

## Pantheon Report

Generated at 2018-06-20 16:27:18 (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.

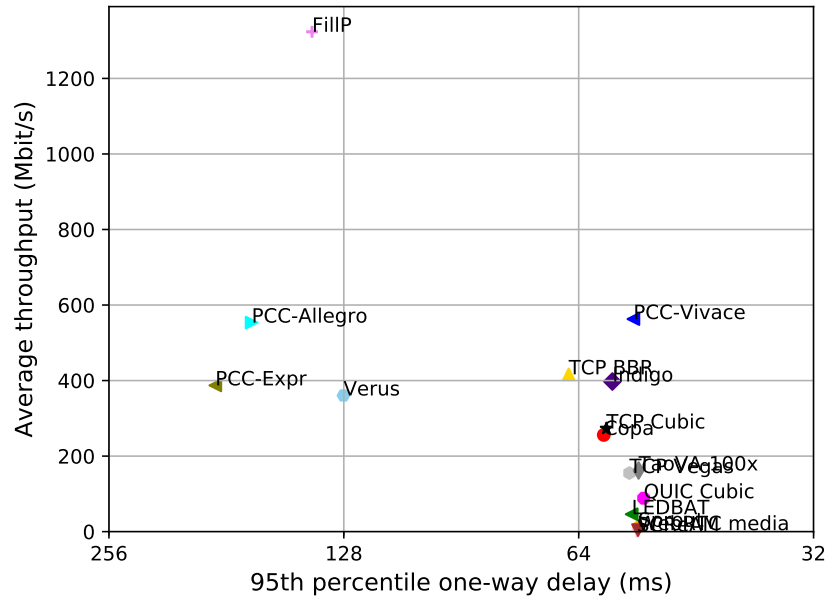
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

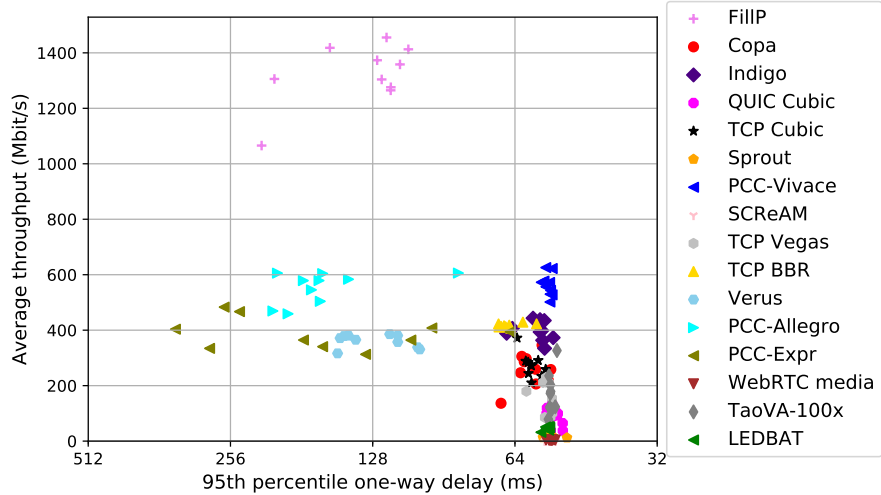
Git summary:

```
branch: master @ 9141c5f9450c85ea5ea2ea755a8e946998d3abf3
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-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
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	211.98	208.19	198.07	64.80	65.87	67.48	0.03	0.04	0.09
Copa	10	160.38	90.02	112.14	57.10	57.03	60.33	0.00	0.01	0.01
TCP Cubic	10	167.83	119.17	78.24	59.21	57.99	57.76	0.01	0.04	0.09
FillP	10	705.52	653.08	553.10	142.95	123.42	85.77	1.30	1.06	0.38
Indigo	10	205.17	207.27	169.11	57.34	58.01	59.26	0.01	0.02	0.04
LEDBAT	10	28.42	21.24	10.81	54.80	54.40	53.24	0.00	0.00	0.01
PCC-Allegro	10	472.19	92.30	60.37	168.25	164.19	158.48	2.69	2.80	3.67
PCC-Expr	10	268.38	157.14	43.42	192.79	149.25	110.00	6.54	3.19	3.24
QUIC Cubic	10	46.31	49.31	28.78	52.84	52.49	52.78	0.00	0.01	0.01
SCReAM	10	0.21	0.21	0.22	52.85	52.50	53.50	0.00	0.00	0.11
Sprout	10	6.54	6.90	5.28	53.66	53.65	53.90	0.00	0.01	0.01
TaoVA-100x	10	129.81	96.30	121.25	53.16	53.64	54.00	0.00	0.01	0.01
TCP Vegas	10	67.75	99.70	63.18	54.76	55.02	54.82	0.00	0.01	0.04
Verus	10	216.23	160.53	115.62	119.18	130.58	128.95	0.21	0.29	0.90
PCC-Vivace	10	345.23	273.25	108.85	53.78	53.89	53.37	0.00	0.00	0.03
WebRTC media	10	2.06	1.33	0.54	53.10	52.81	53.69	0.02	0.00	0.02

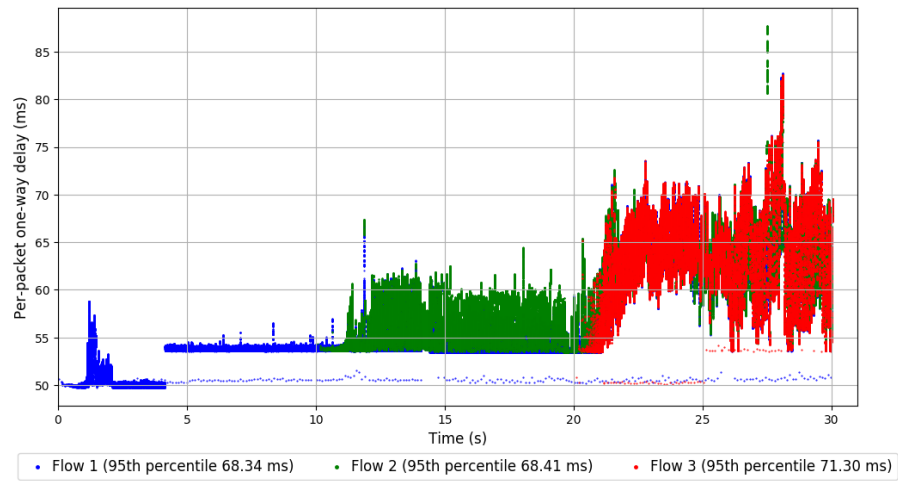
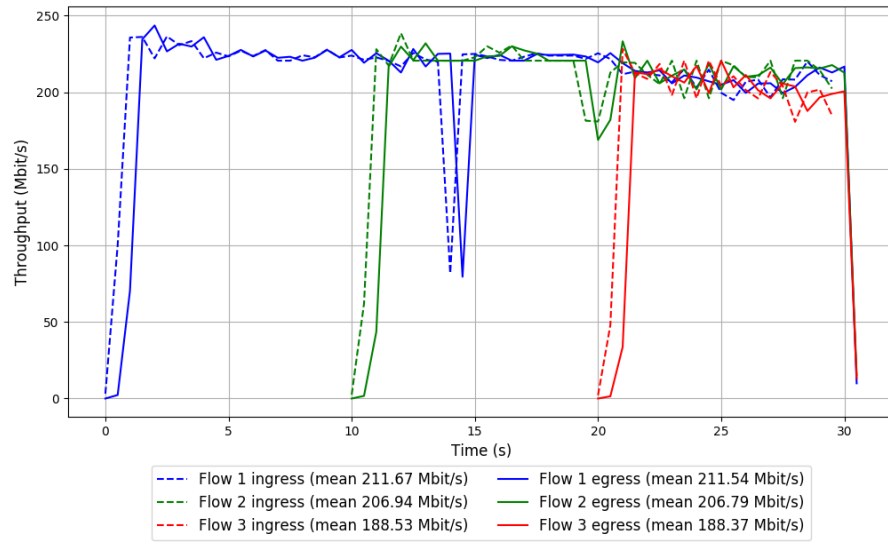
Run 1: Statistics of TCP BBR

Start at: 2018-06-20 10:25:35  
End at: 2018-06-20 10:26:05  
Local clock offset: -0.223 ms  
Remote clock offset: -0.238 ms

# Below is generated by plot.py at 2018-06-20 14:22:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 411.69 Mbit/s  
95th percentile per-packet one-way delay: 69.166 ms  
Loss rate: 0.05%  
-- Flow 1:  
Average throughput: 211.54 Mbit/s  
95th percentile per-packet one-way delay: 68.336 ms  
Loss rate: 0.07%  
-- Flow 2:  
Average throughput: 206.79 Mbit/s  
95th percentile per-packet one-way delay: 68.411 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 188.37 Mbit/s  
95th percentile per-packet one-way delay: 71.295 ms  
Loss rate: 0.06%



# Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-06-20 10:48:26

End at: 2018-06-20 10:48:56

Local clock offset: -0.106 ms

Remote clock offset: -1.4 ms

# Below is generated by plot.py at 2018-06-20 14:22:28

# Datalink statistics

-- Total of 3 flows:

Average throughput: 422.78 Mbit/s

95th percentile per-packet one-way delay: 57.609 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 213.46 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 213.47 Mbit/s

95th percentile per-packet one-way delay: 57.652 ms

Loss rate: 0.05%

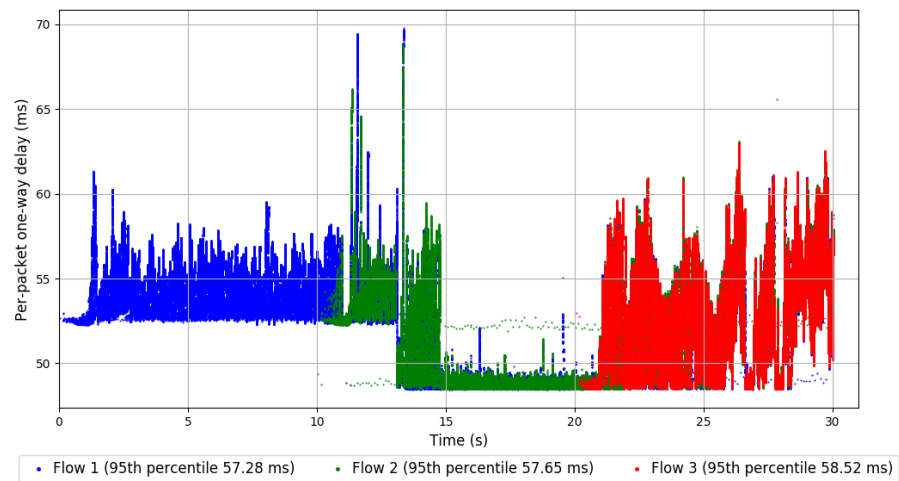
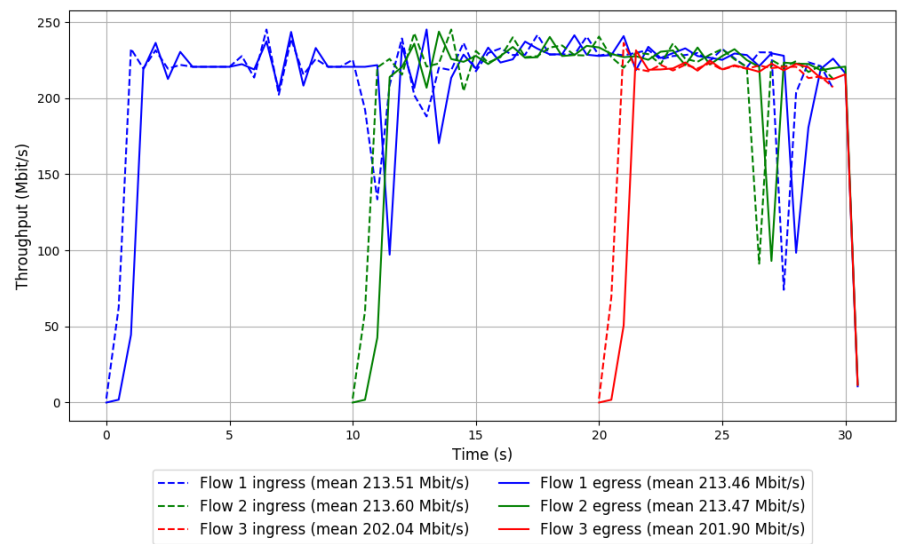
-- Flow 3:

Average throughput: 201.90 Mbit/s

95th percentile per-packet one-way delay: 58.516 ms

Loss rate: 0.11%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-06-20 11:11:11

End at: 2018-06-20 11:11:41

Local clock offset: 0.118 ms

Remote clock offset: 1.223 ms

# Below is generated by plot.py at 2018-06-20 14:22:28

# Datalink statistics

-- Total of 3 flows:

Average throughput: 415.92 Mbit/s

95th percentile per-packet one-way delay: 67.500 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 210.22 Mbit/s

95th percentile per-packet one-way delay: 66.624 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 206.91 Mbit/s

95th percentile per-packet one-way delay: 67.606 ms

Loss rate: 0.02%

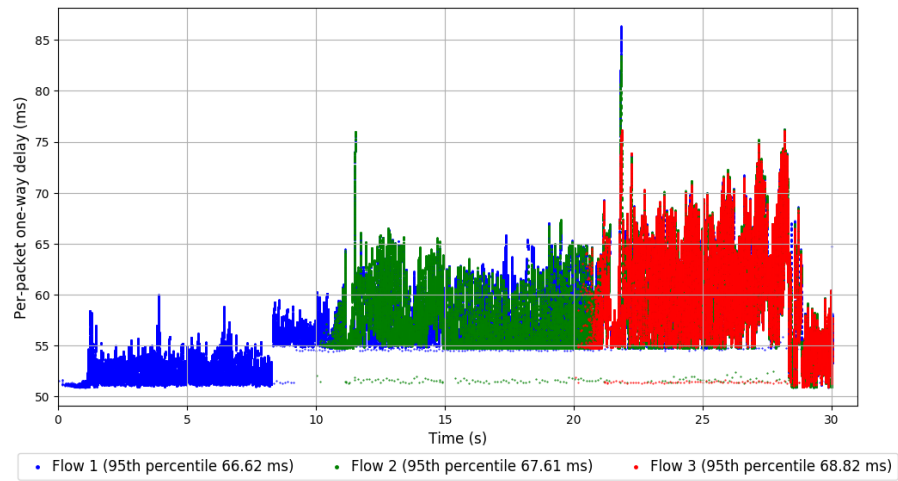
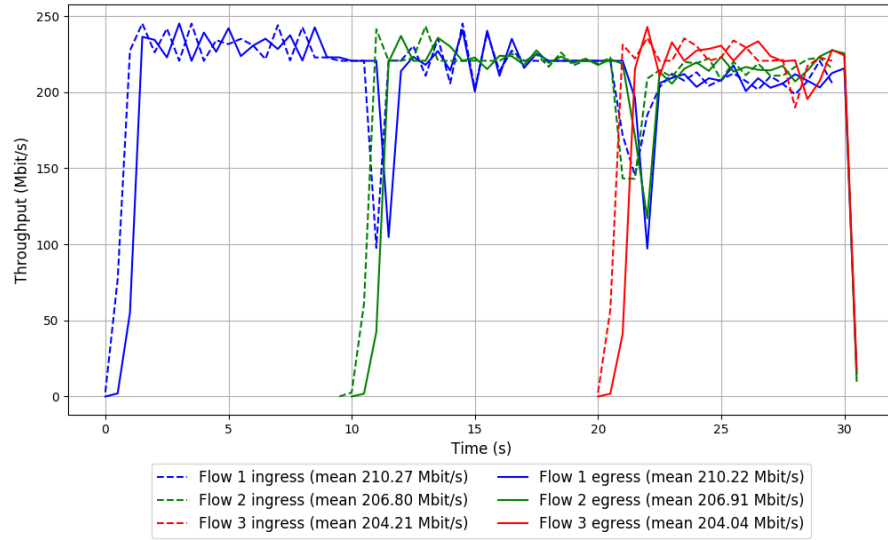
-- Flow 3:

Average throughput: 204.04 Mbit/s

95th percentile per-packet one-way delay: 68.819 ms

Loss rate: 0.08%

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

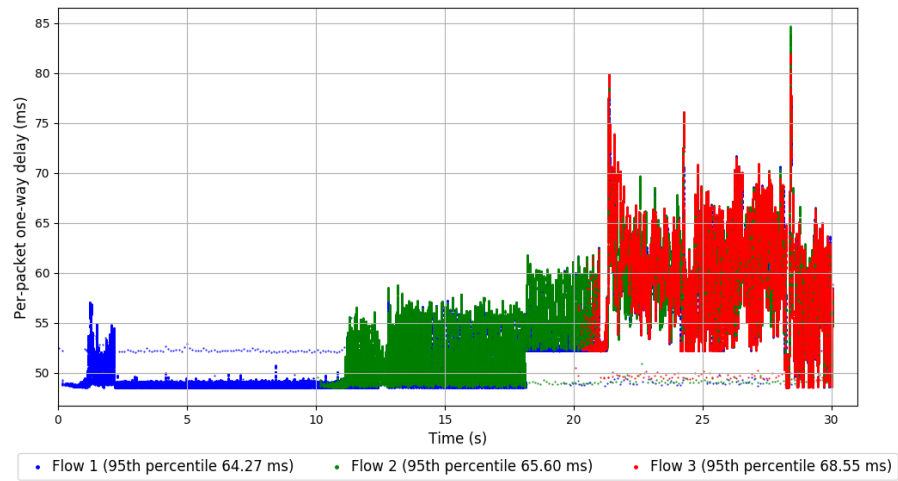
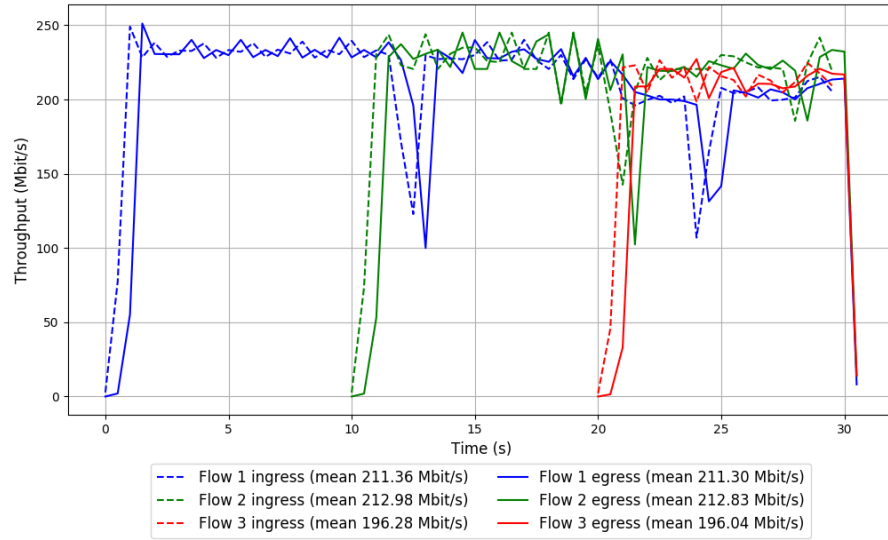


Run 4: Statistics of TCP BBR

Start at: 2018-06-20 11:34:01  
End at: 2018-06-20 11:34:31  
Local clock offset: 0.084 ms  
Remote clock offset: -1.243 ms

# Below is generated by plot.py at 2018-06-20 14:22:28  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 418.18 Mbit/s  
95th percentile per-packet one-way delay: 65.795 ms  
Loss rate: 0.06%  
-- Flow 1:  
Average throughput: 211.30 Mbit/s  
95th percentile per-packet one-way delay: 64.265 ms  
Loss rate: 0.04%  
-- Flow 2:  
Average throughput: 212.83 Mbit/s  
95th percentile per-packet one-way delay: 65.600 ms  
Loss rate: 0.07%  
-- Flow 3:  
Average throughput: 196.04 Mbit/s  
95th percentile per-packet one-way delay: 68.554 ms  
Loss rate: 0.13%

# Run 4: Report of TCP BBR — Data Link



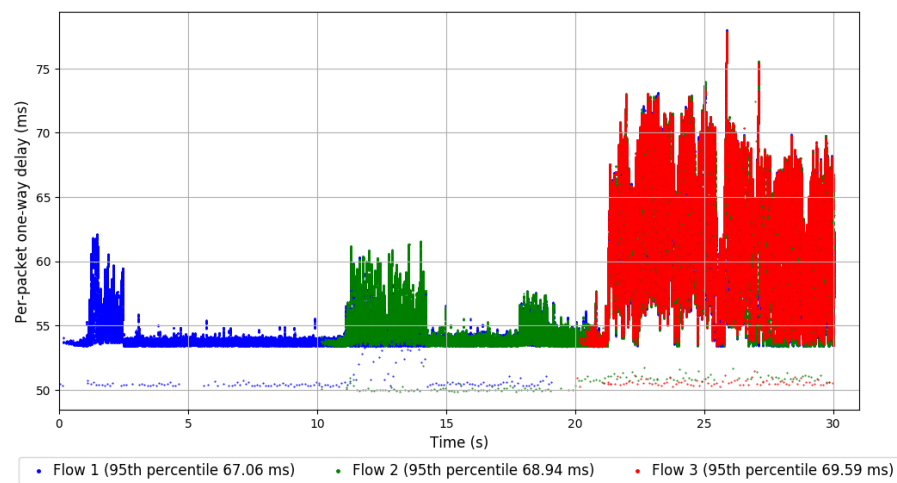
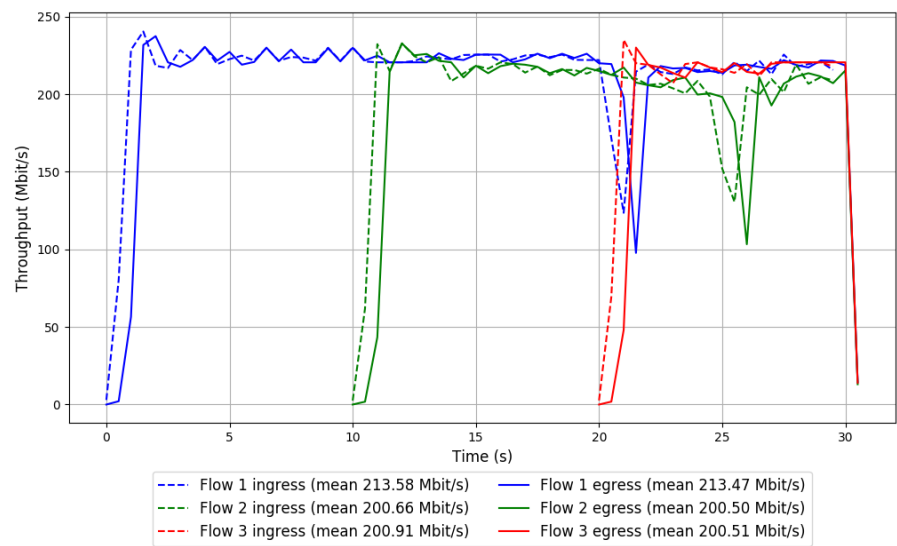
Run 5: Statistics of TCP BBR

Start at: 2018-06-20 11:57:00  
End at: 2018-06-20 11:57:30  
Local clock offset: -0.083 ms  
Remote clock offset: -0.323 ms

# Below is generated by plot.py at 2018-06-20 14:22:28  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 413.69 Mbit/s  
95th percentile per-packet one-way delay: 68.488 ms  
Loss rate: 0.08%  
-- Flow 1:  
Average throughput: 213.47 Mbit/s  
95th percentile per-packet one-way delay: 67.063 ms  
Loss rate: 0.05%  
-- Flow 2:  
Average throughput: 200.50 Mbit/s  
95th percentile per-packet one-way delay: 68.937 ms  
Loss rate: 0.08%  
-- Flow 3:  
Average throughput: 200.51 Mbit/s  
95th percentile per-packet one-way delay: 69.592 ms  
Loss rate: 0.20%



Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-06-20 12:20:02

End at: 2018-06-20 12:20:32

Local clock offset: 0.016 ms

Remote clock offset: 0.07 ms

# Below is generated by plot.py at 2018-06-20 14:22:28

# Datalink statistics

-- Total of 3 flows:

Average throughput: 422.65 Mbit/s

95th percentile per-packet one-way delay: 69.331 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 214.94 Mbit/s

95th percentile per-packet one-way delay: 67.741 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 214.39 Mbit/s

95th percentile per-packet one-way delay: 69.486 ms

Loss rate: 0.08%

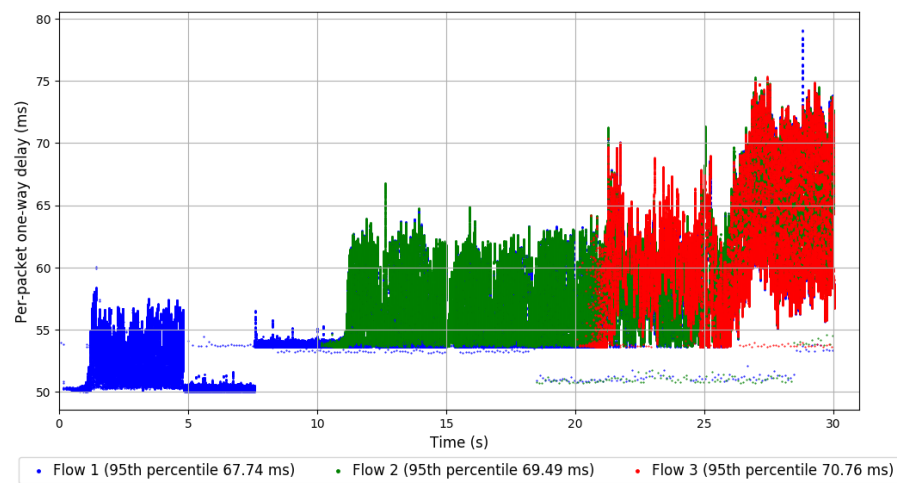
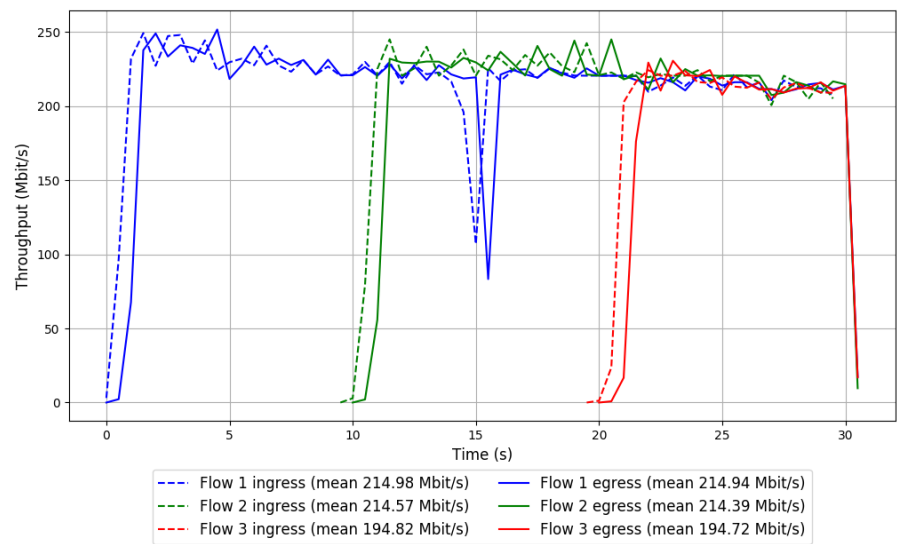
-- Flow 3:

Average throughput: 194.72 Mbit/s

95th percentile per-packet one-way delay: 70.760 ms

Loss rate: 0.07%

Run 6: Report of TCP BBR — Data Link

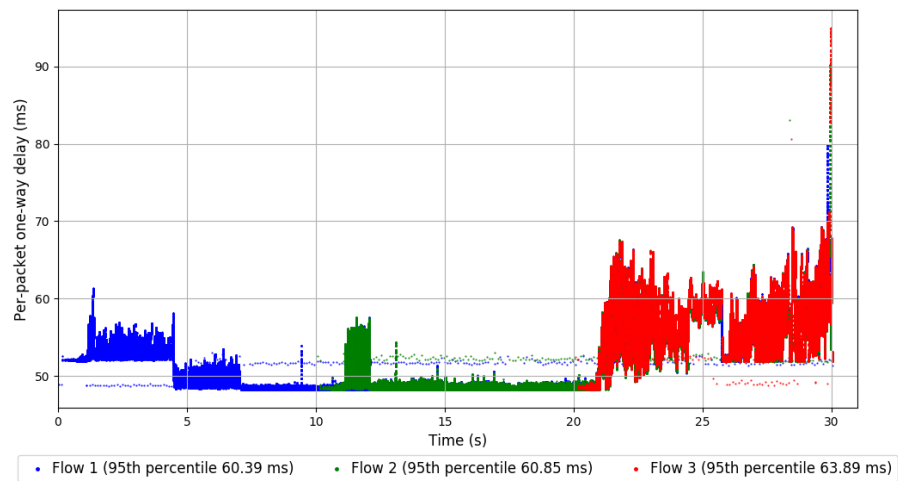
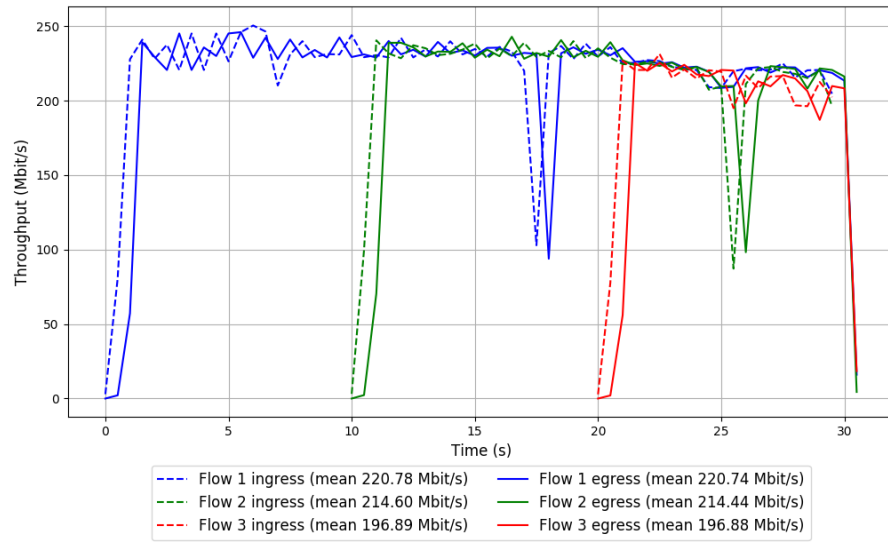


Run 7: Statistics of TCP BBR

Start at: 2018-06-20 12:42:55  
End at: 2018-06-20 12:43:25  
Local clock offset: 0.181 ms  
Remote clock offset: -1.302 ms

# Below is generated by plot.py at 2018-06-20 14:22:34  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 428.99 Mbit/s  
95th percentile per-packet one-way delay: 61.578 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 220.74 Mbit/s  
95th percentile per-packet one-way delay: 60.391 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 214.44 Mbit/s  
95th percentile per-packet one-way delay: 60.852 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 196.88 Mbit/s  
95th percentile per-packet one-way delay: 63.889 ms  
Loss rate: 0.05%

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



Run 8: Statistics of TCP BBR

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

End at: 2018-06-20 13:06:36

Local clock offset: 0.042 ms

Remote clock offset: 0.135 ms

# Below is generated by plot.py at 2018-06-20 14:22:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 411.38 Mbit/s

95th percentile per-packet one-way delay: 67.336 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 208.89 Mbit/s

95th percentile per-packet one-way delay: 66.592 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 203.59 Mbit/s

95th percentile per-packet one-way delay: 67.361 ms

Loss rate: 0.08%

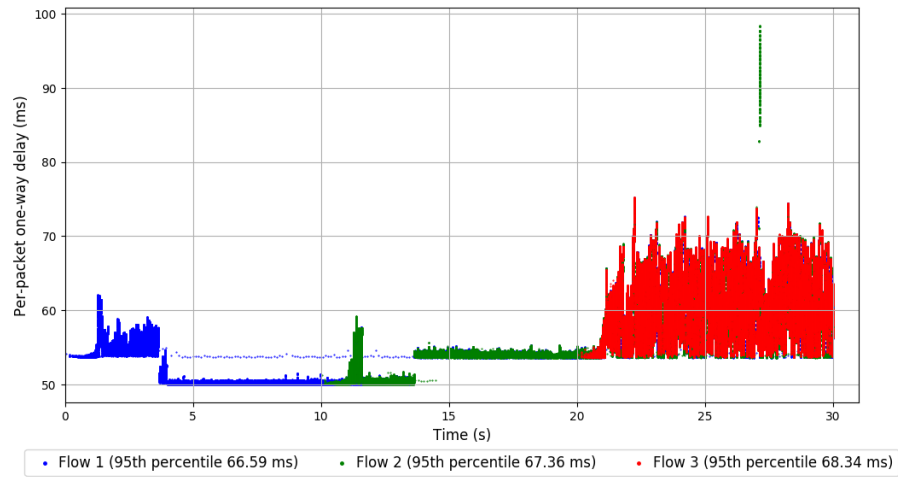
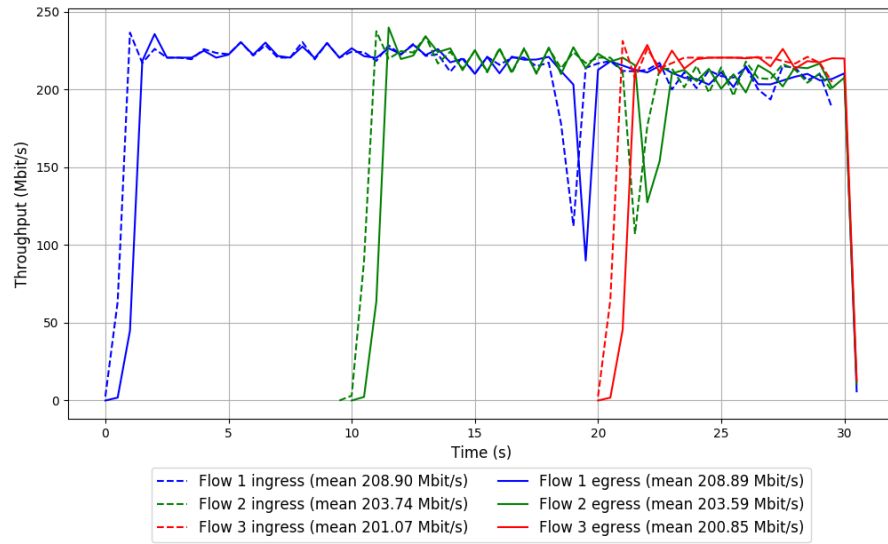
-- Flow 3:

Average throughput: 200.85 Mbit/s

95th percentile per-packet one-way delay: 68.338 ms

Loss rate: 0.02%

# Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-06-20 13:28:53

End at: 2018-06-20 13:29:23

Local clock offset: -0.13 ms

Remote clock offset: 0.012 ms

# Below is generated by plot.py at 2018-06-20 14:28:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 412.31 Mbit/s

95th percentile per-packet one-way delay: 66.984 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 208.95 Mbit/s

95th percentile per-packet one-way delay: 65.679 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 204.96 Mbit/s

95th percentile per-packet one-way delay: 67.077 ms

Loss rate: 0.03%

-- Flow 3:

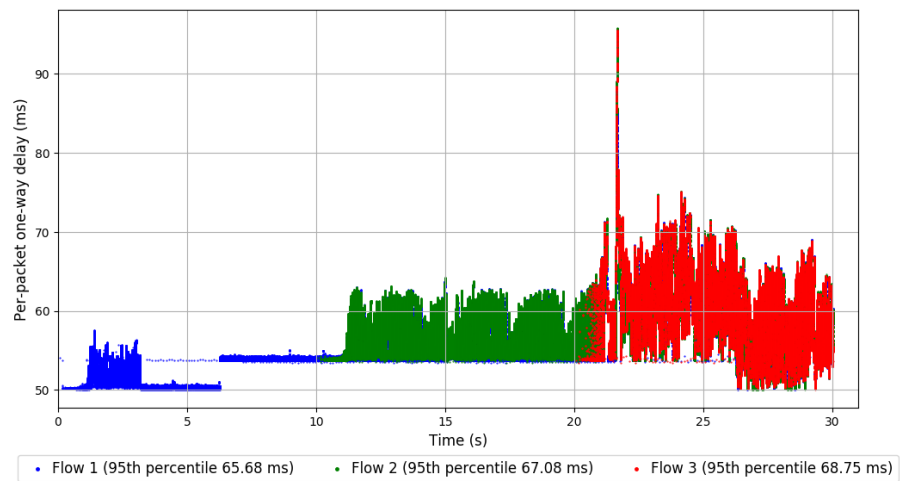
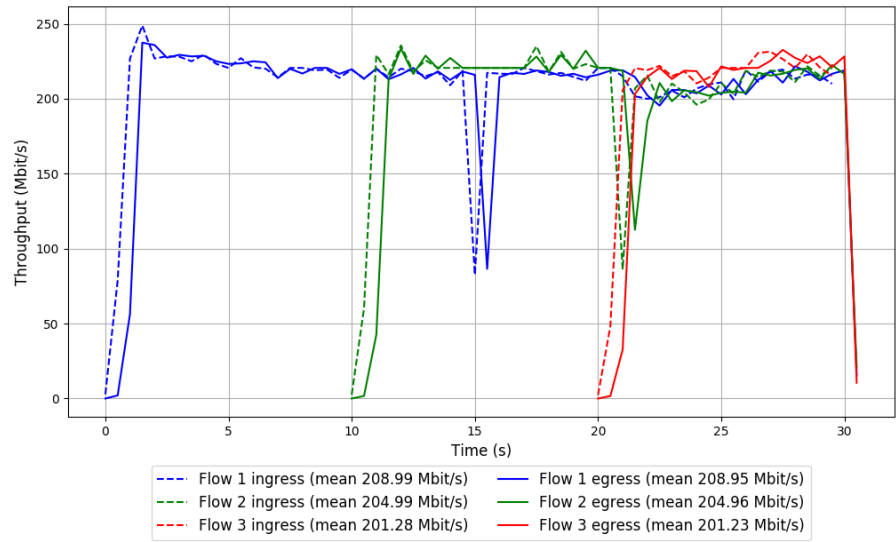
Average throughput: 201.23 Mbit/s

95th percentile per-packet one-way delay: 68.754 ms

Loss rate: 0.06%



# Run 9: Report of TCP BBR — Data Link

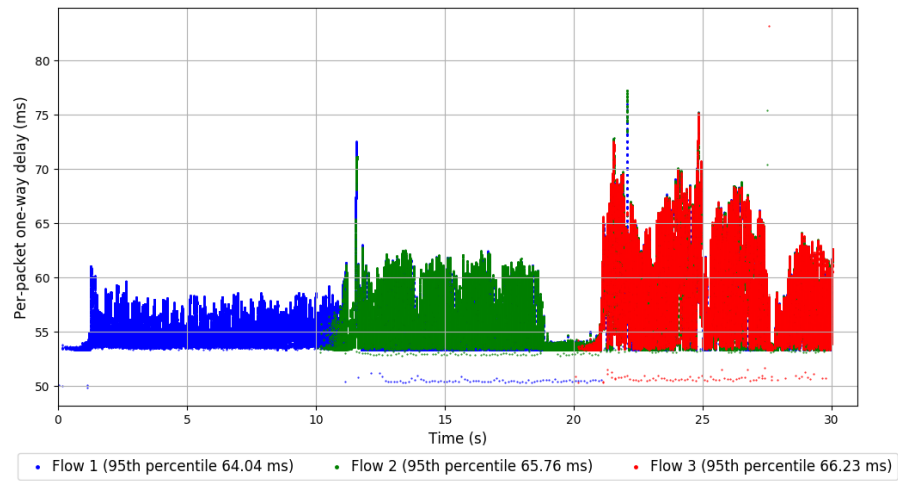
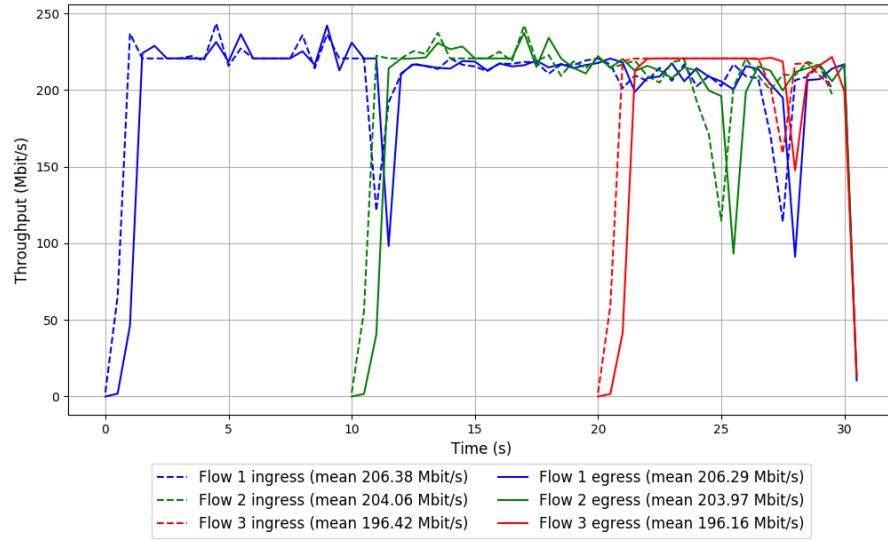


Run 10: Statistics of TCP BBR

Start at: 2018-06-20 13:51:59  
End at: 2018-06-20 13:52:29  
Local clock offset: 0.123 ms  
Remote clock offset: -0.168 ms

# Below is generated by plot.py at 2018-06-20 14:28:26  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 407.27 Mbit/s  
95th percentile per-packet one-way delay: 65.363 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 206.29 Mbit/s  
95th percentile per-packet one-way delay: 64.038 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 203.97 Mbit/s  
95th percentile per-packet one-way delay: 65.760 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 196.16 Mbit/s  
95th percentile per-packet one-way delay: 66.235 ms  
Loss rate: 0.11%

# Run 10: Report of TCP BBR — Data Link

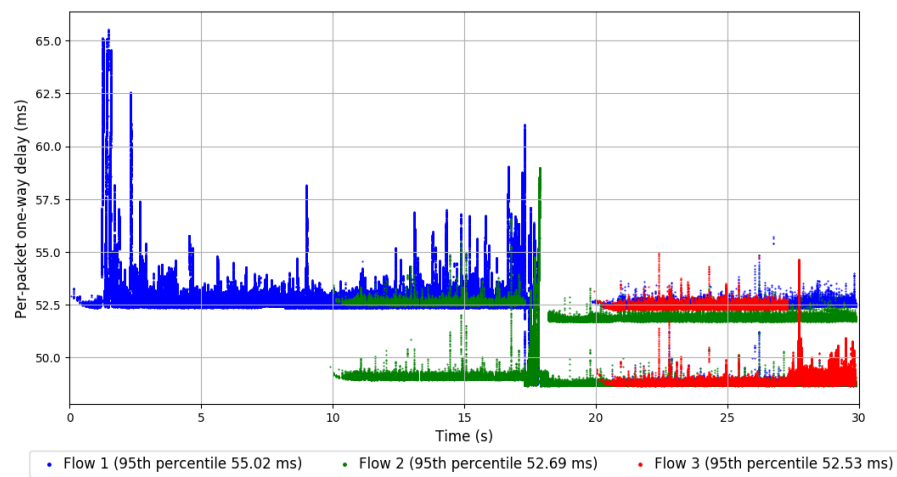
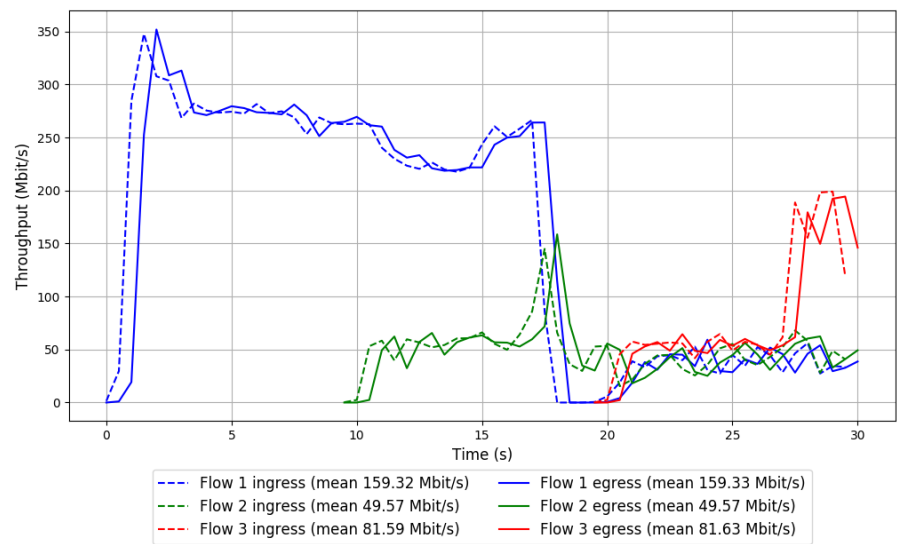


Run 1: Statistics of Copa

Start at: 2018-06-20 10:11:22  
End at: 2018-06-20 10:11:52  
Local clock offset: -0.194 ms  
Remote clock offset: -1.283 ms

# Below is generated by plot.py at 2018-06-20 14:28:26  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 219.65 Mbit/s  
95th percentile per-packet one-way delay: 54.402 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 159.33 Mbit/s  
95th percentile per-packet one-way delay: 55.024 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 49.57 Mbit/s  
95th percentile per-packet one-way delay: 52.690 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 81.63 Mbit/s  
95th percentile per-packet one-way delay: 52.535 ms  
Loss rate: 0.00%

Run 1: Report of Copa — Data Link

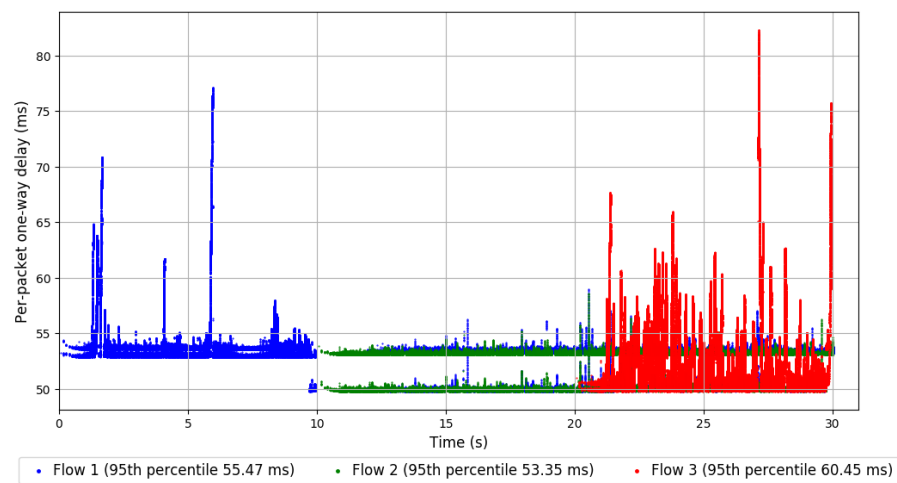
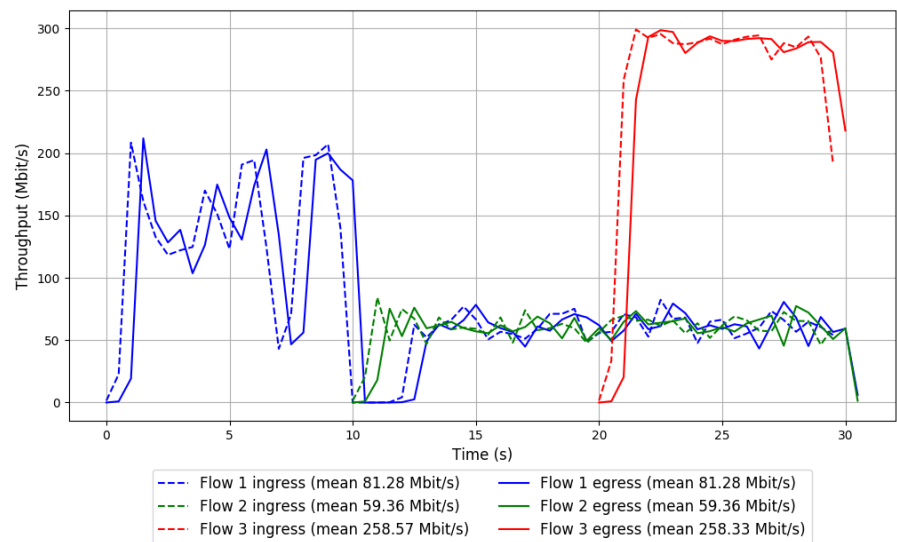


Run 2: Statistics of Copa

Start at: 2018-06-20 10:33:59  
End at: 2018-06-20 10:34:29  
Local clock offset: -0.162 ms  
Remote clock offset: -0.126 ms

# Below is generated by plot.py at 2018-06-20 14:28:26  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 206.01 Mbit/s  
95th percentile per-packet one-way delay: 57.762 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 81.28 Mbit/s  
95th percentile per-packet one-way delay: 55.466 ms  
Loss rate: 0.02%  
-- Flow 2:  
Average throughput: 59.36 Mbit/s  
95th percentile per-packet one-way delay: 53.355 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 258.33 Mbit/s  
95th percentile per-packet one-way delay: 60.452 ms  
Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-06-20 10:56:45

End at: 2018-06-20 10:57:15

Local clock offset: 0.011 ms

Remote clock offset: 1.064 ms

# Below is generated by plot.py at 2018-06-20 14:29:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 259.07 Mbit/s

95th percentile per-packet one-way delay: 57.892 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 206.06 Mbit/s

95th percentile per-packet one-way delay: 58.489 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 52.04 Mbit/s

95th percentile per-packet one-way delay: 54.893 ms

Loss rate: 0.01%

-- Flow 3:

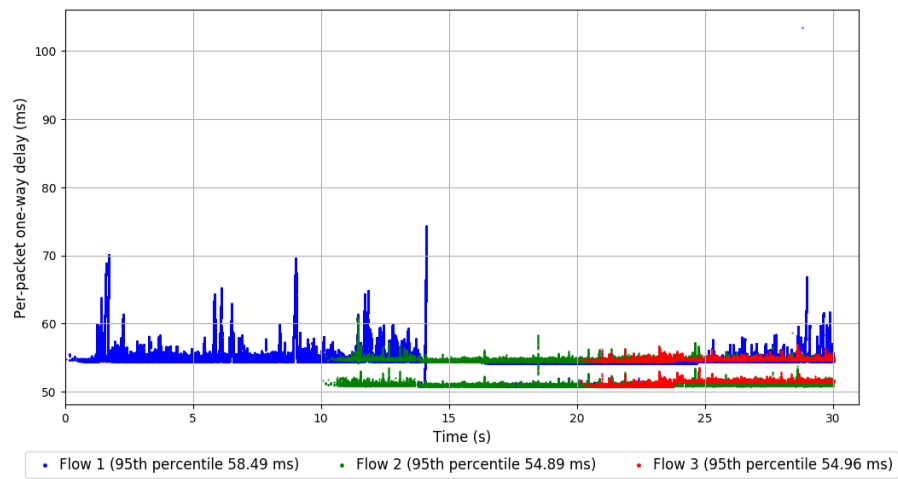
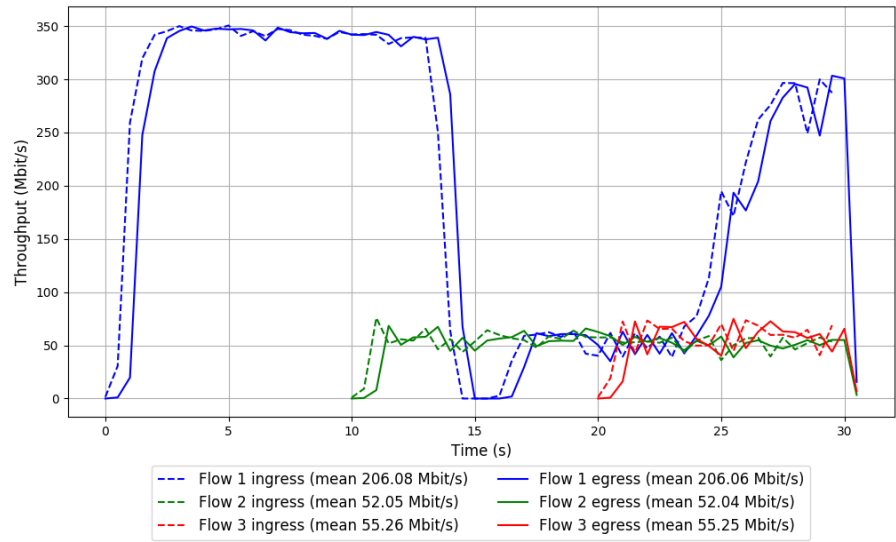
Average throughput: 55.25 Mbit/s

95th percentile per-packet one-way delay: 54.958 ms

Loss rate: 0.06%



### Run 3: Report of Copa — Data Link

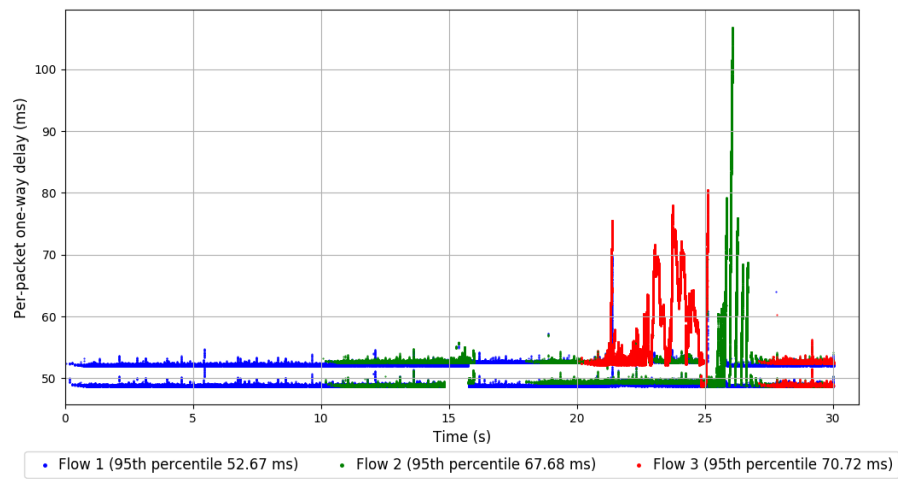
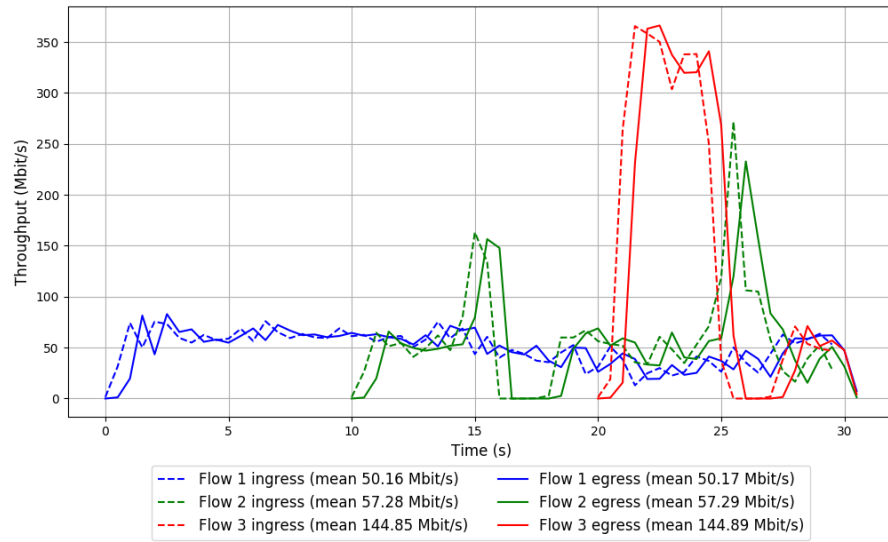


Run 4: Statistics of Copa

Start at: 2018-06-20 11:19:34  
End at: 2018-06-20 11:20:04  
Local clock offset: -0.102 ms  
Remote clock offset: -1.232 ms

# Below is generated by plot.py at 2018-06-20 14:29:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 136.45 Mbit/s  
95th percentile per-packet one-way delay: 68.499 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 50.17 Mbit/s  
95th percentile per-packet one-way delay: 52.668 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 57.29 Mbit/s  
95th percentile per-packet one-way delay: 67.684 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 144.89 Mbit/s  
95th percentile per-packet one-way delay: 70.725 ms  
Loss rate: 0.00%

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



Run 5: Statistics of Copa

Start at: 2018-06-20 11:42:22

End at: 2018-06-20 11:42:52

Local clock offset: 0.031 ms

Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2018-06-20 14:30:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 297.31 Mbit/s

95th percentile per-packet one-way delay: 60.586 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 241.12 Mbit/s

95th percentile per-packet one-way delay: 61.346 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 53.46 Mbit/s

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

Loss rate: 0.00%

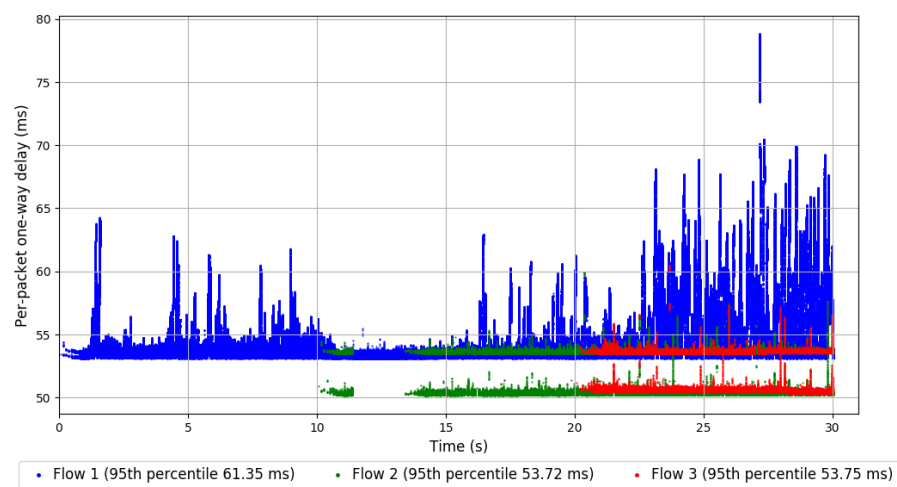
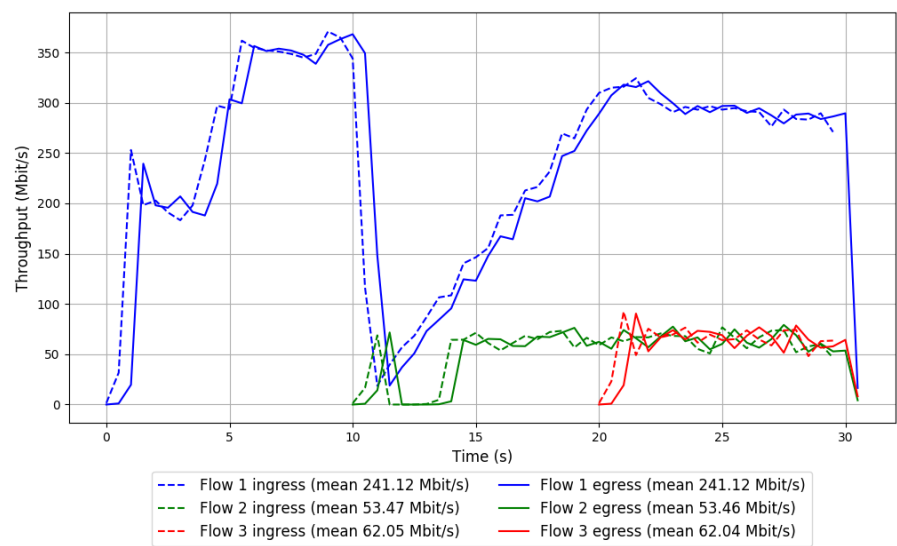
-- Flow 3:

Average throughput: 62.04 Mbit/s

95th percentile per-packet one-way delay: 53.747 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-06-20 12:05:20

End at: 2018-06-20 12:05:50

Local clock offset: 0.058 ms

Remote clock offset: 1.308 ms

# Below is generated by plot.py at 2018-06-20 14:30:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 246.49 Mbit/s

95th percentile per-packet one-way delay: 62.272 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 187.09 Mbit/s

95th percentile per-packet one-way delay: 59.046 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 57.08 Mbit/s

95th percentile per-packet one-way delay: 66.034 ms

Loss rate: 0.00%

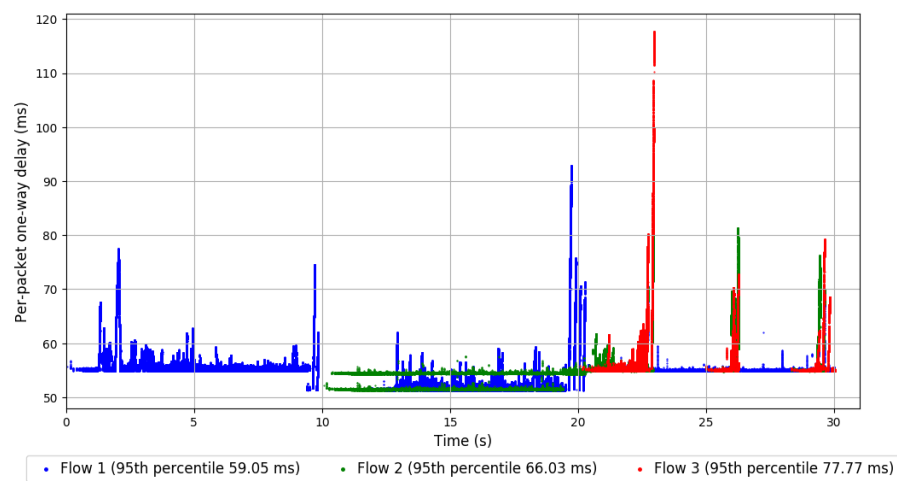
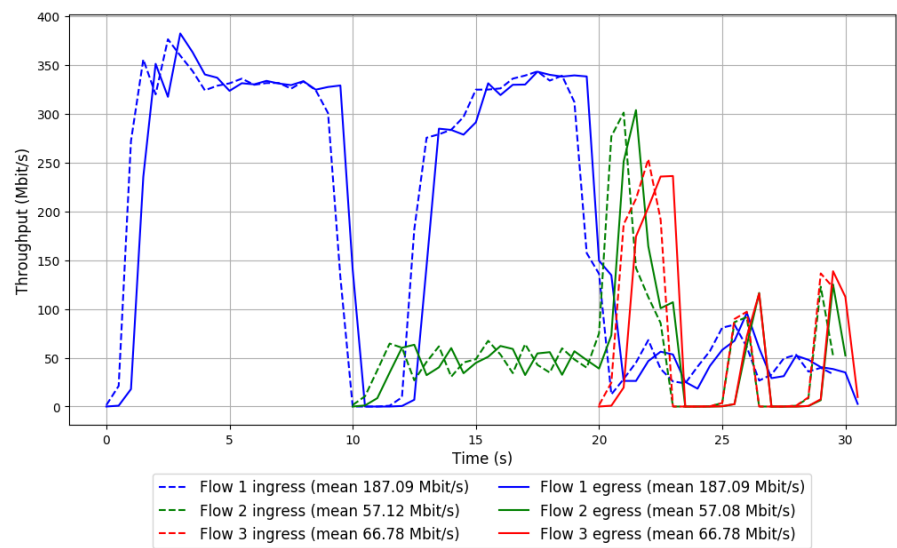
-- Flow 3:

Average throughput: 66.78 Mbit/s

95th percentile per-packet one-way delay: 77.771 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-06-20 12:28:24

End at: 2018-06-20 12:28:54

Local clock offset: -0.144 ms

Remote clock offset: 0.179 ms

# Below is generated by plot.py at 2018-06-20 14:34:55

# Datalink statistics

-- Total of 3 flows:

Average throughput: 286.18 Mbit/s

95th percentile per-packet one-way delay: 61.165 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 155.28 Mbit/s

95th percentile per-packet one-way delay: 61.659 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 167.70 Mbit/s

95th percentile per-packet one-way delay: 60.988 ms

Loss rate: 0.03%

-- Flow 3:

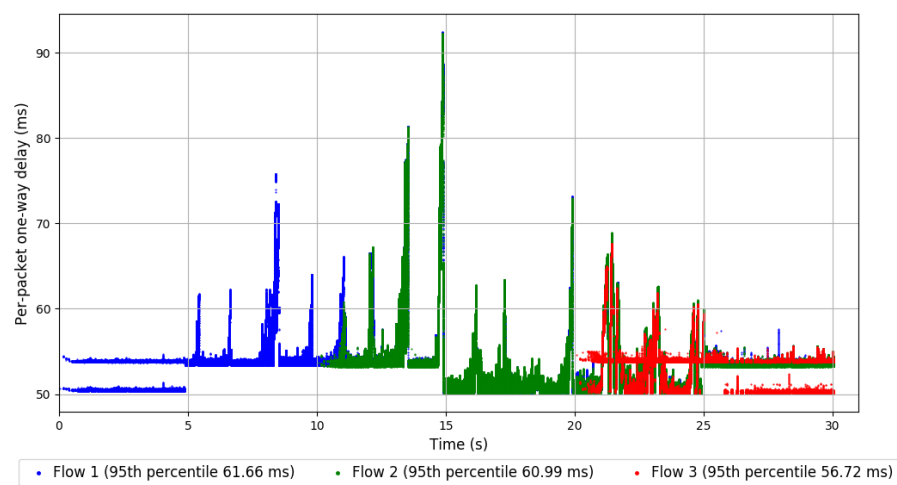
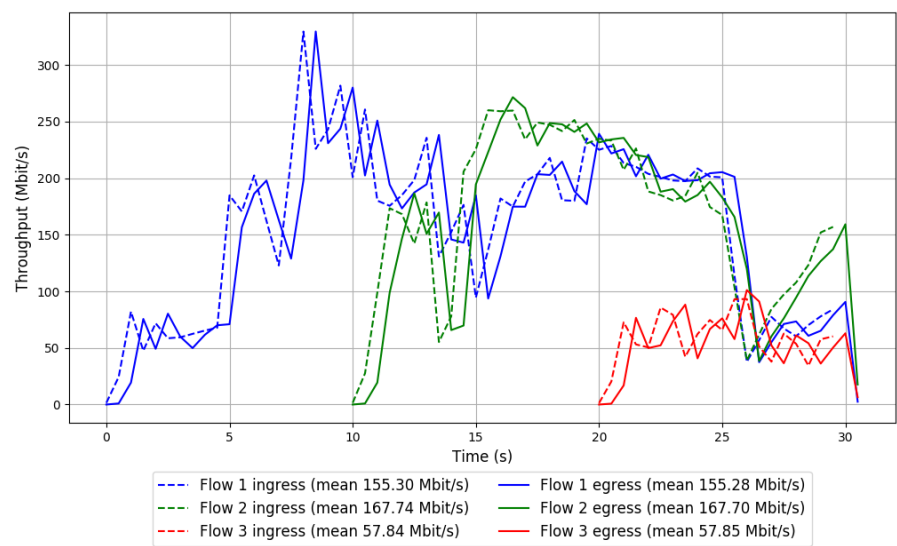
Average throughput: 57.85 Mbit/s

95th percentile per-packet one-way delay: 56.718 ms

Loss rate: 0.00%



Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-06-20 12:51:18

End at: 2018-06-20 12:51:48

Local clock offset: 0.103 ms

Remote clock offset: 0.108 ms

# Below is generated by plot.py at 2018-06-20 14:35:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 258.02 Mbit/s

95th percentile per-packet one-way delay: 53.747 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 55.88 Mbit/s

95th percentile per-packet one-way delay: 53.737 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 284.66 Mbit/s

95th percentile per-packet one-way delay: 53.250 ms

Loss rate: 0.01%

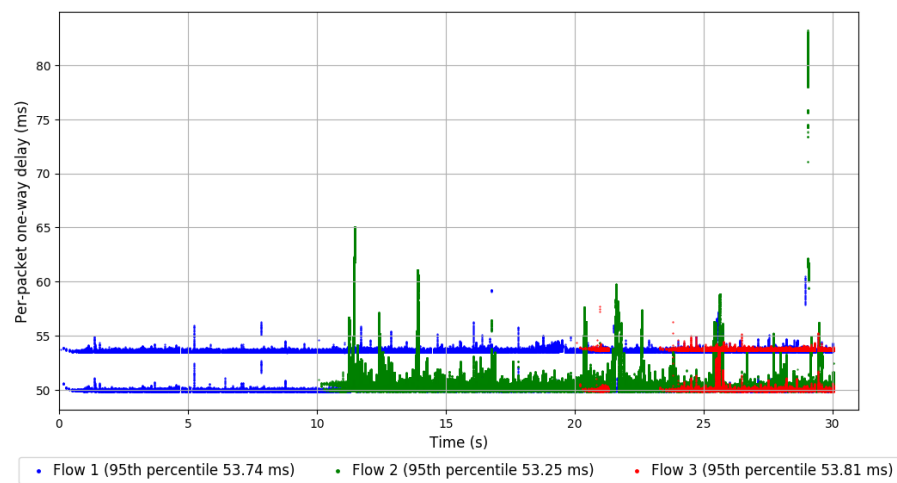
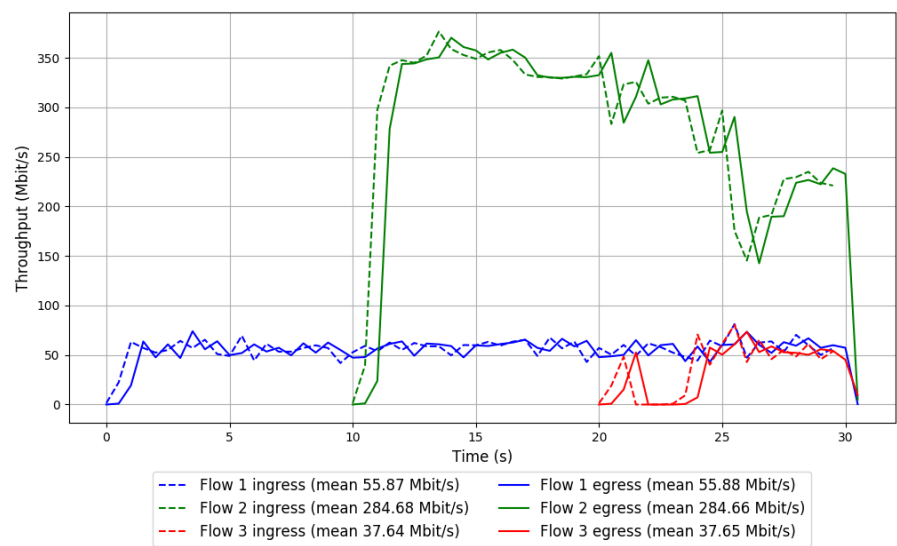
-- Flow 3:

Average throughput: 37.65 Mbit/s

95th percentile per-packet one-way delay: 53.808 ms

Loss rate: 0.01%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-06-20 13:14:22

End at: 2018-06-20 13:14:52

Local clock offset: -0.032 ms

Remote clock offset: -1.59 ms

# Below is generated by plot.py at 2018-06-20 14:38:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 346.15 Mbit/s

95th percentile per-packet one-way delay: 56.087 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 278.83 Mbit/s

95th percentile per-packet one-way delay: 56.287 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 53.82 Mbit/s

95th percentile per-packet one-way delay: 52.266 ms

Loss rate: 0.00%

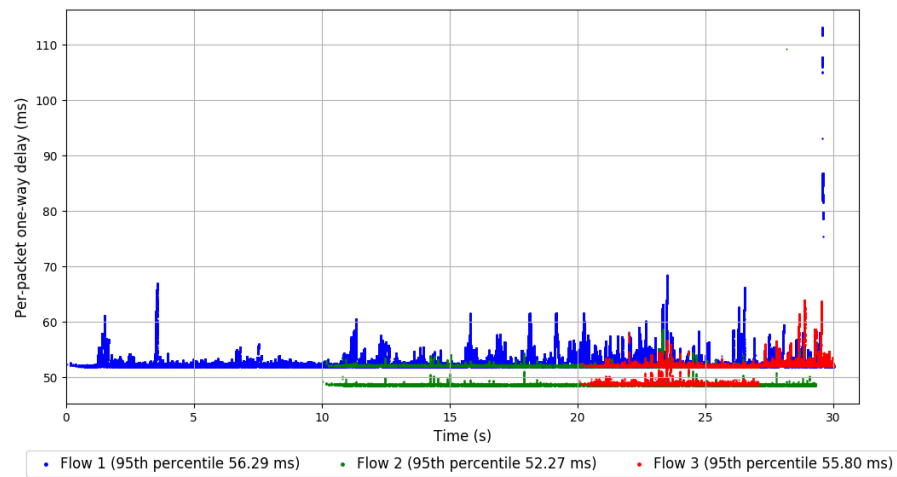
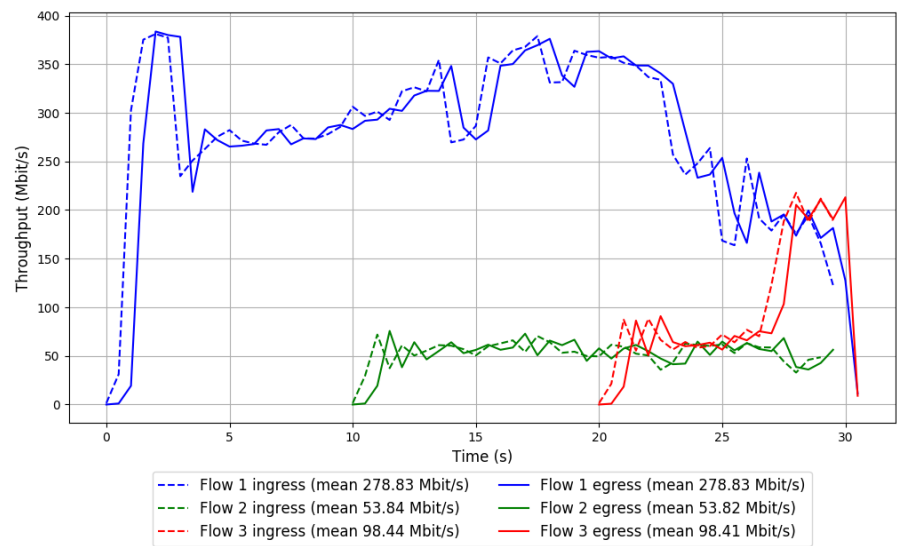
-- Flow 3:

Average throughput: 98.41 Mbit/s

95th percentile per-packet one-way delay: 55.804 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link

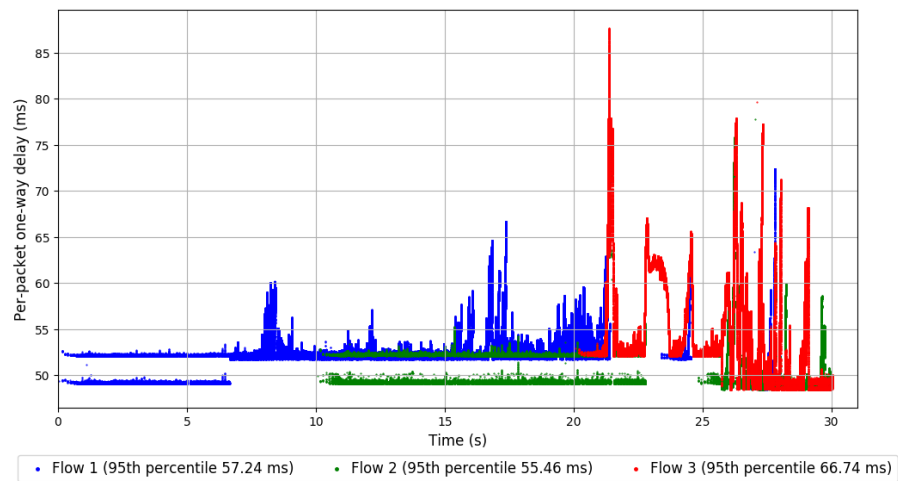
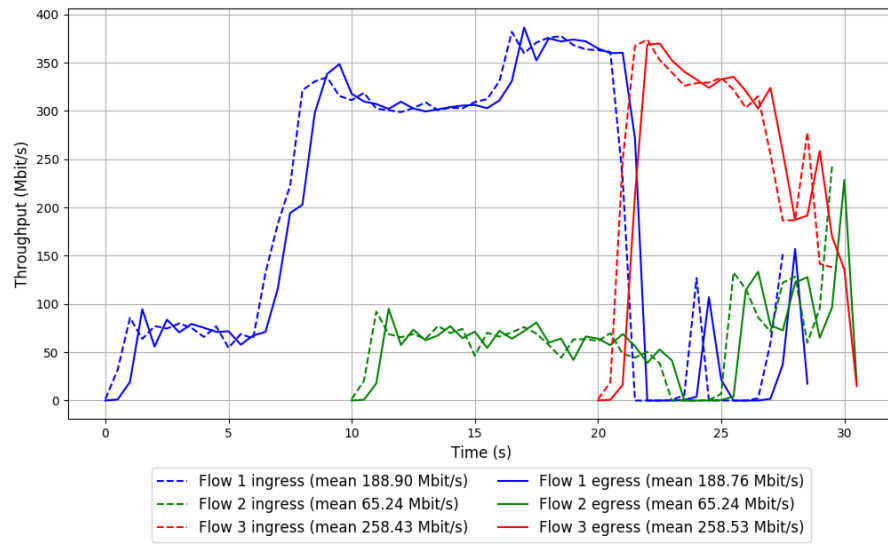


Run 10: Statistics of Copa

Start at: 2018-06-20 13:37:13  
End at: 2018-06-20 13:37:43  
Local clock offset: -0.182 ms  
Remote clock offset: -1.617 ms

# Below is generated by plot.py at 2018-06-20 14:38:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 305.51 Mbit/s  
95th percentile per-packet one-way delay: 61.905 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 188.76 Mbit/s  
95th percentile per-packet one-way delay: 57.241 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 65.24 Mbit/s  
95th percentile per-packet one-way delay: 55.463 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 258.53 Mbit/s  
95th percentile per-packet one-way delay: 66.738 ms  
Loss rate: 0.00%

# Run 10: Report of Copa — Data Link



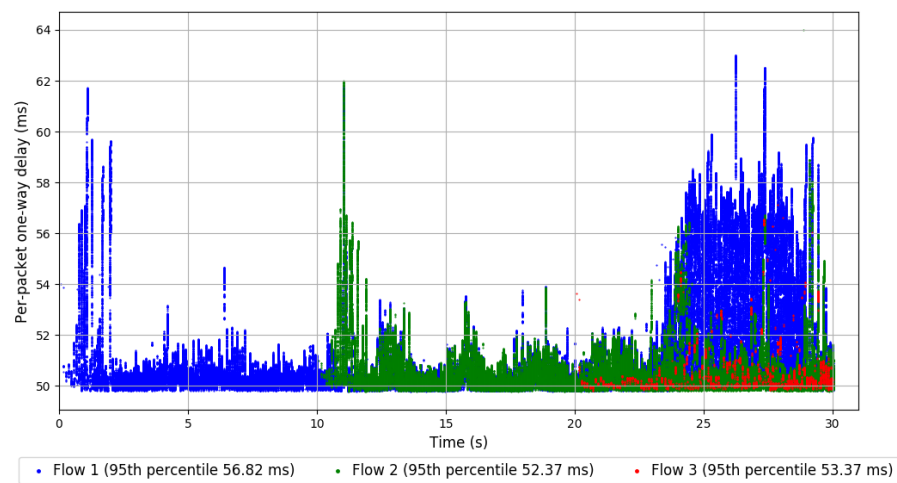
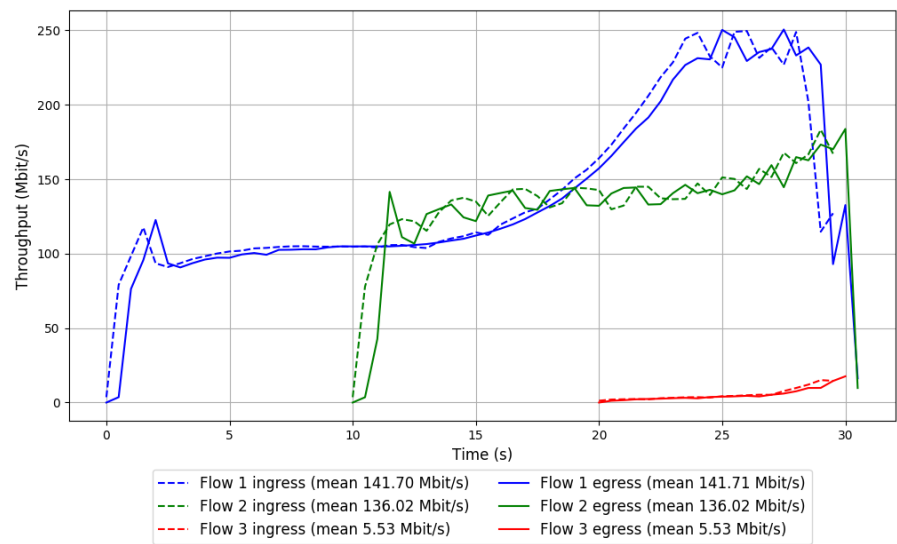
Run 1: Statistics of TCP Cubic

Start at: 2018-06-20 10:32:39  
End at: 2018-06-20 10:33:09  
Local clock offset: -0.197 ms  
Remote clock offset: -0.142 ms

# Below is generated by plot.py at 2018-06-20 14:38:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 234.16 Mbit/s  
95th percentile per-packet one-way delay: 56.227 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 141.71 Mbit/s  
95th percentile per-packet one-way delay: 56.820 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 136.02 Mbit/s  
95th percentile per-packet one-way delay: 52.367 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 5.53 Mbit/s  
95th percentile per-packet one-way delay: 53.374 ms  
Loss rate: 0.02%



Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-06-20 10:55:24

End at: 2018-06-20 10:55:54

Local clock offset: 0.129 ms

Remote clock offset: 1.237 ms

# Below is generated by plot.py at 2018-06-20 14:38:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 244.12 Mbit/s

95th percentile per-packet one-way delay: 59.914 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 132.77 Mbit/s

95th percentile per-packet one-way delay: 60.147 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 113.10 Mbit/s

95th percentile per-packet one-way delay: 59.977 ms

Loss rate: 0.00%

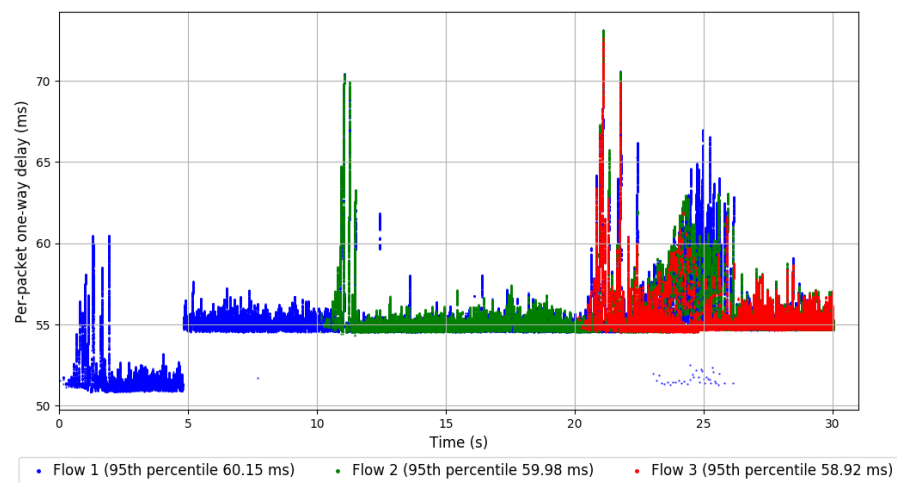
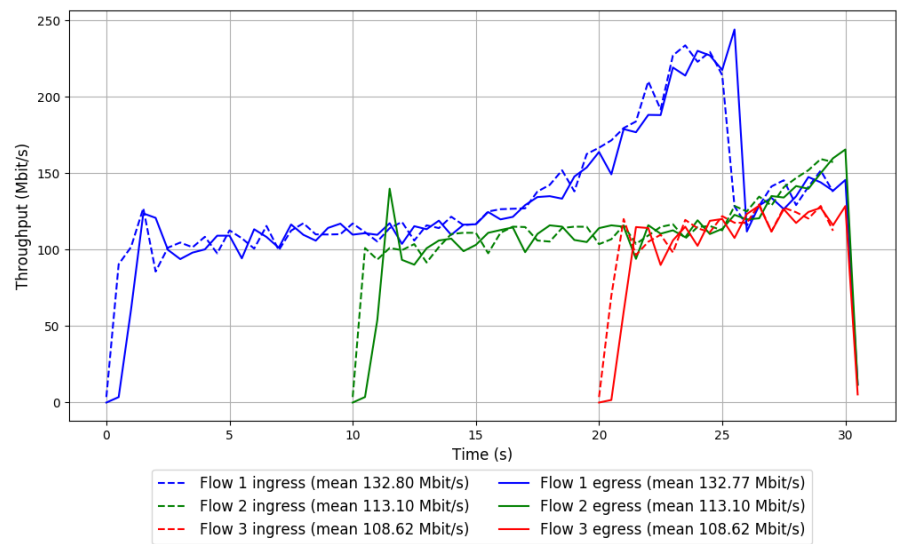
-- Flow 3:

Average throughput: 108.62 Mbit/s

95th percentile per-packet one-way delay: 58.925 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link

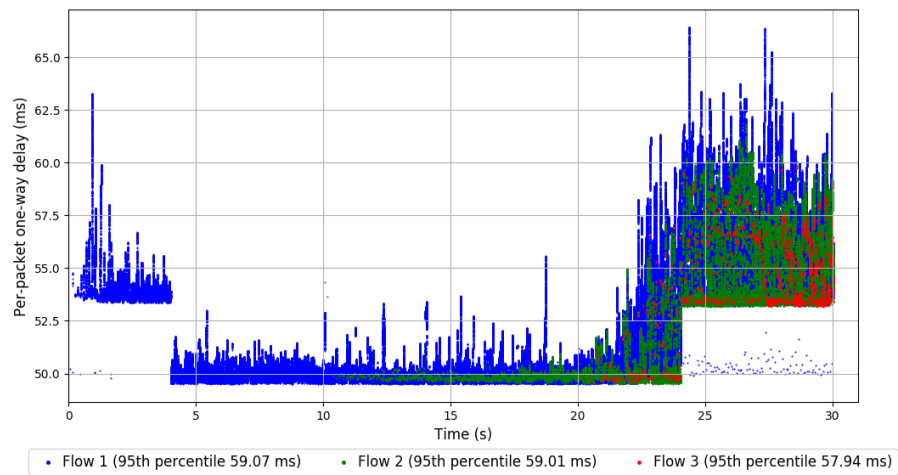
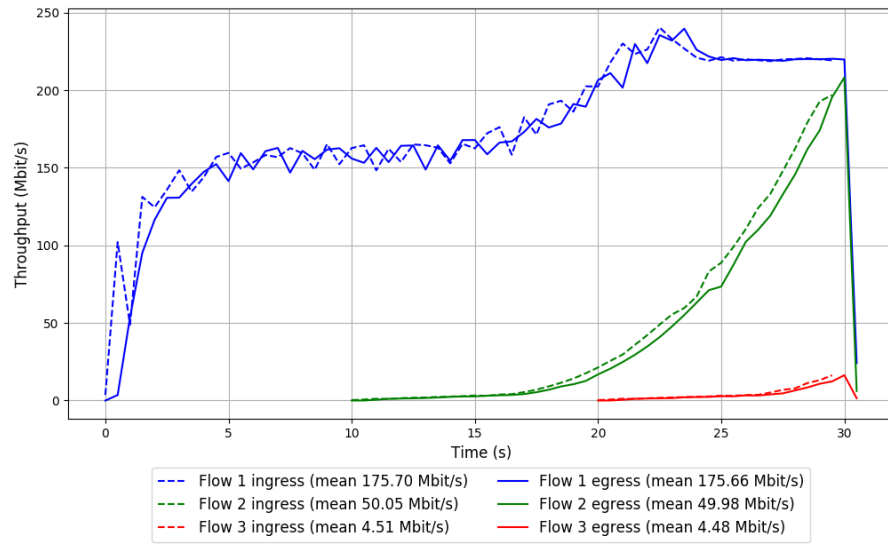


Run 3: Statistics of TCP Cubic

Start at: 2018-06-20 11:18:15  
End at: 2018-06-20 11:18:45  
Local clock offset: 0.041 ms  
Remote clock offset: -0.255 ms

# Below is generated by plot.py at 2018-06-20 14:38:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 210.40 Mbit/s  
95th percentile per-packet one-way delay: 59.041 ms  
Loss rate: 0.03%  
-- Flow 1:  
Average throughput: 175.66 Mbit/s  
95th percentile per-packet one-way delay: 59.067 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 49.98 Mbit/s  
95th percentile per-packet one-way delay: 59.011 ms  
Loss rate: 0.14%  
-- Flow 3:  
Average throughput: 4.48 Mbit/s  
95th percentile per-packet one-way delay: 57.937 ms  
Loss rate: 0.62%

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

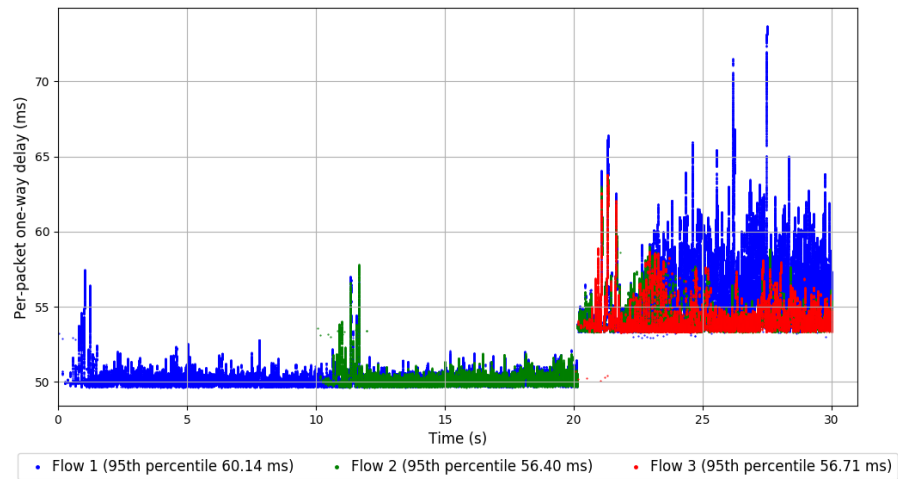
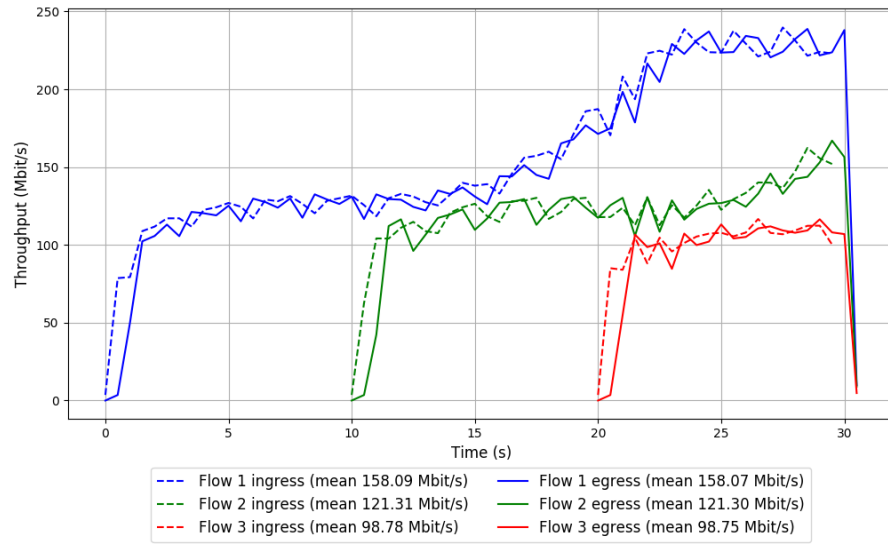


Run 4: Statistics of TCP Cubic

Start at: 2018-06-20 11:40:59  
End at: 2018-06-20 11:41:29  
Local clock offset: 0.014 ms  
Remote clock offset: -0.259 ms

# Below is generated by plot.py at 2018-06-20 14:38:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 271.64 Mbit/s  
95th percentile per-packet one-way delay: 59.083 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 158.07 Mbit/s  
95th percentile per-packet one-way delay: 60.141 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 121.30 Mbit/s  
95th percentile per-packet one-way delay: 56.401 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 98.75 Mbit/s  
95th percentile per-packet one-way delay: 56.714 ms  
Loss rate: 0.00%

# Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-06-20 12:03:57

End at: 2018-06-20 12:04:27

Local clock offset: 0.189 ms

Remote clock offset: 0.016 ms

# Below is generated by plot.py at 2018-06-20 14:38:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 276.22 Mbit/s

95th percentile per-packet one-way delay: 59.260 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 154.92 Mbit/s

95th percentile per-packet one-way delay: 60.308 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 129.80 Mbit/s

95th percentile per-packet one-way delay: 57.198 ms

Loss rate: 0.00%

-- Flow 3:

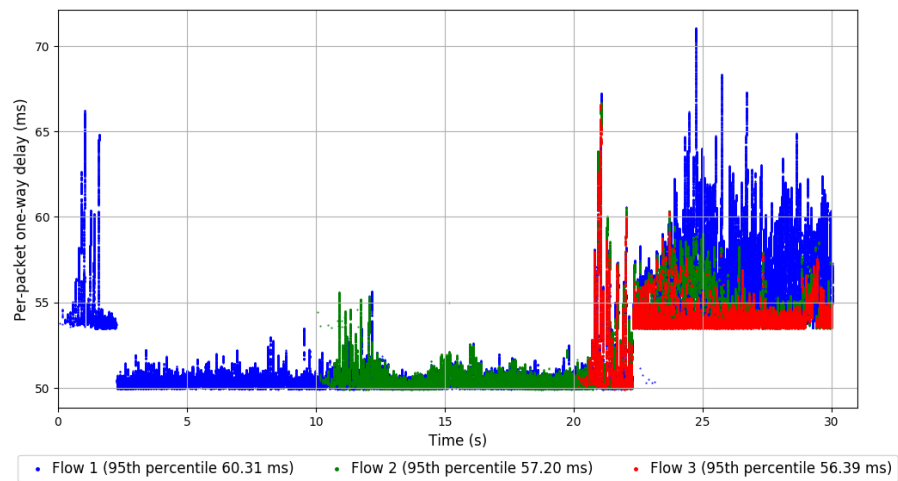
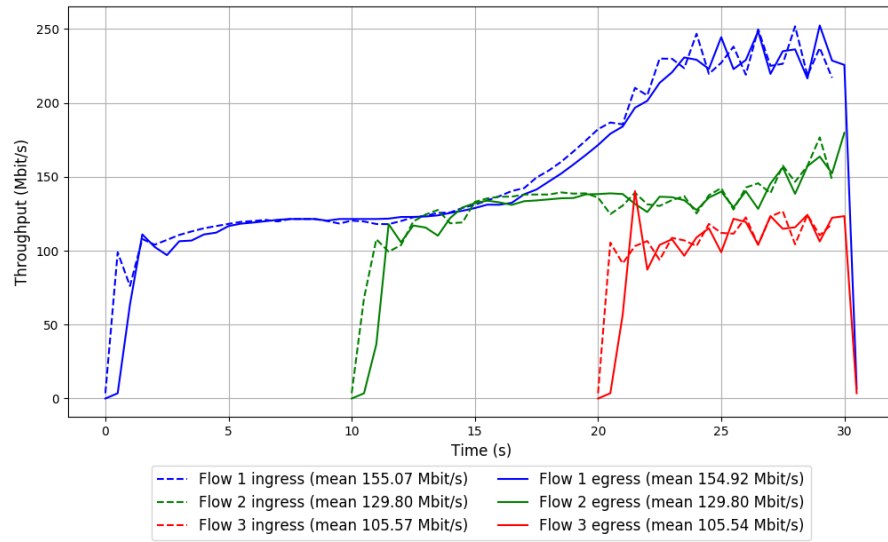
Average throughput: 105.54 Mbit/s

95th percentile per-packet one-way delay: 56.388 ms

Loss rate: 0.00%



# Run 5: Report of TCP Cubic — Data Link

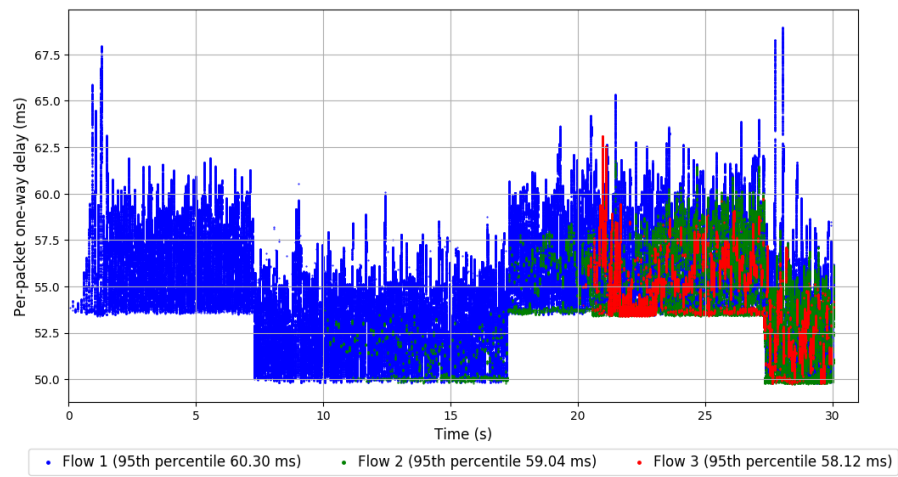
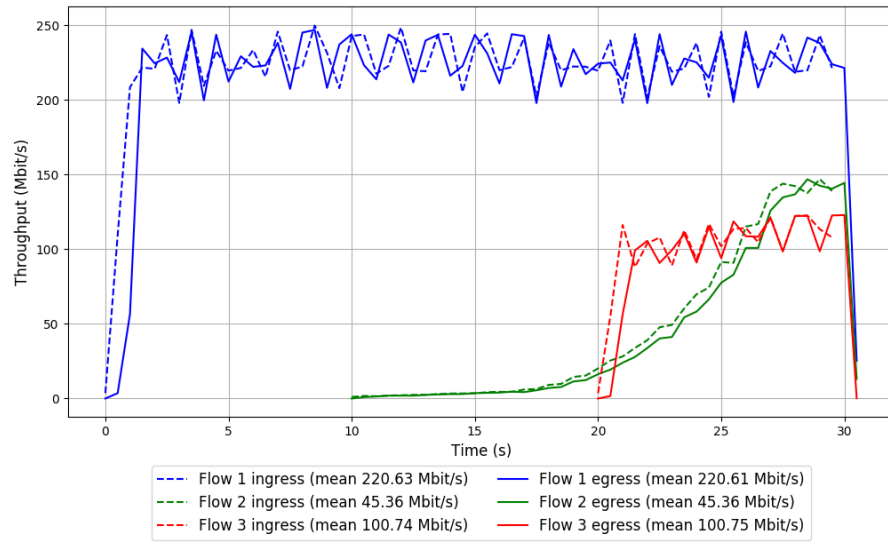


Run 6: Statistics of TCP Cubic

Start at: 2018-06-20 12:27:02  
End at: 2018-06-20 12:27:32  
Local clock offset: -0.25 ms  
Remote clock offset: -0.313 ms

# Below is generated by plot.py at 2018-06-20 14:38:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 284.28 Mbit/s  
95th percentile per-packet one-way delay: 59.993 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 220.61 Mbit/s  
95th percentile per-packet one-way delay: 60.305 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 45.36 Mbit/s  
95th percentile per-packet one-way delay: 59.039 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 100.75 Mbit/s  
95th percentile per-packet one-way delay: 58.125 ms  
Loss rate: 0.00%

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



Run 7: Statistics of TCP Cubic

Start at: 2018-06-20 12:49:57

End at: 2018-06-20 12:50:27

Local clock offset: -0.115 ms

Remote clock offset: 0.157 ms

# Below is generated by plot.py at 2018-06-20 14:38:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 258.71 Mbit/s

95th percentile per-packet one-way delay: 55.113 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 159.20 Mbit/s

95th percentile per-packet one-way delay: 55.200 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 147.05 Mbit/s

95th percentile per-packet one-way delay: 54.986 ms

Loss rate: 0.07%

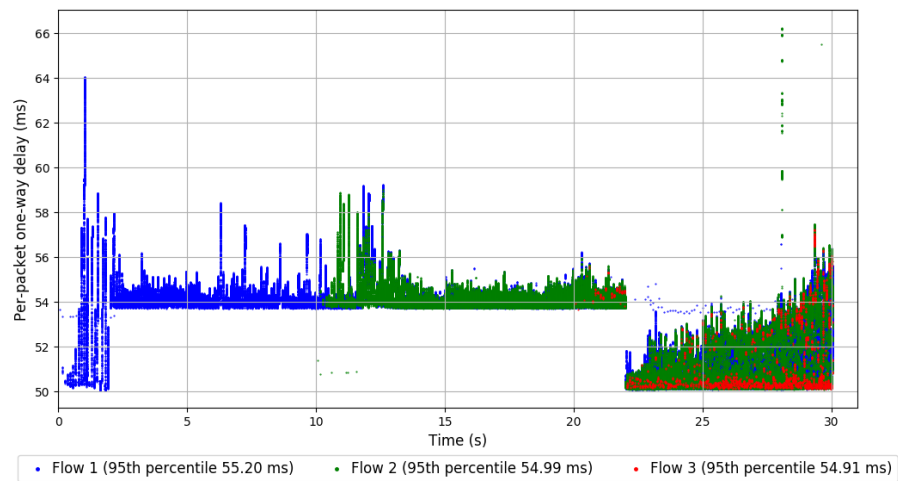
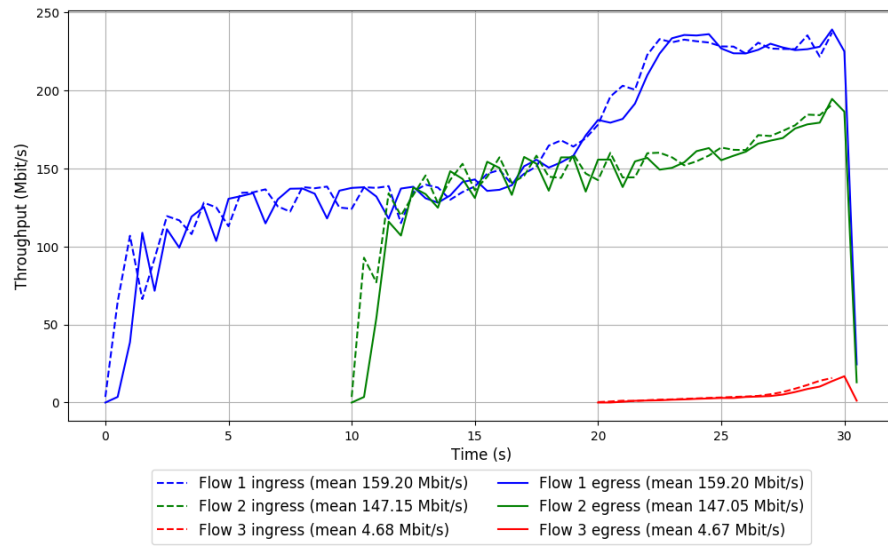
-- Flow 3:

Average throughput: 4.67 Mbit/s

95th percentile per-packet one-way delay: 54.913 ms

Loss rate: 0.26%

# Run 7: Report of TCP Cubic — Data Link

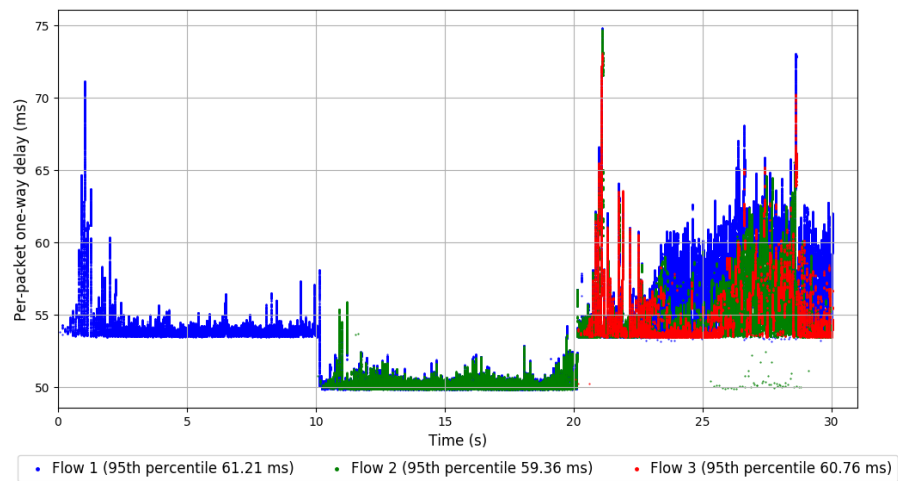
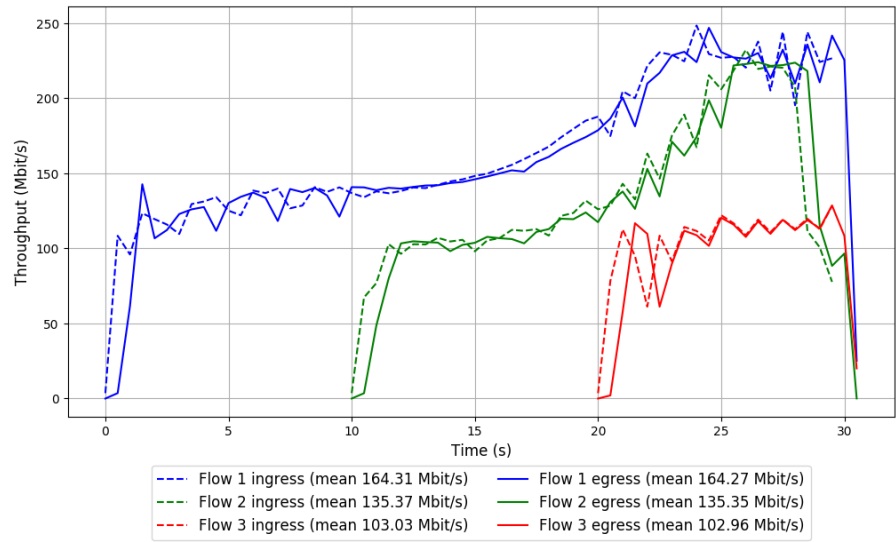


Run 8: Statistics of TCP Cubic

Start at: 2018-06-20 13:12:59  
End at: 2018-06-20 13:13:29  
Local clock offset: 0.063 ms  
Remote clock offset: -0.019 ms

# Below is generated by plot.py at 2018-06-20 14:39:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 288.60 Mbit/s  
95th percentile per-packet one-way delay: 60.725 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 164.27 Mbit/s  
95th percentile per-packet one-way delay: 61.209 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 135.35 Mbit/s  
95th percentile per-packet one-way delay: 59.364 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 102.96 Mbit/s  
95th percentile per-packet one-way delay: 60.760 ms  
Loss rate: 0.03%

# Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-06-20 13:35:46

End at: 2018-06-20 13:36:16

Local clock offset: 0.088 ms

Remote clock offset: -0.08 ms

# Below is generated by plot.py at 2018-06-20 14:41:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 372.04 Mbit/s

95th percentile per-packet one-way delay: 63.348 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 204.22 Mbit/s

95th percentile per-packet one-way delay: 62.100 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 191.69 Mbit/s

95th percentile per-packet one-way delay: 64.606 ms

Loss rate: 0.00%

-- Flow 3:

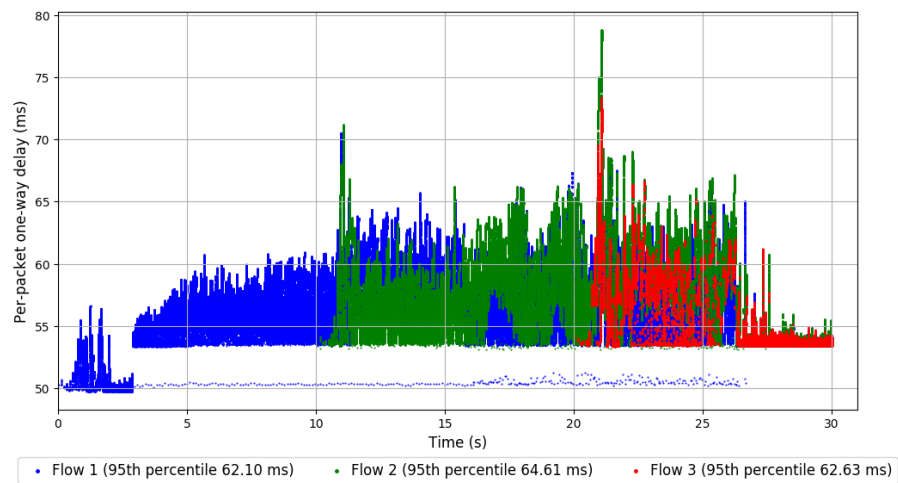
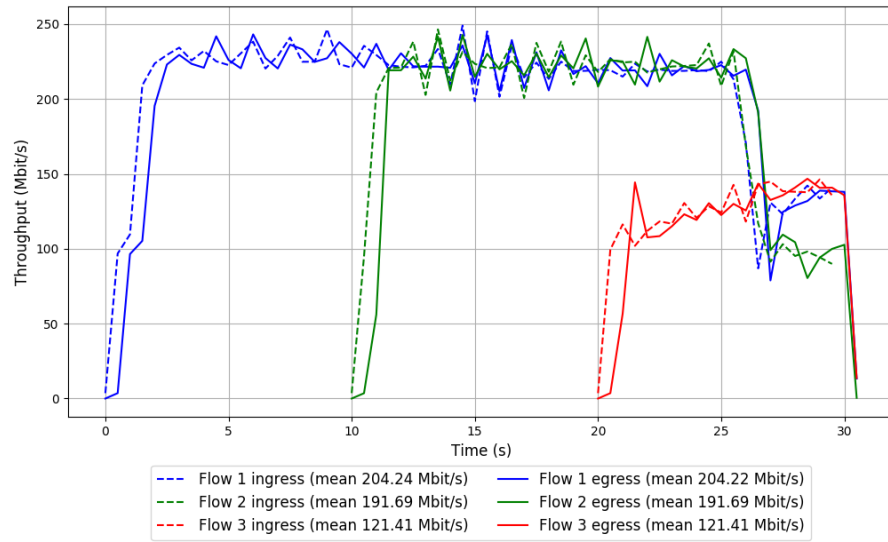
Average throughput: 121.41 Mbit/s

95th percentile per-packet one-way delay: 62.633 ms

Loss rate: 0.00%



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

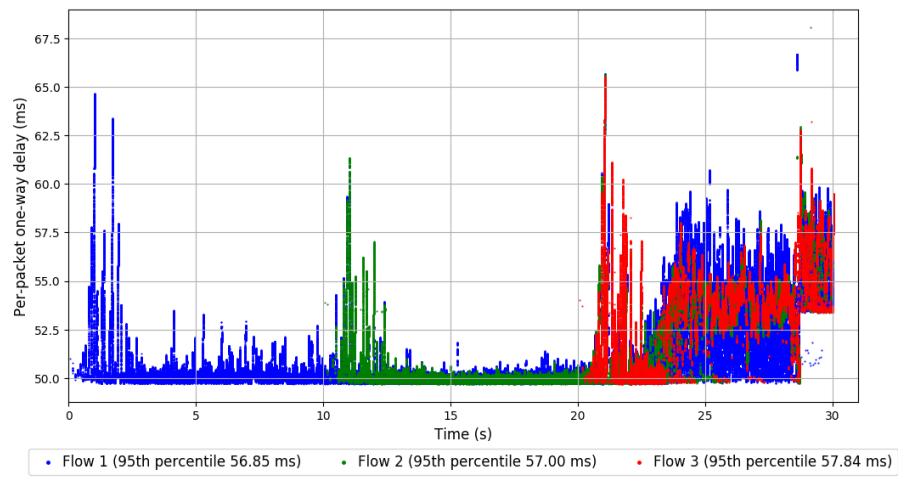
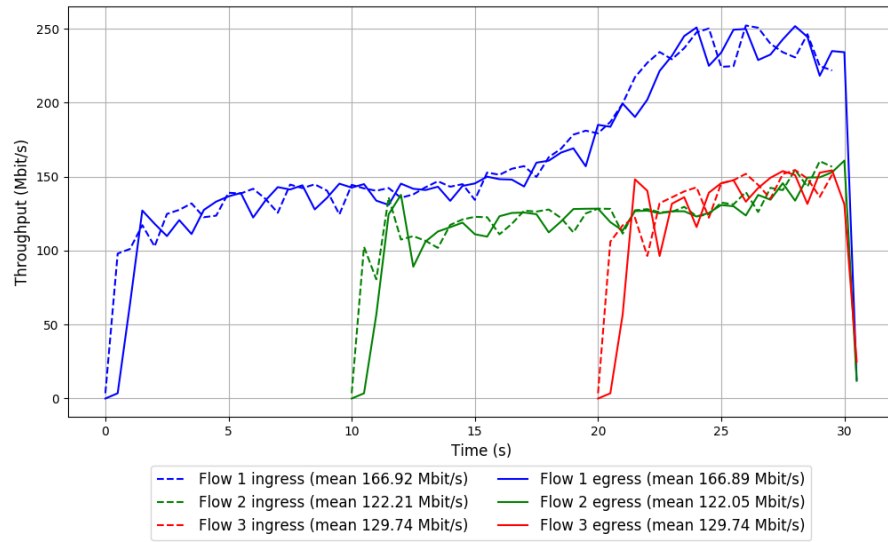


Run 10: Statistics of TCP Cubic

Start at: 2018-06-20 13:58:51  
End at: 2018-06-20 13:59:21  
Local clock offset: 0.055 ms  
Remote clock offset: -0.132 ms

# Below is generated by plot.py at 2018-06-20 14:41:27  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 291.13 Mbit/s  
95th percentile per-packet one-way delay: 57.136 ms  
Loss rate: 0.04%  
-- Flow 1:  
Average throughput: 166.89 Mbit/s  
95th percentile per-packet one-way delay: 56.851 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 122.05 Mbit/s  
95th percentile per-packet one-way delay: 57.000 ms  
Loss rate: 0.13%  
-- Flow 3:  
Average throughput: 129.74 Mbit/s  
95th percentile per-packet one-way delay: 57.841 ms  
Loss rate: 0.01%

# Run 10: Report of TCP Cubic — Data Link

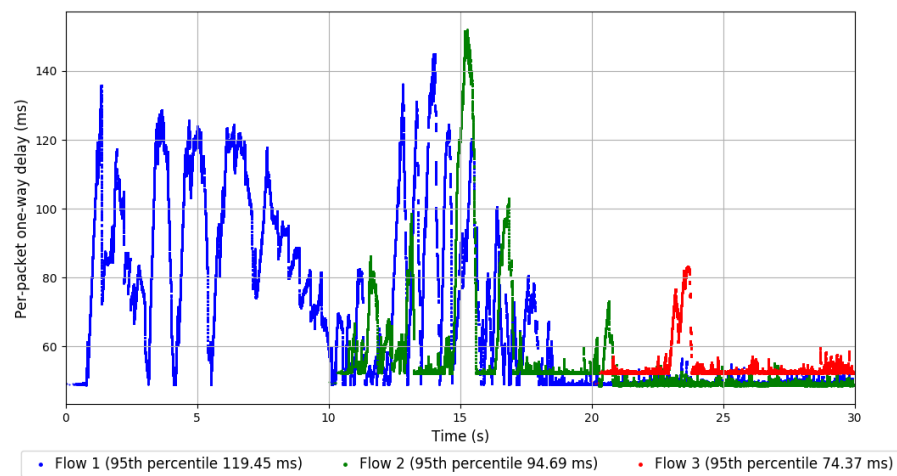
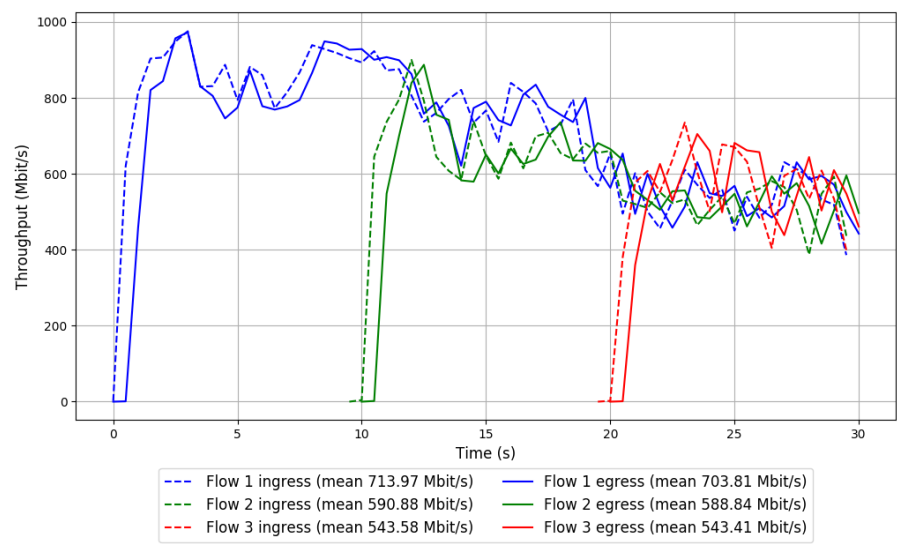


Run 1: Statistics of FillP

Start at: 2018-06-20 10:19:10  
End at: 2018-06-20 10:19:40  
Local clock offset: -0.308 ms  
Remote clock offset: -1.498 ms

# Below is generated by plot.py at 2018-06-20 15:01:51  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1275.91 Mbit/s  
95th percentile per-packet one-way delay: 117.180 ms  
Loss rate: 0.97%  
-- Flow 1:  
Average throughput: 703.81 Mbit/s  
95th percentile per-packet one-way delay: 119.446 ms  
Loss rate: 1.55%  
-- Flow 2:  
Average throughput: 588.84 Mbit/s  
95th percentile per-packet one-way delay: 94.688 ms  
Loss rate: 0.35%  
-- Flow 3:  
Average throughput: 543.41 Mbit/s  
95th percentile per-packet one-way delay: 74.366 ms  
Loss rate: 0.03%

Run 1: Report of FillP — Data Link

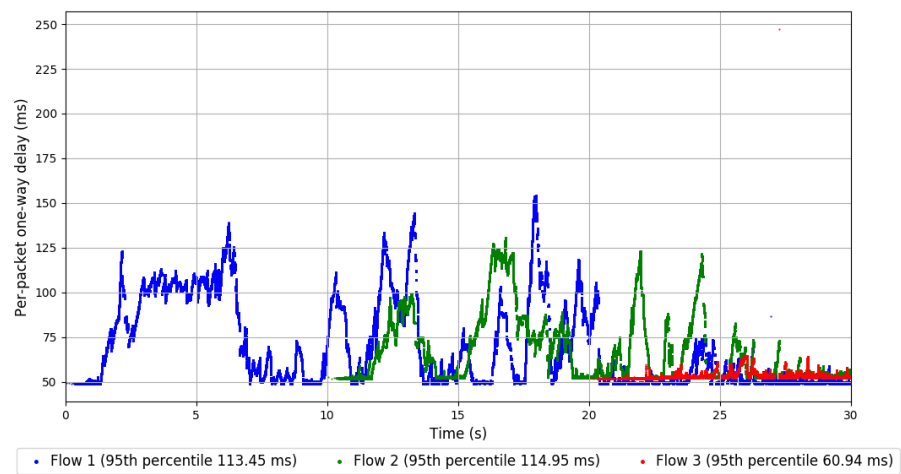
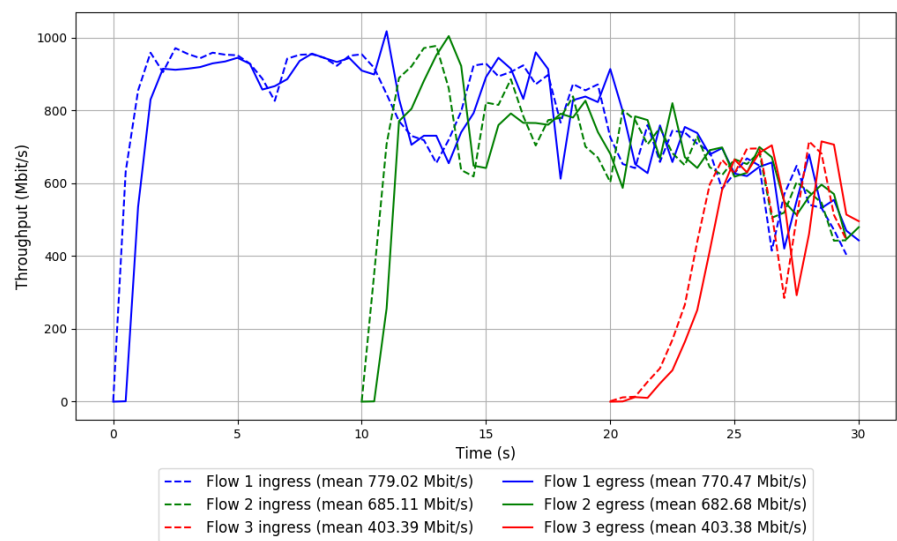


Run 2: Statistics of FillP

Start at: 2018-06-20 10:41:57  
End at: 2018-06-20 10:42:27  
Local clock offset: 0.028 ms  
Remote clock offset: -1.241 ms

# Below is generated by plot.py at 2018-06-20 15:03:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1358.30 Mbit/s  
95th percentile per-packet one-way delay: 112.073 ms  
Loss rate: 0.74%  
-- Flow 1:  
Average throughput: 770.47 Mbit/s  
95th percentile per-packet one-way delay: 113.455 ms  
Loss rate: 1.10%  
-- Flow 2:  
Average throughput: 682.68 Mbit/s  
95th percentile per-packet one-way delay: 114.955 ms  
Loss rate: 0.36%  
-- Flow 3:  
Average throughput: 403.38 Mbit/s  
95th percentile per-packet one-way delay: 60.941 ms  
Loss rate: 0.00%

Run 2: Report of FillP — Data Link



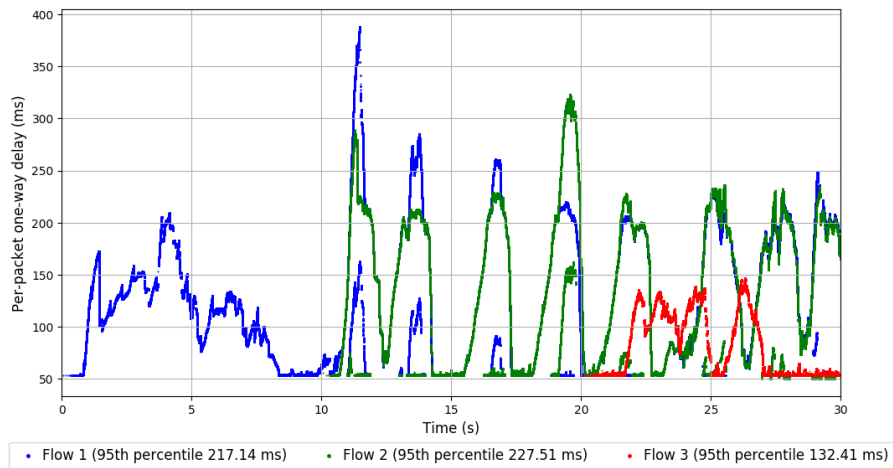
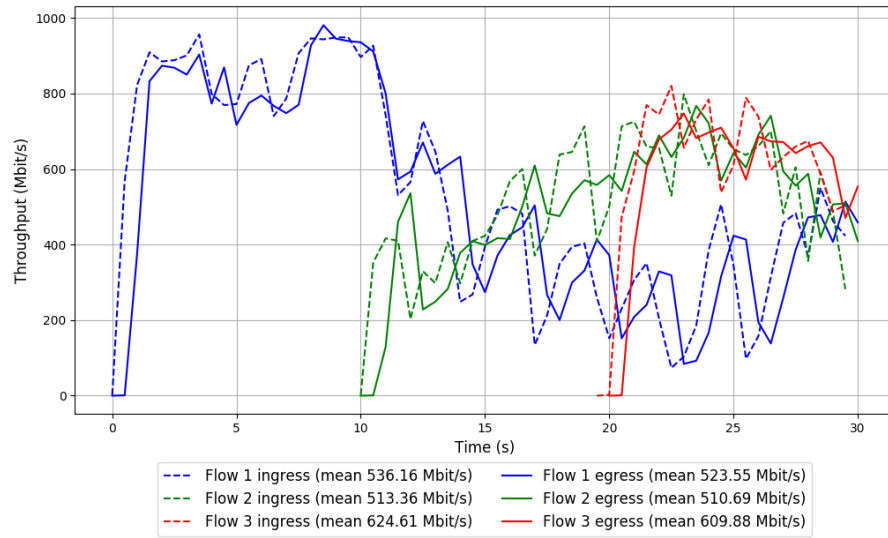
Run 3: Statistics of FillP

Start at: 2018-06-20 11:04:53  
End at: 2018-06-20 11:05:23  
Local clock offset: 0.047 ms  
Remote clock offset: -0.139 ms

# Below is generated by plot.py at 2018-06-20 15:03:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1065.72 Mbit/s  
95th percentile per-packet one-way delay: 219.963 ms  
Loss rate: 1.79%  
-- Flow 1:  
Average throughput: 523.55 Mbit/s  
95th percentile per-packet one-way delay: 217.136 ms  
Loss rate: 2.36%  
-- Flow 2:  
Average throughput: 510.69 Mbit/s  
95th percentile per-packet one-way delay: 227.512 ms  
Loss rate: 0.54%  
-- Flow 3:  
Average throughput: 609.88 Mbit/s  
95th percentile per-packet one-way delay: 132.410 ms  
Loss rate: 2.38%



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

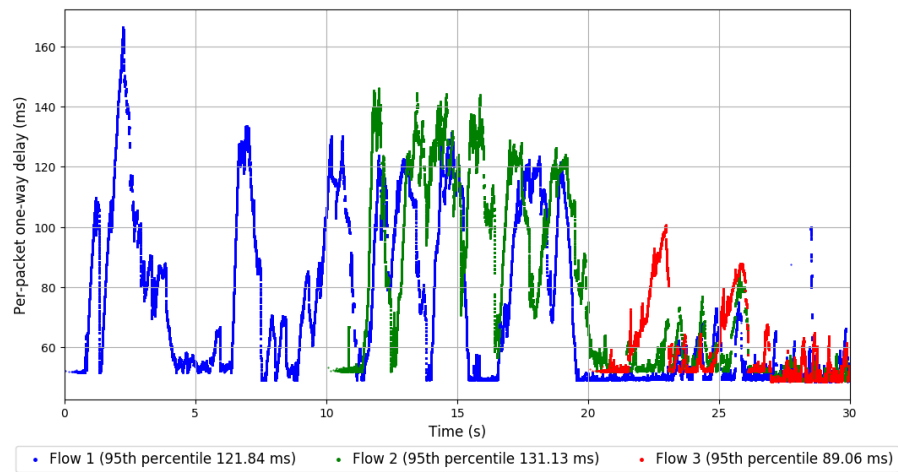
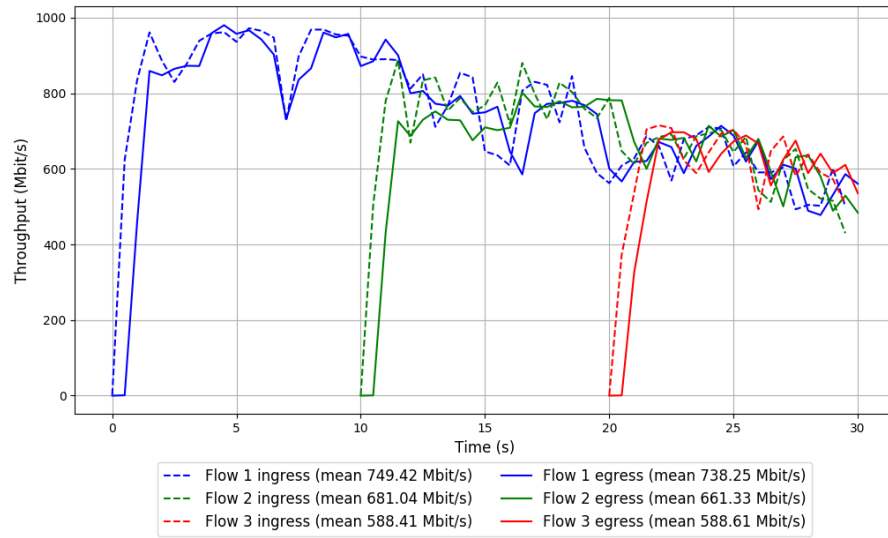


Run 4: Statistics of FillP

Start at: 2018-06-20 11:27:33  
End at: 2018-06-20 11:28:03  
Local clock offset: -0.08 ms  
Remote clock offset: -1.307 ms

# Below is generated by plot.py at 2018-06-20 15:04:37  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1373.32 Mbit/s  
95th percentile per-packet one-way delay: 125.254 ms  
Loss rate: 1.75%  
-- Flow 1:  
Average throughput: 738.25 Mbit/s  
95th percentile per-packet one-way delay: 121.839 ms  
Loss rate: 1.50%  
-- Flow 2:  
Average throughput: 661.33 Mbit/s  
95th percentile per-packet one-way delay: 131.128 ms  
Loss rate: 2.91%  
-- Flow 3:  
Average throughput: 588.61 Mbit/s  
95th percentile per-packet one-way delay: 89.063 ms  
Loss rate: 0.00%

# Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-06-20 11:50:28

End at: 2018-06-20 11:50:58

Local clock offset: -0.131 ms

Remote clock offset: 0.021 ms

# Below is generated by plot.py at 2018-06-20 15:04:38

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1304.13 Mbit/s

95th percentile per-packet one-way delay: 122.521 ms

Loss rate: 1.53%

-- Flow 1:

Average throughput: 710.51 Mbit/s

95th percentile per-packet one-way delay: 122.261 ms

Loss rate: 1.77%

-- Flow 2:

Average throughput: 617.61 Mbit/s

95th percentile per-packet one-way delay: 124.159 ms

Loss rate: 1.38%

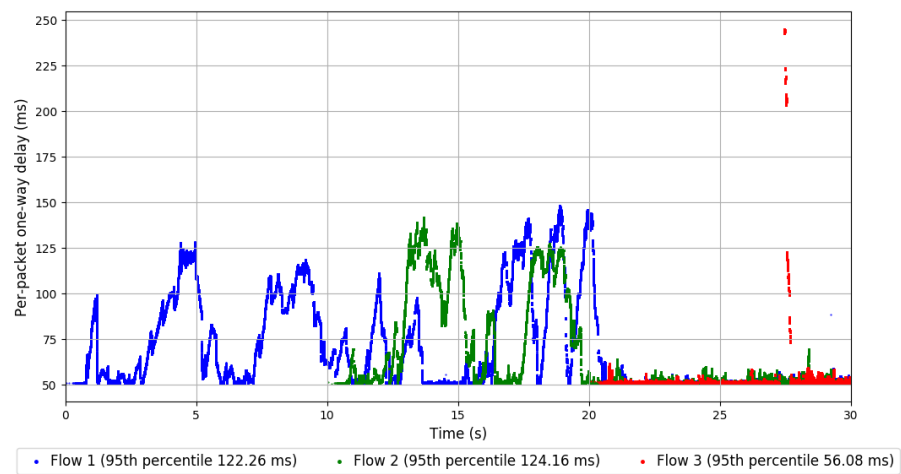
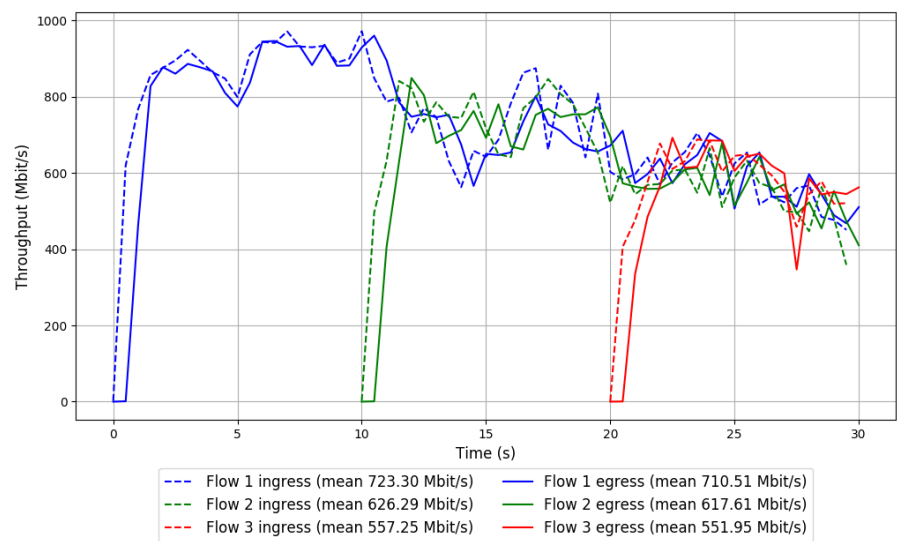
-- Flow 3:

Average throughput: 551.95 Mbit/s

95th percentile per-packet one-way delay: 56.082 ms

Loss rate: 0.96%

Run 5: Report of FillP — Data Link

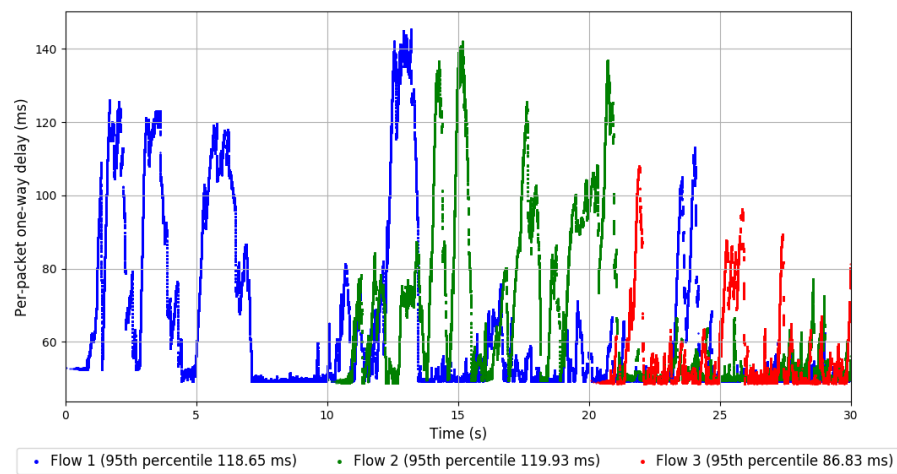
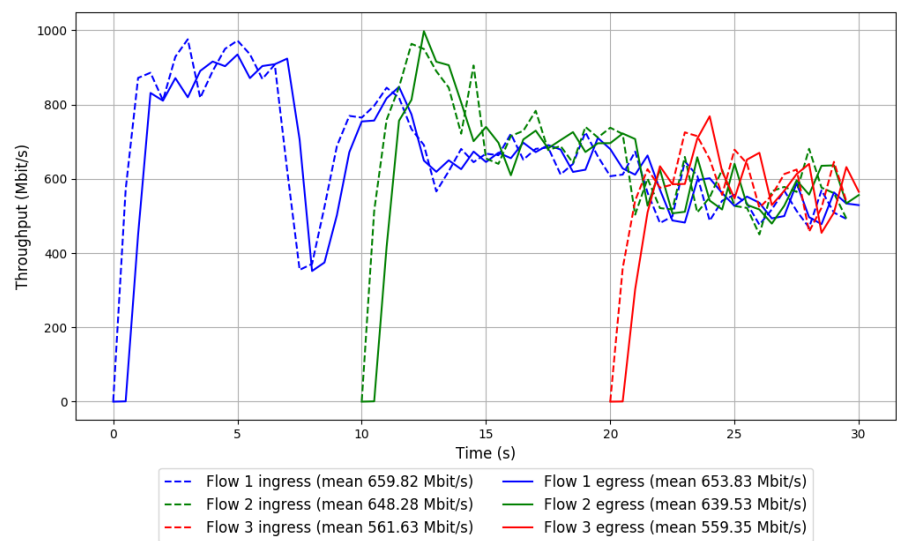


Run 6: Statistics of FillP

Start at: 2018-06-20 12:13:37  
End at: 2018-06-20 12:14:07  
Local clock offset: -0.077 ms  
Remote clock offset: -1.392 ms

# Below is generated by plot.py at 2018-06-20 15:04:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1264.85 Mbit/s  
95th percentile per-packet one-way delay: 117.264 ms  
Loss rate: 0.98%  
-- Flow 1:  
Average throughput: 653.83 Mbit/s  
95th percentile per-packet one-way delay: 118.646 ms  
Loss rate: 0.92%  
-- Flow 2:  
Average throughput: 639.53 Mbit/s  
95th percentile per-packet one-way delay: 119.929 ms  
Loss rate: 1.34%  
-- Flow 3:  
Average throughput: 559.35 Mbit/s  
95th percentile per-packet one-way delay: 86.832 ms  
Loss rate: 0.40%

Run 6: Report of FillP — Data Link



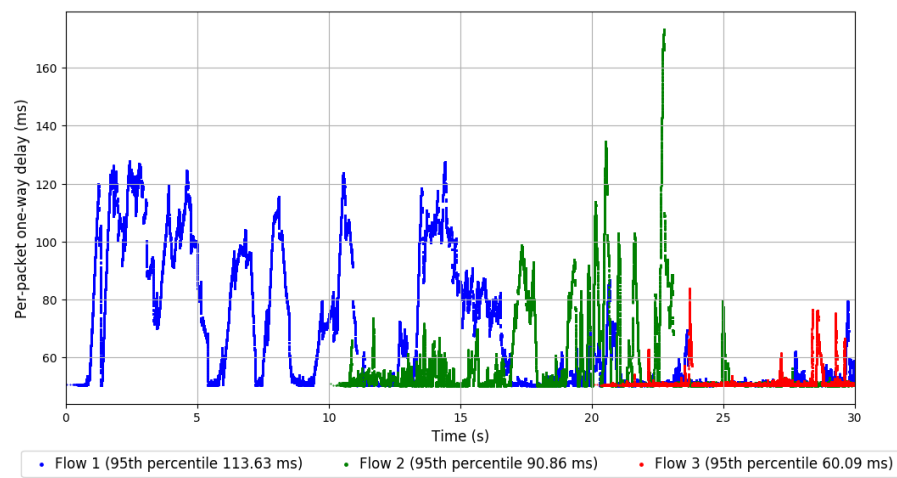
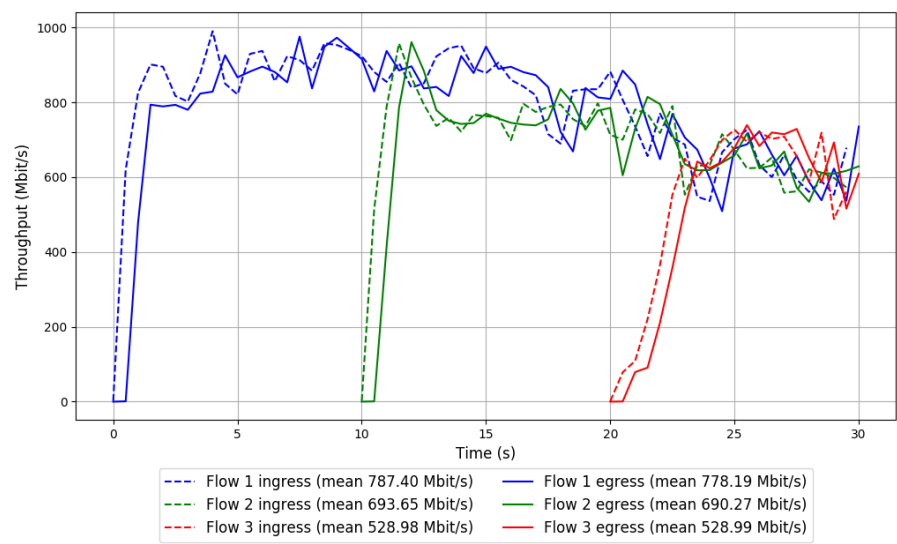
Run 7: Statistics of FillP

Start at: 2018-06-20 12:36:20  
End at: 2018-06-20 12:36:50  
Local clock offset: -0.18 ms  
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2018-06-20 15:09:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1412.76 Mbit/s  
95th percentile per-packet one-way delay: 107.595 ms  
Loss rate: 0.80%  
-- Flow 1:  
Average throughput: 778.19 Mbit/s  
95th percentile per-packet one-way delay: 113.631 ms  
Loss rate: 1.15%  
-- Flow 2:  
Average throughput: 690.27 Mbit/s  
95th percentile per-packet one-way delay: 90.856 ms  
Loss rate: 0.49%  
-- Flow 3:  
Average throughput: 528.99 Mbit/s  
95th percentile per-packet one-way delay: 60.087 ms  
Loss rate: 0.00%



Run 7: Report of FillP — Data Link

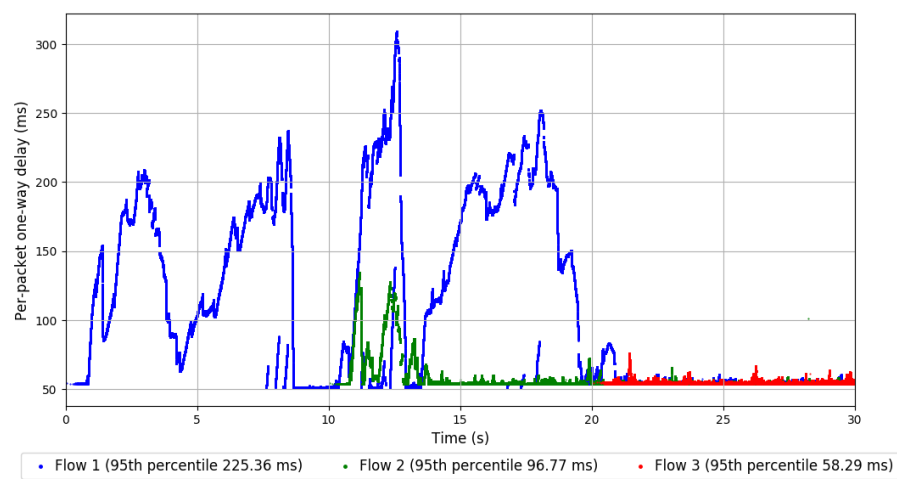
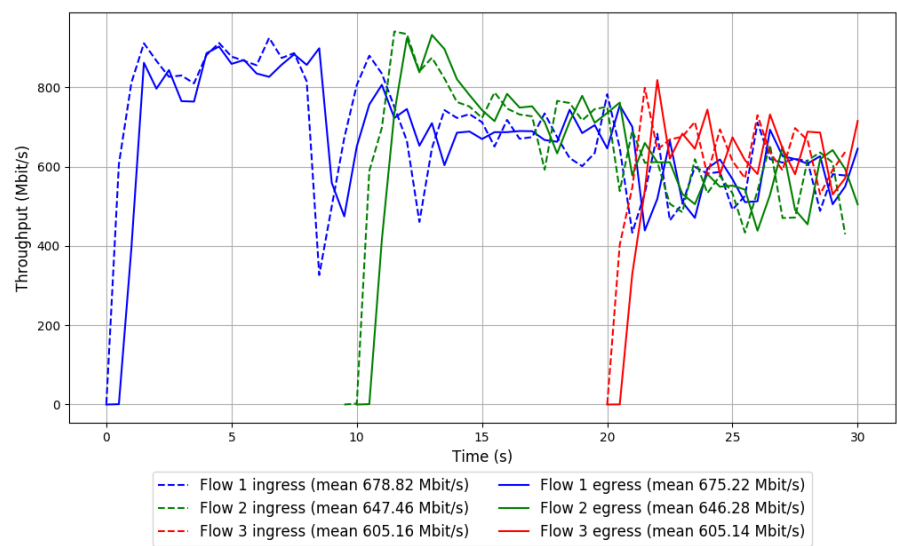


Run 8: Statistics of FillP

Start at: 2018-06-20 12:59:42  
End at: 2018-06-20 13:00:12  
Local clock offset: -0.273 ms  
Remote clock offset: -0.044 ms

# Below is generated by plot.py at 2018-06-20 15:09:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1305.81 Mbit/s  
95th percentile per-packet one-way delay: 206.642 ms  
Loss rate: 0.36%  
-- Flow 1:  
Average throughput: 675.22 Mbit/s  
95th percentile per-packet one-way delay: 225.362 ms  
Loss rate: 0.54%  
-- Flow 2:  
Average throughput: 646.28 Mbit/s  
95th percentile per-packet one-way delay: 96.770 ms  
Loss rate: 0.21%  
-- Flow 3:  
Average throughput: 605.14 Mbit/s  
95th percentile per-packet one-way delay: 58.288 ms  
Loss rate: 0.05%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-06-20 13:22:25

End at: 2018-06-20 13:22:55

Local clock offset: -0.094 ms

Remote clock offset: 0.366 ms

# Below is generated by plot.py at 2018-06-20 15:30:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1418.09 Mbit/s

95th percentile per-packet one-way delay: 157.708 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 751.18 Mbit/s

95th percentile per-packet one-way delay: 155.821 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 765.56 Mbit/s

95th percentile per-packet one-way delay: 116.139 ms

Loss rate: 1.27%

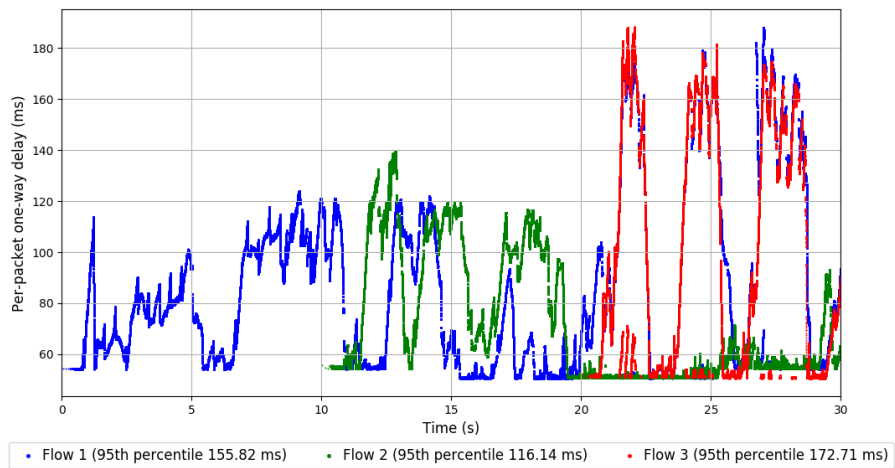
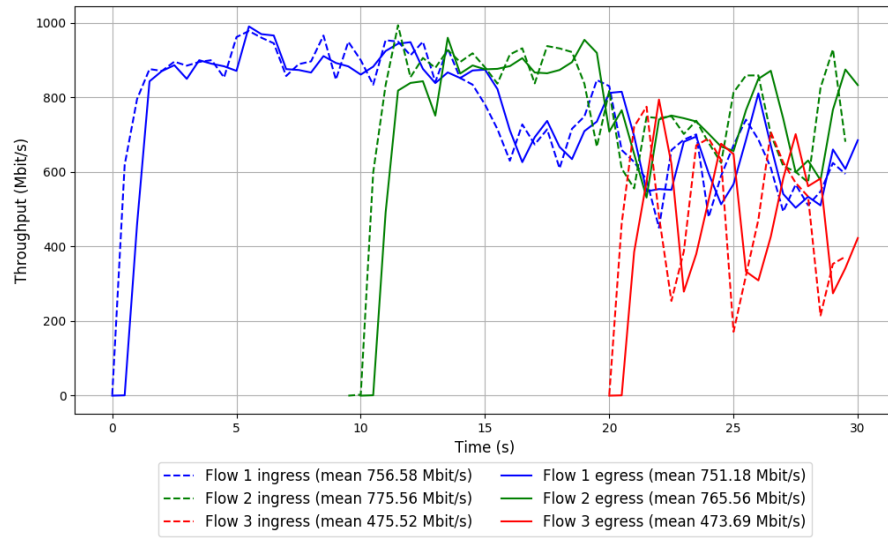
-- Flow 3:

Average throughput: 473.69 Mbit/s

95th percentile per-packet one-way delay: 172.706 ms

Loss rate: 0.00%

# Run 9: Report of FillP — Data Link

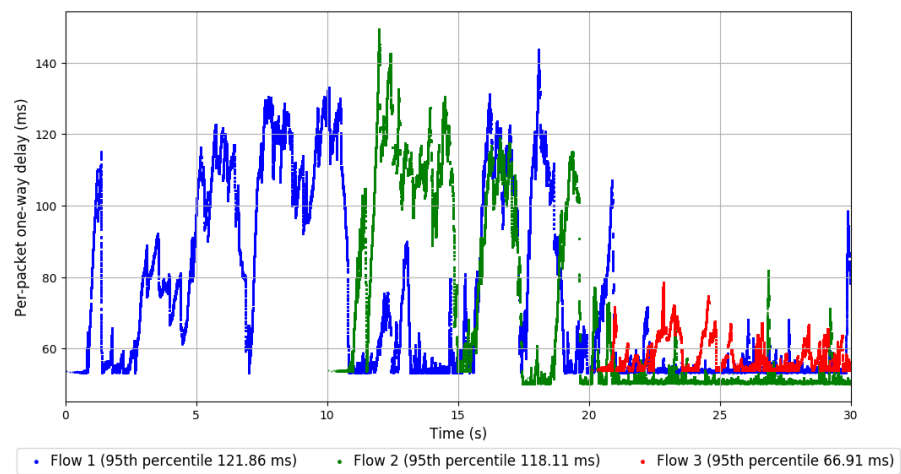
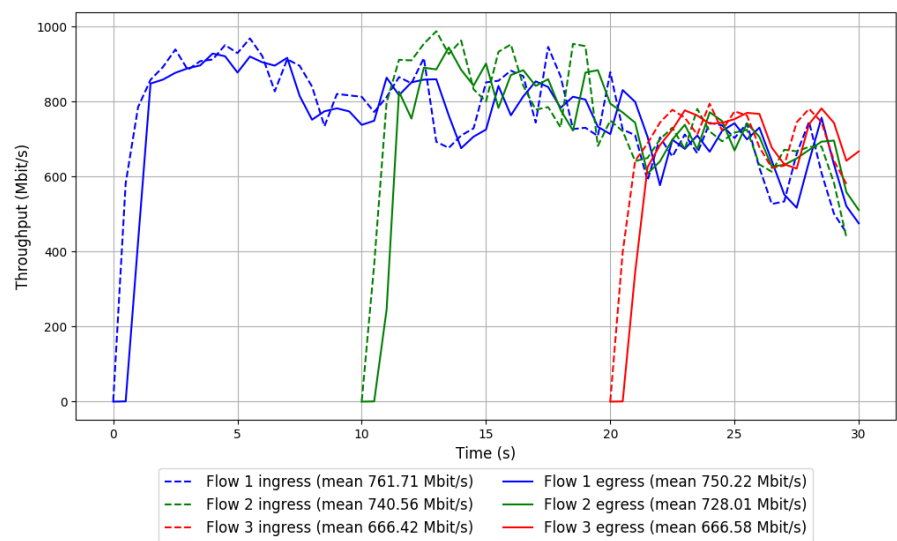


Run 10: Statistics of FillP

Start at: 2018-06-20 13:45:23  
End at: 2018-06-20 13:45:53  
Local clock offset: -0.082 ms  
Remote clock offset: -0.085 ms

# Below is generated by plot.py at 2018-06-20 15:33:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1455.37 Mbit/s  
95th percentile per-packet one-way delay: 119.663 ms  
Loss rate: 1.35%  
-- Flow 1:  
Average throughput: 750.22 Mbit/s  
95th percentile per-packet one-way delay: 121.862 ms  
Loss rate: 1.51%  
-- Flow 2:  
Average throughput: 728.01 Mbit/s  
95th percentile per-packet one-way delay: 118.105 ms  
Loss rate: 1.71%  
-- Flow 3:  
Average throughput: 666.58 Mbit/s  
95th percentile per-packet one-way delay: 66.910 ms  
Loss rate: 0.01%

Run 10: Report of FillP — Data Link



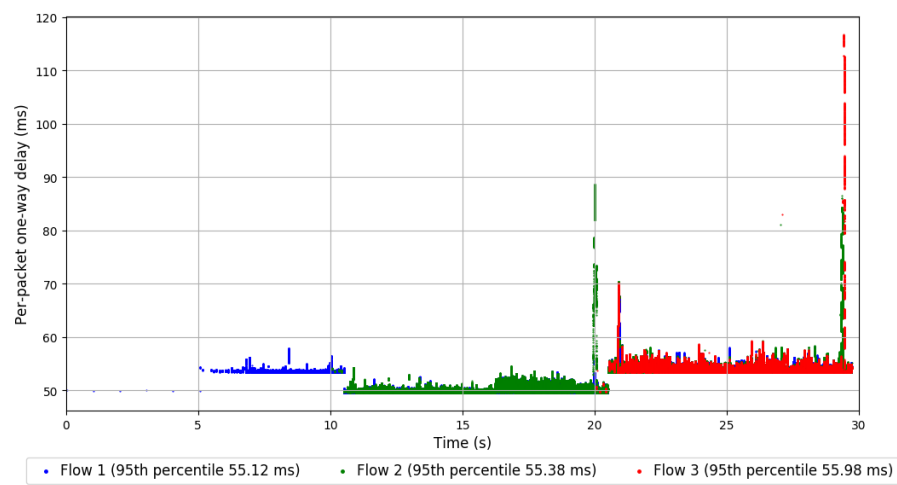
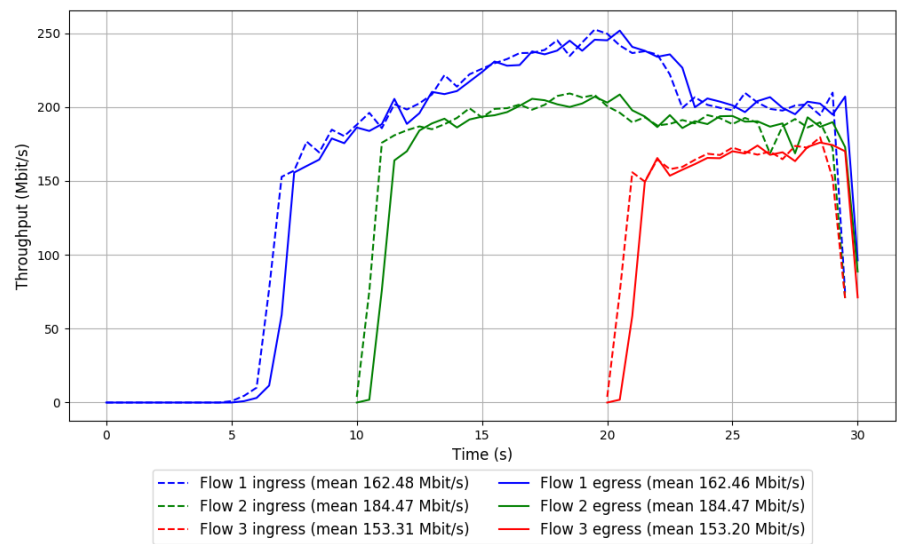
```
Run 1: Statistics of Indigo

Start at: 2018-06-20 10:13:58
End at: 2018-06-20 10:14:28
Local clock offset: -0.208 ms
Remote clock offset: -0.357 ms

# Below is generated by plot.py at 2018-06-20 15:33:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 334.44 Mbit/s
95th percentile per-packet one-way delay: 55.393 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 162.46 Mbit/s
95th percentile per-packet one-way delay: 55.123 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 184.47 Mbit/s
95th percentile per-packet one-way delay: 55.378 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 153.20 Mbit/s
95th percentile per-packet one-way delay: 55.985 ms
Loss rate: 0.07%
```



Run 1: Report of Indigo — Data Link

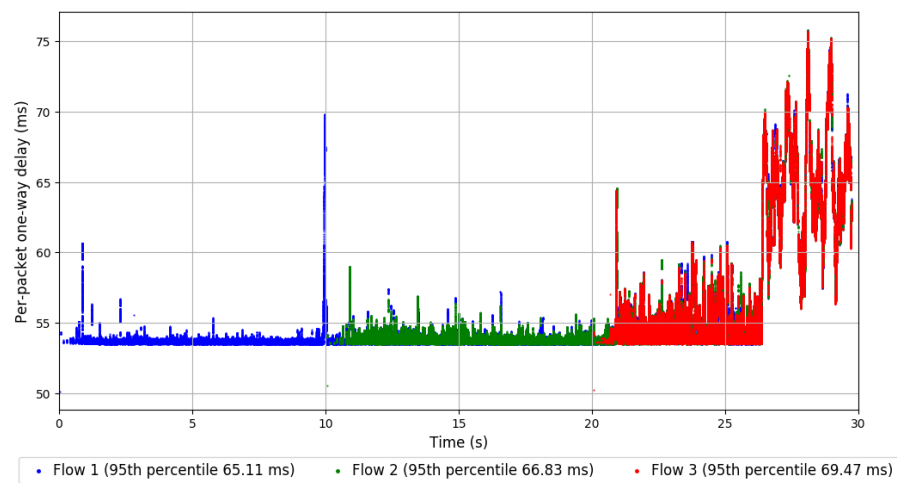
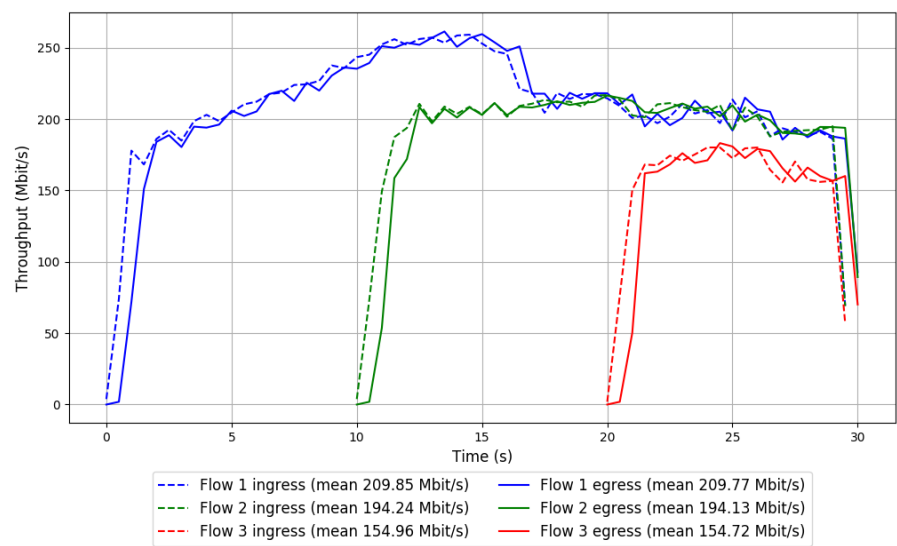


Run 2: Statistics of Indigo

Start at: 2018-06-20 10:36:34  
End at: 2018-06-20 10:37:04  
Local clock offset: -0.035 ms  
Remote clock offset: -0.069 ms

# Below is generated by plot.py at 2018-06-20 15:33:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 388.73 Mbit/s  
95th percentile per-packet one-way delay: 66.655 ms  
Loss rate: 0.05%  
-- Flow 1:  
Average throughput: 209.77 Mbit/s  
95th percentile per-packet one-way delay: 65.109 ms  
Loss rate: 0.03%  
-- Flow 2:  
Average throughput: 194.13 Mbit/s  
95th percentile per-packet one-way delay: 66.835 ms  
Loss rate: 0.06%  
-- Flow 3:  
Average throughput: 154.72 Mbit/s  
95th percentile per-packet one-way delay: 69.469 ms  
Loss rate: 0.15%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-06-20 10:59:25

End at: 2018-06-20 10:59:55

Local clock offset: -0.187 ms

Remote clock offset: 0.019 ms

# Below is generated by plot.py at 2018-06-20 15:33:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 363.55 Mbit/s

95th percentile per-packet one-way delay: 55.926 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 177.92 Mbit/s

95th percentile per-packet one-way delay: 55.249 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 184.85 Mbit/s

95th percentile per-packet one-way delay: 56.055 ms

Loss rate: 0.00%

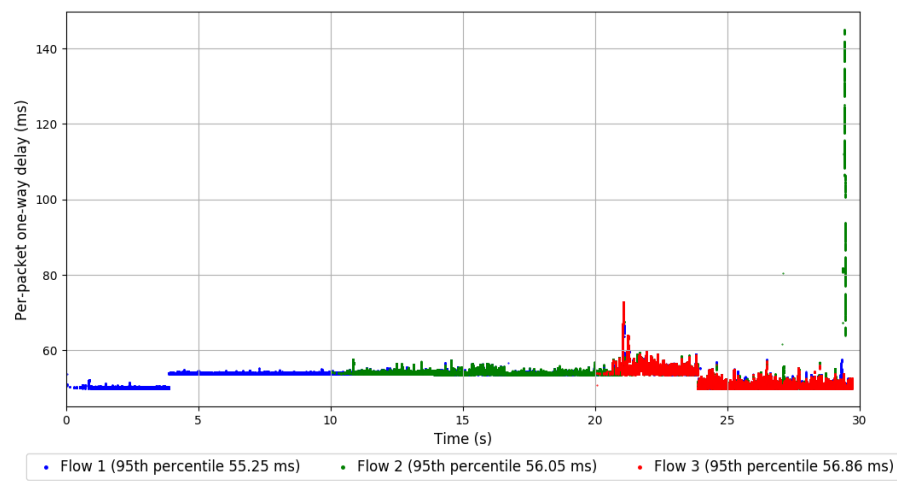
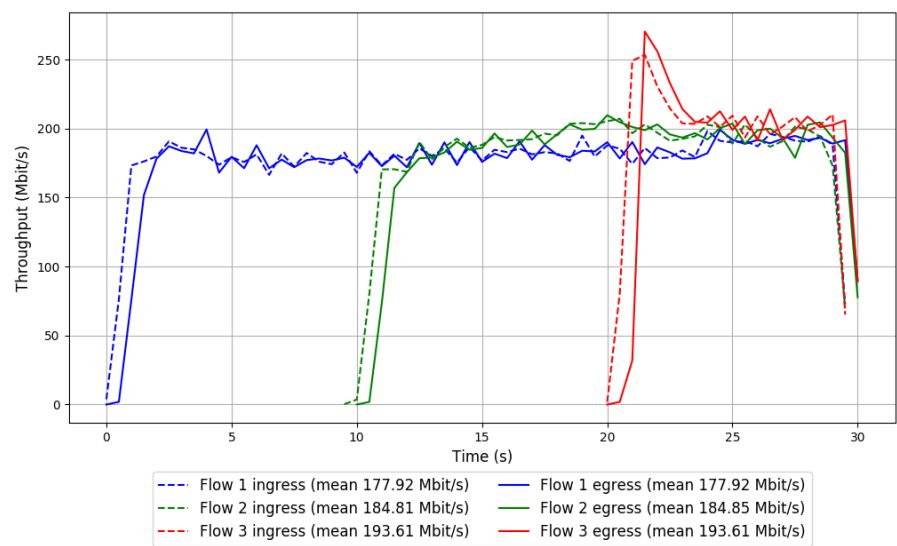
-- Flow 3:

Average throughput: 193.61 Mbit/s

95th percentile per-packet one-way delay: 56.859 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link

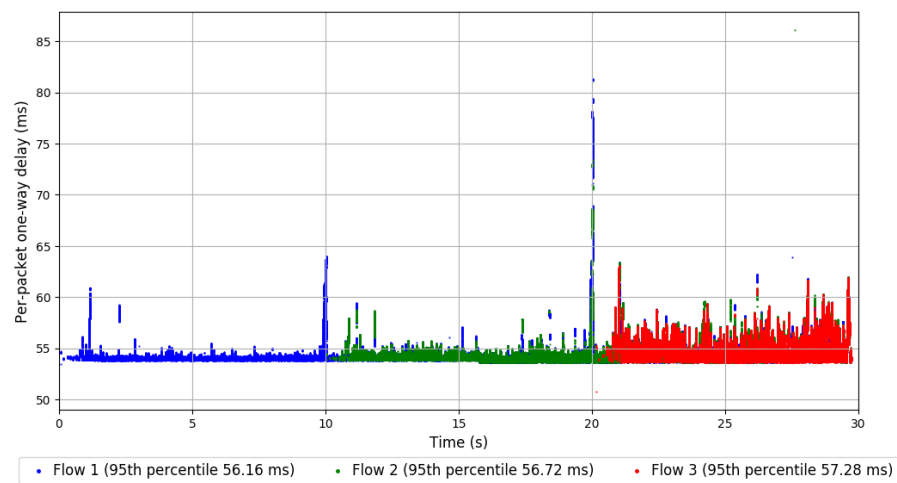
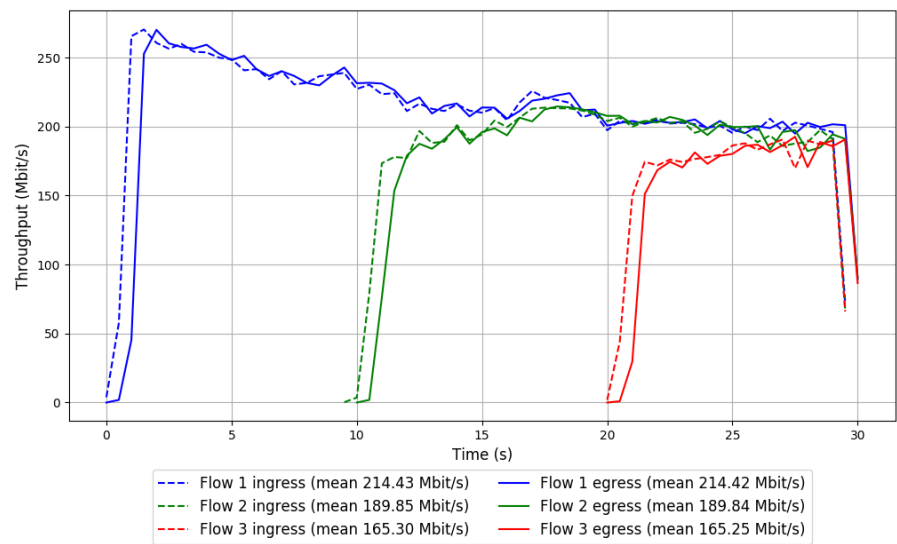


Run 4: Statistics of Indigo

Start at: 2018-06-20 11:22:03  
End at: 2018-06-20 11:22:33  
Local clock offset: -0.219 ms  
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2018-06-20 15:33:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 393.65 Mbit/s  
95th percentile per-packet one-way delay: 56.613 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 214.42 Mbit/s  
95th percentile per-packet one-way delay: 56.157 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 189.84 Mbit/s  
95th percentile per-packet one-way delay: 56.723 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 165.25 Mbit/s  
95th percentile per-packet one-way delay: 57.281 ms  
Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



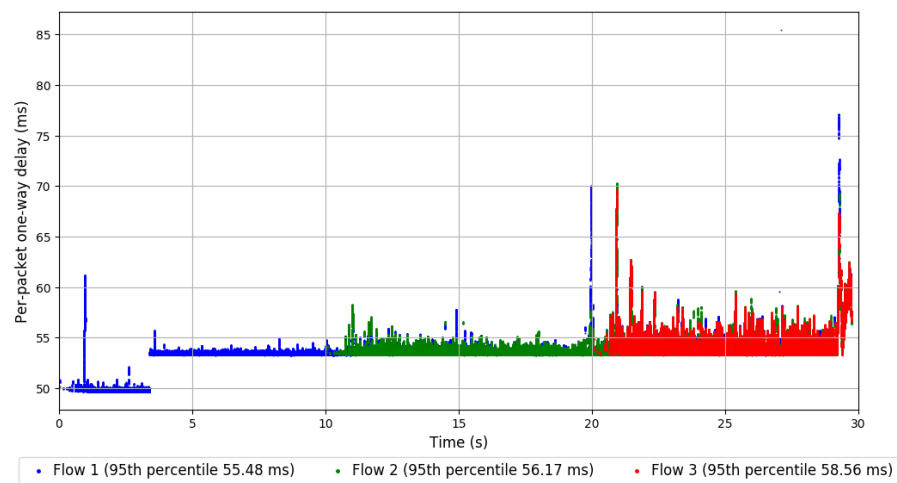
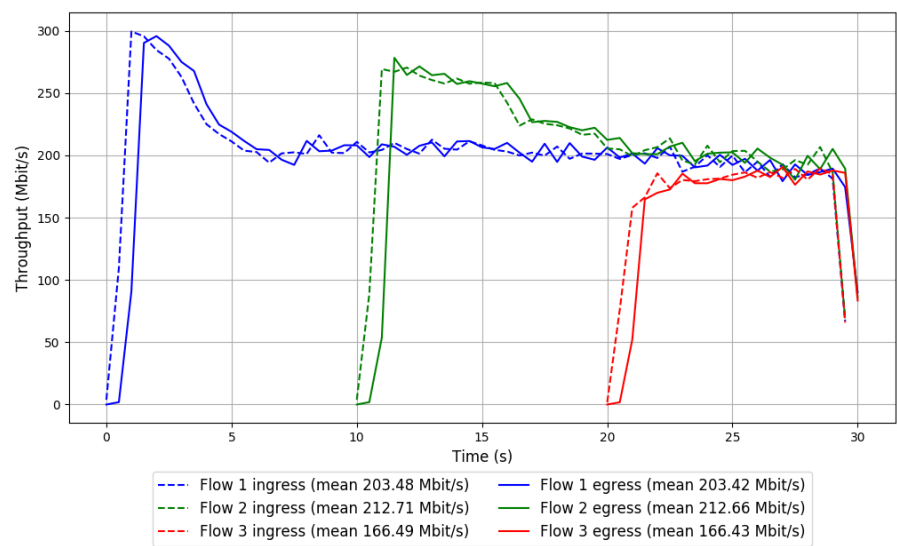
Run 5: Statistics of Indigo

Start at: 2018-06-20 11:45:05  
End at: 2018-06-20 11:45:35  
Local clock offset: -0.001 ms  
Remote clock offset: -0.238 ms

# Below is generated by plot.py at 2018-06-20 15:33:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 398.43 Mbit/s  
95th percentile per-packet one-way delay: 56.158 ms  
Loss rate: 0.04%  
-- Flow 1:  
Average throughput: 203.42 Mbit/s  
95th percentile per-packet one-way delay: 55.481 ms  
Loss rate: 0.02%  
-- Flow 2:  
Average throughput: 212.66 Mbit/s  
95th percentile per-packet one-way delay: 56.174 ms  
Loss rate: 0.04%  
-- Flow 3:  
Average throughput: 166.43 Mbit/s  
95th percentile per-packet one-way delay: 58.565 ms  
Loss rate: 0.07%



Run 5: Report of Indigo — Data Link

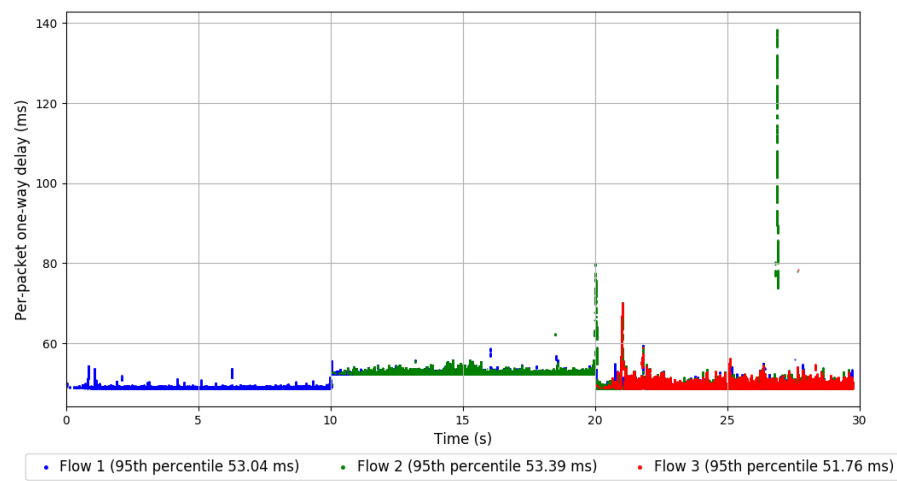
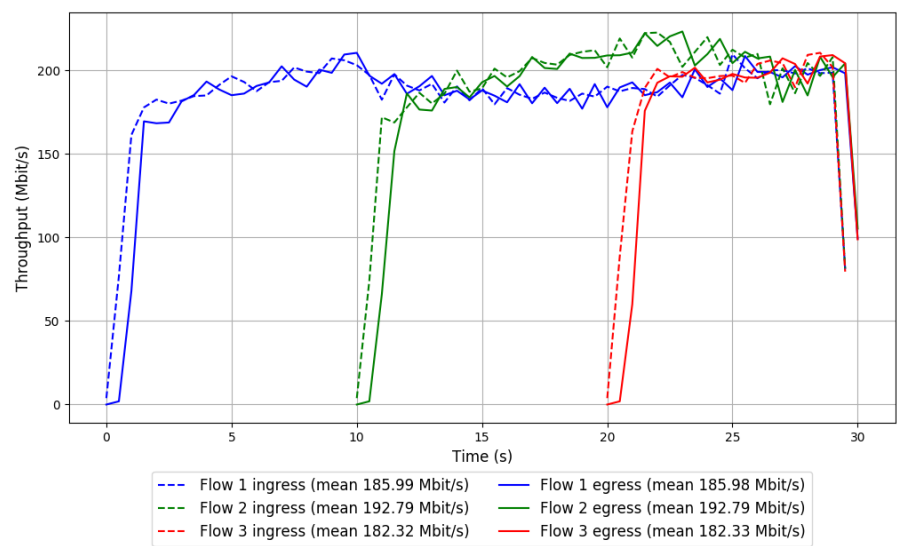


Run 6: Statistics of Indigo

Start at: 2018-06-20 12:07:59  
End at: 2018-06-20 12:08:29  
Local clock offset: -0.093 ms  
Remote clock offset: -1.483 ms

# Below is generated by plot.py at 2018-06-20 15:33:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 373.10 Mbit/s  
95th percentile per-packet one-way delay: 53.128 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 185.98 Mbit/s  
95th percentile per-packet one-way delay: 53.036 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 192.79 Mbit/s  
95th percentile per-packet one-way delay: 53.387 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 182.33 Mbit/s  
95th percentile per-packet one-way delay: 51.764 ms  
Loss rate: 0.00%

Run 6: Report of Indigo — Data Link

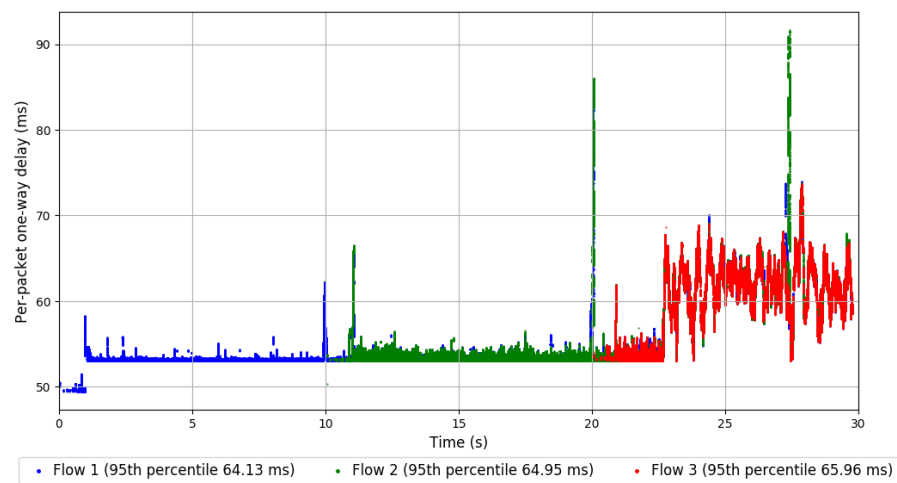
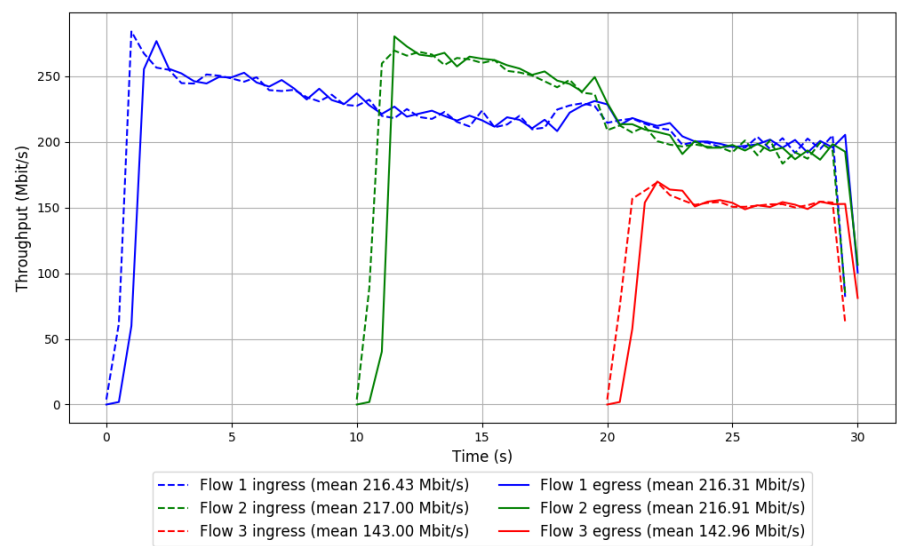


Run 7: Statistics of Indigo

Start at: 2018-06-20 12:31:08  
End at: 2018-06-20 12:31:38  
Local clock offset: 0.08 ms  
Remote clock offset: -0.319 ms

# Below is generated by plot.py at 2018-06-20 15:33:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 406.71 Mbit/s  
95th percentile per-packet one-way delay: 64.817 ms  
Loss rate: 0.04%  
-- Flow 1:  
Average throughput: 216.31 Mbit/s  
95th percentile per-packet one-way delay: 64.128 ms  
Loss rate: 0.05%  
-- Flow 2:  
Average throughput: 216.91 Mbit/s  
95th percentile per-packet one-way delay: 64.951 ms  
Loss rate: 0.04%  
-- Flow 3:  
Average throughput: 142.96 Mbit/s  
95th percentile per-packet one-way delay: 65.956 ms  
Loss rate: 0.05%

Run 7: Report of Indigo — Data Link

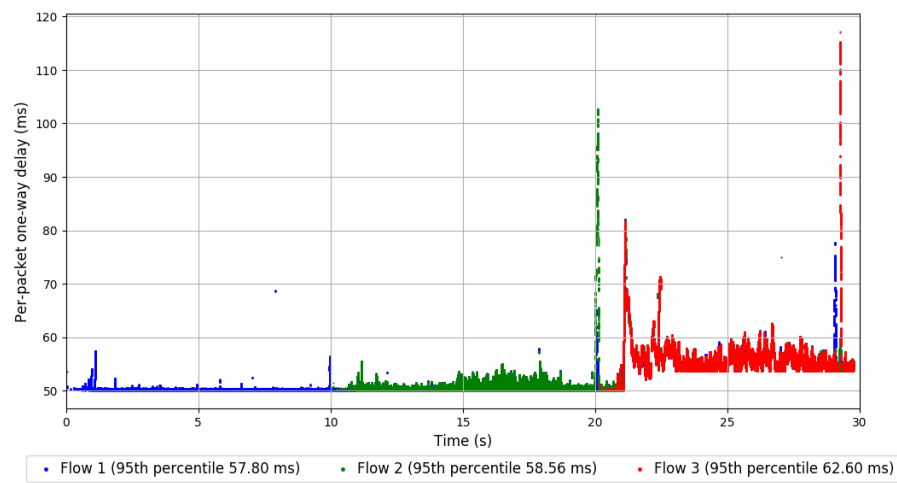
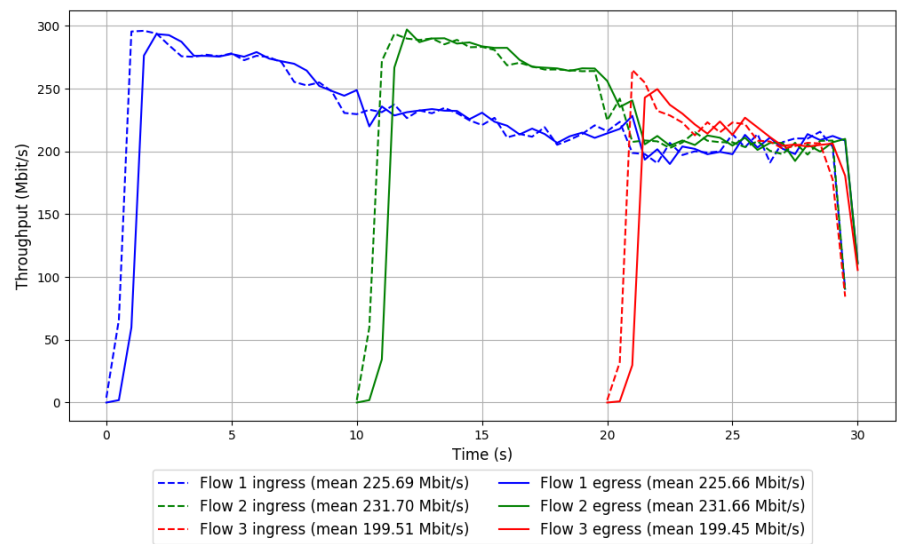


Run 8: Statistics of Indigo

Start at: 2018-06-20 12:53:57  
End at: 2018-06-20 12:54:27  
Local clock offset: -0.213 ms  
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2018-06-20 15:33:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 443.35 Mbit/s  
95th percentile per-packet one-way delay: 58.595 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 225.66 Mbit/s  
95th percentile per-packet one-way delay: 57.797 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 231.66 Mbit/s  
95th percentile per-packet one-way delay: 58.560 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 199.45 Mbit/s  
95th percentile per-packet one-way delay: 62.599 ms  
Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



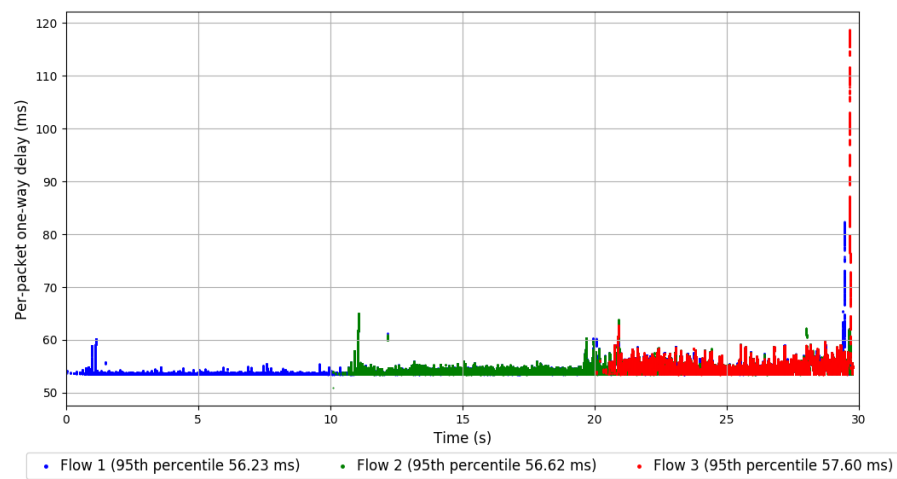
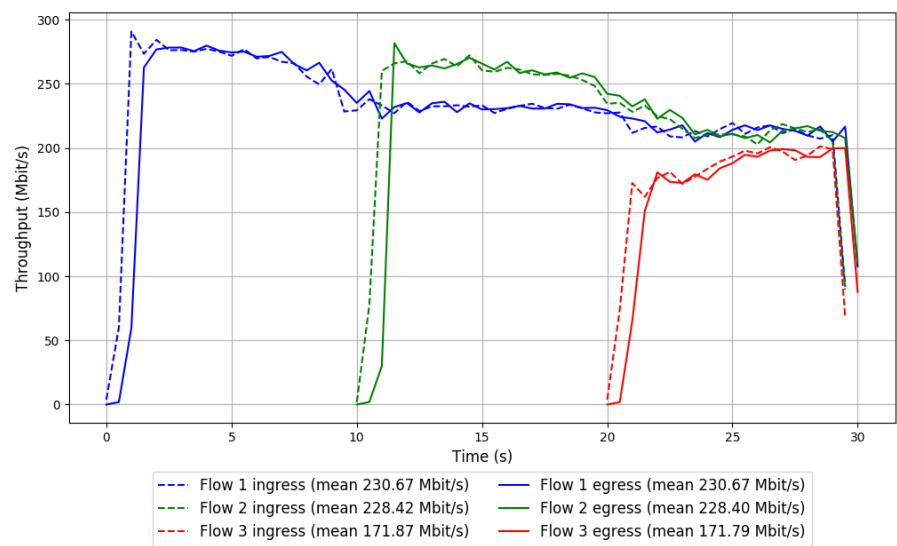
Run 9: Statistics of Indigo

Start at: 2018-06-20 13:17:09  
End at: 2018-06-20 13:17:39  
Local clock offset: -0.007 ms  
Remote clock offset: -0.137 ms

# Below is generated by plot.py at 2018-06-20 15:33:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 437.93 Mbit/s  
95th percentile per-packet one-way delay: 56.635 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 230.67 Mbit/s  
95th percentile per-packet one-way delay: 56.231 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 228.40 Mbit/s  
95th percentile per-packet one-way delay: 56.616 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 171.79 Mbit/s  
95th percentile per-packet one-way delay: 57.602 ms  
Loss rate: 0.07%



Run 9: Report of Indigo — Data Link

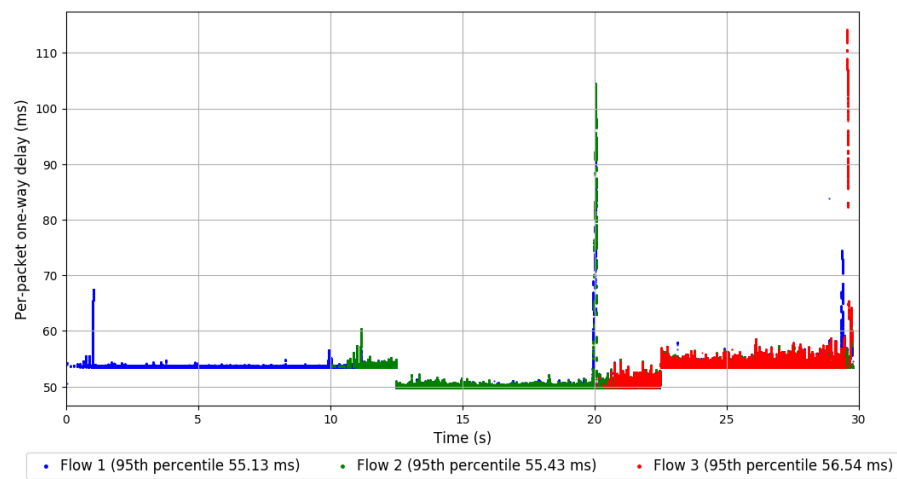
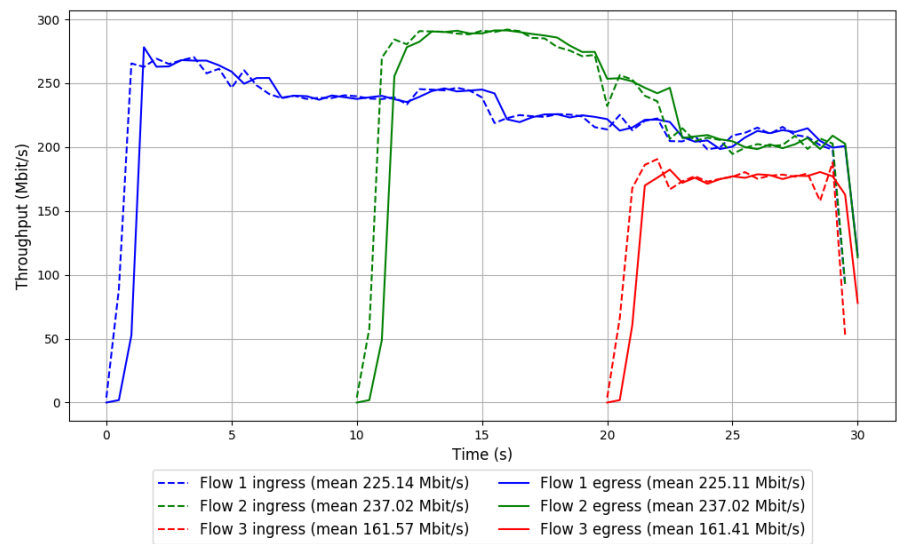


Run 10: Statistics of Indigo

Start at: 2018-06-20 13:39:56  
End at: 2018-06-20 13:40:26  
Local clock offset: -0.068 ms  
Remote clock offset: -0.149 ms

# Below is generated by plot.py at 2018-06-20 15:33:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 434.81 Mbit/s  
95th percentile per-packet one-way delay: 55.471 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 225.11 Mbit/s  
95th percentile per-packet one-way delay: 55.131 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 237.02 Mbit/s  
95th percentile per-packet one-way delay: 55.430 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 161.41 Mbit/s  
95th percentile per-packet one-way delay: 56.541 ms  
Loss rate: 0.00%

Run 10: Report of Indigo — Data Link

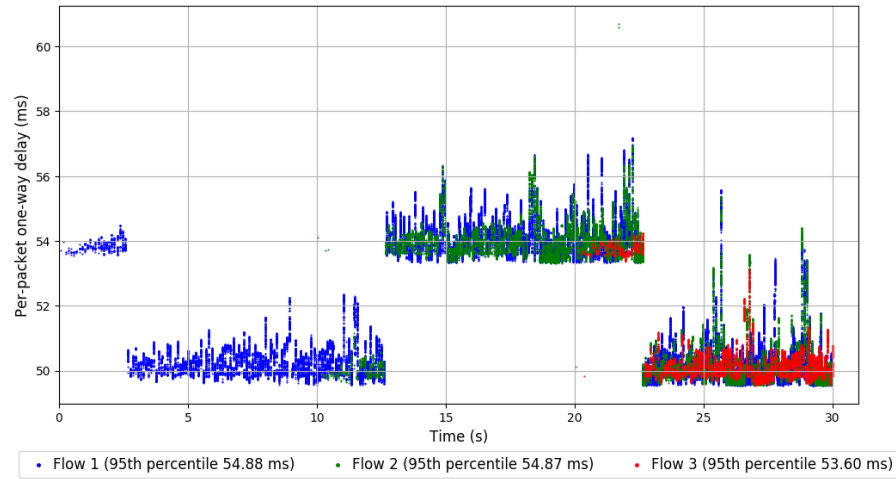
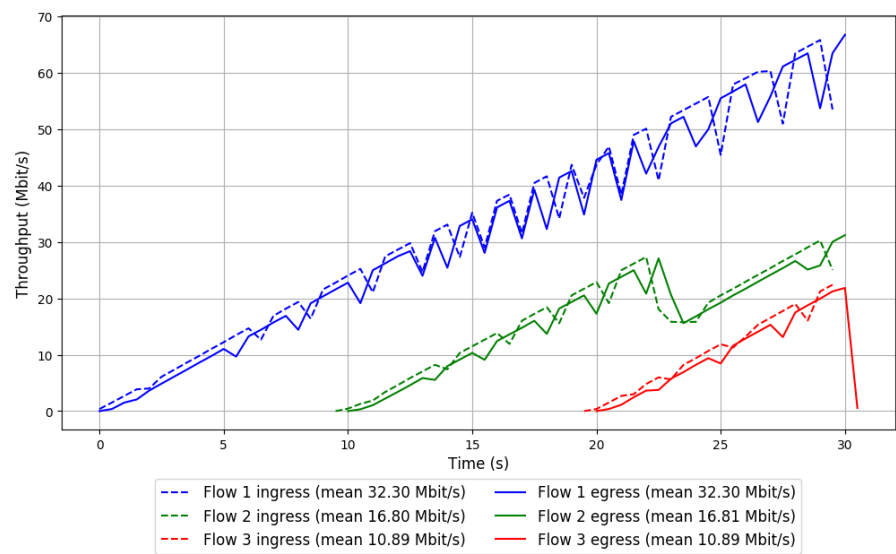


```
Run 1: Statistics of LEDBAT

Start at: 2018-06-20 10:28:37
End at: 2018-06-20 10:29:07
Local clock offset: -0.115 ms
Remote clock offset: -0.294 ms

# Below is generated by plot.py at 2018-06-20 15:33:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 47.03 Mbit/s
95th percentile per-packet one-way delay: 54.833 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 32.30 Mbit/s
95th percentile per-packet one-way delay: 54.885 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 16.81 Mbit/s
95th percentile per-packet one-way delay: 54.870 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.89 Mbit/s
95th percentile per-packet one-way delay: 53.601 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-06-20 10:51:25

End at: 2018-06-20 10:51:55

Local clock offset: -0.273 ms

Remote clock offset: 1.015 ms

# Below is generated by plot.py at 2018-06-20 15:33:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 31.78 Mbit/s

95th percentile per-packet one-way delay: 56.408 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 14.29 Mbit/s

95th percentile per-packet one-way delay: 56.287 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 21.11 Mbit/s

95th percentile per-packet one-way delay: 56.394 ms

Loss rate: 0.00%

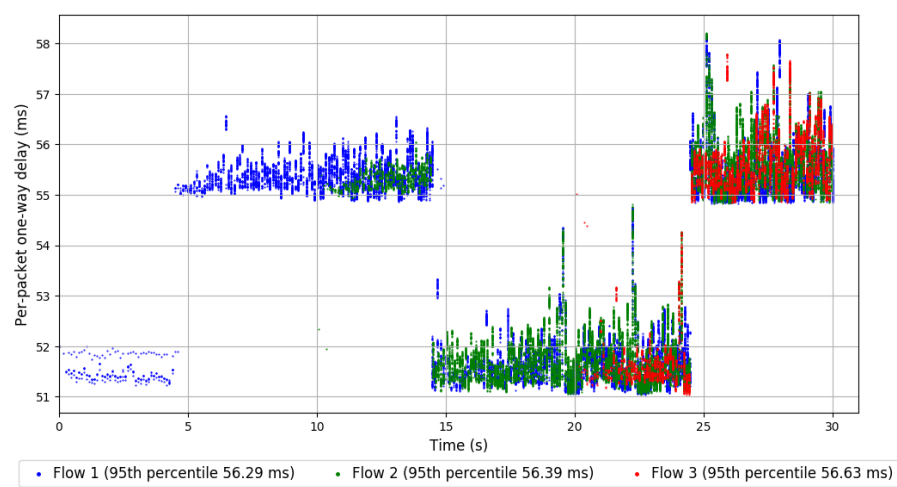
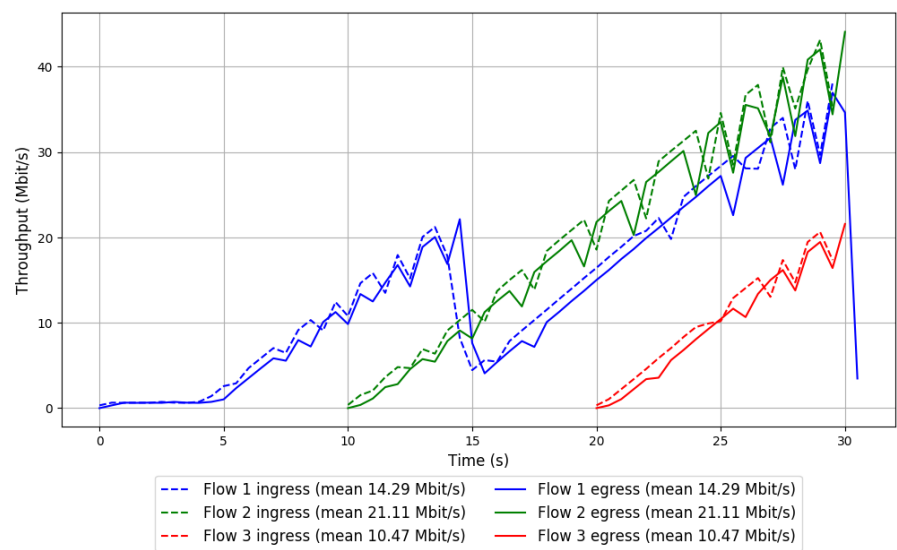
-- Flow 3:

Average throughput: 10.47 Mbit/s

95th percentile per-packet one-way delay: 56.629 ms

Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link



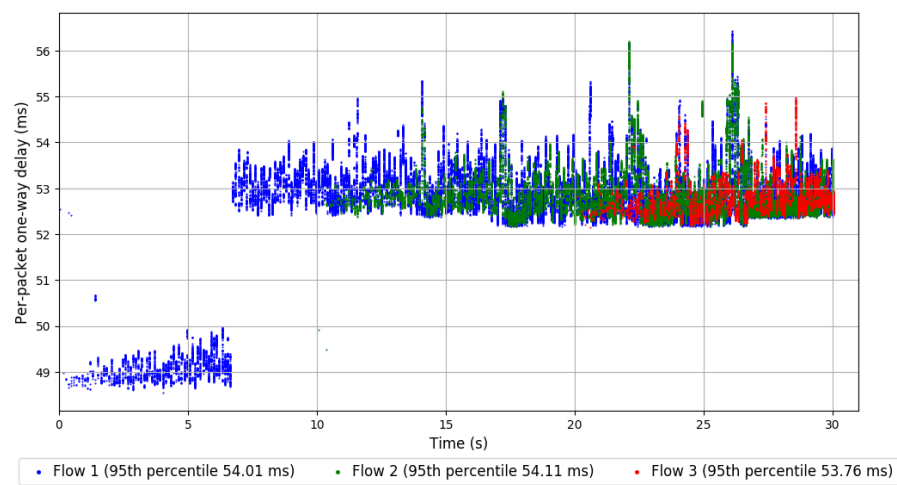
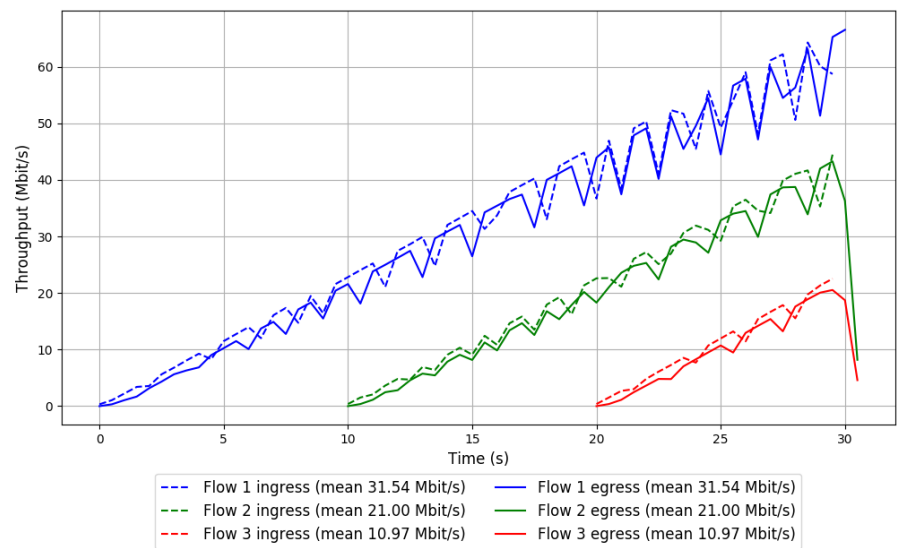
Run 3: Statistics of LEDBAT

Start at: 2018-06-20 11:14:12  
End at: 2018-06-20 11:14:42  
Local clock offset: -0.098 ms  
Remote clock offset: -1.381 ms

# Below is generated by plot.py at 2018-06-20 15:33:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 49.13 Mbit/s  
95th percentile per-packet one-way delay: 54.008 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 31.54 Mbit/s  
95th percentile per-packet one-way delay: 54.009 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 21.00 Mbit/s  
95th percentile per-packet one-way delay: 54.114 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 10.97 Mbit/s  
95th percentile per-packet one-way delay: 53.757 ms  
Loss rate: 0.00%



Run 3: Report of LEDBAT — Data Link

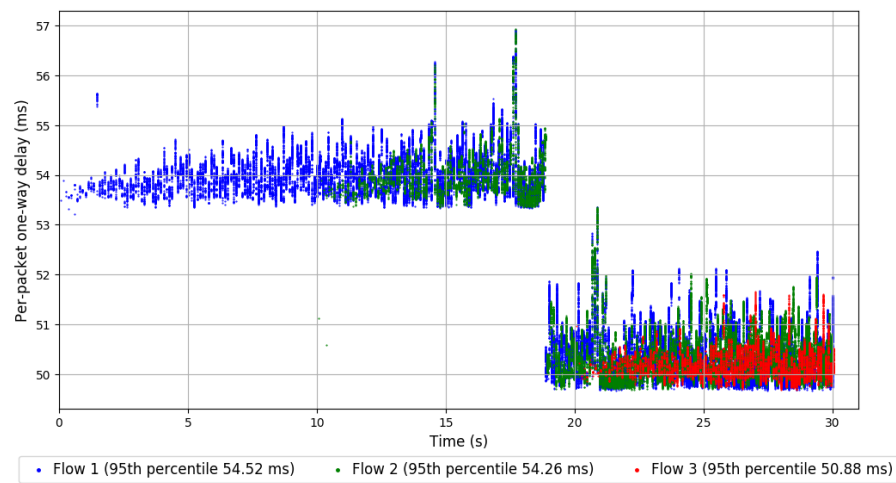
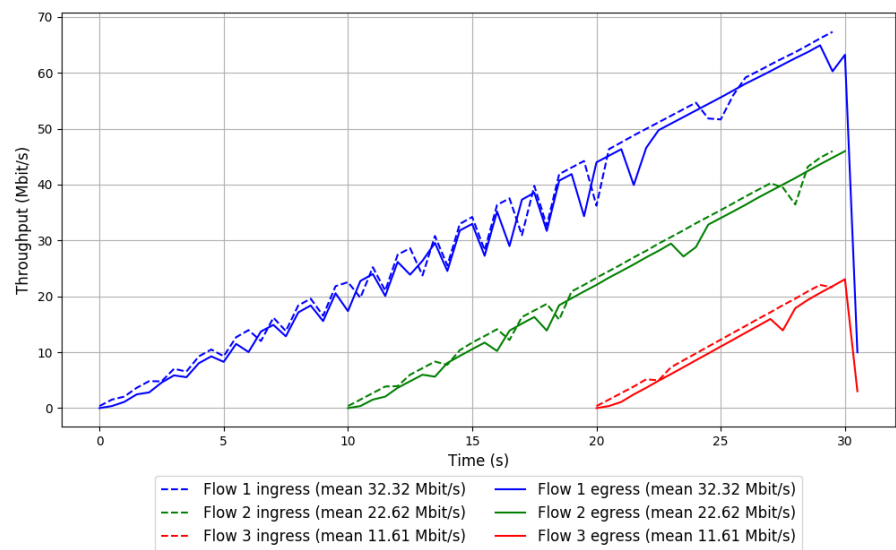


Run 4: Statistics of LEDBAT

Start at: 2018-06-20 11:37:00  
End at: 2018-06-20 11:37:30  
Local clock offset: 0.005 ms  
Remote clock offset: -0.144 ms

# Below is generated by plot.py at 2018-06-20 15:33:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 51.19 Mbit/s  
95th percentile per-packet one-way delay: 54.431 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 32.32 Mbit/s  
95th percentile per-packet one-way delay: 54.519 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 22.62 Mbit/s  
95th percentile per-packet one-way delay: 54.257 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 11.61 Mbit/s  
95th percentile per-packet one-way delay: 50.883 ms  
Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link

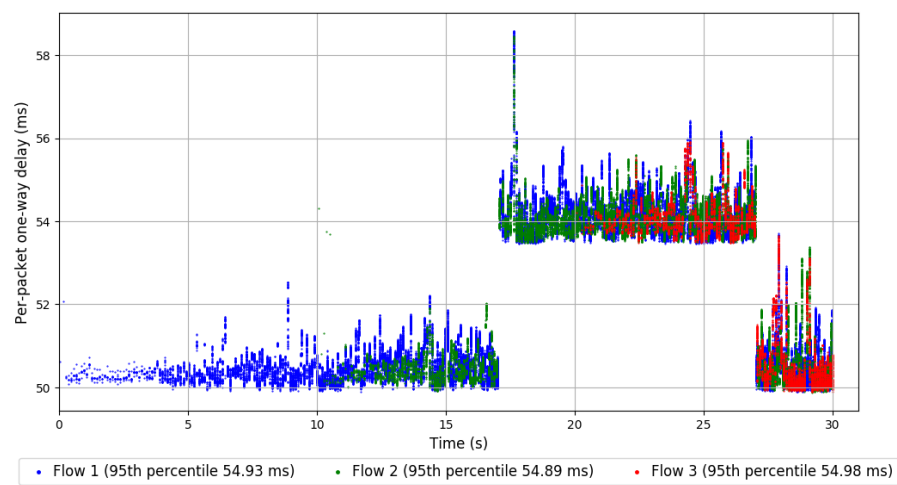
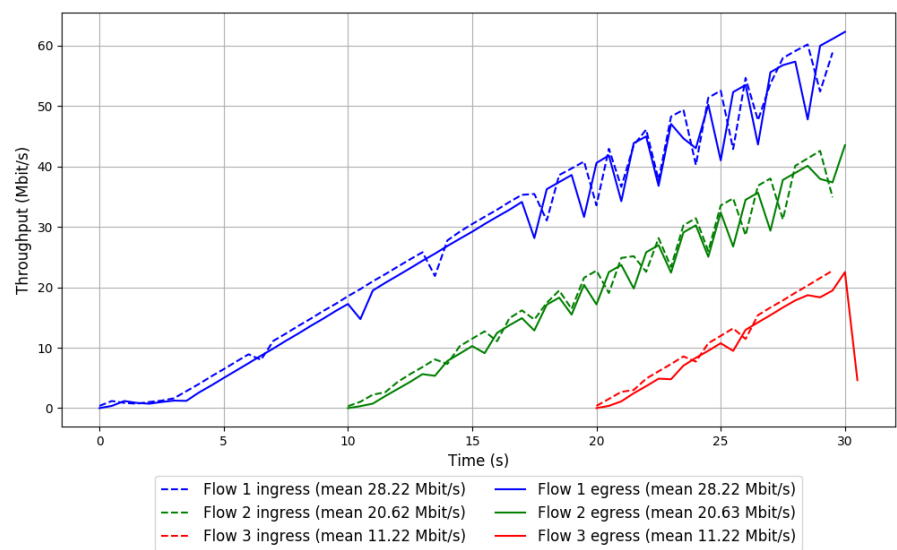


Run 5: Statistics of LEDBAT

Start at: 2018-06-20 12:00:02  
End at: 2018-06-20 12:00:32  
Local clock offset: 0.151 ms  
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2018-06-20 15:33:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 45.59 Mbit/s  
95th percentile per-packet one-way delay: 54.914 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 28.22 Mbit/s  
95th percentile per-packet one-way delay: 54.926 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 20.63 Mbit/s  
95th percentile per-packet one-way delay: 54.890 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 11.22 Mbit/s  
95th percentile per-packet one-way delay: 54.984 ms  
Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-06-20 12:23:06

End at: 2018-06-20 12:23:36

Local clock offset: -0.057 ms

Remote clock offset: 0.203 ms

# Below is generated by plot.py at 2018-06-20 15:33:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 46.70 Mbit/s

95th percentile per-packet one-way delay: 54.280 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 27.47 Mbit/s

95th percentile per-packet one-way delay: 54.470 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 23.24 Mbit/s

95th percentile per-packet one-way delay: 51.843 ms

Loss rate: 0.00%

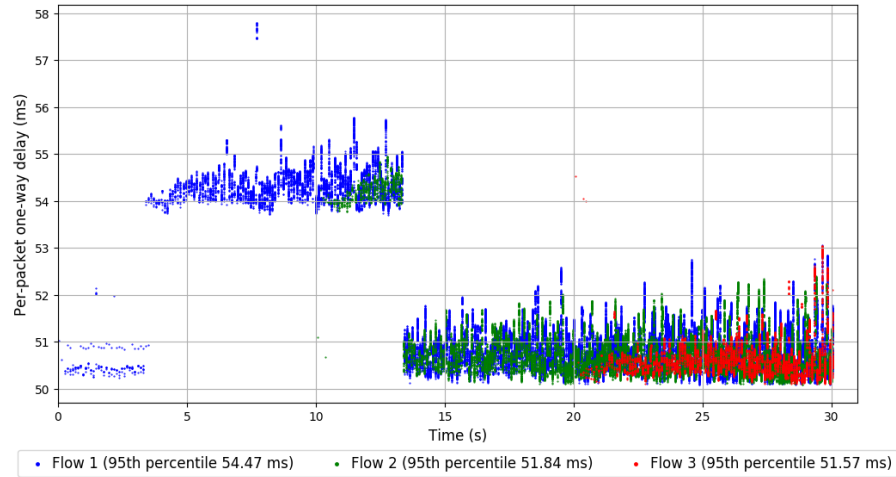
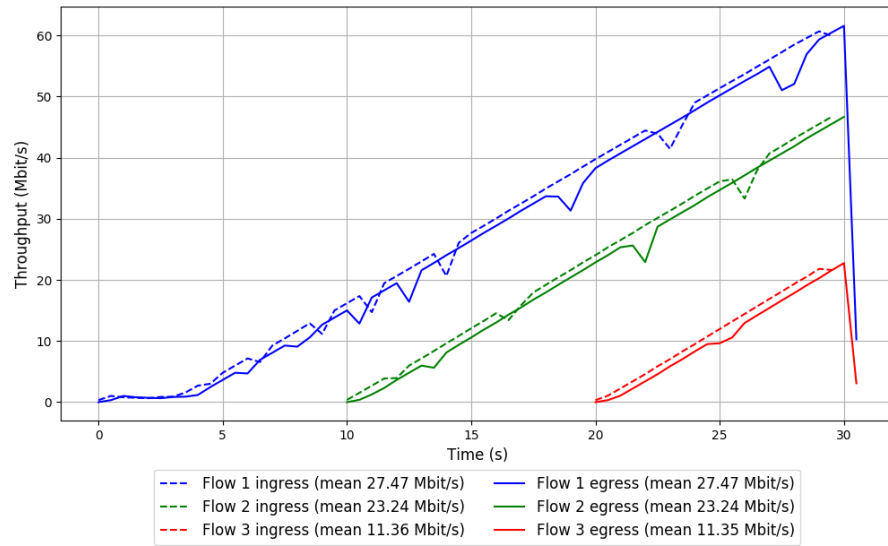
-- Flow 3:

Average throughput: 11.35 Mbit/s

95th percentile per-packet one-way delay: 51.571 ms

Loss rate: 0.10%

## Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-06-20 12:45:54

End at: 2018-06-20 12:46:24

Local clock offset: -0.096 ms

Remote clock offset: 0.168 ms

# Below is generated by plot.py at 2018-06-20 15:33:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 51.02 Mbit/s

95th percentile per-packet one-way delay: 55.142 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 33.26 Mbit/s

95th percentile per-packet one-way delay: 55.086 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 21.52 Mbit/s

95th percentile per-packet one-way delay: 55.297 ms

Loss rate: 0.00%

-- Flow 3:

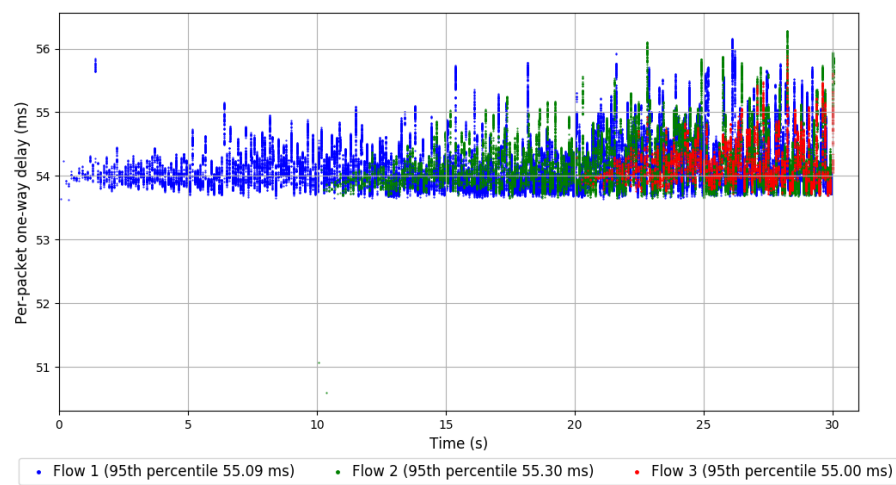
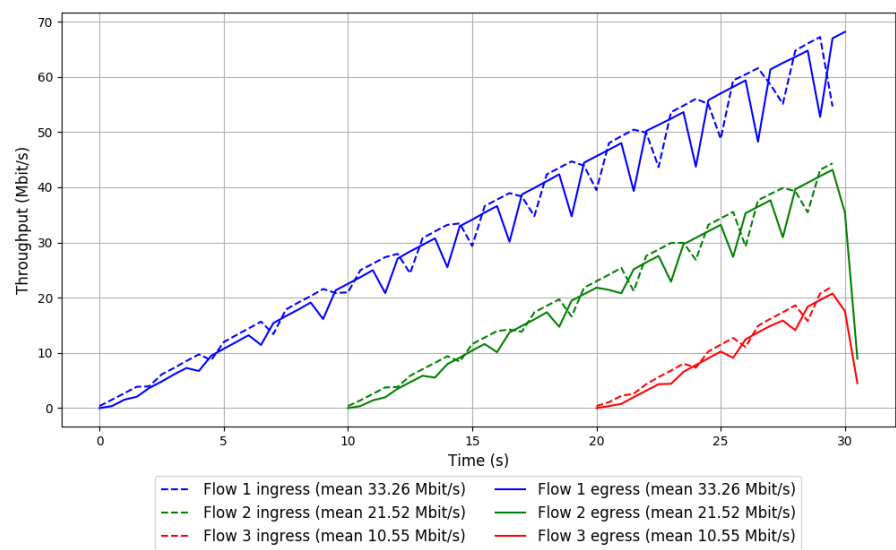
Average throughput: 10.55 Mbit/s

95th percentile per-packet one-way delay: 54.997 ms

Loss rate: 0.00%



Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-06-20 13:09:01

End at: 2018-06-20 13:09:31

Local clock offset: -0.006 ms

Remote clock offset: 0.001 ms

# Below is generated by plot.py at 2018-06-20 15:33:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 47.19 Mbit/s

95th percentile per-packet one-way delay: 54.950 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 30.55 Mbit/s

95th percentile per-packet one-way delay: 55.016 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 20.83 Mbit/s

95th percentile per-packet one-way delay: 54.927 ms

Loss rate: 0.00%

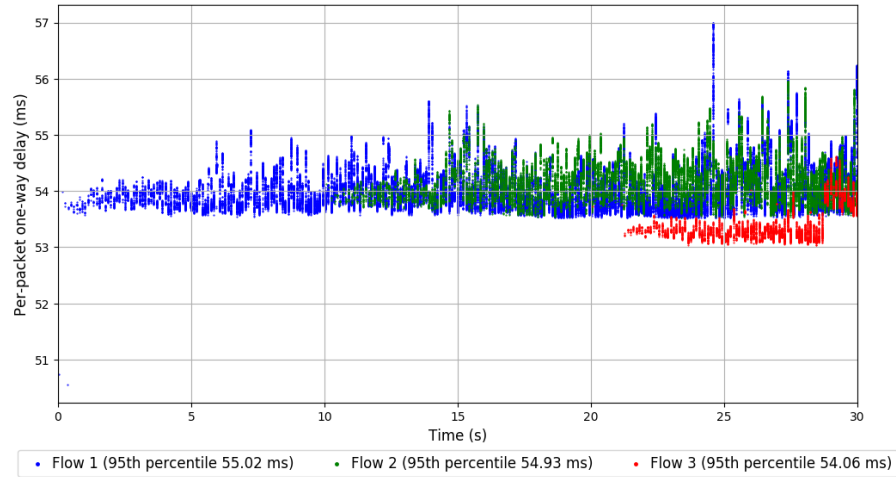
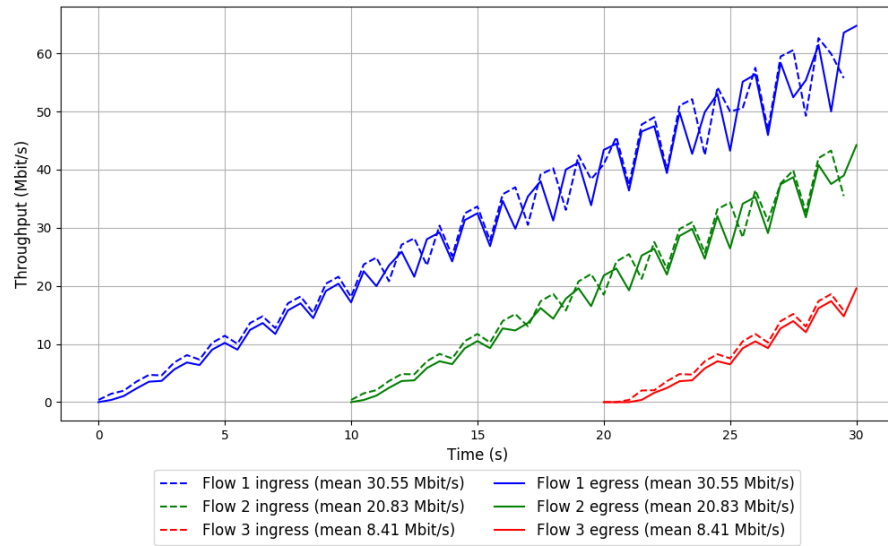
-- Flow 3:

Average throughput: 8.41 Mbit/s

95th percentile per-packet one-way delay: 54.062 ms

Loss rate: 0.01%

## Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-06-20 13:31:54

End at: 2018-06-20 13:32:24

Local clock offset: 0.217 ms

Remote clock offset: 0.099 ms

# Below is generated by plot.py at 2018-06-20 15:33:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 51.81 Mbit/s

95th percentile per-packet one-way delay: 54.117 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 33.27 Mbit/s

95th percentile per-packet one-way delay: 54.231 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 22.30 Mbit/s

95th percentile per-packet one-way delay: 53.794 ms

Loss rate: 0.00%

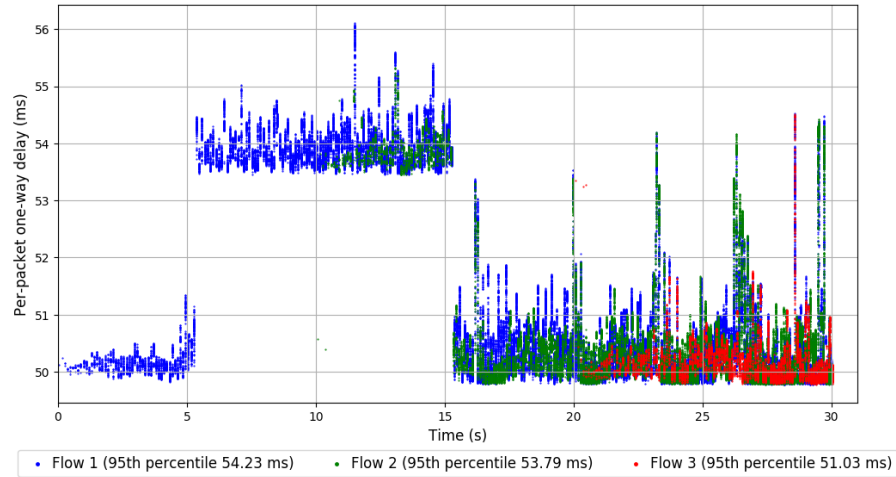
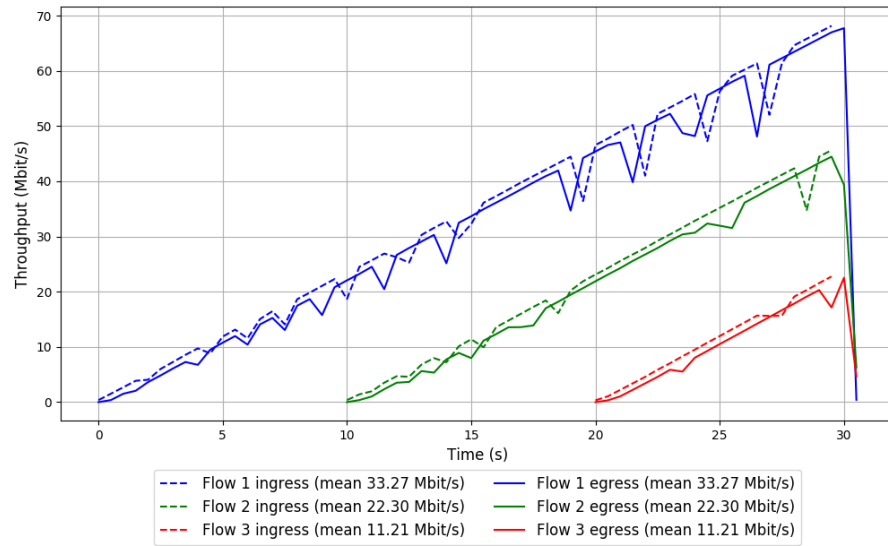
-- Flow 3:

Average throughput: 11.21 Mbit/s

95th percentile per-packet one-way delay: 51.031 ms

Loss rate: 0.00%

# Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-06-20 13:54:54

End at: 2018-06-20 13:55:24

Local clock offset: -0.056 ms

Remote clock offset: -0.25 ms

# Below is generated by plot.py at 2018-06-20 15:33:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 39.57 Mbit/s

95th percentile per-packet one-way delay: 54.315 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 20.94 Mbit/s

95th percentile per-packet one-way delay: 54.532 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 22.30 Mbit/s

95th percentile per-packet one-way delay: 53.641 ms

Loss rate: 0.00%

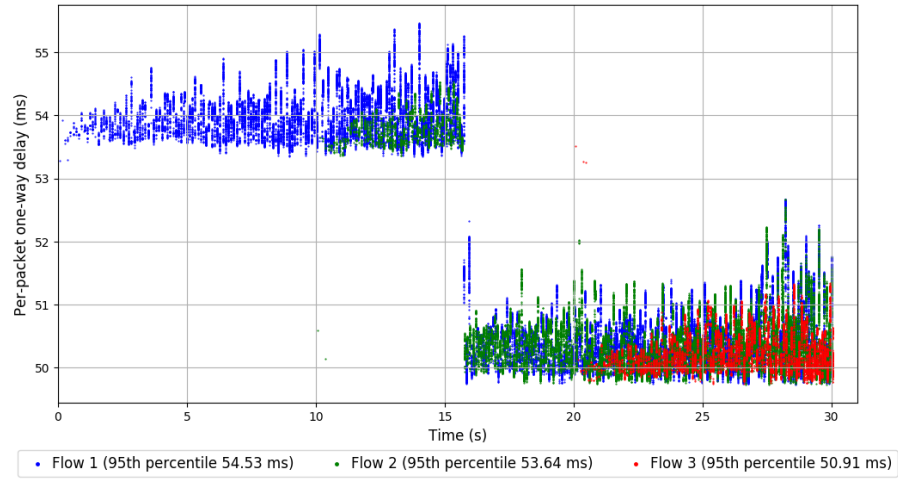
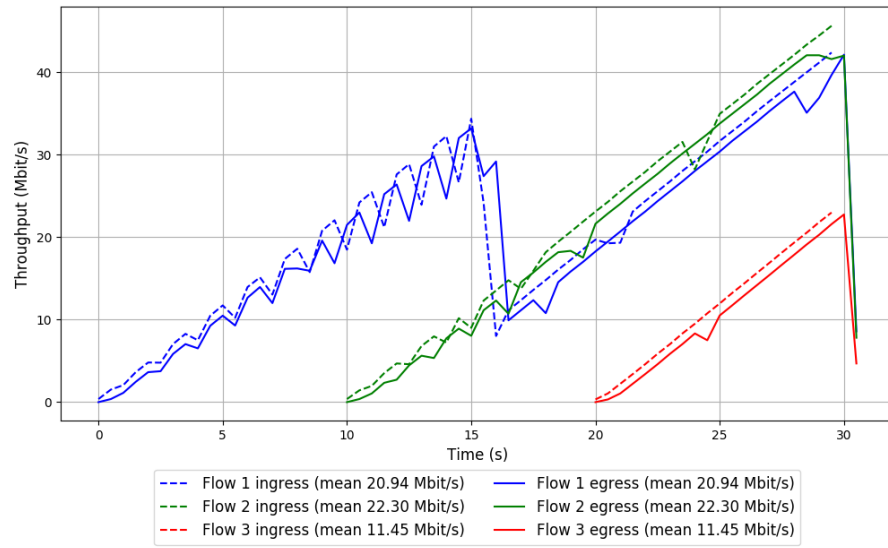
-- Flow 3:

Average throughput: 11.45 Mbit/s

95th percentile per-packet one-way delay: 50.915 ms

Loss rate: 0.00%

# Run 10: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2018-06-20 10:27:05

End at: 2018-06-20 10:27:35

Local clock offset: -0.229 ms

Remote clock offset: -1.32 ms

# Below is generated by plot.py at 2018-06-20 15:33:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 605.60 Mbit/s

95th percentile per-packet one-way delay: 203.584 ms

Loss rate: 1.99%

-- Flow 1:

Average throughput: 515.54 Mbit/s

95th percentile per-packet one-way delay: 207.537 ms

Loss rate: 2.03%

-- Flow 2:

Average throughput: 106.33 Mbit/s

95th percentile per-packet one-way delay: 164.641 ms

Loss rate: 1.84%

-- Flow 3:

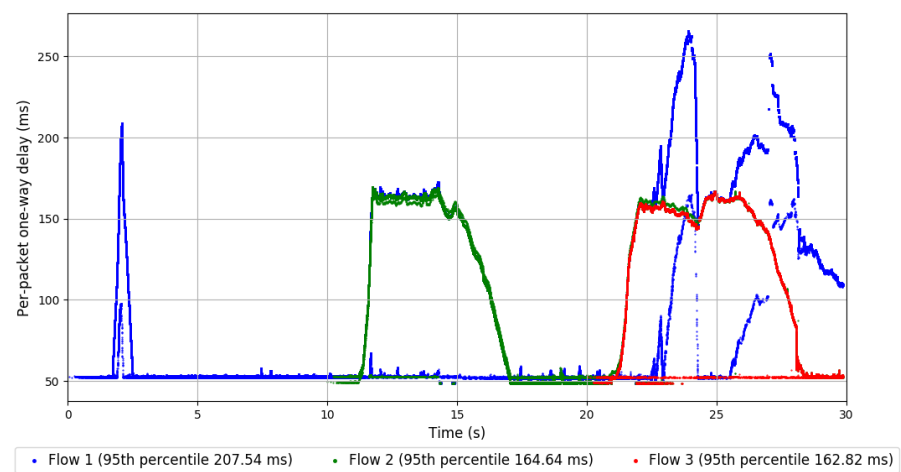
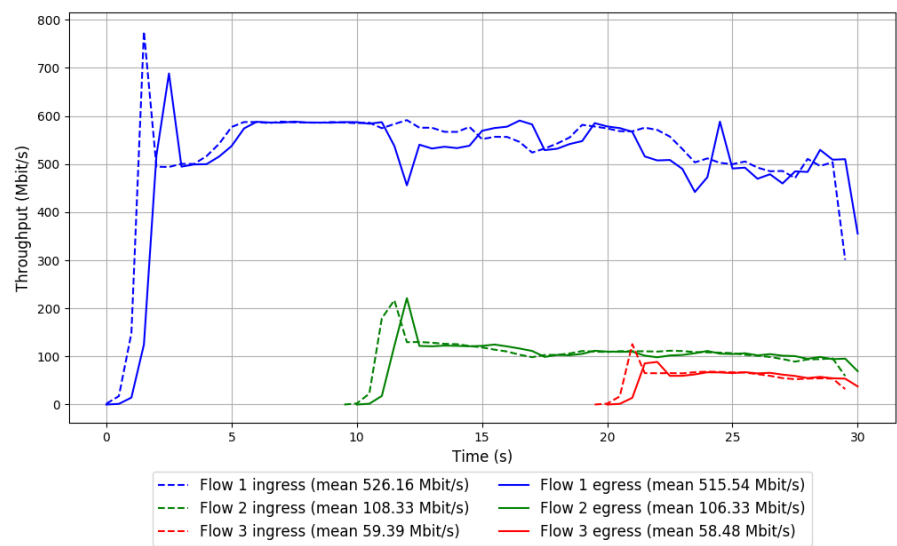
Average throughput: 58.48 Mbit/s

95th percentile per-packet one-way delay: 162.816 ms

Loss rate: 1.55%



Run 1: Report of PCC-Allegro — Data Link

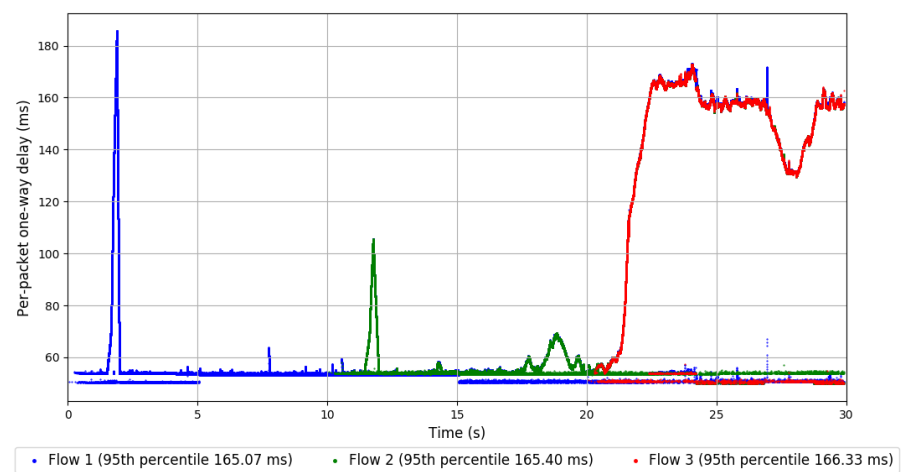
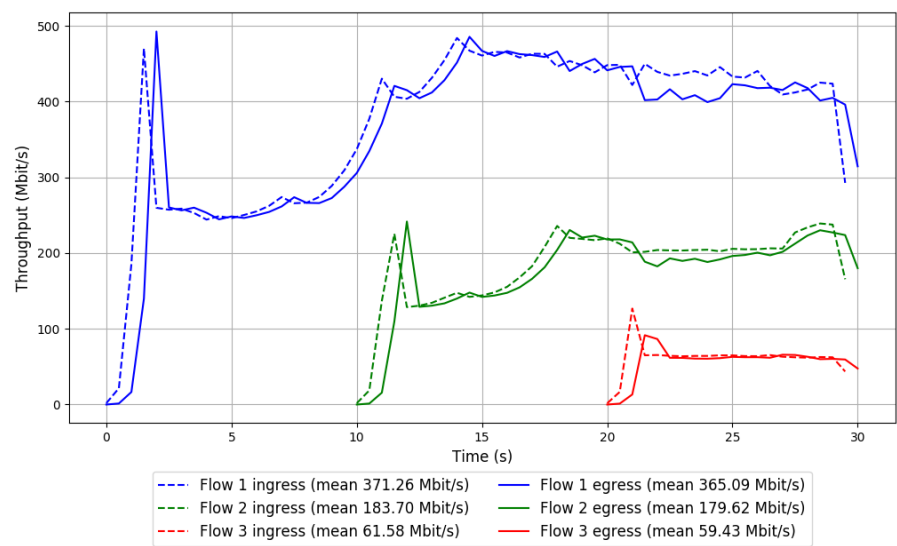


Run 2: Statistics of PCC-Allegro

Start at: 2018-06-20 10:49:55  
End at: 2018-06-20 10:50:25  
Local clock offset: -0.194 ms  
Remote clock offset: -0.086 ms

# Below is generated by plot.py at 2018-06-20 15:33:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 504.01 Mbit/s  
95th percentile per-packet one-way delay: 165.236 ms  
Loss rate: 1.87%  
-- Flow 1:  
Average throughput: 365.09 Mbit/s  
95th percentile per-packet one-way delay: 165.067 ms  
Loss rate: 1.66%  
-- Flow 2:  
Average throughput: 179.62 Mbit/s  
95th percentile per-packet one-way delay: 165.400 ms  
Loss rate: 2.25%  
-- Flow 3:  
Average throughput: 59.43 Mbit/s  
95th percentile per-packet one-way delay: 166.330 ms  
Loss rate: 3.44%

Run 2: Report of PCC-Allegro — Data Link

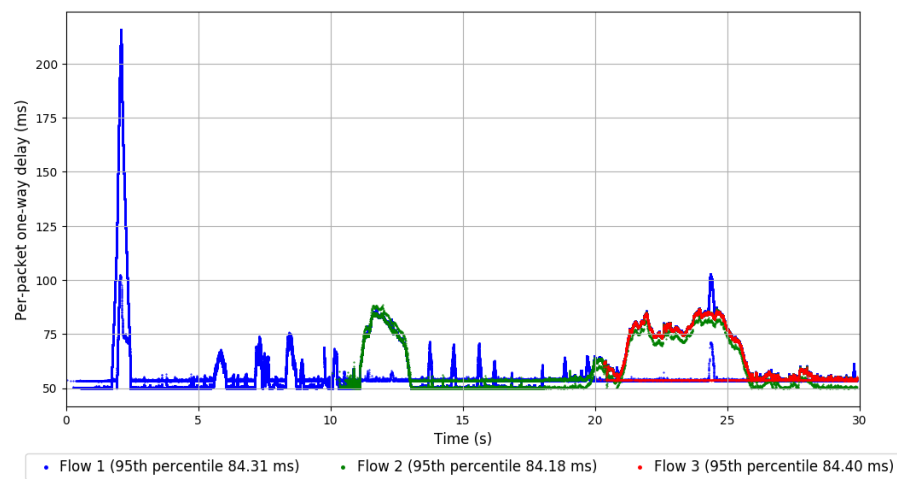
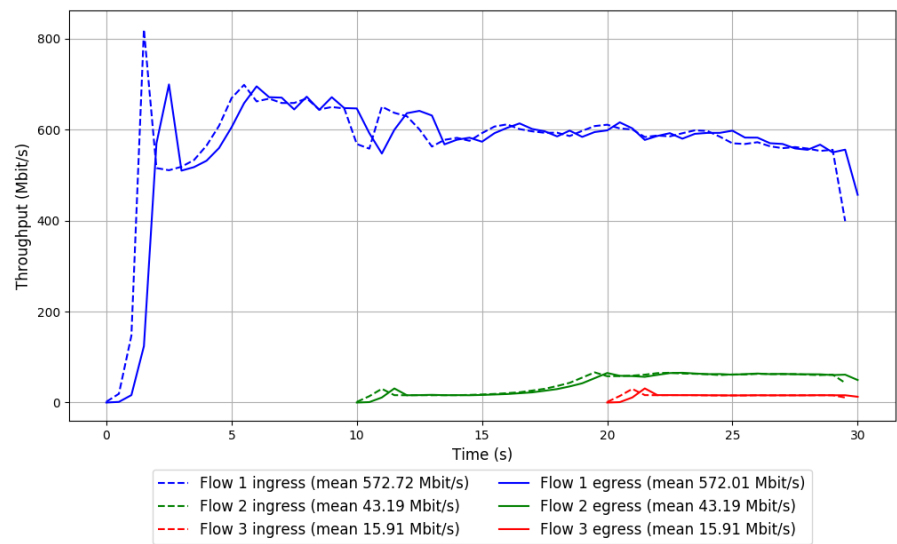


Run 3: Statistics of PCC-Allegro

Start at: 2018-06-20 11:12:41  
End at: 2018-06-20 11:13:11  
Local clock offset: -0.176 ms  
Remote clock offset: -0.102 ms

# Below is generated by plot.py at 2018-06-20 15:33:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 605.89 Mbit/s  
95th percentile per-packet one-way delay: 84.299 ms  
Loss rate: 0.13%  
-- Flow 1:  
Average throughput: 572.01 Mbit/s  
95th percentile per-packet one-way delay: 84.311 ms  
Loss rate: 0.13%  
-- Flow 2:  
Average throughput: 43.19 Mbit/s  
95th percentile per-packet one-way delay: 84.182 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 15.91 Mbit/s  
95th percentile per-packet one-way delay: 84.397 ms  
Loss rate: 0.02%

Run 3: Report of PCC-Allegro — Data Link

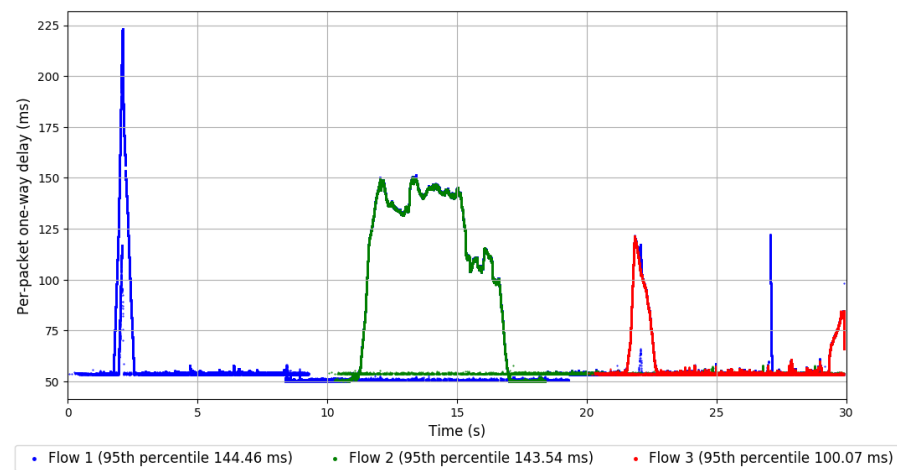
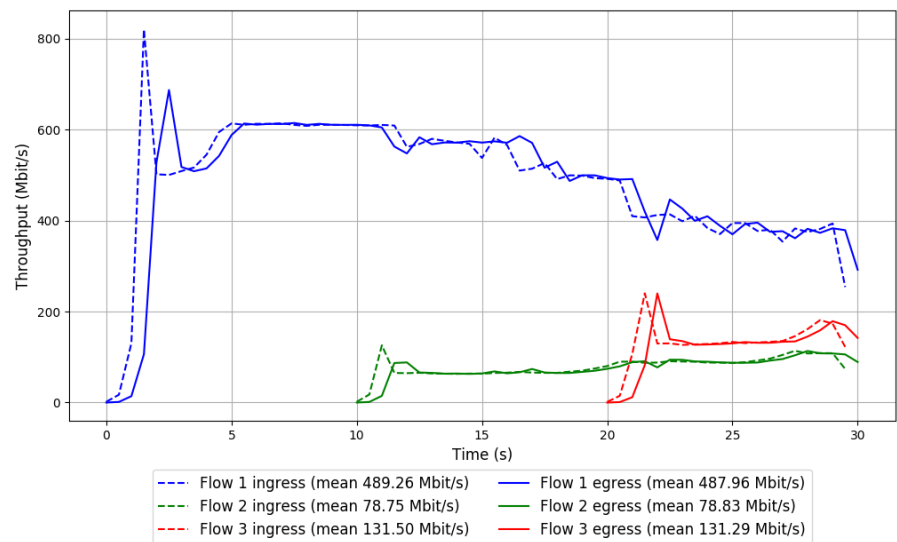


Run 4: Statistics of PCC-Allegro

Start at: 2018-06-20 11:35:31  
End at: 2018-06-20 11:36:01  
Local clock offset: -0.252 ms  
Remote clock offset: -0.068 ms

# Below is generated by plot.py at 2018-06-20 15:33:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 583.60 Mbit/s  
95th percentile per-packet one-way delay: 143.998 ms  
Loss rate: 0.24%  
-- Flow 1:  
Average throughput: 487.96 Mbit/s  
95th percentile per-packet one-way delay: 144.464 ms  
Loss rate: 0.27%  
-- Flow 2:  
Average throughput: 78.83 Mbit/s  
95th percentile per-packet one-way delay: 143.539 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 131.29 Mbit/s  
95th percentile per-packet one-way delay: 100.068 ms  
Loss rate: 0.19%

Run 4: Report of PCC-Allegro — Data Link



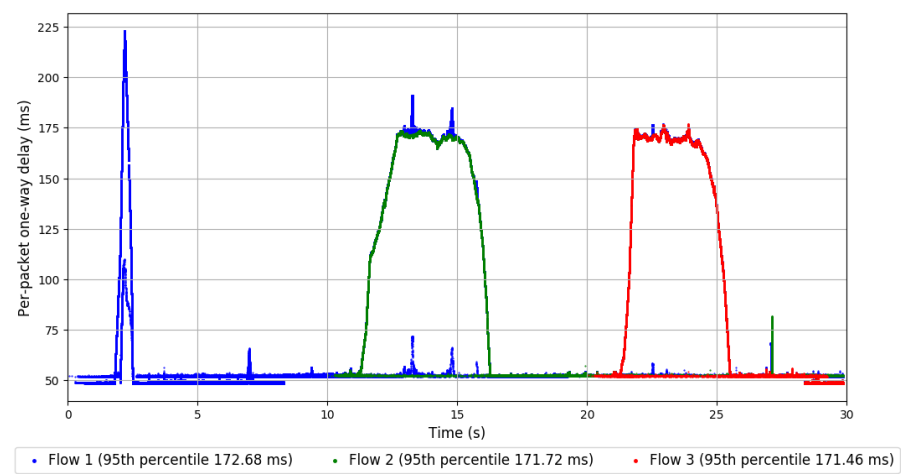
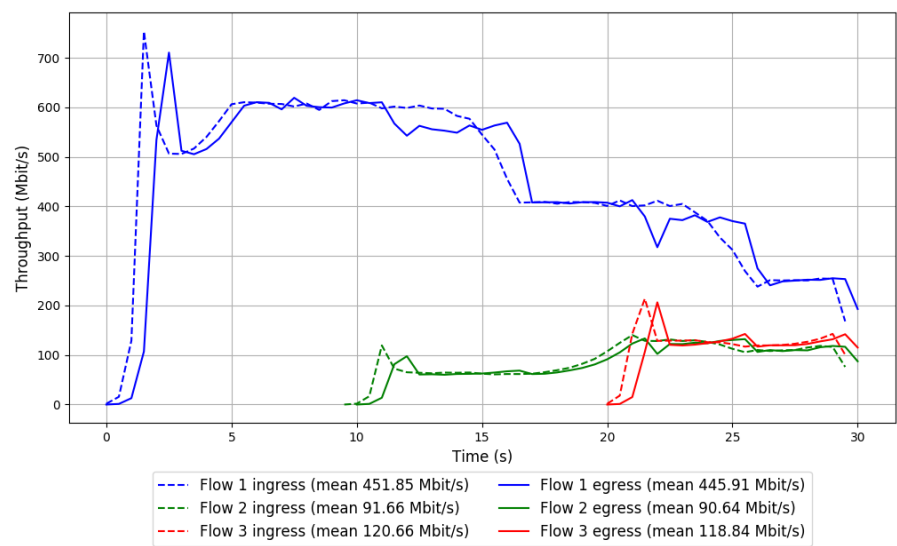
Run 5: Statistics of PCC-Allegro

Start at: 2018-06-20 11:58:31  
End at: 2018-06-20 11:59:01  
Local clock offset: 0.015 ms  
Remote clock offset: -1.484 ms

# Below is generated by plot.py at 2018-06-20 15:33:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 545.28 Mbit/s  
95th percentile per-packet one-way delay: 172.513 ms  
Loss rate: 1.32%  
-- Flow 1:  
Average throughput: 445.91 Mbit/s  
95th percentile per-packet one-way delay: 172.677 ms  
Loss rate: 1.32%  
-- Flow 2:  
Average throughput: 90.64 Mbit/s  
95th percentile per-packet one-way delay: 171.722 ms  
Loss rate: 1.13%  
-- Flow 3:  
Average throughput: 118.84 Mbit/s  
95th percentile per-packet one-way delay: 171.463 ms  
Loss rate: 1.55%



Run 5: Report of PCC-Allegro — Data Link



Run 6: Statistics of PCC-Allegro

Start at: 2018-06-20 12:21:32

End at: 2018-06-20 12:22:02

Local clock offset: -0.029 ms

Remote clock offset: 0.006 ms

# Below is generated by plot.py at 2018-06-20 15:33:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 578.76 Mbit/s

95th percentile per-packet one-way delay: 179.458 ms

Loss rate: 2.13%

-- Flow 1:

Average throughput: 538.10 Mbit/s

95th percentile per-packet one-way delay: 179.551 ms

Loss rate: 2.22%

-- Flow 2:

Average throughput: 4.11 Mbit/s

95th percentile per-packet one-way delay: 179.492 ms

Loss rate: 2.15%

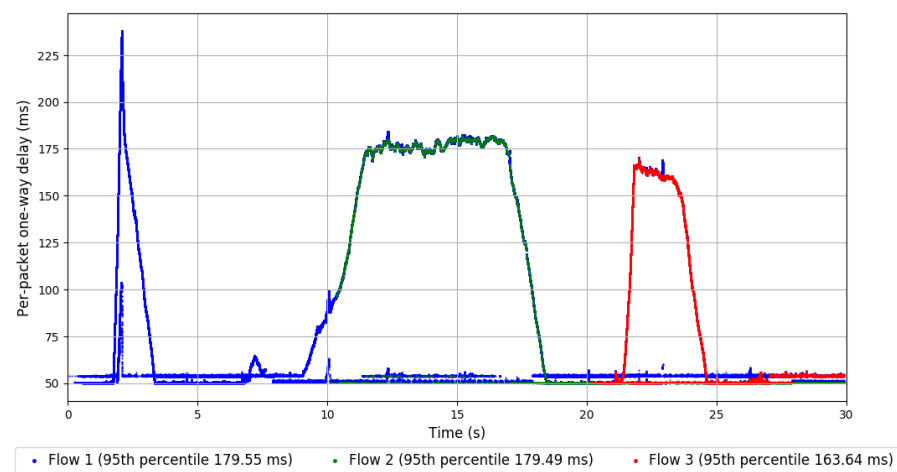
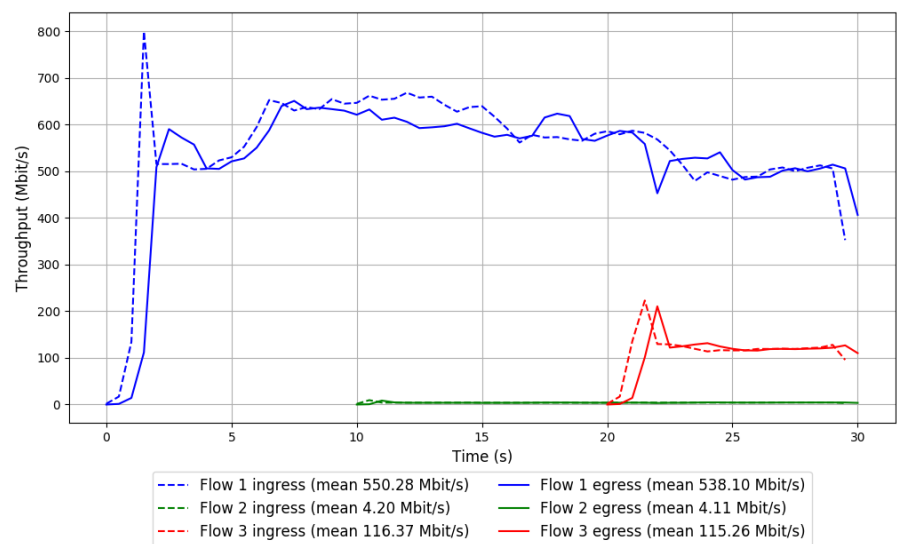
-- Flow 3:

Average throughput: 115.26 Mbit/s

95th percentile per-packet one-way delay: 163.639 ms

Loss rate: 0.92%

Run 6: Report of PCC-Allegro — Data Link

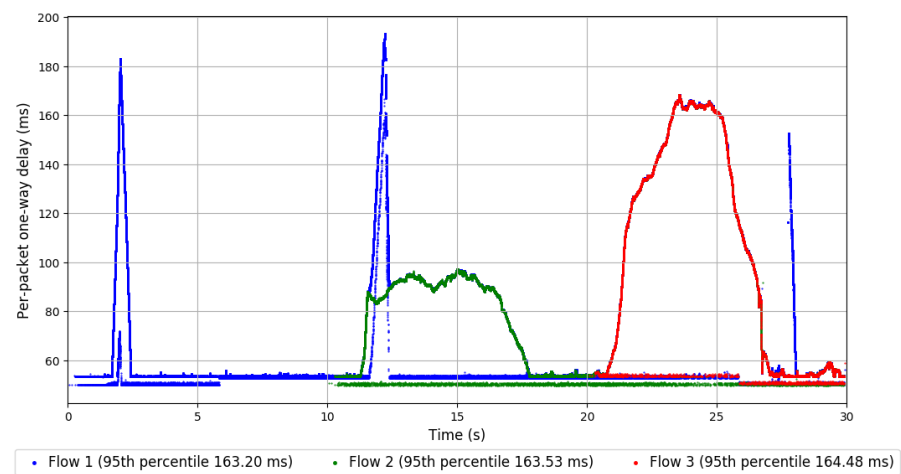
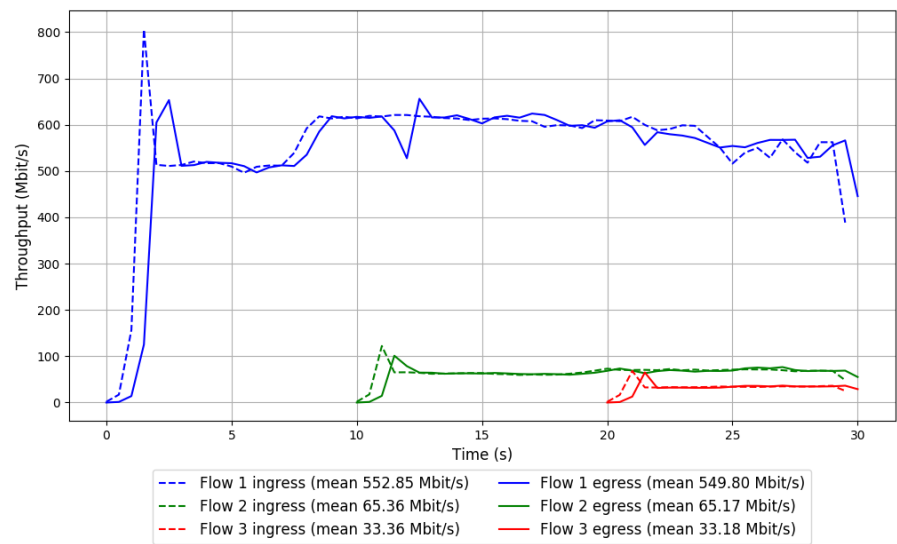


Run 7: Statistics of PCC-Allegro

Start at: 2018-06-20 12:44:24  
End at: 2018-06-20 12:44:54  
Local clock offset: -0.08 ms  
Remote clock offset: -0.151 ms

# Below is generated by plot.py at 2018-06-20 15:38:38  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 603.98 Mbit/s  
95th percentile per-packet one-way delay: 163.302 ms  
Loss rate: 0.52%  
-- Flow 1:  
Average throughput: 549.80 Mbit/s  
95th percentile per-packet one-way delay: 163.201 ms  
Loss rate: 0.54%  
-- Flow 2:  
Average throughput: 65.17 Mbit/s  
95th percentile per-packet one-way delay: 163.531 ms  
Loss rate: 0.29%  
-- Flow 3:  
Average throughput: 33.18 Mbit/s  
95th percentile per-packet one-way delay: 164.476 ms  
Loss rate: 0.50%

Run 7: Report of PCC-Allegro — Data Link

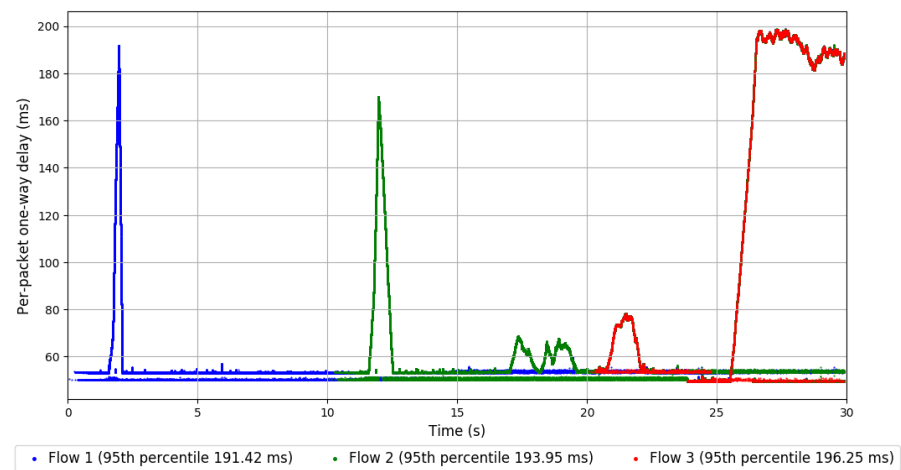
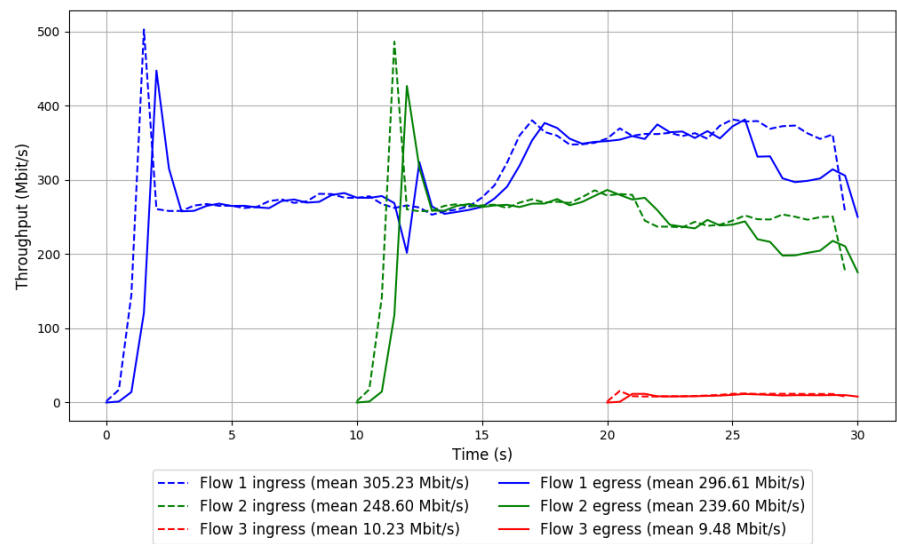


Run 8: Statistics of PCC-Allegro

Start at: 2018-06-20 13:07:35  
End at: 2018-06-20 13:08:05  
Local clock offset: 0.003 ms  
Remote clock offset: -0.348 ms

# Below is generated by plot.py at 2018-06-20 15:38:38  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 459.03 Mbit/s  
95th percentile per-packet one-way delay: 193.344 ms  
Loss rate: 3.13%  
-- Flow 1:  
Average throughput: 296.61 Mbit/s  
95th percentile per-packet one-way delay: 191.417 ms  
Loss rate: 2.82%  
-- Flow 2:  
Average throughput: 239.60 Mbit/s  
95th percentile per-packet one-way delay: 193.948 ms  
Loss rate: 3.62%  
-- Flow 3:  
Average throughput: 9.48 Mbit/s  
95th percentile per-packet one-way delay: 196.254 ms  
Loss rate: 7.34%

Run 8: Report of PCC-Allegro — Data Link



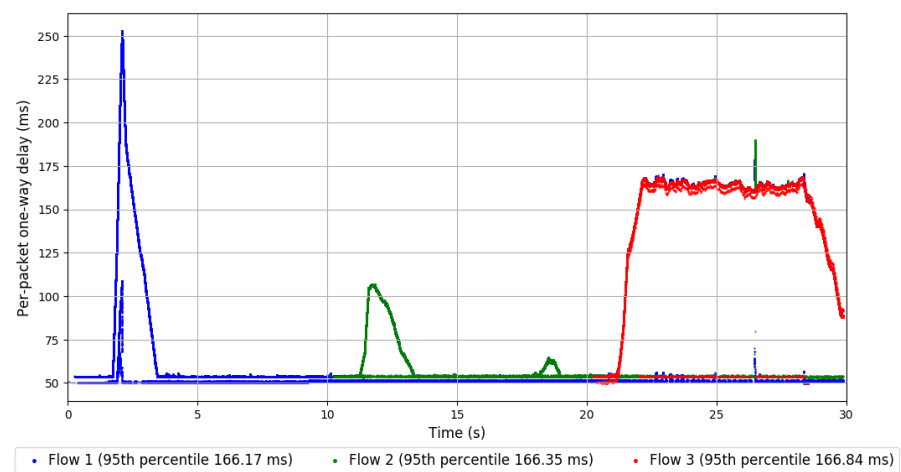
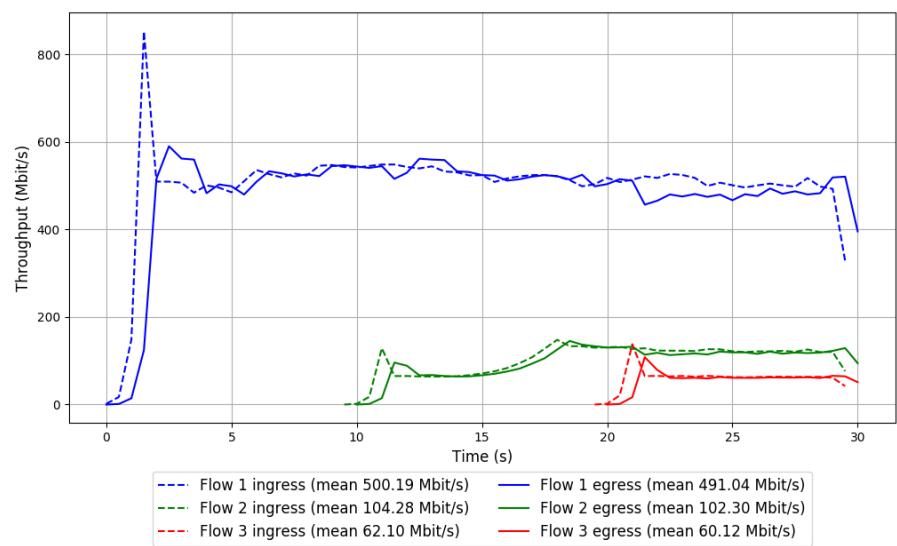
Run 9: Statistics of PCC-Allegro

Start at: 2018-06-20 13:30:21  
End at: 2018-06-20 13:30:51  
Local clock offset: -0.113 ms  
Remote clock offset: -0.258 ms

# Below is generated by plot.py at 2018-06-20 15:39:33  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 578.92 Mbit/s  
95th percentile per-packet one-way delay: 166.250 ms  
Loss rate: 1.89%  
-- Flow 1:  
Average throughput: 491.04 Mbit/s  
95th percentile per-packet one-way delay: 166.174 ms  
Loss rate: 1.83%  
-- Flow 2:  
Average throughput: 102.30 Mbit/s  
95th percentile per-packet one-way delay: 166.353 ms  
Loss rate: 1.92%  
-- Flow 3:  
Average throughput: 60.12 Mbit/s  
95th percentile per-packet one-way delay: 166.839 ms  
Loss rate: 3.18%



Run 9: Report of PCC-Allegro — Data Link

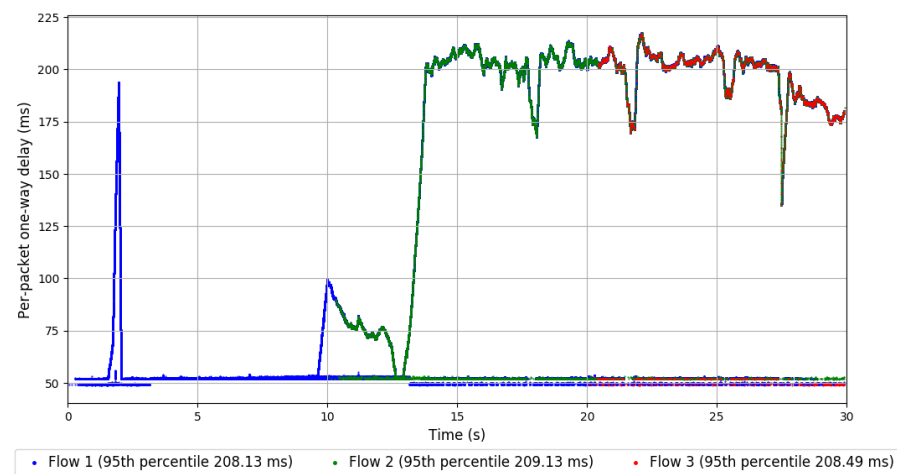
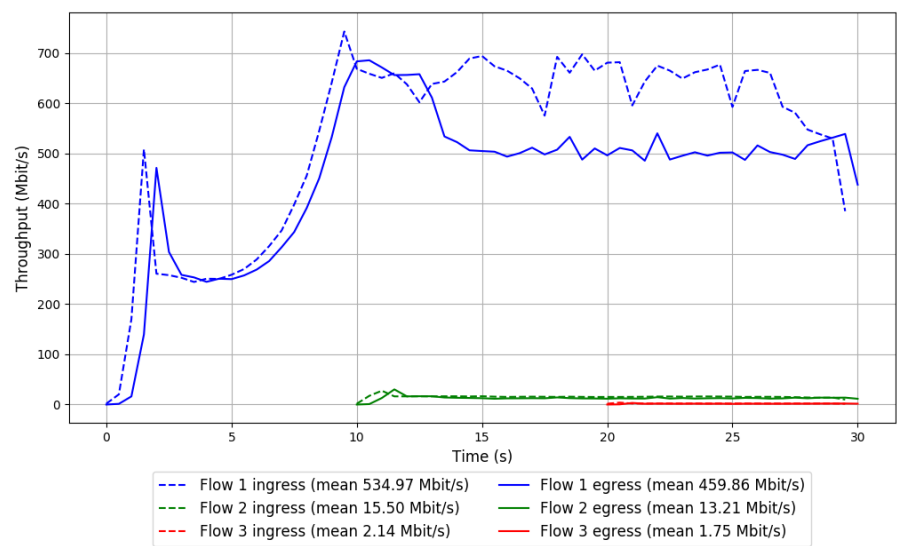


Run 10: Statistics of PCC-Allegro

Start at: 2018-06-20 13:53:27  
End at: 2018-06-20 13:53:57  
Local clock offset: 0.242 ms  
Remote clock offset: -1.476 ms

# Below is generated by plot.py at 2018-06-20 15:39:33  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 469.19 Mbit/s  
95th percentile per-packet one-way delay: 208.155 ms  
Loss rate: 14.05%  
-- Flow 1:  
Average throughput: 459.86 Mbit/s  
95th percentile per-packet one-way delay: 208.135 ms  
Loss rate: 14.03%  
-- Flow 2:  
Average throughput: 13.21 Mbit/s  
95th percentile per-packet one-way delay: 209.134 ms  
Loss rate: 14.75%  
-- Flow 3:  
Average throughput: 1.75 Mbit/s  
95th percentile per-packet one-way delay: 208.489 ms  
Loss rate: 18.05%

Run 10: Report of PCC-Allegro — Data Link

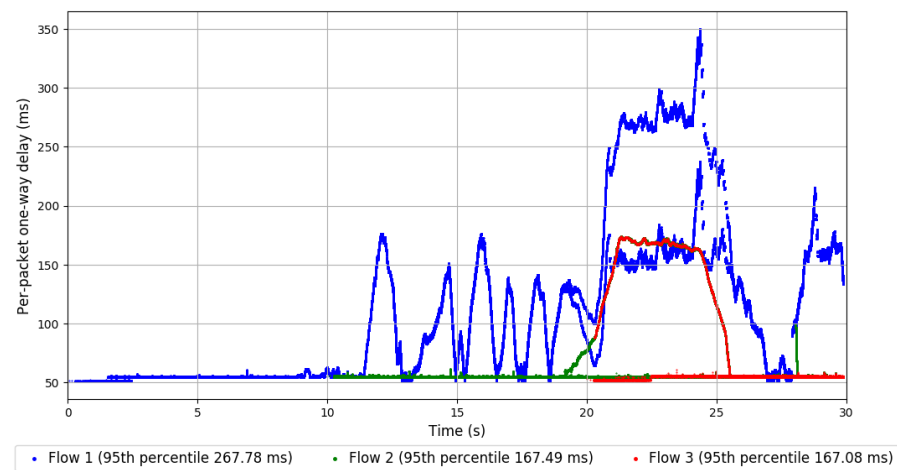
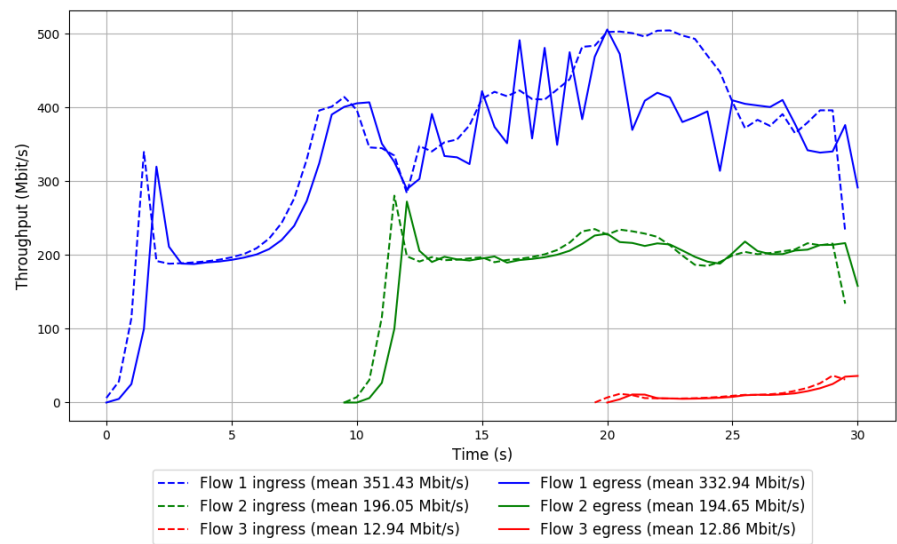


```
Run 1: Statistics of PCC-Expr

Start at: 2018-06-20 10:29:47
End at: 2018-06-20 10:30:17
Local clock offset: -0.16 ms
Remote clock offset: 0.97 ms

# Below is generated by plot.py at 2018-06-20 15:45:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 466.93 Mbit/s
95th percentile per-packet one-way delay: 245.002 ms
Loss rate: 3.99%
-- Flow 1:
Average throughput: 332.94 Mbit/s
95th percentile per-packet one-way delay: 267.779 ms
Loss rate: 5.25%
-- Flow 2:
Average throughput: 194.65 Mbit/s
95th percentile per-packet one-way delay: 167.490 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 12.86 Mbit/s
95th percentile per-packet one-way delay: 167.080 ms
Loss rate: 0.62%
```

Run 1: Report of PCC-Expr — Data Link

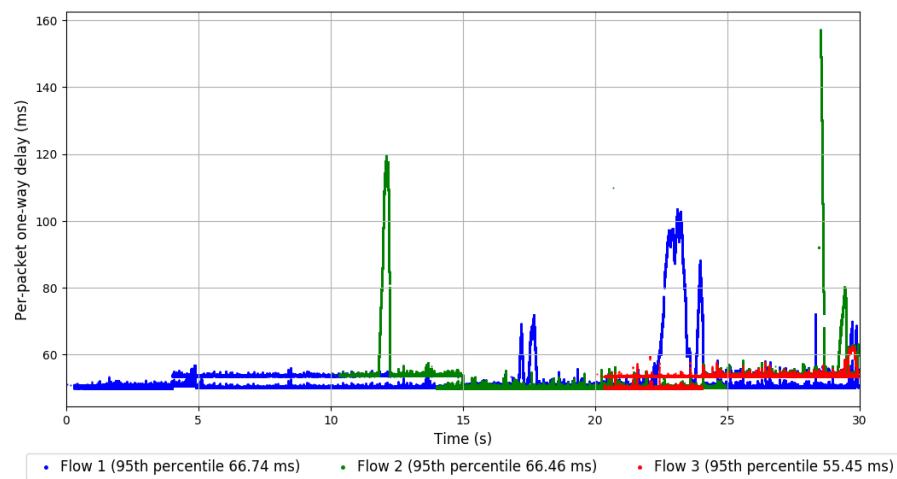
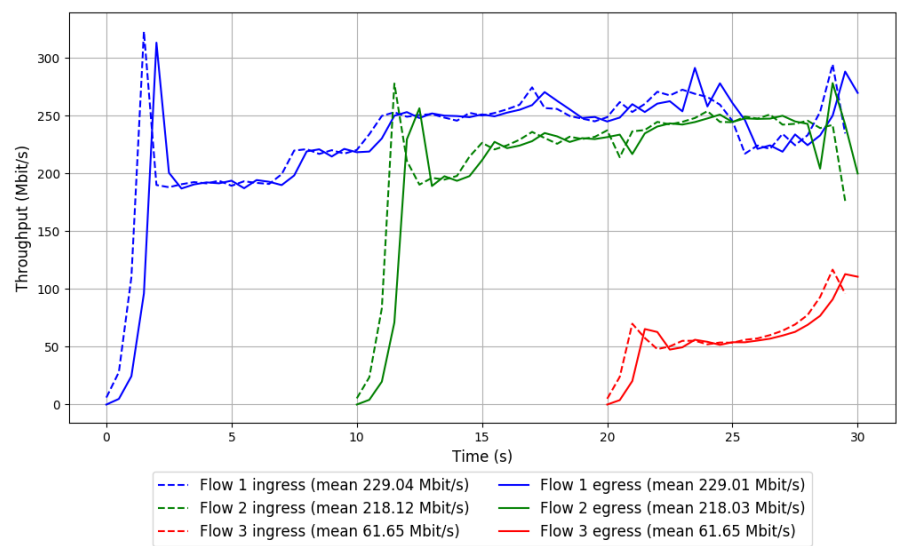


Run 2: Statistics of PCC-Expr

Start at: 2018-06-20 10:52:35  
End at: 2018-06-20 10:53:05  
Local clock offset: -0.289 ms  
Remote clock offset: -0.219 ms

# Below is generated by plot.py at 2018-06-20 15:45:53  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 394.26 Mbit/s  
95th percentile per-packet one-way delay: 65.520 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 229.01 Mbit/s  
95th percentile per-packet one-way delay: 66.739 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 218.03 Mbit/s  
95th percentile per-packet one-way delay: 66.461 ms  
Loss rate: 0.04%  
-- Flow 3:  
Average throughput: 61.65 Mbit/s  
95th percentile per-packet one-way delay: 55.450 ms  
Loss rate: 0.00%

Run 2: Report of PCC-Expr — Data Link



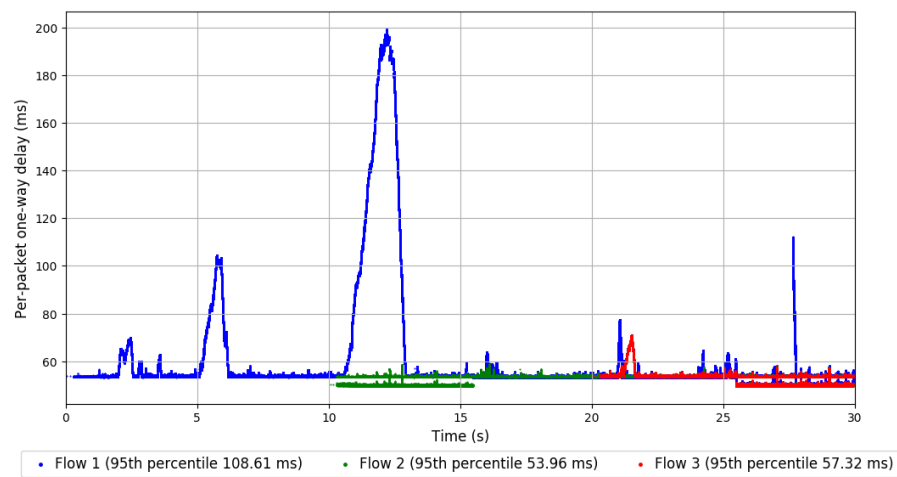
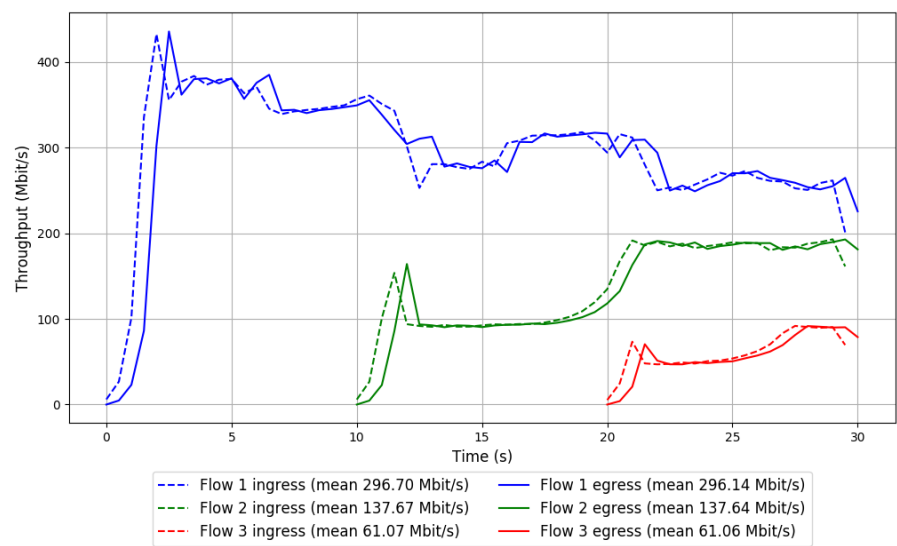
Run 3: Statistics of PCC-Expr

Start at: 2018-06-20 11:15:24  
End at: 2018-06-20 11:15:54  
Local clock offset: 0.016 ms  
Remote clock offset: -0.099 ms

# Below is generated by plot.py at 2018-06-20 15:45:53  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 407.80 Mbit/s  
95th percentile per-packet one-way delay: 95.963 ms  
Loss rate: 0.15%  
-- Flow 1:  
Average throughput: 296.14 Mbit/s  
95th percentile per-packet one-way delay: 108.610 ms  
Loss rate: 0.20%  
-- Flow 2:  
Average throughput: 137.64 Mbit/s  
95th percentile per-packet one-way delay: 53.963 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 61.06 Mbit/s  
95th percentile per-packet one-way delay: 57.324 ms  
Loss rate: 0.04%



Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2018-06-20 11:38:12

End at: 2018-06-20 11:38:42

Local clock offset: 0.072 ms

Remote clock offset: 0.157 ms

# Below is generated by plot.py at 2018-06-20 15:45:53

# Datalink statistics

-- Total of 3 flows:

Average throughput: 340.63 Mbit/s

95th percentile per-packet one-way delay: 163.412 ms

Loss rate: 1.15%

-- Flow 1:

Average throughput: 133.13 Mbit/s

95th percentile per-packet one-way delay: 195.433 ms

Loss rate: 2.89%

-- Flow 2:

Average throughput: 281.91 Mbit/s

95th percentile per-packet one-way delay: 157.362 ms

Loss rate: 0.00%

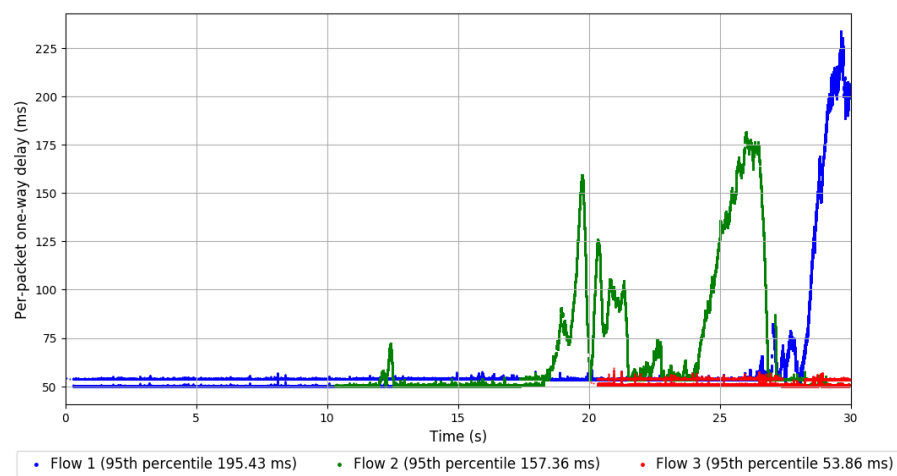
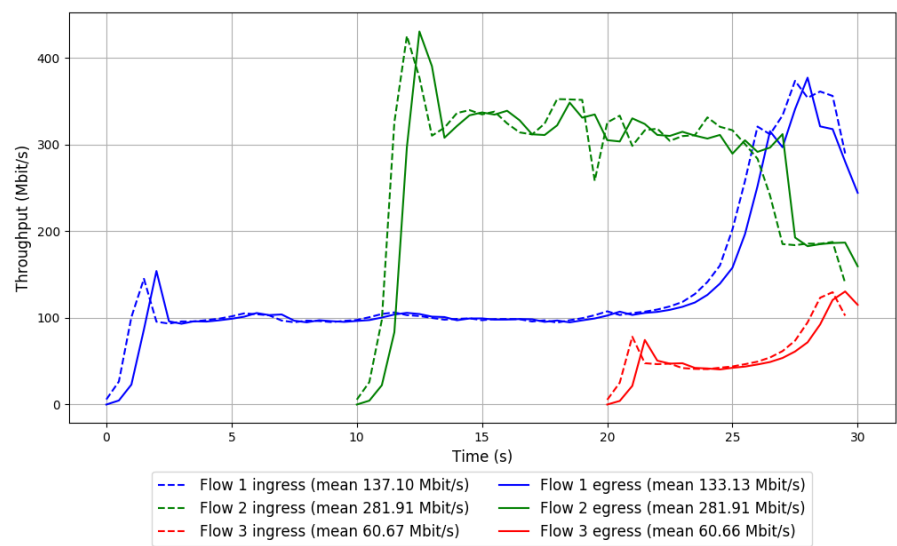
-- Flow 3:

Average throughput: 60.66 Mbit/s

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

Loss rate: 0.00%

Run 4: Report of PCC-Expr — Data Link

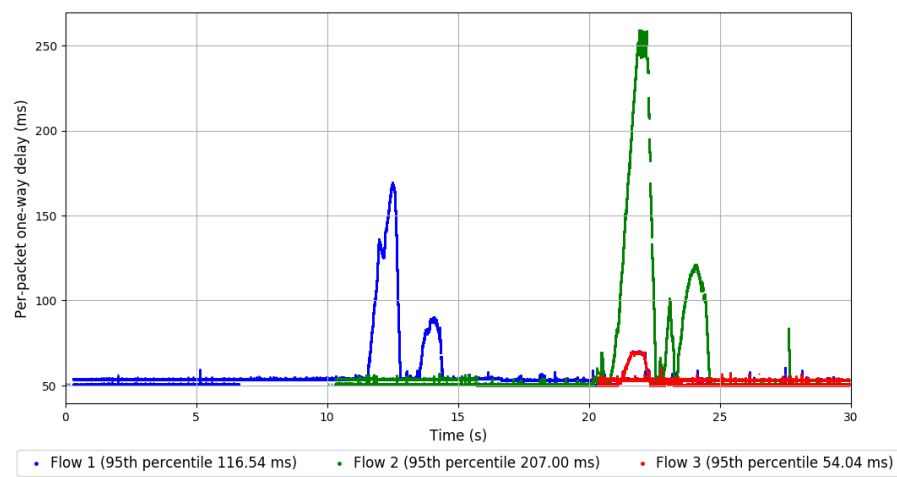
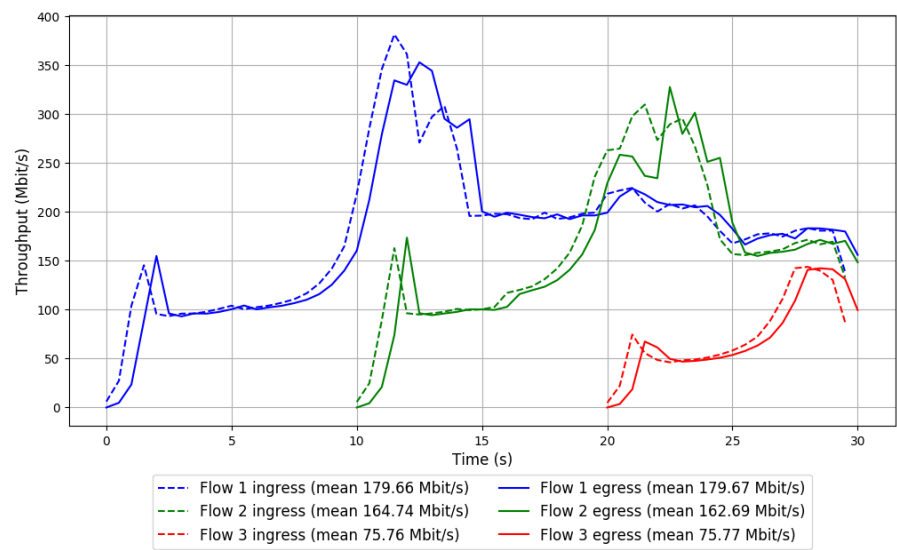


Run 5: Statistics of PCC-Expr

Start at: 2018-06-20 12:01:13  
End at: 2018-06-20 12:01:43  
Local clock offset: -0.043 ms  
Remote clock offset: -0.163 ms

# Below is generated by plot.py at 2018-06-20 15:48:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 312.84 Mbit/s  
95th percentile per-packet one-way delay: 132.570 ms  
Loss rate: 0.44%  
-- Flow 1:  
Average throughput: 179.67 Mbit/s  
95th percentile per-packet one-way delay: 116.543 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 162.69 Mbit/s  
95th percentile per-packet one-way delay: 206.998 ms  
Loss rate: 1.24%  
-- Flow 3:  
Average throughput: 75.77 Mbit/s  
95th percentile per-packet one-way delay: 54.039 ms  
Loss rate: 0.02%

Run 5: Report of PCC-Expr — Data Link

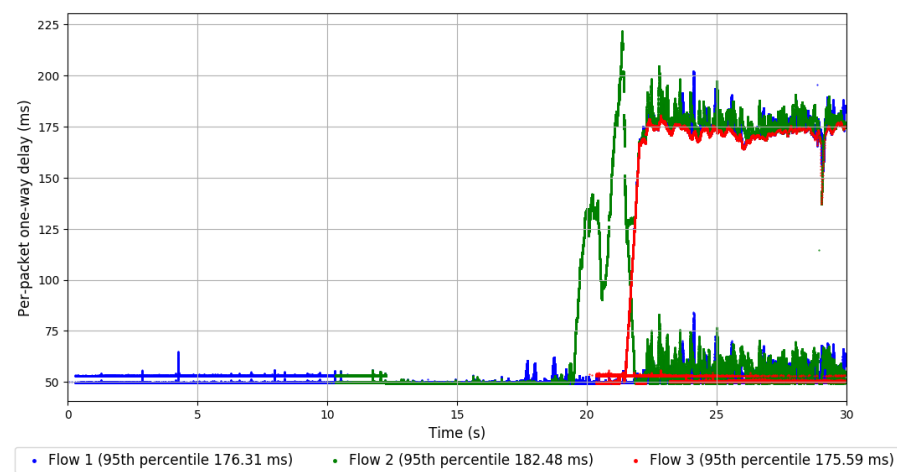
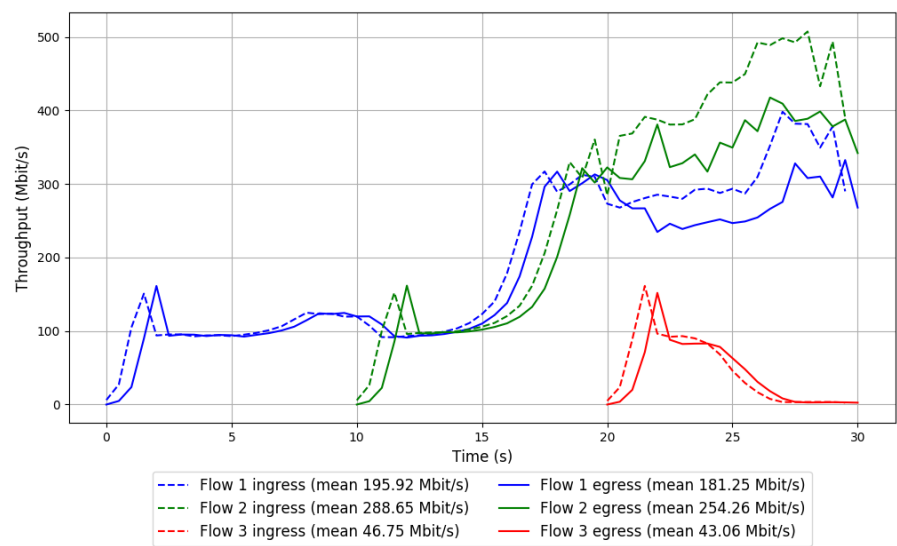


Run 6: Statistics of PCC-Expr

Start at: 2018-06-20 12:24:17  
End at: 2018-06-20 12:24:47  
Local clock offset: 0.06 ms  
Remote clock offset: -0.395 ms

# Below is generated by plot.py at 2018-06-20 15:52:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 364.50 Mbit/s  
95th percentile per-packet one-way delay: 179.407 ms  
Loss rate: 9.61%  
-- Flow 1:  
Average throughput: 181.25 Mbit/s  
95th percentile per-packet one-way delay: 176.305 ms  
Loss rate: 7.49%  
-- Flow 2:  
Average throughput: 254.26 Mbit/s  
95th percentile per-packet one-way delay: 182.480 ms  
Loss rate: 11.91%  
-- Flow 3:  
Average throughput: 43.06 Mbit/s  
95th percentile per-packet one-way delay: 175.591 ms  
Loss rate: 7.90%

Run 6: Report of PCC-Expr — Data Link



Run 7: Statistics of PCC-Expr

Start at: 2018-06-20 12:47:06

End at: 2018-06-20 12:47:36

Local clock offset: -0.036 ms

Remote clock offset: -0.14 ms

# Below is generated by plot.py at 2018-06-20 15:57:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 483.12 Mbit/s

95th percentile per-packet one-way delay: 263.965 ms

Loss rate: 12.40%

-- Flow 1:

Average throughput: 422.90 Mbit/s

95th percentile per-packet one-way delay: 266.497 ms

Loss rate: 13.73%

-- Flow 2:

Average throughput: 83.06 Mbit/s

95th percentile per-packet one-way delay: 171.009 ms

Loss rate: 1.88%

-- Flow 3:

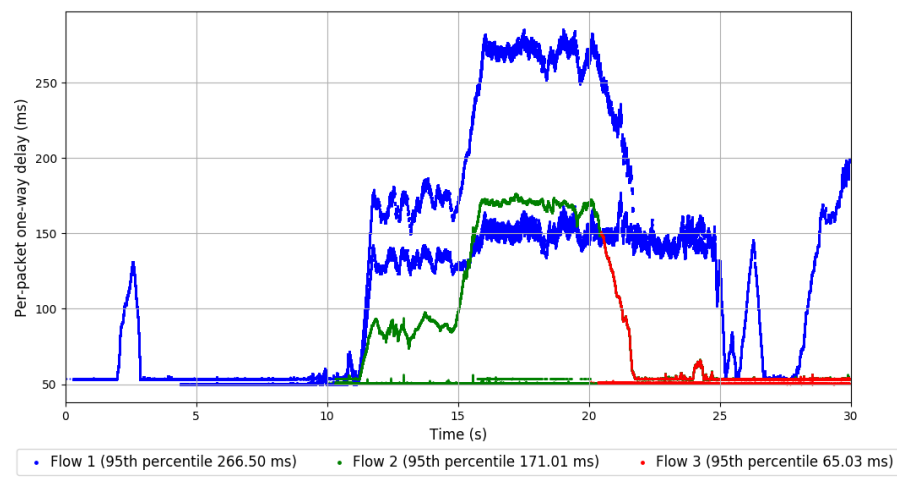
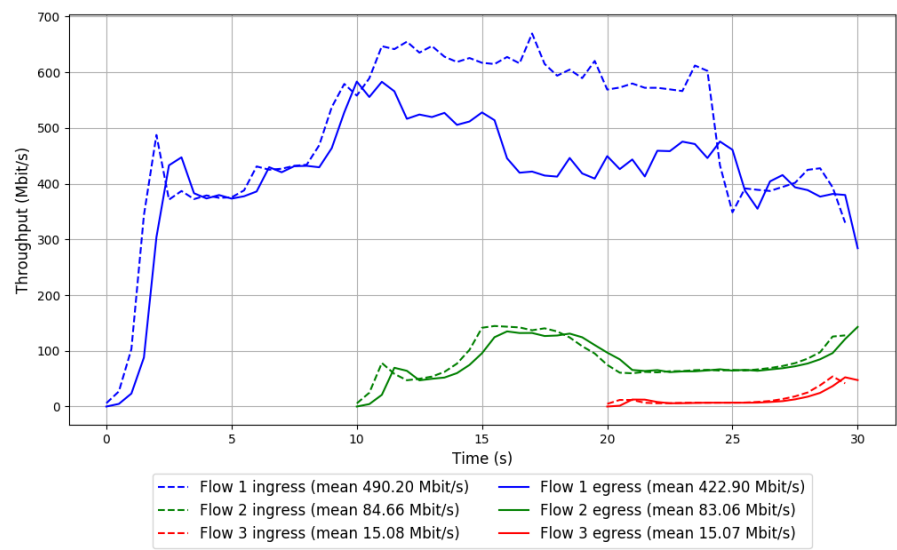
Average throughput: 15.07 Mbit/s

95th percentile per-packet one-way delay: 65.027 ms

Loss rate: 0.05%



Run 7: Report of PCC-Expr — Data Link

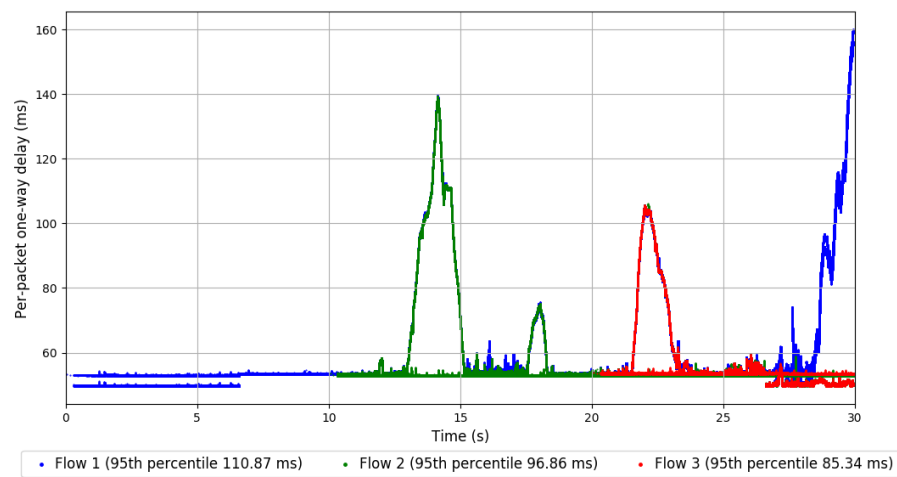
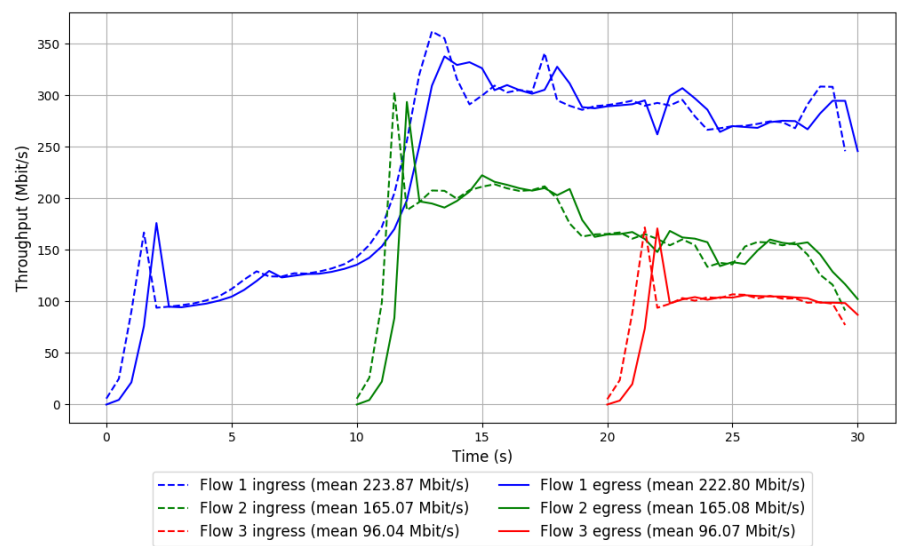


Run 8: Statistics of PCC-Expr

Start at: 2018-06-20 13:10:13  
End at: 2018-06-20 13:10:43  
Local clock offset: 0.011 ms  
Remote clock offset: -0.255 ms

# Below is generated by plot.py at 2018-06-20 15:57:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 364.24 Mbit/s  
95th percentile per-packet one-way delay: 106.301 ms  
Loss rate: 0.30%  
-- Flow 1:  
Average throughput: 222.80 Mbit/s  
95th percentile per-packet one-way delay: 110.868 ms  
Loss rate: 0.48%  
-- Flow 2:  
Average throughput: 165.08 Mbit/s  
95th percentile per-packet one-way delay: 96.861 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 96.07 Mbit/s  
95th percentile per-packet one-way delay: 85.337 ms  
Loss rate: 0.00%

Run 8: Report of PCC-Expr — Data Link

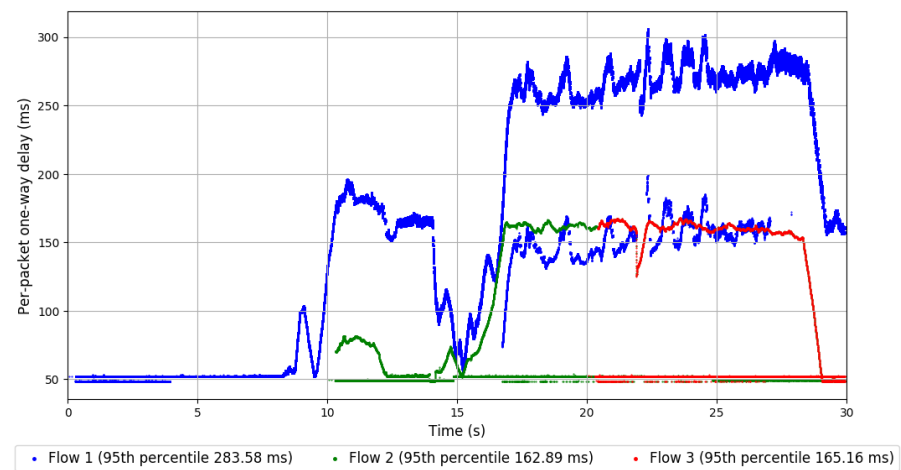
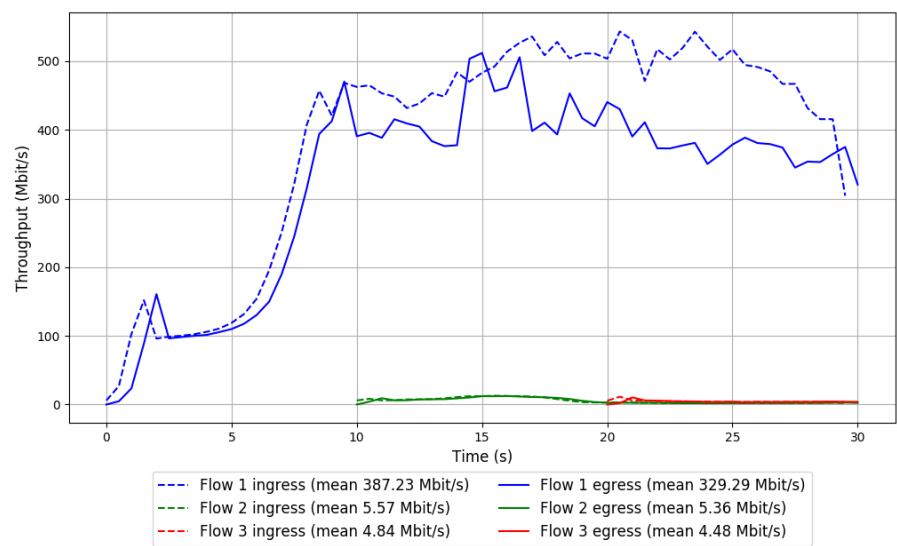


Run 9: Statistics of PCC-Expr

Start at: 2018-06-20 13:33:05  
End at: 2018-06-20 13:33:35  
Local clock offset: 0.08 ms  
Remote clock offset: -1.374 ms

# Below is generated by plot.py at 2018-06-20 15:57:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 334.33 Mbit/s  
95th percentile per-packet one-way delay: 283.463 ms  
Loss rate: 14.84%  
-- Flow 1:  
Average throughput: 329.29 Mbit/s  
95th percentile per-packet one-way delay: 283.576 ms  
Loss rate: 14.97%  
-- Flow 2:  
Average throughput: 5.36 Mbit/s  
95th percentile per-packet one-way delay: 162.890 ms  
Loss rate: 3.74%  
-- Flow 3:  
Average throughput: 4.48 Mbit/s  
95th percentile per-packet one-way delay: 165.161 ms  
Loss rate: 7.55%

Run 9: Report of PCC-Expr — Data Link



Run 10: Statistics of PCC-Expr

Start at: 2018-06-20 13:56:04

End at: 2018-06-20 13:56:34

Local clock offset: 0.01 ms

Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2018-06-20 16:00:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 403.48 Mbit/s

95th percentile per-packet one-way delay: 334.833 ms

Loss rate: 19.51%

-- Flow 1:

Average throughput: 356.67 Mbit/s

95th percentile per-packet one-way delay: 335.593 ms

Loss rate: 20.35%

-- Flow 2:

Average throughput: 68.68 Mbit/s

95th percentile per-packet one-way delay: 226.976 ms

Loss rate: 12.37%

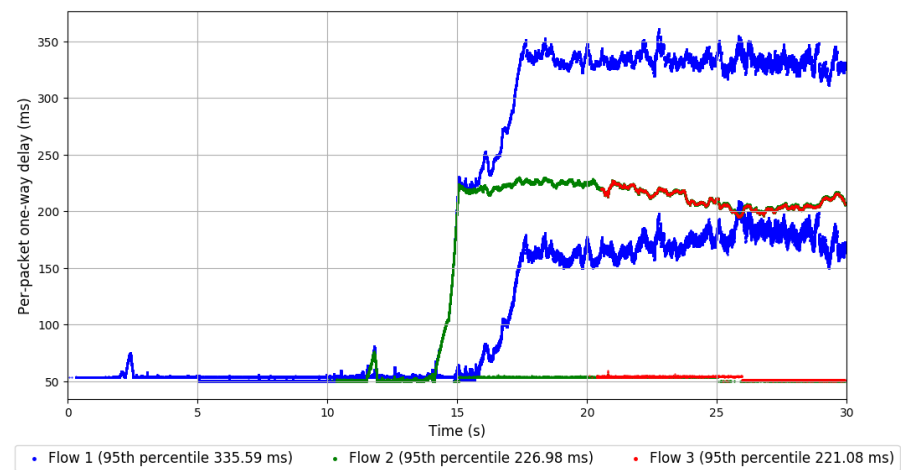
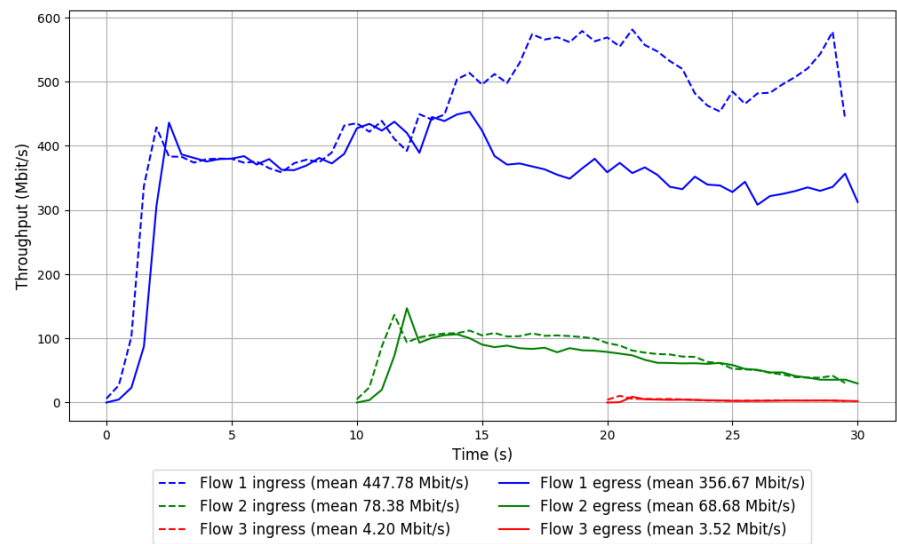
-- Flow 3:

Average throughput: 3.52 Mbit/s

95th percentile per-packet one-way delay: 221.084 ms

Loss rate: 16.20%

Run 10: Report of PCC-Expr — Data Link



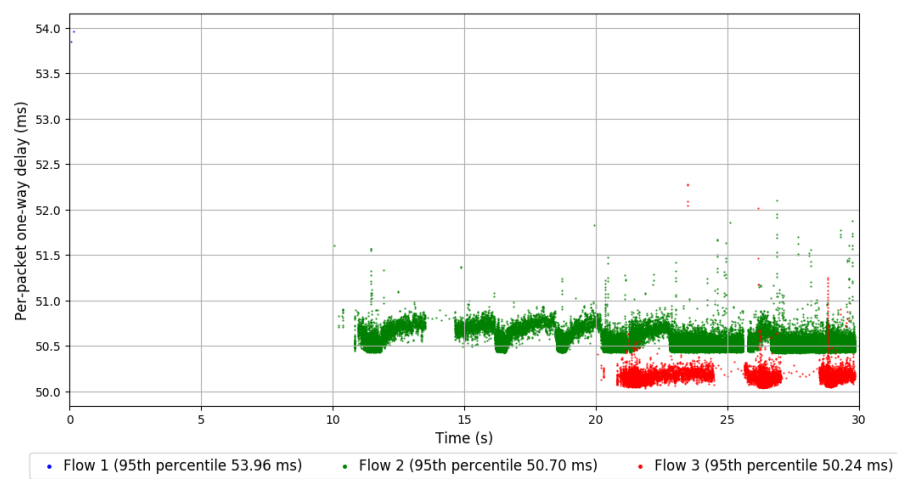
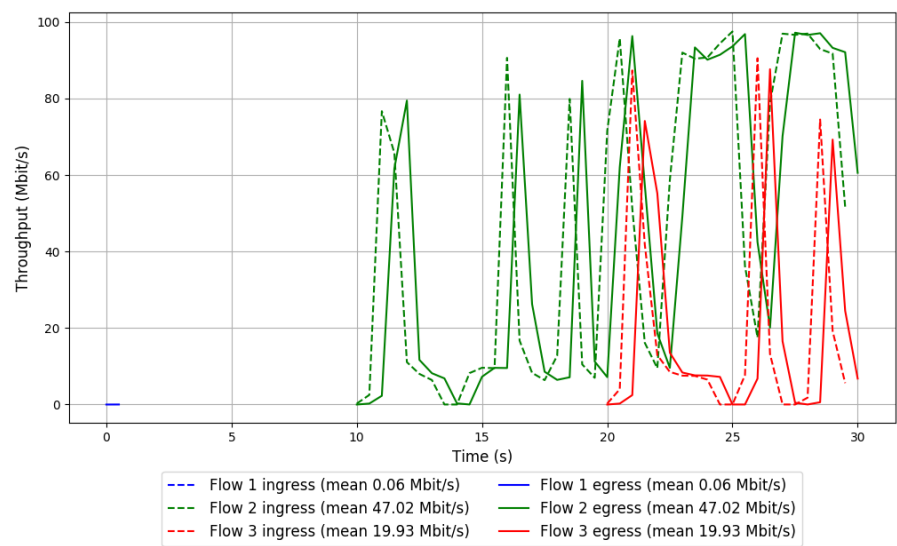
Run 1: Statistics of QUIC Cubic

Start at: 2018-06-20 10:16:41  
End at: 2018-06-20 10:17:11  
Local clock offset: -0.124 ms  
Remote clock offset: -0.058 ms

# Below is generated by plot.py at 2018-06-20 16:00:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 37.73 Mbit/s  
95th percentile per-packet one-way delay: 50.687 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.06 Mbit/s  
95th percentile per-packet one-way delay: 53.960 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 47.02 Mbit/s  
95th percentile per-packet one-way delay: 50.703 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 19.93 Mbit/s  
95th percentile per-packet one-way delay: 50.245 ms  
Loss rate: 0.00%



Run 1: Report of QUIC Cubic — Data Link

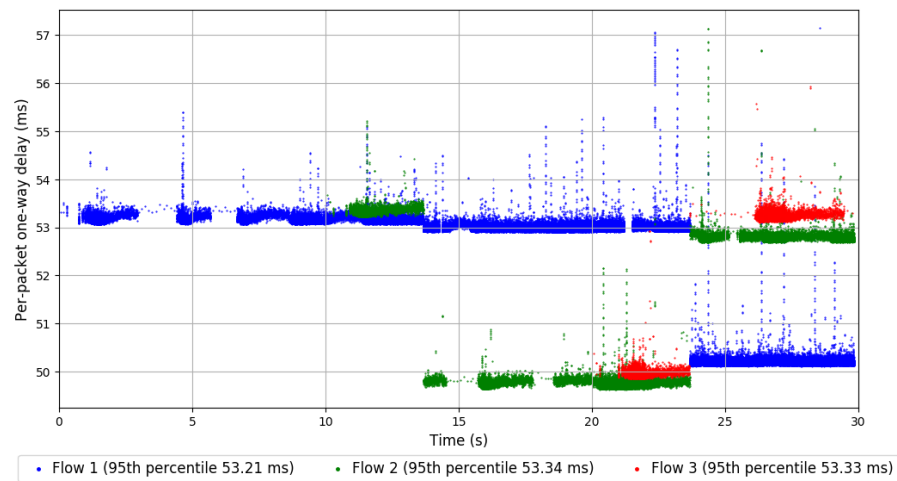
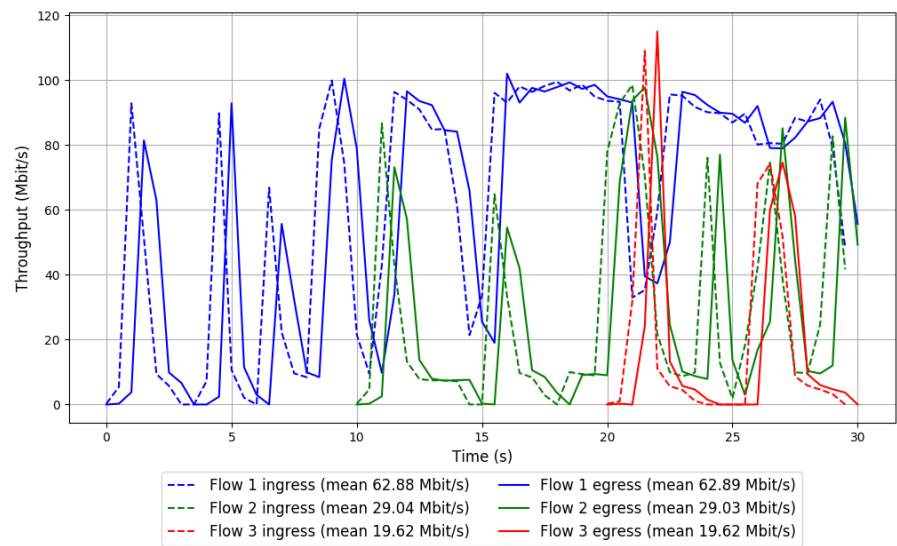


Run 2: Statistics of QUIC Cubic

Start at: 2018-06-20 10:39:26  
End at: 2018-06-20 10:39:56  
Local clock offset: -0.08 ms  
Remote clock offset: -0.204 ms

# Below is generated by plot.py at 2018-06-20 16:00:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 88.55 Mbit/s  
95th percentile per-packet one-way delay: 53.269 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 62.89 Mbit/s  
95th percentile per-packet one-way delay: 53.211 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 29.03 Mbit/s  
95th percentile per-packet one-way delay: 53.344 ms  
Loss rate: 0.03%  
-- Flow 3:  
Average throughput: 19.62 Mbit/s  
95th percentile per-packet one-way delay: 53.328 ms  
Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-06-20 11:02:16

End at: 2018-06-20 11:02:46

Local clock offset: -0.015 ms

Remote clock offset: 1.189 ms

# Below is generated by plot.py at 2018-06-20 16:00:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 98.70 Mbit/s

95th percentile per-packet one-way delay: 54.864 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 61.60 Mbit/s

95th percentile per-packet one-way delay: 54.890 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 41.55 Mbit/s

95th percentile per-packet one-way delay: 54.506 ms

Loss rate: 0.01%

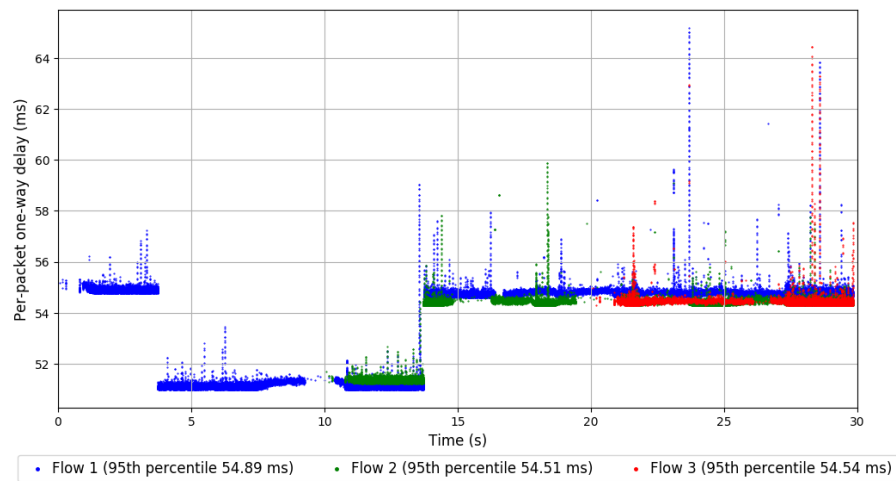
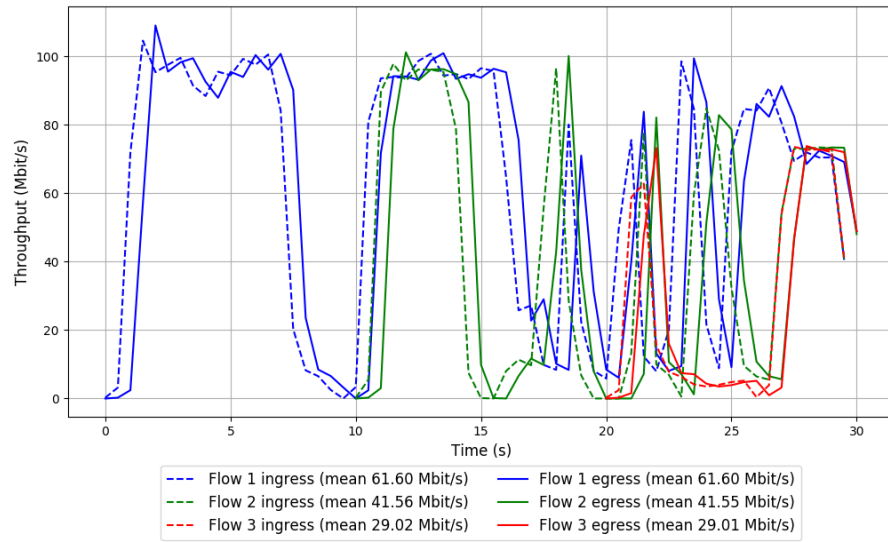
-- Flow 3:

Average throughput: 29.01 Mbit/s

95th percentile per-packet one-way delay: 54.537 ms

Loss rate: 0.02%

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

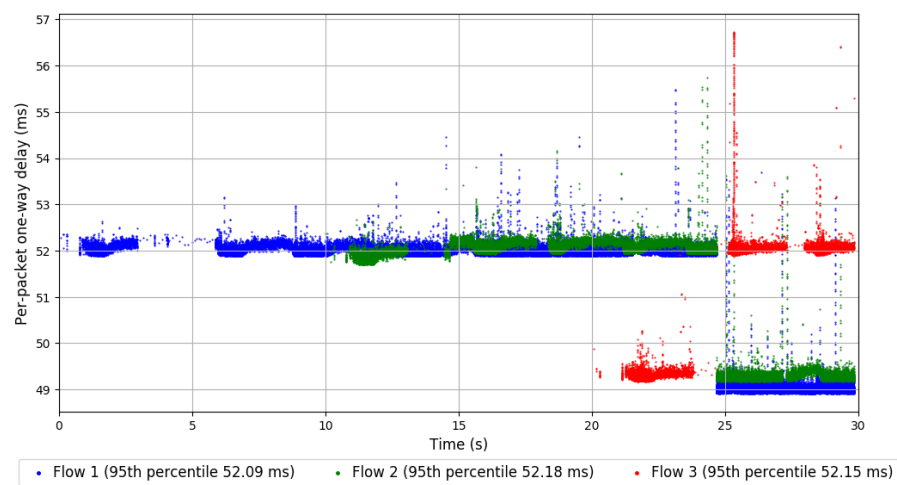
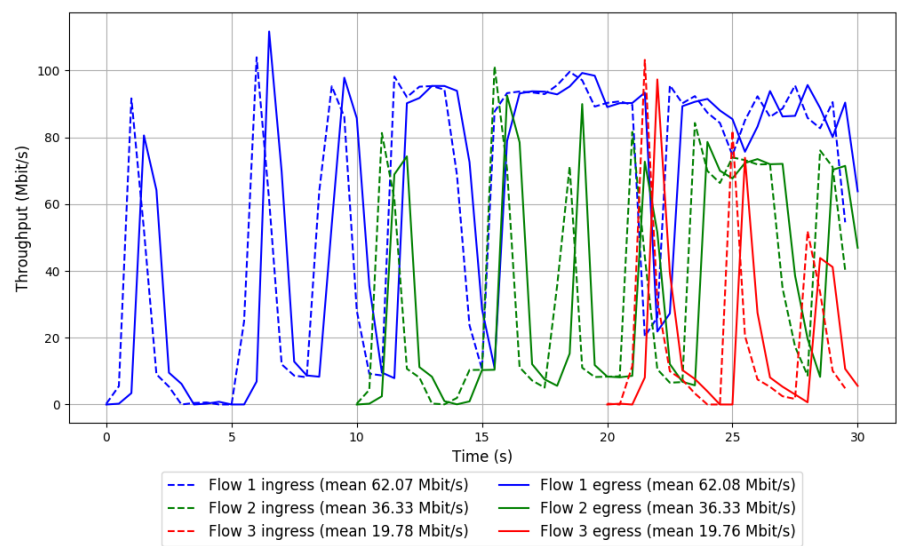


Run 4: Statistics of QUIC Cubic

Start at: 2018-06-20 11:24:55  
End at: 2018-06-20 11:25:25  
Local clock offset: -0.185 ms  
Remote clock offset: -1.388 ms

# Below is generated by plot.py at 2018-06-20 16:00:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 92.66 Mbit/s  
95th percentile per-packet one-way delay: 52.128 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 62.08 Mbit/s  
95th percentile per-packet one-way delay: 52.095 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 36.33 Mbit/s  
95th percentile per-packet one-way delay: 52.183 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 19.76 Mbit/s  
95th percentile per-packet one-way delay: 52.148 ms  
Loss rate: 0.02%

Run 4: Report of QUIC Cubic — Data Link



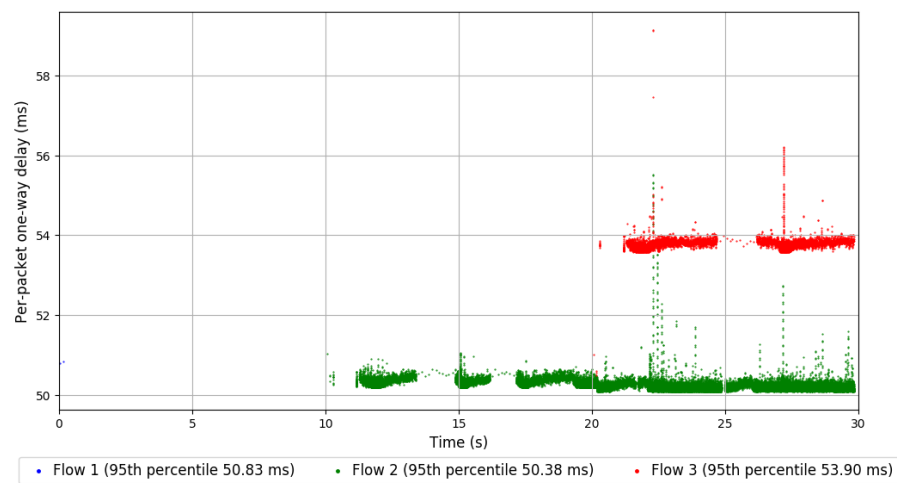
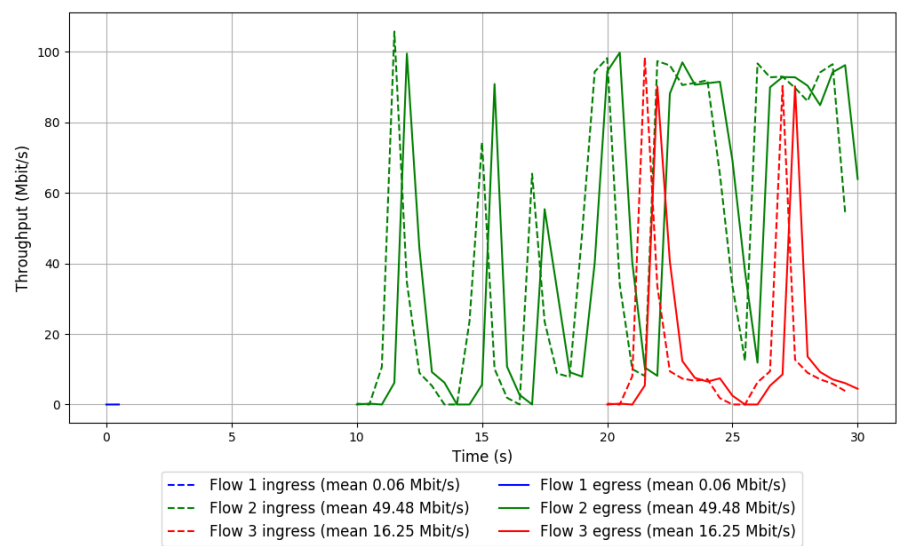
Run 5: Statistics of QUIC Cubic

Start at: 2018-06-20 11:48:00  
End at: 2018-06-20 11:48:30  
Local clock offset: 0.018 ms  
Remote clock offset: -0.155 ms

# Below is generated by plot.py at 2018-06-20 16:00:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 38.17 Mbit/s  
95th percentile per-packet one-way delay: 53.741 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.06 Mbit/s  
95th percentile per-packet one-way delay: 50.830 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 49.48 Mbit/s  
95th percentile per-packet one-way delay: 50.380 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 16.25 Mbit/s  
95th percentile per-packet one-way delay: 53.900 ms  
Loss rate: 0.02%



Run 5: Report of QUIC Cubic — Data Link

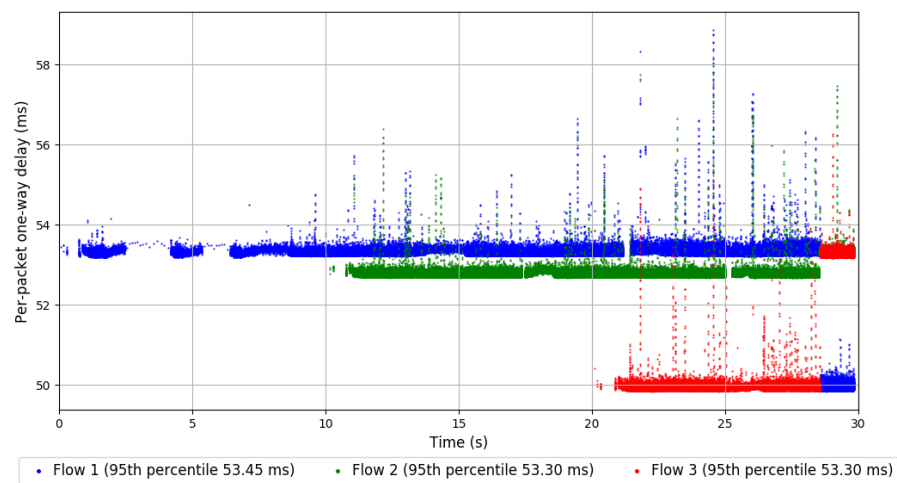
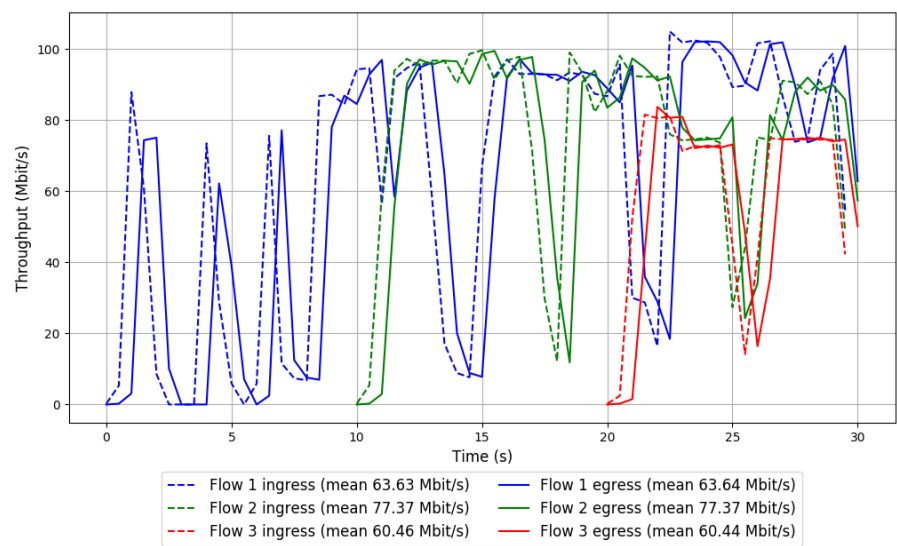


Run 6: Statistics of QUIC Cubic

Start at: 2018-06-20 12:10:51  
End at: 2018-06-20 12:11:21  
Local clock offset: -0.001 ms  
Remote clock offset: -0.426 ms

# Below is generated by plot.py at 2018-06-20 16:00:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 134.80 Mbit/s  
95th percentile per-packet one-way delay: 53.409 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 63.64 Mbit/s  
95th percentile per-packet one-way delay: 53.452 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 77.37 Mbit/s  
95th percentile per-packet one-way delay: 53.297 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 60.44 Mbit/s  
95th percentile per-packet one-way delay: 53.303 ms  
Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-06-20 12:33:55

End at: 2018-06-20 12:34:25

Local clock offset: -0.056 ms

Remote clock offset: 0.18 ms

# Below is generated by plot.py at 2018-06-20 16:00:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 64.52 Mbit/s

95th percentile per-packet one-way delay: 50.721 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 50.612 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 64.56 Mbit/s

95th percentile per-packet one-way delay: 50.737 ms

Loss rate: 0.00%

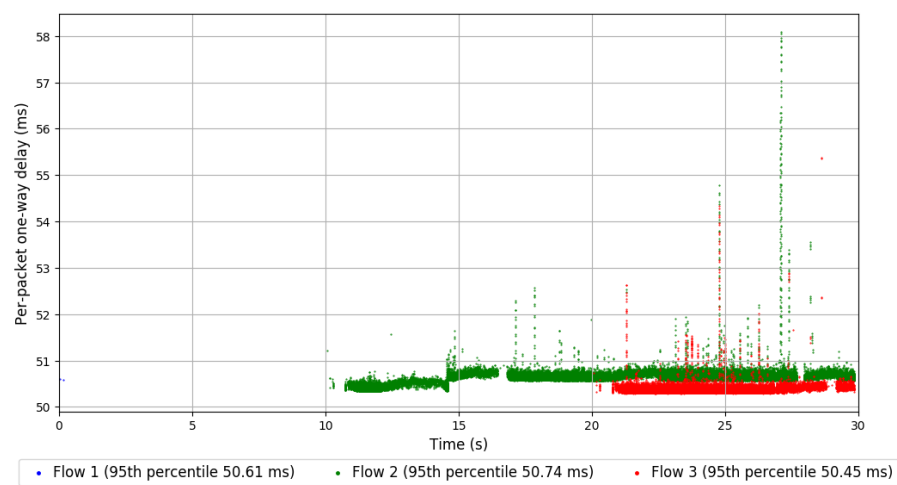
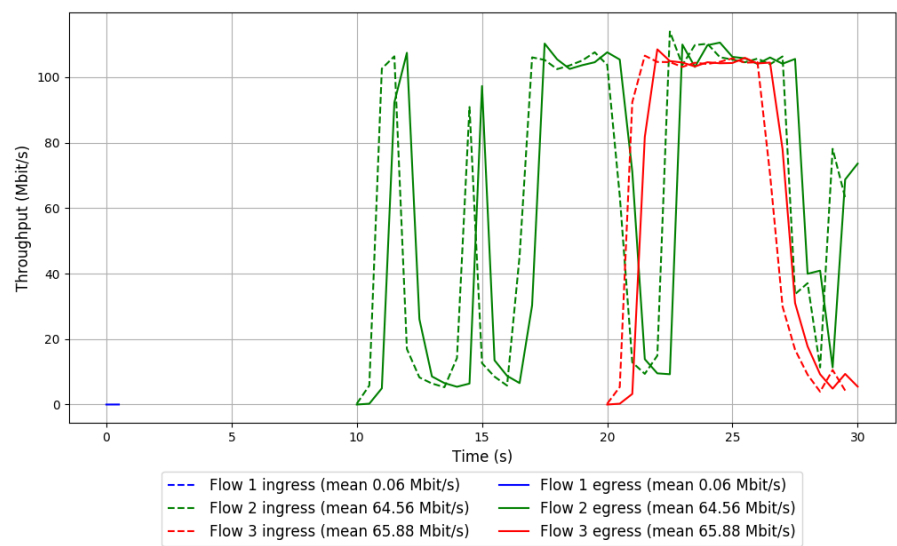
-- Flow 3:

Average throughput: 65.88 Mbit/s

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

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-06-20 12:56:49

End at: 2018-06-20 12:57:19

Local clock offset: 0.053 ms

Remote clock offset: 1.201 ms

# Below is generated by plot.py at 2018-06-20 16:00:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 119.37 Mbit/s

95th percentile per-packet one-way delay: 54.758 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 76.33 Mbit/s

95th percentile per-packet one-way delay: 54.601 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 55.24 Mbit/s

95th percentile per-packet one-way delay: 54.815 ms

Loss rate: 0.02%

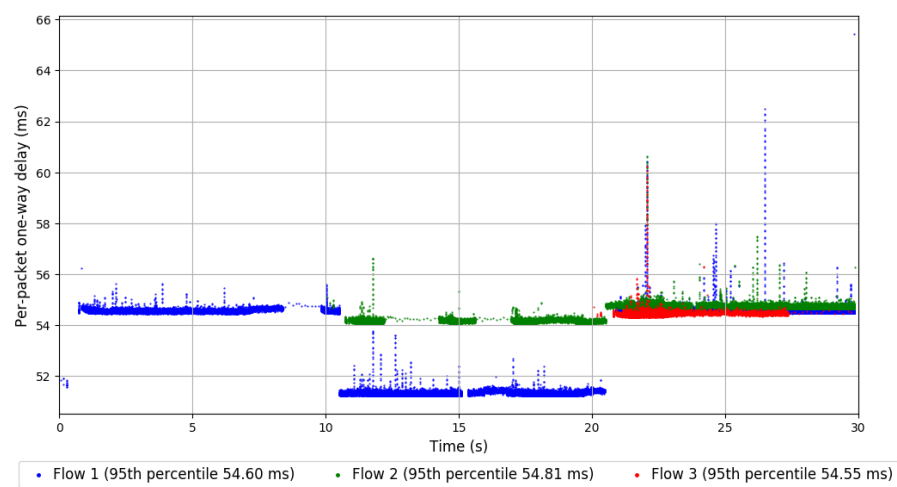
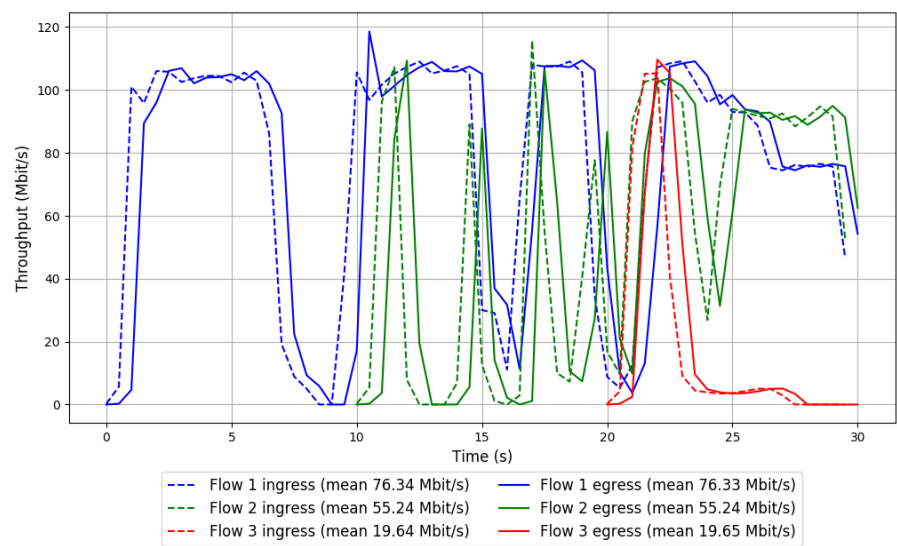
-- Flow 3:

Average throughput: 19.65 Mbit/s

95th percentile per-packet one-way delay: 54.552 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



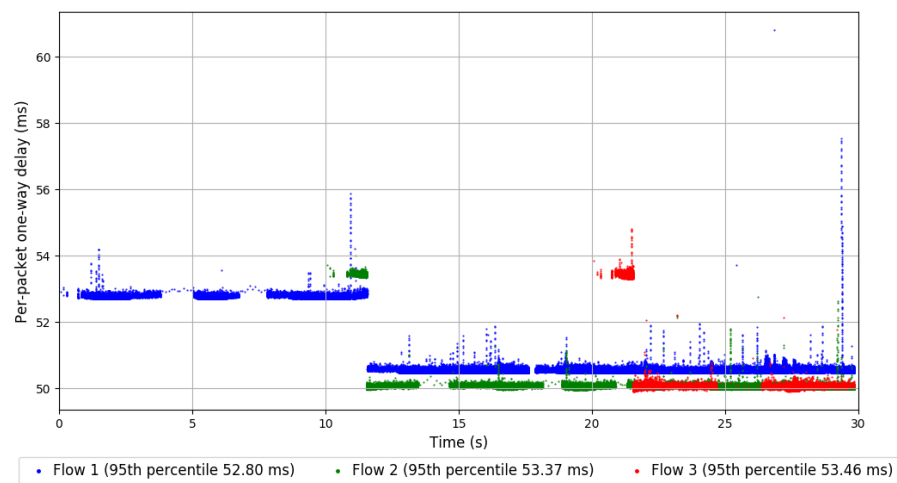
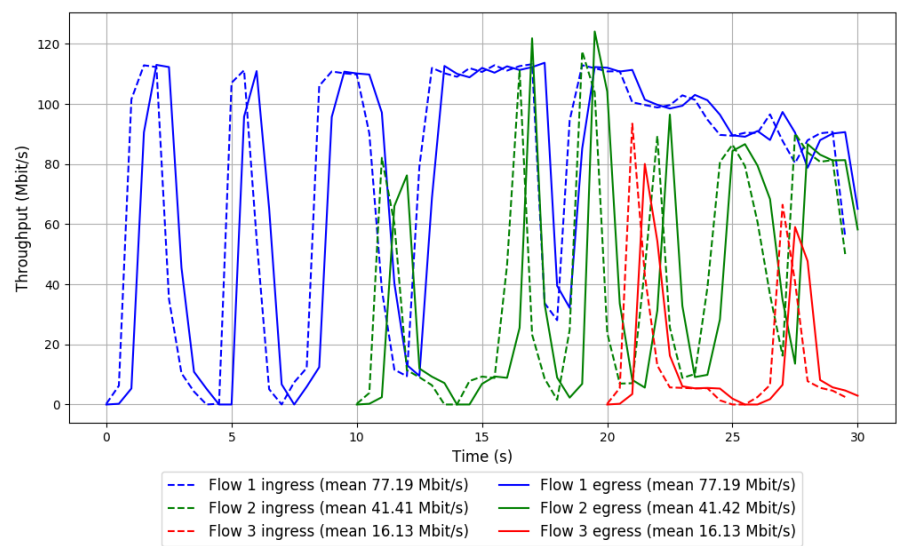
Run 9: Statistics of QUIC Cubic

Start at: 2018-06-20 13:19:58  
End at: 2018-06-20 13:20:28  
Local clock offset: 0.196 ms  
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2018-06-20 16:00:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 109.99 Mbit/s  
95th percentile per-packet one-way delay: 52.814 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 77.19 Mbit/s  
95th percentile per-packet one-way delay: 52.798 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 41.42 Mbit/s  
95th percentile per-packet one-way delay: 53.367 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 16.13 Mbit/s  
95th percentile per-packet one-way delay: 53.459 ms  
Loss rate: 0.00%



Run 9: Report of QUIC Cubic — Data Link

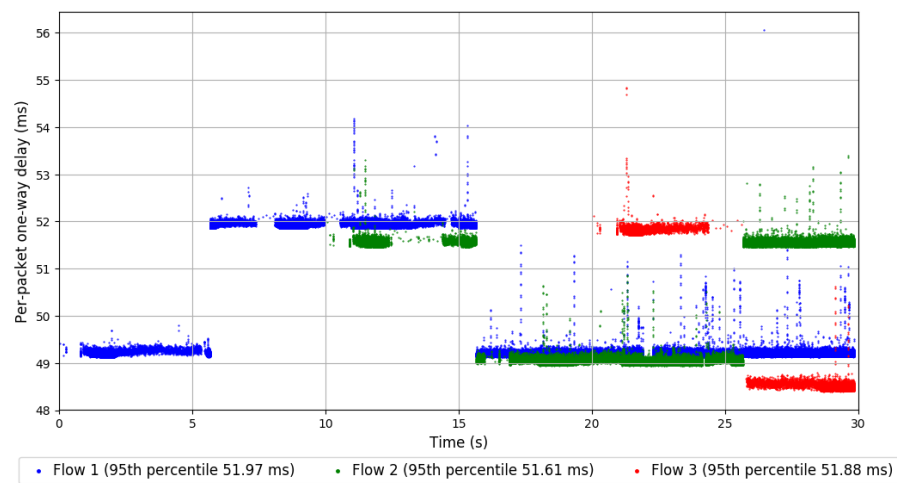
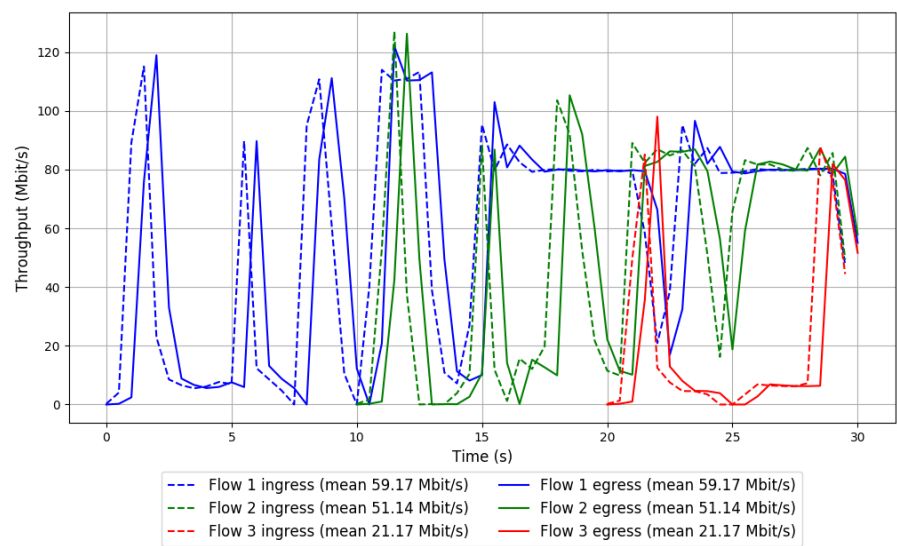


Run 10: Statistics of QUIC Cubic

Start at: 2018-06-20 13:42:44  
End at: 2018-06-20 13:43:14  
Local clock offset: 0.015 ms  
Remote clock offset: -1.519 ms

# Below is generated by plot.py at 2018-06-20 16:00:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 100.07 Mbit/s  
95th percentile per-packet one-way delay: 51.949 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 59.17 Mbit/s  
95th percentile per-packet one-way delay: 51.968 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 51.14 Mbit/s  
95th percentile per-packet one-way delay: 51.608 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 21.17 Mbit/s  
95th percentile per-packet one-way delay: 51.880 ms  
Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link

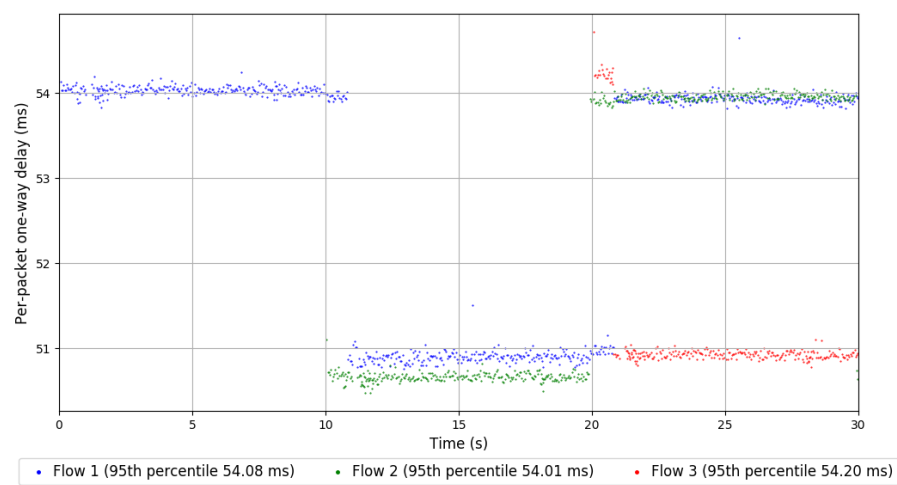
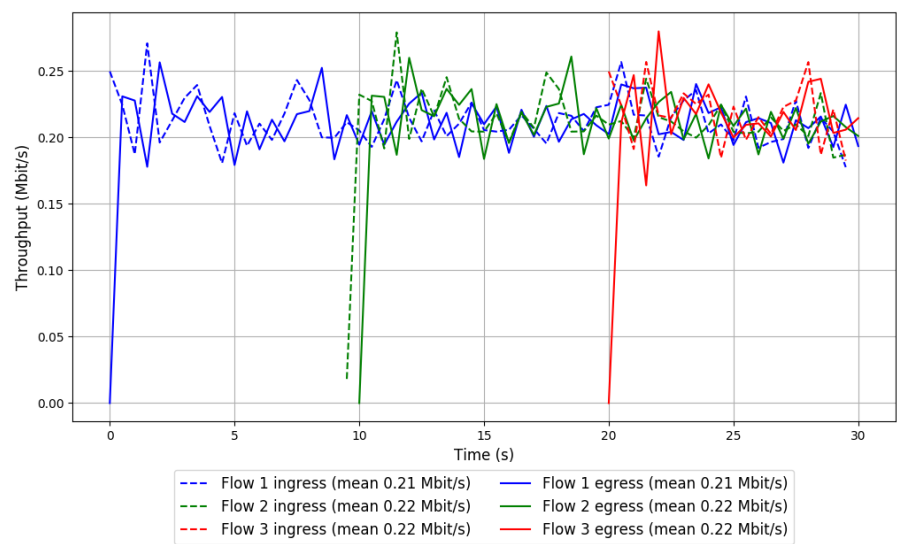


```
Run 1: Statistics of SReAM

Start at: 2018-06-20 10:21:09
End at: 2018-06-20 10:21:39
Local clock offset: -0.167 ms
Remote clock offset: 0.126 ms

# Below is generated by plot.py at 2018-06-20 16:00:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 54.070 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 54.081 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 54.009 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 54.205 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link

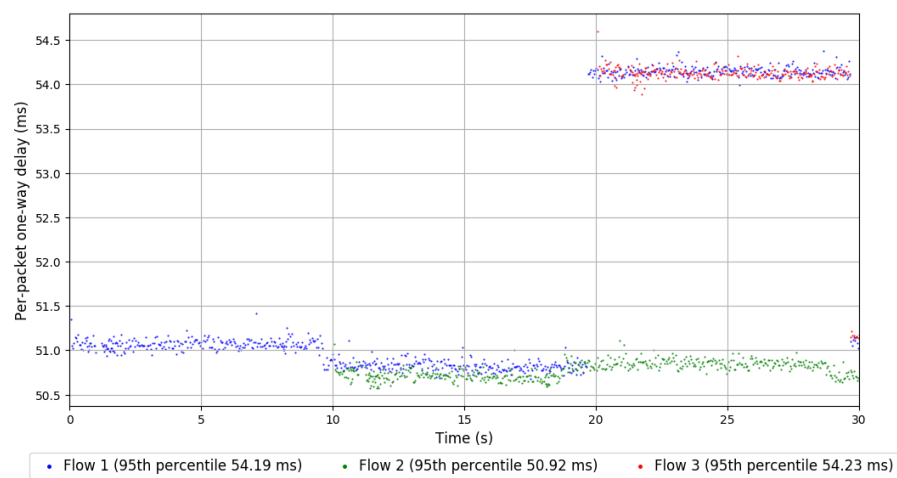
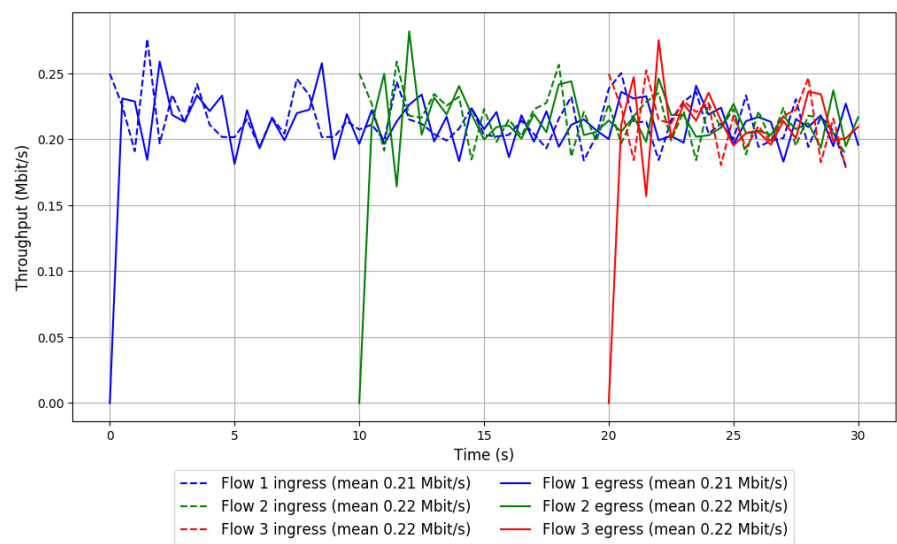


Run 2: Statistics of SReAM

Start at: 2018-06-20 10:44:00  
End at: 2018-06-20 10:44:30  
Local clock offset: -0.134 ms  
Remote clock offset: 0.192 ms

# Below is generated by plot.py at 2018-06-20 16:00:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 54.188 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 54.193 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 50.917 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 54.228 ms  
Loss rate: 0.00%

Run 2: Report of SReAM — Data Link



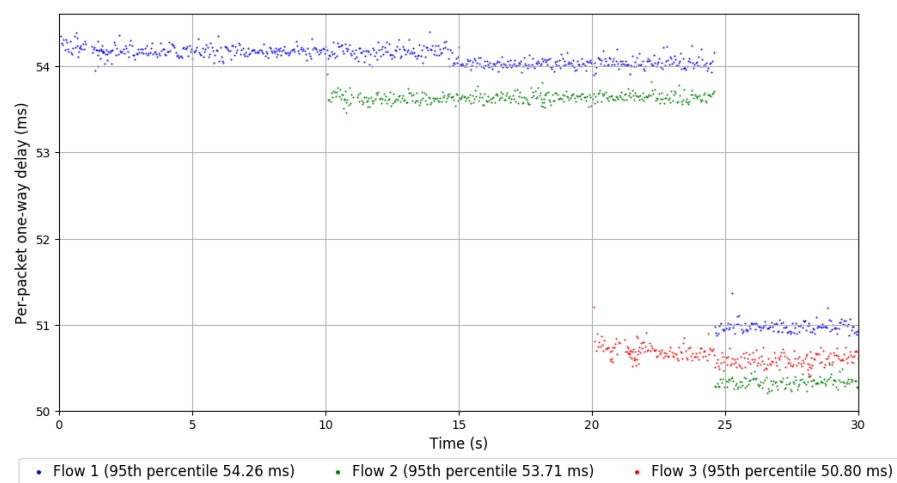
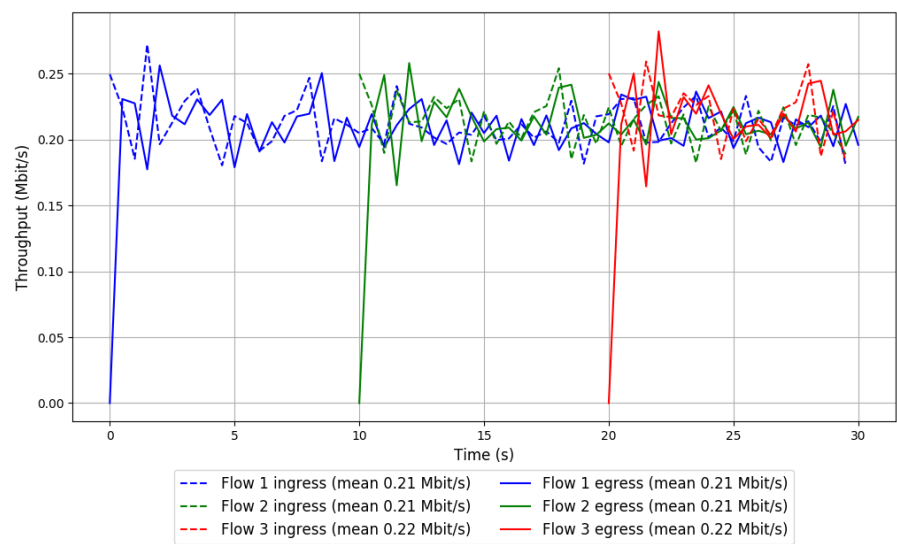
Run 3: Statistics of SCReAM

Start at: 2018-06-20 11:06:45  
End at: 2018-06-20 11:07:15  
Local clock offset: -0.268 ms  
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2018-06-20 16:00:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 54.225 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 54.256 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 53.710 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 50.802 ms  
Loss rate: 0.00%



Run 3: Report of SReAM — Data Link

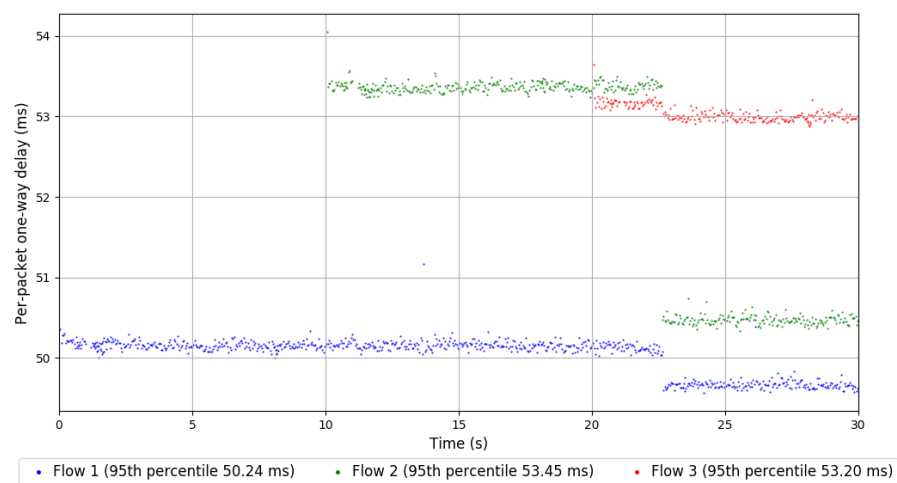
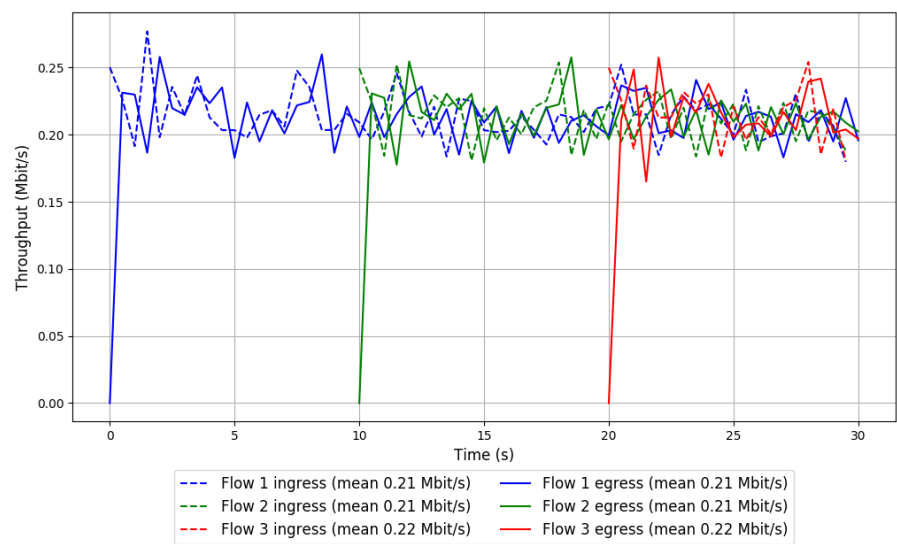


Run 4: Statistics of SReAM

Start at: 2018-06-20 11:29:37  
End at: 2018-06-20 11:30:07  
Local clock offset: 0.002 ms  
Remote clock offset: -0.428 ms

# Below is generated by plot.py at 2018-06-20 16:00:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 53.405 ms  
Loss rate: 0.06%  
-- Flow 1:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 50.238 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 53.445 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 53.198 ms  
Loss rate: 0.35%

Run 4: Report of SReAM — Data Link

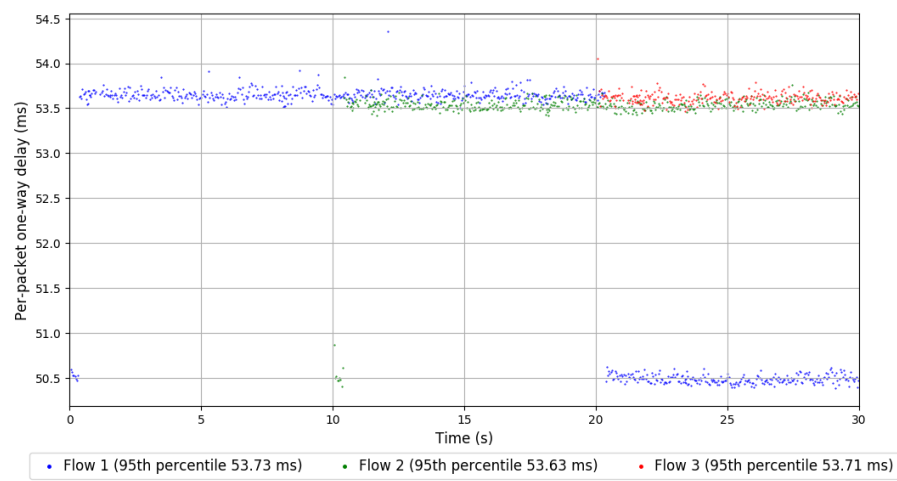
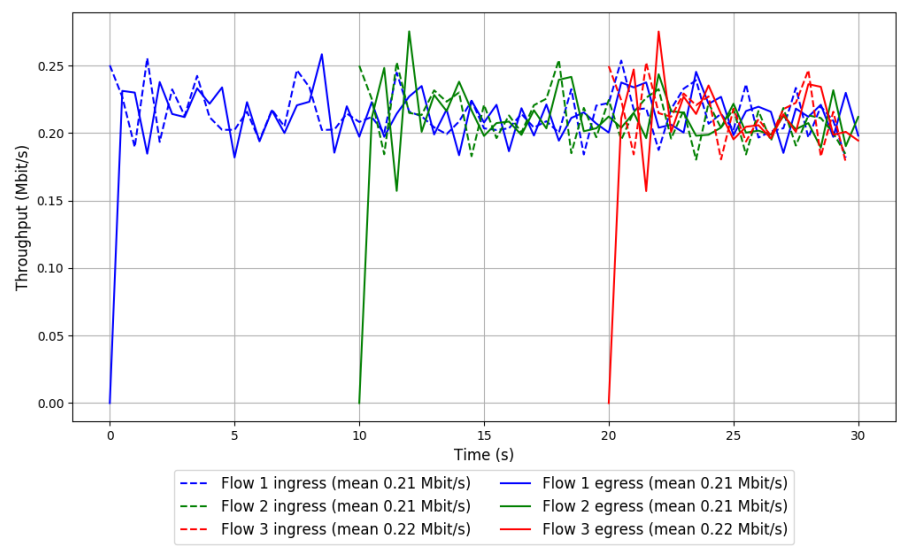


Run 5: Statistics of SReAM

Start at: 2018-06-20 11:52:30  
End at: 2018-06-20 11:53:00  
Local clock offset: 0.069 ms  
Remote clock offset: -0.136 ms

# Below is generated by plot.py at 2018-06-20 16:00:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 53.710 ms  
Loss rate: 0.06%  
-- Flow 1:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 53.730 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 53.635 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 53.708 ms  
Loss rate: 0.35%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-06-20 12:15:37

End at: 2018-06-20 12:16:07

Local clock offset: -0.006 ms

Remote clock offset: 0.074 ms

# Below is generated by plot.py at 2018-06-20 16:00:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.375 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 54.017 ms

Loss rate: 0.00%

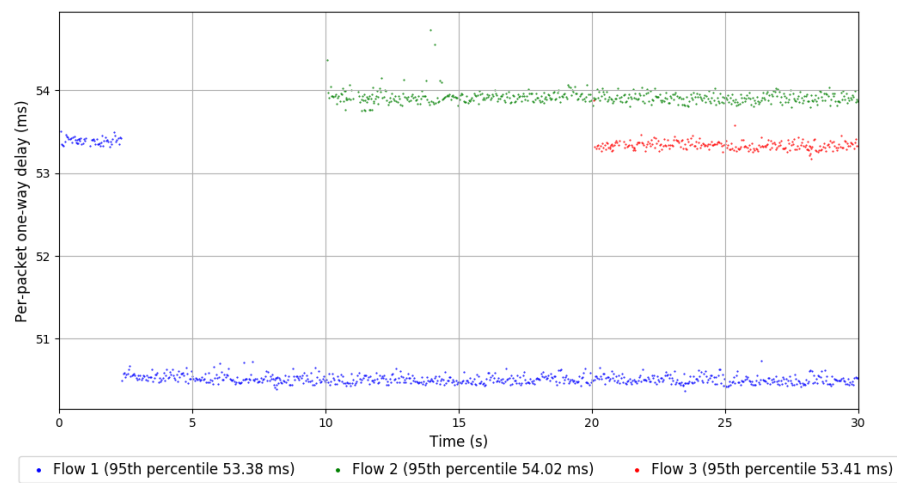
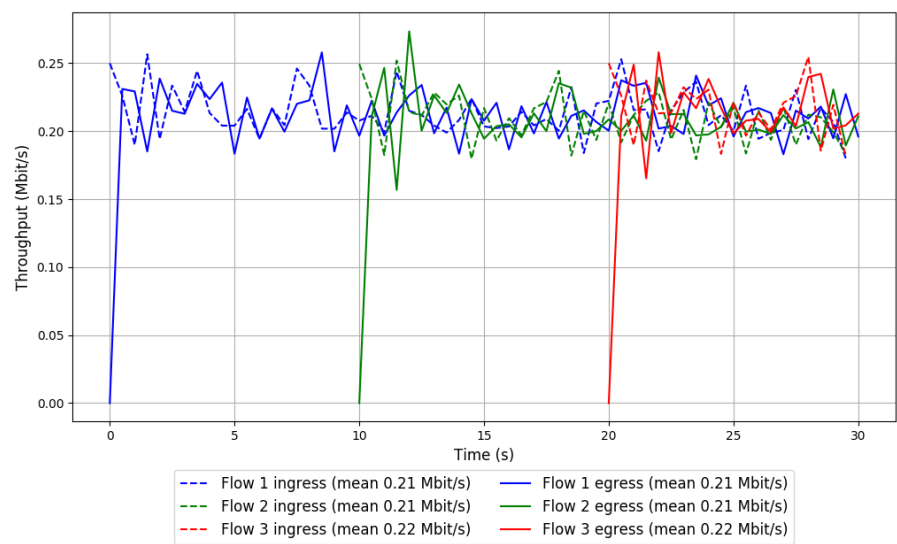
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.413 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



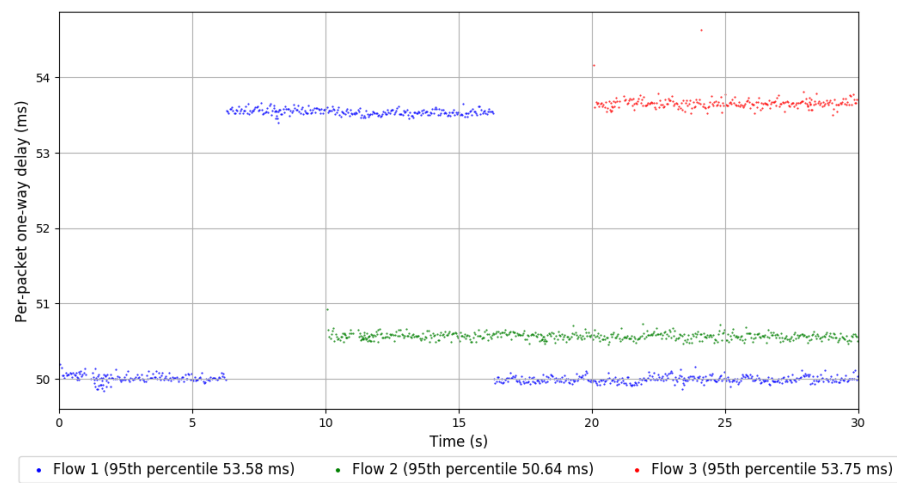
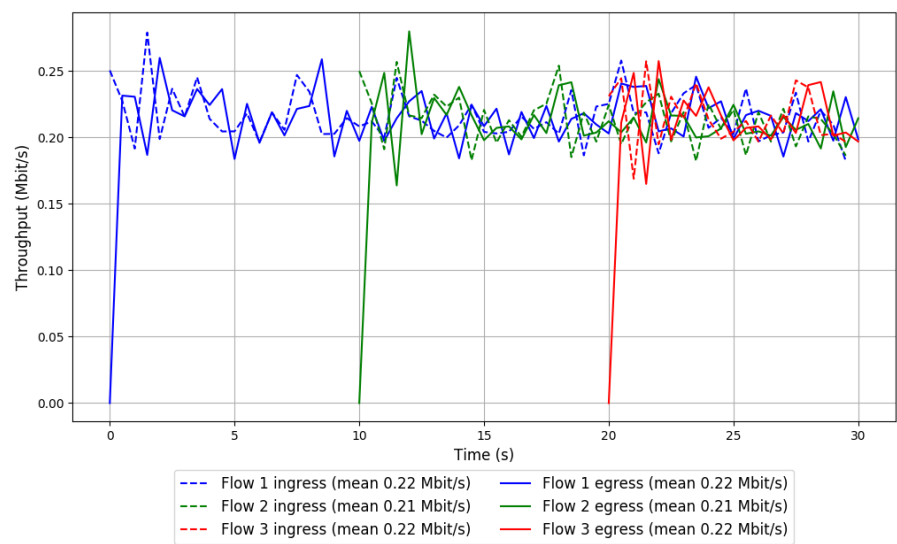
Run 7: Statistics of SReAM

Start at: 2018-06-20 12:38:24  
End at: 2018-06-20 12:38:54  
Local clock offset: -0.071 ms  
Remote clock offset: -0.084 ms

# Below is generated by plot.py at 2018-06-20 16:00:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 53.670 ms  
Loss rate: 0.06%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 53.581 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 50.641 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 53.746 ms  
Loss rate: 0.36%



Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2018-06-20 13:01:41

End at: 2018-06-20 13:02:11

Local clock offset: 0.094 ms

Remote clock offset: 0.113 ms

# Below is generated by plot.py at 2018-06-20 16:00:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 53.970 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.798 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.448 ms

Loss rate: 0.00%

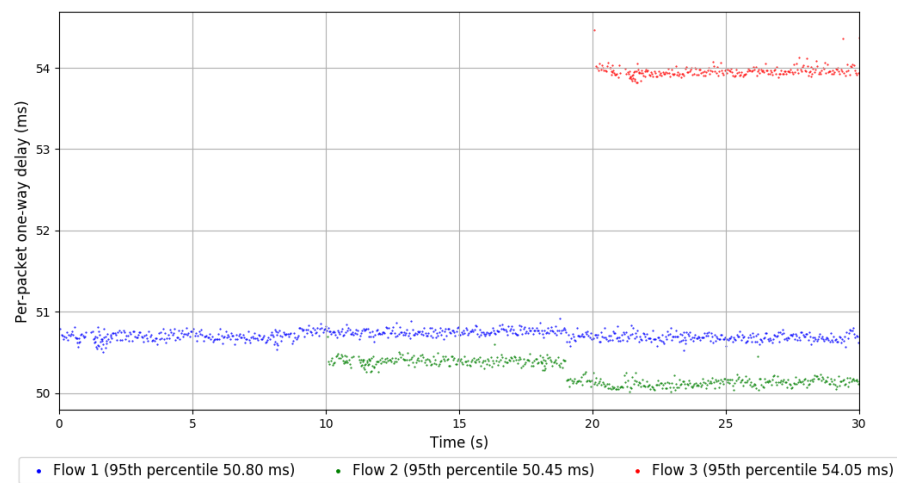
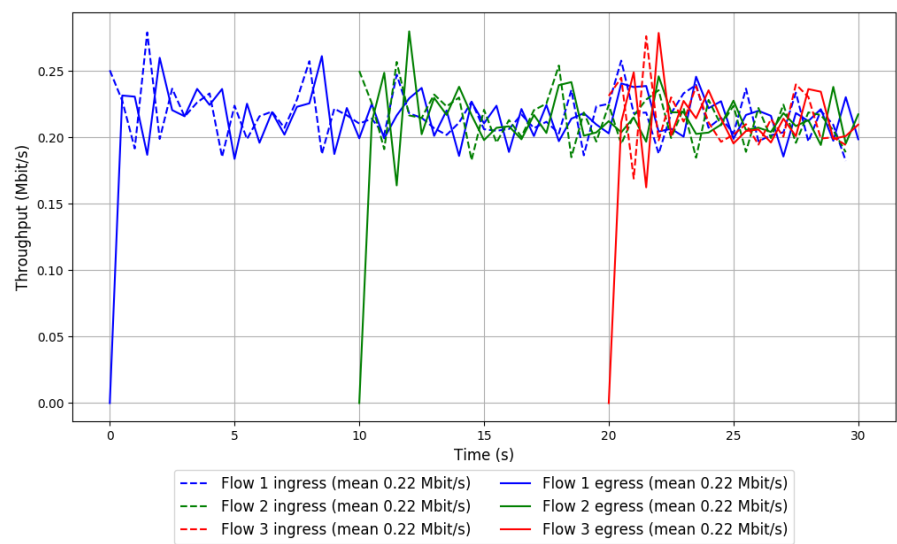
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 54.045 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-06-20 13:24:28

End at: 2018-06-20 13:24:58

Local clock offset: -0.181 ms

Remote clock offset: 1.174 ms

# Below is generated by plot.py at 2018-06-20 16:00:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 55.367 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 51.786 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 52.358 ms

Loss rate: 0.00%

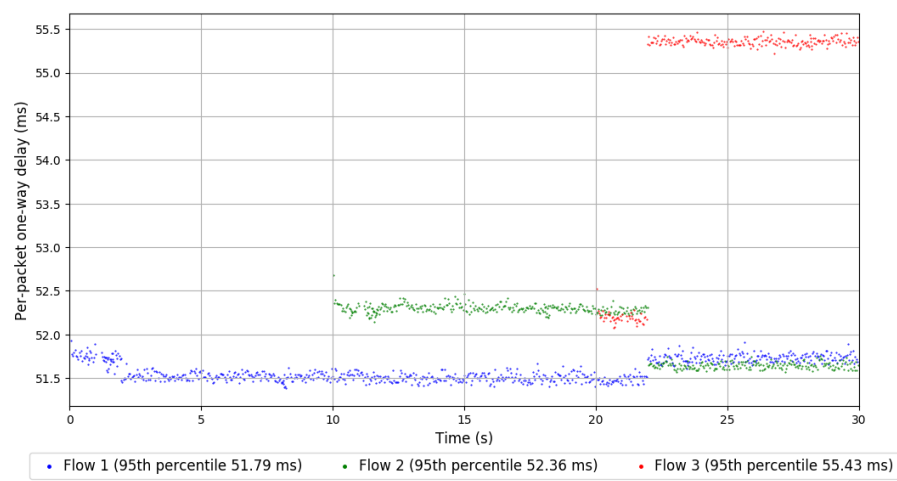
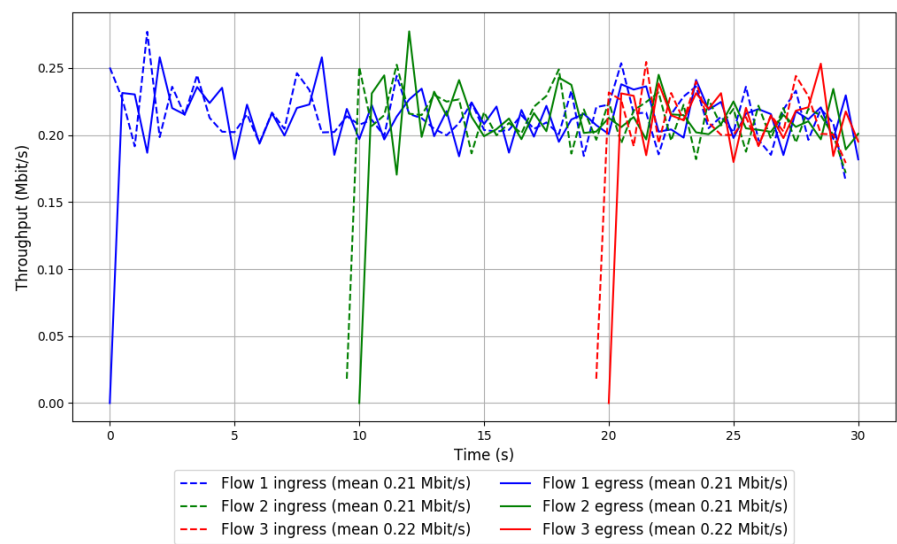
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 55.428 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

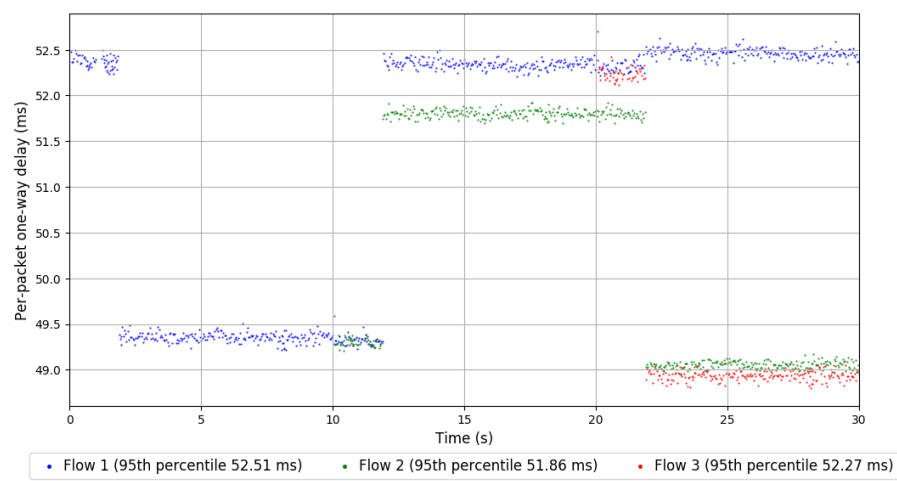
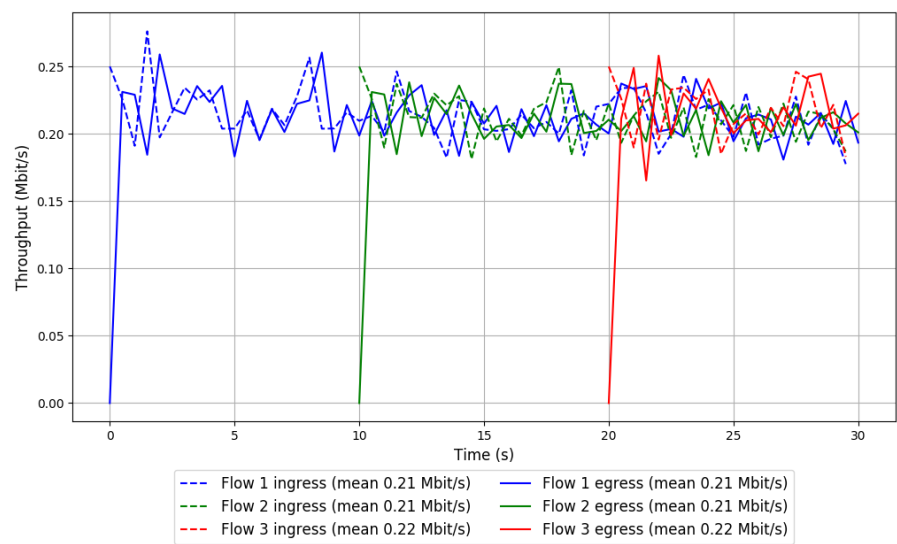


Run 10: Statistics of SCReAM

Start at: 2018-06-20 13:47:28  
End at: 2018-06-20 13:47:58  
Local clock offset: 0.177 ms  
Remote clock offset: -1.254 ms

# Below is generated by plot.py at 2018-06-20 16:00:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 52.485 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 52.511 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 51.859 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 52.267 ms  
Loss rate: 0.00%

Run 10: Report of SReAM — Data Link



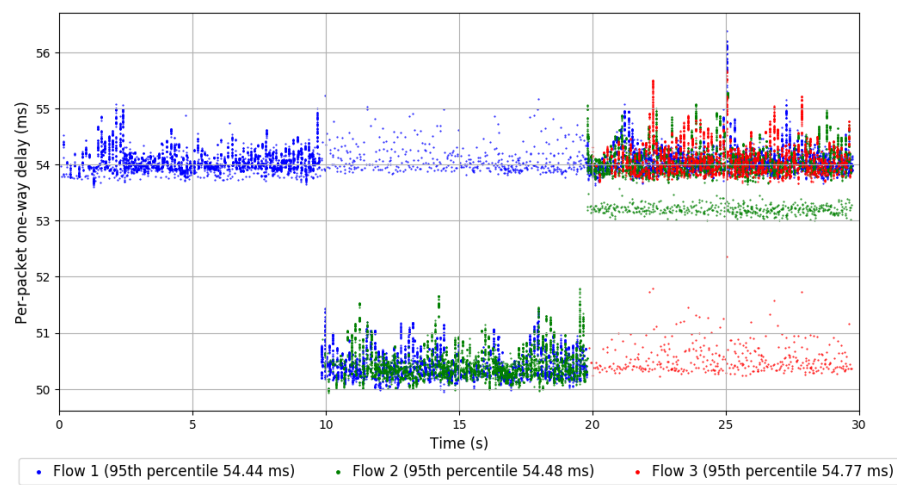
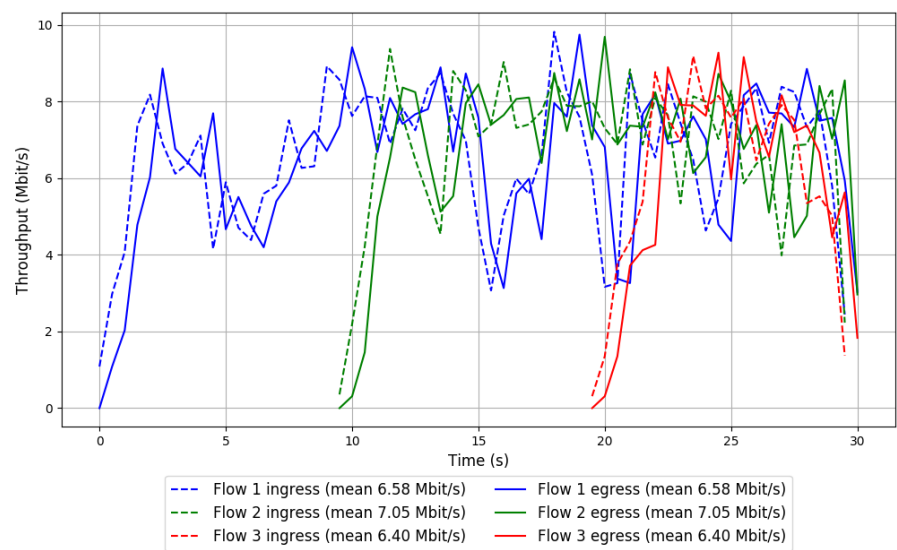
Run 1: Statistics of Sprout

Start at: 2018-06-20 10:12:49  
End at: 2018-06-20 10:13:19  
Local clock offset: -0.205 ms  
Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2018-06-20 16:00:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 13.41 Mbit/s  
95th percentile per-packet one-way delay: 54.517 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 6.58 Mbit/s  
95th percentile per-packet one-way delay: 54.444 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 7.05 Mbit/s  
95th percentile per-packet one-way delay: 54.484 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 6.40 Mbit/s  
95th percentile per-packet one-way delay: 54.770 ms  
Loss rate: 0.00%



Run 1: Report of Sprout — Data Link

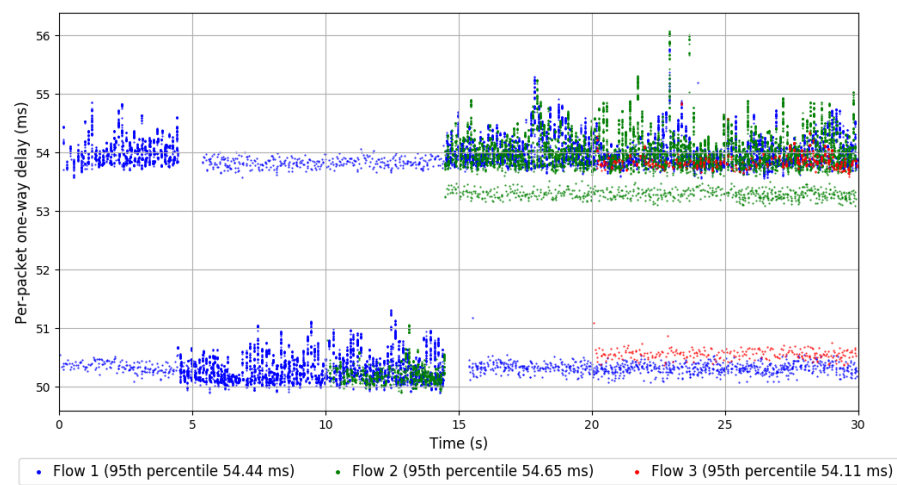
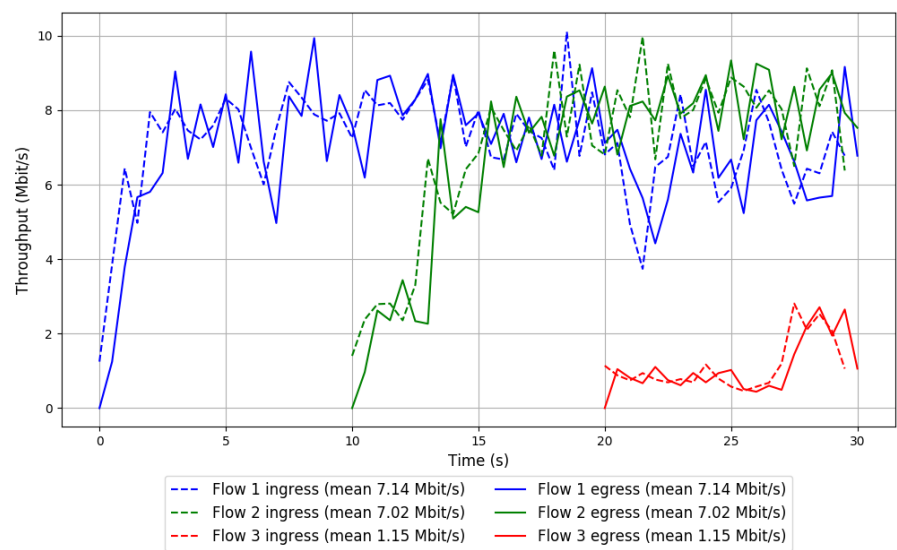


Run 2: Statistics of Sprout

Start at: 2018-06-20 10:35:25  
End at: 2018-06-20 10:35:55  
Local clock offset: -0.021 ms  
Remote clock offset: -0.011 ms

# Below is generated by plot.py at 2018-06-20 16:00:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.18 Mbit/s  
95th percentile per-packet one-way delay: 54.523 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 7.14 Mbit/s  
95th percentile per-packet one-way delay: 54.436 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 7.02 Mbit/s  
95th percentile per-packet one-way delay: 54.650 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 1.15 Mbit/s  
95th percentile per-packet one-way delay: 54.110 ms  
Loss rate: 0.00%

Run 2: Report of Sprout — Data Link

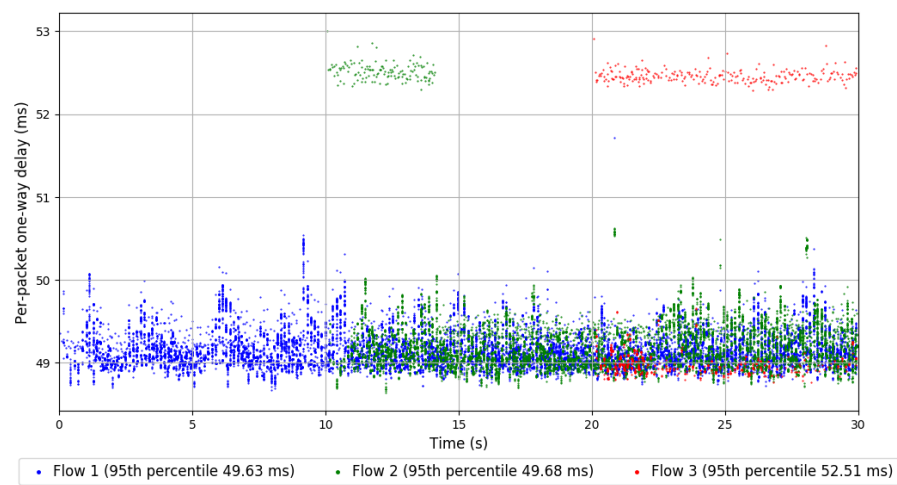
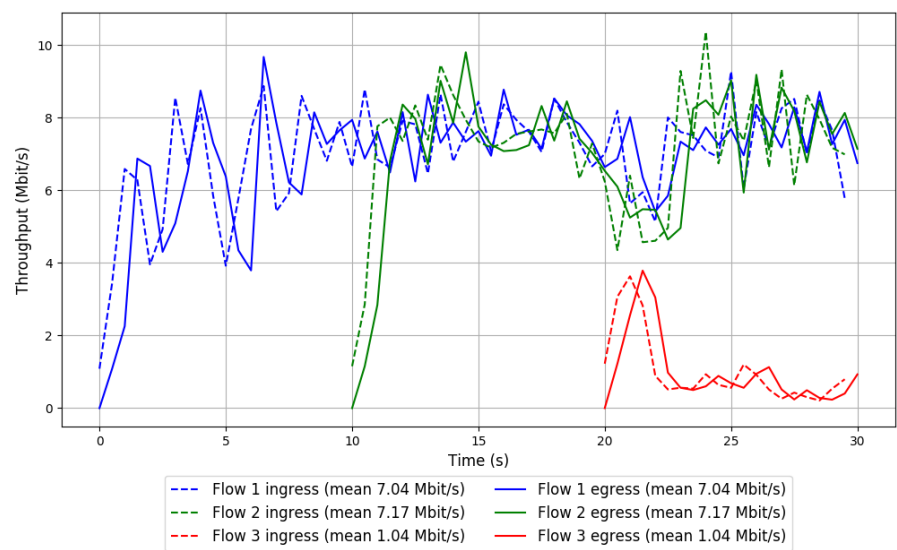


### Run 3: Statistics of Sprout

Start at: 2018-06-20 10:58:16  
End at: 2018-06-20 10:58:46  
Local clock offset: -0.325 ms  
Remote clock offset: -1.47 ms

```
# Below is generated by plot.py at 2018-06-20 16:00:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.15 Mbit/s
95th percentile per-packet one-way delay: 49.674 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.04 Mbit/s
95th percentile per-packet one-way delay: 49.634 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.17 Mbit/s
95th percentile per-packet one-way delay: 49.677 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.04 Mbit/s
95th percentile per-packet one-way delay: 52.512 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

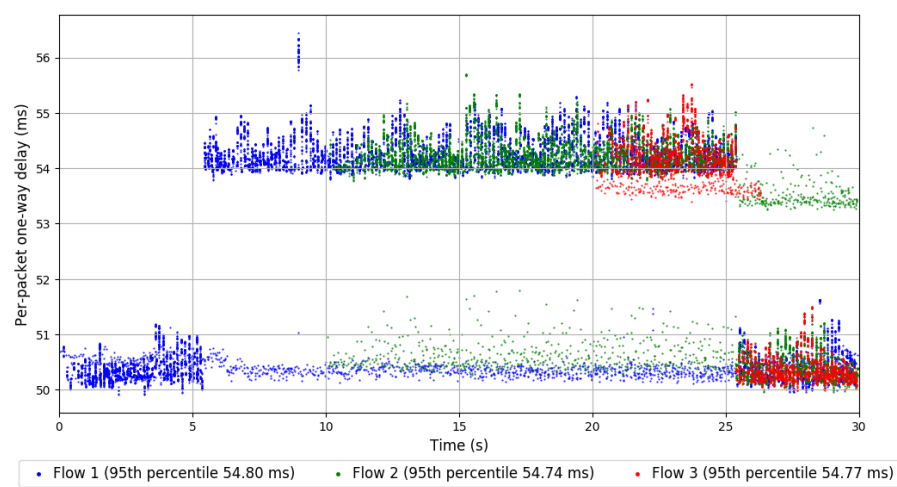
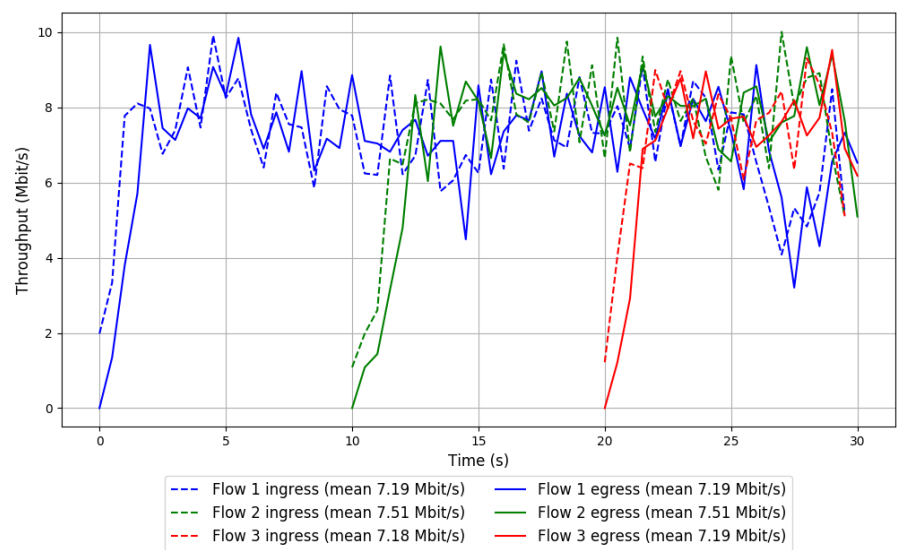


Run 4: Statistics of Sprout

Start at: 2018-06-20 11:20:54  
End at: 2018-06-20 11:21:24  
Local clock offset: -0.087 ms  
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2018-06-20 16:00:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 14.55 Mbit/s  
95th percentile per-packet one-way delay: 54.772 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 7.19 Mbit/s  
95th percentile per-packet one-way delay: 54.795 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 7.51 Mbit/s  
95th percentile per-packet one-way delay: 54.742 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 7.19 Mbit/s  
95th percentile per-packet one-way delay: 54.767 ms  
Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



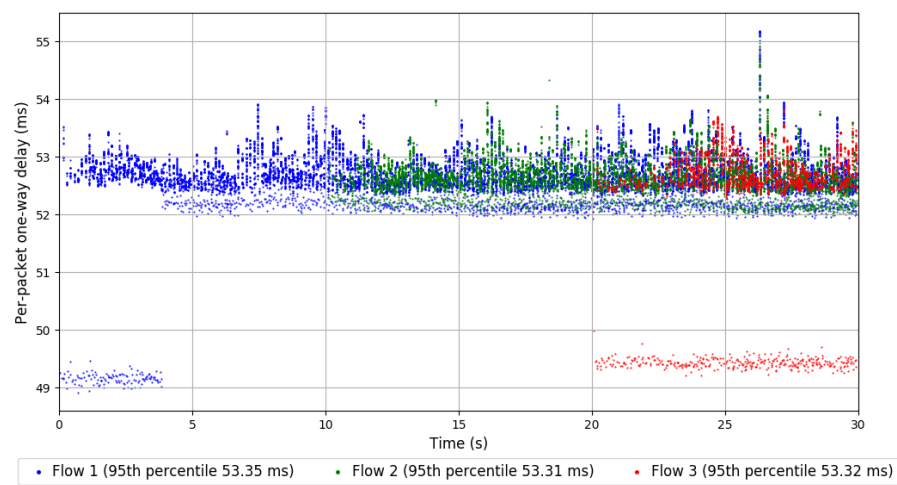
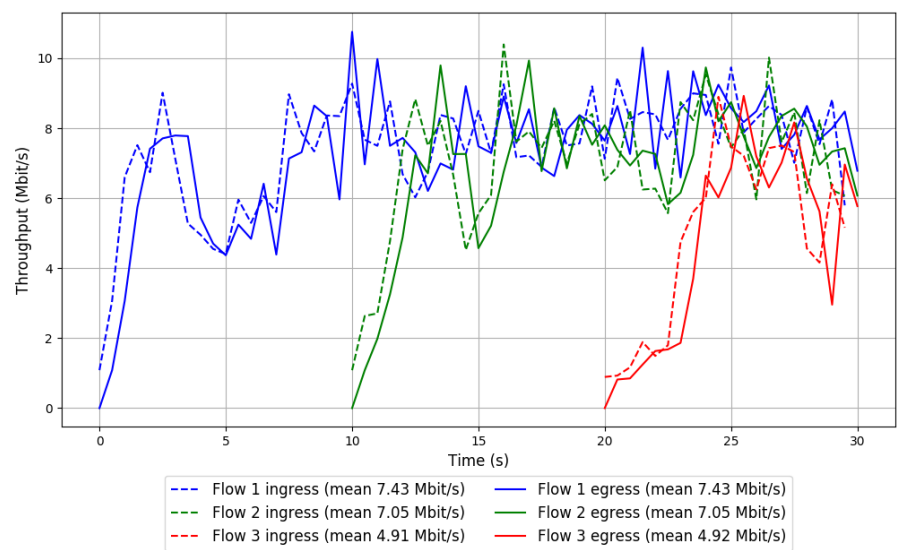
Run 5: Statistics of Sprout

Start at: 2018-06-20 11:43:56  
End at: 2018-06-20 11:44:26  
Local clock offset: -0.034 ms  
Remote clock offset: -1.348 ms

# Below is generated by plot.py at 2018-06-20 16:00:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 13.74 Mbit/s  
95th percentile per-packet one-way delay: 53.334 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 7.43 Mbit/s  
95th percentile per-packet one-way delay: 53.352 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 7.05 Mbit/s  
95th percentile per-packet one-way delay: 53.308 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 4.92 Mbit/s  
95th percentile per-packet one-way delay: 53.323 ms  
Loss rate: 0.10%



Run 5: Report of Sprout — Data Link

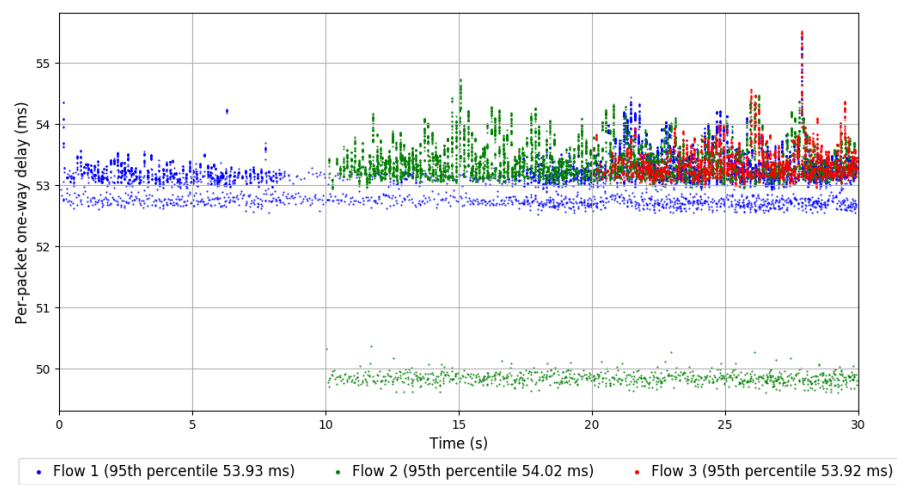
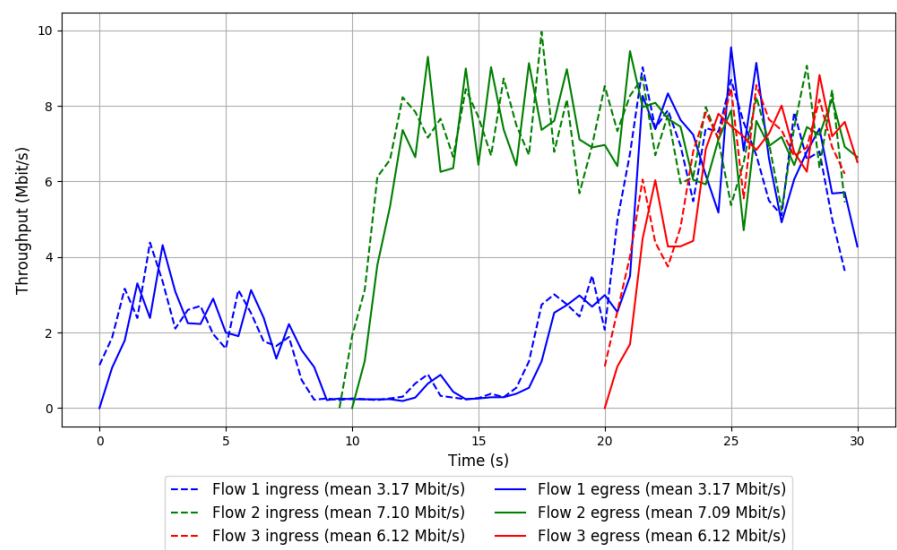


Run 6: Statistics of Sprout

Start at: 2018-06-20 12:06:50  
End at: 2018-06-20 12:07:20  
Local clock offset: 0.287 ms  
Remote clock offset: -0.484 ms

# Below is generated by plot.py at 2018-06-20 16:00:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 9.91 Mbit/s  
95th percentile per-packet one-way delay: 53.978 ms  
Loss rate: 0.05%  
-- Flow 1:  
Average throughput: 3.17 Mbit/s  
95th percentile per-packet one-way delay: 53.928 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 7.09 Mbit/s  
95th percentile per-packet one-way delay: 54.022 ms  
Loss rate: 0.11%  
-- Flow 3:  
Average throughput: 6.12 Mbit/s  
95th percentile per-packet one-way delay: 53.924 ms  
Loss rate: 0.00%

Run 6: Report of Sprout — Data Link

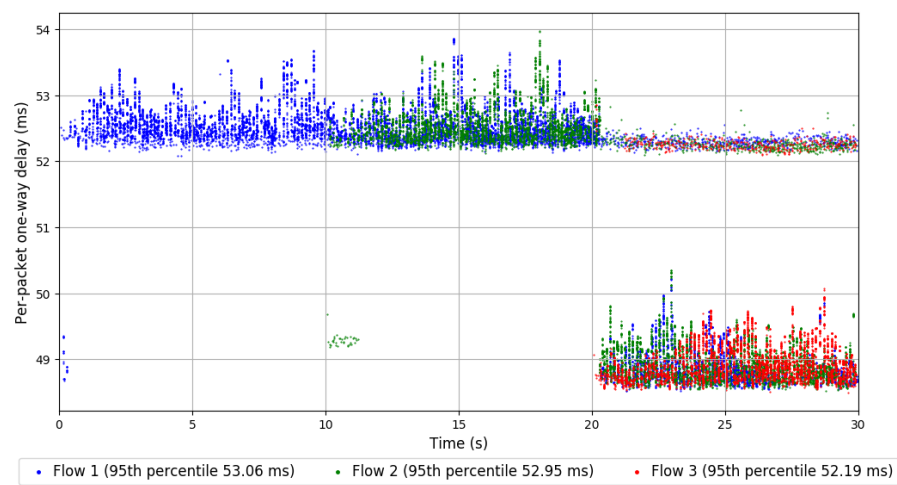
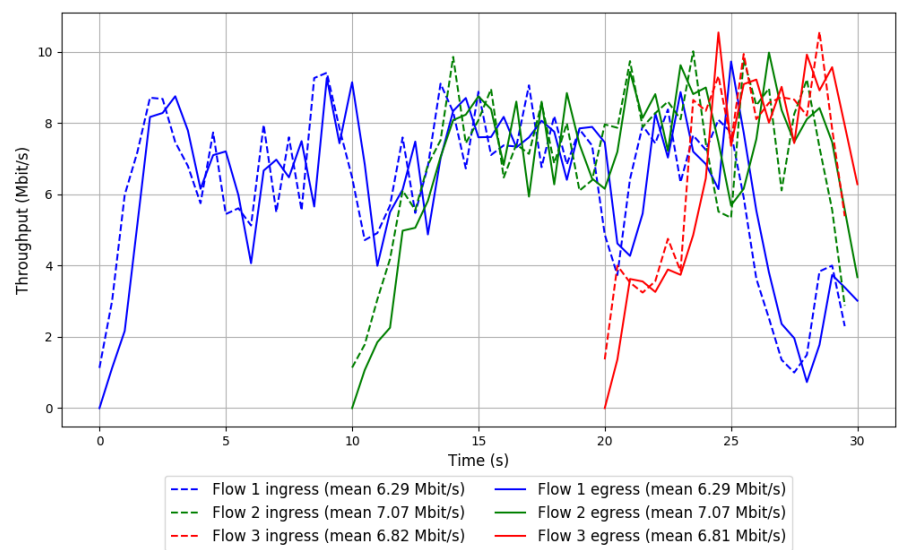


Run 7: Statistics of Sprout

Start at: 2018-06-20 12:29:59  
End at: 2018-06-20 12:30:29  
Local clock offset: 0.069 ms  
Remote clock offset: -1.247 ms

```
# Below is generated by plot.py at 2018-06-20 16:00:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.23 Mbit/s
95th percentile per-packet one-way delay: 52.971 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.29 Mbit/s
95th percentile per-packet one-way delay: 53.063 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.07 Mbit/s
95th percentile per-packet one-way delay: 52.952 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.81 Mbit/s
95th percentile per-packet one-way delay: 52.190 ms
Loss rate: 0.00%
```

Run 7: Report of Sprout — Data Link

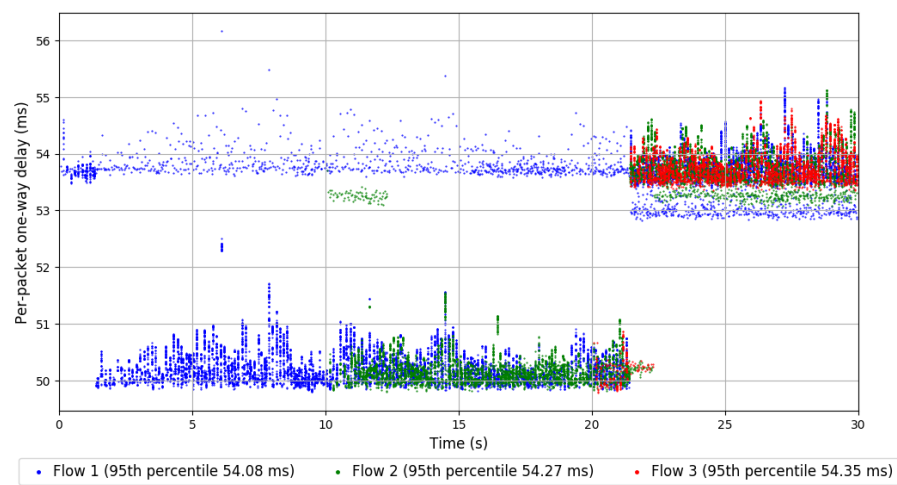
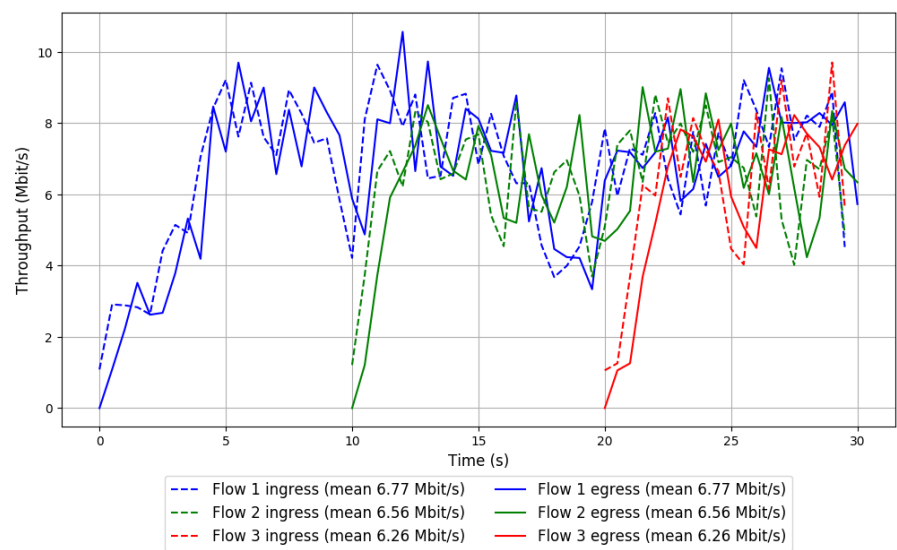


Run 8: Statistics of Sprout

Start at: 2018-06-20 12:52:48  
End at: 2018-06-20 12:53:18  
Local clock offset: -0.027 ms  
Remote clock offset: -0.143 ms

```
# Below is generated by plot.py at 2018-06-20 16:00:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.19 Mbit/s
95th percentile per-packet one-way delay: 54.195 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.77 Mbit/s
95th percentile per-packet one-way delay: 54.082 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.56 Mbit/s
95th percentile per-packet one-way delay: 54.265 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.26 Mbit/s
95th percentile per-packet one-way delay: 54.350 ms
Loss rate: 0.00%
```

Run 8: Report of Sprout — Data Link



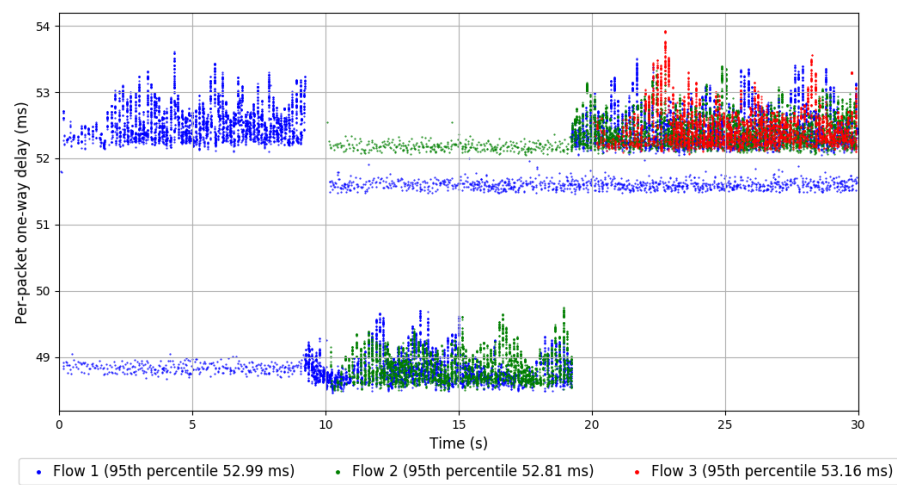
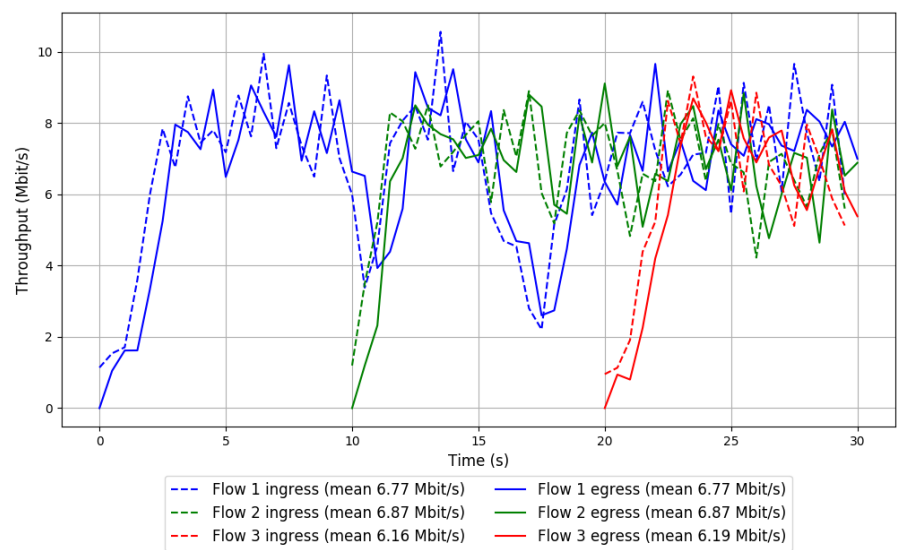
Run 9: Statistics of Sprout

Start at: 2018-06-20 13:16:00  
End at: 2018-06-20 13:16:30  
Local clock offset: 0.115 ms  
Remote clock offset: -1.398 ms

# Below is generated by plot.py at 2018-06-20 16:00:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 13.36 Mbit/s  
95th percentile per-packet one-way delay: 52.967 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 6.77 Mbit/s  
95th percentile per-packet one-way delay: 52.993 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 6.87 Mbit/s  
95th percentile per-packet one-way delay: 52.810 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 6.19 Mbit/s  
95th percentile per-packet one-way delay: 53.155 ms  
Loss rate: 0.00%



Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-06-20 13:38:47

End at: 2018-06-20 13:39:17

Local clock offset: -0.041 ms

Remote clock offset: 1.194 ms

# Below is generated by plot.py at 2018-06-20 16:00:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 12.93 Mbit/s

95th percentile per-packet one-way delay: 55.833 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.00 Mbit/s

95th percentile per-packet one-way delay: 55.889 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 5.58 Mbit/s

95th percentile per-packet one-way delay: 55.631 ms

Loss rate: 0.00%

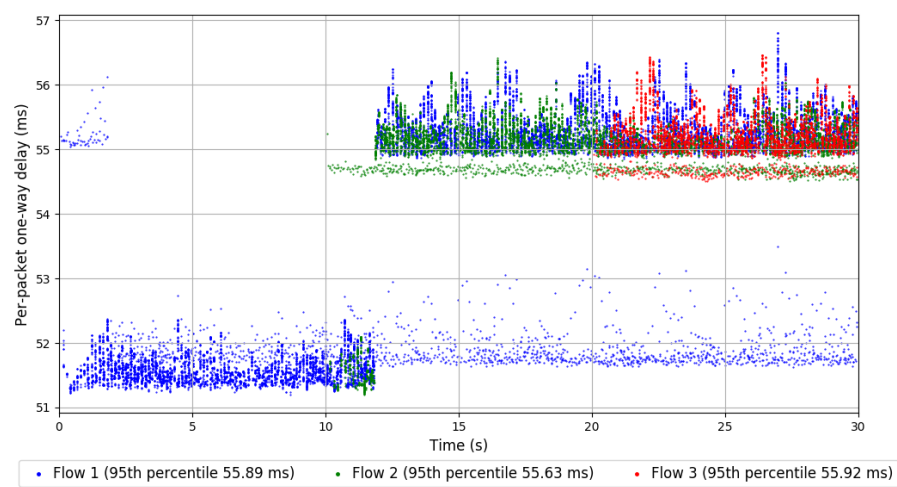
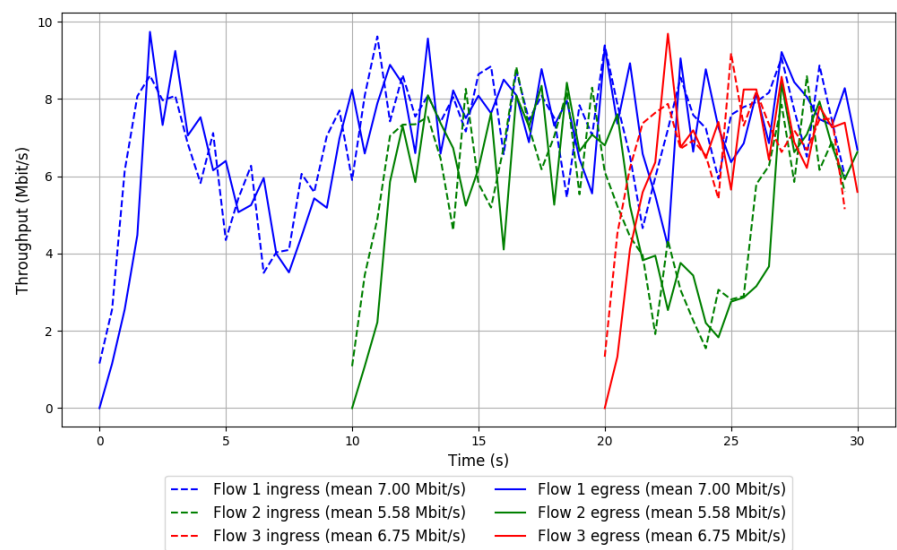
-- Flow 3:

Average throughput: 6.75 Mbit/s

95th percentile per-packet one-way delay: 55.920 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

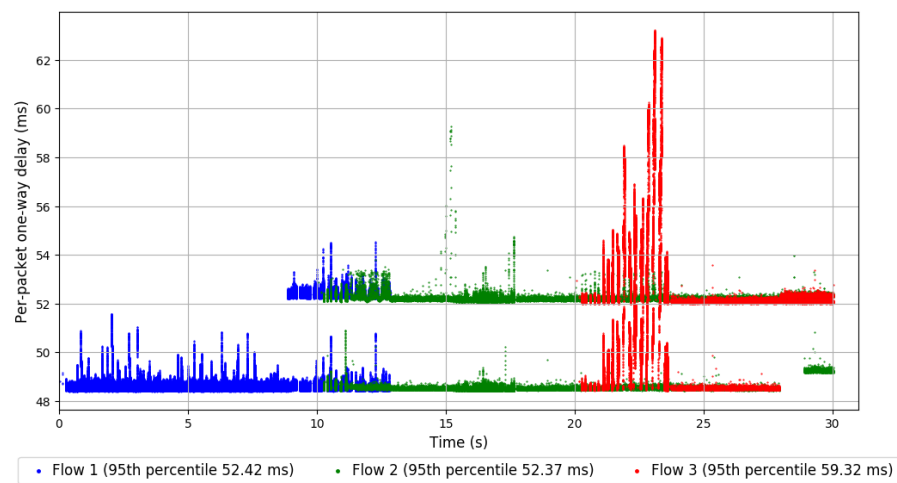
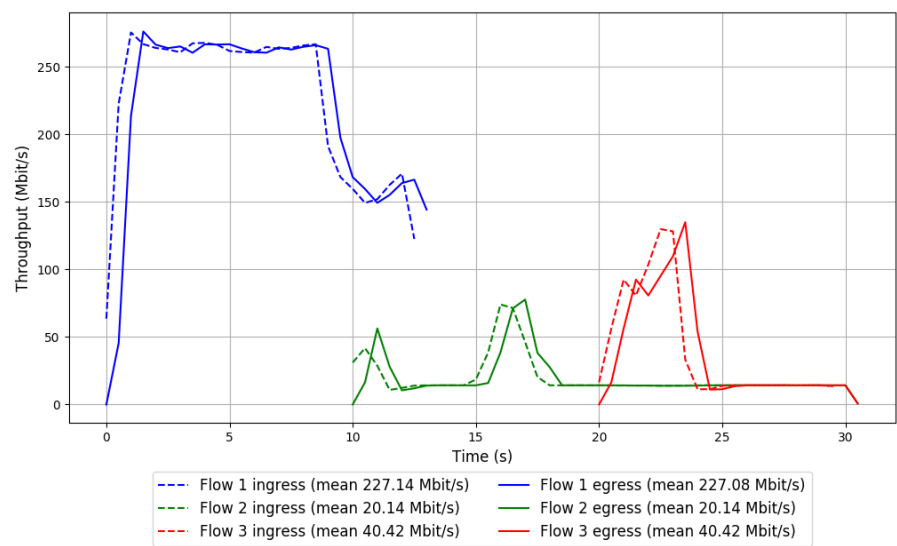


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-06-20 10:17:51
End at: 2018-06-20 10:18:21
Local clock offset: -0.233 ms
Remote clock offset: -1.572 ms

# Below is generated by plot.py at 2018-06-20 16:00:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 123.63 Mbit/s
95th percentile per-packet one-way delay: 52.574 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 227.08 Mbit/s
95th percentile per-packet one-way delay: 52.421 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 20.14 Mbit/s
95th percentile per-packet one-way delay: 52.374 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 40.42 Mbit/s
95th percentile per-packet one-way delay: 59.321 ms
Loss rate: 0.01%
```

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

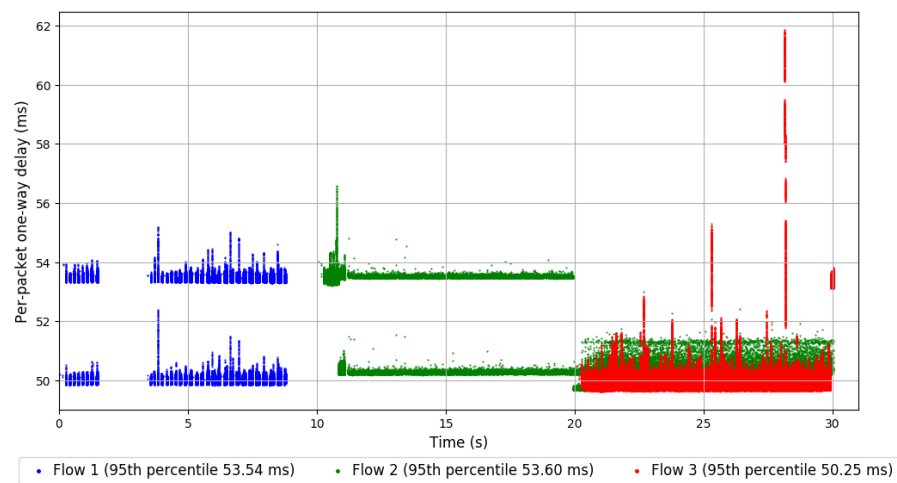
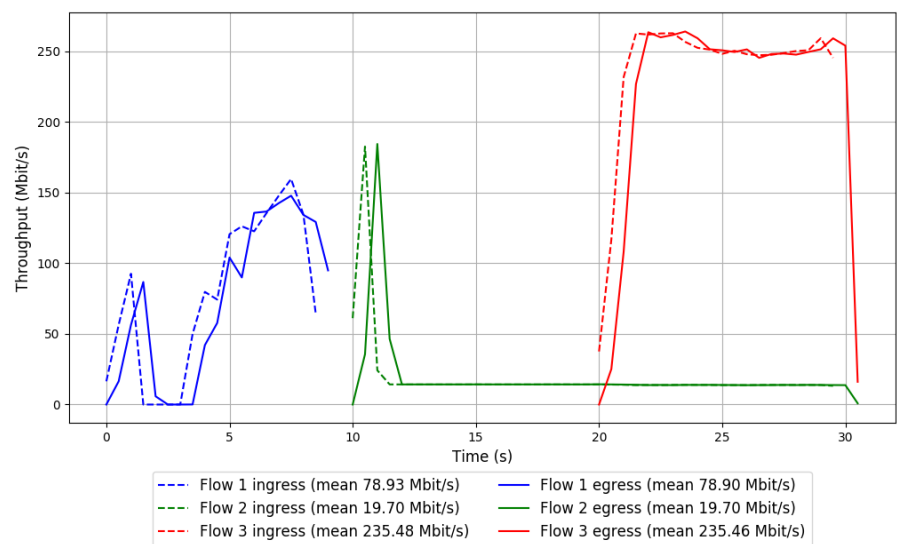


Run 2: Statistics of TaoVA-100x

Start at: 2018-06-20 10:40:39  
End at: 2018-06-20 10:41:09  
Local clock offset: 0.017 ms  
Remote clock offset: -0.093 ms

# Below is generated by plot.py at 2018-06-20 16:00:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 114.35 Mbit/s  
95th percentile per-packet one-way delay: 53.500 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 78.90 Mbit/s  
95th percentile per-packet one-way delay: 53.542 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 19.70 Mbit/s  
95th percentile per-packet one-way delay: 53.600 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 235.46 Mbit/s  
95th percentile per-packet one-way delay: 50.249 ms  
Loss rate: 0.02%

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



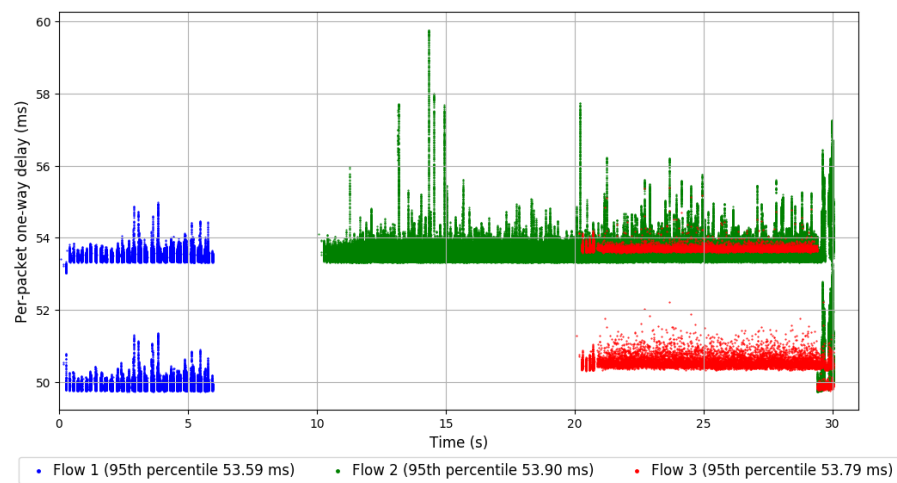
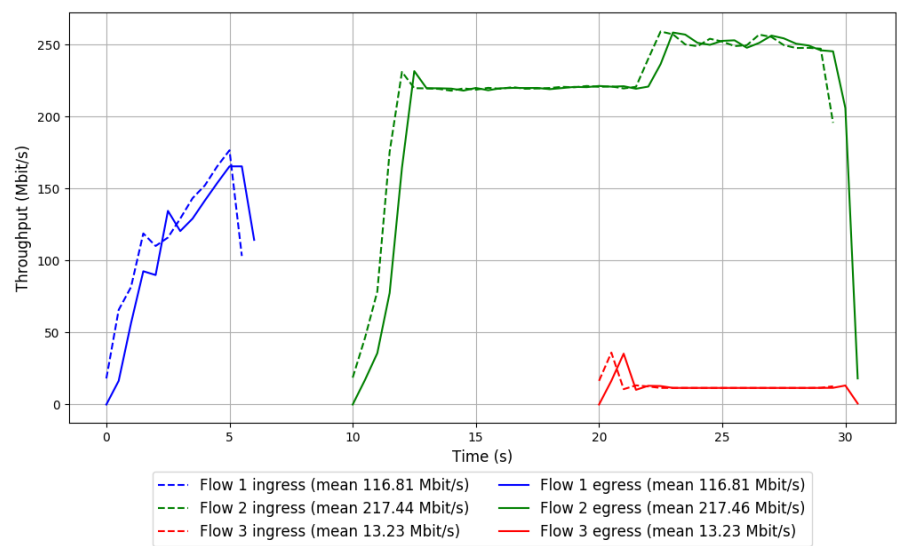
Run 3: Statistics of TaoVA-100x

Start at: 2018-06-20 11:03:30  
End at: 2018-06-20 11:04:00  
Local clock offset: -0.203 ms  
Remote clock offset: -0.236 ms

# Below is generated by plot.py at 2018-06-20 16:00:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 172.24 Mbit/s  
95th percentile per-packet one-way delay: 53.868 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 116.81 Mbit/s  
95th percentile per-packet one-way delay: 53.594 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 217.46 Mbit/s  
95th percentile per-packet one-way delay: 53.898 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 13.23 Mbit/s  
95th percentile per-packet one-way delay: 53.786 ms  
Loss rate: 0.00%



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

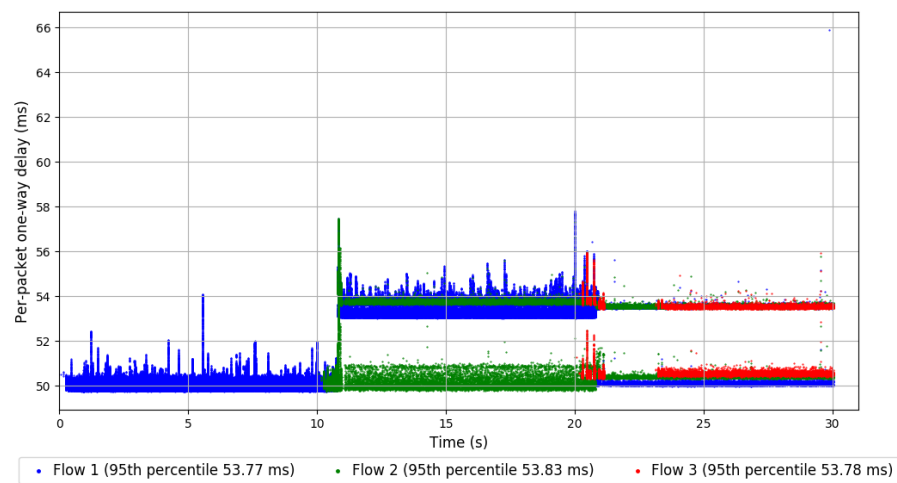
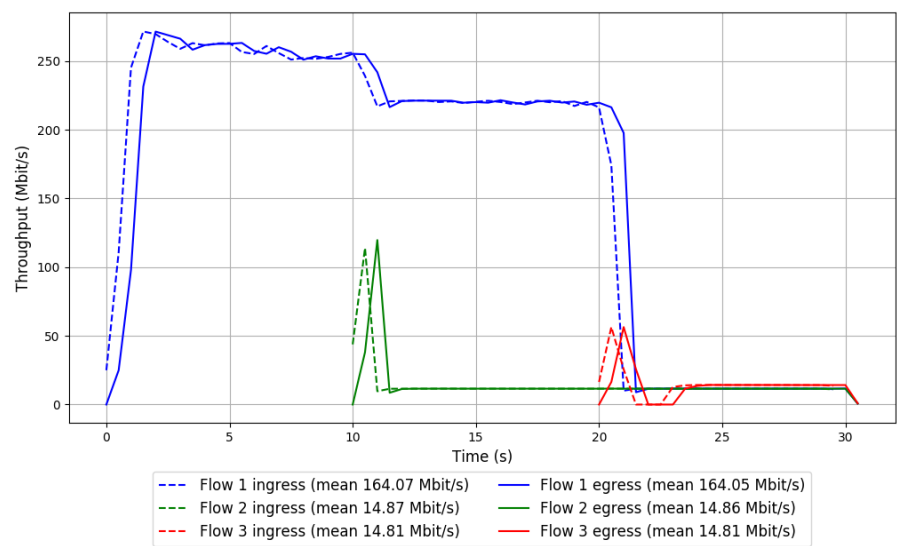


Run 4: Statistics of TaoVA-100x

Start at: 2018-06-20 11:26:08  
End at: 2018-06-20 11:26:38  
Local clock offset: -0.119 ms  
Remote clock offset: -0.176 ms

# Below is generated by plot.py at 2018-06-20 16:00:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 178.87 Mbit/s  
95th percentile per-packet one-way delay: 53.772 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 164.05 Mbit/s  
95th percentile per-packet one-way delay: 53.768 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 14.86 Mbit/s  
95th percentile per-packet one-way delay: 53.828 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 14.81 Mbit/s  
95th percentile per-packet one-way delay: 53.781 ms  
Loss rate: 0.00%

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

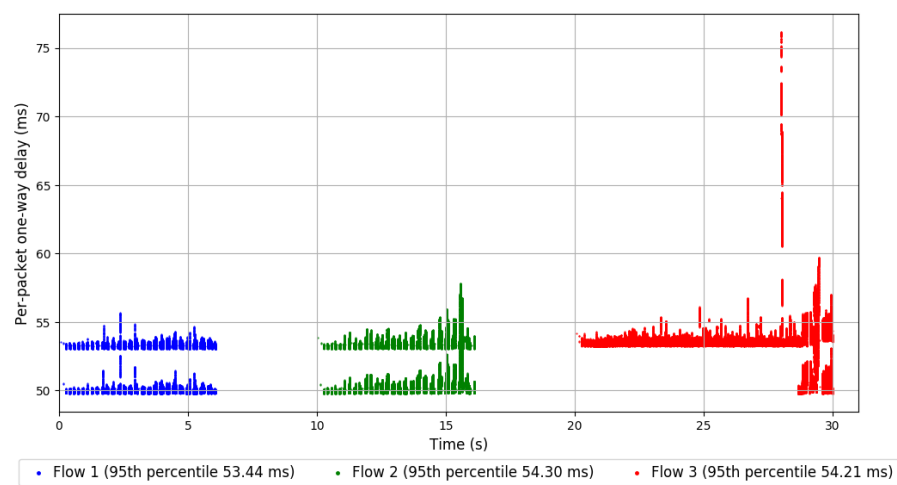
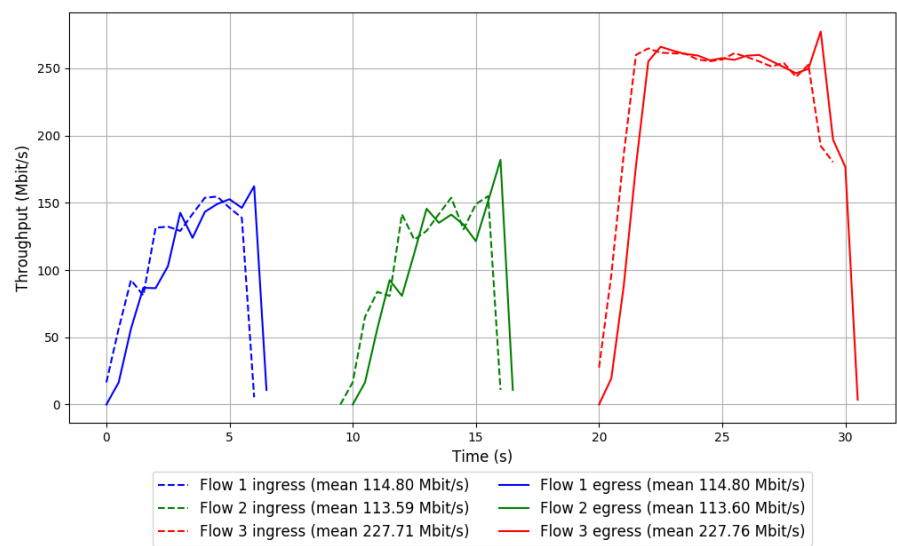


Run 5: Statistics of TaoVA-100x

Start at: 2018-06-20 11:49:10  
End at: 2018-06-20 11:49:40  
Local clock offset: 0.004 ms  
Remote clock offset: -0.178 ms

# Below is generated by plot.py at 2018-06-20 16:00:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 121.74 Mbit/s  
95th percentile per-packet one-way delay: 54.061 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 114.80 Mbit/s  
95th percentile per-packet one-way delay: 53.440 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 113.60 Mbit/s  
95th percentile per-packet one-way delay: 54.295 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 227.76 Mbit/s  
95th percentile per-packet one-way delay: 54.208 ms  
Loss rate: 0.00%

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

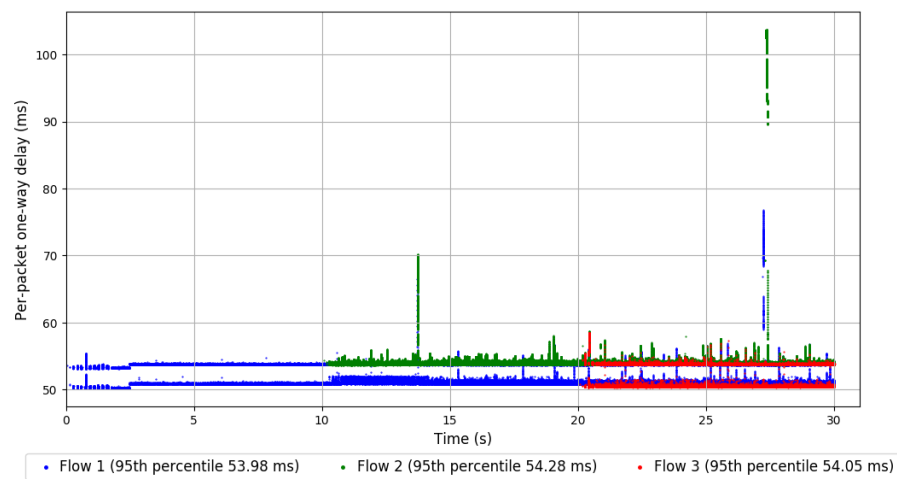
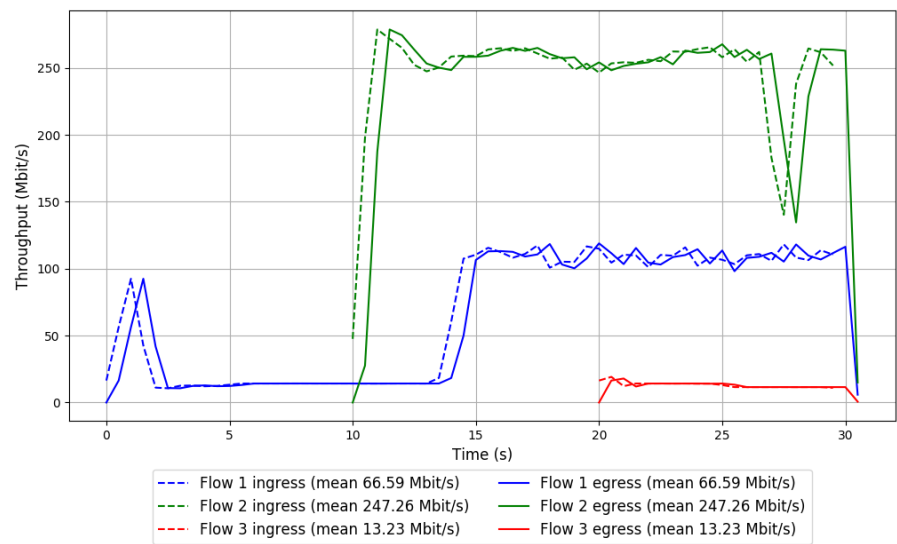


Run 6: Statistics of TaoVA-100x

Start at: 2018-06-20 12:12:07  
End at: 2018-06-20 12:12:37  
Local clock offset: -0.199 ms  
Remote clock offset: -0.129 ms

# Below is generated by plot.py at 2018-06-20 16:04:33  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 235.67 Mbit/s  
95th percentile per-packet one-way delay: 54.216 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 66.59 Mbit/s  
95th percentile per-packet one-way delay: 53.983 ms  
Loss rate: 0.02%  
-- Flow 2:  
Average throughput: 247.26 Mbit/s  
95th percentile per-packet one-way delay: 54.282 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 13.23 Mbit/s  
95th percentile per-packet one-way delay: 54.050 ms  
Loss rate: 0.02%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-06-20 12:35:07

End at: 2018-06-20 12:35:37

Local clock offset: -0.115 ms

Remote clock offset: 0.231 ms

# Below is generated by plot.py at 2018-06-20 16:04:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 64.70 Mbit/s

95th percentile per-packet one-way delay: 53.919 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 130.29 Mbit/s

95th percentile per-packet one-way delay: 53.870 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 24.05 Mbit/s

95th percentile per-packet one-way delay: 53.915 ms

Loss rate: 0.00%

-- Flow 3:

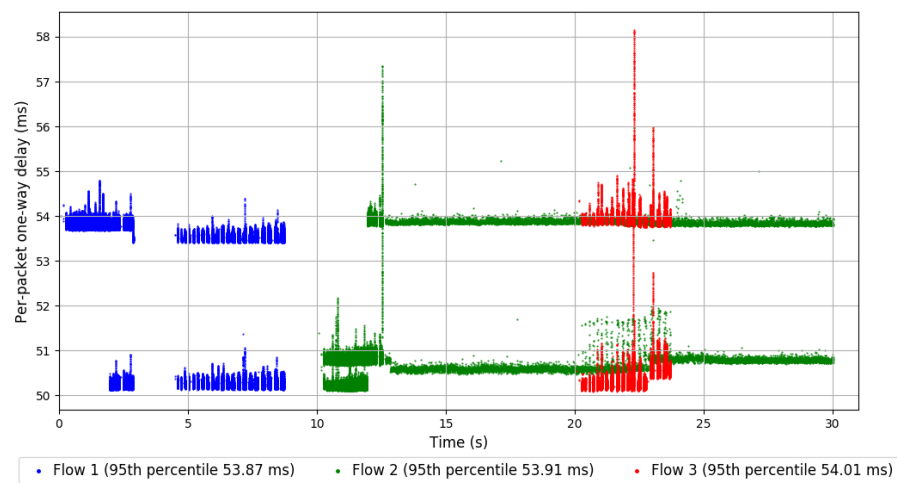
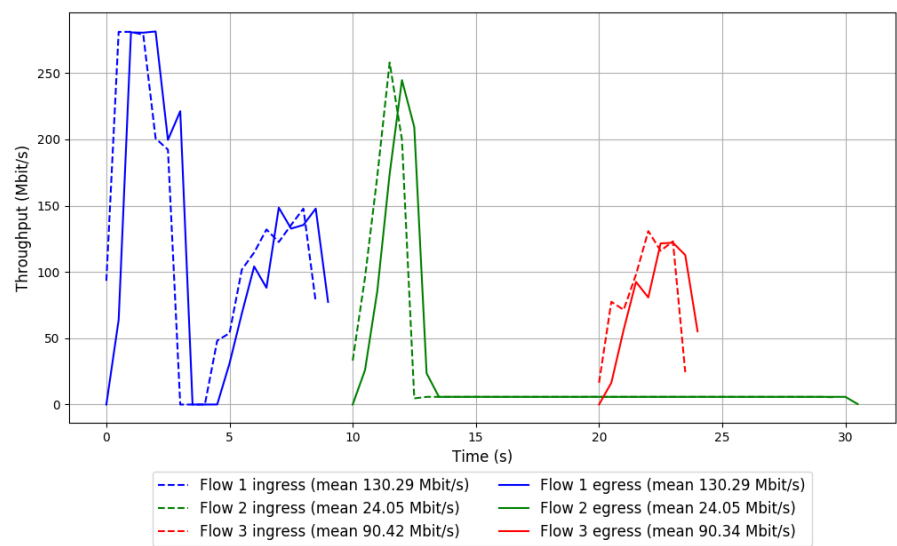
Average throughput: 90.34 Mbit/s

95th percentile per-packet one-way delay: 54.006 ms

Loss rate: 0.00%



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

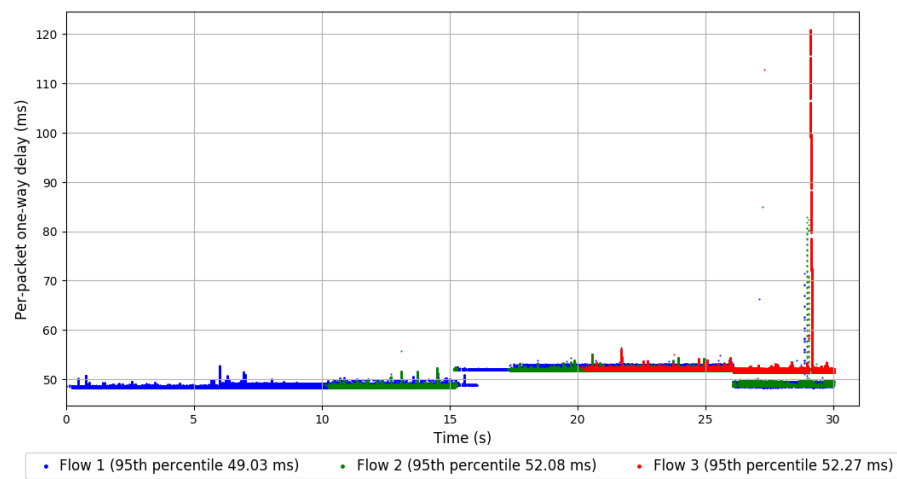
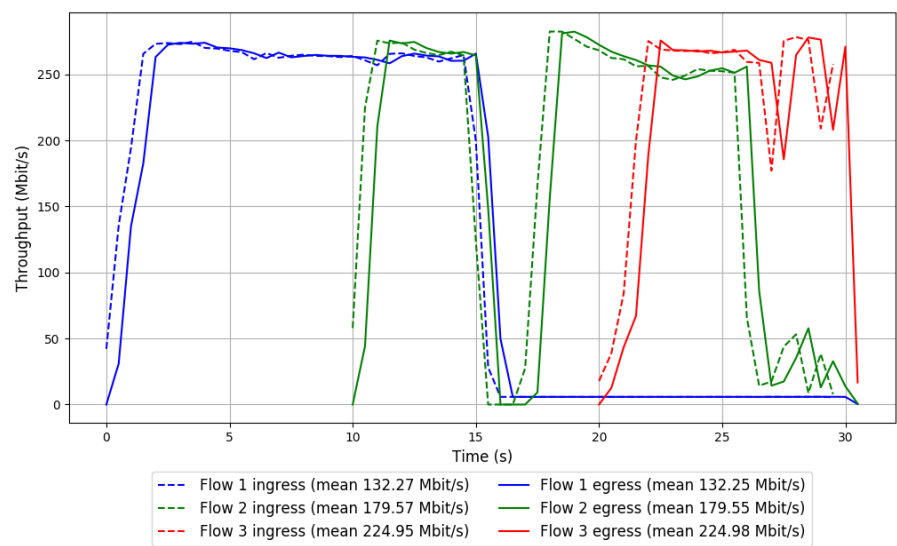


Run 8: Statistics of TaoVA-100x

Start at: 2018-06-20 12:58:04  
End at: 2018-06-20 12:58:34  
Local clock offset: 0.162 ms  
Remote clock offset: -1.452 ms

# Below is generated by plot.py at 2018-06-20 16:08:36  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 326.55 Mbit/s  
95th percentile per-packet one-way delay: 52.152 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 132.25 Mbit/s  
95th percentile per-packet one-way delay: 49.027 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 179.55 Mbit/s  
95th percentile per-packet one-way delay: 52.083 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 224.98 Mbit/s  
95th percentile per-packet one-way delay: 52.268 ms  
Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-06-20 13:21:12

End at: 2018-06-20 13:21:42

Local clock offset: -0.181 ms

Remote clock offset: 0.291 ms

# Below is generated by plot.py at 2018-06-20 16:08:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 78.95 Mbit/s

95th percentile per-packet one-way delay: 54.389 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 109.31 Mbit/s

95th percentile per-packet one-way delay: 54.193 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 109.09 Mbit/s

95th percentile per-packet one-way delay: 54.298 ms

Loss rate: 0.00%

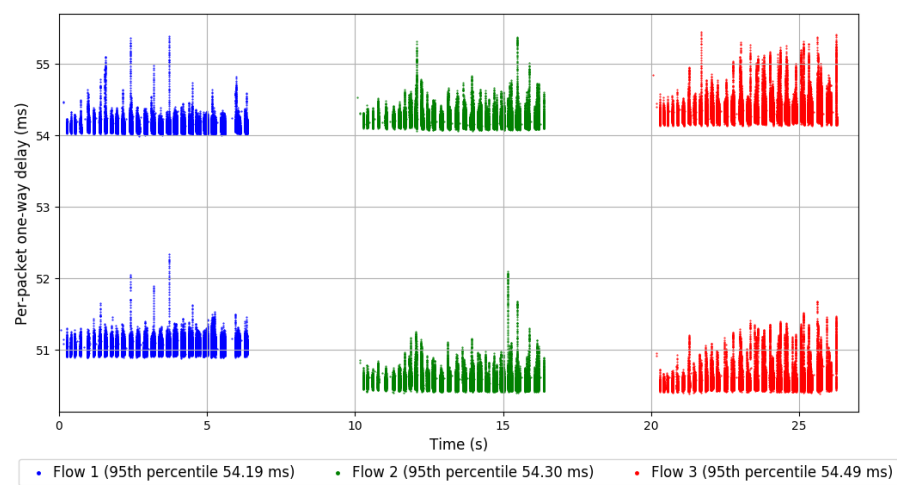
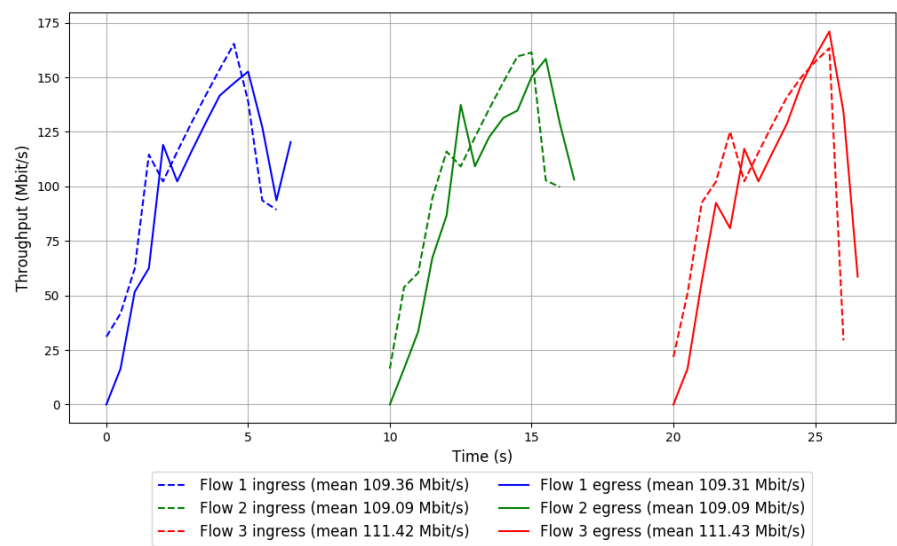
-- Flow 3:

Average throughput: 111.43 Mbit/s

95th percentile per-packet one-way delay: 54.486 ms

Loss rate: 0.00%

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

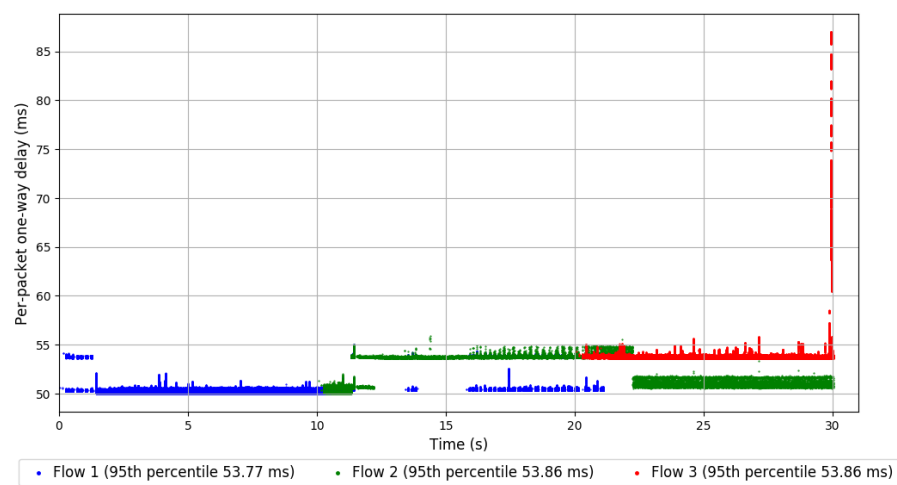
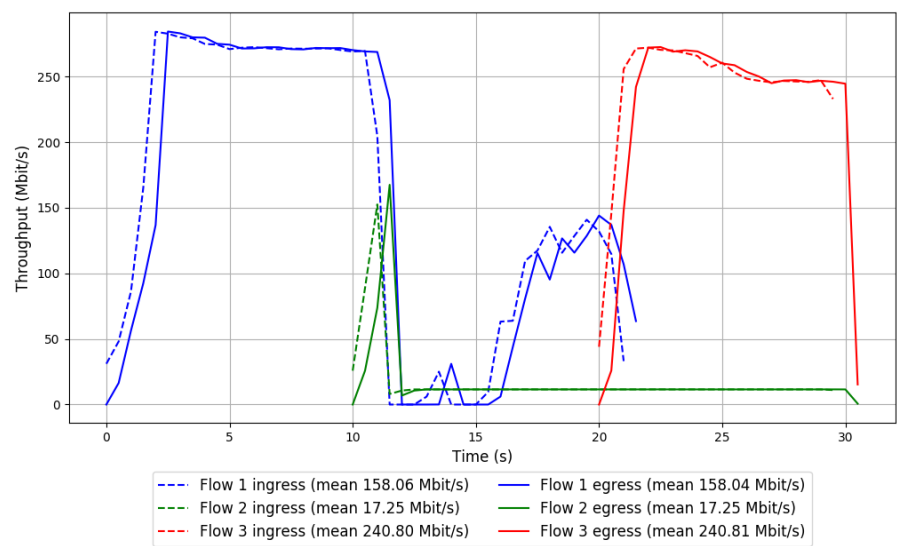


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-06-20 13:43:58
End at: 2018-06-20 13:44:28
Local clock offset: -0.065 ms
Remote clock offset: 0.016 ms

# Below is generated by plot.py at 2018-06-20 16:08:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 202.45 Mbit/s
95th percentile per-packet one-way delay: 53.822 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 158.04 Mbit/s
95th percentile per-packet one-way delay: 53.769 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 17.25 Mbit/s
95th percentile per-packet one-way delay: 53.862 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 240.81 Mbit/s
95th percentile per-packet one-way delay: 53.861 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-06-20 10:15:28

End at: 2018-06-20 10:15:58

Local clock offset: -0.271 ms

Remote clock offset: 0.013 ms

# Below is generated by plot.py at 2018-06-20 16:08:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 85.31 Mbit/s

95th percentile per-packet one-way delay: 55.321 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 17.69 Mbit/s

95th percentile per-packet one-way delay: 55.197 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 17.78 Mbit/s

95th percentile per-packet one-way delay: 55.021 ms

Loss rate: 0.00%

-- Flow 3:

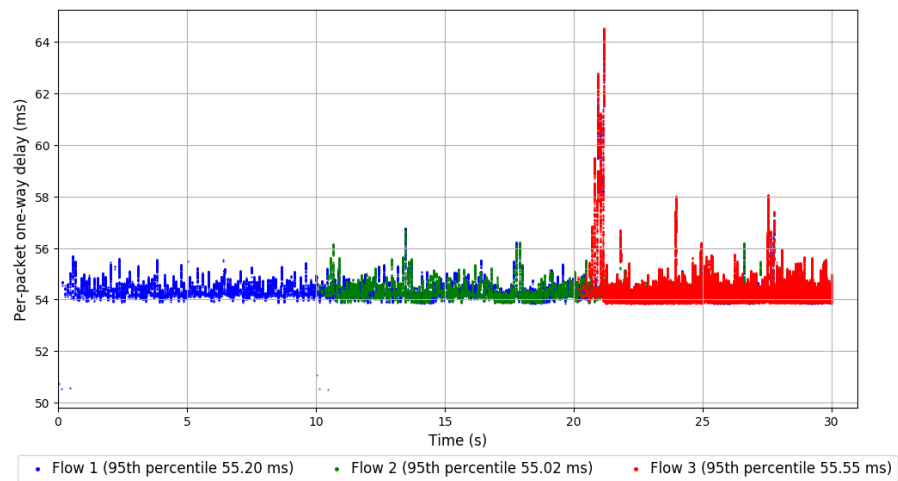
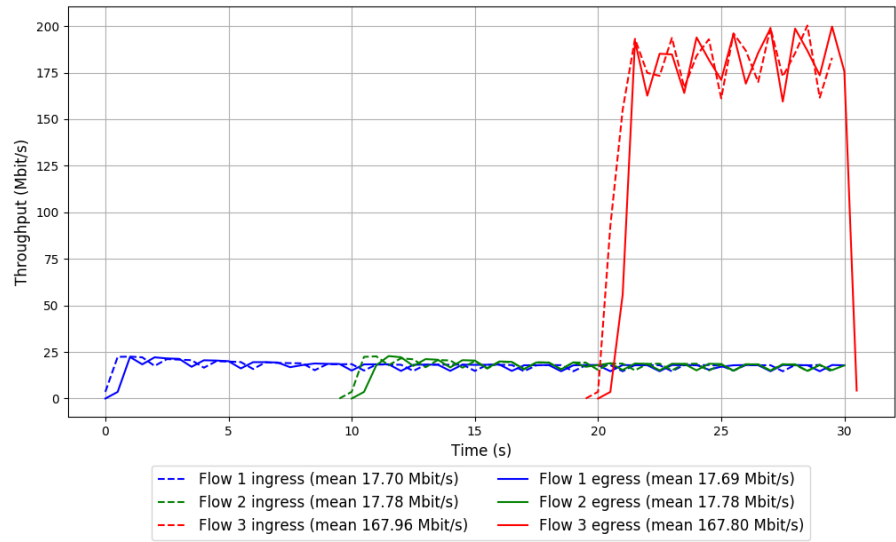
Average throughput: 167.80 Mbit/s

95th percentile per-packet one-way delay: 55.552 ms

Loss rate: 0.13%



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

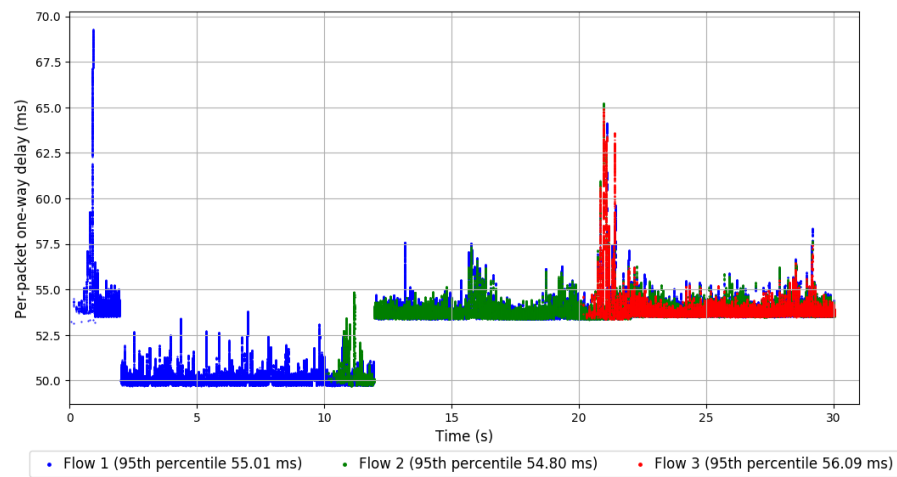
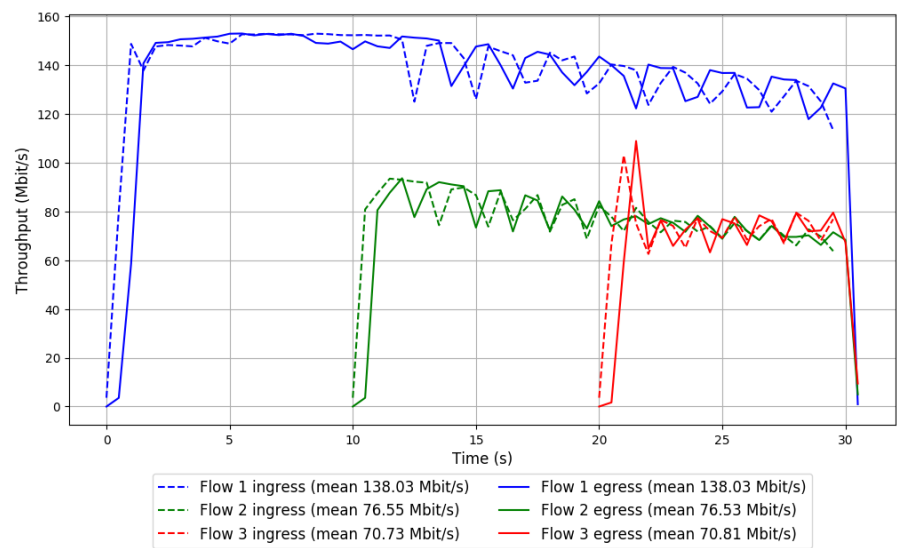


Run 2: Statistics of TCP Vegas

Start at: 2018-06-20 10:38:07  
End at: 2018-06-20 10:38:37  
Local clock offset: -0.154 ms  
Remote clock offset: -0.195 ms

# Below is generated by plot.py at 2018-06-20 16:08:36  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 212.42 Mbit/s  
95th percentile per-packet one-way delay: 55.017 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 138.03 Mbit/s  
95th percentile per-packet one-way delay: 55.012 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 76.53 Mbit/s  
95th percentile per-packet one-way delay: 54.798 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 70.81 Mbit/s  
95th percentile per-packet one-way delay: 56.092 ms  
Loss rate: 0.03%

Run 2: Report of TCP Vegas — Data Link

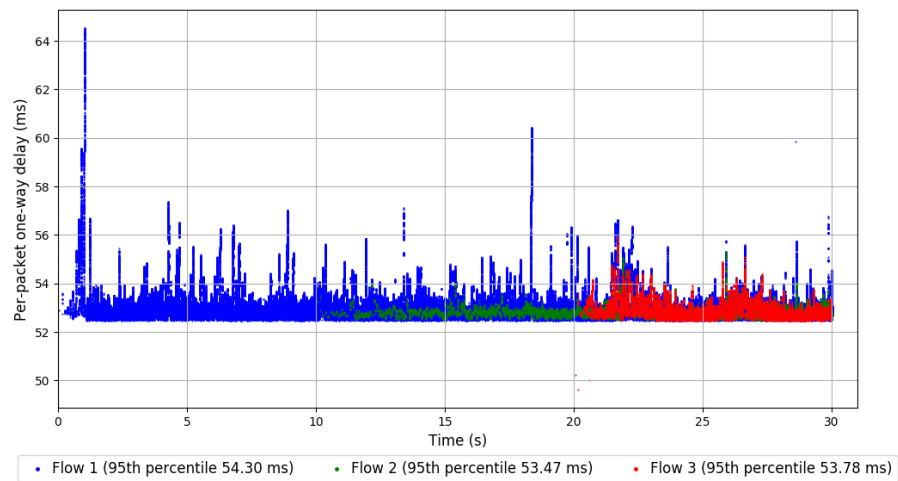
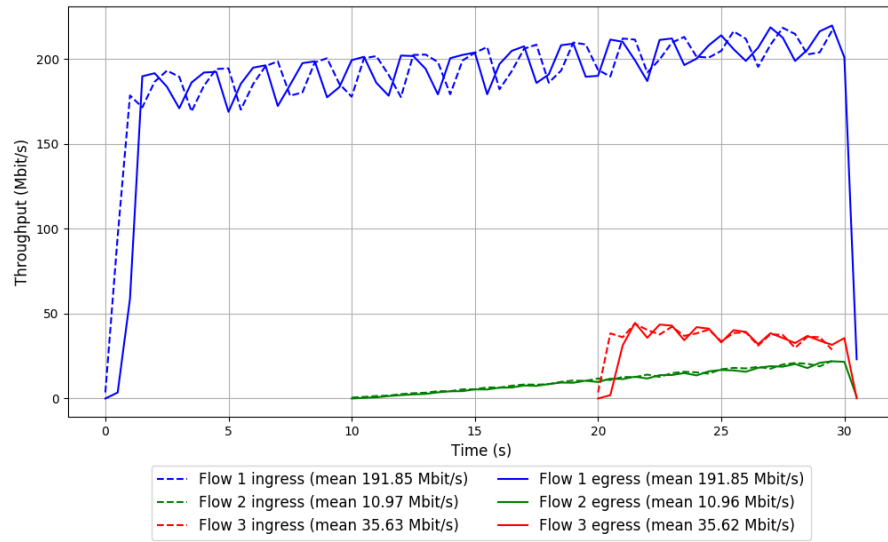


Run 3: Statistics of TCP Vegas

Start at: 2018-06-20 11:00:57  
End at: 2018-06-20 11:01:27  
Local clock offset: -0.261 ms  
Remote clock offset: -1.407 ms

# Below is generated by plot.py at 2018-06-20 16:08:36  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 210.95 Mbit/s  
95th percentile per-packet one-way delay: 54.238 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 191.85 Mbit/s  
95th percentile per-packet one-way delay: 54.301 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 10.96 Mbit/s  
95th percentile per-packet one-way delay: 53.470 ms  
Loss rate: 0.04%  
-- Flow 3:  
Average throughput: 35.62 Mbit/s  
95th percentile per-packet one-way delay: 53.779 ms  
Loss rate: 0.00%

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

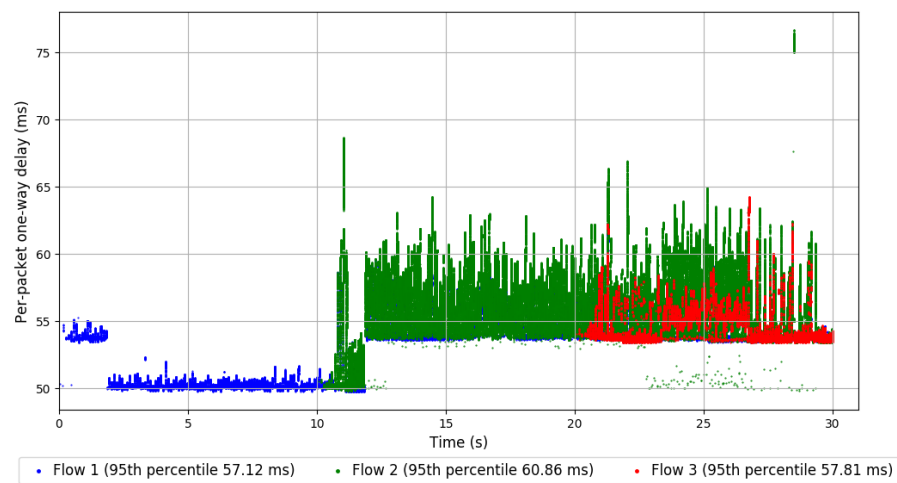
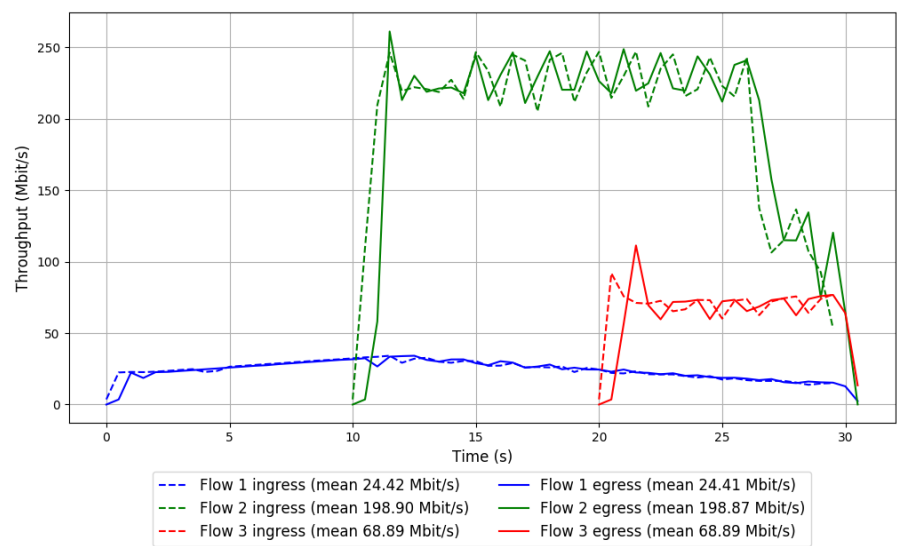


Run 4: Statistics of TCP Vegas

Start at: 2018-06-20 11:23:37  
End at: 2018-06-20 11:24:07  
Local clock offset: -0.011 ms  
Remote clock offset: -0.092 ms

# Below is generated by plot.py at 2018-06-20 16:08:36  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 179.65 Mbit/s  
95th percentile per-packet one-way delay: 60.535 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 24.41 Mbit/s  
95th percentile per-packet one-way delay: 57.124 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 198.87 Mbit/s  
95th percentile per-packet one-way delay: 60.856 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 68.89 Mbit/s  
95th percentile per-packet one-way delay: 57.806 ms  
Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-06-20 11:46:40

End at: 2018-06-20 11:47:10

Local clock offset: -0.13 ms

Remote clock offset: 0.293 ms

# Below is generated by plot.py at 2018-06-20 16:08:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 211.28 Mbit/s

95th percentile per-packet one-way delay: 55.816 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 81.86 Mbit/s

95th percentile per-packet one-way delay: 55.764 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 184.18 Mbit/s

95th percentile per-packet one-way delay: 55.878 ms

Loss rate: 0.03%

-- Flow 3:

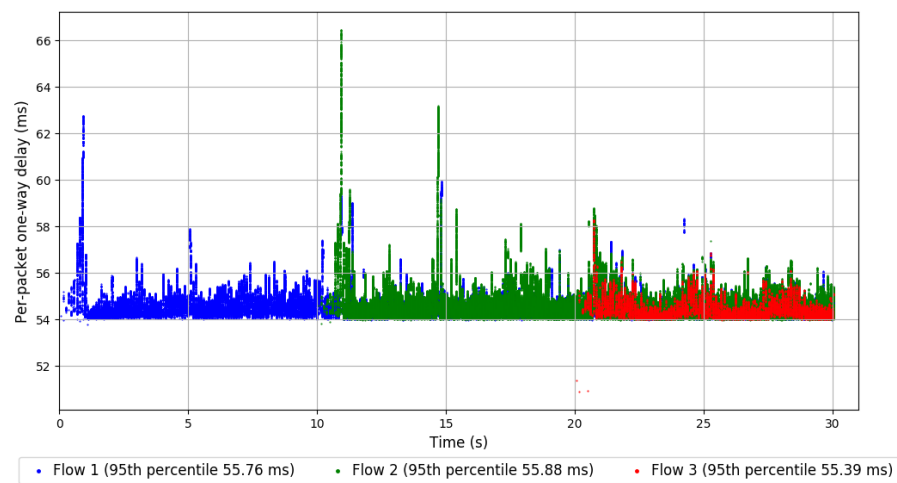
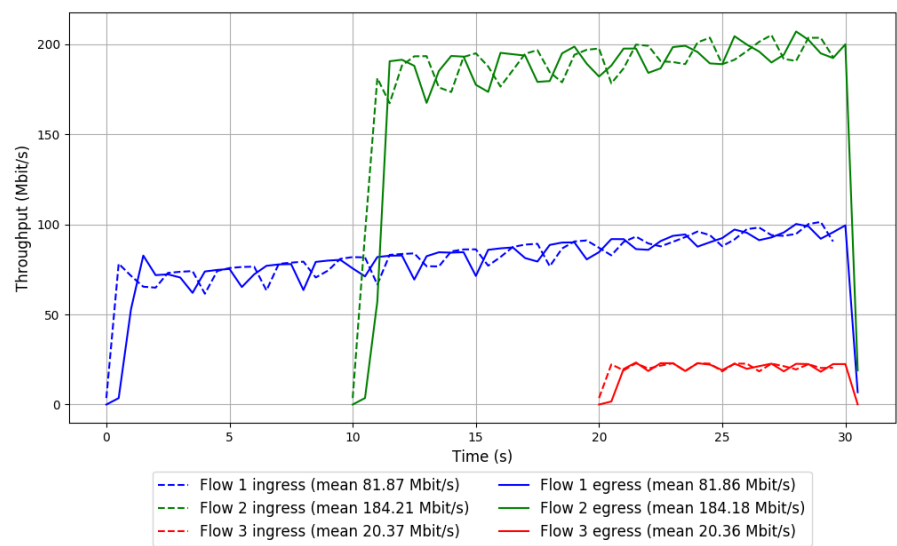
Average throughput: 20.36 Mbit/s

95th percentile per-packet one-way delay: 55.394 ms

Loss rate: 0.00%



Run 5: Report of TCP Vegas — Data Link

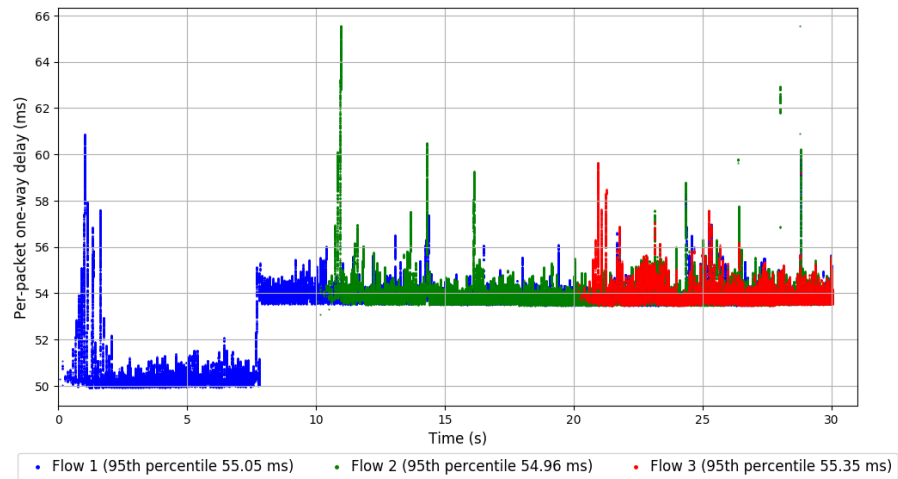
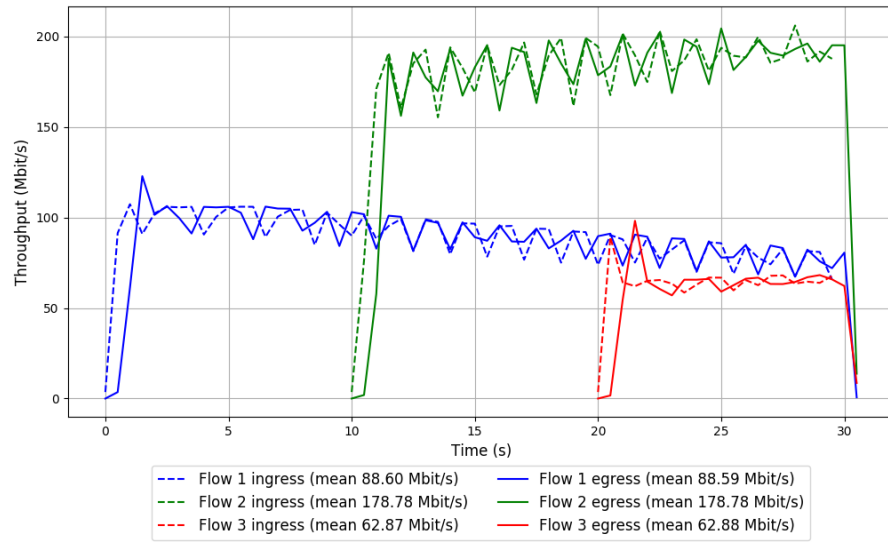


Run 6: Statistics of TCP Vegas

Start at: 2018-06-20 12:09:31  
End at: 2018-06-20 12:10:01  
Local clock offset: 0.096 ms  
Remote clock offset: -0.083 ms

# Below is generated by plot.py at 2018-06-20 16:08:36  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 228.43 Mbit/s  
95th percentile per-packet one-way delay: 55.044 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 88.59 Mbit/s  
95th percentile per-packet one-way delay: 55.048 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 178.78 Mbit/s  
95th percentile per-packet one-way delay: 54.959 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 62.88 Mbit/s  
95th percentile per-packet one-way delay: 55.348 ms  
Loss rate: 0.00%

# Run 6: Report of TCP Vegas — Data Link

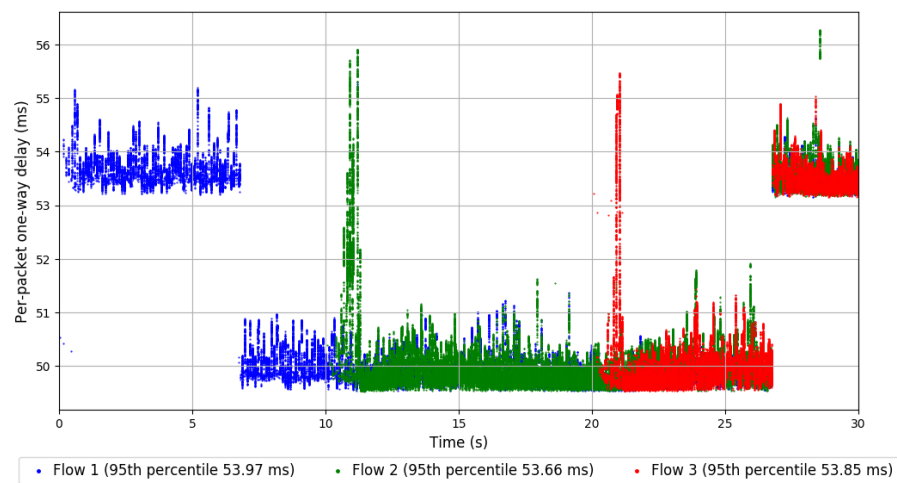
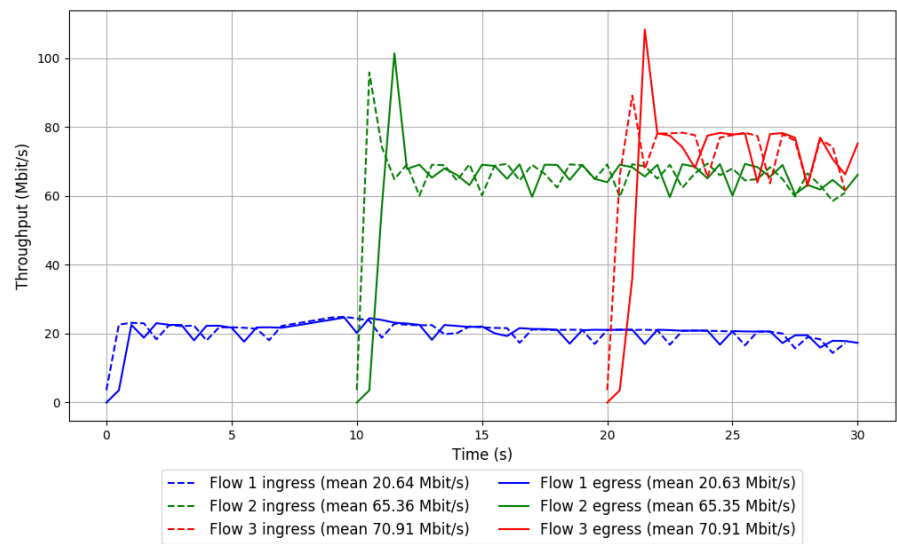


Run 7: Statistics of TCP Vegas

Start at: 2018-06-20 12:32:42  
End at: 2018-06-20 12:33:12  
Local clock offset: -0.083 ms  
Remote clock offset: -0.324 ms

# Below is generated by plot.py at 2018-06-20 16:08:36  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 87.61 Mbit/s  
95th percentile per-packet one-way delay: 53.816 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 20.63 Mbit/s  
95th percentile per-packet one-way delay: 53.972 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 65.35 Mbit/s  
95th percentile per-packet one-way delay: 53.655 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 70.91 Mbit/s  
95th percentile per-packet one-way delay: 53.848 ms  
Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link

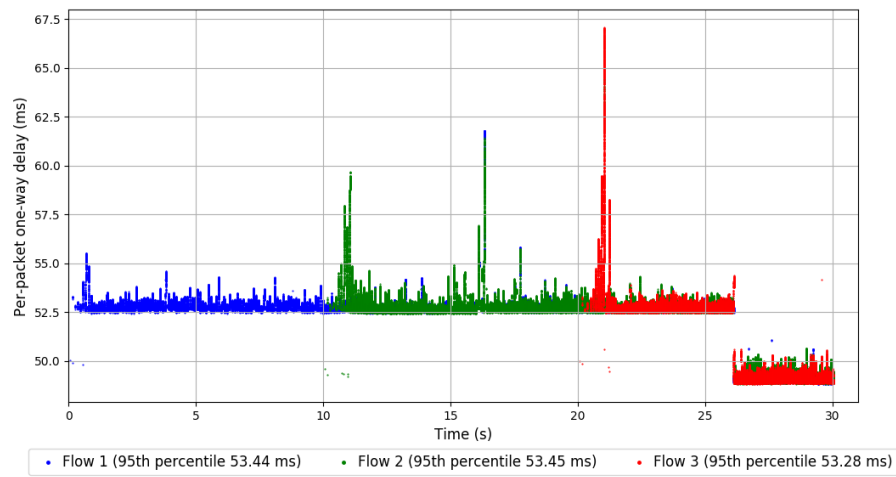
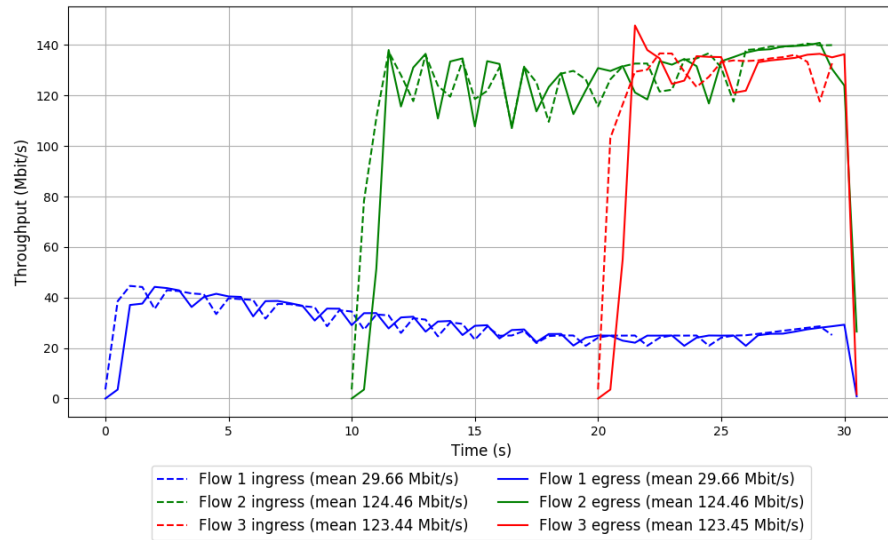


Run 8: Statistics of TCP Vegas

Start at: 2018-06-20 12:55:33  
End at: 2018-06-20 12:56:03  
Local clock offset: -0.03 ms  
Remote clock offset: -1.084 ms

# Below is generated by plot.py at 2018-06-20 16:08:36  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 153.58 Mbit/s  
95th percentile per-packet one-way delay: 53.414 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 29.66 Mbit/s  
95th percentile per-packet one-way delay: 53.444 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 124.46 Mbit/s  
95th percentile per-packet one-way delay: 53.452 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 123.45 Mbit/s  
95th percentile per-packet one-way delay: 53.283 ms  
Loss rate: 0.00%

# Run 8: Report of TCP Vegas — Data Link



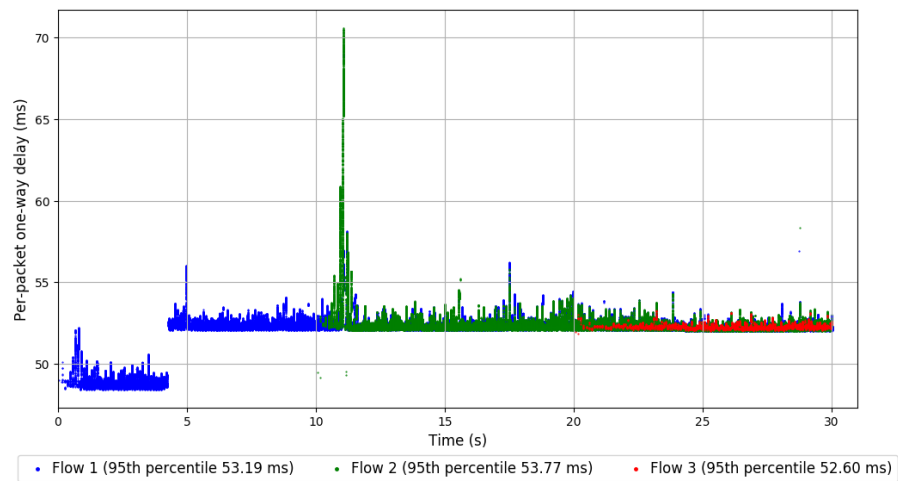
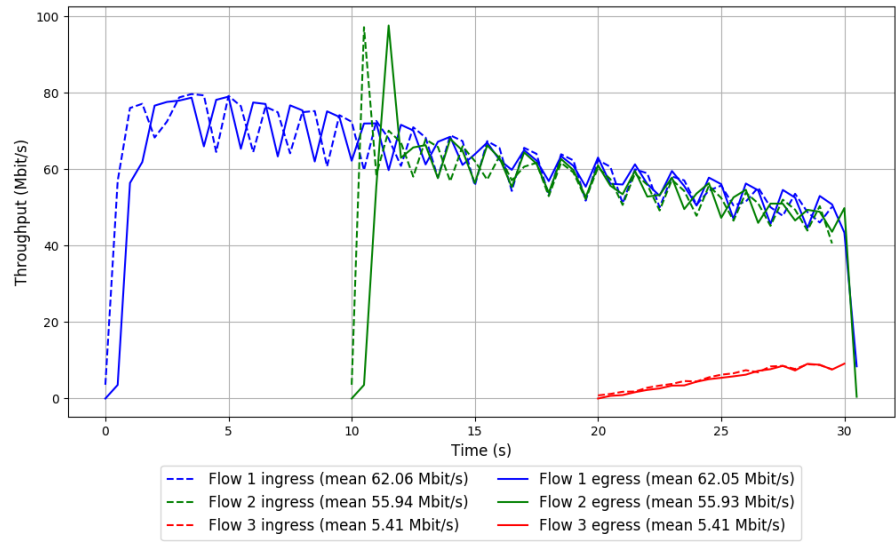
Run 9: Statistics of TCP Vegas

Start at: 2018-06-20 13:18:45  
End at: 2018-06-20 13:19:15  
Local clock offset: 0.019 ms  
Remote clock offset: -1.492 ms

# Below is generated by plot.py at 2018-06-20 16:08:36  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 101.07 Mbit/s  
95th percentile per-packet one-way delay: 53.339 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 62.05 Mbit/s  
95th percentile per-packet one-way delay: 53.191 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 55.93 Mbit/s  
95th percentile per-packet one-way delay: 53.768 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 5.41 Mbit/s  
95th percentile per-packet one-way delay: 52.605 ms  
Loss rate: 0.11%



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



Run 10: Statistics of TCP Vegas

Start at: 2018-06-20 13:41:32

End at: 2018-06-20 13:42:02

Local clock offset: -0.037 ms

Remote clock offset: 0.103 ms

# Below is generated by plot.py at 2018-06-20 16:08:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 80.64 Mbit/s

95th percentile per-packet one-way delay: 54.485 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 22.77 Mbit/s

95th percentile per-packet one-way delay: 54.579 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 84.18 Mbit/s

95th percentile per-packet one-way delay: 54.342 ms

Loss rate: 0.00%

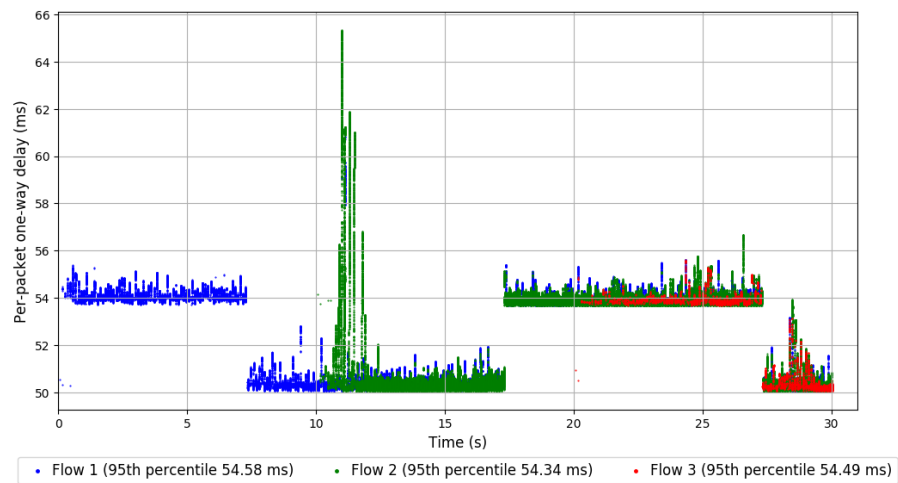
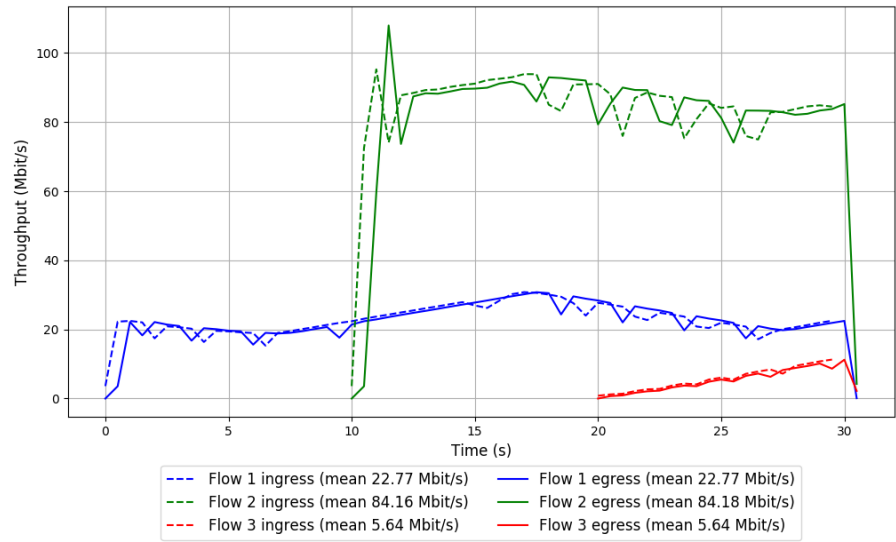
-- Flow 3:

Average throughput: 5.64 Mbit/s

95th percentile per-packet one-way delay: 54.494 ms

Loss rate: 0.11%

# Run 10: Report of TCP Vegas — Data Link

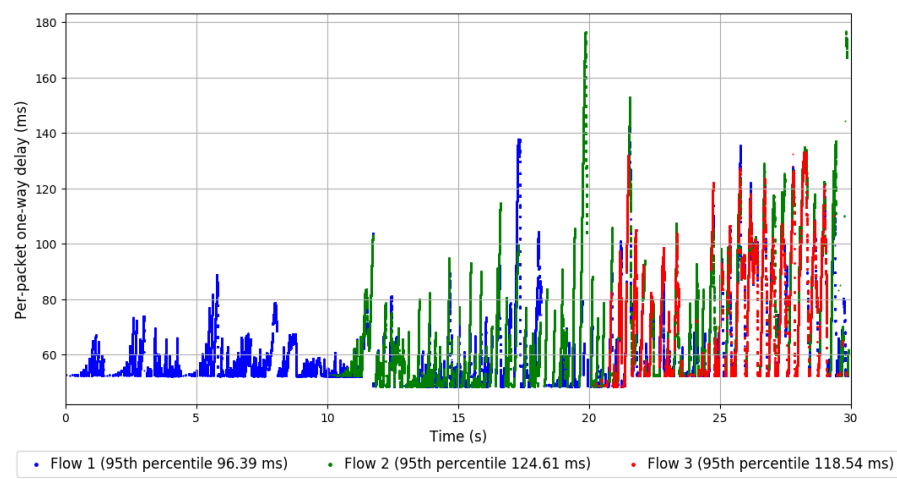
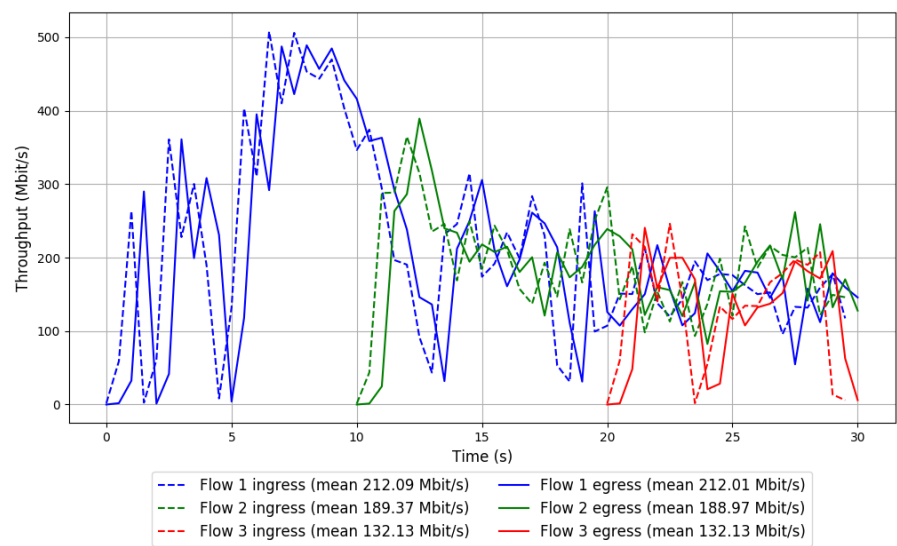


Run 1: Statistics of Verus

Start at: 2018-06-20 10:22:18  
End at: 2018-06-20 10:22:48  
Local clock offset: -0.165 ms  
Remote clock offset: -1.348 ms

# Below is generated by plot.py at 2018-06-20 16:11:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 380.73 Mbit/s  
95th percentile per-packet one-way delay: 113.330 ms  
Loss rate: 0.11%  
-- Flow 1:  
Average throughput: 212.01 Mbit/s  
95th percentile per-packet one-way delay: 96.394 ms  
Loss rate: 0.05%  
-- Flow 2:  
Average throughput: 188.97 Mbit/s  
95th percentile per-packet one-way delay: 124.605 ms  
Loss rate: 0.24%  
-- Flow 3:  
Average throughput: 132.13 Mbit/s  
95th percentile per-packet one-way delay: 118.544 ms  
Loss rate: 0.00%

Run 1: Report of Verus — Data Link

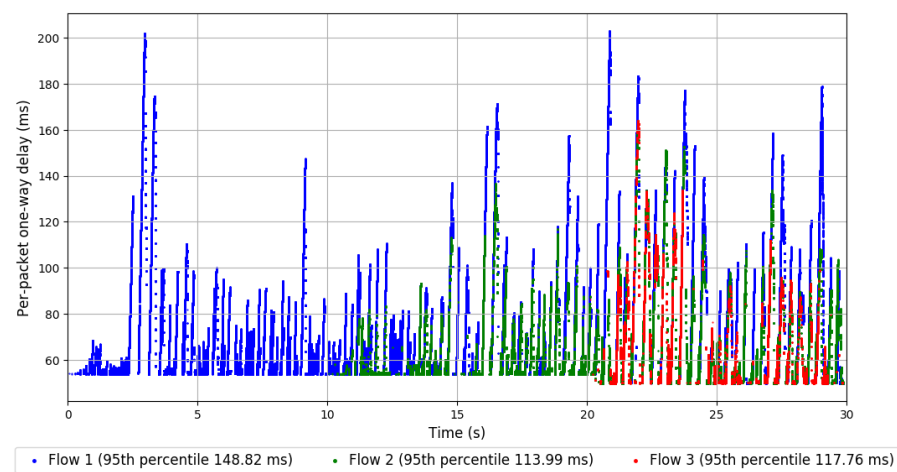
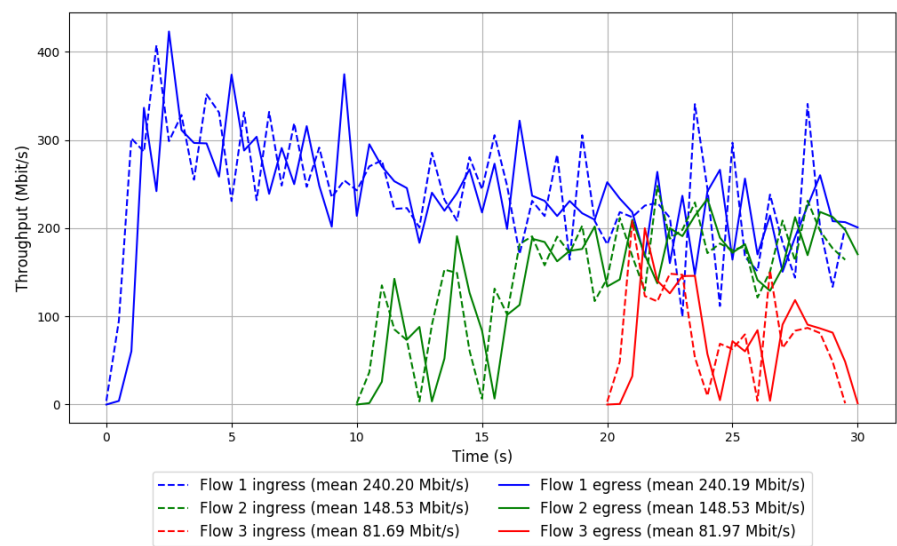


Run 2: Statistics of Verus

Start at: 2018-06-20 10:45:09  
End at: 2018-06-20 10:45:39  
Local clock offset: -0.258 ms  
Remote clock offset: -0.169 ms

# Below is generated by plot.py at 2018-06-20 16:11:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 365.43 Mbit/s  
95th percentile per-packet one-way delay: 139.021 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 240.19 Mbit/s  
95th percentile per-packet one-way delay: 148.821 ms  
Loss rate: 0.02%  
-- Flow 2:  
Average throughput: 148.53 Mbit/s  
95th percentile per-packet one-way delay: 113.991 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 81.97 Mbit/s  
95th percentile per-packet one-way delay: 117.760 ms  
Loss rate: 0.03%

Run 2: Report of Verus — Data Link



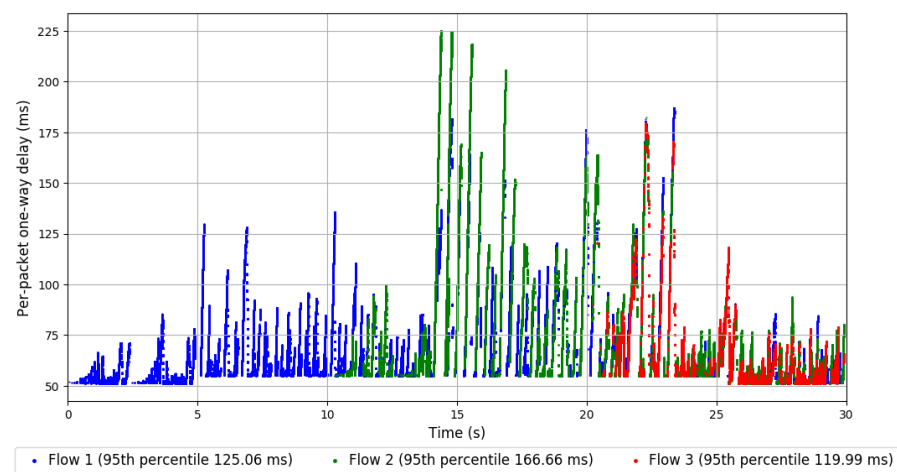
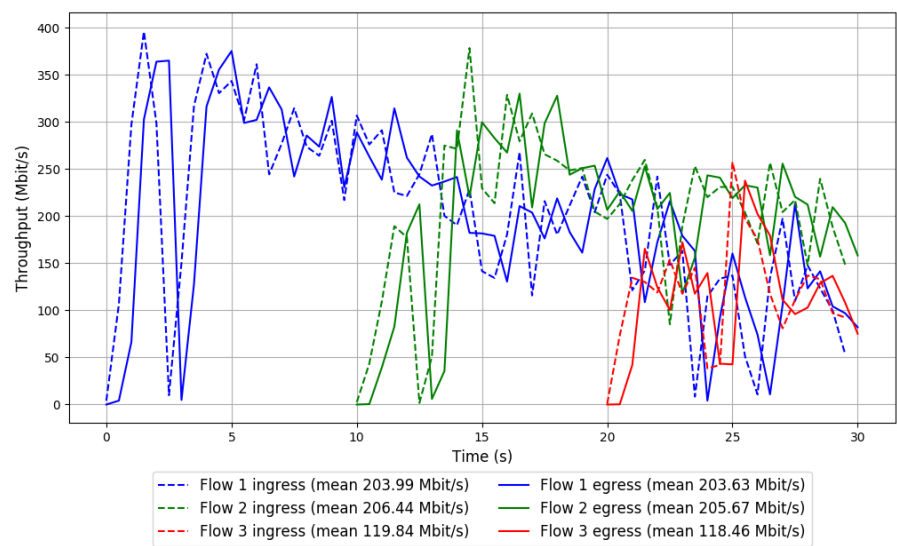
Run 3: Statistics of Verus

Start at: 2018-06-20 11:07:54  
End at: 2018-06-20 11:08:24  
Local clock offset: -0.165 ms  
Remote clock offset: 1.271 ms

# Below is generated by plot.py at 2018-06-20 16:12:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 378.83 Mbit/s  
95th percentile per-packet one-way delay: 147.193 ms  
Loss rate: 0.35%  
-- Flow 1:  
Average throughput: 203.63 Mbit/s  
95th percentile per-packet one-way delay: 125.064 ms  
Loss rate: 0.17%  
-- Flow 2:  
Average throughput: 205.67 Mbit/s  
95th percentile per-packet one-way delay: 166.665 ms  
Loss rate: 0.39%  
-- Flow 3:  
Average throughput: 118.46 Mbit/s  
95th percentile per-packet one-way delay: 119.986 ms  
Loss rate: 1.16%



Run 3: Report of Verus — Data Link

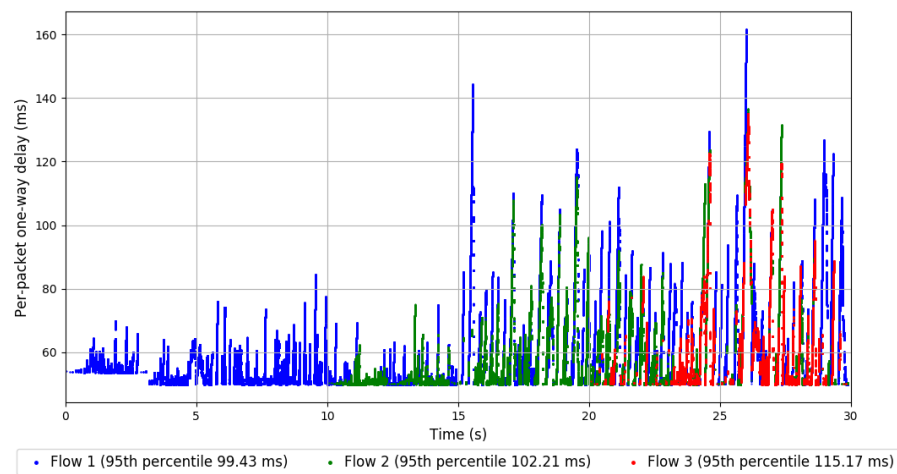
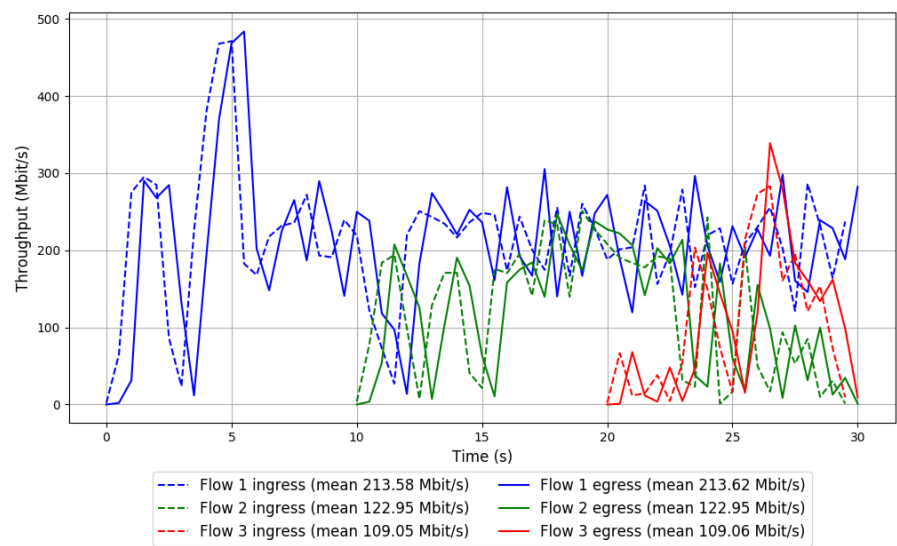


Run 4: Statistics of Verus

Start at: 2018-06-20 11:30:46  
End at: 2018-06-20 11:31:16  
Local clock offset: -0.034 ms  
Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2018-06-20 16:12:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 330.77 Mbit/s  
95th percentile per-packet one-way delay: 101.780 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 213.62 Mbit/s  
95th percentile per-packet one-way delay: 99.427 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 122.95 Mbit/s  
95th percentile per-packet one-way delay: 102.206 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 109.06 Mbit/s  
95th percentile per-packet one-way delay: 115.175 ms  
Loss rate: 0.00%

Run 4: Report of Verus — Data Link

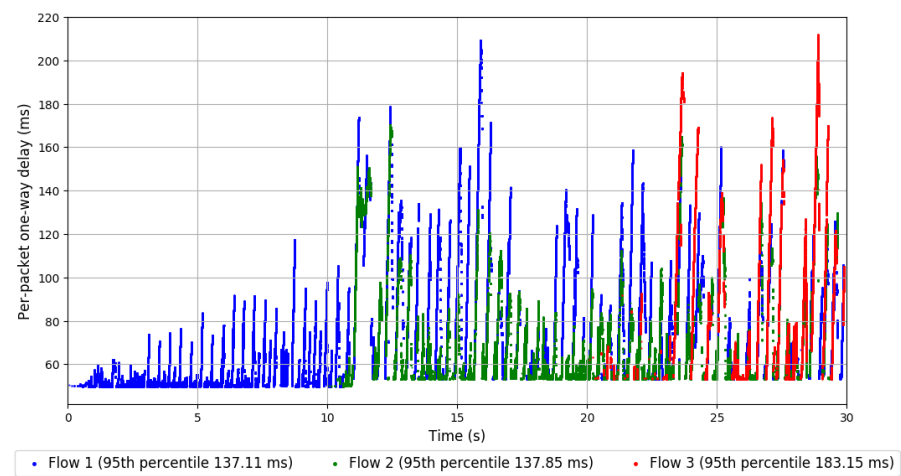
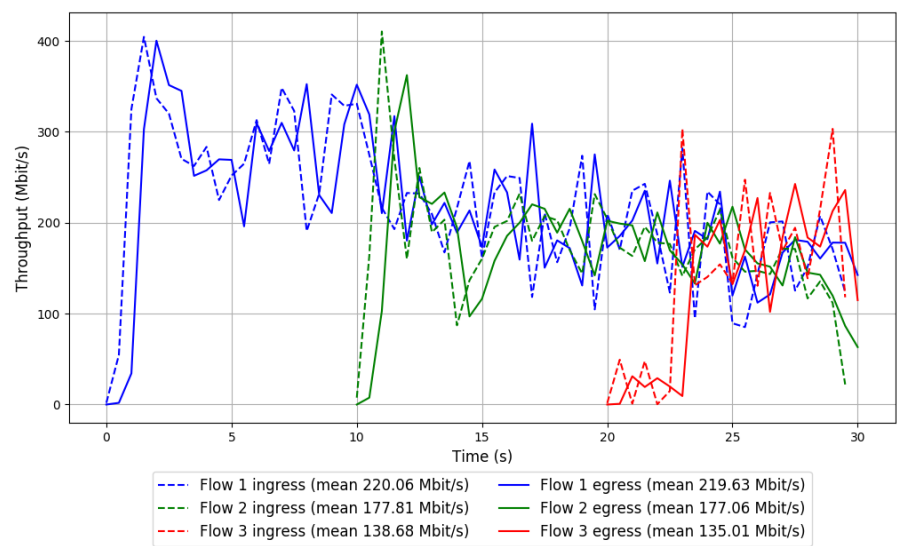


Run 5: Statistics of Verus

Start at: 2018-06-20 11:53:38  
End at: 2018-06-20 11:54:08  
Local clock offset: 0.02 ms  
Remote clock offset: -0.322 ms

# Below is generated by plot.py at 2018-06-20 16:12:33  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 380.25 Mbit/s  
95th percentile per-packet one-way delay: 144.052 ms  
Loss rate: 0.44%  
-- Flow 1:  
Average throughput: 219.63 Mbit/s  
95th percentile per-packet one-way delay: 137.112 ms  
Loss rate: 0.16%  
-- Flow 2:  
Average throughput: 177.06 Mbit/s  
95th percentile per-packet one-way delay: 137.849 ms  
Loss rate: 0.07%  
-- Flow 3:  
Average throughput: 135.01 Mbit/s  
95th percentile per-packet one-way delay: 183.146 ms  
Loss rate: 2.75%

Run 5: Report of Verus — Data Link

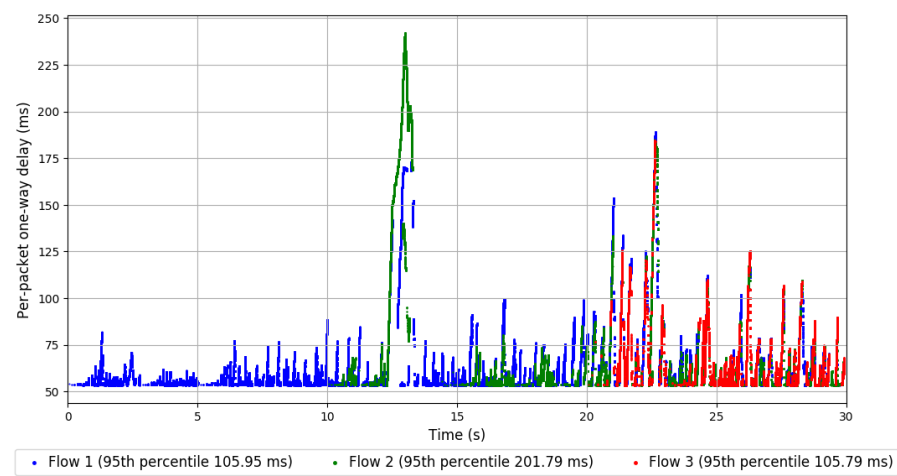
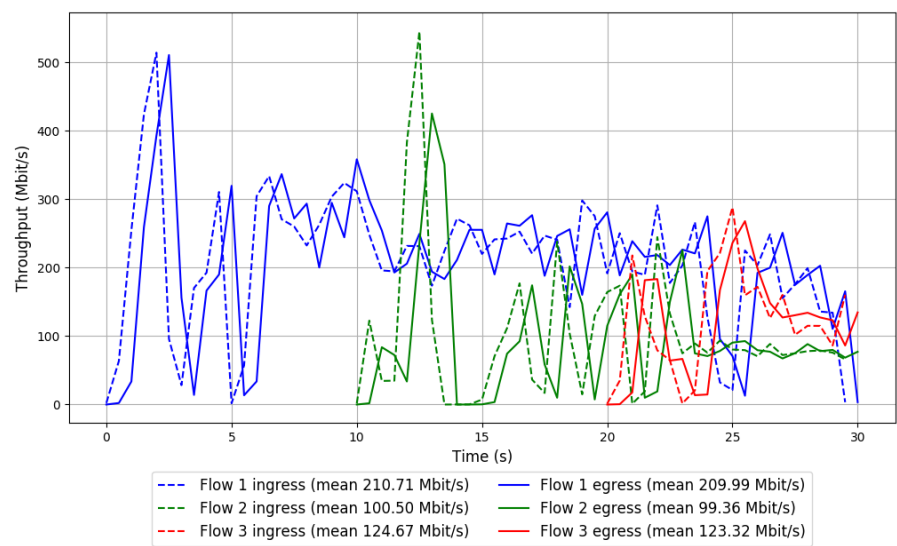


Run 6: Statistics of Verus

Start at: 2018-06-20 12:16:45  
End at: 2018-06-20 12:17:15  
Local clock offset: -0.036 ms  
Remote clock offset: -0.229 ms

# Below is generated by plot.py at 2018-06-20 16:12:33  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 316.41 Mbit/s  
95th percentile per-packet one-way delay: 151.879 ms  
Loss rate: 0.58%  
-- Flow 1:  
Average throughput: 209.99 Mbit/s  
95th percentile per-packet one-way delay: 105.951 ms  
Loss rate: 0.31%  
-- Flow 2:  
Average throughput: 99.36 Mbit/s  
95th percentile per-packet one-way delay: 201.789 ms  
Loss rate: 1.13%  
-- Flow 3:  
Average throughput: 123.32 Mbit/s  
95th percentile per-packet one-way delay: 105.786 ms  
Loss rate: 1.08%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-06-20 12:39:32

End at: 2018-06-20 12:40:02

Local clock offset: -0.092 ms

Remote clock offset: 0.215 ms

# Below is generated by plot.py at 2018-06-20 16:13:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 371.36 Mbit/s

95th percentile per-packet one-way delay: 150.050 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 244.12 Mbit/s

95th percentile per-packet one-way delay: 157.170 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 161.54 Mbit/s

95th percentile per-packet one-way delay: 129.576 ms

Loss rate: 0.34%

-- Flow 3:

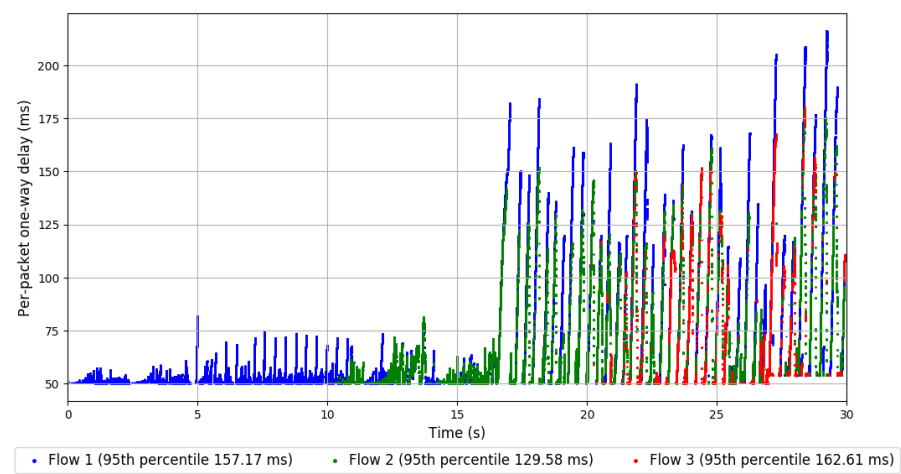
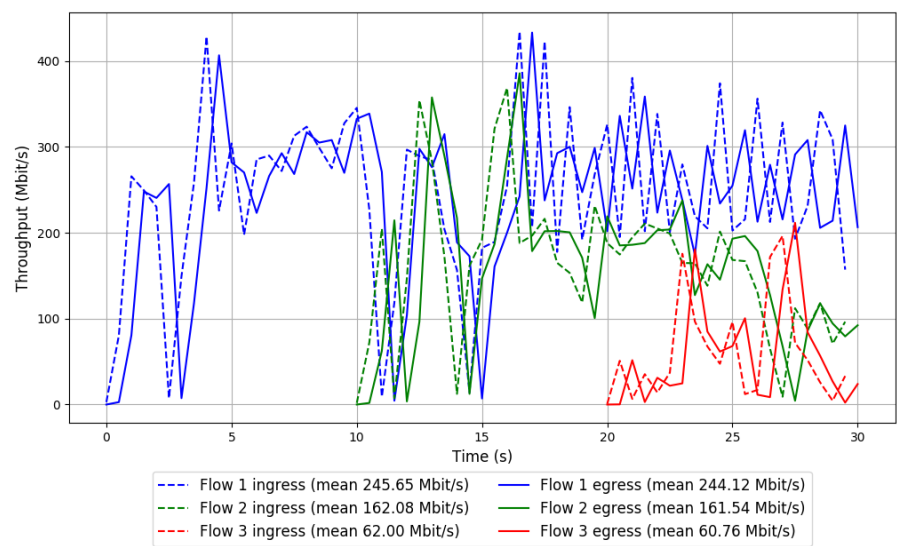
Average throughput: 60.76 Mbit/s

95th percentile per-packet one-way delay: 162.608 ms

Loss rate: 2.03%



Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-06-20 13:02:49

End at: 2018-06-20 13:03:19

Local clock offset: 0.098 ms

Remote clock offset: 1.205 ms

# Below is generated by plot.py at 2018-06-20 16:15:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 338.37 Mbit/s

95th percentile per-packet one-way delay: 102.848 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 188.14 Mbit/s

95th percentile per-packet one-way delay: 95.491 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 169.60 Mbit/s

95th percentile per-packet one-way delay: 95.856 ms

Loss rate: 0.26%

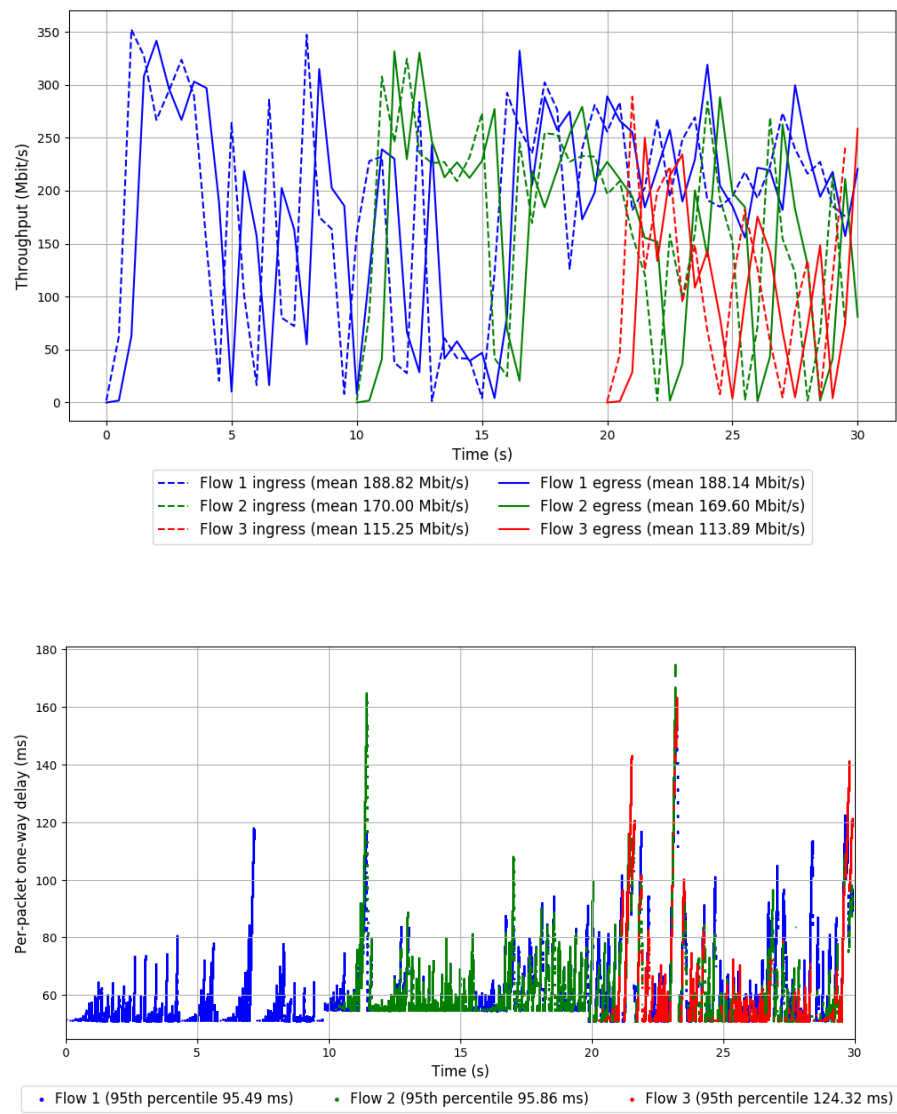
-- Flow 3:

Average throughput: 113.89 Mbit/s

95th percentile per-packet one-way delay: 124.318 ms

Loss rate: 1.13%

Run 8: Report of Verus — Data Link

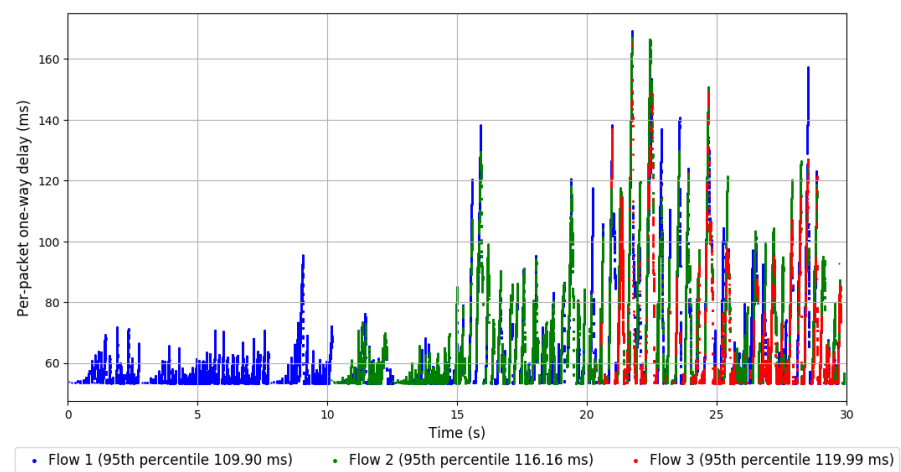
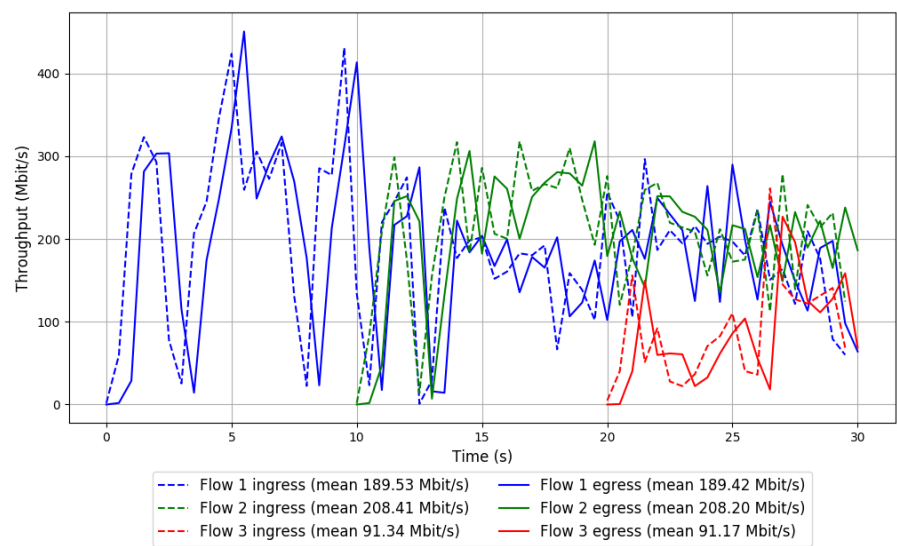


Run 9: Statistics of Verus

Start at: 2018-06-20 13:25:36  
End at: 2018-06-20 13:26:06  
Local clock offset: 0.104 ms  
Remote clock offset: -0.106 ms

# Below is generated by plot.py at 2018-06-20 16:17:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 357.42 Mbit/s  
95th percentile per-packet one-way delay: 113.289 ms  
Loss rate: 0.07%  
-- Flow 1:  
Average throughput: 189.42 Mbit/s  
95th percentile per-packet one-way delay: 109.897 ms  
Loss rate: 0.06%  
-- Flow 2:  
Average throughput: 208.20 Mbit/s  
95th percentile per-packet one-way delay: 116.156 ms  
Loss rate: 0.10%  
-- Flow 3:  
Average throughput: 91.17 Mbit/s  
95th percentile per-packet one-way delay: 119.986 ms  
Loss rate: 0.00%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-06-20 13:48:36

End at: 2018-06-20 13:49:06

Local clock offset: -0.022 ms

Remote clock offset: 0.17 ms

# Below is generated by plot.py at 2018-06-20 16:17:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 385.71 Mbit/s

95th percentile per-packet one-way delay: 117.839 ms

Loss rate: 0.40%

-- Flow 1:

Average throughput: 241.53 Mbit/s

95th percentile per-packet one-way delay: 116.426 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 123.40 Mbit/s

95th percentile per-packet one-way delay: 117.123 ms

Loss rate: 0.32%

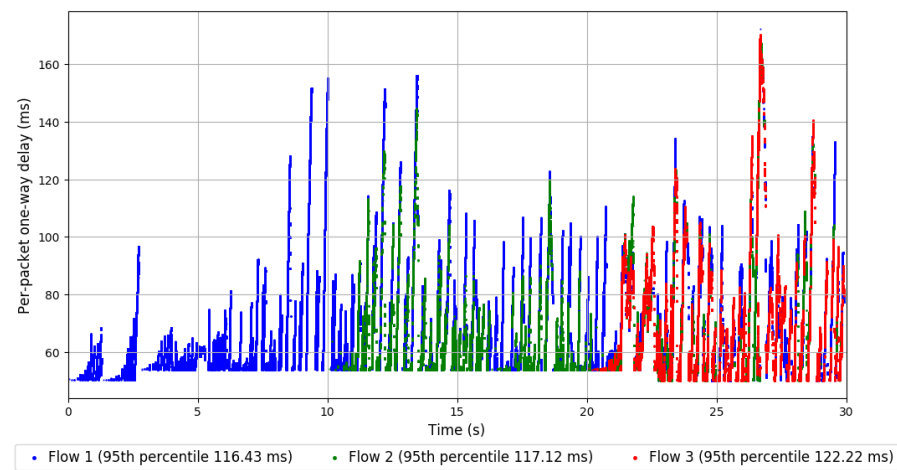
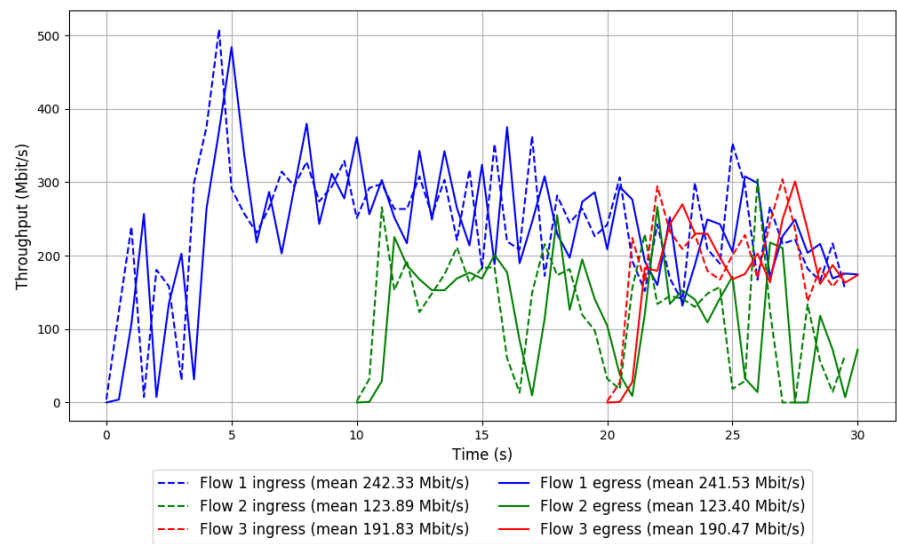
-- Flow 3:

Average throughput: 190.47 Mbit/s

95th percentile per-packet one-way delay: 122.225 ms

Loss rate: 0.78%

Run 10: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2018-06-20 10:23:51

End at: 2018-06-20 10:24:21

Local clock offset: -0.353 ms

Remote clock offset: 0.106 ms

# Below is generated by plot.py at 2018-06-20 16:21:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 527.40 Mbit/s

95th percentile per-packet one-way delay: 53.413 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 346.70 Mbit/s

95th percentile per-packet one-way delay: 51.710 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 244.62 Mbit/s

95th percentile per-packet one-way delay: 53.429 ms

Loss rate: 0.00%

-- Flow 3:

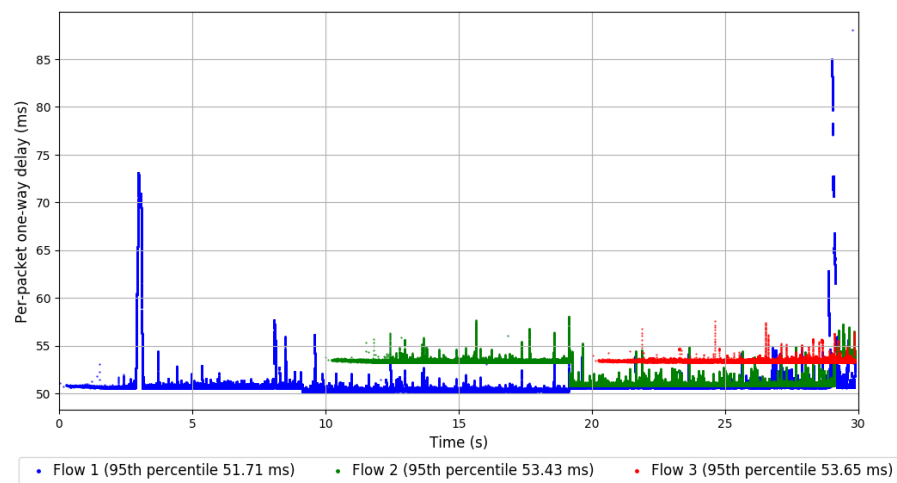
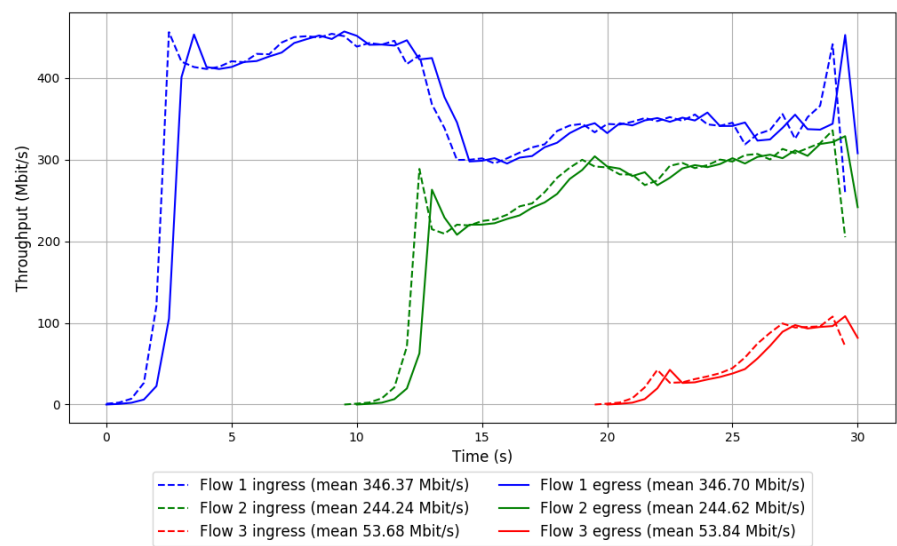
Average throughput: 53.84 Mbit/s

95th percentile per-packet one-way delay: 53.648 ms

Loss rate: 0.02%



Run 1: Report of PCC-Vivace — Data Link

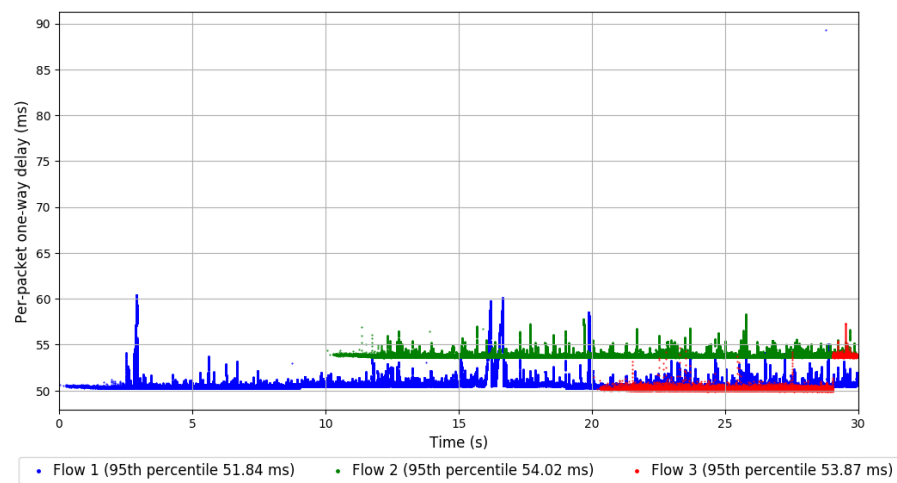
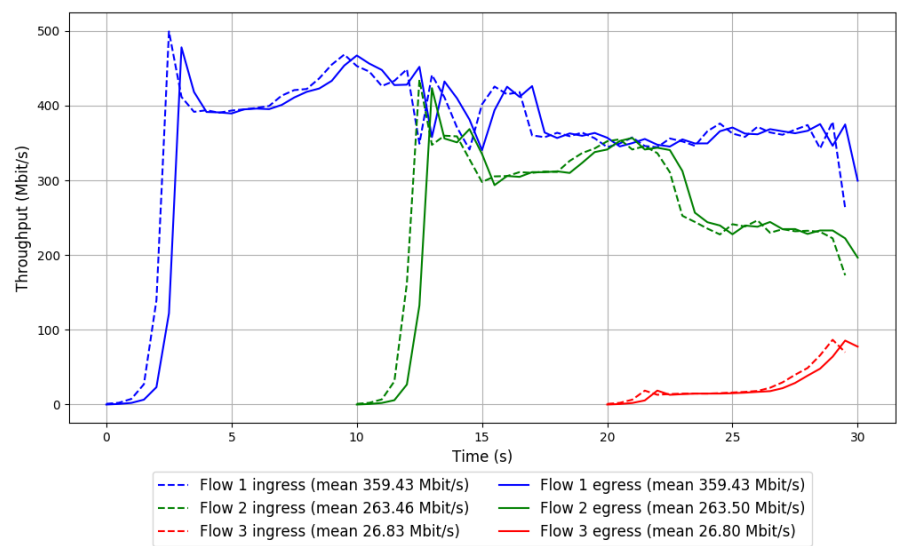


Run 2: Statistics of PCC-Vivace

Start at: 2018-06-20 10:46:41  
End at: 2018-06-20 10:47:11  
Local clock offset: -0.127 ms  
Remote clock offset: -0.005 ms

# Below is generated by plot.py at 2018-06-20 16:21:38  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 543.42 Mbit/s  
95th percentile per-packet one-way delay: 53.819 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 359.43 Mbit/s  
95th percentile per-packet one-way delay: 51.840 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 263.50 Mbit/s  
95th percentile per-packet one-way delay: 54.017 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 26.80 Mbit/s  
95th percentile per-packet one-way delay: 53.867 ms  
Loss rate: 0.14%

Run 2: Report of PCC-Vivace — Data Link

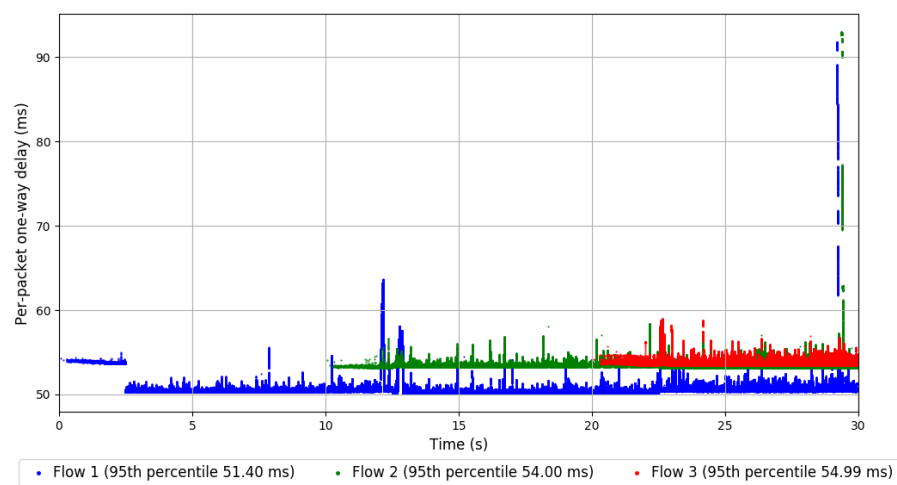
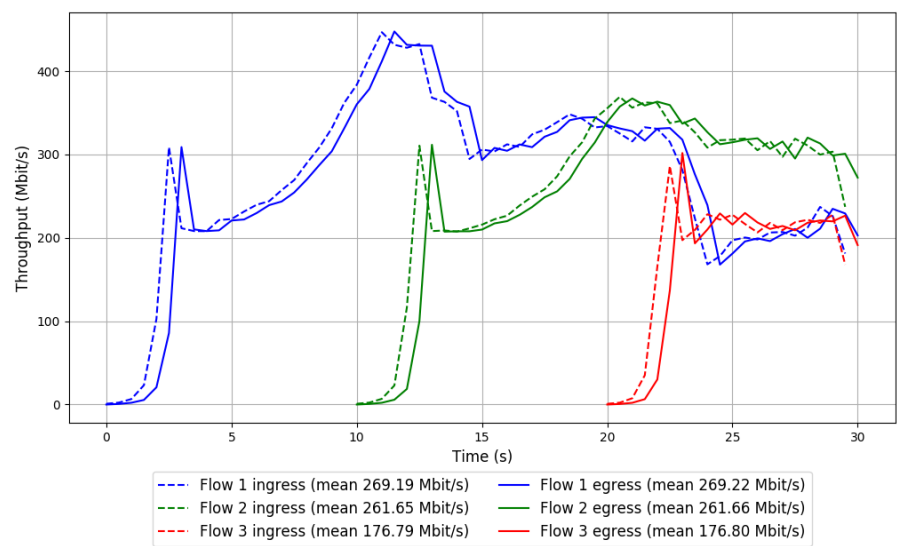


Run 3: Statistics of PCC-Vivace

Start at: 2018-06-20 11:09:27  
End at: 2018-06-20 11:09:57  
Local clock offset: -0.085 ms  
Remote clock offset: -0.084 ms

# Below is generated by plot.py at 2018-06-20 16:21:38  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 501.52 Mbit/s  
95th percentile per-packet one-way delay: 53.978 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 269.22 Mbit/s  
95th percentile per-packet one-way delay: 51.401 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 261.66 Mbit/s  
95th percentile per-packet one-way delay: 54.000 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 176.80 Mbit/s  
95th percentile per-packet one-way delay: 54.990 ms  
Loss rate: 0.01%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2018-06-20 11:32:16

End at: 2018-06-20 11:32:46

Local clock offset: -0.151 ms

Remote clock offset: 0.008 ms

# Below is generated by plot.py at 2018-06-20 16:22:06

# Datalink statistics

-- Total of 3 flows:

Average throughput: 529.76 Mbit/s

95th percentile per-packet one-way delay: 53.942 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 336.49 Mbit/s

95th percentile per-packet one-way delay: 52.195 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 264.40 Mbit/s

95th percentile per-packet one-way delay: 54.349 ms

Loss rate: 0.02%

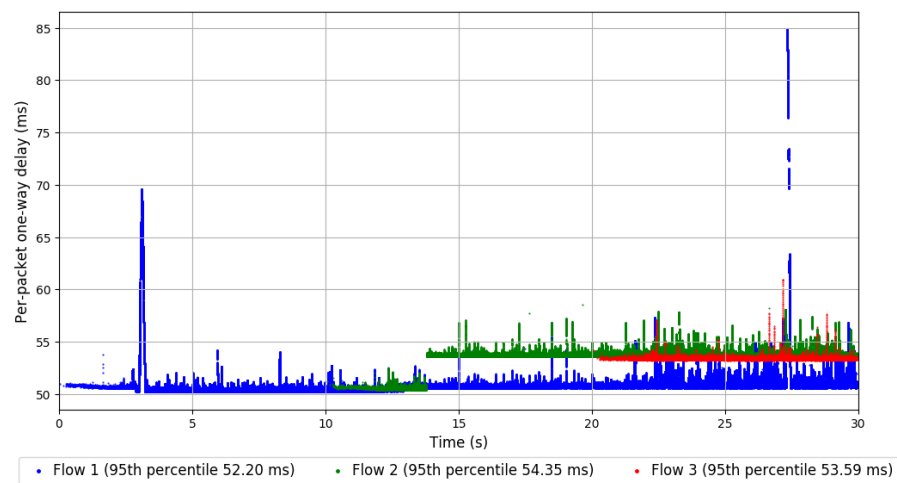
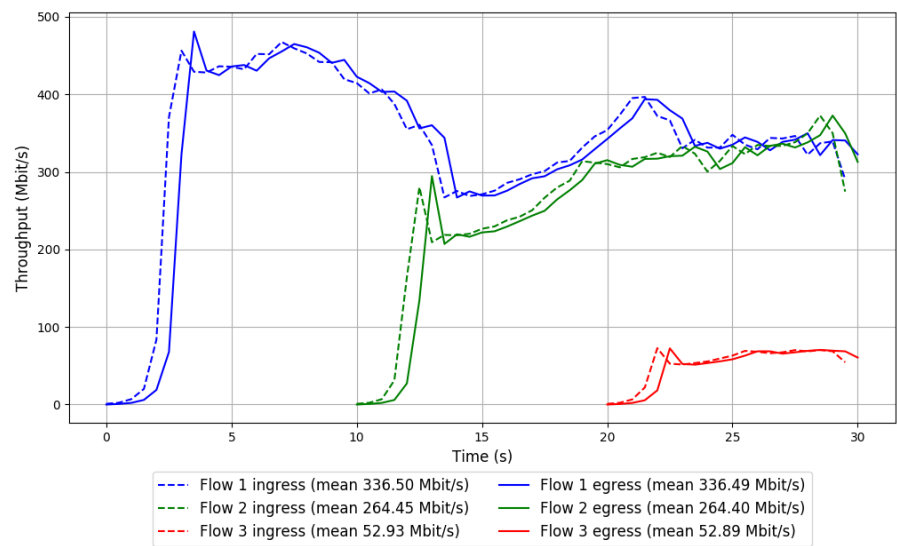
-- Flow 3:

Average throughput: 52.89 Mbit/s

95th percentile per-packet one-way delay: 53.586 ms

Loss rate: 0.11%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2018-06-20 11:55:12

End at: 2018-06-20 11:55:42

Local clock offset: 0.157 ms

Remote clock offset: -0.36 ms

# Below is generated by plot.py at 2018-06-20 16:23:39

# Datalink statistics

-- Total of 3 flows:

Average throughput: 572.08 Mbit/s

95th percentile per-packet one-way delay: 54.062 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 333.70 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 269.42 Mbit/s

95th percentile per-packet one-way delay: 54.741 ms

Loss rate: 0.00%

-- Flow 3:

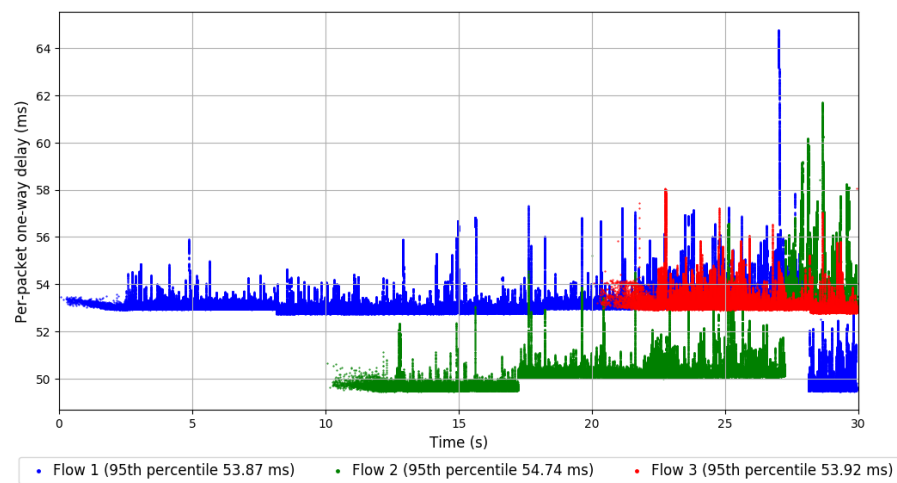
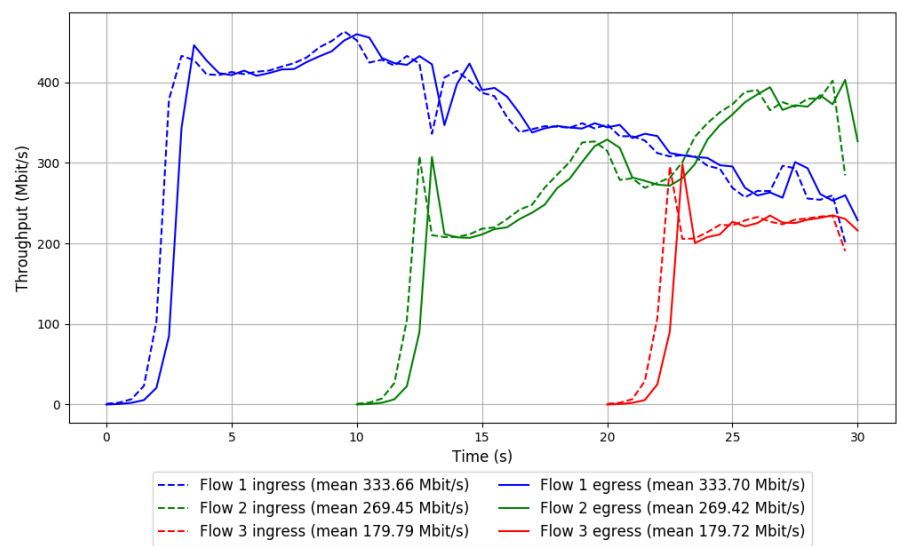
Average throughput: 179.72 Mbit/s

95th percentile per-packet one-way delay: 53.923 ms

Loss rate: 0.00%



Run 5: Report of PCC-Vivace — Data Link



Run 6: Statistics of PCC-Vivace

Start at: 2018-06-20 12:18:14

End at: 2018-06-20 12:18:44

Local clock offset: -0.157 ms

Remote clock offset: 0.25 ms

# Below is generated by plot.py at 2018-06-20 16:25:19

# Datalink statistics

-- Total of 3 flows:

Average throughput: 577.14 Mbit/s

95th percentile per-packet one-way delay: 55.567 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 367.01 Mbit/s

95th percentile per-packet one-way delay: 56.267 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 238.84 Mbit/s

95th percentile per-packet one-way delay: 53.697 ms

Loss rate: 0.00%

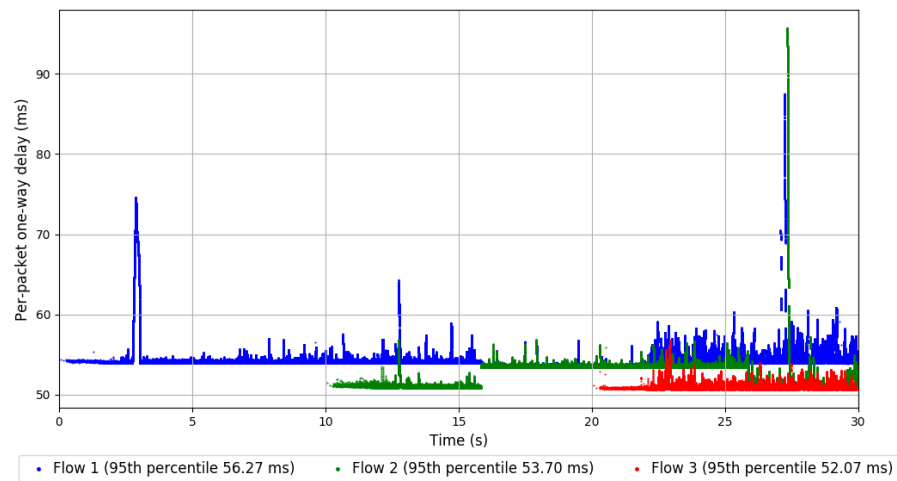
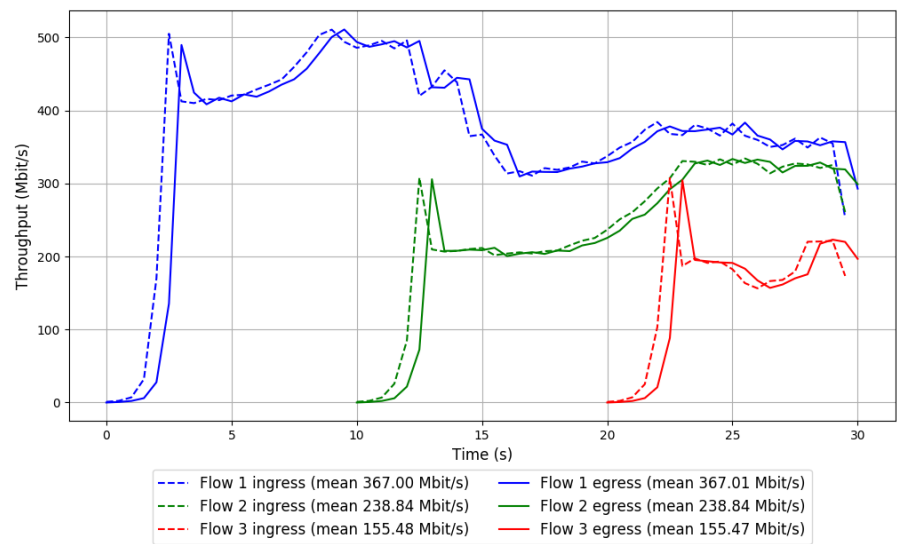
-- Flow 3:

Average throughput: 155.47 Mbit/s

95th percentile per-packet one-way delay: 52.067 ms

Loss rate: 0.00%

Run 6: Report of PCC-Vivace — Data Link

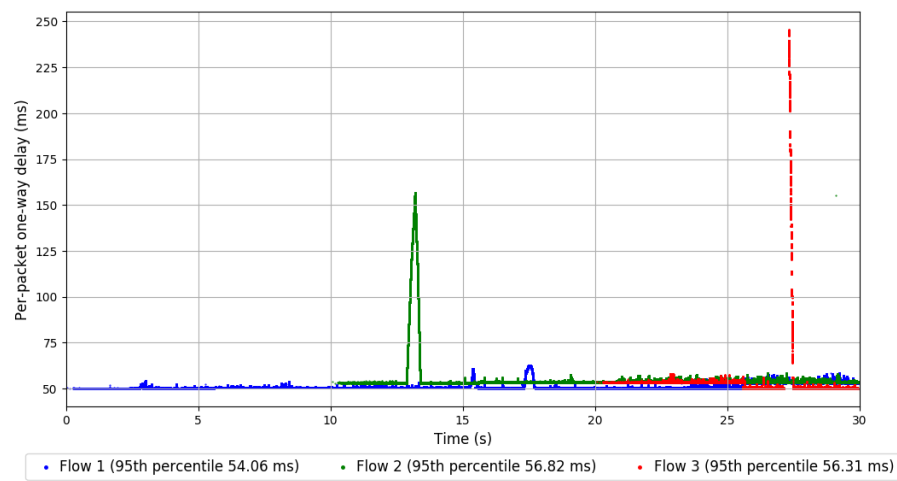
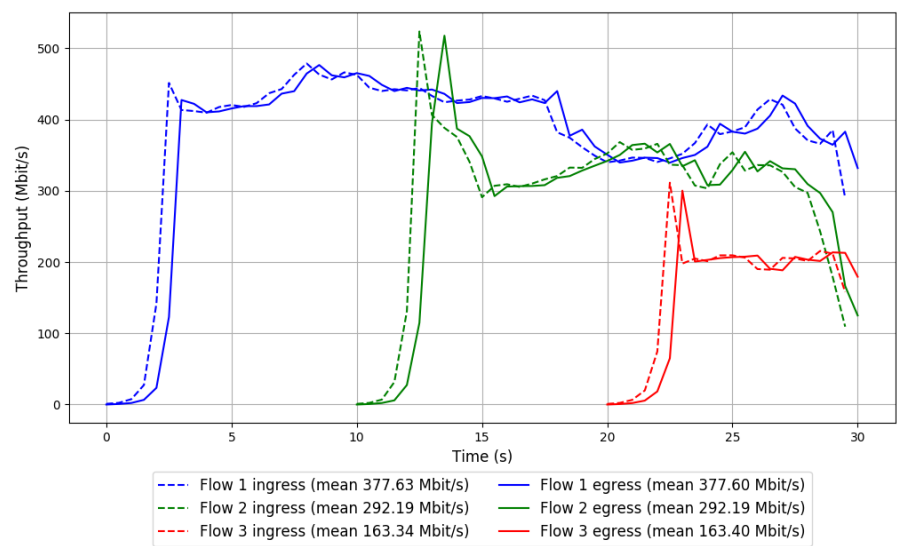


Run 7: Statistics of PCC-Vivace

Start at: 2018-06-20 12:41:04  
End at: 2018-06-20 12:41:34  
Local clock offset: 0.017 ms  
Remote clock offset: -0.053 ms

# Below is generated by plot.py at 2018-06-20 16:26:33  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 625.78 Mbit/s  
95th percentile per-packet one-way delay: 55.086 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 377.60 Mbit/s  
95th percentile per-packet one-way delay: 54.064 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 292.19 Mbit/s  
95th percentile per-packet one-way delay: 56.819 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 163.40 Mbit/s  
95th percentile per-packet one-way delay: 56.308 ms  
Loss rate: 0.00%

Run 7: Report of PCC-Vivace — Data Link



Run 8: Statistics of PCC-Vivace

Start at: 2018-06-20 13:04:19

End at: 2018-06-20 13:04:49

Local clock offset: -0.023 ms

Remote clock offset: 1.123 ms

# Below is generated by plot.py at 2018-06-20 16:26:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 572.64 Mbit/s

95th percentile per-packet one-way delay: 56.303 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 351.96 Mbit/s

95th percentile per-packet one-way delay: 58.934 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 299.02 Mbit/s

95th percentile per-packet one-way delay: 53.106 ms

Loss rate: 0.00%

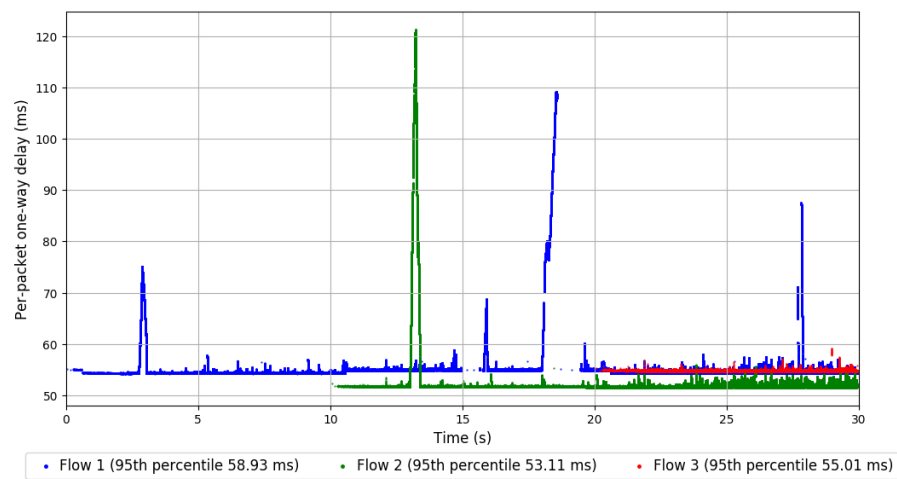
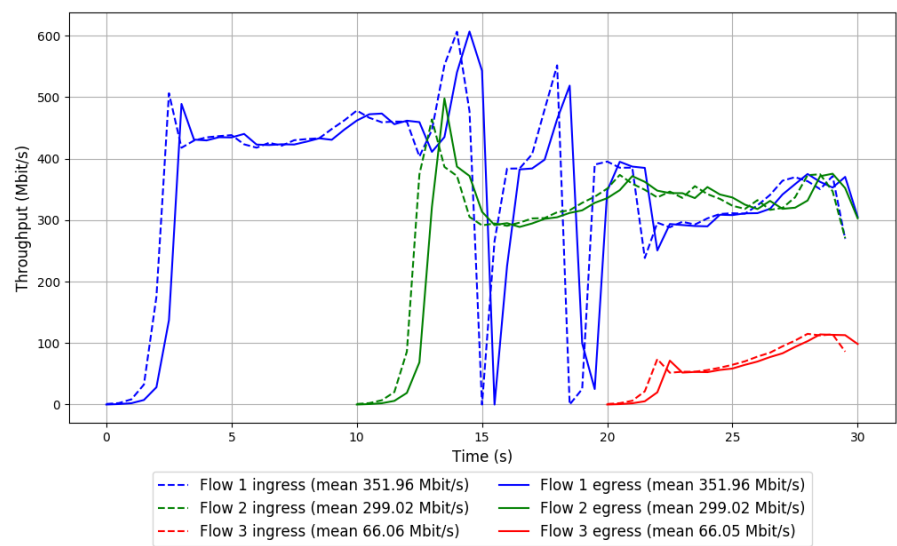
-- Flow 3:

Average throughput: 66.05 Mbit/s

95th percentile per-packet one-way delay: 55.009 ms

Loss rate: 0.04%

Run 8: Report of PCC-Vivace — Data Link



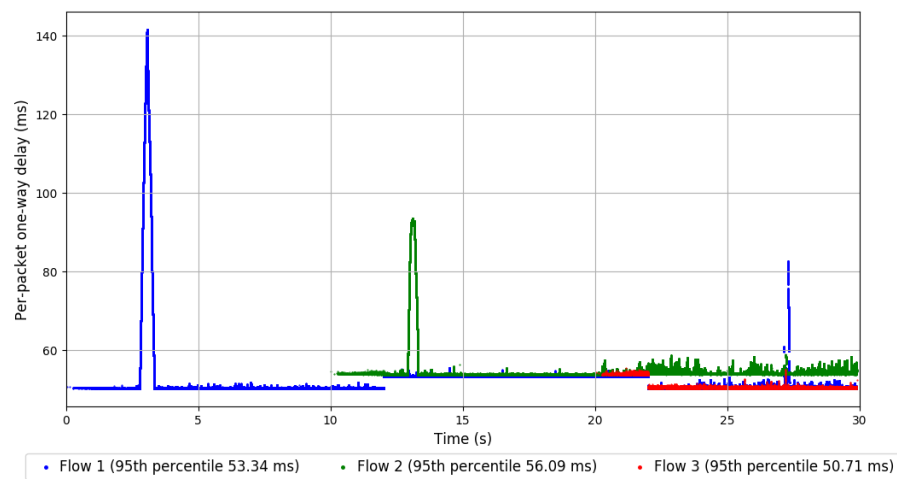
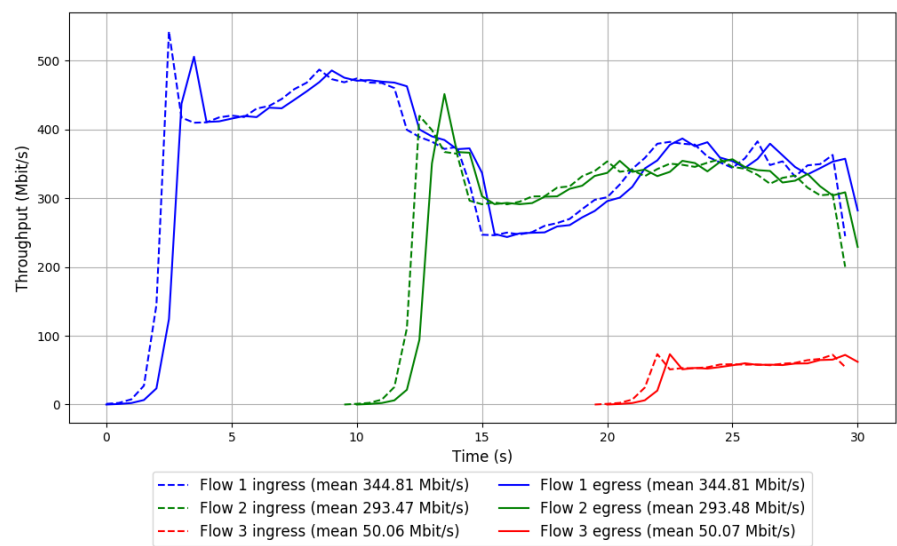
Run 9: Statistics of PCC-Vivace

Start at: 2018-06-20 13:27:08  
End at: 2018-06-20 13:27:38  
Local clock offset: -0.051 ms  
Remote clock offset: -0.058 ms

# Below is generated by plot.py at 2018-06-20 16:27:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 556.60 Mbit/s  
95th percentile per-packet one-way delay: 55.051 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 344.81 Mbit/s  
95th percentile per-packet one-way delay: 53.336 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 293.48 Mbit/s  
95th percentile per-packet one-way delay: 56.089 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 50.07 Mbit/s  
95th percentile per-packet one-way delay: 50.714 ms  
Loss rate: 0.00%



Run 9: Report of PCC-Vivace — Data Link

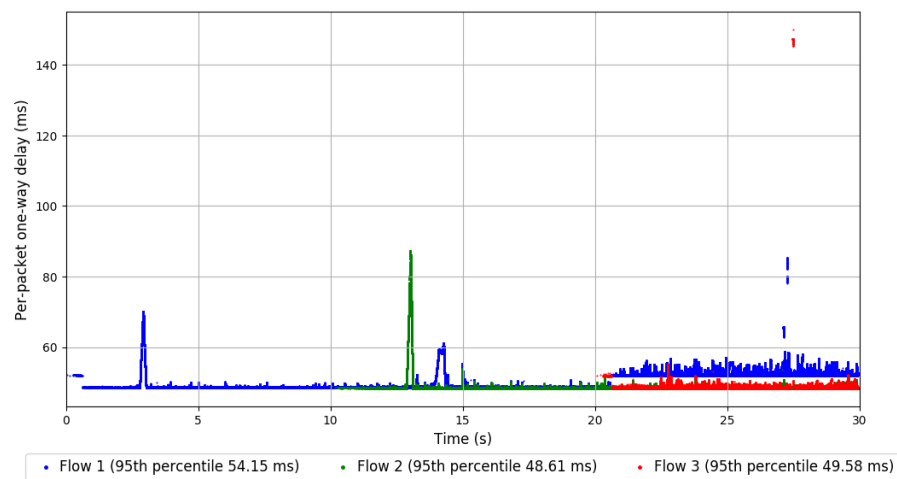
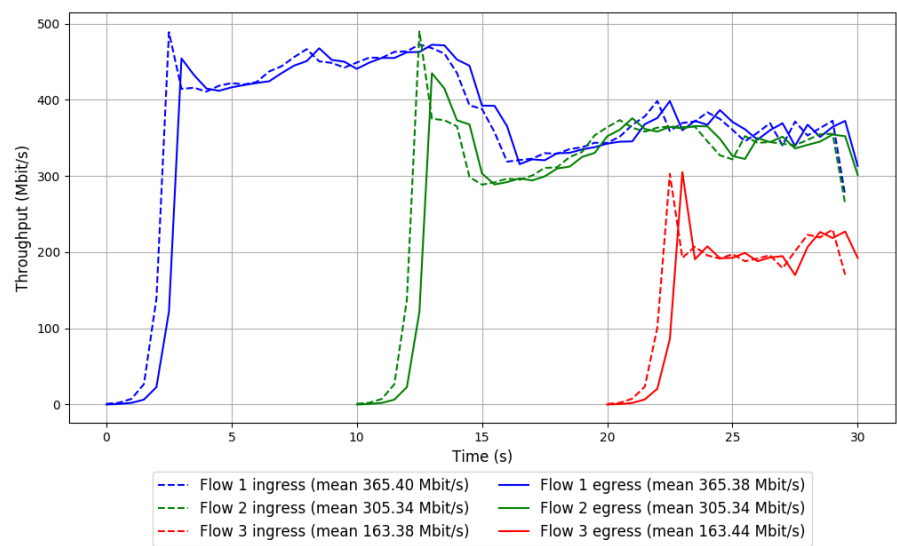


Run 10: Statistics of PCC-Vivace

Start at: 2018-06-20 13:50:09  
End at: 2018-06-20 13:50:39  
Local clock offset: 0.053 ms  
Remote clock offset: -1.617 ms

# Below is generated by plot.py at 2018-06-20 16:27:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 622.33 Mbit/s  
95th percentile per-packet one-way delay: 53.384 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 365.38 Mbit/s  
95th percentile per-packet one-way delay: 54.151 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 305.34 Mbit/s  
95th percentile per-packet one-way delay: 48.610 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 163.44 Mbit/s  
95th percentile per-packet one-way delay: 49.579 ms  
Loss rate: 0.00%

Run 10: Report of PCC-Vivace — Data Link

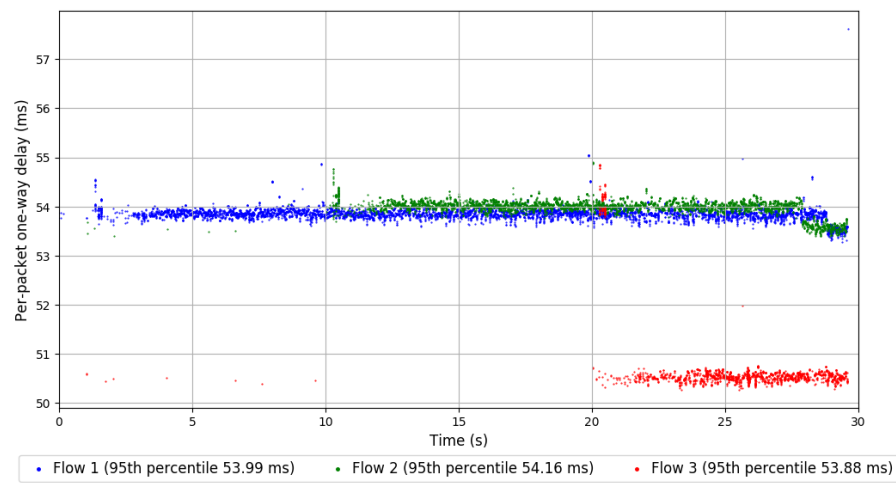
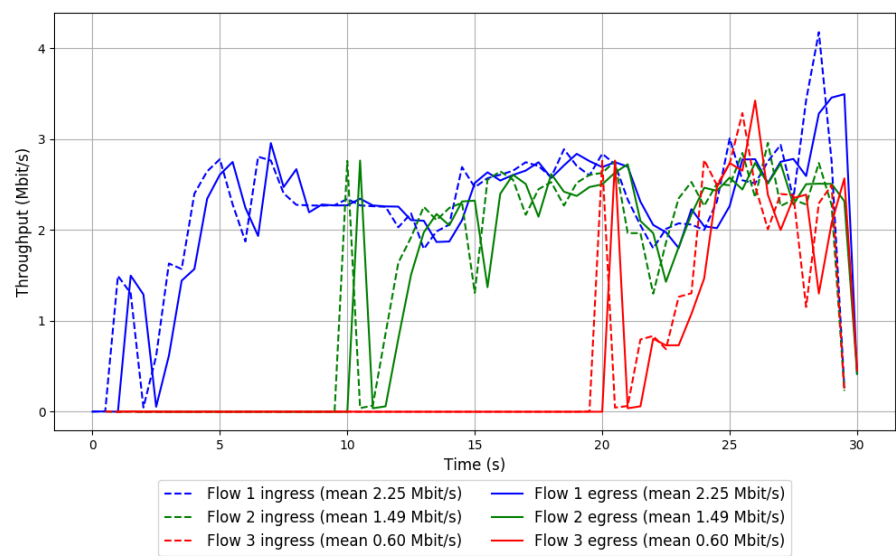


Run 1: Statistics of WebRTC media

Start at: 2018-06-20 10:31:31  
End at: 2018-06-20 10:32:01  
Local clock offset: -0.288 ms  
Remote clock offset: -0.143 ms

# Below is generated by plot.py at 2018-06-20 16:27:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 4.27 Mbit/s  
95th percentile per-packet one-way delay: 54.105 ms  
Loss rate: 0.04%  
-- Flow 1:  
Average throughput: 2.25 Mbit/s  
95th percentile per-packet one-way delay: 53.986 ms  
Loss rate: 0.09%  
-- Flow 2:  
Average throughput: 1.49 Mbit/s  
95th percentile per-packet one-way delay: 54.161 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.60 Mbit/s  
95th percentile per-packet one-way delay: 53.875 ms  
Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link

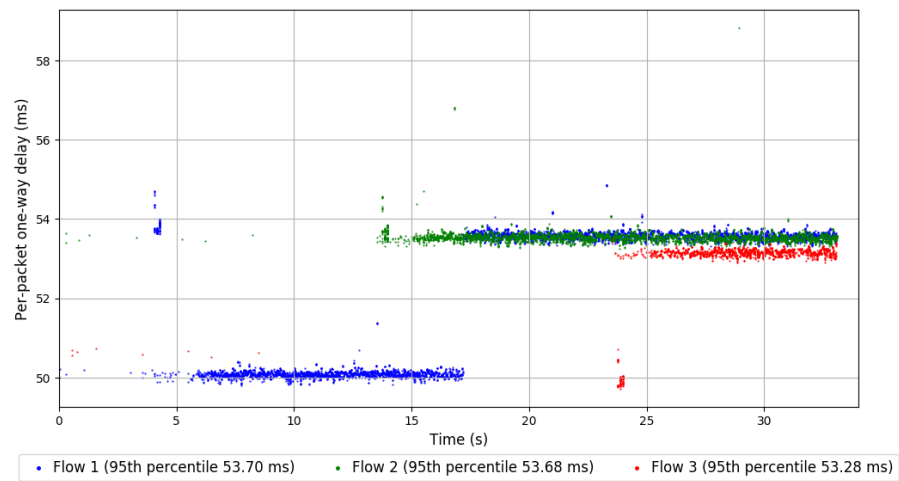
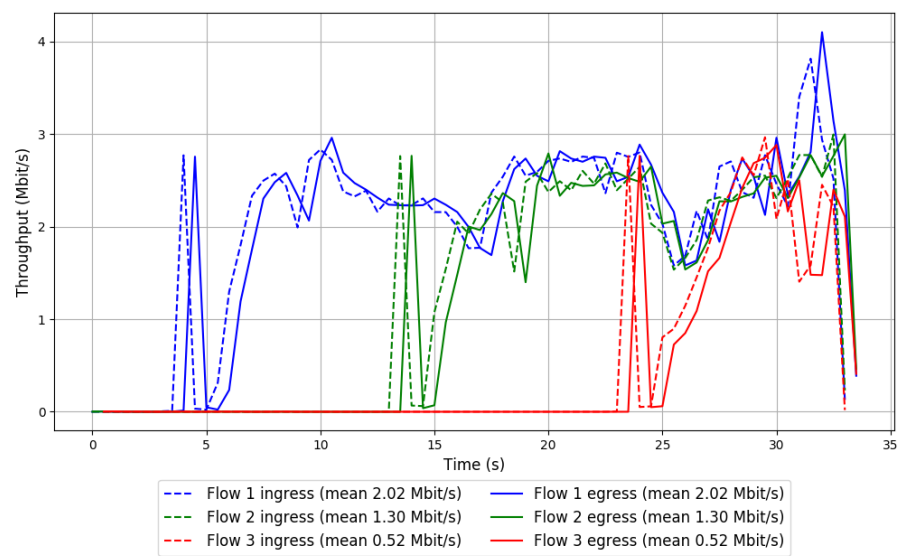


Run 2: Statistics of WebRTC media

Start at: 2018-06-20 10:54:16  
End at: 2018-06-20 10:54:46  
Local clock offset: 0.159 ms  
Remote clock offset: -0.015 ms

# Below is generated by plot.py at 2018-06-20 16:27:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.82 Mbit/s  
95th percentile per-packet one-way delay: 53.686 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 2.02 Mbit/s  
95th percentile per-packet one-way delay: 53.698 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.30 Mbit/s  
95th percentile per-packet one-way delay: 53.682 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.52 Mbit/s  
95th percentile per-packet one-way delay: 53.277 ms  
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



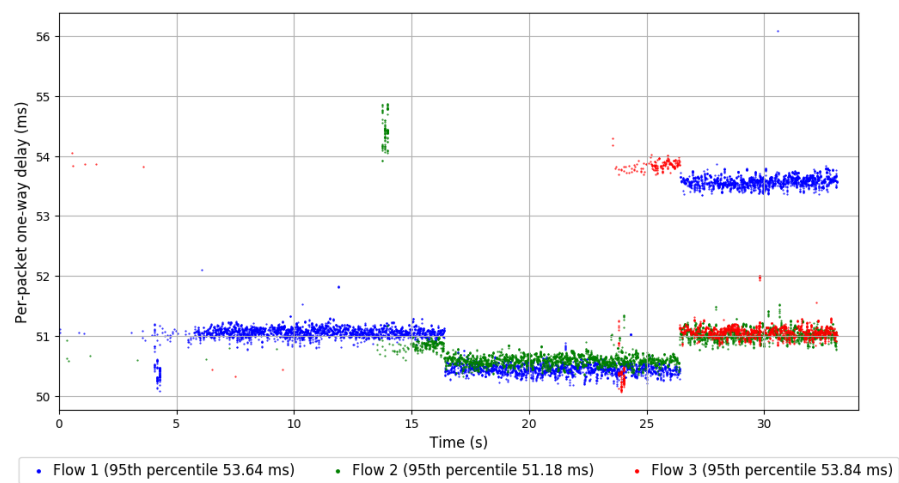
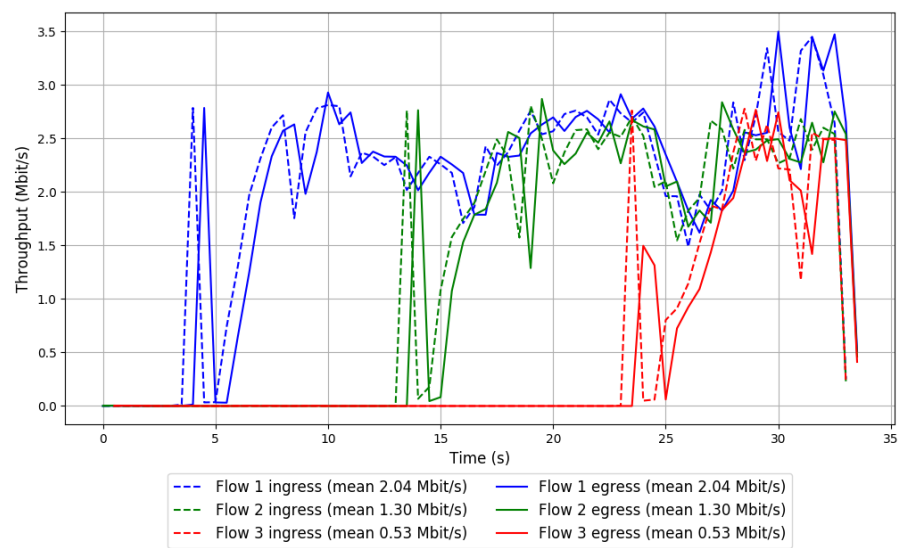
Run 3: Statistics of WebRTC media

Start at: 2018-06-20 11:17:07  
End at: 2018-06-20 11:17:37  
Local clock offset: -0.219 ms  
Remote clock offset: -0.052 ms

# Below is generated by plot.py at 2018-06-20 16:27:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.85 Mbit/s  
95th percentile per-packet one-way delay: 53.639 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 2.04 Mbit/s  
95th percentile per-packet one-way delay: 53.644 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.30 Mbit/s  
95th percentile per-packet one-way delay: 51.178 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.53 Mbit/s  
95th percentile per-packet one-way delay: 53.842 ms  
Loss rate: 0.00%



Run 3: Report of WebRTC media — Data Link

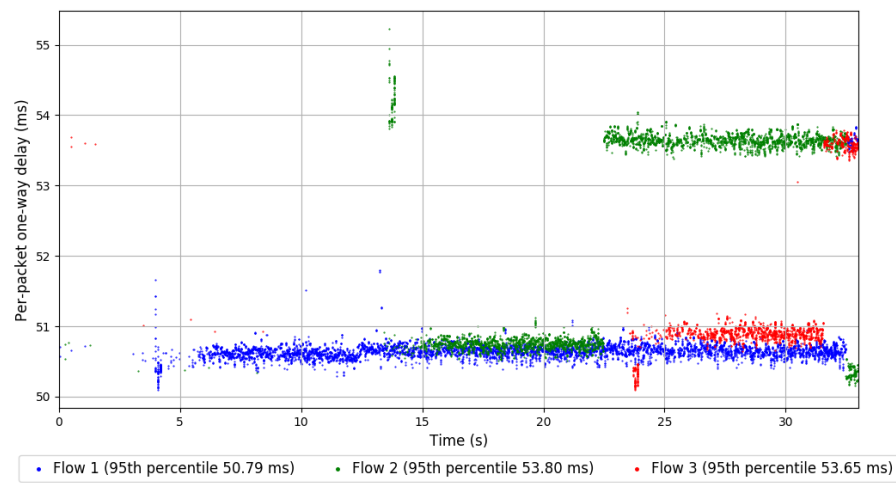
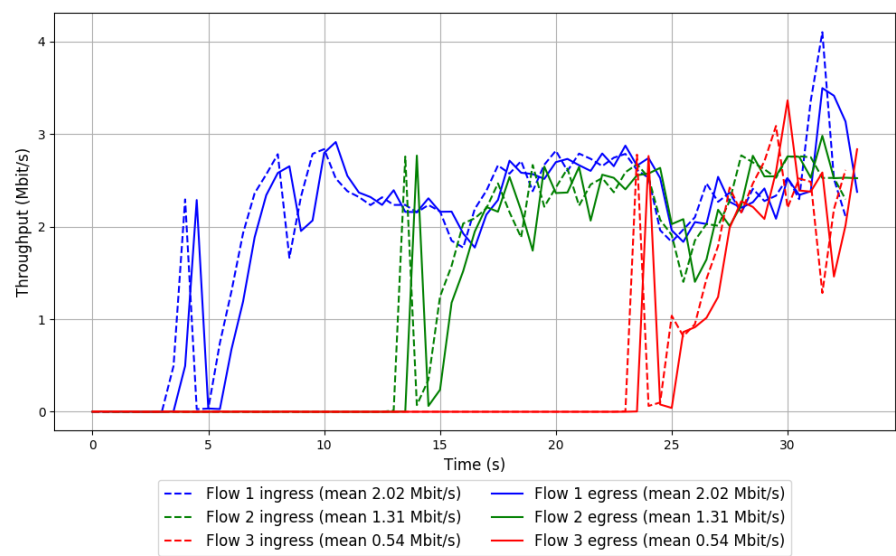


Run 4: Statistics of WebRTC media

Start at: 2018-06-20 11:39:51  
End at: 2018-06-20 11:40:21  
Local clock offset: -0.044 ms  
Remote clock offset: 0.118 ms

# Below is generated by plot.py at 2018-06-20 16:27:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.86 Mbit/s  
95th percentile per-packet one-way delay: 53.709 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 2.02 Mbit/s  
95th percentile per-packet one-way delay: 50.793 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.31 Mbit/s  
95th percentile per-packet one-way delay: 53.795 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.54 Mbit/s  
95th percentile per-packet one-way delay: 53.646 ms  
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link

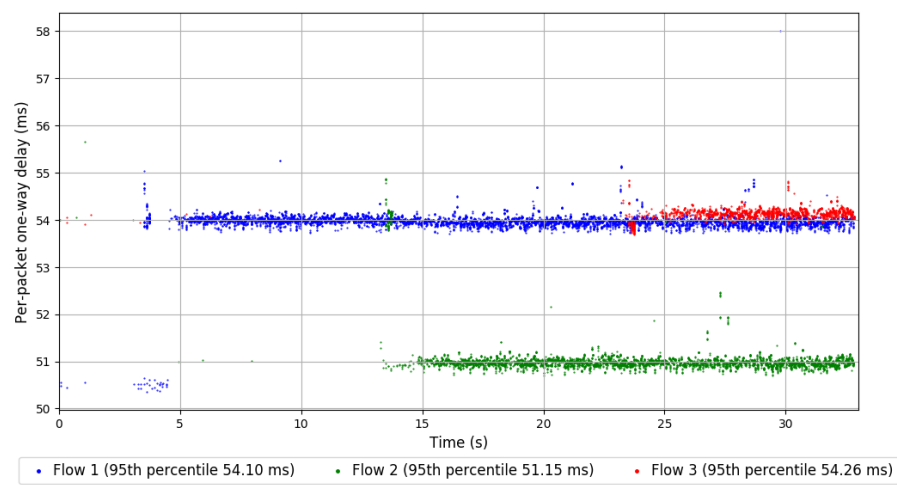
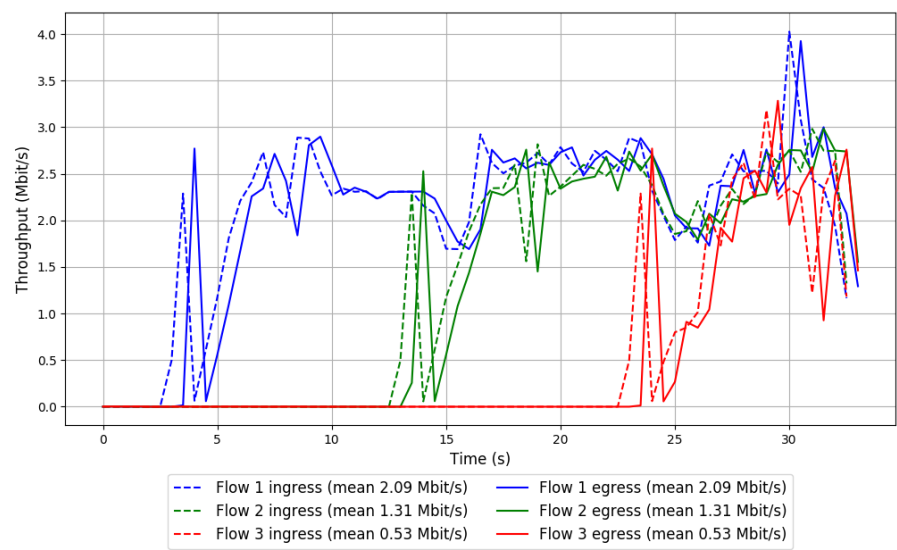


Run 5: Statistics of WebRTC media

Start at: 2018-06-20 12:02:48  
End at: 2018-06-20 12:03:18  
Local clock offset: -0.161 ms  
Remote clock offset: -0.124 ms

# Below is generated by plot.py at 2018-06-20 16:27:14  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.93 Mbit/s  
95th percentile per-packet one-way delay: 54.172 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 2.09 Mbit/s  
95th percentile per-packet one-way delay: 54.100 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.31 Mbit/s  
95th percentile per-packet one-way delay: 51.150 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.53 Mbit/s  
95th percentile per-packet one-way delay: 54.260 ms  
Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

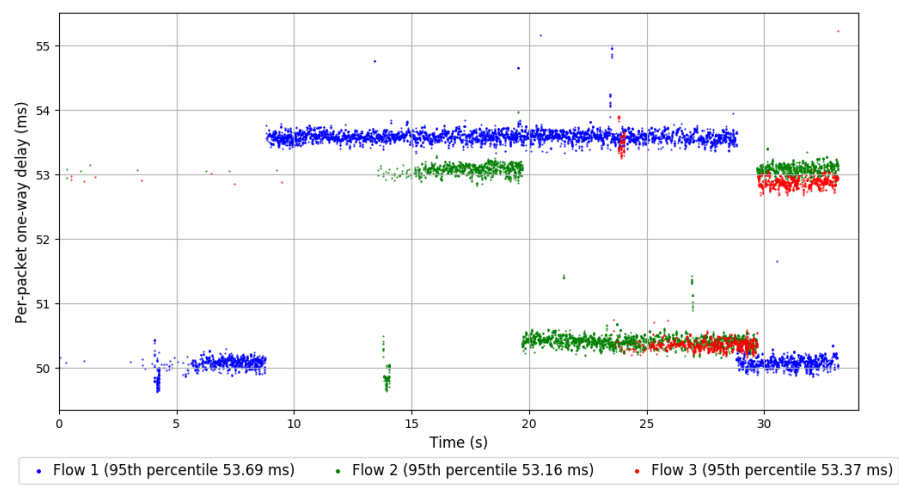
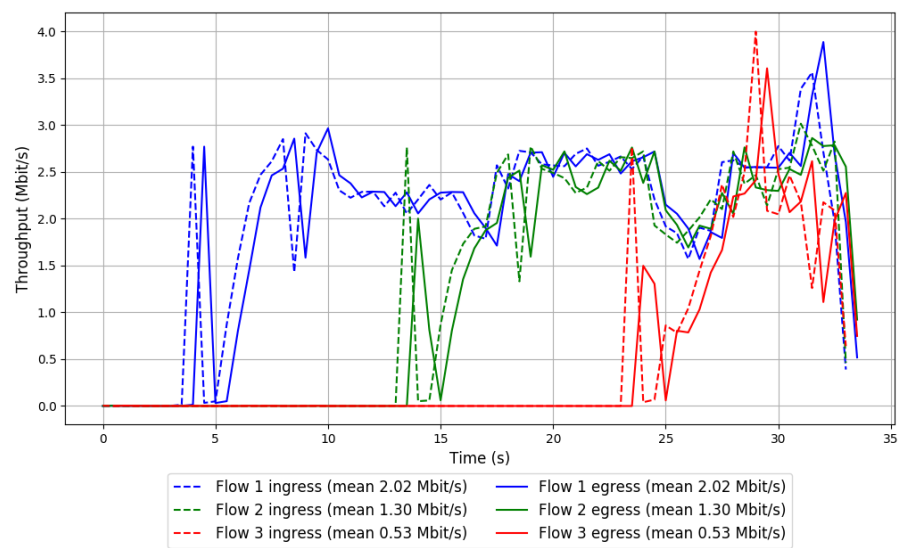


Run 6: Statistics of WebRTC media

Start at: 2018-06-20 12:25:54  
End at: 2018-06-20 12:26:24  
Local clock offset: 0.003 ms  
Remote clock offset: -0.257 ms

# Below is generated by plot.py at 2018-06-20 16:27:14  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.83 Mbit/s  
95th percentile per-packet one-way delay: 53.668 ms  
Loss rate: 0.03%  
-- Flow 1:  
Average throughput: 2.02 Mbit/s  
95th percentile per-packet one-way delay: 53.692 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.30 Mbit/s  
95th percentile per-packet one-way delay: 53.163 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.53 Mbit/s  
95th percentile per-packet one-way delay: 53.374 ms  
Loss rate: 0.22%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-06-20 12:48:49

End at: 2018-06-20 12:49:19

Local clock offset: 0.135 ms

Remote clock offset: 0.174 ms

# Below is generated by plot.py at 2018-06-20 16:27:14

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.89 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.04 Mbit/s

95th percentile per-packet one-way delay: 50.514 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 53.385 ms

Loss rate: 0.00%

-- Flow 3:

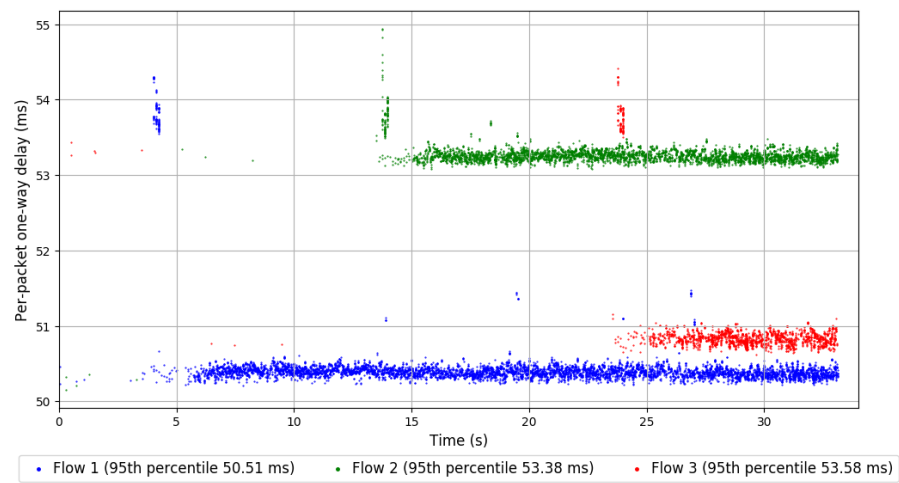
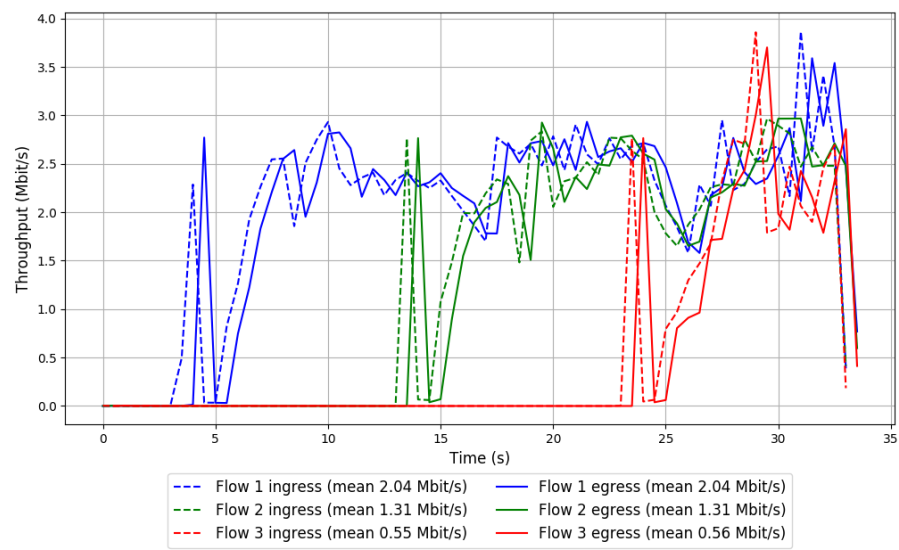
Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 53.583 ms

Loss rate: 0.00%



Run 7: Report of WebRTC media — Data Link

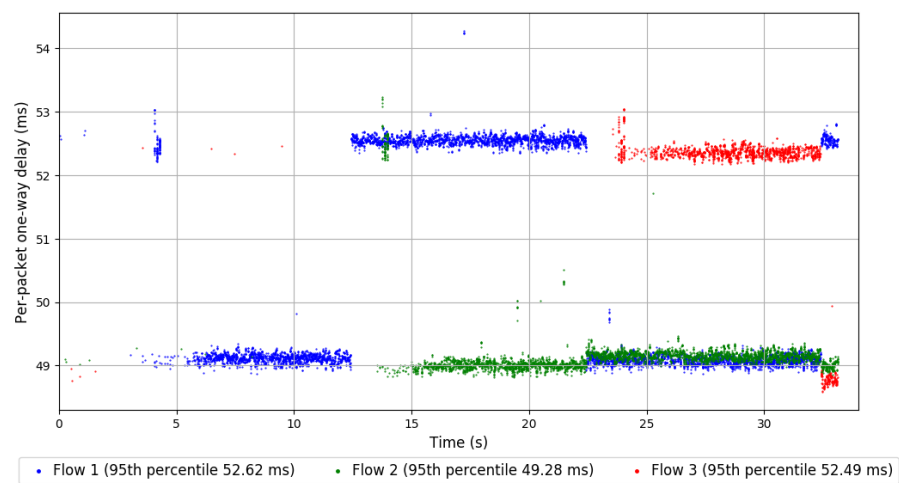
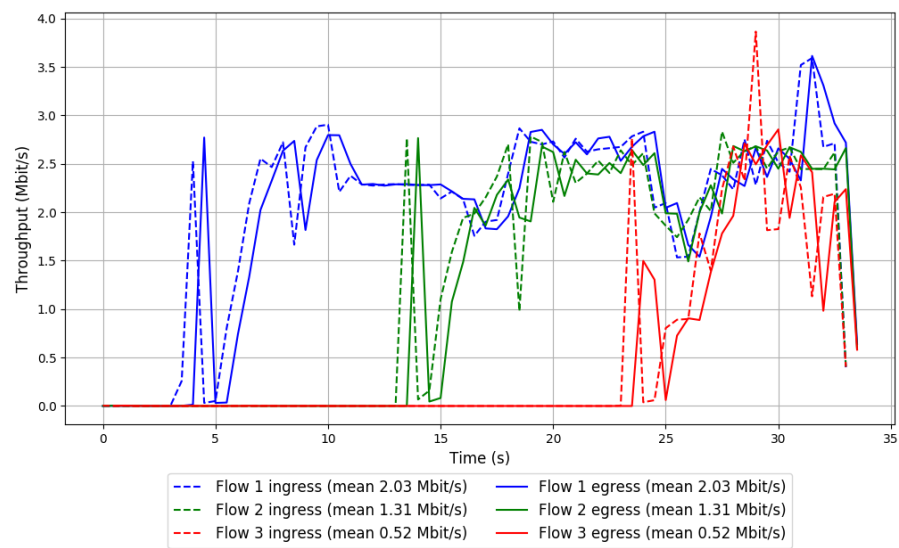


Run 8: Statistics of WebRTC media

Start at: 2018-06-20 13:11:51  
End at: 2018-06-20 13:12:21  
Local clock offset: -0.023 ms  
Remote clock offset: -1.398 ms

# Below is generated by plot.py at 2018-06-20 16:27:14  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.85 Mbit/s  
95th percentile per-packet one-way delay: 52.598 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 2.03 Mbit/s  
95th percentile per-packet one-way delay: 52.619 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.31 Mbit/s  
95th percentile per-packet one-way delay: 49.282 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.52 Mbit/s  
95th percentile per-packet one-way delay: 52.493 ms  
Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link

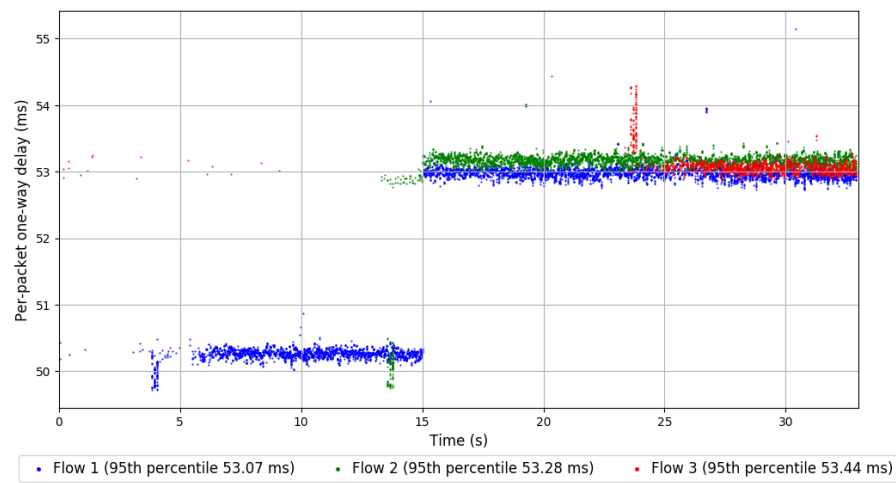
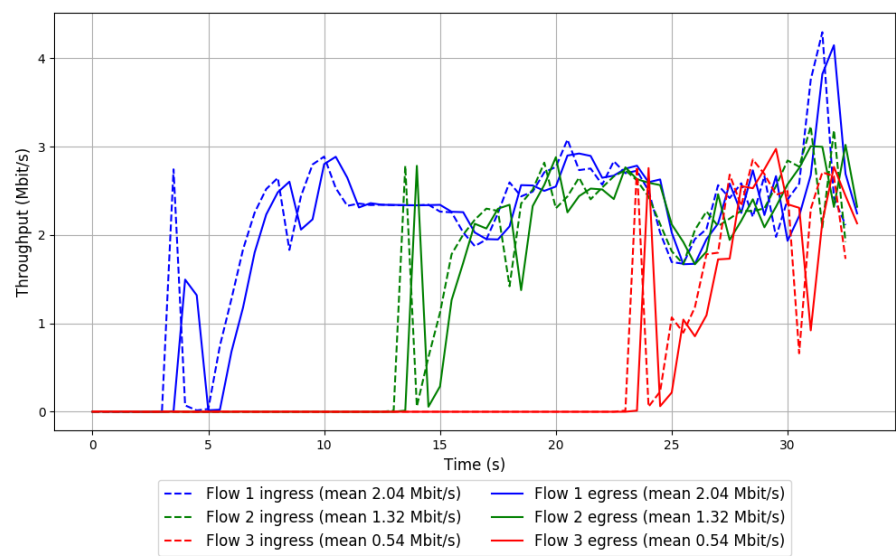


Run 9: Statistics of WebRTC media

Start at: 2018-06-20 13:34:38  
End at: 2018-06-20 13:35:08  
Local clock offset: 0.168 ms  
Remote clock offset: -0.125 ms

# Below is generated by plot.py at 2018-06-20 16:27:14  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.90 Mbit/s  
95th percentile per-packet one-way delay: 53.248 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 2.04 Mbit/s  
95th percentile per-packet one-way delay: 53.070 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.32 Mbit/s  
95th percentile per-packet one-way delay: 53.280 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.54 Mbit/s  
95th percentile per-packet one-way delay: 53.444 ms  
Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-06-20 13:57:42

End at: 2018-06-20 13:58:12

Local clock offset: 0.103 ms

Remote clock offset: 1.392 ms

# Below is generated by plot.py at 2018-06-20 16:27:14

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.00 Mbit/s

95th percentile per-packet one-way delay: 54.999 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 2.10 Mbit/s

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

Loss rate: 0.08%

-- Flow 2:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 55.030 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 55.087 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

