

## Pantheon Report

Generated at 2018-05-26 20:57:46 (UTC).

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

Repeated the test of 16 congestion control schemes 10 times.

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

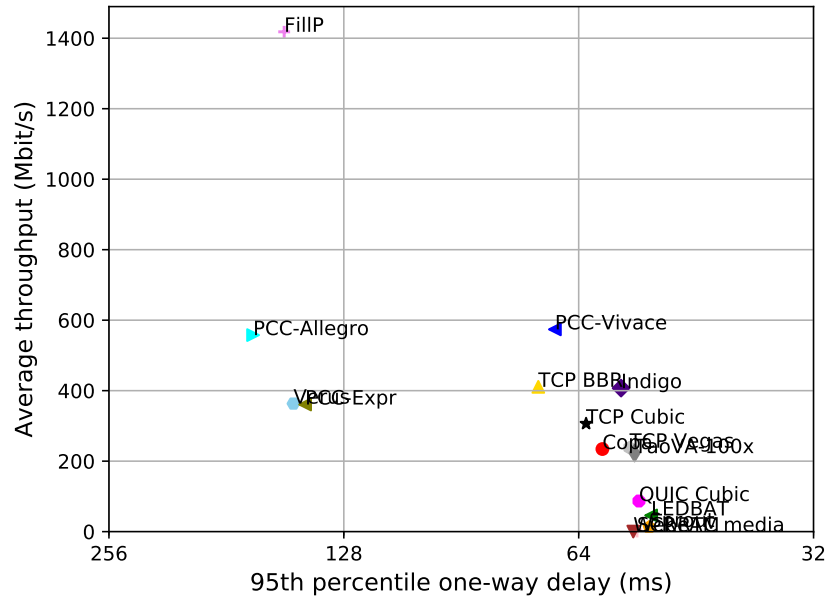
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

NTP offsets were measured against `time.google.com` and have been applied to correct the timestamps in logs.

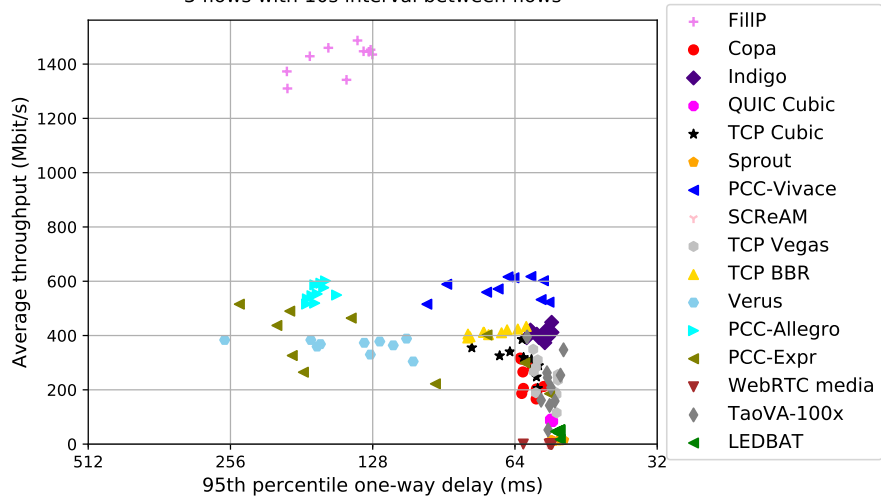
Git summary:

```
branch: master @ 0088822873ea99180f63545a341ef069f40efe59
third_party/illp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/genericCC @ c7966e494a929986eaa5a9c169a7f381fe1bbbe5
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
third_party/sprout @ c838669682f0c19f6baf92afc9a596a406d48c1f
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

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



test from GCE Tokyo to GCE Sydney, 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	212.15	204.31	190.45	70.68	72.41	73.72	0.37	0.57	1.21
Copa	10	129.13	106.18	109.86	58.09	57.16	64.04	0.25	0.44	1.13
TCP Cubic	10	183.56	118.23	134.40	62.48	62.34	62.40	0.42	1.29	2.00
FillP	10	749.67	692.71	632.81	157.88	143.58	123.75	3.26	4.15	3.27
Indigo	10	221.54	198.59	164.11	55.75	56.73	57.64	0.34	0.54	1.21
LEDBAT	10	29.00	20.56	10.07	51.74	51.53	51.47	0.89	1.02	2.21
PCC-Allegro	10	506.38	57.57	40.03	167.30	167.02	154.82	1.40	1.58	2.25
PCC-Expr	10	203.92	183.68	106.19	113.42	143.70	89.61	2.64	4.01	3.52
QUIC Cubic	10	57.87	33.66	19.99	52.77	52.59	52.29	0.47	1.15	1.06
SCReAM	10	0.21	0.21	0.22	52.92	53.44	52.79	0.32	0.59	1.09
Sprout	10	6.74	6.94	5.82	51.96	51.87	52.45	0.36	0.53	1.03
TaoVA-100x	10	108.35	123.72	102.45	53.83	54.72	54.87	0.32	0.42	0.97
TCP Vegas	10	139.22	105.53	87.64	54.20	54.81	55.89	0.32	0.60	1.33
Verus	10	226.67	149.56	115.35	143.36	138.26	144.73	1.41	1.32	2.93
PCC-Vivace	10	334.03	298.30	127.59	63.60	70.38	63.25	0.31	0.64	1.47
WebRTC media	10	0.05	0.05	0.05	52.18	53.32	52.84	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

Start at: 2018-05-26 14:21:04

End at: 2018-05-26 14:21:34

Local clock offset: 0.263 ms

Remote clock offset: 0.023 ms

# Below is generated by plot.py at 2018-05-26 18:34:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 395.47 Mbit/s

95th percentile per-packet one-way delay: 79.661 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 209.05 Mbit/s

95th percentile per-packet one-way delay: 78.144 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 195.27 Mbit/s

95th percentile per-packet one-way delay: 80.254 ms

Loss rate: 0.63%

-- Flow 3:

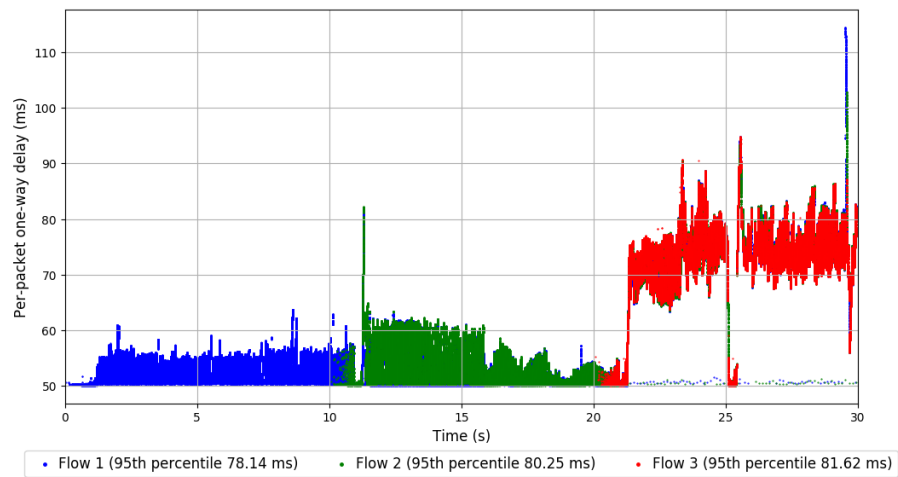
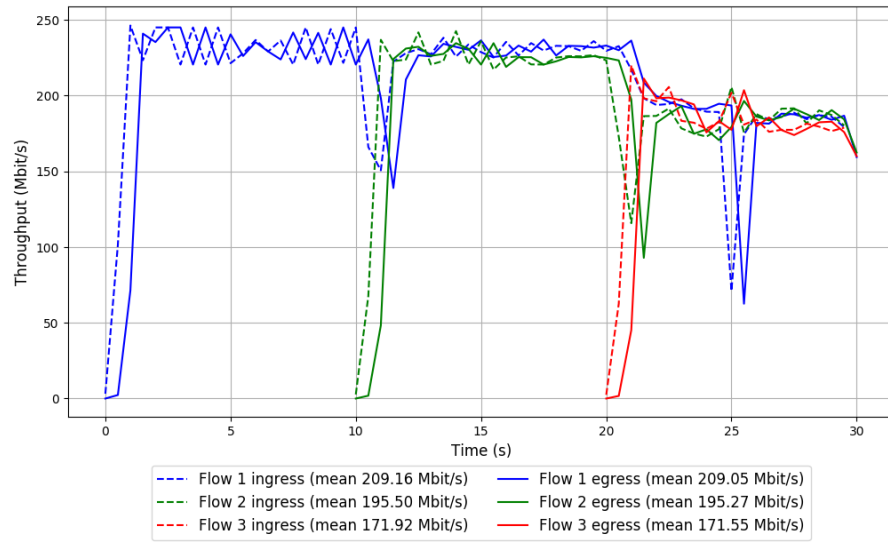
Average throughput: 171.55 Mbit/s

95th percentile per-packet one-way delay: 81.617 ms

Loss rate: 1.28%



# Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-05-26 14:44:08

End at: 2018-05-26 14:44:38

Local clock offset: -0.048 ms

Remote clock offset: 0.157 ms

# Below is generated by plot.py at 2018-05-26 18:34:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 410.25 Mbit/s

95th percentile per-packet one-way delay: 68.323 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 209.93 Mbit/s

95th percentile per-packet one-way delay: 66.898 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 207.01 Mbit/s

95th percentile per-packet one-way delay: 68.441 ms

Loss rate: 0.57%

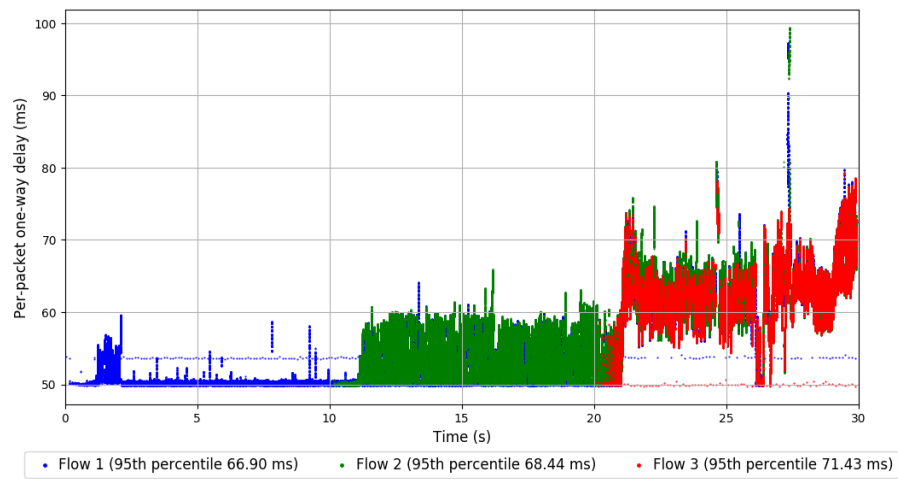
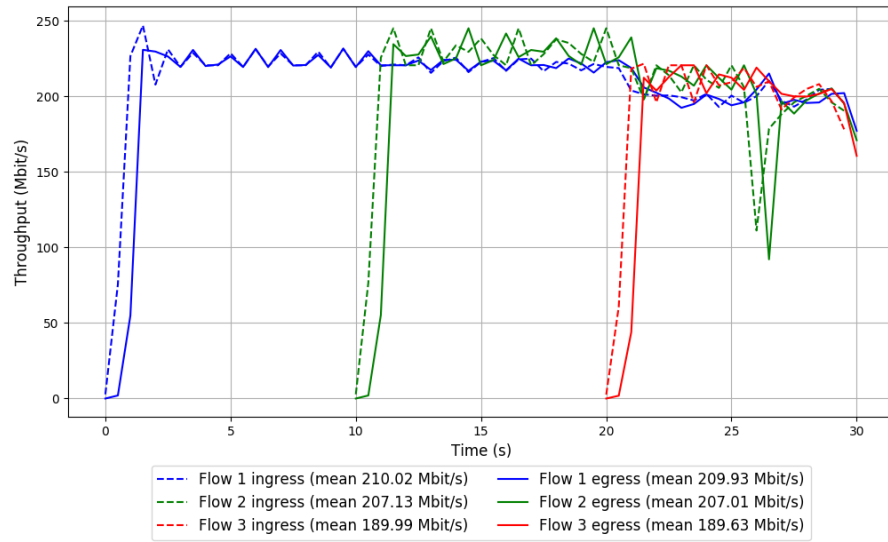
-- Flow 3:

Average throughput: 189.63 Mbit/s

95th percentile per-packet one-way delay: 71.433 ms

Loss rate: 1.19%

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

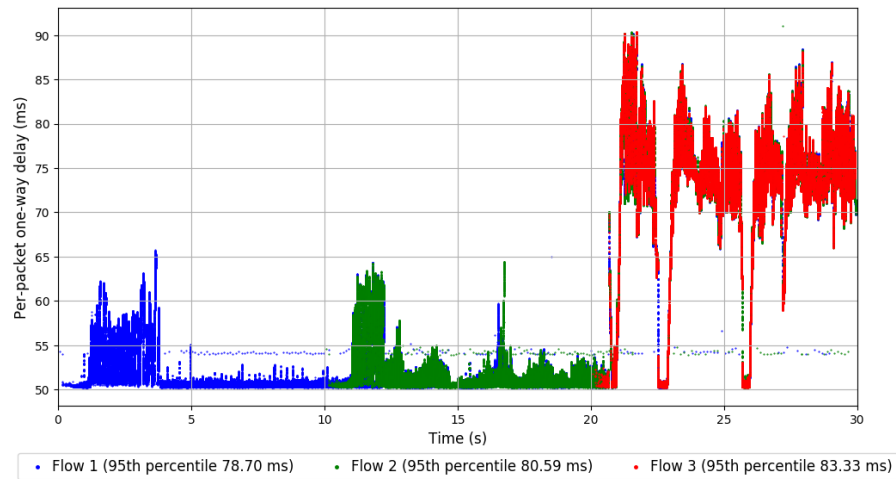
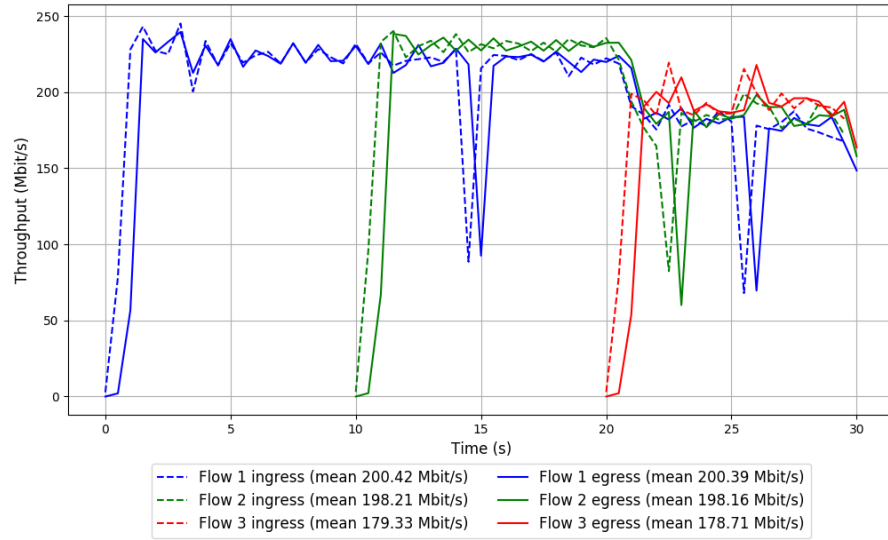


Run 3: Statistics of TCP BBR

Start at: 2018-05-26 15:07:14  
End at: 2018-05-26 15:07:44  
Local clock offset: 0.172 ms  
Remote clock offset: -0.079 ms

# Below is generated by plot.py at 2018-05-26 18:34:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 391.12 Mbit/s  
95th percentile per-packet one-way delay: 80.544 ms  
Loss rate: 0.58%  
-- Flow 1:  
Average throughput: 200.39 Mbit/s  
95th percentile per-packet one-way delay: 78.696 ms  
Loss rate: 0.36%  
-- Flow 2:  
Average throughput: 198.16 Mbit/s  
95th percentile per-packet one-way delay: 80.594 ms  
Loss rate: 0.55%  
-- Flow 3:  
Average throughput: 178.71 Mbit/s  
95th percentile per-packet one-way delay: 83.334 ms  
Loss rate: 1.37%

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



Run 4: Statistics of TCP BBR

Start at: 2018-05-26 15:30:25

End at: 2018-05-26 15:30:55

Local clock offset: -0.032 ms

Remote clock offset: 0.029 ms

# Below is generated by plot.py at 2018-05-26 18:34:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 405.52 Mbit/s

95th percentile per-packet one-way delay: 80.474 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 212.90 Mbit/s

95th percentile per-packet one-way delay: 80.282 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 202.69 Mbit/s

95th percentile per-packet one-way delay: 81.051 ms

Loss rate: 0.58%

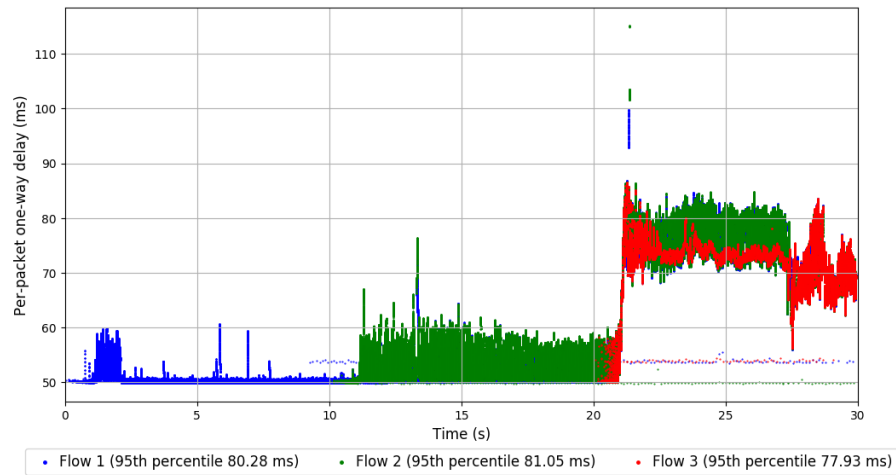
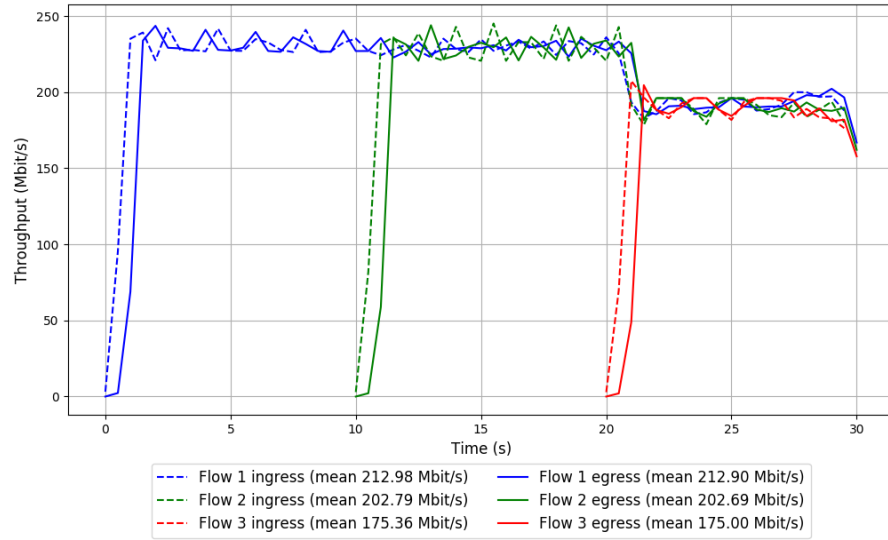
-- Flow 3:

Average throughput: 175.00 Mbit/s

95th percentile per-packet one-way delay: 77.927 ms

Loss rate: 1.29%

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



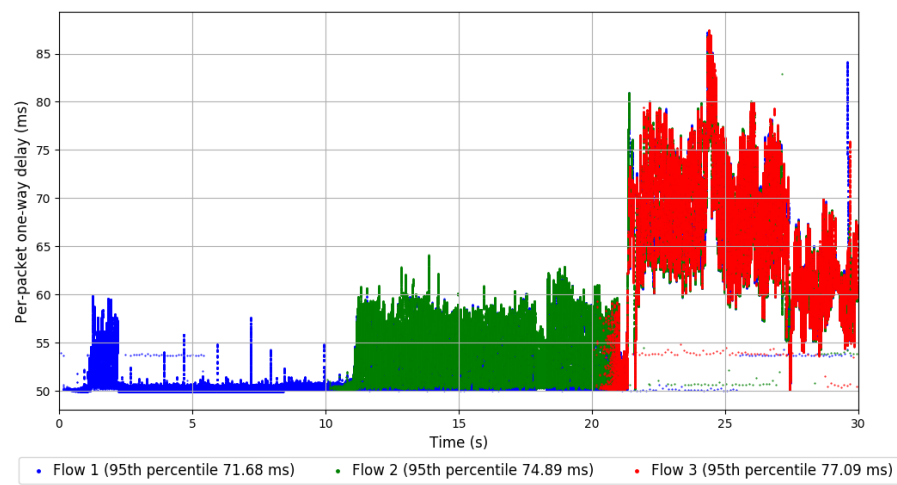
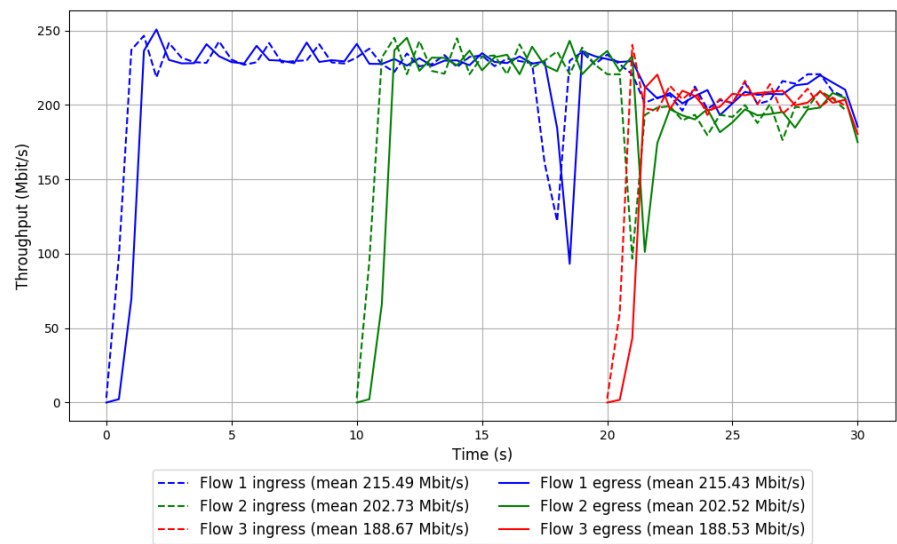
Run 5: Statistics of TCP BBR

Start at: 2018-05-26 15:54:09  
End at: 2018-05-26 15:54:39  
Local clock offset: -0.106 ms  
Remote clock offset: -0.065 ms

# Below is generated by plot.py at 2018-05-26 18:34:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 412.27 Mbit/s  
95th percentile per-packet one-way delay: 74.626 ms  
Loss rate: 0.56%  
-- Flow 1:  
Average throughput: 215.43 Mbit/s  
95th percentile per-packet one-way delay: 71.676 ms  
Loss rate: 0.38%  
-- Flow 2:  
Average throughput: 202.52 Mbit/s  
95th percentile per-packet one-way delay: 74.890 ms  
Loss rate: 0.59%  
-- Flow 3:  
Average throughput: 188.53 Mbit/s  
95th percentile per-packet one-way delay: 77.089 ms  
Loss rate: 1.13%



Run 5: Report of TCP BBR — Data Link

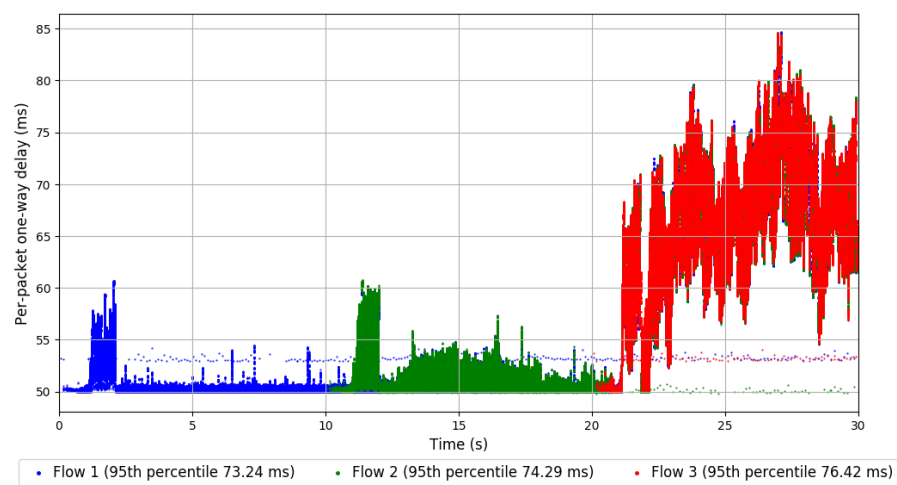
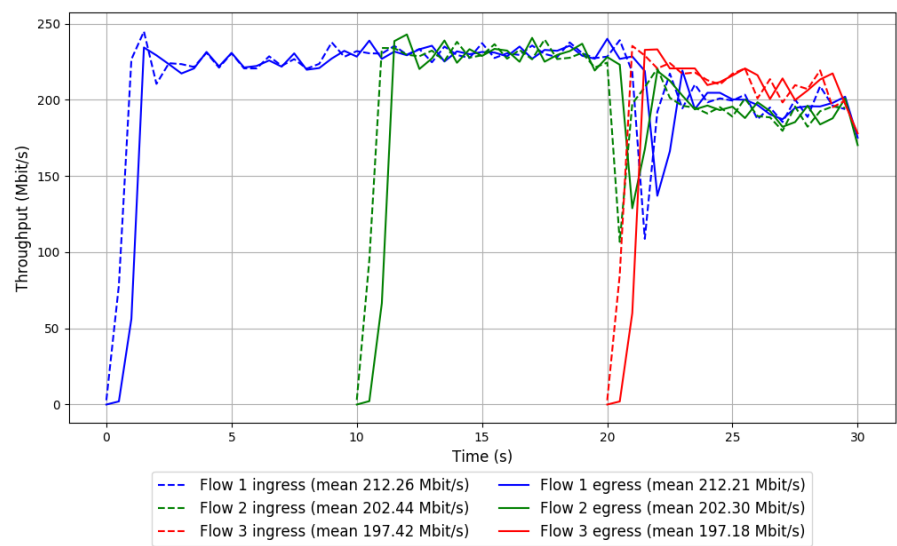


Run 6: Statistics of TCP BBR

Start at: 2018-05-26 16:17:08  
End at: 2018-05-26 16:17:38  
Local clock offset: -0.23 ms  
Remote clock offset: -0.175 ms

# Below is generated by plot.py at 2018-05-26 18:34:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 411.86 Mbit/s  
95th percentile per-packet one-way delay: 74.397 ms  
Loss rate: 0.56%  
-- Flow 1:  
Average throughput: 212.21 Mbit/s  
95th percentile per-packet one-way delay: 73.244 ms  
Loss rate: 0.37%  
-- Flow 2:  
Average throughput: 202.30 Mbit/s  
95th percentile per-packet one-way delay: 74.286 ms  
Loss rate: 0.58%  
-- Flow 3:  
Average throughput: 197.18 Mbit/s  
95th percentile per-packet one-way delay: 76.415 ms  
Loss rate: 1.17%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-05-26 16:40:18

End at: 2018-05-26 16:40:48

Local clock offset: 0.192 ms

Remote clock offset: 0.09 ms

# Below is generated by plot.py at 2018-05-26 18:34:45

# Datalink statistics

-- Total of 3 flows:

Average throughput: 403.33 Mbit/s

95th percentile per-packet one-way delay: 72.780 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 206.68 Mbit/s

95th percentile per-packet one-way delay: 71.785 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 201.17 Mbit/s

95th percentile per-packet one-way delay: 73.142 ms

Loss rate: 0.55%

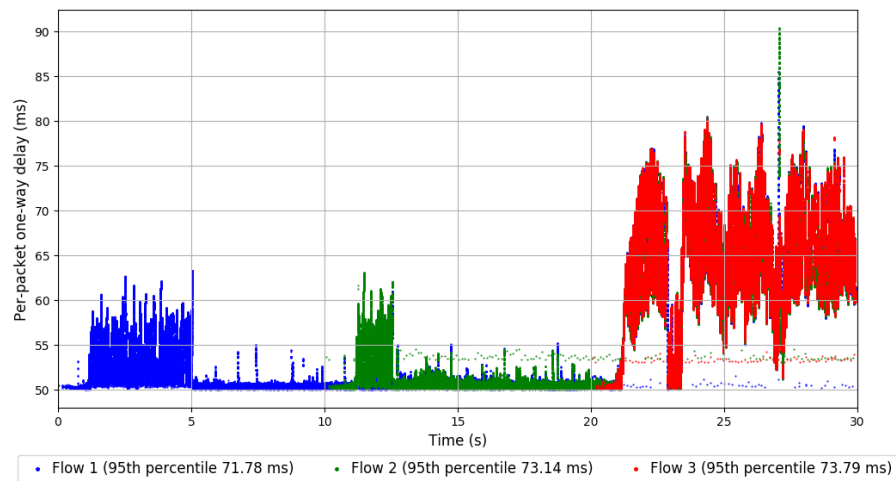
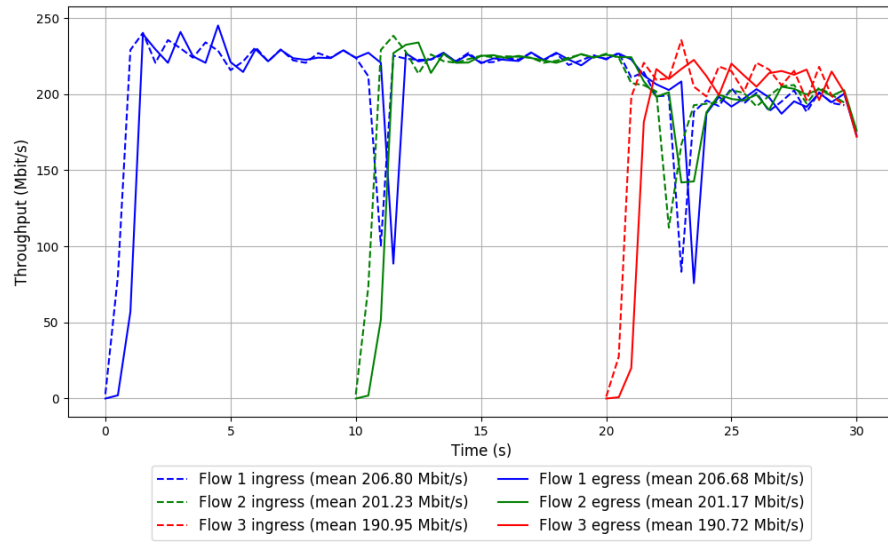
-- Flow 3:

Average throughput: 190.72 Mbit/s

95th percentile per-packet one-way delay: 73.788 ms

Loss rate: 1.20%

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

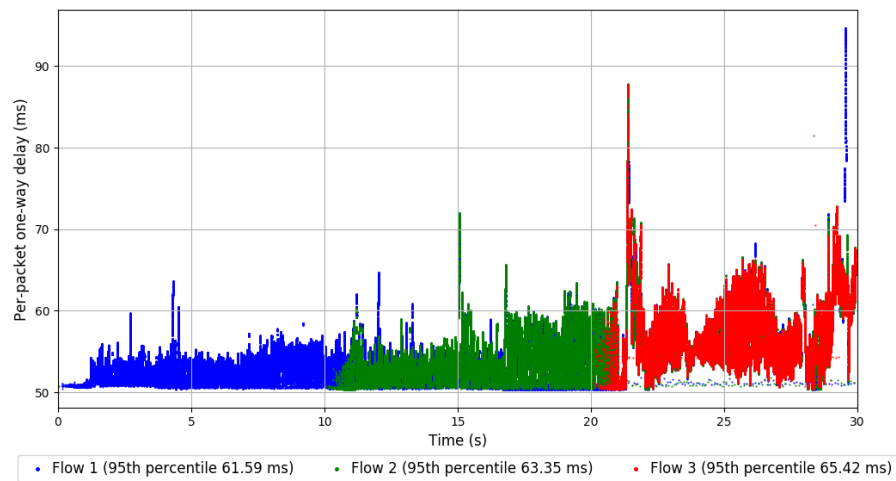
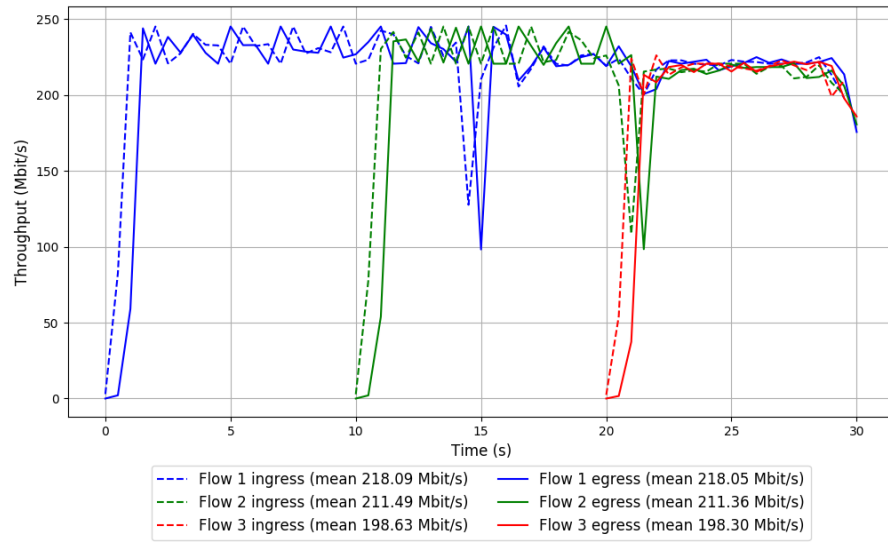


Run 8: Statistics of TCP BBR

Start at: 2018-05-26 17:02:54  
End at: 2018-05-26 17:03:24  
Local clock offset: 0.184 ms  
Remote clock offset: -0.468 ms

# Below is generated by plot.py at 2018-05-26 18:34:58  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 424.03 Mbit/s  
95th percentile per-packet one-way delay: 63.132 ms  
Loss rate: 0.56%  
-- Flow 1:  
Average throughput: 218.05 Mbit/s  
95th percentile per-packet one-way delay: 61.588 ms  
Loss rate: 0.36%  
-- Flow 2:  
Average throughput: 211.36 Mbit/s  
95th percentile per-packet one-way delay: 63.347 ms  
Loss rate: 0.58%  
-- Flow 3:  
Average throughput: 198.30 Mbit/s  
95th percentile per-packet one-way delay: 65.415 ms  
Loss rate: 1.19%

# Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-05-26 17:26:11

End at: 2018-05-26 17:26:41

Local clock offset: -0.398 ms

Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2018-05-26 18:42:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 433.64 Mbit/s

95th percentile per-packet one-way delay: 60.576 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 220.78 Mbit/s

95th percentile per-packet one-way delay: 58.947 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 216.96 Mbit/s

95th percentile per-packet one-way delay: 61.087 ms

Loss rate: 0.53%

-- Flow 3:

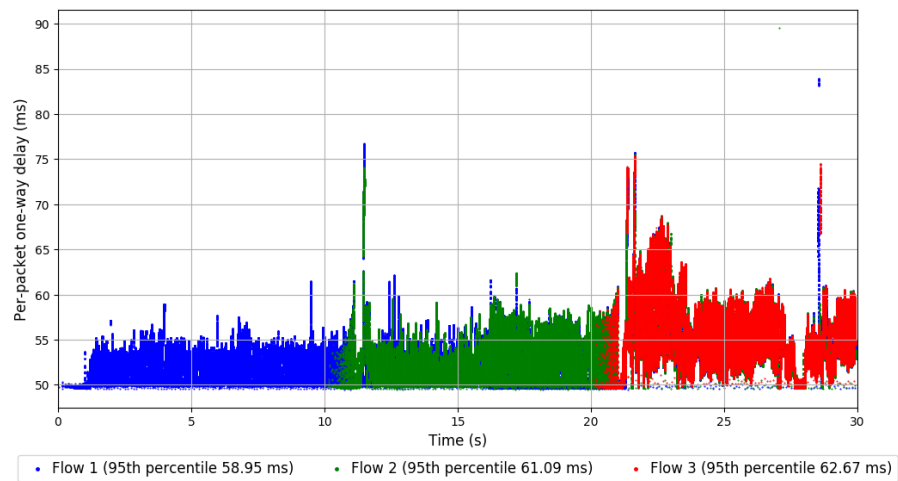
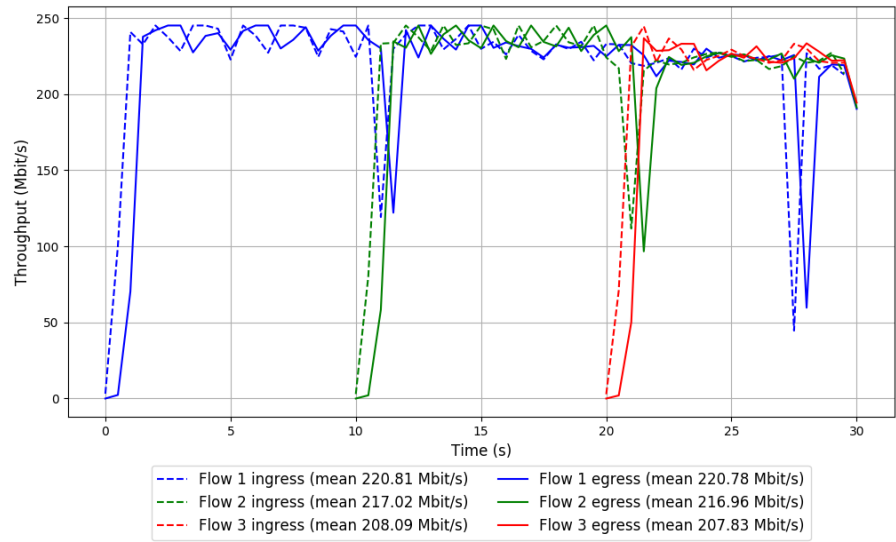
Average throughput: 207.83 Mbit/s

95th percentile per-packet one-way delay: 62.673 ms

Loss rate: 1.18%



# Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-05-26 17:49:51

End at: 2018-05-26 17:50:21

Local clock offset: 0.189 ms

Remote clock offset: 0.029 ms

# Below is generated by plot.py at 2018-05-26 18:42:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 421.18 Mbit/s

95th percentile per-packet one-way delay: 66.506 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 216.12 Mbit/s

95th percentile per-packet one-way delay: 65.507 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 205.65 Mbit/s

95th percentile per-packet one-way delay: 67.016 ms

Loss rate: 0.56%

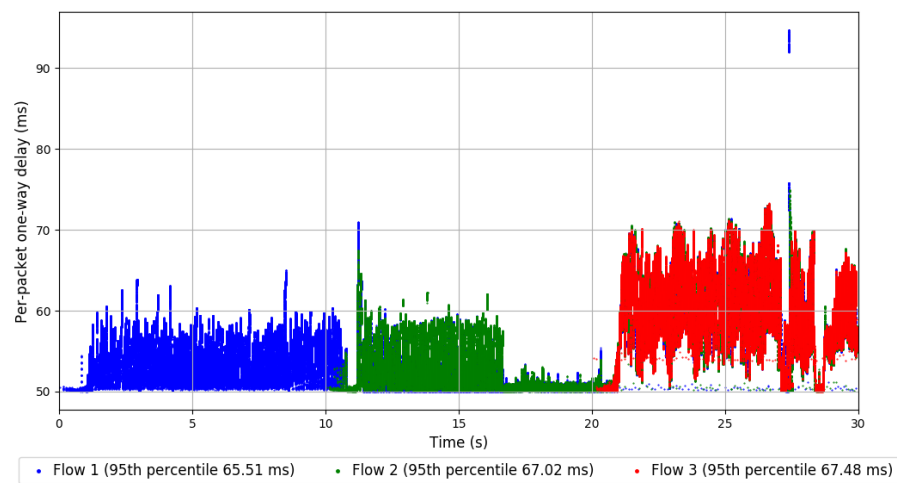
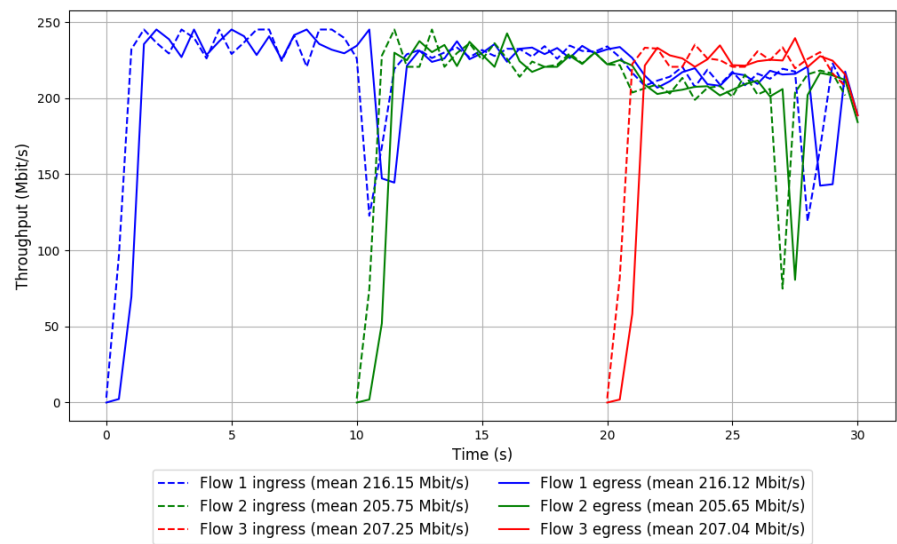
-- Flow 3:

Average throughput: 207.04 Mbit/s

95th percentile per-packet one-way delay: 67.477 ms

Loss rate: 1.14%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2018-05-26 14:36:50

End at: 2018-05-26 14:37:20

Local clock offset: 0.183 ms

Remote clock offset: 0.114 ms

# Below is generated by plot.py at 2018-05-26 18:42:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 186.57 Mbit/s

95th percentile per-packet one-way delay: 61.920 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 93.18 Mbit/s

95th percentile per-packet one-way delay: 53.755 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 67.46 Mbit/s

95th percentile per-packet one-way delay: 54.135 ms

Loss rate: 0.00%

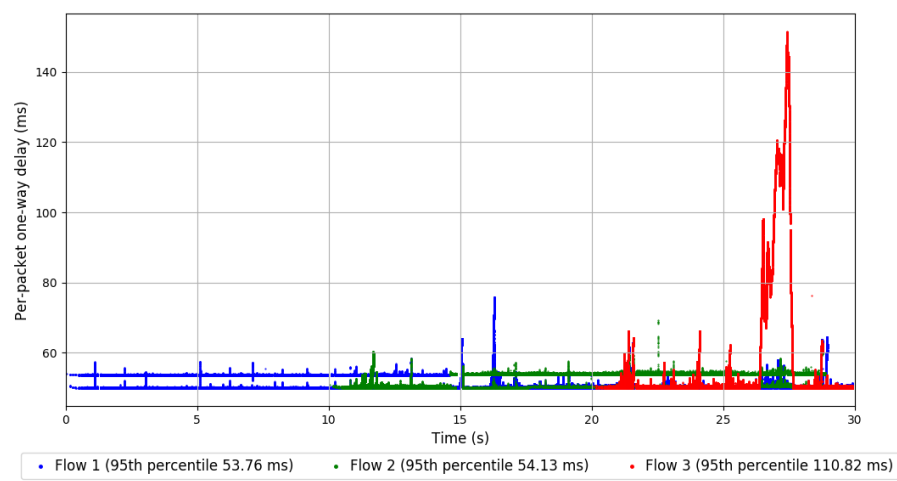
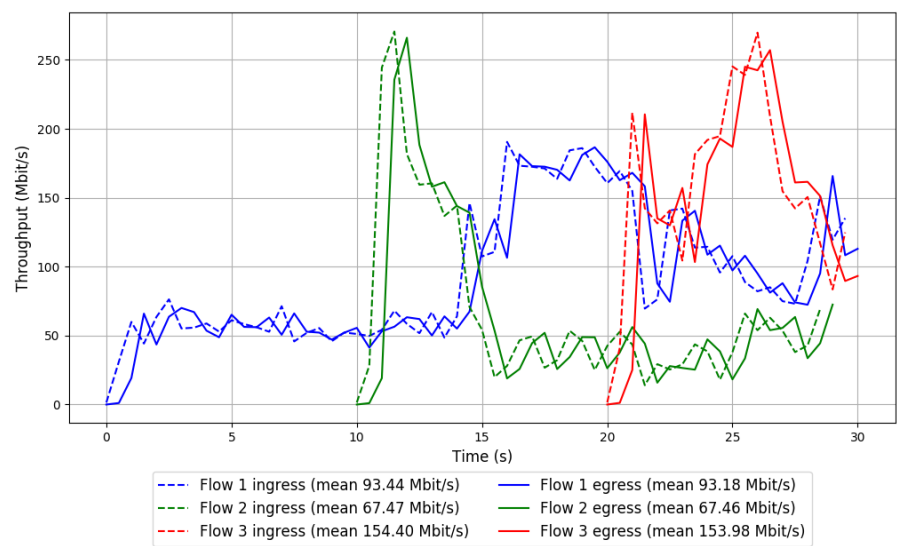
-- Flow 3:

Average throughput: 153.98 Mbit/s

95th percentile per-packet one-way delay: 110.816 ms

Loss rate: 1.27%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-05-26 15:00:02

End at: 2018-05-26 15:00:32

Local clock offset: -0.031 ms

Remote clock offset: 0.217 ms

# Below is generated by plot.py at 2018-05-26 18:42:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 166.32 Mbit/s

95th percentile per-packet one-way delay: 57.714 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 96.24 Mbit/s

95th percentile per-packet one-way delay: 59.602 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 55.18 Mbit/s

95th percentile per-packet one-way delay: 53.654 ms

Loss rate: 0.73%

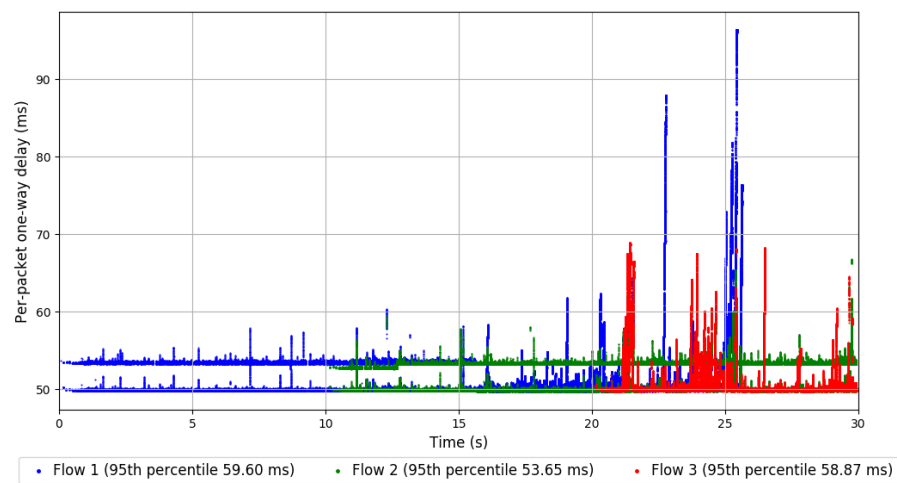
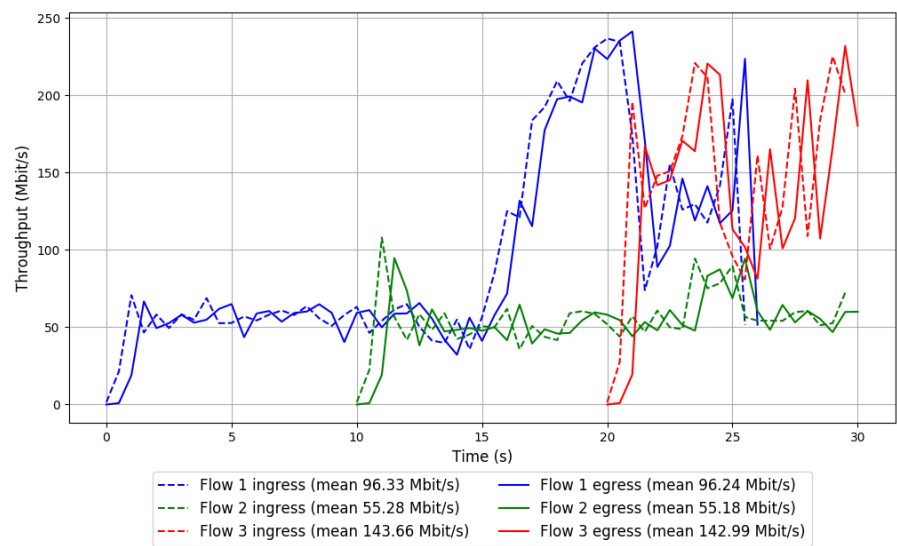
-- Flow 3:

Average throughput: 142.99 Mbit/s

95th percentile per-packet one-way delay: 58.867 ms

Loss rate: 1.48%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-05-26 15:23:14

End at: 2018-05-26 15:23:44

Local clock offset: 0.157 ms

Remote clock offset: 0.11 ms

# Below is generated by plot.py at 2018-05-26 18:42:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 205.09 Mbit/s

95th percentile per-packet one-way delay: 61.423 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 55.12 Mbit/s

95th percentile per-packet one-way delay: 54.441 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 210.41 Mbit/s

95th percentile per-packet one-way delay: 63.461 ms

Loss rate: 0.02%

-- Flow 3:

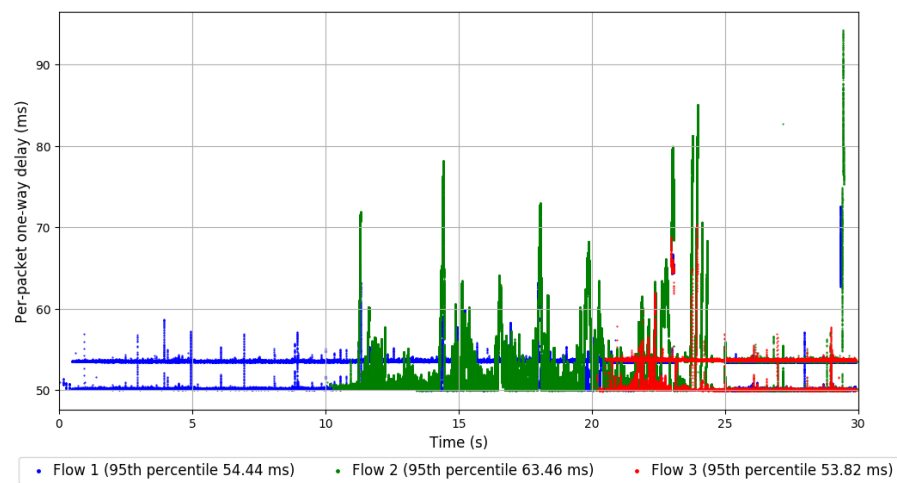
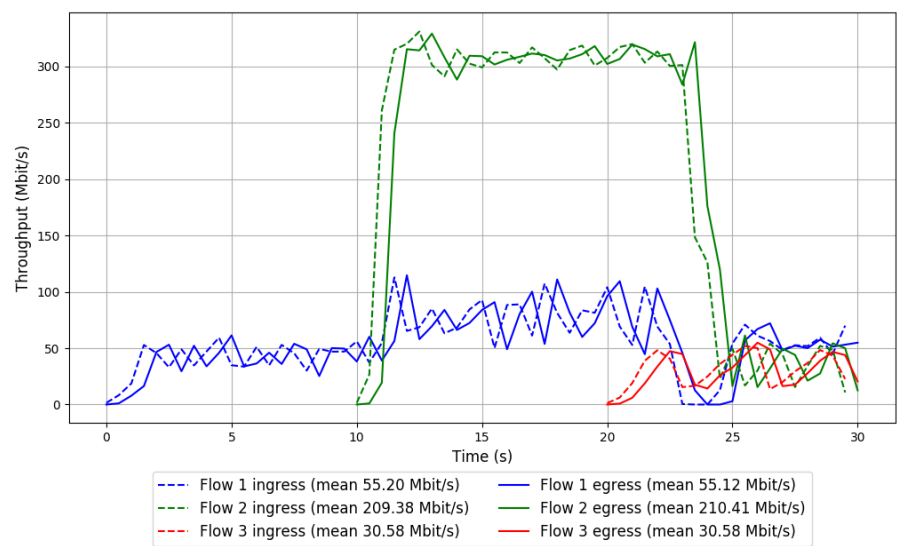
Average throughput: 30.58 Mbit/s

95th percentile per-packet one-way delay: 53.816 ms

Loss rate: 1.02%



Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-05-26 15:46:51

End at: 2018-05-26 15:47:21

Local clock offset: 0.244 ms

Remote clock offset: 0.196 ms

# Below is generated by plot.py at 2018-05-26 18:42:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 212.43 Mbit/s

95th percentile per-packet one-way delay: 55.611 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 127.45 Mbit/s

95th percentile per-packet one-way delay: 54.359 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 101.36 Mbit/s

95th percentile per-packet one-way delay: 57.977 ms

Loss rate: 0.92%

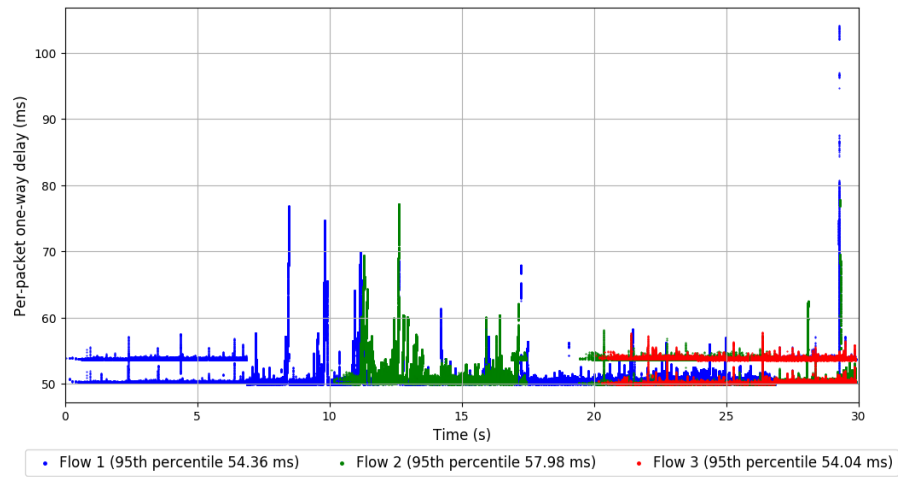
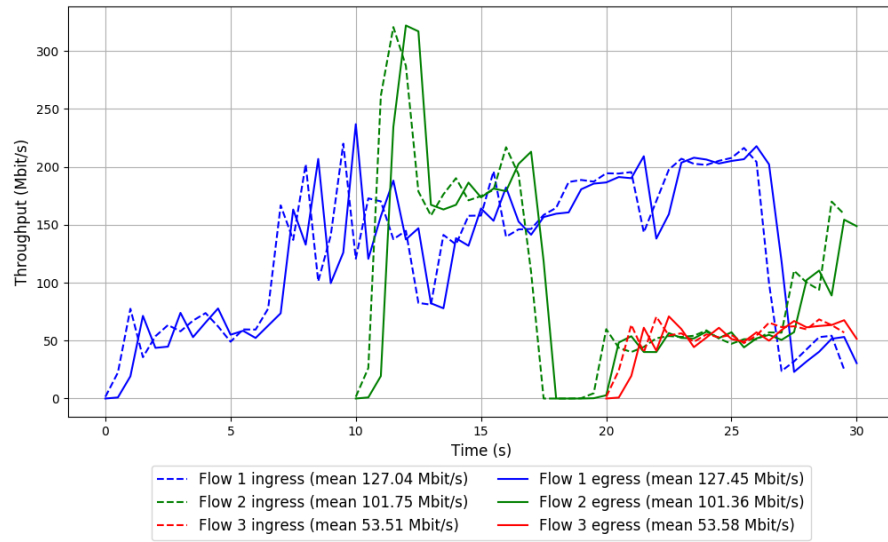
-- Flow 3:

Average throughput: 53.58 Mbit/s

95th percentile per-packet one-way delay: 54.043 ms

Loss rate: 1.00%

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

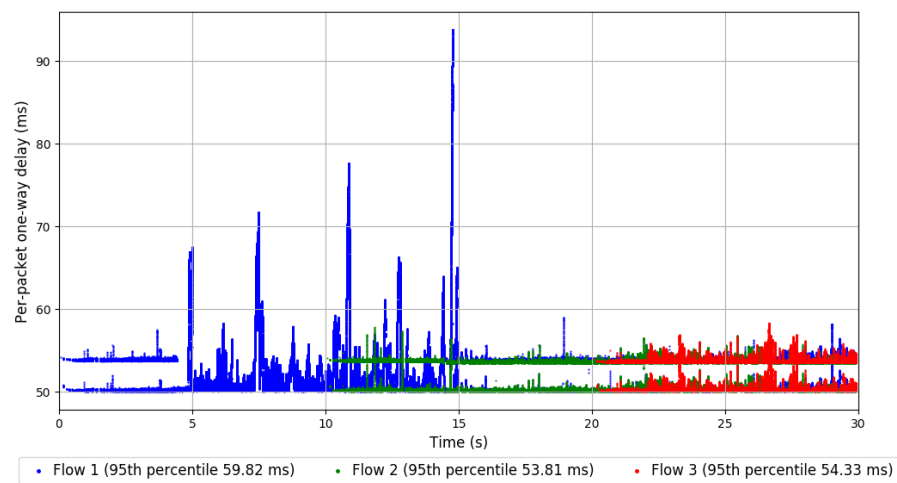
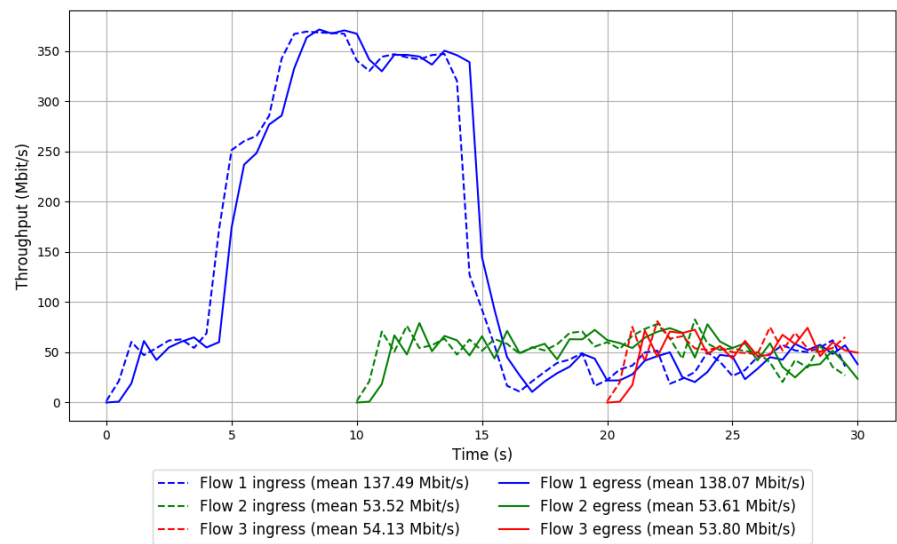


Run 5: Statistics of Copa

Start at: 2018-05-26 16:10:10  
End at: 2018-05-26 16:10:40  
Local clock offset: -0.024 ms  
Remote clock offset: -0.002 ms

```
# Below is generated by plot.py at 2018-05-26 18:42:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 191.10 Mbit/s
95th percentile per-packet one-way delay: 57.550 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 138.07 Mbit/s
95th percentile per-packet one-way delay: 59.819 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 53.61 Mbit/s
95th percentile per-packet one-way delay: 53.806 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 53.80 Mbit/s
95th percentile per-packet one-way delay: 54.328 ms
Loss rate: 1.68%
```

Run 5: Report of Copa — Data Link

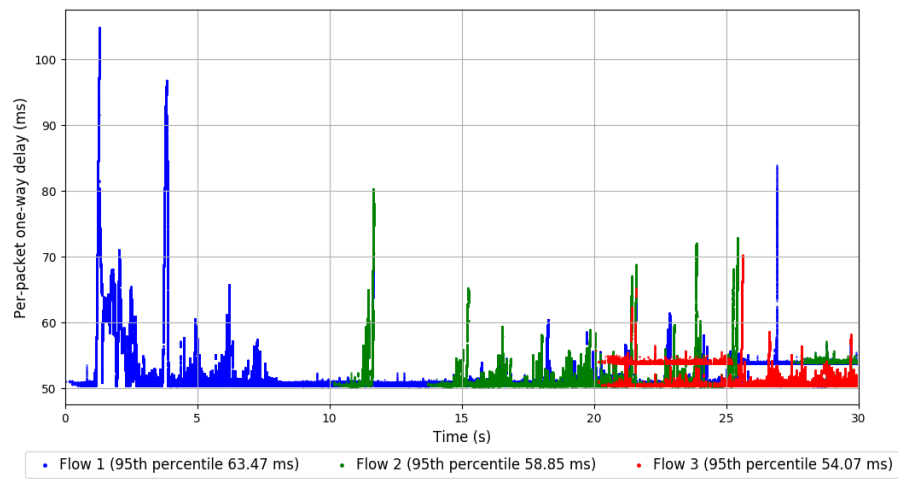
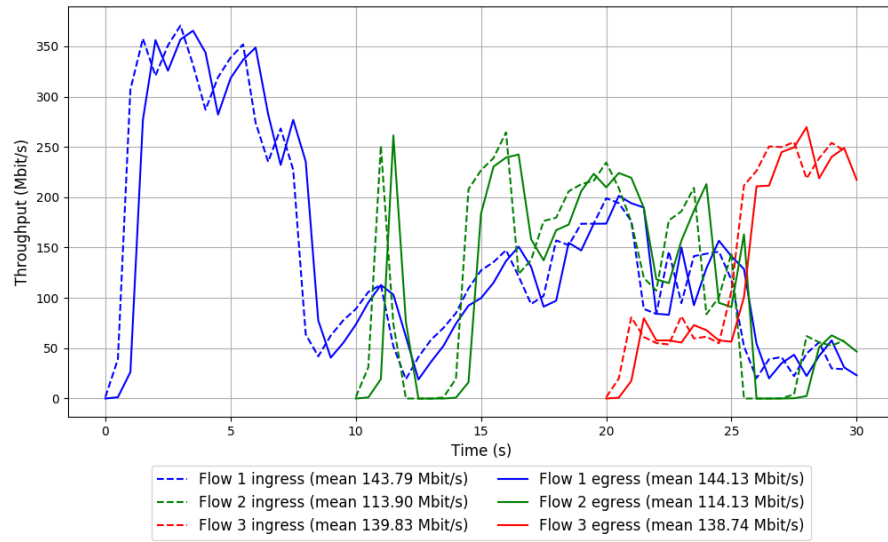


Run 6: Statistics of Copa

Start at: 2018-05-26 16:33:09  
End at: 2018-05-26 16:33:39  
Local clock offset: 0.098 ms  
Remote clock offset: -0.282 ms

# Below is generated by plot.py at 2018-05-26 18:43:39  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 265.84 Mbit/s  
95th percentile per-packet one-way delay: 61.580 ms  
Loss rate: 0.46%  
-- Flow 1:  
Average throughput: 144.13 Mbit/s  
95th percentile per-packet one-way delay: 63.470 ms  
Loss rate: 0.10%  
-- Flow 2:  
Average throughput: 114.13 Mbit/s  
95th percentile per-packet one-way delay: 58.846 ms  
Loss rate: 0.29%  
-- Flow 3:  
Average throughput: 138.74 Mbit/s  
95th percentile per-packet one-way delay: 54.071 ms  
Loss rate: 1.83%

## Run 6: Report of Copa — Data Link



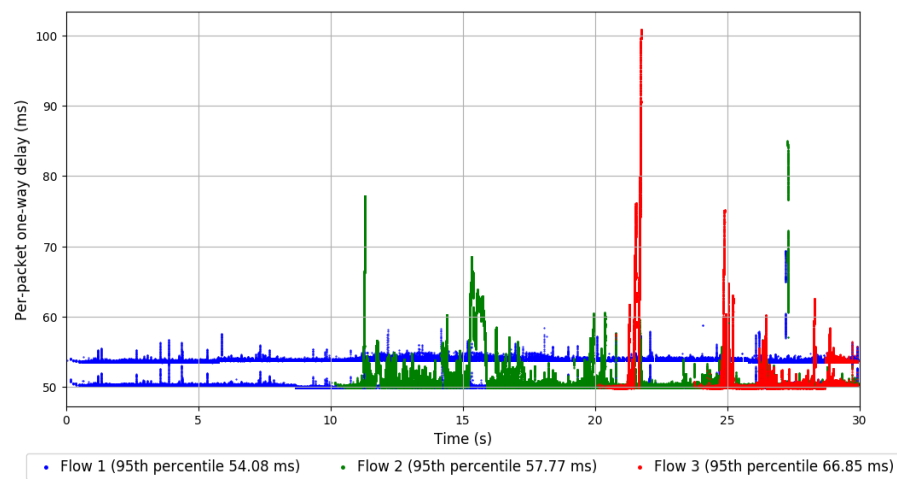
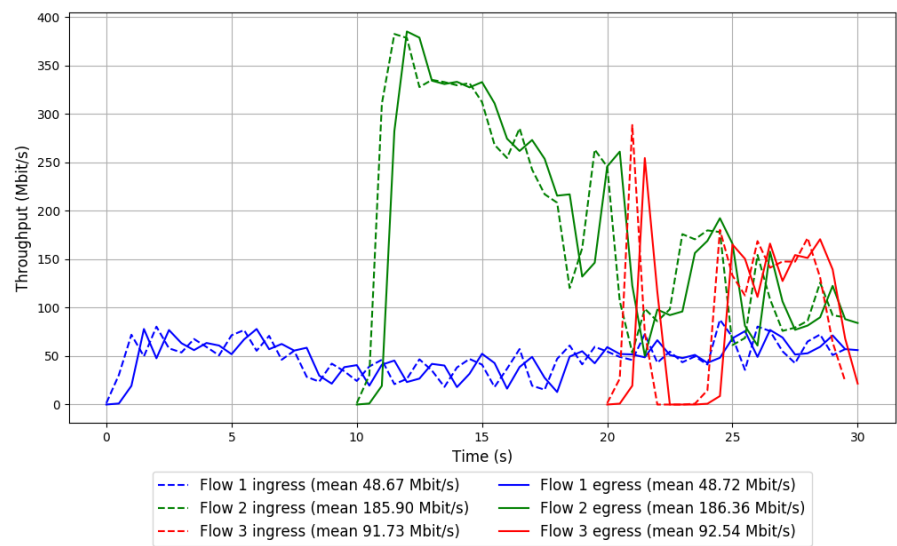
Run 7: Statistics of Copa

Start at: 2018-05-26 16:55:59  
End at: 2018-05-26 16:56:29  
Local clock offset: -0.072 ms  
Remote clock offset: -0.267 ms

# Below is generated by plot.py at 2018-05-26 18:46:29  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 203.25 Mbit/s  
95th percentile per-packet one-way delay: 57.640 ms  
Loss rate: 0.22%  
-- Flow 1:  
Average throughput: 48.72 Mbit/s  
95th percentile per-packet one-way delay: 54.075 ms  
Loss rate: 0.16%  
-- Flow 2:  
Average throughput: 186.36 Mbit/s  
95th percentile per-packet one-way delay: 57.773 ms  
Loss rate: 0.26%  
-- Flow 3:  
Average throughput: 92.54 Mbit/s  
95th percentile per-packet one-way delay: 66.848 ms  
Loss rate: 0.14%



Run 7: Report of Copa — Data Link

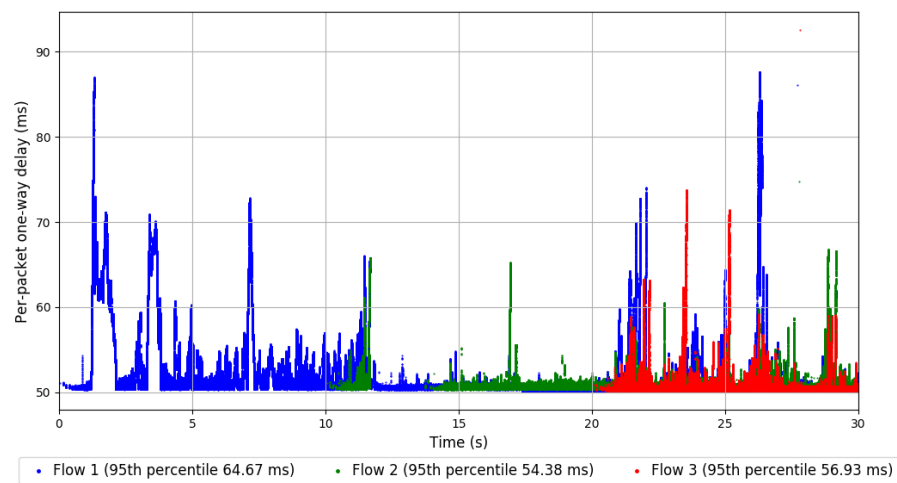
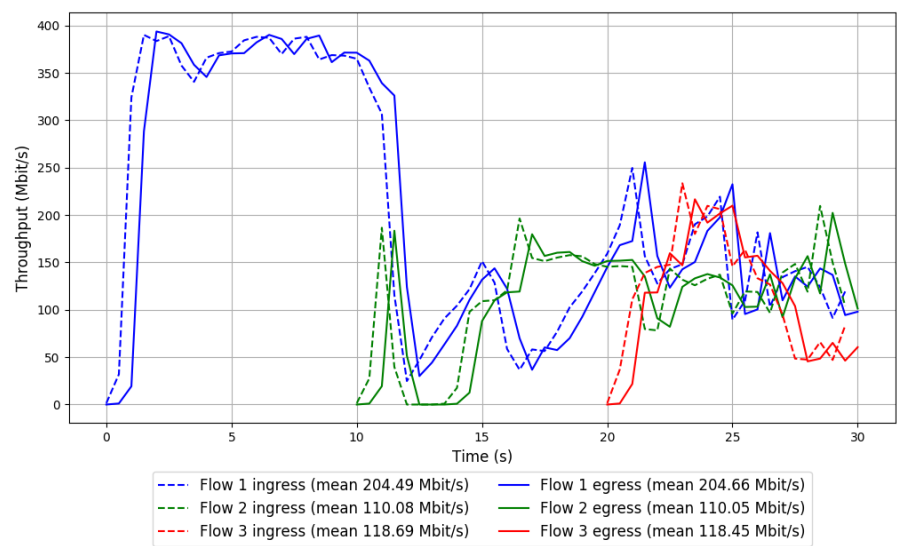


Run 8: Statistics of Copa

Start at: 2018-05-26 17:18:50  
End at: 2018-05-26 17:19:20  
Local clock offset: 0.066 ms  
Remote clock offset: -0.291 ms

# Below is generated by plot.py at 2018-05-26 18:51:07  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 316.96 Mbit/s  
95th percentile per-packet one-way delay: 62.358 ms  
Loss rate: 0.44%  
-- Flow 1:  
Average throughput: 204.66 Mbit/s  
95th percentile per-packet one-way delay: 64.671 ms  
Loss rate: 0.26%  
-- Flow 2:  
Average throughput: 110.05 Mbit/s  
95th percentile per-packet one-way delay: 54.375 ms  
Loss rate: 0.54%  
-- Flow 3:  
Average throughput: 118.45 Mbit/s  
95th percentile per-packet one-way delay: 56.928 ms  
Loss rate: 1.22%

Run 8: Report of Copa — Data Link

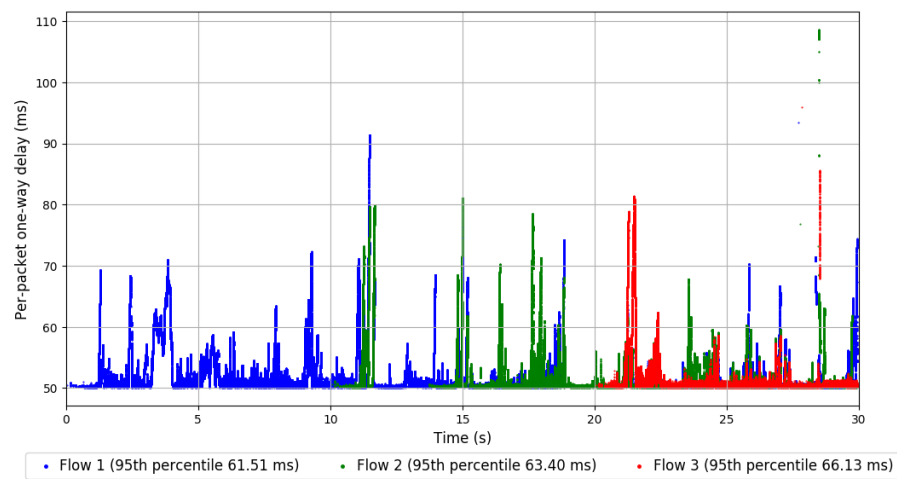
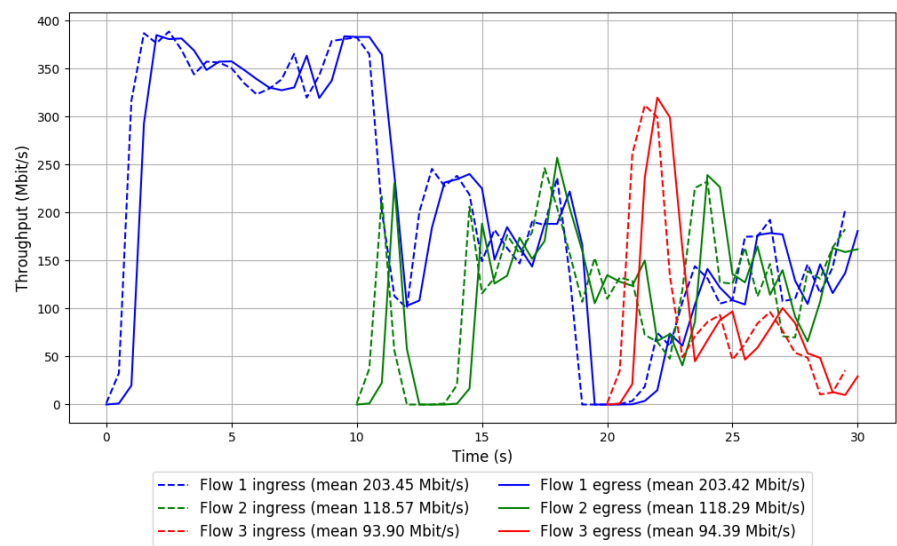


Run 9: Statistics of Copa

Start at: 2018-05-26 17:42:25  
End at: 2018-05-26 17:42:55  
Local clock offset: 0.163 ms  
Remote clock offset: -0.101 ms

# Below is generated by plot.py at 2018-05-26 18:51:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 313.24 Mbit/s  
95th percentile per-packet one-way delay: 62.118 ms  
Loss rate: 0.46%  
-- Flow 1:  
Average throughput: 203.42 Mbit/s  
95th percentile per-packet one-way delay: 61.513 ms  
Loss rate: 0.35%  
-- Flow 2:  
Average throughput: 118.29 Mbit/s  
95th percentile per-packet one-way delay: 63.395 ms  
Loss rate: 0.74%  
-- Flow 3:  
Average throughput: 94.39 Mbit/s  
95th percentile per-packet one-way delay: 66.128 ms  
Loss rate: 0.50%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-05-26 18:05:52

End at: 2018-05-26 18:06:22

Local clock offset: 0.36 ms

Remote clock offset: 0.069 ms

# Below is generated by plot.py at 2018-05-26 18:51:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 282.72 Mbit/s

95th percentile per-packet one-way delay: 58.836 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 180.33 Mbit/s

95th percentile per-packet one-way delay: 55.222 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 44.99 Mbit/s

95th percentile per-packet one-way delay: 54.168 ms

Loss rate: 0.51%

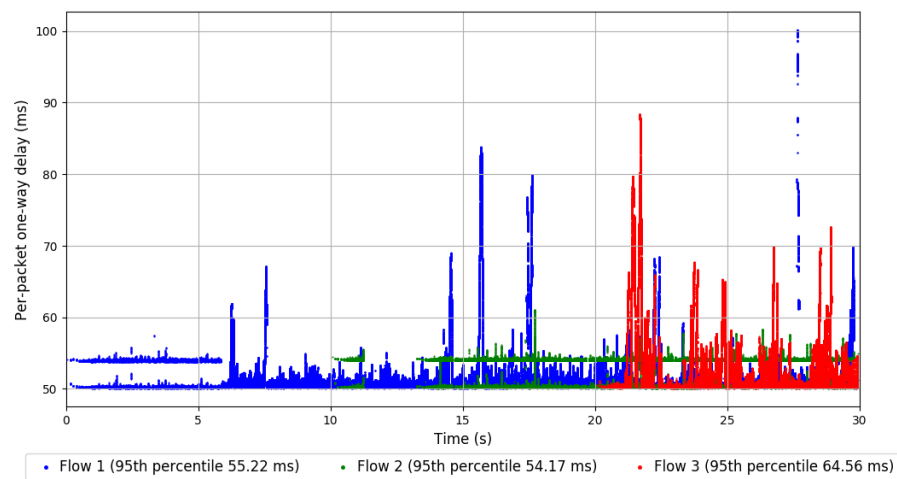
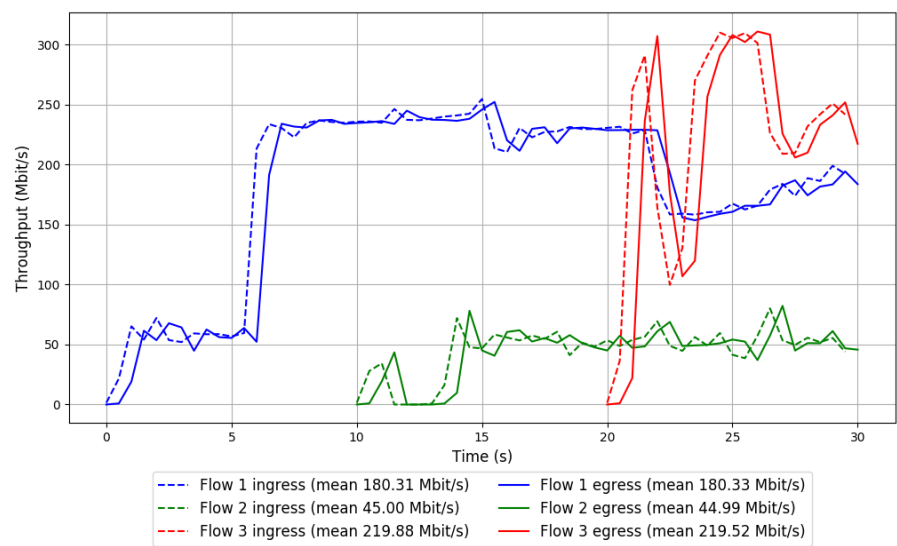
-- Flow 3:

Average throughput: 219.52 Mbit/s

95th percentile per-packet one-way delay: 64.562 ms

Loss rate: 1.18%

Run 10: Report of Copa — Data Link



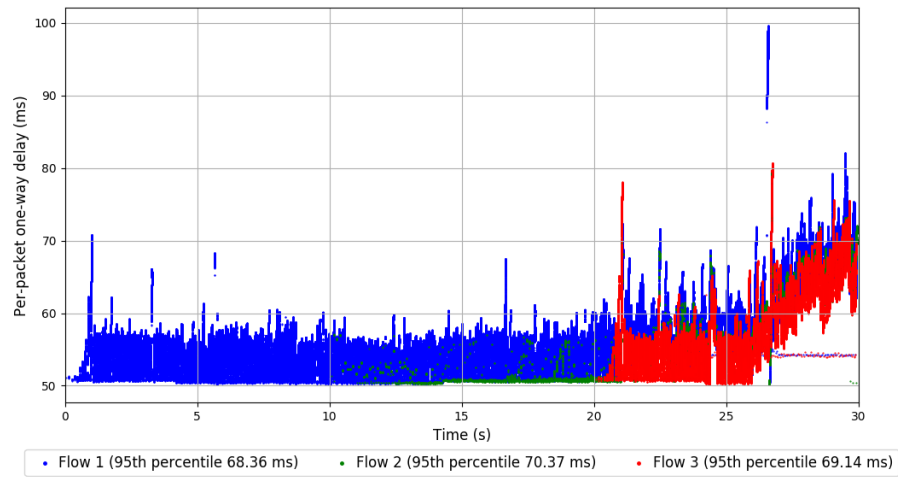
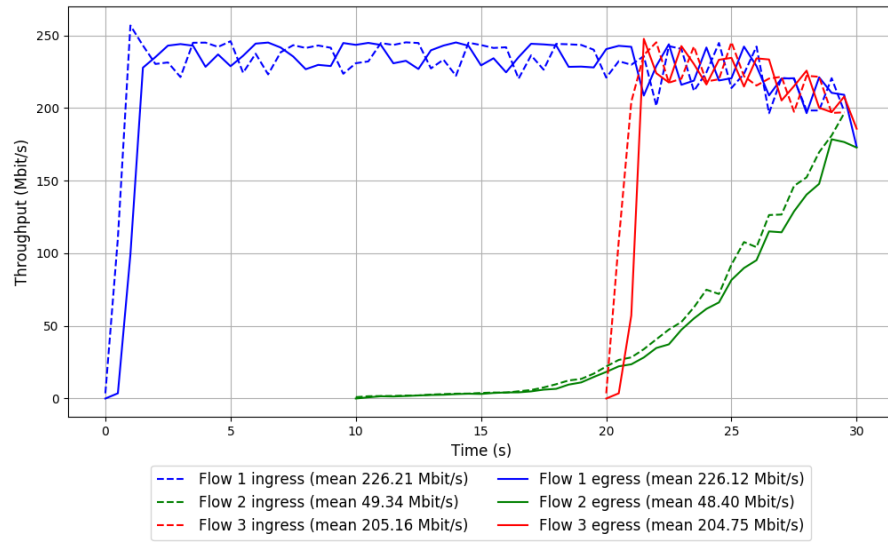
Run 1: Statistics of TCP Cubic

Start at: 2018-05-26 14:30:23  
End at: 2018-05-26 14:30:53  
Local clock offset: 0.207 ms  
Remote clock offset: -0.137 ms

# Below is generated by plot.py at 2018-05-26 18:51:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 325.55 Mbit/s  
95th percentile per-packet one-way delay: 68.960 ms  
Loss rate: 0.74%  
-- Flow 1:  
Average throughput: 226.12 Mbit/s  
95th percentile per-packet one-way delay: 68.364 ms  
Loss rate: 0.36%  
-- Flow 2:  
Average throughput: 48.40 Mbit/s  
95th percentile per-packet one-way delay: 70.372 ms  
Loss rate: 2.39%  
-- Flow 3:  
Average throughput: 204.75 Mbit/s  
95th percentile per-packet one-way delay: 69.137 ms  
Loss rate: 1.21%



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



Run 2: Statistics of TCP Cubic

Start at: 2018-05-26 14:53:24

End at: 2018-05-26 14:53:54

Local clock offset: -0.175 ms

Remote clock offset: 0.124 ms

# Below is generated by plot.py at 2018-05-26 18:51:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 319.16 Mbit/s

95th percentile per-packet one-way delay: 61.371 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 222.34 Mbit/s

95th percentile per-packet one-way delay: 61.421 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 50.68 Mbit/s

95th percentile per-packet one-way delay: 61.181 ms

Loss rate: 2.25%

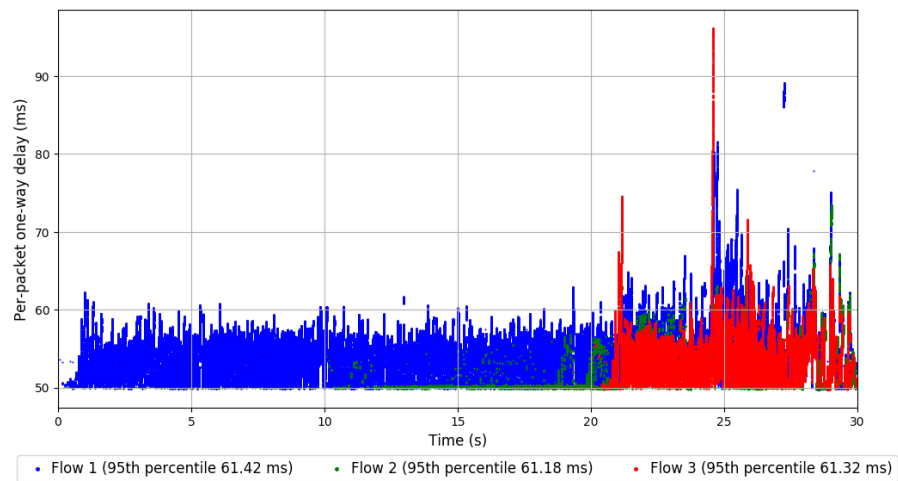
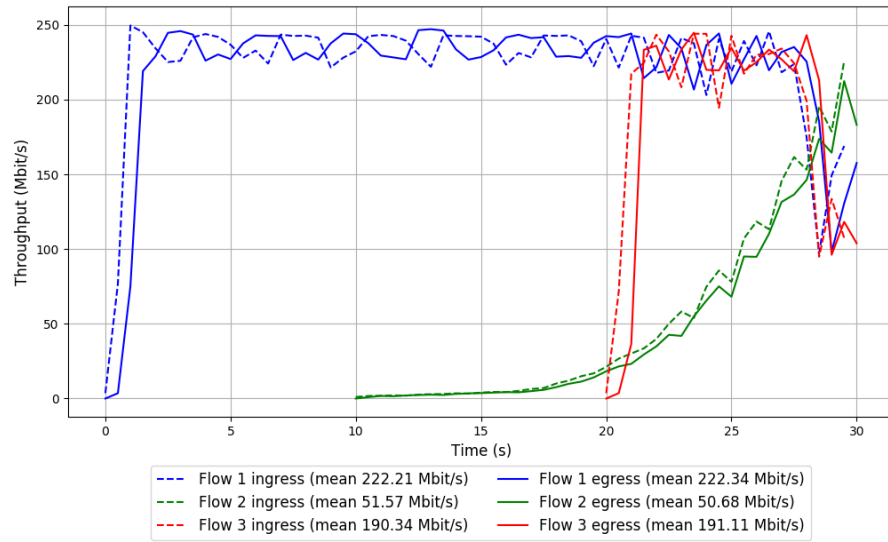
-- Flow 3:

Average throughput: 191.11 Mbit/s

95th percentile per-packet one-way delay: 61.316 ms

Loss rate: 0.65%

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



Run 3: Statistics of TCP Cubic

Start at: 2018-05-26 15:16:32

End at: 2018-05-26 15:17:02

Local clock offset: -0.314 ms

Remote clock offset: 0.038 ms

# Below is generated by plot.py at 2018-05-26 18:51:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 355.06 Mbit/s

95th percentile per-packet one-way delay: 78.967 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 155.67 Mbit/s

95th percentile per-packet one-way delay: 77.369 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 208.74 Mbit/s

95th percentile per-packet one-way delay: 80.374 ms

Loss rate: 0.58%

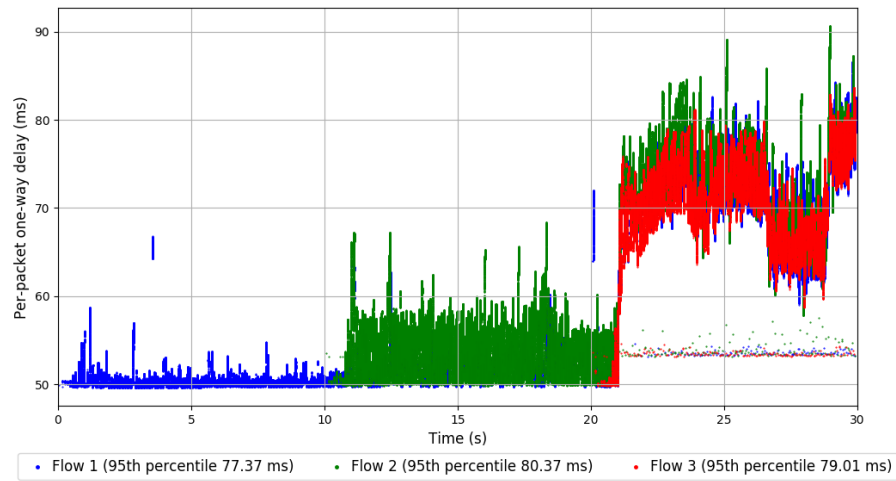
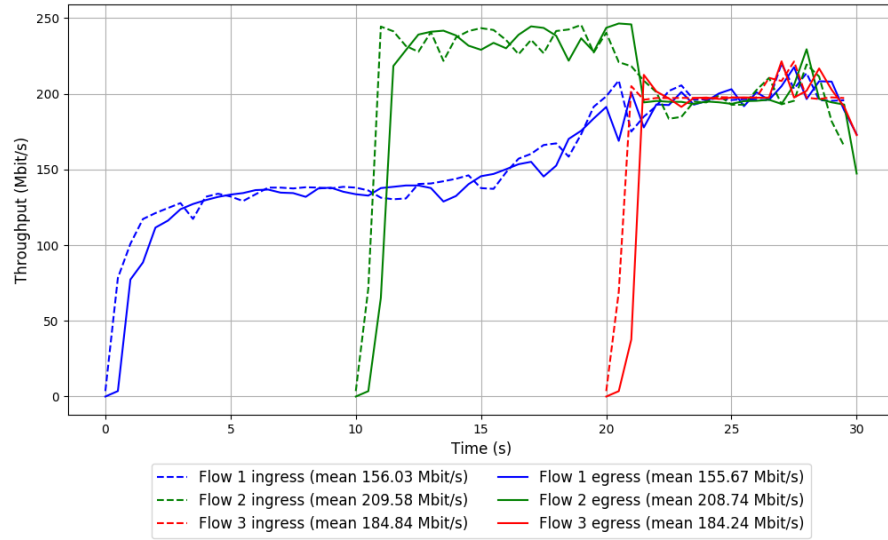
-- Flow 3:

Average throughput: 184.24 Mbit/s

95th percentile per-packet one-way delay: 79.007 ms

Loss rate: 1.34%

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

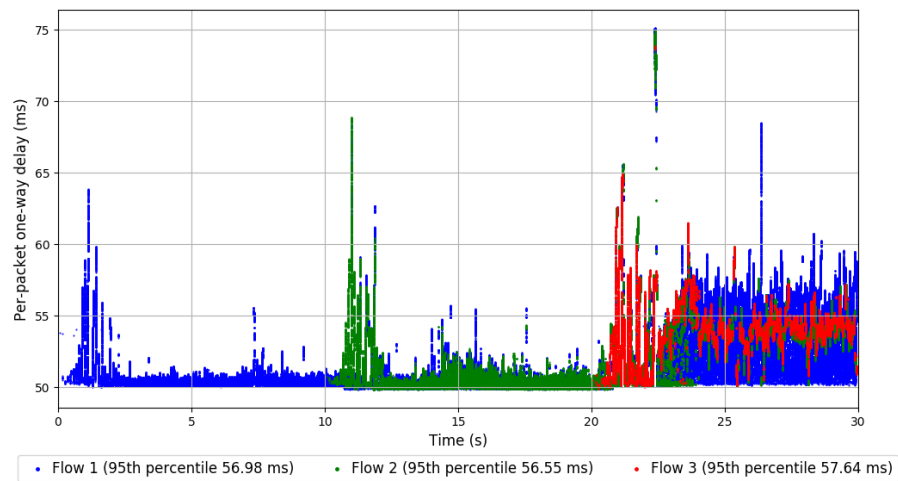
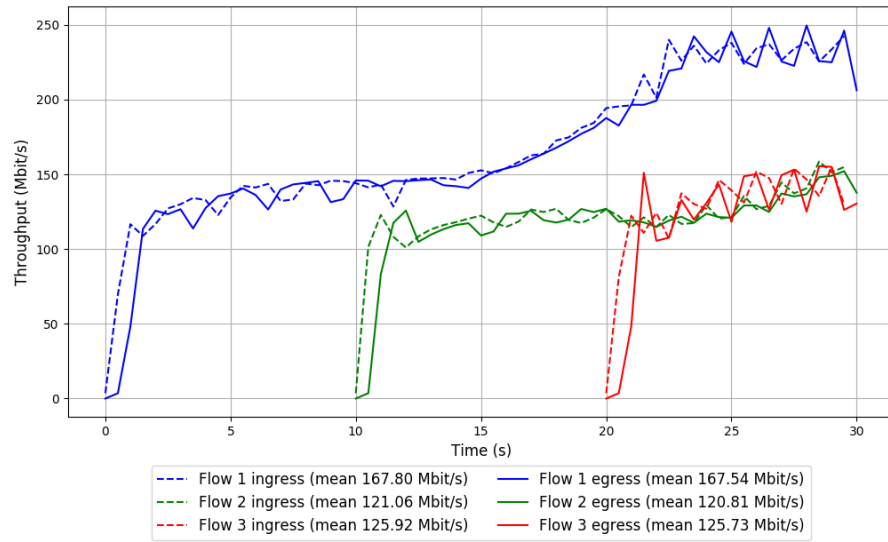


Run 4: Statistics of TCP Cubic

Start at: 2018-05-26 15:40:17  
End at: 2018-05-26 15:40:47  
Local clock offset: -0.116 ms  
Remote clock offset: -0.066 ms

# Below is generated by plot.py at 2018-05-26 18:51:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 289.25 Mbit/s  
95th percentile per-packet one-way delay: 57.024 ms  
Loss rate: 0.65%  
-- Flow 1:  
Average throughput: 167.54 Mbit/s  
95th percentile per-packet one-way delay: 56.979 ms  
Loss rate: 0.49%  
-- Flow 2:  
Average throughput: 120.81 Mbit/s  
95th percentile per-packet one-way delay: 56.548 ms  
Loss rate: 0.73%  
-- Flow 3:  
Average throughput: 125.73 Mbit/s  
95th percentile per-packet one-way delay: 57.638 ms  
Loss rate: 1.16%

# Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-05-26 16:03:37

End at: 2018-05-26 16:04:07

Local clock offset: -0.448 ms

Remote clock offset: 0.069 ms

# Below is generated by plot.py at 2018-05-26 18:54:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 385.98 Mbit/s

95th percentile per-packet one-way delay: 61.802 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 227.46 Mbit/s

95th percentile per-packet one-way delay: 62.528 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 135.38 Mbit/s

95th percentile per-packet one-way delay: 59.242 ms

Loss rate: 0.71%

-- Flow 3:

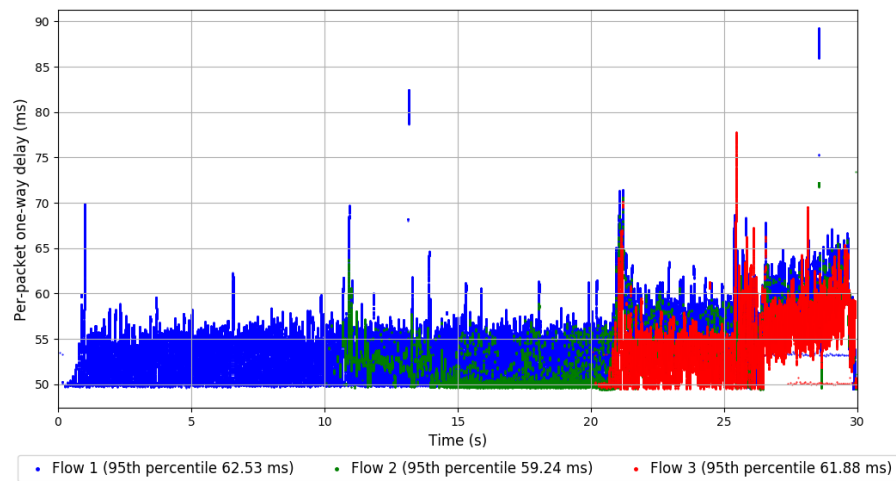
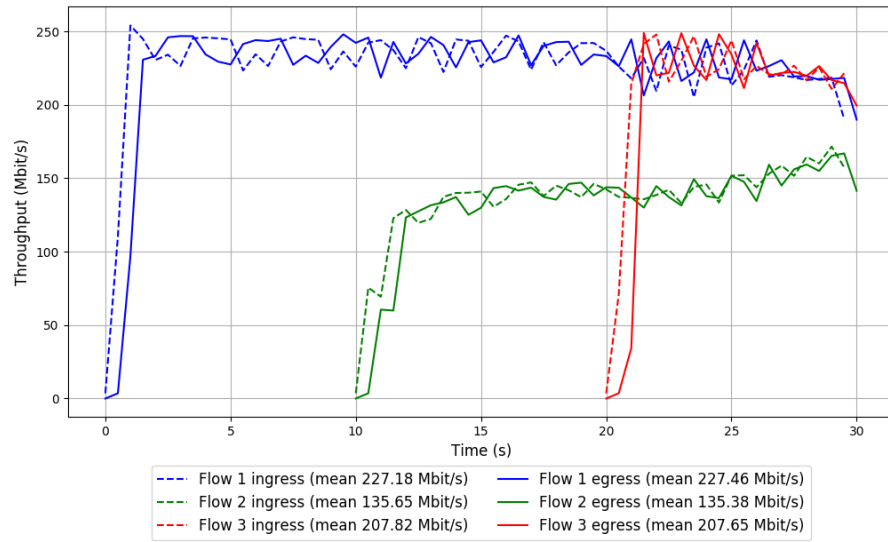
Average throughput: 207.65 Mbit/s

95th percentile per-packet one-way delay: 61.884 ms

Loss rate: 1.13%



# Run 5: Report of TCP Cubic — Data Link

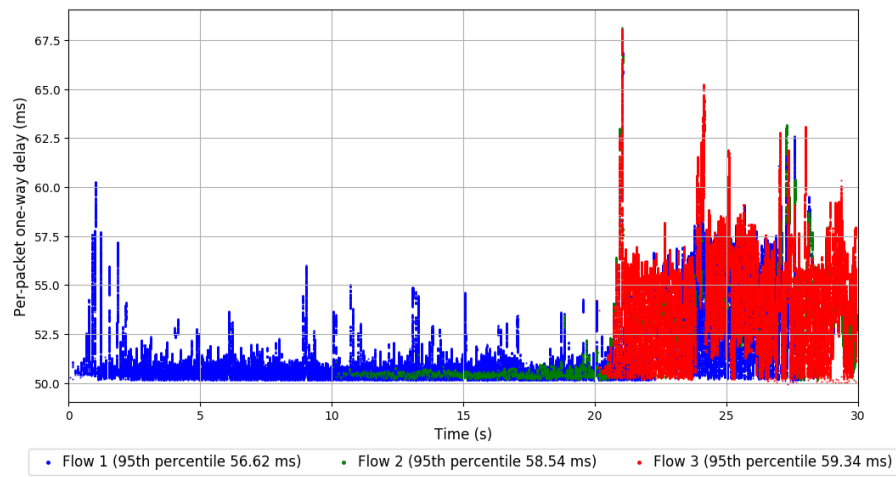
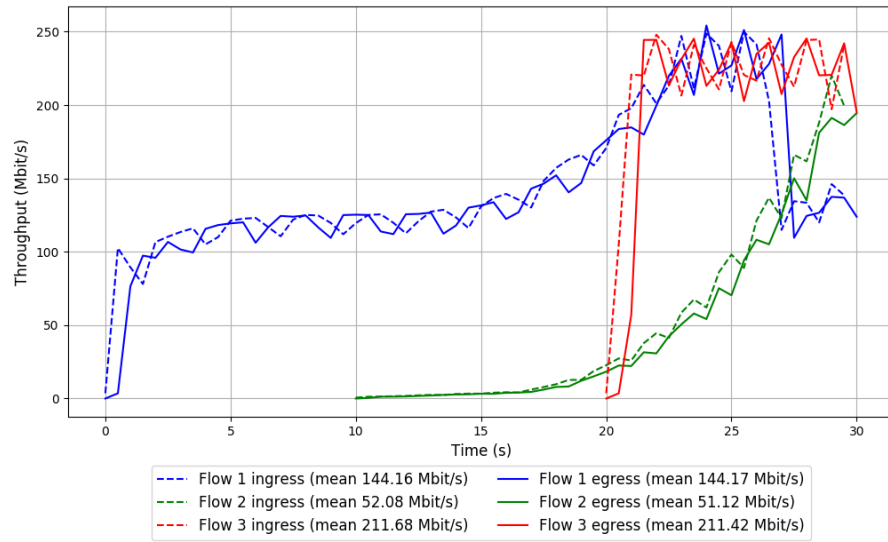


Run 6: Statistics of TCP Cubic

Start at: 2018-05-26 16:26:38  
End at: 2018-05-26 16:27:08  
Local clock offset: -0.019 ms  
Remote clock offset: -0.197 ms

# Below is generated by plot.py at 2018-05-26 18:54:15  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 247.81 Mbit/s  
95th percentile per-packet one-way delay: 57.635 ms  
Loss rate: 0.85%  
-- Flow 1:  
Average throughput: 144.17 Mbit/s  
95th percentile per-packet one-way delay: 56.617 ms  
Loss rate: 0.33%  
-- Flow 2:  
Average throughput: 51.12 Mbit/s  
95th percentile per-packet one-way delay: 58.543 ms  
Loss rate: 2.34%  
-- Flow 3:  
Average throughput: 211.42 Mbit/s  
95th percentile per-packet one-way delay: 59.343 ms  
Loss rate: 1.17%

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

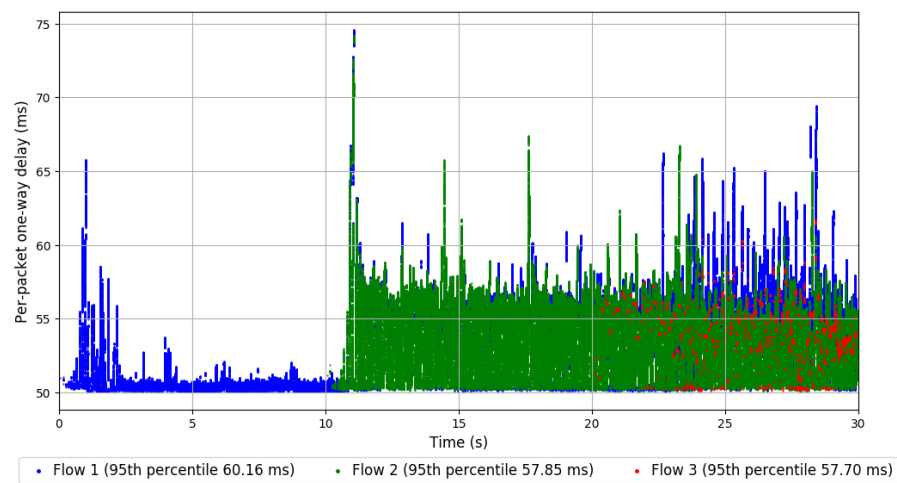
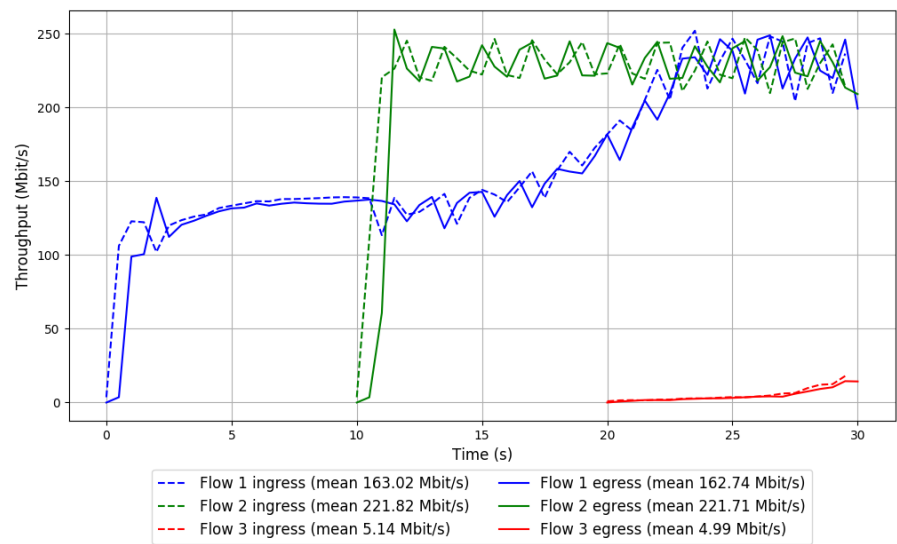


Run 7: Statistics of TCP Cubic

Start at: 2018-05-26 16:49:28  
End at: 2018-05-26 16:49:58  
Local clock offset: 0.019 ms  
Remote clock offset: -0.304 ms

# Below is generated by plot.py at 2018-05-26 18:54:15  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 311.67 Mbit/s  
95th percentile per-packet one-way delay: 59.045 ms  
Loss rate: 0.56%  
-- Flow 1:  
Average throughput: 162.74 Mbit/s  
95th percentile per-packet one-way delay: 60.161 ms  
Loss rate: 0.52%  
-- Flow 2:  
Average throughput: 221.71 Mbit/s  
95th percentile per-packet one-way delay: 57.847 ms  
Loss rate: 0.56%  
-- Flow 3:  
Average throughput: 4.99 Mbit/s  
95th percentile per-packet one-way delay: 57.698 ms  
Loss rate: 4.04%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-05-26 17:12:24

End at: 2018-05-26 17:12:54

Local clock offset: 0.041 ms

Remote clock offset: 0.107 ms

# Below is generated by plot.py at 2018-05-26 18:54:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 205.44 Mbit/s

95th percentile per-packet one-way delay: 57.284 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 168.48 Mbit/s

95th percentile per-packet one-way delay: 57.041 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 53.15 Mbit/s

95th percentile per-packet one-way delay: 57.831 ms

Loss rate: 1.95%

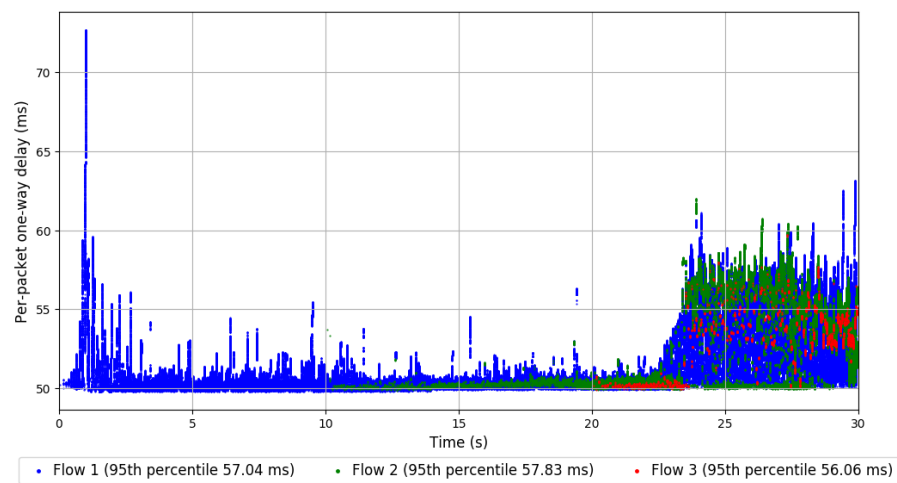
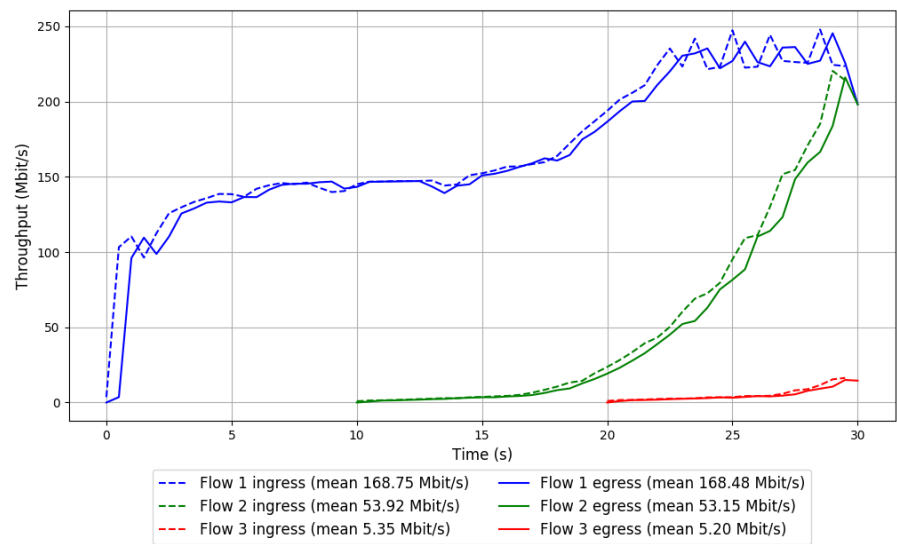
-- Flow 3:

Average throughput: 5.20 Mbit/s

95th percentile per-packet one-way delay: 56.058 ms

Loss rate: 3.87%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-05-26 17:35:52

End at: 2018-05-26 17:36:22

Local clock offset: -0.115 ms

Remote clock offset: 0.32 ms

# Below is generated by plot.py at 2018-05-26 18:55:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 340.36 Mbit/s

95th percentile per-packet one-way delay: 65.593 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 193.39 Mbit/s

95th percentile per-packet one-way delay: 64.425 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 119.93 Mbit/s

95th percentile per-packet one-way delay: 66.202 ms

Loss rate: 0.75%

-- Flow 3:

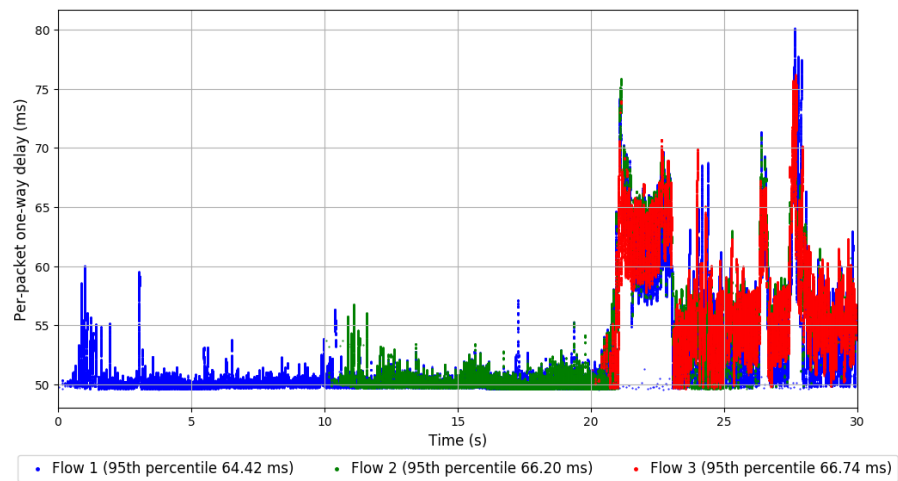
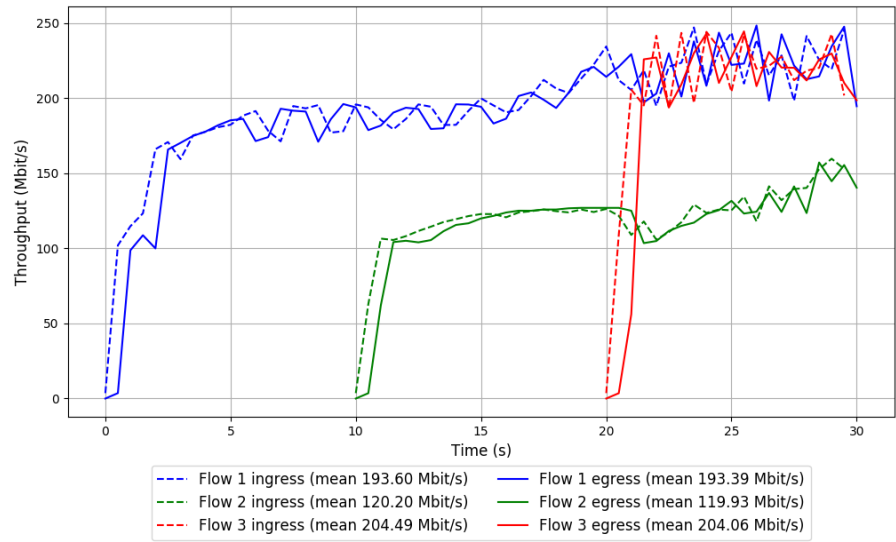
Average throughput: 204.06 Mbit/s

95th percentile per-packet one-way delay: 66.741 ms

Loss rate: 1.24%



# Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-05-26 17:59:18

End at: 2018-05-26 17:59:48

Local clock offset: 0.038 ms

Remote clock offset: 0.12 ms

# Below is generated by plot.py at 2018-05-26 18:55:56

# Datalink statistics

-- Total of 3 flows:

Average throughput: 283.89 Mbit/s

95th percentile per-packet one-way delay: 58.480 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 167.67 Mbit/s

95th percentile per-packet one-way delay: 59.848 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 172.40 Mbit/s

95th percentile per-packet one-way delay: 55.276 ms

Loss rate: 0.66%

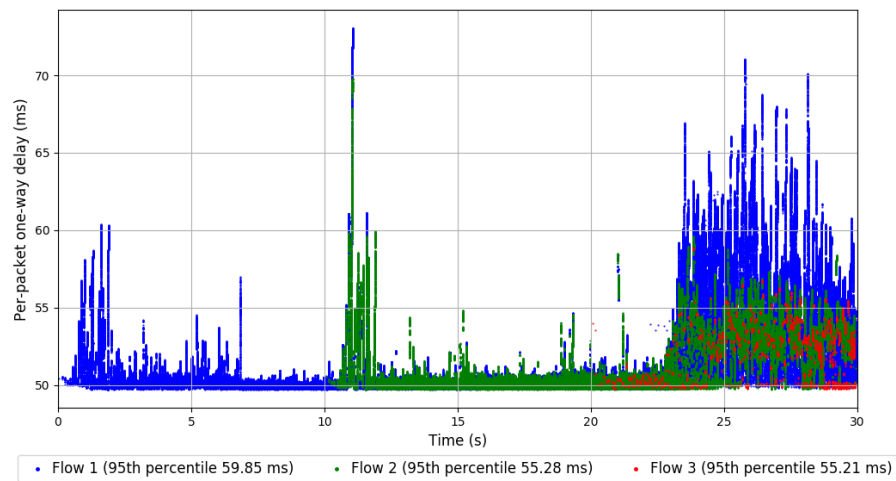
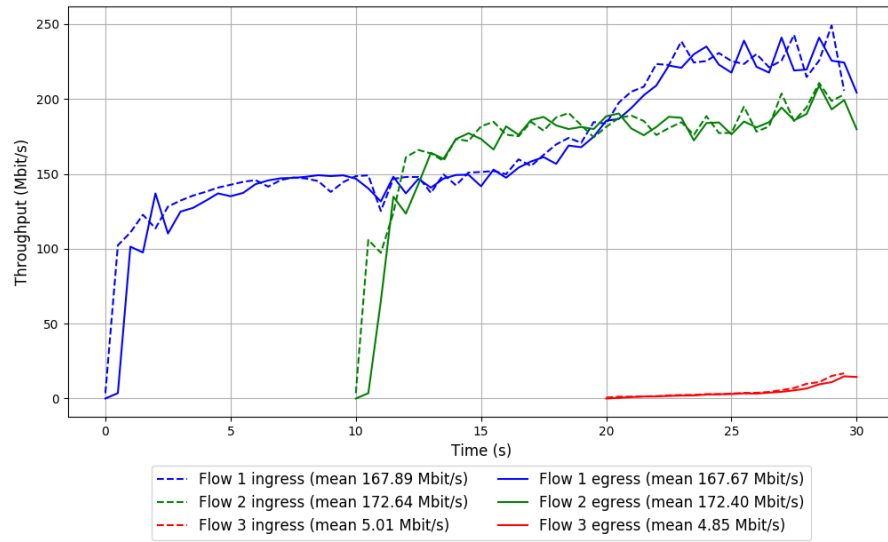
-- Flow 3:

Average throughput: 4.85 Mbit/s

95th percentile per-packet one-way delay: 55.208 ms

Loss rate: 4.19%

# Run 10: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2018-05-26 14:34:48

End at: 2018-05-26 14:35:18

Local clock offset: 0.098 ms

Remote clock offset: 0.233 ms

# Below is generated by plot.py at 2018-05-26 19:20:55

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1310.14 Mbit/s

95th percentile per-packet one-way delay: 193.941 ms

Loss rate: 5.47%

-- Flow 1:

Average throughput: 706.36 Mbit/s

95th percentile per-packet one-way delay: 213.083 ms

Loss rate: 4.28%

-- Flow 2:

Average throughput: 599.46 Mbit/s

95th percentile per-packet one-way delay: 179.158 ms

Loss rate: 7.80%

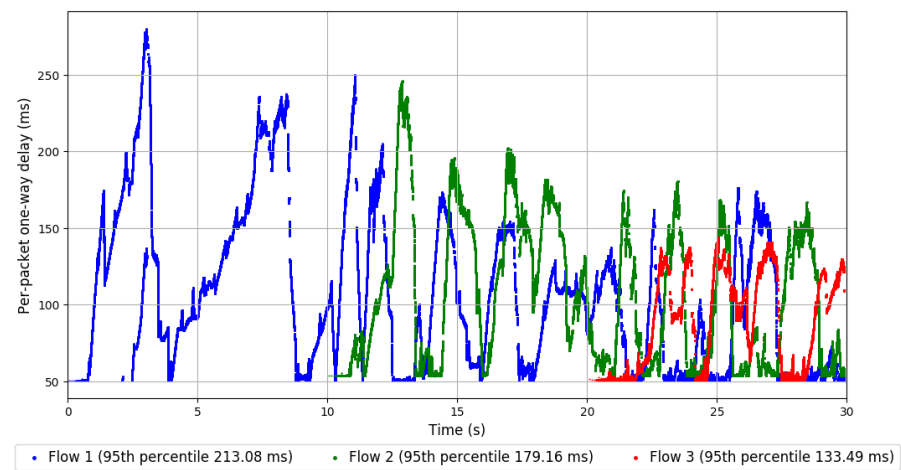
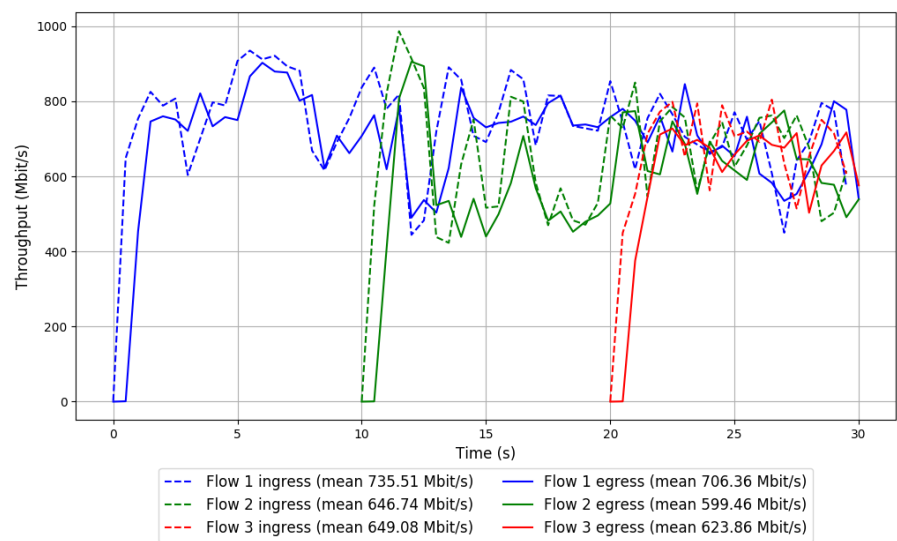
-- Flow 3:

Average throughput: 623.86 Mbit/s

95th percentile per-packet one-way delay: 133.487 ms

Loss rate: 4.87%

Run 1: Report of FillP — Data Link

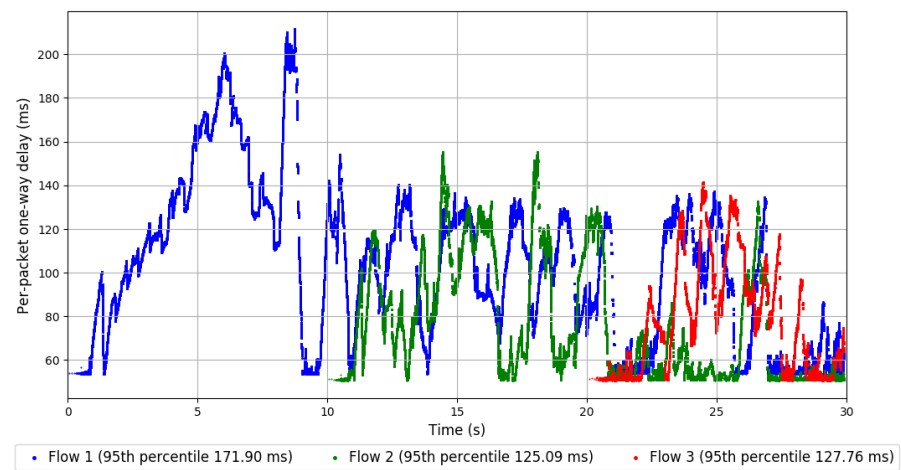
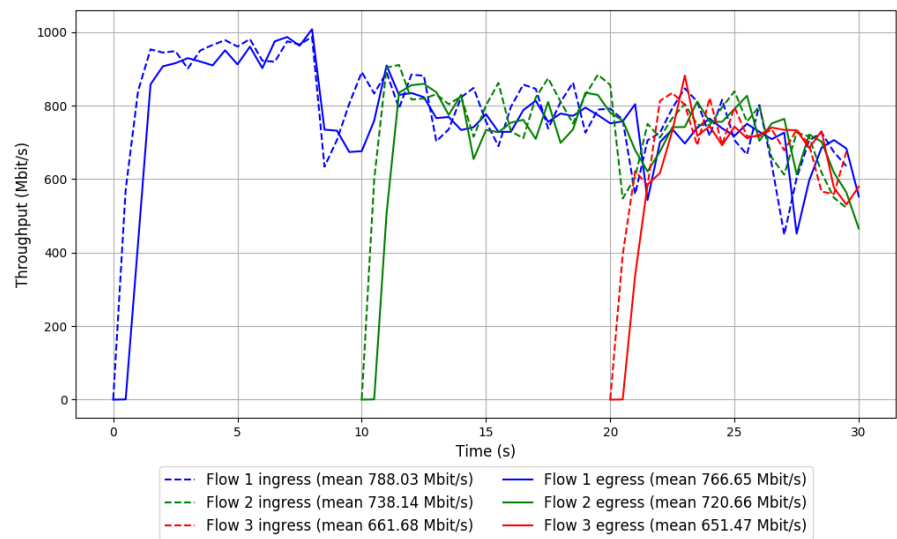


Run 2: Statistics of FillP

Start at: 2018-05-26 14:57:53  
End at: 2018-05-26 14:58:23  
Local clock offset: 0.37 ms  
Remote clock offset: -0.205 ms

# Below is generated by plot.py at 2018-05-26 19:24:29  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1459.92 Mbit/s  
95th percentile per-packet one-way delay: 158.889 ms  
Loss rate: 2.92%  
-- Flow 1:  
Average throughput: 766.65 Mbit/s  
95th percentile per-packet one-way delay: 171.904 ms  
Loss rate: 3.06%  
-- Flow 2:  
Average throughput: 720.66 Mbit/s  
95th percentile per-packet one-way delay: 125.088 ms  
Loss rate: 2.85%  
-- Flow 3:  
Average throughput: 651.47 Mbit/s  
95th percentile per-packet one-way delay: 127.760 ms  
Loss rate: 2.55%

Run 2: Report of FillP — Data Link



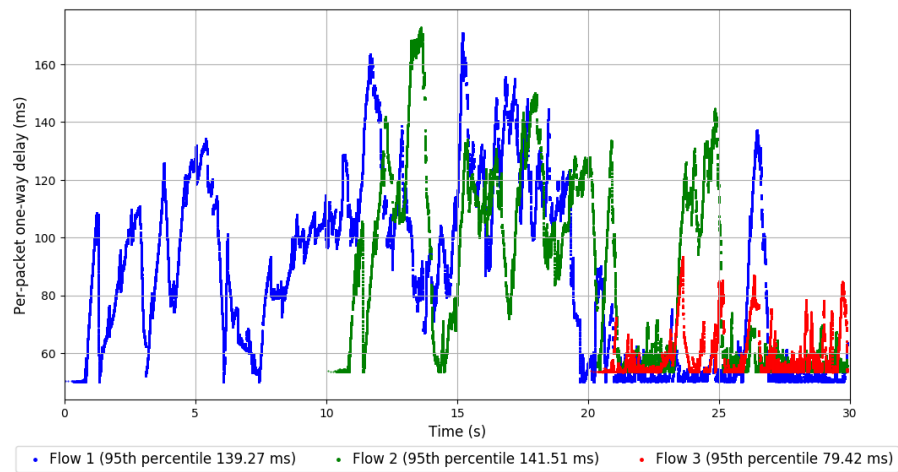
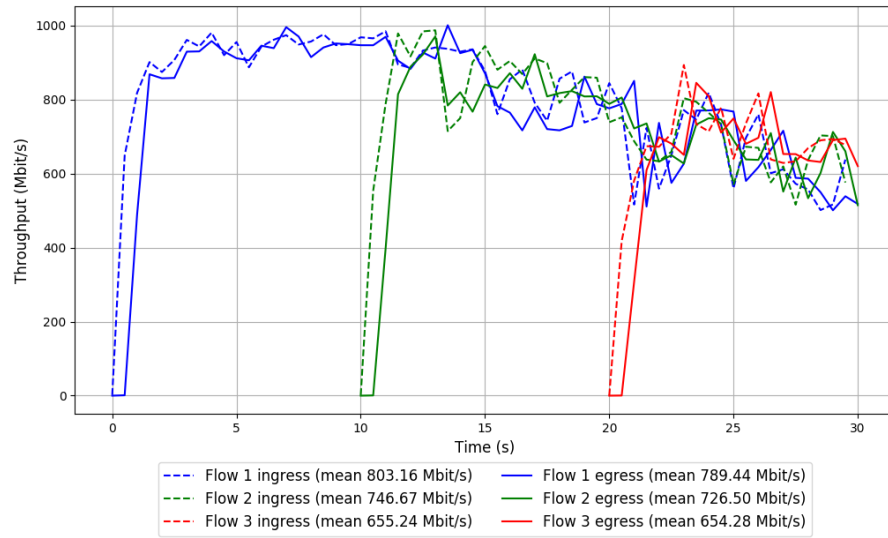
Run 3: Statistics of FillP

Start at: 2018-05-26 15:21:04  
End at: 2018-05-26 15:21:34  
Local clock offset: -0.003 ms  
Remote clock offset: 0.044 ms

# Below is generated by plot.py at 2018-05-26 19:25:30  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1486.94 Mbit/s  
95th percentile per-packet one-way delay: 137.849 ms  
Loss rate: 2.31%  
-- Flow 1:  
Average throughput: 789.44 Mbit/s  
95th percentile per-packet one-way delay: 139.271 ms  
Loss rate: 2.04%  
-- Flow 2:  
Average throughput: 726.50 Mbit/s  
95th percentile per-packet one-way delay: 141.510 ms  
Loss rate: 3.23%  
-- Flow 3:  
Average throughput: 654.28 Mbit/s  
95th percentile per-packet one-way delay: 79.418 ms  
Loss rate: 1.22%



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



Run 4: Statistics of FillP

Start at: 2018-05-26 15:44:44

End at: 2018-05-26 15:45:14

Local clock offset: 0.06 ms

Remote clock offset: 0.154 ms

# Below is generated by plot.py at 2018-05-26 19:25:30

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1428.90 Mbit/s

95th percentile per-packet one-way delay: 173.911 ms

Loss rate: 2.56%

-- Flow 1:

Average throughput: 729.93 Mbit/s

95th percentile per-packet one-way delay: 197.233 ms

Loss rate: 2.55%

-- Flow 2:

Average throughput: 731.23 Mbit/s

95th percentile per-packet one-way delay: 145.396 ms

Loss rate: 2.59%

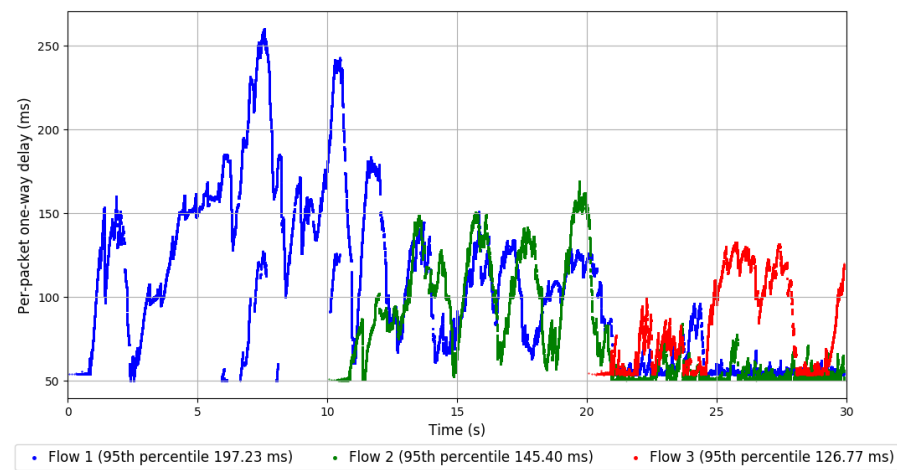
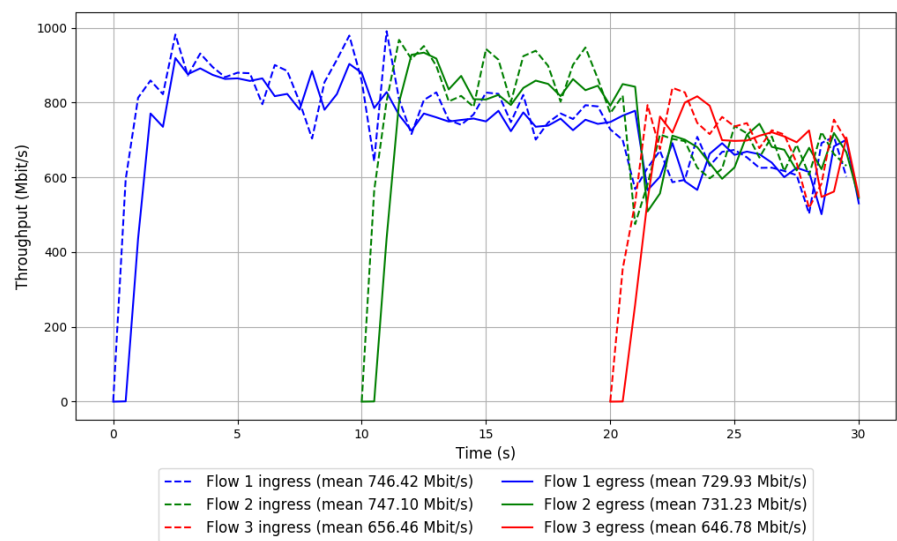
-- Flow 3:

Average throughput: 646.78 Mbit/s

95th percentile per-packet one-way delay: 126.767 ms

Loss rate: 2.51%

Run 4: Report of FillP — Data Link

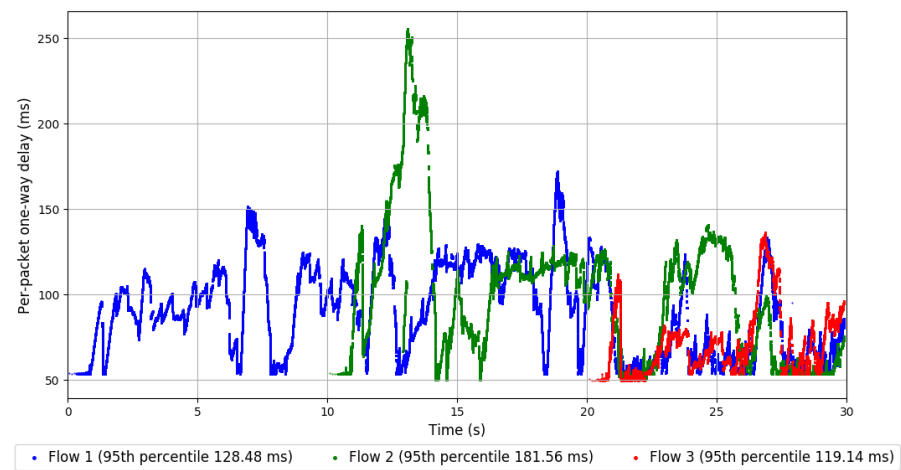
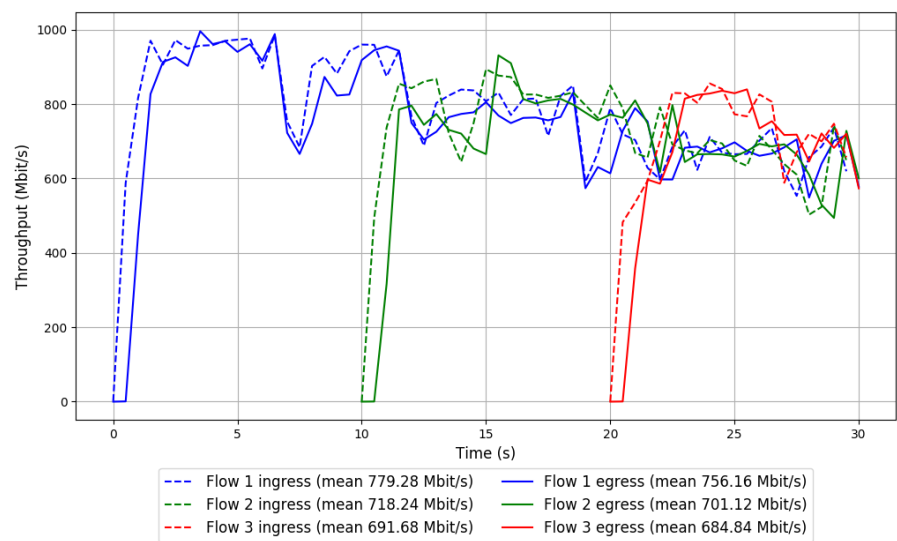


Run 5: Statistics of FillP

Start at: 2018-05-26 16:08:02  
End at: 2018-05-26 16:08:32  
Local clock offset: -0.274 ms  
Remote clock offset: -0.065 ms

# Below is generated by plot.py at 2018-05-26 19:26:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1447.18 Mbit/s  
95th percentile per-packet one-way delay: 133.826 ms  
Loss rate: 2.97%  
-- Flow 1:  
Average throughput: 756.16 Mbit/s  
95th percentile per-packet one-way delay: 128.477 ms  
Loss rate: 3.31%  
-- Flow 2:  
Average throughput: 701.12 Mbit/s  
95th percentile per-packet one-way delay: 181.560 ms  
Loss rate: 2.88%  
-- Flow 3:  
Average throughput: 684.84 Mbit/s  
95th percentile per-packet one-way delay: 119.142 ms  
Loss rate: 2.01%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-05-26 16:31:05

End at: 2018-05-26 16:31:35

Local clock offset: -0.162 ms

Remote clock offset: 0.357 ms

# Below is generated by plot.py at 2018-05-26 19:26:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1372.99 Mbit/s

95th percentile per-packet one-way delay: 194.470 ms

Loss rate: 2.85%

-- Flow 1:

Average throughput: 713.41 Mbit/s

95th percentile per-packet one-way delay: 206.828 ms

Loss rate: 2.43%

-- Flow 2:

Average throughput: 678.42 Mbit/s

95th percentile per-packet one-way delay: 133.924 ms

Loss rate: 4.25%

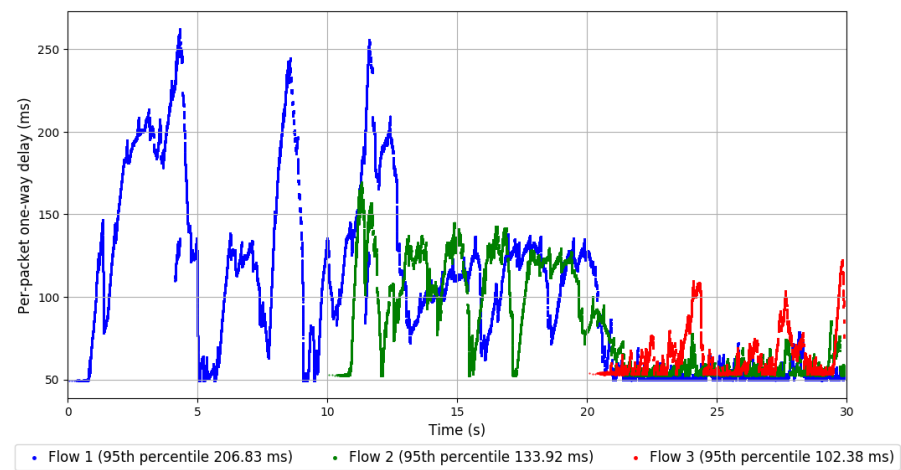
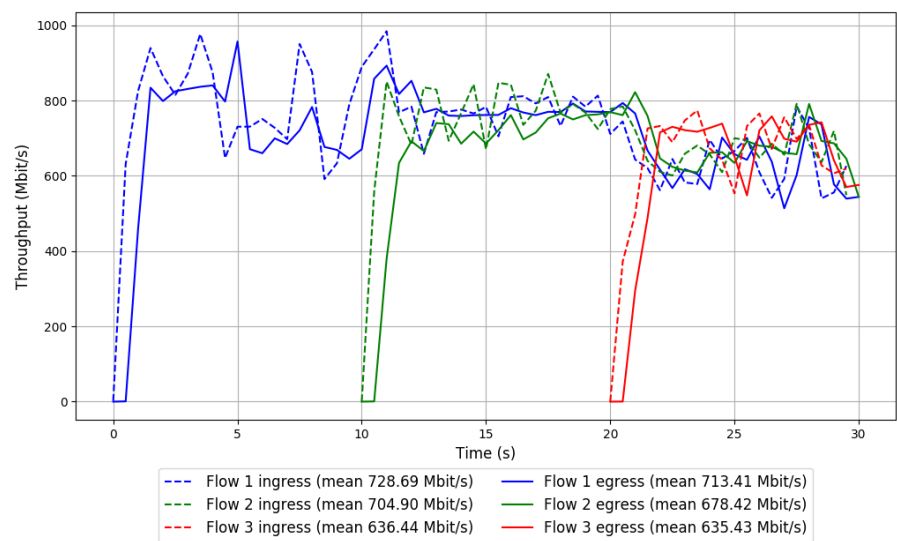
-- Flow 3:

Average throughput: 635.43 Mbit/s

95th percentile per-packet one-way delay: 102.375 ms

Loss rate: 1.22%

Run 6: Report of FillP — Data Link



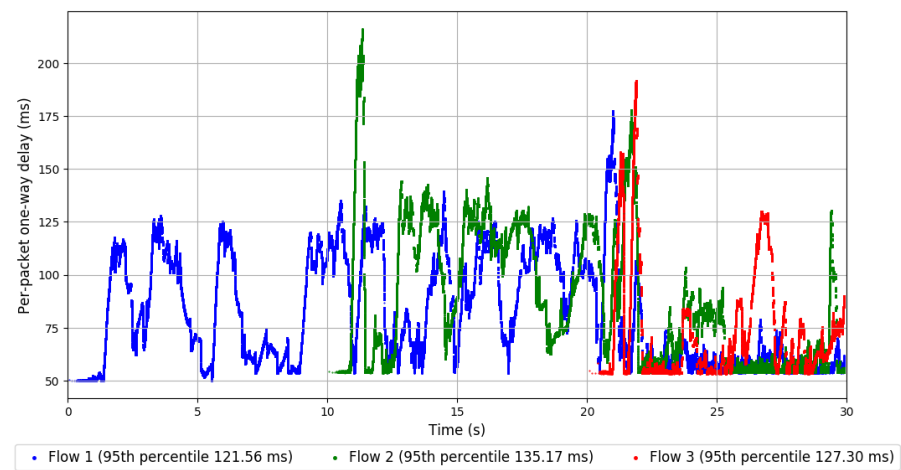
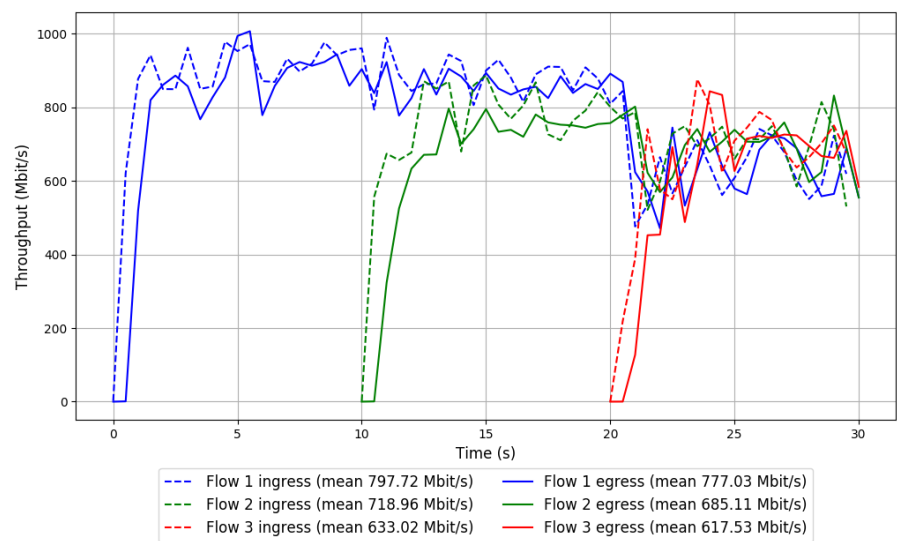
Run 7: Statistics of FillP

Start at: 2018-05-26 16:53:51  
End at: 2018-05-26 16:54:21  
Local clock offset: 0.014 ms  
Remote clock offset: -0.249 ms

# Below is generated by plot.py at 2018-05-26 19:28:24  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1435.20 Mbit/s  
95th percentile per-packet one-way delay: 128.234 ms  
Loss rate: 3.73%  
-- Flow 1:  
Average throughput: 777.03 Mbit/s  
95th percentile per-packet one-way delay: 121.557 ms  
Loss rate: 2.92%  
-- Flow 2:  
Average throughput: 685.11 Mbit/s  
95th percentile per-packet one-way delay: 135.173 ms  
Loss rate: 5.20%  
-- Flow 3:  
Average throughput: 617.53 Mbit/s  
95th percentile per-packet one-way delay: 127.301 ms  
Loss rate: 3.47%



Run 7: Report of FillP — Data Link

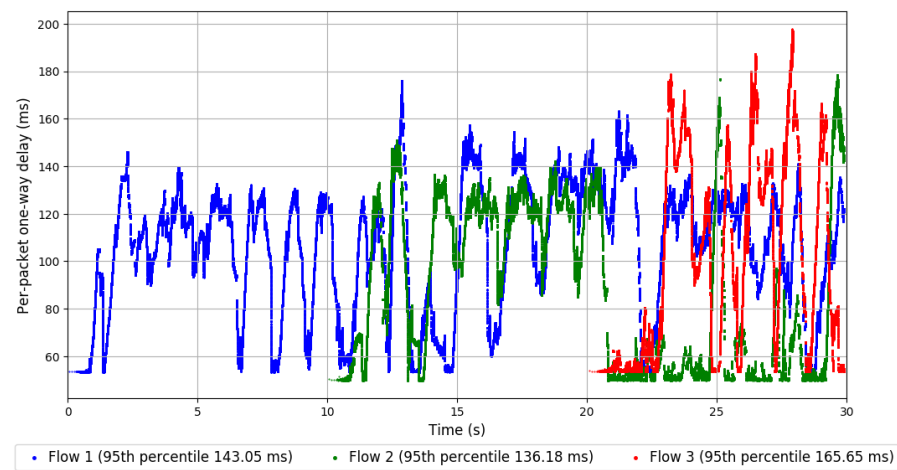
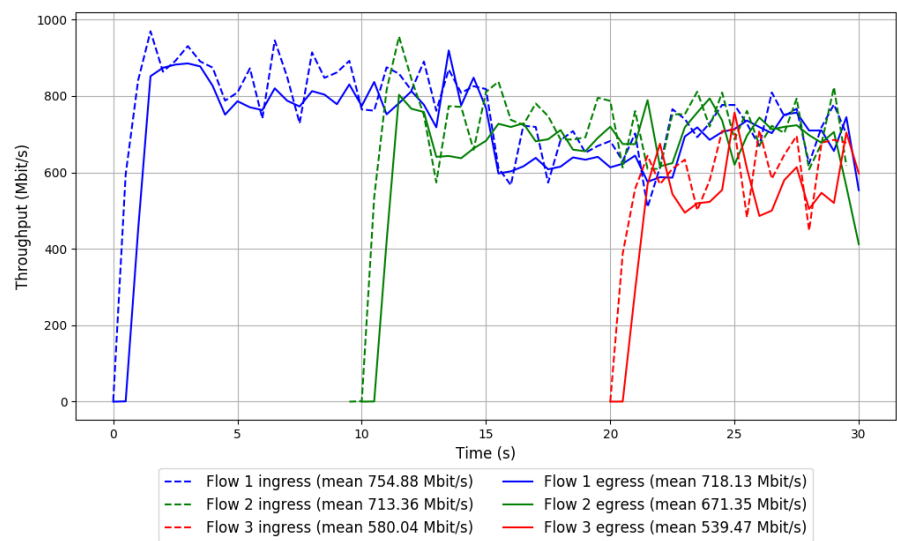


Run 8: Statistics of FillP

Start at: 2018-05-26 17:16:44  
End at: 2018-05-26 17:17:14  
Local clock offset: -0.145 ms  
Remote clock offset: -0.122 ms

# Below is generated by plot.py at 2018-05-26 19:28:24  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1342.00 Mbit/s  
95th percentile per-packet one-way delay: 145.434 ms  
Loss rate: 5.97%  
-- Flow 1:  
Average throughput: 718.13 Mbit/s  
95th percentile per-packet one-way delay: 143.050 ms  
Loss rate: 5.21%  
-- Flow 2:  
Average throughput: 671.35 Mbit/s  
95th percentile per-packet one-way delay: 136.184 ms  
Loss rate: 6.37%  
-- Flow 3:  
Average throughput: 539.47 Mbit/s  
95th percentile per-packet one-way delay: 165.653 ms  
Loss rate: 7.99%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-05-26 17:40:17

End at: 2018-05-26 17:40:47

Local clock offset: 0.242 ms

Remote clock offset: 0.026 ms

# Below is generated by plot.py at 2018-05-26 19:55:19

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1445.46 Mbit/s

95th percentile per-packet one-way delay: 130.465 ms

Loss rate: 3.57%

-- Flow 1:

Average throughput: 742.87 Mbit/s

95th percentile per-packet one-way delay: 137.060 ms

Loss rate: 4.06%

-- Flow 2:

Average throughput: 744.90 Mbit/s

95th percentile per-packet one-way delay: 121.069 ms

Loss rate: 2.83%

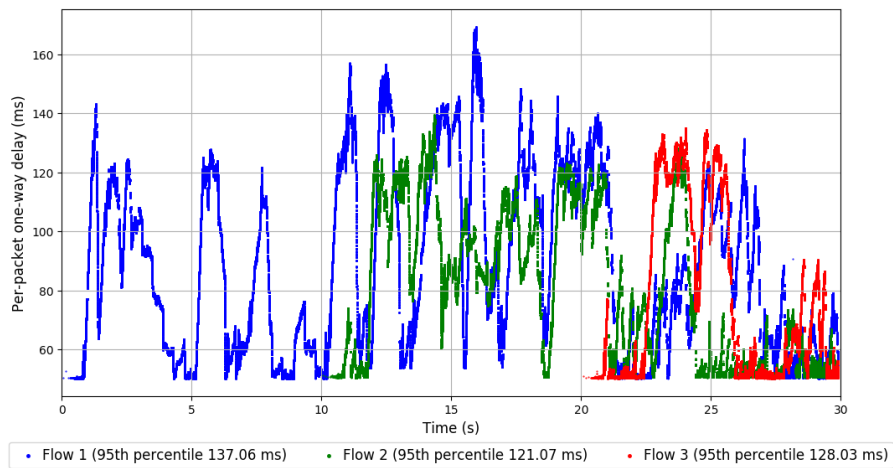
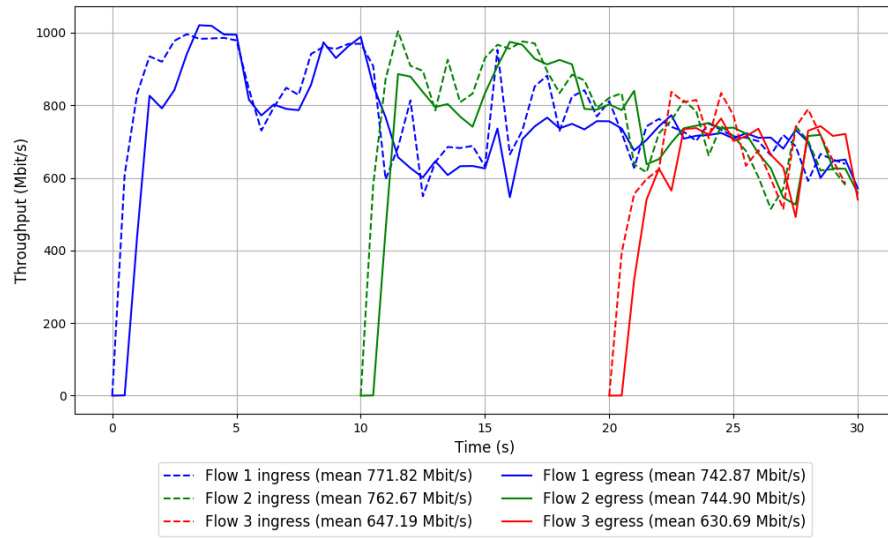
-- Flow 3:

Average throughput: 630.69 Mbit/s

95th percentile per-packet one-way delay: 128.033 ms

Loss rate: 3.56%

### Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-05-26 18:03:43

End at: 2018-05-26 18:04:13

Local clock offset: 0.209 ms

Remote clock offset: 0.043 ms

# Below is generated by plot.py at 2018-05-26 19:59:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1452.91 Mbit/s

95th percentile per-packet one-way delay: 129.316 ms

Loss rate: 3.04%

-- Flow 1:

Average throughput: 796.72 Mbit/s

95th percentile per-packet one-way delay: 120.291 ms

Loss rate: 2.70%

-- Flow 2:

Average throughput: 668.31 Mbit/s

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

Loss rate: 3.50%

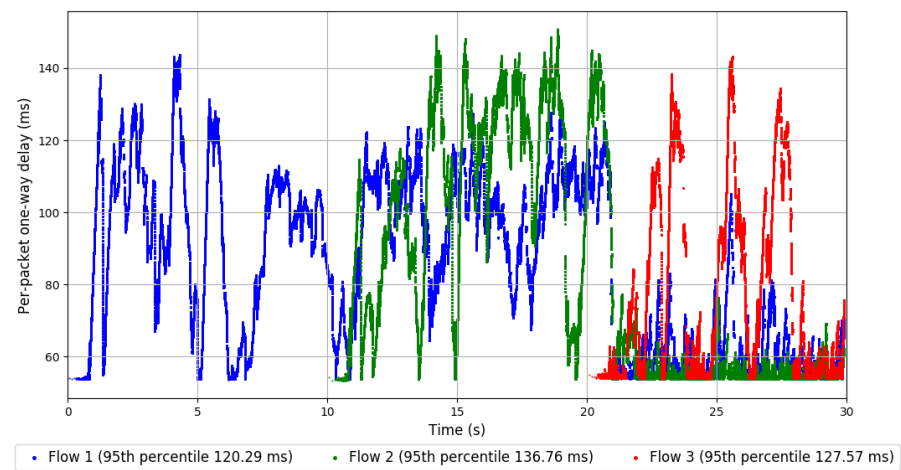
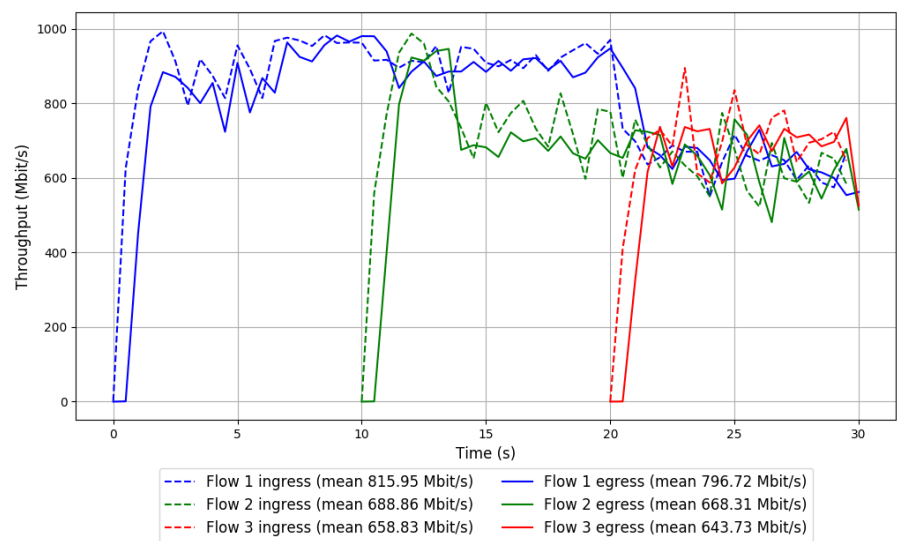
-- Flow 3:

Average throughput: 643.73 Mbit/s

95th percentile per-packet one-way delay: 127.567 ms

Loss rate: 3.34%

Run 10: Report of FillP — Data Link



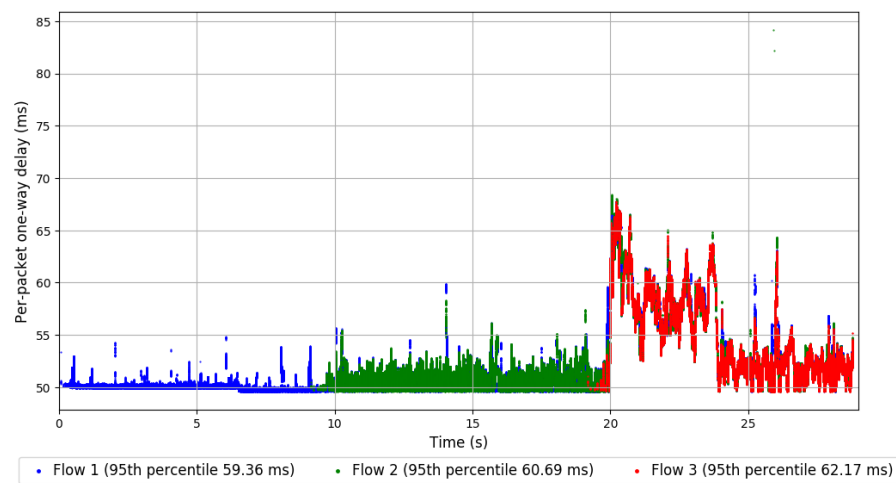
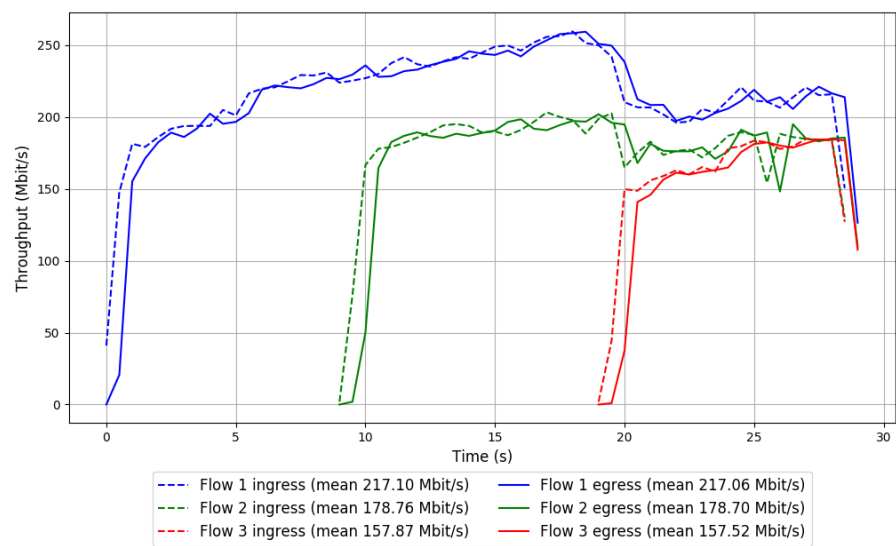
```
Run 1: Statistics of Indigo

Start at: 2018-05-26 14:19:30
End at: 2018-05-26 14:20:00
Local clock offset: -0.003 ms
Remote clock offset: 0.254 ms

# Below is generated by plot.py at 2018-05-26 19:59:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 392.01 Mbit/s
95th percentile per-packet one-way delay: 60.448 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 217.06 Mbit/s
95th percentile per-packet one-way delay: 59.363 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 178.70 Mbit/s
95th percentile per-packet one-way delay: 60.692 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 157.52 Mbit/s
95th percentile per-packet one-way delay: 62.172 ms
Loss rate: 1.25%
```



Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-05-26 14:42:32

End at: 2018-05-26 14:43:02

Local clock offset: 0.124 ms

Remote clock offset: 0.071 ms

# Below is generated by plot.py at 2018-05-26 19:59:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 420.07 Mbit/s

95th percentile per-packet one-way delay: 59.348 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 233.47 Mbit/s

95th percentile per-packet one-way delay: 58.100 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 204.94 Mbit/s

95th percentile per-packet one-way delay: 59.605 ms

Loss rate: 0.53%

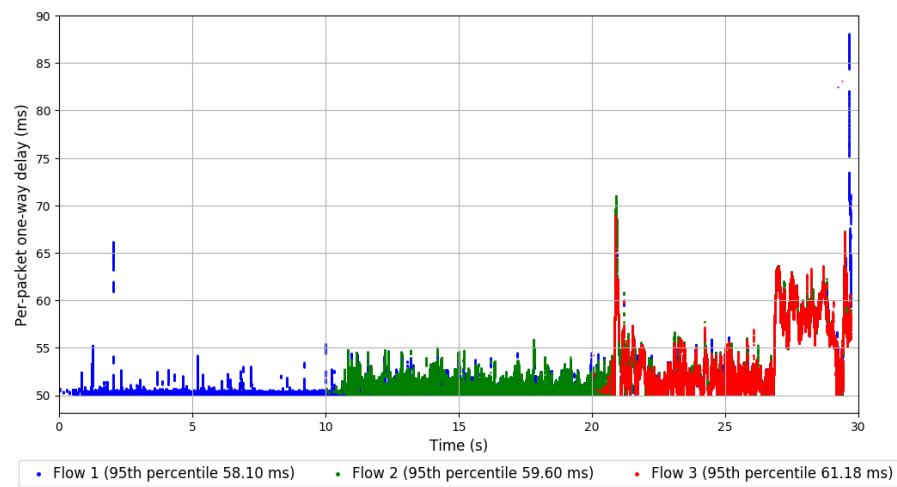
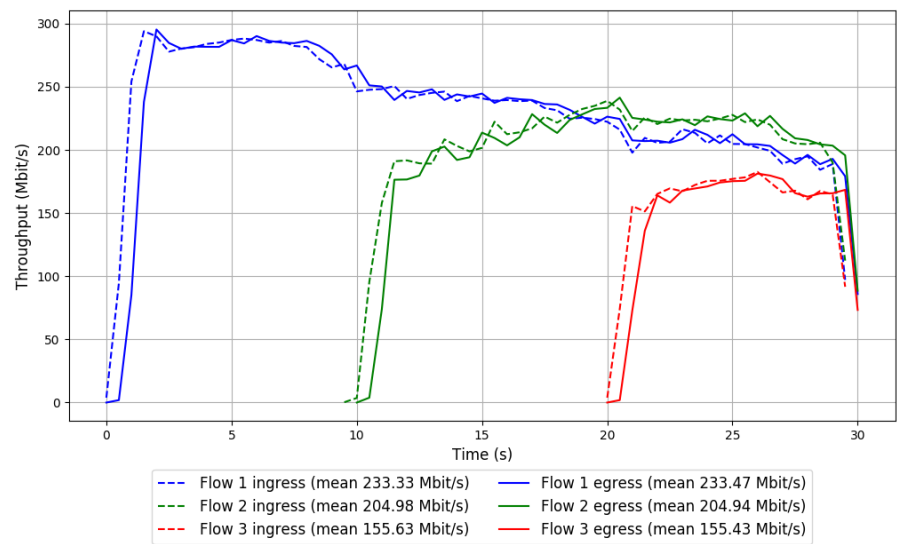
-- Flow 3:

Average throughput: 155.43 Mbit/s

95th percentile per-packet one-way delay: 61.183 ms

Loss rate: 1.16%

Run 2: Report of Indigo — Data Link

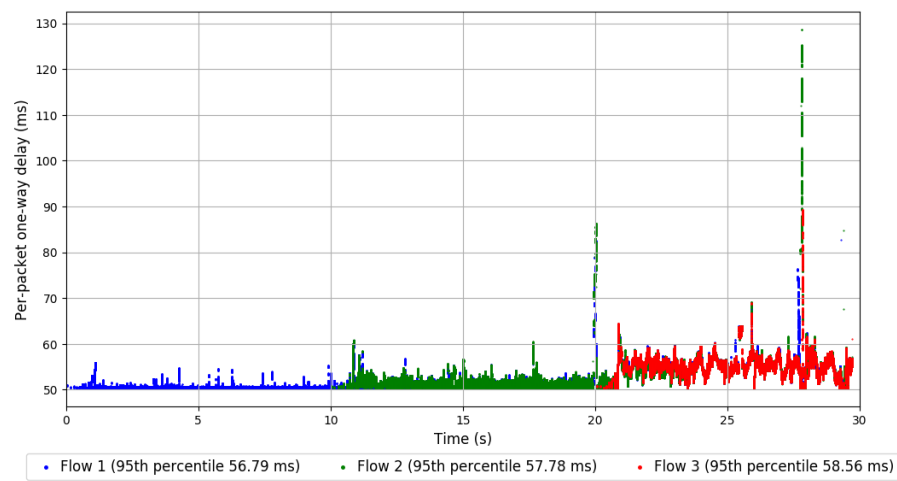
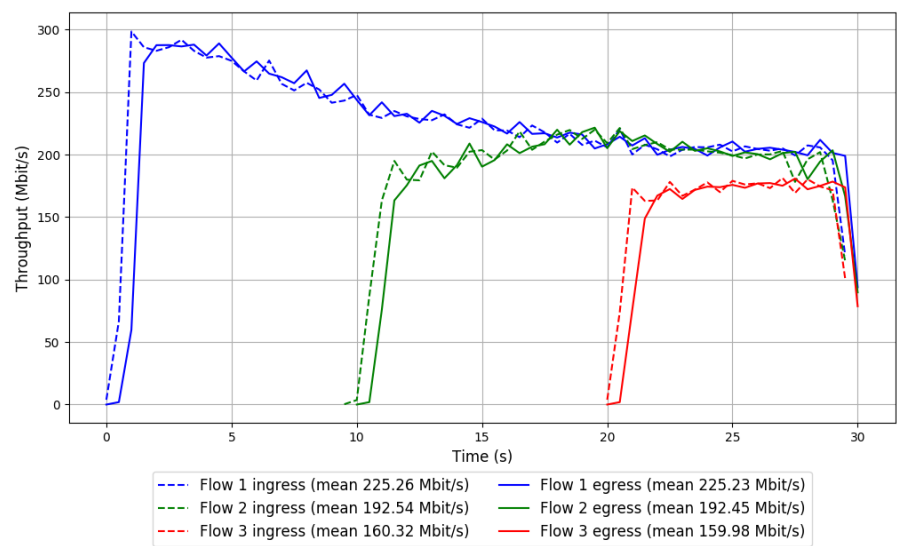


Run 3: Statistics of Indigo

Start at: 2018-05-26 15:05:39  
End at: 2018-05-26 15:06:09  
Local clock offset: 0.281 ms  
Remote clock offset: -0.032 ms

# Below is generated by plot.py at 2018-05-26 19:59:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 404.83 Mbit/s  
95th percentile per-packet one-way delay: 57.540 ms  
Loss rate: 0.52%  
-- Flow 1:  
Average throughput: 225.23 Mbit/s  
95th percentile per-packet one-way delay: 56.786 ms  
Loss rate: 0.35%  
-- Flow 2:  
Average throughput: 192.45 Mbit/s  
95th percentile per-packet one-way delay: 57.776 ms  
Loss rate: 0.56%  
-- Flow 3:  
Average throughput: 159.98 Mbit/s  
95th percentile per-packet one-way delay: 58.562 ms  
Loss rate: 1.19%

Run 3: Report of Indigo — Data Link

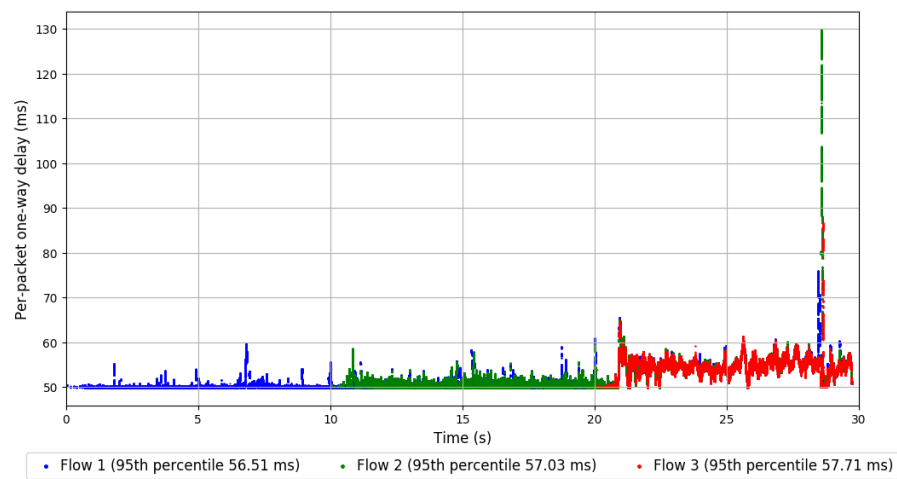
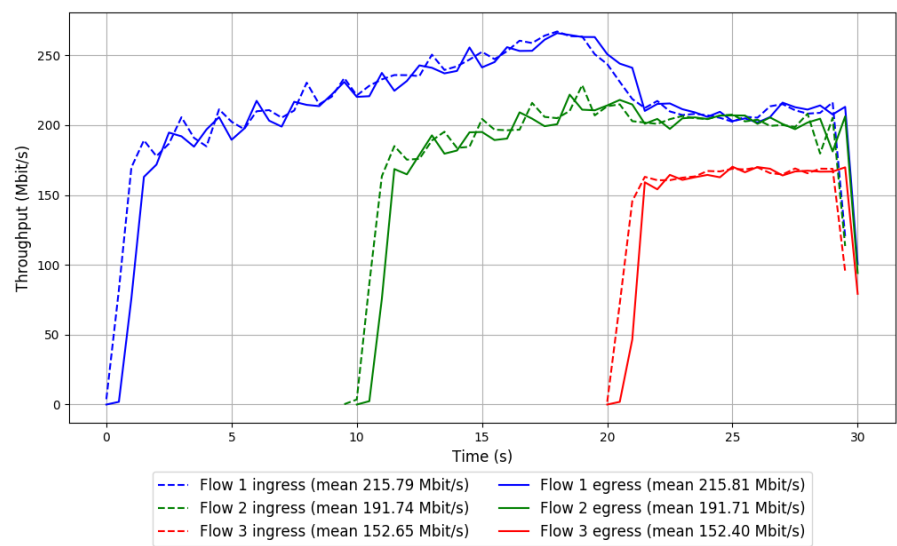


Run 4: Statistics of Indigo

Start at: 2018-05-26 15:28:50  
End at: 2018-05-26 15:29:20  
Local clock offset: -0.099 ms  
Remote clock offset: -0.062 ms

# Below is generated by plot.py at 2018-05-26 19:59:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 392.37 Mbit/s  
95th percentile per-packet one-way delay: 56.901 ms  
Loss rate: 0.50%  
-- Flow 1:  
Average throughput: 215.81 Mbit/s  
95th percentile per-packet one-way delay: 56.509 ms  
Loss rate: 0.33%  
-- Flow 2:  
Average throughput: 191.71 Mbit/s  
95th percentile per-packet one-way delay: 57.034 ms  
Loss rate: 0.53%  
-- Flow 3:  
Average throughput: 152.40 Mbit/s  
95th percentile per-packet one-way delay: 57.707 ms  
Loss rate: 1.19%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-05-26 15:52:34

End at: 2018-05-26 15:53:04

Local clock offset: -0.169 ms

Remote clock offset: 0.229 ms

# Below is generated by plot.py at 2018-05-26 19:59:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 412.74 Mbit/s

95th percentile per-packet one-way delay: 58.886 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 227.98 Mbit/s

95th percentile per-packet one-way delay: 57.943 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 201.84 Mbit/s

95th percentile per-packet one-way delay: 59.294 ms

Loss rate: 0.56%

-- Flow 3:

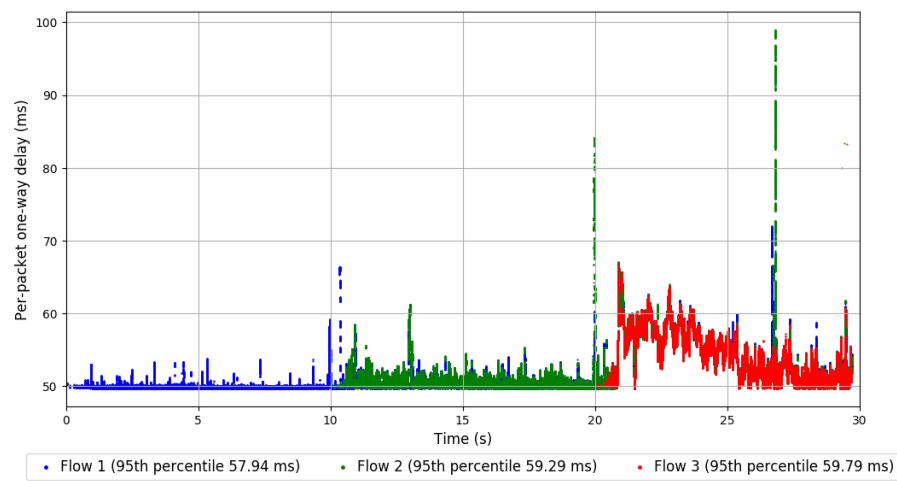
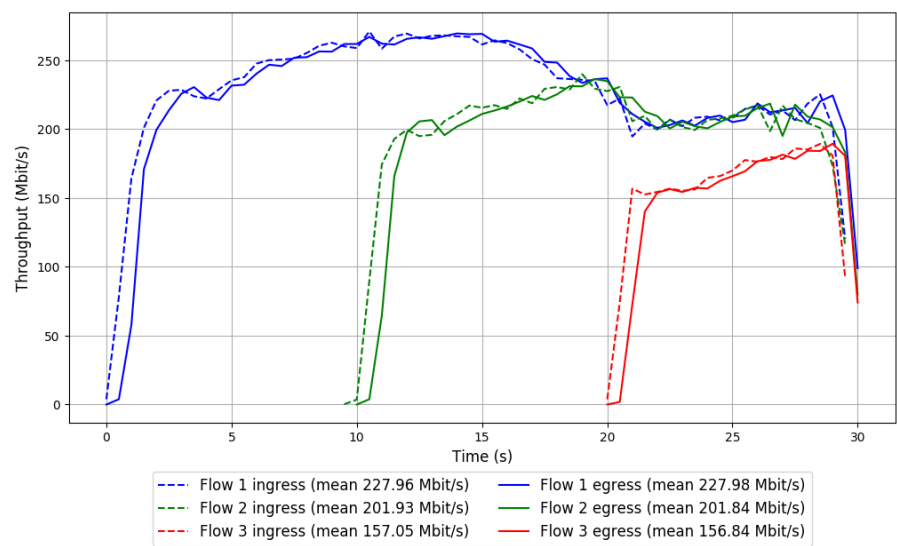
Average throughput: 156.84 Mbit/s

95th percentile per-packet one-way delay: 59.794 ms

Loss rate: 1.25%



Run 5: Report of Indigo — Data Link

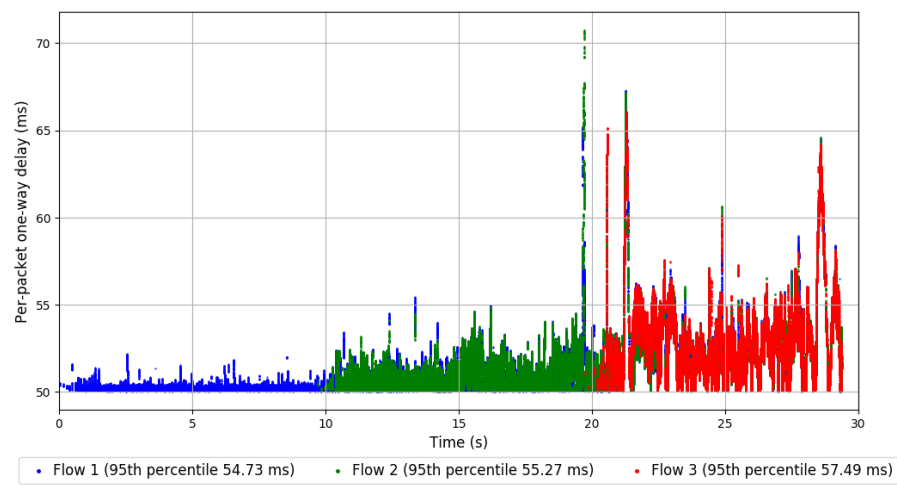
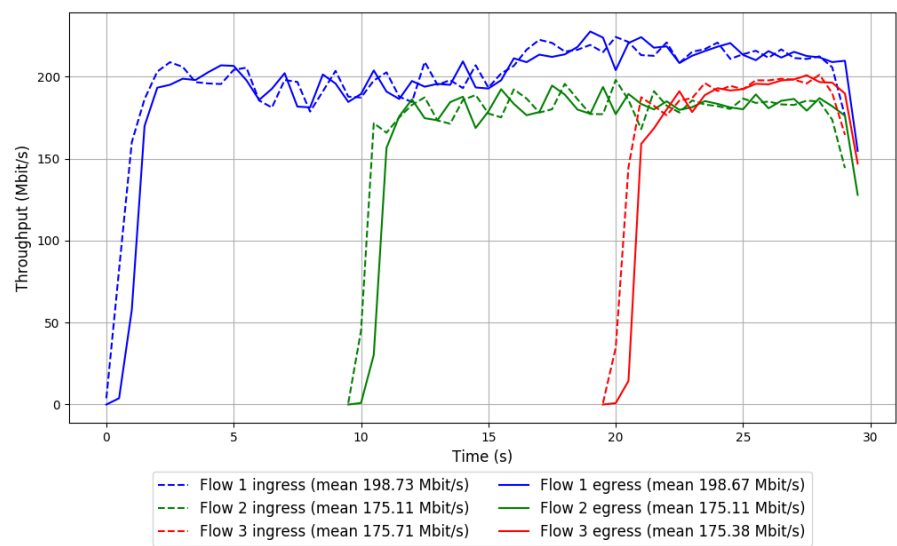


Run 6: Statistics of Indigo

Start at: 2018-05-26 16:15:35  
End at: 2018-05-26 16:16:05  
Local clock offset: -0.172 ms  
Remote clock offset: -0.206 ms

# Below is generated by plot.py at 2018-05-26 19:59:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 373.55 Mbit/s  
95th percentile per-packet one-way delay: 55.333 ms  
Loss rate: 0.55%  
-- Flow 1:  
Average throughput: 198.67 Mbit/s  
95th percentile per-packet one-way delay: 54.731 ms  
Loss rate: 0.37%  
-- Flow 2:  
Average throughput: 175.11 Mbit/s  
95th percentile per-packet one-way delay: 55.266 ms  
Loss rate: 0.51%  
-- Flow 3:  
Average throughput: 175.38 Mbit/s  
95th percentile per-packet one-way delay: 57.494 ms  
Loss rate: 1.21%

Run 6: Report of Indigo — Data Link

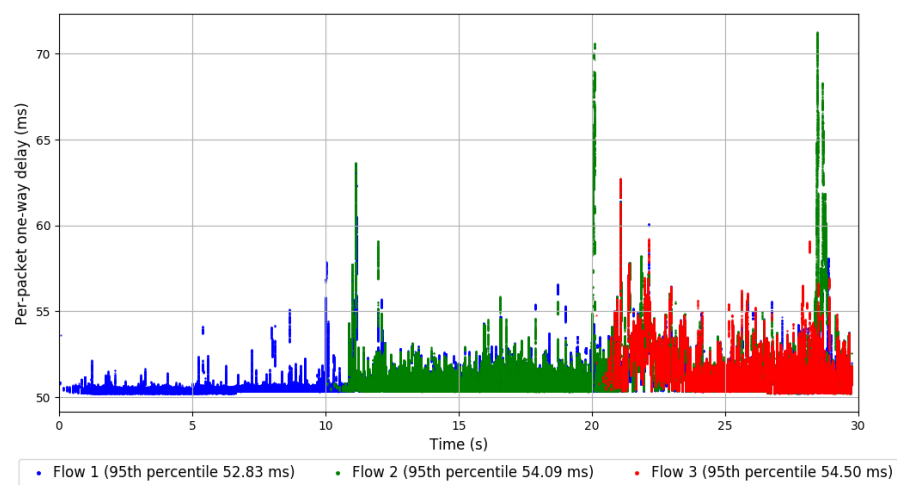
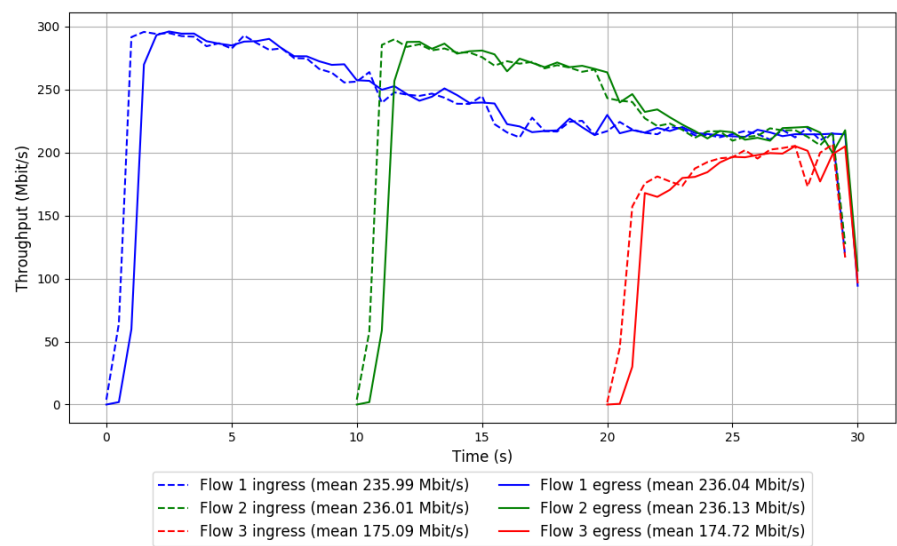


Run 7: Statistics of Indigo

Start at: 2018-05-26 16:38:41  
End at: 2018-05-26 16:39:11  
Local clock offset: -0.175 ms  
Remote clock offset: -0.452 ms

# Below is generated by plot.py at 2018-05-26 19:59:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 448.74 Mbit/s  
95th percentile per-packet one-way delay: 53.521 ms  
Loss rate: 0.48%  
-- Flow 1:  
Average throughput: 236.04 Mbit/s  
95th percentile per-packet one-way delay: 52.830 ms  
Loss rate: 0.32%  
-- Flow 2:  
Average throughput: 236.13 Mbit/s  
95th percentile per-packet one-way delay: 54.091 ms  
Loss rate: 0.46%  
-- Flow 3:  
Average throughput: 174.72 Mbit/s  
95th percentile per-packet one-way delay: 54.499 ms  
Loss rate: 1.25%

Run 7: Report of Indigo — Data Link

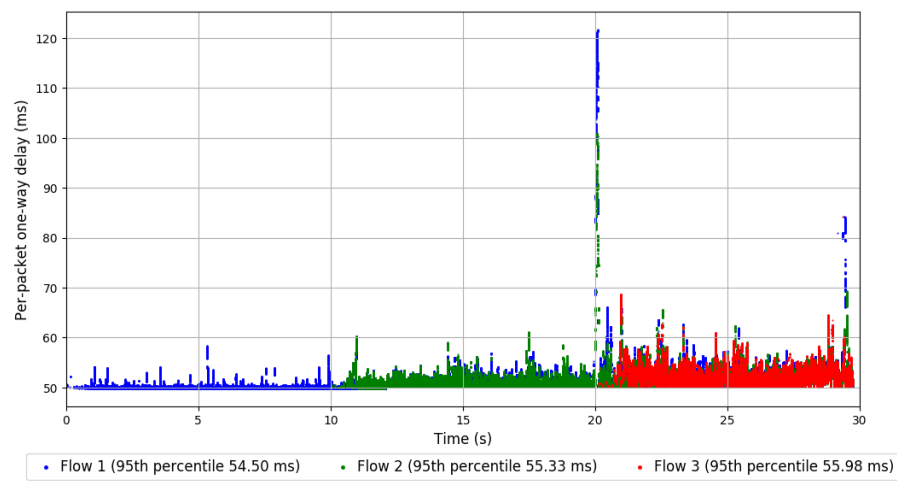
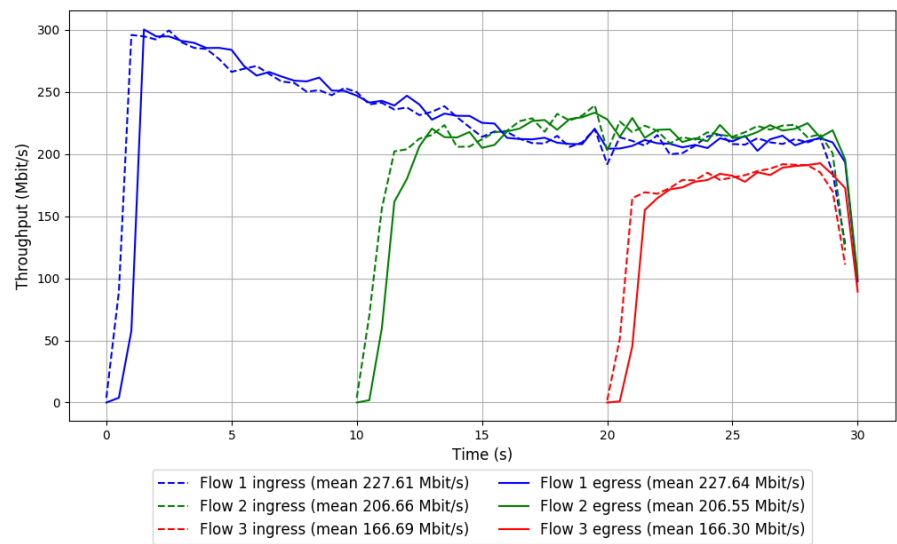


Run 8: Statistics of Indigo

Start at: 2018-05-26 17:01:15  
End at: 2018-05-26 17:01:45  
Local clock offset: 0.01 ms  
Remote clock offset: -0.121 ms

# Below is generated by plot.py at 2018-05-26 19:59:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 418.29 Mbit/s  
95th percentile per-packet one-way delay: 55.043 ms  
Loss rate: 0.52%  
-- Flow 1:  
Average throughput: 227.64 Mbit/s  
95th percentile per-packet one-way delay: 54.500 ms  
Loss rate: 0.33%  
-- Flow 2:  
Average throughput: 206.55 Mbit/s  
95th percentile per-packet one-way delay: 55.326 ms  
Loss rate: 0.56%  
-- Flow 3:  
Average throughput: 166.30 Mbit/s  
95th percentile per-packet one-way delay: 55.985 ms  
Loss rate: 1.25%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-05-26 17:24:37

End at: 2018-05-26 17:25:07

Local clock offset: -0.288 ms

Remote clock offset: 0.055 ms

# Below is generated by plot.py at 2018-05-26 19:59:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 397.59 Mbit/s

95th percentile per-packet one-way delay: 54.297 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 210.69 Mbit/s

95th percentile per-packet one-way delay: 53.741 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 200.16 Mbit/s

95th percentile per-packet one-way delay: 54.509 ms

Loss rate: 0.53%

-- Flow 3:

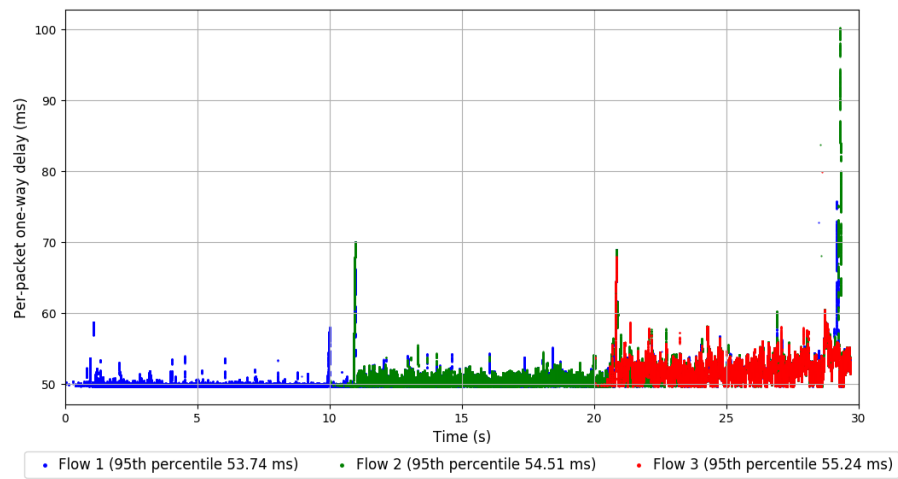
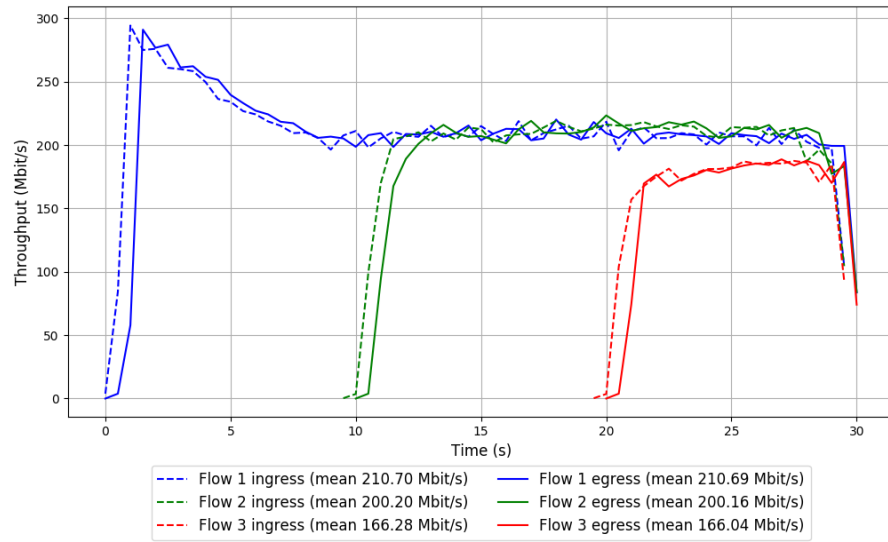
Average throughput: 166.04 Mbit/s

95th percentile per-packet one-way delay: 55.237 ms

Loss rate: 1.18%



## Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-05-26 17:48:15

End at: 2018-05-26 17:48:45

Local clock offset: 0.139 ms

Remote clock offset: 0.309 ms

# Below is generated by plot.py at 2018-05-26 19:59:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 411.70 Mbit/s

95th percentile per-packet one-way delay: 53.437 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 222.80 Mbit/s

95th percentile per-packet one-way delay: 53.015 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 198.30 Mbit/s

95th percentile per-packet one-way delay: 53.748 ms

Loss rate: 0.58%

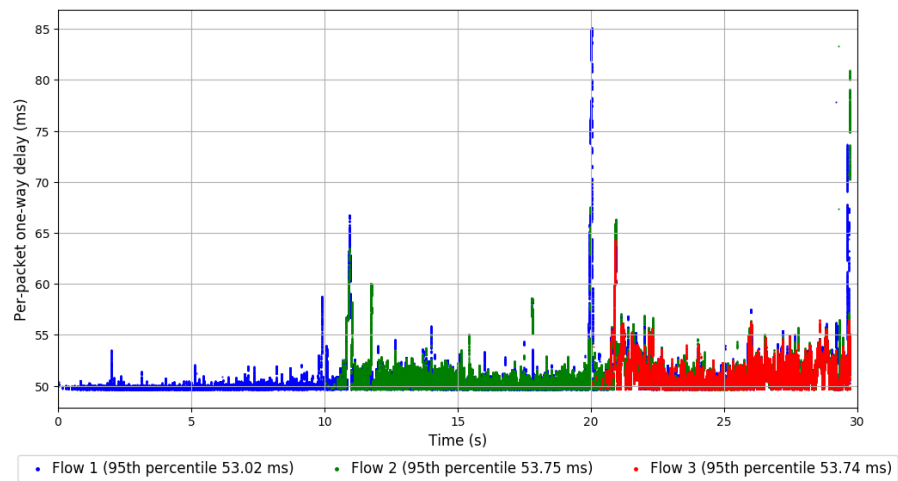
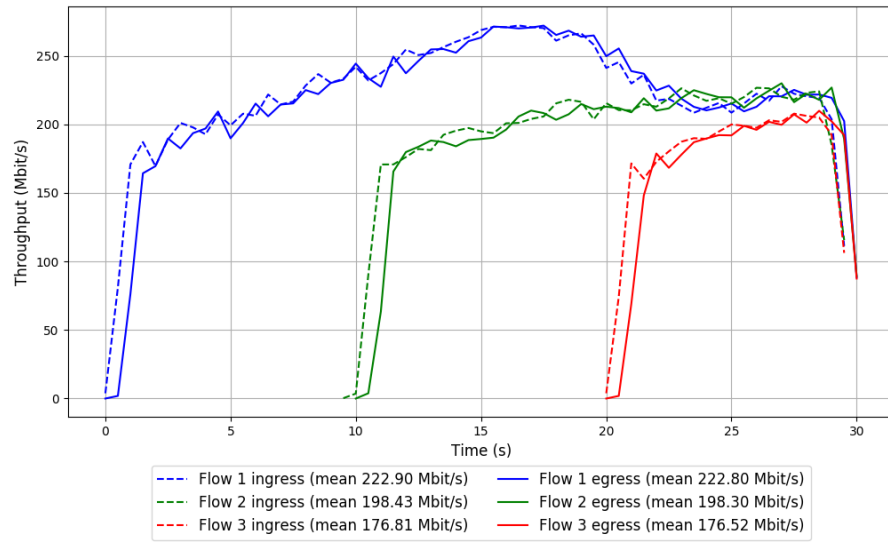
-- Flow 3:

Average throughput: 176.52 Mbit/s

95th percentile per-packet one-way delay: 53.743 ms

Loss rate: 1.21%

## Run 10: Report of Indigo — Data Link

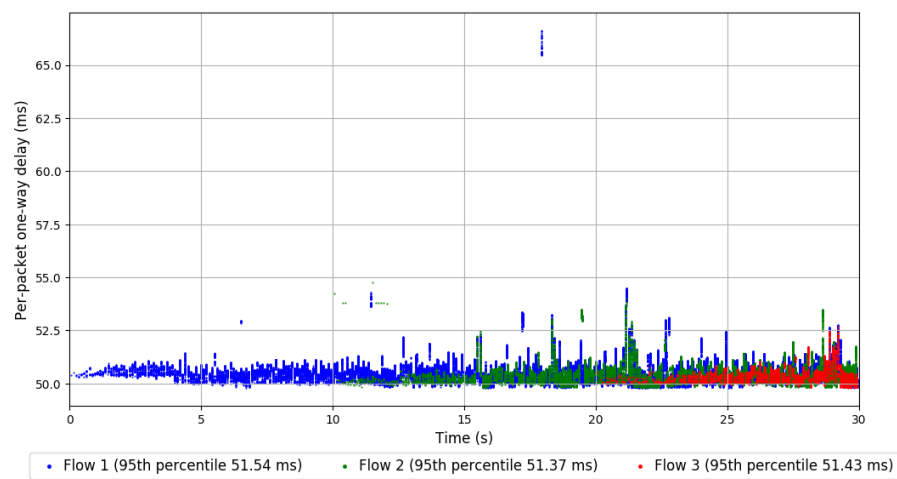
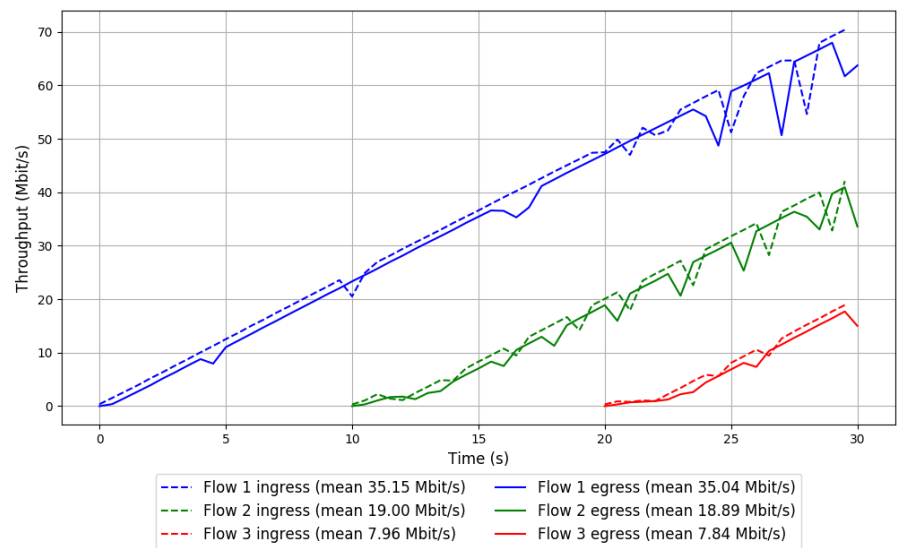


Run 1: Statistics of LEDBAT

Start at: 2018-05-26 14:25:14  
End at: 2018-05-26 14:25:44  
Local clock offset: -0.058 ms  
Remote clock offset: -0.025 ms

# Below is generated by plot.py at 2018-05-26 19:59:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 50.15 Mbit/s  
95th percentile per-packet one-way delay: 51.487 ms  
Loss rate: 0.88%  
-- Flow 1:  
Average throughput: 35.04 Mbit/s  
95th percentile per-packet one-way delay: 51.540 ms  
Loss rate: 0.67%  
-- Flow 2:  
Average throughput: 18.89 Mbit/s  
95th percentile per-packet one-way delay: 51.370 ms  
Loss rate: 1.12%  
-- Flow 3:  
Average throughput: 7.84 Mbit/s  
95th percentile per-packet one-way delay: 51.427 ms  
Loss rate: 2.46%

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-05-26 14:48:15

End at: 2018-05-26 14:48:45

Local clock offset: 0.399 ms

Remote clock offset: 0.526 ms

# Below is generated by plot.py at 2018-05-26 19:59:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 17.07 Mbit/s

95th percentile per-packet one-way delay: 51.319 ms

Loss rate: 1.40%

-- Flow 1:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 51.032 ms

Loss rate: 2.67%

-- Flow 2:

Average throughput: 20.80 Mbit/s

95th percentile per-packet one-way delay: 51.365 ms

Loss rate: 1.07%

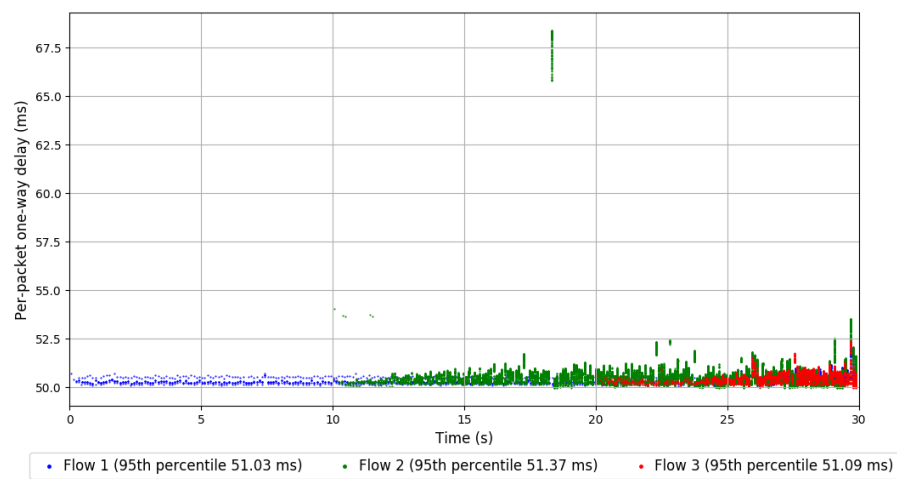
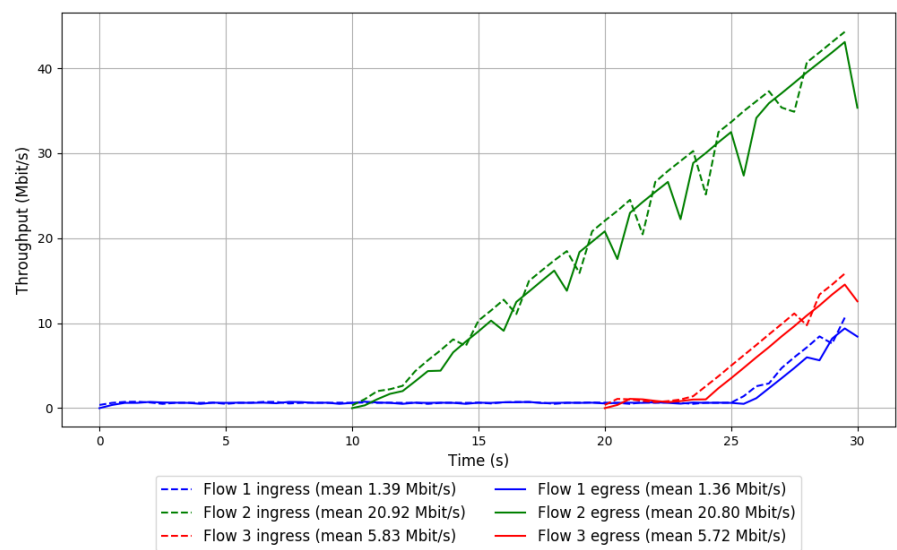
-- Flow 3:

Average throughput: 5.72 Mbit/s

95th percentile per-packet one-way delay: 51.086 ms

Loss rate: 2.82%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-05-26 15:11:24

End at: 2018-05-26 15:11:54

Local clock offset: -0.173 ms

Remote clock offset: 0.384 ms

# Below is generated by plot.py at 2018-05-26 19:59:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 51.71 Mbit/s

95th percentile per-packet one-way delay: 51.489 ms

Loss rate: 0.89%

-- Flow 1:

Average throughput: 32.87 Mbit/s

95th percentile per-packet one-way delay: 51.534 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 23.23 Mbit/s

95th percentile per-packet one-way delay: 51.522 ms

Loss rate: 1.01%

-- Flow 3:

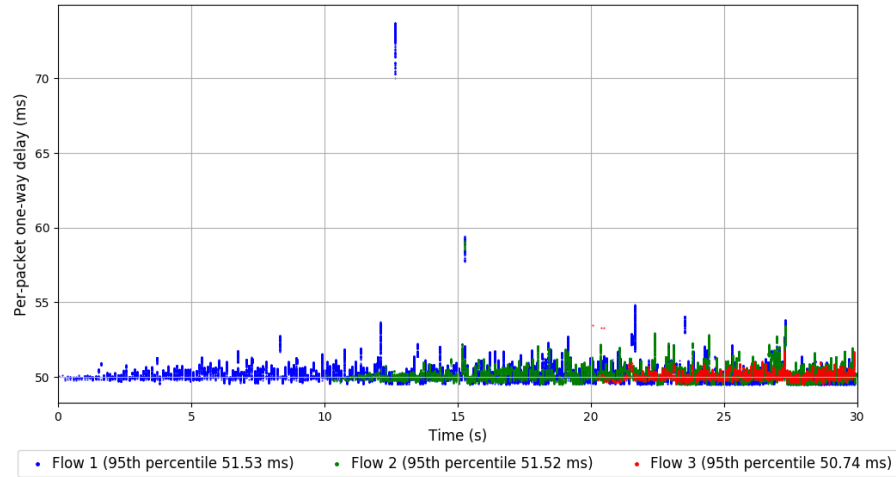
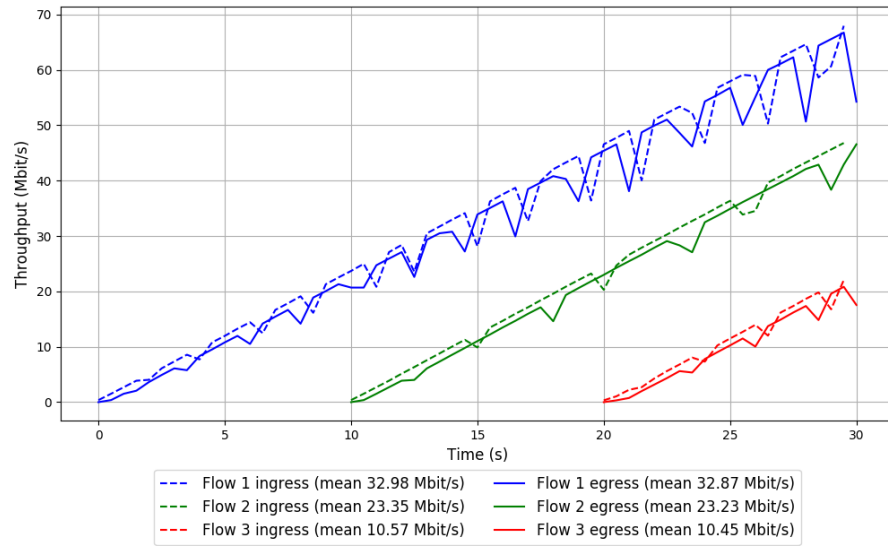
Average throughput: 10.45 Mbit/s

95th percentile per-packet one-way delay: 50.736 ms

Loss rate: 2.15%



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



Run 4: Statistics of LEDBAT

Start at: 2018-05-26 15:34:37

End at: 2018-05-26 15:35:07

Local clock offset: 0.046 ms

Remote clock offset: -0.06 ms

# Below is generated by plot.py at 2018-05-26 19:59:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 49.92 Mbit/s

95th percentile per-packet one-way delay: 51.822 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 31.83 Mbit/s

95th percentile per-packet one-way delay: 51.899 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 21.69 Mbit/s

95th percentile per-packet one-way delay: 51.489 ms

Loss rate: 0.85%

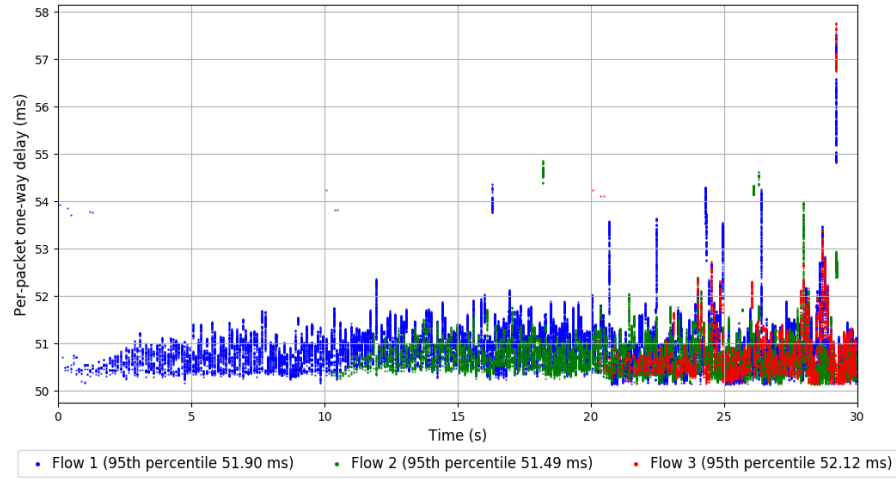
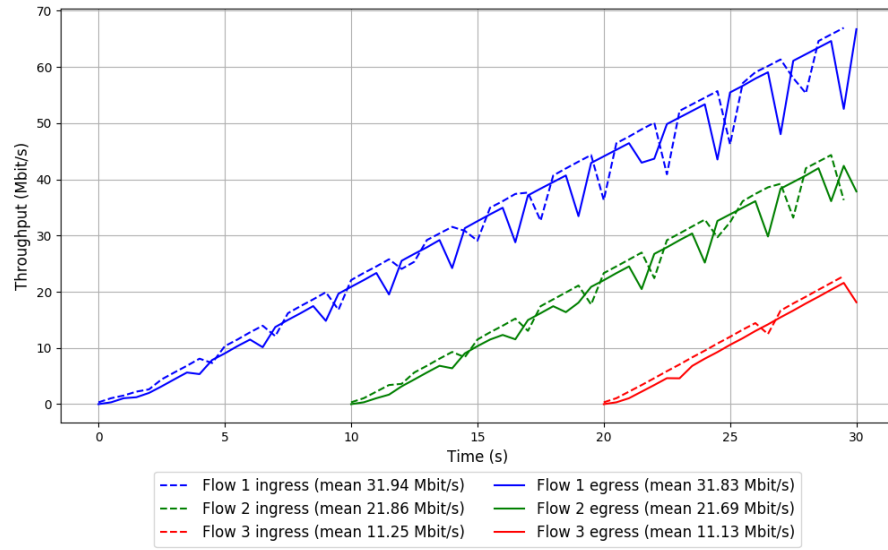
-- Flow 3:

Average throughput: 11.13 Mbit/s

95th percentile per-packet one-way delay: 52.123 ms

Loss rate: 2.09%

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



Run 5: Statistics of LEDBAT

Start at: 2018-05-26 15:58:21

End at: 2018-05-26 15:58:51

Local clock offset: 0.159 ms

Remote clock offset: 0.066 ms

# Below is generated by plot.py at 2018-05-26 19:59:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 49.81 Mbit/s

95th percentile per-packet one-way delay: 51.980 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 32.26 Mbit/s

95th percentile per-packet one-way delay: 52.116 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 20.91 Mbit/s

95th percentile per-packet one-way delay: 51.703 ms

Loss rate: 0.79%

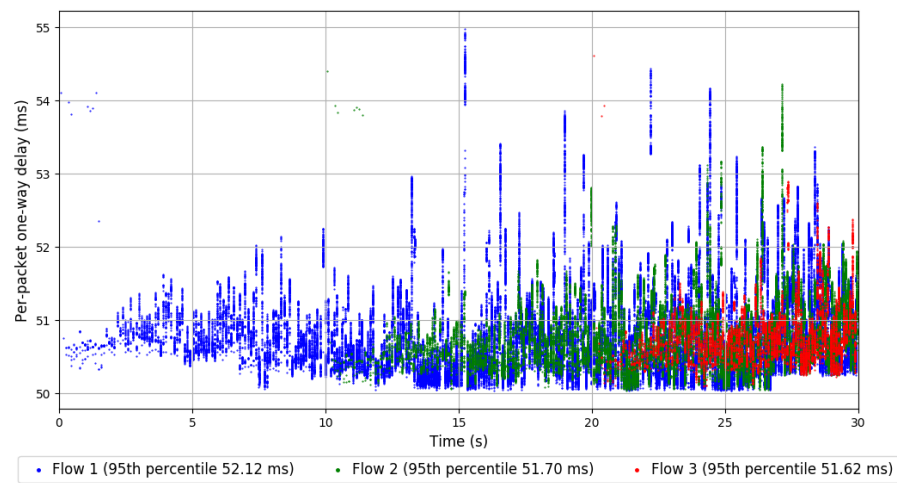
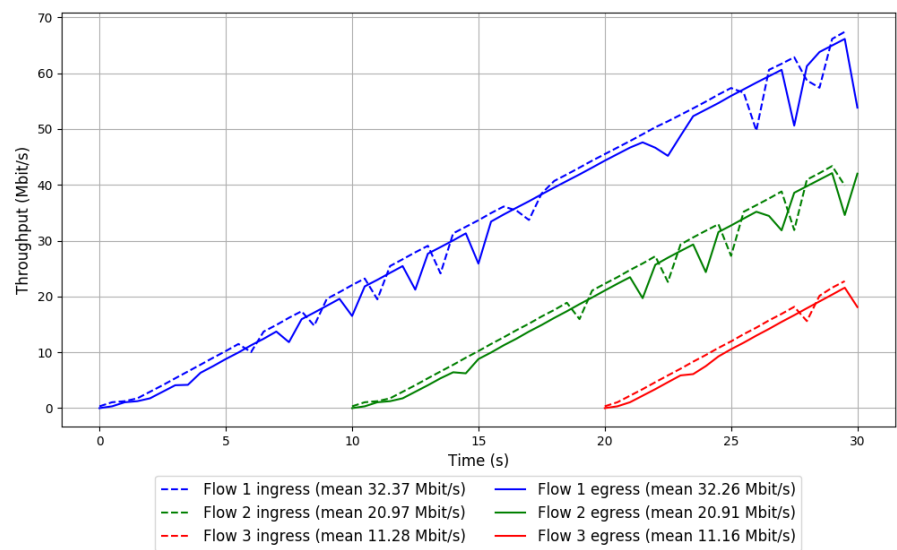
-- Flow 3:

Average throughput: 11.16 Mbit/s

95th percentile per-packet one-way delay: 51.618 ms

Loss rate: 2.08%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-05-26 16:21:18

End at: 2018-05-26 16:21:48

Local clock offset: -0.153 ms

Remote clock offset: 0.393 ms

# Below is generated by plot.py at 2018-05-26 19:59:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 52.72 Mbit/s

95th percentile per-packet one-way delay: 51.414 ms

Loss rate: 0.88%

-- Flow 1:

Average throughput: 34.57 Mbit/s

95th percentile per-packet one-way delay: 51.548 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 22.15 Mbit/s

95th percentile per-packet one-way delay: 51.204 ms

Loss rate: 1.04%

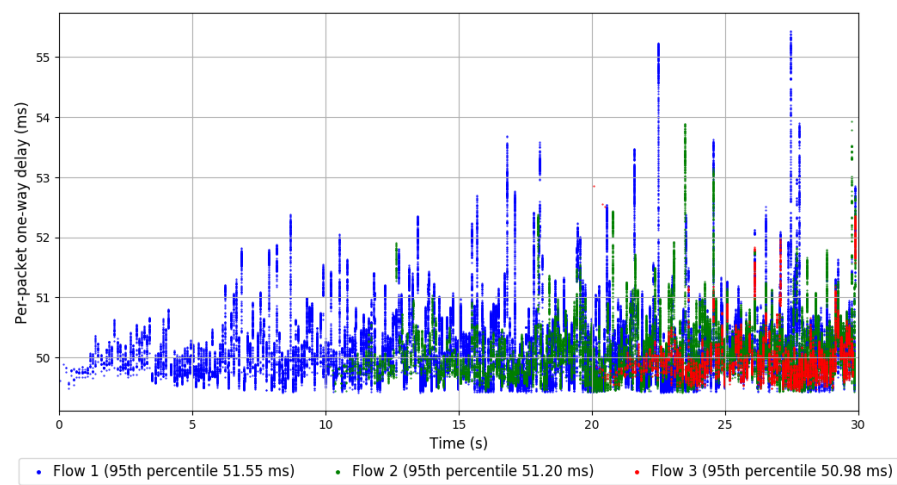
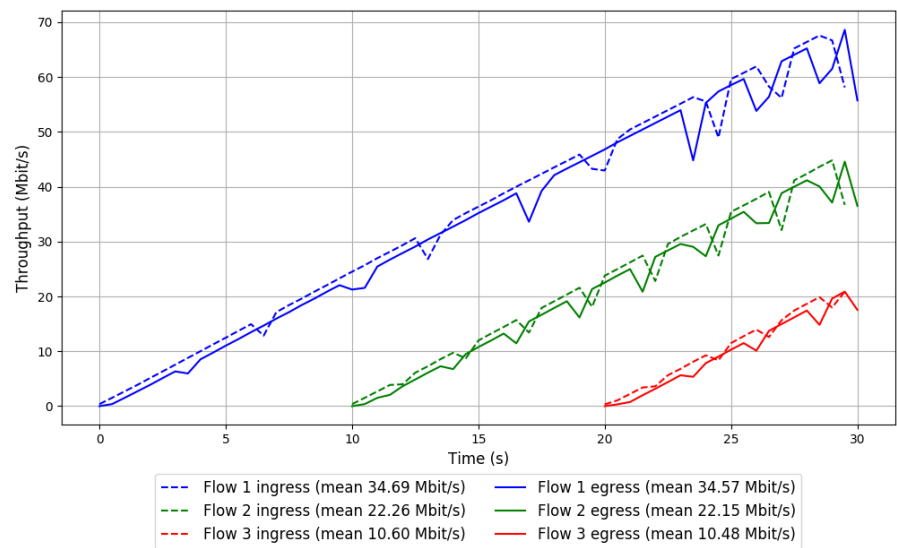
-- Flow 3:

Average throughput: 10.48 Mbit/s

95th percentile per-packet one-way delay: 50.982 ms

Loss rate: 2.14%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-05-26 16:44:28

End at: 2018-05-26 16:44:58

Local clock offset: 0.249 ms

Remote clock offset: 0.216 ms

# Below is generated by plot.py at 2018-05-26 19:59:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 48.74 Mbit/s

95th percentile per-packet one-way delay: 51.630 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 33.67 Mbit/s

95th percentile per-packet one-way delay: 51.615 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 17.21 Mbit/s

95th percentile per-packet one-way delay: 51.349 ms

Loss rate: 1.03%

-- Flow 3:

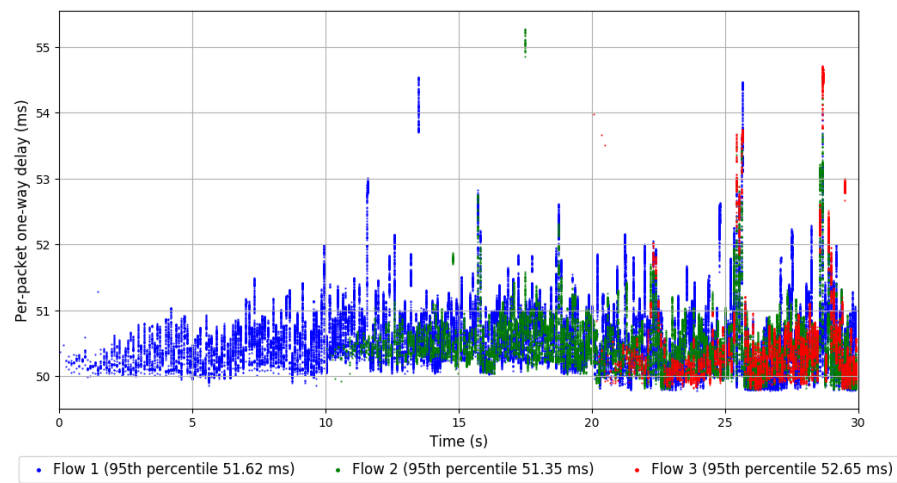
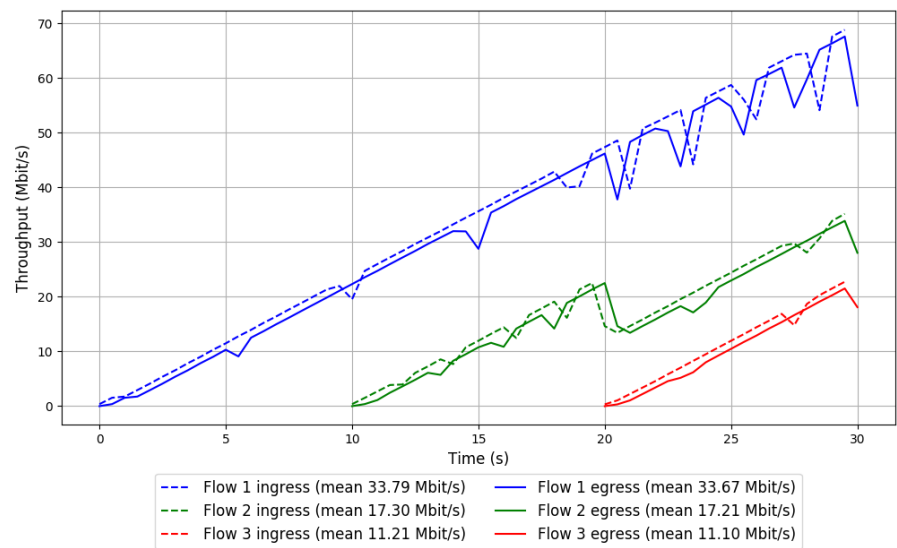
Average throughput: 11.10 Mbit/s

95th percentile per-packet one-way delay: 52.646 ms

Loss rate: 2.08%



Run 7: Report of LEDBAT — Data Link

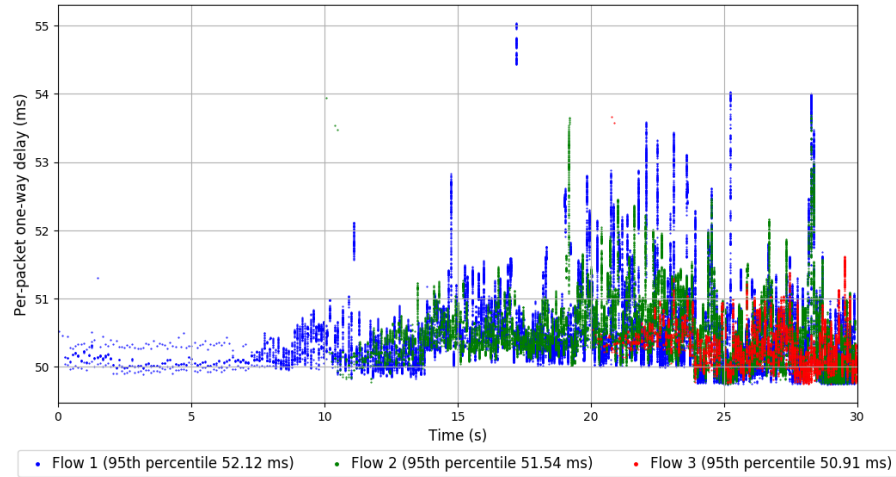
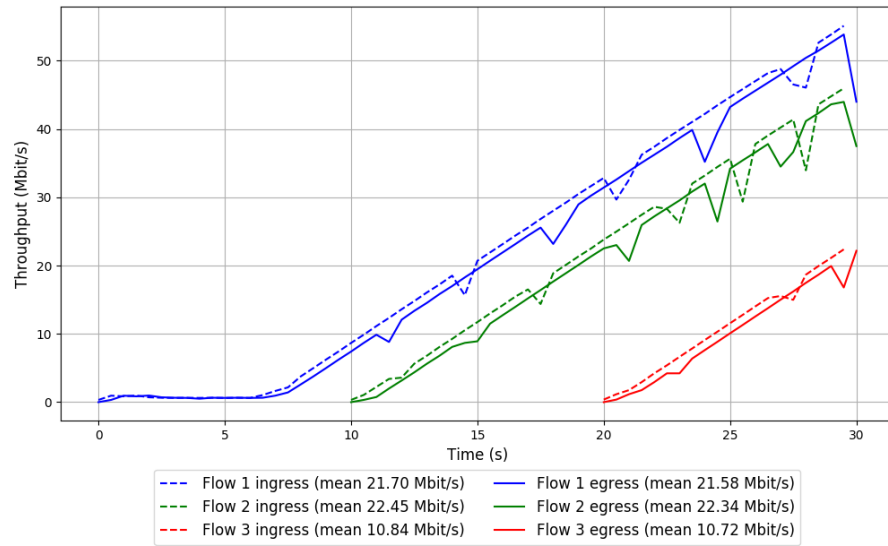


Run 8: Statistics of LEDBAT

Start at: 2018-05-26 17:07:04  
End at: 2018-05-26 17:07:34  
Local clock offset: -0.102 ms  
Remote clock offset: -0.163 ms

```
# Below is generated by plot.py at 2018-05-26 19:59:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 39.93 Mbit/s
95th percentile per-packet one-way delay: 51.780 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 21.58 Mbit/s
95th percentile per-packet one-way delay: 52.124 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 22.34 Mbit/s
95th percentile per-packet one-way delay: 51.538 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 10.72 Mbit/s
95th percentile per-packet one-way delay: 50.915 ms
Loss rate: 2.11%
```

# Run 8: Report of LEDBAT — Data Link

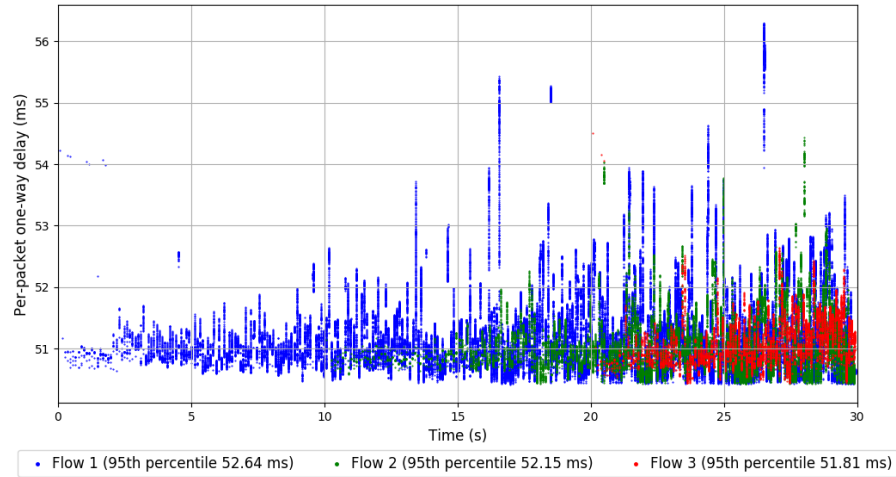
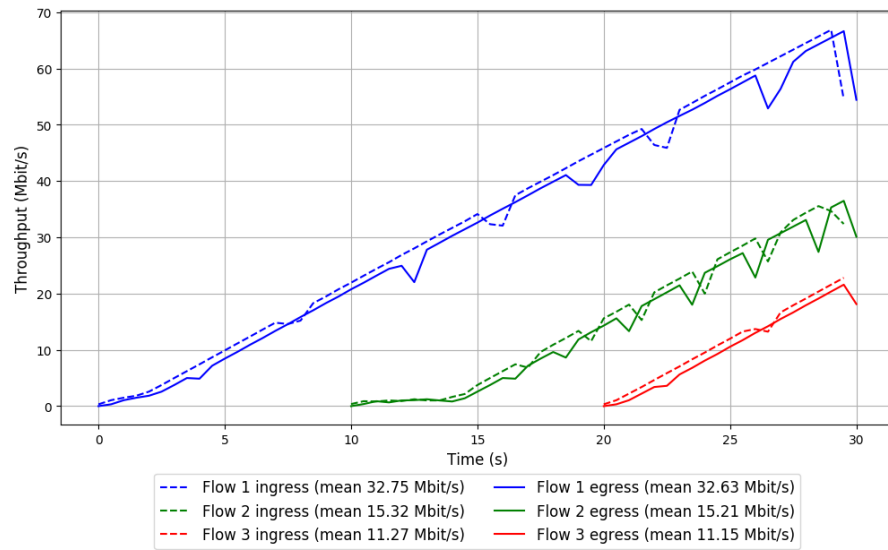


Run 9: Statistics of LEDBAT

Start at: 2018-05-26 17:30:23  
End at: 2018-05-26 17:30:53  
Local clock offset: 0.12 ms  
Remote clock offset: -0.291 ms

# Below is generated by plot.py at 2018-05-26 19:59:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 46.38 Mbit/s  
95th percentile per-packet one-way delay: 52.505 ms  
Loss rate: 0.93%  
-- Flow 1:  
Average throughput: 32.63 Mbit/s  
95th percentile per-packet one-way delay: 52.643 ms  
Loss rate: 0.69%  
-- Flow 2:  
Average throughput: 15.21 Mbit/s  
95th percentile per-packet one-way delay: 52.151 ms  
Loss rate: 1.25%  
-- Flow 3:  
Average throughput: 11.15 Mbit/s  
95th percentile per-packet one-way delay: 51.810 ms  
Loss rate: 2.09%

# Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-05-26 17:53:57

End at: 2018-05-26 17:54:27

Local clock offset: 0.018 ms

Remote clock offset: 0.209 ms

# Below is generated by plot.py at 2018-05-26 19:59:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 53.08 Mbit/s

95th percentile per-packet one-way delay: 51.450 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 34.15 Mbit/s

95th percentile per-packet one-way delay: 51.391 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 23.16 Mbit/s

95th percentile per-packet one-way delay: 51.648 ms

Loss rate: 1.02%

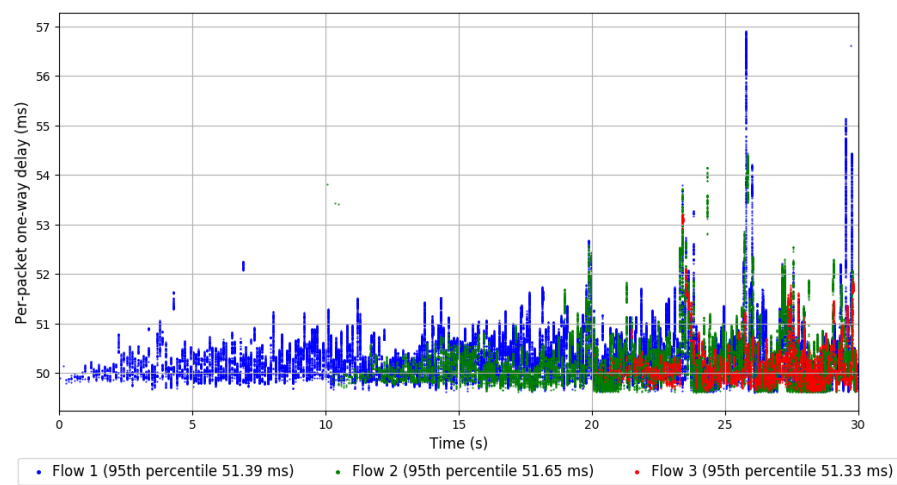
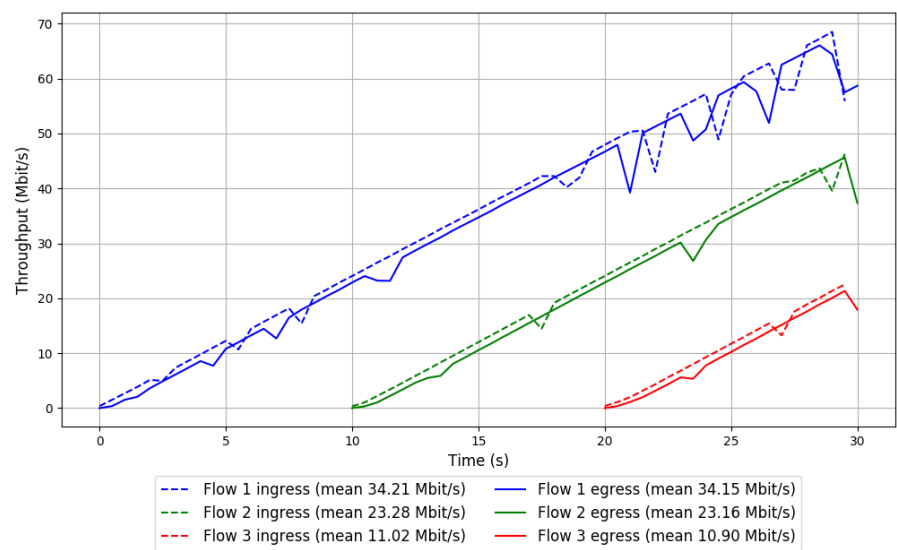
-- Flow 3:

Average throughput: 10.90 Mbit/s

95th percentile per-packet one-way delay: 51.330 ms

Loss rate: 2.10%

Run 10: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2018-05-26 14:26:25

End at: 2018-05-26 14:26:55

Local clock offset: -0.304 ms

Remote clock offset: 0.117 ms

# Below is generated by plot.py at 2018-05-26 19:59:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 515.89 Mbit/s

95th percentile per-packet one-way delay: 176.644 ms

Loss rate: 1.63%

-- Flow 1:

Average throughput: 472.23 Mbit/s

95th percentile per-packet one-way delay: 176.621 ms

Loss rate: 1.62%

-- Flow 2:

Average throughput: 63.78 Mbit/s

95th percentile per-packet one-way delay: 176.943 ms

Loss rate: 1.71%

-- Flow 3:

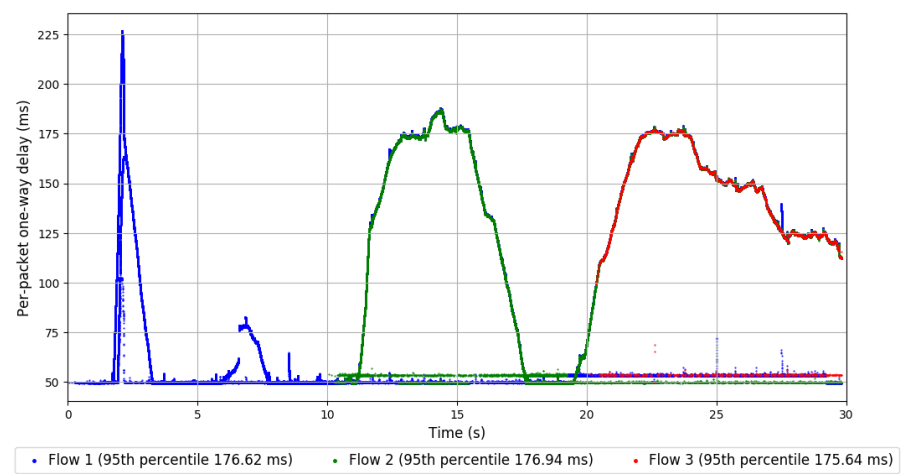
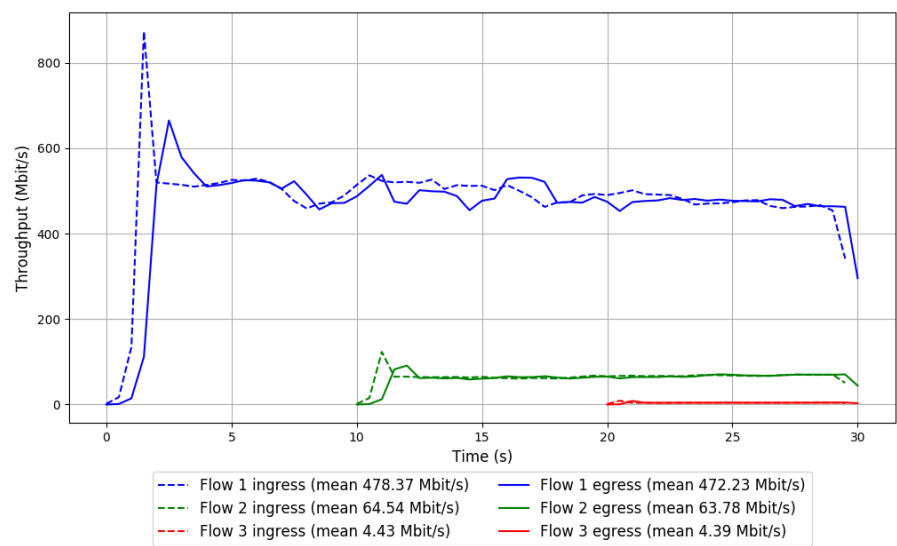
Average throughput: 4.39 Mbit/s

95th percentile per-packet one-way delay: 175.638 ms

Loss rate: 1.81%



Run 1: Report of PCC-Allegro — Data Link

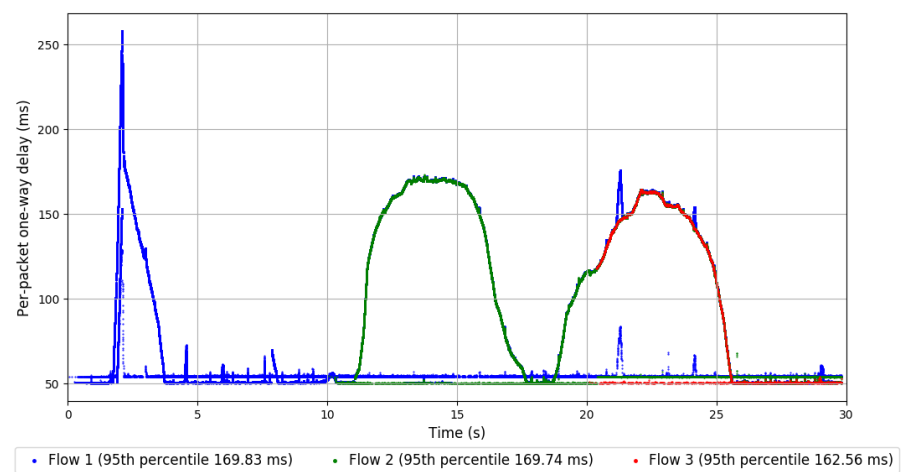
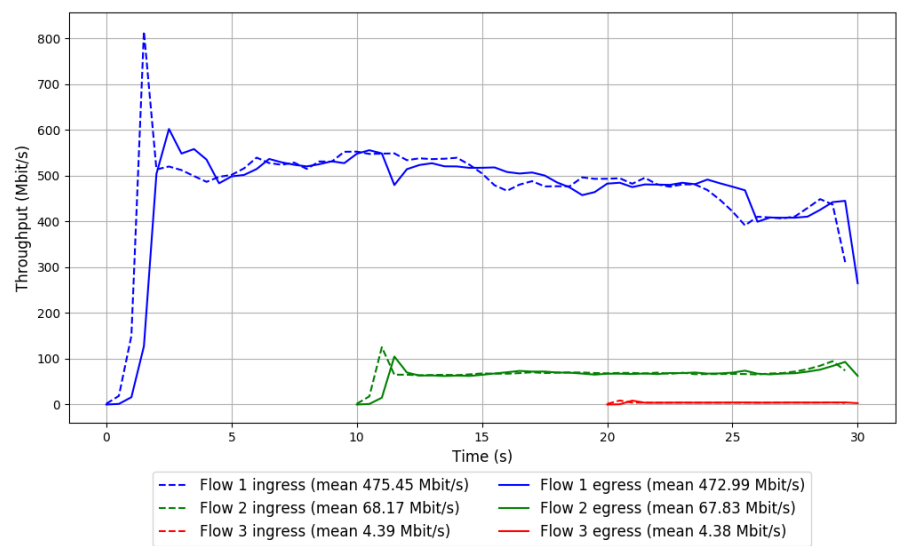


Run 2: Statistics of PCC-Allegro

Start at: 2018-05-26 14:49:24  
End at: 2018-05-26 14:49:54  
Local clock offset: 0.215 ms  
Remote clock offset: -0.096 ms

# Below is generated by plot.py at 2018-05-26 19:59:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 519.39 Mbit/s  
95th percentile per-packet one-way delay: 169.821 ms  
Loss rate: 0.88%  
-- Flow 1:  
Average throughput: 472.99 Mbit/s  
95th percentile per-packet one-way delay: 169.833 ms  
Loss rate: 0.87%  
-- Flow 2:  
Average throughput: 67.83 Mbit/s  
95th percentile per-packet one-way delay: 169.742 ms  
Loss rate: 1.02%  
-- Flow 3:  
Average throughput: 4.38 Mbit/s  
95th percentile per-packet one-way delay: 162.556 ms  
Loss rate: 1.17%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2018-05-26 15:12:35

End at: 2018-05-26 15:13:05

Local clock offset: -0.033 ms

Remote clock offset: 0.137 ms

# Below is generated by plot.py at 2018-05-26 19:59:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 553.20 Mbit/s

95th percentile per-packet one-way delay: 167.764 ms

Loss rate: 2.07%

-- Flow 1:

Average throughput: 501.96 Mbit/s

95th percentile per-packet one-way delay: 167.768 ms

Loss rate: 2.02%

-- Flow 2:

Average throughput: 68.02 Mbit/s

95th percentile per-packet one-way delay: 167.806 ms

Loss rate: 2.54%

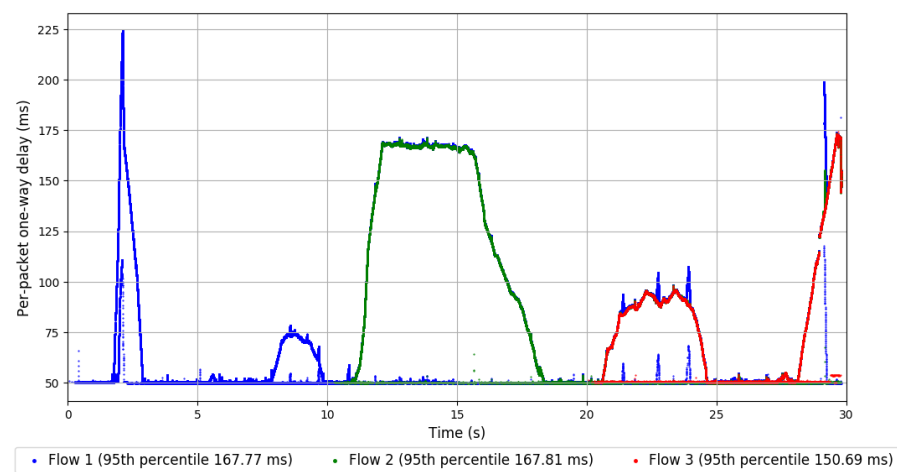
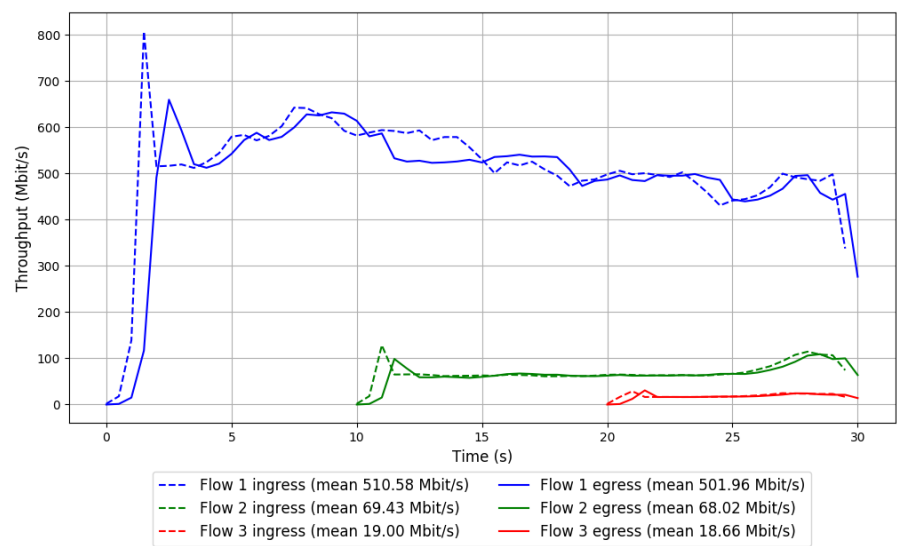
-- Flow 3:

Average throughput: 18.66 Mbit/s

95th percentile per-packet one-way delay: 150.687 ms

Loss rate: 2.79%

Run 3: Report of PCC-Allegro — Data Link

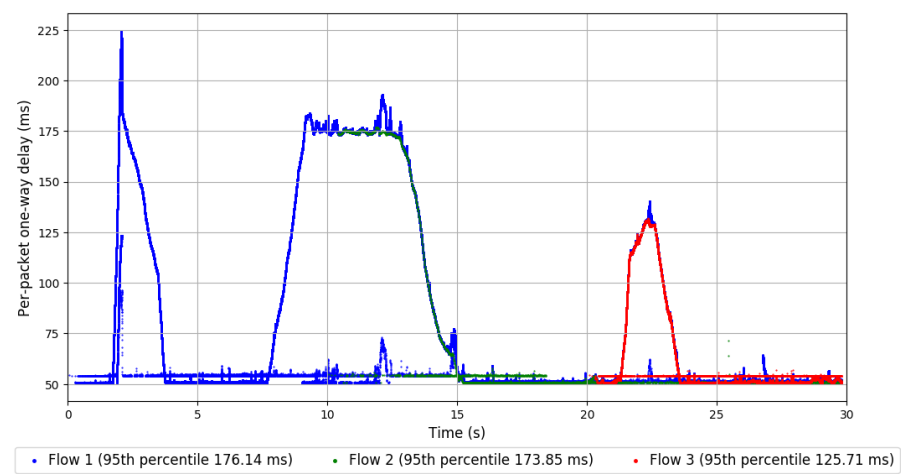
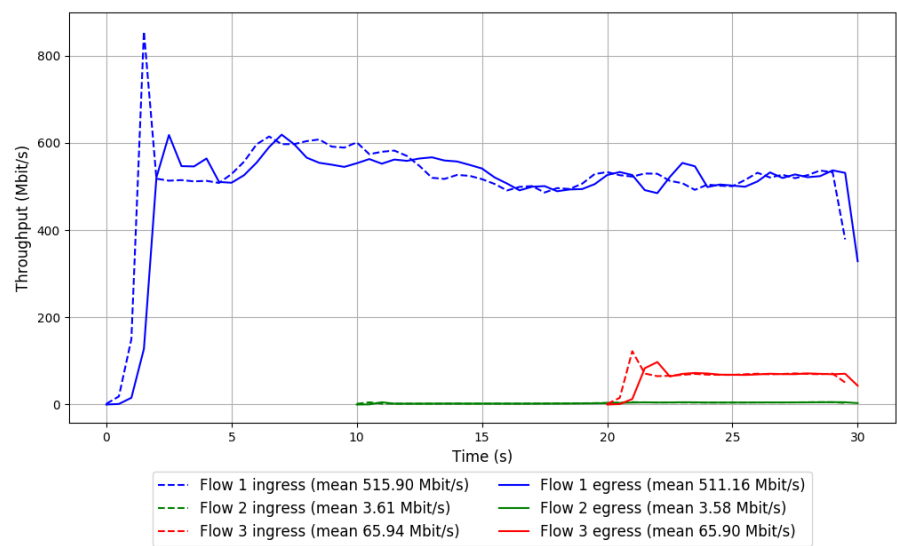


Run 4: Statistics of PCC-Allegro

Start at: 2018-05-26 15:35:49  
End at: 2018-05-26 15:36:19  
Local clock offset: 0.093 ms  
Remote clock offset: -0.212 ms

# Below is generated by plot.py at 2018-05-26 19:59:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 535.08 Mbit/s  
95th percentile per-packet one-way delay: 175.955 ms  
Loss rate: 1.26%  
-- Flow 1:  
Average throughput: 511.16 Mbit/s  
95th percentile per-packet one-way delay: 176.140 ms  
Loss rate: 1.27%  
-- Flow 2:  
Average throughput: 3.58 Mbit/s  
95th percentile per-packet one-way delay: 173.848 ms  
Loss rate: 1.19%  
-- Flow 3:  
Average throughput: 65.90 Mbit/s  
95th percentile per-packet one-way delay: 125.713 ms  
Loss rate: 1.13%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2018-05-26 15:59:32

End at: 2018-05-26 16:00:02

Local clock offset: 0.2 ms

Remote clock offset: 0.389 ms

# Below is generated by plot.py at 2018-05-26 19:59:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 576.41 Mbit/s

95th percentile per-packet one-way delay: 162.501 ms

Loss rate: 1.01%

-- Flow 1:

Average throughput: 511.77 Mbit/s

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

Loss rate: 0.96%

-- Flow 2:

Average throughput: 68.18 Mbit/s

95th percentile per-packet one-way delay: 162.589 ms

Loss rate: 1.20%

-- Flow 3:

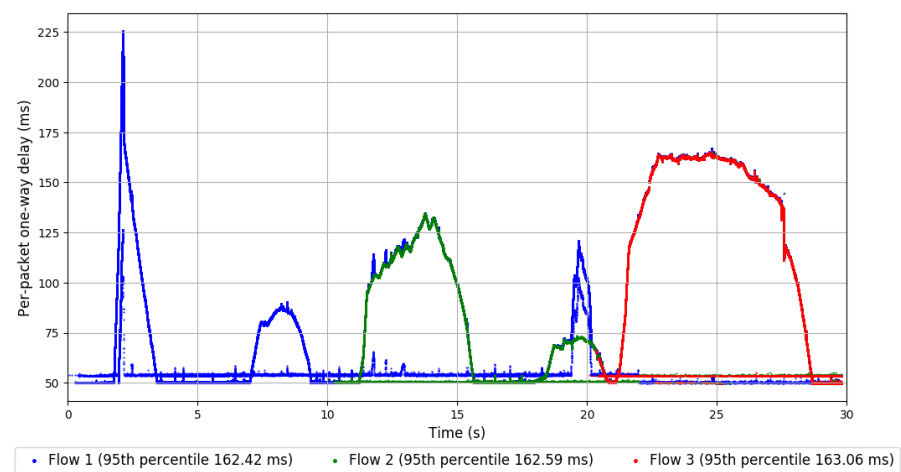
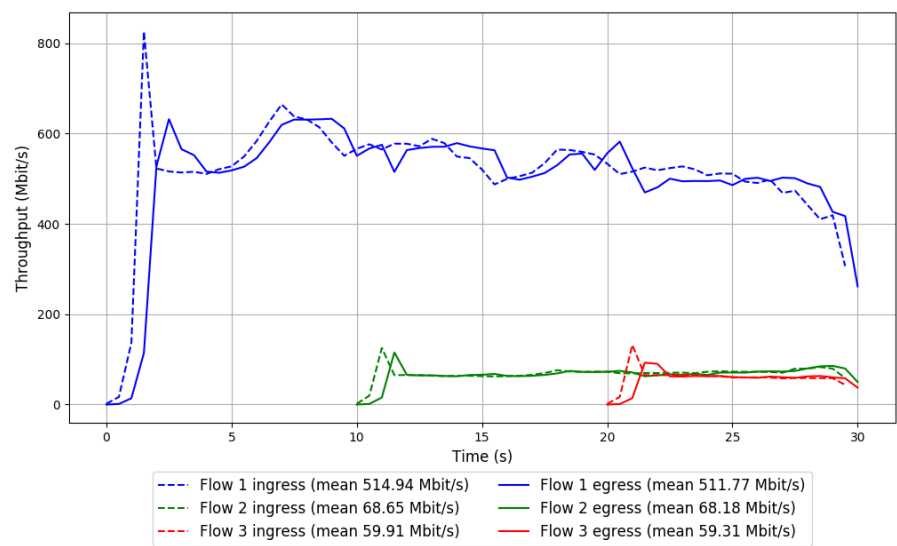
Average throughput: 59.31 Mbit/s

95th percentile per-packet one-way delay: 163.055 ms

Loss rate: 2.06%



Run 5: Report of PCC-Allegro — Data Link

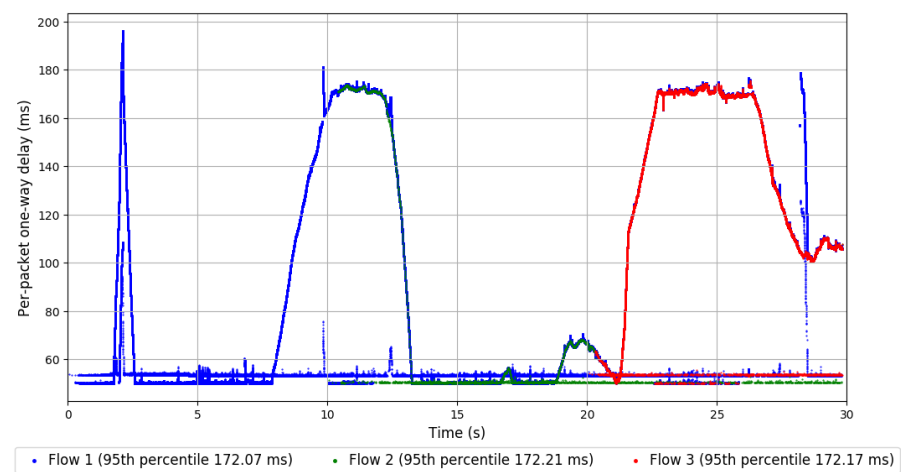
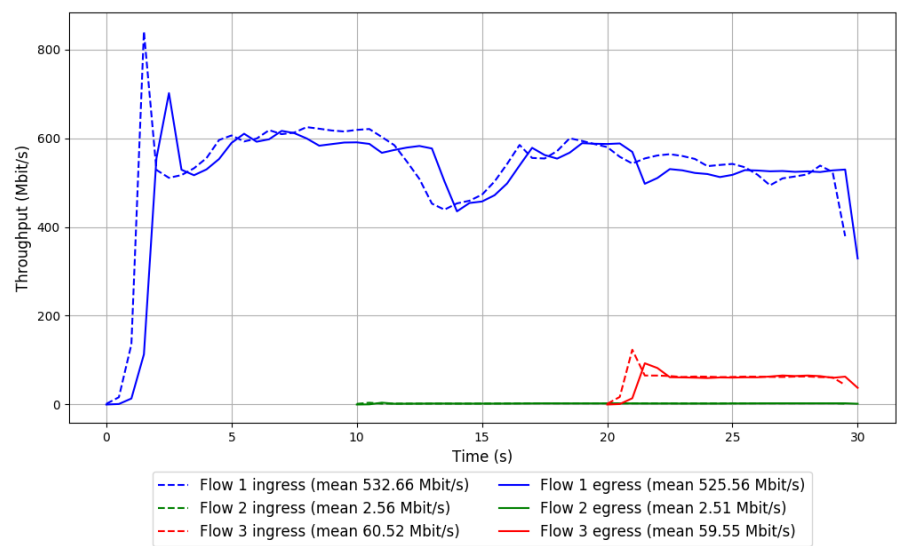


Run 6: Statistics of PCC-Allegro

Start at: 2018-05-26 16:22:30  
End at: 2018-05-26 16:23:00  
Local clock offset: -0.015 ms  
Remote clock offset: -0.121 ms

# Below is generated by plot.py at 2018-05-26 19:59:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 546.71 Mbit/s  
95th percentile per-packet one-way delay: 172.074 ms  
Loss rate: 1.71%  
-- Flow 1:  
Average throughput: 525.56 Mbit/s  
95th percentile per-packet one-way delay: 172.068 ms  
Loss rate: 1.67%  
-- Flow 2:  
Average throughput: 2.51 Mbit/s  
95th percentile per-packet one-way delay: 172.209 ms  
Loss rate: 2.27%  
-- Flow 3:  
Average throughput: 59.55 Mbit/s  
95th percentile per-packet one-way delay: 172.172 ms  
Loss rate: 2.65%

Run 6: Report of PCC-Allegro — Data Link



Run 7: Statistics of PCC-Allegro

Start at: 2018-05-26 16:45:39

End at: 2018-05-26 16:46:09

Local clock offset: 0.001 ms

Remote clock offset: 0.224 ms

# Below is generated by plot.py at 2018-05-26 20:00:55

# Datalink statistics

-- Total of 3 flows:

Average throughput: 549.21 Mbit/s

95th percentile per-packet one-way delay: 152.629 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 483.20 Mbit/s

95th percentile per-packet one-way delay: 152.777 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 82.45 Mbit/s

95th percentile per-packet one-way delay: 151.569 ms

Loss rate: 0.68%

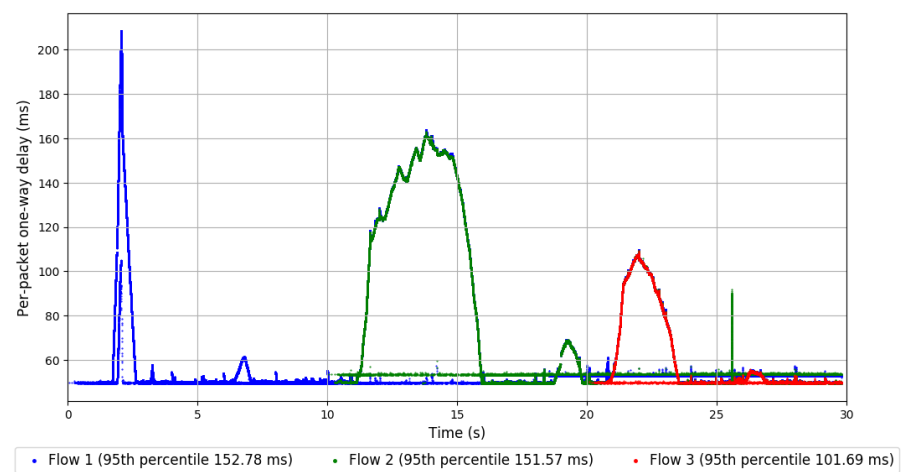
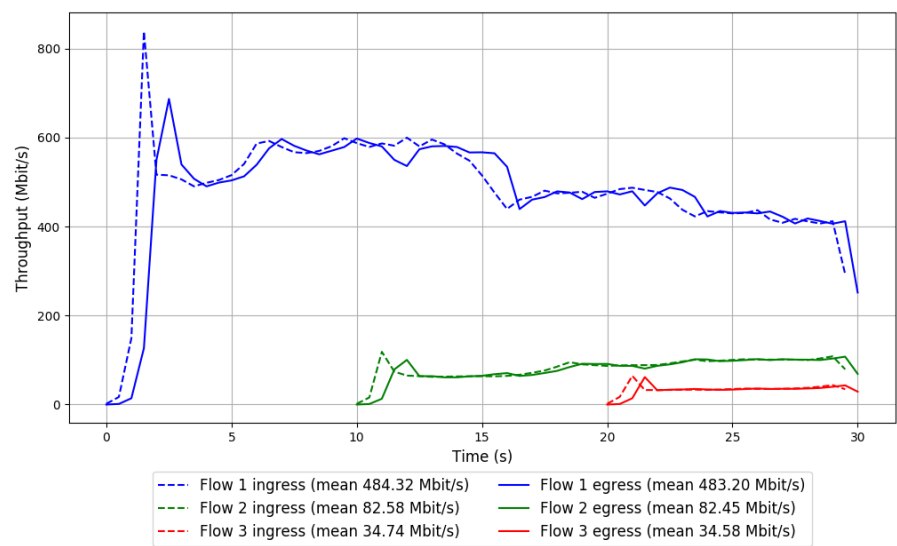
-- Flow 3:

Average throughput: 34.58 Mbit/s

95th percentile per-packet one-way delay: 101.692 ms

Loss rate: 1.49%

Run 7: Report of PCC-Allegro — Data Link

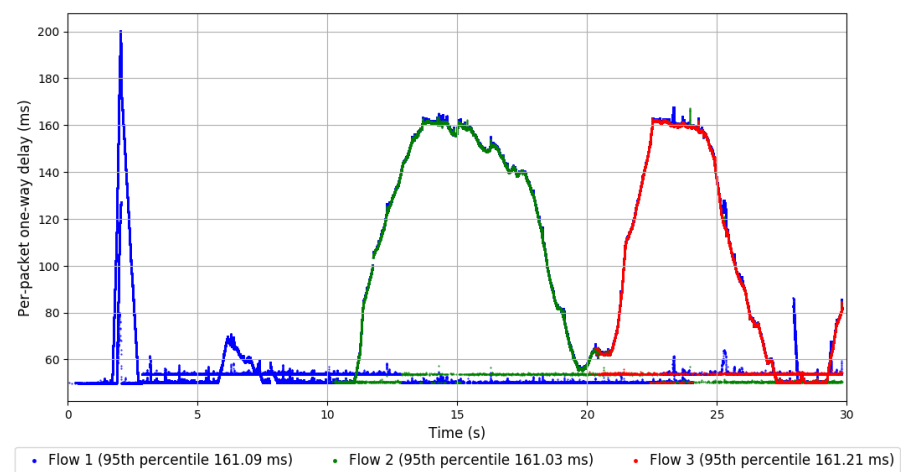
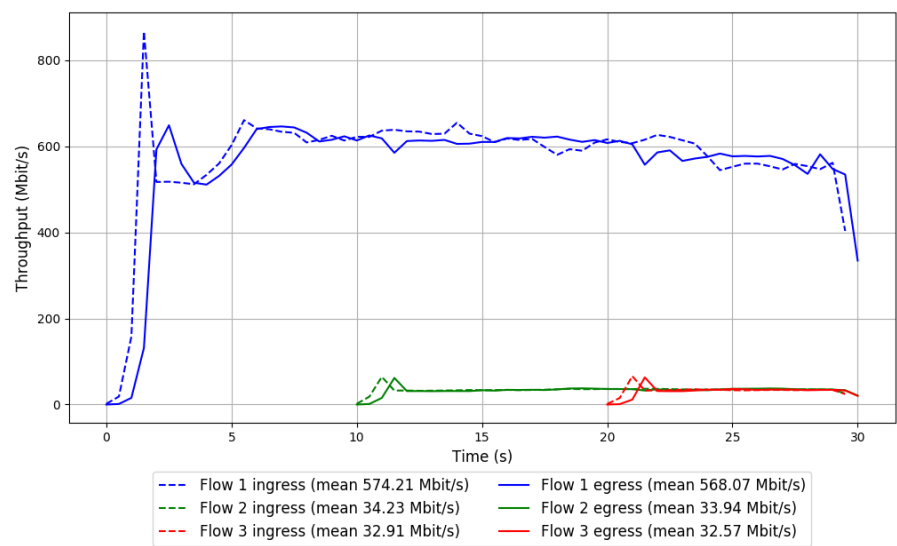


Run 8: Statistics of PCC-Allegro

Start at: 2018-05-26 17:08:15  
End at: 2018-05-26 17:08:45  
Local clock offset: 0.014 ms  
Remote clock offset: -0.101 ms

```
# Below is generated by plot.py at 2018-05-26 20:01:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 601.24 Mbit/s
95th percentile per-packet one-way delay: 161.085 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 568.07 Mbit/s
95th percentile per-packet one-way delay: 161.087 ms
Loss rate: 1.40%
-- Flow 2:
Average throughput: 33.94 Mbit/s
95th percentile per-packet one-way delay: 161.027 ms
Loss rate: 1.34%
-- Flow 3:
Average throughput: 32.57 Mbit/s
95th percentile per-packet one-way delay: 161.214 ms
Loss rate: 2.10%
```

Run 8: Report of PCC-Allegro — Data Link



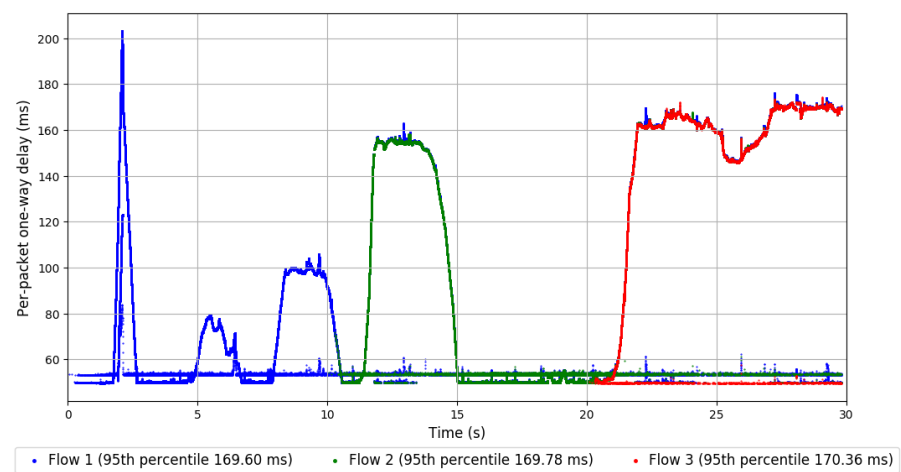
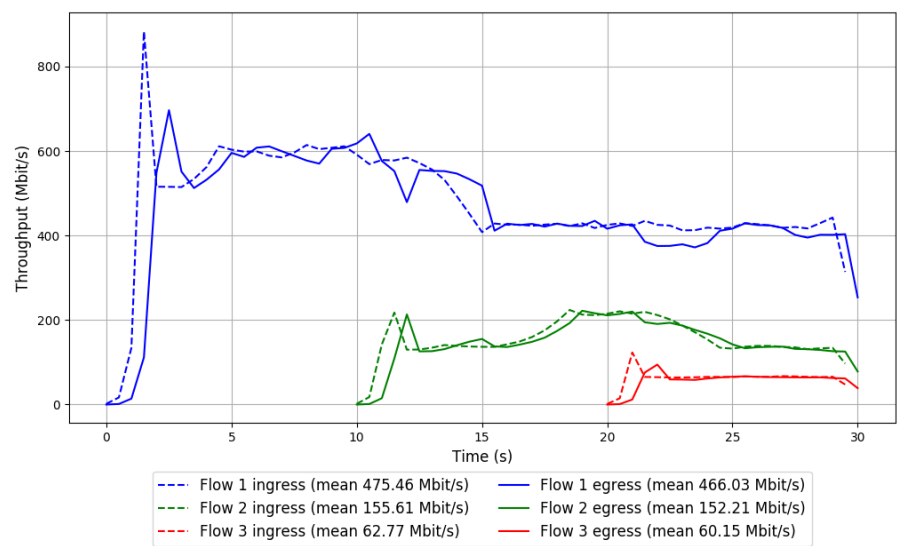
Run 9: Statistics of PCC-Allegro

Start at: 2018-05-26 17:31:34  
End at: 2018-05-26 17:32:04  
Local clock offset: -0.325 ms  
Remote clock offset: -0.022 ms

# Below is generated by plot.py at 2018-05-26 20:02:03  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 586.72 Mbit/s  
95th percentile per-packet one-way delay: 169.700 ms  
Loss rate: 2.49%  
-- Flow 1:  
Average throughput: 466.03 Mbit/s  
95th percentile per-packet one-way delay: 169.597 ms  
Loss rate: 2.32%  
-- Flow 2:  
Average throughput: 152.21 Mbit/s  
95th percentile per-packet one-way delay: 169.780 ms  
Loss rate: 2.72%  
-- Flow 3:  
Average throughput: 60.15 Mbit/s  
95th percentile per-packet one-way delay: 170.356 ms  
Loss rate: 5.15%



Run 9: Report of PCC-Allegro — Data Link



Run 10: Statistics of PCC-Allegro

Start at: 2018-05-26 17:55:09

End at: 2018-05-26 17:55:39

Local clock offset: 0.268 ms

Remote clock offset: 0.173 ms

# Below is generated by plot.py at 2018-05-26 20:02:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 592.71 Mbit/s

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

Loss rate: 1.32%

-- Flow 1:

Average throughput: 550.83 Mbit/s

95th percentile per-packet one-way delay: 164.724 ms

Loss rate: 1.29%

-- Flow 2:

Average throughput: 33.16 Mbit/s

95th percentile per-packet one-way delay: 164.721 ms

Loss rate: 1.17%

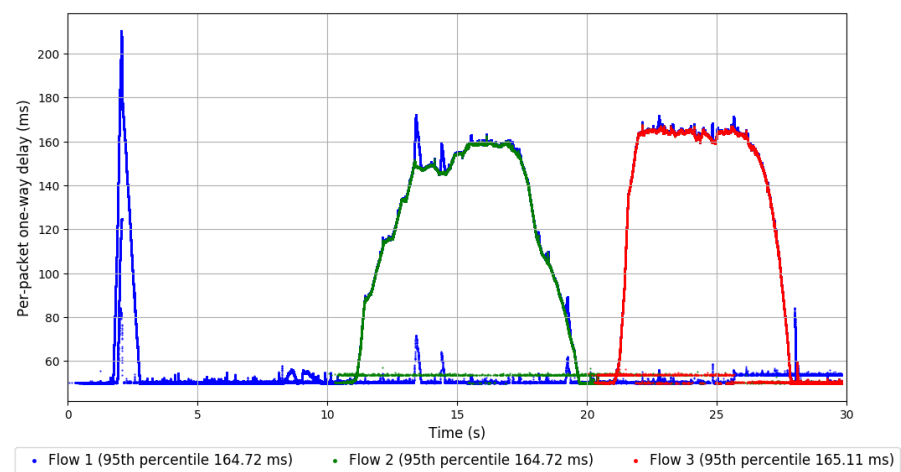
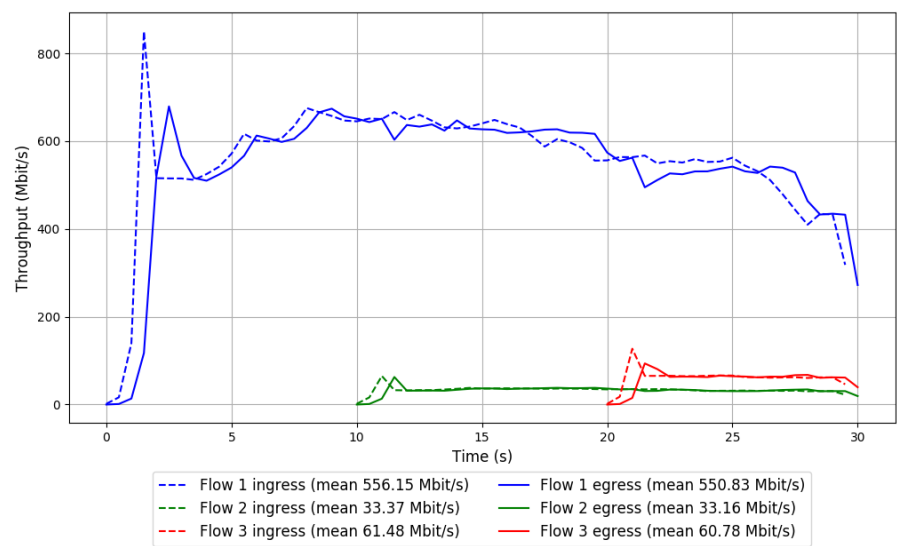
-- Flow 3:

Average throughput: 60.78 Mbit/s

95th percentile per-packet one-way delay: 165.108 ms

Loss rate: 2.17%

Run 10: Report of PCC-Allegro — Data Link

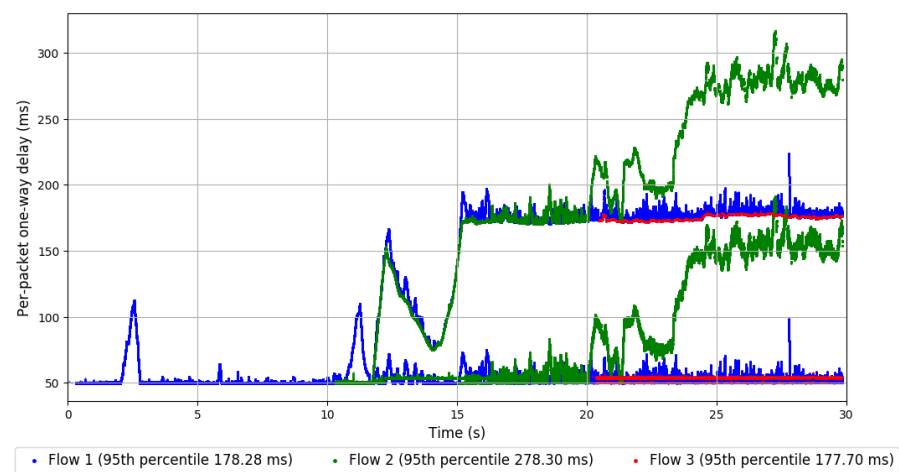
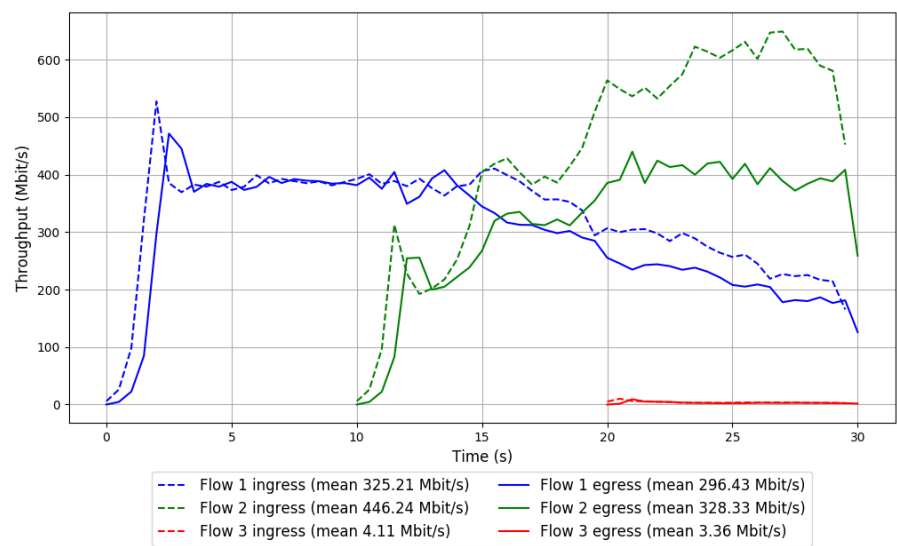


```
Run 1: Statistics of PCC-Expr

Start at: 2018-05-26 14:39:32
End at: 2018-05-26 14:40:02
Local clock offset: -0.062 ms
Remote clock offset: 0.19 ms

# Below is generated by plot.py at 2018-05-26 20:13:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 515.55 Mbit/s
95th percentile per-packet one-way delay: 245.190 ms
Loss rate: 17.58%
-- Flow 1:
Average throughput: 296.43 Mbit/s
95th percentile per-packet one-way delay: 178.280 ms
Loss rate: 9.16%
-- Flow 2:
Average throughput: 328.33 Mbit/s
95th percentile per-packet one-way delay: 278.298 ms
Loss rate: 26.80%
-- Flow 3:
Average throughput: 3.36 Mbit/s
95th percentile per-packet one-way delay: 177.700 ms
Loss rate: 19.21%
```

Run 1: Report of PCC-Expr — Data Link

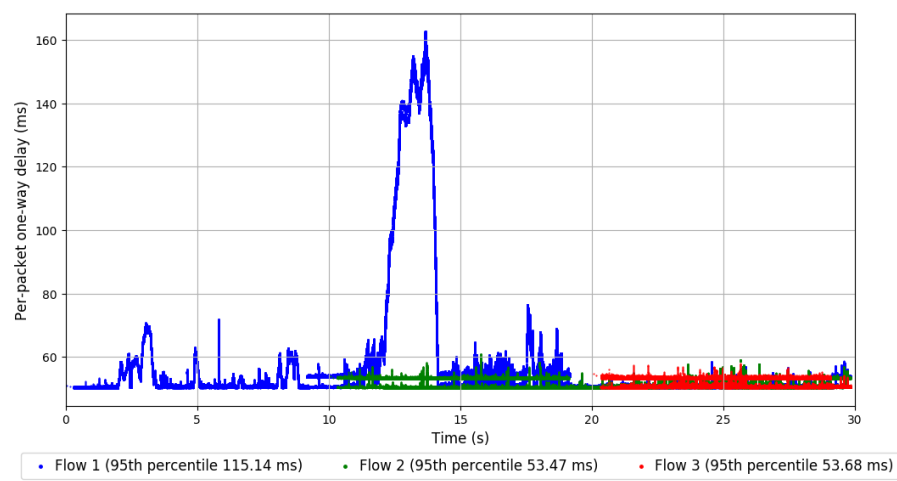
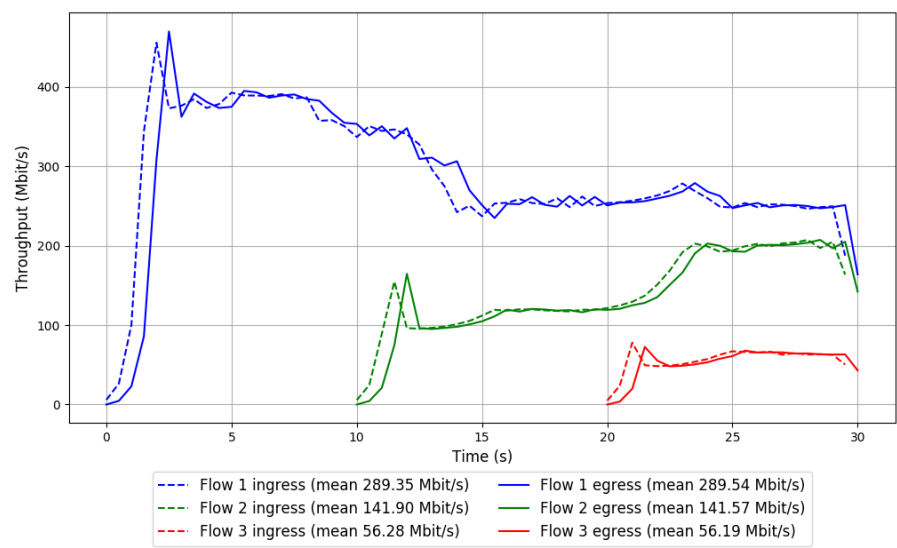


Run 2: Statistics of PCC-Expr

Start at: 2018-05-26 15:02:45  
End at: 2018-05-26 15:03:15  
Local clock offset: 0.066 ms  
Remote clock offset: -0.211 ms

# Below is generated by plot.py at 2018-05-26 20:13:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 401.95 Mbit/s  
95th percentile per-packet one-way delay: 73.342 ms  
Loss rate: 0.43%  
-- Flow 1:  
Average throughput: 289.54 Mbit/s  
95th percentile per-packet one-way delay: 115.136 ms  
Loss rate: 0.27%  
-- Flow 2:  
Average throughput: 141.57 Mbit/s  
95th percentile per-packet one-way delay: 53.466 ms  
Loss rate: 0.75%  
-- Flow 3:  
Average throughput: 56.19 Mbit/s  
95th percentile per-packet one-way delay: 53.676 ms  
Loss rate: 1.21%

Run 2: Report of PCC-Expr — Data Link



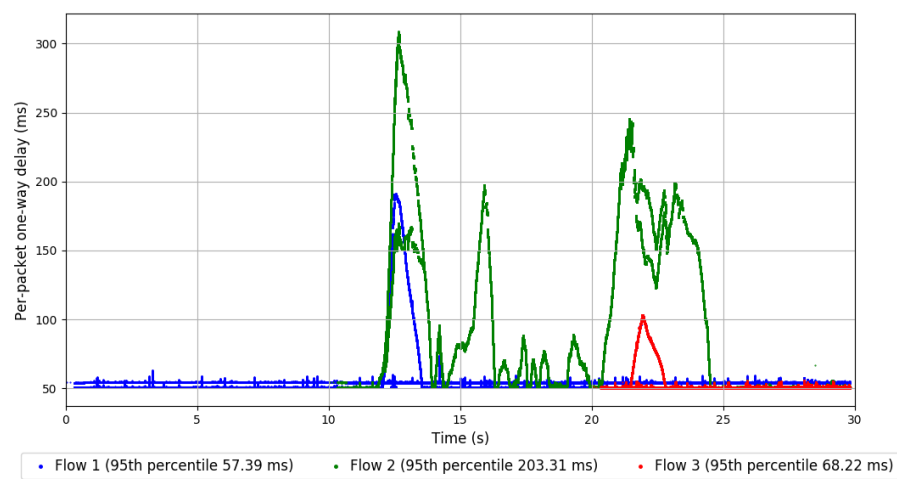
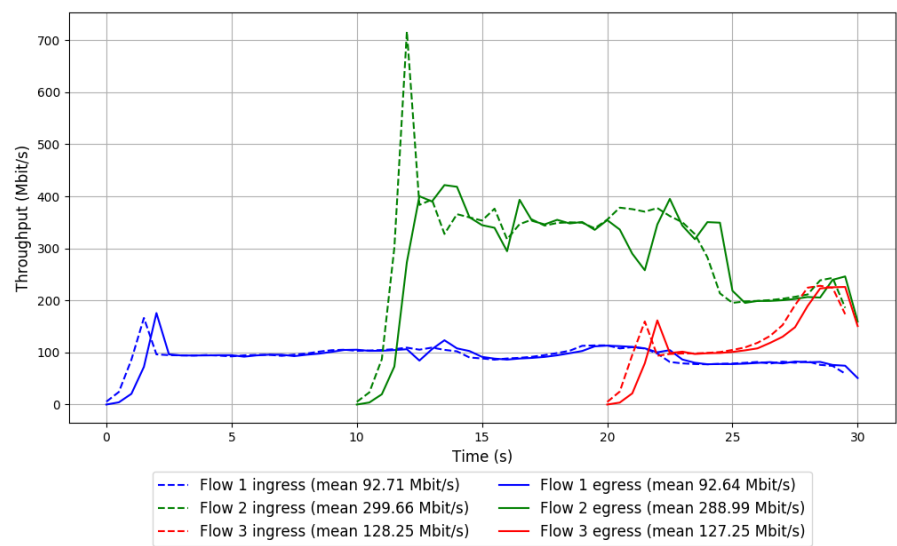
Run 3: Statistics of PCC-Expr

Start at: 2018-05-26 15:26:04  
End at: 2018-05-26 15:26:34  
Local clock offset: 0.029 ms  
Remote clock offset: -0.227 ms

# Below is generated by plot.py at 2018-05-26 20:13:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 326.28 Mbit/s  
95th percentile per-packet one-way delay: 189.479 ms  
Loss rate: 2.77%  
-- Flow 1:  
Average throughput: 92.64 Mbit/s  
95th percentile per-packet one-way delay: 57.391 ms  
Loss rate: 0.43%  
-- Flow 2:  
Average throughput: 288.99 Mbit/s  
95th percentile per-packet one-way delay: 203.308 ms  
Loss rate: 4.07%  
-- Flow 3:  
Average throughput: 127.25 Mbit/s  
95th percentile per-packet one-way delay: 68.225 ms  
Loss rate: 1.80%



Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2018-05-26 15:49:39

End at: 2018-05-26 15:50:09

Local clock offset: 0.114 ms

Remote clock offset: 0.084 ms

# Below is generated by plot.py at 2018-05-26 20:17:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 489.85 Mbit/s

95th percentile per-packet one-way delay: 191.783 ms

Loss rate: 5.10%

-- Flow 1:

Average throughput: 330.97 Mbit/s

95th percentile per-packet one-way delay: 201.561 ms

Loss rate: 6.08%

-- Flow 2:

Average throughput: 193.90 Mbit/s

95th percentile per-packet one-way delay: 174.143 ms

Loss rate: 3.44%

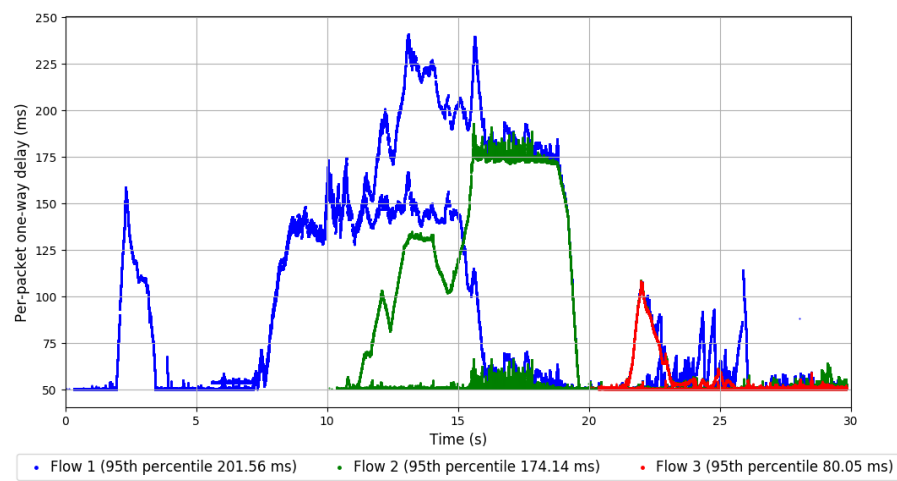
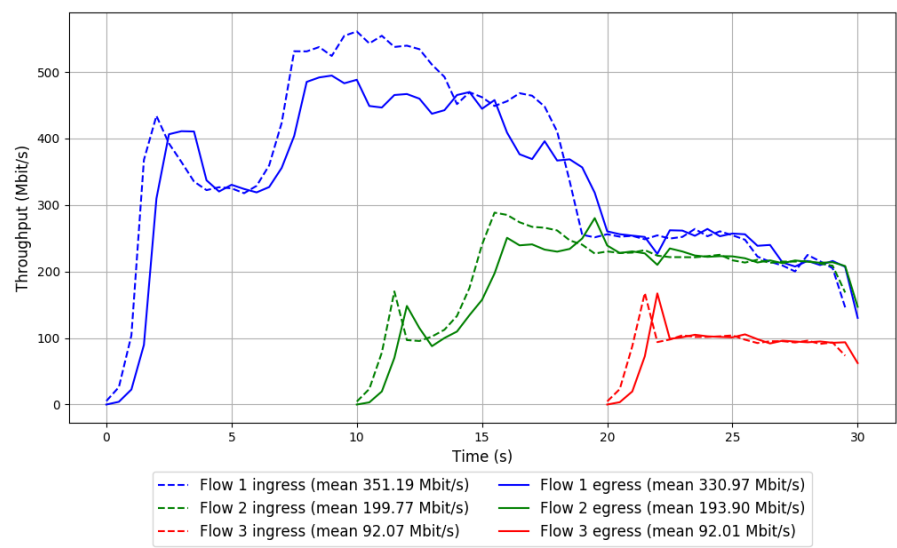
-- Flow 3:

Average throughput: 92.01 Mbit/s

95th percentile per-packet one-way delay: 80.053 ms

Loss rate: 1.10%

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2018-05-26 16:12:57

End at: 2018-05-26 16:13:27

Local clock offset: -0.072 ms

Remote clock offset: 0.17 ms

# Below is generated by plot.py at 2018-05-26 20:17:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 222.02 Mbit/s

95th percentile per-packet one-way delay: 94.310 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 102.76 Mbit/s

95th percentile per-packet one-way delay: 53.719 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 133.01 Mbit/s

95th percentile per-packet one-way delay: 169.355 ms

Loss rate: 0.68%

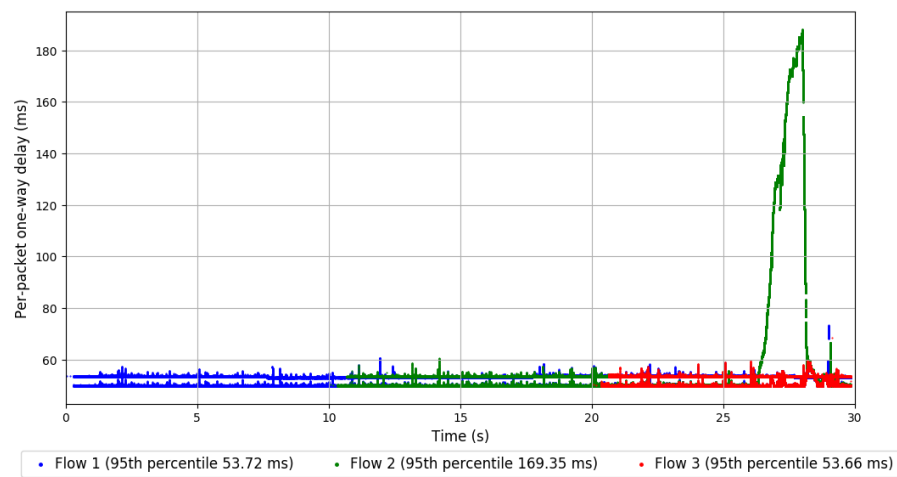
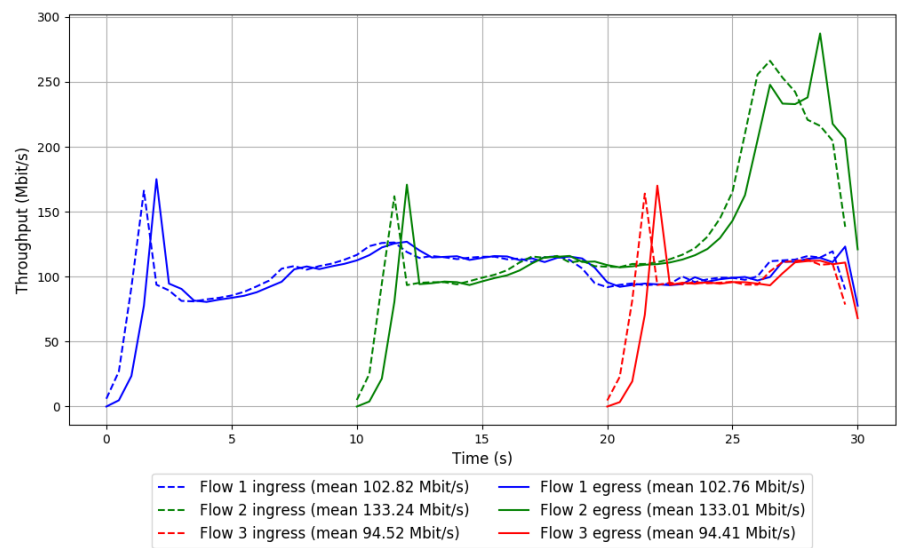
-- Flow 3:

Average throughput: 94.41 Mbit/s

95th percentile per-packet one-way delay: 53.655 ms

Loss rate: 1.13%

Run 5: Report of PCC-Expr — Data Link

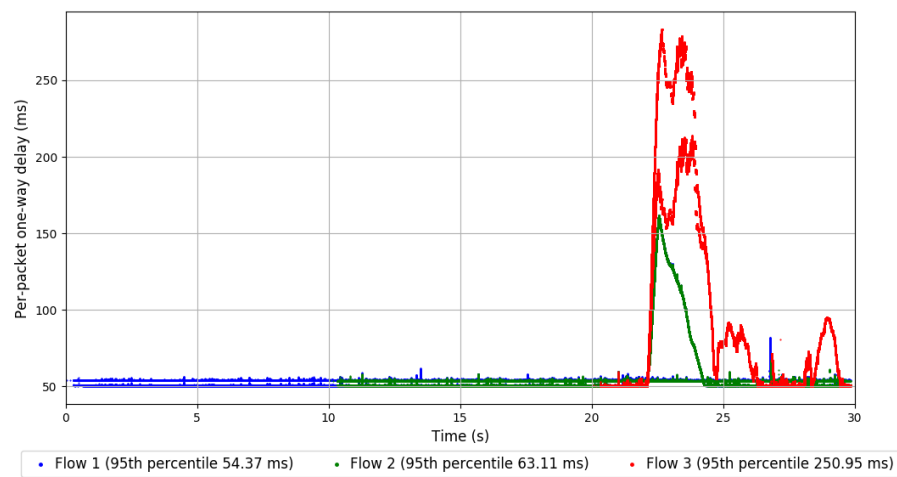
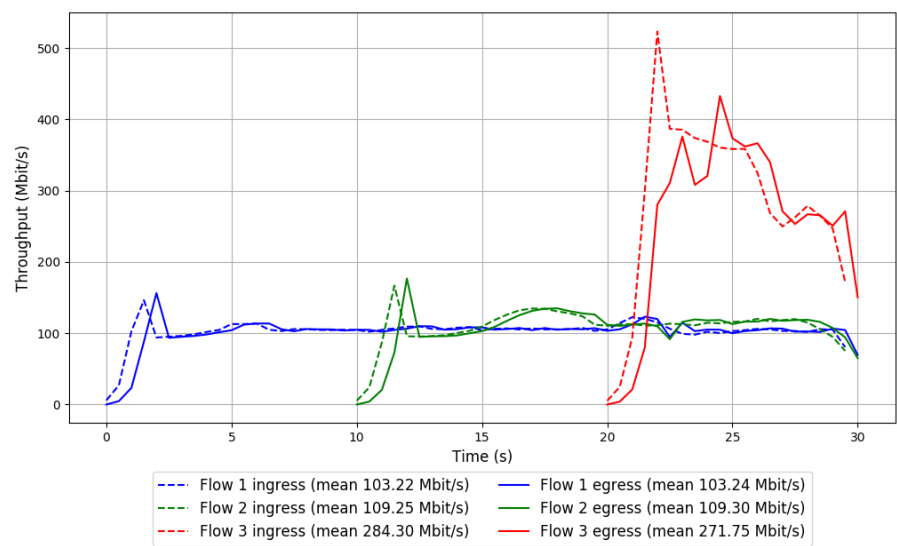


Run 6: Statistics of PCC-Expr

Start at: 2018-05-26 16:36:00  
End at: 2018-05-26 16:36:30  
Local clock offset: 0.093 ms  
Remote clock offset: -0.439 ms

# Below is generated by plot.py at 2018-05-26 20:17:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 264.90 Mbit/s  
95th percentile per-packet one-way delay: 179.446 ms  
Loss rate: 2.14%  
-- Flow 1:  
Average throughput: 103.24 Mbit/s  
95th percentile per-packet one-way delay: 54.366 ms  
Loss rate: 0.35%  
-- Flow 2:  
Average throughput: 109.30 Mbit/s  
95th percentile per-packet one-way delay: 63.112 ms  
Loss rate: 0.47%  
-- Flow 3:  
Average throughput: 271.75 Mbit/s  
95th percentile per-packet one-way delay: 250.952 ms  
Loss rate: 5.40%

Run 6: Report of PCC-Expr — Data Link



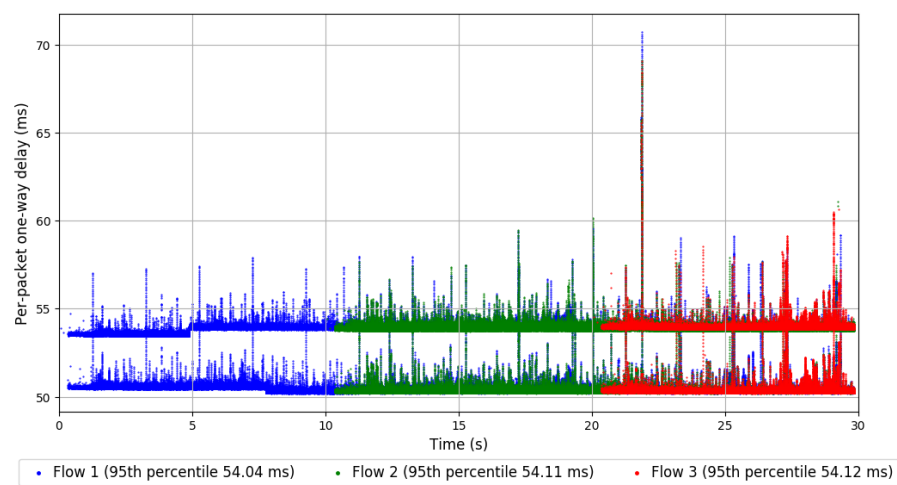
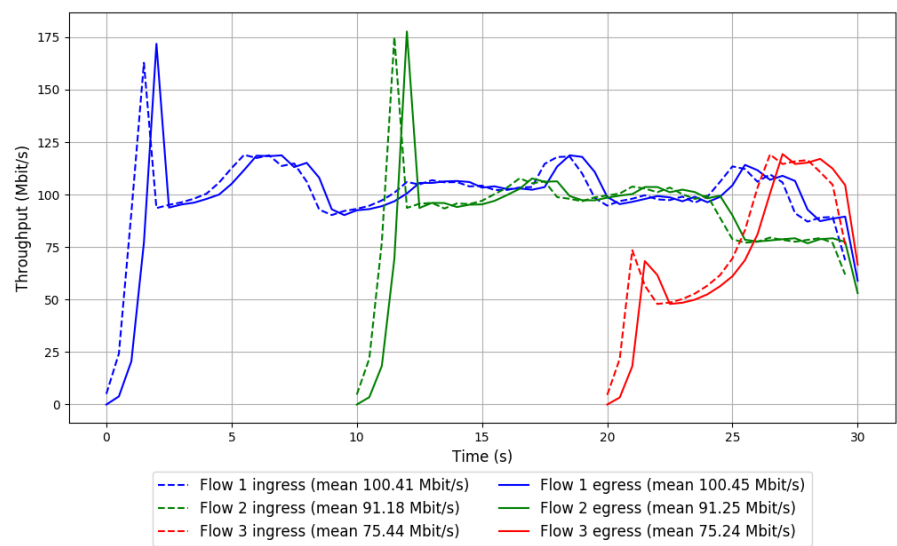
Run 7: Statistics of PCC-Expr

Start at: 2018-05-26 16:58:40  
End at: 2018-05-26 16:59:10  
Local clock offset: 0.218 ms  
Remote clock offset: -0.272 ms

# Below is generated by plot.py at 2018-05-26 20:17:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 185.67 Mbit/s  
95th percentile per-packet one-way delay: 54.081 ms  
Loss rate: 0.49%  
-- Flow 1:  
Average throughput: 100.45 Mbit/s  
95th percentile per-packet one-way delay: 54.043 ms  
Loss rate: 0.31%  
-- Flow 2:  
Average throughput: 91.25 Mbit/s  
95th percentile per-packet one-way delay: 54.111 ms  
Loss rate: 0.45%  
-- Flow 3:  
Average throughput: 75.24 Mbit/s  
95th percentile per-packet one-way delay: 54.117 ms  
Loss rate: 1.33%



Run 7: Report of PCC-Expr — Data Link



Run 8: Statistics of PCC-Expr

Start at: 2018-05-26 17:21:51

End at: 2018-05-26 17:22:21

Local clock offset: -0.085 ms

Remote clock offset: 0.072 ms

# Below is generated by plot.py at 2018-05-26 20:17:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 299.31 Mbit/s

95th percentile per-packet one-way delay: 60.991 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 99.68 Mbit/s

95th percentile per-packet one-way delay: 53.638 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 226.41 Mbit/s

95th percentile per-packet one-way delay: 81.289 ms

Loss rate: 0.57%

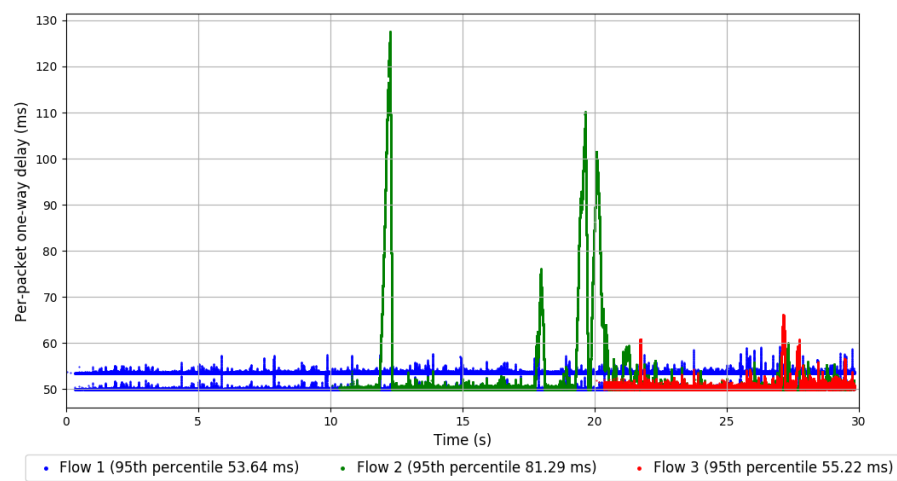
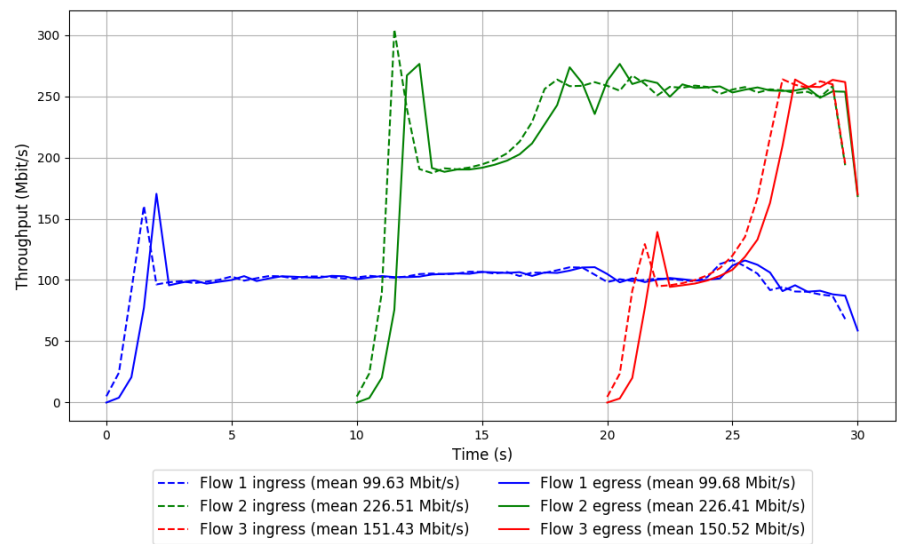
-- Flow 3:

Average throughput: 150.52 Mbit/s

95th percentile per-packet one-way delay: 55.220 ms

Loss rate: 1.66%

Run 8: Report of PCC-Expr — Data Link



Run 9: Statistics of PCC-Expr

Start at: 2018-05-26 17:45:19

End at: 2018-05-26 17:45:49

Local clock offset: 0.014 ms

Remote clock offset: 0.365 ms

# Below is generated by plot.py at 2018-05-26 20:24:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 437.08 Mbit/s

95th percentile per-packet one-way delay: 204.204 ms

Loss rate: 6.85%

-- Flow 1:

Average throughput: 327.88 Mbit/s

95th percentile per-packet one-way delay: 230.336 ms

Loss rate: 8.45%

-- Flow 2:

Average throughput: 114.26 Mbit/s

95th percentile per-packet one-way delay: 168.415 ms

Loss rate: 1.90%

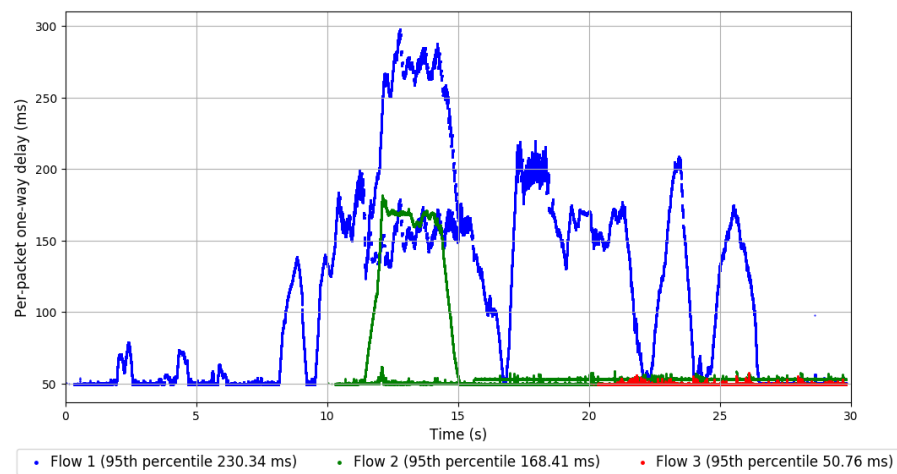
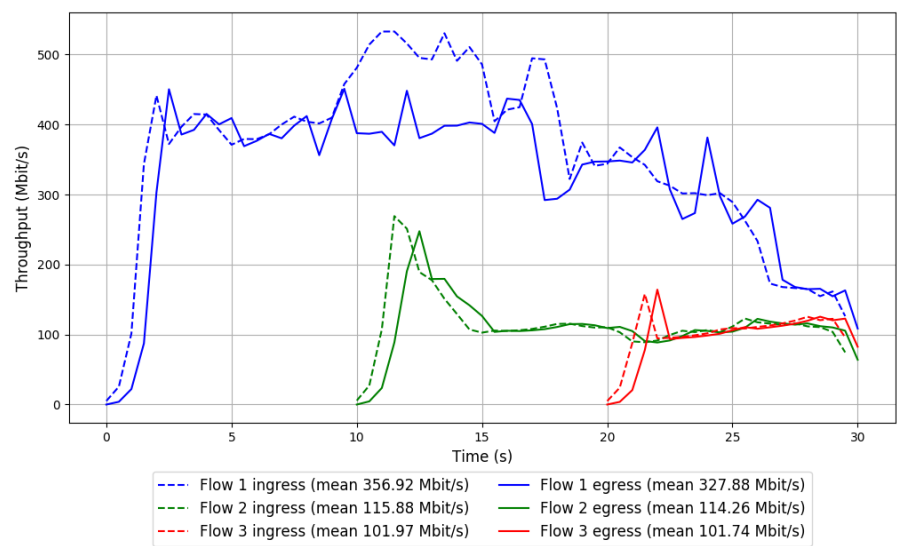
-- Flow 3:

Average throughput: 101.74 Mbit/s

95th percentile per-packet one-way delay: 50.760 ms

Loss rate: 1.26%

Run 9: Report of PCC-Expr — Data Link



Run 10: Statistics of PCC-Expr

Start at: 2018-05-26 18:08:50

End at: 2018-05-26 18:09:20

Local clock offset: 0.012 ms

Remote clock offset: 0.007 ms

# Below is generated by plot.py at 2018-05-26 20:25:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 464.25 Mbit/s

95th percentile per-packet one-way delay: 142.152 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 295.63 Mbit/s

95th percentile per-packet one-way delay: 135.746 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 209.82 Mbit/s

95th percentile per-packet one-way delay: 191.460 ms

Loss rate: 0.92%

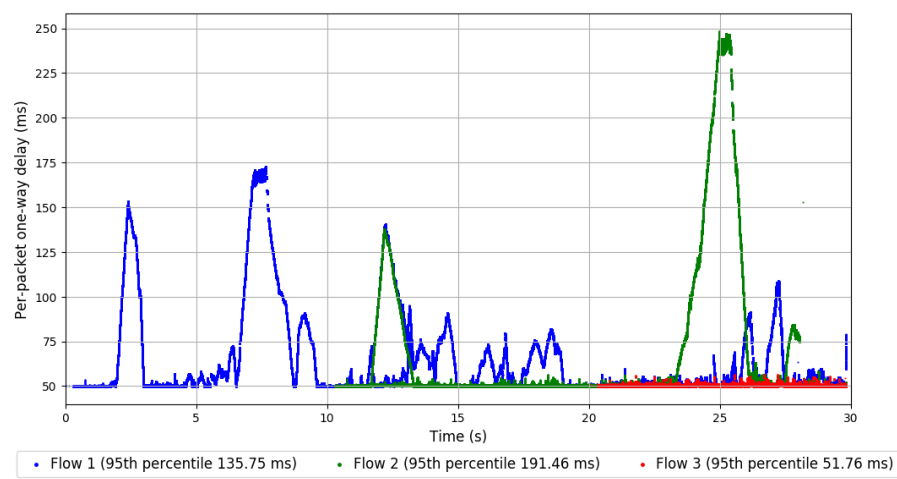
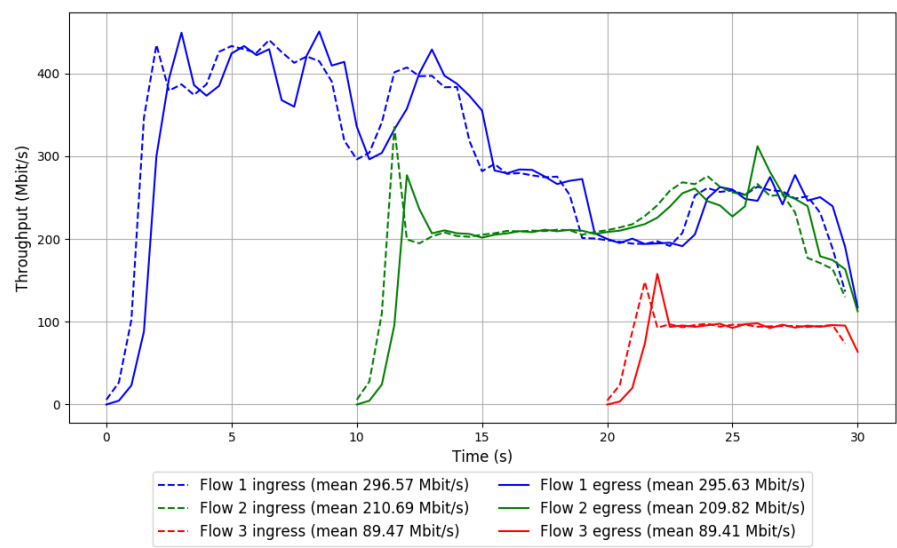
-- Flow 3:

Average throughput: 89.41 Mbit/s

95th percentile per-packet one-way delay: 51.757 ms

Loss rate: 1.10%

Run 10: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-05-26 14:31:48

End at: 2018-05-26 14:32:18

Local clock offset: 0.055 ms

Remote clock offset: 0.126 ms

# Below is generated by plot.py at 2018-05-26 20:25:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 86.39 Mbit/s

95th percentile per-packet one-way delay: 53.759 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 54.59 Mbit/s

95th percentile per-packet one-way delay: 53.554 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 38.52 Mbit/s

95th percentile per-packet one-way delay: 53.817 ms

Loss rate: 1.09%

-- Flow 3:

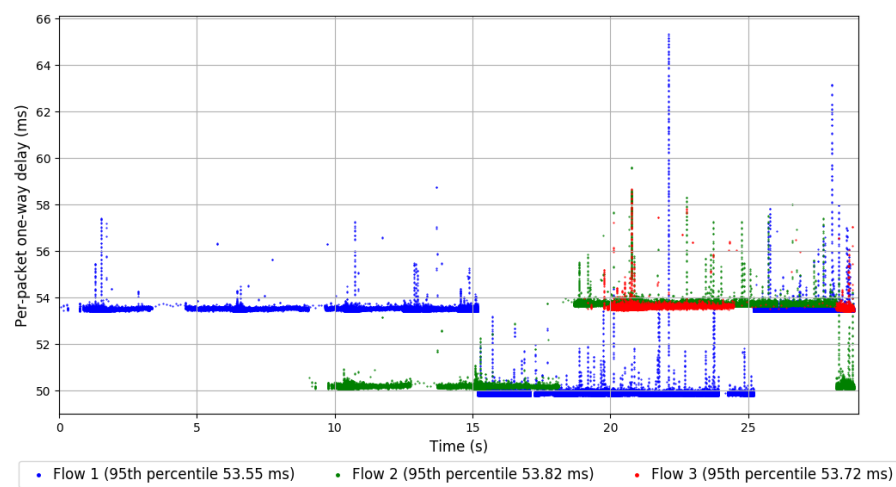
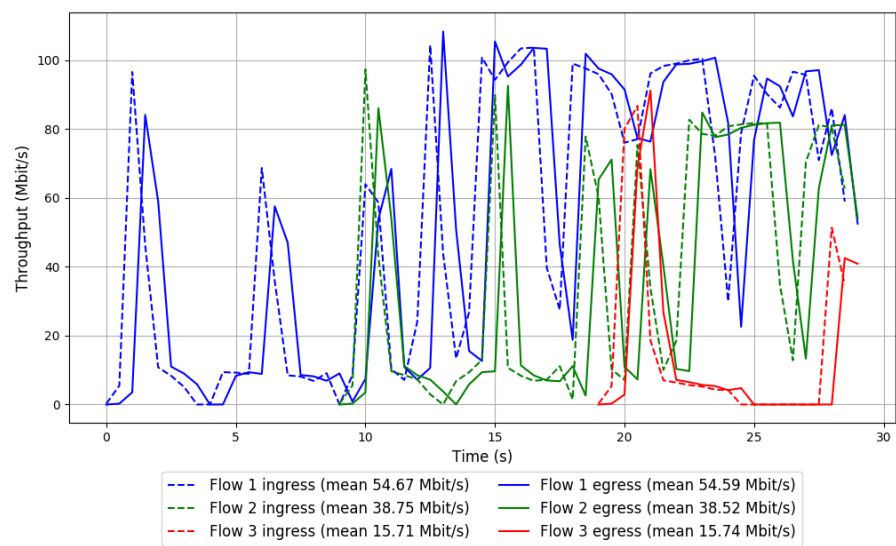
Average throughput: 15.74 Mbit/s

95th percentile per-packet one-way delay: 53.724 ms

Loss rate: 0.90%



Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-05-26 14:54:48

End at: 2018-05-26 14:55:18

Local clock offset: -0.283 ms

Remote clock offset: 0.256 ms

# Below is generated by plot.py at 2018-05-26 20:25:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 84.52 Mbit/s

95th percentile per-packet one-way delay: 53.190 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 60.38 Mbit/s

95th percentile per-packet one-way delay: 49.616 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 27.96 Mbit/s

95th percentile per-packet one-way delay: 49.713 ms

Loss rate: 1.26%

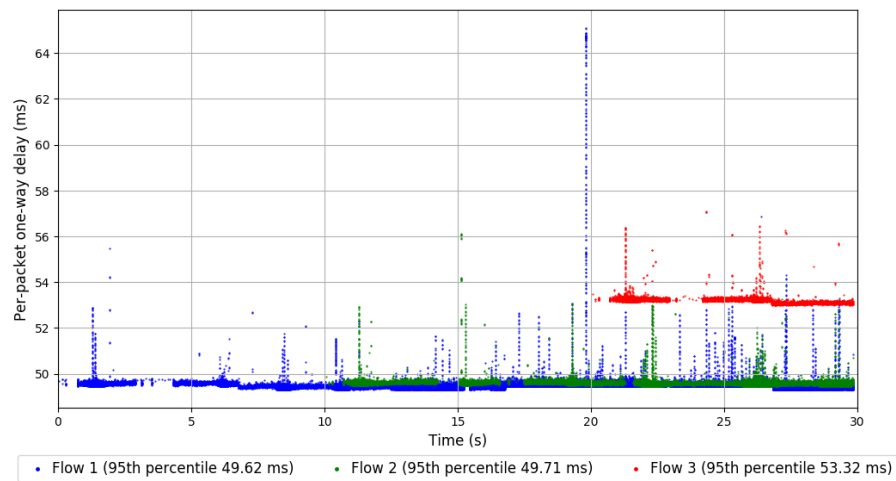
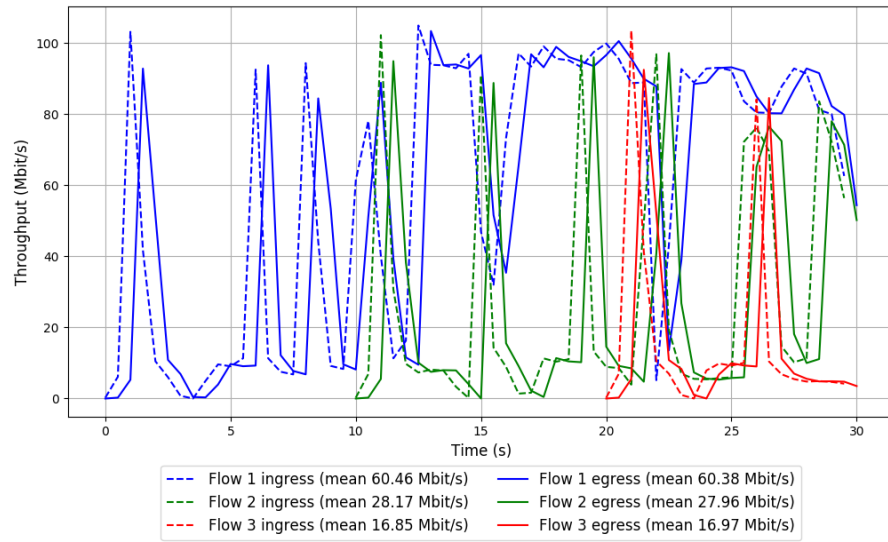
-- Flow 3:

Average throughput: 16.97 Mbit/s

95th percentile per-packet one-way delay: 53.324 ms

Loss rate: 0.35%

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



Run 3: Statistics of QUIC Cubic

Start at: 2018-05-26 15:17:59

End at: 2018-05-26 15:18:29

Local clock offset: 0.089 ms

Remote clock offset: 0.265 ms

# Below is generated by plot.py at 2018-05-26 20:25:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 91.14 Mbit/s

95th percentile per-packet one-way delay: 53.447 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 61.55 Mbit/s

95th percentile per-packet one-way delay: 53.440 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 33.97 Mbit/s

95th percentile per-packet one-way delay: 53.468 ms

Loss rate: 1.36%

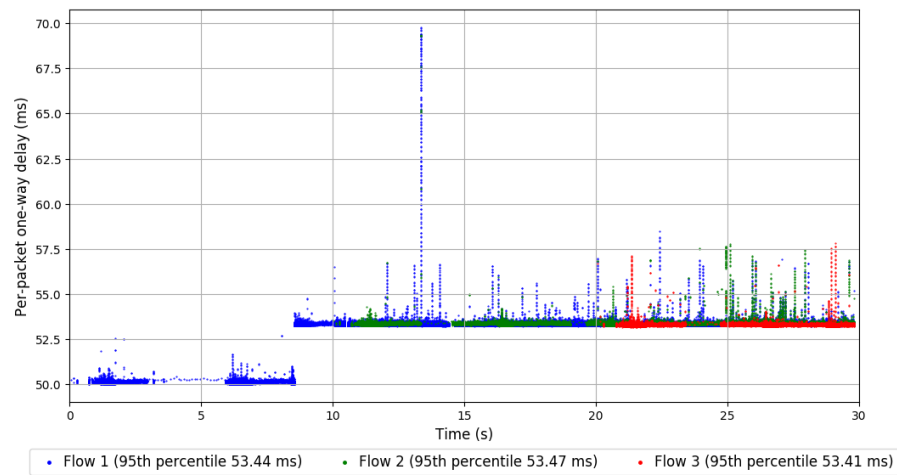
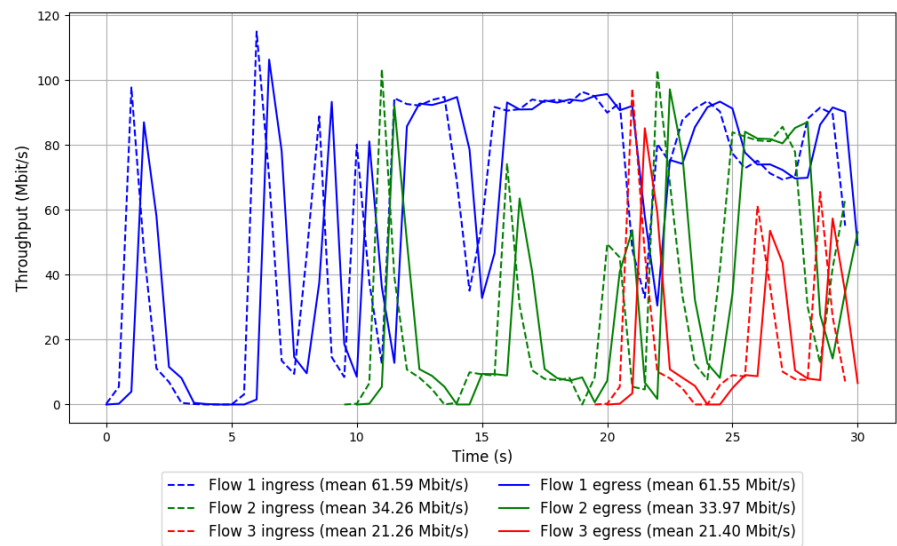
-- Flow 3:

Average throughput: 21.40 Mbit/s

95th percentile per-packet one-way delay: 53.407 ms

Loss rate: 0.43%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-05-26 15:41:40

End at: 2018-05-26 15:42:10

Local clock offset: -0.14 ms

Remote clock offset: 0.103 ms

# Below is generated by plot.py at 2018-05-26 20:25:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 88.78 Mbit/s

95th percentile per-packet one-way delay: 53.548 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 60.54 Mbit/s

95th percentile per-packet one-way delay: 50.063 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 31.55 Mbit/s

95th percentile per-packet one-way delay: 53.612 ms

Loss rate: 0.41%

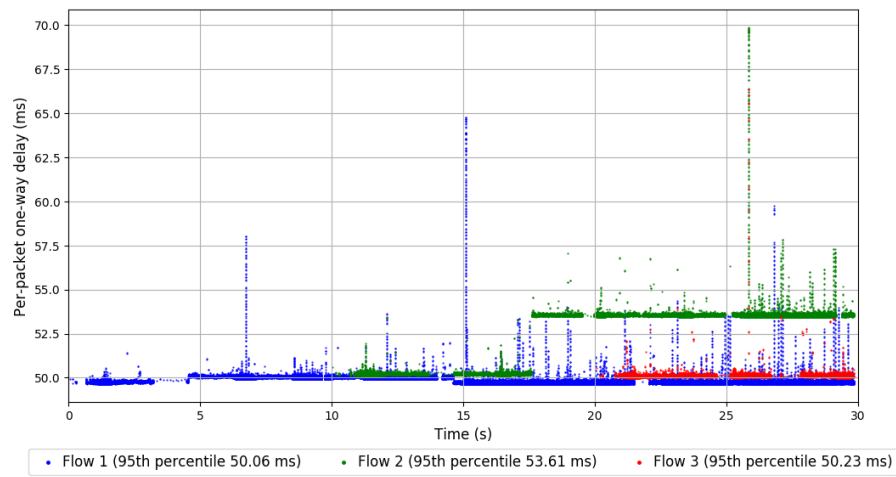
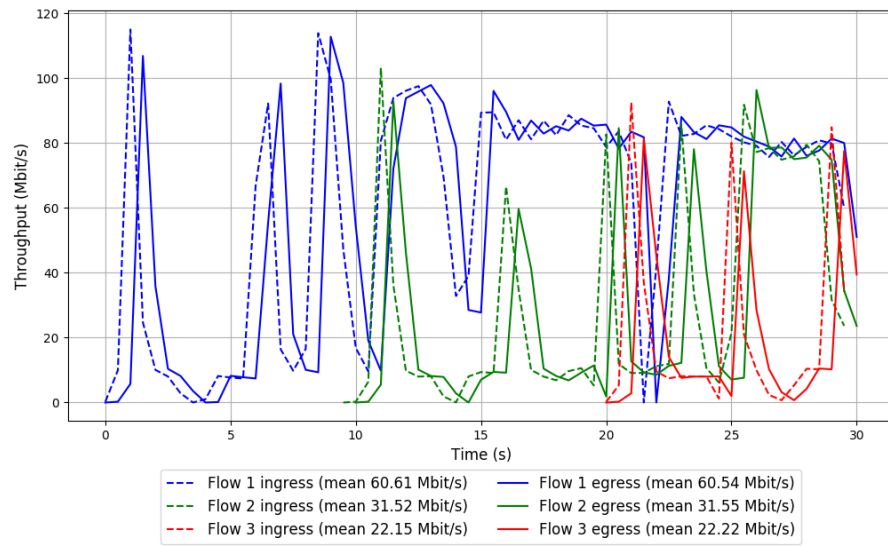
-- Flow 3:

Average throughput: 22.22 Mbit/s

95th percentile per-packet one-way delay: 50.227 ms

Loss rate: 0.70%

#### Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-05-26 16:05:05

End at: 2018-05-26 16:05:35

Local clock offset: -0.269 ms

Remote clock offset: 0.028 ms

# Below is generated by plot.py at 2018-05-26 20:25:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 82.84 Mbit/s

95th percentile per-packet one-way delay: 53.438 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 55.70 Mbit/s

95th percentile per-packet one-way delay: 53.403 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 30.38 Mbit/s

95th percentile per-packet one-way delay: 53.455 ms

Loss rate: 0.67%

-- Flow 3:

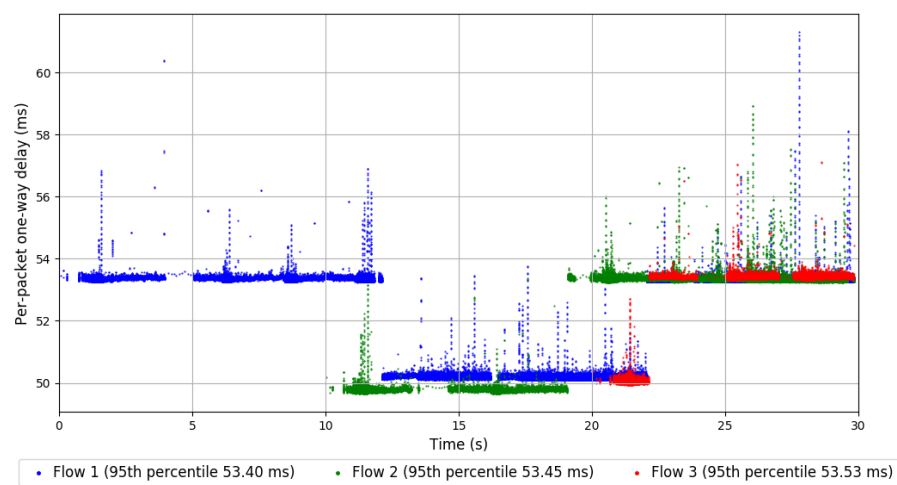
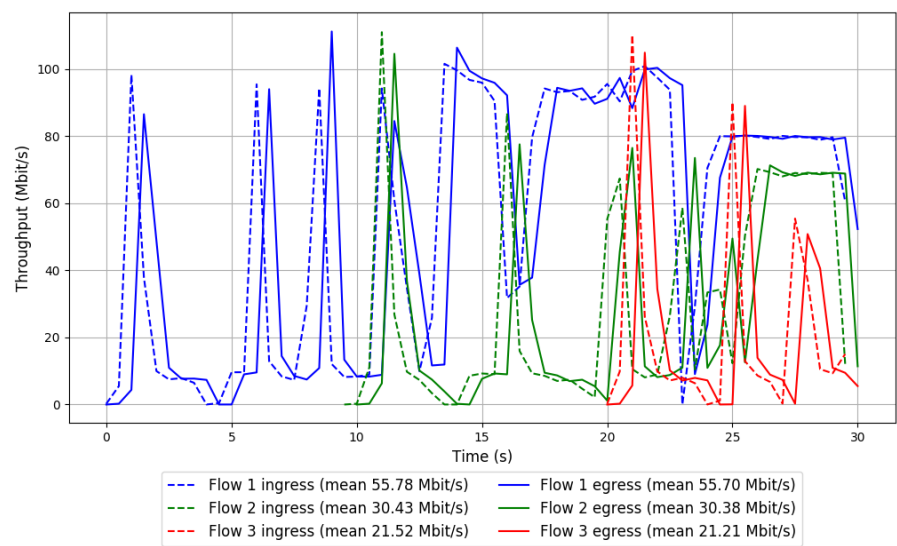
Average throughput: 21.21 Mbit/s

95th percentile per-packet one-way delay: 53.527 ms

Loss rate: 2.45%



Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-05-26 16:27:59

End at: 2018-05-26 16:28:29

Local clock offset: 0.021 ms

Remote clock offset: -0.16 ms

# Below is generated by plot.py at 2018-05-26 20:25:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 91.33 Mbit/s

95th percentile per-packet one-way delay: 53.906 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 60.73 Mbit/s

95th percentile per-packet one-way delay: 53.216 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 35.58 Mbit/s

95th percentile per-packet one-way delay: 53.966 ms

Loss rate: 1.06%

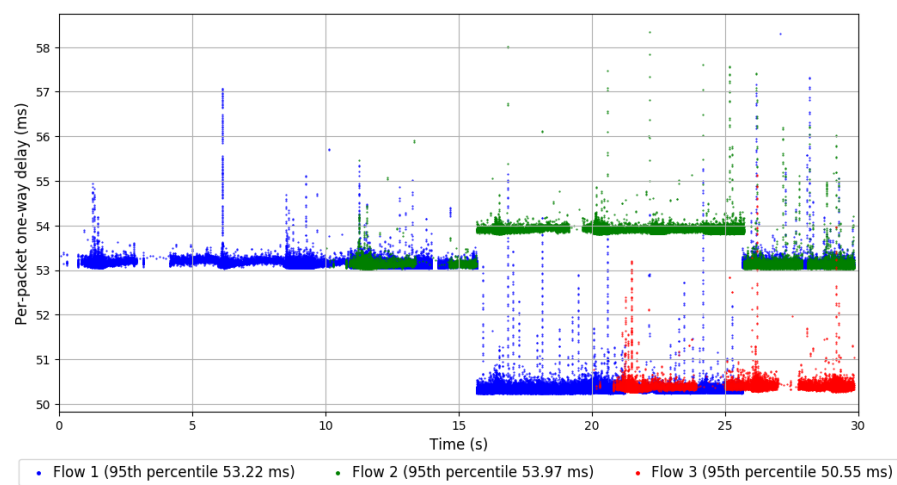
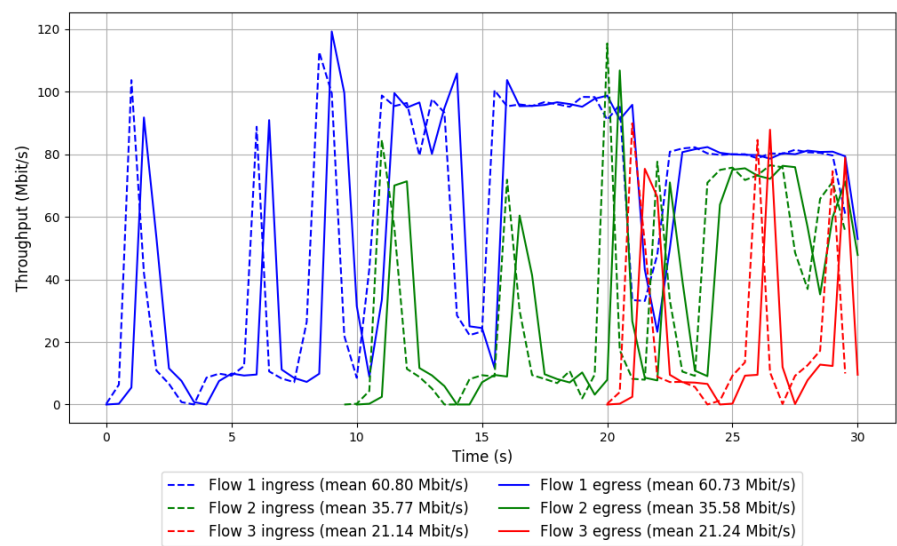
-- Flow 3:

Average throughput: 21.24 Mbit/s

95th percentile per-packet one-way delay: 50.546 ms

Loss rate: 0.53%

Run 6: Report of QUIC Cubic — Data Link

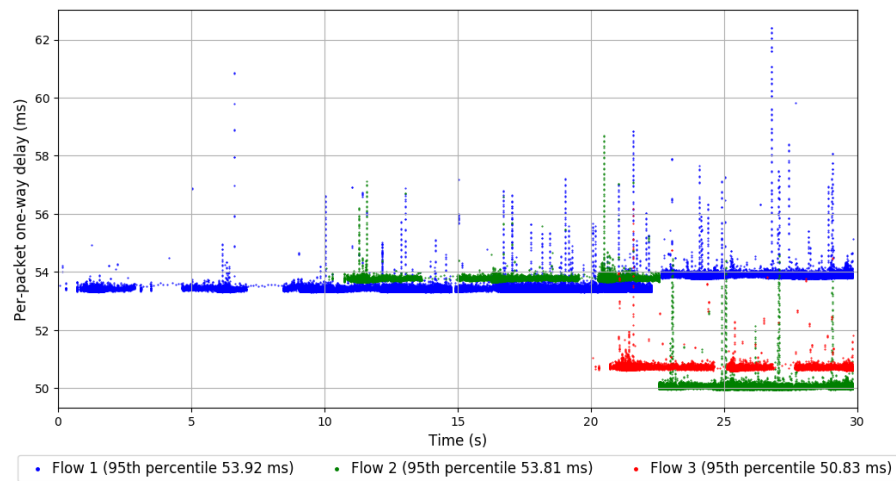
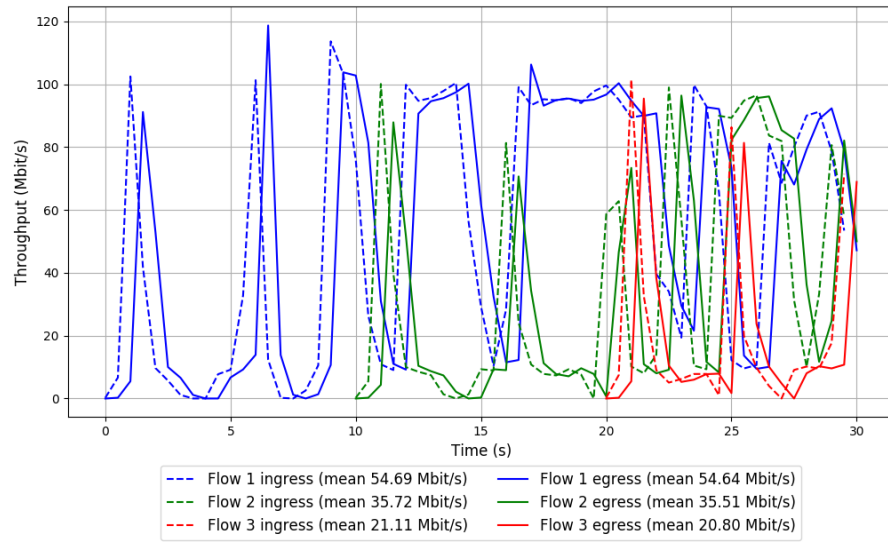


Run 7: Statistics of QUIC Cubic

Start at: 2018-05-26 16:50:52  
End at: 2018-05-26 16:51:22  
Local clock offset: 0.058 ms  
Remote clock offset: -0.251 ms

# Below is generated by plot.py at 2018-05-26 20:25:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 85.04 Mbit/s  
95th percentile per-packet one-way delay: 53.901 ms  
Loss rate: 0.80%  
-- Flow 1:  
Average throughput: 54.64 Mbit/s  
95th percentile per-packet one-way delay: 53.922 ms  
Loss rate: 0.45%  
-- Flow 2:  
Average throughput: 35.51 Mbit/s  
95th percentile per-packet one-way delay: 53.815 ms  
Loss rate: 1.12%  
-- Flow 3:  
Average throughput: 20.80 Mbit/s  
95th percentile per-packet one-way delay: 50.826 ms  
Loss rate: 2.48%

## Run 7: Report of QUIC Cubic — Data Link

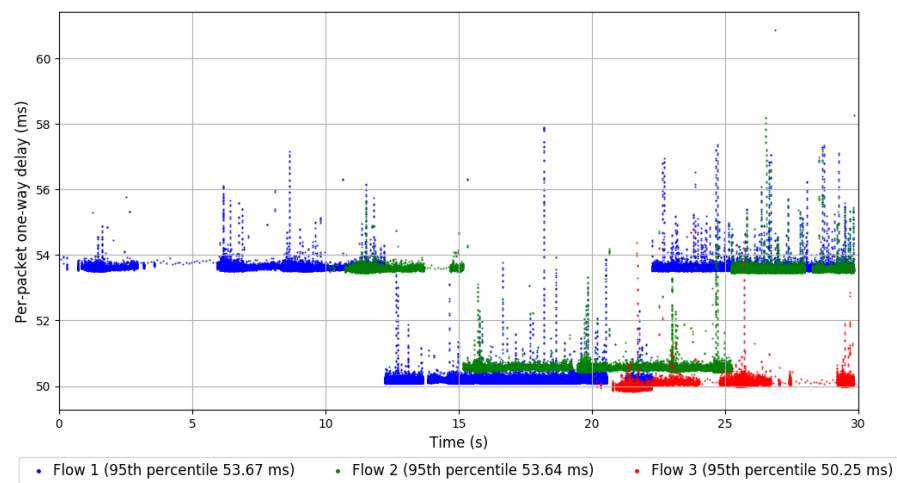
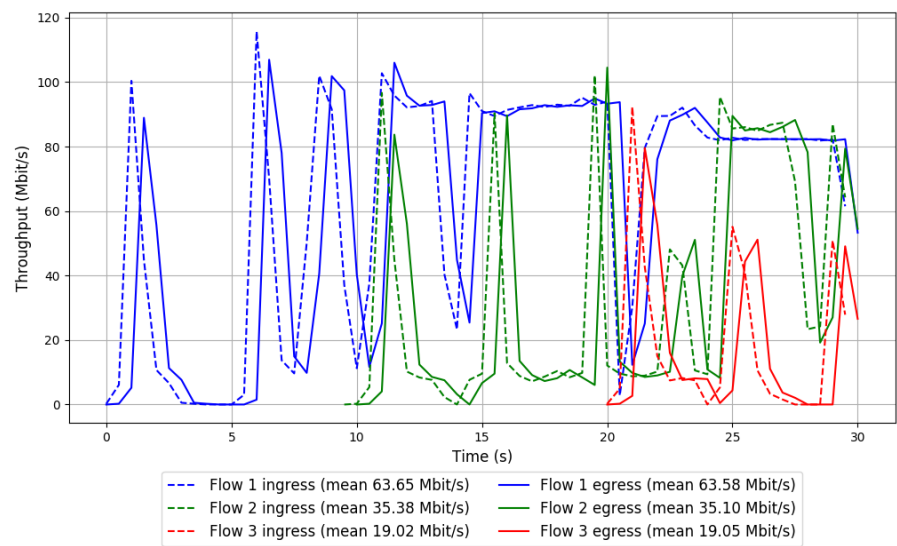


Run 8: Statistics of QUIC Cubic

Start at: 2018-05-26 17:13:42  
End at: 2018-05-26 17:14:12  
Local clock offset: 0.045 ms  
Remote clock offset: -0.076 ms

# Below is generated by plot.py at 2018-05-26 20:25:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 93.11 Mbit/s  
95th percentile per-packet one-way delay: 53.658 ms  
Loss rate: 0.70%  
-- Flow 1:  
Average throughput: 63.58 Mbit/s  
95th percentile per-packet one-way delay: 53.666 ms  
Loss rate: 0.45%  
-- Flow 2:  
Average throughput: 35.10 Mbit/s  
95th percentile per-packet one-way delay: 53.642 ms  
Loss rate: 1.33%  
-- Flow 3:  
Average throughput: 19.05 Mbit/s  
95th percentile per-packet one-way delay: 50.253 ms  
Loss rate: 0.82%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-05-26 17:37:17

End at: 2018-05-26 17:37:47

Local clock offset: -0.144 ms

Remote clock offset: 0.292 ms

# Below is generated by plot.py at 2018-05-26 20:25:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 82.13 Mbit/s

95th percentile per-packet one-way delay: 53.230 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 51.79 Mbit/s

95th percentile per-packet one-way delay: 53.183 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 36.38 Mbit/s

95th percentile per-packet one-way delay: 50.121 ms

Loss rate: 1.17%

-- Flow 3:

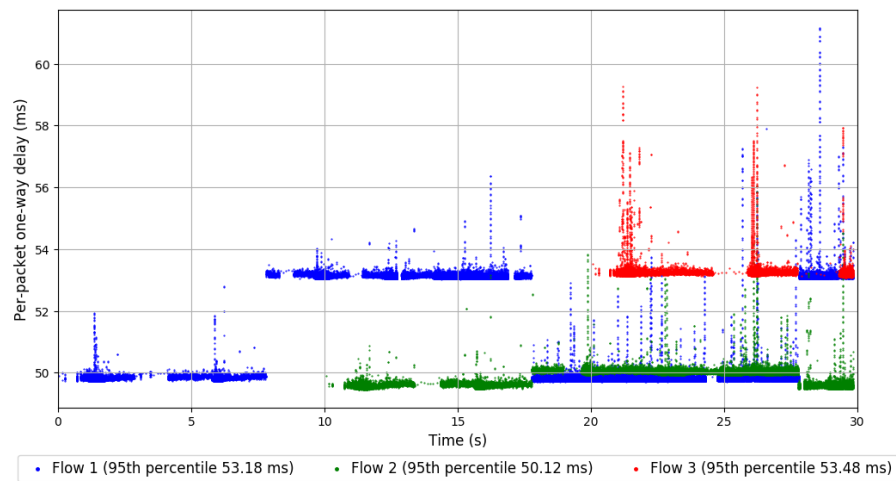
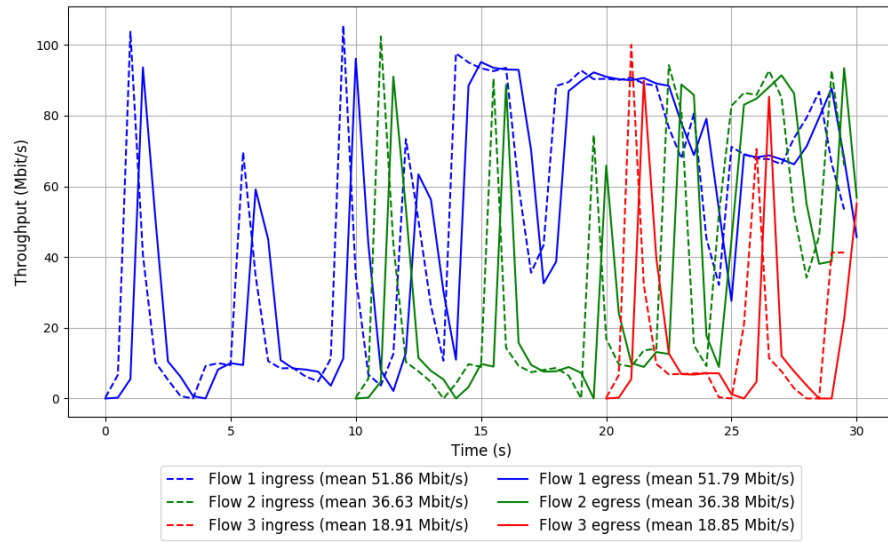
Average throughput: 18.85 Mbit/s

95th percentile per-packet one-way delay: 53.482 ms

Loss rate: 1.33%



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



Run 10: Statistics of QUIC Cubic

Start at: 2018-05-26 18:00:40

End at: 2018-05-26 18:01:10

Local clock offset: 0.059 ms

Remote clock offset: 0.079 ms

# Below is generated by plot.py at 2018-05-26 20:25:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 83.55 Mbit/s

95th percentile per-packet one-way delay: 53.626 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 55.18 Mbit/s

95th percentile per-packet one-way delay: 53.644 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 31.62 Mbit/s

95th percentile per-packet one-way delay: 50.289 ms

Loss rate: 1.98%

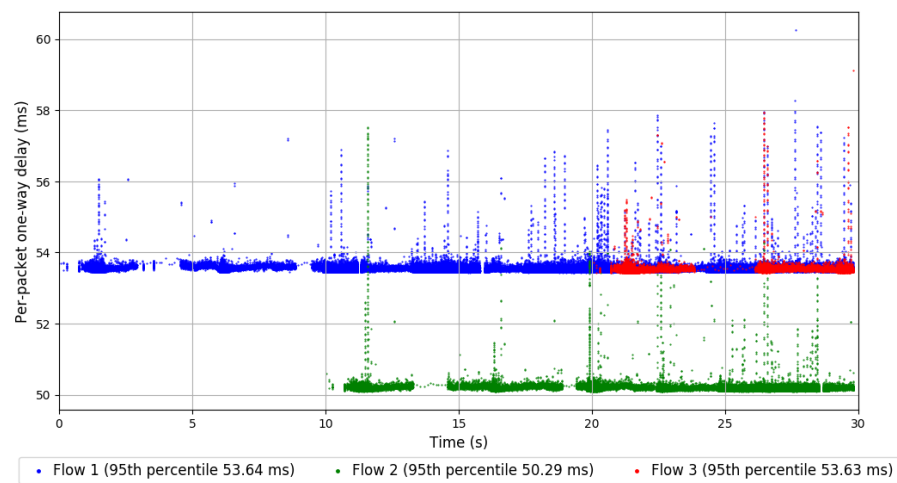
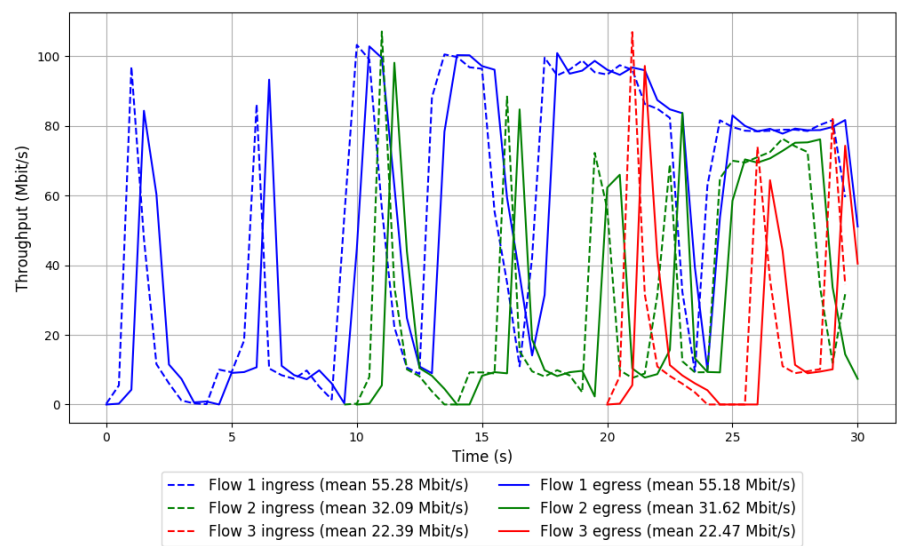
-- Flow 3:

Average throughput: 22.47 Mbit/s

95th percentile per-packet one-way delay: 53.629 ms

Loss rate: 0.64%

Run 10: Report of QUIC Cubic — Data Link

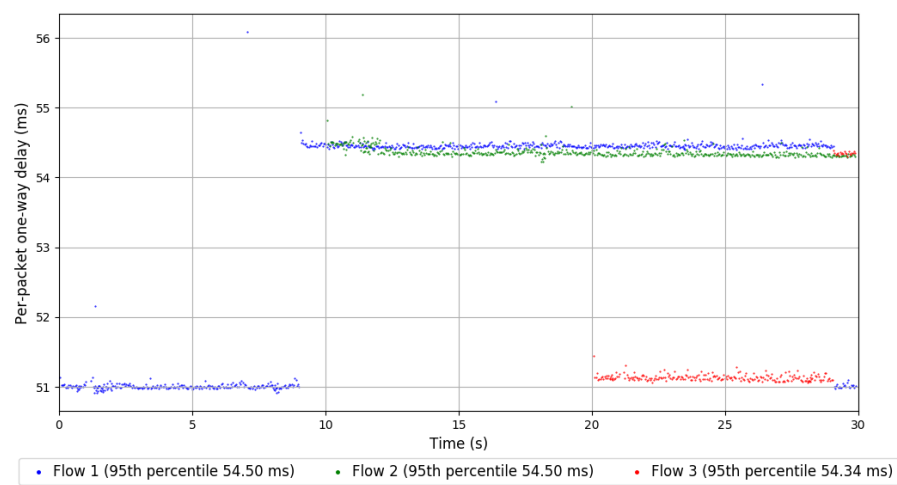
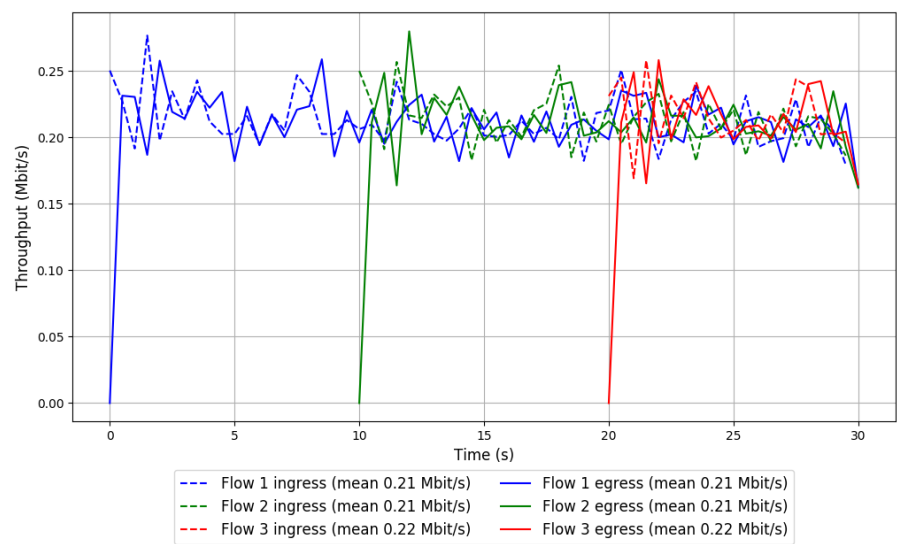


Run 1: Statistics of SCReAM

Start at: 2018-05-26 14:24:05  
End at: 2018-05-26 14:24:35  
Local clock offset: 0.425 ms  
Remote clock offset: -0.203 ms

# Below is generated by plot.py at 2018-05-26 20:25:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 54.499 ms  
Loss rate: 0.51%  
-- Flow 1:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 54.503 ms  
Loss rate: 0.26%  
-- Flow 2:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 54.501 ms  
Loss rate: 0.61%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 54.335 ms  
Loss rate: 1.08%

Run 1: Report of SReAM — Data Link

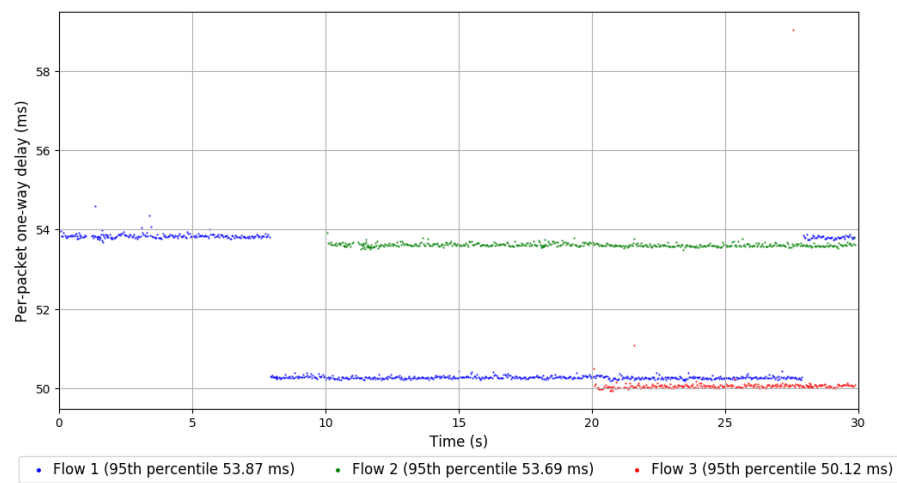
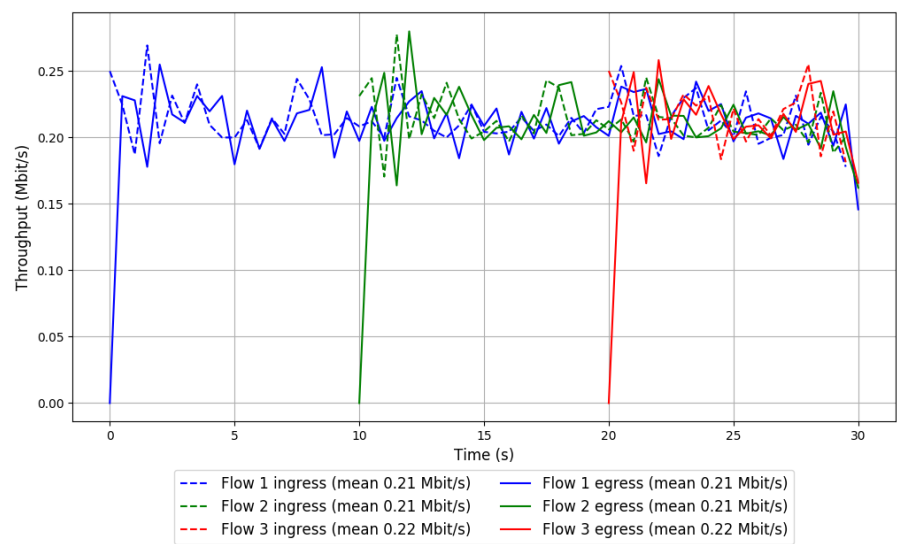


```
Run 2: Statistics of SReAM

Start at: 2018-05-26 14:47:07
End at: 2018-05-26 14:47:37
Local clock offset: 0.073 ms
Remote clock offset: 0.17 ms

# Below is generated by plot.py at 2018-05-26 20:25:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.849 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.873 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.689 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.123 ms
Loss rate: 1.09%
```

Run 2: Report of SReAM — Data Link



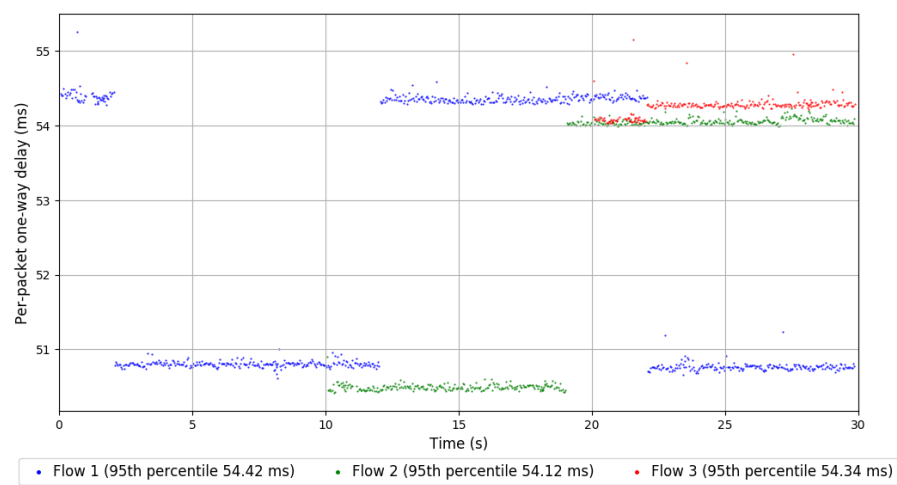
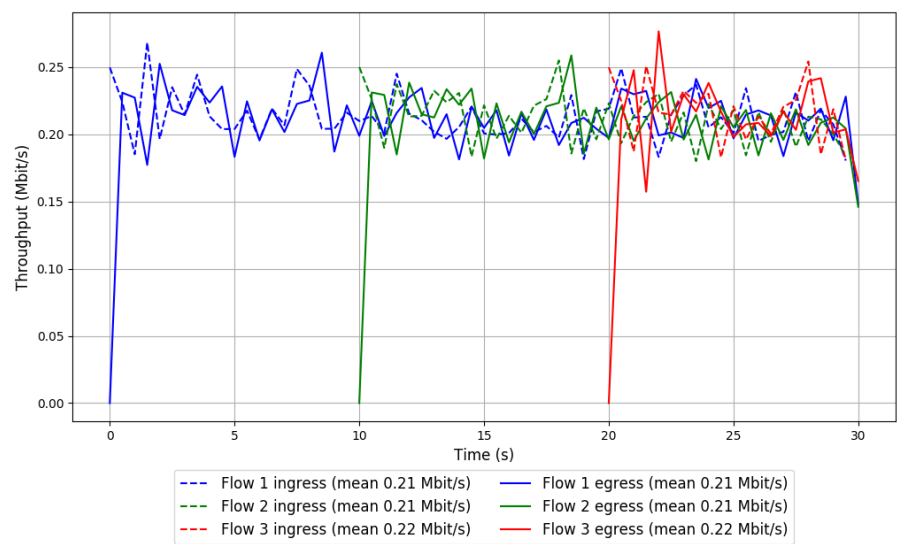
Run 3: Statistics of SReAM

Start at: 2018-05-26 15:10:15  
End at: 2018-05-26 15:10:45  
Local clock offset: 0.178 ms  
Remote clock offset: -0.307 ms

# Below is generated by plot.py at 2018-05-26 20:25:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 54.395 ms  
Loss rate: 0.58%  
-- Flow 1:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 54.421 ms  
Loss rate: 0.38%  
-- Flow 2:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 54.119 ms  
Loss rate: 0.61%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 54.340 ms  
Loss rate: 1.09%



Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2018-05-26 15:33:29

End at: 2018-05-26 15:33:59

Local clock offset: 0.268 ms

Remote clock offset: 0.044 ms

# Below is generated by plot.py at 2018-05-26 20:25:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 53.951 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.961 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 52.873 ms

Loss rate: 0.60%

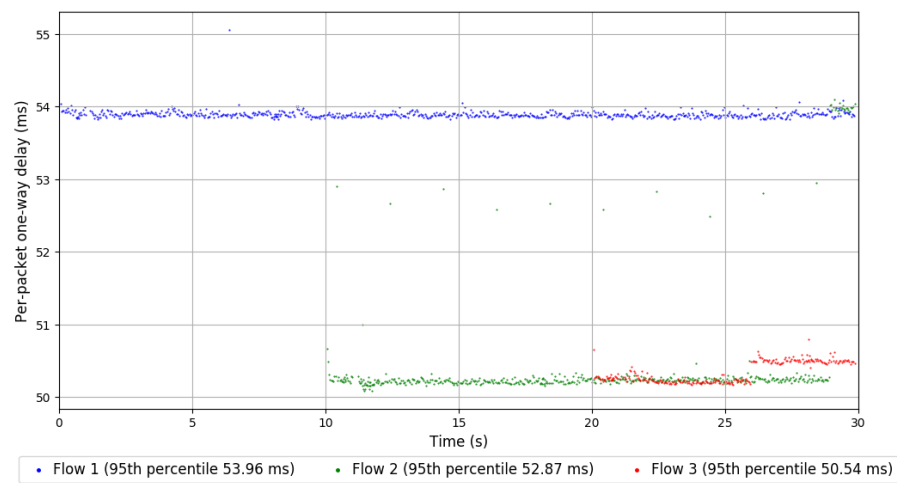
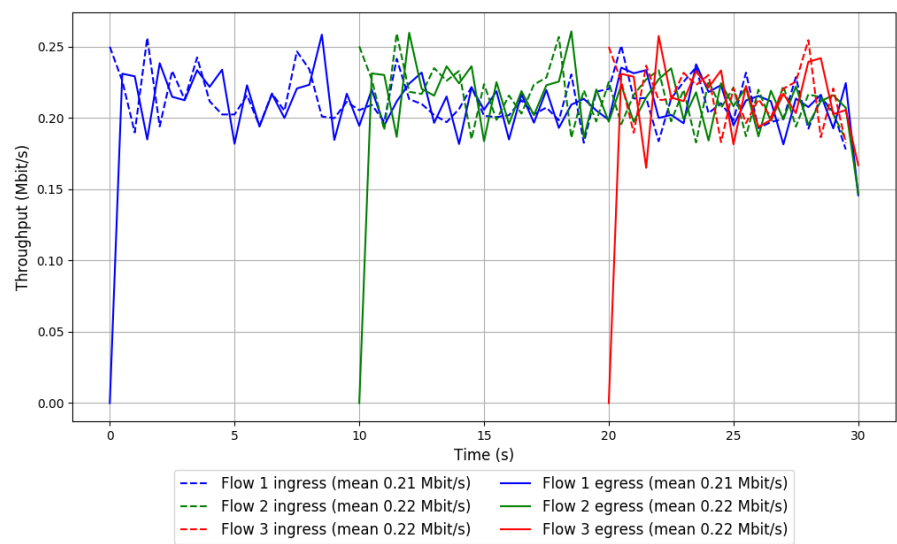
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.544 ms

Loss rate: 1.10%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2018-05-26 15:57:13

End at: 2018-05-26 15:57:43

Local clock offset: -0.499 ms

Remote clock offset: 0.083 ms

# Below is generated by plot.py at 2018-05-26 20:25:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 53.482 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 50.249 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.487 ms

Loss rate: 0.62%

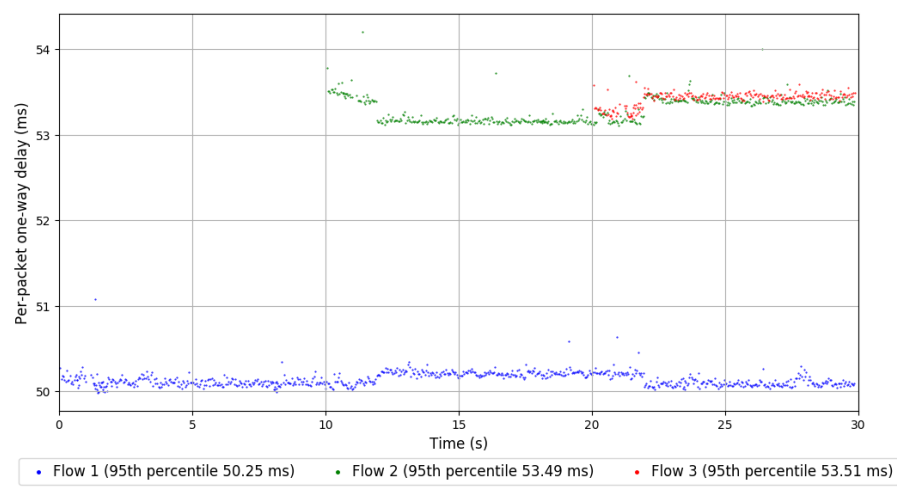
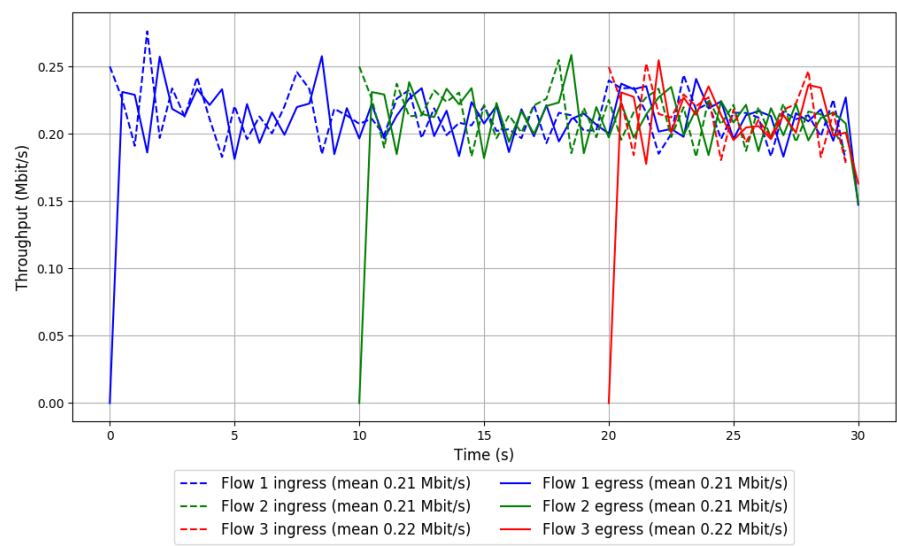
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.508 ms

Loss rate: 1.08%

Run 5: Report of SCReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-05-26 16:20:10

End at: 2018-05-26 16:20:40

Local clock offset: 0.004 ms

Remote clock offset: 0.07 ms

# Below is generated by plot.py at 2018-05-26 20:25:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 53.694 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.656 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.733 ms

Loss rate: 0.61%

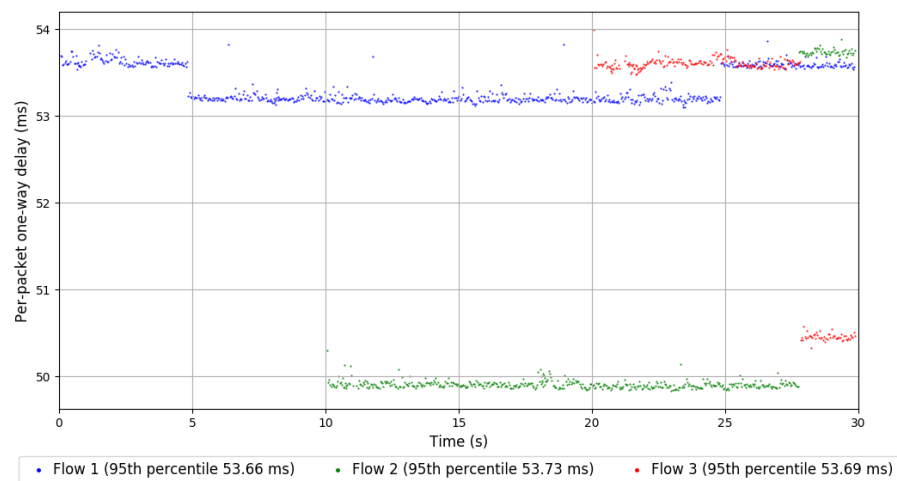
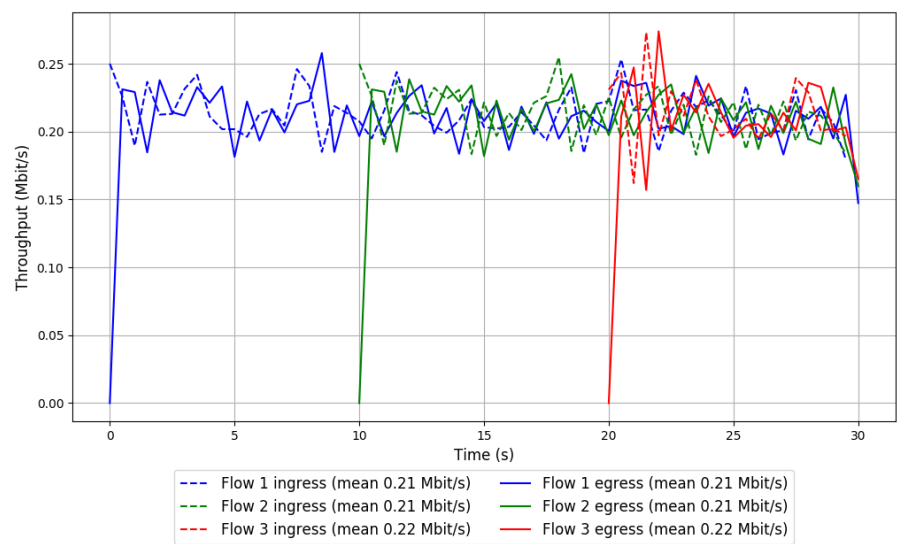
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.685 ms

Loss rate: 1.10%

Run 6: Report of SReAM — Data Link



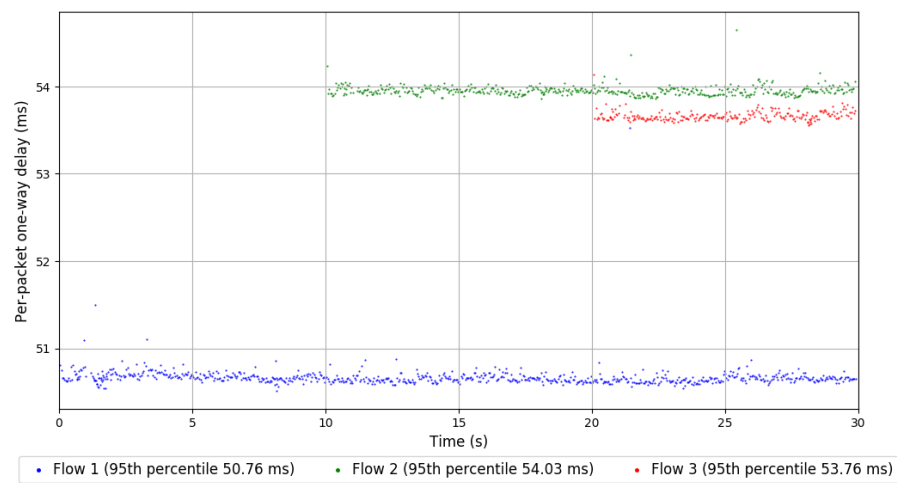
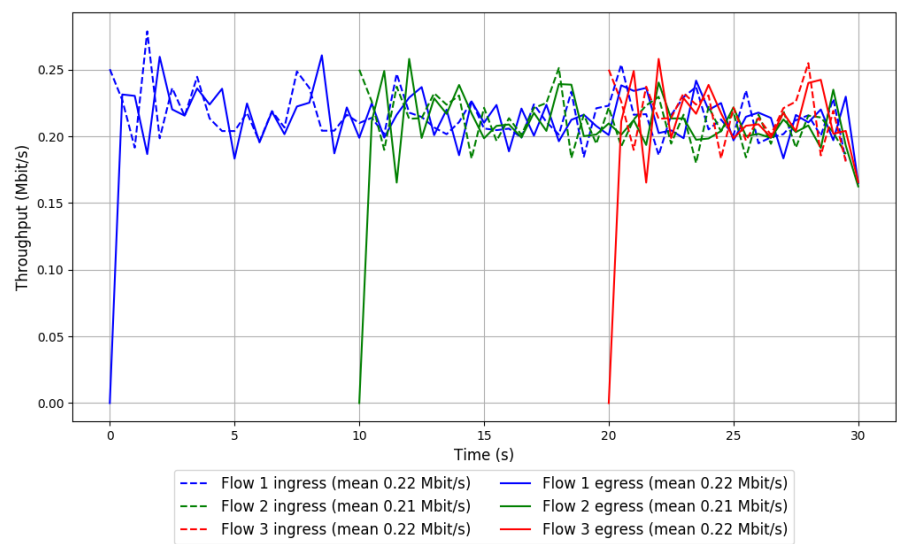
Run 7: Statistics of SReAM

Start at: 2018-05-26 16:43:19  
End at: 2018-05-26 16:43:49  
Local clock offset: 0.022 ms  
Remote clock offset: -0.303 ms

# Below is generated by plot.py at 2018-05-26 20:25:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 53.997 ms  
Loss rate: 0.52%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 50.760 ms  
Loss rate: 0.26%  
-- Flow 2:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 54.035 ms  
Loss rate: 0.62%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 53.757 ms  
Loss rate: 1.09%



Run 7: Report of SReAM — Data Link

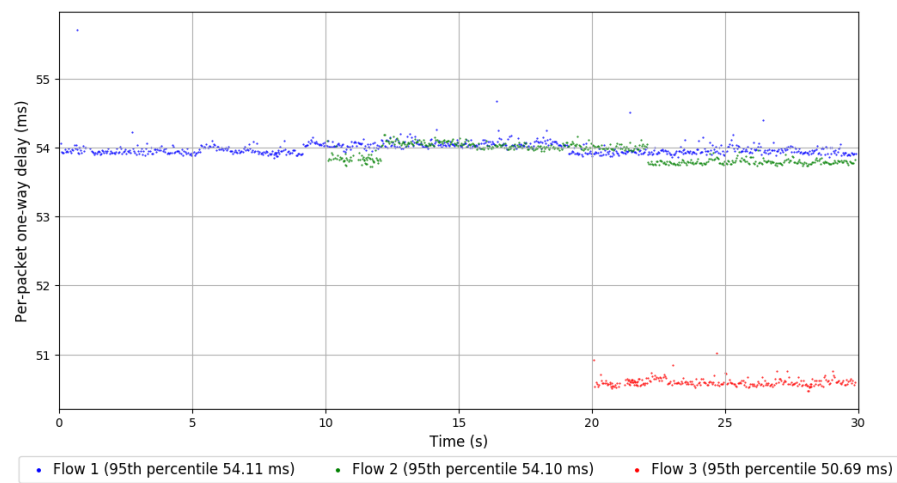
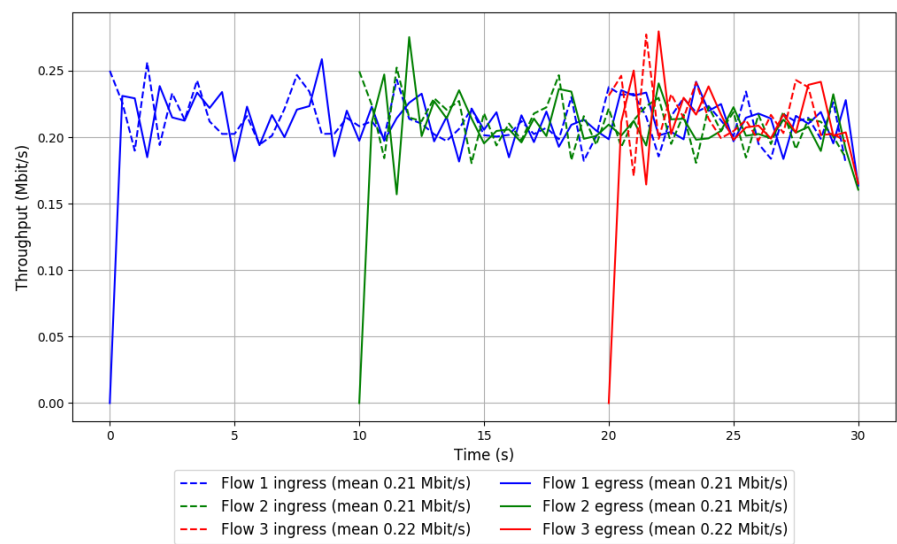


Run 8: Statistics of SCReAM

Start at: 2018-05-26 17:05:55  
End at: 2018-05-26 17:06:25  
Local clock offset: 0.159 ms  
Remote clock offset: -0.209 ms

# Below is generated by plot.py at 2018-05-26 20:25:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 54.098 ms  
Loss rate: 0.52%  
-- Flow 1:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 54.111 ms  
Loss rate: 0.26%  
-- Flow 2:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 54.099 ms  
Loss rate: 0.61%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 50.693 ms  
Loss rate: 1.08%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-05-26 17:29:14

End at: 2018-05-26 17:29:44

Local clock offset: -0.076 ms

Remote clock offset: 0.117 ms

# Below is generated by plot.py at 2018-05-26 20:25:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 53.571 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.592 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.497 ms

Loss rate: 0.62%

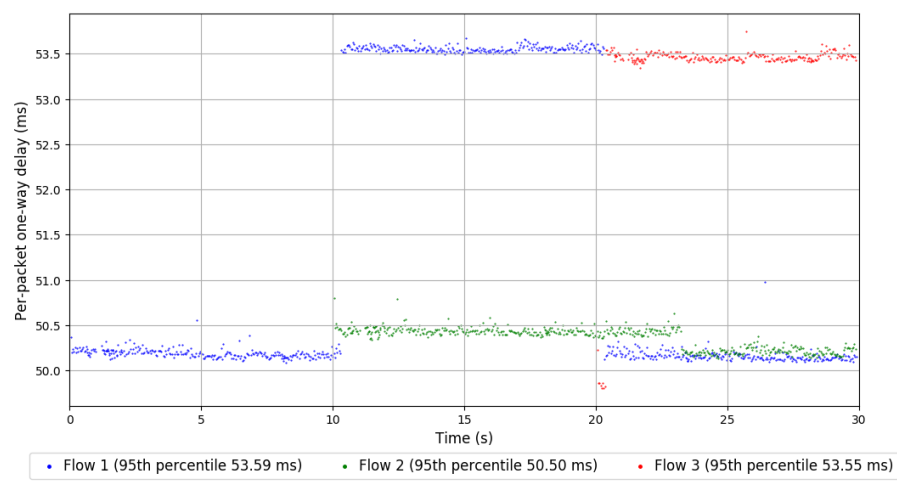
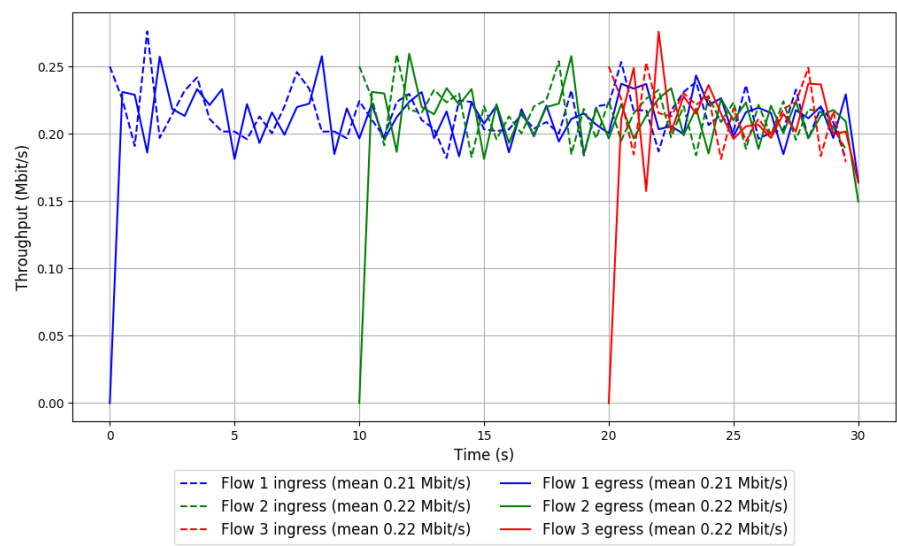
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.545 ms

Loss rate: 1.08%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-05-26 17:52:49

End at: 2018-05-26 17:53:19

Local clock offset: -0.193 ms

Remote clock offset: 0.196 ms

# Below is generated by plot.py at 2018-05-26 20:25:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 53.345 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.116 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.366 ms

Loss rate: 0.40%

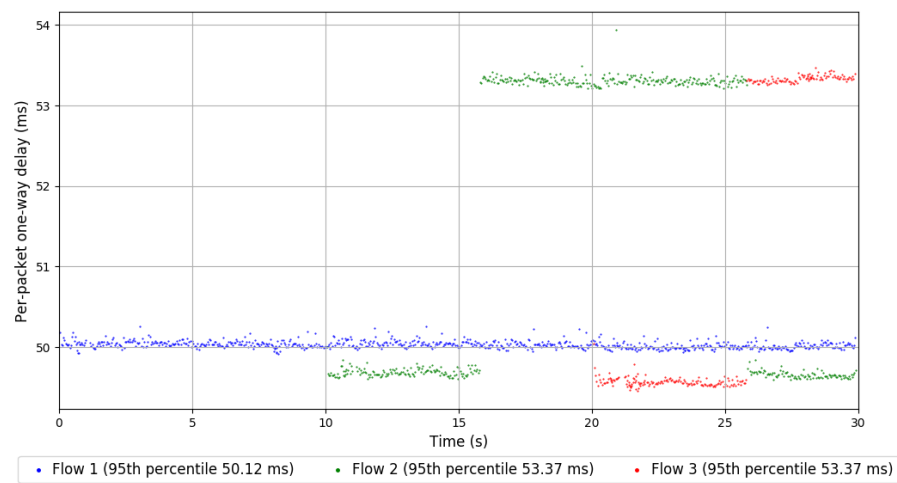
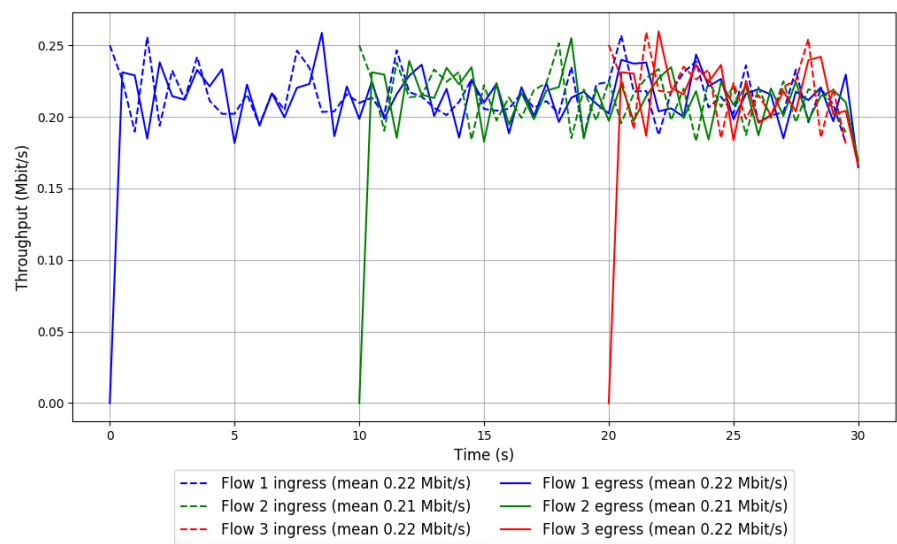
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.373 ms

Loss rate: 1.08%

Run 10: Report of SCReAM — Data Link



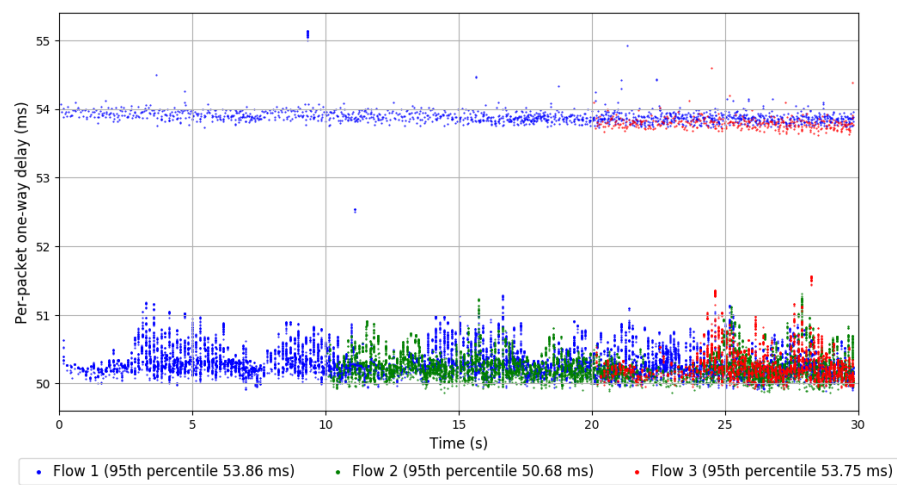
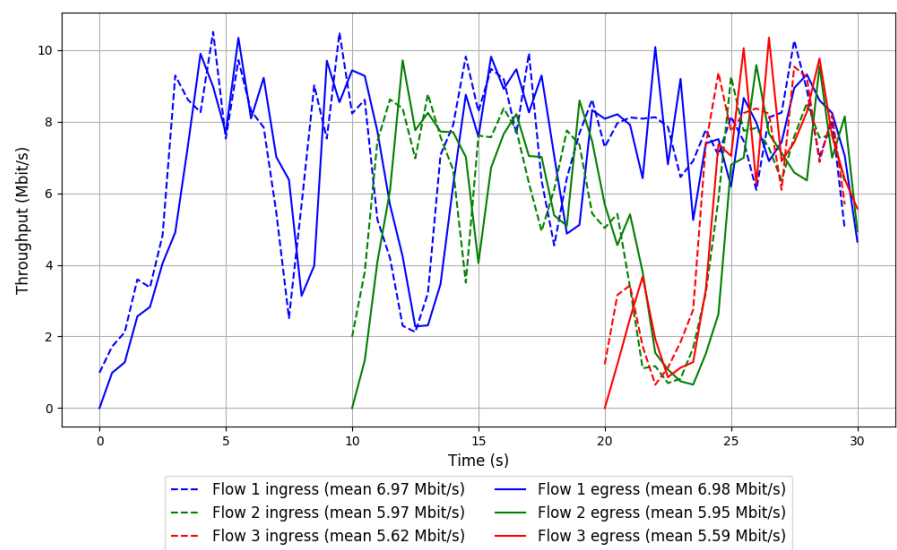
Run 1: Statistics of Sprout

Start at: 2018-05-26 14:18:20  
End at: 2018-05-26 14:18:50  
Local clock offset: -0.292 ms  
Remote clock offset: -0.306 ms

# Below is generated by plot.py at 2018-05-26 20:25:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.76 Mbit/s  
95th percentile per-packet one-way delay: 53.760 ms  
Loss rate: 0.70%  
-- Flow 1:  
Average throughput: 6.98 Mbit/s  
95th percentile per-packet one-way delay: 53.859 ms  
Loss rate: 0.32%  
-- Flow 2:  
Average throughput: 5.95 Mbit/s  
95th percentile per-packet one-way delay: 50.678 ms  
Loss rate: 0.89%  
-- Flow 3:  
Average throughput: 5.59 Mbit/s  
95th percentile per-packet one-way delay: 53.748 ms  
Loss rate: 1.71%



Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-05-26 14:41:22

End at: 2018-05-26 14:41:52

Local clock offset: 0.088 ms

Remote clock offset: 0.233 ms

# Below is generated by plot.py at 2018-05-26 20:25:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 13.19 Mbit/s

95th percentile per-packet one-way delay: 53.525 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 6.44 Mbit/s

95th percentile per-packet one-way delay: 53.506 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 6.76 Mbit/s

95th percentile per-packet one-way delay: 53.540 ms

Loss rate: 0.48%

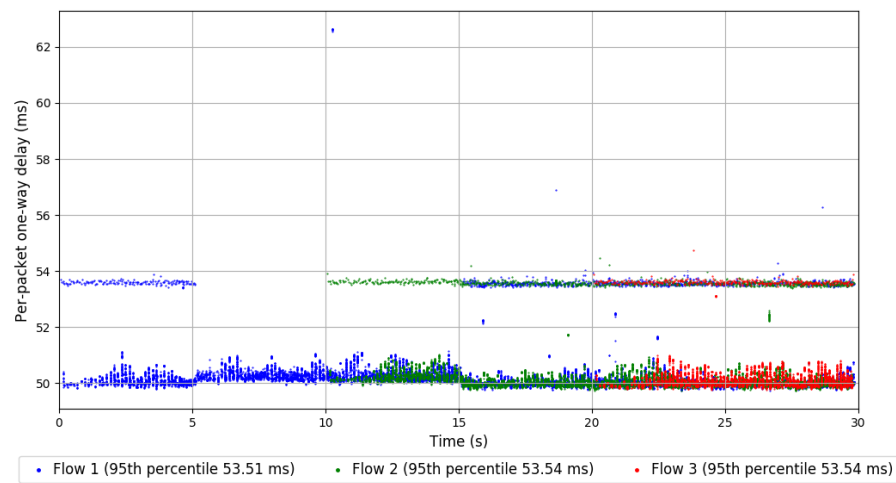
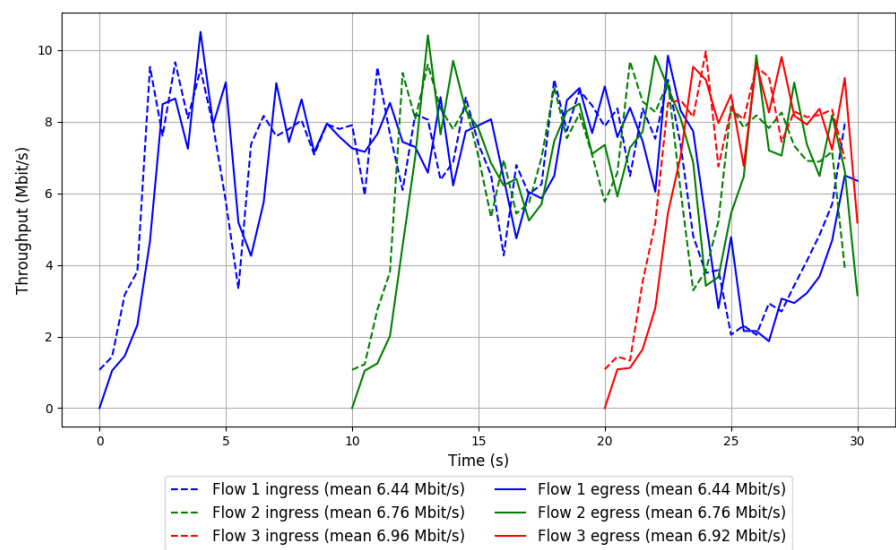
-- Flow 3:

Average throughput: 6.92 Mbit/s

95th percentile per-packet one-way delay: 53.544 ms

Loss rate: 1.45%

Run 2: Report of Sprout — Data Link



### Run 3: Statistics of Sprout

Start at: 2018-05-26 15:04:29

End at: 2018-05-26 15:04:59

Local clock offset: -0.191 ms

Remote clock offset: 0.204 ms

# Below is generated by plot.py at 2018-05-26 20:25:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 14.38 Mbit/s

95th percentile per-packet one-way delay: 50.440 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 7.34 Mbit/s

95th percentile per-packet one-way delay: 50.457 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 7.47 Mbit/s

95th percentile per-packet one-way delay: 50.454 ms

Loss rate: 0.51%

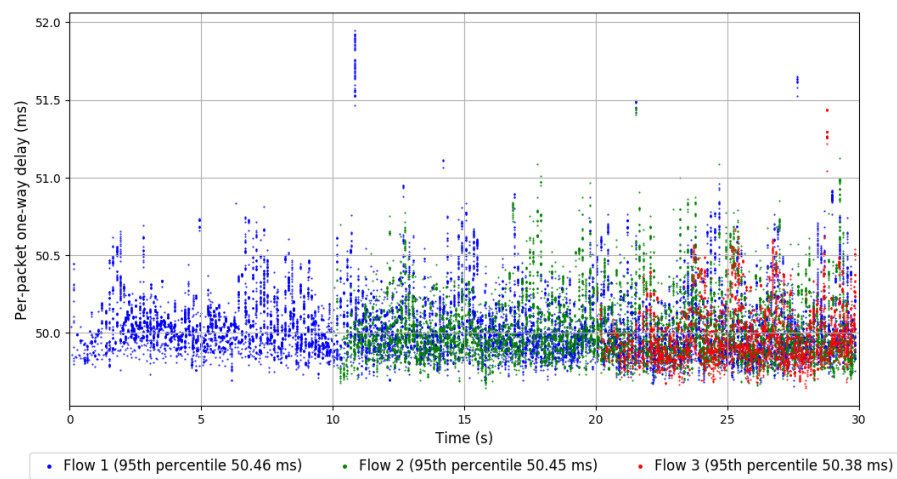
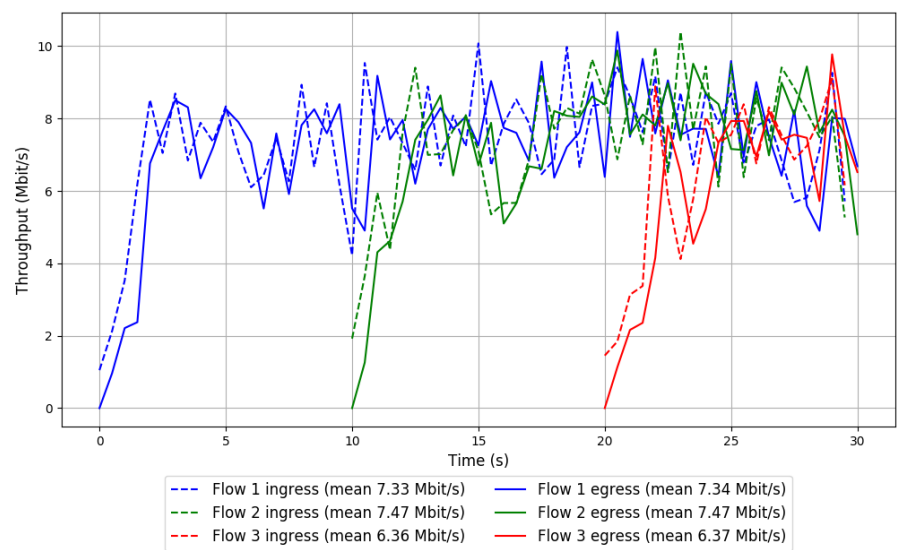
-- Flow 3:

Average throughput: 6.37 Mbit/s

95th percentile per-packet one-way delay: 50.382 ms

Loss rate: 0.97%

Run 3: Report of Sprout — Data Link

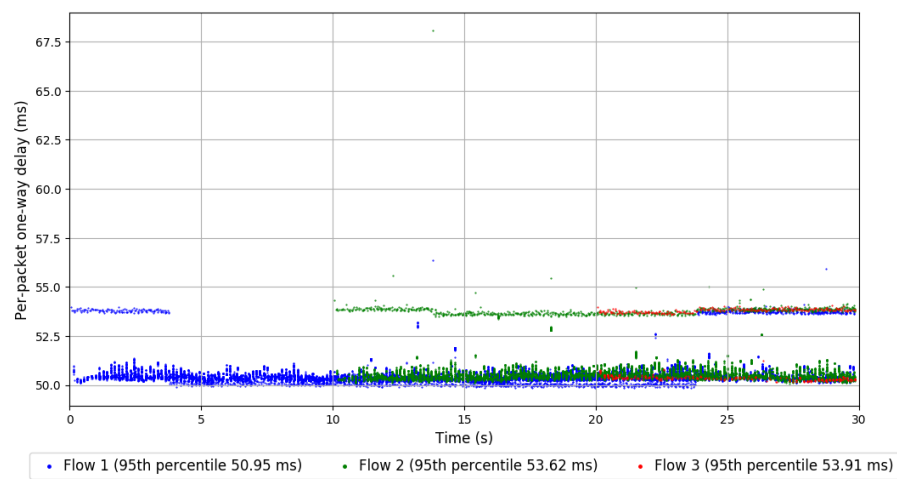
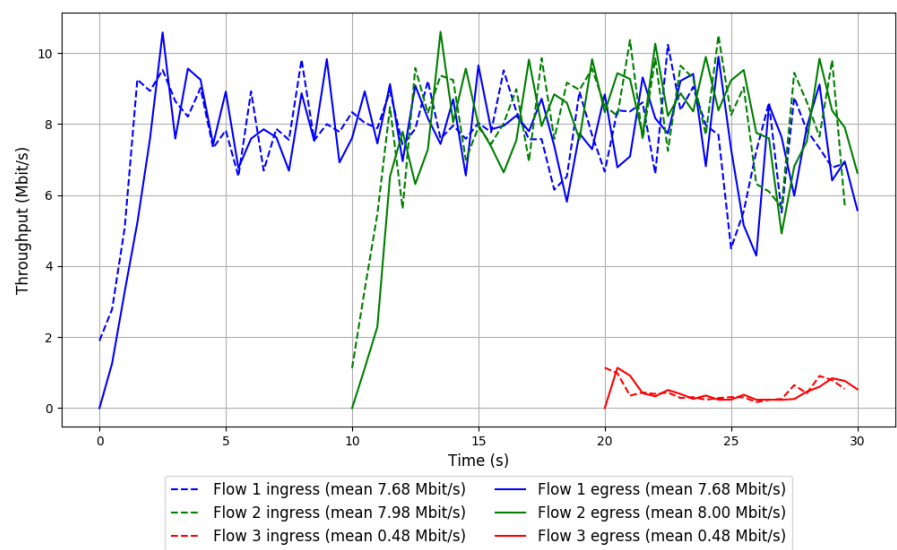


#### Run 4: Statistics of Sprout

Start at: 2018-05-26 15:27:41  
End at: 2018-05-26 15:28:11  
Local clock offset: 0.123 ms  
Remote clock offset: 0.004 ms

```
# Below is generated by plot.py at 2018-05-26 20:25:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.14 Mbit/s
95th percentile per-packet one-way delay: 51.861 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 7.68 Mbit/s
95th percentile per-packet one-way delay: 50.948 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 8.00 Mbit/s
95th percentile per-packet one-way delay: 53.615 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 53.911 ms
Loss rate: 1.04%
```

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-05-26 15:51:24

End at: 2018-05-26 15:51:54

Local clock offset: -0.38 ms

Remote clock offset: -0.17 ms

# Below is generated by plot.py at 2018-05-26 20:25:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 14.20 Mbit/s

95th percentile per-packet one-way delay: 50.676 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 7.52 Mbit/s

95th percentile per-packet one-way delay: 50.564 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 6.33 Mbit/s

95th percentile per-packet one-way delay: 50.708 ms

Loss rate: 0.76%

-- Flow 3:

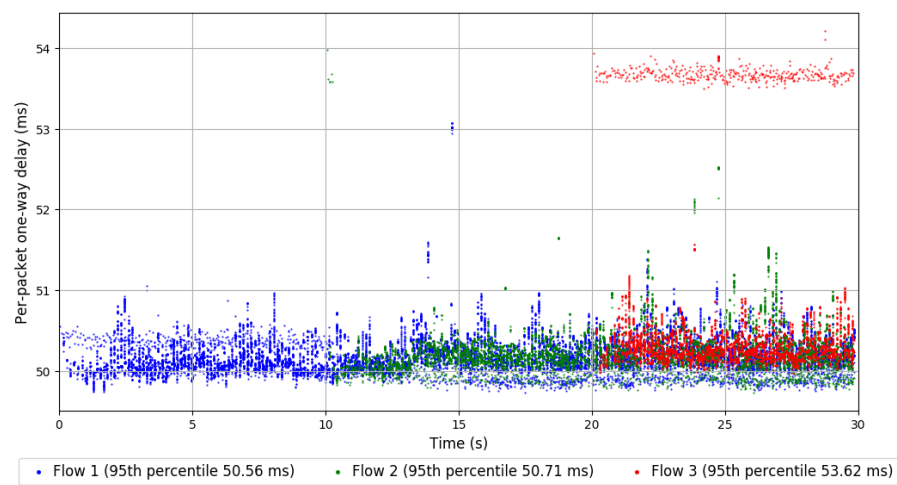
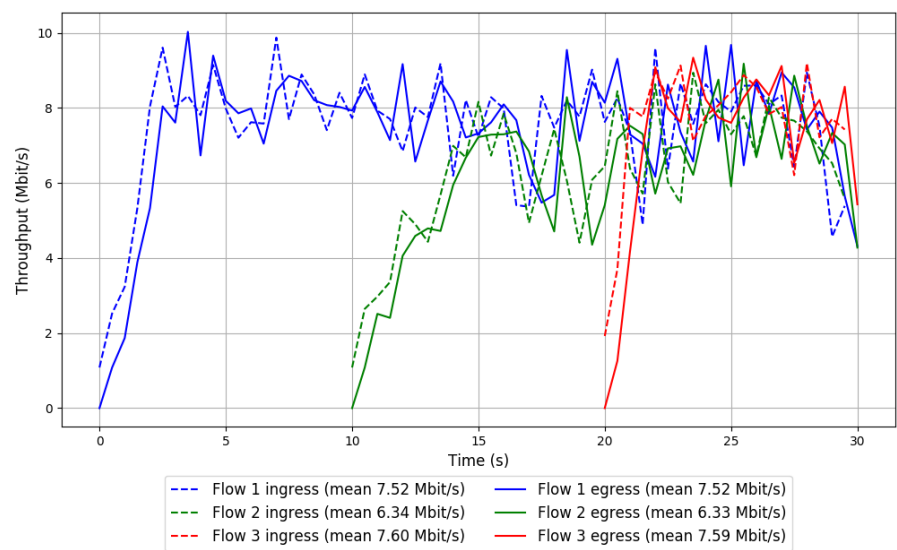
Average throughput: 7.59 Mbit/s

95th percentile per-packet one-way delay: 53.624 ms

Loss rate: 1.52%



Run 5: Report of Sprout — Data Link

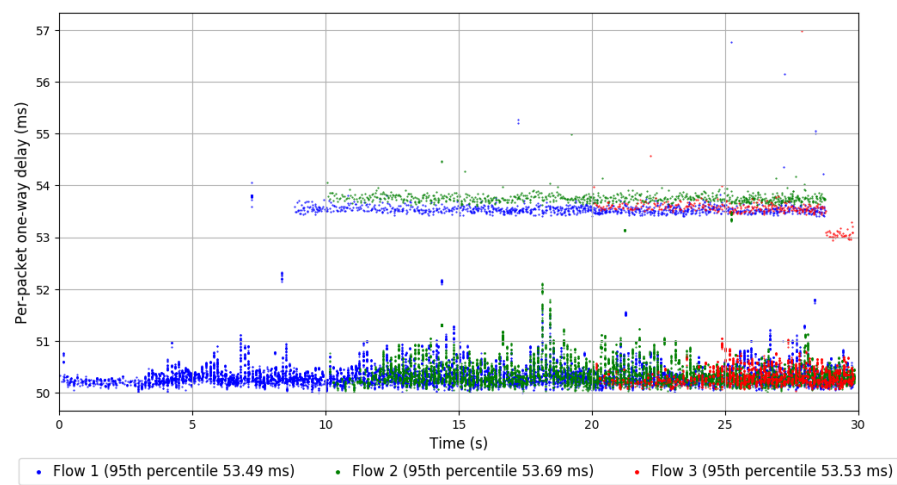
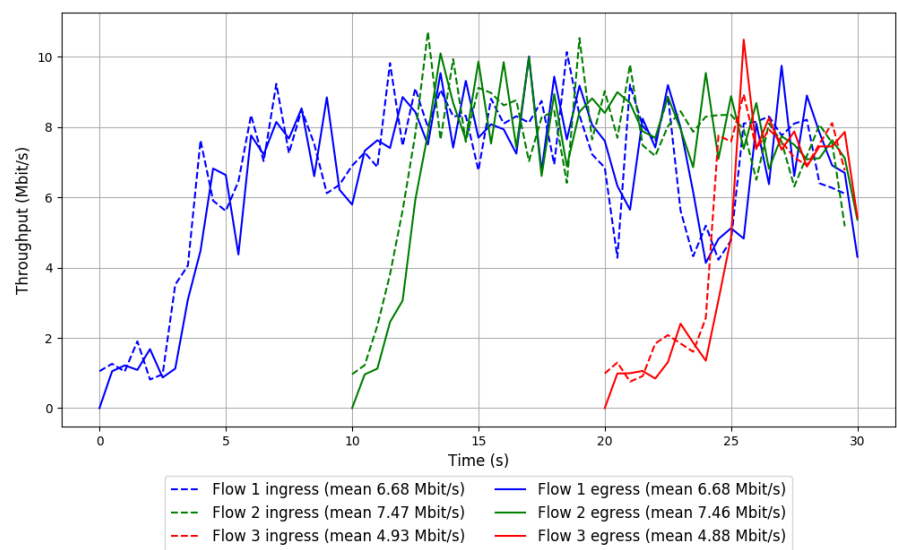


Run 6: Statistics of Sprout

Start at: 2018-05-26 16:14:26  
End at: 2018-05-26 16:14:56  
Local clock offset: -0.026 ms  
Remote clock offset: 0.019 ms

# Below is generated by plot.py at 2018-05-26 20:25:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 13.22 Mbit/s  
95th percentile per-packet one-way delay: 53.509 ms  
Loss rate: 0.66%  
-- Flow 1:  
Average throughput: 6.68 Mbit/s  
95th percentile per-packet one-way delay: 53.488 ms  
Loss rate: 0.48%  
-- Flow 2:  
Average throughput: 7.46 Mbit/s  
95th percentile per-packet one-way delay: 53.688 ms  
Loss rate: 0.33%  
-- Flow 3:  
Average throughput: 4.88 Mbit/s  
95th percentile per-packet one-way delay: 53.530 ms  
Loss rate: 2.39%

Run 6: Report of Sprout — Data Link

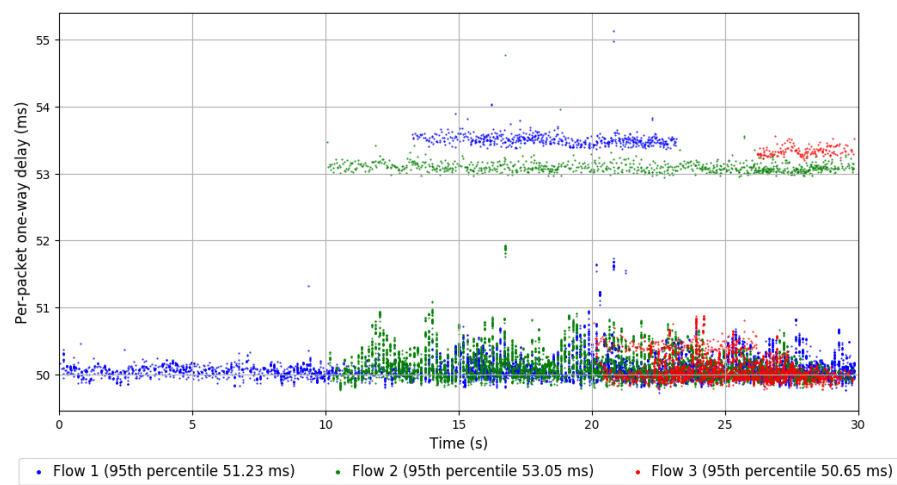
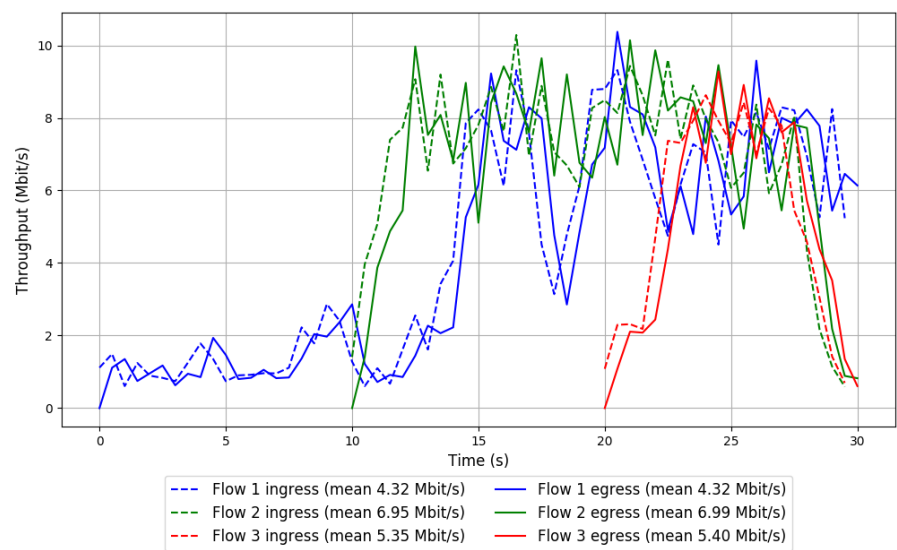


Run 7: Statistics of Sprout

Start at: 2018-05-26 16:37:31  
End at: 2018-05-26 16:38:01  
Local clock offset: 0.032 ms  
Remote clock offset: 0.24 ms

# Below is generated by plot.py at 2018-05-26 20:25:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 10.72 Mbit/s  
95th percentile per-packet one-way delay: 53.028 ms  
Loss rate: 0.20%  
-- Flow 1:  
Average throughput: 4.32 Mbit/s  
95th percentile per-packet one-way delay: 51.230 ms  
Loss rate: 0.42%  
-- Flow 2:  
Average throughput: 6.99 Mbit/s  
95th percentile per-packet one-way delay: 53.054 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 5.40 Mbit/s  
95th percentile per-packet one-way delay: 50.648 ms  
Loss rate: 0.17%

Run 7: Report of Sprout — Data Link

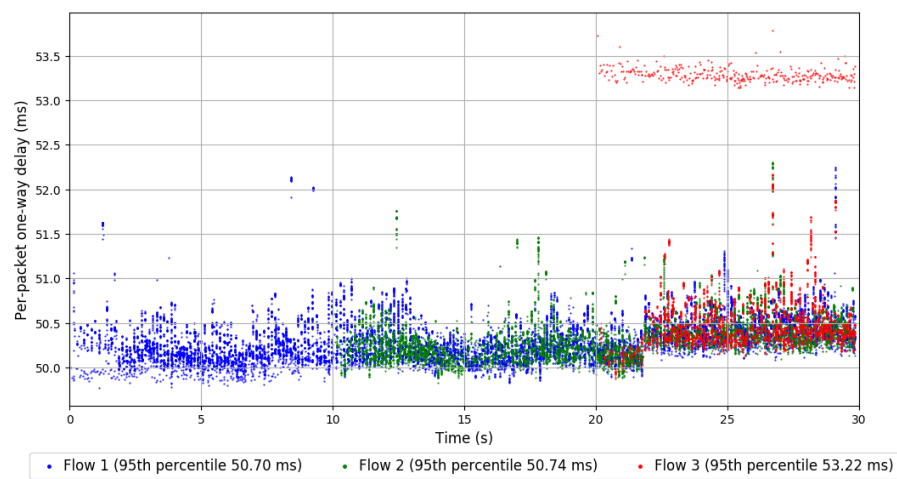
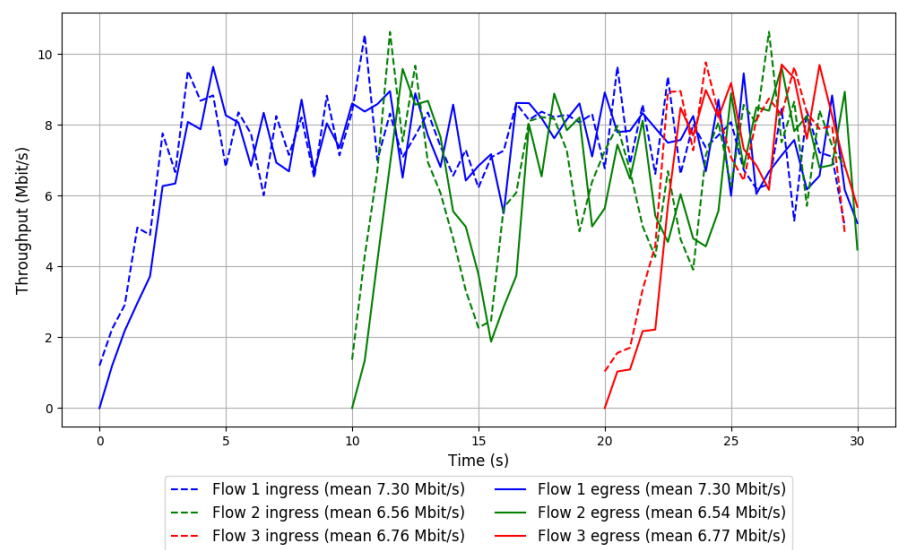


Run 8: Statistics of Sprout

Start at: 2018-05-26 17:00:06  
End at: 2018-05-26 17:00:36  
Local clock offset: 0.059 ms  
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2018-05-26 20:25:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 13.86 Mbit/s  
95th percentile per-packet one-way delay: 50.809 ms  
Loss rate: 0.49%  
-- Flow 1:  
Average throughput: 7.30 Mbit/s  
95th percentile per-packet one-way delay: 50.701 ms  
Loss rate: 0.24%  
-- Flow 2:  
Average throughput: 6.54 Mbit/s  
95th percentile per-packet one-way delay: 50.738 ms  
Loss rate: 0.90%  
-- Flow 3:  
Average throughput: 6.77 Mbit/s  
95th percentile per-packet one-way delay: 53.224 ms  
Loss rate: 0.52%

Run 8: Report of Sprout — Data Link



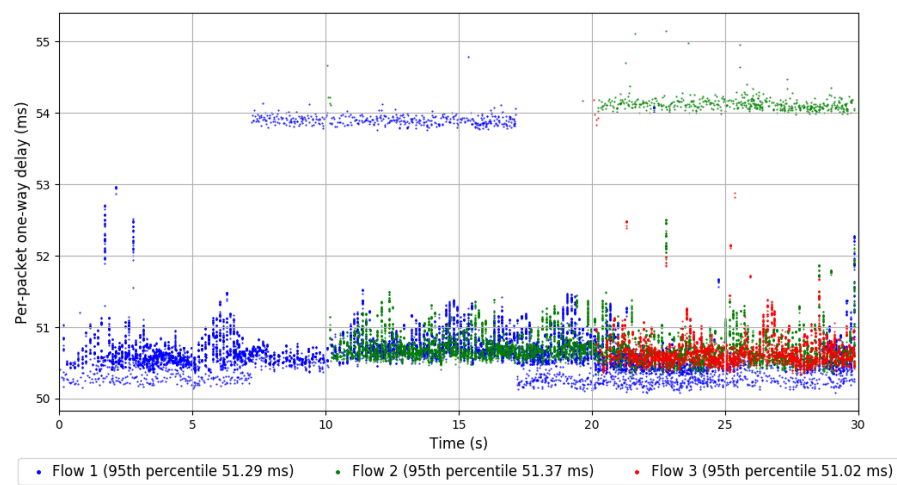
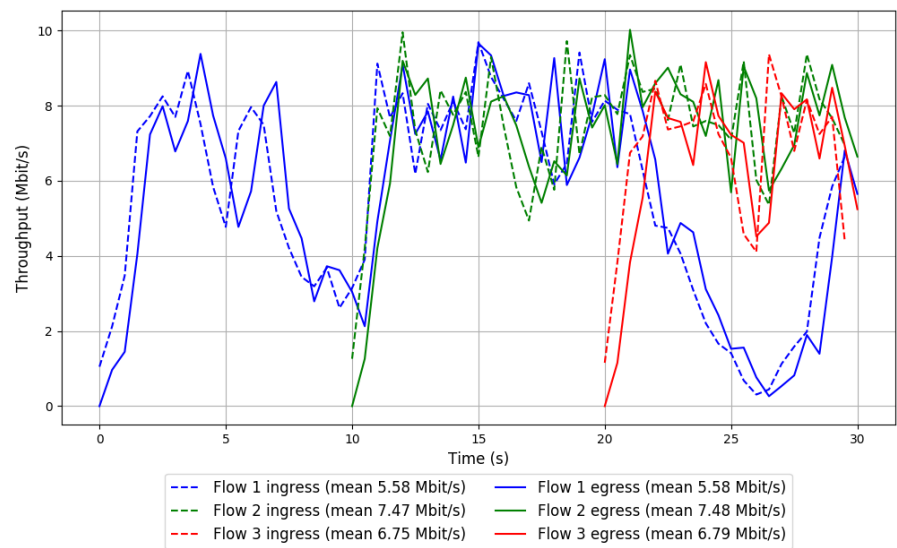
Run 9: Statistics of Sprout

Start at: 2018-05-26 17:23:27  
End at: 2018-05-26 17:23:57  
Local clock offset: 0.179 ms  
Remote clock offset: -0.111 ms

```
# Below is generated by plot.py at 2018-05-26 20:25:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.77 Mbit/s
95th percentile per-packet one-way delay: 51.258 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 5.58 Mbit/s
95th percentile per-packet one-way delay: 51.286 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 7.48 Mbit/s
95th percentile per-packet one-way delay: 51.367 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 6.79 Mbit/s
95th percentile per-packet one-way delay: 51.018 ms
Loss rate: 0.20%
```



Run 9: Report of Sprout — Data Link

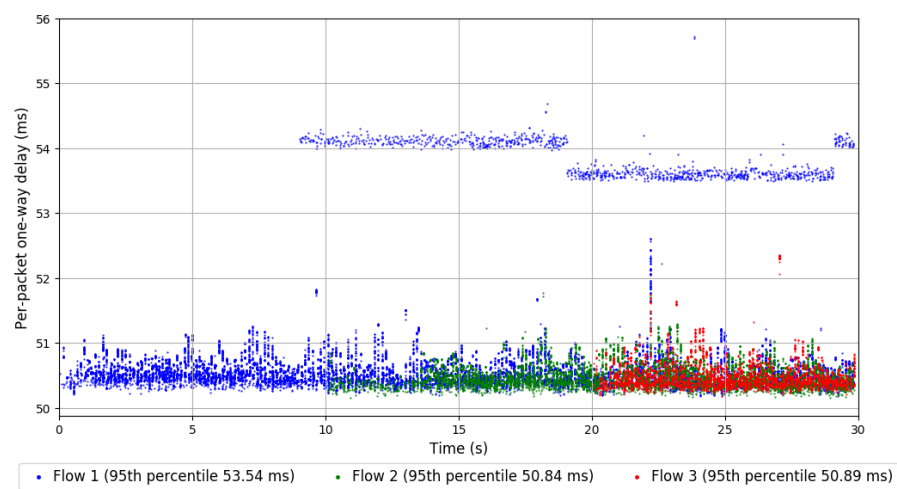
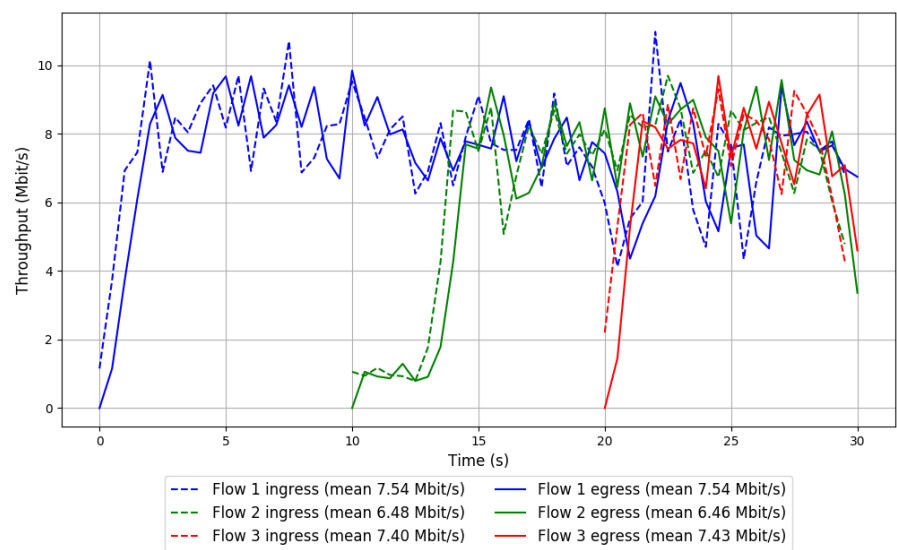


Run 10: Statistics of Sprout

Start at: 2018-05-26 17:47:05  
End at: 2018-05-26 17:47:35  
Local clock offset: 0.13 ms  
Remote clock offset: -0.173 ms

# Below is generated by plot.py at 2018-05-26 20:25:05  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 14.26 Mbit/s  
95th percentile per-packet one-way delay: 51.028 ms  
Loss rate: 0.51%  
-- Flow 1:  
Average throughput: 7.54 Mbit/s  
95th percentile per-packet one-way delay: 53.543 ms  
Loss rate: 0.43%  
-- Flow 2:  
Average throughput: 6.46 Mbit/s  
95th percentile per-packet one-way delay: 50.843 ms  
Loss rate: 0.75%  
-- Flow 3:  
Average throughput: 7.43 Mbit/s  
95th percentile per-packet one-way delay: 50.889 ms  
Loss rate: 0.34%

Run 10: Report of Sprout — Data Link

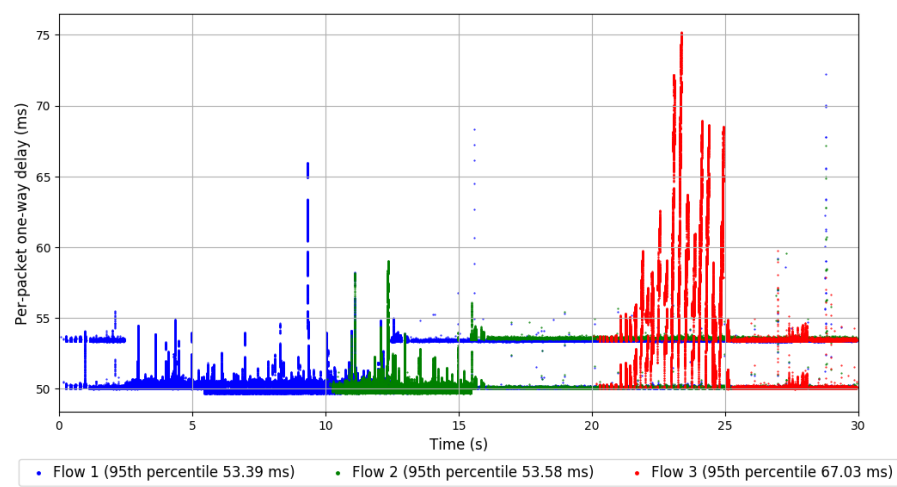
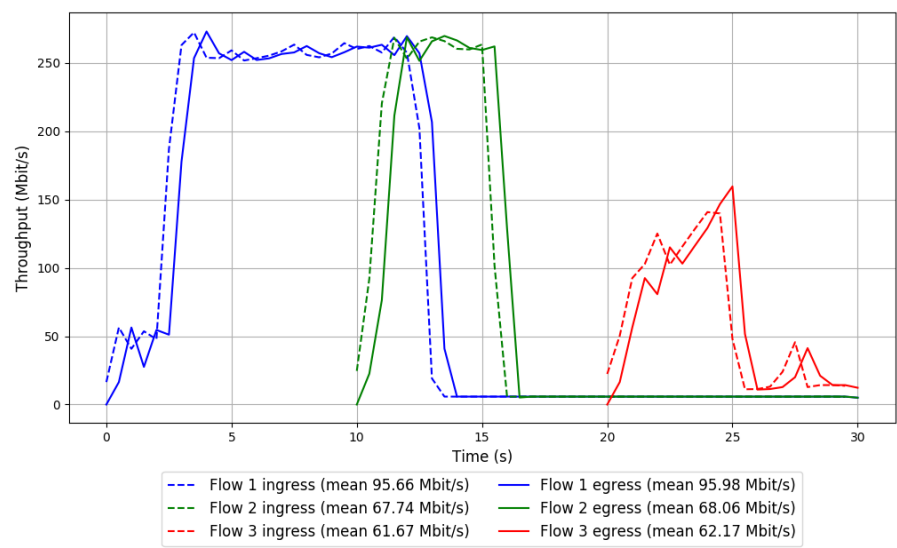


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-05-26 14:27:52
End at: 2018-05-26 14:28:22
Local clock offset: -0.146 ms
Remote clock offset: 0.012 ms

# Below is generated by plot.py at 2018-05-26 20:25:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 161.74 Mbit/s
95th percentile per-packet one-way delay: 56.335 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 95.98 Mbit/s
95th percentile per-packet one-way delay: 53.392 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 68.06 Mbit/s
95th percentile per-packet one-way delay: 53.576 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 62.17 Mbit/s
95th percentile per-packet one-way delay: 67.030 ms
Loss rate: 0.23%
```

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-05-26 14:50:51

End at: 2018-05-26 14:51:21

Local clock offset: -0.233 ms

Remote clock offset: 0.323 ms

# Below is generated by plot.py at 2018-05-26 20:25:05

# Datalink statistics

-- Total of 3 flows:

Average throughput: 158.61 Mbit/s

95th percentile per-packet one-way delay: 52.695 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 67.65 Mbit/s

95th percentile per-packet one-way delay: 52.545 ms

Loss rate: 1.04%

-- Flow 2:

Average throughput: 111.00 Mbit/s

95th percentile per-packet one-way delay: 53.188 ms

Loss rate: 1.23%

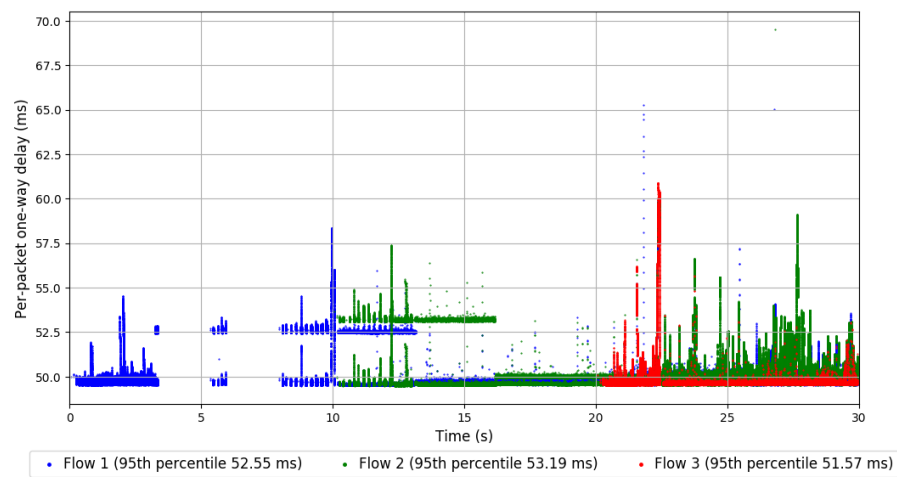
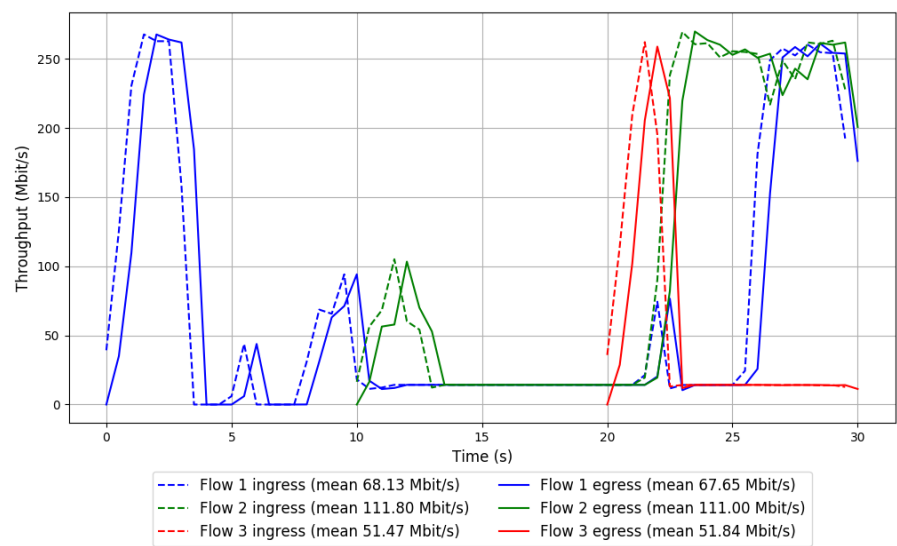
-- Flow 3:

Average throughput: 51.84 Mbit/s

95th percentile per-packet one-way delay: 51.567 ms

Loss rate: 0.27%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-05-26 15:14:03

End at: 2018-05-26 15:14:33

Local clock offset: -0.203 ms

Remote clock offset: 0.29 ms

# Below is generated by plot.py at 2018-05-26 20:25:05

# Datalink statistics

-- Total of 3 flows:

Average throughput: 142.37 Mbit/s

95th percentile per-packet one-way delay: 54.057 ms

Loss rate: 0.80%

-- Flow 1:

Average throughput: 18.58 Mbit/s

95th percentile per-packet one-way delay: 53.593 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 72.78 Mbit/s

95th percentile per-packet one-way delay: 55.840 ms

Loss rate: 0.38%

-- Flow 3:

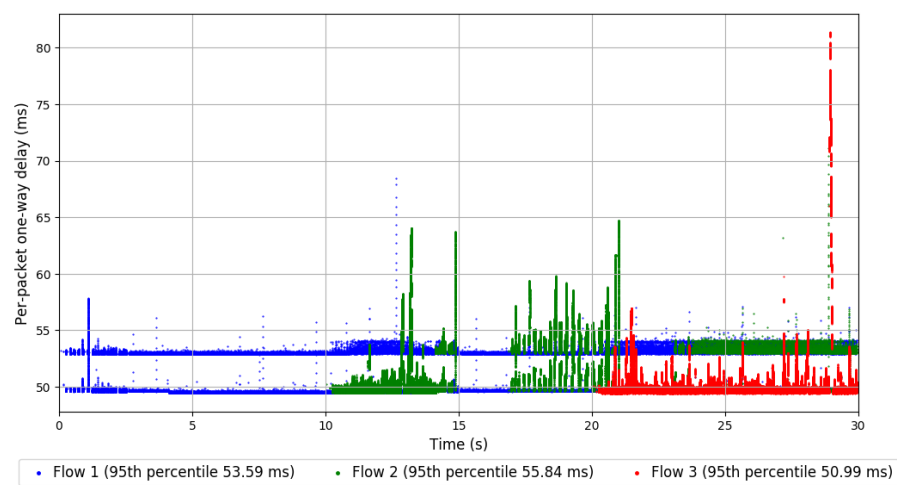
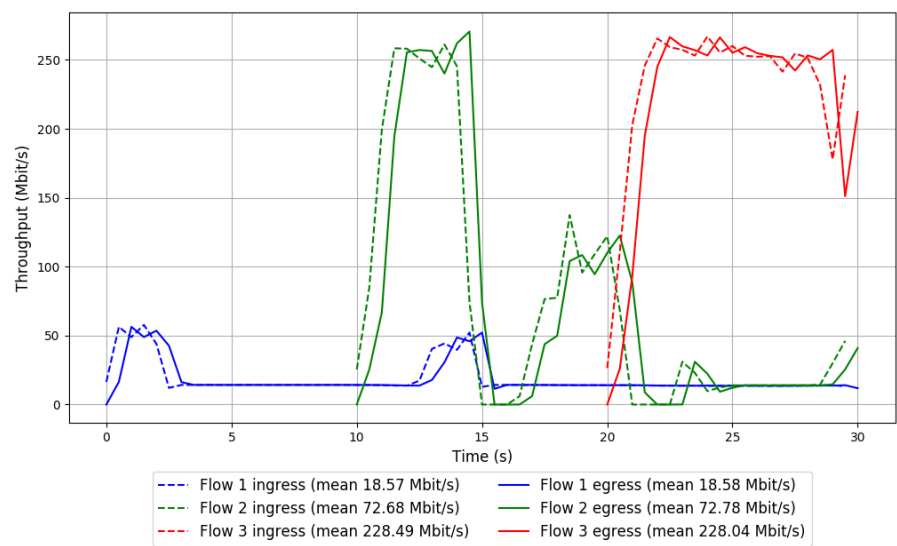
Average throughput: 228.04 Mbit/s

95th percentile per-packet one-way delay: 50.990 ms

Loss rate: 1.21%



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



Run 4: Statistics of TaoVA-100x

Start at: 2018-05-26 15:37:22

End at: 2018-05-26 15:37:52

Local clock offset: -0.226 ms

Remote clock offset: 0.028 ms

# Below is generated by plot.py at 2018-05-26 20:30:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 394.68 Mbit/s

95th percentile per-packet one-way delay: 60.319 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 234.11 Mbit/s

95th percentile per-packet one-way delay: 59.405 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 188.41 Mbit/s

95th percentile per-packet one-way delay: 64.644 ms

Loss rate: 0.50%

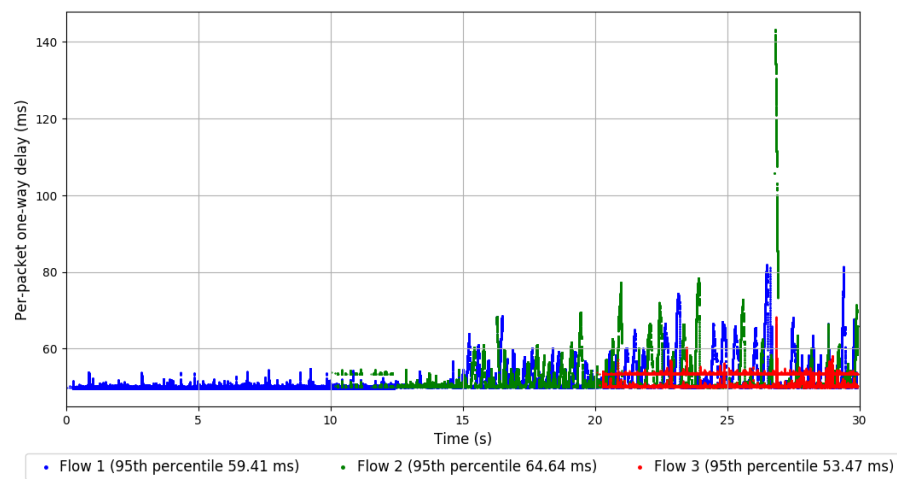
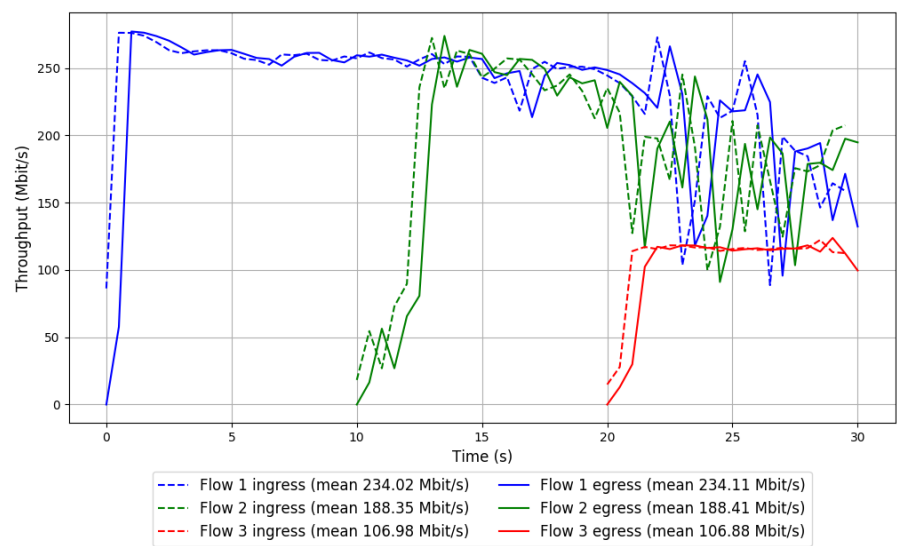
-- Flow 3:

Average throughput: 106.88 Mbit/s

95th percentile per-packet one-way delay: 53.467 ms

Loss rate: 1.15%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-05-26 16:01:02

End at: 2018-05-26 16:01:32

Local clock offset: -0.043 ms

Remote clock offset: 0.07 ms

# Below is generated by plot.py at 2018-05-26 20:30:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 208.63 Mbit/s

95th percentile per-packet one-way delay: 53.711 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 26.76 Mbit/s

95th percentile per-packet one-way delay: 54.191 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 153.26 Mbit/s

95th percentile per-packet one-way delay: 51.218 ms

Loss rate: 0.09%

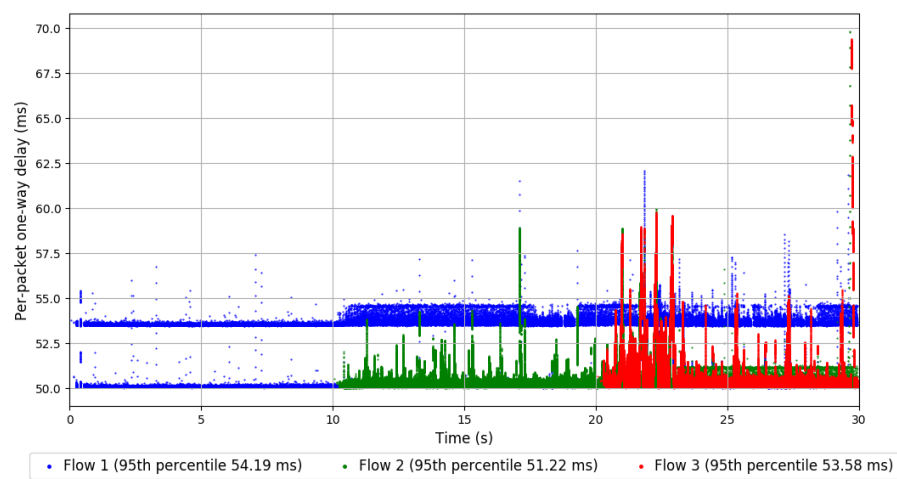
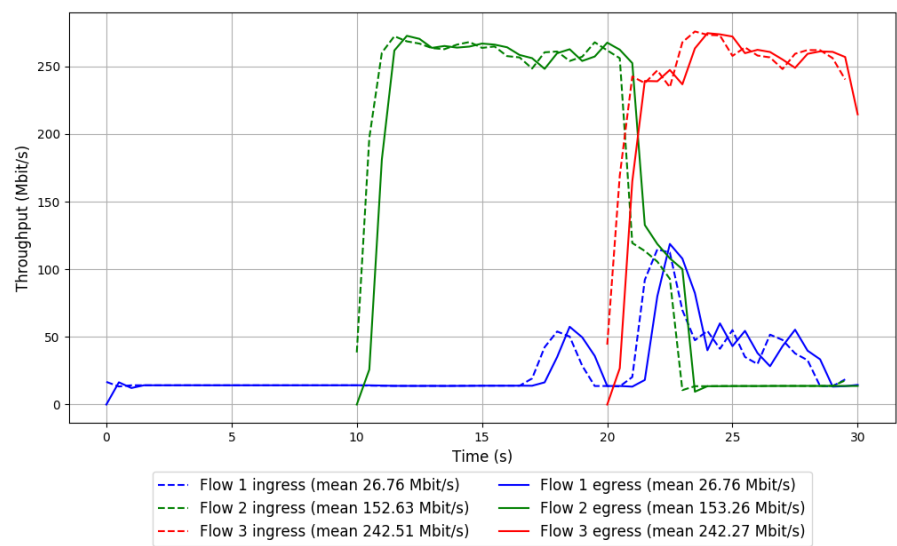
-- Flow 3:

Average throughput: 242.27 Mbit/s

95th percentile per-packet one-way delay: 53.578 ms

Loss rate: 1.08%

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

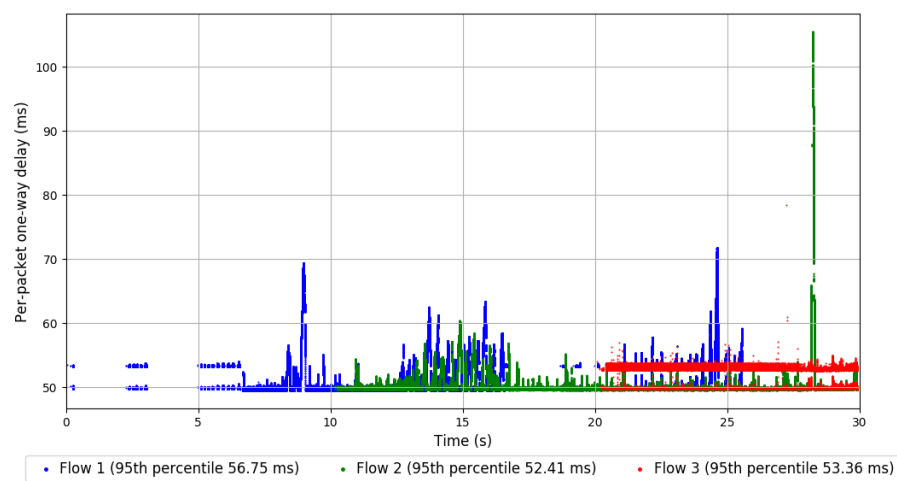
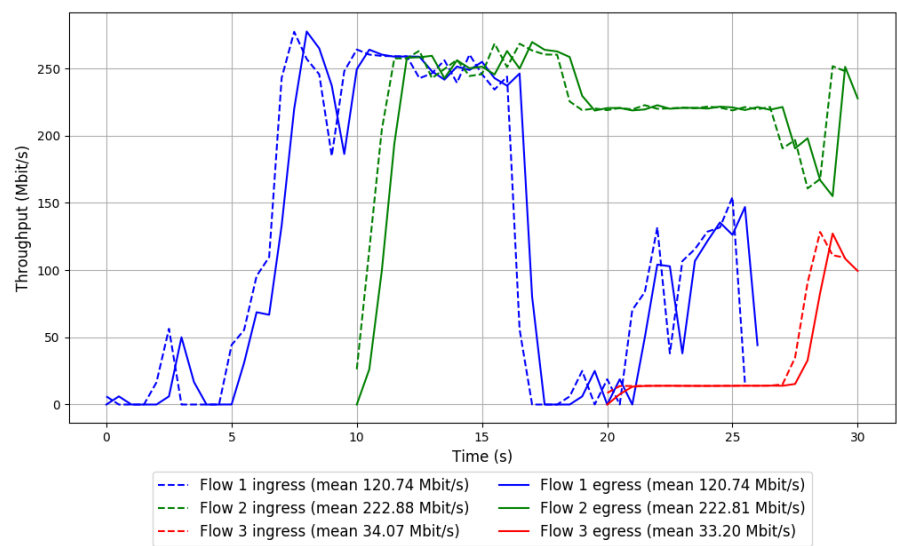


Run 6: Statistics of TaoVA-100x

Start at: 2018-05-26 16:23:58  
End at: 2018-05-26 16:24:28  
Local clock offset: -0.323 ms  
Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2018-05-26 20:30:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 262.78 Mbit/s  
95th percentile per-packet one-way delay: 54.752 ms  
Loss rate: 0.46%  
-- Flow 1:  
Average throughput: 120.74 Mbit/s  
95th percentile per-packet one-way delay: 56.754 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 222.81 Mbit/s  
95th percentile per-packet one-way delay: 52.410 ms  
Loss rate: 0.54%  
-- Flow 3:  
Average throughput: 33.20 Mbit/s  
95th percentile per-packet one-way delay: 53.357 ms  
Loss rate: 3.59%

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



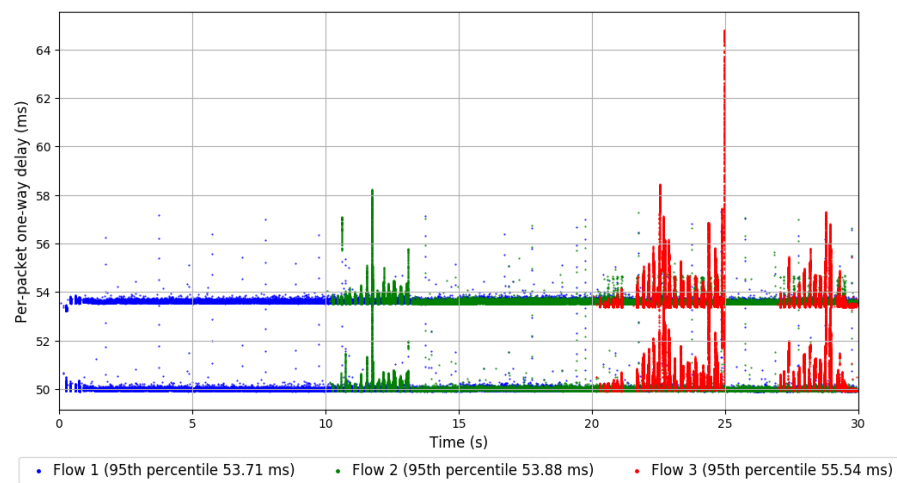
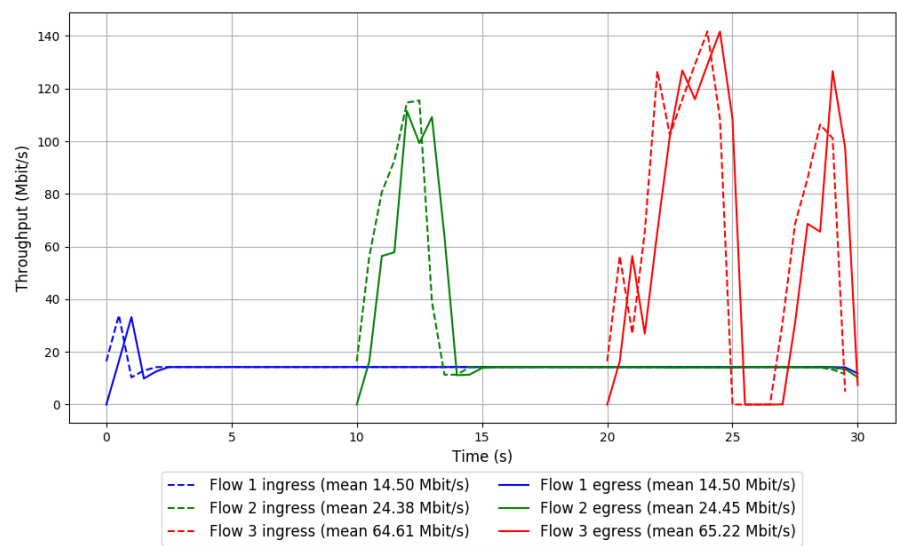
Run 7: Statistics of TaoVA-100x

Start at: 2018-05-26 16:47:07  
End at: 2018-05-26 16:47:37  
Local clock offset: 0.096 ms  
Remote clock offset: -0.043 ms

# Below is generated by plot.py at 2018-05-26 20:30:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 52.28 Mbit/s  
95th percentile per-packet one-way delay: 54.446 ms  
Loss rate: 0.20%  
-- Flow 1:  
Average throughput: 14.50 Mbit/s  
95th percentile per-packet one-way delay: 53.706 ms  
Loss rate: 0.32%  
-- Flow 2:  
Average throughput: 24.45 Mbit/s  
95th percentile per-packet one-way delay: 53.880 ms  
Loss rate: 0.24%  
-- Flow 3:  
Average throughput: 65.22 Mbit/s  
95th percentile per-packet one-way delay: 55.536 ms  
Loss rate: 0.09%



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

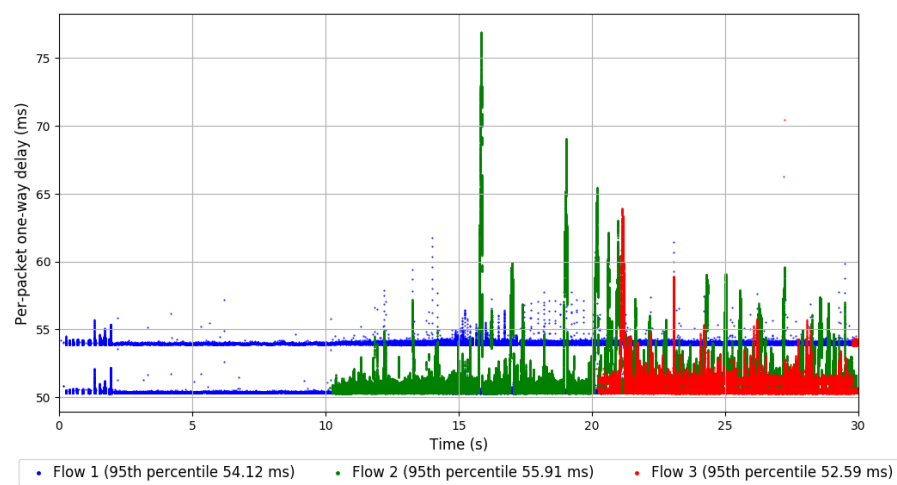
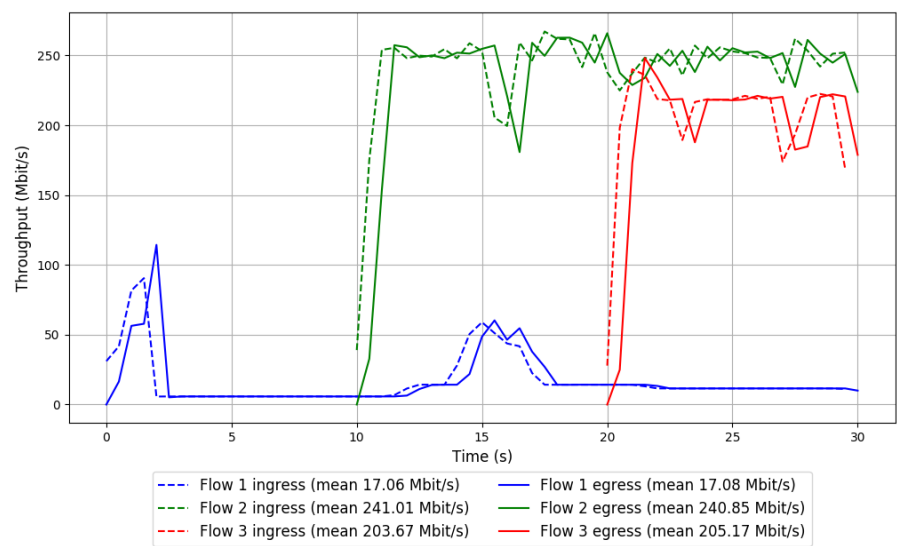


Run 8: Statistics of TaoVA-100x

Start at: 2018-05-26 17:09:45  
End at: 2018-05-26 17:10:15  
Local clock offset: 0.448 ms  
Remote clock offset: -0.138 ms

# Below is generated by plot.py at 2018-05-26 20:31:10  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 245.03 Mbit/s  
95th percentile per-packet one-way delay: 54.610 ms  
Loss rate: 0.48%  
-- Flow 1:  
Average throughput: 17.08 Mbit/s  
95th percentile per-packet one-way delay: 54.118 ms  
Loss rate: 0.23%  
-- Flow 2:  
Average throughput: 240.85 Mbit/s  
95th percentile per-packet one-way delay: 55.905 ms  
Loss rate: 0.58%  
-- Flow 3:  
Average throughput: 205.17 Mbit/s  
95th percentile per-packet one-way delay: 52.586 ms  
Loss rate: 0.30%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-05-26 17:33:04

End at: 2018-05-26 17:33:34

Local clock offset: -0.507 ms

Remote clock offset: 0.083 ms

# Below is generated by plot.py at 2018-05-26 20:34:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 347.38 Mbit/s

95th percentile per-packet one-way delay: 50.512 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 248.28 Mbit/s

95th percentile per-packet one-way delay: 50.071 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 142.32 Mbit/s

95th percentile per-packet one-way delay: 52.191 ms

Loss rate: 0.05%

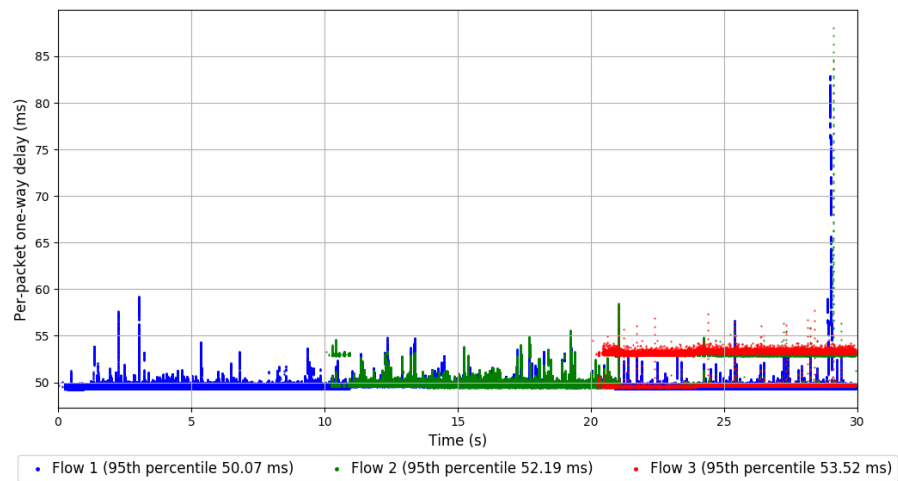
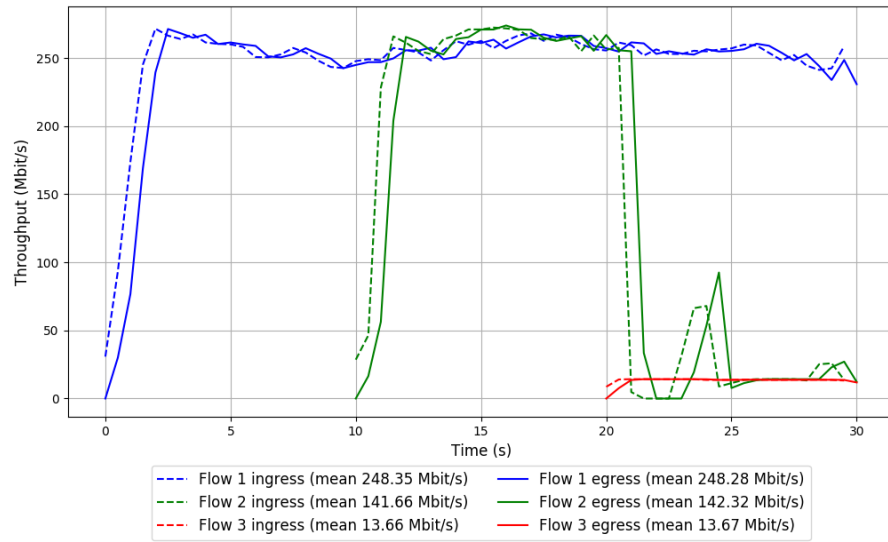
-- Flow 3:

Average throughput: 13.67 Mbit/s

95th percentile per-packet one-way delay: 53.525 ms

Loss rate: 1.02%

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



Run 10: Statistics of TaoVA-100x

Start at: 2018-05-26 17:56:38

End at: 2018-05-26 17:57:08

Local clock offset: 0.153 ms

Remote clock offset: 0.132 ms

# Below is generated by plot.py at 2018-05-26 20:34:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 253.92 Mbit/s

95th percentile per-packet one-way delay: 51.264 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 239.80 Mbit/s

95th percentile per-packet one-way delay: 50.486 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 13.30 Mbit/s

95th percentile per-packet one-way delay: 54.358 ms

Loss rate: 0.52%

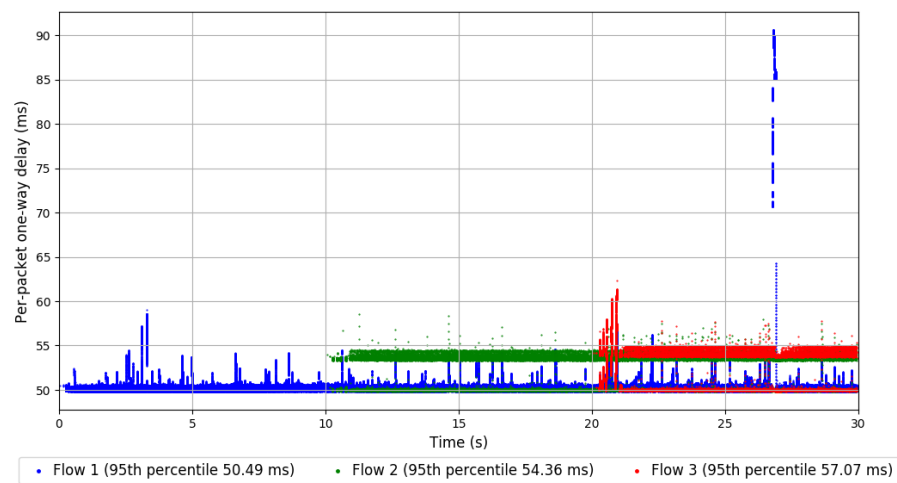
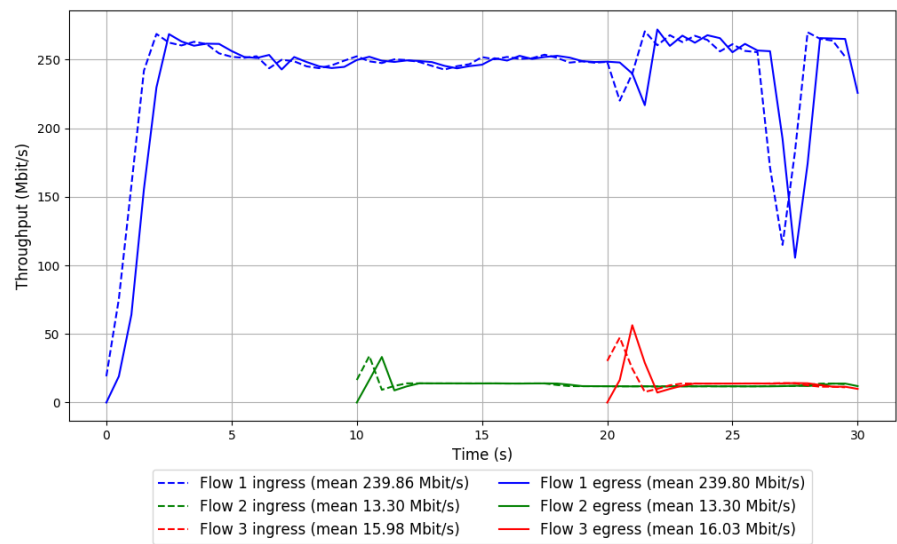
-- Flow 3:

Average throughput: 16.03 Mbit/s

95th percentile per-packet one-way delay: 57.073 ms

Loss rate: 0.73%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-05-26 14:38:15

End at: 2018-05-26 14:38:45

Local clock offset: 0.353 ms

Remote clock offset: 0.042 ms

# Below is generated by plot.py at 2018-05-26 20:34:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 183.23 Mbit/s

95th percentile per-packet one-way delay: 52.277 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 92.83 Mbit/s

95th percentile per-packet one-way delay: 52.110 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 97.85 Mbit/s

95th percentile per-packet one-way delay: 52.750 ms

Loss rate: 0.51%

-- Flow 3:

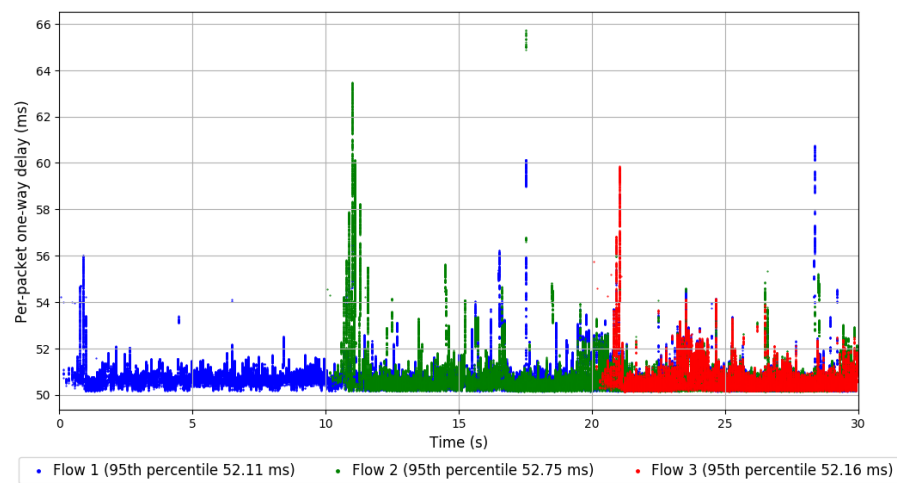
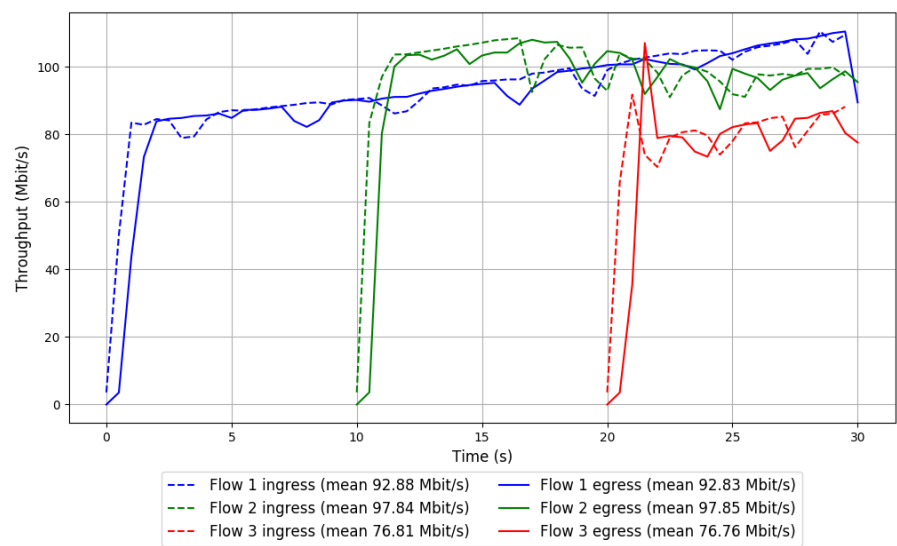
Average throughput: 76.76 Mbit/s

95th percentile per-packet one-way delay: 52.159 ms

Loss rate: 1.15%



Run 1: Report of TCP Vegas — Data Link

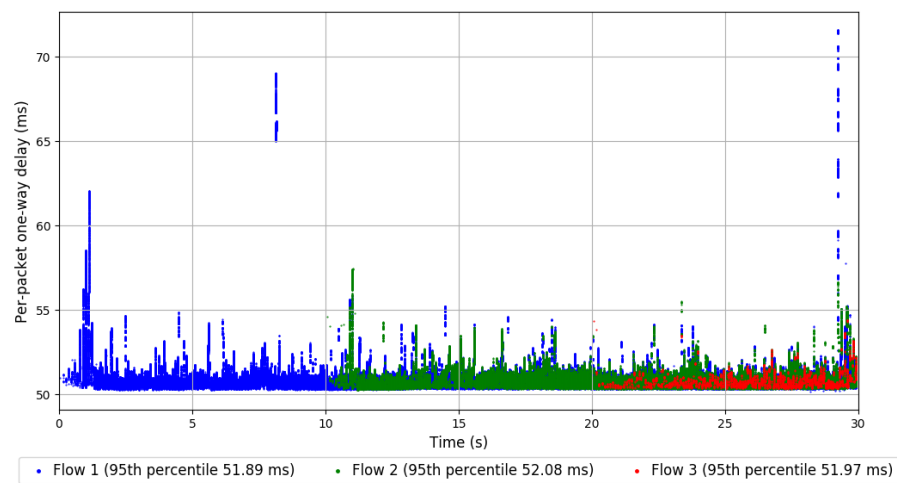
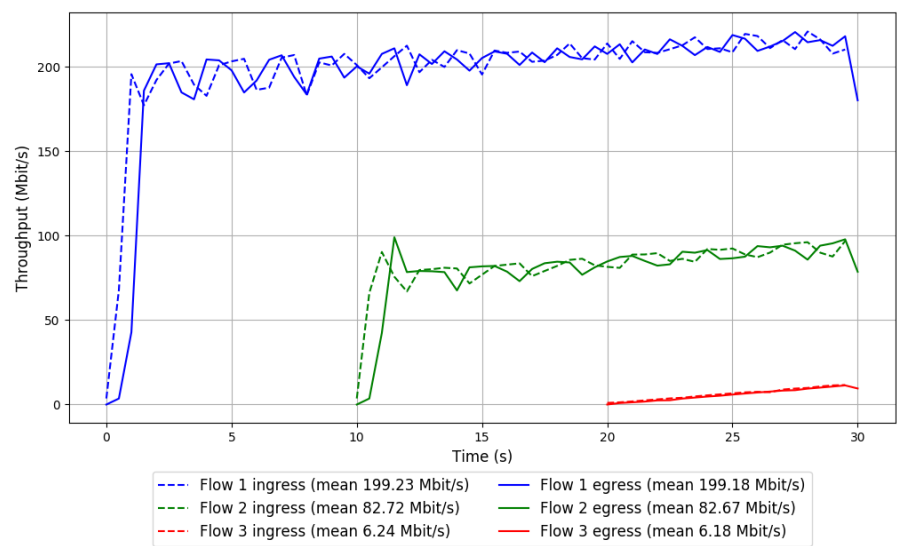


Run 2: Statistics of TCP Vegas

Start at: 2018-05-26 15:01:25  
End at: 2018-05-26 15:01:55  
Local clock offset: 0.157 ms  
Remote clock offset: -0.139 ms

# Below is generated by plot.py at 2018-05-26 20:34:34  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 256.13 Mbit/s  
95th percentile per-packet one-way delay: 51.933 ms  
Loss rate: 0.44%  
-- Flow 1:  
Average throughput: 199.18 Mbit/s  
95th percentile per-packet one-way delay: 51.889 ms  
Loss rate: 0.38%  
-- Flow 2:  
Average throughput: 82.67 Mbit/s  
95th percentile per-packet one-way delay: 52.076 ms  
Loss rate: 0.60%  
-- Flow 3:  
Average throughput: 6.18 Mbit/s  
95th percentile per-packet one-way delay: 51.971 ms  
Loss rate: 2.03%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-05-26 15:24:41

End at: 2018-05-26 15:25:11

Local clock offset: 0.531 ms

Remote clock offset: 0.07 ms

# Below is generated by plot.py at 2018-05-26 20:34:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 283.23 Mbit/s

95th percentile per-packet one-way delay: 57.786 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 134.47 Mbit/s

95th percentile per-packet one-way delay: 57.745 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 221.52 Mbit/s

95th percentile per-packet one-way delay: 57.831 ms

Loss rate: 0.55%

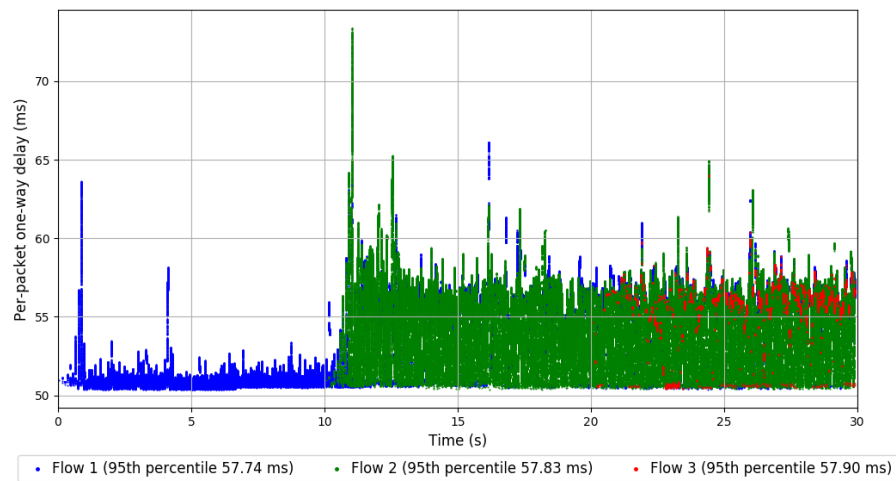
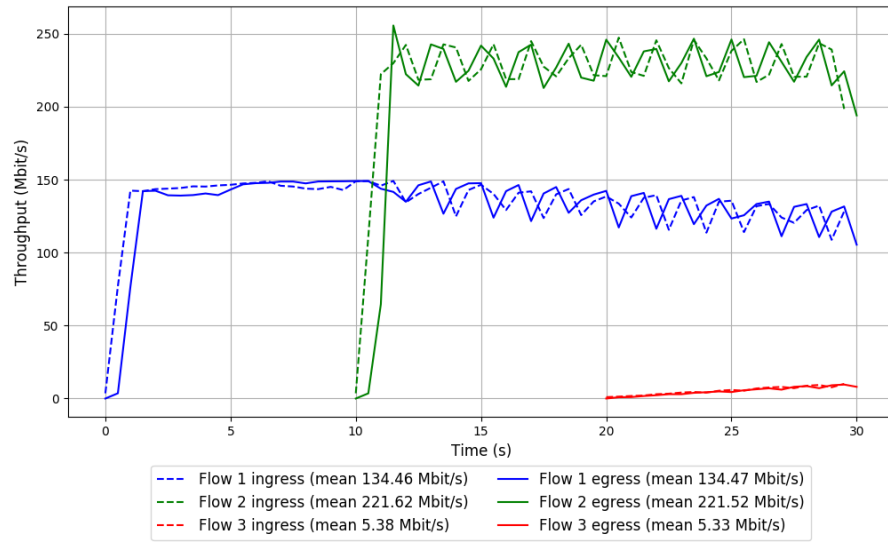
-- Flow 3:

Average throughput: 5.33 Mbit/s

95th percentile per-packet one-way delay: 57.898 ms

Loss rate: 2.00%

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



Run 4: Statistics of TCP Vegas

Start at: 2018-05-26 15:48:19

End at: 2018-05-26 15:48:49

Local clock offset: -0.134 ms

Remote clock offset: 0.109 ms

# Below is generated by plot.py at 2018-05-26 20:34:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 235.87 Mbit/s

95th percentile per-packet one-way delay: 51.894 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 158.50 Mbit/s

95th percentile per-packet one-way delay: 51.508 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 59.20 Mbit/s

95th percentile per-packet one-way delay: 52.415 ms

Loss rate: 0.50%

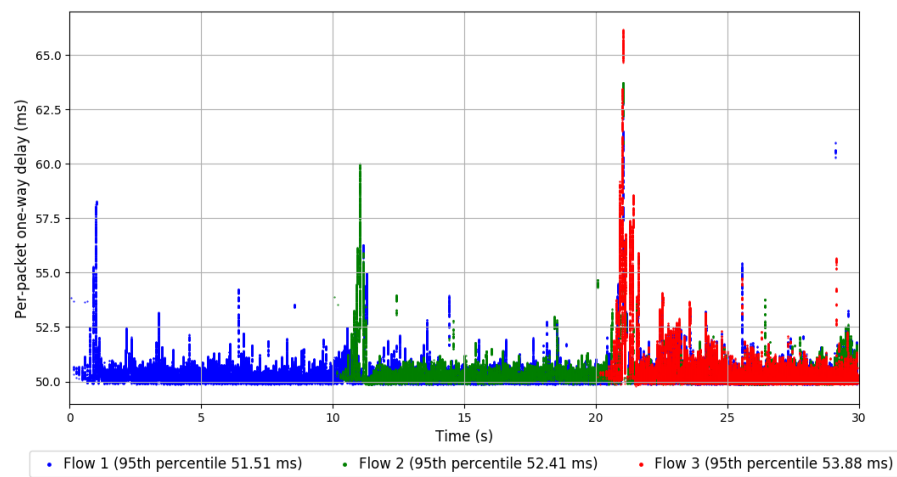
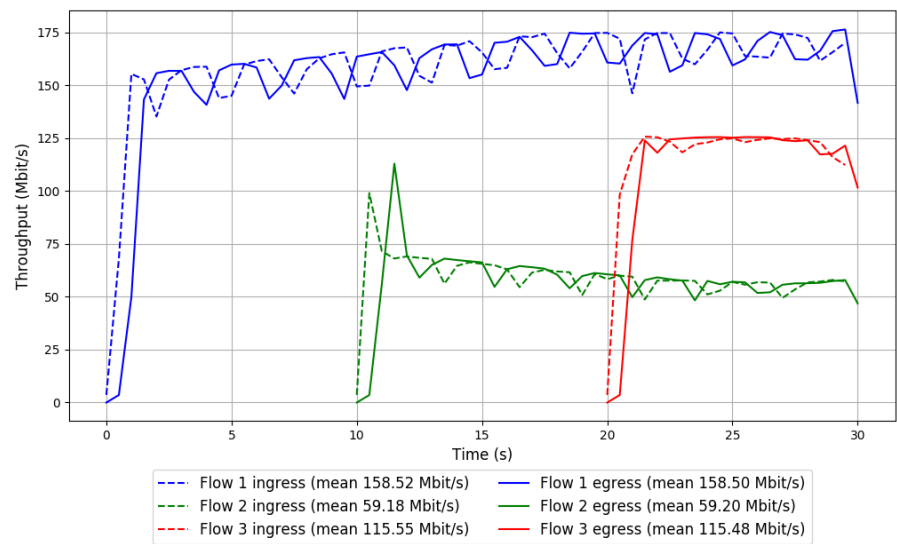
-- Flow 3:

Average throughput: 115.48 Mbit/s

95th percentile per-packet one-way delay: 53.878 ms

Loss rate: 1.06%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-05-26 16:11:35

End at: 2018-05-26 16:12:05

Local clock offset: 0.217 ms

Remote clock offset: 0.209 ms

# Below is generated by plot.py at 2018-05-26 20:34:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 267.62 Mbit/s

95th percentile per-packet one-way delay: 58.384 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 220.92 Mbit/s

95th percentile per-packet one-way delay: 58.385 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 64.57 Mbit/s

95th percentile per-packet one-way delay: 58.459 ms

Loss rate: 0.51%

-- Flow 3:

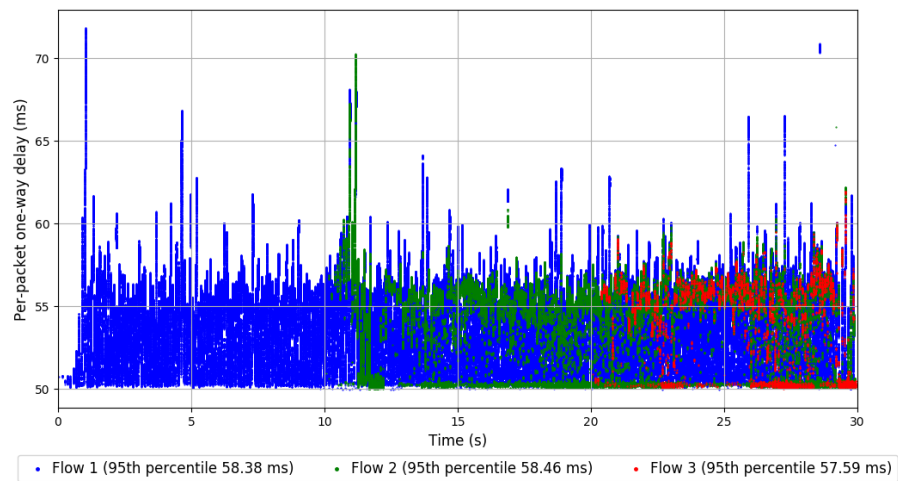
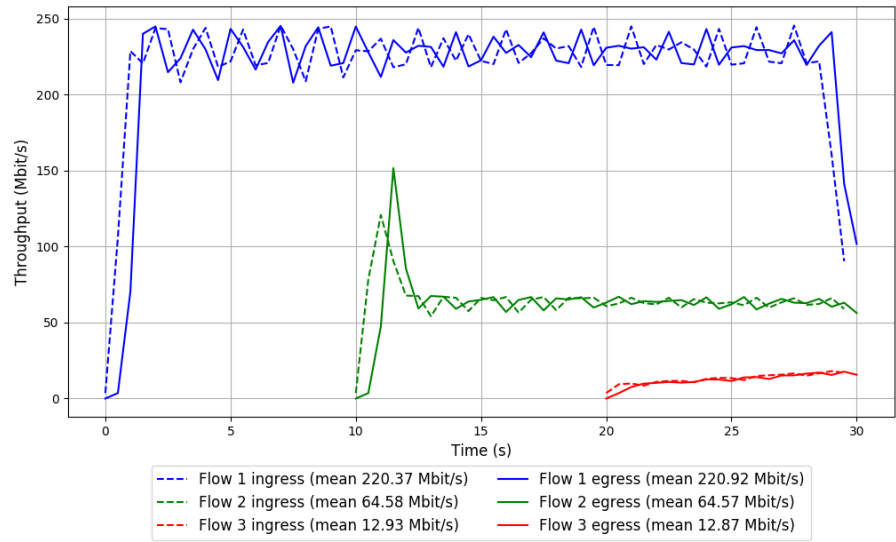
Average throughput: 12.87 Mbit/s

95th percentile per-packet one-way delay: 57.588 ms

Loss rate: 1.47%



# Run 5: Report of TCP Vegas — Data Link

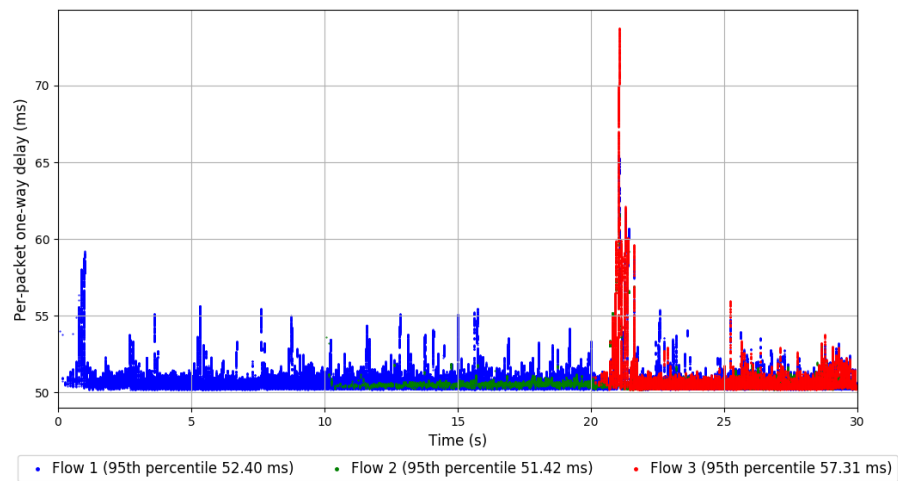
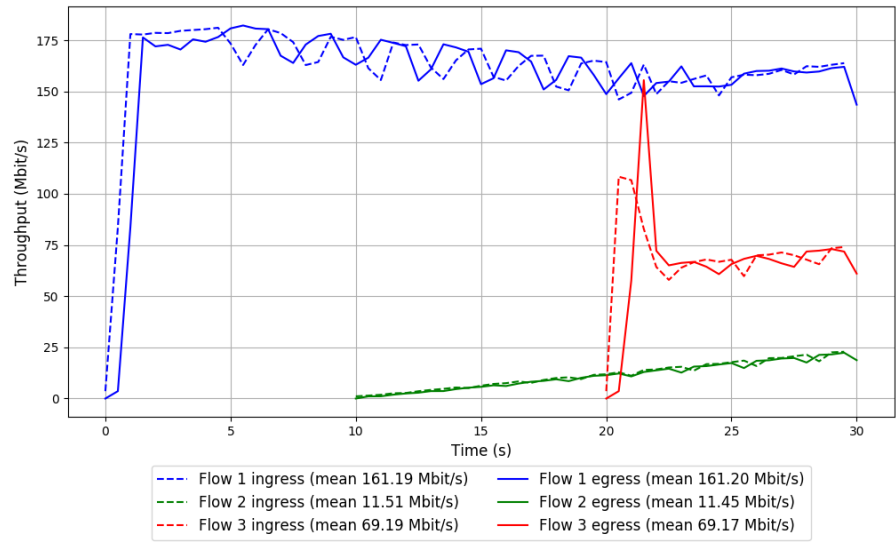


Run 6: Statistics of TCP Vegas

Start at: 2018-05-26 16:34:41  
End at: 2018-05-26 16:35:11  
Local clock offset: 0.176 ms  
Remote clock offset: -0.059 ms

# Below is generated by plot.py at 2018-05-26 20:34:34  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 191.61 Mbit/s  
95th percentile per-packet one-way delay: 52.641 ms  
Loss rate: 0.46%  
-- Flow 1:  
Average throughput: 161.20 Mbit/s  
95th percentile per-packet one-way delay: 52.400 ms  
Loss rate: 0.34%  
-- Flow 2:  
Average throughput: 11.45 Mbit/s  
95th percentile per-packet one-way delay: 51.418 ms  
Loss rate: 1.03%  
-- Flow 3:  
Average throughput: 69.17 Mbit/s  
95th percentile per-packet one-way delay: 57.312 ms  
Loss rate: 1.08%

# Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-05-26 16:57:25

End at: 2018-05-26 16:57:55

Local clock offset: 0.332 ms

Remote clock offset: 0.149 ms

# Below is generated by plot.py at 2018-05-26 20:34:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 115.43 Mbit/s

95th percentile per-packet one-way delay: 52.232 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 78.10 Mbit/s

95th percentile per-packet one-way delay: 52.034 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 11.12 Mbit/s

95th percentile per-packet one-way delay: 51.180 ms

Loss rate: 1.07%

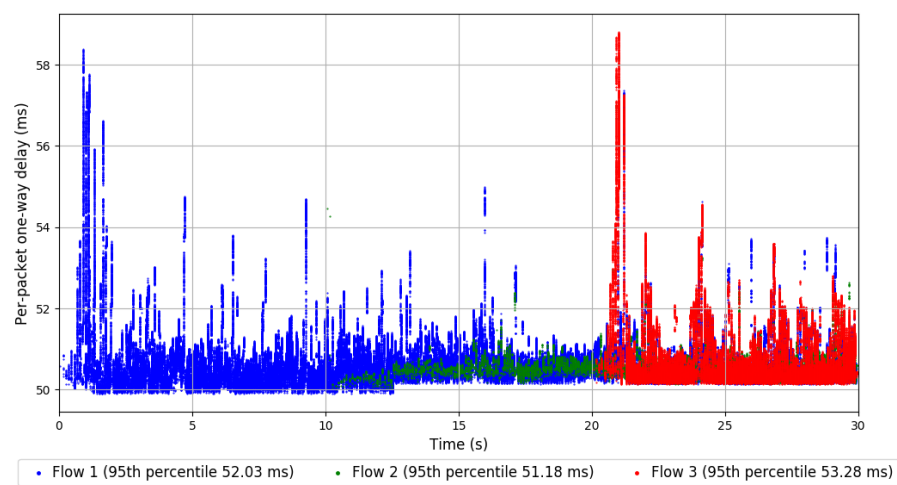
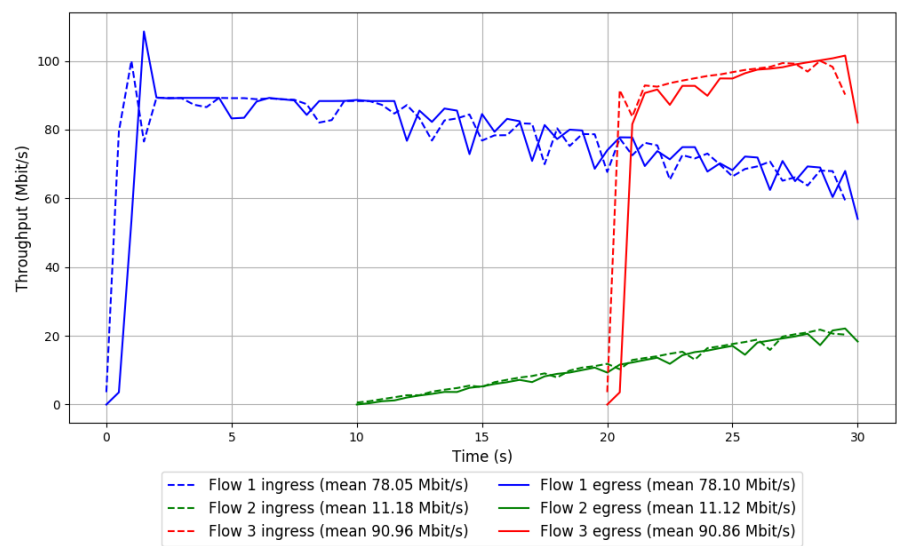
-- Flow 3:

Average throughput: 90.86 Mbit/s

95th percentile per-packet one-way delay: 53.279 ms

Loss rate: 1.11%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-05-26 17:20:28

End at: 2018-05-26 17:20:58

Local clock offset: -0.027 ms

Remote clock offset: 0.011 ms

# Below is generated by plot.py at 2018-05-26 20:36:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 310.19 Mbit/s

95th percentile per-packet one-way delay: 57.282 ms

Loss rate: 0.33%

-- Flow 1:

Average throughput: 155.81 Mbit/s

95th percentile per-packet one-way delay: 56.557 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 199.19 Mbit/s

95th percentile per-packet one-way delay: 57.819 ms

Loss rate: 0.16%

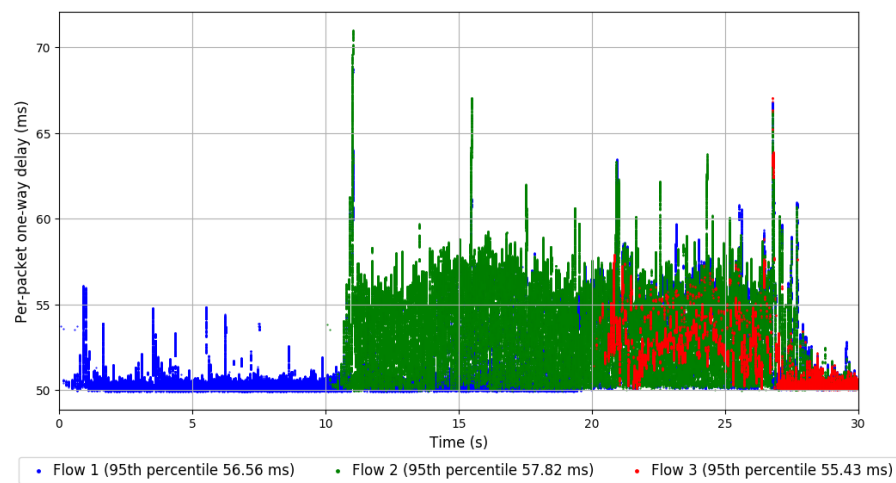
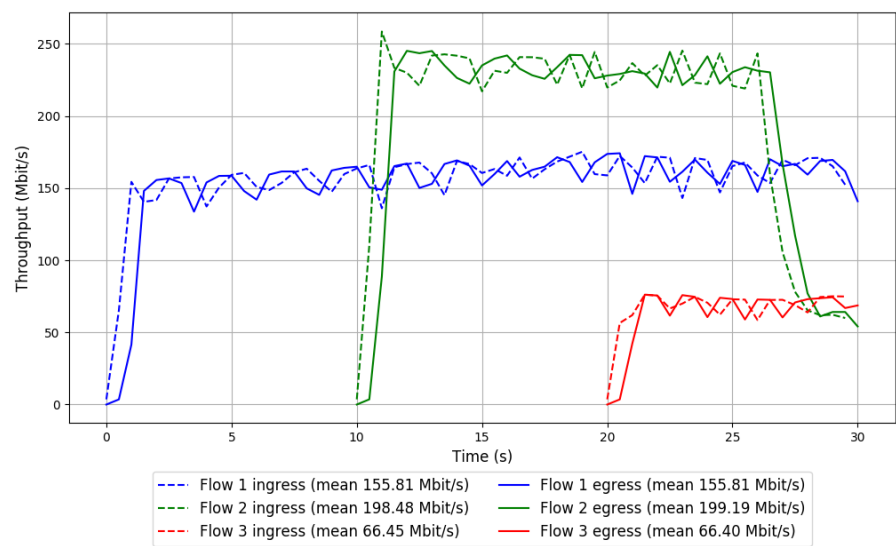
-- Flow 3:

Average throughput: 66.40 Mbit/s

95th percentile per-packet one-way delay: 55.434 ms

Loss rate: 1.12%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-05-26 17:44:01

End at: 2018-05-26 17:44:31

Local clock offset: -0.272 ms

Remote clock offset: 0.205 ms

# Below is generated by plot.py at 2018-05-26 20:36:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 189.16 Mbit/s

95th percentile per-packet one-way delay: 57.785 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 62.48 Mbit/s

95th percentile per-packet one-way delay: 51.927 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 80.86 Mbit/s

95th percentile per-packet one-way delay: 55.388 ms

Loss rate: 0.54%

-- Flow 3:

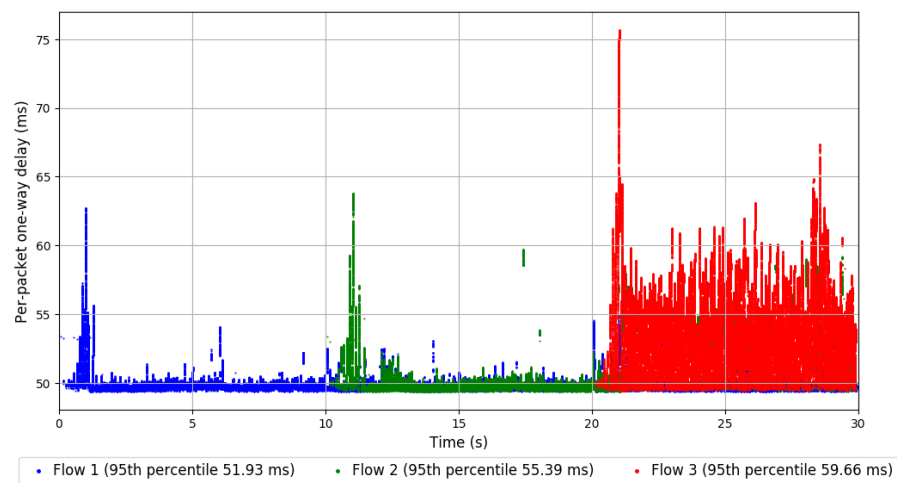
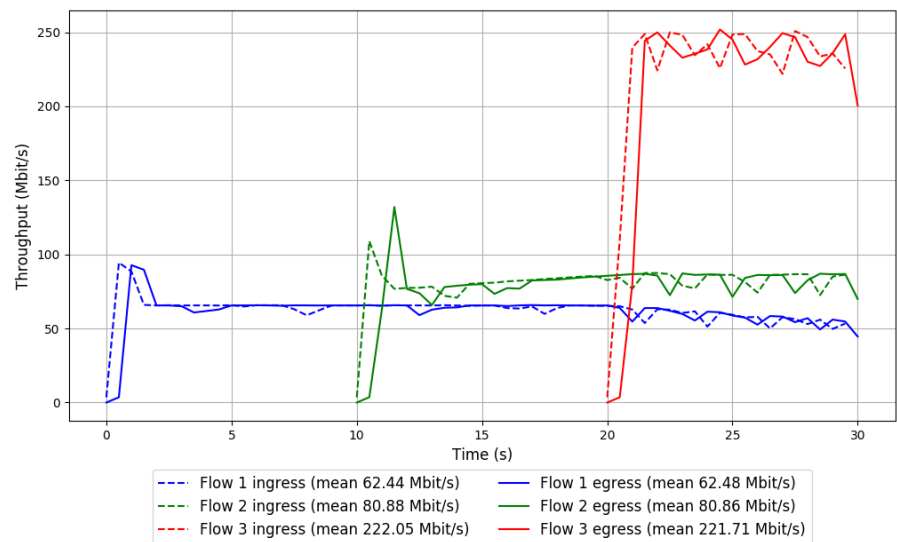
Average throughput: 221.71 Mbit/s

95th percentile per-packet one-way delay: 59.659 ms

Loss rate: 1.14%



Run 9: Report of TCP Vegas — Data Link

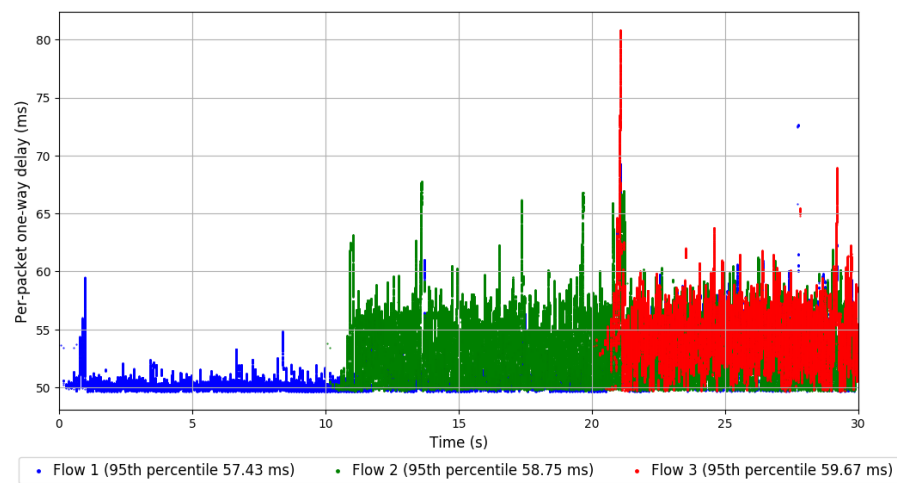
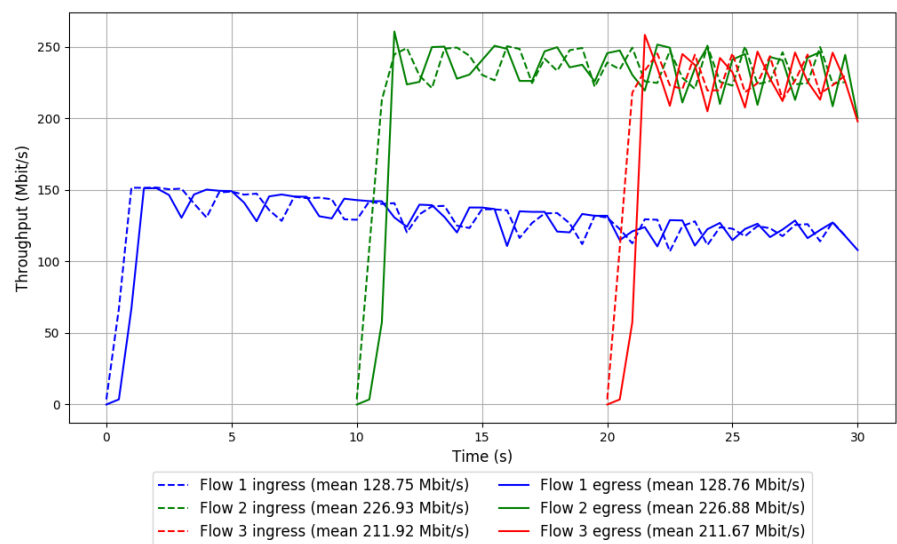


Run 10: Statistics of TCP Vegas

Start at: 2018-05-26 18:07:25  
End at: 2018-05-26 18:07:55  
Local clock offset: -0.203 ms  
Remote clock offset: -0.035 ms

# Below is generated by plot.py at 2018-05-26 20:39:10  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 349.27 Mbit/s  
95th percentile per-packet one-way delay: 58.544 ms  
Loss rate: 0.60%  
-- Flow 1:  
Average throughput: 128.76 Mbit/s  
95th percentile per-packet one-way delay: 57.434 ms  
Loss rate: 0.34%  
-- Flow 2:  
Average throughput: 226.88 Mbit/s  
95th percentile per-packet one-way delay: 58.746 ms  
Loss rate: 0.55%  
-- Flow 3:  
Average throughput: 211.67 Mbit/s  
95th percentile per-packet one-way delay: 59.673 ms  
Loss rate: 1.17%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-05-26 14:22:32

End at: 2018-05-26 14:23:02

Local clock offset: 0.15 ms

Remote clock offset: 0.071 ms

# Below is generated by plot.py at 2018-05-26 20:39:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 377.95 Mbit/s

95th percentile per-packet one-way delay: 123.677 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 235.20 Mbit/s

95th percentile per-packet one-way delay: 115.668 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 176.34 Mbit/s

95th percentile per-packet one-way delay: 125.348 ms

Loss rate: 0.51%

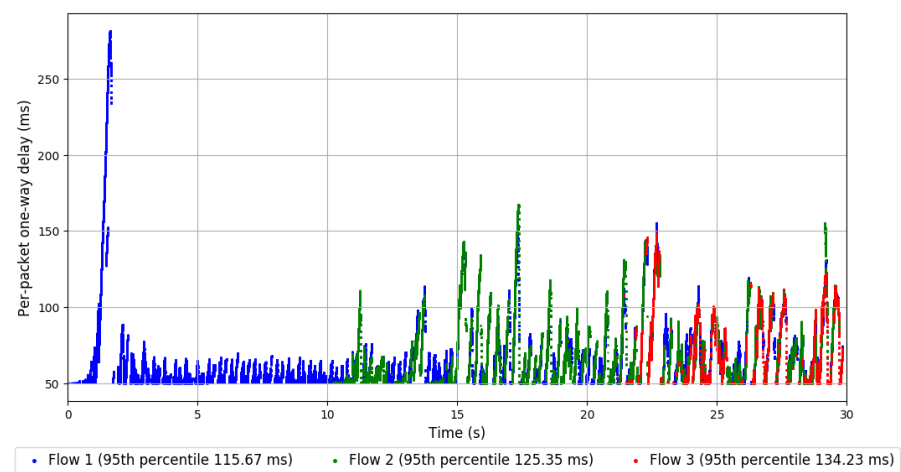
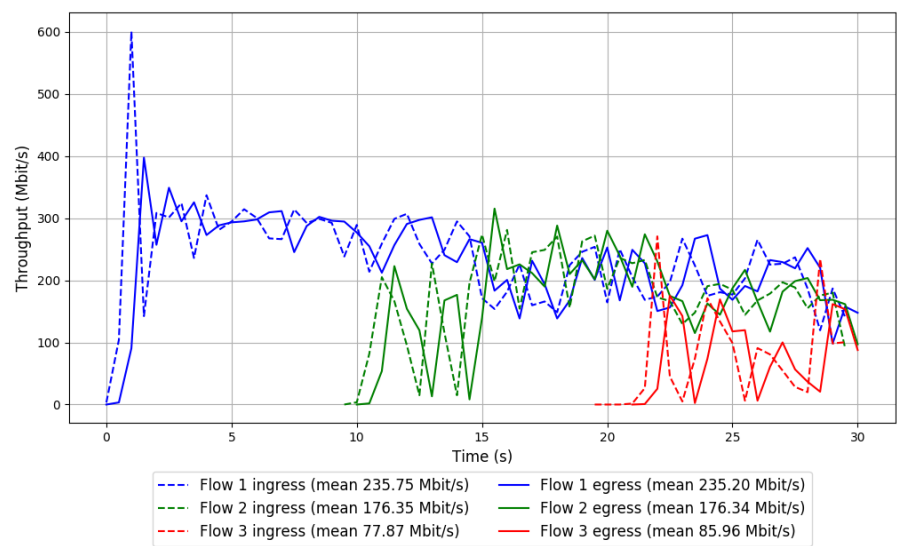
-- Flow 3:

Average throughput: 85.96 Mbit/s

95th percentile per-packet one-way delay: 134.228 ms

Loss rate: 1.98%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-05-26 14:45:36

End at: 2018-05-26 14:46:06

Local clock offset: -0.272 ms

Remote clock offset: 0.123 ms

# Below is generated by plot.py at 2018-05-26 20:39:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 329.85 Mbit/s

95th percentile per-packet one-way delay: 129.472 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 190.87 Mbit/s

95th percentile per-packet one-way delay: 116.878 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 134.25 Mbit/s

95th percentile per-packet one-way delay: 138.633 ms

Loss rate: 0.16%

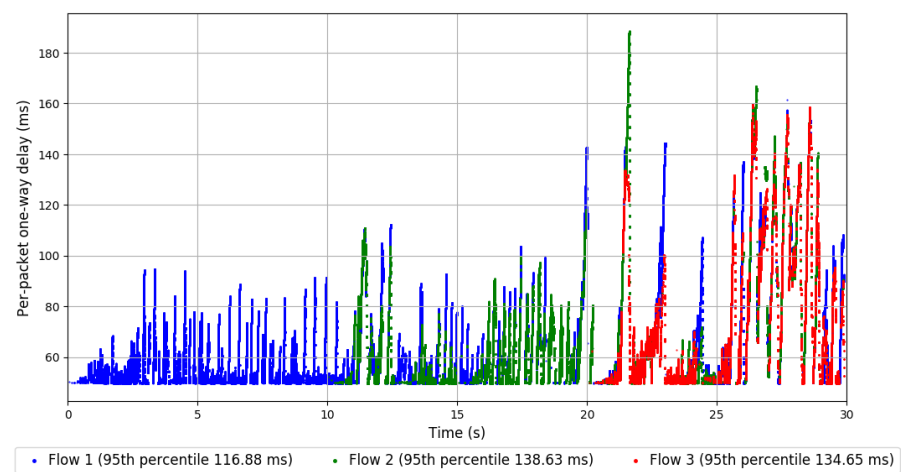
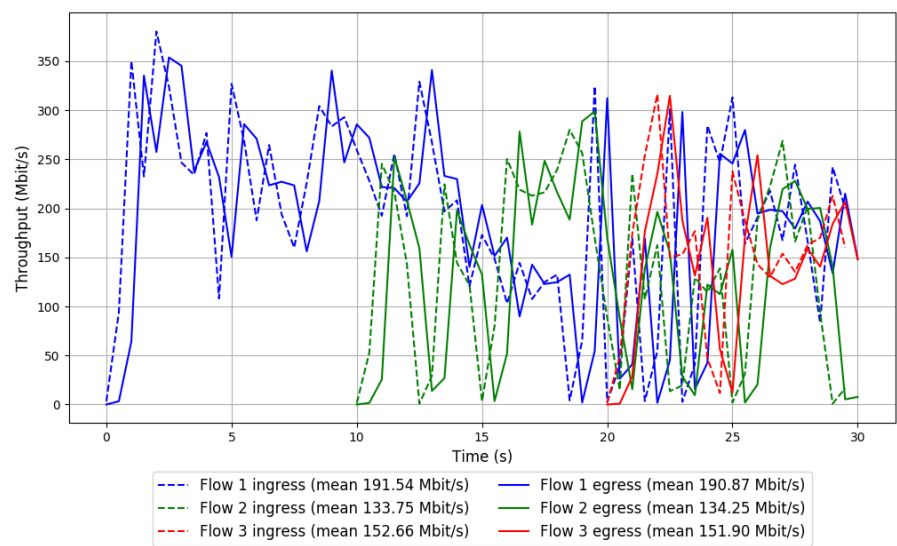
-- Flow 3:

Average throughput: 151.90 Mbit/s

95th percentile per-packet one-way delay: 134.653 ms

Loss rate: 1.53%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-05-26 15:08:42

End at: 2018-05-26 15:09:12

Local clock offset: 0.053 ms

Remote clock offset: 0.229 ms

# Below is generated by plot.py at 2018-05-26 20:40:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 373.21 Mbit/s

95th percentile per-packet one-way delay: 133.366 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 210.53 Mbit/s

95th percentile per-packet one-way delay: 109.875 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 179.23 Mbit/s

95th percentile per-packet one-way delay: 145.327 ms

Loss rate: 0.49%

-- Flow 3:

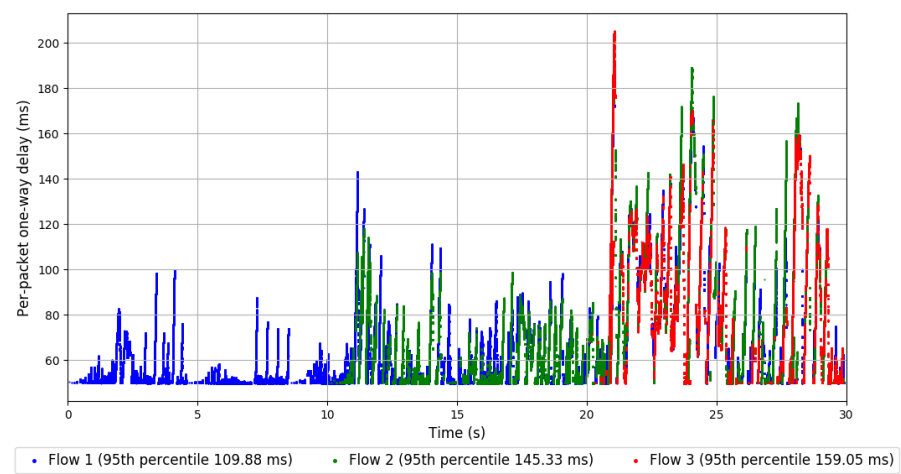
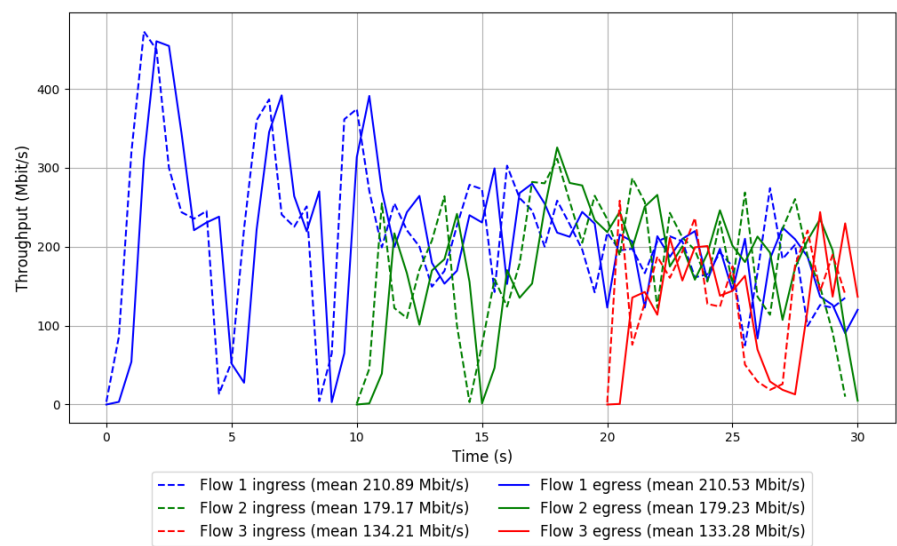
Average throughput: 133.28 Mbit/s

95th percentile per-packet one-way delay: 159.053 ms

Loss rate: 2.30%



Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-05-26 15:31:54

End at: 2018-05-26 15:32:24

Local clock offset: 0.062 ms

Remote clock offset: 0.038 ms

# Below is generated by plot.py at 2018-05-26 20:41:00

# Datalink statistics

-- Total of 3 flows:

Average throughput: 383.75 Mbit/s

95th percentile per-packet one-way delay: 263.318 ms

Loss rate: 7.10%

-- Flow 1:

Average throughput: 294.45 Mbit/s

95th percentile per-packet one-way delay: 267.176 ms

Loss rate: 7.10%

-- Flow 2:

Average throughput: 84.14 Mbit/s

95th percentile per-packet one-way delay: 165.290 ms

Loss rate: 3.58%

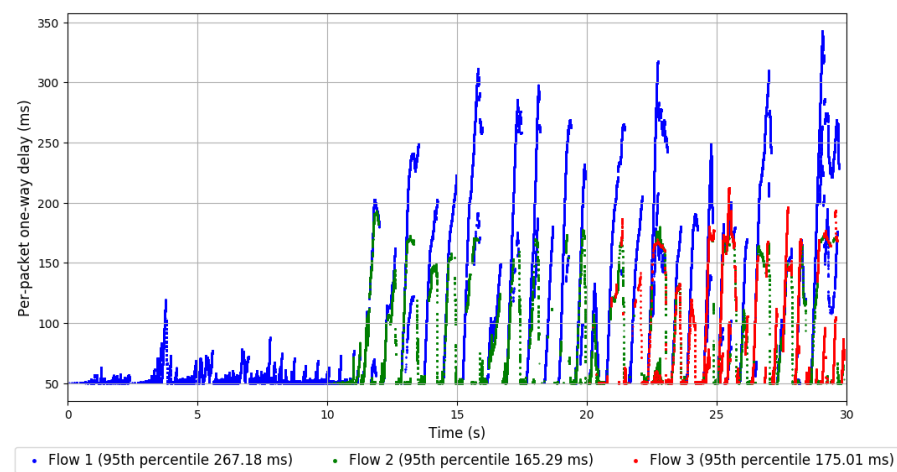
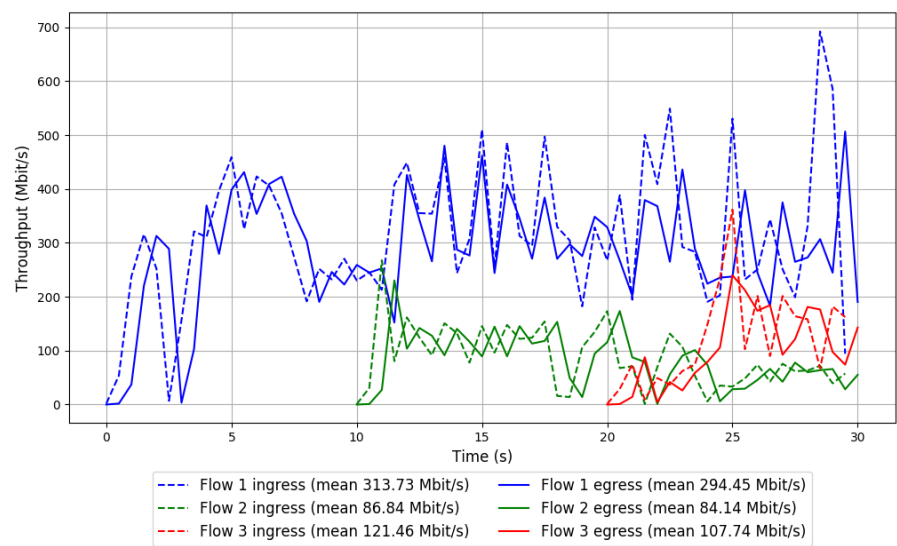
-- Flow 3:

Average throughput: 107.74 Mbit/s

95th percentile per-packet one-way delay: 175.011 ms

Loss rate: 12.21%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-05-26 15:55:38

End at: 2018-05-26 15:56:08

Local clock offset: -0.376 ms

Remote clock offset: 0.125 ms

# Below is generated by plot.py at 2018-05-26 20:42:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 388.65 Mbit/s

95th percentile per-packet one-way delay: 108.548 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 249.66 Mbit/s

95th percentile per-packet one-way delay: 100.867 ms

Loss rate: 0.93%

-- Flow 2:

Average throughput: 149.63 Mbit/s

95th percentile per-packet one-way delay: 114.325 ms

Loss rate: 0.75%

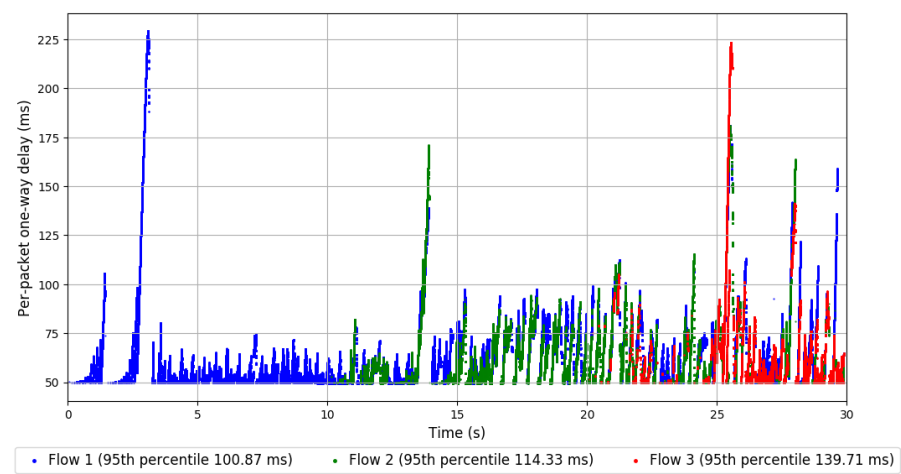
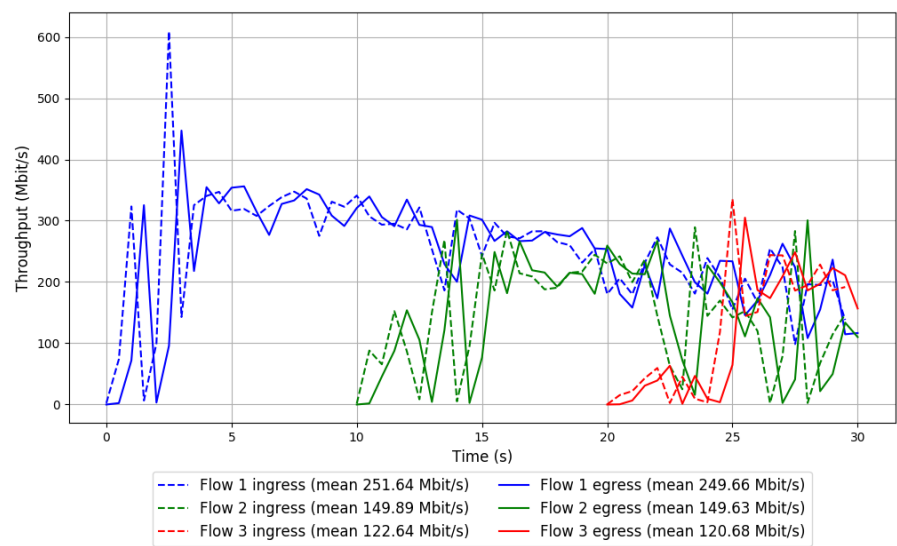
-- Flow 3:

Average throughput: 120.68 Mbit/s

95th percentile per-packet one-way delay: 139.705 ms

Loss rate: 2.57%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-05-26 16:18:37

End at: 2018-05-26 16:19:07

Local clock offset: -0.062 ms

Remote clock offset: 0.051 ms

# Below is generated by plot.py at 2018-05-26 20:42:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 368.38 Mbit/s

95th percentile per-packet one-way delay: 165.136 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 264.78 Mbit/s

95th percentile per-packet one-way delay: 166.621 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 111.58 Mbit/s

95th percentile per-packet one-way delay: 171.083 ms

Loss rate: 0.79%

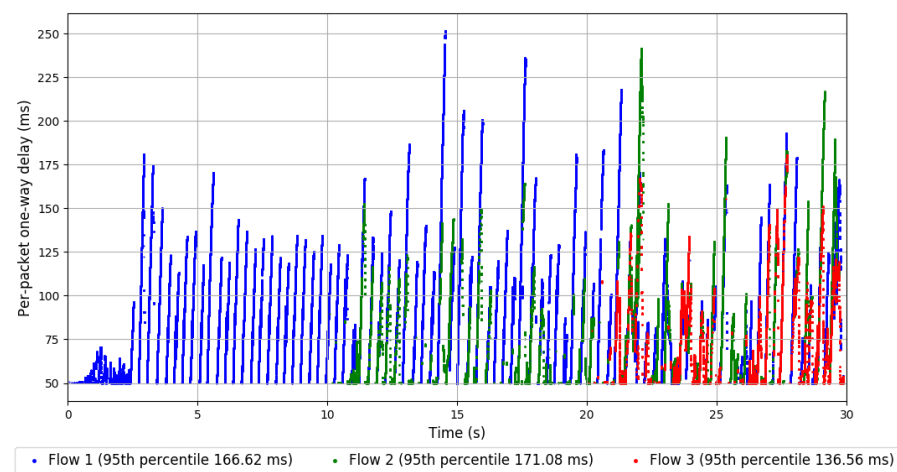
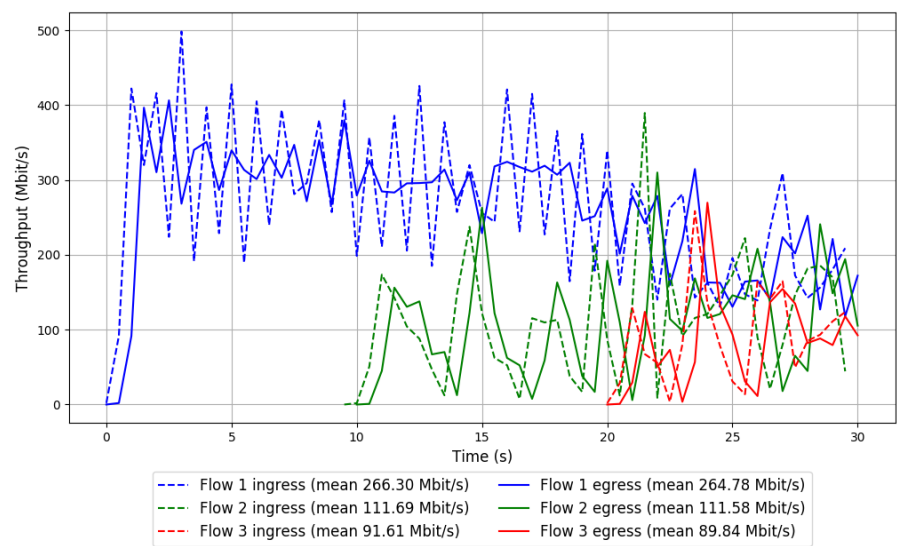
-- Flow 3:

Average throughput: 89.84 Mbit/s

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

Loss rate: 2.97%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-05-26 16:41:46

End at: 2018-05-26 16:42:16

Local clock offset: 0.434 ms

Remote clock offset: 0.09 ms

# Below is generated by plot.py at 2018-05-26 20:44:14

# Datalink statistics

-- Total of 3 flows:

Average throughput: 363.89 Mbit/s

95th percentile per-packet one-way delay: 115.805 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 222.11 Mbit/s

95th percentile per-packet one-way delay: 104.344 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 150.47 Mbit/s

95th percentile per-packet one-way delay: 112.725 ms

Loss rate: 0.67%

-- Flow 3:

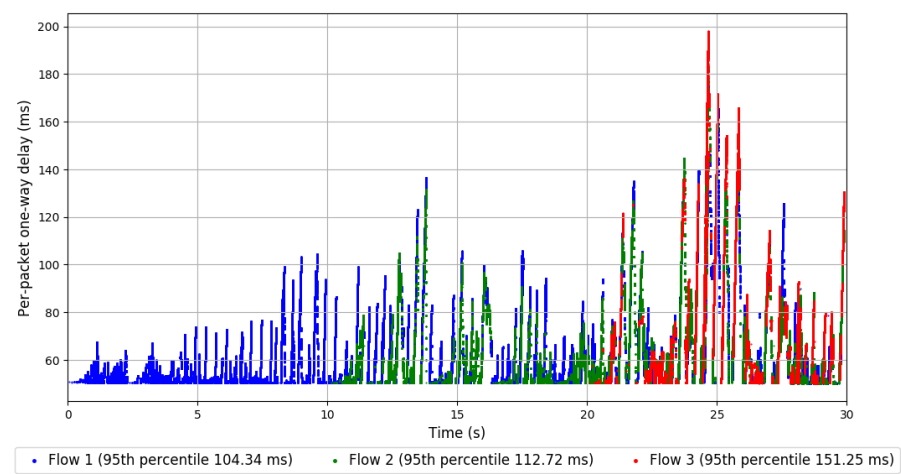
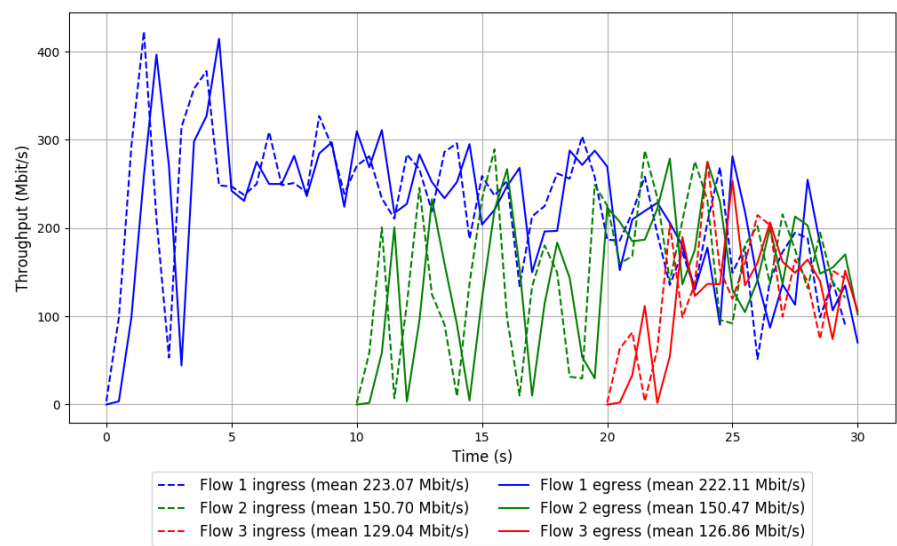
Average throughput: 126.86 Mbit/s

95th percentile per-packet one-way delay: 151.249 ms

Loss rate: 2.38%



Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-05-26 17:04:23

End at: 2018-05-26 17:04:53

Local clock offset: -0.04 ms

Remote clock offset: 0.033 ms

# Below is generated by plot.py at 2018-05-26 20:45:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 359.27 Mbit/s

95th percentile per-packet one-way delay: 167.857 ms

Loss rate: 1.12%

-- Flow 1:

Average throughput: 251.18 Mbit/s

95th percentile per-packet one-way delay: 172.820 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 115.03 Mbit/s

95th percentile per-packet one-way delay: 131.430 ms

Loss rate: 2.54%

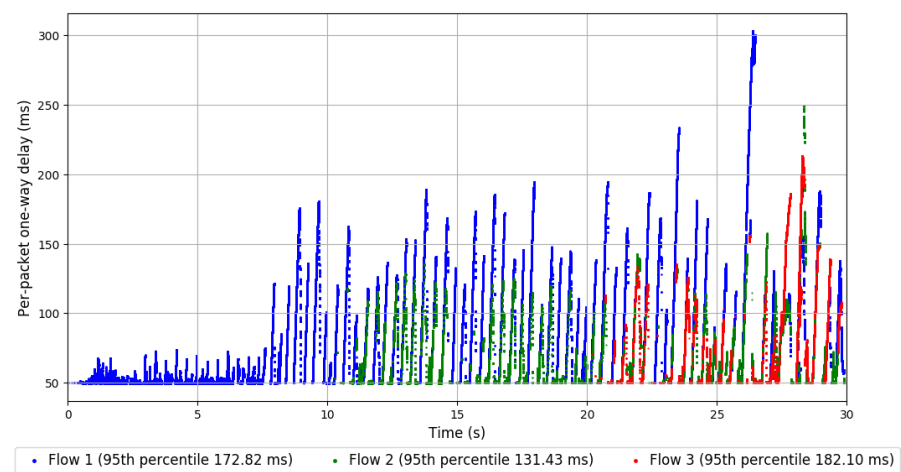
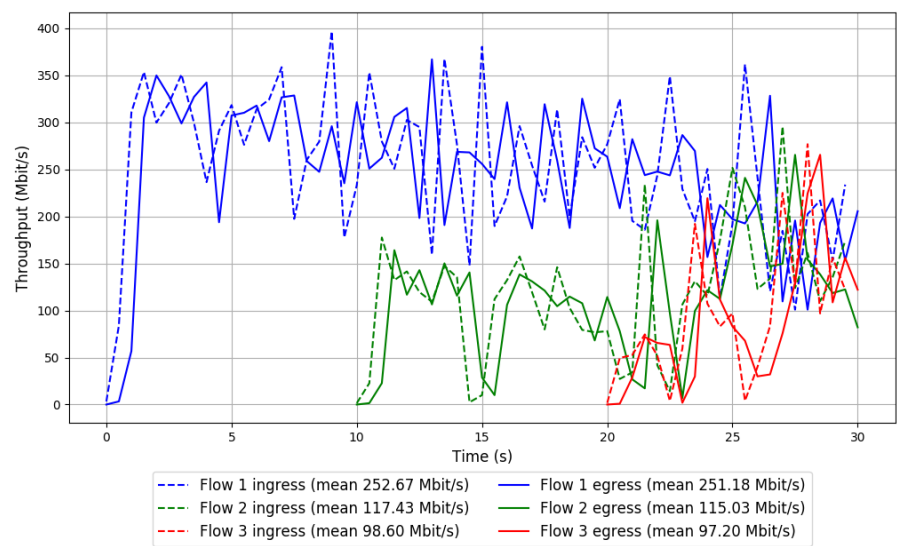
-- Flow 3:

Average throughput: 97.20 Mbit/s

95th percentile per-packet one-way delay: 182.098 ms

Loss rate: 0.86%

Run 8: Report of Verus — Data Link

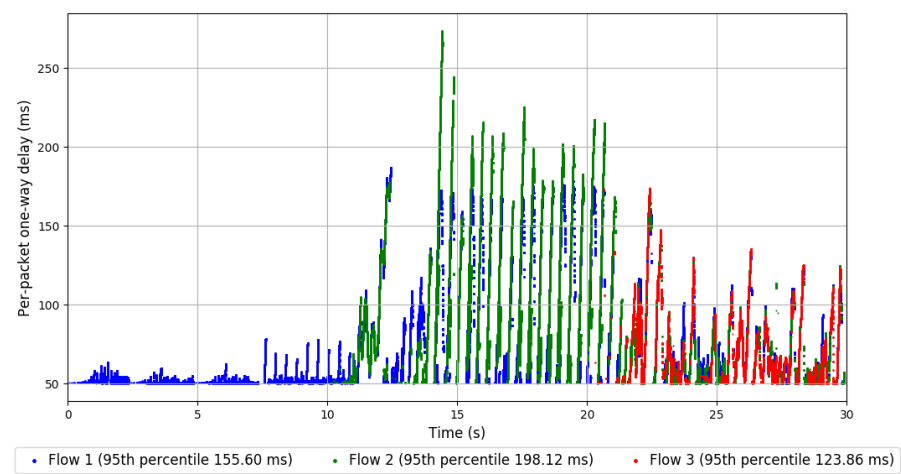
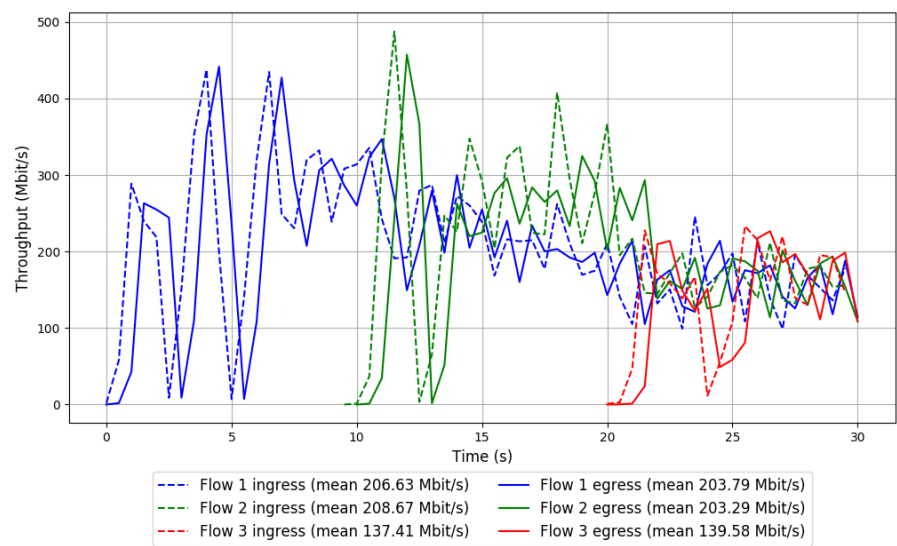


Run 9: Statistics of Verus

Start at: 2018-05-26 17:27:40  
End at: 2018-05-26 17:28:10  
Local clock offset: 0.028 ms  
Remote clock offset: -0.004 ms

# Below is generated by plot.py at 2018-05-26 20:46:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 383.60 Mbit/s  
95th percentile per-packet one-way delay: 173.054 ms  
Loss rate: 2.23%  
-- Flow 1:  
Average throughput: 203.79 Mbit/s  
95th percentile per-packet one-way delay: 155.601 ms  
Loss rate: 1.71%  
-- Flow 2:  
Average throughput: 203.29 Mbit/s  
95th percentile per-packet one-way delay: 198.116 ms  
Loss rate: 3.03%  
-- Flow 3:  
Average throughput: 139.58 Mbit/s  
95th percentile per-packet one-way delay: 123.863 ms  
Loss rate: 2.13%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-05-26 17:51:20

End at: 2018-05-26 17:51:50

Local clock offset: 0.081 ms

Remote clock offset: 0.242 ms

# Below is generated by plot.py at 2018-05-26 20:46:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 304.44 Mbit/s

95th percentile per-packet one-way delay: 105.092 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 144.15 Mbit/s

95th percentile per-packet one-way delay: 123.762 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 191.67 Mbit/s

95th percentile per-packet one-way delay: 80.372 ms

Loss rate: 0.66%

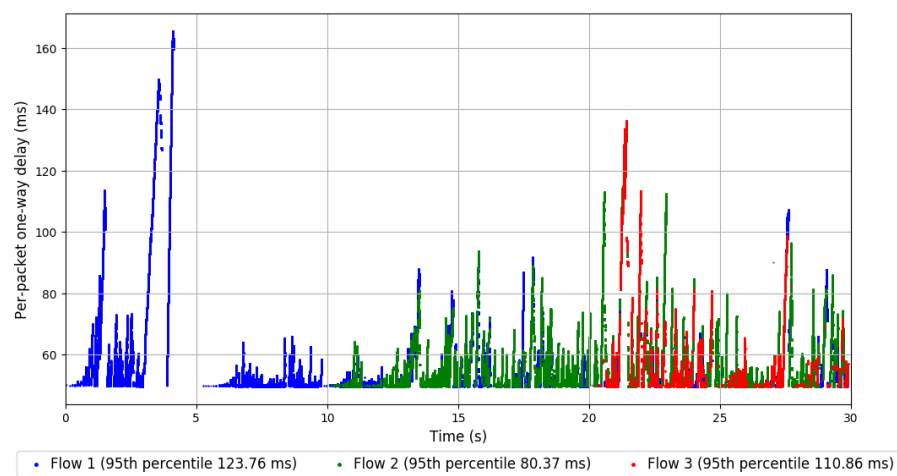
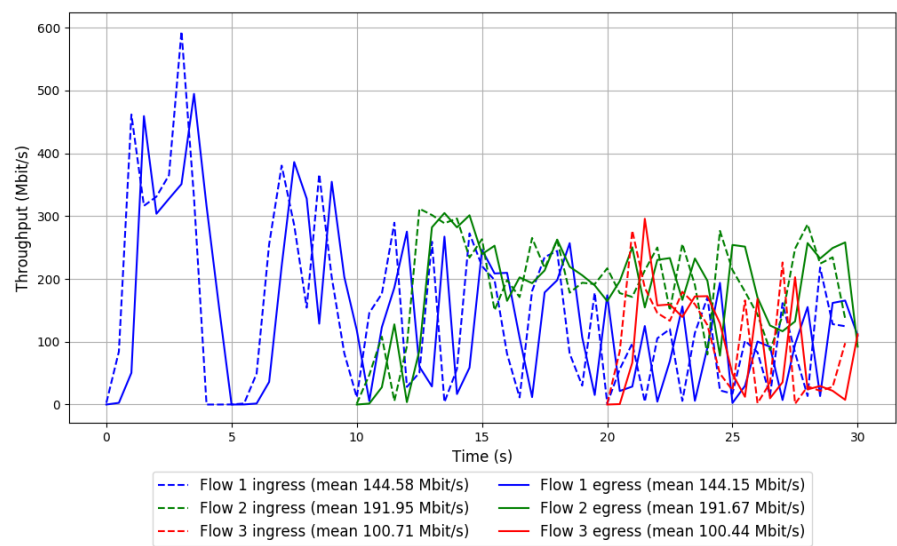
-- Flow 3:

Average throughput: 100.44 Mbit/s

95th percentile per-packet one-way delay: 110.864 ms

Loss rate: 0.33%

Run 10: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2018-05-26 14:33:01

End at: 2018-05-26 14:33:31

Local clock offset: 0.439 ms

Remote clock offset: 0.135 ms

# Below is generated by plot.py at 2018-05-26 20:50:42

# Datalink statistics

-- Total of 3 flows:

Average throughput: 522.85 Mbit/s

95th percentile per-packet one-way delay: 54.223 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 308.14 Mbit/s

95th percentile per-packet one-way delay: 57.365 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 279.04 Mbit/s

95th percentile per-packet one-way delay: 53.748 ms

Loss rate: 0.74%

-- Flow 3:

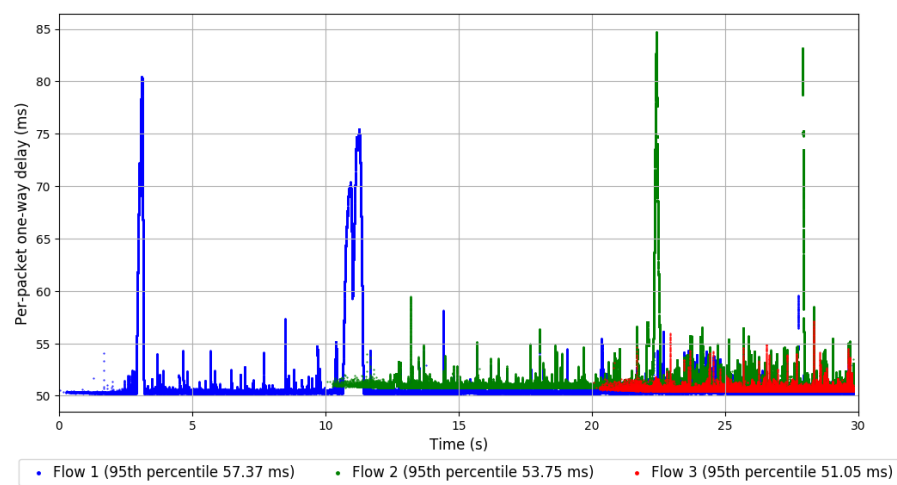
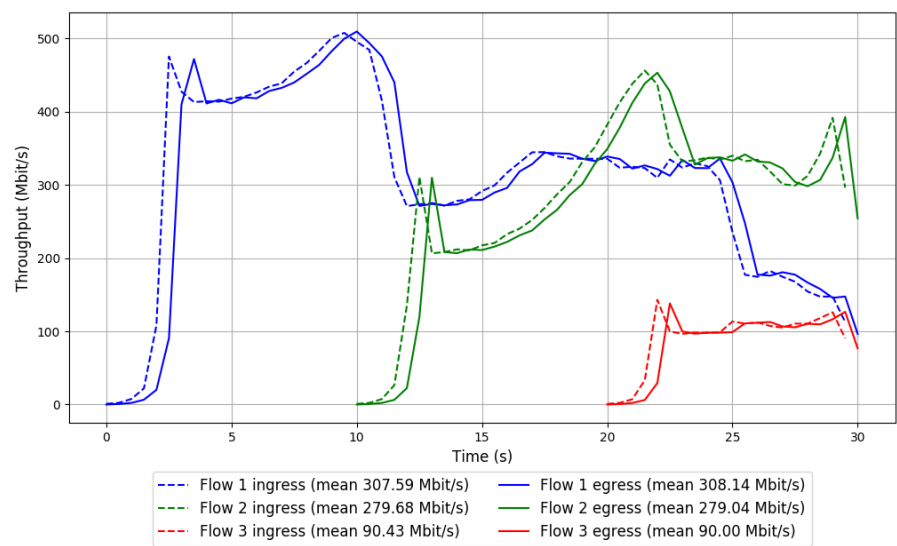
Average throughput: 90.00 Mbit/s

95th percentile per-packet one-way delay: 51.050 ms

Loss rate: 1.51%



Run 1: Report of PCC-Vivace — Data Link

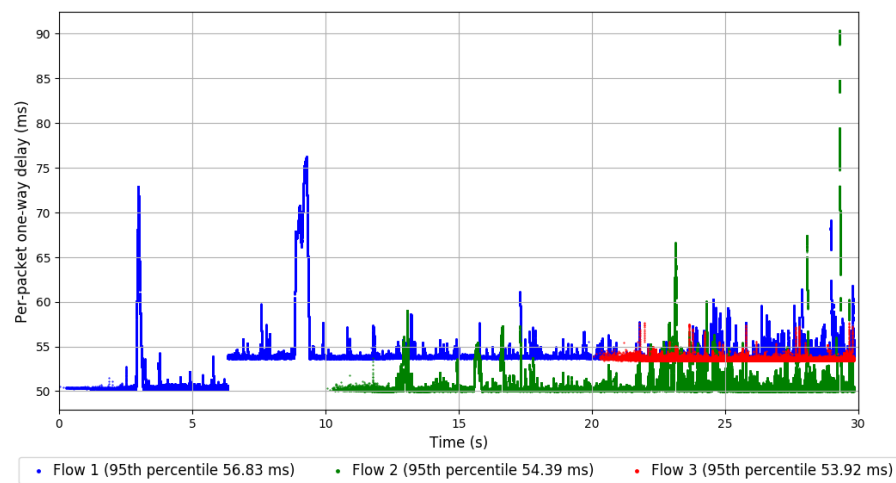
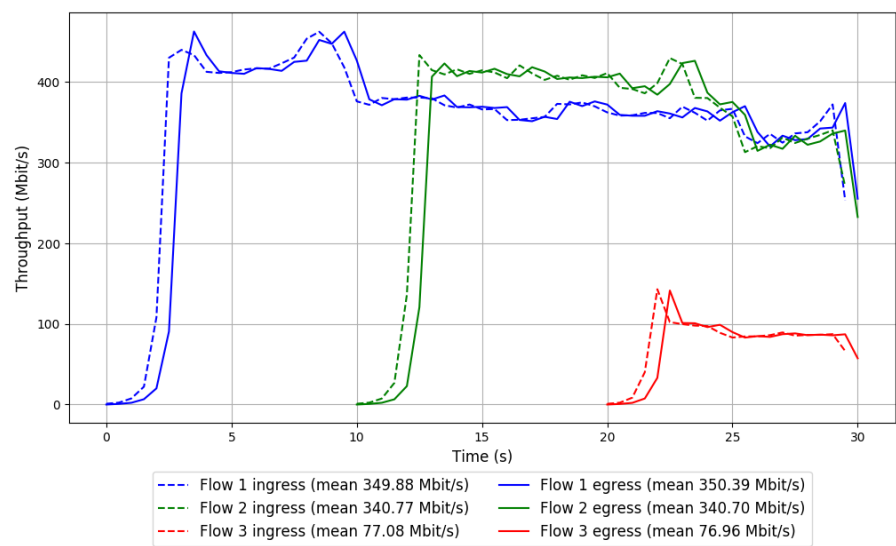


Run 2: Statistics of PCC-Vivace

Start at: 2018-05-26 14:56:01  
End at: 2018-05-26 14:56:31  
Local clock offset: -0.112 ms  
Remote clock offset: -0.004 ms

# Below is generated by plot.py at 2018-05-26 20:52:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 601.88 Mbit/s  
95th percentile per-packet one-way delay: 55.713 ms  
Loss rate: 0.37%  
-- Flow 1:  
Average throughput: 350.39 Mbit/s  
95th percentile per-packet one-way delay: 56.827 ms  
Loss rate: 0.20%  
-- Flow 2:  
Average throughput: 340.70 Mbit/s  
95th percentile per-packet one-way delay: 54.389 ms  
Loss rate: 0.53%  
-- Flow 3:  
Average throughput: 76.96 Mbit/s  
95th percentile per-packet one-way delay: 53.923 ms  
Loss rate: 1.23%

Run 2: Report of PCC-Vivace — Data Link

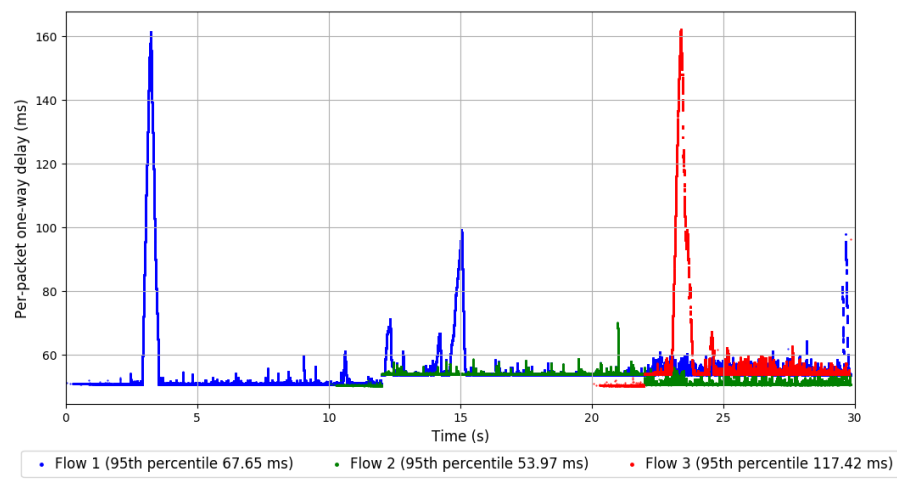
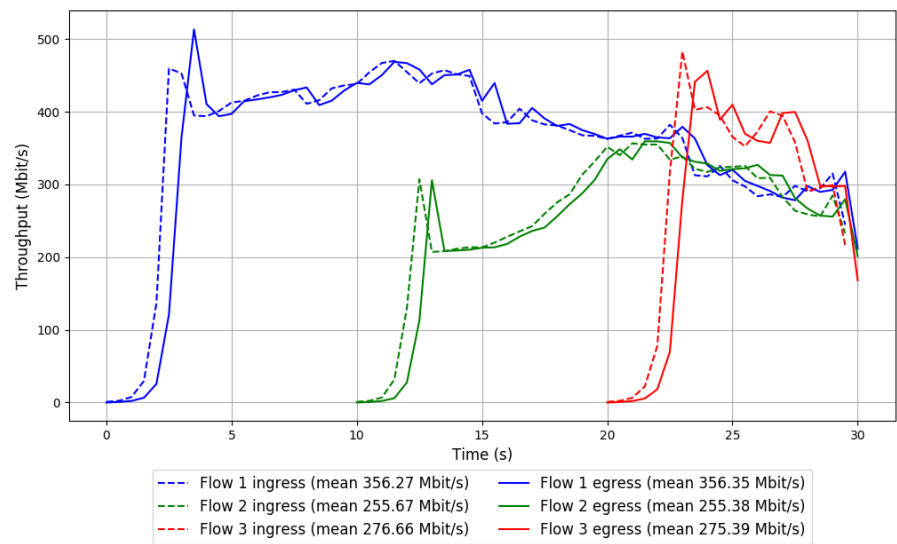


Run 3: Statistics of PCC-Vivace

Start at: 2018-05-26 15:19:13  
End at: 2018-05-26 15:19:43  
Local clock offset: 0.105 ms  
Remote clock offset: -0.043 ms

# Below is generated by plot.py at 2018-05-26 20:53:57  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 616.16 Mbit/s  
95th percentile per-packet one-way delay: 66.205 ms  
Loss rate: 0.57%  
-- Flow 1:  
Average throughput: 356.35 Mbit/s  
95th percentile per-packet one-way delay: 67.649 ms  
Loss rate: 0.32%  
-- Flow 2:  
Average throughput: 255.38 Mbit/s  
95th percentile per-packet one-way delay: 53.973 ms  
Loss rate: 0.62%  
-- Flow 3:  
Average throughput: 275.39 Mbit/s  
95th percentile per-packet one-way delay: 117.424 ms  
Loss rate: 1.46%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2018-05-26 15:42:53

End at: 2018-05-26 15:43:23

Local clock offset: -0.228 ms

Remote clock offset: 0.028 ms

# Below is generated by plot.py at 2018-05-26 20:54:40

# Datalink statistics

-- Total of 3 flows:

Average throughput: 612.78 Mbit/s

95th percentile per-packet one-way delay: 64.321 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 349.70 Mbit/s

95th percentile per-packet one-way delay: 56.545 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 260.51 Mbit/s

95th percentile per-packet one-way delay: 56.179 ms

Loss rate: 0.72%

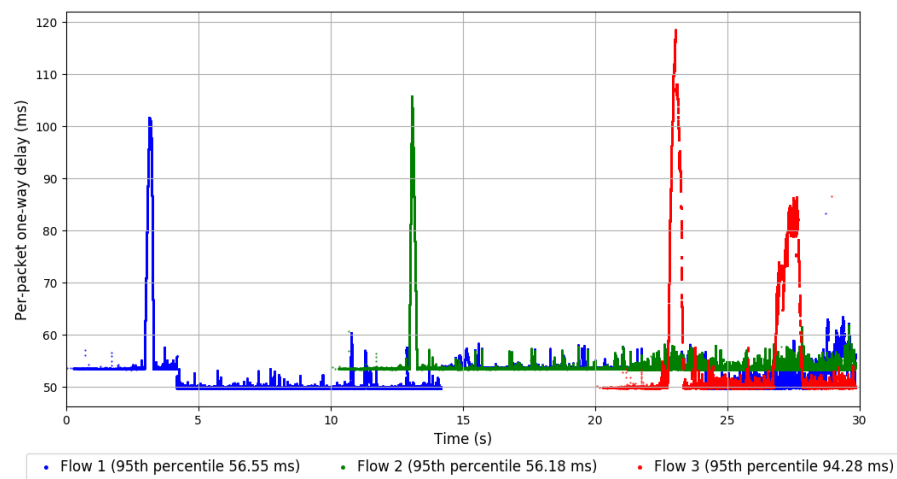
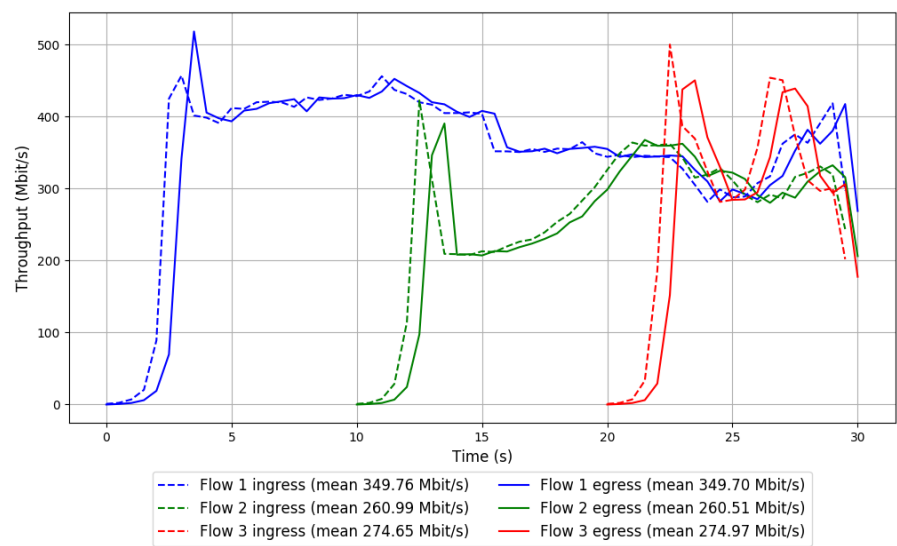
-- Flow 3:

Average throughput: 274.97 Mbit/s

95th percentile per-packet one-way delay: 94.285 ms

Loss rate: 0.91%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2018-05-26 16:06:18

End at: 2018-05-26 16:06:48

Local clock offset: -0.115 ms

Remote clock offset: 0.116 ms

# Below is generated by plot.py at 2018-05-26 20:54:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 515.45 Mbit/s

95th percentile per-packet one-way delay: 98.330 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 330.91 Mbit/s

95th percentile per-packet one-way delay: 80.707 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 253.50 Mbit/s

95th percentile per-packet one-way delay: 116.403 ms

Loss rate: 0.47%

-- Flow 3:

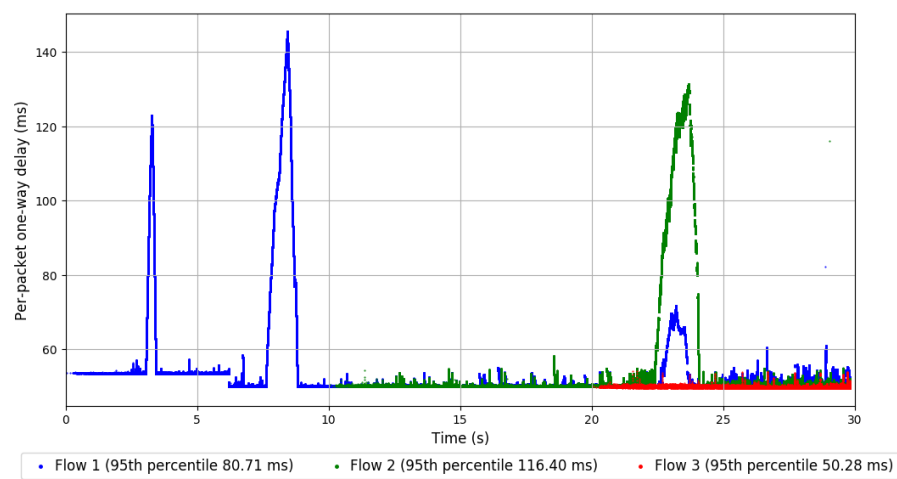
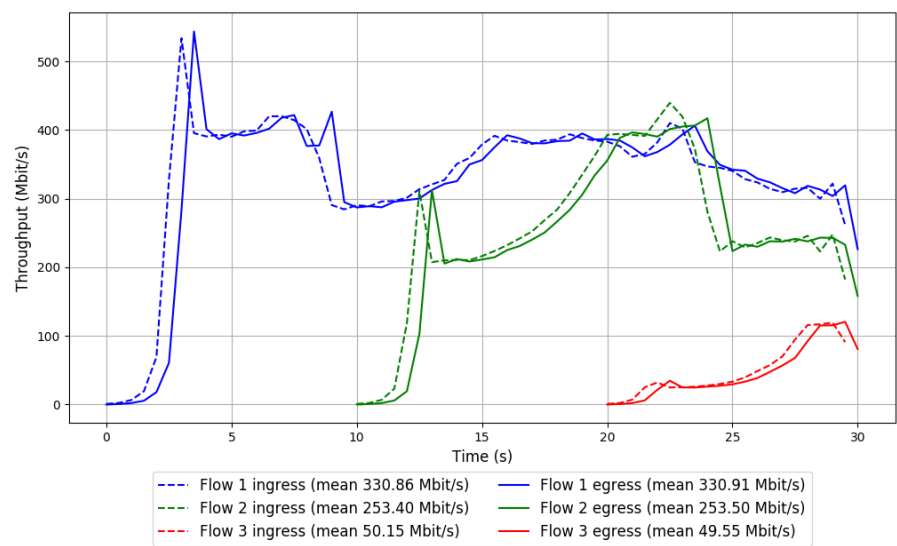
Average throughput: 49.55 Mbit/s

95th percentile per-packet one-way delay: 50.277 ms

Loss rate: 2.20%



Run 5: Report of PCC-Vivace — Data Link

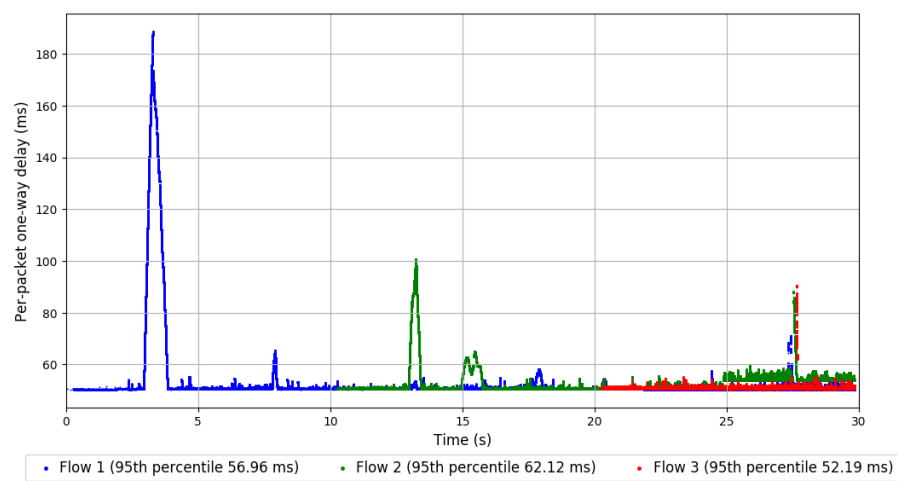
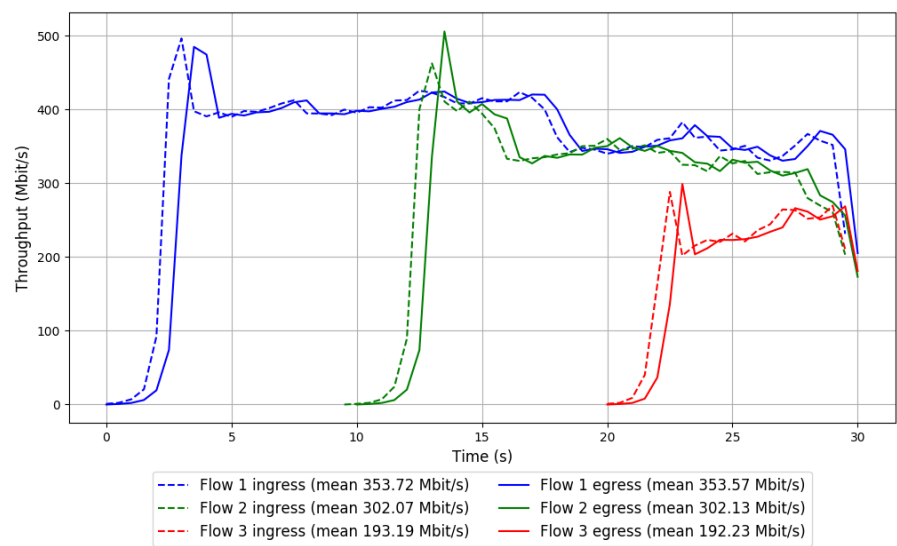


Run 6: Statistics of PCC-Vivace

Start at: 2018-05-26 16:29:13  
End at: 2018-05-26 16:29:43  
Local clock offset: 0.314 ms  
Remote clock offset: -0.076 ms

# Below is generated by plot.py at 2018-05-26 20:56:29  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 617.30 Mbit/s  
95th percentile per-packet one-way delay: 59.232 ms  
Loss rate: 0.53%  
-- Flow 1:  
Average throughput: 353.57 Mbit/s  
95th percentile per-packet one-way delay: 56.958 ms  
Loss rate: 0.38%  
-- Flow 2:  
Average throughput: 302.13 Mbit/s  
95th percentile per-packet one-way delay: 62.116 ms  
Loss rate: 0.49%  
-- Flow 3:  
Average throughput: 192.23 Mbit/s  
95th percentile per-packet one-way delay: 52.191 ms  
Loss rate: 1.52%

Run 6: Report of PCC-Vivace — Data Link

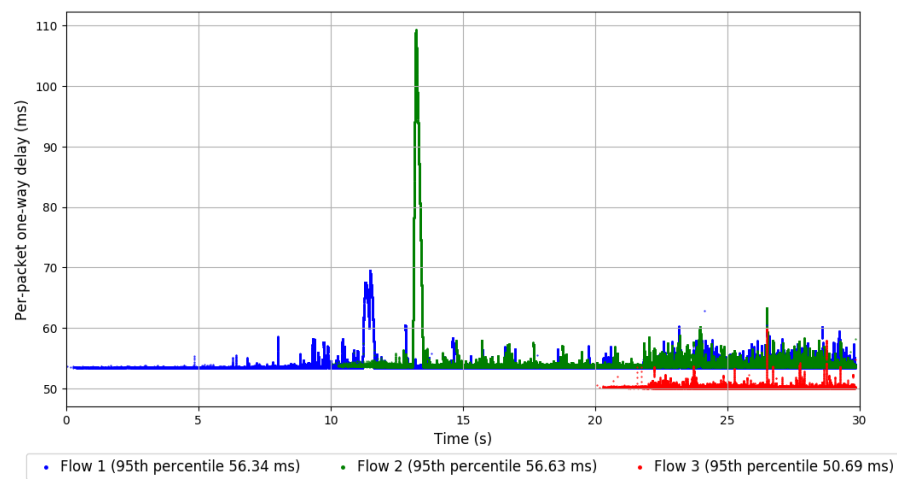
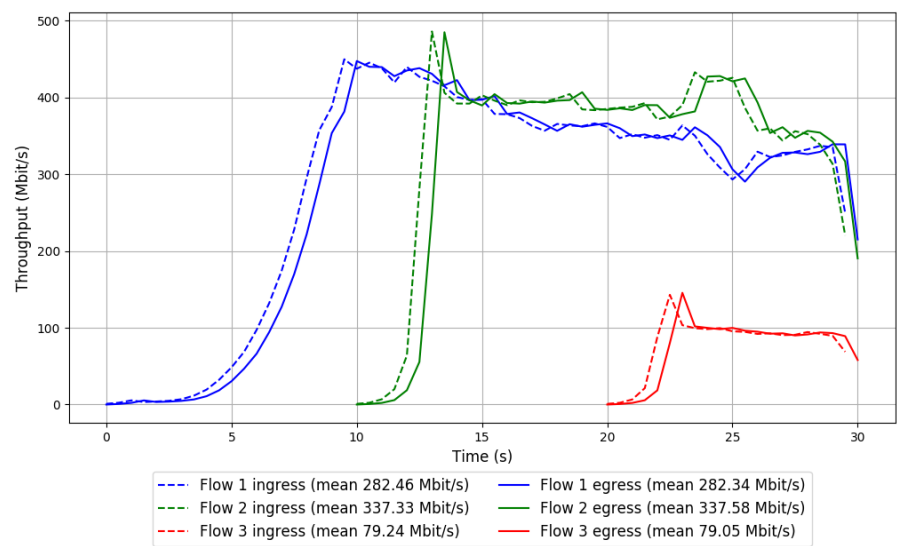


Run 7: Statistics of PCC-Vivace

Start at: 2018-05-26 16:52:05  
End at: 2018-05-26 16:52:35  
Local clock offset: 0.103 ms  
Remote clock offset: -0.237 ms

# Below is generated by plot.py at 2018-05-26 20:56:29  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 532.33 Mbit/s  
95th percentile per-packet one-way delay: 56.350 ms  
Loss rate: 0.45%  
-- Flow 1:  
Average throughput: 282.34 Mbit/s  
95th percentile per-packet one-way delay: 56.343 ms  
Loss rate: 0.40%  
-- Flow 2:  
Average throughput: 337.58 Mbit/s  
95th percentile per-packet one-way delay: 56.631 ms  
Loss rate: 0.43%  
-- Flow 3:  
Average throughput: 79.05 Mbit/s  
95th percentile per-packet one-way delay: 50.687 ms  
Loss rate: 1.26%

Run 7: Report of PCC-Vivace — Data Link



Run 8: Statistics of PCC-Vivace

Start at: 2018-05-26 17:14:56

End at: 2018-05-26 17:15:26

Local clock offset: -0.294 ms

Remote clock offset: 0.081 ms

# Below is generated by plot.py at 2018-05-26 20:56:38

# Datalink statistics

-- Total of 3 flows:

Average throughput: 571.64 Mbit/s

95th percentile per-packet one-way delay: 69.476 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 333.66 Mbit/s

95th percentile per-packet one-way delay: 71.896 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 278.37 Mbit/s

95th percentile per-packet one-way delay: 84.026 ms

Loss rate: 1.55%

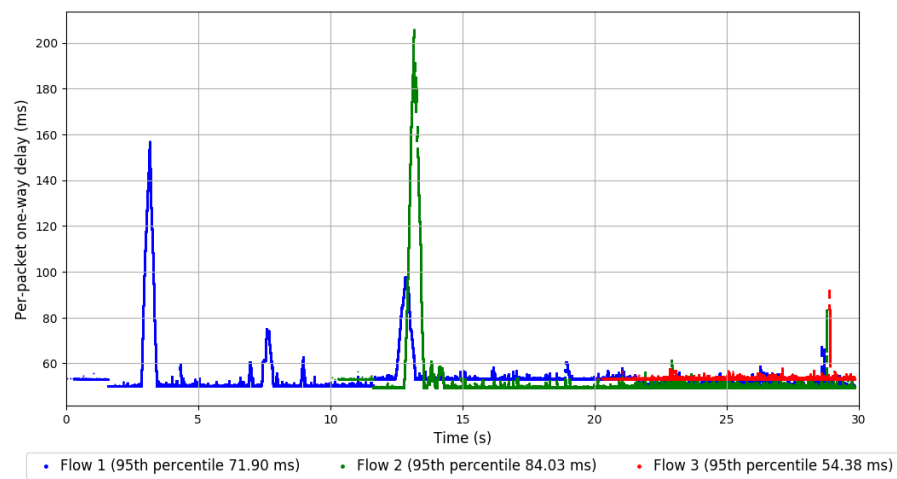
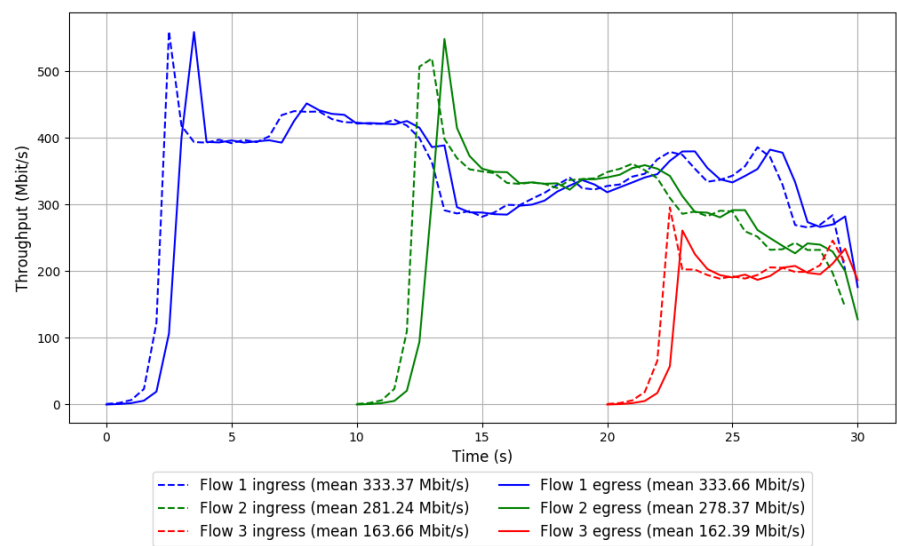
-- Flow 3:

Average throughput: 162.39 Mbit/s

95th percentile per-packet one-way delay: 54.385 ms

Loss rate: 1.83%

Run 8: Report of PCC-Vivace — Data Link



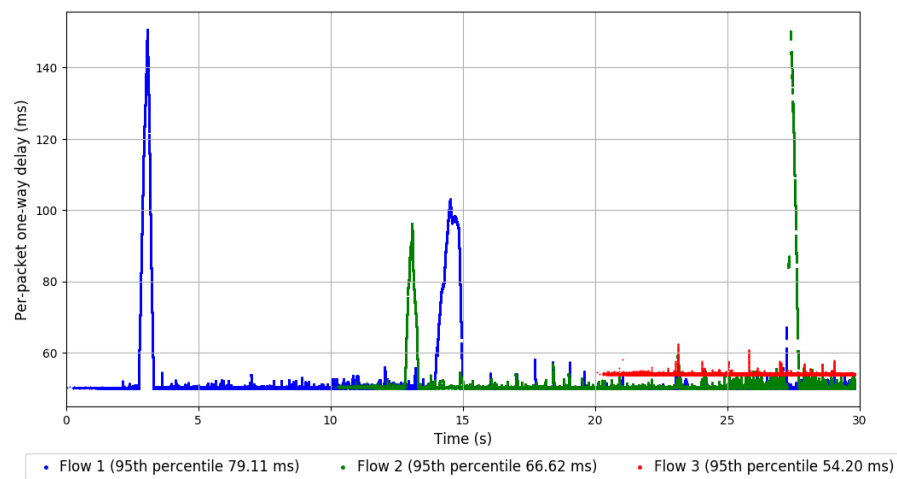
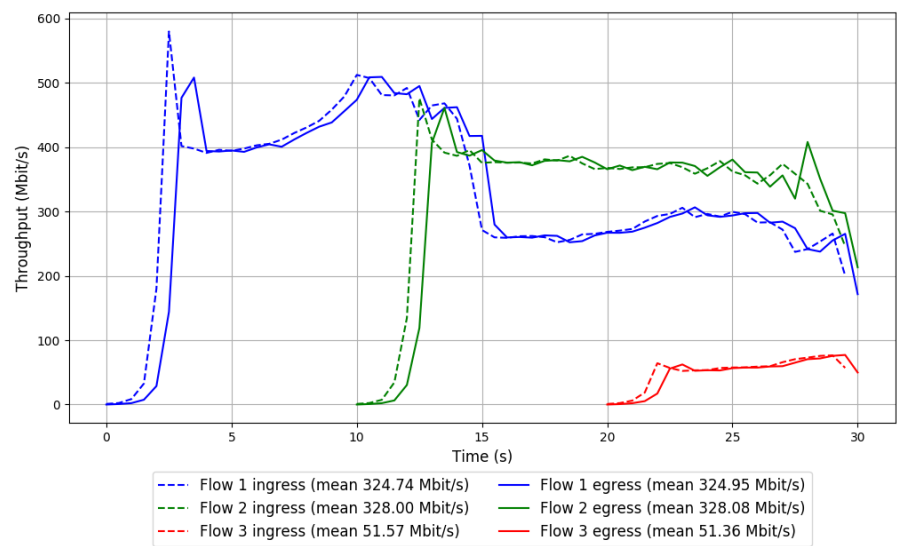
Run 9: Statistics of PCC-Vivace

Start at: 2018-05-26 17:38:30  
End at: 2018-05-26 17:39:00  
Local clock offset: -0.06 ms  
Remote clock offset: -0.208 ms

# Below is generated by plot.py at 2018-05-26 20:57:26  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 559.57 Mbit/s  
95th percentile per-packet one-way delay: 73.494 ms  
Loss rate: 0.40%  
-- Flow 1:  
Average throughput: 324.95 Mbit/s  
95th percentile per-packet one-way delay: 79.108 ms  
Loss rate: 0.28%  
-- Flow 2:  
Average throughput: 328.08 Mbit/s  
95th percentile per-packet one-way delay: 66.621 ms  
Loss rate: 0.49%  
-- Flow 3:  
Average throughput: 51.36 Mbit/s  
95th percentile per-packet one-way delay: 54.202 ms  
Loss rate: 1.47%



Run 9: Report of PCC-Vivace — Data Link



Run 10: Statistics of PCC-Vivace

Start at: 2018-05-26 18:01:54

End at: 2018-05-26 18:02:24

Local clock offset: 0.395 ms

Remote clock offset: 0.113 ms

# Below is generated by plot.py at 2018-05-26 20:57:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 588.86 Mbit/s

95th percentile per-packet one-way delay: 89.255 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 350.25 Mbit/s

95th percentile per-packet one-way delay: 52.622 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 347.67 Mbit/s

95th percentile per-packet one-way delay: 99.731 ms

Loss rate: 0.39%

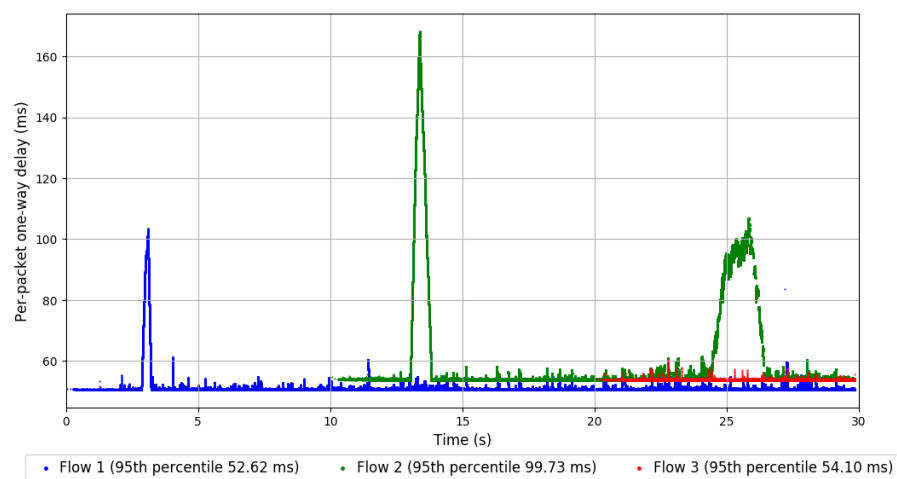
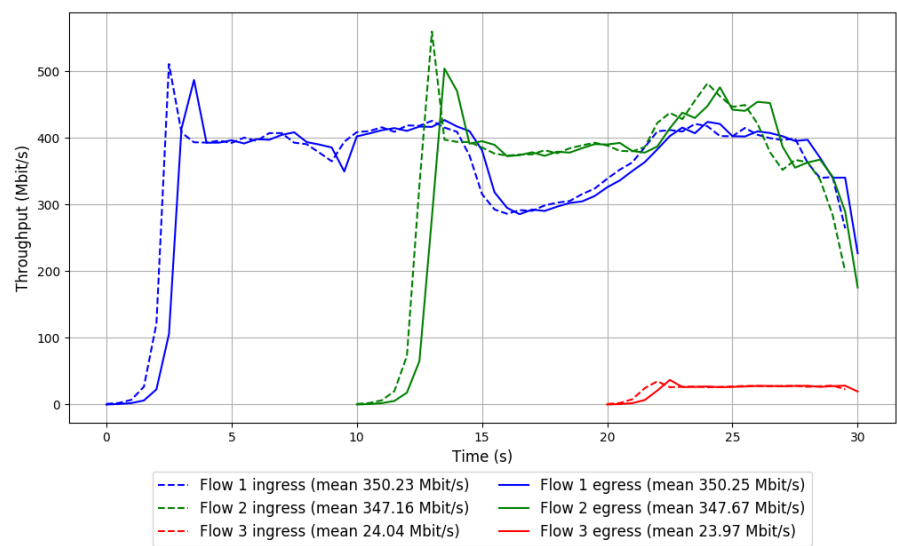
-- Flow 3:

Average throughput: 23.97 Mbit/s

95th percentile per-packet one-way delay: 54.099 ms

Loss rate: 1.34%

Run 10: Report of PCC-Vivace — Data Link

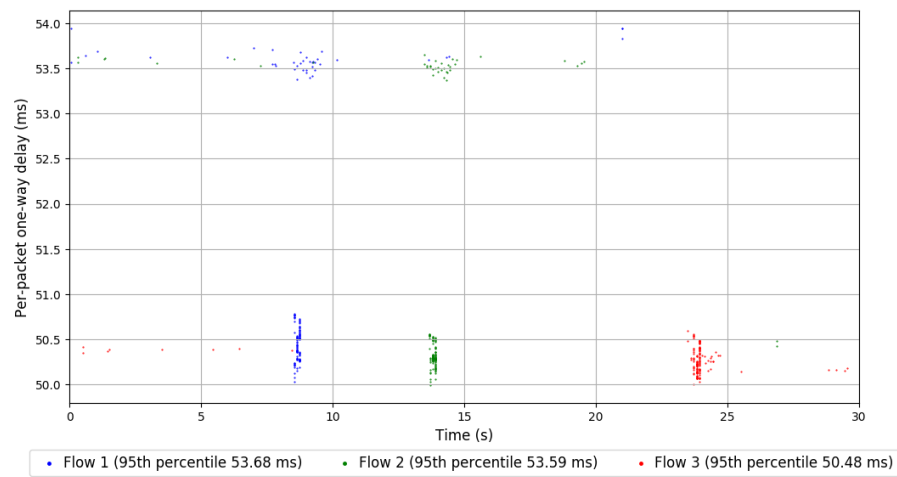
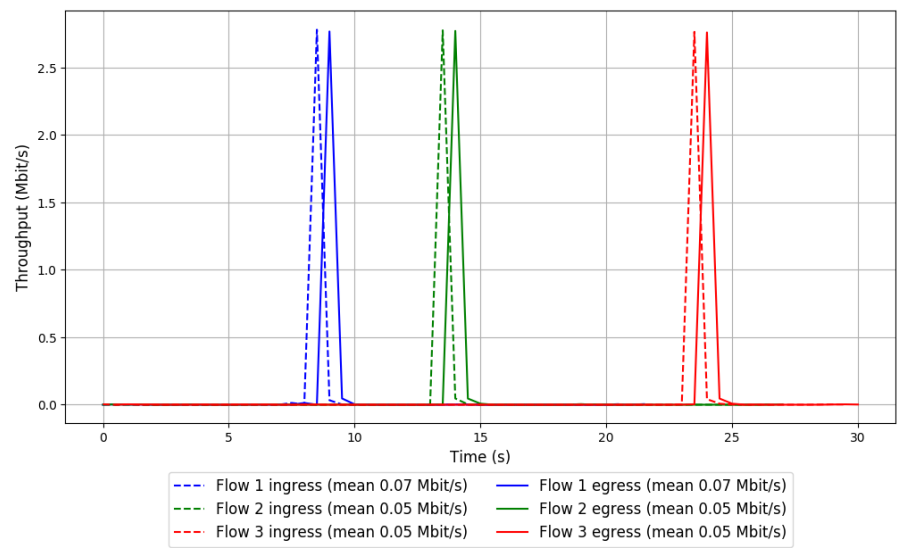


```
Run 1: Statistics of WebRTC media

Start at: 2018-05-26 14:29:15
End at: 2018-05-26 14:29:45
Local clock offset: -0.038 ms
Remote clock offset: 0.165 ms

# Below is generated by plot.py at 2018-05-26 20:57:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 53.601 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 53.678 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 53.591 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 50.485 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-05-26 14:52:16

End at: 2018-05-26 14:52:46

Local clock offset: -0.146 ms

Remote clock offset: 0.172 ms

# Below is generated by plot.py at 2018-05-26 20:57:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 53.527 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 50.360 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 50.355 ms

Loss rate: 0.00%

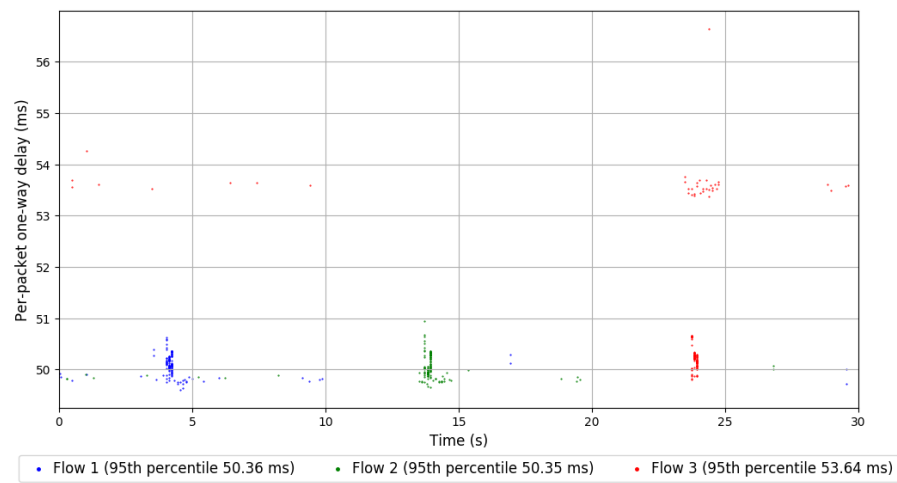
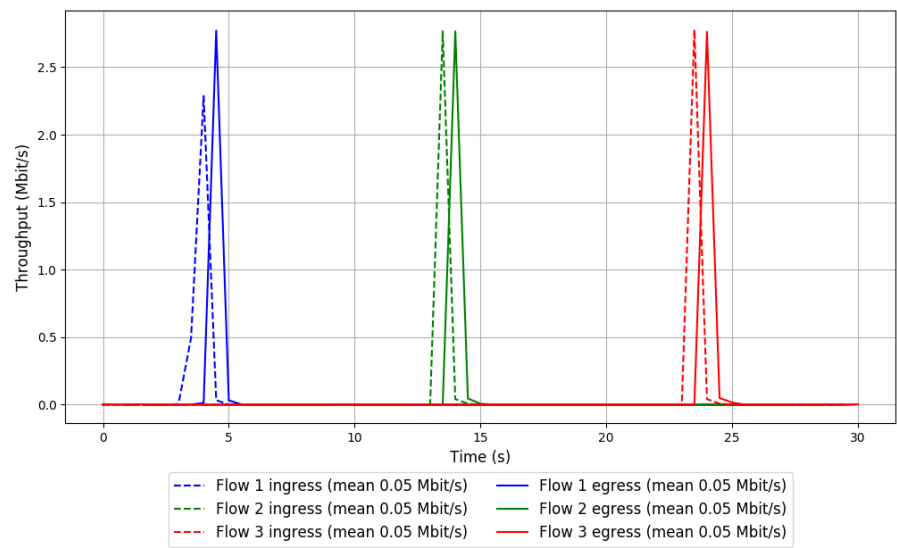
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 53.643 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



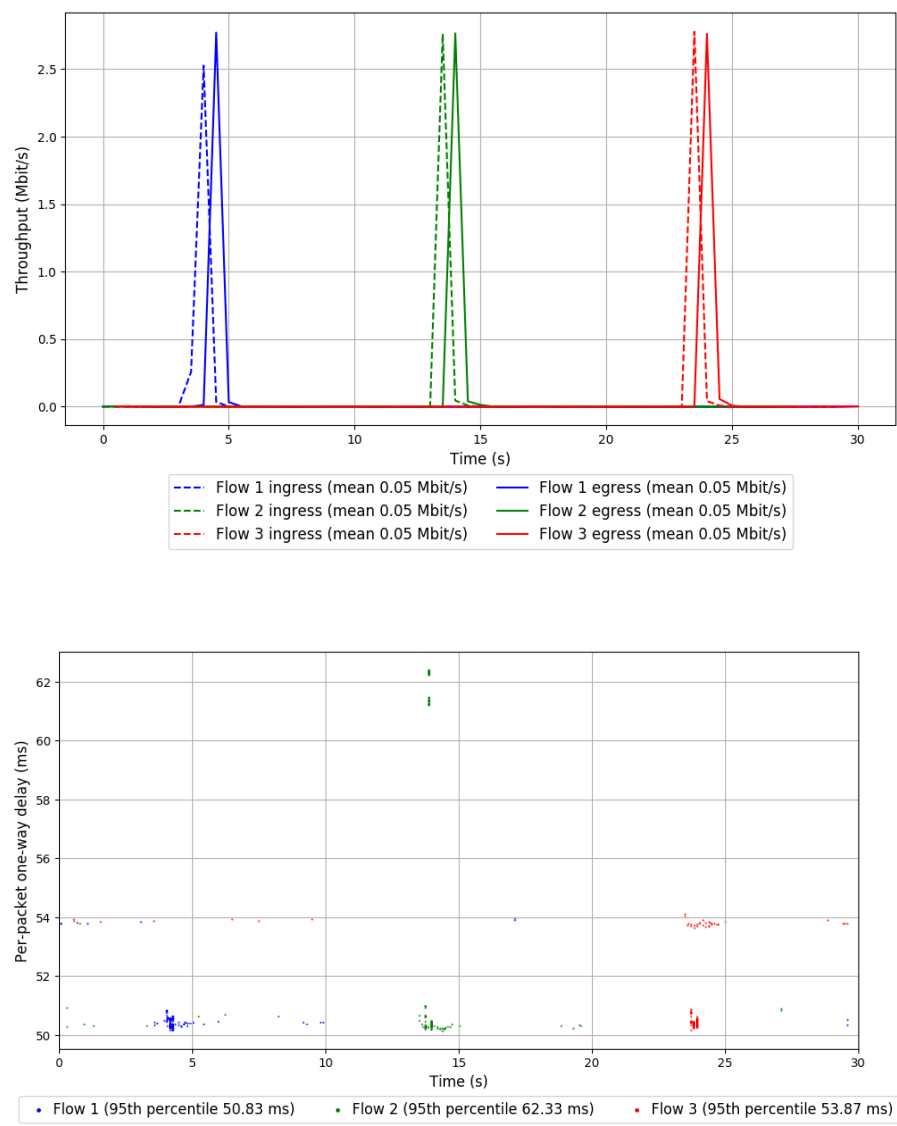
Run 3: Statistics of WebRTC media

Start at: 2018-05-26 15:15:24  
End at: 2018-05-26 15:15:54  
Local clock offset: -0.068 ms  
Remote clock offset: -0.233 ms

# Below is generated by plot.py at 2018-05-26 20:57:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.14 Mbit/s  
95th percentile per-packet one-way delay: 61.447 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 50.830 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 62.330 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 53.873 ms  
Loss rate: 0.00%



Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-05-26 15:39:09

End at: 2018-05-26 15:39:39

Local clock offset: -0.236 ms

Remote clock offset: 0.301 ms

# Below is generated by plot.py at 2018-05-26 20:57:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 53.401 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 53.411 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 50.165 ms

Loss rate: 0.00%

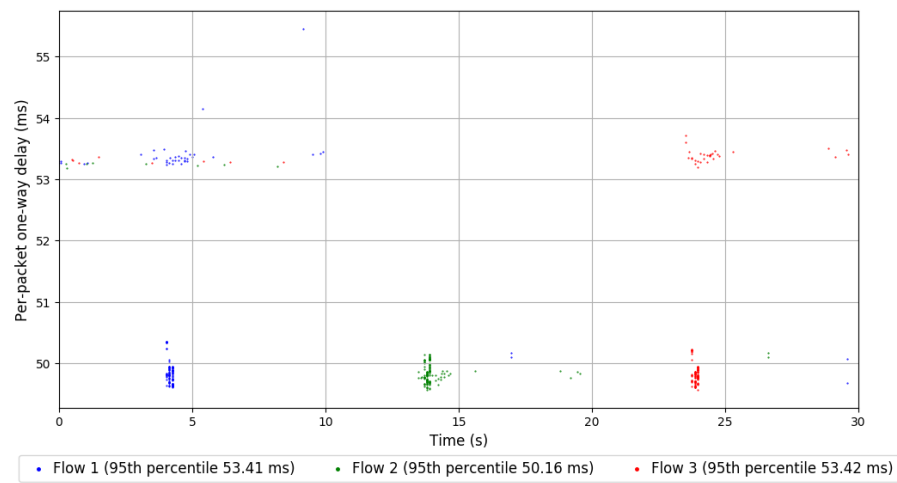
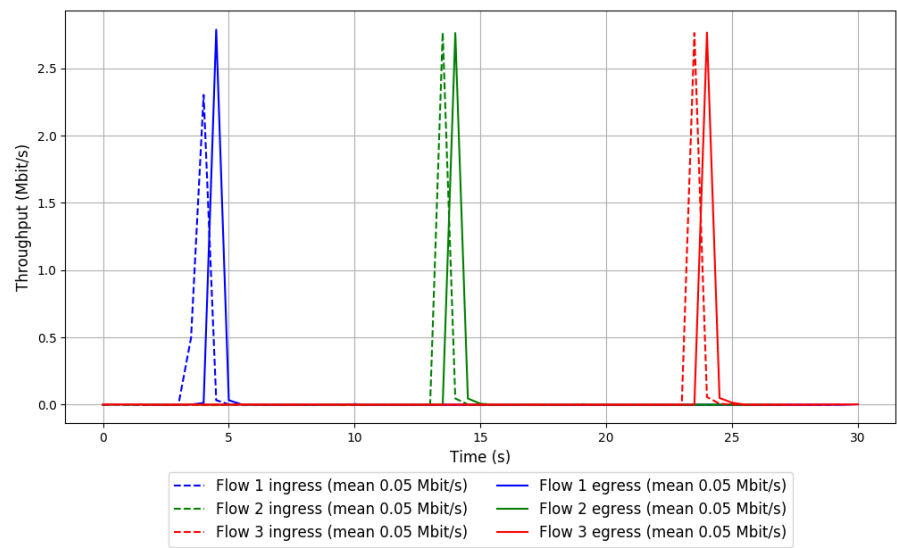
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 53.418 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-05-26 16:02:29

End at: 2018-05-26 16:02:59

Local clock offset: -0.047 ms

Remote clock offset: 0.193 ms

# Below is generated by plot.py at 2018-05-26 20:57:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 53.691 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 50.556 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 53.666 ms

Loss rate: 0.00%

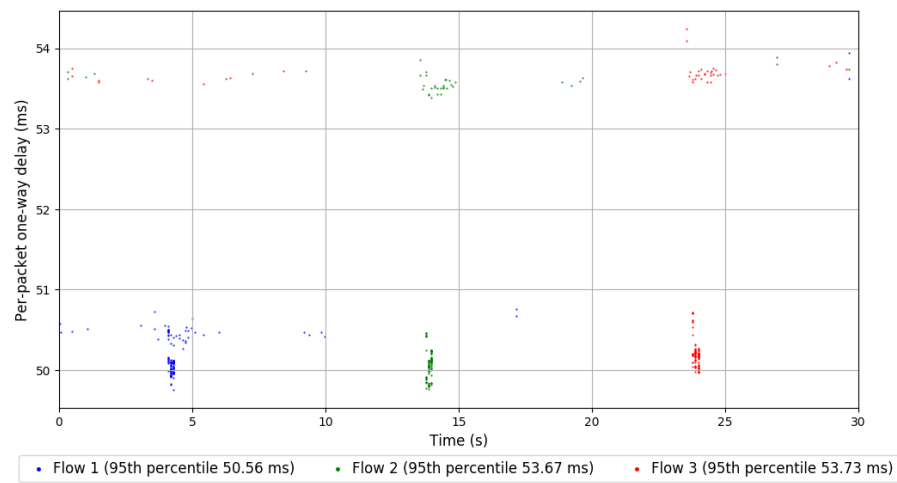
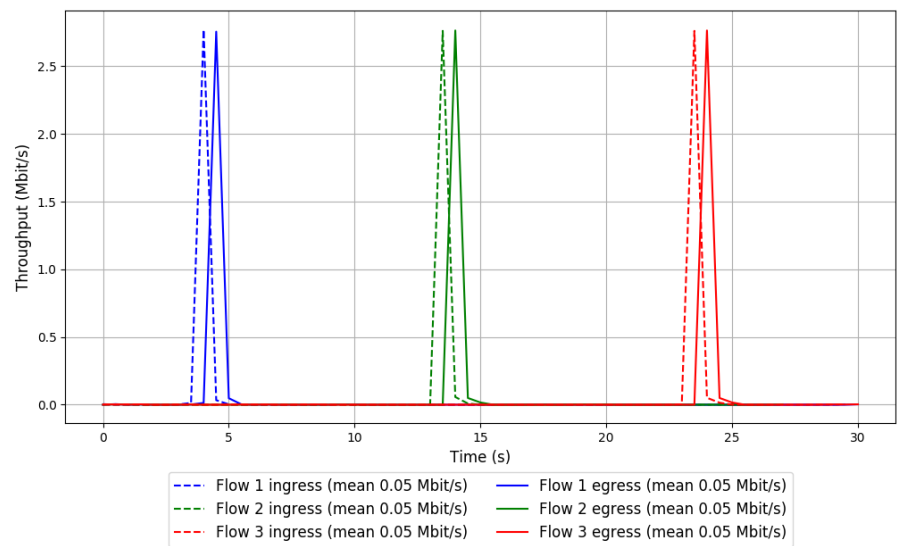
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 53.734 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-05-26 16:25:30

End at: 2018-05-26 16:26:00

Local clock offset: 0.206 ms

Remote clock offset: 0.061 ms

# Below is generated by plot.py at 2018-05-26 20:57:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 53.921 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 51.015 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 53.894 ms

Loss rate: 0.00%

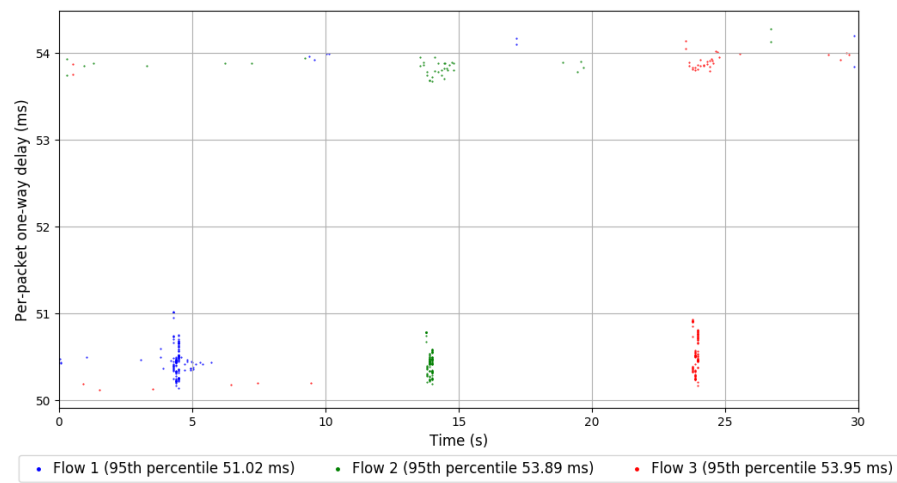
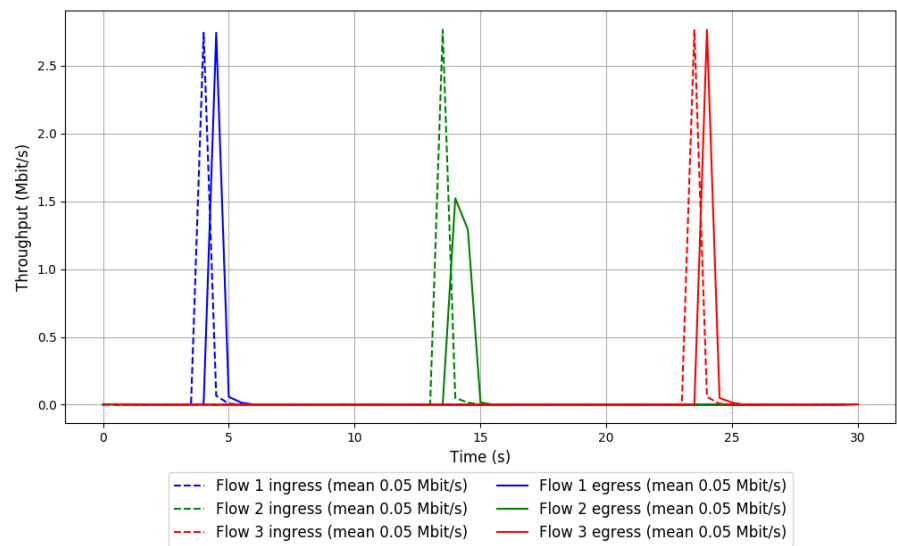
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 53.951 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



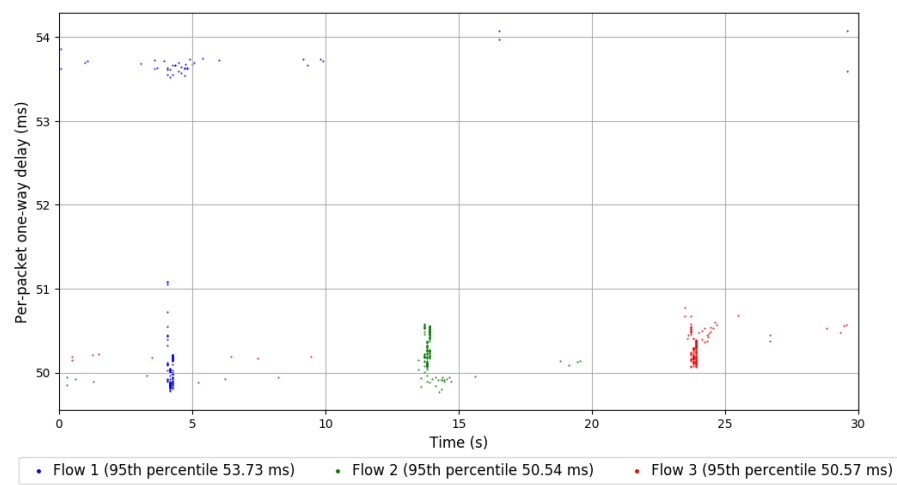
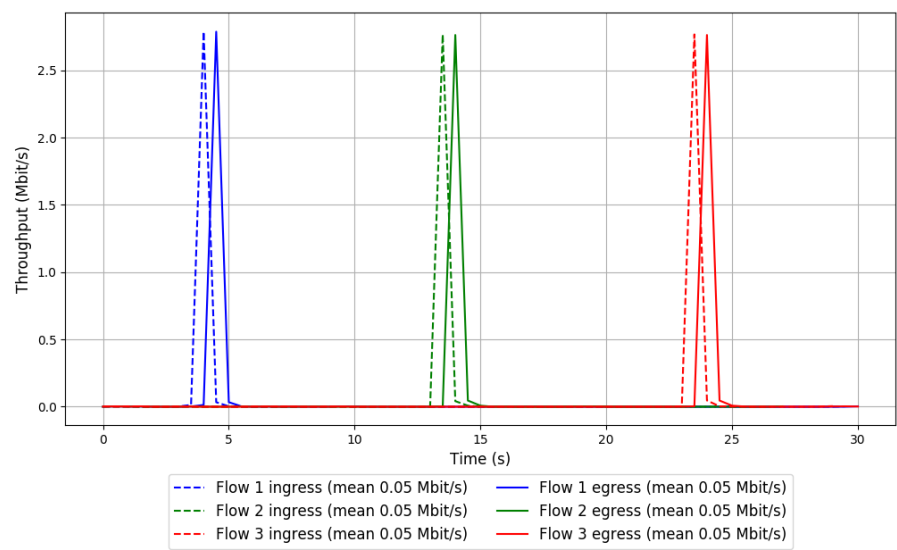
Run 7: Statistics of WebRTC media

Start at: 2018-05-26 16:48:20  
End at: 2018-05-26 16:48:50  
Local clock offset: -0.155 ms  
Remote clock offset: -0.126 ms

# Below is generated by plot.py at 2018-05-26 20:57:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.14 Mbit/s  
95th percentile per-packet one-way delay: 53.641 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 53.729 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 50.544 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 50.573 ms  
Loss rate: 0.00%



Run 7: Report of WebRTC media — Data Link

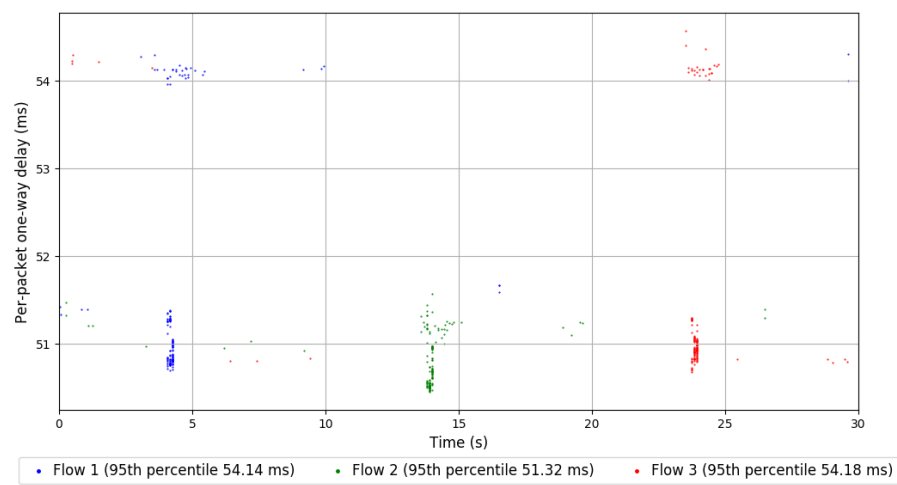
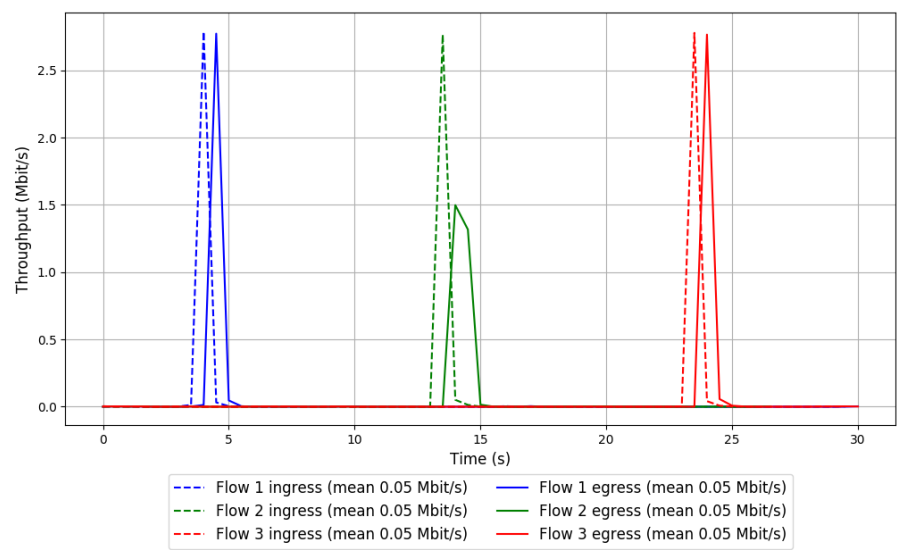


Run 8: Statistics of WebRTC media

Start at: 2018-05-26 17:11:15  
End at: 2018-05-26 17:11:45  
Local clock offset: 0.33 ms  
Remote clock offset: -0.315 ms

# Below is generated by plot.py at 2018-05-26 20:57:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.14 Mbit/s  
95th percentile per-packet one-way delay: 54.138 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 54.137 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 51.317 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 54.180 ms  
Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-05-26 17:34:43

End at: 2018-05-26 17:35:13

Local clock offset: -0.045 ms

Remote clock offset: 0.063 ms

# Below is generated by plot.py at 2018-05-26 20:57:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 53.585 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 50.635 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 53.661 ms

Loss rate: 0.00%

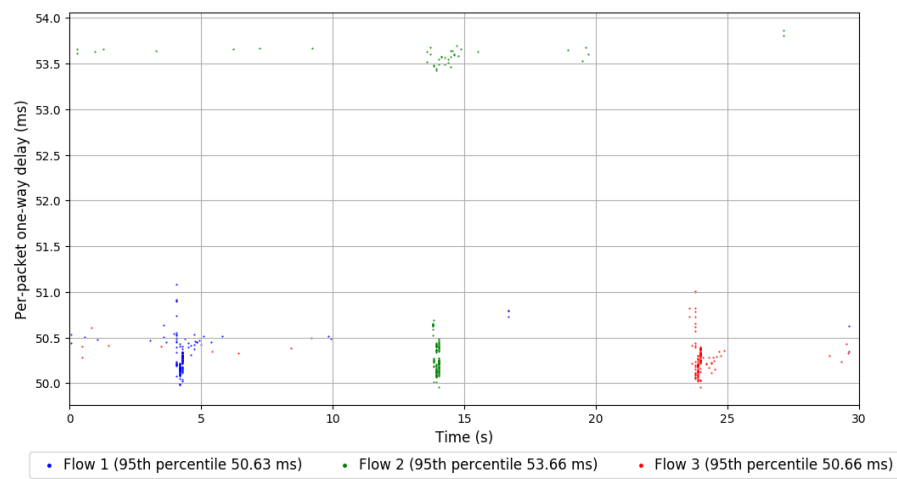
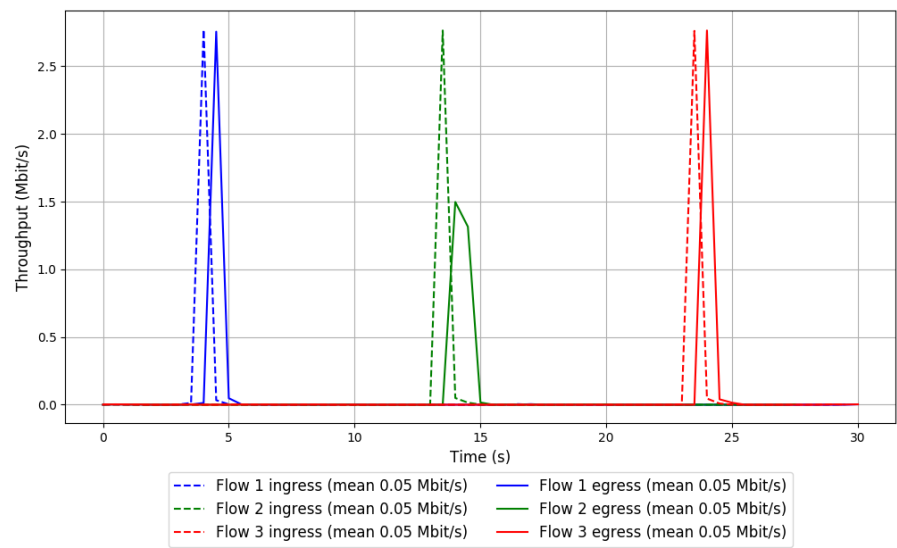
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 50.655 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-05-26 17:58:10

End at: 2018-05-26 17:58:40

Local clock offset: 0.06 ms

Remote clock offset: 0.14 ms

# Below is generated by plot.py at 2018-05-26 20:57:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 53.812 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 53.445 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 53.665 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 53.854 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

