

Pantheon Report

Generated at 2018-01-03 12:57:09 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

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

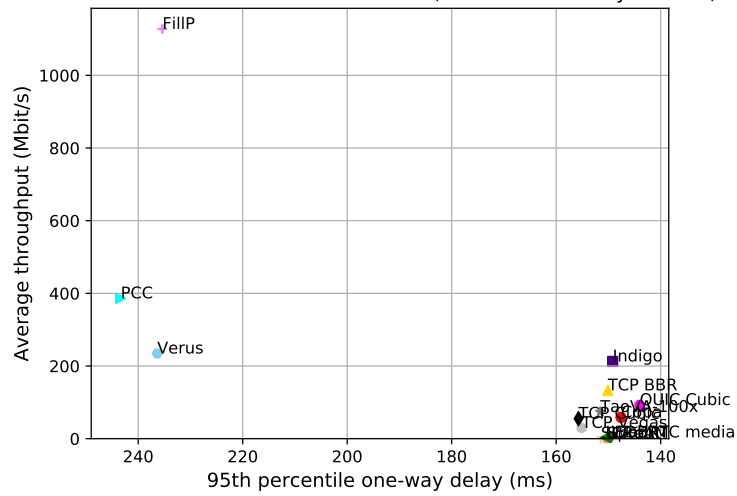
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

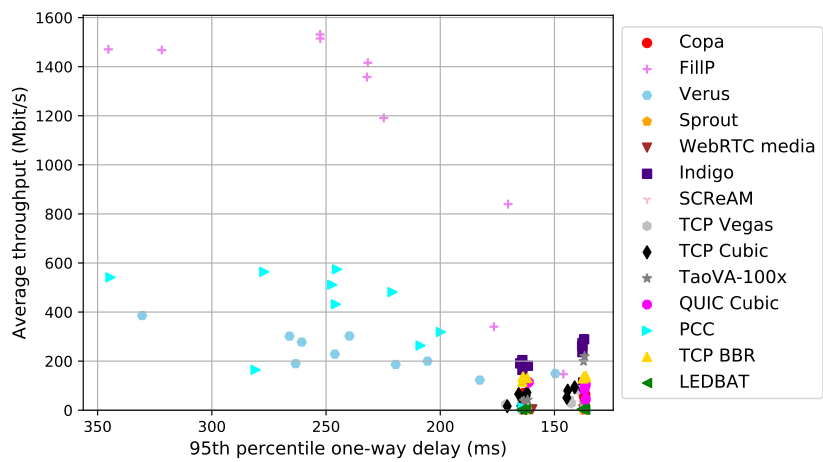
Git summary:

```
branch: master @ 904a5750834816b1e46a2c86405d707788d27c16
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/fillp @ dcaef6b00654e660f73f7ed679d2eab61ce08639
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ 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	70.13	65.75	59.09	150.08	144.78	144.95	1.07	1.63	3.67
TCP Cubic	10	28.37	31.74	21.39	592.63	154.84	158.81	1.84	2.25	5.34
LEDBAT	10	1.68	1.71	1.02	150.58	148.48	150.84	2.58	2.79	5.54
PCC	10	278.06	107.52	115.52	225.87	216.00	236.28	3.04	2.99	6.81
QUIC Cubic	10	47.01	49.82	39.28	144.03	139.14	136.31	0.80	1.46	3.31
SCReAM	9	0.21	0.21	0.20	144.92	142.43	145.78	0.88	1.43	2.64
WebRTC media	10	1.98	1.20	0.37	141.56	141.74	152.21	1.08	1.80	5.90
Sprout	10	0.38	0.35	0.42	149.96	145.23	145.08	0.99	1.36	2.91
TaoVA-100x	9	44.59	39.29	18.23	151.48	151.61	152.12	0.92	2.36	3.55
TCP Vegas	10	12.86	15.94	19.28	154.04	154.62	148.36	1.80	1.53	3.71
Verus	10	153.33	87.75	73.73	223.08	229.70	217.66	1.97	4.39	4.36
Copa	10	33.57	35.76	25.71	150.32	147.14	144.84	0.82	1.08	6.65
FillP	10	613.47	510.95	544.91	213.28	242.68	241.27	3.57	5.73	8.42
Indigo	9	107.46	115.40	90.57	148.85	146.50	153.50	0.97	1.48	4.08

Run 1: Statistics of TCP BBR

Start at: 2018-01-03 06:52:45

End at: 2018-01-03 06:53:15

Below is generated by plot.py at 2018-01-03 12:02:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 136.00 Mbit/s

95th percentile per-packet one-way delay: 136.240 ms

Loss rate: 1.74%

-- Flow 1:

Average throughput: 71.69 Mbit/s

95th percentile per-packet one-way delay: 136.222 ms

Loss rate: 1.11%

-- Flow 2:

Average throughput: 69.99 Mbit/s

95th percentile per-packet one-way delay: 136.237 ms

Loss rate: 1.71%

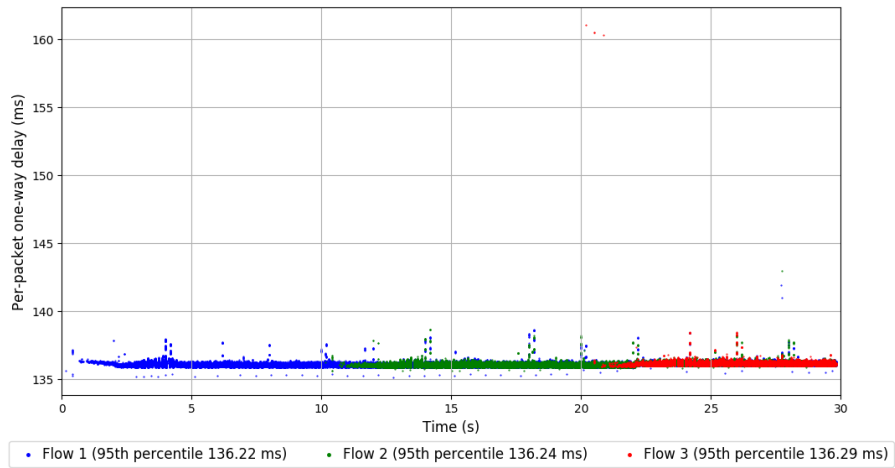
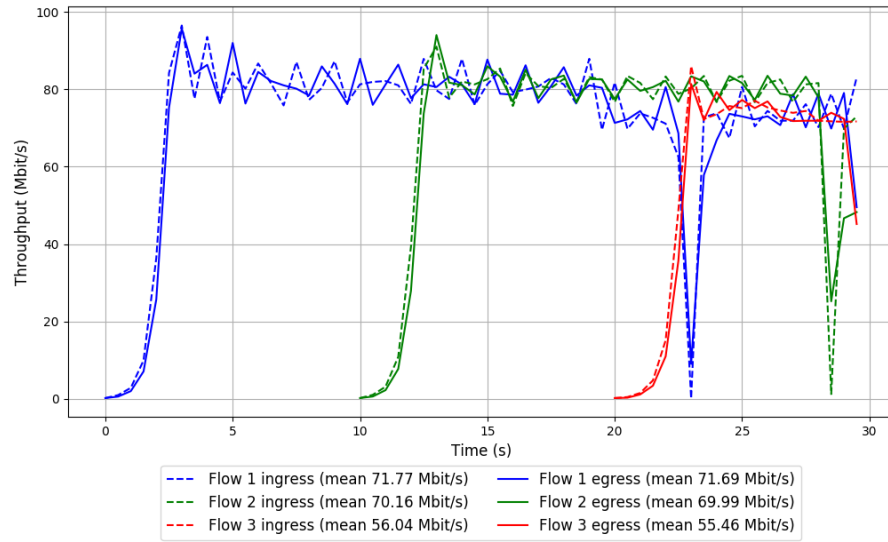
-- Flow 3:

Average throughput: 55.46 Mbit/s

95th percentile per-packet one-way delay: 136.291 ms

Loss rate: 4.26%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-03 07:08:44

End at: 2018-01-03 07:09:14

Below is generated by plot.py at 2018-01-03 12:02:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 140.60 Mbit/s

95th percentile per-packet one-way delay: 136.323 ms

Loss rate: 1.51%

-- Flow 1:

Average throughput: 73.29 Mbit/s

95th percentile per-packet one-way delay: 136.318 ms

Loss rate: 0.97%

-- Flow 2:

Average throughput: 70.42 Mbit/s

95th percentile per-packet one-way delay: 136.327 ms

Loss rate: 1.53%

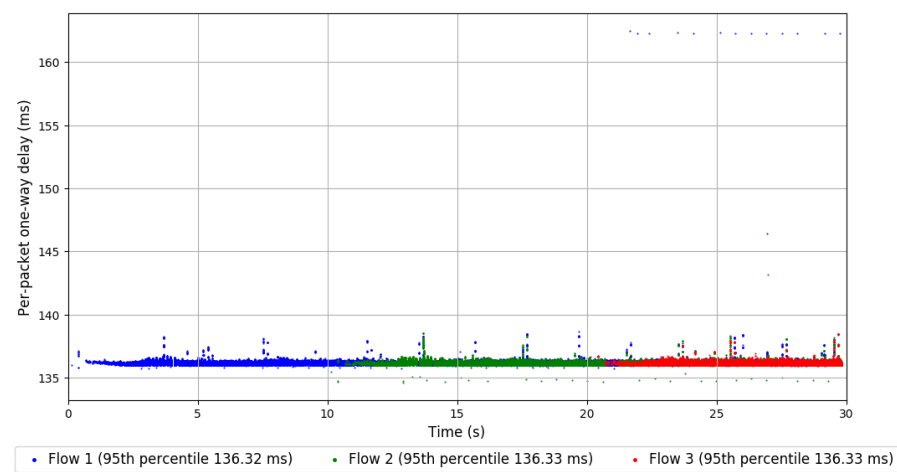
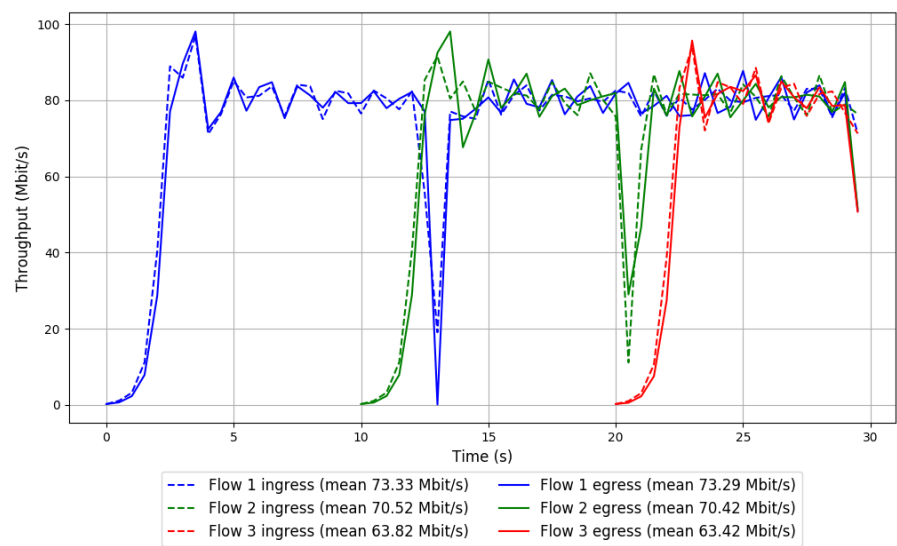
-- Flow 3:

Average throughput: 63.42 Mbit/s

95th percentile per-packet one-way delay: 136.332 ms

Loss rate: 3.37%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-03 07:24:55

End at: 2018-01-03 07:25:25

Below is generated by plot.py at 2018-01-03 12:02:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 131.29 Mbit/s

95th percentile per-packet one-way delay: 161.846 ms

Loss rate: 1.83%

-- Flow 1:

Average throughput: 69.01 Mbit/s

95th percentile per-packet one-way delay: 161.810 ms

Loss rate: 1.34%

-- Flow 2:

Average throughput: 66.15 Mbit/s

95th percentile per-packet one-way delay: 161.834 ms

Loss rate: 1.63%

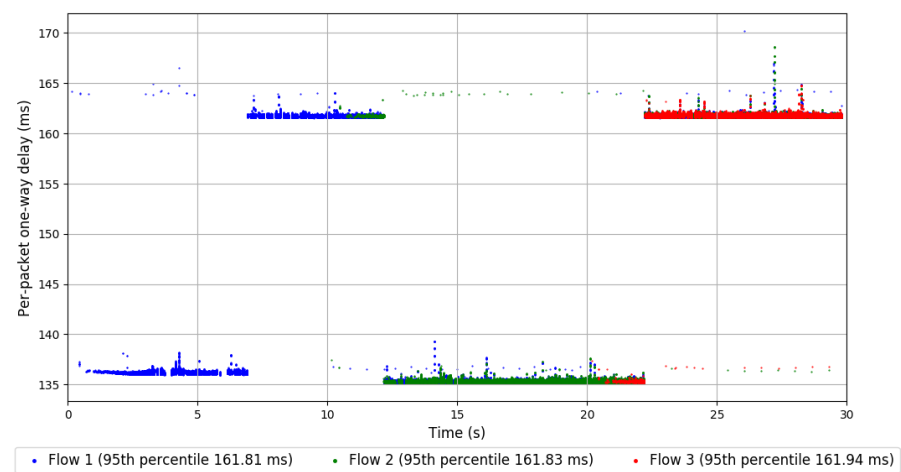
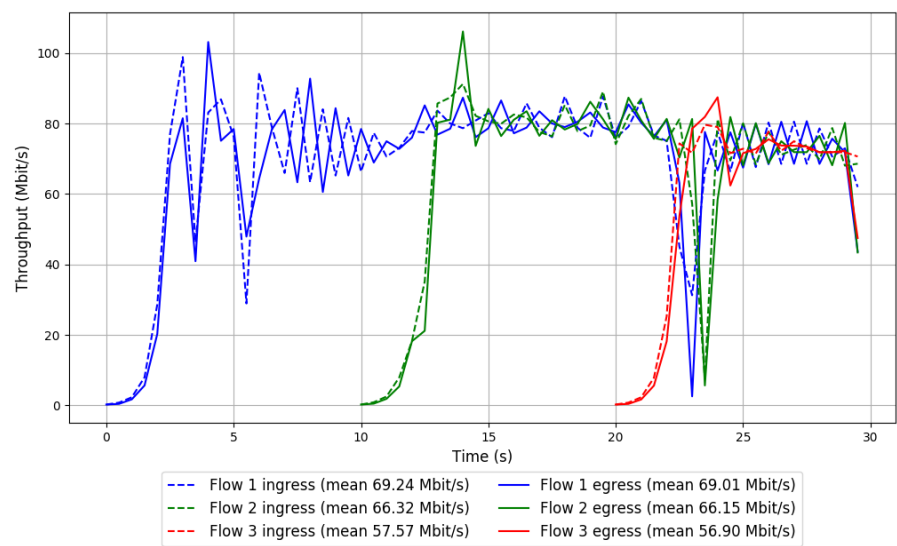
-- Flow 3:

Average throughput: 56.90 Mbit/s

95th percentile per-packet one-way delay: 161.941 ms

Loss rate: 4.09%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-03 07:39:17

End at: 2018-01-03 07:39:47

Below is generated by plot.py at 2018-01-03 12:02:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.09 Mbit/s

95th percentile per-packet one-way delay: 137.137 ms

Loss rate: 1.55%

-- Flow 1:

Average throughput: 71.03 Mbit/s

95th percentile per-packet one-way delay: 137.104 ms

Loss rate: 1.01%

-- Flow 2:

Average throughput: 70.16 Mbit/s

95th percentile per-packet one-way delay: 137.127 ms

Loss rate: 1.53%

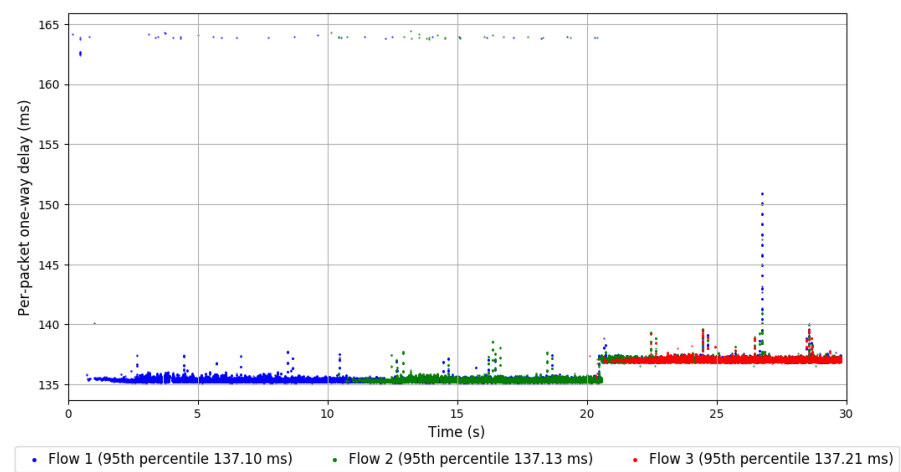
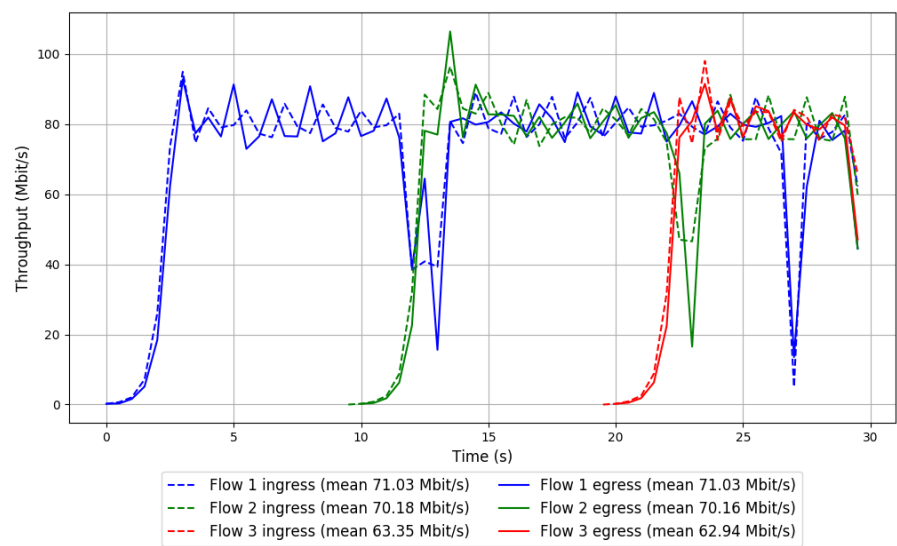
-- Flow 3:

Average throughput: 62.94 Mbit/s

95th percentile per-packet one-way delay: 137.212 ms

Loss rate: 3.39%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-03 07:54:40

End at: 2018-01-03 07:55:10

Below is generated by plot.py at 2018-01-03 12:02:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 132.17 Mbit/s

95th percentile per-packet one-way delay: 163.756 ms

Loss rate: 1.61%

-- Flow 1:

Average throughput: 69.25 Mbit/s

95th percentile per-packet one-way delay: 163.711 ms

Loss rate: 1.03%

-- Flow 2:

Average throughput: 66.11 Mbit/s

95th percentile per-packet one-way delay: 163.733 ms

Loss rate: 1.62%

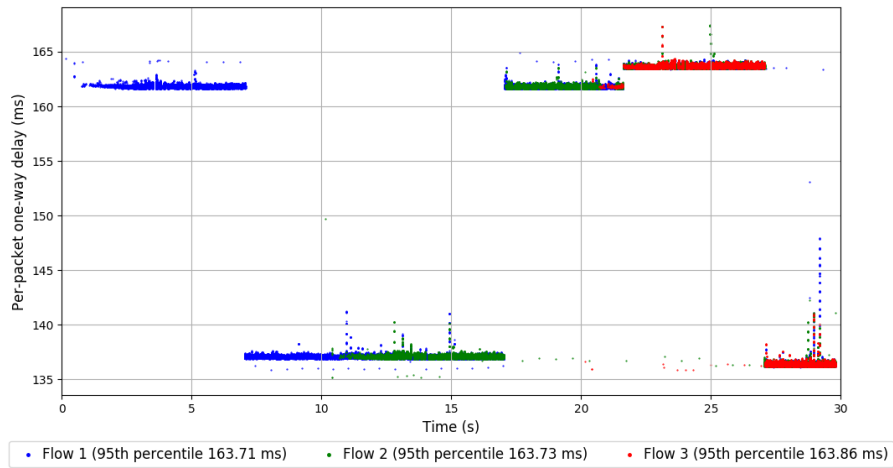
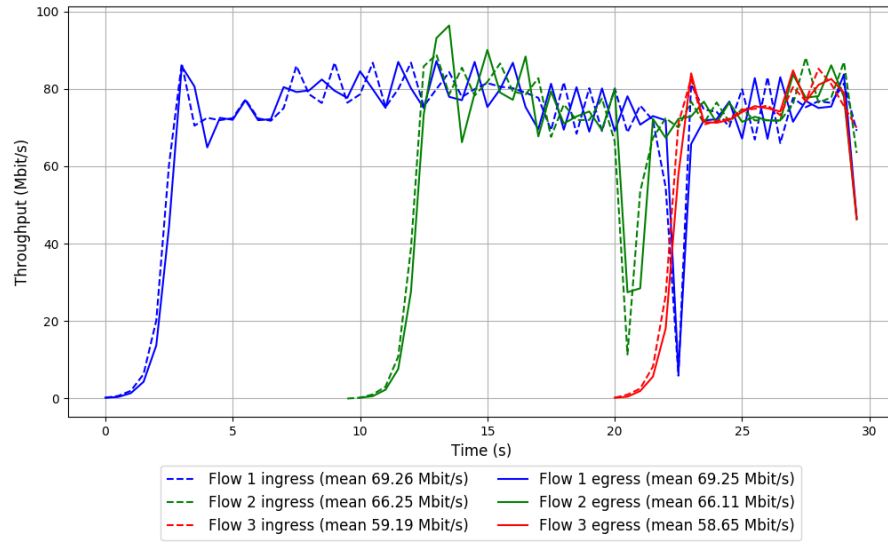
-- Flow 3:

Average throughput: 58.65 Mbit/s

95th percentile per-packet one-way delay: 163.858 ms

Loss rate: 3.63%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-03 08:09:36

End at: 2018-01-03 08:10:06

Below is generated by plot.py at 2018-01-03 12:02:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 137.05 Mbit/s

95th percentile per-packet one-way delay: 163.624 ms

Loss rate: 1.58%

-- Flow 1:

Average throughput: 70.52 Mbit/s

95th percentile per-packet one-way delay: 163.675 ms

Loss rate: 1.06%

-- Flow 2:

Average throughput: 69.24 Mbit/s

95th percentile per-packet one-way delay: 137.319 ms

Loss rate: 1.55%

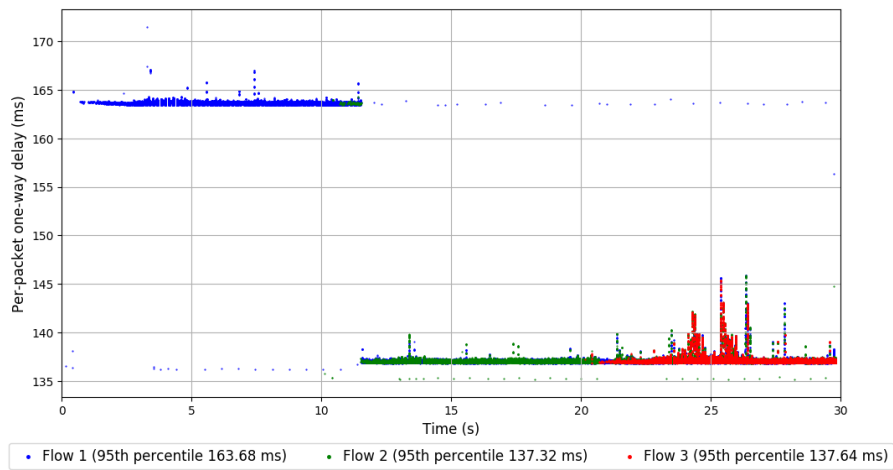
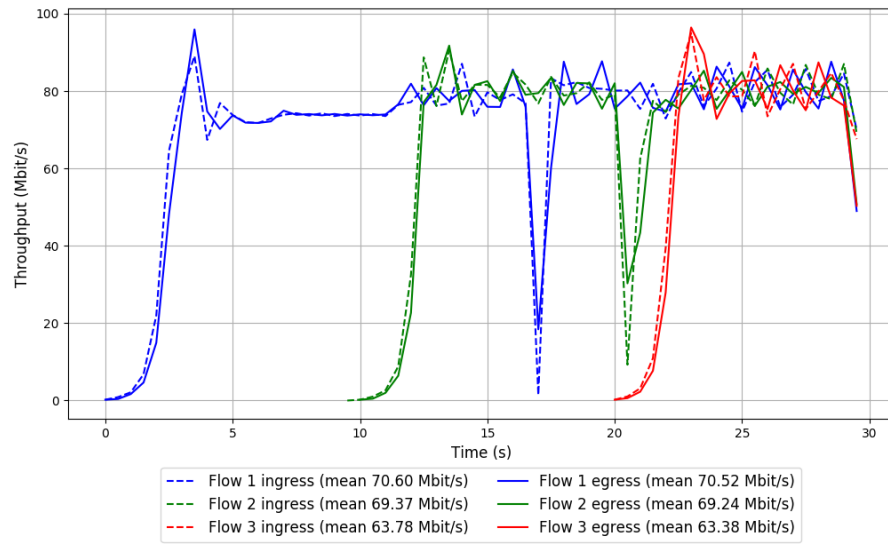
-- Flow 3:

Average throughput: 63.38 Mbit/s

95th percentile per-packet one-way delay: 137.638 ms

Loss rate: 3.36%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-03 08:25:16

End at: 2018-01-03 08:25:46

Below is generated by plot.py at 2018-01-03 12:02:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 134.99 Mbit/s

95th percentile per-packet one-way delay: 163.949 ms

Loss rate: 1.58%

-- Flow 1:

Average throughput: 71.56 Mbit/s

95th percentile per-packet one-way delay: 163.998 ms

Loss rate: 1.12%

-- Flow 2:

Average throughput: 64.38 Mbit/s

95th percentile per-packet one-way delay: 137.144 ms

Loss rate: 1.47%

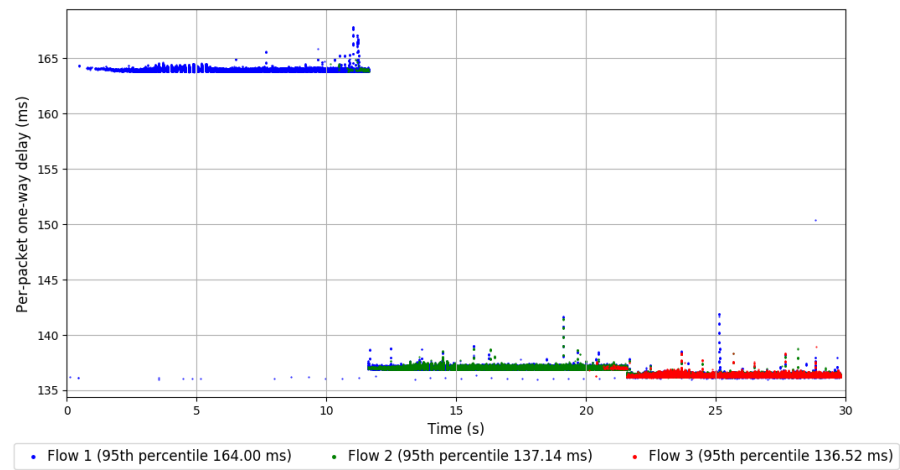
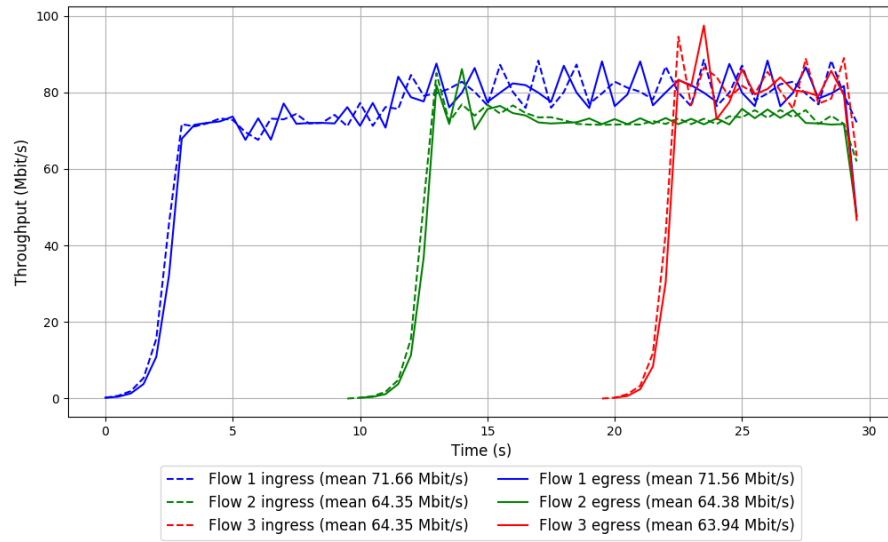
-- Flow 3:

Average throughput: 63.94 Mbit/s

95th percentile per-packet one-way delay: 136.520 ms

Loss rate: 3.36%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-03 08:40:35

End at: 2018-01-03 08:41:05

Below is generated by plot.py at 2018-01-03 12:02:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 115.96 Mbit/s

95th percentile per-packet one-way delay: 164.040 ms

Loss rate: 1.76%

-- Flow 1:

Average throughput: 62.18 Mbit/s

95th percentile per-packet one-way delay: 164.011 ms

Loss rate: 1.04%

-- Flow 2:

Average throughput: 56.55 Mbit/s

95th percentile per-packet one-way delay: 164.061 ms

Loss rate: 1.76%

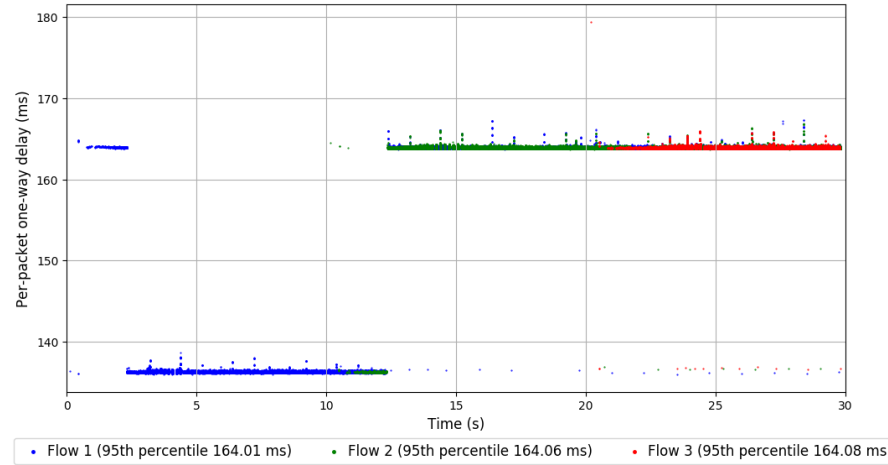
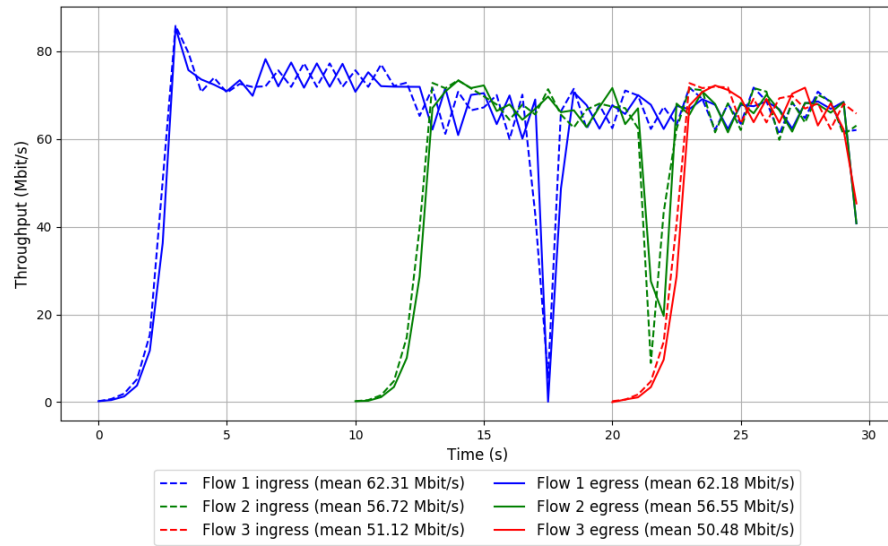
-- Flow 3:

Average throughput: 50.48 Mbit/s

95th percentile per-packet one-way delay: 164.077 ms

Loss rate: 4.40%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-03 08:56:18

End at: 2018-01-03 08:56:48

Below is generated by plot.py at 2018-01-03 12:04:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 129.51 Mbit/s

95th percentile per-packet one-way delay: 137.494 ms

Loss rate: 1.67%

-- Flow 1:

Average throughput: 72.11 Mbit/s

95th percentile per-packet one-way delay: 137.397 ms

Loss rate: 1.05%

-- Flow 2:

Average throughput: 60.70 Mbit/s

95th percentile per-packet one-way delay: 137.399 ms

Loss rate: 1.81%

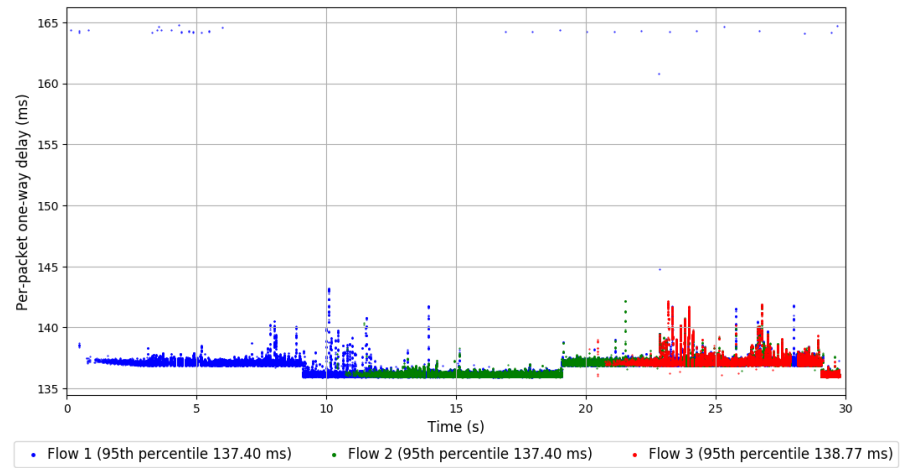
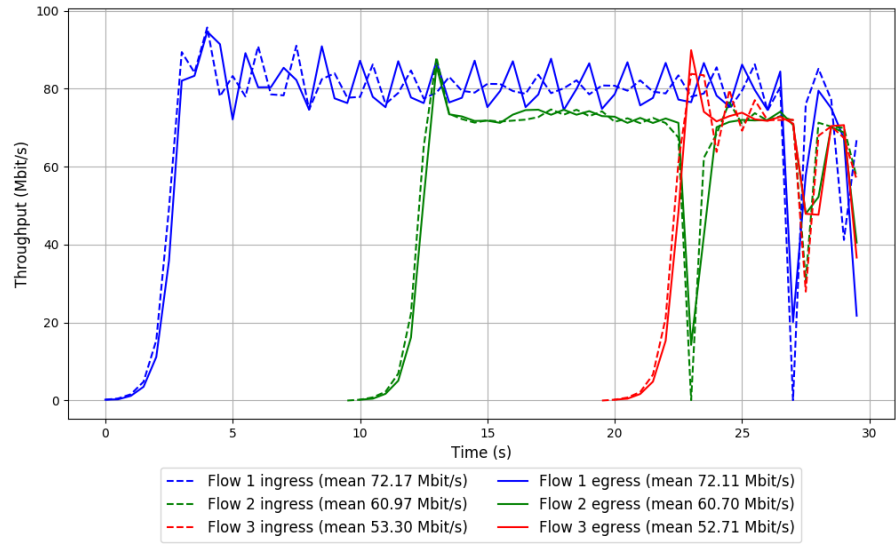
-- Flow 3:

Average throughput: 52.71 Mbit/s

95th percentile per-packet one-way delay: 138.766 ms

Loss rate: 3.87%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-03 09:10:52

End at: 2018-01-03 09:11:22

Below is generated by plot.py at 2018-01-03 12:05:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 133.37 Mbit/s

95th percentile per-packet one-way delay: 136.645 ms

Loss rate: 1.54%

-- Flow 1:

Average throughput: 70.65 Mbit/s

95th percentile per-packet one-way delay: 136.573 ms

Loss rate: 1.02%

-- Flow 2:

Average throughput: 63.75 Mbit/s

95th percentile per-packet one-way delay: 136.626 ms

Loss rate: 1.70%

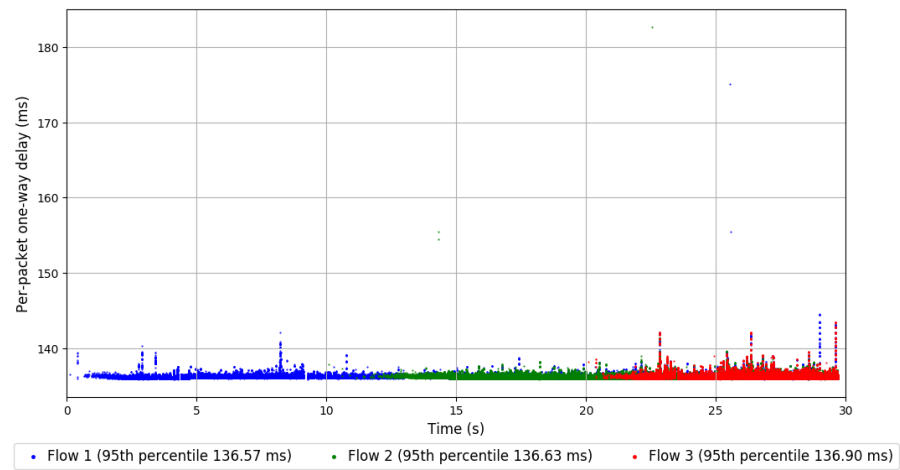
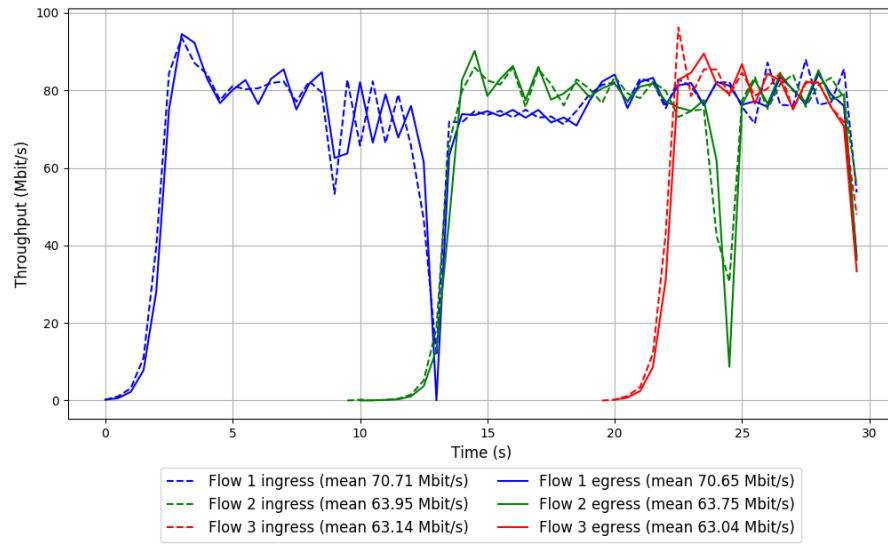
-- Flow 3:

Average throughput: 63.04 Mbit/s

95th percentile per-packet one-way delay: 136.899 ms

Loss rate: 2.97%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-03 06:46:48

End at: 2018-01-03 06:47:18

Below is generated by plot.py at 2018-01-03 12:05:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.83 Mbit/s

95th percentile per-packet one-way delay: 144.213 ms

Loss rate: 2.38%

-- Flow 1:

Average throughput: 43.95 Mbit/s

95th percentile per-packet one-way delay: 143.989 ms

Loss rate: 2.22%

-- Flow 2:

Average throughput: 40.69 Mbit/s

95th percentile per-packet one-way delay: 143.994 ms

Loss rate: 2.74%

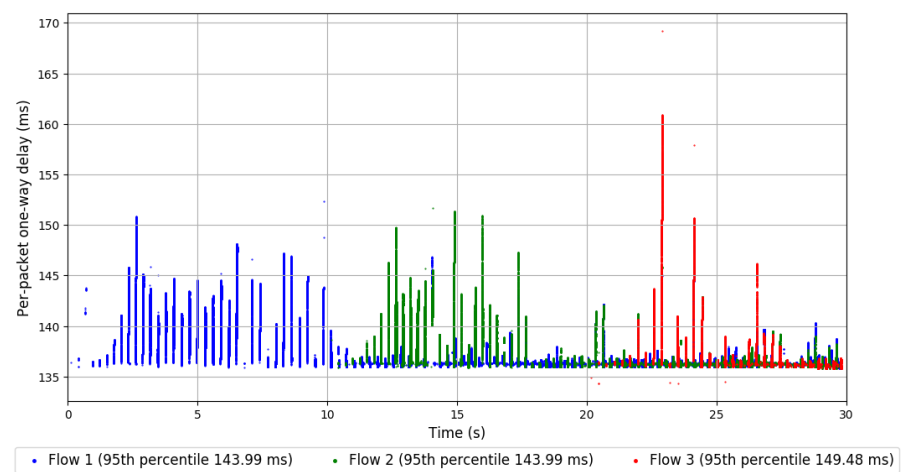
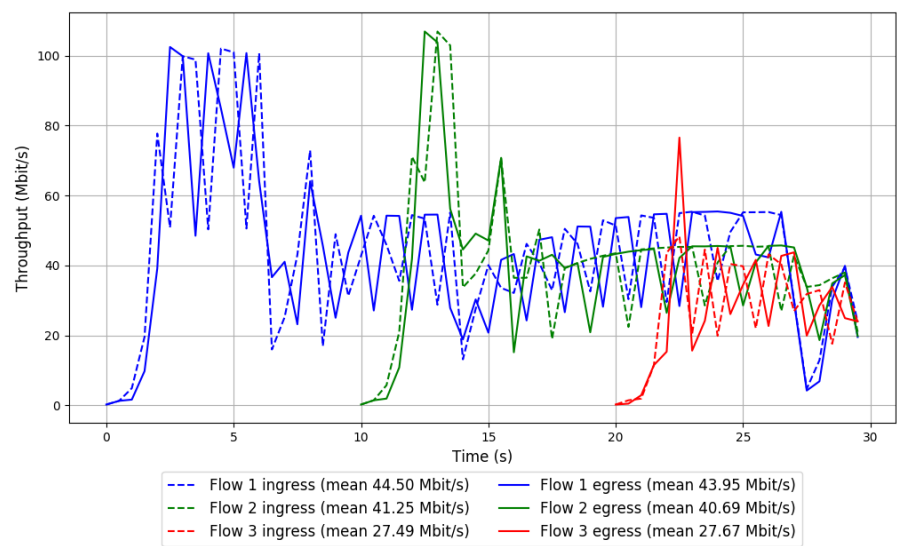
-- Flow 3:

Average throughput: 27.67 Mbit/s

95th percentile per-packet one-way delay: 149.477 ms

Loss rate: 2.08%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-03 07:02:40

End at: 2018-01-03 07:03:10

Below is generated by plot.py at 2018-01-03 12:05:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 50.67 Mbit/s

95th percentile per-packet one-way delay: 144.605 ms

Loss rate: 2.34%

-- Flow 1:

Average throughput: 13.09 Mbit/s

95th percentile per-packet one-way delay: 137.675 ms

Loss rate: 3.88%

-- Flow 2:

Average throughput: 39.77 Mbit/s

95th percentile per-packet one-way delay: 143.403 ms

Loss rate: 1.24%

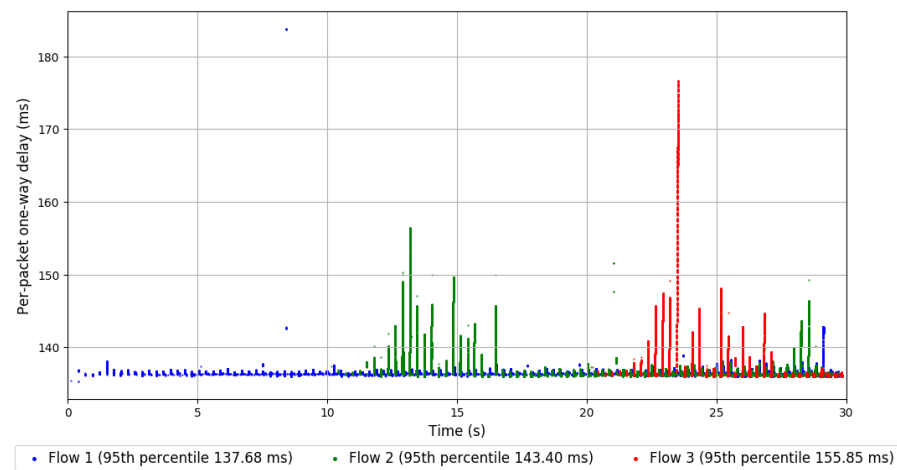
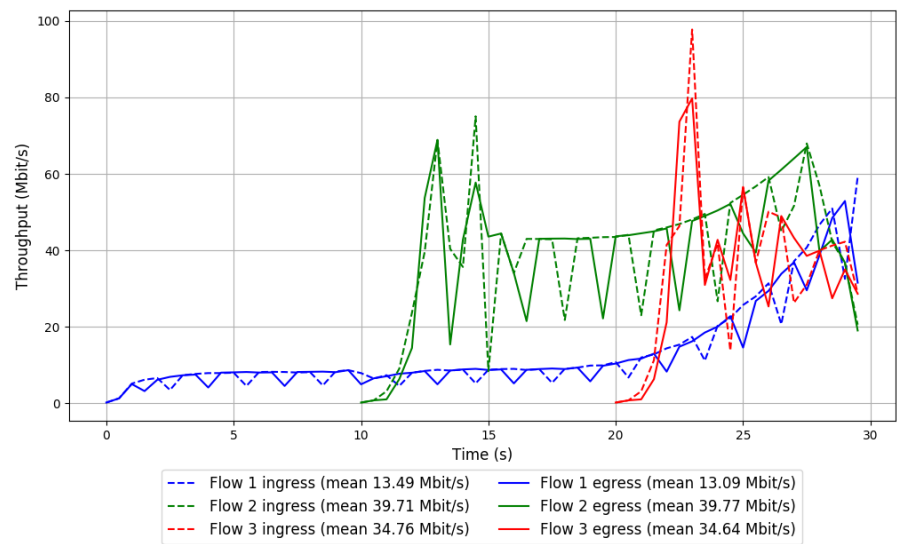
-- Flow 3:

Average throughput: 34.64 Mbit/s

95th percentile per-packet one-way delay: 155.850 ms

Loss rate: 3.08%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-03 07:18:55

End at: 2018-01-03 07:19:25

Below is generated by plot.py at 2018-01-03 12:05:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.27 Mbit/s

95th percentile per-packet one-way delay: 141.171 ms

Loss rate: 1.65%

-- Flow 1:

Average throughput: 50.64 Mbit/s

95th percentile per-packet one-way delay: 139.274 ms

Loss rate: 1.00%

-- Flow 2:

Average throughput: 45.19 Mbit/s

95th percentile per-packet one-way delay: 140.023 ms

Loss rate: 1.82%

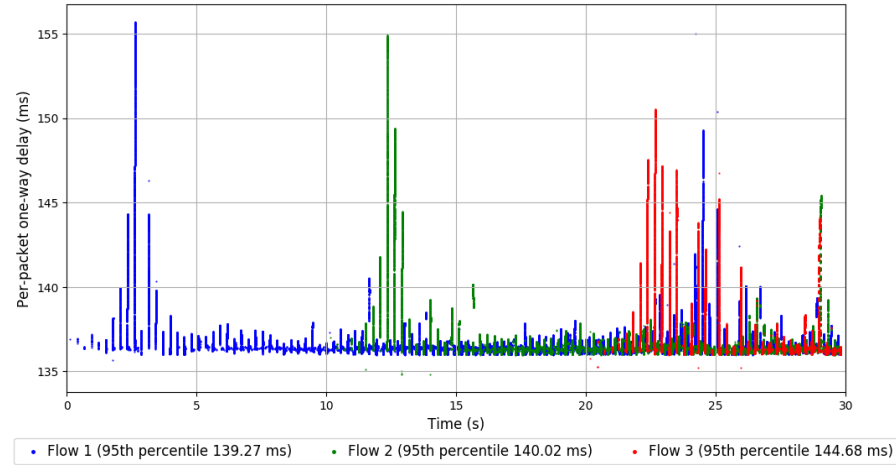
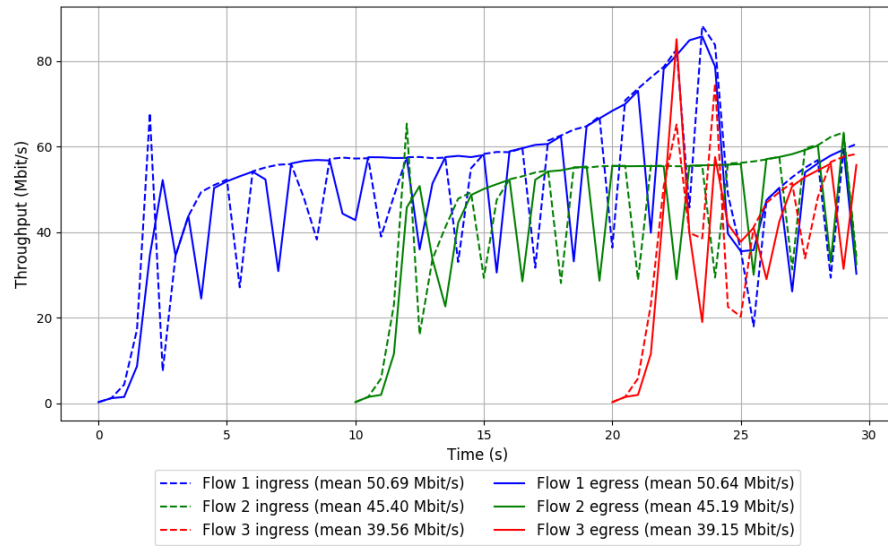
-- Flow 3:

Average throughput: 39.15 Mbit/s

95th percentile per-packet one-way delay: 144.680 ms

Loss rate: 3.77%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-03 07:33:41

End at: 2018-01-03 07:34:11

Below is generated by plot.py at 2018-01-03 12:05:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 72.09 Mbit/s

95th percentile per-packet one-way delay: 162.035 ms

Loss rate: 2.04%

-- Flow 1:

Average throughput: 38.92 Mbit/s

95th percentile per-packet one-way delay: 162.053 ms

Loss rate: 1.83%

-- Flow 2:

Average throughput: 34.02 Mbit/s

95th percentile per-packet one-way delay: 161.927 ms

Loss rate: 1.90%

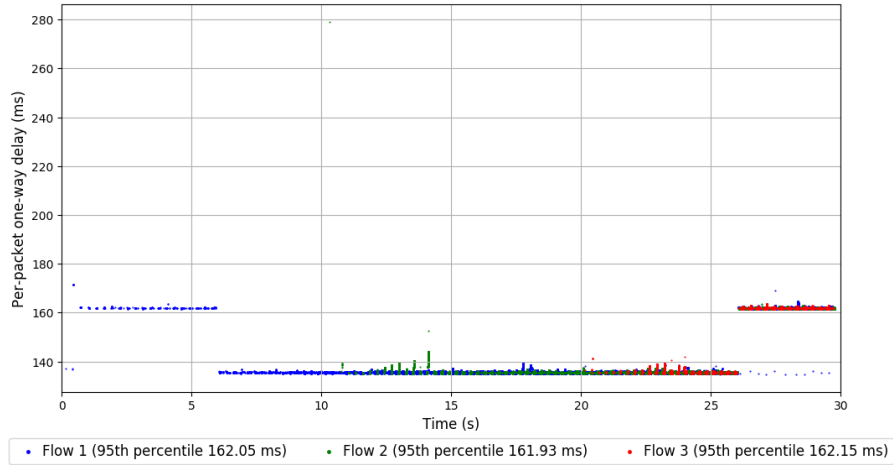
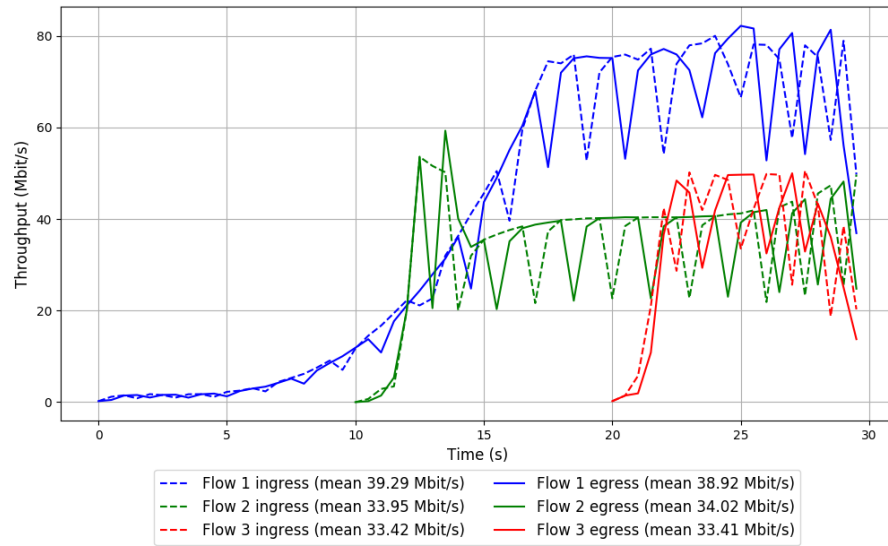
-- Flow 3:

Average throughput: 33.41 Mbit/s

95th percentile per-packet one-way delay: 162.148 ms

Loss rate: 3.05%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-03 07:48:56

End at: 2018-01-03 07:49:26

Below is generated by plot.py at 2018-01-03 12:05:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 59.32 Mbit/s

95th percentile per-packet one-way delay: 162.369 ms

Loss rate: 2.46%

-- Flow 1:

Average throughput: 28.01 Mbit/s

95th percentile per-packet one-way delay: 162.315 ms

Loss rate: 3.38%

-- Flow 2:

Average throughput: 42.44 Mbit/s

95th percentile per-packet one-way delay: 162.340 ms

Loss rate: 1.32%

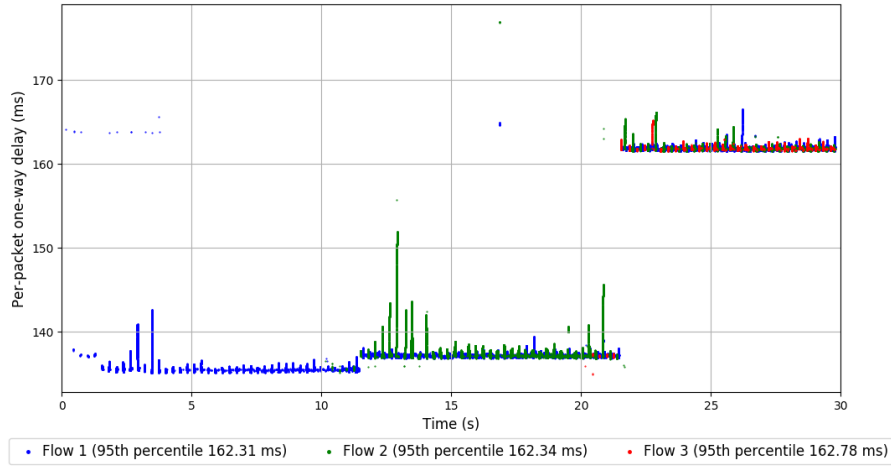
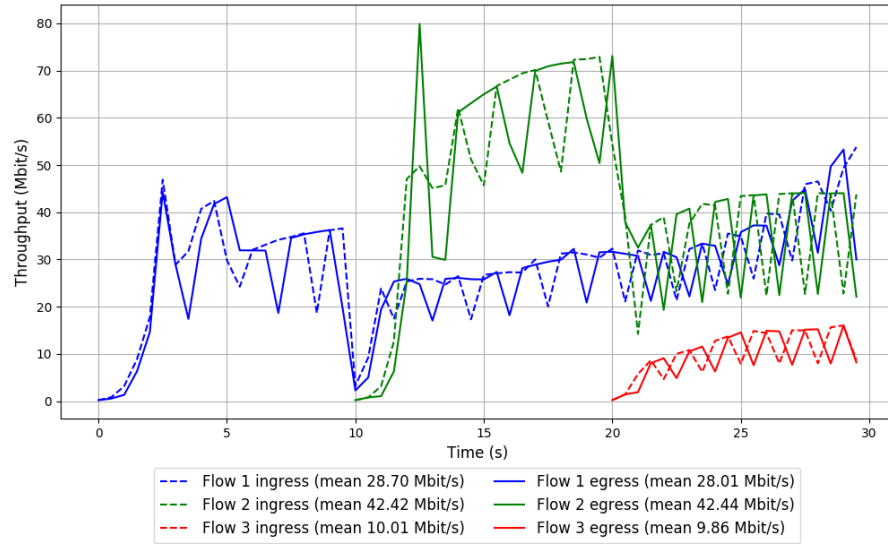
-- Flow 3:

Average throughput: 9.86 Mbit/s

95th percentile per-packet one-way delay: 162.785 ms

Loss rate: 4.24%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-03 08:04:01

End at: 2018-01-03 08:04:31

Below is generated by plot.py at 2018-01-03 12:05:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.16 Mbit/s

95th percentile per-packet one-way delay: 164.340 ms

Loss rate: 4.03%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 550.554 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 14.93 Mbit/s

95th percentile per-packet one-way delay: 164.374 ms

Loss rate: 3.30%

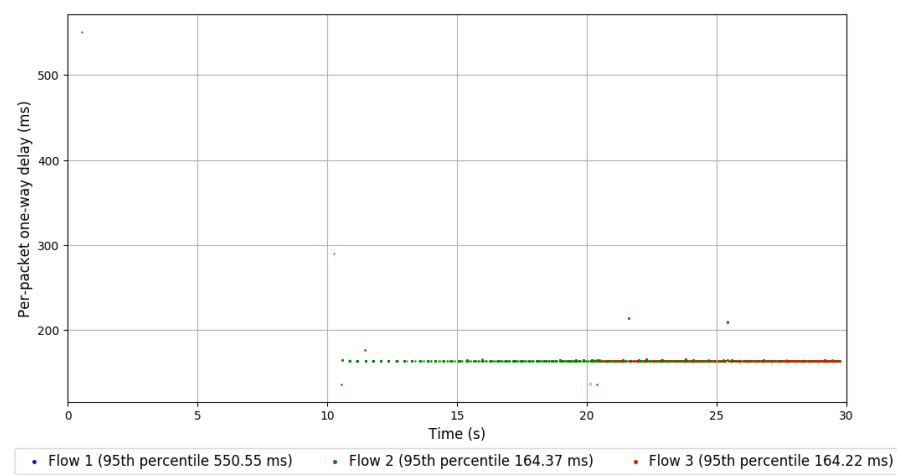
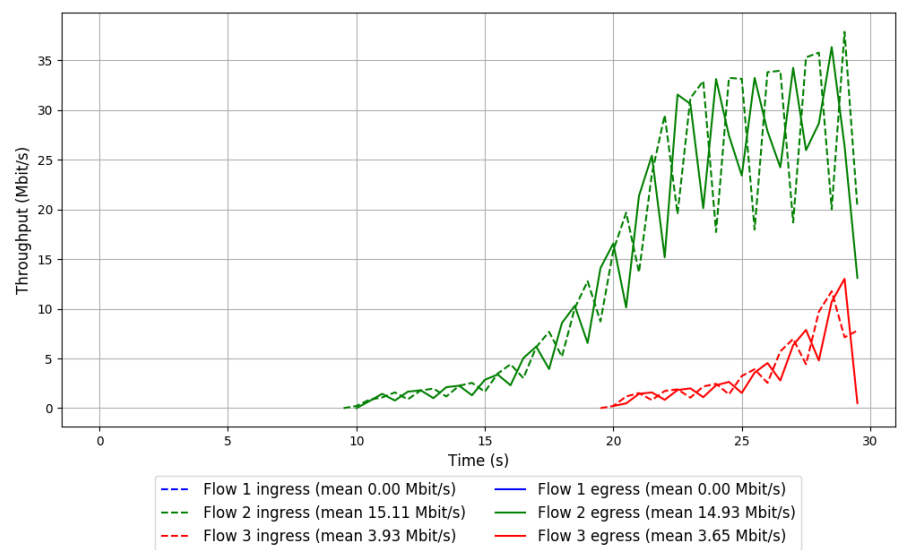
-- Flow 3:

Average throughput: 3.65 Mbit/s

95th percentile per-packet one-way delay: 164.222 ms

Loss rate: 9.68%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-03 08:19:26

End at: 2018-01-03 08:19:56

Below is generated by plot.py at 2018-01-03 12:05:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.99 Mbit/s

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

Loss rate: 3.79%

-- Flow 1:

Average throughput: 9.12 Mbit/s

95th percentile per-packet one-way delay: 164.471 ms

Loss rate: 2.95%

-- Flow 2:

Average throughput: 11.47 Mbit/s

95th percentile per-packet one-way delay: 164.895 ms

Loss rate: 3.75%

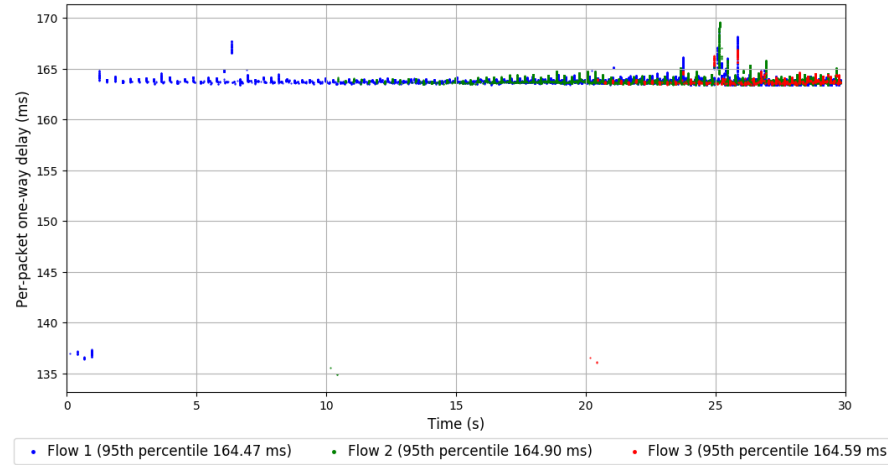
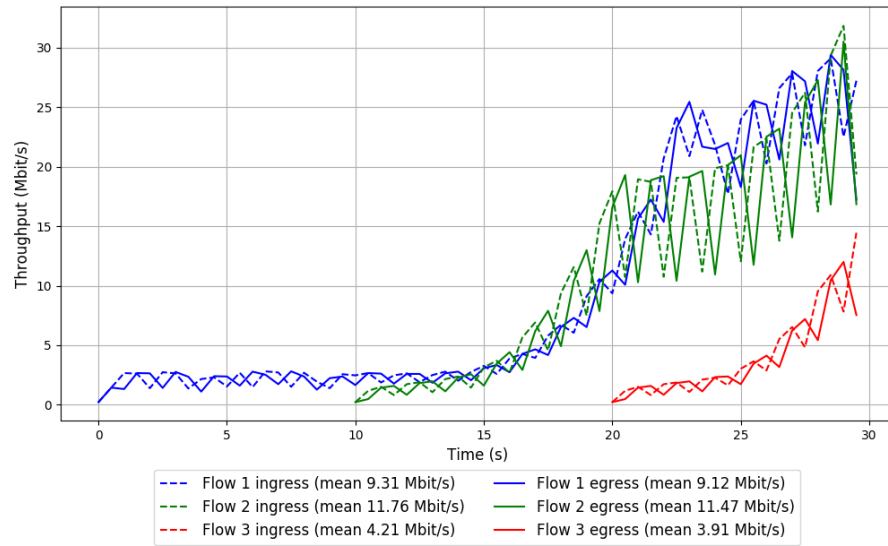
-- Flow 3:

Average throughput: 3.91 Mbit/s

95th percentile per-packet one-way delay: 164.586 ms

Loss rate: 9.59%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-03 08:35:03

End at: 2018-01-03 08:35:33

Below is generated by plot.py at 2018-01-03 12:05:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 65.81 Mbit/s

95th percentile per-packet one-way delay: 165.667 ms

Loss rate: 1.76%

-- Flow 1:

Average throughput: 30.27 Mbit/s

95th percentile per-packet one-way delay: 164.145 ms

Loss rate: 1.40%

-- Flow 2:

Average throughput: 37.71 Mbit/s

95th percentile per-packet one-way delay: 164.183 ms

Loss rate: 1.54%

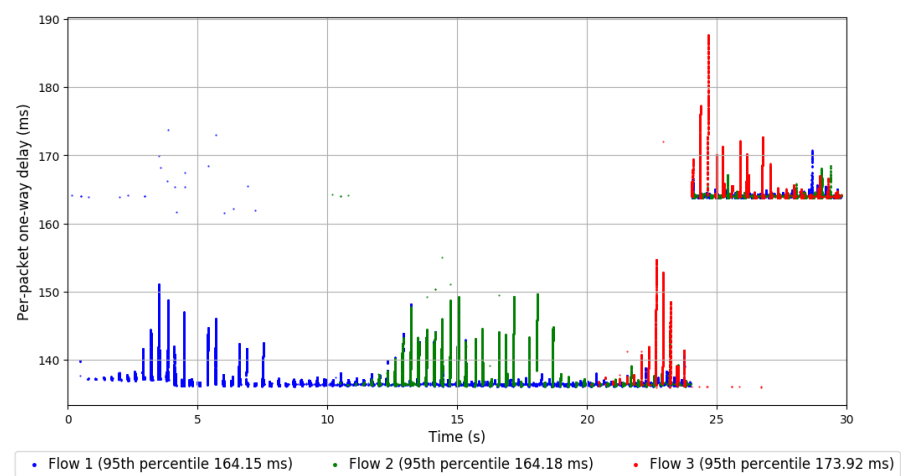
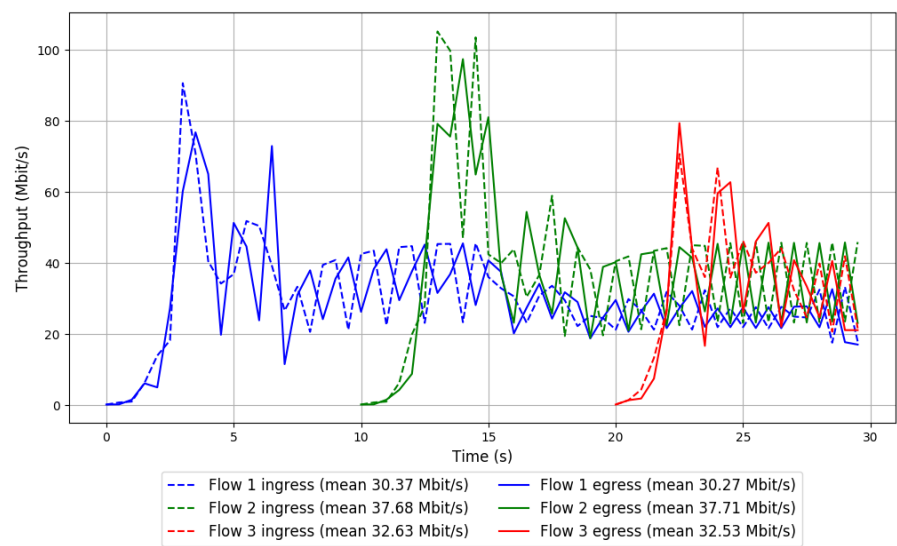
-- Flow 3:

Average throughput: 32.53 Mbit/s

95th percentile per-packet one-way delay: 173.922 ms

Loss rate: 3.31%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-03 08:50:31

End at: 2018-01-03 08:51:01

Below is generated by plot.py at 2018-01-03 12:05:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.28 Mbit/s

95th percentile per-packet one-way delay: 170.664 ms

Loss rate: 5.86%

-- Flow 1:

Average throughput: 14.96 Mbit/s

95th percentile per-packet one-way delay: 4164.384 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 13.31 Mbit/s

95th percentile per-packet one-way delay: 165.256 ms

Loss rate: 3.14%

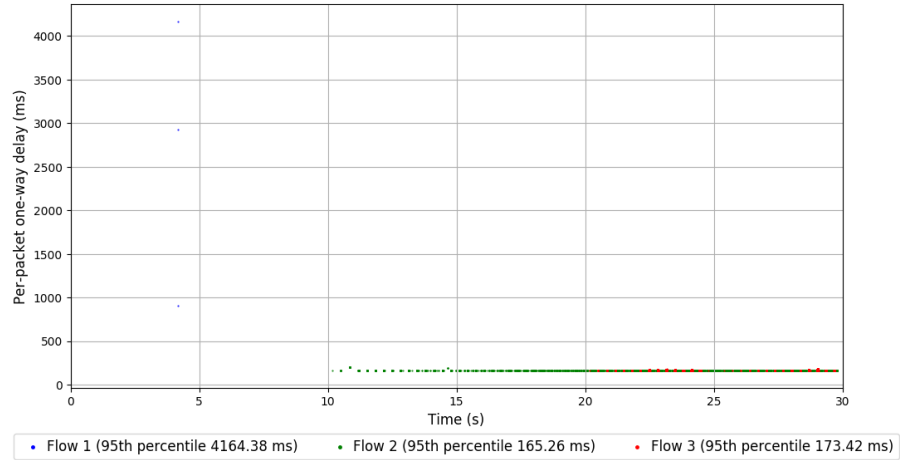
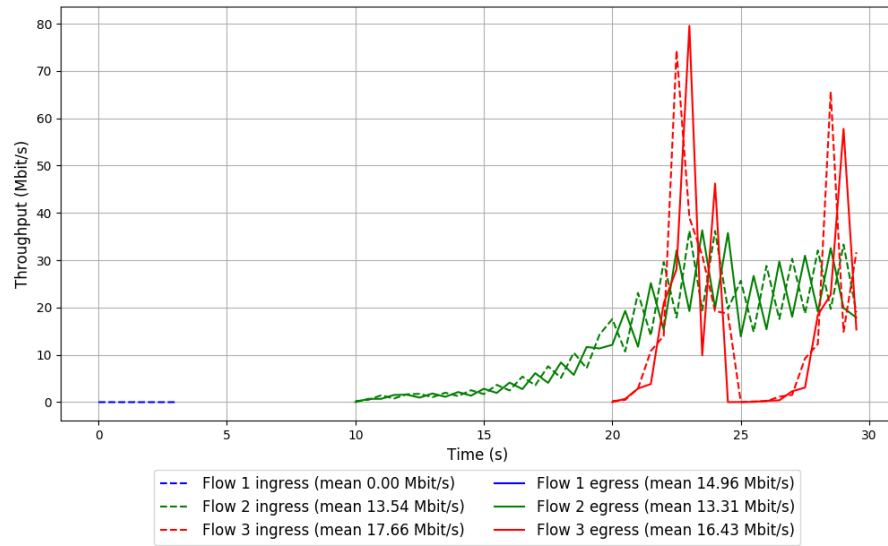
-- Flow 3:

Average throughput: 16.43 Mbit/s

95th percentile per-packet one-way delay: 173.416 ms

Loss rate: 10.08%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

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

End at: 2018-01-03 09:05:39

Below is generated by plot.py at 2018-01-03 12:05:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.66 Mbit/s

95th percentile per-packet one-way delay: 137.515 ms

Loss rate: 1.84%

-- Flow 1:

Average throughput: 54.75 Mbit/s

95th percentile per-packet one-way delay: 137.454 ms

Loss rate: 1.69%

-- Flow 2:

Average throughput: 37.87 Mbit/s

95th percentile per-packet one-way delay: 137.967 ms

Loss rate: 1.71%

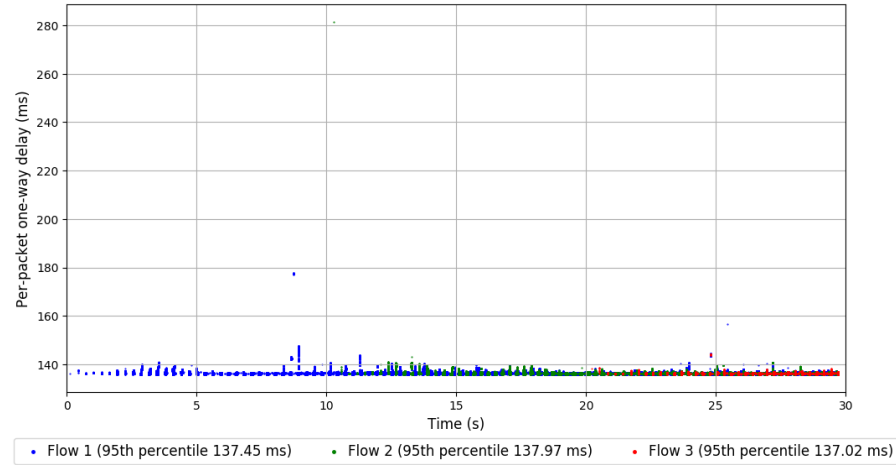
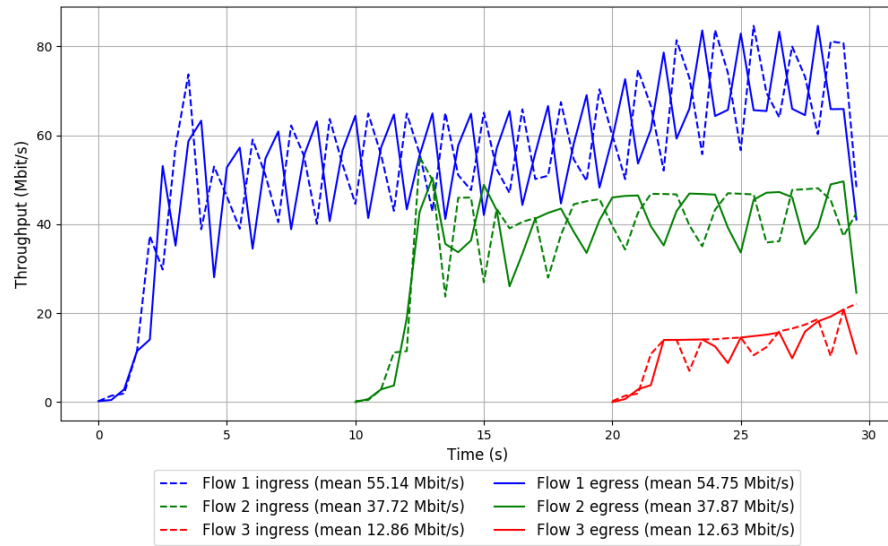
-- Flow 3:

Average throughput: 12.63 Mbit/s

95th percentile per-packet one-way delay: 137.018 ms

Loss rate: 4.57%

Run 10: Report of TCP Cubic — Data Link

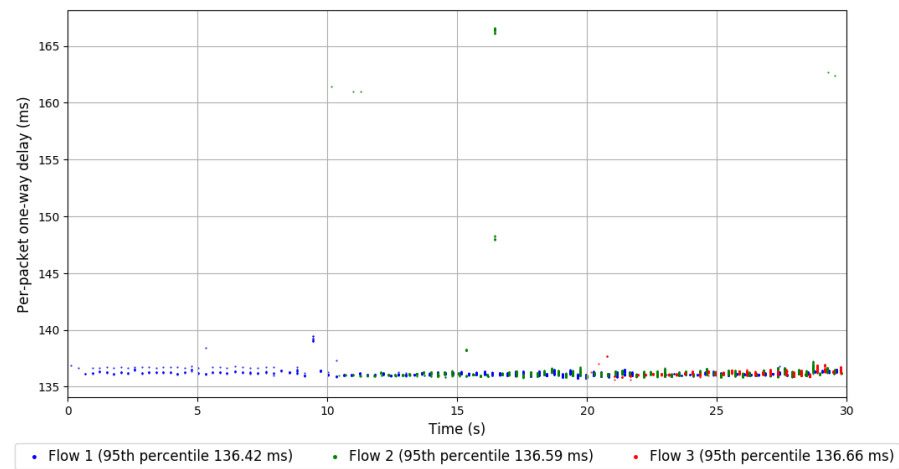
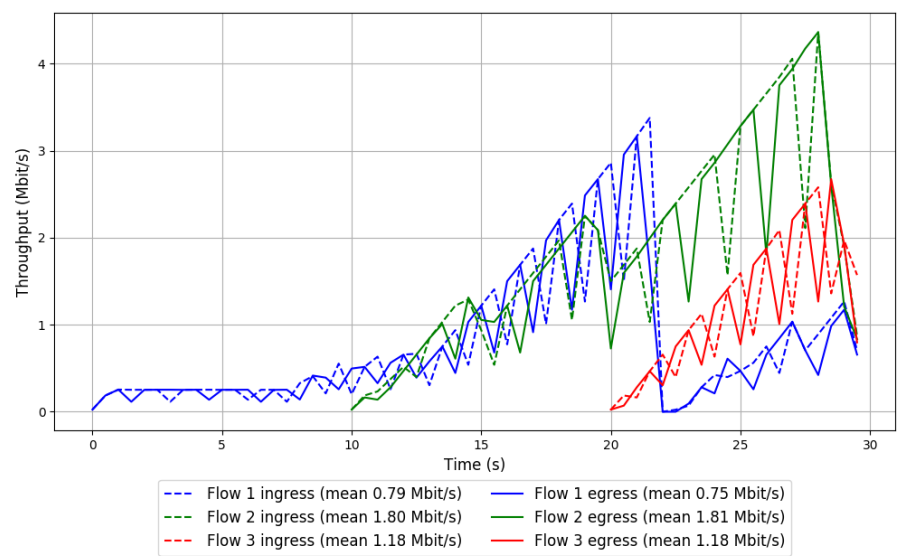


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-03 06:50:59
End at: 2018-01-03 06:51:29

# Below is generated by plot.py at 2018-01-03 12:05:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 136.535 ms
Loss rate: 2.81%
-- Flow 1:
Average throughput: 0.75 Mbit/s
95th percentile per-packet one-way delay: 136.423 ms
Loss rate: 5.16%
-- Flow 2:
Average throughput: 1.81 Mbit/s
95th percentile per-packet one-way delay: 136.591 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 1.18 Mbit/s
95th percentile per-packet one-way delay: 136.659 ms
Loss rate: 3.50%
```


Run 1: Report of LEDBAT — Data Link

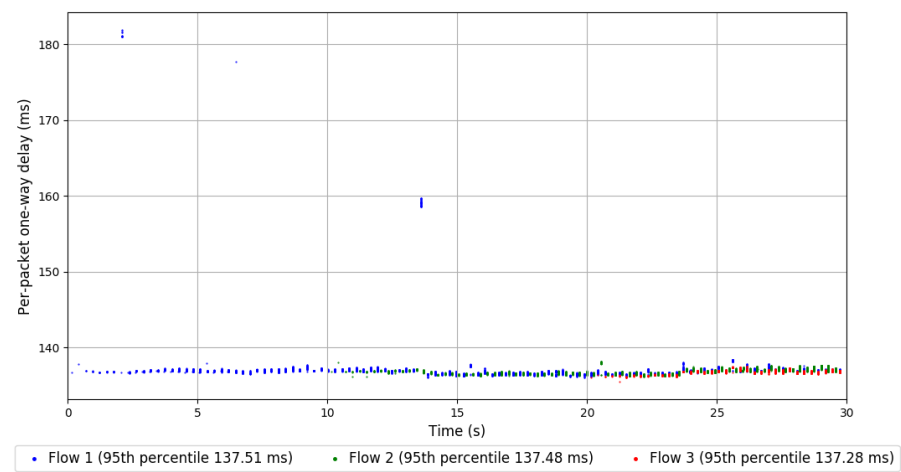
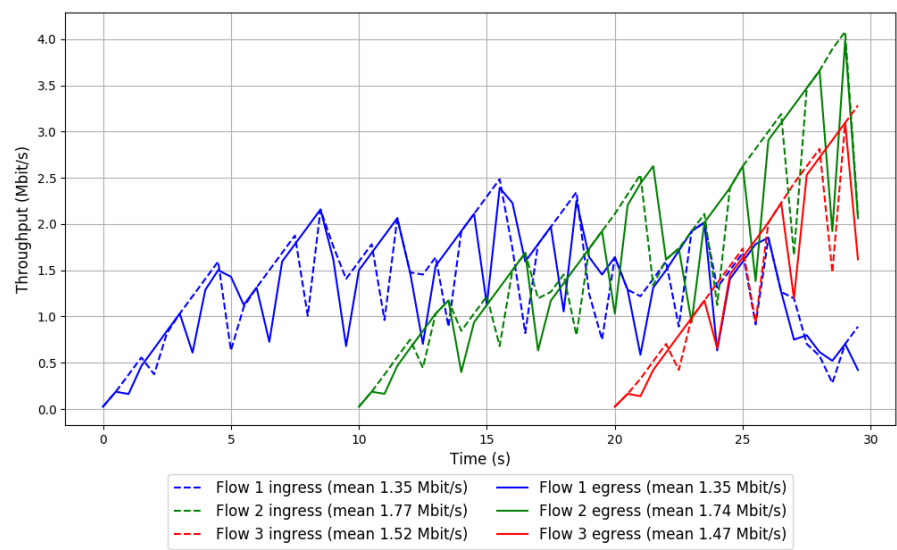


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-03 07:06:54
End at: 2018-01-03 07:07:24

# Below is generated by plot.py at 2018-01-03 12:05:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.96 Mbit/s
95th percentile per-packet one-way delay: 137.446 ms
Loss rate: 2.53%
-- Flow 1:
Average throughput: 1.35 Mbit/s
95th percentile per-packet one-way delay: 137.506 ms
Loss rate: 0.96%
-- Flow 2:
Average throughput: 1.74 Mbit/s
95th percentile per-packet one-way delay: 137.480 ms
Loss rate: 3.03%
-- Flow 3:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 137.276 ms
Loss rate: 5.57%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-03 07:23:08

End at: 2018-01-03 07:23:38

Below is generated by plot.py at 2018-01-03 12:05:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.82 Mbit/s

95th percentile per-packet one-way delay: 136.992 ms

Loss rate: 3.31%

-- Flow 1:

Average throughput: 1.50 Mbit/s

95th percentile per-packet one-way delay: 137.104 ms

Loss rate: 3.31%

-- Flow 2:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 136.798 ms

Loss rate: 2.85%

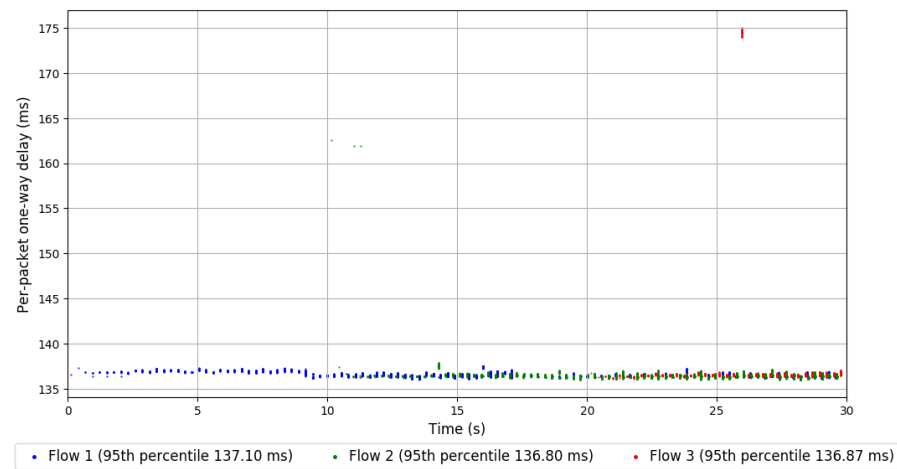
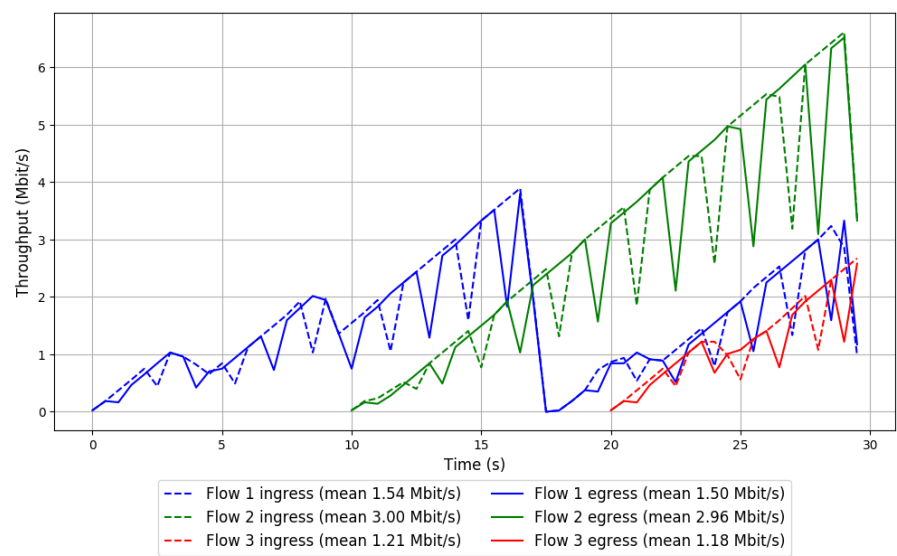
-- Flow 3:

Average throughput: 1.18 Mbit/s

95th percentile per-packet one-way delay: 136.869 ms

Loss rate: 5.67%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-03 07:37:30

End at: 2018-01-03 07:38:00

Below is generated by plot.py at 2018-01-03 12:05:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 138.157 ms

Loss rate: 1.86%

-- Flow 1:

Average throughput: 2.58 Mbit/s

95th percentile per-packet one-way delay: 138.526 ms

Loss rate: 1.40%

-- Flow 2:

Average throughput: 1.61 Mbit/s

95th percentile per-packet one-way delay: 137.752 ms

Loss rate: 2.24%

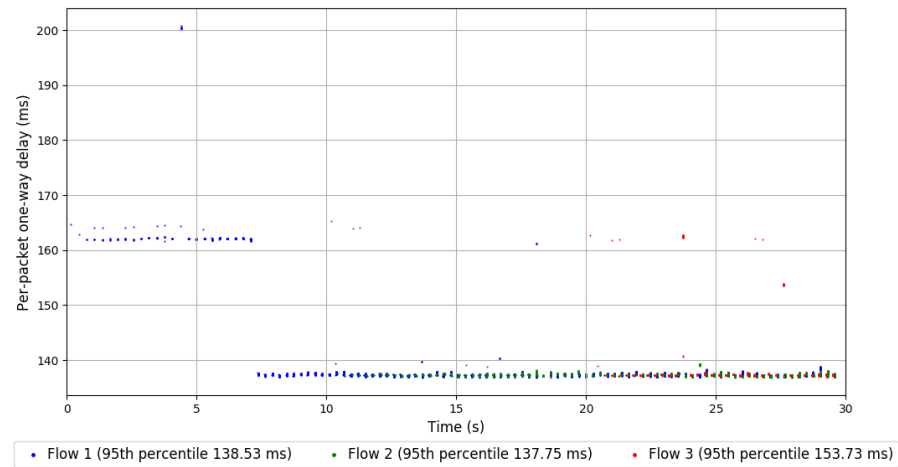
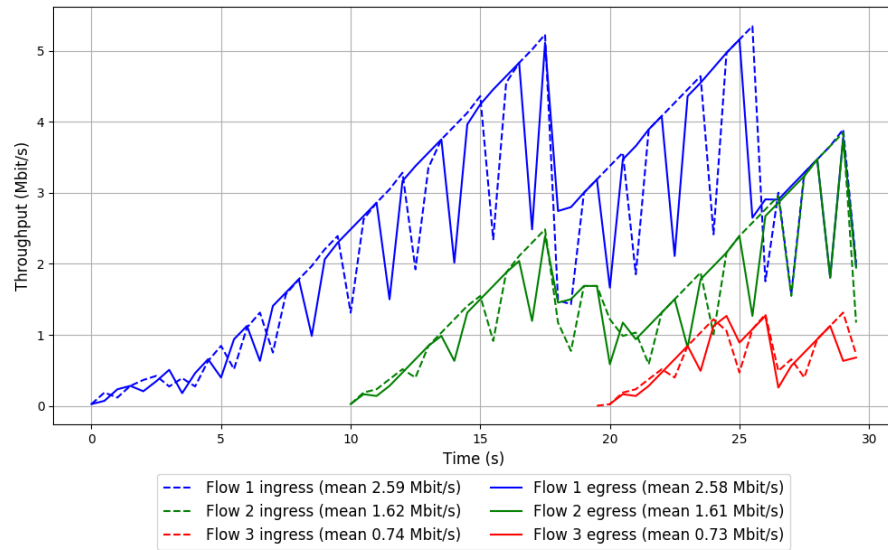
-- Flow 3:

Average throughput: 0.73 Mbit/s

95th percentile per-packet one-way delay: 153.731 ms

Loss rate: 5.06%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-03 07:52:51

End at: 2018-01-03 07:53:21

Below is generated by plot.py at 2018-01-03 12:05:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.71 Mbit/s

95th percentile per-packet one-way delay: 162.419 ms

Loss rate: 2.51%

-- Flow 1:

Average throughput: 3.09 Mbit/s

95th percentile per-packet one-way delay: 162.417 ms

Loss rate: 1.98%

-- Flow 2:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 162.427 ms

Loss rate: 2.99%

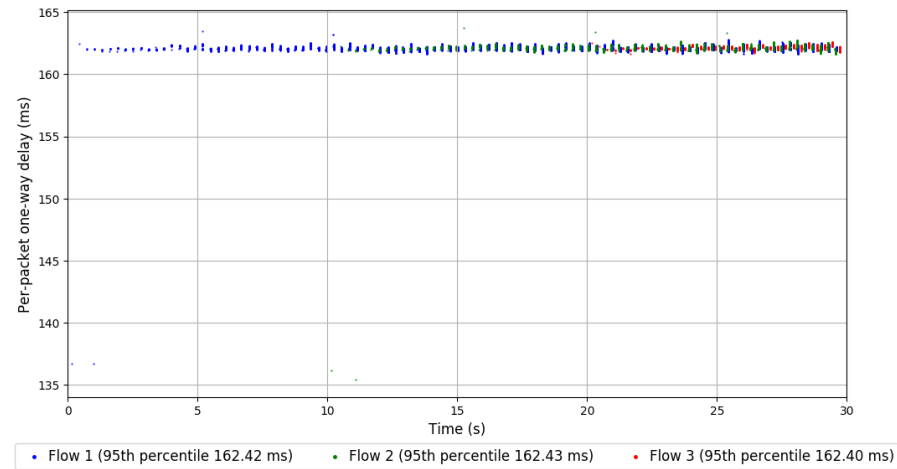
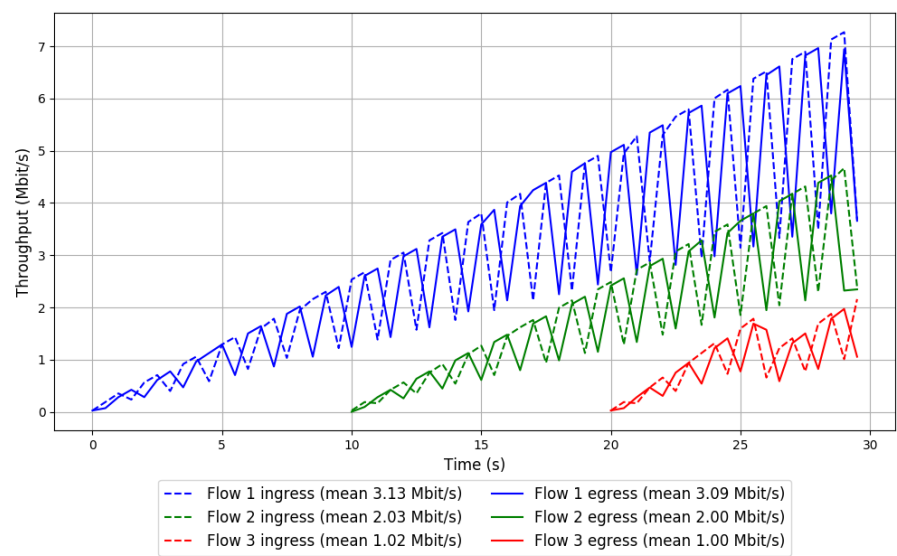
-- Flow 3:

Average throughput: 1.00 Mbit/s

95th percentile per-packet one-way delay: 162.398 ms

Loss rate: 5.47%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-03 08:07:53

End at: 2018-01-03 08:08:23

Below is generated by plot.py at 2018-01-03 12:05:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.33 Mbit/s

95th percentile per-packet one-way delay: 164.203 ms

Loss rate: 2.26%

-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 164.223 ms

Loss rate: 1.65%

-- Flow 2:

Average throughput: 1.51 Mbit/s

95th percentile per-packet one-way delay: 164.129 ms

Loss rate: 2.28%

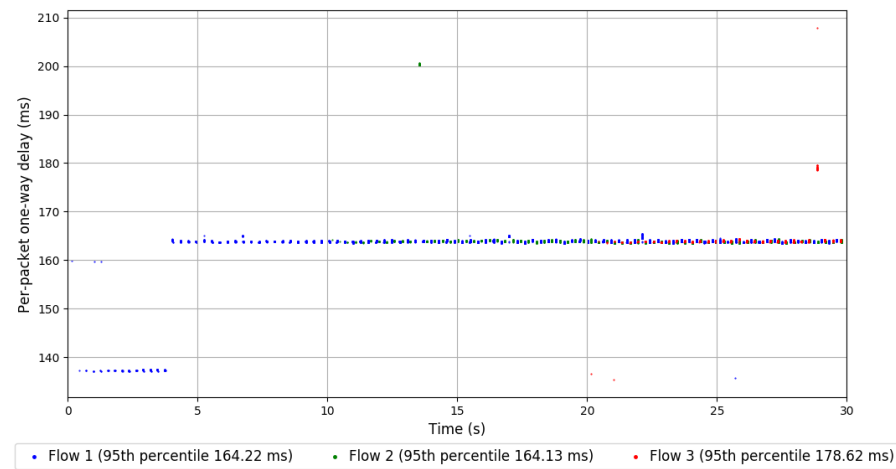
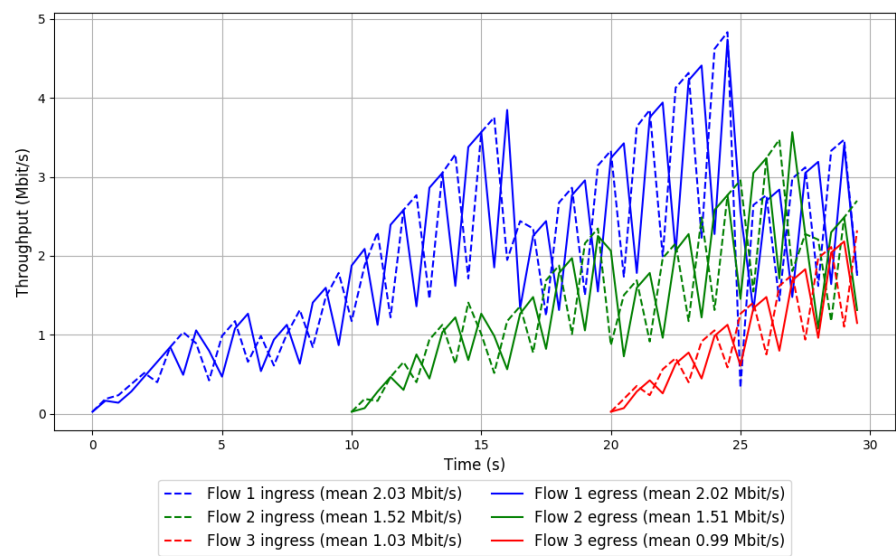
-- Flow 3:

Average throughput: 0.99 Mbit/s

95th percentile per-packet one-way delay: 178.615 ms

Loss rate: 5.79%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-03 08:23:29

End at: 2018-01-03 08:23:59

Below is generated by plot.py at 2018-01-03 12:05:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.63 Mbit/s

95th percentile per-packet one-way delay: 164.352 ms

Loss rate: 1.62%

-- Flow 1:

Average throughput: 1.09 Mbit/s

95th percentile per-packet one-way delay: 164.143 ms

Loss rate: 1.82%

-- Flow 2:

Average throughput: 1.88 Mbit/s

95th percentile per-packet one-way delay: 164.480 ms

Loss rate: 0.73%

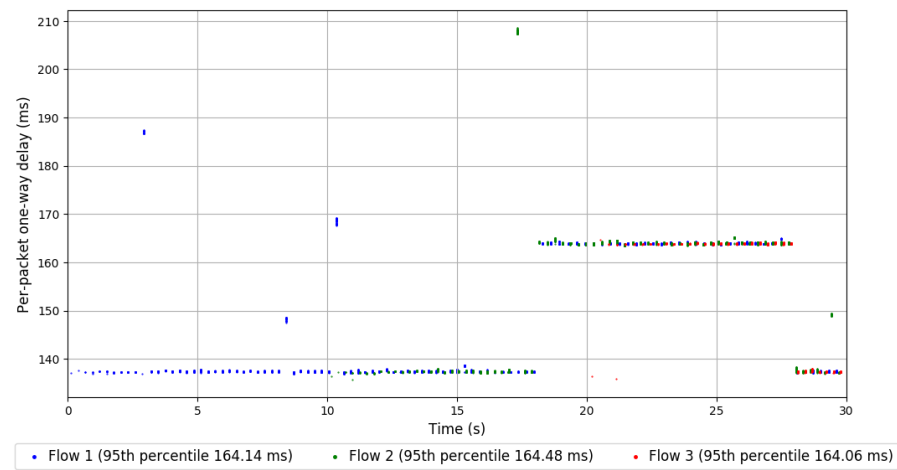
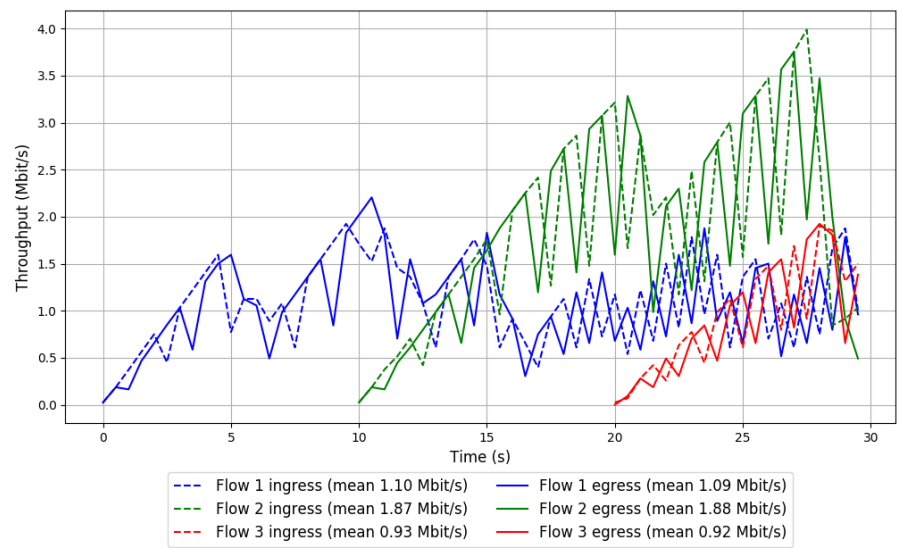
-- Flow 3:

Average throughput: 0.92 Mbit/s

95th percentile per-packet one-way delay: 164.064 ms

Loss rate: 4.46%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-03 08:38:48

End at: 2018-01-03 08:39:18

Below is generated by plot.py at 2018-01-03 12:05:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 164.165 ms

Loss rate: 3.88%

-- Flow 1:

Average throughput: 1.94 Mbit/s

95th percentile per-packet one-way delay: 164.216 ms

Loss rate: 3.51%

-- Flow 2:

Average throughput: 0.90 Mbit/s

95th percentile per-packet one-way delay: 142.984 ms

Loss rate: 4.95%

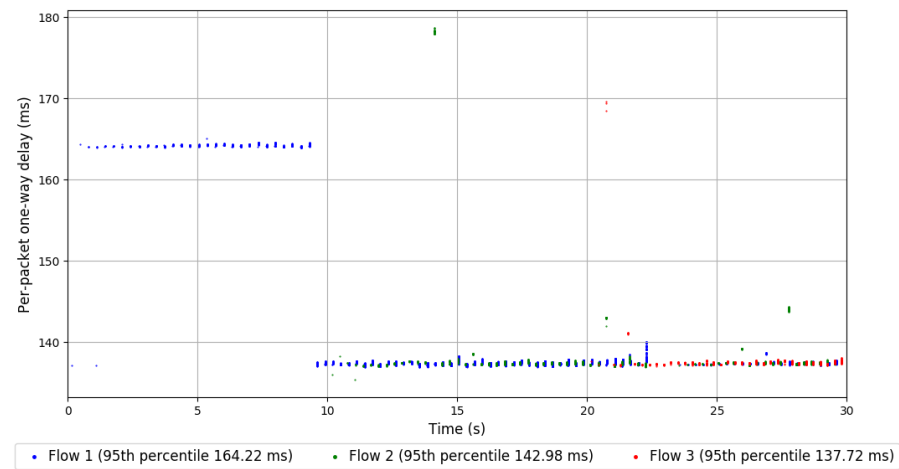
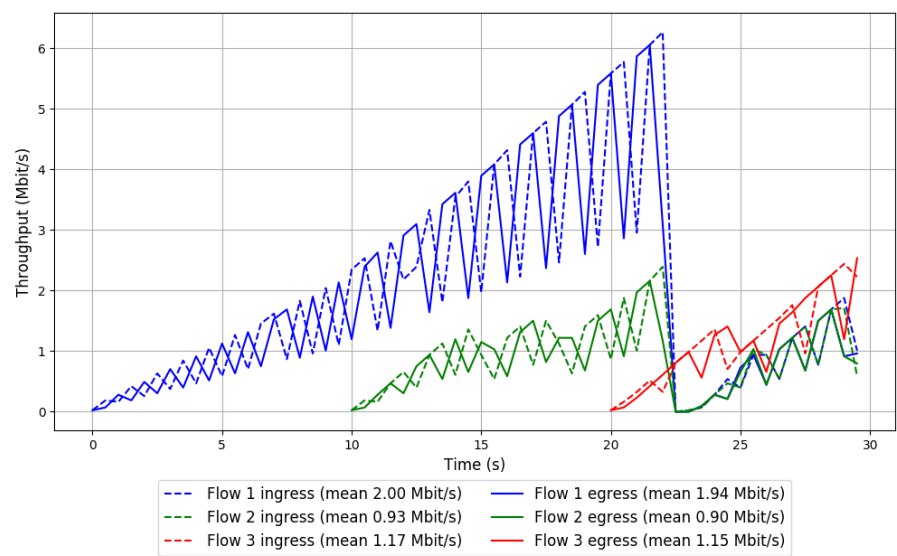
-- Flow 3:

Average throughput: 1.15 Mbit/s

95th percentile per-packet one-way delay: 137.715 ms

Loss rate: 4.05%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-03 08:54:26

End at: 2018-01-03 08:54:56

Below is generated by plot.py at 2018-01-03 12:05:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.69 Mbit/s

95th percentile per-packet one-way delay: 164.467 ms

Loss rate: 5.18%

-- Flow 1:

Average throughput: 1.00 Mbit/s

95th percentile per-packet one-way delay: 164.302 ms

Loss rate: 4.93%

-- Flow 2:

Average throughput: 0.81 Mbit/s

95th percentile per-packet one-way delay: 165.248 ms

Loss rate: 4.36%

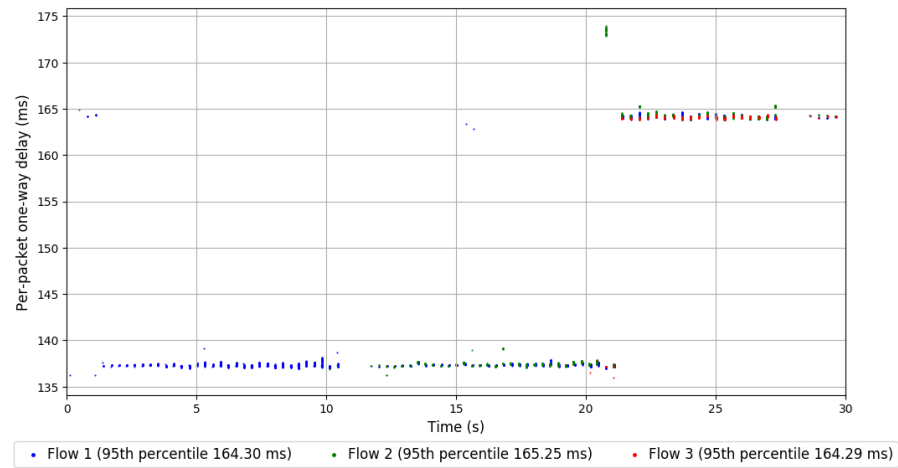
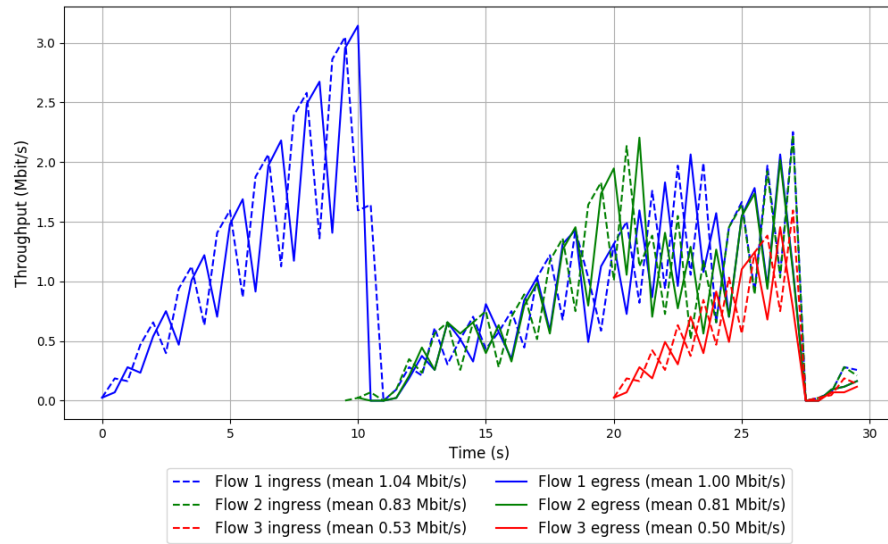
-- Flow 3:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 164.289 ms

Loss rate: 9.30%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-01-03 09:09:07

End at: 2018-01-03 09:09:37

Below is generated by plot.py at 2018-01-03 12:05:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.01 Mbit/s

95th percentile per-packet one-way delay: 136.907 ms

Loss rate: 2.72%

-- Flow 1:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 136.963 ms

Loss rate: 1.12%

-- Flow 2:

Average throughput: 1.86 Mbit/s

95th percentile per-packet one-way delay: 136.890 ms

Loss rate: 3.47%

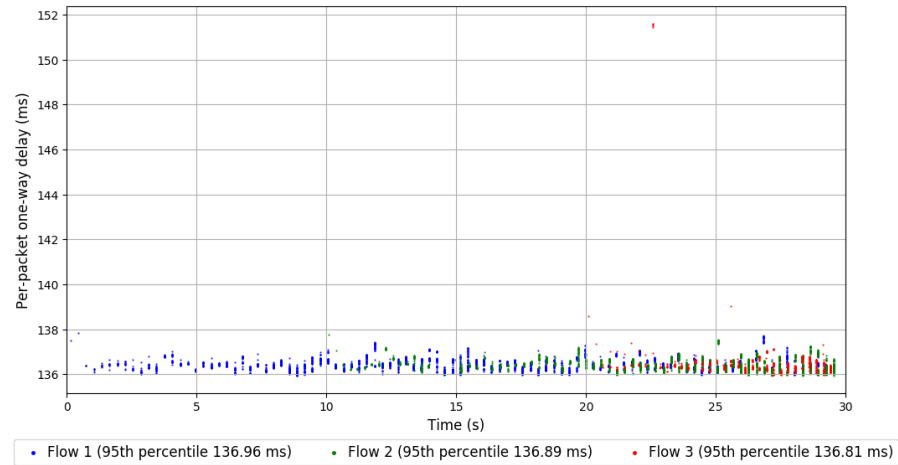
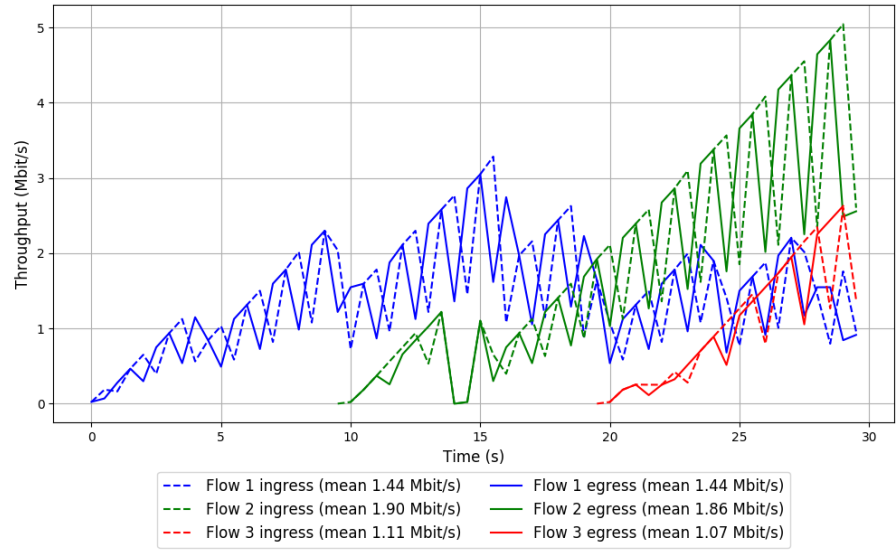
-- Flow 3:

Average throughput: 1.07 Mbit/s

95th percentile per-packet one-way delay: 136.805 ms

Loss rate: 6.49%

Run 10: Report of LEDBAT — Data Link

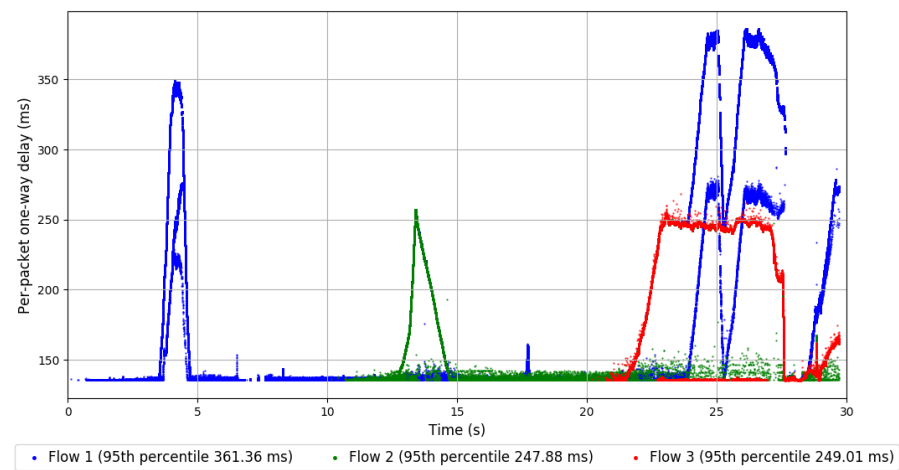
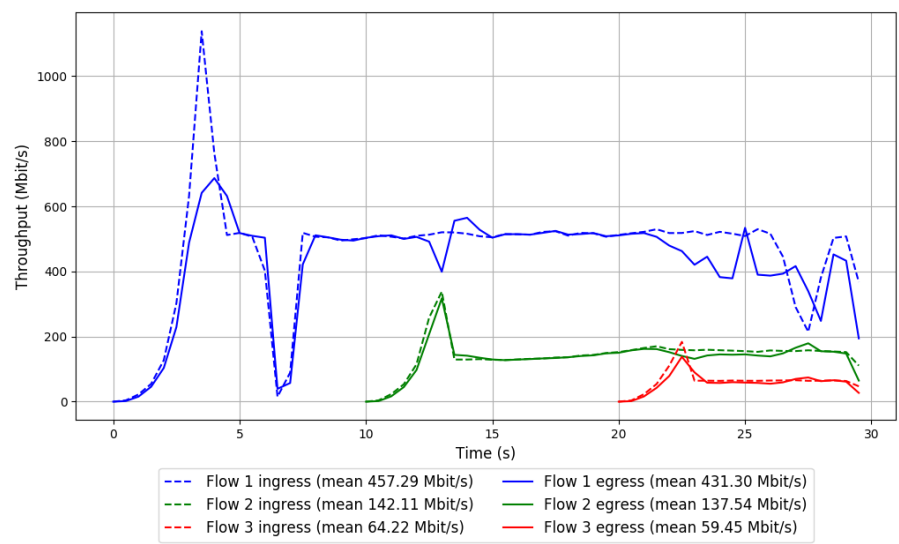


```
Run 1: Statistics of PCC

Start at: 2018-01-03 06:47:43
End at: 2018-01-03 06:48:14

# Below is generated by plot.py at 2018-01-03 12:13:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 541.45 Mbit/s
95th percentile per-packet one-way delay: 344.351 ms
Loss rate: 6.39%
-- Flow 1:
Average throughput: 431.30 Mbit/s
95th percentile per-packet one-way delay: 361.360 ms
Loss rate: 6.58%
-- Flow 2:
Average throughput: 137.54 Mbit/s
95th percentile per-packet one-way delay: 247.878 ms
Loss rate: 4.61%
-- Flow 3:
Average throughput: 59.45 Mbit/s
95th percentile per-packet one-way delay: 249.008 ms
Loss rate: 10.11%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-01-03 07:03:33

End at: 2018-01-03 07:04:03

Below is generated by plot.py at 2018-01-03 12:14:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 574.36 Mbit/s

95th percentile per-packet one-way delay: 245.154 ms

Loss rate: 3.75%

-- Flow 1:

Average throughput: 512.23 Mbit/s

95th percentile per-packet one-way delay: 245.145 ms

Loss rate: 3.73%

-- Flow 2:

Average throughput: 64.48 Mbit/s

95th percentile per-packet one-way delay: 244.158 ms

Loss rate: 2.67%

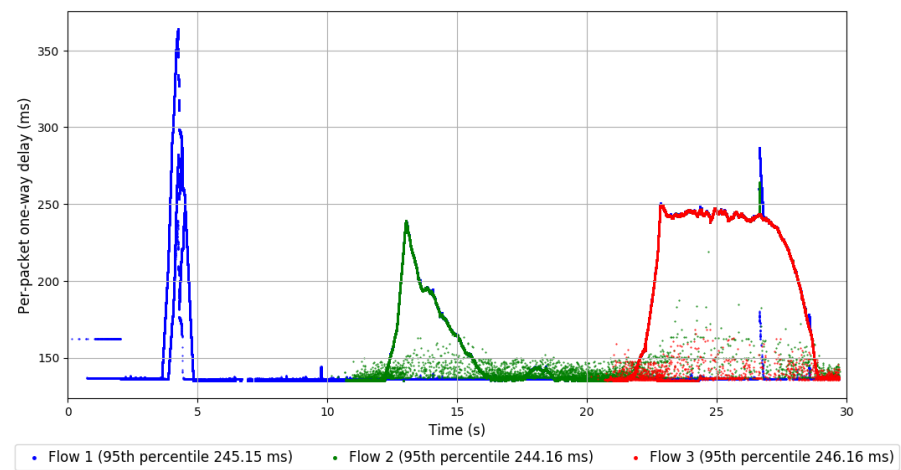
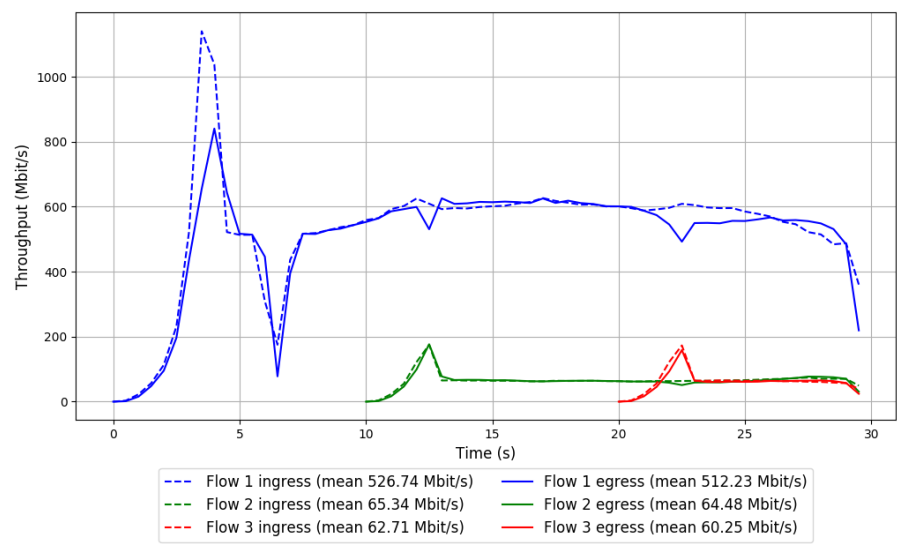
-- Flow 3:

Average throughput: 60.25 Mbit/s

95th percentile per-packet one-way delay: 246.160 ms

Loss rate: 6.61%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-03 07:19:50

End at: 2018-01-03 07:20:20

Below is generated by plot.py at 2018-01-03 12:14:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 563.86 Mbit/s

95th percentile per-packet one-way delay: 277.011 ms

Loss rate: 5.48%

-- Flow 1:

Average throughput: 463.23 Mbit/s

95th percentile per-packet one-way delay: 285.519 ms

Loss rate: 5.38%

-- Flow 2:

Average throughput: 122.40 Mbit/s

95th percentile per-packet one-way delay: 248.347 ms

Loss rate: 4.97%

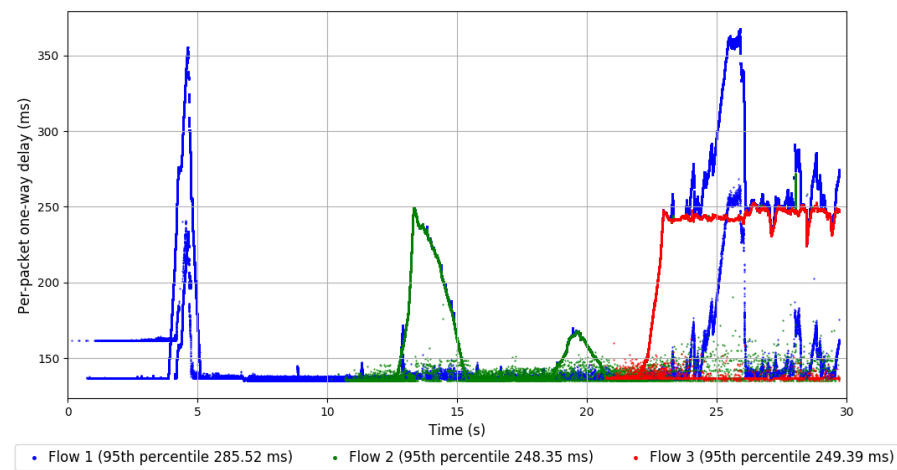
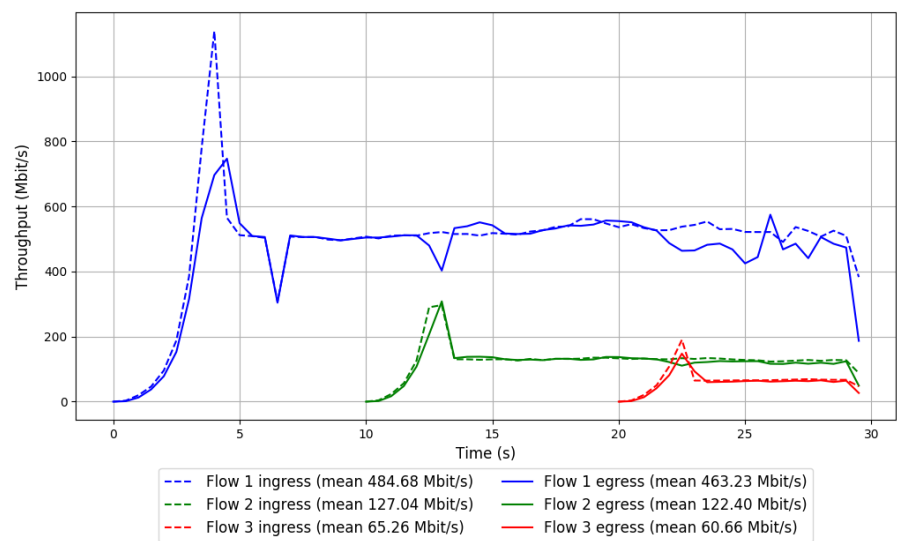
-- Flow 3:

Average throughput: 60.66 Mbit/s

95th percentile per-packet one-way delay: 249.389 ms

Loss rate: 9.74%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-01-03 07:34:36

End at: 2018-01-03 07:35:06

Below is generated by plot.py at 2018-01-03 12:14:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 481.38 Mbit/s

95th percentile per-packet one-way delay: 220.897 ms

Loss rate: 1.67%

-- Flow 1:

Average throughput: 439.41 Mbit/s

95th percentile per-packet one-way delay: 205.475 ms

Loss rate: 1.35%

-- Flow 2:

Average throughput: 4.40 Mbit/s

95th percentile per-packet one-way delay: 205.526 ms

Loss rate: 1.73%

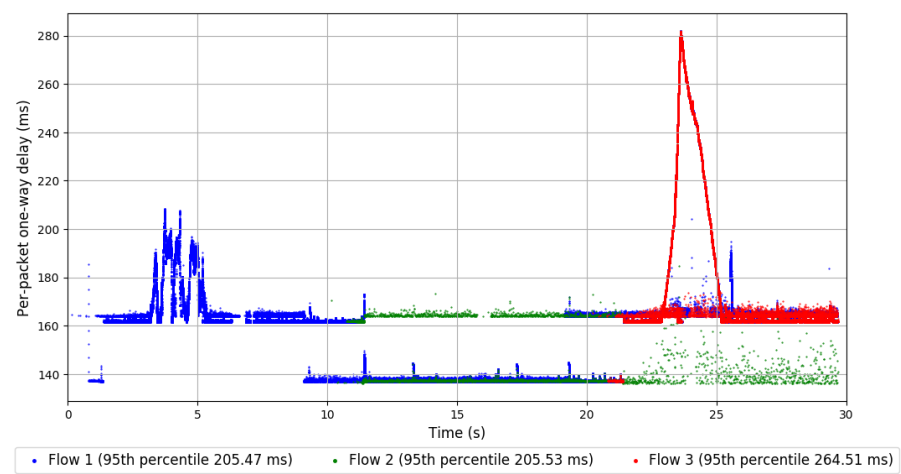
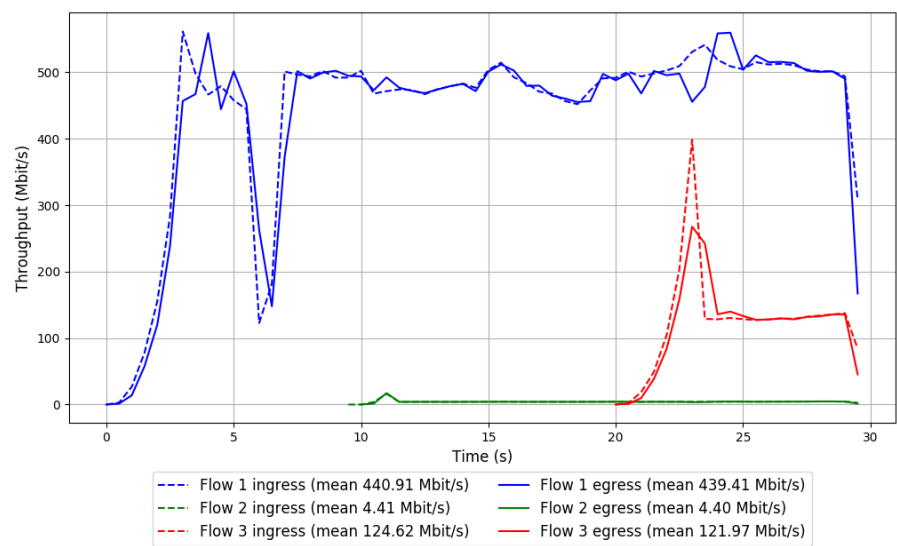
-- Flow 3:

Average throughput: 121.97 Mbit/s

95th percentile per-packet one-way delay: 264.513 ms

Loss rate: 5.16%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-03 07:49:50

End at: 2018-01-03 07:50:20

Below is generated by plot.py at 2018-01-03 12:14:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 318.58 Mbit/s

95th percentile per-packet one-way delay: 199.713 ms

Loss rate: 3.42%

-- Flow 1:

Average throughput: 5.38 Mbit/s

95th percentile per-packet one-way delay: 161.910 ms

Loss rate: 2.49%

-- Flow 2:

Average throughput: 469.32 Mbit/s

95th percentile per-packet one-way delay: 201.811 ms

Loss rate: 3.44%

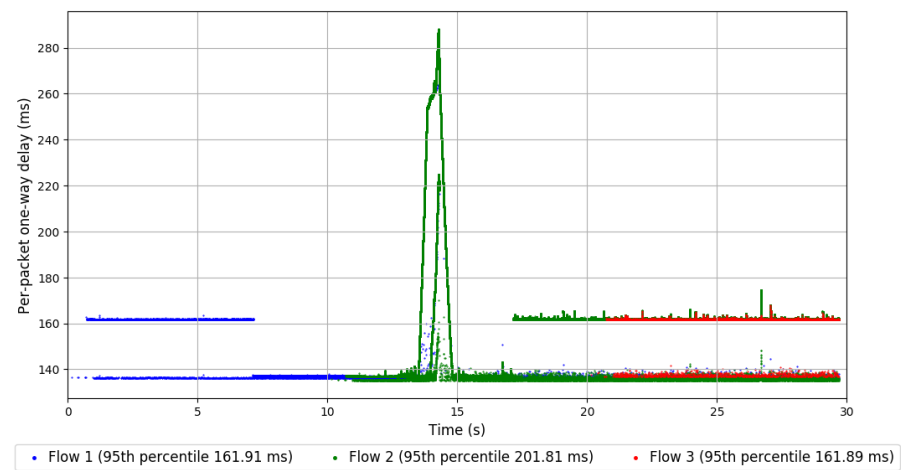
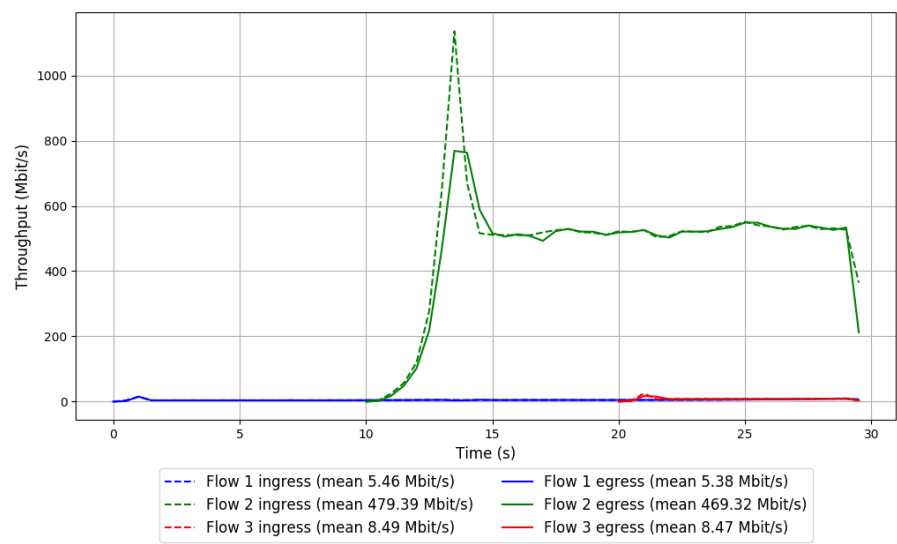
-- Flow 3:

Average throughput: 8.47 Mbit/s

95th percentile per-packet one-way delay: 161.894 ms

Loss rate: 3.00%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-03 08:04:52

End at: 2018-01-03 08:05:22

Below is generated by plot.py at 2018-01-03 12:14:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 164.51 Mbit/s

95th percentile per-packet one-way delay: 280.847 ms

Loss rate: 6.46%

-- Flow 1:

Average throughput: 36.97 Mbit/s

95th percentile per-packet one-way delay: 165.213 ms

Loss rate: 1.81%

-- Flow 2:

Average throughput: 8.79 Mbit/s

95th percentile per-packet one-way delay: 167.628 ms

Loss rate: 2.18%

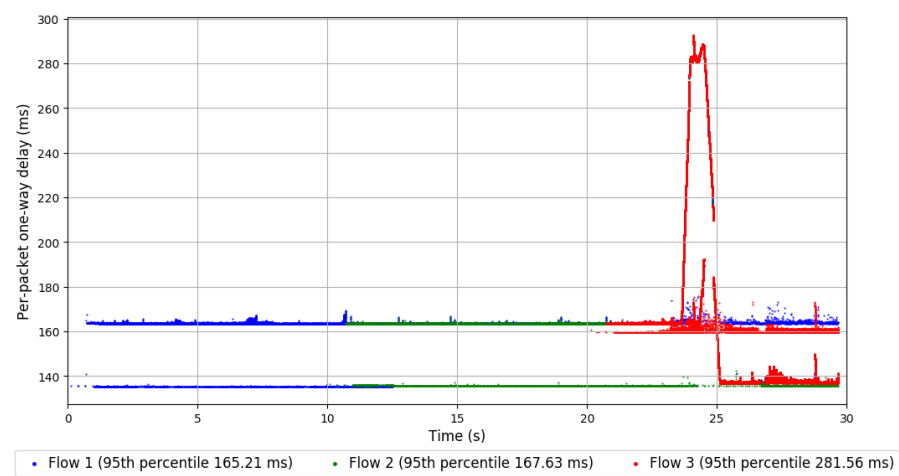
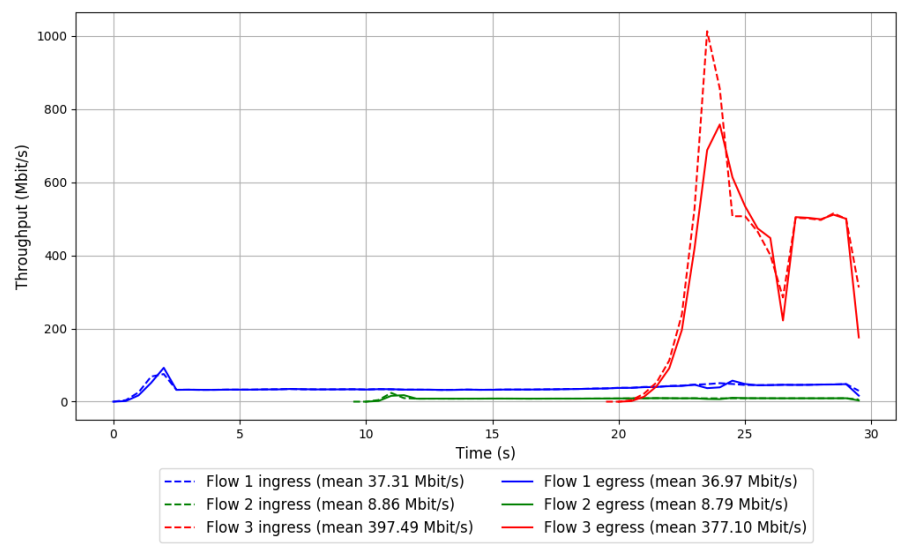
-- Flow 3:

Average throughput: 377.10 Mbit/s

95th percentile per-packet one-way delay: 281.563 ms

Loss rate: 7.98%

Run 6: Report of PCC — Data Link

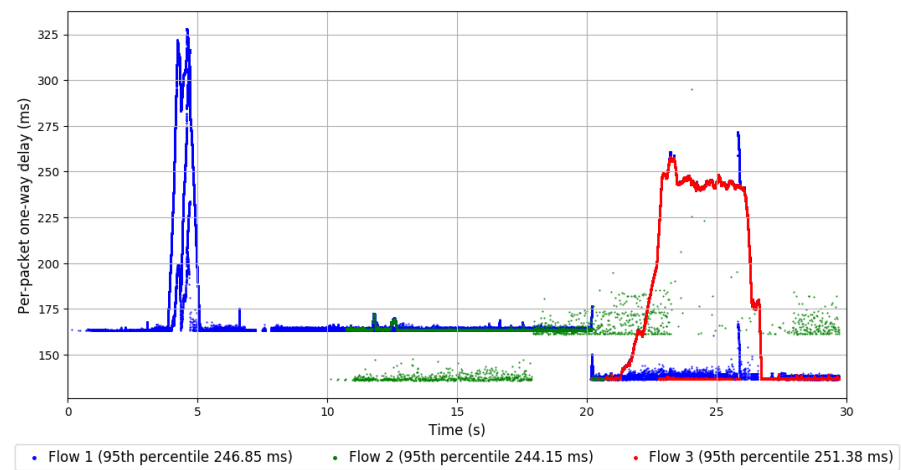
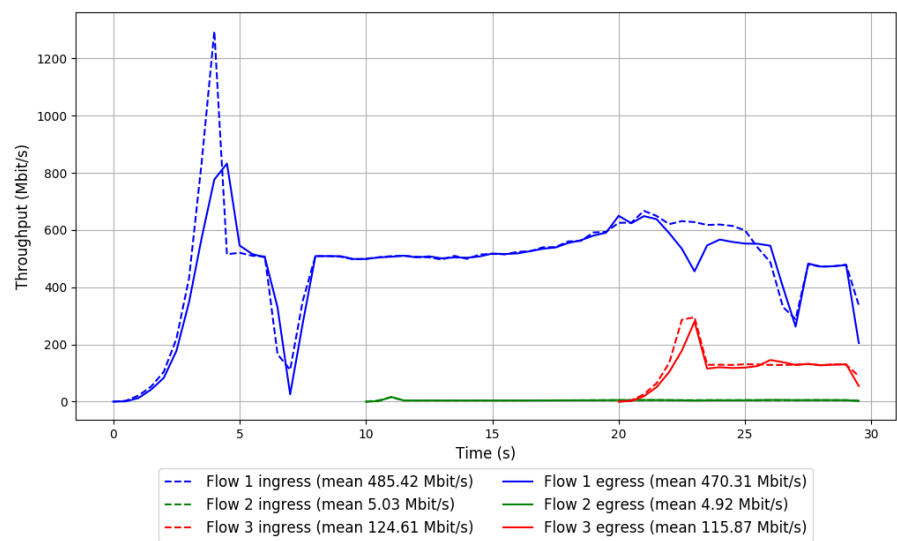


```
Run 7: Statistics of PCC

Start at: 2018-01-03 08:20:17
End at: 2018-01-03 08:20:47

# Below is generated by plot.py at 2018-01-03 12:14:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 511.09 Mbit/s
95th percentile per-packet one-way delay: 247.290 ms
Loss rate: 4.51%
-- Flow 1:
Average throughput: 470.31 Mbit/s
95th percentile per-packet one-way delay: 246.854 ms
Loss rate: 4.09%
-- Flow 2:
Average throughput: 4.92 Mbit/s
95th percentile per-packet one-way delay: 244.145 ms
Loss rate: 3.58%
-- Flow 3:
Average throughput: 115.87 Mbit/s
95th percentile per-packet one-way delay: 251.375 ms
Loss rate: 9.60%
```


Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-03 08:35:58

End at: 2018-01-03 08:36:28

Below is generated by plot.py at 2018-01-03 12:14:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.35 Mbit/s

95th percentile per-packet one-way delay: 163.990 ms

Loss rate: 1.81%

-- Flow 1:

Average throughput: 6.57 Mbit/s

95th percentile per-packet one-way delay: 163.991 ms

Loss rate: 1.46%

-- Flow 2:

Average throughput: 4.99 Mbit/s

95th percentile per-packet one-way delay: 163.983 ms

Loss rate: 1.79%

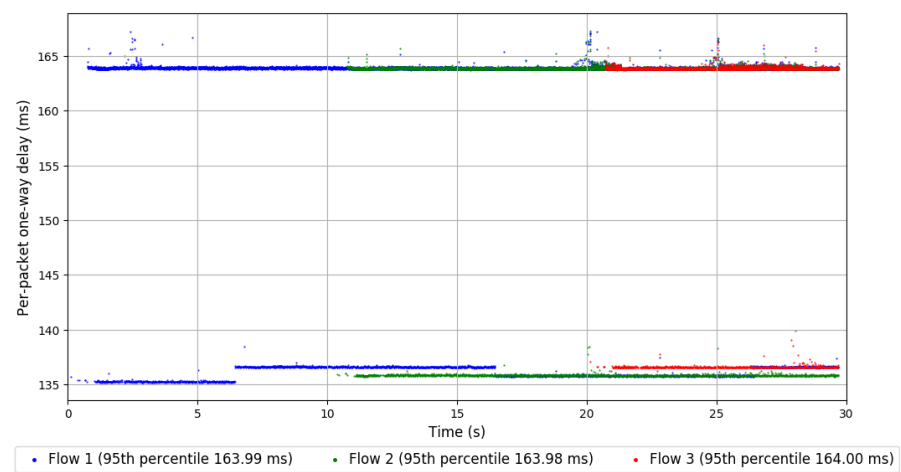
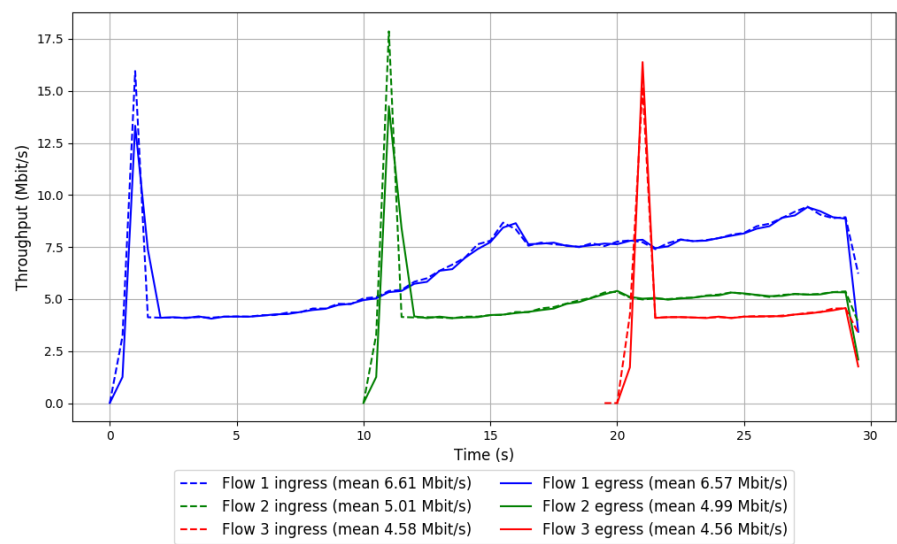
-- Flow 3:

Average throughput: 4.56 Mbit/s

95th percentile per-packet one-way delay: 163.997 ms

Loss rate: 3.42%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-03 08:51:24

End at: 2018-01-03 08:51:54

Below is generated by plot.py at 2018-01-03 12:14:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 263.60 Mbit/s

95th percentile per-packet one-way delay: 208.611 ms

Loss rate: 3.23%

-- Flow 1:

Average throughput: 177.46 Mbit/s

95th percentile per-packet one-way delay: 179.476 ms

Loss rate: 1.90%

-- Flow 2:

Average throughput: 20.77 Mbit/s

95th percentile per-packet one-way delay: 190.141 ms

Loss rate: 2.22%

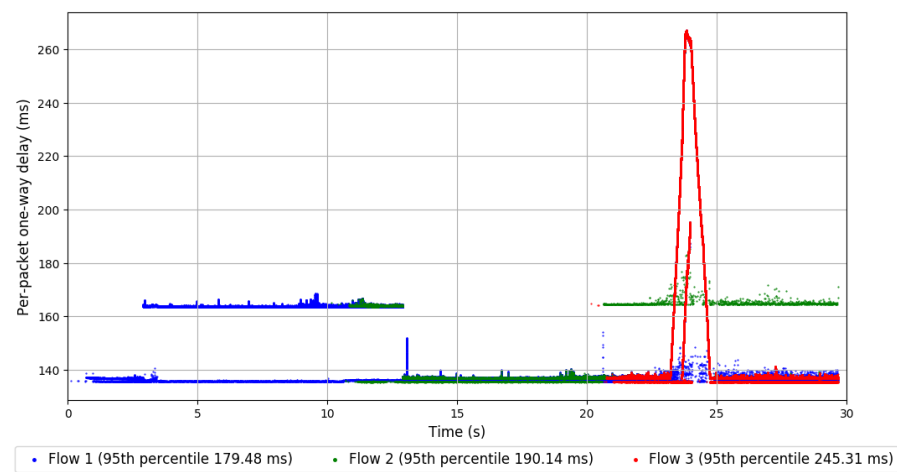
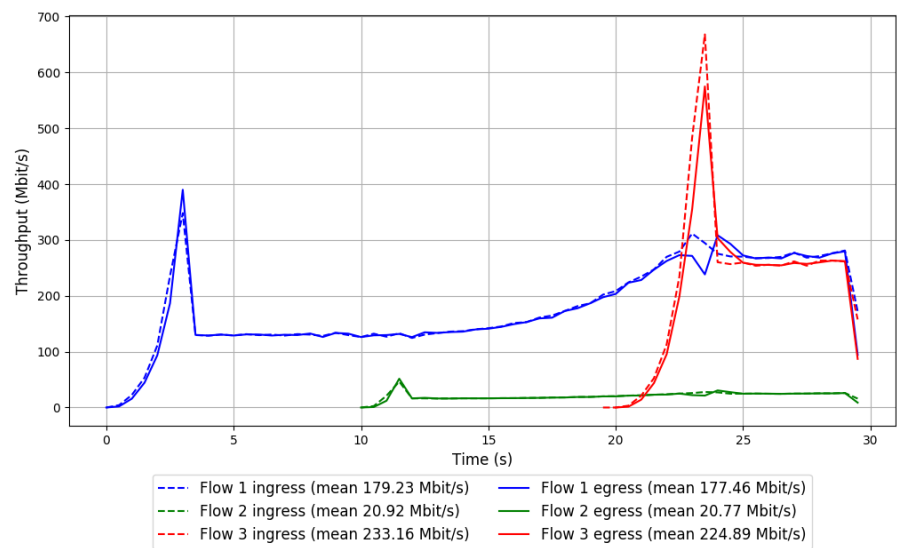
-- Flow 3:

Average throughput: 224.89 Mbit/s

95th percentile per-packet one-way delay: 245.312 ms

Loss rate: 6.53%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-01-03 09:06:05

End at: 2018-01-03 09:06:35

Below is generated by plot.py at 2018-01-03 12:16:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 431.76 Mbit/s

95th percentile per-packet one-way delay: 245.659 ms

Loss rate: 2.45%

-- Flow 1:

Average throughput: 237.74 Mbit/s

95th percentile per-packet one-way delay: 243.734 ms

Loss rate: 1.66%

-- Flow 2:

Average throughput: 237.55 Mbit/s

95th percentile per-packet one-way delay: 246.347 ms

Loss rate: 2.73%

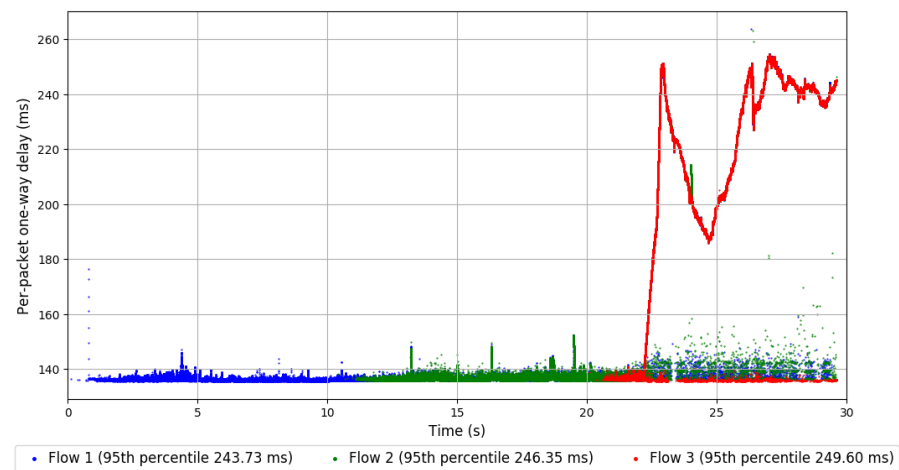
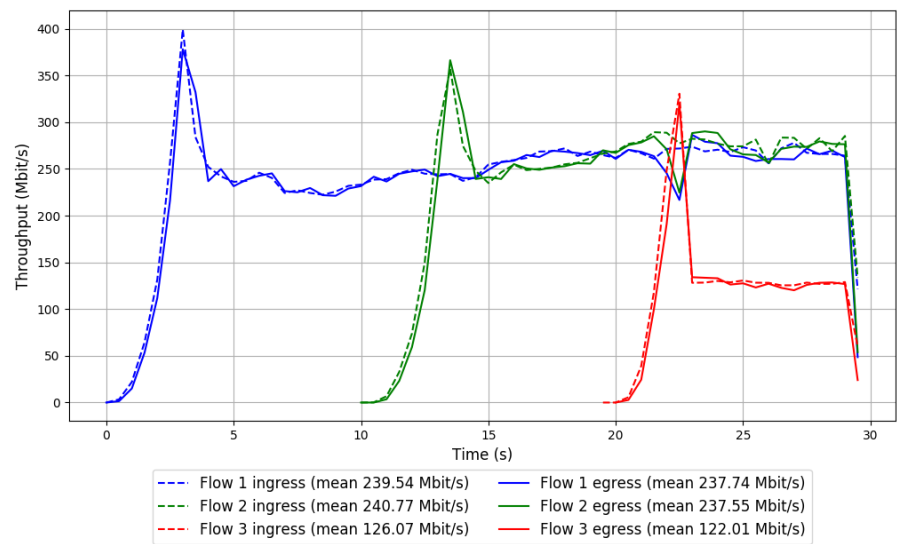
-- Flow 3:

Average throughput: 122.01 Mbit/s

95th percentile per-packet one-way delay: 249.603 ms

Loss rate: 5.96%

Run 10: Report of PCC — Data Link

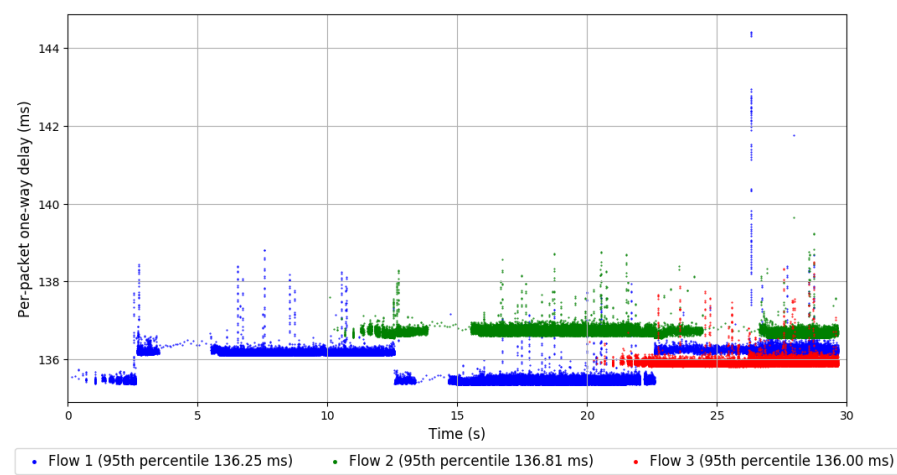
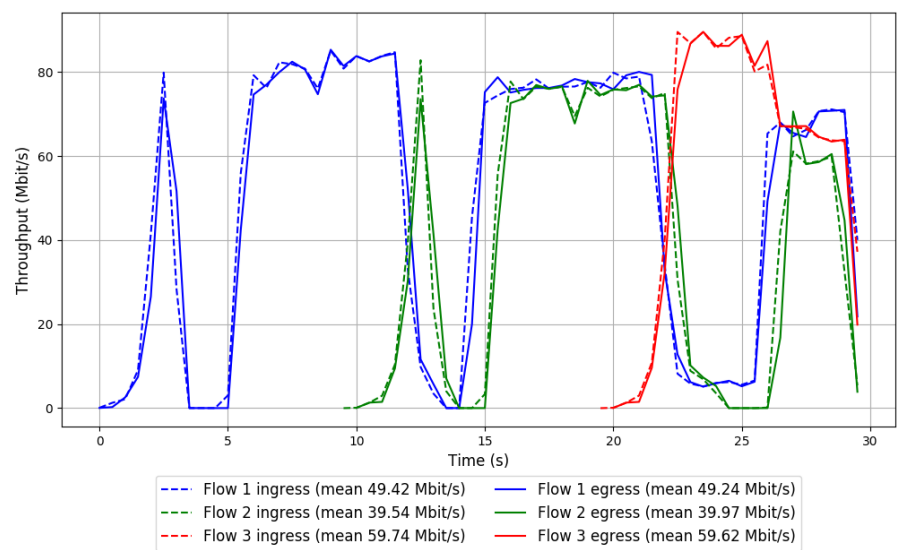


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-03 06:56:05
End at: 2018-01-03 06:56:35

# Below is generated by plot.py at 2018-01-03 12:16:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.03 Mbit/s
95th percentile per-packet one-way delay: 136.738 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 49.24 Mbit/s
95th percentile per-packet one-way delay: 136.253 ms
Loss rate: 1.26%
-- Flow 2:
Average throughput: 39.97 Mbit/s
95th percentile per-packet one-way delay: 136.812 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 59.62 Mbit/s
95th percentile per-packet one-way delay: 135.998 ms
Loss rate: 2.95%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-01-03 07:12:00

End at: 2018-01-03 07:12:30

Below is generated by plot.py at 2018-01-03 12:16:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 104.40 Mbit/s

95th percentile per-packet one-way delay: 136.299 ms

Loss rate: 1.28%

-- Flow 1:

Average throughput: 71.85 Mbit/s

95th percentile per-packet one-way delay: 136.286 ms

Loss rate: 1.01%

-- Flow 2:

Average throughput: 36.72 Mbit/s

95th percentile per-packet one-way delay: 136.322 ms

Loss rate: 2.32%

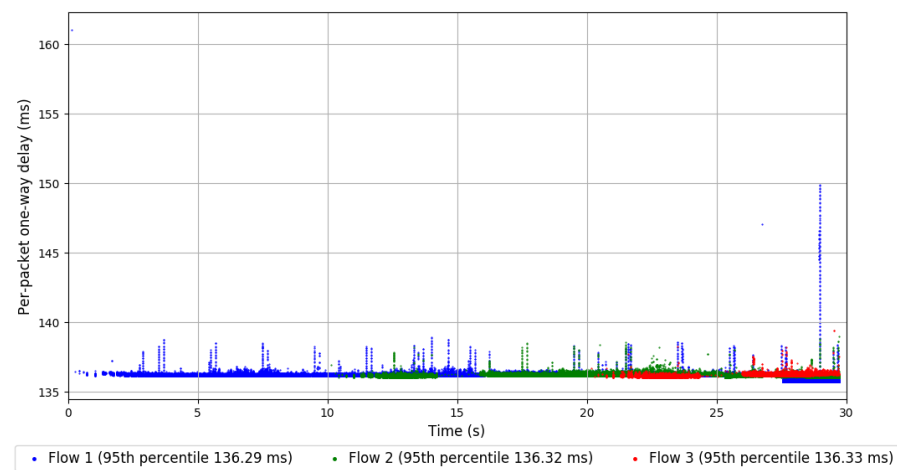
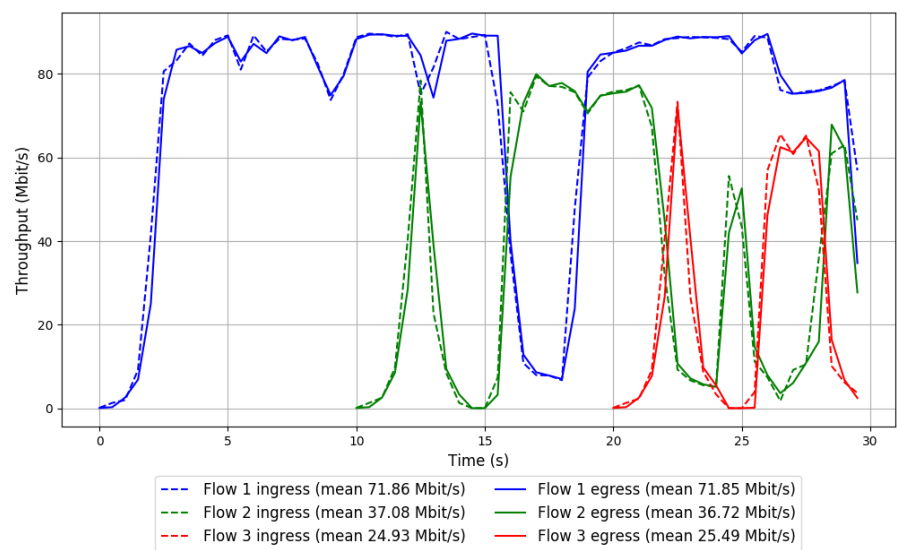
-- Flow 3:

Average throughput: 25.49 Mbit/s

95th percentile per-packet one-way delay: 136.331 ms

Loss rate: 0.55%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-03 07:28:06

End at: 2018-01-03 07:28:36

Below is generated by plot.py at 2018-01-03 12:16:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 107.69 Mbit/s

95th percentile per-packet one-way delay: 136.684 ms

Loss rate: 1.63%

-- Flow 1:

Average throughput: 57.67 Mbit/s

95th percentile per-packet one-way delay: 136.598 ms

Loss rate: 1.01%

-- Flow 2:

Average throughput: 49.43 Mbit/s

95th percentile per-packet one-way delay: 136.746 ms

Loss rate: 1.81%

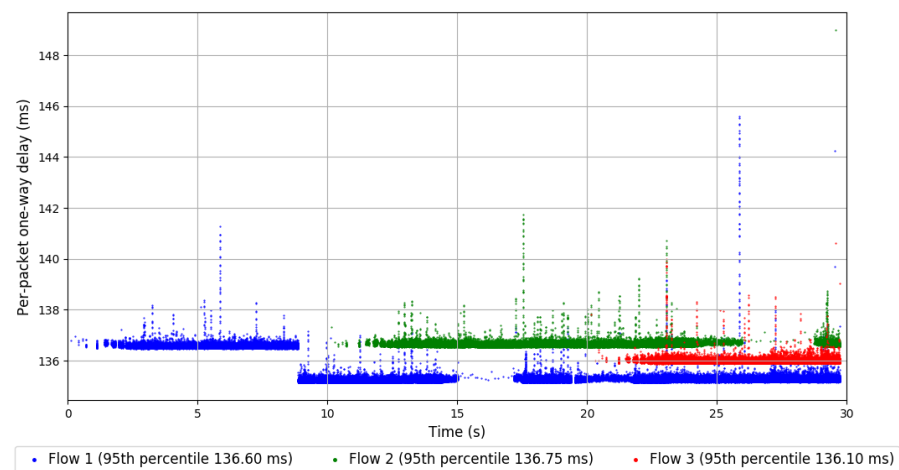
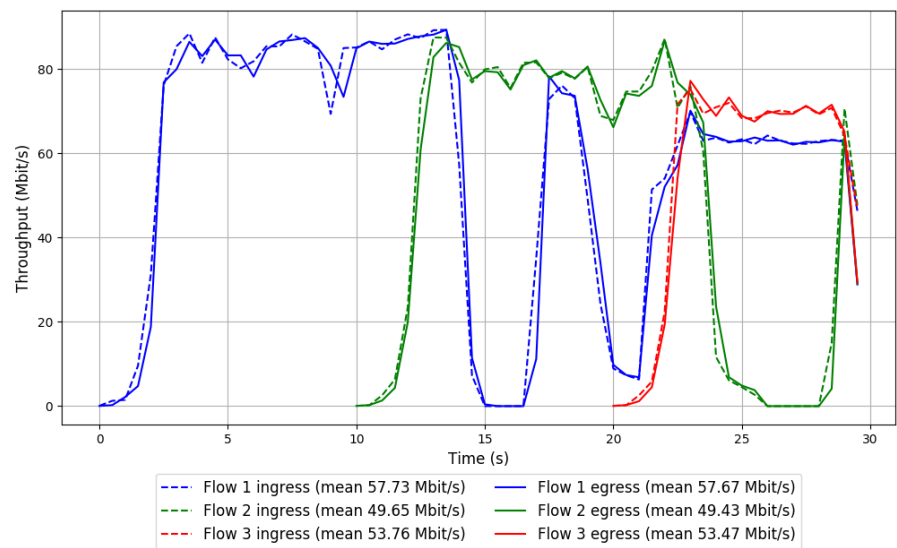
-- Flow 3:

Average throughput: 53.47 Mbit/s

95th percentile per-packet one-way delay: 136.103 ms

Loss rate: 3.30%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-03 07:42:40

End at: 2018-01-03 07:43:10

Below is generated by plot.py at 2018-01-03 12:16:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.96 Mbit/s

95th percentile per-packet one-way delay: 161.626 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 59.27 Mbit/s

95th percentile per-packet one-way delay: 161.519 ms

Loss rate: 1.27%

-- Flow 2:

Average throughput: 62.14 Mbit/s

95th percentile per-packet one-way delay: 163.826 ms

Loss rate: 0.16%

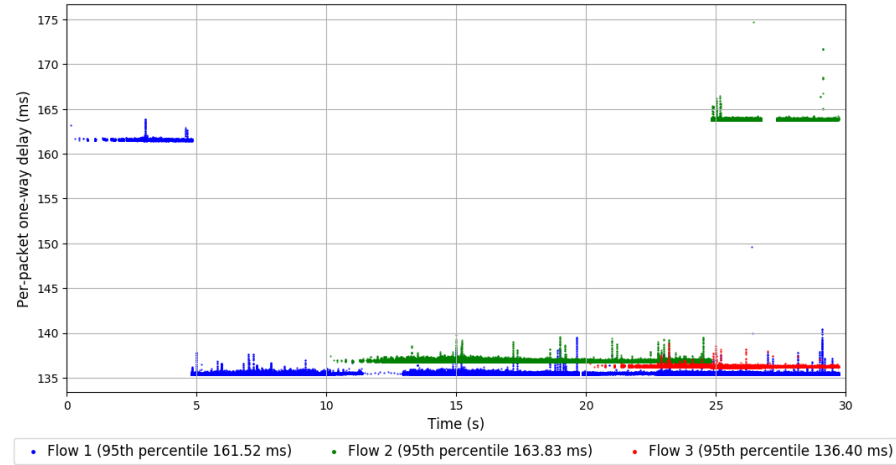
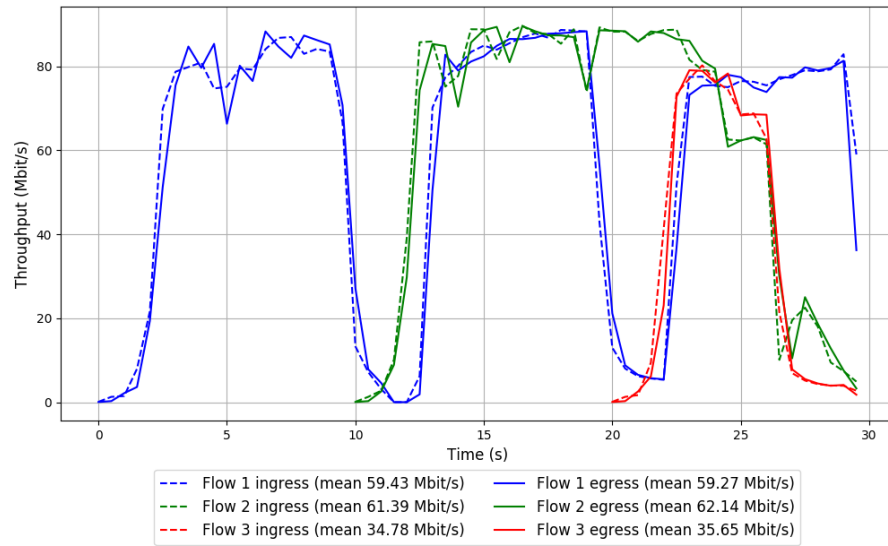
-- Flow 3:

Average throughput: 35.65 Mbit/s

95th percentile per-packet one-way delay: 136.396 ms

Loss rate: 0.29%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-03 07:58:05

End at: 2018-01-03 07:58:35

Below is generated by plot.py at 2018-01-03 12:16:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 112.79 Mbit/s

95th percentile per-packet one-way delay: 161.501 ms

Loss rate: 1.68%

-- Flow 1:

Average throughput: 61.44 Mbit/s

95th percentile per-packet one-way delay: 161.544 ms

Loss rate: 1.01%

-- Flow 2:

Average throughput: 49.76 Mbit/s

95th percentile per-packet one-way delay: 135.901 ms

Loss rate: 1.68%

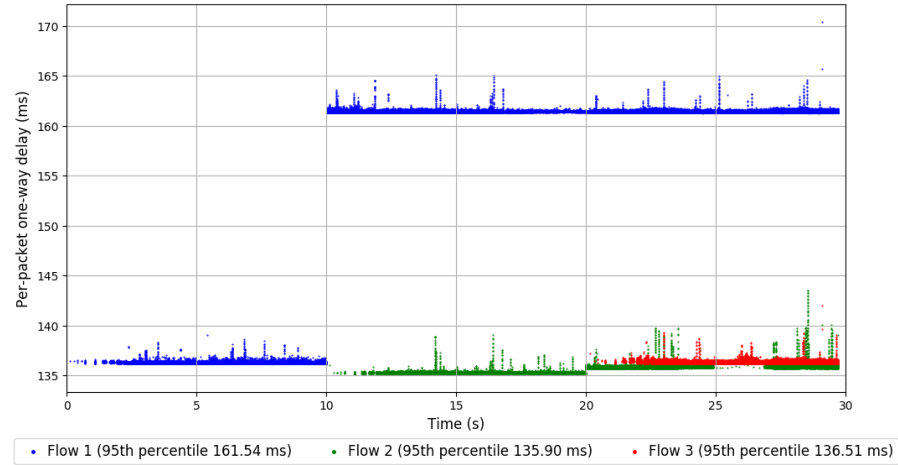
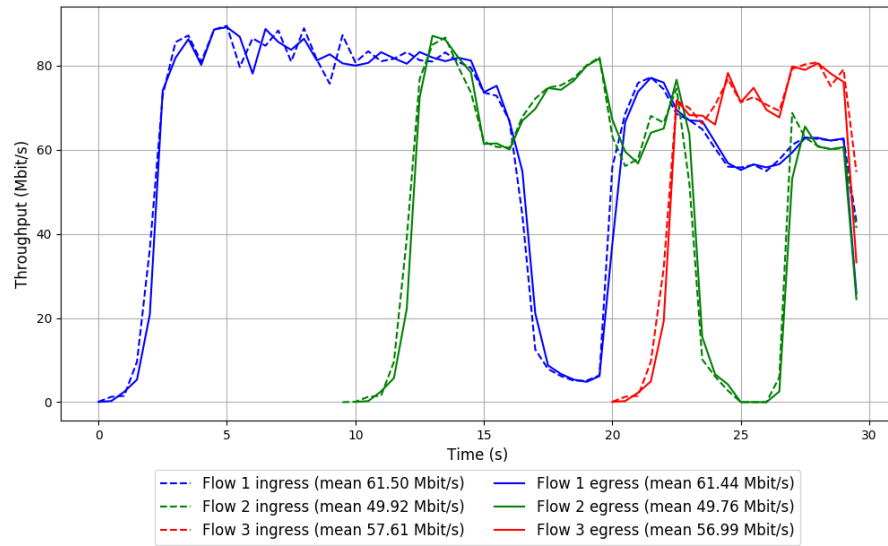
-- Flow 3:

Average throughput: 56.99 Mbit/s

95th percentile per-packet one-way delay: 136.511 ms

Loss rate: 3.84%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-03 08:13:00

End at: 2018-01-03 08:13:31

Below is generated by plot.py at 2018-01-03 12:16:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 114.54 Mbit/s

95th percentile per-packet one-way delay: 161.201 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 64.31 Mbit/s

95th percentile per-packet one-way delay: 161.228 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 62.18 Mbit/s

95th percentile per-packet one-way delay: 136.545 ms

Loss rate: 1.81%

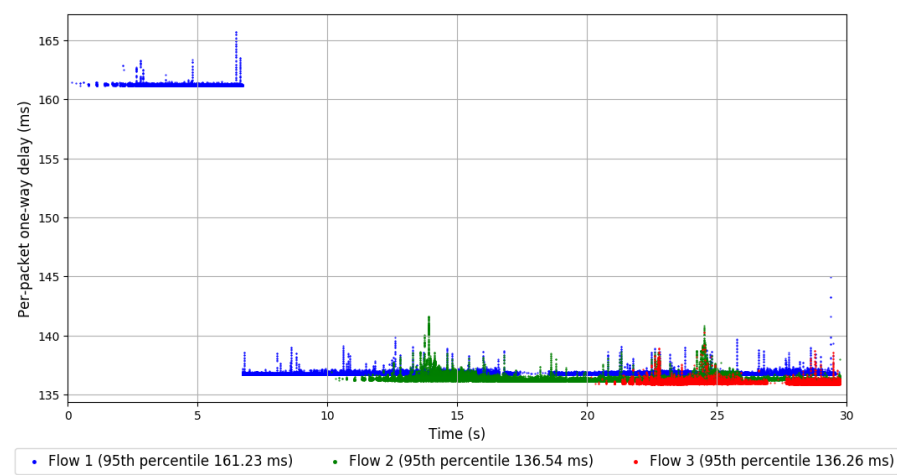
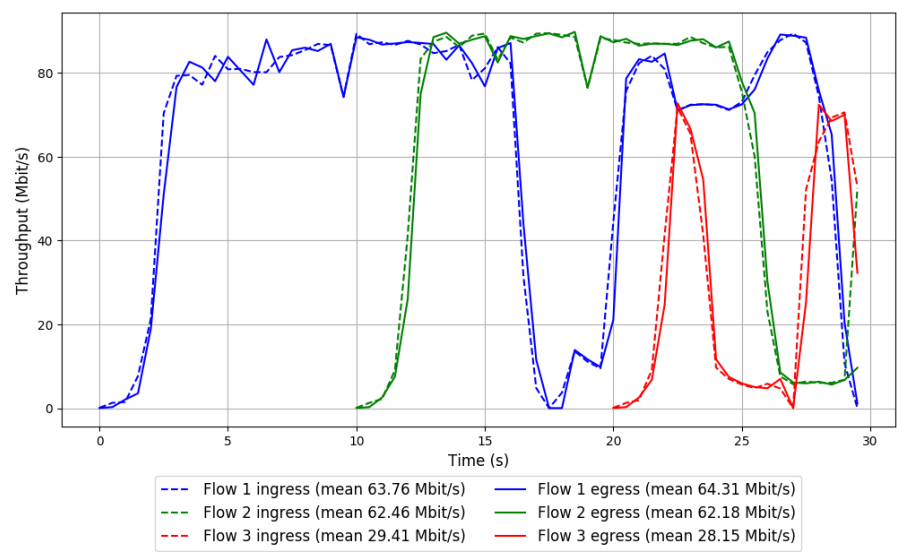
-- Flow 3:

Average throughput: 28.15 Mbit/s

95th percentile per-packet one-way delay: 136.263 ms

Loss rate: 6.91%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-03 08:28:33

End at: 2018-01-03 08:29:03

Below is generated by plot.py at 2018-01-03 12:16:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.81 Mbit/s

95th percentile per-packet one-way delay: 136.920 ms

Loss rate: 1.27%

-- Flow 1:

Average throughput: 47.87 Mbit/s

95th percentile per-packet one-way delay: 136.941 ms

Loss rate: 1.18%

-- Flow 2:

Average throughput: 34.50 Mbit/s

95th percentile per-packet one-way delay: 136.556 ms

Loss rate: 1.79%

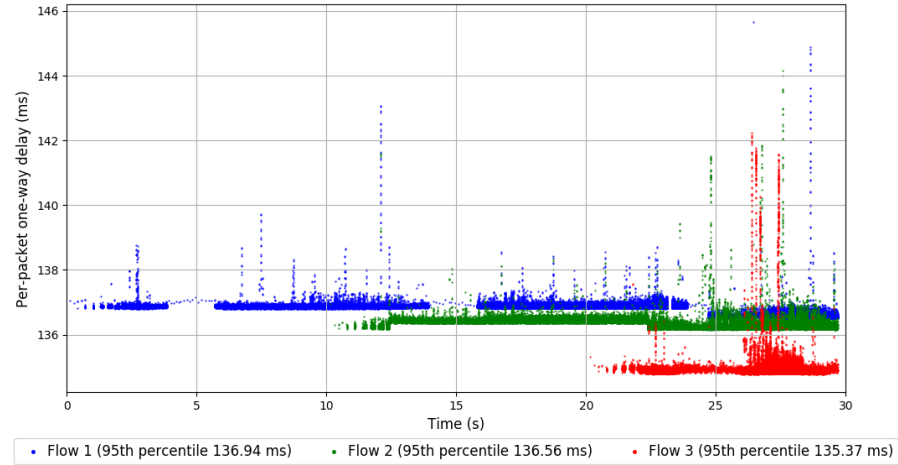
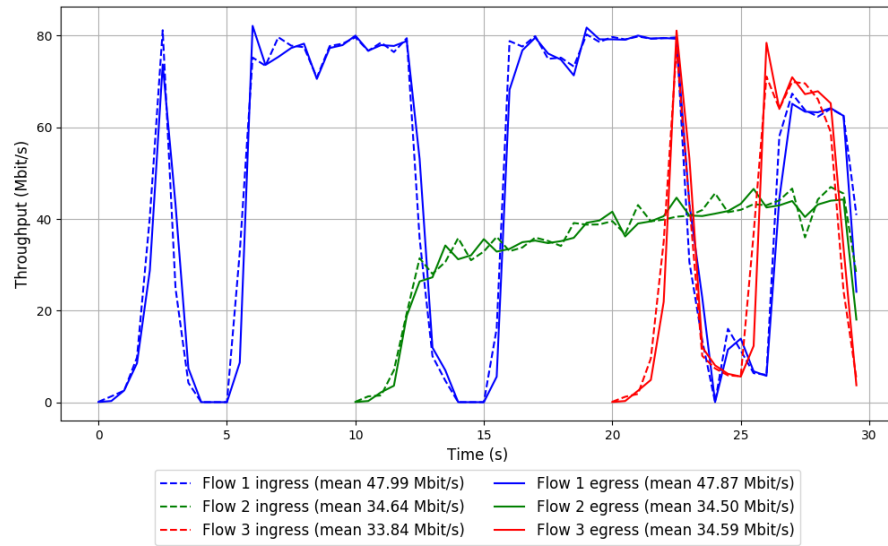
-- Flow 3:

Average throughput: 34.59 Mbit/s

95th percentile per-packet one-way delay: 135.371 ms

Loss rate: 0.62%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-03 08:43:59

End at: 2018-01-03 08:44:29

Below is generated by plot.py at 2018-01-03 12:16:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.51 Mbit/s

95th percentile per-packet one-way delay: 136.506 ms

Loss rate: 1.75%

-- Flow 1:

Average throughput: 58.35 Mbit/s

95th percentile per-packet one-way delay: 136.270 ms

Loss rate: 1.24%

-- Flow 2:

Average throughput: 62.31 Mbit/s

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

Loss rate: 1.61%

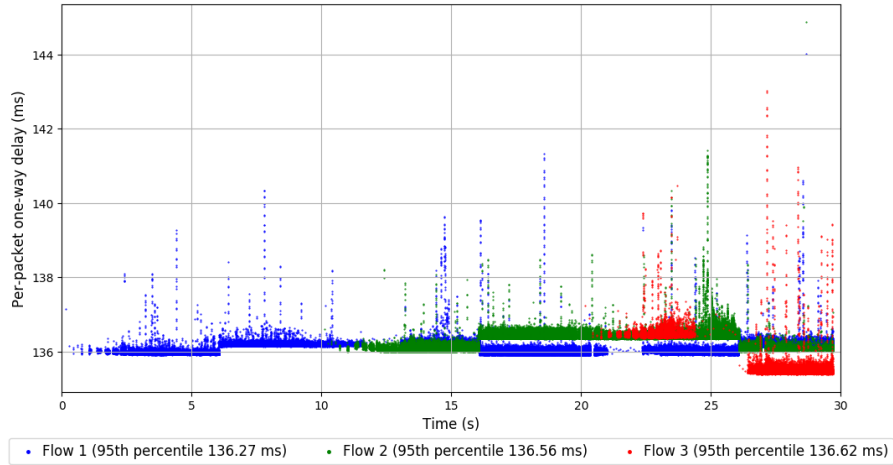
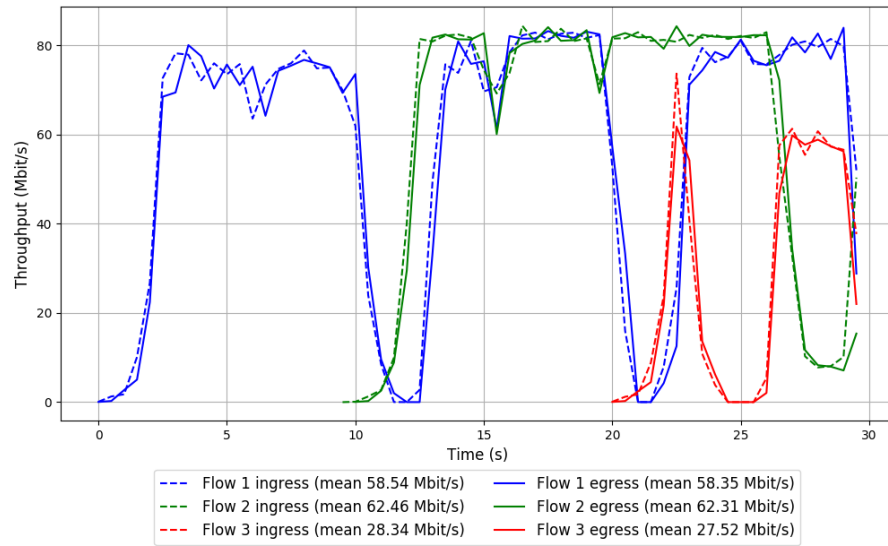
-- Flow 3:

Average throughput: 27.52 Mbit/s

95th percentile per-packet one-way delay: 136.616 ms

Loss rate: 5.59%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-03 08:59:27

End at: 2018-01-03 08:59:57

Below is generated by plot.py at 2018-01-03 12:16:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 47.30 Mbit/s

95th percentile per-packet one-way delay: 136.303 ms

Loss rate: 2.45%

-- Flow 1:

Average throughput: 0.04 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 52.81 Mbit/s

95th percentile per-packet one-way delay: 135.923 ms

Loss rate: 1.62%

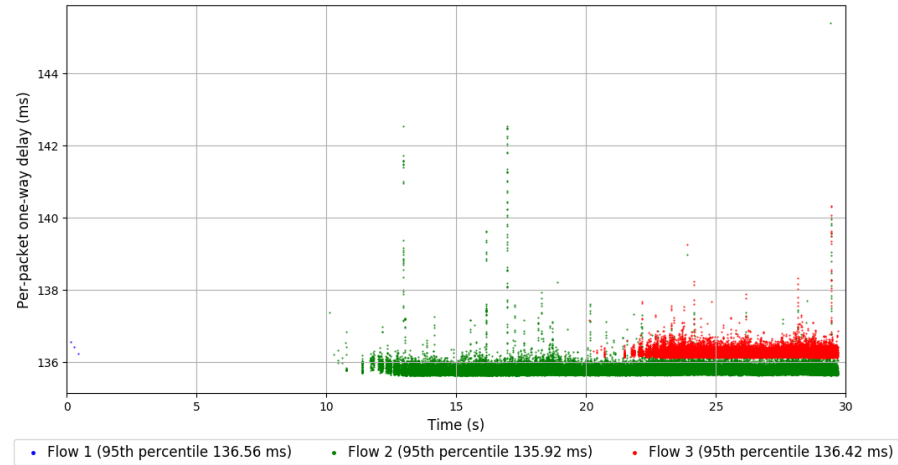
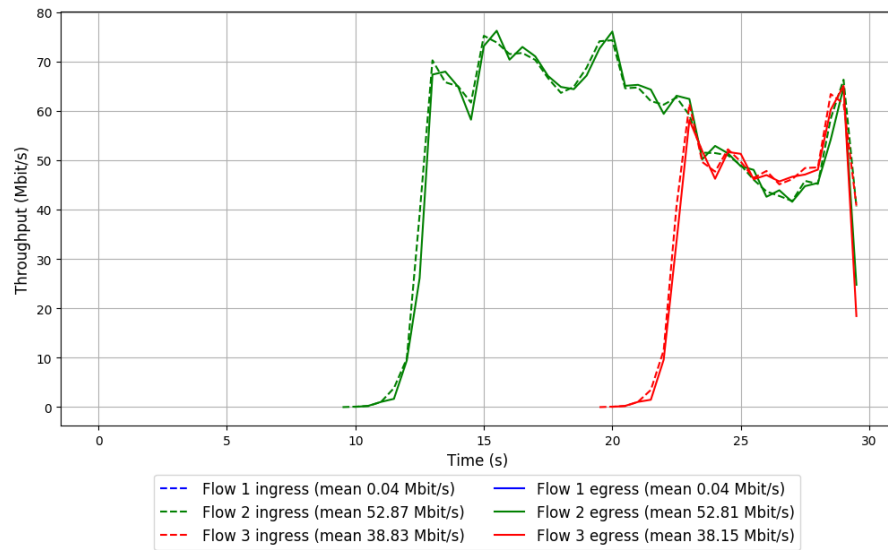
-- Flow 3:

Average throughput: 38.15 Mbit/s

95th percentile per-packet one-way delay: 136.419 ms

Loss rate: 4.72%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-01-03 09:13:57

End at: 2018-01-03 09:14:27

Below is generated by plot.py at 2018-01-03 12:16:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 42.65 Mbit/s

95th percentile per-packet one-way delay: 136.414 ms

Loss rate: 2.19%

-- Flow 1:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 137.106 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 48.37 Mbit/s

95th percentile per-packet one-way delay: 136.178 ms

Loss rate: 1.45%

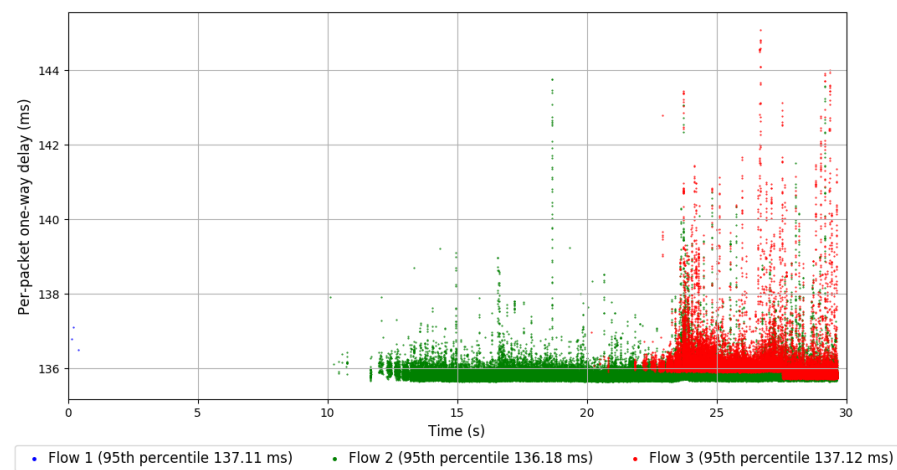
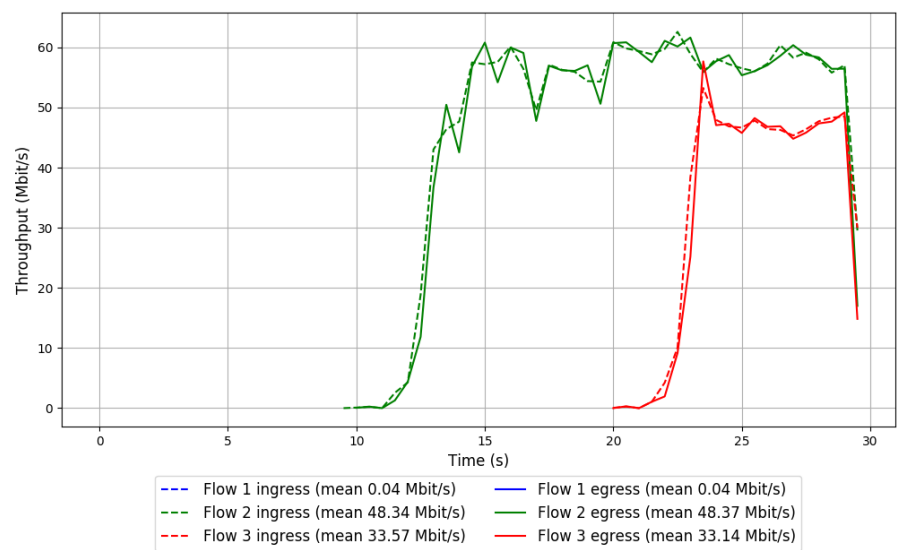
-- Flow 3:

Average throughput: 33.14 Mbit/s

95th percentile per-packet one-way delay: 137.119 ms

Loss rate: 4.35%

Run 10: Report of QUIC Cubic — Data Link

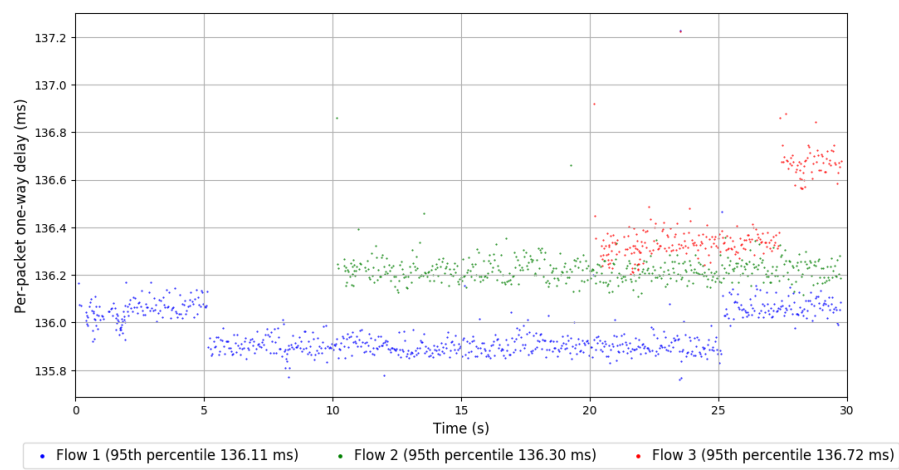
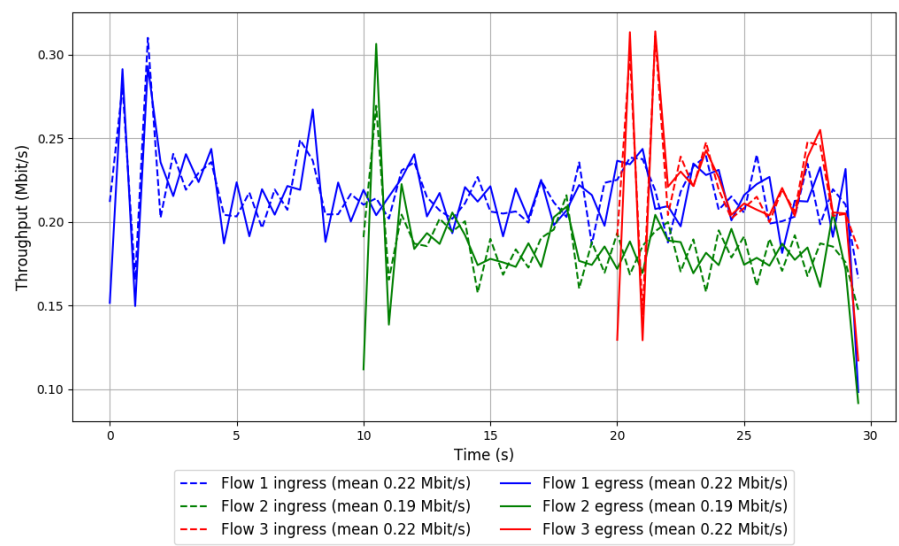


```
Run 1: Statistics of SCReAM

Start at: 2018-01-03 06:50:10
End at: 2018-01-03 06:50:40

# Below is generated by plot.py at 2018-01-03 12:16:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 136.433 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.107 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 136.296 ms
Loss rate: 1.43%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.715 ms
Loss rate: 2.63%
```

Run 1: Report of SReAM — Data Link

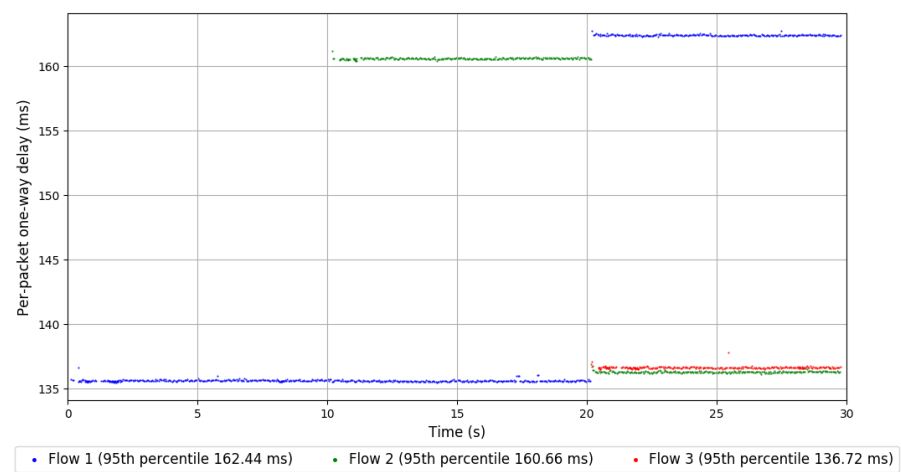
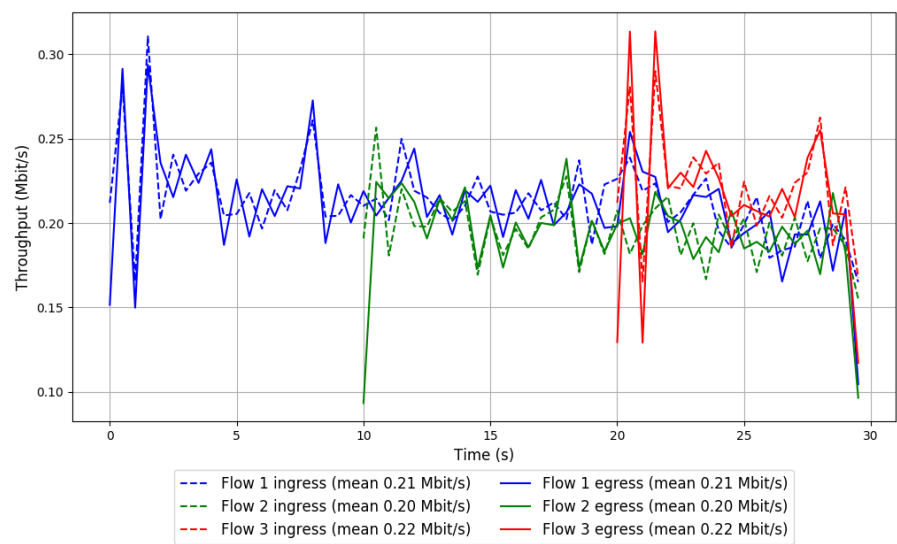


```
Run 2: Statistics of SCReAM

Start at: 2018-01-03 07:06:05
End at: 2018-01-03 07:06:35

# Below is generated by plot.py at 2018-01-03 12:16:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 162.417 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 162.443 ms
Loss rate: 0.95%
-- Flow 2:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 160.662 ms
Loss rate: 1.69%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.719 ms
Loss rate: 2.63%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SReAM

Start at: 2018-01-03 07:22:20

End at: 2018-01-03 07:22:50

Below is generated by plot.py at 2018-01-03 12:16:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 136.734 ms

Loss rate: 1.33%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.206 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.757 ms

Loss rate: 1.42%

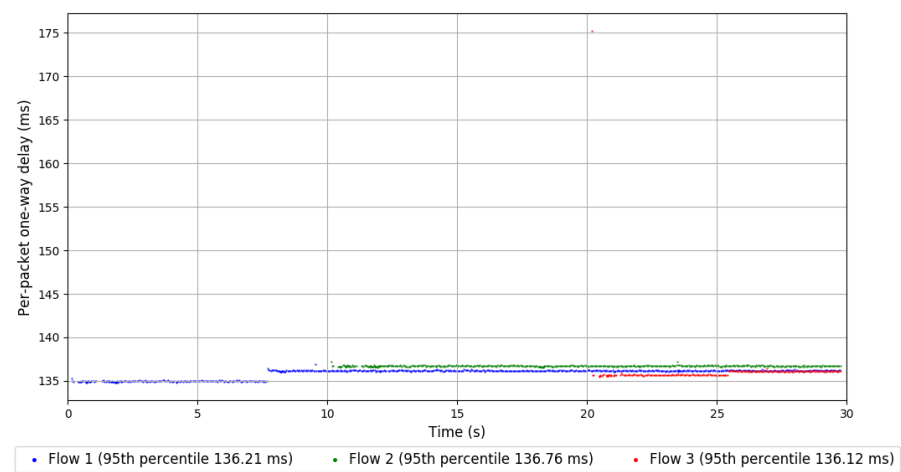
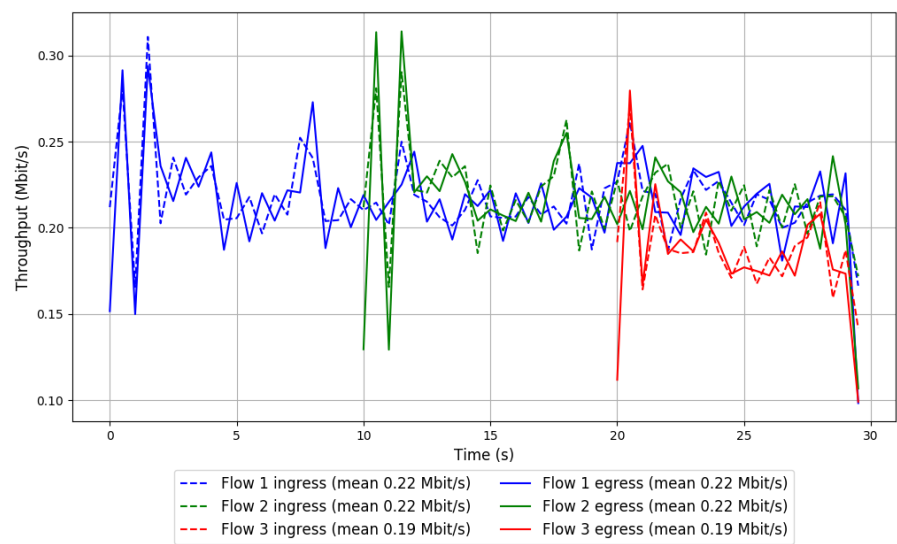
-- Flow 3:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 136.123 ms

Loss rate: 2.62%

Run 3: Report of SReAM — Data Link

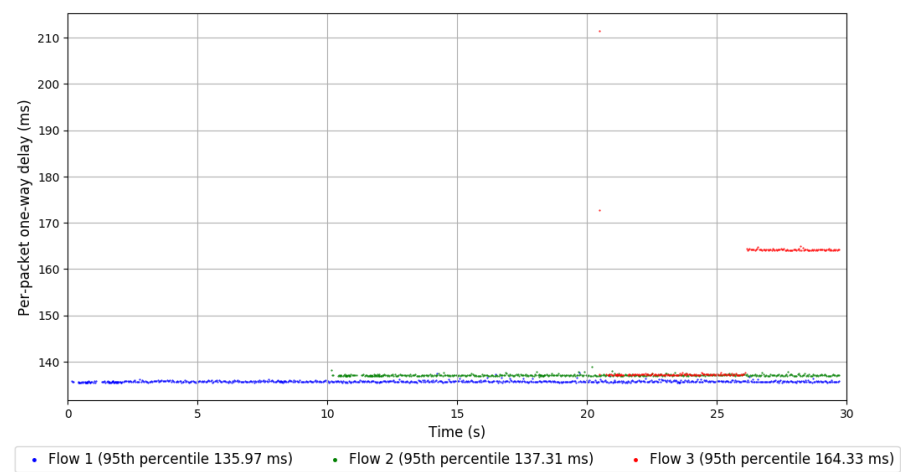
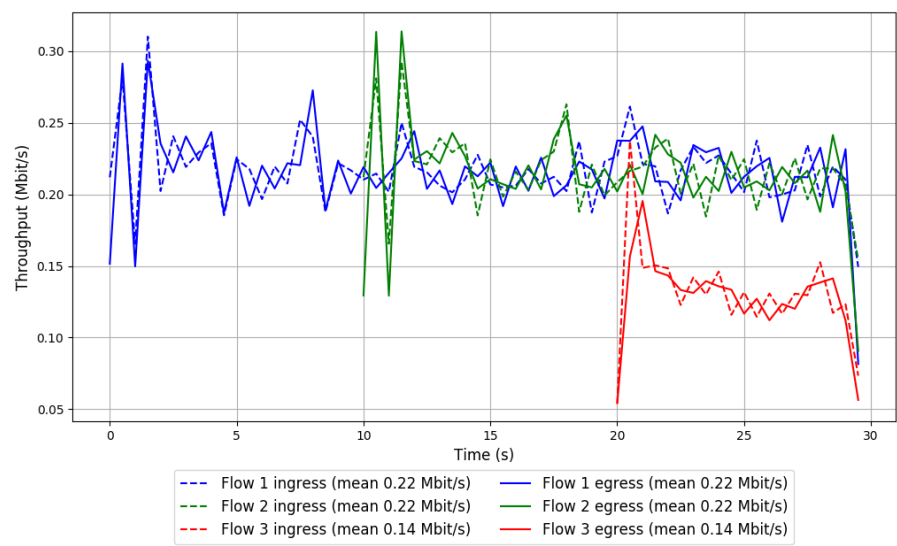


```
Run 4: Statistics of SReAM

Start at: 2018-01-03 07:36:41
End at: 2018-01-03 07:37:11

# Below is generated by plot.py at 2018-01-03 12:16:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 164.097 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.974 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.306 ms
Loss rate: 1.41%
-- Flow 3:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 164.326 ms
Loss rate: 2.45%
```

Run 4: Report of SCSReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-01-03 07:52:02

End at: 2018-01-03 07:52:32

Below is generated by plot.py at 2018-01-03 12:16:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 164.163 ms

Loss rate: 1.46%

-- Flow 1:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 161.905 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 164.129 ms

Loss rate: 1.61%

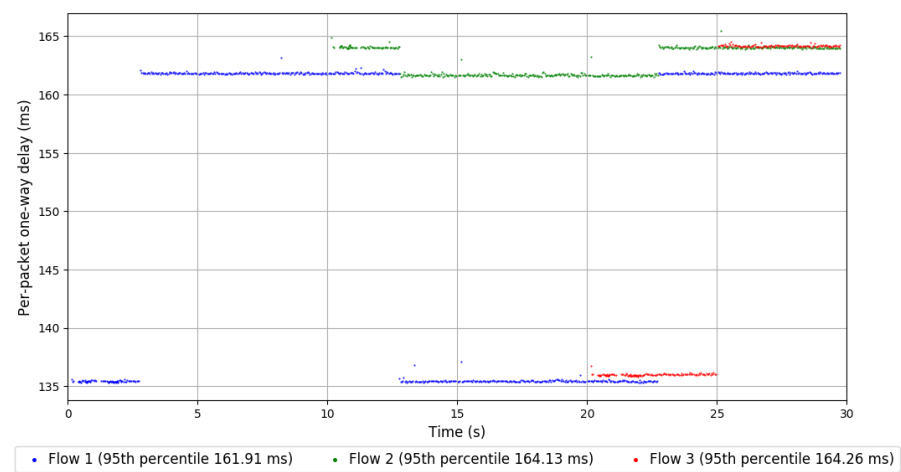
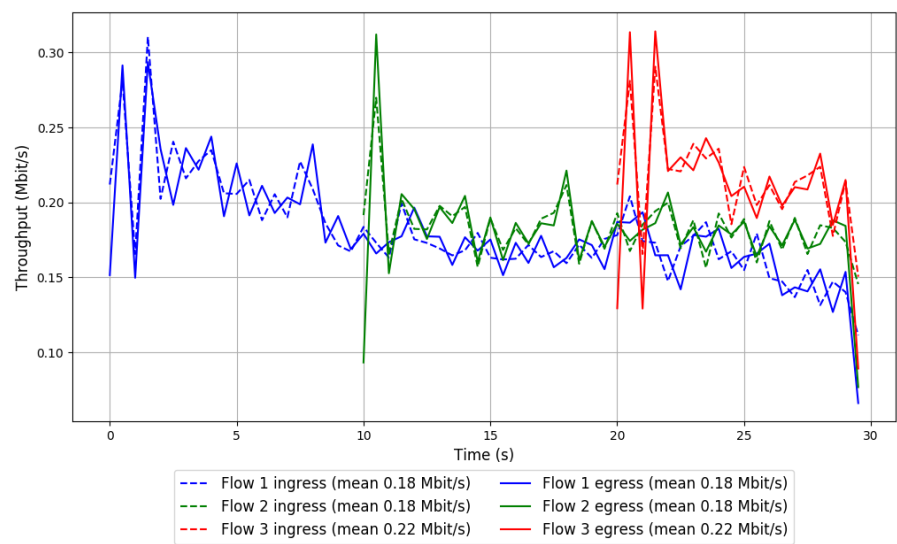
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 164.257 ms

Loss rate: 2.79%

Run 5: Report of SReAM — Data Link

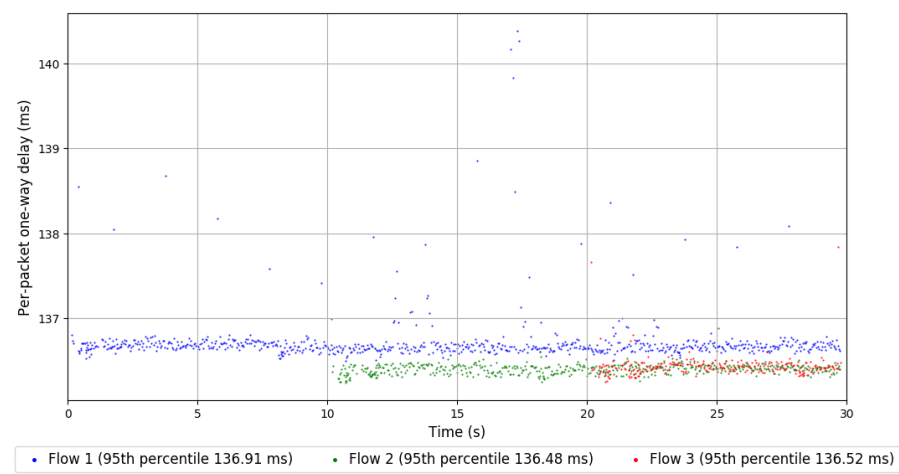
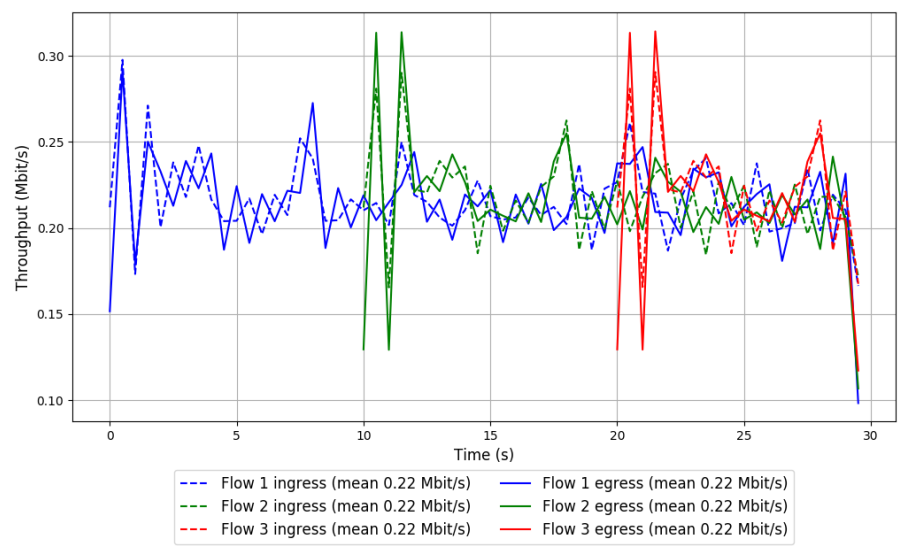


```
Run 6: Statistics of SReAM

Start at: 2018-01-03 08:07:03
End at: 2018-01-03 08:07:33

# Below is generated by plot.py at 2018-01-03 12:16:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 136.765 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.910 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.480 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.522 ms
Loss rate: 2.63%
```

Run 6: Report of SReAM — Data Link

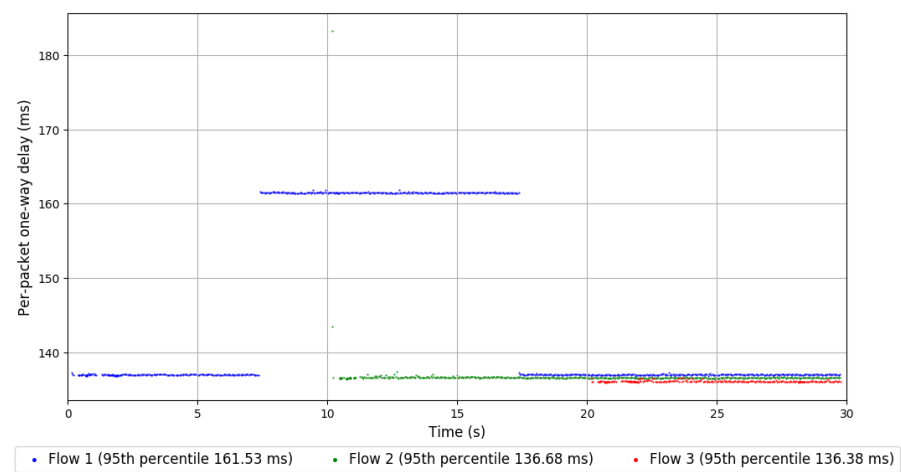
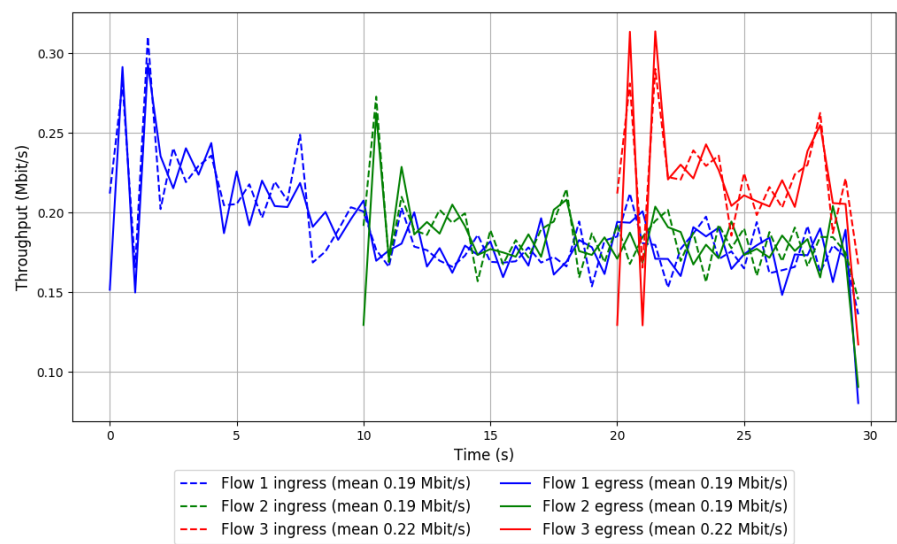


```
Run 7: Statistics of SReAM

Start at: 2018-01-03 08:22:40
End at: 2018-01-03 08:23:10

# Below is generated by plot.py at 2018-01-03 12:16:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 161.509 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 161.533 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 136.683 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.379 ms
Loss rate: 2.63%
```


Run 7: Report of SReAM — Data Link

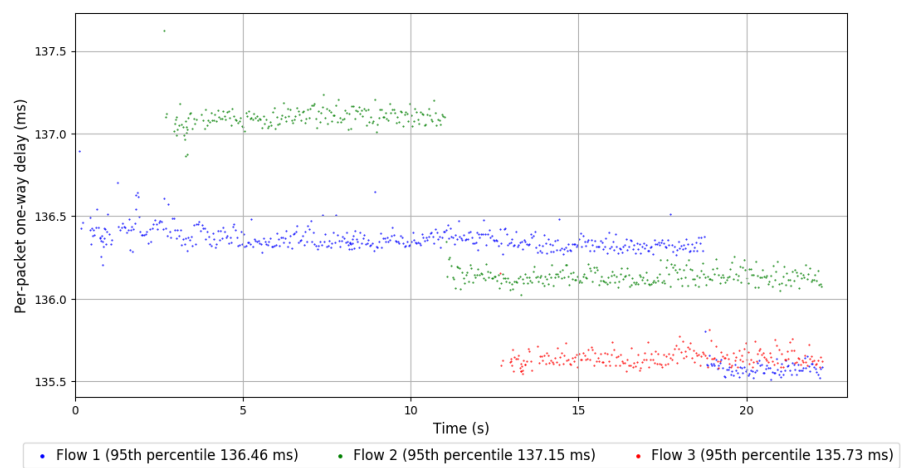
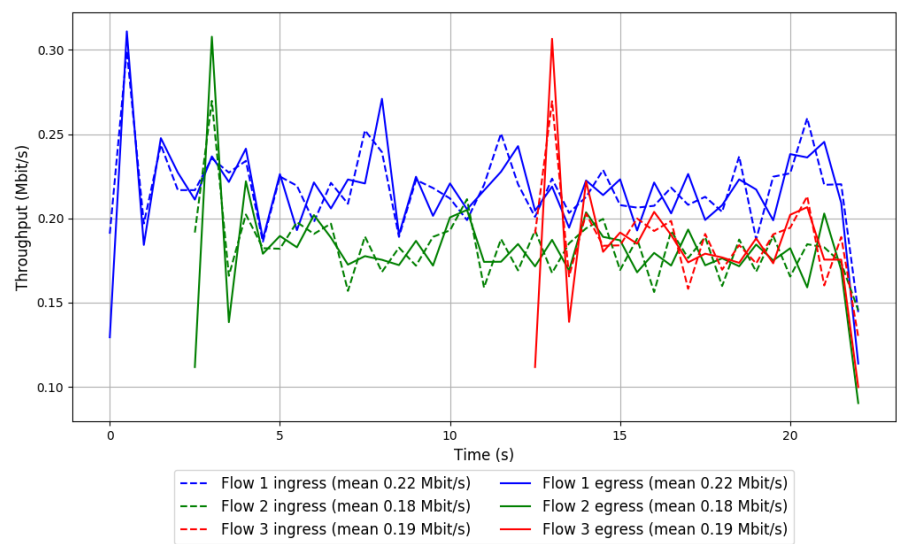


Run 8: Statistics of SReAM

Start at: 2018-01-03 08:37:59

End at: 2018-01-03 08:38:29

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-01-03 08:53:36

End at: 2018-01-03 08:54:06

Below is generated by plot.py at 2018-01-03 12:16:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 164.055 ms

Loss rate: 1.30%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.756 ms

Loss rate: 0.91%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.200 ms

Loss rate: 1.41%

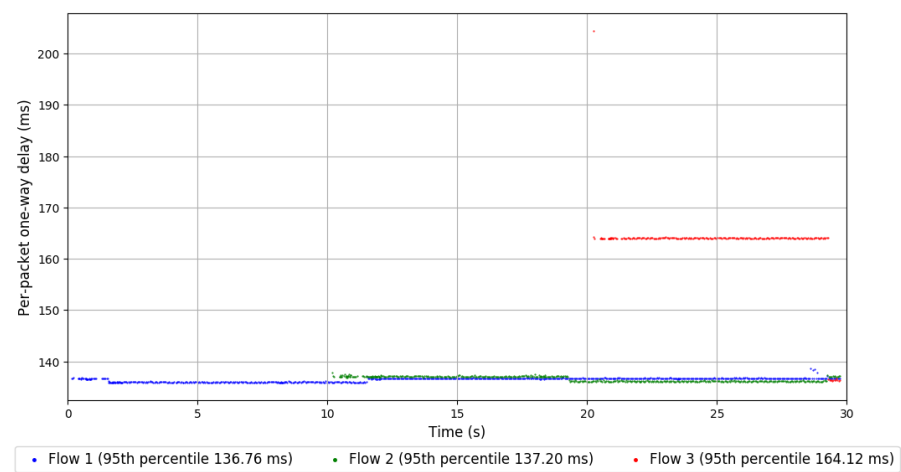
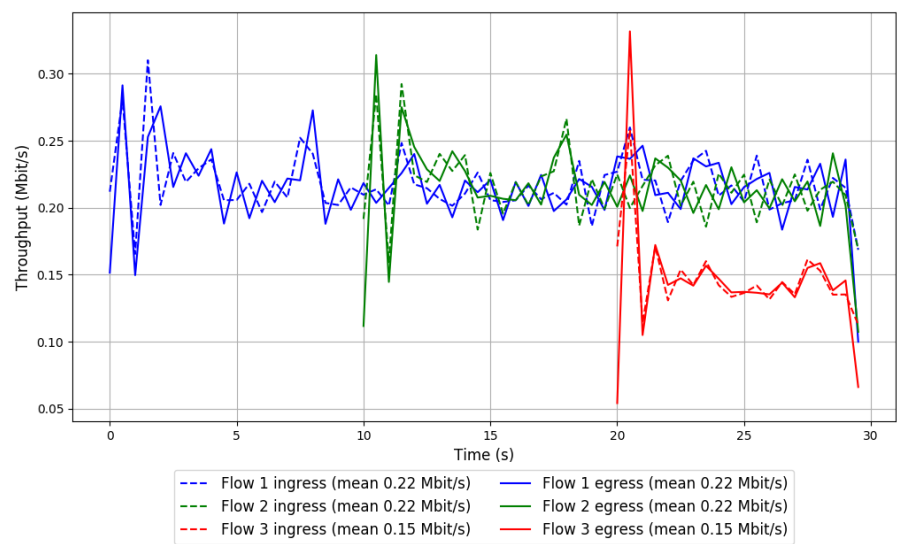
-- Flow 3:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 164.121 ms

Loss rate: 2.67%

Run 9: Report of SCRaM — Data Link

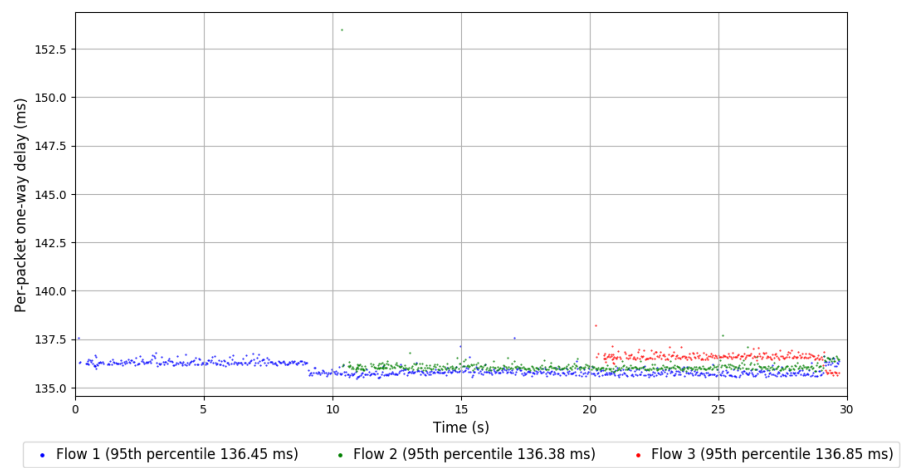
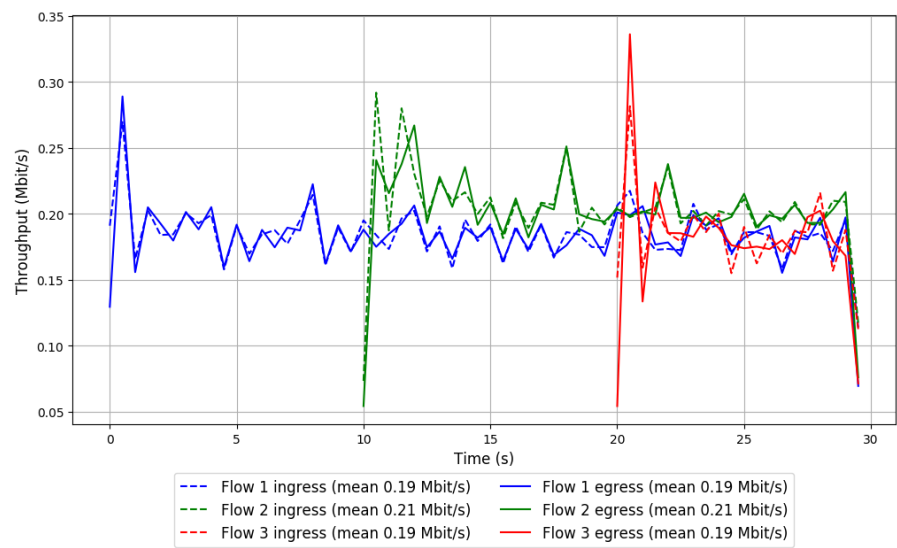


```
Run 10: Statistics of SCReAM

Start at: 2018-01-03 09:08:18
End at: 2018-01-03 09:08:48

# Below is generated by plot.py at 2018-01-03 12:16:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 136.667 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 136.450 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 136.382 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 136.854 ms
Loss rate: 2.72%
```

Run 10: Report of SCReAM — Data Link

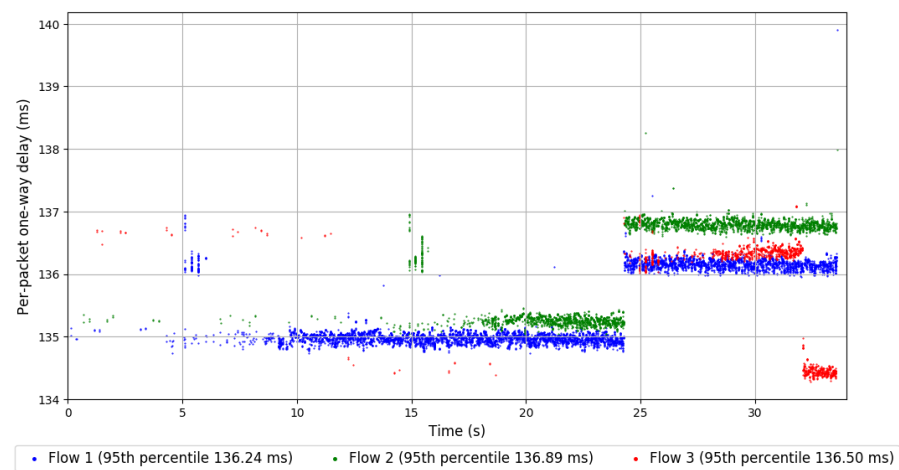
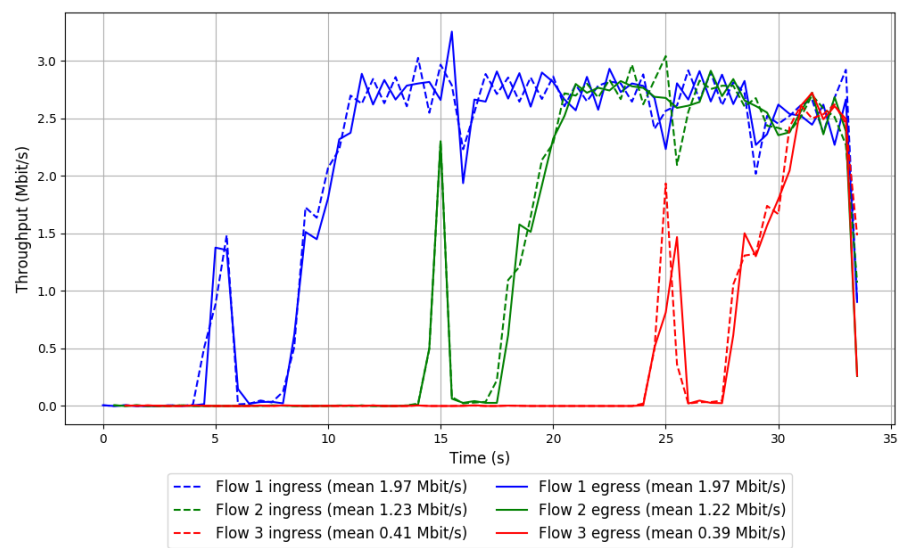


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-03 06:42:17
End at: 2018-01-03 06:42:47

# Below is generated by plot.py at 2018-01-03 12:16:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.54 Mbit/s
95th percentile per-packet one-way delay: 136.846 ms
Loss rate: 1.78%
-- Flow 1:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 136.243 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 136.892 ms
Loss rate: 1.67%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 136.505 ms
Loss rate: 6.51%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-01-03 06:58:02

End at: 2018-01-03 06:58:32

Below is generated by plot.py at 2018-01-03 12:16:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.61 Mbit/s

95th percentile per-packet one-way delay: 162.770 ms

Loss rate: 1.73%

-- Flow 1:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 162.797 ms

Loss rate: 1.09%

-- Flow 2:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 136.284 ms

Loss rate: 1.77%

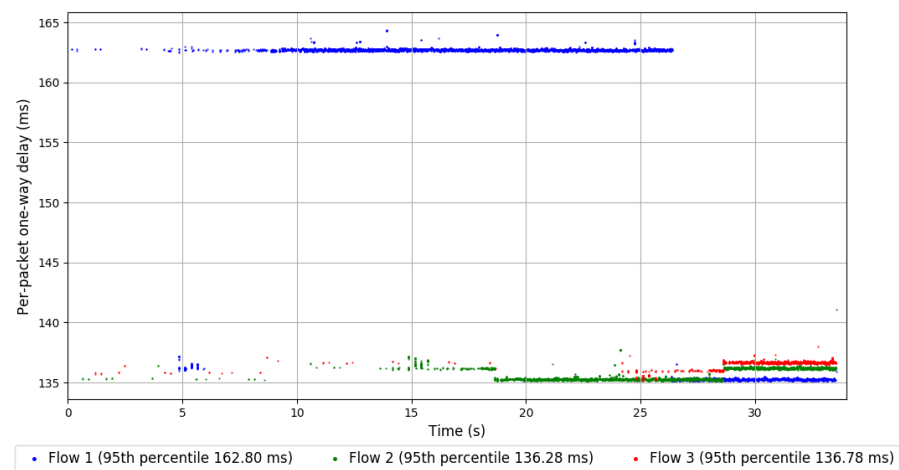
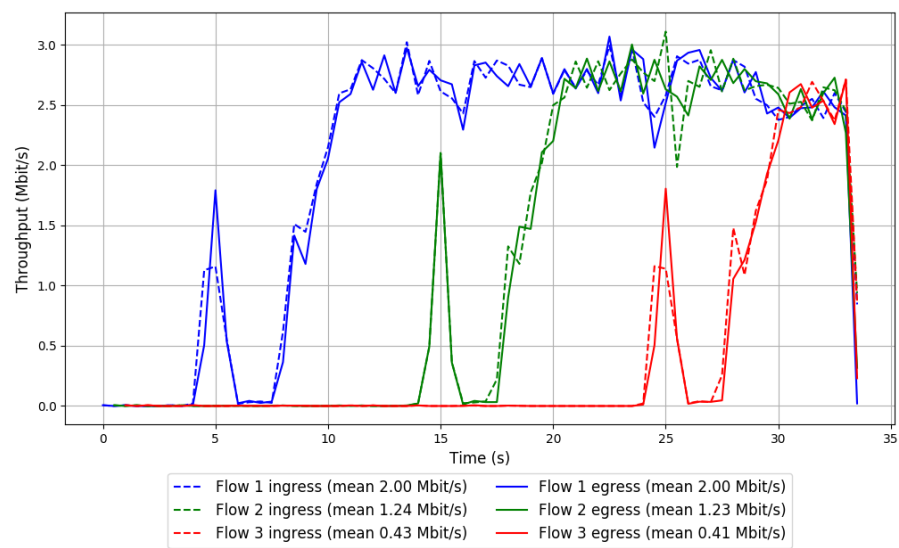
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 136.775 ms

Loss rate: 4.73%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-03 07:14:11

End at: 2018-01-03 07:14:41

Below is generated by plot.py at 2018-01-03 12:16:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.60 Mbit/s

95th percentile per-packet one-way delay: 136.729 ms

Loss rate: 1.73%

-- Flow 1:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 135.462 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 136.716 ms

Loss rate: 2.08%

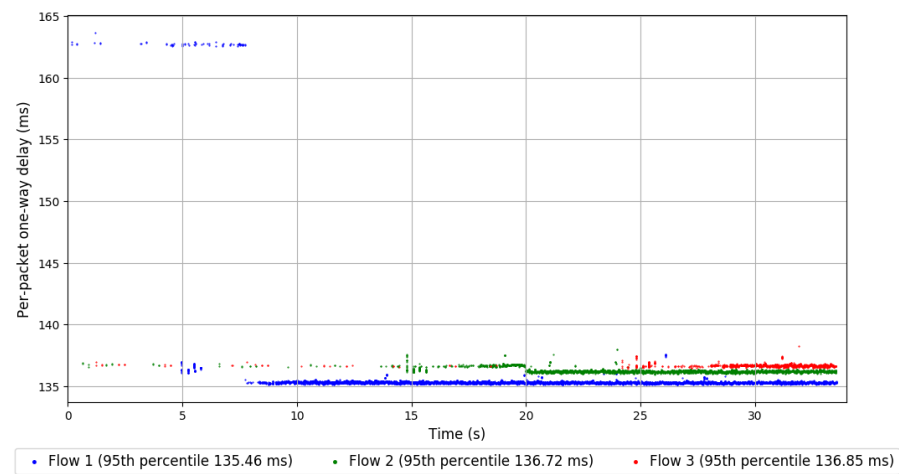
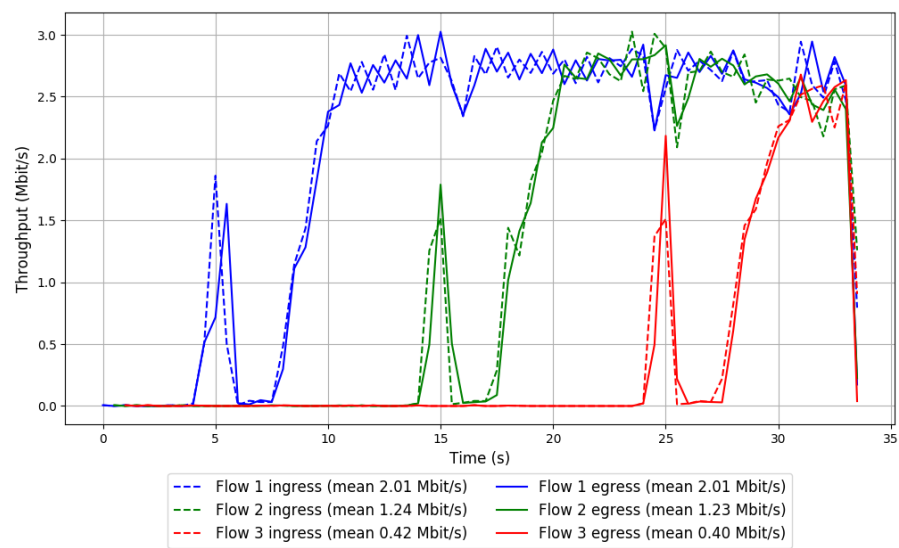
-- Flow 3:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 136.848 ms

Loss rate: 5.01%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-03 07:29:58

End at: 2018-01-03 07:30:28

Below is generated by plot.py at 2018-01-03 12:16:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.45 Mbit/s

95th percentile per-packet one-way delay: 161.658 ms

Loss rate: 2.01%

-- Flow 1:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 136.307 ms

Loss rate: 1.39%

-- Flow 2:

Average throughput: 1.15 Mbit/s

95th percentile per-packet one-way delay: 161.766 ms

Loss rate: 1.86%

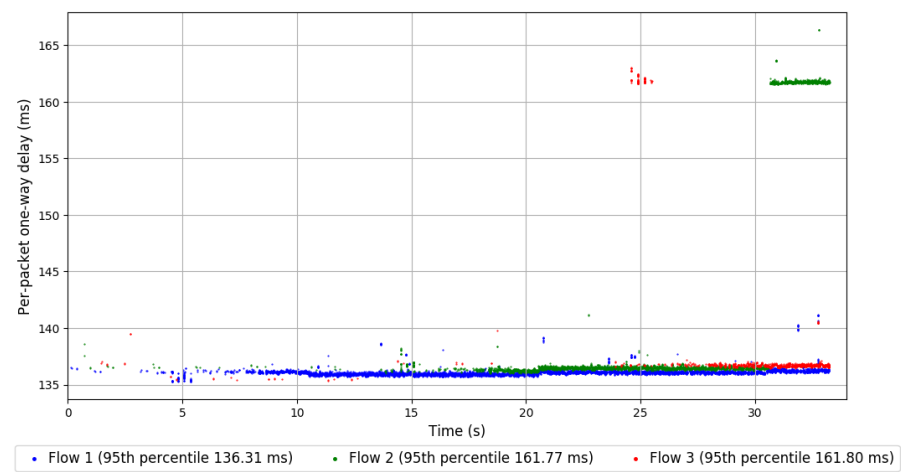
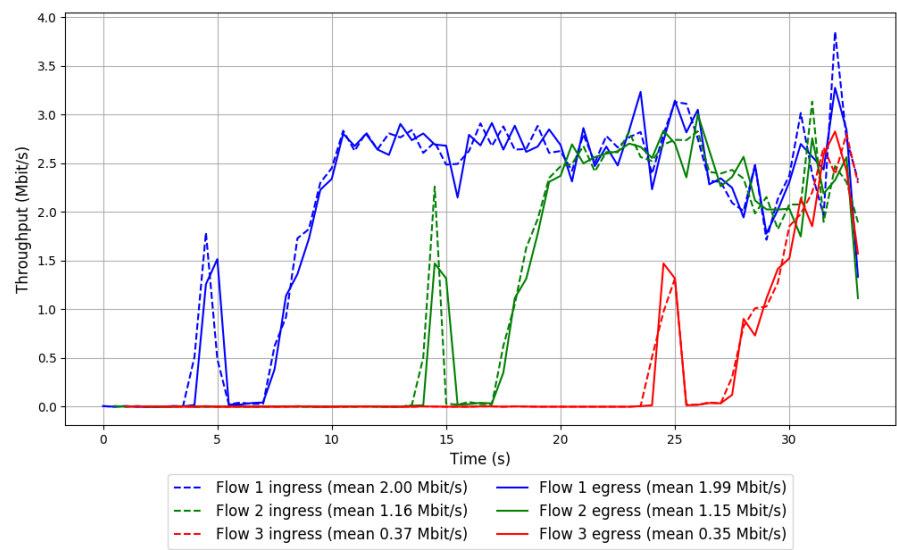
-- Flow 3:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 161.797 ms

Loss rate: 6.06%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-03 07:44:34

End at: 2018-01-03 07:45:04

Below is generated by plot.py at 2018-01-03 12:16:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.57 Mbit/s

95th percentile per-packet one-way delay: 136.872 ms

Loss rate: 1.65%

-- Flow 1:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 136.014 ms

Loss rate: 1.06%

-- Flow 2:

Average throughput: 1.21 Mbit/s

95th percentile per-packet one-way delay: 136.952 ms

Loss rate: 1.52%

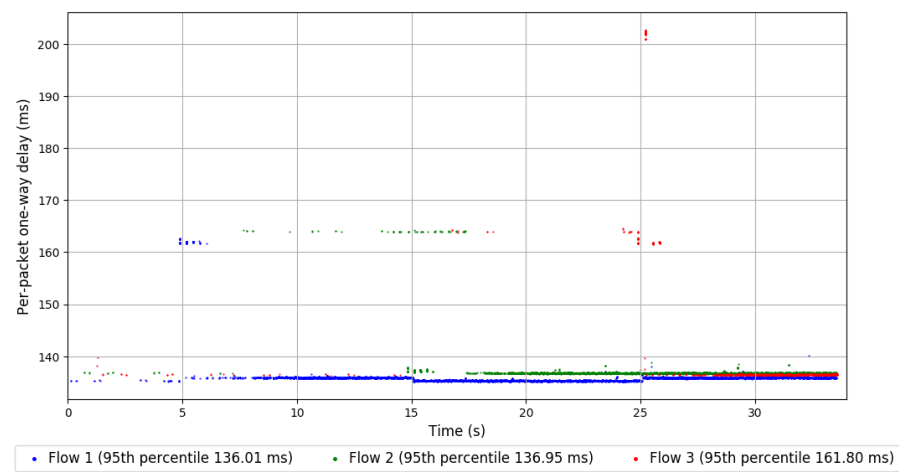
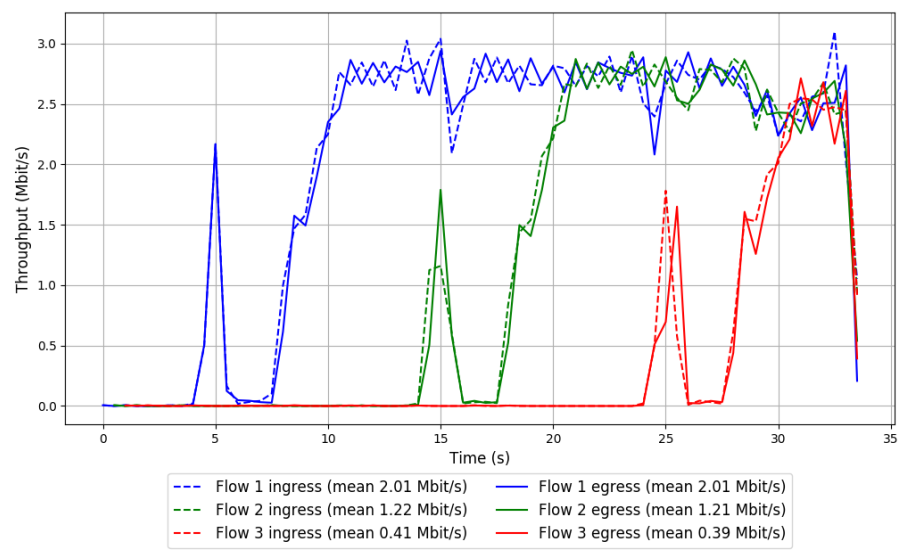
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 161.801 ms

Loss rate: 5.02%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-03 07:59:54

End at: 2018-01-03 08:00:24

Below is generated by plot.py at 2018-01-03 12:16:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.51 Mbit/s

95th percentile per-packet one-way delay: 159.737 ms

Loss rate: 1.90%

-- Flow 1:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 136.042 ms

Loss rate: 1.06%

-- Flow 2:

Average throughput: 1.20 Mbit/s

95th percentile per-packet one-way delay: 136.065 ms

Loss rate: 1.94%

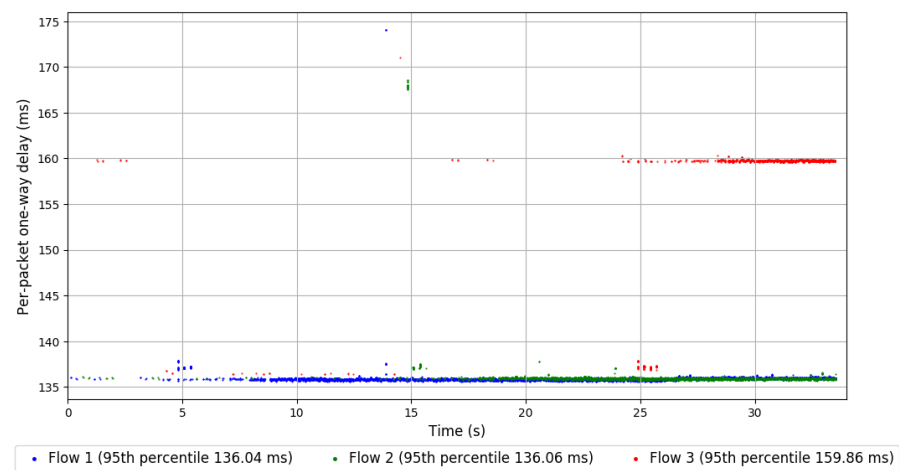
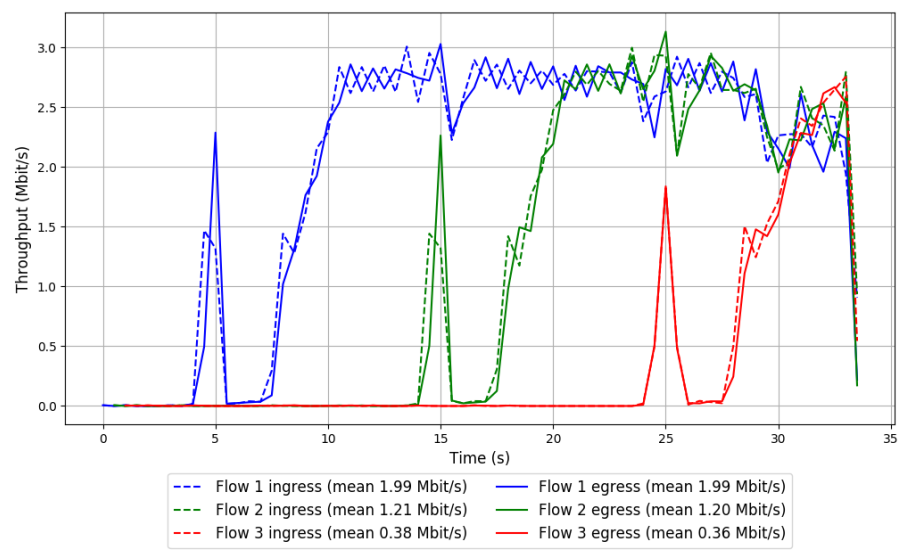
-- Flow 3:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 159.861 ms

Loss rate: 6.32%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-03 08:14:56

End at: 2018-01-03 08:15:26

Below is generated by plot.py at 2018-01-03 12:16:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.59 Mbit/s

95th percentile per-packet one-way delay: 161.917 ms

Loss rate: 1.71%

-- Flow 1:

Average throughput: 2.02 Mbit/s

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

Loss rate: 1.03%

-- Flow 2:

Average throughput: 1.20 Mbit/s

95th percentile per-packet one-way delay: 161.957 ms

Loss rate: 1.44%

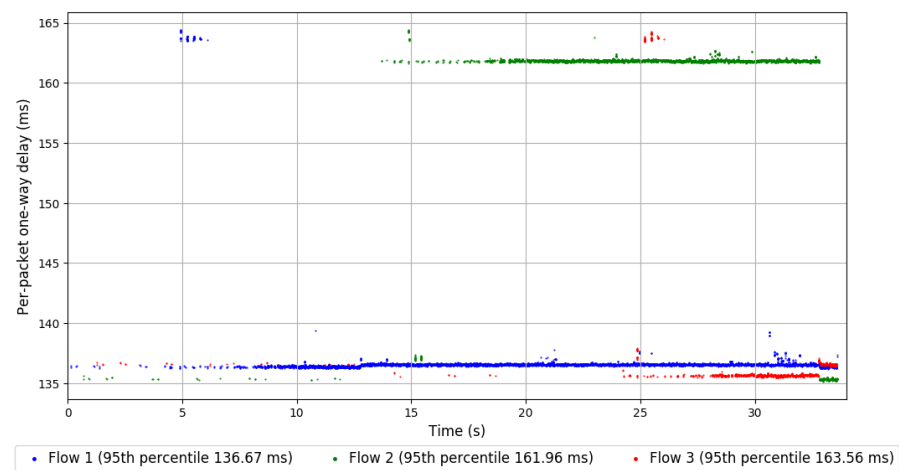
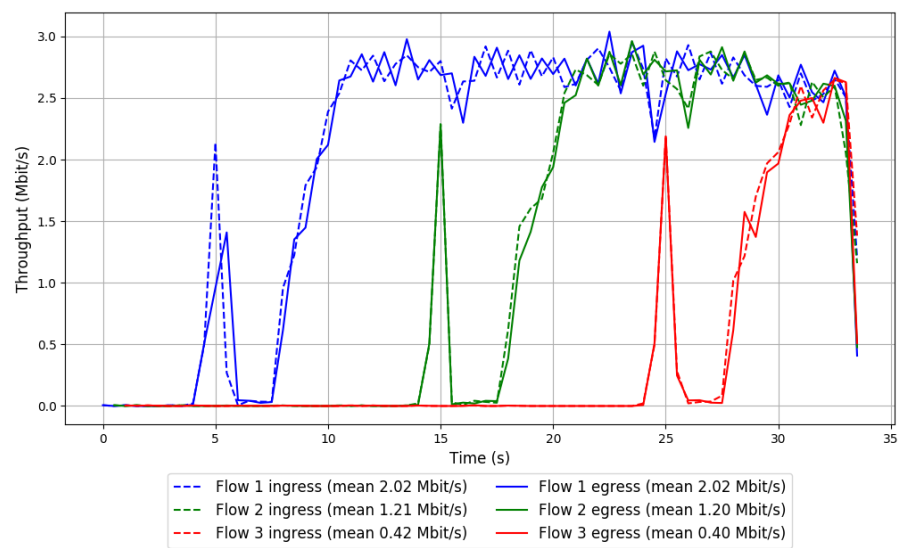
-- Flow 3:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 163.561 ms

Loss rate: 5.82%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-03 08:30:22

End at: 2018-01-03 08:30:52

Below is generated by plot.py at 2018-01-03 12:16:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.54 Mbit/s

95th percentile per-packet one-way delay: 136.817 ms

Loss rate: 1.83%

-- Flow 1:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 136.735 ms

Loss rate: 0.86%

-- Flow 2:

Average throughput: 1.22 Mbit/s

95th percentile per-packet one-way delay: 136.836 ms

Loss rate: 2.10%

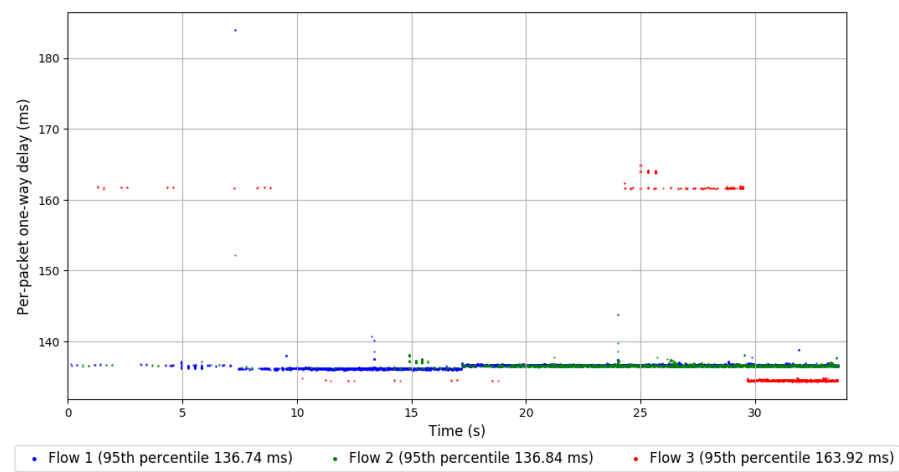
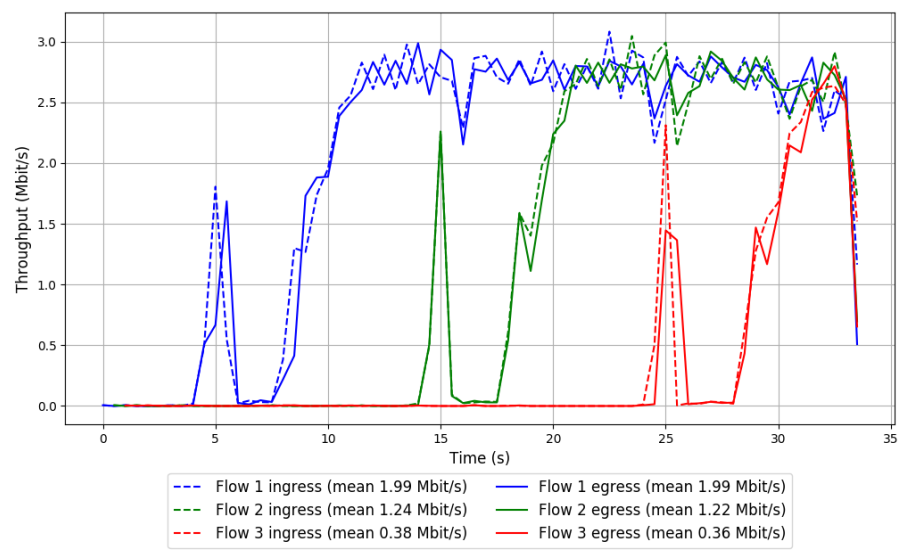
-- Flow 3:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 163.923 ms

Loss rate: 6.19%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-03 08:45:51

End at: 2018-01-03 08:46:21

Below is generated by plot.py at 2018-01-03 12:16:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.40 Mbit/s

95th percentile per-packet one-way delay: 163.933 ms

Loss rate: 1.76%

-- Flow 1:

Average throughput: 1.85 Mbit/s

95th percentile per-packet one-way delay: 161.942 ms

Loss rate: 1.11%

-- Flow 2:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 136.878 ms

Loss rate: 1.44%

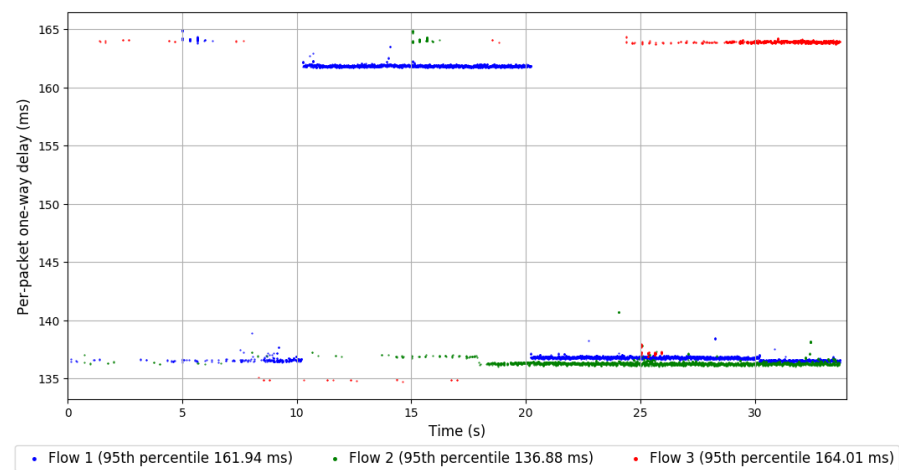
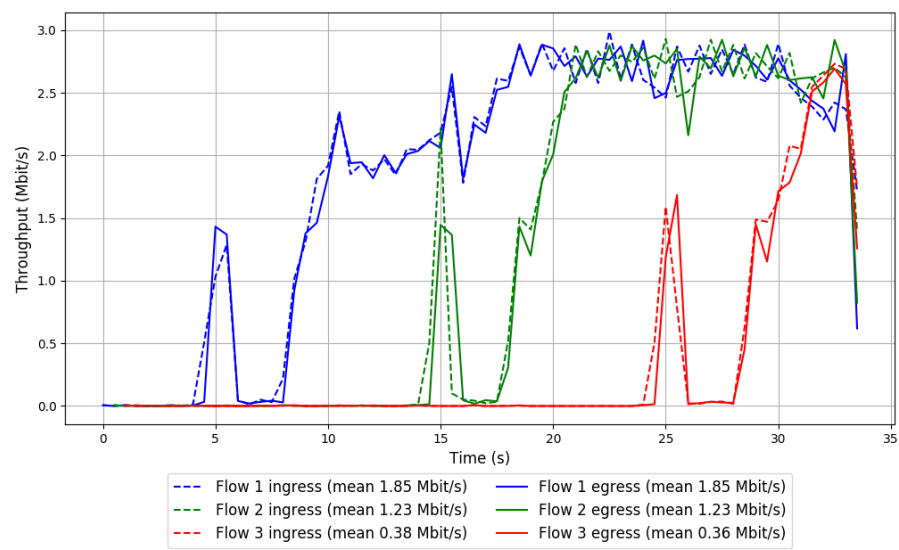
-- Flow 3:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 164.015 ms

Loss rate: 6.11%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-03 09:01:35

End at: 2018-01-03 09:02:05

Below is generated by plot.py at 2018-01-03 12:16:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.32 Mbit/s

95th percentile per-packet one-way delay: 137.332 ms

Loss rate: 2.21%

-- Flow 1:

Average throughput: 1.93 Mbit/s

95th percentile per-packet one-way delay: 137.388 ms

Loss rate: 1.45%

-- Flow 2:

Average throughput: 1.12 Mbit/s

95th percentile per-packet one-way delay: 137.073 ms

Loss rate: 2.15%

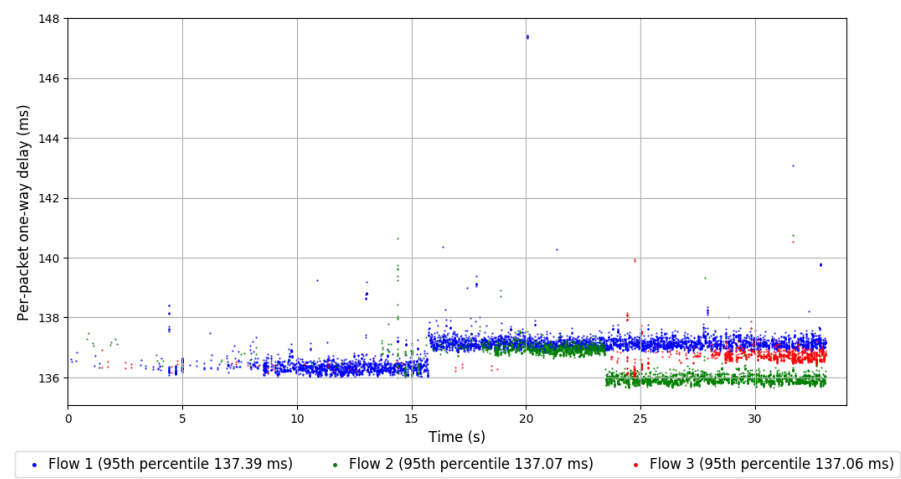
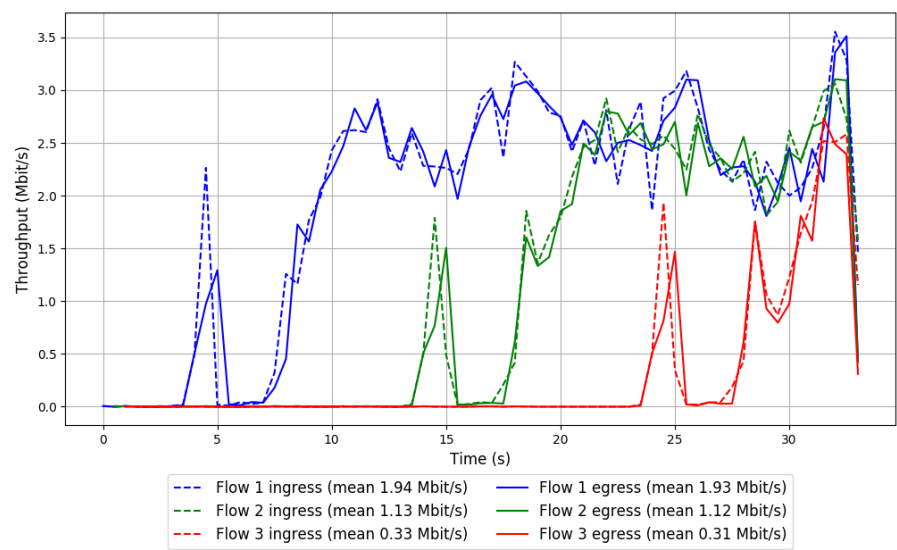
-- Flow 3:

Average throughput: 0.31 Mbit/s

95th percentile per-packet one-way delay: 137.061 ms

Loss rate: 7.19%

Run 10: Report of WebRTC media — Data Link

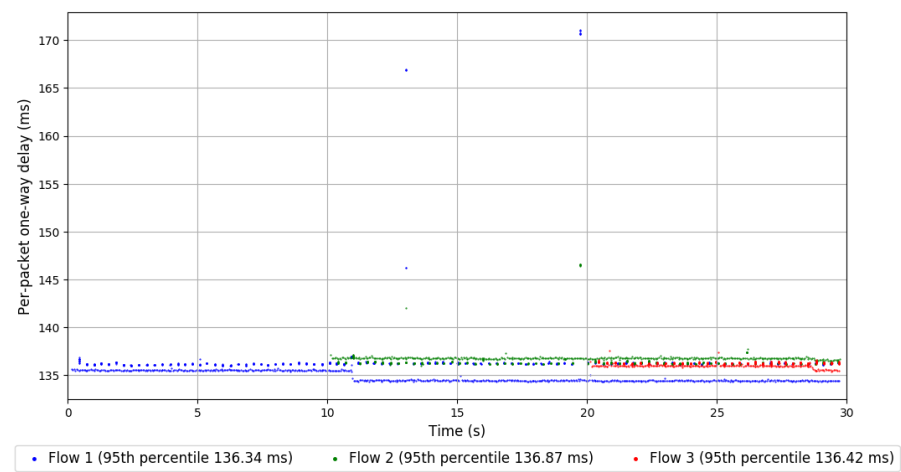
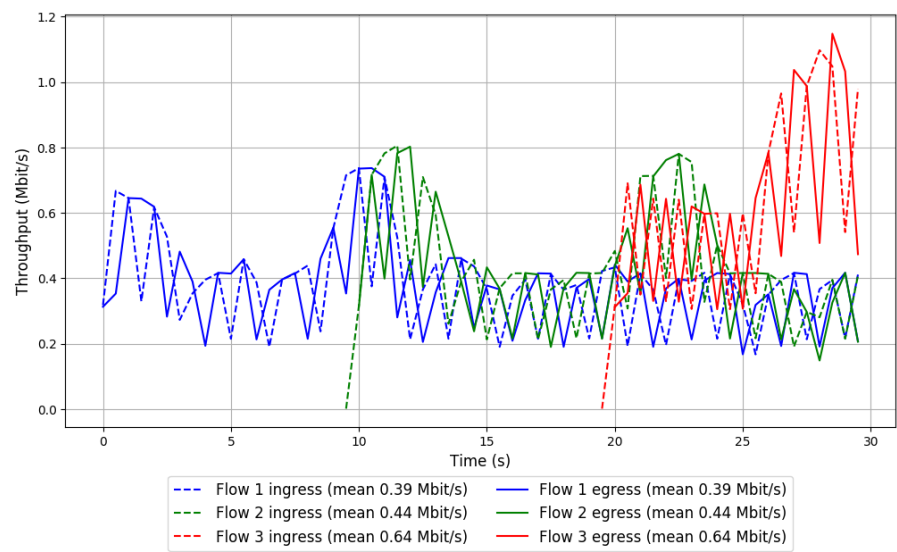


```
Run 1: Statistics of Sprout

Start at: 2018-01-03 06:43:06
End at: 2018-01-03 06:43:36

# Below is generated by plot.py at 2018-01-03 12:16:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.88 Mbit/s
95th percentile per-packet one-way delay: 136.815 ms
Loss rate: 1.74%
-- Flow 1:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 136.340 ms
Loss rate: 0.91%
-- Flow 2:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 136.868 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 136.417 ms
Loss rate: 4.01%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-03 06:58:52

End at: 2018-01-03 06:59:22

Below is generated by plot.py at 2018-01-03 12:16:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.76 Mbit/s

95th percentile per-packet one-way delay: 136.715 ms

Loss rate: 1.39%

-- Flow 1:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 136.711 ms

Loss rate: 1.04%

-- Flow 2:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 136.711 ms

Loss rate: 1.35%

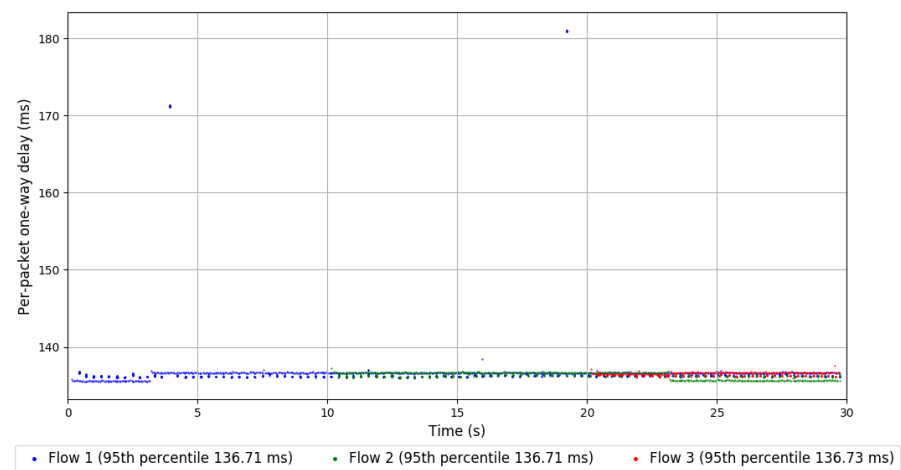
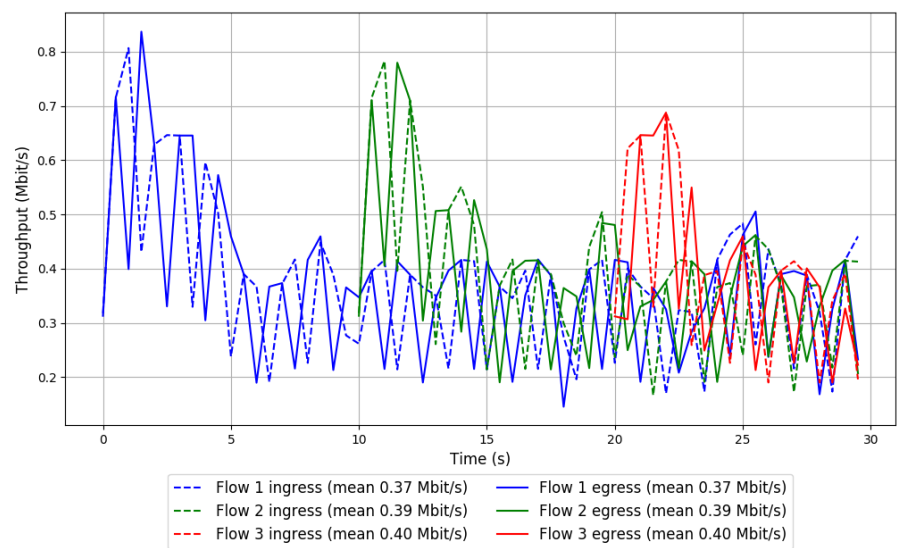
-- Flow 3:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 136.727 ms

Loss rate: 2.46%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-03 07:15:01

End at: 2018-01-03 07:15:31

Below is generated by plot.py at 2018-01-03 12:16:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.80 Mbit/s

95th percentile per-packet one-way delay: 136.849 ms

Loss rate: 1.28%

-- Flow 1:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 136.867 ms

Loss rate: 1.47%

-- Flow 2:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 136.839 ms

Loss rate: 0.27%

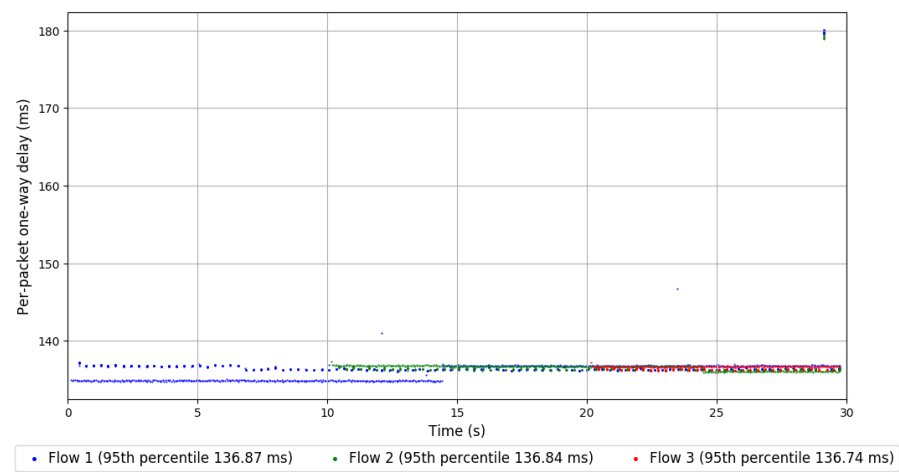
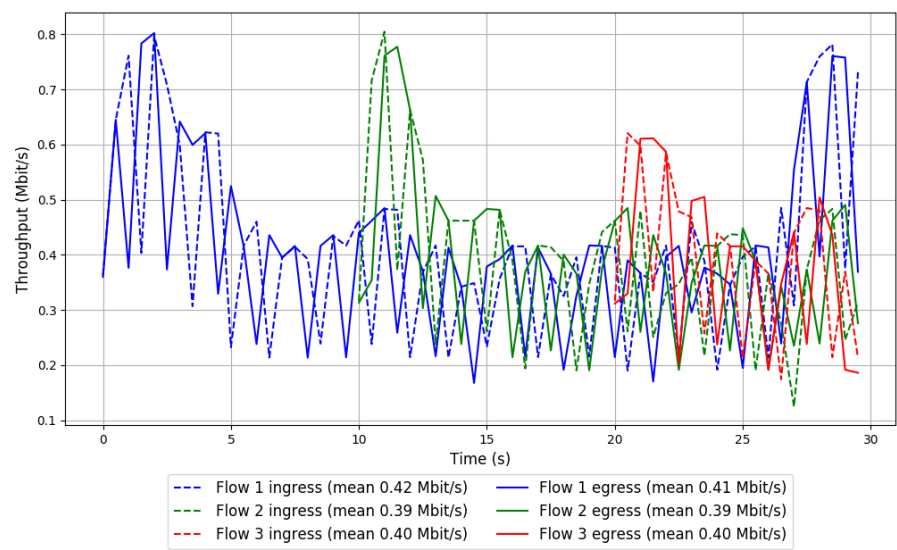
-- Flow 3:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 136.738 ms

Loss rate: 2.67%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-03 07:30:48

End at: 2018-01-03 07:31:18

Below is generated by plot.py at 2018-01-03 12:16:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.78 Mbit/s

95th percentile per-packet one-way delay: 137.218 ms

Loss rate: 1.16%

-- Flow 1:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 137.121 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 138.055 ms

Loss rate: 1.33%

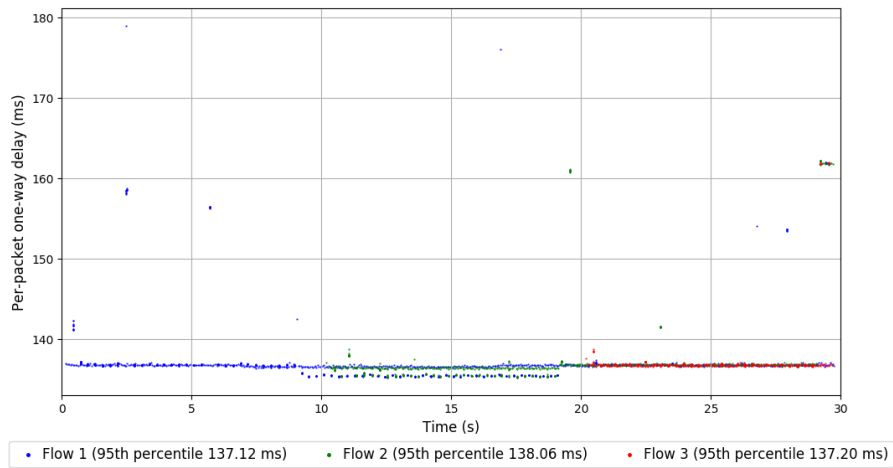
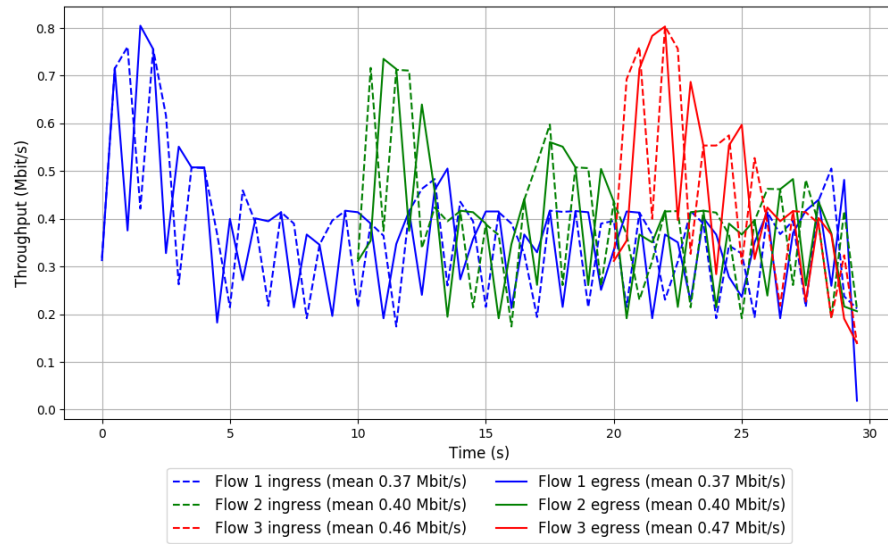
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 137.199 ms

Loss rate: 1.51%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-01-03 07:45:24

End at: 2018-01-03 07:45:54

Below is generated by plot.py at 2018-01-03 12:16:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.74 Mbit/s

95th percentile per-packet one-way delay: 163.933 ms

Loss rate: 1.41%

-- Flow 1:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 161.651 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 137.280 ms

Loss rate: 1.66%

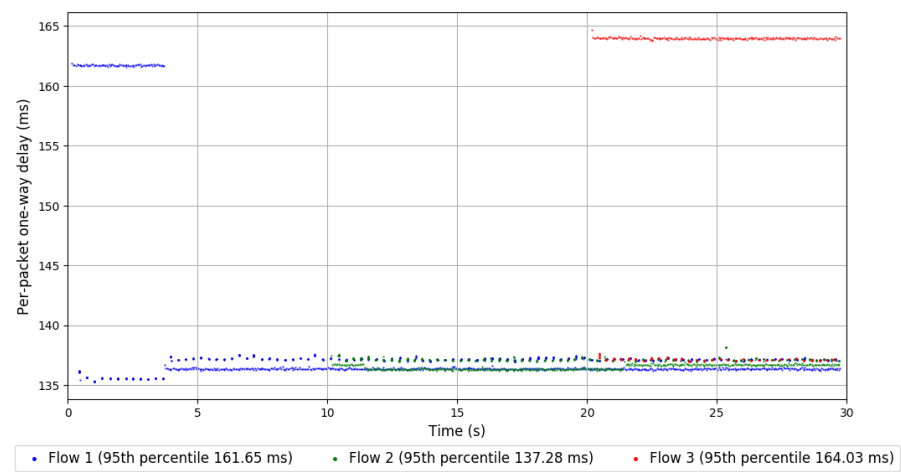
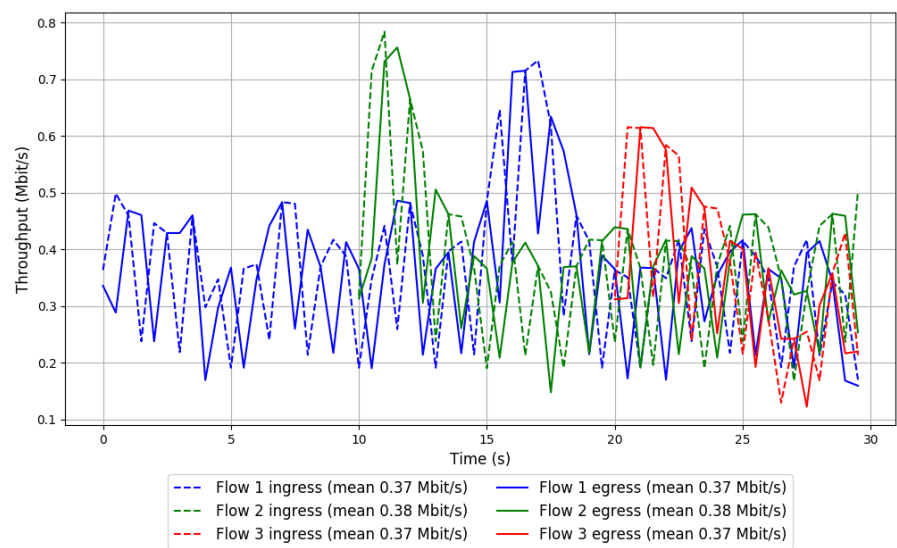
-- Flow 3:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 164.033 ms

Loss rate: 2.90%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-03 08:00:45

End at: 2018-01-03 08:01:15

Below is generated by plot.py at 2018-01-03 12:16:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 163.742 ms

Loss rate: 1.66%

-- Flow 1:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 163.765 ms

Loss rate: 1.44%

-- Flow 2:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 163.726 ms

Loss rate: 0.84%

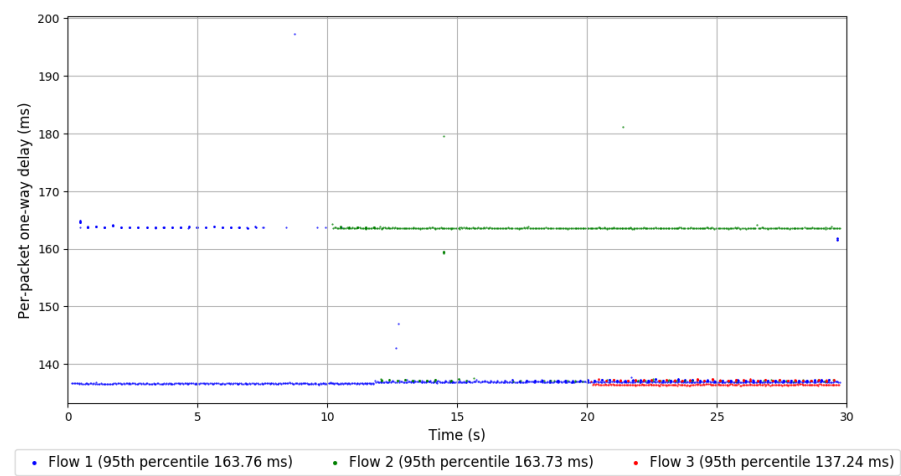
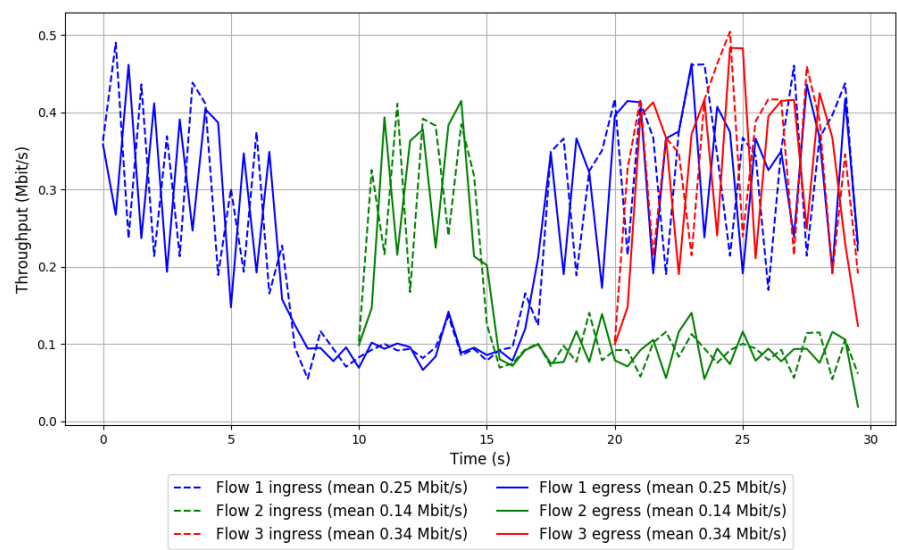
-- Flow 3:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 137.239 ms

Loss rate: 2.84%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-03 08:15:47

End at: 2018-01-03 08:16:17

Below is generated by plot.py at 2018-01-03 12:16:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.77 Mbit/s

95th percentile per-packet one-way delay: 161.534 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 161.561 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 137.330 ms

Loss rate: 1.57%

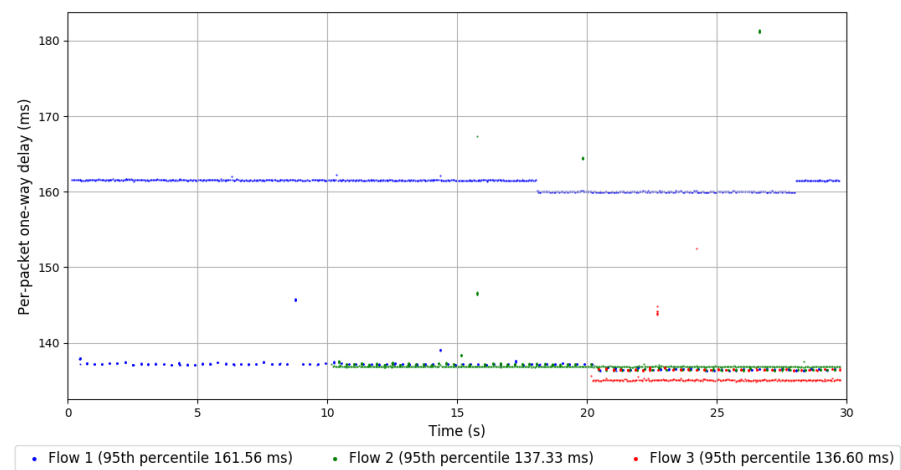
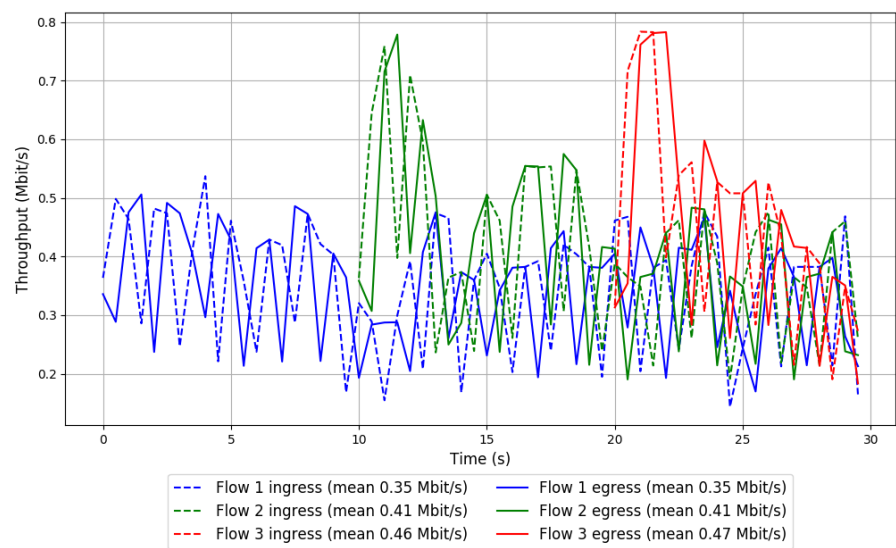
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 136.604 ms

Loss rate: 1.03%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-03 08:31:11

End at: 2018-01-03 08:31:41

Below is generated by plot.py at 2018-01-03 12:16:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.61 Mbit/s

95th percentile per-packet one-way delay: 164.118 ms

Loss rate: 1.69%

-- Flow 1:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 164.131 ms

Loss rate: 0.92%

-- Flow 2:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 163.973 ms

Loss rate: 2.62%

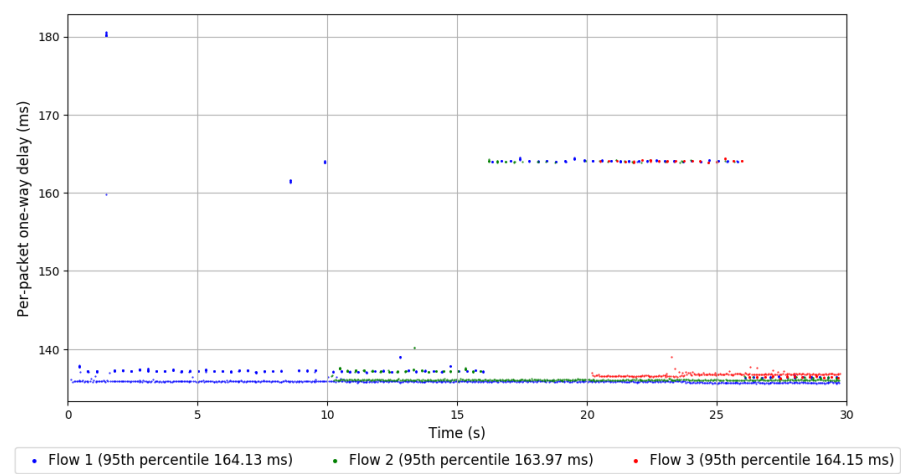
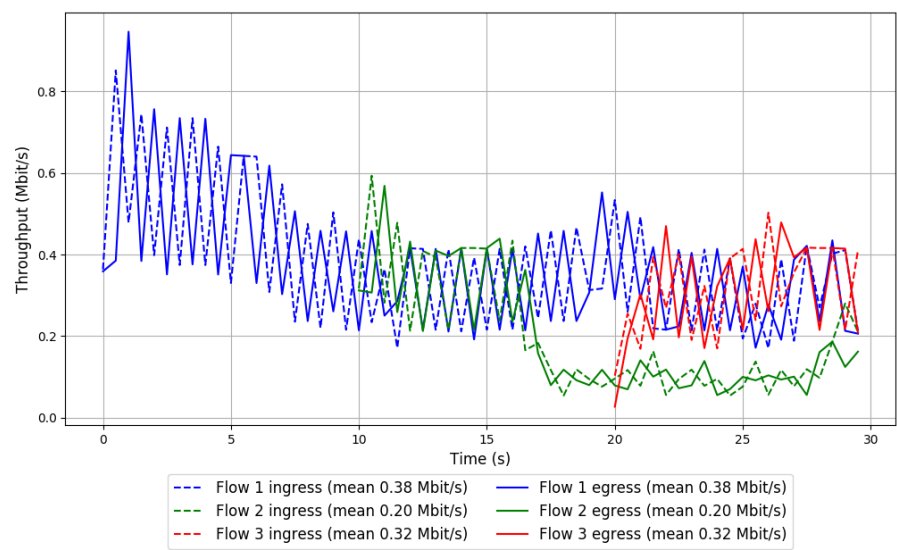
-- Flow 3:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 164.146 ms

Loss rate: 3.26%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-01-03 08:46:42

End at: 2018-01-03 08:47:12

Below is generated by plot.py at 2018-01-03 12:16:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.75 Mbit/s

95th percentile per-packet one-way delay: 164.158 ms

Loss rate: 1.53%

-- Flow 1:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 164.148 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 164.106 ms

Loss rate: 1.45%

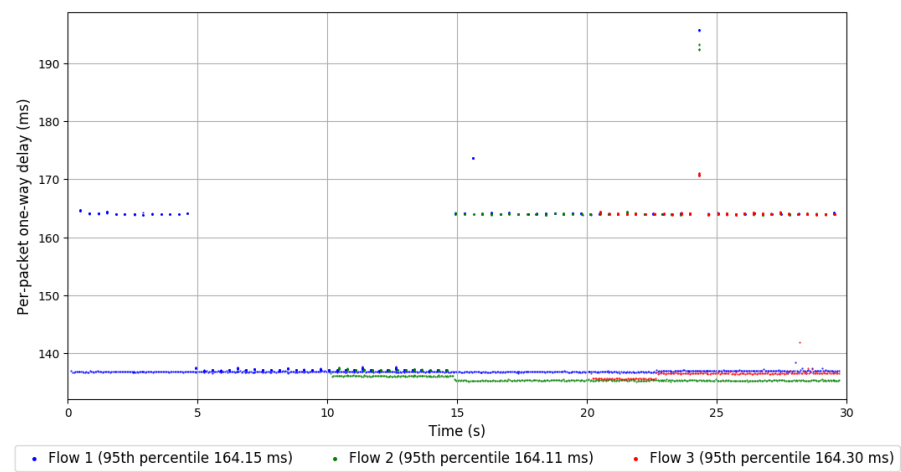
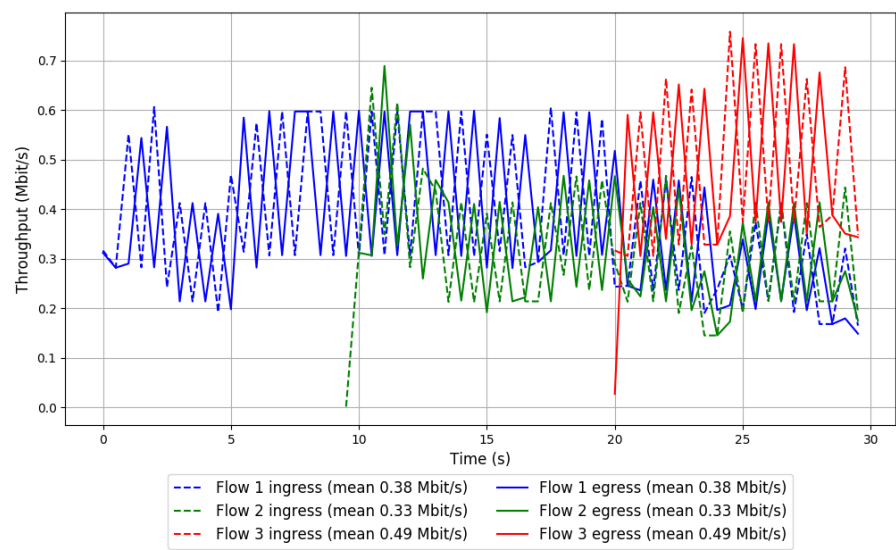
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 164.302 ms

Loss rate: 3.59%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-03 09:02:26

End at: 2018-01-03 09:02:56

Below is generated by plot.py at 2018-01-03 12:16:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.92 Mbit/s

95th percentile per-packet one-way delay: 137.366 ms

Loss rate: 1.51%

-- Flow 1:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 137.321 ms

Loss rate: 0.98%

-- Flow 2:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 137.400 ms

Loss rate: 1.30%

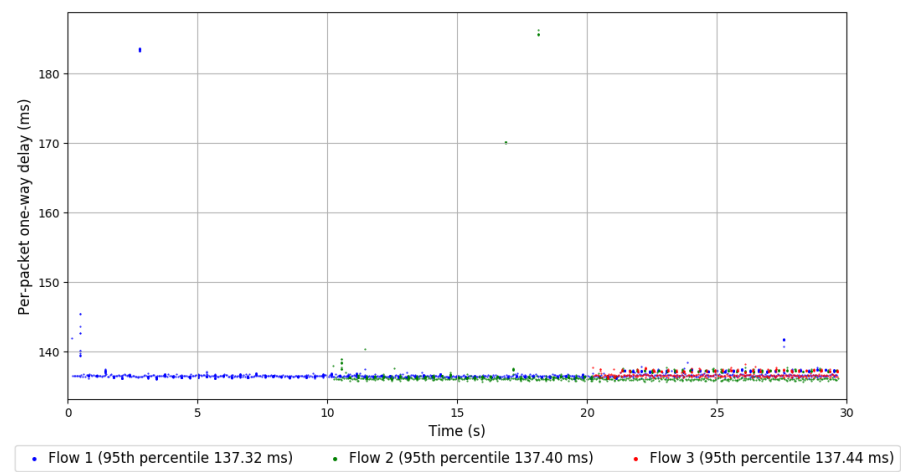
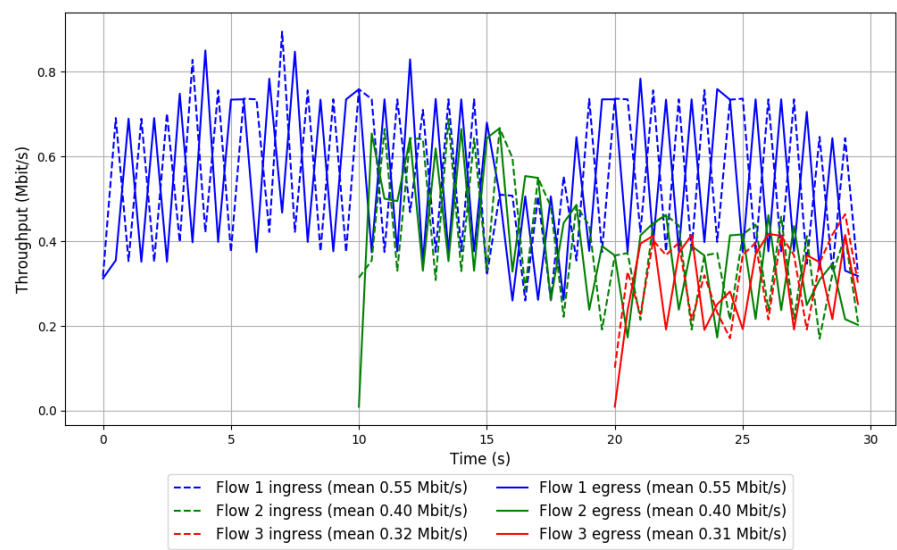
-- Flow 3:

Average throughput: 0.31 Mbit/s

95th percentile per-packet one-way delay: 137.437 ms

Loss rate: 4.84%

Run 10: Report of Sprout — Data Link

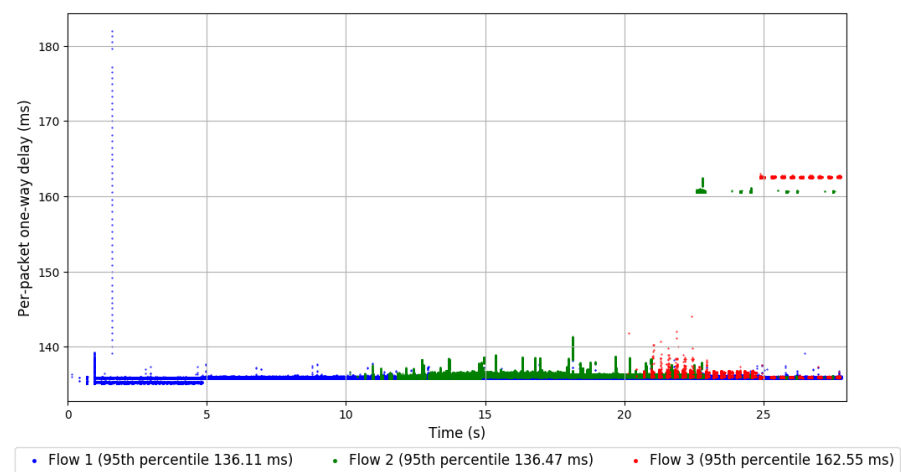
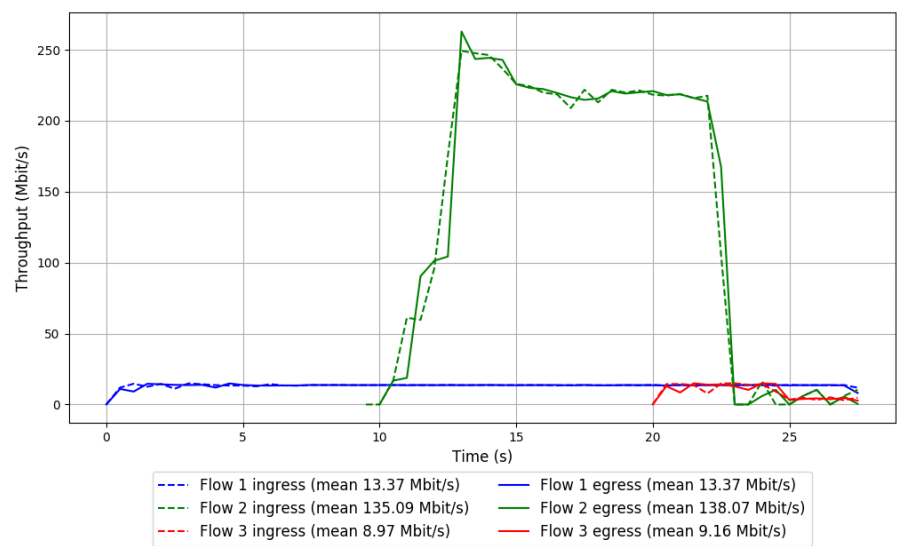


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-03 06:57:00
End at: 2018-01-03 06:57:30

# Below is generated by plot.py at 2018-01-03 12:18:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 102.95 Mbit/s
95th percentile per-packet one-way delay: 136.508 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 13.37 Mbit/s
95th percentile per-packet one-way delay: 136.112 ms
Loss rate: 1.00%
-- Flow 2:
Average throughput: 138.07 Mbit/s
95th percentile per-packet one-way delay: 136.467 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 9.16 Mbit/s
95th percentile per-packet one-way delay: 162.554 ms
Loss rate: 1.64%
```


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

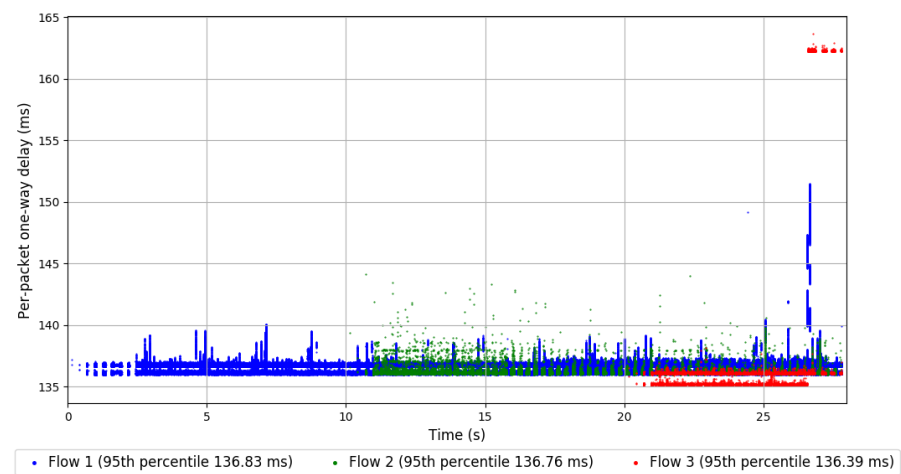
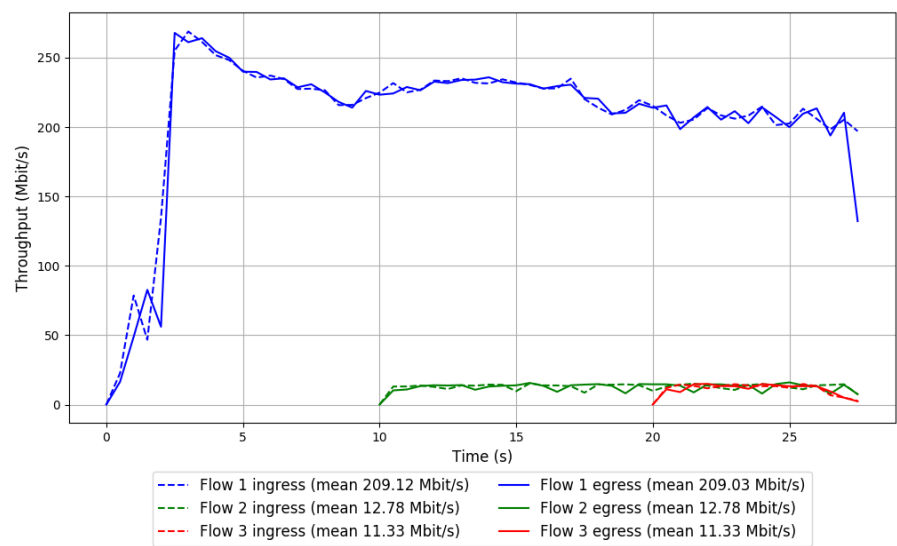


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-03 07:12:56
End at: 2018-01-03 07:13:26

# Below is generated by plot.py at 2018-01-03 12:22:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 220.31 Mbit/s
95th percentile per-packet one-way delay: 136.834 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 209.03 Mbit/s
95th percentile per-packet one-way delay: 136.834 ms
Loss rate: 1.01%
-- Flow 2:
Average throughput: 12.78 Mbit/s
95th percentile per-packet one-way delay: 136.756 ms
Loss rate: 1.56%
-- Flow 3:
Average throughput: 11.33 Mbit/s
95th percentile per-packet one-way delay: 136.387 ms
Loss rate: 0.90%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-01-03 07:29:05

End at: 2018-01-03 07:29:35

Below is generated by plot.py at 2018-01-03 12:22:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 24.05 Mbit/s

95th percentile per-packet one-way delay: 136.733 ms

Loss rate: 1.88%

-- Flow 1:

Average throughput: 12.89 Mbit/s

95th percentile per-packet one-way delay: 136.688 ms

Loss rate: 1.47%

-- Flow 2:

Average throughput: 12.16 Mbit/s

95th percentile per-packet one-way delay: 136.762 ms

Loss rate: 1.69%

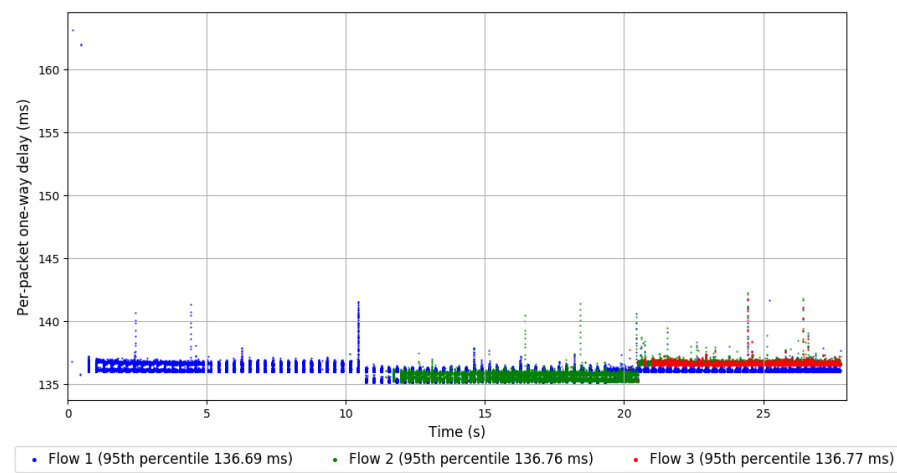
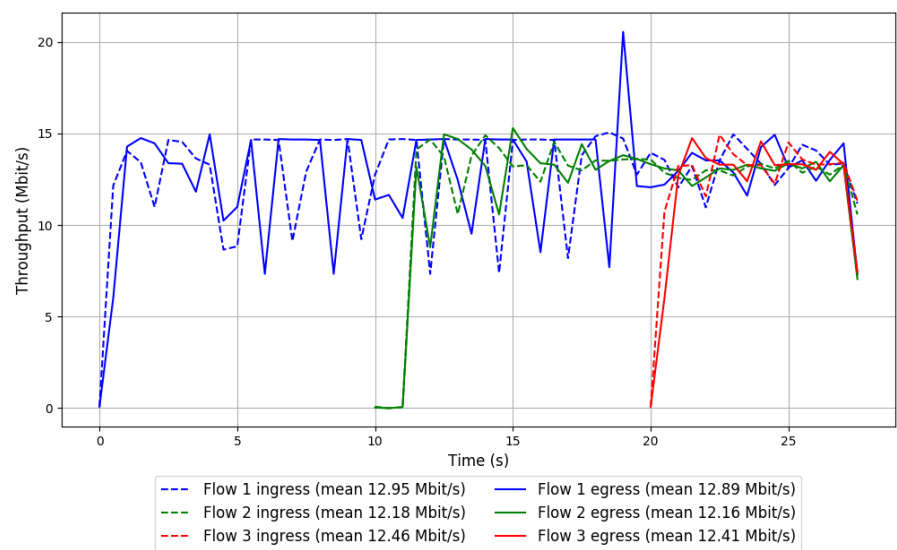
-- Flow 3:

Average throughput: 12.41 Mbit/s

95th percentile per-packet one-way delay: 136.766 ms

Loss rate: 3.81%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-01-03 07:43:38

End at: 2018-01-03 07:44:08

Below is generated by plot.py at 2018-01-03 12:22:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 42.60 Mbit/s

95th percentile per-packet one-way delay: 161.777 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 6.42 Mbit/s

95th percentile per-packet one-way delay: 161.729 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 54.19 Mbit/s

95th percentile per-packet one-way delay: 161.784 ms

Loss rate: 0.38%

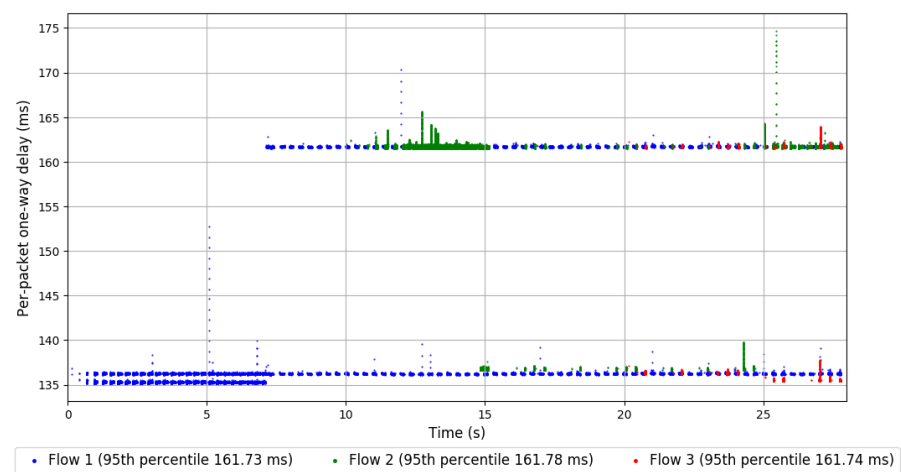
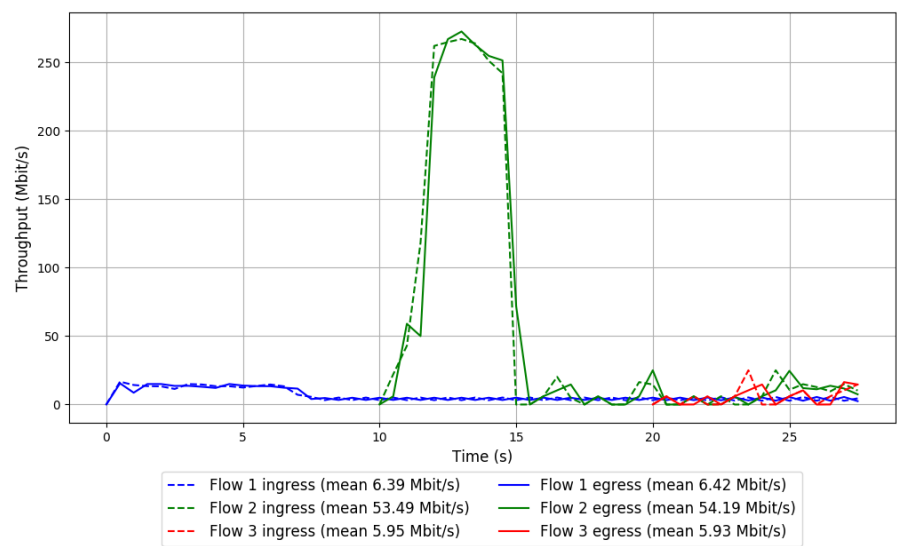
-- Flow 3:

Average throughput: 5.93 Mbit/s

95th percentile per-packet one-way delay: 161.738 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-01-03 07:59:03

End at: 2018-01-03 07:59:33

Below is generated by plot.py at 2018-01-03 12:22:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.01 Mbit/s

95th percentile per-packet one-way delay: 163.645 ms

Loss rate: 4.47%

-- Flow 1:

Average throughput: 7.63 Mbit/s

95th percentile per-packet one-way delay: 163.630 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.28 Mbit/s

95th percentile per-packet one-way delay: 163.641 ms

Loss rate: 0.45%

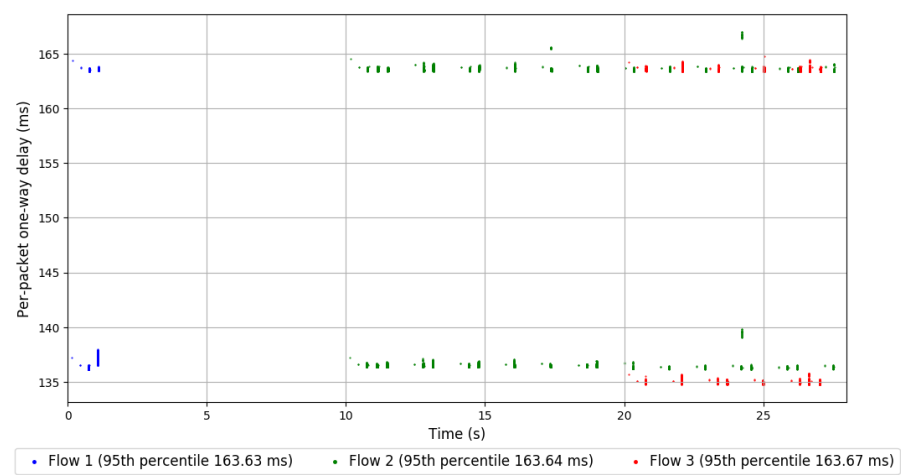
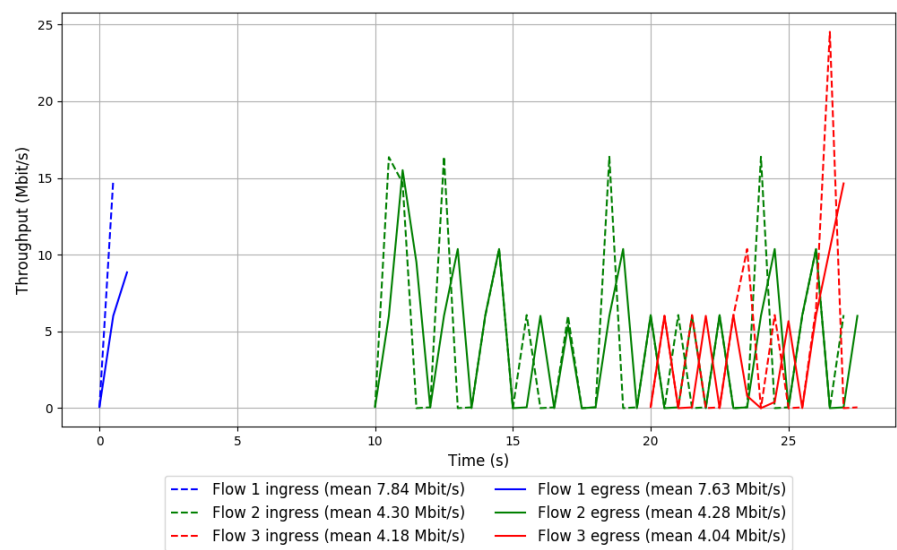
-- Flow 3:

Average throughput: 4.04 Mbit/s

95th percentile per-packet one-way delay: 163.669 ms

Loss rate: 14.63%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-01-03 08:13:59

End at: 2018-01-03 08:14:29

Below is generated by plot.py at 2018-01-03 12:22:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 37.96 Mbit/s

95th percentile per-packet one-way delay: 163.479 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 6.00 Mbit/s

95th percentile per-packet one-way delay: 163.557 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 10.17 Mbit/s

95th percentile per-packet one-way delay: 163.501 ms

Loss rate: 0.55%

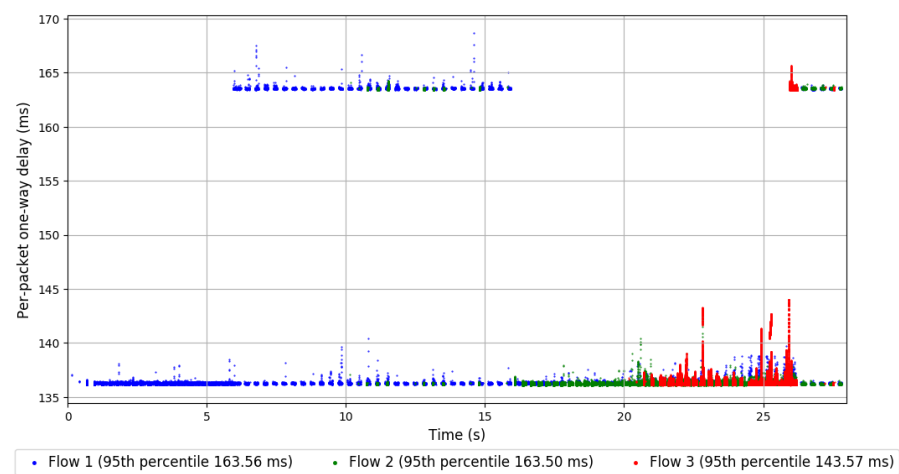
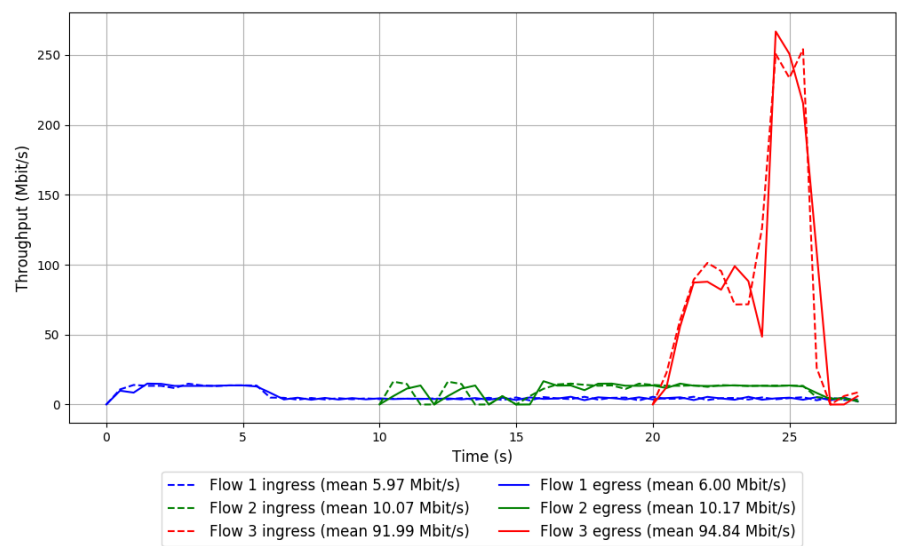
-- Flow 3:

Average throughput: 94.84 Mbit/s

95th percentile per-packet one-way delay: 143.568 ms

Loss rate: 0.61%

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

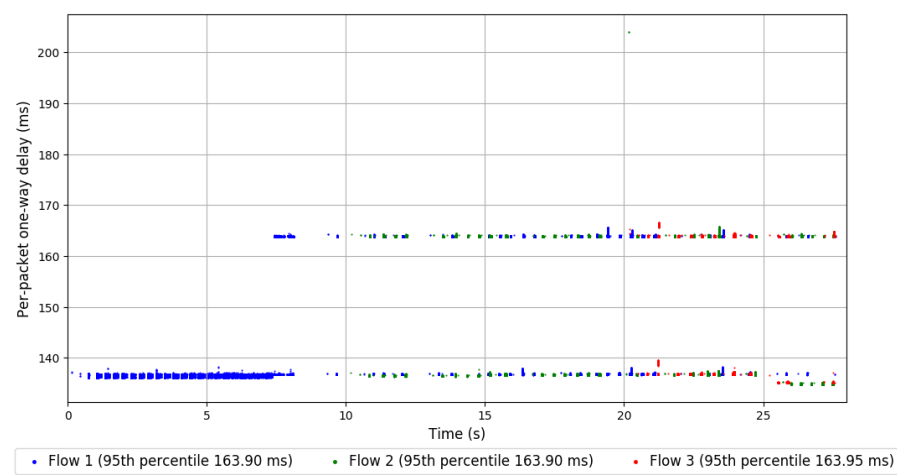
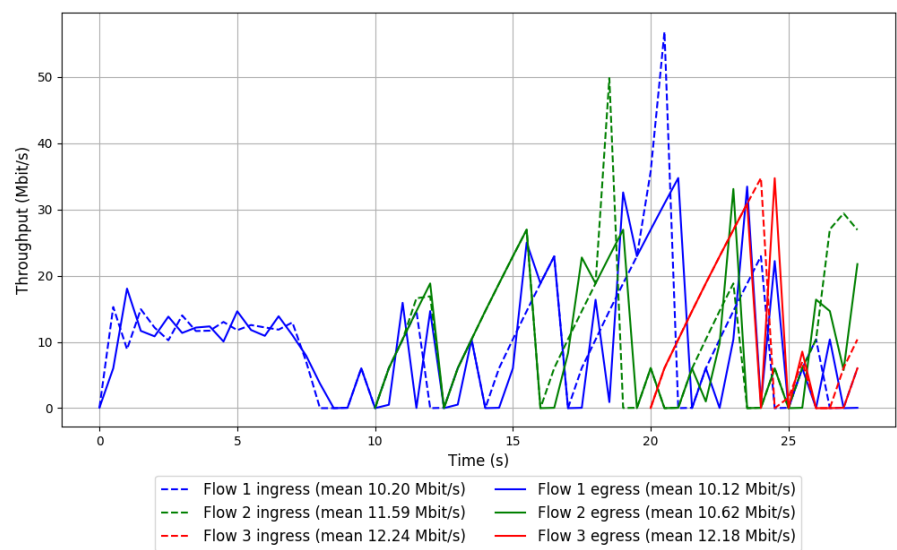


```
Run 7: Statistics of TaoVA-100x

Start at: 2018-01-03 08:29:28
End at: 2018-01-03 08:29:58

# Below is generated by plot.py at 2018-01-03 12:22:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.13 Mbit/s
95th percentile per-packet one-way delay: 163.907 ms
Loss rate: 5.40%
-- Flow 1:
Average throughput: 10.12 Mbit/s
95th percentile per-packet one-way delay: 163.896 ms
Loss rate: 2.03%
-- Flow 2:
Average throughput: 10.62 Mbit/s
95th percentile per-packet one-way delay: 163.903 ms
Loss rate: 10.01%
-- Flow 3:
Average throughput: 12.18 Mbit/s
95th percentile per-packet one-way delay: 163.948 ms
Loss rate: 5.45%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-03 08:44:57

End at: 2018-01-03 08:45:27

Below is generated by plot.py at 2018-01-03 12:22:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.50 Mbit/s

95th percentile per-packet one-way delay: 163.914 ms

Loss rate: 1.38%

-- Flow 1:

Average throughput: 5.92 Mbit/s

95th percentile per-packet one-way delay: 163.925 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 6.35 Mbit/s

95th percentile per-packet one-way delay: 163.899 ms

Loss rate: 3.22%

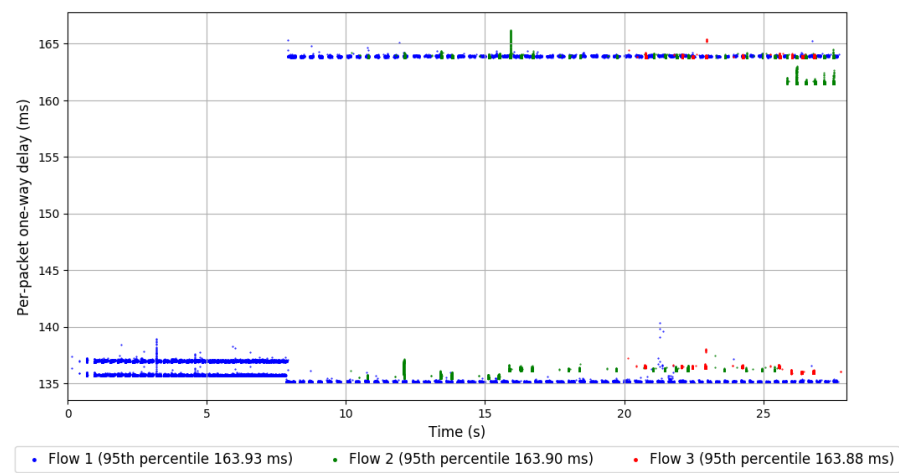
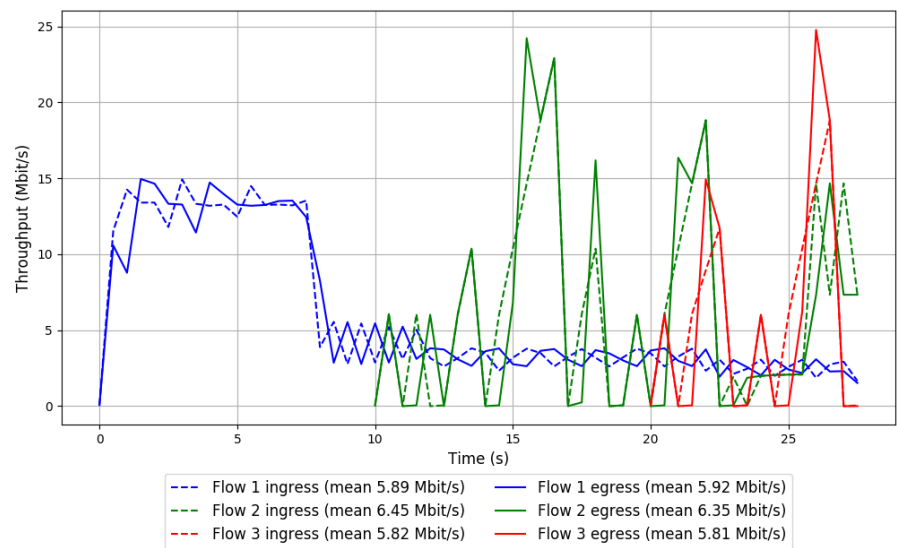
-- Flow 3:

Average throughput: 5.81 Mbit/s

95th percentile per-packet one-way delay: 163.881 ms

Loss rate: 0.05%

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

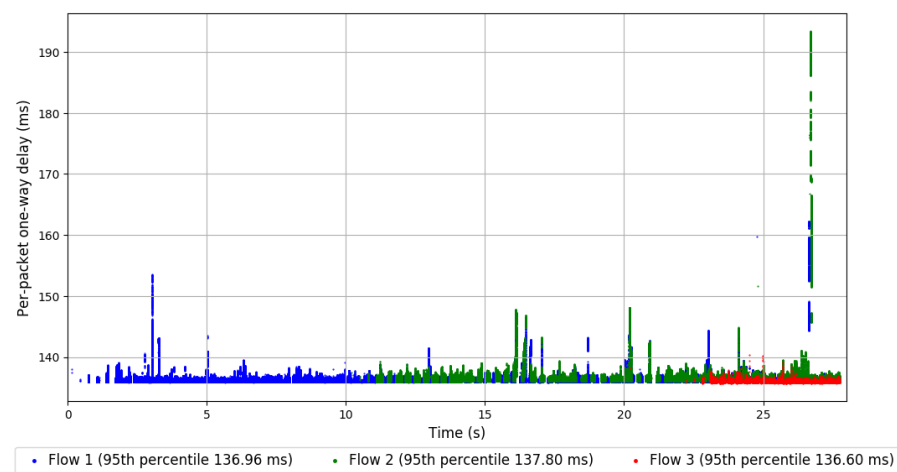
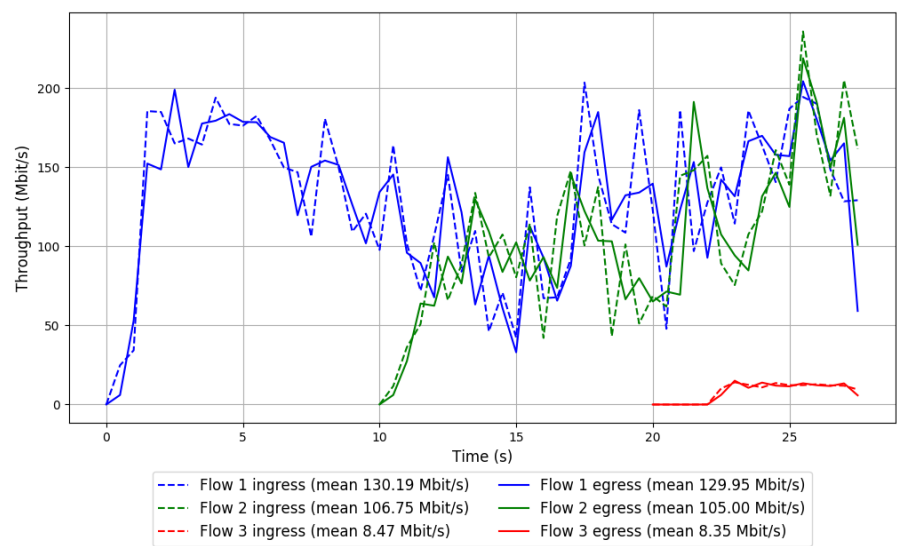


```
Run 9: Statistics of TaoVA-100x

Start at: 2018-01-03 09:00:21
End at: 2018-01-03 09:00:51

# Below is generated by plot.py at 2018-01-03 12:22:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 198.98 Mbit/s
95th percentile per-packet one-way delay: 137.265 ms
Loss rate: 1.89%
-- Flow 1:
Average throughput: 129.95 Mbit/s
95th percentile per-packet one-way delay: 136.961 ms
Loss rate: 1.18%
-- Flow 2:
Average throughput: 105.00 Mbit/s
95th percentile per-packet one-way delay: 137.797 ms
Loss rate: 3.15%
-- Flow 3:
Average throughput: 8.35 Mbit/s
95th percentile per-packet one-way delay: 136.598 ms
Loss rate: 4.89%
```


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

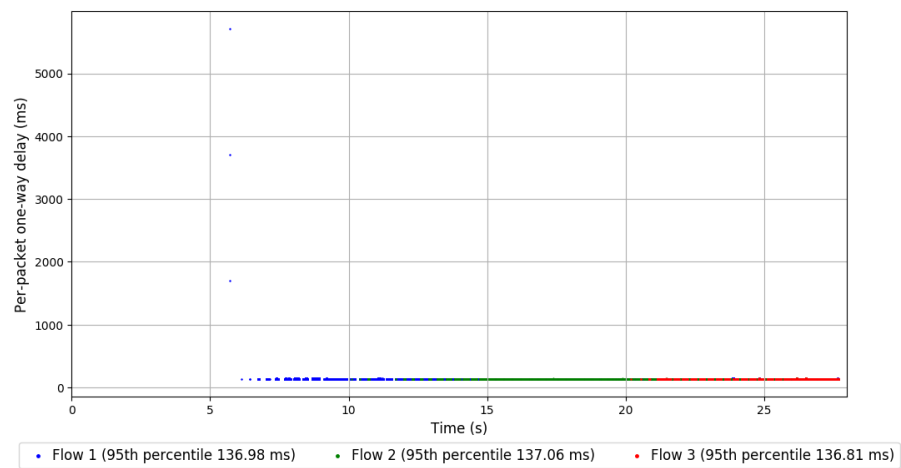
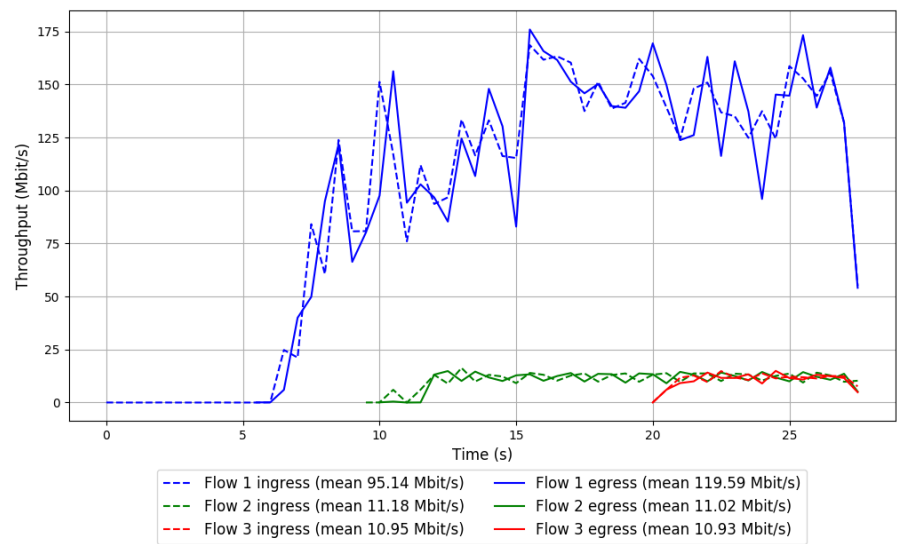


Run 10: Statistics of TaoVA-100x

Start at: 2018-01-03 09:14:52

End at: 2018-01-03 09:15:22

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-03 06:43:55

End at: 2018-01-03 06:44:25

Below is generated by plot.py at 2018-01-03 12:22:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 43.34 Mbit/s

95th percentile per-packet one-way delay: 143.419 ms

Loss rate: 1.26%

-- Flow 1:

Average throughput: 21.91 Mbit/s

95th percentile per-packet one-way delay: 143.710 ms

Loss rate: 1.29%

-- Flow 2:

Average throughput: 22.81 Mbit/s

95th percentile per-packet one-way delay: 138.115 ms

Loss rate: 0.89%

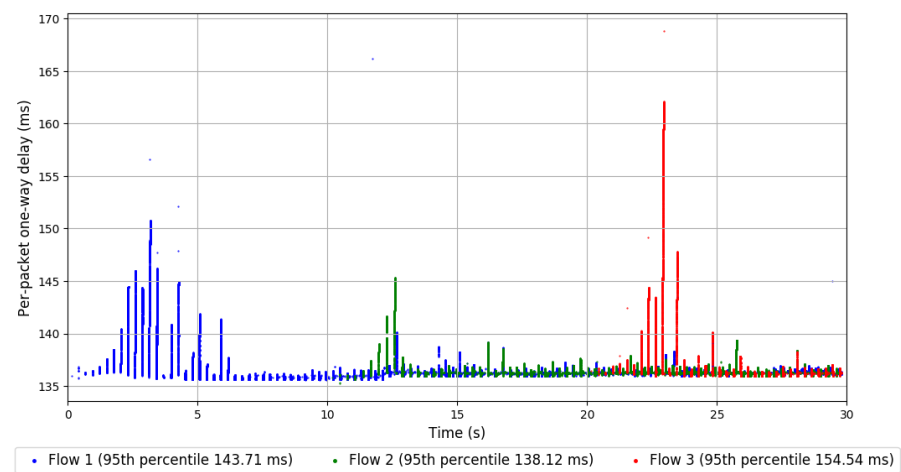
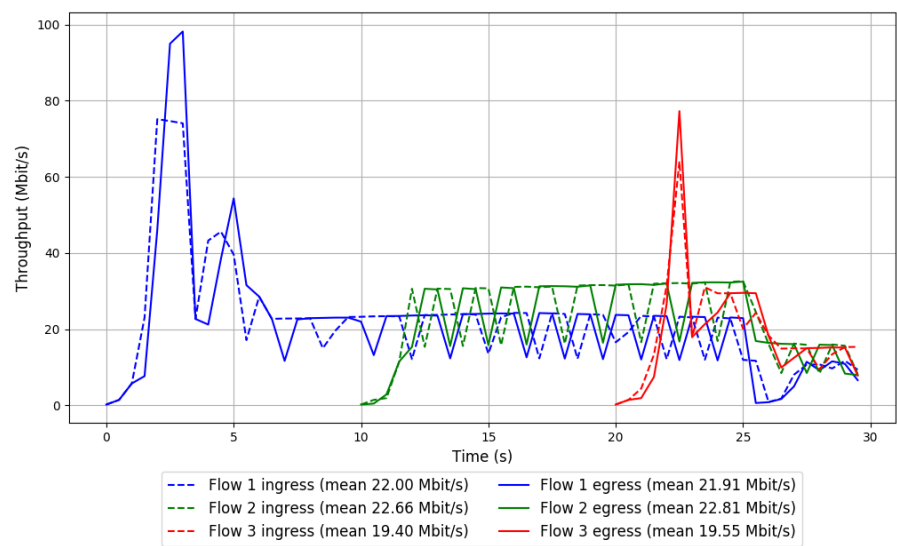
-- Flow 3:

Average throughput: 19.55 Mbit/s

95th percentile per-packet one-way delay: 154.537 ms

Loss rate: 2.03%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-03 06:59:41

End at: 2018-01-03 07:00:11

Below is generated by plot.py at 2018-01-03 12:22:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 27.86 Mbit/s

95th percentile per-packet one-way delay: 142.652 ms

Loss rate: 2.28%

-- Flow 1:

Average throughput: 12.92 Mbit/s

95th percentile per-packet one-way delay: 137.455 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 18.27 Mbit/s

95th percentile per-packet one-way delay: 145.272 ms

Loss rate: 2.62%

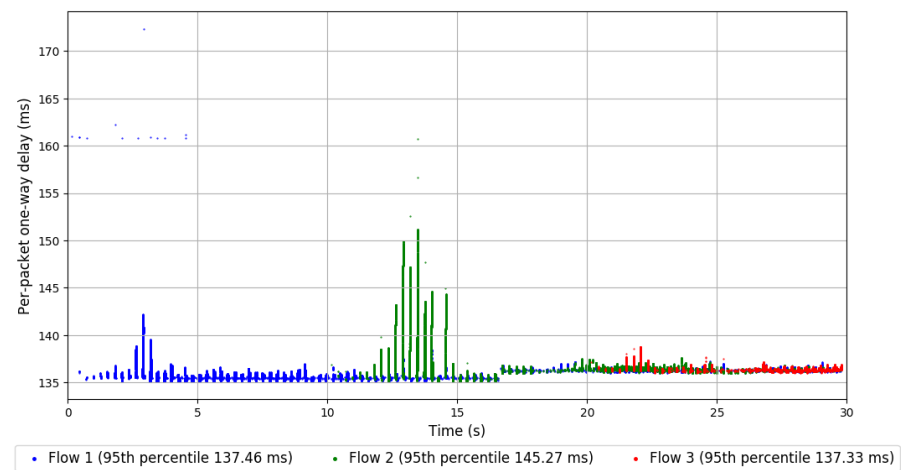
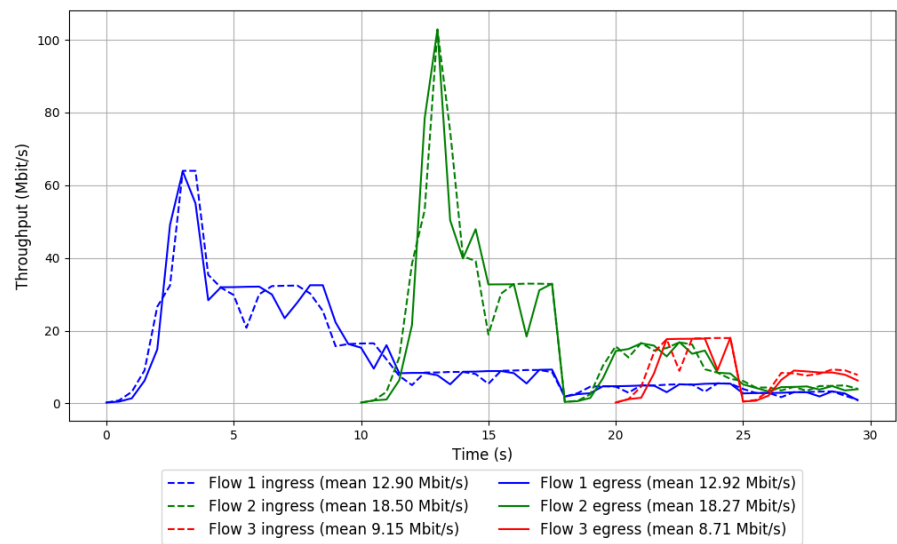
-- Flow 3:

Average throughput: 8.71 Mbit/s

95th percentile per-packet one-way delay: 137.330 ms

Loss rate: 7.45%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-03 07:15:49

End at: 2018-01-03 07:16:19

Below is generated by plot.py at 2018-01-03 12:22:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.52 Mbit/s

95th percentile per-packet one-way delay: 139.461 ms

Loss rate: 1.84%

-- Flow 1:

Average throughput: 31.24 Mbit/s

95th percentile per-packet one-way delay: 140.265 ms

Loss rate: 0.96%

-- Flow 2:

Average throughput: 45.48 Mbit/s

95th percentile per-packet one-way delay: 137.592 ms

Loss rate: 1.52%

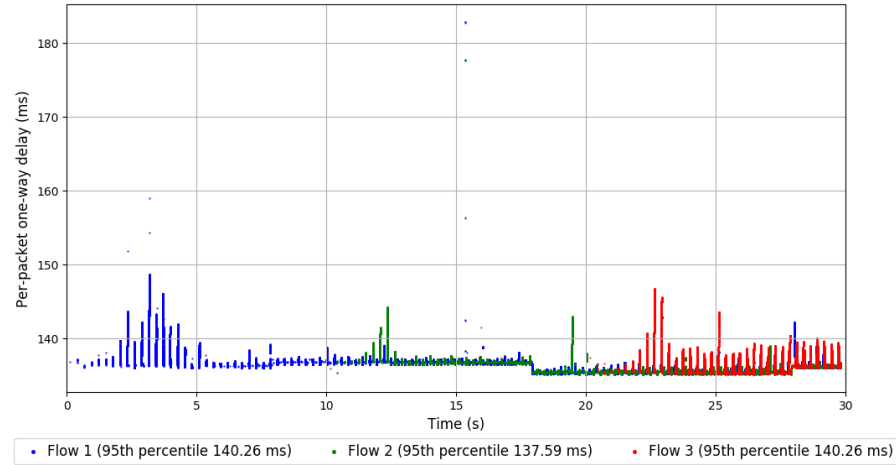
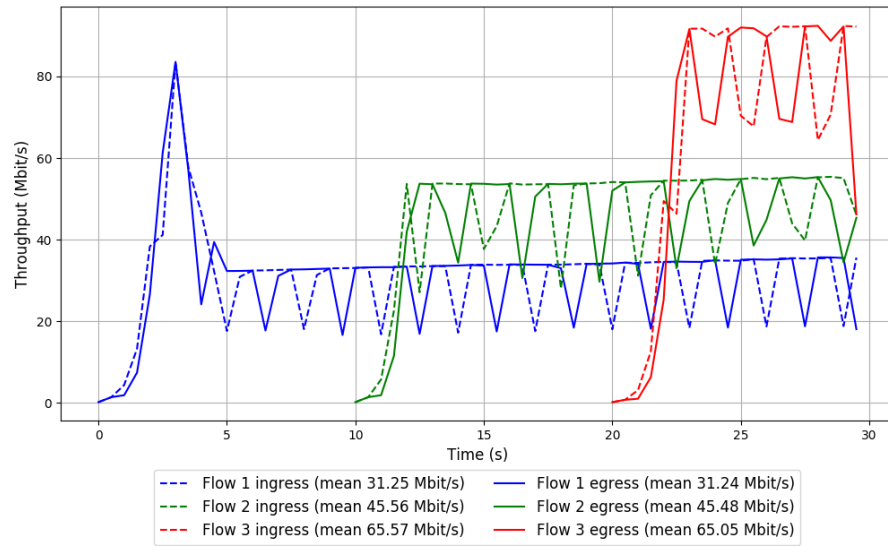
-- Flow 3:

Average throughput: 65.05 Mbit/s

95th percentile per-packet one-way delay: 140.259 ms

Loss rate: 3.54%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-03 07:31:38

End at: 2018-01-03 07:32:08

Below is generated by plot.py at 2018-01-03 12:22:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.09 Mbit/s

95th percentile per-packet one-way delay: 162.091 ms

Loss rate: 1.96%

-- Flow 1:

Average throughput: 11.80 Mbit/s

95th percentile per-packet one-way delay: 162.171 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 161.967 ms

Loss rate: 1.72%

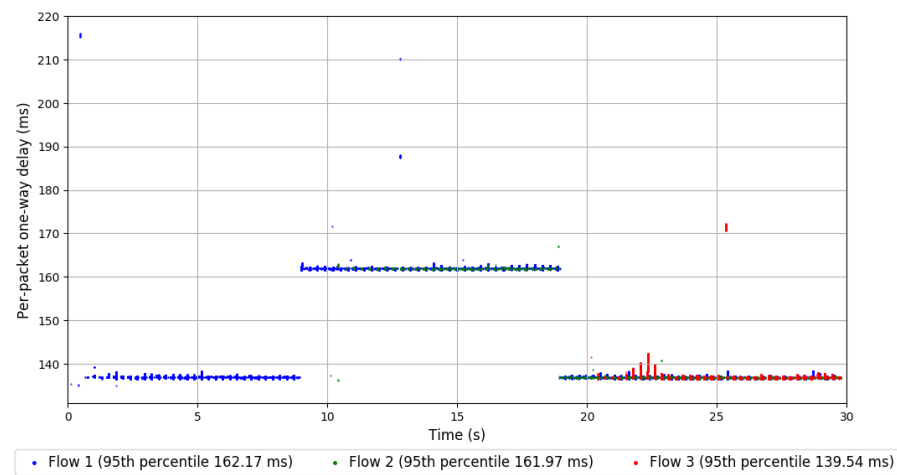
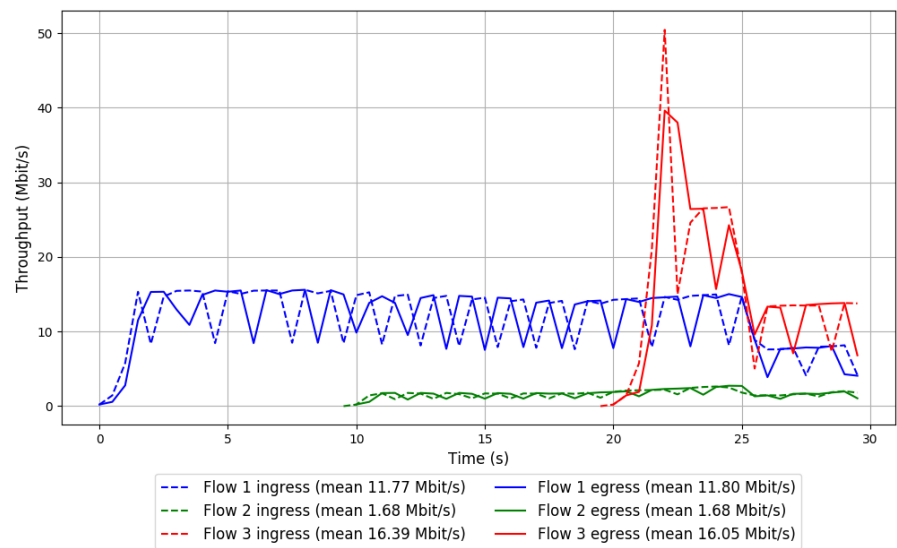
-- Flow 3:

Average throughput: 16.05 Mbit/s

95th percentile per-packet one-way delay: 139.543 ms

Loss rate: 4.83%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-03 07:46:13

End at: 2018-01-03 07:46:43

Below is generated by plot.py at 2018-01-03 12:22:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 30.11 Mbit/s

95th percentile per-packet one-way delay: 162.766 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 19.99 Mbit/s

95th percentile per-packet one-way delay: 162.856 ms

Loss rate: 1.00%

-- Flow 2:

Average throughput: 14.47 Mbit/s

95th percentile per-packet one-way delay: 162.653 ms

Loss rate: 0.58%

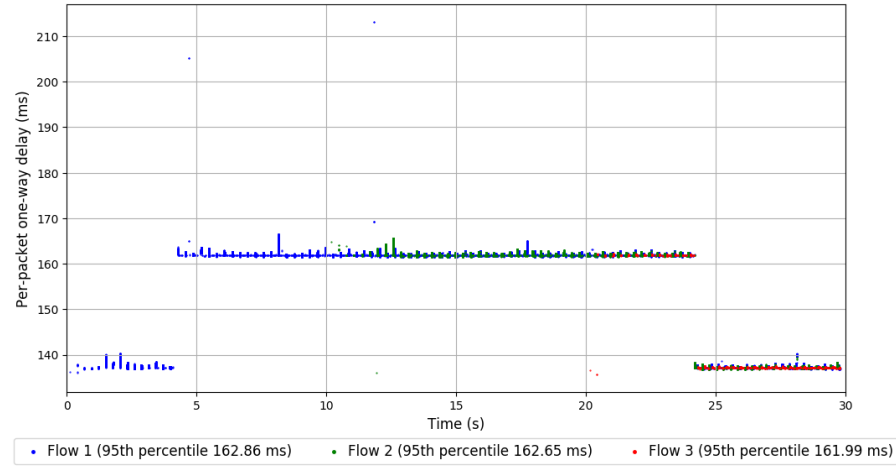
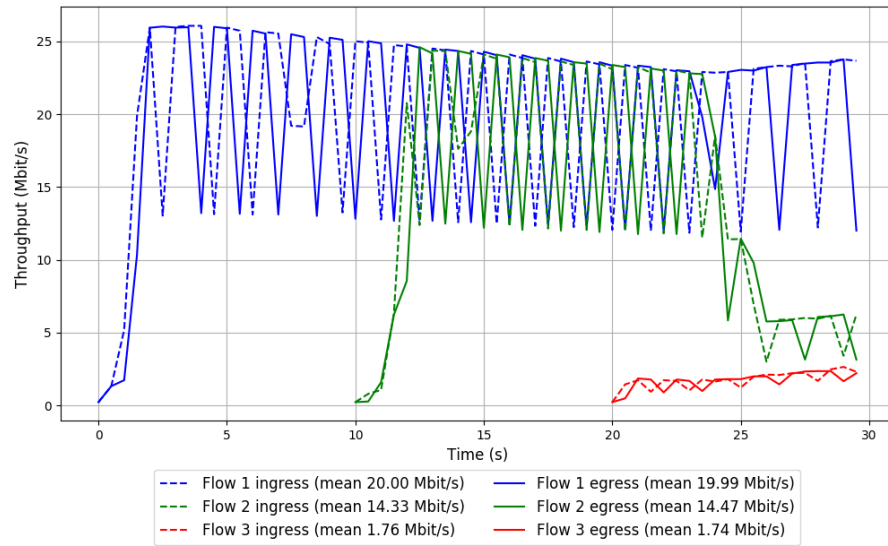
-- Flow 3:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 161.990 ms

Loss rate: 3.92%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-03 08:01:34

End at: 2018-01-03 08:02:05

Below is generated by plot.py at 2018-01-03 12:22:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 23.91 Mbit/s

95th percentile per-packet one-way delay: 171.303 ms

Loss rate: 1.34%

-- Flow 1:

Average throughput: 1.20 Mbit/s

95th percentile per-packet one-way delay: 163.951 ms

Loss rate: 1.00%

-- Flow 2:

Average throughput: 33.63 Mbit/s

95th percentile per-packet one-way delay: 171.461 ms

Loss rate: 1.32%

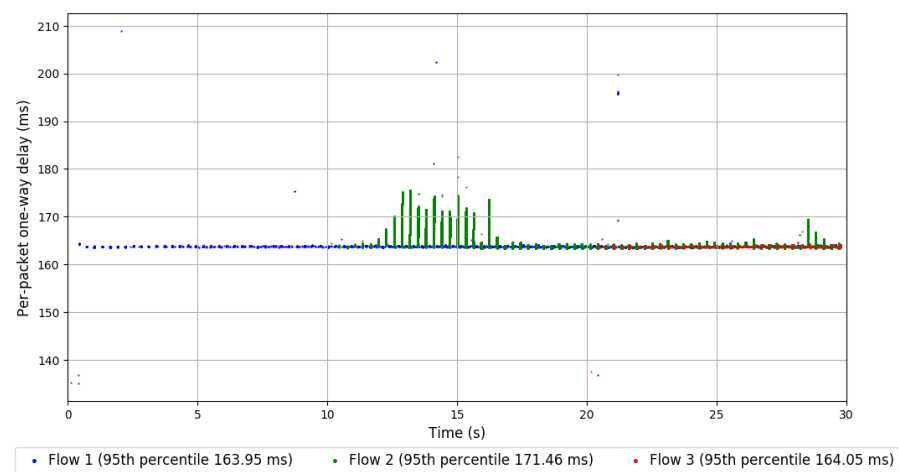
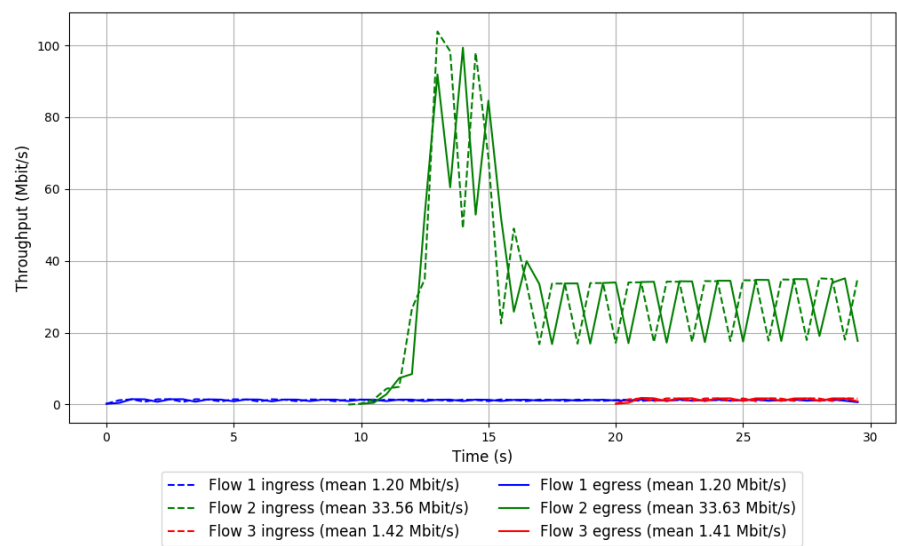
-- Flow 3:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 164.047 ms

Loss rate: 3.16%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-03 08:16:36

End at: 2018-01-03 08:17:06

Below is generated by plot.py at 2018-01-03 12:22:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 163.939 ms

Loss rate: 2.60%

-- Flow 1:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 163.993 ms

Loss rate: 1.91%

-- Flow 2:

Average throughput: 1.16 Mbit/s

95th percentile per-packet one-way delay: 163.861 ms

Loss rate: 2.67%

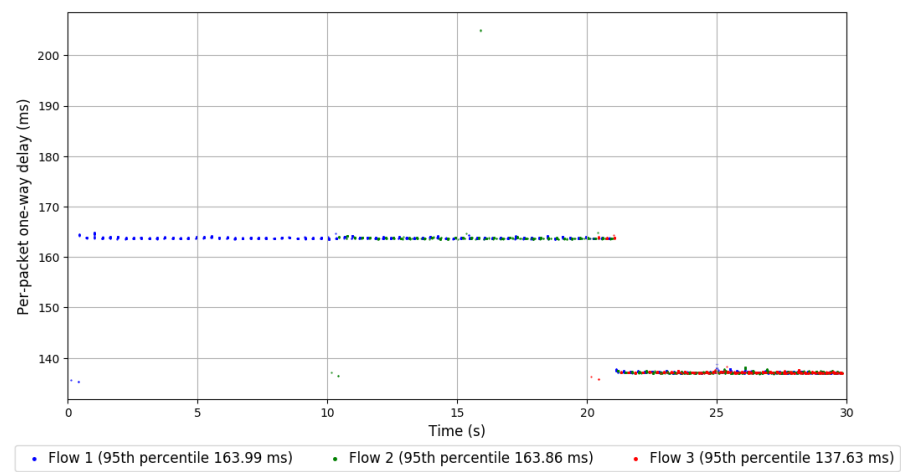
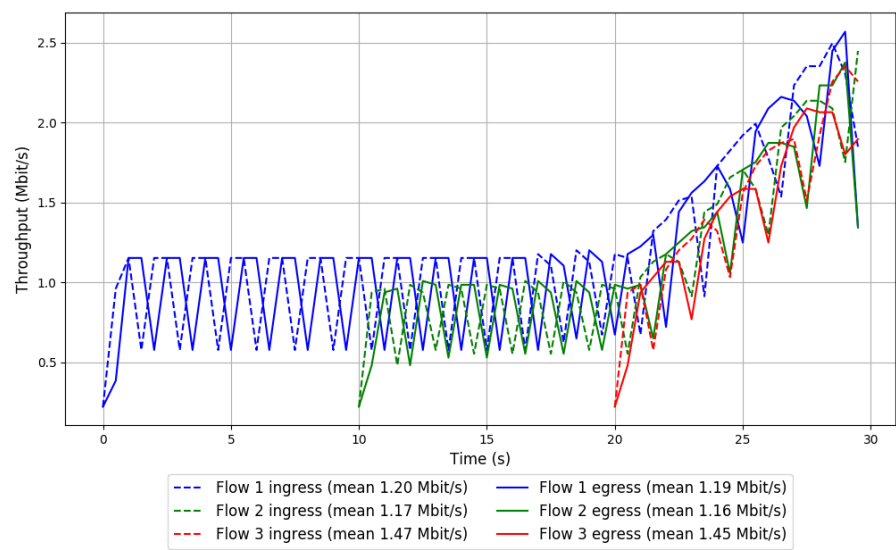
-- Flow 3:

Average throughput: 1.45 Mbit/s

95th percentile per-packet one-way delay: 137.628 ms

Loss rate: 4.19%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-03 08:32:01

End at: 2018-01-03 08:32:31

Below is generated by plot.py at 2018-01-03 12:22:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 42.14 Mbit/s

95th percentile per-packet one-way delay: 164.438 ms

Loss rate: 1.27%

-- Flow 1:

Average throughput: 22.00 Mbit/s

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

Loss rate: 1.11%

-- Flow 2:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 164.129 ms

Loss rate: 2.26%

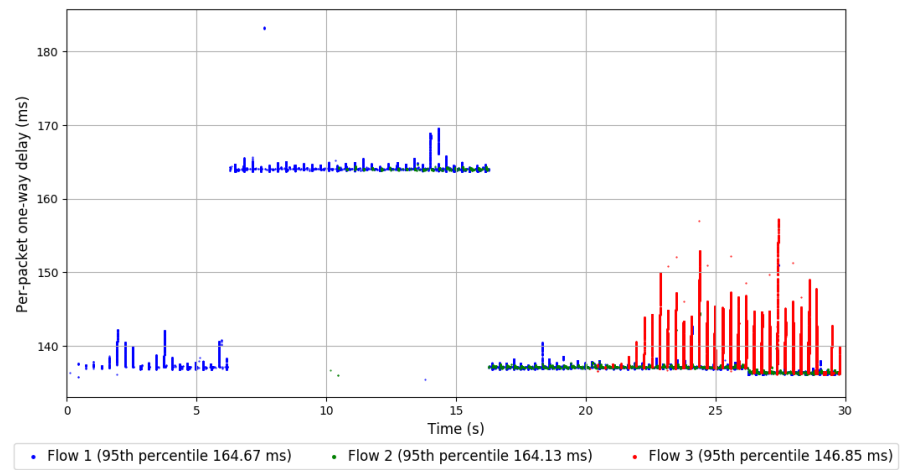
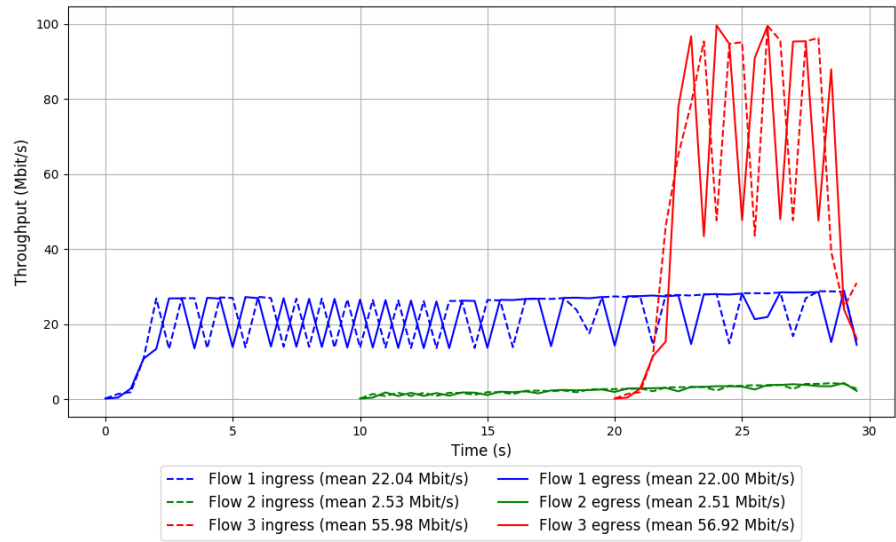
-- Flow 3:

Average throughput: 56.92 Mbit/s

95th percentile per-packet one-way delay: 146.848 ms

Loss rate: 1.38%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-03 08:47:33

End at: 2018-01-03 08:48:03

Below is generated by plot.py at 2018-01-03 12:22:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 164.369 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 0.81 Mbit/s

95th percentile per-packet one-way delay: 164.368 ms

Loss rate: 1.09%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 164.331 ms

Loss rate: 0.37%

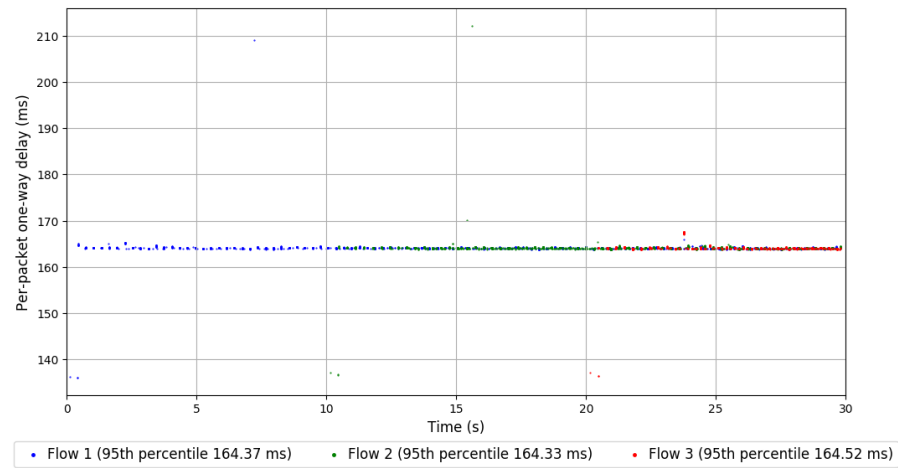
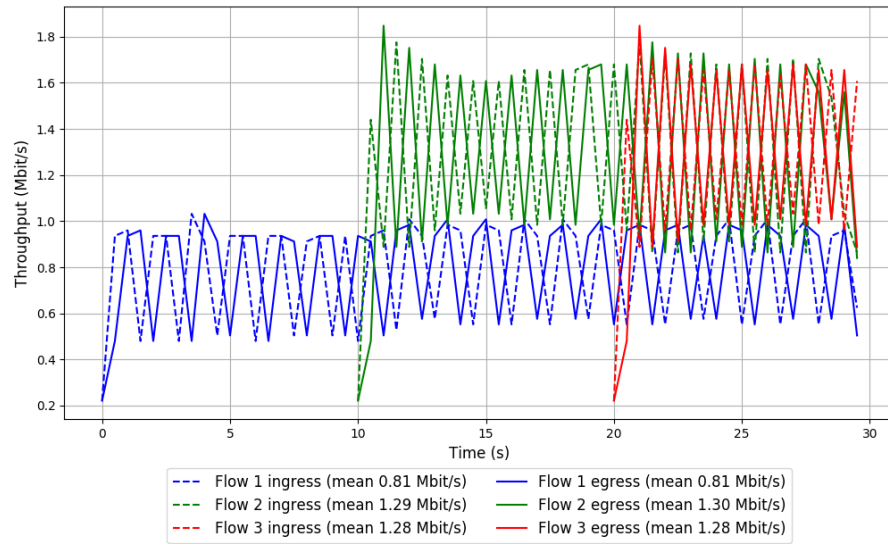
-- Flow 3:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 164.519 ms

Loss rate: 3.12%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-03 09:03:15

End at: 2018-01-03 09:03:45

Below is generated by plot.py at 2018-01-03 12:22:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 24.18 Mbit/s

95th percentile per-packet one-way delay: 136.869 ms

Loss rate: 3.56%

-- Flow 1:

Average throughput: 5.55 Mbit/s

95th percentile per-packet one-way delay: 136.969 ms

Loss rate: 8.21%

-- Flow 2:

Average throughput: 18.11 Mbit/s

95th percentile per-packet one-way delay: 136.782 ms

Loss rate: 1.32%

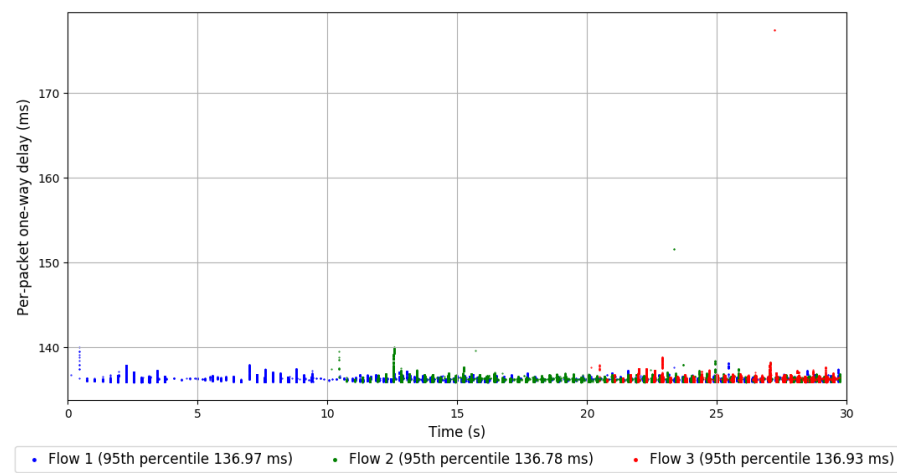
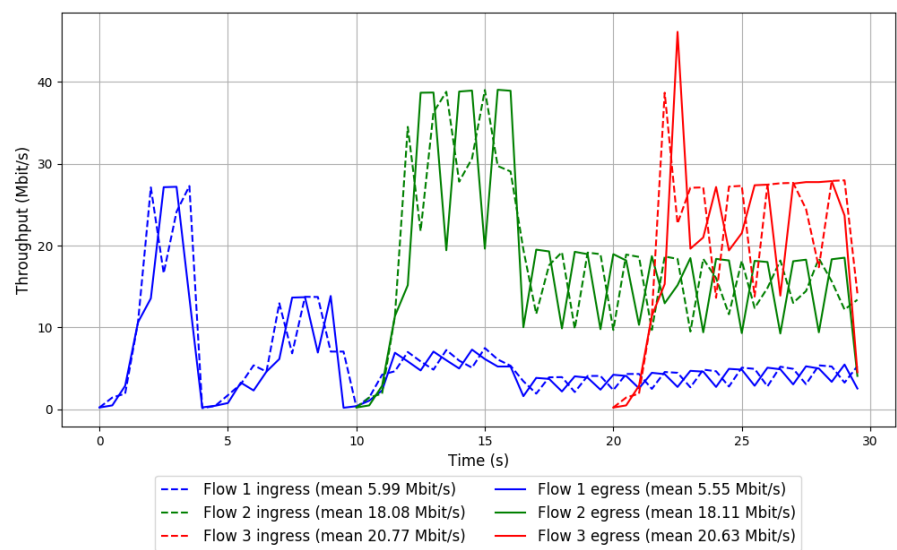
-- Flow 3:

Average throughput: 20.63 Mbit/s

95th percentile per-packet one-way delay: 136.930 ms

Loss rate: 3.45%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-01-03 06:54:54

End at: 2018-01-03 06:55:24

Below is generated by plot.py at 2018-01-03 12:22:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 228.86 Mbit/s

95th percentile per-packet one-way delay: 246.140 ms

Loss rate: 4.07%

-- Flow 1:

Average throughput: 132.17 Mbit/s

95th percentile per-packet one-way delay: 181.161 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 111.50 Mbit/s

95th percentile per-packet one-way delay: 311.912 ms

Loss rate: 8.51%

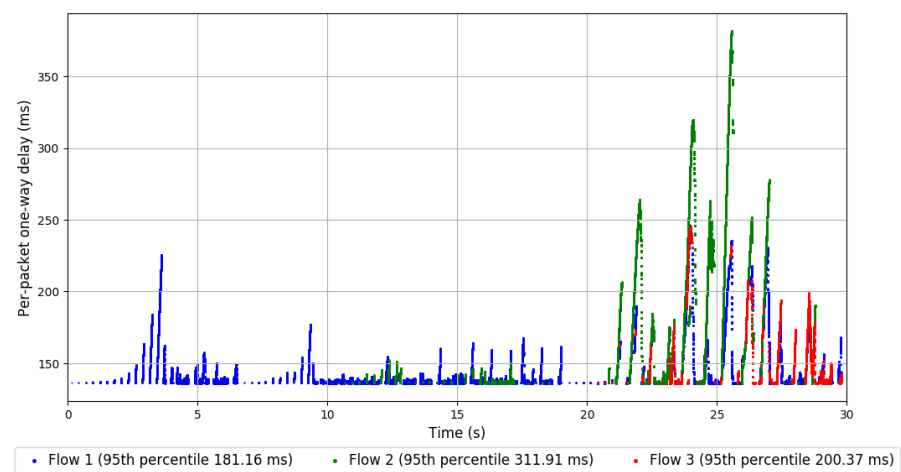
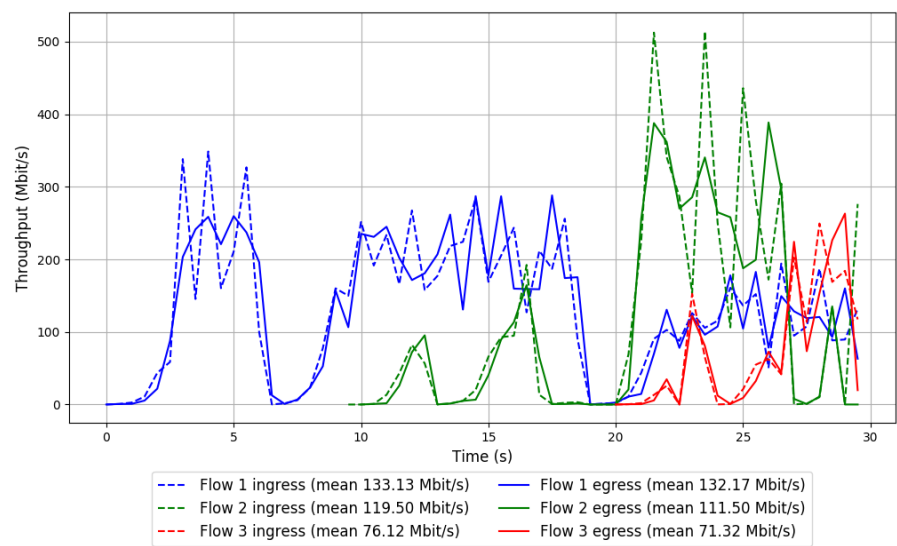
-- Flow 3:

Average throughput: 71.32 Mbit/s

95th percentile per-packet one-way delay: 200.365 ms

Loss rate: 6.78%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-03 07:10:54

End at: 2018-01-03 07:11:24

Below is generated by plot.py at 2018-01-03 12:22:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 189.73 Mbit/s

95th percentile per-packet one-way delay: 263.304 ms

Loss rate: 2.31%

-- Flow 1:

Average throughput: 155.00 Mbit/s

95th percentile per-packet one-way delay: 270.211 ms

Loss rate: 2.43%

-- Flow 2:

Average throughput: 39.75 Mbit/s

95th percentile per-packet one-way delay: 175.761 ms

Loss rate: 0.21%

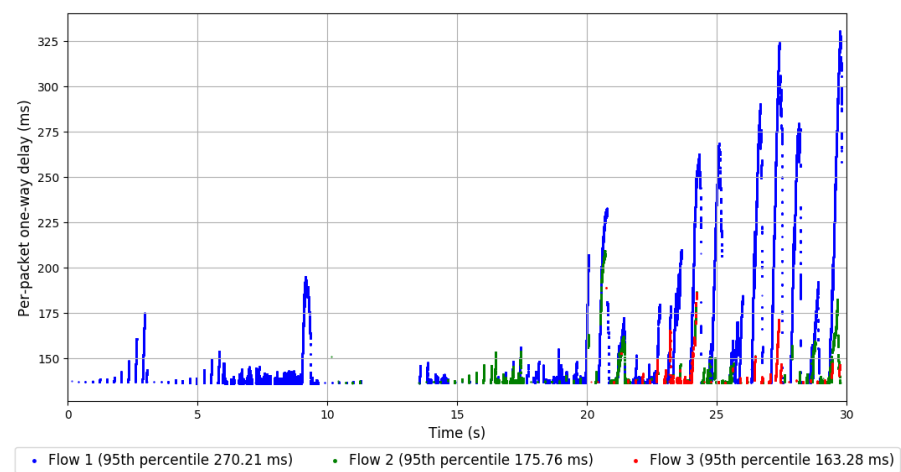
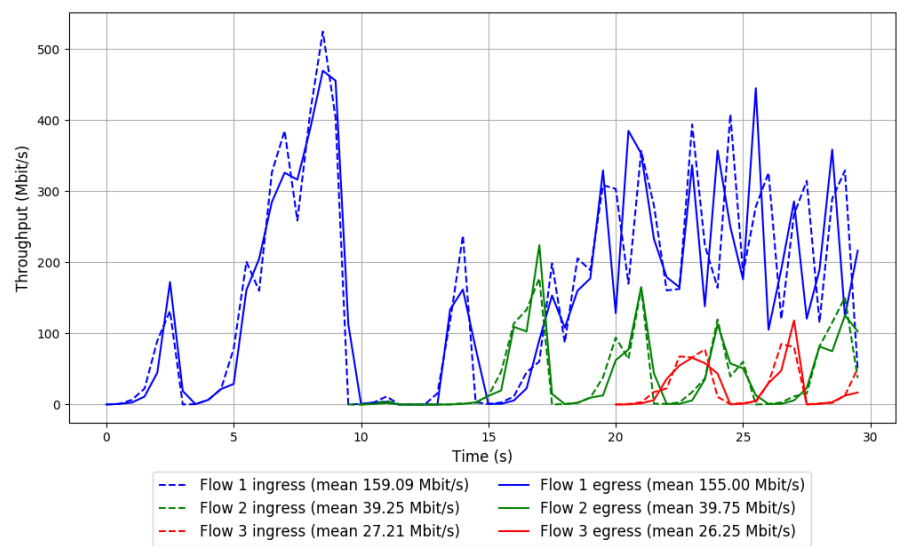
-- Flow 3:

Average throughput: 26.25 Mbit/s

95th percentile per-packet one-way delay: 163.284 ms

Loss rate: 6.31%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-03 07:26:56

End at: 2018-01-03 07:27:26

Below is generated by plot.py at 2018-01-03 12:22:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 200.13 Mbit/s

95th percentile per-packet one-way delay: 205.582 ms

Loss rate: 3.63%

-- Flow 1:

Average throughput: 154.39 Mbit/s

95th percentile per-packet one-way delay: 217.654 ms

Loss rate: 4.46%

-- Flow 2:

Average throughput: 65.61 Mbit/s

95th percentile per-packet one-way delay: 181.845 ms

Loss rate: 0.83%

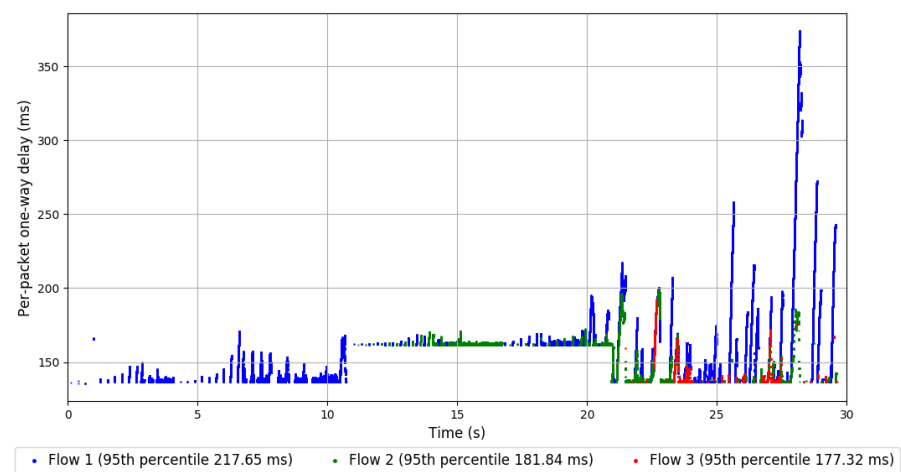
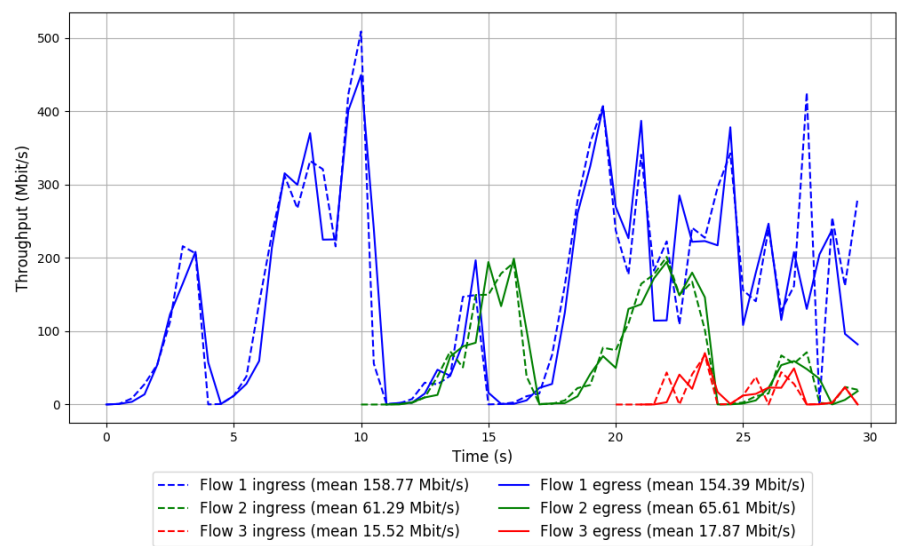
-- Flow 3:

Average throughput: 17.87 Mbit/s

95th percentile per-packet one-way delay: 177.318 ms

Loss rate: 0.02%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-03 07:41:24

End at: 2018-01-03 07:41:54

Below is generated by plot.py at 2018-01-03 12:23:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 277.64 Mbit/s

95th percentile per-packet one-way delay: 260.643 ms

Loss rate: 2.61%

-- Flow 1:

Average throughput: 170.41 Mbit/s

95th percentile per-packet one-way delay: 185.723 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 85.12 Mbit/s

95th percentile per-packet one-way delay: 258.728 ms

Loss rate: 2.55%

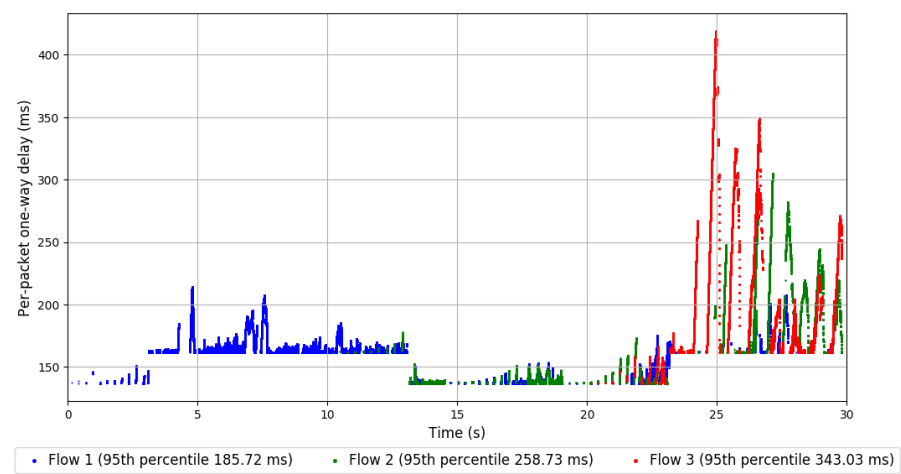
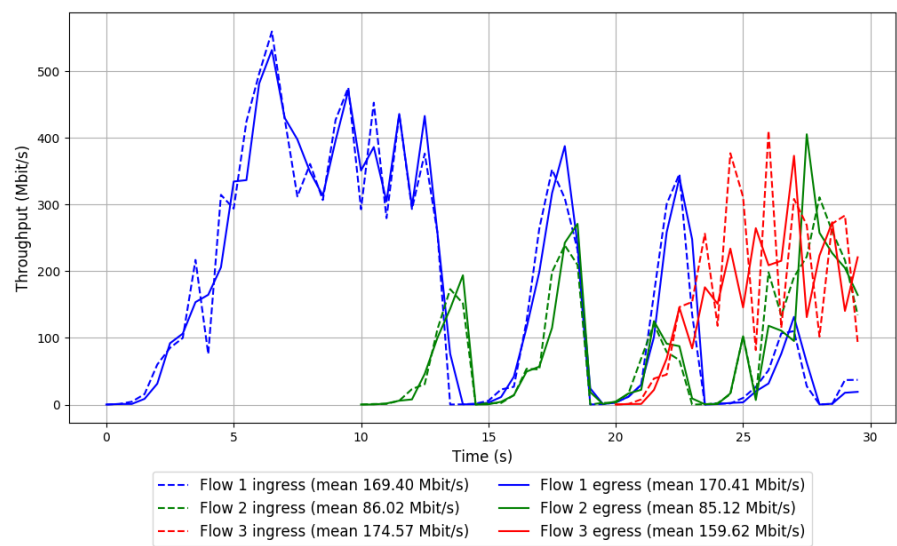
-- Flow 3:

Average throughput: 159.62 Mbit/s

95th percentile per-packet one-way delay: 343.033 ms

Loss rate: 9.15%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-03 07:56:48

End at: 2018-01-03 07:57:18

Below is generated by plot.py at 2018-01-03 12:24:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 301.61 Mbit/s

95th percentile per-packet one-way delay: 265.995 ms

Loss rate: 1.52%

-- Flow 1:

Average throughput: 200.69 Mbit/s

95th percentile per-packet one-way delay: 241.642 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 84.26 Mbit/s

95th percentile per-packet one-way delay: 235.706 ms

Loss rate: 2.68%

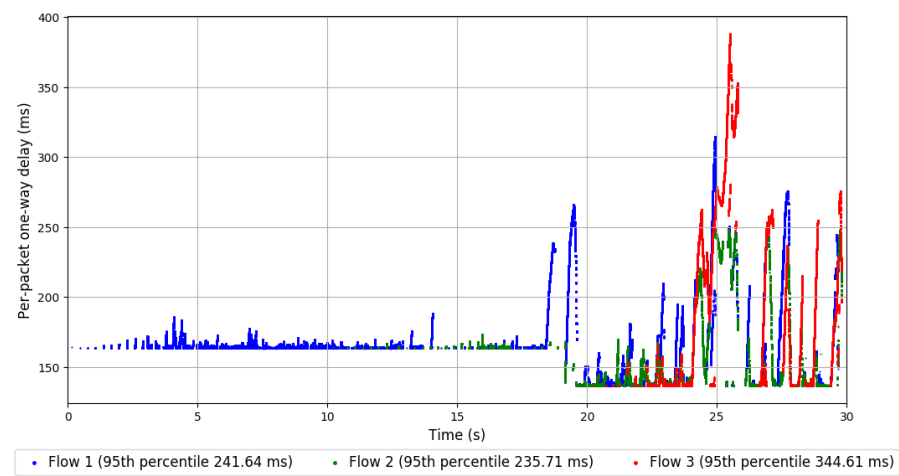
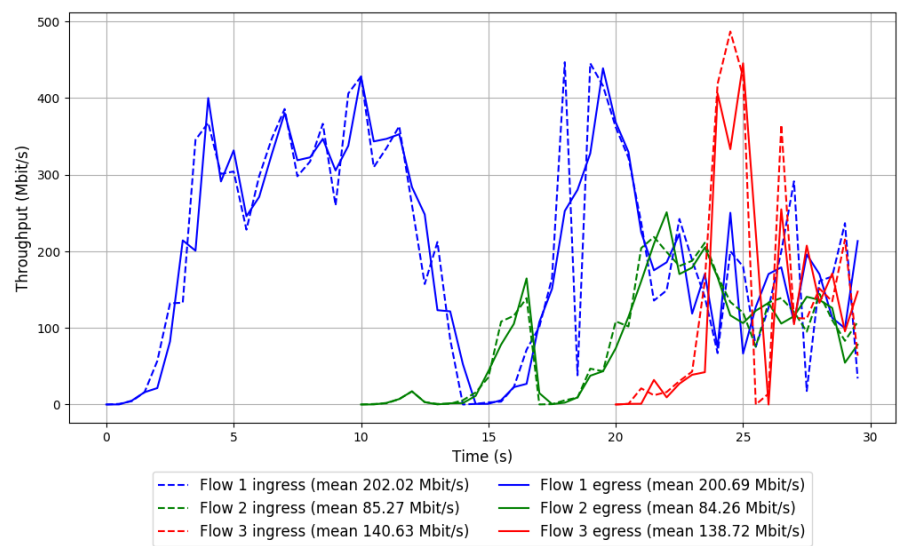
-- Flow 3:

Average throughput: 138.72 Mbit/s

95th percentile per-packet one-way delay: 344.608 ms

Loss rate: 4.12%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-03 08:11:45

End at: 2018-01-03 08:12:15

Below is generated by plot.py at 2018-01-03 12:25:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 302.44 Mbit/s

95th percentile per-packet one-way delay: 239.747 ms

Loss rate: 1.89%

-- Flow 1:

Average throughput: 224.09 Mbit/s

95th percentile per-packet one-way delay: 255.068 ms

Loss rate: 2.53%

-- Flow 2:

Average throughput: 77.74 Mbit/s

95th percentile per-packet one-way delay: 205.885 ms

Loss rate: 0.01%

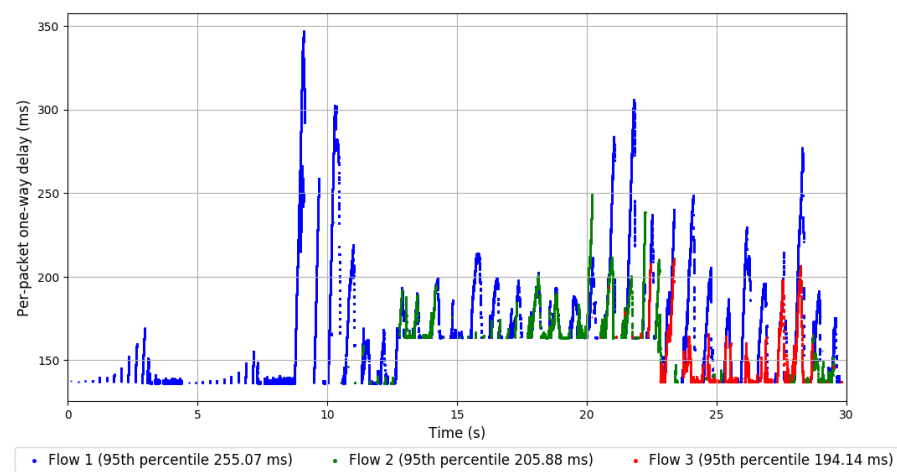
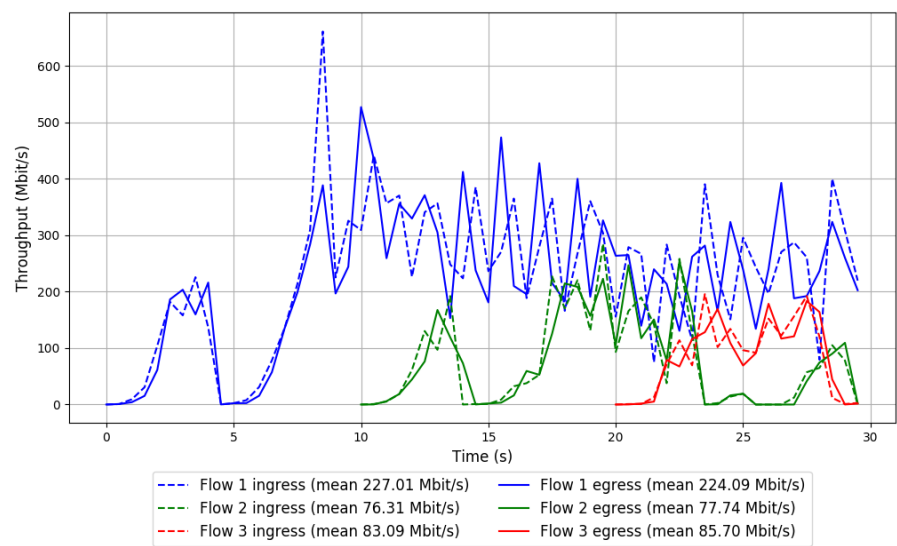
-- Flow 3:

Average throughput: 85.70 Mbit/s

95th percentile per-packet one-way delay: 194.144 ms

Loss rate: 0.11%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-03 08:27:26

End at: 2018-01-03 08:27:56

Below is generated by plot.py at 2018-01-03 12:25:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.42 Mbit/s

95th percentile per-packet one-way delay: 219.481 ms

Loss rate: 2.48%

-- Flow 1:

Average throughput: 118.97 Mbit/s

95th percentile per-packet one-way delay: 238.174 ms

Loss rate: 1.14%

-- Flow 2:

Average throughput: 80.45 Mbit/s

95th percentile per-packet one-way delay: 208.921 ms

Loss rate: 3.42%

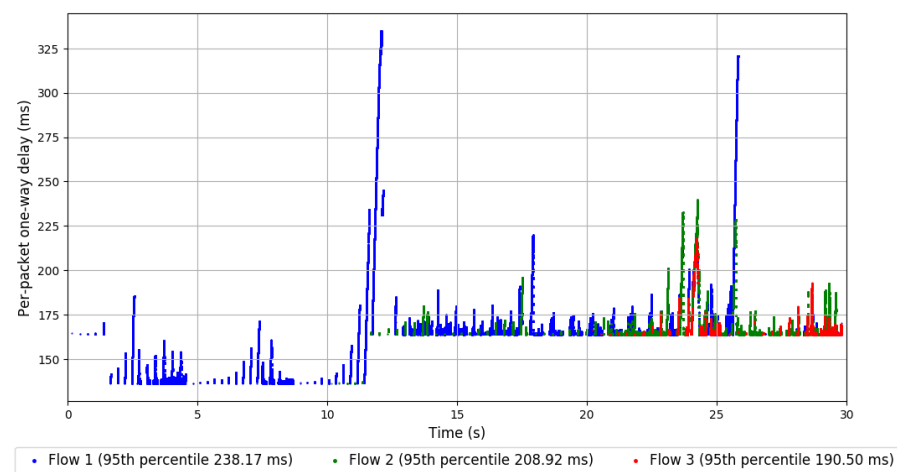
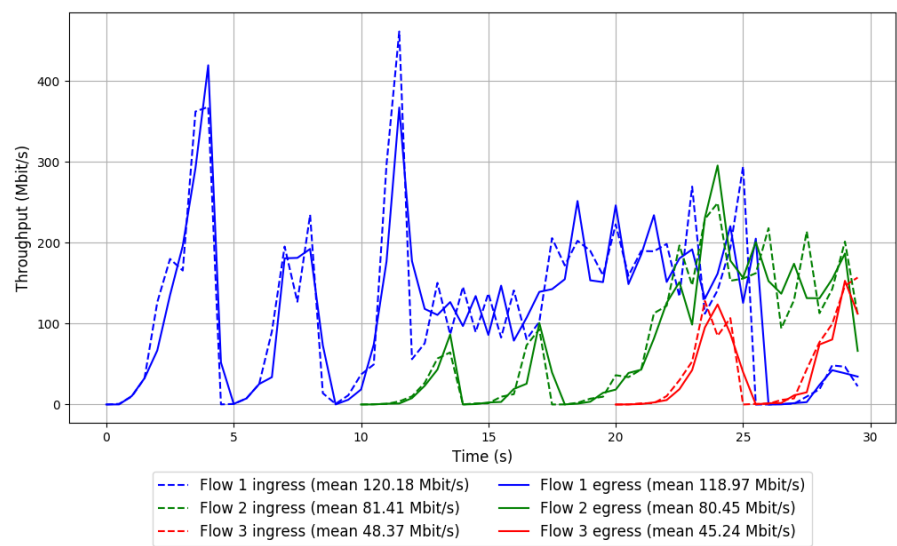
-- Flow 3:

Average throughput: 45.24 Mbit/s

95th percentile per-packet one-way delay: 190.505 ms

Loss rate: 9.34%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-03 08:42:33

End at: 2018-01-03 08:43:03

Below is generated by plot.py at 2018-01-03 12:28:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 385.84 Mbit/s

95th percentile per-packet one-way delay: 330.506 ms

Loss rate: 7.48%

-- Flow 1:

Average throughput: 235.61 Mbit/s

95th percentile per-packet one-way delay: 300.640 ms

Loss rate: 5.56%

-- Flow 2:

Average throughput: 206.38 Mbit/s

95th percentile per-packet one-way delay: 388.050 ms

Loss rate: 10.96%

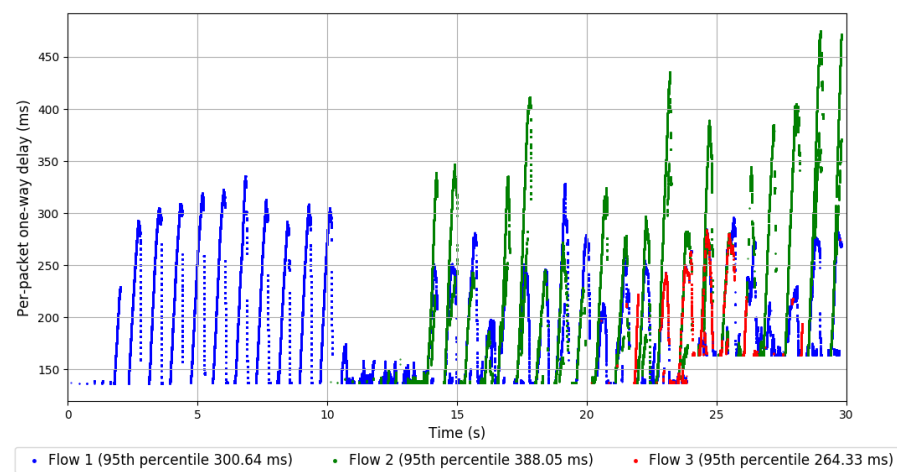
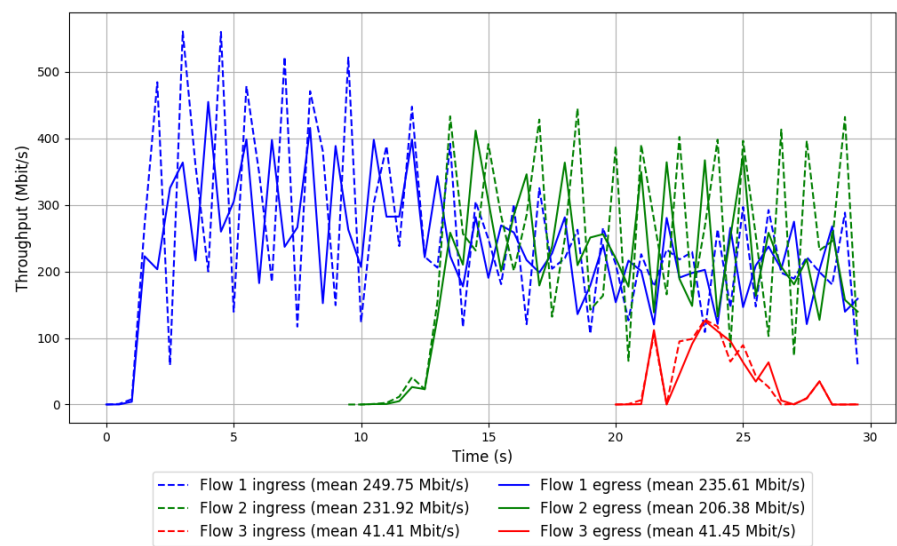
-- Flow 3:

Average throughput: 41.45 Mbit/s

95th percentile per-packet one-way delay: 264.335 ms

Loss rate: 3.31%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-03 08:58:26

End at: 2018-01-03 08:58:56

Below is generated by plot.py at 2018-01-03 12:28:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.75 Mbit/s

95th percentile per-packet one-way delay: 182.683 ms

Loss rate: 4.41%

-- Flow 1:

Average throughput: 60.03 Mbit/s

95th percentile per-packet one-way delay: 187.786 ms

Loss rate: 1.47%

-- Flow 2:

Average throughput: 49.01 Mbit/s

95th percentile per-packet one-way delay: 183.399 ms

Loss rate: 10.72%

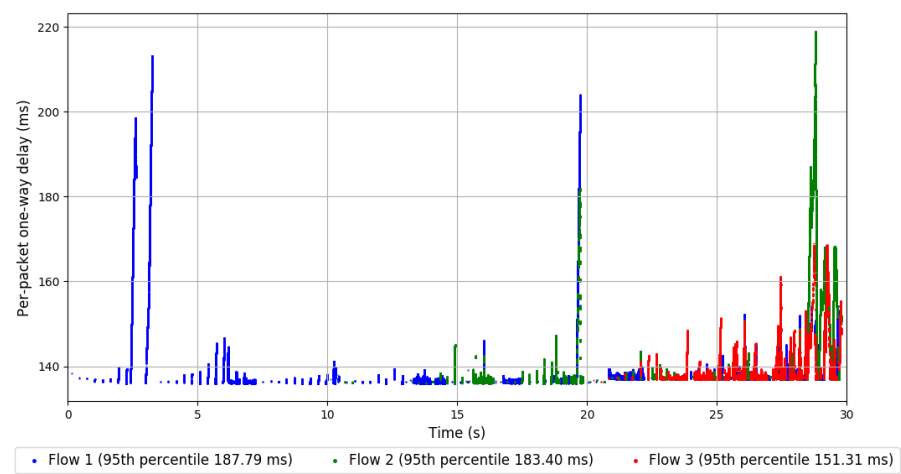
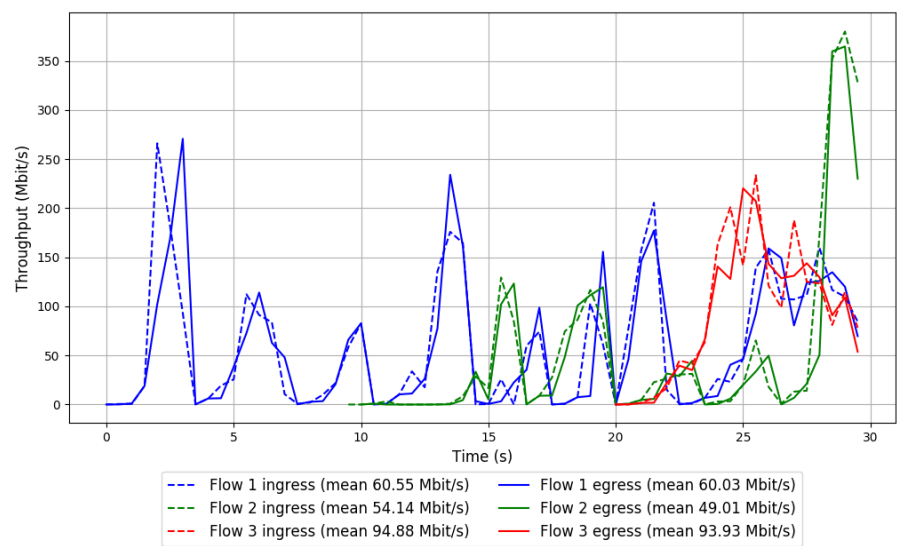
-- Flow 3:

Average throughput: 93.93 Mbit/s

95th percentile per-packet one-way delay: 151.310 ms

Loss rate: 2.80%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-03 09:12:54

End at: 2018-01-03 09:13:24

Below is generated by plot.py at 2018-01-03 12:28:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 149.42 Mbit/s

95th percentile per-packet one-way delay: 149.643 ms

Loss rate: 1.68%

-- Flow 1:

Average throughput: 81.97 Mbit/s

95th percentile per-packet one-way delay: 152.697 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 77.67 Mbit/s

95th percentile per-packet one-way delay: 146.765 ms

Loss rate: 3.98%

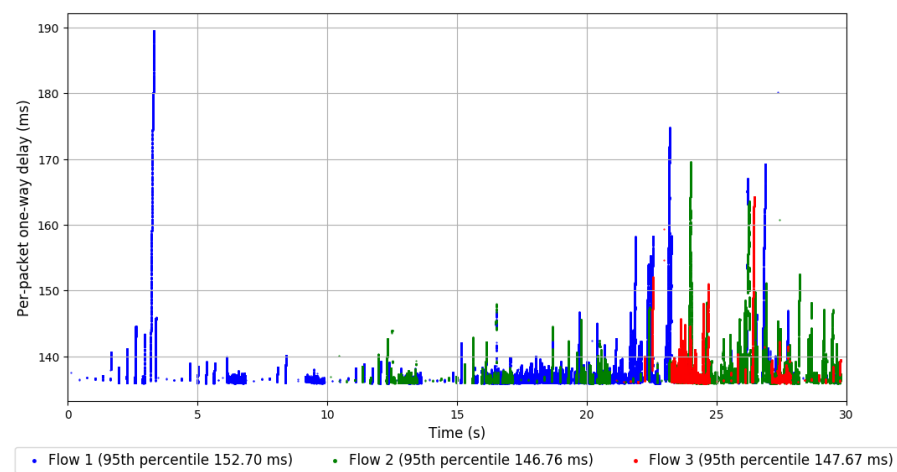
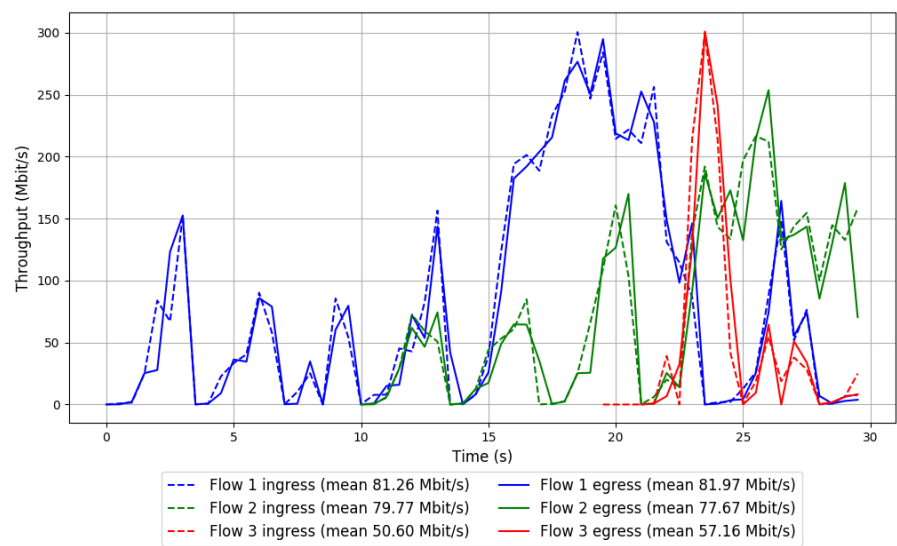
-- Flow 3:

Average throughput: 57.16 Mbit/s

95th percentile per-packet one-way delay: 147.671 ms

Loss rate: 1.66%

Run 10: Report of Verus — Data Link

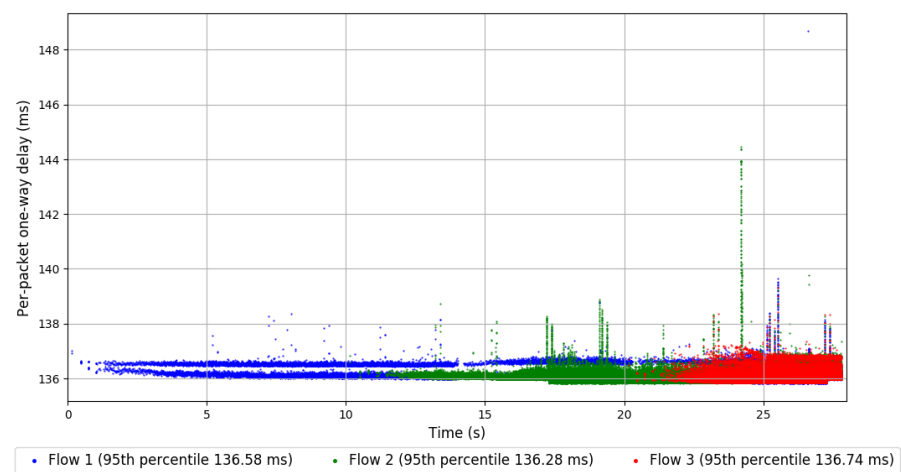
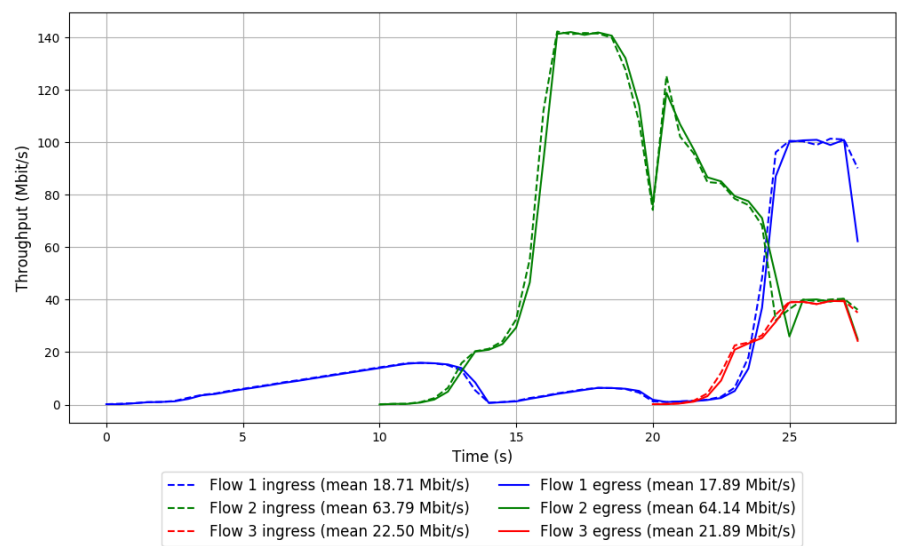


```
Run 1: Statistics of Copa

Start at: 2018-01-03 06:51:48
End at: 2018-01-03 06:52:18

# Below is generated by plot.py at 2018-01-03 12:28:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.89 Mbit/s
95th percentile per-packet one-way delay: 136.525 ms
Loss rate: 2.70%
-- Flow 1:
Average throughput: 17.89 Mbit/s
95th percentile per-packet one-way delay: 136.584 ms
Loss rate: 5.32%
-- Flow 2:
Average throughput: 64.14 Mbit/s
95th percentile per-packet one-way delay: 136.284 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 21.89 Mbit/s
95th percentile per-packet one-way delay: 136.743 ms
Loss rate: 6.05%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-03 07:07:43

End at: 2018-01-03 07:08:13

Below is generated by plot.py at 2018-01-03 12:28:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 98.44 Mbit/s

95th percentile per-packet one-way delay: 136.598 ms

Loss rate: 0.88%

-- Flow 1:

Average throughput: 50.20 Mbit/s

95th percentile per-packet one-way delay: 136.446 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 73.73 Mbit/s

95th percentile per-packet one-way delay: 136.605 ms

Loss rate: 1.57%

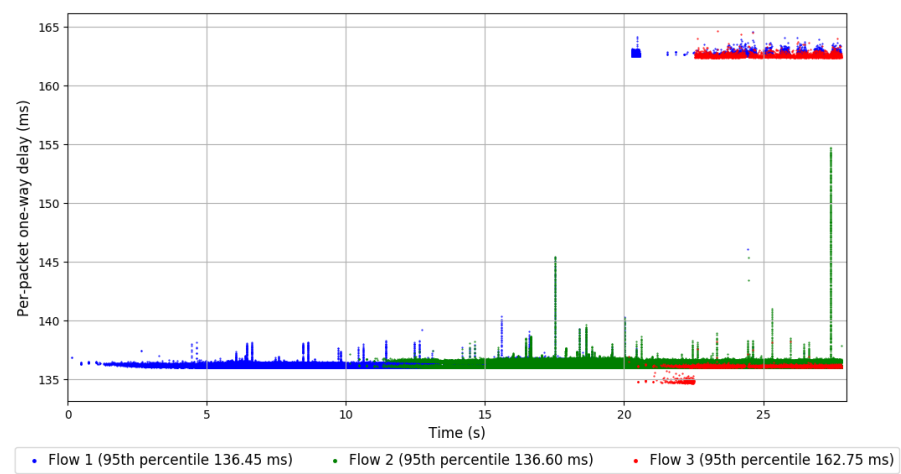
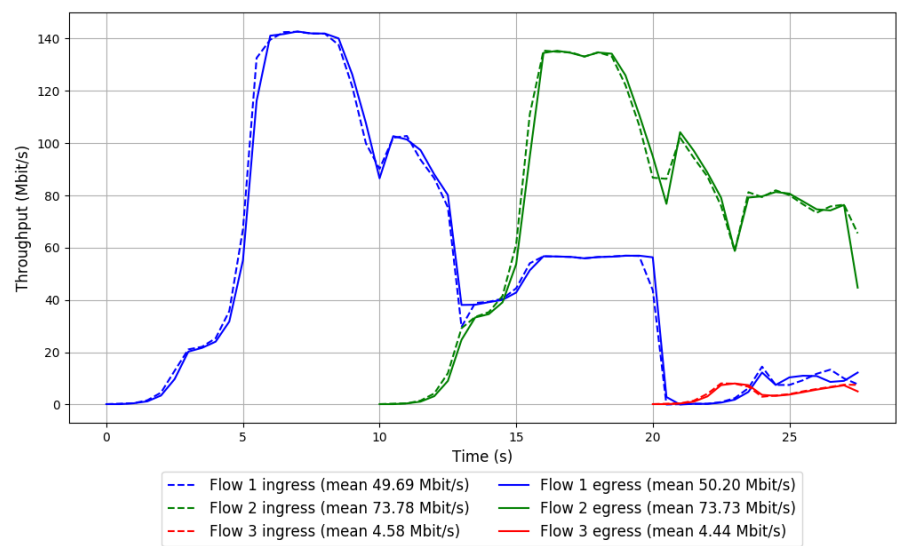
-- Flow 3:

Average throughput: 4.44 Mbit/s

95th percentile per-packet one-way delay: 162.755 ms

Loss rate: 6.43%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-03 07:23:58

End at: 2018-01-03 07:24:28

Below is generated by plot.py at 2018-01-03 12:28:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 69.76 Mbit/s

95th percentile per-packet one-way delay: 163.711 ms

Loss rate: 2.74%

-- Flow 1:

Average throughput: 22.50 Mbit/s

95th percentile per-packet one-way delay: 163.861 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 49.37 Mbit/s

95th percentile per-packet one-way delay: 136.603 ms

Loss rate: 1.07%

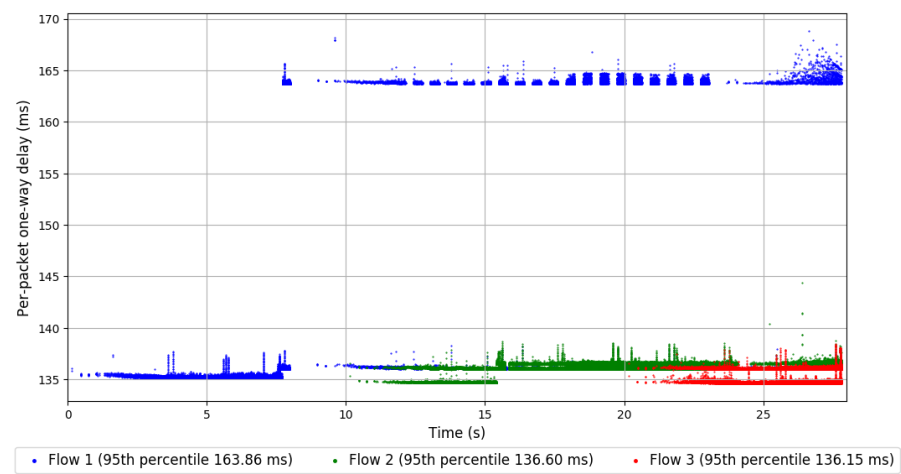
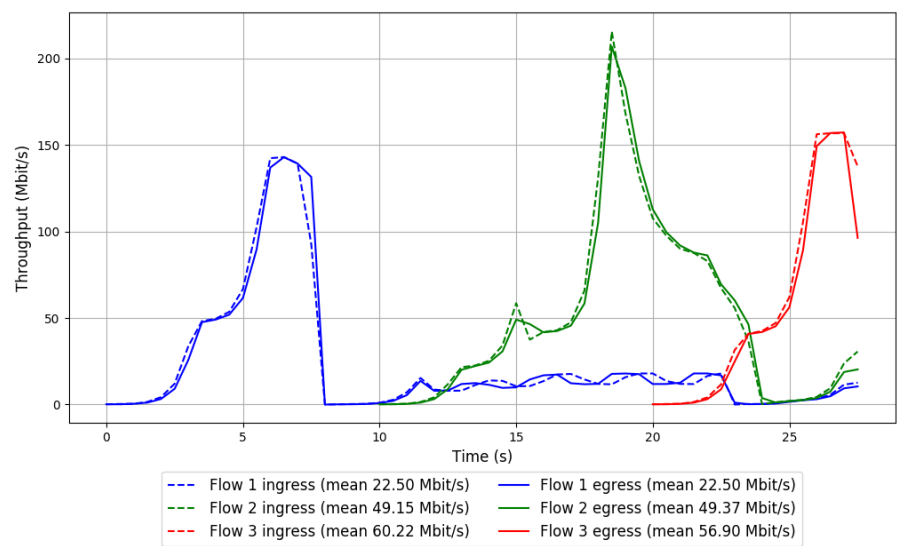
-- Flow 3:

Average throughput: 56.90 Mbit/s

95th percentile per-packet one-way delay: 136.151 ms

Loss rate: 8.76%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-03 07:38:19

End at: 2018-01-03 07:38:50

Below is generated by plot.py at 2018-01-03 12:28:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 54.71 Mbit/s

95th percentile per-packet one-way delay: 163.911 ms

Loss rate: 1.78%

-- Flow 1:

Average throughput: 67.32 Mbit/s

95th percentile per-packet one-way delay: 163.933 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 161.818 ms

Loss rate: 0.00%

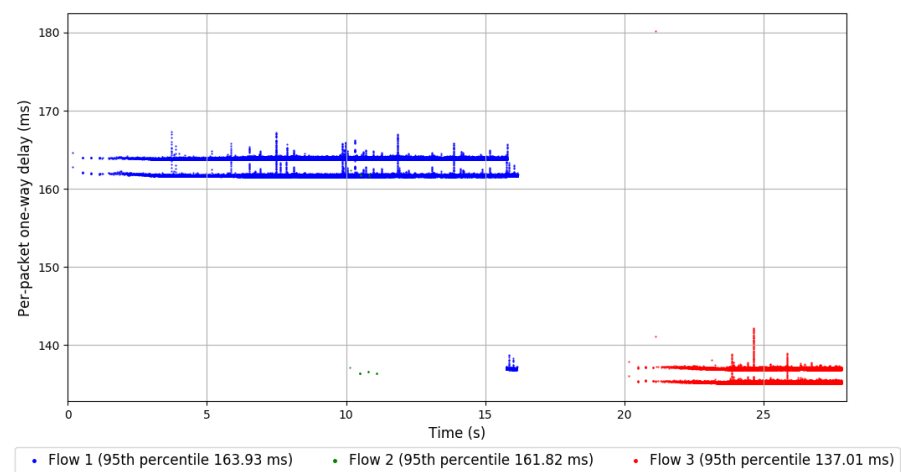
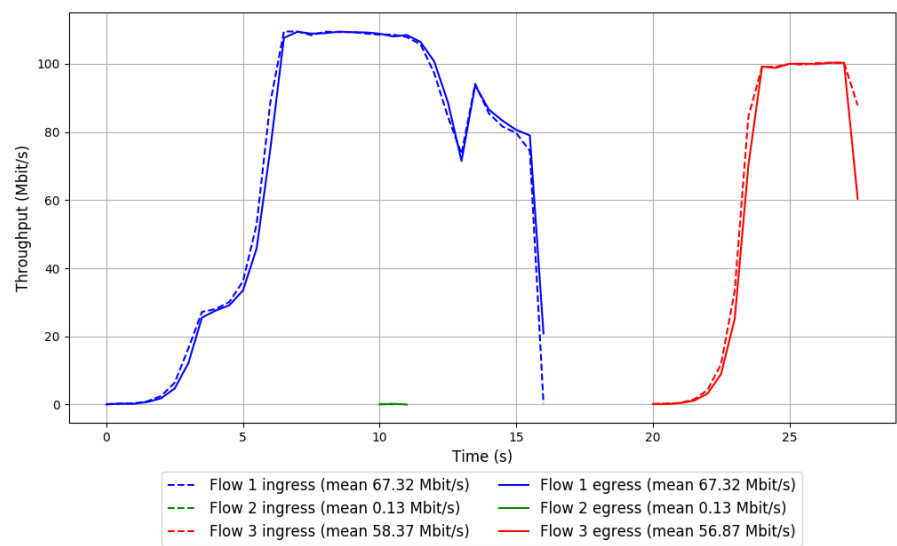
-- Flow 3:

Average throughput: 56.87 Mbit/s

95th percentile per-packet one-way delay: 137.015 ms

Loss rate: 5.94%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-03 07:53:43

End at: 2018-01-03 07:54:13

Below is generated by plot.py at 2018-01-03 12:28:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 58.34 Mbit/s

95th percentile per-packet one-way delay: 137.141 ms

Loss rate: 3.54%

-- Flow 1:

Average throughput: 48.60 Mbit/s

95th percentile per-packet one-way delay: 161.621 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 162.433 ms

Loss rate: 0.00%

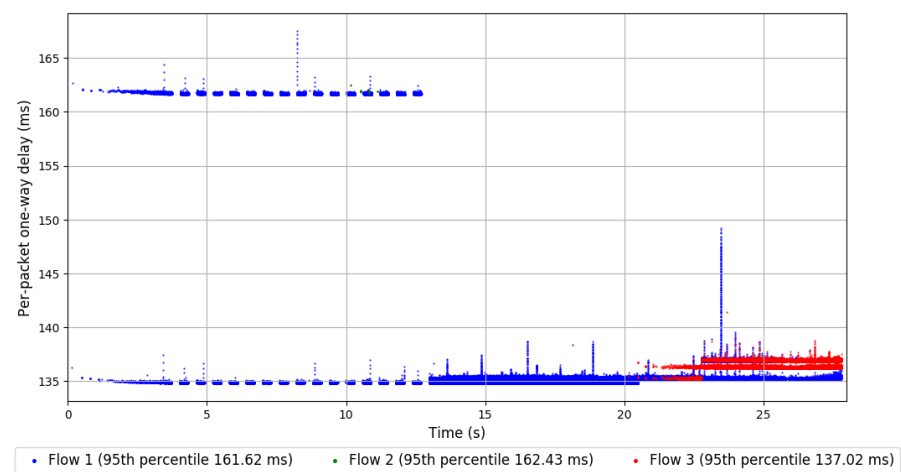
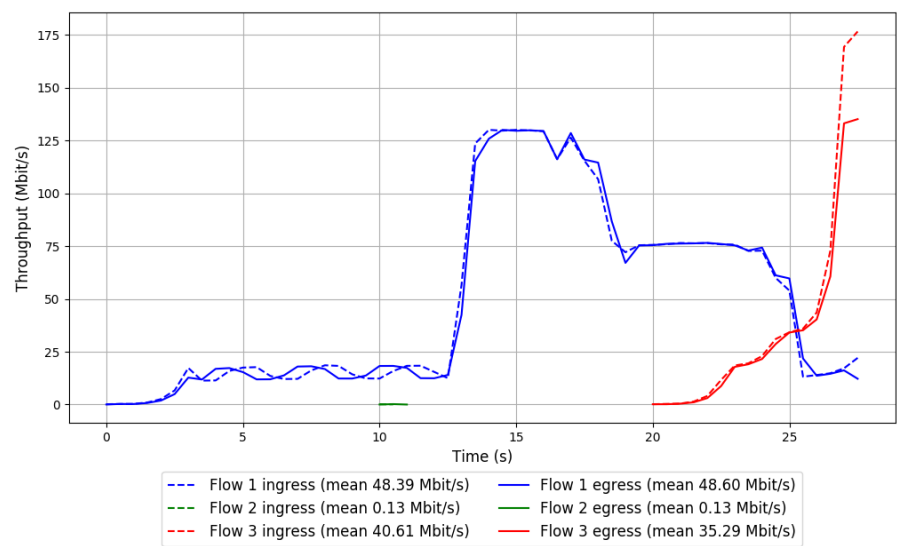
-- Flow 3:

Average throughput: 35.29 Mbit/s

95th percentile per-packet one-way delay: 137.018 ms

Loss rate: 16.08%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-03 08:08:44

End at: 2018-01-03 08:09:14

Below is generated by plot.py at 2018-01-03 12:28:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.51 Mbit/s

95th percentile per-packet one-way delay: 163.605 ms

Loss rate: 2.64%

-- Flow 1:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 163.788 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.72 Mbit/s

95th percentile per-packet one-way delay: 163.614 ms

Loss rate: 0.65%

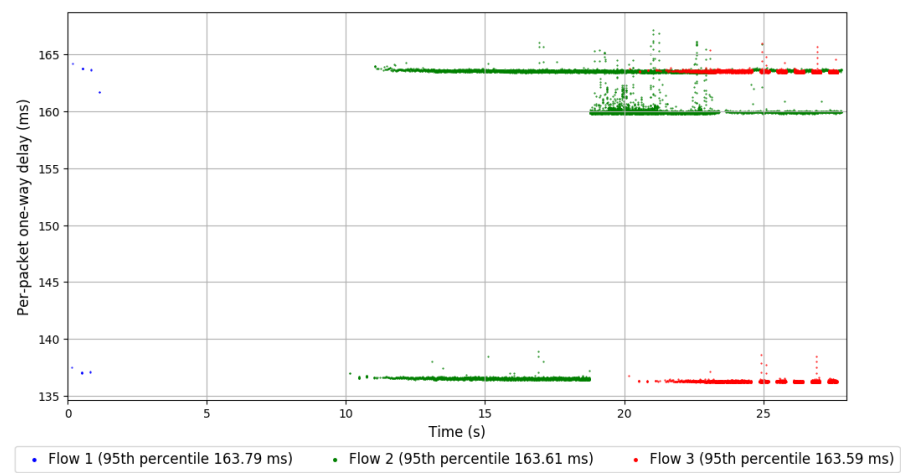
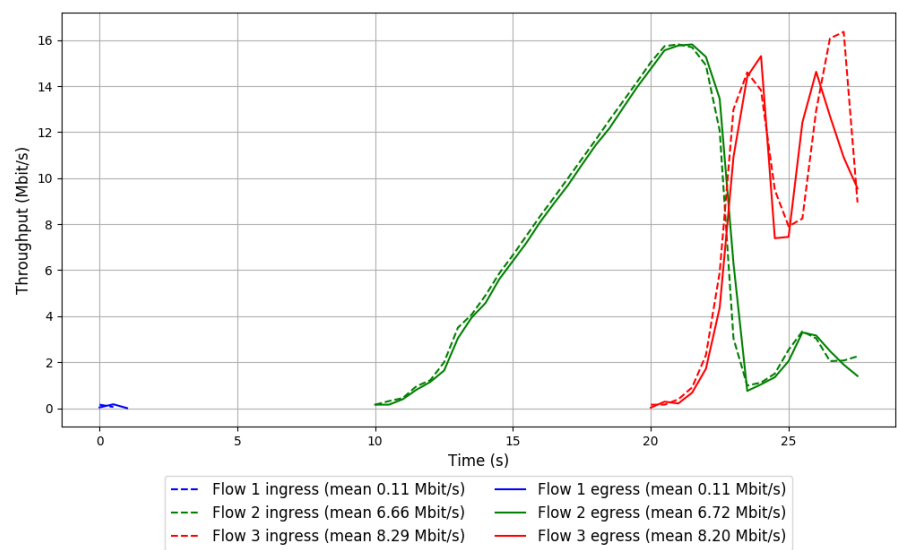
-- Flow 3:

Average throughput: 8.20 Mbit/s

95th percentile per-packet one-way delay: 163.586 ms

Loss rate: 6.26%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-03 08:24:18

End at: 2018-01-03 08:24:48

Below is generated by plot.py at 2018-01-03 12:28:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 53.28 Mbit/s

95th percentile per-packet one-way delay: 136.947 ms

Loss rate: 3.31%

-- Flow 1:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 163.069 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 65.18 Mbit/s

95th percentile per-packet one-way delay: 136.876 ms

Loss rate: 1.25%

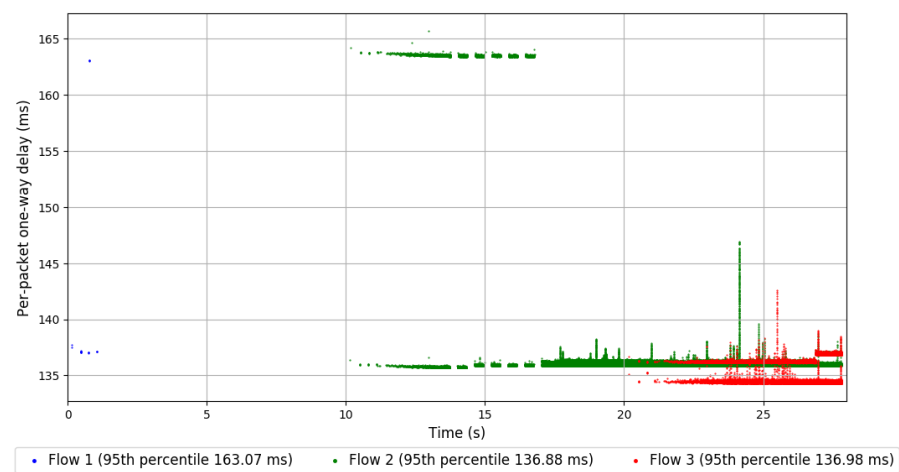
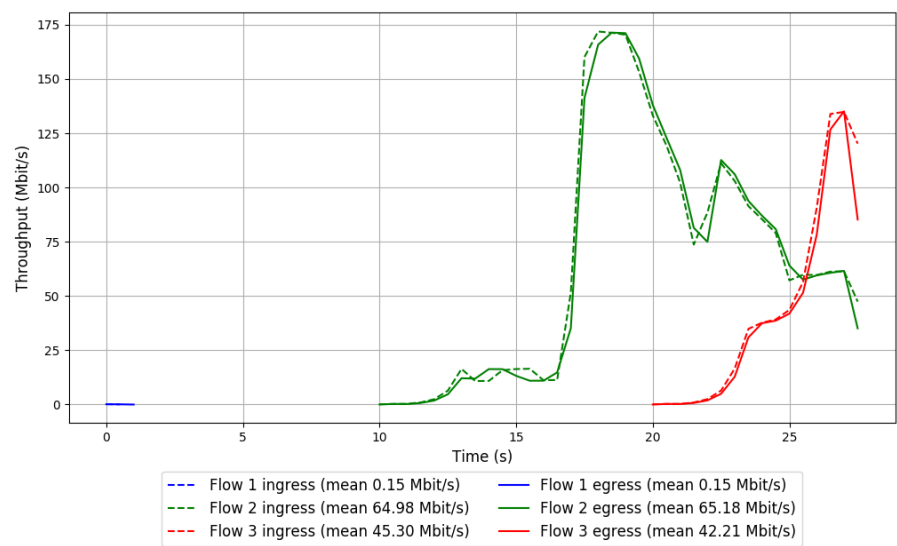
-- Flow 3:

Average throughput: 42.21 Mbit/s

95th percentile per-packet one-way delay: 136.981 ms

Loss rate: 10.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-01-03 08:39:37

End at: 2018-01-03 08:40:07

Below is generated by plot.py at 2018-01-03 12:28:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 55.44 Mbit/s

95th percentile per-packet one-way delay: 163.822 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 57.09 Mbit/s

95th percentile per-packet one-way delay: 140.001 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 24.86 Mbit/s

95th percentile per-packet one-way delay: 163.854 ms

Loss rate: 0.12%

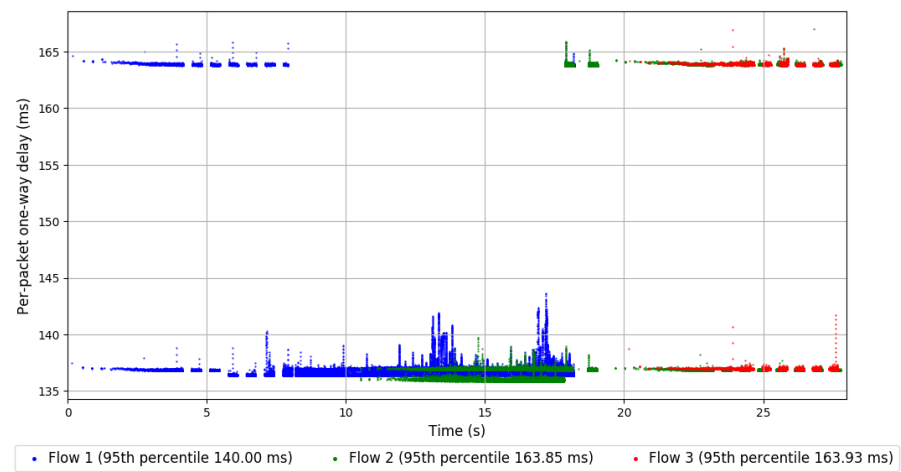
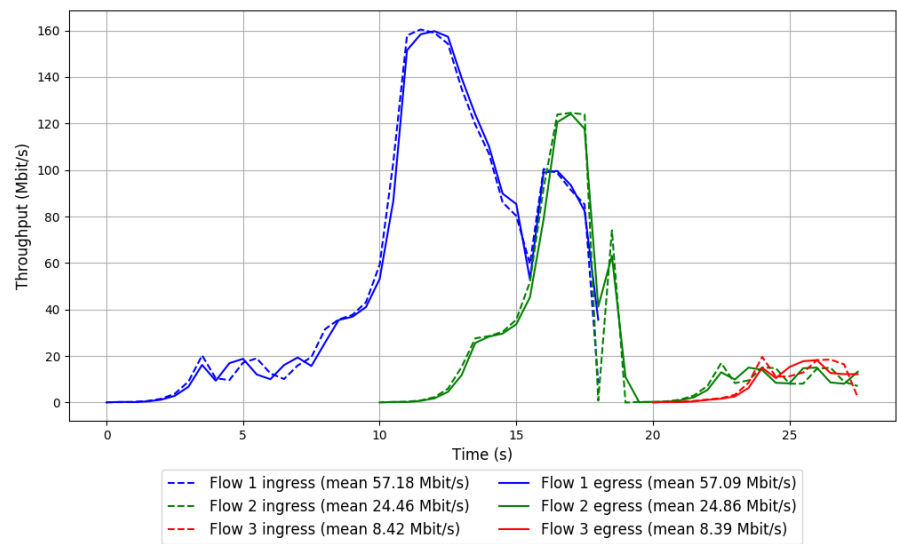
-- Flow 3:

Average throughput: 8.39 Mbit/s

95th percentile per-packet one-way delay: 163.925 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-03 08:55:16

End at: 2018-01-03 08:55:46

Below is generated by plot.py at 2018-01-03 12:28:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.85 Mbit/s

95th percentile per-packet one-way delay: 136.933 ms

Loss rate: 2.03%

-- Flow 1:

Average throughput: 51.80 Mbit/s

95th percentile per-packet one-way delay: 136.965 ms

Loss rate: 1.25%

-- Flow 2:

Average throughput: 51.30 Mbit/s

95th percentile per-packet one-way delay: 136.659 ms

Loss rate: 2.25%

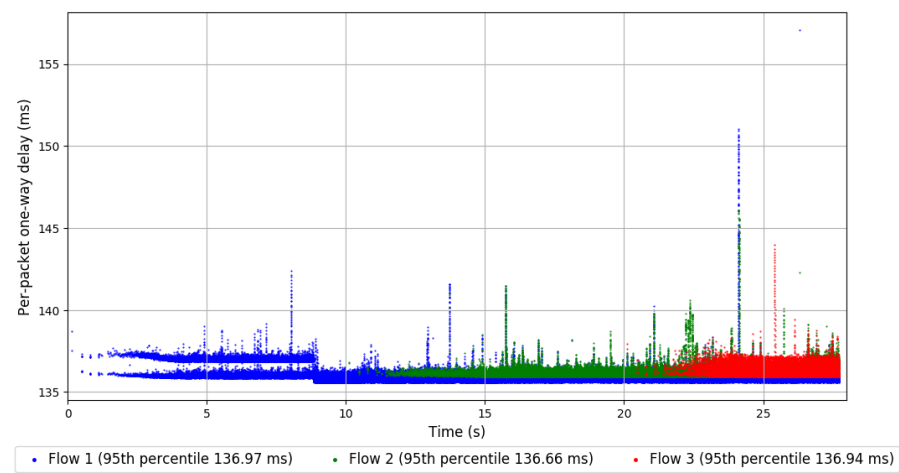
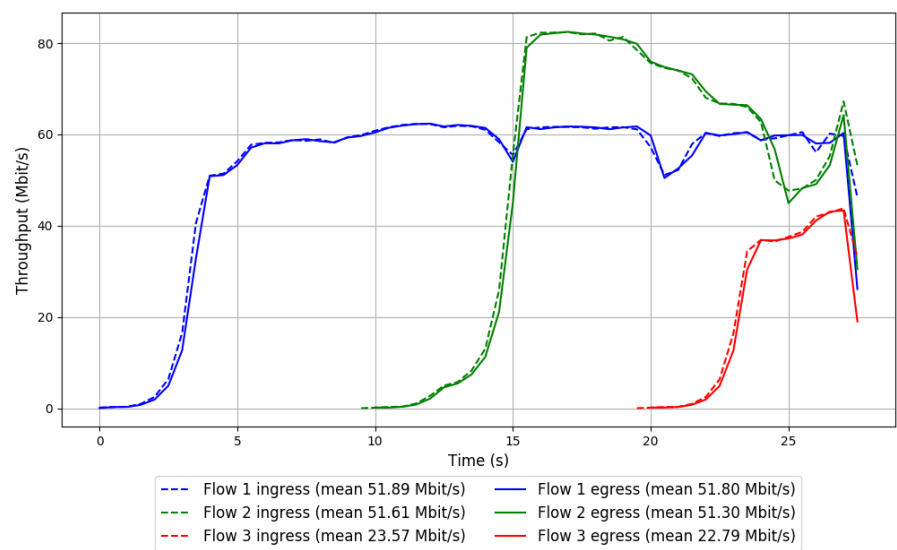
-- Flow 3:

Average throughput: 22.79 Mbit/s

95th percentile per-packet one-way delay: 136.938 ms

Loss rate: 6.98%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-03 09:09:58

End at: 2018-01-03 09:10:28

Below is generated by plot.py at 2018-01-03 12:28:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 34.03 Mbit/s

95th percentile per-packet one-way delay: 136.753 ms

Loss rate: 1.51%

-- Flow 1:

Average throughput: 20.01 Mbit/s

95th percentile per-packet one-way delay: 136.887 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 22.02 Mbit/s

95th percentile per-packet one-way delay: 136.612 ms

Loss rate: 2.95%

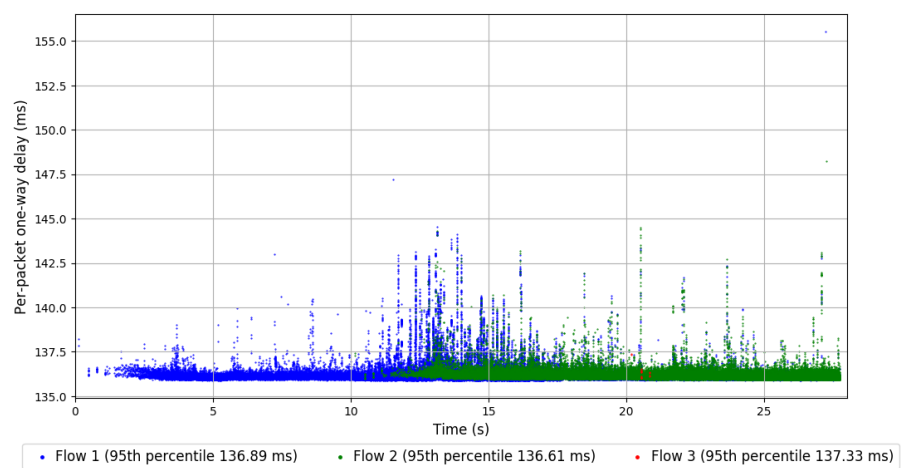
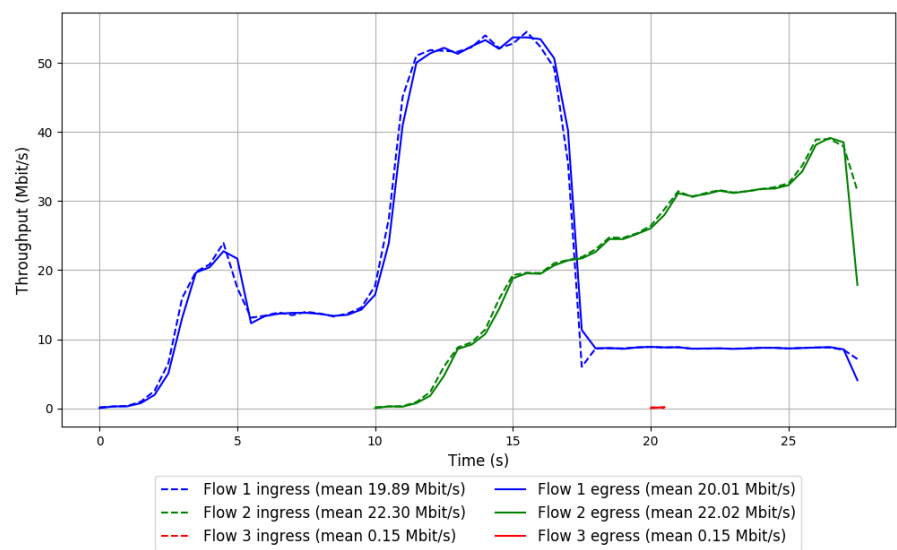
-- Flow 3:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 137.330 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

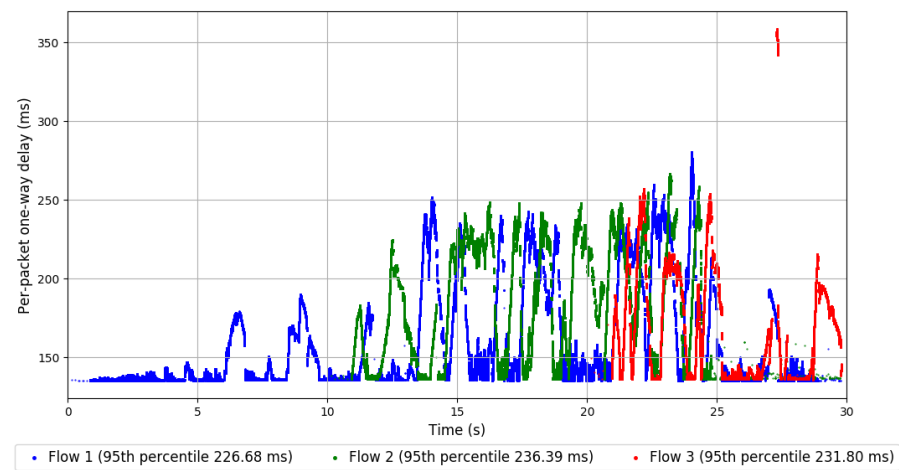
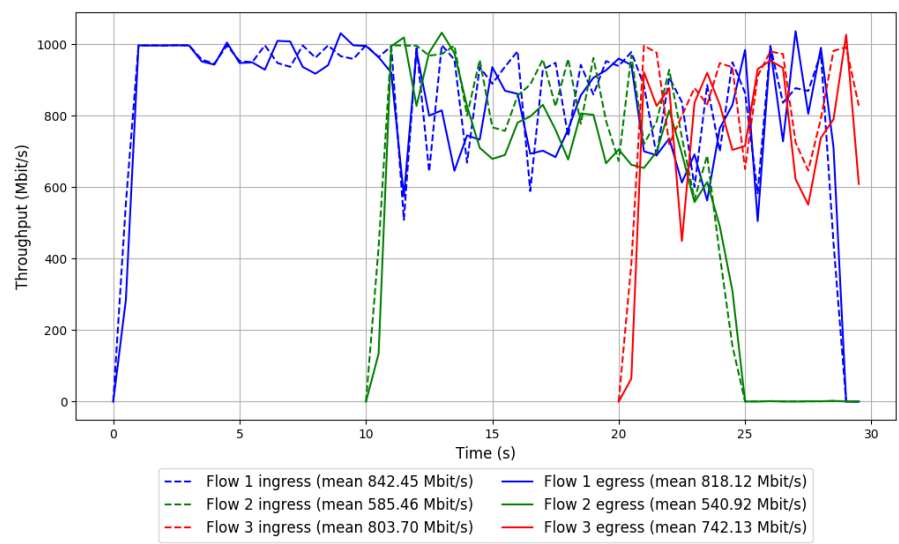


```
Run 1: Statistics of FillP

Start at: 2018-01-03 06:44:49
End at: 2018-01-03 06:45:19

# Below is generated by plot.py at 2018-01-03 12:51:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1416.02 Mbit/s
95th percentile per-packet one-way delay: 231.721 ms
Loss rate: 6.30%
-- Flow 1:
Average throughput: 818.12 Mbit/s
95th percentile per-packet one-way delay: 226.682 ms
Loss rate: 3.78%
-- Flow 2:
Average throughput: 540.92 Mbit/s
95th percentile per-packet one-way delay: 236.389 ms
Loss rate: 8.98%
-- Flow 3:
Average throughput: 742.13 Mbit/s
95th percentile per-packet one-way delay: 231.797 ms
Loss rate: 10.33%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-01-03 07:00:33

End at: 2018-01-03 07:01:03

Below is generated by plot.py at 2018-01-03 12:54:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 1531.27 Mbit/s

95th percentile per-packet one-way delay: 252.604 ms

Loss rate: 8.94%

-- Flow 1:

Average throughput: 857.35 Mbit/s

95th percentile per-packet one-way delay: 221.263 ms

Loss rate: 4.64%

-- Flow 2:

Average throughput: 706.27 Mbit/s

95th percentile per-packet one-way delay: 262.189 ms

Loss rate: 12.14%

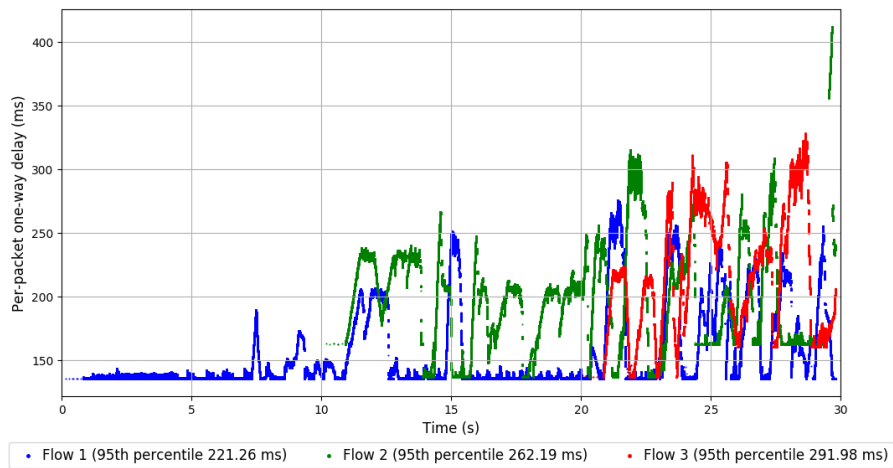
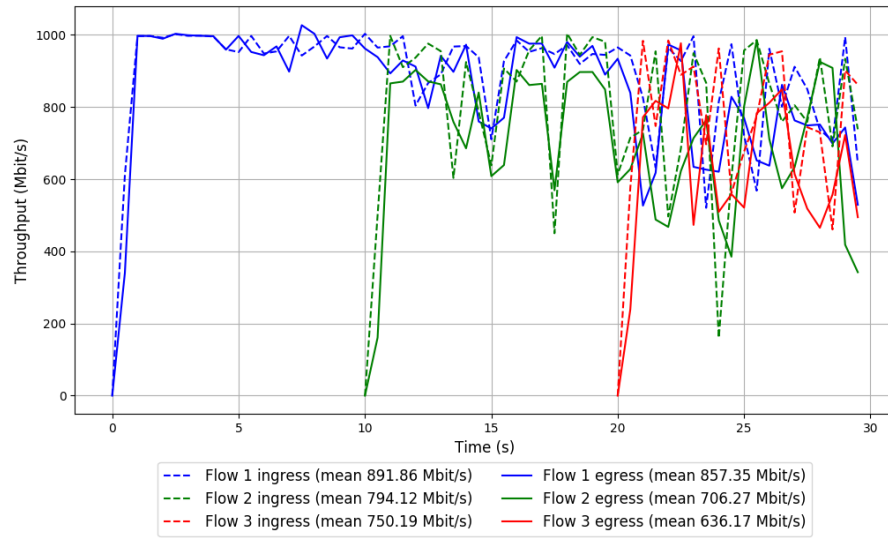
-- Flow 3:

Average throughput: 636.17 Mbit/s

95th percentile per-packet one-way delay: 291.976 ms

Loss rate: 17.56%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-03 07:16:49

End at: 2018-01-03 07:17:19

Below is generated by plot.py at 2018-01-03 12:54:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 1514.67 Mbit/s

95th percentile per-packet one-way delay: 252.525 ms

Loss rate: 8.26%

-- Flow 1:

Average throughput: 772.78 Mbit/s

95th percentile per-packet one-way delay: 261.222 ms

Loss rate: 7.33%

-- Flow 2:

Average throughput: 770.26 Mbit/s

95th percentile per-packet one-way delay: 246.474 ms

Loss rate: 8.11%

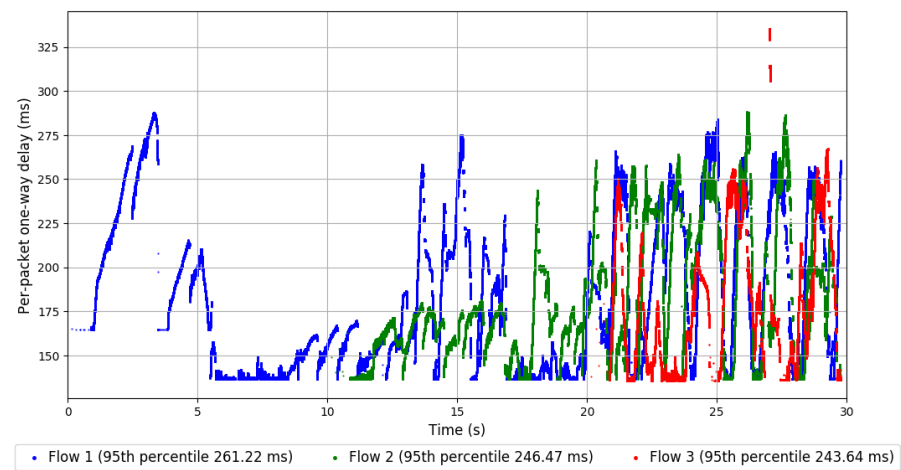
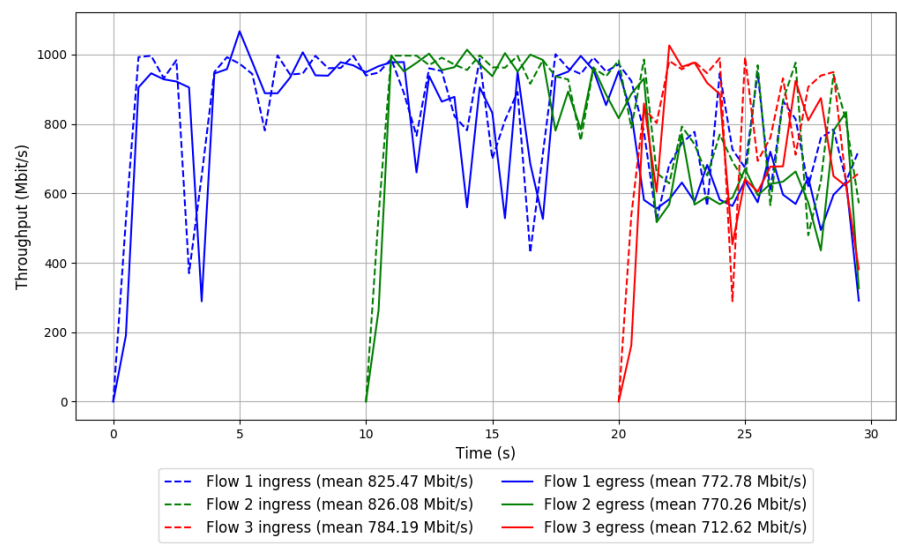
-- Flow 3:

Average throughput: 712.62 Mbit/s

95th percentile per-packet one-way delay: 243.640 ms

Loss rate: 11.54%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-01-03 07:32:30

End at: 2018-01-03 07:33:00

Below is generated by plot.py at 2018-01-03 12:54:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 340.26 Mbit/s

95th percentile per-packet one-way delay: 176.510 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 115.94 Mbit/s

95th percentile per-packet one-way delay: 175.627 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 170.70 Mbit/s

95th percentile per-packet one-way delay: 184.691 ms

Loss rate: 0.29%

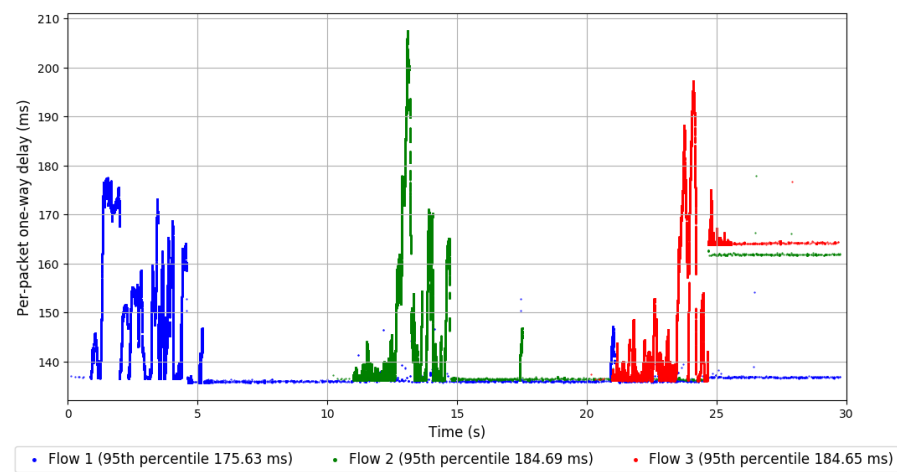
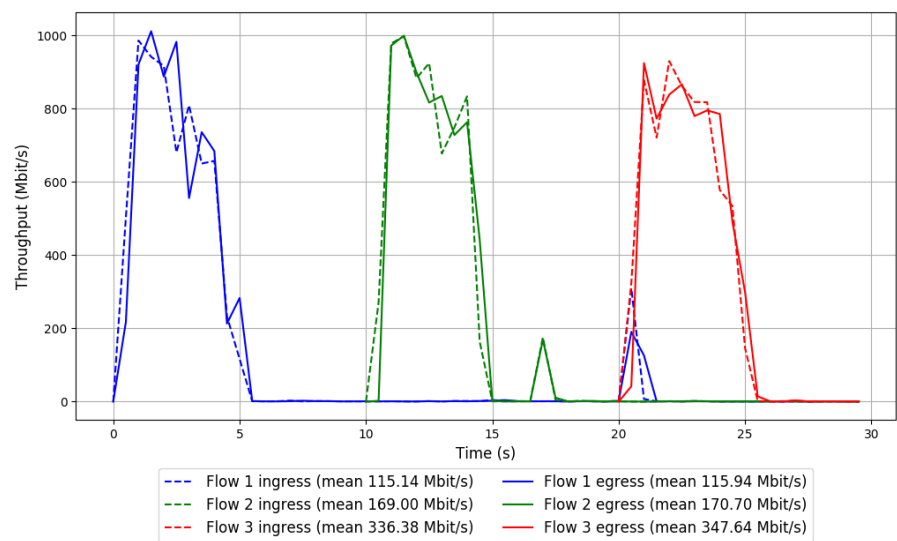
-- Flow 3:

Average throughput: 347.64 Mbit/s

95th percentile per-packet one-way delay: 184.654 ms

Loss rate: 0.01%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-03 07:47:06

End at: 2018-01-03 07:47:36

Below is generated by plot.py at 2018-01-03 12:54:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 1191.37 Mbit/s

95th percentile per-packet one-way delay: 224.721 ms

Loss rate: 2.36%

-- Flow 1:

Average throughput: 602.09 Mbit/s

95th percentile per-packet one-way delay: 242.903 ms

Loss rate: 1.63%

-- Flow 2:

Average throughput: 627.01 Mbit/s

95th percentile per-packet one-way delay: 219.205 ms

Loss rate: 4.02%

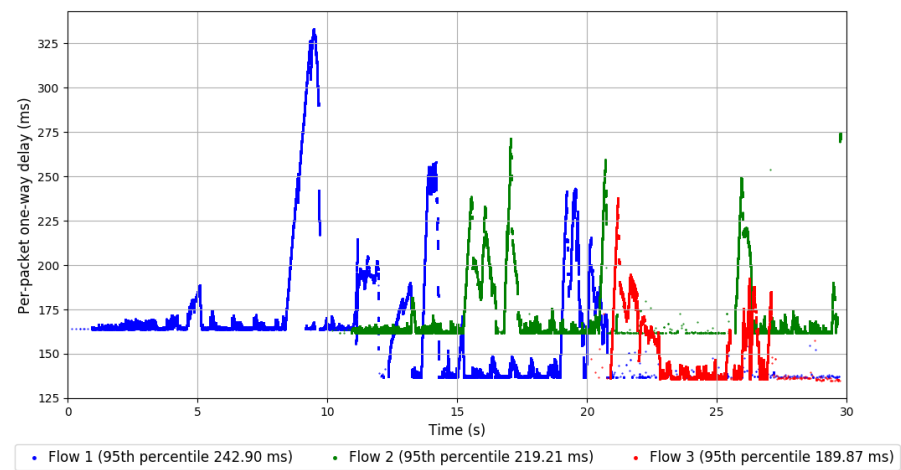
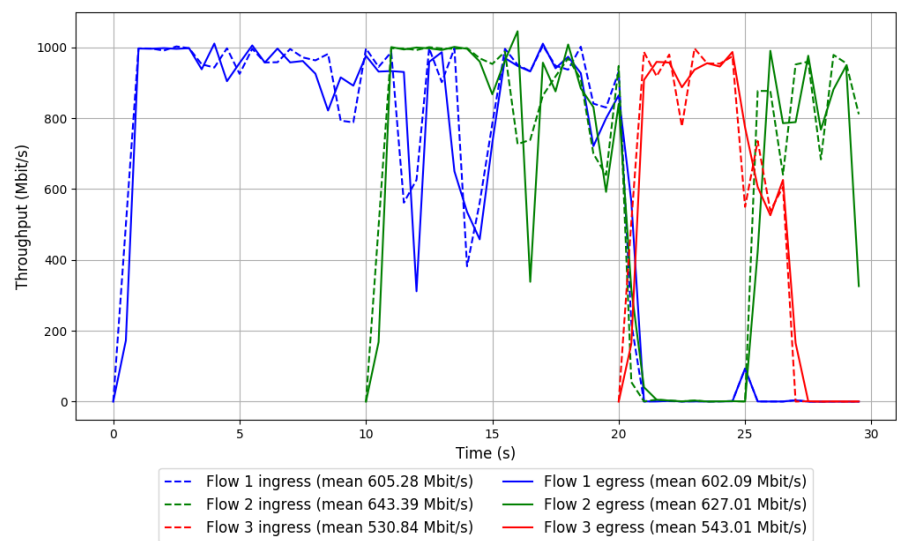
-- Flow 3:

Average throughput: 543.01 Mbit/s

95th percentile per-packet one-way delay: 189.874 ms

Loss rate: 0.80%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-03 08:02:27

End at: 2018-01-03 08:02:57

Below is generated by plot.py at 2018-01-03 12:54:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 839.88 Mbit/s

95th percentile per-packet one-way delay: 170.312 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 440.80 Mbit/s

95th percentile per-packet one-way delay: 158.072 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 252.87 Mbit/s

95th percentile per-packet one-way delay: 169.045 ms

Loss rate: 0.00%

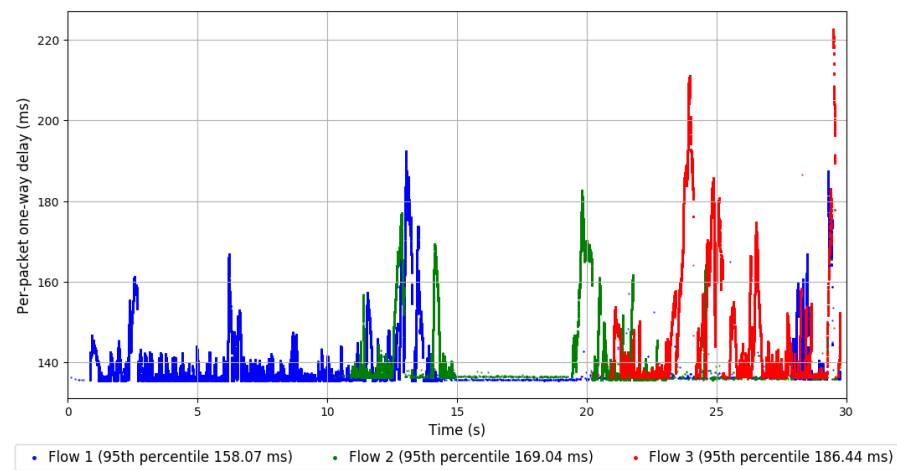
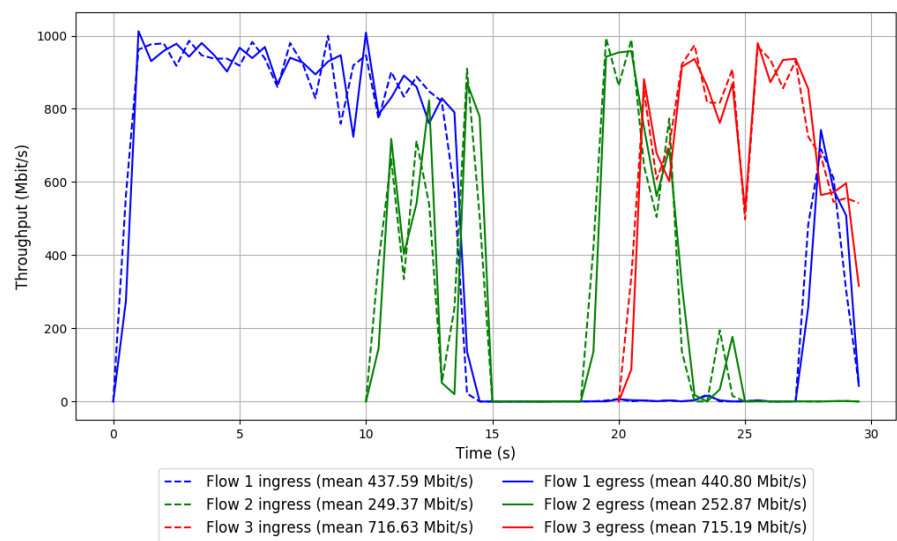
-- Flow 3:

Average throughput: 715.19 Mbit/s

95th percentile per-packet one-way delay: 186.440 ms

Loss rate: 2.98%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-01-03 08:17:27

End at: 2018-01-03 08:17:57

Below is generated by plot.py at 2018-01-03 12:54:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 1357.91 Mbit/s

95th percentile per-packet one-way delay: 232.082 ms

Loss rate: 5.58%

-- Flow 1:

Average throughput: 846.86 Mbit/s

95th percentile per-packet one-way delay: 232.602 ms

Loss rate: 4.99%

-- Flow 2:

Average throughput: 567.28 Mbit/s

95th percentile per-packet one-way delay: 233.404 ms

Loss rate: 6.36%

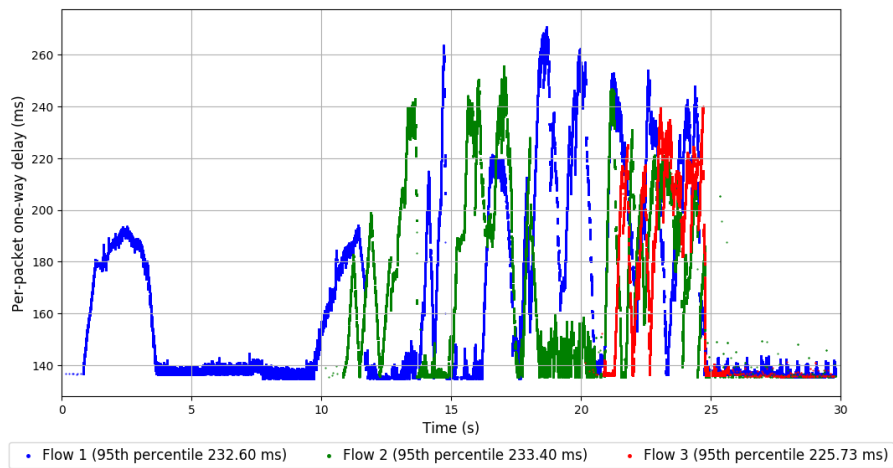
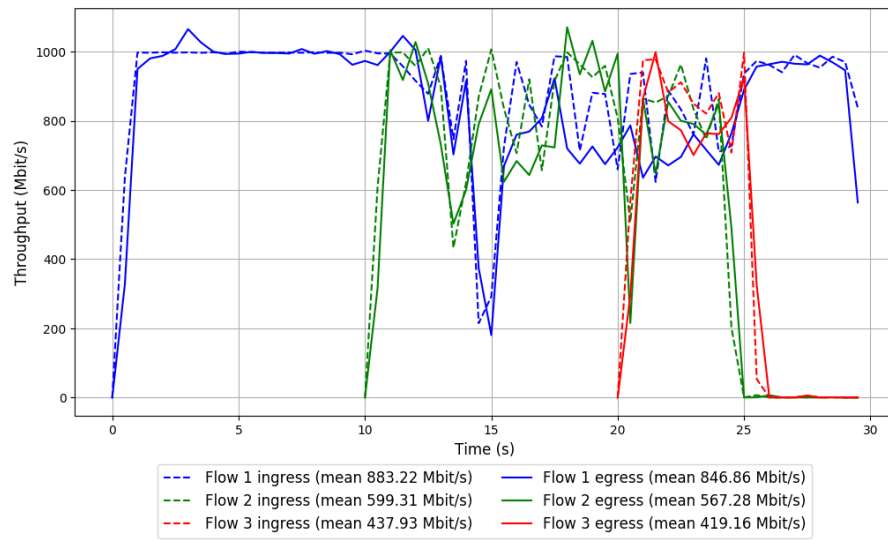
-- Flow 3:

Average throughput: 419.16 Mbit/s

95th percentile per-packet one-way delay: 225.734 ms

Loss rate: 7.05%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-03 08:32:55

End at: 2018-01-03 08:33:25

Below is generated by plot.py at 2018-01-03 12:56:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 1470.65 Mbit/s

95th percentile per-packet one-way delay: 345.271 ms

Loss rate: 9.78%

-- Flow 1:

Average throughput: 810.53 Mbit/s

95th percentile per-packet one-way delay: 243.195 ms

Loss rate: 7.59%

-- Flow 2:

Average throughput: 703.14 Mbit/s

95th percentile per-packet one-way delay: 363.585 ms

Loss rate: 10.11%

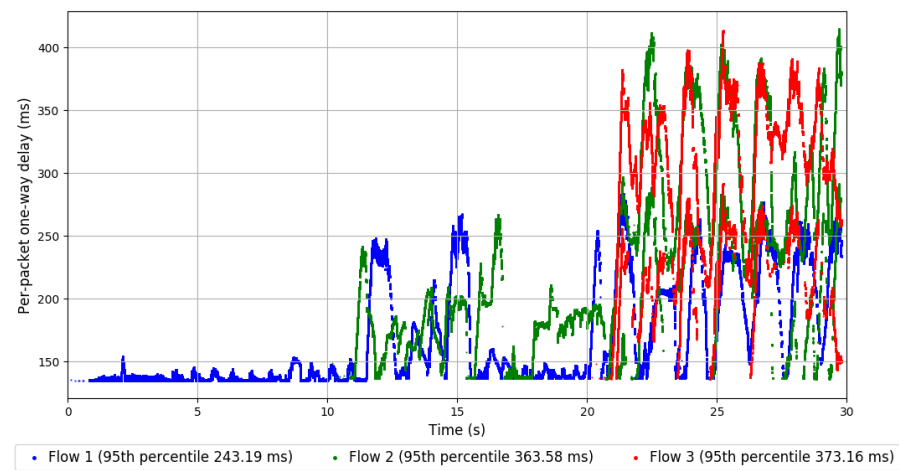
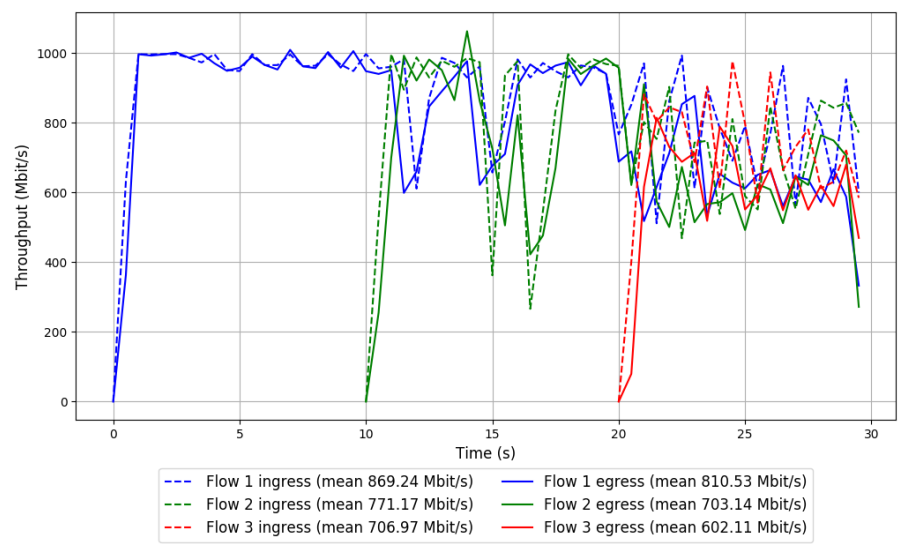
-- Flow 3:

Average throughput: 602.11 Mbit/s

95th percentile per-packet one-way delay: 373.160 ms

Loss rate: 17.19%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-03 08:48:24

End at: 2018-01-03 08:48:54

Below is generated by plot.py at 2018-01-03 12:57:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 1467.69 Mbit/s

95th percentile per-packet one-way delay: 321.908 ms

Loss rate: 7.63%

-- Flow 1:

Average throughput: 836.11 Mbit/s

95th percentile per-packet one-way delay: 225.407 ms

Loss rate: 5.65%

-- Flow 2:

Average throughput: 648.13 Mbit/s

95th percentile per-packet one-way delay: 364.089 ms

Loss rate: 6.60%

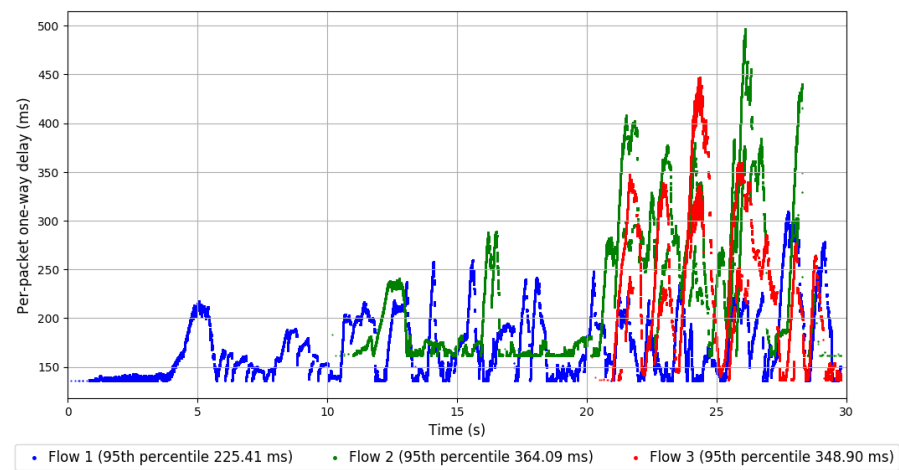
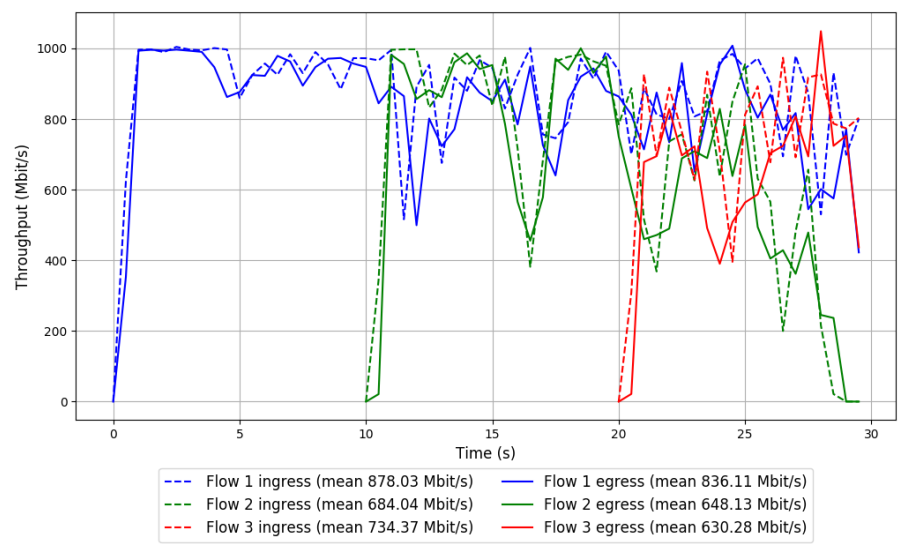
-- Flow 3:

Average throughput: 630.28 Mbit/s

95th percentile per-packet one-way delay: 348.904 ms

Loss rate: 16.77%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-01-03 09:04:09

End at: 2018-01-03 09:04:39

Below is generated by plot.py at 2018-01-03 12:57:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 147.23 Mbit/s

95th percentile per-packet one-way delay: 146.111 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 34.15 Mbit/s

95th percentile per-packet one-way delay: 145.837 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 122.96 Mbit/s

95th percentile per-packet one-way delay: 147.759 ms

Loss rate: 0.73%

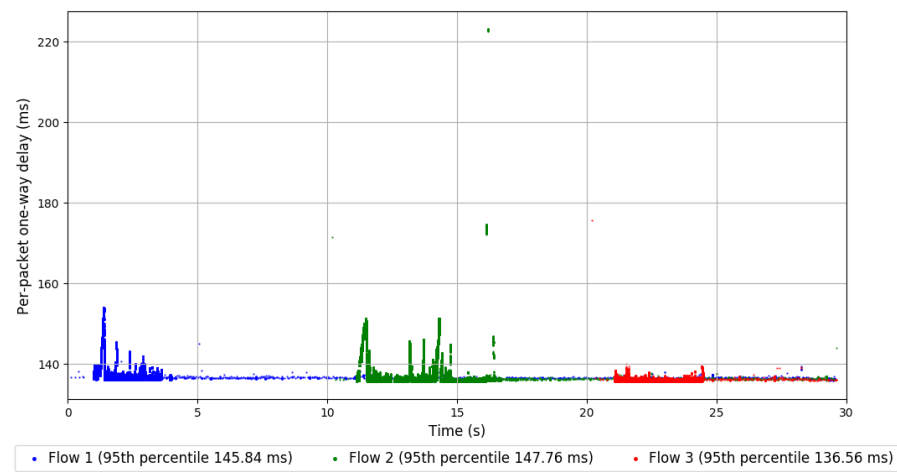
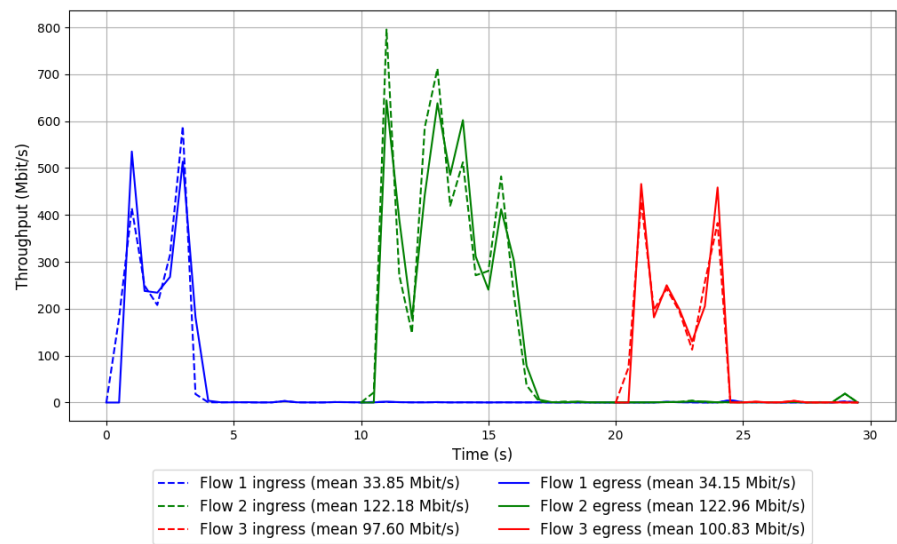
-- Flow 3:

Average throughput: 100.83 Mbit/s

95th percentile per-packet one-way delay: 136.563 ms

Loss rate: 0.00%

Run 10: Report of FillP — Data Link

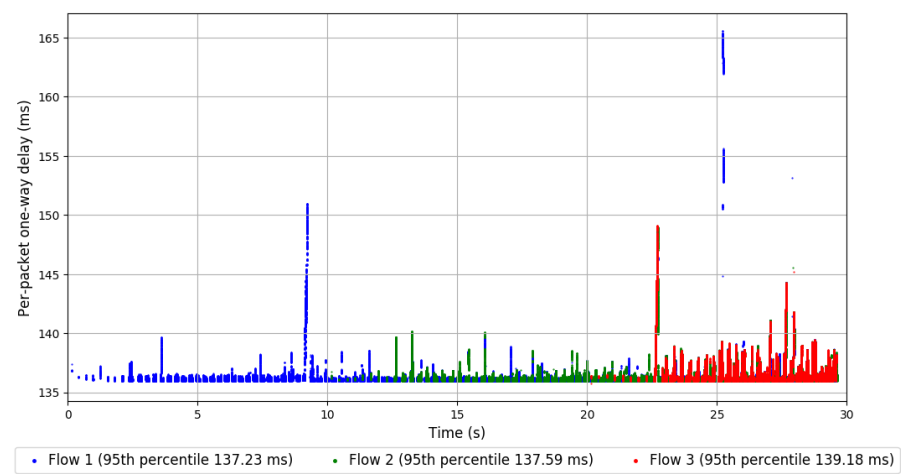
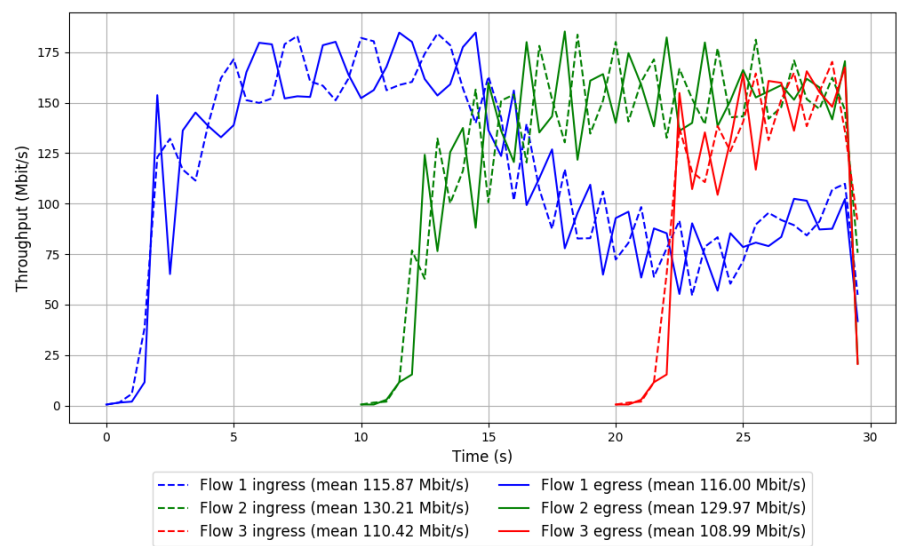


```
Run 1: Statistics of Indigo

Start at: 2018-01-03 06:49:00
End at: 2018-01-03 06:49:30

# Below is generated by plot.py at 2018-01-03 12:57:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 236.79 Mbit/s
95th percentile per-packet one-way delay: 137.773 ms
Loss rate: 1.62%
-- Flow 1:
Average throughput: 116.00 Mbit/s
95th percentile per-packet one-way delay: 137.227 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 129.97 Mbit/s
95th percentile per-packet one-way delay: 137.593 ms
Loss rate: 1.57%
-- Flow 3:
Average throughput: 108.99 Mbit/s
95th percentile per-packet one-way delay: 139.181 ms
Loss rate: 4.36%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-01-03 07:04:50

End at: 2018-01-03 07:05:20

Below is generated by plot.py at 2018-01-03 12:57:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 289.18 Mbit/s

95th percentile per-packet one-way delay: 137.027 ms

Loss rate: 1.57%

-- Flow 1:

Average throughput: 151.40 Mbit/s

95th percentile per-packet one-way delay: 136.788 ms

Loss rate: 1.00%

-- Flow 2:

Average throughput: 151.27 Mbit/s

95th percentile per-packet one-way delay: 137.195 ms

Loss rate: 1.50%

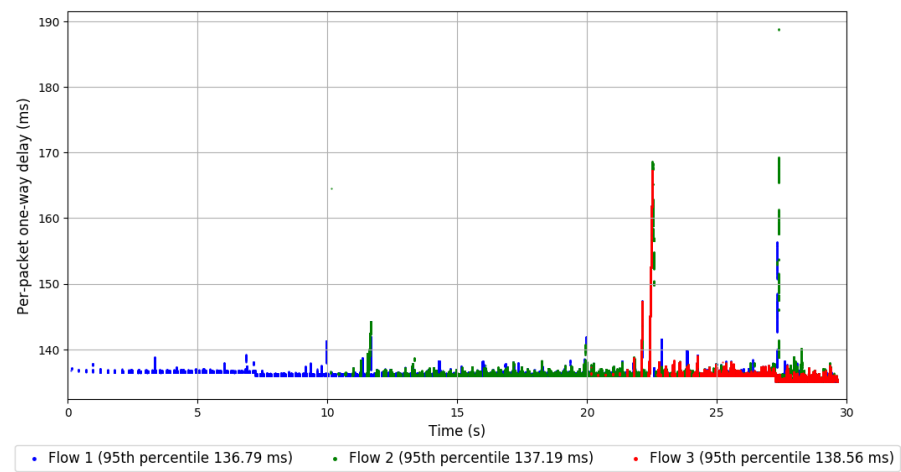
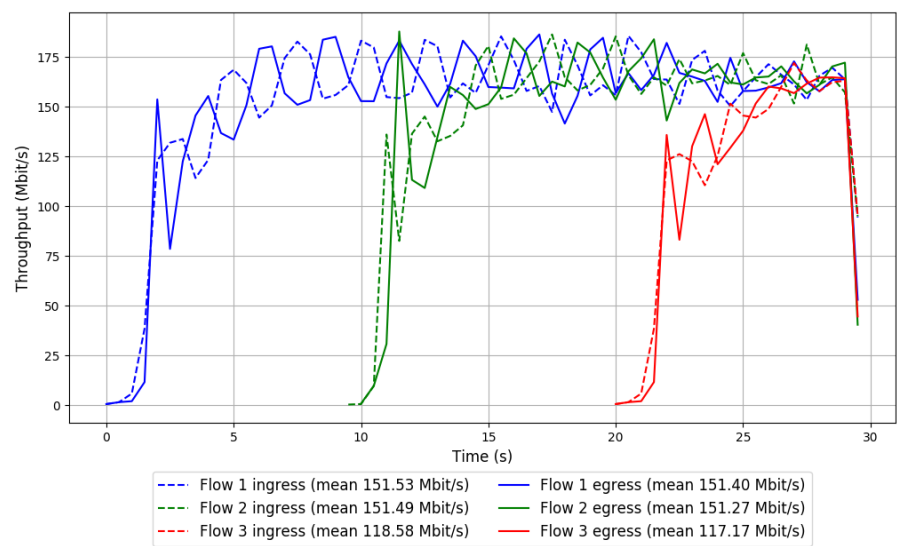
-- Flow 3:

Average throughput: 117.17 Mbit/s

95th percentile per-packet one-way delay: 138.565 ms

Loss rate: 3.94%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-03 07:21:07

End at: 2018-01-03 07:21:37

Below is generated by plot.py at 2018-01-03 12:57:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 260.88 Mbit/s

95th percentile per-packet one-way delay: 137.893 ms

Loss rate: 1.63%

-- Flow 1:

Average throughput: 141.97 Mbit/s

95th percentile per-packet one-way delay: 137.276 ms

Loss rate: 1.03%

-- Flow 2:

Average throughput: 141.04 Mbit/s

95th percentile per-packet one-way delay: 137.511 ms

Loss rate: 1.94%

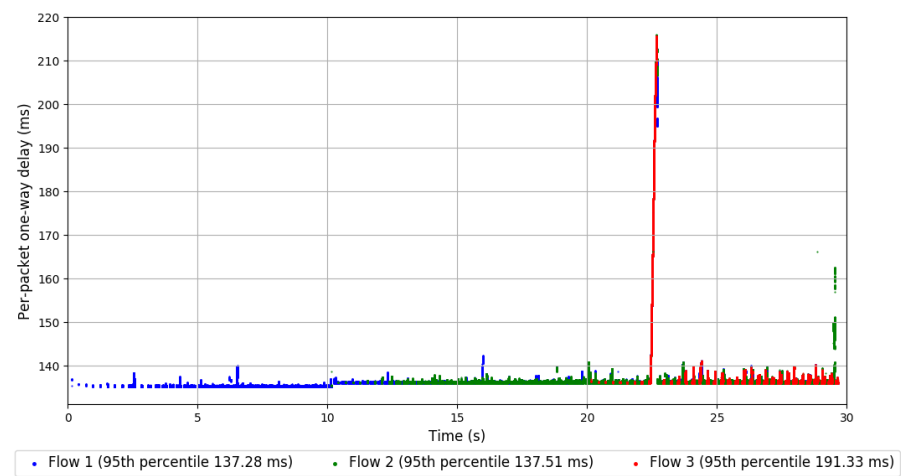
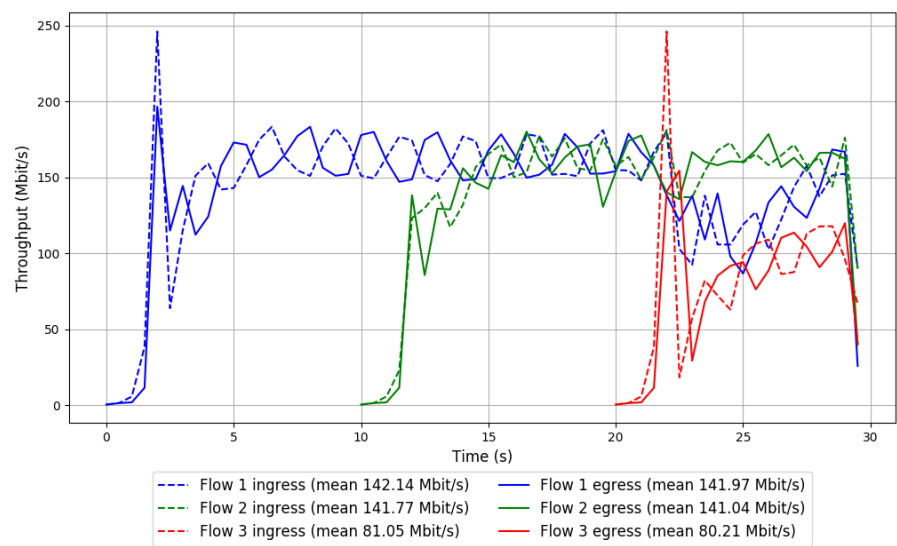
-- Flow 3:

Average throughput: 80.21 Mbit/s

95th percentile per-packet one-way delay: 191.326 ms

Loss rate: 3.79%

Run 3: Report of Indigo — Data Link

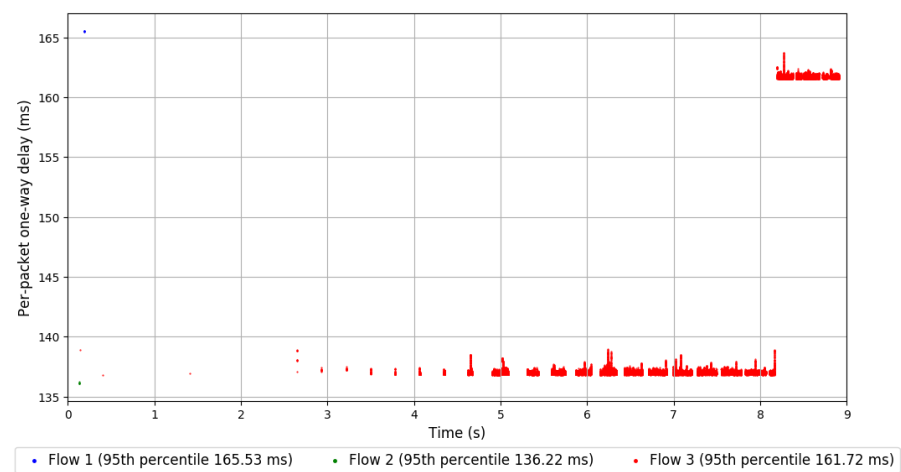
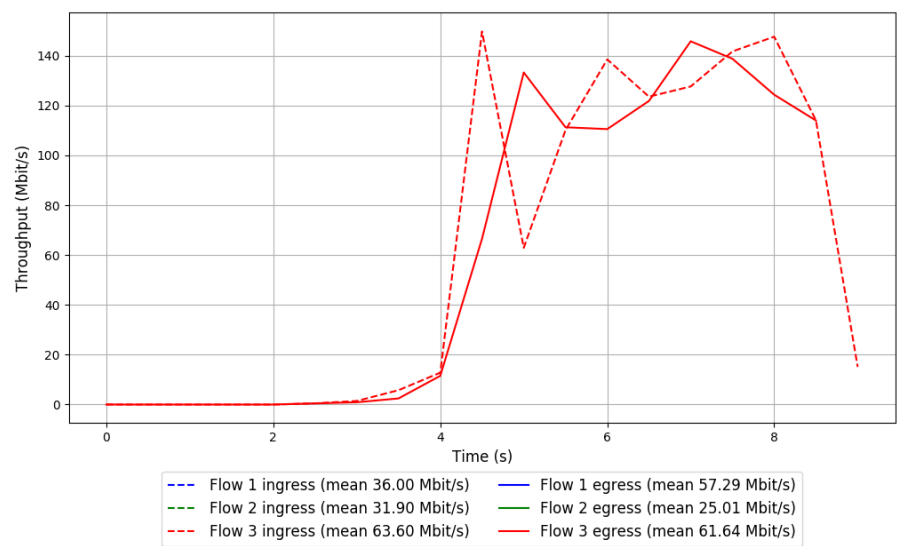


Run 4: Statistics of Indigo

Start at: 2018-01-03 07:35:48

End at: 2018-01-03 07:36:18

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-03 07:50:55

End at: 2018-01-03 07:51:25

Below is generated by plot.py at 2018-01-03 12:57:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 181.16 Mbit/s

95th percentile per-packet one-way delay: 161.644 ms

Loss rate: 2.09%

-- Flow 1:

Average throughput: 51.26 Mbit/s

95th percentile per-packet one-way delay: 161.756 ms

Loss rate: 1.65%

-- Flow 2:

Average throughput: 141.20 Mbit/s

95th percentile per-packet one-way delay: 137.339 ms

Loss rate: 1.58%

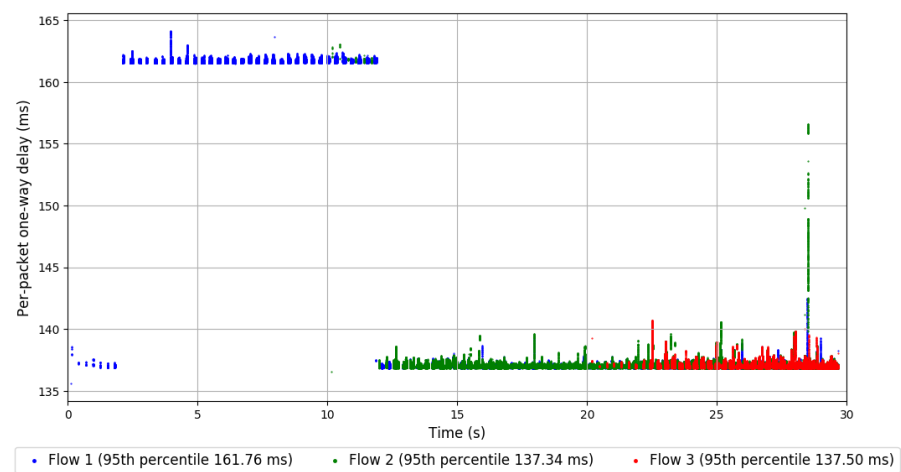
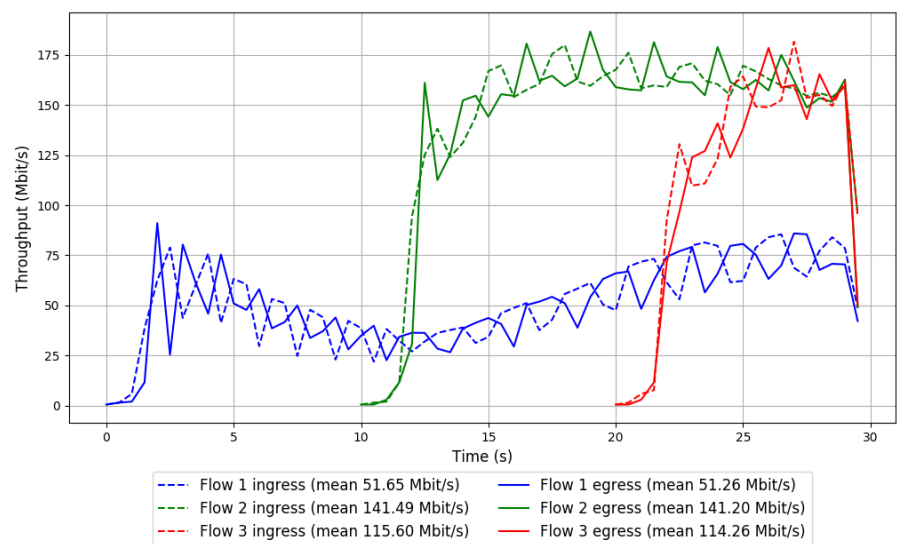
-- Flow 3:

Average throughput: 114.26 Mbit/s

95th percentile per-packet one-way delay: 137.495 ms

Loss rate: 3.93%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-01-03 08:05:50

End at: 2018-01-03 08:06:20

Below is generated by plot.py at 2018-01-03 12:57:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 273.82 Mbit/s

95th percentile per-packet one-way delay: 137.746 ms

Loss rate: 1.51%

-- Flow 1:

Average throughput: 149.12 Mbit/s

95th percentile per-packet one-way delay: 137.478 ms

Loss rate: 0.91%

-- Flow 2:

Average throughput: 134.08 Mbit/s

95th percentile per-packet one-way delay: 137.861 ms

Loss rate: 1.53%

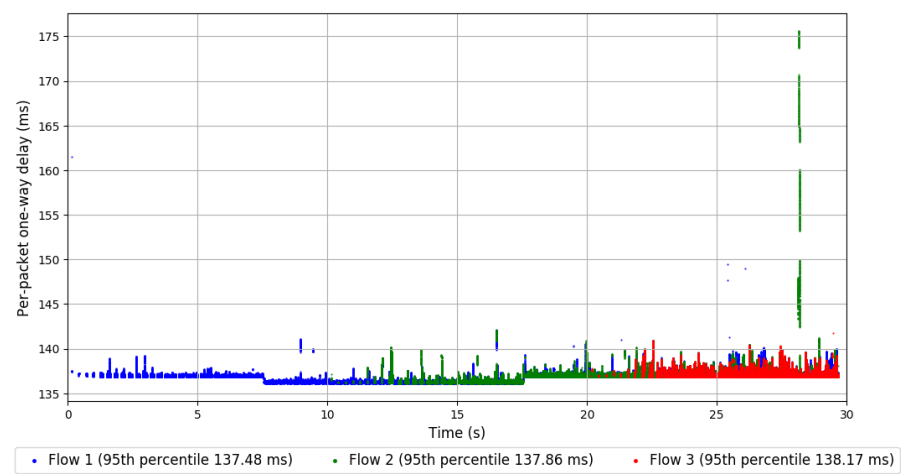
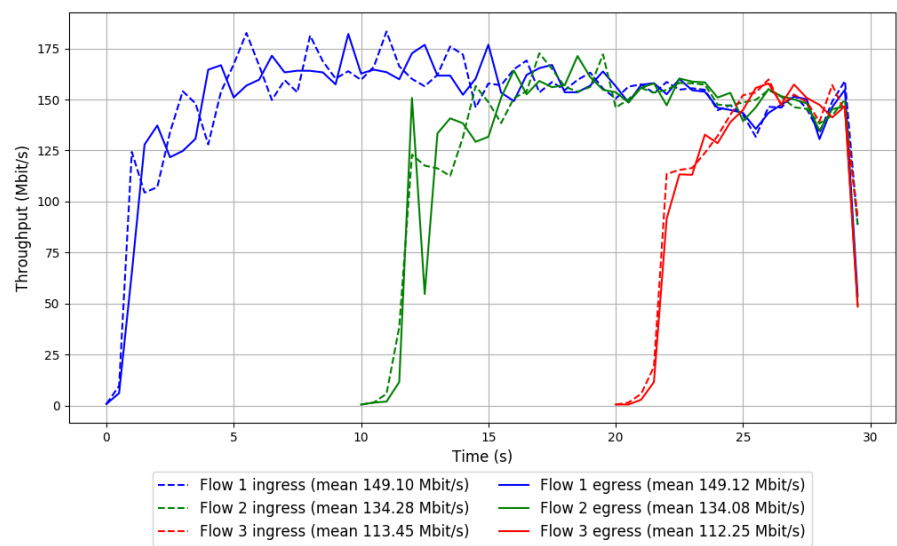
-- Flow 3:

Average throughput: 112.25 Mbit/s

95th percentile per-packet one-way delay: 138.166 ms

Loss rate: 3.84%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-01-03 08:21:31

End at: 2018-01-03 08:22:01

Below is generated by plot.py at 2018-01-03 12:57:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 204.20 Mbit/s

95th percentile per-packet one-way delay: 164.081 ms

Loss rate: 2.19%

-- Flow 1:

Average throughput: 111.23 Mbit/s

95th percentile per-packet one-way delay: 163.787 ms

Loss rate: 1.60%

-- Flow 2:

Average throughput: 87.66 Mbit/s

95th percentile per-packet one-way delay: 164.165 ms

Loss rate: 1.56%

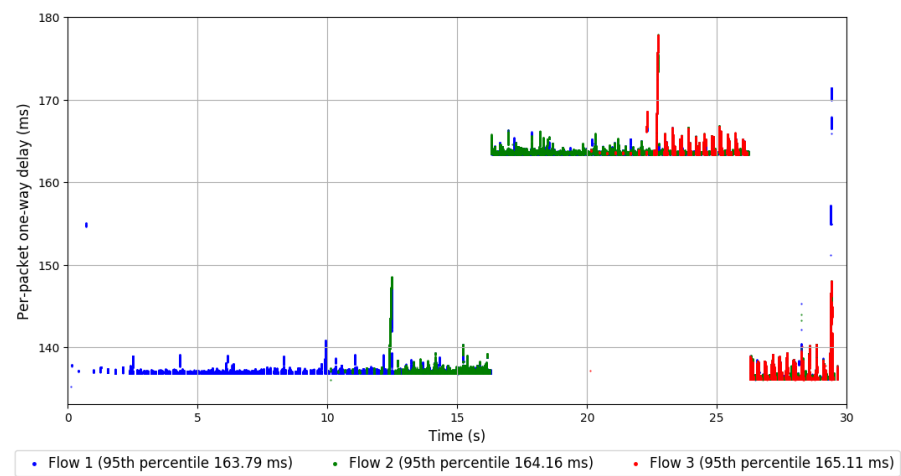
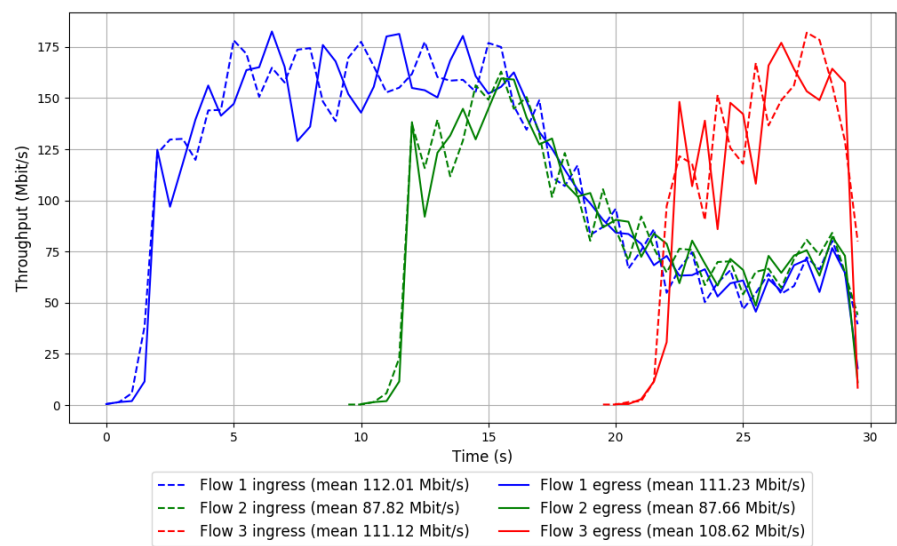
-- Flow 3:

Average throughput: 108.62 Mbit/s

95th percentile per-packet one-way delay: 165.106 ms

Loss rate: 4.99%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-01-03 08:36:51

End at: 2018-01-03 08:37:21

Below is generated by plot.py at 2018-01-03 12:57:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 190.91 Mbit/s

95th percentile per-packet one-way delay: 165.001 ms

Loss rate: 1.44%

-- Flow 1:

Average throughput: 102.33 Mbit/s

95th percentile per-packet one-way delay: 164.157 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 85.70 Mbit/s

95th percentile per-packet one-way delay: 165.240 ms

Loss rate: 1.02%

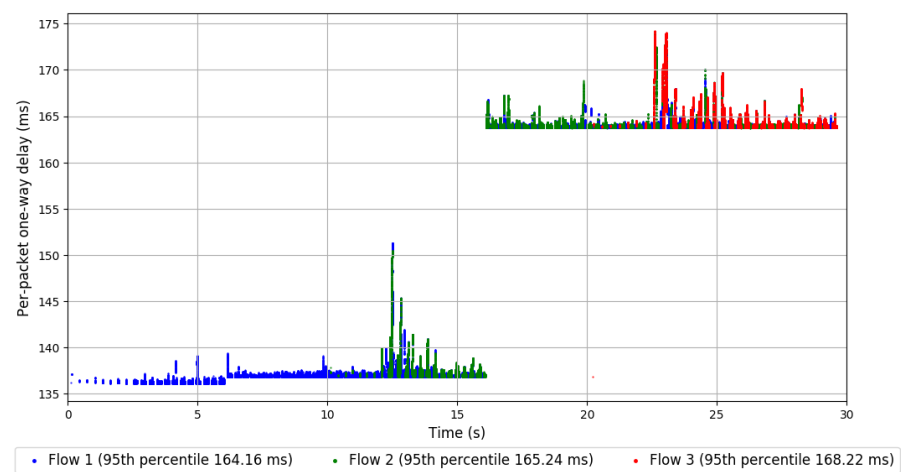
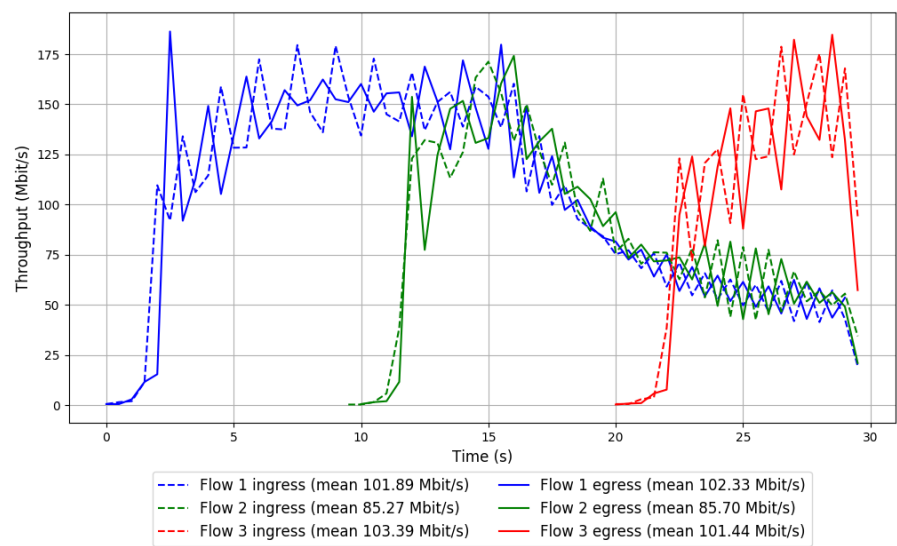
-- Flow 3:

Average throughput: 101.44 Mbit/s

95th percentile per-packet one-way delay: 168.222 ms

Loss rate: 4.72%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-01-03 08:52:30

End at: 2018-01-03 08:53:00

Below is generated by plot.py at 2018-01-03 12:57:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 164.38 Mbit/s

95th percentile per-packet one-way delay: 164.038 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 102.25 Mbit/s

95th percentile per-packet one-way delay: 164.006 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 87.17 Mbit/s

95th percentile per-packet one-way delay: 164.044 ms

Loss rate: 1.02%

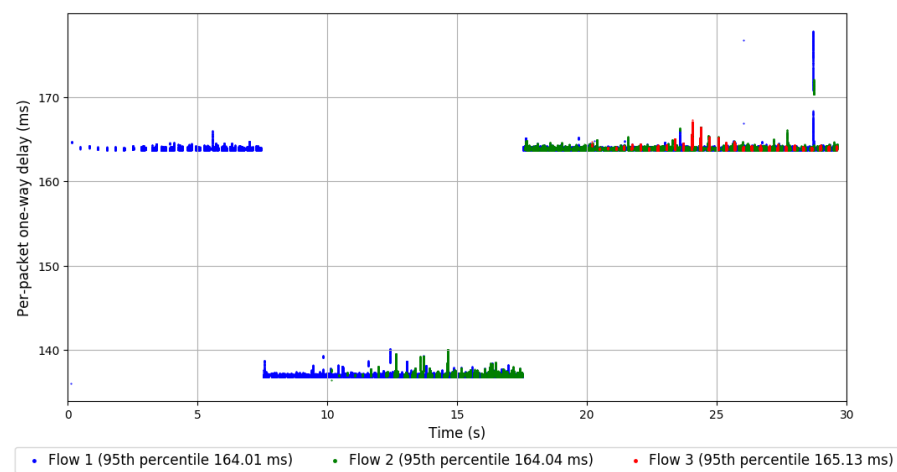
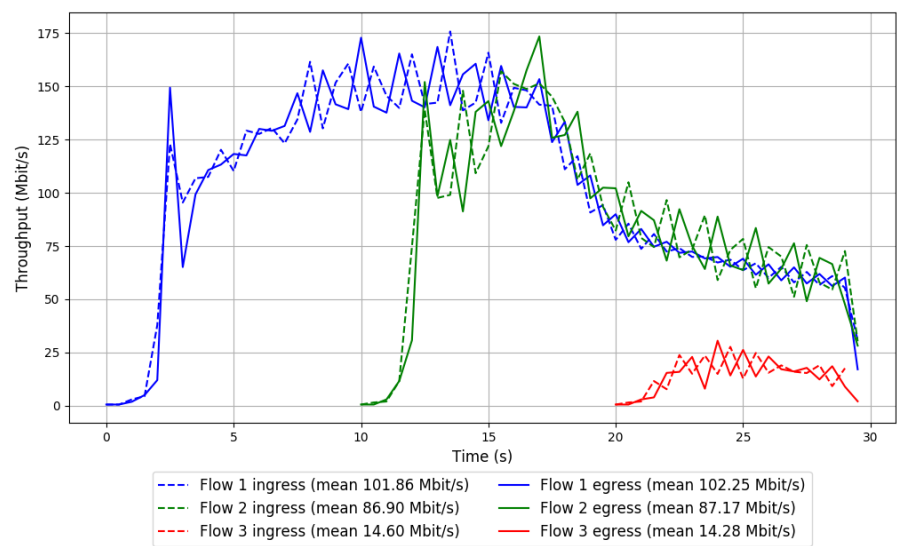
-- Flow 3:

Average throughput: 14.28 Mbit/s

95th percentile per-packet one-way delay: 165.132 ms

Loss rate: 2.41%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-01-03 09:07:18

End at: 2018-01-03 09:07:48

Below is generated by plot.py at 2018-01-03 12:57:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 112.64 Mbit/s

95th percentile per-packet one-way delay: 137.478 ms

Loss rate: 1.77%

-- Flow 1:

Average throughput: 41.60 Mbit/s

95th percentile per-packet one-way delay: 137.161 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 80.48 Mbit/s

95th percentile per-packet one-way delay: 137.513 ms

Loss rate: 1.56%

-- Flow 3:

Average throughput: 57.94 Mbit/s

95th percentile per-packet one-way delay: 138.349 ms

Loss rate: 4.72%

Run 10: Report of Indigo — Data Link

