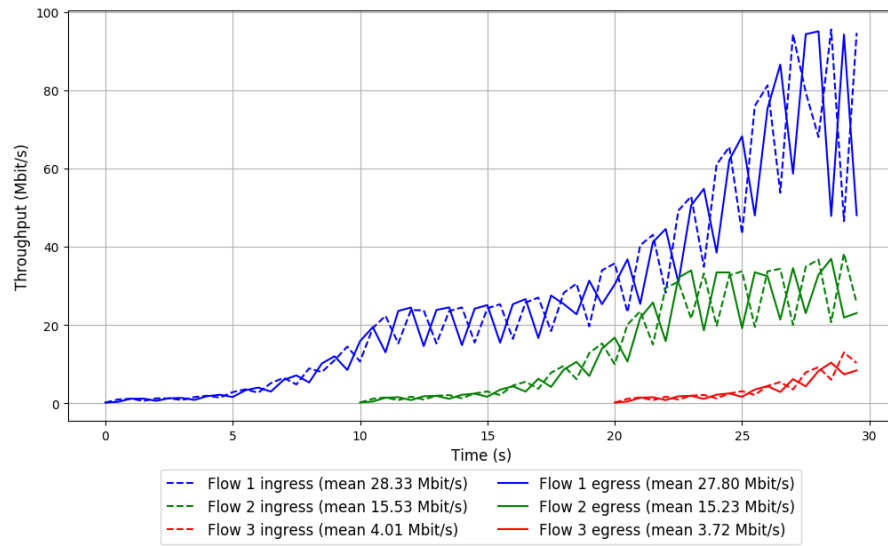
-- Flow 3:

Average throughput: 3.72 Mbit/s

95th percentile per-packet one-way delay: 165.925 ms

Loss rate: 9.72%

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



Run 10: Statistics of TCP Cubic

Start at: 2017-09-08 13:02:44

End at: 2017-09-08 13:03:14

# Below is generated by plot.py at 2017-09-08 16:12:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 83.08 Mbit/s

95th percentile per-packet one-way delay: 174.131 ms

Loss rate: 2.10%

-- Flow 1:

Average throughput: 48.79 Mbit/s

95th percentile per-packet one-way delay: 174.047 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 21.06 Mbit/s

95th percentile per-packet one-way delay: 167.670 ms

Loss rate: 3.52%

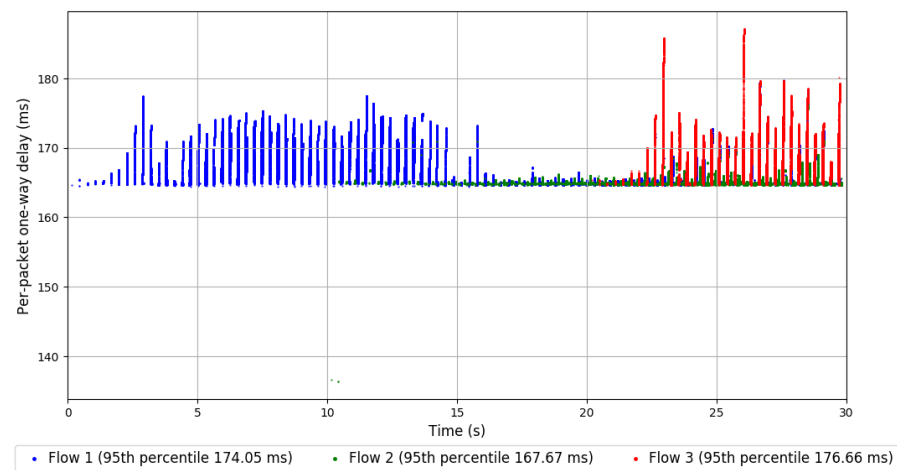
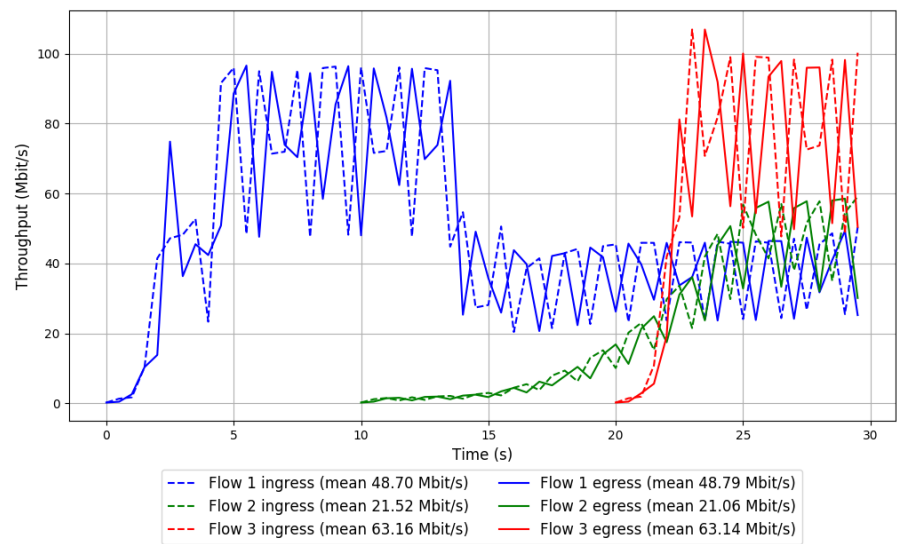
-- Flow 3:

Average throughput: 63.14 Mbit/s

95th percentile per-packet one-way delay: 176.655 ms

Loss rate: 3.97%

Run 10: Report of TCP Cubic — Data Link



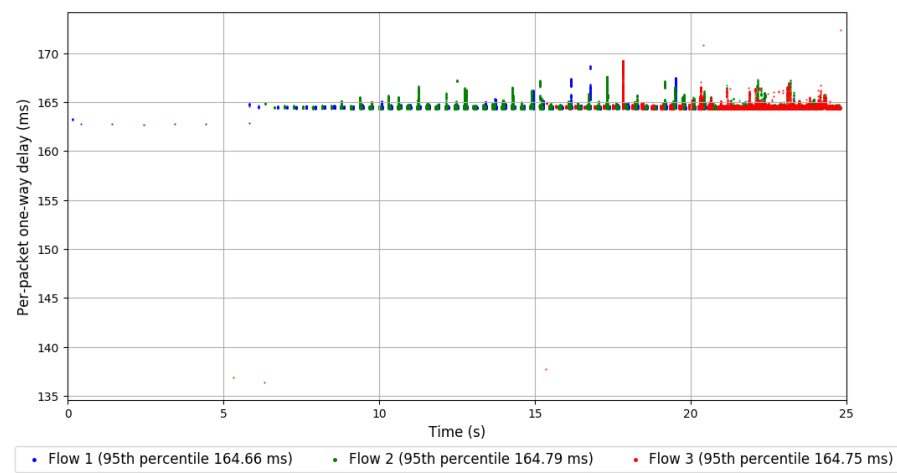
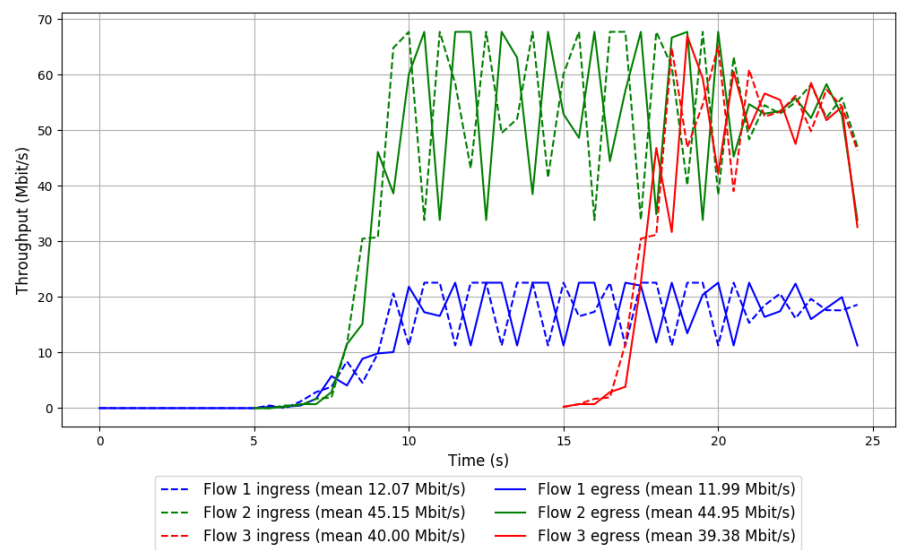
```
Run 1: Statistics of Indigo

Start at: 2017-09-08 11:03:36
End at: 2017-09-08 11:04:06

# Below is generated by plot.py at 2017-09-08 16:12:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.64 Mbit/s
95th percentile per-packet one-way delay: 164.758 ms
Loss rate: 2.45%
-- Flow 1:
Average throughput: 11.99 Mbit/s
95th percentile per-packet one-way delay: 164.658 ms
Loss rate: 1.87%
-- Flow 2:
Average throughput: 44.95 Mbit/s
95th percentile per-packet one-way delay: 164.787 ms
Loss rate: 1.84%
-- Flow 3:
Average throughput: 39.38 Mbit/s
95th percentile per-packet one-way delay: 164.746 ms
Loss rate: 4.29%
```



Run 1: Report of Indigo — Data Link

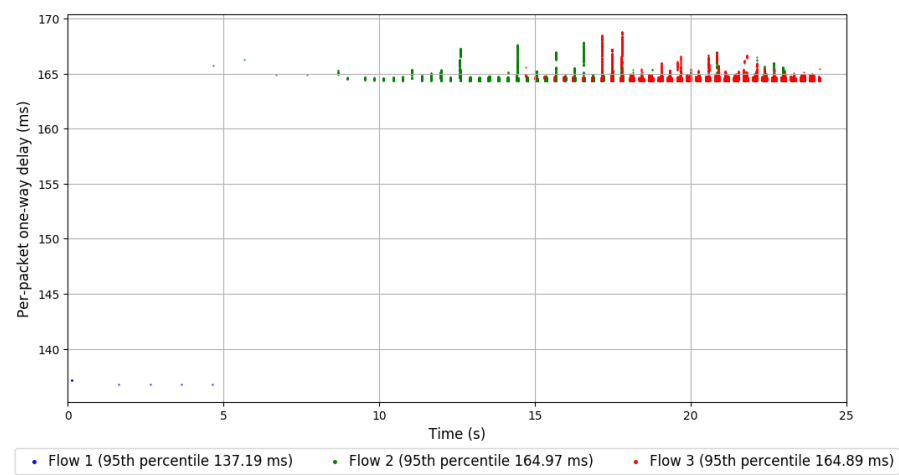
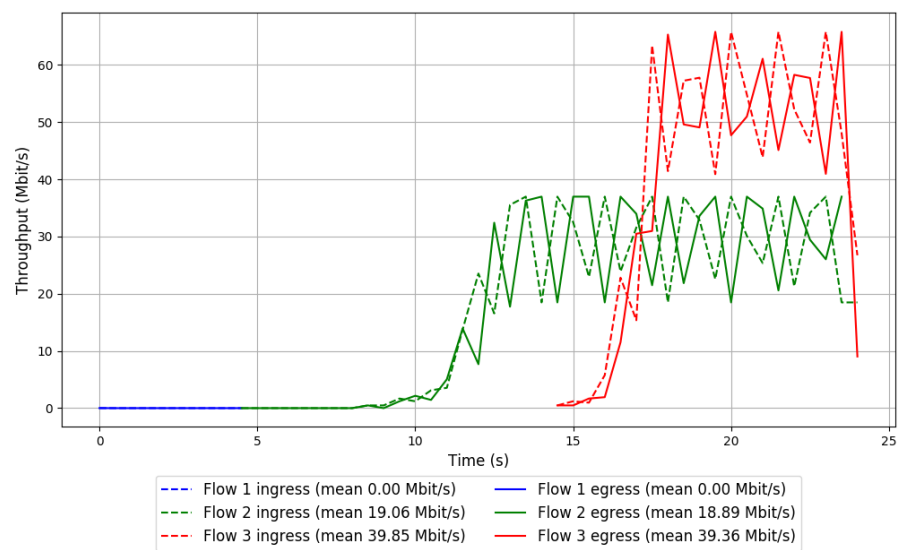


Run 2: Statistics of Indigo

Start at: 2017-09-08 11:17:33

End at: 2017-09-08 11:18:03

Run 2: Report of Indigo — Data Link

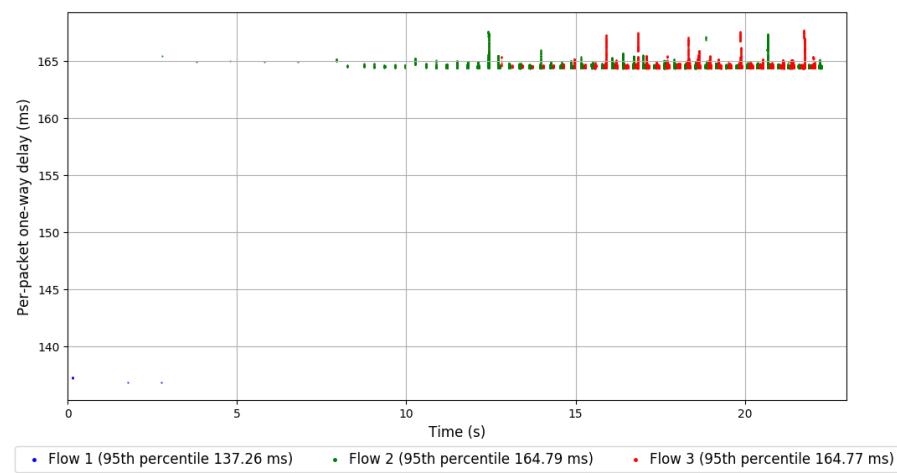
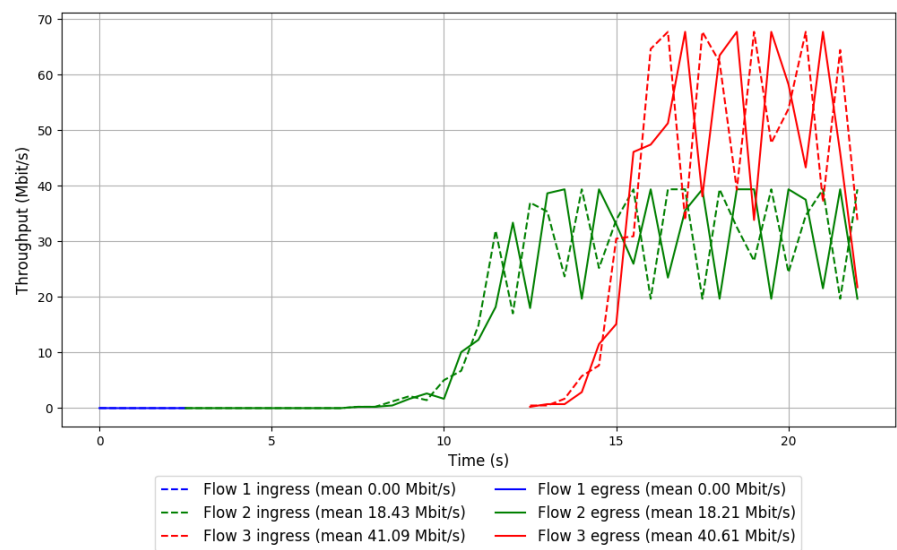


Run 3: Statistics of Indigo

Start at: 2017-09-08 11:31:31

End at: 2017-09-08 11:32:01

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-09-08 11:45:30

End at: 2017-09-08 11:46:00

# Below is generated by plot.py at 2017-09-08 16:12:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 63.32 Mbit/s

95th percentile per-packet one-way delay: 164.761 ms

Loss rate: 1.88%

-- Flow 1:

Average throughput: 23.65 Mbit/s

95th percentile per-packet one-way delay: 164.677 ms

Loss rate: 1.48%

-- Flow 2:

Average throughput: 40.71 Mbit/s

95th percentile per-packet one-way delay: 164.727 ms

Loss rate: 1.05%

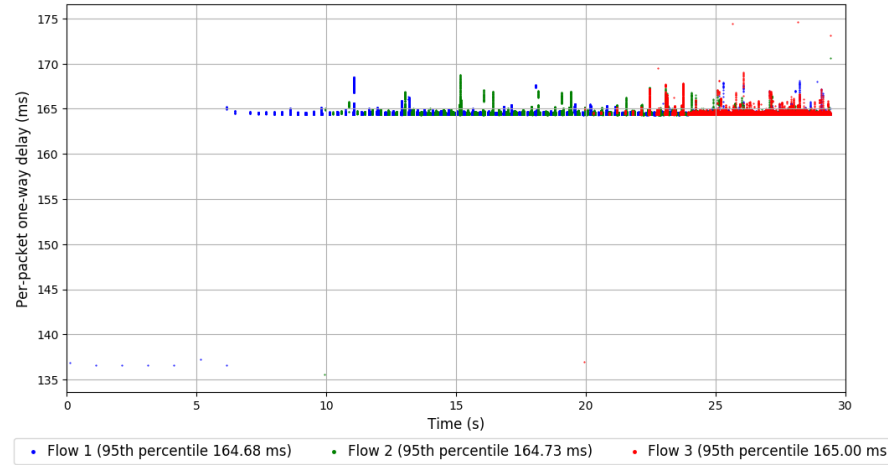
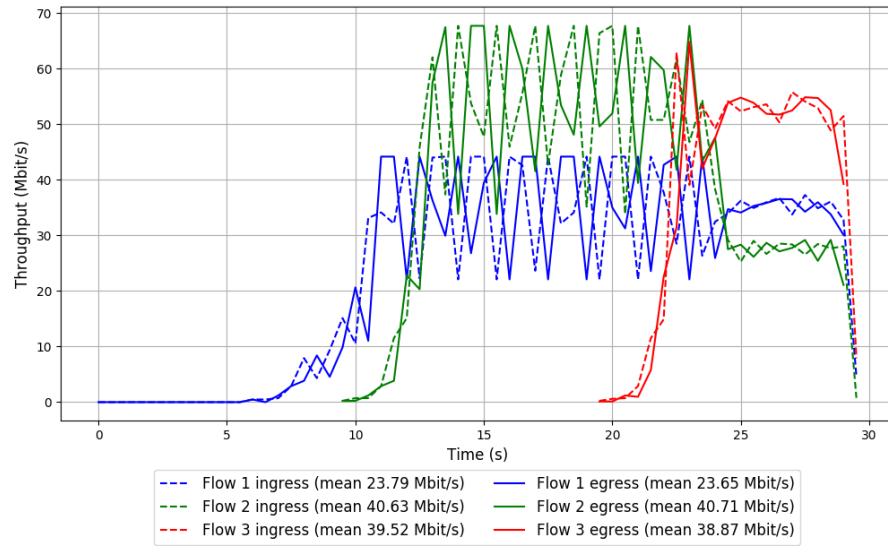
-- Flow 3:

Average throughput: 38.87 Mbit/s

95th percentile per-packet one-way delay: 165.000 ms

Loss rate: 4.34%

# Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-09-08 11:59:01

End at: 2017-09-08 11:59:31

# Below is generated by plot.py at 2017-09-08 16:12:51

# Datalink statistics

-- Total of 3 flows:

Average throughput: 58.86 Mbit/s

95th percentile per-packet one-way delay: 164.965 ms

Loss rate: 2.15%

-- Flow 1:

Average throughput: 16.10 Mbit/s

95th percentile per-packet one-way delay: 164.906 ms

Loss rate: 1.64%

-- Flow 2:

Average throughput: 46.88 Mbit/s

95th percentile per-packet one-way delay: 164.954 ms

Loss rate: 1.79%

-- Flow 3:

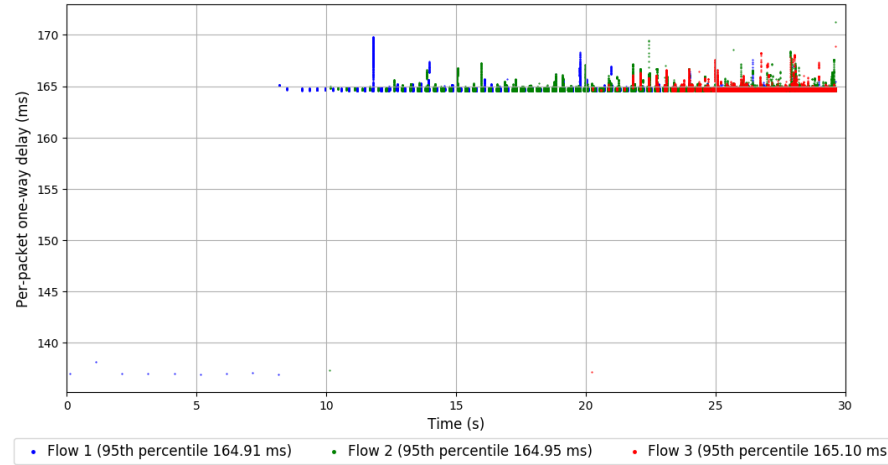
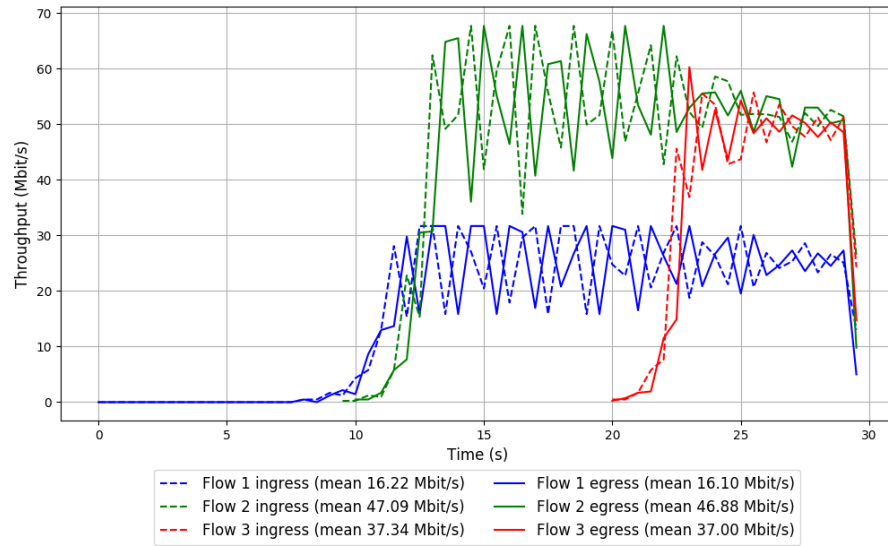
Average throughput: 37.00 Mbit/s

95th percentile per-packet one-way delay: 165.102 ms

Loss rate: 3.73%



## Run 5: Report of Indigo — Data Link

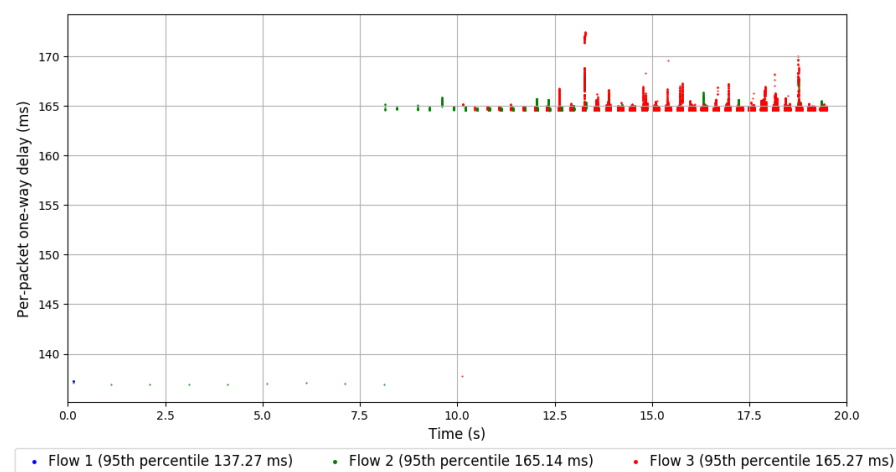
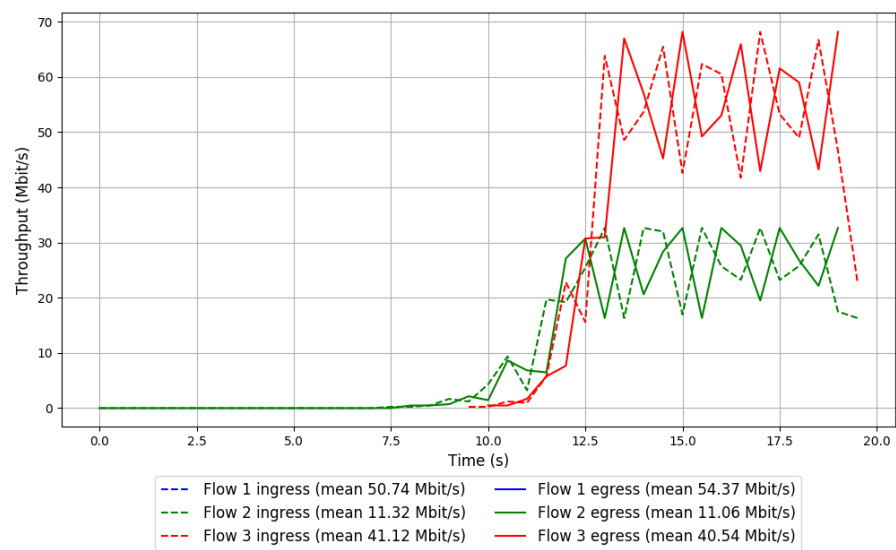


Run 6: Statistics of Indigo

Start at: 2017-09-08 12:12:15

End at: 2017-09-08 12:12:45

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-09-08 12:25:30

End at: 2017-09-08 12:26:00

# Below is generated by plot.py at 2017-09-08 16:13:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 79.36 Mbit/s

95th percentile per-packet one-way delay: 164.889 ms

Loss rate: 1.54%

-- Flow 1:

Average throughput: 38.86 Mbit/s

95th percentile per-packet one-way delay: 164.815 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 47.38 Mbit/s

95th percentile per-packet one-way delay: 164.976 ms

Loss rate: 1.75%

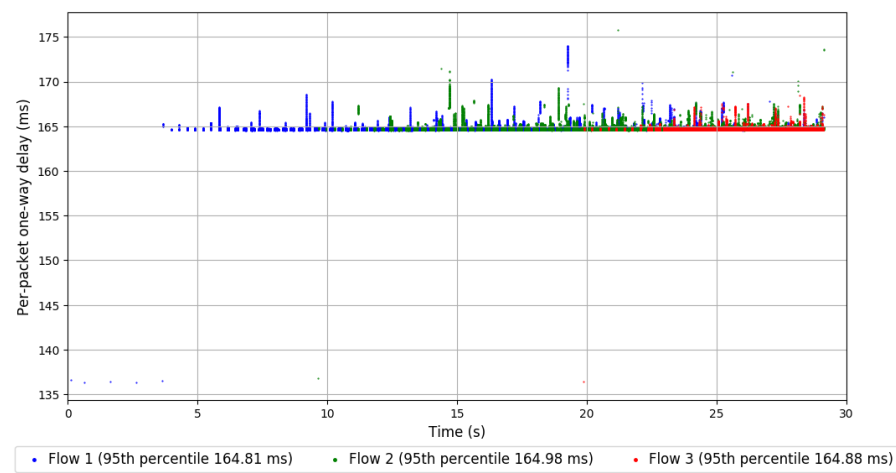
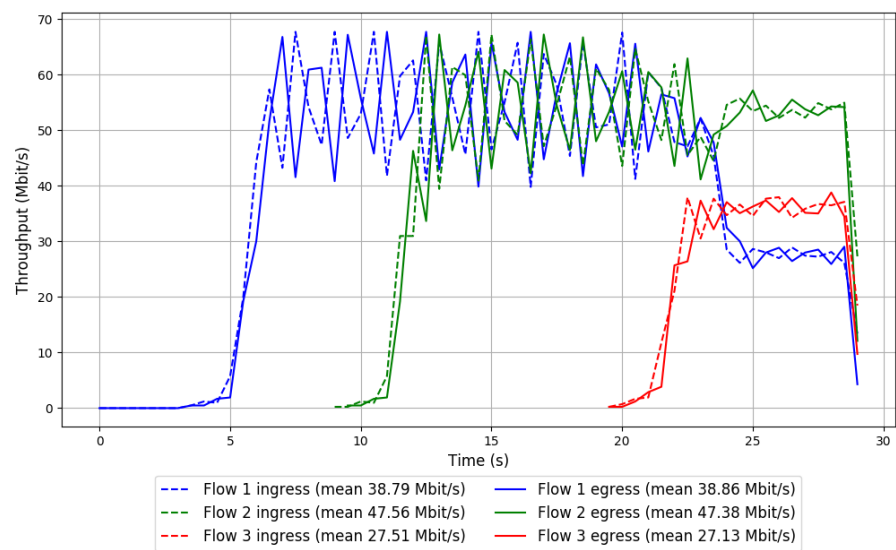
-- Flow 3:

Average throughput: 27.13 Mbit/s

95th percentile per-packet one-way delay: 164.881 ms

Loss rate: 4.20%

Run 7: Report of Indigo — Data Link

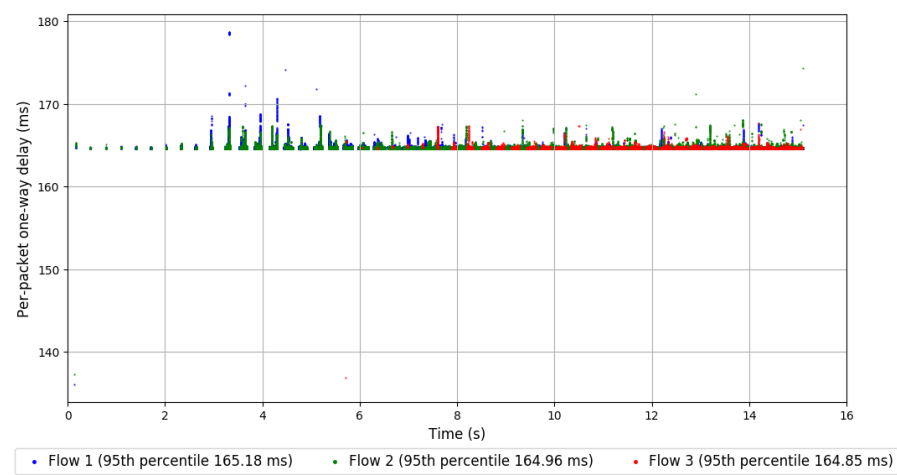
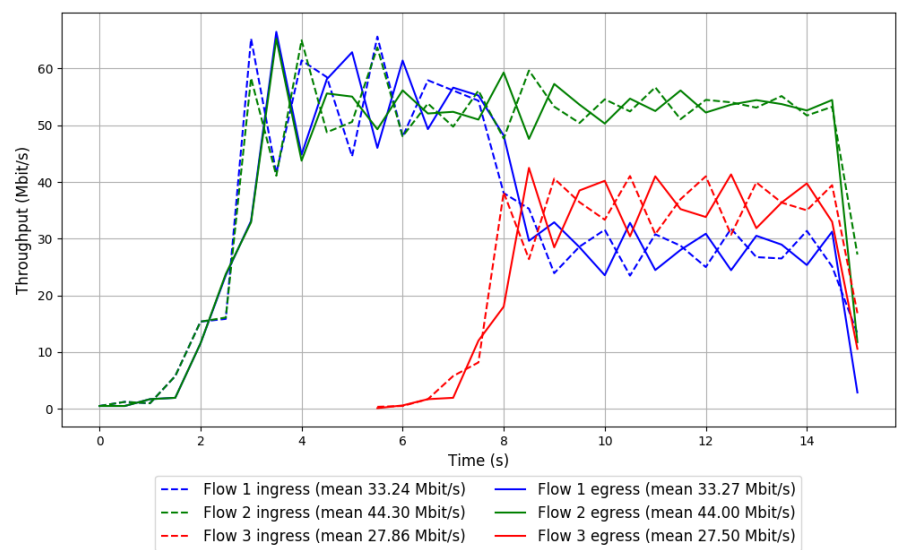


Run 8: Statistics of Indigo

Start at: 2017-09-08 12:38:53

End at: 2017-09-08 12:39:23

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-09-08 12:52:12

End at: 2017-09-08 12:52:42

# Below is generated by plot.py at 2017-09-08 16:13:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 86.11 Mbit/s

95th percentile per-packet one-way delay: 164.956 ms

Loss rate: 1.48%

-- Flow 1:

Average throughput: 49.49 Mbit/s

95th percentile per-packet one-way delay: 164.921 ms

Loss rate: 1.11%

-- Flow 2:

Average throughput: 40.24 Mbit/s

95th percentile per-packet one-way delay: 165.012 ms

Loss rate: 1.08%

-- Flow 3:

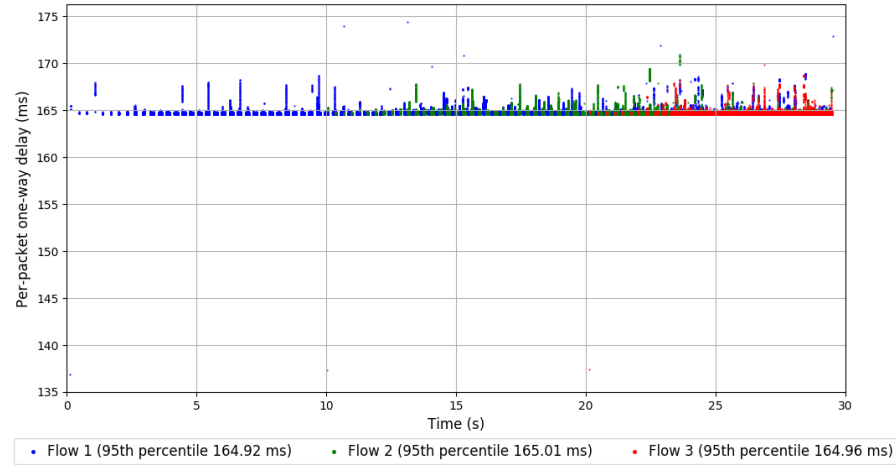
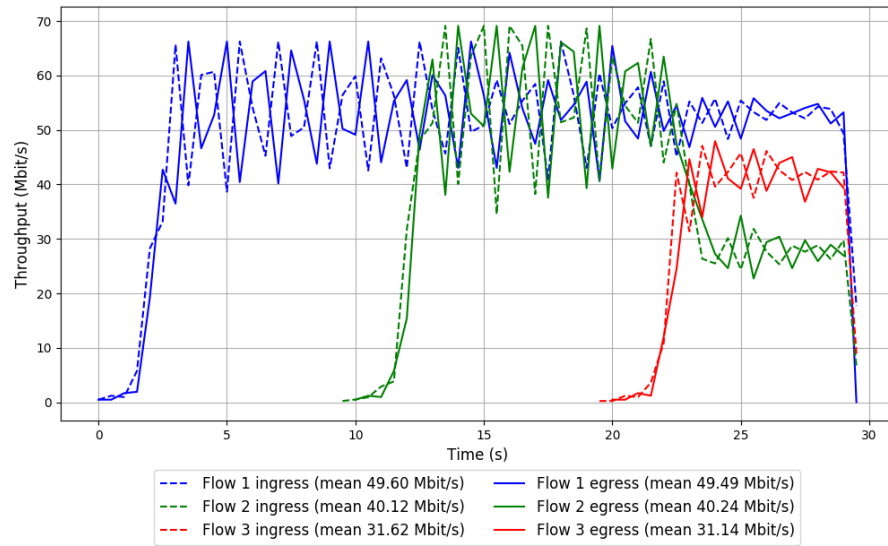
Average throughput: 31.14 Mbit/s

95th percentile per-packet one-way delay: 164.957 ms

Loss rate: 4.33%



## Run 9: Report of Indigo — Data Link

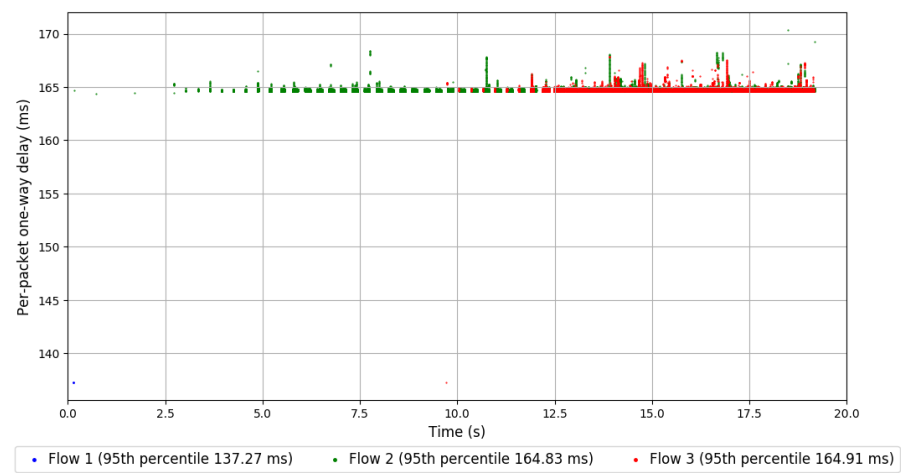
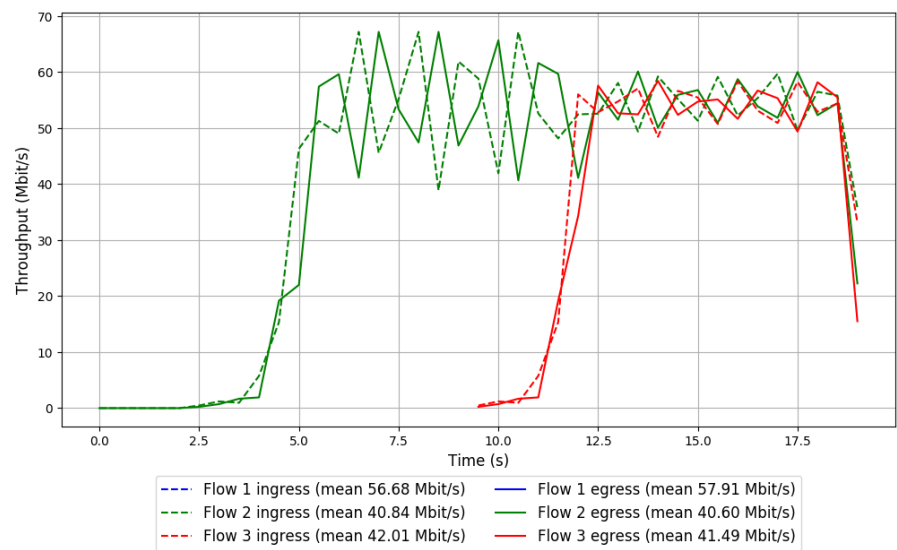


Run 10: Statistics of Indigo

Start at: 2017-09-08 13:05:36

End at: 2017-09-08 13:06:06

Run 10: Report of Indigo — Data Link

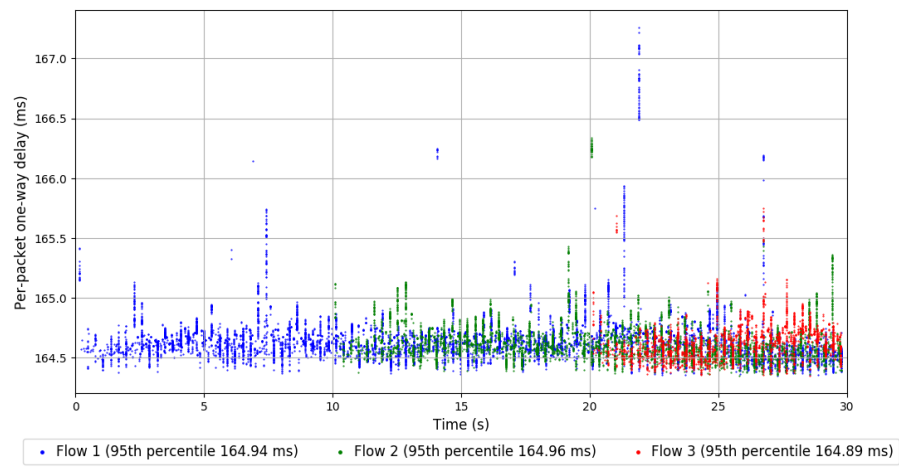
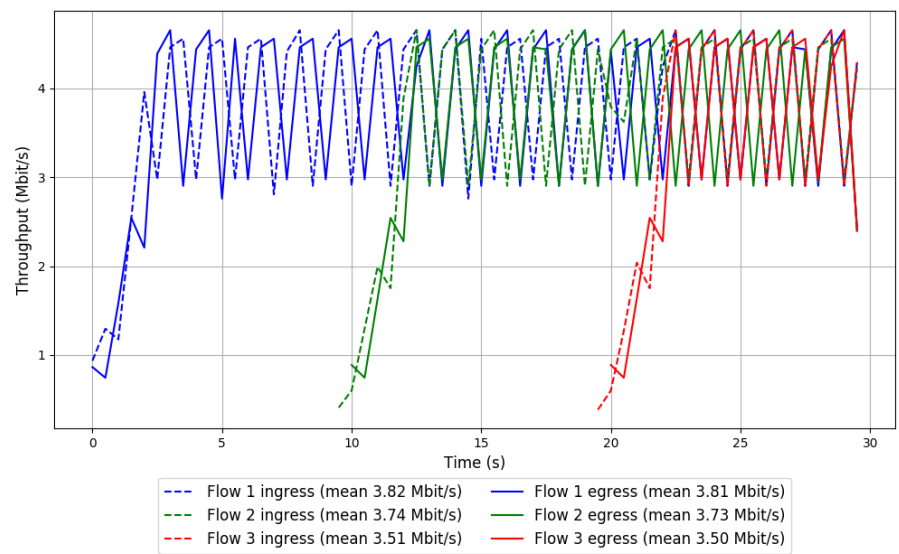


```
Run 1: Statistics of KohoCC

Start at: 2017-09-08 10:59:47
End at: 2017-09-08 11:00:17

# Below is generated by plot.py at 2017-09-08 16:13:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.43 Mbit/s
95th percentile per-packet one-way delay: 164.946 ms
Loss rate: 1.61%
-- Flow 1:
Average throughput: 3.81 Mbit/s
95th percentile per-packet one-way delay: 164.943 ms
Loss rate: 1.05%
-- Flow 2:
Average throughput: 3.73 Mbit/s
95th percentile per-packet one-way delay: 164.959 ms
Loss rate: 1.61%
-- Flow 3:
Average throughput: 3.50 Mbit/s
95th percentile per-packet one-way delay: 164.893 ms
Loss rate: 3.44%
```

Run 1: Report of KohoCC — Data Link

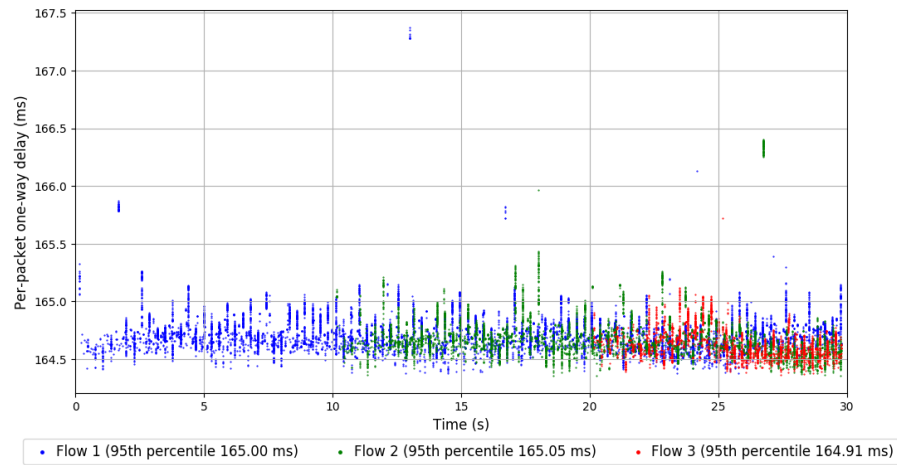
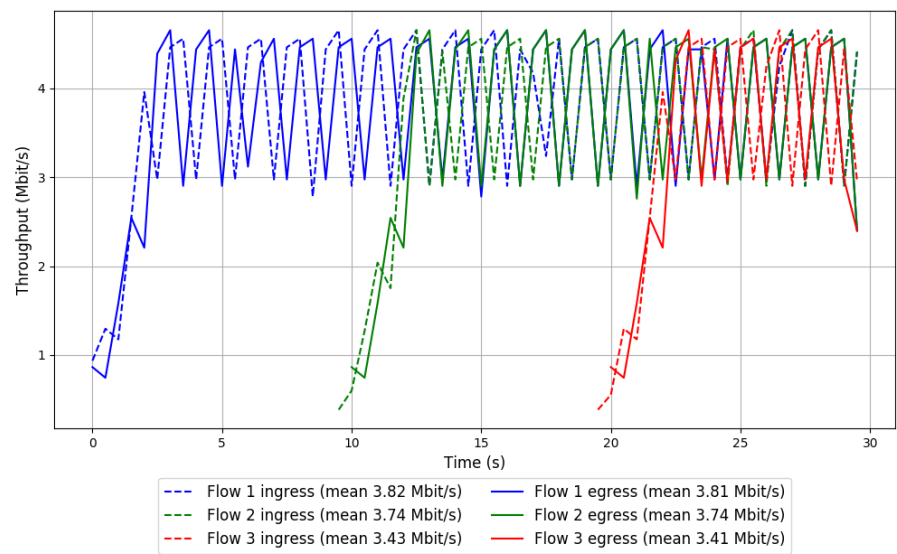


```
Run 2: Statistics of KohoCC

Start at: 2017-09-08 11:13:44
End at: 2017-09-08 11:14:14

# Below is generated by plot.py at 2017-09-08 16:13:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.40 Mbit/s
95th percentile per-packet one-way delay: 164.996 ms
Loss rate: 1.63%
-- Flow 1:
Average throughput: 3.81 Mbit/s
95th percentile per-packet one-way delay: 164.998 ms
Loss rate: 1.05%
-- Flow 2:
Average throughput: 3.74 Mbit/s
95th percentile per-packet one-way delay: 165.049 ms
Loss rate: 1.61%
-- Flow 3:
Average throughput: 3.41 Mbit/s
95th percentile per-packet one-way delay: 164.912 ms
Loss rate: 3.63%
```

Run 2: Report of KohoCC — Data Link



Run 3: Statistics of KohoCC

Start at: 2017-09-08 11:27:45

End at: 2017-09-08 11:28:15

# Below is generated by plot.py at 2017-09-08 16:13:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 7.41 Mbit/s

95th percentile per-packet one-way delay: 164.943 ms

Loss rate: 1.62%

-- Flow 1:

Average throughput: 3.82 Mbit/s

95th percentile per-packet one-way delay: 164.934 ms

Loss rate: 1.05%

-- Flow 2:

Average throughput: 3.74 Mbit/s

95th percentile per-packet one-way delay: 164.938 ms

Loss rate: 1.61%

-- Flow 3:

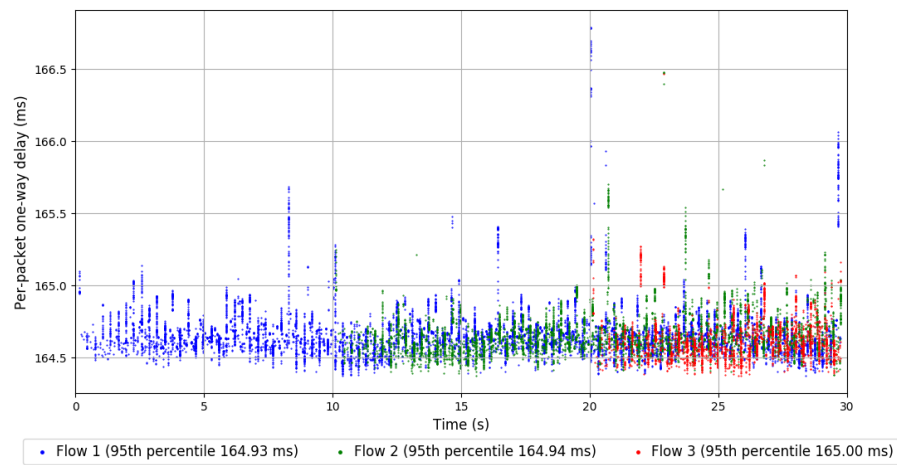
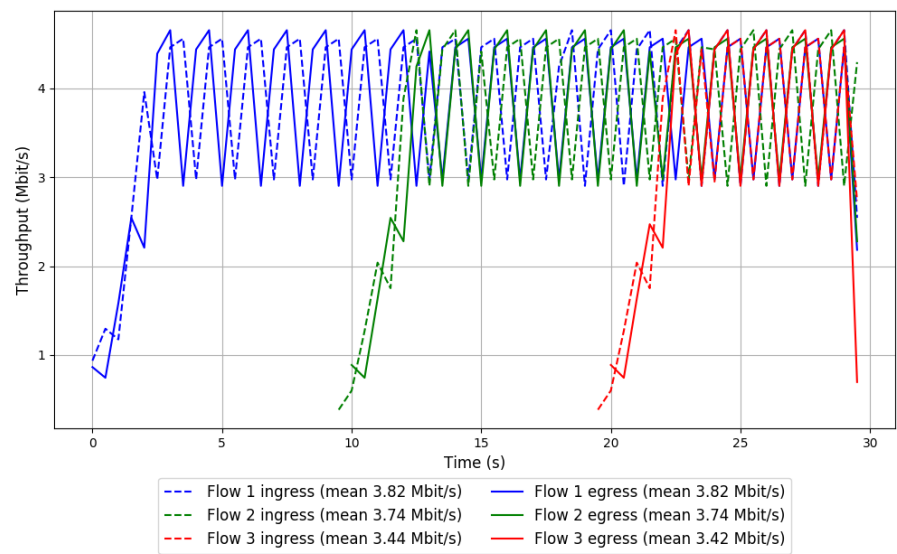
Average throughput: 3.42 Mbit/s

95th percentile per-packet one-way delay: 164.999 ms

Loss rate: 3.52%



Run 3: Report of KohoCC — Data Link

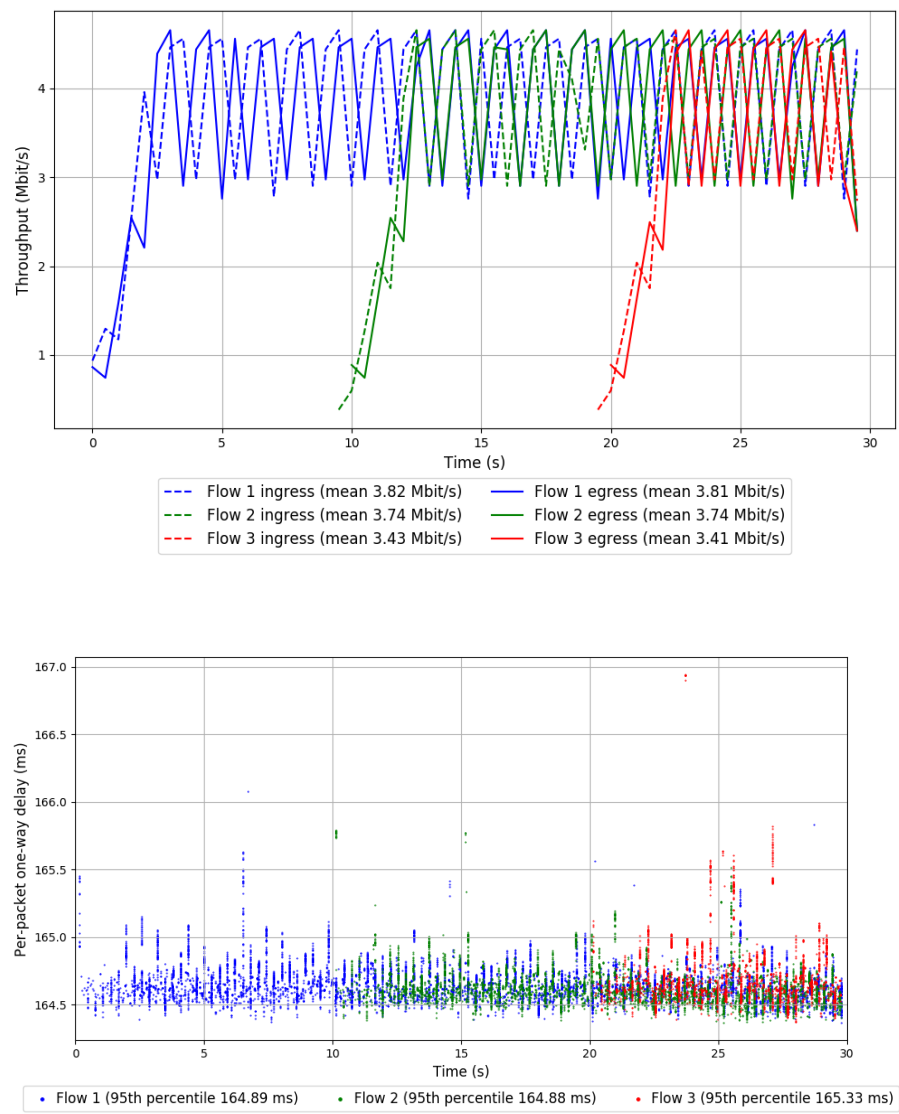


```
Run 4: Statistics of KohoCC

Start at: 2017-09-08 11:41:40
End at: 2017-09-08 11:42:10

# Below is generated by plot.py at 2017-09-08 16:13:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.40 Mbit/s
95th percentile per-packet one-way delay: 164.943 ms
Loss rate: 1.62%
-- Flow 1:
Average throughput: 3.81 Mbit/s
95th percentile per-packet one-way delay: 164.894 ms
Loss rate: 1.05%
-- Flow 2:
Average throughput: 3.74 Mbit/s
95th percentile per-packet one-way delay: 164.885 ms
Loss rate: 1.61%
-- Flow 3:
Average throughput: 3.41 Mbit/s
95th percentile per-packet one-way delay: 165.330 ms
Loss rate: 3.52%
```

Run 4: Report of KohoCC — Data Link



Run 5: Statistics of KohoCC

Start at: 2017-09-08 11:55:21

End at: 2017-09-08 11:55:51

# Below is generated by plot.py at 2017-09-08 16:13:30

# Datalink statistics

-- Total of 3 flows:

Average throughput: 7.40 Mbit/s

95th percentile per-packet one-way delay: 164.941 ms

Loss rate: 1.65%

-- Flow 1:

Average throughput: 3.81 Mbit/s

95th percentile per-packet one-way delay: 165.025 ms

Loss rate: 1.12%

-- Flow 2:

Average throughput: 3.74 Mbit/s

95th percentile per-packet one-way delay: 164.804 ms

Loss rate: 1.61%

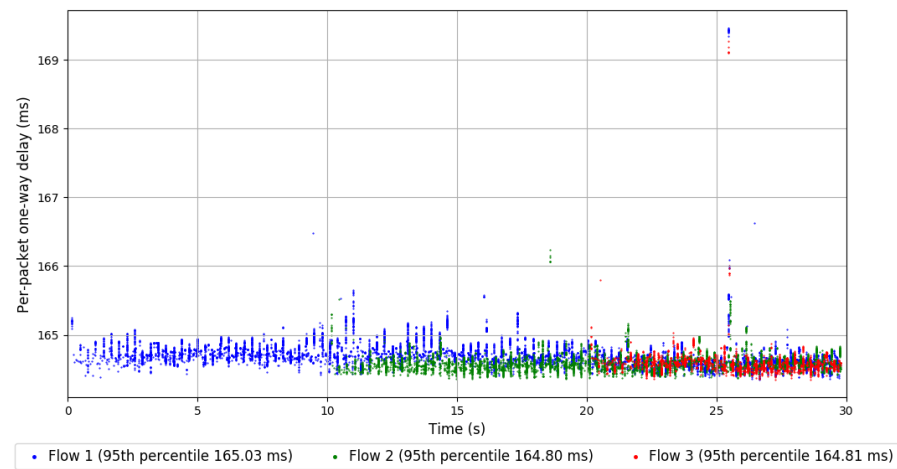
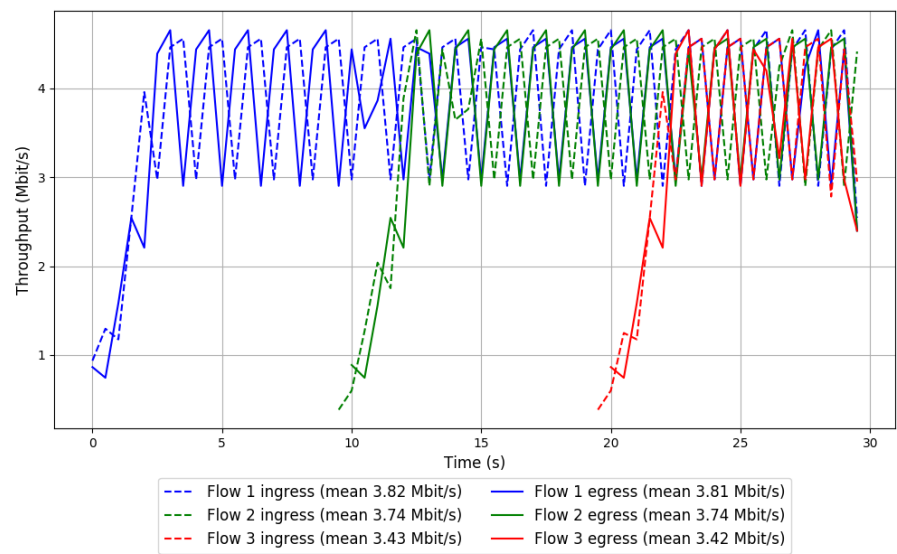
-- Flow 3:

Average throughput: 3.42 Mbit/s

95th percentile per-packet one-way delay: 164.813 ms

Loss rate: 3.52%

Run 5: Report of KohoCC — Data Link



Run 6: Statistics of KohoCC

Start at: 2017-09-08 12:08:33

End at: 2017-09-08 12:09:03

# Below is generated by plot.py at 2017-09-08 16:13:30

# Datalink statistics

-- Total of 3 flows:

Average throughput: 7.37 Mbit/s

95th percentile per-packet one-way delay: 165.105 ms

Loss rate: 1.62%

-- Flow 1:

Average throughput: 3.82 Mbit/s

95th percentile per-packet one-way delay: 165.055 ms

Loss rate: 1.05%

-- Flow 2:

Average throughput: 3.69 Mbit/s

95th percentile per-packet one-way delay: 165.148 ms

Loss rate: 1.63%

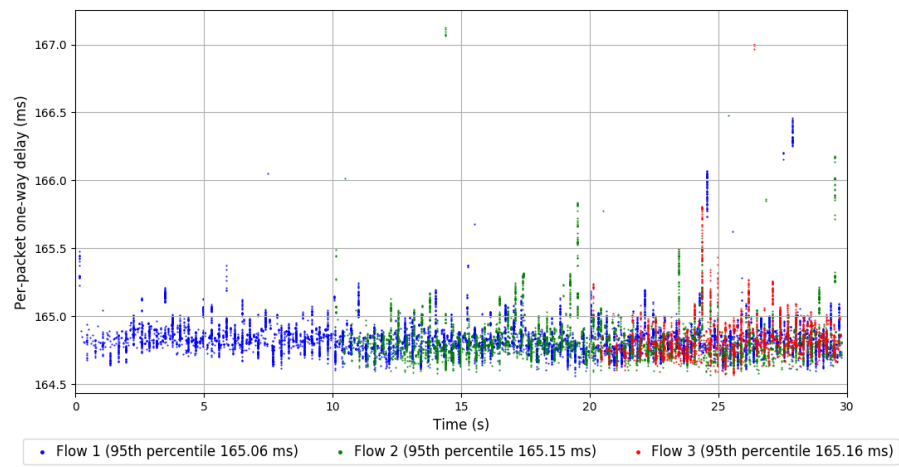
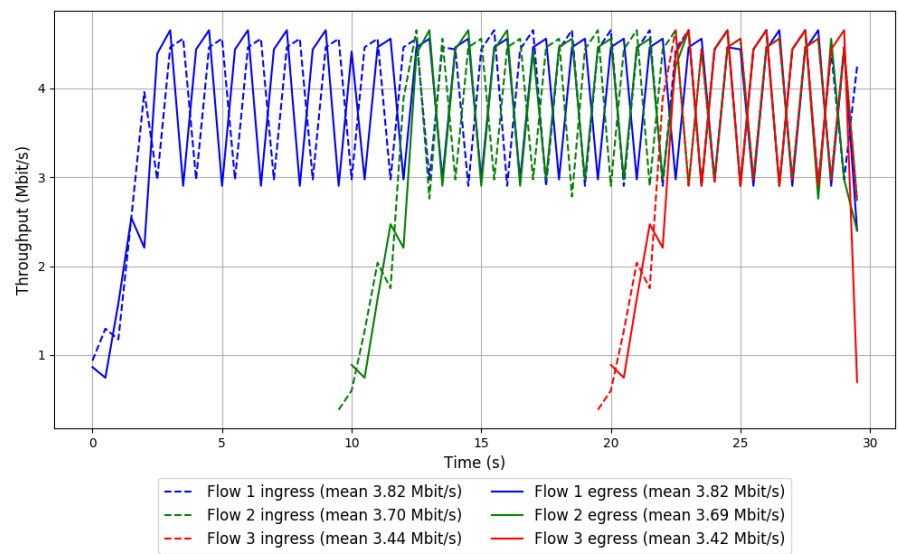
-- Flow 3:

Average throughput: 3.42 Mbit/s

95th percentile per-packet one-way delay: 165.163 ms

Loss rate: 3.52%

Run 6: Report of KohoCC — Data Link



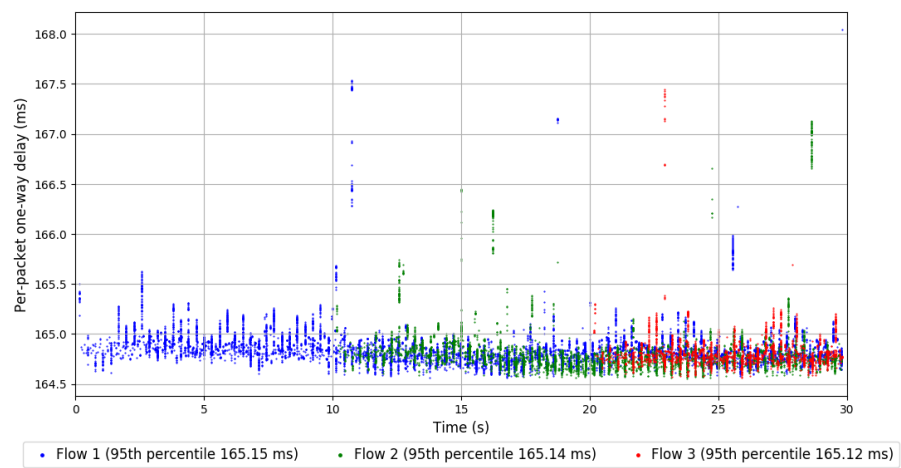
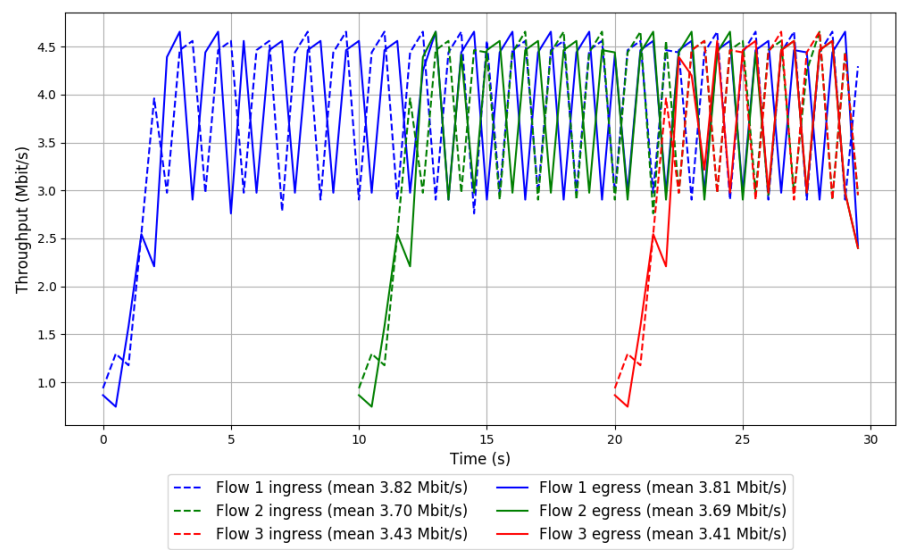
```
Run 7: Statistics of KohoCC

Start at: 2017-09-08 12:21:51
End at: 2017-09-08 12:22:21

# Below is generated by plot.py at 2017-09-08 16:13:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.36 Mbit/s
95th percentile per-packet one-way delay: 165.142 ms
Loss rate: 1.62%
-- Flow 1:
Average throughput: 3.81 Mbit/s
95th percentile per-packet one-way delay: 165.146 ms
Loss rate: 1.04%
-- Flow 2:
Average throughput: 3.69 Mbit/s
95th percentile per-packet one-way delay: 165.143 ms
Loss rate: 1.63%
-- Flow 3:
Average throughput: 3.41 Mbit/s
95th percentile per-packet one-way delay: 165.118 ms
Loss rate: 3.52%
```



Run 7: Report of KohoCC — Data Link



Run 8: Statistics of KohoCC

Start at: 2017-09-08 12:35:16

End at: 2017-09-08 12:35:46

# Below is generated by plot.py at 2017-09-08 16:13:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 7.39 Mbit/s

95th percentile per-packet one-way delay: 165.258 ms

Loss rate: 1.63%

-- Flow 1:

Average throughput: 3.81 Mbit/s

95th percentile per-packet one-way delay: 165.245 ms

Loss rate: 1.08%

-- Flow 2:

Average throughput: 3.73 Mbit/s

95th percentile per-packet one-way delay: 165.233 ms

Loss rate: 1.61%

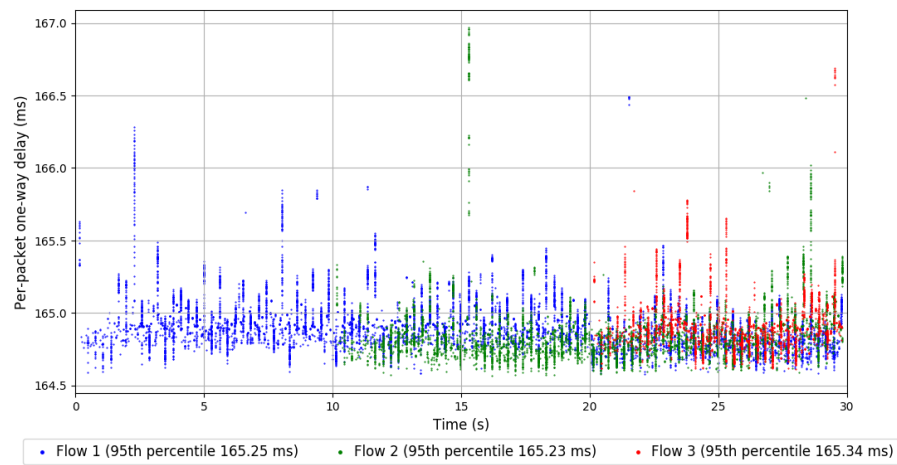
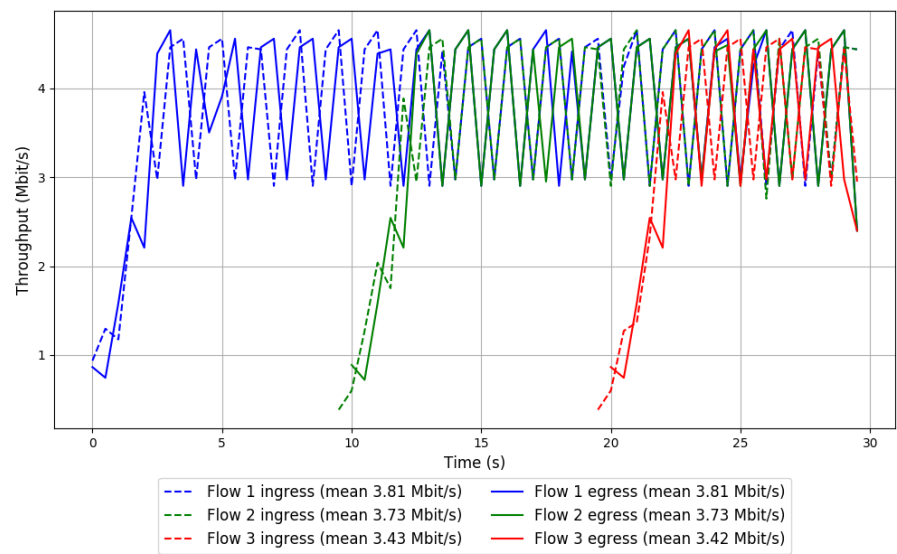
-- Flow 3:

Average throughput: 3.42 Mbit/s

95th percentile per-packet one-way delay: 165.342 ms

Loss rate: 3.52%

Run 8: Report of KohoCC — Data Link



Run 9: Statistics of KohoCC

Start at: 2017-09-08 12:48:33

End at: 2017-09-08 12:49:03

# Below is generated by plot.py at 2017-09-08 16:13:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 7.39 Mbit/s

95th percentile per-packet one-way delay: 165.143 ms

Loss rate: 1.62%

-- Flow 1:

Average throughput: 3.81 Mbit/s

95th percentile per-packet one-way delay: 165.157 ms

Loss rate: 1.05%

-- Flow 2:

Average throughput: 3.73 Mbit/s

95th percentile per-packet one-way delay: 165.133 ms

Loss rate: 1.61%

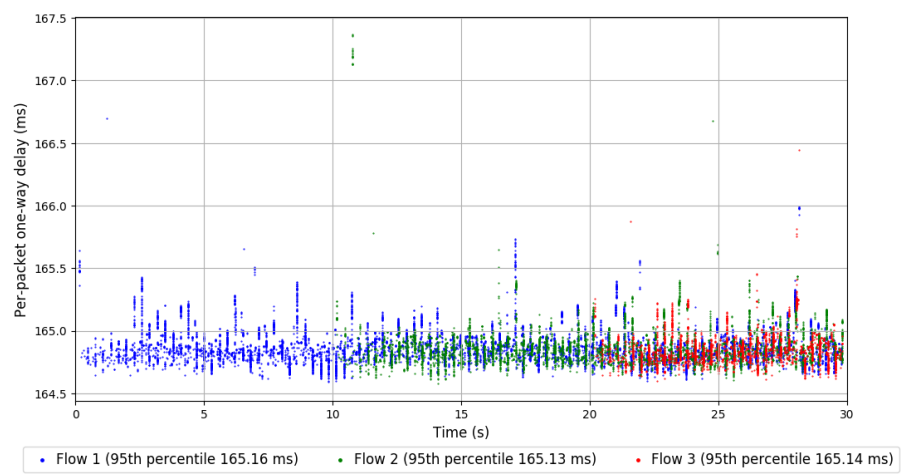
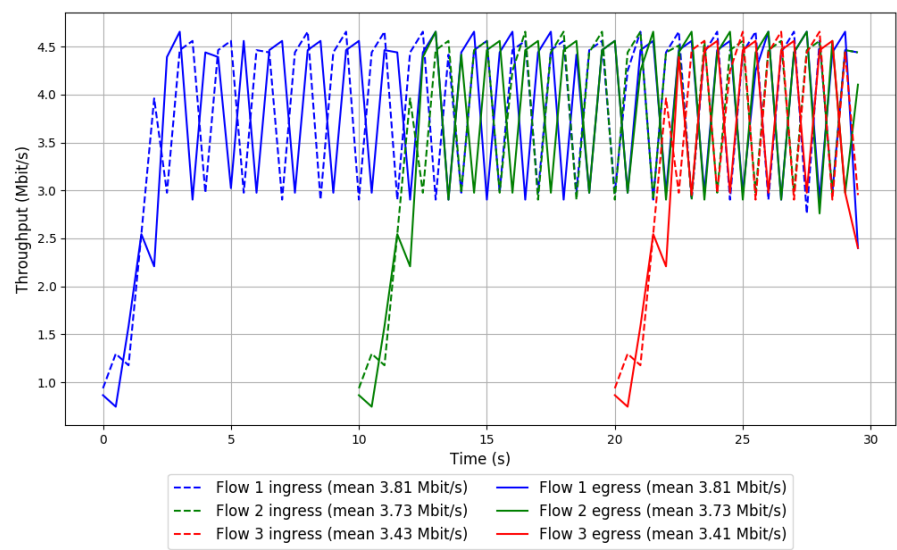
-- Flow 3:

Average throughput: 3.41 Mbit/s

95th percentile per-packet one-way delay: 165.138 ms

Loss rate: 3.52%

Run 9: Report of KohoCC — Data Link



Run 10: Statistics of KohoCC

Start at: 2017-09-08 13:01:54

End at: 2017-09-08 13:02:24

# Below is generated by plot.py at 2017-09-08 16:13:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 7.40 Mbit/s

95th percentile per-packet one-way delay: 165.315 ms

Loss rate: 1.62%

-- Flow 1:

Average throughput: 3.81 Mbit/s

95th percentile per-packet one-way delay: 165.336 ms

Loss rate: 1.05%

-- Flow 2:

Average throughput: 3.74 Mbit/s

95th percentile per-packet one-way delay: 165.369 ms

Loss rate: 1.61%

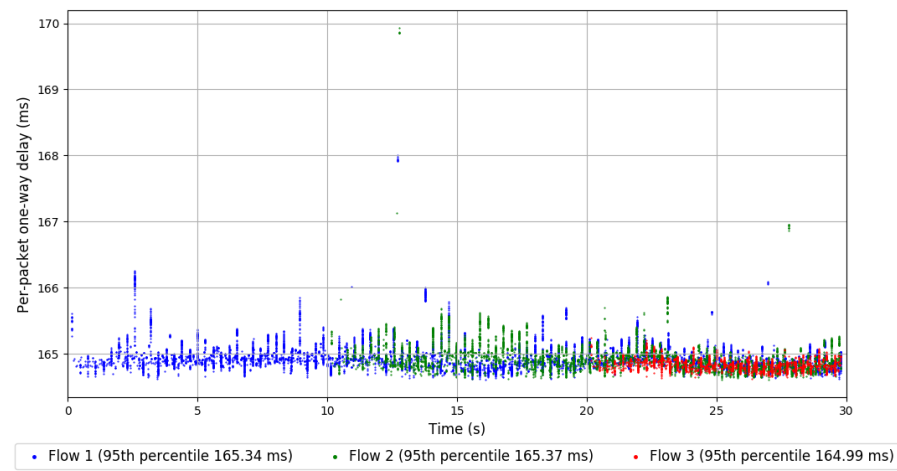
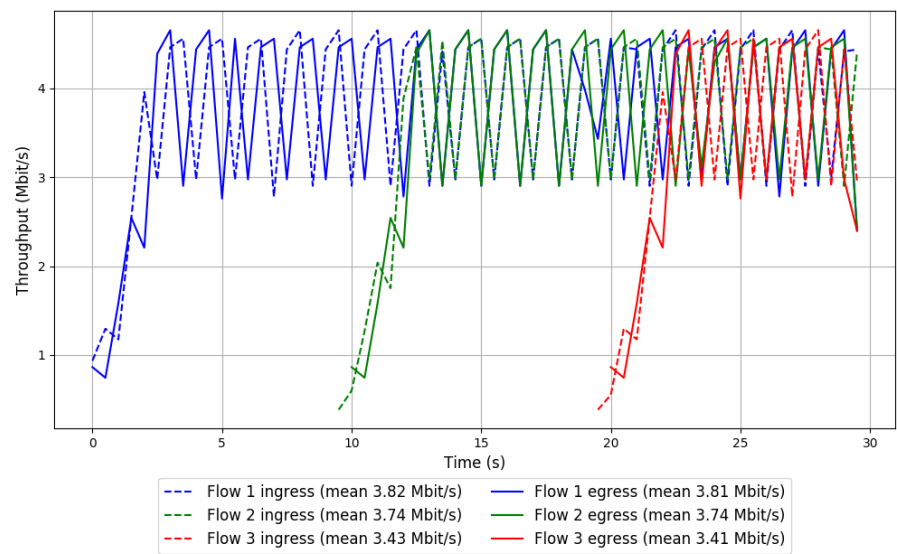
-- Flow 3:

Average throughput: 3.41 Mbit/s

95th percentile per-packet one-way delay: 164.987 ms

Loss rate: 3.52%

Run 10: Report of KohoCC — Data Link



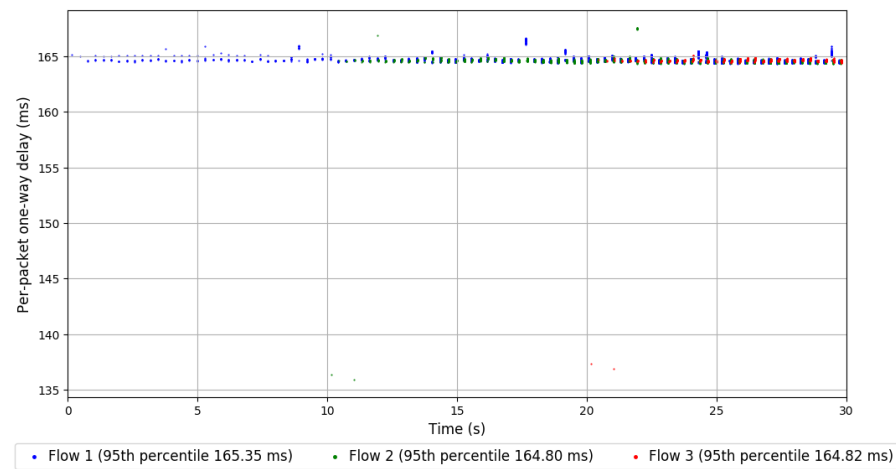
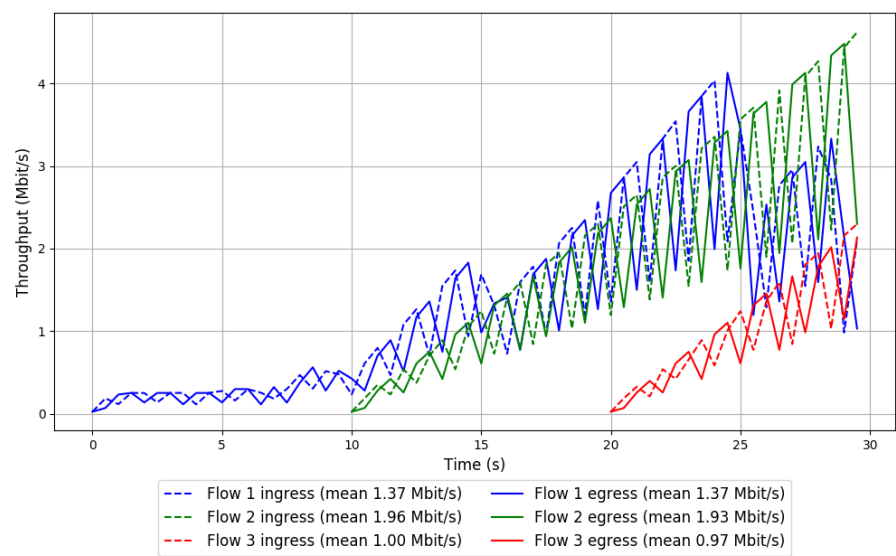
```
Run 1: Statistics of LEDBAT

Start at: 2017-09-08 11:02:45
End at: 2017-09-08 11:03:16

# Below is generated by plot.py at 2017-09-08 16:13:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.96 Mbit/s
95th percentile per-packet one-way delay: 165.021 ms
Loss rate: 2.54%
-- Flow 1:
Average throughput: 1.37 Mbit/s
95th percentile per-packet one-way delay: 165.347 ms
Loss rate: 1.32%
-- Flow 2:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 164.796 ms
Loss rate: 2.97%
-- Flow 3:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 164.819 ms
Loss rate: 5.89%
```



Run 1: Report of LEDBAT — Data Link

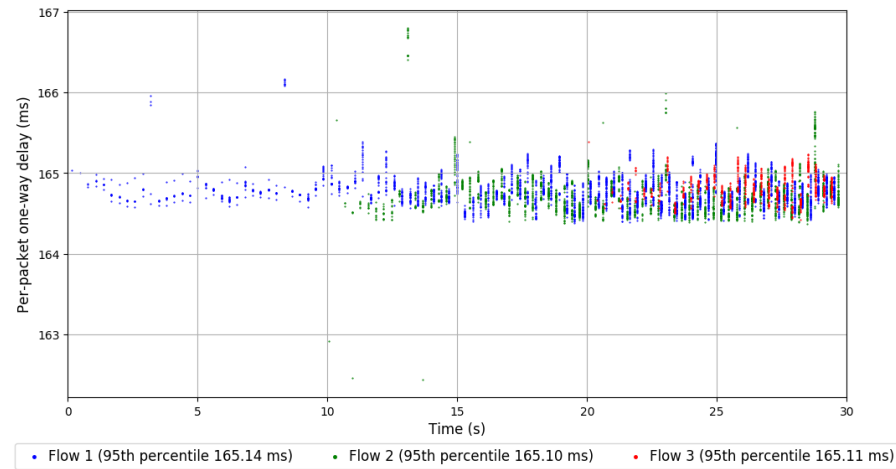
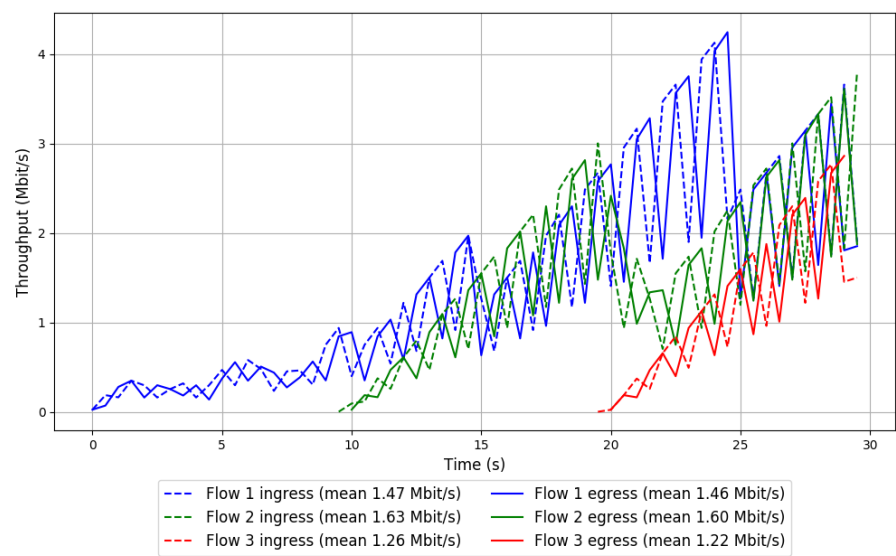


```
Run 2: Statistics of LEDBAT

Start at: 2017-09-08 11:16:42
End at: 2017-09-08 11:17:12

# Below is generated by plot.py at 2017-09-08 16:13:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.90 Mbit/s
95th percentile per-packet one-way delay: 165.119 ms
Loss rate: 3.02%
-- Flow 1:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 165.137 ms
Loss rate: 2.17%
-- Flow 2:
Average throughput: 1.60 Mbit/s
95th percentile per-packet one-way delay: 165.099 ms
Loss rate: 2.96%
-- Flow 3:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 165.106 ms
Loss rate: 6.19%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-09-08 11:30:40

End at: 2017-09-08 11:31:10

# Below is generated by plot.py at 2017-09-08 16:13:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.51 Mbit/s

95th percentile per-packet one-way delay: 165.217 ms

Loss rate: 2.51%

-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 165.313 ms

Loss rate: 2.50%

-- Flow 2:

Average throughput: 1.62 Mbit/s

95th percentile per-packet one-way delay: 164.939 ms

Loss rate: 1.53%

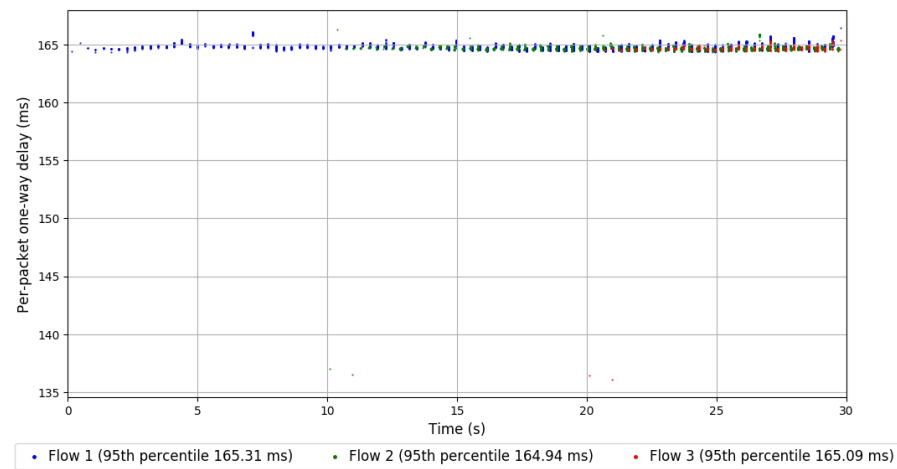
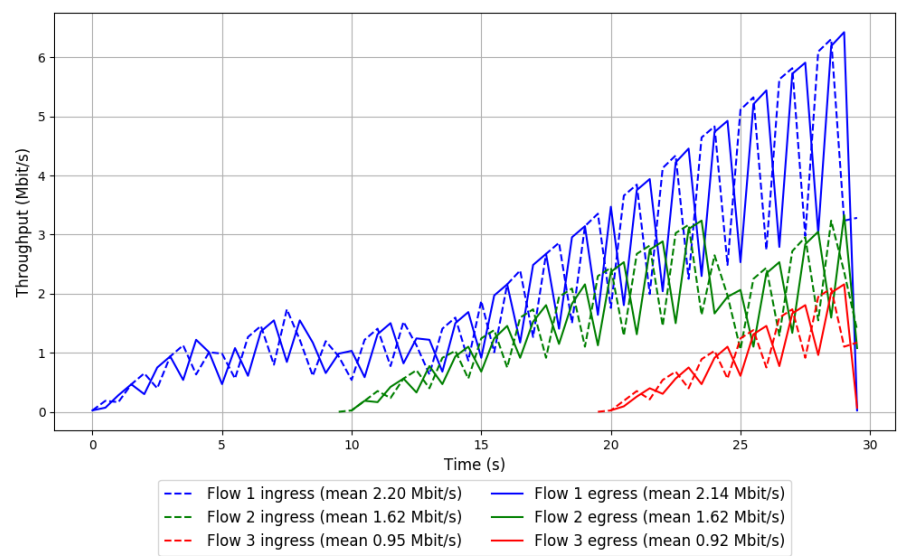
-- Flow 3:

Average throughput: 0.92 Mbit/s

95th percentile per-packet one-way delay: 165.087 ms

Loss rate: 5.86%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-09-08 11:44:38

End at: 2017-09-08 11:45:08

# Below is generated by plot.py at 2017-09-08 16:13:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.78 Mbit/s

95th percentile per-packet one-way delay: 165.072 ms

Loss rate: 2.55%

-- Flow 1:

Average throughput: 3.81 Mbit/s

95th percentile per-packet one-way delay: 165.079 ms

Loss rate: 2.05%

-- Flow 2:

Average throughput: 2.56 Mbit/s

95th percentile per-packet one-way delay: 165.088 ms

Loss rate: 3.04%

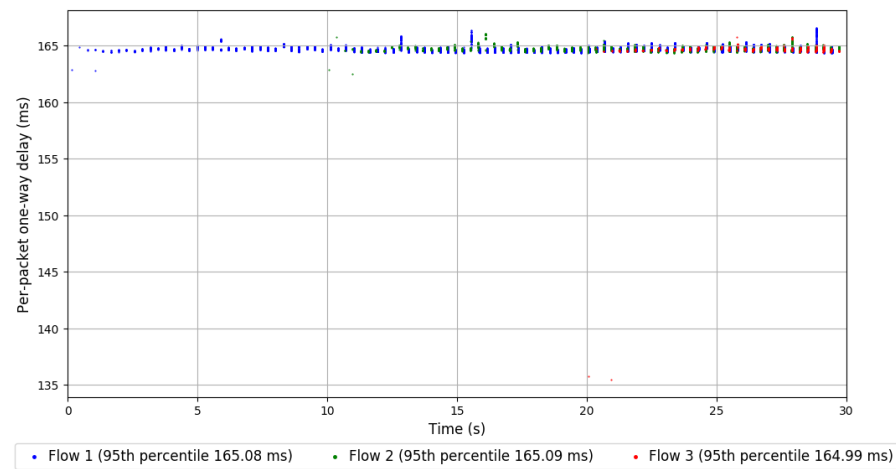
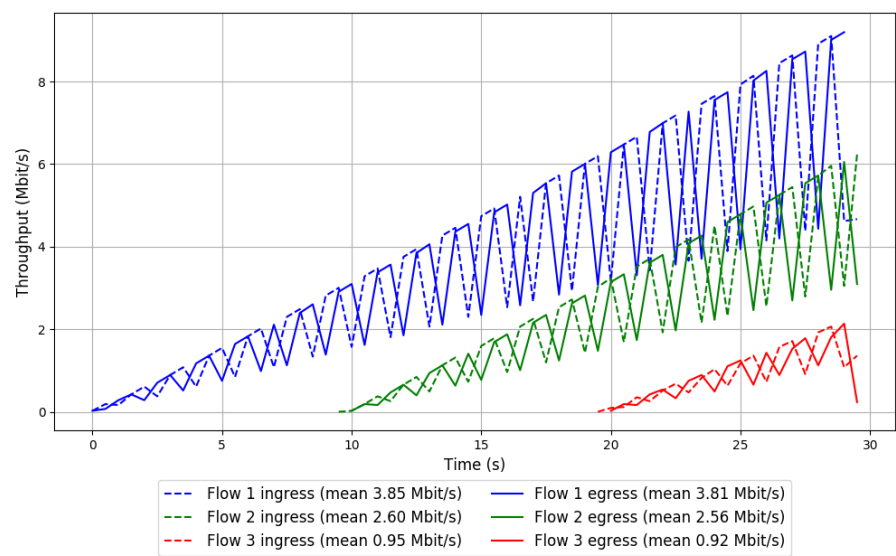
-- Flow 3:

Average throughput: 0.92 Mbit/s

95th percentile per-packet one-way delay: 164.989 ms

Loss rate: 5.97%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-09-08 11:58:12

End at: 2017-09-08 11:58:42

# Below is generated by plot.py at 2017-09-08 16:13:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.15 Mbit/s

95th percentile per-packet one-way delay: 165.051 ms

Loss rate: 2.49%

-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 165.075 ms

Loss rate: 2.28%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 164.952 ms

Loss rate: 2.31%

-- Flow 3:

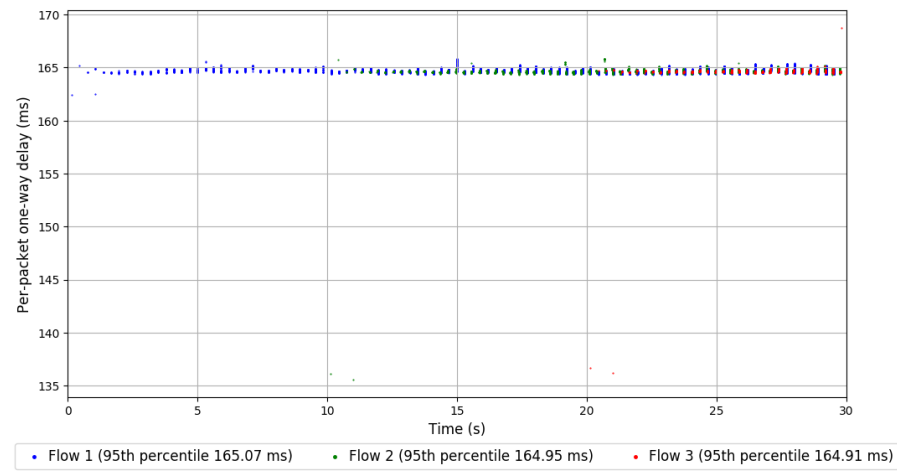
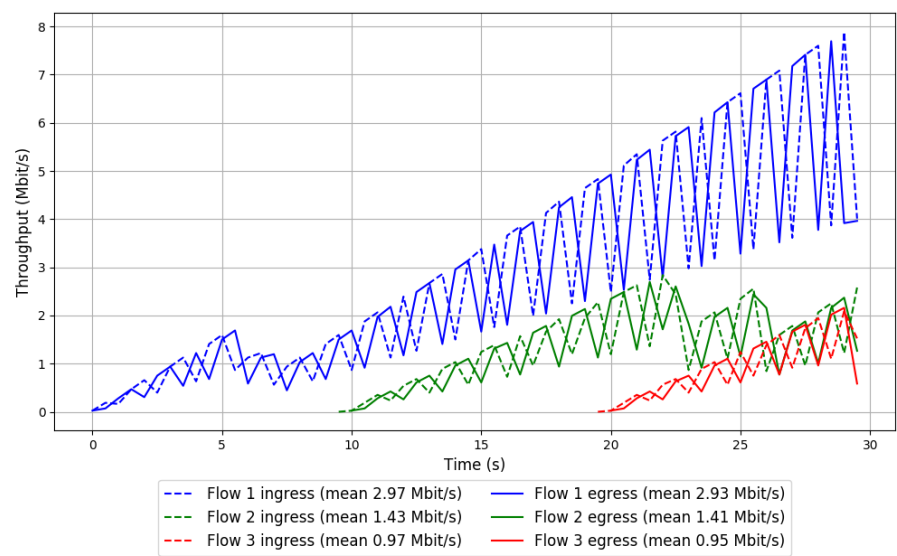
Average throughput: 0.95 Mbit/s

95th percentile per-packet one-way delay: 164.914 ms

Loss rate: 4.88%



Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-09-08 12:11:26

End at: 2017-09-08 12:11:56

# Below is generated by plot.py at 2017-09-08 16:13:45

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.17 Mbit/s

95th percentile per-packet one-way delay: 165.420 ms

Loss rate: 2.79%

-- Flow 1:

Average throughput: 2.63 Mbit/s

95th percentile per-packet one-way delay: 165.503 ms

Loss rate: 2.29%

-- Flow 2:

Average throughput: 1.89 Mbit/s

95th percentile per-packet one-way delay: 165.168 ms

Loss rate: 3.03%

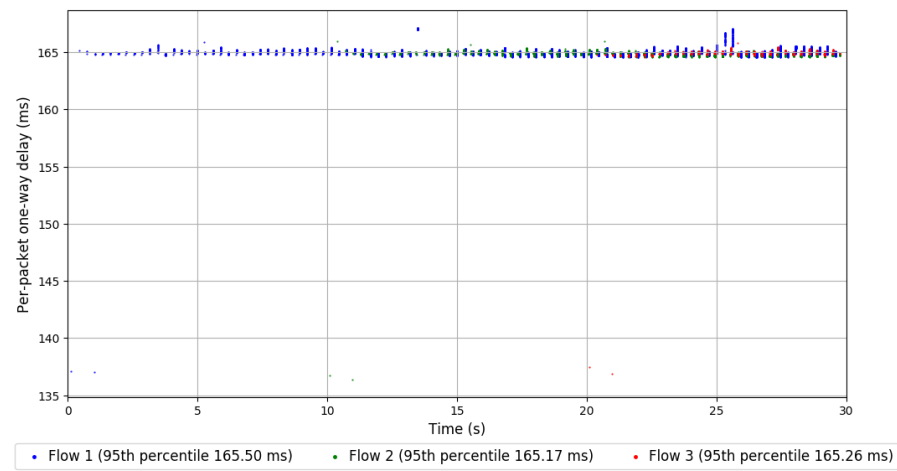
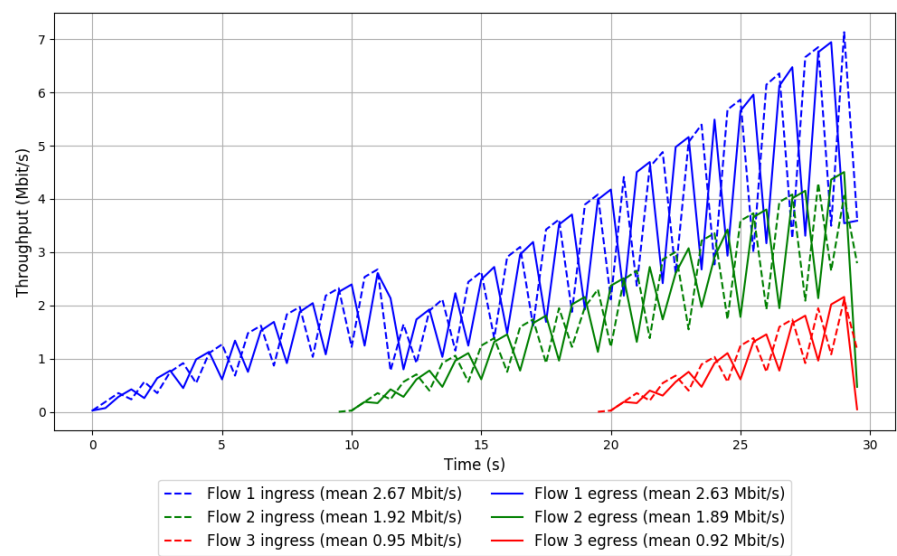
-- Flow 3:

Average throughput: 0.92 Mbit/s

95th percentile per-packet one-way delay: 165.264 ms

Loss rate: 5.98%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-09-08 12:24:40

End at: 2017-09-08 12:25:10

# Below is generated by plot.py at 2017-09-08 16:13:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.25 Mbit/s

95th percentile per-packet one-way delay: 165.250 ms

Loss rate: 2.79%

-- Flow 1:

Average throughput: 3.01 Mbit/s

95th percentile per-packet one-way delay: 165.257 ms

Loss rate: 2.27%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 165.266 ms

Loss rate: 3.37%

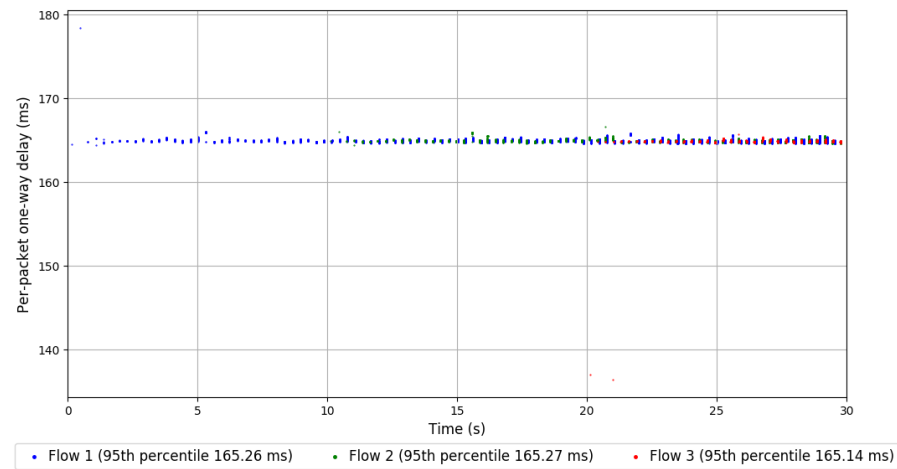
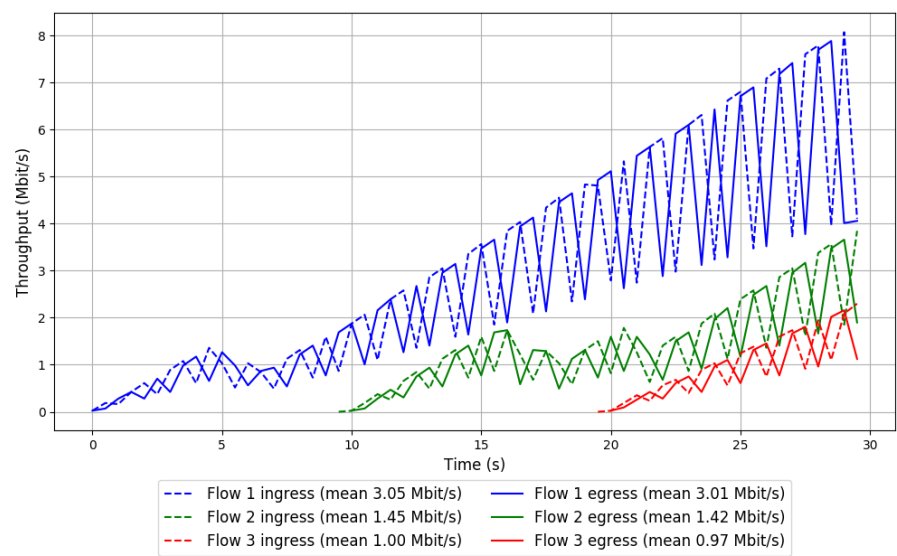
-- Flow 3:

Average throughput: 0.97 Mbit/s

95th percentile per-packet one-way delay: 165.137 ms

Loss rate: 5.87%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-09-08 12:38:03

End at: 2017-09-08 12:38:33

# Below is generated by plot.py at 2017-09-08 16:13:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.19 Mbit/s

95th percentile per-packet one-way delay: 165.551 ms

Loss rate: 2.84%

-- Flow 1:

Average throughput: 2.65 Mbit/s

95th percentile per-packet one-way delay: 165.586 ms

Loss rate: 2.37%

-- Flow 2:

Average throughput: 1.89 Mbit/s

95th percentile per-packet one-way delay: 165.328 ms

Loss rate: 3.03%

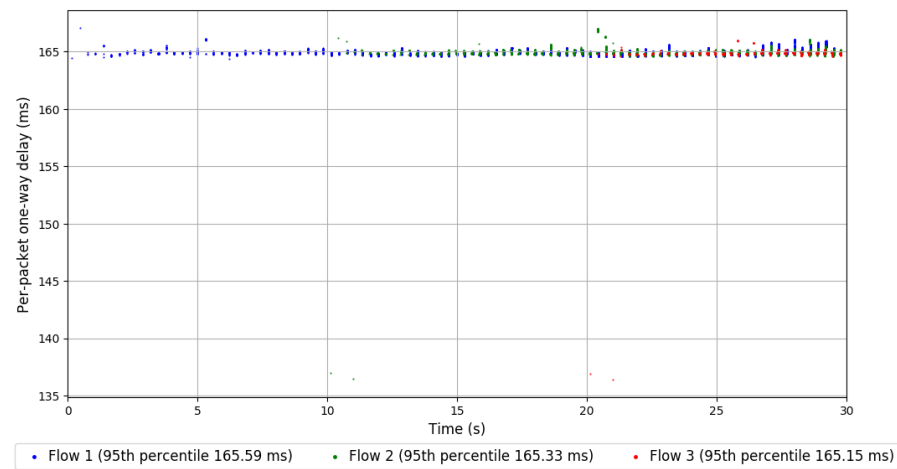
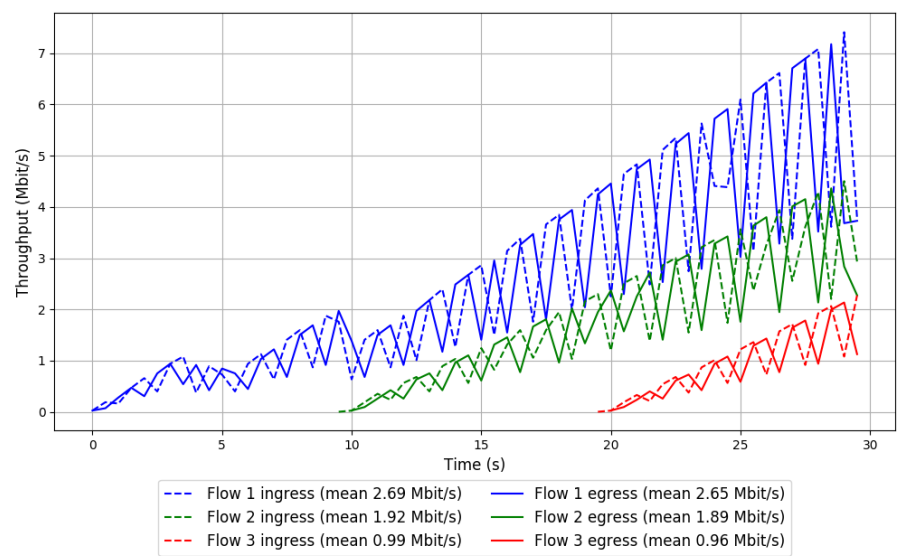
-- Flow 3:

Average throughput: 0.96 Mbit/s

95th percentile per-packet one-way delay: 165.146 ms

Loss rate: 5.85%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-09-08 12:51:22

End at: 2017-09-08 12:51:52

# Below is generated by plot.py at 2017-09-08 16:13:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.41 Mbit/s

95th percentile per-packet one-way delay: 165.215 ms

Loss rate: 2.58%

-- Flow 1:

Average throughput: 2.85 Mbit/s

95th percentile per-packet one-way delay: 165.228 ms

Loss rate: 2.03%

-- Flow 2:

Average throughput: 1.94 Mbit/s

95th percentile per-packet one-way delay: 165.184 ms

Loss rate: 2.98%

-- Flow 3:

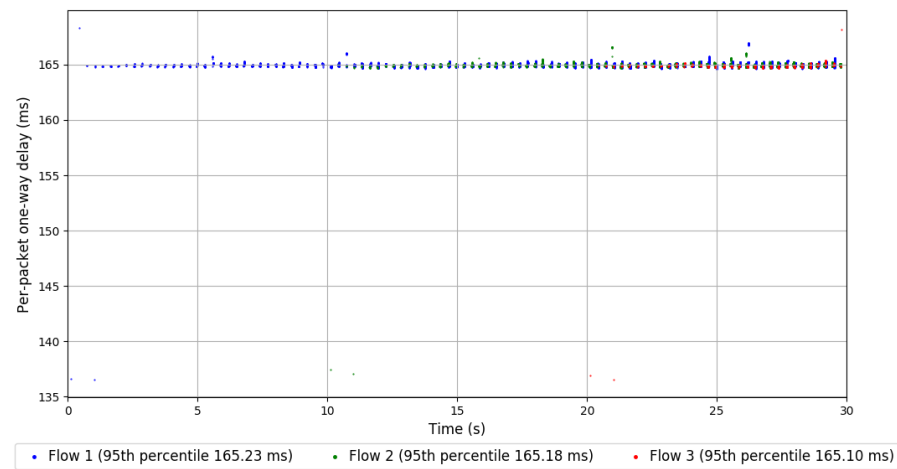
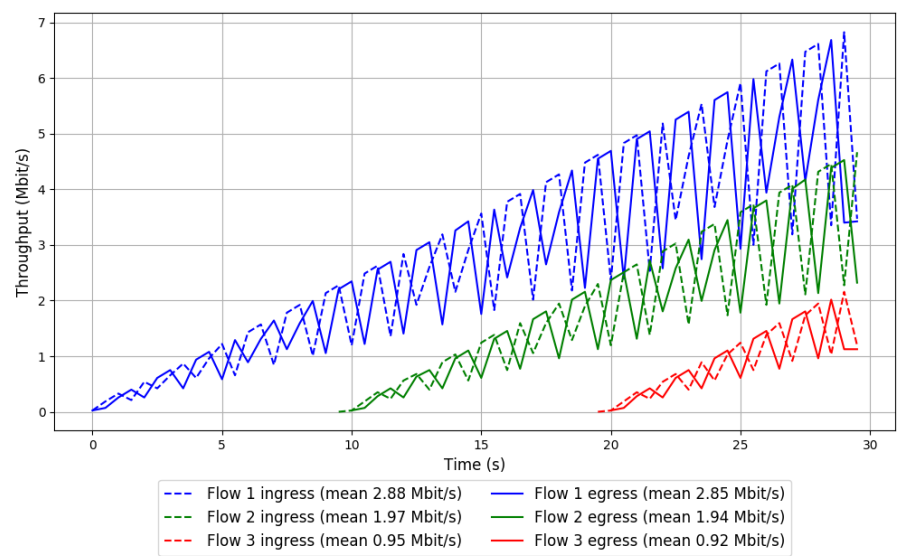
Average throughput: 0.92 Mbit/s

95th percentile per-packet one-way delay: 165.100 ms

Loss rate: 5.85%



Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-09-08 13:04:46

End at: 2017-09-08 13:05:16

# Below is generated by plot.py at 2017-09-08 16:13:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.53 Mbit/s

95th percentile per-packet one-way delay: 165.249 ms

Loss rate: 2.55%

-- Flow 1:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 165.207 ms

Loss rate: 2.00%

-- Flow 2:

Average throughput: 1.94 Mbit/s

95th percentile per-packet one-way delay: 165.332 ms

Loss rate: 2.97%

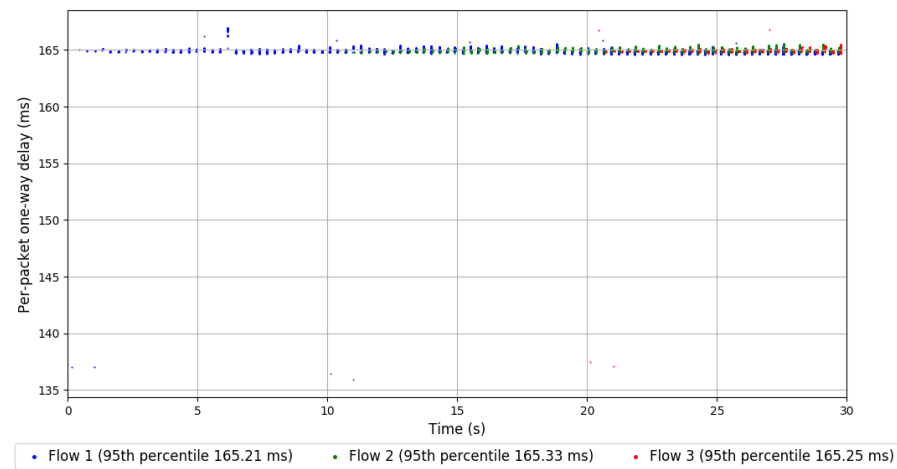
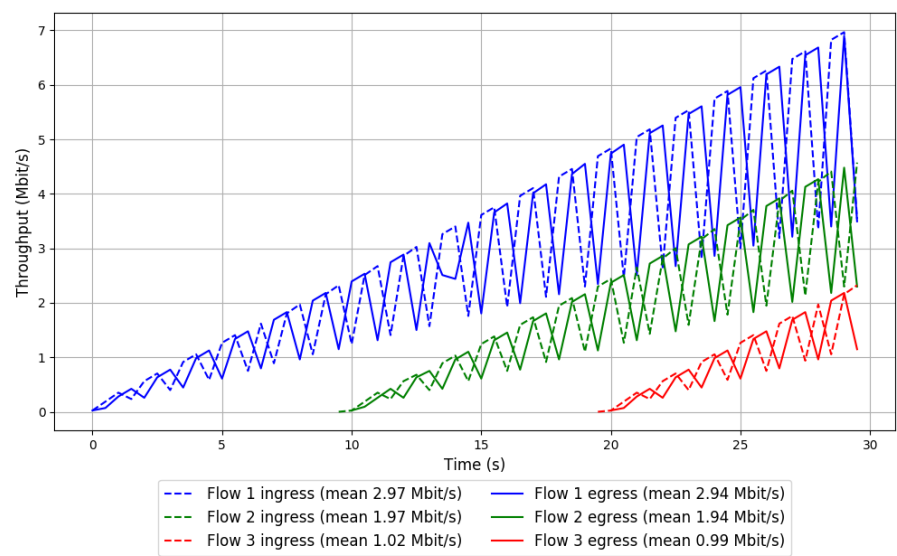
-- Flow 3:

Average throughput: 0.99 Mbit/s

95th percentile per-packet one-way delay: 165.245 ms

Loss rate: 5.79%

Run 10: Report of LEDBAT — Data Link

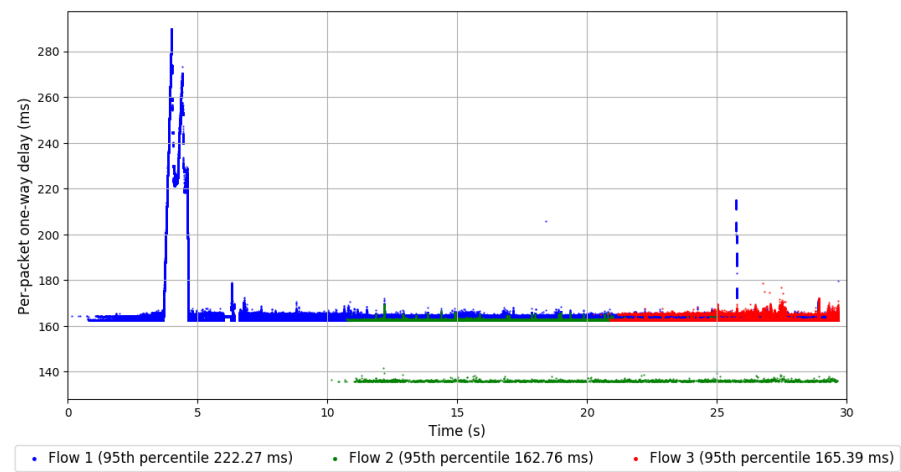
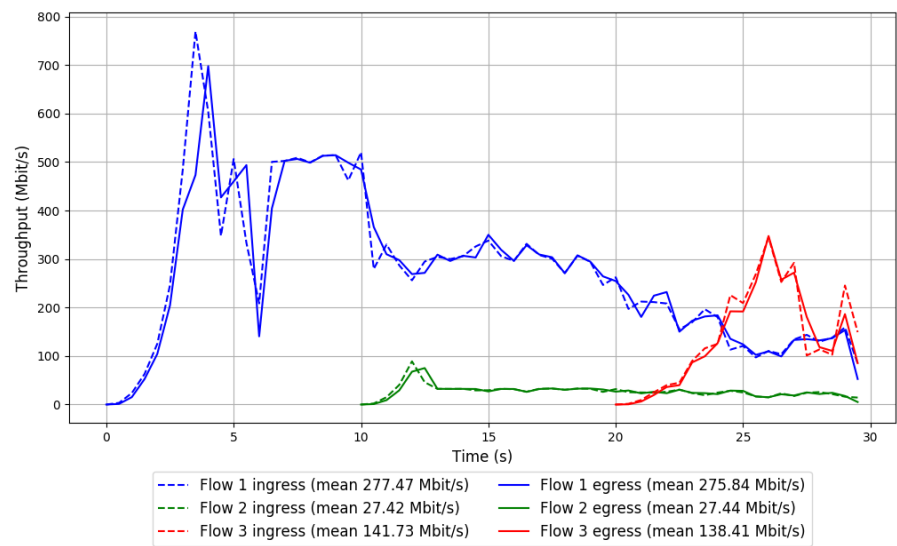


```
Run 1: Statistics of PCC

Start at: 2017-09-08 10:57:40
End at: 2017-09-08 10:58:10

# Below is generated by plot.py at 2017-09-08 16:14:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 338.17 Mbit/s
95th percentile per-packet one-way delay: 206.085 ms
Loss rate: 2.06%
-- Flow 1:
Average throughput: 275.84 Mbit/s
95th percentile per-packet one-way delay: 222.266 ms
Loss rate: 1.56%
-- Flow 2:
Average throughput: 27.44 Mbit/s
95th percentile per-packet one-way delay: 162.764 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 138.41 Mbit/s
95th percentile per-packet one-way delay: 165.392 ms
Loss rate: 5.37%
```

Run 1: Report of PCC — Data Link

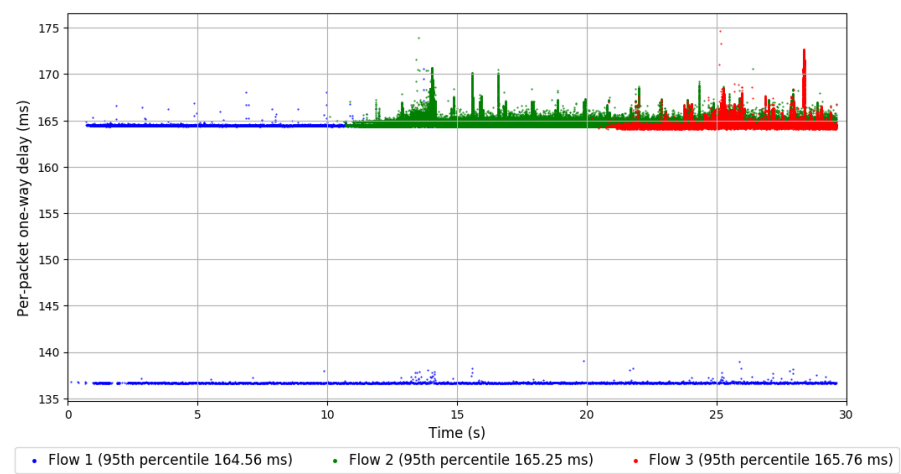
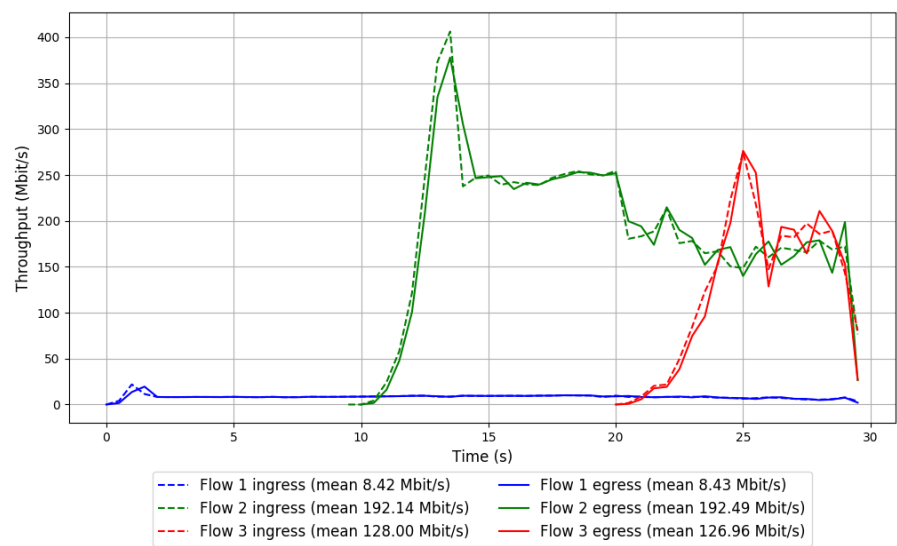


```
Run 2: Statistics of PCC

Start at: 2017-09-08 11:11:43
End at: 2017-09-08 11:12:13

# Below is generated by plot.py at 2017-09-08 16:14:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 176.49 Mbit/s
95th percentile per-packet one-way delay: 165.330 ms
Loss rate: 1.92%
-- Flow 1:
Average throughput: 8.43 Mbit/s
95th percentile per-packet one-way delay: 164.564 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 192.49 Mbit/s
95th percentile per-packet one-way delay: 165.246 ms
Loss rate: 1.35%
-- Flow 3:
Average throughput: 126.96 Mbit/s
95th percentile per-packet one-way delay: 165.764 ms
Loss rate: 3.86%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-09-08 11:25:40

End at: 2017-09-08 11:26:10

# Below is generated by plot.py at 2017-09-08 16:15:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 366.94 Mbit/s

95th percentile per-packet one-way delay: 166.994 ms

Loss rate: 1.03%

-- Flow 1:

Average throughput: 305.38 Mbit/s

95th percentile per-packet one-way delay: 166.723 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 13.72 Mbit/s

95th percentile per-packet one-way delay: 164.858 ms

Loss rate: 1.54%

-- Flow 3:

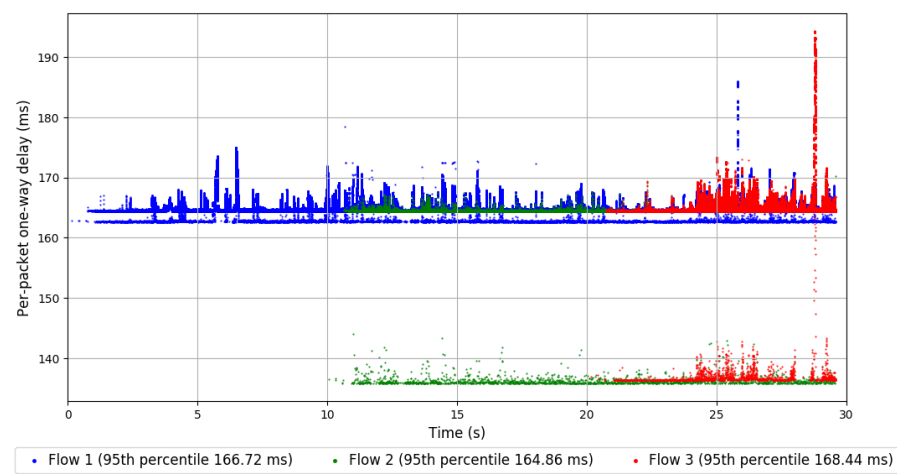
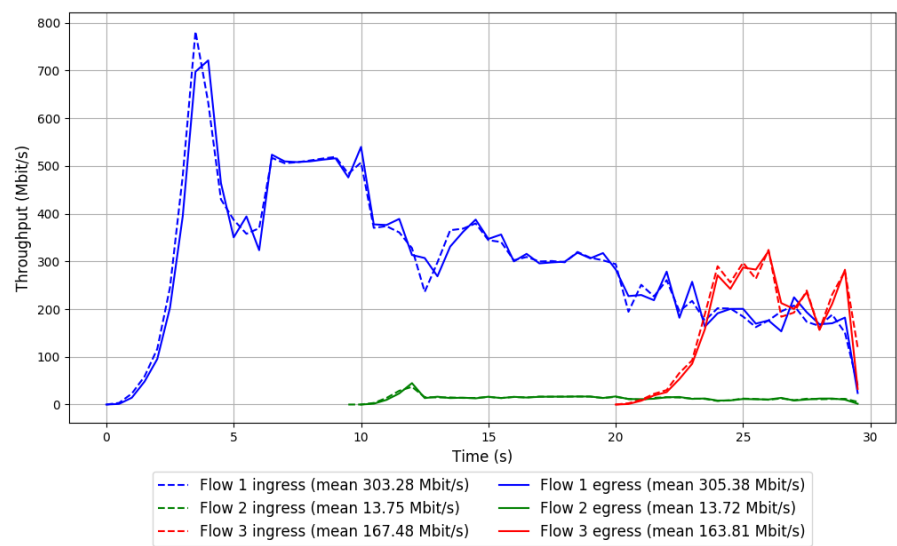
Average throughput: 163.81 Mbit/s

95th percentile per-packet one-way delay: 168.444 ms

Loss rate: 4.91%



Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-09-08 11:39:42

End at: 2017-09-08 11:40:12

# Below is generated by plot.py at 2017-09-08 16:15:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 67.46 Mbit/s

95th percentile per-packet one-way delay: 164.532 ms

Loss rate: 1.00%

-- Flow 1:

Average throughput: 63.48 Mbit/s

95th percentile per-packet one-way delay: 164.528 ms

Loss rate: 0.94%

-- Flow 2:

Average throughput: 4.12 Mbit/s

95th percentile per-packet one-way delay: 164.564 ms

Loss rate: 1.42%

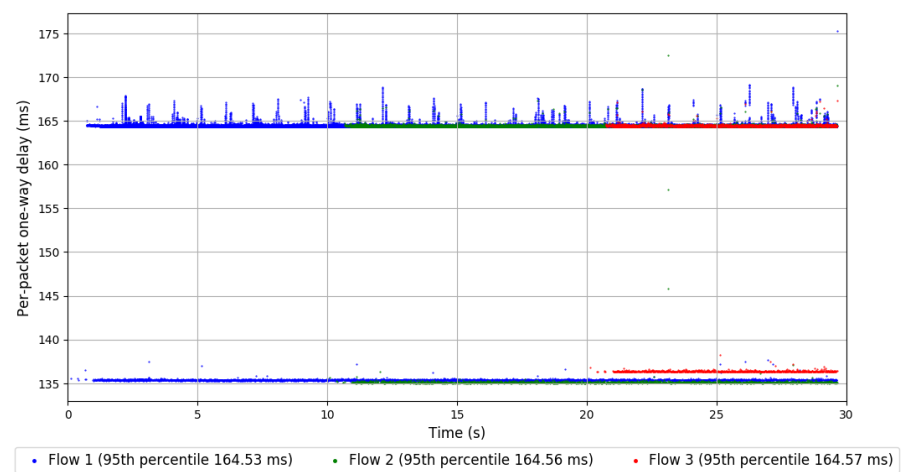
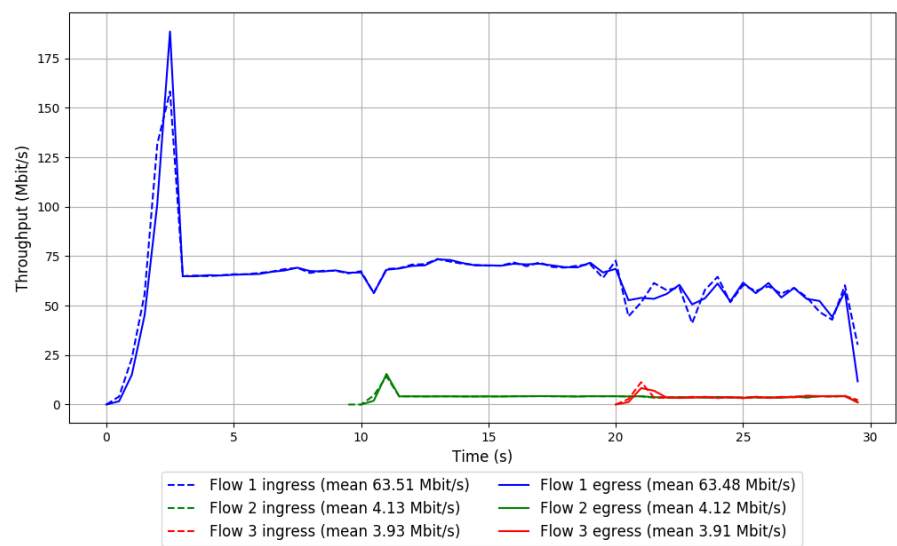
-- Flow 3:

Average throughput: 3.91 Mbit/s

95th percentile per-packet one-way delay: 164.570 ms

Loss rate: 3.40%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-09-08 11:53:29

End at: 2017-09-08 11:53:59

# Below is generated by plot.py at 2017-09-08 16:15:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 65.14 Mbit/s

95th percentile per-packet one-way delay: 166.246 ms

Loss rate: 5.00%

-- Flow 1:

Average throughput: 4.74 Mbit/s

95th percentile per-packet one-way delay: 164.552 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 4.28 Mbit/s

95th percentile per-packet one-way delay: 164.570 ms

Loss rate: 1.35%

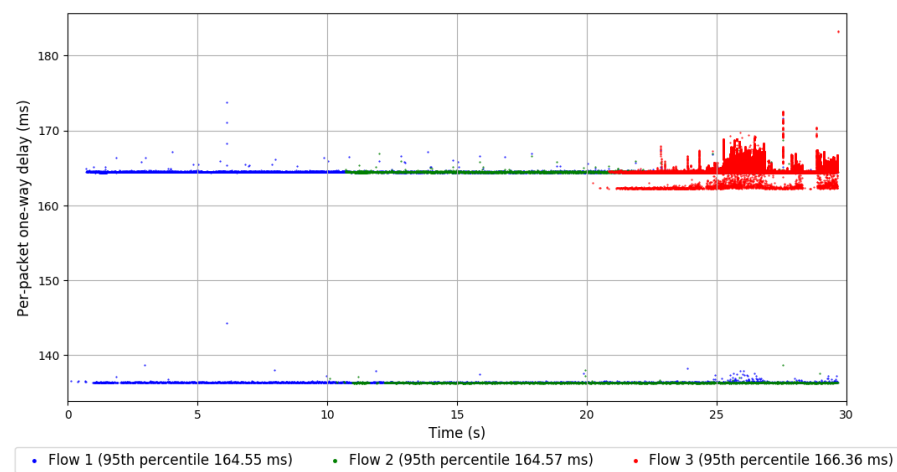
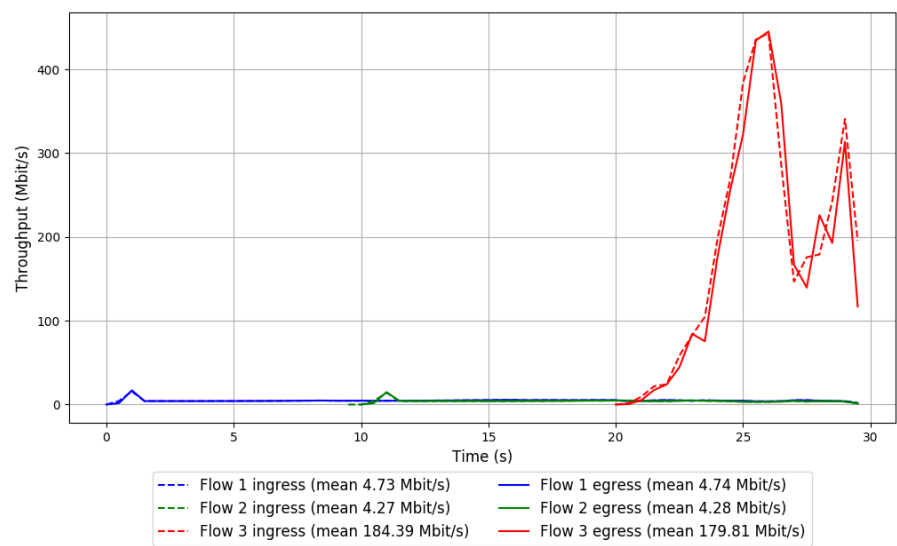
-- Flow 3:

Average throughput: 179.81 Mbit/s

95th percentile per-packet one-way delay: 166.360 ms

Loss rate: 5.50%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-09-08 12:06:47

End at: 2017-09-08 12:07:17

# Below is generated by plot.py at 2017-09-08 16:15:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 8.61 Mbit/s

95th percentile per-packet one-way delay: 164.757 ms

Loss rate: 1.39%

-- Flow 1:

Average throughput: 4.23 Mbit/s

95th percentile per-packet one-way delay: 164.755 ms

Loss rate: 1.22%

-- Flow 2:

Average throughput: 4.04 Mbit/s

95th percentile per-packet one-way delay: 164.751 ms

Loss rate: 1.06%

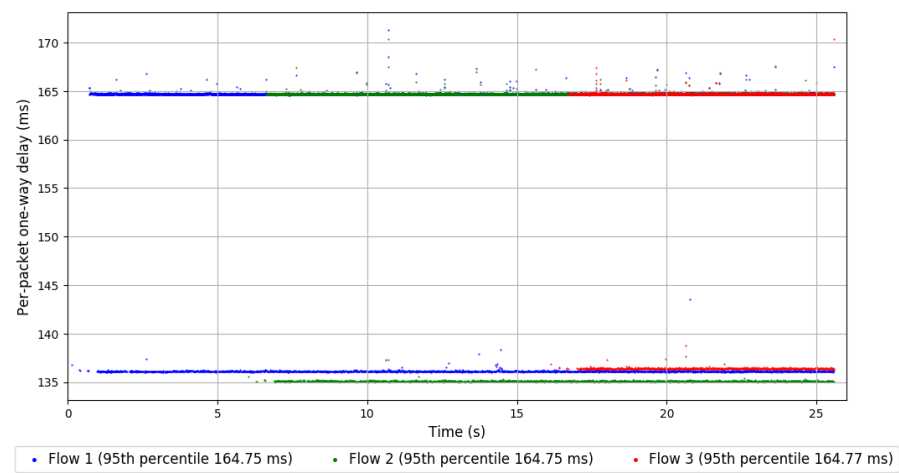
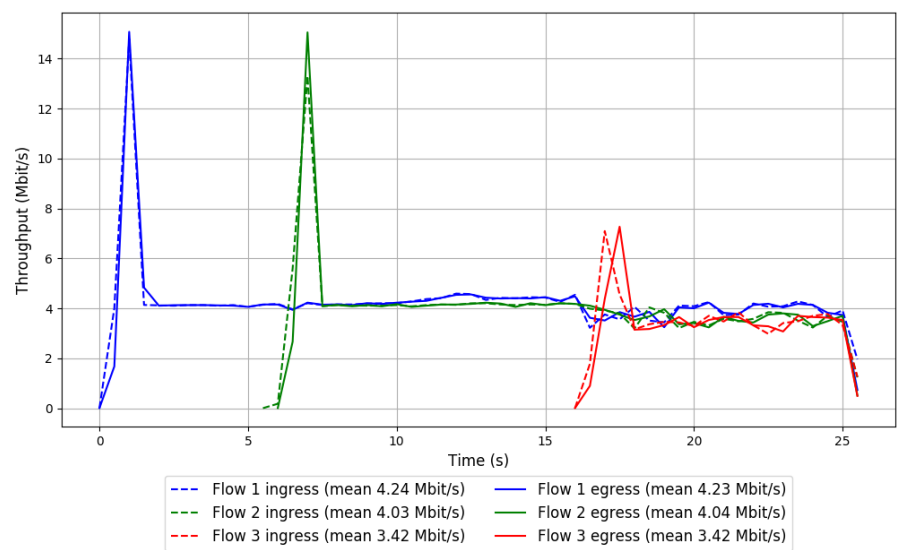
-- Flow 3:

Average throughput: 3.42 Mbit/s

95th percentile per-packet one-way delay: 164.773 ms

Loss rate: 2.73%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-09-08 12:19:57

End at: 2017-09-08 12:20:27

# Below is generated by plot.py at 2017-09-08 16:15:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 36.62 Mbit/s

95th percentile per-packet one-way delay: 164.771 ms

Loss rate: 2.83%

-- Flow 1:

Average throughput: 4.56 Mbit/s

95th percentile per-packet one-way delay: 164.743 ms

Loss rate: 1.02%

-- Flow 2:

Average throughput: 8.15 Mbit/s

95th percentile per-packet one-way delay: 164.731 ms

Loss rate: 1.57%

-- Flow 3:

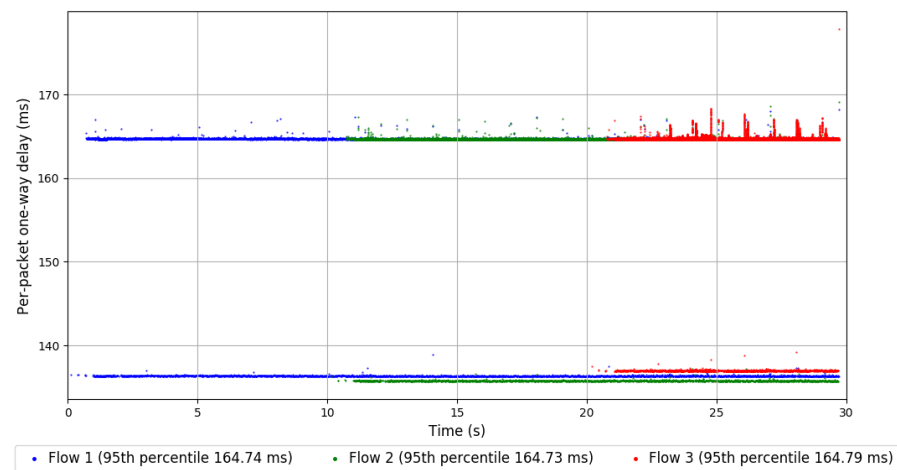
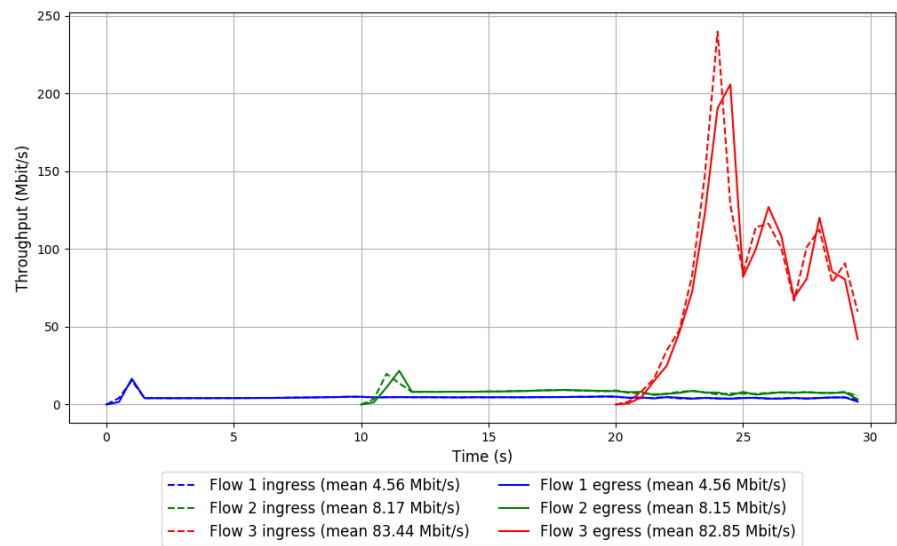
Average throughput: 82.85 Mbit/s

95th percentile per-packet one-way delay: 164.791 ms

Loss rate: 3.38%



Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-09-08 12:33:30

End at: 2017-09-08 12:34:00

# Below is generated by plot.py at 2017-09-08 16:15:40

# Datalink statistics

-- Total of 3 flows:

Average throughput: 20.12 Mbit/s

95th percentile per-packet one-way delay: 164.730 ms

Loss rate: 1.07%

-- Flow 1:

Average throughput: 15.90 Mbit/s

95th percentile per-packet one-way delay: 164.719 ms

Loss rate: 0.81%

-- Flow 2:

Average throughput: 4.34 Mbit/s

95th percentile per-packet one-way delay: 164.751 ms

Loss rate: 1.54%

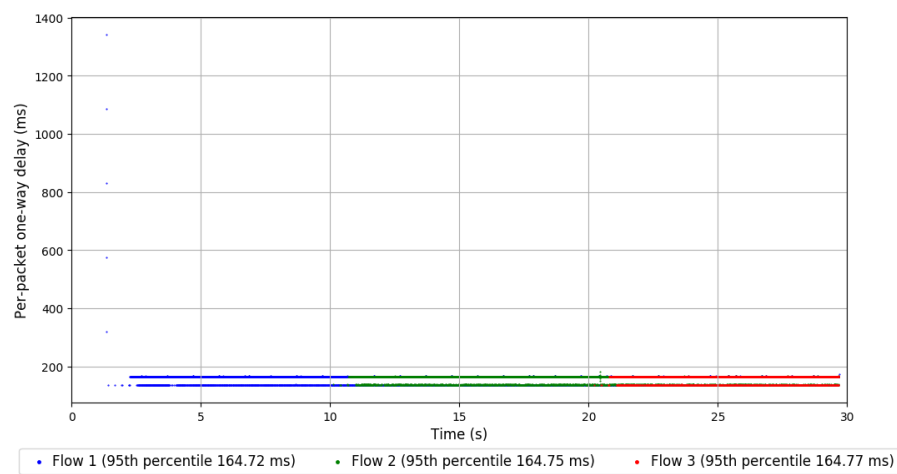
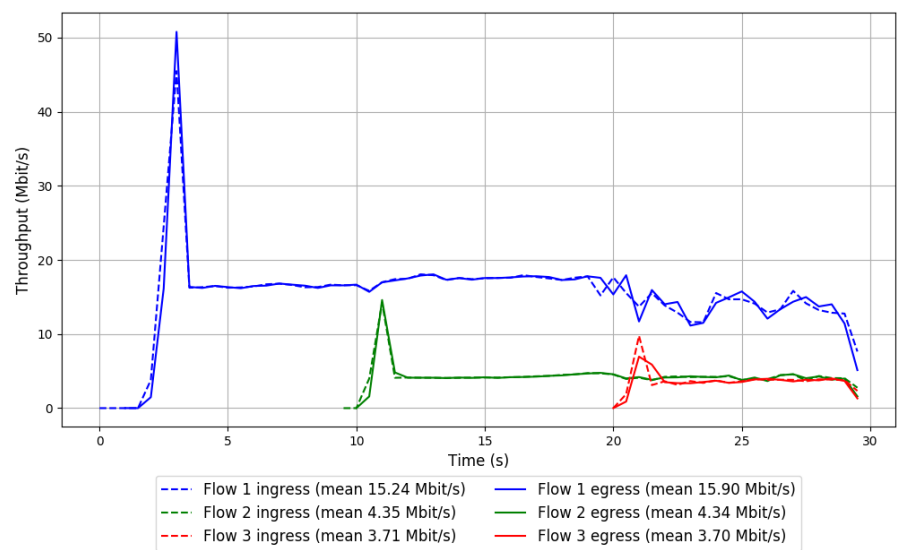
-- Flow 3:

Average throughput: 3.70 Mbit/s

95th percentile per-packet one-way delay: 164.771 ms

Loss rate: 3.13%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-09-08 12:46:37

End at: 2017-09-08 12:47:07

# Below is generated by plot.py at 2017-09-08 16:16:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 213.81 Mbit/s

95th percentile per-packet one-way delay: 166.633 ms

Loss rate: 1.22%

-- Flow 1:

Average throughput: 7.77 Mbit/s

95th percentile per-packet one-way delay: 165.356 ms

Loss rate: 1.16%

-- Flow 2:

Average throughput: 264.62 Mbit/s

95th percentile per-packet one-way delay: 166.673 ms

Loss rate: 1.21%

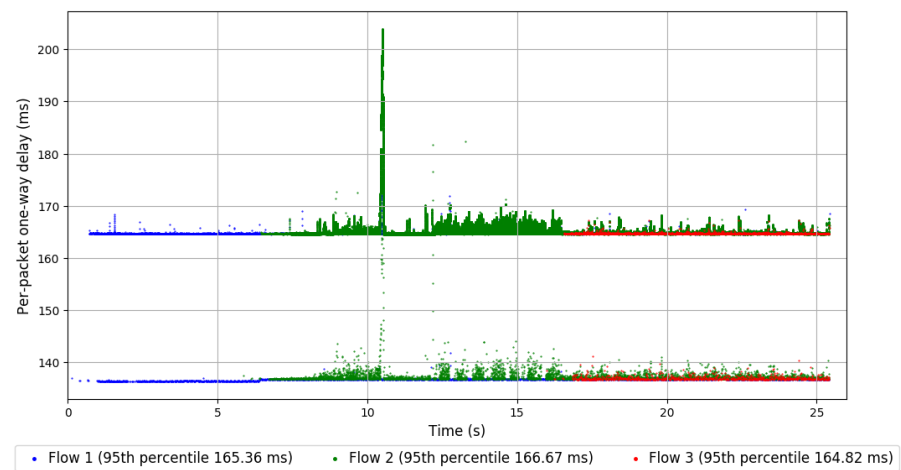
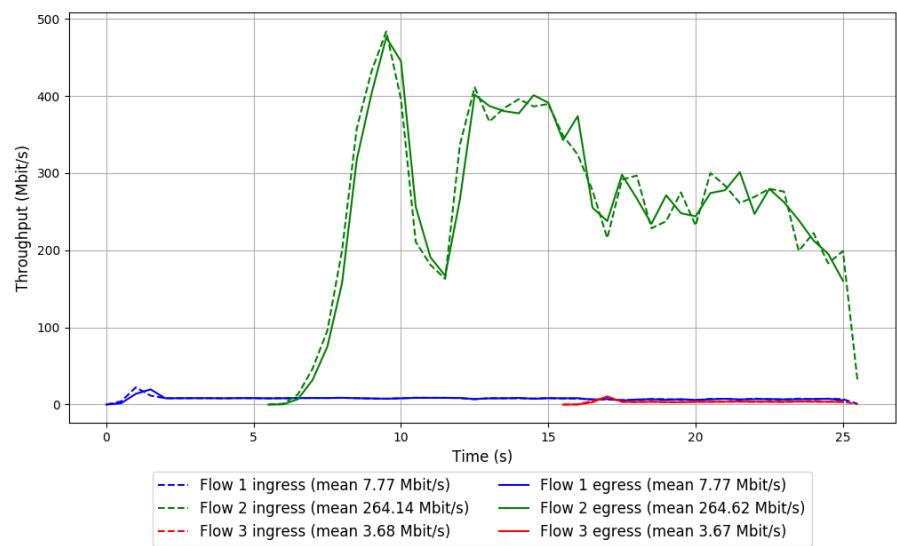
-- Flow 3:

Average throughput: 3.67 Mbit/s

95th percentile per-packet one-way delay: 164.822 ms

Loss rate: 2.94%

Run 9: Report of PCC — Data Link

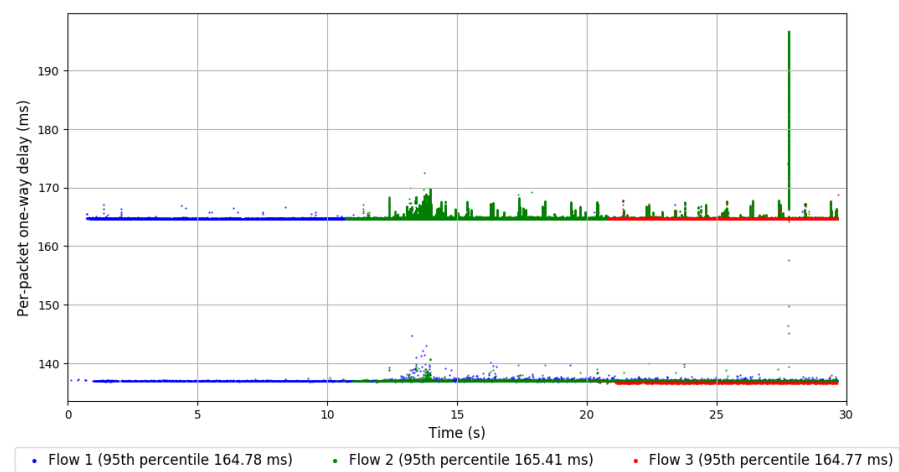
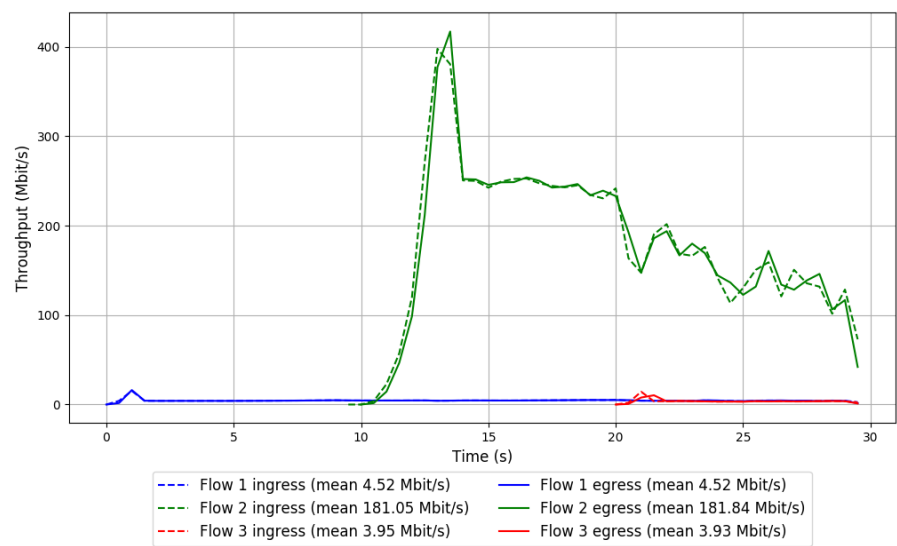


```
Run 10: Statistics of PCC

Start at: 2017-09-08 13:00:01
End at: 2017-09-08 13:00:31

# Below is generated by plot.py at 2017-09-08 16:16:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 126.19 Mbit/s
95th percentile per-packet one-way delay: 165.363 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 4.52 Mbit/s
95th percentile per-packet one-way delay: 164.782 ms
Loss rate: 0.98%
-- Flow 2:
Average throughput: 181.84 Mbit/s
95th percentile per-packet one-way delay: 165.413 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 3.93 Mbit/s
95th percentile per-packet one-way delay: 164.769 ms
Loss rate: 3.25%
```

Run 10: Report of PCC — Data Link



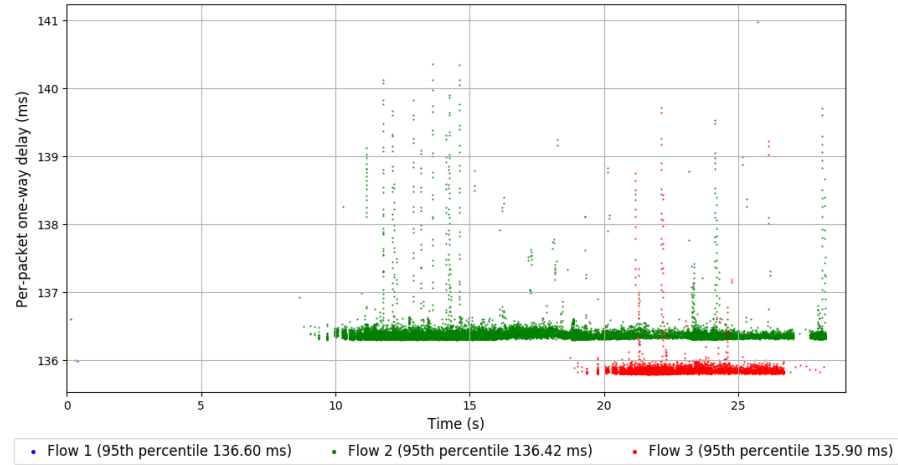
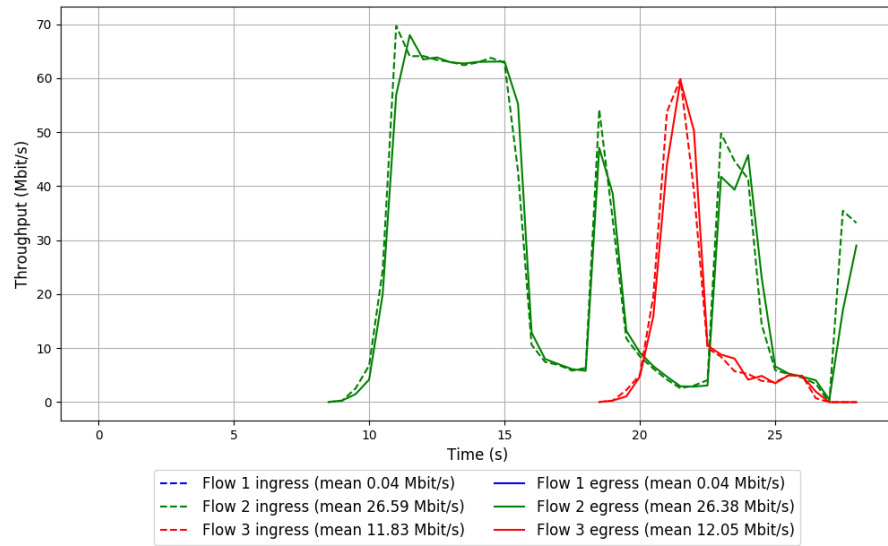
```
Run 1: Statistics of QUIC Cubic

Start at: 2017-09-08 11:04:32
End at: 2017-09-08 11:05:02

# Below is generated by plot.py at 2017-09-08 16:16:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 22.43 Mbit/s
95th percentile per-packet one-way delay: 136.411 ms
Loss rate: 1.76%
-- Flow 1:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 136.598 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 26.38 Mbit/s
95th percentile per-packet one-way delay: 136.420 ms
Loss rate: 2.14%
-- Flow 3:
Average throughput: 12.05 Mbit/s
95th percentile per-packet one-way delay: 135.899 ms
Loss rate: 0.00%
```



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



Run 2: Statistics of QUIC Cubic

Start at: 2017-09-08 11:18:26

End at: 2017-09-08 11:18:56

# Below is generated by plot.py at 2017-09-08 16:16:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 19.73 Mbit/s

95th percentile per-packet one-way delay: 164.526 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 164.972 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 23.48 Mbit/s

95th percentile per-packet one-way delay: 164.538 ms

Loss rate: 0.31%

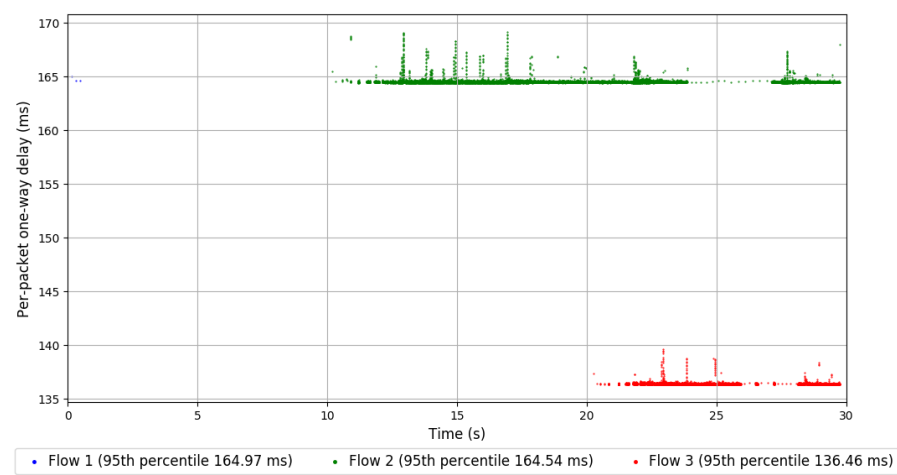
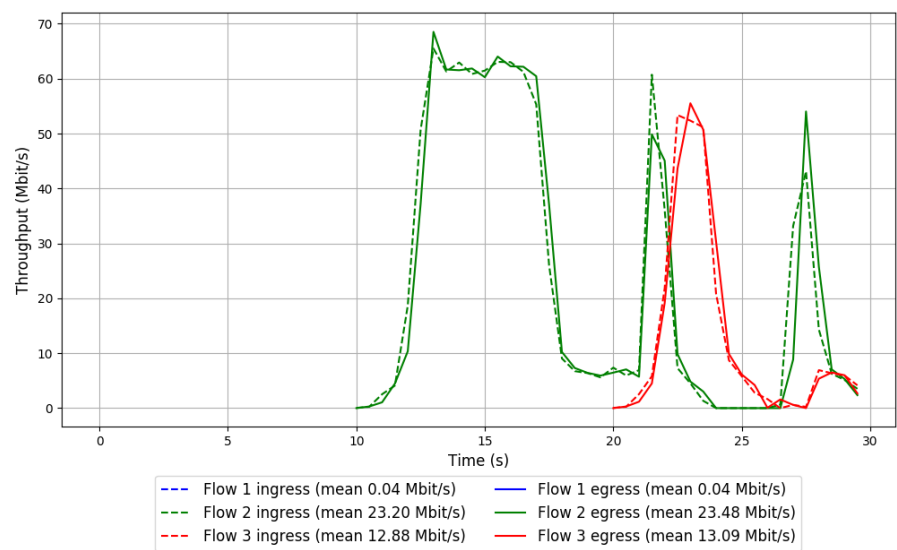
-- Flow 3:

Average throughput: 13.09 Mbit/s

95th percentile per-packet one-way delay: 136.458 ms

Loss rate: 1.22%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-09-08 11:32:24

End at: 2017-09-08 11:32:54

# Below is generated by plot.py at 2017-09-08 16:16:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 19.63 Mbit/s

95th percentile per-packet one-way delay: 136.712 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 136.475 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 24.81 Mbit/s

95th percentile per-packet one-way delay: 136.397 ms

Loss rate: 0.27%

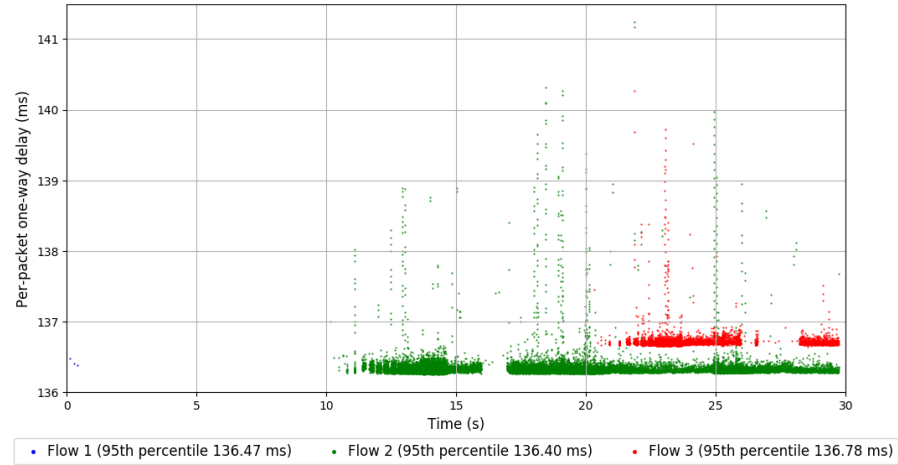
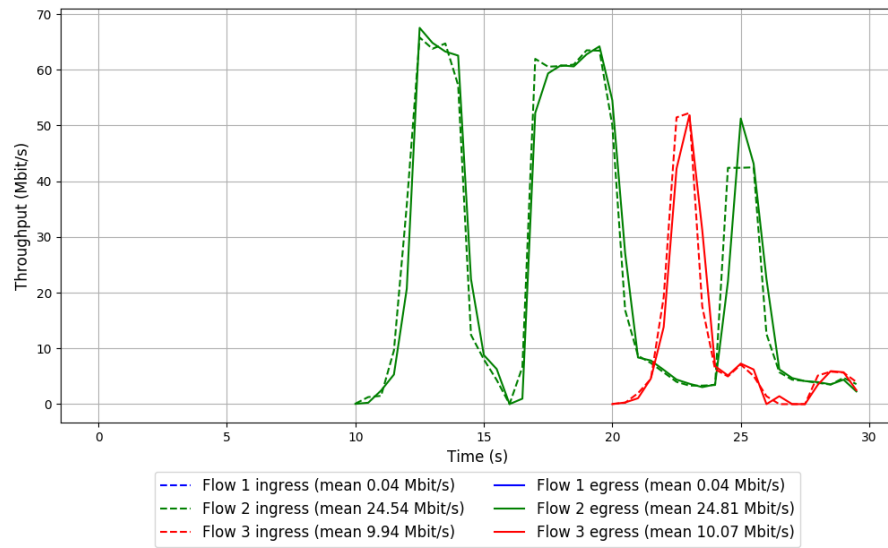
-- Flow 3:

Average throughput: 10.07 Mbit/s

95th percentile per-packet one-way delay: 136.778 ms

Loss rate: 1.54%

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



Run 4: Statistics of QUIC Cubic

Start at: 2017-09-08 11:46:26

End at: 2017-09-08 11:46:56

# Below is generated by plot.py at 2017-09-08 16:16:23

# Datalink statistics

-- Total of 3 flows:

Average throughput: 24.94 Mbit/s

95th percentile per-packet one-way delay: 164.482 ms

Loss rate: 2.92%

-- Flow 1:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 137.611 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 20.95 Mbit/s

95th percentile per-packet one-way delay: 163.120 ms

Loss rate: 2.67%

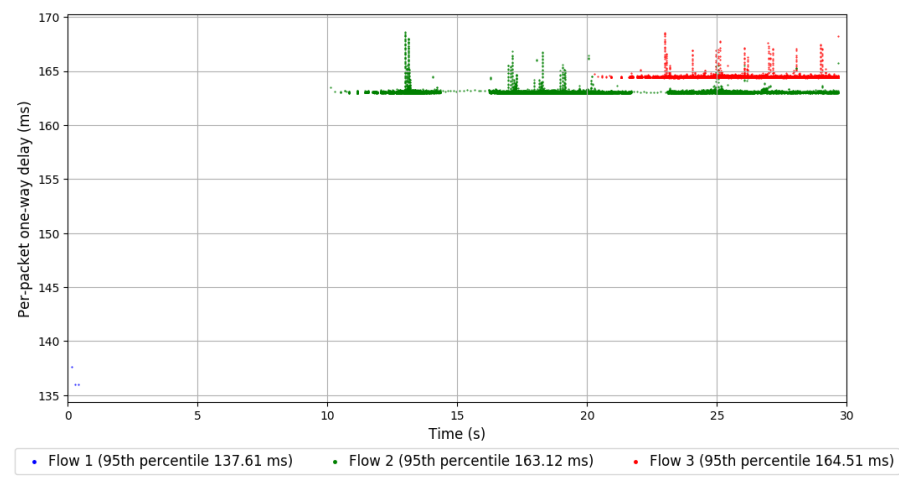
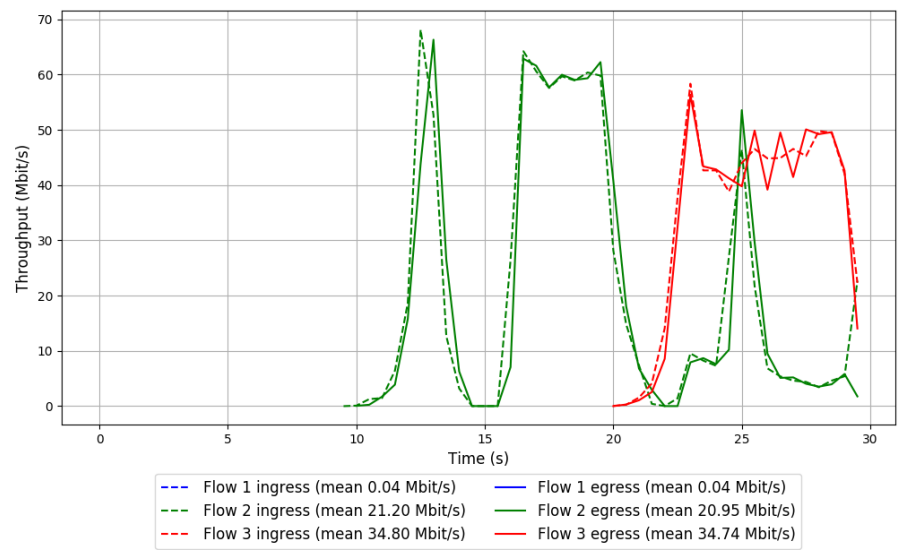
-- Flow 3:

Average throughput: 34.74 Mbit/s

95th percentile per-packet one-way delay: 164.511 ms

Loss rate: 3.24%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-09-08 11:59:56

End at: 2017-09-08 12:00:26

# Below is generated by plot.py at 2017-09-08 16:16:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 17.29 Mbit/s

95th percentile per-packet one-way delay: 136.921 ms

Loss rate: 2.73%

-- Flow 1:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 136.075 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 21.65 Mbit/s

95th percentile per-packet one-way delay: 136.405 ms

Loss rate: 3.13%

-- Flow 3:

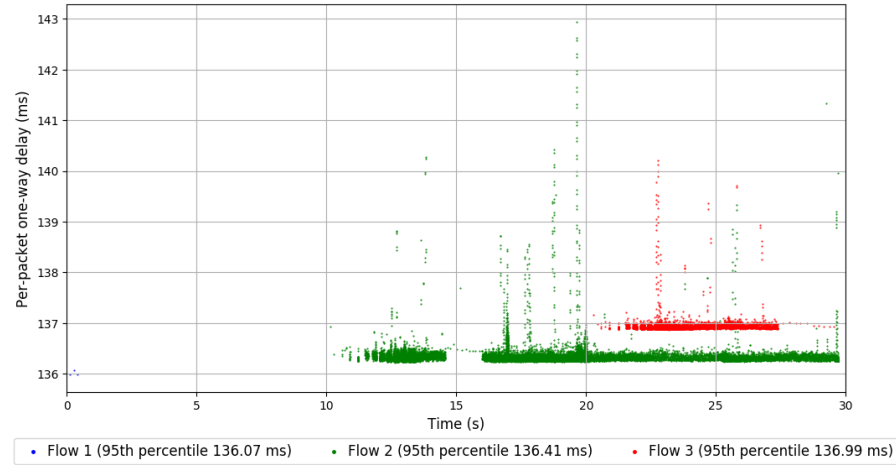
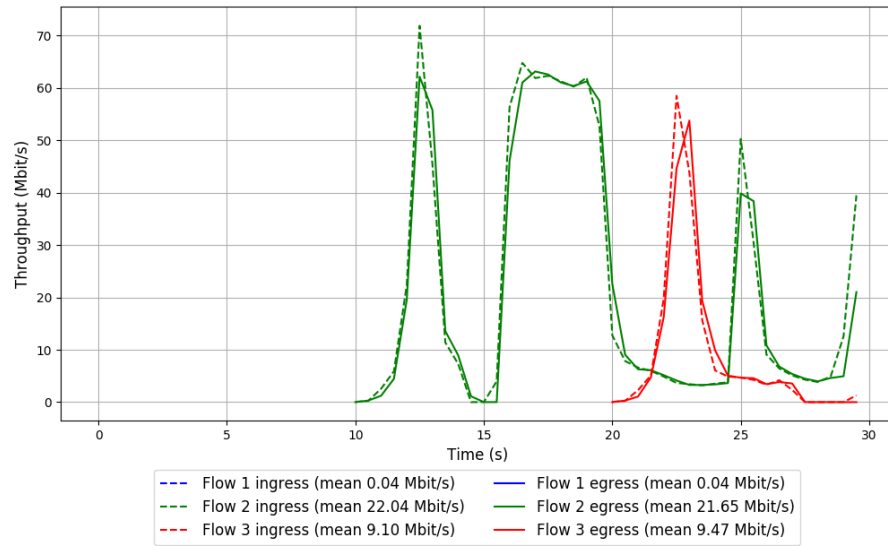
Average throughput: 9.47 Mbit/s

95th percentile per-packet one-way delay: 136.988 ms

Loss rate: 0.73%



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



Run 6: Statistics of QUIC Cubic

Start at: 2017-09-08 12:13:07

End at: 2017-09-08 12:13:37

# Below is generated by plot.py at 2017-09-08 16:16:29

# Datalink statistics

-- Total of 3 flows:

Average throughput: 23.28 Mbit/s

95th percentile per-packet one-way delay: 136.434 ms

Loss rate: 3.95%

-- Flow 1:

Average throughput: 0.02 Mbit/s

95th percentile per-packet one-way delay: 136.369 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 30.38 Mbit/s

95th percentile per-packet one-way delay: 136.437 ms

Loss rate: 1.74%

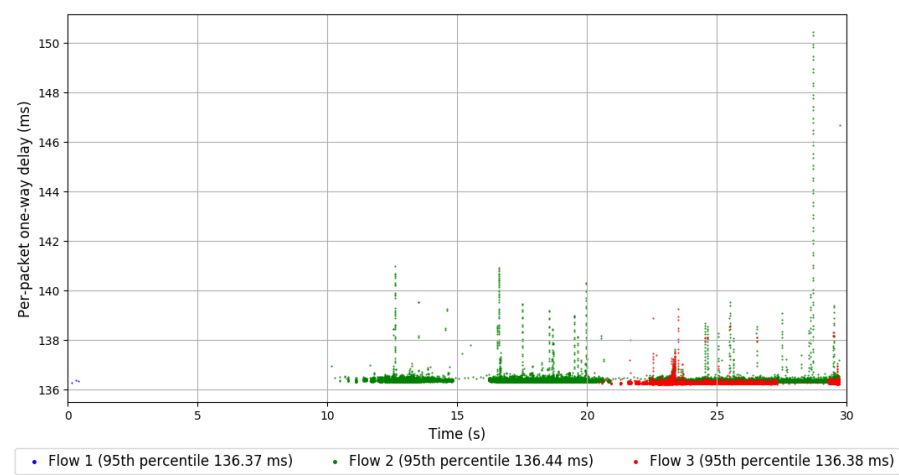
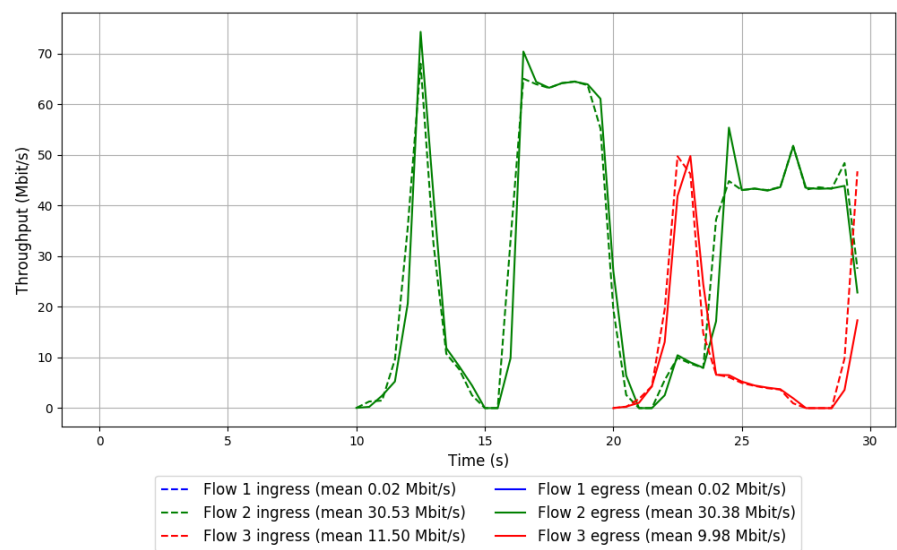
-- Flow 3:

Average throughput: 9.98 Mbit/s

95th percentile per-packet one-way delay: 136.378 ms

Loss rate: 15.90%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-09-08 12:26:26

End at: 2017-09-08 12:26:56

# Below is generated by plot.py at 2017-09-08 16:16:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 33.79 Mbit/s

95th percentile per-packet one-way delay: 164.680 ms

Loss rate: 1.15%

-- Flow 1:

Average throughput: 23.48 Mbit/s

95th percentile per-packet one-way delay: 136.390 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 11.69 Mbit/s

95th percentile per-packet one-way delay: 136.453 ms

Loss rate: 4.25%

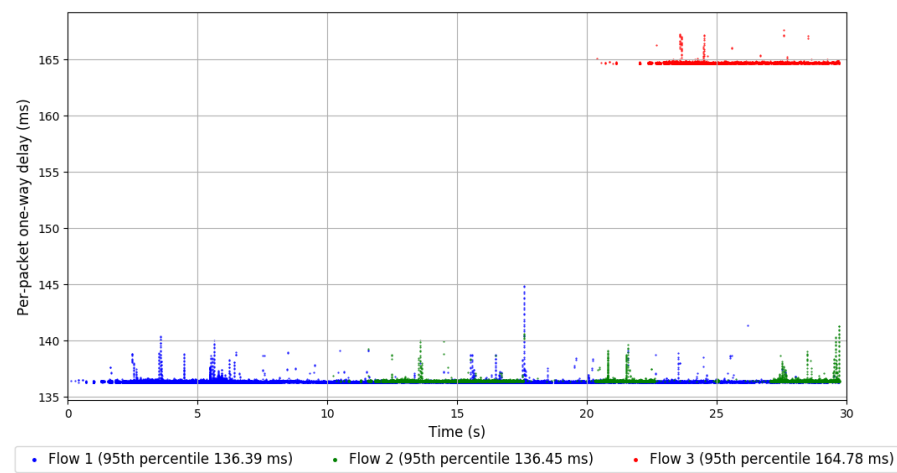
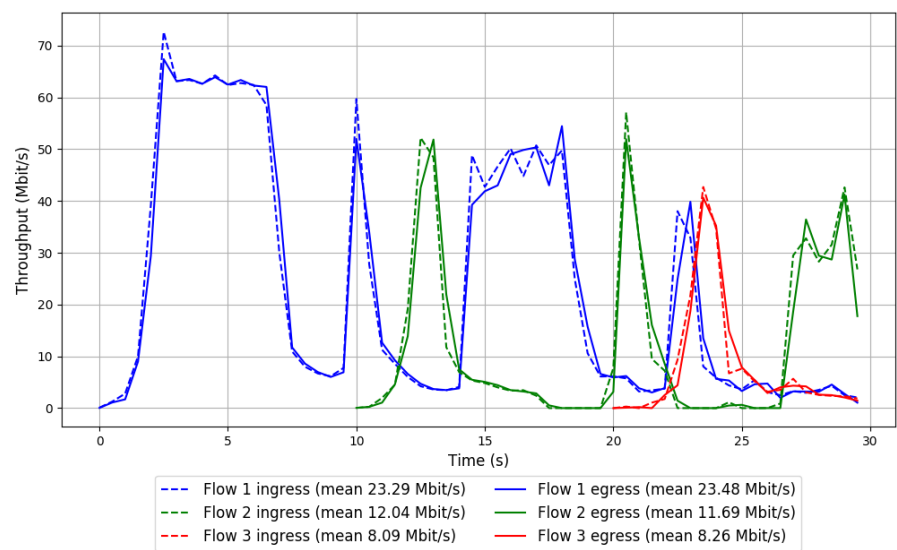
-- Flow 3:

Average throughput: 8.26 Mbit/s

95th percentile per-packet one-way delay: 164.781 ms

Loss rate: 0.92%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-09-08 12:39:46

End at: 2017-09-08 12:40:16

# Below is generated by plot.py at 2017-09-08 16:16:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 32.72 Mbit/s

95th percentile per-packet one-way delay: 136.653 ms

Loss rate: 1.16%

-- Flow 1:

Average throughput: 19.83 Mbit/s

95th percentile per-packet one-way delay: 136.674 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 12.13 Mbit/s

95th percentile per-packet one-way delay: 136.181 ms

Loss rate: 0.40%

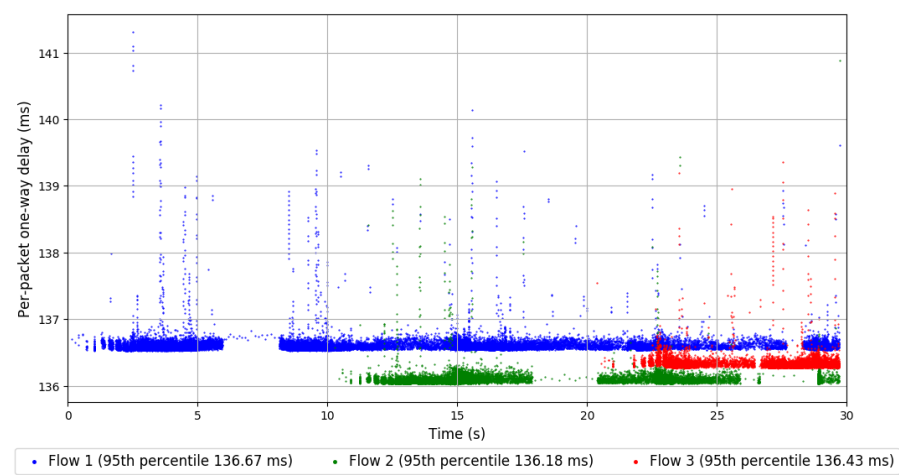
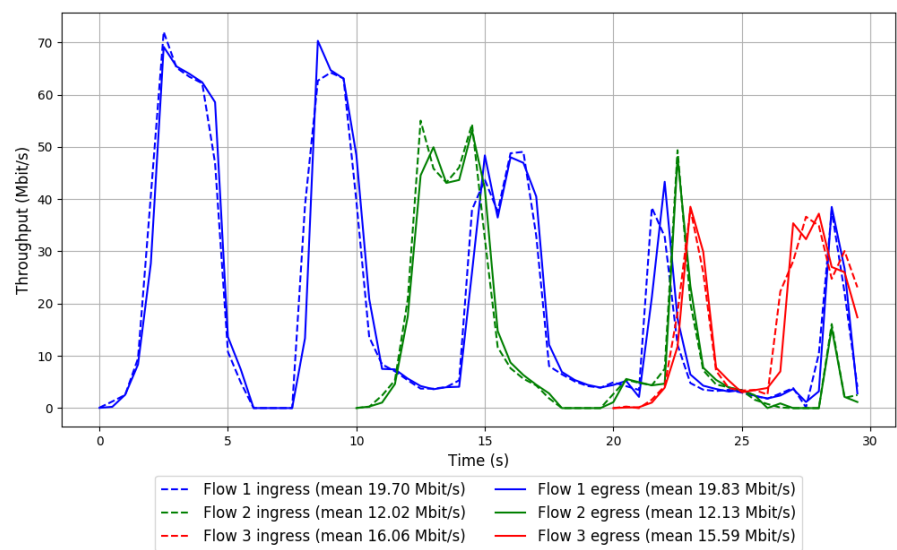
-- Flow 3:

Average throughput: 15.59 Mbit/s

95th percentile per-packet one-way delay: 136.429 ms

Loss rate: 5.69%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-09-08 12:53:08

End at: 2017-09-08 12:53:38

# Below is generated by plot.py at 2017-09-08 16:16:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 39.07 Mbit/s

95th percentile per-packet one-way delay: 136.146 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 18.44 Mbit/s

95th percentile per-packet one-way delay: 136.022 ms

Loss rate: 1.32%

-- Flow 2:

Average throughput: 23.19 Mbit/s

95th percentile per-packet one-way delay: 136.188 ms

Loss rate: 0.17%

-- Flow 3:

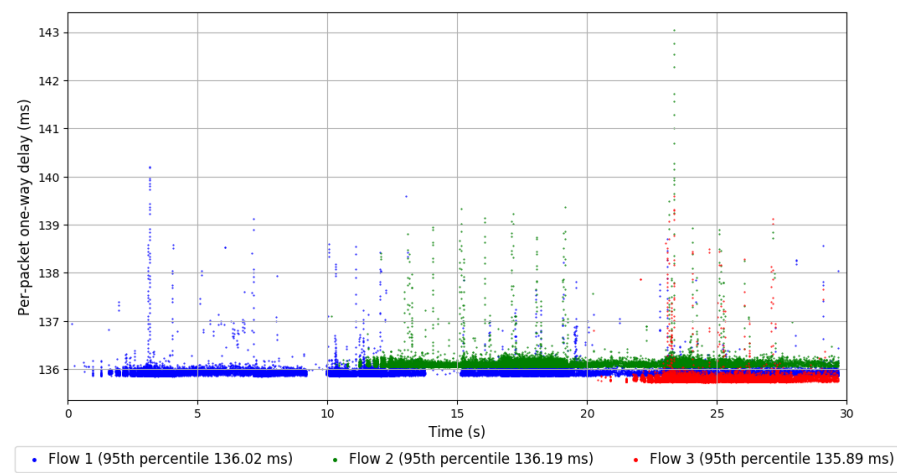
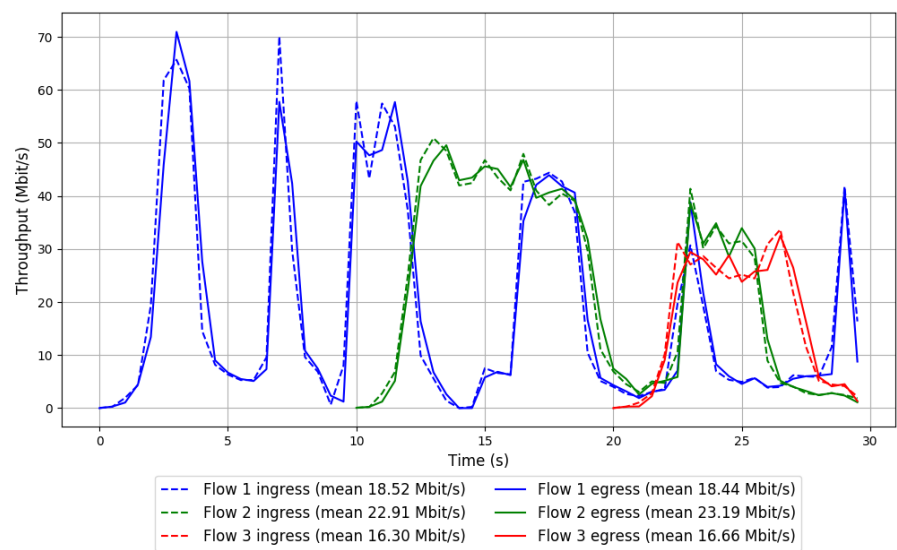
Average throughput: 16.66 Mbit/s

95th percentile per-packet one-way delay: 135.886 ms

Loss rate: 0.64%



Run 9: Report of QUIC Cubic — Data Link

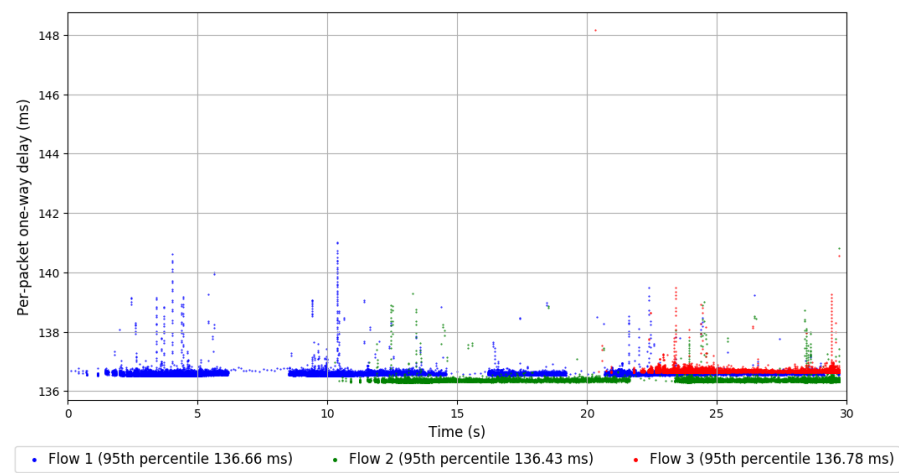
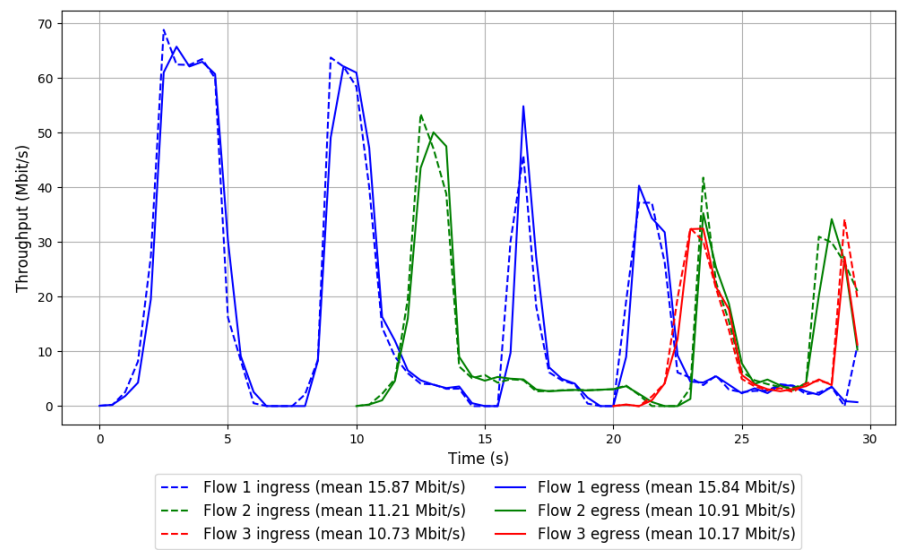


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-09-08 13:06:29
End at: 2017-09-08 13:06:59

# Below is generated by plot.py at 2017-09-08 16:16:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 26.25 Mbit/s
95th percentile per-packet one-way delay: 136.686 ms
Loss rate: 2.80%
-- Flow 1:
Average throughput: 15.84 Mbit/s
95th percentile per-packet one-way delay: 136.658 ms
Loss rate: 1.09%
-- Flow 2:
Average throughput: 10.91 Mbit/s
95th percentile per-packet one-way delay: 136.431 ms
Loss rate: 4.03%
-- Flow 3:
Average throughput: 10.17 Mbit/s
95th percentile per-packet one-way delay: 136.780 ms
Loss rate: 7.95%
```

Run 10: Report of QUIC Cubic — Data Link

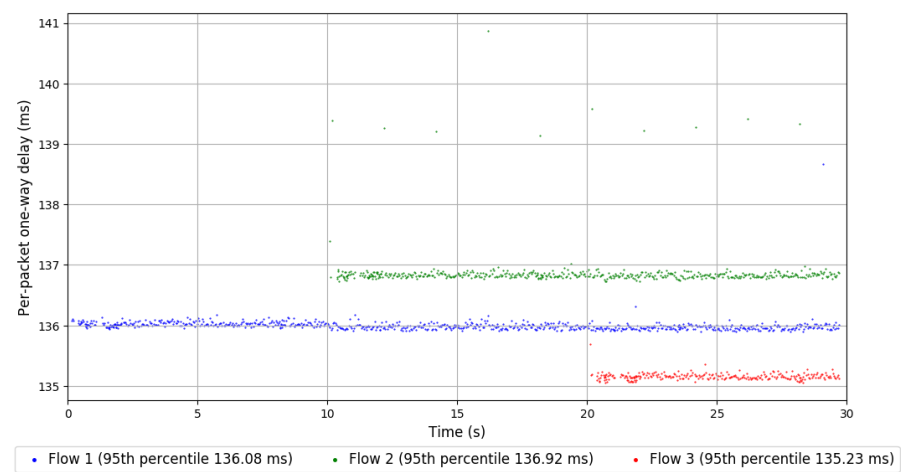
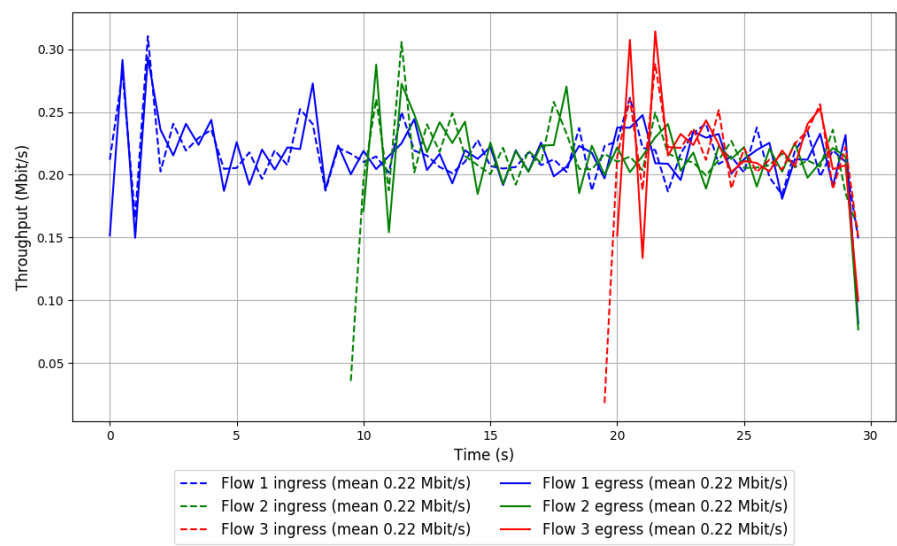


```
Run 1: Statistics of SCReAM

Start at: 2017-09-08 11:09:57
End at: 2017-09-08 11:10:27

# Below is generated by plot.py at 2017-09-08 16:16:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 136.881 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.083 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.919 ms
Loss rate: 1.43%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.232 ms
Loss rate: 2.63%
```

Run 1: Report of SReAM — Data Link

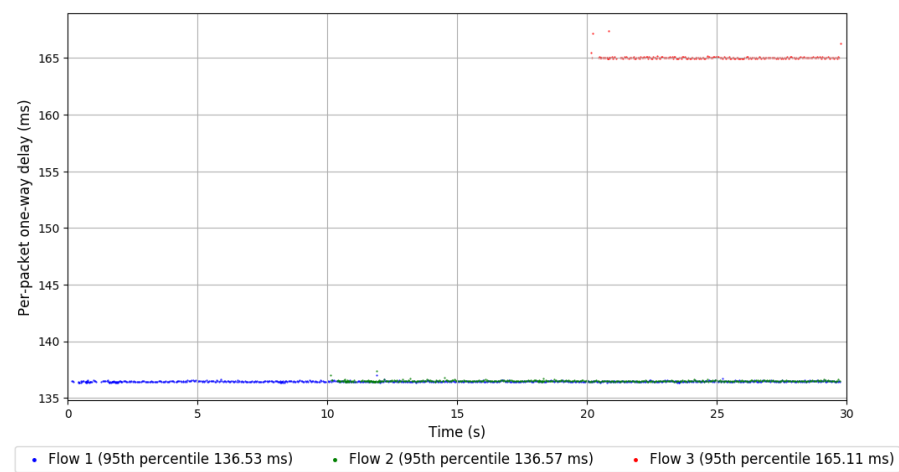
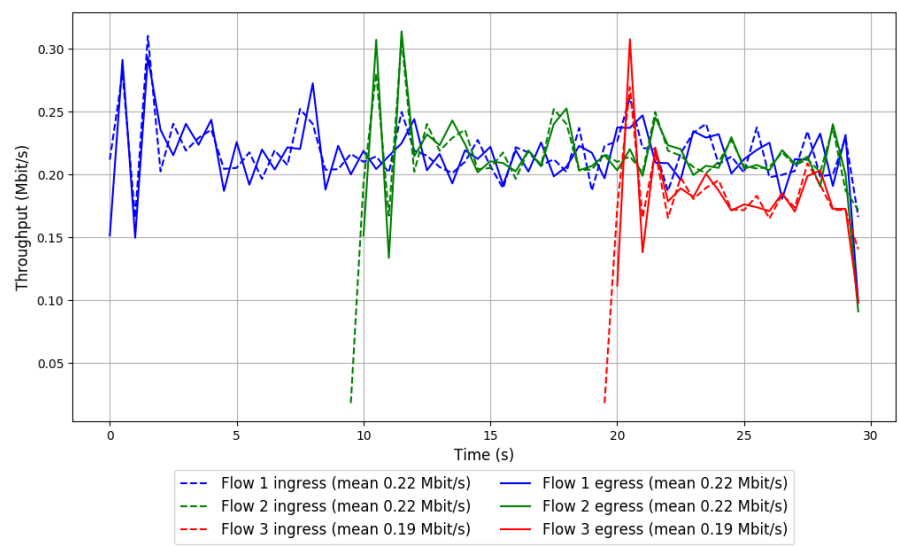


```
Run 2: Statistics of SCReAM

Start at: 2017-09-08 11:23:57
End at: 2017-09-08 11:24:27

# Below is generated by plot.py at 2017-09-08 16:16:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 165.054 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.530 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.571 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 165.107 ms
Loss rate: 2.63%
```

Run 2: Report of SCReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-09-08 11:37:47

End at: 2017-09-08 11:38:17

# Below is generated by plot.py at 2017-09-08 16:16:48

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 164.647 ms

Loss rate: 1.32%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.522 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 164.669 ms

Loss rate: 1.43%

-- Flow 3:

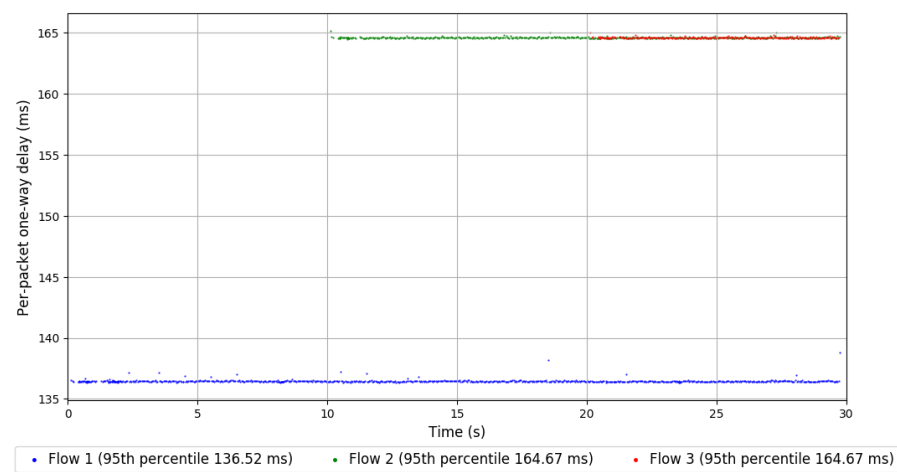
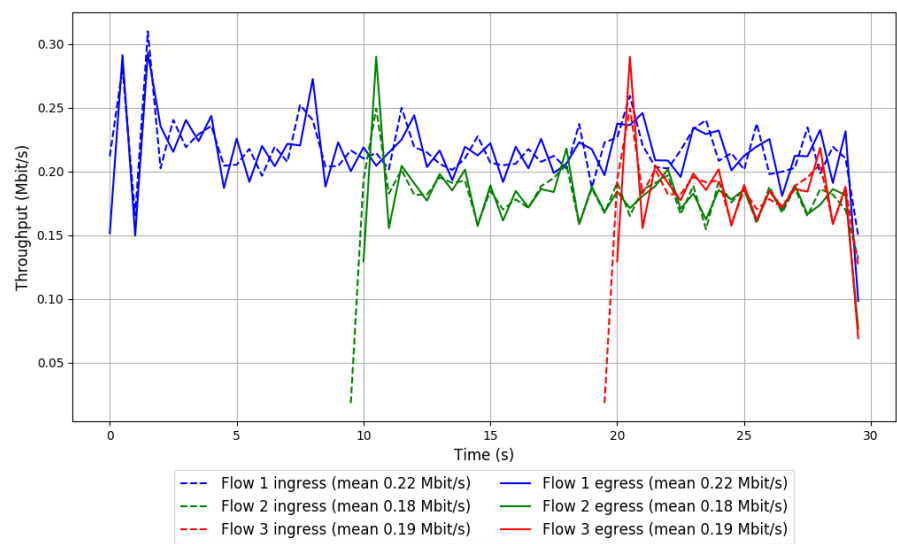
Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 164.674 ms

Loss rate: 3.02%



Run 3: Report of SReAM — Data Link



Run 4: Statistics of SReAM

Start at: 2017-09-08 11:51:46

End at: 2017-09-08 11:52:16

# Below is generated by plot.py at 2017-09-08 16:16:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 136.983 ms

Loss rate: 1.37%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.056 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.028 ms

Loss rate: 1.42%

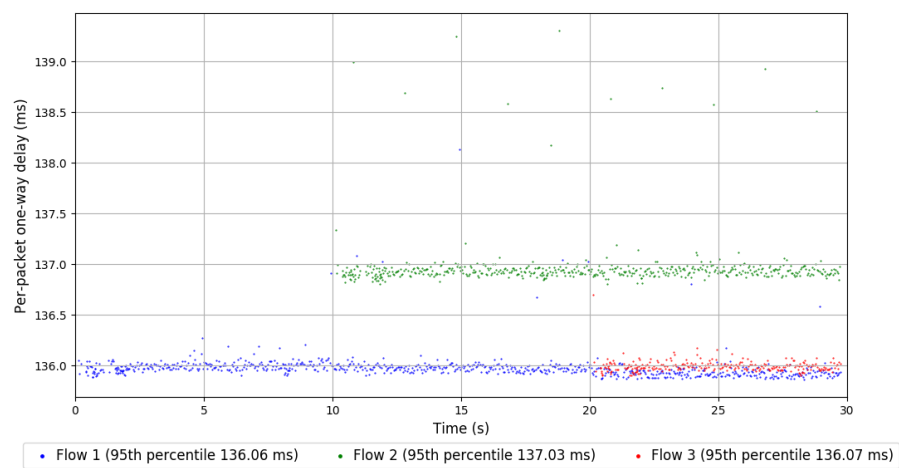
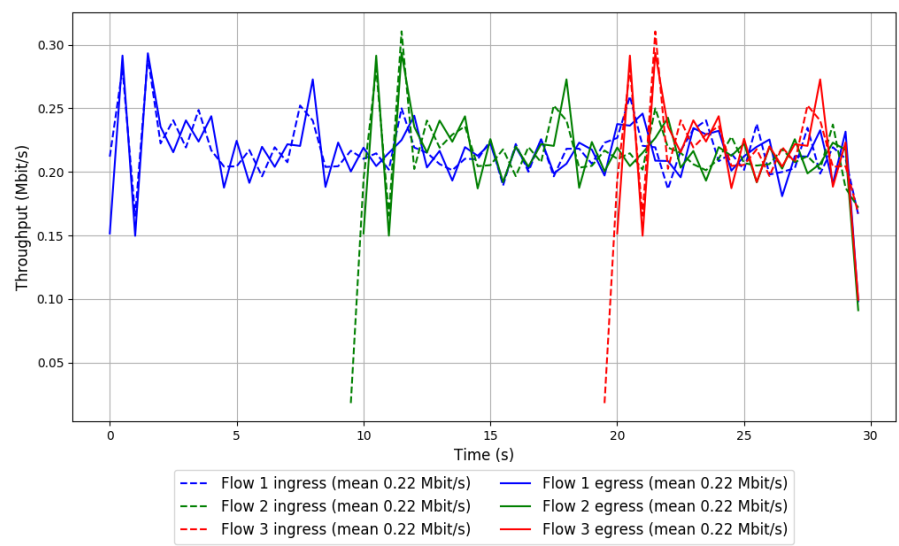
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.075 ms

Loss rate: 2.63%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2017-09-08 12:05:07

End at: 2017-09-08 12:05:37

# Below is generated by plot.py at 2017-09-08 16:16:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 136.537 ms

Loss rate: 1.37%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.558 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 135.963 ms

Loss rate: 1.42%

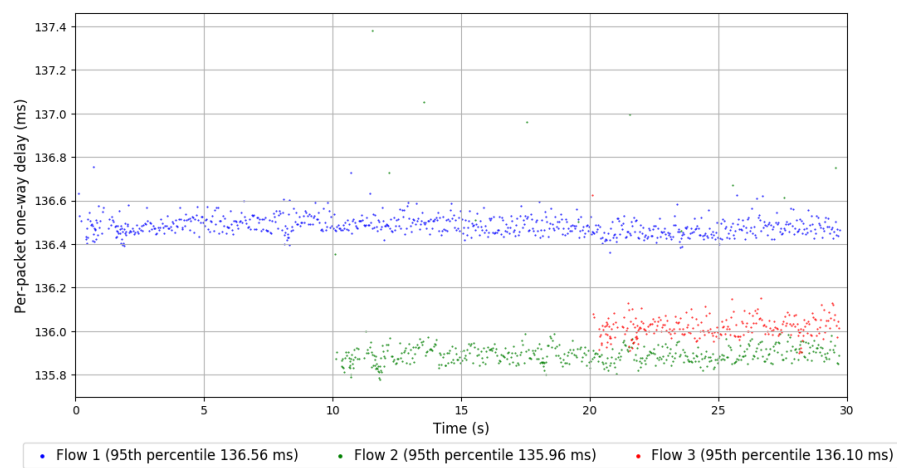
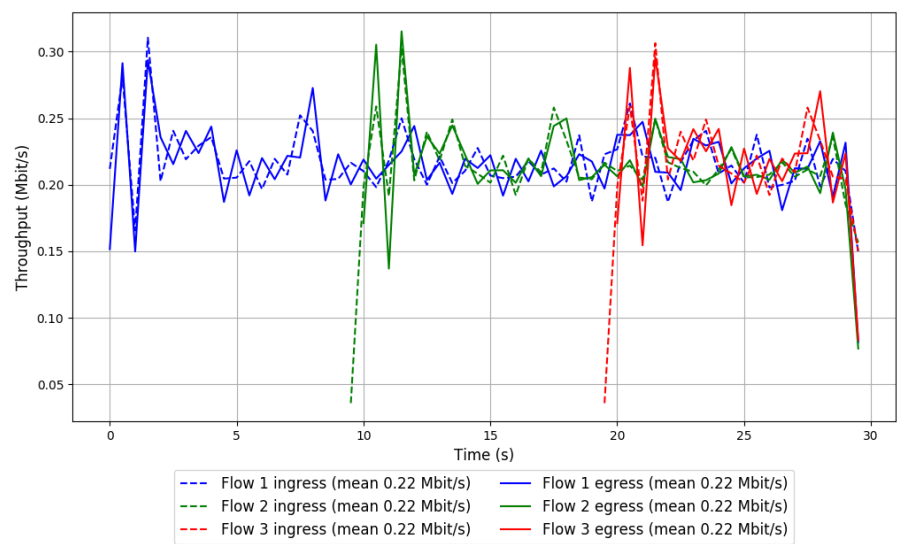
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.097 ms

Loss rate: 2.63%

Run 5: Report of SReAM — Data Link

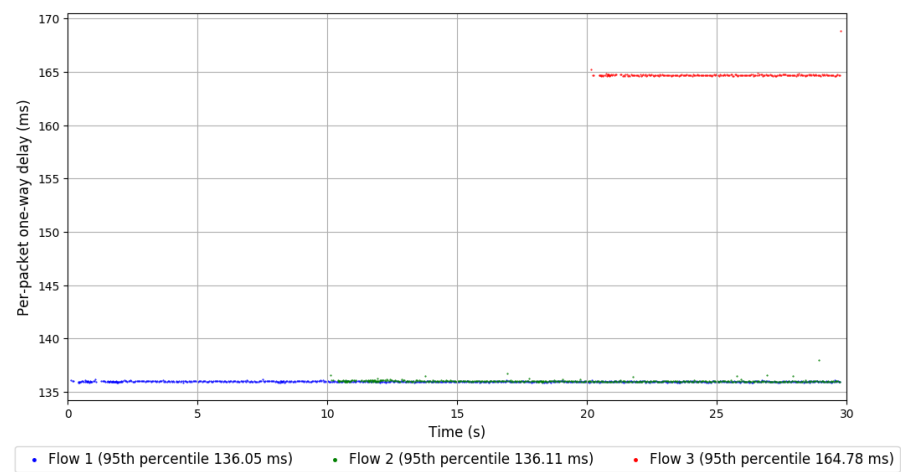
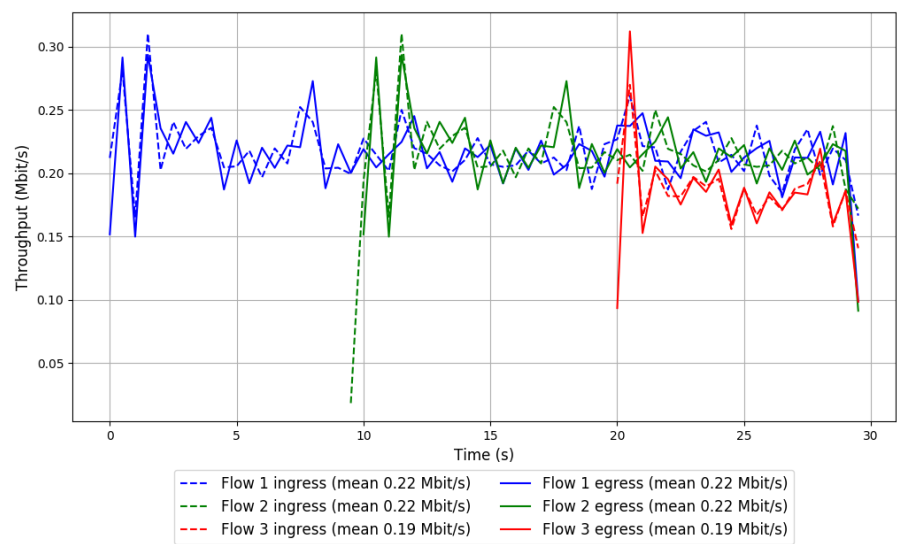


```
Run 6: Statistics of SCReAM

Start at: 2017-09-08 12:18:17
End at: 2017-09-08 12:18:47

# Below is generated by plot.py at 2017-09-08 16:16:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 164.720 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.051 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.108 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 164.775 ms
Loss rate: 2.63%
```

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SReAM

Start at: 2017-09-08 12:31:35

End at: 2017-09-08 12:32:05

# Below is generated by plot.py at 2017-09-08 16:16:52

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 137.053 ms

Loss rate: 1.37%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.106 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.006 ms

Loss rate: 1.42%

-- Flow 3:

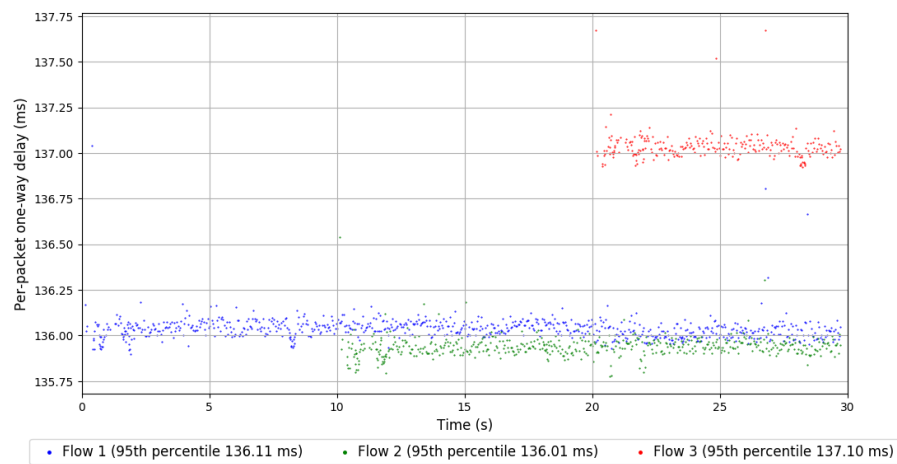
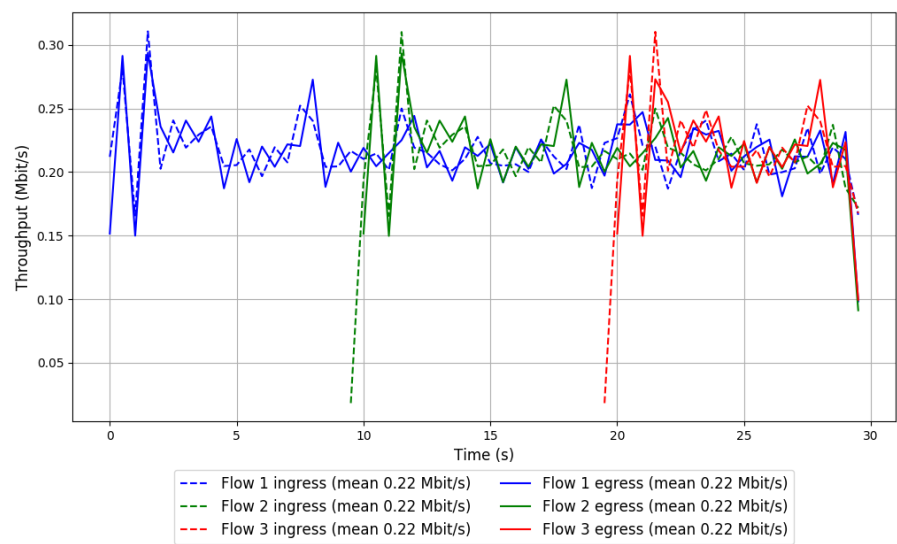
Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.098 ms

Loss rate: 2.64%



Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2017-09-08 12:44:56

End at: 2017-09-08 12:45:26

# Below is generated by plot.py at 2017-09-08 16:16:53

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 136.535 ms

Loss rate: 1.30%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.539 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.547 ms

Loss rate: 1.42%

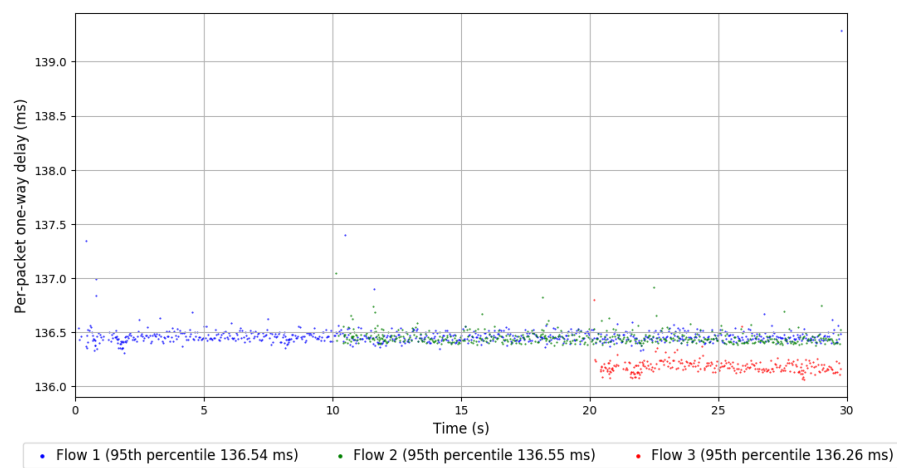
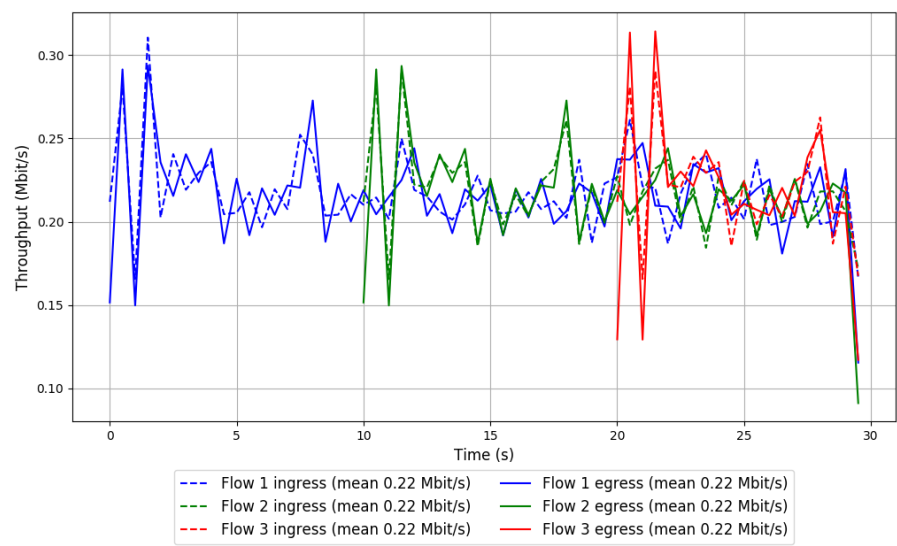
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.259 ms

Loss rate: 2.63%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2017-09-08 12:58:22

End at: 2017-09-08 12:58:52

# Below is generated by plot.py at 2017-09-08 16:16:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 137.038 ms

Loss rate: 1.37%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.832 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.077 ms

Loss rate: 1.42%

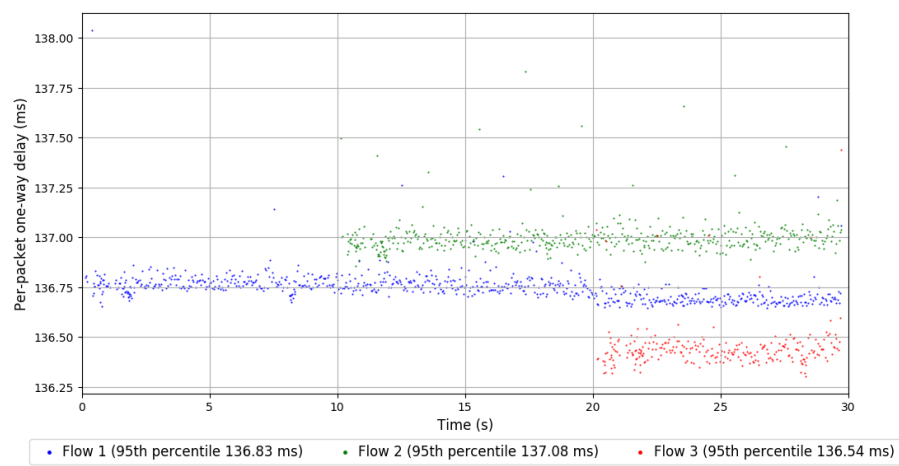
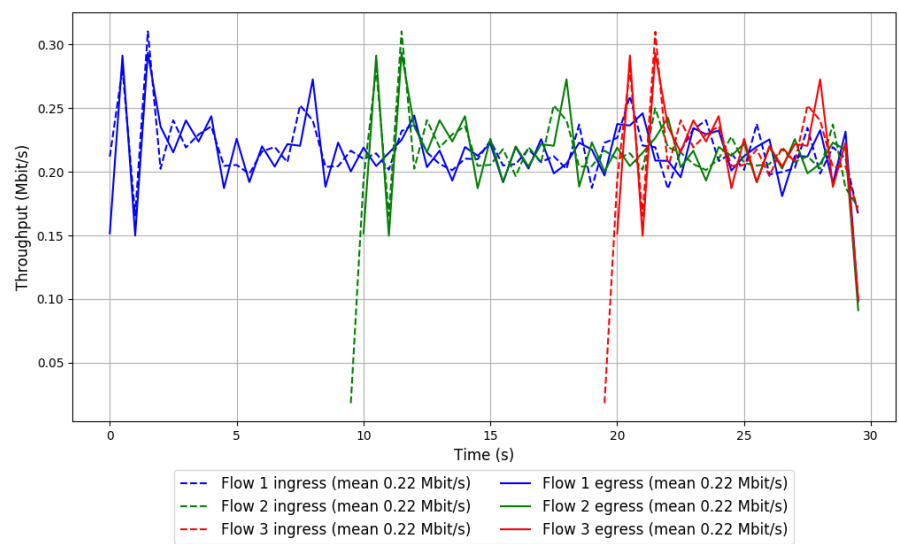
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.541 ms

Loss rate: 2.63%

Run 9: Report of SReAM — Data Link

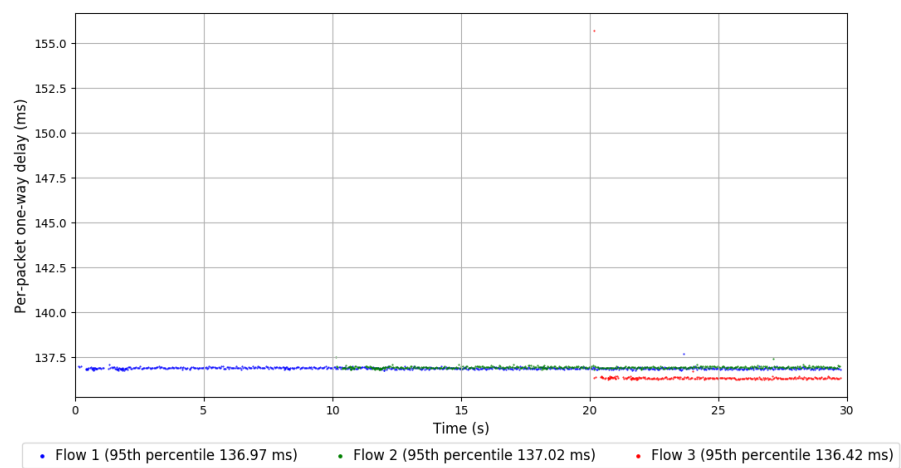
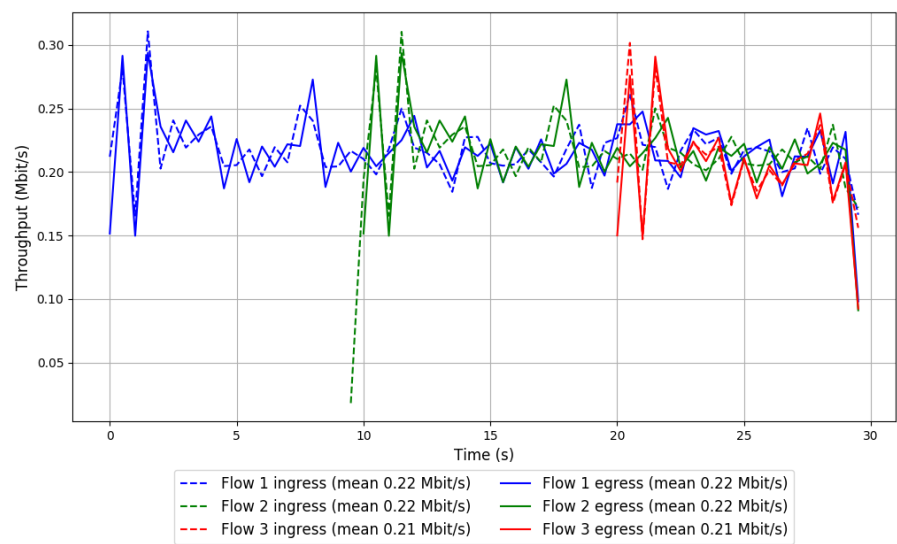


```
Run 10: Statistics of SReAM

Start at: 2017-09-08 13:11:37
End at: 2017-09-08 13:12:07

# Below is generated by plot.py at 2017-09-08 16:16:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 136.991 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.968 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.017 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 136.420 ms
Loss rate: 2.61%
```

Run 10: Report of SCSReAM — Data Link



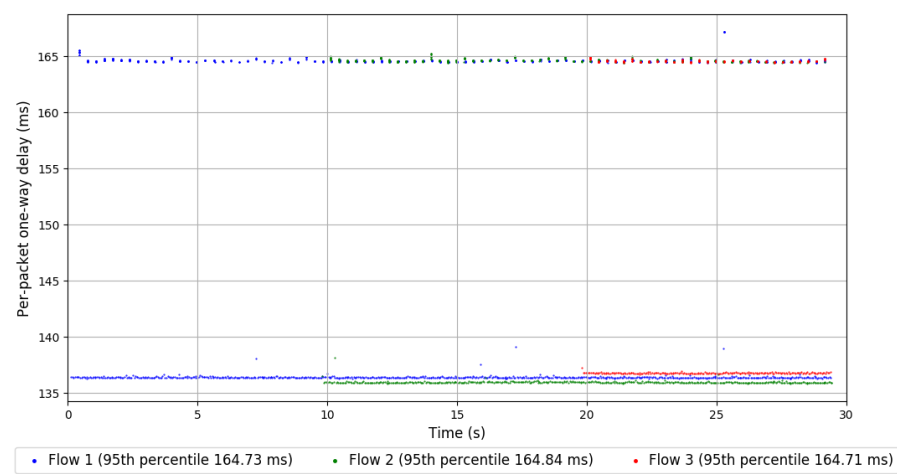
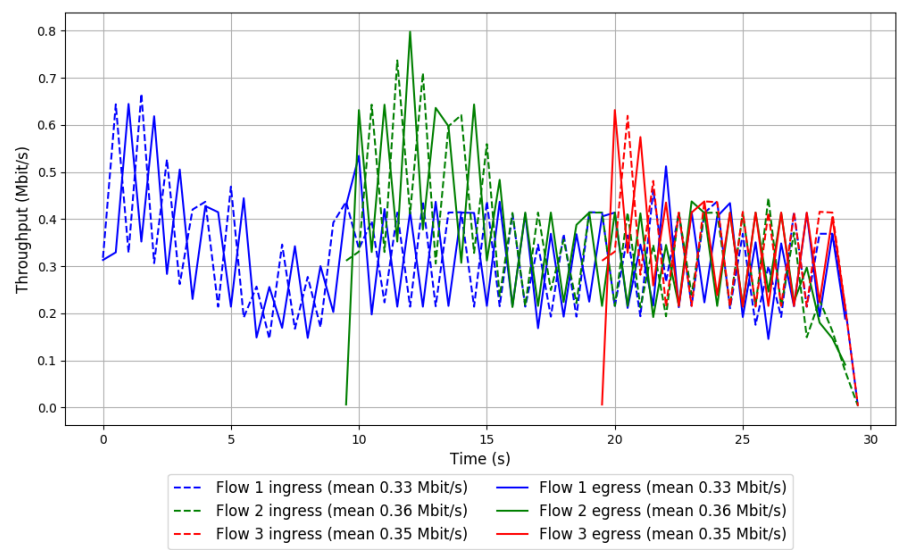
```
Run 1: Statistics of Sprout

Start at: 2017-09-08 11:06:17
End at: 2017-09-08 11:06:47

# Below is generated by plot.py at 2017-09-08 16:16:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.68 Mbit/s
95th percentile per-packet one-way delay: 164.766 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 164.726 ms
Loss rate: 1.08%
-- Flow 2:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 164.839 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 164.711 ms
Loss rate: 3.04%
```



Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-09-08 11:20:11

End at: 2017-09-08 11:20:41

# Below is generated by plot.py at 2017-09-08 16:16:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.73 Mbit/s

95th percentile per-packet one-way delay: 164.956 ms

Loss rate: 1.66%

-- Flow 1:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 164.713 ms

Loss rate: 1.10%

-- Flow 2:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 165.009 ms

Loss rate: 1.70%

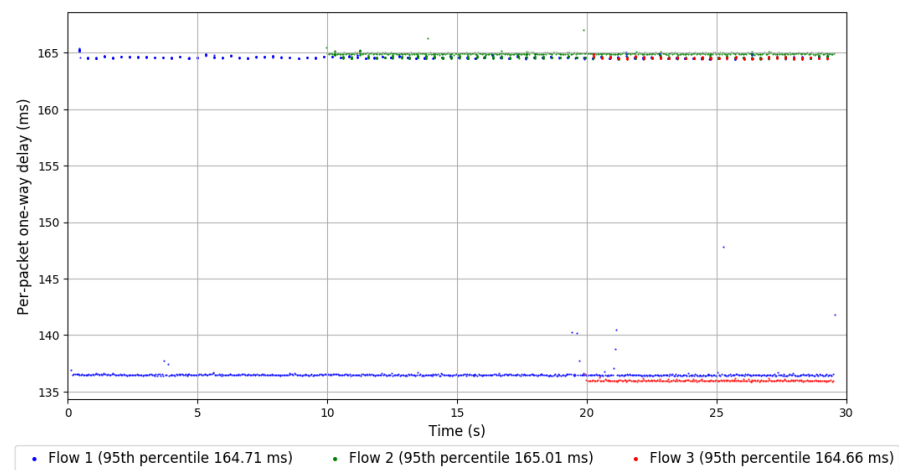
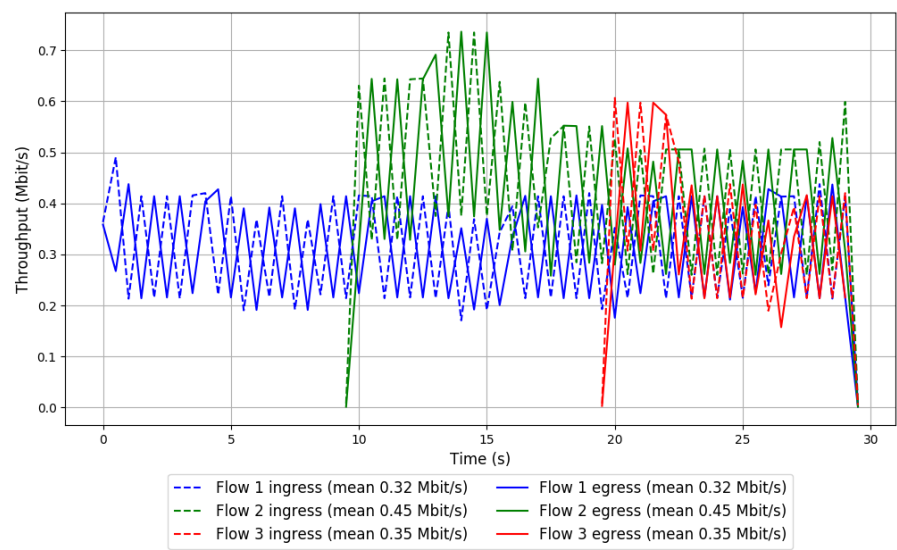
-- Flow 3:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 164.655 ms

Loss rate: 3.09%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-09-08 11:34:09

End at: 2017-09-08 11:34:39

# Below is generated by plot.py at 2017-09-08 16:16:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 164.777 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 0.27 Mbit/s

95th percentile per-packet one-way delay: 164.782 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 164.765 ms

Loss rate: 1.56%

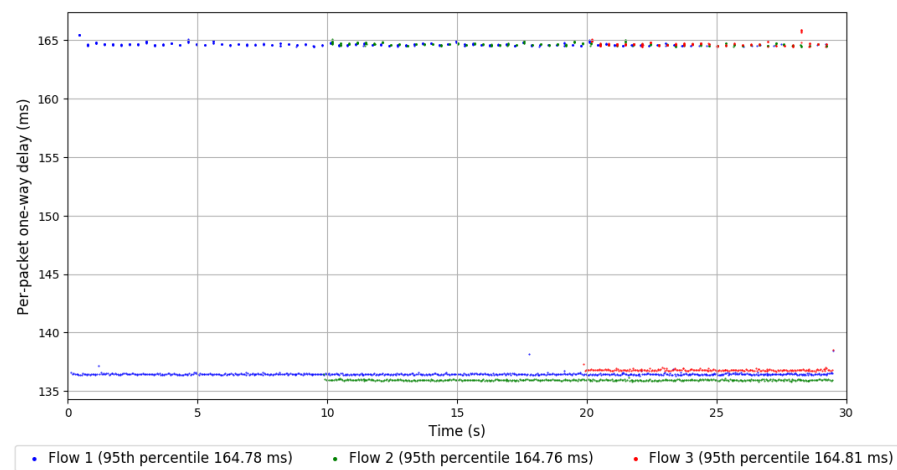
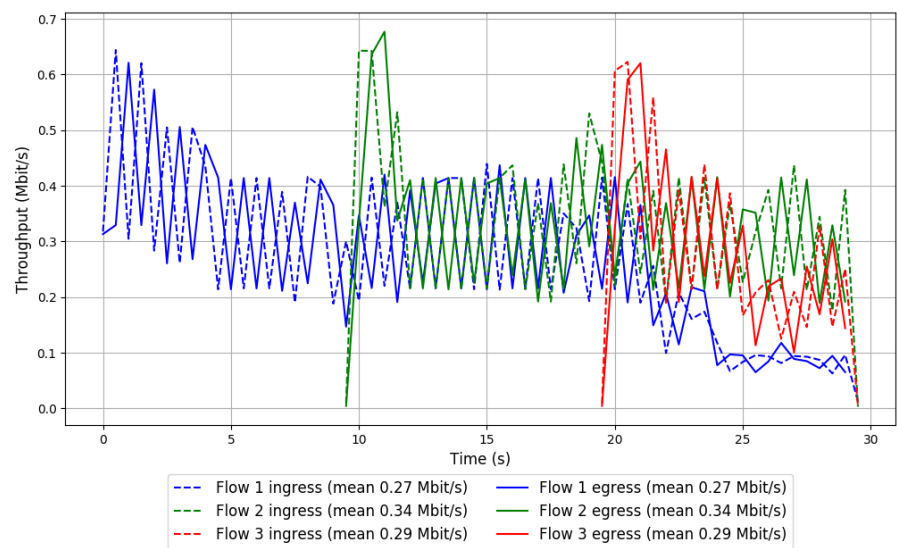
-- Flow 3:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 164.810 ms

Loss rate: 2.02%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-09-08 11:48:12

End at: 2017-09-08 11:48:42

# Below is generated by plot.py at 2017-09-08 16:17:00

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.66 Mbit/s

95th percentile per-packet one-way delay: 164.793 ms

Loss rate: 1.52%

-- Flow 1:

Average throughput: 0.31 Mbit/s

95th percentile per-packet one-way delay: 164.836 ms

Loss rate: 1.11%

-- Flow 2:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 164.693 ms

Loss rate: 1.45%

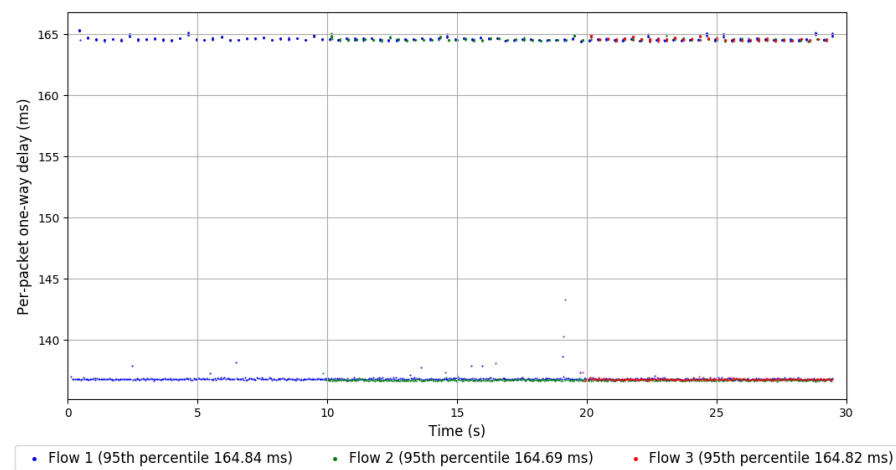
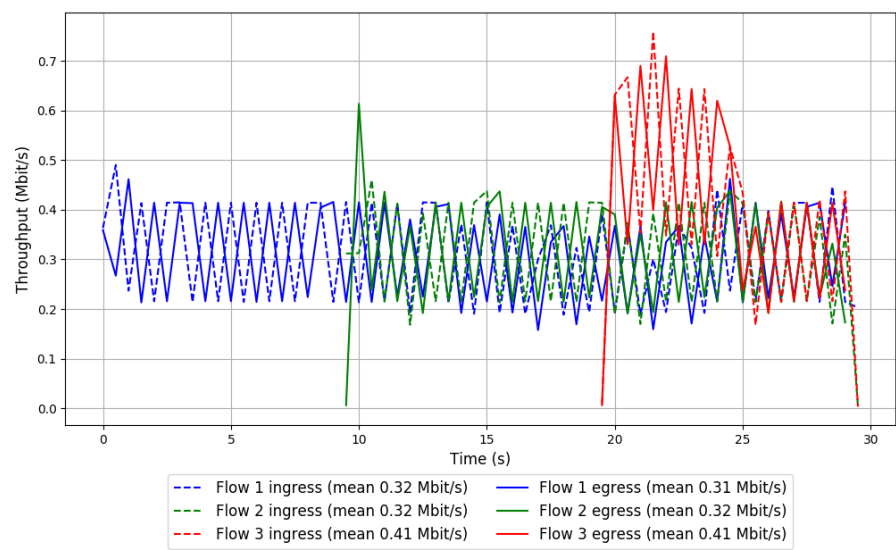
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 164.817 ms

Loss rate: 2.54%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-09-08 12:01:37

End at: 2017-09-08 12:02:07

# Below is generated by plot.py at 2017-09-08 16:17:00

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.62 Mbit/s

95th percentile per-packet one-way delay: 164.954 ms

Loss rate: 1.68%

-- Flow 1:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 165.013 ms

Loss rate: 1.09%

-- Flow 2:

Average throughput: 0.31 Mbit/s

95th percentile per-packet one-way delay: 164.947 ms

Loss rate: 1.69%

-- Flow 3:

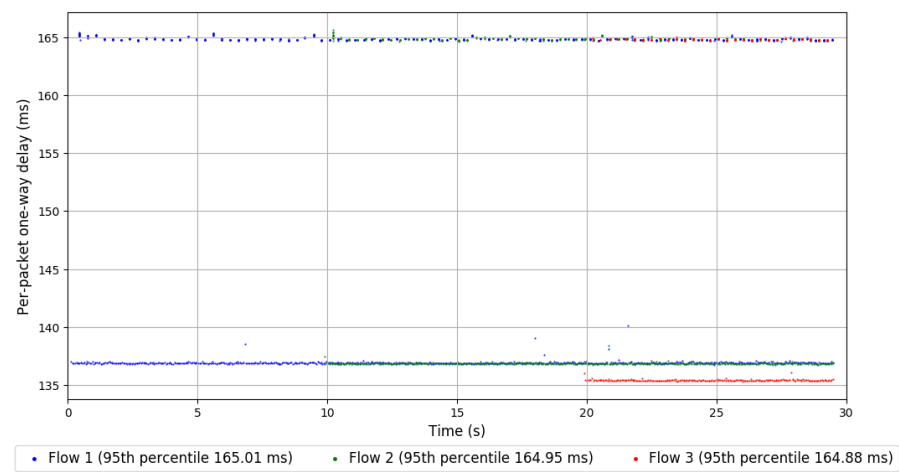
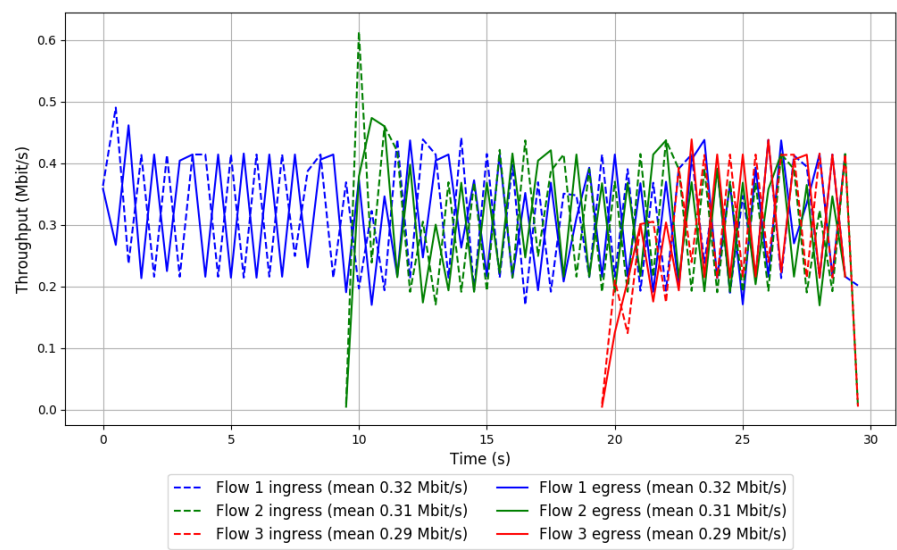
Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 164.885 ms

Loss rate: 3.61%



Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-09-08 12:14:48

End at: 2017-09-08 12:15:18

# Below is generated by plot.py at 2017-09-08 16:17:01

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 164.977 ms

Loss rate: 1.81%

-- Flow 1:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 164.900 ms

Loss rate: 0.91%

-- Flow 2:

Average throughput: 0.30 Mbit/s

95th percentile per-packet one-way delay: 164.937 ms

Loss rate: 1.74%

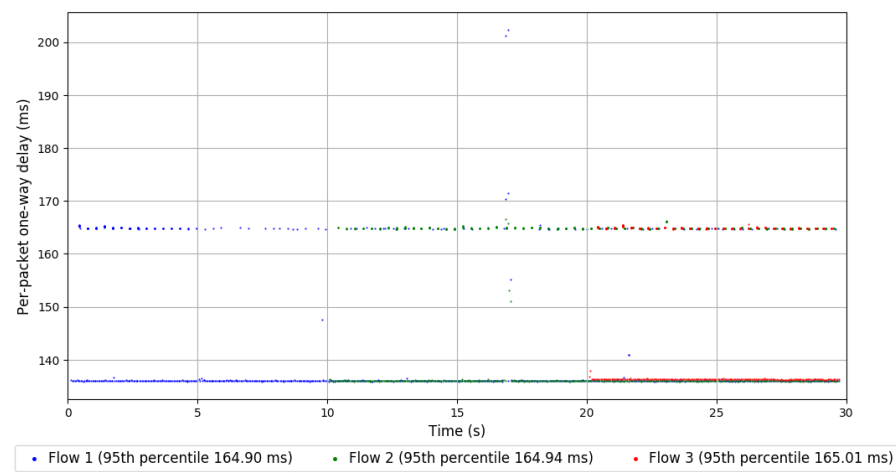
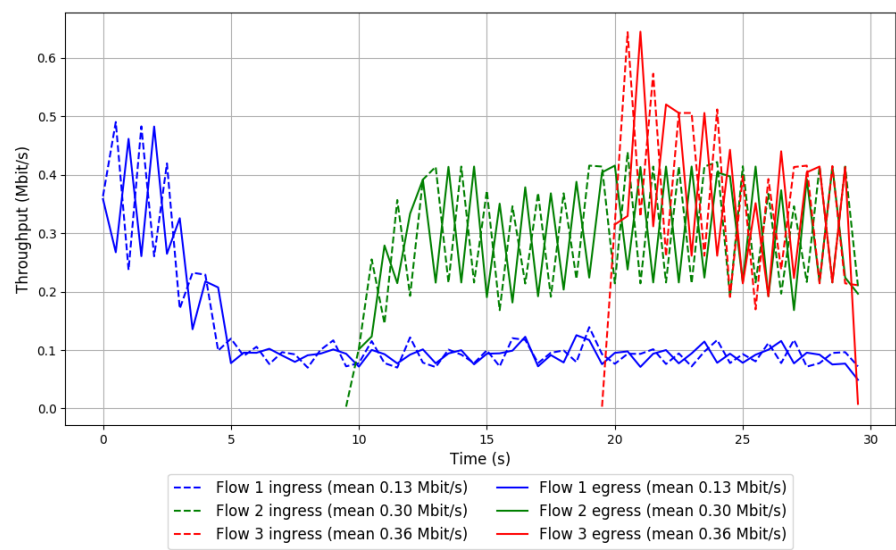
-- Flow 3:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 165.010 ms

Loss rate: 2.89%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-09-08 12:28:08

End at: 2017-09-08 12:28:38

# Below is generated by plot.py at 2017-09-08 16:17:02

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.66 Mbit/s

95th percentile per-packet one-way delay: 164.974 ms

Loss rate: 1.37%

-- Flow 1:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 164.978 ms

Loss rate: 1.09%

-- Flow 2:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 164.972 ms

Loss rate: 0.94%

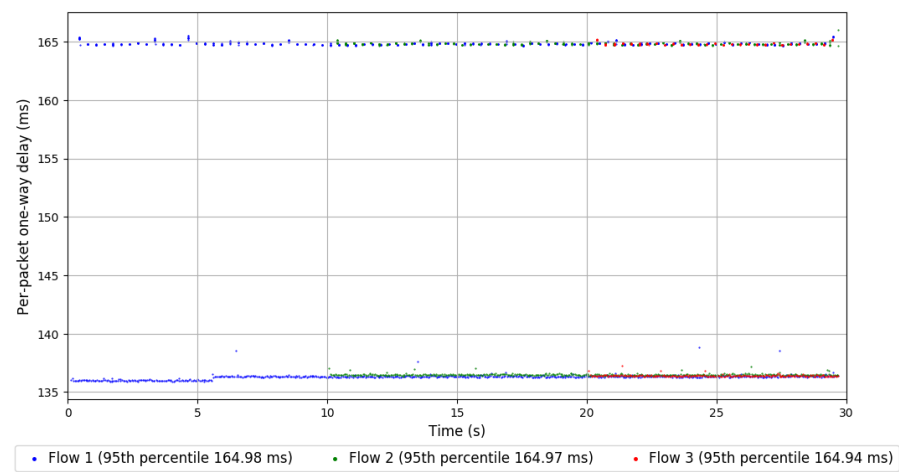
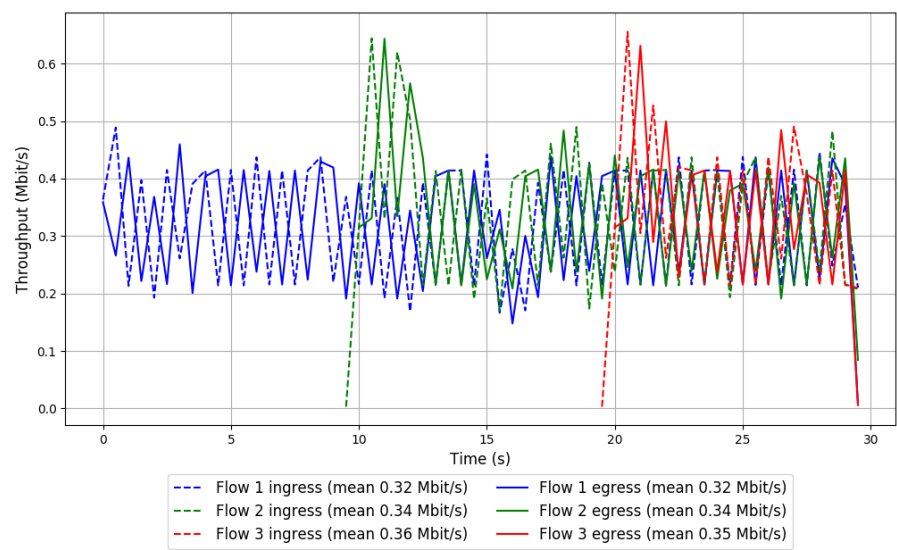
-- Flow 3:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 164.937 ms

Loss rate: 2.96%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-09-08 12:41:29

End at: 2017-09-08 12:41:59

# Below is generated by plot.py at 2017-09-08 16:17:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 164.963 ms

Loss rate: 1.49%

-- Flow 1:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 164.970 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 165.003 ms

Loss rate: 1.31%

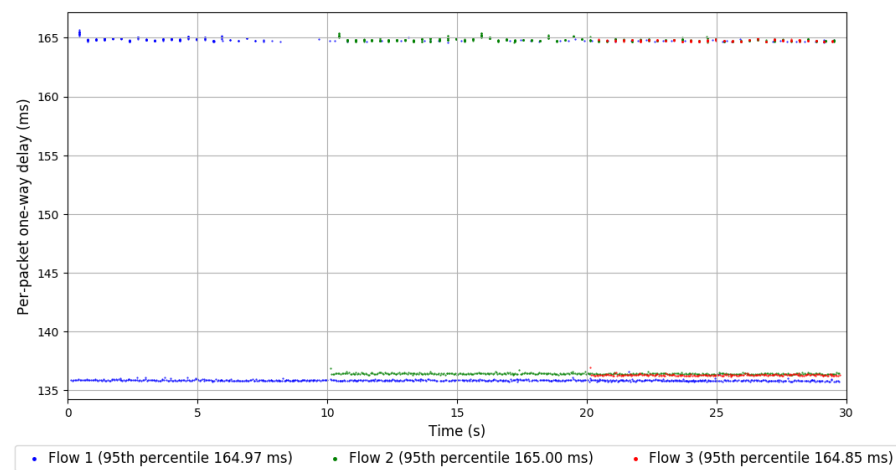
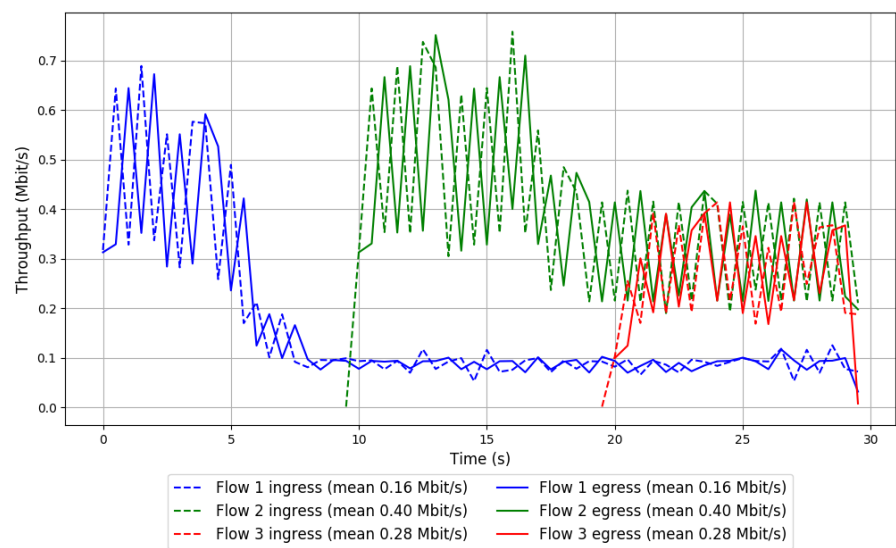
-- Flow 3:

Average throughput: 0.28 Mbit/s

95th percentile per-packet one-way delay: 164.849 ms

Loss rate: 3.35%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-09-08 12:54:51

End at: 2017-09-08 12:55:21

# Below is generated by plot.py at 2017-09-08 16:17:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 164.931 ms

Loss rate: 1.64%

-- Flow 1:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 164.885 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 164.945 ms

Loss rate: 1.51%

-- Flow 3:

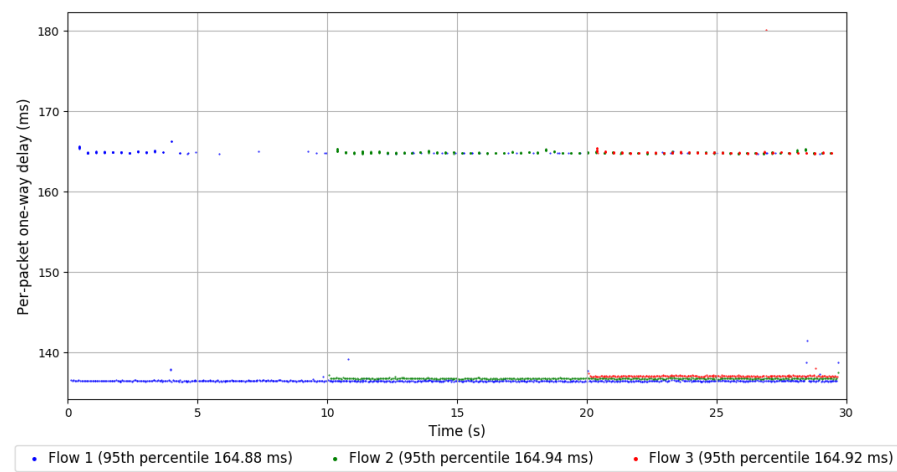
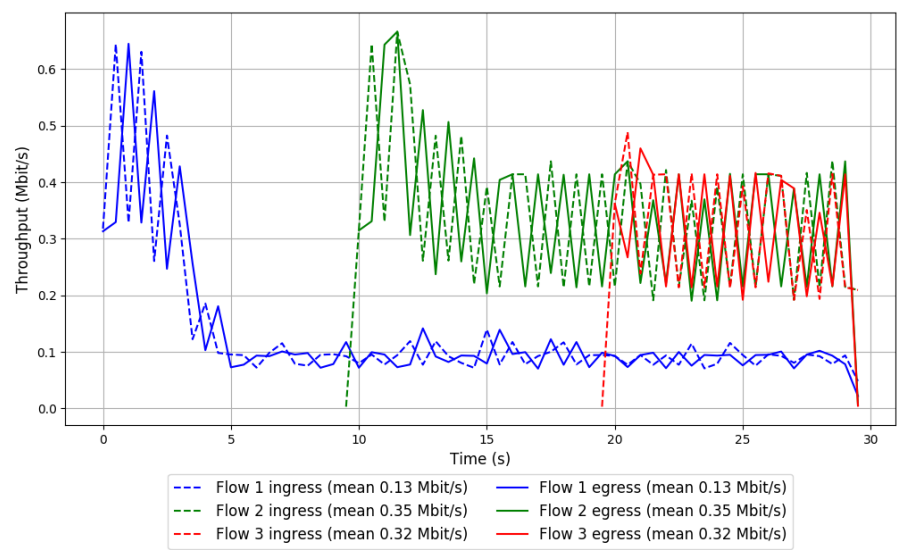
Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 164.924 ms

Loss rate: 3.25%



Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-09-08 13:08:11

End at: 2017-09-08 13:08:41

# Below is generated by plot.py at 2017-09-08 16:17:05

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 165.018 ms

Loss rate: 1.47%

-- Flow 1:

Average throughput: 0.31 Mbit/s

95th percentile per-packet one-way delay: 164.989 ms

Loss rate: 1.00%

-- Flow 2:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 164.986 ms

Loss rate: 1.61%

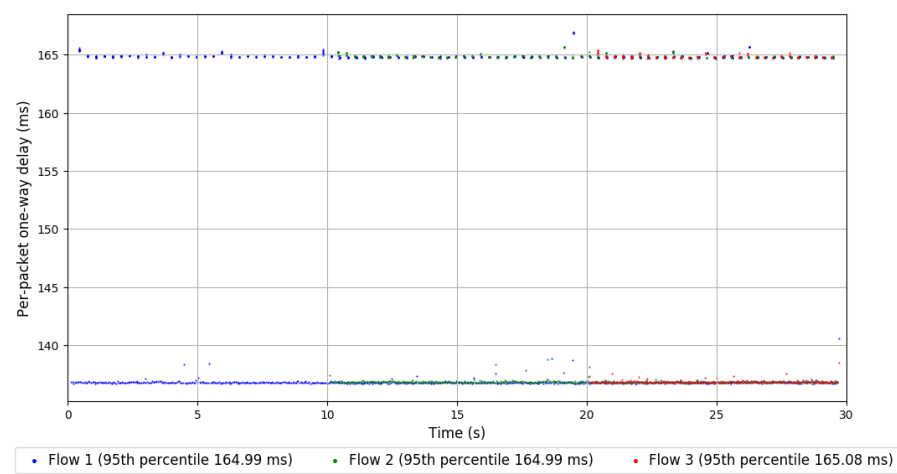
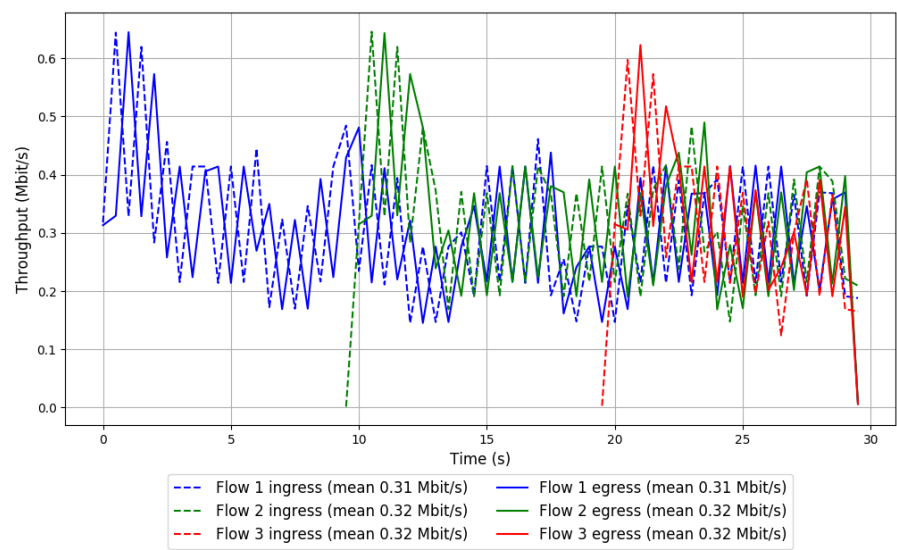
-- Flow 3:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 165.080 ms

Loss rate: 2.55%

Run 10: Report of Sprout — Data Link

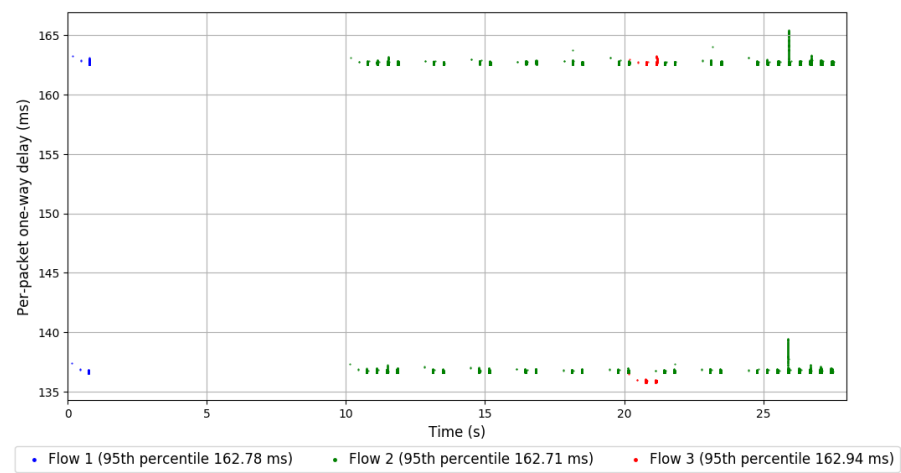
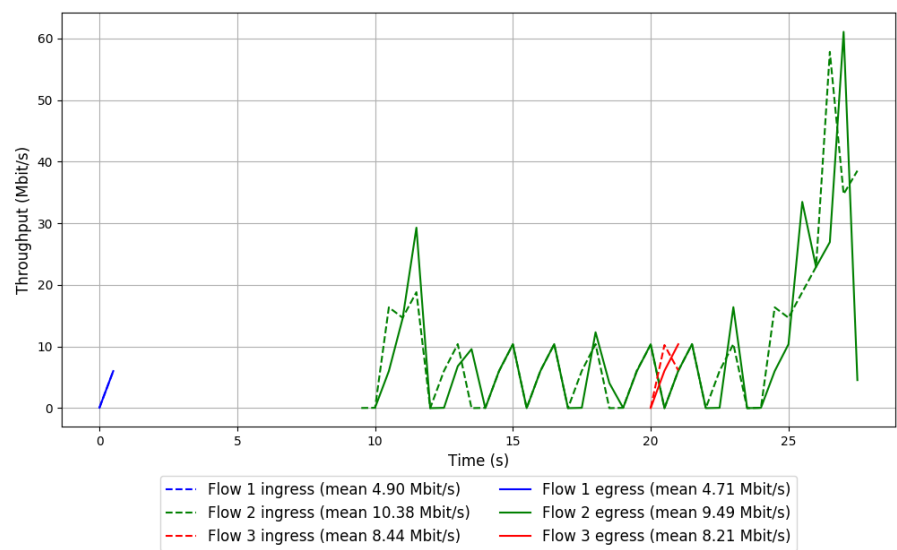


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-09-08 10:56:48
End at: 2017-09-08 10:57:18

# Below is generated by plot.py at 2017-09-08 16:17:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.44 Mbit/s
95th percentile per-packet one-way delay: 162.719 ms
Loss rate: 9.84%
-- Flow 1:
Average throughput: 4.71 Mbit/s
95th percentile per-packet one-way delay: 162.785 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 9.49 Mbit/s
95th percentile per-packet one-way delay: 162.713 ms
Loss rate: 10.44%
-- Flow 3:
Average throughput: 8.21 Mbit/s
95th percentile per-packet one-way delay: 162.939 ms
Loss rate: 0.00%
```

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



Run 2: Statistics of TaoVA-100x

Start at: 2017-09-08 11:10:48

End at: 2017-09-08 11:11:18

# Below is generated by plot.py at 2017-09-08 16:17:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 32.86 Mbit/s

95th percentile per-packet one-way delay: 164.880 ms

Loss rate: 3.48%

-- Flow 1:

Average throughput: 11.80 Mbit/s

95th percentile per-packet one-way delay: 164.612 ms

Loss rate: 1.06%

-- Flow 2:

Average throughput: 11.70 Mbit/s

95th percentile per-packet one-way delay: 164.616 ms

Loss rate: 1.81%

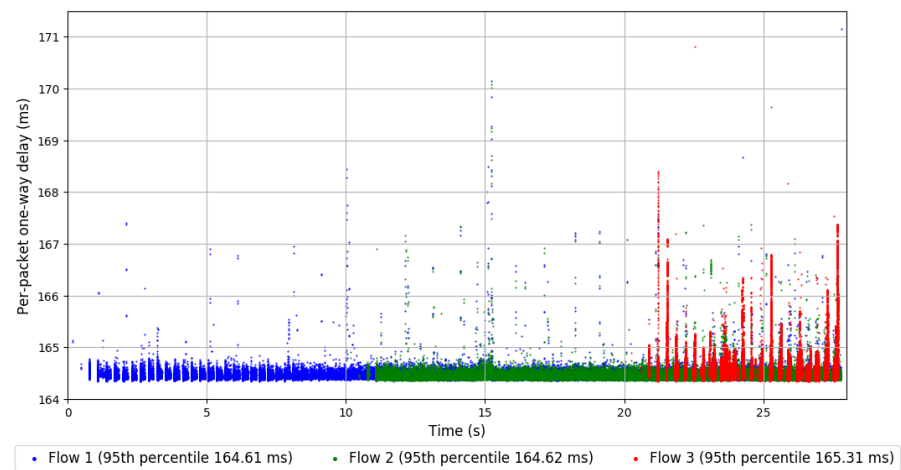
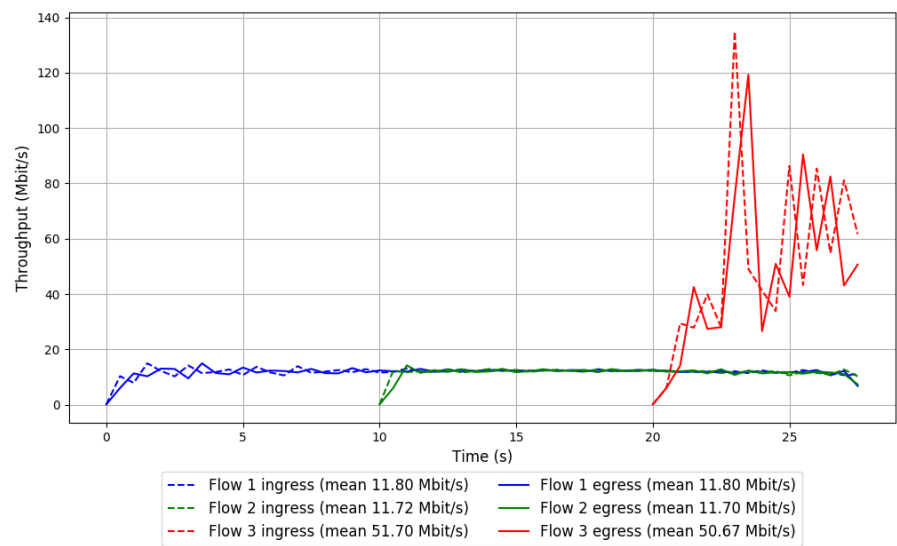
-- Flow 3:

Average throughput: 50.67 Mbit/s

95th percentile per-packet one-way delay: 165.315 ms

Loss rate: 6.35%

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



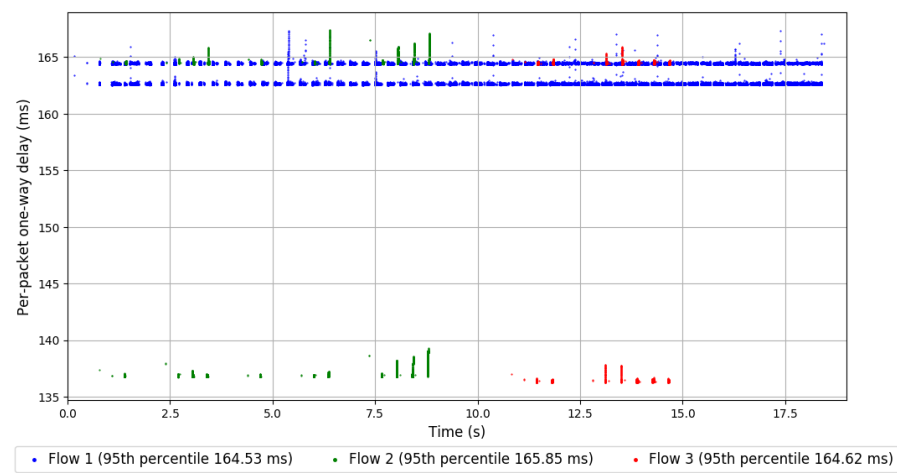
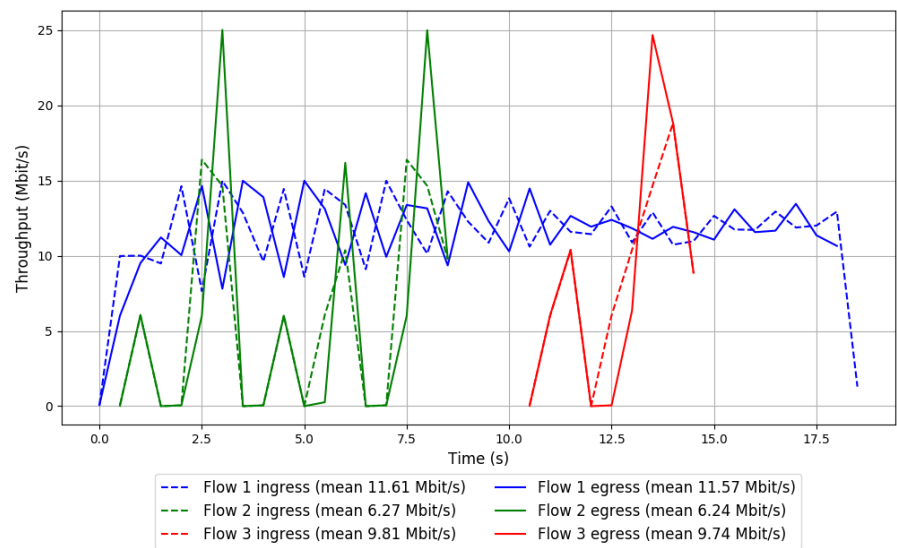
Run 3: Statistics of TaoVA-100x

Start at: 2017-09-08 11:24:48

End at: 2017-09-08 11:25:18



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

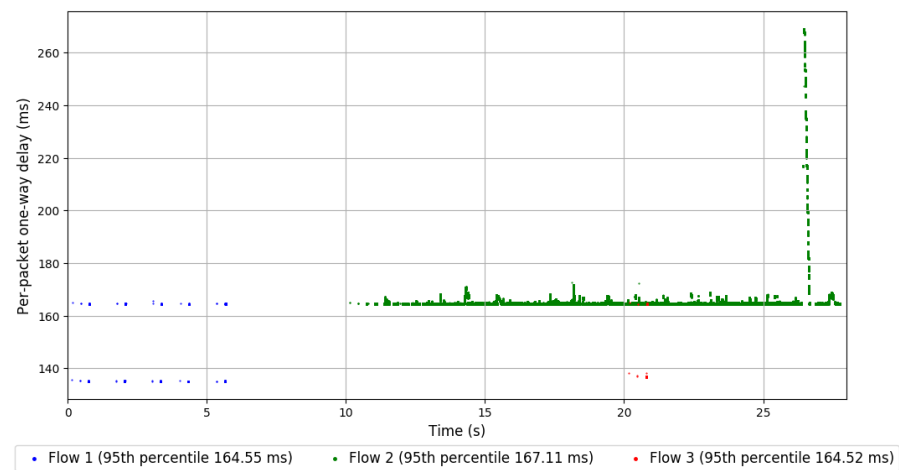
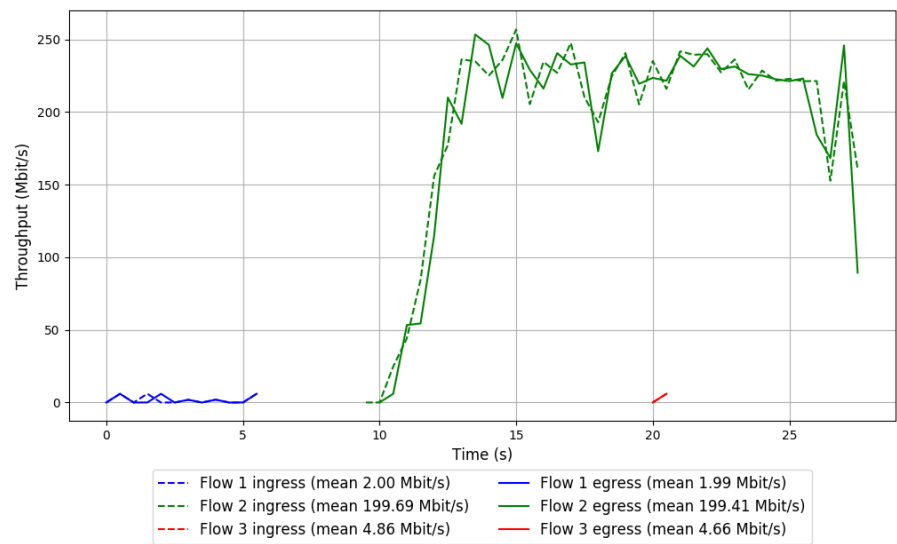


```
Run 4: Statistics of TaoVA-100x

Start at: 2017-09-08 11:38:38
End at: 2017-09-08 11:39:08

# Below is generated by plot.py at 2017-09-08 16:17:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 127.70 Mbit/s
95th percentile per-packet one-way delay: 167.105 ms
Loss rate: 1.97%
-- Flow 1:
Average throughput: 1.99 Mbit/s
95th percentile per-packet one-way delay: 164.553 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 199.41 Mbit/s
95th percentile per-packet one-way delay: 167.112 ms
Loss rate: 1.97%
-- Flow 3:
Average throughput: 4.66 Mbit/s
95th percentile per-packet one-way delay: 164.517 ms
Loss rate: 0.00%
```

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

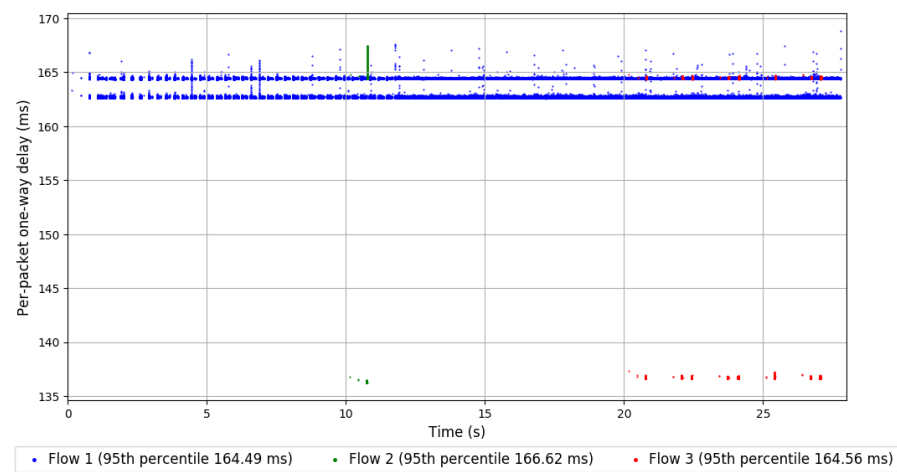
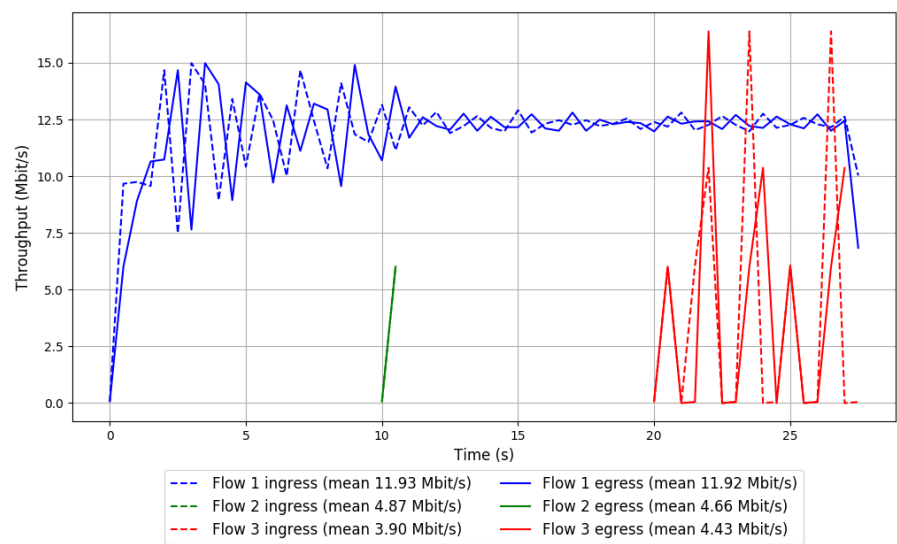


```
Run 5: Statistics of TaoVA-100x

Start at: 2017-09-08 11:52:37
End at: 2017-09-08 11:53:07

# Below is generated by plot.py at 2017-09-08 16:17:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.15 Mbit/s
95th percentile per-packet one-way delay: 164.504 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 11.92 Mbit/s
95th percentile per-packet one-way delay: 164.494 ms
Loss rate: 1.11%
-- Flow 2:
Average throughput: 4.66 Mbit/s
95th percentile per-packet one-way delay: 166.618 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.43 Mbit/s
95th percentile per-packet one-way delay: 164.557 ms
Loss rate: 0.08%
```

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-09-08 12:05:56

End at: 2017-09-08 12:06:26

# Below is generated by plot.py at 2017-09-08 16:17:51

# Datalink statistics

-- Total of 3 flows:

Average throughput: 8.08 Mbit/s

95th percentile per-packet one-way delay: 164.778 ms

Loss rate: 4.92%

-- Flow 1:

Average throughput: 9.33 Mbit/s

95th percentile per-packet one-way delay: 164.790 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.54 Mbit/s

95th percentile per-packet one-way delay: 166.436 ms

Loss rate: 0.00%

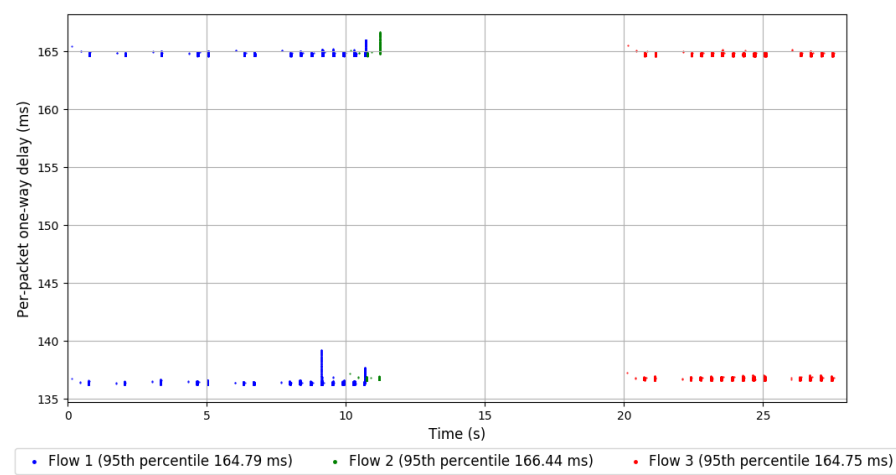
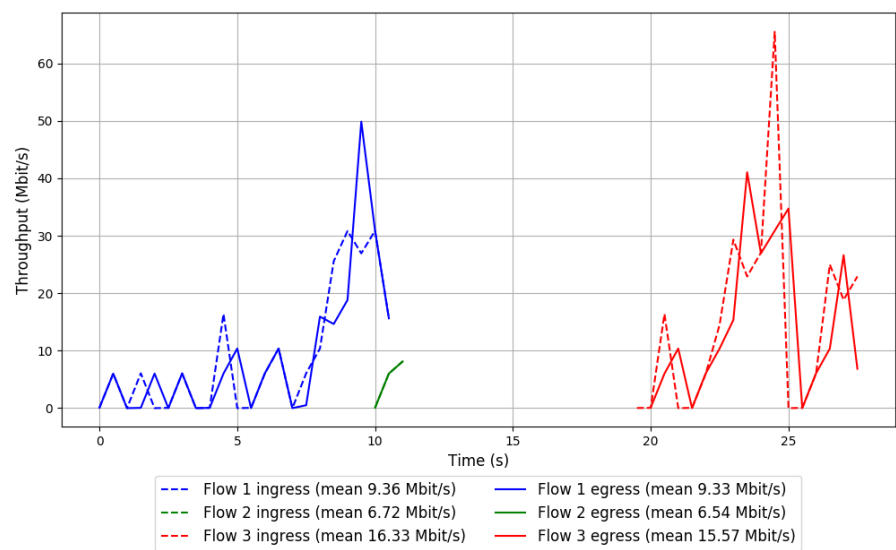
-- Flow 3:

Average throughput: 15.57 Mbit/s

95th percentile per-packet one-way delay: 164.748 ms

Loss rate: 9.00%

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



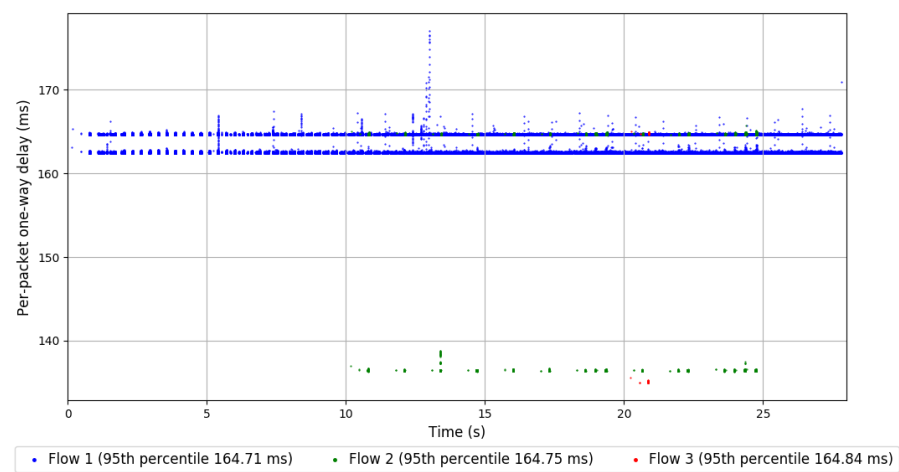
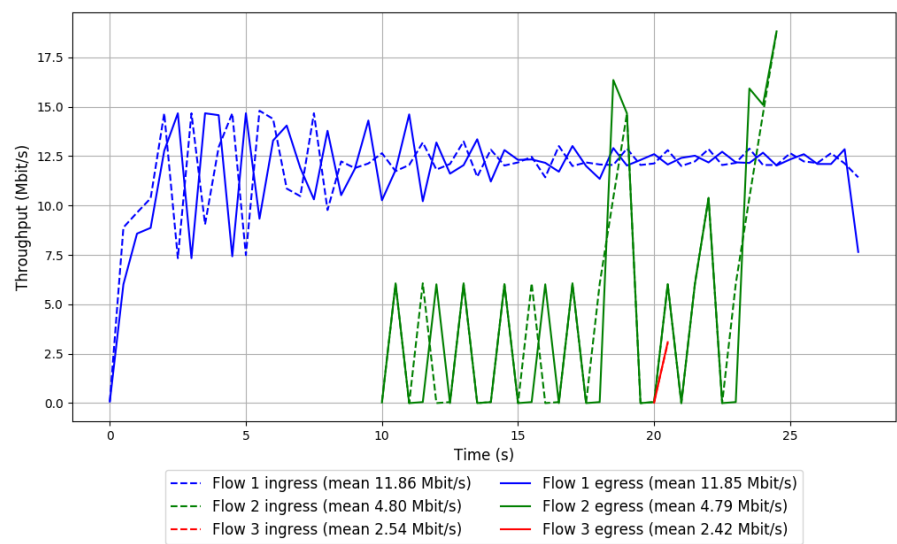
```
Run 7: Statistics of TaoVA-100x

Start at: 2017-09-08 12:19:06
End at: 2017-09-08 12:19:36

# Below is generated by plot.py at 2017-09-08 16:17:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.43 Mbit/s
95th percentile per-packet one-way delay: 164.719 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 11.85 Mbit/s
95th percentile per-packet one-way delay: 164.707 ms
Loss rate: 1.13%
-- Flow 2:
Average throughput: 4.79 Mbit/s
95th percentile per-packet one-way delay: 164.755 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 164.842 ms
Loss rate: 0.00%
```



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



Run 8: Statistics of TaoVA-100x

Start at: 2017-09-08 12:32:24

End at: 2017-09-08 12:32:54

# Below is generated by plot.py at 2017-09-08 16:18:23

# Datalink statistics

-- Total of 3 flows:

Average throughput: 145.92 Mbit/s

95th percentile per-packet one-way delay: 166.022 ms

Loss rate: 1.86%

-- Flow 1:

Average throughput: 145.22 Mbit/s

95th percentile per-packet one-way delay: 166.012 ms

Loss rate: 1.87%

-- Flow 2:

Average throughput: 3.31 Mbit/s

95th percentile per-packet one-way delay: 168.229 ms

Loss rate: 0.00%

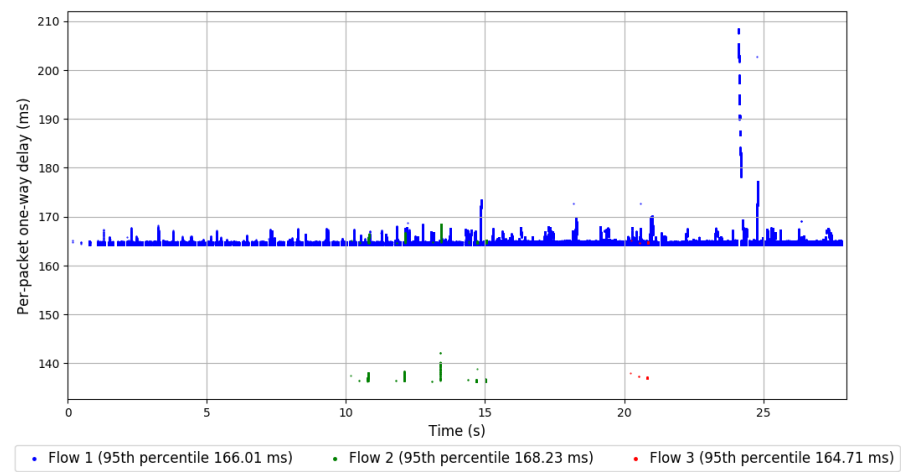
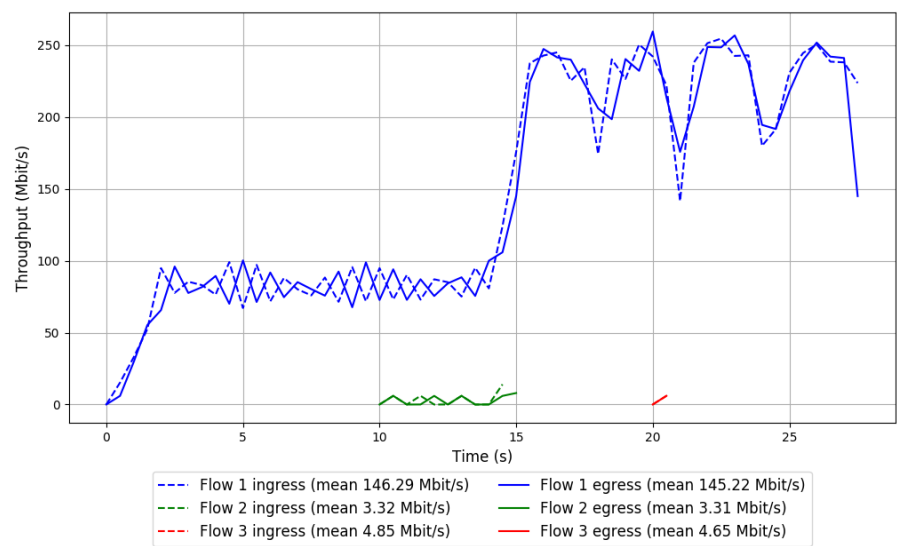
-- Flow 3:

Average throughput: 4.65 Mbit/s

95th percentile per-packet one-way delay: 164.705 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-09-08 12:45:45

End at: 2017-09-08 12:46:15

# Below is generated by plot.py at 2017-09-08 16:18:23

# Datalink statistics

-- Total of 3 flows:

Average throughput: 13.70 Mbit/s

95th percentile per-packet one-way delay: 164.744 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 12.03 Mbit/s

95th percentile per-packet one-way delay: 164.734 ms

Loss rate: 1.11%

-- Flow 2:

Average throughput: 3.89 Mbit/s

95th percentile per-packet one-way delay: 164.798 ms

Loss rate: 0.00%

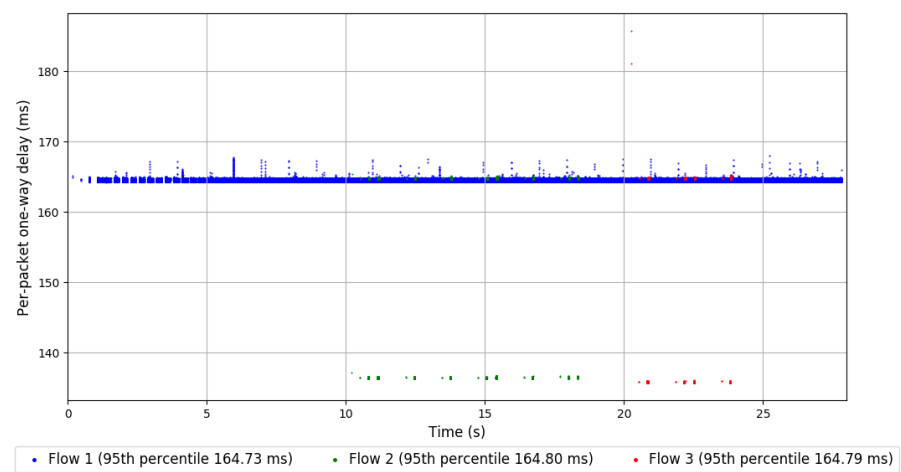
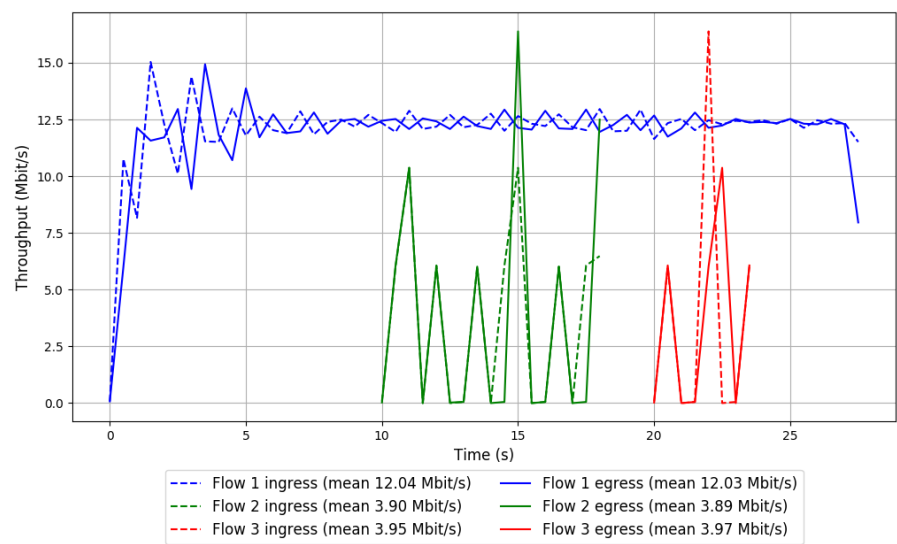
-- Flow 3:

Average throughput: 3.97 Mbit/s

95th percentile per-packet one-way delay: 164.792 ms

Loss rate: 0.00%

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

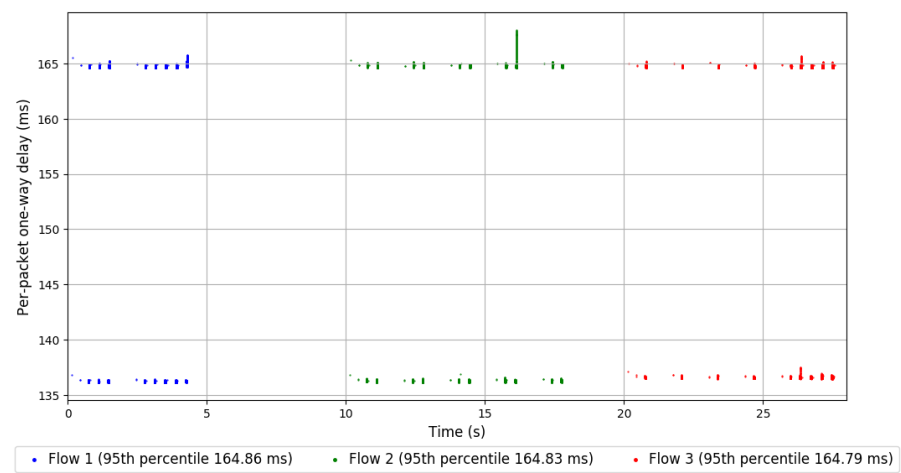
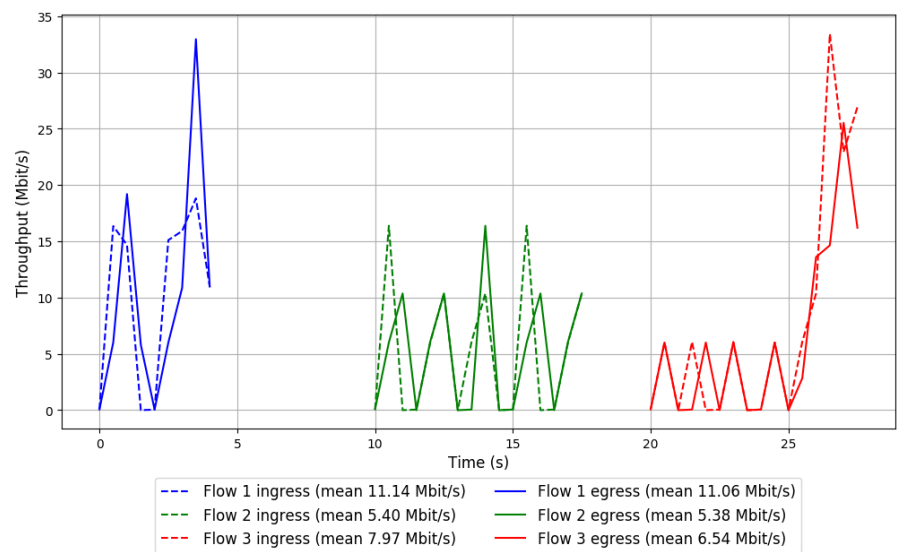


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-09-08 12:59:11
End at: 2017-09-08 12:59:41

# Below is generated by plot.py at 2017-09-08 16:18:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.94 Mbit/s
95th percentile per-packet one-way delay: 164.817 ms
Loss rate: 9.03%
-- Flow 1:
Average throughput: 11.06 Mbit/s
95th percentile per-packet one-way delay: 164.860 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 5.38 Mbit/s
95th percentile per-packet one-way delay: 164.827 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.54 Mbit/s
95th percentile per-packet one-way delay: 164.787 ms
Loss rate: 21.71%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-09-08 11:08:03

End at: 2017-09-08 11:08:33

# Below is generated by plot.py at 2017-09-08 16:18:23

# Datalink statistics

-- Total of 3 flows:

Average throughput: 50.27 Mbit/s

95th percentile per-packet one-way delay: 172.763 ms

Loss rate: 1.32%

-- Flow 1:

Average throughput: 31.52 Mbit/s

95th percentile per-packet one-way delay: 169.933 ms

Loss rate: 1.11%

-- Flow 2:

Average throughput: 0.78 Mbit/s

95th percentile per-packet one-way delay: 164.737 ms

Loss rate: 1.55%

-- Flow 3:

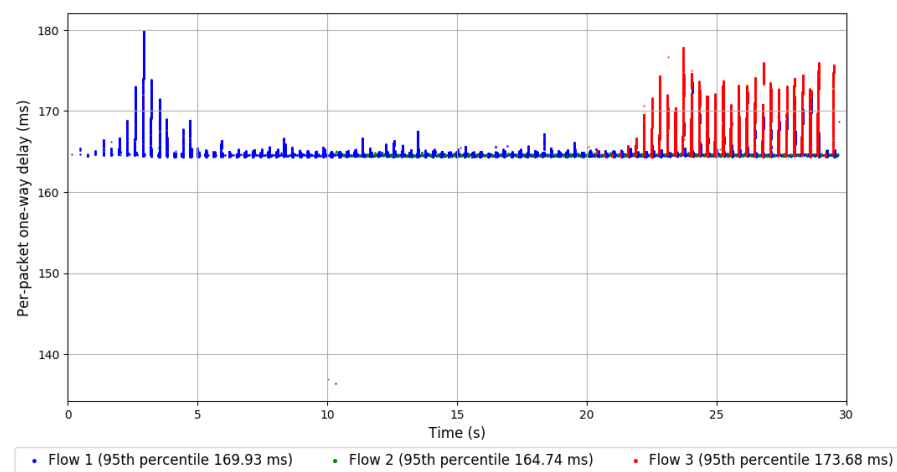
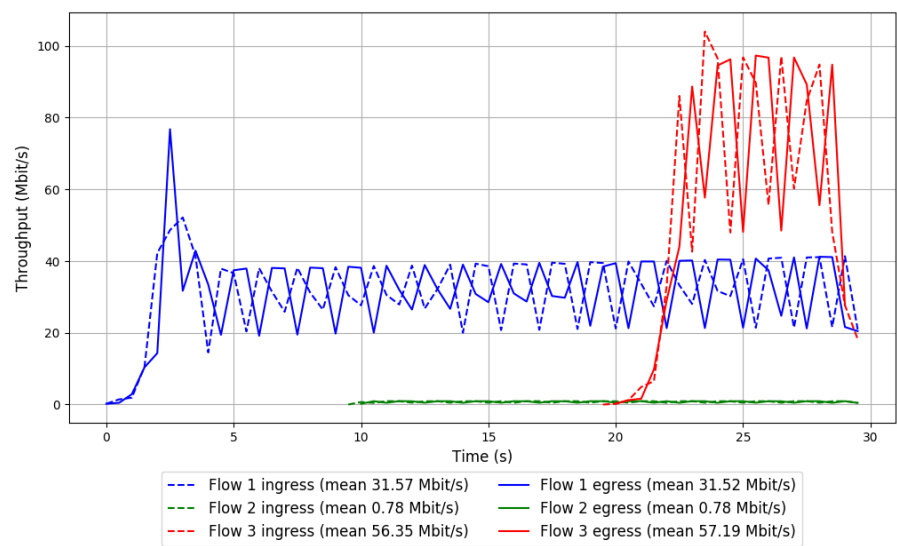
Average throughput: 57.19 Mbit/s

95th percentile per-packet one-way delay: 173.678 ms

Loss rate: 1.66%



Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-09-08 11:22:01

End at: 2017-09-08 11:22:31

# Below is generated by plot.py at 2017-09-08 16:18:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 57.53 Mbit/s

95th percentile per-packet one-way delay: 168.304 ms

Loss rate: 1.59%

-- Flow 1:

Average throughput: 36.17 Mbit/s

95th percentile per-packet one-way delay: 167.539 ms

Loss rate: 1.11%

-- Flow 2:

Average throughput: 20.19 Mbit/s

95th percentile per-packet one-way delay: 167.820 ms

Loss rate: 1.69%

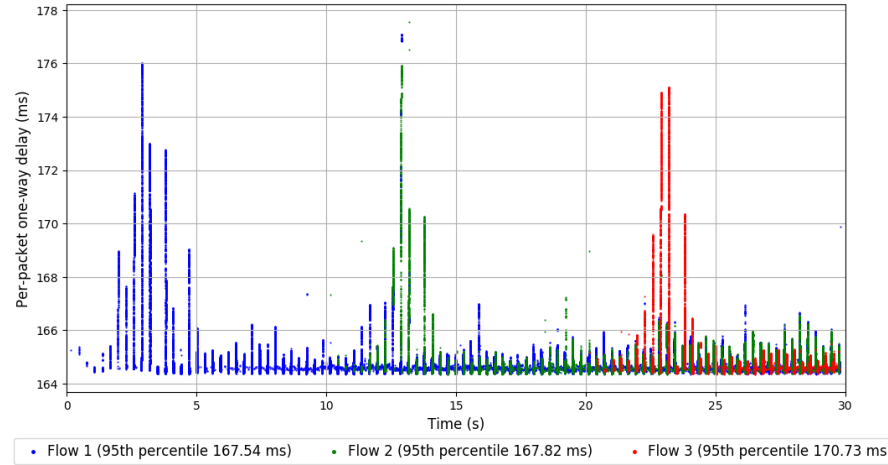
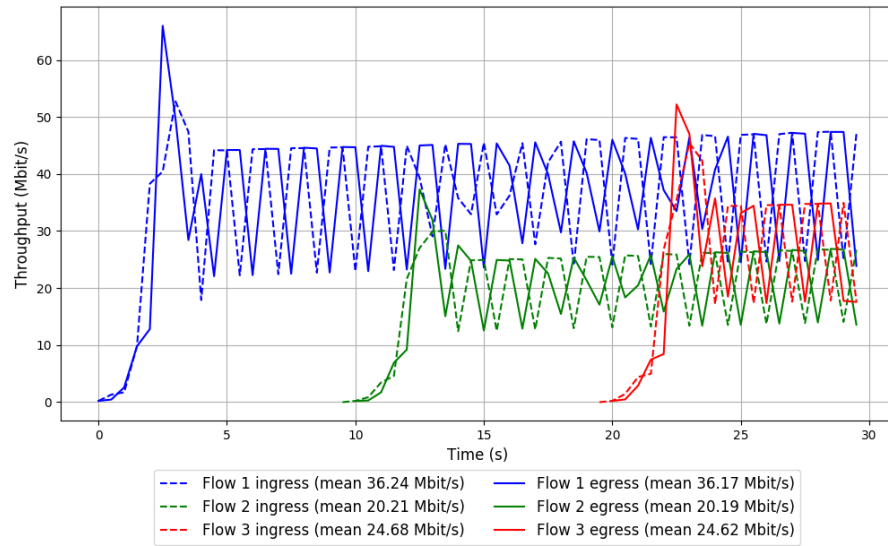
-- Flow 3:

Average throughput: 24.62 Mbit/s

95th percentile per-packet one-way delay: 170.733 ms

Loss rate: 3.58%

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



Run 3: Statistics of TCP Vegas

Start at: 2017-09-08 11:35:54

End at: 2017-09-08 11:36:24

# Below is generated by plot.py at 2017-09-08 16:18:29

# Datalink statistics

-- Total of 3 flows:

Average throughput: 20.44 Mbit/s

95th percentile per-packet one-way delay: 168.511 ms

Loss rate: 1.66%

-- Flow 1:

Average throughput: 0.79 Mbit/s

95th percentile per-packet one-way delay: 164.846 ms

Loss rate: 1.02%

-- Flow 2:

Average throughput: 29.24 Mbit/s

95th percentile per-packet one-way delay: 168.699 ms

Loss rate: 1.67%

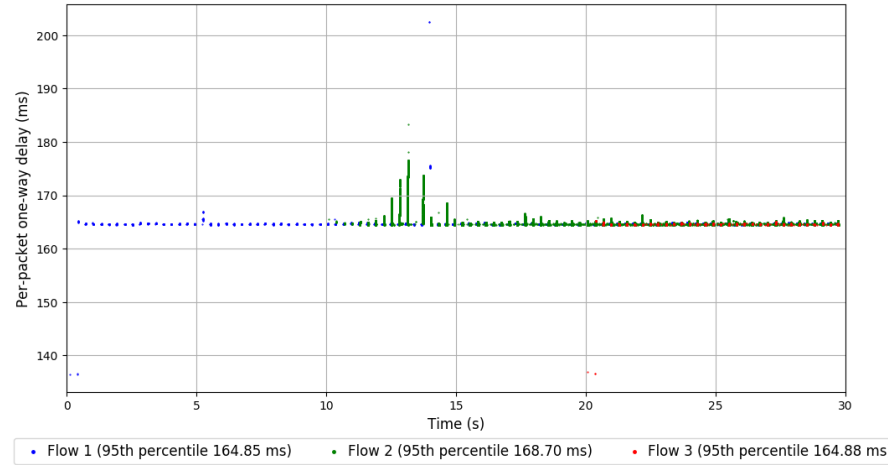
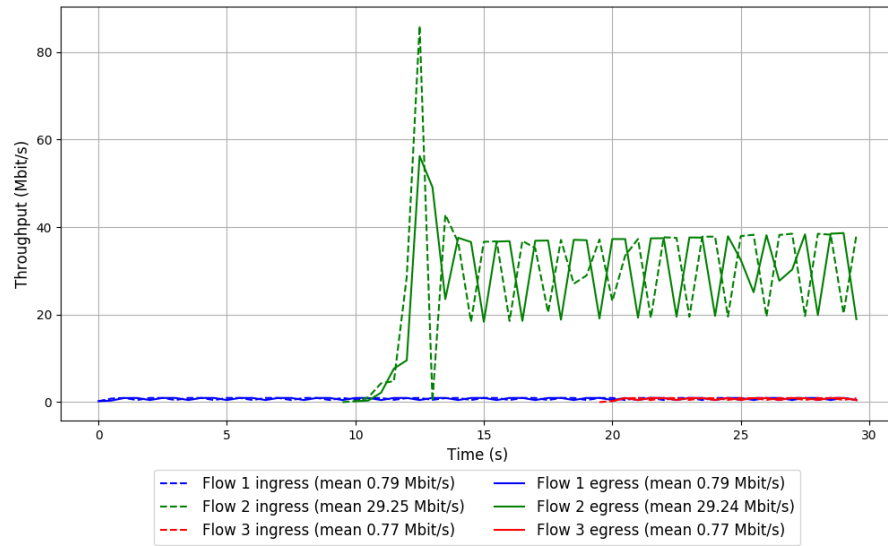
-- Flow 3:

Average throughput: 0.77 Mbit/s

95th percentile per-packet one-way delay: 164.884 ms

Loss rate: 3.13%

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



Run 4: Statistics of TCP Vegas

Start at: 2017-09-08 11:49:55

End at: 2017-09-08 11:50:25

# Below is generated by plot.py at 2017-09-08 16:18:29

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.66 Mbit/s

95th percentile per-packet one-way delay: 164.747 ms

Loss rate: 1.47%

-- Flow 1:

Average throughput: 0.89 Mbit/s

95th percentile per-packet one-way delay: 164.763 ms

Loss rate: 0.95%

-- Flow 2:

Average throughput: 0.79 Mbit/s

95th percentile per-packet one-way delay: 164.738 ms

Loss rate: 1.53%

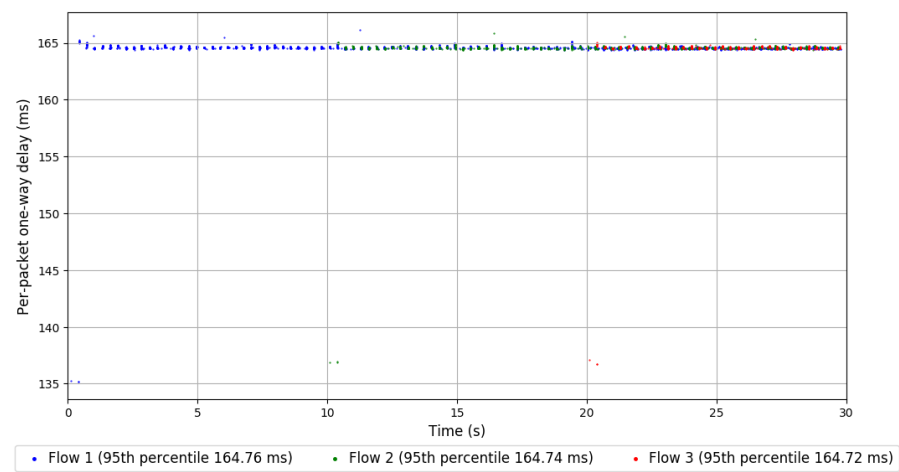
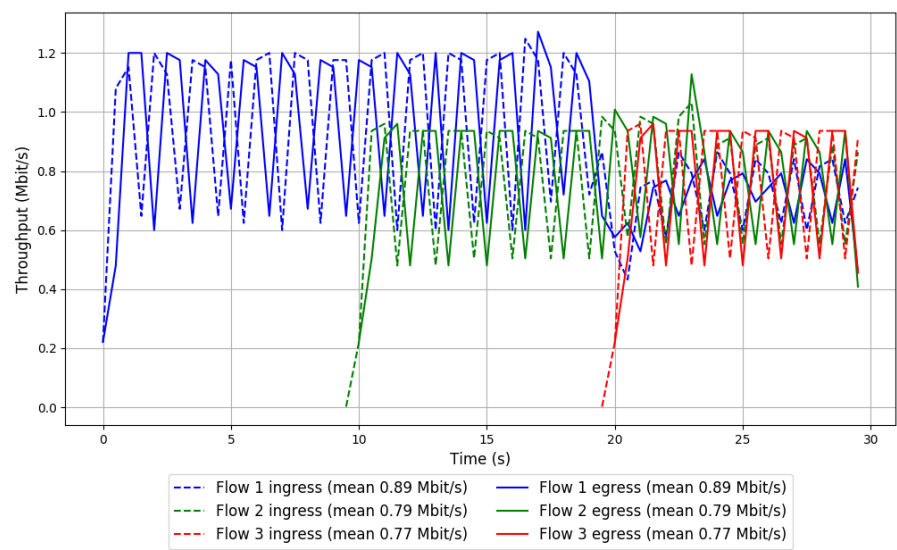
-- Flow 3:

Average throughput: 0.77 Mbit/s

95th percentile per-packet one-way delay: 164.717 ms

Loss rate: 3.13%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-09-08 12:03:17

End at: 2017-09-08 12:03:47

# Below is generated by plot.py at 2017-09-08 16:18:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 23.49 Mbit/s

95th percentile per-packet one-way delay: 166.490 ms

Loss rate: 1.13%

-- Flow 1:

Average throughput: 22.73 Mbit/s

95th percentile per-packet one-way delay: 166.663 ms

Loss rate: 1.10%

-- Flow 2:

Average throughput: 0.78 Mbit/s

95th percentile per-packet one-way delay: 164.988 ms

Loss rate: 1.55%

-- Flow 3:

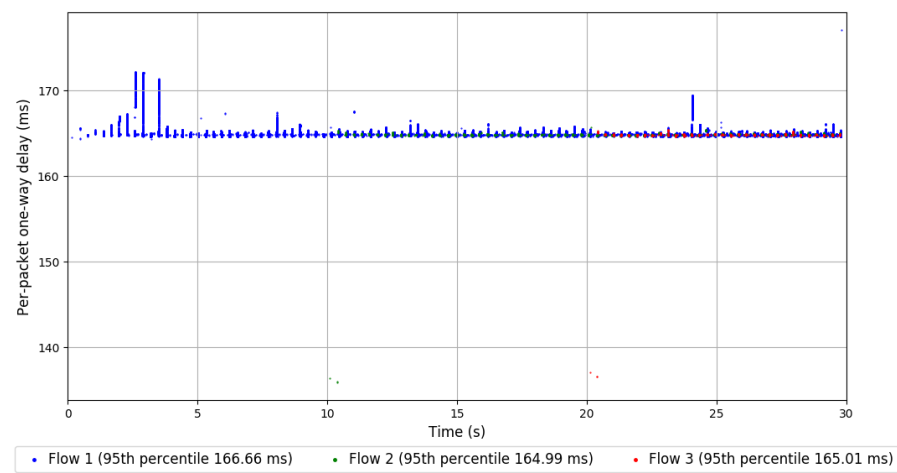
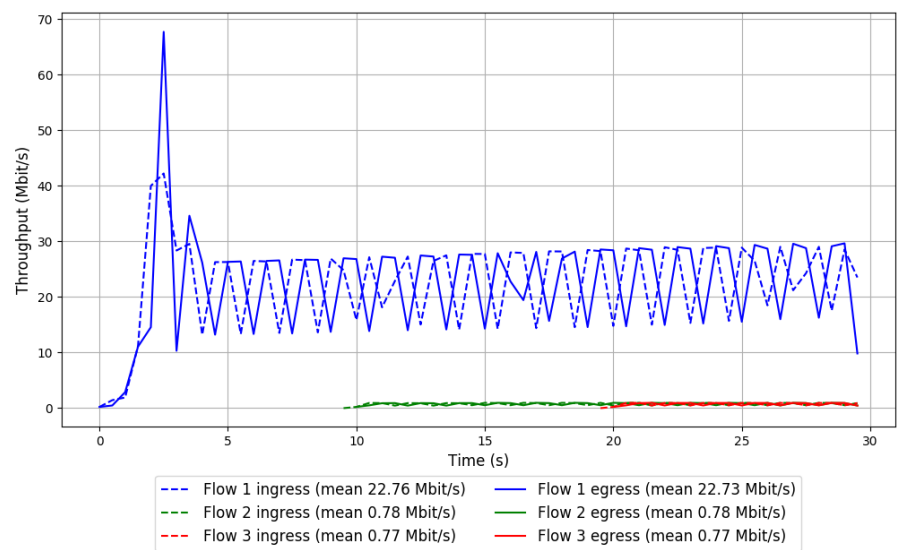
Average throughput: 0.77 Mbit/s

95th percentile per-packet one-way delay: 165.008 ms

Loss rate: 3.13%



Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-09-08 12:16:29

End at: 2017-09-08 12:16:59

# Below is generated by plot.py at 2017-09-08 16:18:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 165.049 ms

Loss rate: 1.40%

-- Flow 1:

Average throughput: 1.20 Mbit/s

95th percentile per-packet one-way delay: 165.061 ms

Loss rate: 0.97%

-- Flow 2:

Average throughput: 0.78 Mbit/s

95th percentile per-packet one-way delay: 165.042 ms

Loss rate: 1.54%

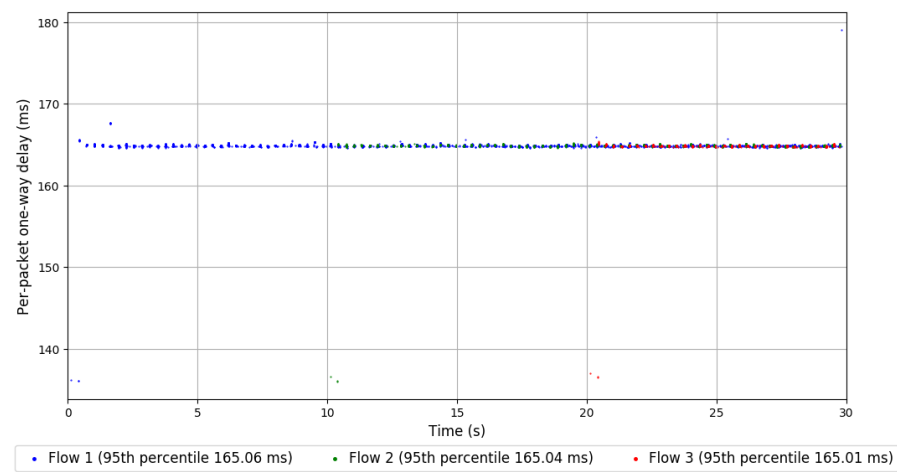
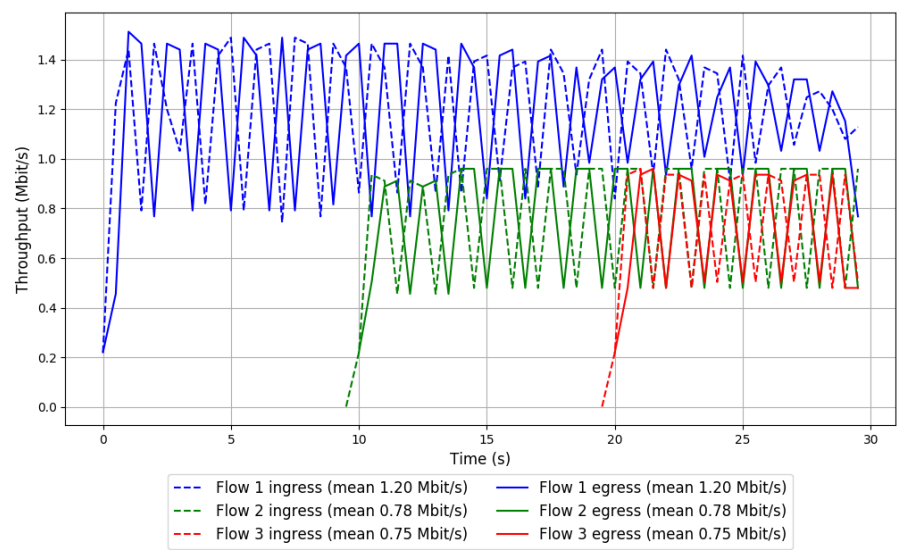
-- Flow 3:

Average throughput: 0.75 Mbit/s

95th percentile per-packet one-way delay: 165.006 ms

Loss rate: 3.22%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-09-08 12:29:47

End at: 2017-09-08 12:30:17

# Below is generated by plot.py at 2017-09-08 16:18:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.54 Mbit/s

95th percentile per-packet one-way delay: 164.958 ms

Loss rate: 1.55%

-- Flow 1:

Average throughput: 0.79 Mbit/s

95th percentile per-packet one-way delay: 164.989 ms

Loss rate: 1.03%

-- Flow 2:

Average throughput: 0.78 Mbit/s

95th percentile per-packet one-way delay: 164.935 ms

Loss rate: 1.55%

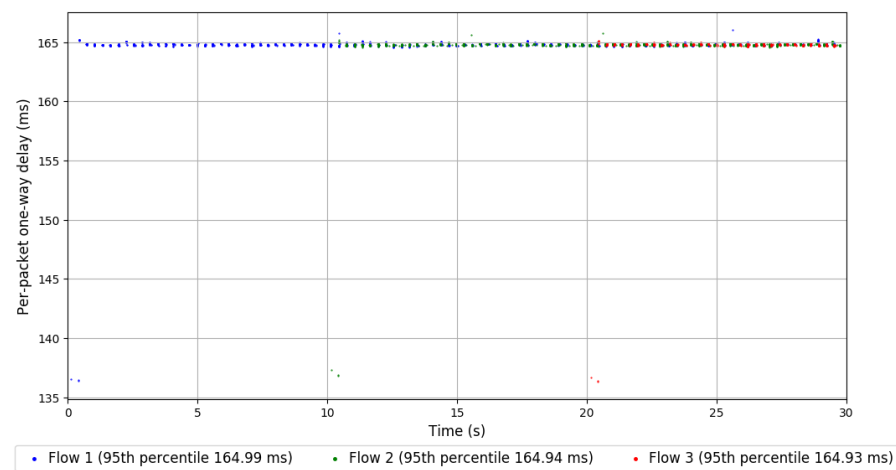
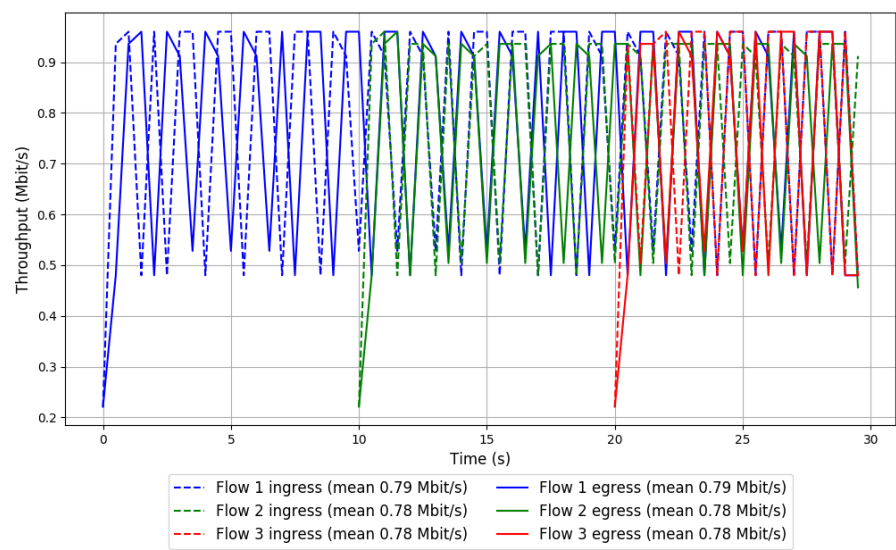
-- Flow 3:

Average throughput: 0.78 Mbit/s

95th percentile per-packet one-way delay: 164.925 ms

Loss rate: 3.18%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-09-08 12:43:08

End at: 2017-09-08 12:43:38

# Below is generated by plot.py at 2017-09-08 16:18:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.54 Mbit/s

95th percentile per-packet one-way delay: 164.998 ms

Loss rate: 1.52%

-- Flow 1:

Average throughput: 0.78 Mbit/s

95th percentile per-packet one-way delay: 165.008 ms

Loss rate: 1.03%

-- Flow 2:

Average throughput: 0.78 Mbit/s

95th percentile per-packet one-way delay: 165.007 ms

Loss rate: 1.47%

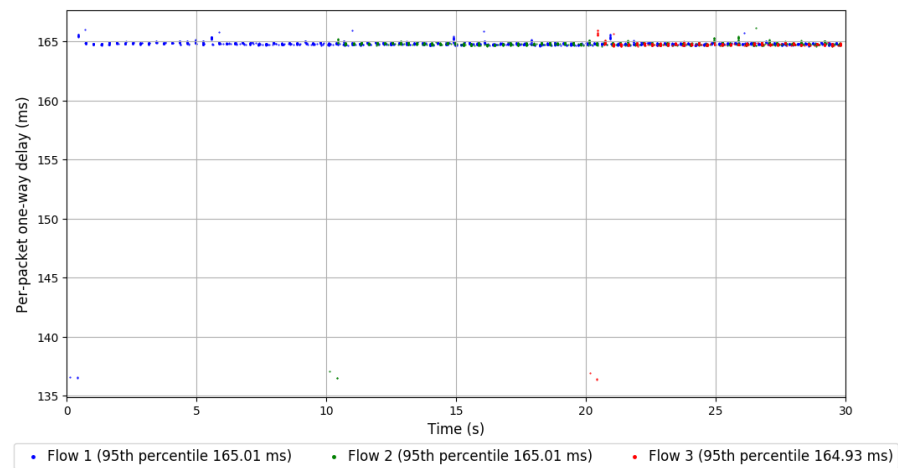
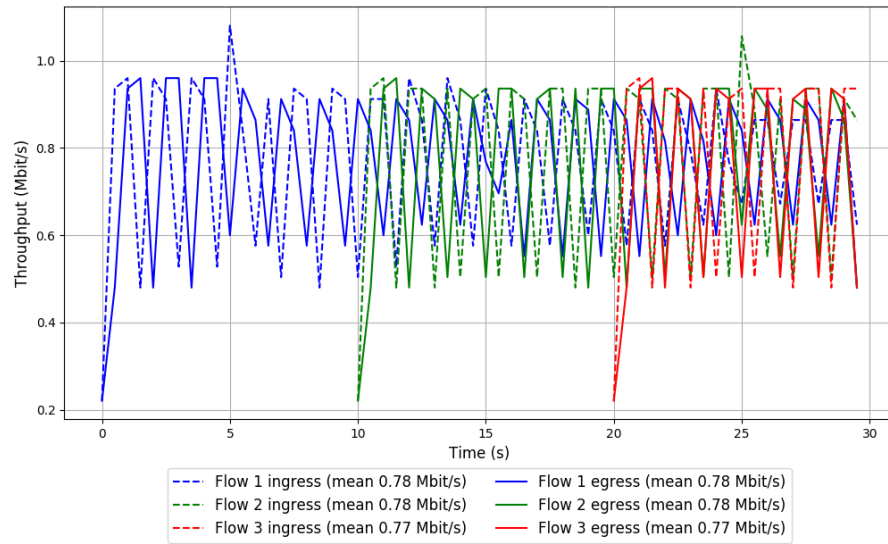
-- Flow 3:

Average throughput: 0.77 Mbit/s

95th percentile per-packet one-way delay: 164.932 ms

Loss rate: 3.13%

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



Run 9: Statistics of TCP Vegas

Start at: 2017-09-08 12:56:32

End at: 2017-09-08 12:57:02

# Below is generated by plot.py at 2017-09-08 16:18:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 25.22 Mbit/s

95th percentile per-packet one-way delay: 166.830 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 24.47 Mbit/s

95th percentile per-packet one-way delay: 166.901 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 0.77 Mbit/s

95th percentile per-packet one-way delay: 164.997 ms

Loss rate: 1.47%

-- Flow 3:

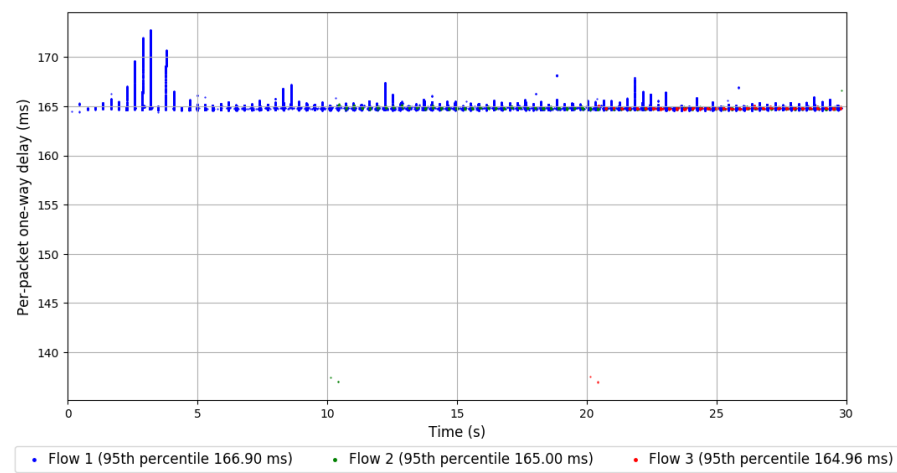
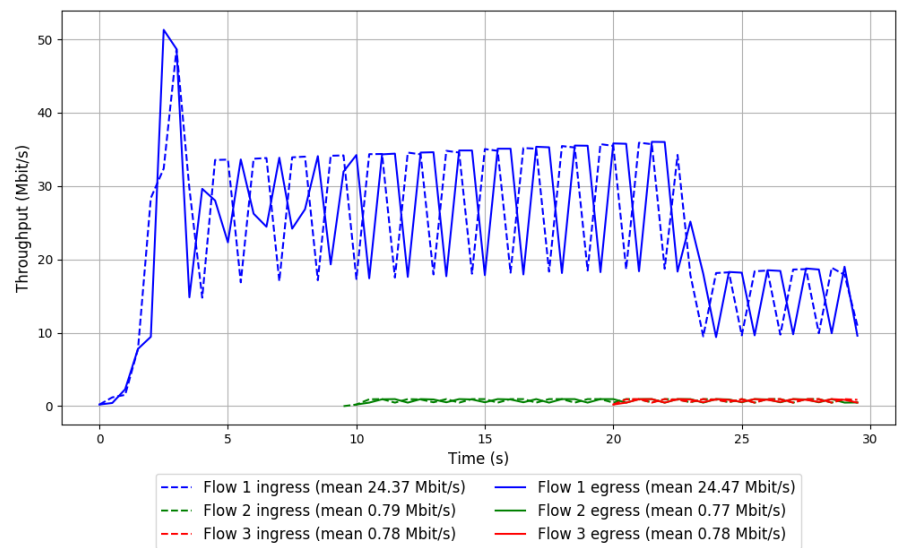
Average throughput: 0.78 Mbit/s

95th percentile per-packet one-way delay: 164.956 ms

Loss rate: 3.10%



Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-09-08 13:09:50

End at: 2017-09-08 13:10:20

# Below is generated by plot.py at 2017-09-08 16:18:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.54 Mbit/s

95th percentile per-packet one-way delay: 165.077 ms

Loss rate: 1.55%

-- Flow 1:

Average throughput: 0.78 Mbit/s

95th percentile per-packet one-way delay: 165.122 ms

Loss rate: 1.03%

-- Flow 2:

Average throughput: 0.77 Mbit/s

95th percentile per-packet one-way delay: 165.040 ms

Loss rate: 1.55%

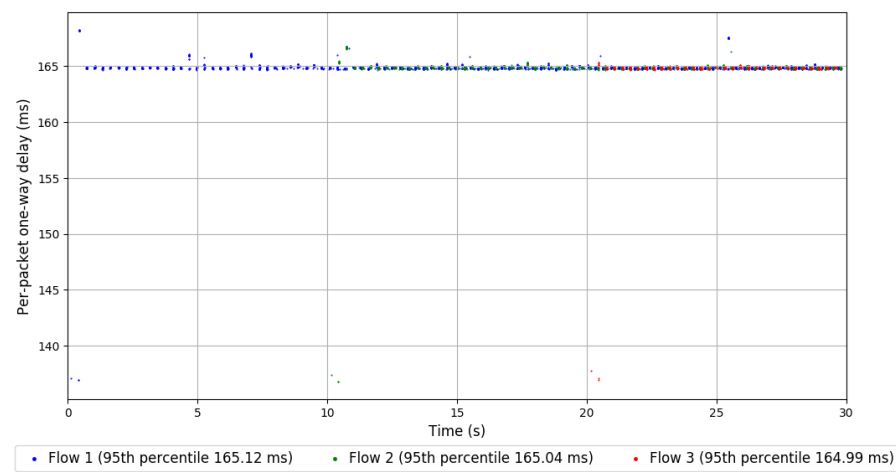
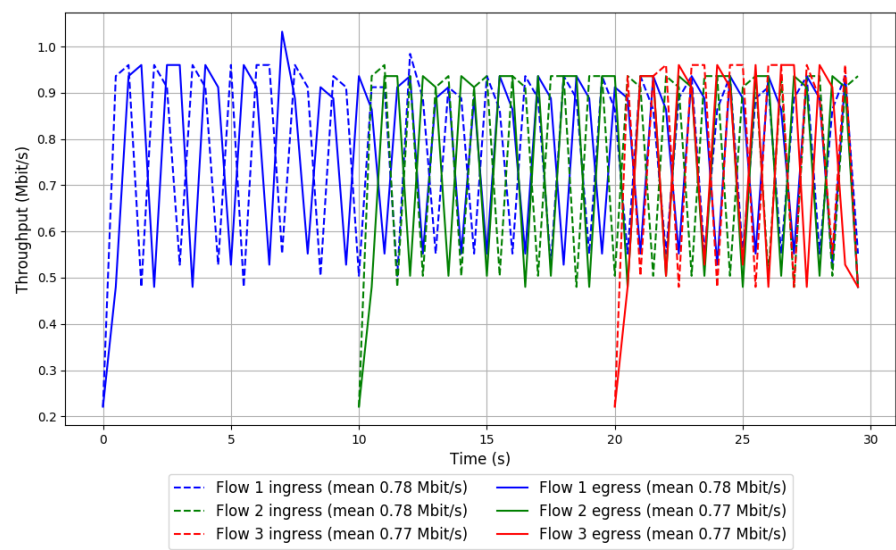
-- Flow 3:

Average throughput: 0.77 Mbit/s

95th percentile per-packet one-way delay: 164.990 ms

Loss rate: 3.18%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-09-08 10:58:49

End at: 2017-09-08 10:59:19

# Below is generated by plot.py at 2017-09-08 16:18:56

# Datalink statistics

-- Total of 3 flows:

Average throughput: 80.13 Mbit/s

95th percentile per-packet one-way delay: 178.984 ms

Loss rate: 1.36%

-- Flow 1:

Average throughput: 26.94 Mbit/s

95th percentile per-packet one-way delay: 213.978 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 61.86 Mbit/s

95th percentile per-packet one-way delay: 177.368 ms

Loss rate: 0.83%

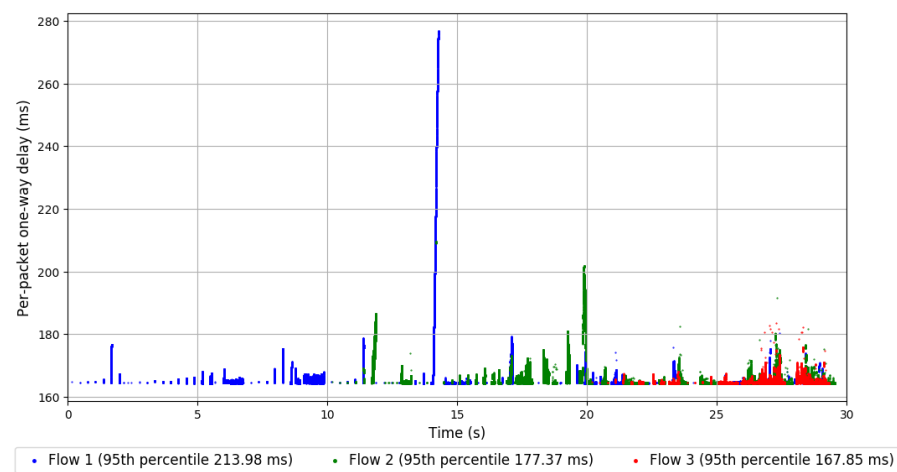
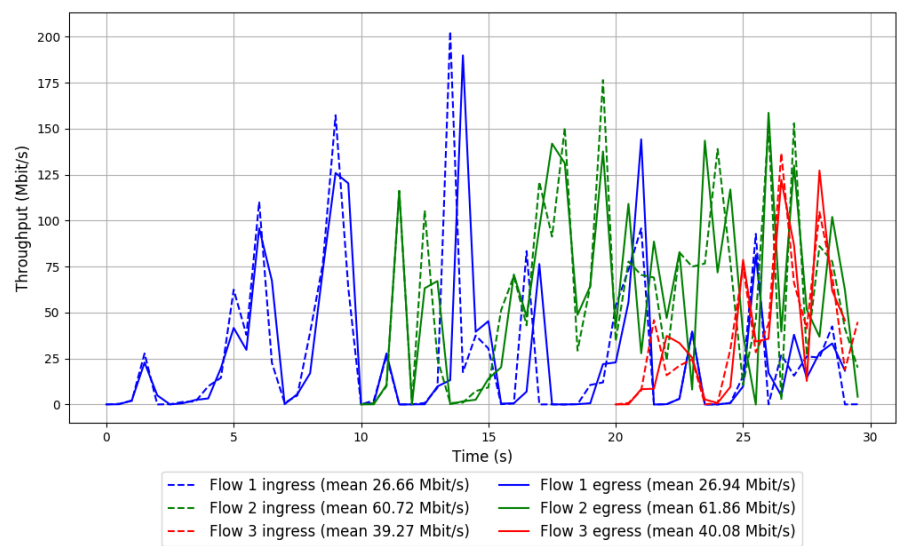
-- Flow 3:

Average throughput: 40.08 Mbit/s

95th percentile per-packet one-way delay: 167.849 ms

Loss rate: 5.78%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-09-08 11:12:44

End at: 2017-09-08 11:13:14

# Below is generated by plot.py at 2017-09-08 16:19:02

# Datalink statistics

-- Total of 3 flows:

Average throughput: 100.83 Mbit/s

95th percentile per-packet one-way delay: 190.154 ms

Loss rate: 1.16%

-- Flow 1:

Average throughput: 77.57 Mbit/s

95th percentile per-packet one-way delay: 180.006 ms

Loss rate: 1.21%

-- Flow 2:

Average throughput: 26.24 Mbit/s

95th percentile per-packet one-way delay: 230.171 ms

Loss rate: 0.00%

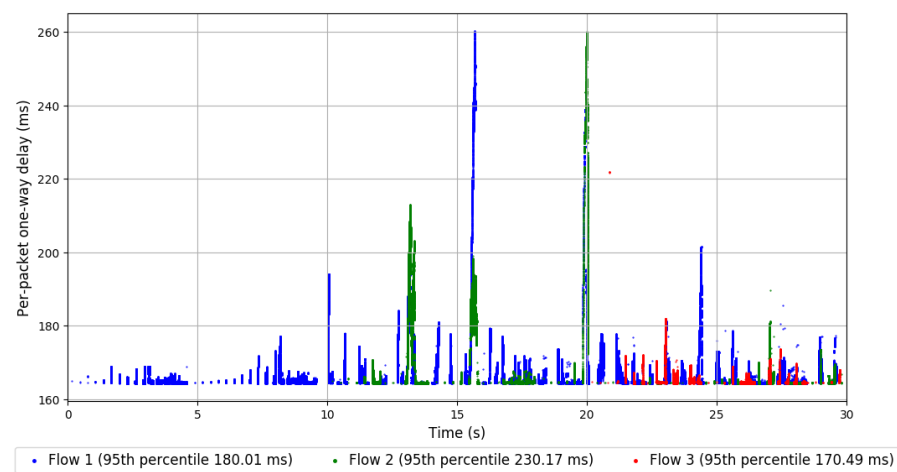
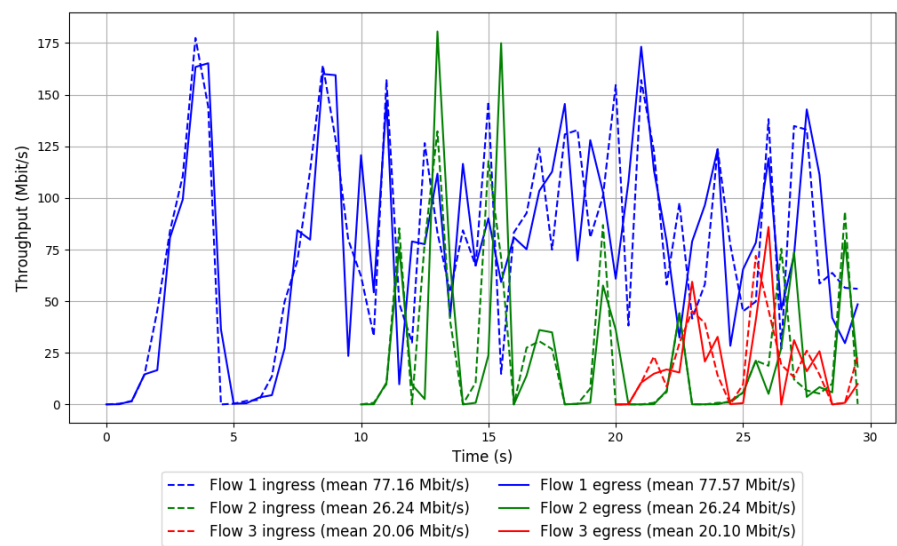
-- Flow 3:

Average throughput: 20.10 Mbit/s

95th percentile per-packet one-way delay: 170.489 ms

Loss rate: 3.50%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-09-08 11:26:49

End at: 2017-09-08 11:27:19

# Below is generated by plot.py at 2017-09-08 16:19:05

# Datalink statistics

-- Total of 3 flows:

Average throughput: 52.34 Mbit/s

95th percentile per-packet one-way delay: 178.644 ms

Loss rate: 1.77%

-- Flow 1:

Average throughput: 22.77 Mbit/s

95th percentile per-packet one-way delay: 170.303 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 38.21 Mbit/s

95th percentile per-packet one-way delay: 240.141 ms

Loss rate: 3.26%

-- Flow 3:

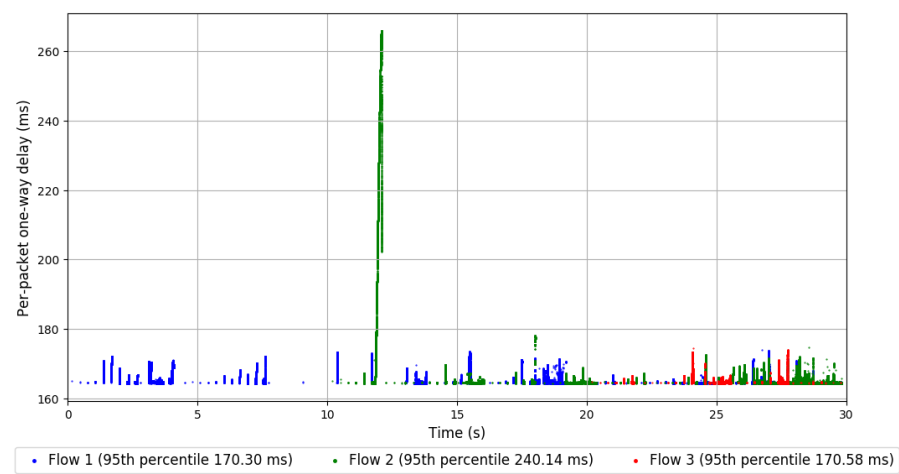
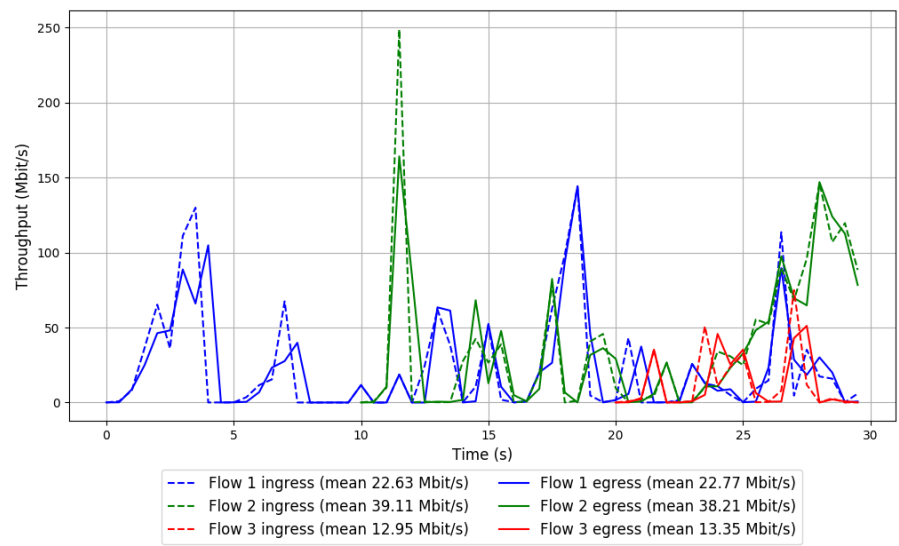
Average throughput: 13.35 Mbit/s

95th percentile per-packet one-way delay: 170.578 ms

Loss rate: 0.06%



Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-09-08 11:40:37

End at: 2017-09-08 11:41:07

# Below is generated by plot.py at 2017-09-08 16:19:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 128.36 Mbit/s

95th percentile per-packet one-way delay: 177.857 ms

Loss rate: 1.39%

-- Flow 1:

Average throughput: 74.55 Mbit/s

95th percentile per-packet one-way delay: 175.842 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 57.08 Mbit/s

95th percentile per-packet one-way delay: 182.757 ms

Loss rate: 1.91%

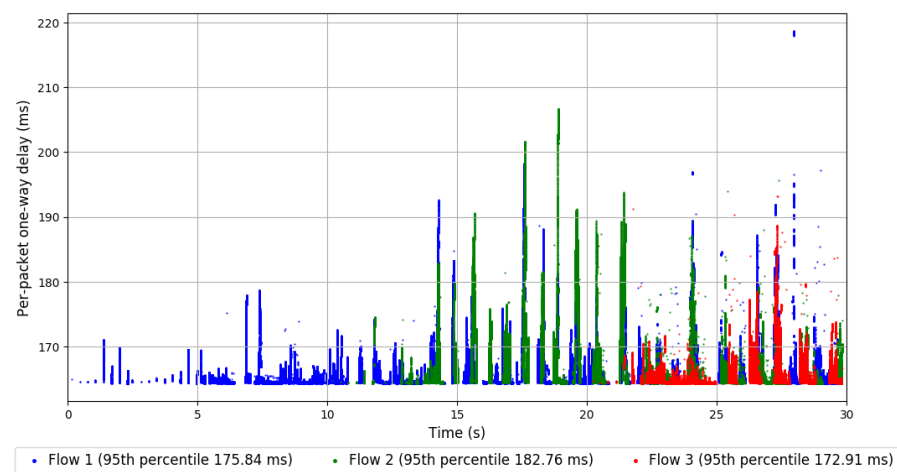
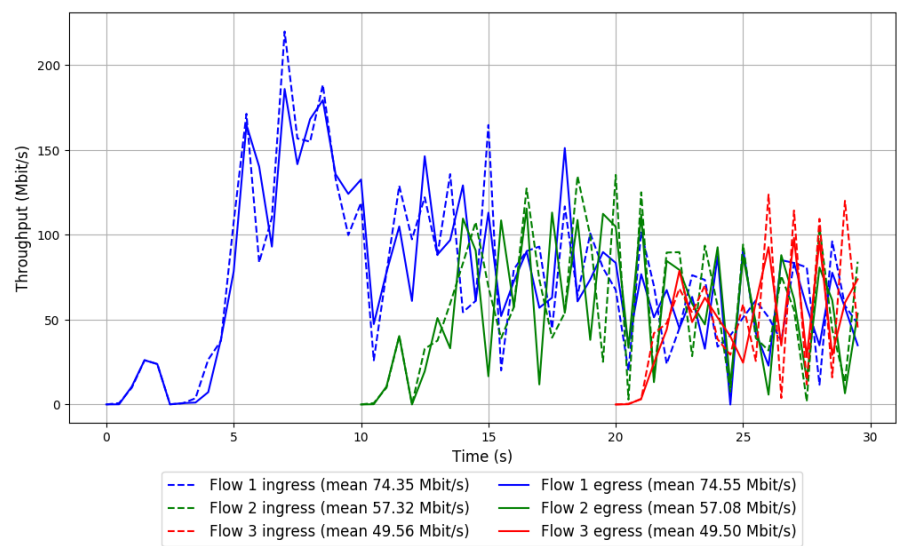
-- Flow 3:

Average throughput: 49.50 Mbit/s

95th percentile per-packet one-way delay: 172.911 ms

Loss rate: 3.22%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-09-08 11:54:24

End at: 2017-09-08 11:54:54

# Below is generated by plot.py at 2017-09-08 16:19:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 88.75 Mbit/s

95th percentile per-packet one-way delay: 182.714 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 54.30 Mbit/s

95th percentile per-packet one-way delay: 178.716 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 38.51 Mbit/s

95th percentile per-packet one-way delay: 179.684 ms

Loss rate: 2.98%

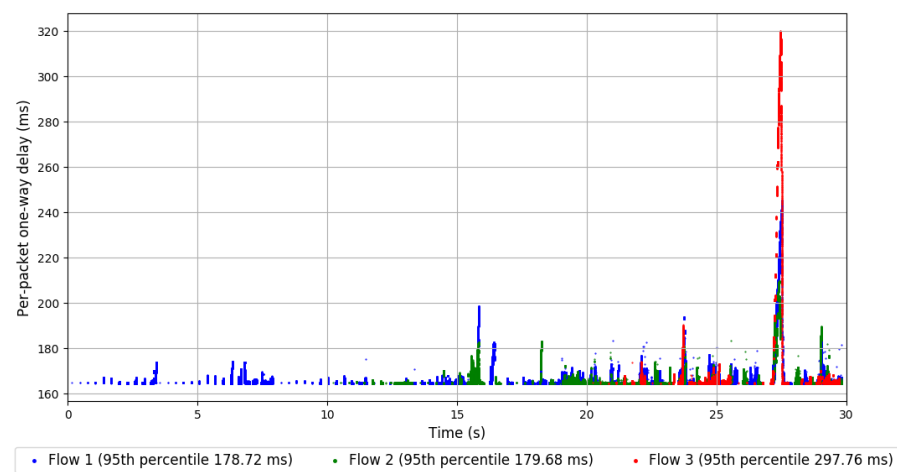
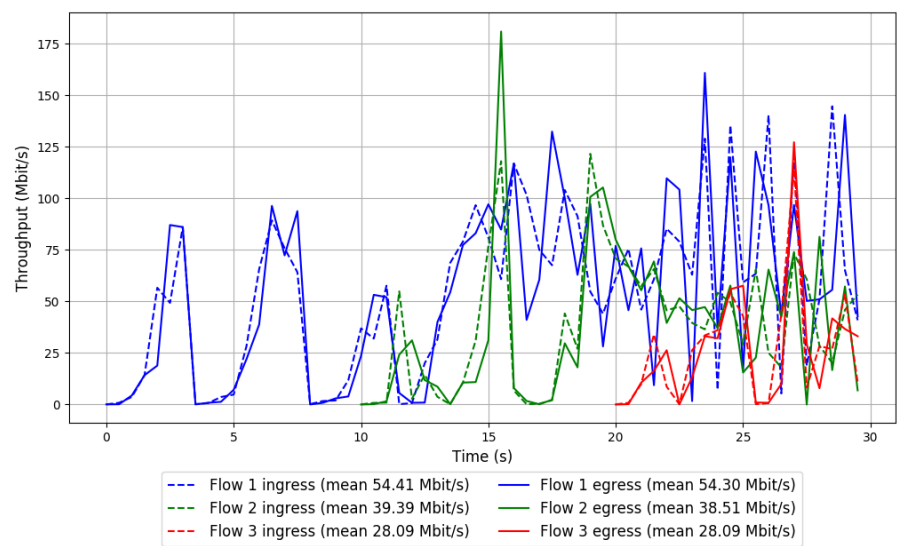
-- Flow 3:

Average throughput: 28.09 Mbit/s

95th percentile per-packet one-way delay: 297.763 ms

Loss rate: 0.00%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-09-08 12:07:37

End at: 2017-09-08 12:08:07

# Below is generated by plot.py at 2017-09-08 16:19:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 79.66 Mbit/s

95th percentile per-packet one-way delay: 179.444 ms

Loss rate: 2.92%

-- Flow 1:

Average throughput: 22.95 Mbit/s

95th percentile per-packet one-way delay: 174.573 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 70.93 Mbit/s

95th percentile per-packet one-way delay: 177.468 ms

Loss rate: 4.62%

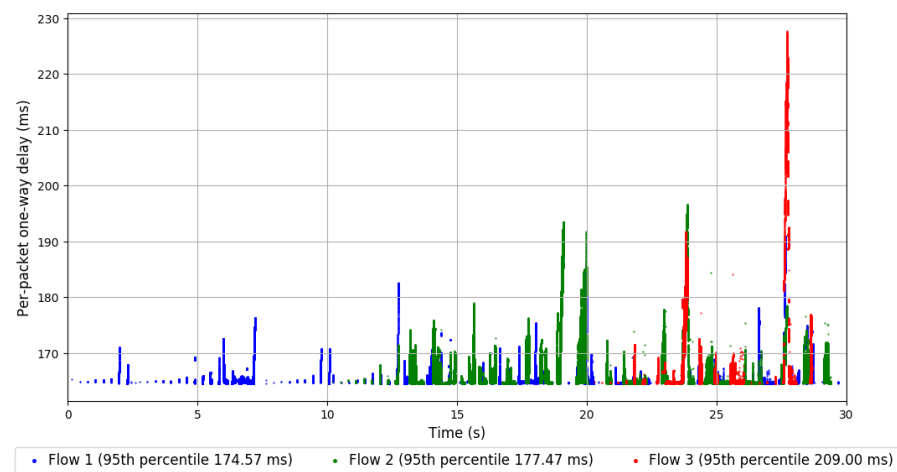
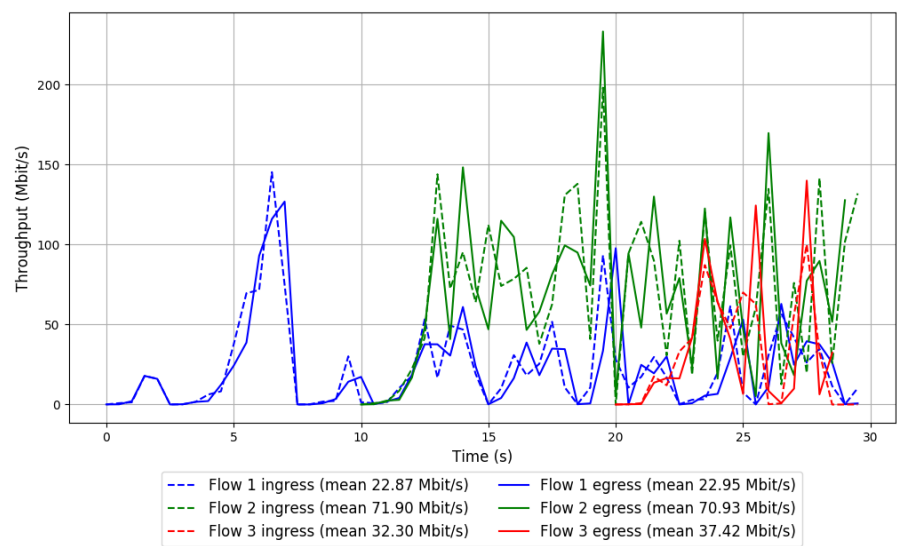
-- Flow 3:

Average throughput: 37.42 Mbit/s

95th percentile per-packet one-way delay: 208.995 ms

Loss rate: 0.01%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-09-08 12:20:49

End at: 2017-09-08 12:21:19

# Below is generated by plot.py at 2017-09-08 16:20:02

# Datalink statistics

-- Total of 3 flows:

Average throughput: 137.94 Mbit/s

95th percentile per-packet one-way delay: 180.905 ms

Loss rate: 1.43%

-- Flow 1:

Average throughput: 80.85 Mbit/s

95th percentile per-packet one-way delay: 175.930 ms

Loss rate: 0.91%

-- Flow 2:

Average throughput: 70.72 Mbit/s

95th percentile per-packet one-way delay: 189.586 ms

Loss rate: 1.31%

-- Flow 3:

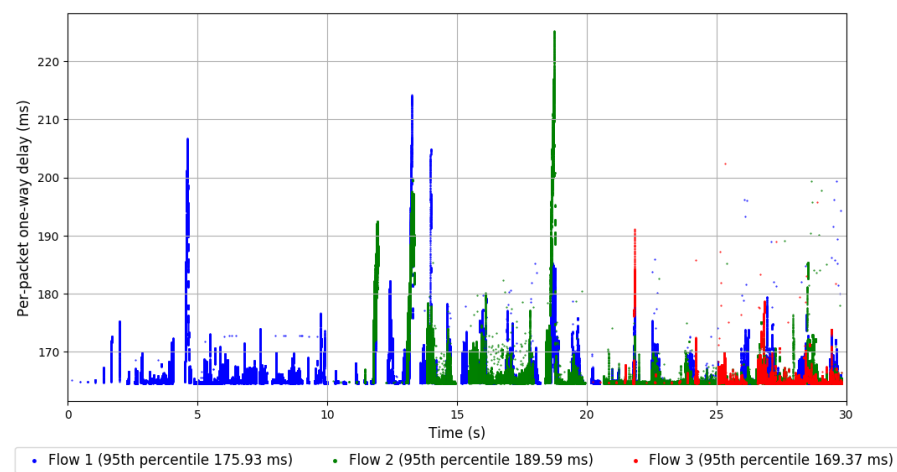
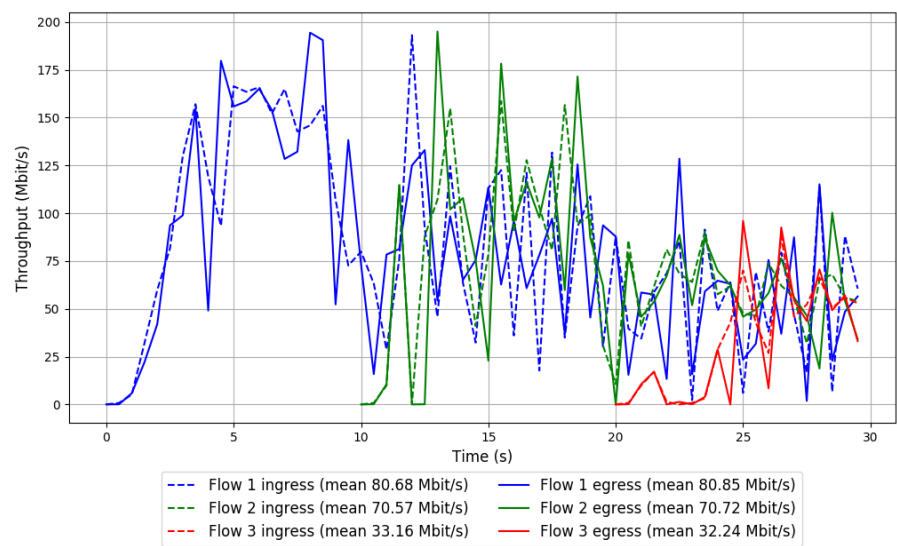
Average throughput: 32.24 Mbit/s

95th percentile per-packet one-way delay: 169.366 ms

Loss rate: 5.77%



Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-09-08 12:34:20

End at: 2017-09-08 12:34:50

# Below is generated by plot.py at 2017-09-08 16:20:02

# Datalink statistics

-- Total of 3 flows:

Average throughput: 64.71 Mbit/s

95th percentile per-packet one-way delay: 173.549 ms

Loss rate: 2.65%

-- Flow 1:

Average throughput: 40.99 Mbit/s

95th percentile per-packet one-way delay: 171.169 ms

Loss rate: 3.24%

-- Flow 2:

Average throughput: 27.54 Mbit/s

95th percentile per-packet one-way delay: 186.931 ms

Loss rate: 2.04%

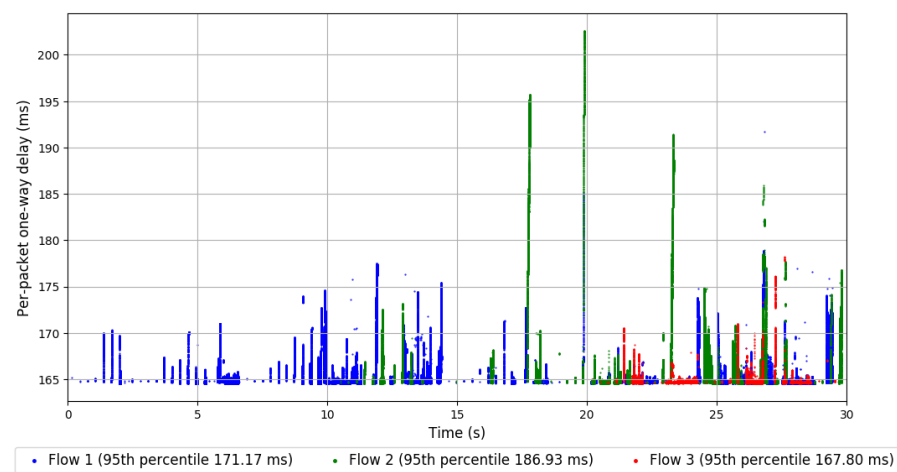
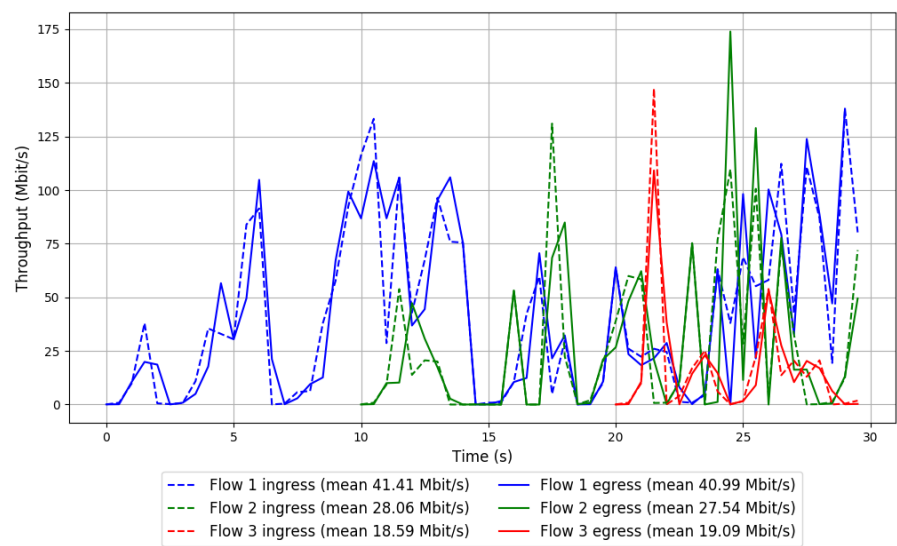
-- Flow 3:

Average throughput: 19.09 Mbit/s

95th percentile per-packet one-way delay: 167.801 ms

Loss rate: 0.51%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-09-08 12:47:35

End at: 2017-09-08 12:48:05

# Below is generated by plot.py at 2017-09-08 16:20:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 83.55 Mbit/s

95th percentile per-packet one-way delay: 190.859 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 39.59 Mbit/s

95th percentile per-packet one-way delay: 187.097 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.05 Mbit/s

95th percentile per-packet one-way delay: 211.223 ms

Loss rate: 0.83%

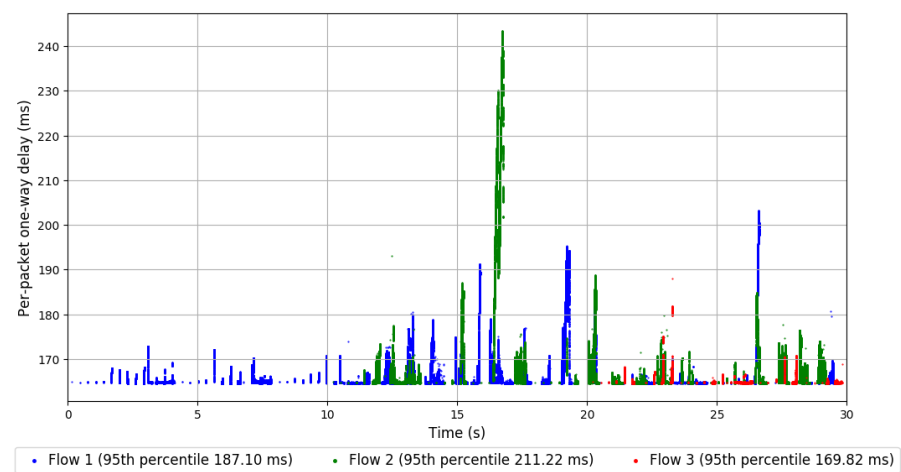
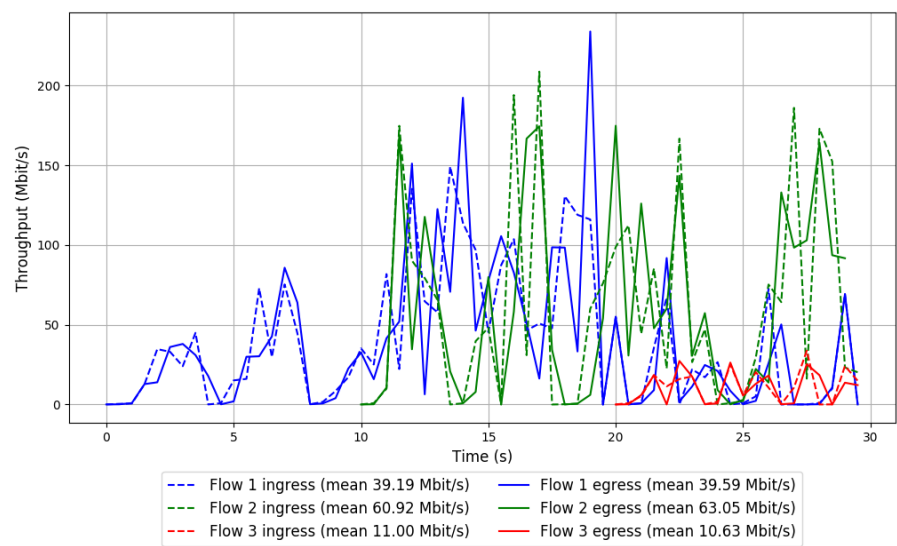
-- Flow 3:

Average throughput: 10.63 Mbit/s

95th percentile per-packet one-way delay: 169.816 ms

Loss rate: 6.09%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-09-08 13:00:56

End at: 2017-09-08 13:01:26

# Below is generated by plot.py at 2017-09-08 16:20:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 85.91 Mbit/s

95th percentile per-packet one-way delay: 174.200 ms

Loss rate: 2.00%

-- Flow 1:

Average throughput: 31.27 Mbit/s

95th percentile per-packet one-way delay: 173.941 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 63.56 Mbit/s

95th percentile per-packet one-way delay: 172.943 ms

Loss rate: 0.00%

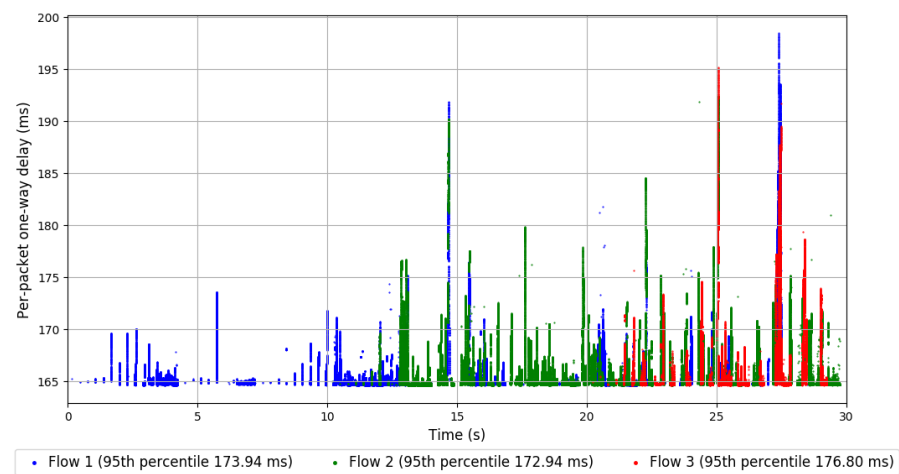
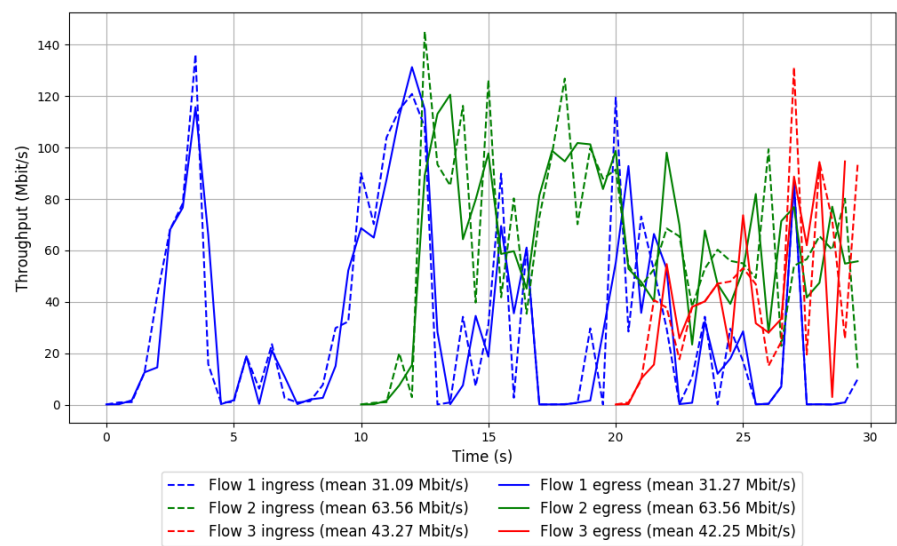
-- Flow 3:

Average throughput: 42.25 Mbit/s

95th percentile per-packet one-way delay: 176.801 ms

Loss rate: 10.95%

Run 10: Report of Verus — Data Link



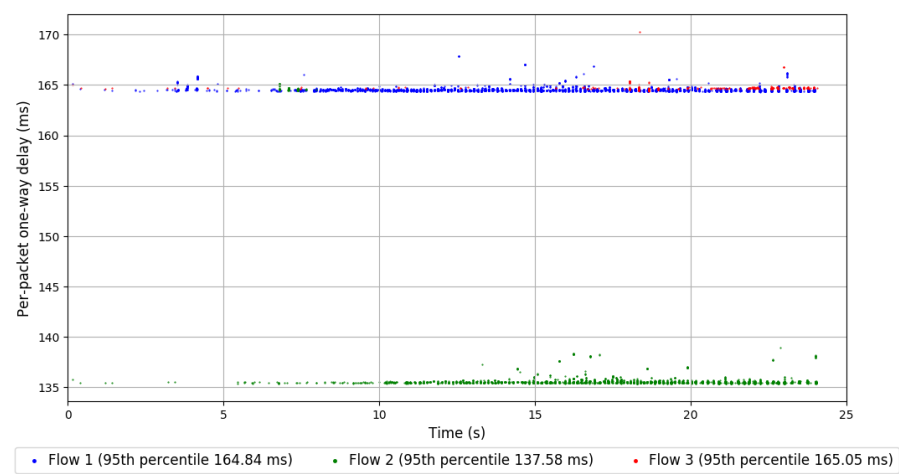
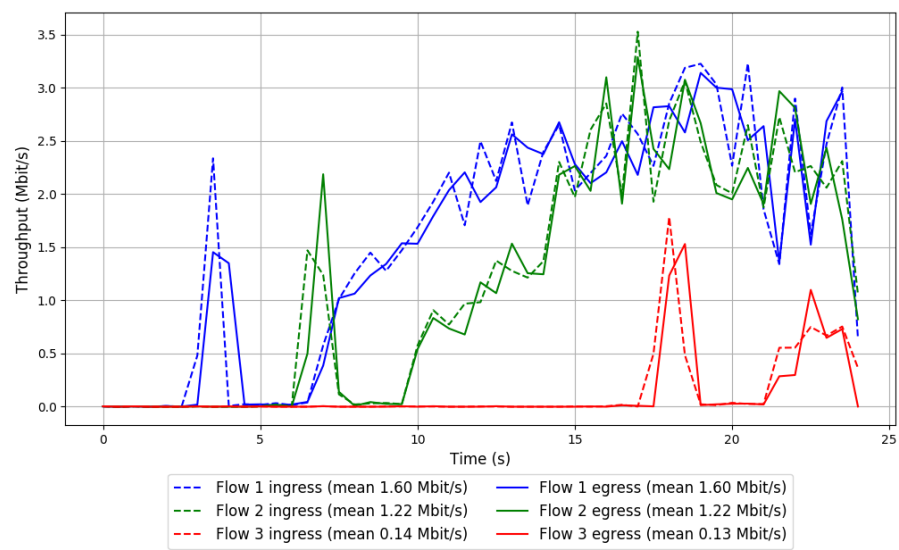
Run 1: Statistics of WebRTC media

Start at: 2017-09-08 11:05:26

End at: 2017-09-08 11:05:56



Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-09-08 11:19:21

End at: 2017-09-08 11:19:51

# Below is generated by plot.py at 2017-09-08 16:20:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.21 Mbit/s

95th percentile per-packet one-way delay: 164.707 ms

Loss rate: 1.98%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 165.171 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 137.741 ms

Loss rate: 1.50%

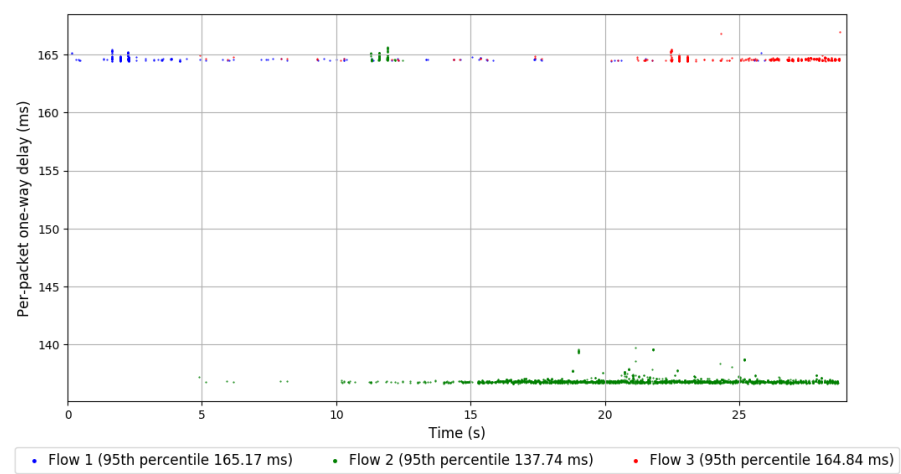
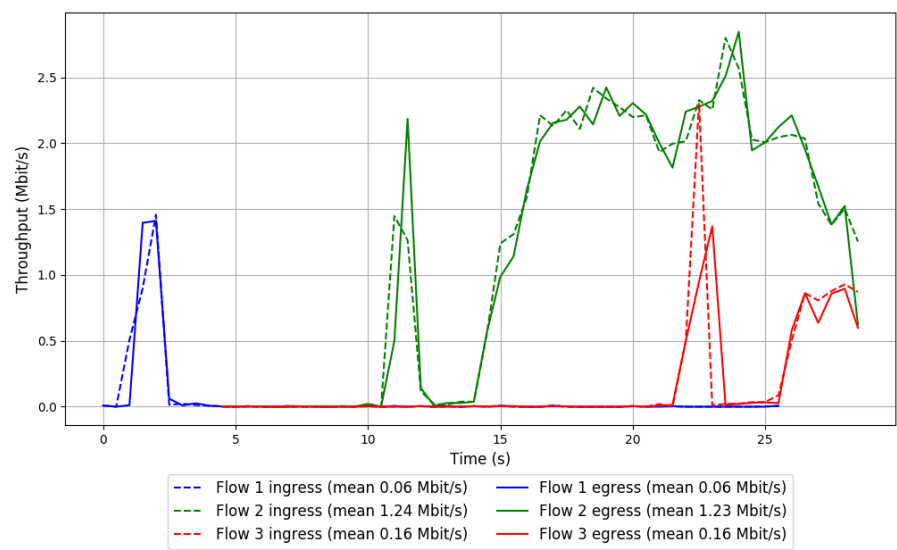
-- Flow 3:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 164.842 ms

Loss rate: 6.27%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-09-08 11:33:19

End at: 2017-09-08 11:33:49

# Below is generated by plot.py at 2017-09-08 16:20:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 164.618 ms

Loss rate: 2.83%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 165.120 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 137.242 ms

Loss rate: 1.63%

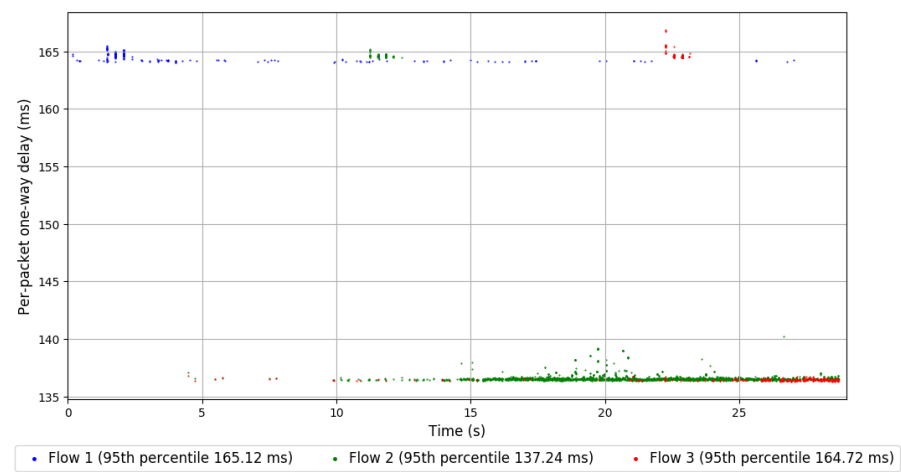
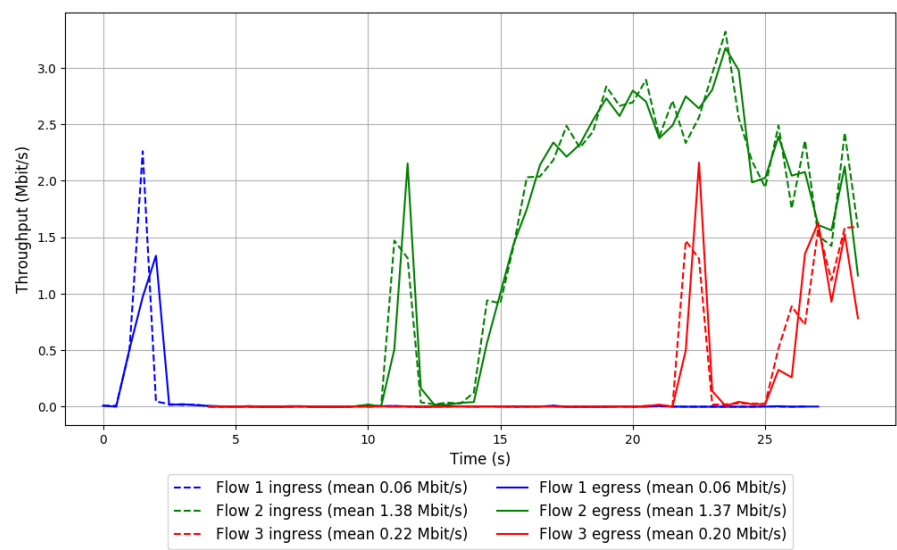
-- Flow 3:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 164.715 ms

Loss rate: 10.99%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-09-08 11:47:21

End at: 2017-09-08 11:47:51

# Below is generated by plot.py at 2017-09-08 16:20:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.27 Mbit/s

95th percentile per-packet one-way delay: 164.973 ms

Loss rate: 2.90%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 164.933 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 164.948 ms

Loss rate: 2.43%

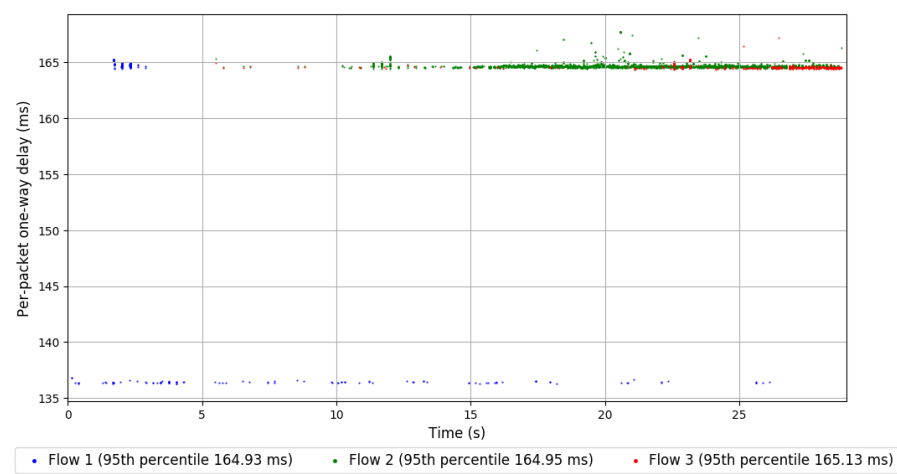
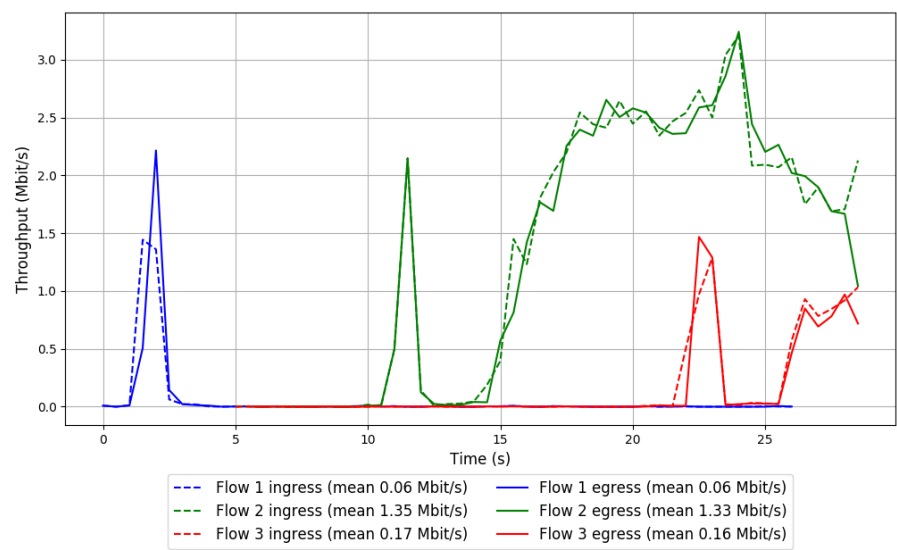
-- Flow 3:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 165.134 ms

Loss rate: 7.74%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-09-08 12:00:48

End at: 2017-09-08 12:01:18

# Below is generated by plot.py at 2017-09-08 16:20:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 164.822 ms

Loss rate: 2.69%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 165.142 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 137.255 ms

Loss rate: 1.36%

-- Flow 3:

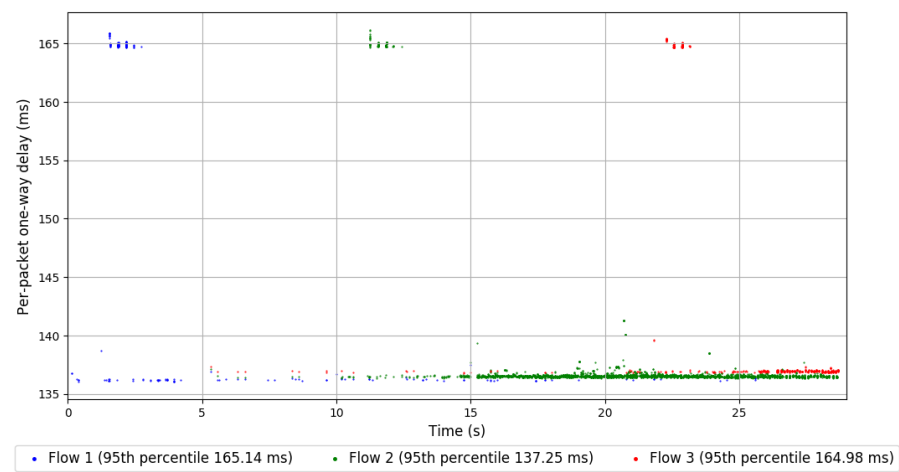
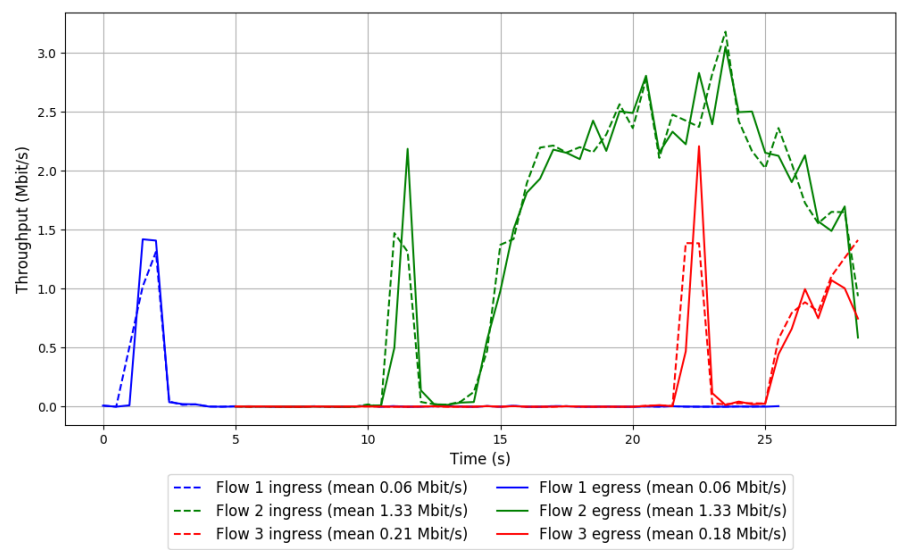
Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 164.983 ms

Loss rate: 12.02%



Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-09-08 12:13:59

End at: 2017-09-08 12:14:29

# Below is generated by plot.py at 2017-09-08 16:20:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 164.784 ms

Loss rate: 3.01%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 165.210 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 136.971 ms

Loss rate: 2.17%

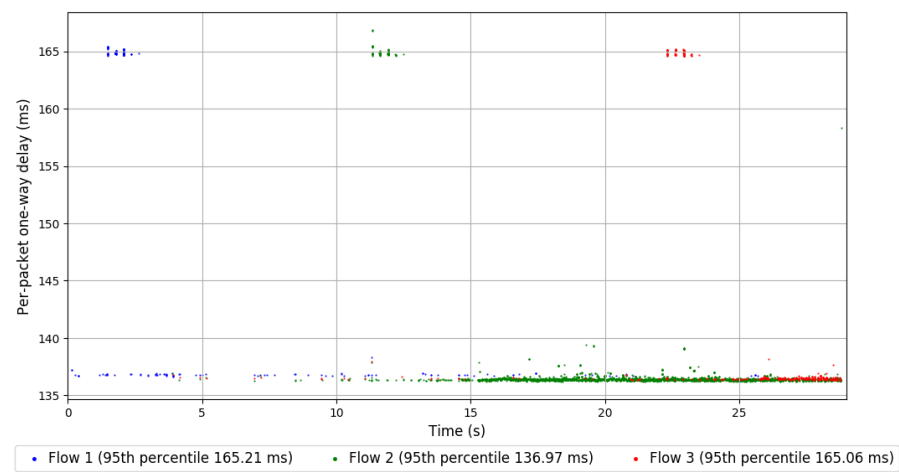
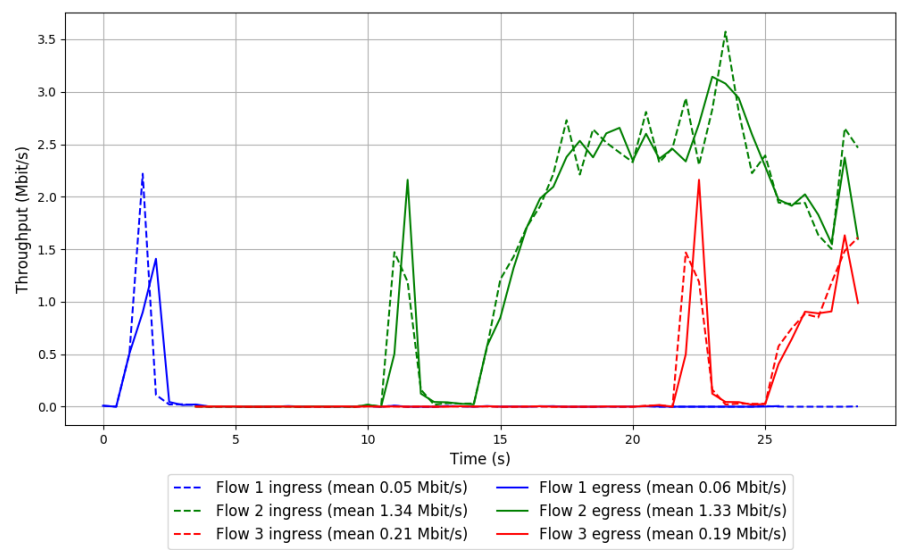
-- Flow 3:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 165.061 ms

Loss rate: 9.38%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-09-08 12:27:19

End at: 2017-09-08 12:27:49

# Below is generated by plot.py at 2017-09-08 16:20:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 164.937 ms

Loss rate: 2.33%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 165.443 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 1.15 Mbit/s

95th percentile per-packet one-way delay: 137.400 ms

Loss rate: 1.46%

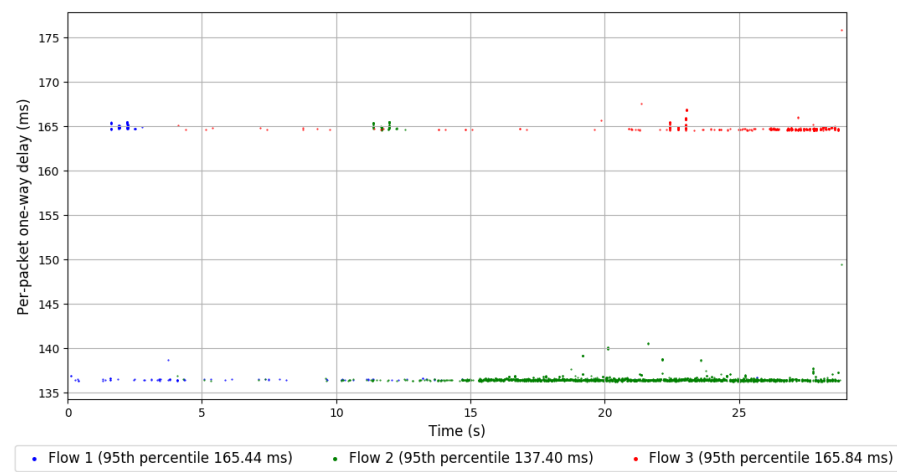
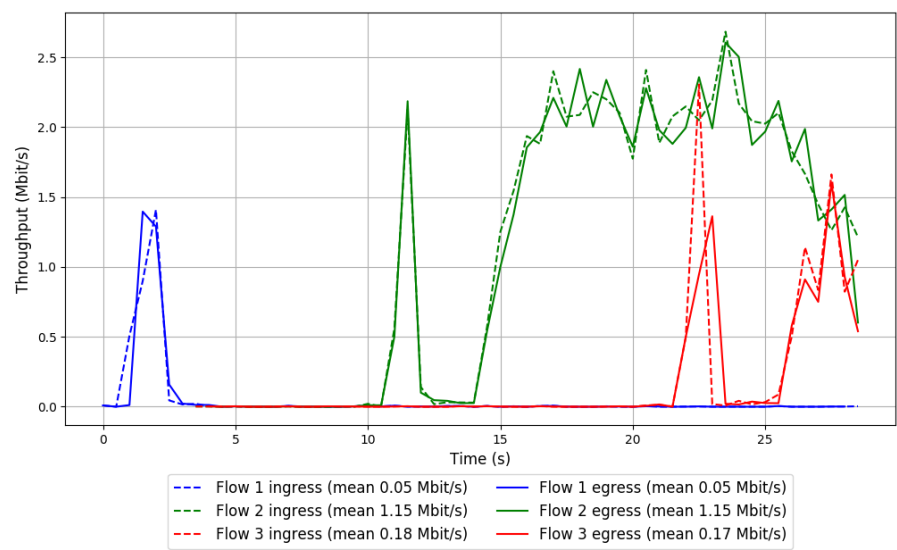
-- Flow 3:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 165.841 ms

Loss rate: 8.58%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-09-08 12:40:39

End at: 2017-09-08 12:41:09

# Below is generated by plot.py at 2017-09-08 16:20:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 164.883 ms

Loss rate: 2.86%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 165.252 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 137.130 ms

Loss rate: 1.63%

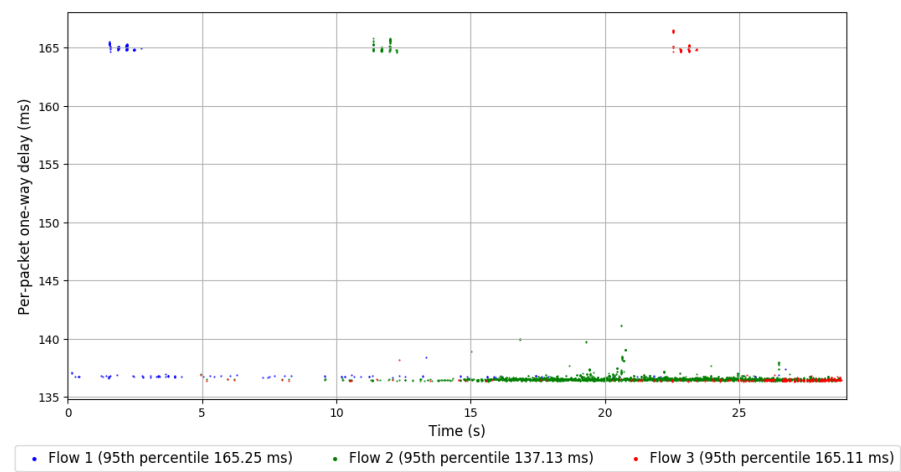
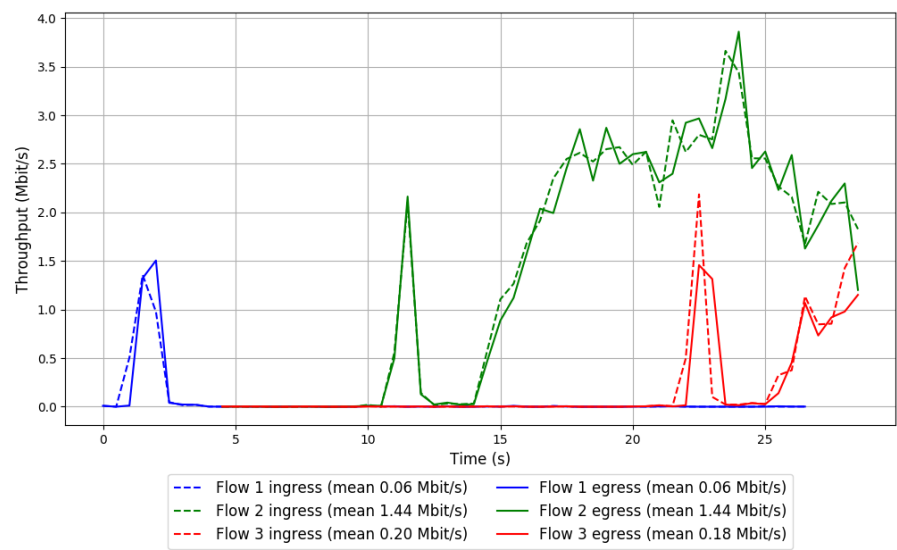
-- Flow 3:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 165.112 ms

Loss rate: 12.68%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-09-08 12:54:02

End at: 2017-09-08 12:54:32

# Below is generated by plot.py at 2017-09-08 16:20:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 165.003 ms

Loss rate: 3.18%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 165.275 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 164.812 ms

Loss rate: 2.28%

-- Flow 3:

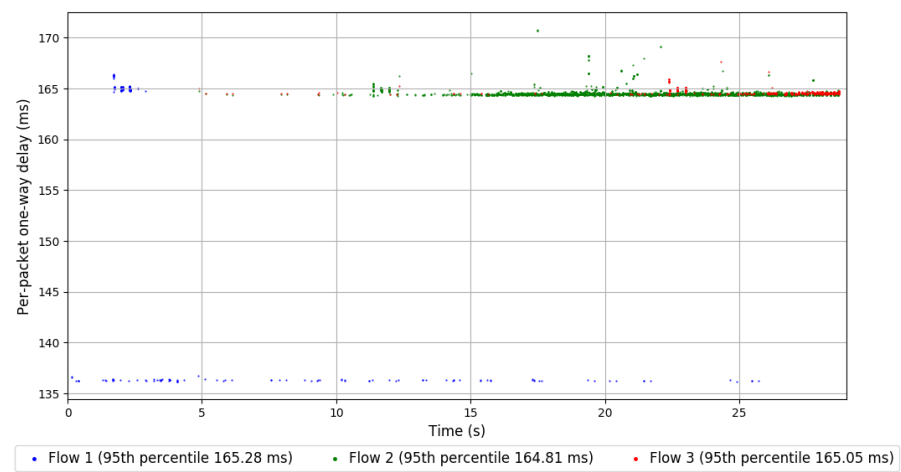
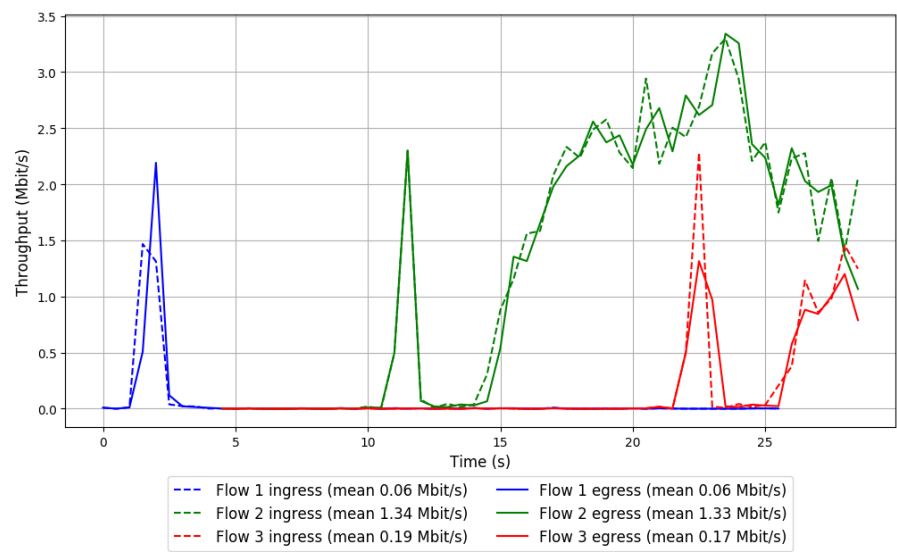
Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 165.052 ms

Loss rate: 10.49%



Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-09-08 13:07:22

End at: 2017-09-08 13:07:52

# Below is generated by plot.py at 2017-09-08 16:20:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 164.904 ms

Loss rate: 2.09%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 165.178 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 138.087 ms

Loss rate: 1.57%

-- Flow 3:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 166.544 ms

Loss rate: 6.50%

Run 10: Report of WebRTC media — Data Link

