

## Pantheon Report

Generated at 2018-06-01 16:13:57 (UTC).

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

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.

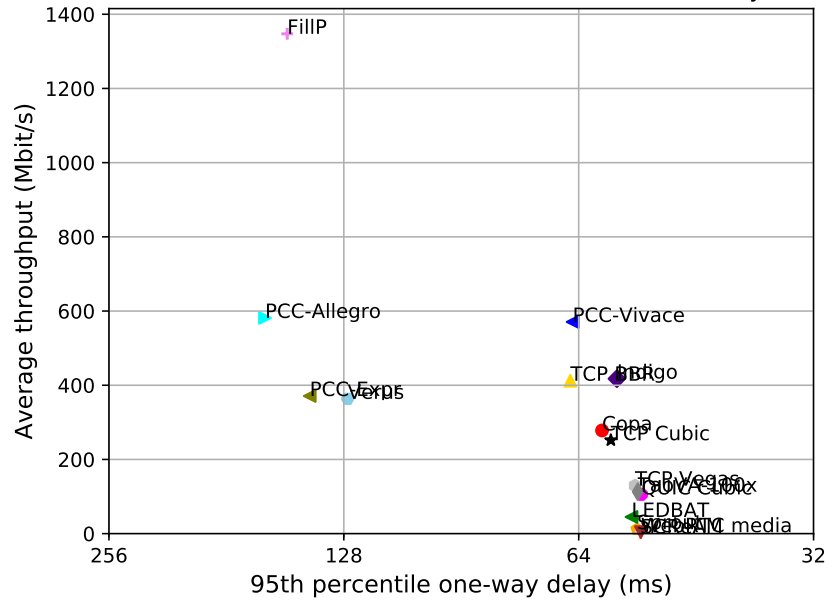
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

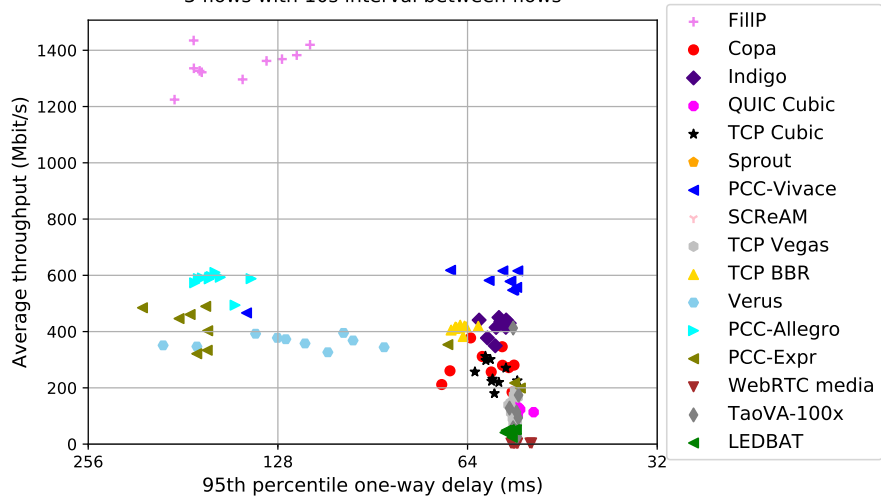
Git summary:

```
branch: master @ 227fdf9a3757f17b88537cceed5743a33037a3d2
third_party/fillp @ 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-quirk @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ c838669682f0c19f6baf92afc9a596a406d48c1f
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webRTC @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

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



test from GCE Sydney to GCE Tokyo, 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	207.14	207.84	200.42	64.26	65.44	67.20	0.04	0.06	0.12
Copa	10	158.87	137.38	90.22	58.98	57.40	59.27	0.02	0.01	0.06
TCP Cubic	10	159.90	107.83	60.91	58.01	57.73	57.84	0.01	0.09	0.26
FillP	10	740.30	636.57	553.79	140.10	151.11	121.83	1.59	1.56	0.71
Indigo	10	214.59	220.10	175.94	56.48	57.31	58.15	0.02	0.02	0.05
LEDBAT	10	27.32	21.56	10.18	54.79	54.74	54.71	0.02	0.04	0.00
PCC-Allegro	10	538.26	47.03	36.10	161.57	157.91	145.73	0.95	0.78	1.26
PCC-Expr	10	214.20	197.47	76.91	127.34	121.22	104.22	2.80	3.35	3.09
QUIC Cubic	10	56.00	54.08	42.17	52.84	52.57	53.05	0.01	0.01	0.02
SCReAM	10	0.21	0.21	0.22	52.96	52.01	52.58	0.00	0.00	0.03
Sprout	10	6.17	6.02	5.56	53.86	53.87	53.81	0.00	0.00	0.06
TaoVA-100x	10	38.13	94.54	57.60	53.77	53.74	53.94	0.01	0.01	0.02
TCP Vegas	10	74.44	53.82	57.84	54.15	54.12	54.32	0.01	0.01	0.03
Verus	10	214.96	181.05	89.10	112.79	127.31	139.00	0.19	0.42	1.44
PCC-Vivace	10	341.84	279.74	129.76	70.99	54.42	61.85	0.14	0.01	0.01
WebRTC media	10	2.08	1.33	0.55	53.00	53.05	52.99	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

Start at: 2018-06-01 10:10:52

End at: 2018-06-01 10:11:22

Local clock offset: -0.183 ms

Remote clock offset: -0.07 ms

# Below is generated by plot.py at 2018-06-01 14:14:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 411.41 Mbit/s

95th percentile per-packet one-way delay: 67.020 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 208.84 Mbit/s

95th percentile per-packet one-way delay: 66.423 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 203.91 Mbit/s

95th percentile per-packet one-way delay: 66.948 ms

Loss rate: 0.02%

-- Flow 3:

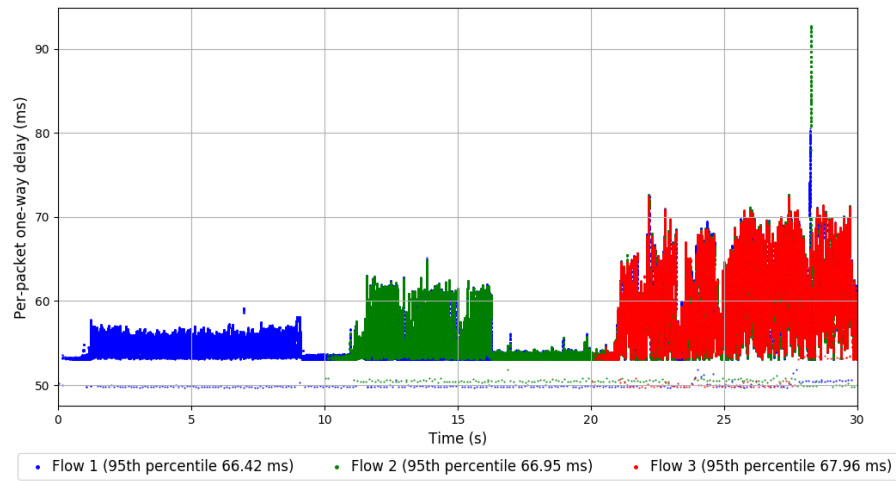
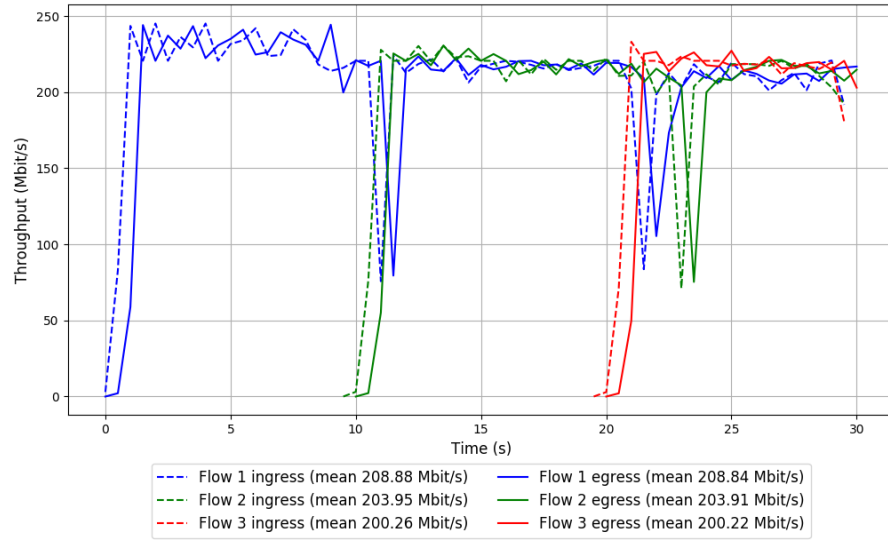
Average throughput: 200.22 Mbit/s

95th percentile per-packet one-way delay: 67.958 ms

Loss rate: 0.03%



# Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-06-01 10:33:18

End at: 2018-06-01 10:33:48

Local clock offset: 0.089 ms

Remote clock offset: 0.335 ms

# Below is generated by plot.py at 2018-06-01 14:14:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 382.60 Mbit/s

95th percentile per-packet one-way delay: 65.026 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 183.21 Mbit/s

95th percentile per-packet one-way delay: 63.582 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 199.58 Mbit/s

95th percentile per-packet one-way delay: 64.996 ms

Loss rate: 0.32%

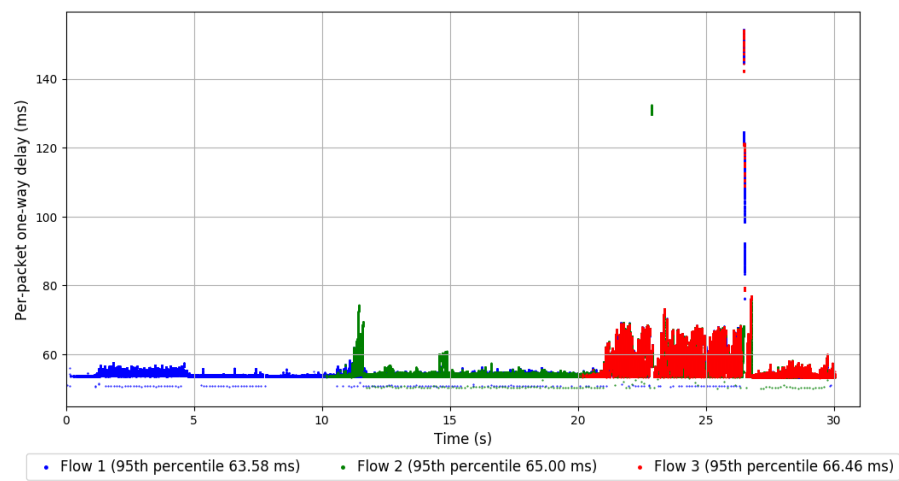
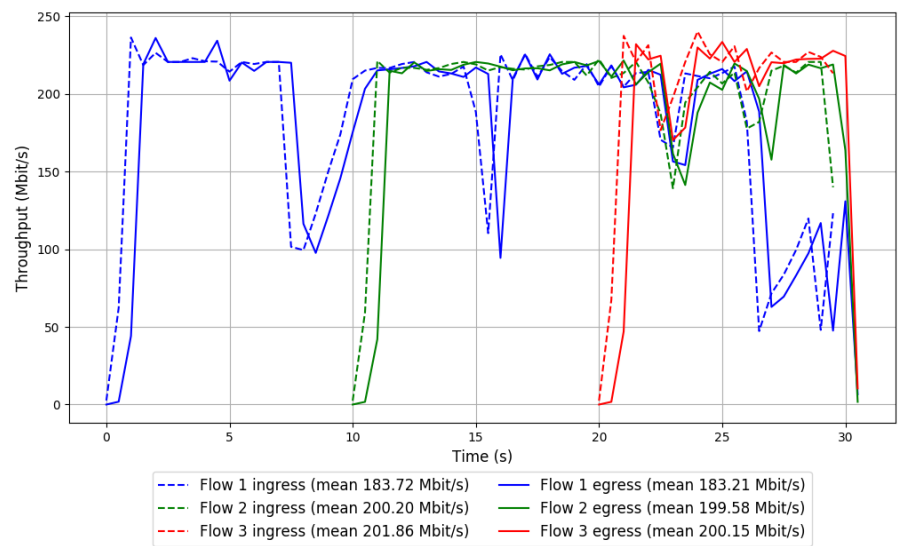
-- Flow 3:

Average throughput: 200.15 Mbit/s

95th percentile per-packet one-way delay: 66.459 ms

Loss rate: 0.86%

Run 2: Report of TCP BBR — Data Link

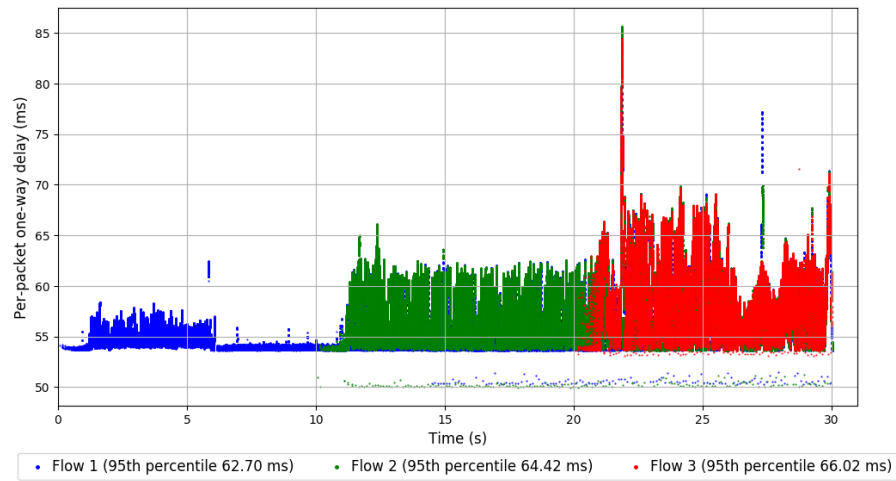
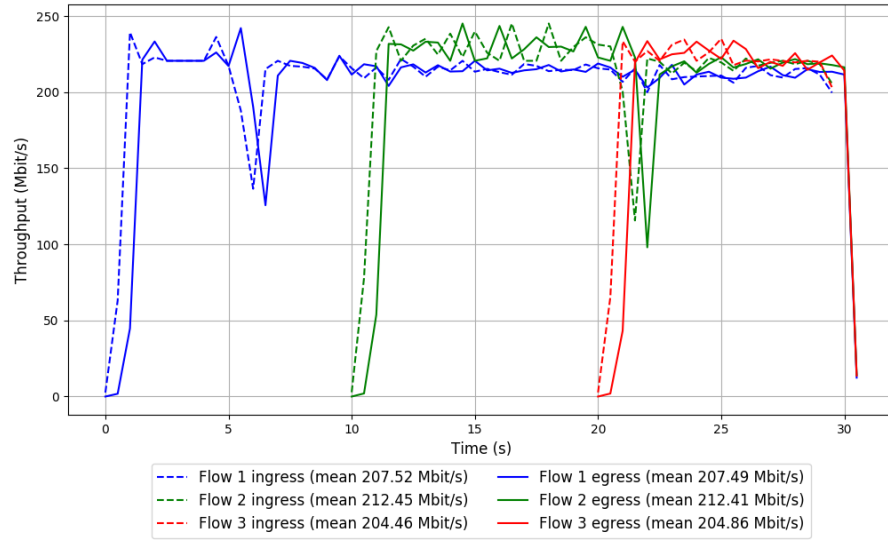


Run 3: Statistics of TCP BBR

Start at: 2018-06-01 10:55:55  
End at: 2018-06-01 10:56:25  
Local clock offset: -0.206 ms  
Remote clock offset: 13.791 ms

# Below is generated by plot.py at 2018-06-01 14:14:28  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 417.05 Mbit/s  
95th percentile per-packet one-way delay: 64.376 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 207.49 Mbit/s  
95th percentile per-packet one-way delay: 62.705 ms  
Loss rate: 0.03%  
-- Flow 2:  
Average throughput: 212.41 Mbit/s  
95th percentile per-packet one-way delay: 64.420 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 204.86 Mbit/s  
95th percentile per-packet one-way delay: 66.022 ms  
Loss rate: 0.02%

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

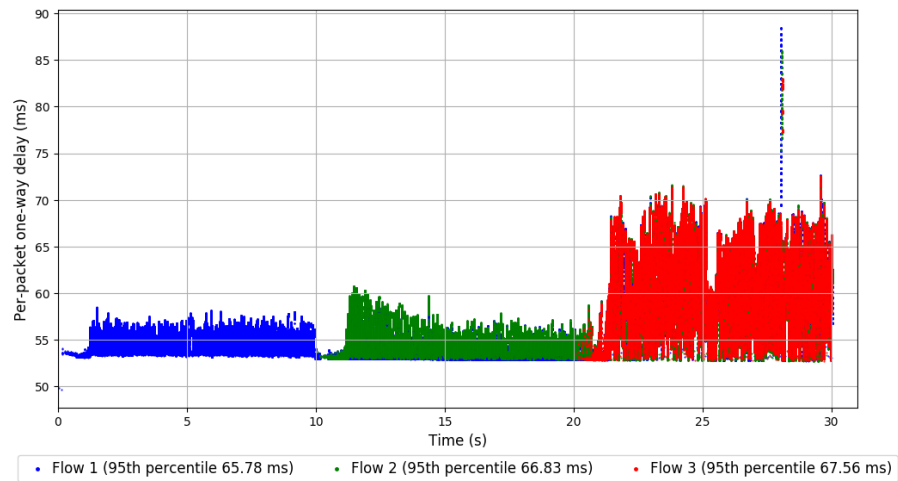
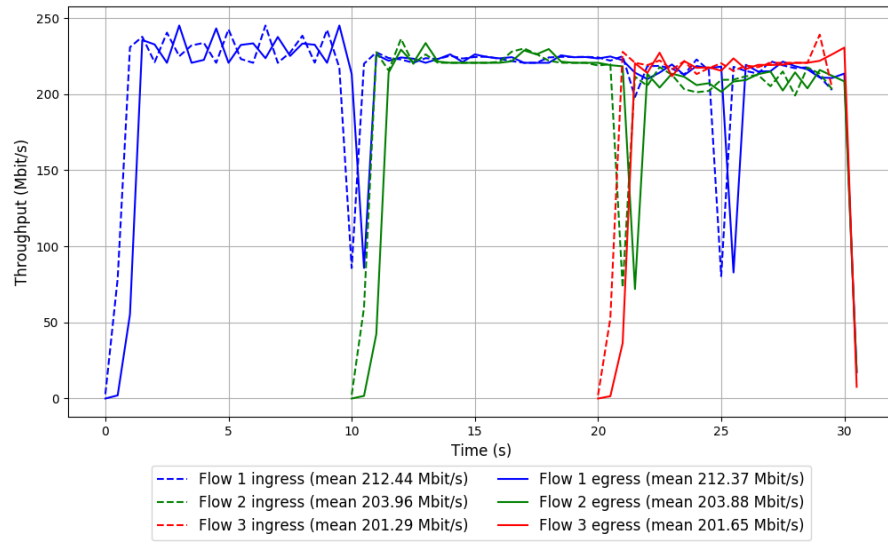


Run 4: Statistics of TCP BBR

Start at: 2018-06-01 11:18:39  
End at: 2018-06-01 11:19:09  
Local clock offset: 0.242 ms  
Remote clock offset: 27.298 ms

# Below is generated by plot.py at 2018-06-01 14:14:28  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 414.97 Mbit/s  
95th percentile per-packet one-way delay: 66.680 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 212.37 Mbit/s  
95th percentile per-packet one-way delay: 65.780 ms  
Loss rate: 0.03%  
-- Flow 2:  
Average throughput: 203.88 Mbit/s  
95th percentile per-packet one-way delay: 66.829 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 201.65 Mbit/s  
95th percentile per-packet one-way delay: 67.557 ms  
Loss rate: 0.05%

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



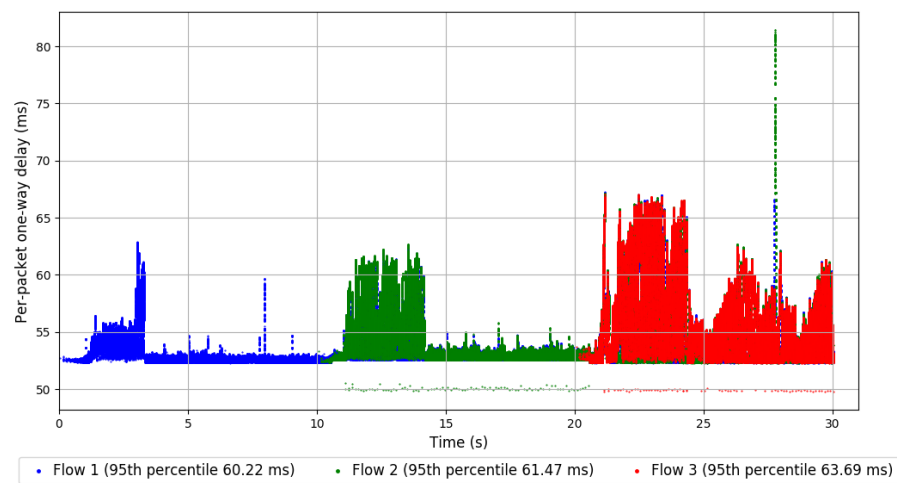
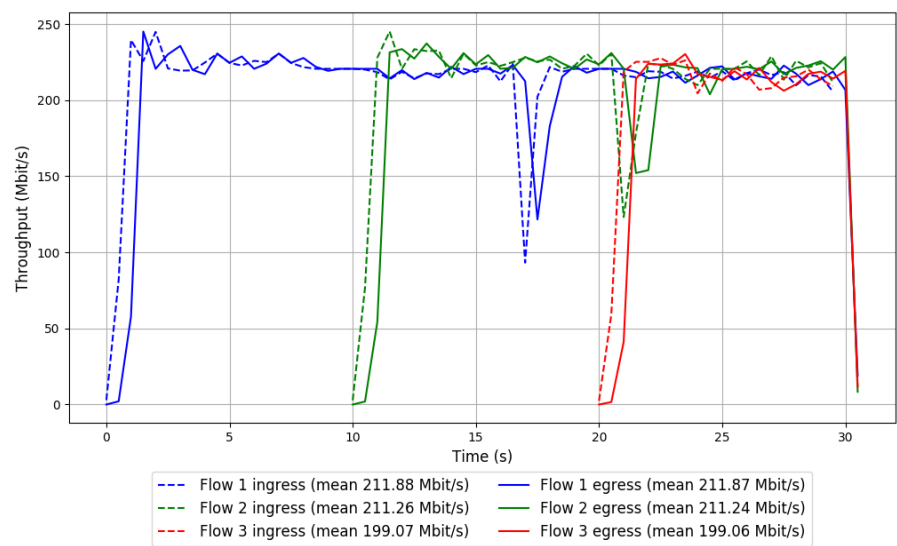
Run 5: Statistics of TCP BBR

Start at: 2018-06-01 11:41:29  
End at: 2018-06-01 11:41:59  
Local clock offset: 0.12 ms  
Remote clock offset: 11.053 ms

# Below is generated by plot.py at 2018-06-01 14:14:28  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 418.74 Mbit/s  
95th percentile per-packet one-way delay: 61.537 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 211.87 Mbit/s  
95th percentile per-packet one-way delay: 60.220 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 211.24 Mbit/s  
95th percentile per-packet one-way delay: 61.473 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 199.06 Mbit/s  
95th percentile per-packet one-way delay: 63.687 ms  
Loss rate: 0.04%



Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-06-01 12:04:36

End at: 2018-06-01 12:05:06

Local clock offset: -0.029 ms

Remote clock offset: 7.408 ms

# Below is generated by plot.py at 2018-06-01 14:14:28

# Datalink statistics

-- Total of 3 flows:

Average throughput: 416.04 Mbit/s

95th percentile per-packet one-way delay: 66.899 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 211.75 Mbit/s

95th percentile per-packet one-way delay: 65.796 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 207.32 Mbit/s

95th percentile per-packet one-way delay: 67.047 ms

Loss rate: 0.02%

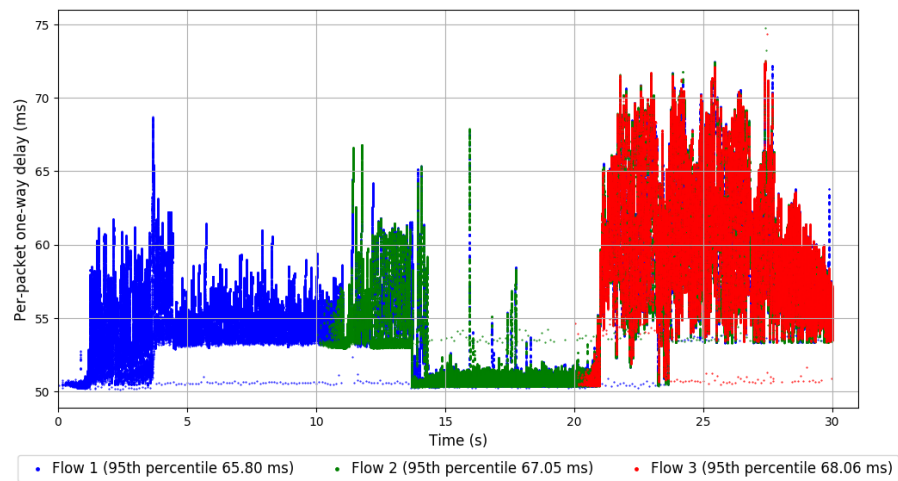
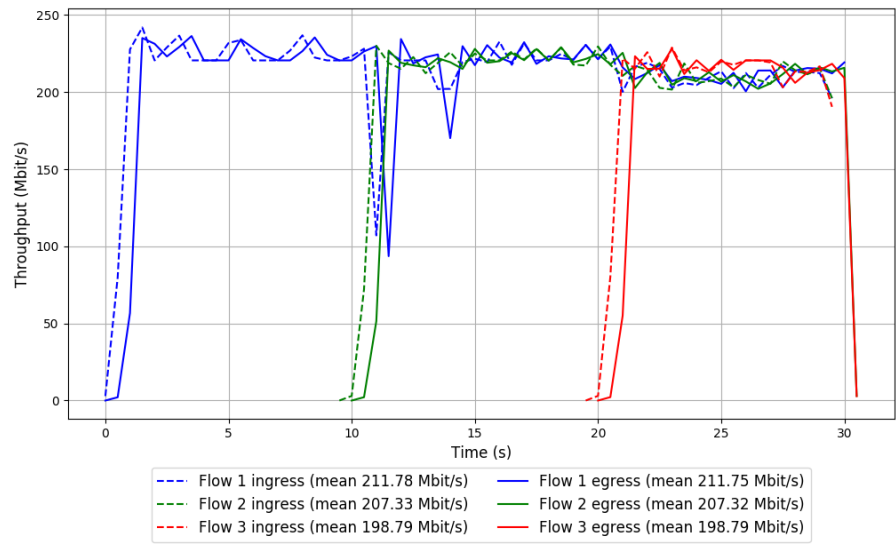
-- Flow 3:

Average throughput: 198.79 Mbit/s

95th percentile per-packet one-way delay: 68.063 ms

Loss rate: 0.04%

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



Run 7: Statistics of TCP BBR

Start at: 2018-06-01 12:28:00

End at: 2018-06-01 12:28:30

Local clock offset: 0.005 ms

Remote clock offset: 7.0 ms

# Below is generated by plot.py at 2018-06-01 14:14:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 422.95 Mbit/s

95th percentile per-packet one-way delay: 65.735 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 215.02 Mbit/s

95th percentile per-packet one-way delay: 63.287 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 213.70 Mbit/s

95th percentile per-packet one-way delay: 65.602 ms

Loss rate: 0.02%

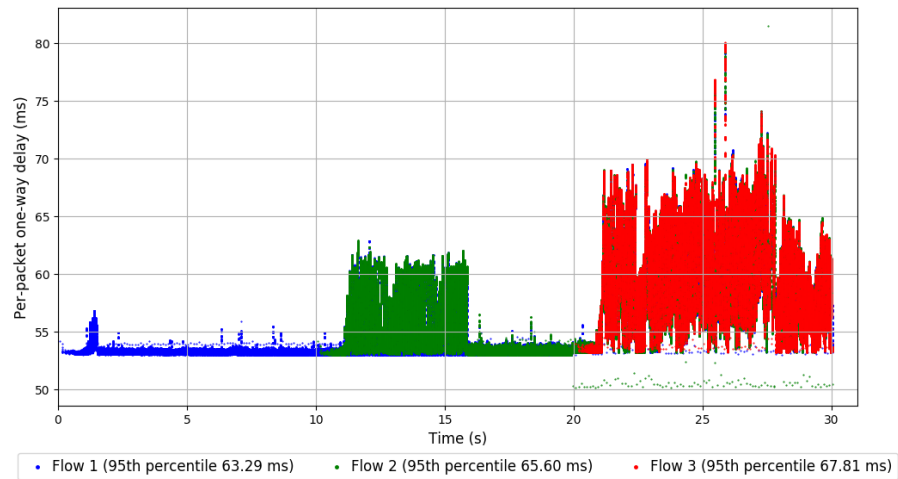
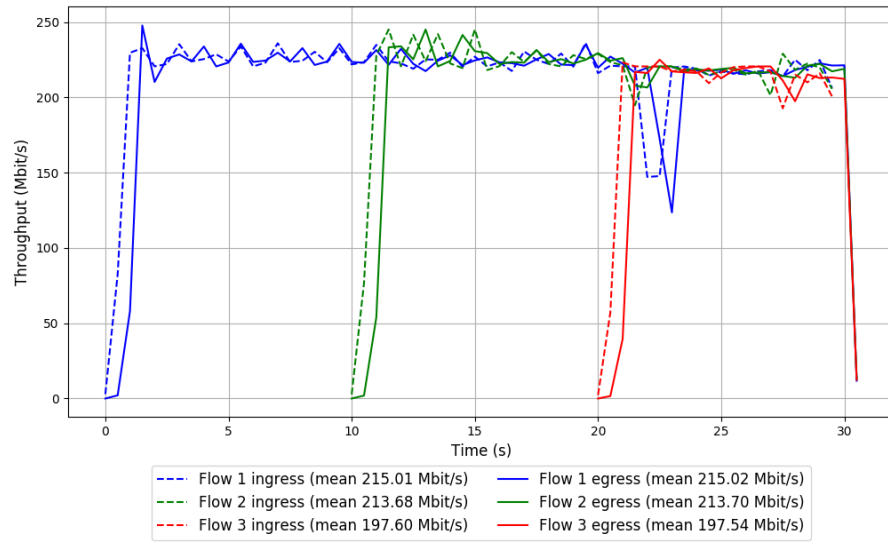
-- Flow 3:

Average throughput: 197.54 Mbit/s

95th percentile per-packet one-way delay: 67.805 ms

Loss rate: 0.04%

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



Run 8: Statistics of TCP BBR

Start at: 2018-06-01 12:50:39

End at: 2018-06-01 12:51:09

Local clock offset: -0.254 ms

Remote clock offset: 2.456 ms

# Below is generated by plot.py at 2018-06-01 14:14:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 412.92 Mbit/s

95th percentile per-packet one-way delay: 66.025 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 205.87 Mbit/s

95th percentile per-packet one-way delay: 64.636 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 210.75 Mbit/s

95th percentile per-packet one-way delay: 64.826 ms

Loss rate: 0.04%

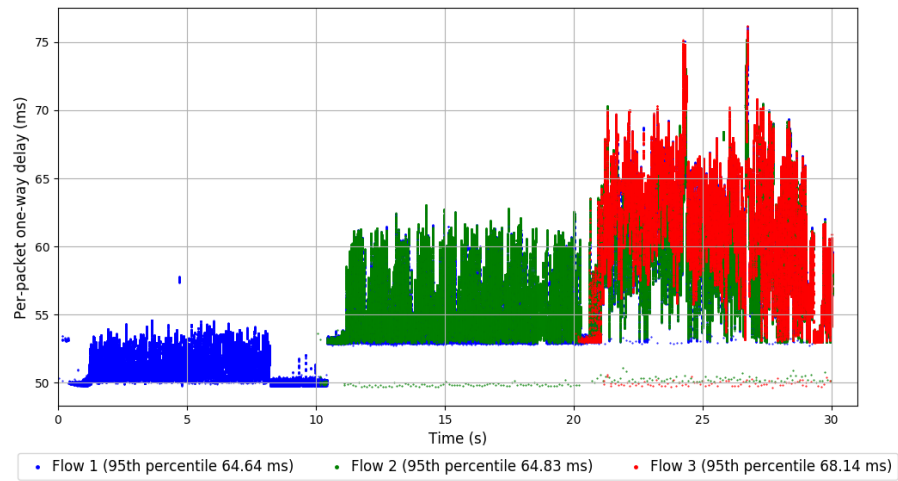
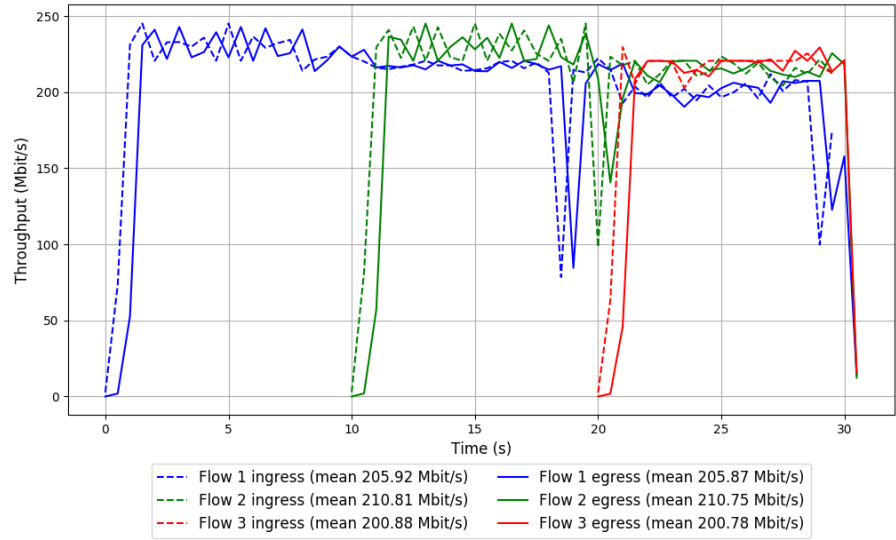
-- Flow 3:

Average throughput: 200.78 Mbit/s

95th percentile per-packet one-way delay: 68.140 ms

Loss rate: 0.00%

# Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-06-01 13:13:14

End at: 2018-06-01 13:13:44

Local clock offset: -0.511 ms

Remote clock offset: 1.709 ms

# Below is generated by plot.py at 2018-06-01 14:20:14

# Datalink statistics

-- Total of 3 flows:

Average throughput: 419.49 Mbit/s

95th percentile per-packet one-way delay: 64.721 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 212.47 Mbit/s

95th percentile per-packet one-way delay: 63.611 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 211.75 Mbit/s

95th percentile per-packet one-way delay: 63.692 ms

Loss rate: 0.05%

-- Flow 3:

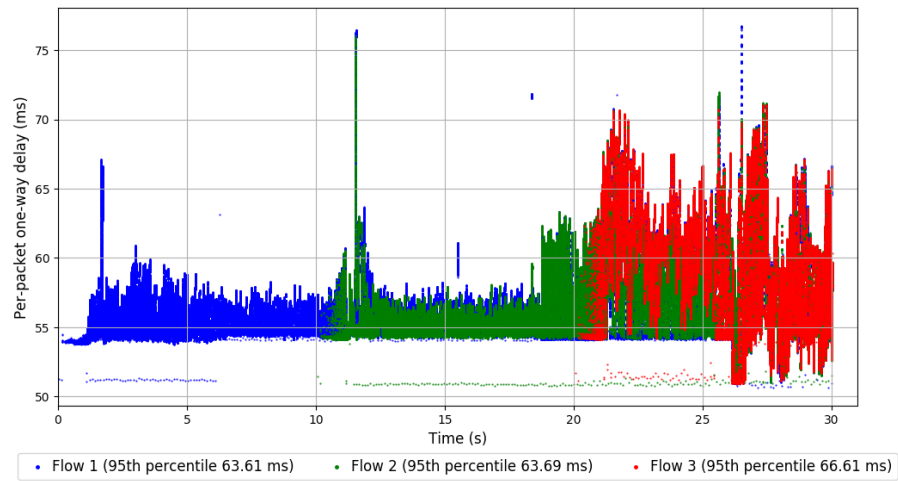
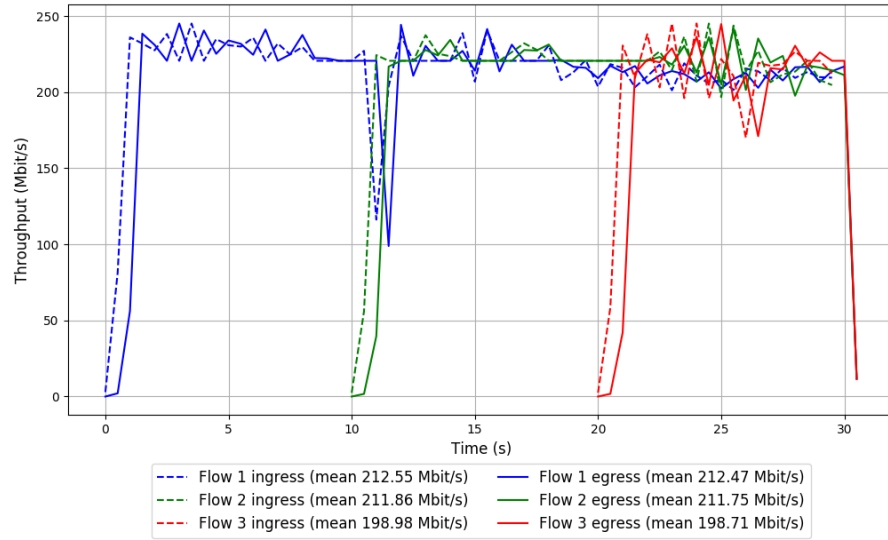
Average throughput: 198.71 Mbit/s

95th percentile per-packet one-way delay: 66.610 ms

Loss rate: 0.12%



# Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-06-01 13:36:00

End at: 2018-06-01 13:36:30

Local clock offset: 0.26 ms

Remote clock offset: 0.616 ms

# Below is generated by plot.py at 2018-06-01 14:20:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 405.47 Mbit/s

95th percentile per-packet one-way delay: 67.963 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 202.55 Mbit/s

95th percentile per-packet one-way delay: 66.602 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 203.82 Mbit/s

95th percentile per-packet one-way delay: 68.573 ms

Loss rate: 0.07%

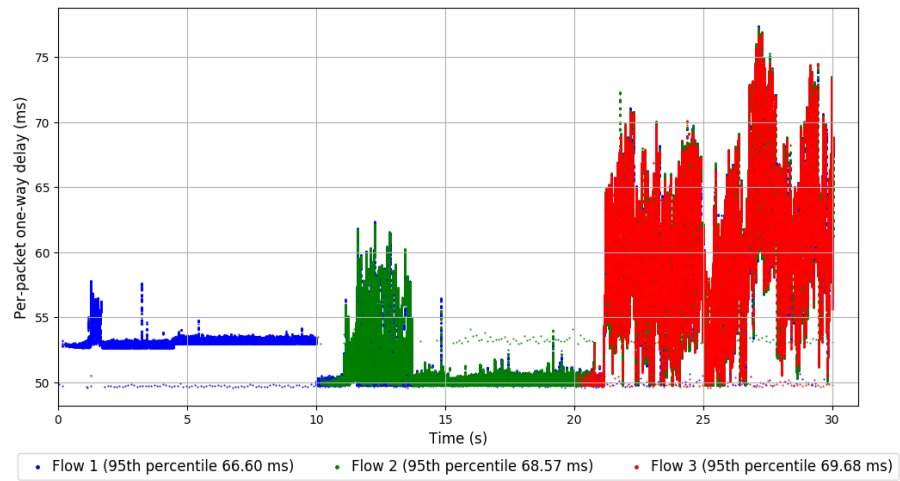
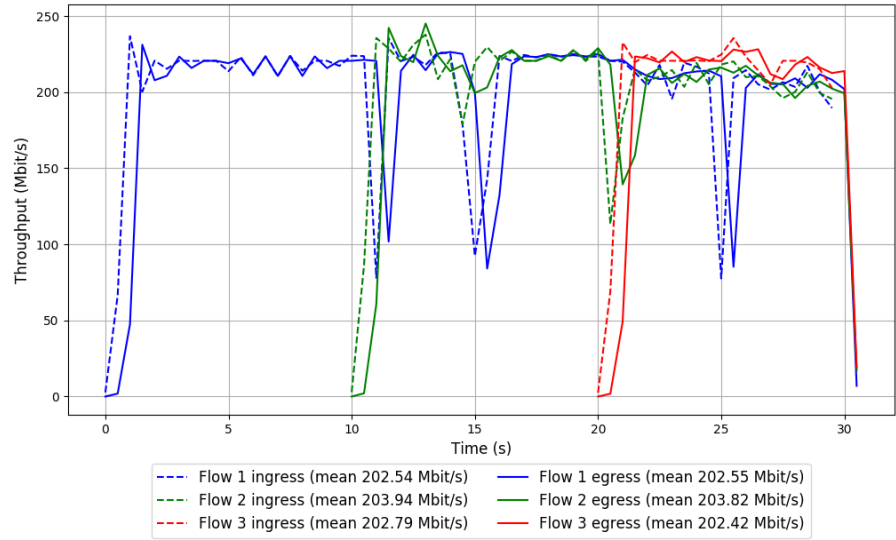
-- Flow 3:

Average throughput: 202.42 Mbit/s

95th percentile per-packet one-way delay: 69.681 ms

Loss rate: 0.00%

# Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2018-06-01 10:07:02

End at: 2018-06-01 10:07:32

Local clock offset: -0.584 ms

Remote clock offset: 0.076 ms

# Below is generated by plot.py at 2018-06-01 14:22:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 271.92 Mbit/s

95th percentile per-packet one-way delay: 55.050 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 167.37 Mbit/s

95th percentile per-packet one-way delay: 54.203 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 132.17 Mbit/s

95th percentile per-packet one-way delay: 55.852 ms

Loss rate: 0.00%

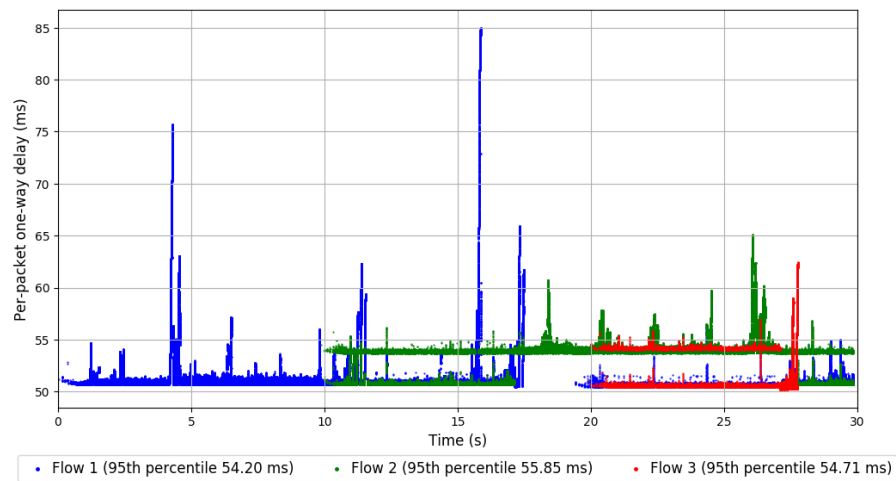
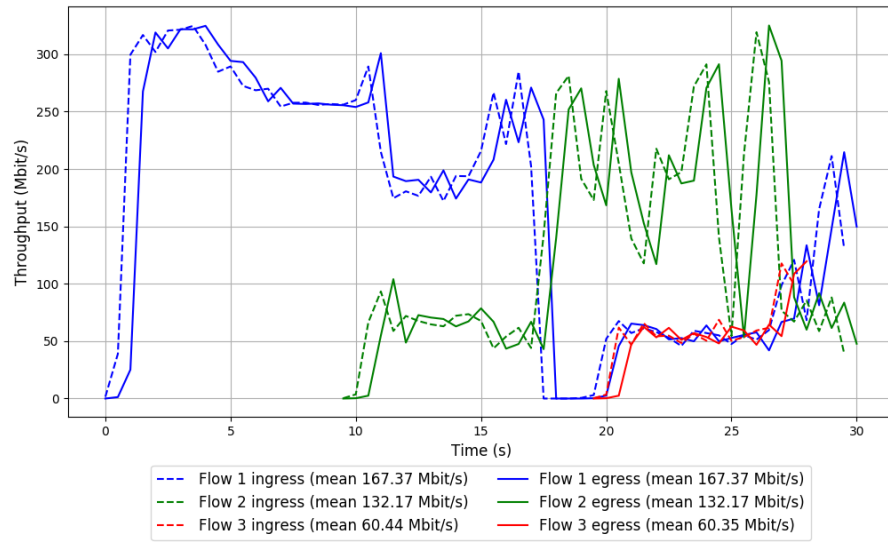
-- Flow 3:

Average throughput: 60.35 Mbit/s

95th percentile per-packet one-way delay: 54.714 ms

Loss rate: 0.00%

# Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-06-01 10:29:38

End at: 2018-06-01 10:30:08

Local clock offset: -0.009 ms

Remote clock offset: 0.051 ms

# Below is generated by plot.py at 2018-06-01 14:22:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 184.76 Mbit/s

95th percentile per-packet one-way delay: 54.391 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 120.14 Mbit/s

95th percentile per-packet one-way delay: 54.960 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.86 Mbit/s

95th percentile per-packet one-way delay: 53.287 ms

Loss rate: 0.00%

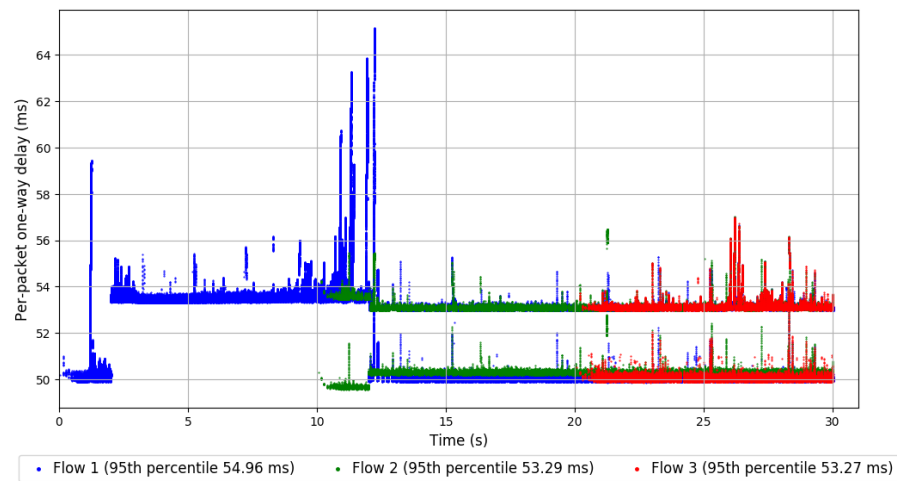
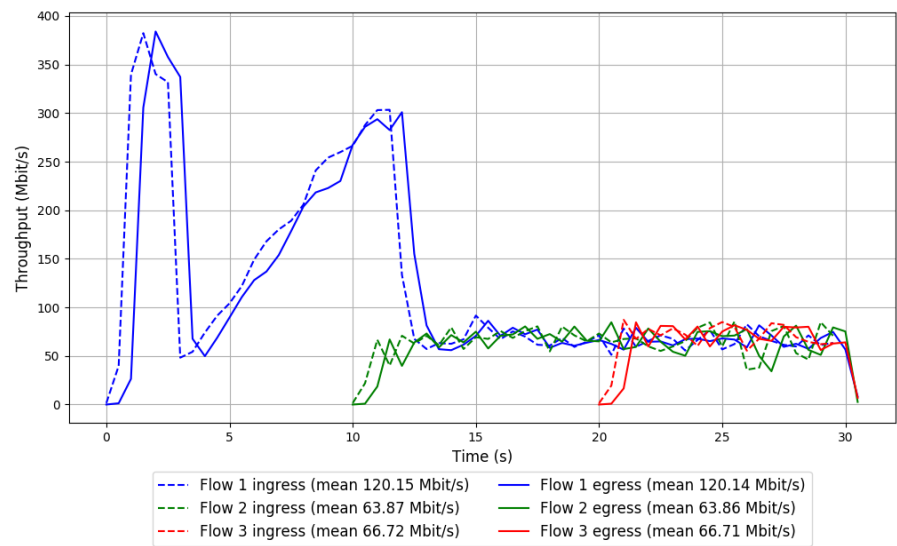
-- Flow 3:

Average throughput: 66.71 Mbit/s

95th percentile per-packet one-way delay: 53.271 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



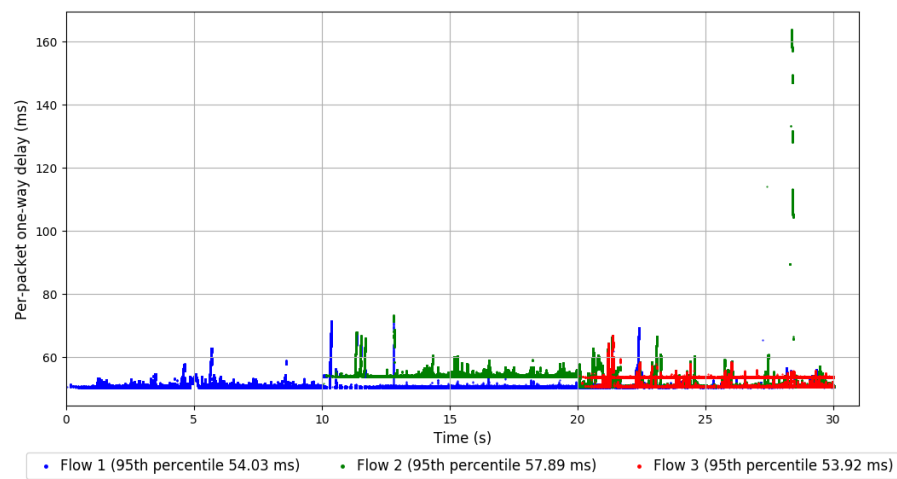
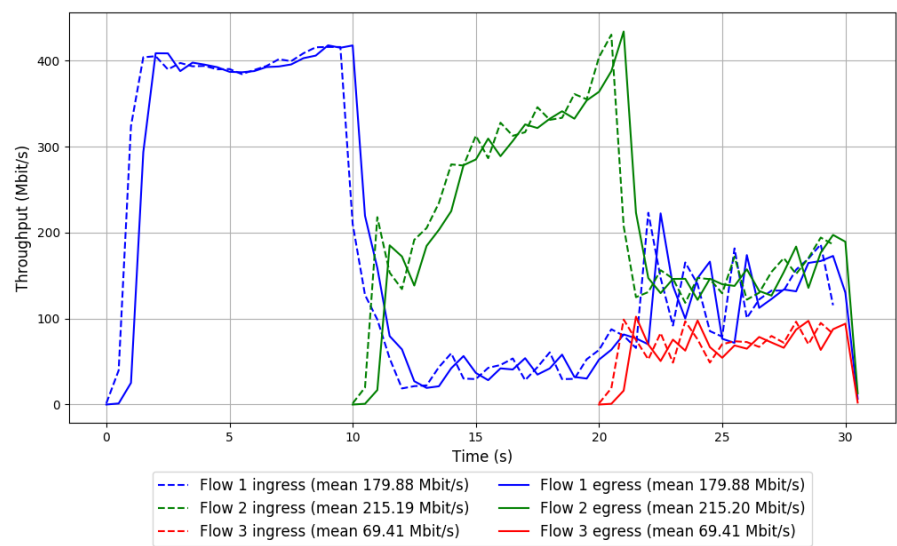
Run 3: Statistics of Copa

Start at: 2018-06-01 10:52:00  
End at: 2018-06-01 10:52:30  
Local clock offset: -0.154 ms  
Remote clock offset: 14.496 ms

# Below is generated by plot.py at 2018-06-01 14:24:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 346.21 Mbit/s  
95th percentile per-packet one-way delay: 56.384 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 179.88 Mbit/s  
95th percentile per-packet one-way delay: 54.029 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 215.20 Mbit/s  
95th percentile per-packet one-way delay: 57.893 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 69.41 Mbit/s  
95th percentile per-packet one-way delay: 53.924 ms  
Loss rate: 0.00%



Run 3: Report of Copa — Data Link

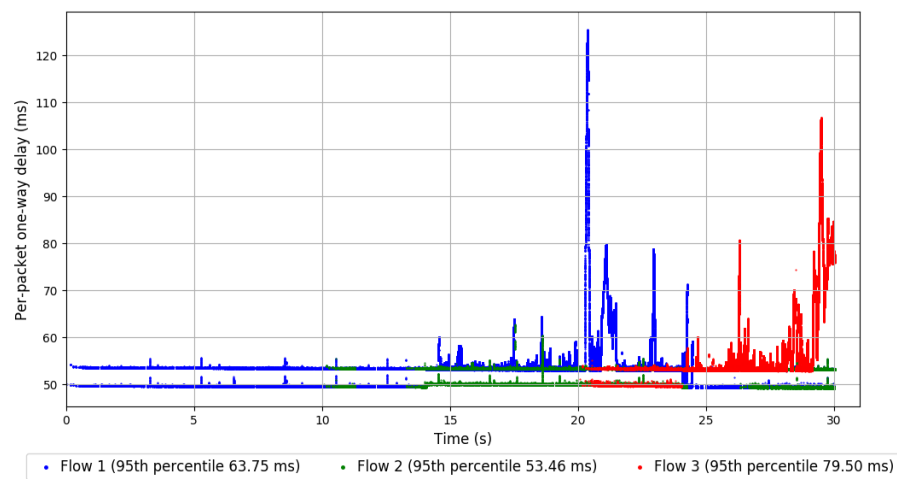
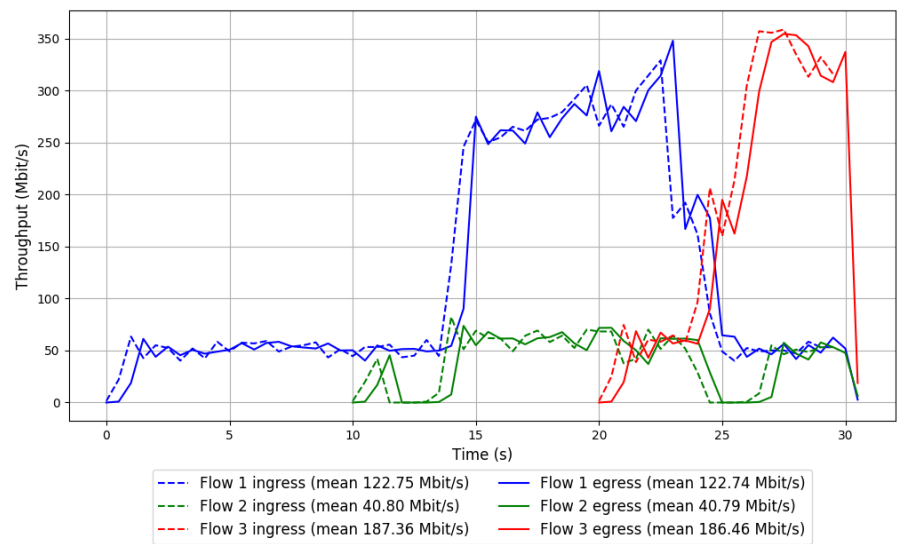


Run 4: Statistics of Copa

Start at: 2018-06-01 11:14:56  
End at: 2018-06-01 11:15:26  
Local clock offset: -0.116 ms  
Remote clock offset: 24.083 ms

# Below is generated by plot.py at 2018-06-01 14:24:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 211.76 Mbit/s  
95th percentile per-packet one-way delay: 70.334 ms  
Loss rate: 0.14%  
-- Flow 1:  
Average throughput: 122.74 Mbit/s  
95th percentile per-packet one-way delay: 63.748 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 40.79 Mbit/s  
95th percentile per-packet one-way delay: 53.463 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 186.46 Mbit/s  
95th percentile per-packet one-way delay: 79.501 ms  
Loss rate: 0.49%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-06-01 11:37:39

End at: 2018-06-01 11:38:09

Local clock offset: 0.128 ms

Remote clock offset: 11.83 ms

# Below is generated by plot.py at 2018-06-01 14:24:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 280.81 Mbit/s

95th percentile per-packet one-way delay: 54.004 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 191.91 Mbit/s

95th percentile per-packet one-way delay: 54.104 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 111.61 Mbit/s

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

Loss rate: 0.00%

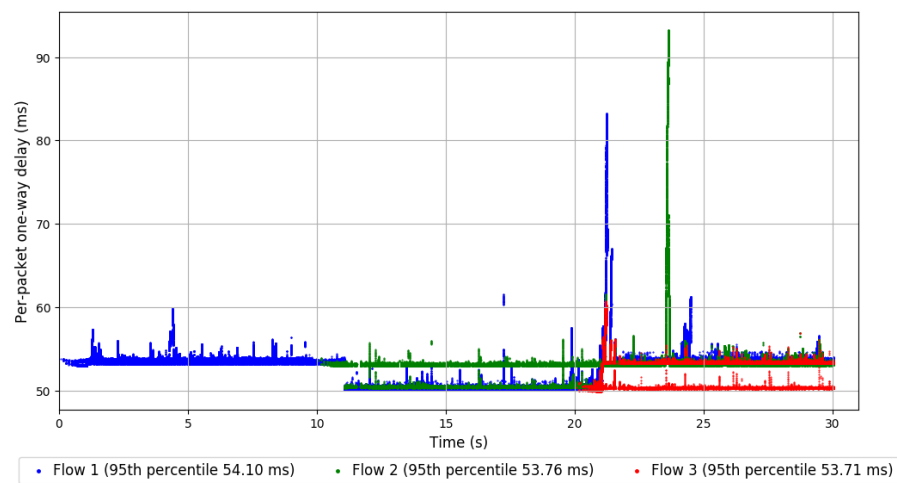
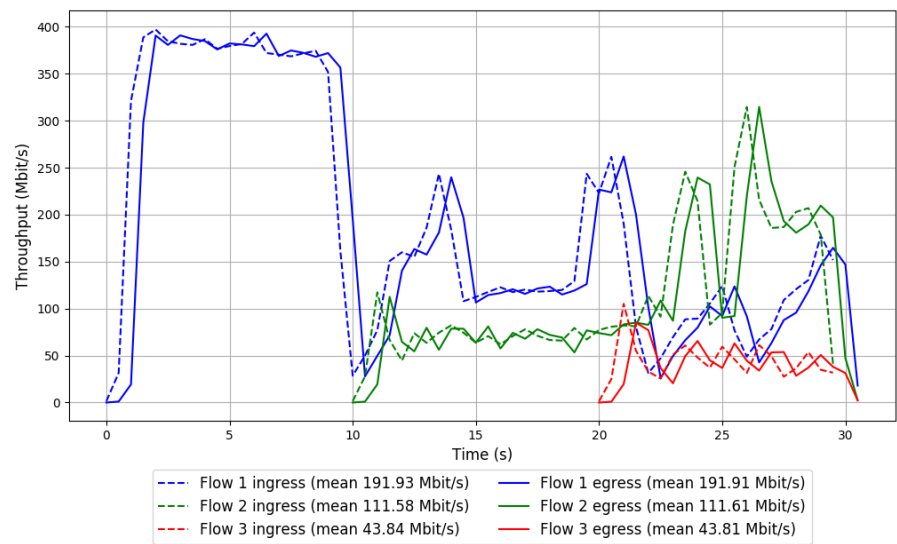
-- Flow 3:

Average throughput: 43.81 Mbit/s

95th percentile per-packet one-way delay: 53.706 ms

Loss rate: 0.05%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-06-01 12:00:43

End at: 2018-06-01 12:01:13

Local clock offset: -0.075 ms

Remote clock offset: 10.27 ms

# Below is generated by plot.py at 2018-06-01 14:24:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 311.51 Mbit/s

95th percentile per-packet one-way delay: 60.649 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 185.17 Mbit/s

95th percentile per-packet one-way delay: 59.354 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 169.80 Mbit/s

95th percentile per-packet one-way delay: 63.232 ms

Loss rate: 0.02%

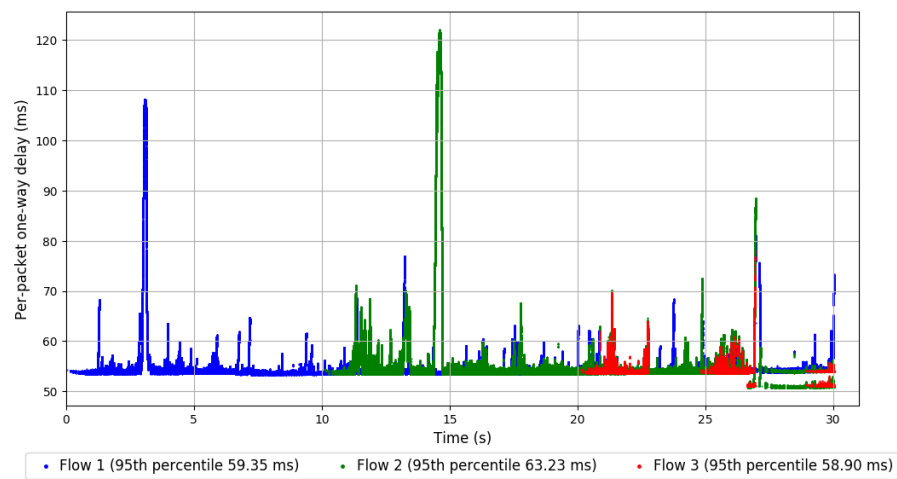
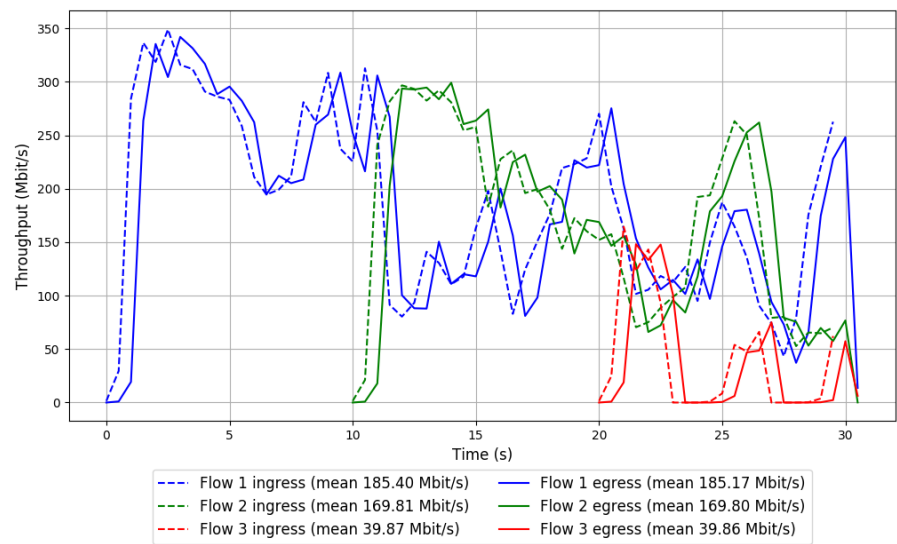
-- Flow 3:

Average throughput: 39.86 Mbit/s

95th percentile per-packet one-way delay: 58.899 ms

Loss rate: 0.04%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-06-01 12:24:02

End at: 2018-06-01 12:24:32

Local clock offset: 0.051 ms

Remote clock offset: 6.535 ms

# Below is generated by plot.py at 2018-06-01 14:31:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 377.52 Mbit/s

95th percentile per-packet one-way delay: 63.291 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 188.17 Mbit/s

95th percentile per-packet one-way delay: 63.016 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 284.19 Mbit/s

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

Loss rate: 0.00%

-- Flow 3:

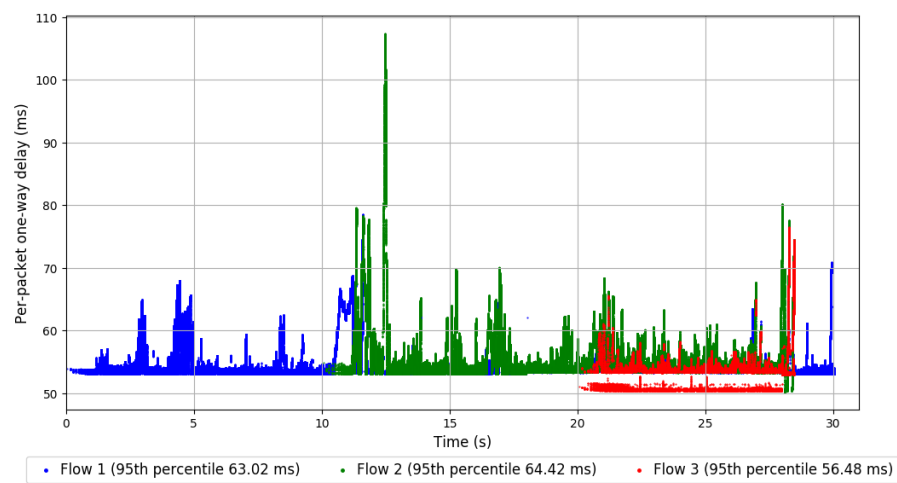
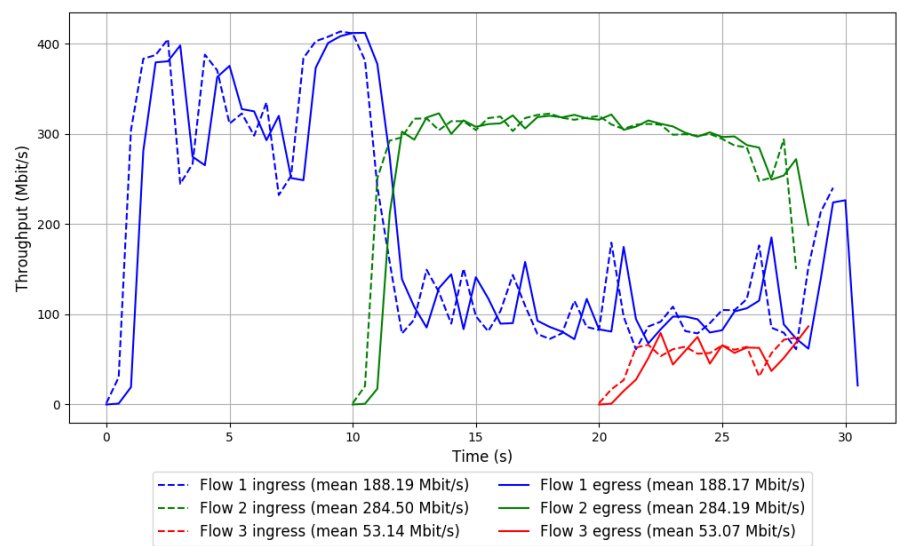
Average throughput: 53.07 Mbit/s

95th percentile per-packet one-way delay: 56.476 ms

Loss rate: 0.00%



Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-06-01 12:46:50

End at: 2018-06-01 12:47:20

Local clock offset: -0.207 ms

Remote clock offset: 2.672 ms

# Below is generated by plot.py at 2018-06-01 14:31:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 280.17 Mbit/s

95th percentile per-packet one-way delay: 56.323 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 183.90 Mbit/s

95th percentile per-packet one-way delay: 55.748 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 117.29 Mbit/s

95th percentile per-packet one-way delay: 57.611 ms

Loss rate: 0.00%

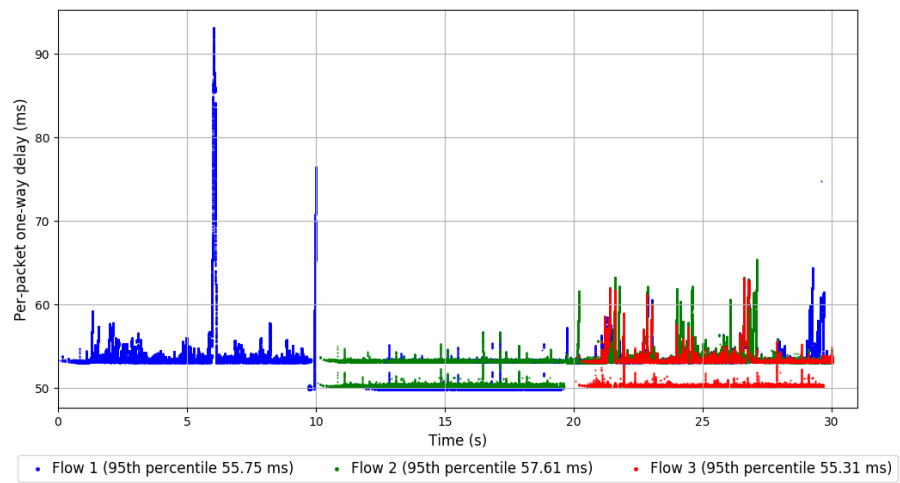
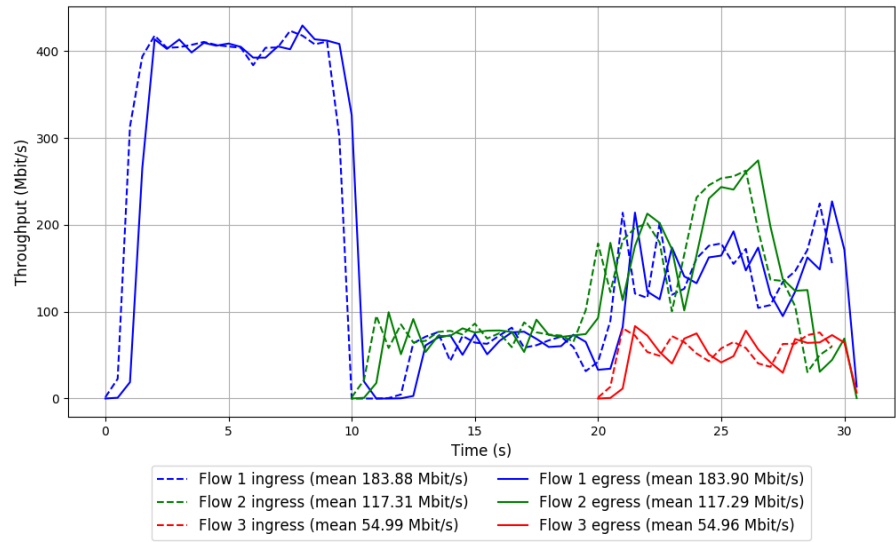
-- Flow 3:

Average throughput: 54.96 Mbit/s

95th percentile per-packet one-way delay: 55.311 ms

Loss rate: 0.06%

# Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-06-01 13:09:26

End at: 2018-06-01 13:09:56

Local clock offset: -0.461 ms

Remote clock offset: 1.904 ms

# Below is generated by plot.py at 2018-06-01 14:31:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 260.57 Mbit/s

95th percentile per-packet one-way delay: 68.242 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 168.43 Mbit/s

95th percentile per-packet one-way delay: 74.648 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 85.39 Mbit/s

95th percentile per-packet one-way delay: 56.620 ms

Loss rate: 0.02%

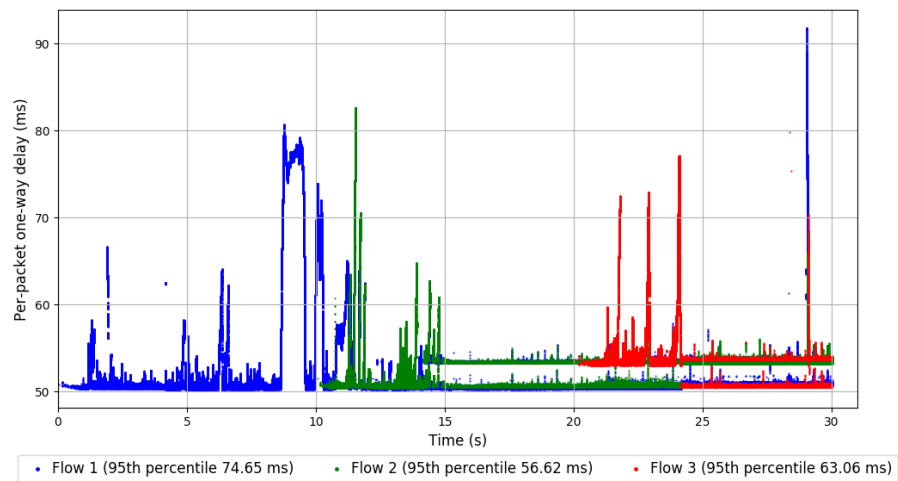
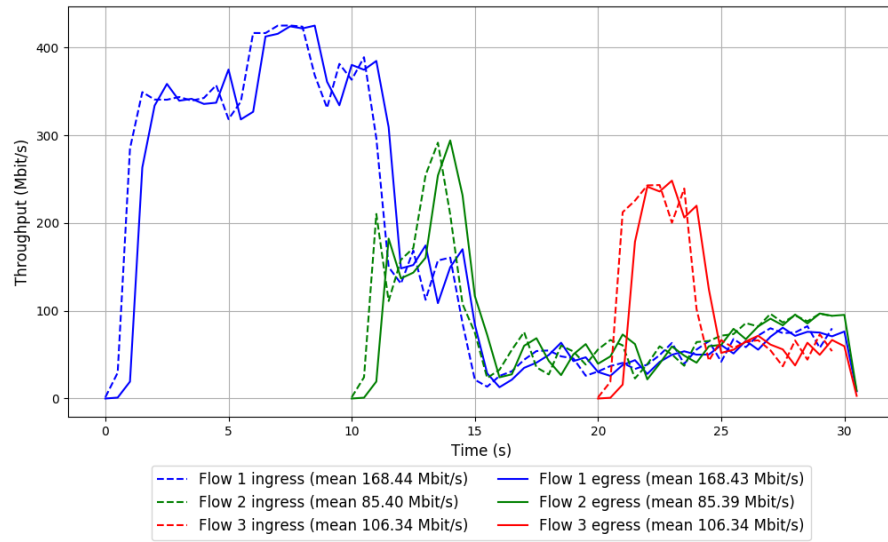
-- Flow 3:

Average throughput: 106.34 Mbit/s

95th percentile per-packet one-way delay: 63.061 ms

Loss rate: 0.00%

# Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-06-01 13:32:12

End at: 2018-06-01 13:32:42

Local clock offset: 0.064 ms

Remote clock offset: 0.91 ms

# Below is generated by plot.py at 2018-06-01 14:31:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 256.52 Mbit/s

95th percentile per-packet one-way delay: 58.694 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 80.98 Mbit/s

95th percentile per-packet one-way delay: 56.036 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 153.46 Mbit/s

95th percentile per-packet one-way delay: 57.888 ms

Loss rate: 0.01%

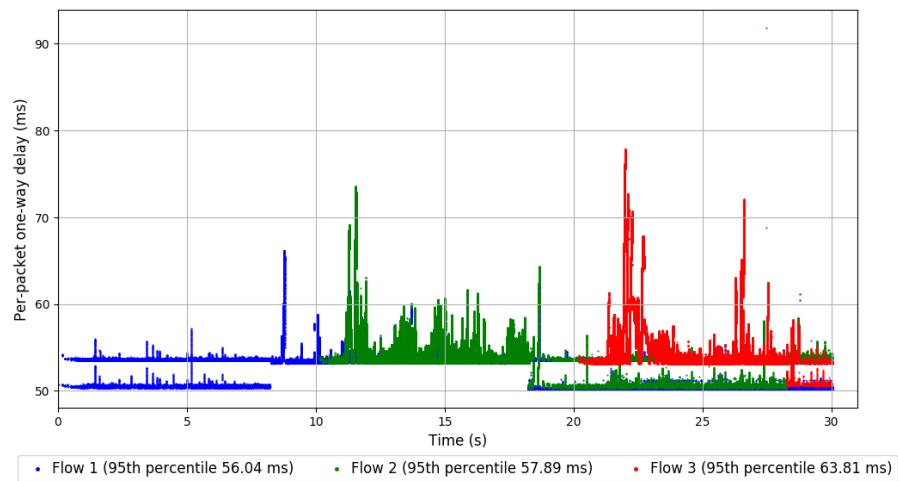
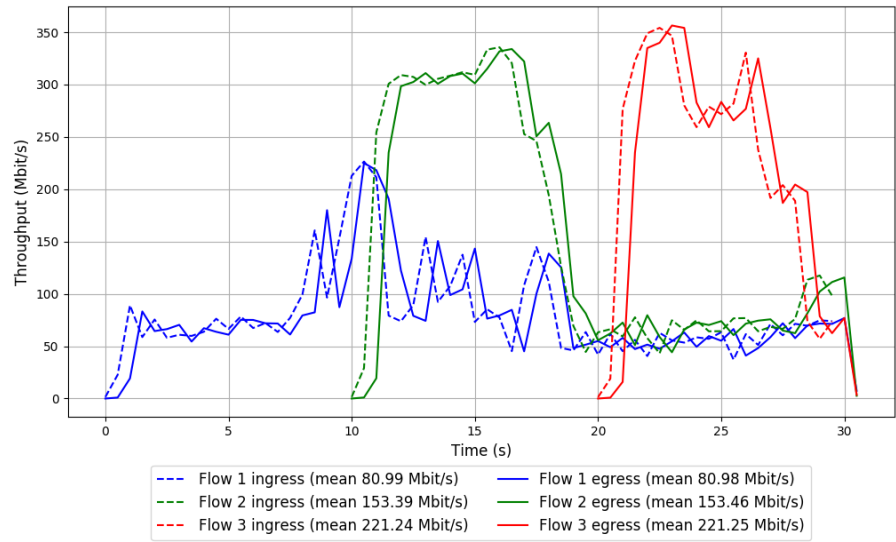
-- Flow 3:

Average throughput: 221.25 Mbit/s

95th percentile per-packet one-way delay: 63.812 ms

Loss rate: 0.00%

## Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-06-01 10:18:02

End at: 2018-06-01 10:18:32

Local clock offset: 0.009 ms

Remote clock offset: 0.311 ms

# Below is generated by plot.py at 2018-06-01 14:31:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 312.15 Mbit/s

95th percentile per-packet one-way delay: 59.947 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 169.79 Mbit/s

95th percentile per-packet one-way delay: 60.580 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 211.78 Mbit/s

95th percentile per-packet one-way delay: 58.948 ms

Loss rate: 0.06%

-- Flow 3:

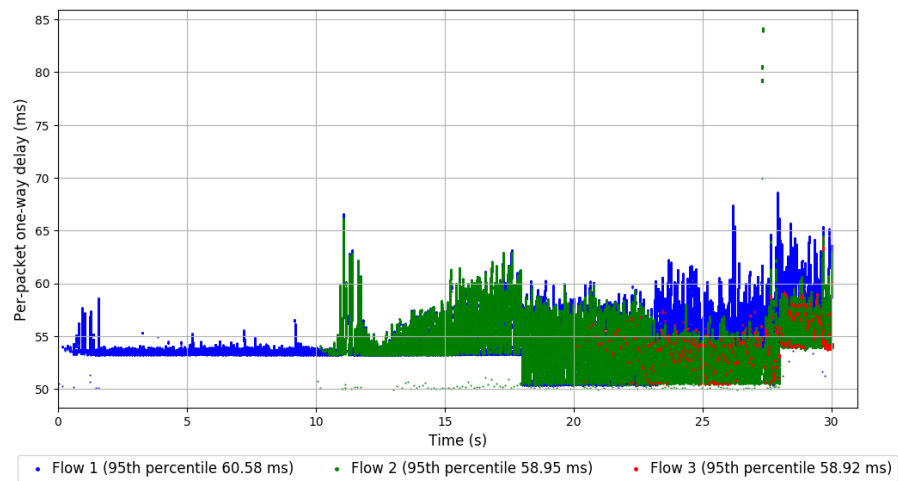
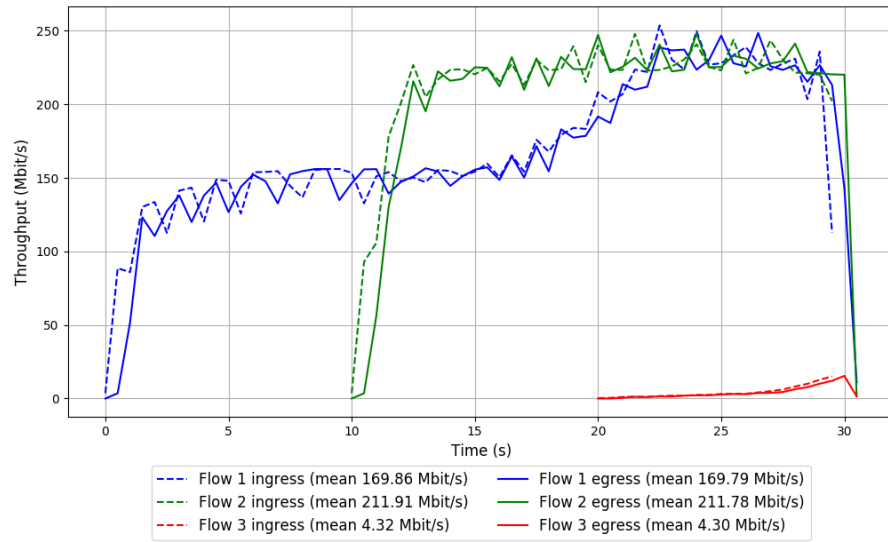
Average throughput: 4.30 Mbit/s

95th percentile per-packet one-way delay: 58.918 ms

Loss rate: 0.28%



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



Run 2: Statistics of TCP Cubic

Start at: 2018-06-01 10:40:32

End at: 2018-06-01 10:41:02

Local clock offset: -0.081 ms

Remote clock offset: 7.81 ms

# Below is generated by plot.py at 2018-06-01 14:31:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 225.39 Mbit/s

95th percentile per-packet one-way delay: 53.358 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 113.28 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 105.96 Mbit/s

95th percentile per-packet one-way delay: 52.469 ms

Loss rate: 0.06%

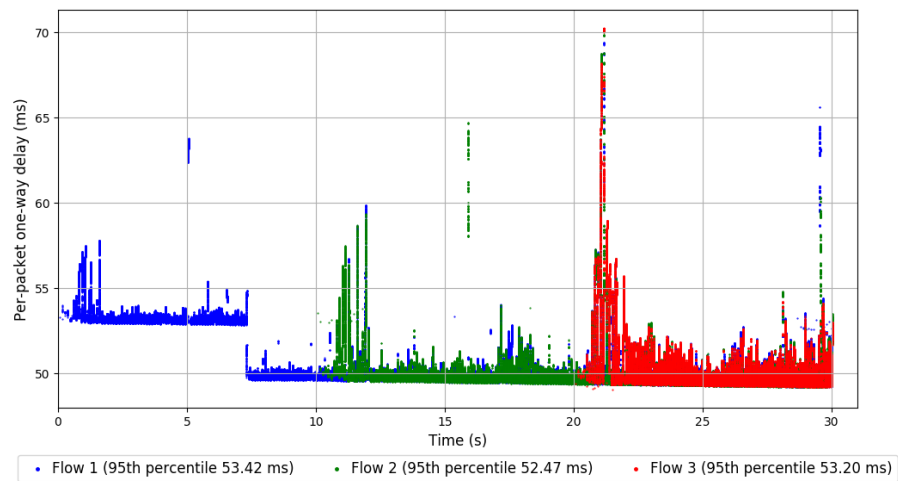
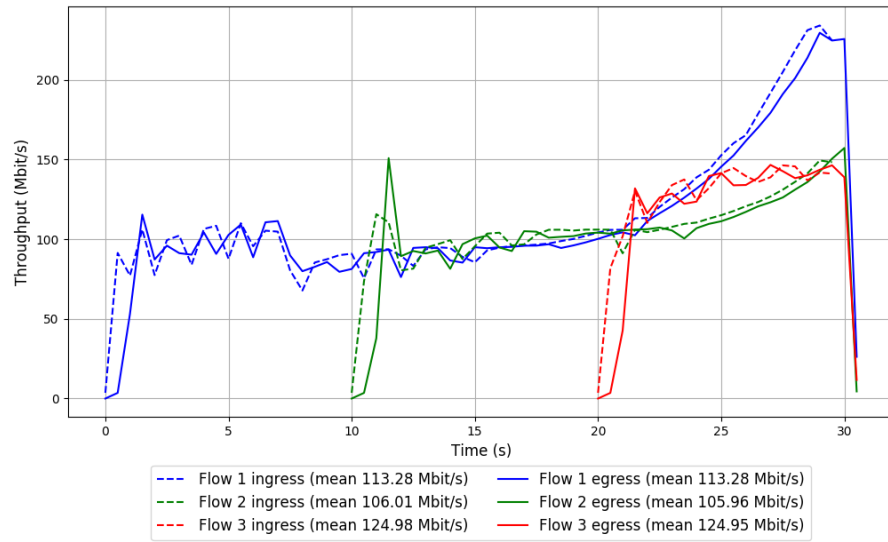
-- Flow 3:

Average throughput: 124.95 Mbit/s

95th percentile per-packet one-way delay: 53.200 ms

Loss rate: 0.03%

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

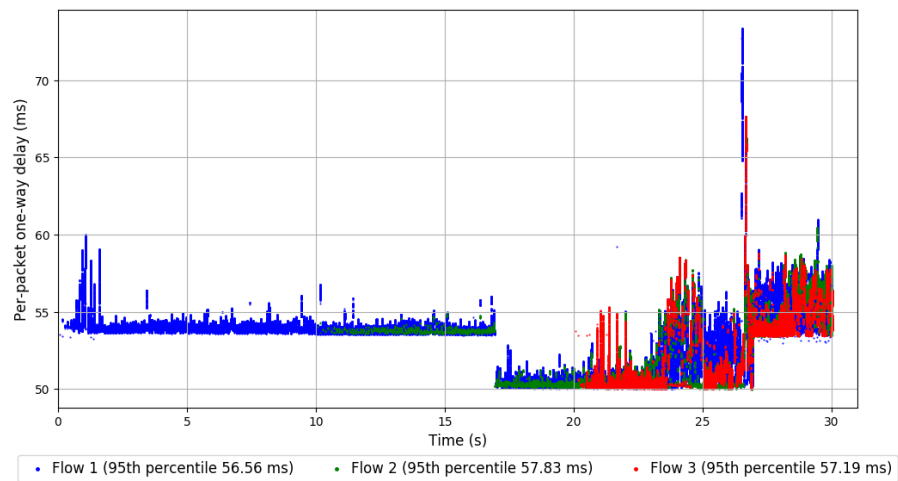
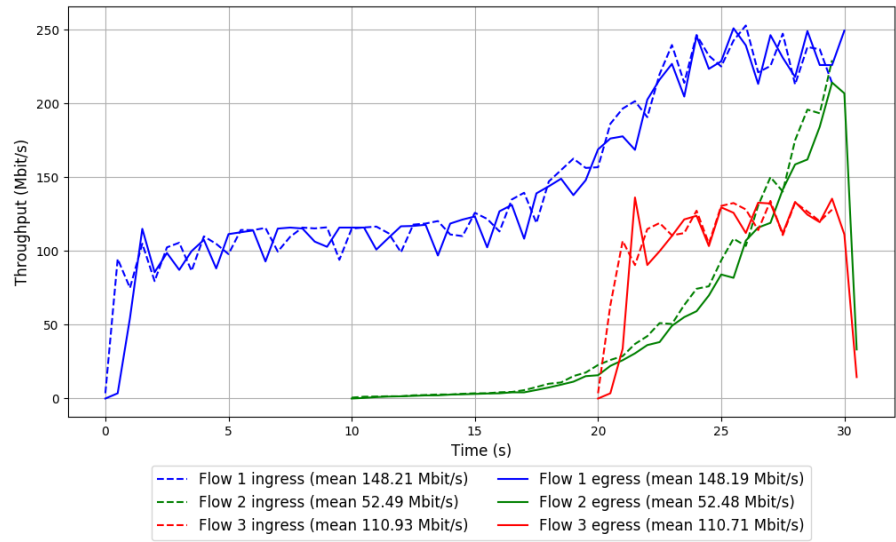


Run 3: Statistics of TCP Cubic

Start at: 2018-06-01 11:03:13  
End at: 2018-06-01 11:03:43  
Local clock offset: -0.088 ms  
Remote clock offset: 16.162 ms

# Below is generated by plot.py at 2018-06-01 14:31:26  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 219.75 Mbit/s  
95th percentile per-packet one-way delay: 57.085 ms  
Loss rate: 0.04%  
-- Flow 1:  
Average throughput: 148.19 Mbit/s  
95th percentile per-packet one-way delay: 56.556 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 52.48 Mbit/s  
95th percentile per-packet one-way delay: 57.834 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 110.71 Mbit/s  
95th percentile per-packet one-way delay: 57.193 ms  
Loss rate: 0.23%

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

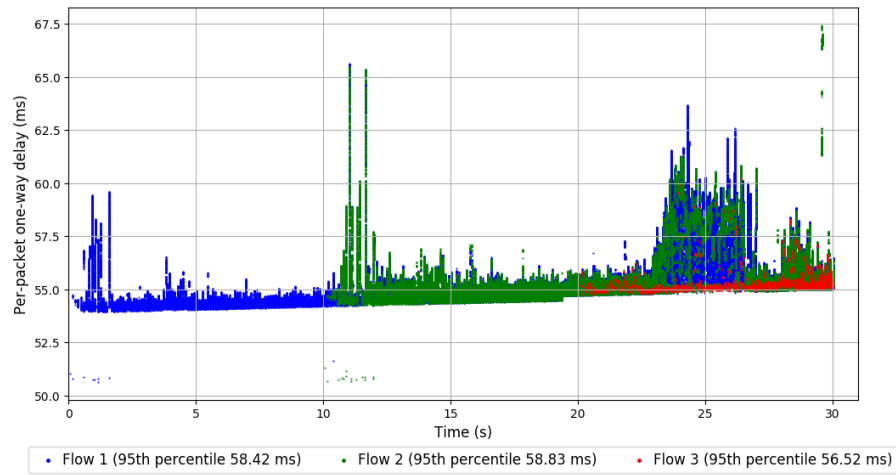
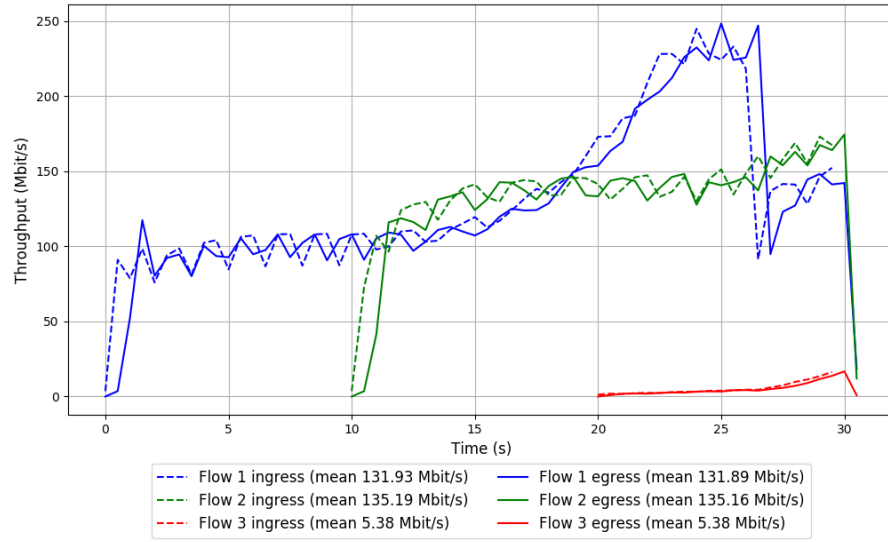


Run 4: Statistics of TCP Cubic

Start at: 2018-06-01 11:26:00  
End at: 2018-06-01 11:26:30  
Local clock offset: -0.118 ms  
Remote clock offset: 21.282 ms

# Below is generated by plot.py at 2018-06-01 14:31:27  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 223.70 Mbit/s  
95th percentile per-packet one-way delay: 58.615 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 131.89 Mbit/s  
95th percentile per-packet one-way delay: 58.418 ms  
Loss rate: 0.03%  
-- Flow 2:  
Average throughput: 135.16 Mbit/s  
95th percentile per-packet one-way delay: 58.833 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 5.38 Mbit/s  
95th percentile per-packet one-way delay: 56.522 ms  
Loss rate: 0.02%

# Run 4: Report of TCP Cubic — Data Link



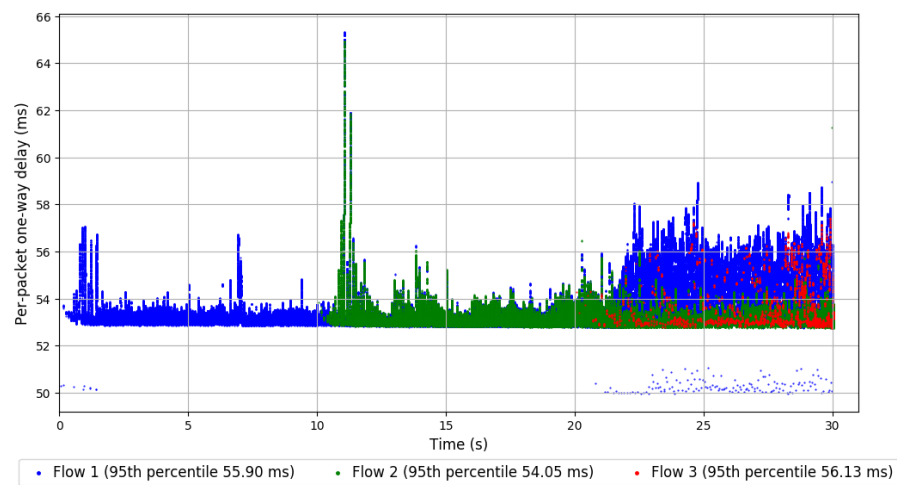
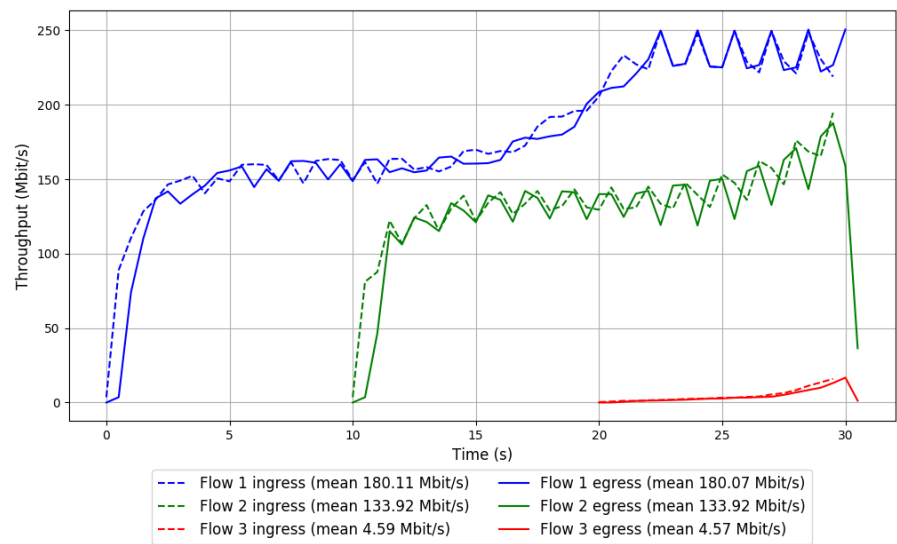
Run 5: Statistics of TCP Cubic

Start at: 2018-06-01 11:48:52  
End at: 2018-06-01 11:49:22  
Local clock offset: -0.154 ms  
Remote clock offset: 12.734 ms

# Below is generated by plot.py at 2018-06-01 14:31:27  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 270.59 Mbit/s  
95th percentile per-packet one-way delay: 55.627 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 180.07 Mbit/s  
95th percentile per-packet one-way delay: 55.896 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 133.92 Mbit/s  
95th percentile per-packet one-way delay: 54.053 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 4.57 Mbit/s  
95th percentile per-packet one-way delay: 56.130 ms  
Loss rate: 0.26%



Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-06-01 12:12:23

End at: 2018-06-01 12:12:53

Local clock offset: -0.043 ms

Remote clock offset: 5.586 ms

# Below is generated by plot.py at 2018-06-01 14:31:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 231.54 Mbit/s

95th percentile per-packet one-way delay: 58.407 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 169.06 Mbit/s

95th percentile per-packet one-way delay: 57.232 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.12 Mbit/s

95th percentile per-packet one-way delay: 59.274 ms

Loss rate: 0.01%

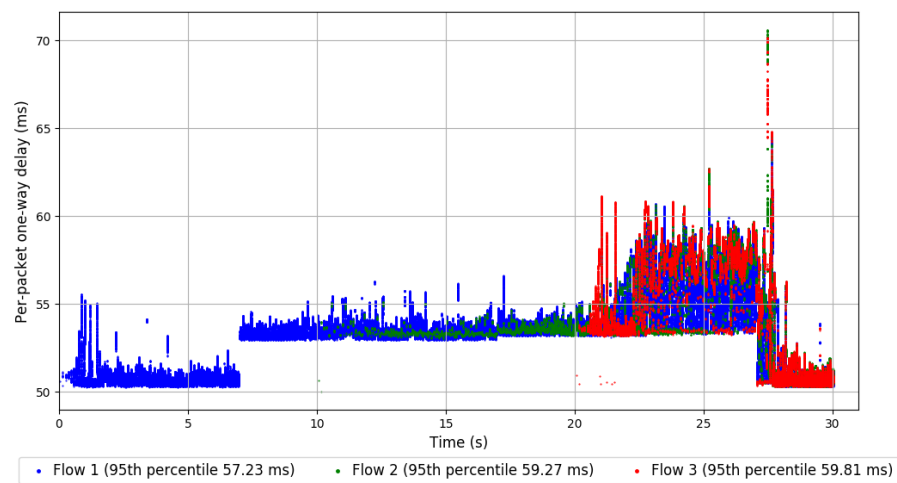
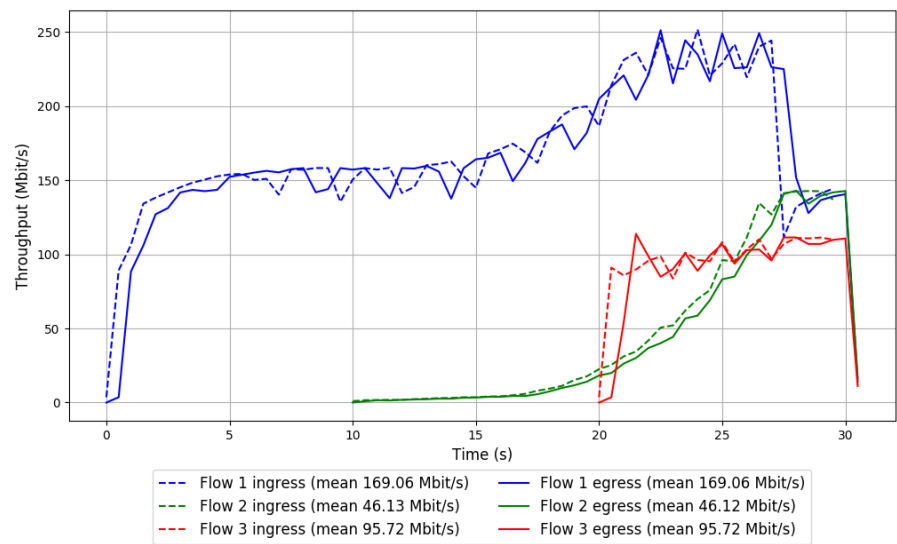
-- Flow 3:

Average throughput: 95.72 Mbit/s

95th percentile per-packet one-way delay: 59.812 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-06-01 12:35:11

End at: 2018-06-01 12:35:41

Local clock offset: 0.264 ms

Remote clock offset: 4.69 ms

# Below is generated by plot.py at 2018-06-01 14:32:23

# Datalink statistics

-- Total of 3 flows:

Average throughput: 297.47 Mbit/s

95th percentile per-packet one-way delay: 59.853 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 170.90 Mbit/s

95th percentile per-packet one-way delay: 58.902 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 132.96 Mbit/s

95th percentile per-packet one-way delay: 60.231 ms

Loss rate: 0.01%

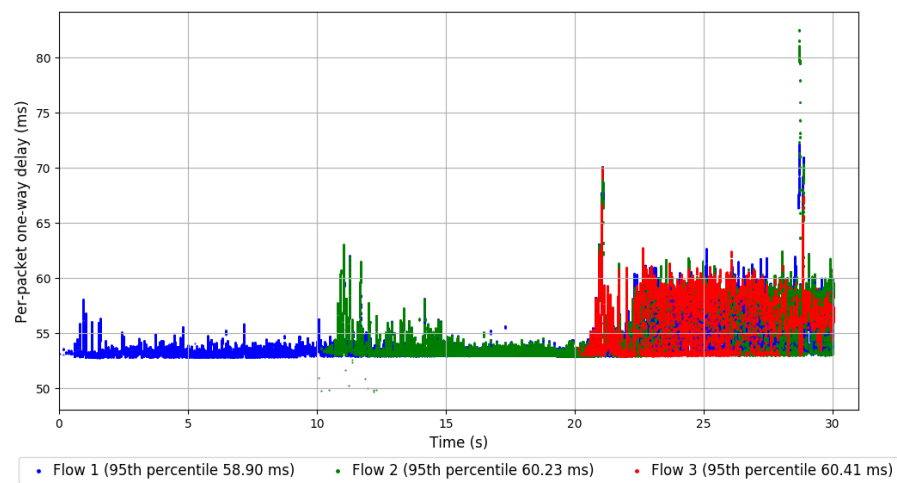
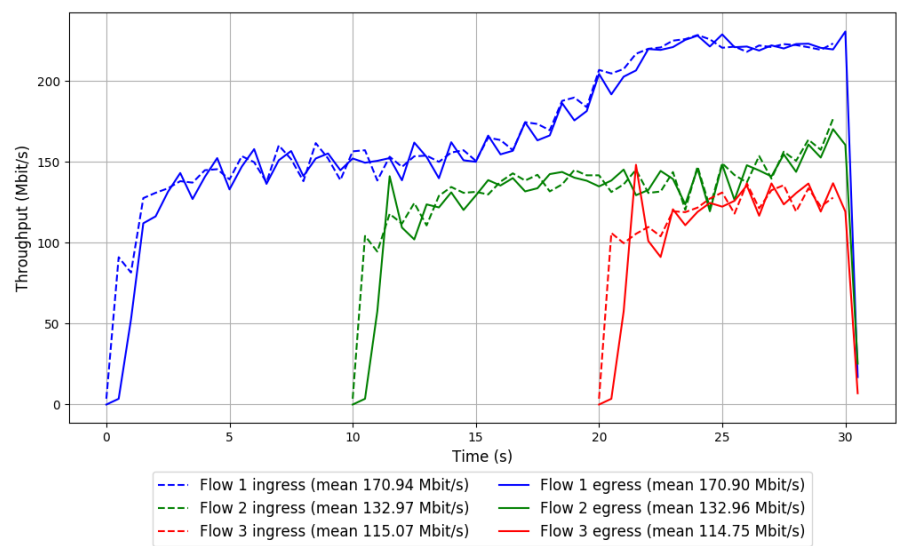
-- Flow 3:

Average throughput: 114.75 Mbit/s

95th percentile per-packet one-way delay: 60.414 ms

Loss rate: 0.32%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-06-01 12:57:51

End at: 2018-06-01 12:58:21

Local clock offset: -0.291 ms

Remote clock offset: 3.018 ms

# Below is generated by plot.py at 2018-06-01 14:33:10

# Datalink statistics

-- Total of 3 flows:

Average throughput: 301.11 Mbit/s

95th percentile per-packet one-way delay: 58.889 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 149.49 Mbit/s

95th percentile per-packet one-way delay: 59.012 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 158.66 Mbit/s

95th percentile per-packet one-way delay: 58.473 ms

Loss rate: 0.09%

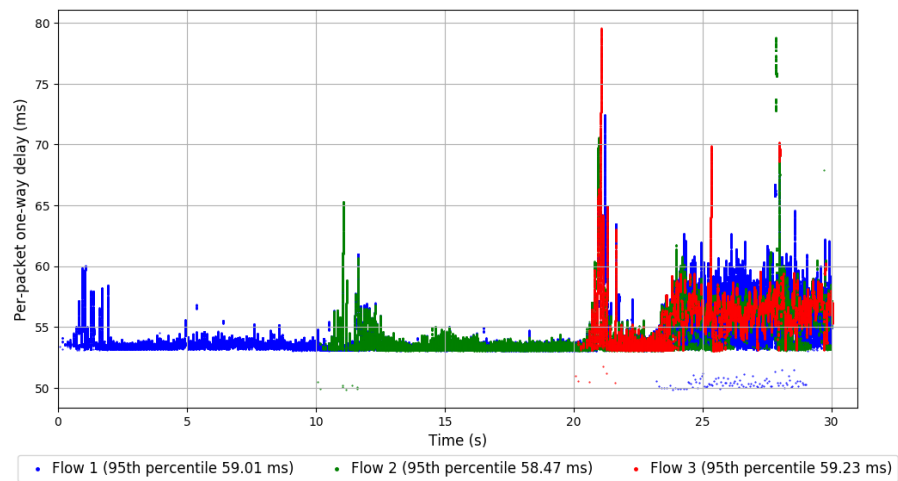
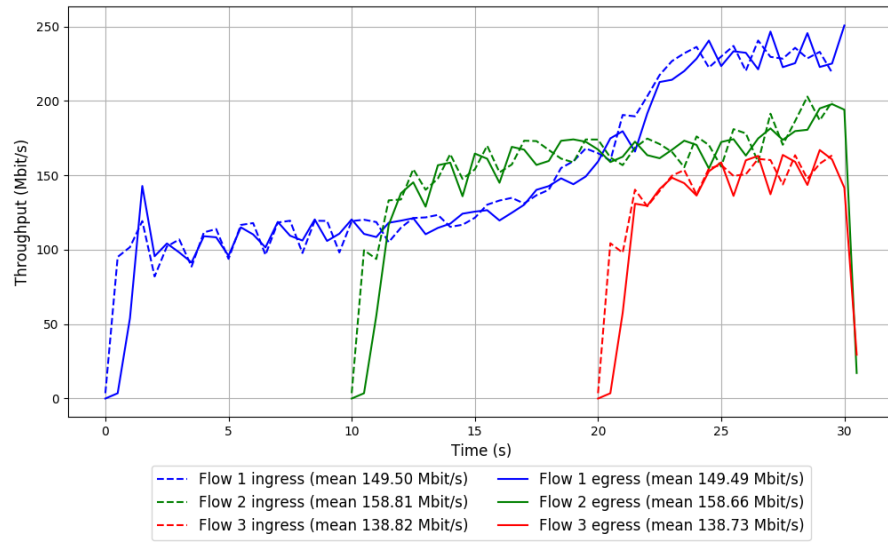
-- Flow 3:

Average throughput: 138.73 Mbit/s

95th percentile per-packet one-way delay: 59.234 ms

Loss rate: 0.00%

# Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-06-01 13:20:34

End at: 2018-06-01 13:21:04

Local clock offset: -0.575 ms

Remote clock offset: 0.715 ms

# Below is generated by plot.py at 2018-06-01 14:33:10

# Datalink statistics

-- Total of 3 flows:

Average throughput: 180.12 Mbit/s

95th percentile per-packet one-way delay: 58.009 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 145.01 Mbit/s

95th percentile per-packet one-way delay: 57.492 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 50.30 Mbit/s

95th percentile per-packet one-way delay: 58.633 ms

Loss rate: 0.01%

-- Flow 3:

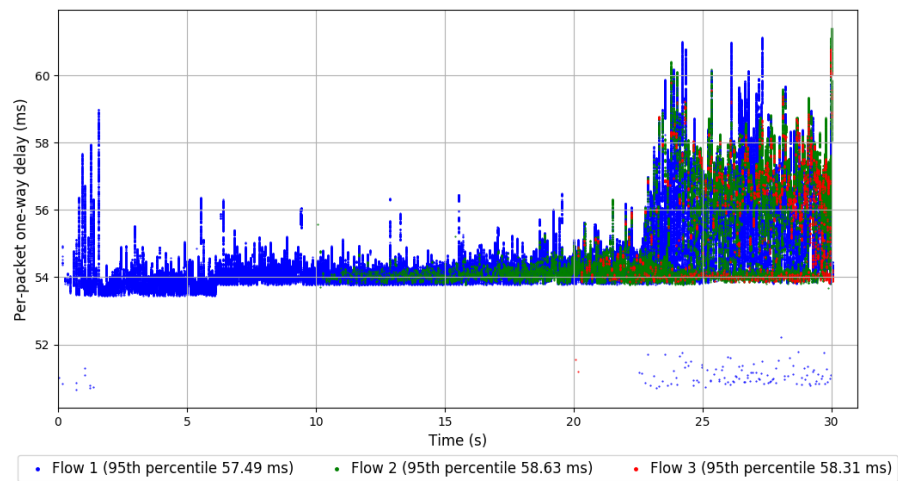
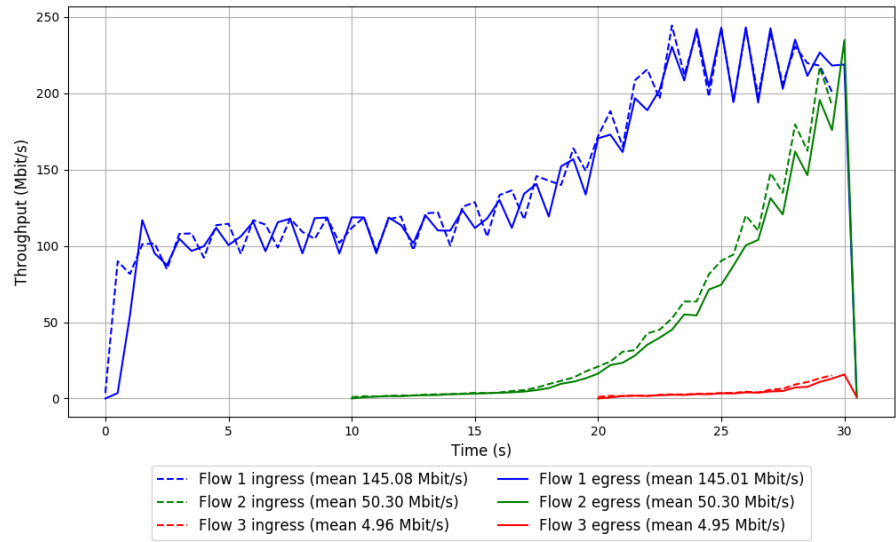
Average throughput: 4.95 Mbit/s

95th percentile per-packet one-way delay: 58.313 ms

Loss rate: 0.22%



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



Run 10: Statistics of TCP Cubic

Start at: 2018-06-01 13:43:10

End at: 2018-06-01 13:43:40

Local clock offset: 0.205 ms

Remote clock offset: 0.351 ms

# Below is generated by plot.py at 2018-06-01 14:33:10

# Datalink statistics

-- Total of 3 flows:

Average throughput: 256.86 Mbit/s

95th percentile per-packet one-way delay: 62.297 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 221.27 Mbit/s

95th percentile per-packet one-way delay: 62.562 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 50.96 Mbit/s

95th percentile per-packet one-way delay: 58.550 ms

Loss rate: 0.59%

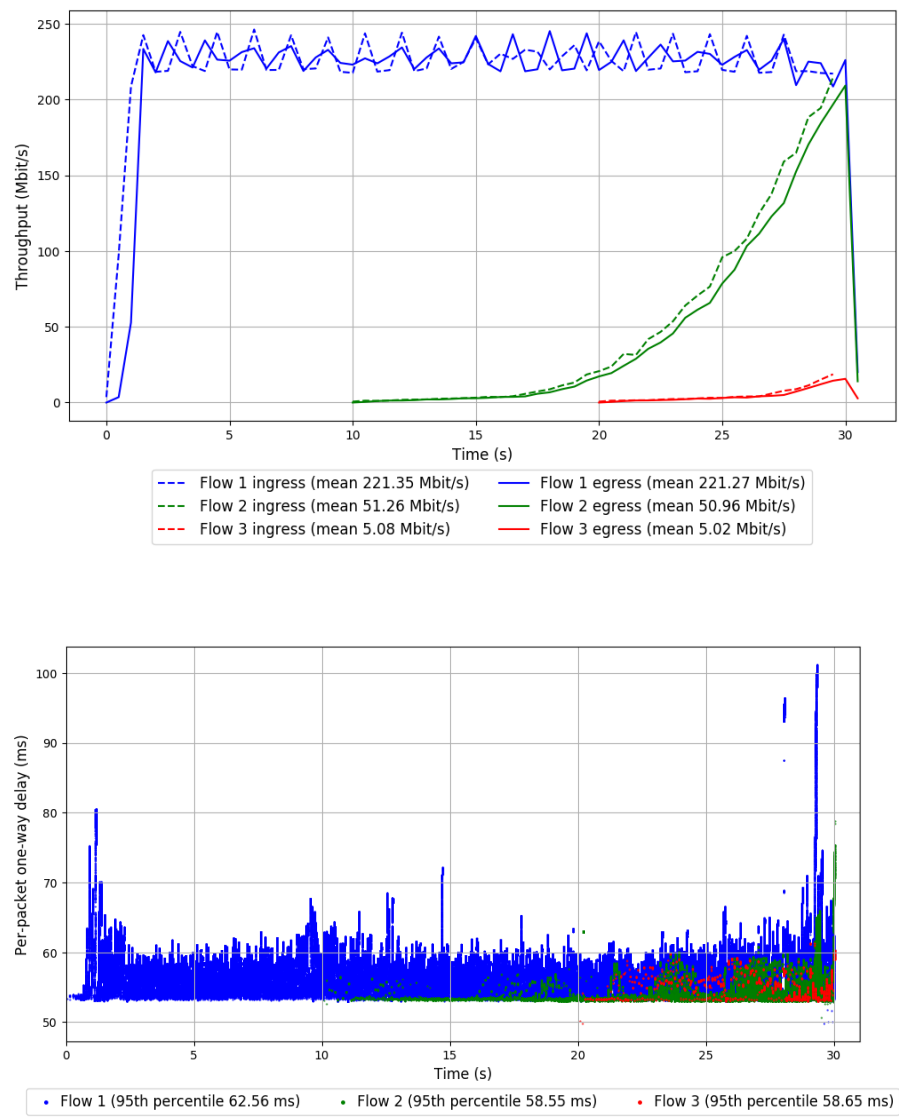
-- Flow 3:

Average throughput: 5.02 Mbit/s

95th percentile per-packet one-way delay: 58.651 ms

Loss rate: 1.28%

Run 10: Report of TCP Cubic — Data Link

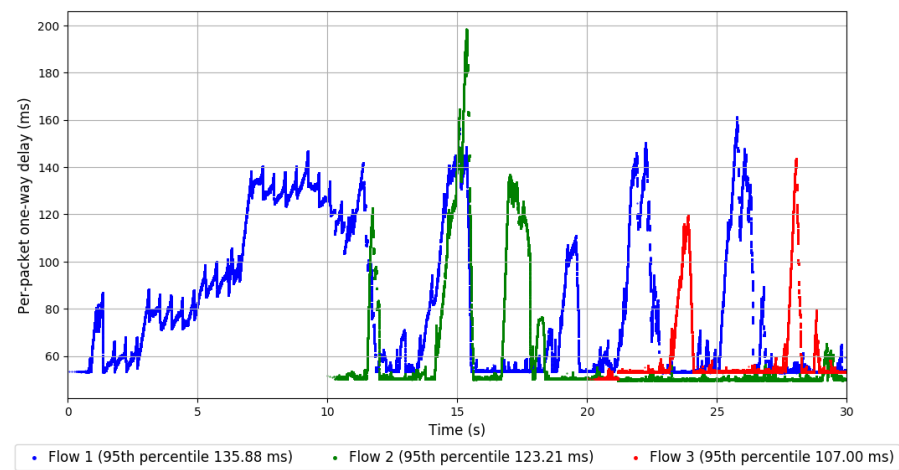
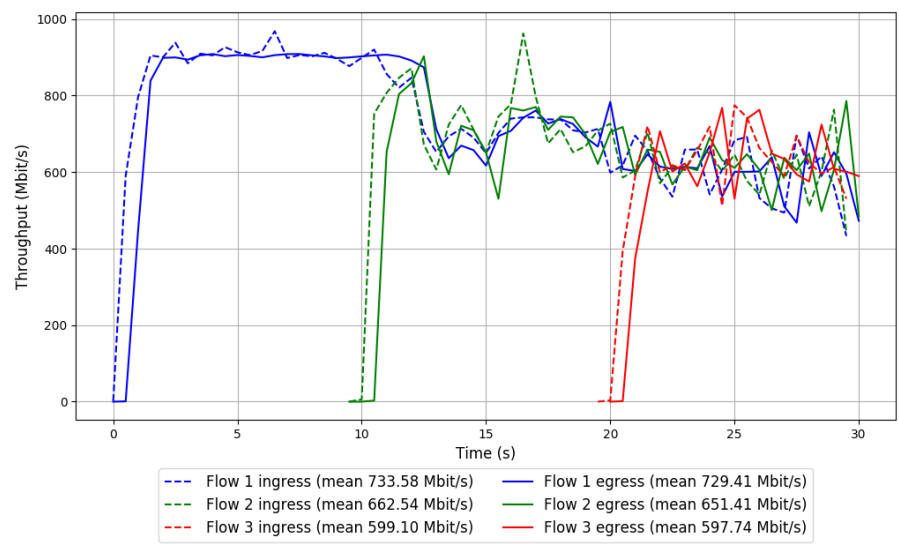


Run 1: Statistics of FillP

Start at: 2018-06-01 10:14:48  
End at: 2018-06-01 10:15:19  
Local clock offset: -0.123 ms  
Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2018-06-01 14:55:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1362.17 Mbit/s  
95th percentile per-packet one-way delay: 133.421 ms  
Loss rate: 0.87%  
-- Flow 1:  
Average throughput: 729.41 Mbit/s  
95th percentile per-packet one-way delay: 135.883 ms  
Loss rate: 0.55%  
-- Flow 2:  
Average throughput: 651.41 Mbit/s  
95th percentile per-packet one-way delay: 123.206 ms  
Loss rate: 1.69%  
-- Flow 3:  
Average throughput: 597.74 Mbit/s  
95th percentile per-packet one-way delay: 106.995 ms  
Loss rate: 0.23%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-06-01 10:37:19

End at: 2018-06-01 10:37:49

Local clock offset: -0.002 ms

Remote clock offset: 4.519 ms

# Below is generated by plot.py at 2018-06-01 14:55:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1224.62 Mbit/s

95th percentile per-packet one-way delay: 186.732 ms

Loss rate: 1.37%

-- Flow 1:

Average throughput: 715.68 Mbit/s

95th percentile per-packet one-way delay: 193.326 ms

Loss rate: 1.04%

-- Flow 2:

Average throughput: 465.60 Mbit/s

95th percentile per-packet one-way delay: 188.676 ms

Loss rate: 0.11%

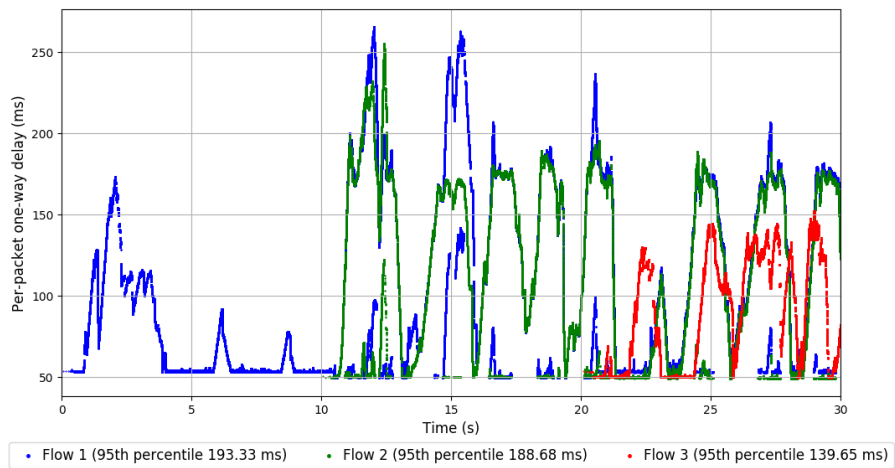
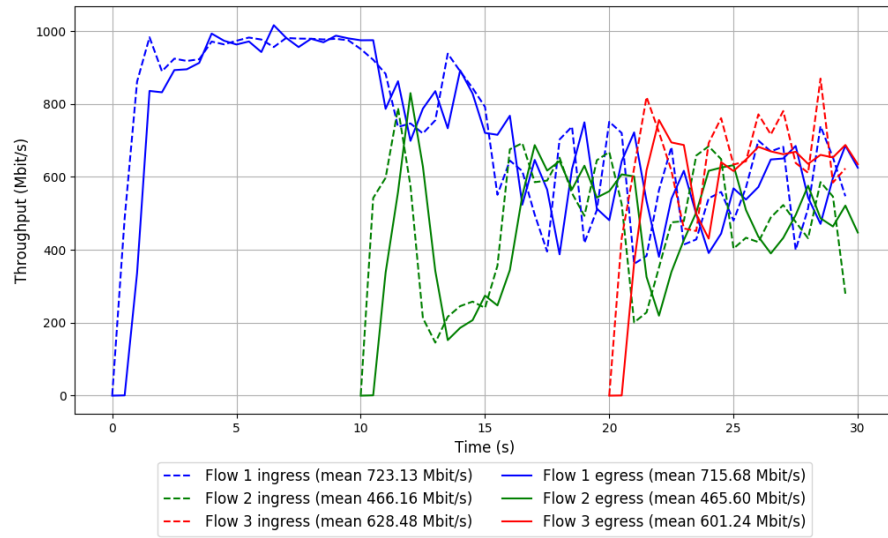
-- Flow 3:

Average throughput: 601.24 Mbit/s

95th percentile per-packet one-way delay: 139.650 ms

Loss rate: 4.37%

## Run 2: Report of FillP — Data Link



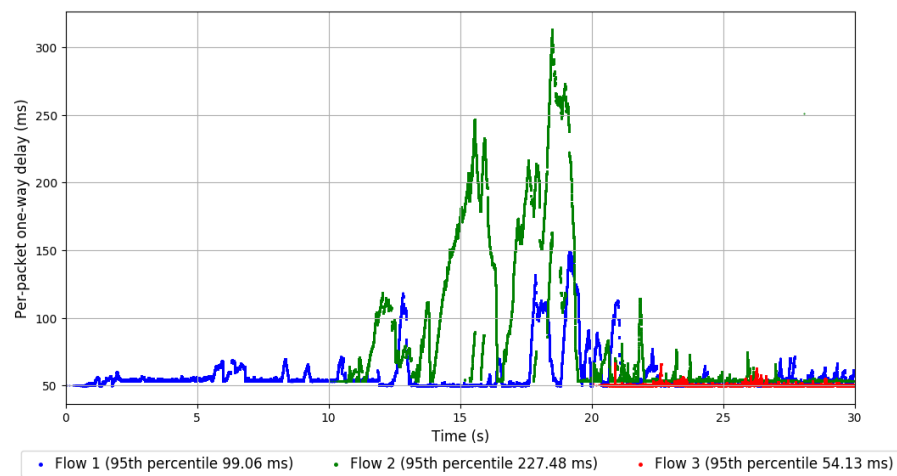
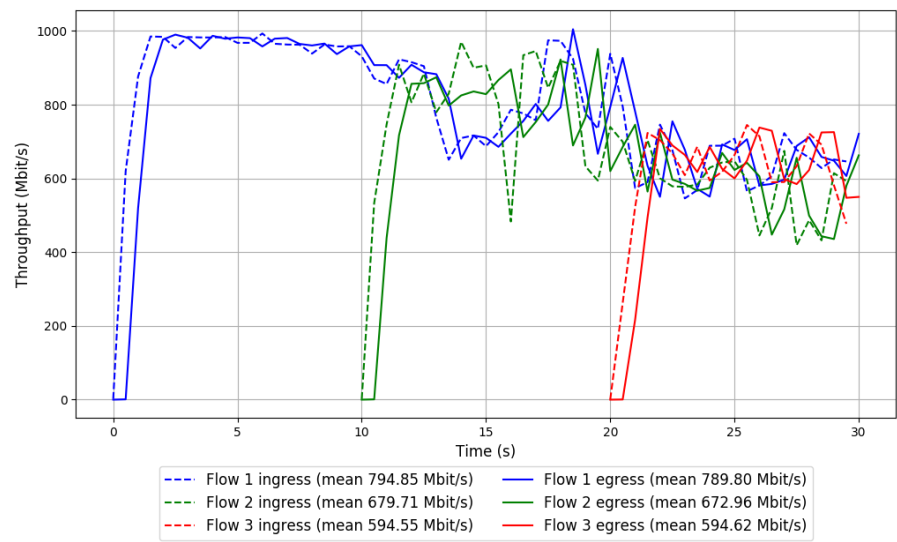
Run 3: Statistics of FillP

Start at: 2018-06-01 10:59:58  
End at: 2018-06-01 11:00:28  
Local clock offset: -0.188 ms  
Remote clock offset: 14.239 ms

# Below is generated by plot.py at 2018-06-01 14:59:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1434.80 Mbit/s  
95th percentile per-packet one-way delay: 174.129 ms  
Loss rate: 0.67%  
-- Flow 1:  
Average throughput: 789.80 Mbit/s  
95th percentile per-packet one-way delay: 99.056 ms  
Loss rate: 0.63%  
-- Flow 2:  
Average throughput: 672.96 Mbit/s  
95th percentile per-packet one-way delay: 227.477 ms  
Loss rate: 1.01%  
-- Flow 3:  
Average throughput: 594.62 Mbit/s  
95th percentile per-packet one-way delay: 54.134 ms  
Loss rate: 0.00%



Run 3: Report of FillP — Data Link

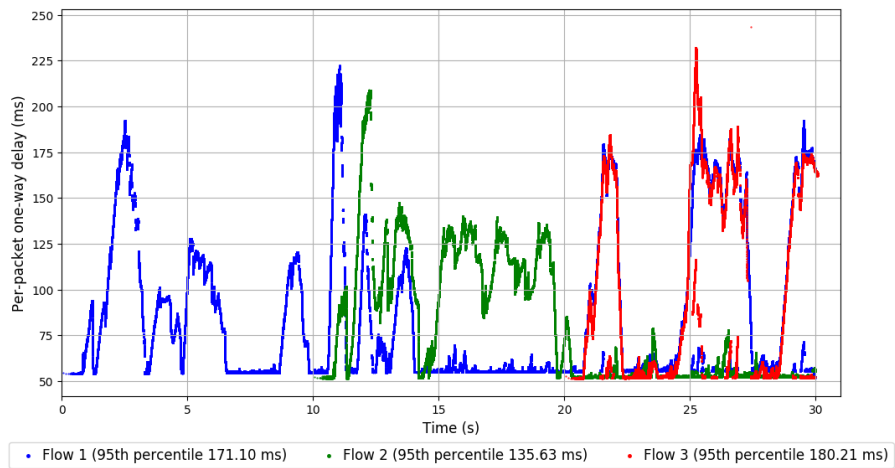
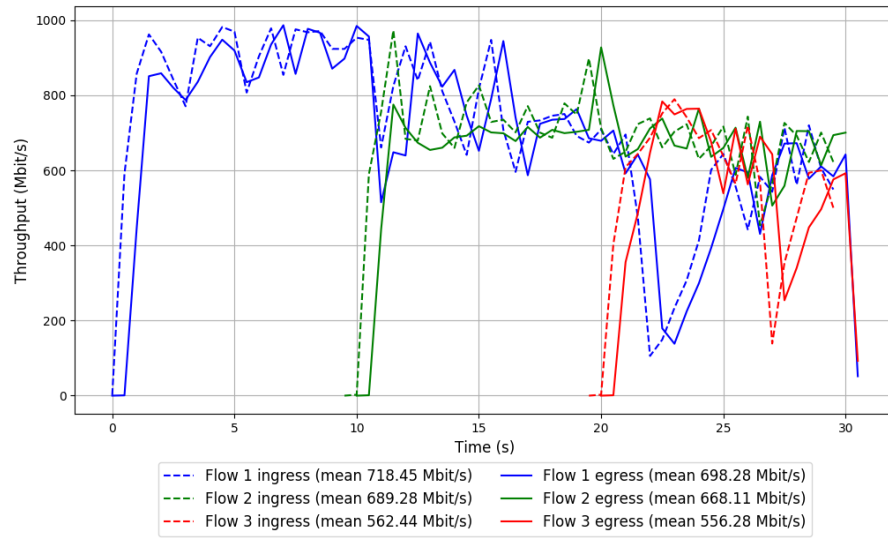


Run 4: Statistics of FillP

Start at: 2018-06-01 11:22:40  
End at: 2018-06-01 11:23:10  
Local clock offset: -0.193 ms  
Remote clock offset: 29.216 ms

# Below is generated by plot.py at 2018-06-01 14:59:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1326.76 Mbit/s  
95th percentile per-packet one-way delay: 170.358 ms  
Loss rate: 2.40%  
-- Flow 1:  
Average throughput: 698.28 Mbit/s  
95th percentile per-packet one-way delay: 171.098 ms  
Loss rate: 2.61%  
-- Flow 2:  
Average throughput: 668.11 Mbit/s  
95th percentile per-packet one-way delay: 135.628 ms  
Loss rate: 3.05%  
-- Flow 3:  
Average throughput: 556.28 Mbit/s  
95th percentile per-packet one-way delay: 180.211 ms  
Loss rate: 0.00%

# Run 4: Report of FillP — Data Link

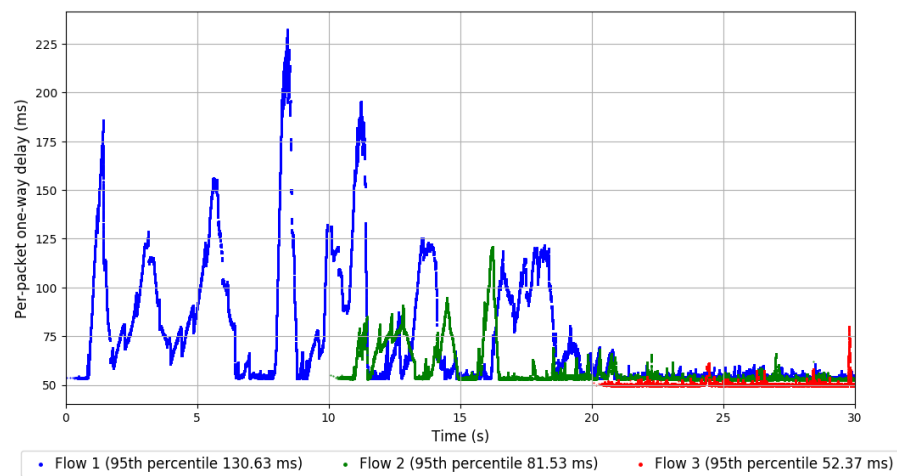
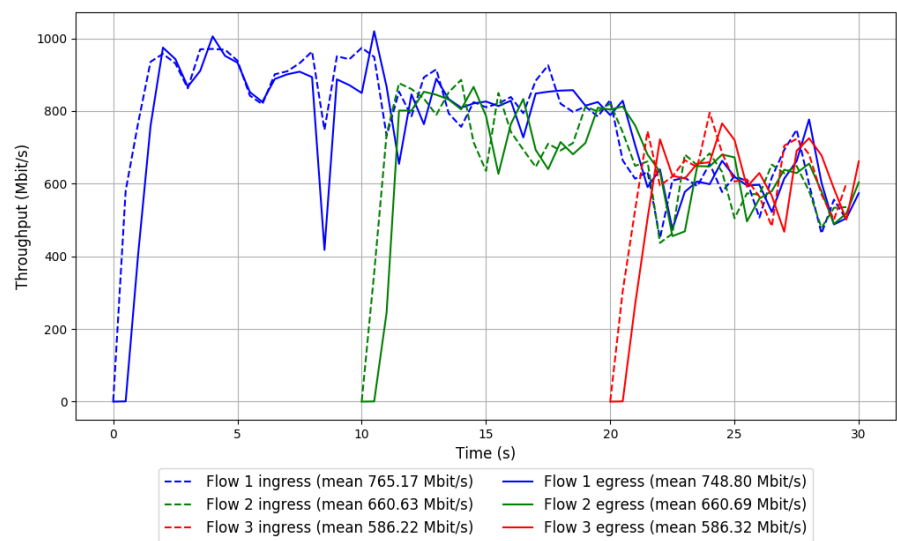


Run 5: Statistics of FillP

Start at: 2018-06-01 11:45:26  
End at: 2018-06-01 11:45:56  
Local clock offset: 0.089 ms  
Remote clock offset: 11.846 ms

# Below is generated by plot.py at 2018-06-01 14:59:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1382.73 Mbit/s  
95th percentile per-packet one-way delay: 119.477 ms  
Loss rate: 1.18%  
-- Flow 1:  
Average throughput: 748.80 Mbit/s  
95th percentile per-packet one-way delay: 130.633 ms  
Loss rate: 2.15%  
-- Flow 2:  
Average throughput: 660.69 Mbit/s  
95th percentile per-packet one-way delay: 81.527 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 586.32 Mbit/s  
95th percentile per-packet one-way delay: 52.371 ms  
Loss rate: 0.00%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-06-01 12:08:36

End at: 2018-06-01 12:09:06

Local clock offset: -0.034 ms

Remote clock offset: 6.108 ms

# Below is generated by plot.py at 2018-06-01 14:59:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1335.90 Mbit/s

95th percentile per-packet one-way delay: 174.008 ms

Loss rate: 1.50%

-- Flow 1:

Average throughput: 742.27 Mbit/s

95th percentile per-packet one-way delay: 174.270 ms

Loss rate: 1.67%

-- Flow 2:

Average throughput: 728.38 Mbit/s

95th percentile per-packet one-way delay: 147.758 ms

Loss rate: 1.58%

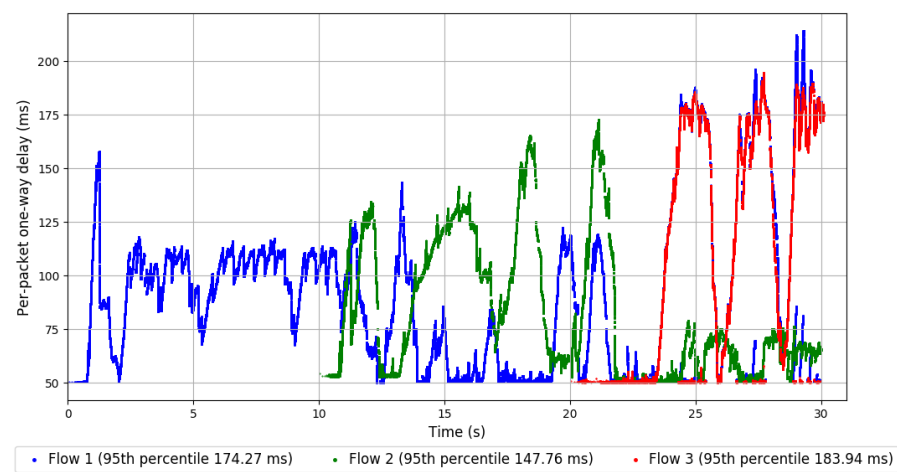
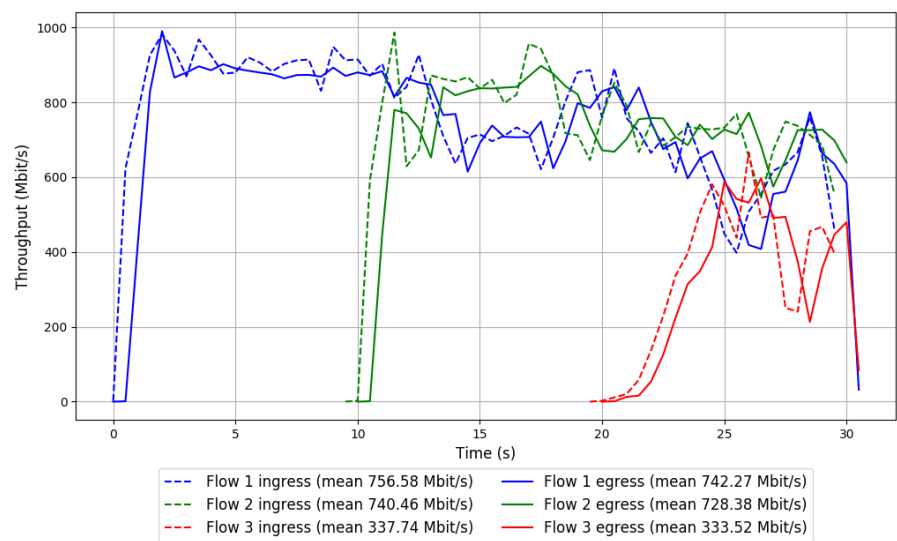
-- Flow 3:

Average throughput: 333.52 Mbit/s

95th percentile per-packet one-way delay: 183.941 ms

Loss rate: 0.01%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-06-01 12:31:59

End at: 2018-06-01 12:32:29

Local clock offset: 0.314 ms

Remote clock offset: 6.33 ms

# Below is generated by plot.py at 2018-06-01 14:59:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1296.38 Mbit/s

95th percentile per-packet one-way delay: 145.608 ms

Loss rate: 2.55%

-- Flow 1:

Average throughput: 718.71 Mbit/s

95th percentile per-packet one-way delay: 121.072 ms

Loss rate: 2.32%

-- Flow 2:

Average throughput: 593.25 Mbit/s

95th percentile per-packet one-way delay: 152.606 ms

Loss rate: 3.36%

-- Flow 3:

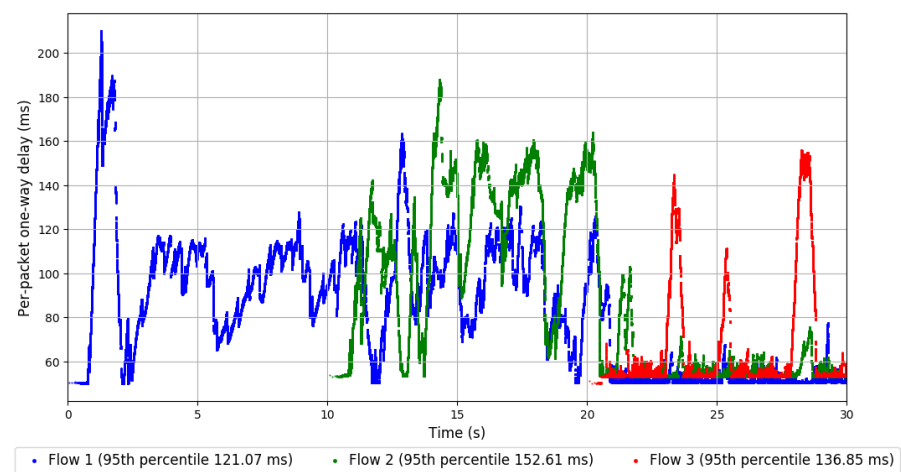
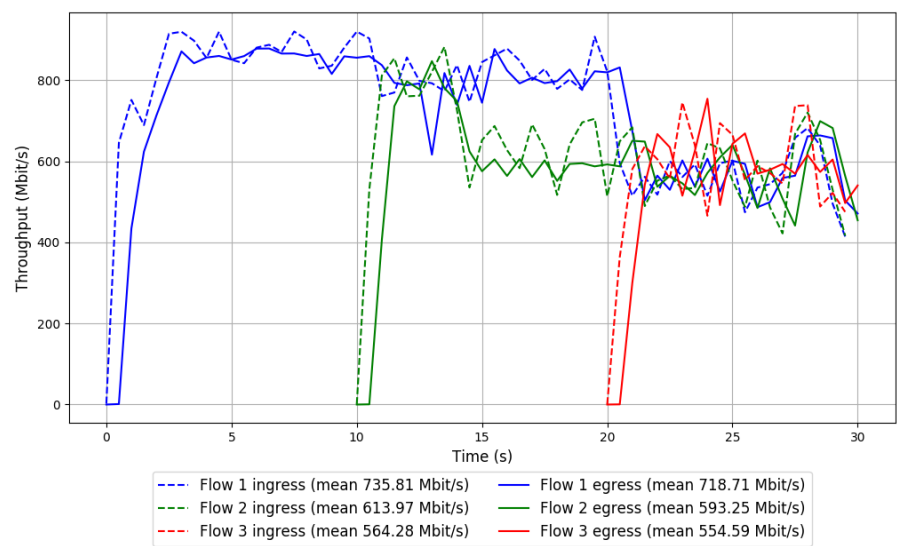
Average throughput: 554.59 Mbit/s

95th percentile per-packet one-way delay: 136.853 ms

Loss rate: 1.69%



Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-06-01 12:54:37

End at: 2018-06-01 12:55:07

Local clock offset: -0.339 ms

Remote clock offset: 2.821 ms

# Below is generated by plot.py at 2018-06-01 15:01:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1419.46 Mbit/s

95th percentile per-packet one-way delay: 113.808 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 760.80 Mbit/s

95th percentile per-packet one-way delay: 112.348 ms

Loss rate: 0.91%

-- Flow 2:

Average throughput: 672.57 Mbit/s

95th percentile per-packet one-way delay: 130.686 ms

Loss rate: 0.63%

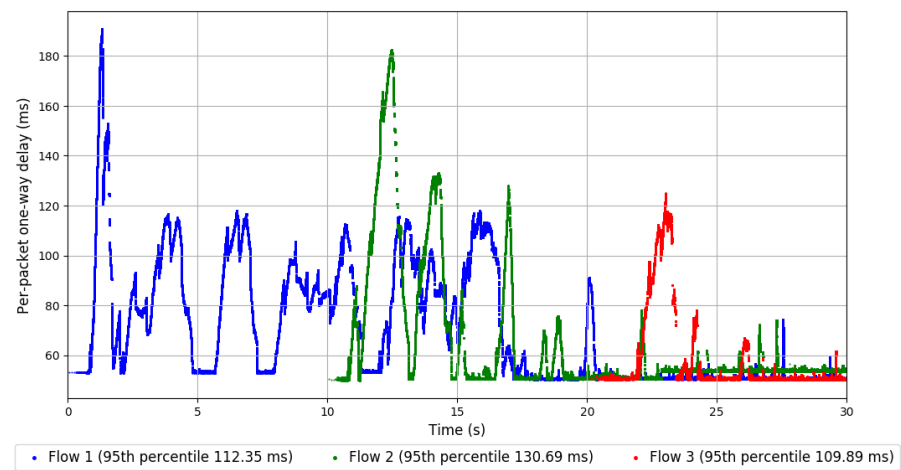
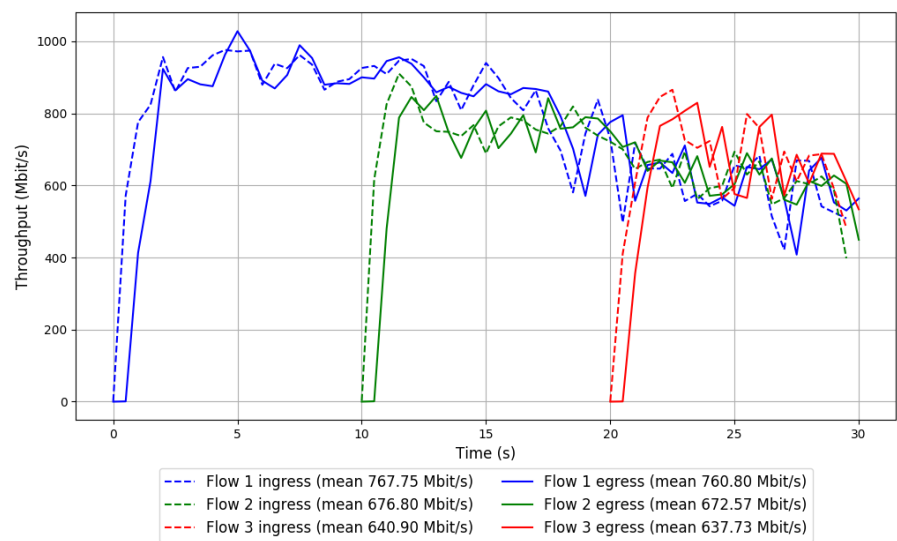
-- Flow 3:

Average throughput: 637.73 Mbit/s

95th percentile per-packet one-way delay: 109.889 ms

Loss rate: 0.50%

Run 8: Report of FillP — Data Link

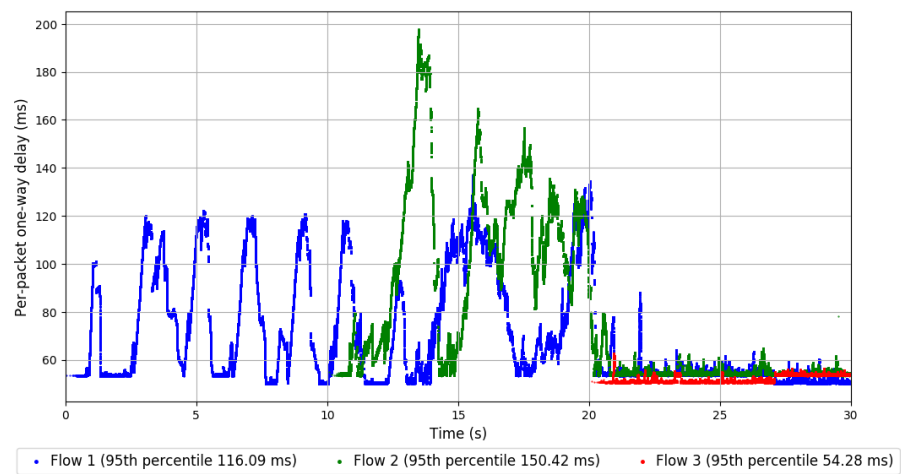
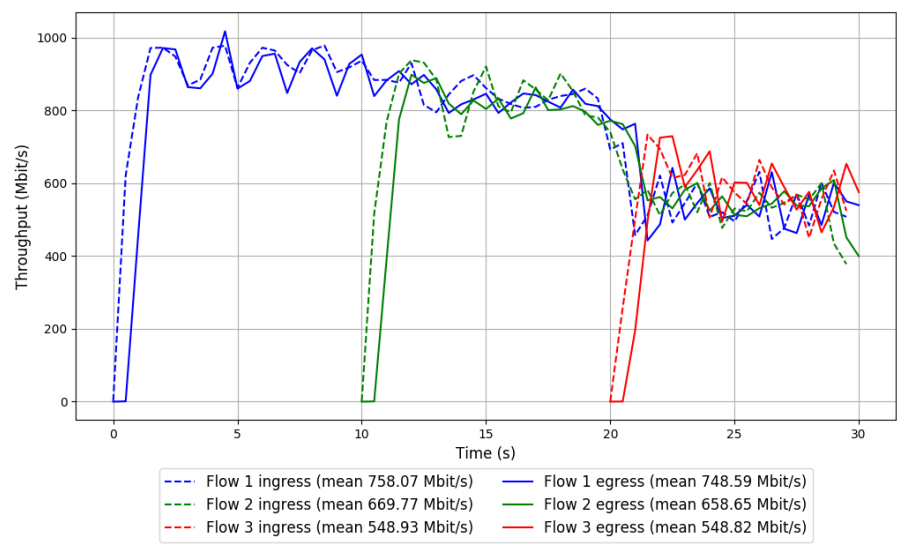


Run 9: Statistics of FillP

Start at: 2018-06-01 13:17:13  
End at: 2018-06-01 13:17:43  
Local clock offset: -0.254 ms  
Remote clock offset: 1.034 ms

# Below is generated by plot.py at 2018-06-01 15:23:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1368.60 Mbit/s  
95th percentile per-packet one-way delay: 126.089 ms  
Loss rate: 1.23%  
-- Flow 1:  
Average throughput: 748.59 Mbit/s  
95th percentile per-packet one-way delay: 116.089 ms  
Loss rate: 1.26%  
-- Flow 2:  
Average throughput: 658.65 Mbit/s  
95th percentile per-packet one-way delay: 150.417 ms  
Loss rate: 1.68%  
-- Flow 3:  
Average throughput: 548.82 Mbit/s  
95th percentile per-packet one-way delay: 54.278 ms  
Loss rate: 0.04%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-06-01 13:39:56

End at: 2018-06-01 13:40:26

Local clock offset: -0.163 ms

Remote clock offset: 0.274 ms

# Below is generated by plot.py at 2018-06-01 15:23:45

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1321.81 Mbit/s

95th percentile per-packet one-way delay: 169.043 ms

Loss rate: 2.37%

-- Flow 1:

Average throughput: 750.70 Mbit/s

95th percentile per-packet one-way delay: 147.228 ms

Loss rate: 2.77%

-- Flow 2:

Average throughput: 594.09 Mbit/s

95th percentile per-packet one-way delay: 173.142 ms

Loss rate: 2.53%

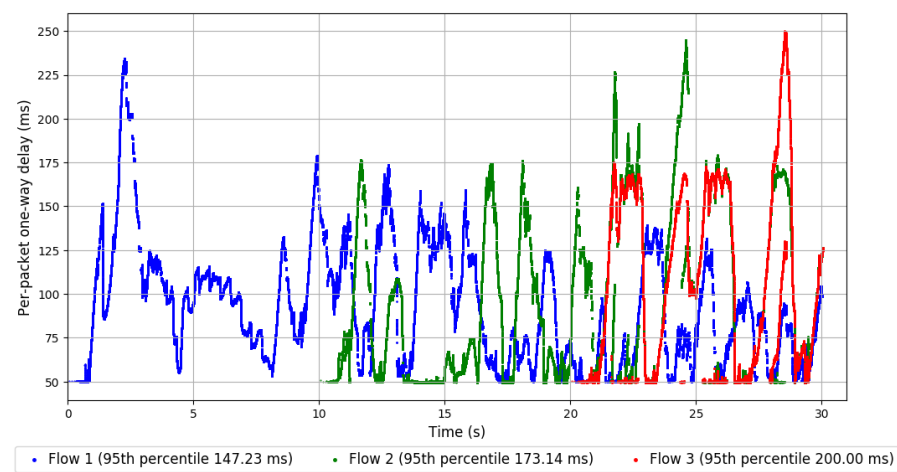
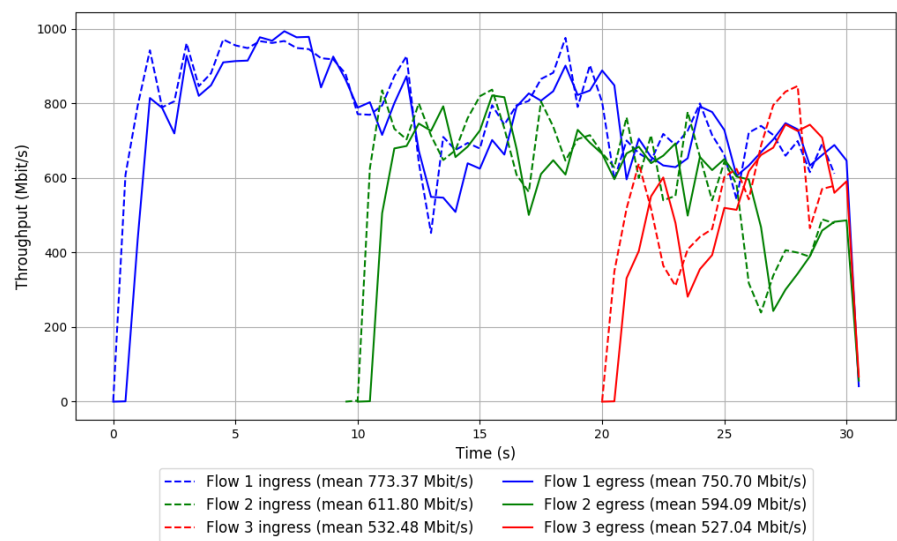
-- Flow 3:

Average throughput: 527.04 Mbit/s

95th percentile per-packet one-way delay: 199.996 ms

Loss rate: 0.26%

Run 10: Report of FillP — Data Link



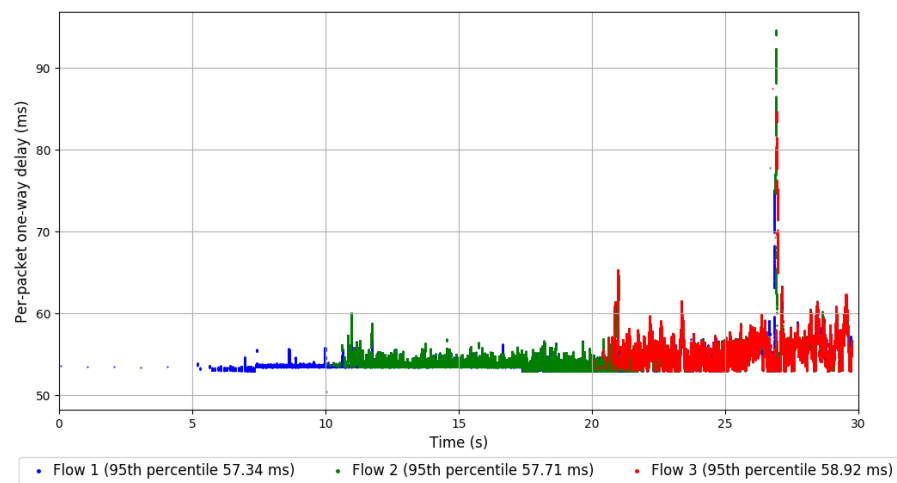
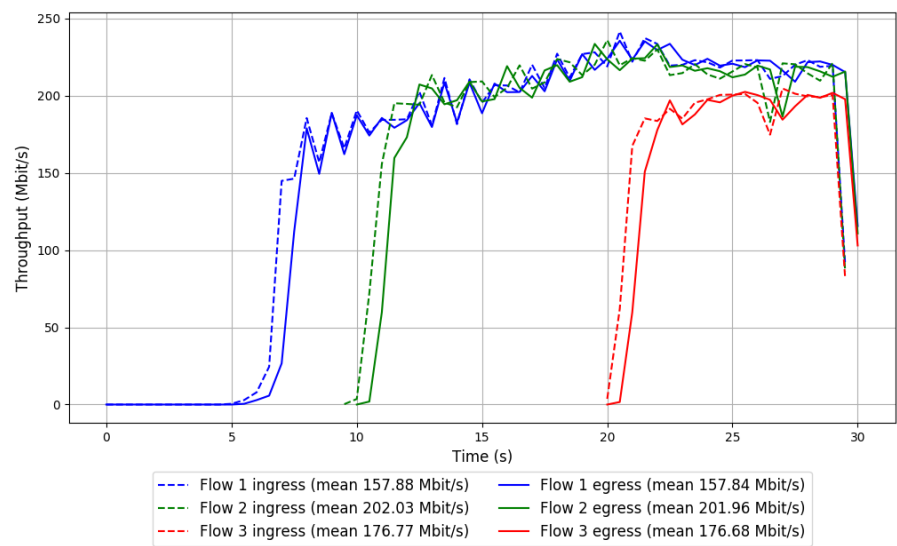
```
Run 1: Statistics of Indigo

Start at: 2018-06-01 10:24:22
End at: 2018-06-01 10:24:52
Local clock offset: -0.325 ms
Remote clock offset: -0.286 ms

# Below is generated by plot.py at 2018-06-01 15:23:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 349.59 Mbit/s
95th percentile per-packet one-way delay: 57.827 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 157.84 Mbit/s
95th percentile per-packet one-way delay: 57.338 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 201.96 Mbit/s
95th percentile per-packet one-way delay: 57.711 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 176.68 Mbit/s
95th percentile per-packet one-way delay: 58.921 ms
Loss rate: 0.07%
```



Run 1: Report of Indigo — Data Link

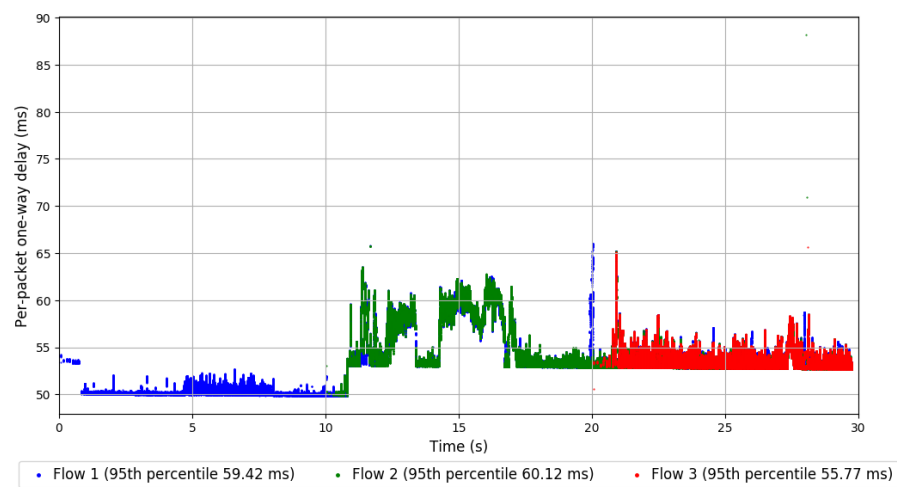
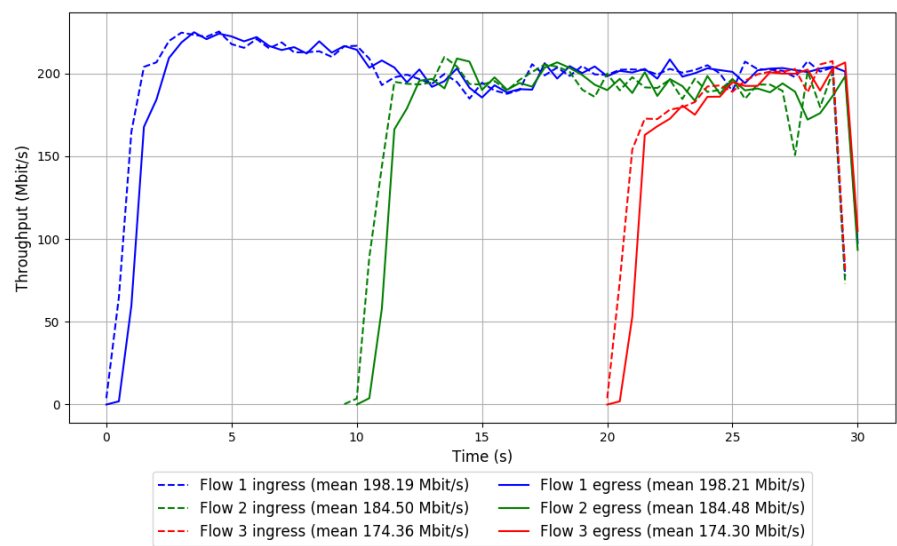


Run 2: Statistics of Indigo

Start at: 2018-06-01 10:46:39  
End at: 2018-06-01 10:47:09  
Local clock offset: -0.219 ms  
Remote clock offset: 15.257 ms

# Below is generated by plot.py at 2018-06-01 15:23:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 377.34 Mbit/s  
95th percentile per-packet one-way delay: 59.513 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 198.21 Mbit/s  
95th percentile per-packet one-way delay: 59.417 ms  
Loss rate: 0.02%  
-- Flow 2:  
Average throughput: 184.48 Mbit/s  
95th percentile per-packet one-way delay: 60.123 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 174.30 Mbit/s  
95th percentile per-packet one-way delay: 55.766 ms  
Loss rate: 0.05%

Run 2: Report of Indigo — Data Link

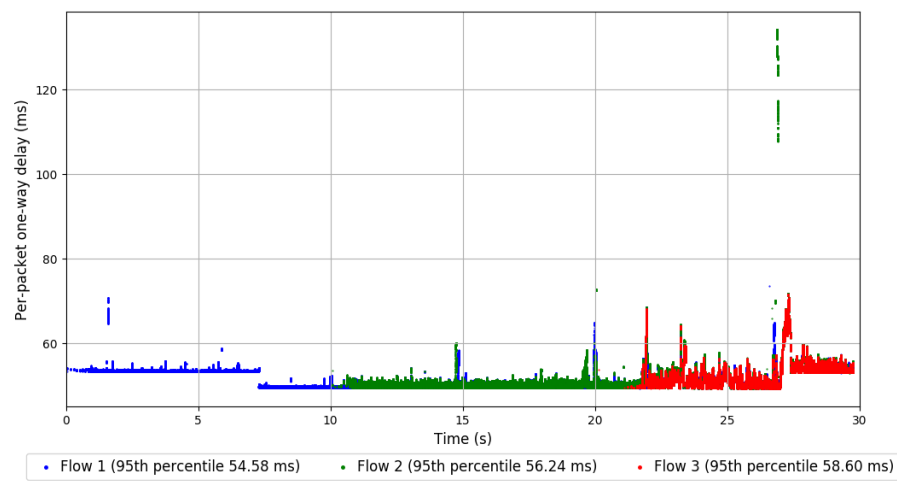
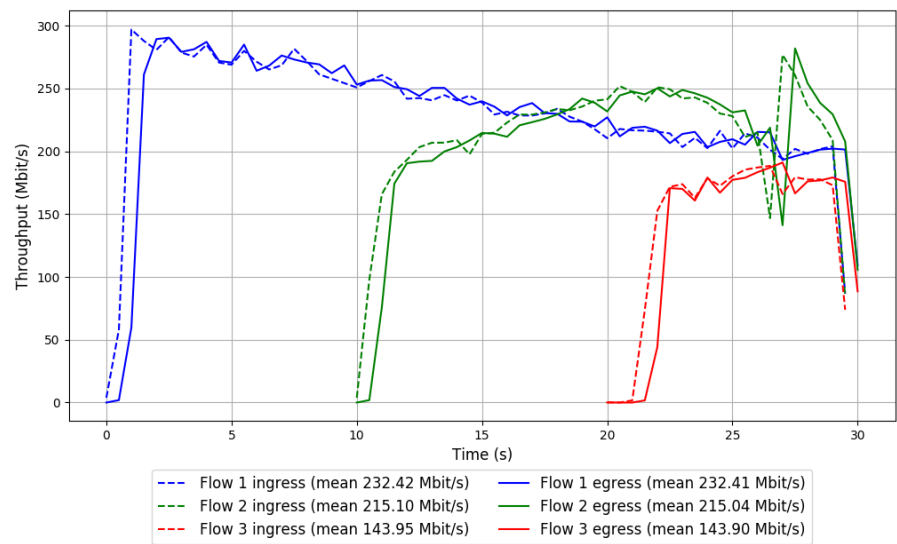


Run 3: Statistics of Indigo

Start at: 2018-06-01 11:09:32  
End at: 2018-06-01 11:10:02  
Local clock offset: 0.035 ms  
Remote clock offset: 20.101 ms

# Below is generated by plot.py at 2018-06-01 15:23:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 421.70 Mbit/s  
95th percentile per-packet one-way delay: 55.517 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 232.41 Mbit/s  
95th percentile per-packet one-way delay: 54.575 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 215.04 Mbit/s  
95th percentile per-packet one-way delay: 56.244 ms  
Loss rate: 0.03%  
-- Flow 3:  
Average throughput: 143.90 Mbit/s  
95th percentile per-packet one-way delay: 58.596 ms  
Loss rate: 0.08%

Run 3: Report of Indigo — Data Link

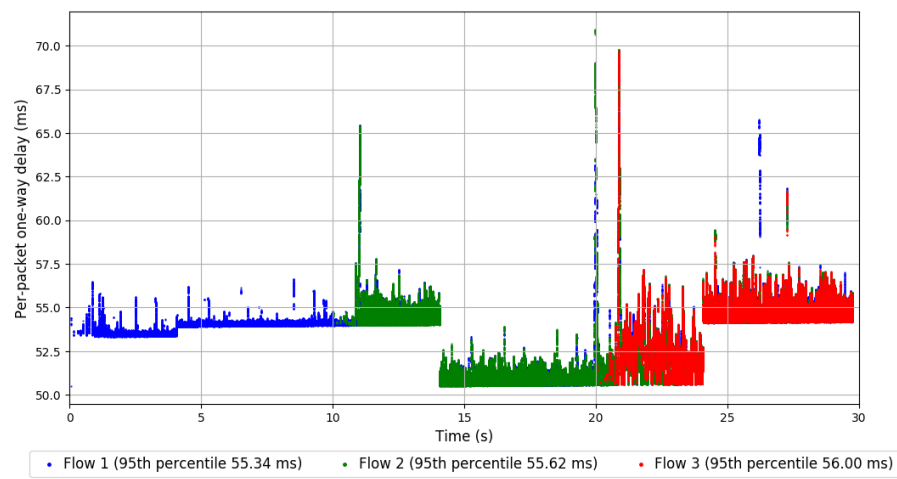
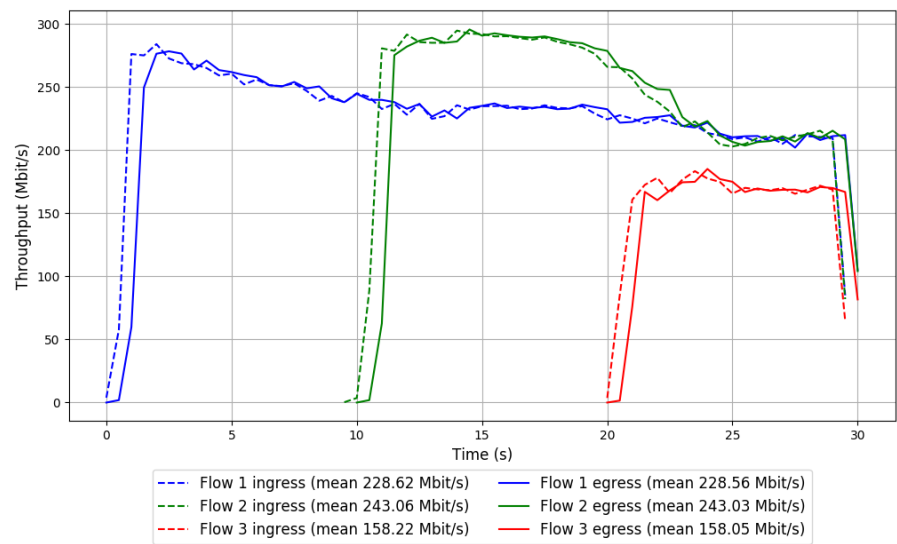


Run 4: Statistics of Indigo

Start at: 2018-06-01 11:32:15  
End at: 2018-06-01 11:32:45  
Local clock offset: -0.366 ms  
Remote clock offset: 13.693 ms

# Below is generated by plot.py at 2018-06-01 15:23:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 441.26 Mbit/s  
95th percentile per-packet one-way delay: 55.568 ms  
Loss rate: 0.03%  
-- Flow 1:  
Average throughput: 228.56 Mbit/s  
95th percentile per-packet one-way delay: 55.336 ms  
Loss rate: 0.02%  
-- Flow 2:  
Average throughput: 243.03 Mbit/s  
95th percentile per-packet one-way delay: 55.622 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 158.05 Mbit/s  
95th percentile per-packet one-way delay: 55.999 ms  
Loss rate: 0.12%

Run 4: Report of Indigo — Data Link



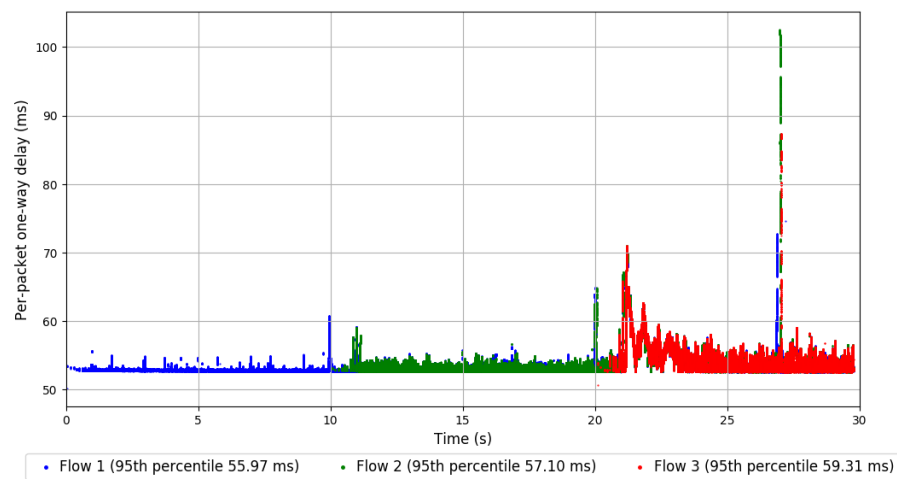
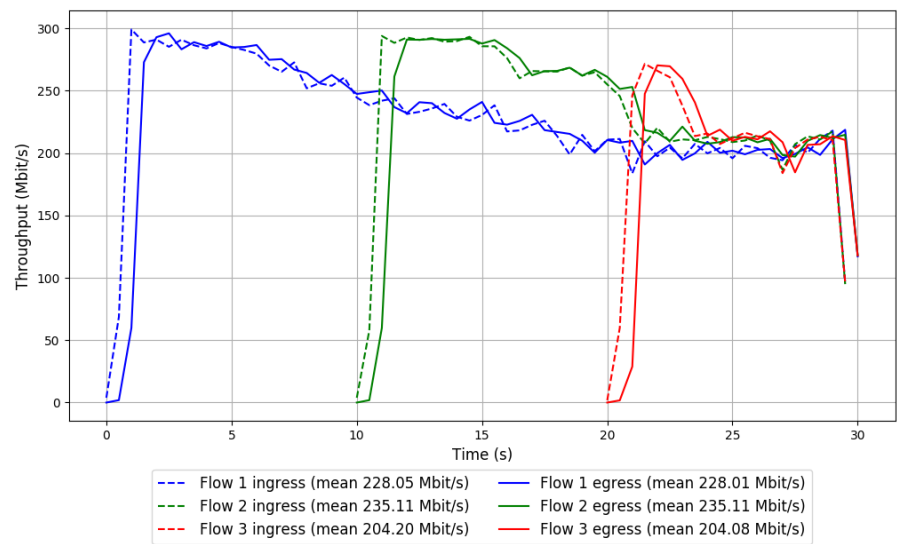
Run 5: Statistics of Indigo

Start at: 2018-06-01 11:55:19  
End at: 2018-06-01 11:55:49  
Local clock offset: 0.014 ms  
Remote clock offset: 14.873 ms

# Below is generated by plot.py at 2018-06-01 15:23:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 450.26 Mbit/s  
95th percentile per-packet one-way delay: 57.062 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 228.01 Mbit/s  
95th percentile per-packet one-way delay: 55.969 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 235.11 Mbit/s  
95th percentile per-packet one-way delay: 57.096 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 204.08 Mbit/s  
95th percentile per-packet one-way delay: 59.310 ms  
Loss rate: 0.03%



Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-06-01 12:18:38

End at: 2018-06-01 12:19:08

Local clock offset: -0.199 ms

Remote clock offset: 5.407 ms

# Below is generated by plot.py at 2018-06-01 15:23:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 429.66 Mbit/s

95th percentile per-packet one-way delay: 54.951 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 229.41 Mbit/s

95th percentile per-packet one-way delay: 54.633 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 213.12 Mbit/s

95th percentile per-packet one-way delay: 54.987 ms

Loss rate: 0.01%

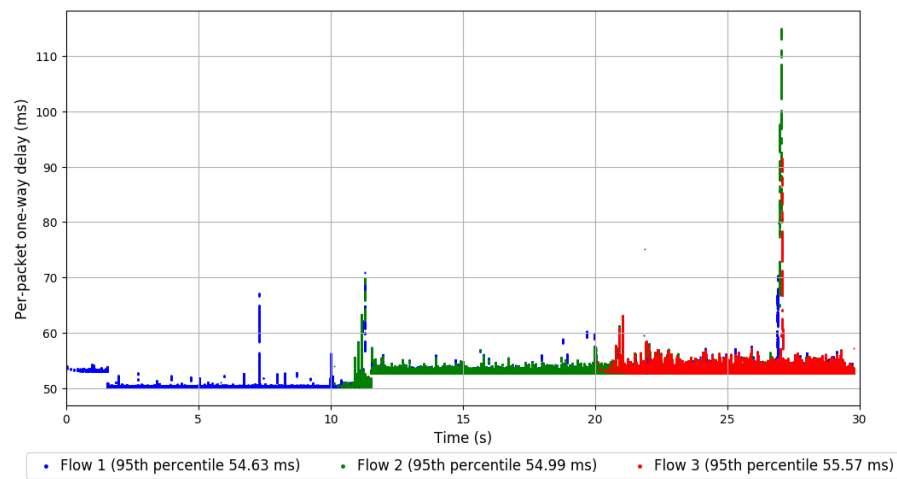
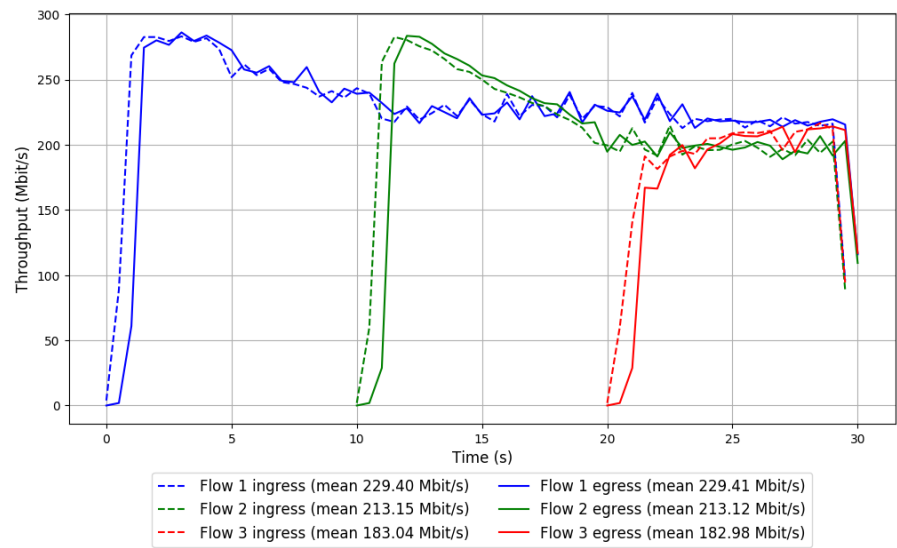
-- Flow 3:

Average throughput: 182.98 Mbit/s

95th percentile per-packet one-way delay: 55.574 ms

Loss rate: 0.02%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-06-01 12:41:27

End at: 2018-06-01 12:41:57

Local clock offset: -0.008 ms

Remote clock offset: 3.078 ms

# Below is generated by plot.py at 2018-06-01 15:23:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 441.01 Mbit/s

95th percentile per-packet one-way delay: 61.345 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 222.87 Mbit/s

95th percentile per-packet one-way delay: 59.301 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 232.18 Mbit/s

95th percentile per-packet one-way delay: 61.230 ms

Loss rate: 0.04%

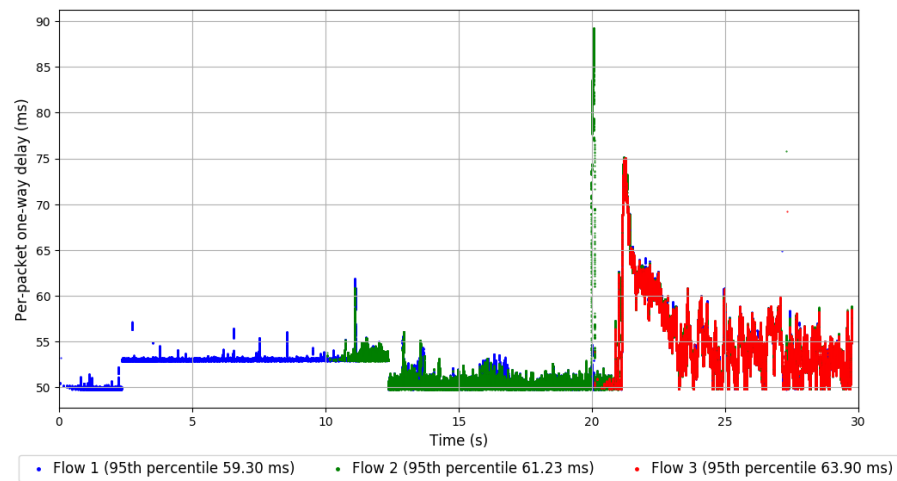
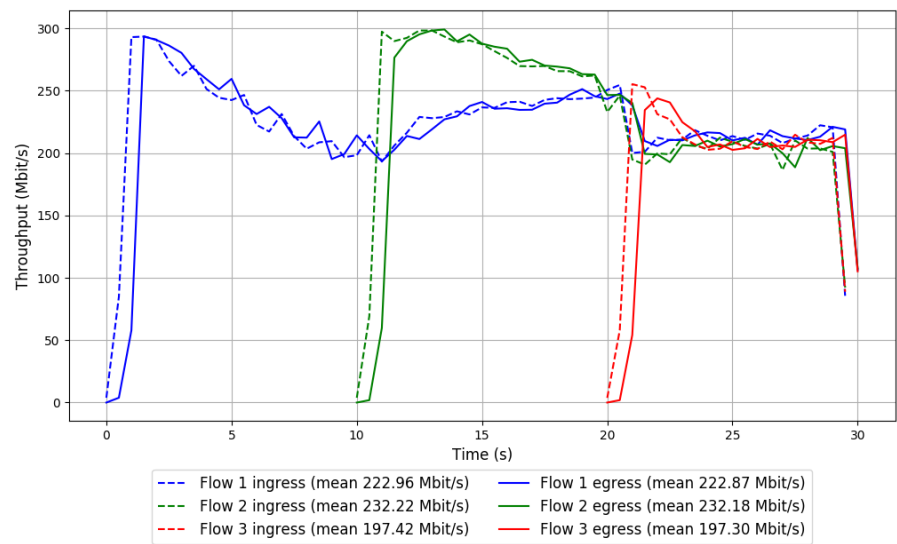
-- Flow 3:

Average throughput: 197.30 Mbit/s

95th percentile per-packet one-way delay: 63.901 ms

Loss rate: 0.07%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-06-01 13:04:01

End at: 2018-06-01 13:04:31

Local clock offset: -0.171 ms

Remote clock offset: 3.549 ms

# Below is generated by plot.py at 2018-06-01 15:23:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 435.66 Mbit/s

95th percentile per-packet one-way delay: 56.661 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 221.27 Mbit/s

95th percentile per-packet one-way delay: 56.113 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 236.25 Mbit/s

95th percentile per-packet one-way delay: 56.636 ms

Loss rate: 0.01%

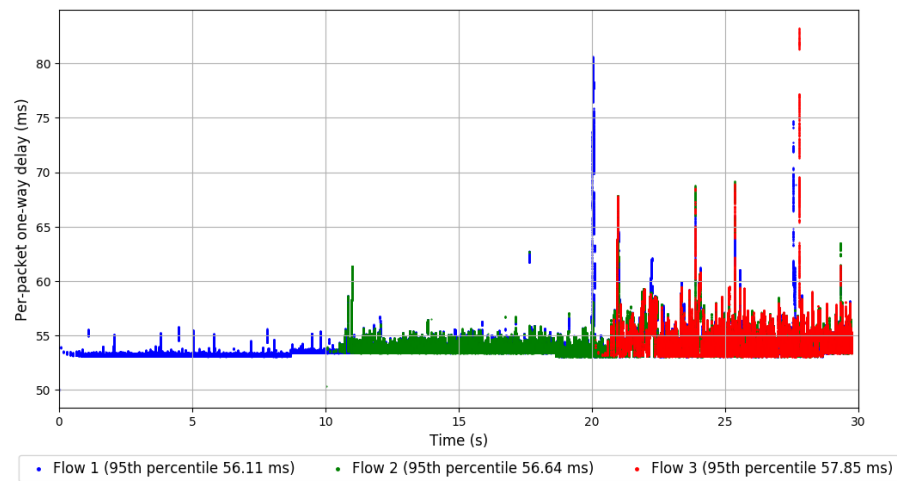
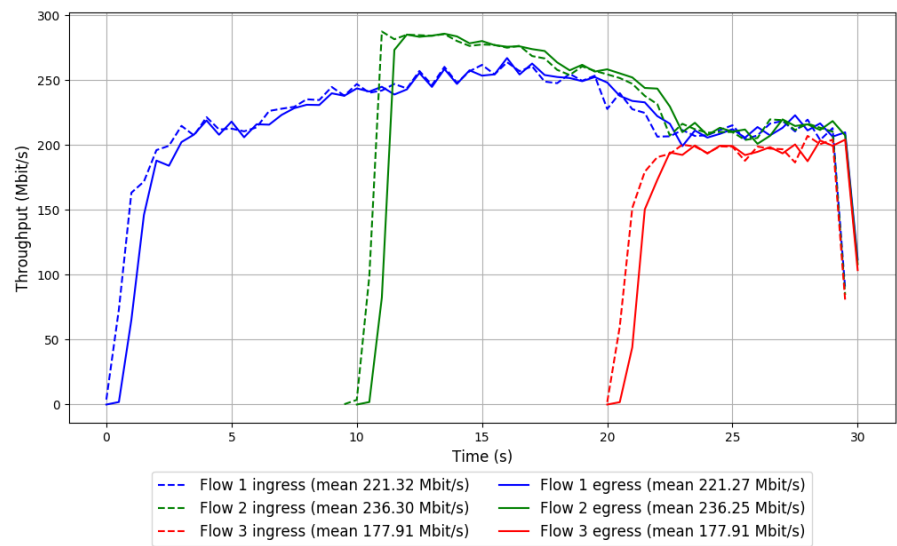
-- Flow 3:

Average throughput: 177.91 Mbit/s

95th percentile per-packet one-way delay: 57.855 ms

Loss rate: 0.03%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-06-01 13:26:48

End at: 2018-06-01 13:27:18

Local clock offset: -0.337 ms

Remote clock offset: 0.755 ms

# Below is generated by plot.py at 2018-06-01 15:23:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 414.58 Mbit/s

95th percentile per-packet one-way delay: 57.660 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 213.96 Mbit/s

95th percentile per-packet one-way delay: 56.931 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 211.42 Mbit/s

95th percentile per-packet one-way delay: 57.828 ms

Loss rate: 0.03%

-- Flow 3:

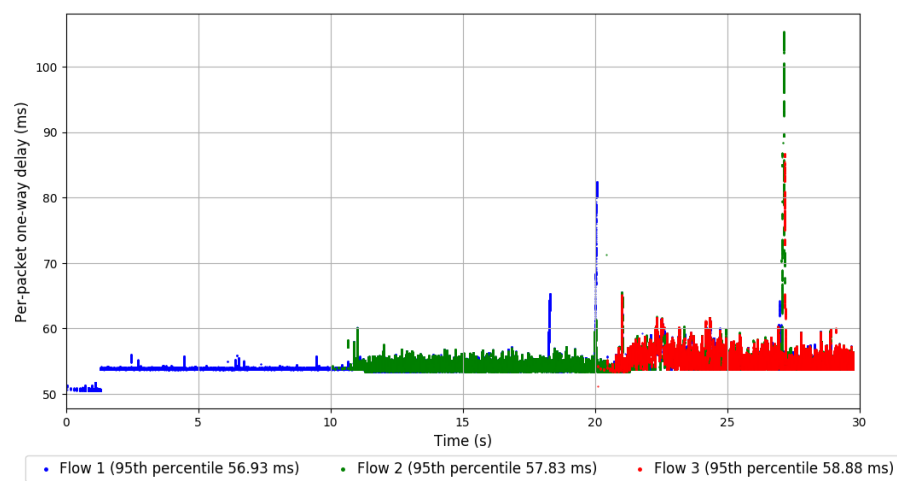
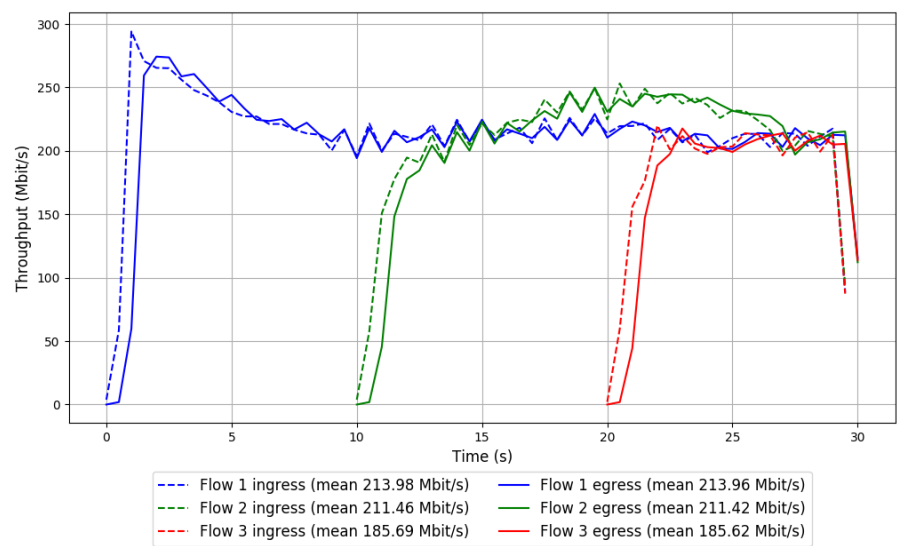
Average throughput: 185.62 Mbit/s

95th percentile per-packet one-way delay: 58.880 ms

Loss rate: 0.03%



Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-06-01 13:49:19

End at: 2018-06-01 13:49:49

Local clock offset: -0.448 ms

Remote clock offset: 0.202 ms

# Below is generated by plot.py at 2018-06-01 15:23:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 414.98 Mbit/s

95th percentile per-packet one-way delay: 55.646 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 213.39 Mbit/s

95th percentile per-packet one-way delay: 55.144 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 228.38 Mbit/s

95th percentile per-packet one-way delay: 55.652 ms

Loss rate: 0.02%

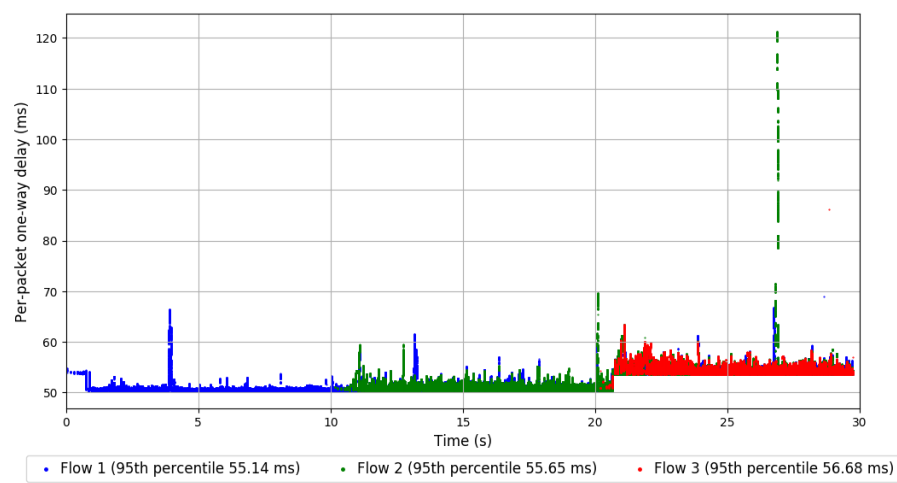
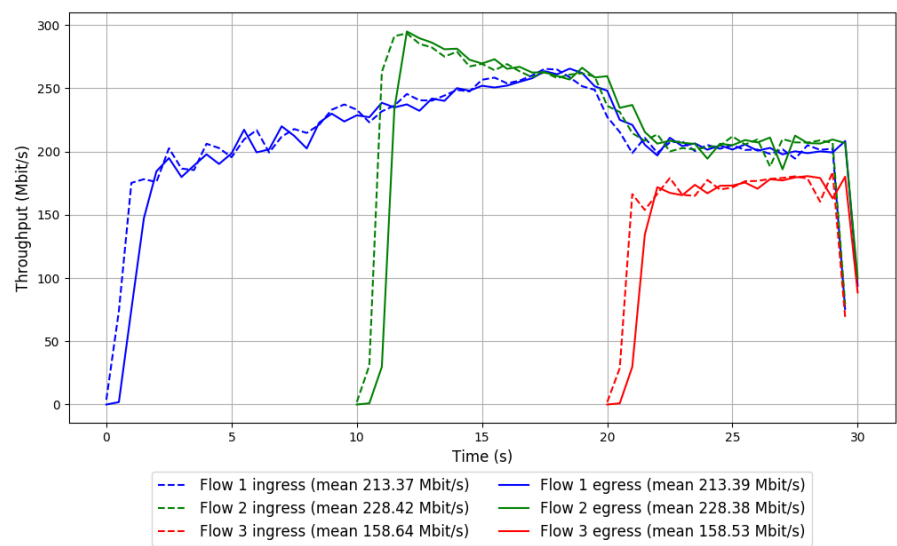
-- Flow 3:

Average throughput: 158.53 Mbit/s

95th percentile per-packet one-way delay: 56.677 ms

Loss rate: 0.03%

Run 10: Report of Indigo — Data Link

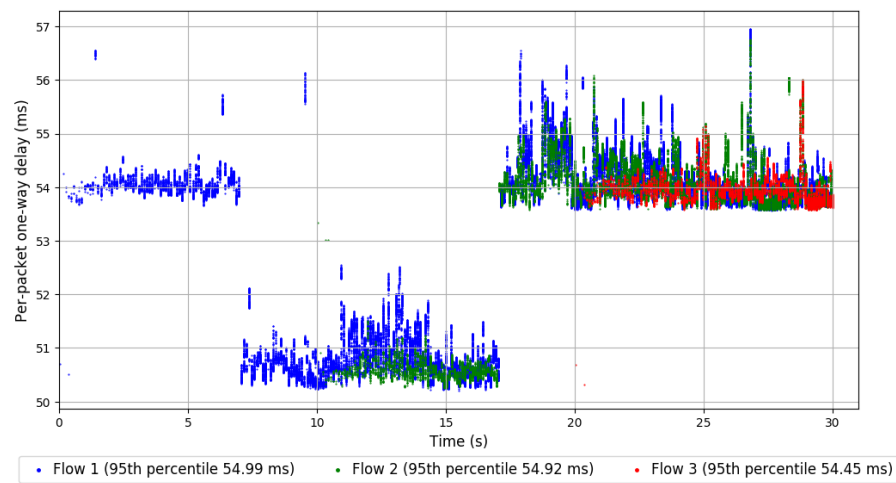
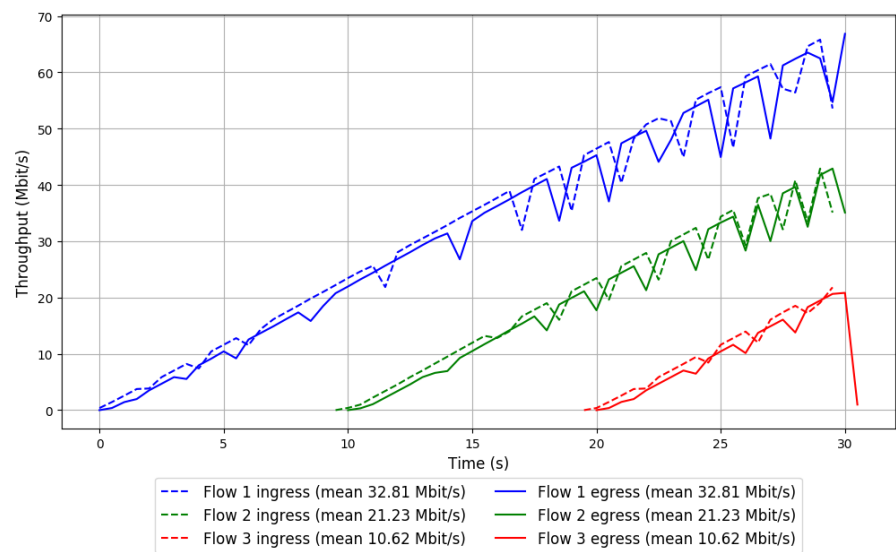


```
Run 1: Statistics of LEDBAT

Start at: 2018-06-01 10:25:53
End at: 2018-06-01 10:26:23
Local clock offset: -0.301 ms
Remote clock offset: -0.115 ms

# Below is generated by plot.py at 2018-06-01 15:23:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 50.37 Mbit/s
95th percentile per-packet one-way delay: 54.944 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 32.81 Mbit/s
95th percentile per-packet one-way delay: 54.990 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 21.23 Mbit/s
95th percentile per-packet one-way delay: 54.921 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.62 Mbit/s
95th percentile per-packet one-way delay: 54.455 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

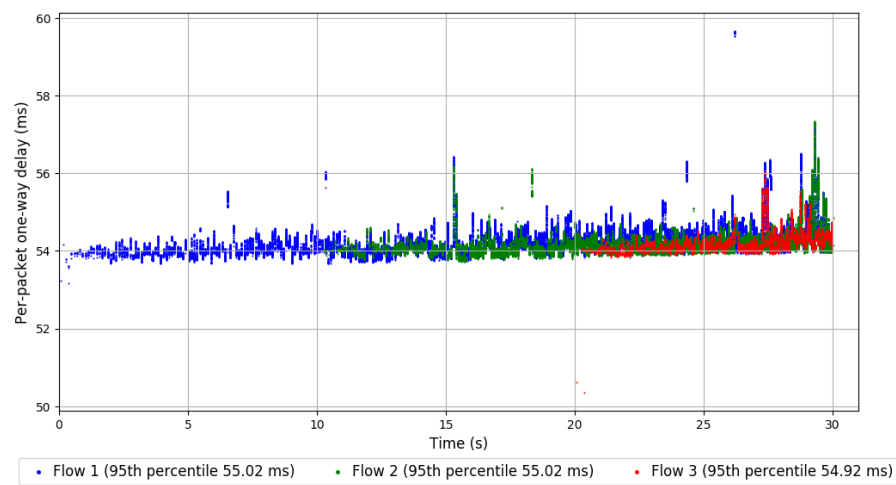
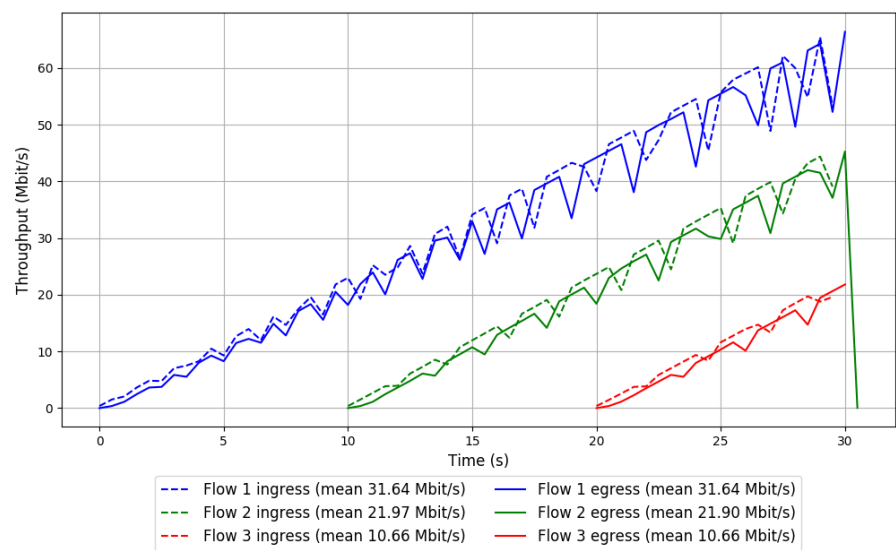


Run 2: Statistics of LEDBAT

Start at: 2018-06-01 10:48:11  
End at: 2018-06-01 10:48:41  
Local clock offset: -0.086 ms  
Remote clock offset: 17.036 ms

# Below is generated by plot.py at 2018-06-01 15:23:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 49.67 Mbit/s  
95th percentile per-packet one-way delay: 55.006 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 31.64 Mbit/s  
95th percentile per-packet one-way delay: 55.022 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 21.90 Mbit/s  
95th percentile per-packet one-way delay: 55.017 ms  
Loss rate: 0.31%  
-- Flow 3:  
Average throughput: 10.66 Mbit/s  
95th percentile per-packet one-way delay: 54.918 ms  
Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link



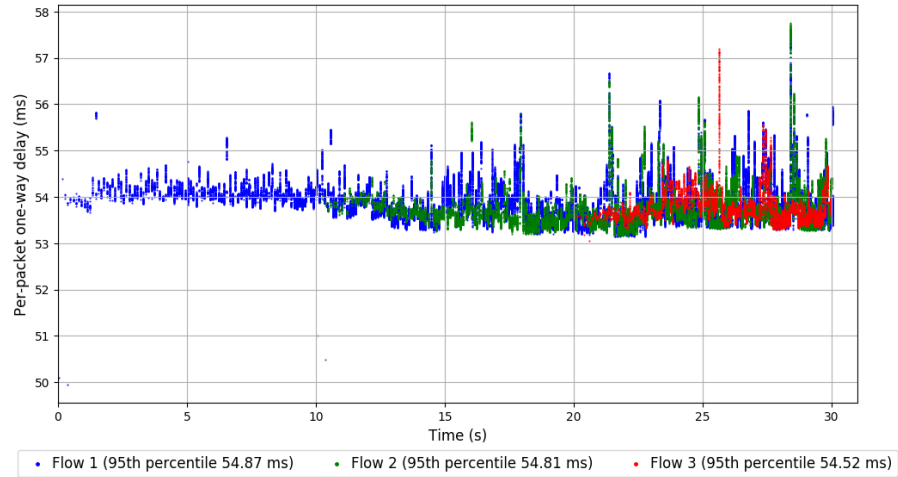
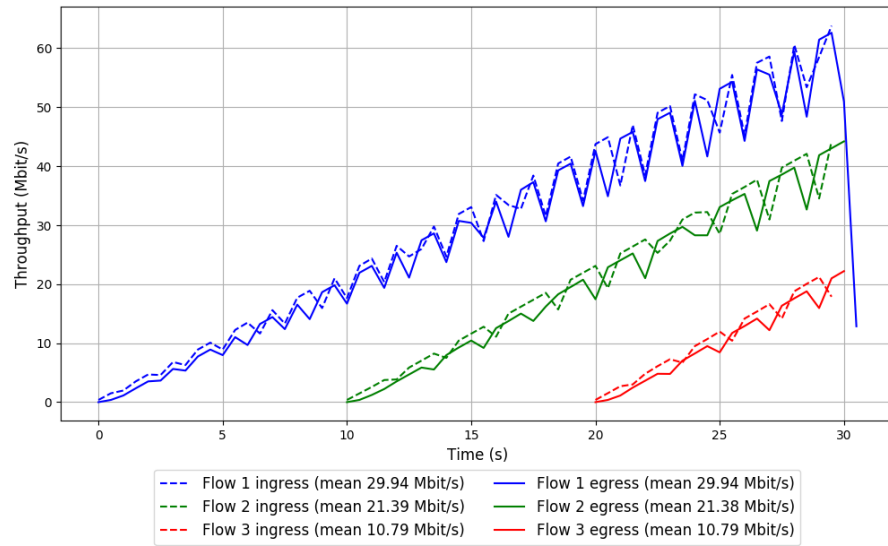
Run 3: Statistics of LEDBAT

Start at: 2018-06-01 11:11:07  
End at: 2018-06-01 11:11:37  
Local clock offset: -0.161 ms  
Remote clock offset: 21.258 ms

# Below is generated by plot.py at 2018-06-01 15:23:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 47.71 Mbit/s  
95th percentile per-packet one-way delay: 54.834 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 29.94 Mbit/s  
95th percentile per-packet one-way delay: 54.870 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 21.38 Mbit/s  
95th percentile per-packet one-way delay: 54.810 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 10.79 Mbit/s  
95th percentile per-packet one-way delay: 54.515 ms  
Loss rate: 0.00%



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

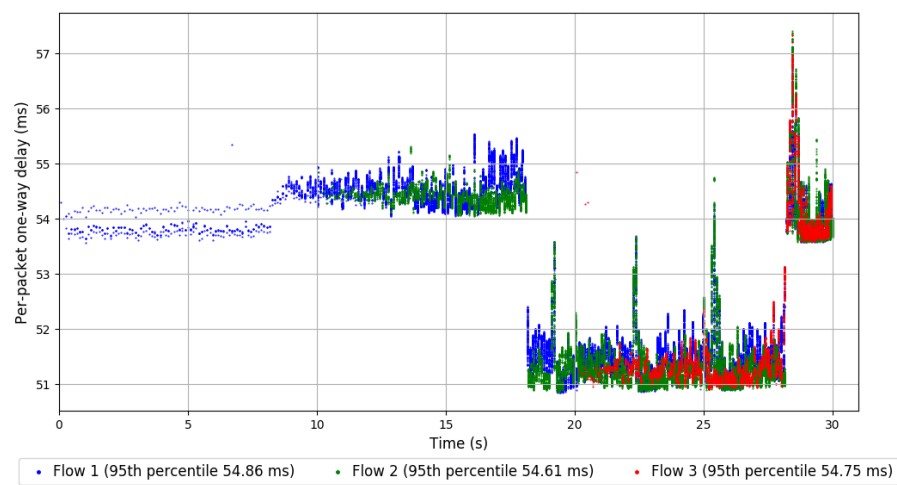
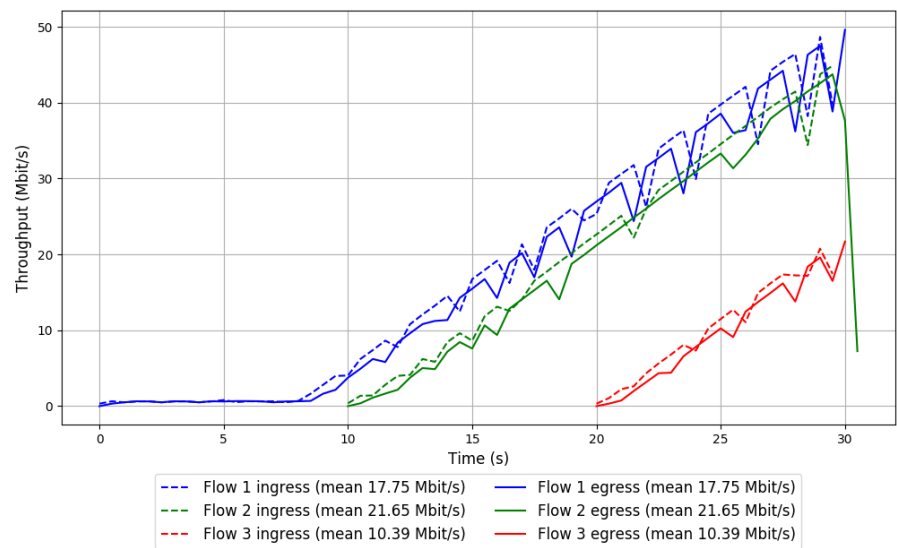


Run 4: Statistics of LEDBAT

Start at: 2018-06-01 11:33:52  
End at: 2018-06-01 11:34:22  
Local clock offset: -0.562 ms  
Remote clock offset: 12.667 ms

# Below is generated by plot.py at 2018-06-01 15:23:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 35.55 Mbit/s  
95th percentile per-packet one-way delay: 54.760 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 17.75 Mbit/s  
95th percentile per-packet one-way delay: 54.858 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 21.65 Mbit/s  
95th percentile per-packet one-way delay: 54.613 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 10.39 Mbit/s  
95th percentile per-packet one-way delay: 54.749 ms  
Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link

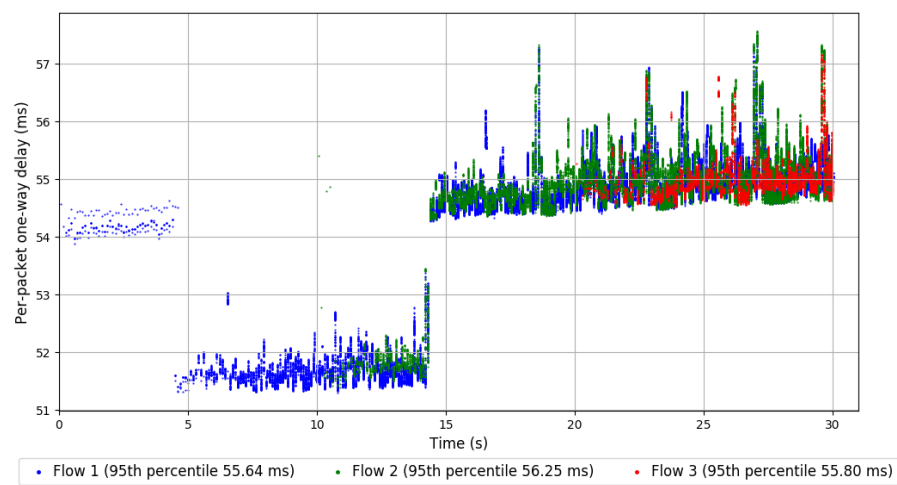
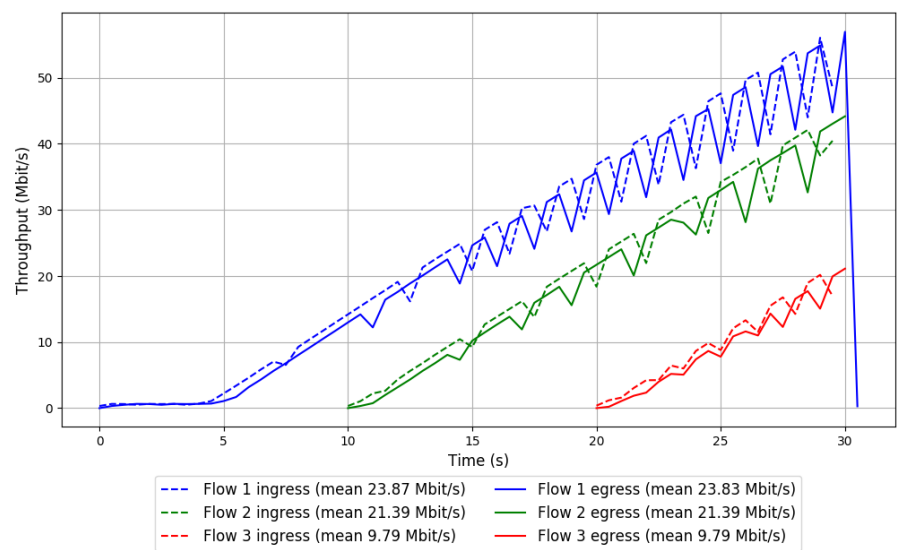


Run 5: Statistics of LEDBAT

Start at: 2018-06-01 11:56:55  
End at: 2018-06-01 11:57:25  
Local clock offset: -0.408 ms  
Remote clock offset: 14.768 ms

# Below is generated by plot.py at 2018-06-01 15:23:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 41.27 Mbit/s  
95th percentile per-packet one-way delay: 55.827 ms  
Loss rate: 0.10%  
-- Flow 1:  
Average throughput: 23.83 Mbit/s  
95th percentile per-packet one-way delay: 55.639 ms  
Loss rate: 0.18%  
-- Flow 2:  
Average throughput: 21.39 Mbit/s  
95th percentile per-packet one-way delay: 56.248 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 9.79 Mbit/s  
95th percentile per-packet one-way delay: 55.802 ms  
Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-06-01 12:20:13

End at: 2018-06-01 12:20:43

Local clock offset: -0.002 ms

Remote clock offset: 5.501 ms

# Below is generated by plot.py at 2018-06-01 15:23:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 51.38 Mbit/s

95th percentile per-packet one-way delay: 53.550 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 33.37 Mbit/s

95th percentile per-packet one-way delay: 53.594 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 21.59 Mbit/s

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

Loss rate: 0.13%

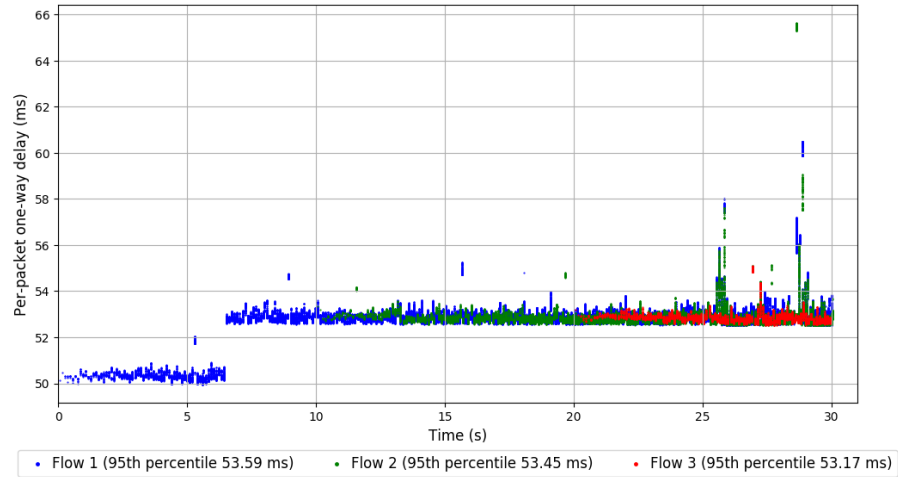
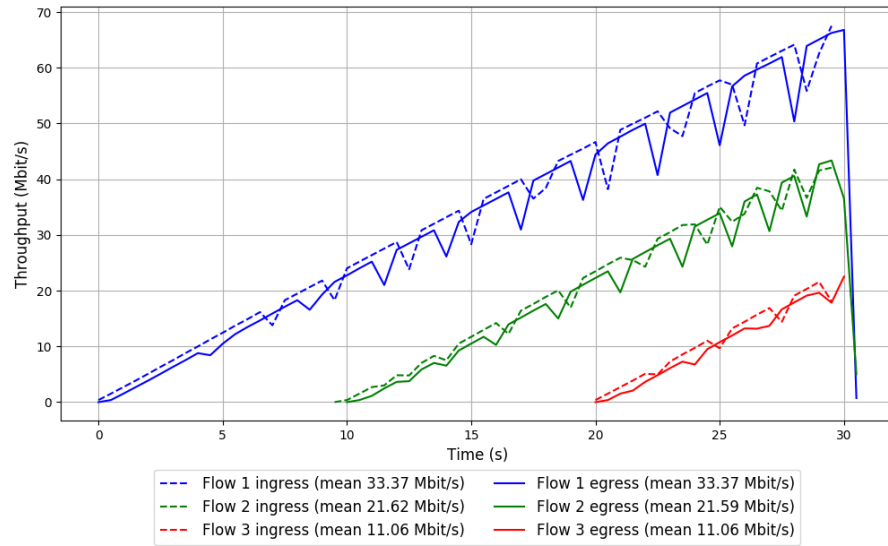
-- Flow 3:

Average throughput: 11.06 Mbit/s

95th percentile per-packet one-way delay: 53.171 ms

Loss rate: 0.00%

## Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-06-01 12:43:03

End at: 2018-06-01 12:43:33

Local clock offset: -0.344 ms

Remote clock offset: 2.831 ms

# Below is generated by plot.py at 2018-06-01 15:23:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 23.89 Mbit/s

95th percentile per-packet one-way delay: 54.356 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.53 Mbit/s

95th percentile per-packet one-way delay: 54.449 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 21.94 Mbit/s

95th percentile per-packet one-way delay: 54.289 ms

Loss rate: 0.00%

-- Flow 3:

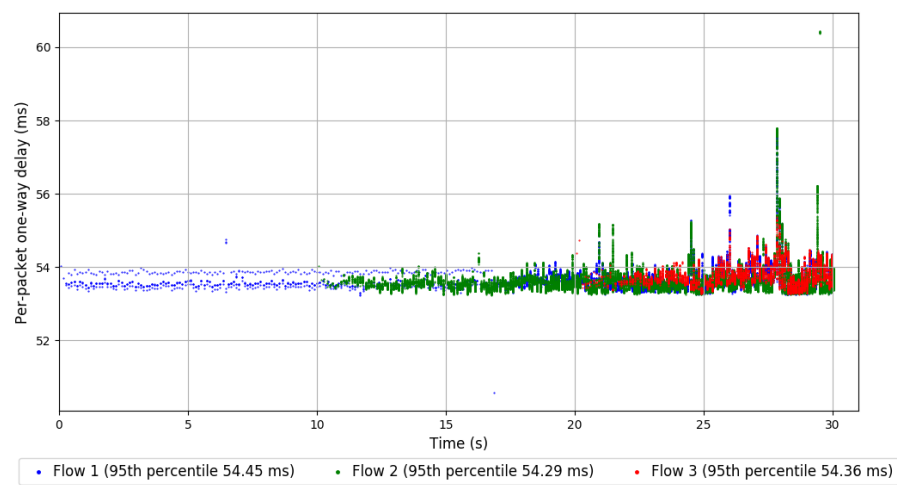
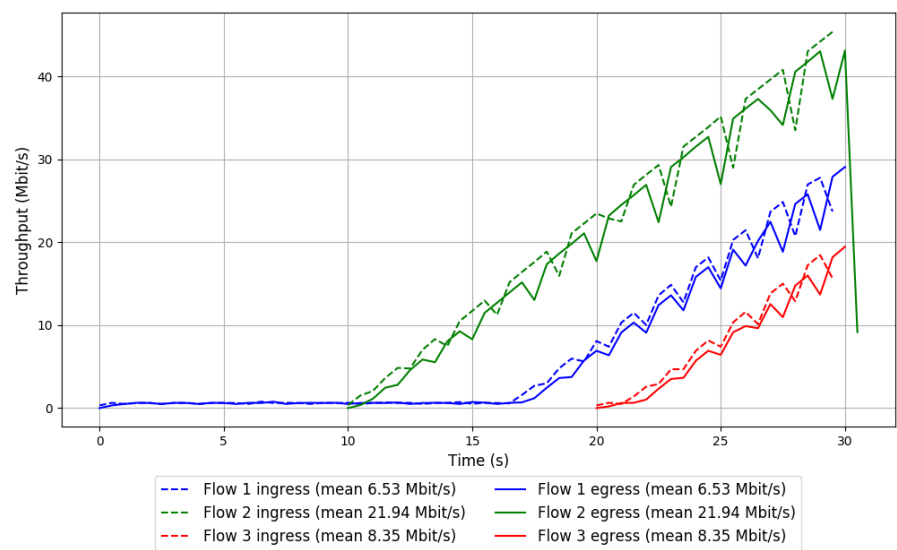
Average throughput: 8.35 Mbit/s

95th percentile per-packet one-way delay: 54.364 ms

Loss rate: 0.00%



Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-06-01 13:05:37

End at: 2018-06-01 13:06:07

Local clock offset: -0.257 ms

Remote clock offset: 3.081 ms

# Below is generated by plot.py at 2018-06-01 15:23:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 50.20 Mbit/s

95th percentile per-packet one-way delay: 54.953 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 32.65 Mbit/s

95th percentile per-packet one-way delay: 54.883 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 21.21 Mbit/s

95th percentile per-packet one-way delay: 54.966 ms

Loss rate: 0.00%

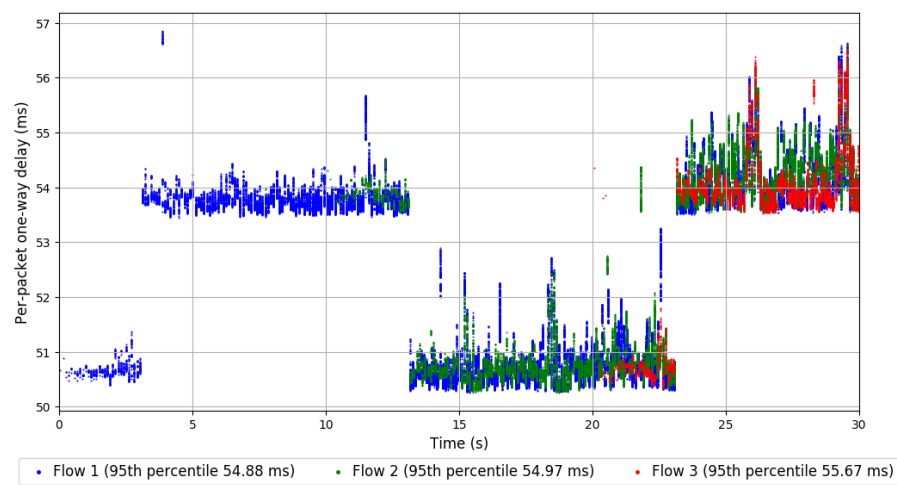
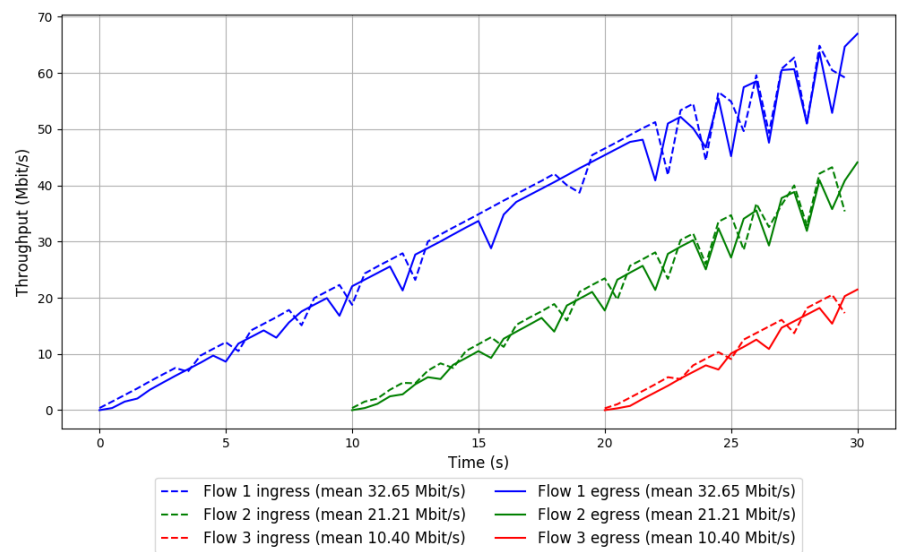
-- Flow 3:

Average throughput: 10.40 Mbit/s

95th percentile per-packet one-way delay: 55.669 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-06-01 13:28:23

End at: 2018-06-01 13:28:53

Local clock offset: -0.11 ms

Remote clock offset: 0.705 ms

# Below is generated by plot.py at 2018-06-01 15:23:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 51.47 Mbit/s

95th percentile per-packet one-way delay: 53.895 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 32.96 Mbit/s

95th percentile per-packet one-way delay: 53.938 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 22.55 Mbit/s

95th percentile per-packet one-way delay: 53.705 ms

Loss rate: 0.00%

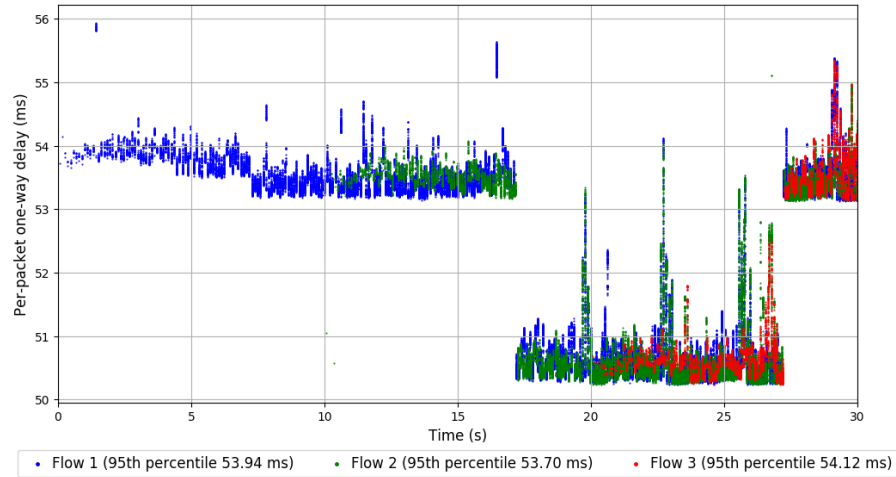
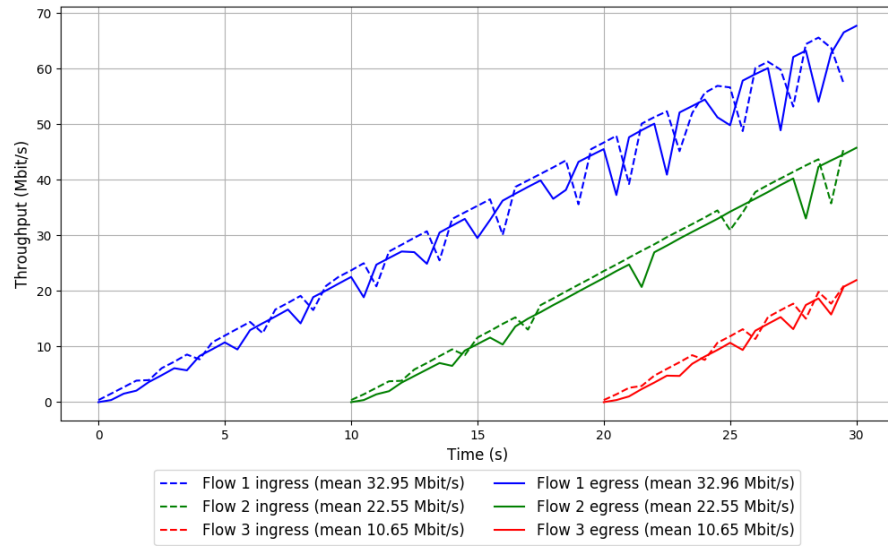
-- Flow 3:

Average throughput: 10.65 Mbit/s

95th percentile per-packet one-way delay: 54.124 ms

Loss rate: 0.00%

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



Run 10: Statistics of LEDBAT

Start at: 2018-06-01 13:50:53

End at: 2018-06-01 13:51:23

Local clock offset: 0.17 ms

Remote clock offset: 0.273 ms

# Below is generated by plot.py at 2018-06-01 15:23:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 48.51 Mbit/s

95th percentile per-packet one-way delay: 55.570 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 31.73 Mbit/s

95th percentile per-packet one-way delay: 55.623 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 20.78 Mbit/s

95th percentile per-packet one-way delay: 55.416 ms

Loss rate: 0.00%

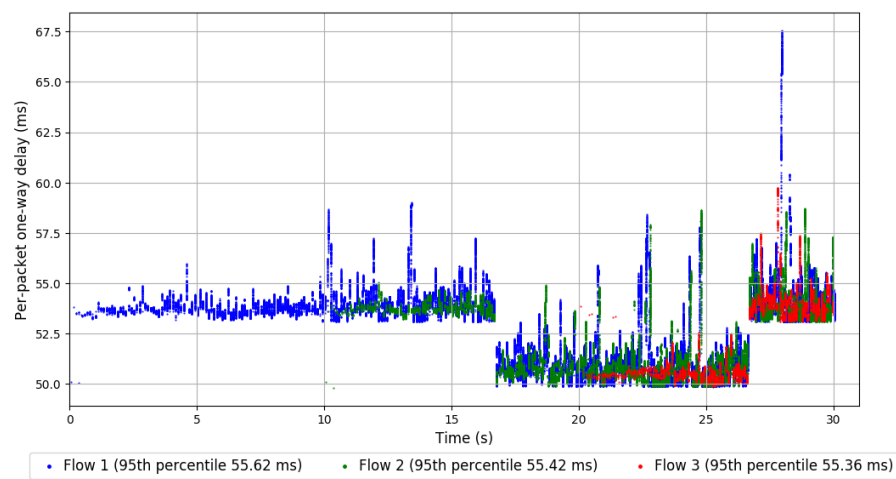
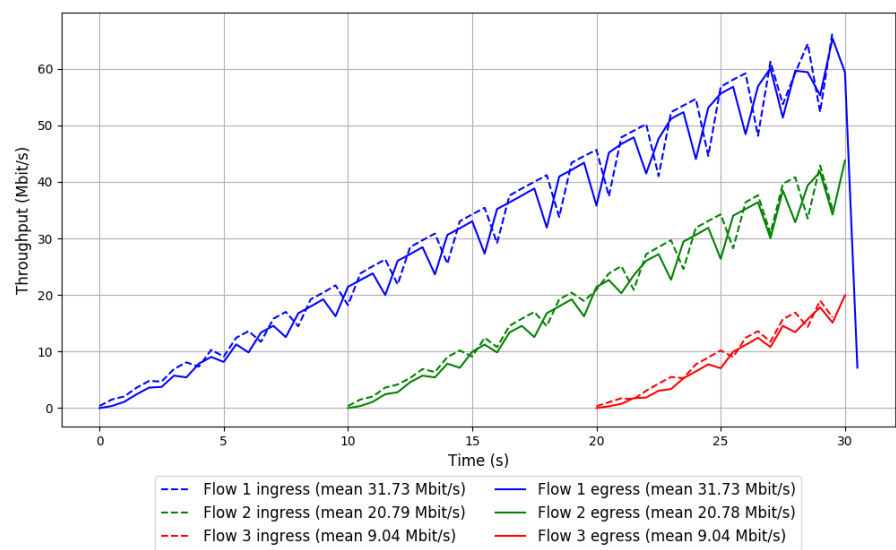
-- Flow 3:

Average throughput: 9.04 Mbit/s

95th percentile per-packet one-way delay: 55.358 ms

Loss rate: 0.00%

Run 10: Report of LEDBAT — Data Link



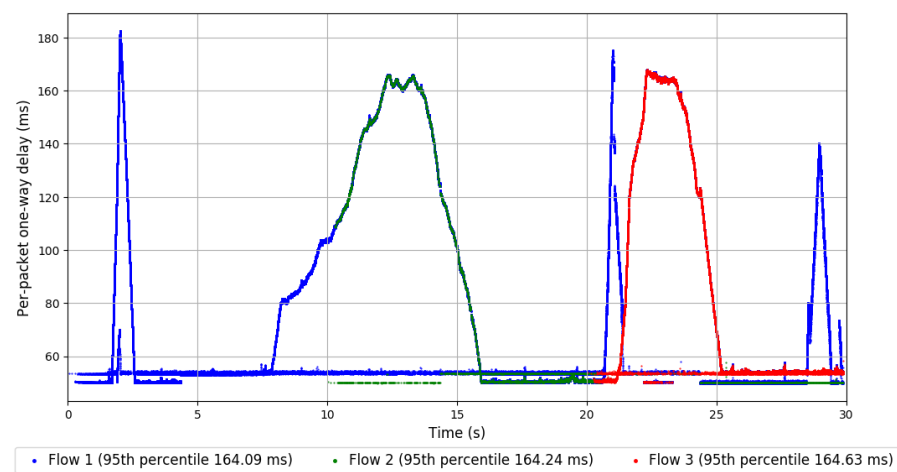
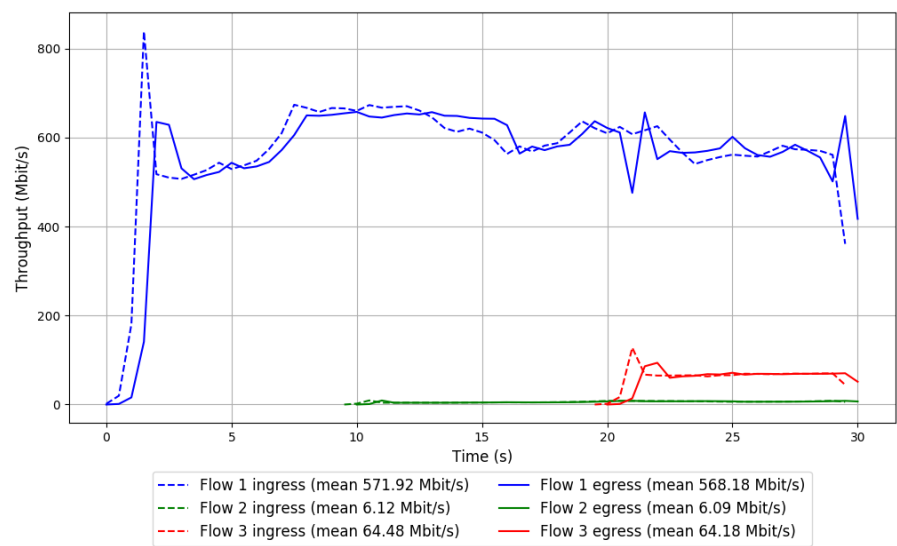
Run 1: Statistics of PCC-Allegro

Start at: 2018-06-01 10:04:25  
End at: 2018-06-01 10:04:55  
Local clock offset: -0.155 ms  
Remote clock offset: -0.056 ms

# Below is generated by plot.py at 2018-06-01 15:23:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 593.35 Mbit/s  
95th percentile per-packet one-way delay: 164.117 ms  
Loss rate: 0.65%  
-- Flow 1:  
Average throughput: 568.18 Mbit/s  
95th percentile per-packet one-way delay: 164.086 ms  
Loss rate: 0.66%  
-- Flow 2:  
Average throughput: 6.09 Mbit/s  
95th percentile per-packet one-way delay: 164.244 ms  
Loss rate: 0.51%  
-- Flow 3:  
Average throughput: 64.18 Mbit/s  
95th percentile per-packet one-way delay: 164.626 ms  
Loss rate: 0.45%



Run 1: Report of PCC-Allegro — Data Link

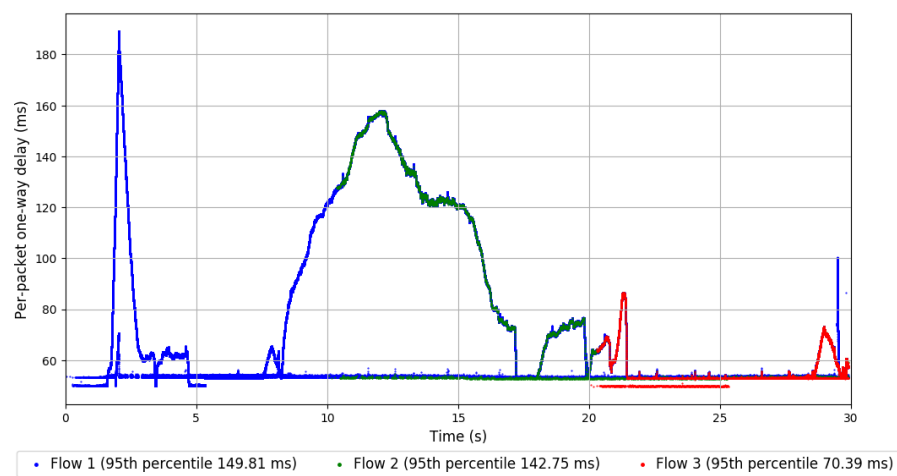
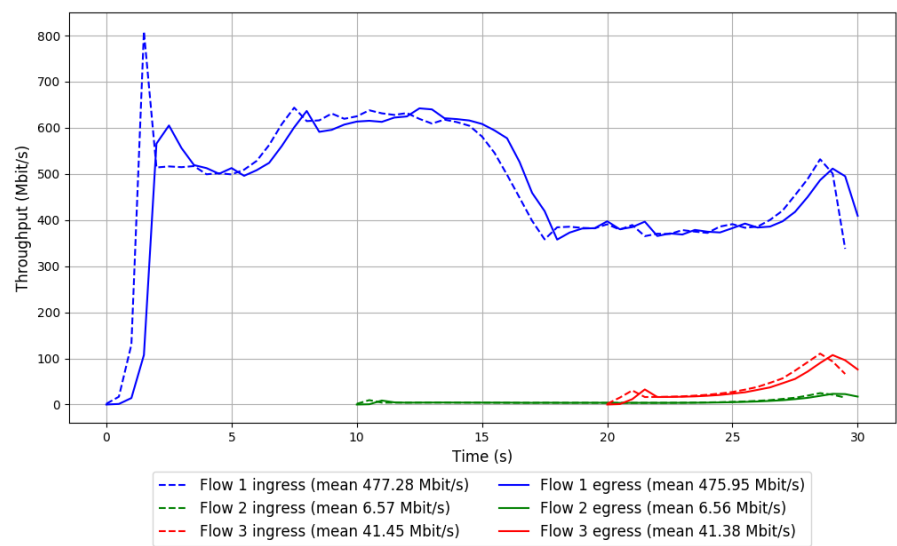


Run 2: Statistics of PCC-Allegro

Start at: 2018-06-01 10:27:04  
End at: 2018-06-01 10:27:34  
Local clock offset: 0.014 ms  
Remote clock offset: -0.099 ms

# Below is generated by plot.py at 2018-06-01 15:23:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 493.92 Mbit/s  
95th percentile per-packet one-way delay: 149.669 ms  
Loss rate: 0.28%  
-- Flow 1:  
Average throughput: 475.95 Mbit/s  
95th percentile per-packet one-way delay: 149.815 ms  
Loss rate: 0.29%  
-- Flow 2:  
Average throughput: 6.56 Mbit/s  
95th percentile per-packet one-way delay: 142.747 ms  
Loss rate: 0.09%  
-- Flow 3:  
Average throughput: 41.38 Mbit/s  
95th percentile per-packet one-way delay: 70.393 ms  
Loss rate: 0.14%

Run 2: Report of PCC-Allegro — Data Link

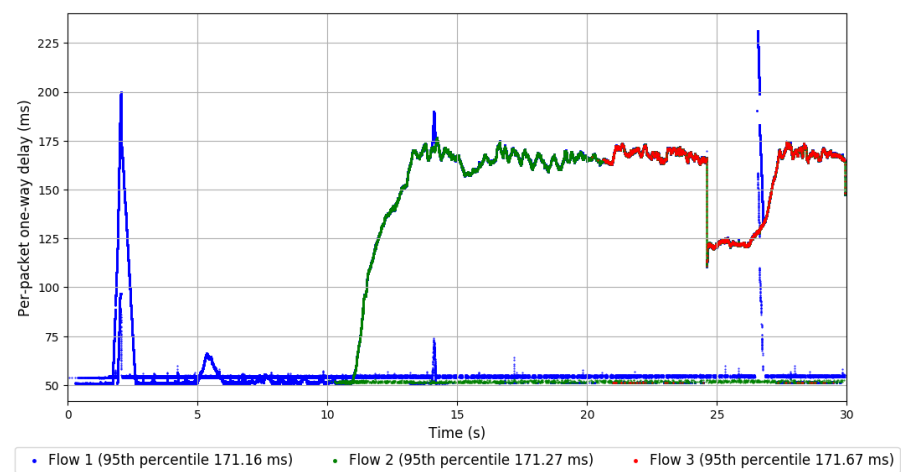
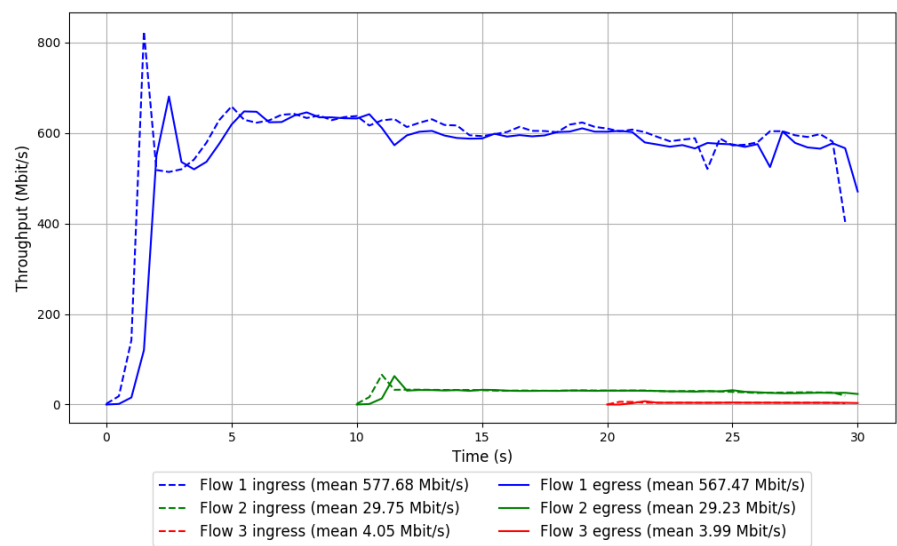


Run 3: Statistics of PCC-Allegro

Start at: 2018-06-01 10:49:22  
End at: 2018-06-01 10:49:52  
Local clock offset: -0.362 ms  
Remote clock offset: 16.104 ms

# Below is generated by plot.py at 2018-06-01 15:23:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 588.16 Mbit/s  
95th percentile per-packet one-way delay: 171.169 ms  
Loss rate: 1.78%  
-- Flow 1:  
Average throughput: 567.47 Mbit/s  
95th percentile per-packet one-way delay: 171.159 ms  
Loss rate: 1.77%  
-- Flow 2:  
Average throughput: 29.23 Mbit/s  
95th percentile per-packet one-way delay: 171.273 ms  
Loss rate: 1.75%  
-- Flow 3:  
Average throughput: 3.99 Mbit/s  
95th percentile per-packet one-way delay: 171.674 ms  
Loss rate: 2.59%

Run 3: Report of PCC-Allegro — Data Link

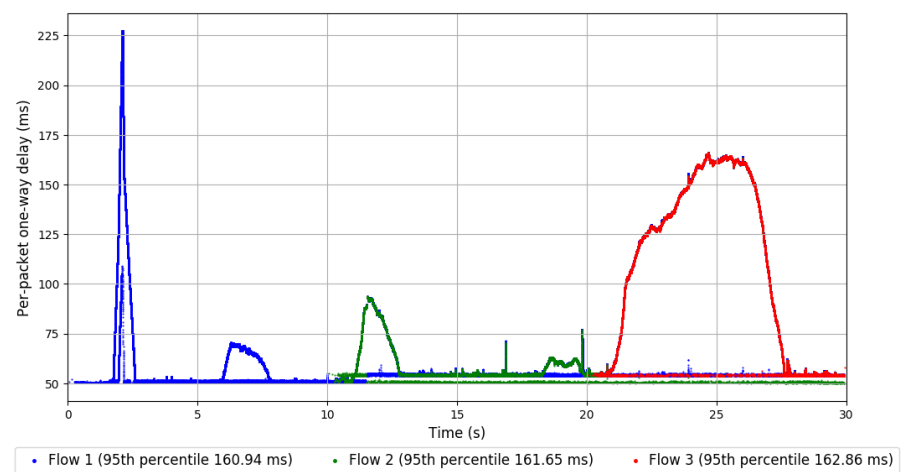
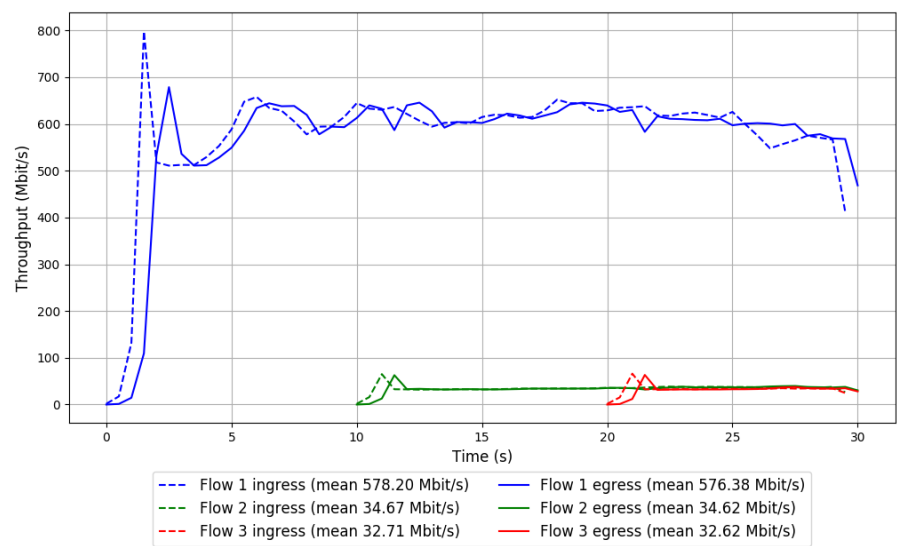


Run 4: Statistics of PCC-Allegro

Start at: 2018-06-01 11:12:18  
End at: 2018-06-01 11:12:48  
Local clock offset: -0.313 ms  
Remote clock offset: 22.342 ms

# Below is generated by plot.py at 2018-06-01 15:23:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 610.06 Mbit/s  
95th percentile per-packet one-way delay: 161.085 ms  
Loss rate: 0.31%  
-- Flow 1:  
Average throughput: 576.38 Mbit/s  
95th percentile per-packet one-way delay: 160.937 ms  
Loss rate: 0.31%  
-- Flow 2:  
Average throughput: 34.62 Mbit/s  
95th percentile per-packet one-way delay: 161.647 ms  
Loss rate: 0.16%  
-- Flow 3:  
Average throughput: 32.62 Mbit/s  
95th percentile per-packet one-way delay: 162.858 ms  
Loss rate: 0.25%

Run 4: Report of PCC-Allegro — Data Link



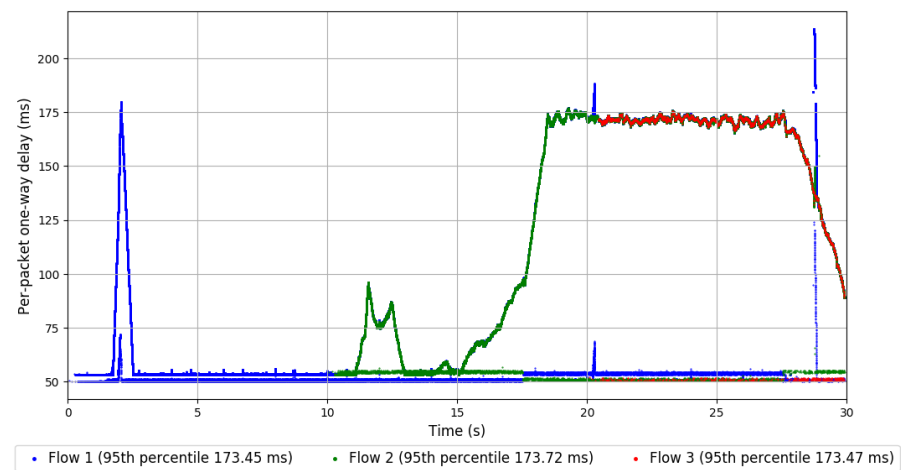
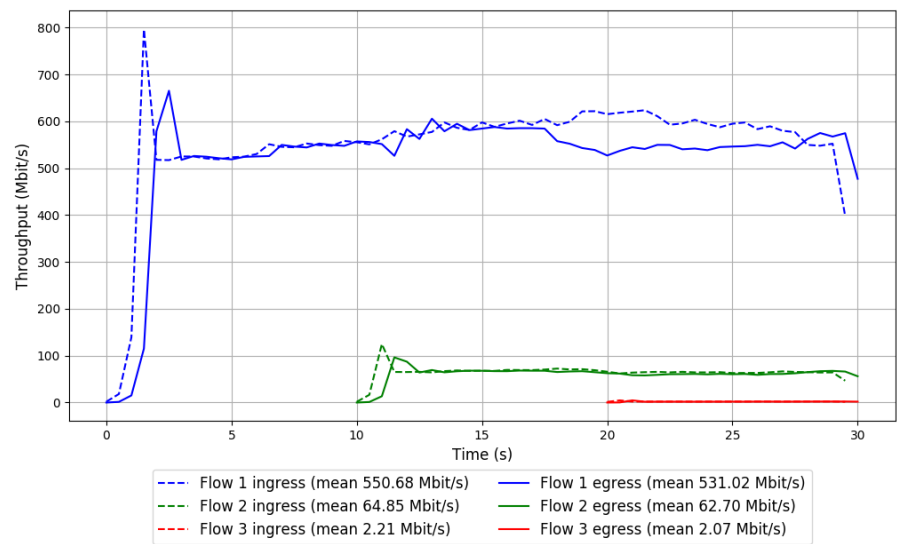
Run 5: Statistics of PCC-Allegro

Start at: 2018-06-01 11:35:02  
End at: 2018-06-01 11:35:32  
Local clock offset: -0.188 ms  
Remote clock offset: 12.135 ms

# Below is generated by plot.py at 2018-06-01 15:23:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 573.36 Mbit/s  
95th percentile per-packet one-way delay: 173.480 ms  
Loss rate: 3.55%  
-- Flow 1:  
Average throughput: 531.02 Mbit/s  
95th percentile per-packet one-way delay: 173.449 ms  
Loss rate: 3.57%  
-- Flow 2:  
Average throughput: 62.70 Mbit/s  
95th percentile per-packet one-way delay: 173.720 ms  
Loss rate: 3.33%  
-- Flow 3:  
Average throughput: 2.07 Mbit/s  
95th percentile per-packet one-way delay: 173.475 ms  
Loss rate: 6.15%



Run 5: Report of PCC-Allegro — Data Link

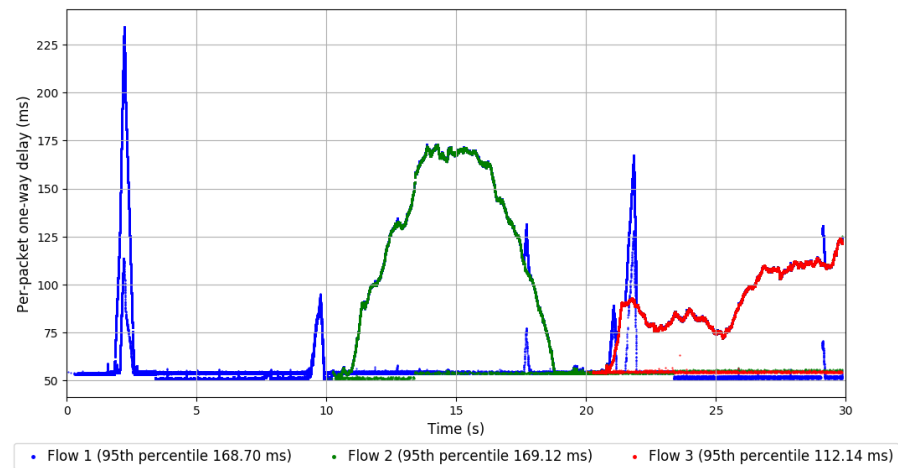
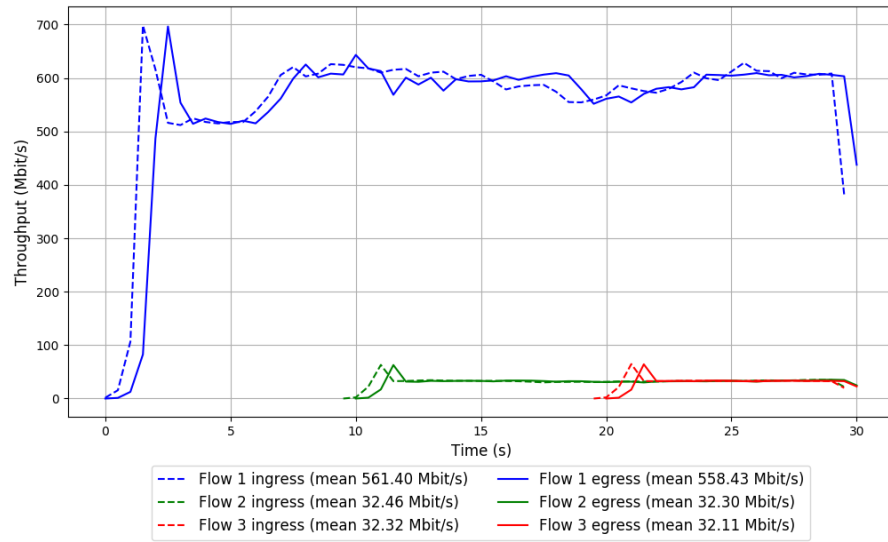


Run 6: Statistics of PCC-Allegro

Start at: 2018-06-01 11:58:06  
End at: 2018-06-01 11:58:36  
Local clock offset: 0.005 ms  
Remote clock offset: 12.974 ms

# Below is generated by plot.py at 2018-06-01 15:23:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 590.47 Mbit/s  
95th percentile per-packet one-way delay: 168.644 ms  
Loss rate: 0.54%  
-- Flow 1:  
Average throughput: 558.43 Mbit/s  
95th percentile per-packet one-way delay: 168.698 ms  
Loss rate: 0.54%  
-- Flow 2:  
Average throughput: 32.30 Mbit/s  
95th percentile per-packet one-way delay: 169.120 ms  
Loss rate: 0.48%  
-- Flow 3:  
Average throughput: 32.11 Mbit/s  
95th percentile per-packet one-way delay: 112.137 ms  
Loss rate: 0.68%

## Run 6: Report of PCC-Allegro — Data Link

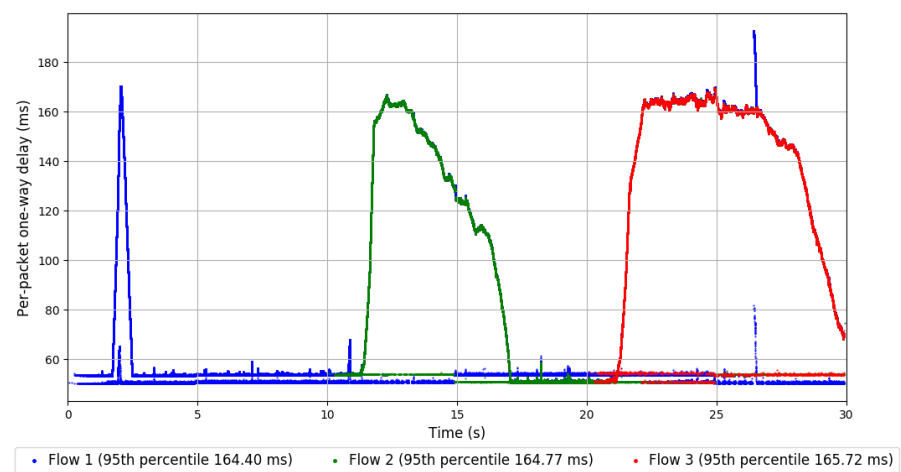
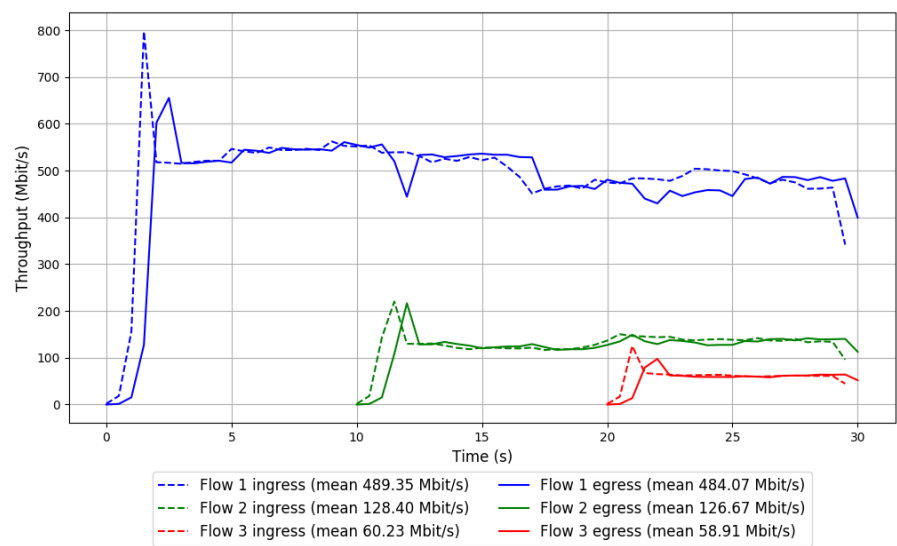


Run 7: Statistics of PCC-Allegro

Start at: 2018-06-01 12:21:25  
End at: 2018-06-01 12:21:55  
Local clock offset: -0.513 ms  
Remote clock offset: 5.823 ms

# Below is generated by plot.py at 2018-06-01 15:30:19  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 587.58 Mbit/s  
95th percentile per-packet one-way delay: 164.521 ms  
Loss rate: 1.15%  
-- Flow 1:  
Average throughput: 484.07 Mbit/s  
95th percentile per-packet one-way delay: 164.398 ms  
Loss rate: 1.08%  
-- Flow 2:  
Average throughput: 126.67 Mbit/s  
95th percentile per-packet one-way delay: 164.766 ms  
Loss rate: 1.34%  
-- Flow 3:  
Average throughput: 58.91 Mbit/s  
95th percentile per-packet one-way delay: 165.721 ms  
Loss rate: 2.21%

Run 7: Report of PCC-Allegro — Data Link



Run 8: Statistics of PCC-Allegro

Start at: 2018-06-01 12:44:13

End at: 2018-06-01 12:44:43

Local clock offset: -0.55 ms

Remote clock offset: 2.626 ms

# Below is generated by plot.py at 2018-06-01 15:31:14

# Datalink statistics

-- Total of 3 flows:

Average throughput: 593.28 Mbit/s

95th percentile per-packet one-way delay: 157.987 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 527.39 Mbit/s

95th percentile per-packet one-way delay: 157.681 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 69.16 Mbit/s

95th percentile per-packet one-way delay: 158.811 ms

Loss rate: 0.12%

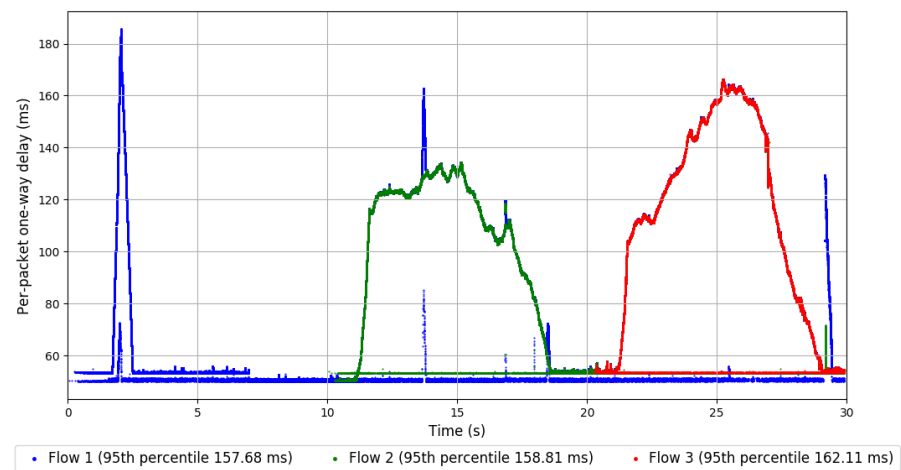
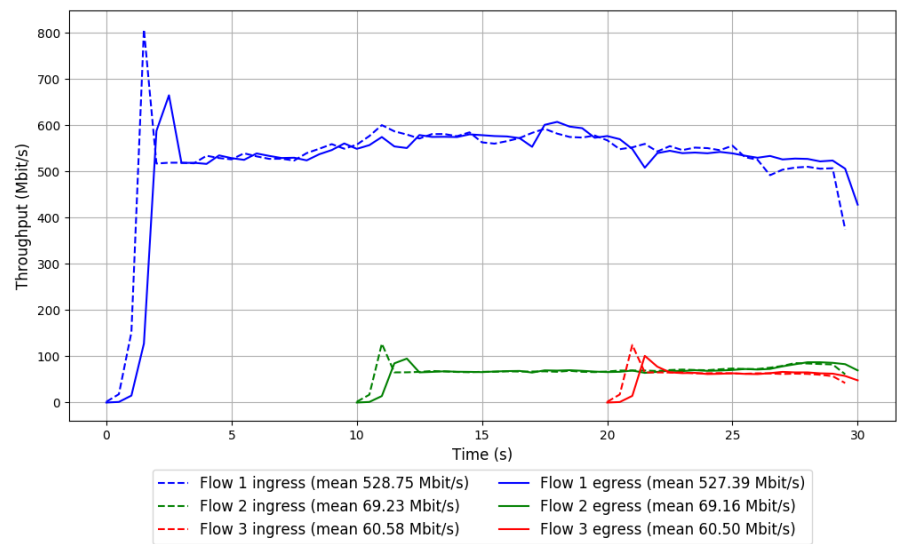
-- Flow 3:

Average throughput: 60.50 Mbit/s

95th percentile per-packet one-way delay: 162.114 ms

Loss rate: 0.16%

Run 8: Report of PCC-Allegro — Data Link



Run 9: Statistics of PCC-Allegro

Start at: 2018-06-01 13:06:48

End at: 2018-06-01 13:07:18

Local clock offset: -0.346 ms

Remote clock offset: 2.863 ms

# Below is generated by plot.py at 2018-06-01 15:31:40

# Datalink statistics

-- Total of 3 flows:

Average throughput: 588.17 Mbit/s

95th percentile per-packet one-way delay: 141.154 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 552.93 Mbit/s

95th percentile per-packet one-way delay: 142.101 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 36.72 Mbit/s

95th percentile per-packet one-way delay: 111.577 ms

Loss rate: 0.01%

-- Flow 3:

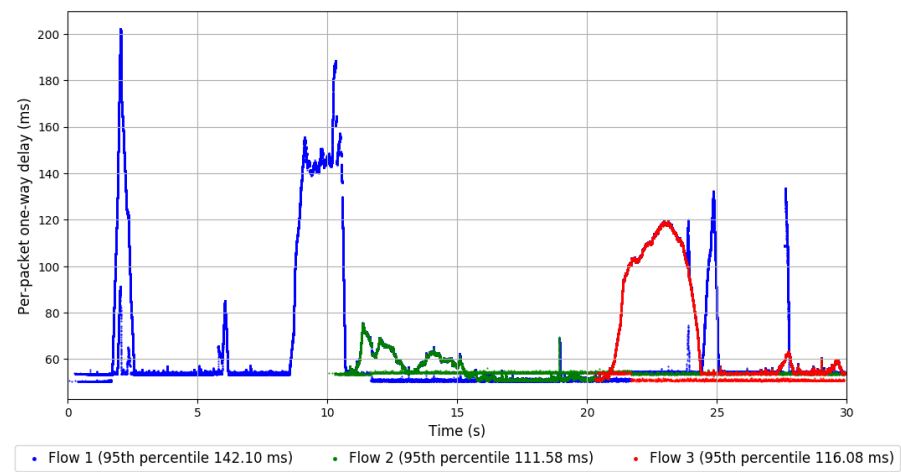
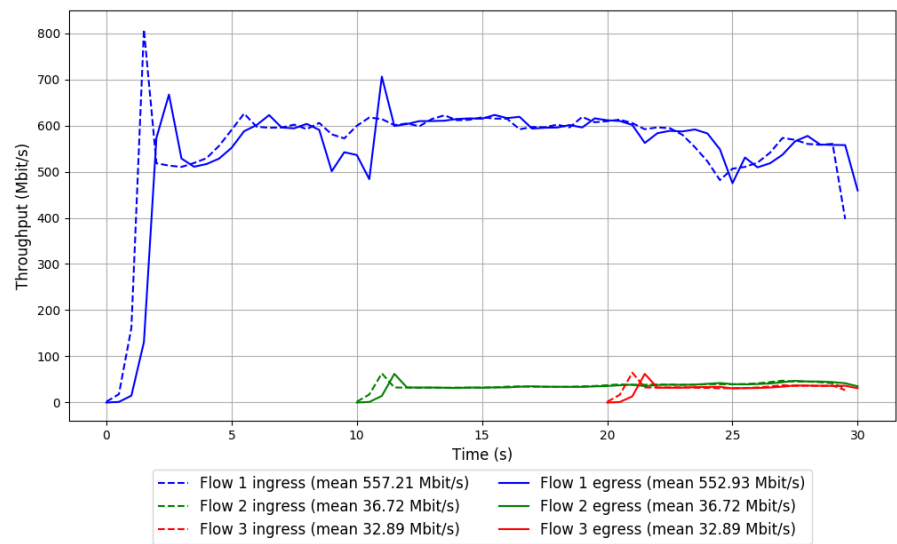
Average throughput: 32.89 Mbit/s

95th percentile per-packet one-way delay: 116.075 ms

Loss rate: 0.02%



Run 9: Report of PCC-Allegro — Data Link



Run 10: Statistics of PCC-Allegro

Start at: 2018-06-01 13:29:34

End at: 2018-06-01 13:30:04

Local clock offset: -0.422 ms

Remote clock offset: 0.758 ms

# Below is generated by plot.py at 2018-06-01 15:32:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 595.43 Mbit/s

95th percentile per-packet one-way delay: 163.200 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 540.79 Mbit/s

95th percentile per-packet one-way delay: 163.376 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 66.22 Mbit/s

95th percentile per-packet one-way delay: 161.146 ms

Loss rate: 0.06%

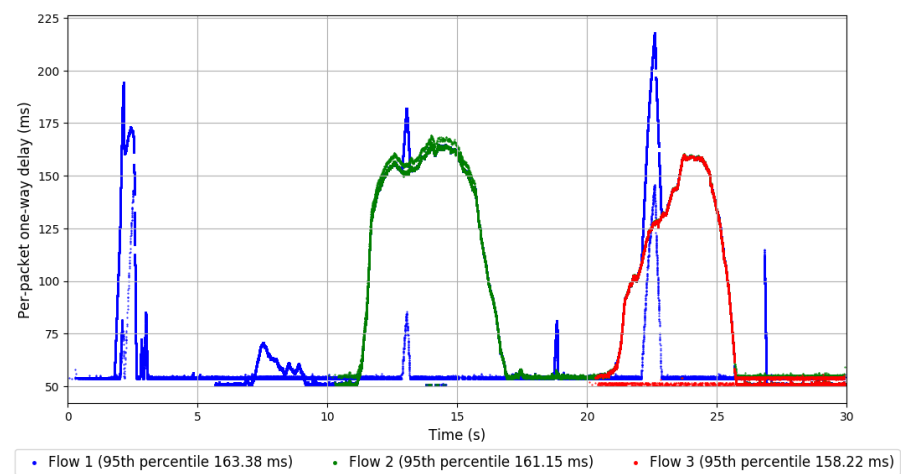
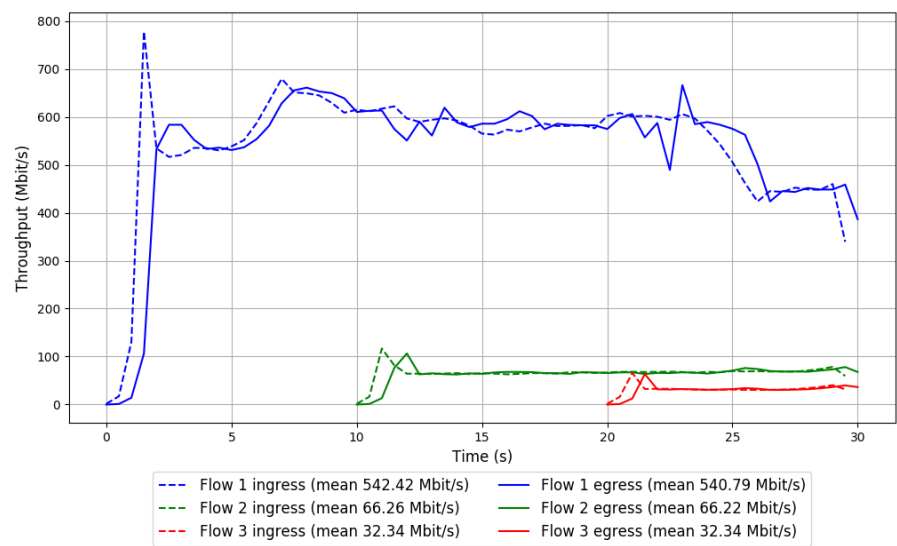
-- Flow 3:

Average throughput: 32.34 Mbit/s

95th percentile per-packet one-way delay: 158.224 ms

Loss rate: 0.00%

Run 10: Report of PCC-Allegro — Data Link

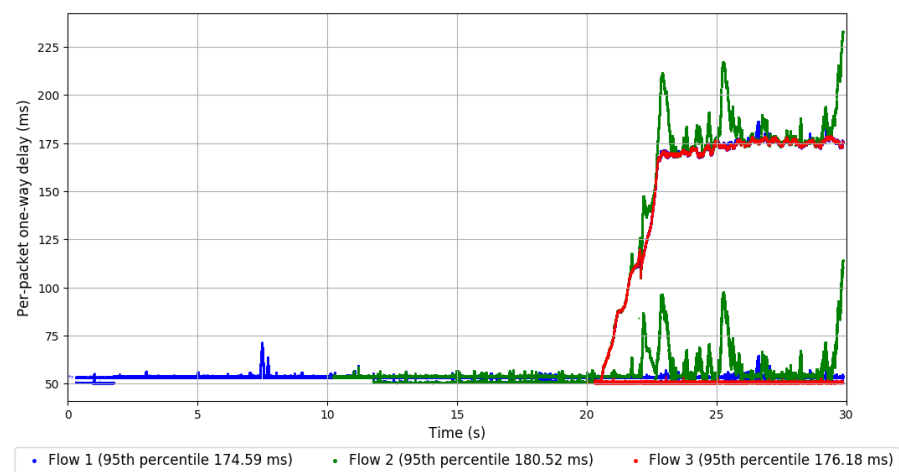
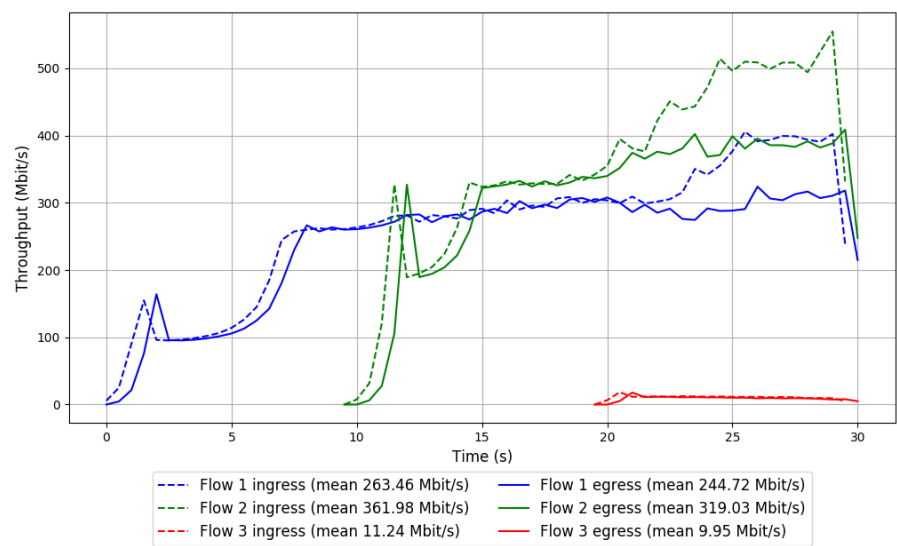


```
Run 1: Statistics of PCC-Expr

Start at: 2018-06-01 10:20:58
End at: 2018-06-01 10:21:28
Local clock offset: -0.135 ms
Remote clock offset: 0.21 ms

# Below is generated by plot.py at 2018-06-01 15:37:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 460.76 Mbit/s
95th percentile per-packet one-way delay: 176.422 ms
Loss rate: 9.41%
-- Flow 1:
Average throughput: 244.72 Mbit/s
95th percentile per-packet one-way delay: 174.588 ms
Loss rate: 7.12%
-- Flow 2:
Average throughput: 319.03 Mbit/s
95th percentile per-packet one-way delay: 180.516 ms
Loss rate: 11.87%
-- Flow 3:
Average throughput: 9.95 Mbit/s
95th percentile per-packet one-way delay: 176.180 ms
Loss rate: 11.44%
```

Run 1: Report of PCC-Expr — Data Link

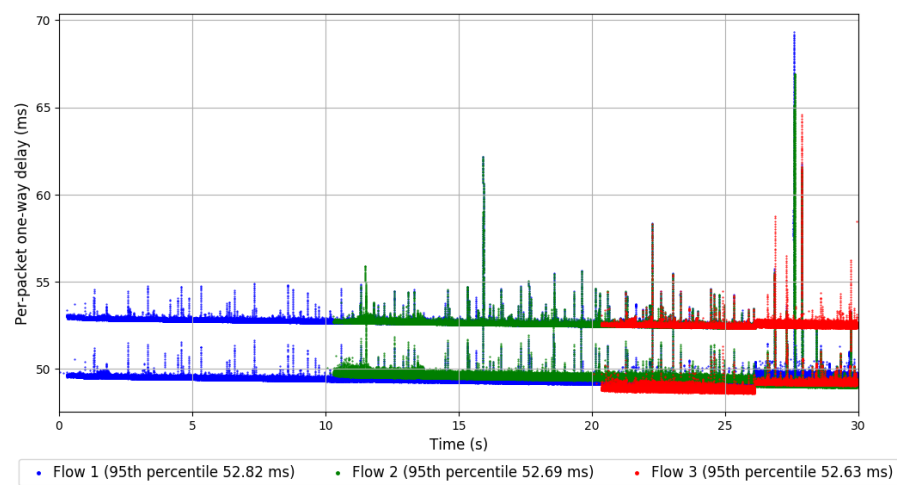
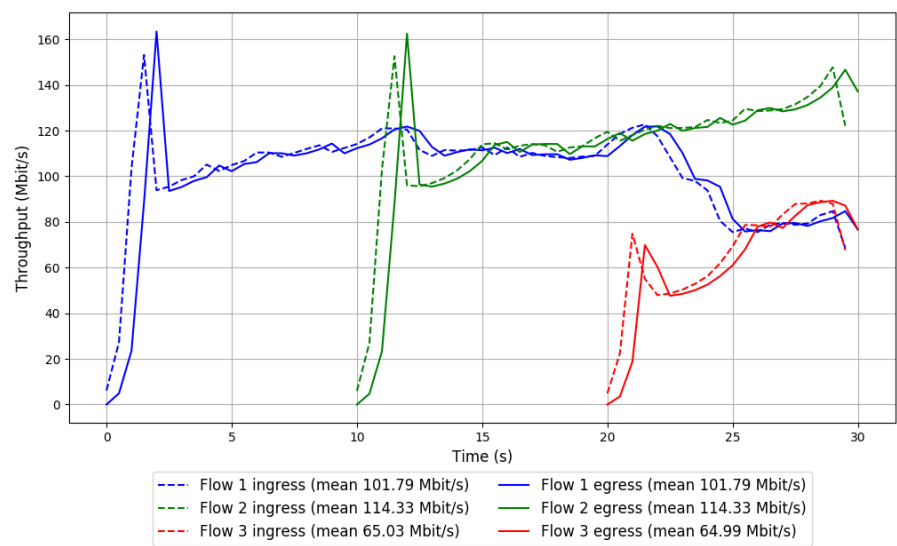


Run 2: Statistics of PCC-Expr

Start at: 2018-06-01 10:43:24  
End at: 2018-06-01 10:43:54  
Local clock offset: -0.165 ms  
Remote clock offset: 10.998 ms

# Below is generated by plot.py at 2018-06-01 15:37:36  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 199.25 Mbit/s  
95th percentile per-packet one-way delay: 52.777 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 101.79 Mbit/s  
95th percentile per-packet one-way delay: 52.816 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 114.33 Mbit/s  
95th percentile per-packet one-way delay: 52.687 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 64.99 Mbit/s  
95th percentile per-packet one-way delay: 52.635 ms  
Loss rate: 0.00%

Run 2: Report of PCC-Expr — Data Link



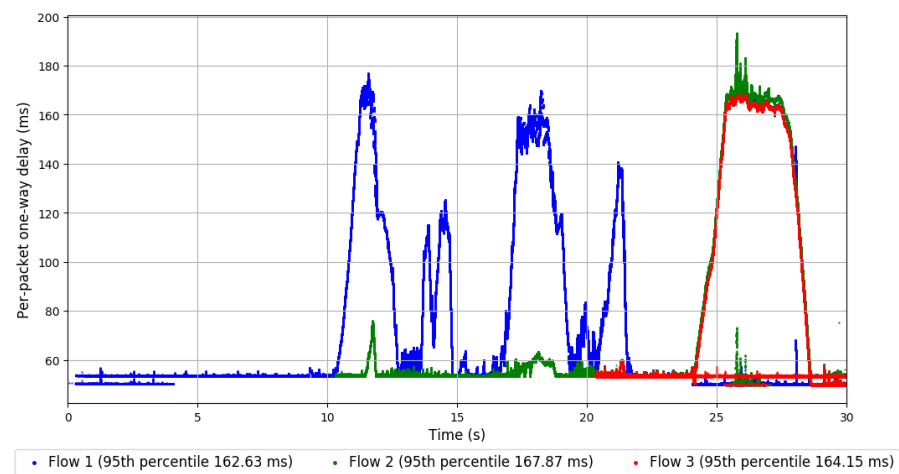
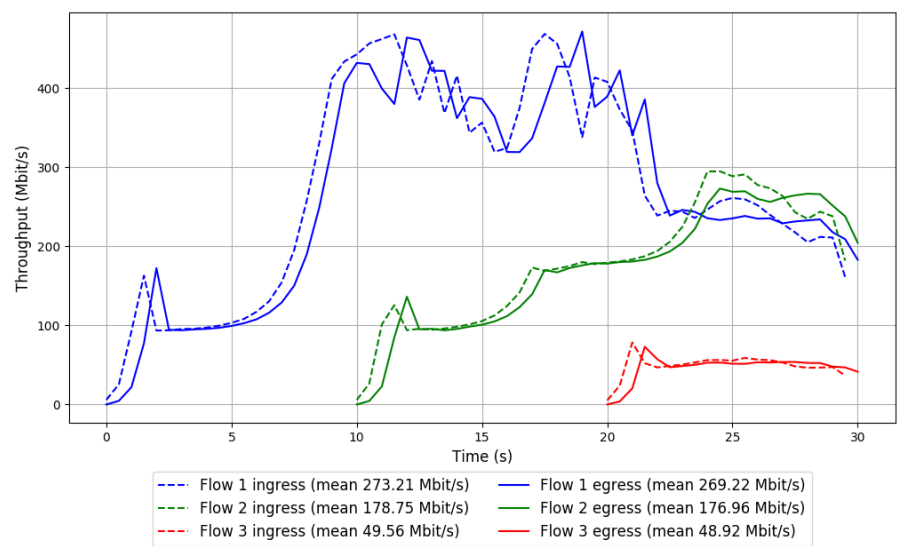
Run 3: Statistics of PCC-Expr

Start at: 2018-06-01 11:06:06  
End at: 2018-06-01 11:06:36  
Local clock offset: -0.014 ms  
Remote clock offset: 17.925 ms

# Below is generated by plot.py at 2018-06-01 15:37:36  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 403.02 Mbit/s  
95th percentile per-packet one-way delay: 165.437 ms  
Loss rate: 1.33%  
-- Flow 1:  
Average throughput: 269.22 Mbit/s  
95th percentile per-packet one-way delay: 162.635 ms  
Loss rate: 1.46%  
-- Flow 2:  
Average throughput: 176.96 Mbit/s  
95th percentile per-packet one-way delay: 167.870 ms  
Loss rate: 1.01%  
-- Flow 3:  
Average throughput: 48.92 Mbit/s  
95th percentile per-packet one-way delay: 164.154 ms  
Loss rate: 1.29%



Run 3: Report of PCC-Expr — Data Link

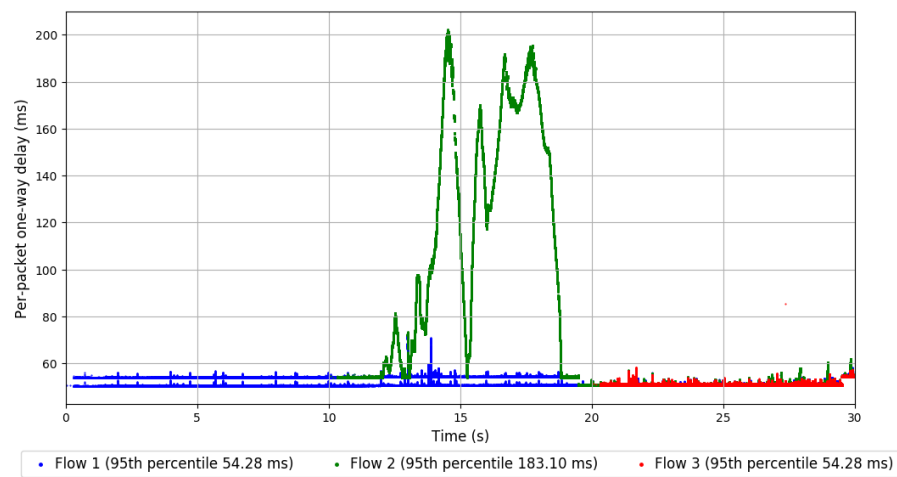
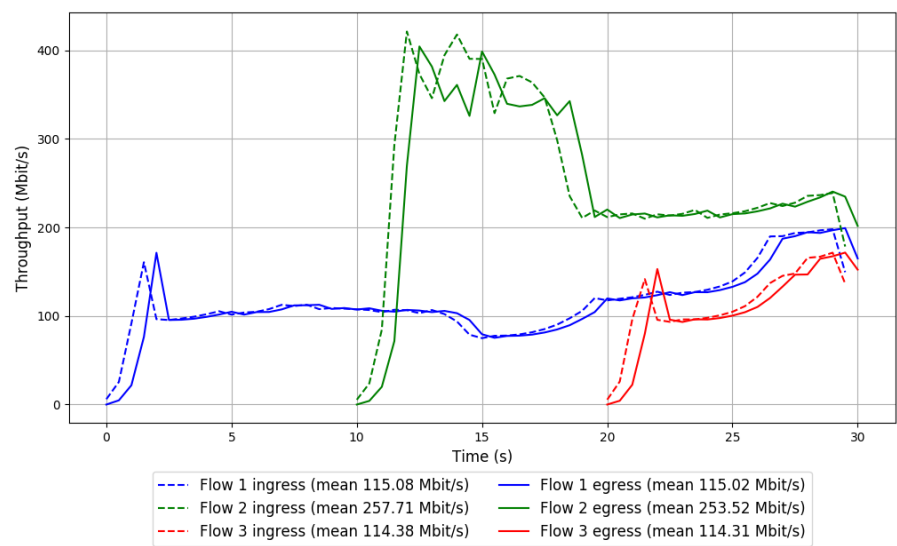


Run 4: Statistics of PCC-Expr

Start at: 2018-06-01 11:28:50  
End at: 2018-06-01 11:29:20  
Local clock offset: -0.156 ms  
Remote clock offset: 16.742 ms

# Below is generated by plot.py at 2018-06-01 15:37:36  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 321.32 Mbit/s  
95th percentile per-packet one-way delay: 172.195 ms  
Loss rate: 0.90%  
-- Flow 1:  
Average throughput: 115.02 Mbit/s  
95th percentile per-packet one-way delay: 54.282 ms  
Loss rate: 0.05%  
-- Flow 2:  
Average throughput: 253.52 Mbit/s  
95th percentile per-packet one-way delay: 183.104 ms  
Loss rate: 1.65%  
-- Flow 3:  
Average throughput: 114.31 Mbit/s  
95th percentile per-packet one-way delay: 54.277 ms  
Loss rate: 0.07%

Run 4: Report of PCC-Expr — Data Link

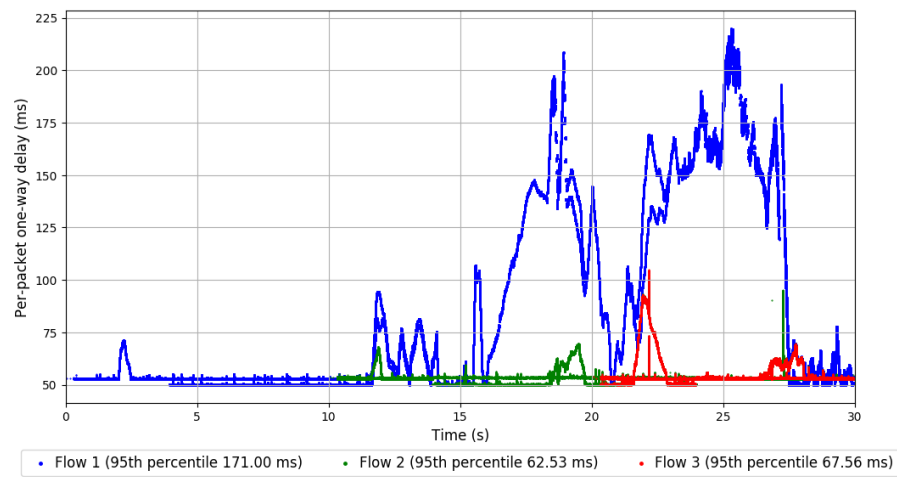
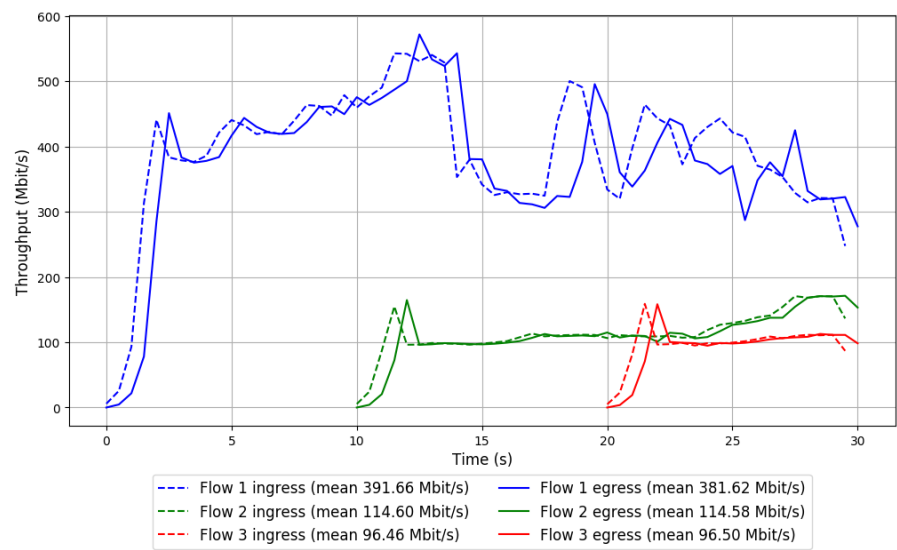


Run 5: Statistics of PCC-Expr

Start at: 2018-06-01 11:51:46  
End at: 2018-06-01 11:52:16  
Local clock offset: -0.049 ms  
Remote clock offset: 13.585 ms

# Below is generated by plot.py at 2018-06-01 15:46:05  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 489.63 Mbit/s  
95th percentile per-packet one-way delay: 166.656 ms  
Loss rate: 2.03%  
-- Flow 1:  
Average throughput: 381.62 Mbit/s  
95th percentile per-packet one-way delay: 171.000 ms  
Loss rate: 2.58%  
-- Flow 2:  
Average throughput: 114.58 Mbit/s  
95th percentile per-packet one-way delay: 62.531 ms  
Loss rate: 0.03%  
-- Flow 3:  
Average throughput: 96.50 Mbit/s  
95th percentile per-packet one-way delay: 67.562 ms  
Loss rate: 0.02%

Run 5: Report of PCC-Expr — Data Link



Run 6: Statistics of PCC-Expr

Start at: 2018-06-01 12:15:13

End at: 2018-06-01 12:15:43

Local clock offset: -0.289 ms

Remote clock offset: 5.39 ms

# Below is generated by plot.py at 2018-06-01 15:47:38

# Datalink statistics

-- Total of 3 flows:

Average throughput: 484.70 Mbit/s

95th percentile per-packet one-way delay: 209.985 ms

Loss rate: 5.51%

-- Flow 1:

Average throughput: 231.74 Mbit/s

95th percentile per-packet one-way delay: 169.427 ms

Loss rate: 4.53%

-- Flow 2:

Average throughput: 375.49 Mbit/s

95th percentile per-packet one-way delay: 218.779 ms

Loss rate: 6.39%

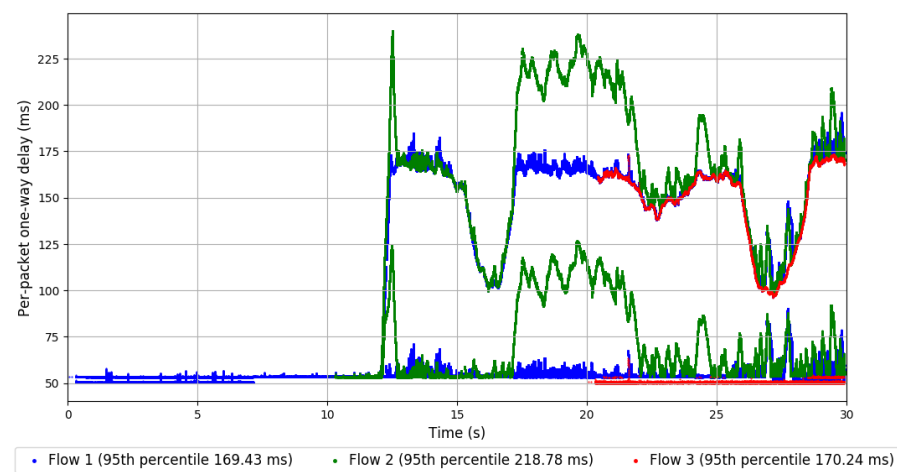
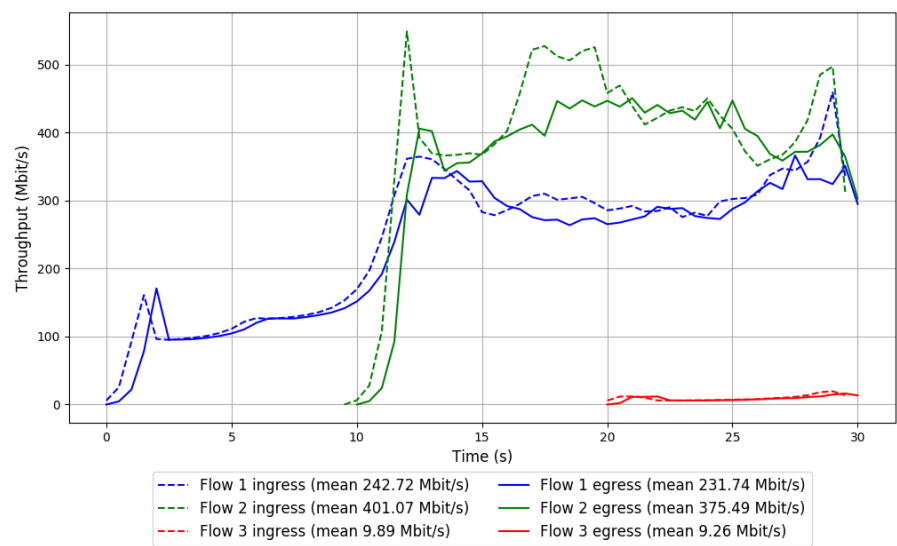
-- Flow 3:

Average throughput: 9.26 Mbit/s

95th percentile per-packet one-way delay: 170.236 ms

Loss rate: 6.37%

Run 6: Report of PCC-Expr — Data Link



Run 7: Statistics of PCC-Expr

Start at: 2018-06-01 12:38:04

End at: 2018-06-01 12:38:34

Local clock offset: -0.127 ms

Remote clock offset: 3.941 ms

# Below is generated by plot.py at 2018-06-01 15:47:38

# Datalink statistics

-- Total of 3 flows:

Average throughput: 333.64 Mbit/s

95th percentile per-packet one-way delay: 165.737 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 209.50 Mbit/s

95th percentile per-packet one-way delay: 173.297 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 95.73 Mbit/s

95th percentile per-packet one-way delay: 53.937 ms

Loss rate: 0.01%

-- Flow 3:

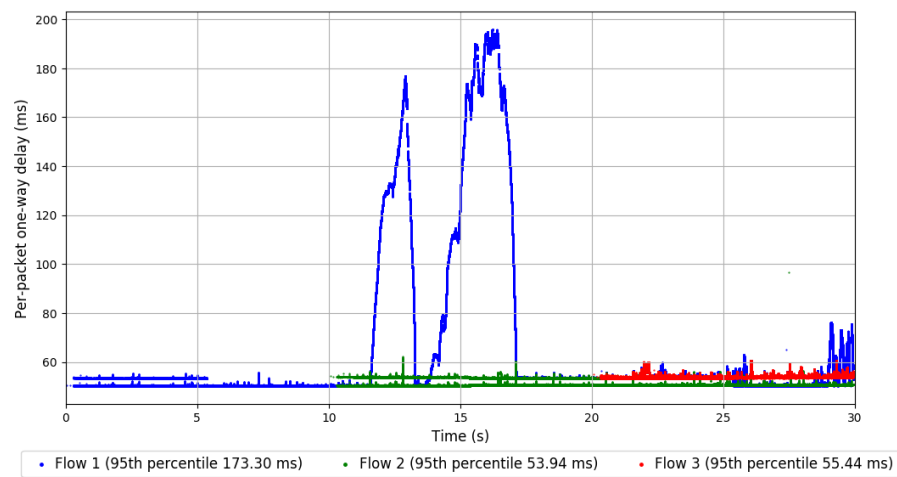
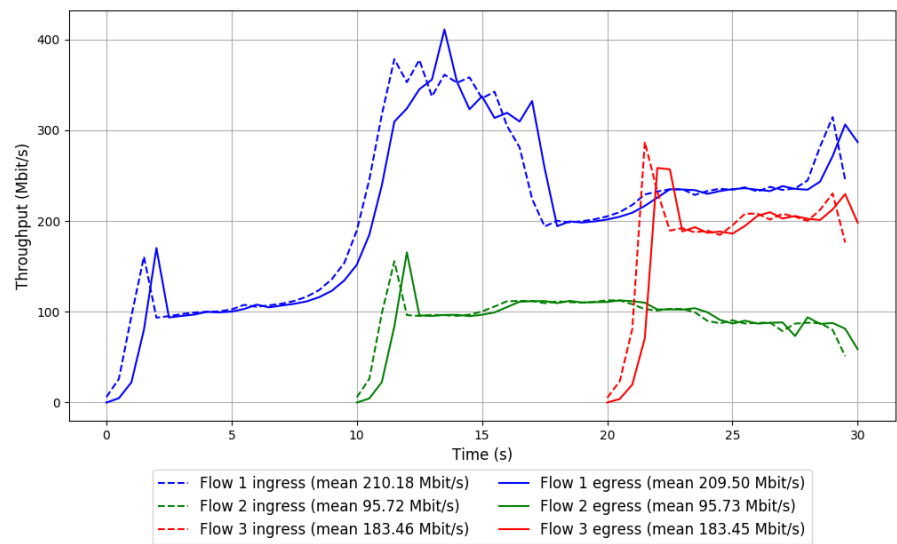
Average throughput: 183.45 Mbit/s

95th percentile per-packet one-way delay: 55.436 ms

Loss rate: 0.05%



Run 7: Report of PCC-Expr — Data Link



Run 8: Statistics of PCC-Expr

Start at: 2018-06-01 13:00:47

End at: 2018-06-01 13:01:17

Local clock offset: -0.492 ms

Remote clock offset: 3.029 ms

# Below is generated by plot.py at 2018-06-01 15:47:38

# Datalink statistics

-- Total of 3 flows:

Average throughput: 217.35 Mbit/s

95th percentile per-packet one-way delay: 53.890 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 101.68 Mbit/s

95th percentile per-packet one-way delay: 53.557 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 145.21 Mbit/s

95th percentile per-packet one-way delay: 54.692 ms

Loss rate: 0.13%

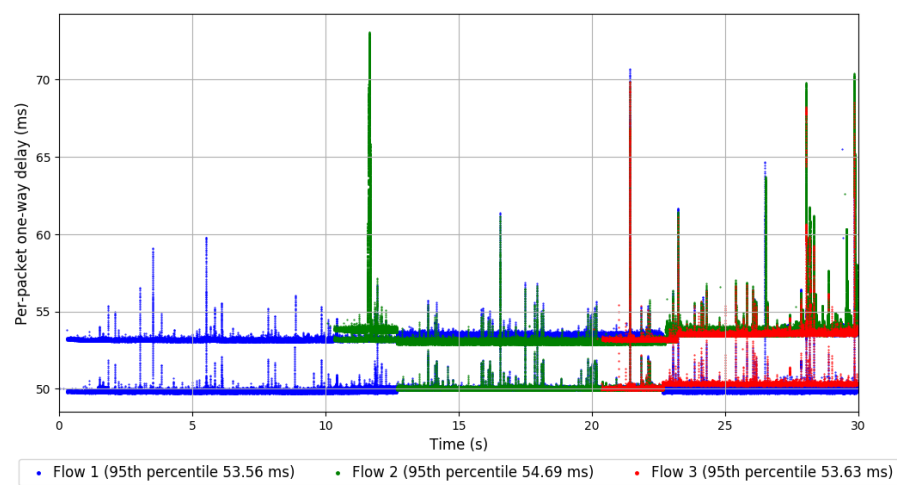
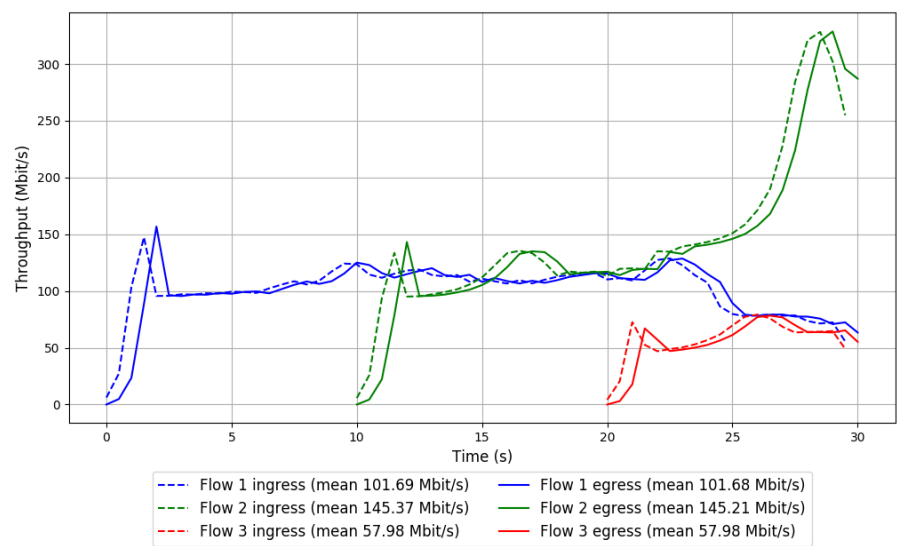
-- Flow 3:

Average throughput: 57.98 Mbit/s

95th percentile per-packet one-way delay: 53.628 ms

Loss rate: 0.03%

Run 8: Report of PCC-Expr — Data Link



Run 9: Statistics of PCC-Expr

Start at: 2018-06-01 13:23:23

End at: 2018-06-01 13:23:53

Local clock offset: -0.157 ms

Remote clock offset: 0.669 ms

# Below is generated by plot.py at 2018-06-01 15:48:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 446.24 Mbit/s

95th percentile per-packet one-way delay: 183.709 ms

Loss rate: 12.07%

-- Flow 1:

Average throughput: 258.80 Mbit/s

95th percentile per-packet one-way delay: 183.328 ms

Loss rate: 11.86%

-- Flow 2:

Average throughput: 279.08 Mbit/s

95th percentile per-packet one-way delay: 184.184 ms

Loss rate: 12.36%

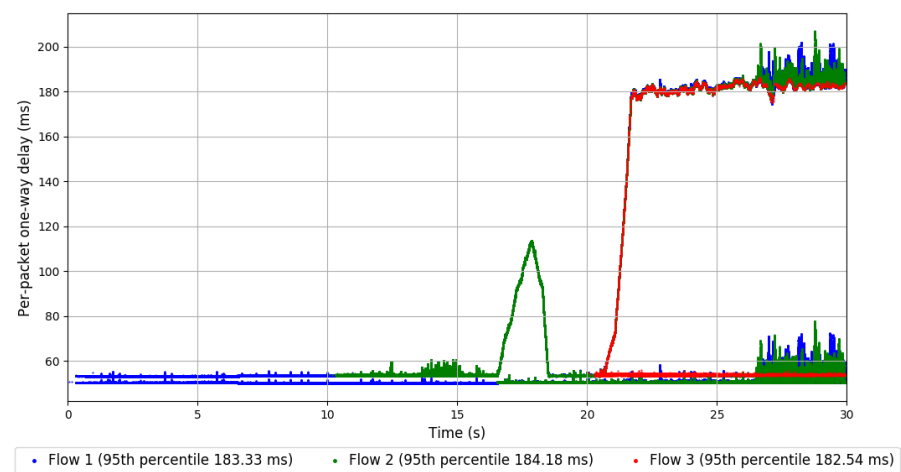
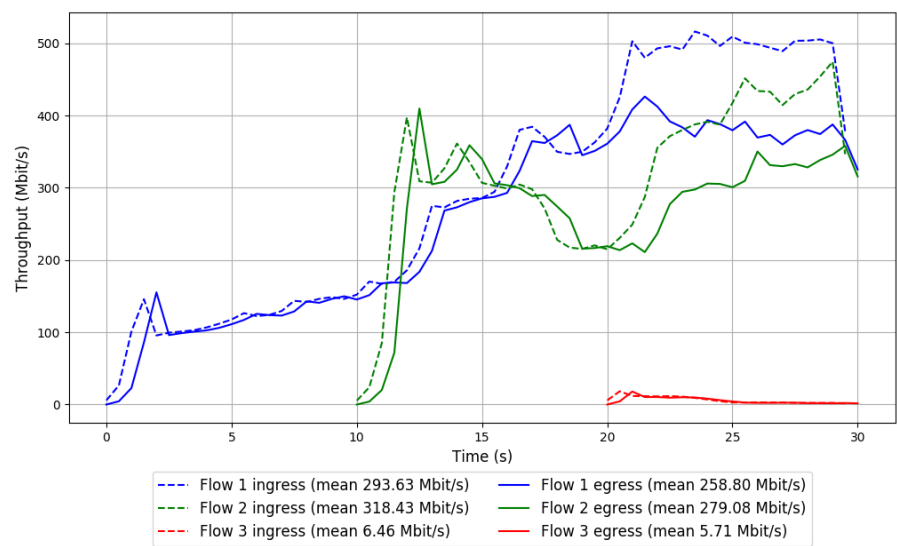
-- Flow 3:

Average throughput: 5.71 Mbit/s

95th percentile per-packet one-way delay: 182.541 ms

Loss rate: 11.62%

Run 9: Report of PCC-Expr — Data Link



Run 10: Statistics of PCC-Expr

Start at: 2018-06-01 13:46:00

End at: 2018-06-01 13:46:30

Local clock offset: -0.041 ms

Remote clock offset: 0.281 ms

# Below is generated by plot.py at 2018-06-01 15:48:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 353.66 Mbit/s

95th percentile per-packet one-way delay: 68.780 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 227.87 Mbit/s

95th percentile per-packet one-way delay: 78.444 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 100.80 Mbit/s

95th percentile per-packet one-way delay: 53.854 ms

Loss rate: 0.01%

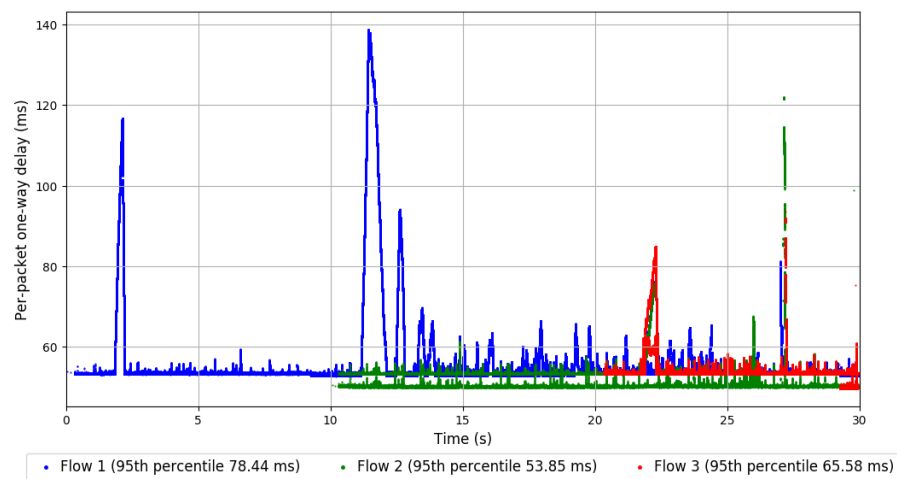
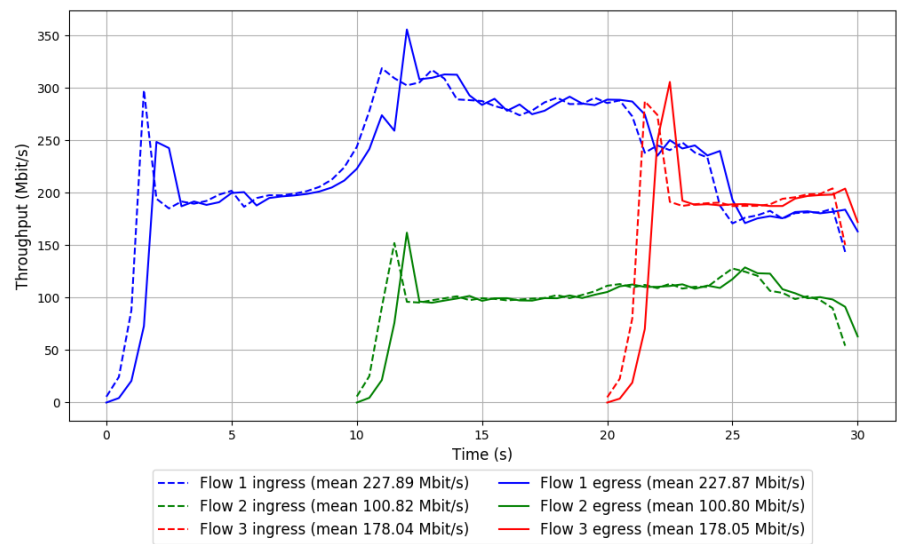
-- Flow 3:

Average throughput: 178.05 Mbit/s

95th percentile per-packet one-way delay: 65.576 ms

Loss rate: 0.00%

Run 10: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-06-01 10:12:21

End at: 2018-06-01 10:12:51

Local clock offset: -0.332 ms

Remote clock offset: 0.304 ms

# Below is generated by plot.py at 2018-06-01 15:48:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 53.02 Mbit/s

95th percentile per-packet one-way delay: 53.866 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 53.828 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.71 Mbit/s

95th percentile per-packet one-way delay: 53.549 ms

Loss rate: 0.00%

-- Flow 3:

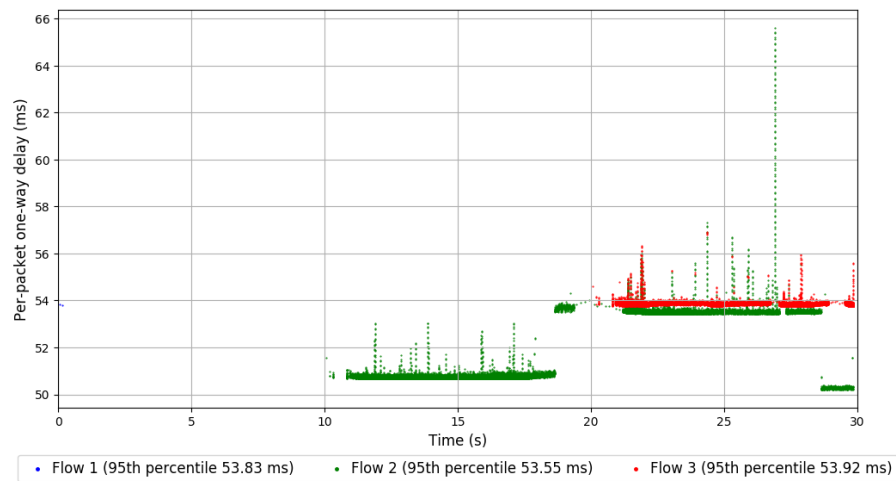
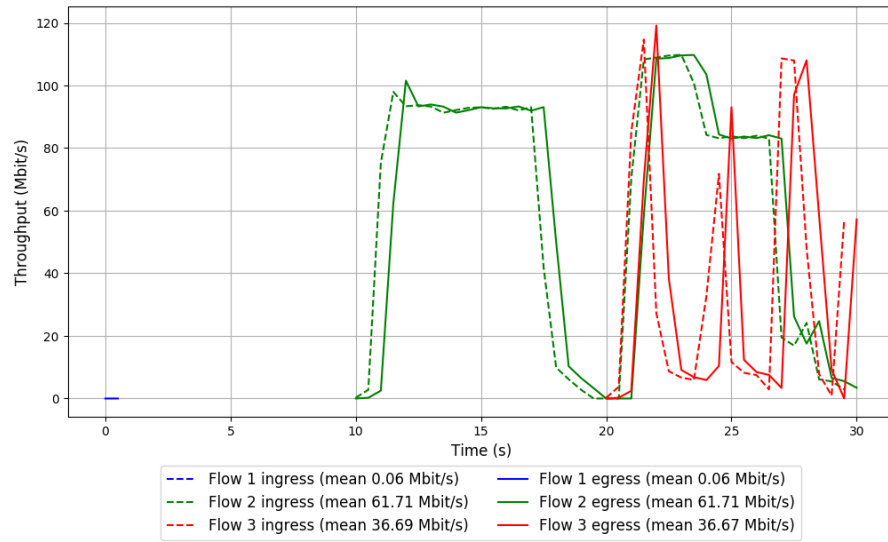
Average throughput: 36.67 Mbit/s

95th percentile per-packet one-way delay: 53.925 ms

Loss rate: 0.08%



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



Run 2: Statistics of QUIC Cubic

Start at: 2018-06-01 10:34:46

End at: 2018-06-01 10:35:17

Local clock offset: -0.021 ms

Remote clock offset: 1.03 ms

# Below is generated by plot.py at 2018-06-01 15:48:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 128.80 Mbit/s

95th percentile per-packet one-way delay: 53.058 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 73.46 Mbit/s

95th percentile per-packet one-way delay: 53.083 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 52.73 Mbit/s

95th percentile per-packet one-way delay: 52.767 ms

Loss rate: 0.02%

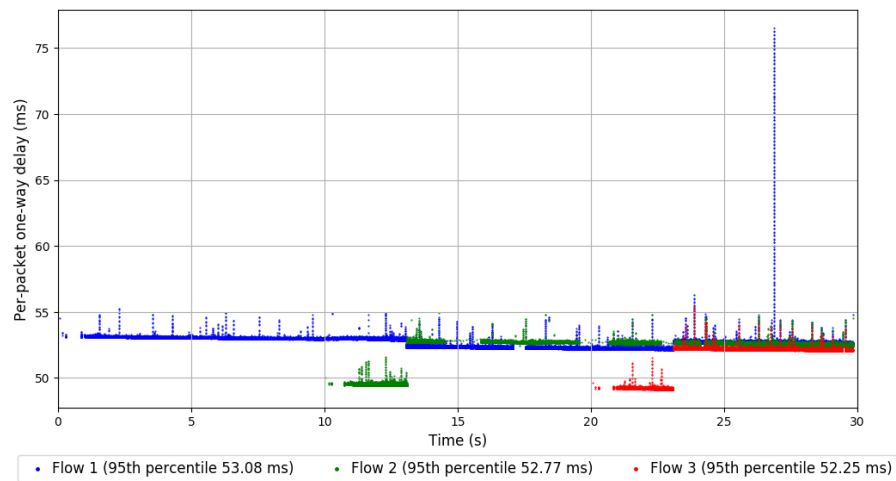
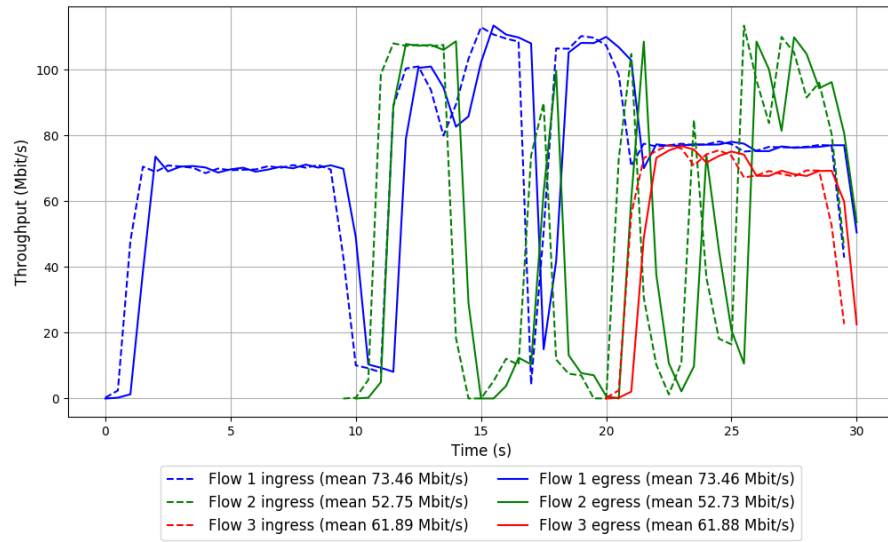
-- Flow 3:

Average throughput: 61.88 Mbit/s

95th percentile per-packet one-way delay: 52.251 ms

Loss rate: 0.01%

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

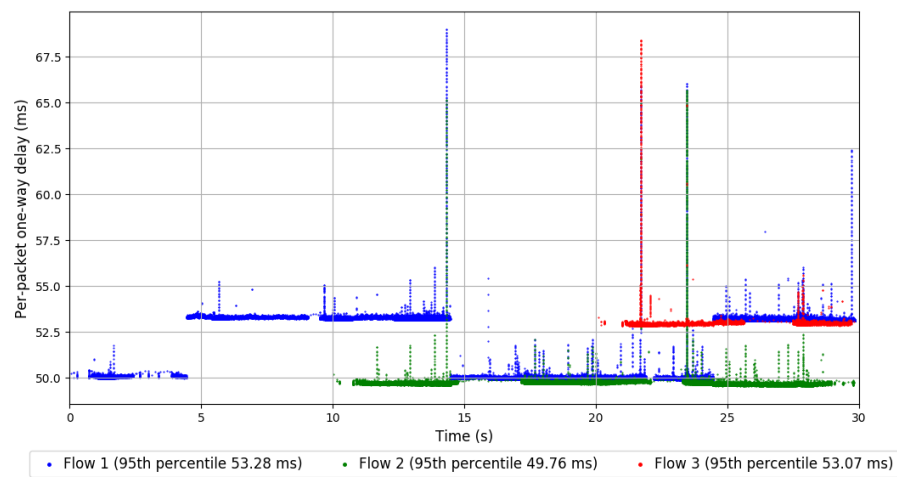
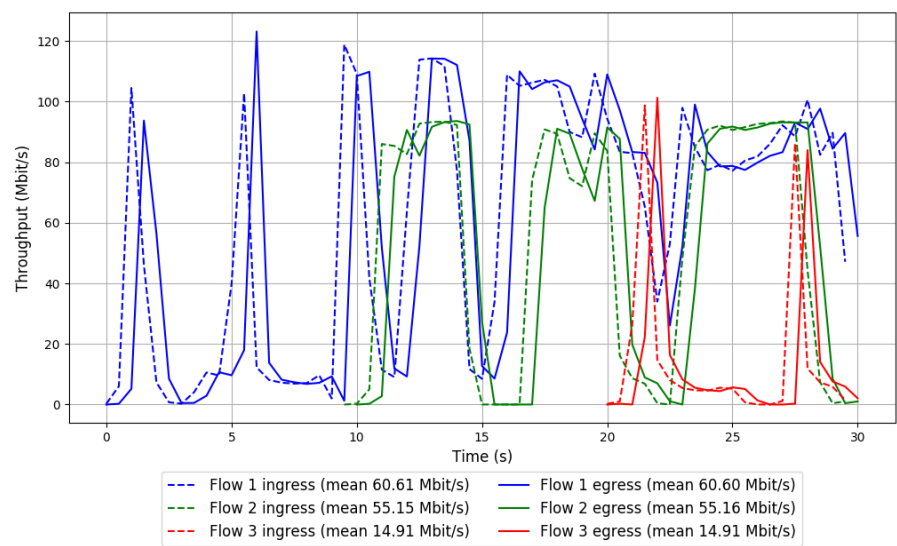


Run 3: Statistics of QUIC Cubic

Start at: 2018-06-01 10:57:25  
End at: 2018-06-01 10:57:55  
Local clock offset: 0.045 ms  
Remote clock offset: 13.648 ms

# Below is generated by plot.py at 2018-06-01 15:48:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 102.06 Mbit/s  
95th percentile per-packet one-way delay: 53.259 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 60.60 Mbit/s  
95th percentile per-packet one-way delay: 53.282 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 55.16 Mbit/s  
95th percentile per-packet one-way delay: 49.763 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 14.91 Mbit/s  
95th percentile per-packet one-way delay: 53.073 ms  
Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link

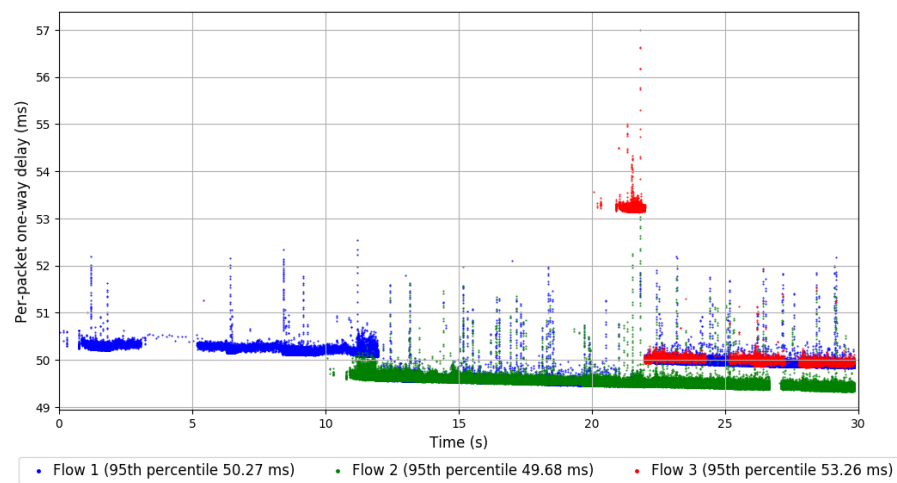
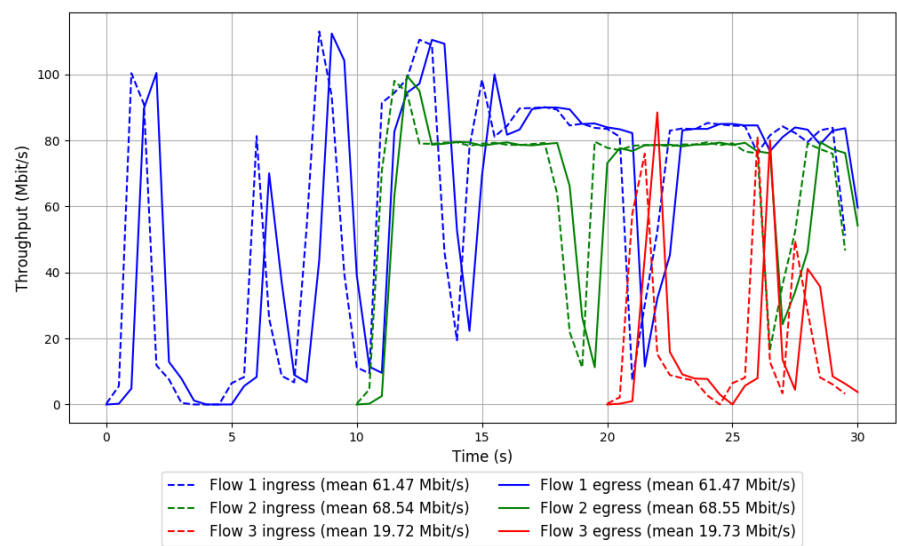


Run 4: Statistics of QUIC Cubic

Start at: 2018-06-01 11:20:08  
End at: 2018-06-01 11:20:38  
Local clock offset: -0.063 ms  
Remote clock offset: 28.521 ms

# Below is generated by plot.py at 2018-06-01 15:48:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 113.46 Mbit/s  
95th percentile per-packet one-way delay: 50.265 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 61.47 Mbit/s  
95th percentile per-packet one-way delay: 50.269 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 68.55 Mbit/s  
95th percentile per-packet one-way delay: 49.683 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 19.73 Mbit/s  
95th percentile per-packet one-way delay: 53.263 ms  
Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



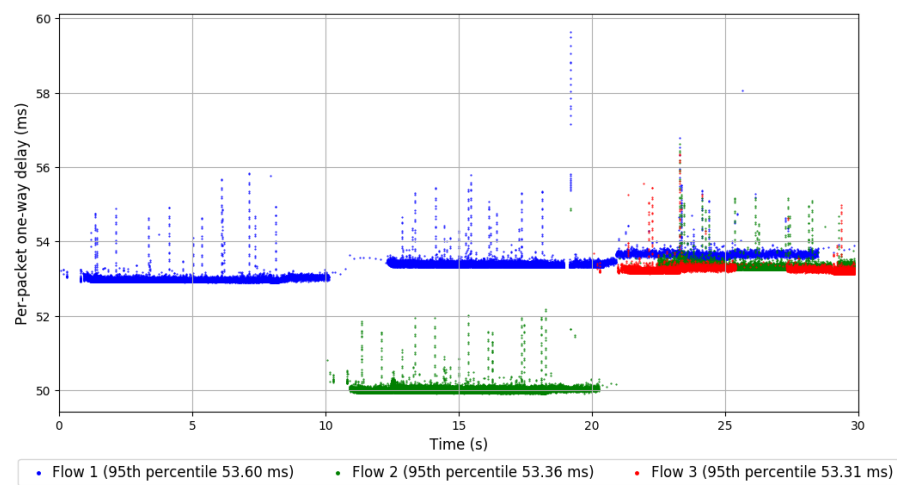
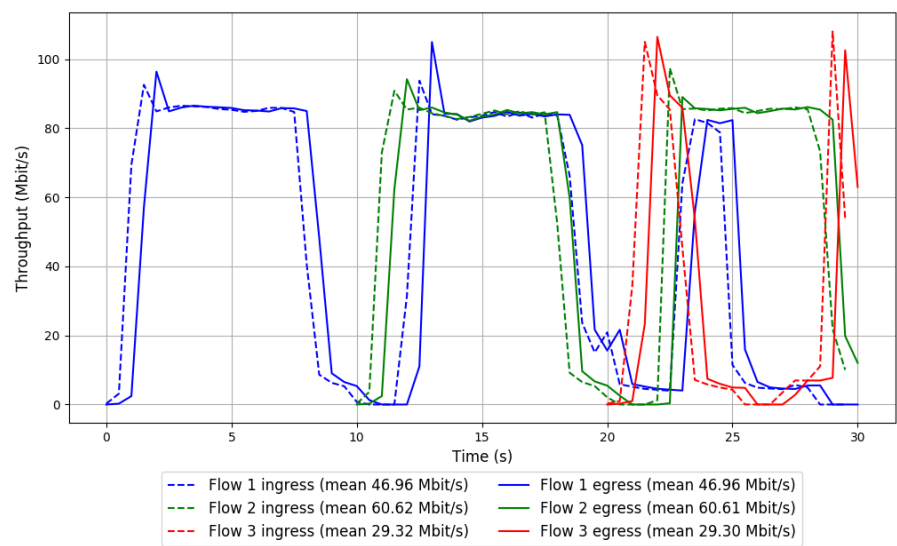
Run 5: Statistics of QUIC Cubic

Start at: 2018-06-01 11:42:59  
End at: 2018-06-01 11:43:29  
Local clock offset: -0.095 ms  
Remote clock offset: 11.493 ms

# Below is generated by plot.py at 2018-06-01 15:48:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 96.83 Mbit/s  
95th percentile per-packet one-way delay: 53.557 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 46.96 Mbit/s  
95th percentile per-packet one-way delay: 53.604 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 60.61 Mbit/s  
95th percentile per-packet one-way delay: 53.363 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 29.30 Mbit/s  
95th percentile per-packet one-way delay: 53.306 ms  
Loss rate: 0.06%



Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-06-01 12:06:05

End at: 2018-06-01 12:06:35

Local clock offset: -0.097 ms

Remote clock offset: 6.949 ms

# Below is generated by plot.py at 2018-06-01 15:48:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 95.33 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 46.31 Mbit/s

95th percentile per-packet one-way delay: 53.805 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 42.68 Mbit/s

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

Loss rate: 0.00%

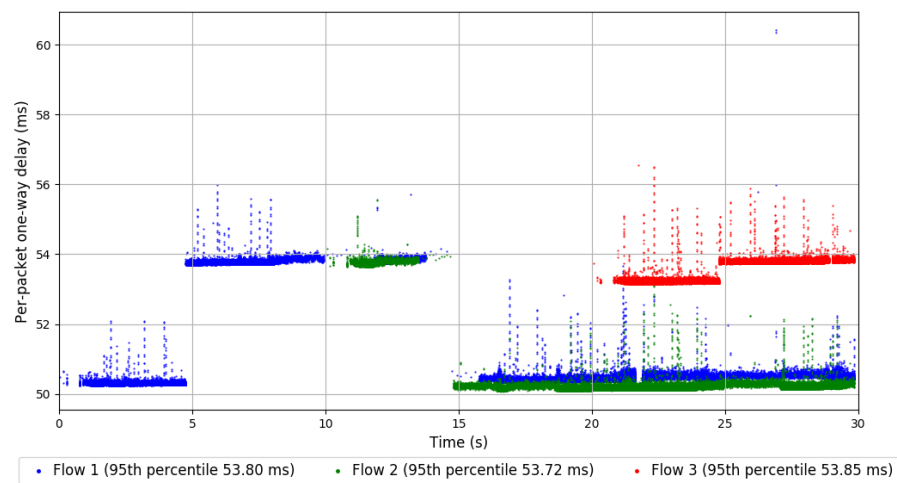
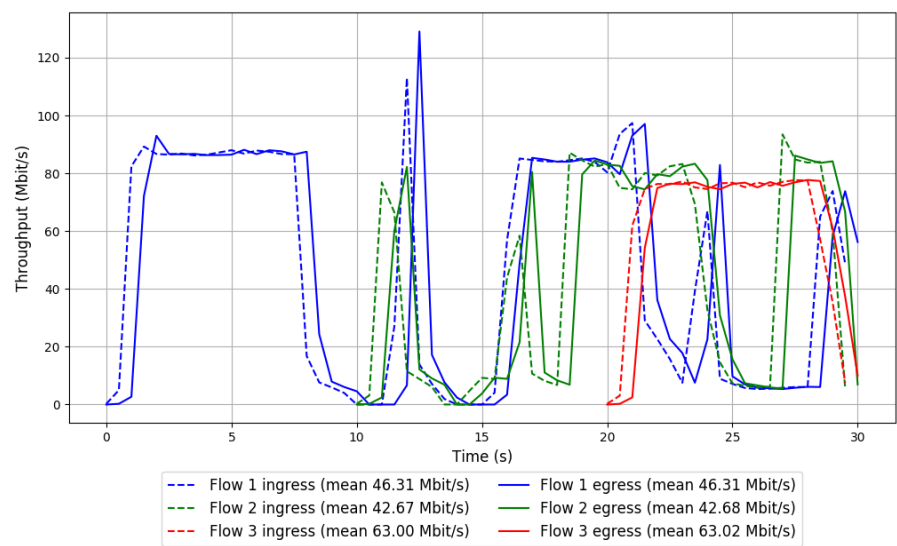
-- Flow 3:

Average throughput: 63.02 Mbit/s

95th percentile per-packet one-way delay: 53.851 ms

Loss rate: 0.01%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-06-01 12:29:29

End at: 2018-06-01 12:29:59

Local clock offset: 0.012 ms

Remote clock offset: 6.852 ms

# Below is generated by plot.py at 2018-06-01 15:48:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 123.28 Mbit/s

95th percentile per-packet one-way delay: 52.805 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 67.02 Mbit/s

95th percentile per-packet one-way delay: 52.821 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 55.38 Mbit/s

95th percentile per-packet one-way delay: 52.789 ms

Loss rate: 0.00%

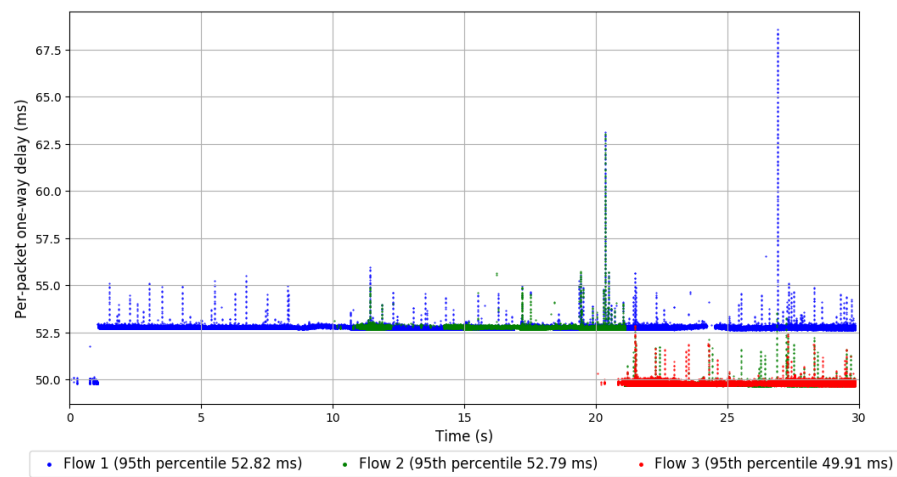
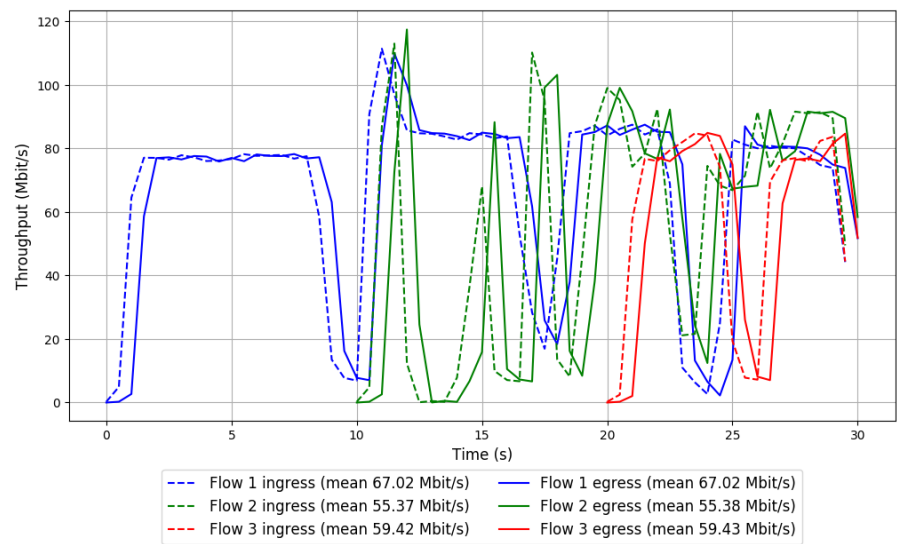
-- Flow 3:

Average throughput: 59.43 Mbit/s

95th percentile per-packet one-way delay: 49.910 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-06-01 12:52:08

End at: 2018-06-01 12:52:38

Local clock offset: -0.386 ms

Remote clock offset: 2.585 ms

# Below is generated by plot.py at 2018-06-01 15:48:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 110.69 Mbit/s

95th percentile per-packet one-way delay: 53.672 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 64.09 Mbit/s

95th percentile per-packet one-way delay: 53.395 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 40.08 Mbit/s

95th percentile per-packet one-way delay: 53.174 ms

Loss rate: 0.02%

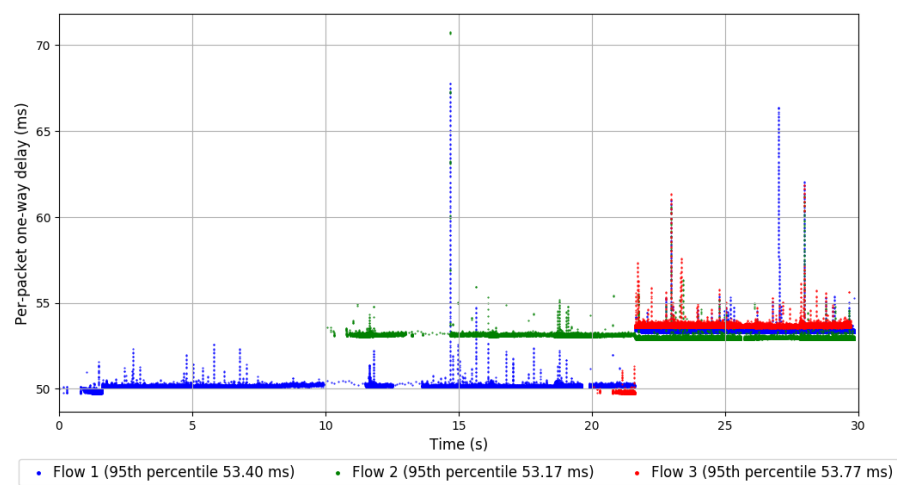
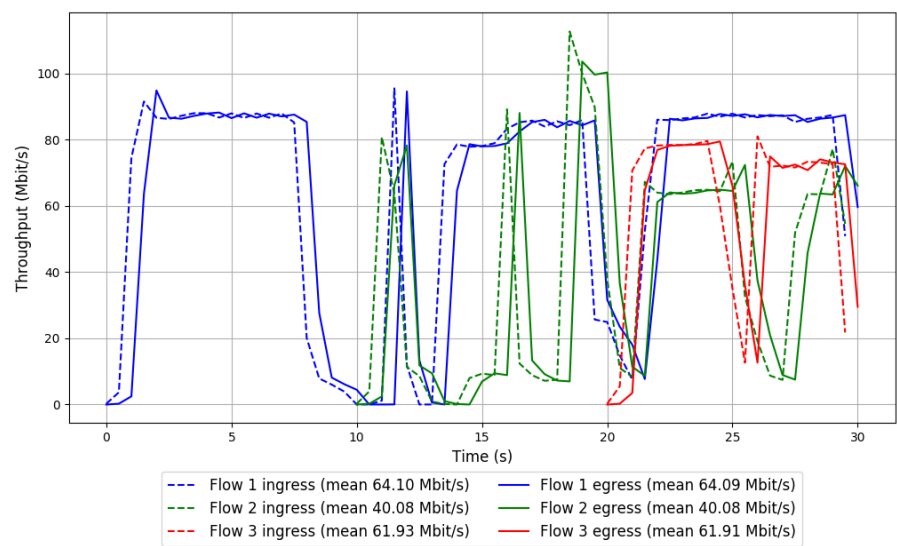
-- Flow 3:

Average throughput: 61.91 Mbit/s

95th percentile per-packet one-way delay: 53.773 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-06-01 13:14:43

End at: 2018-06-01 13:15:13

Local clock offset: -0.209 ms

Remote clock offset: 1.073 ms

# Below is generated by plot.py at 2018-06-01 15:48:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 136.10 Mbit/s

95th percentile per-packet one-way delay: 53.579 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 72.64 Mbit/s

95th percentile per-packet one-way delay: 50.395 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 67.53 Mbit/s

95th percentile per-packet one-way delay: 53.632 ms

Loss rate: 0.01%

-- Flow 3:

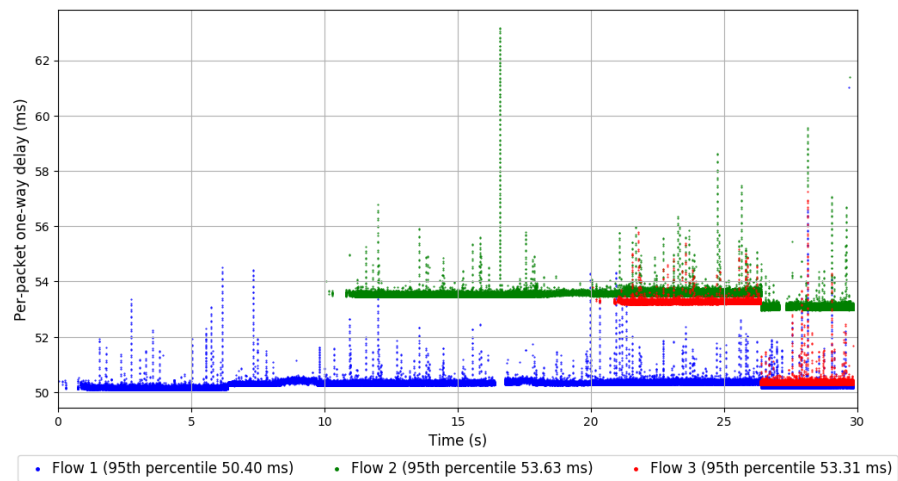
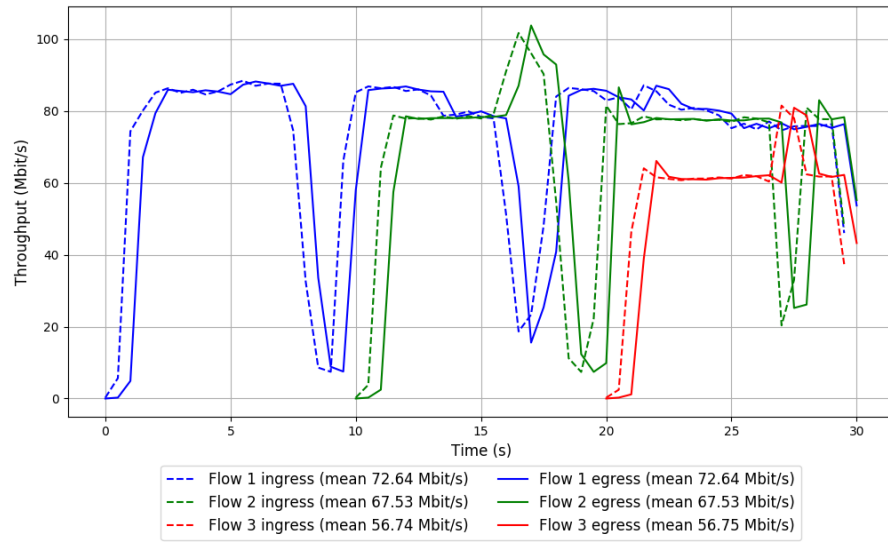
Average throughput: 56.75 Mbit/s

95th percentile per-packet one-way delay: 53.315 ms

Loss rate: 0.00%



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



Run 10: Statistics of QUIC Cubic

Start at: 2018-06-01 13:37:28

End at: 2018-06-01 13:37:58

Local clock offset: -0.187 ms

Remote clock offset: 0.848 ms

# Below is generated by plot.py at 2018-06-01 15:48:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 97.53 Mbit/s

95th percentile per-packet one-way delay: 53.901 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 67.43 Mbit/s

95th percentile per-packet one-way delay: 53.914 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 36.42 Mbit/s

95th percentile per-packet one-way delay: 53.267 ms

Loss rate: 0.02%

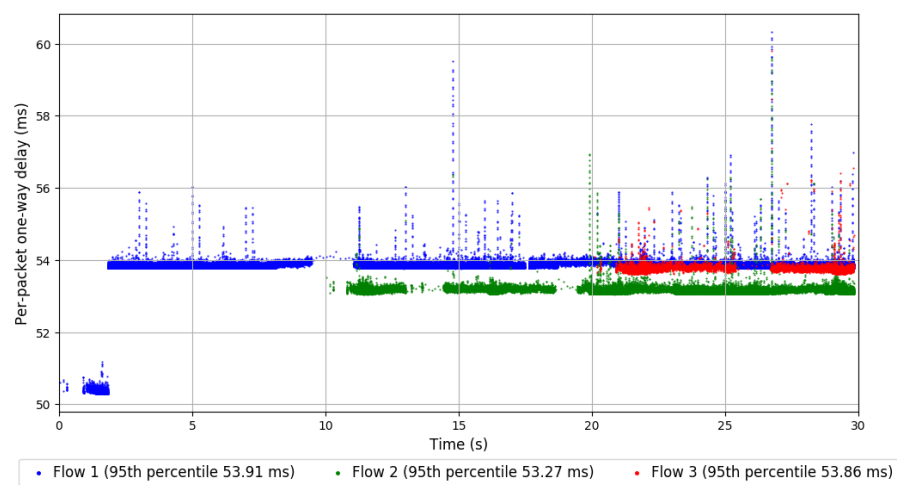
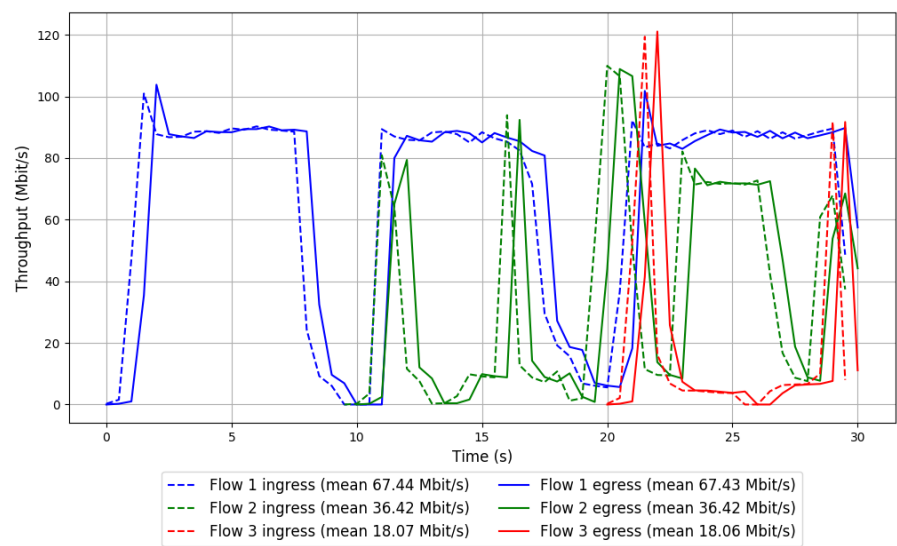
-- Flow 3:

Average throughput: 18.06 Mbit/s

95th percentile per-packet one-way delay: 53.859 ms

Loss rate: 0.01%

Run 10: Report of QUIC Cubic — Data Link

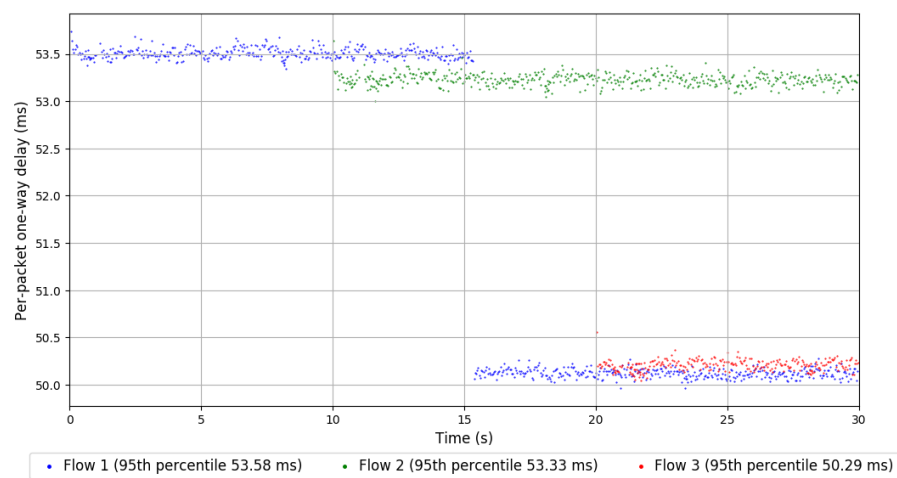
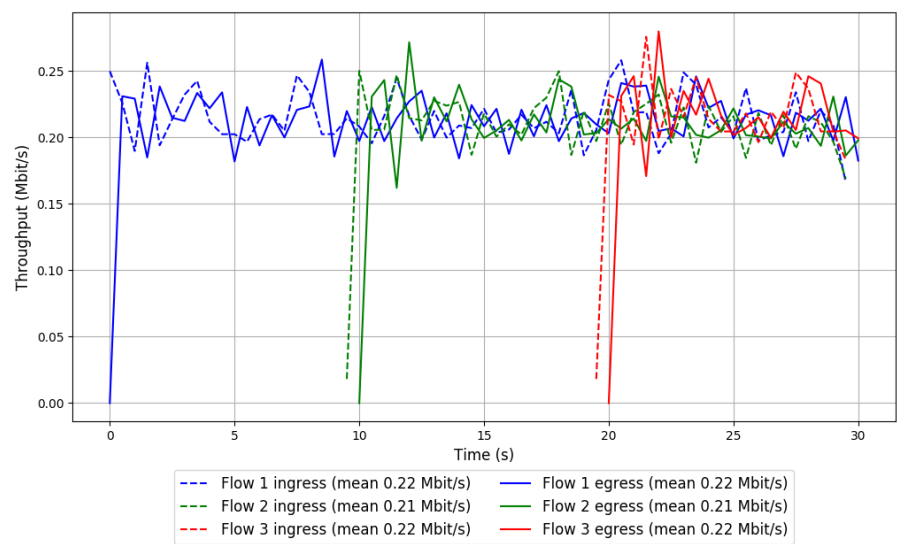


Run 1: Statistics of SReAM

Start at: 2018-06-01 10:05:54  
End at: 2018-06-01 10:06:24  
Local clock offset: -0.281 ms  
Remote clock offset: -0.179 ms

# Below is generated by plot.py at 2018-06-01 15:48:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 53.551 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 53.582 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 53.328 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 50.287 ms  
Loss rate: 0.00%

Run 1: Report of SReAM — Data Link

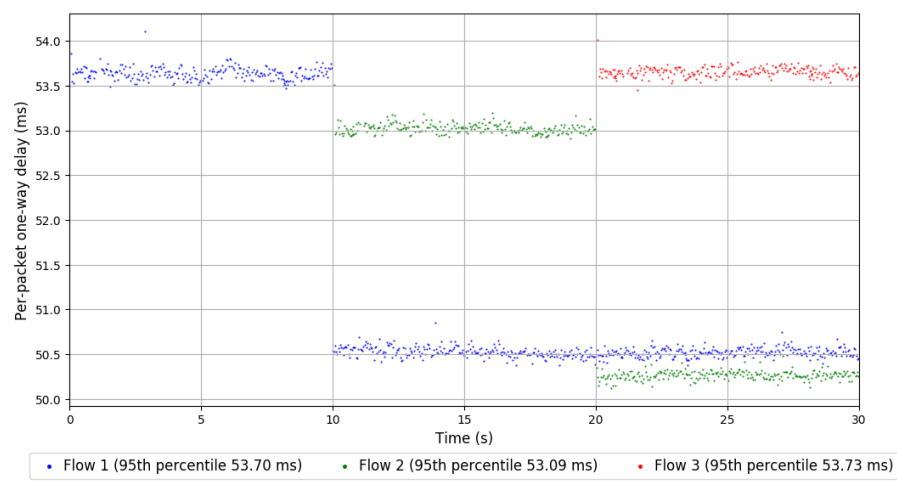
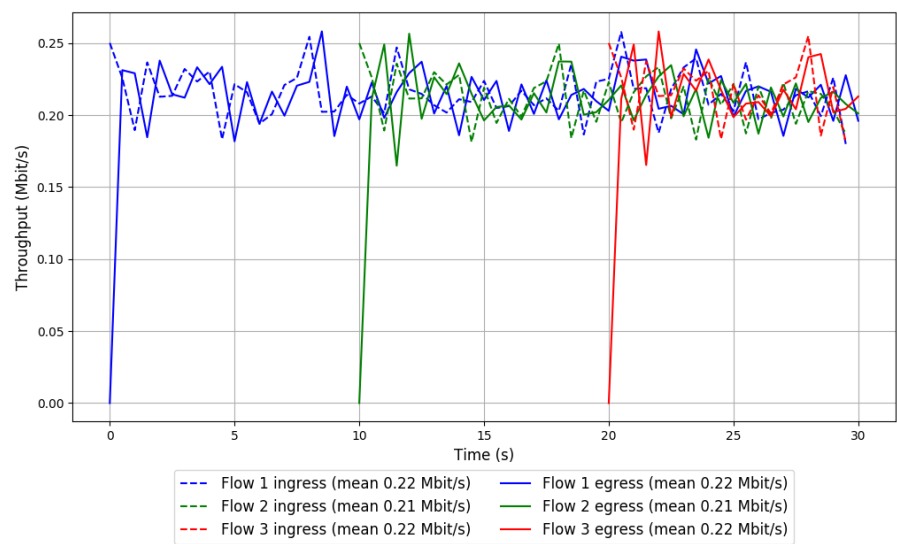


Run 2: Statistics of SCReAM

Start at: 2018-06-01 10:28:30  
End at: 2018-06-01 10:29:00  
Local clock offset: -0.161 ms  
Remote clock offset: -0.078 ms

# Below is generated by plot.py at 2018-06-01 15:48:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 53.704 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 53.702 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 53.090 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 53.735 ms  
Loss rate: 0.00%

Run 2: Report of SReAM — Data Link



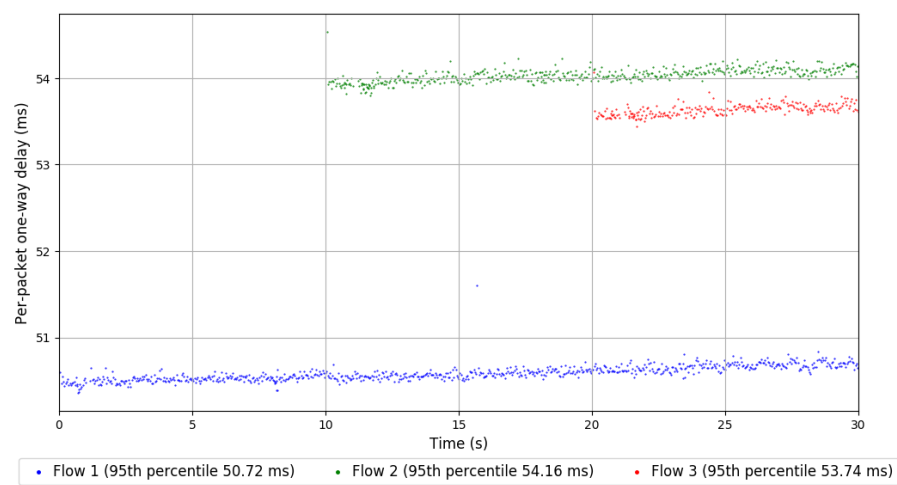
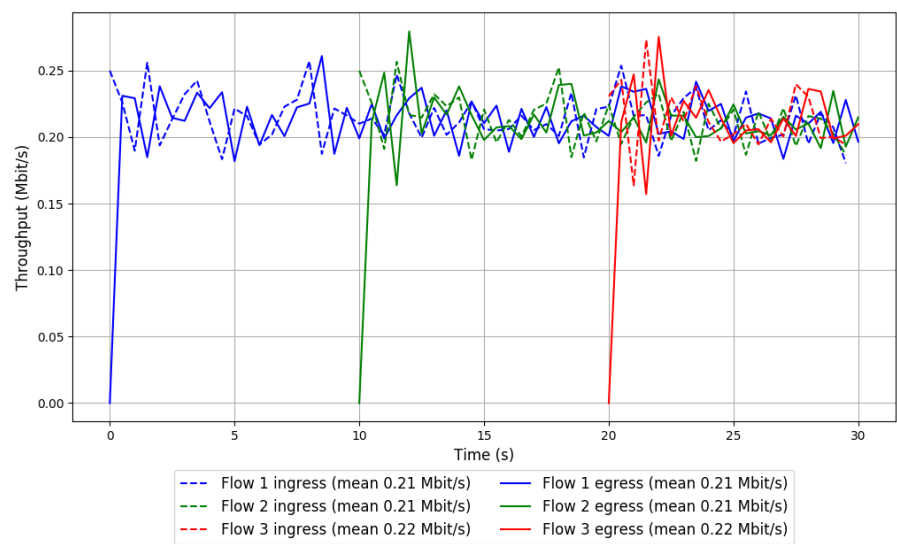
Run 3: Statistics of SReAM

Start at: 2018-06-01 10:50:52  
End at: 2018-06-01 10:51:22  
Local clock offset: -0.017 ms  
Remote clock offset: 15.055 ms

# Below is generated by plot.py at 2018-06-01 15:48:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 54.110 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 50.717 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 54.160 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 53.741 ms  
Loss rate: 0.00%



Run 3: Report of SReAM — Data Link

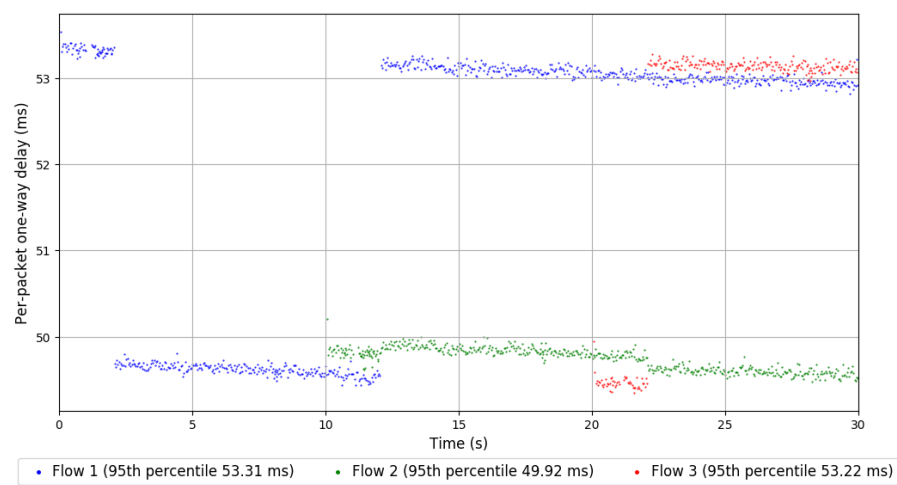
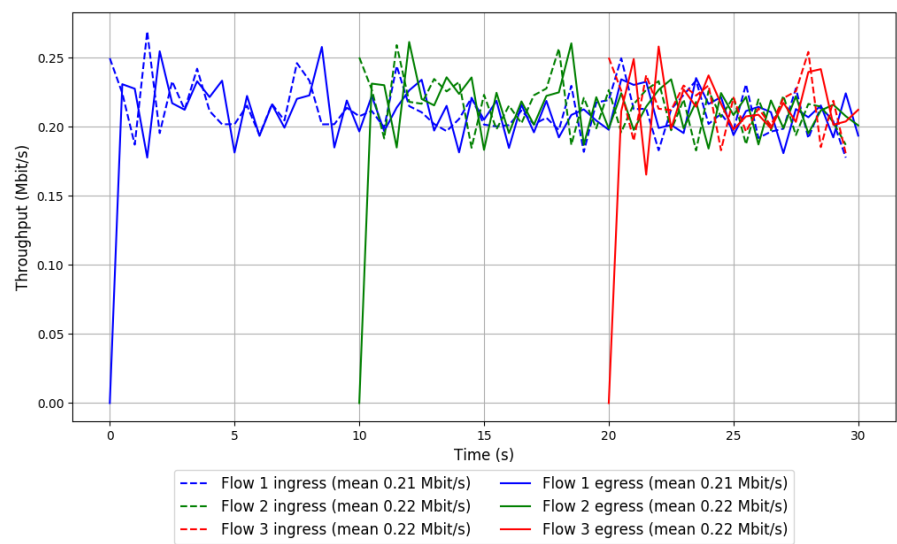


Run 4: Statistics of SReAM

Start at: 2018-06-01 11:13:48  
End at: 2018-06-01 11:14:18  
Local clock offset: 0.018 ms  
Remote clock offset: 23.082 ms

# Below is generated by plot.py at 2018-06-01 15:48:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 53.223 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 53.309 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 49.923 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 53.220 ms  
Loss rate: 0.00%

Run 4: Report of SReAM — Data Link

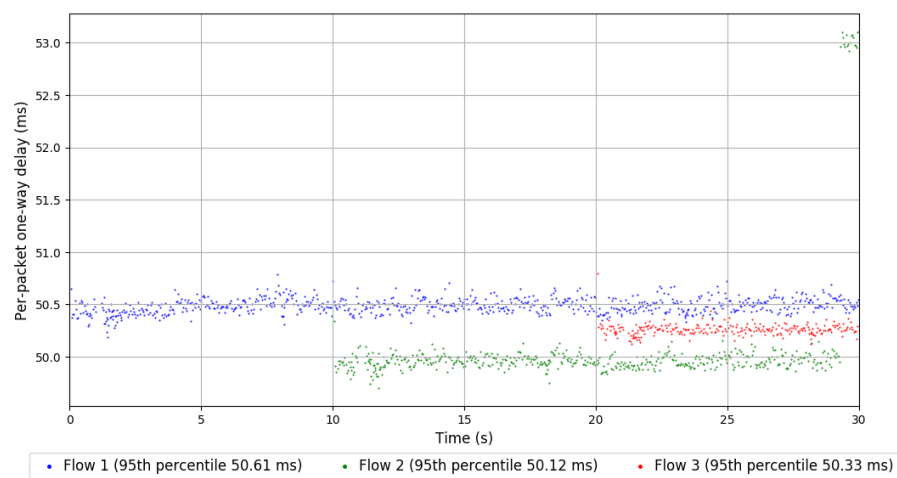
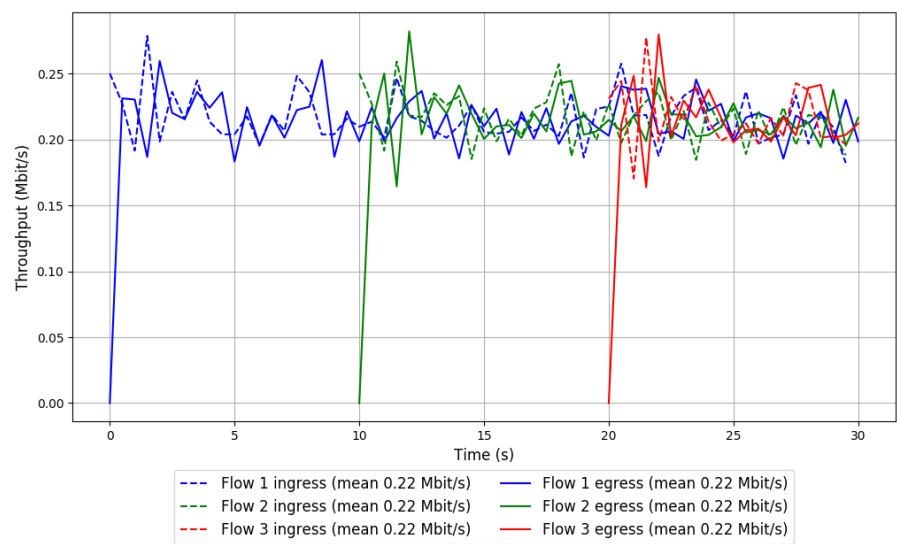


Run 5: Statistics of SReAM

Start at: 2018-06-01 11:36:30  
End at: 2018-06-01 11:37:00  
Local clock offset: -0.095 ms  
Remote clock offset: 11.562 ms

# Below is generated by plot.py at 2018-06-01 15:48:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 50.591 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 50.613 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 50.119 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 50.334 ms  
Loss rate: 0.00%

Run 5: Report of SCReAM — Data Link

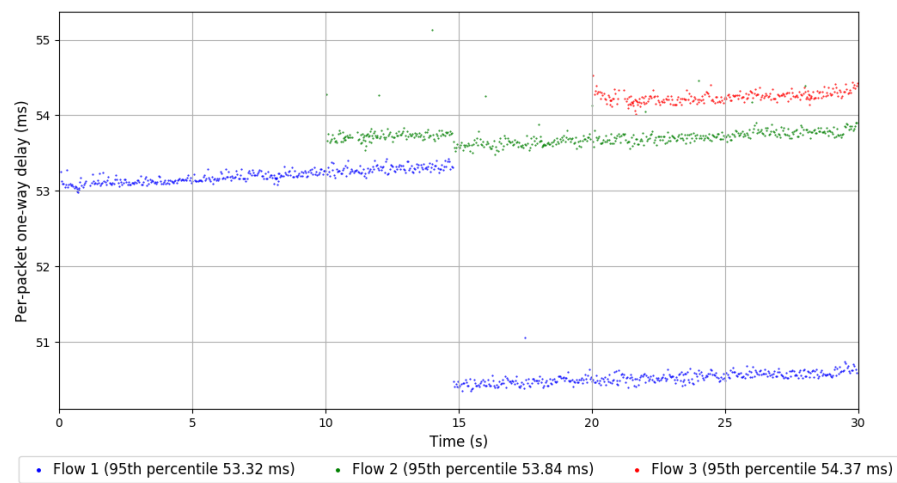
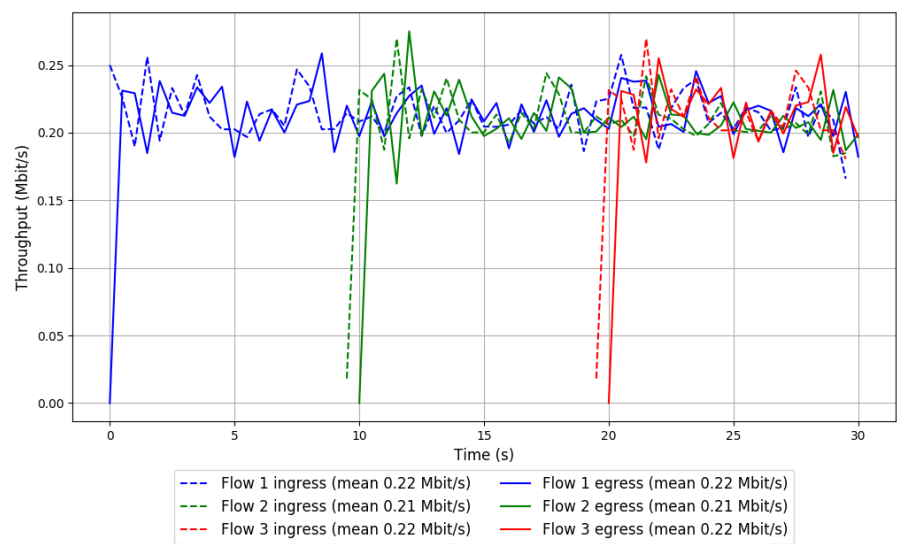


Run 6: Statistics of SCReAM

Start at: 2018-06-01 11:59:35  
End at: 2018-06-01 12:00:05  
Local clock offset: 0.187 ms  
Remote clock offset: 11.211 ms

# Below is generated by plot.py at 2018-06-01 15:48:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 54.281 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 53.320 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 53.838 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 54.365 ms  
Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



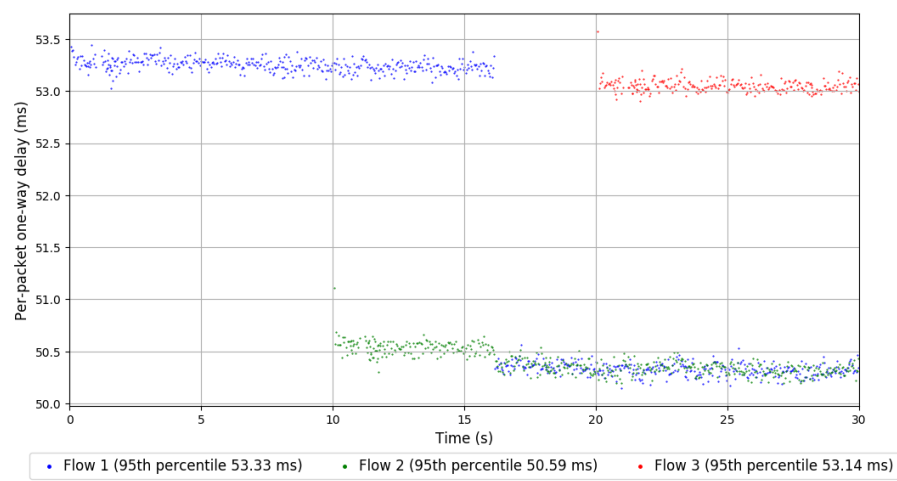
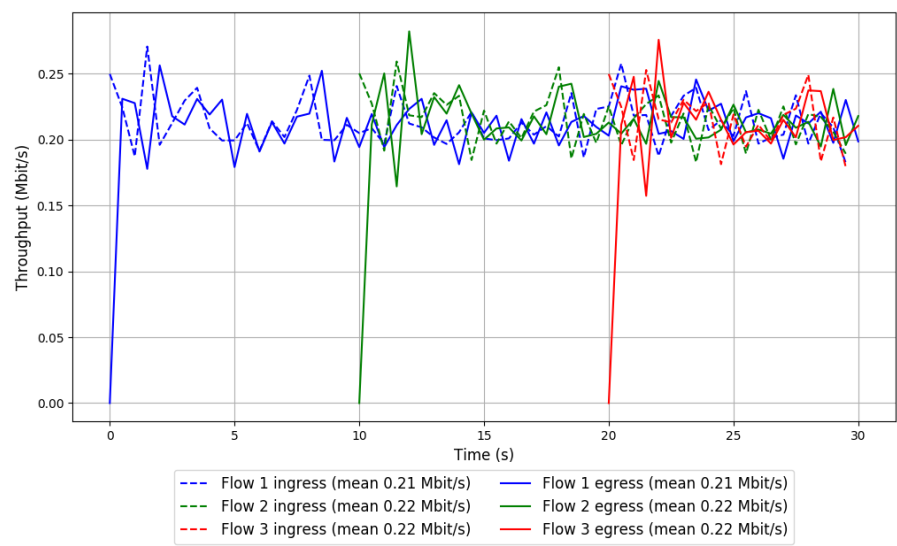
Run 7: Statistics of SReAM

Start at: 2018-06-01 12:22:54  
End at: 2018-06-01 12:23:24  
Local clock offset: -0.131 ms  
Remote clock offset: 6.046 ms

# Below is generated by plot.py at 2018-06-01 15:48:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 53.309 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 53.332 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 50.594 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 53.144 ms  
Loss rate: 0.00%



Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2018-06-01 12:45:42

End at: 2018-06-01 12:46:12

Local clock offset: -0.445 ms

Remote clock offset: 2.927 ms

# Below is generated by plot.py at 2018-06-01 15:48:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 53.851 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.865 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 51.043 ms

Loss rate: 0.00%

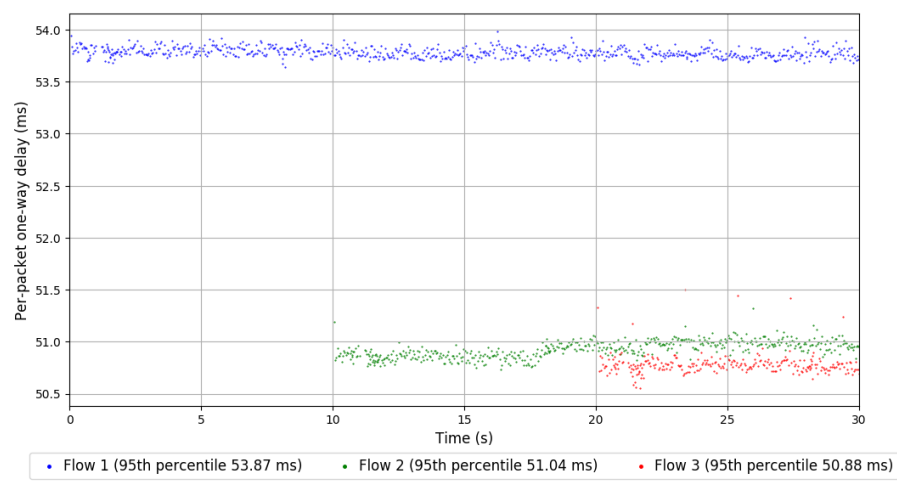
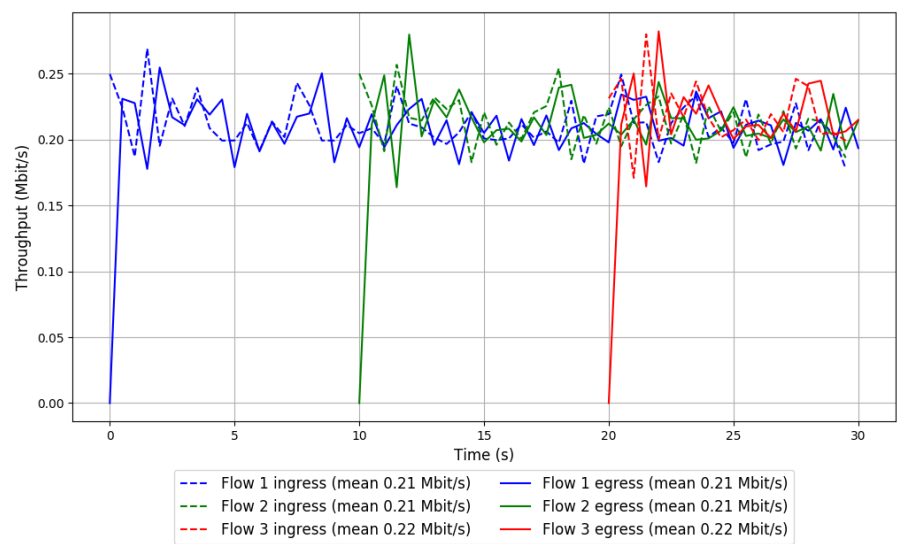
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.883 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-06-01 13:08:17

End at: 2018-06-01 13:08:47

Local clock offset: -0.201 ms

Remote clock offset: 2.318 ms

# Below is generated by plot.py at 2018-06-01 15:48:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 53.863 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.892 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.804 ms

Loss rate: 0.00%

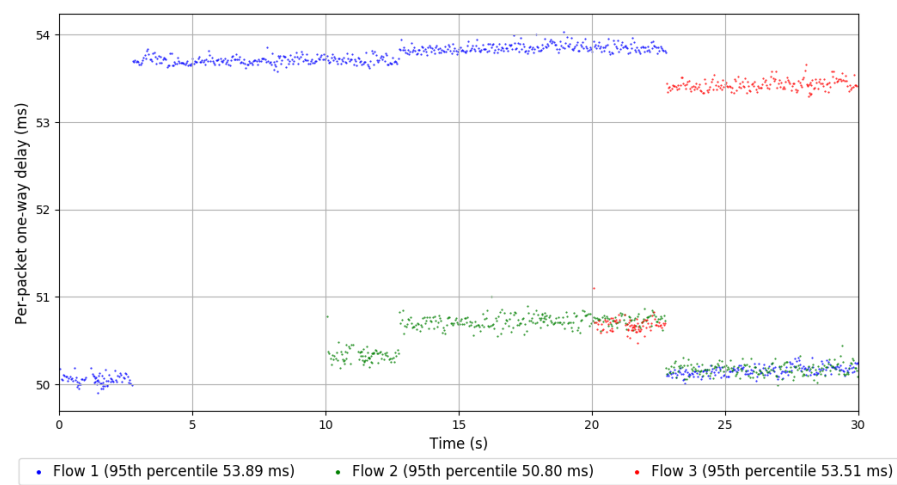
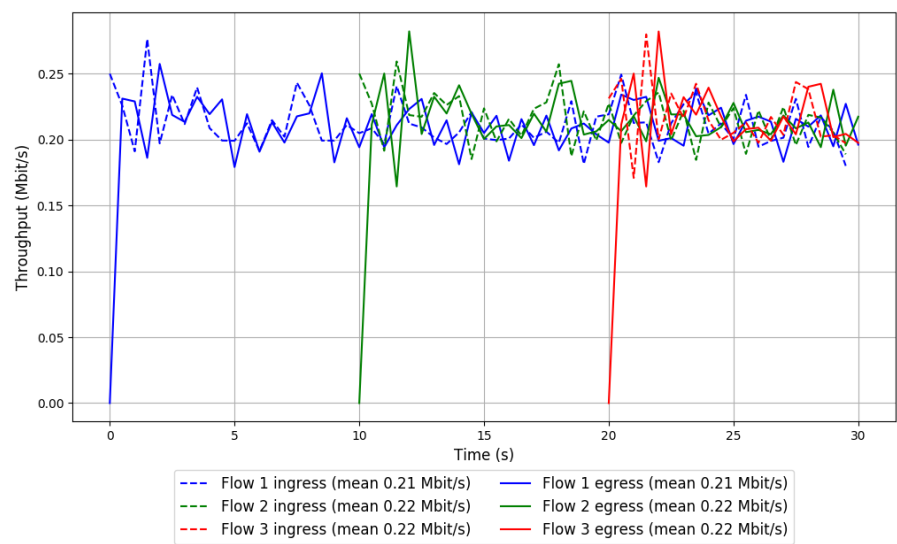
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.512 ms

Loss rate: 0.35%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-06-01 13:31:03

End at: 2018-06-01 13:31:33

Local clock offset: 0.253 ms

Remote clock offset: 0.557 ms

# Below is generated by plot.py at 2018-06-01 15:48:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 53.265 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.285 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.233 ms

Loss rate: 0.00%

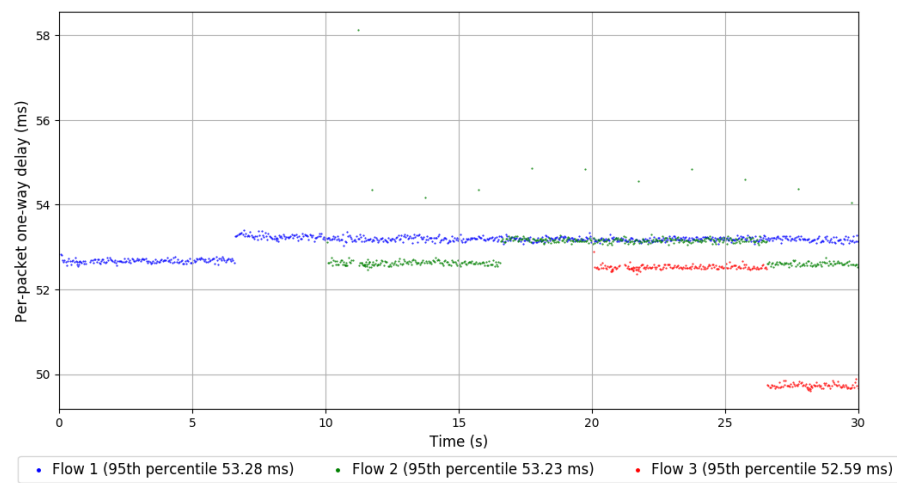
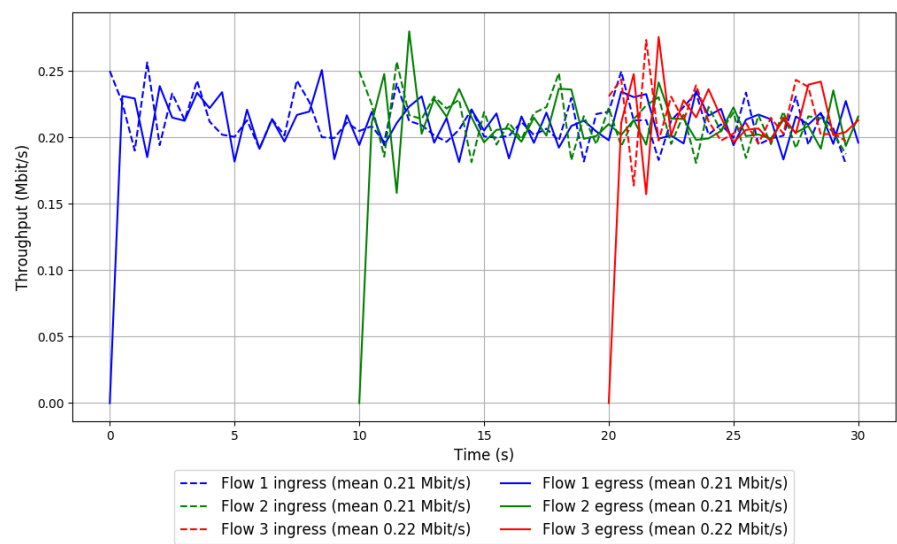
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 52.586 ms

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link



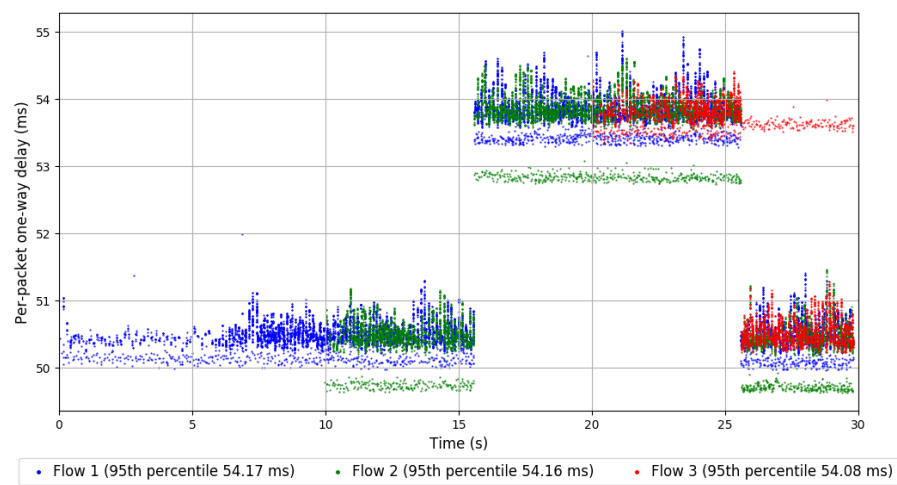
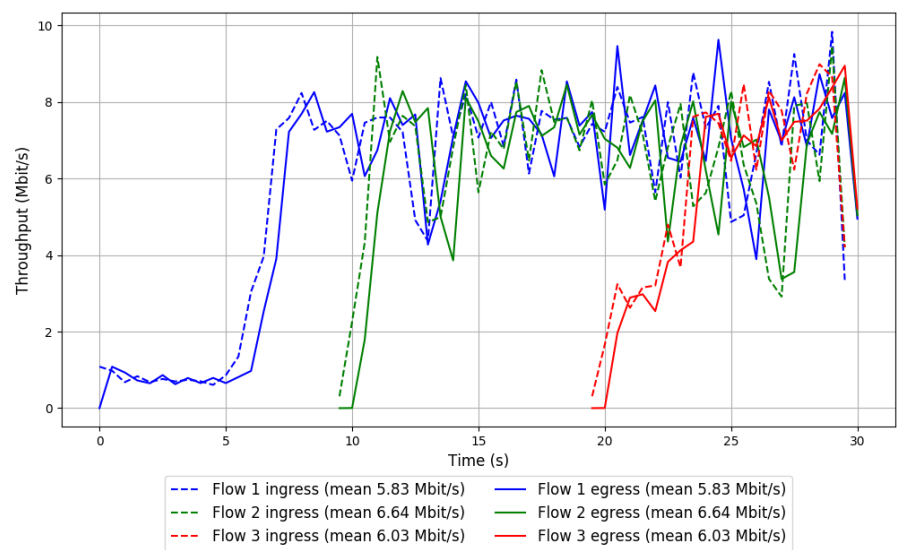
Run 1: Statistics of Sprout

Start at: 2018-06-01 10:08:34  
End at: 2018-06-01 10:09:04  
Local clock offset: -0.182 ms  
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2018-06-01 15:48:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.26 Mbit/s  
95th percentile per-packet one-way delay: 54.145 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 5.83 Mbit/s  
95th percentile per-packet one-way delay: 54.168 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 6.64 Mbit/s  
95th percentile per-packet one-way delay: 54.158 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 6.03 Mbit/s  
95th percentile per-packet one-way delay: 54.080 ms  
Loss rate: 0.00%



Run 1: Report of Sprout — Data Link

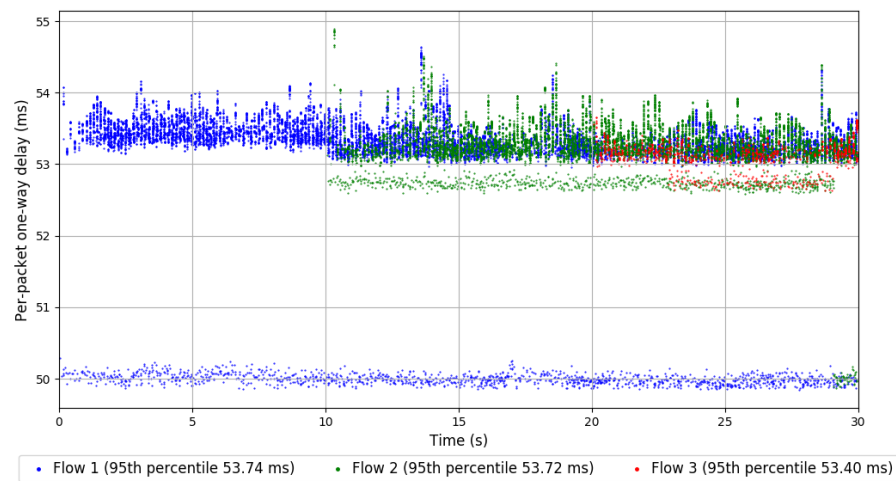
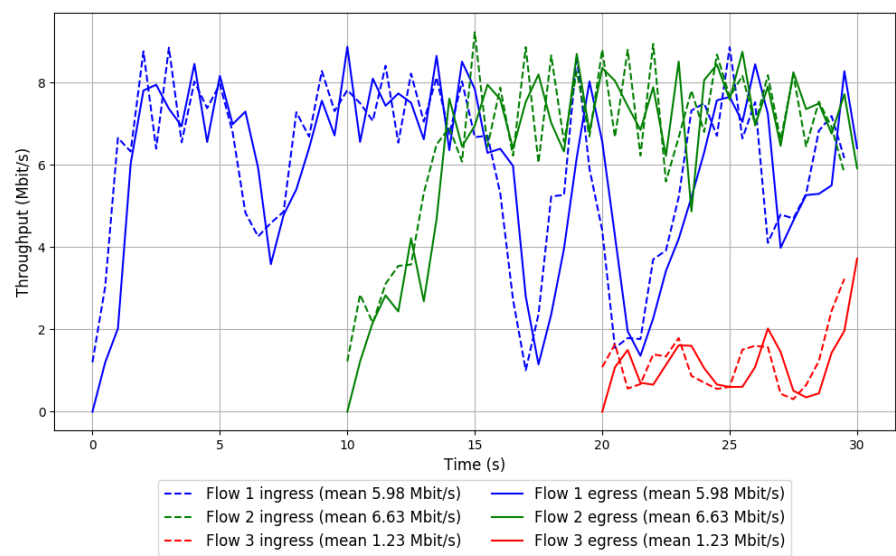


Run 2: Statistics of Sprout

Start at: 2018-06-01 10:31:01  
End at: 2018-06-01 10:31:31  
Local clock offset: 0.299 ms  
Remote clock offset: -0.015 ms

# Below is generated by plot.py at 2018-06-01 15:48:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 10.79 Mbit/s  
95th percentile per-packet one-way delay: 53.728 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 5.98 Mbit/s  
95th percentile per-packet one-way delay: 53.740 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 6.63 Mbit/s  
95th percentile per-packet one-way delay: 53.724 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 1.23 Mbit/s  
95th percentile per-packet one-way delay: 53.398 ms  
Loss rate: 0.00%

Run 2: Report of Sprout — Data Link

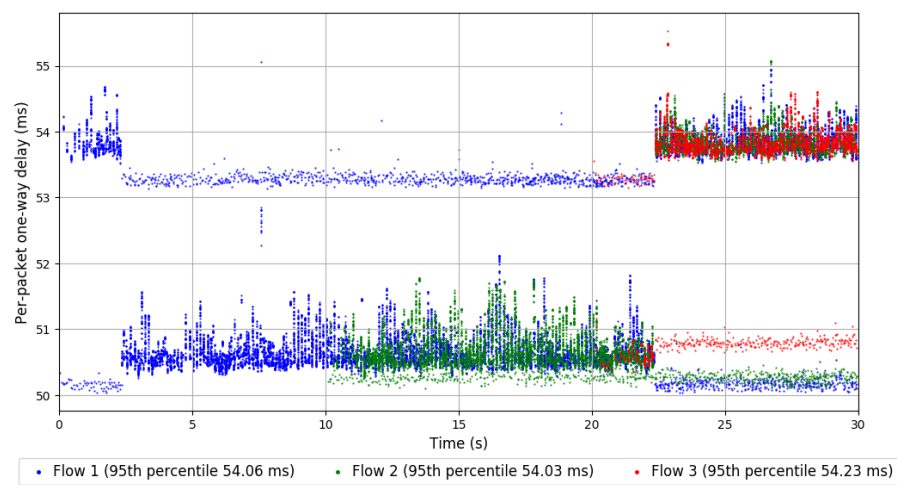
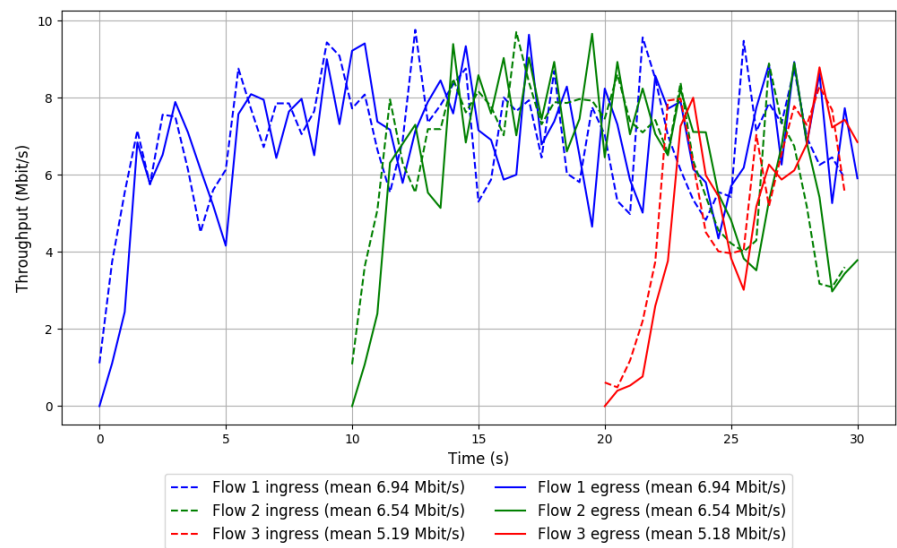


Run 3: Statistics of Sprout

Start at: 2018-06-01 10:53:37  
End at: 2018-06-01 10:54:07  
Local clock offset: -0.06 ms  
Remote clock offset: 13.802 ms

# Below is generated by plot.py at 2018-06-01 15:48:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 13.00 Mbit/s  
95th percentile per-packet one-way delay: 54.080 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 6.94 Mbit/s  
95th percentile per-packet one-way delay: 54.059 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 6.54 Mbit/s  
95th percentile per-packet one-way delay: 54.035 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 5.18 Mbit/s  
95th percentile per-packet one-way delay: 54.228 ms  
Loss rate: 0.16%

Run 3: Report of Sprout — Data Link

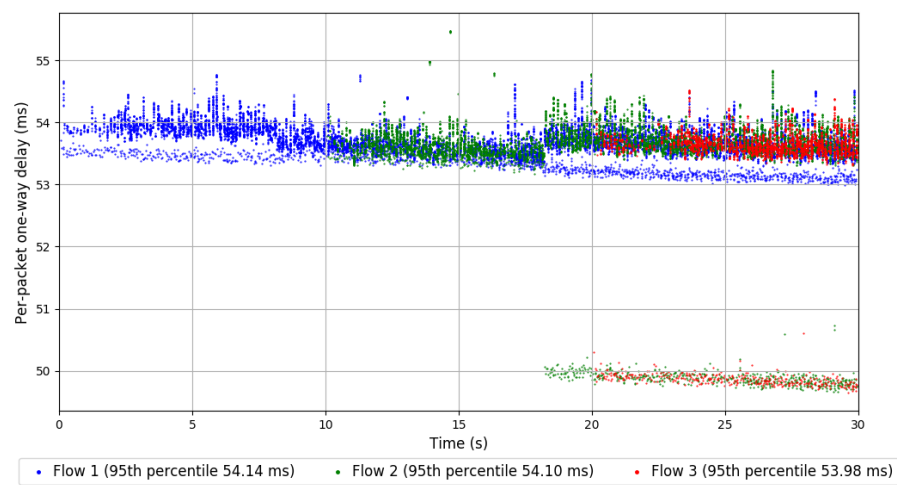
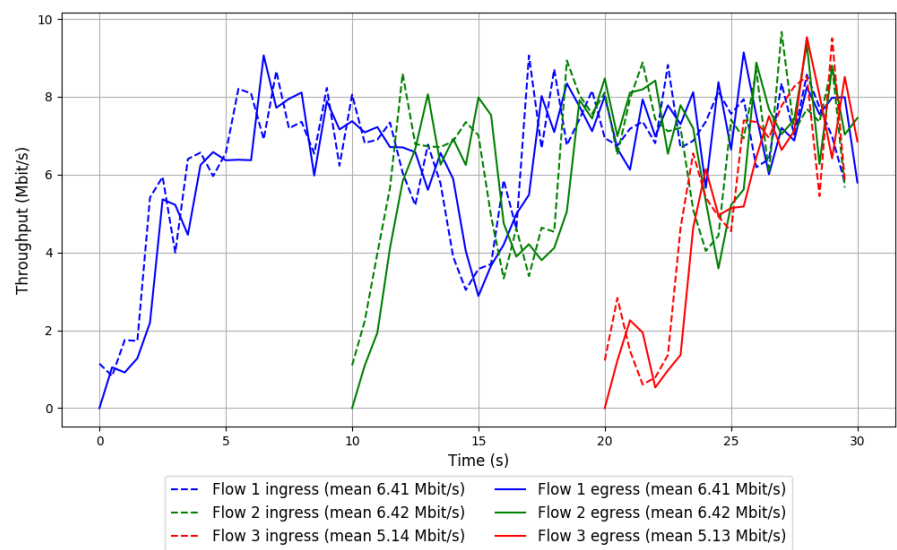


#### Run 4: Statistics of Sprout

Start at: 2018-06-01 11:16:21  
End at: 2018-06-01 11:16:52  
Local clock offset: -0.179 ms  
Remote clock offset: 25.303 ms

```
# Below is generated by plot.py at 2018-06-01 15:48:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.38 Mbit/s
95th percentile per-packet one-way delay: 54.108 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.41 Mbit/s
95th percentile per-packet one-way delay: 54.138 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.42 Mbit/s
95th percentile per-packet one-way delay: 54.098 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 5.13 Mbit/s
95th percentile per-packet one-way delay: 53.980 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link



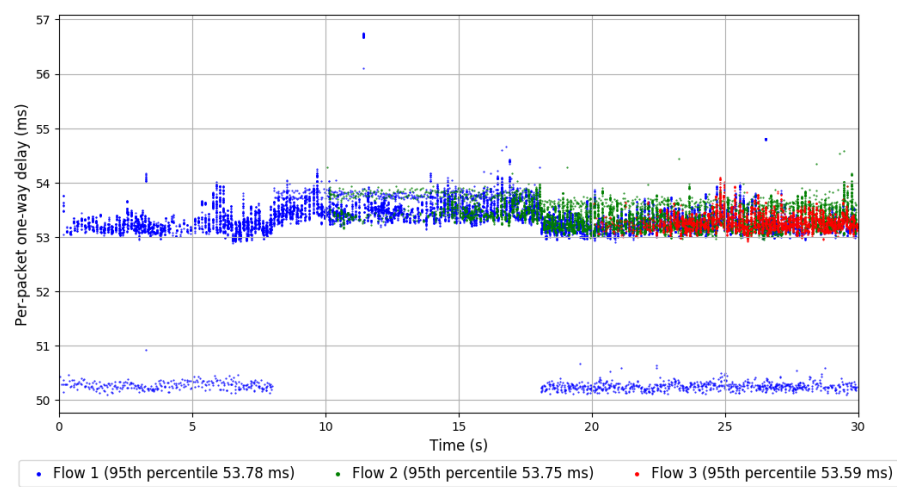
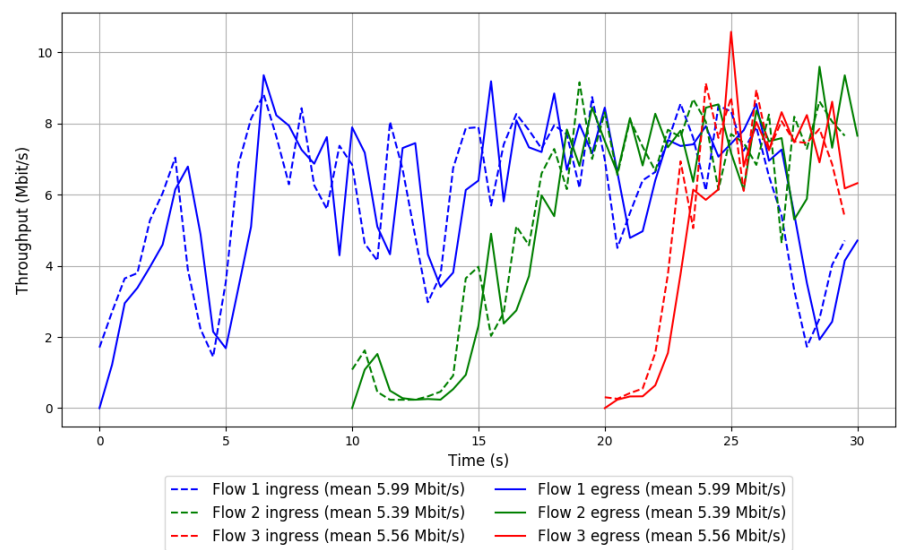
Run 5: Statistics of Sprout

Start at: 2018-06-01 11:39:12  
End at: 2018-06-01 11:39:42  
Local clock offset: -0.067 ms  
Remote clock offset: 11.392 ms

# Below is generated by plot.py at 2018-06-01 15:48:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 11.40 Mbit/s  
95th percentile per-packet one-way delay: 53.750 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 5.99 Mbit/s  
95th percentile per-packet one-way delay: 53.779 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 5.39 Mbit/s  
95th percentile per-packet one-way delay: 53.751 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 5.56 Mbit/s  
95th percentile per-packet one-way delay: 53.587 ms  
Loss rate: 0.00%



Run 5: Report of Sprout — Data Link

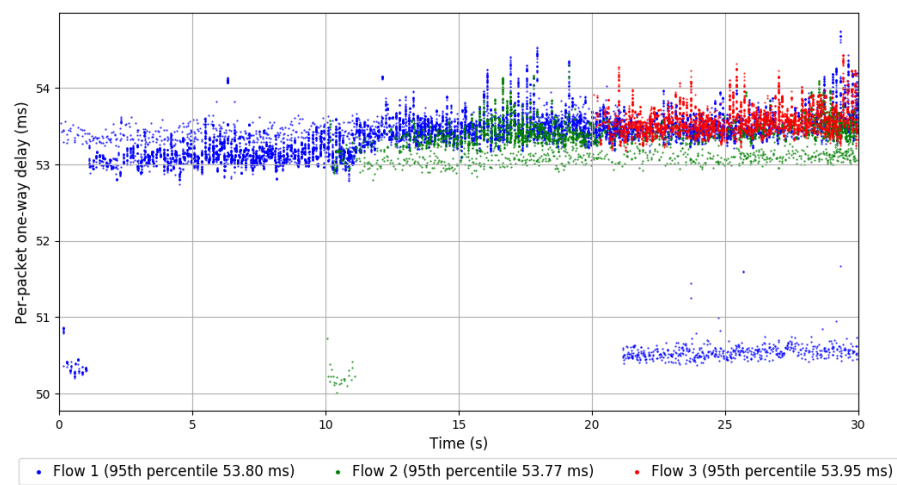
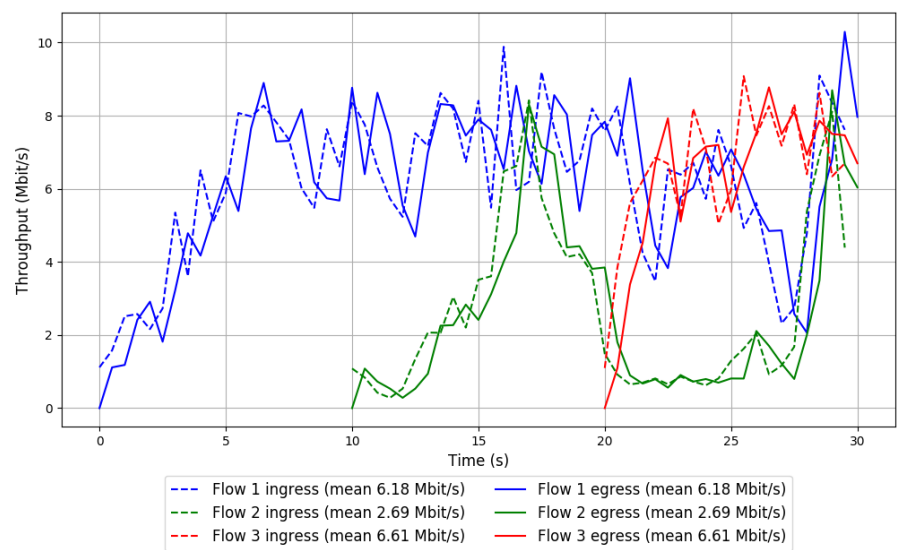


Run 6: Statistics of Sprout

Start at: 2018-06-01 12:02:19  
End at: 2018-06-01 12:02:49  
Local clock offset: 0.283 ms  
Remote clock offset: 8.798 ms

```
# Below is generated by plot.py at 2018-06-01 15:48:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.14 Mbit/s
95th percentile per-packet one-way delay: 53.844 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.18 Mbit/s
95th percentile per-packet one-way delay: 53.797 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.69 Mbit/s
95th percentile per-packet one-way delay: 53.765 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.61 Mbit/s
95th percentile per-packet one-way delay: 53.948 ms
Loss rate: 0.00%
```

Run 6: Report of Sprout — Data Link

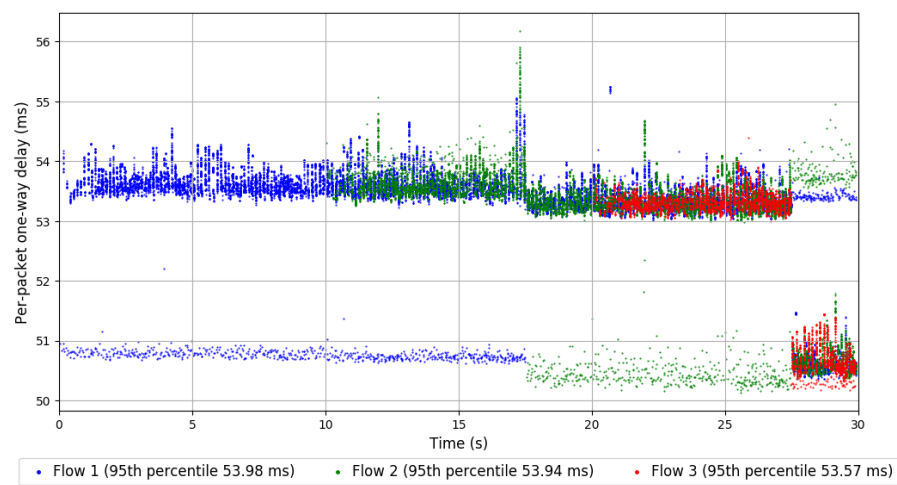
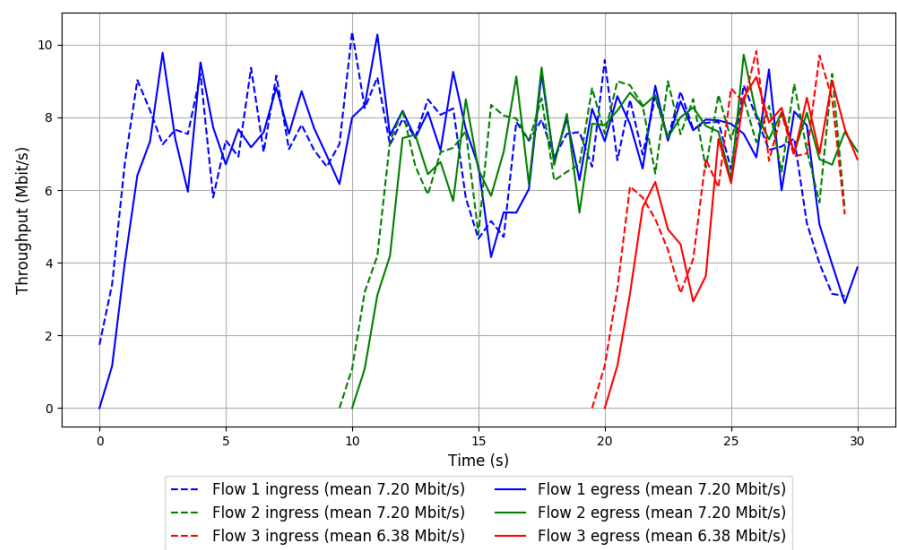


Run 7: Statistics of Sprout

Start at: 2018-06-01 12:25:42  
End at: 2018-06-01 12:26:12  
Local clock offset: 0.081 ms  
Remote clock offset: 6.71 ms

# Below is generated by plot.py at 2018-06-01 15:48:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 14.09 Mbit/s  
95th percentile per-packet one-way delay: 53.935 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 7.20 Mbit/s  
95th percentile per-packet one-way delay: 53.980 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 7.20 Mbit/s  
95th percentile per-packet one-way delay: 53.940 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 6.38 Mbit/s  
95th percentile per-packet one-way delay: 53.570 ms  
Loss rate: 0.00%

Run 7: Report of Sprout — Data Link

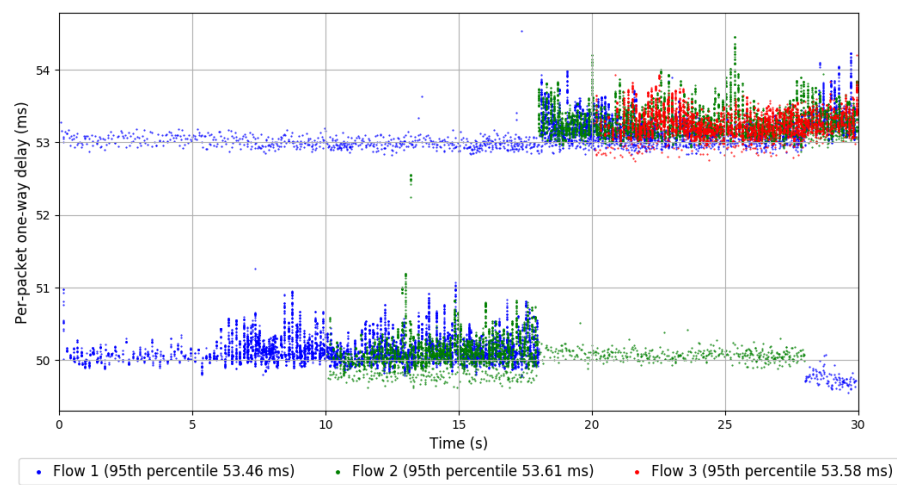
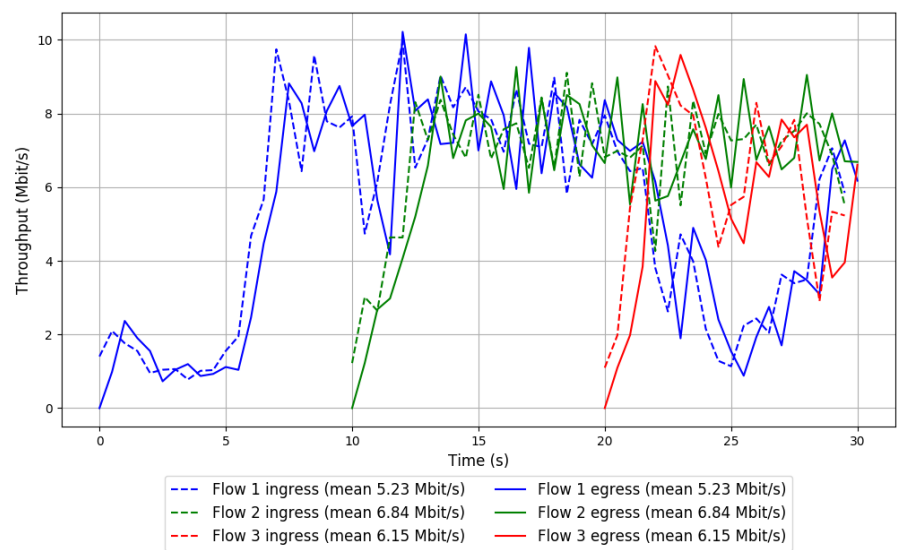


Run 8: Statistics of Sprout

Start at: 2018-06-01 12:48:22  
End at: 2018-06-01 12:48:52  
Local clock offset: -0.131 ms  
Remote clock offset: 2.556 ms

# Below is generated by plot.py at 2018-06-01 15:48:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 11.80 Mbit/s  
95th percentile per-packet one-way delay: 53.561 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 5.23 Mbit/s  
95th percentile per-packet one-way delay: 53.457 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 6.84 Mbit/s  
95th percentile per-packet one-way delay: 53.614 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 6.15 Mbit/s  
95th percentile per-packet one-way delay: 53.582 ms  
Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



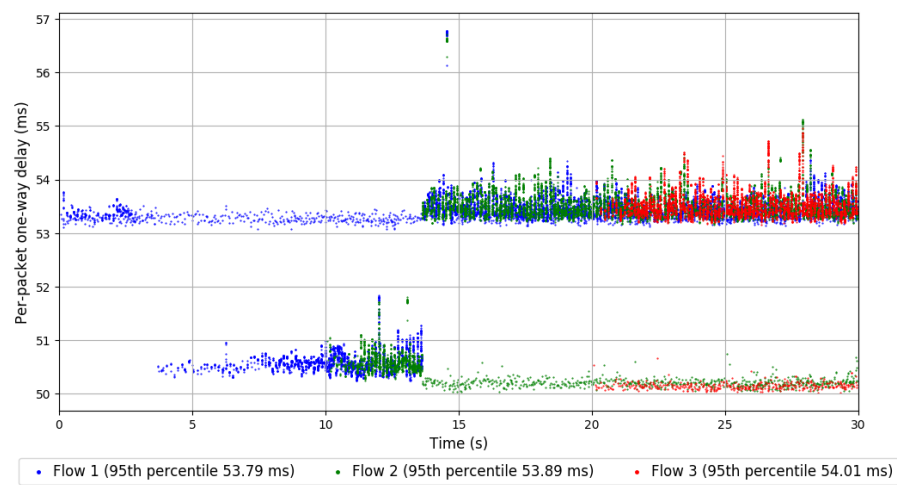
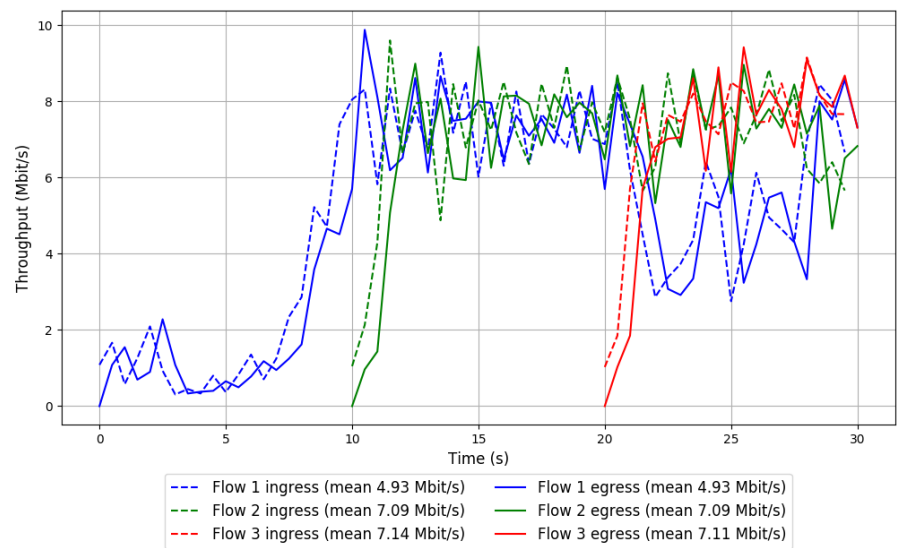
Run 9: Statistics of Sprout

Start at: 2018-06-01 13:10:56  
End at: 2018-06-01 13:11:26  
Local clock offset: -0.216 ms  
Remote clock offset: 1.657 ms

# Below is generated by plot.py at 2018-06-01 15:48:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 11.99 Mbit/s  
95th percentile per-packet one-way delay: 53.878 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 4.93 Mbit/s  
95th percentile per-packet one-way delay: 53.789 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 7.09 Mbit/s  
95th percentile per-packet one-way delay: 53.893 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 7.11 Mbit/s  
95th percentile per-packet one-way delay: 54.005 ms  
Loss rate: 0.47%



Run 9: Report of Sprout — Data Link

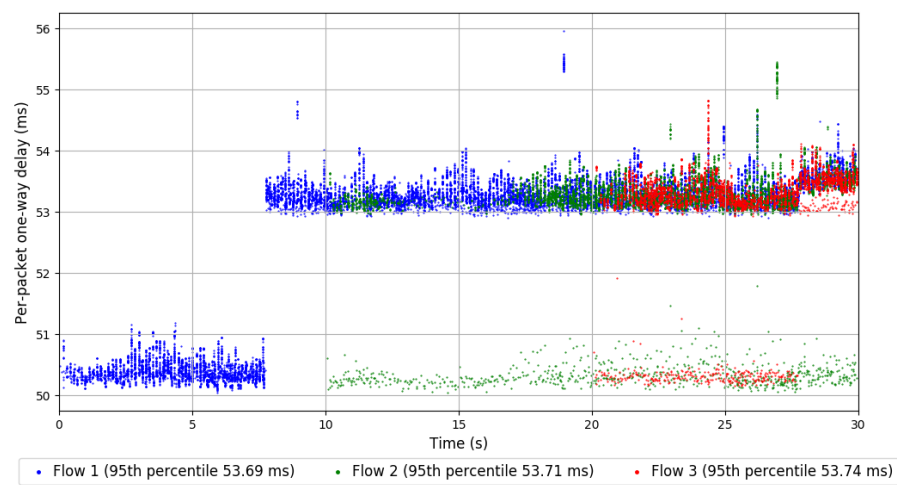
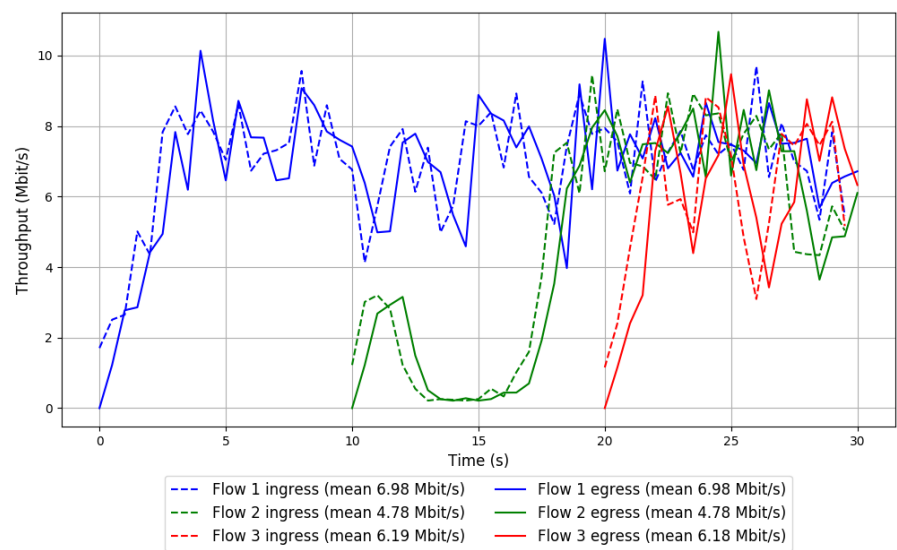


Run 10: Statistics of Sprout

Start at: 2018-06-01 13:33:42  
End at: 2018-06-01 13:34:12  
Local clock offset: -0.196 ms  
Remote clock offset: 0.374 ms

# Below is generated by plot.py at 2018-06-01 15:48:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.20 Mbit/s  
95th percentile per-packet one-way delay: 53.704 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 6.98 Mbit/s  
95th percentile per-packet one-way delay: 53.687 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 4.78 Mbit/s  
95th percentile per-packet one-way delay: 53.714 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 6.18 Mbit/s  
95th percentile per-packet one-way delay: 53.742 ms  
Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

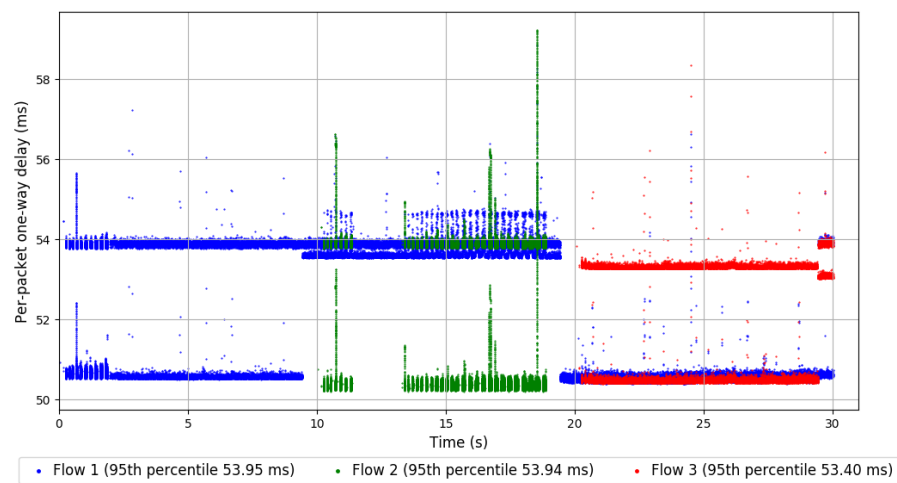
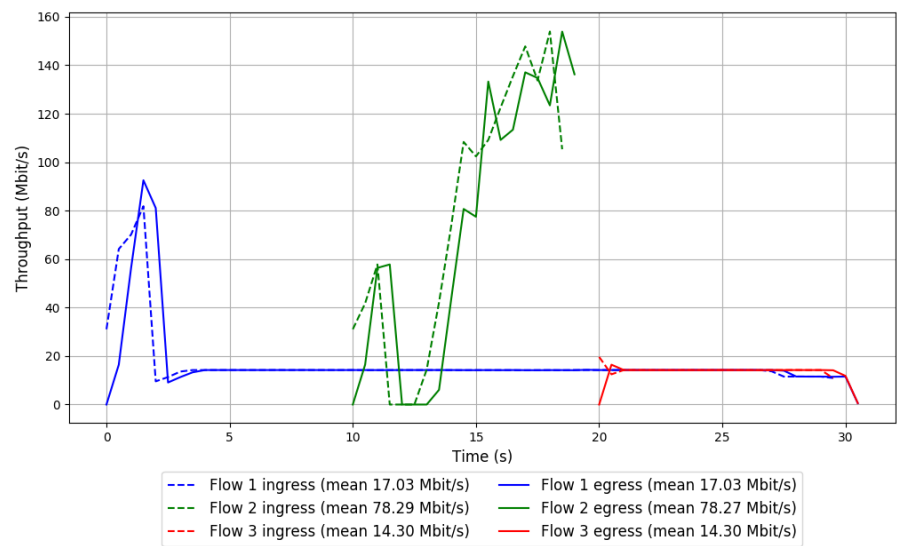


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-06-01 10:16:50
End at: 2018-06-01 10:17:20
Local clock offset: -0.152 ms
Remote clock offset: 0.239 ms

# Below is generated by plot.py at 2018-06-01 15:48:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 44.80 Mbit/s
95th percentile per-packet one-way delay: 53.937 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 17.03 Mbit/s
95th percentile per-packet one-way delay: 53.952 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 78.27 Mbit/s
95th percentile per-packet one-way delay: 53.935 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 14.30 Mbit/s
95th percentile per-packet one-way delay: 53.395 ms
Loss rate: 0.02%
```

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-06-01 10:39:16

End at: 2018-06-01 10:39:46

Local clock offset: -0.046 ms

Remote clock offset: 6.605 ms

# Below is generated by plot.py at 2018-06-01 15:48:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 93.62 Mbit/s

95th percentile per-packet one-way delay: 53.161 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 17.66 Mbit/s

95th percentile per-packet one-way delay: 53.271 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 74.69 Mbit/s

95th percentile per-packet one-way delay: 53.187 ms

Loss rate: 0.00%

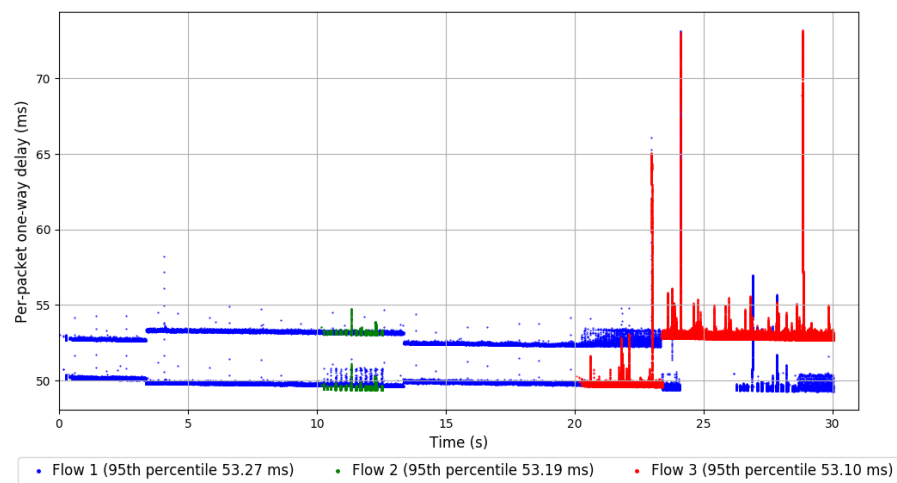
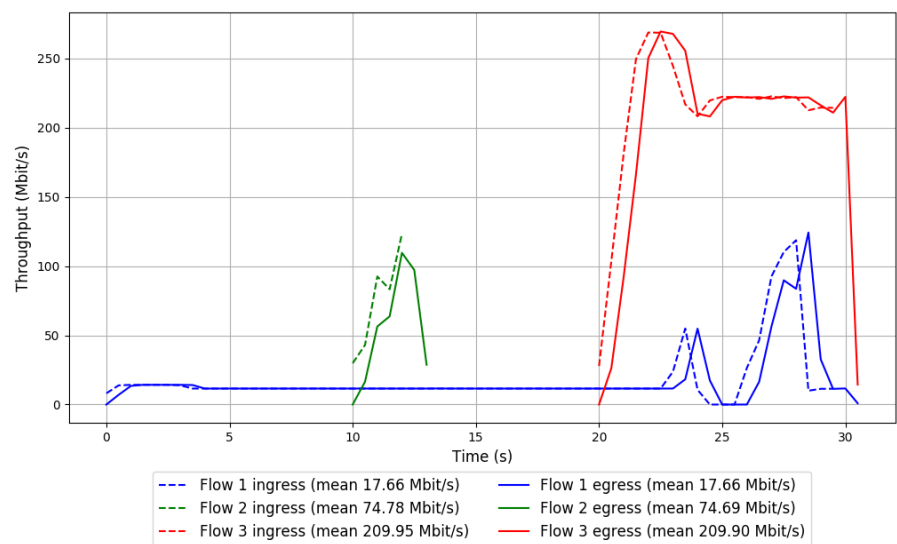
-- Flow 3:

Average throughput: 209.90 Mbit/s

95th percentile per-packet one-way delay: 53.101 ms

Loss rate: 0.03%

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



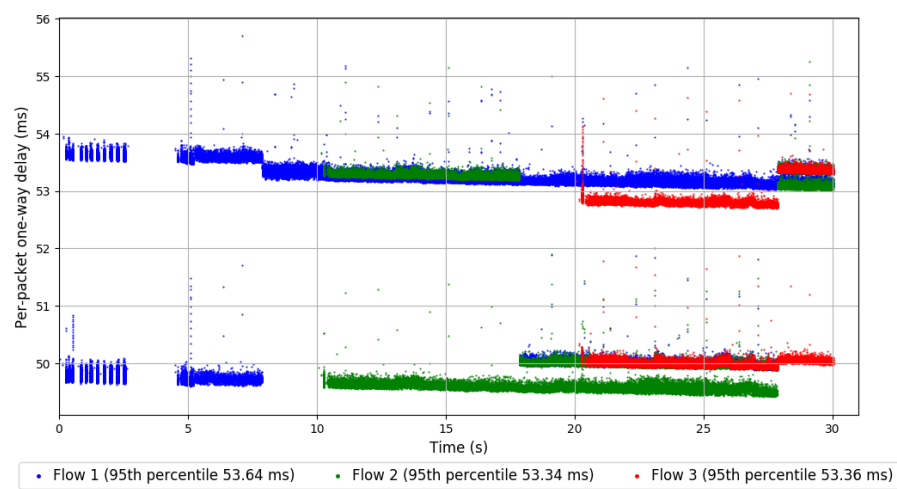
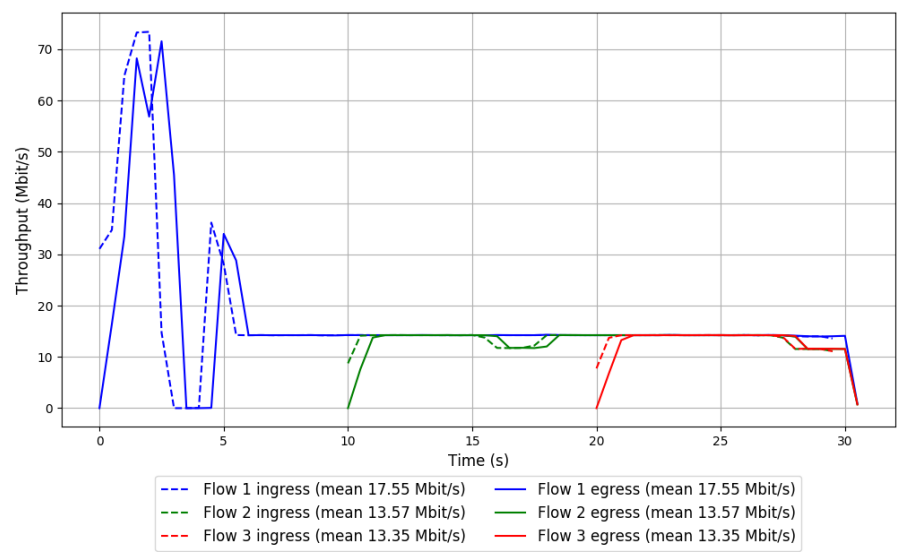
Run 3: Statistics of TaoVA-100x

Start at: 2018-06-01 11:02:02  
End at: 2018-06-01 11:02:32  
Local clock offset: -0.188 ms  
Remote clock offset: 15.333 ms

# Below is generated by plot.py at 2018-06-01 15:48:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 31.02 Mbit/s  
95th percentile per-packet one-way delay: 53.619 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 17.55 Mbit/s  
95th percentile per-packet one-way delay: 53.643 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 13.57 Mbit/s  
95th percentile per-packet one-way delay: 53.345 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 13.35 Mbit/s  
95th percentile per-packet one-way delay: 53.360 ms  
Loss rate: 0.02%



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

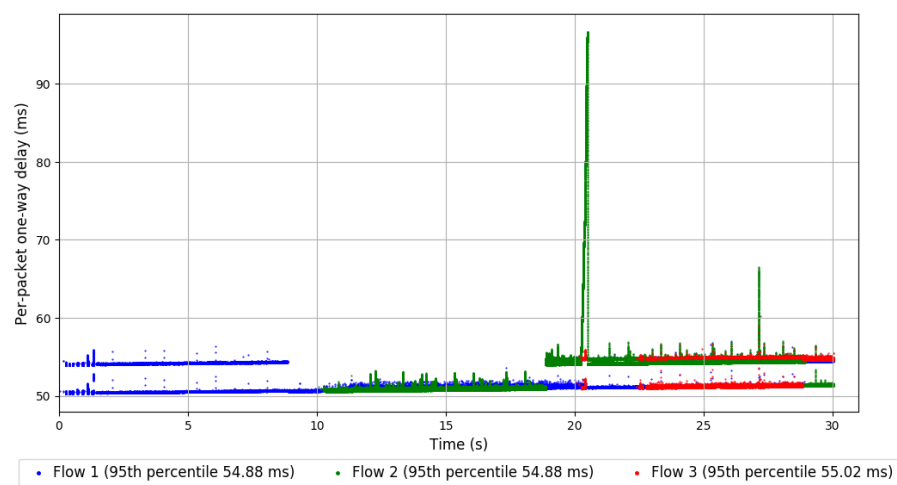
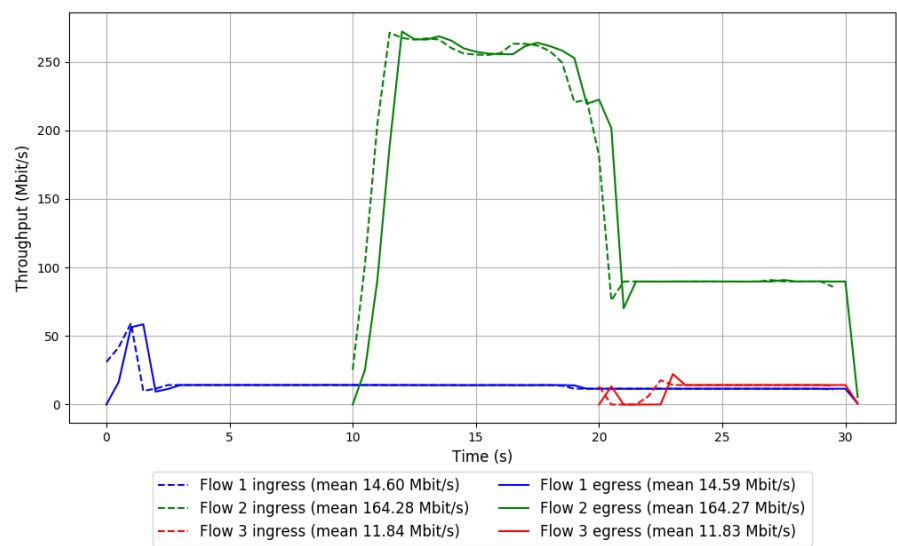


Run 4: Statistics of TaoVA-100x

Start at: 2018-06-01 11:24:41  
End at: 2018-06-01 11:25:11  
Local clock offset: 0.14 ms  
Remote clock offset: 23.973 ms

# Below is generated by plot.py at 2018-06-01 15:49:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 127.95 Mbit/s  
95th percentile per-packet one-way delay: 54.898 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 14.59 Mbit/s  
95th percentile per-packet one-way delay: 54.881 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 164.27 Mbit/s  
95th percentile per-packet one-way delay: 54.884 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 11.83 Mbit/s  
95th percentile per-packet one-way delay: 55.016 ms  
Loss rate: 0.02%

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

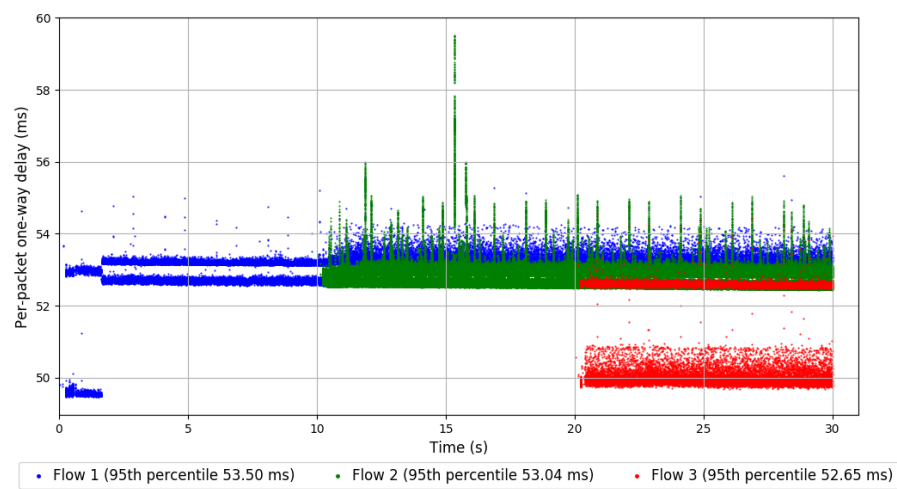
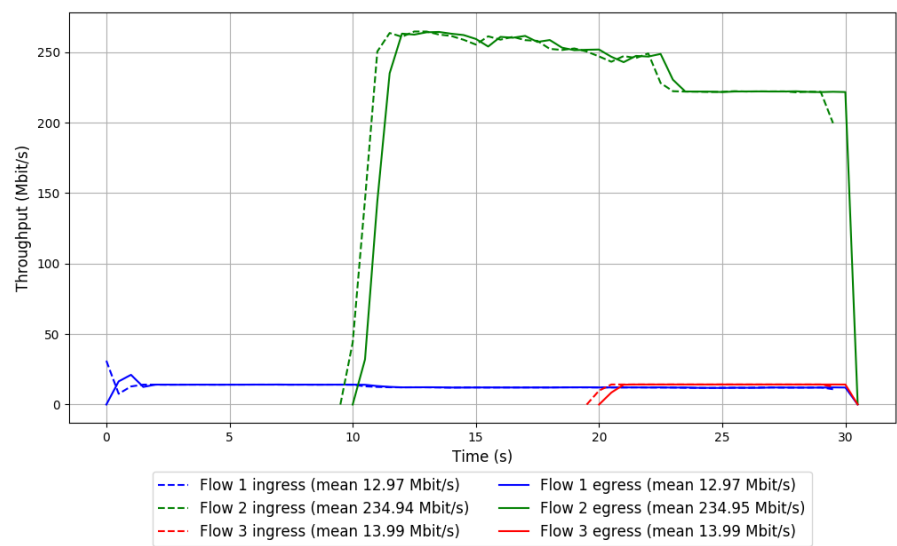


Run 5: Statistics of TaoVA-100x

Start at: 2018-06-01 11:47:28  
End at: 2018-06-01 11:47:58  
Local clock offset: -0.028 ms  
Remote clock offset: 12.182 ms

# Below is generated by plot.py at 2018-06-01 15:51:32  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 174.26 Mbit/s  
95th percentile per-packet one-way delay: 53.110 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 12.97 Mbit/s  
95th percentile per-packet one-way delay: 53.496 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 234.95 Mbit/s  
95th percentile per-packet one-way delay: 53.040 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 13.99 Mbit/s  
95th percentile per-packet one-way delay: 52.647 ms  
Loss rate: 0.01%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-06-01 12:10:38

End at: 2018-06-01 12:11:08

Local clock offset: -0.089 ms

Remote clock offset: 5.752 ms

# Below is generated by plot.py at 2018-06-01 15:59:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 412.63 Mbit/s

95th percentile per-packet one-way delay: 54.160 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 180.82 Mbit/s

95th percentile per-packet one-way delay: 53.945 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 240.98 Mbit/s

95th percentile per-packet one-way delay: 53.757 ms

Loss rate: 0.00%

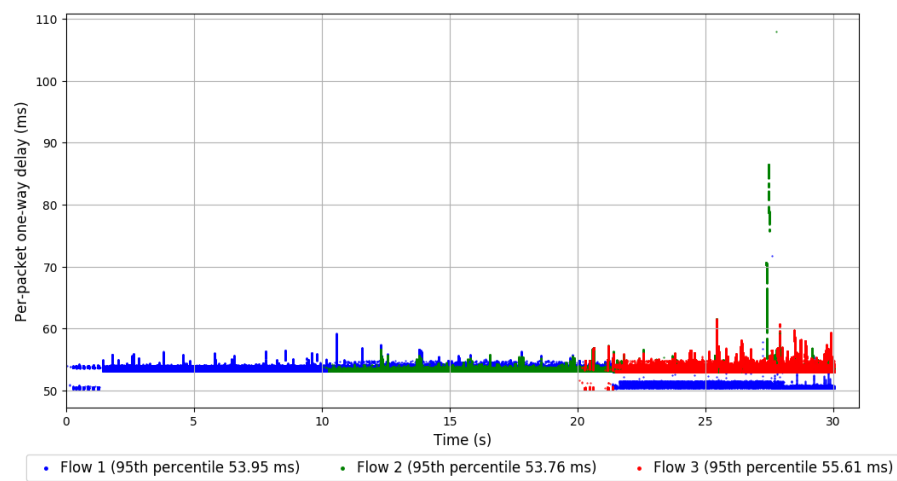
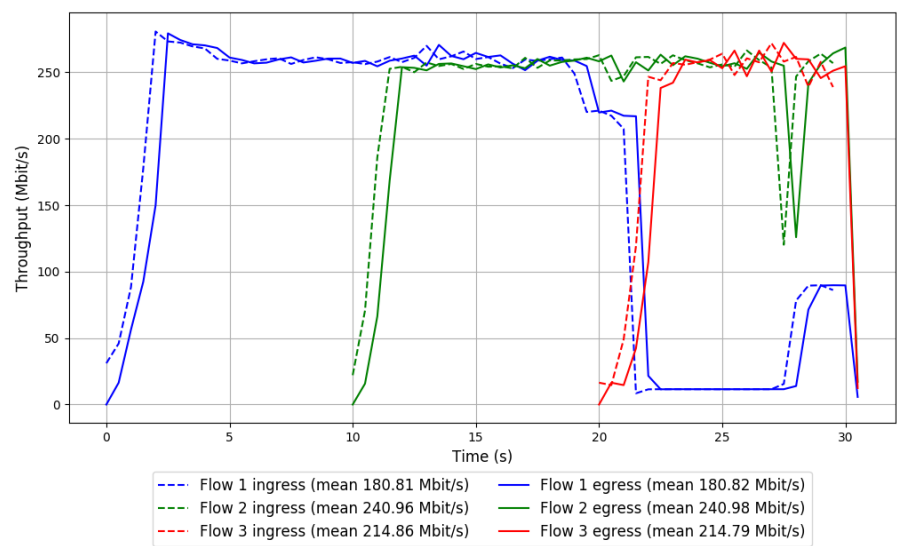
-- Flow 3:

Average throughput: 214.79 Mbit/s

95th percentile per-packet one-way delay: 55.607 ms

Loss rate: 0.03%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-06-01 12:33:58

End at: 2018-06-01 12:34:28

Local clock offset: -0.245 ms

Remote clock offset: 5.15 ms

# Below is generated by plot.py at 2018-06-01 15:59:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 46.44 Mbit/s

95th percentile per-packet one-way delay: 53.681 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 15.28 Mbit/s

95th percentile per-packet one-way delay: 53.562 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 27.14 Mbit/s

95th percentile per-packet one-way delay: 53.590 ms

Loss rate: 0.01%

-- Flow 3:

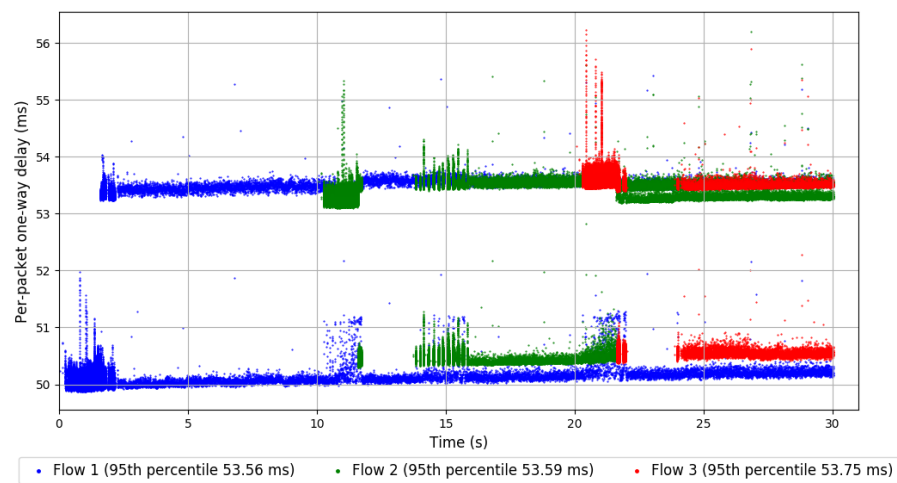
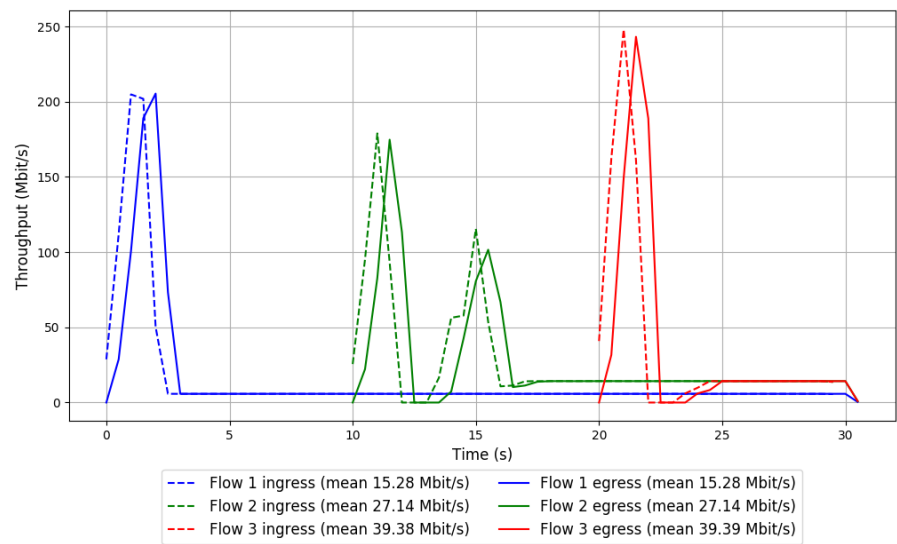
Average throughput: 39.39 Mbit/s

95th percentile per-packet one-way delay: 53.754 ms

Loss rate: 0.01%



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



Run 8: Statistics of TaoVA-100x

Start at: 2018-06-01 12:56:40

End at: 2018-06-01 12:57:10

Local clock offset: -0.417 ms

Remote clock offset: 2.927 ms

# Below is generated by plot.py at 2018-06-01 15:59:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 26.99 Mbit/s

95th percentile per-packet one-way delay: 53.358 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 12.56 Mbit/s

95th percentile per-packet one-way delay: 53.378 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 14.40 Mbit/s

95th percentile per-packet one-way delay: 53.336 ms

Loss rate: 0.01%

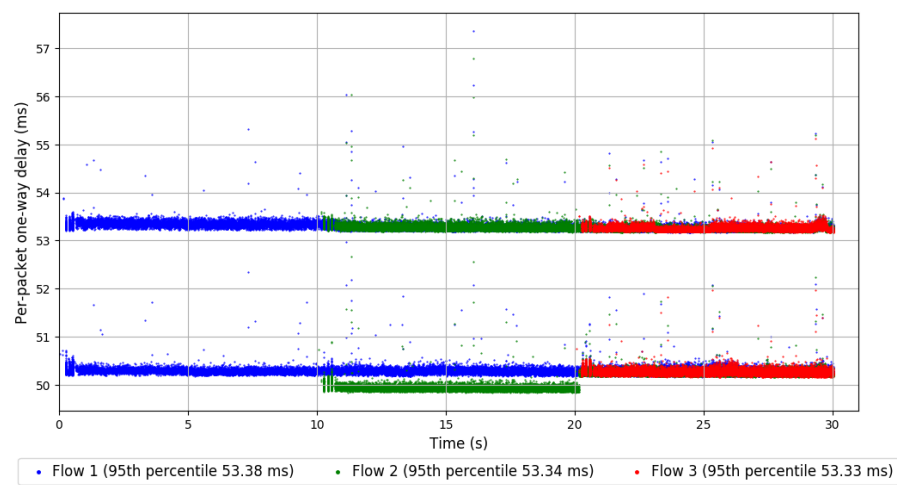
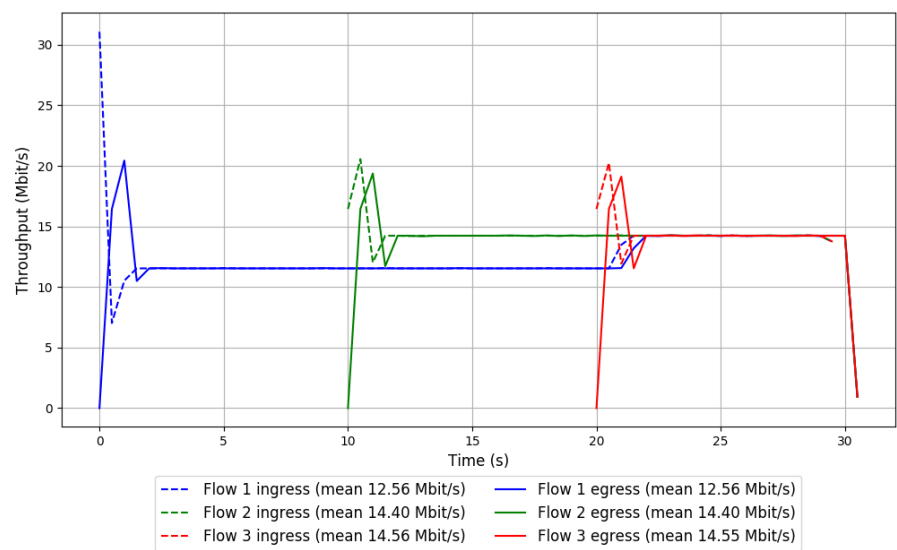
-- Flow 3:

Average throughput: 14.55 Mbit/s

95th percentile per-packet one-way delay: 53.328 ms

Loss rate: 0.02%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-06-01 13:19:15

End at: 2018-06-01 13:19:45

Local clock offset: -0.133 ms

Remote clock offset: 0.795 ms

# Below is generated by plot.py at 2018-06-01 15:59:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 114.07 Mbit/s

95th percentile per-packet one-way delay: 53.507 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 62.50 Mbit/s

95th percentile per-packet one-way delay: 53.521 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 63.53 Mbit/s

95th percentile per-packet one-way delay: 53.466 ms

Loss rate: 0.00%

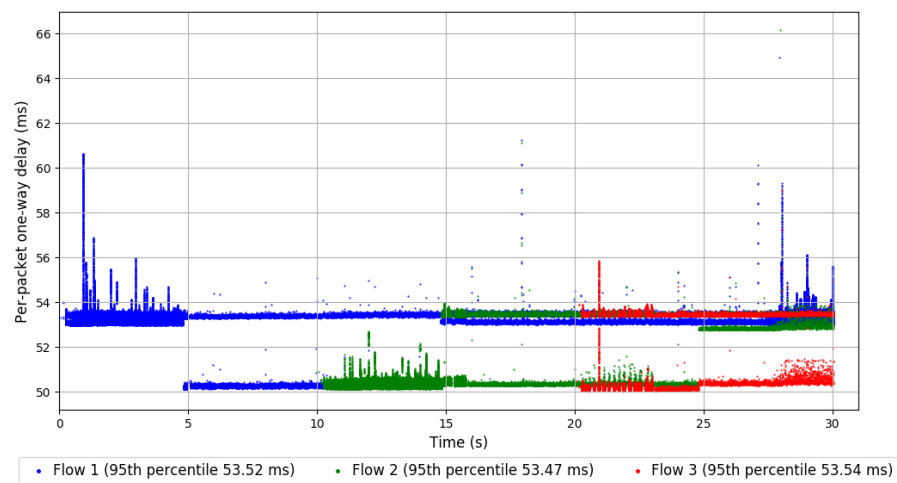
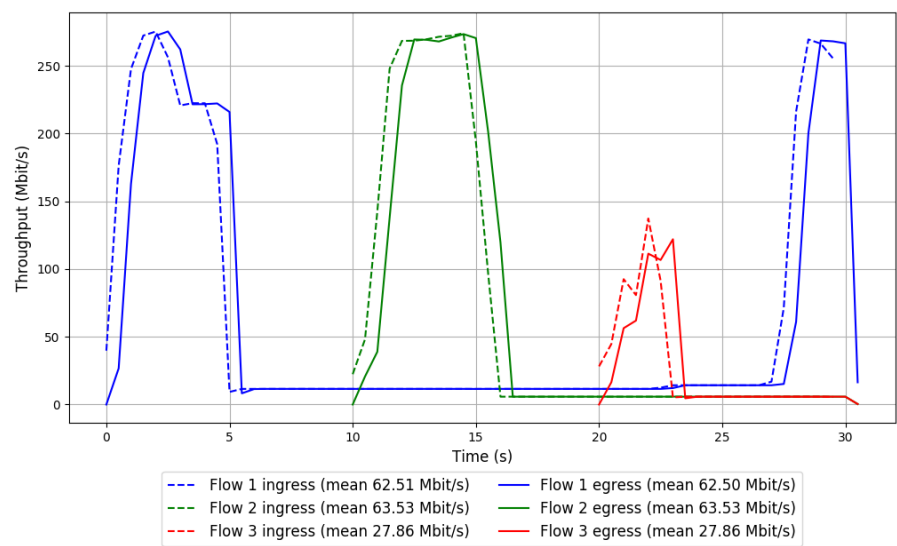
-- Flow 3:

Average throughput: 27.86 Mbit/s

95th percentile per-packet one-way delay: 53.539 ms

Loss rate: 0.00%

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

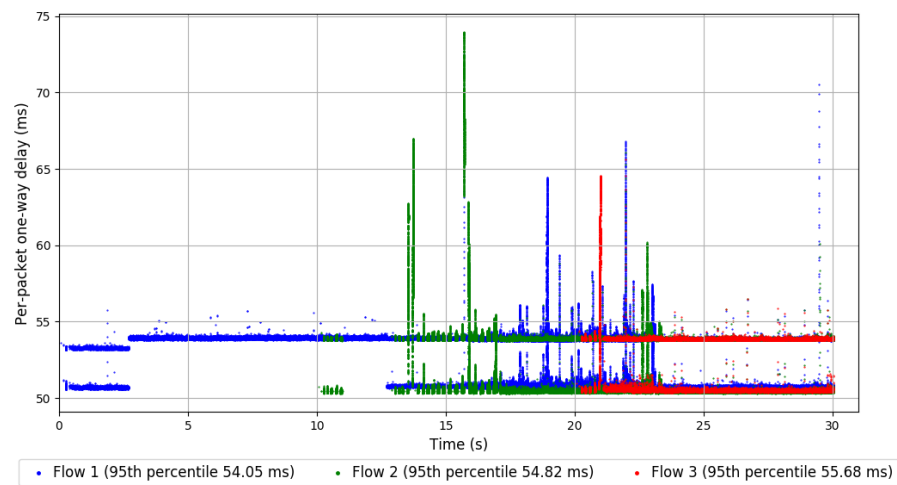
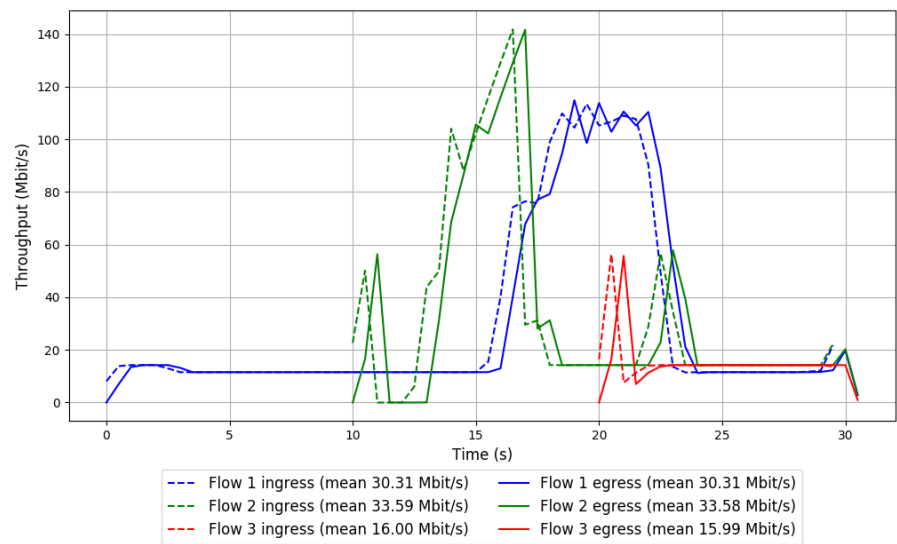


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-06-01 13:41:57
End at: 2018-06-01 13:42:27
Local clock offset: -0.228 ms
Remote clock offset: 0.737 ms

# Below is generated by plot.py at 2018-06-01 15:59:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 57.99 Mbit/s
95th percentile per-packet one-way delay: 54.173 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 30.31 Mbit/s
95th percentile per-packet one-way delay: 54.045 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 33.58 Mbit/s
95th percentile per-packet one-way delay: 54.816 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 15.99 Mbit/s
95th percentile per-packet one-way delay: 55.682 ms
Loss rate: 0.02%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-06-01 10:13:33

End at: 2018-06-01 10:14:03

Local clock offset: -0.221 ms

Remote clock offset: -0.1 ms

# Below is generated by plot.py at 2018-06-01 15:59:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 147.88 Mbit/s

95th percentile per-packet one-way delay: 54.710 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 72.25 Mbit/s

95th percentile per-packet one-way delay: 54.586 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.97 Mbit/s

95th percentile per-packet one-way delay: 54.155 ms

Loss rate: 0.00%

-- Flow 3:

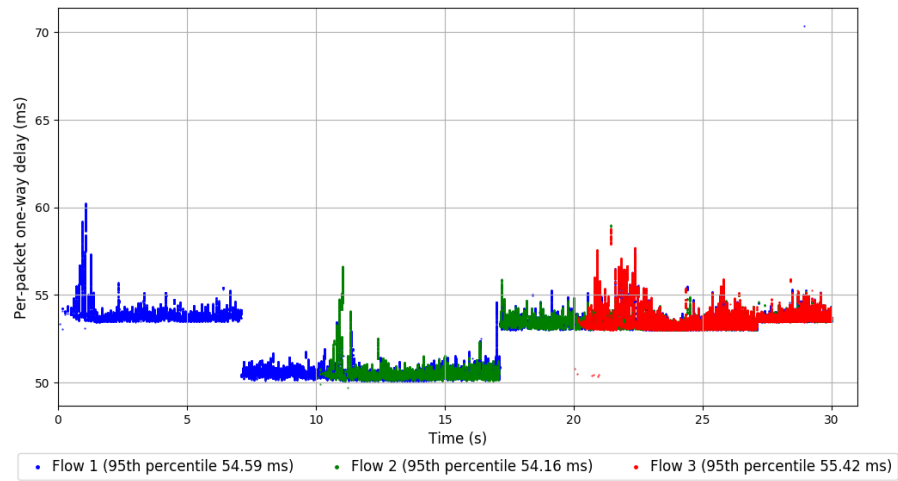
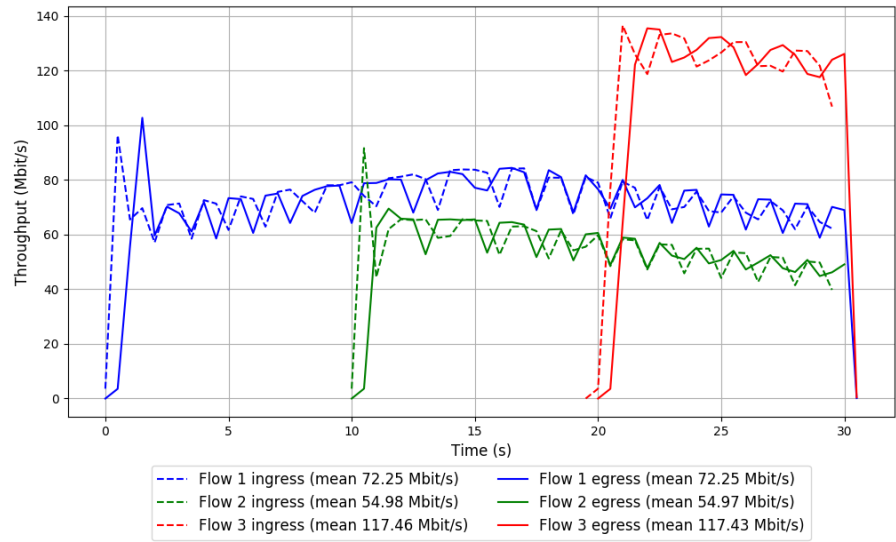
Average throughput: 117.43 Mbit/s

95th percentile per-packet one-way delay: 55.424 ms

Loss rate: 0.00%



# Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-06-01 10:36:05

End at: 2018-06-01 10:36:35

Local clock offset: -0.256 ms

Remote clock offset: 2.832 ms

# Below is generated by plot.py at 2018-06-01 15:59:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 128.31 Mbit/s

95th percentile per-packet one-way delay: 54.474 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 41.23 Mbit/s

95th percentile per-packet one-way delay: 54.565 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 78.94 Mbit/s

95th percentile per-packet one-way delay: 54.201 ms

Loss rate: 0.00%

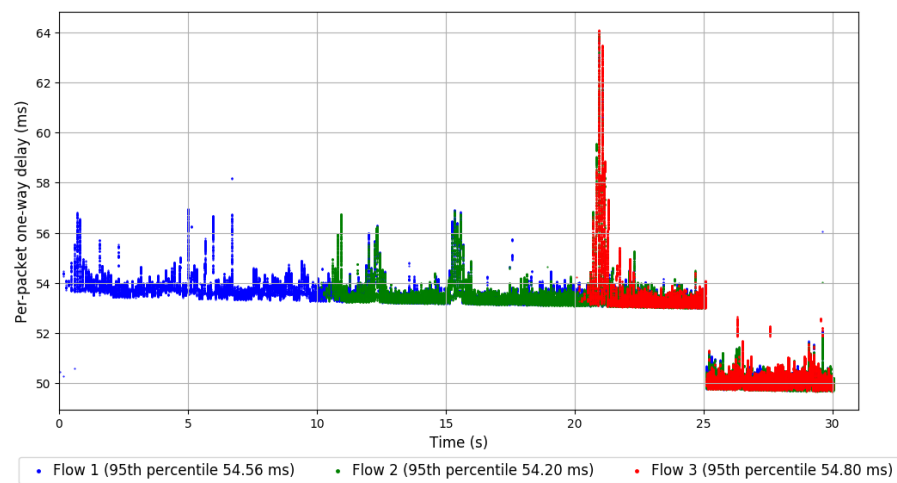
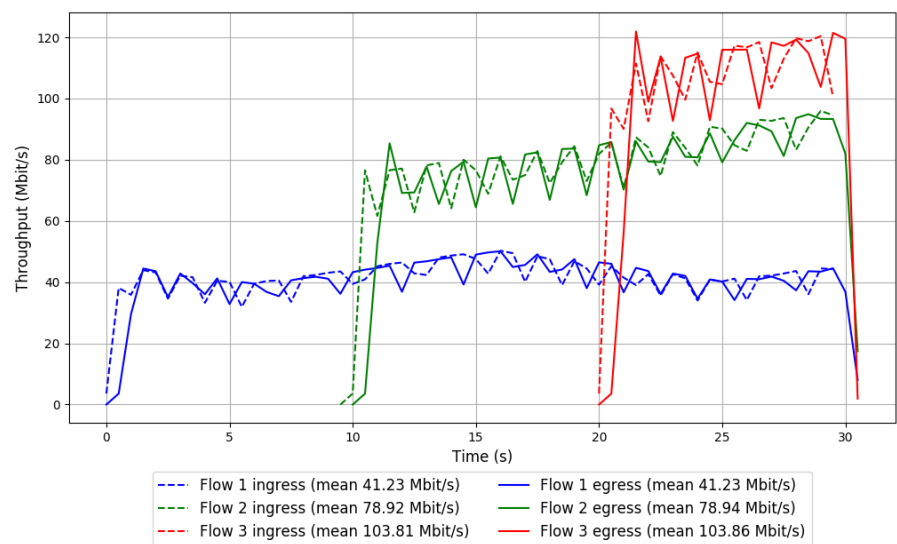
-- Flow 3:

Average throughput: 103.86 Mbit/s

95th percentile per-packet one-way delay: 54.799 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link

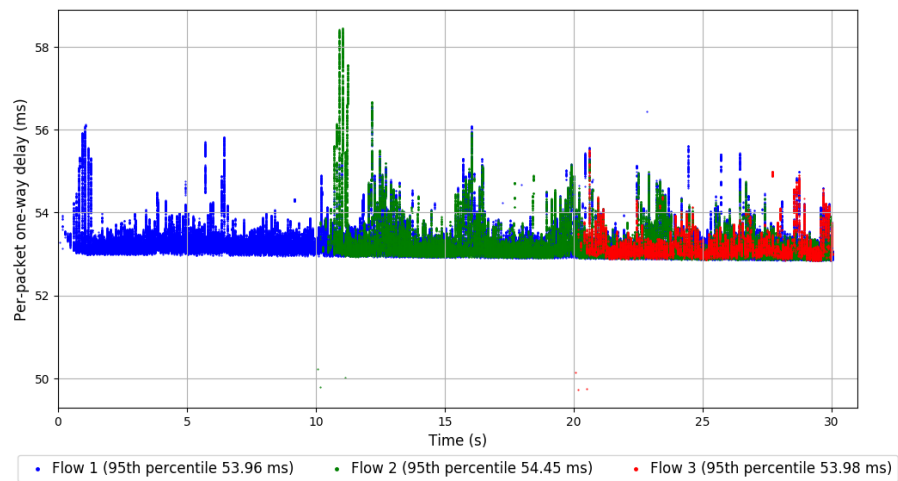
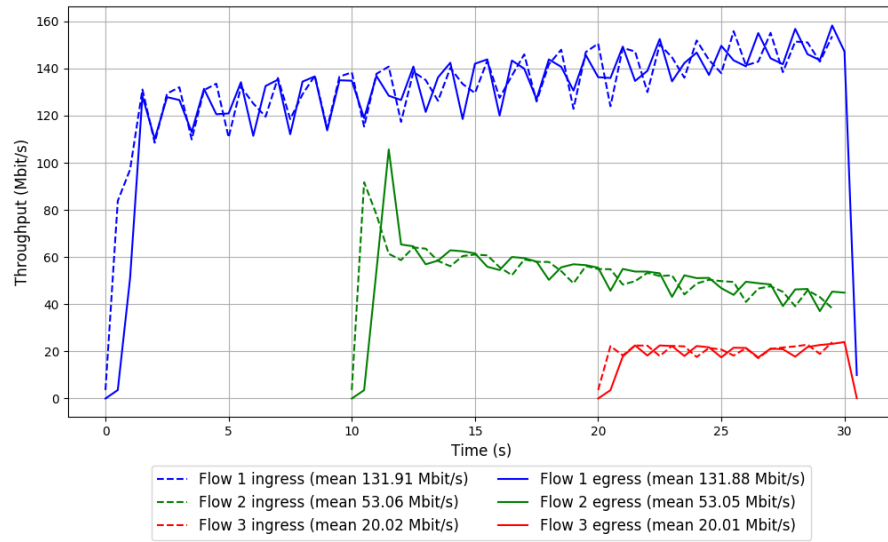


Run 3: Statistics of TCP Vegas

Start at: 2018-06-01 10:58:41  
End at: 2018-06-01 10:59:11  
Local clock offset: 0.194 ms  
Remote clock offset: 14.073 ms

# Below is generated by plot.py at 2018-06-01 15:59:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 173.81 Mbit/s  
95th percentile per-packet one-way delay: 54.081 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 131.88 Mbit/s  
95th percentile per-packet one-way delay: 53.959 ms  
Loss rate: 0.03%  
-- Flow 2:  
Average throughput: 53.05 Mbit/s  
95th percentile per-packet one-way delay: 54.447 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 20.01 Mbit/s  
95th percentile per-packet one-way delay: 53.984 ms  
Loss rate: 0.00%

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

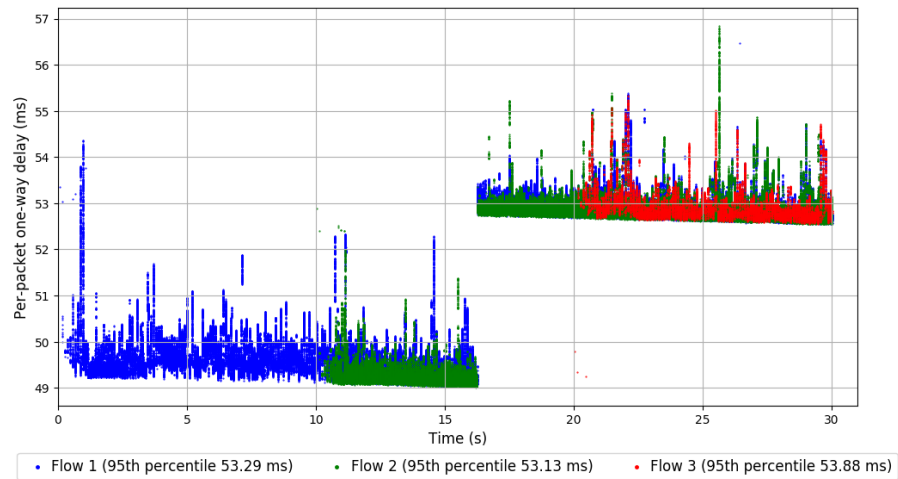
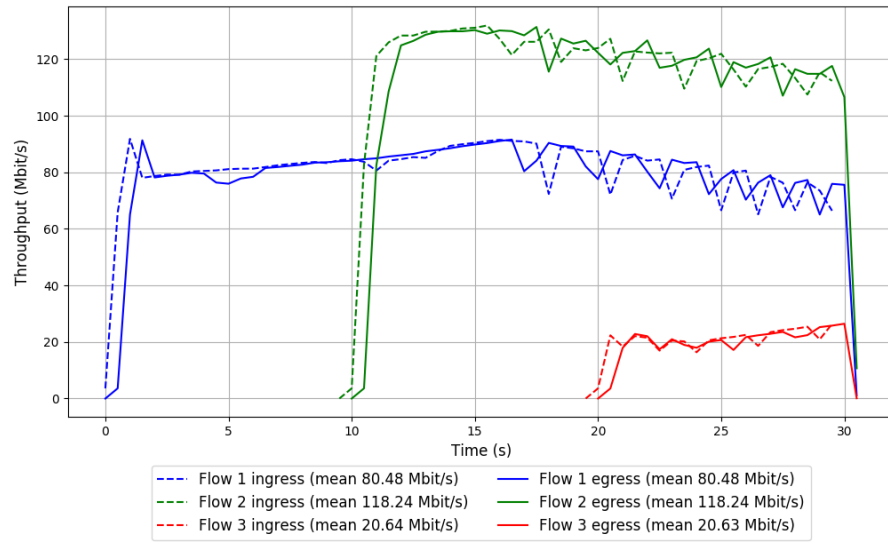


Run 4: Statistics of TCP Vegas

Start at: 2018-06-01 11:21:24  
End at: 2018-06-01 11:21:54  
Local clock offset: 0.072 ms  
Remote clock offset: 29.017 ms

# Below is generated by plot.py at 2018-06-01 15:59:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 166.11 Mbit/s  
95th percentile per-packet one-way delay: 53.246 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 80.48 Mbit/s  
95th percentile per-packet one-way delay: 53.291 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 118.24 Mbit/s  
95th percentile per-packet one-way delay: 53.130 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 20.63 Mbit/s  
95th percentile per-packet one-way delay: 53.884 ms  
Loss rate: 0.00%

# Run 4: Report of TCP Vegas — Data Link



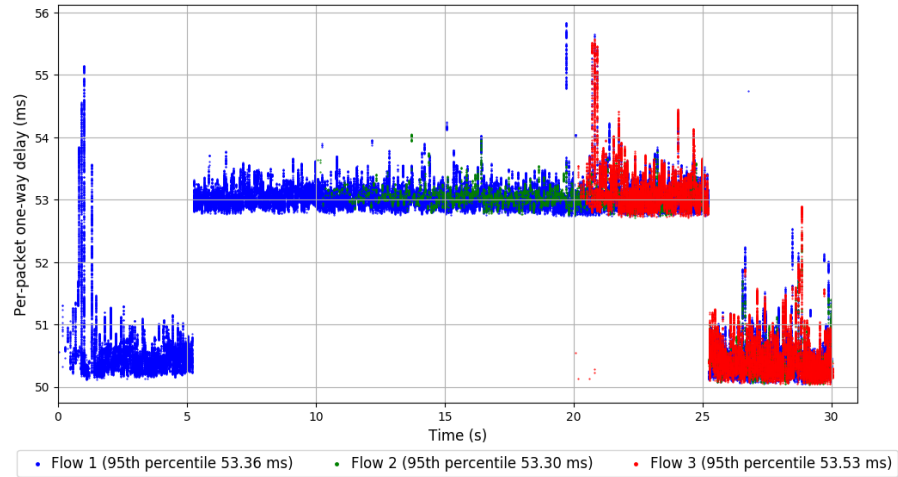
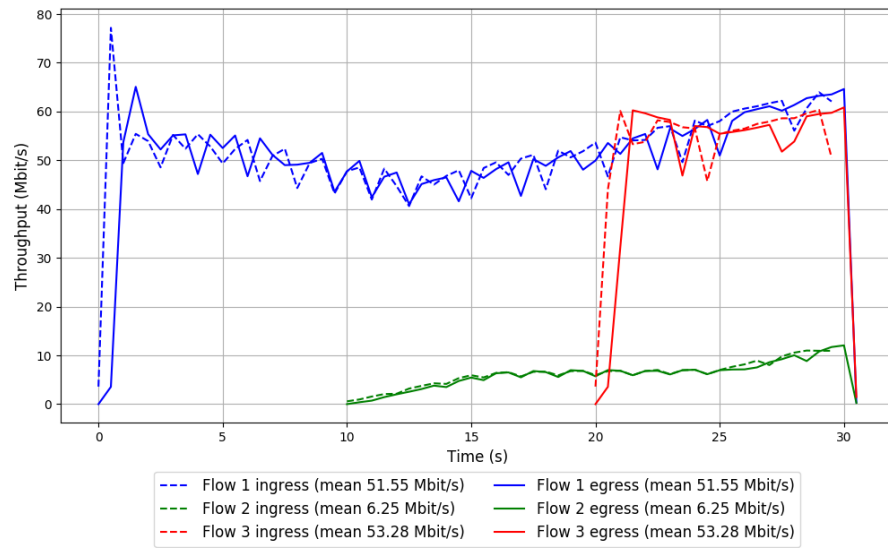
Run 5: Statistics of TCP Vegas

Start at: 2018-06-01 11:44:15  
End at: 2018-06-01 11:44:45  
Local clock offset: 0.104 ms  
Remote clock offset: 11.853 ms

# Below is generated by plot.py at 2018-06-01 15:59:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 73.38 Mbit/s  
95th percentile per-packet one-way delay: 53.398 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 51.55 Mbit/s  
95th percentile per-packet one-way delay: 53.356 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 6.25 Mbit/s  
95th percentile per-packet one-way delay: 53.303 ms  
Loss rate: 0.08%  
-- Flow 3:  
Average throughput: 53.28 Mbit/s  
95th percentile per-packet one-way delay: 53.533 ms  
Loss rate: 0.00%



# Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-06-01 12:07:18

End at: 2018-06-01 12:07:48

Local clock offset: 0.243 ms

Remote clock offset: 6.256 ms

# Below is generated by plot.py at 2018-06-01 15:59:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 190.44 Mbit/s

95th percentile per-packet one-way delay: 53.856 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 123.28 Mbit/s

95th percentile per-packet one-way delay: 53.868 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 75.83 Mbit/s

95th percentile per-packet one-way delay: 53.861 ms

Loss rate: 0.00%

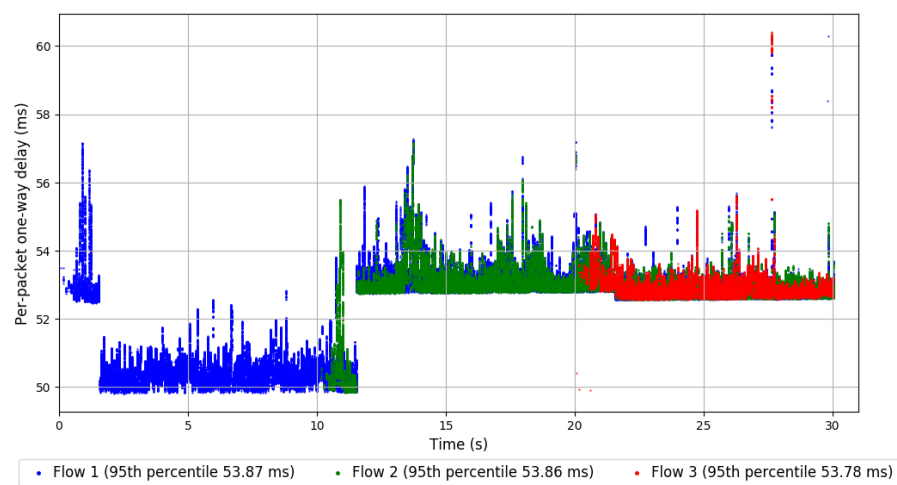
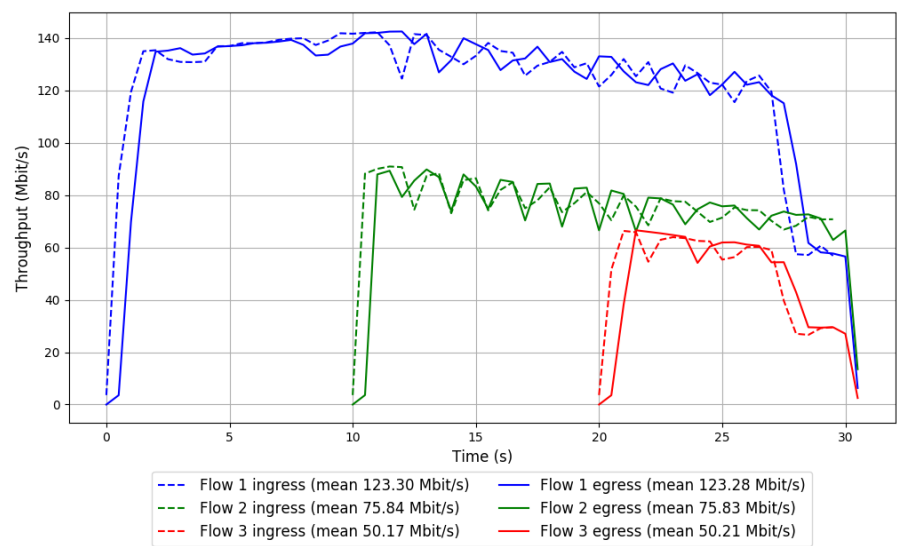
-- Flow 3:

Average throughput: 50.21 Mbit/s

95th percentile per-packet one-way delay: 53.781 ms

Loss rate: 0.20%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-06-01 12:30:44

End at: 2018-06-01 12:31:14

Local clock offset: 0.111 ms

Remote clock offset: 7.189 ms

# Below is generated by plot.py at 2018-06-01 15:59:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 139.29 Mbit/s

95th percentile per-packet one-way delay: 55.155 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 64.16 Mbit/s

95th percentile per-packet one-way delay: 54.686 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 81.60 Mbit/s

95th percentile per-packet one-way delay: 55.688 ms

Loss rate: 0.00%

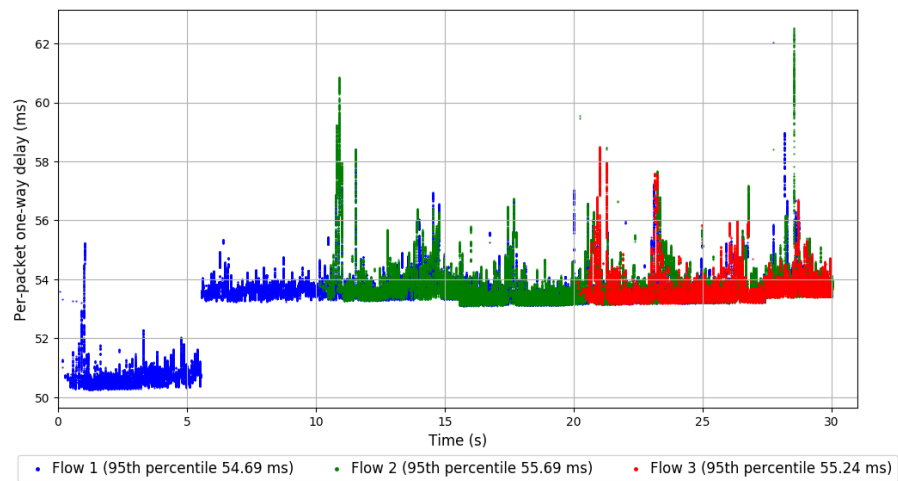
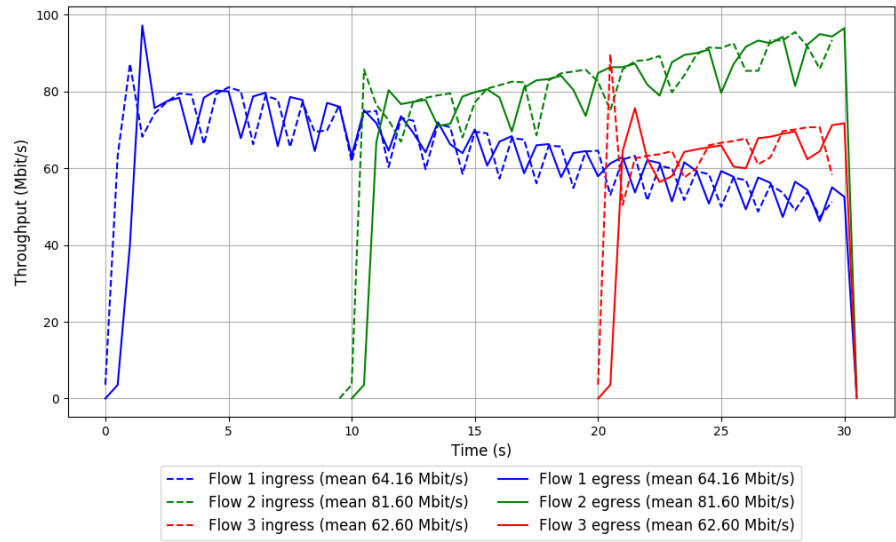
-- Flow 3:

Average throughput: 62.60 Mbit/s

95th percentile per-packet one-way delay: 55.240 ms

Loss rate: 0.00%

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



Run 8: Statistics of TCP Vegas

Start at: 2018-06-01 12:53:24

End at: 2018-06-01 12:53:54

Local clock offset: -0.53 ms

Remote clock offset: 2.562 ms

# Below is generated by plot.py at 2018-06-01 15:59:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 91.58 Mbit/s

95th percentile per-packet one-way delay: 54.293 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 60.56 Mbit/s

95th percentile per-packet one-way delay: 54.275 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 10.60 Mbit/s

95th percentile per-packet one-way delay: 54.194 ms

Loss rate: 0.05%

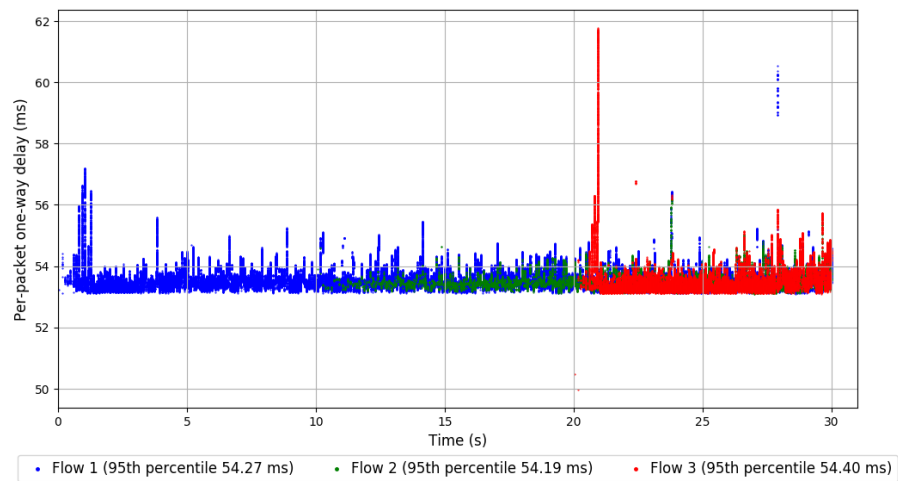
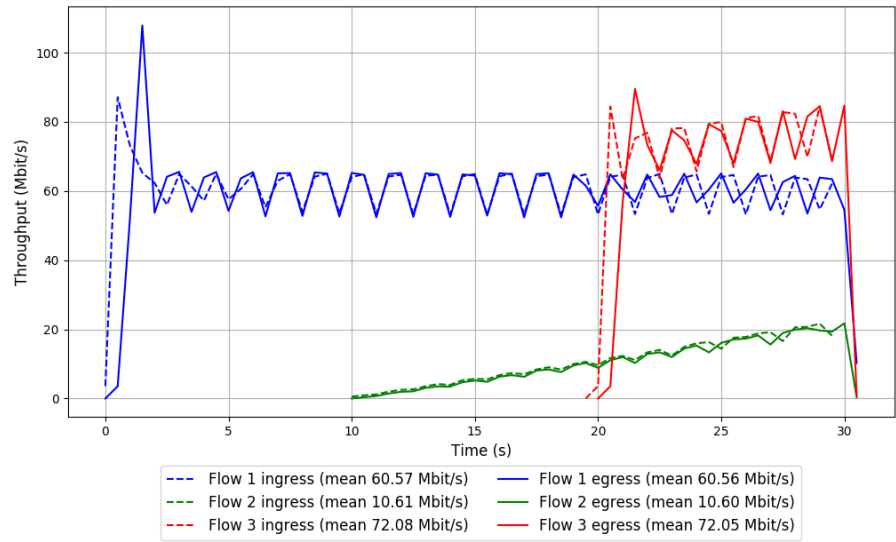
-- Flow 3:

Average throughput: 72.05 Mbit/s

95th percentile per-packet one-way delay: 54.401 ms

Loss rate: 0.00%

# Run 8: Report of TCP Vegas — Data Link



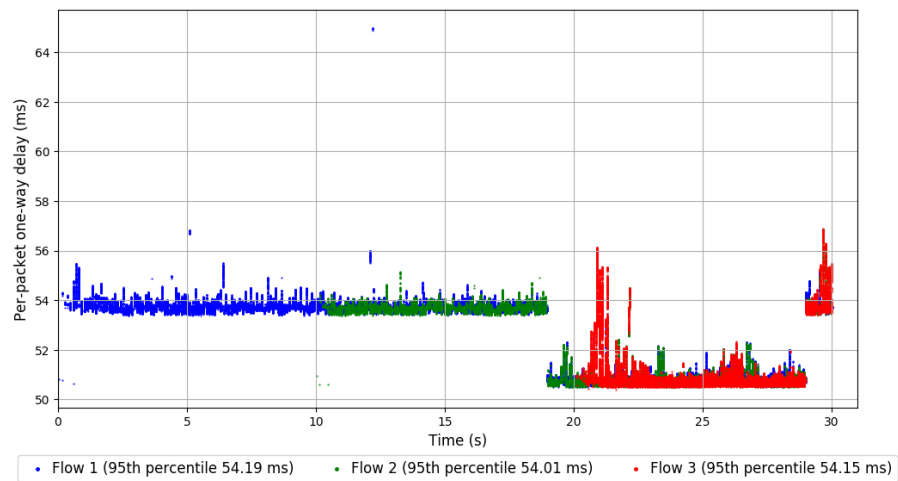
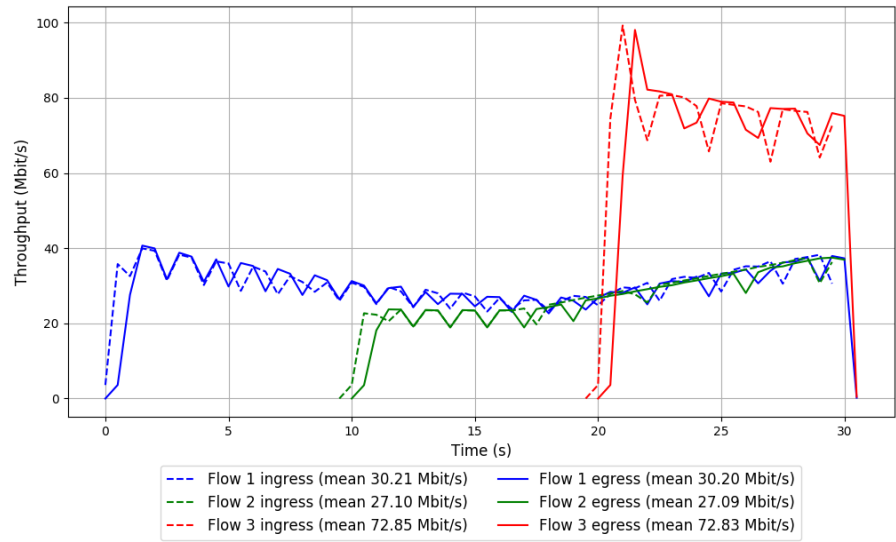
Run 9: Statistics of TCP Vegas

Start at: 2018-06-01 13:16:01  
End at: 2018-06-01 13:16:31  
Local clock offset: -0.308 ms  
Remote clock offset: 1.214 ms

# Below is generated by plot.py at 2018-06-01 15:59:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 72.43 Mbit/s  
95th percentile per-packet one-way delay: 54.148 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 30.20 Mbit/s  
95th percentile per-packet one-way delay: 54.190 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 27.09 Mbit/s  
95th percentile per-packet one-way delay: 54.008 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 72.83 Mbit/s  
95th percentile per-packet one-way delay: 54.150 ms  
Loss rate: 0.00%



# Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-06-01 13:38:42

End at: 2018-06-01 13:39:12

Local clock offset: 0.052 ms

Remote clock offset: 0.574 ms

# Below is generated by plot.py at 2018-06-01 15:59:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 111.63 Mbit/s

95th percentile per-packet one-way delay: 54.625 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 88.83 Mbit/s

95th percentile per-packet one-way delay: 54.717 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 31.64 Mbit/s

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

Loss rate: 0.00%

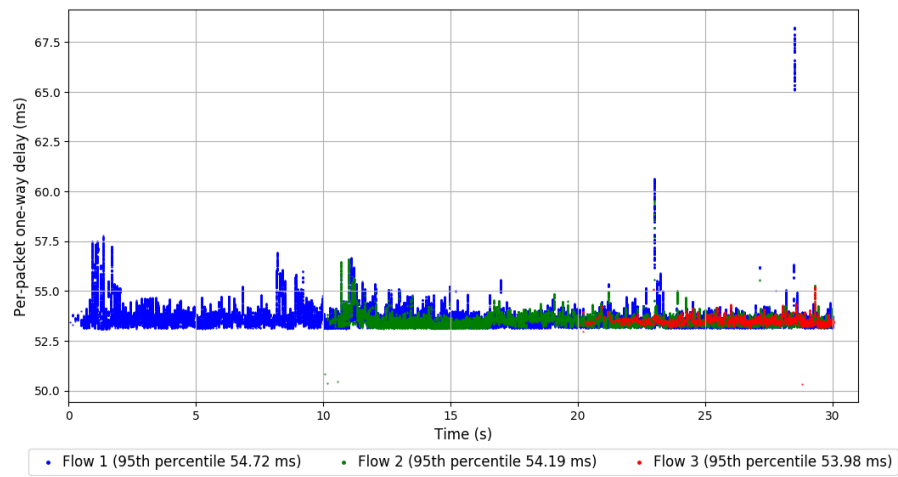
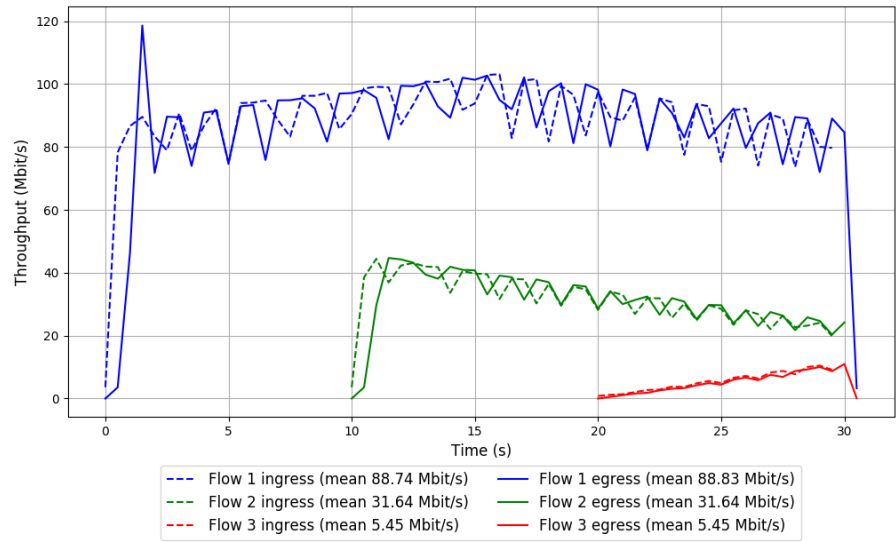
-- Flow 3:

Average throughput: 5.45 Mbit/s

95th percentile per-packet one-way delay: 53.981 ms

Loss rate: 0.11%

# Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-06-01 10:19:25

End at: 2018-06-01 10:19:55

Local clock offset: -0.09 ms

Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2018-06-01 15:59:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 377.68 Mbit/s

95th percentile per-packet one-way delay: 128.249 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 225.12 Mbit/s

95th percentile per-packet one-way delay: 138.438 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 187.66 Mbit/s

95th percentile per-packet one-way delay: 105.223 ms

Loss rate: 0.28%

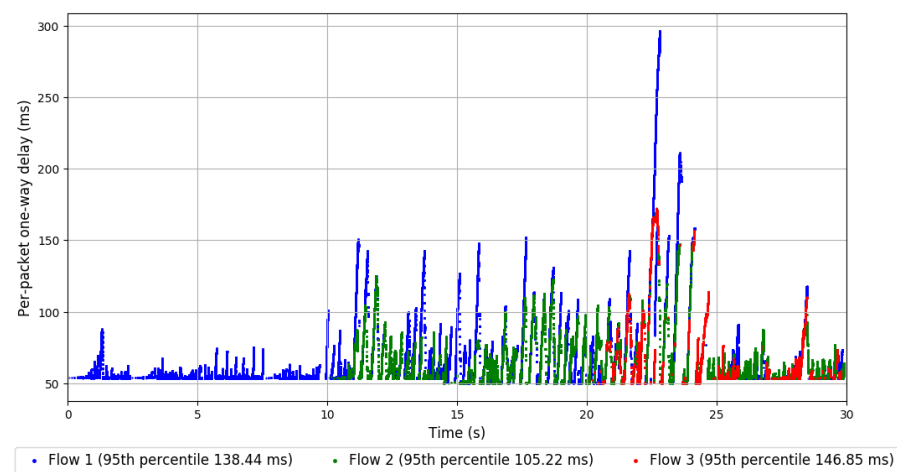
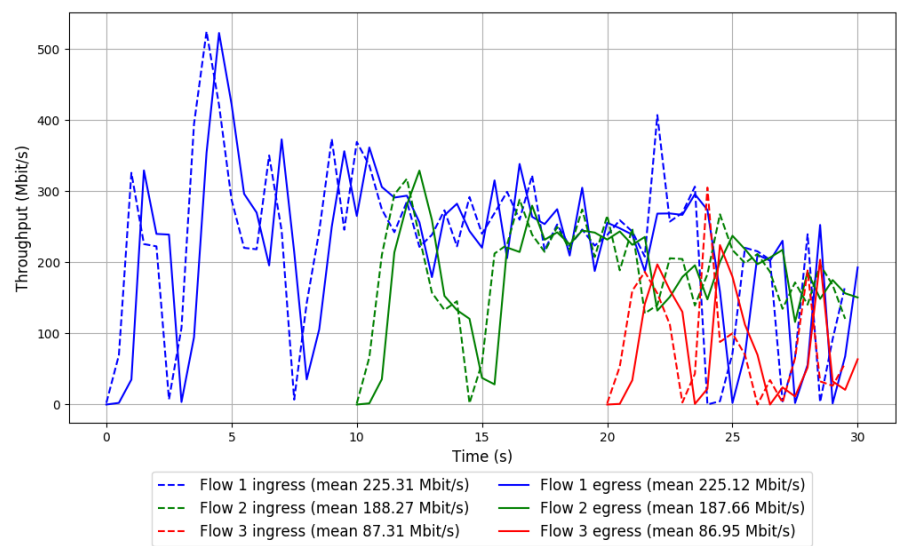
-- Flow 3:

Average throughput: 86.95 Mbit/s

95th percentile per-packet one-way delay: 146.854 ms

Loss rate: 0.34%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-06-01 10:41:52

End at: 2018-06-01 10:42:22

Local clock offset: 0.034 ms

Remote clock offset: 9.592 ms

# Below is generated by plot.py at 2018-06-01 15:59:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 357.85 Mbit/s

95th percentile per-packet one-way delay: 115.913 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 225.59 Mbit/s

95th percentile per-packet one-way delay: 114.010 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 152.63 Mbit/s

95th percentile per-packet one-way delay: 116.695 ms

Loss rate: 0.86%

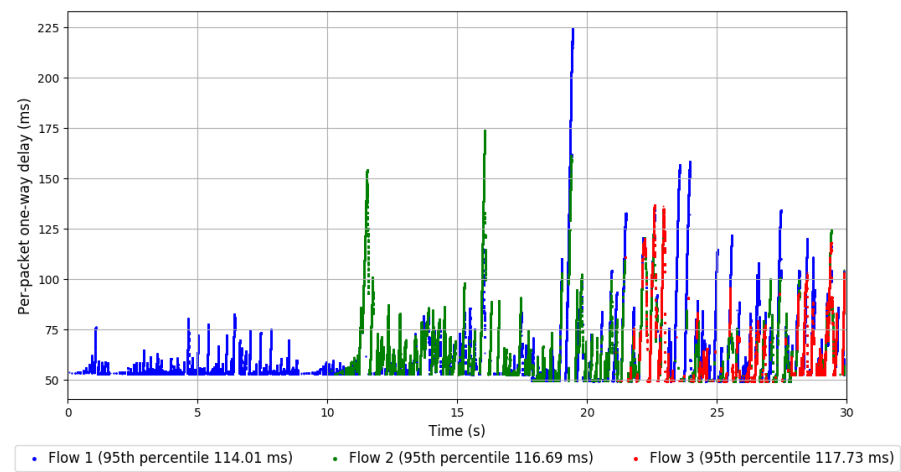
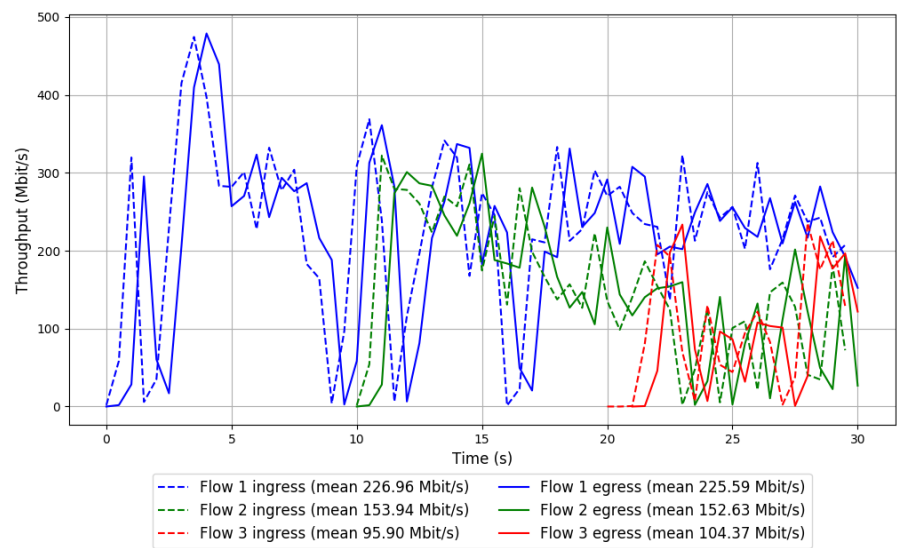
-- Flow 3:

Average throughput: 104.37 Mbit/s

95th percentile per-packet one-way delay: 117.730 ms

Loss rate: 2.09%

Run 2: Report of Verus — Data Link



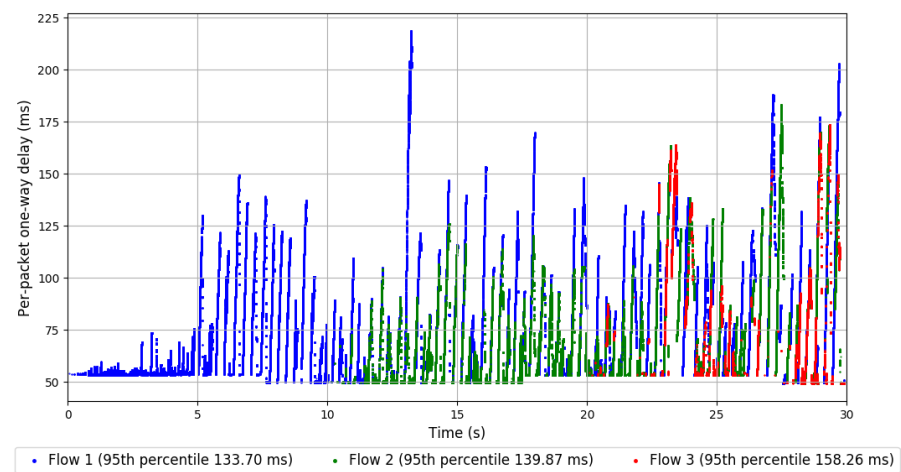
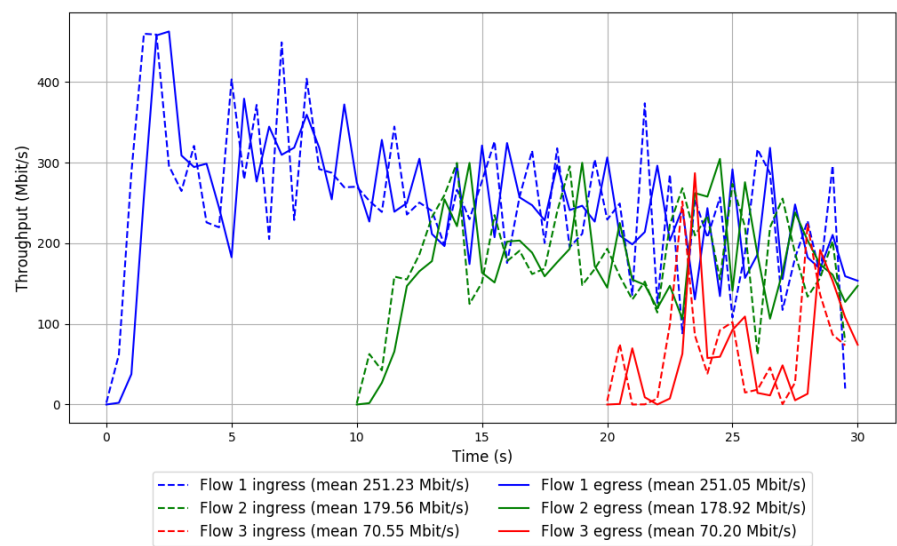
Run 3: Statistics of Verus

Start at: 2018-06-01 11:04:32  
End at: 2018-06-01 11:05:02  
Local clock offset: 0.319 ms  
Remote clock offset: 16.905 ms

# Below is generated by plot.py at 2018-06-01 15:59:21  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 392.39 Mbit/s  
95th percentile per-packet one-way delay: 138.867 ms  
Loss rate: 0.20%  
-- Flow 1:  
Average throughput: 251.05 Mbit/s  
95th percentile per-packet one-way delay: 133.699 ms  
Loss rate: 0.09%  
-- Flow 2:  
Average throughput: 178.92 Mbit/s  
95th percentile per-packet one-way delay: 139.873 ms  
Loss rate: 0.36%  
-- Flow 3:  
Average throughput: 70.20 Mbit/s  
95th percentile per-packet one-way delay: 158.259 ms  
Loss rate: 0.55%



Run 3: Report of Verus — Data Link

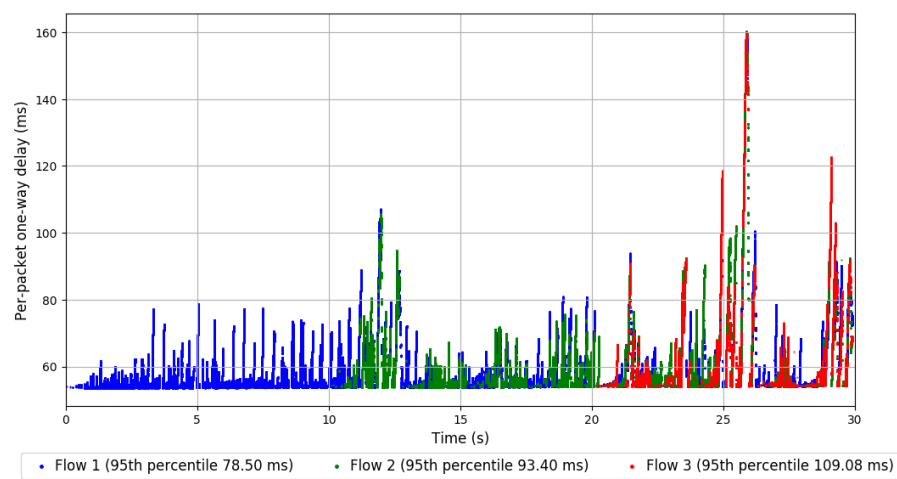
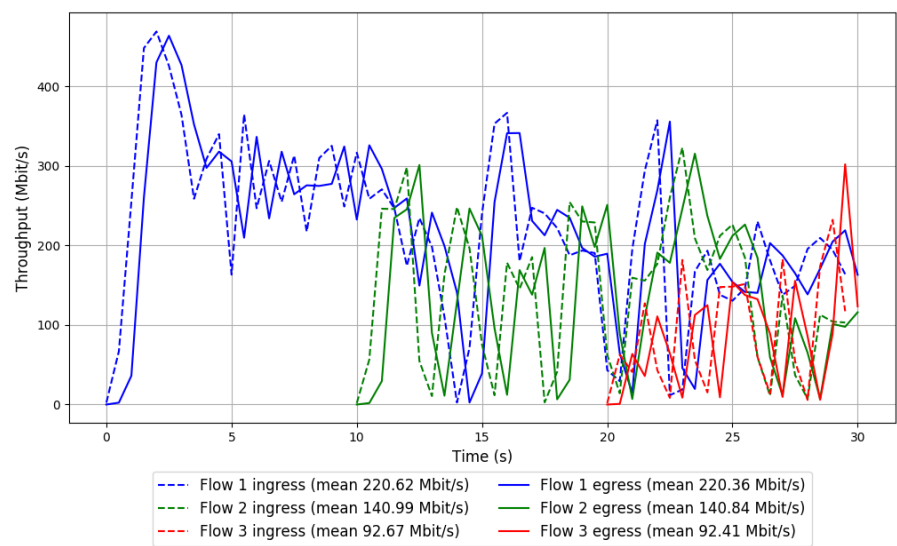


Run 4: Statistics of Verus

Start at: 2018-06-01 11:27:20  
End at: 2018-06-01 11:27:50  
Local clock offset: 0.036 ms  
Remote clock offset: 18.802 ms

# Below is generated by plot.py at 2018-06-01 15:59:21  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 344.33 Mbit/s  
95th percentile per-packet one-way delay: 86.809 ms  
Loss rate: 0.15%  
-- Flow 1:  
Average throughput: 220.36 Mbit/s  
95th percentile per-packet one-way delay: 78.500 ms  
Loss rate: 0.12%  
-- Flow 2:  
Average throughput: 140.84 Mbit/s  
95th percentile per-packet one-way delay: 93.397 ms  
Loss rate: 0.09%  
-- Flow 3:  
Average throughput: 92.41 Mbit/s  
95th percentile per-packet one-way delay: 109.085 ms  
Loss rate: 0.49%

Run 4: Report of Verus — Data Link

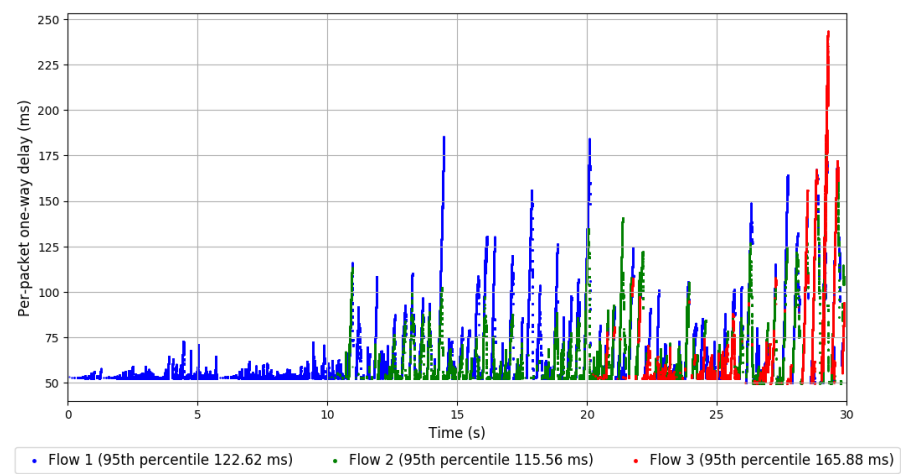
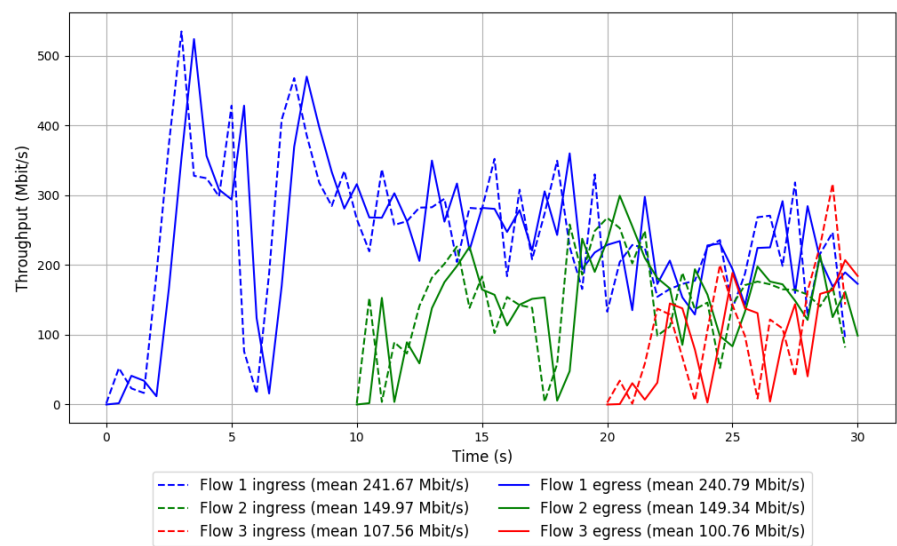


Run 5: Statistics of Verus

Start at: 2018-06-01 11:50:14  
End at: 2018-06-01 11:50:44  
Local clock offset: 0.203 ms  
Remote clock offset: 13.127 ms

# Below is generated by plot.py at 2018-06-01 15:59:26  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 372.89 Mbit/s  
95th percentile per-packet one-way delay: 124.347 ms  
Loss rate: 0.82%  
-- Flow 1:  
Average throughput: 240.79 Mbit/s  
95th percentile per-packet one-way delay: 122.623 ms  
Loss rate: 0.28%  
-- Flow 2:  
Average throughput: 149.34 Mbit/s  
95th percentile per-packet one-way delay: 115.563 ms  
Loss rate: 0.15%  
-- Flow 3:  
Average throughput: 100.76 Mbit/s  
95th percentile per-packet one-way delay: 165.877 ms  
Loss rate: 6.45%

Run 5: Report of Verus — Data Link

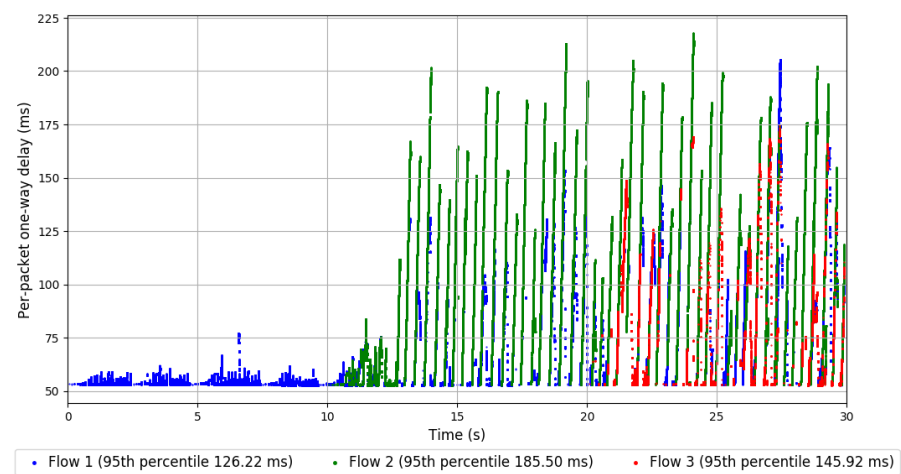
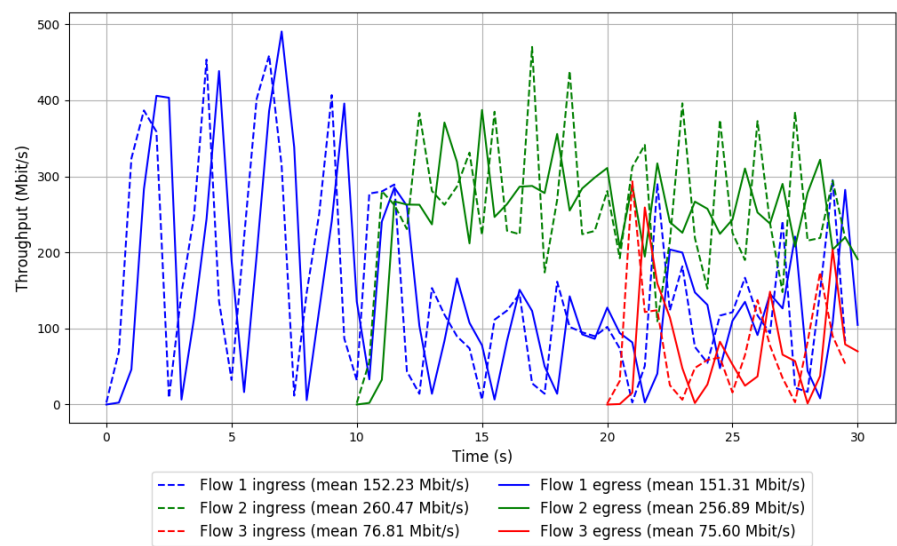


Run 6: Statistics of Verus

Start at: 2018-06-01 12:13:42  
End at: 2018-06-01 12:14:12  
Local clock offset: -0.015 ms  
Remote clock offset: 5.309 ms

# Below is generated by plot.py at 2018-06-01 15:59:36  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 346.87 Mbit/s  
95th percentile per-packet one-way delay: 172.091 ms  
Loss rate: 1.04%  
-- Flow 1:  
Average throughput: 151.31 Mbit/s  
95th percentile per-packet one-way delay: 126.222 ms  
Loss rate: 0.60%  
-- Flow 2:  
Average throughput: 256.89 Mbit/s  
95th percentile per-packet one-way delay: 185.495 ms  
Loss rate: 1.39%  
-- Flow 3:  
Average throughput: 75.60 Mbit/s  
95th percentile per-packet one-way delay: 145.916 ms  
Loss rate: 1.34%

Run 6: Report of Verus — Data Link



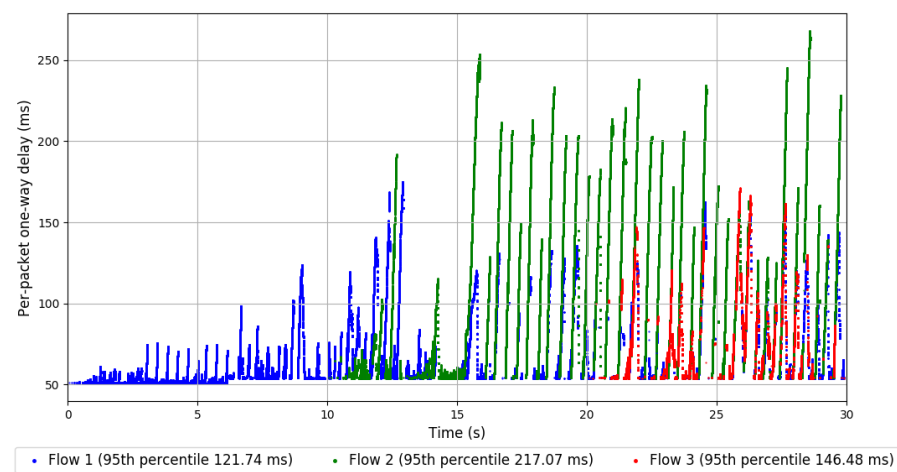
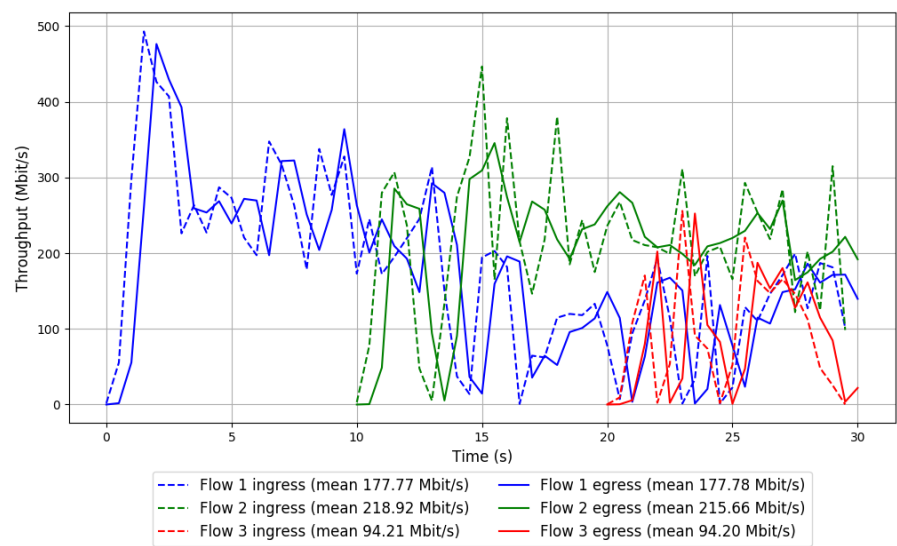
Run 7: Statistics of Verus

Start at: 2018-06-01 12:36:34  
End at: 2018-06-01 12:37:04  
Local clock offset: -0.523 ms  
Remote clock offset: 4.345 ms

# Below is generated by plot.py at 2018-06-01 15:59:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 351.07 Mbit/s  
95th percentile per-packet one-way delay: 194.703 ms  
Loss rate: 0.25%  
-- Flow 1:  
Average throughput: 177.78 Mbit/s  
95th percentile per-packet one-way delay: 121.739 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 215.66 Mbit/s  
95th percentile per-packet one-way delay: 217.068 ms  
Loss rate: 0.61%  
-- Flow 3:  
Average throughput: 94.20 Mbit/s  
95th percentile per-packet one-way delay: 146.477 ms  
Loss rate: 0.00%



Run 7: Report of Verus — Data Link

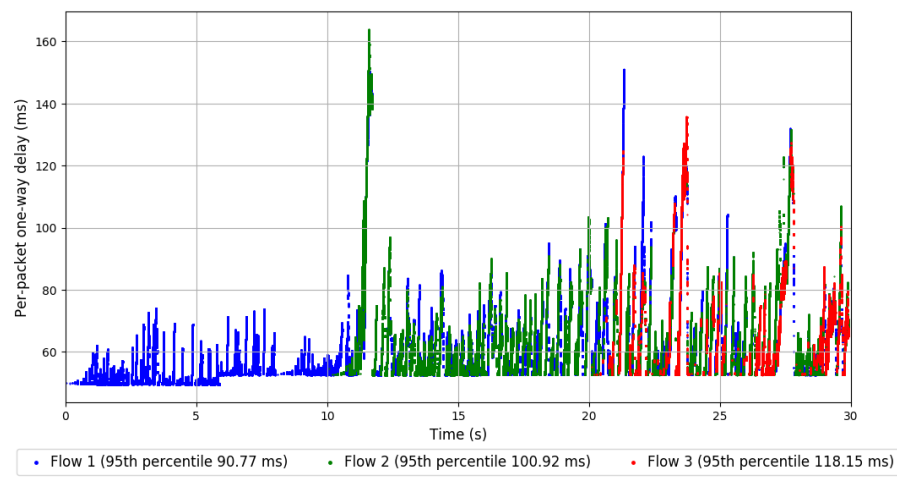
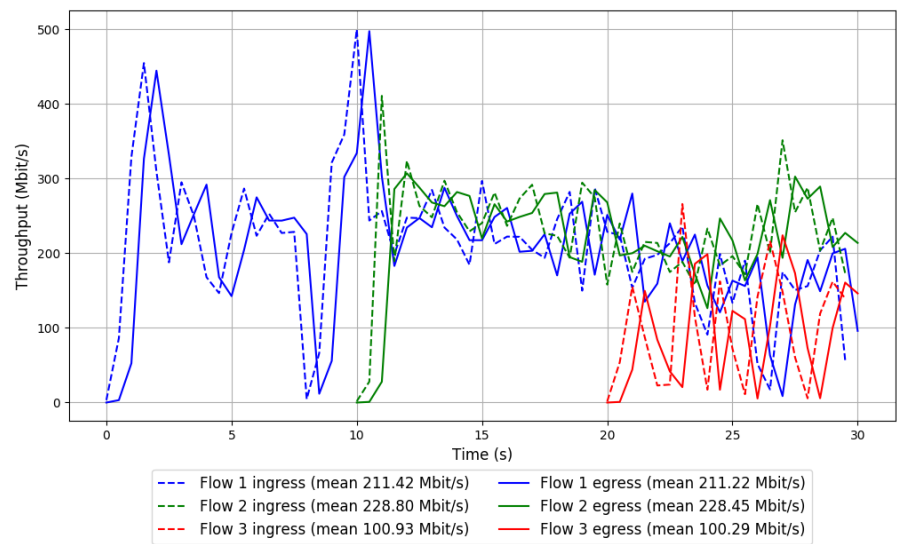


Run 8: Statistics of Verus

Start at: 2018-06-01 12:59:14  
End at: 2018-06-01 12:59:44  
Local clock offset: -0.12 ms  
Remote clock offset: 2.786 ms

# Below is generated by plot.py at 2018-06-01 16:04:22  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 395.31 Mbit/s  
95th percentile per-packet one-way delay: 100.688 ms  
Loss rate: 0.15%  
-- Flow 1:  
Average throughput: 211.22 Mbit/s  
95th percentile per-packet one-way delay: 90.772 ms  
Loss rate: 0.04%  
-- Flow 2:  
Average throughput: 228.45 Mbit/s  
95th percentile per-packet one-way delay: 100.925 ms  
Loss rate: 0.19%  
-- Flow 3:  
Average throughput: 100.29 Mbit/s  
95th percentile per-packet one-way delay: 118.149 ms  
Loss rate: 0.69%

Run 8: Report of Verus — Data Link

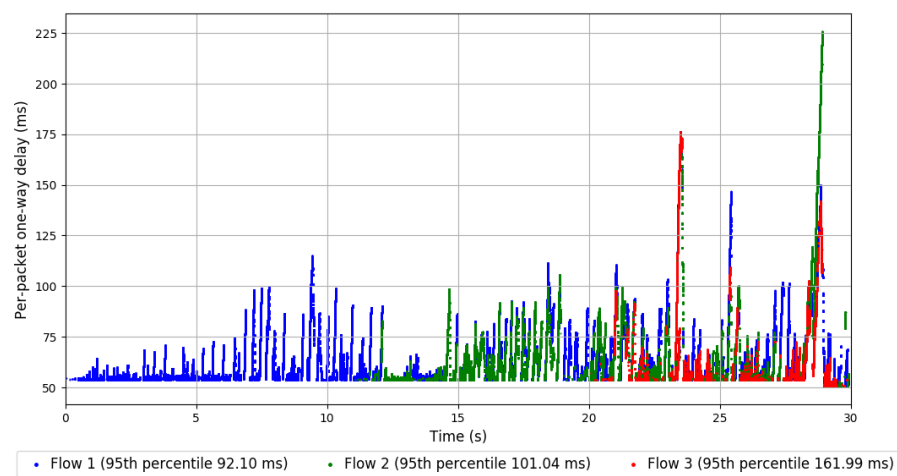
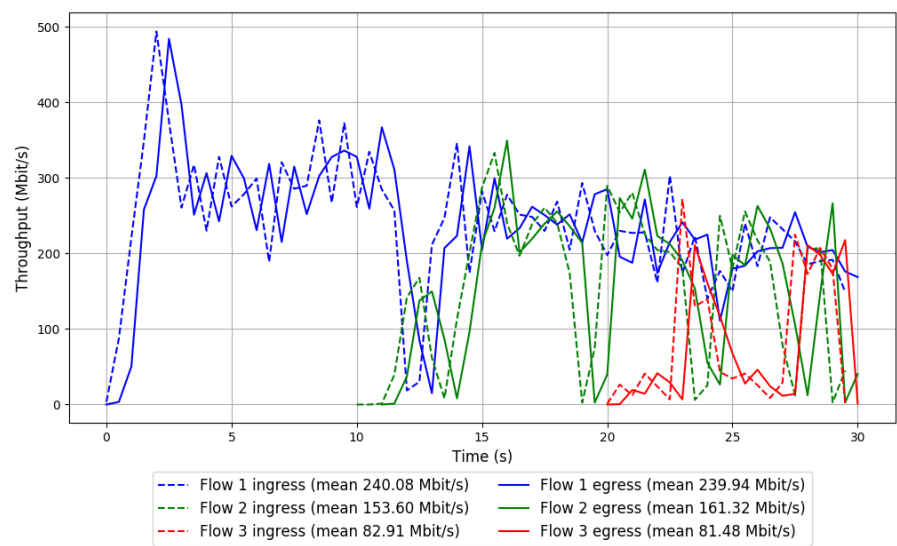


Run 9: Statistics of Verus

Start at: 2018-06-01 13:21:51  
End at: 2018-06-01 13:22:21  
Local clock offset: -0.573 ms  
Remote clock offset: 0.614 ms

# Below is generated by plot.py at 2018-06-01 16:04:22  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 368.43 Mbit/s  
95th percentile per-packet one-way delay: 97.250 ms  
Loss rate: 0.25%  
-- Flow 1:  
Average throughput: 239.94 Mbit/s  
95th percentile per-packet one-way delay: 92.099 ms  
Loss rate: 0.07%  
-- Flow 2:  
Average throughput: 161.32 Mbit/s  
95th percentile per-packet one-way delay: 101.040 ms  
Loss rate: 0.26%  
-- Flow 3:  
Average throughput: 81.48 Mbit/s  
95th percentile per-packet one-way delay: 161.986 ms  
Loss rate: 1.76%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-06-01 13:44:31

End at: 2018-06-01 13:45:01

Local clock offset: 0.013 ms

Remote clock offset: 0.209 ms

# Below is generated by plot.py at 2018-06-01 16:04:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 326.49 Mbit/s

95th percentile per-packet one-way delay: 106.637 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 206.46 Mbit/s

95th percentile per-packet one-way delay: 109.802 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 138.79 Mbit/s

95th percentile per-packet one-way delay: 97.862 ms

Loss rate: 0.01%

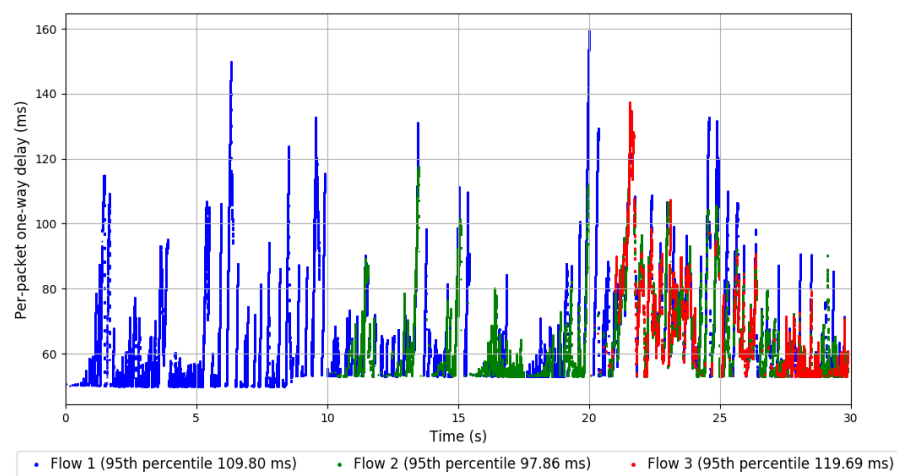
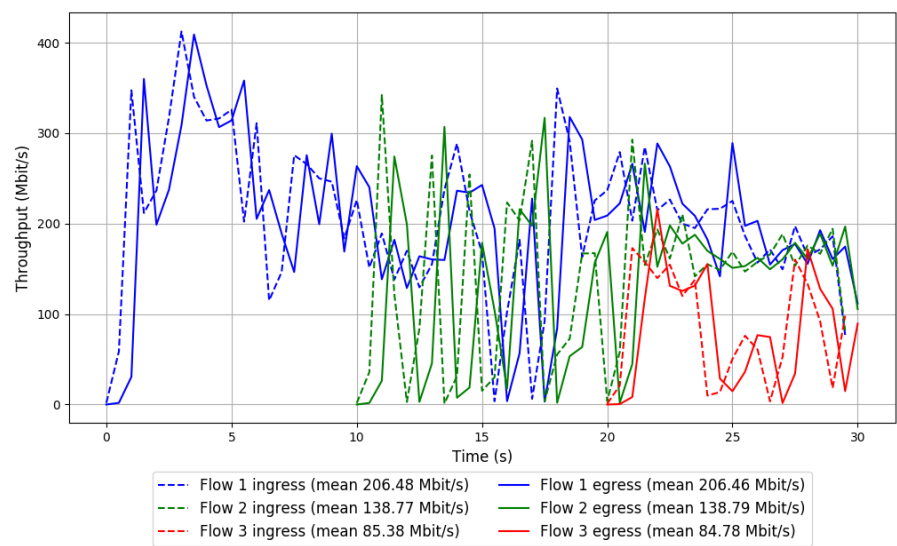
-- Flow 3:

Average throughput: 84.78 Mbit/s

95th percentile per-packet one-way delay: 119.687 ms

Loss rate: 0.72%

Run 10: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2018-06-01 10:22:37

End at: 2018-06-01 10:23:07

Local clock offset: -0.224 ms

Remote clock offset: 0.015 ms

# Below is generated by plot.py at 2018-06-01 16:08:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 547.21 Mbit/s

95th percentile per-packet one-way delay: 54.288 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 354.94 Mbit/s

95th percentile per-packet one-way delay: 54.177 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 274.63 Mbit/s

95th percentile per-packet one-way delay: 54.524 ms

Loss rate: 0.02%

-- Flow 3:

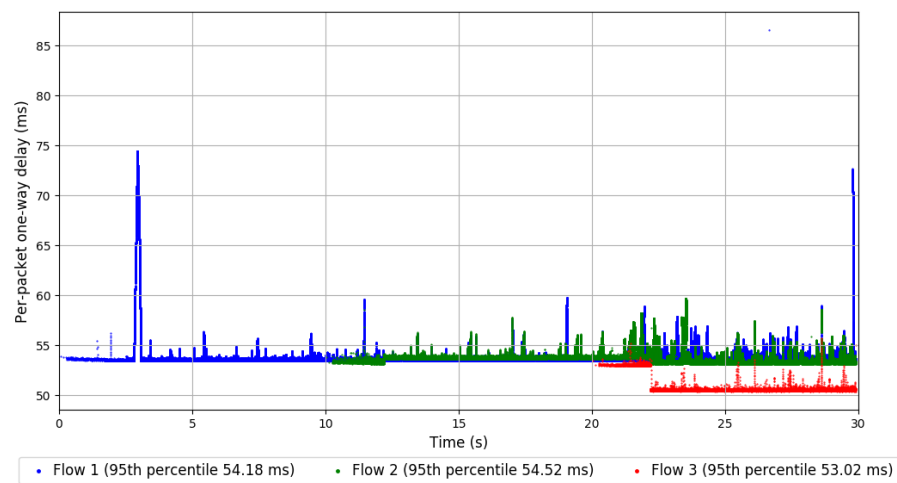
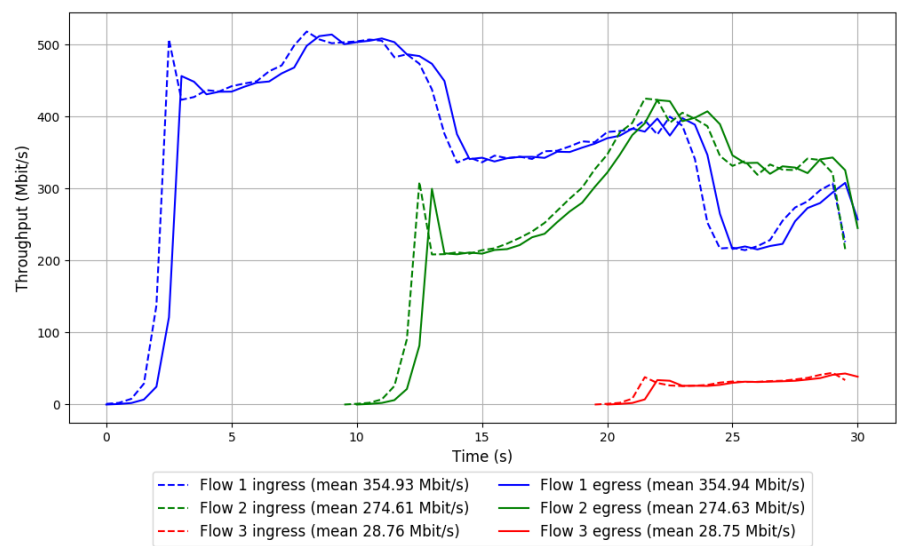
Average throughput: 28.75 Mbit/s

95th percentile per-packet one-way delay: 53.025 ms

Loss rate: 0.00%



Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2018-06-01 10:44:50

End at: 2018-06-01 10:45:20

Local clock offset: 0.202 ms

Remote clock offset: 13.16 ms

# Below is generated by plot.py at 2018-06-01 16:09:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 615.70 Mbit/s

95th percentile per-packet one-way delay: 53.266 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 381.91 Mbit/s

95th percentile per-packet one-way delay: 51.573 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 269.70 Mbit/s

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

Loss rate: 0.00%

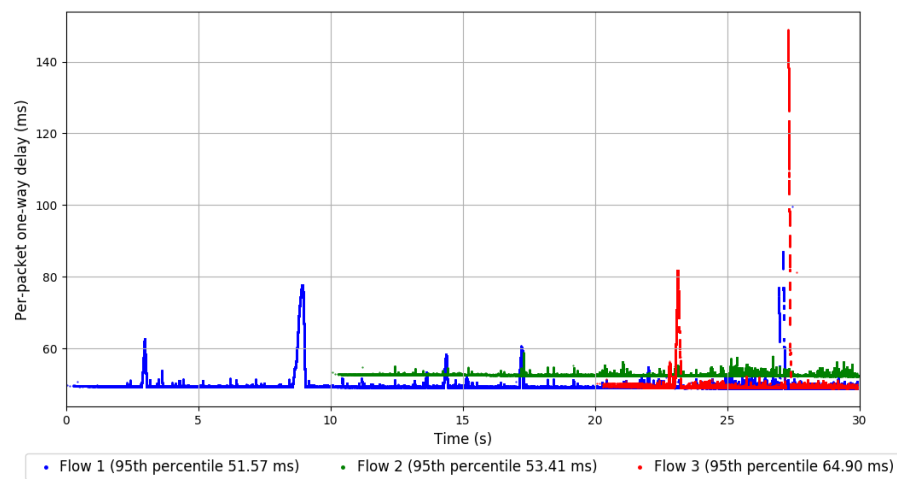
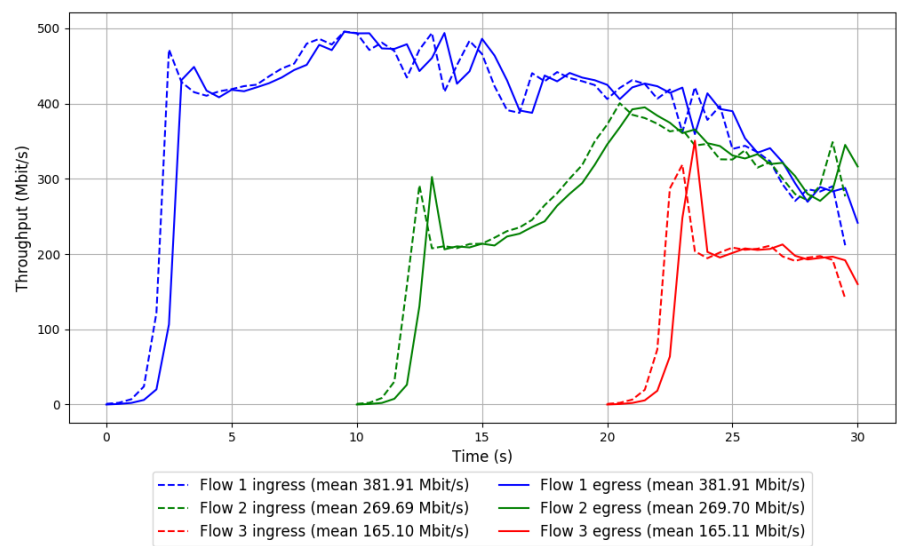
-- Flow 3:

Average throughput: 165.11 Mbit/s

95th percentile per-packet one-way delay: 64.897 ms

Loss rate: 0.00%

Run 2: Report of PCC-Vivace — Data Link

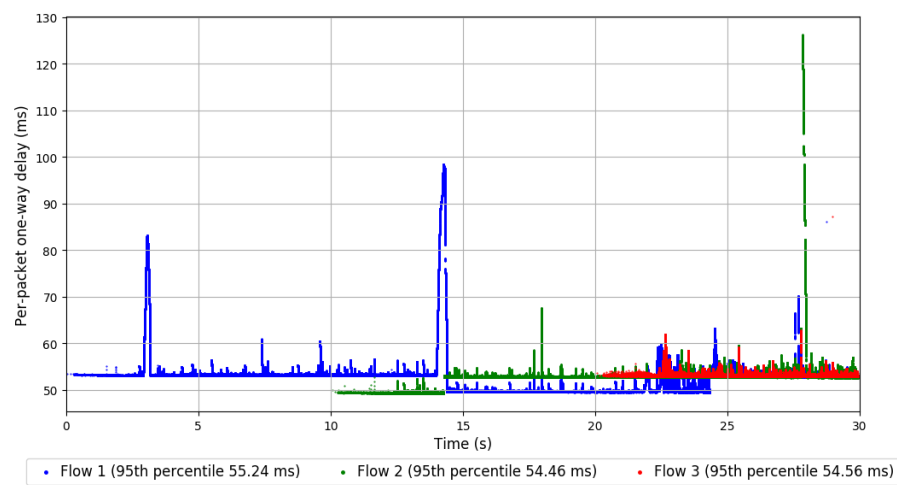
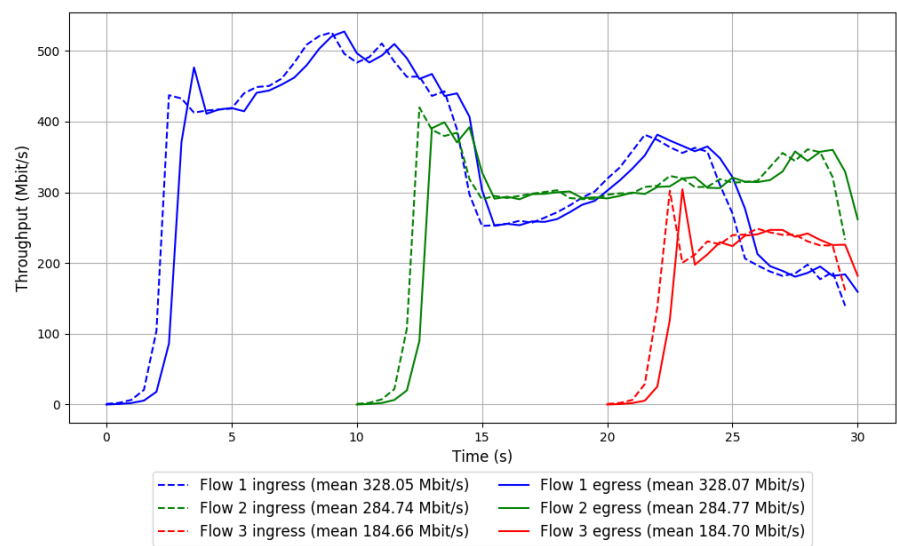


Run 3: Statistics of PCC-Vivace

Start at: 2018-06-01 11:07:45  
End at: 2018-06-01 11:08:15  
Local clock offset: -0.043 ms  
Remote clock offset: 18.704 ms

# Below is generated by plot.py at 2018-06-01 16:09:34  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 578.38 Mbit/s  
95th percentile per-packet one-way delay: 54.801 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 328.07 Mbit/s  
95th percentile per-packet one-way delay: 55.244 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 284.77 Mbit/s  
95th percentile per-packet one-way delay: 54.459 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 184.70 Mbit/s  
95th percentile per-packet one-way delay: 54.556 ms  
Loss rate: 0.04%

Run 3: Report of PCC-Vivace — Data Link

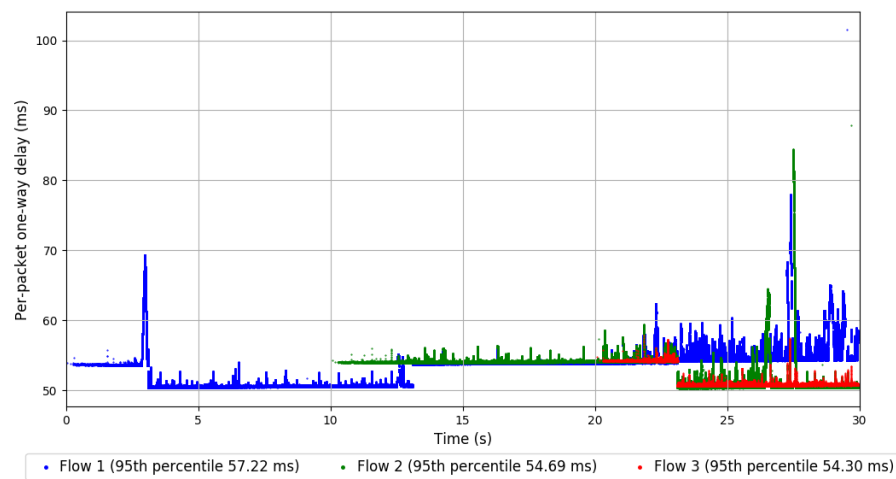
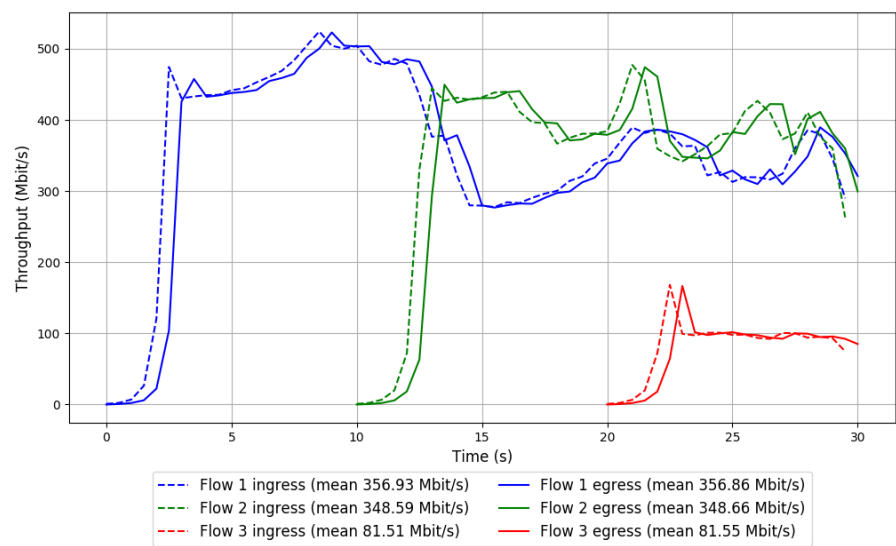


Run 4: Statistics of PCC-Vivace

Start at: 2018-06-01 11:30:27  
End at: 2018-06-01 11:30:57  
Local clock offset: -0.3 ms  
Remote clock offset: 14.985 ms

# Below is generated by plot.py at 2018-06-01 16:09:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 615.63 Mbit/s  
95th percentile per-packet one-way delay: 56.254 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 356.86 Mbit/s  
95th percentile per-packet one-way delay: 57.224 ms  
Loss rate: 0.03%  
-- Flow 2:  
Average throughput: 348.66 Mbit/s  
95th percentile per-packet one-way delay: 54.689 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 81.55 Mbit/s  
95th percentile per-packet one-way delay: 54.301 ms  
Loss rate: 0.00%

Run 4: Report of PCC-Vivace — Data Link



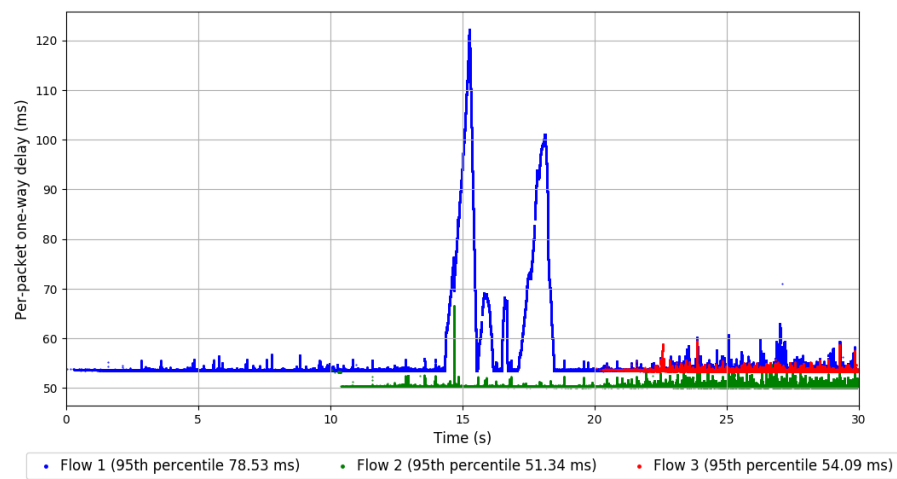
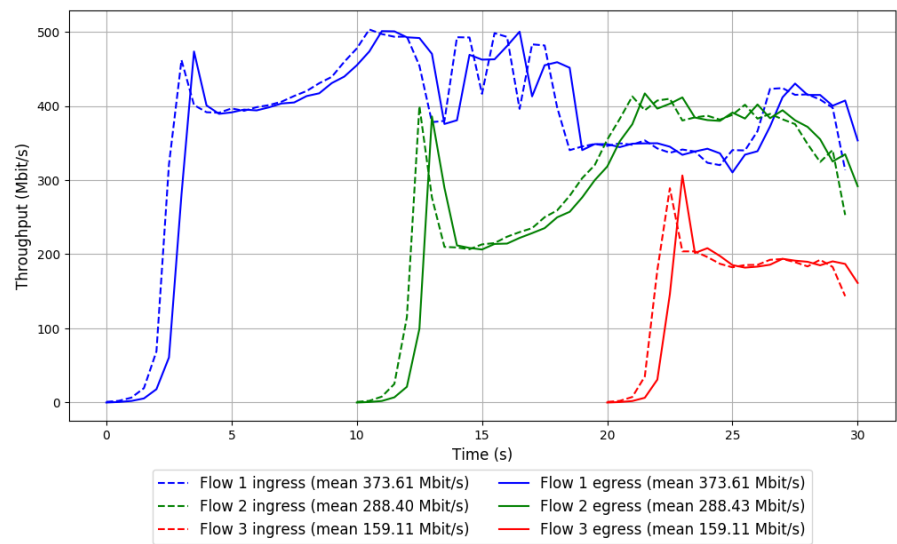
Run 5: Statistics of PCC-Vivace

Start at: 2018-06-01 11:53:29  
End at: 2018-06-01 11:53:59  
Local clock offset: -0.246 ms  
Remote clock offset: 14.196 ms

# Below is generated by plot.py at 2018-06-01 16:10:48  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 617.85 Mbit/s  
95th percentile per-packet one-way delay: 68.100 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 373.61 Mbit/s  
95th percentile per-packet one-way delay: 78.529 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 288.43 Mbit/s  
95th percentile per-packet one-way delay: 51.344 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 159.11 Mbit/s  
95th percentile per-packet one-way delay: 54.086 ms  
Loss rate: 0.02%



Run 5: Report of PCC-Vivace — Data Link



Run 6: Statistics of PCC-Vivace

Start at: 2018-06-01 12:16:53

End at: 2018-06-01 12:17:23

Local clock offset: -0.222 ms

Remote clock offset: 5.462 ms

# Below is generated by plot.py at 2018-06-01 16:12:23

# Datalink statistics

-- Total of 3 flows:

Average throughput: 548.20 Mbit/s

95th percentile per-packet one-way delay: 54.061 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 330.72 Mbit/s

95th percentile per-packet one-way delay: 53.998 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 272.48 Mbit/s

95th percentile per-packet one-way delay: 54.323 ms

Loss rate: 0.00%

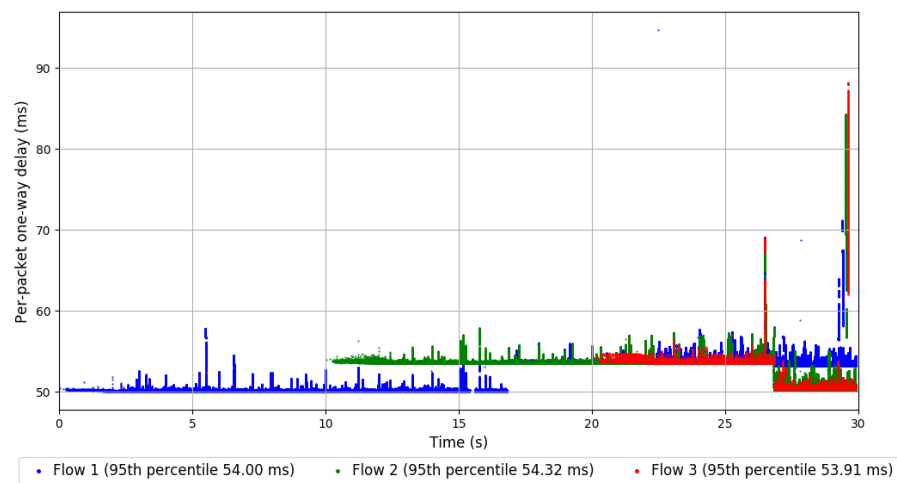
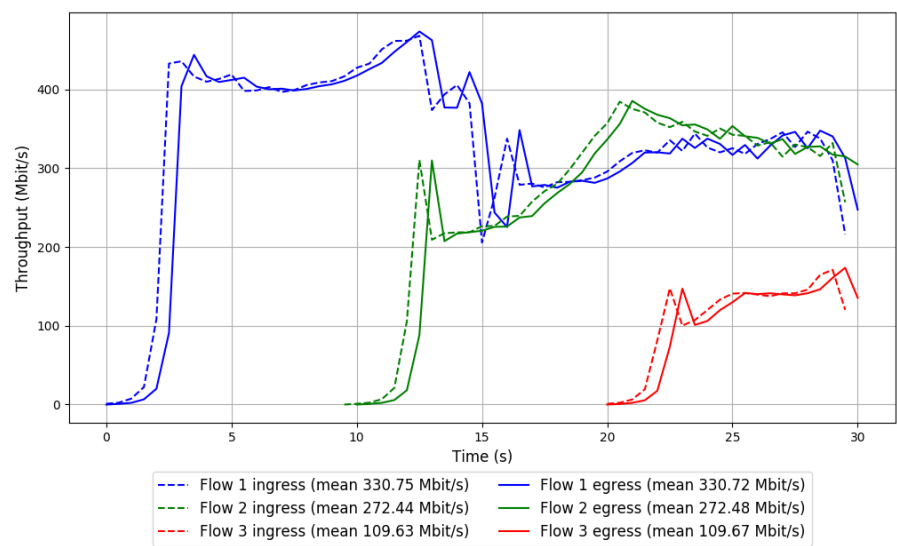
-- Flow 3:

Average throughput: 109.67 Mbit/s

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

Loss rate: 0.00%

Run 6: Report of PCC-Vivace — Data Link



Run 7: Statistics of PCC-Vivace

Start at: 2018-06-01 12:39:40

End at: 2018-06-01 12:40:10

Local clock offset: -0.006 ms

Remote clock offset: 3.525 ms

# Below is generated by plot.py at 2018-06-01 16:12:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 581.90 Mbit/s

95th percentile per-packet one-way delay: 59.152 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 352.93 Mbit/s

95th percentile per-packet one-way delay: 58.347 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 295.41 Mbit/s

95th percentile per-packet one-way delay: 59.915 ms

Loss rate: 0.03%

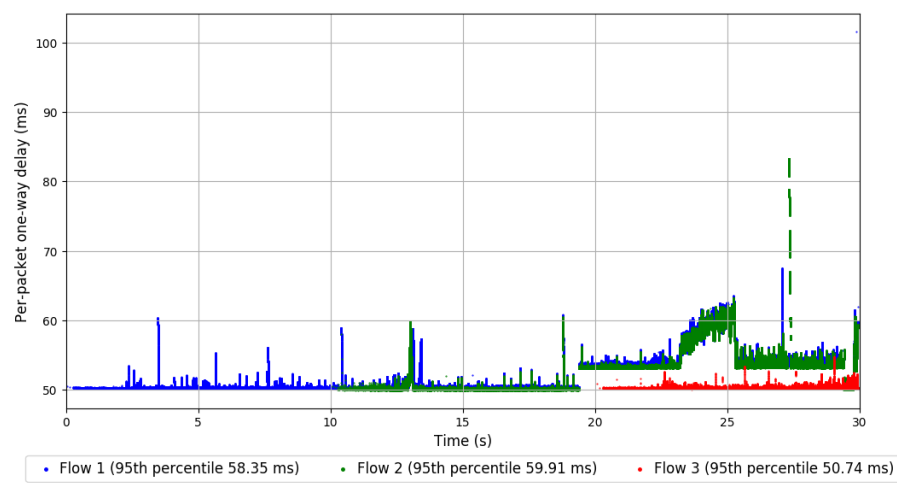
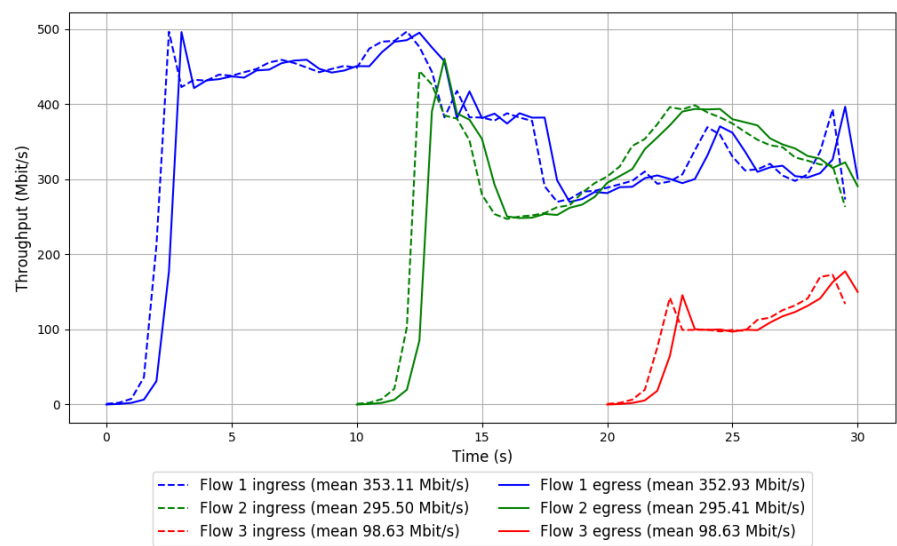
-- Flow 3:

Average throughput: 98.63 Mbit/s

95th percentile per-packet one-way delay: 50.745 ms

Loss rate: 0.00%

Run 7: Report of PCC-Vivace — Data Link



Run 8: Statistics of PCC-Vivace

Start at: 2018-06-01 13:02:14

End at: 2018-06-01 13:02:44

Local clock offset: -0.349 ms

Remote clock offset: 3.414 ms

# Below is generated by plot.py at 2018-06-01 16:13:13

# Datalink statistics

-- Total of 3 flows:

Average throughput: 578.50 Mbit/s

95th percentile per-packet one-way delay: 54.629 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 349.35 Mbit/s

95th percentile per-packet one-way delay: 53.978 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 265.68 Mbit/s

95th percentile per-packet one-way delay: 54.923 ms

Loss rate: 0.01%

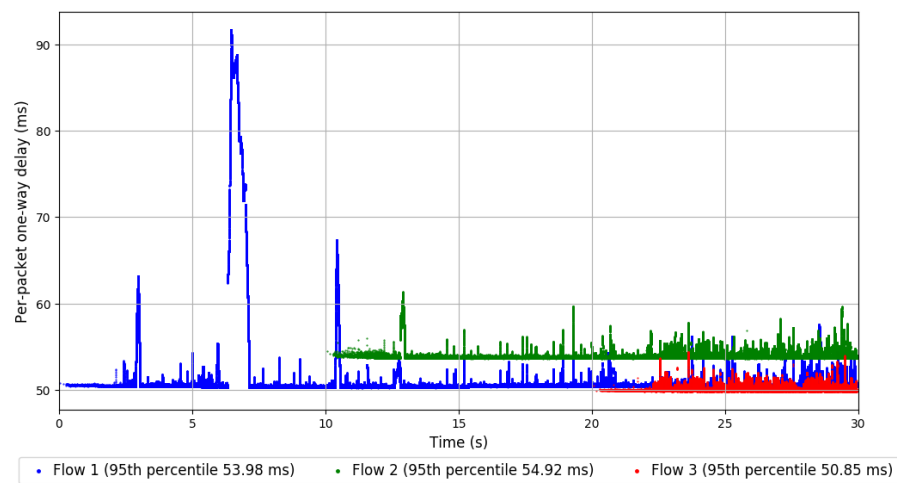
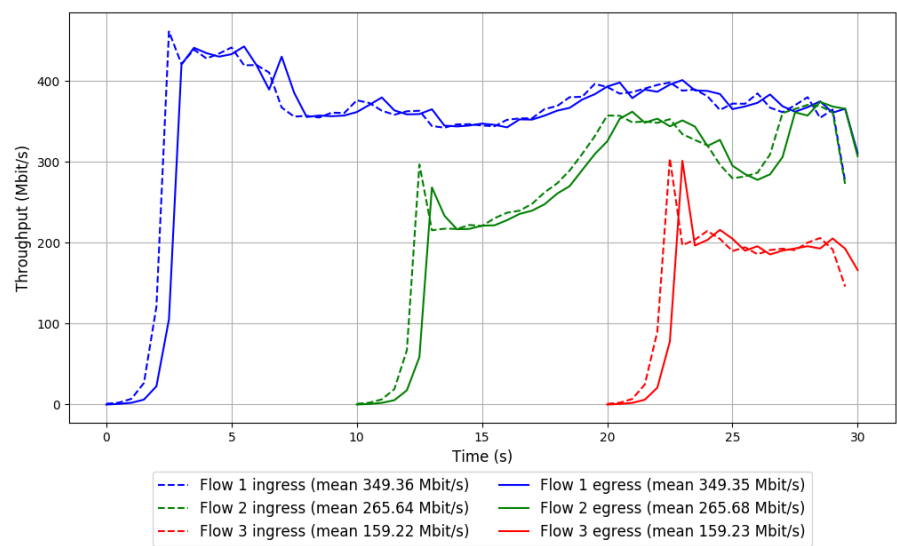
-- Flow 3:

Average throughput: 159.23 Mbit/s

95th percentile per-packet one-way delay: 50.855 ms

Loss rate: 0.01%

Run 8: Report of PCC-Vivace — Data Link



Run 9: Statistics of PCC-Vivace

Start at: 2018-06-01 13:25:02

End at: 2018-06-01 13:25:32

Local clock offset: -0.144 ms

Remote clock offset: 0.48 ms

# Below is generated by plot.py at 2018-06-01 16:13:53

# Datalink statistics

-- Total of 3 flows:

Average throughput: 557.04 Mbit/s

95th percentile per-packet one-way delay: 53.485 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 355.02 Mbit/s

95th percentile per-packet one-way delay: 62.706 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 289.89 Mbit/s

95th percentile per-packet one-way delay: 53.079 ms

Loss rate: 0.00%

-- Flow 3:

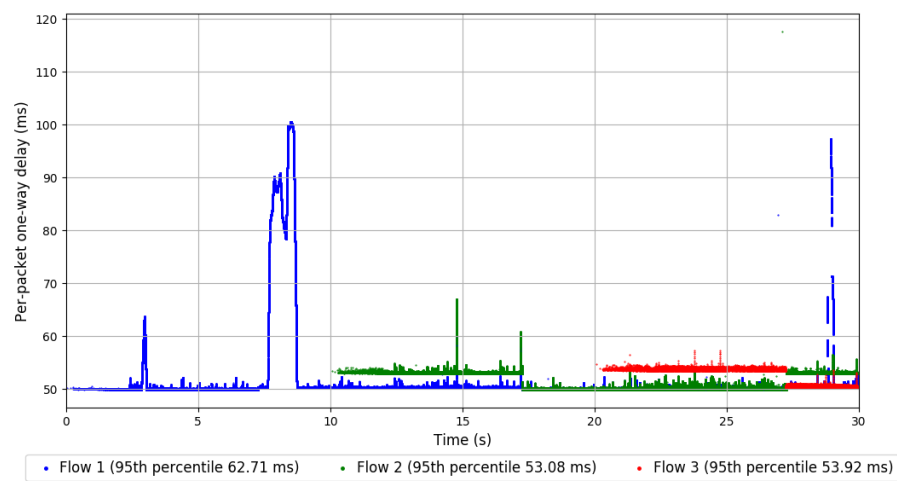
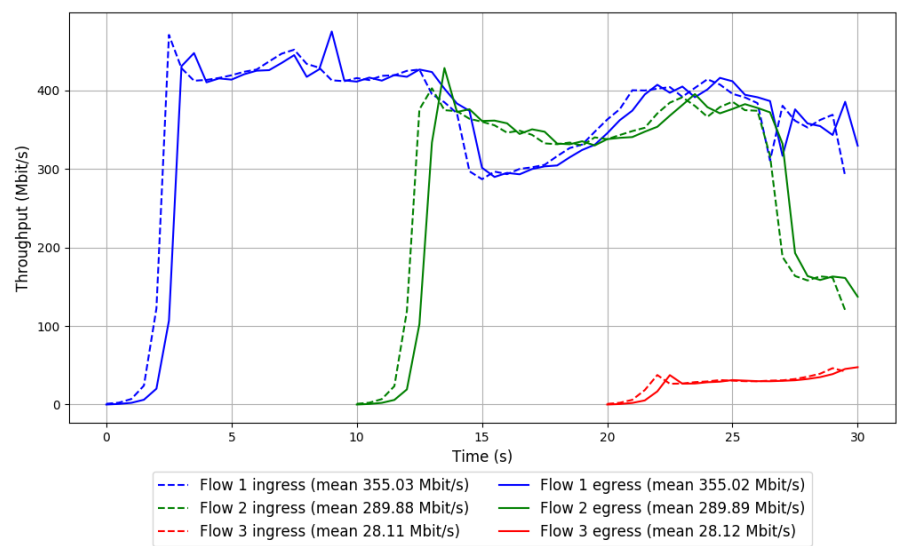
Average throughput: 28.12 Mbit/s

95th percentile per-packet one-way delay: 53.924 ms

Loss rate: 0.00%



Run 9: Report of PCC-Vivace — Data Link



Run 10: Statistics of PCC-Vivace

Start at: 2018-06-01 13:47:40

End at: 2018-06-01 13:48:10

Local clock offset: -0.01 ms

Remote clock offset: 0.365 ms

# Below is generated by plot.py at 2018-06-01 16:13:53

# Datalink statistics

-- Total of 3 flows:

Average throughput: 466.35 Mbit/s

95th percentile per-packet one-way delay: 143.558 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 234.98 Mbit/s

95th percentile per-packet one-way delay: 184.086 ms

Loss rate: 1.25%

-- Flow 2:

Average throughput: 207.71 Mbit/s

95th percentile per-packet one-way delay: 53.575 ms

Loss rate: 0.01%

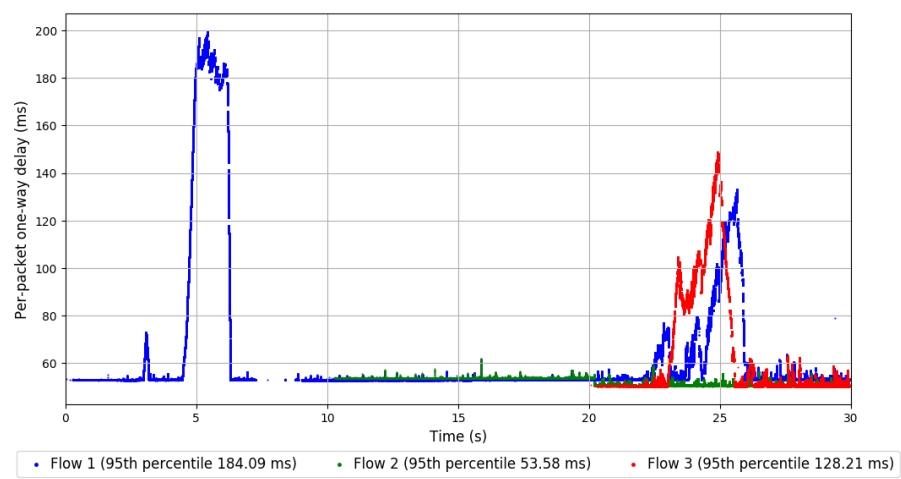
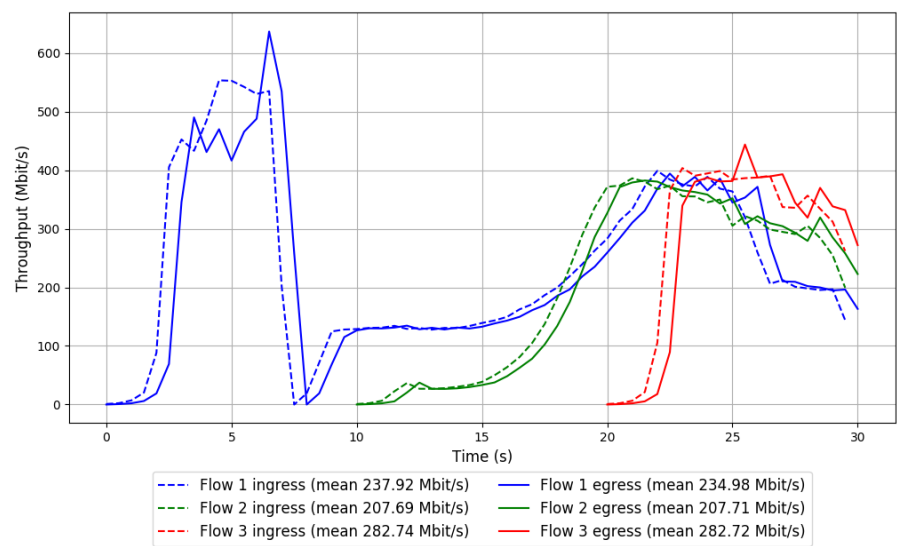
-- Flow 3:

Average throughput: 282.72 Mbit/s

95th percentile per-packet one-way delay: 128.211 ms

Loss rate: 0.02%

Run 10: Report of PCC-Vivace — Data Link

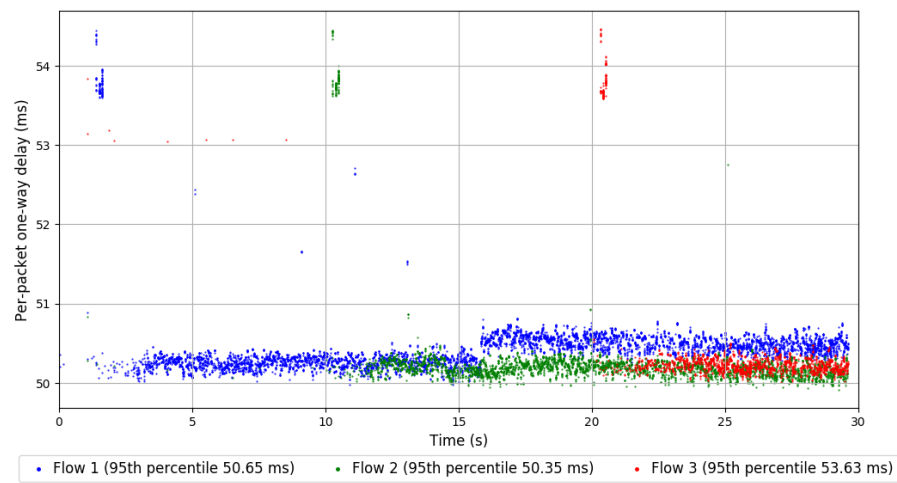
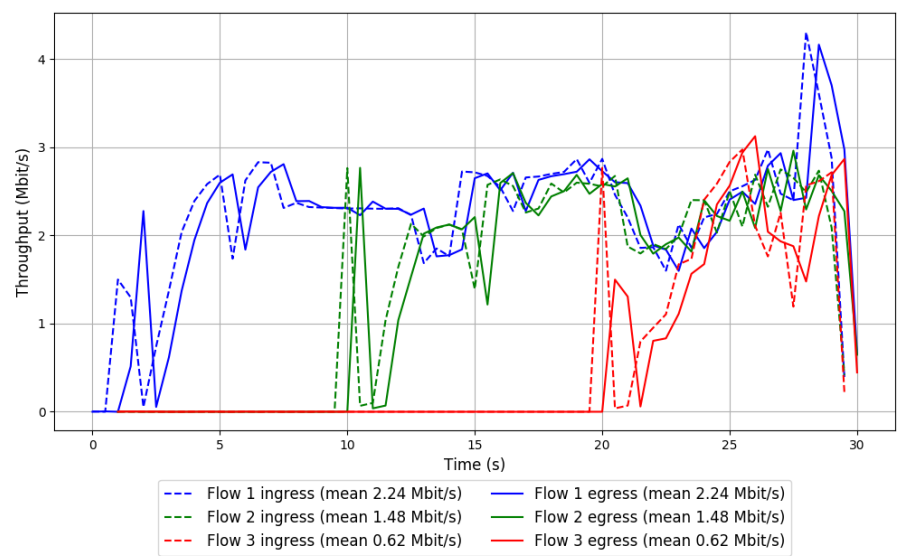


```
Run 1: Statistics of WebRTC media

Start at: 2018-06-01 10:09:44
End at: 2018-06-01 10:10:14
Local clock offset: -0.144 ms
Remote clock offset: -0.032 ms

# Below is generated by plot.py at 2018-06-01 16:13:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.26 Mbit/s
95th percentile per-packet one-way delay: 50.634 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 50.646 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 50.352 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 53.633 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-06-01 10:32:10

End at: 2018-06-01 10:32:40

Local clock offset: -0.538 ms

Remote clock offset: 0.113 ms

# Below is generated by plot.py at 2018-06-01 16:13:53

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.91 Mbit/s

95th percentile per-packet one-way delay: 53.882 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 53.881 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 53.882 ms

Loss rate: 0.00%

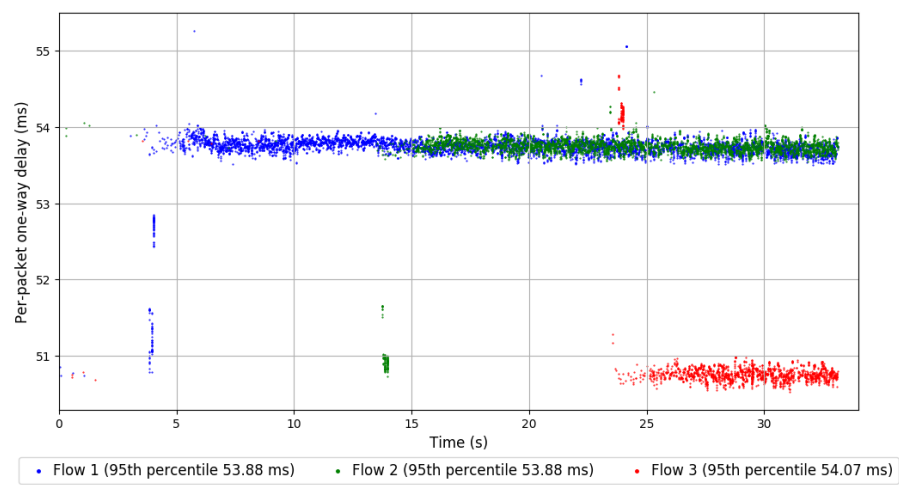
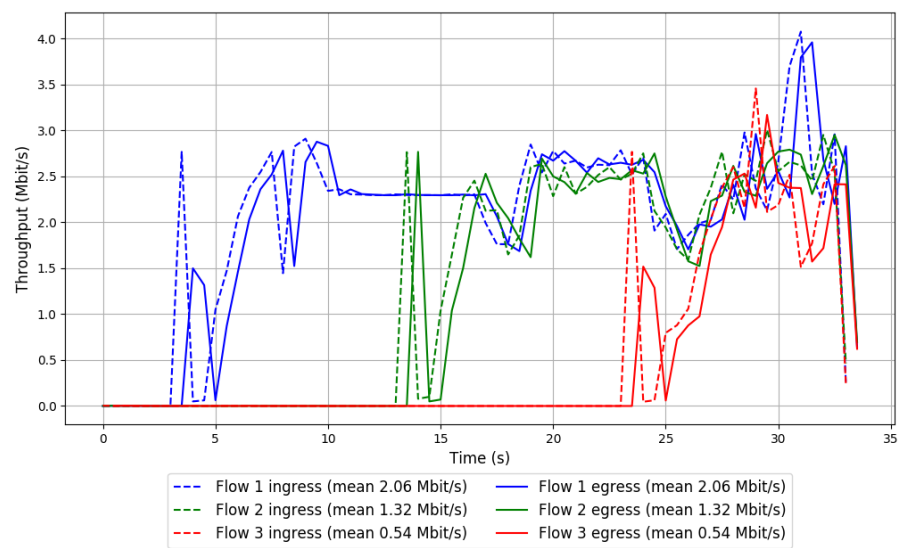
-- Flow 3:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 54.071 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



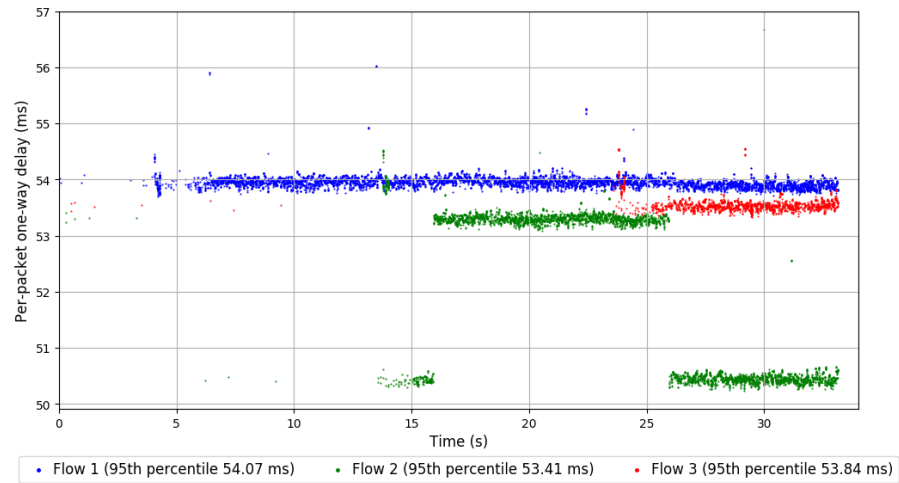
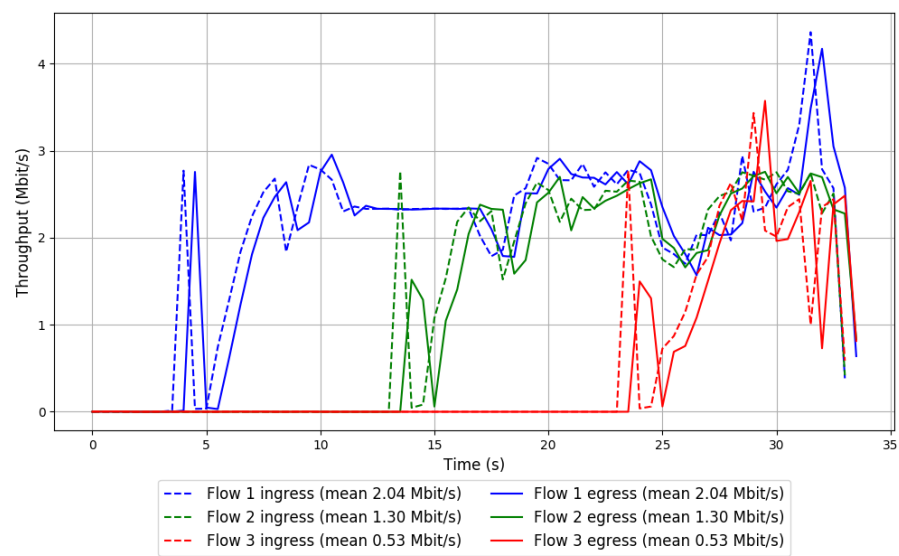
Run 3: Statistics of WebRTC media

Start at: 2018-06-01 10:54:47  
End at: 2018-06-01 10:55:17  
Local clock offset: -0.05 ms  
Remote clock offset: 13.902 ms

# Below is generated by plot.py at 2018-06-01 16:13:53  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.86 Mbit/s  
95th percentile per-packet one-way delay: 54.047 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 2.04 Mbit/s  
95th percentile per-packet one-way delay: 54.073 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.30 Mbit/s  
95th percentile per-packet one-way delay: 53.409 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.53 Mbit/s  
95th percentile per-packet one-way delay: 53.836 ms  
Loss rate: 0.00%



Run 3: Report of WebRTC media — Data Link

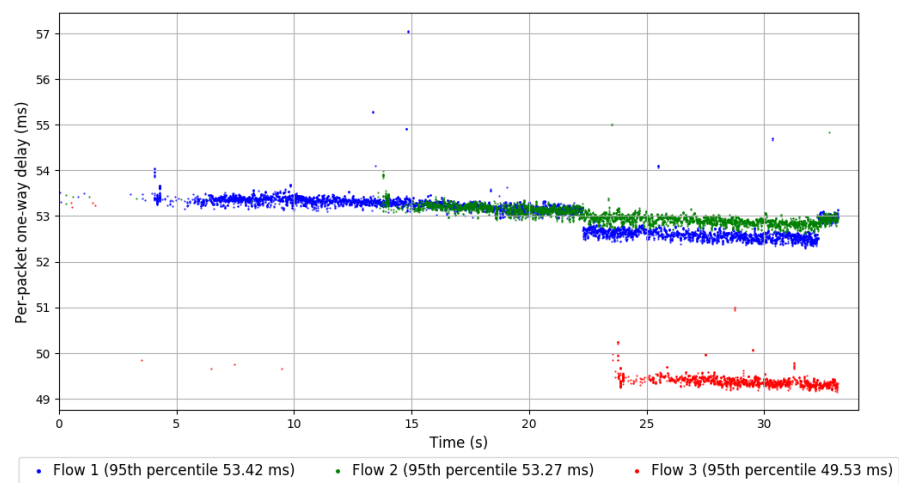
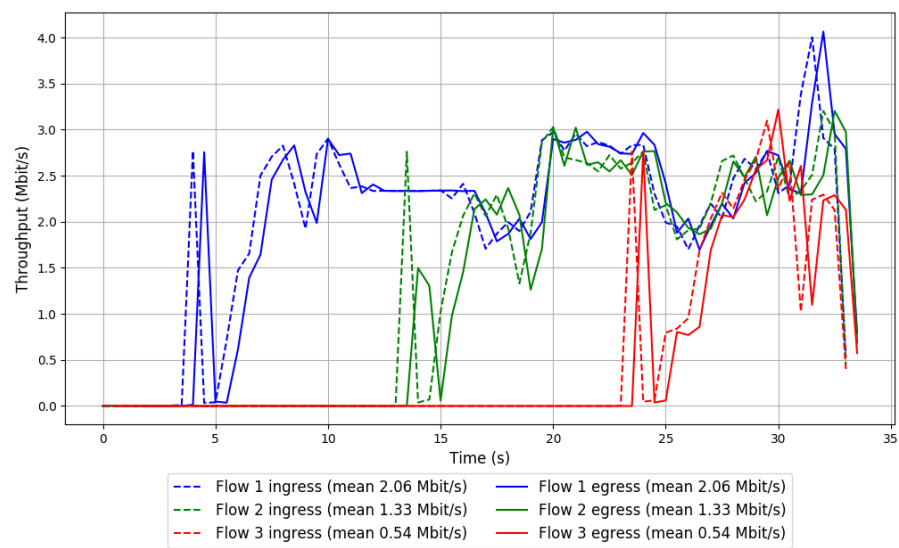


Run 4: Statistics of WebRTC media

Start at: 2018-06-01 11:17:31  
End at: 2018-06-01 11:18:01  
Local clock offset: 0.14 ms  
Remote clock offset: 26.102 ms

# Below is generated by plot.py at 2018-06-01 16:13:53  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.91 Mbit/s  
95th percentile per-packet one-way delay: 53.396 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 2.06 Mbit/s  
95th percentile per-packet one-way delay: 53.424 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.33 Mbit/s  
95th percentile per-packet one-way delay: 53.274 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.54 Mbit/s  
95th percentile per-packet one-way delay: 49.534 ms  
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-06-01 11:40:21

End at: 2018-06-01 11:40:51

Local clock offset: -0.384 ms

Remote clock offset: 11.55 ms

# Below is generated by plot.py at 2018-06-01 16:13:53

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 54.371 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.04 Mbit/s

95th percentile per-packet one-way delay: 54.397 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 54.240 ms

Loss rate: 0.00%

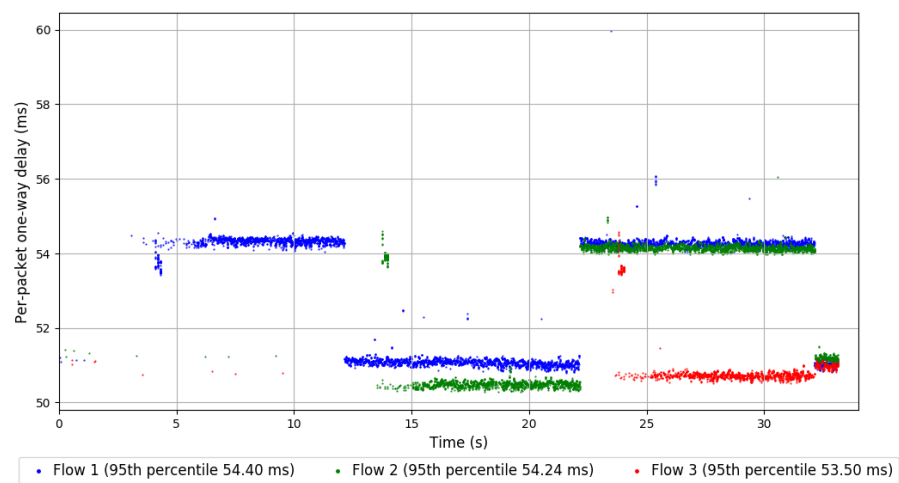
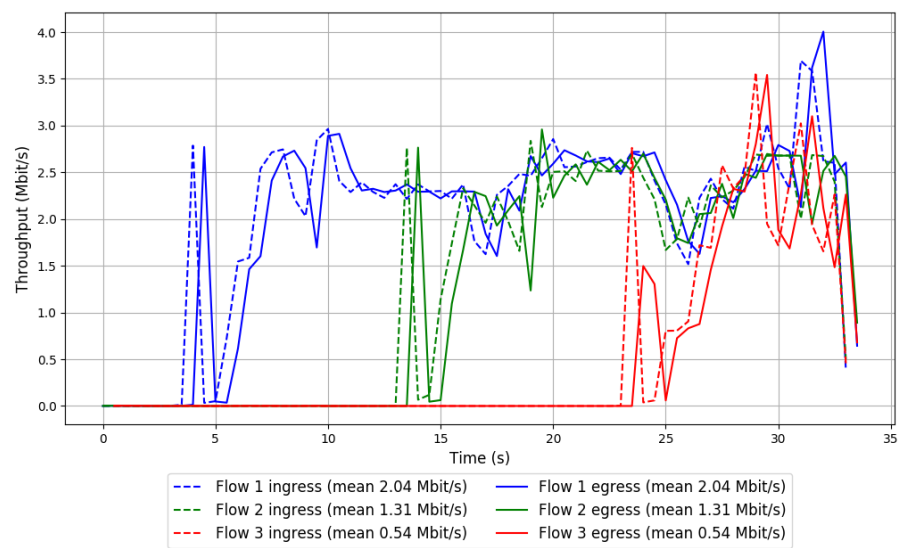
-- Flow 3:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 53.502 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-06-01 12:03:28

End at: 2018-06-01 12:03:58

Local clock offset: 0.022 ms

Remote clock offset: 8.491 ms

# Below is generated by plot.py at 2018-06-01 16:13:53

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.86 Mbit/s

95th percentile per-packet one-way delay: 54.028 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 54.054 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 53.905 ms

Loss rate: 0.00%

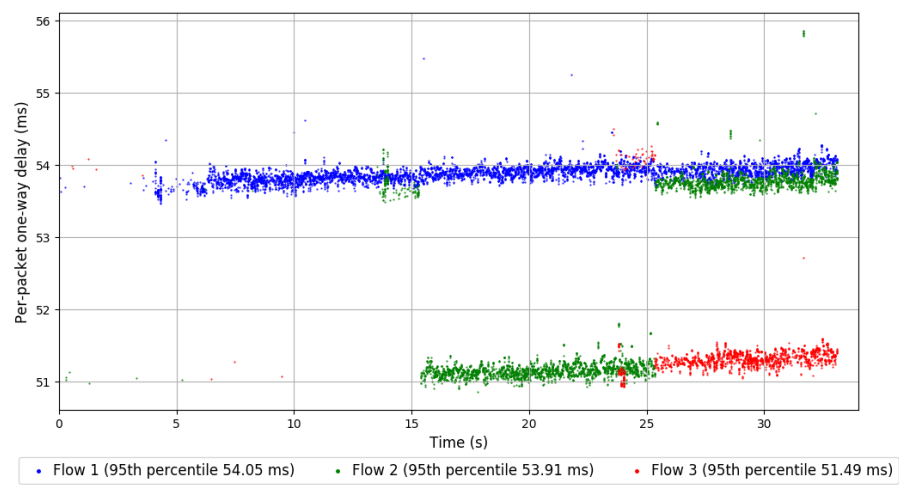
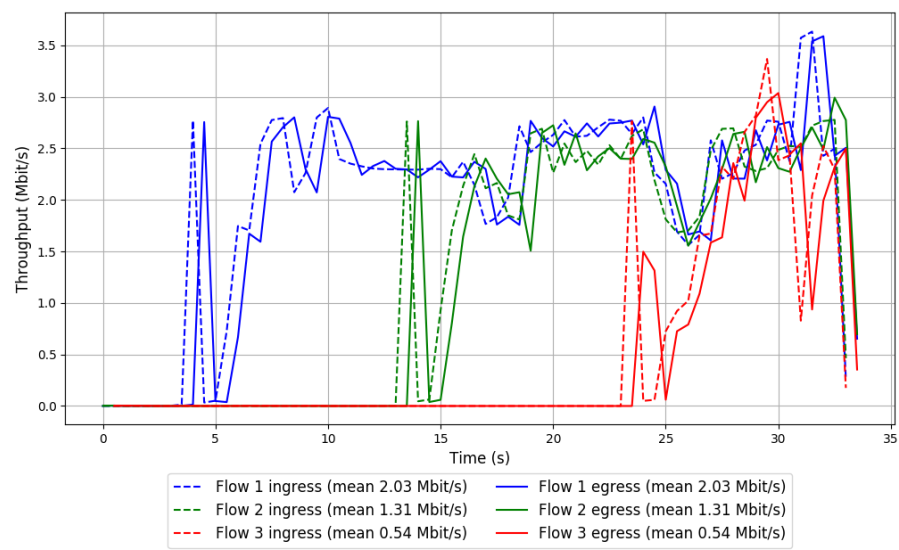
-- Flow 3:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 51.494 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



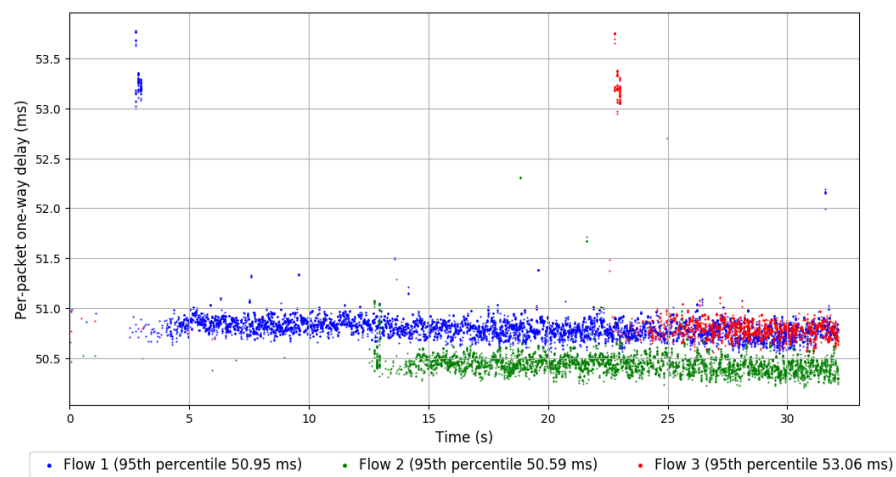
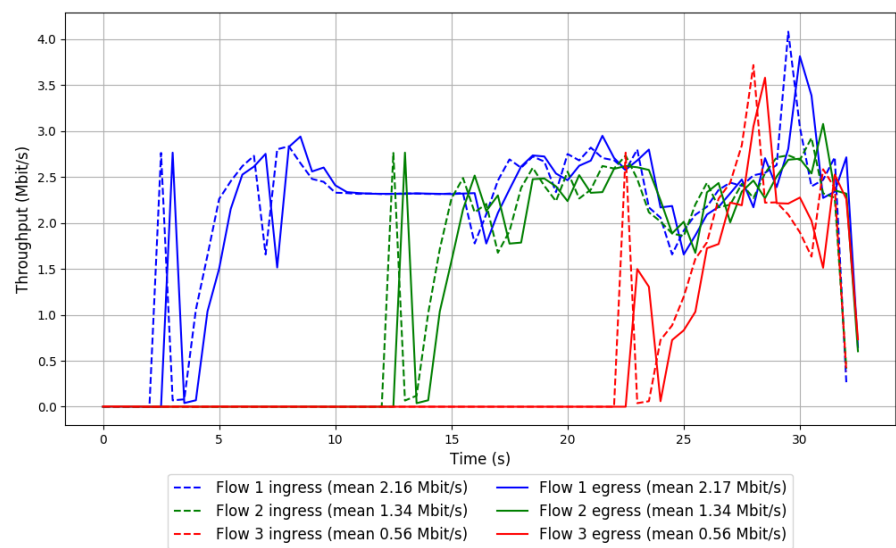
Run 7: Statistics of WebRTC media

Start at: 2018-06-01 12:26:51  
End at: 2018-06-01 12:27:22  
Local clock offset: -0.164 ms  
Remote clock offset: 6.572 ms

# Below is generated by plot.py at 2018-06-01 16:13:53  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 4.06 Mbit/s  
95th percentile per-packet one-way delay: 50.936 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 2.17 Mbit/s  
95th percentile per-packet one-way delay: 50.952 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.34 Mbit/s  
95th percentile per-packet one-way delay: 50.592 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.56 Mbit/s  
95th percentile per-packet one-way delay: 53.064 ms  
Loss rate: 0.00%



Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-06-01 12:49:31

End at: 2018-06-01 12:50:01

Local clock offset: -0.411 ms

Remote clock offset: 3.12 ms

# Below is generated by plot.py at 2018-06-01 16:13:53

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 54.611 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.04 Mbit/s

95th percentile per-packet one-way delay: 54.641 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 53.898 ms

Loss rate: 0.00%

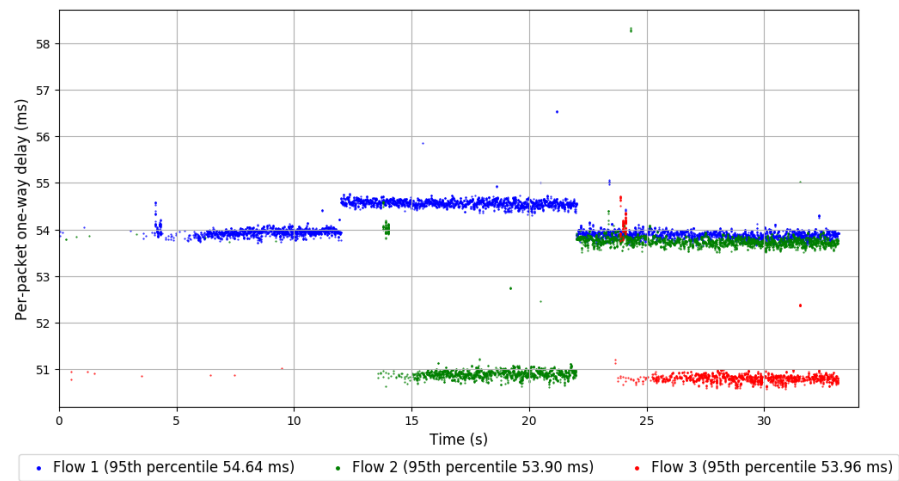
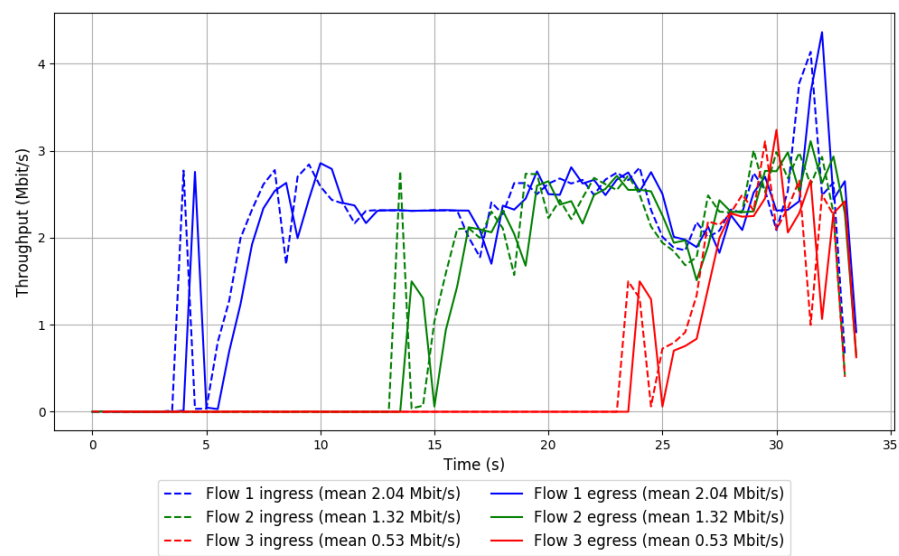
-- Flow 3:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 53.964 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-06-01 13:12:05

End at: 2018-06-01 13:12:35

Local clock offset: -0.082 ms

Remote clock offset: 1.34 ms

# Below is generated by plot.py at 2018-06-01 16:13:53

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 53.297 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 53.217 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 53.390 ms

Loss rate: 0.00%

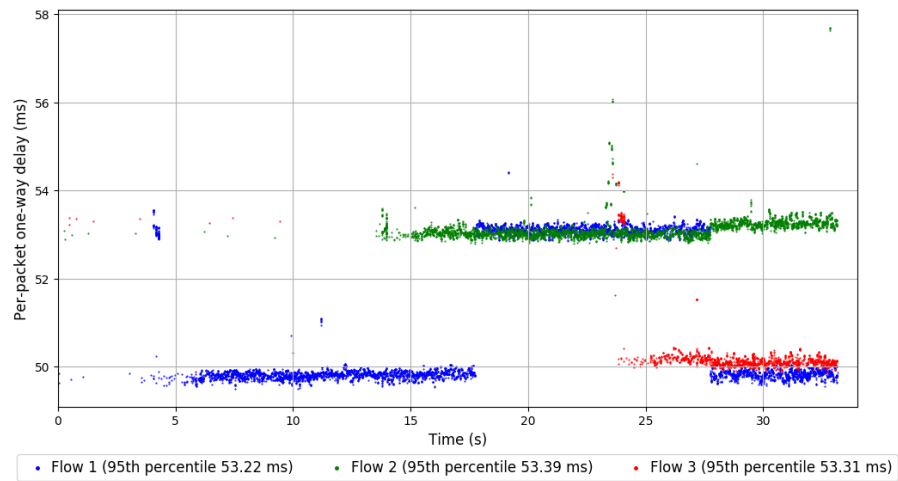
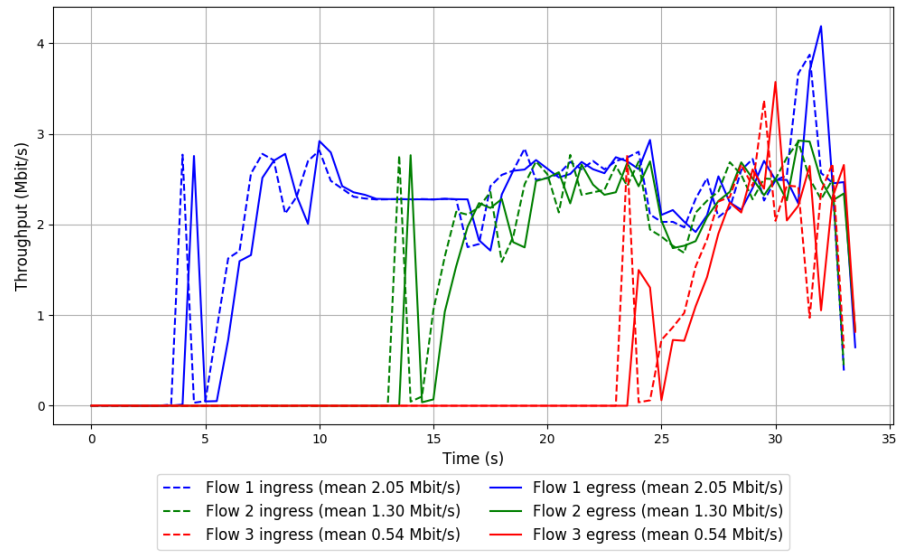
-- Flow 3:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 53.310 ms

Loss rate: 0.00%

### Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-06-01 13:34:51

End at: 2018-06-01 13:35:21

Local clock offset: -0.191 ms

Remote clock offset: 0.597 ms

# Below is generated by plot.py at 2018-06-01 16:13:53

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.83 Mbit/s

95th percentile per-packet one-way delay: 53.512 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.04 Mbit/s

95th percentile per-packet one-way delay: 50.686 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 53.556 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 53.537 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

