

Pantheon Report

Generated at 2018-01-02 21:50:14 (UTC).

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

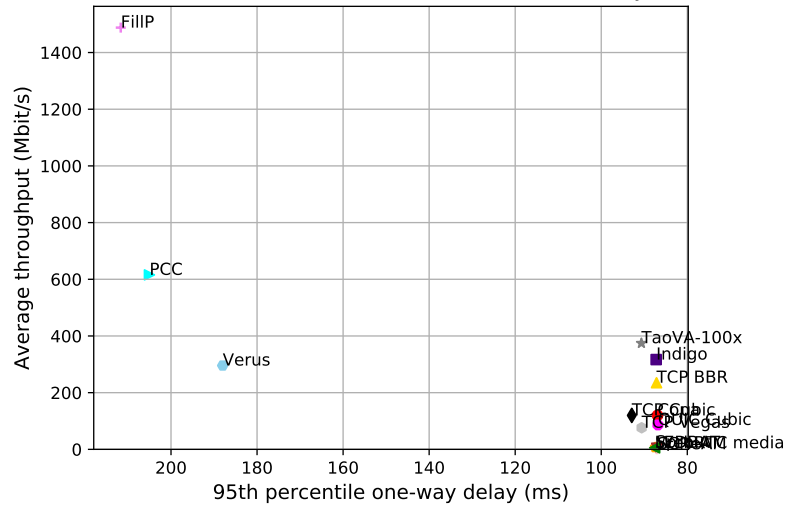
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

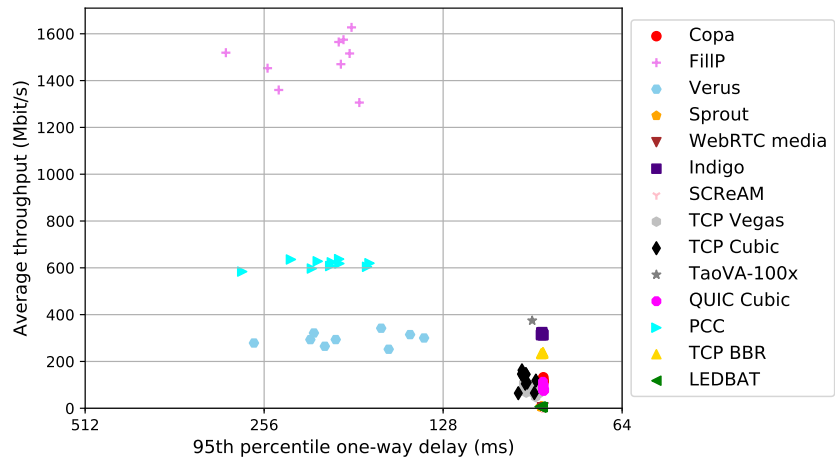
Git summary:

```
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 @ f1a14bffe749737437f61b1eaeeb30b267cde681
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 Sydney Ethernet to GCE Iowa Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



test from GCE Sydney Ethernet to GCE Iowa Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows



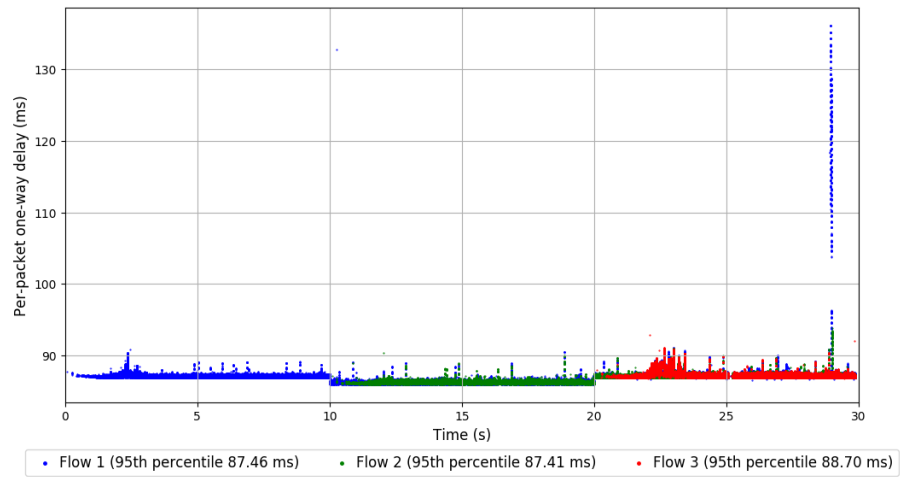
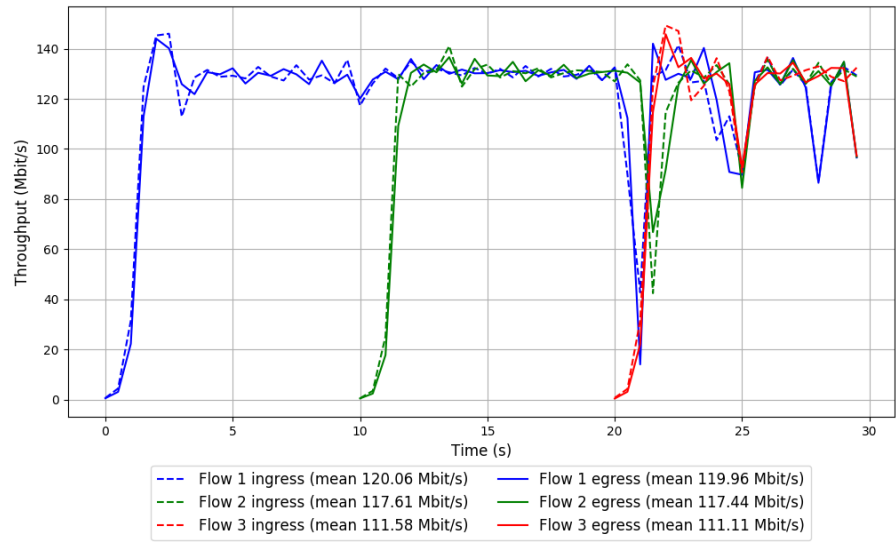
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	120.27	118.12	111.18	87.13	87.09	87.42	0.78	1.01	2.15
TCP Cubic	10	57.55	60.82	66.66	91.39	93.08	92.89	1.09	1.15	1.90
LEDBAT	10	2.70	2.95	1.89	87.60	87.56	87.32	2.13	2.70	3.77
PCC	10	567.37	55.51	35.31	207.24	185.63	179.95	2.54	1.88	3.36
QUIC Cubic	10	51.65	40.50	23.52	86.84	86.64	86.80	0.74	1.27	3.10
SCReAM	10	0.22	0.22	0.22	86.95	86.98	86.74	0.54	0.87	1.54
WebRTC media	10	2.14	1.32	0.50	86.99	86.94	87.01	0.75	1.36	2.59
Sprout	10	3.39	3.65	2.96	87.41	87.45	87.43	1.79	2.02	3.03
TaoVA-100x	1	183.10	193.10	155.37	92.99	87.65	90.38	0.71	0.86	2.74
TCP Vegas	10	25.62	46.18	60.71	89.16	90.27	91.45	1.19	0.72	1.42
Verus	9	173.31	126.88	101.93	166.73	183.67	193.29	1.34	2.45	5.94
Copa	10	69.75	58.07	46.42	86.87	86.95	92.45	0.46	1.13	7.49
FillP	9	745.95	803.66	634.00	197.92	207.71	213.70	7.16	8.50	10.86
Indigo	10	168.90	157.30	135.74	87.07	87.55	87.31	0.60	0.87	2.09

```
Run 1: Statistics of TCP BBR

Start at: 2018-01-02 15:26:31
End at: 2018-01-02 15:27:01

# Below is generated by plot.py at 2018-01-02 20:33:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 234.34 Mbit/s
95th percentile per-packet one-way delay: 87.575 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 119.96 Mbit/s
95th percentile per-packet one-way delay: 87.461 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 117.44 Mbit/s
95th percentile per-packet one-way delay: 87.406 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 111.11 Mbit/s
95th percentile per-packet one-way delay: 88.702 ms
Loss rate: 2.42%
```


Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-02 15:41:37

End at: 2018-01-02 15:42:07

Below is generated by plot.py at 2018-01-02 20:33:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 233.59 Mbit/s

95th percentile per-packet one-way delay: 87.114 ms

Loss rate: 1.27%

-- Flow 1:

Average throughput: 119.05 Mbit/s

95th percentile per-packet one-way delay: 87.168 ms

Loss rate: 1.10%

-- Flow 2:

Average throughput: 116.89 Mbit/s

95th percentile per-packet one-way delay: 87.011 ms

Loss rate: 1.12%

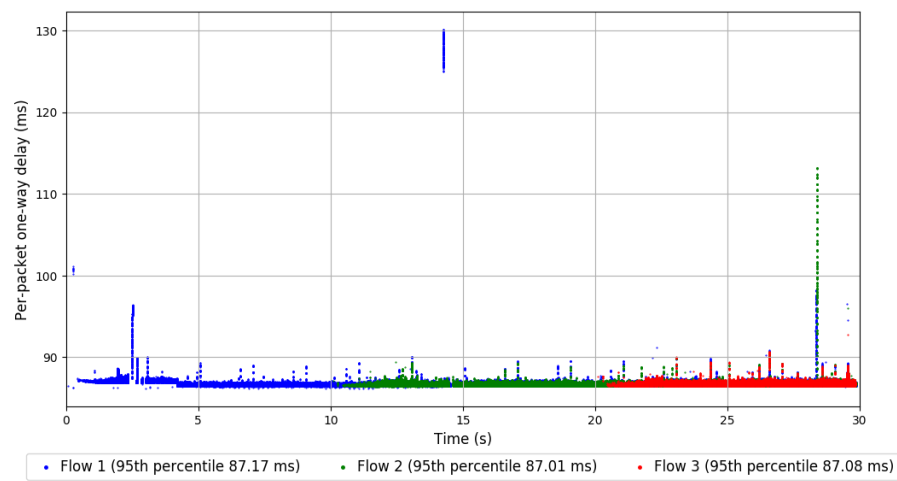
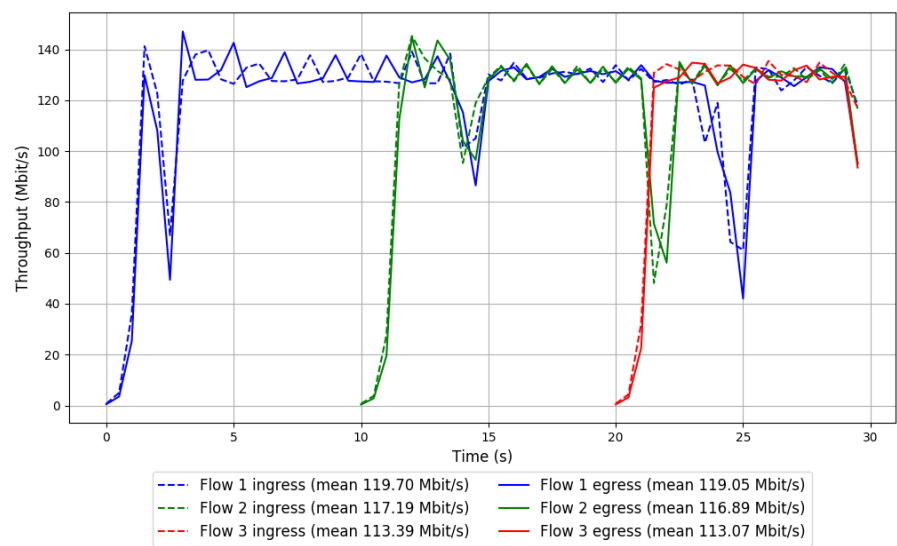
-- Flow 3:

Average throughput: 113.07 Mbit/s

95th percentile per-packet one-way delay: 87.085 ms

Loss rate: 2.13%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-02 15:56:27

End at: 2018-01-02 15:56:57

Below is generated by plot.py at 2018-01-02 20:33:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 237.90 Mbit/s

95th percentile per-packet one-way delay: 87.058 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 121.73 Mbit/s

95th percentile per-packet one-way delay: 87.051 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 121.49 Mbit/s

95th percentile per-packet one-way delay: 87.030 ms

Loss rate: 0.92%

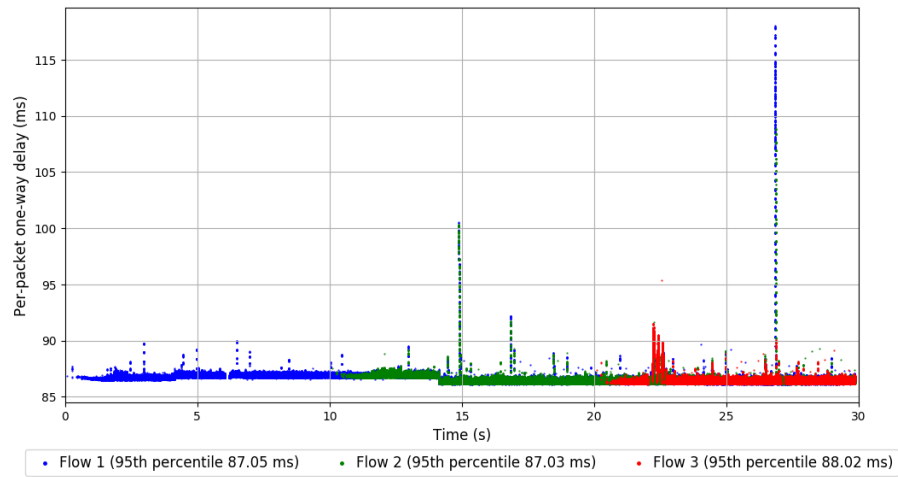
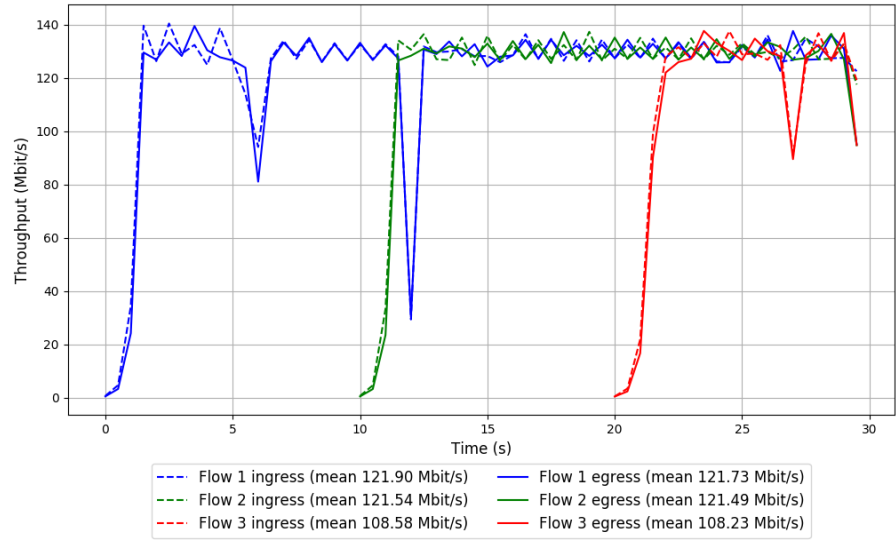
-- Flow 3:

Average throughput: 108.23 Mbit/s

95th percentile per-packet one-way delay: 88.017 ms

Loss rate: 2.07%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-02 16:11:24

End at: 2018-01-02 16:11:54

Below is generated by plot.py at 2018-01-02 20:33:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 238.96 Mbit/s

95th percentile per-packet one-way delay: 86.877 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 121.26 Mbit/s

95th percentile per-packet one-way delay: 86.913 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 121.65 Mbit/s

95th percentile per-packet one-way delay: 86.865 ms

Loss rate: 0.81%

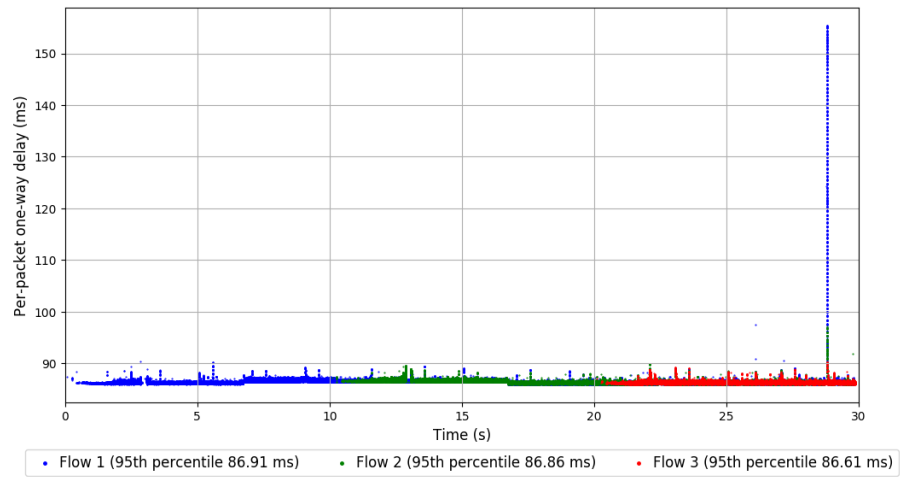
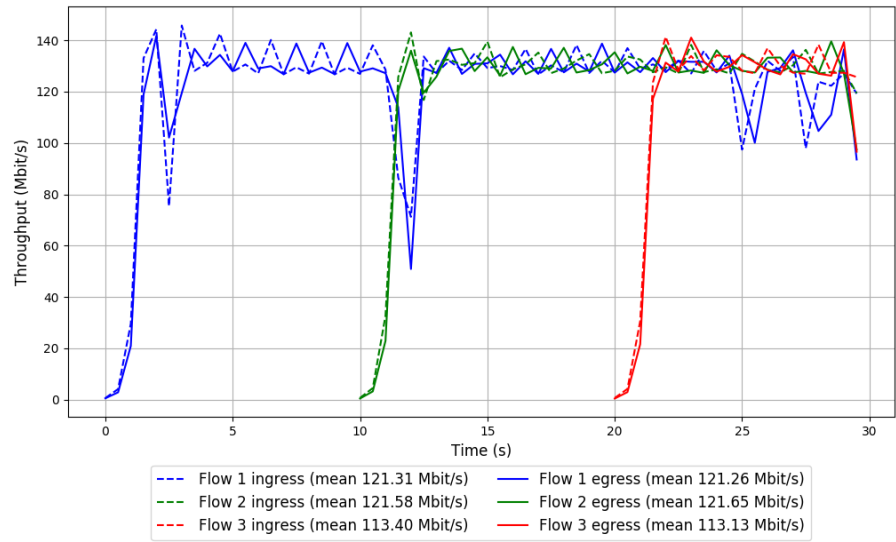
-- Flow 3:

Average throughput: 113.13 Mbit/s

95th percentile per-packet one-way delay: 86.613 ms

Loss rate: 2.01%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-02 16:26:36

End at: 2018-01-02 16:27:06

Below is generated by plot.py at 2018-01-02 20:33:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 231.38 Mbit/s

95th percentile per-packet one-way delay: 87.383 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 119.93 Mbit/s

95th percentile per-packet one-way delay: 87.352 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 114.58 Mbit/s

95th percentile per-packet one-way delay: 87.354 ms

Loss rate: 1.17%

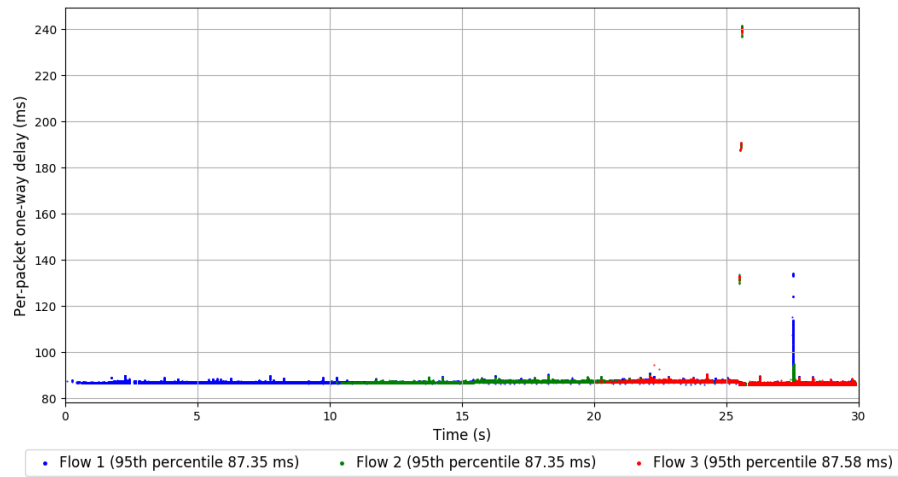
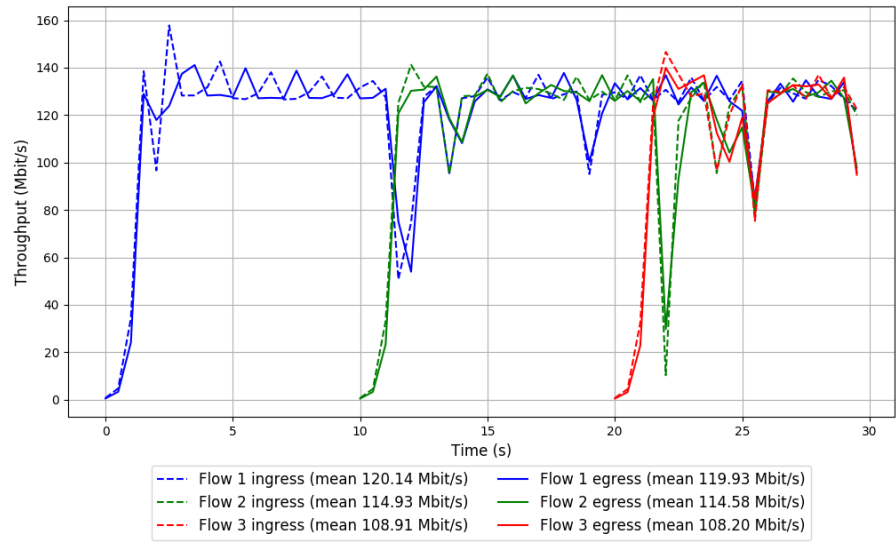
-- Flow 3:

Average throughput: 108.20 Mbit/s

95th percentile per-packet one-way delay: 87.582 ms

Loss rate: 2.48%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-02 16:41:45

End at: 2018-01-02 16:42:15

Below is generated by plot.py at 2018-01-02 20:33:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 234.44 Mbit/s

95th percentile per-packet one-way delay: 87.202 ms

Loss rate: 1.28%

-- Flow 1:

Average throughput: 119.63 Mbit/s

95th percentile per-packet one-way delay: 87.219 ms

Loss rate: 1.05%

-- Flow 2:

Average throughput: 116.89 Mbit/s

95th percentile per-packet one-way delay: 87.076 ms

Loss rate: 1.13%

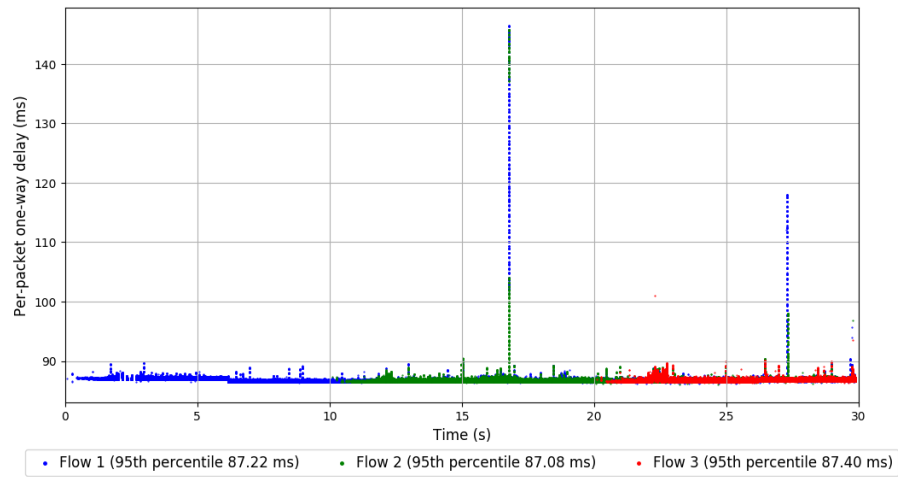
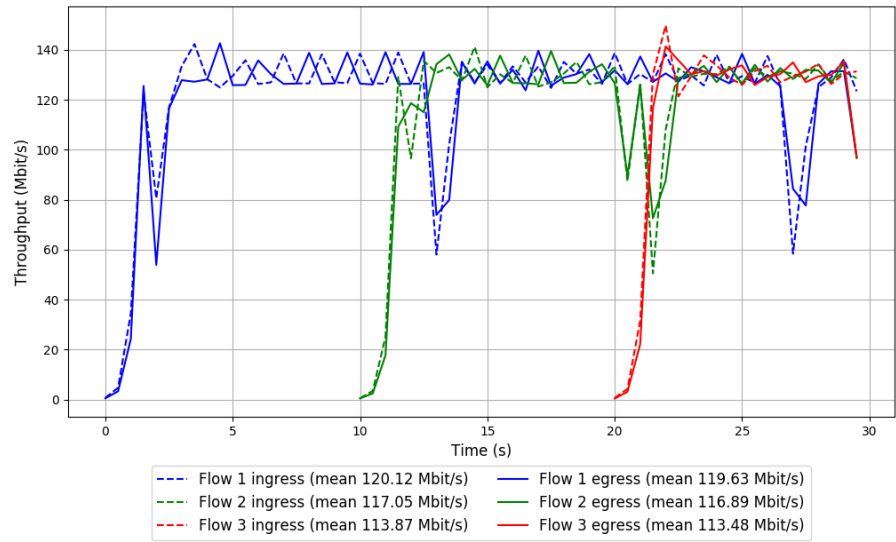
-- Flow 3:

Average throughput: 113.48 Mbit/s

95th percentile per-packet one-way delay: 87.404 ms

Loss rate: 2.32%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-02 16:56:52

End at: 2018-01-02 16:57:22

Below is generated by plot.py at 2018-01-02 20:33:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 238.78 Mbit/s

95th percentile per-packet one-way delay: 87.025 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 123.34 Mbit/s

95th percentile per-packet one-way delay: 87.026 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 119.61 Mbit/s

95th percentile per-packet one-way delay: 87.047 ms

Loss rate: 0.93%

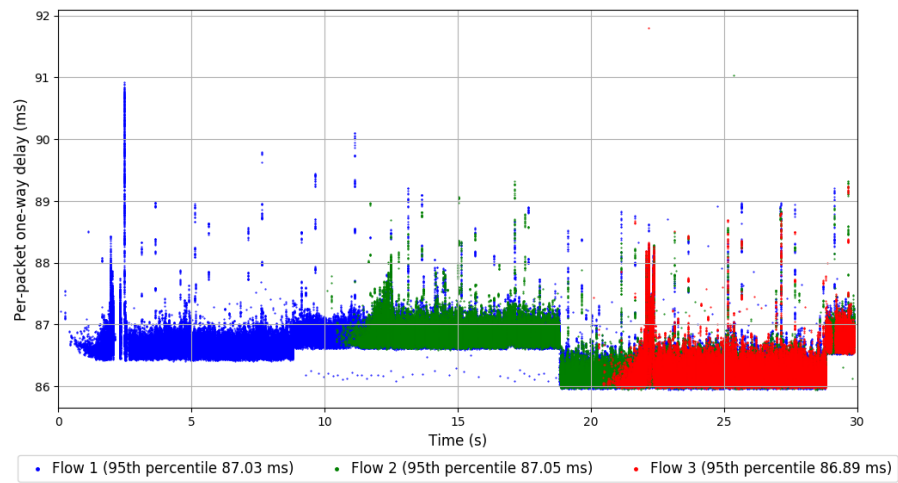
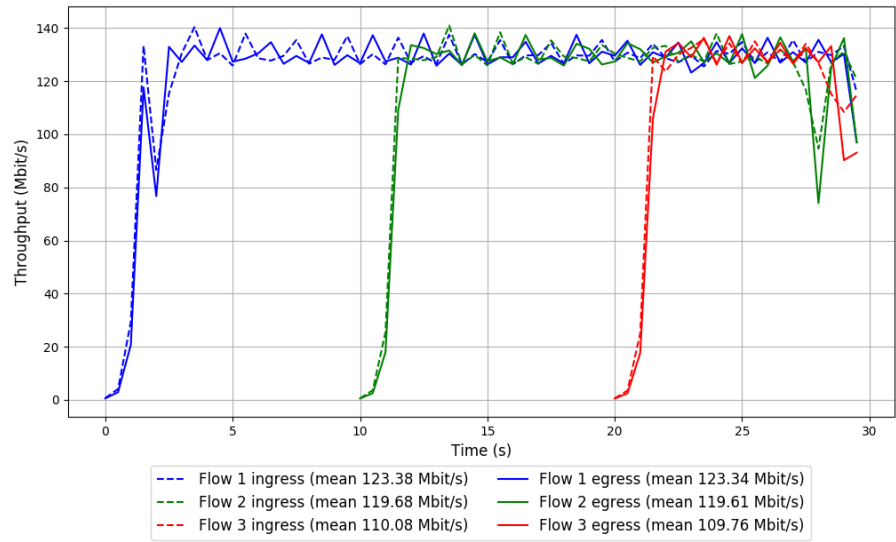
-- Flow 3:

Average throughput: 109.76 Mbit/s

95th percentile per-packet one-way delay: 86.890 ms

Loss rate: 2.04%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-02 17:10:40

End at: 2018-01-02 17:11:10

Below is generated by plot.py at 2018-01-02 20:33:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 234.73 Mbit/s

95th percentile per-packet one-way delay: 86.981 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 119.46 Mbit/s

95th percentile per-packet one-way delay: 86.938 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 118.45 Mbit/s

95th percentile per-packet one-way delay: 86.949 ms

Loss rate: 0.97%

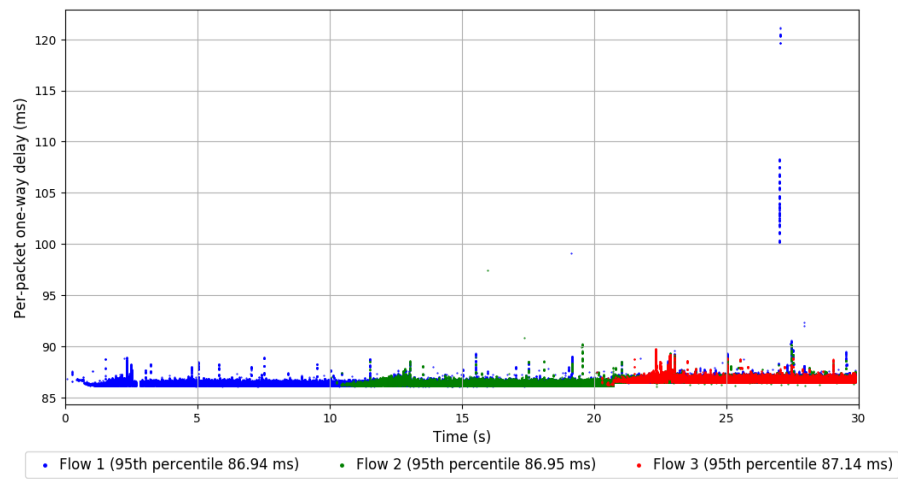
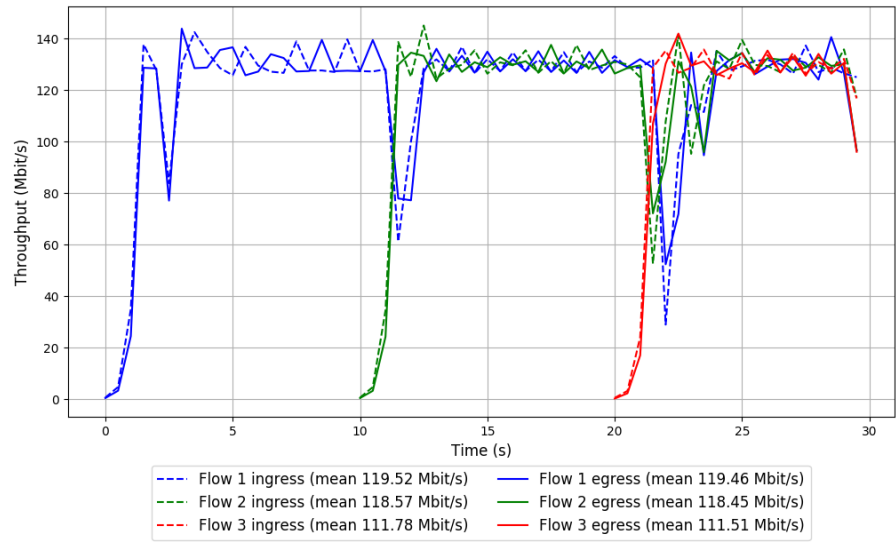
-- Flow 3:

Average throughput: 111.51 Mbit/s

95th percentile per-packet one-way delay: 87.143 ms

Loss rate: 2.01%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-02 17:25:45

End at: 2018-01-02 17:26:15

Below is generated by plot.py at 2018-01-02 20:37:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 232.82 Mbit/s

95th percentile per-packet one-way delay: 87.430 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 119.32 Mbit/s

95th percentile per-packet one-way delay: 87.343 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 115.84 Mbit/s

95th percentile per-packet one-way delay: 87.346 ms

Loss rate: 0.97%

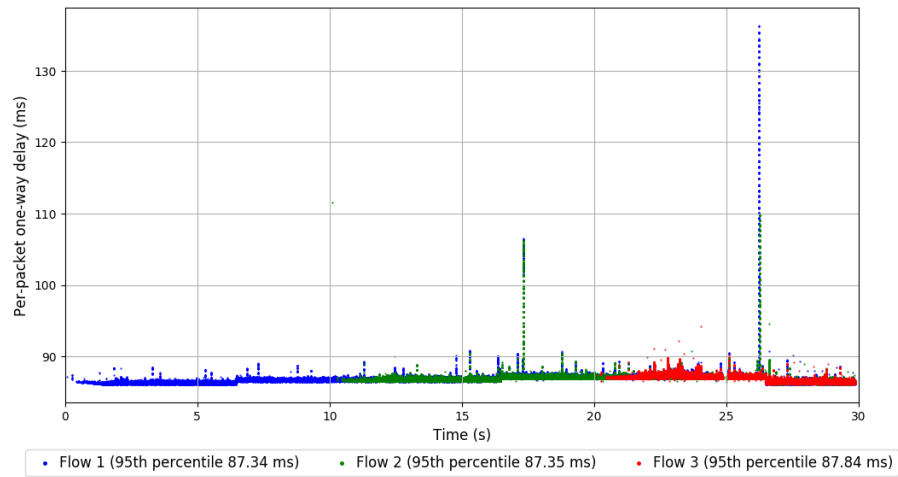
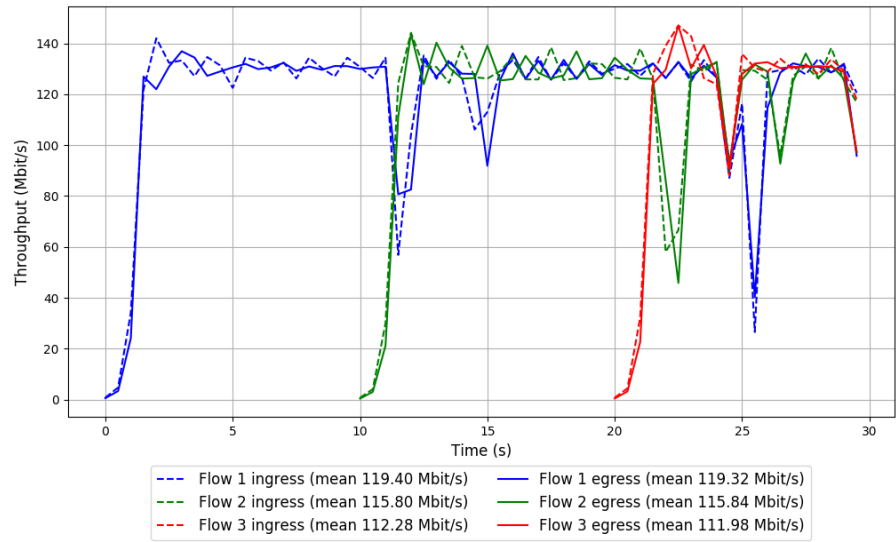
-- Flow 3:

Average throughput: 111.98 Mbit/s

95th percentile per-packet one-way delay: 87.838 ms

Loss rate: 2.01%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-02 17:41:00

End at: 2018-01-02 17:41:30

Below is generated by plot.py at 2018-01-02 20:37:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 233.93 Mbit/s

95th percentile per-packet one-way delay: 86.849 ms

Loss rate: 1.03%

-- Flow 1:

Average throughput: 118.98 Mbit/s

95th percentile per-packet one-way delay: 86.814 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 118.33 Mbit/s

95th percentile per-packet one-way delay: 86.847 ms

Loss rate: 0.93%

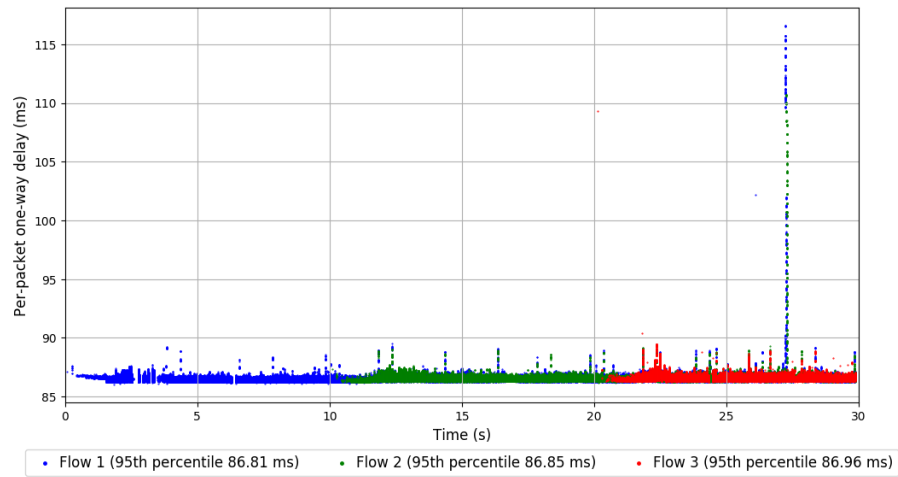
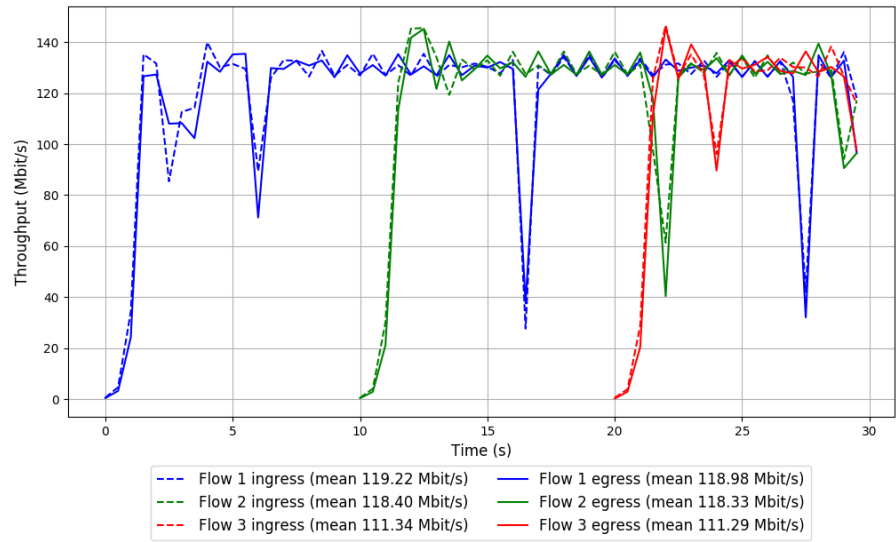
-- Flow 3:

Average throughput: 111.29 Mbit/s

95th percentile per-packet one-way delay: 86.963 ms

Loss rate: 2.02%

Run 10: Report of TCP BBR — Data Link

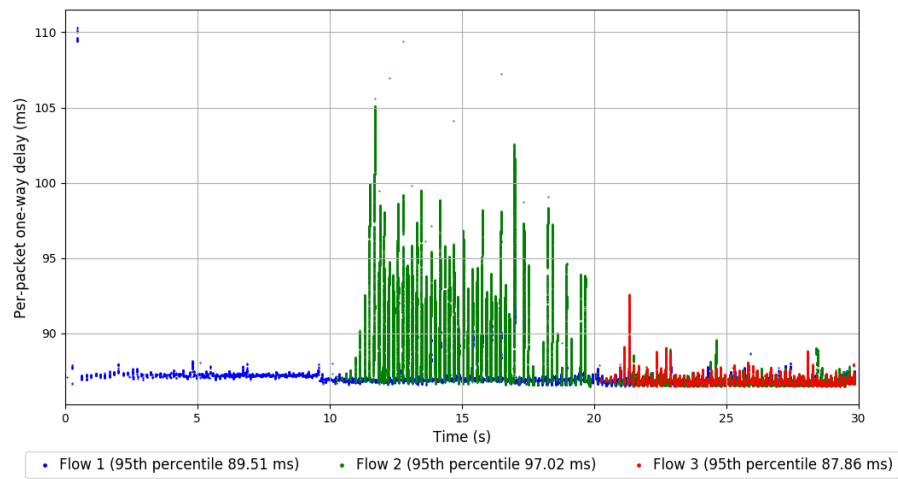
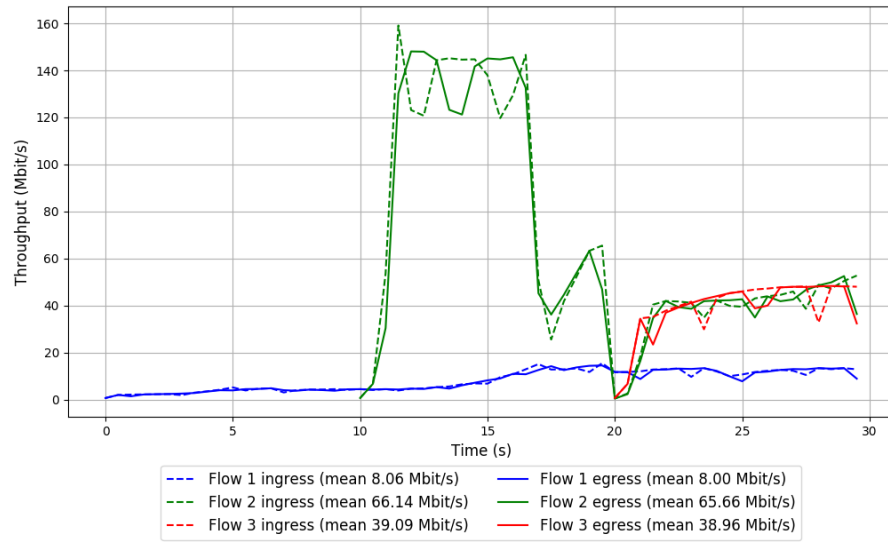


```
Run 1: Statistics of TCP Cubic

Start at: 2018-01-02 15:31:02
End at: 2018-01-02 15:31:32

# Below is generated by plot.py at 2018-01-02 20:37:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.32 Mbit/s
95th percentile per-packet one-way delay: 95.669 ms
Loss rate: 1.65%
-- Flow 1:
Average throughput: 8.00 Mbit/s
95th percentile per-packet one-way delay: 89.514 ms
Loss rate: 1.32%
-- Flow 2:
Average throughput: 65.66 Mbit/s
95th percentile per-packet one-way delay: 97.021 ms
Loss rate: 1.59%
-- Flow 3:
Average throughput: 38.96 Mbit/s
95th percentile per-packet one-way delay: 87.861 ms
Loss rate: 2.08%
```

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-02 15:46:07

End at: 2018-01-02 15:46:37

Below is generated by plot.py at 2018-01-02 20:37:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 118.30 Mbit/s

95th percentile per-packet one-way delay: 89.383 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 57.32 Mbit/s

95th percentile per-packet one-way delay: 90.677 ms

Loss rate: 1.15%

-- Flow 2:

Average throughput: 66.86 Mbit/s

95th percentile per-packet one-way delay: 88.324 ms

Loss rate: 1.20%

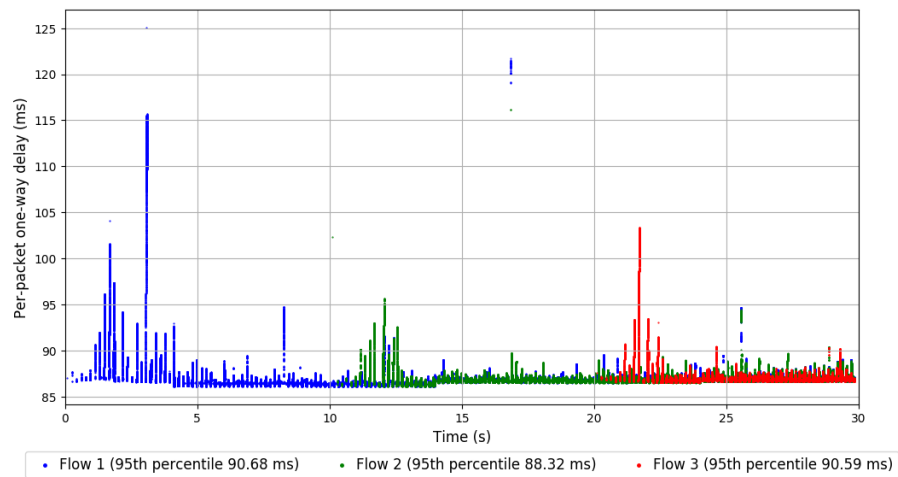
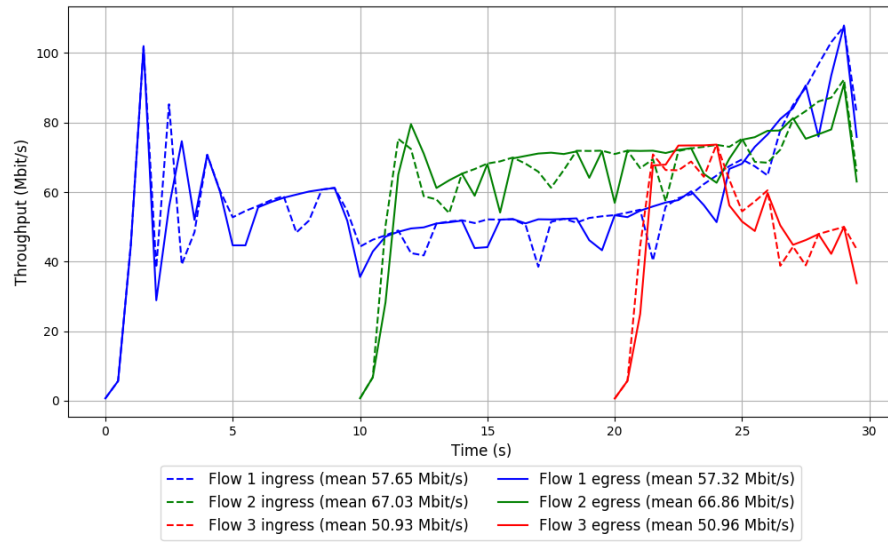
-- Flow 3:

Average throughput: 50.96 Mbit/s

95th percentile per-packet one-way delay: 90.590 ms

Loss rate: 1.70%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-02 16:00:57

End at: 2018-01-02 16:01:27

Below is generated by plot.py at 2018-01-02 20:37:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 162.09 Mbit/s

95th percentile per-packet one-way delay: 94.323 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 85.30 Mbit/s

95th percentile per-packet one-way delay: 94.708 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 88.19 Mbit/s

95th percentile per-packet one-way delay: 93.992 ms

Loss rate: 0.95%

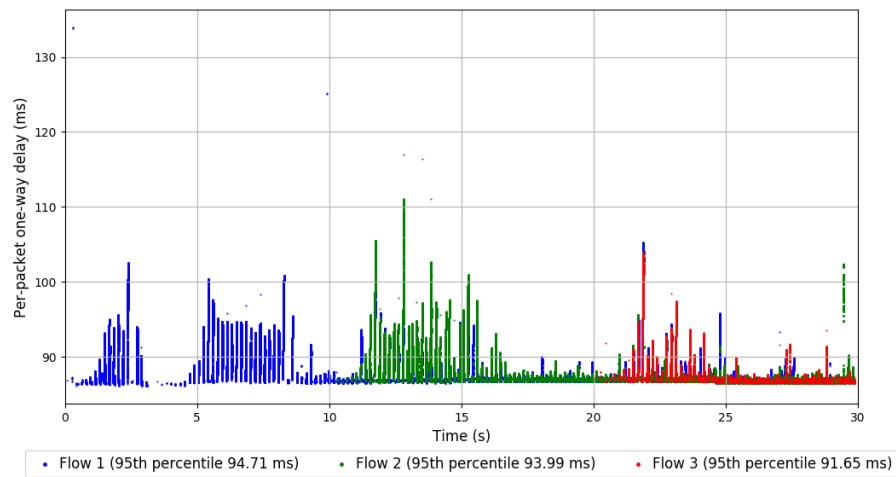
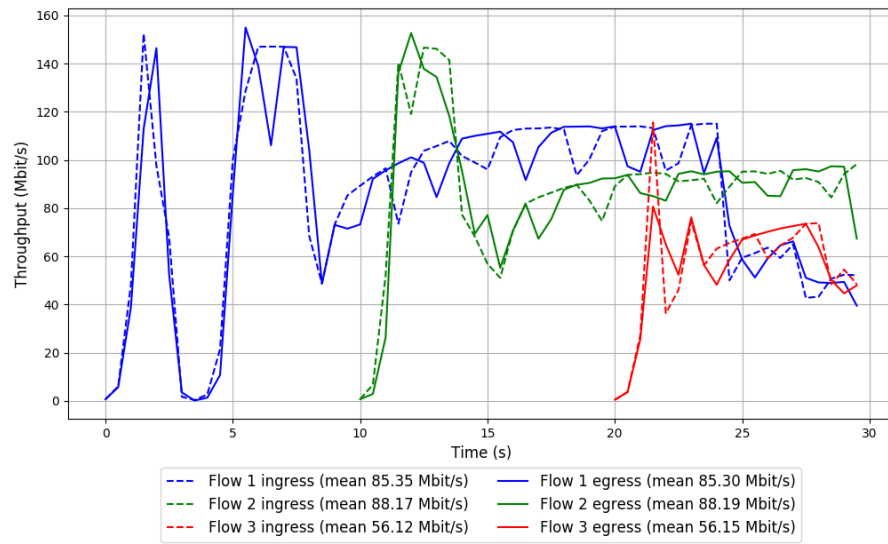
-- Flow 3:

Average throughput: 56.15 Mbit/s

95th percentile per-packet one-way delay: 91.647 ms

Loss rate: 1.69%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-02 16:15:54

End at: 2018-01-02 16:16:24

Below is generated by plot.py at 2018-01-02 20:37:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 145.97 Mbit/s

95th percentile per-packet one-way delay: 92.947 ms

Loss rate: 0.86%

-- Flow 1:

Average throughput: 67.81 Mbit/s

95th percentile per-packet one-way delay: 91.769 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 71.21 Mbit/s

95th percentile per-packet one-way delay: 93.495 ms

Loss rate: 1.16%

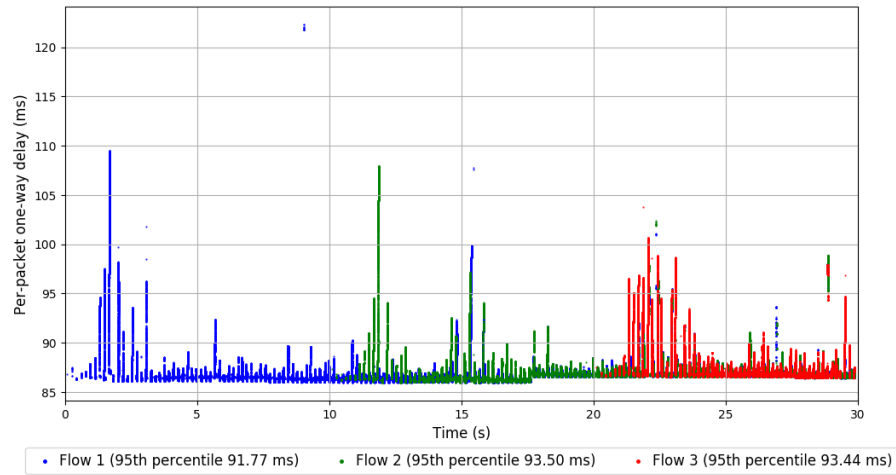
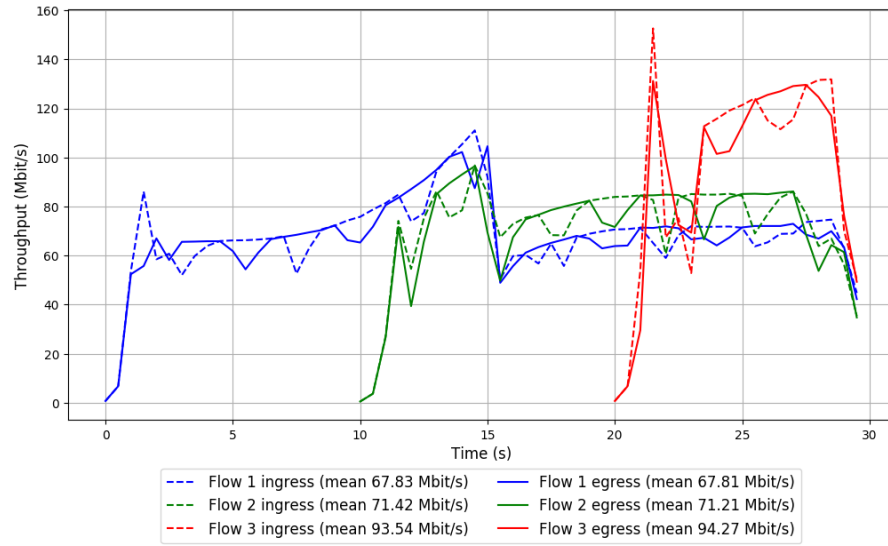
-- Flow 3:

Average throughput: 94.27 Mbit/s

95th percentile per-packet one-way delay: 93.441 ms

Loss rate: 0.95%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-02 16:31:09

End at: 2018-01-02 16:31:39

Below is generated by plot.py at 2018-01-02 20:37:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 136.12 Mbit/s

95th percentile per-packet one-way delay: 93.961 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 71.65 Mbit/s

95th percentile per-packet one-way delay: 91.498 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 58.57 Mbit/s

95th percentile per-packet one-way delay: 92.131 ms

Loss rate: 1.01%

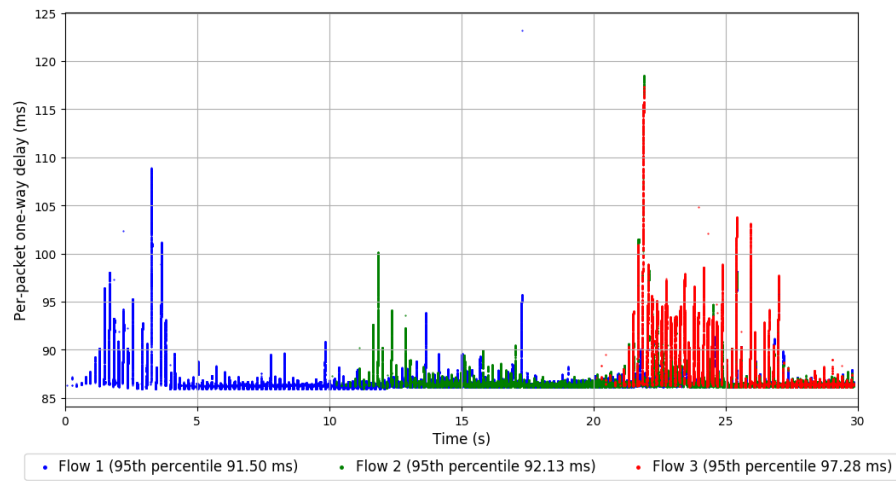
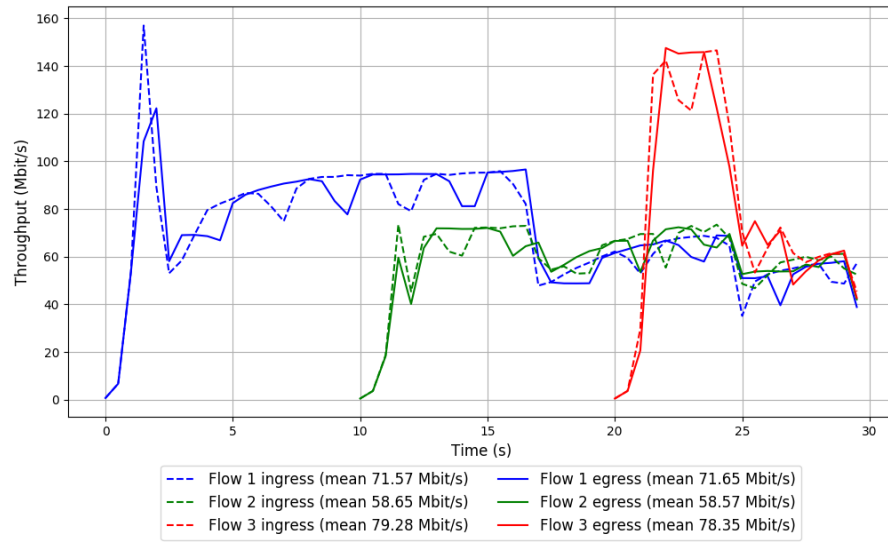
-- Flow 3:

Average throughput: 78.35 Mbit/s

95th percentile per-packet one-way delay: 97.282 ms

Loss rate: 2.90%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-02 16:46:16

End at: 2018-01-02 16:46:46

Below is generated by plot.py at 2018-01-02 20:37:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 144.62 Mbit/s

95th percentile per-packet one-way delay: 92.801 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 70.32 Mbit/s

95th percentile per-packet one-way delay: 91.265 ms

Loss rate: 1.12%

-- Flow 2:

Average throughput: 76.52 Mbit/s

95th percentile per-packet one-way delay: 94.797 ms

Loss rate: 0.78%

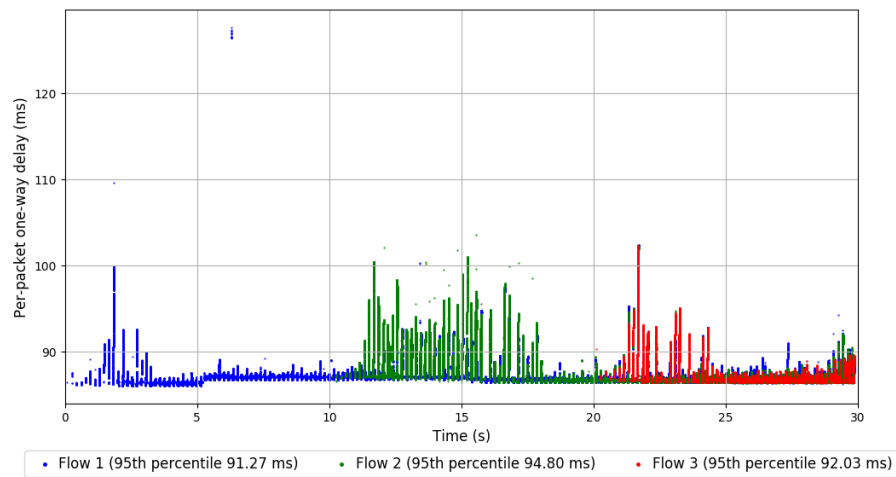
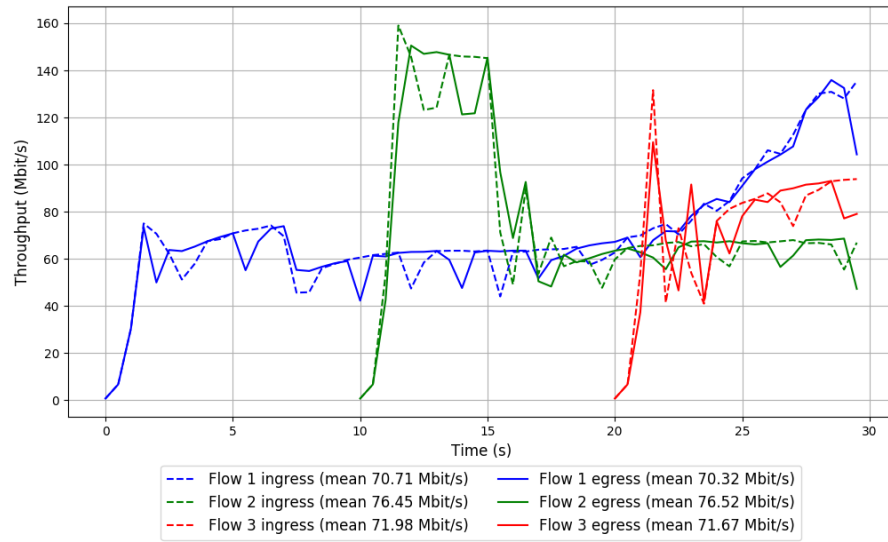
-- Flow 3:

Average throughput: 71.67 Mbit/s

95th percentile per-packet one-way delay: 92.026 ms

Loss rate: 2.20%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-02 17:01:21

End at: 2018-01-02 17:01:51

Below is generated by plot.py at 2018-01-02 20:37:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 109.93 Mbit/s

95th percentile per-packet one-way delay: 92.392 ms

Loss rate: 1.37%

-- Flow 1:

Average throughput: 46.61 Mbit/s

95th percentile per-packet one-way delay: 92.463 ms

Loss rate: 1.11%

-- Flow 2:

Average throughput: 50.25 Mbit/s

95th percentile per-packet one-way delay: 91.117 ms

Loss rate: 0.91%

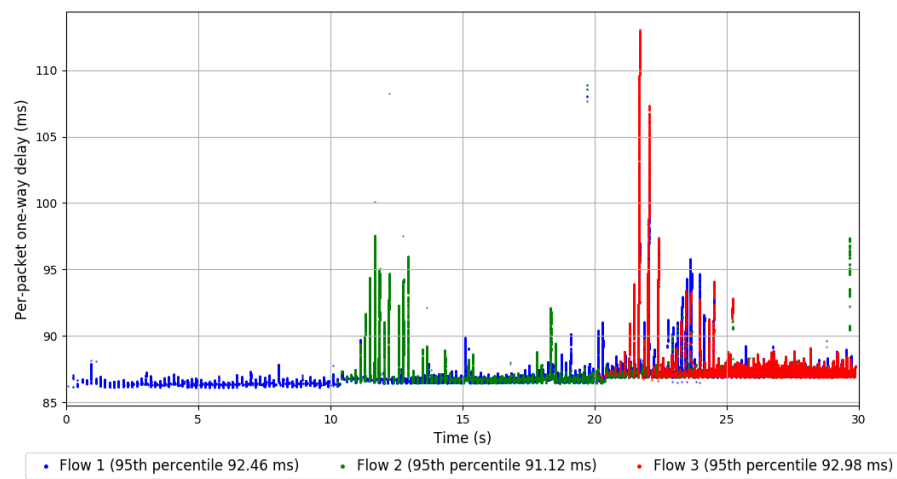
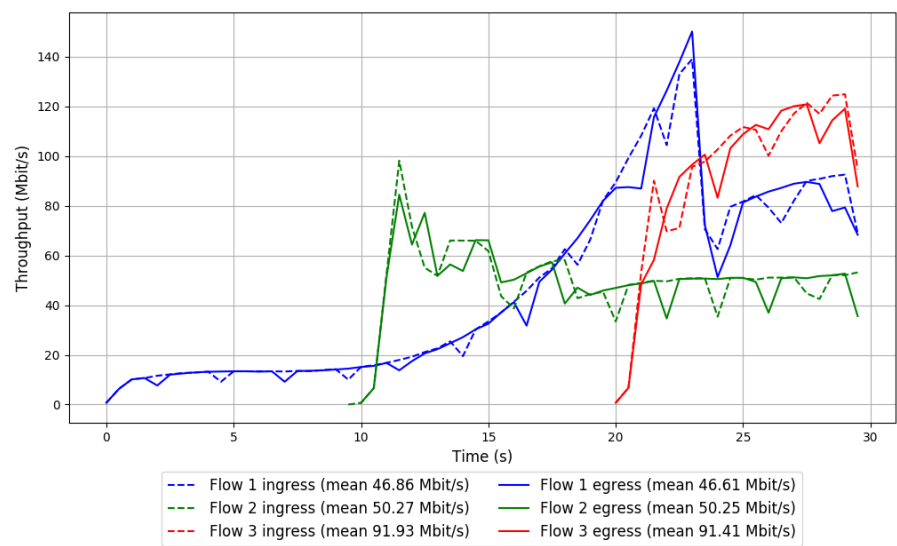
-- Flow 3:

Average throughput: 91.41 Mbit/s

95th percentile per-packet one-way delay: 92.978 ms

Loss rate: 2.29%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-02 17:15:13

End at: 2018-01-02 17:15:43

Below is generated by plot.py at 2018-01-02 20:37:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 104.89 Mbit/s

95th percentile per-packet one-way delay: 93.121 ms

Loss rate: 1.48%

-- Flow 1:

Average throughput: 51.24 Mbit/s

95th percentile per-packet one-way delay: 89.594 ms

Loss rate: 1.97%

-- Flow 2:

Average throughput: 53.62 Mbit/s

95th percentile per-packet one-way delay: 94.175 ms

Loss rate: 0.76%

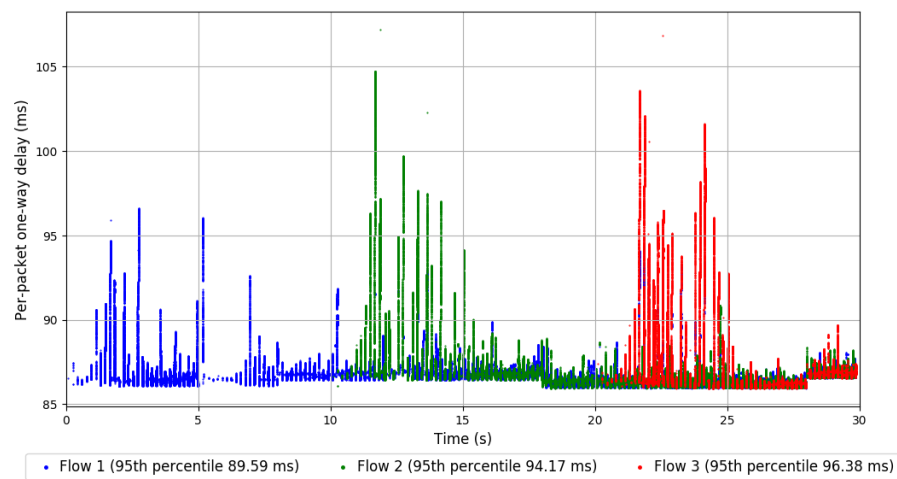
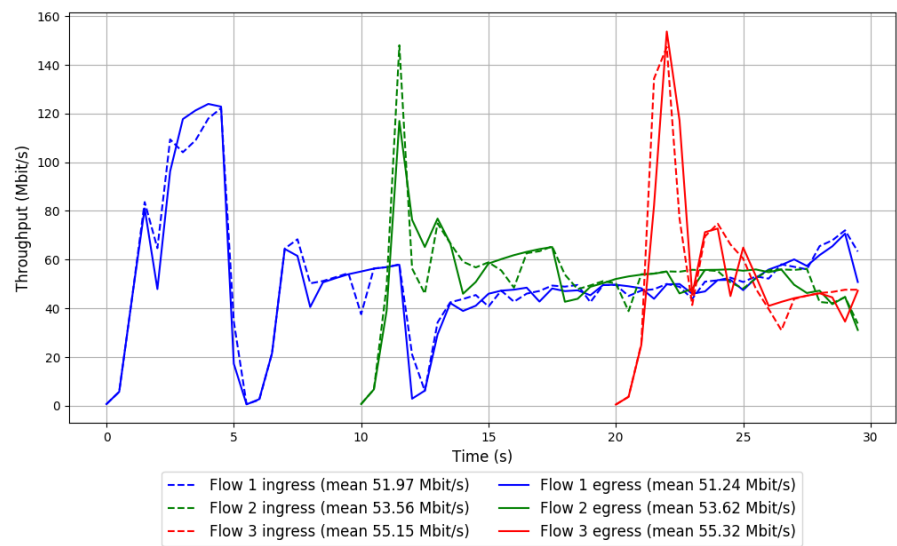
-- Flow 3:

Average throughput: 55.32 Mbit/s

95th percentile per-packet one-way delay: 96.377 ms

Loss rate: 1.47%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-02 17:30:14

End at: 2018-01-02 17:30:44

Below is generated by plot.py at 2018-01-02 20:38:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 146.09 Mbit/s

95th percentile per-packet one-way delay: 94.522 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 83.75 Mbit/s

95th percentile per-packet one-way delay: 92.543 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 64.97 Mbit/s

95th percentile per-packet one-way delay: 98.233 ms

Loss rate: 1.00%

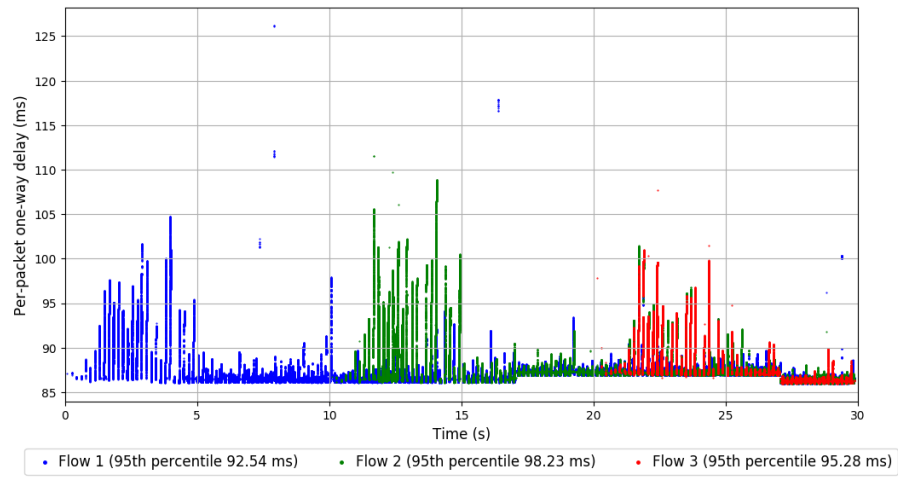
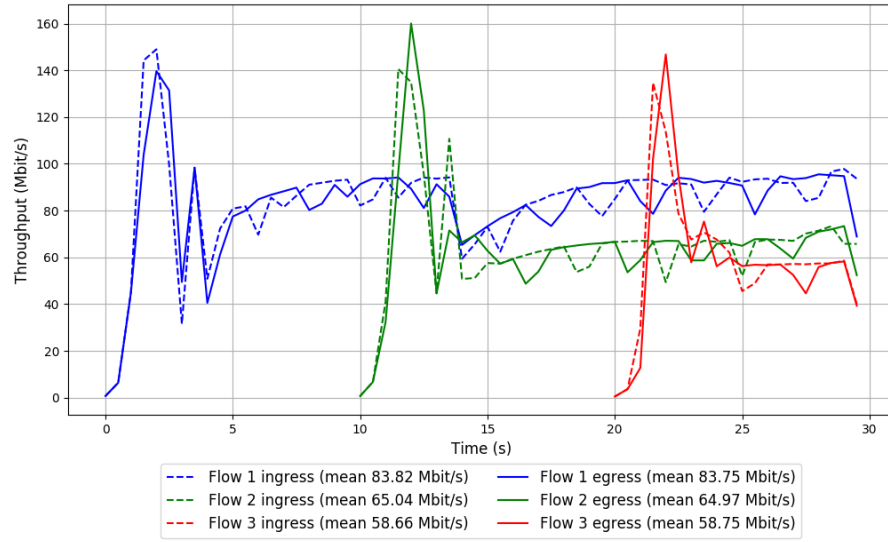
-- Flow 3:

Average throughput: 58.75 Mbit/s

95th percentile per-packet one-way delay: 95.276 ms

Loss rate: 1.70%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-02 17:45:27

End at: 2018-01-02 17:45:57

Below is generated by plot.py at 2018-01-02 20:38:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 64.95 Mbit/s

95th percentile per-packet one-way delay: 89.910 ms

Loss rate: 1.98%

-- Flow 1:

Average throughput: 33.54 Mbit/s

95th percentile per-packet one-way delay: 89.901 ms

Loss rate: 1.89%

-- Flow 2:

Average throughput: 12.38 Mbit/s

95th percentile per-packet one-way delay: 87.482 ms

Loss rate: 2.13%

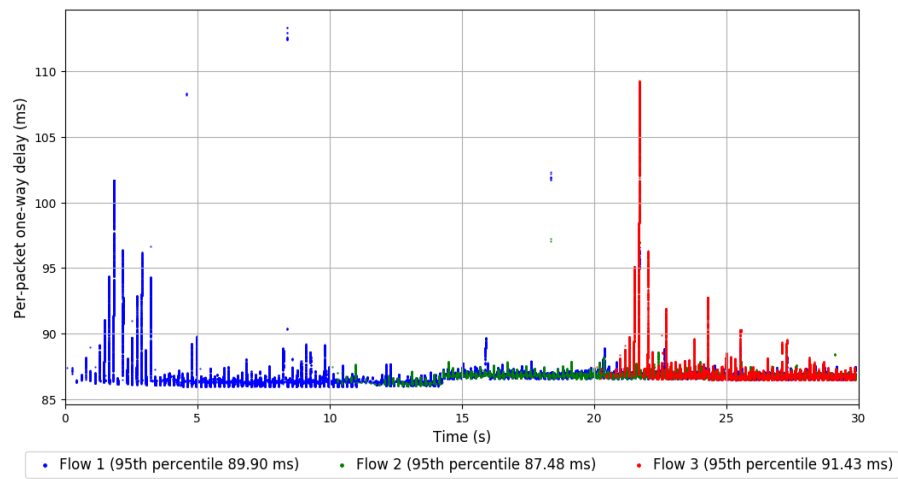
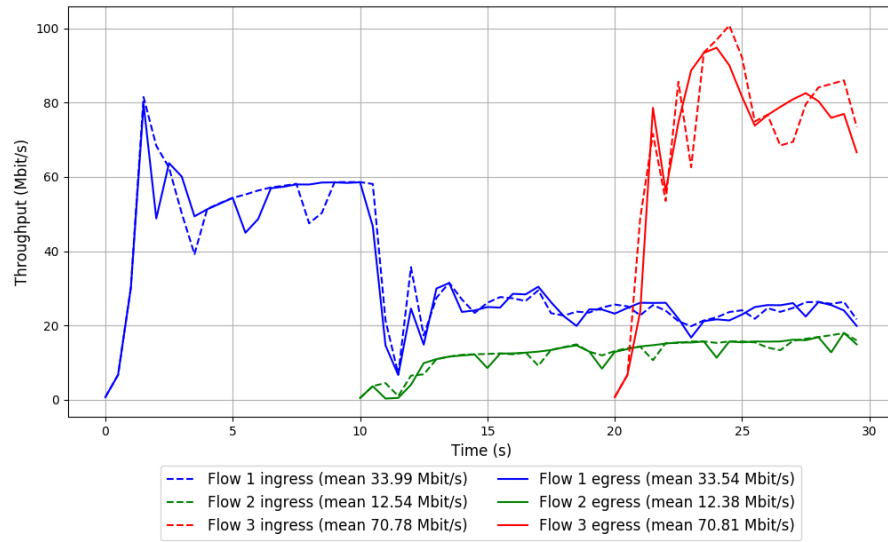
-- Flow 3:

Average throughput: 70.81 Mbit/s

95th percentile per-packet one-way delay: 91.428 ms

Loss rate: 2.06%

Run 10: Report of TCP Cubic — Data Link

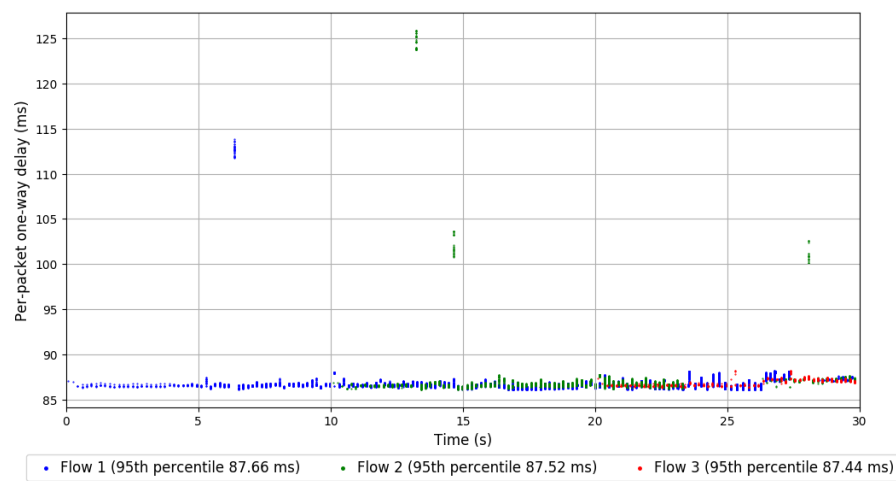
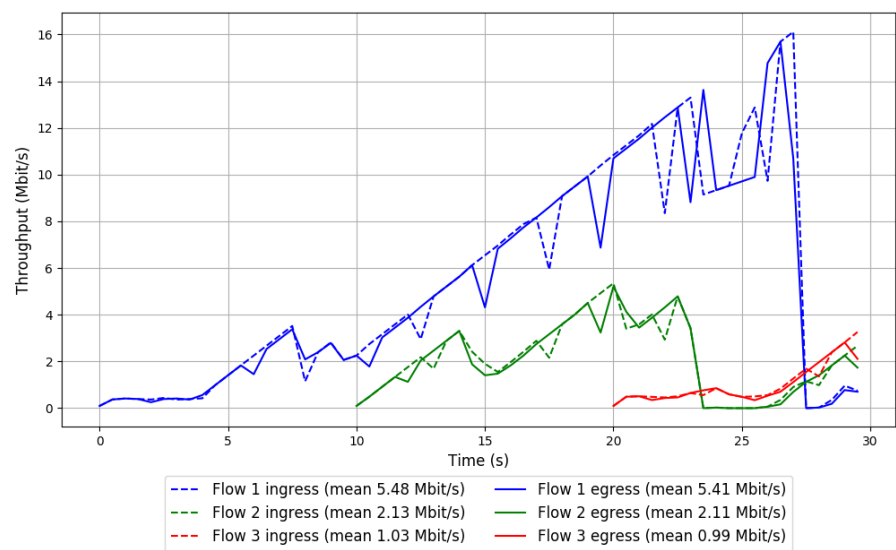


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-02 15:38:15
End at: 2018-01-02 15:38:45

# Below is generated by plot.py at 2018-01-02 20:38:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.11 Mbit/s
95th percentile per-packet one-way delay: 87.630 ms
Loss rate: 2.03%
-- Flow 1:
Average throughput: 5.41 Mbit/s
95th percentile per-packet one-way delay: 87.655 ms
Loss rate: 1.88%
-- Flow 2:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 87.523 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 0.99 Mbit/s
95th percentile per-packet one-way delay: 87.445 ms
Loss rate: 5.65%
```


Run 1: Report of LEDBAT — Data Link

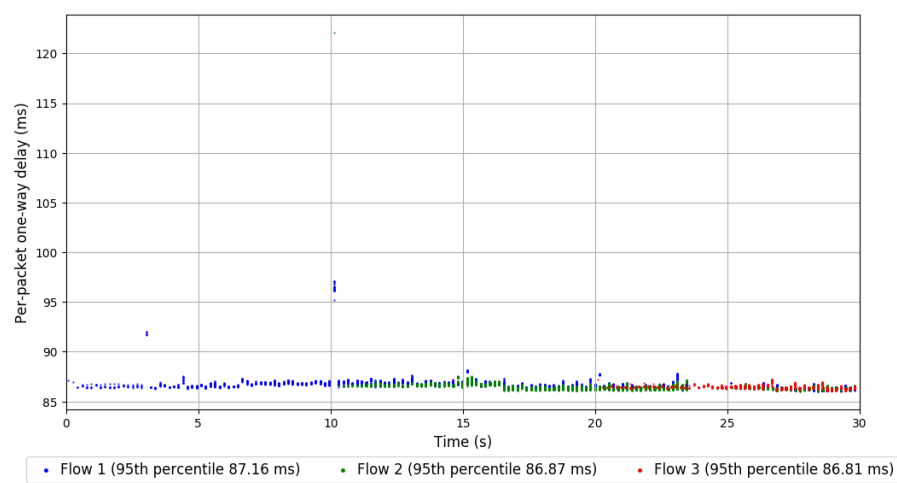
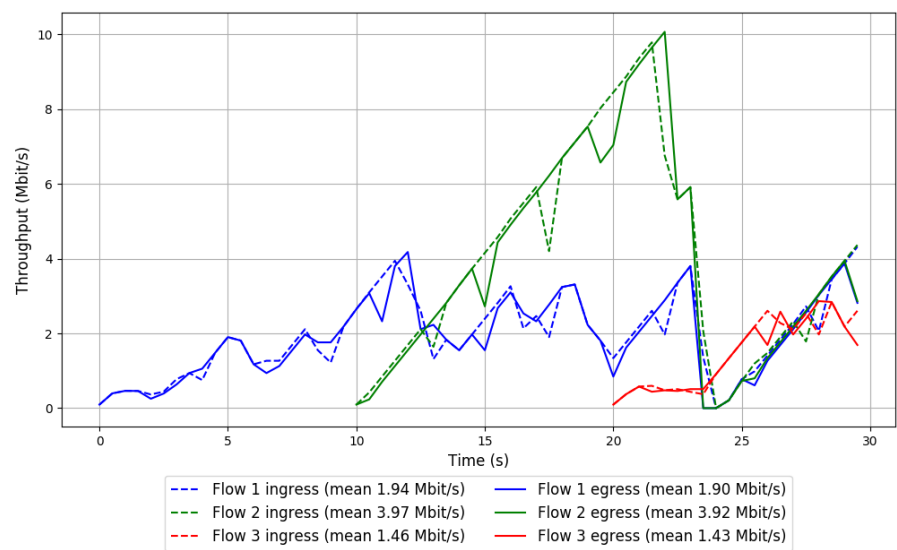


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-02 15:53:05
End at: 2018-01-02 15:53:35

# Below is generated by plot.py at 2018-01-02 20:38:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.96 Mbit/s
95th percentile per-packet one-way delay: 87.029 ms
Loss rate: 2.46%
-- Flow 1:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 87.157 ms
Loss rate: 2.55%
-- Flow 2:
Average throughput: 3.92 Mbit/s
95th percentile per-packet one-way delay: 86.871 ms
Loss rate: 2.26%
-- Flow 3:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 86.813 ms
Loss rate: 3.18%
```

Run 2: Report of LEDBAT — Data Link

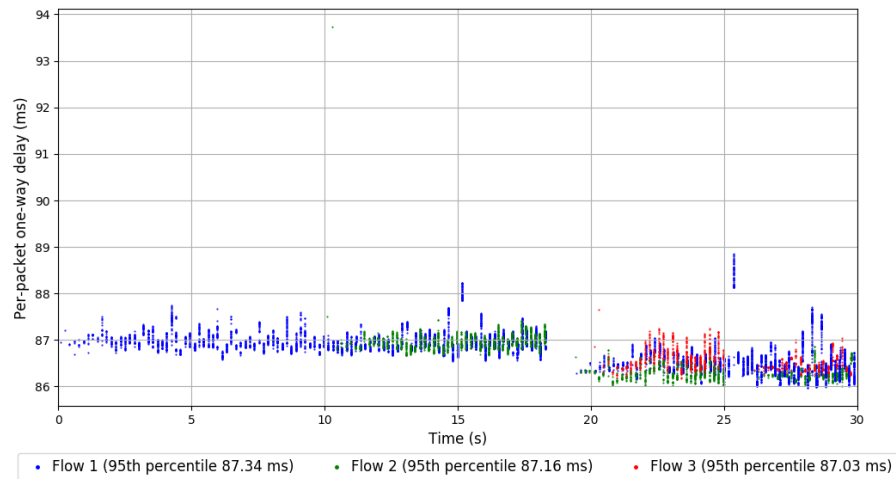
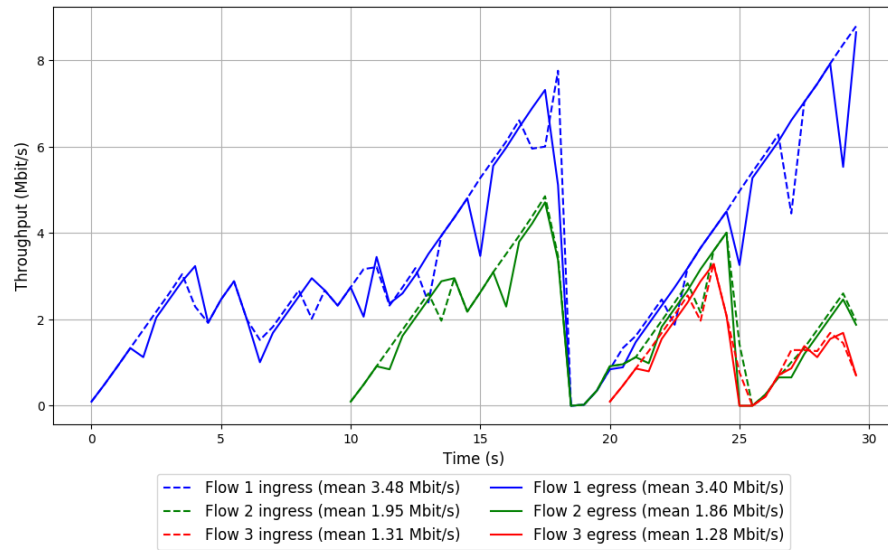


```
Run 3: Statistics of LEDBAT

Start at: 2018-01-02 16:08:02
End at: 2018-01-02 16:08:32

# Below is generated by plot.py at 2018-01-02 20:38:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.04 Mbit/s
95th percentile per-packet one-way delay: 87.256 ms
Loss rate: 3.58%
-- Flow 1:
Average throughput: 3.40 Mbit/s
95th percentile per-packet one-way delay: 87.340 ms
Loss rate: 2.77%
-- Flow 2:
Average throughput: 1.86 Mbit/s
95th percentile per-packet one-way delay: 87.162 ms
Loss rate: 5.42%
-- Flow 3:
Average throughput: 1.28 Mbit/s
95th percentile per-packet one-way delay: 87.033 ms
Loss rate: 4.55%
```

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-02 16:23:12

End at: 2018-01-02 16:23:42

Below is generated by plot.py at 2018-01-02 20:38:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.73 Mbit/s

95th percentile per-packet one-way delay: 88.108 ms

Loss rate: 1.72%

-- Flow 1:

Average throughput: 2.63 Mbit/s

95th percentile per-packet one-way delay: 88.200 ms

Loss rate: 2.26%

-- Flow 2:

Average throughput: 5.13 Mbit/s

95th percentile per-packet one-way delay: 88.090 ms

Loss rate: 1.15%

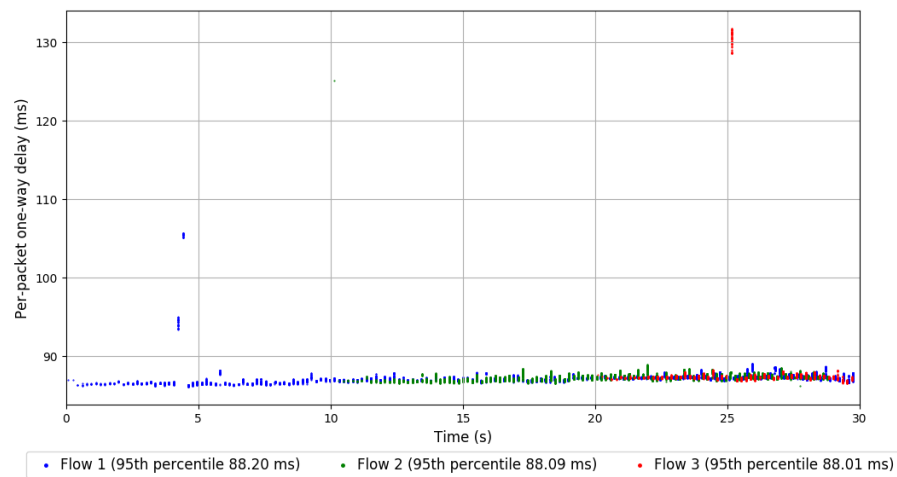
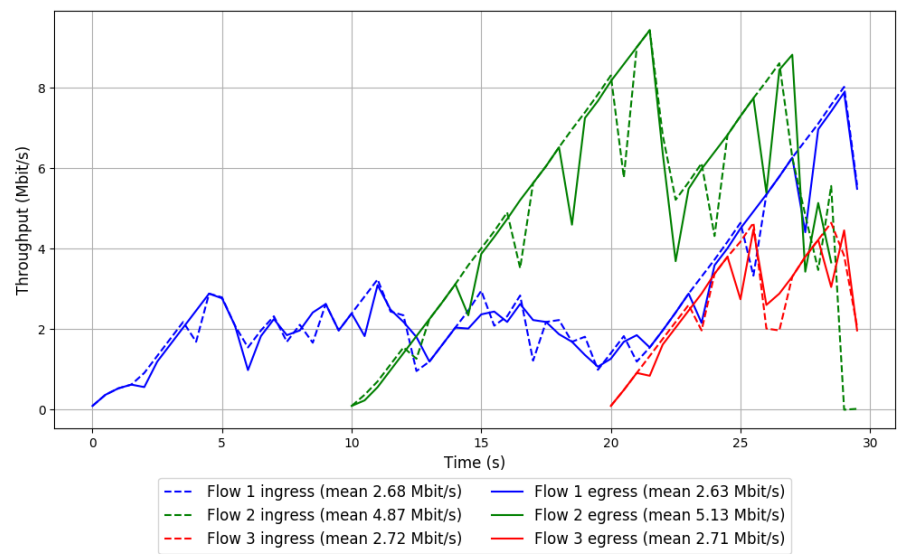
-- Flow 3:

Average throughput: 2.71 Mbit/s

95th percentile per-packet one-way delay: 88.006 ms

Loss rate: 2.16%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-02 16:38:22

End at: 2018-01-02 16:38:52

Below is generated by plot.py at 2018-01-02 20:38:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.34 Mbit/s

95th percentile per-packet one-way delay: 87.615 ms

Loss rate: 2.21%

-- Flow 1:

Average throughput: 1.08 Mbit/s

95th percentile per-packet one-way delay: 87.264 ms

Loss rate: 2.18%

-- Flow 2:

Average throughput: 1.69 Mbit/s

95th percentile per-packet one-way delay: 87.545 ms

Loss rate: 3.24%

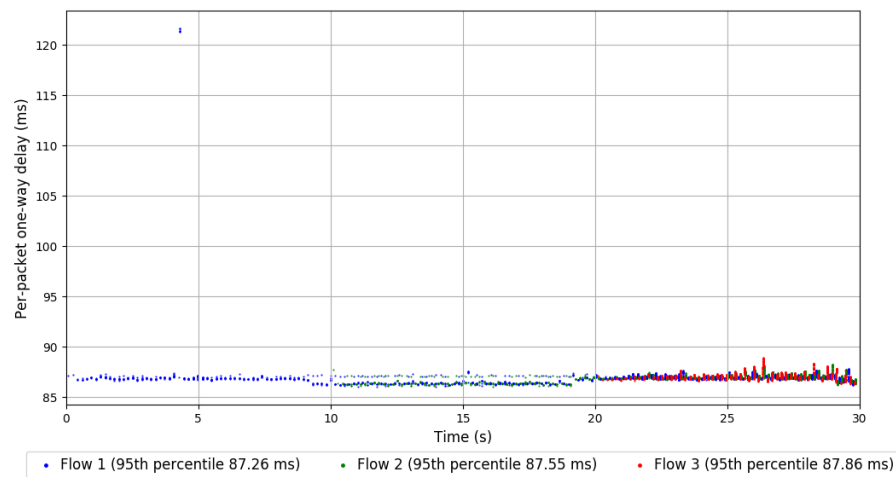
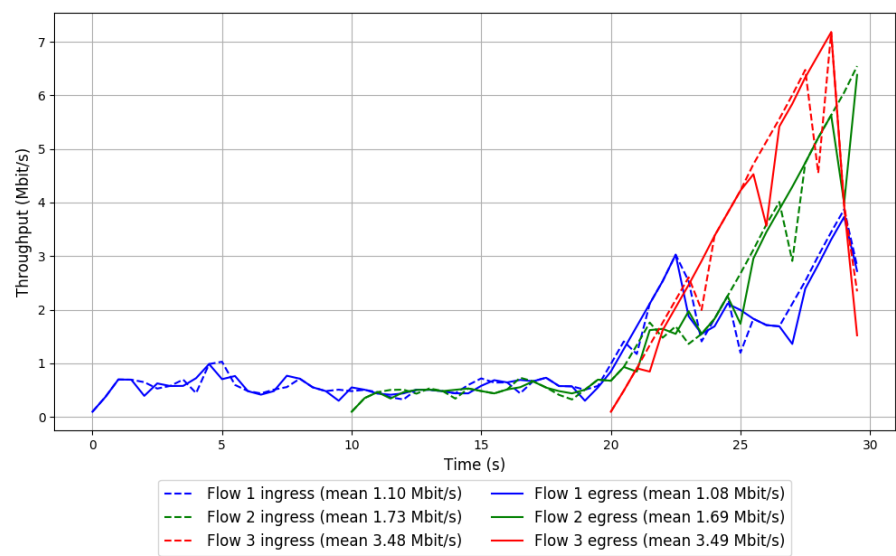
-- Flow 3:

Average throughput: 3.49 Mbit/s

95th percentile per-packet one-way delay: 87.857 ms

Loss rate: 1.23%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-02 16:53:31

End at: 2018-01-02 16:54:01

Below is generated by plot.py at 2018-01-02 20:38:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.50 Mbit/s

95th percentile per-packet one-way delay: 87.460 ms

Loss rate: 1.63%

-- Flow 1:

Average throughput: 2.85 Mbit/s

95th percentile per-packet one-way delay: 87.537 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 87.319 ms

Loss rate: 3.30%

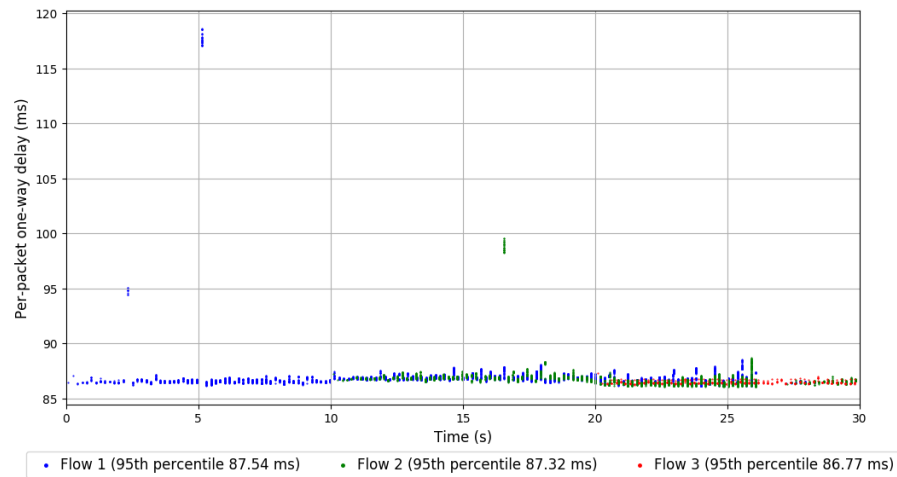
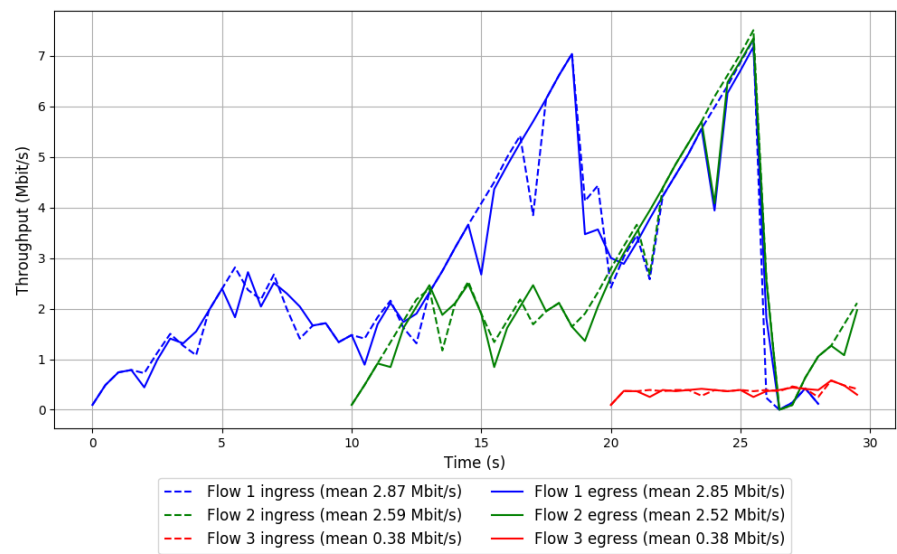
-- Flow 3:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 86.768 ms

Loss rate: 1.52%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-02 17:07:18

End at: 2018-01-02 17:07:48

Below is generated by plot.py at 2018-01-02 20:38:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.82 Mbit/s

95th percentile per-packet one-way delay: 88.017 ms

Loss rate: 2.21%

-- Flow 1:

Average throughput: 2.73 Mbit/s

95th percentile per-packet one-way delay: 88.040 ms

Loss rate: 2.01%

-- Flow 2:

Average throughput: 3.12 Mbit/s

95th percentile per-packet one-way delay: 88.164 ms

Loss rate: 1.69%

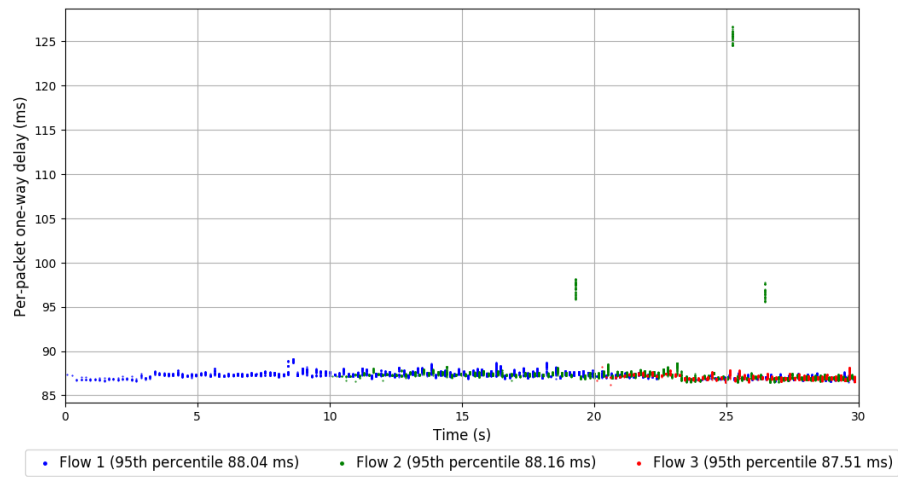
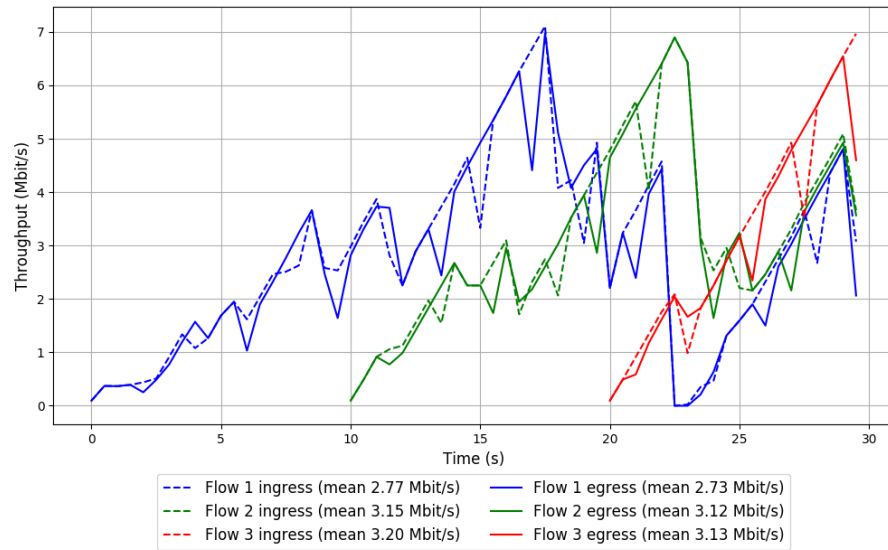
-- Flow 3:

Average throughput: 3.13 Mbit/s

95th percentile per-packet one-way delay: 87.512 ms

Loss rate: 3.74%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-02 17:22:21

End at: 2018-01-02 17:22:51

Below is generated by plot.py at 2018-01-02 20:38:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.90 Mbit/s

95th percentile per-packet one-way delay: 87.768 ms

Loss rate: 2.17%

-- Flow 1:

Average throughput: 2.63 Mbit/s

95th percentile per-packet one-way delay: 87.592 ms

Loss rate: 2.17%

-- Flow 2:

Average throughput: 4.30 Mbit/s

95th percentile per-packet one-way delay: 87.951 ms

Loss rate: 1.49%

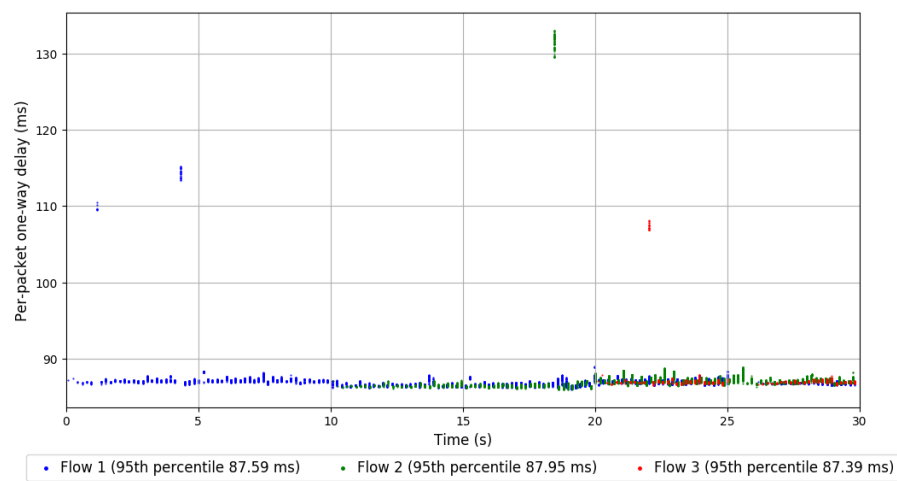
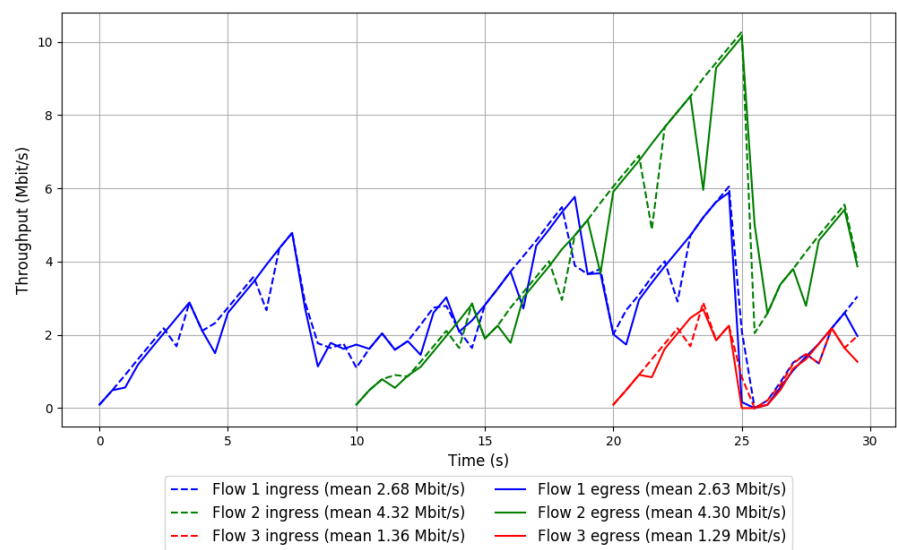
-- Flow 3:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 87.388 ms

Loss rate: 6.46%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-02 17:37:37

End at: 2018-01-02 17:38:07

Below is generated by plot.py at 2018-01-02 20:38:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.52 Mbit/s

95th percentile per-packet one-way delay: 87.440 ms

Loss rate: 3.05%

-- Flow 1:

Average throughput: 1.83 Mbit/s

95th percentile per-packet one-way delay: 87.453 ms

Loss rate: 2.12%

-- Flow 2:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 87.457 ms

Loss rate: 3.39%

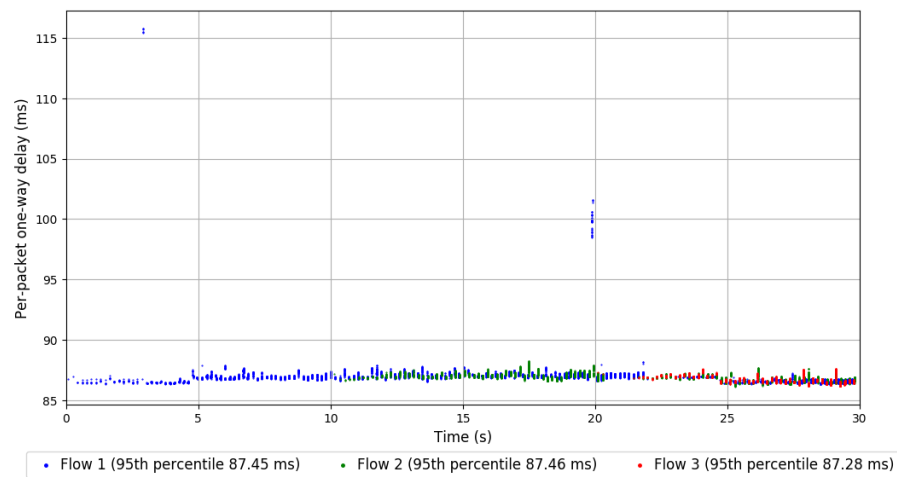
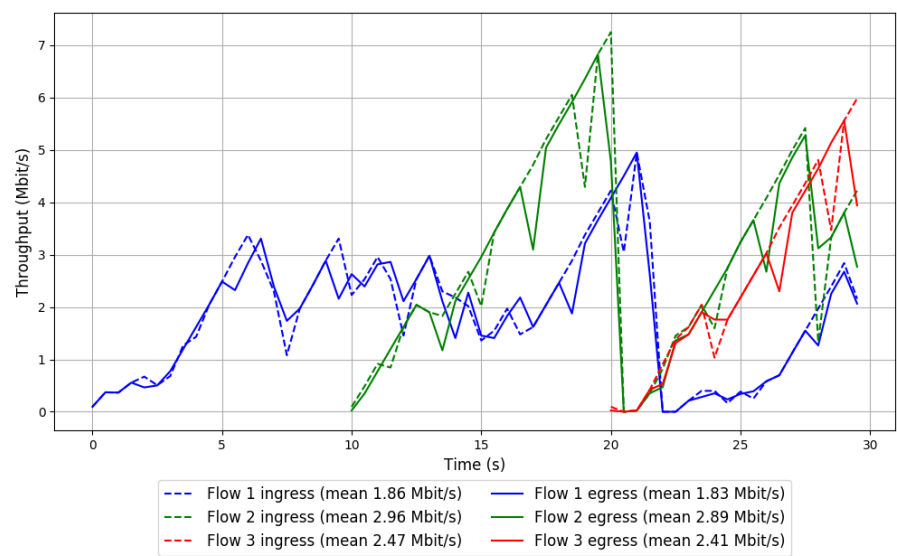
-- Flow 3:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 87.281 ms

Loss rate: 4.33%

Run 9: Report of LEDBAT — Data Link

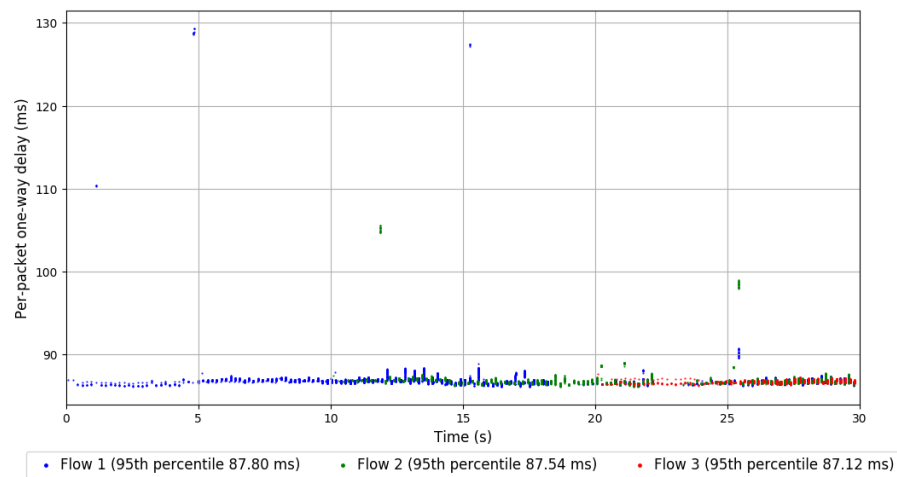
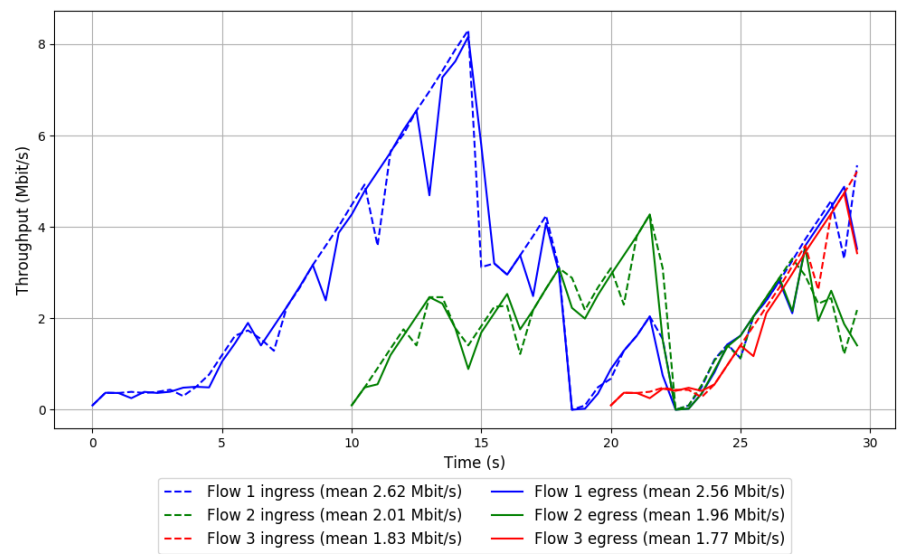


```
Run 10: Statistics of LEDBAT

Start at: 2018-01-02 17:52:27
End at: 2018-01-02 17:52:57

# Below is generated by plot.py at 2018-01-02 20:38:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.43 Mbit/s
95th percentile per-packet one-way delay: 87.599 ms
Loss rate: 3.22%
-- Flow 1:
Average throughput: 2.56 Mbit/s
95th percentile per-packet one-way delay: 87.800 ms
Loss rate: 2.78%
-- Flow 2:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 87.542 ms
Loss rate: 3.32%
-- Flow 3:
Average throughput: 1.77 Mbit/s
95th percentile per-packet one-way delay: 87.117 ms
Loss rate: 4.93%
```

Run 10: Report of LEDBAT — Data Link

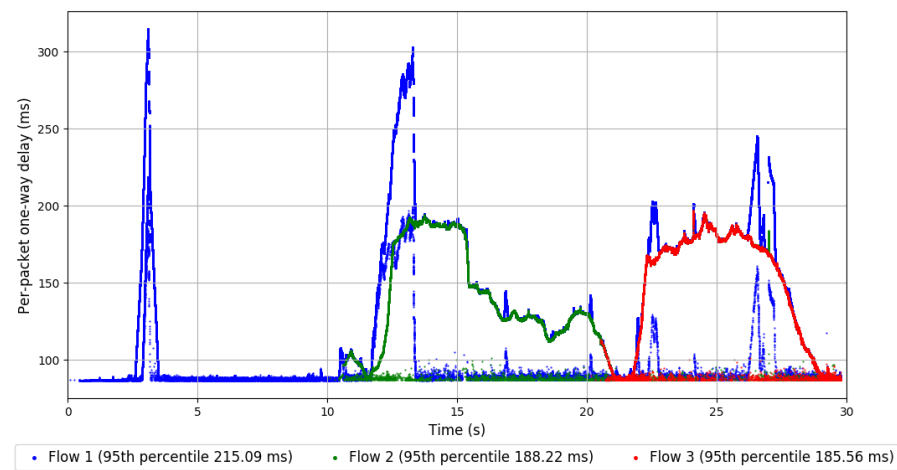
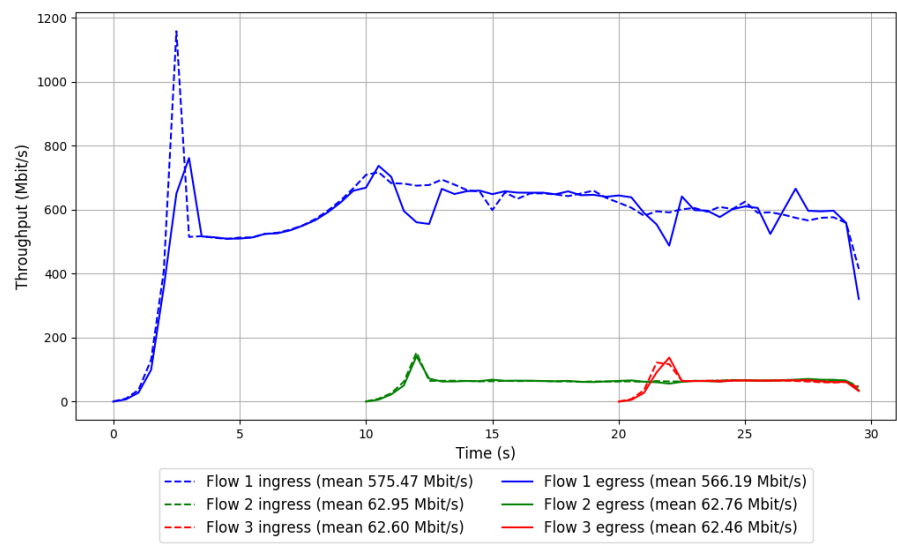


```
Run 1: Statistics of PCC

Start at: 2018-01-02 15:25:20
End at: 2018-01-02 15:25:50

# Below is generated by plot.py at 2018-01-02 20:47:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 627.96 Mbit/s
95th percentile per-packet one-way delay: 207.989 ms
Loss rate: 2.11%
-- Flow 1:
Average throughput: 566.19 Mbit/s
95th percentile per-packet one-way delay: 215.086 ms
Loss rate: 2.19%
-- Flow 2:
Average throughput: 62.76 Mbit/s
95th percentile per-packet one-way delay: 188.225 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 62.46 Mbit/s
95th percentile per-packet one-way delay: 185.560 ms
Loss rate: 1.98%
```

Run 1: Report of PCC — Data Link

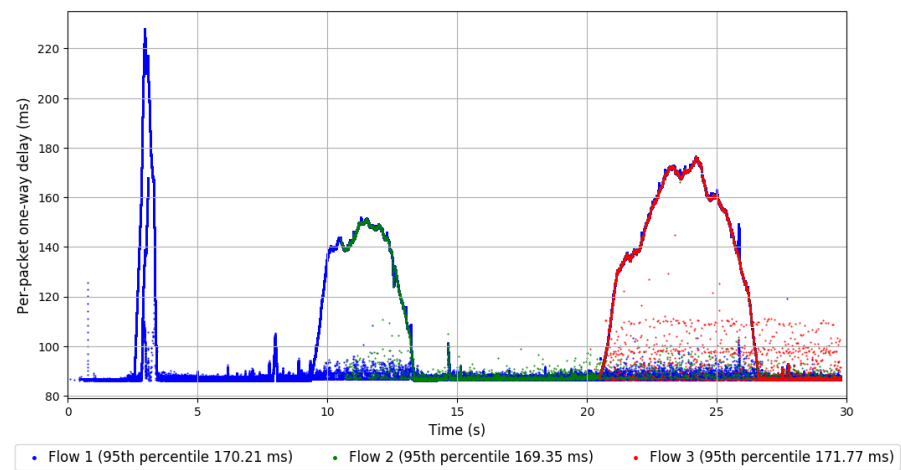
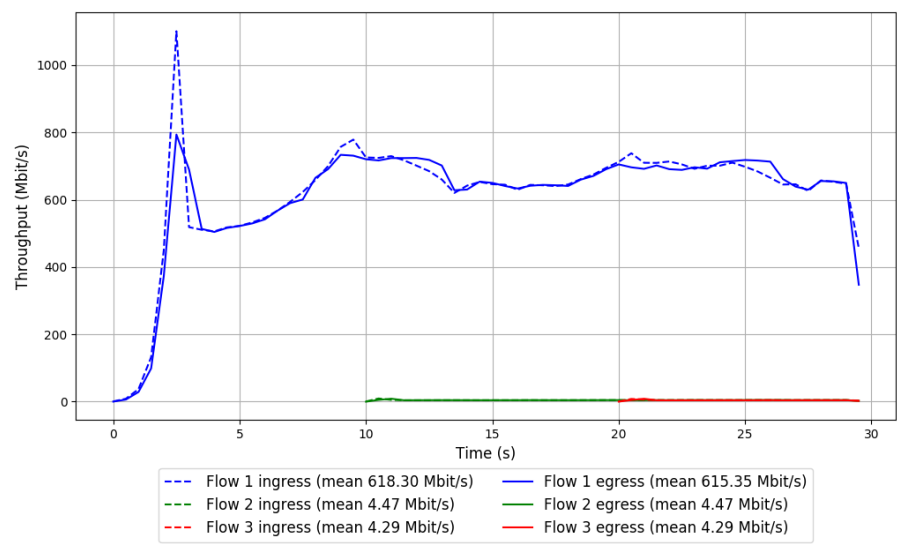


```
Run 2: Statistics of PCC

Start at: 2018-01-02 15:40:27
End at: 2018-01-02 15:40:57

# Below is generated by plot.py at 2018-01-02 20:47:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 619.67 Mbit/s
95th percentile per-packet one-way delay: 170.211 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 615.35 Mbit/s
95th percentile per-packet one-way delay: 170.208 ms
Loss rate: 1.06%
-- Flow 2:
Average throughput: 4.47 Mbit/s
95th percentile per-packet one-way delay: 169.354 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 4.29 Mbit/s
95th percentile per-packet one-way delay: 171.769 ms
Loss rate: 1.76%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-02 15:55:16

End at: 2018-01-02 15:55:46

Below is generated by plot.py at 2018-01-02 20:47:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 635.75 Mbit/s

95th percentile per-packet one-way delay: 230.762 ms

Loss rate: 3.02%

-- Flow 1:

Average throughput: 623.31 Mbit/s

95th percentile per-packet one-way delay: 231.330 ms

Loss rate: 3.06%

-- Flow 2:

Average throughput: 16.66 Mbit/s

95th percentile per-packet one-way delay: 166.306 ms

Loss rate: 1.12%

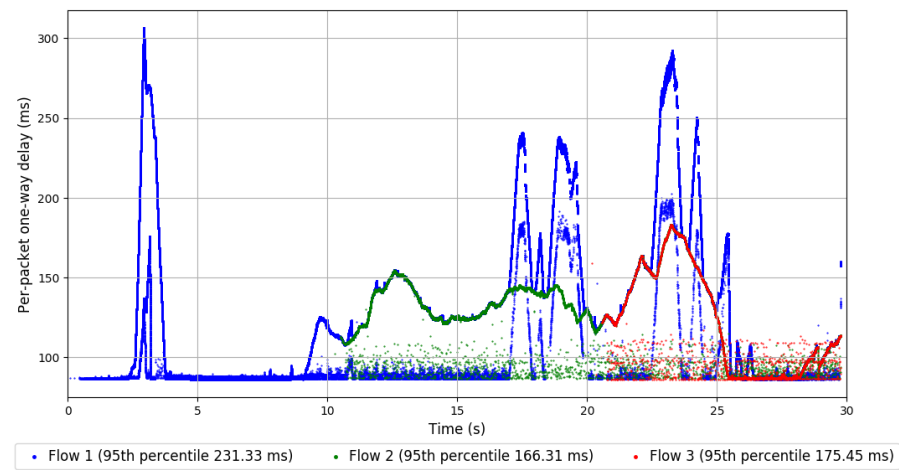
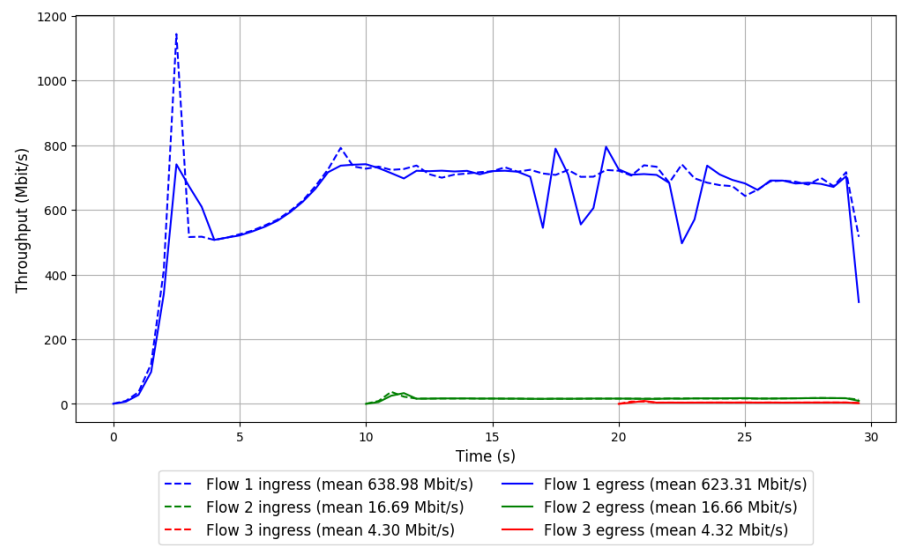
-- Flow 3:

Average throughput: 4.32 Mbit/s

95th percentile per-packet one-way delay: 175.450 ms

Loss rate: 2.16%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-01-02 16:10:14

End at: 2018-01-02 16:10:44

Below is generated by plot.py at 2018-01-02 20:47:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 618.40 Mbit/s

95th percentile per-packet one-way delay: 191.265 ms

Loss rate: 1.54%

-- Flow 1:

Average throughput: 571.42 Mbit/s

95th percentile per-packet one-way delay: 191.351 ms

Loss rate: 1.56%

-- Flow 2:

Average throughput: 68.78 Mbit/s

95th percentile per-packet one-way delay: 190.794 ms

Loss rate: 1.35%

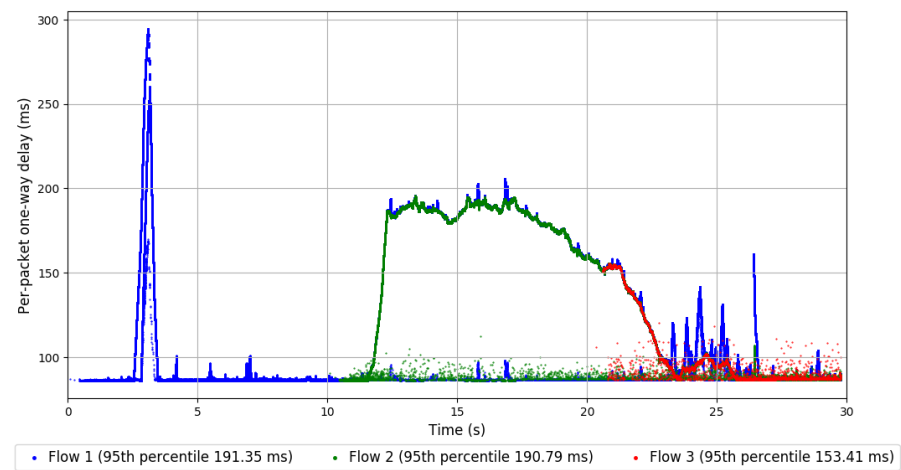
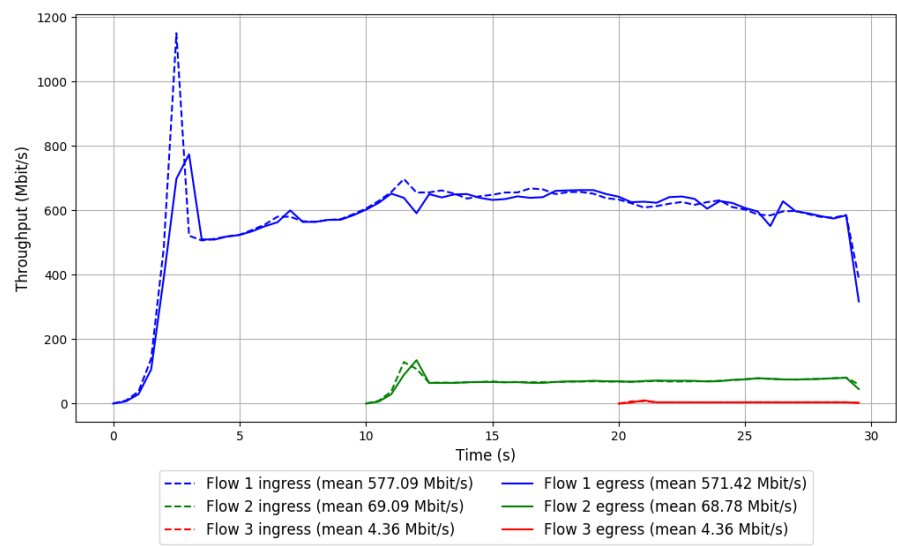
-- Flow 3:

Average throughput: 4.36 Mbit/s

95th percentile per-packet one-way delay: 153.415 ms

Loss rate: 1.75%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-02 16:25:24

End at: 2018-01-02 16:25:54

Below is generated by plot.py at 2018-01-02 20:48:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 637.18 Mbit/s

95th percentile per-packet one-way delay: 191.458 ms

Loss rate: 3.30%

-- Flow 1:

Average throughput: 575.13 Mbit/s

95th percentile per-packet one-way delay: 192.209 ms

Loss rate: 3.21%

-- Flow 2:

Average throughput: 64.13 Mbit/s

95th percentile per-packet one-way delay: 188.718 ms

Loss rate: 2.91%

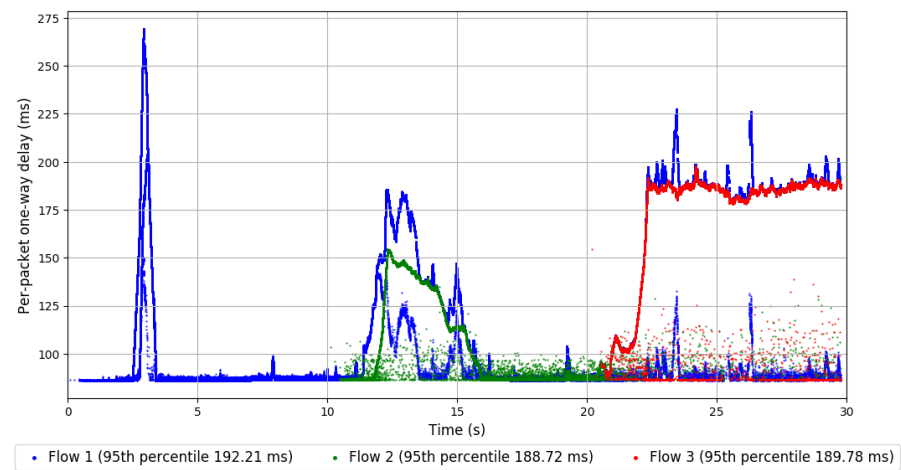
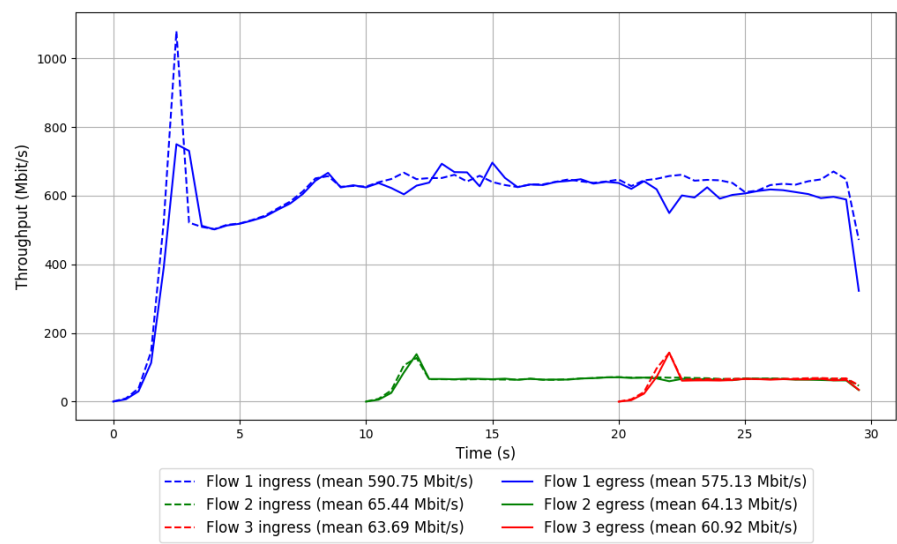
-- Flow 3:

Average throughput: 60.92 Mbit/s

95th percentile per-packet one-way delay: 189.785 ms

Loss rate: 6.69%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-02 16:40:35

End at: 2018-01-02 16:41:05

Below is generated by plot.py at 2018-01-02 20:48:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 607.58 Mbit/s

95th percentile per-packet one-way delay: 198.206 ms

Loss rate: 3.01%

-- Flow 1:

Average throughput: 565.46 Mbit/s

95th percentile per-packet one-way delay: 198.240 ms

Loss rate: 3.02%

-- Flow 2:

Average throughput: 62.59 Mbit/s

95th percentile per-packet one-way delay: 197.925 ms

Loss rate: 2.93%

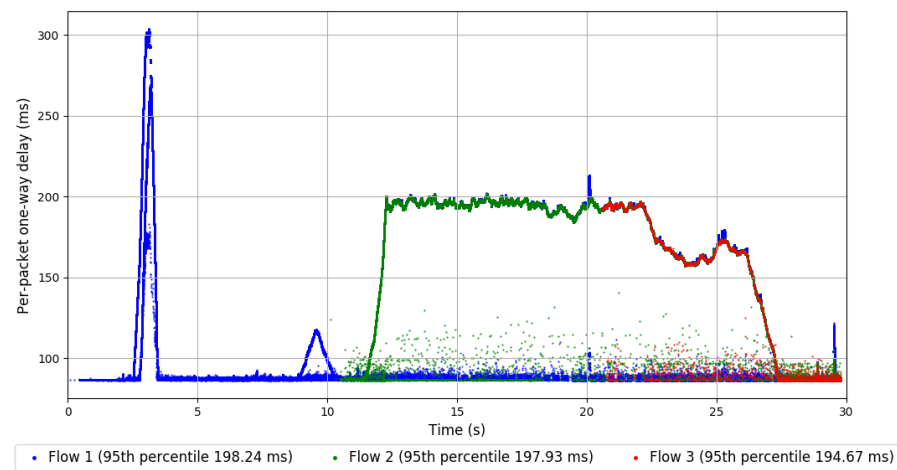
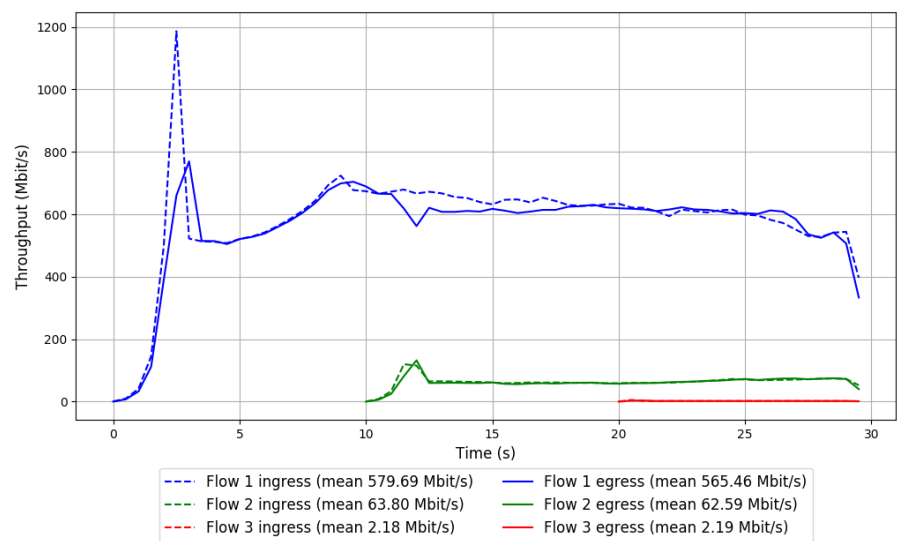
-- Flow 3:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 194.672 ms

Loss rate: 1.72%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-02 16:55:43

End at: 2018-01-02 16:56:13

Below is generated by plot.py at 2018-01-02 20:48:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 583.94 Mbit/s

95th percentile per-packet one-way delay: 278.670 ms

Loss rate: 3.94%

-- Flow 1:

Average throughput: 511.27 Mbit/s

95th percentile per-packet one-way delay: 280.373 ms

Loss rate: 3.91%

-- Flow 2:

Average throughput: 80.80 Mbit/s

95th percentile per-packet one-way delay: 196.520 ms

Loss rate: 3.28%

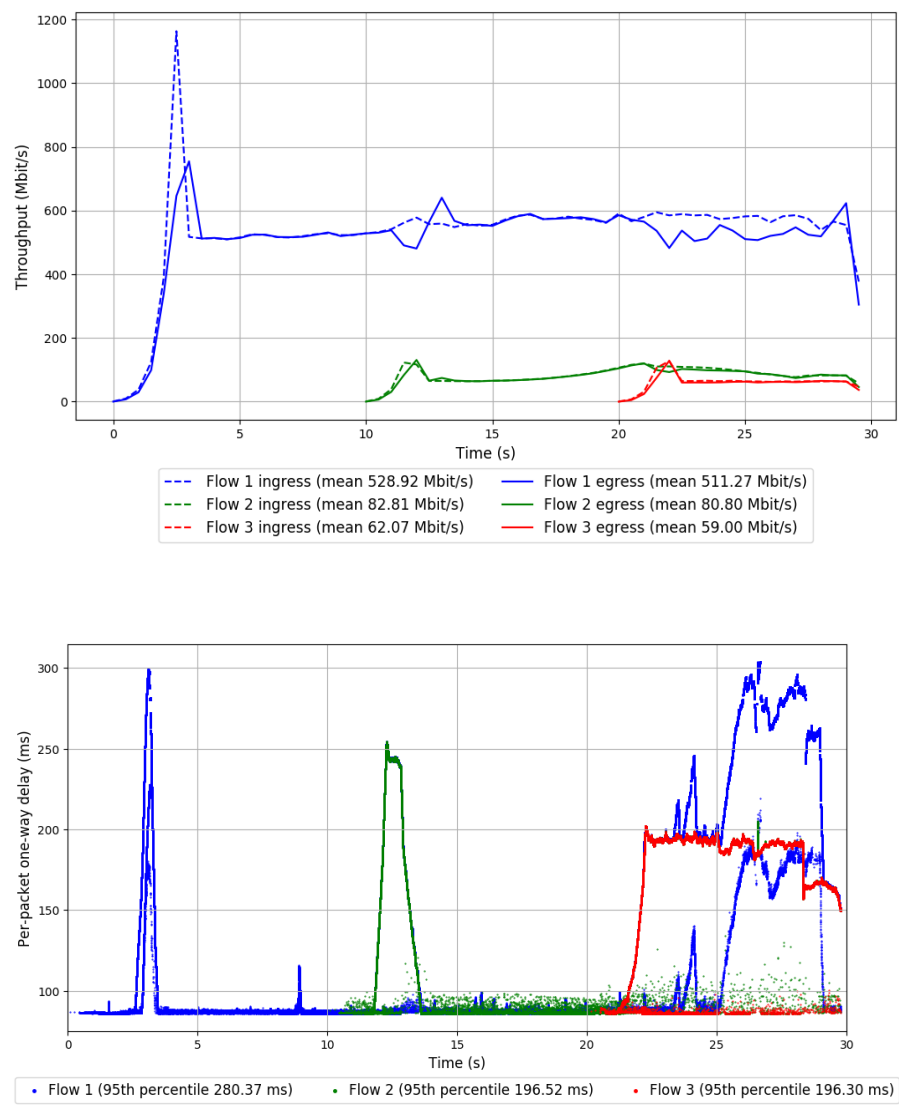
-- Flow 3:

Average throughput: 59.00 Mbit/s

95th percentile per-packet one-way delay: 196.299 ms

Loss rate: 6.64%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-02 17:09:30

End at: 2018-01-02 17:10:00

Below is generated by plot.py at 2018-01-02 20:49:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 604.41 Mbit/s

95th percentile per-packet one-way delay: 171.828 ms

Loss rate: 1.69%

-- Flow 1:

Average throughput: 562.39 Mbit/s

95th percentile per-packet one-way delay: 172.478 ms

Loss rate: 1.71%

-- Flow 2:

Average throughput: 32.90 Mbit/s

95th percentile per-packet one-way delay: 170.025 ms

Loss rate: 0.92%

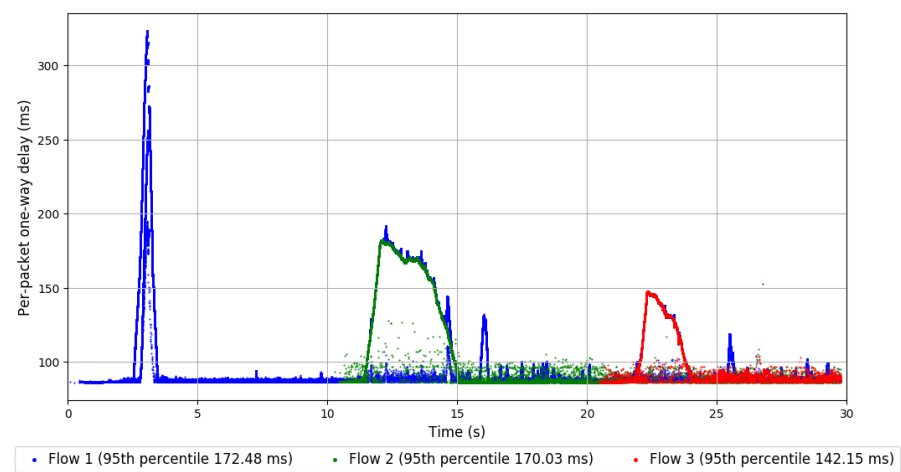
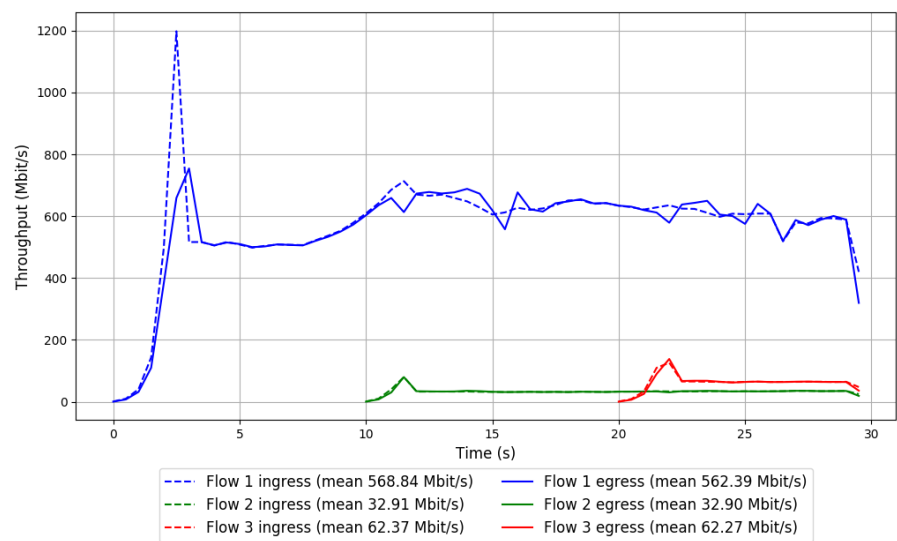
-- Flow 3:

Average throughput: 62.27 Mbit/s

95th percentile per-packet one-way delay: 142.148 ms

Loss rate: 1.92%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-02 17:24:33

End at: 2018-01-02 17:25:03

Below is generated by plot.py at 2018-01-02 20:57:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 597.01 Mbit/s

95th percentile per-packet one-way delay: 212.762 ms

Loss rate: 3.43%

-- Flow 1:

Average throughput: 500.91 Mbit/s

95th percentile per-packet one-way delay: 224.194 ms

Loss rate: 3.62%

-- Flow 2:

Average throughput: 129.22 Mbit/s

95th percentile per-packet one-way delay: 191.692 ms

Loss rate: 2.24%

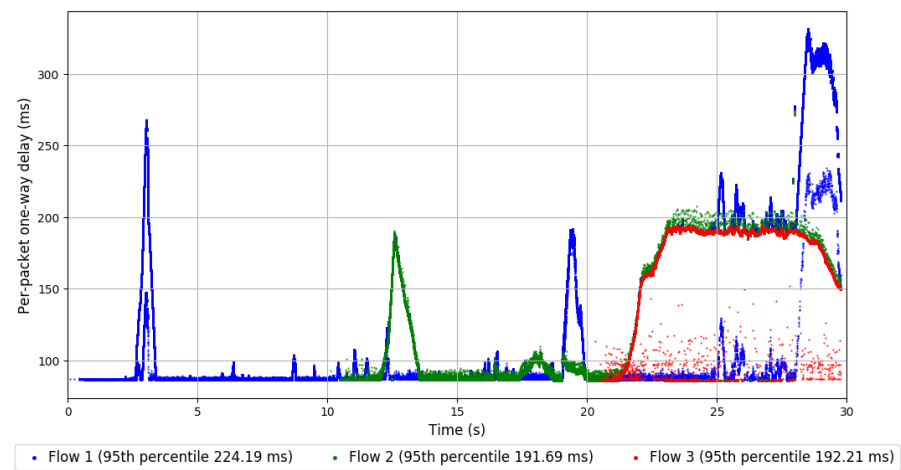
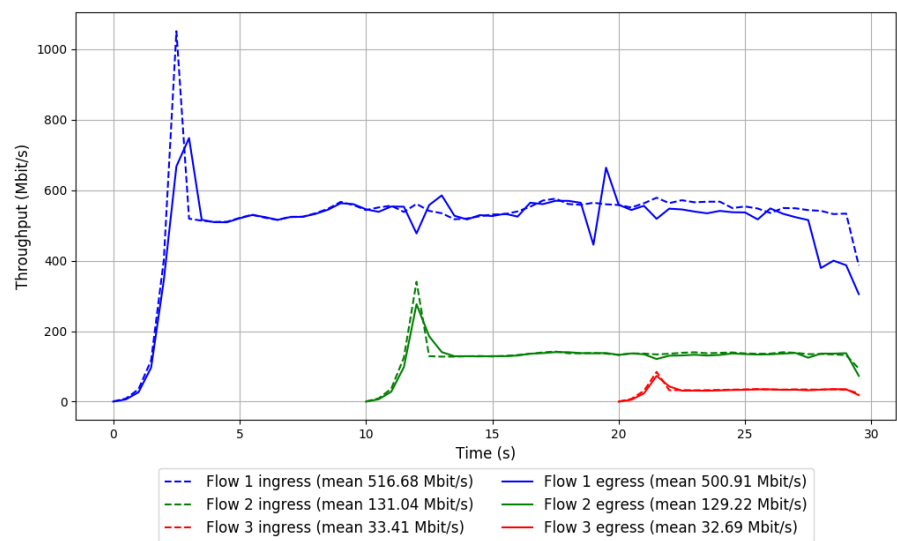
-- Flow 3:

Average throughput: 32.69 Mbit/s

95th percentile per-packet one-way delay: 192.212 ms

Loss rate: 3.90%

Run 9: Report of PCC — Data Link

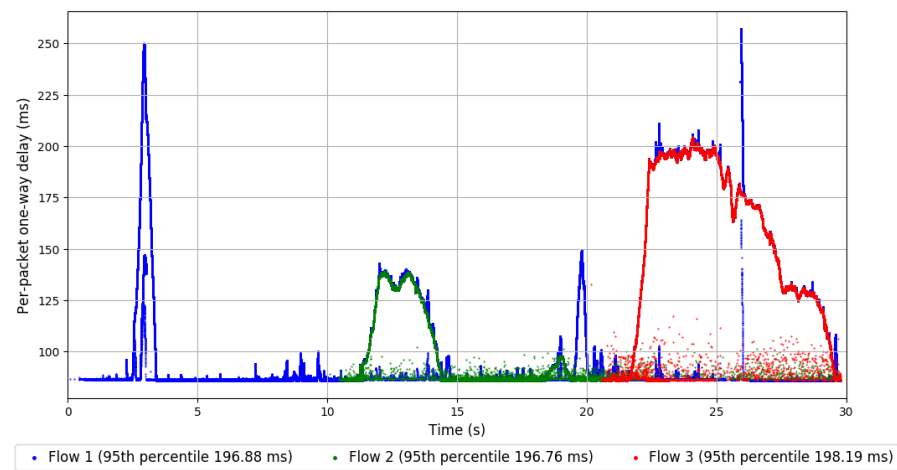
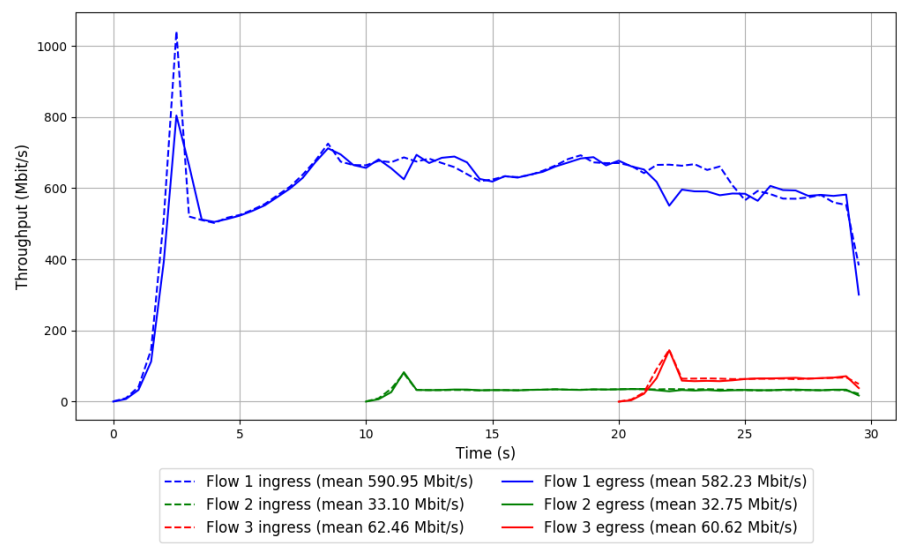


```
Run 10: Statistics of PCC

Start at: 2018-01-02 17:39:48
End at: 2018-01-02 17:40:18

# Below is generated by plot.py at 2018-01-02 20:57:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 623.54 Mbit/s
95th percentile per-packet one-way delay: 196.952 ms
Loss rate: 2.14%
-- Flow 1:
Average throughput: 582.23 Mbit/s
95th percentile per-packet one-way delay: 196.883 ms
Loss rate: 2.05%
-- Flow 2:
Average throughput: 32.75 Mbit/s
95th percentile per-packet one-way delay: 196.764 ms
Loss rate: 1.93%
-- Flow 3:
Average throughput: 60.62 Mbit/s
95th percentile per-packet one-way delay: 198.188 ms
Loss rate: 5.11%
```

Run 10: Report of PCC — Data Link

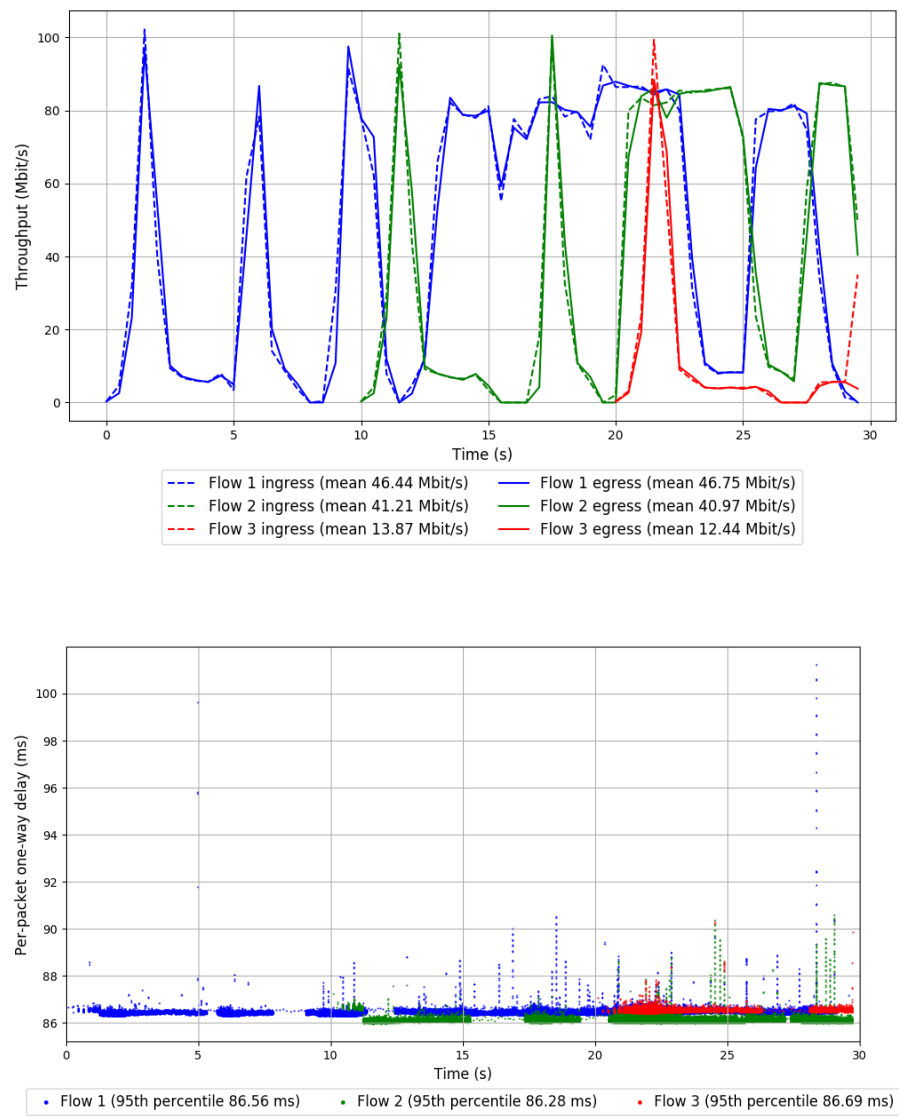


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-02 15:30:13
End at: 2018-01-02 15:30:43

# Below is generated by plot.py at 2018-01-02 20:57:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.88 Mbit/s
95th percentile per-packet one-way delay: 86.556 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 46.75 Mbit/s
95th percentile per-packet one-way delay: 86.555 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 40.97 Mbit/s
95th percentile per-packet one-way delay: 86.279 ms
Loss rate: 1.46%
-- Flow 3:
Average throughput: 12.44 Mbit/s
95th percentile per-packet one-way delay: 86.687 ms
Loss rate: 11.85%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-01-02 15:45:18

End at: 2018-01-02 15:45:48

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.24 Mbit/s

95th percentile per-packet one-way delay: 86.995 ms

Loss rate: 1.26%

-- Flow 1:

Average throughput: 47.17 Mbit/s

95th percentile per-packet one-way delay: 87.074 ms

Loss rate: 1.09%

-- Flow 2:

Average throughput: 52.64 Mbit/s

95th percentile per-packet one-way delay: 86.671 ms

Loss rate: 1.01%

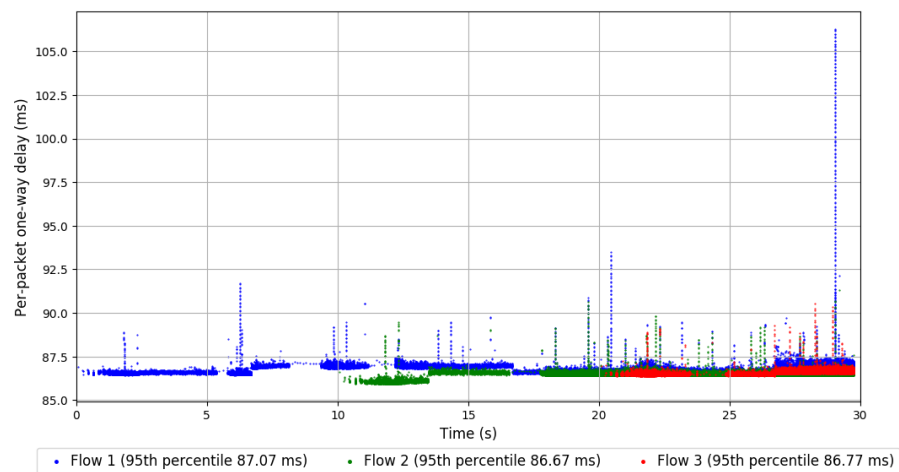
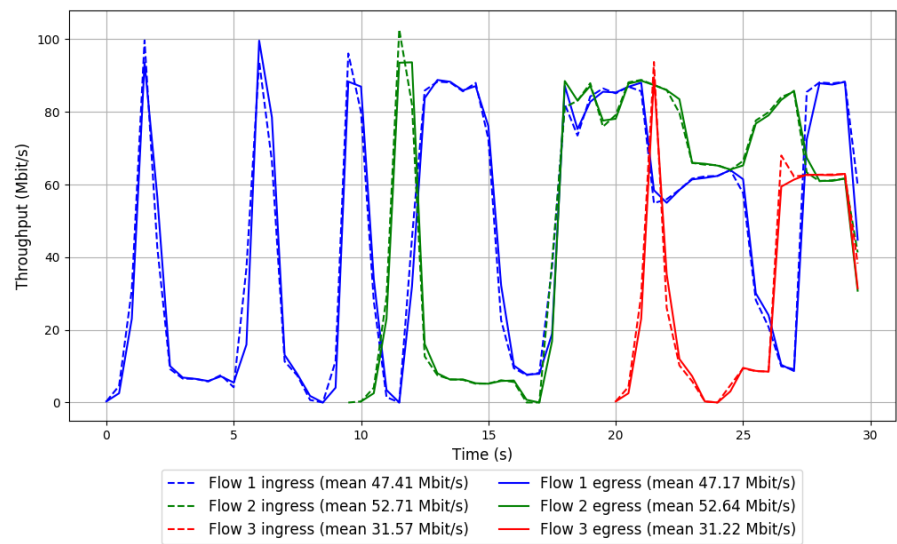
-- Flow 3:

Average throughput: 31.22 Mbit/s

95th percentile per-packet one-way delay: 86.767 ms

Loss rate: 2.87%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-02 16:00:06

End at: 2018-01-02 16:00:36

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 113.24 Mbit/s

95th percentile per-packet one-way delay: 86.963 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 60.80 Mbit/s

95th percentile per-packet one-way delay: 86.892 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 49.89 Mbit/s

95th percentile per-packet one-way delay: 86.631 ms

Loss rate: 0.19%

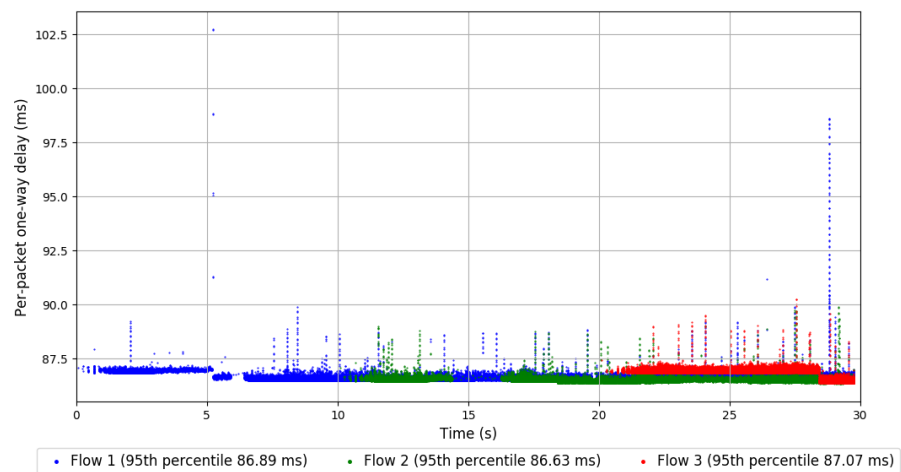
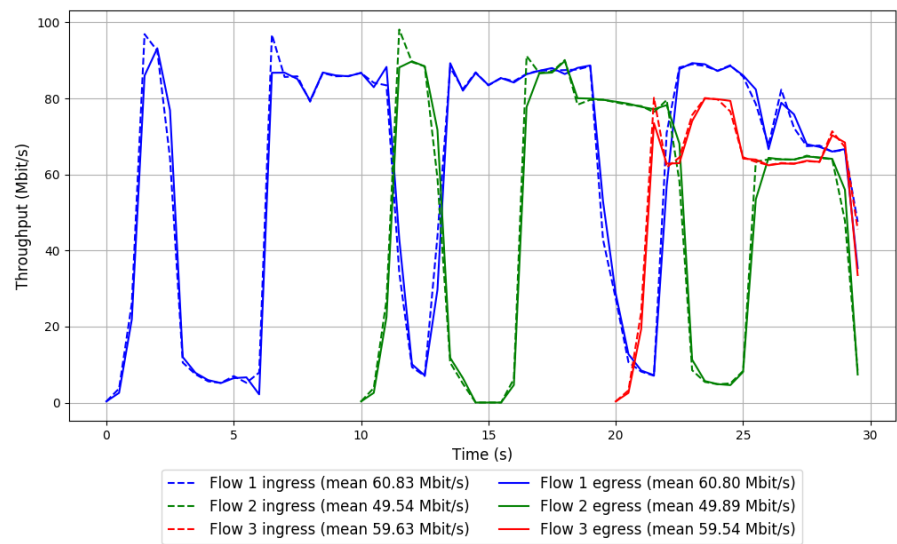
-- Flow 3:

Average throughput: 59.54 Mbit/s

95th percentile per-packet one-way delay: 87.073 ms

Loss rate: 1.96%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-02 16:15:04

End at: 2018-01-02 16:15:34

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.30 Mbit/s

95th percentile per-packet one-way delay: 86.999 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 52.36 Mbit/s

95th percentile per-packet one-way delay: 87.043 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 47.47 Mbit/s

95th percentile per-packet one-way delay: 86.695 ms

Loss rate: 1.20%

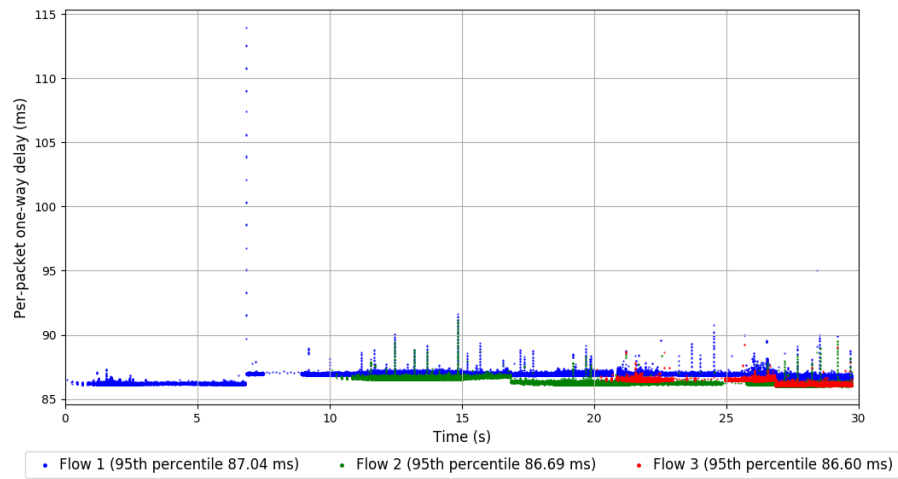
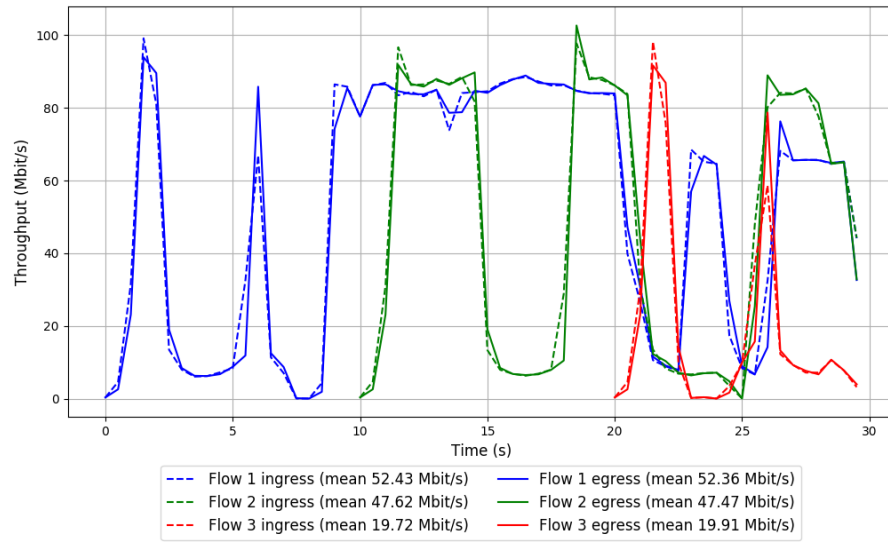
-- Flow 3:

Average throughput: 19.91 Mbit/s

95th percentile per-packet one-way delay: 86.601 ms

Loss rate: 0.16%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-02 16:30:17

End at: 2018-01-02 16:30:47

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.32 Mbit/s

95th percentile per-packet one-way delay: 86.696 ms

Loss rate: 1.13%

-- Flow 1:

Average throughput: 57.53 Mbit/s

95th percentile per-packet one-way delay: 86.709 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 43.45 Mbit/s

95th percentile per-packet one-way delay: 86.664 ms

Loss rate: 1.31%

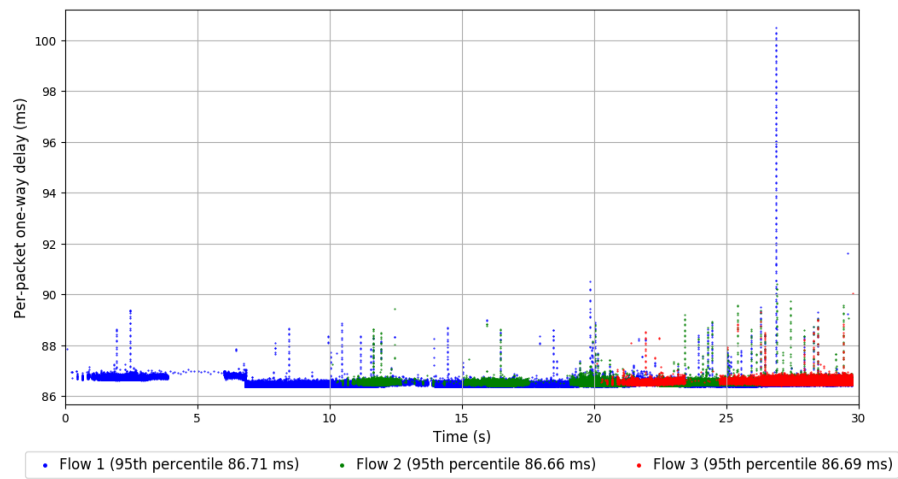
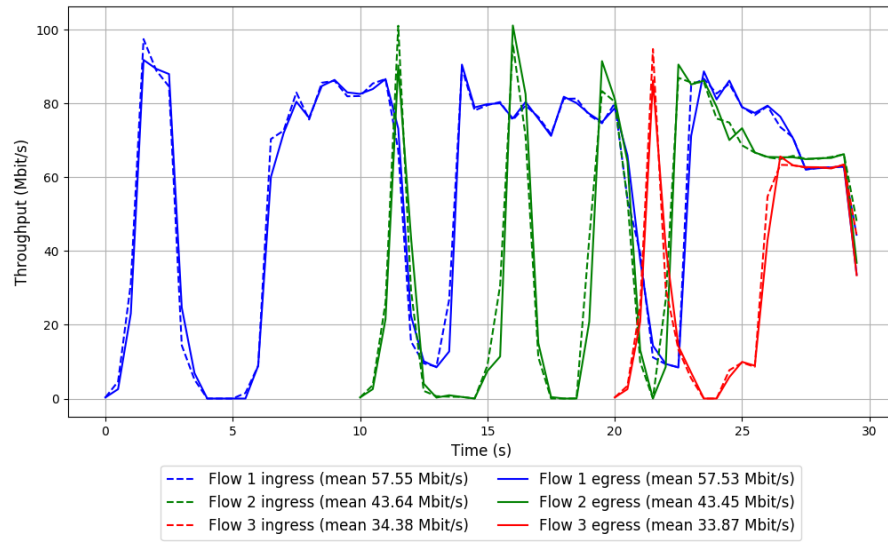
-- Flow 3:

Average throughput: 33.87 Mbit/s

95th percentile per-packet one-way delay: 86.694 ms

Loss rate: 3.21%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-02 16:45:27

End at: 2018-01-02 16:45:57

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.71 Mbit/s

95th percentile per-packet one-way delay: 86.811 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 50.73 Mbit/s

95th percentile per-packet one-way delay: 86.814 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 37.94 Mbit/s

95th percentile per-packet one-way delay: 86.800 ms

Loss rate: 1.82%

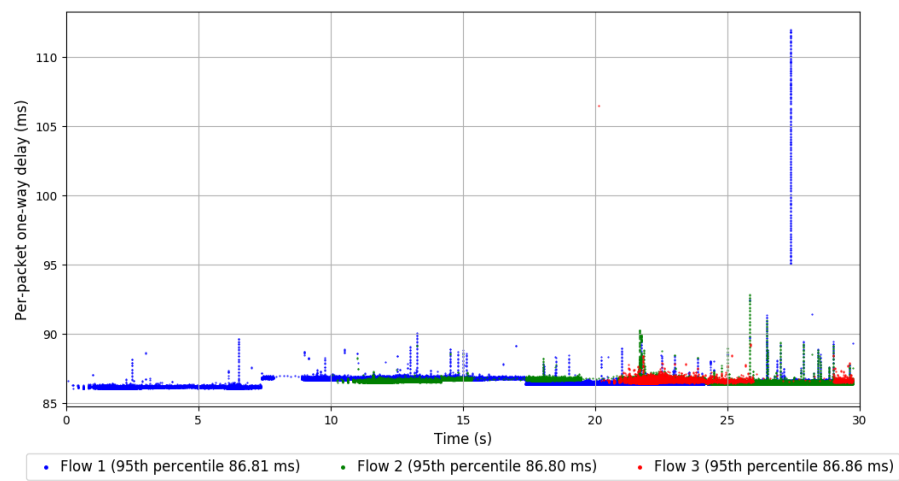
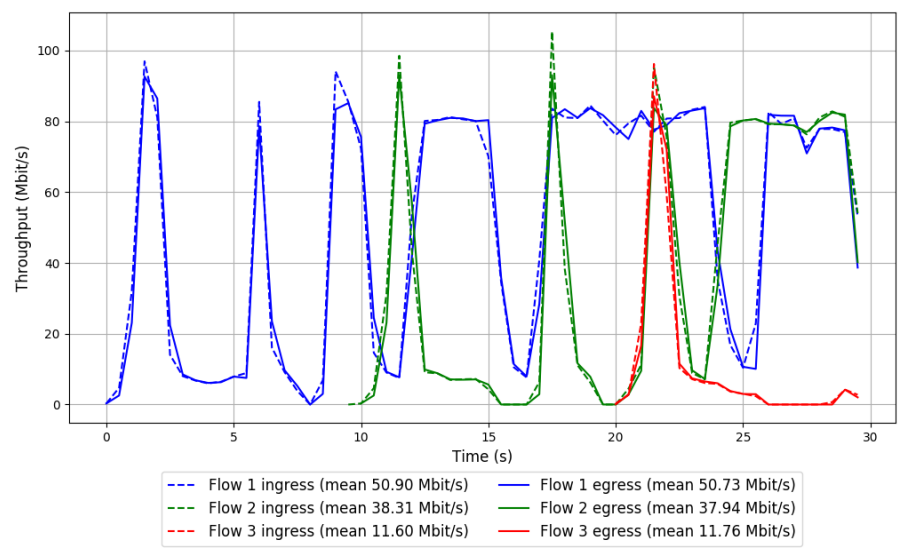
-- Flow 3:

Average throughput: 11.76 Mbit/s

95th percentile per-packet one-way delay: 86.861 ms

Loss rate: 0.64%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-02 17:00:32

End at: 2018-01-02 17:01:02

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.74 Mbit/s

95th percentile per-packet one-way delay: 86.956 ms

Loss rate: 1.57%

-- Flow 1:

Average throughput: 53.42 Mbit/s

95th percentile per-packet one-way delay: 86.962 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 24.99 Mbit/s

95th percentile per-packet one-way delay: 86.754 ms

Loss rate: 2.33%

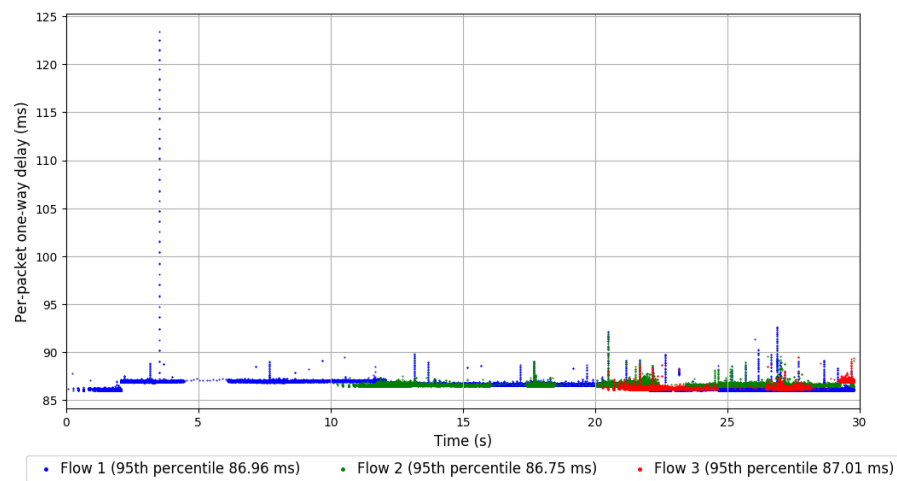
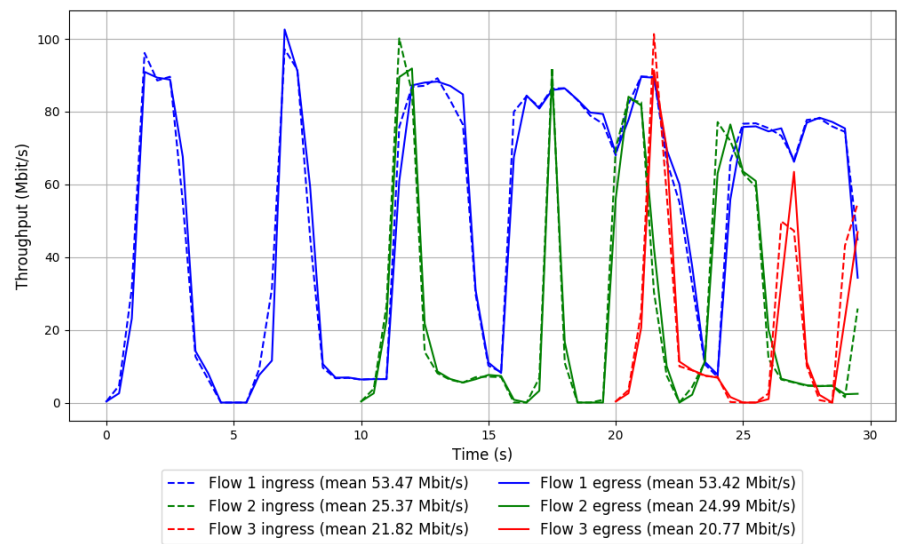
-- Flow 3:

Average throughput: 20.77 Mbit/s

95th percentile per-packet one-way delay: 87.014 ms

Loss rate: 6.49%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-02 17:14:24

End at: 2018-01-02 17:14:54

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.62 Mbit/s

95th percentile per-packet one-way delay: 86.951 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 48.99 Mbit/s

95th percentile per-packet one-way delay: 86.992 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 42.64 Mbit/s

95th percentile per-packet one-way delay: 86.624 ms

Loss rate: 1.38%

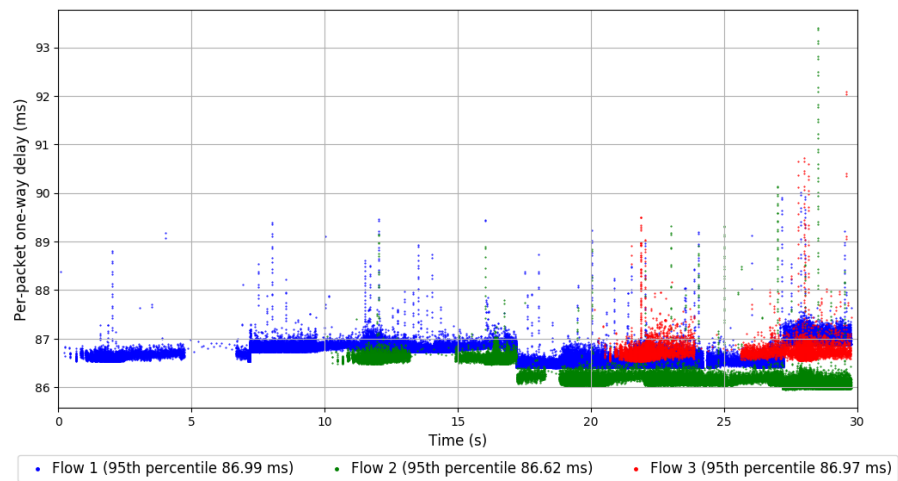
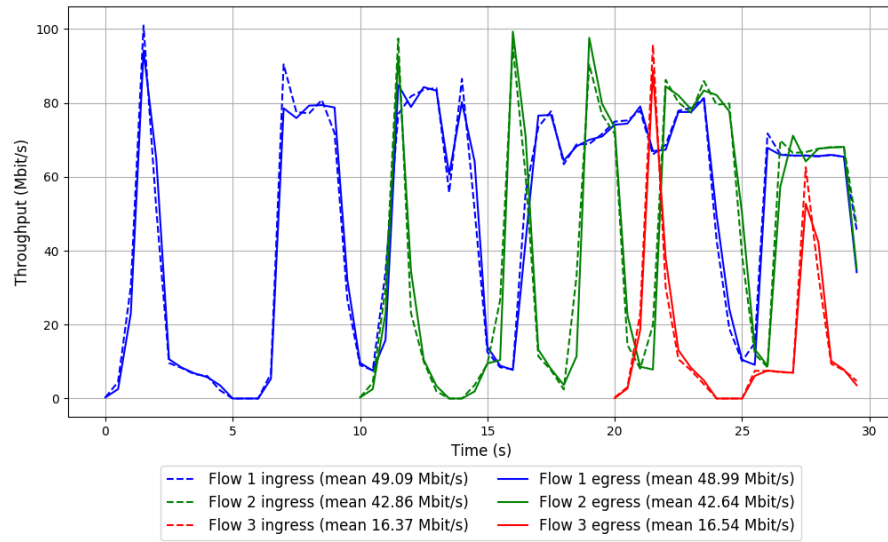
-- Flow 3:

Average throughput: 16.54 Mbit/s

95th percentile per-packet one-way delay: 86.975 ms

Loss rate: 0.75%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-02 17:29:25

End at: 2018-01-02 17:29:55

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.08 Mbit/s

95th percentile per-packet one-way delay: 86.653 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 52.38 Mbit/s

95th percentile per-packet one-way delay: 86.629 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 31.71 Mbit/s

95th percentile per-packet one-way delay: 86.713 ms

Loss rate: 0.23%

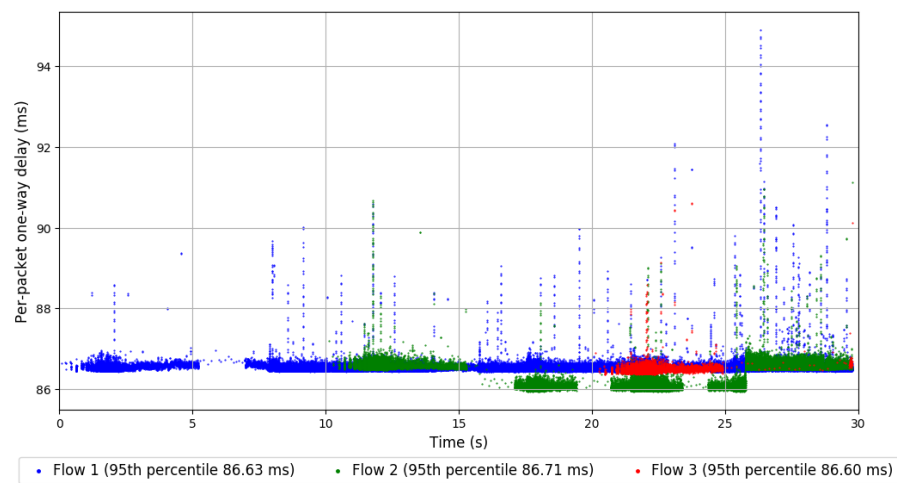
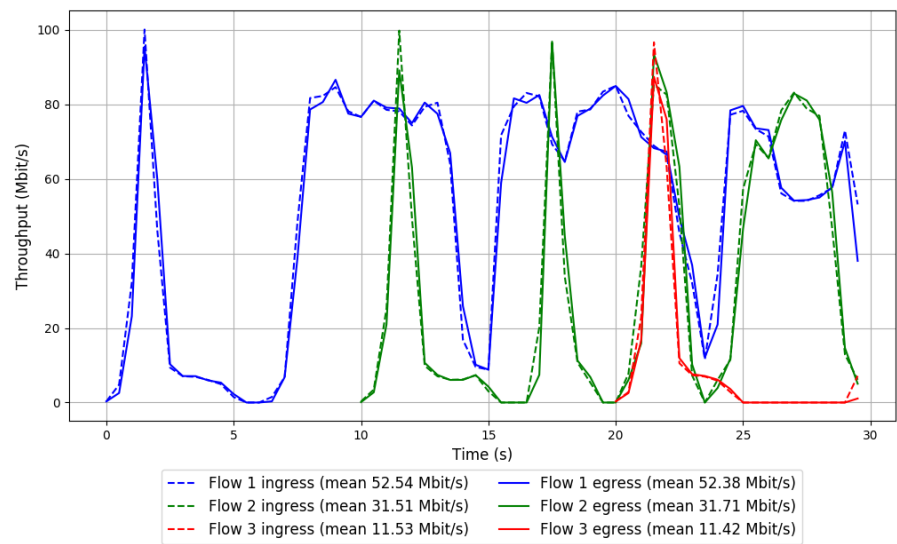
-- Flow 3:

Average throughput: 11.42 Mbit/s

95th percentile per-packet one-way delay: 86.604 ms

Loss rate: 2.67%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-01-02 17:44:38

End at: 2018-01-02 17:45:08

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.21 Mbit/s

95th percentile per-packet one-way delay: 86.710 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 46.37 Mbit/s

95th percentile per-packet one-way delay: 86.732 ms

Loss rate: 1.05%

-- Flow 2:

Average throughput: 33.34 Mbit/s

95th percentile per-packet one-way delay: 86.587 ms

Loss rate: 1.73%

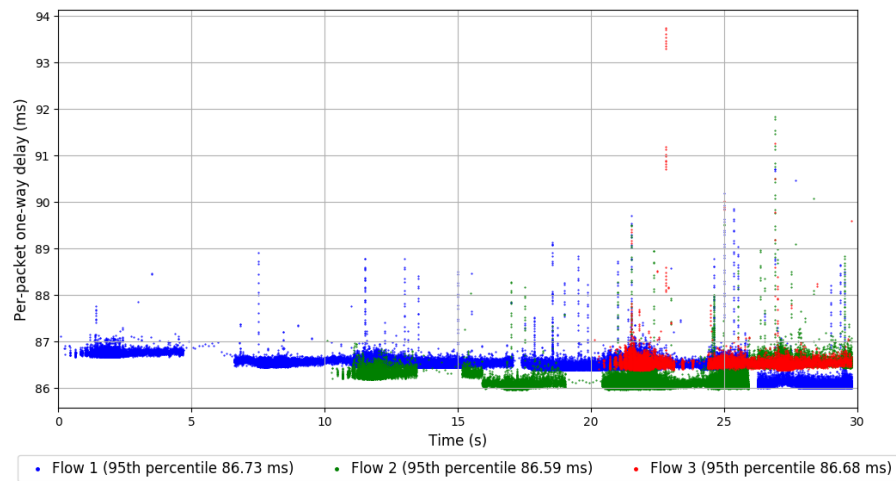
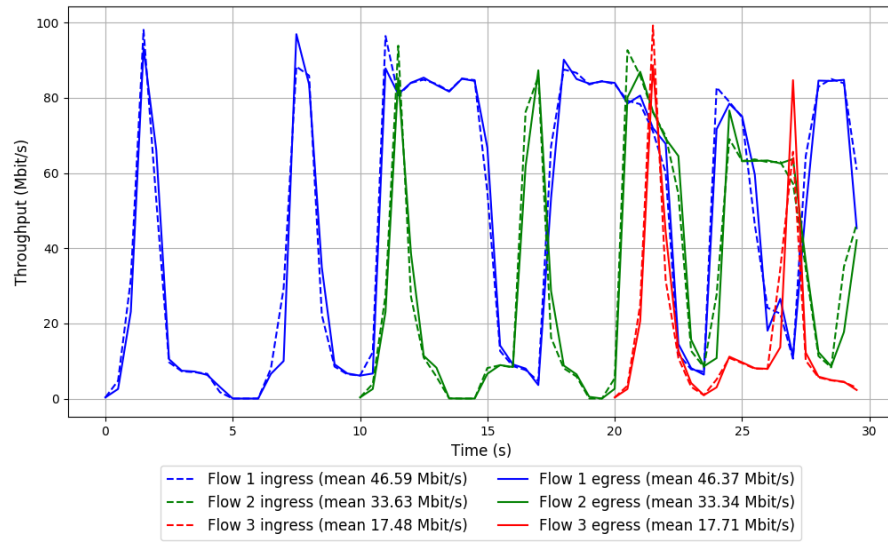
-- Flow 3:

Average throughput: 17.71 Mbit/s

95th percentile per-packet one-way delay: 86.683 ms

Loss rate: 0.39%

Run 10: Report of QUIC Cubic — Data Link

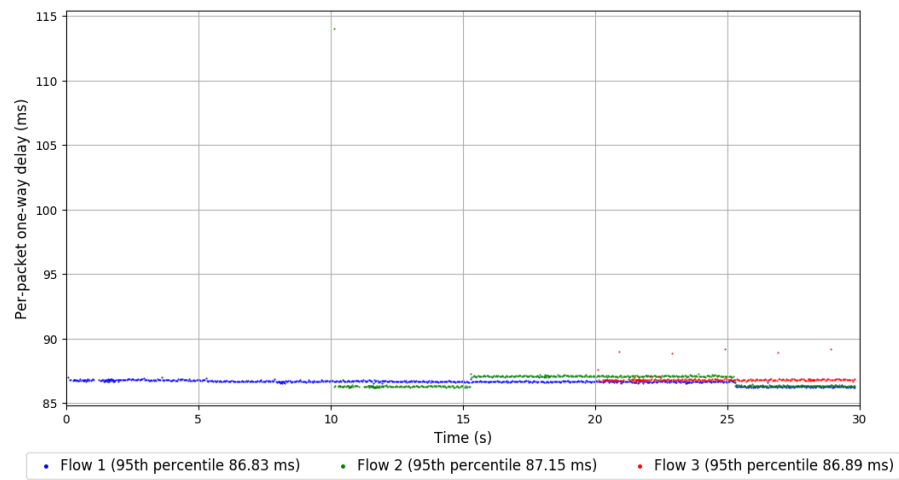
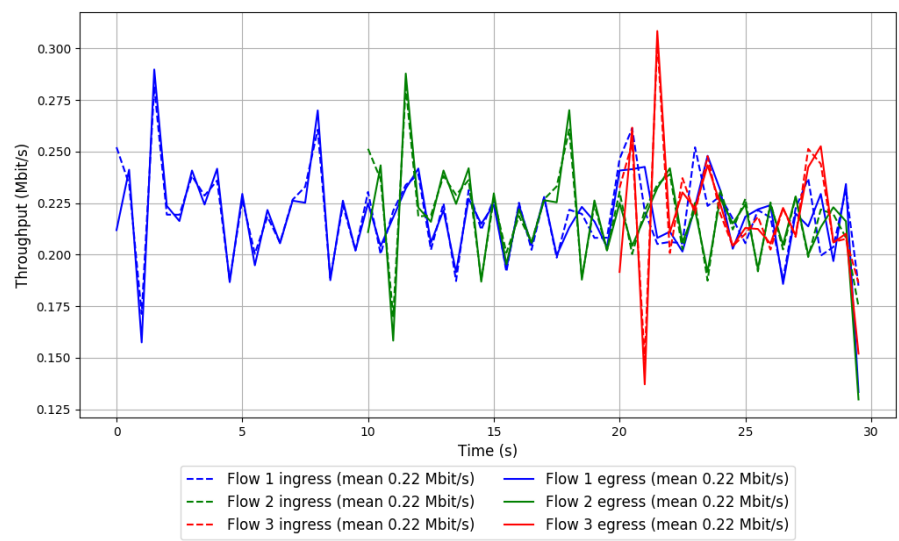


```
Run 1: Statistics of SReAM

Start at: 2018-01-02 15:38:59
End at: 2018-01-02 15:39:29

# Below is generated by plot.py at 2018-01-02 20:57:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 87.114 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.826 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.147 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.888 ms
Loss rate: 1.50%
```

Run 1: Report of SReAM — Data Link

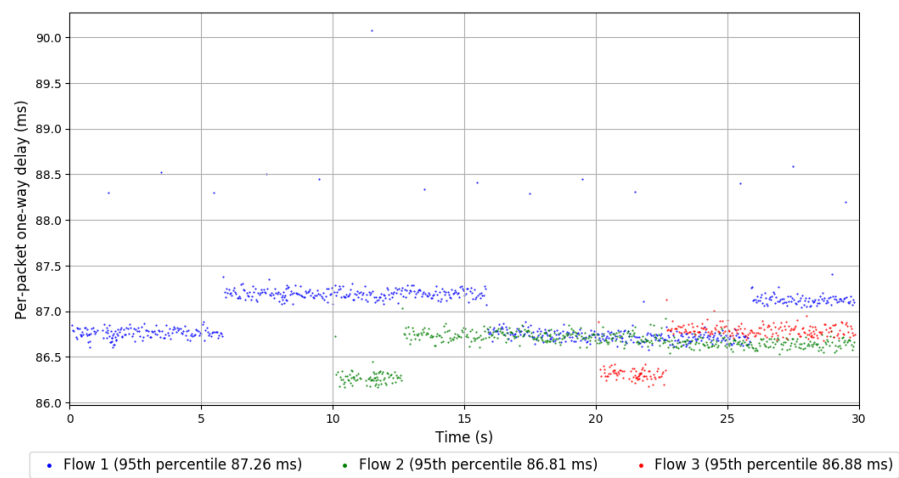
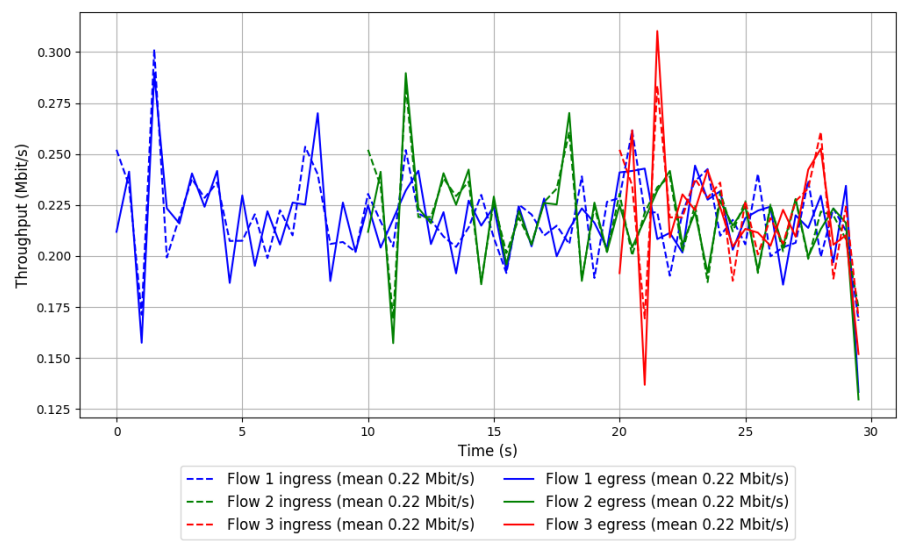


```
Run 2: Statistics of SReAM

Start at: 2018-01-02 15:53:48
End at: 2018-01-02 15:54:19

# Below is generated by plot.py at 2018-01-02 20:57:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 87.228 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.261 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.809 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.878 ms
Loss rate: 1.50%
```

Run 2: Report of SReAM — Data Link

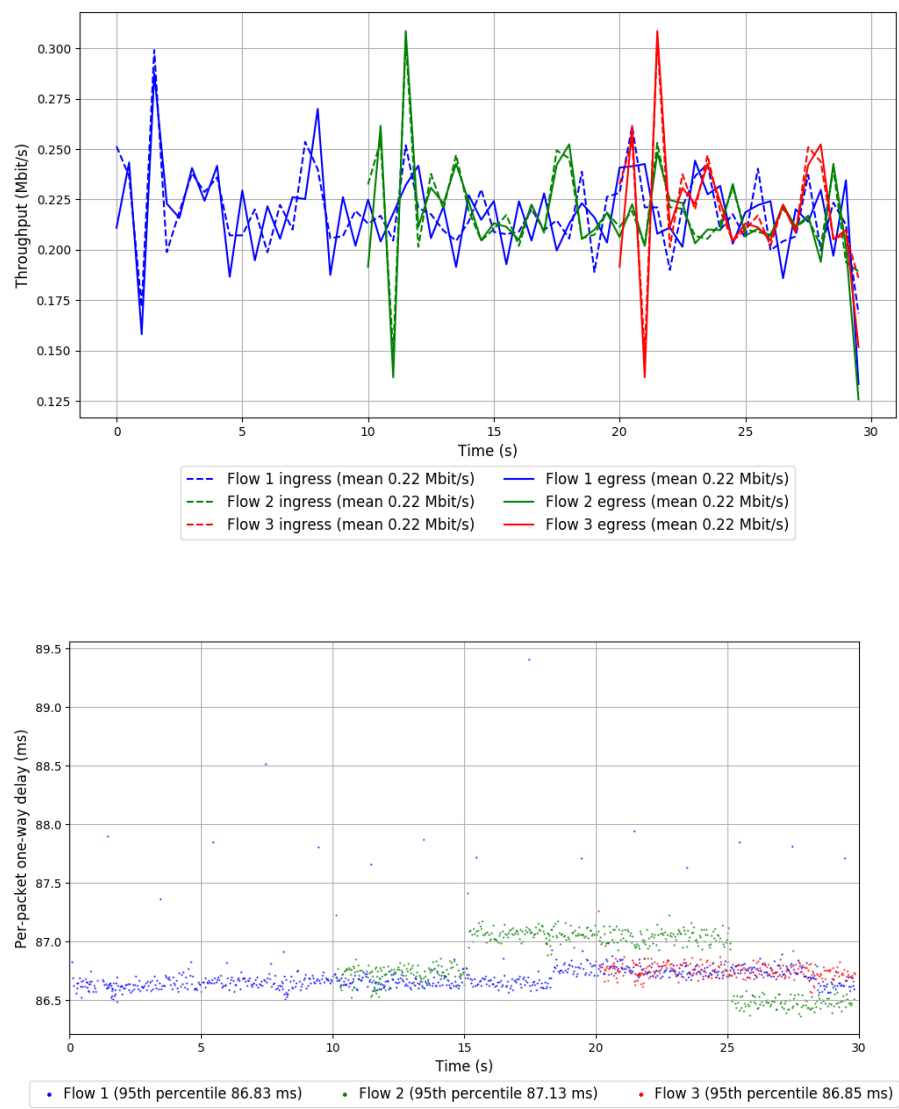


```
Run 3: Statistics of SCReAM

Start at: 2018-01-02 16:08:46
End at: 2018-01-02 16:09:16

# Below is generated by plot.py at 2018-01-02 20:57:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 87.097 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.835 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.126 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.846 ms
Loss rate: 1.50%
```


Run 3: Report of SReAM — Data Link

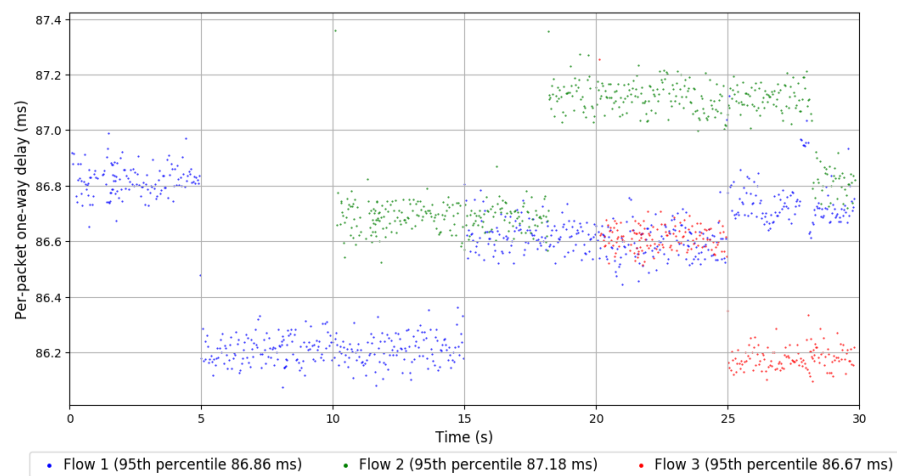
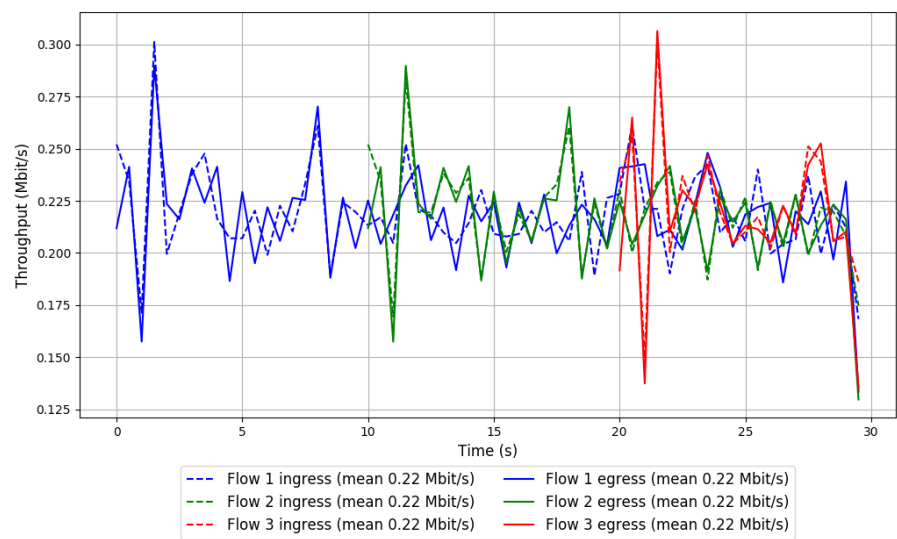


```
Run 4: Statistics of SCReAM

Start at: 2018-01-02 16:23:56
End at: 2018-01-02 16:24:26

# Below is generated by plot.py at 2018-01-02 20:57:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 87.148 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.860 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.183 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.666 ms
Loss rate: 1.88%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2018-01-02 16:39:06

End at: 2018-01-02 16:39:36

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 86.964 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.981 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.812 ms

Loss rate: 0.85%

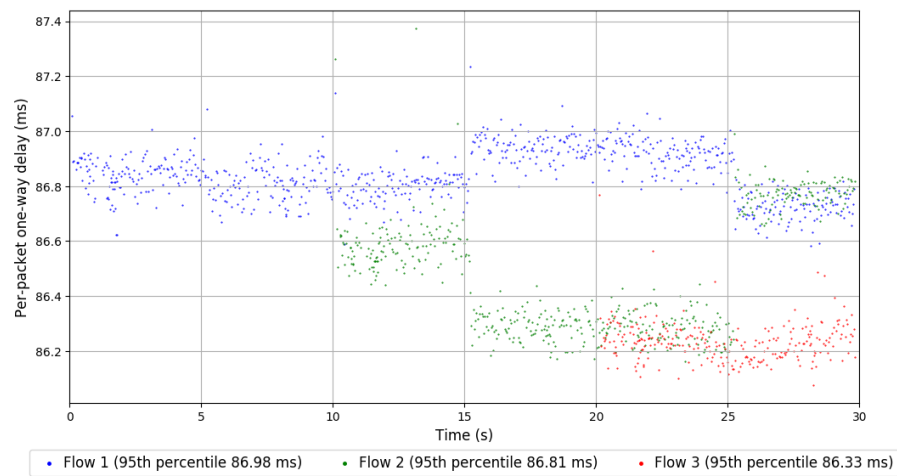
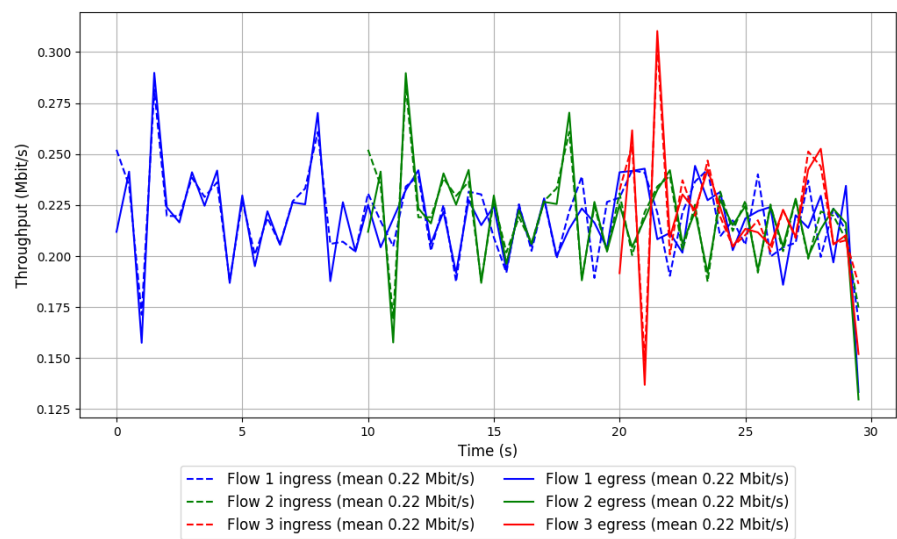
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.325 ms

Loss rate: 1.50%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-01-02 16:54:15

End at: 2018-01-02 16:54:45

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 87.036 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.919 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.075 ms

Loss rate: 0.85%

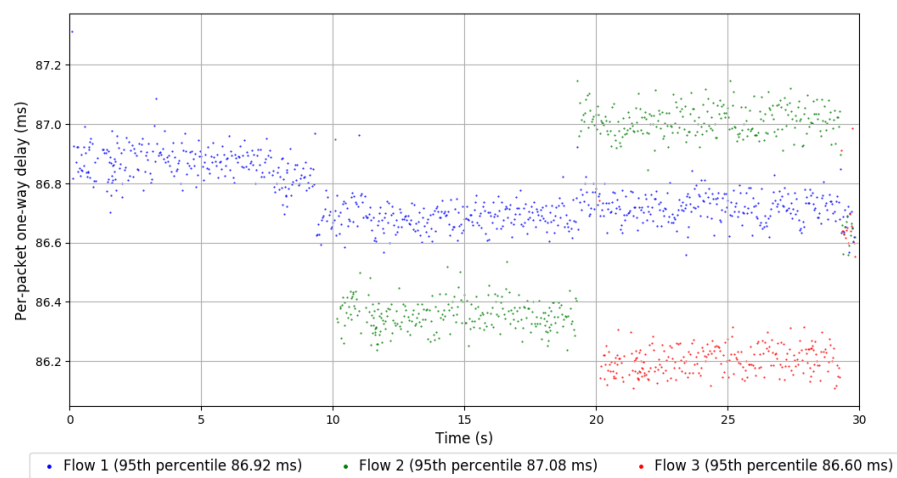
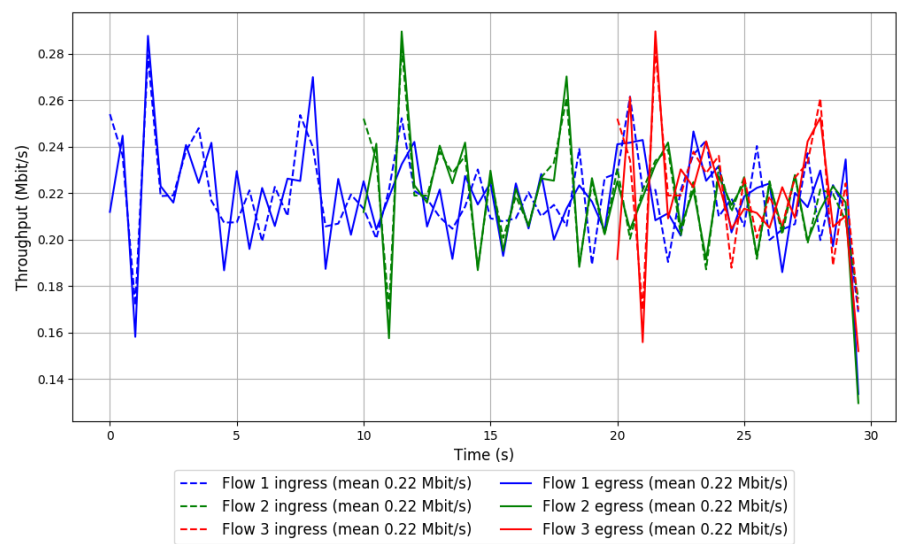
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.599 ms

Loss rate: 1.50%

Run 6: Report of SReAM — Data Link

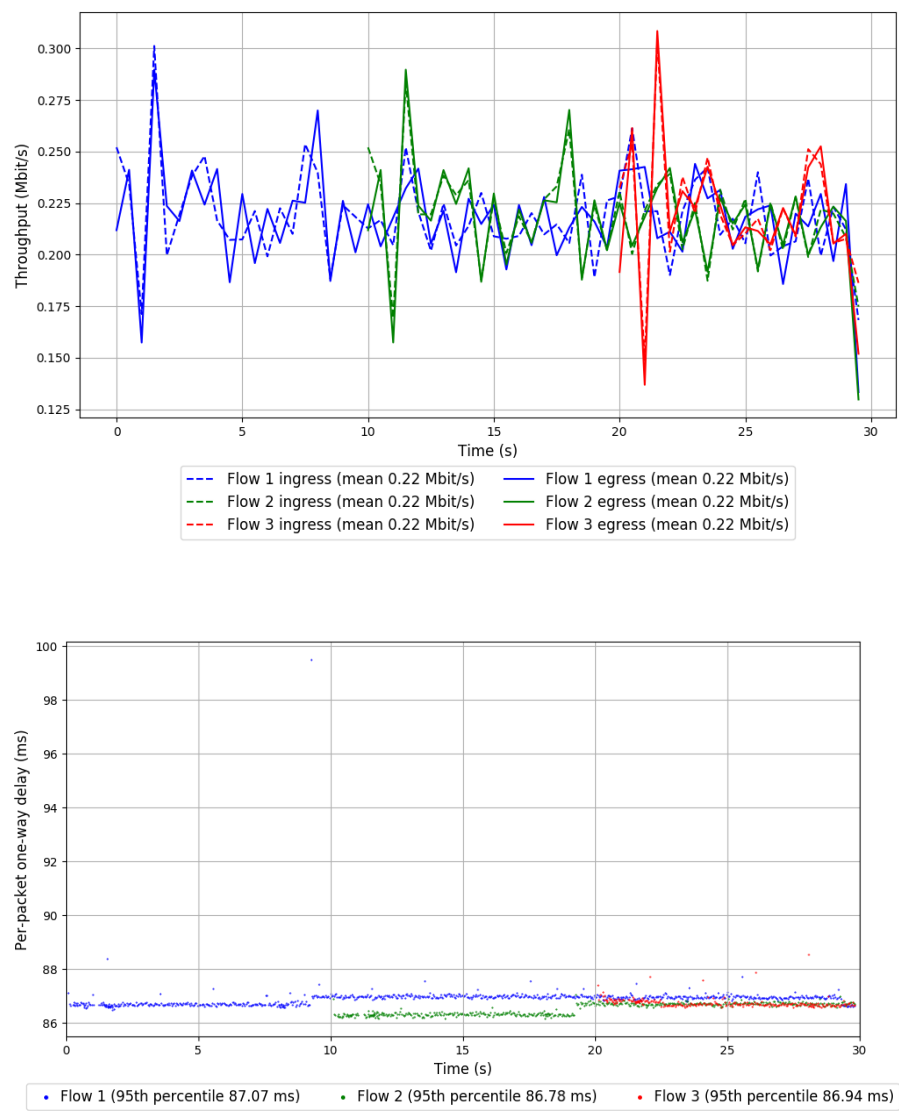


```
Run 7: Statistics of SReAM

Start at: 2018-01-02 17:08:02
End at: 2018-01-02 17:08:32

# Below is generated by plot.py at 2018-01-02 20:57:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 87.046 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.072 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.785 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.944 ms
Loss rate: 1.50%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2018-01-02 17:23:05

End at: 2018-01-02 17:23:35

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 86.795 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.808 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.764 ms

Loss rate: 0.85%

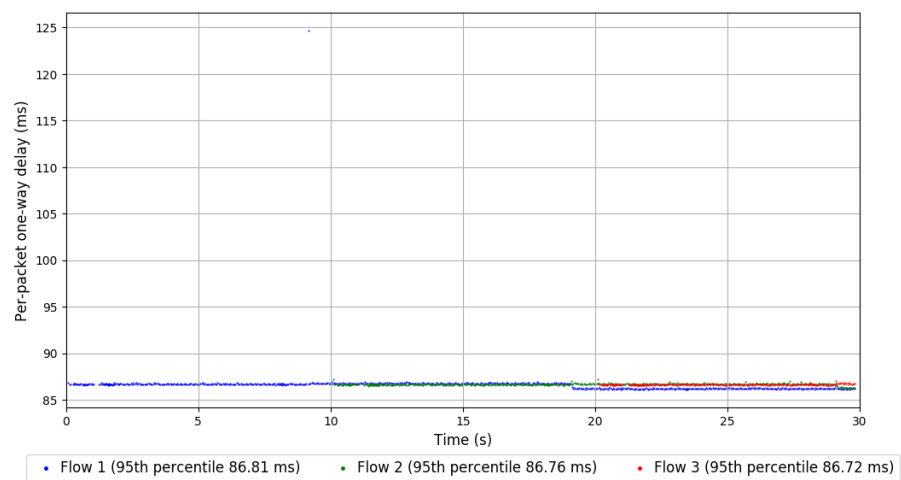
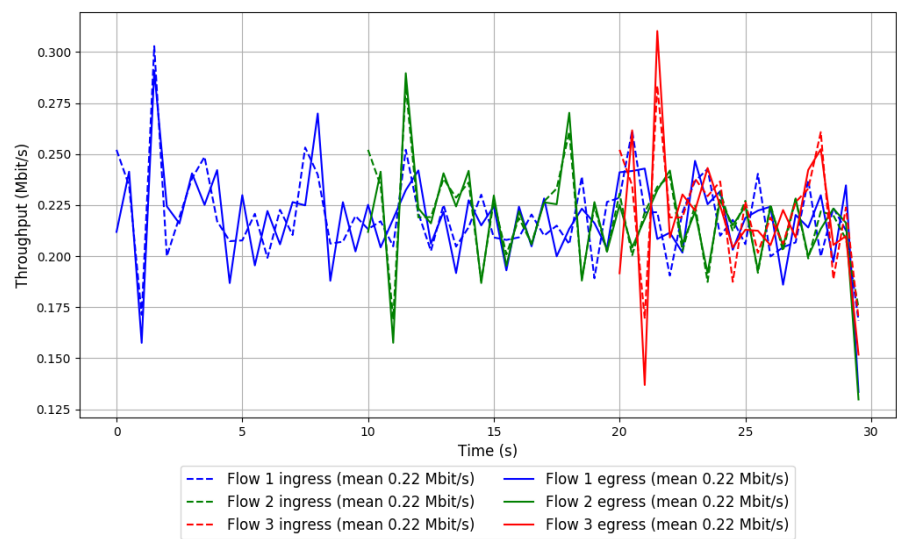
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.725 ms

Loss rate: 1.50%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-01-02 17:38:20

End at: 2018-01-02 17:38:50

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 87.061 ms

Loss rate: 0.86%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.031 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.091 ms

Loss rate: 0.86%

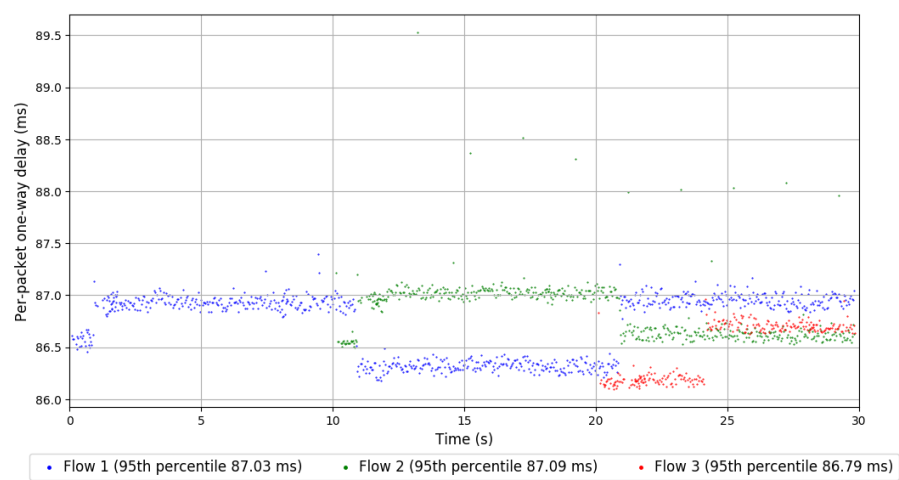
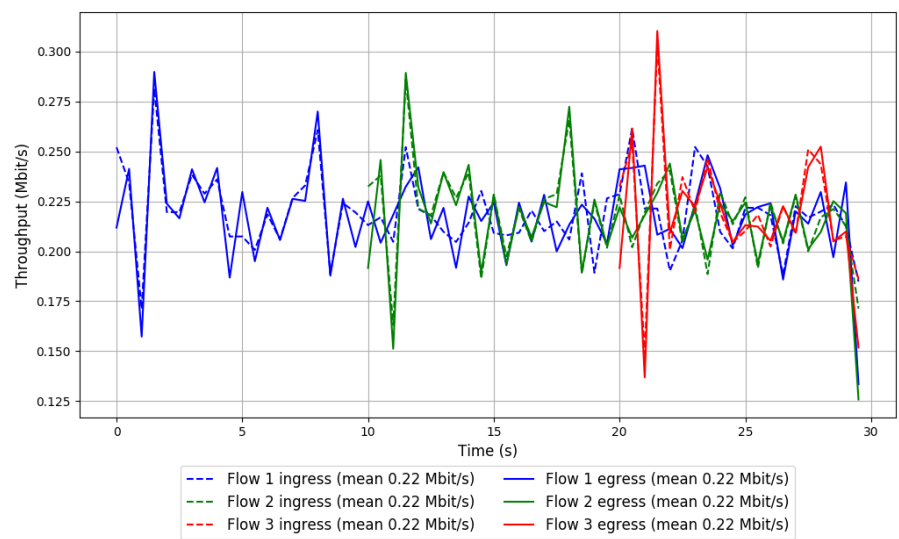
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.787 ms

Loss rate: 1.50%

Run 9: Report of SReAM — Data Link

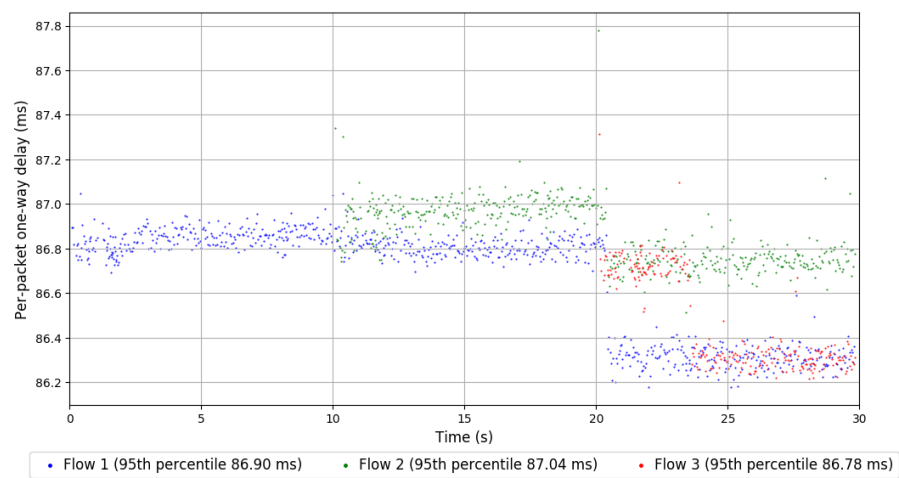
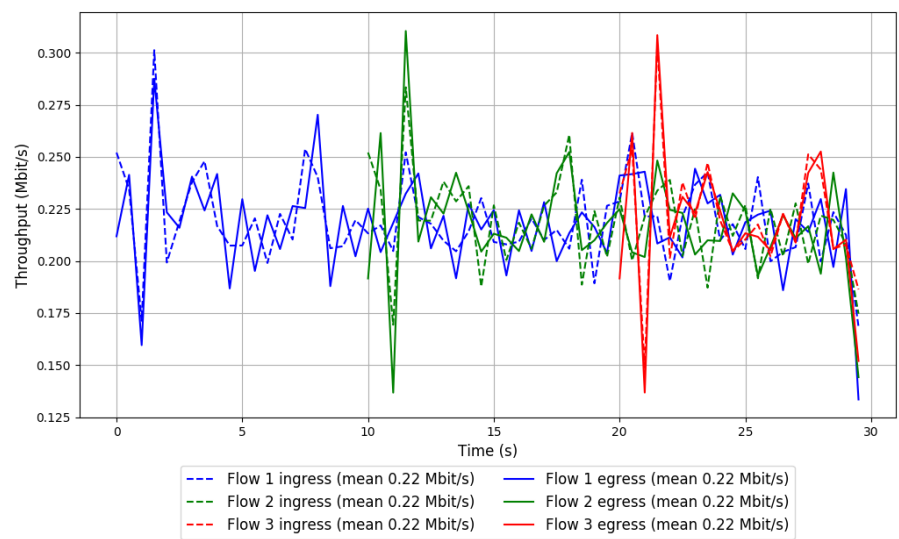


```
Run 10: Statistics of SReAM

Start at: 2018-01-02 17:53:11
End at: 2018-01-02 17:53:41

# Below is generated by plot.py at 2018-01-02 20:57:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 87.010 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.903 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.043 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.779 ms
Loss rate: 1.50%
```

Run 10: Report of SReAM — Data Link

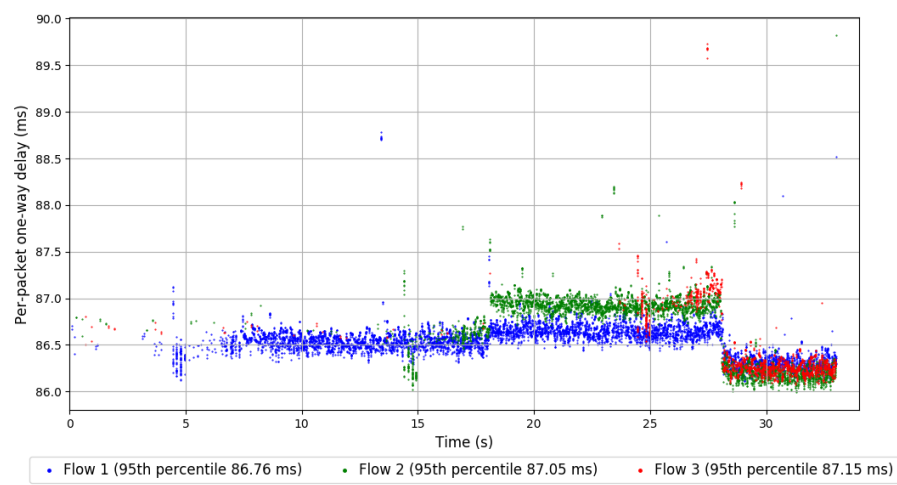
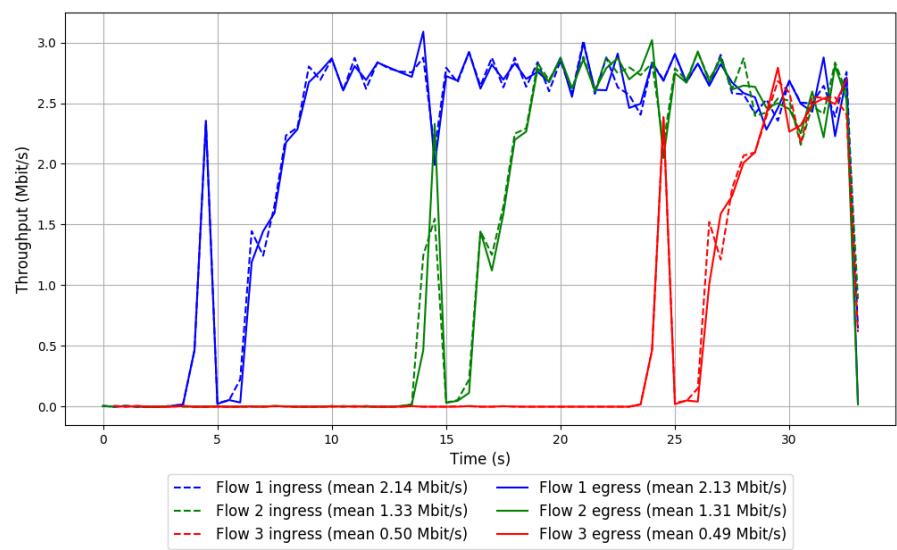


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-02 15:24:36
End at: 2018-01-02 15:25:06

# Below is generated by plot.py at 2018-01-02 20:57:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.92 Mbit/s
95th percentile per-packet one-way delay: 87.018 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 2.13 Mbit/s
95th percentile per-packet one-way delay: 86.756 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 87.048 ms
Loss rate: 1.64%
-- Flow 3:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 87.148 ms
Loss rate: 2.67%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-01-02 15:39:43

End at: 2018-01-02 15:40:13

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.95 Mbit/s

95th percentile per-packet one-way delay: 87.239 ms

Loss rate: 1.25%

-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 87.266 ms

Loss rate: 0.94%

-- Flow 2:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 86.850 ms

Loss rate: 1.37%

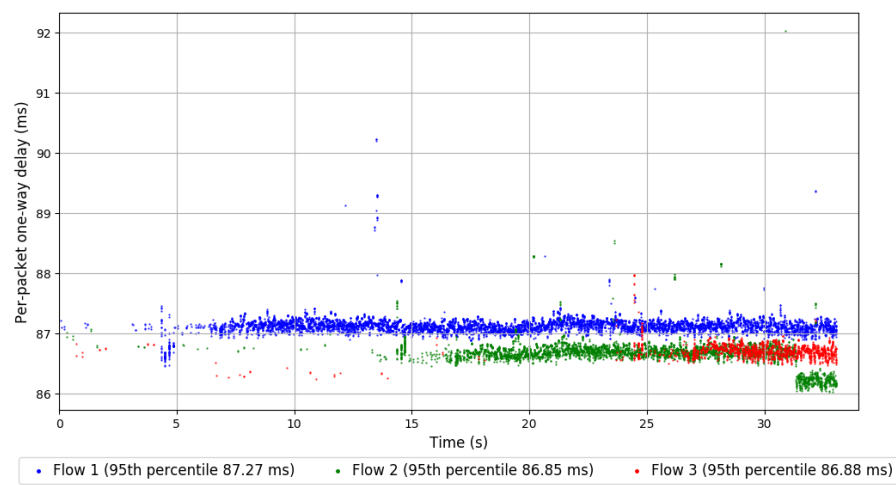
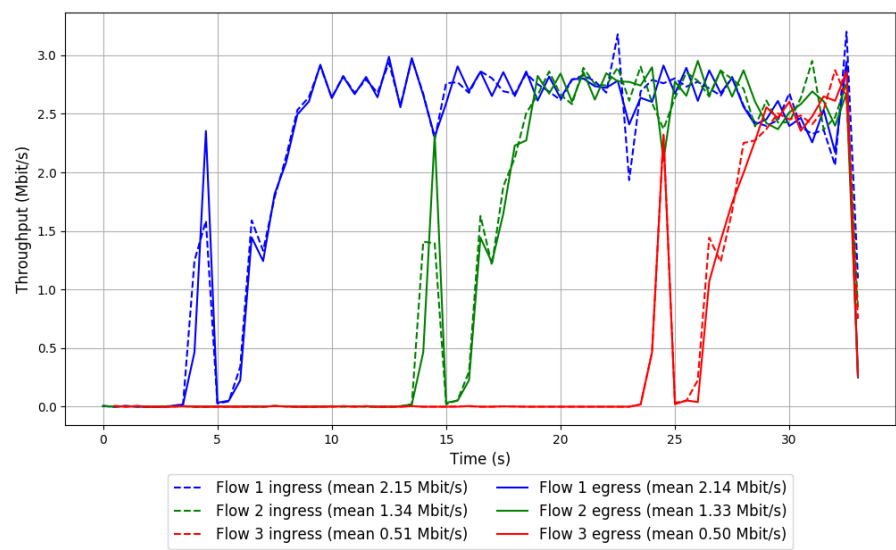
-- Flow 3:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 86.882 ms

Loss rate: 2.27%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-02 15:54:32

End at: 2018-01-02 15:55:02

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.95 Mbit/s

95th percentile per-packet one-way delay: 87.144 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 87.164 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 87.001 ms

Loss rate: 1.27%

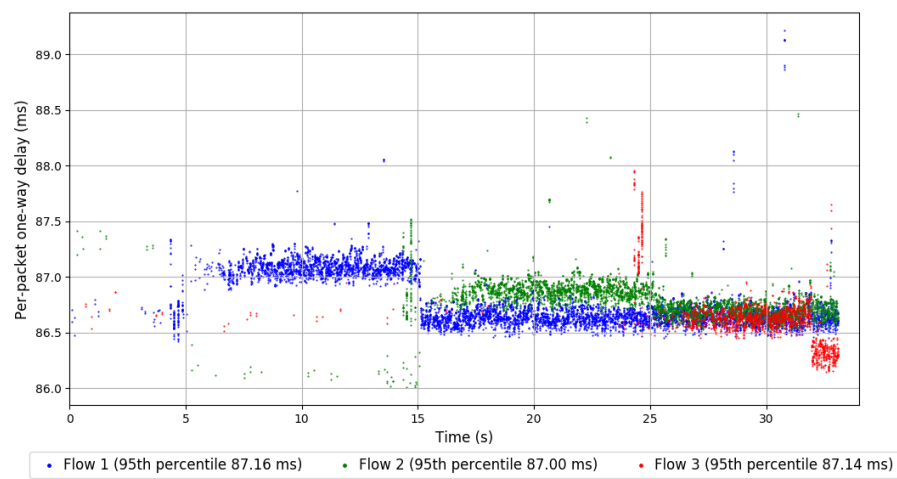
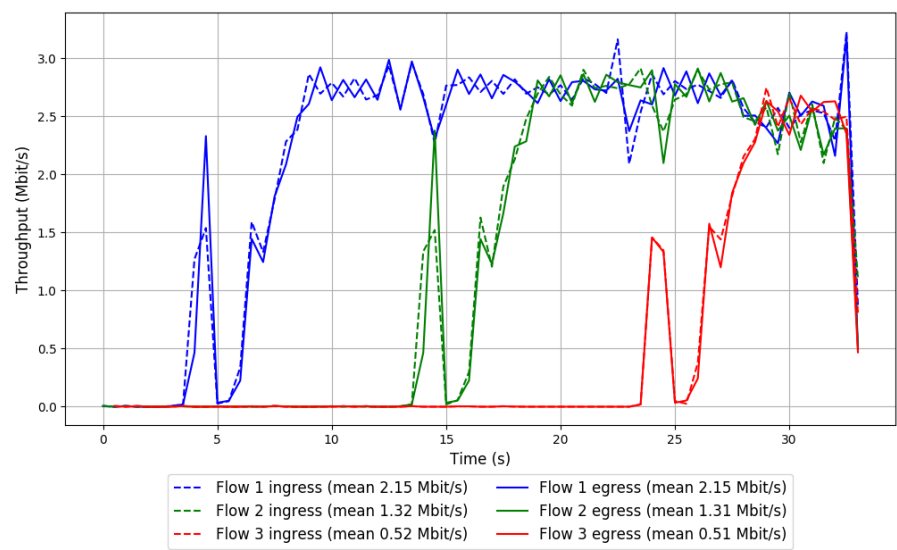
-- Flow 3:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 87.140 ms

Loss rate: 2.16%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-02 16:09:30

End at: 2018-01-02 16:10:00

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.96 Mbit/s

95th percentile per-packet one-way delay: 87.054 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 86.451 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 87.136 ms

Loss rate: 1.02%

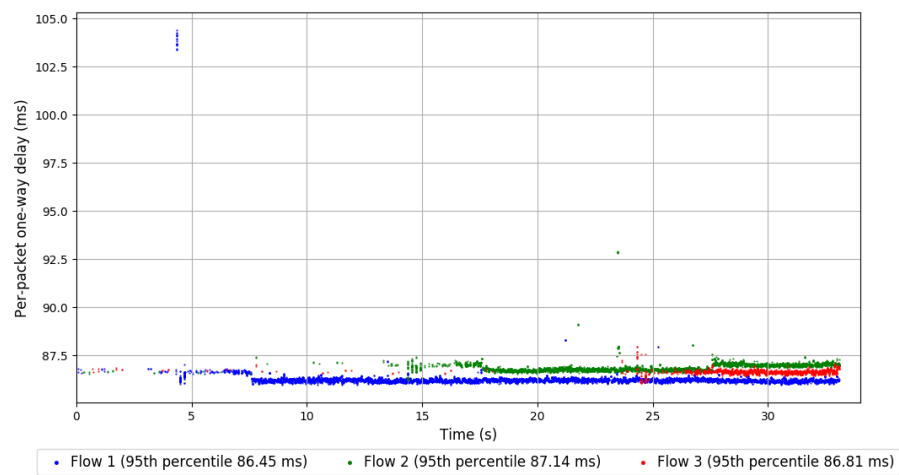
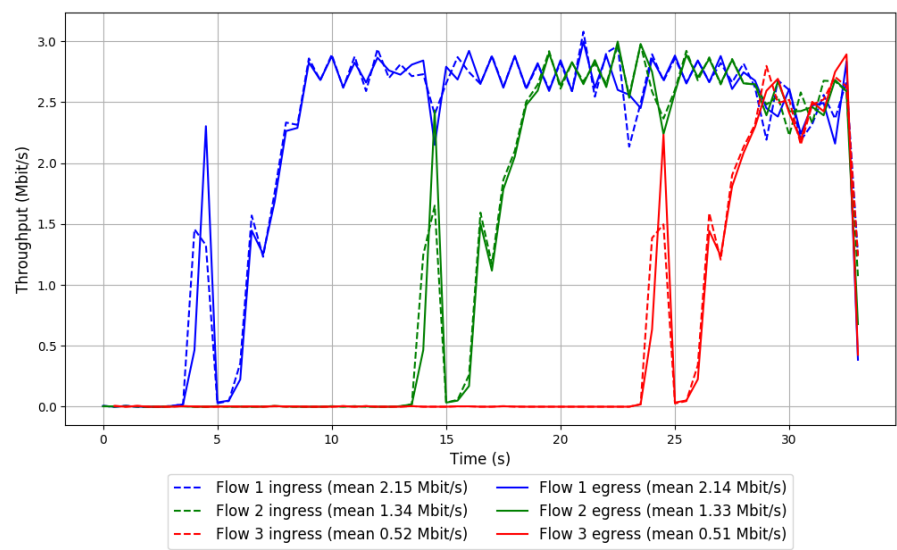
-- Flow 3:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 86.805 ms

Loss rate: 3.09%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-02 16:24:40

End at: 2018-01-02 16:25:10

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 86.871 ms

Loss rate: 1.26%

-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 86.796 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 86.915 ms

Loss rate: 1.48%

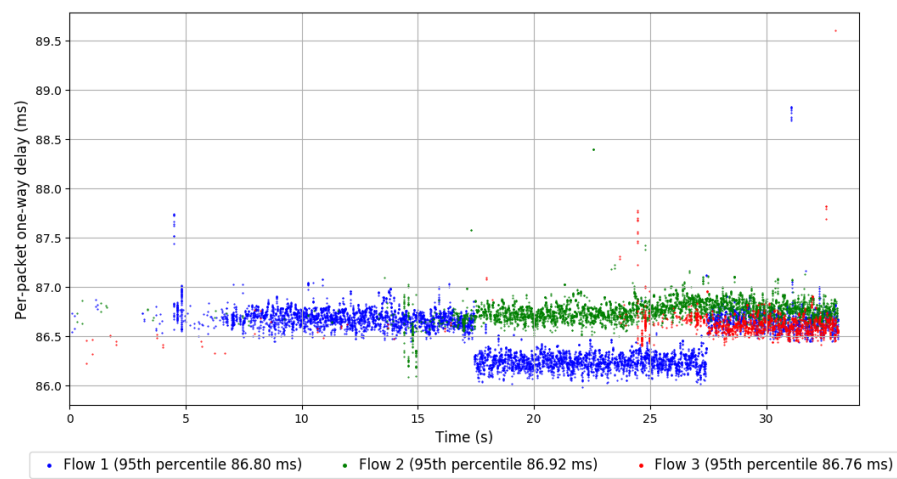
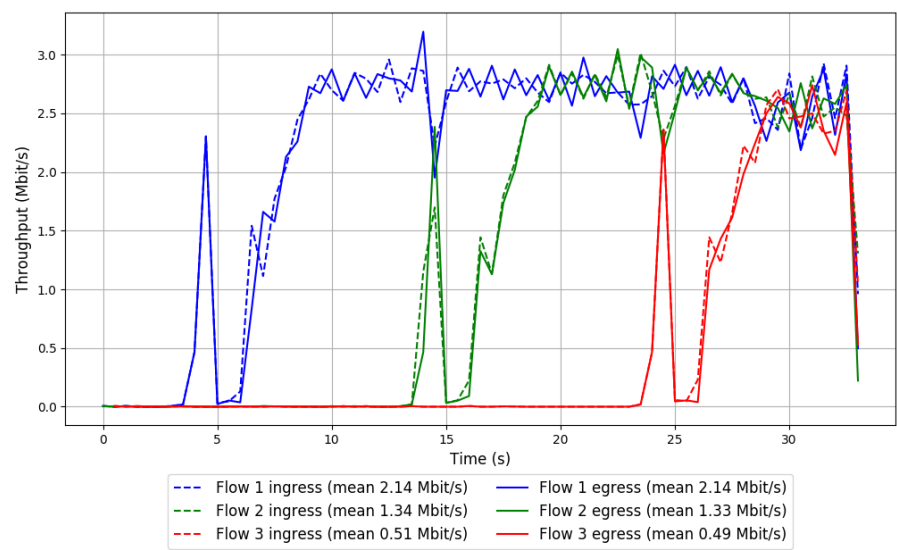
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 86.760 ms

Loss rate: 3.17%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-02 16:39:50

End at: 2018-01-02 16:40:20

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 87.174 ms

Loss rate: 1.22%

-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 87.201 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 86.897 ms

Loss rate: 1.33%

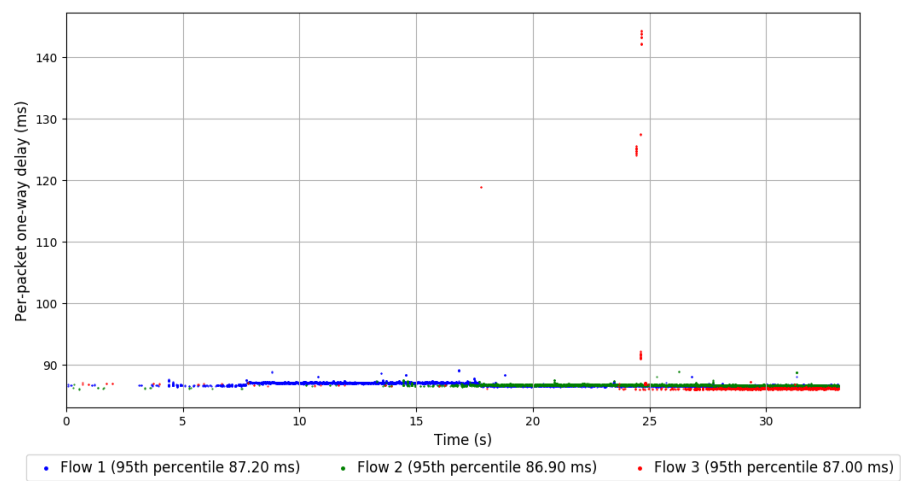
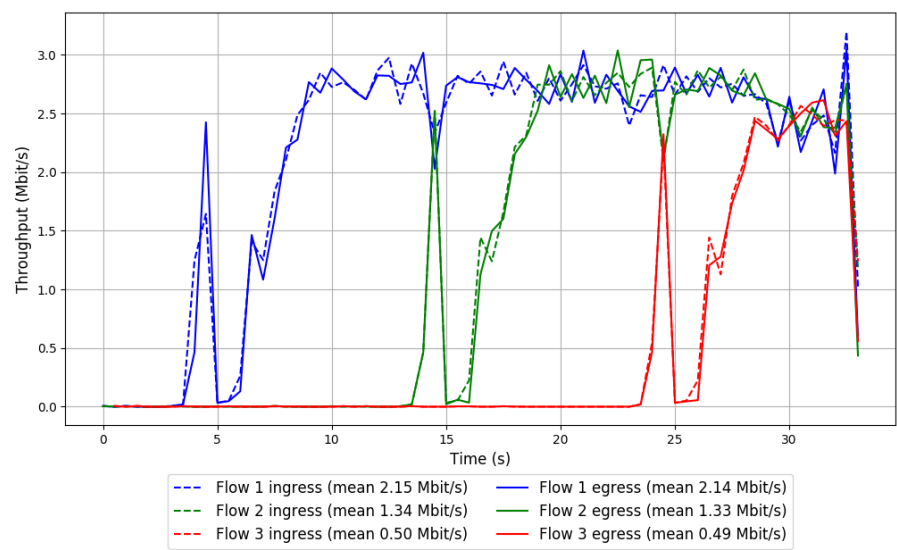
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 87.001 ms

Loss rate: 3.09%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-02 16:54:59

End at: 2018-01-02 16:55:29

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.91 Mbit/s

95th percentile per-packet one-way delay: 86.861 ms

Loss rate: 1.03%

-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 86.833 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 86.845 ms

Loss rate: 1.12%

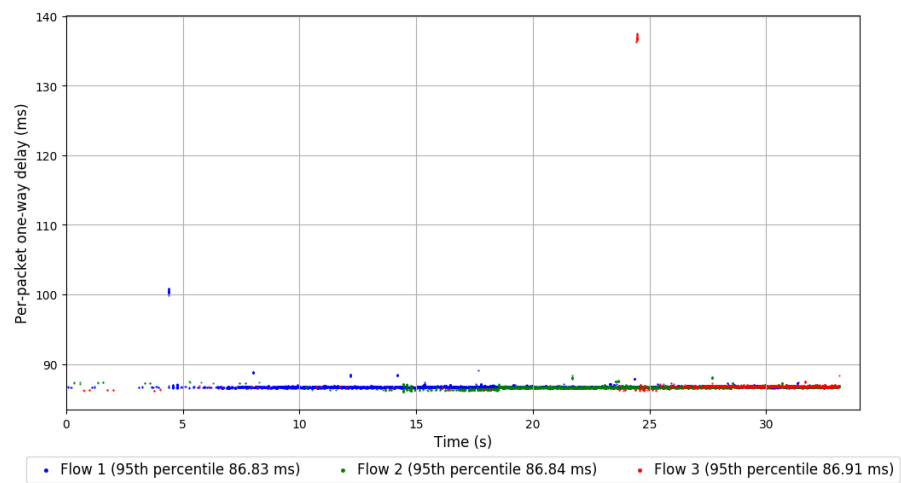
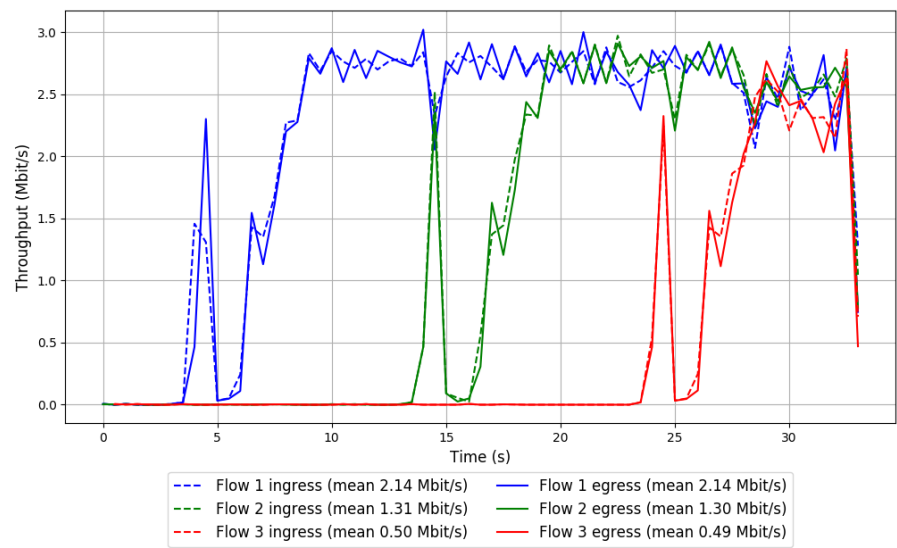
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 86.914 ms

Loss rate: 2.13%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-02 17:08:46

End at: 2018-01-02 17:09:16

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 87.234 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 87.255 ms

Loss rate: 0.82%

-- Flow 2:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 87.100 ms

Loss rate: 1.50%

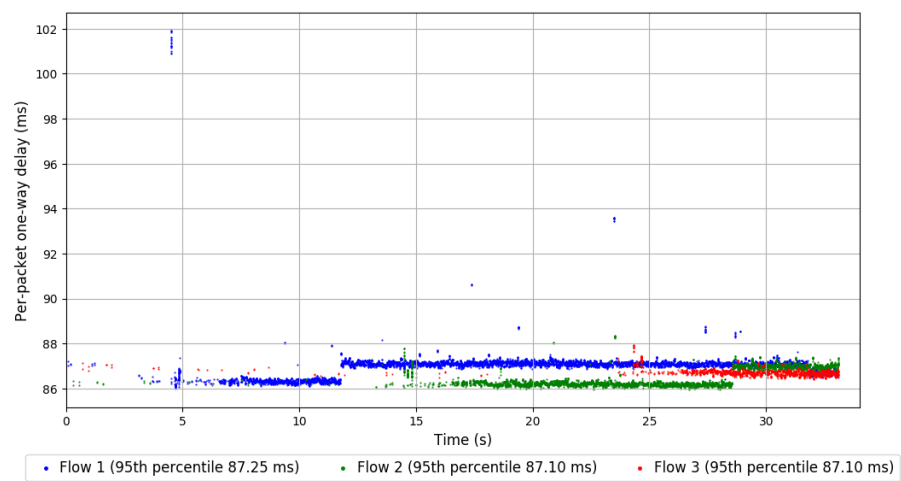
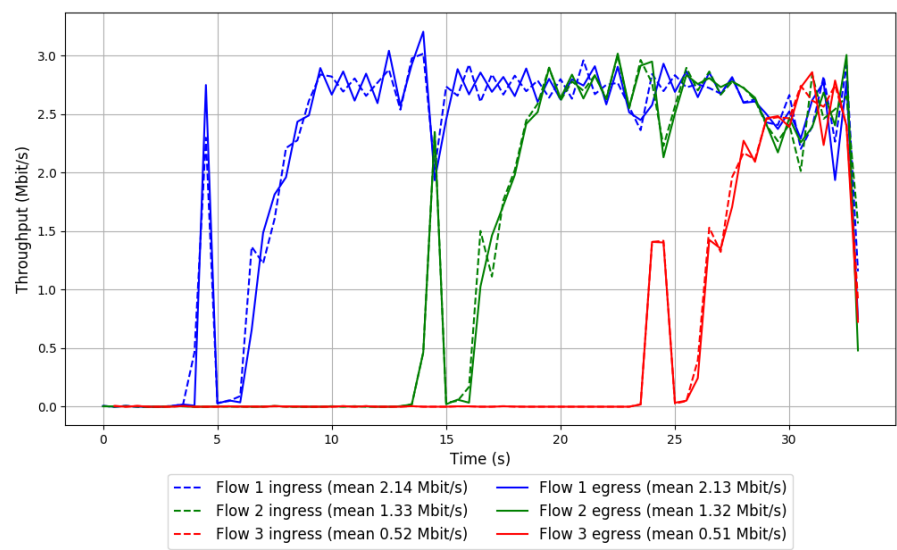
-- Flow 3:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 87.096 ms

Loss rate: 2.11%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-02 17:23:49

End at: 2018-01-02 17:24:19

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.95 Mbit/s

95th percentile per-packet one-way delay: 87.089 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 87.102 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 87.076 ms

Loss rate: 1.51%

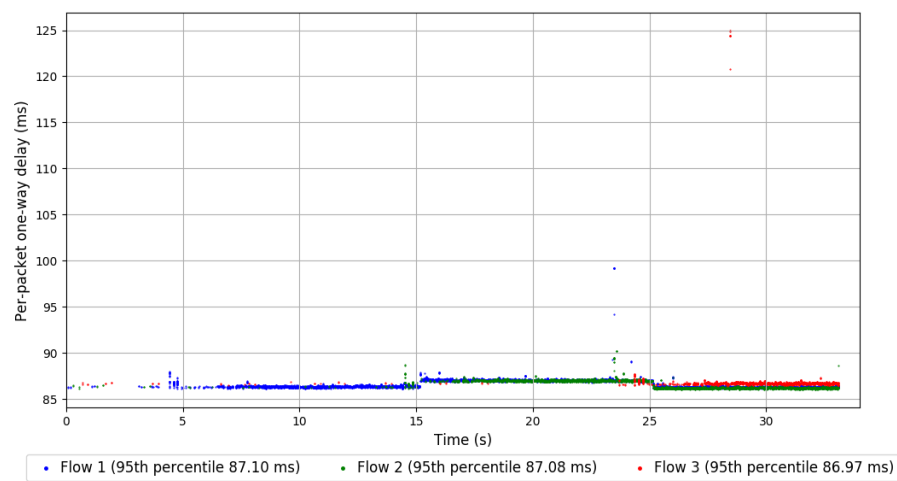
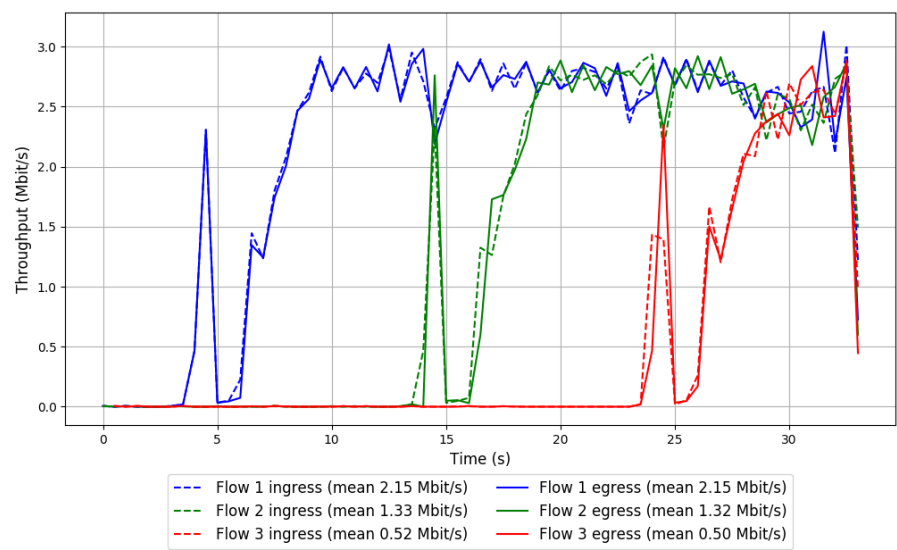
-- Flow 3:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 86.972 ms

Loss rate: 2.91%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-02 17:39:04

End at: 2018-01-02 17:39:34

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 87.315 ms

Loss rate: 1.10%

-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 87.088 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 86.547 ms

Loss rate: 1.36%

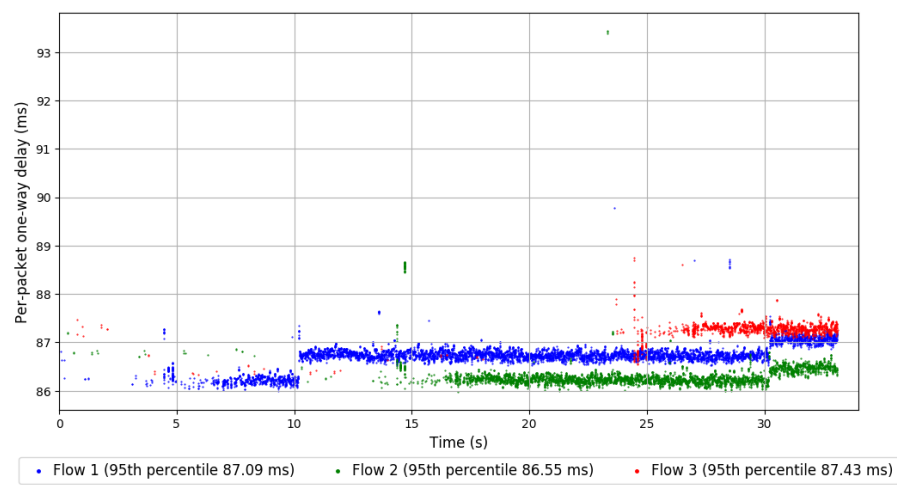
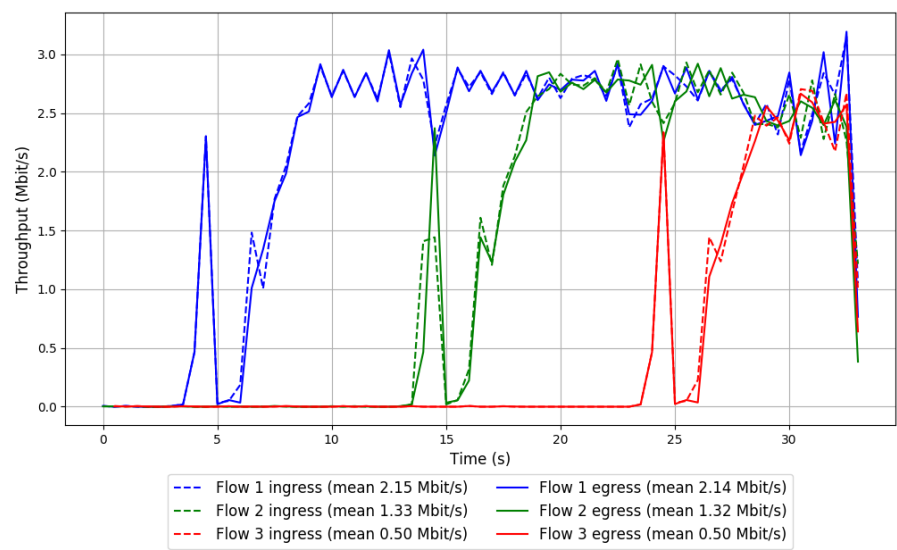
-- Flow 3:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 87.427 ms

Loss rate: 2.34%

Run 10: Report of WebRTC media — Data Link

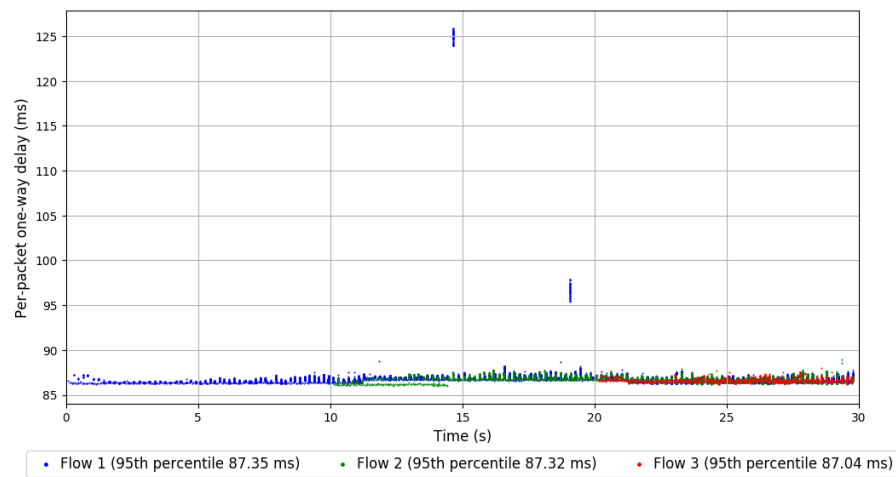
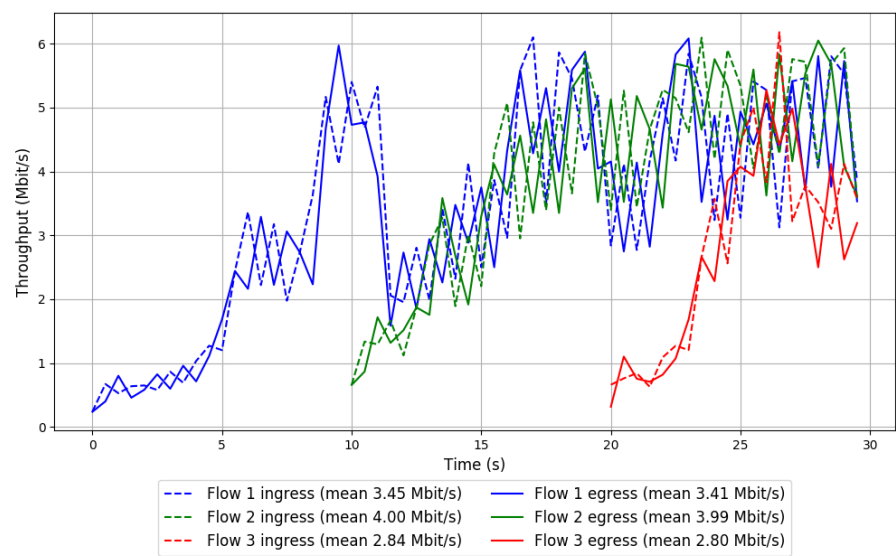


```
Run 1: Statistics of Sprout

Start at: 2018-01-02 15:27:30
End at: 2018-01-02 15:28:00

# Below is generated by plot.py at 2018-01-02 20:57:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.96 Mbit/s
95th percentile per-packet one-way delay: 87.307 ms
Loss rate: 1.80%
-- Flow 1:
Average throughput: 3.41 Mbit/s
95th percentile per-packet one-way delay: 87.350 ms
Loss rate: 1.89%
-- Flow 2:
Average throughput: 3.99 Mbit/s
95th percentile per-packet one-way delay: 87.317 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 2.80 Mbit/s
95th percentile per-packet one-way delay: 87.042 ms
Loss rate: 3.36%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-02 15:42:36

End at: 2018-01-02 15:43:06

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.47 Mbit/s

95th percentile per-packet one-way delay: 87.612 ms

Loss rate: 2.35%

-- Flow 1:

Average throughput: 3.25 Mbit/s

95th percentile per-packet one-way delay: 87.557 ms

Loss rate: 2.26%

-- Flow 2:

Average throughput: 3.14 Mbit/s

95th percentile per-packet one-way delay: 87.619 ms

Loss rate: 2.89%

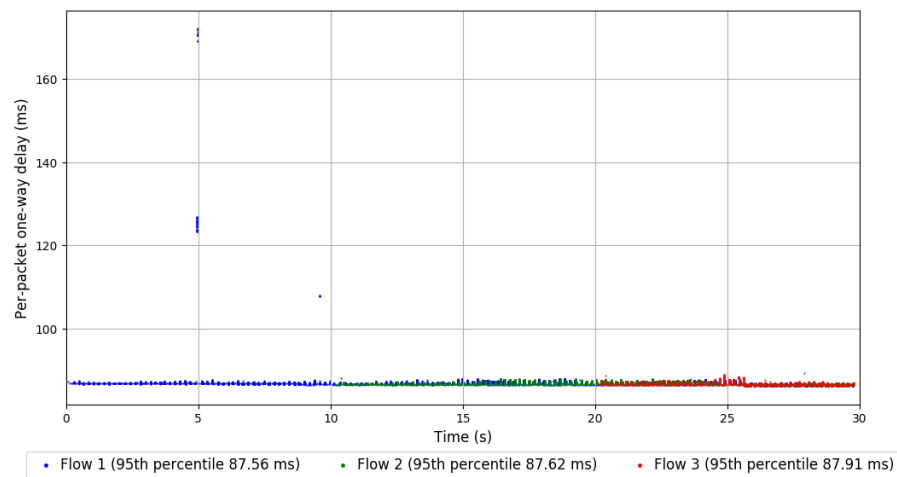
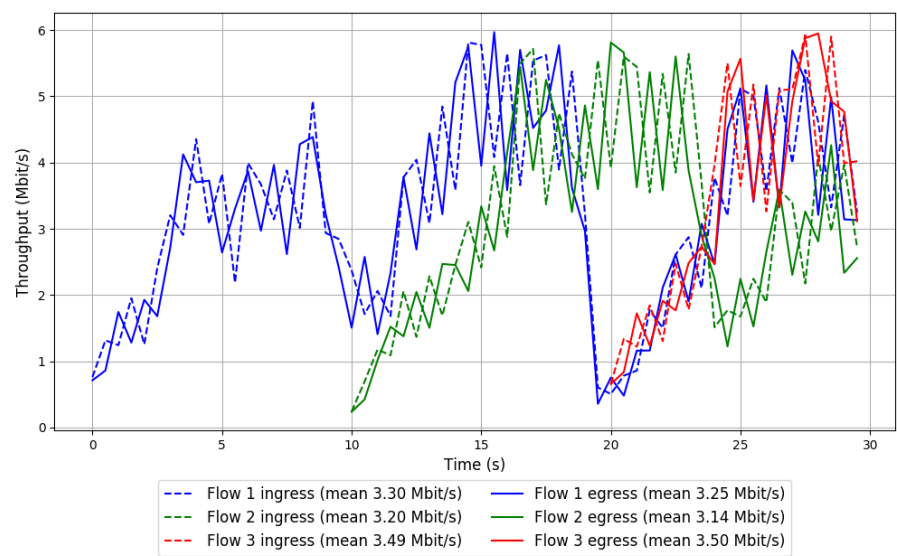
-- Flow 3:

Average throughput: 3.50 Mbit/s

95th percentile per-packet one-way delay: 87.911 ms

Loss rate: 1.60%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-02 15:57:26

End at: 2018-01-02 15:57:56

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.20 Mbit/s

95th percentile per-packet one-way delay: 87.089 ms

Loss rate: 2.26%

-- Flow 1:

Average throughput: 2.54 Mbit/s

95th percentile per-packet one-way delay: 87.127 ms

Loss rate: 2.65%

-- Flow 2:

Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 87.085 ms

Loss rate: 1.43%

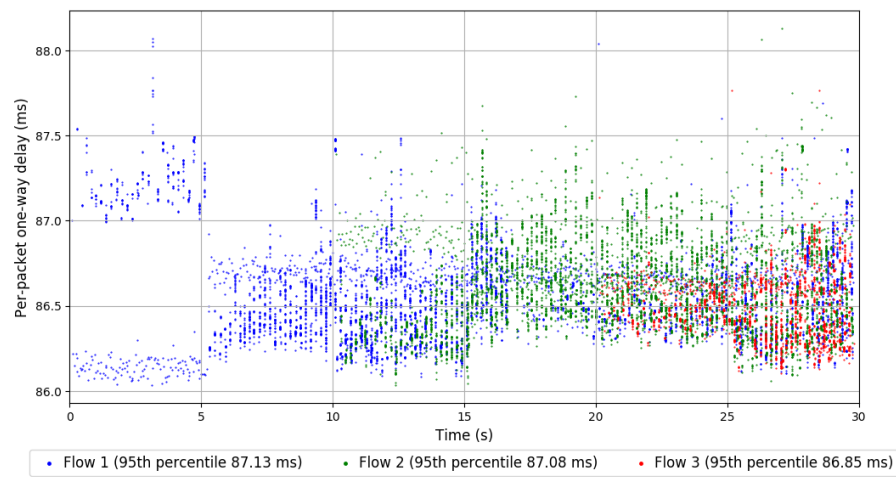
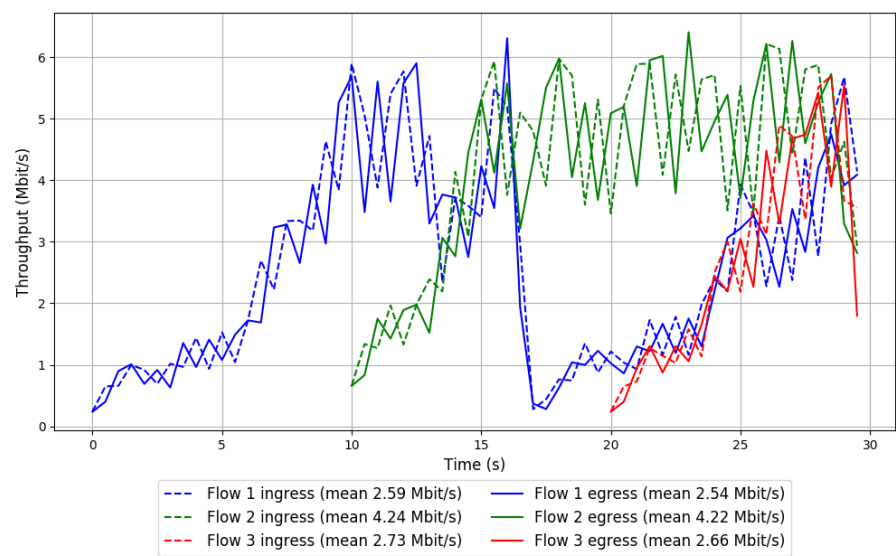
-- Flow 3:

Average throughput: 2.66 Mbit/s

95th percentile per-packet one-way delay: 86.847 ms

Loss rate: 3.78%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-02 16:12:23

End at: 2018-01-02 16:12:53

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.68 Mbit/s

95th percentile per-packet one-way delay: 87.288 ms

Loss rate: 1.36%

-- Flow 1:

Average throughput: 4.32 Mbit/s

95th percentile per-packet one-way delay: 87.266 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 3.39 Mbit/s

95th percentile per-packet one-way delay: 87.204 ms

Loss rate: 2.59%

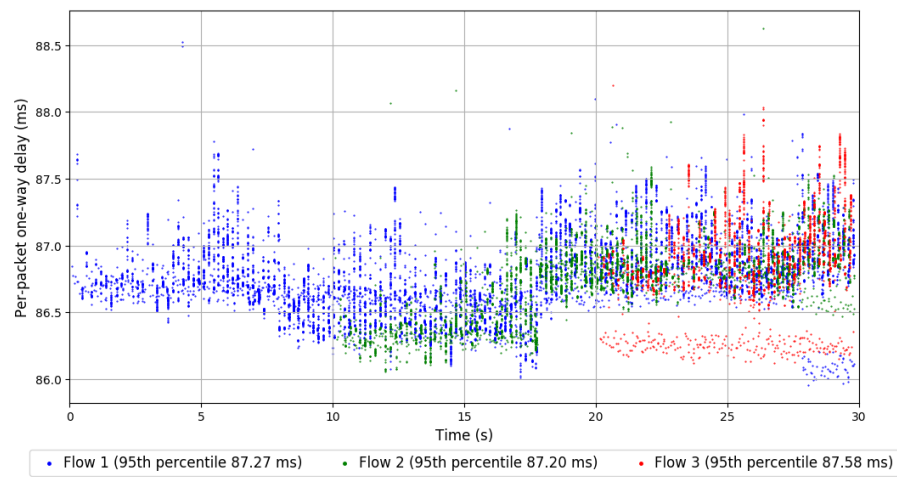
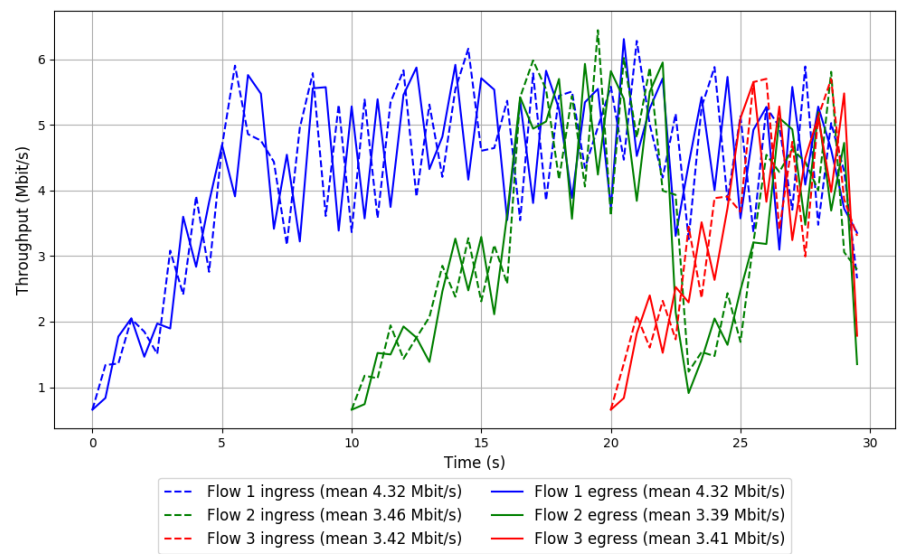
-- Flow 3:

Average throughput: 3.41 Mbit/s

95th percentile per-packet one-way delay: 87.576 ms

Loss rate: 2.42%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-01-02 16:27:34

End at: 2018-01-02 16:28:04

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.88 Mbit/s

95th percentile per-packet one-way delay: 87.704 ms

Loss rate: 1.53%

-- Flow 1:

Average throughput: 3.13 Mbit/s

95th percentile per-packet one-way delay: 87.645 ms

Loss rate: 2.09%

-- Flow 2:

Average throughput: 4.27 Mbit/s

95th percentile per-packet one-way delay: 87.746 ms

Loss rate: 0.22%

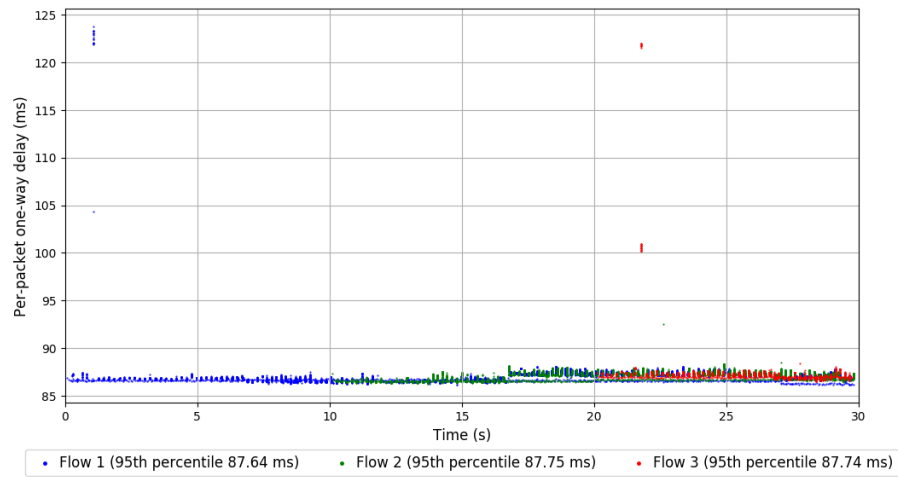
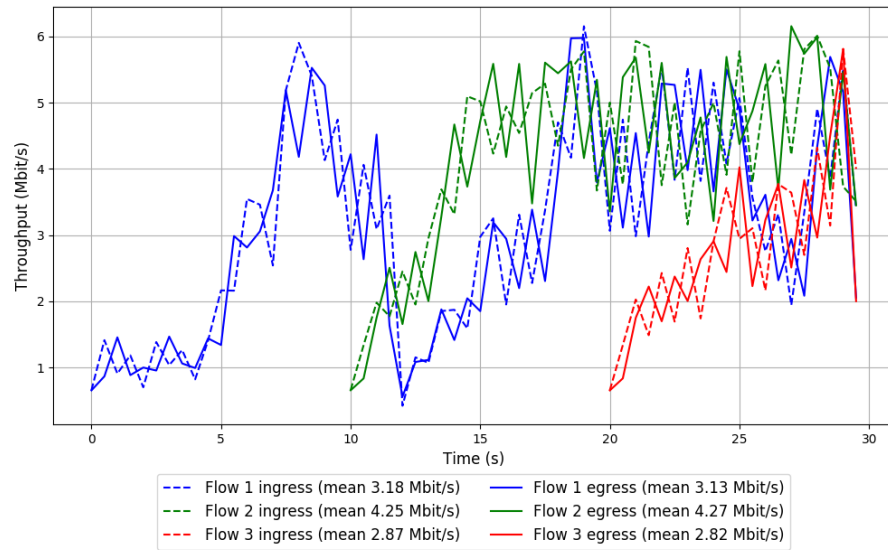
-- Flow 3:

Average throughput: 2.82 Mbit/s

95th percentile per-packet one-way delay: 87.744 ms

Loss rate: 3.55%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-02 16:42:44

End at: 2018-01-02 16:43:14

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.97 Mbit/s

95th percentile per-packet one-way delay: 87.412 ms

Loss rate: 1.07%

-- Flow 1:

Average throughput: 4.11 Mbit/s

95th percentile per-packet one-way delay: 87.345 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 4.25 Mbit/s

95th percentile per-packet one-way delay: 87.434 ms

Loss rate: 0.97%

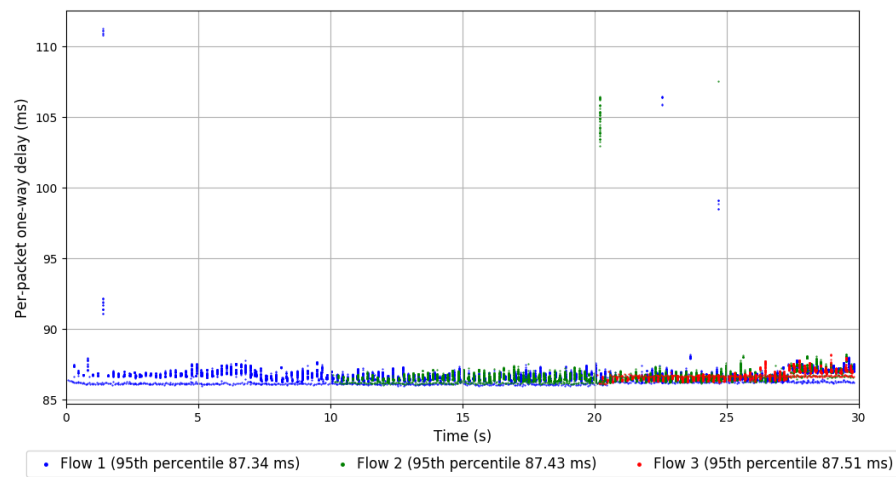
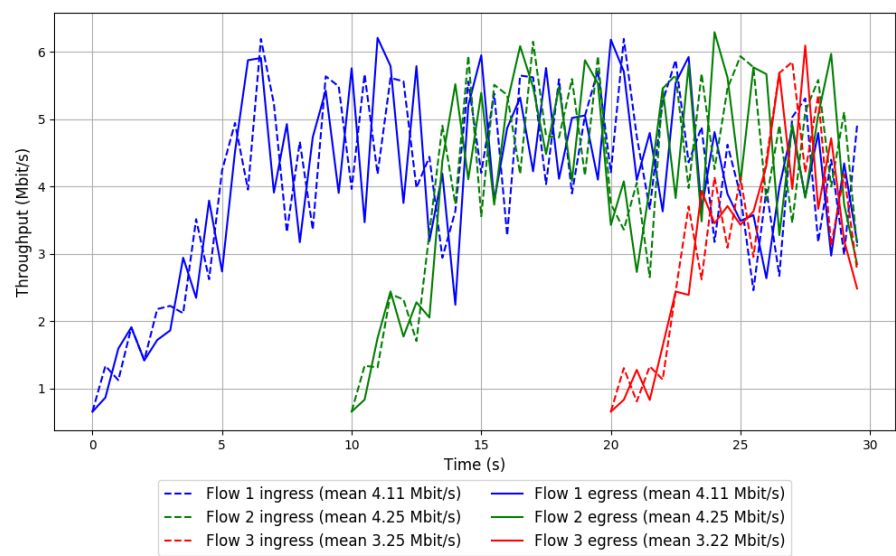
-- Flow 3:

Average throughput: 3.22 Mbit/s

95th percentile per-packet one-way delay: 87.511 ms

Loss rate: 2.41%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-02 16:57:51

End at: 2018-01-02 16:58:21

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.36 Mbit/s

95th percentile per-packet one-way delay: 87.760 ms

Loss rate: 1.57%

-- Flow 1:

Average throughput: 3.68 Mbit/s

95th percentile per-packet one-way delay: 87.650 ms

Loss rate: 1.40%

-- Flow 2:

Average throughput: 4.16 Mbit/s

95th percentile per-packet one-way delay: 87.842 ms

Loss rate: 1.35%

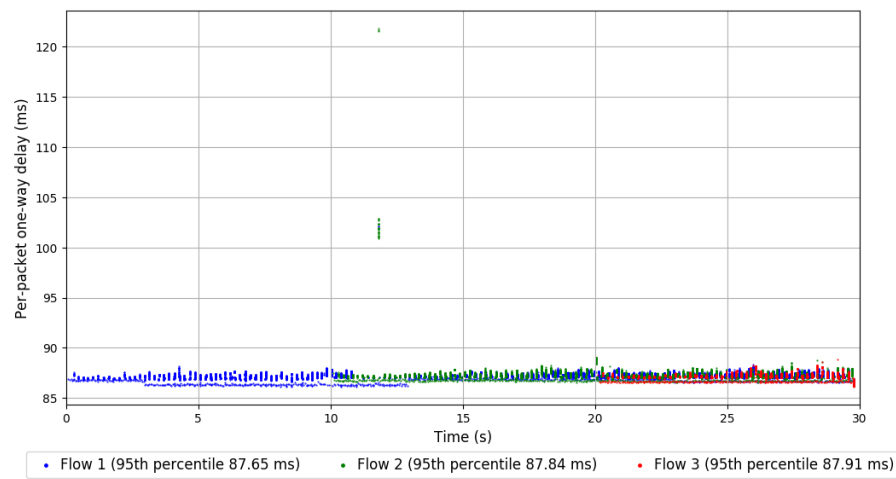
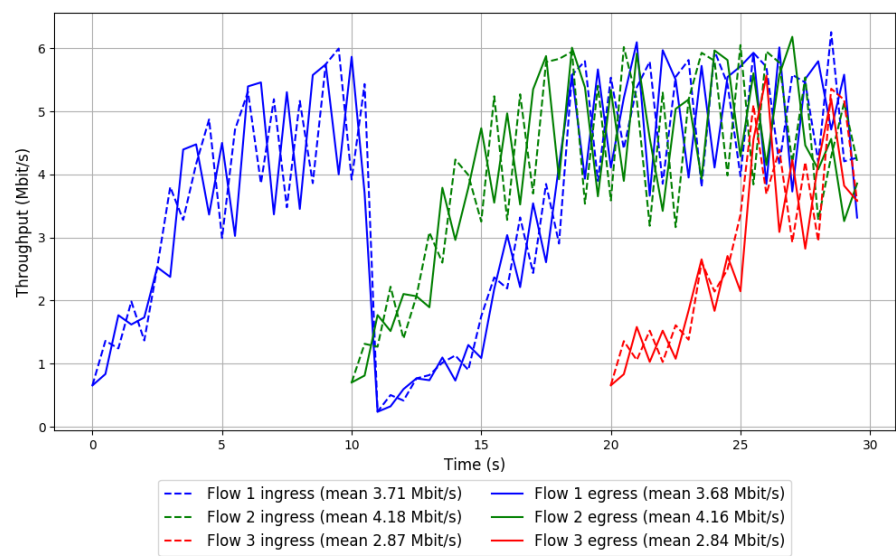
-- Flow 3:

Average throughput: 2.84 Mbit/s

95th percentile per-packet one-way delay: 87.905 ms

Loss rate: 2.89%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-02 17:11:39

End at: 2018-01-02 17:12:09

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.16 Mbit/s

95th percentile per-packet one-way delay: 87.414 ms

Loss rate: 1.95%

-- Flow 1:

Average throughput: 4.05 Mbit/s

95th percentile per-packet one-way delay: 87.425 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 87.441 ms

Loss rate: 4.05%

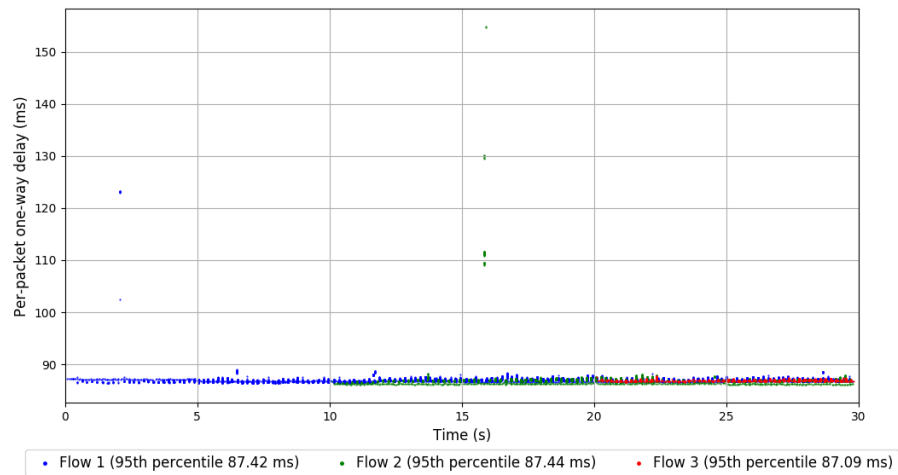
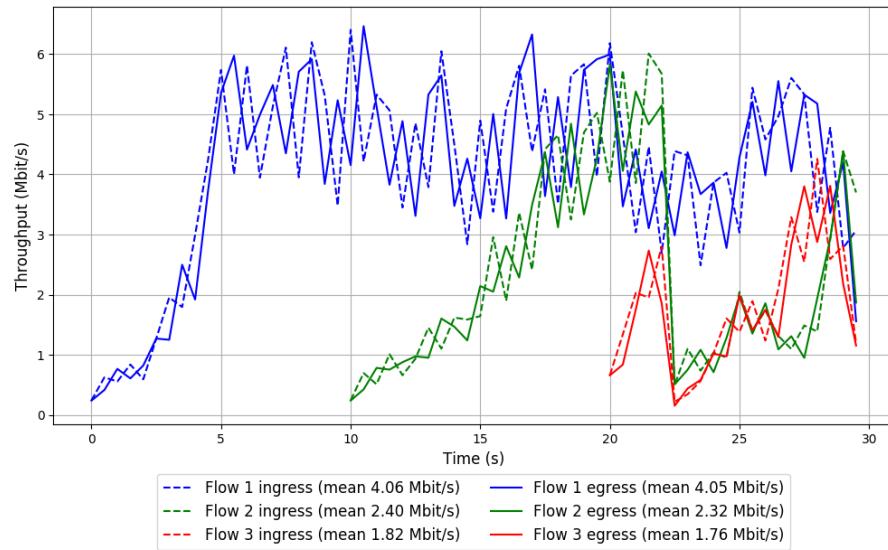
-- Flow 3:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 87.093 ms

Loss rate: 4.85%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-01-02 17:26:44

End at: 2018-01-02 17:27:14

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.26 Mbit/s

95th percentile per-packet one-way delay: 87.677 ms

Loss rate: 2.40%

-- Flow 1:

Average throughput: 3.26 Mbit/s

95th percentile per-packet one-way delay: 87.743 ms

Loss rate: 2.08%

-- Flow 2:

Average throughput: 3.24 Mbit/s

95th percentile per-packet one-way delay: 87.647 ms

Loss rate: 2.66%

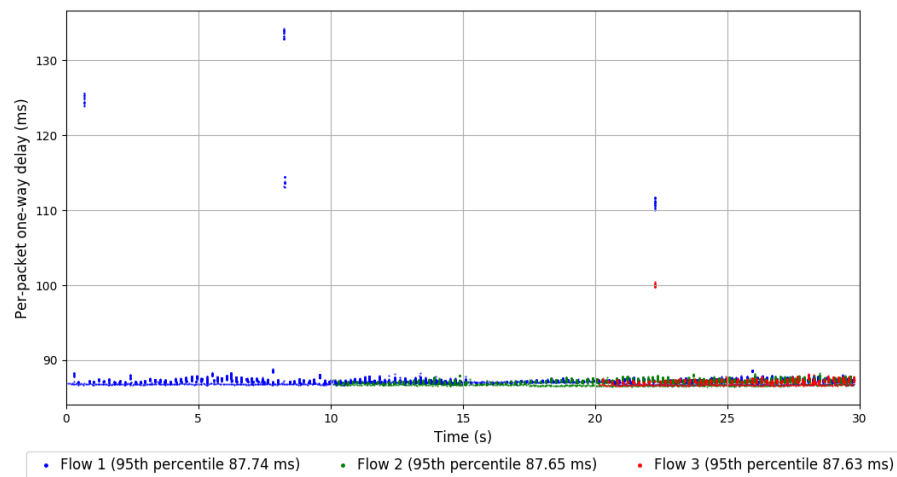
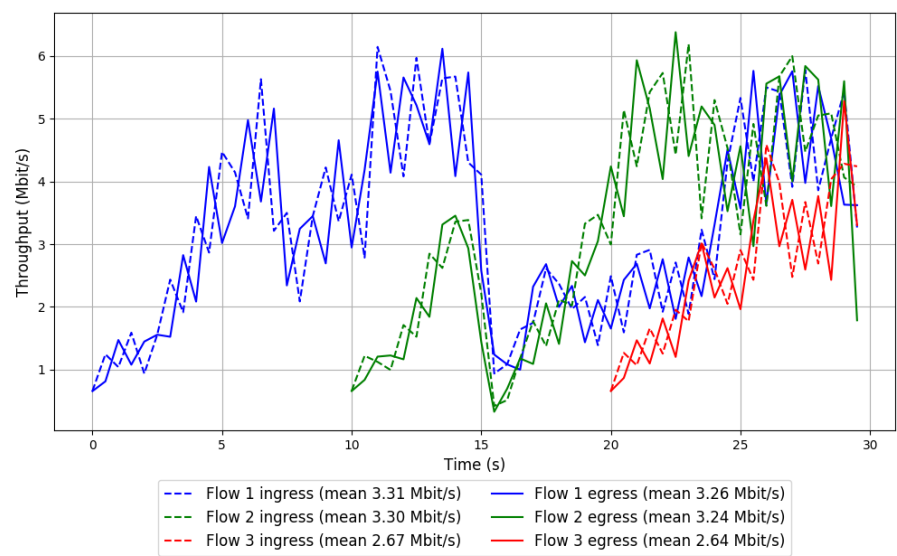
-- Flow 3:

Average throughput: 2.64 Mbit/s

95th percentile per-packet one-way delay: 87.626 ms

Loss rate: 2.94%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-02 17:41:58

End at: 2018-01-02 17:42:28

Below is generated by plot.py at 2018-01-02 20:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.82 Mbit/s

95th percentile per-packet one-way delay: 87.139 ms

Loss rate: 3.09%

-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 86.987 ms

Loss rate: 3.63%

-- Flow 2:

Average throughput: 3.54 Mbit/s

95th percentile per-packet one-way delay: 87.205 ms

Loss rate: 2.90%

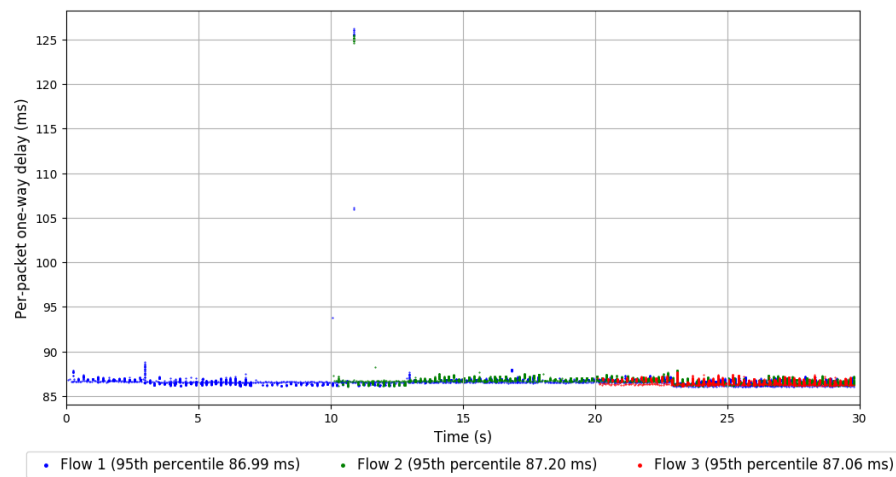
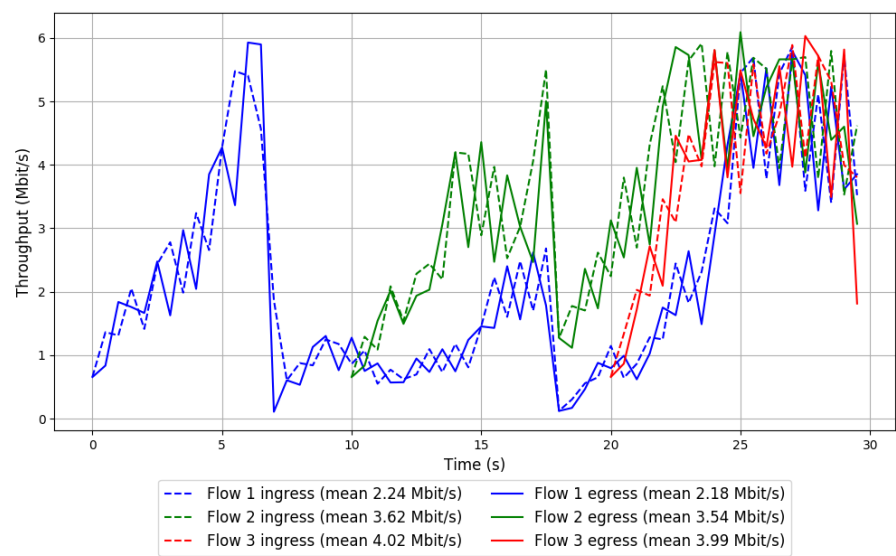
-- Flow 3:

Average throughput: 3.99 Mbit/s

95th percentile per-packet one-way delay: 87.060 ms

Loss rate: 2.52%

Run 10: Report of Sprout — Data Link

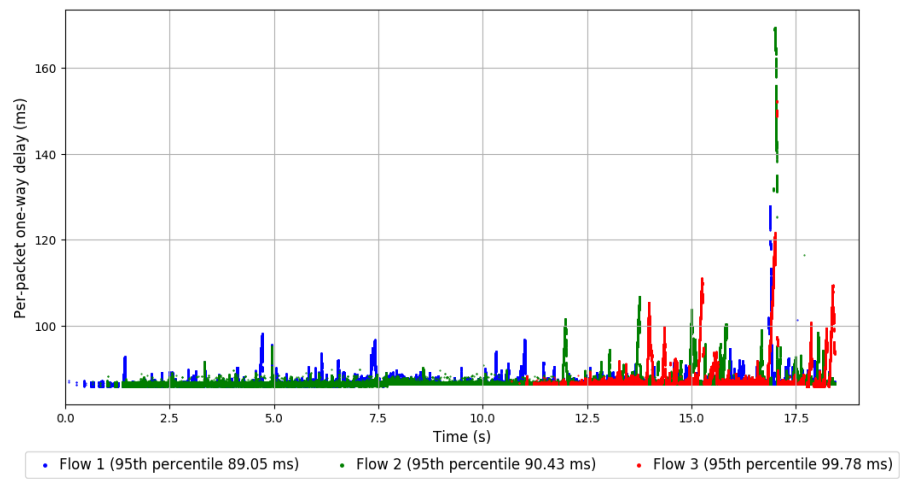
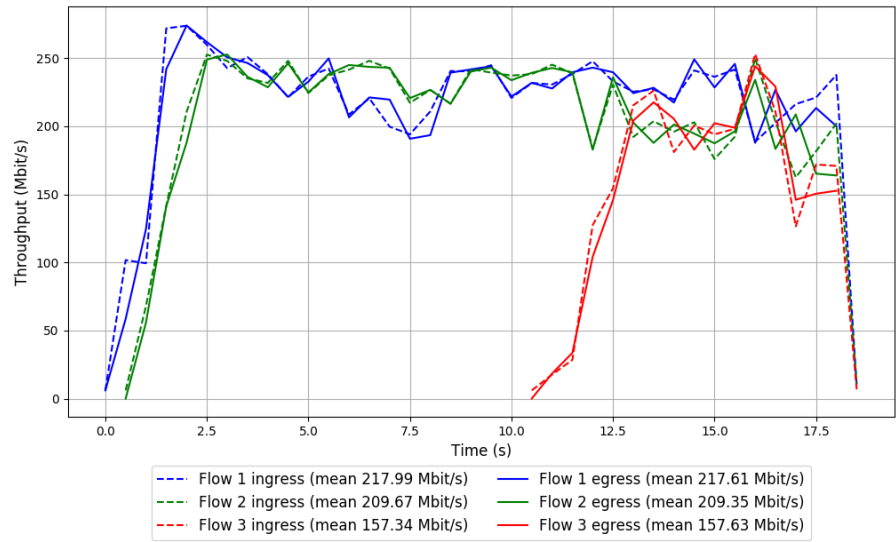


Run 1: Statistics of TaoVA-100x

Start at: 2018-01-02 15:35:02

End at: 2018-01-02 15:35:32

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

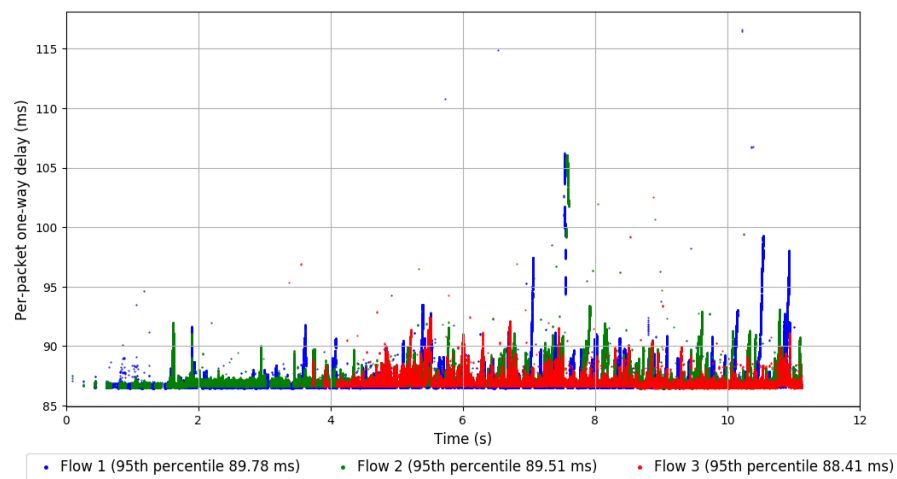
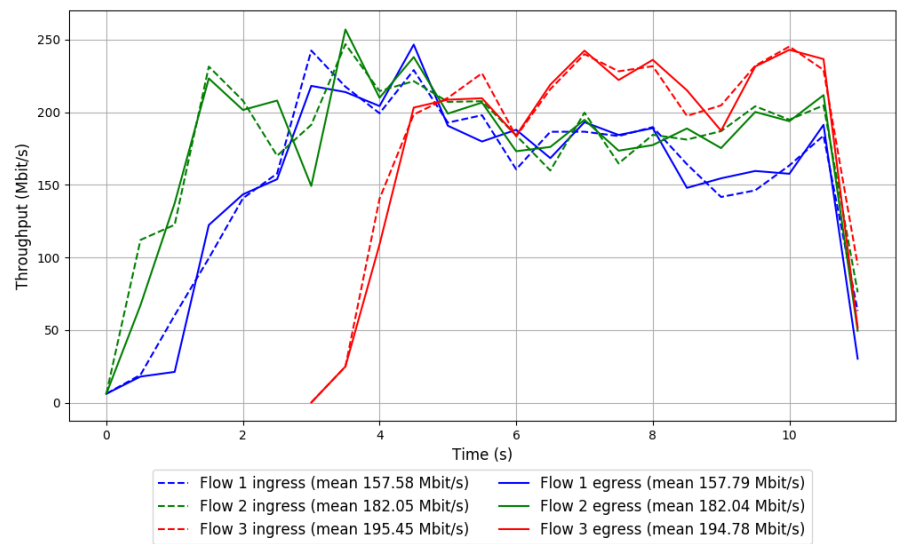


Run 2: Statistics of TaoVA-100x

Start at: 2018-01-02 15:50:04

End at: 2018-01-02 15:50:34

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

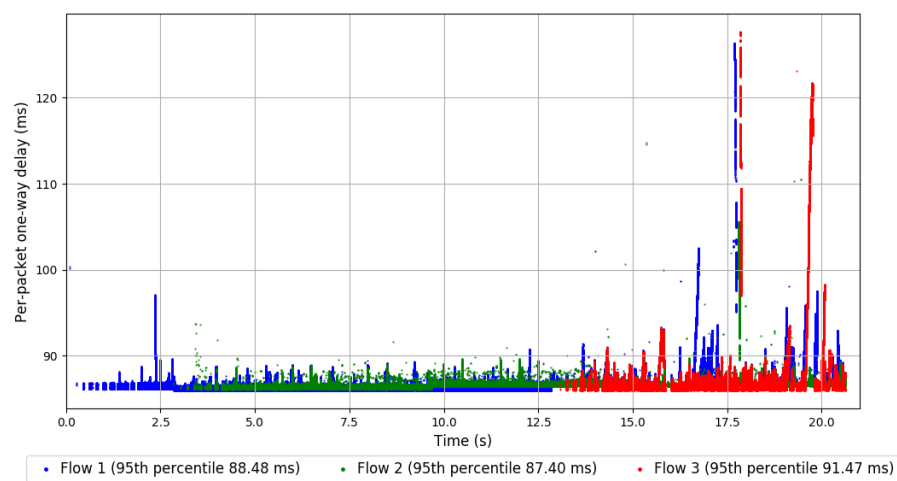
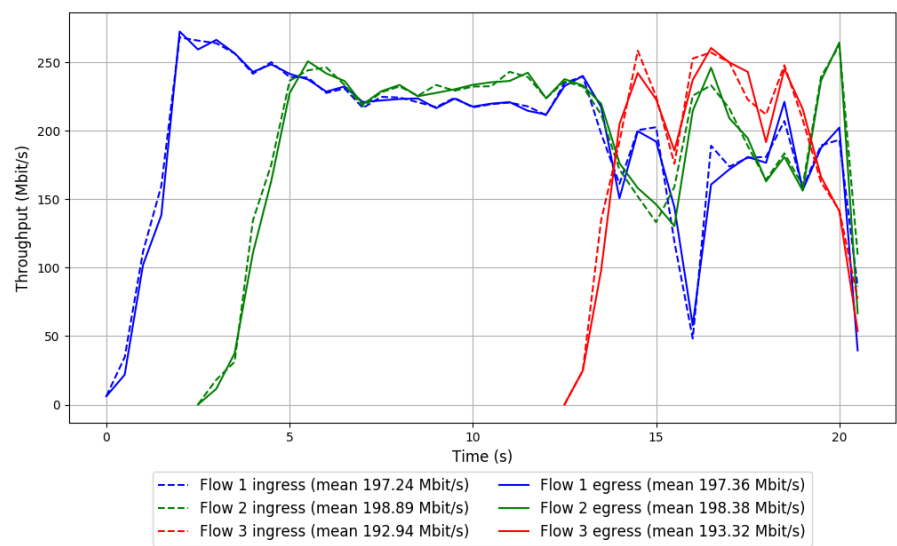


Run 3: Statistics of TaoVA-100x

Start at: 2018-01-02 16:05:02

End at: 2018-01-02 16:05:32

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

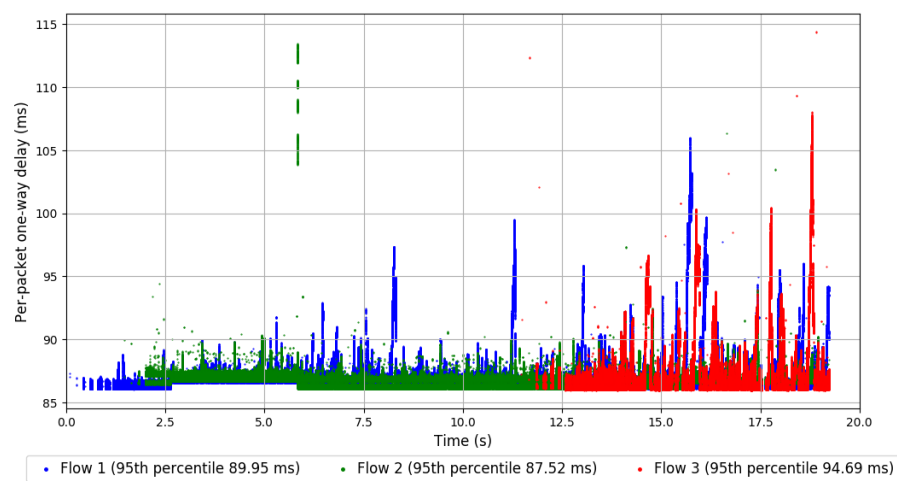
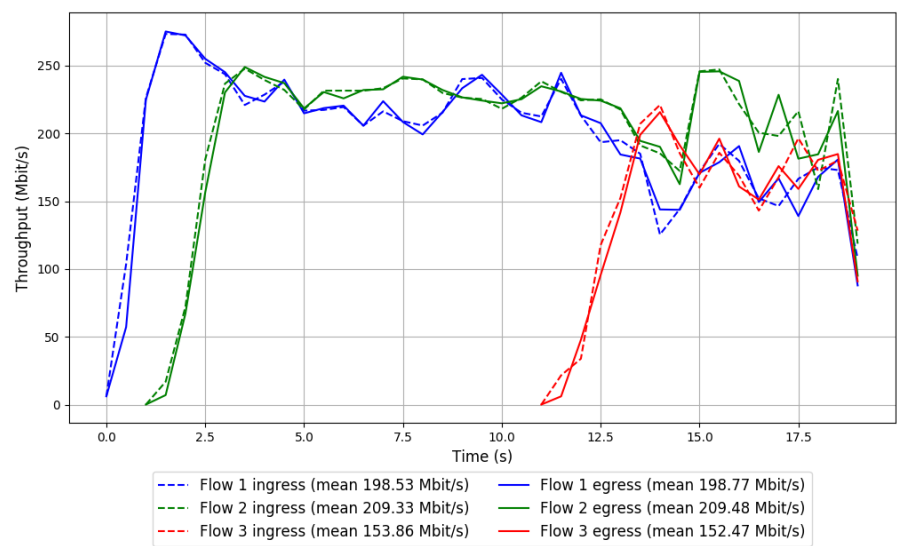


Run 4: Statistics of TaoVA-100x

Start at: 2018-01-02 16:19:58

End at: 2018-01-02 16:20:28

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

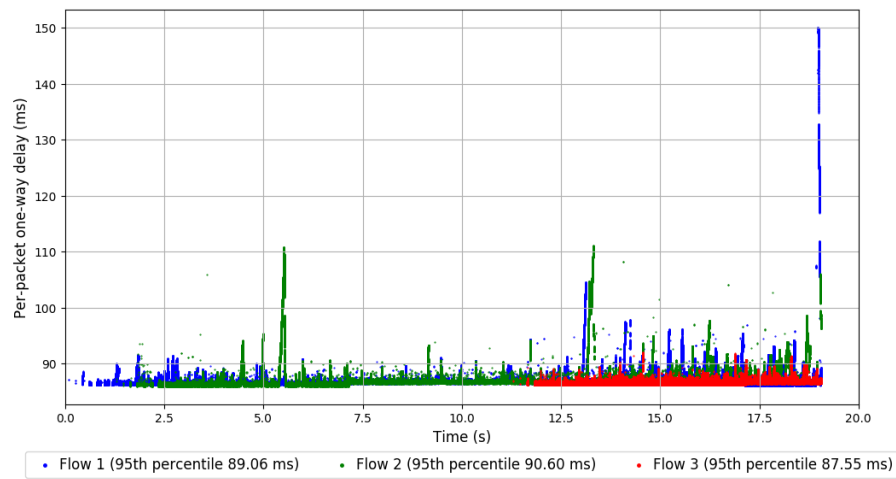
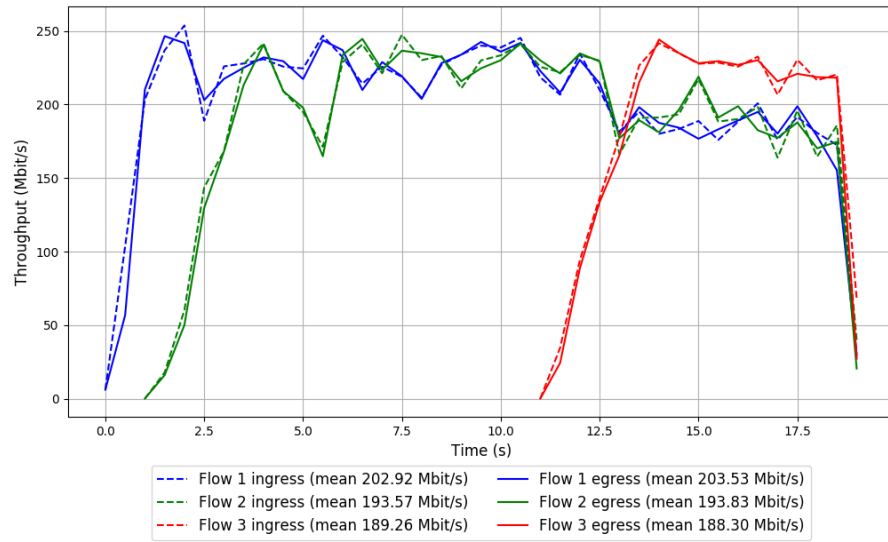


Run 5: Statistics of TaoVA-100x

Start at: 2018-01-02 16:35:13

End at: 2018-01-02 16:35:43

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

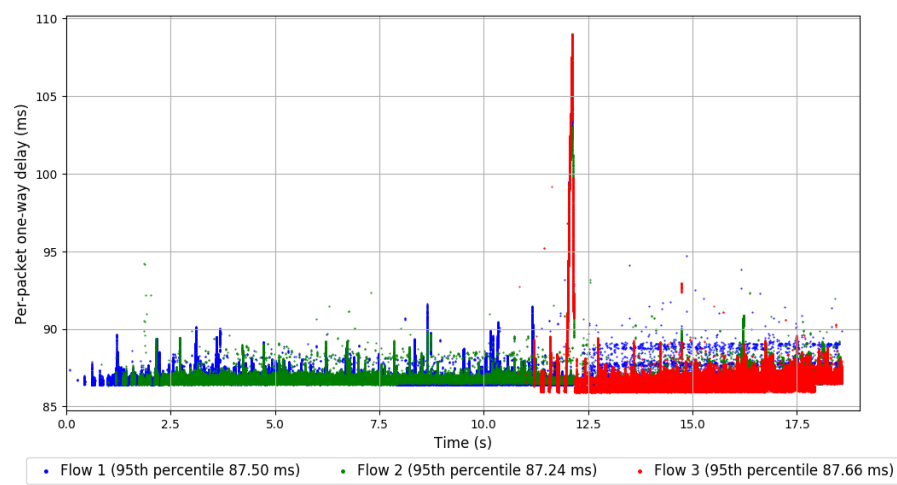
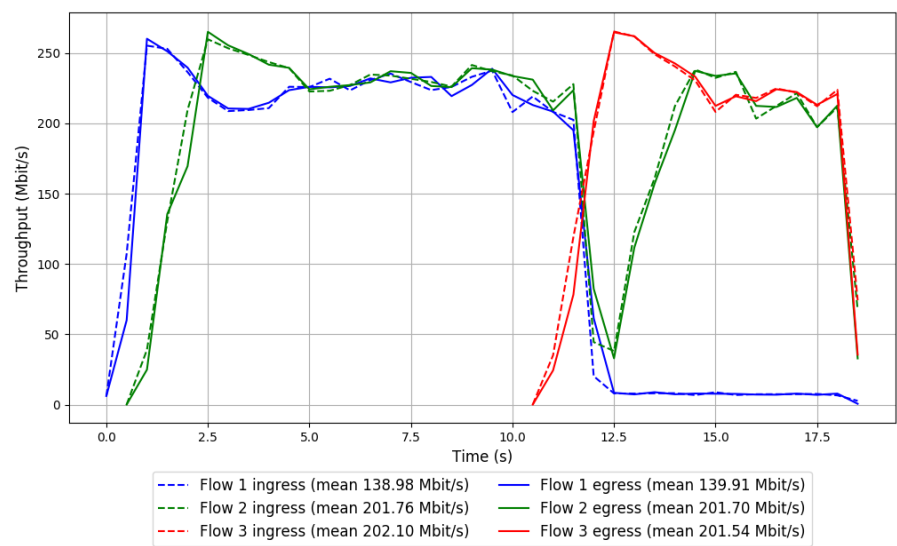


Run 6: Statistics of TaoVA-100x

Start at: 2018-01-02 16:50:22

End at: 2018-01-02 16:50:52

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

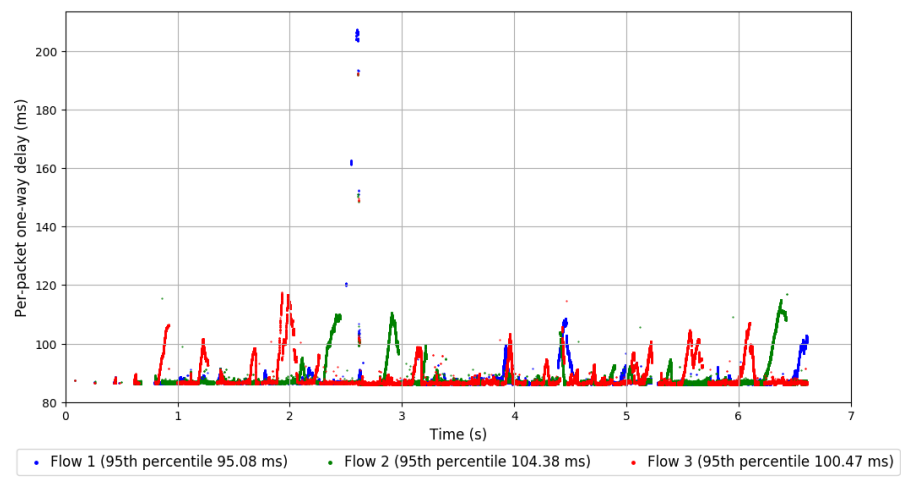
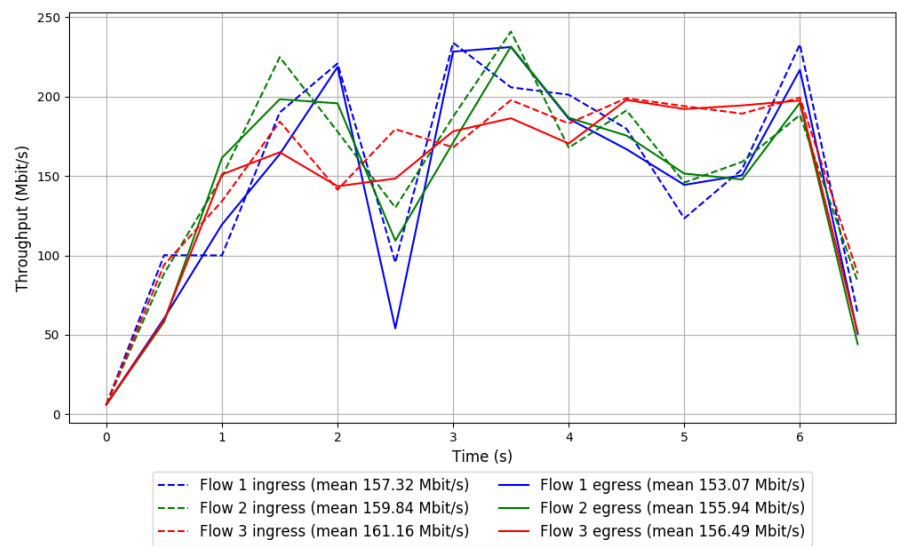


Run 7: Statistics of TaoVA-100x

Start at: 2018-01-02 17:05:25

End at: 2018-01-02 17:05:55

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

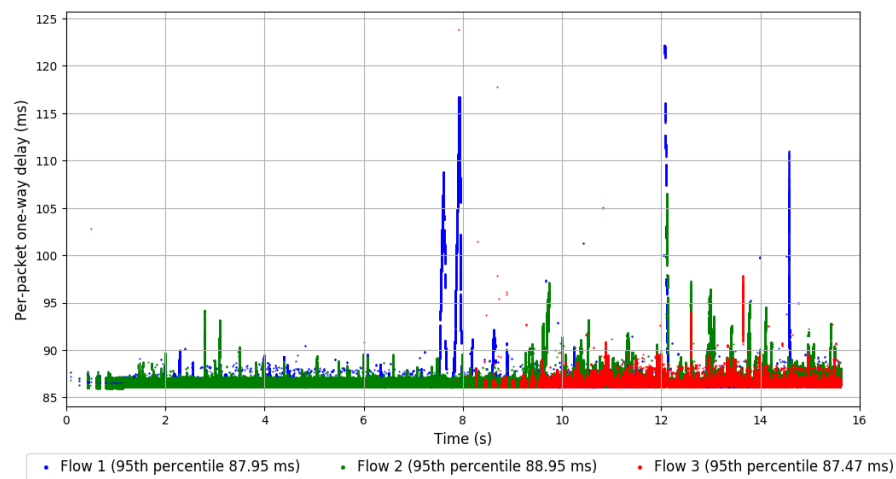
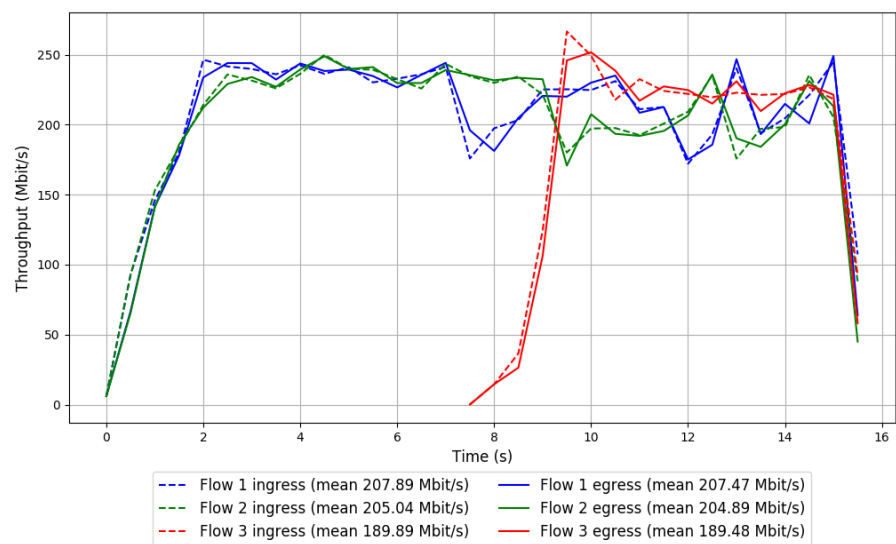


Run 8: Statistics of TaoVA-100x

Start at: 2018-01-02 17:19:16

End at: 2018-01-02 17:19:46

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-01-02 17:34:26

End at: 2018-01-02 17:34:56

Below is generated by plot.py at 2018-01-02 21:07:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 374.52 Mbit/s

95th percentile per-packet one-way delay: 90.662 ms

Loss rate: 1.04%

-- Flow 1:

Average throughput: 183.10 Mbit/s

95th percentile per-packet one-way delay: 92.991 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 193.10 Mbit/s

95th percentile per-packet one-way delay: 87.654 ms

Loss rate: 0.86%

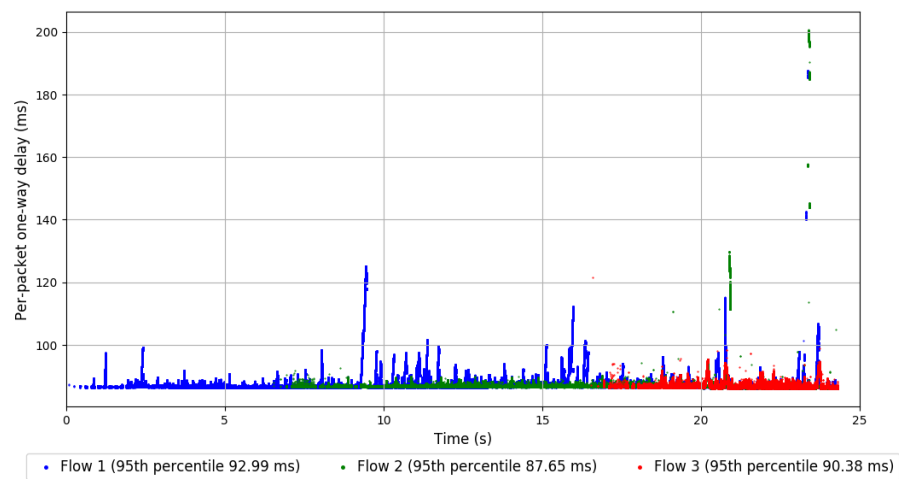
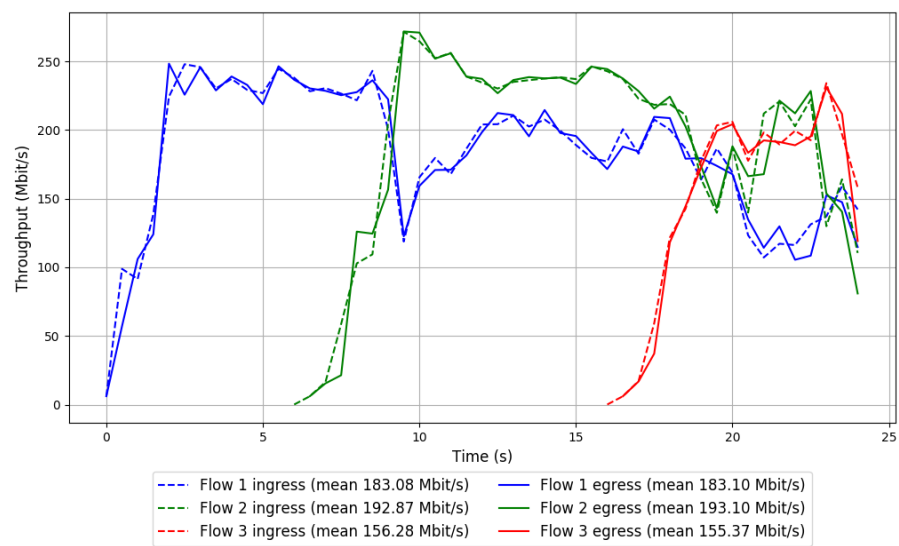
-- Flow 3:

Average throughput: 155.37 Mbit/s

95th percentile per-packet one-way delay: 90.380 ms

Loss rate: 2.74%

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

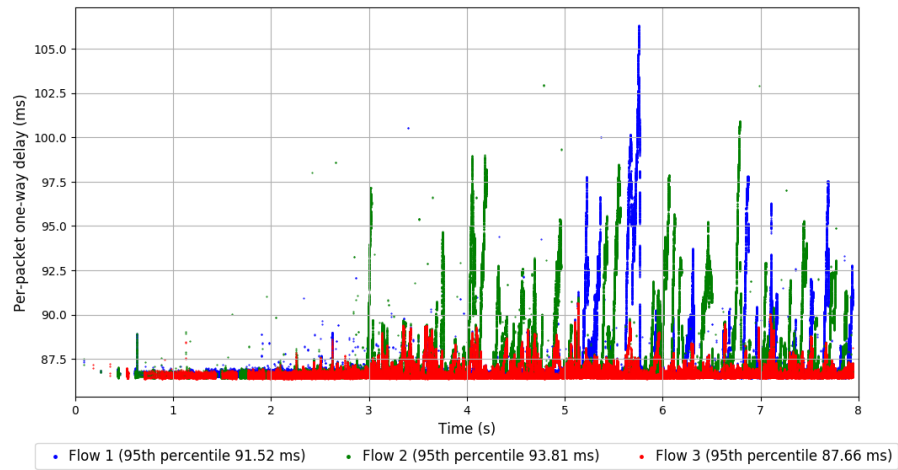
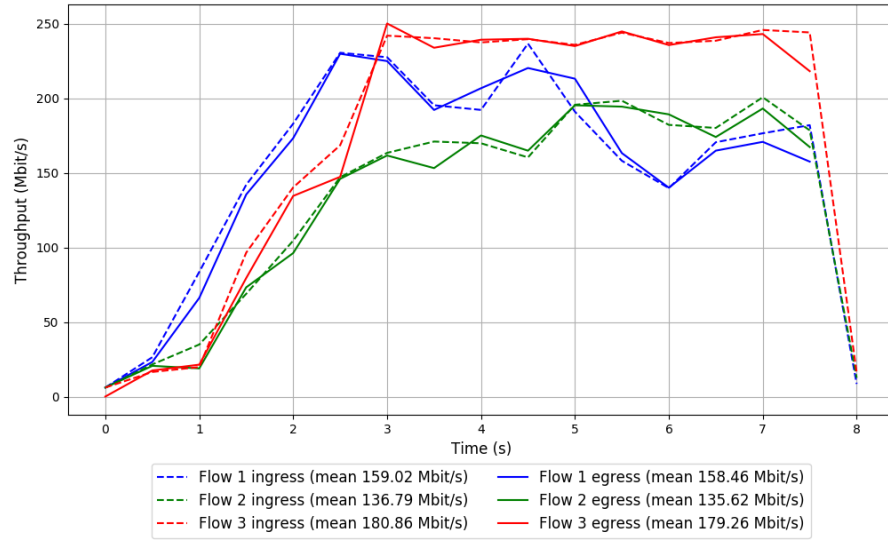


Run 10: Statistics of TaoVA-100x

Start at: 2018-01-02 17:49:33

End at: 2018-01-02 17:50:03

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-02 15:28:14

End at: 2018-01-02 15:28:44

Below is generated by plot.py at 2018-01-02 21:07:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.43 Mbit/s

95th percentile per-packet one-way delay: 91.298 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 43.14 Mbit/s

95th percentile per-packet one-way delay: 90.344 ms

Loss rate: 1.47%

-- Flow 2:

Average throughput: 64.56 Mbit/s

95th percentile per-packet one-way delay: 92.353 ms

Loss rate: 0.68%

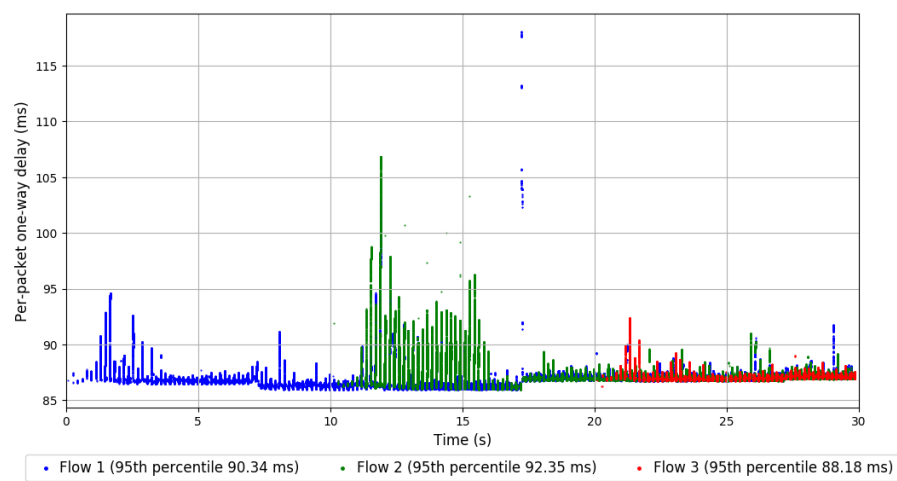
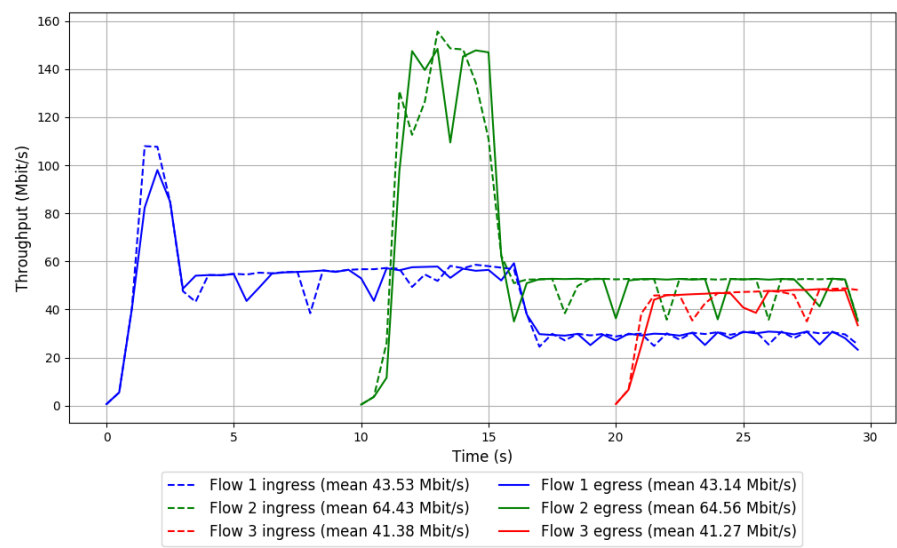
-- Flow 3:

Average throughput: 41.27 Mbit/s

95th percentile per-packet one-way delay: 88.178 ms

Loss rate: 2.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-02 15:43:19

End at: 2018-01-02 15:43:49

Below is generated by plot.py at 2018-01-02 21:07:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 65.29 Mbit/s

95th percentile per-packet one-way delay: 90.367 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 7.23 Mbit/s

95th percentile per-packet one-way delay: 87.358 ms

Loss rate: 2.41%

-- Flow 2:

Average throughput: 73.53 Mbit/s

95th percentile per-packet one-way delay: 90.627 ms

Loss rate: 0.23%

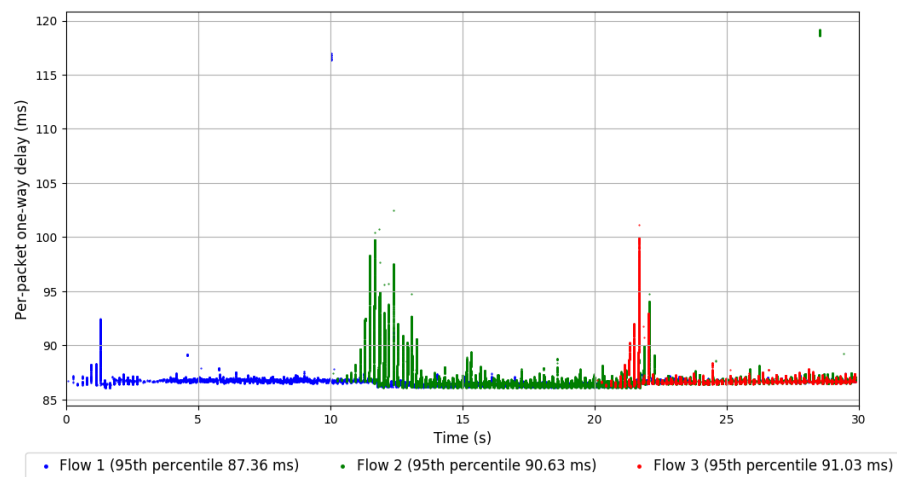
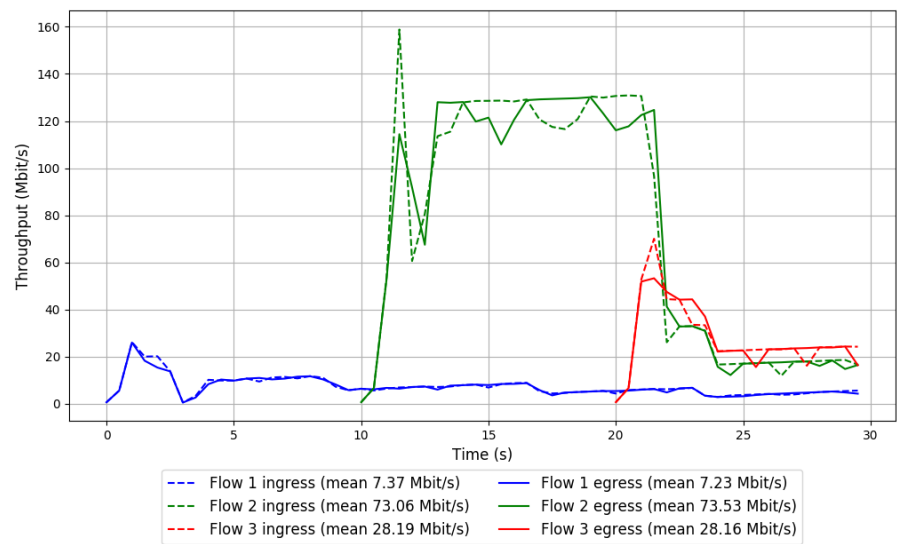
-- Flow 3:

Average throughput: 28.16 Mbit/s

95th percentile per-packet one-way delay: 91.029 ms

Loss rate: 1.46%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-02 15:58:10

End at: 2018-01-02 15:58:40

Below is generated by plot.py at 2018-01-02 21:07:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.46 Mbit/s

95th percentile per-packet one-way delay: 88.354 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 28.27 Mbit/s

95th percentile per-packet one-way delay: 88.336 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 28.47 Mbit/s

95th percentile per-packet one-way delay: 87.951 ms

Loss rate: 0.46%

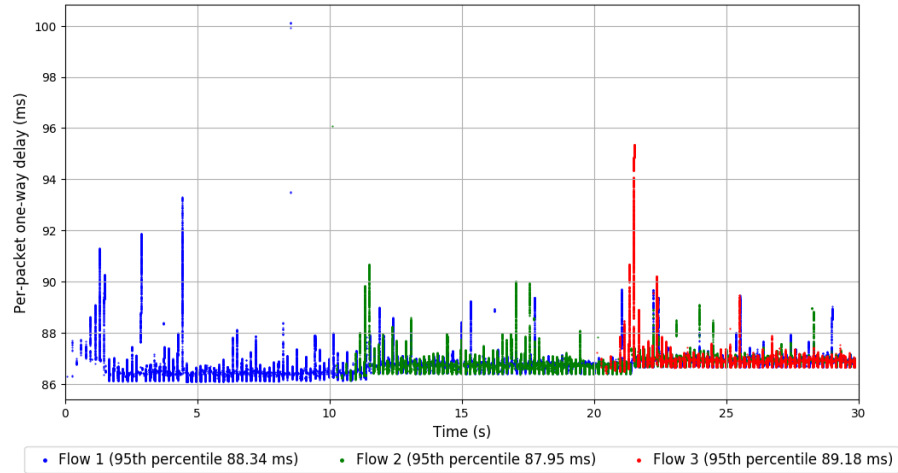
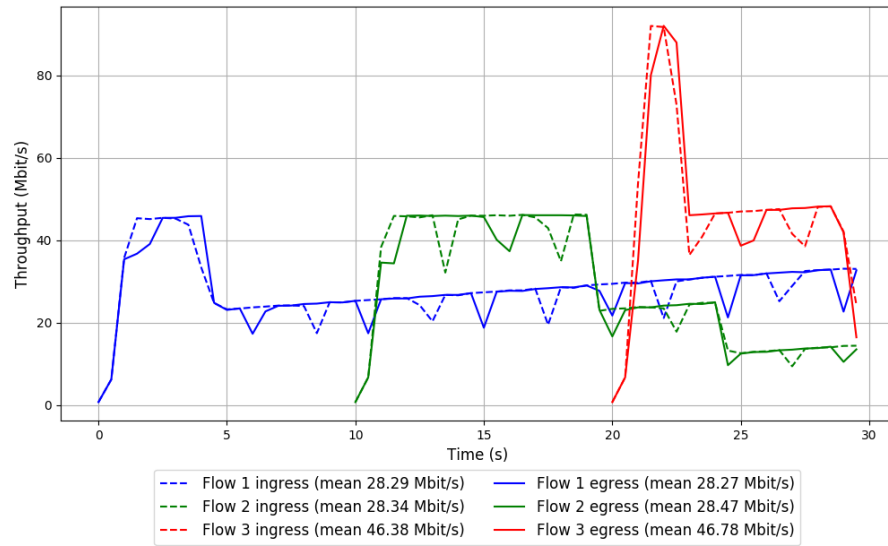
-- Flow 3:

Average throughput: 46.78 Mbit/s

95th percentile per-packet one-way delay: 89.180 ms

Loss rate: 0.91%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-02 16:13:07

End at: 2018-01-02 16:13:37

Below is generated by plot.py at 2018-01-02 21:07:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.53 Mbit/s

95th percentile per-packet one-way delay: 88.181 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 21.03 Mbit/s

95th percentile per-packet one-way delay: 88.398 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 46.71 Mbit/s

95th percentile per-packet one-way delay: 88.324 ms

Loss rate: 0.96%

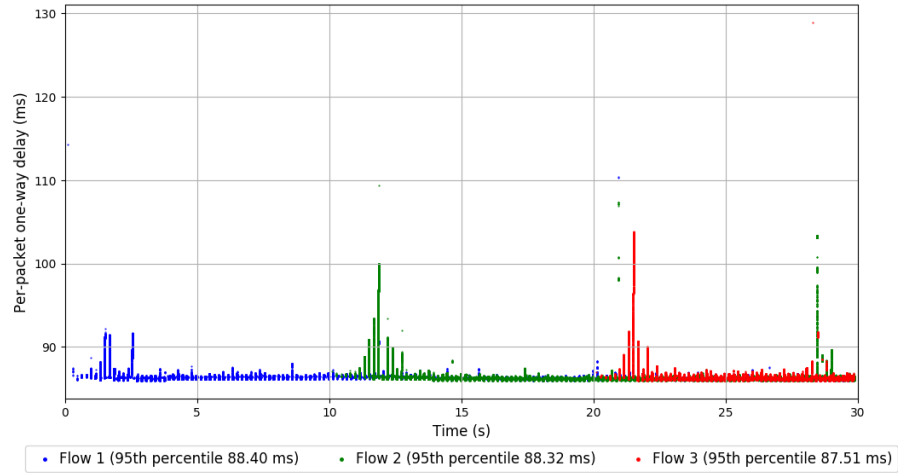
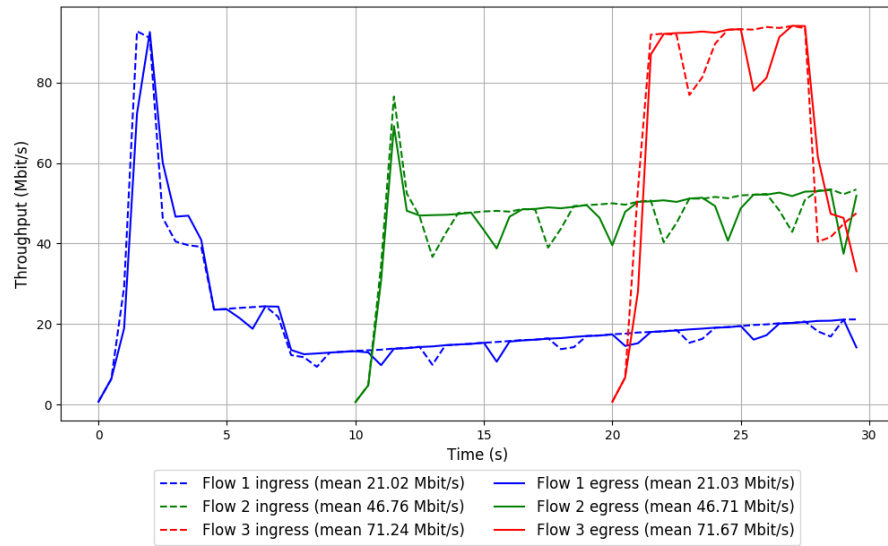
-- Flow 3:

Average throughput: 71.67 Mbit/s

95th percentile per-packet one-way delay: 87.512 ms

Loss rate: 1.15%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-02 16:28:18

End at: 2018-01-02 16:28:48

Below is generated by plot.py at 2018-01-02 21:07:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 98.40 Mbit/s

95th percentile per-packet one-way delay: 88.204 ms

Loss rate: 1.29%

-- Flow 1:

Average throughput: 50.09 Mbit/s

95th percentile per-packet one-way delay: 88.115 ms

Loss rate: 1.06%

-- Flow 2:

Average throughput: 33.49 Mbit/s

95th percentile per-packet one-way delay: 88.861 ms

Loss rate: 0.98%

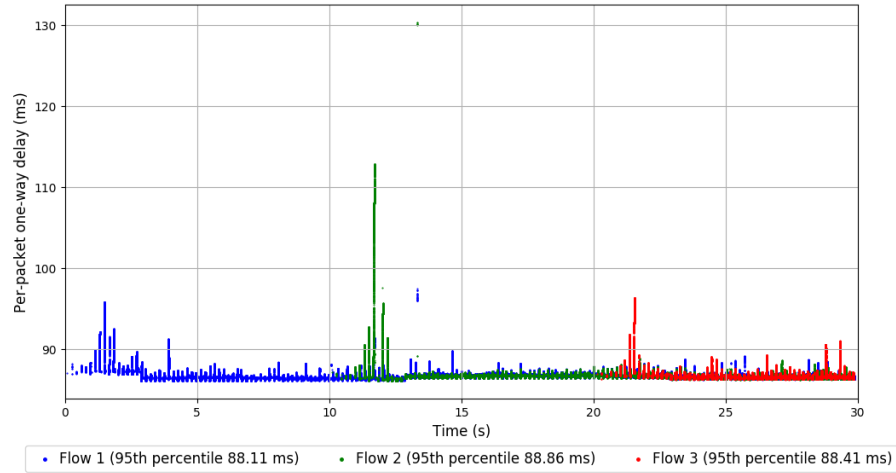
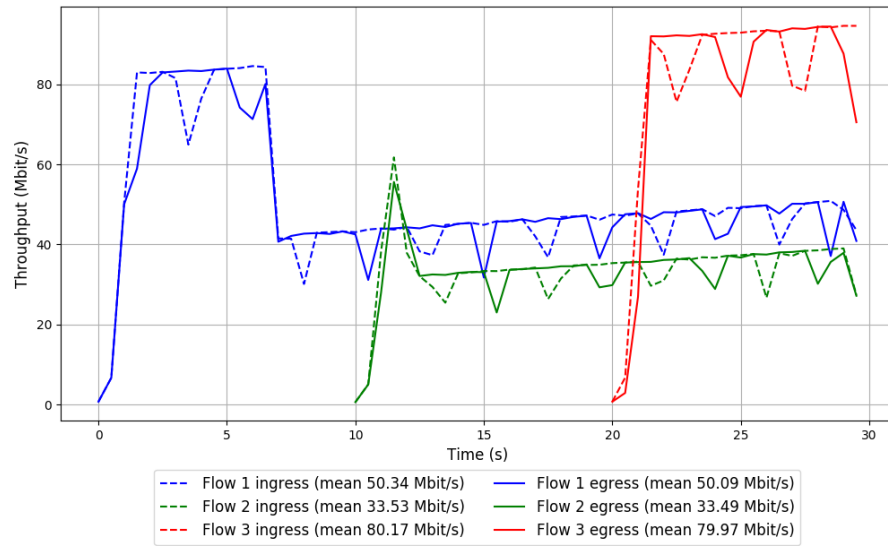
-- Flow 3:

Average throughput: 79.97 Mbit/s

95th percentile per-packet one-way delay: 88.410 ms

Loss rate: 2.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-02 16:43:28

End at: 2018-01-02 16:43:58

Below is generated by plot.py at 2018-01-02 21:07:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.84 Mbit/s

95th percentile per-packet one-way delay: 94.508 ms

Loss rate: 1.03%

-- Flow 1:

Average throughput: 23.56 Mbit/s

95th percentile per-packet one-way delay: 90.581 ms

Loss rate: 1.02%

-- Flow 2:

Average throughput: 38.32 Mbit/s

95th percentile per-packet one-way delay: 92.977 ms

Loss rate: 1.12%

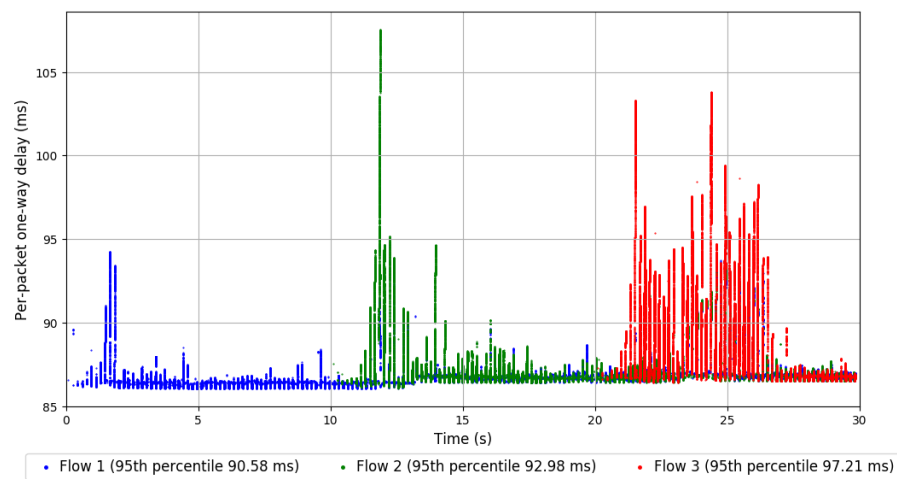
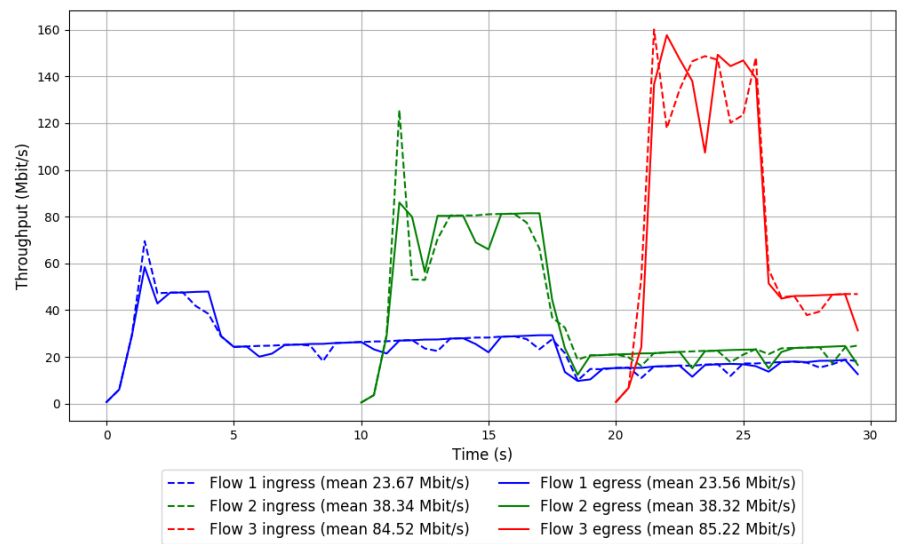
-- Flow 3:

Average throughput: 85.22 Mbit/s

95th percentile per-packet one-way delay: 97.206 ms

Loss rate: 0.94%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-02 16:58:35

End at: 2018-01-02 16:59:05

Below is generated by plot.py at 2018-01-02 21:07:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.67 Mbit/s

95th percentile per-packet one-way delay: 92.772 ms

Loss rate: 1.15%

-- Flow 1:

Average throughput: 19.08 Mbit/s

95th percentile per-packet one-way delay: 90.152 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 41.54 Mbit/s

95th percentile per-packet one-way delay: 92.914 ms

Loss rate: 1.23%

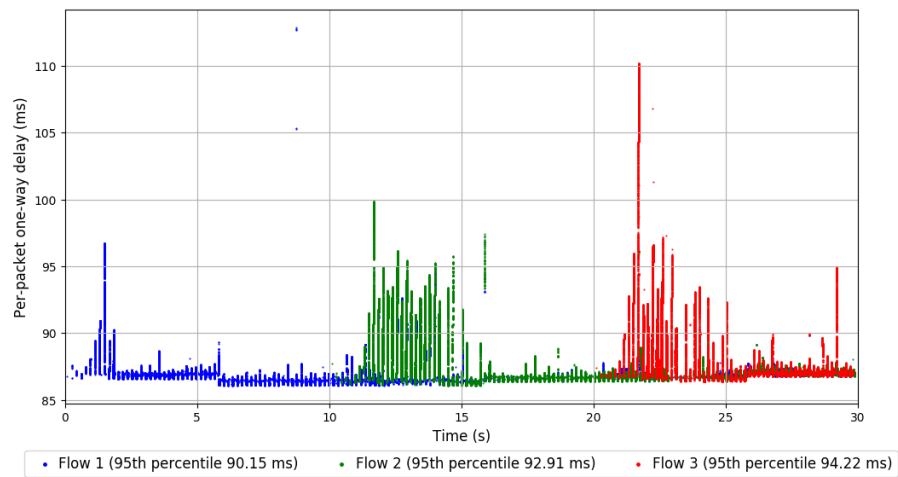
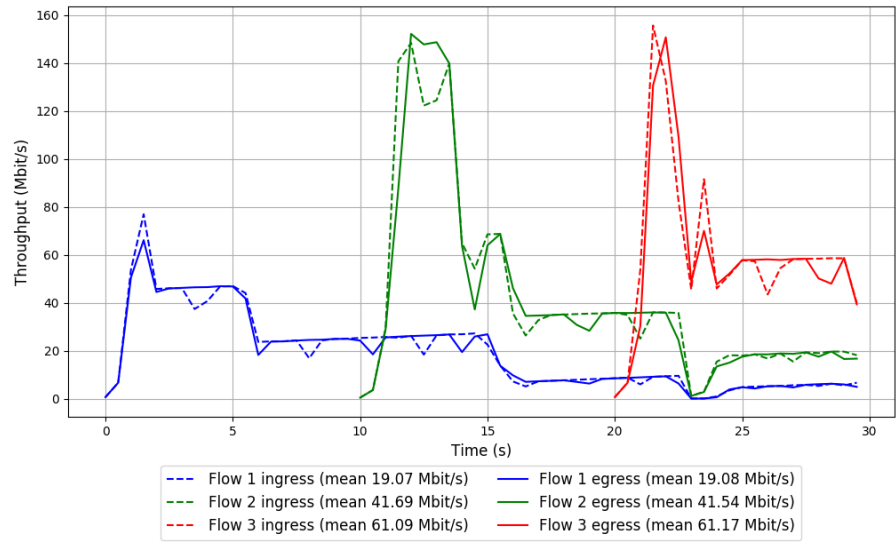
-- Flow 3:

Average throughput: 61.17 Mbit/s

95th percentile per-packet one-way delay: 94.225 ms

Loss rate: 1.63%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-02 17:12:24

End at: 2018-01-02 17:12:54

Below is generated by plot.py at 2018-01-02 21:07:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 106.47 Mbit/s

95th percentile per-packet one-way delay: 93.721 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 36.38 Mbit/s

95th percentile per-packet one-way delay: 89.998 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 68.62 Mbit/s

95th percentile per-packet one-way delay: 89.742 ms

Loss rate: 0.45%

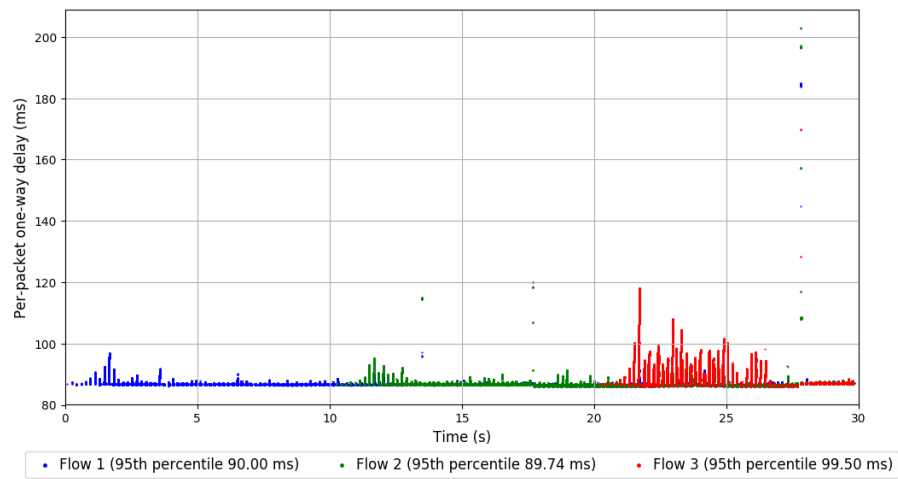
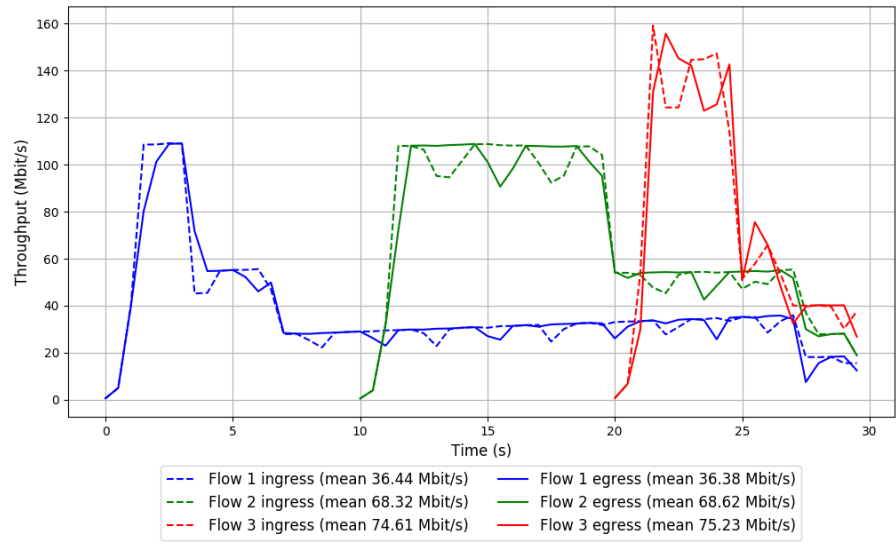
-- Flow 3:

Average throughput: 75.23 Mbit/s

95th percentile per-packet one-way delay: 99.501 ms

Loss rate: 0.92%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-02 17:27:28

End at: 2018-01-02 17:27:58

Below is generated by plot.py at 2018-01-02 21:07:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.02 Mbit/s

95th percentile per-packet one-way delay: 89.207 ms

Loss rate: 1.30%

-- Flow 1:

Average throughput: 20.73 Mbit/s

95th percentile per-packet one-way delay: 90.897 ms

Loss rate: 0.92%

-- Flow 2:

Average throughput: 22.91 Mbit/s

95th percentile per-packet one-way delay: 88.636 ms

Loss rate: 0.60%

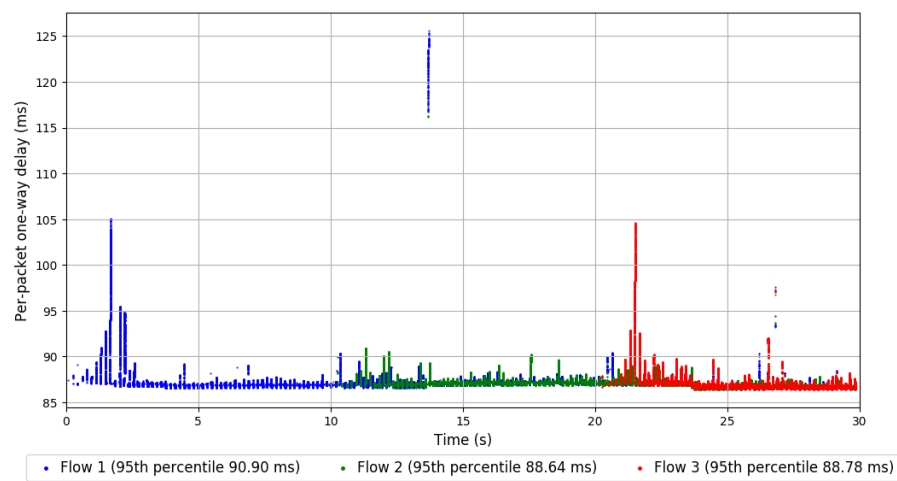
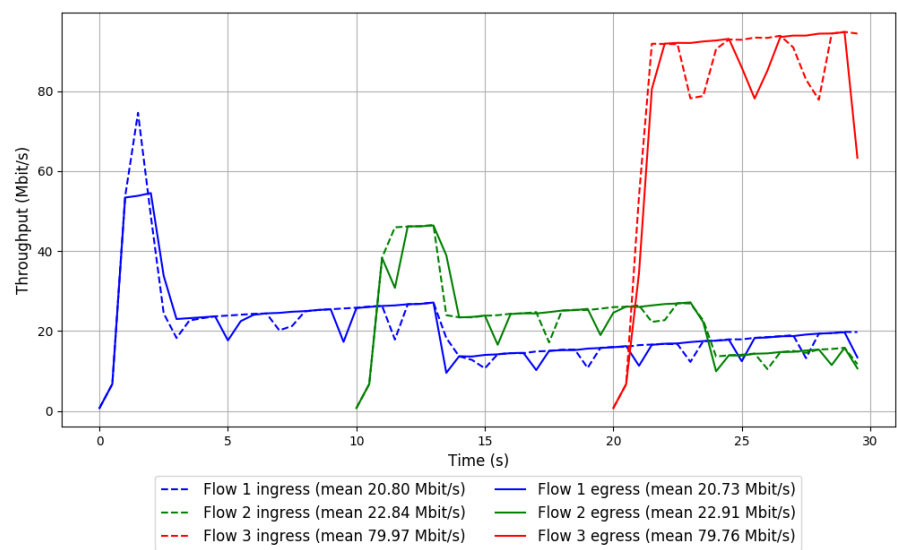
-- Flow 3:

Average throughput: 79.76 Mbit/s

95th percentile per-packet one-way delay: 88.782 ms

Loss rate: 2.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-02 17:42:42

End at: 2018-01-02 17:43:12

Below is generated by plot.py at 2018-01-02 21:07:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 48.06 Mbit/s

95th percentile per-packet one-way delay: 89.466 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 6.74 Mbit/s

95th percentile per-packet one-way delay: 87.389 ms

Loss rate: 2.50%

-- Flow 2:

Average throughput: 43.64 Mbit/s

95th percentile per-packet one-way delay: 90.327 ms

Loss rate: 0.54%

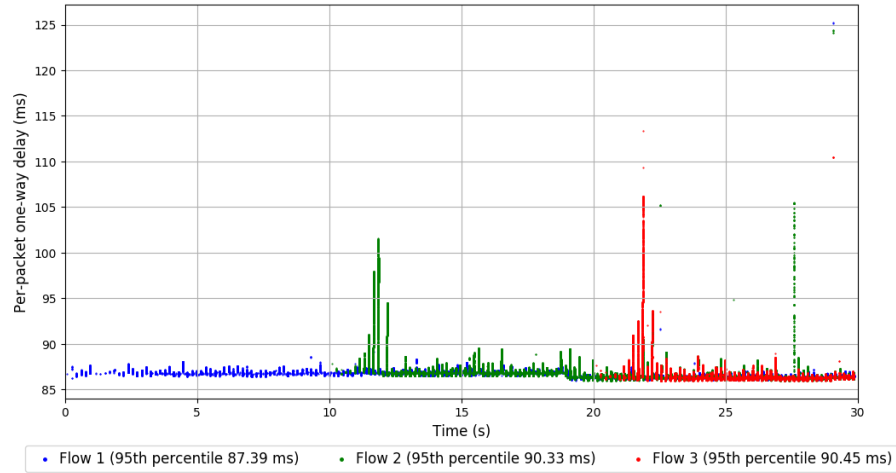
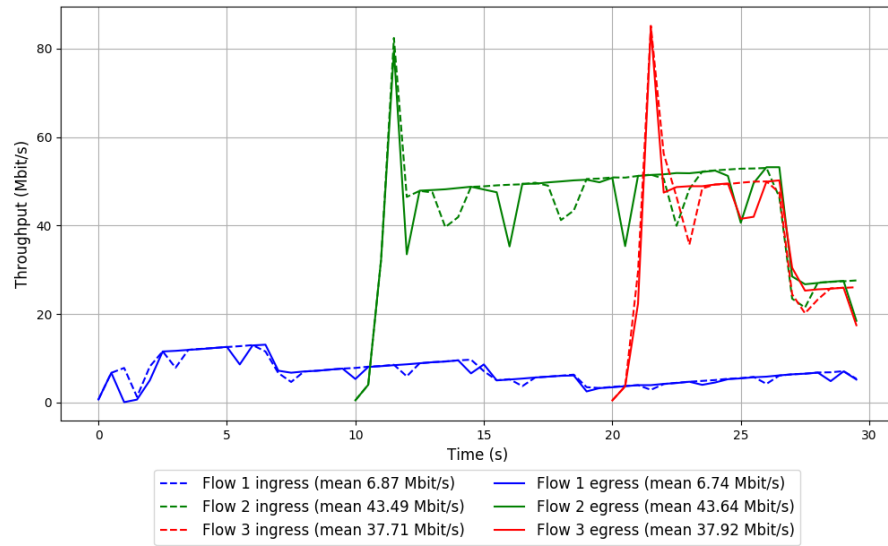
-- Flow 3:

Average throughput: 37.92 Mbit/s

95th percentile per-packet one-way delay: 90.452 ms

Loss rate: 1.20%

Run 10: Report of TCP Vegas — Data Link

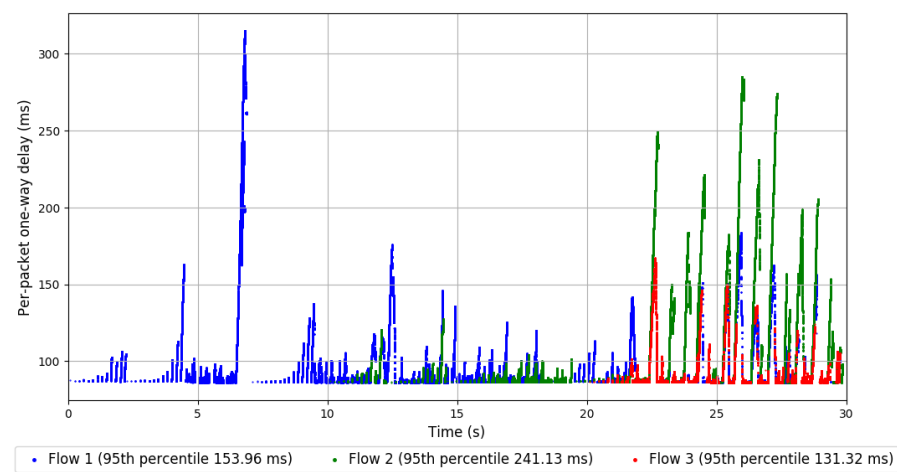
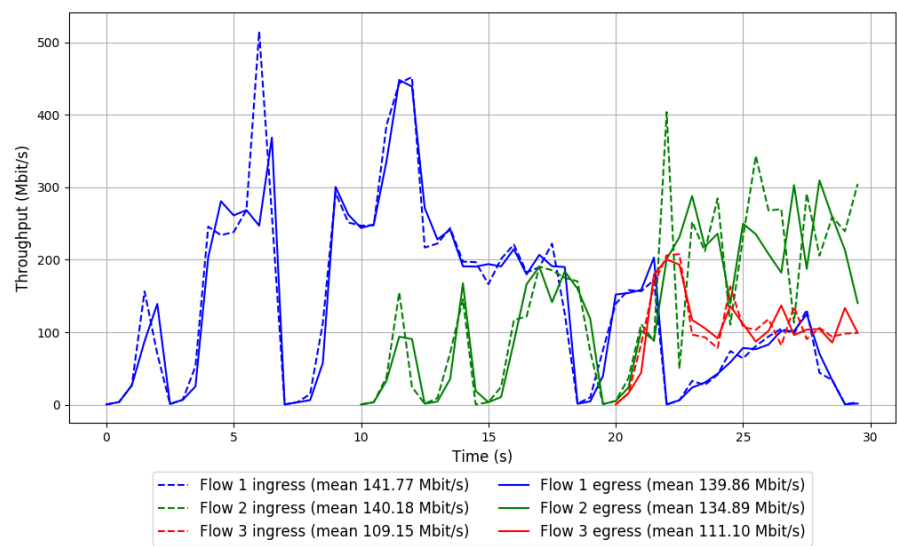


```
Run 1: Statistics of Verus

Start at: 2018-01-02 15:33:56
End at: 2018-01-02 15:34:26

# Below is generated by plot.py at 2018-01-02 21:07:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 264.92 Mbit/s
95th percentile per-packet one-way delay: 202.386 ms
Loss rate: 2.60%
-- Flow 1:
Average throughput: 139.86 Mbit/s
95th percentile per-packet one-way delay: 153.957 ms
Loss rate: 1.93%
-- Flow 2:
Average throughput: 134.89 Mbit/s
95th percentile per-packet one-way delay: 241.133 ms
Loss rate: 4.60%
-- Flow 3:
Average throughput: 111.10 Mbit/s
95th percentile per-packet one-way delay: 131.324 ms
Loss rate: 0.00%
```


Run 1: Report of Verus — Data Link

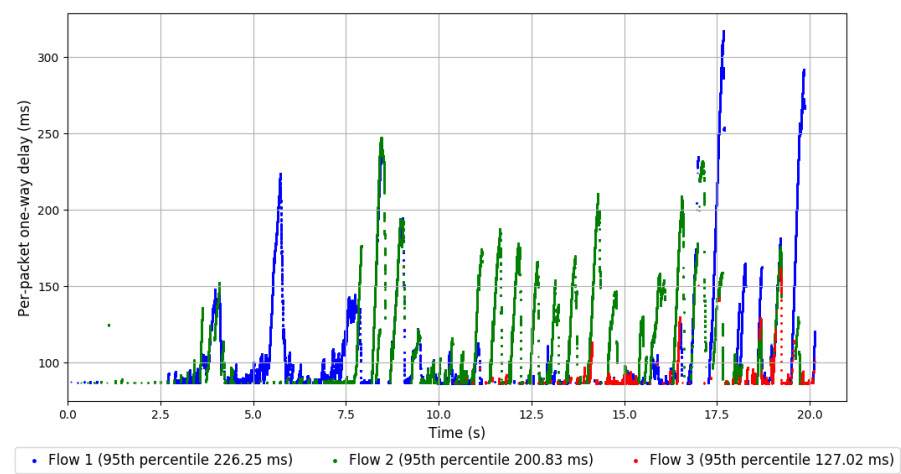
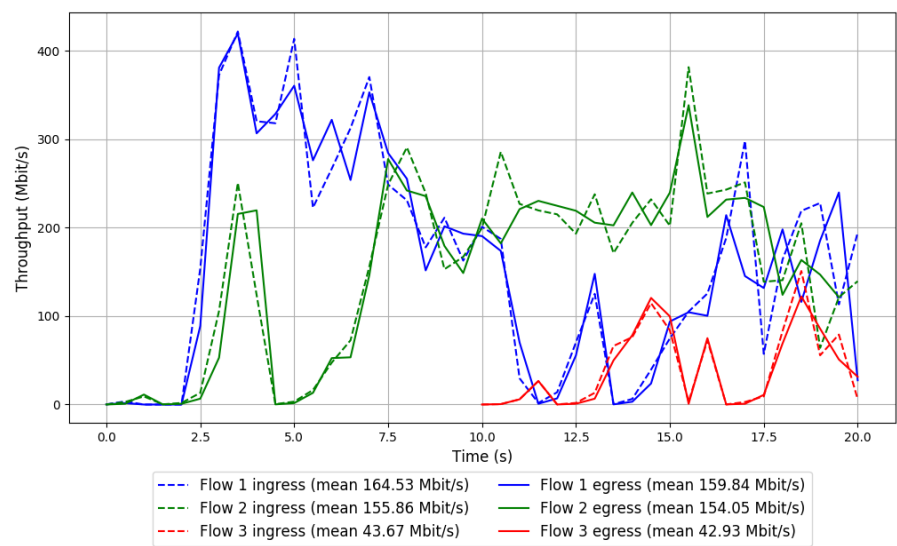


Run 2: Statistics of Verus

Start at: 2018-01-02 15:49:01

End at: 2018-01-02 15:49:31

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-02 16:03:55

End at: 2018-01-02 16:04:25

Below is generated by plot.py at 2018-01-02 21:07:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 342.02 Mbit/s

95th percentile per-packet one-way delay: 162.704 ms

Loss rate: 2.37%

-- Flow 1:

Average throughput: 169.31 Mbit/s

95th percentile per-packet one-way delay: 157.329 ms

Loss rate: 1.08%

-- Flow 2:

Average throughput: 167.79 Mbit/s

95th percentile per-packet one-way delay: 156.553 ms

Loss rate: 1.30%

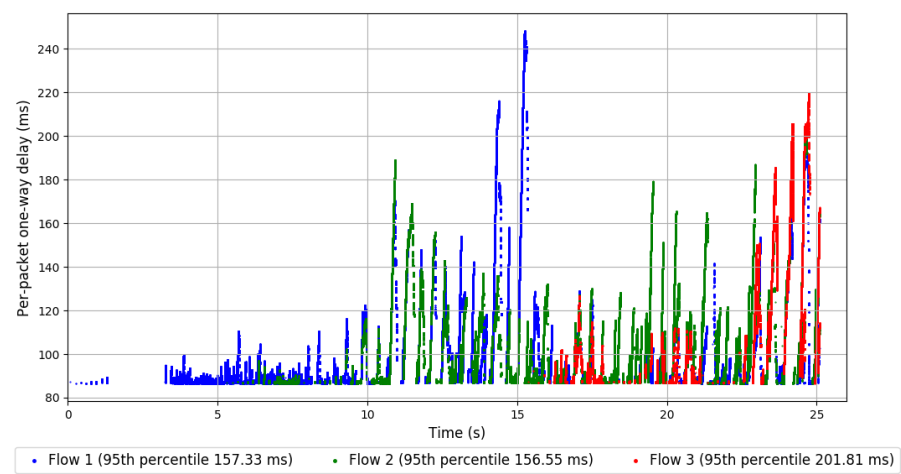
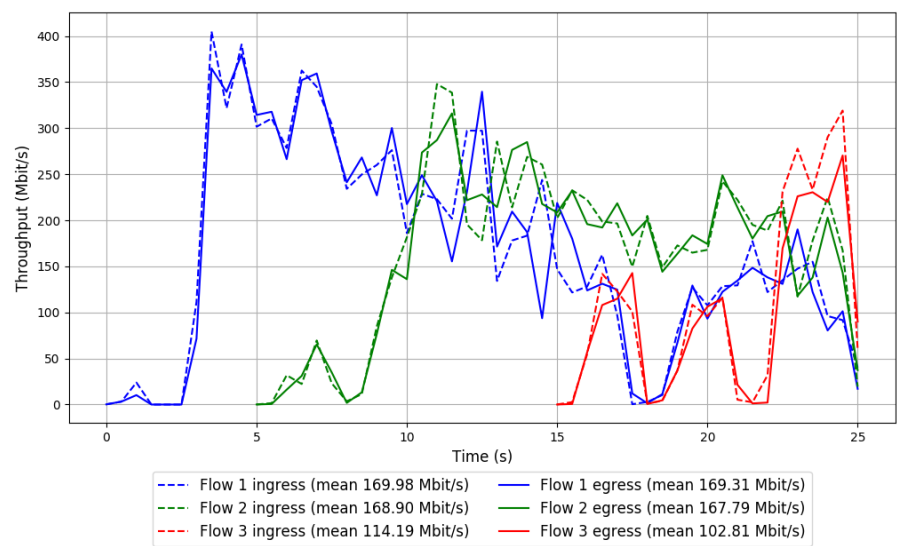
-- Flow 3:

Average throughput: 102.81 Mbit/s

95th percentile per-packet one-way delay: 201.809 ms

Loss rate: 10.56%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-02 16:18:50

End at: 2018-01-02 16:19:20

Below is generated by plot.py at 2018-01-02 21:07:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 300.28 Mbit/s

95th percentile per-packet one-way delay: 137.791 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 238.97 Mbit/s

95th percentile per-packet one-way delay: 142.633 ms

Loss rate: 1.04%

-- Flow 2:

Average throughput: 54.08 Mbit/s

95th percentile per-packet one-way delay: 117.435 ms

Loss rate: 0.01%

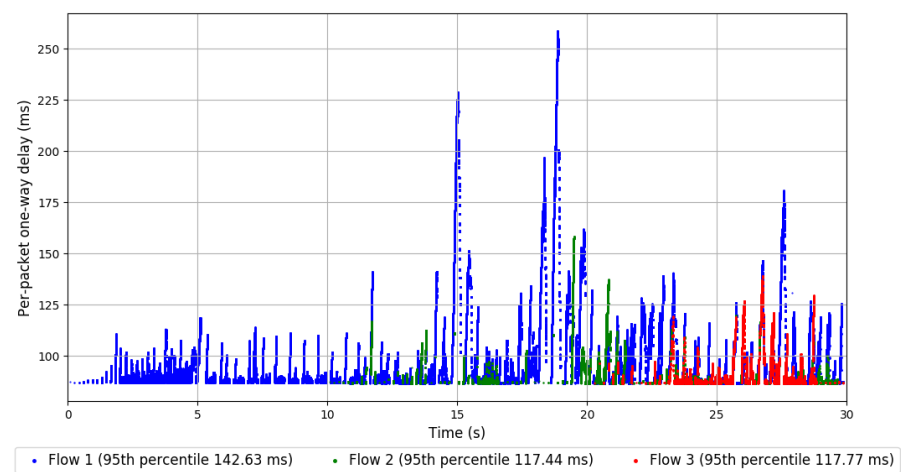
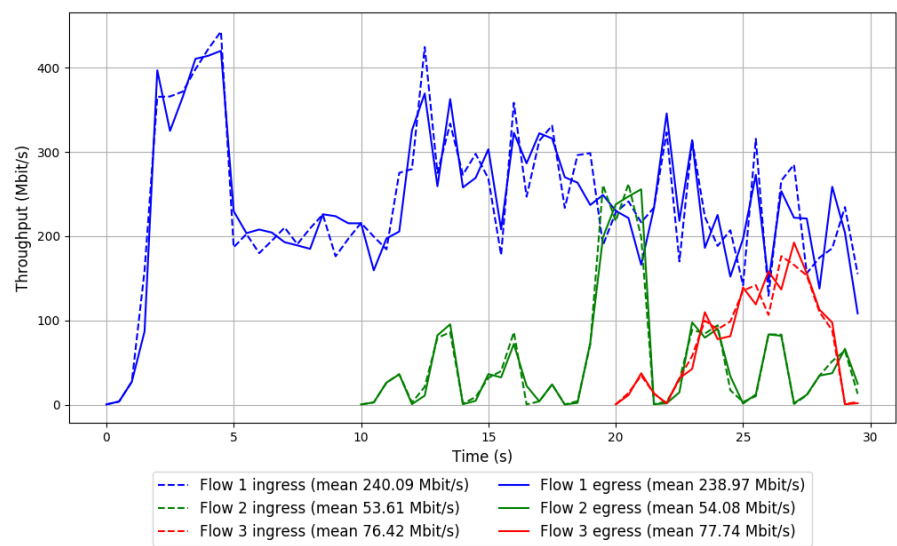
-- Flow 3:

Average throughput: 77.74 Mbit/s

95th percentile per-packet one-way delay: 117.771 ms

Loss rate: 0.13%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-02 16:34:06

End at: 2018-01-02 16:34:36

Below is generated by plot.py at 2018-01-02 21:07:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 278.78 Mbit/s

95th percentile per-packet one-way delay: 266.311 ms

Loss rate: 6.16%

-- Flow 1:

Average throughput: 114.38 Mbit/s

95th percentile per-packet one-way delay: 136.855 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 187.52 Mbit/s

95th percentile per-packet one-way delay: 292.116 ms

Loss rate: 7.97%

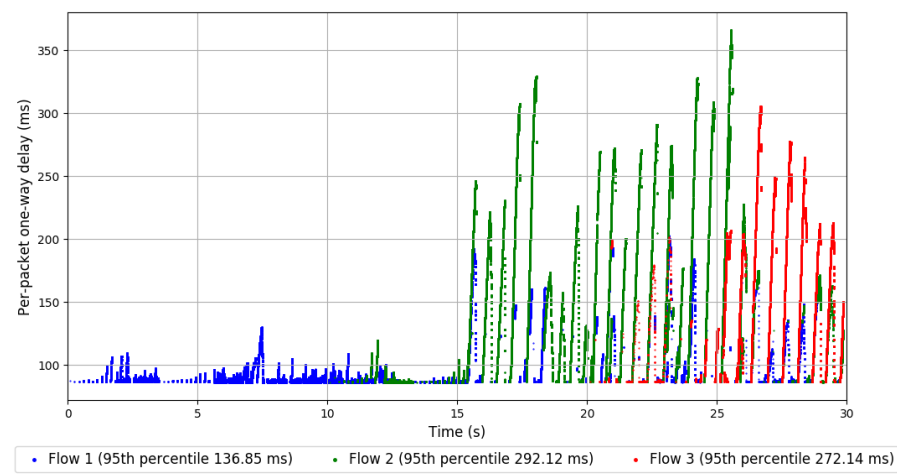
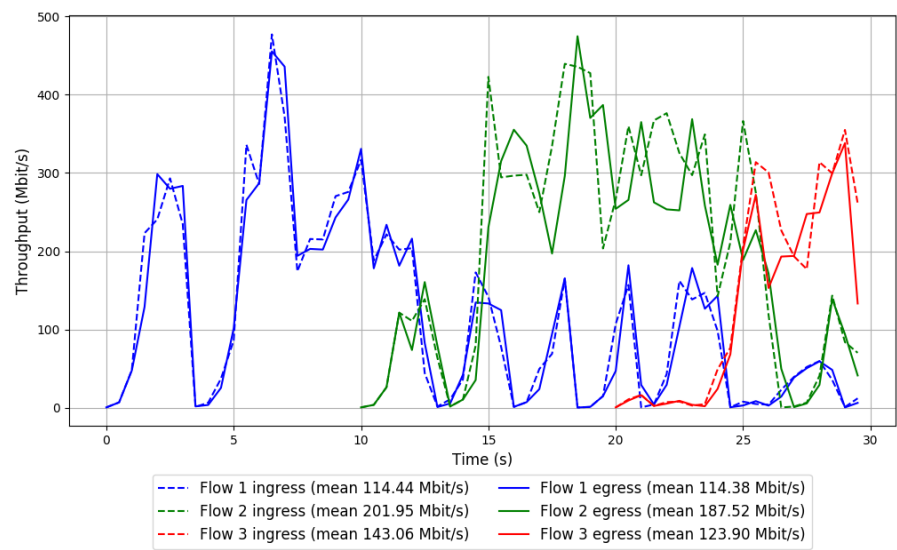
-- Flow 3:

Average throughput: 123.90 Mbit/s

95th percentile per-packet one-way delay: 272.136 ms

Loss rate: 14.30%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-02 16:49:15

End at: 2018-01-02 16:49:45

Below is generated by plot.py at 2018-01-02 21:08:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 293.32 Mbit/s

95th percentile per-packet one-way delay: 214.055 ms

Loss rate: 2.51%

-- Flow 1:

Average throughput: 166.87 Mbit/s

95th percentile per-packet one-way delay: 219.475 ms

Loss rate: 2.28%

-- Flow 2:

Average throughput: 112.20 Mbit/s

95th percentile per-packet one-way delay: 161.351 ms

Loss rate: 0.63%

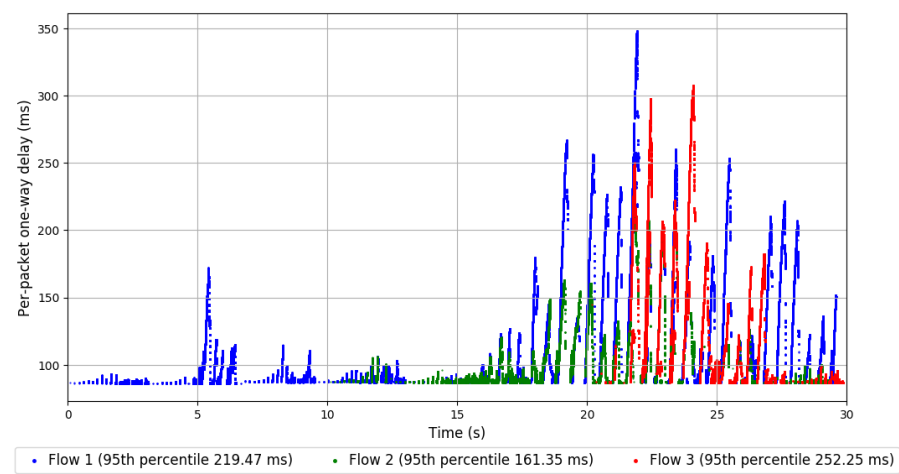
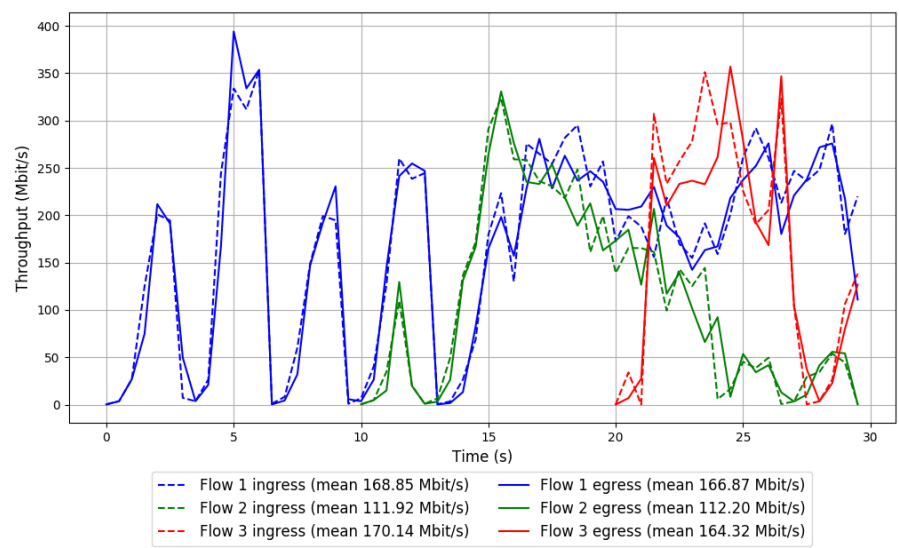
-- Flow 3:

Average throughput: 164.32 Mbit/s

95th percentile per-packet one-way delay: 252.254 ms

Loss rate: 5.67%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-02 17:04:16

End at: 2018-01-02 17:04:46

Below is generated by plot.py at 2018-01-02 21:11:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 314.73 Mbit/s

95th percentile per-packet one-way delay: 145.476 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 246.93 Mbit/s

95th percentile per-packet one-way delay: 149.649 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 79.26 Mbit/s

95th percentile per-packet one-way delay: 131.376 ms

Loss rate: 0.84%

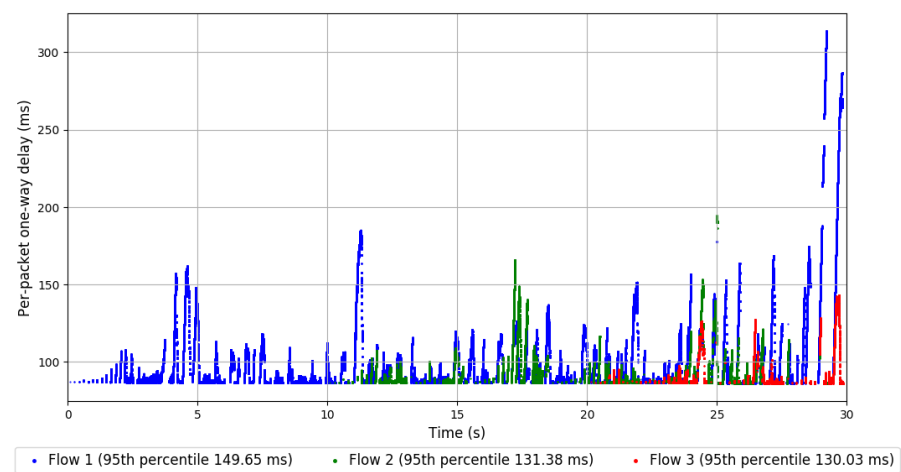
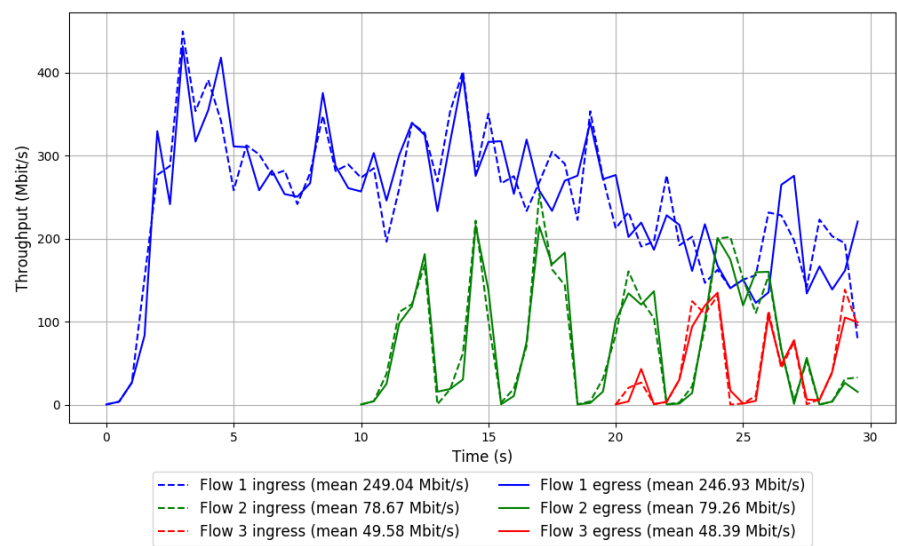
-- Flow 3:

Average throughput: 48.39 Mbit/s

95th percentile per-packet one-way delay: 130.029 ms

Loss rate: 3.00%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-02 17:18:13

End at: 2018-01-02 17:18:43

Below is generated by plot.py at 2018-01-02 21:11:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 252.15 Mbit/s

95th percentile per-packet one-way delay: 158.025 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 125.82 Mbit/s

95th percentile per-packet one-way delay: 136.513 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 146.40 Mbit/s

95th percentile per-packet one-way delay: 203.653 ms

Loss rate: 0.59%

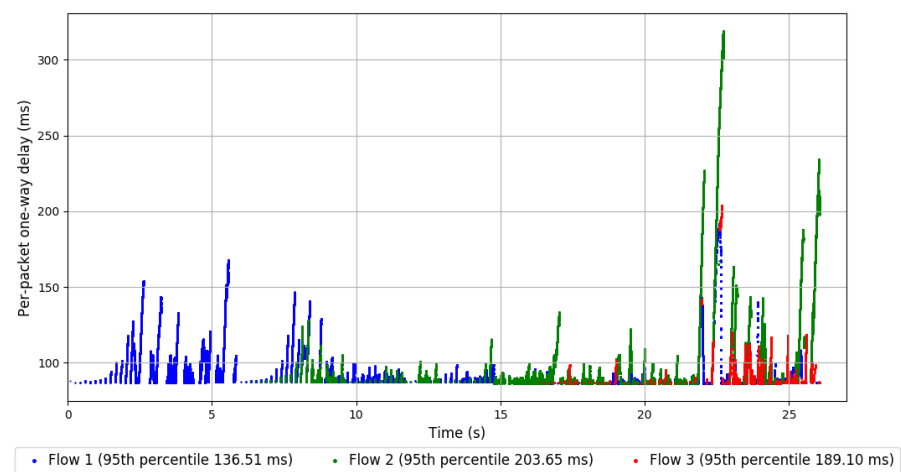
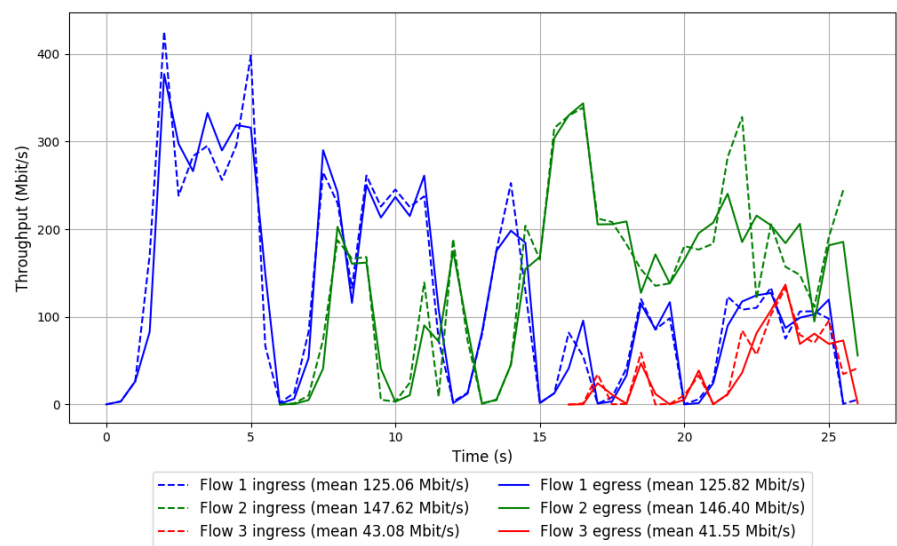
-- Flow 3:

Average throughput: 41.55 Mbit/s

95th percentile per-packet one-way delay: 189.102 ms

Loss rate: 4.98%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-02 17:33:16

End at: 2018-01-02 17:33:46

Below is generated by plot.py at 2018-01-02 21:11:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 293.51 Mbit/s

95th percentile per-packet one-way delay: 194.007 ms

Loss rate: 1.95%

-- Flow 1:

Average throughput: 180.50 Mbit/s

95th percentile per-packet one-way delay: 204.065 ms

Loss rate: 1.77%

-- Flow 2:

Average throughput: 129.07 Mbit/s

95th percentile per-packet one-way delay: 147.776 ms

Loss rate: 1.32%

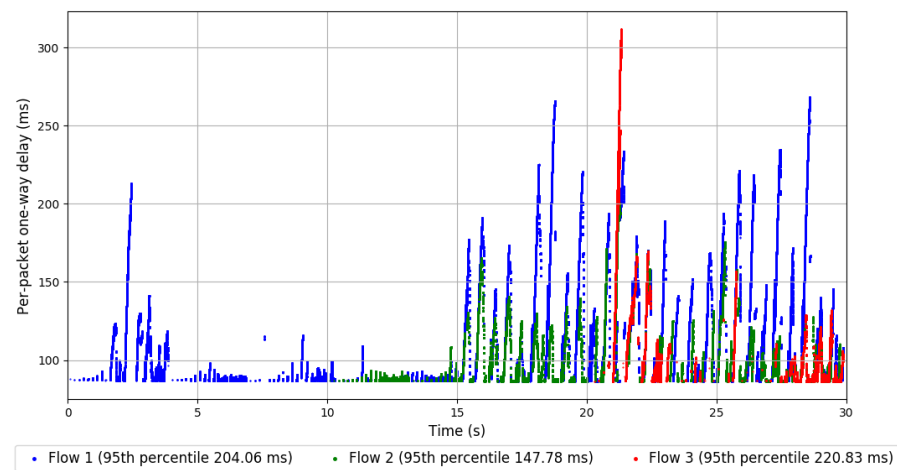
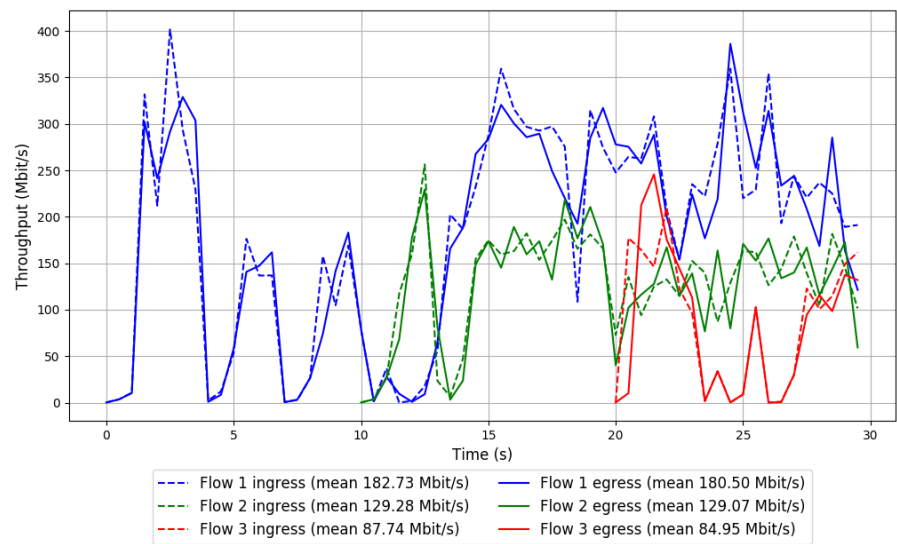
-- Flow 3:

Average throughput: 84.95 Mbit/s

95th percentile per-packet one-way delay: 220.832 ms

Loss rate: 4.94%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-02 17:48:23

End at: 2018-01-02 17:48:53

Below is generated by plot.py at 2018-01-02 21:12:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 321.60 Mbit/s

95th percentile per-packet one-way delay: 211.119 ms

Loss rate: 4.73%

-- Flow 1:

Average throughput: 177.11 Mbit/s

95th percentile per-packet one-way delay: 200.131 ms

Loss rate: 2.96%

-- Flow 2:

Average throughput: 130.70 Mbit/s

95th percentile per-packet one-way delay: 201.617 ms

Loss rate: 4.81%

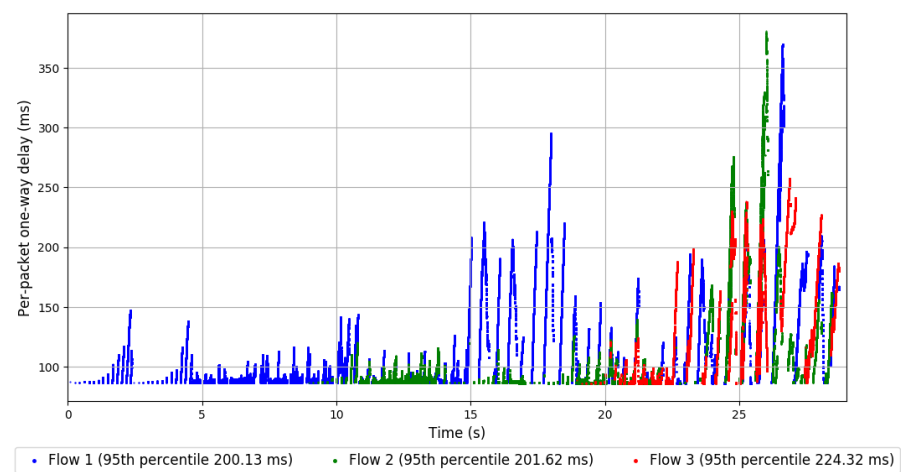
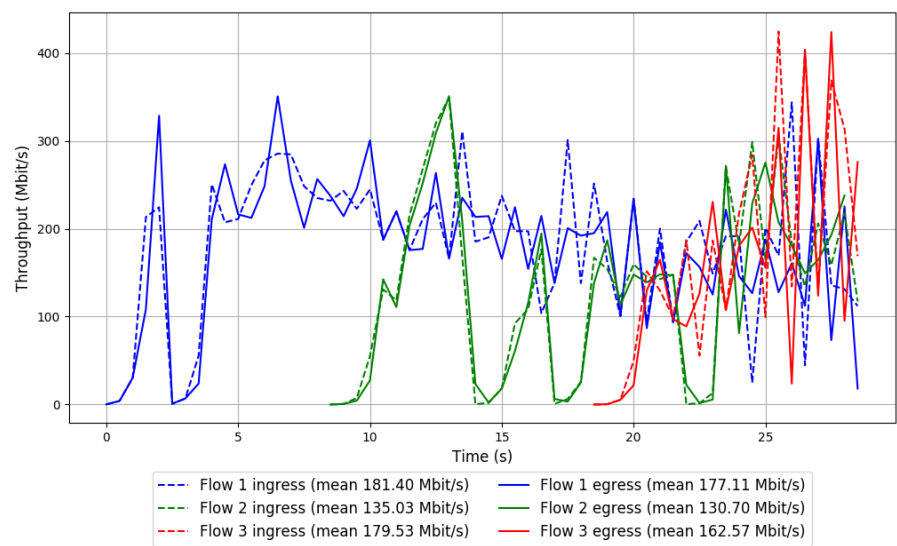
-- Flow 3:

Average throughput: 162.57 Mbit/s

95th percentile per-packet one-way delay: 224.321 ms

Loss rate: 9.87%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-01-02 15:31:49

End at: 2018-01-02 15:32:19

Below is generated by plot.py at 2018-01-02 21:12:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 132.40 Mbit/s

95th percentile per-packet one-way delay: 86.821 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 77.13 Mbit/s

95th percentile per-packet one-way delay: 86.719 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 64.17 Mbit/s

95th percentile per-packet one-way delay: 86.871 ms

Loss rate: 0.94%

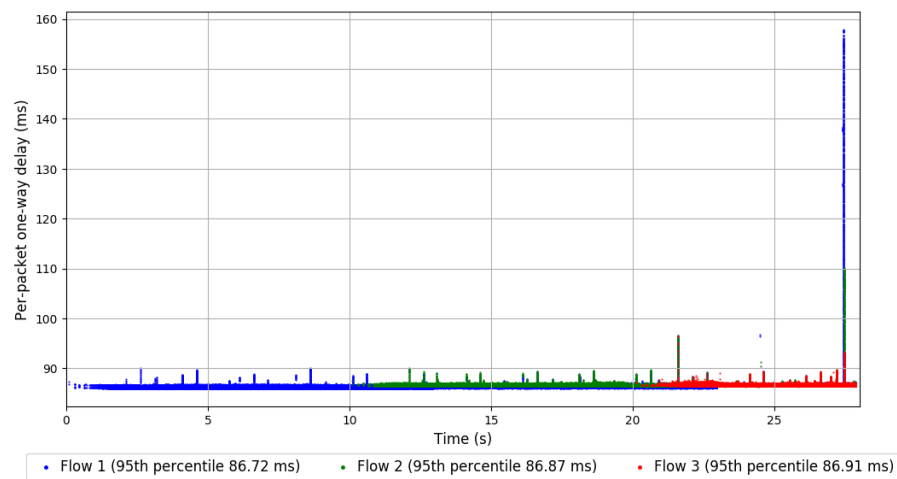
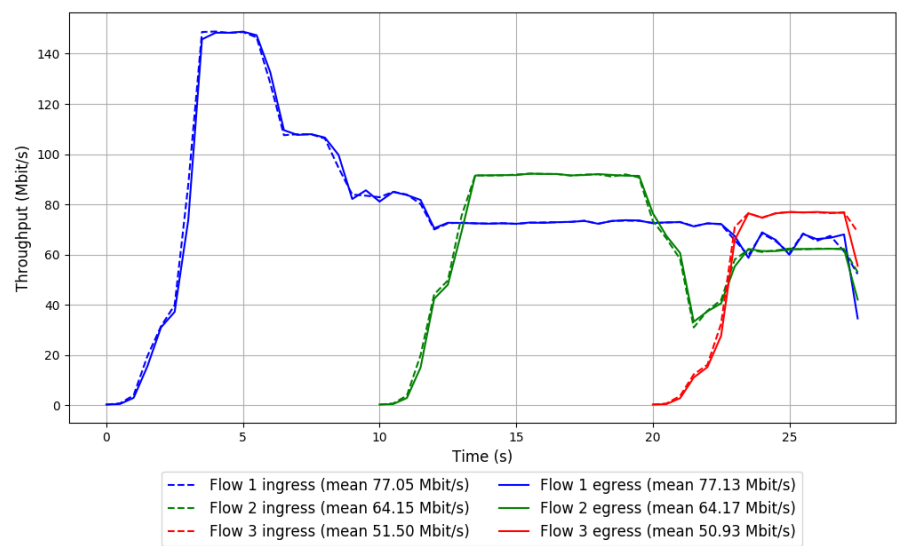
-- Flow 3:

Average throughput: 50.93 Mbit/s

95th percentile per-packet one-way delay: 86.911 ms

Loss rate: 3.28%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-02 15:46:58

End at: 2018-01-02 15:47:28

Below is generated by plot.py at 2018-01-02 21:12:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 118.07 Mbit/s

95th percentile per-packet one-way delay: 86.893 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 79.62 Mbit/s

95th percentile per-packet one-way delay: 86.822 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 60.12 Mbit/s

95th percentile per-packet one-way delay: 87.180 ms

Loss rate: 0.90%

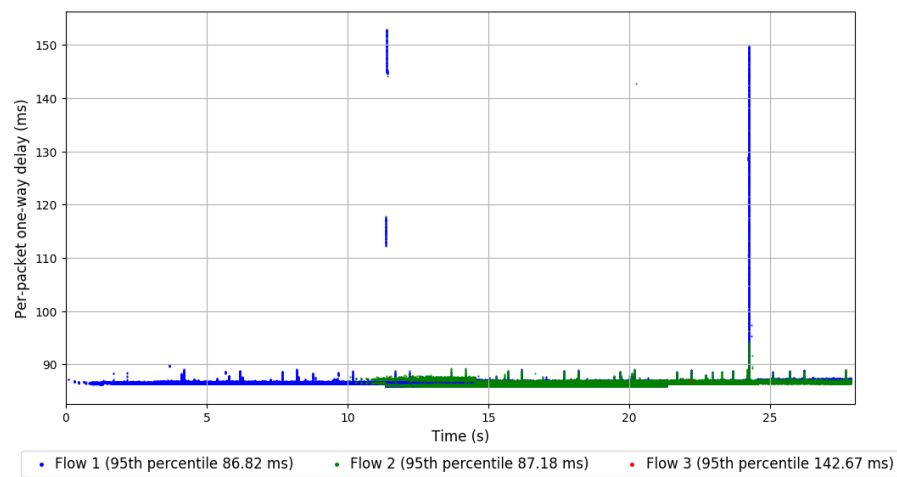
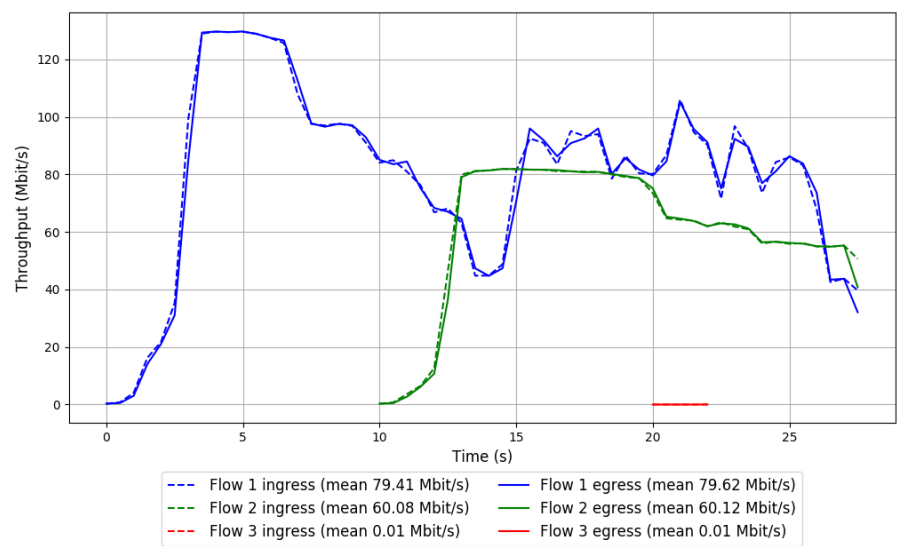
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 142.672 ms

Loss rate: 46.17%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-02 16:01:50

End at: 2018-01-02 16:02:20

Below is generated by plot.py at 2018-01-02 21:12:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.53 Mbit/s

95th percentile per-packet one-way delay: 86.966 ms

Loss rate: 1.10%

-- Flow 1:

Average throughput: 70.35 Mbit/s

95th percentile per-packet one-way delay: 86.992 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 62.07 Mbit/s

95th percentile per-packet one-way delay: 86.848 ms

Loss rate: 1.06%

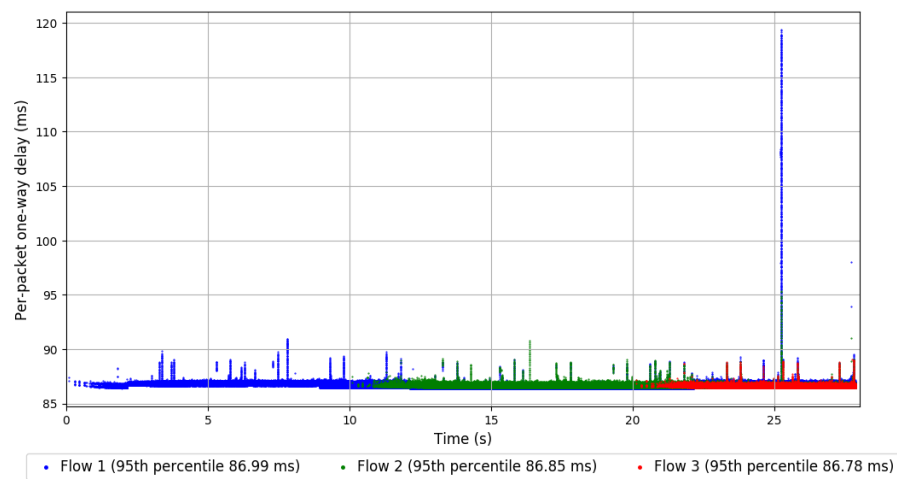
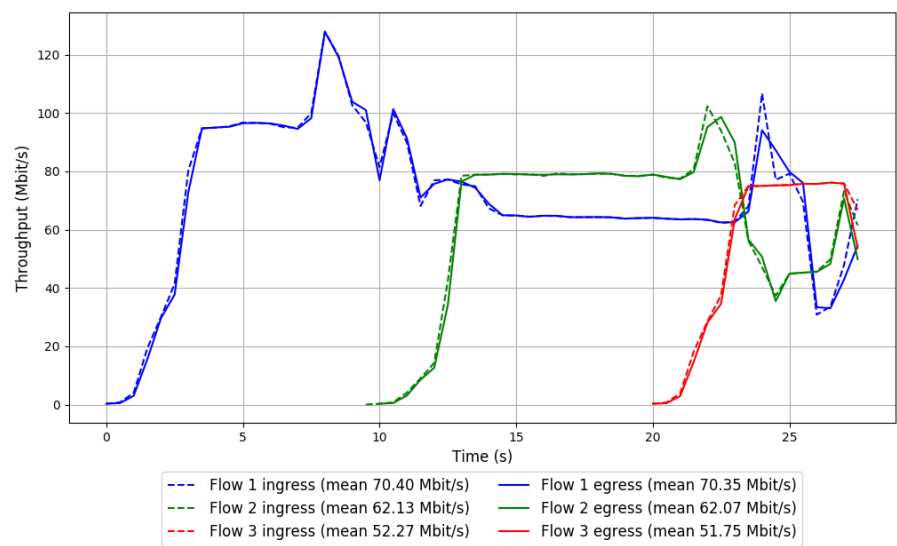
-- Flow 3:

Average throughput: 51.75 Mbit/s

95th percentile per-packet one-way delay: 86.776 ms

Loss rate: 3.17%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-02 16:16:46

End at: 2018-01-02 16:17:16

Below is generated by plot.py at 2018-01-02 21:12:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 114.95 Mbit/s

95th percentile per-packet one-way delay: 86.835 ms

Loss rate: 1.00%

-- Flow 1:

Average throughput: 56.91 Mbit/s

95th percentile per-packet one-way delay: 86.846 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 68.40 Mbit/s

95th percentile per-packet one-way delay: 86.837 ms

Loss rate: 1.12%

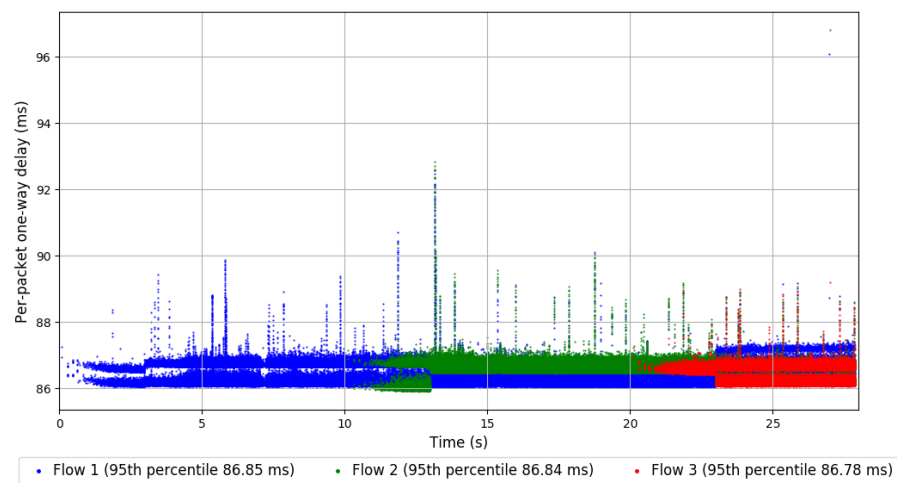
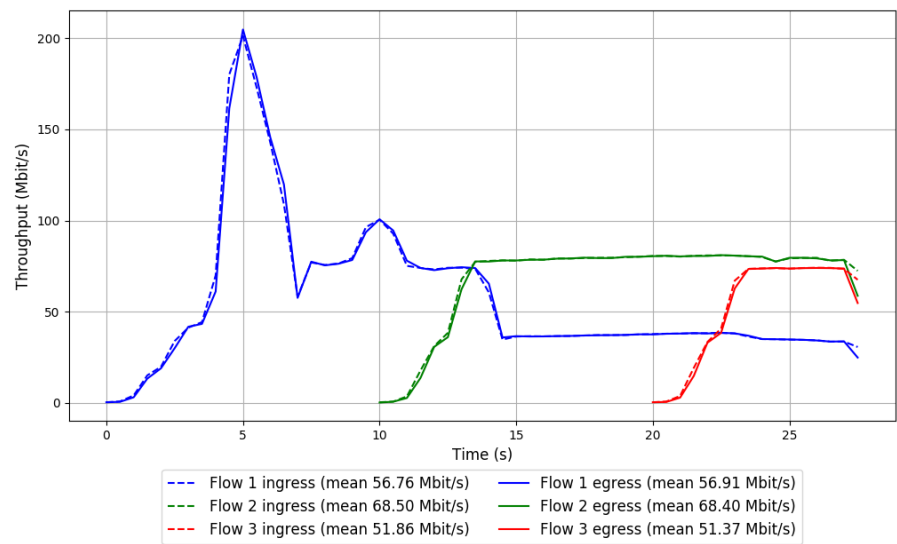
-- Flow 3:

Average throughput: 51.37 Mbit/s

95th percentile per-packet one-way delay: 86.776 ms

Loss rate: 3.11%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-02 16:32:01

End at: 2018-01-02 16:32:31

Below is generated by plot.py at 2018-01-02 21:13:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.74 Mbit/s

95th percentile per-packet one-way delay: 86.766 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 65.61 Mbit/s

95th percentile per-packet one-way delay: 86.767 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 58.37 Mbit/s

95th percentile per-packet one-way delay: 86.698 ms

Loss rate: 0.47%

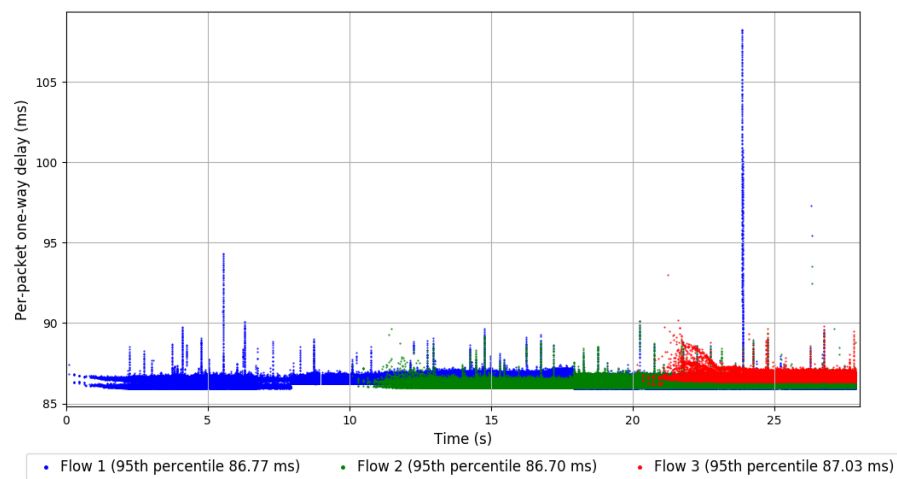
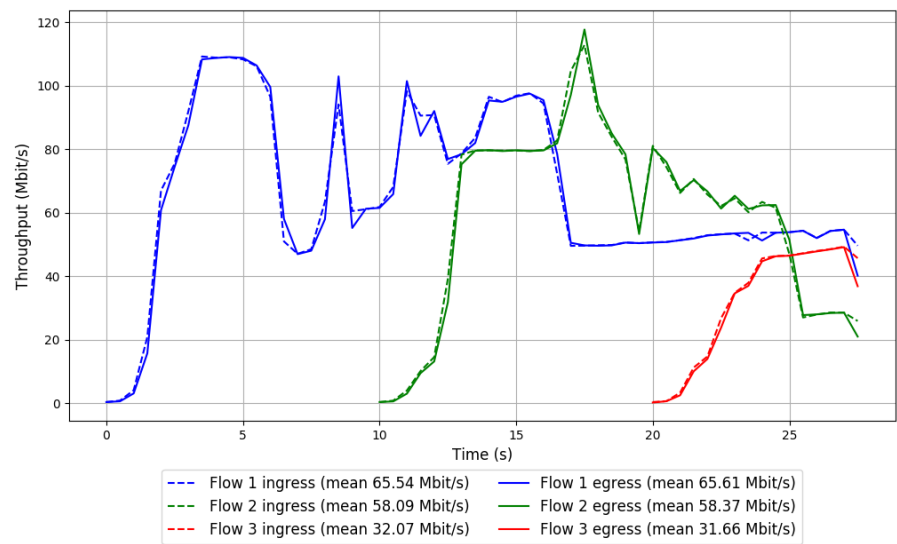
-- Flow 3:

Average throughput: 31.66 Mbit/s

95th percentile per-packet one-way delay: 87.033 ms

Loss rate: 3.46%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-02 16:47:09

End at: 2018-01-02 16:47:39

Below is generated by plot.py at 2018-01-02 21:14:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 117.00 Mbit/s

95th percentile per-packet one-way delay: 86.881 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 68.69 Mbit/s

95th percentile per-packet one-way delay: 86.916 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 59.67 Mbit/s

95th percentile per-packet one-way delay: 86.599 ms

Loss rate: 0.69%

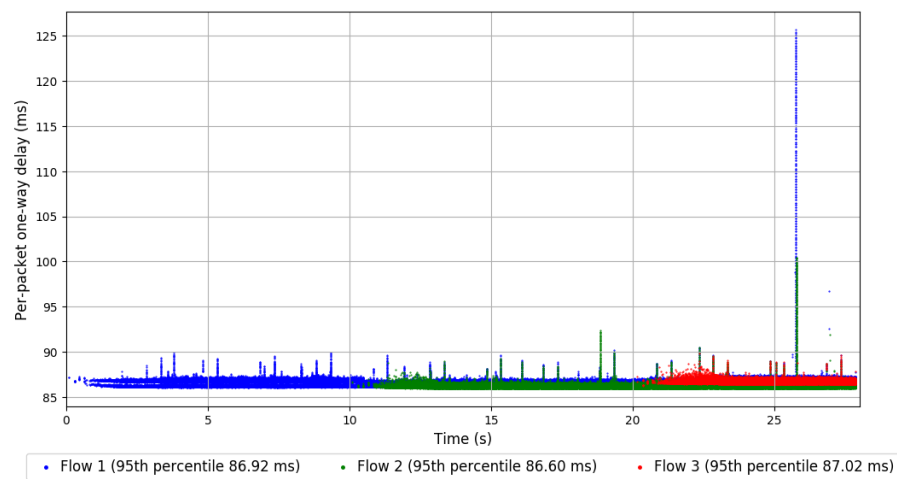
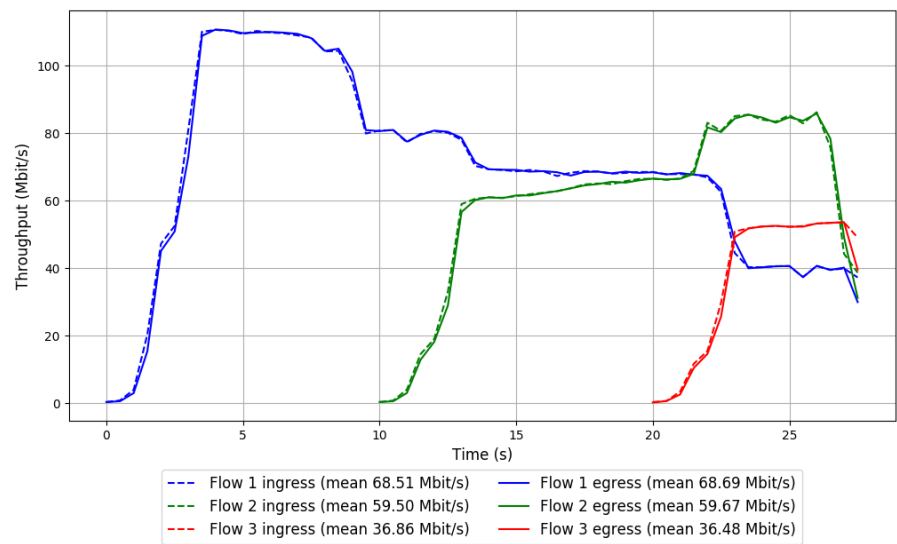
-- Flow 3:

Average throughput: 36.48 Mbit/s

95th percentile per-packet one-way delay: 87.023 ms

Loss rate: 3.20%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-02 17:02:11

End at: 2018-01-02 17:02:41

Below is generated by plot.py at 2018-01-02 21:14:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 112.14 Mbit/s

95th percentile per-packet one-way delay: 87.261 ms

Loss rate: 1.41%

-- Flow 1:

Average throughput: 60.49 Mbit/s

95th percentile per-packet one-way delay: 87.030 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 50.97 Mbit/s

95th percentile per-packet one-way delay: 87.411 ms

Loss rate: 2.26%

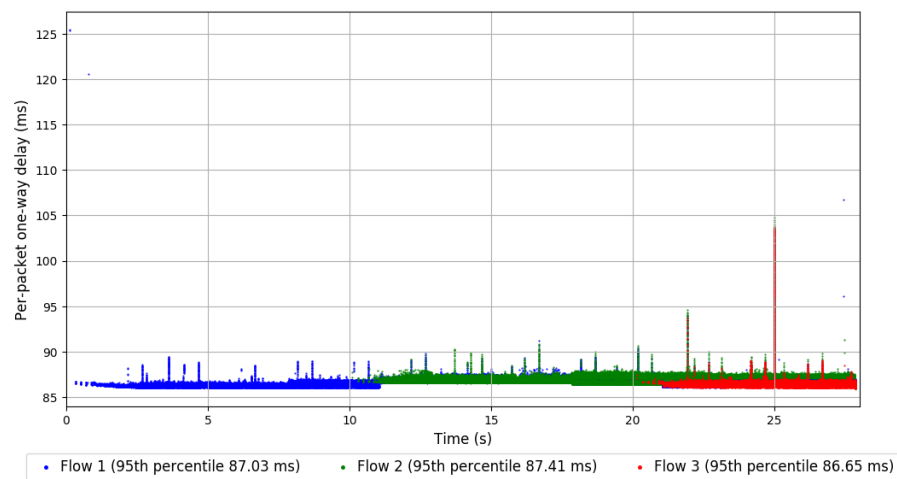
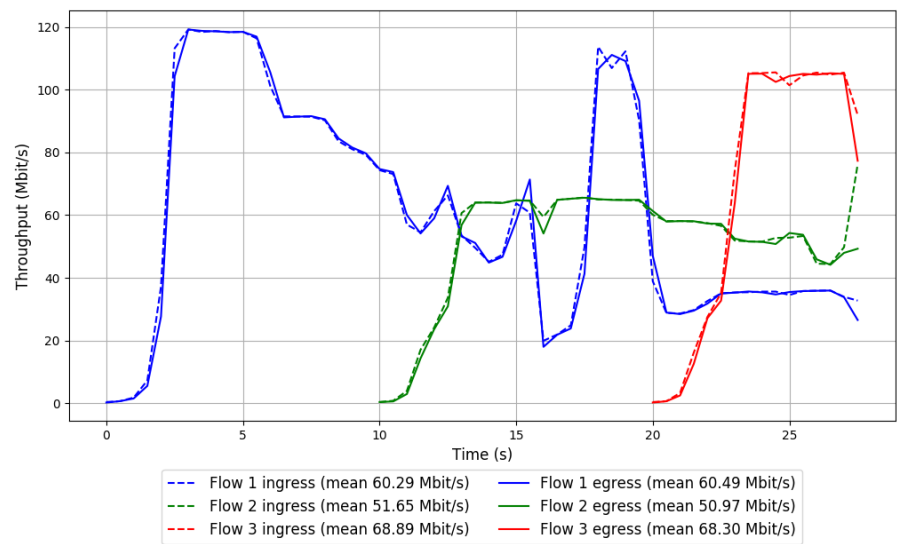
-- Flow 3:

Average throughput: 68.30 Mbit/s

95th percentile per-packet one-way delay: 86.652 ms

Loss rate: 3.03%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-01-02 17:16:05

End at: 2018-01-02 17:16:35

Below is generated by plot.py at 2018-01-02 21:14:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.63 Mbit/s

95th percentile per-packet one-way delay: 86.839 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 74.32 Mbit/s

95th percentile per-packet one-way delay: 86.804 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 55.21 Mbit/s

95th percentile per-packet one-way delay: 86.913 ms

Loss rate: 0.87%

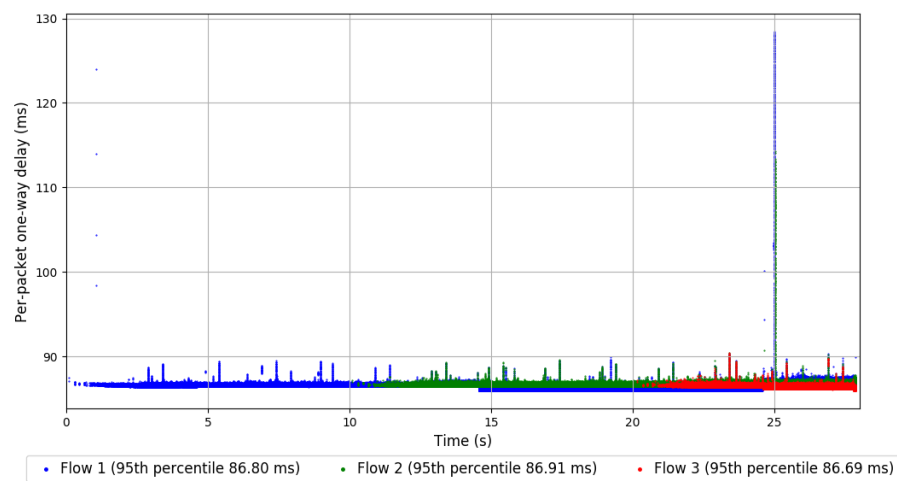
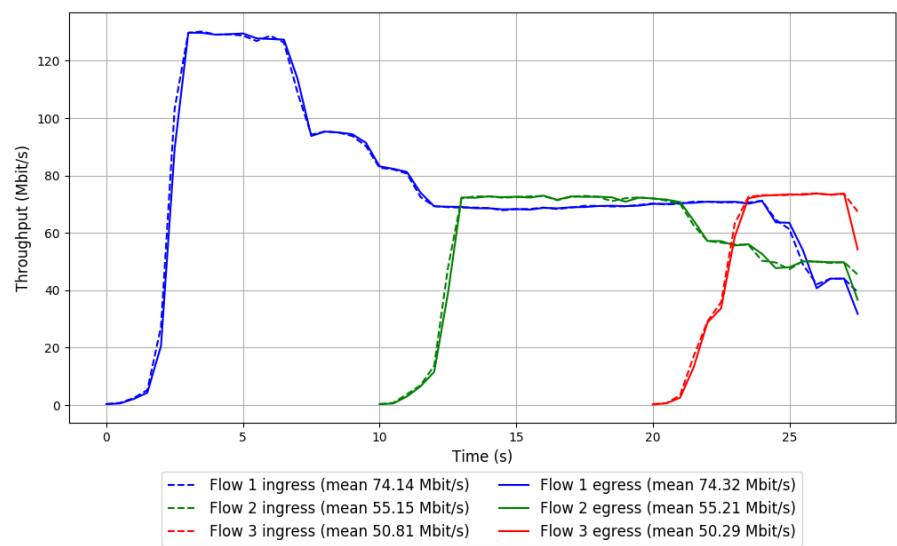
-- Flow 3:

Average throughput: 50.29 Mbit/s

95th percentile per-packet one-way delay: 86.687 ms

Loss rate: 3.19%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-02 17:31:08

End at: 2018-01-02 17:31:38

Below is generated by plot.py at 2018-01-02 21:14:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.27 Mbit/s

95th percentile per-packet one-way delay: 87.124 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 72.75 Mbit/s

95th percentile per-packet one-way delay: 86.894 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 53.15 Mbit/s

95th percentile per-packet one-way delay: 87.066 ms

Loss rate: 1.10%

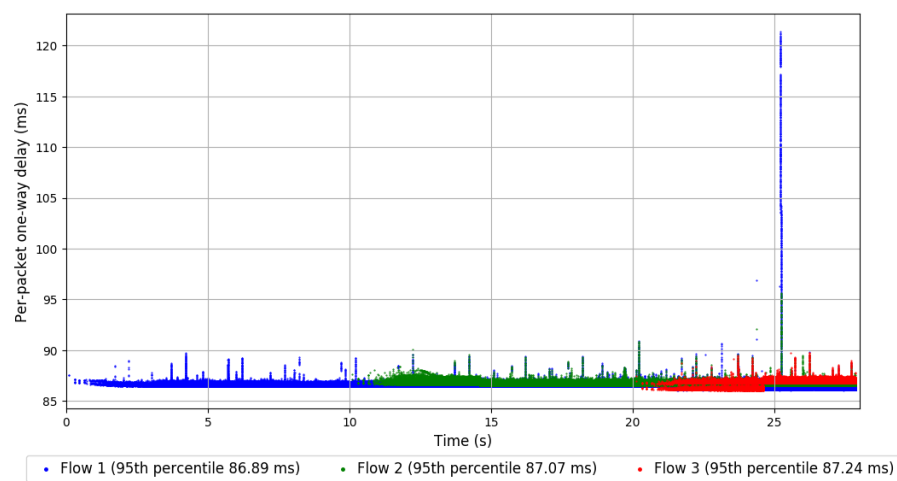
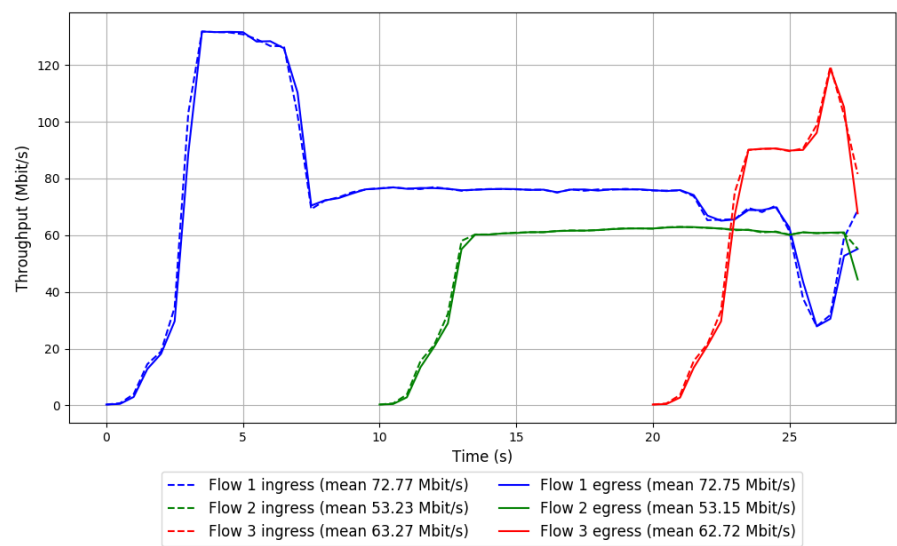
-- Flow 3:

Average throughput: 62.72 Mbit/s

95th percentile per-packet one-way delay: 87.243 ms

Loss rate: 3.03%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-02 17:46:15

End at: 2018-01-02 17:46:45

Below is generated by plot.py at 2018-01-02 21:14:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 119.64 Mbit/s

95th percentile per-packet one-way delay: 86.890 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 71.66 Mbit/s

95th percentile per-packet one-way delay: 86.865 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 48.54 Mbit/s

95th percentile per-packet one-way delay: 87.041 ms

Loss rate: 1.90%

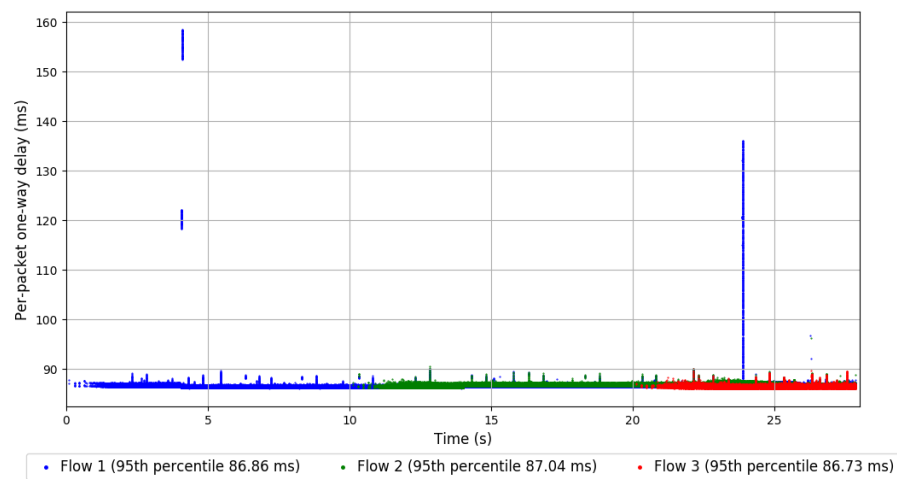
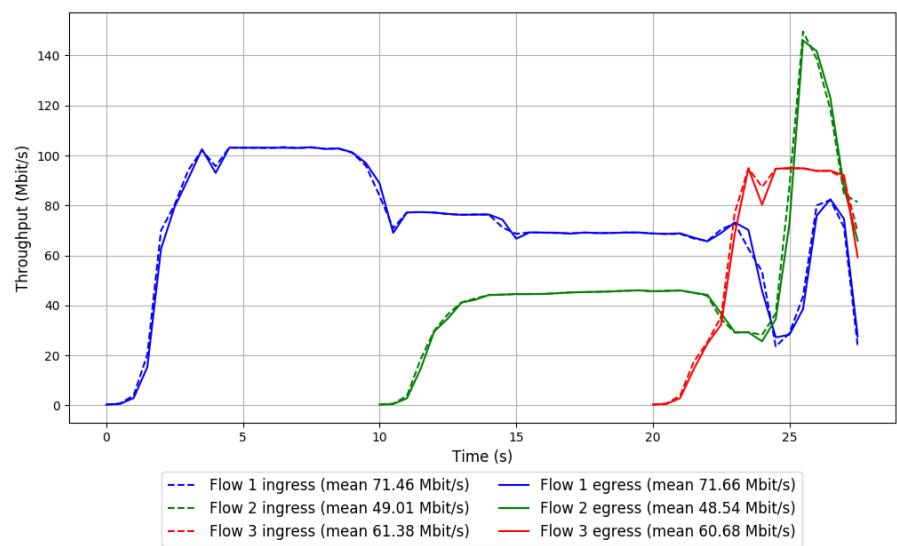
-- Flow 3:

Average throughput: 60.68 Mbit/s

95th percentile per-packet one-way delay: 86.726 ms

Loss rate: 3.30%

Run 10: Report of Copa — Data Link

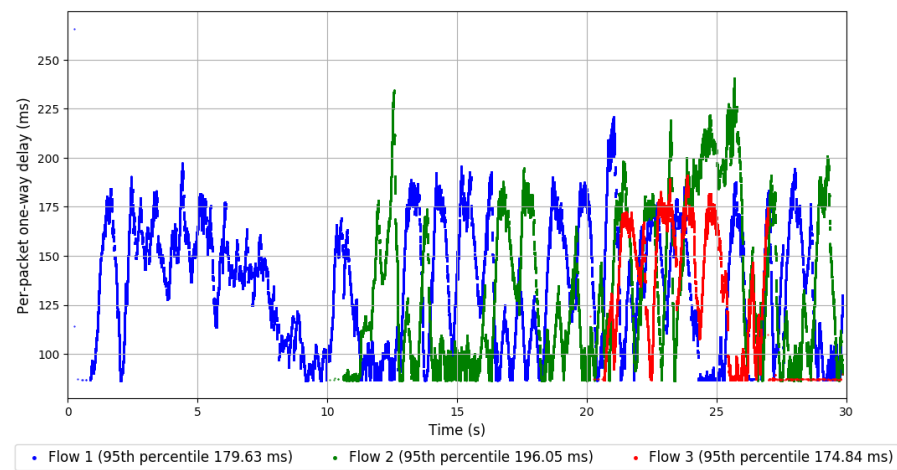
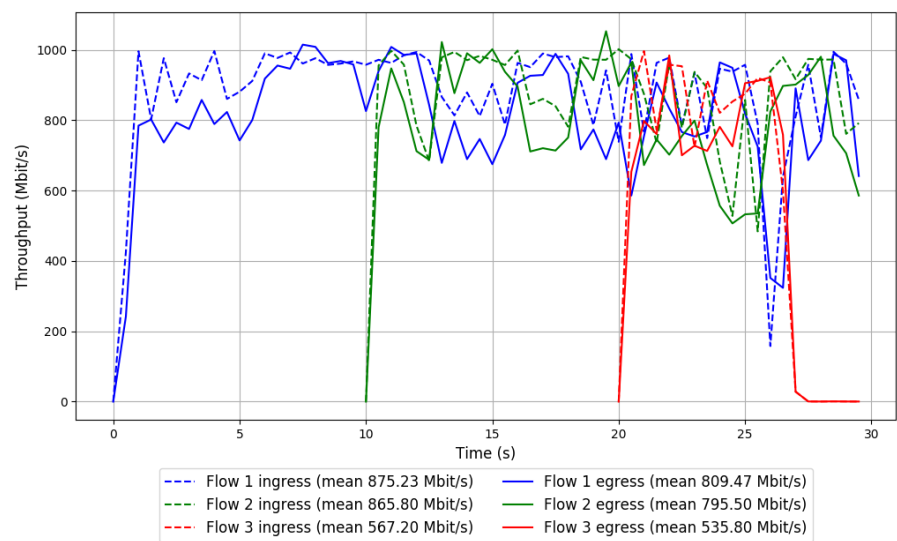


```
Run 1: Statistics of FillP

Start at: 2018-01-02 15:36:21
End at: 2018-01-02 15:36:51

# Below is generated by plot.py at 2018-01-02 21:38:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1515.83 Mbit/s
95th percentile per-packet one-way delay: 183.855 ms
Loss rate: 8.57%
-- Flow 1:
Average throughput: 809.47 Mbit/s
95th percentile per-packet one-way delay: 179.628 ms
Loss rate: 8.60%
-- Flow 2:
Average throughput: 795.50 Mbit/s
95th percentile per-packet one-way delay: 196.052 ms
Loss rate: 8.92%
-- Flow 3:
Average throughput: 535.80 Mbit/s
95th percentile per-packet one-way delay: 174.843 ms
Loss rate: 7.32%
```


Run 1: Report of FillP — Data Link

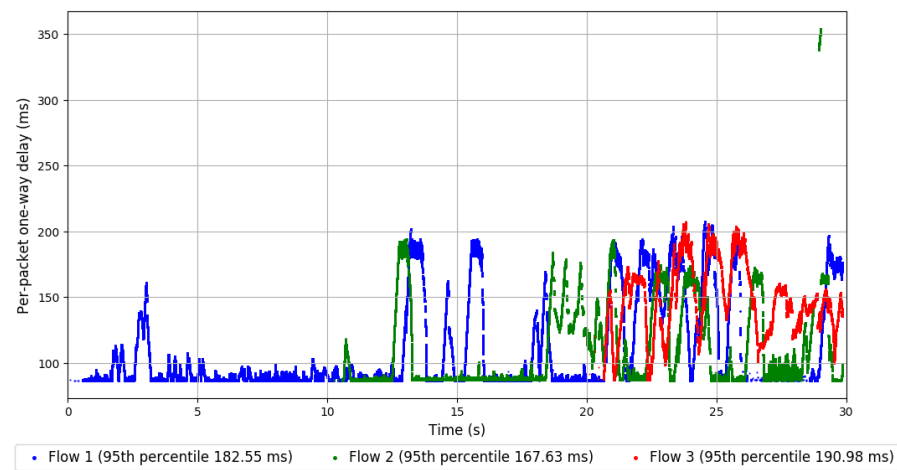
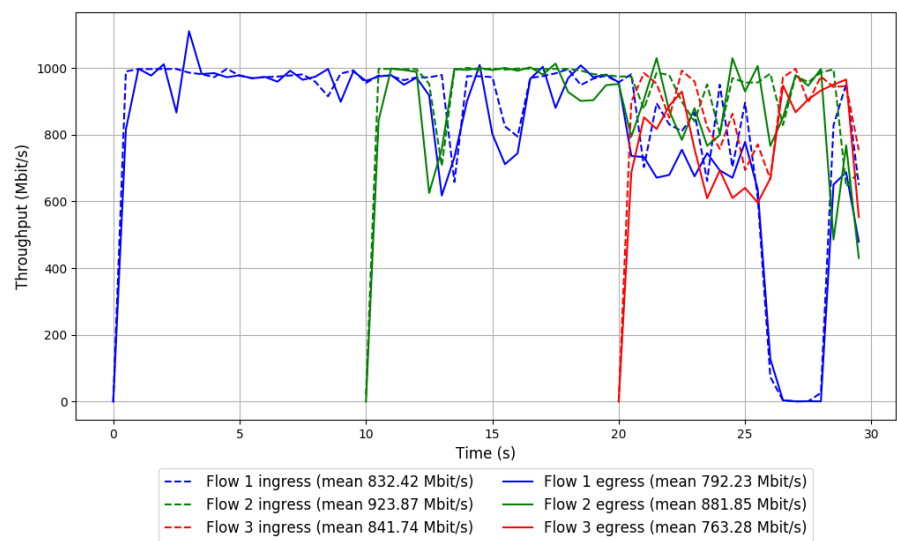


```
Run 2: Statistics of FillP

Start at: 2018-01-02 15:51:09
End at: 2018-01-02 15:51:39

# Below is generated by plot.py at 2018-01-02 21:41:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1627.32 Mbit/s
95th percentile per-packet one-way delay: 182.497 ms
Loss rate: 6.29%
-- Flow 1:
Average throughput: 792.23 Mbit/s
95th percentile per-packet one-way delay: 182.553 ms
Loss rate: 5.38%
-- Flow 2:
Average throughput: 881.85 Mbit/s
95th percentile per-packet one-way delay: 167.629 ms
Loss rate: 5.39%
-- Flow 3:
Average throughput: 763.28 Mbit/s
95th percentile per-packet one-way delay: 190.979 ms
Loss rate: 10.97%
```

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-02 16:06:20

End at: 2018-01-02 16:06:50

Below is generated by plot.py at 2018-01-02 21:41:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 1306.12 Mbit/s

95th percentile per-packet one-way delay: 177.068 ms

Loss rate: 5.07%

-- Flow 1:

Average throughput: 458.30 Mbit/s

95th percentile per-packet one-way delay: 155.801 ms

Loss rate: 2.02%

-- Flow 2:

Average throughput: 875.84 Mbit/s

95th percentile per-packet one-way delay: 179.963 ms

Loss rate: 5.13%

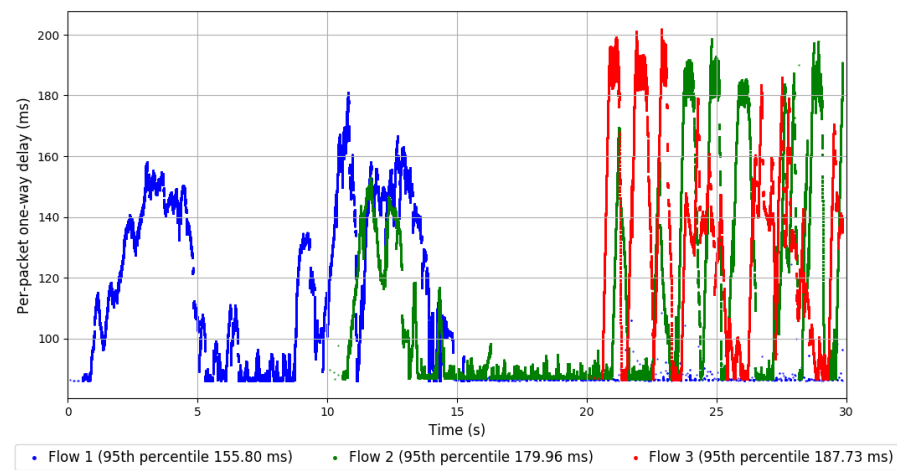
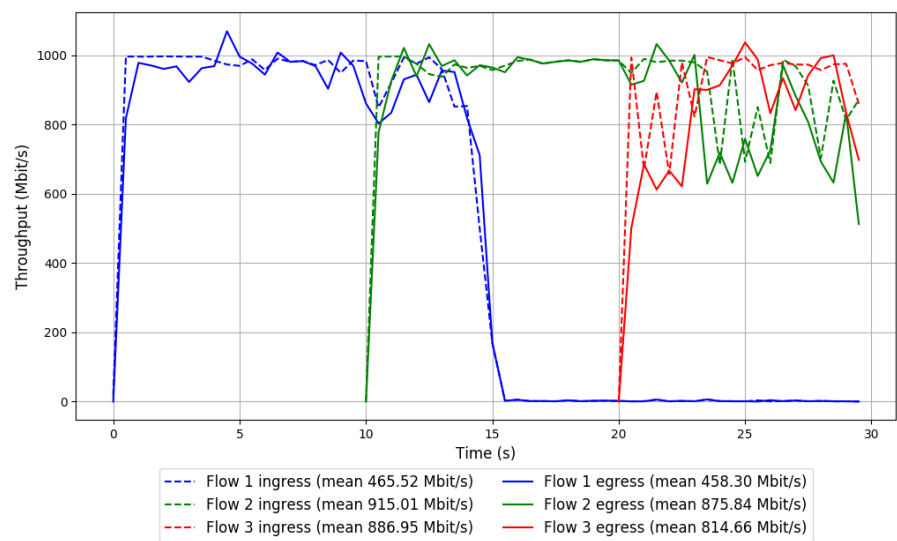
-- Flow 3:

Average throughput: 814.66 Mbit/s

95th percentile per-packet one-way delay: 187.728 ms

Loss rate: 9.76%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-01-02 16:21:15

End at: 2018-01-02 16:21:45

Below is generated by plot.py at 2018-01-02 21:42:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 1564.84 Mbit/s

95th percentile per-packet one-way delay: 191.776 ms

Loss rate: 10.39%

-- Flow 1:

Average throughput: 800.27 Mbit/s

95th percentile per-packet one-way delay: 201.525 ms

Loss rate: 9.67%

-- Flow 2:

Average throughput: 783.07 Mbit/s

95th percentile per-packet one-way delay: 189.747 ms

Loss rate: 10.67%

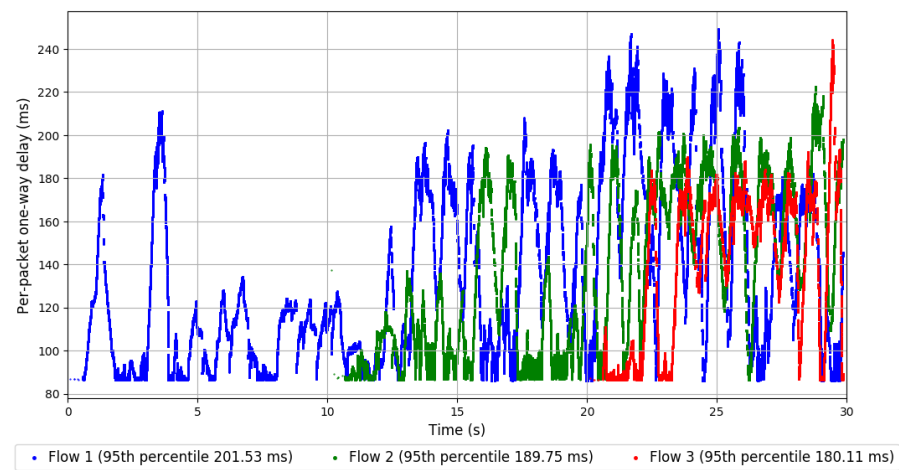
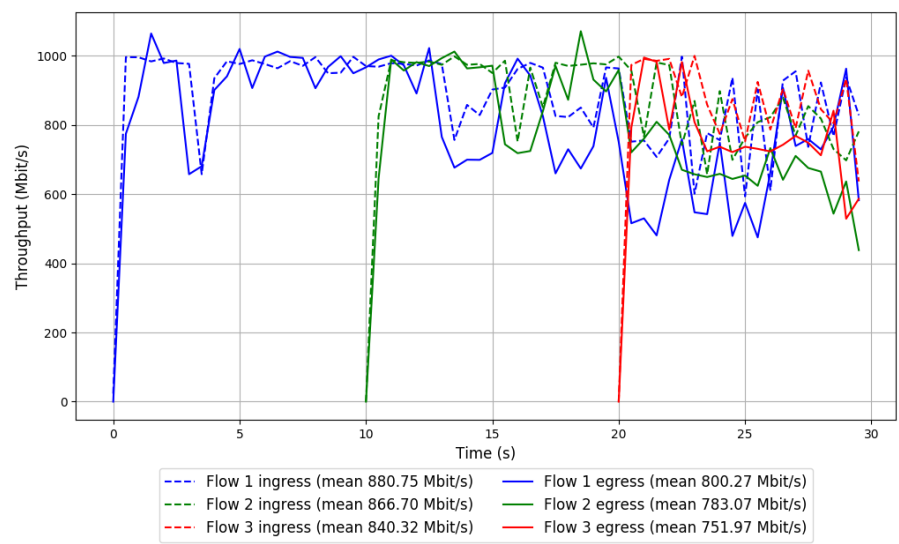
-- Flow 3:

Average throughput: 751.97 Mbit/s

95th percentile per-packet one-way delay: 180.111 ms

Loss rate: 12.10%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-02 16:36:31

End at: 2018-01-02 16:37:01

Below is generated by plot.py at 2018-01-02 21:42:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 1453.01 Mbit/s

95th percentile per-packet one-way delay: 252.637 ms

Loss rate: 5.55%

-- Flow 1:

Average throughput: 771.67 Mbit/s

95th percentile per-packet one-way delay: 166.609 ms

Loss rate: 3.31%

-- Flow 2:

Average throughput: 830.50 Mbit/s

95th percentile per-packet one-way delay: 291.933 ms

Loss rate: 7.51%

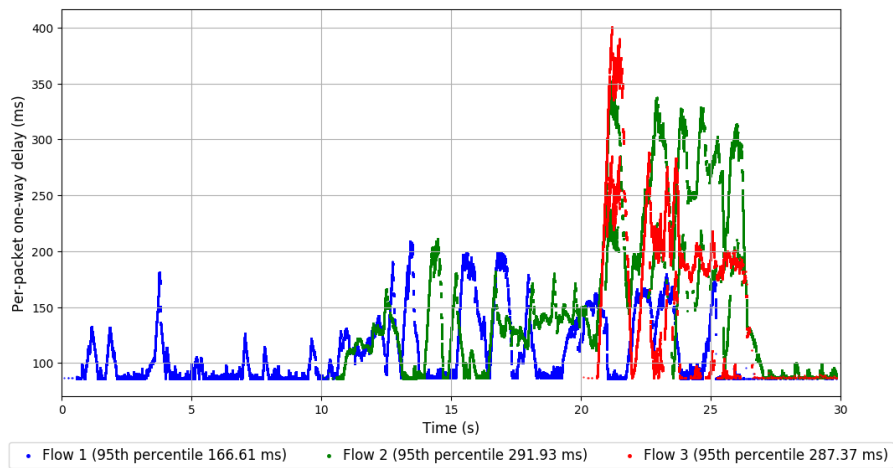
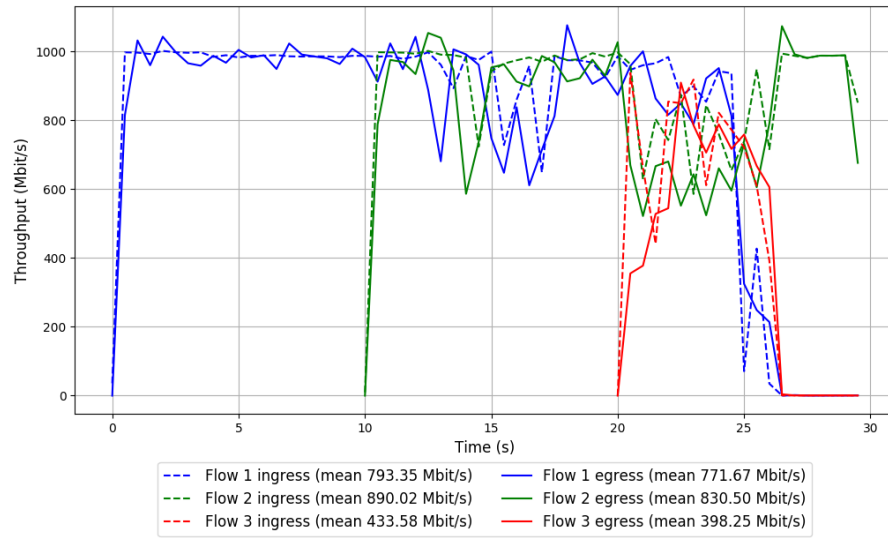
-- Flow 3:

Average throughput: 398.25 Mbit/s

95th percentile per-packet one-way delay: 287.371 ms

Loss rate: 9.83%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-02 16:51:35

End at: 2018-01-02 16:52:05

Below is generated by plot.py at 2018-01-02 21:42:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 1574.72 Mbit/s

95th percentile per-packet one-way delay: 188.271 ms

Loss rate: 8.55%

-- Flow 1:

Average throughput: 735.61 Mbit/s

95th percentile per-packet one-way delay: 194.565 ms

Loss rate: 10.07%

-- Flow 2:

Average throughput: 885.01 Mbit/s

95th percentile per-packet one-way delay: 164.898 ms

Loss rate: 5.38%

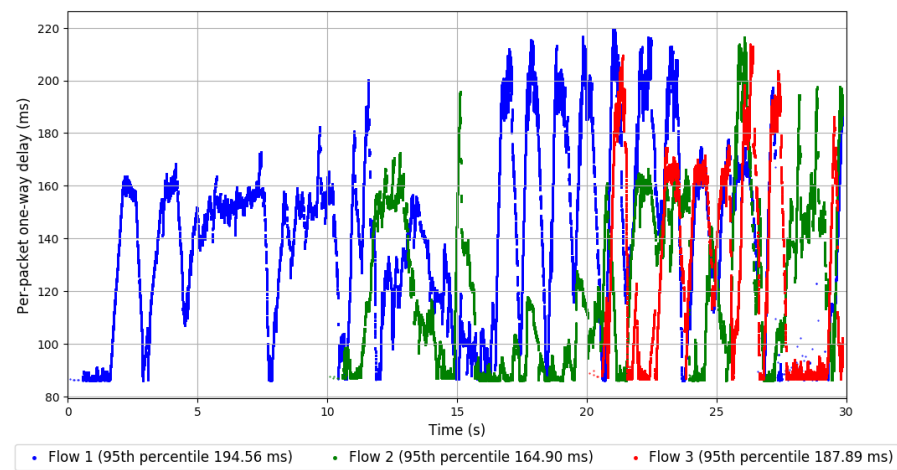
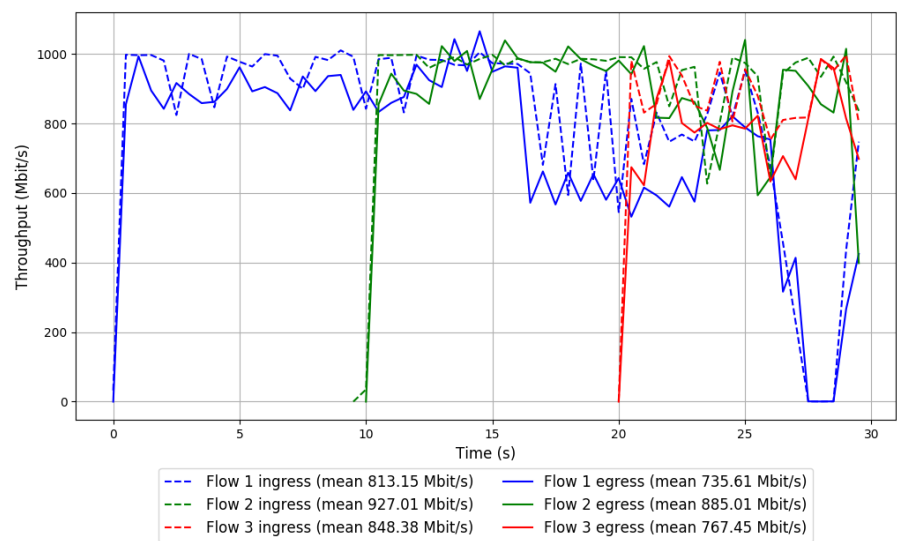
-- Flow 3:

Average throughput: 767.45 Mbit/s

95th percentile per-packet one-way delay: 187.894 ms

Loss rate: 11.16%

Run 6: Report of FillP — Data Link

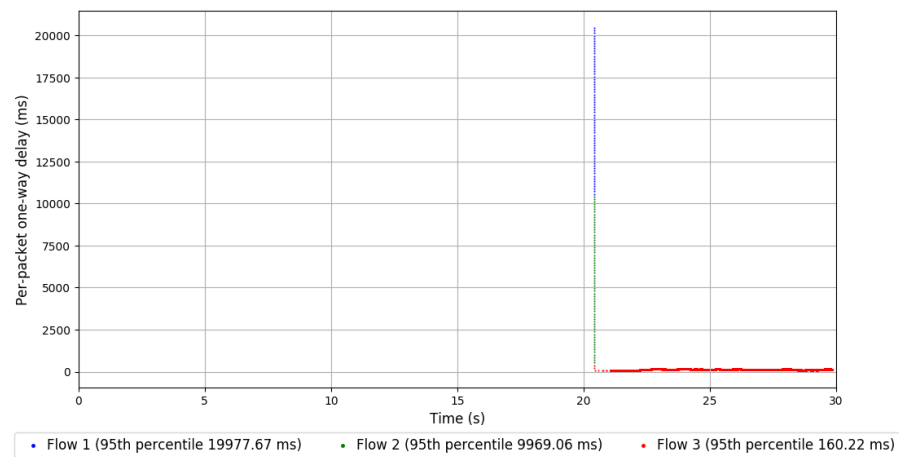
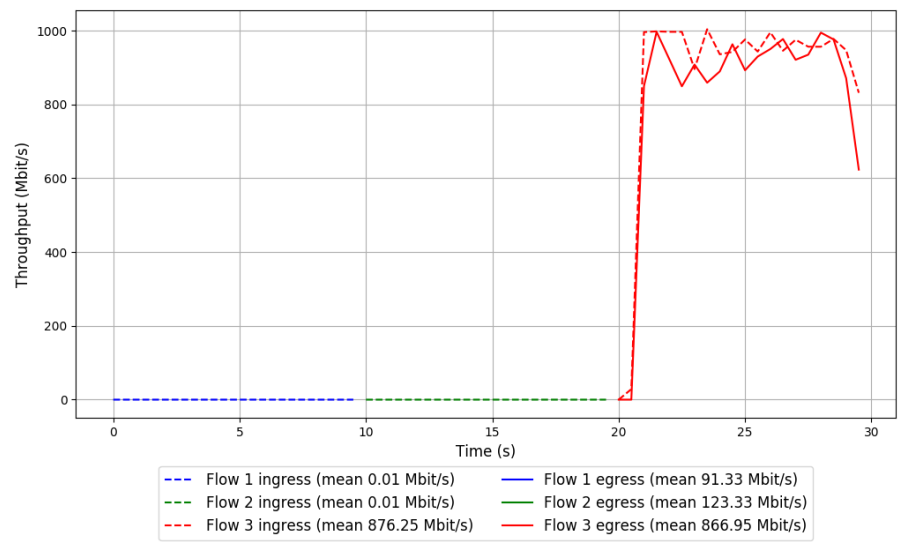


Run 7: Statistics of FillP

Start at: 2018-01-02 17:06:22

End at: 2018-01-02 17:06:52

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-02 17:20:32

End at: 2018-01-02 17:21:02

Below is generated by plot.py at 2018-01-02 21:42:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 1359.85 Mbit/s

95th percentile per-packet one-way delay: 241.950 ms

Loss rate: 11.03%

-- Flow 1:

Average throughput: 732.23 Mbit/s

95th percentile per-packet one-way delay: 203.453 ms

Loss rate: 7.44%

-- Flow 2:

Average throughput: 587.34 Mbit/s

95th percentile per-packet one-way delay: 266.904 ms

Loss rate: 15.58%

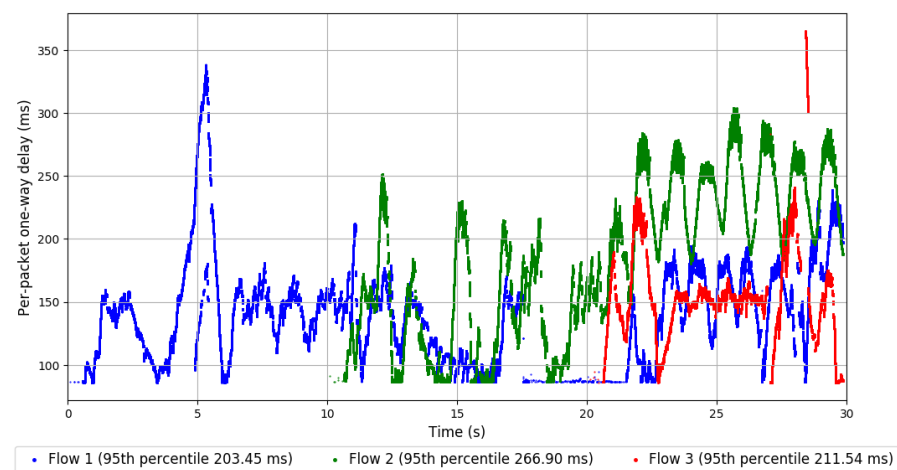
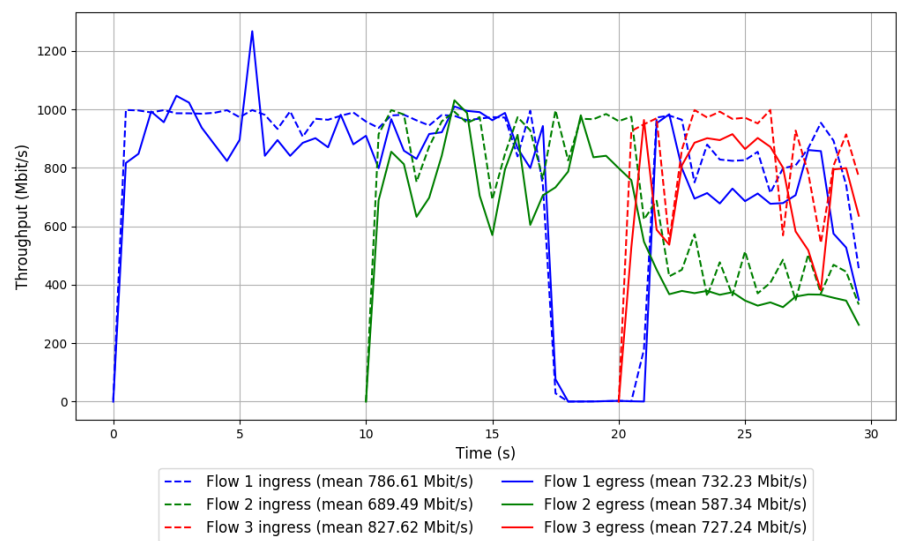
-- Flow 3:

Average throughput: 727.24 Mbit/s

95th percentile per-packet one-way delay: 211.537 ms

Loss rate: 13.69%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-02 17:35:44

End at: 2018-01-02 17:36:14

Below is generated by plot.py at 2018-01-02 21:47:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 1470.09 Mbit/s

95th percentile per-packet one-way delay: 190.188 ms

Loss rate: 8.97%

-- Flow 1:

Average throughput: 811.07 Mbit/s

95th percentile per-packet one-way delay: 195.219 ms

Loss rate: 10.15%

-- Flow 2:

Average throughput: 857.01 Mbit/s

95th percentile per-packet one-way delay: 183.848 ms

Loss rate: 7.30%

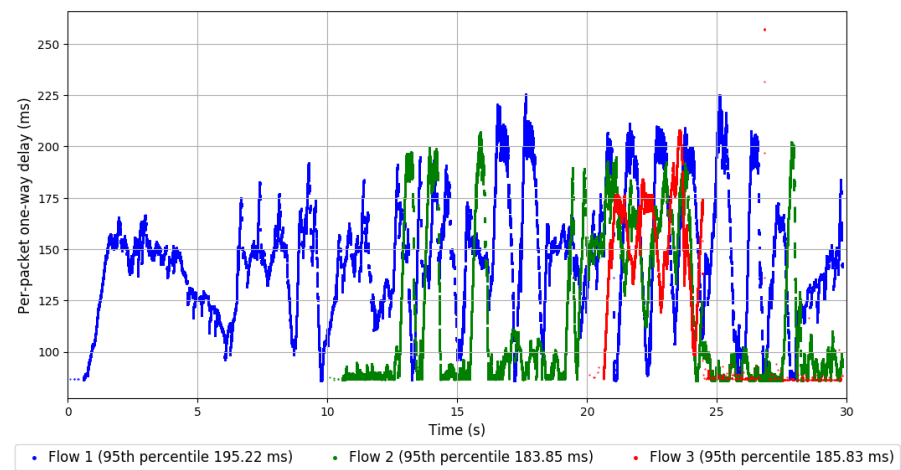
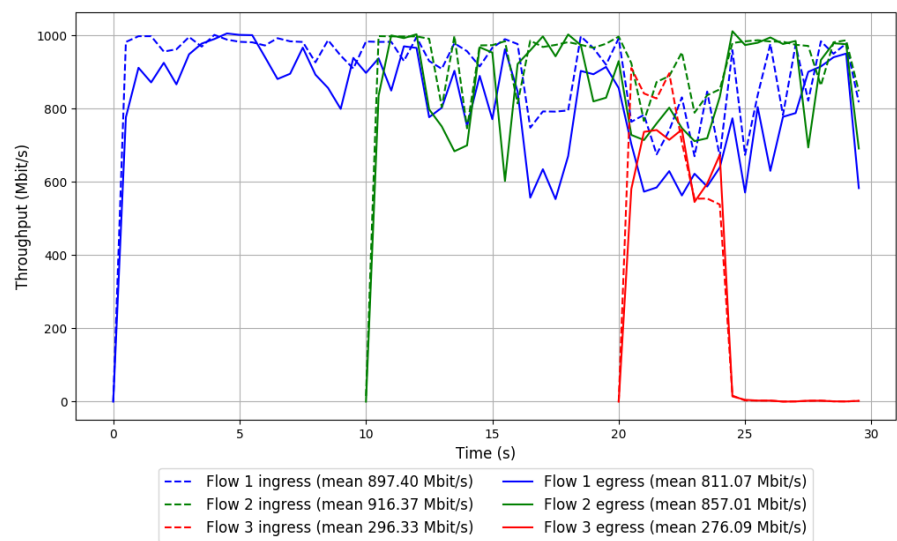
-- Flow 3:

Average throughput: 276.09 Mbit/s

95th percentile per-packet one-way delay: 185.829 ms

Loss rate: 8.53%

Run 9: Report of FillP — Data Link

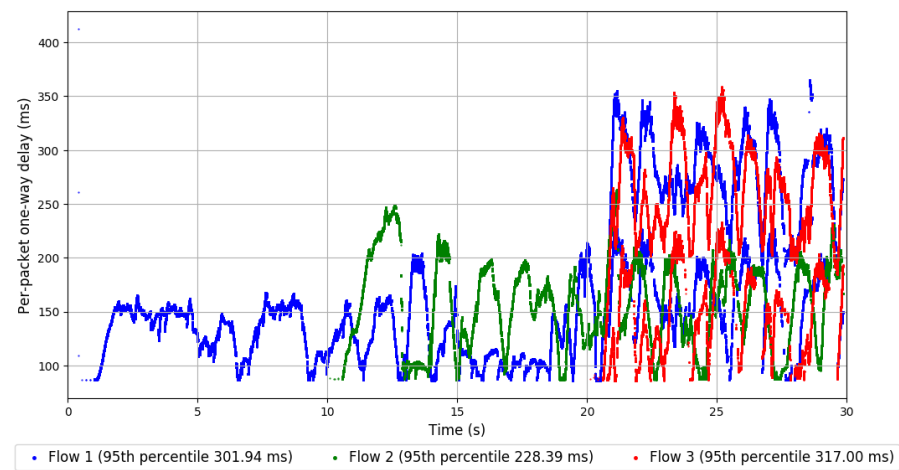
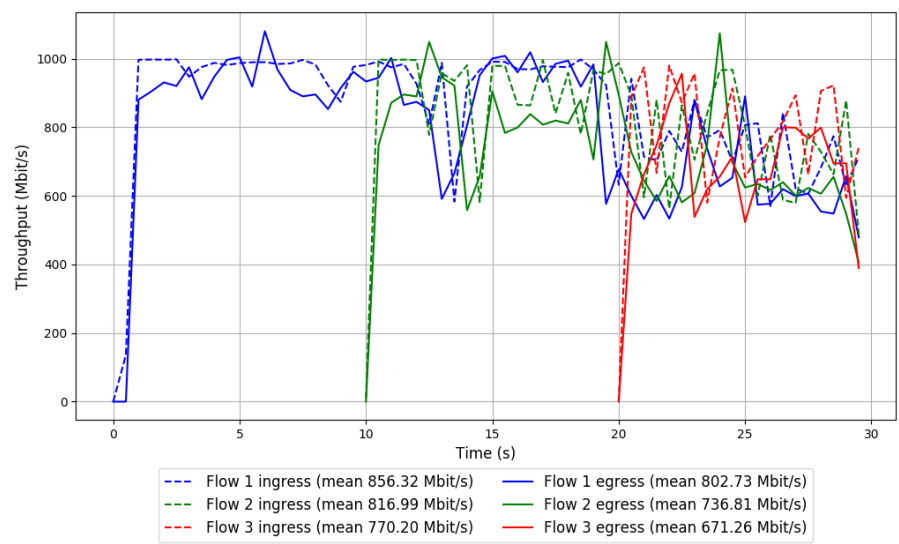


```
Run 10: Statistics of FillP

Start at: 2018-01-02 17:50:31
End at: 2018-01-02 17:51:01

# Below is generated by plot.py at 2018-01-02 21:50:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1519.20 Mbit/s
95th percentile per-packet one-way delay: 296.883 ms
Loss rate: 9.75%
-- Flow 1:
Average throughput: 802.73 Mbit/s
95th percentile per-packet one-way delay: 301.935 ms
Loss rate: 7.83%
-- Flow 2:
Average throughput: 736.81 Mbit/s
95th percentile per-packet one-way delay: 228.389 ms
Loss rate: 10.61%
-- Flow 3:
Average throughput: 671.26 Mbit/s
95th percentile per-packet one-way delay: 317.003 ms
Loss rate: 14.40%
```

Run 10: Report of FillP — Data Link

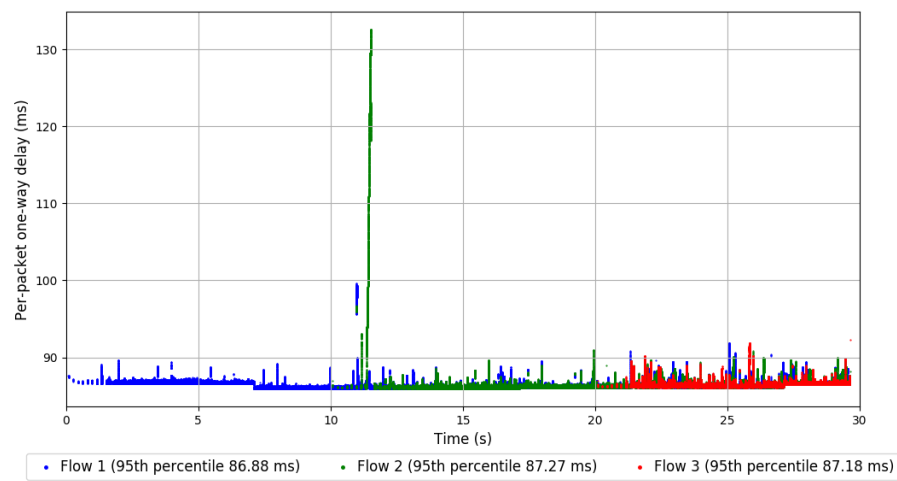
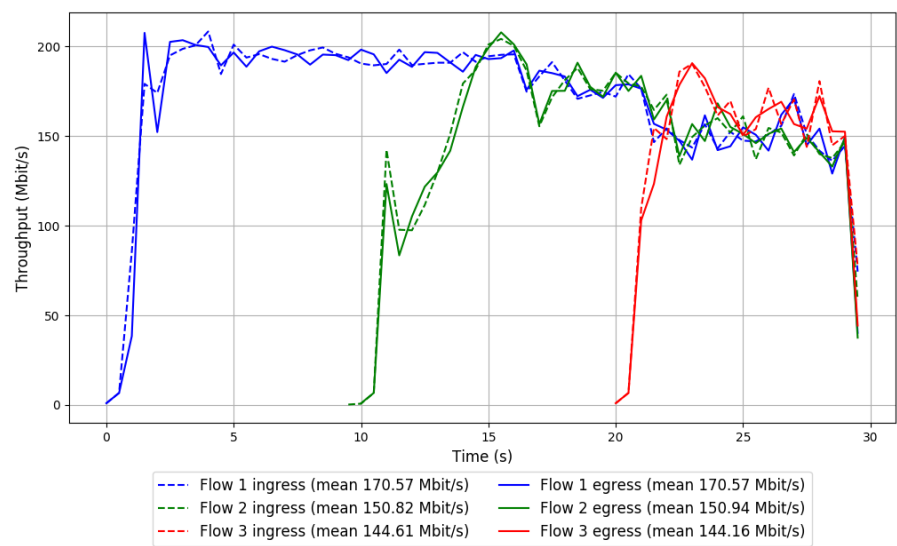


```
Run 1: Statistics of Indigo

Start at: 2018-01-02 15:29:04
End at: 2018-01-02 15:29:34

# Below is generated by plot.py at 2018-01-02 21:50:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 316.97 Mbit/s
95th percentile per-packet one-way delay: 86.982 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 170.57 Mbit/s
95th percentile per-packet one-way delay: 86.882 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 150.94 Mbit/s
95th percentile per-packet one-way delay: 87.267 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 144.16 Mbit/s
95th percentile per-packet one-way delay: 87.184 ms
Loss rate: 2.03%
```

Run 1: Report of Indigo — Data Link

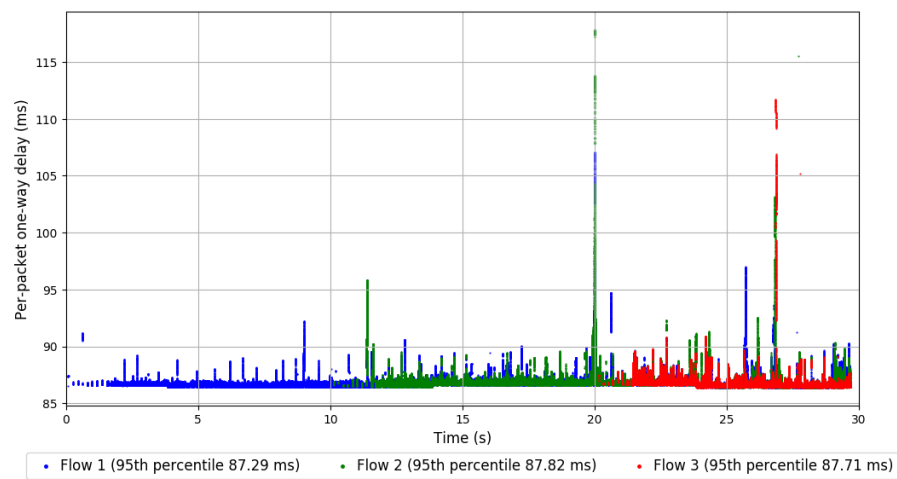
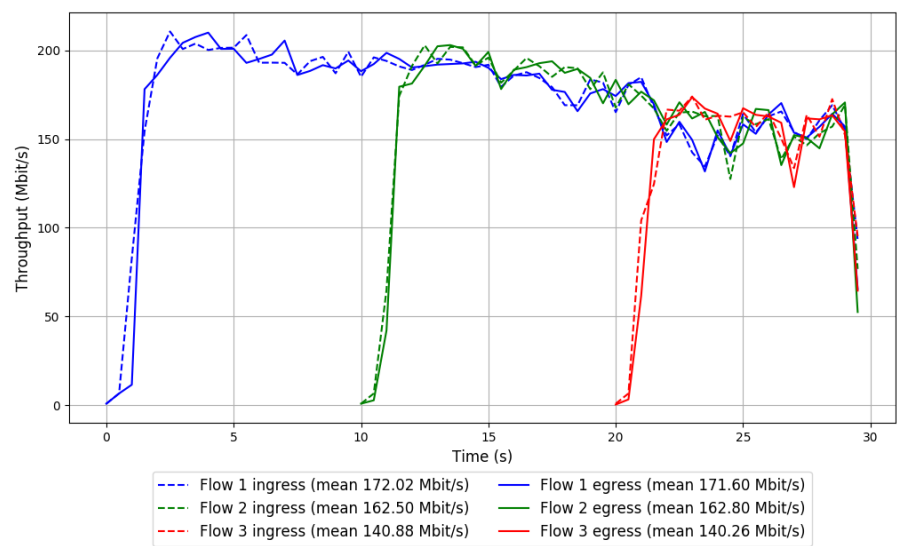


```
Run 2: Statistics of Indigo

Start at: 2018-01-02 15:44:07
End at: 2018-01-02 15:44:37

# Below is generated by plot.py at 2018-01-02 21:50:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 324.34 Mbit/s
95th percentile per-packet one-way delay: 87.516 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 171.60 Mbit/s
95th percentile per-packet one-way delay: 87.288 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 162.80 Mbit/s
95th percentile per-packet one-way delay: 87.821 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 140.26 Mbit/s
95th percentile per-packet one-way delay: 87.708 ms
Loss rate: 2.20%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-02 15:58:57

End at: 2018-01-02 15:59:27

Below is generated by plot.py at 2018-01-02 21:50:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 312.17 Mbit/s

95th percentile per-packet one-way delay: 87.029 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 166.51 Mbit/s

95th percentile per-packet one-way delay: 86.955 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 158.79 Mbit/s

95th percentile per-packet one-way delay: 87.109 ms

Loss rate: 0.98%

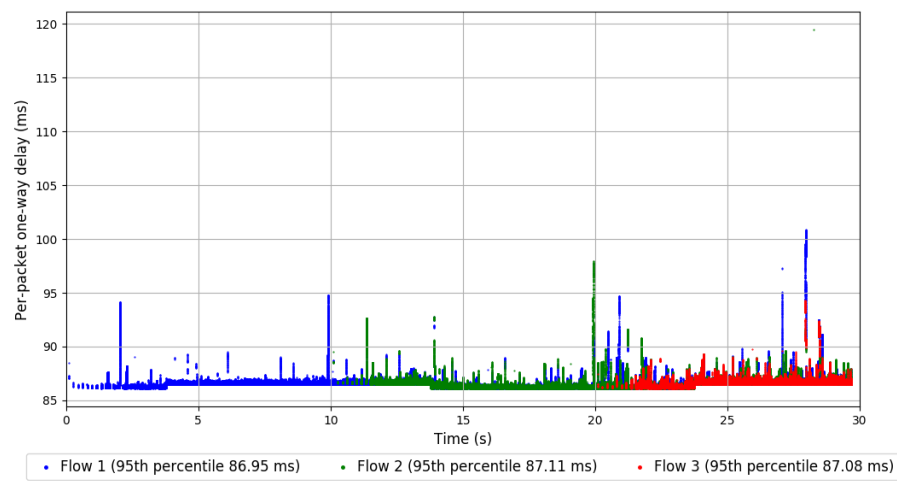
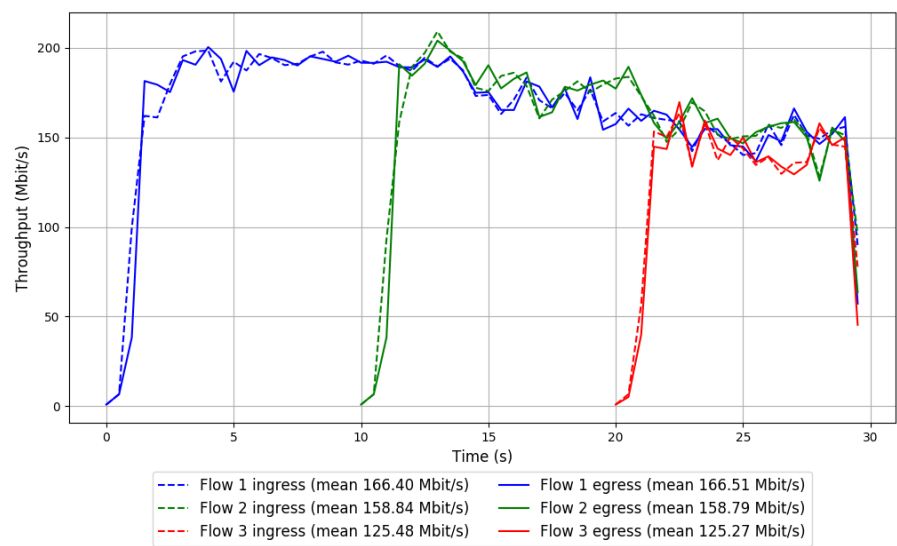
-- Flow 3:

Average throughput: 125.27 Mbit/s

95th percentile per-packet one-way delay: 87.083 ms

Loss rate: 2.08%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-01-02 16:13:55

End at: 2018-01-02 16:14:25

Below is generated by plot.py at 2018-01-02 21:50:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 312.40 Mbit/s

95th percentile per-packet one-way delay: 87.577 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 161.96 Mbit/s

95th percentile per-packet one-way delay: 87.306 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 159.87 Mbit/s

95th percentile per-packet one-way delay: 88.159 ms

Loss rate: 0.92%

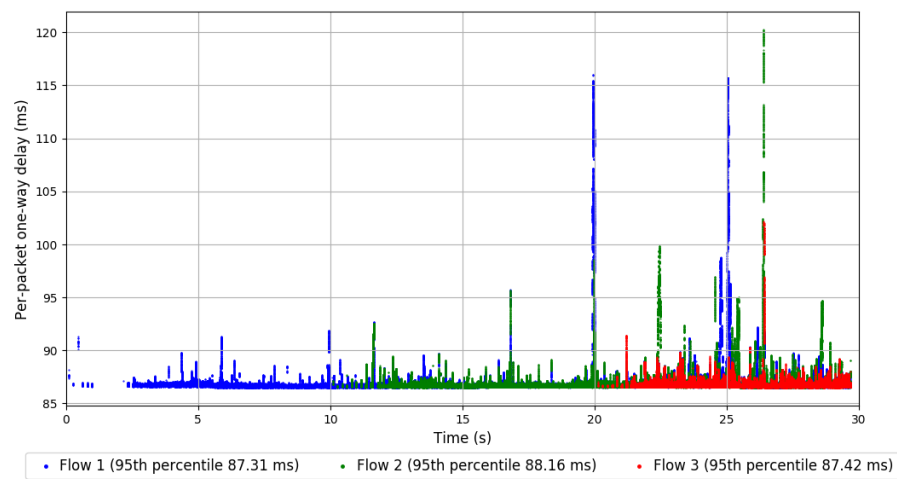
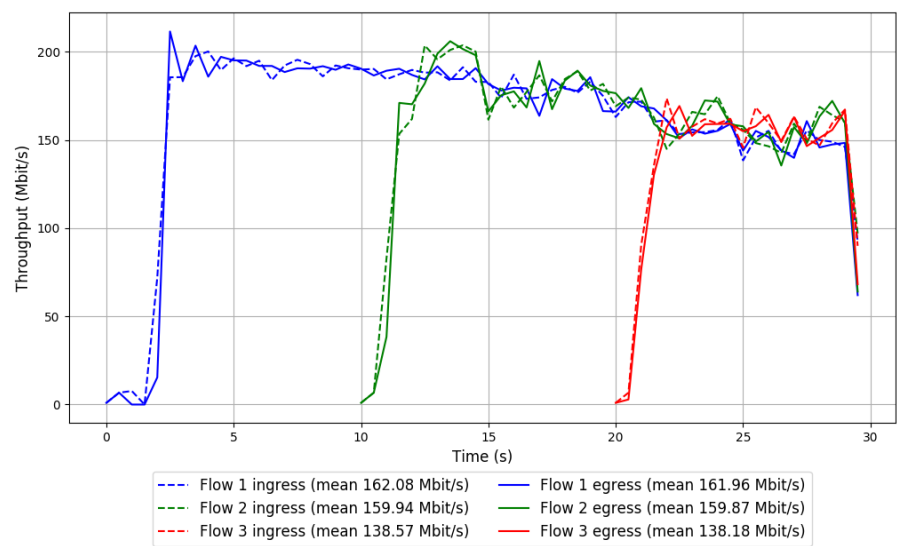
-- Flow 3:

Average throughput: 138.18 Mbit/s

95th percentile per-packet one-way delay: 87.421 ms

Loss rate: 2.07%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-02 16:29:08

End at: 2018-01-02 16:29:38

Below is generated by plot.py at 2018-01-02 21:50:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 312.52 Mbit/s

95th percentile per-packet one-way delay: 86.790 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 166.54 Mbit/s

95th percentile per-packet one-way delay: 86.646 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 158.48 Mbit/s

95th percentile per-packet one-way delay: 87.339 ms

Loss rate: 0.89%

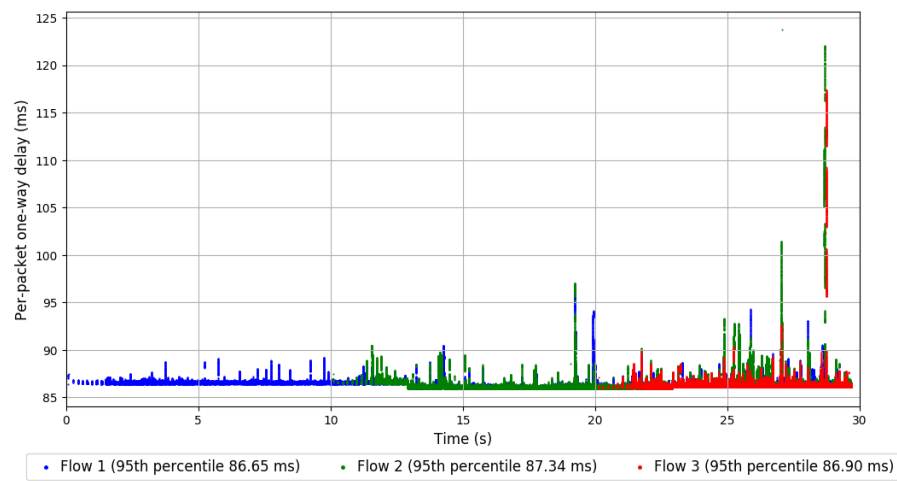
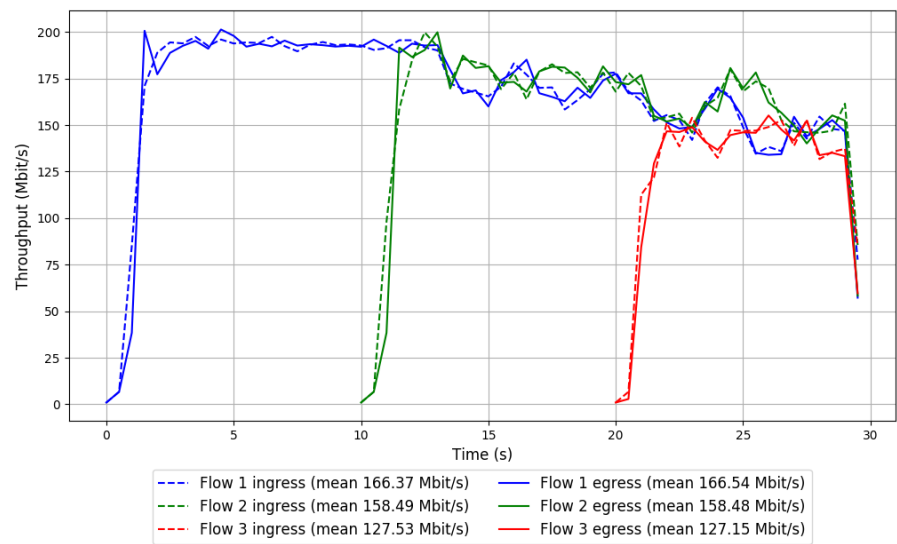
-- Flow 3:

Average throughput: 127.15 Mbit/s

95th percentile per-packet one-way delay: 86.896 ms

Loss rate: 2.07%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-01-02 16:44:17

End at: 2018-01-02 16:44:47

Below is generated by plot.py at 2018-01-02 21:50:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 315.54 Mbit/s

95th percentile per-packet one-way delay: 87.032 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 166.45 Mbit/s

95th percentile per-packet one-way delay: 86.832 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 156.23 Mbit/s

95th percentile per-packet one-way delay: 87.280 ms

Loss rate: 0.71%

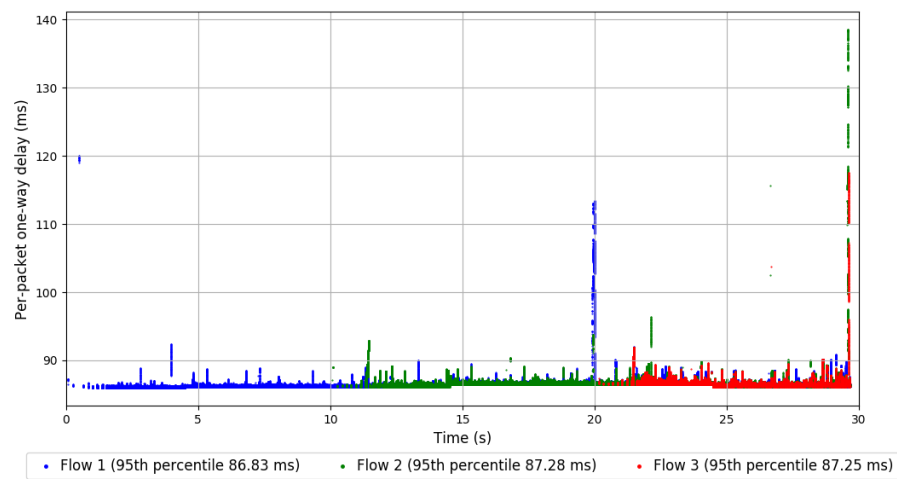
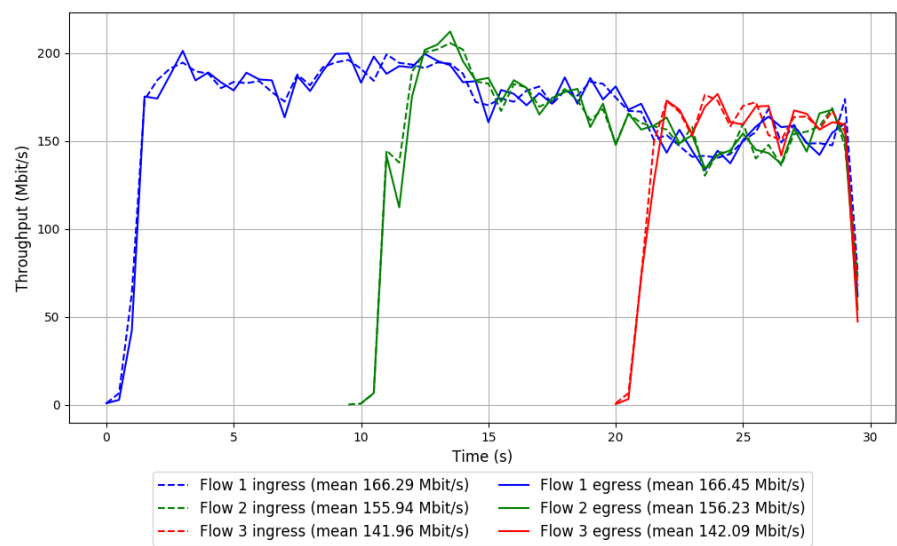
-- Flow 3:

Average throughput: 142.09 Mbit/s

95th percentile per-packet one-way delay: 87.249 ms

Loss rate: 1.71%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-01-02 16:59:23

End at: 2018-01-02 16:59:53

Below is generated by plot.py at 2018-01-02 21:50:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 314.16 Mbit/s

95th percentile per-packet one-way delay: 87.616 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 171.78 Mbit/s

95th percentile per-packet one-way delay: 87.421 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 150.99 Mbit/s

95th percentile per-packet one-way delay: 88.217 ms

Loss rate: 0.89%

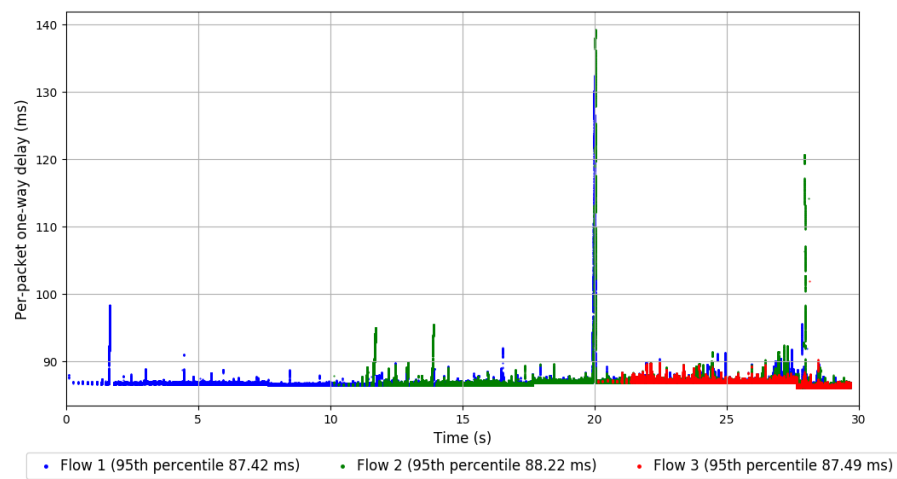
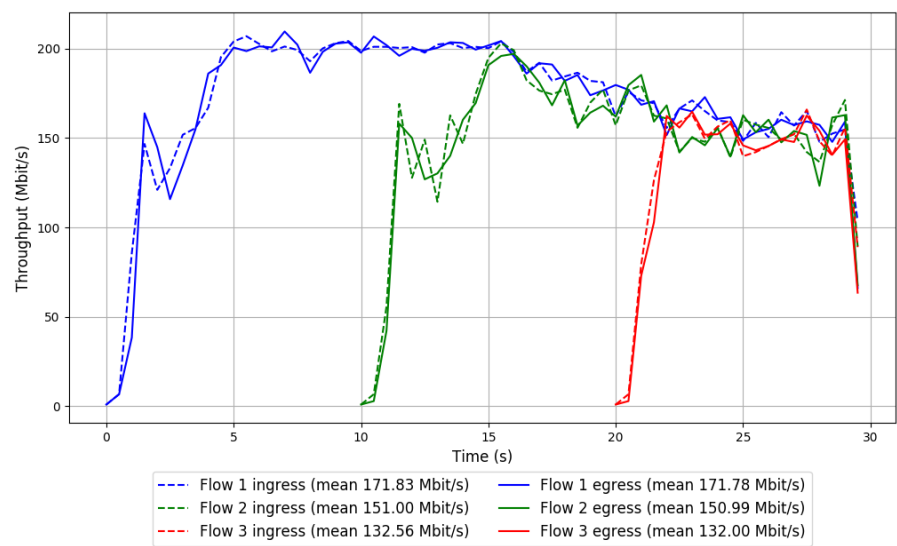
-- Flow 3:

Average throughput: 132.00 Mbit/s

95th percentile per-packet one-way delay: 87.494 ms

Loss rate: 2.20%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-01-02 17:13:14

End at: 2018-01-02 17:13:44

Below is generated by plot.py at 2018-01-02 21:50:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 316.40 Mbit/s

95th percentile per-packet one-way delay: 87.499 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 167.40 Mbit/s

95th percentile per-packet one-way delay: 87.303 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 159.18 Mbit/s

95th percentile per-packet one-way delay: 87.869 ms

Loss rate: 1.03%

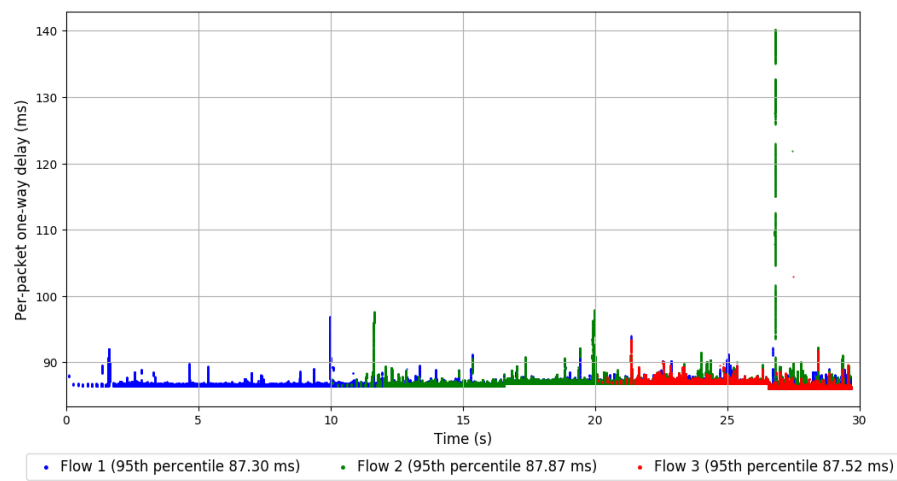
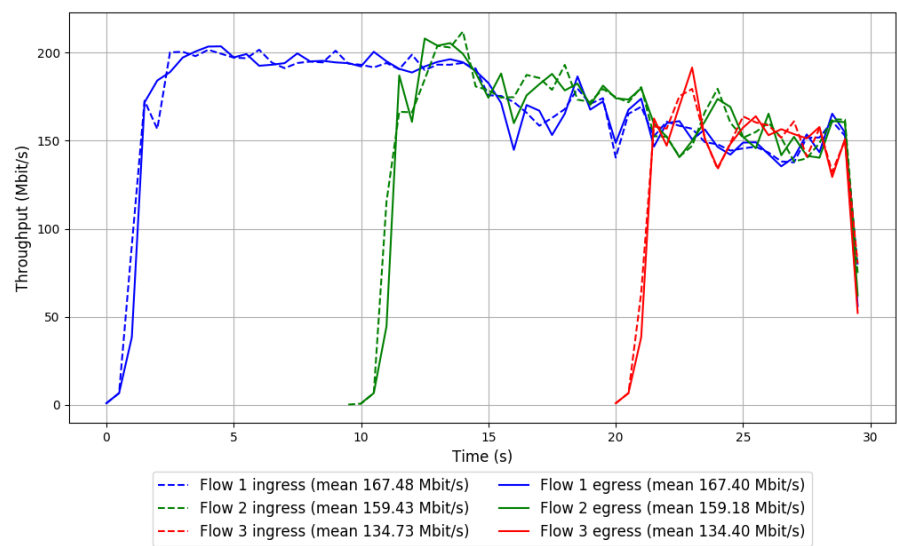
-- Flow 3:

Average throughput: 134.40 Mbit/s

95th percentile per-packet one-way delay: 87.520 ms

Loss rate: 2.05%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-01-02 17:28:15

End at: 2018-01-02 17:28:45

Below is generated by plot.py at 2018-01-02 21:50:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 325.39 Mbit/s

95th percentile per-packet one-way delay: 87.200 ms

Loss rate: 0.94%

-- Flow 1:

Average throughput: 170.82 Mbit/s

95th percentile per-packet one-way delay: 87.049 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 165.92 Mbit/s

95th percentile per-packet one-way delay: 87.263 ms

Loss rate: 0.86%

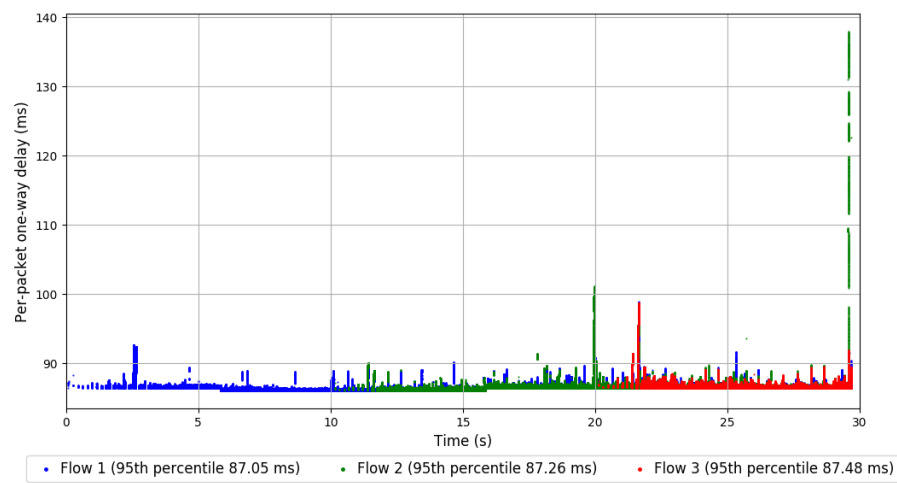
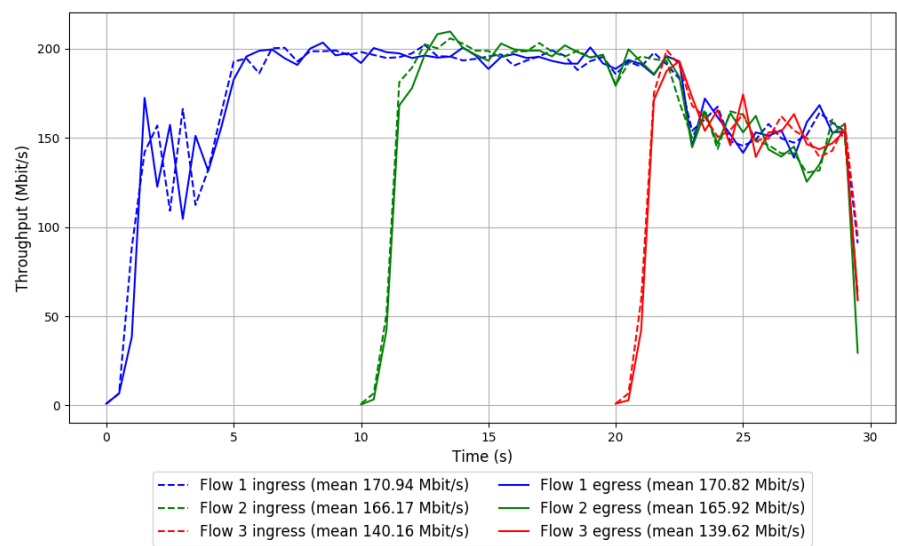
-- Flow 3:

Average throughput: 139.62 Mbit/s

95th percentile per-packet one-way delay: 87.483 ms

Loss rate: 2.17%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-01-02 17:43:29

End at: 2018-01-02 17:43:59

Below is generated by plot.py at 2018-01-02 21:50:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 317.55 Mbit/s

95th percentile per-packet one-way delay: 87.081 ms

Loss rate: 0.88%

-- Flow 1:

Average throughput: 175.36 Mbit/s

95th percentile per-packet one-way delay: 87.012 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 149.77 Mbit/s

95th percentile per-packet one-way delay: 87.162 ms

Loss rate: 0.93%

-- Flow 3:

Average throughput: 134.28 Mbit/s

95th percentile per-packet one-way delay: 87.095 ms

Loss rate: 2.35%

Run 10: Report of Indigo — Data Link

