

## Pantheon Report

Generated at 2018-06-05 15:25:45 (UTC).

Data path: AWS Korea Ethernet (*local*) → China 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.

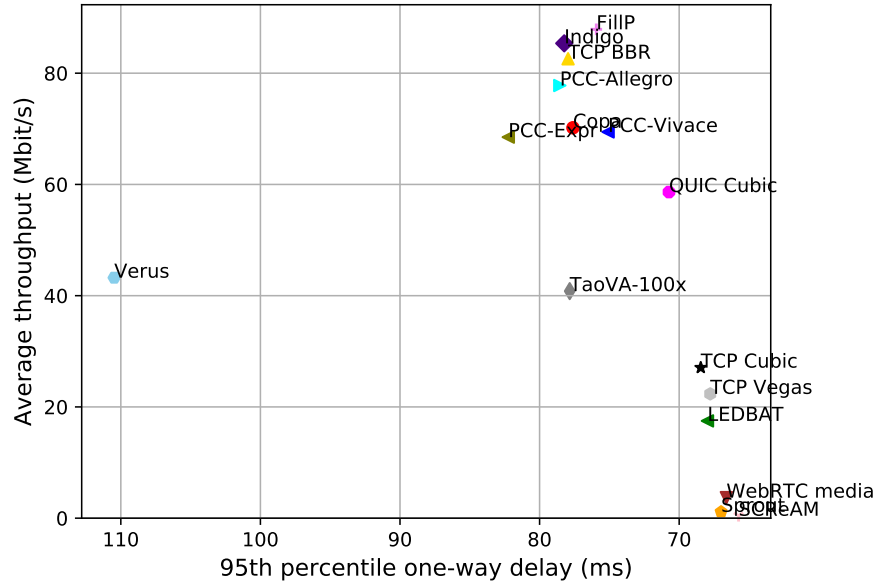
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

NTP offsets were measured against `ntp.nict.jp` and have been applied to correct the timestamps in logs.

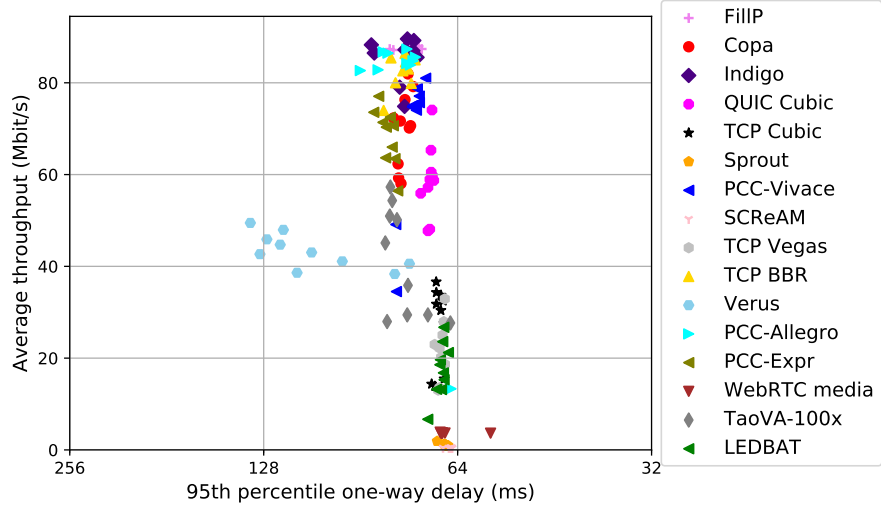
Git summary:

```
branch: master @ 227fdf9a3757f17b88537cceed5743a33037a3d2
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/genericCC @ c7966e494a929986eaa5a9c169a7f381fe1bbbe5
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quirk @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ c838669682f0c19f6baf92afc9a596a406d48c1f
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webRTC @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

test from AWS Korea to China, 10 runs of 30s each per scheme  
 3 flows with 10s interval between flows (mean of all runs by scheme)



test from AWS Korea to China, 10 runs of 30s each per scheme  
 3 flows with 10s interval between flows



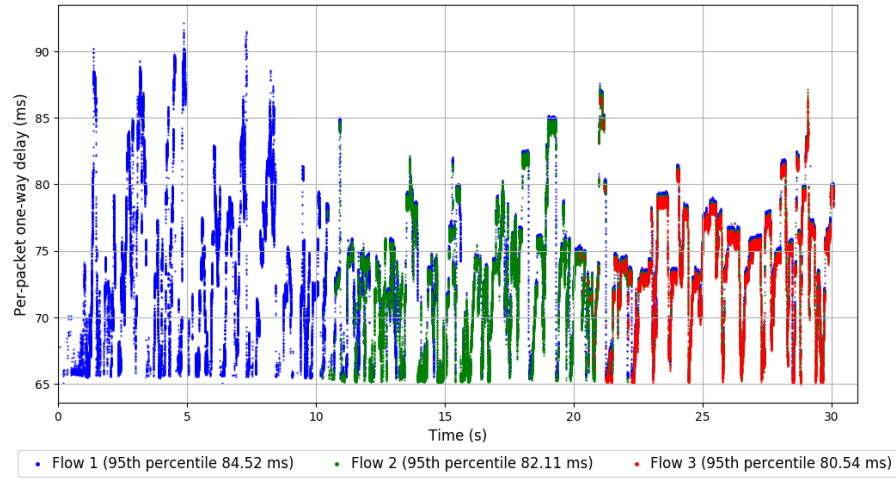
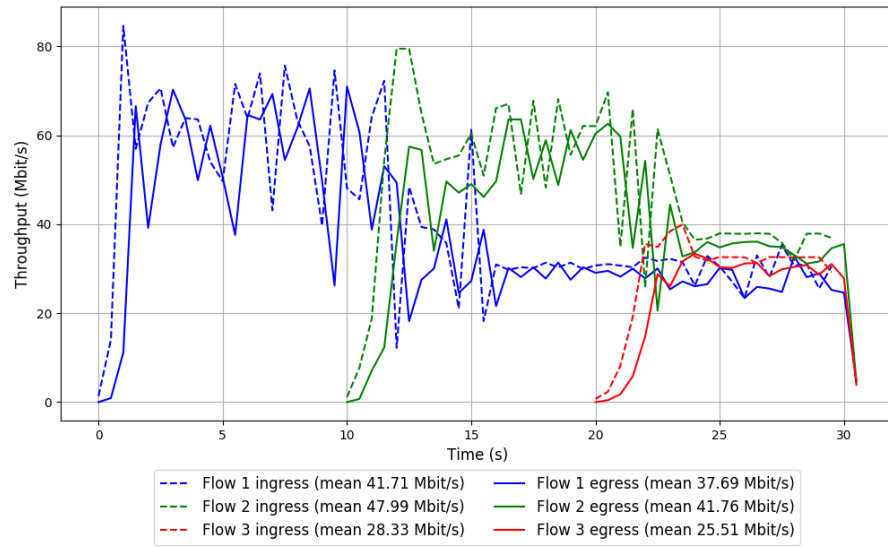
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	50.06	38.28	21.16	77.47	78.28	78.14	10.07	12.65	12.68
Copa	10	56.04	16.00	10.49	77.94	77.33	77.21	2.20	2.01	2.26
TCP Cubic	10	13.03	15.18	11.81	68.17	68.58	68.77	0.51	0.57	0.80
FillP	10	53.04	36.24	32.34	75.51	76.74	76.30	17.62	19.37	21.08
Indigo	10	52.35	34.87	30.81	77.61	78.63	79.17	28.90	43.51	63.48
LEDBAT	10	10.57	7.82	5.41	67.94	67.83	68.42	0.34	0.38	0.34
PCC-Allegro	10	67.08	11.81	8.65	78.54	78.80	77.47	1.89	2.31	2.45
PCC-Expr	10	55.50	13.24	12.78	82.17	82.17	82.20	2.05	2.90	3.26
QUIC Cubic	10	36.44	23.20	20.79	70.51	70.29	71.02	1.01	0.42	0.49
SCReAM	10	0.22	0.22	0.21	65.68	65.71	65.76	0.02	0.00	0.04
Sprout	10	0.49	0.56	0.86	66.77	66.82	67.13	0.00	0.00	0.07
TaoVA-100x	10	17.20	29.93	11.09	74.62	77.77	77.71	4.61	5.24	10.36
TCP Vegas	10	11.52	11.08	10.40	67.63	67.87	68.11	0.43	0.55	0.84
Verus	10	31.19	15.97	6.97	107.25	95.66	88.25	78.54	63.42	57.57
PCC-Vivace	10	54.94	16.84	9.99	74.82	75.23	75.96	0.62	0.74	0.98
WebRTC media	10	1.97	1.27	0.47	66.69	66.50	66.83	0.02	0.00	0.02

Run 1: Statistics of TCP BBR

Start at: 2018-06-05 11:40:50  
End at: 2018-06-05 11:41:20  
Local clock offset: 7.644 ms  
Remote clock offset: -5.512 ms

# Below is generated by plot.py at 2018-06-05 15:09:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 73.98 Mbit/s  
95th percentile per-packet one-way delay: 83.377 ms  
Loss rate: 10.93%  
-- Flow 1:  
Average throughput: 37.69 Mbit/s  
95th percentile per-packet one-way delay: 84.524 ms  
Loss rate: 9.60%  
-- Flow 2:  
Average throughput: 41.76 Mbit/s  
95th percentile per-packet one-way delay: 82.111 ms  
Loss rate: 12.97%  
-- Flow 3:  
Average throughput: 25.51 Mbit/s  
95th percentile per-packet one-way delay: 80.541 ms  
Loss rate: 9.92%

# Run 1: Report of TCP BBR — Data Link

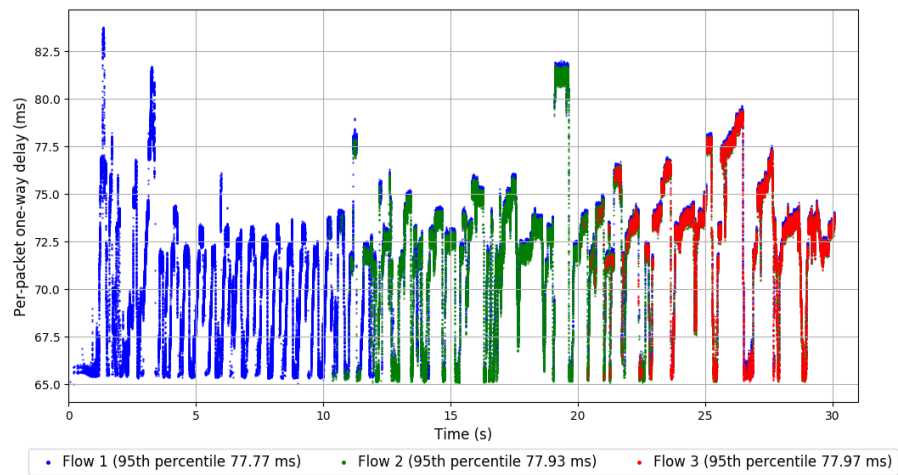
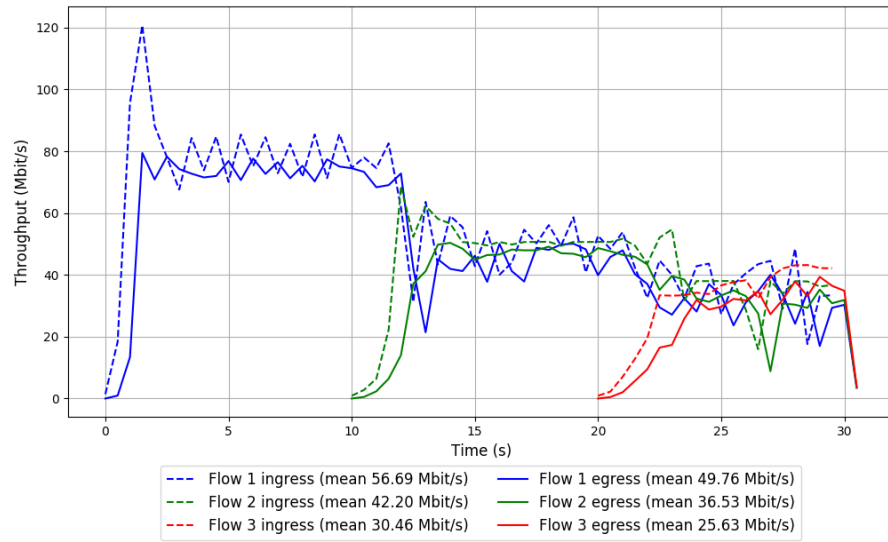


Run 2: Statistics of TCP BBR

Start at: 2018-06-05 12:03:56  
End at: 2018-06-05 12:04:26  
Local clock offset: 7.605 ms  
Remote clock offset: -4.486 ms

# Below is generated by plot.py at 2018-06-05 15:09:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 82.61 Mbit/s  
95th percentile per-packet one-way delay: 77.841 ms  
Loss rate: 12.95%  
-- Flow 1:  
Average throughput: 49.76 Mbit/s  
95th percentile per-packet one-way delay: 77.772 ms  
Loss rate: 12.19%  
-- Flow 2:  
Average throughput: 36.53 Mbit/s  
95th percentile per-packet one-way delay: 77.933 ms  
Loss rate: 13.43%  
-- Flow 3:  
Average throughput: 25.63 Mbit/s  
95th percentile per-packet one-way delay: 77.973 ms  
Loss rate: 15.85%

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

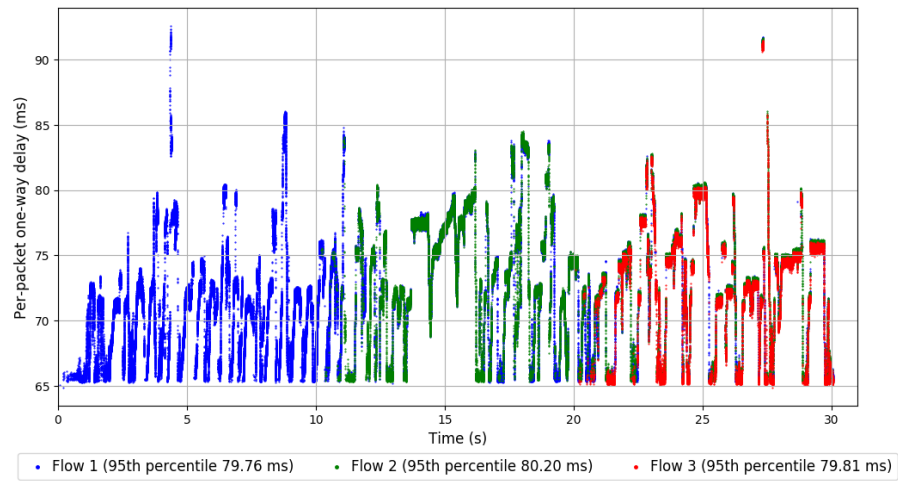
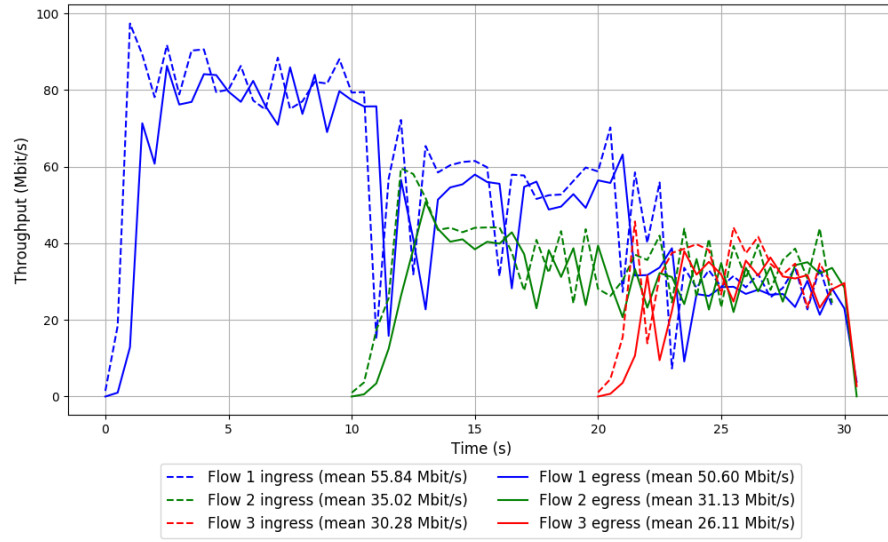


Run 3: Statistics of TCP BBR

Start at: 2018-06-05 12:26:05  
End at: 2018-06-05 12:26:35  
Local clock offset: 5.729 ms  
Remote clock offset: -5.275 ms

# Below is generated by plot.py at 2018-06-05 15:09:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 80.01 Mbit/s  
95th percentile per-packet one-way delay: 79.912 ms  
Loss rate: 10.33%  
-- Flow 1:  
Average throughput: 50.60 Mbit/s  
95th percentile per-packet one-way delay: 79.756 ms  
Loss rate: 9.37%  
-- Flow 2:  
Average throughput: 31.13 Mbit/s  
95th percentile per-packet one-way delay: 80.196 ms  
Loss rate: 11.12%  
-- Flow 3:  
Average throughput: 26.11 Mbit/s  
95th percentile per-packet one-way delay: 79.808 ms  
Loss rate: 13.83%

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

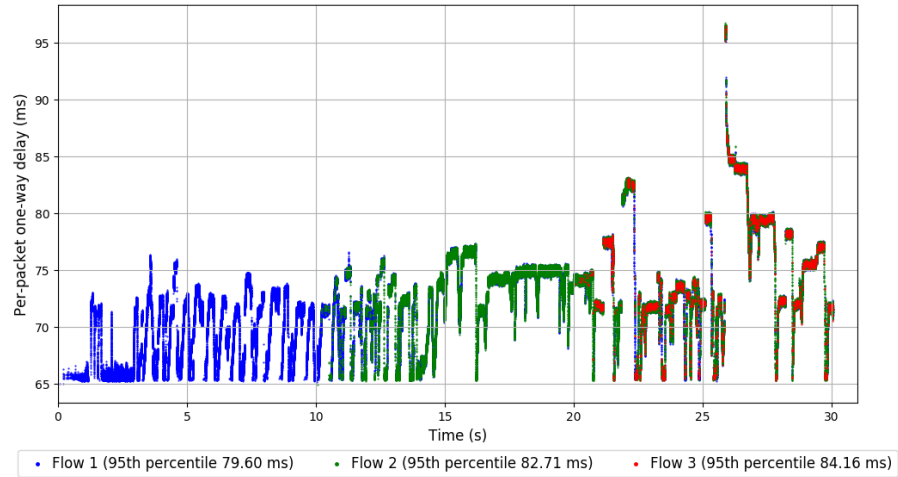
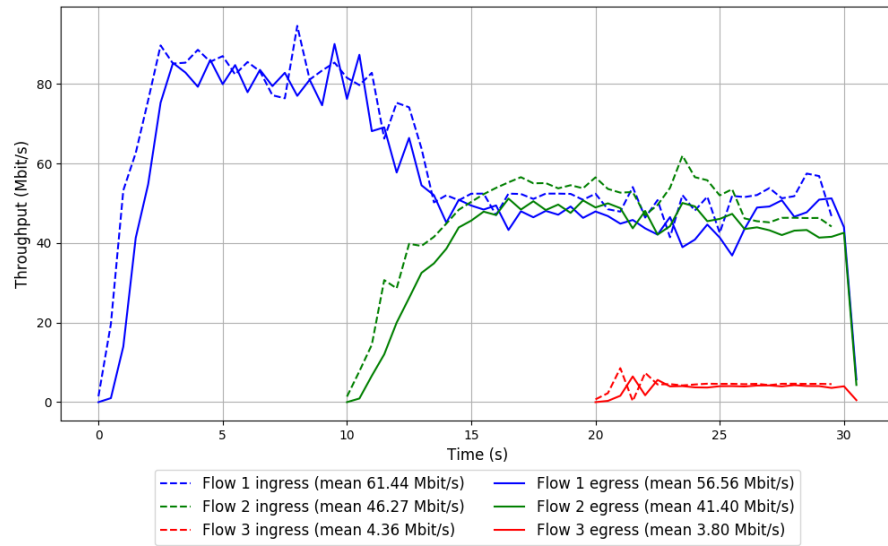


Run 4: Statistics of TCP BBR

Start at: 2018-06-05 12:48:34  
End at: 2018-06-05 12:49:04  
Local clock offset: 5.373 ms  
Remote clock offset: -5.601 ms

# Below is generated by plot.py at 2018-06-05 15:09:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 85.42 Mbit/s  
95th percentile per-packet one-way delay: 81.224 ms  
Loss rate: 8.83%  
-- Flow 1:  
Average throughput: 56.56 Mbit/s  
95th percentile per-packet one-way delay: 79.600 ms  
Loss rate: 7.91%  
-- Flow 2:  
Average throughput: 41.40 Mbit/s  
95th percentile per-packet one-way delay: 82.712 ms  
Loss rate: 10.48%  
-- Flow 3:  
Average throughput: 3.80 Mbit/s  
95th percentile per-packet one-way delay: 84.162 ms  
Loss rate: 12.78%

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

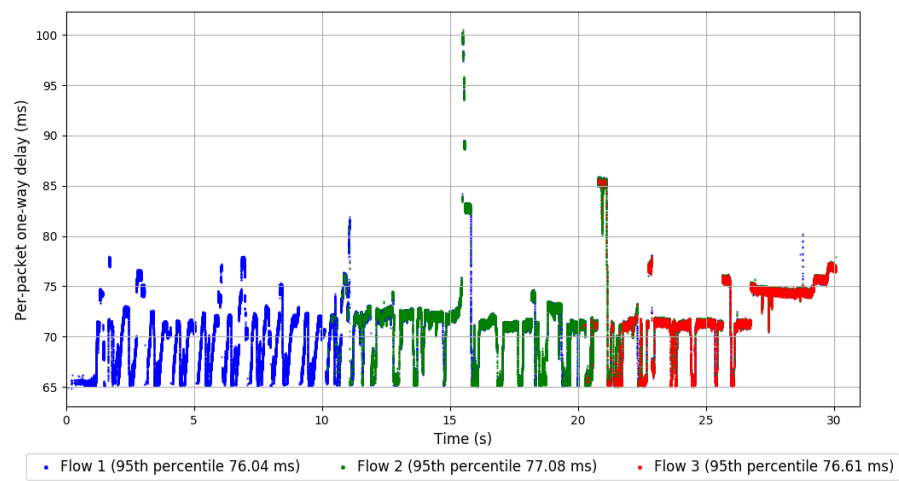
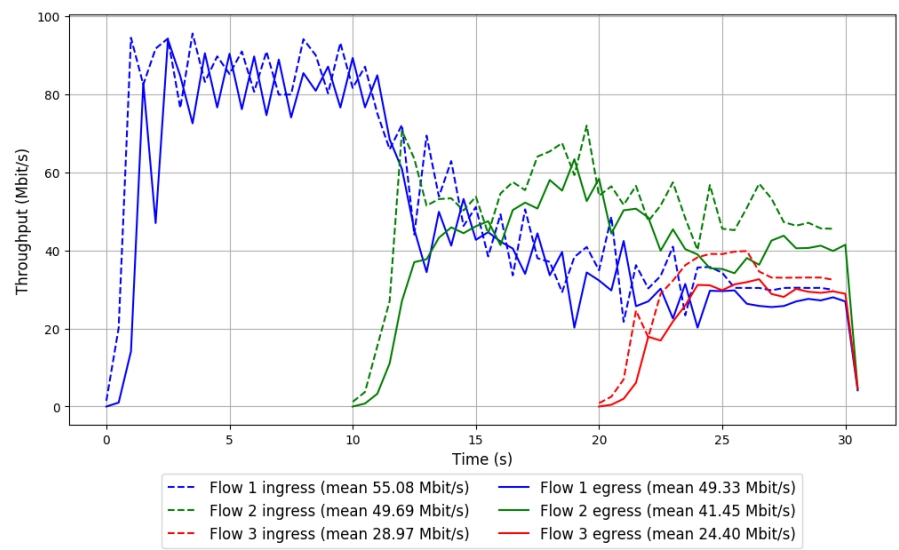


Run 5: Statistics of TCP BBR

Start at: 2018-06-05 13:10:47  
End at: 2018-06-05 13:11:17  
Local clock offset: 5.307 ms  
Remote clock offset: -5.665 ms

# Below is generated by plot.py at 2018-06-05 15:09:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 85.06 Mbit/s  
95th percentile per-packet one-way delay: 76.503 ms  
Loss rate: 13.01%  
-- Flow 1:  
Average throughput: 49.33 Mbit/s  
95th percentile per-packet one-way delay: 76.037 ms  
Loss rate: 10.42%  
-- Flow 2:  
Average throughput: 41.45 Mbit/s  
95th percentile per-packet one-way delay: 77.084 ms  
Loss rate: 16.55%  
-- Flow 3:  
Average throughput: 24.40 Mbit/s  
95th percentile per-packet one-way delay: 76.606 ms  
Loss rate: 15.71%

Run 5: Report of TCP BBR — Data Link

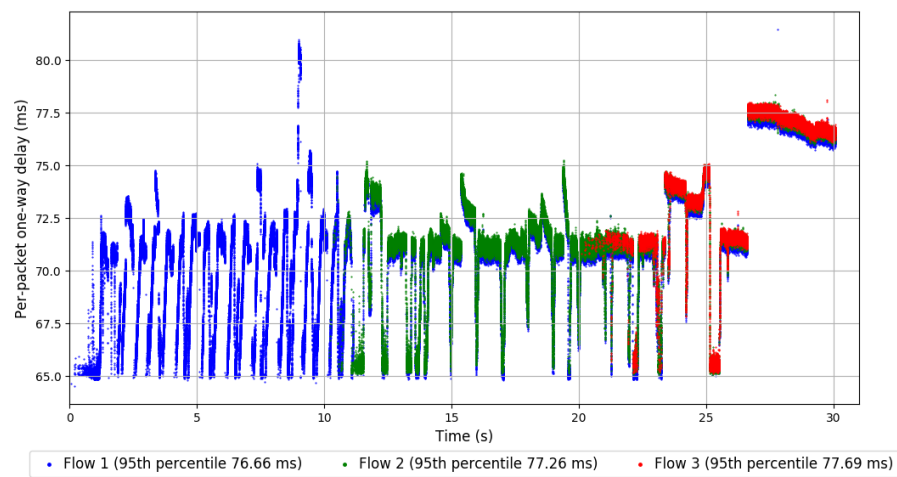
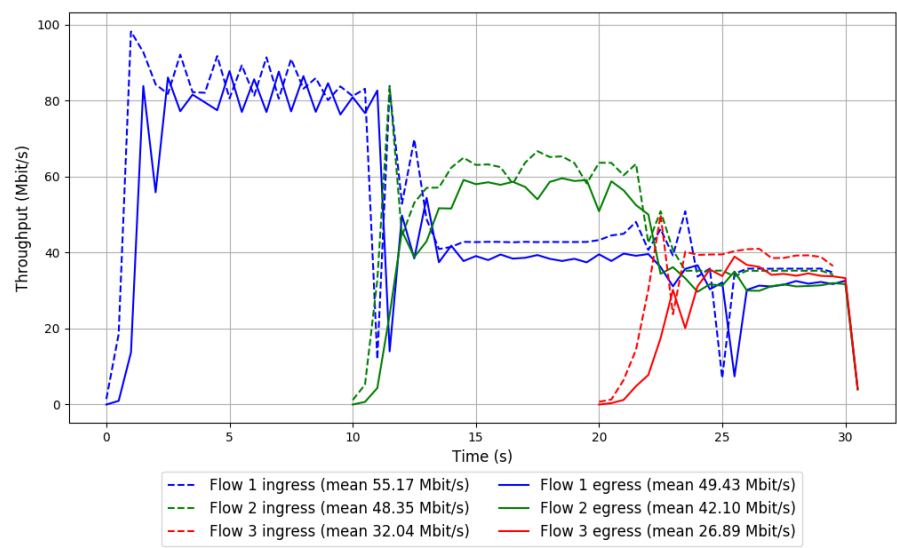


Run 6: Statistics of TCP BBR

Start at: 2018-06-05 13:32:50  
End at: 2018-06-05 13:33:20  
Local clock offset: 4.308 ms  
Remote clock offset: -5.678 ms

# Below is generated by plot.py at 2018-06-05 15:09:57  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 86.41 Mbit/s  
95th percentile per-packet one-way delay: 77.235 ms  
Loss rate: 11.82%  
-- Flow 1:  
Average throughput: 49.43 Mbit/s  
95th percentile per-packet one-way delay: 76.662 ms  
Loss rate: 10.37%  
-- Flow 2:  
Average throughput: 42.10 Mbit/s  
95th percentile per-packet one-way delay: 77.258 ms  
Loss rate: 12.90%  
-- Flow 3:  
Average throughput: 26.89 Mbit/s  
95th percentile per-packet one-way delay: 77.693 ms  
Loss rate: 16.02%

Run 6: Report of TCP BBR — Data Link

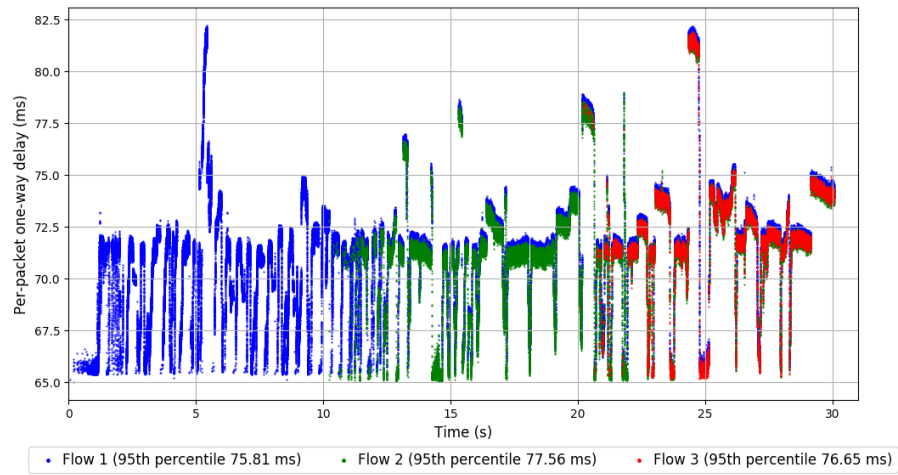
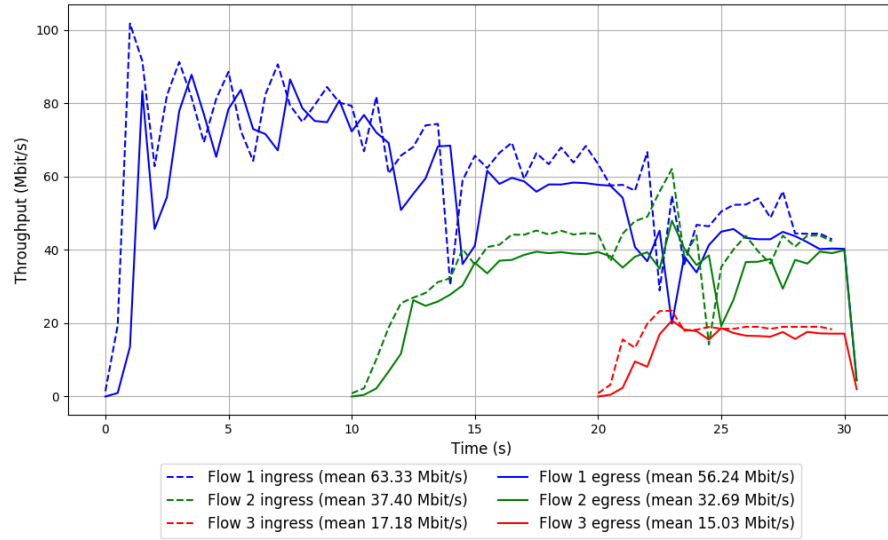


Run 7: Statistics of TCP BBR

Start at: 2018-06-05 13:55:36  
End at: 2018-06-05 13:56:06  
Local clock offset: 3.995 ms  
Remote clock offset: -5.842 ms

# Below is generated by plot.py at 2018-06-05 15:09:57  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 83.01 Mbit/s  
95th percentile per-packet one-way delay: 76.335 ms  
Loss rate: 11.62%  
-- Flow 1:  
Average throughput: 56.24 Mbit/s  
95th percentile per-packet one-way delay: 75.806 ms  
Loss rate: 11.17%  
-- Flow 2:  
Average throughput: 32.69 Mbit/s  
95th percentile per-packet one-way delay: 77.565 ms  
Loss rate: 12.58%  
-- Flow 3:  
Average throughput: 15.03 Mbit/s  
95th percentile per-packet one-way delay: 76.650 ms  
Loss rate: 12.47%

# Run 7: Report of TCP BBR — Data Link

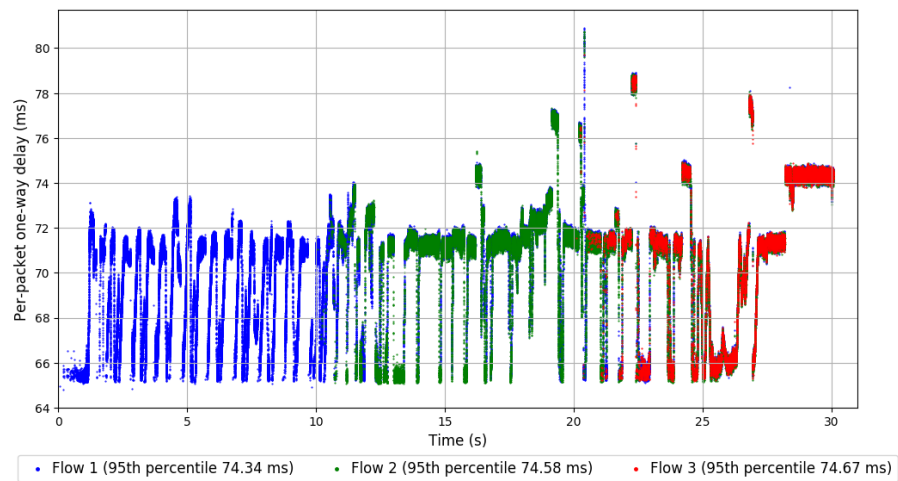
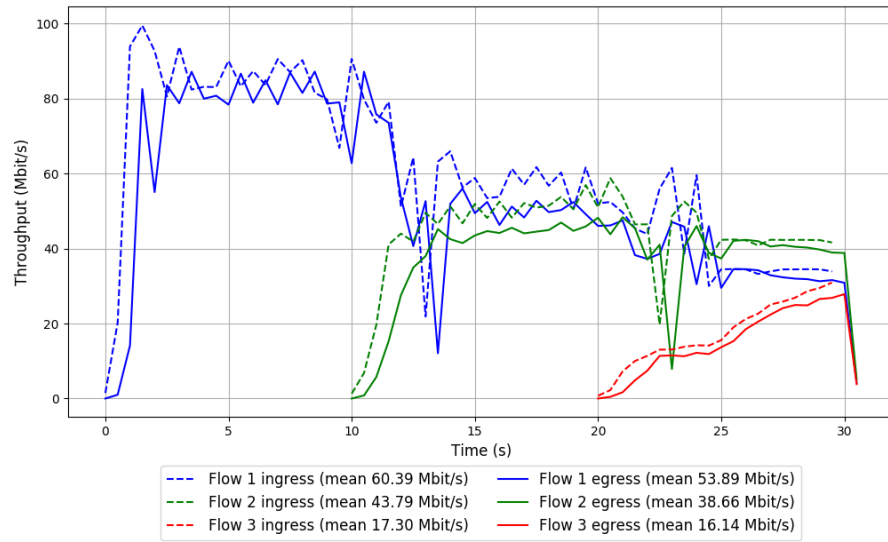


Run 8: Statistics of TCP BBR

Start at: 2018-06-05 14:17:29  
End at: 2018-06-05 14:17:59  
Local clock offset: 5.486 ms  
Remote clock offset: -1.438 ms

# Below is generated by plot.py at 2018-06-05 15:09:57  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 85.01 Mbit/s  
95th percentile per-packet one-way delay: 74.500 ms  
Loss rate: 10.79%  
-- Flow 1:  
Average throughput: 53.89 Mbit/s  
95th percentile per-packet one-way delay: 74.343 ms  
Loss rate: 10.74%  
-- Flow 2:  
Average throughput: 38.66 Mbit/s  
95th percentile per-packet one-way delay: 74.584 ms  
Loss rate: 11.69%  
-- Flow 3:  
Average throughput: 16.14 Mbit/s  
95th percentile per-packet one-way delay: 74.668 ms  
Loss rate: 6.72%

# Run 8: Report of TCP BBR — Data Link

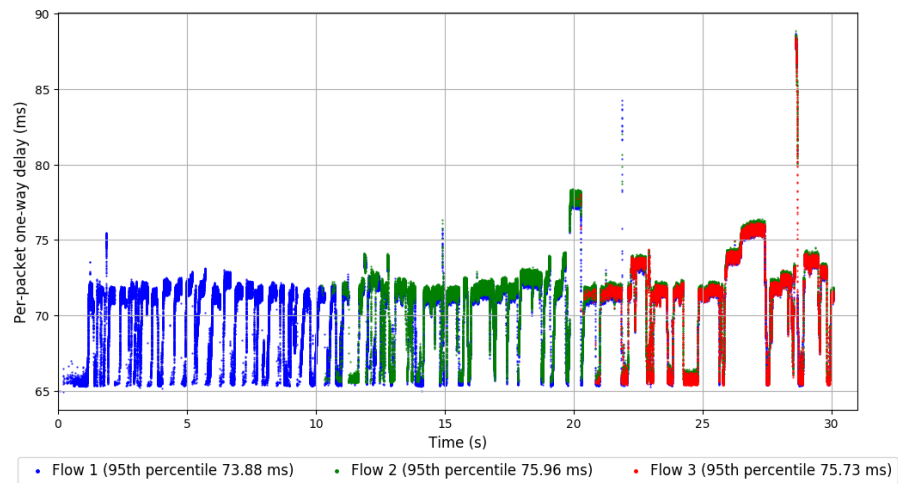
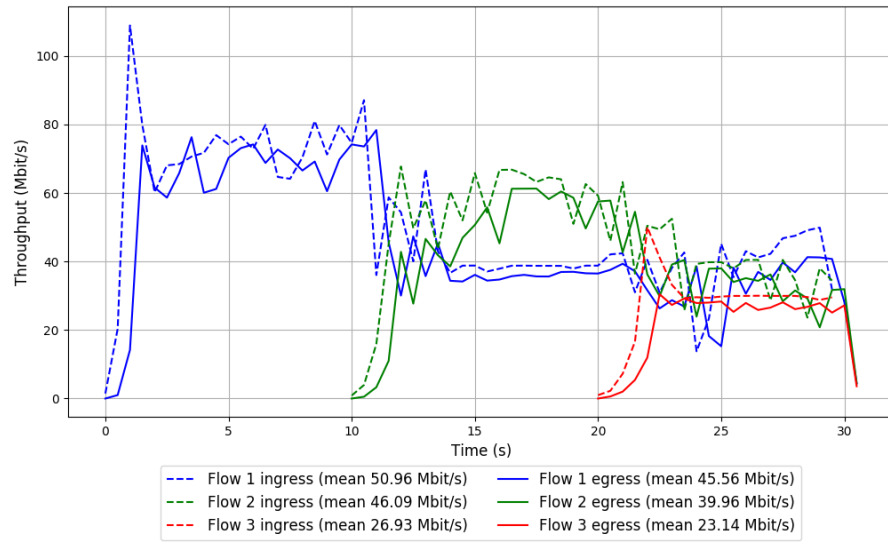


Run 9: Statistics of TCP BBR

Start at: 2018-06-05 14:39:27  
End at: 2018-06-05 14:39:58  
Local clock offset: 7.088 ms  
Remote clock offset: -3.433 ms

# Below is generated by plot.py at 2018-06-05 15:10:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 79.87 Mbit/s  
95th percentile per-packet one-way delay: 75.530 ms  
Loss rate: 11.84%  
-- Flow 1:  
Average throughput: 45.56 Mbit/s  
95th percentile per-packet one-way delay: 73.879 ms  
Loss rate: 10.57%  
-- Flow 2:  
Average throughput: 39.96 Mbit/s  
95th percentile per-packet one-way delay: 75.961 ms  
Loss rate: 13.28%  
-- Flow 3:  
Average throughput: 23.14 Mbit/s  
95th percentile per-packet one-way delay: 75.734 ms  
Loss rate: 14.12%

# Run 9: Report of TCP BBR — Data Link

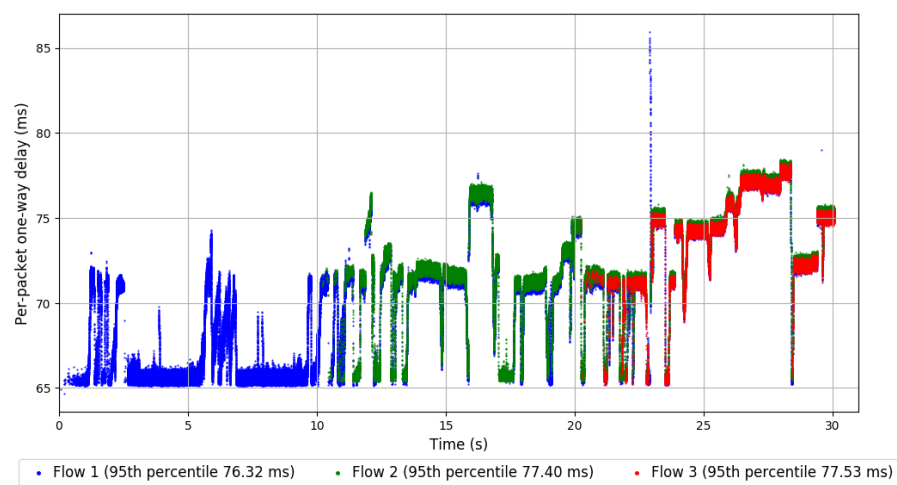
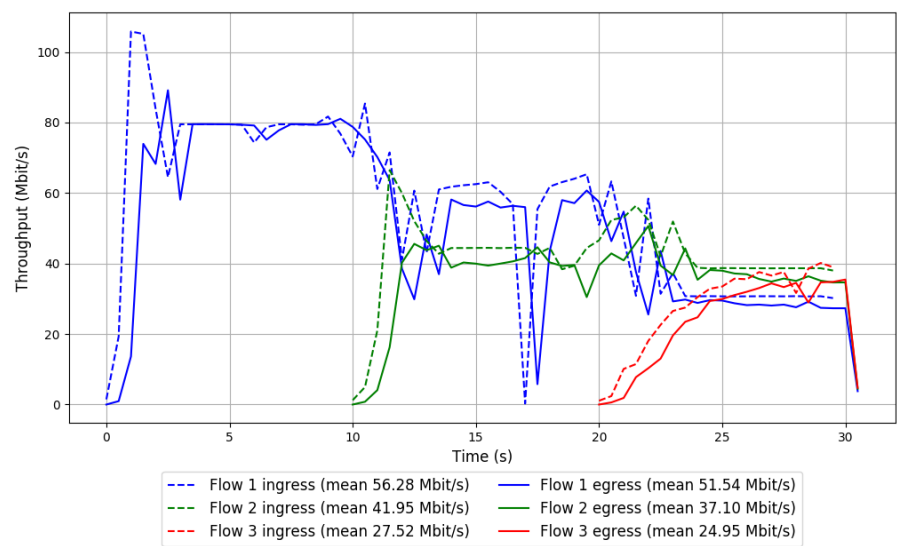


Run 10: Statistics of TCP BBR

Start at: 2018-06-05 15:01:33  
End at: 2018-06-05 15:02:03  
Local clock offset: 4.895 ms  
Remote clock offset: -5.474 ms

# Below is generated by plot.py at 2018-06-05 15:10:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 84.55 Mbit/s  
95th percentile per-packet one-way delay: 77.121 ms  
Loss rate: 9.42%  
-- Flow 1:  
Average throughput: 51.54 Mbit/s  
95th percentile per-packet one-way delay: 76.319 ms  
Loss rate: 8.39%  
-- Flow 2:  
Average throughput: 37.10 Mbit/s  
95th percentile per-packet one-way delay: 77.396 ms  
Loss rate: 11.53%  
-- Flow 3:  
Average throughput: 24.95 Mbit/s  
95th percentile per-packet one-way delay: 77.531 ms  
Loss rate: 9.35%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2018-06-05 11:29:43

End at: 2018-06-05 11:30:13

Local clock offset: 7.631 ms

Remote clock offset: -5.82 ms

# Below is generated by plot.py at 2018-06-05 15:11:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 59.25 Mbit/s

95th percentile per-packet one-way delay: 79.031 ms

Loss rate: 2.61%

-- Flow 1:

Average throughput: 38.20 Mbit/s

95th percentile per-packet one-way delay: 79.340 ms

Loss rate: 3.14%

-- Flow 2:

Average throughput: 22.97 Mbit/s

95th percentile per-packet one-way delay: 78.500 ms

Loss rate: 1.27%

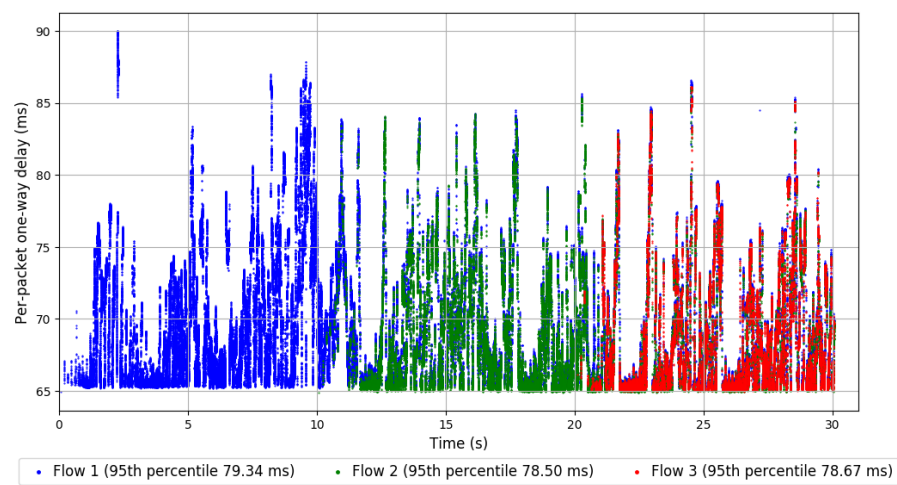
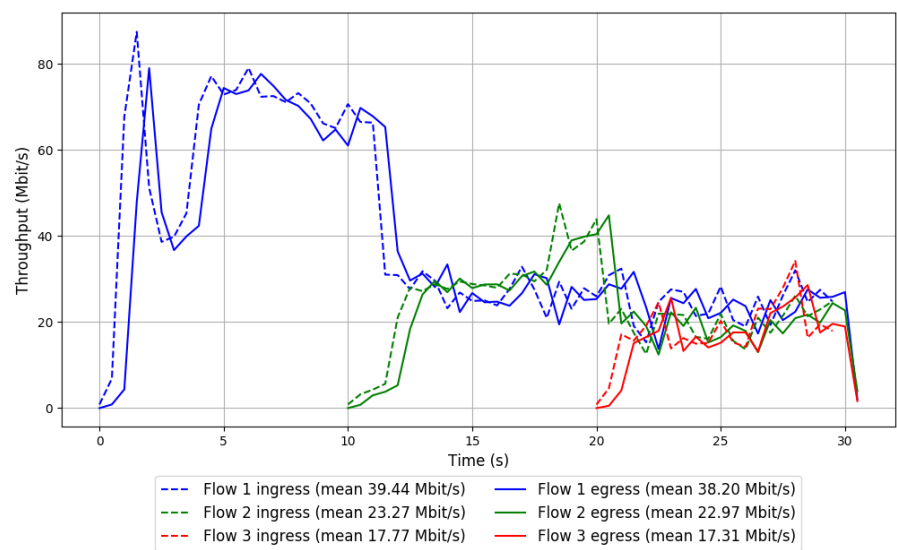
-- Flow 3:

Average throughput: 17.31 Mbit/s

95th percentile per-packet one-way delay: 78.667 ms

Loss rate: 2.56%

Run 1: Report of Copa — Data Link

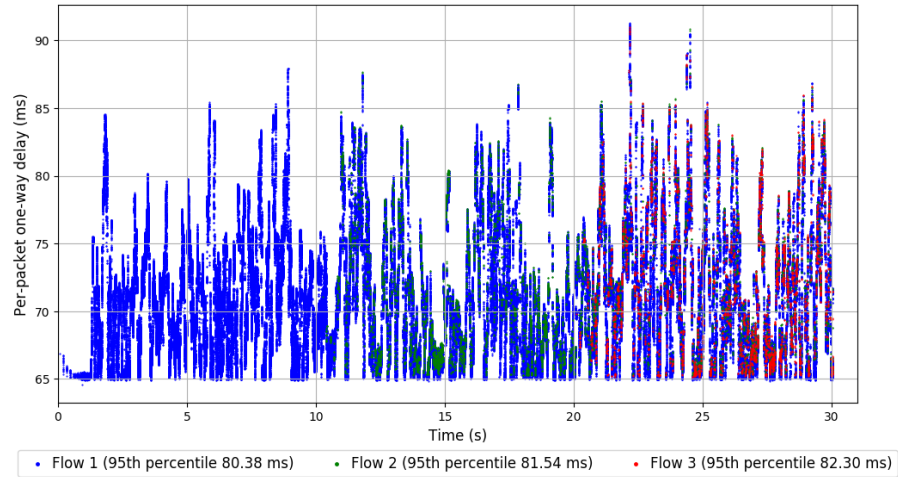
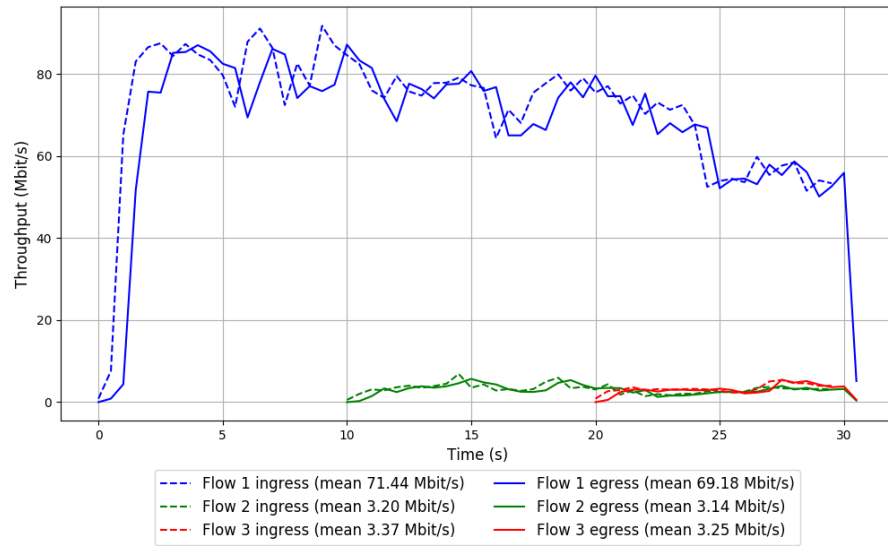


Run 2: Statistics of Copa

Start at: 2018-06-05 11:52:29  
End at: 2018-06-05 11:52:59  
Local clock offset: 7.801 ms  
Remote clock offset: -4.788 ms

# Below is generated by plot.py at 2018-06-05 15:11:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 72.33 Mbit/s  
95th percentile per-packet one-way delay: 80.481 ms  
Loss rate: 3.14%  
-- Flow 1:  
Average throughput: 69.18 Mbit/s  
95th percentile per-packet one-way delay: 80.376 ms  
Loss rate: 3.15%  
-- Flow 2:  
Average throughput: 3.14 Mbit/s  
95th percentile per-packet one-way delay: 81.539 ms  
Loss rate: 2.81%  
-- Flow 3:  
Average throughput: 3.25 Mbit/s  
95th percentile per-packet one-way delay: 82.299 ms  
Loss rate: 3.55%

## Run 2: Report of Copa — Data Link

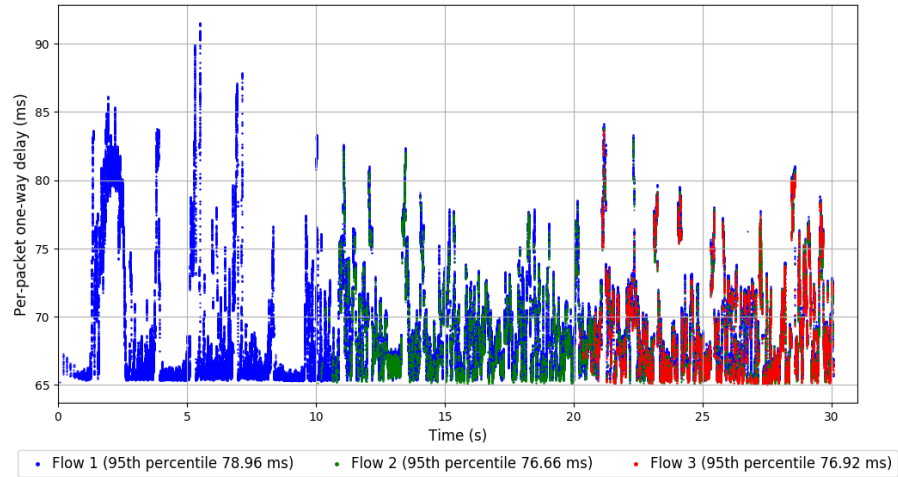
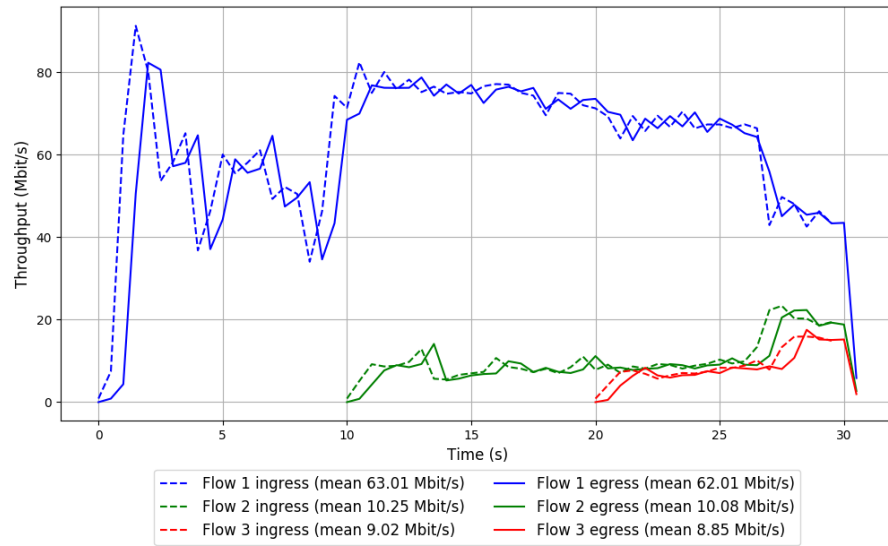


Run 3: Statistics of Copa

Start at: 2018-06-05 12:14:51  
End at: 2018-06-05 12:15:21  
Local clock offset: 6.673 ms  
Remote clock offset: -4.433 ms

# Below is generated by plot.py at 2018-06-05 15:11:32  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 71.67 Mbit/s  
95th percentile per-packet one-way delay: 78.548 ms  
Loss rate: 1.59%  
-- Flow 1:  
Average throughput: 62.01 Mbit/s  
95th percentile per-packet one-way delay: 78.964 ms  
Loss rate: 1.58%  
-- Flow 2:  
Average throughput: 10.08 Mbit/s  
95th percentile per-packet one-way delay: 76.661 ms  
Loss rate: 1.64%  
-- Flow 3:  
Average throughput: 8.85 Mbit/s  
95th percentile per-packet one-way delay: 76.921 ms  
Loss rate: 1.89%

### Run 3: Report of Copa — Data Link

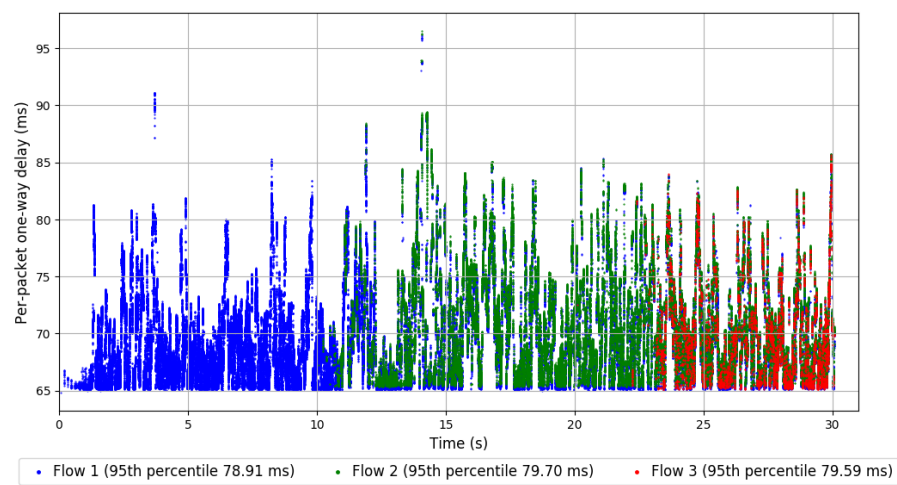
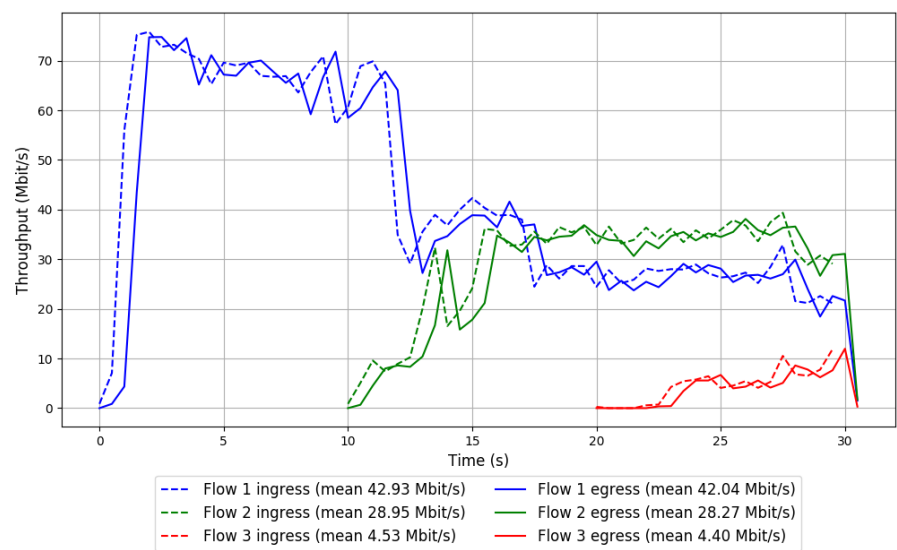


Run 4: Statistics of Copa

Start at: 2018-06-05 12:37:14  
End at: 2018-06-05 12:37:44  
Local clock offset: 5.251 ms  
Remote clock offset: -5.626 ms

# Below is generated by plot.py at 2018-06-05 15:11:32  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 62.34 Mbit/s  
95th percentile per-packet one-way delay: 79.188 ms  
Loss rate: 2.17%  
-- Flow 1:  
Average throughput: 42.04 Mbit/s  
95th percentile per-packet one-way delay: 78.913 ms  
Loss rate: 2.05%  
-- Flow 2:  
Average throughput: 28.27 Mbit/s  
95th percentile per-packet one-way delay: 79.696 ms  
Loss rate: 2.35%  
-- Flow 3:  
Average throughput: 4.40 Mbit/s  
95th percentile per-packet one-way delay: 79.595 ms  
Loss rate: 3.01%

Run 4: Report of Copa — Data Link

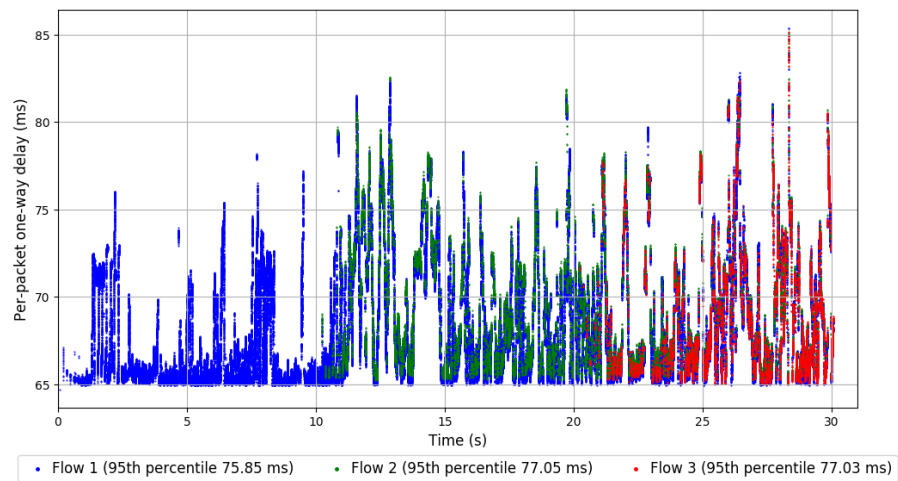
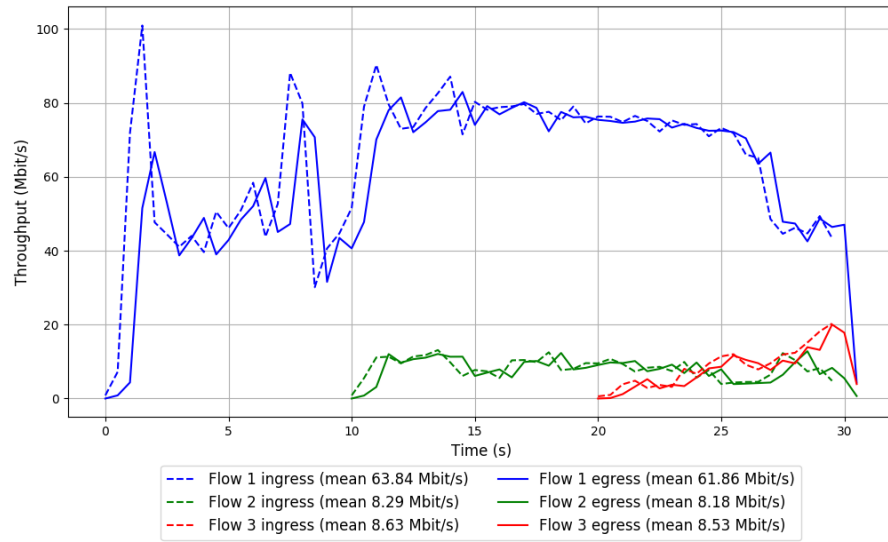


Run 5: Statistics of Copa

Start at: 2018-06-05 12:59:38  
End at: 2018-06-05 13:00:08  
Local clock offset: 5.471 ms  
Remote clock offset: -5.523 ms

```
# Below is generated by plot.py at 2018-06-05 15:11:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.15 Mbit/s
95th percentile per-packet one-way delay: 76.062 ms
Loss rate: 2.87%
-- Flow 1:
Average throughput: 61.86 Mbit/s
95th percentile per-packet one-way delay: 75.852 ms
Loss rate: 3.08%
-- Flow 2:
Average throughput: 8.18 Mbit/s
95th percentile per-packet one-way delay: 77.052 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 8.53 Mbit/s
95th percentile per-packet one-way delay: 77.033 ms
Loss rate: 1.18%
```

## Run 5: Report of Copa — Data Link

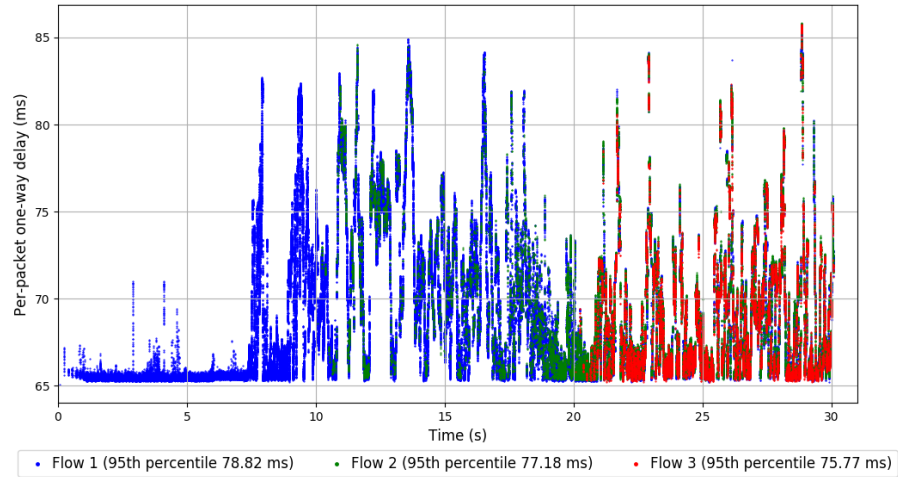
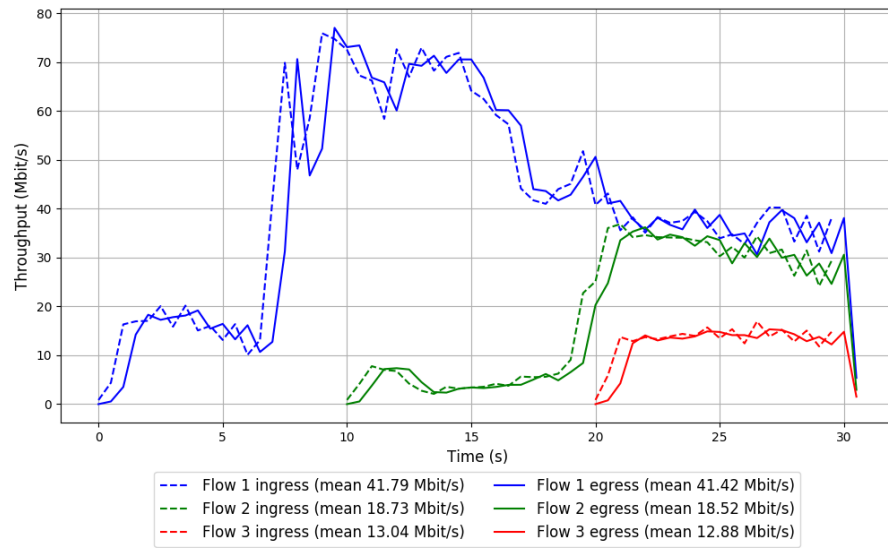


Run 6: Statistics of Copa

Start at: 2018-06-05 13:21:45  
End at: 2018-06-05 13:22:15  
Local clock offset: 4.416 ms  
Remote clock offset: -5.876 ms

# Below is generated by plot.py at 2018-06-05 15:11:32  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 58.05 Mbit/s  
95th percentile per-packet one-way delay: 78.361 ms  
Loss rate: 0.93%  
-- Flow 1:  
Average throughput: 41.42 Mbit/s  
95th percentile per-packet one-way delay: 78.820 ms  
Loss rate: 0.85%  
-- Flow 2:  
Average throughput: 18.52 Mbit/s  
95th percentile per-packet one-way delay: 77.176 ms  
Loss rate: 1.10%  
-- Flow 3:  
Average throughput: 12.88 Mbit/s  
95th percentile per-packet one-way delay: 75.773 ms  
Loss rate: 1.21%

## Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-06-05 13:44:27

End at: 2018-06-05 13:44:57

Local clock offset: 4.078 ms

Remote clock offset: -5.92 ms

# Below is generated by plot.py at 2018-06-05 15:12:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 70.64 Mbit/s

95th percentile per-packet one-way delay: 75.726 ms

Loss rate: 3.58%

-- Flow 1:

Average throughput: 43.96 Mbit/s

95th percentile per-packet one-way delay: 78.658 ms

Loss rate: 3.65%

-- Flow 2:

Average throughput: 25.08 Mbit/s

95th percentile per-packet one-way delay: 72.662 ms

Loss rate: 3.89%

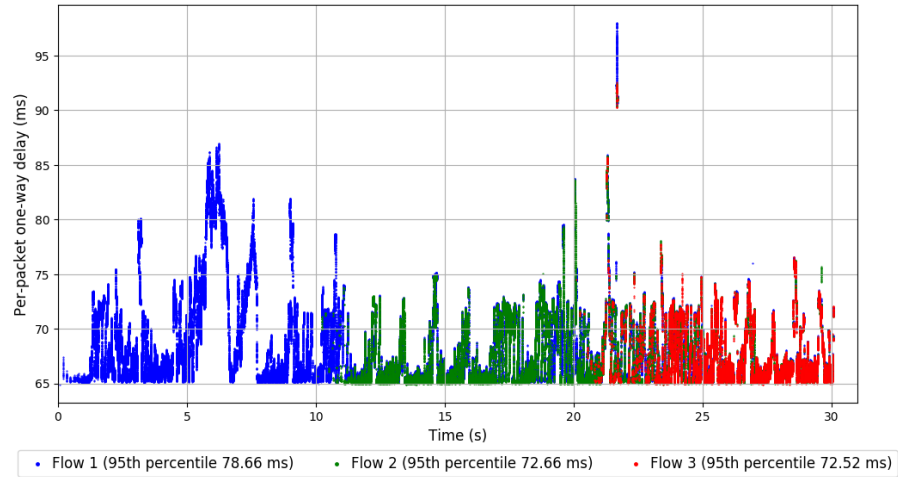
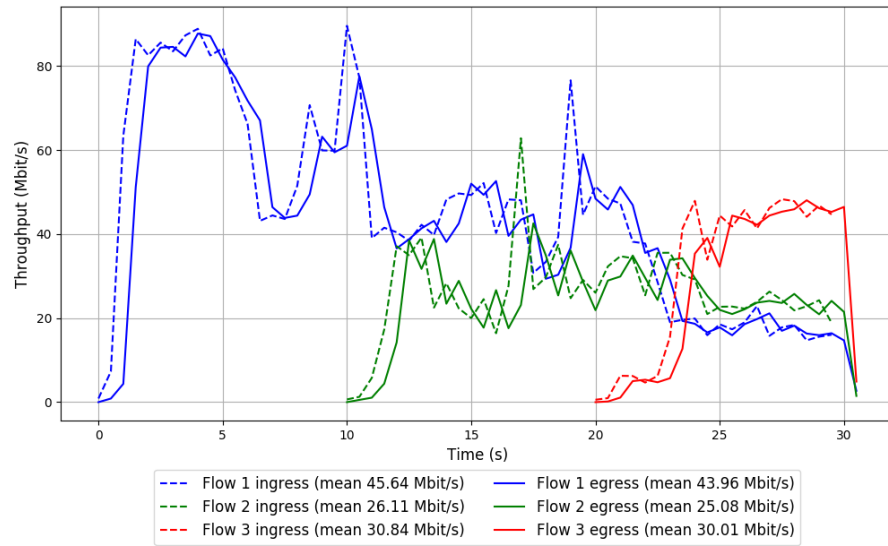
-- Flow 3:

Average throughput: 30.01 Mbit/s

95th percentile per-packet one-way delay: 72.520 ms

Loss rate: 2.72%

## Run 7: Report of Copa — Data Link

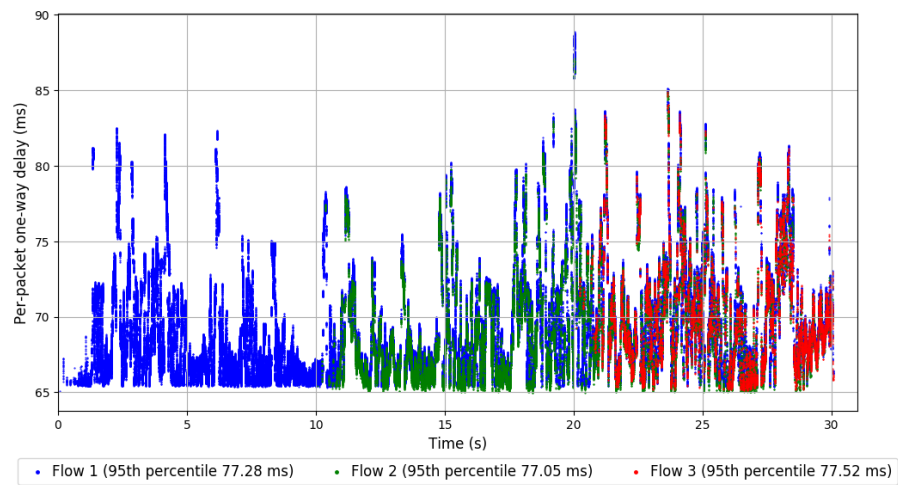
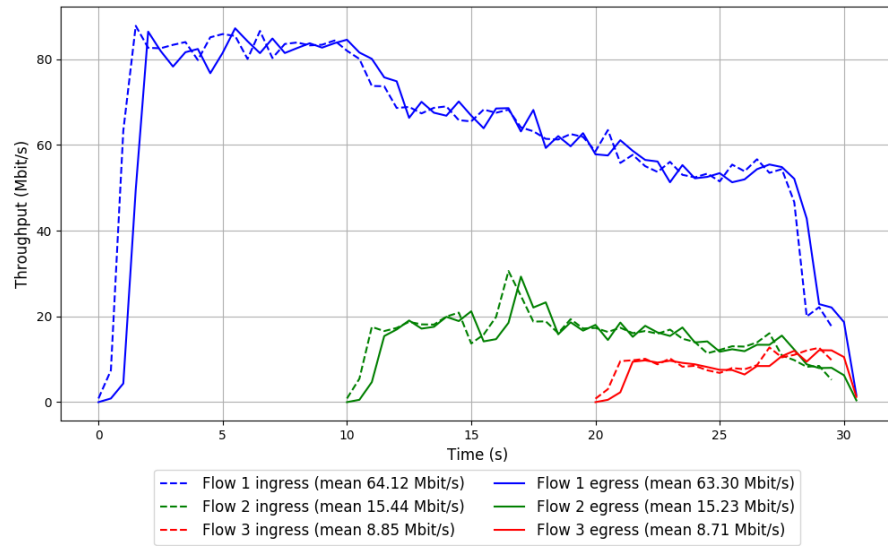


Run 8: Statistics of Copa

Start at: 2018-06-05 14:06:29  
End at: 2018-06-05 14:06:59  
Local clock offset: 3.842 ms  
Remote clock offset: -3.028 ms

# Below is generated by plot.py at 2018-06-05 15:12:48  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 76.33 Mbit/s  
95th percentile per-packet one-way delay: 77.261 ms  
Loss rate: 1.30%  
-- Flow 1:  
Average throughput: 63.30 Mbit/s  
95th percentile per-packet one-way delay: 77.276 ms  
Loss rate: 1.28%  
-- Flow 2:  
Average throughput: 15.23 Mbit/s  
95th percentile per-packet one-way delay: 77.051 ms  
Loss rate: 1.35%  
-- Flow 3:  
Average throughput: 8.71 Mbit/s  
95th percentile per-packet one-way delay: 77.519 ms  
Loss rate: 1.60%

## Run 8: Report of Copa — Data Link

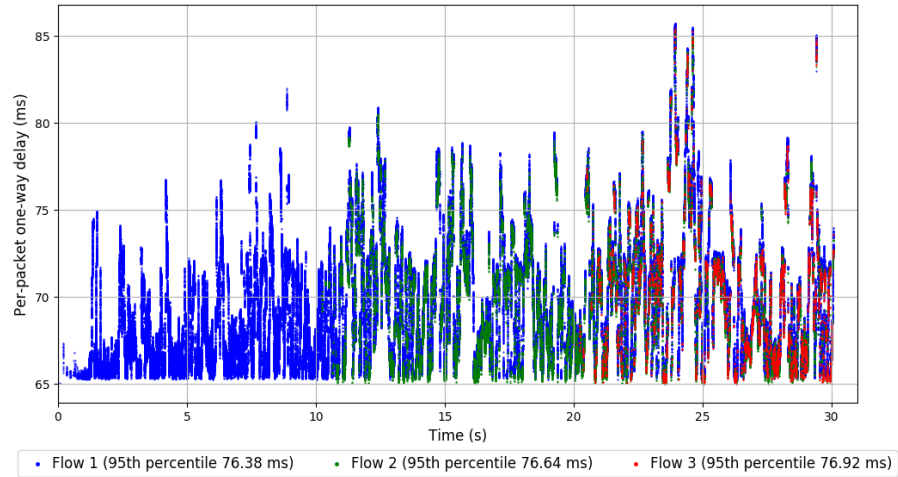
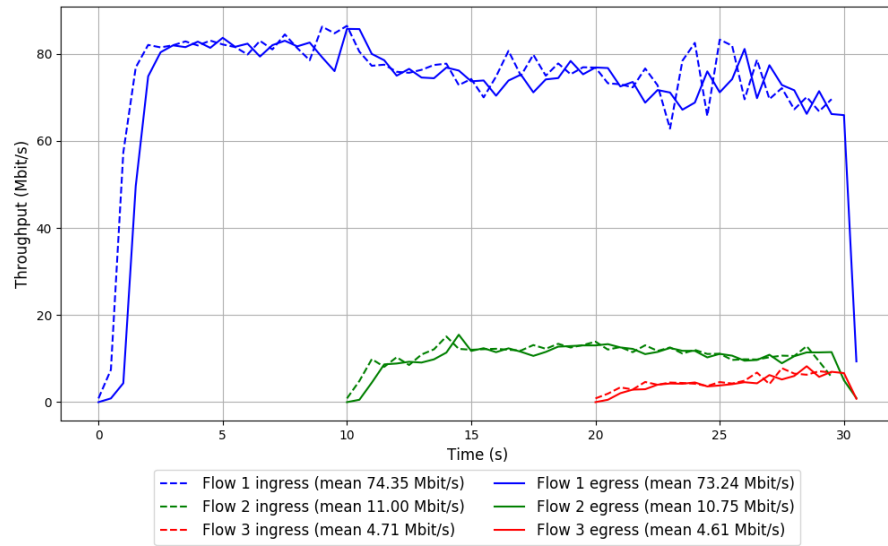


Run 9: Statistics of Copa

Start at: 2018-06-05 14:28:22  
End at: 2018-06-05 14:28:52  
Local clock offset: 6.591 ms  
Remote clock offset: -0.719 ms

# Below is generated by plot.py at 2018-06-05 15:13:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 81.93 Mbit/s  
95th percentile per-packet one-way delay: 76.413 ms  
Loss rate: 1.54%  
-- Flow 1:  
Average throughput: 73.24 Mbit/s  
95th percentile per-packet one-way delay: 76.384 ms  
Loss rate: 1.46%  
-- Flow 2:  
Average throughput: 10.75 Mbit/s  
95th percentile per-packet one-way delay: 76.636 ms  
Loss rate: 2.22%  
-- Flow 3:  
Average throughput: 4.61 Mbit/s  
95th percentile per-packet one-way delay: 76.922 ms  
Loss rate: 2.15%

### Run 9: Report of Copa — Data Link

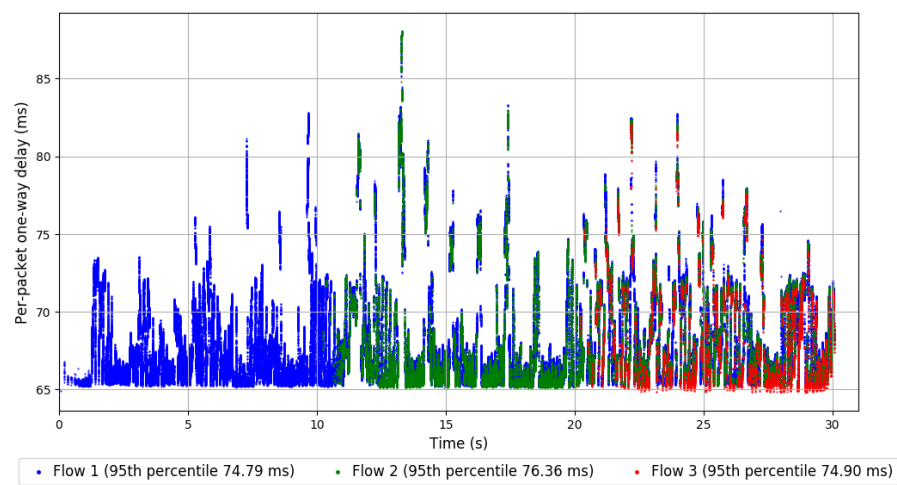
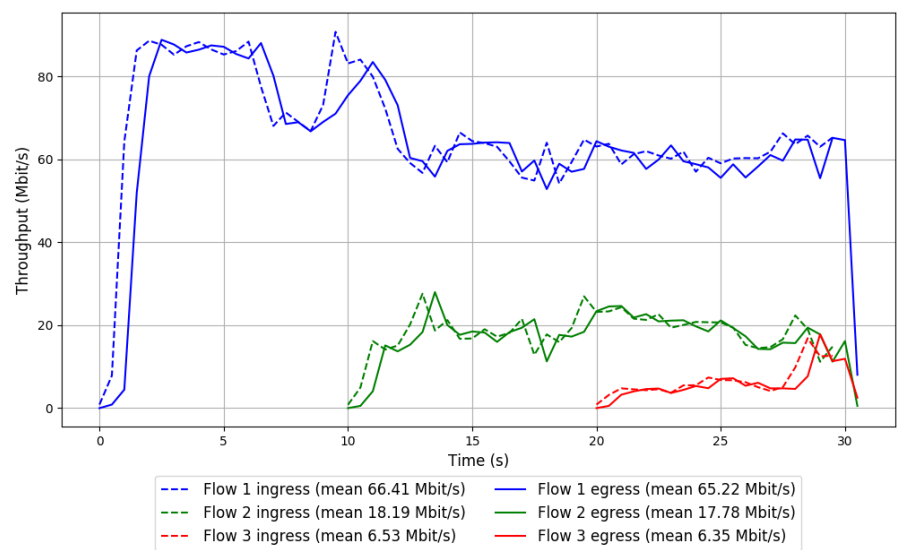


Run 10: Statistics of Copa

Start at: 2018-06-05 14:50:24  
End at: 2018-06-05 14:50:54  
Local clock offset: 5.537 ms  
Remote clock offset: -5.081 ms

# Below is generated by plot.py at 2018-06-05 15:13:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 79.18 Mbit/s  
95th percentile per-packet one-way delay: 75.024 ms  
Loss rate: 1.87%  
-- Flow 1:  
Average throughput: 65.22 Mbit/s  
95th percentile per-packet one-way delay: 74.793 ms  
Loss rate: 1.77%  
-- Flow 2:  
Average throughput: 17.78 Mbit/s  
95th percentile per-packet one-way delay: 76.360 ms  
Loss rate: 2.26%  
-- Flow 3:  
Average throughput: 6.35 Mbit/s  
95th percentile per-packet one-way delay: 74.897 ms  
Loss rate: 2.76%

Run 10: Report of Copa — Data Link

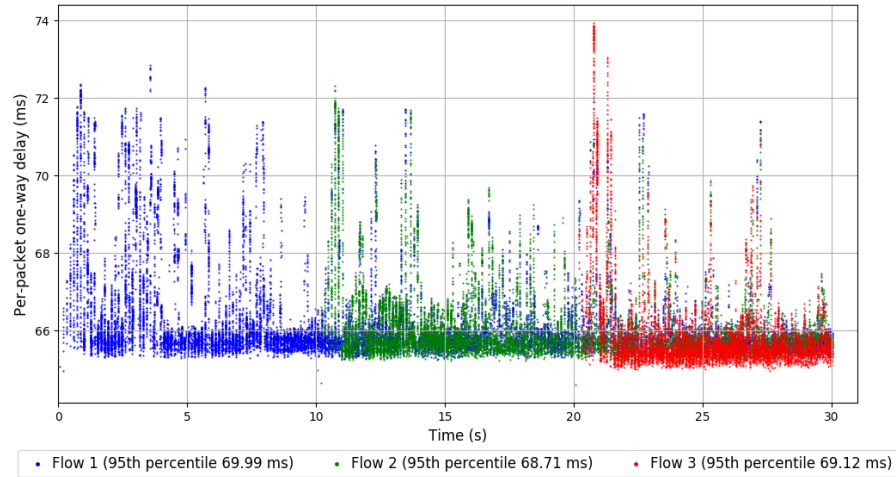
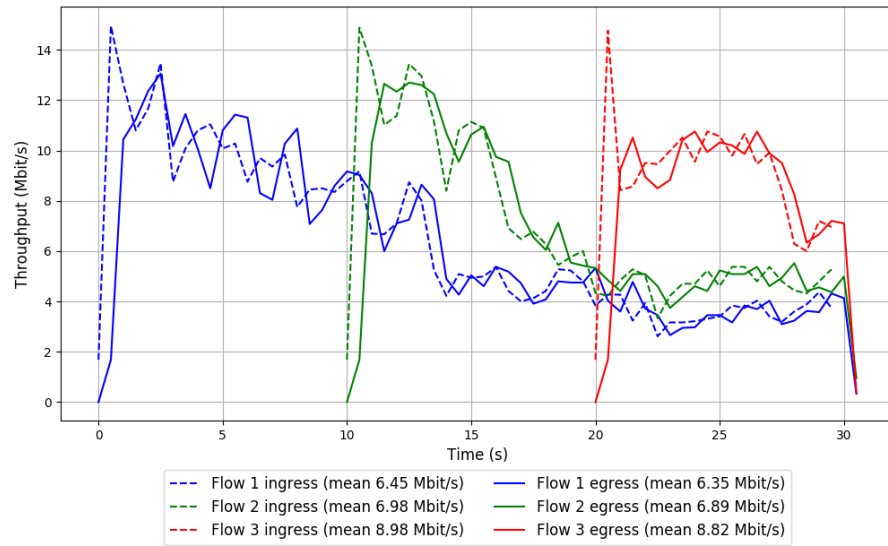


Run 1: Statistics of TCP Cubic

Start at: 2018-06-05 11:42:18  
End at: 2018-06-05 11:42:48  
Local clock offset: 7.734 ms  
Remote clock offset: -5.366 ms

# Below is generated by plot.py at 2018-06-05 15:13:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 13.86 Mbit/s  
95th percentile per-packet one-way delay: 69.427 ms  
Loss rate: 1.48%  
-- Flow 1:  
Average throughput: 6.35 Mbit/s  
95th percentile per-packet one-way delay: 69.989 ms  
Loss rate: 1.51%  
-- Flow 2:  
Average throughput: 6.89 Mbit/s  
95th percentile per-packet one-way delay: 68.713 ms  
Loss rate: 1.26%  
-- Flow 3:  
Average throughput: 8.82 Mbit/s  
95th percentile per-packet one-way delay: 69.117 ms  
Loss rate: 1.76%

# Run 1: Report of TCP Cubic — Data Link

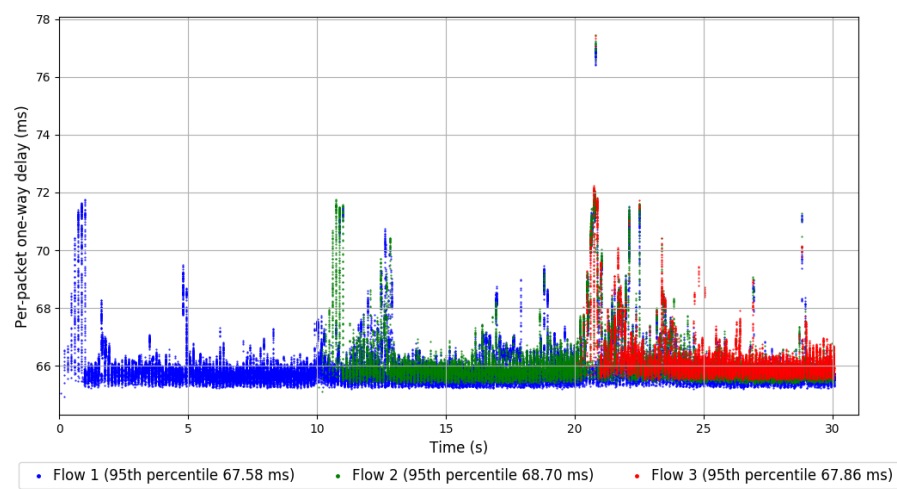
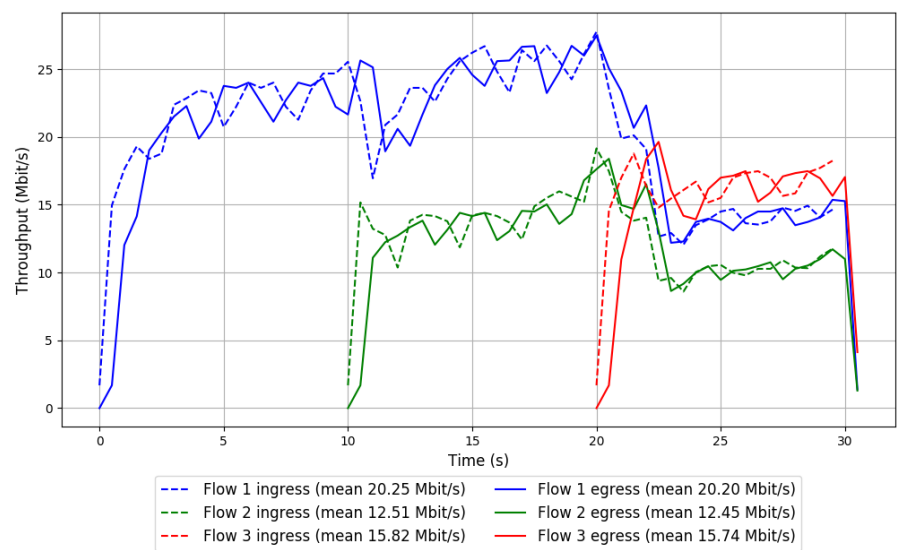


Run 2: Statistics of TCP Cubic

Start at: 2018-06-05 12:05:20  
End at: 2018-06-05 12:05:50  
Local clock offset: 7.549 ms  
Remote clock offset: -4.492 ms

# Below is generated by plot.py at 2018-06-05 15:13:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 33.72 Mbit/s  
95th percentile per-packet one-way delay: 67.920 ms  
Loss rate: 0.35%  
-- Flow 1:  
Average throughput: 20.20 Mbit/s  
95th percentile per-packet one-way delay: 67.575 ms  
Loss rate: 0.25%  
-- Flow 2:  
Average throughput: 12.45 Mbit/s  
95th percentile per-packet one-way delay: 68.701 ms  
Loss rate: 0.51%  
-- Flow 3:  
Average throughput: 15.74 Mbit/s  
95th percentile per-packet one-way delay: 67.860 ms  
Loss rate: 0.49%

Run 2: Report of TCP Cubic — Data Link

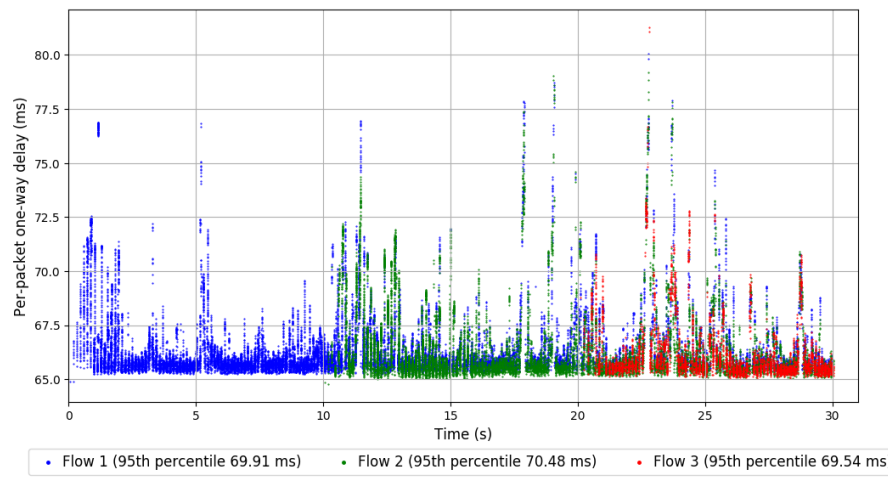
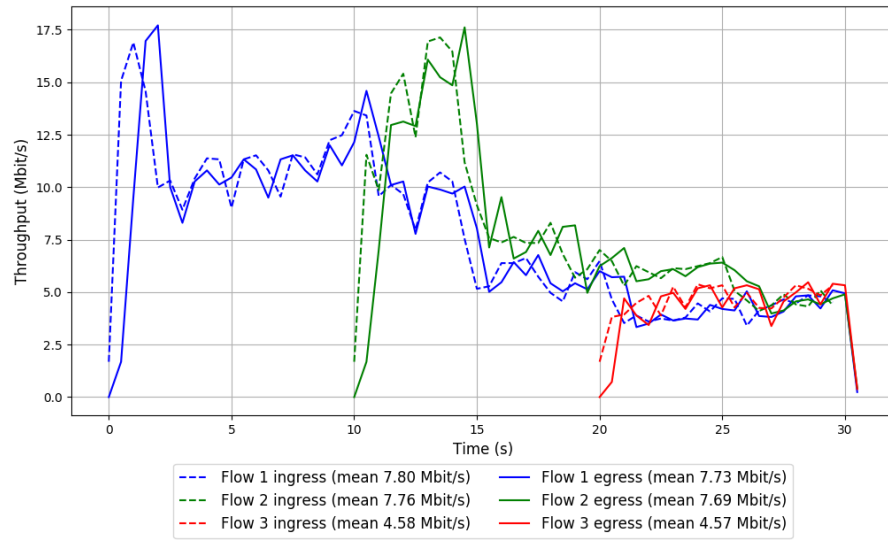


Run 3: Statistics of TCP Cubic

Start at: 2018-06-05 12:27:35  
End at: 2018-06-05 12:28:05  
Local clock offset: 5.609 ms  
Remote clock offset: -5.356 ms

# Below is generated by plot.py at 2018-06-05 15:13:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 14.36 Mbit/s  
95th percentile per-packet one-way delay: 70.236 ms  
Loss rate: 0.82%  
-- Flow 1:  
Average throughput: 7.73 Mbit/s  
95th percentile per-packet one-way delay: 69.908 ms  
Loss rate: 0.93%  
-- Flow 2:  
Average throughput: 7.69 Mbit/s  
95th percentile per-packet one-way delay: 70.482 ms  
Loss rate: 0.85%  
-- Flow 3:  
Average throughput: 4.57 Mbit/s  
95th percentile per-packet one-way delay: 69.540 ms  
Loss rate: 0.11%

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

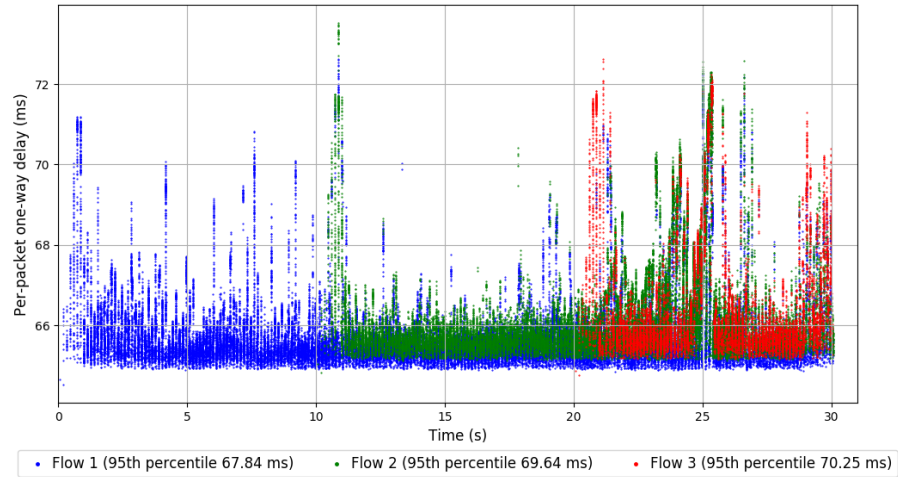
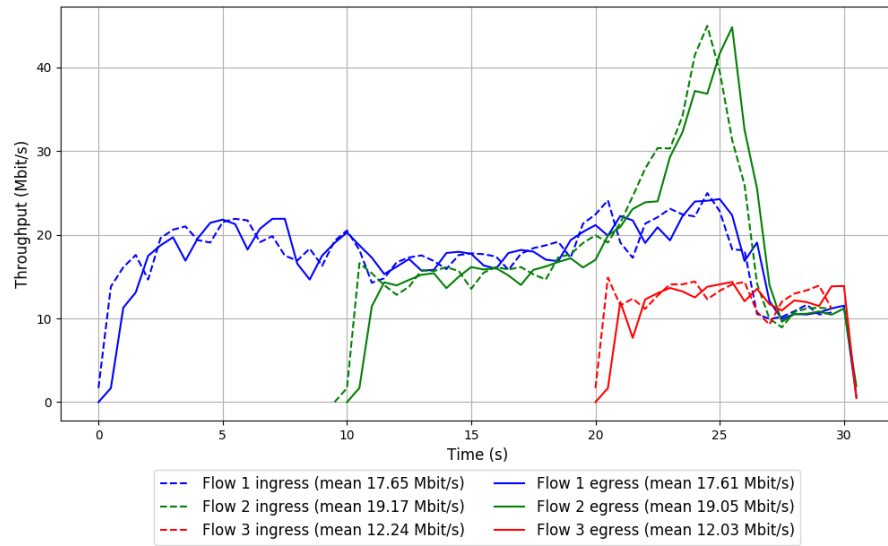


Run 4: Statistics of TCP Cubic

Start at: 2018-06-05 12:50:02  
End at: 2018-06-05 12:50:32  
Local clock offset: 5.551 ms  
Remote clock offset: -5.495 ms

# Below is generated by plot.py at 2018-06-05 15:13:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 34.32 Mbit/s  
95th percentile per-packet one-way delay: 69.054 ms  
Loss rate: 0.52%  
-- Flow 1:  
Average throughput: 17.61 Mbit/s  
95th percentile per-packet one-way delay: 67.836 ms  
Loss rate: 0.18%  
-- Flow 2:  
Average throughput: 19.05 Mbit/s  
95th percentile per-packet one-way delay: 69.640 ms  
Loss rate: 0.60%  
-- Flow 3:  
Average throughput: 12.03 Mbit/s  
95th percentile per-packet one-way delay: 70.253 ms  
Loss rate: 1.70%

# Run 4: Report of TCP Cubic — Data Link

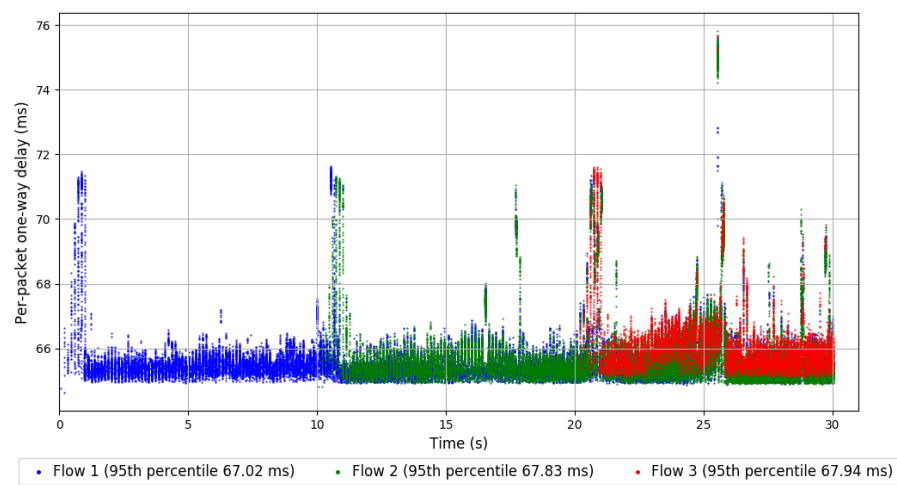
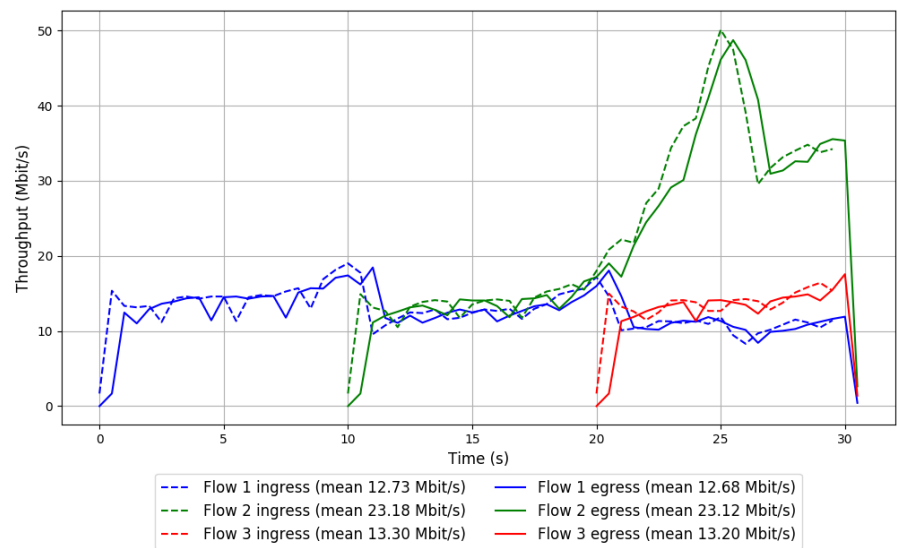


Run 5: Statistics of TCP Cubic

Start at: 2018-06-05 13:12:12  
End at: 2018-06-05 13:12:42  
Local clock offset: 5.065 ms  
Remote clock offset: -5.658 ms

# Below is generated by plot.py at 2018-06-05 15:13:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 32.48 Mbit/s  
95th percentile per-packet one-way delay: 67.425 ms  
Loss rate: 0.36%  
-- Flow 1:  
Average throughput: 12.68 Mbit/s  
95th percentile per-packet one-way delay: 67.018 ms  
Loss rate: 0.36%  
-- Flow 2:  
Average throughput: 23.12 Mbit/s  
95th percentile per-packet one-way delay: 67.832 ms  
Loss rate: 0.26%  
-- Flow 3:  
Average throughput: 13.20 Mbit/s  
95th percentile per-packet one-way delay: 67.944 ms  
Loss rate: 0.73%

Run 5: Report of TCP Cubic — Data Link

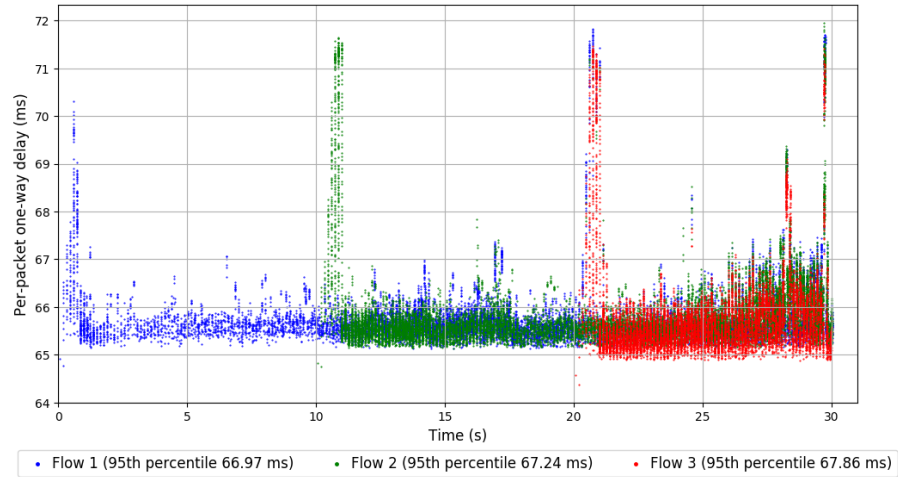
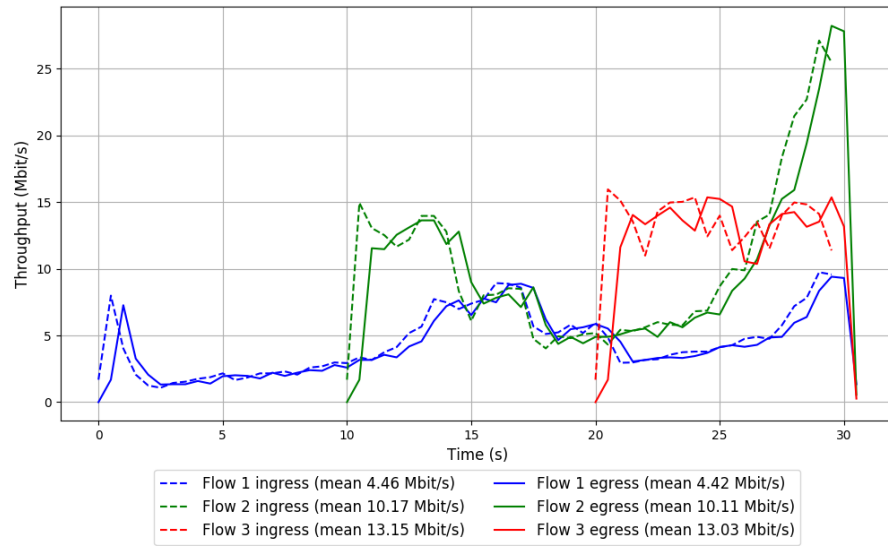


Run 6: Statistics of TCP Cubic

Start at: 2018-06-05 13:34:17  
End at: 2018-06-05 13:34:47  
Local clock offset: 4.309 ms  
Remote clock offset: -5.672 ms

# Below is generated by plot.py at 2018-06-05 15:13:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 15.48 Mbit/s  
95th percentile per-packet one-way delay: 67.164 ms  
Loss rate: 0.74%  
-- Flow 1:  
Average throughput: 4.42 Mbit/s  
95th percentile per-packet one-way delay: 66.966 ms  
Loss rate: 0.78%  
-- Flow 2:  
Average throughput: 10.11 Mbit/s  
95th percentile per-packet one-way delay: 67.243 ms  
Loss rate: 0.60%  
-- Flow 3:  
Average throughput: 13.03 Mbit/s  
95th percentile per-packet one-way delay: 67.858 ms  
Loss rate: 0.92%

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

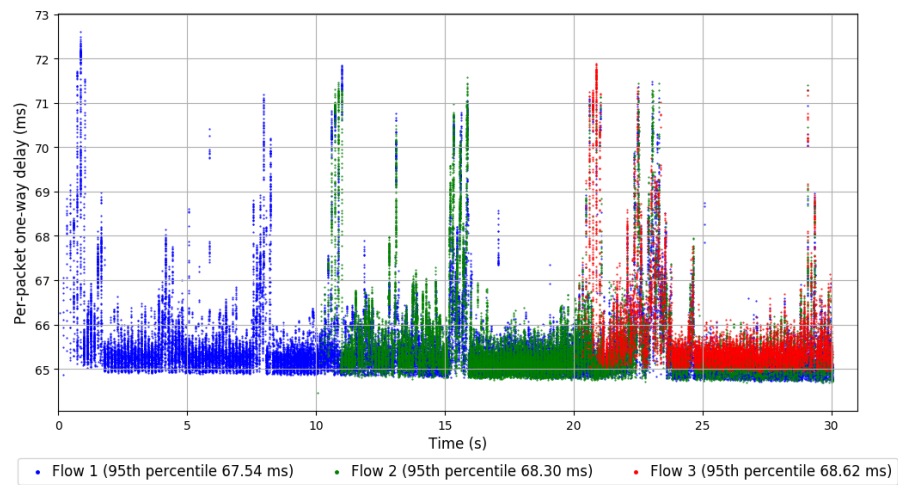
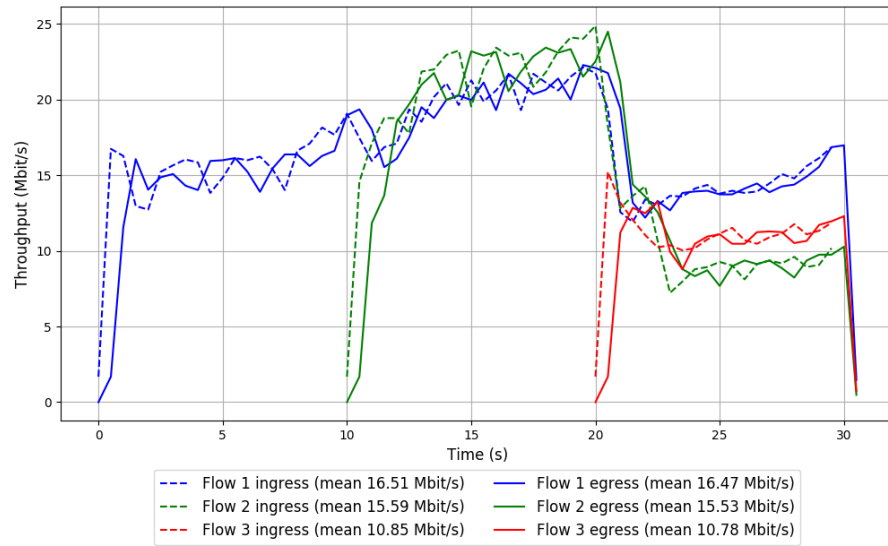


Run 7: Statistics of TCP Cubic

Start at: 2018-06-05 13:57:00  
End at: 2018-06-05 13:57:30  
Local clock offset: 4.127 ms  
Remote clock offset: -5.872 ms

# Below is generated by plot.py at 2018-06-05 15:13:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 30.41 Mbit/s  
95th percentile per-packet one-way delay: 67.954 ms  
Loss rate: 0.32%  
-- Flow 1:  
Average throughput: 16.47 Mbit/s  
95th percentile per-packet one-way delay: 67.543 ms  
Loss rate: 0.23%  
-- Flow 2:  
Average throughput: 15.53 Mbit/s  
95th percentile per-packet one-way delay: 68.297 ms  
Loss rate: 0.36%  
-- Flow 3:  
Average throughput: 10.78 Mbit/s  
95th percentile per-packet one-way delay: 68.624 ms  
Loss rate: 0.65%

# Run 7: Report of TCP Cubic — Data Link

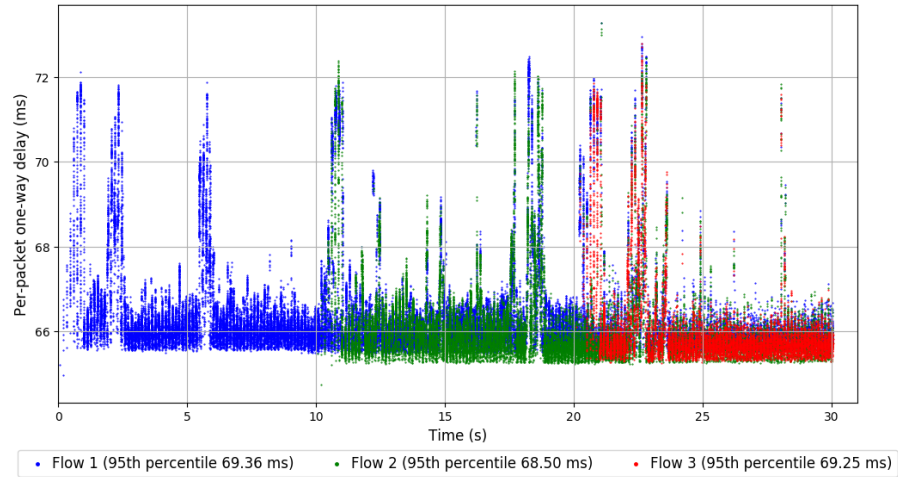
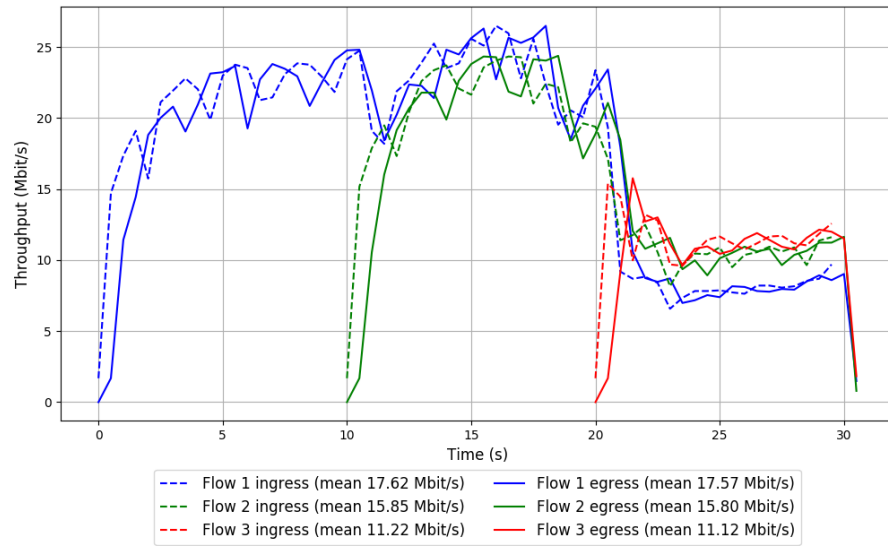


Run 8: Statistics of TCP Cubic

Start at: 2018-06-05 14:18:53  
End at: 2018-06-05 14:19:23  
Local clock offset: 5.667 ms  
Remote clock offset: -1.262 ms

# Below is generated by plot.py at 2018-06-05 15:13:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 31.79 Mbit/s  
95th percentile per-packet one-way delay: 69.052 ms  
Loss rate: 0.35%  
-- Flow 1:  
Average throughput: 17.57 Mbit/s  
95th percentile per-packet one-way delay: 69.365 ms  
Loss rate: 0.24%  
-- Flow 2:  
Average throughput: 15.80 Mbit/s  
95th percentile per-packet one-way delay: 68.496 ms  
Loss rate: 0.34%  
-- Flow 3:  
Average throughput: 11.12 Mbit/s  
95th percentile per-packet one-way delay: 69.253 ms  
Loss rate: 0.91%

# Run 8: Report of TCP Cubic — Data Link

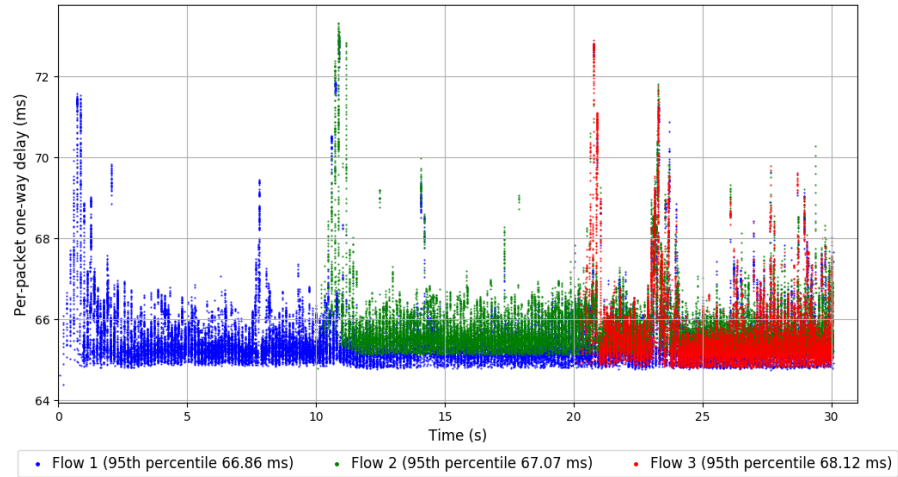
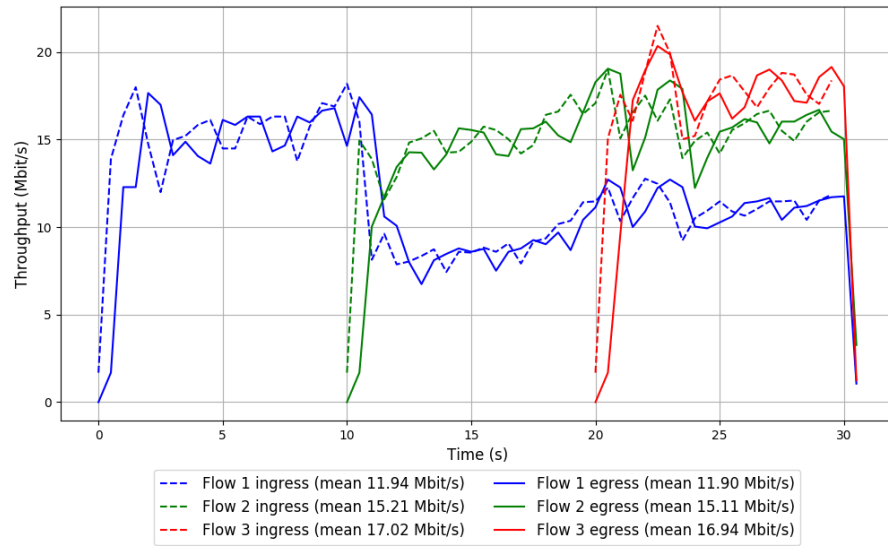


Run 9: Statistics of TCP Cubic

Start at: 2018-06-05 14:40:51  
End at: 2018-06-05 14:41:21  
Local clock offset: 7.064 ms  
Remote clock offset: -3.868 ms

# Below is generated by plot.py at 2018-06-05 15:13:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 27.58 Mbit/s  
95th percentile per-packet one-way delay: 67.202 ms  
Loss rate: 0.46%  
-- Flow 1:  
Average throughput: 11.90 Mbit/s  
95th percentile per-packet one-way delay: 66.858 ms  
Loss rate: 0.29%  
-- Flow 2:  
Average throughput: 15.11 Mbit/s  
95th percentile per-packet one-way delay: 67.070 ms  
Loss rate: 0.66%  
-- Flow 3:  
Average throughput: 16.94 Mbit/s  
95th percentile per-packet one-way delay: 68.123 ms  
Loss rate: 0.46%

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



Run 10: Statistics of TCP Cubic

Start at: 2018-06-05 15:02:58

End at: 2018-06-05 15:03:28

Local clock offset: 4.803 ms

Remote clock offset: -5.5 ms

# Below is generated by plot.py at 2018-06-05 15:13:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 36.63 Mbit/s

95th percentile per-packet one-way delay: 69.095 ms

Loss rate: 0.27%

-- Flow 1:

Average throughput: 15.32 Mbit/s

95th percentile per-packet one-way delay: 68.632 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 26.03 Mbit/s

95th percentile per-packet one-way delay: 69.329 ms

Loss rate: 0.25%

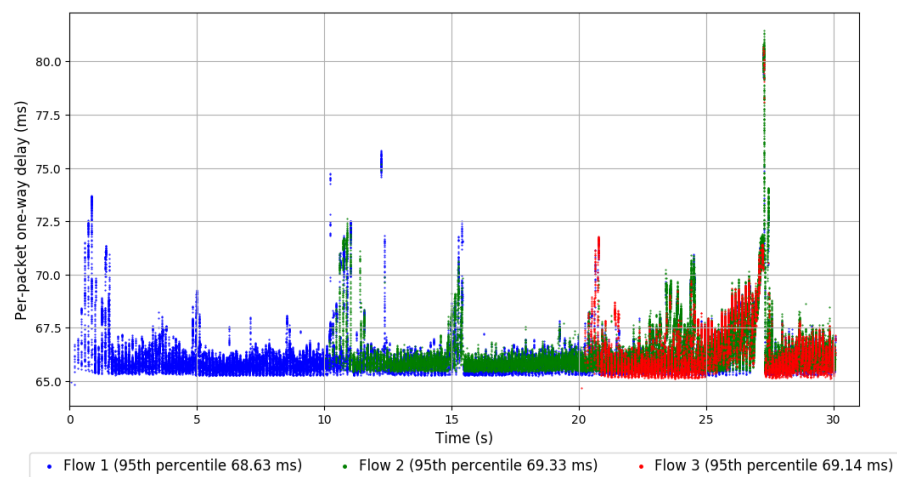
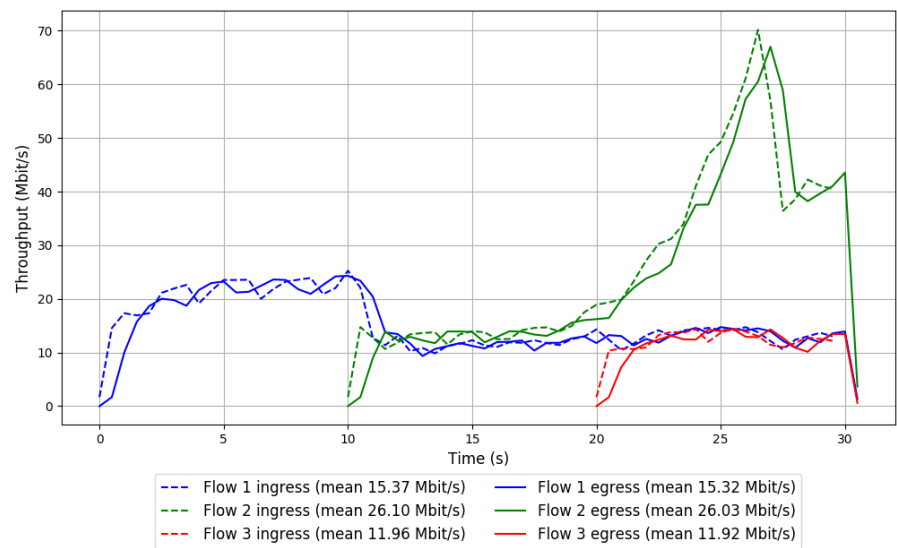
-- Flow 3:

Average throughput: 11.92 Mbit/s

95th percentile per-packet one-way delay: 69.135 ms

Loss rate: 0.27%

Run 10: Report of TCP Cubic — Data Link

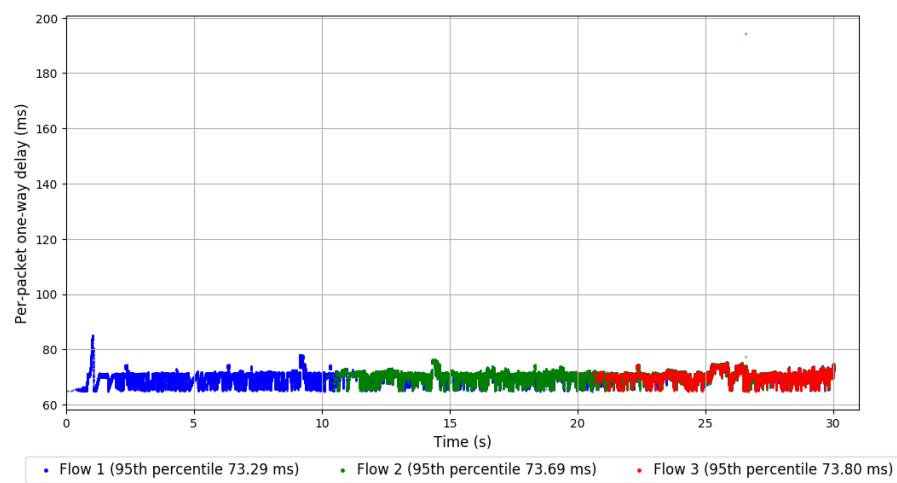
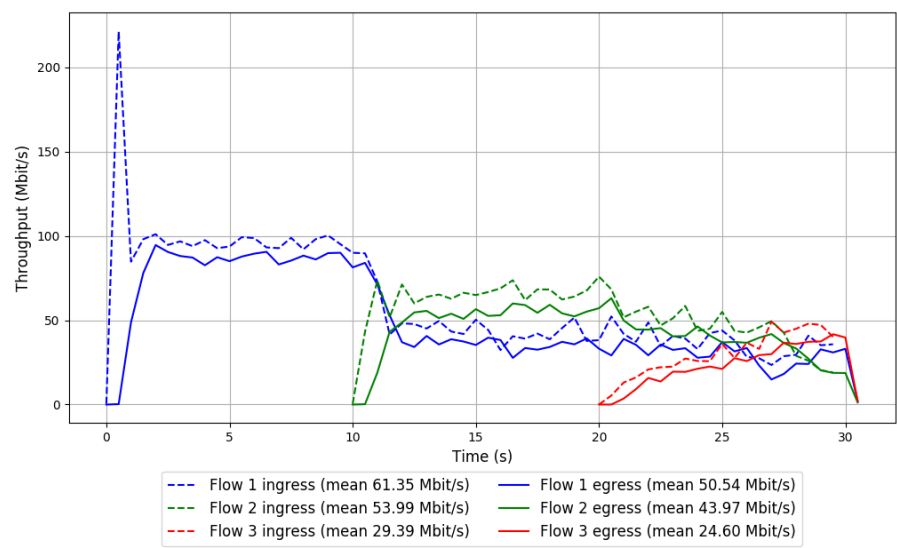


Run 1: Statistics of FillP

Start at: 2018-06-05 11:24:15  
End at: 2018-06-05 11:24:45  
Local clock offset: 7.526 ms  
Remote clock offset: -5.778 ms

# Below is generated by plot.py at 2018-06-05 15:13:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 87.98 Mbit/s  
95th percentile per-packet one-way delay: 73.577 ms  
Loss rate: 17.79%  
-- Flow 1:  
Average throughput: 50.54 Mbit/s  
95th percentile per-packet one-way delay: 73.288 ms  
Loss rate: 17.59%  
-- Flow 2:  
Average throughput: 43.97 Mbit/s  
95th percentile per-packet one-way delay: 73.688 ms  
Loss rate: 18.53%  
-- Flow 3:  
Average throughput: 24.60 Mbit/s  
95th percentile per-packet one-way delay: 73.804 ms  
Loss rate: 16.27%

Run 1: Report of FillP — Data Link

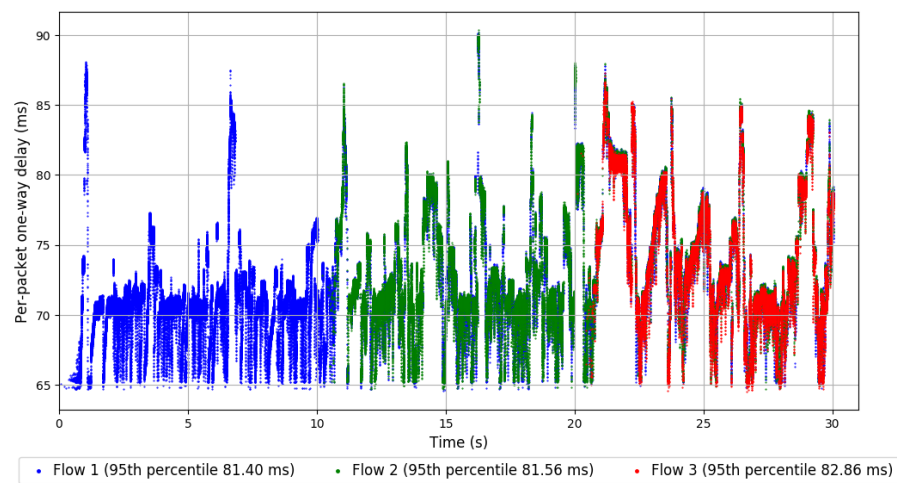
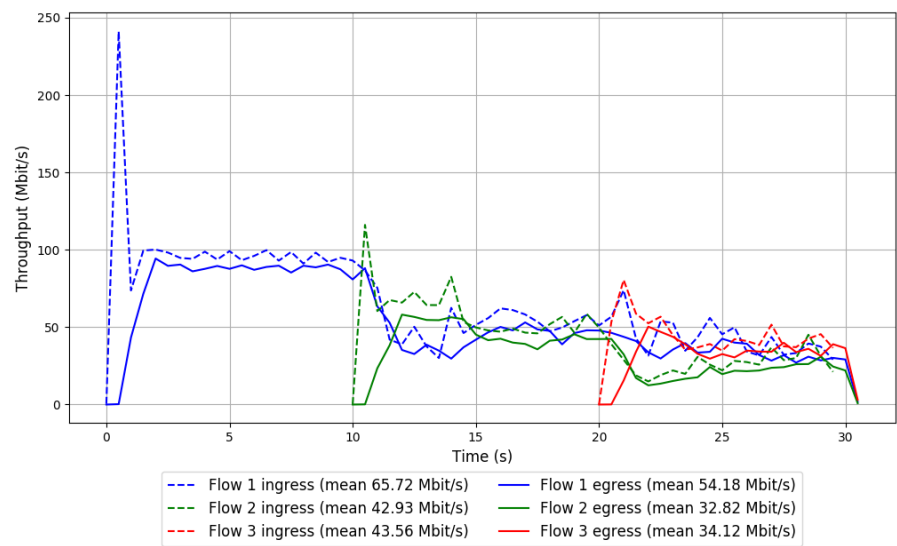


Run 2: Statistics of FillP

Start at: 2018-06-05 11:46:23  
End at: 2018-06-05 11:46:53  
Local clock offset: 7.702 ms  
Remote clock offset: -5.047 ms

# Below is generated by plot.py at 2018-06-05 15:13:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 87.35 Mbit/s  
95th percentile per-packet one-way delay: 81.574 ms  
Loss rate: 19.66%  
-- Flow 1:  
Average throughput: 54.18 Mbit/s  
95th percentile per-packet one-way delay: 81.396 ms  
Loss rate: 17.53%  
-- Flow 2:  
Average throughput: 32.82 Mbit/s  
95th percentile per-packet one-way delay: 81.557 ms  
Loss rate: 23.53%  
-- Flow 3:  
Average throughput: 34.12 Mbit/s  
95th percentile per-packet one-way delay: 82.863 ms  
Loss rate: 21.68%

Run 2: Report of FillP — Data Link

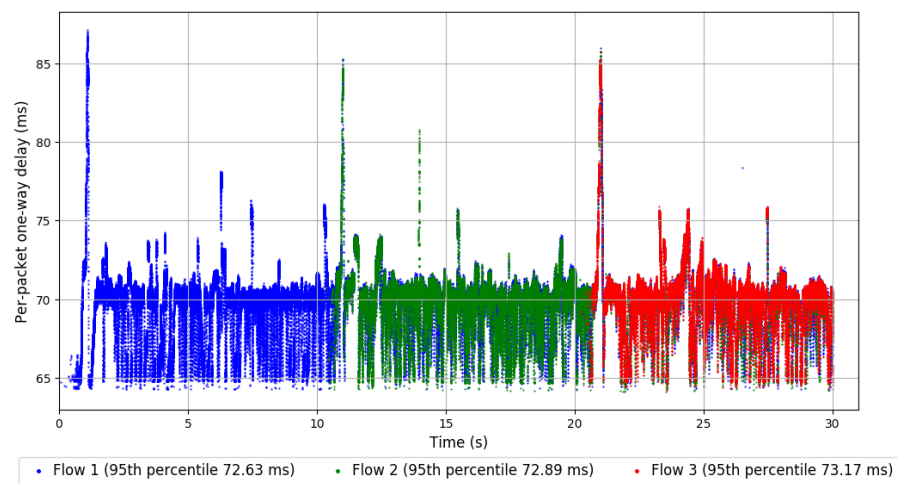
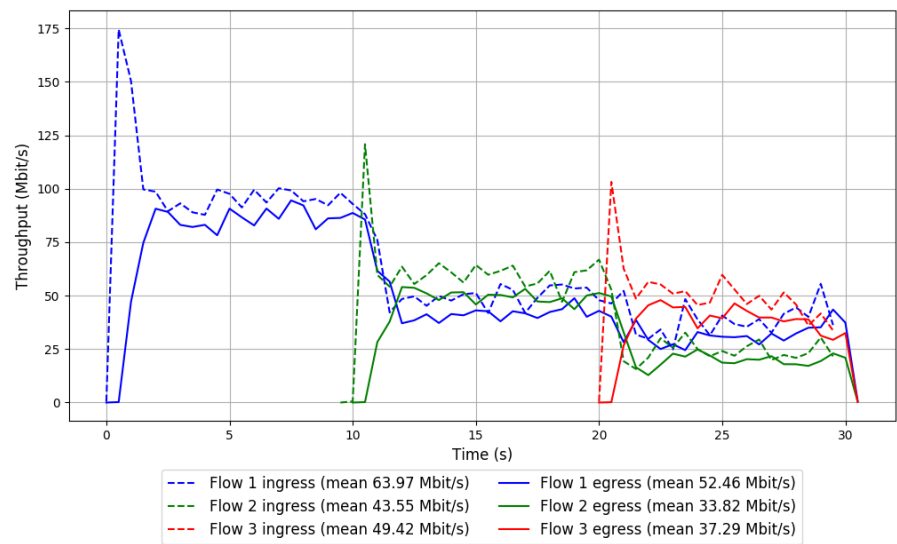


Run 3: Statistics of FillP

Start at: 2018-06-05 12:09:22  
End at: 2018-06-05 12:09:52  
Local clock offset: 7.91 ms  
Remote clock offset: -4.477 ms

# Below is generated by plot.py at 2018-06-05 15:13:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 87.36 Mbit/s  
95th percentile per-packet one-way delay: 72.777 ms  
Loss rate: 20.14%  
-- Flow 1:  
Average throughput: 52.46 Mbit/s  
95th percentile per-packet one-way delay: 72.630 ms  
Loss rate: 18.00%  
-- Flow 2:  
Average throughput: 33.82 Mbit/s  
95th percentile per-packet one-way delay: 72.890 ms  
Loss rate: 22.35%  
-- Flow 3:  
Average throughput: 37.29 Mbit/s  
95th percentile per-packet one-way delay: 73.169 ms  
Loss rate: 24.55%

Run 3: Report of FillP — Data Link

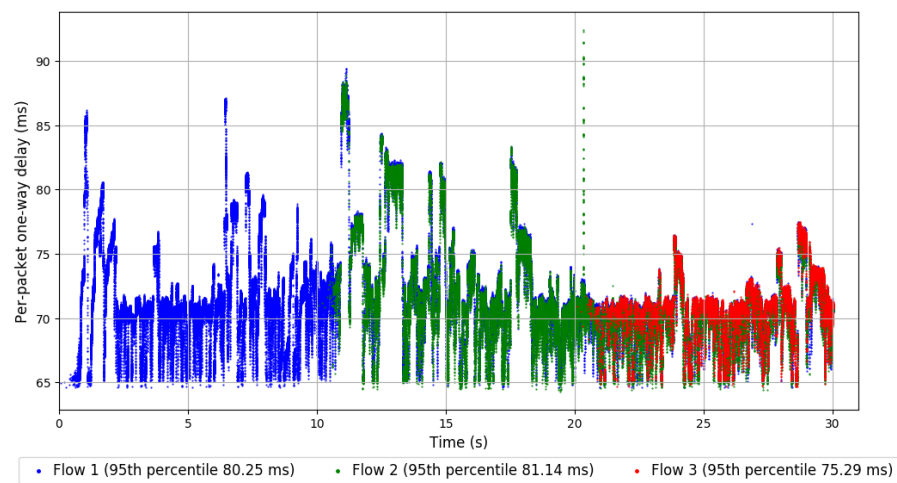
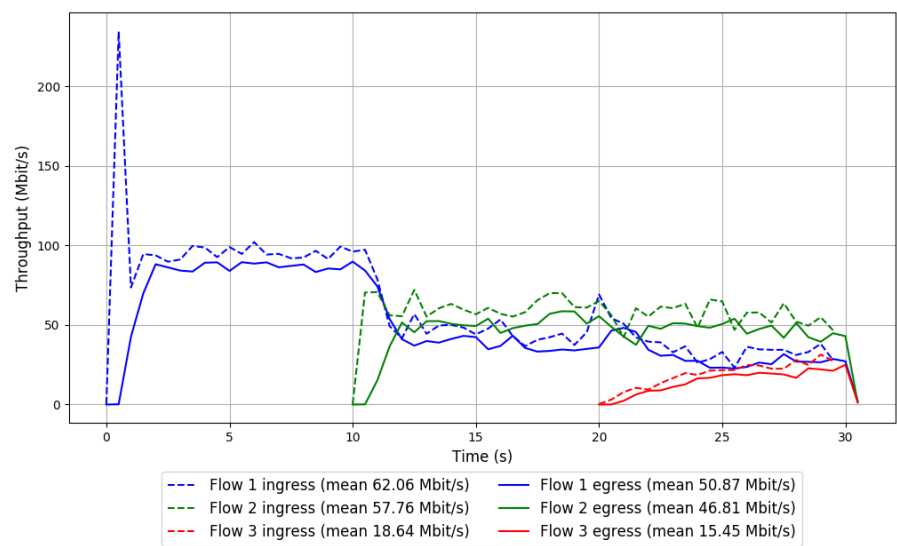


Run 4: Statistics of FillP

Start at: 2018-06-05 12:31:45  
End at: 2018-06-05 12:32:15  
Local clock offset: 5.523 ms  
Remote clock offset: -5.481 ms

# Below is generated by plot.py at 2018-06-05 15:13:53  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 87.15 Mbit/s  
95th percentile per-packet one-way delay: 80.529 ms  
Loss rate: 18.31%  
-- Flow 1:  
Average throughput: 50.87 Mbit/s  
95th percentile per-packet one-way delay: 80.252 ms  
Loss rate: 18.02%  
-- Flow 2:  
Average throughput: 46.81 Mbit/s  
95th percentile per-packet one-way delay: 81.143 ms  
Loss rate: 18.96%  
-- Flow 3:  
Average throughput: 15.45 Mbit/s  
95th percentile per-packet one-way delay: 75.293 ms  
Loss rate: 17.11%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-06-05 12:54:05

End at: 2018-06-05 12:54:35

Local clock offset: 5.392 ms

Remote clock offset: -5.47 ms

# Below is generated by plot.py at 2018-06-05 15:13:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 88.06 Mbit/s

95th percentile per-packet one-way delay: 74.820 ms

Loss rate: 17.99%

-- Flow 1:

Average throughput: 50.06 Mbit/s

95th percentile per-packet one-way delay: 72.418 ms

Loss rate: 17.19%

-- Flow 2:

Average throughput: 38.74 Mbit/s

95th percentile per-packet one-way delay: 74.800 ms

Loss rate: 18.00%

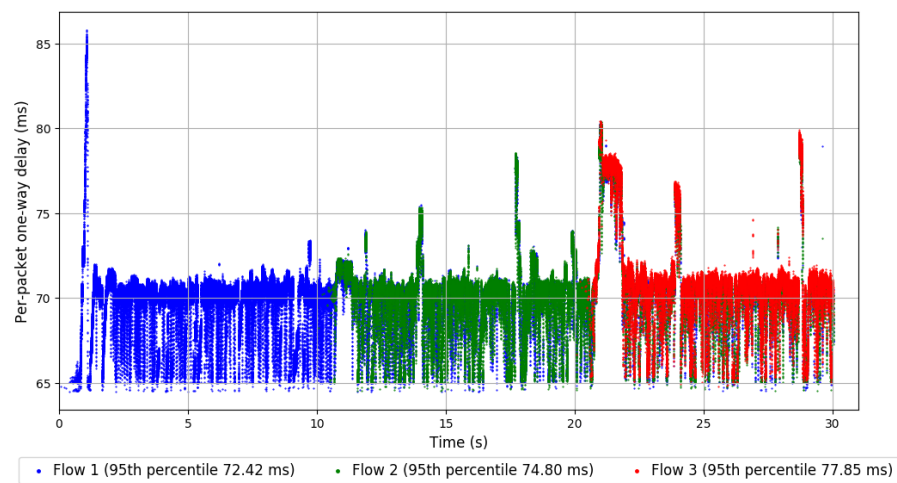
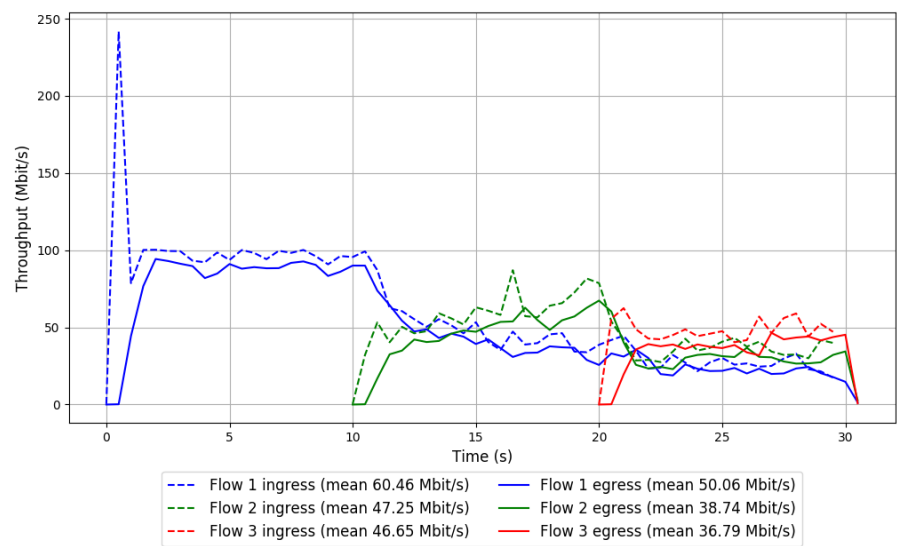
-- Flow 3:

Average throughput: 36.79 Mbit/s

95th percentile per-packet one-way delay: 77.846 ms

Loss rate: 21.12%

Run 5: Report of FillP — Data Link

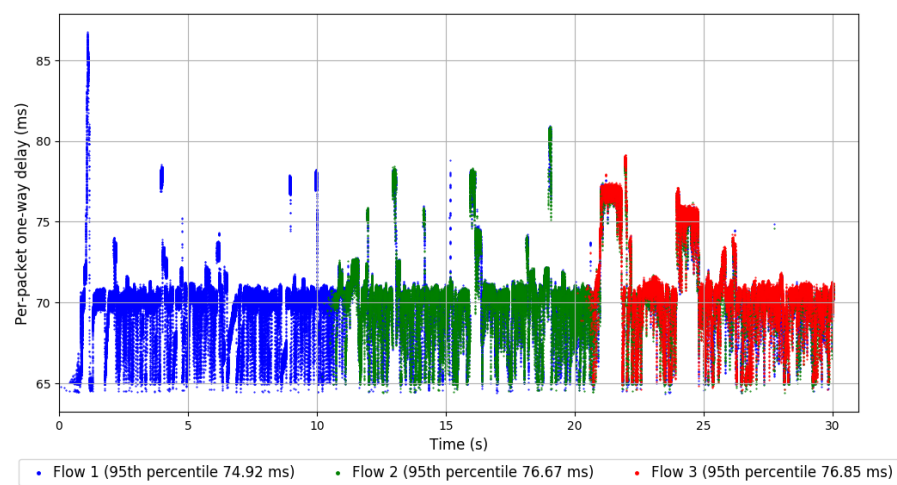
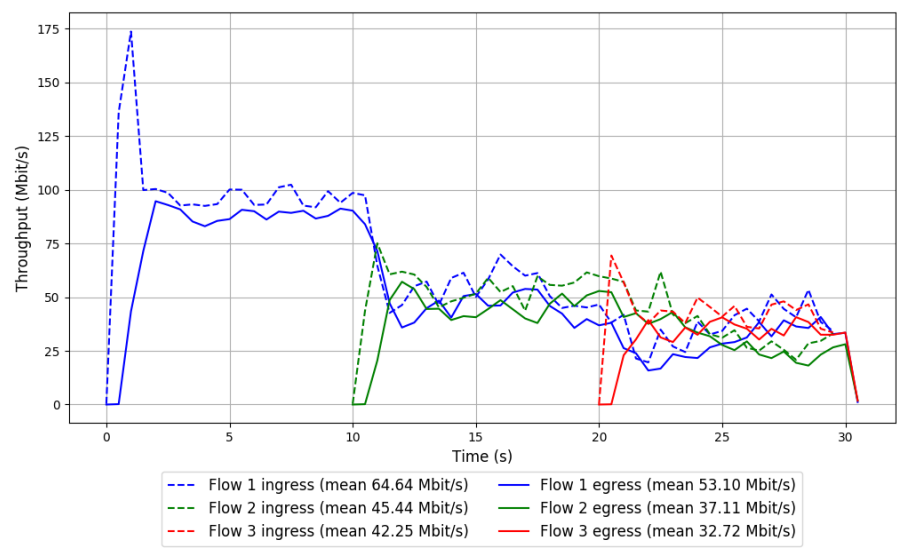


Run 6: Statistics of FillP

Start at: 2018-06-05 13:16:15  
End at: 2018-06-05 13:16:45  
Local clock offset: 4.698 ms  
Remote clock offset: -5.765 ms

# Below is generated by plot.py at 2018-06-05 15:14:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 88.65 Mbit/s  
95th percentile per-packet one-way delay: 76.374 ms  
Loss rate: 18.58%  
-- Flow 1:  
Average throughput: 53.10 Mbit/s  
95th percentile per-packet one-way delay: 74.917 ms  
Loss rate: 17.84%  
-- Flow 2:  
Average throughput: 37.11 Mbit/s  
95th percentile per-packet one-way delay: 76.670 ms  
Loss rate: 18.33%  
-- Flow 3:  
Average throughput: 32.72 Mbit/s  
95th percentile per-packet one-way delay: 76.852 ms  
Loss rate: 22.56%

Run 6: Report of FillP — Data Link

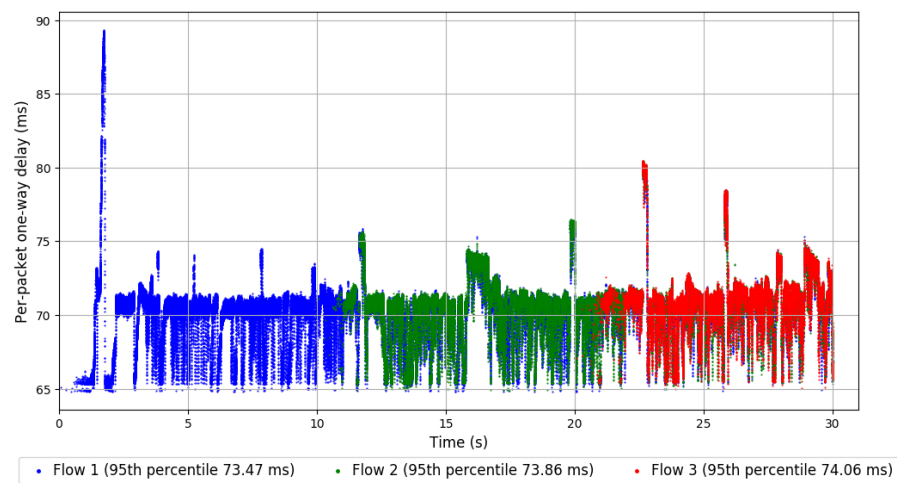
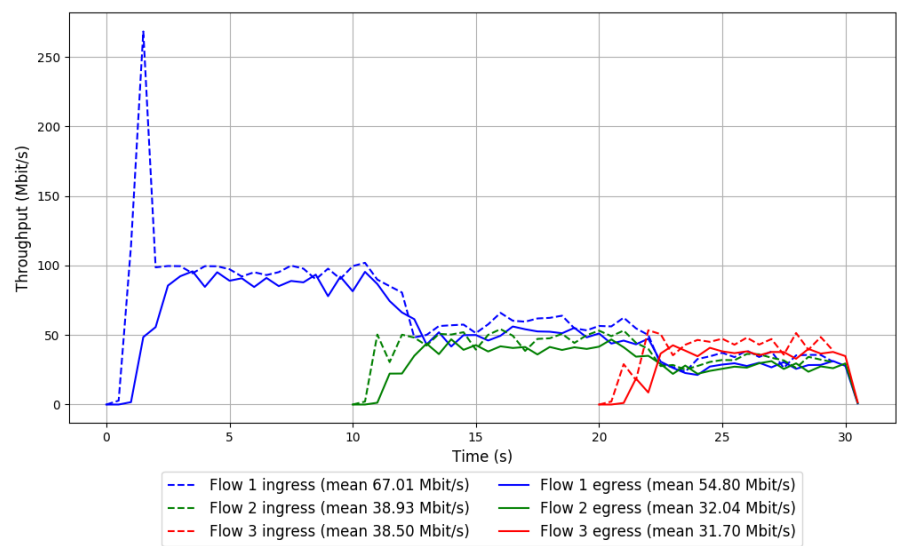


Run 7: Statistics of FillP

Start at: 2018-06-05 13:38:29  
End at: 2018-06-05 13:38:59  
Local clock offset: 3.972 ms  
Remote clock offset: -5.692 ms

# Below is generated by plot.py at 2018-06-05 15:14:32  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 86.64 Mbit/s  
95th percentile per-packet one-way delay: 73.697 ms  
Loss rate: 18.03%  
-- Flow 1:  
Average throughput: 54.80 Mbit/s  
95th percentile per-packet one-way delay: 73.468 ms  
Loss rate: 18.22%  
-- Flow 2:  
Average throughput: 32.04 Mbit/s  
95th percentile per-packet one-way delay: 73.859 ms  
Loss rate: 17.72%  
-- Flow 3:  
Average throughput: 31.70 Mbit/s  
95th percentile per-packet one-way delay: 74.062 ms  
Loss rate: 17.67%

Run 7: Report of FillP — Data Link

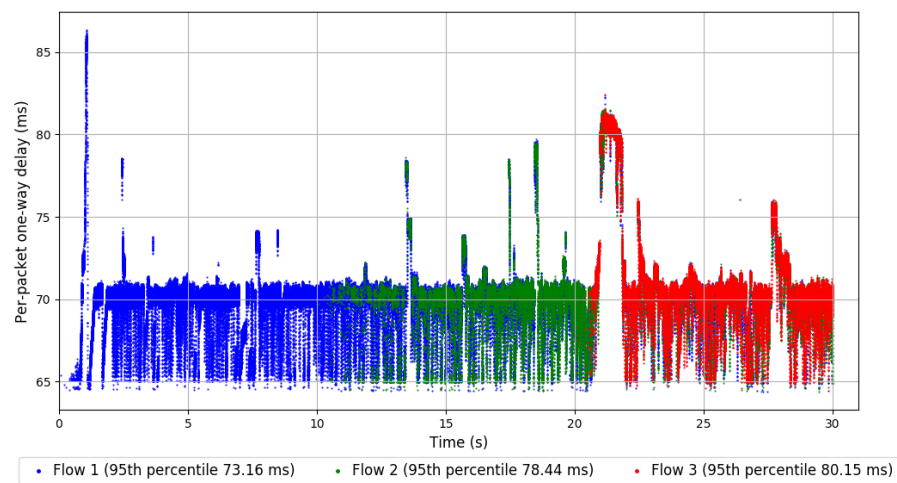
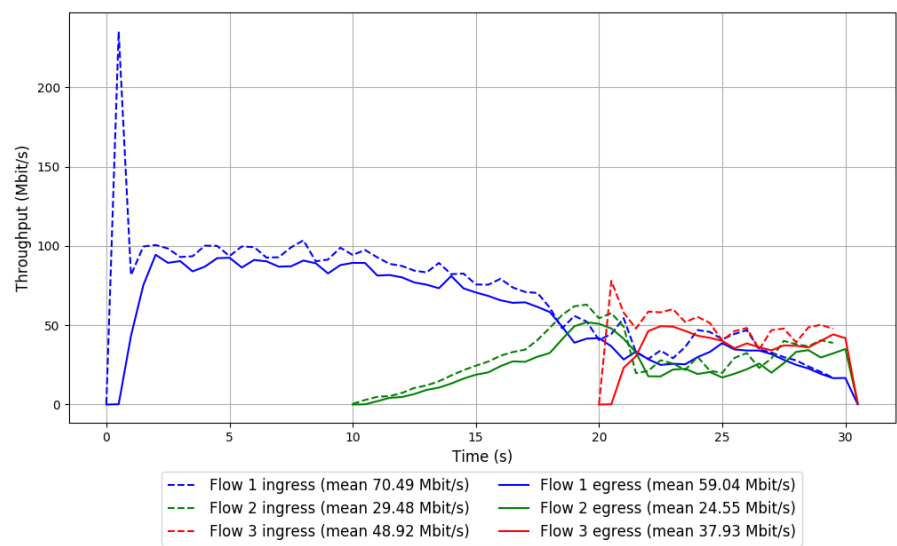


Run 8: Statistics of FillP

Start at: 2018-06-05 14:01:02  
End at: 2018-06-05 14:01:32  
Local clock offset: 3.98 ms  
Remote clock offset: -4.495 ms

# Below is generated by plot.py at 2018-06-05 15:14:37  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 87.94 Mbit/s  
95th percentile per-packet one-way delay: 74.758 ms  
Loss rate: 17.27%  
-- Flow 1:  
Average throughput: 59.04 Mbit/s  
95th percentile per-packet one-way delay: 73.164 ms  
Loss rate: 16.24%  
-- Flow 2:  
Average throughput: 24.55 Mbit/s  
95th percentile per-packet one-way delay: 78.436 ms  
Loss rate: 16.74%  
-- Flow 3:  
Average throughput: 37.93 Mbit/s  
95th percentile per-packet one-way delay: 80.147 ms  
Loss rate: 22.44%

Run 8: Report of FillP — Data Link

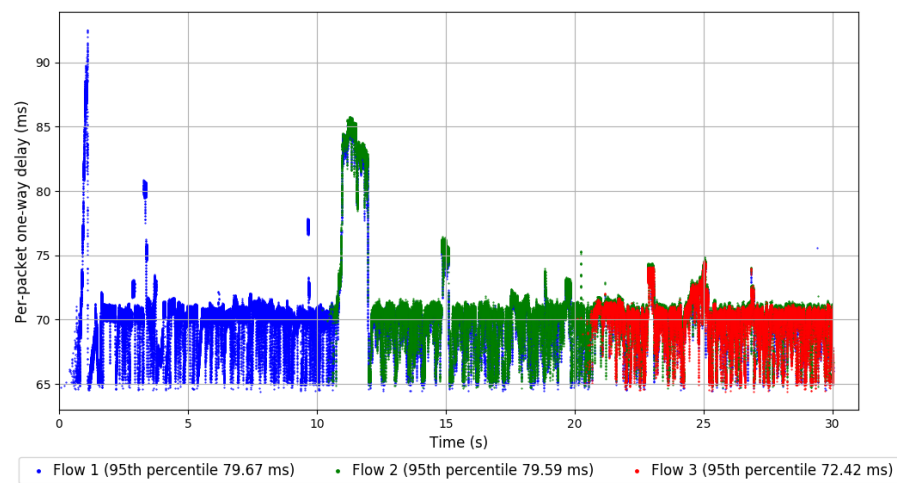
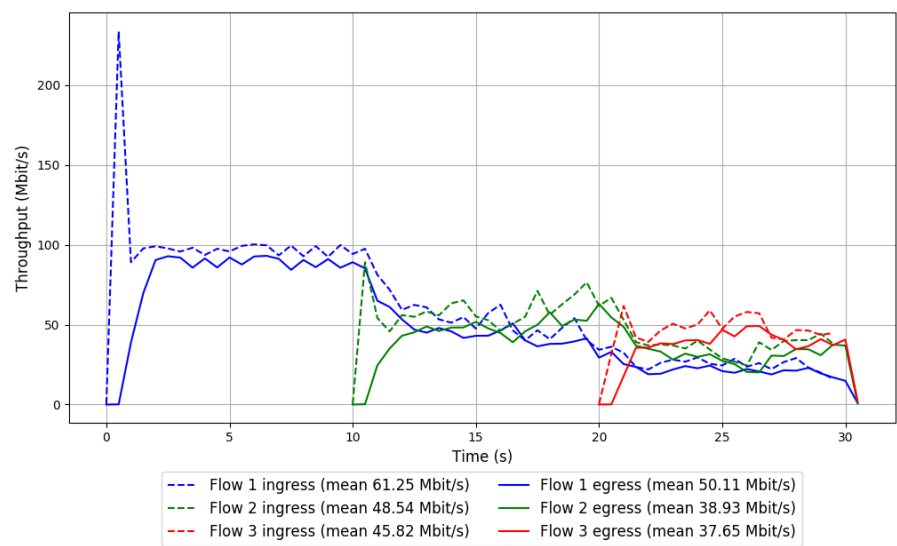


Run 9: Statistics of FillP

Start at: 2018-06-05 14:22:54  
End at: 2018-06-05 14:23:24  
Local clock offset: 6.124 ms  
Remote clock offset: -1.115 ms

# Below is generated by plot.py at 2018-06-05 15:15:10  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 88.51 Mbit/s  
95th percentile per-packet one-way delay: 75.712 ms  
Loss rate: 18.62%  
-- Flow 1:  
Average throughput: 50.11 Mbit/s  
95th percentile per-packet one-way delay: 79.672 ms  
Loss rate: 18.18%  
-- Flow 2:  
Average throughput: 38.93 Mbit/s  
95th percentile per-packet one-way delay: 79.587 ms  
Loss rate: 19.80%  
-- Flow 3:  
Average throughput: 37.65 Mbit/s  
95th percentile per-packet one-way delay: 72.424 ms  
Loss rate: 17.85%

Run 9: Report of FillP — Data Link

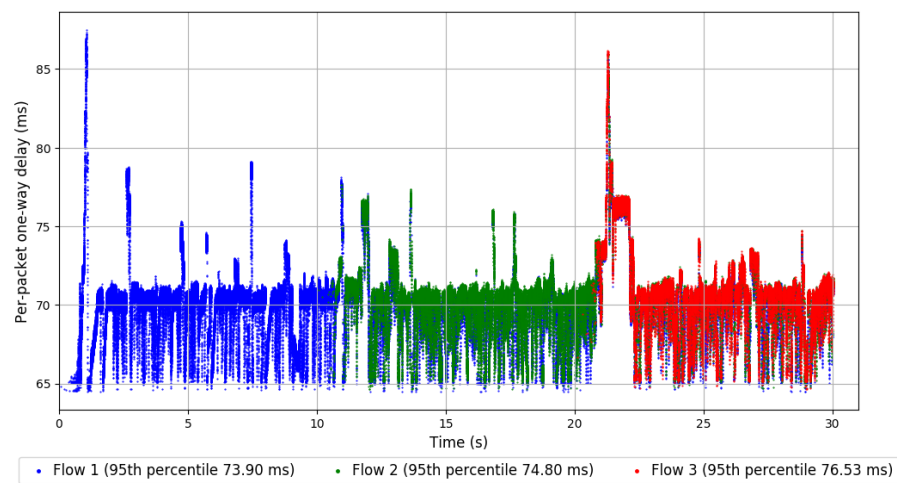
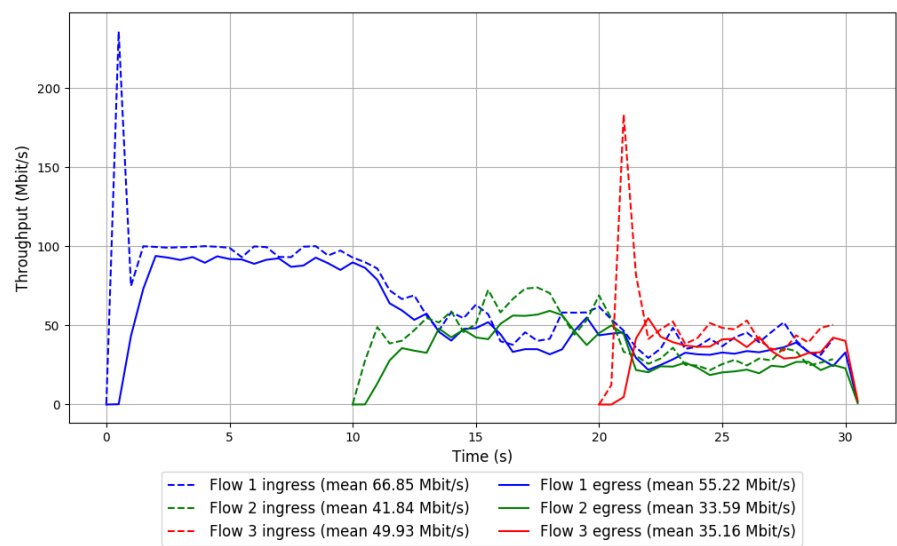


Run 10: Statistics of FillP

Start at: 2018-06-05 14:44:53  
End at: 2018-06-05 14:45:23  
Local clock offset: 6.122 ms  
Remote clock offset: -4.453 ms

# Below is generated by plot.py at 2018-06-05 15:15:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 89.24 Mbit/s  
95th percentile per-packet one-way delay: 75.536 ms  
Loss rate: 19.78%  
-- Flow 1:  
Average throughput: 55.22 Mbit/s  
95th percentile per-packet one-way delay: 73.900 ms  
Loss rate: 17.38%  
-- Flow 2:  
Average throughput: 33.59 Mbit/s  
95th percentile per-packet one-way delay: 74.798 ms  
Loss rate: 19.72%  
-- Flow 3:  
Average throughput: 35.16 Mbit/s  
95th percentile per-packet one-way delay: 76.533 ms  
Loss rate: 29.55%

Run 10: Report of FillP — Data Link

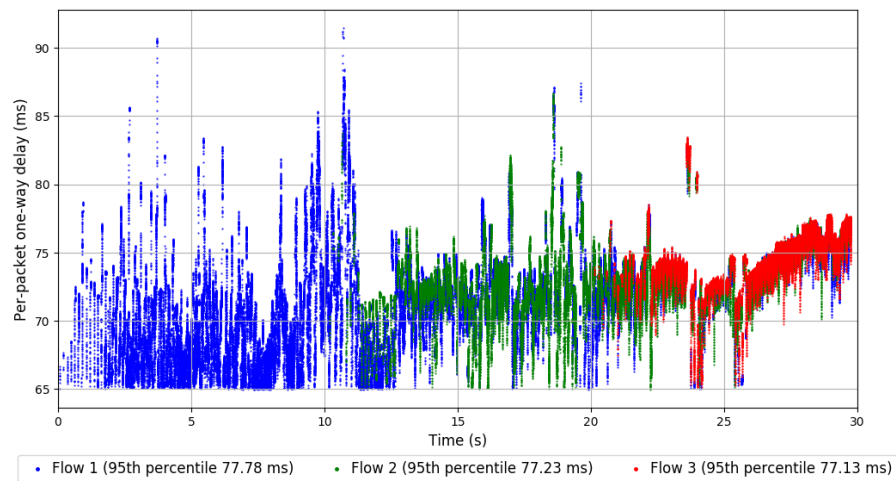
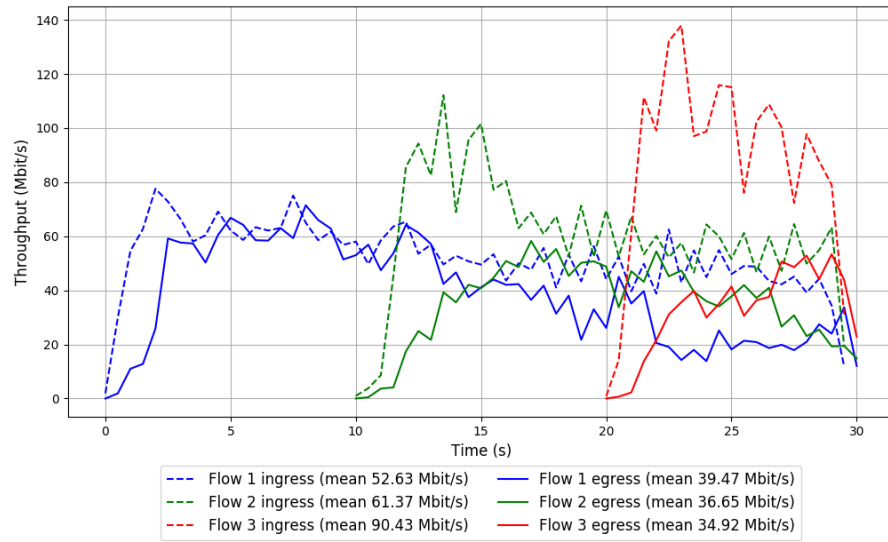


```
Run 1: Statistics of Indigo

Start at: 2018-06-05 11:33:52
End at: 2018-06-05 11:34:22
Local clock offset: 7.718 ms
Remote clock offset: -5.65 ms

# Below is generated by plot.py at 2018-06-05 15:15:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.86 Mbit/s
95th percentile per-packet one-way delay: 77.362 ms
Loss rate: 38.74%
-- Flow 1:
Average throughput: 39.47 Mbit/s
95th percentile per-packet one-way delay: 77.776 ms
Loss rate: 24.97%
-- Flow 2:
Average throughput: 36.65 Mbit/s
95th percentile per-packet one-way delay: 77.231 ms
Loss rate: 40.25%
-- Flow 3:
Average throughput: 34.92 Mbit/s
95th percentile per-packet one-way delay: 77.127 ms
Loss rate: 61.37%
```

## Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-06-05 11:57:03

End at: 2018-06-05 11:57:33

Local clock offset: 7.708 ms

Remote clock offset: -4.69 ms

# Below is generated by plot.py at 2018-06-05 15:15:13

# Datalink statistics

-- Total of 3 flows:

Average throughput: 87.20 Mbit/s

95th percentile per-packet one-way delay: 77.260 ms

Loss rate: 40.02%

-- Flow 1:

Average throughput: 53.19 Mbit/s

95th percentile per-packet one-way delay: 76.589 ms

Loss rate: 29.35%

-- Flow 2:

Average throughput: 36.37 Mbit/s

95th percentile per-packet one-way delay: 77.883 ms

Loss rate: 44.64%

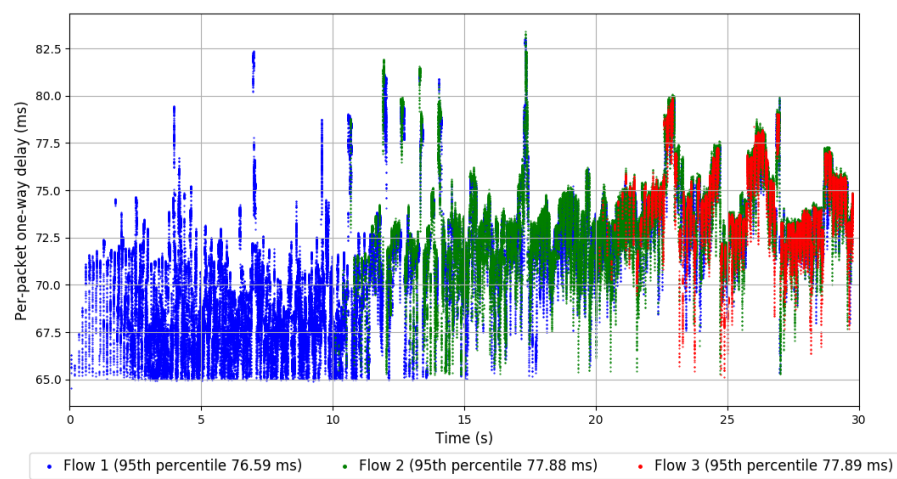
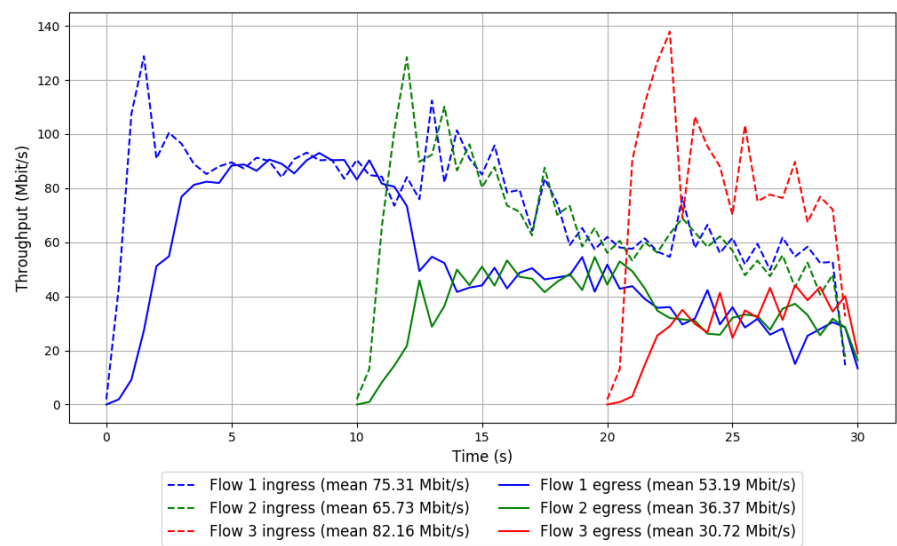
-- Flow 3:

Average throughput: 30.72 Mbit/s

95th percentile per-packet one-way delay: 77.888 ms

Loss rate: 62.60%

Run 2: Report of Indigo — Data Link

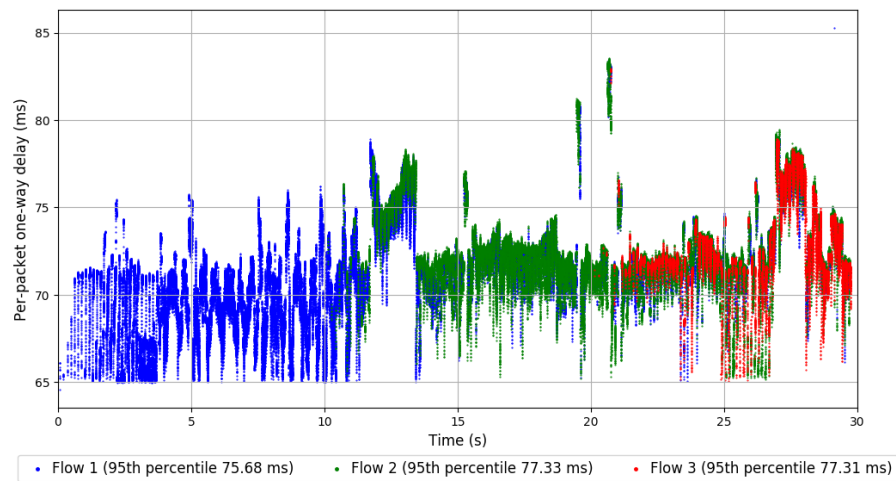
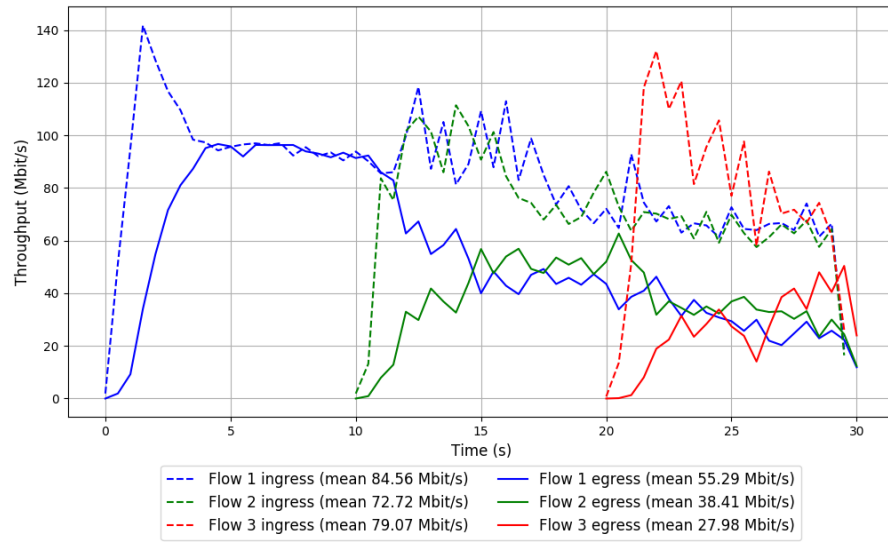


Run 3: Statistics of Indigo

Start at: 2018-06-05 12:19:08  
End at: 2018-06-05 12:19:38  
Local clock offset: 6.251 ms  
Remote clock offset: -4.875 ms

# Below is generated by plot.py at 2018-06-05 15:15:20  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 89.56 Mbit/s  
95th percentile per-packet one-way delay: 76.585 ms  
Loss rate: 43.28%  
-- Flow 1:  
Average throughput: 55.29 Mbit/s  
95th percentile per-packet one-way delay: 75.684 ms  
Loss rate: 34.60%  
-- Flow 2:  
Average throughput: 38.41 Mbit/s  
95th percentile per-packet one-way delay: 77.325 ms  
Loss rate: 47.17%  
-- Flow 3:  
Average throughput: 27.98 Mbit/s  
95th percentile per-packet one-way delay: 77.305 ms  
Loss rate: 64.62%

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



Run 4: Statistics of Indigo

Start at: 2018-06-05 12:41:32

End at: 2018-06-05 12:42:02

Local clock offset: 5.276 ms

Remote clock offset: -5.54 ms

# Below is generated by plot.py at 2018-06-05 15:15:30

# Datalink statistics

-- Total of 3 flows:

Average throughput: 79.04 Mbit/s

95th percentile per-packet one-way delay: 78.727 ms

Loss rate: 43.54%

-- Flow 1:

Average throughput: 46.67 Mbit/s

95th percentile per-packet one-way delay: 78.491 ms

Loss rate: 34.28%

-- Flow 2:

Average throughput: 34.78 Mbit/s

95th percentile per-packet one-way delay: 78.851 ms

Loss rate: 49.15%

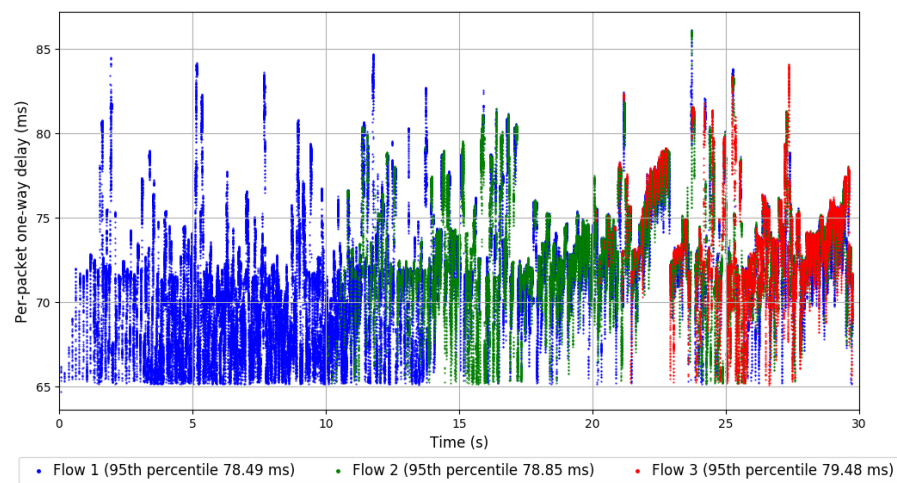
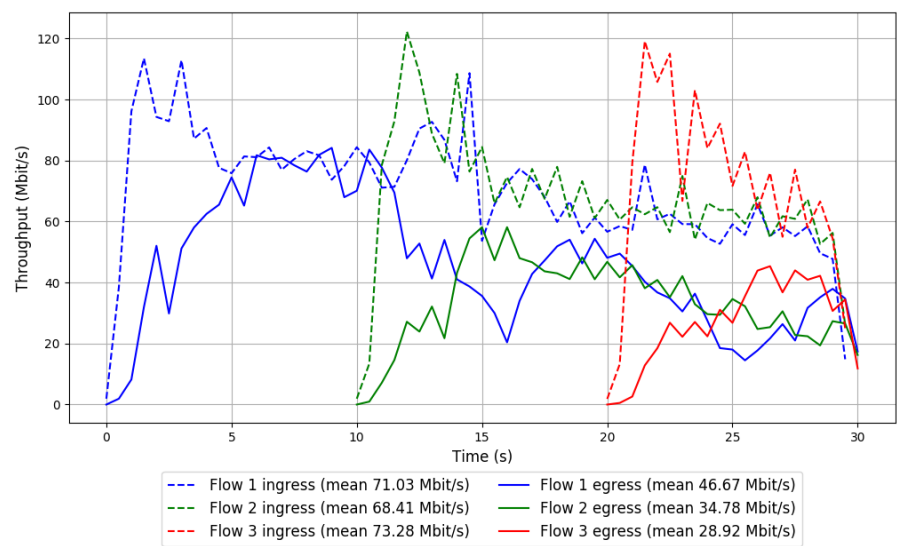
-- Flow 3:

Average throughput: 28.92 Mbit/s

95th percentile per-packet one-way delay: 79.484 ms

Loss rate: 60.55%

Run 4: Report of Indigo — Data Link

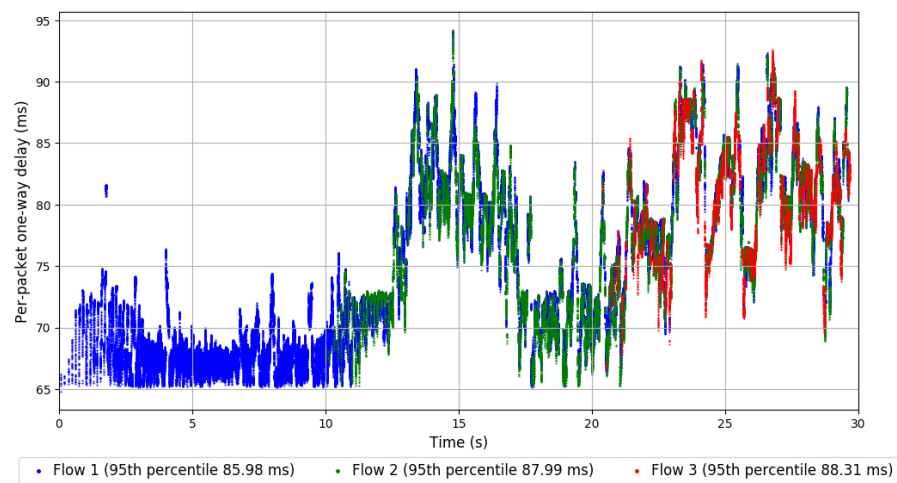
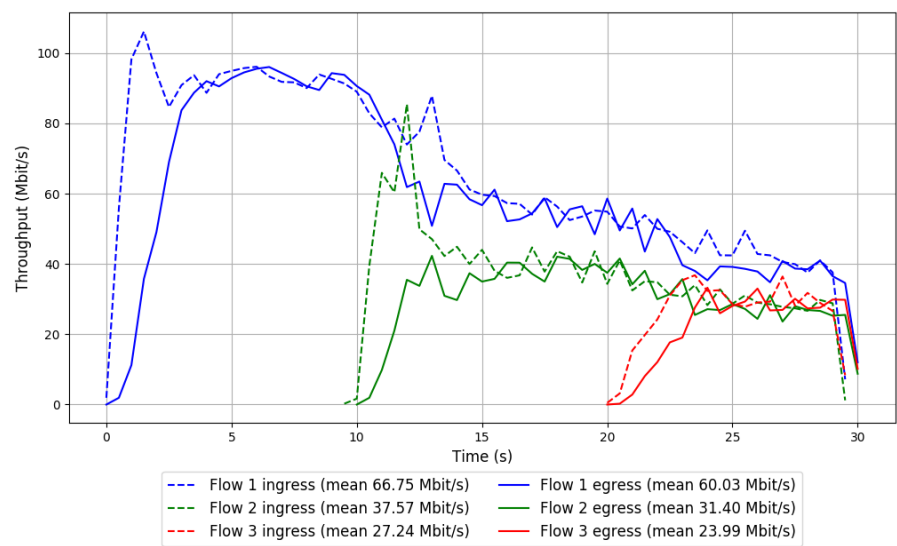


Run 5: Statistics of Indigo

Start at: 2018-06-05 13:03:50  
End at: 2018-06-05 13:04:20  
Local clock offset: 5.297 ms  
Remote clock offset: -5.511 ms

# Below is generated by plot.py at 2018-06-05 15:15:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 88.27 Mbit/s  
95th percentile per-packet one-way delay: 87.121 ms  
Loss rate: 11.75%  
-- Flow 1:  
Average throughput: 60.03 Mbit/s  
95th percentile per-packet one-way delay: 85.982 ms  
Loss rate: 10.01%  
-- Flow 2:  
Average throughput: 31.40 Mbit/s  
95th percentile per-packet one-way delay: 87.986 ms  
Loss rate: 16.34%  
-- Flow 3:  
Average throughput: 23.99 Mbit/s  
95th percentile per-packet one-way delay: 88.309 ms  
Loss rate: 11.92%

Run 5: Report of Indigo — Data Link

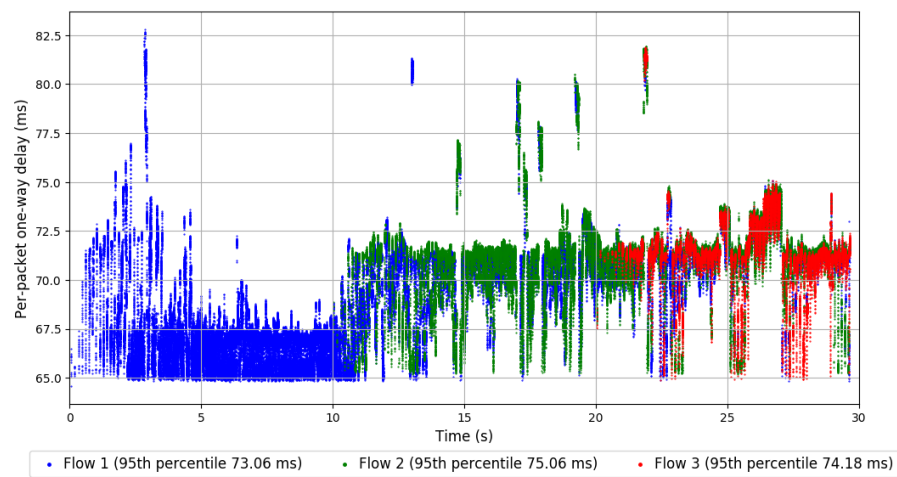
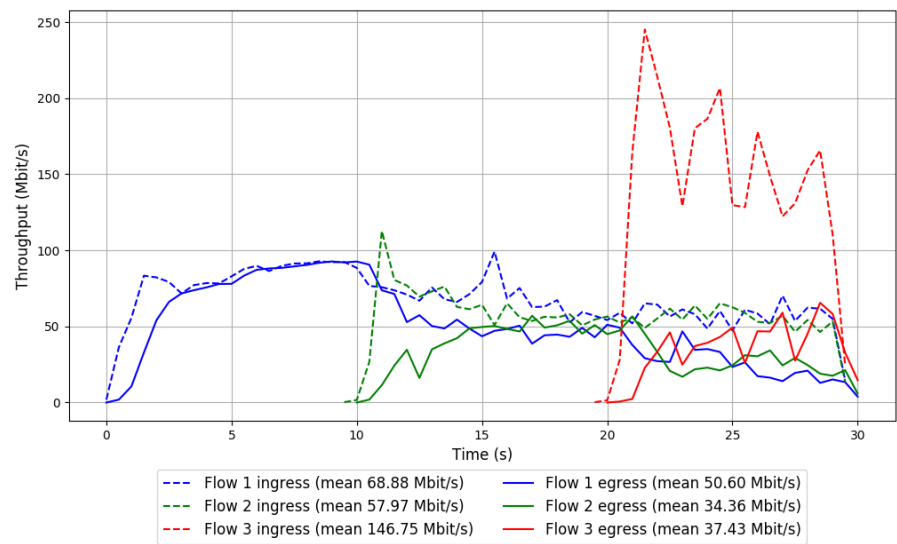


Run 6: Statistics of Indigo

Start at: 2018-06-05 13:25:54  
End at: 2018-06-05 13:26:24  
Local clock offset: 4.301 ms  
Remote clock offset: -5.873 ms

# Below is generated by plot.py at 2018-06-05 15:16:03  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 85.54 Mbit/s  
95th percentile per-packet one-way delay: 73.983 ms  
Loss rate: 44.82%  
-- Flow 1:  
Average throughput: 50.60 Mbit/s  
95th percentile per-packet one-way delay: 73.061 ms  
Loss rate: 26.52%  
-- Flow 2:  
Average throughput: 34.36 Mbit/s  
95th percentile per-packet one-way delay: 75.064 ms  
Loss rate: 40.72%  
-- Flow 3:  
Average throughput: 37.43 Mbit/s  
95th percentile per-packet one-way delay: 74.176 ms  
Loss rate: 74.48%

Run 6: Report of Indigo — Data Link

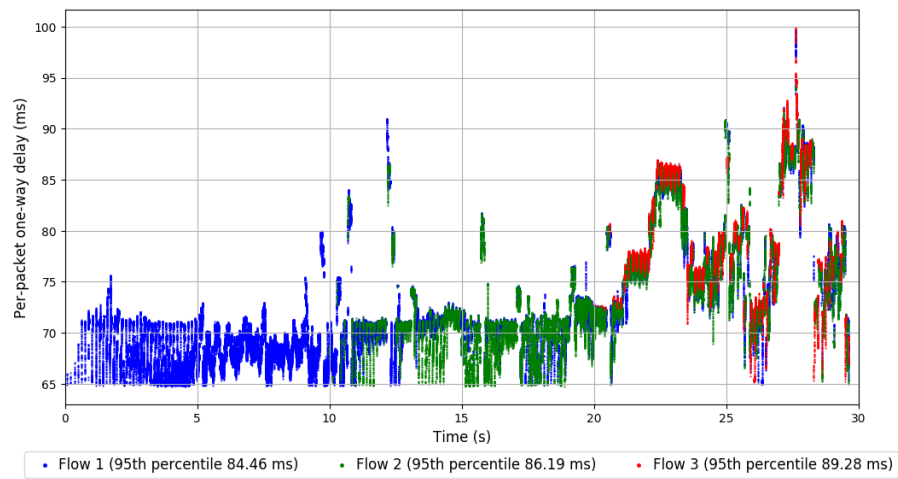
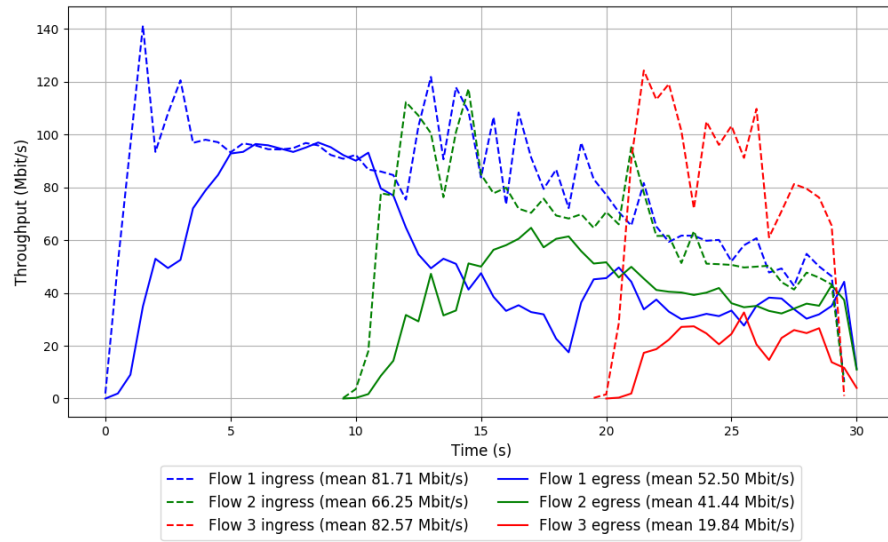


Run 7: Statistics of Indigo

Start at: 2018-06-05 13:48:40  
End at: 2018-06-05 13:49:10  
Local clock offset: 4.181 ms  
Remote clock offset: -5.919 ms

# Below is generated by plot.py at 2018-06-05 15:16:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 86.49 Mbit/s  
95th percentile per-packet one-way delay: 86.216 ms  
Loss rate: 43.32%  
-- Flow 1:  
Average throughput: 52.50 Mbit/s  
95th percentile per-packet one-way delay: 84.458 ms  
Loss rate: 35.73%  
-- Flow 2:  
Average throughput: 41.44 Mbit/s  
95th percentile per-packet one-way delay: 86.186 ms  
Loss rate: 37.43%  
-- Flow 3:  
Average throughput: 19.84 Mbit/s  
95th percentile per-packet one-way delay: 89.280 ms  
Loss rate: 75.98%

## Run 7: Report of Indigo — Data Link

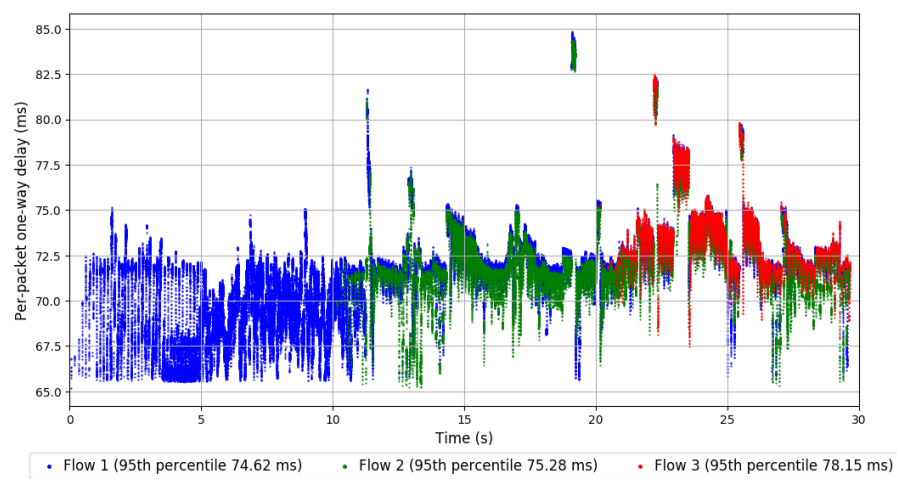
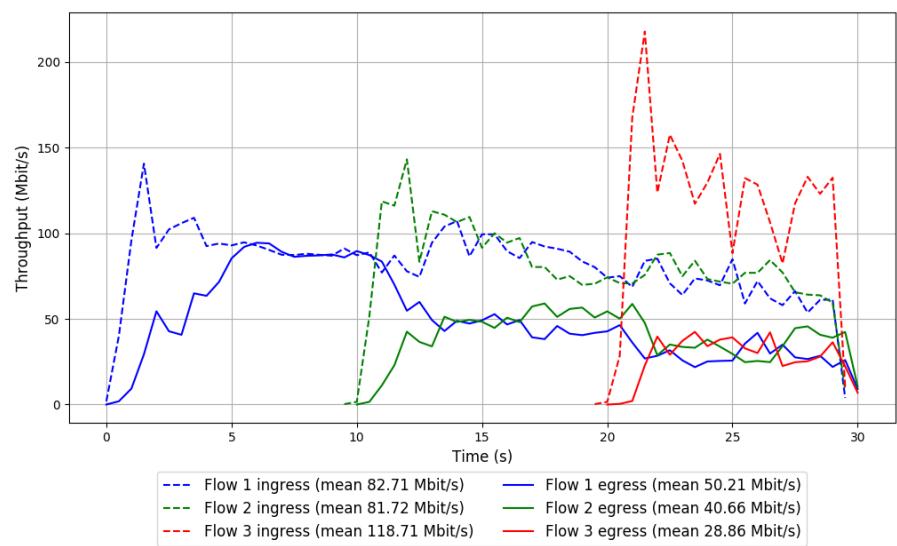


Run 8: Statistics of Indigo

Start at: 2018-06-05 14:10:36  
End at: 2018-06-05 14:11:06  
Local clock offset: 4.081 ms  
Remote clock offset: -2.254 ms

# Below is generated by plot.py at 2018-06-05 15:16:38  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 86.49 Mbit/s  
95th percentile per-packet one-way delay: 75.166 ms  
Loss rate: 50.69%  
-- Flow 1:  
Average throughput: 50.21 Mbit/s  
95th percentile per-packet one-way delay: 74.624 ms  
Loss rate: 39.28%  
-- Flow 2:  
Average throughput: 40.66 Mbit/s  
95th percentile per-packet one-way delay: 75.285 ms  
Loss rate: 50.24%  
-- Flow 3:  
Average throughput: 28.86 Mbit/s  
95th percentile per-packet one-way delay: 78.153 ms  
Loss rate: 75.69%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-06-05 14:32:33

End at: 2018-06-05 14:33:03

Local clock offset: 6.918 ms

Remote clock offset: -1.13 ms

# Below is generated by plot.py at 2018-06-05 15:16:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 86.98 Mbit/s

95th percentile per-packet one-way delay: 75.088 ms

Loss rate: 50.25%

-- Flow 1:

Average throughput: 55.72 Mbit/s

95th percentile per-packet one-way delay: 74.676 ms

Loss rate: 28.46%

-- Flow 2:

Average throughput: 30.44 Mbit/s

95th percentile per-packet one-way delay: 75.074 ms

Loss rate: 57.38%

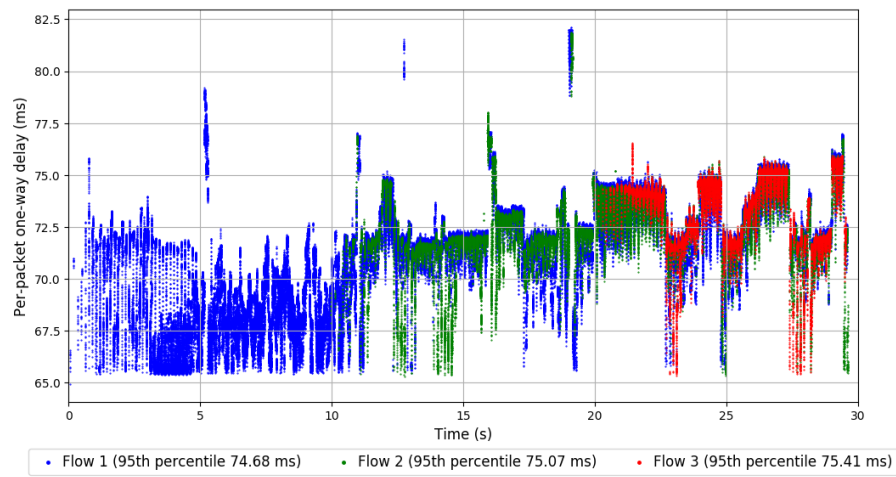
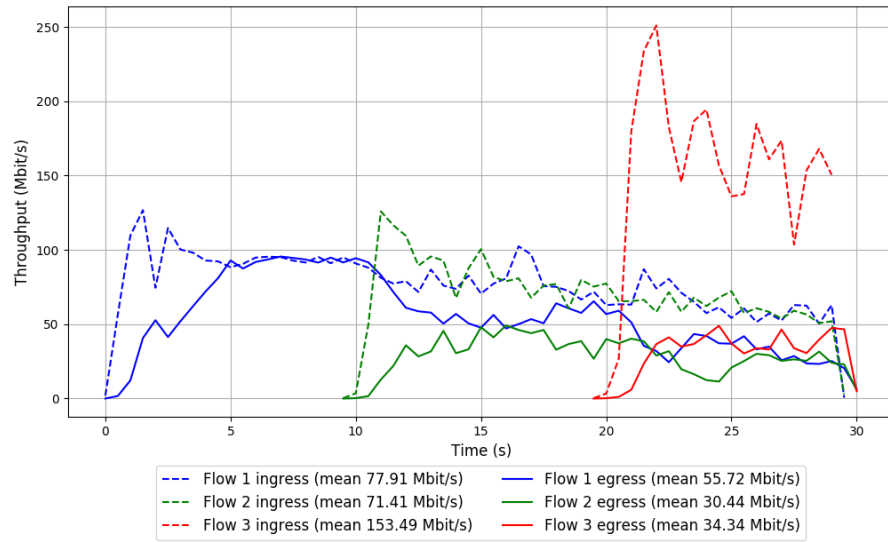
-- Flow 3:

Average throughput: 34.34 Mbit/s

95th percentile per-packet one-way delay: 75.407 ms

Loss rate: 77.63%

## Run 9: Report of Indigo — Data Link

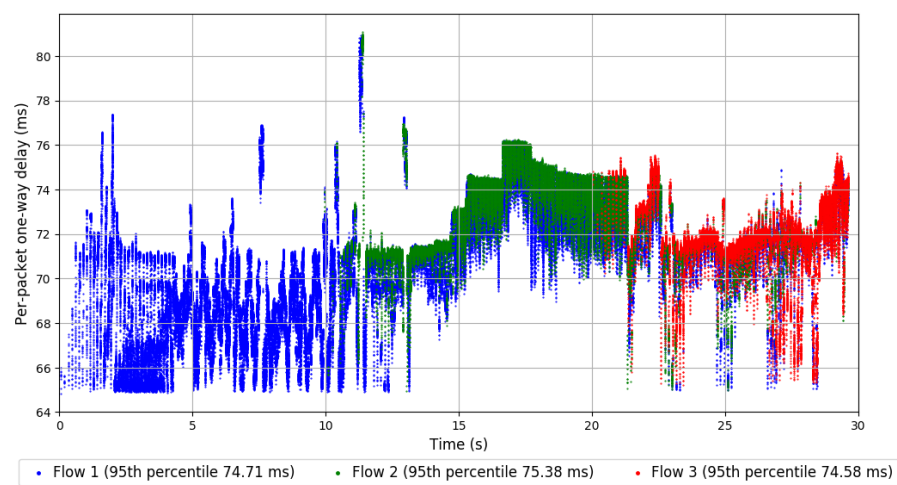
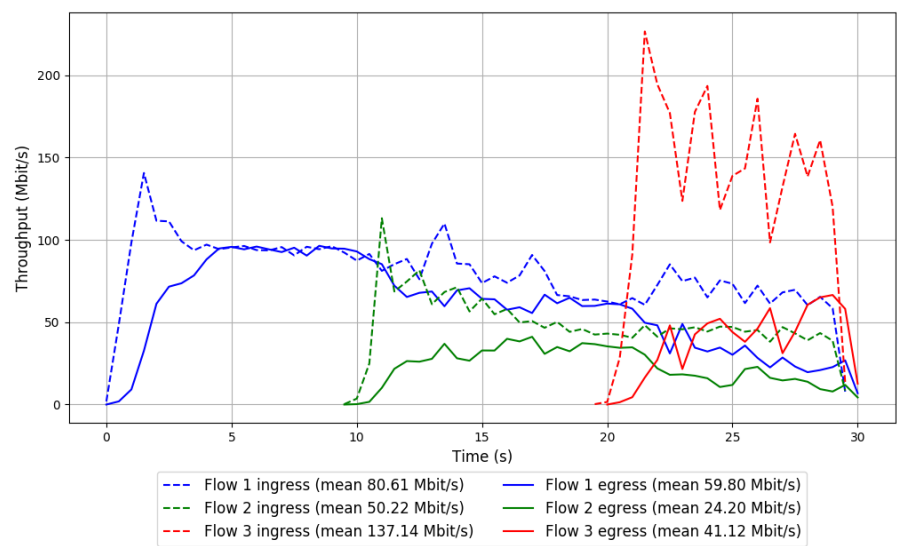


Run 10: Statistics of Indigo

Start at: 2018-06-05 14:54:36  
End at: 2018-06-05 14:55:06  
Local clock offset: 5.274 ms  
Remote clock offset: -5.265 ms

# Below is generated by plot.py at 2018-06-05 15:16:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 89.22 Mbit/s  
95th percentile per-packet one-way delay: 74.842 ms  
Loss rate: 43.68%  
-- Flow 1:  
Average throughput: 59.80 Mbit/s  
95th percentile per-packet one-way delay: 74.714 ms  
Loss rate: 25.78%  
-- Flow 2:  
Average throughput: 24.20 Mbit/s  
95th percentile per-packet one-way delay: 75.379 ms  
Loss rate: 51.81%  
-- Flow 3:  
Average throughput: 41.12 Mbit/s  
95th percentile per-packet one-way delay: 74.575 ms  
Loss rate: 70.01%

Run 10: Report of Indigo — Data Link

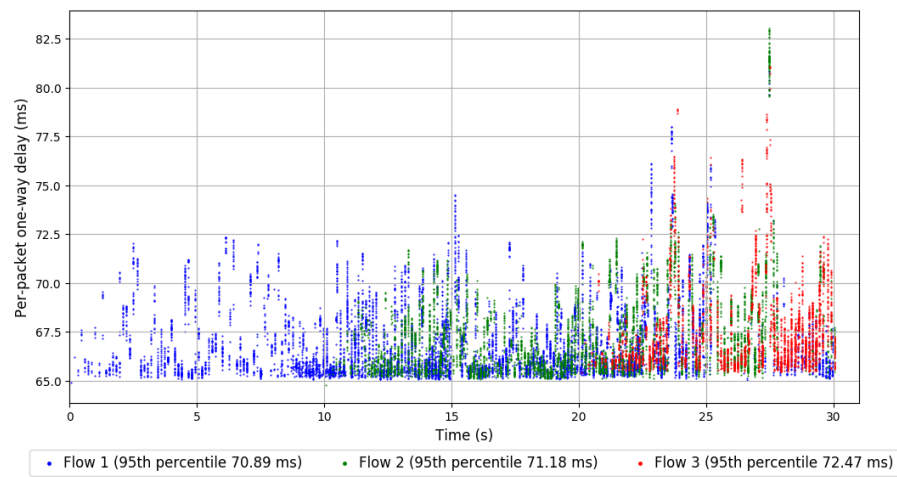
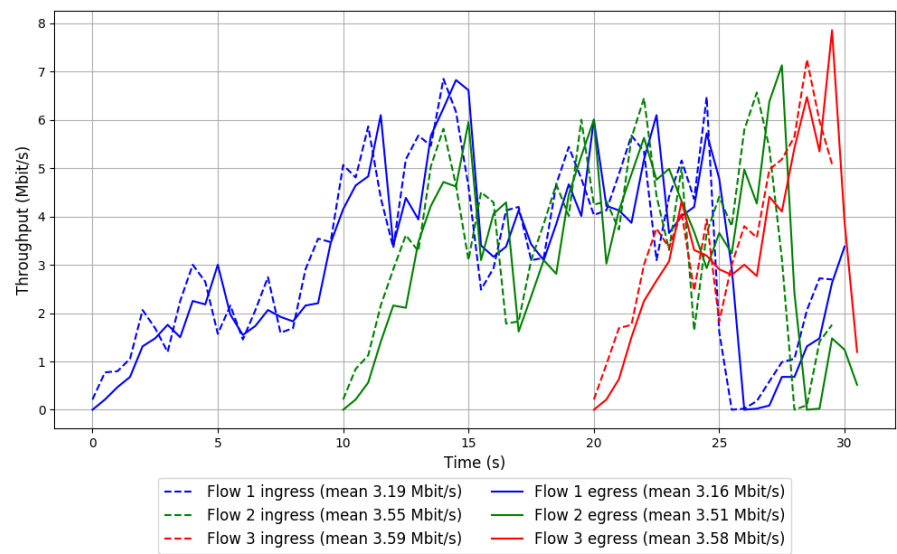


```
Run 1: Statistics of LEDBAT

Start at: 2018-06-05 11:39:31
End at: 2018-06-05 11:40:01
Local clock offset: 7.705 ms
Remote clock offset: -5.502 ms

# Below is generated by plot.py at 2018-06-05 15:16:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.68 Mbit/s
95th percentile per-packet one-way delay: 71.218 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 3.16 Mbit/s
95th percentile per-packet one-way delay: 70.890 ms
Loss rate: 1.03%
-- Flow 2:
Average throughput: 3.51 Mbit/s
95th percentile per-packet one-way delay: 71.180 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 3.58 Mbit/s
95th percentile per-packet one-way delay: 72.465 ms
Loss rate: 0.26%
```

Run 1: Report of LEDBAT — Data Link

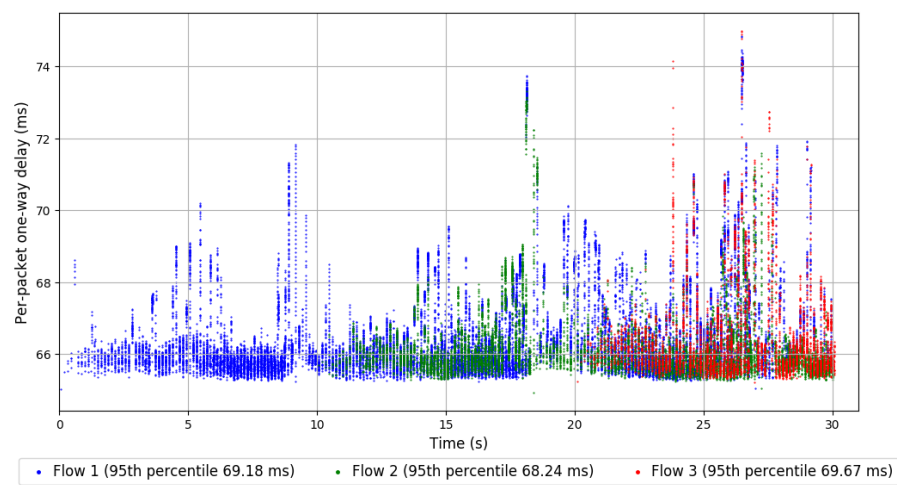
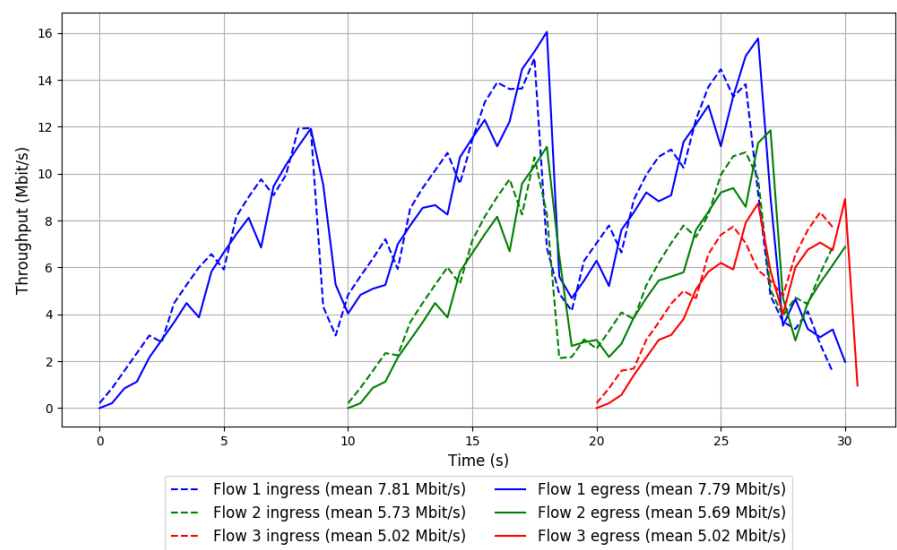


Run 2: Statistics of LEDBAT

Start at: 2018-06-05 12:02:37  
End at: 2018-06-05 12:03:07  
Local clock offset: 7.719 ms  
Remote clock offset: -4.485 ms

# Below is generated by plot.py at 2018-06-05 15:16:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 13.21 Mbit/s  
95th percentile per-packet one-way delay: 68.997 ms  
Loss rate: 0.31%  
-- Flow 1:  
Average throughput: 7.79 Mbit/s  
95th percentile per-packet one-way delay: 69.183 ms  
Loss rate: 0.25%  
-- Flow 2:  
Average throughput: 5.69 Mbit/s  
95th percentile per-packet one-way delay: 68.239 ms  
Loss rate: 0.57%  
-- Flow 3:  
Average throughput: 5.02 Mbit/s  
95th percentile per-packet one-way delay: 69.665 ms  
Loss rate: 0.02%

Run 2: Report of LEDBAT — Data Link

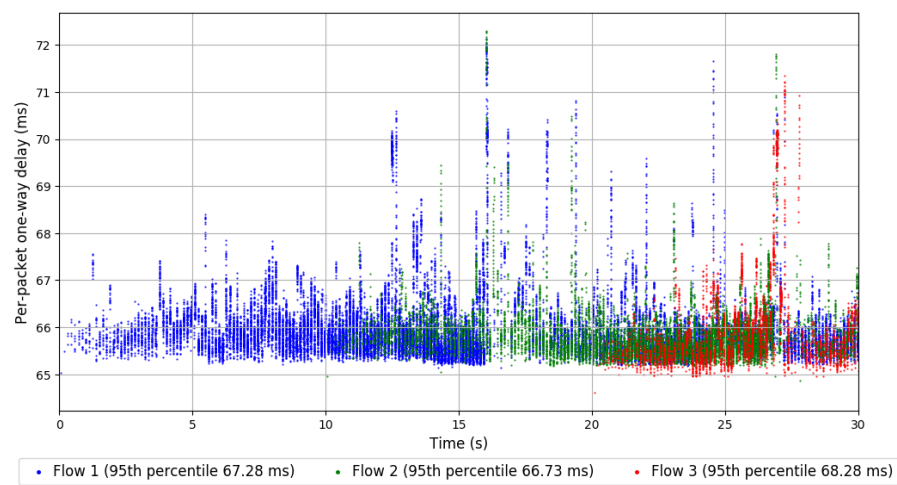
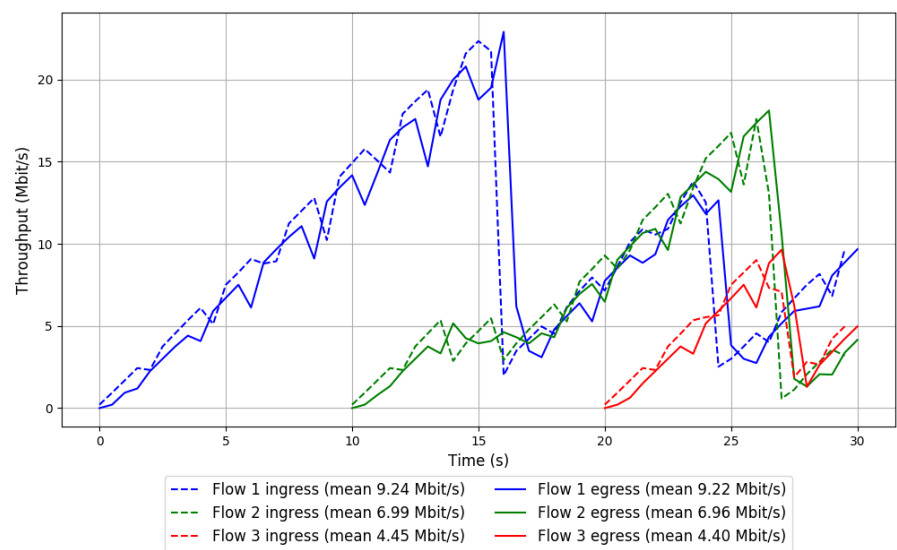


Run 3: Statistics of LEDBAT

Start at: 2018-06-05 12:24:46  
End at: 2018-06-05 12:25:16  
Local clock offset: 5.92 ms  
Remote clock offset: -5.162 ms

# Below is generated by plot.py at 2018-06-05 15:16:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 15.29 Mbit/s  
95th percentile per-packet one-way delay: 67.189 ms  
Loss rate: 0.32%  
-- Flow 1:  
Average throughput: 9.22 Mbit/s  
95th percentile per-packet one-way delay: 67.285 ms  
Loss rate: 0.17%  
-- Flow 2:  
Average throughput: 6.96 Mbit/s  
95th percentile per-packet one-way delay: 66.735 ms  
Loss rate: 0.42%  
-- Flow 3:  
Average throughput: 4.40 Mbit/s  
95th percentile per-packet one-way delay: 68.280 ms  
Loss rate: 0.96%

Run 3: Report of LEDBAT — Data Link

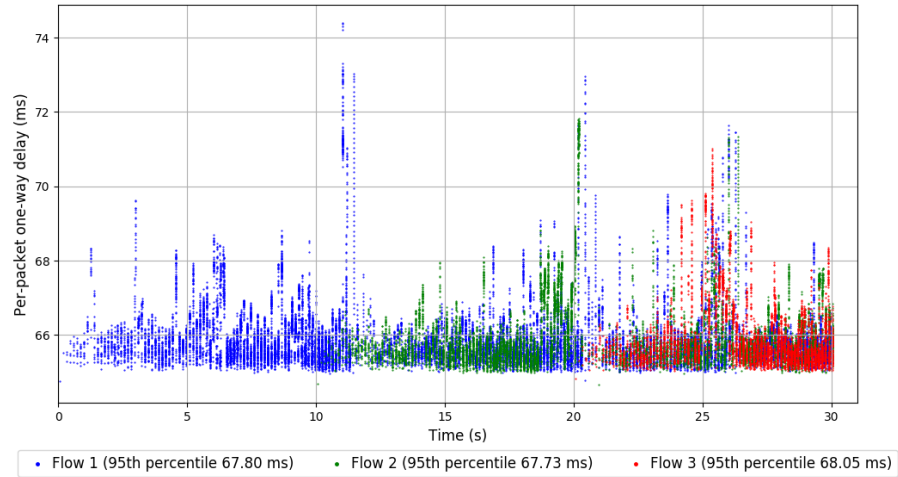
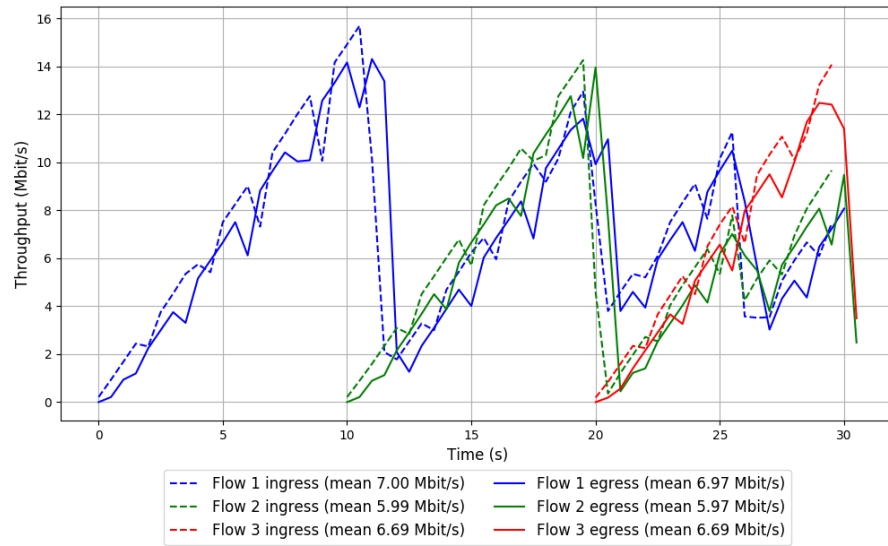


Run 4: Statistics of LEDBAT

Start at: 2018-06-05 12:47:14  
End at: 2018-06-05 12:47:44  
Local clock offset: 5.383 ms  
Remote clock offset: -5.521 ms

# Below is generated by plot.py at 2018-06-05 15:16:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 13.15 Mbit/s  
95th percentile per-packet one-way delay: 67.801 ms  
Loss rate: 0.36%  
-- Flow 1:  
Average throughput: 6.97 Mbit/s  
95th percentile per-packet one-way delay: 67.804 ms  
Loss rate: 0.46%  
-- Flow 2:  
Average throughput: 5.97 Mbit/s  
95th percentile per-packet one-way delay: 67.733 ms  
Loss rate: 0.36%  
-- Flow 3:  
Average throughput: 6.69 Mbit/s  
95th percentile per-packet one-way delay: 68.053 ms  
Loss rate: 0.00%

# Run 4: Report of LEDBAT — Data Link

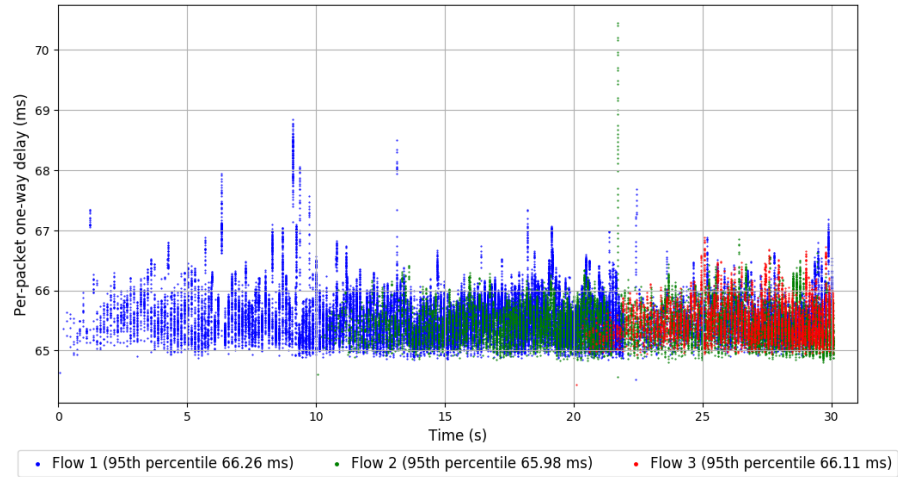
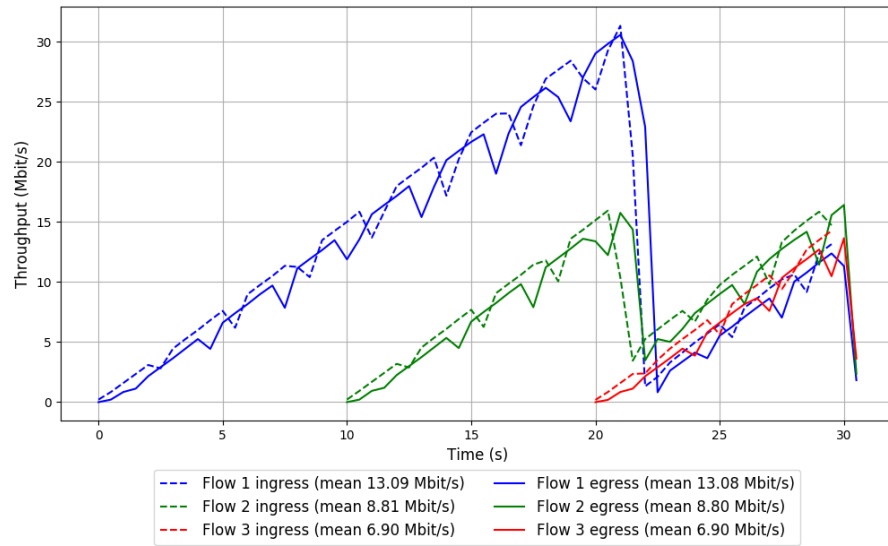


Run 5: Statistics of LEDBAT

Start at: 2018-06-05 13:09:26  
End at: 2018-06-05 13:09:56  
Local clock offset: 5.387 ms  
Remote clock offset: -5.631 ms

# Below is generated by plot.py at 2018-06-05 15:16:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 21.22 Mbit/s  
95th percentile per-packet one-way delay: 66.156 ms  
Loss rate: 0.04%  
-- Flow 1:  
Average throughput: 13.08 Mbit/s  
95th percentile per-packet one-way delay: 66.257 ms  
Loss rate: 0.06%  
-- Flow 2:  
Average throughput: 8.80 Mbit/s  
95th percentile per-packet one-way delay: 65.982 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 6.90 Mbit/s  
95th percentile per-packet one-way delay: 66.106 ms  
Loss rate: 0.00%

## Run 5: Report of LEDBAT — Data Link

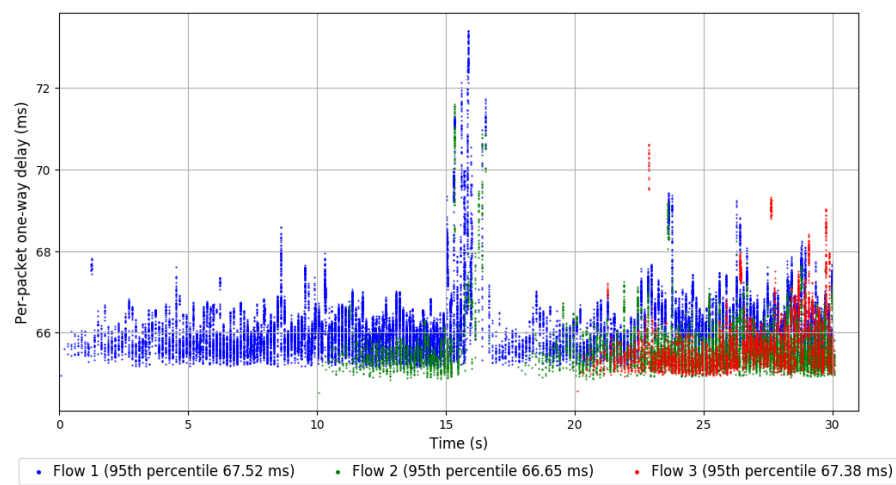
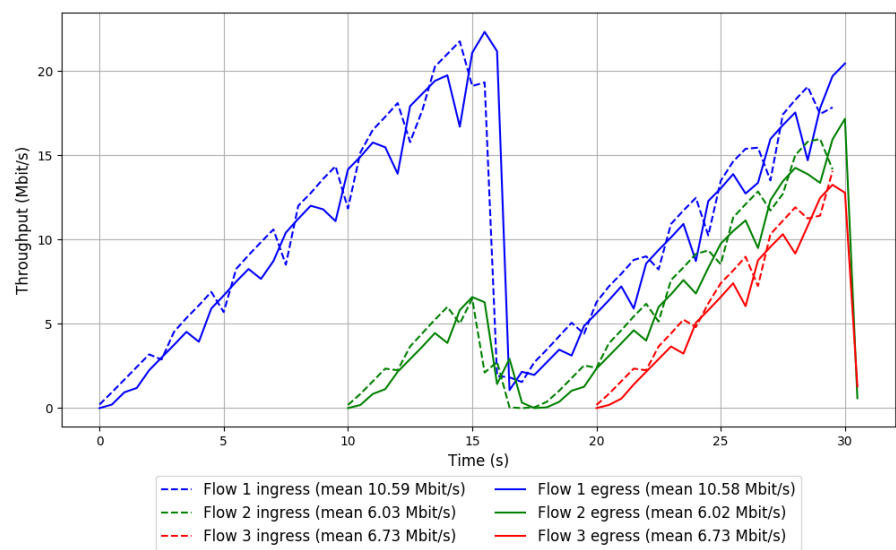


Run 6: Statistics of LEDBAT

Start at: 2018-06-05 13:31:30  
End at: 2018-06-05 13:32:00  
Local clock offset: 4.334 ms  
Remote clock offset: -5.653 ms

# Below is generated by plot.py at 2018-06-05 15:16:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 16.79 Mbit/s  
95th percentile per-packet one-way delay: 67.343 ms  
Loss rate: 0.10%  
-- Flow 1:  
Average throughput: 10.58 Mbit/s  
95th percentile per-packet one-way delay: 67.520 ms  
Loss rate: 0.09%  
-- Flow 2:  
Average throughput: 6.02 Mbit/s  
95th percentile per-packet one-way delay: 66.654 ms  
Loss rate: 0.18%  
-- Flow 3:  
Average throughput: 6.73 Mbit/s  
95th percentile per-packet one-way delay: 67.378 ms  
Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link

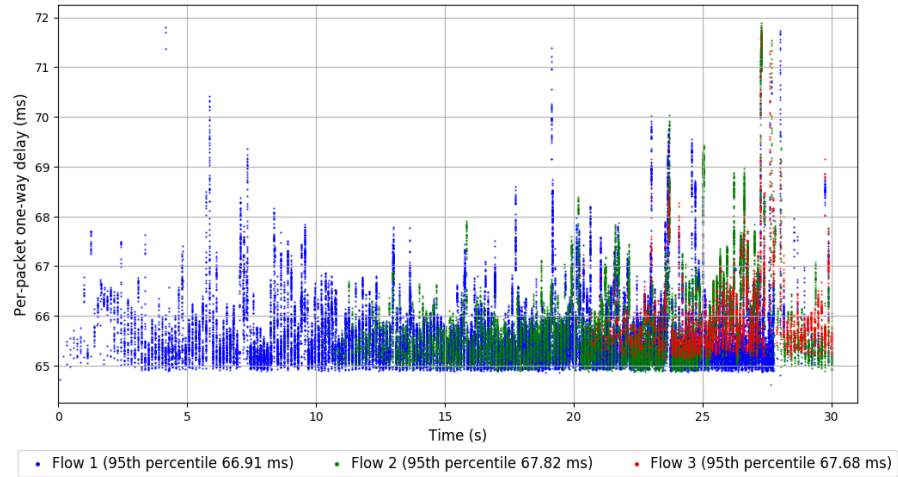
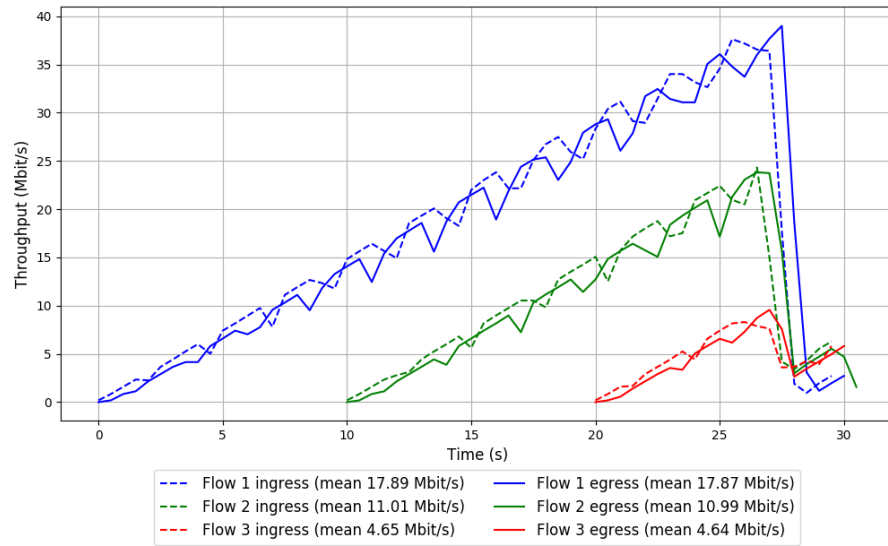


Run 7: Statistics of LEDBAT

Start at: 2018-06-05 13:54:16  
End at: 2018-06-05 13:54:46  
Local clock offset: 4.139 ms  
Remote clock offset: -5.853 ms

# Below is generated by plot.py at 2018-06-05 15:16:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 26.71 Mbit/s  
95th percentile per-packet one-way delay: 67.250 ms  
Loss rate: 0.12%  
-- Flow 1:  
Average throughput: 17.87 Mbit/s  
95th percentile per-packet one-way delay: 66.912 ms  
Loss rate: 0.11%  
-- Flow 2:  
Average throughput: 10.99 Mbit/s  
95th percentile per-packet one-way delay: 67.818 ms  
Loss rate: 0.11%  
-- Flow 3:  
Average throughput: 4.64 Mbit/s  
95th percentile per-packet one-way delay: 67.680 ms  
Loss rate: 0.23%

## Run 7: Report of LEDBAT — Data Link

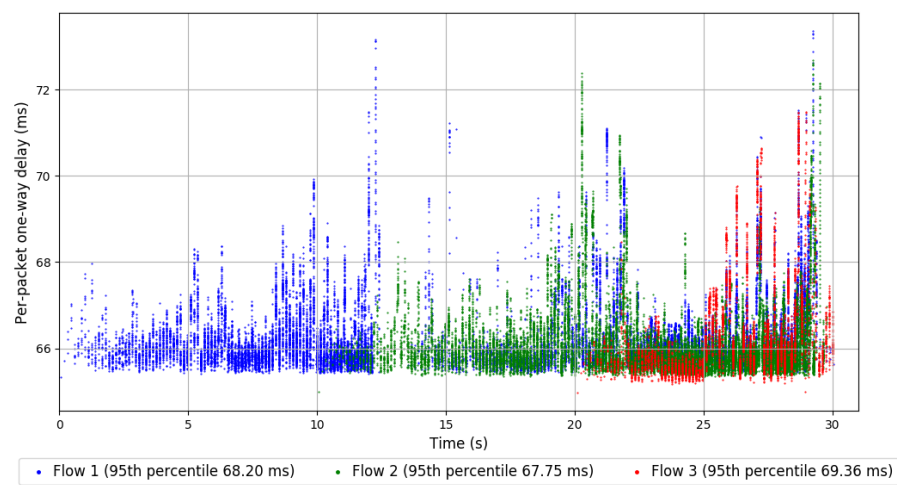
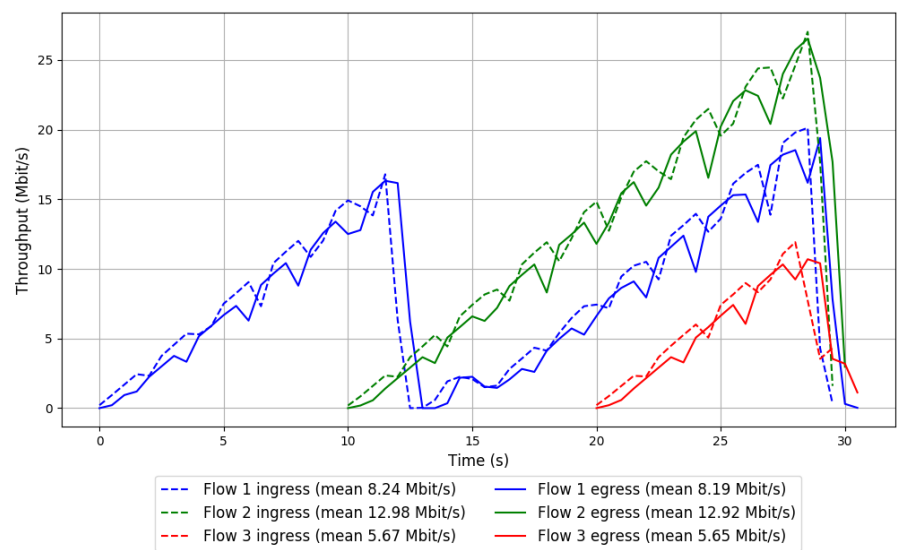


Run 8: Statistics of LEDBAT

Start at: 2018-06-05 14:16:09  
End at: 2018-06-05 14:16:39  
Local clock offset: 5.321 ms  
Remote clock offset: -1.527 ms

# Below is generated by plot.py at 2018-06-05 15:16:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 18.56 Mbit/s  
95th percentile per-packet one-way delay: 68.208 ms  
Loss rate: 0.46%  
-- Flow 1:  
Average throughput: 8.19 Mbit/s  
95th percentile per-packet one-way delay: 68.196 ms  
Loss rate: 0.51%  
-- Flow 2:  
Average throughput: 12.92 Mbit/s  
95th percentile per-packet one-way delay: 67.753 ms  
Loss rate: 0.43%  
-- Flow 3:  
Average throughput: 5.65 Mbit/s  
95th percentile per-packet one-way delay: 69.356 ms  
Loss rate: 0.33%

Run 8: Report of LEDBAT — Data Link

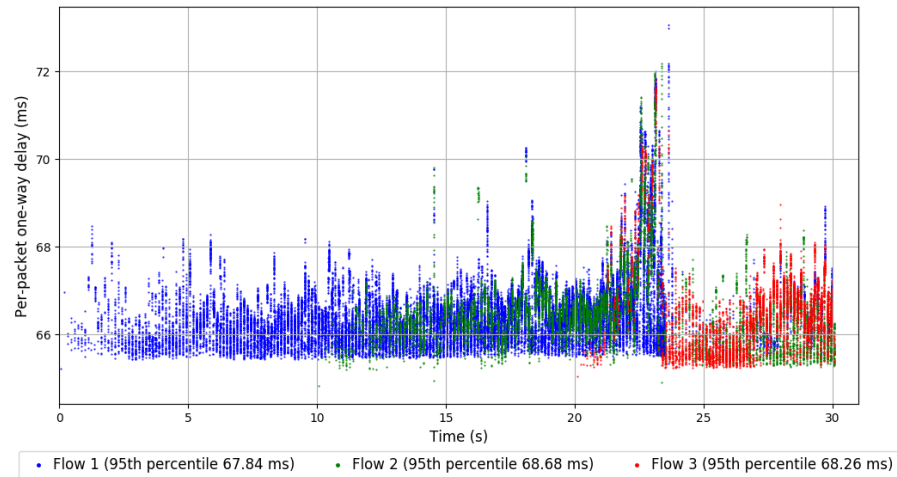
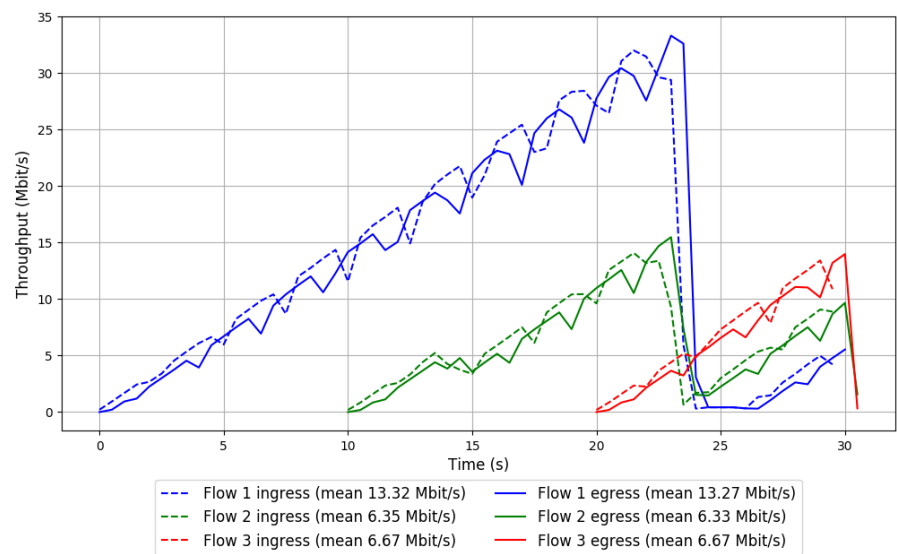


Run 9: Statistics of LEDBAT

Start at: 2018-06-05 14:38:07  
End at: 2018-06-05 14:38:37  
Local clock offset: 7.128 ms  
Remote clock offset: -3.204 ms

# Below is generated by plot.py at 2018-06-05 15:16:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 19.66 Mbit/s  
95th percentile per-packet one-way delay: 68.081 ms  
Loss rate: 0.31%  
-- Flow 1:  
Average throughput: 13.27 Mbit/s  
95th percentile per-packet one-way delay: 67.841 ms  
Loss rate: 0.35%  
-- Flow 2:  
Average throughput: 6.33 Mbit/s  
95th percentile per-packet one-way delay: 68.682 ms  
Loss rate: 0.31%  
-- Flow 3:  
Average throughput: 6.67 Mbit/s  
95th percentile per-packet one-way delay: 68.256 ms  
Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link

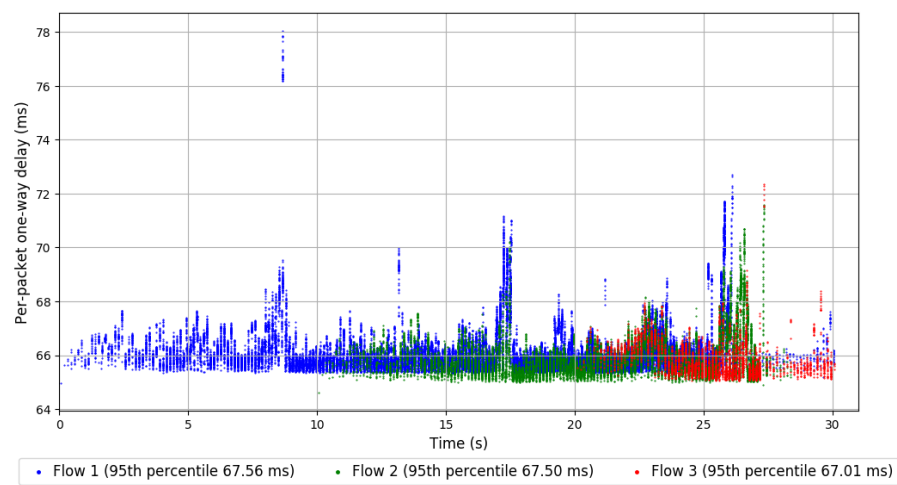
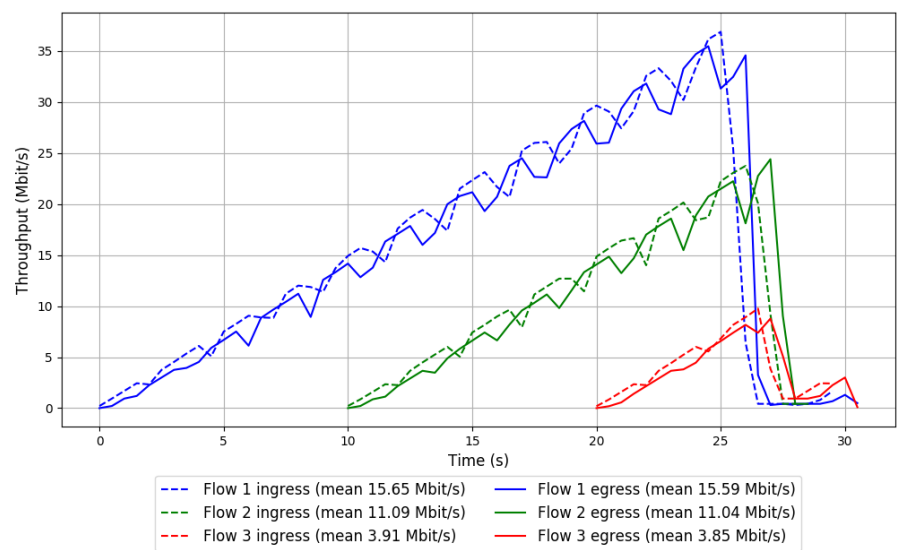


Run 10: Statistics of LEDBAT

Start at: 2018-06-05 15:00:12  
End at: 2018-06-05 15:00:42  
Local clock offset: 4.984 ms  
Remote clock offset: -5.395 ms

# Below is generated by plot.py at 2018-06-05 15:16:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 23.60 Mbit/s  
95th percentile per-packet one-way delay: 67.506 ms  
Loss rate: 0.44%  
-- Flow 1:  
Average throughput: 15.59 Mbit/s  
95th percentile per-packet one-way delay: 67.557 ms  
Loss rate: 0.35%  
-- Flow 2:  
Average throughput: 11.04 Mbit/s  
95th percentile per-packet one-way delay: 67.505 ms  
Loss rate: 0.44%  
-- Flow 3:  
Average throughput: 3.85 Mbit/s  
95th percentile per-packet one-way delay: 67.006 ms  
Loss rate: 1.61%

Run 10: Report of LEDBAT — Data Link

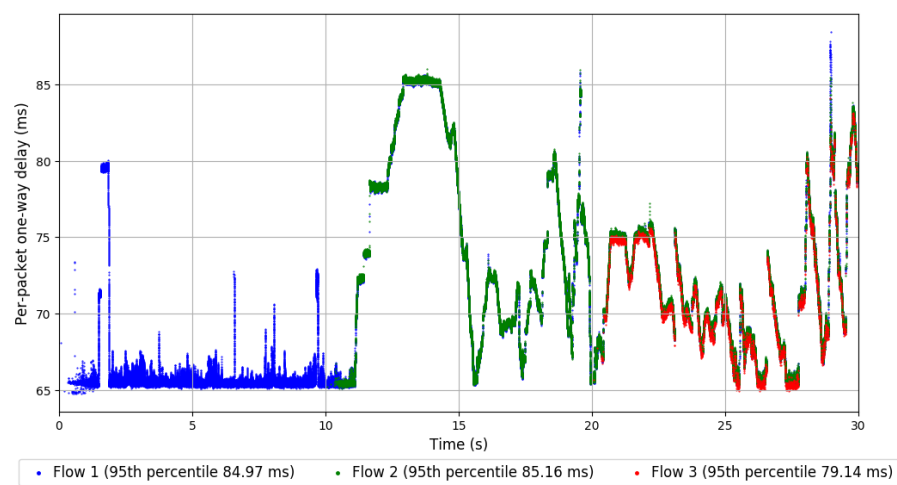
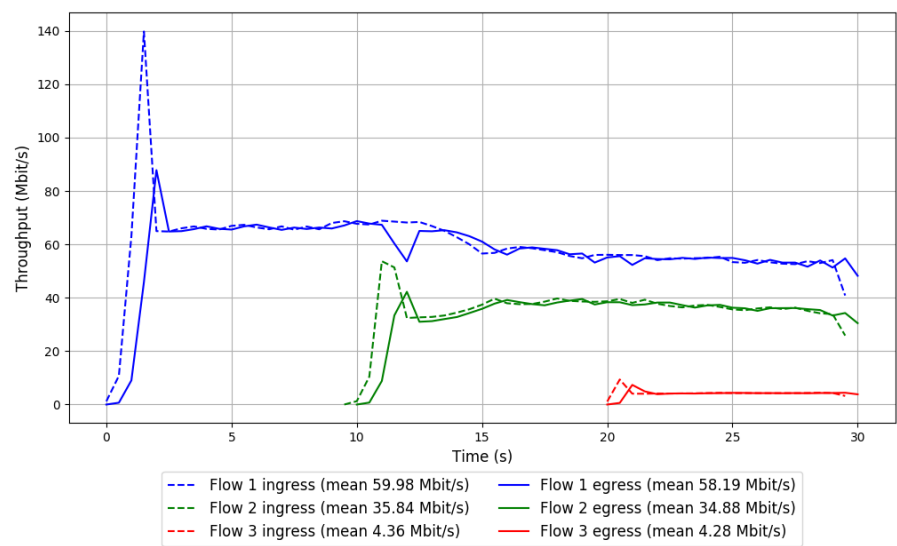


Run 1: Statistics of PCC-Allegro

Start at: 2018-06-05 11:43:37  
End at: 2018-06-05 11:44:07  
Local clock offset: 7.712 ms  
Remote clock offset: -5.265 ms

# Below is generated by plot.py at 2018-06-05 15:17:20  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 82.82 Mbit/s  
95th percentile per-packet one-way delay: 85.035 ms  
Loss rate: 2.83%  
-- Flow 1:  
Average throughput: 58.19 Mbit/s  
95th percentile per-packet one-way delay: 84.971 ms  
Loss rate: 2.95%  
-- Flow 2:  
Average throughput: 34.88 Mbit/s  
95th percentile per-packet one-way delay: 85.162 ms  
Loss rate: 2.61%  
-- Flow 3:  
Average throughput: 4.28 Mbit/s  
95th percentile per-packet one-way delay: 79.142 ms  
Loss rate: 1.55%

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2018-06-05 12:06:41

End at: 2018-06-05 12:07:11

Local clock offset: 7.751 ms

Remote clock offset: -4.59 ms

# Below is generated by plot.py at 2018-06-05 15:17:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 85.59 Mbit/s

95th percentile per-packet one-way delay: 74.445 ms

Loss rate: 1.78%

-- Flow 1:

Average throughput: 82.01 Mbit/s

95th percentile per-packet one-way delay: 74.449 ms

Loss rate: 1.74%

-- Flow 2:

Average throughput: 4.28 Mbit/s

95th percentile per-packet one-way delay: 74.178 ms

Loss rate: 2.84%

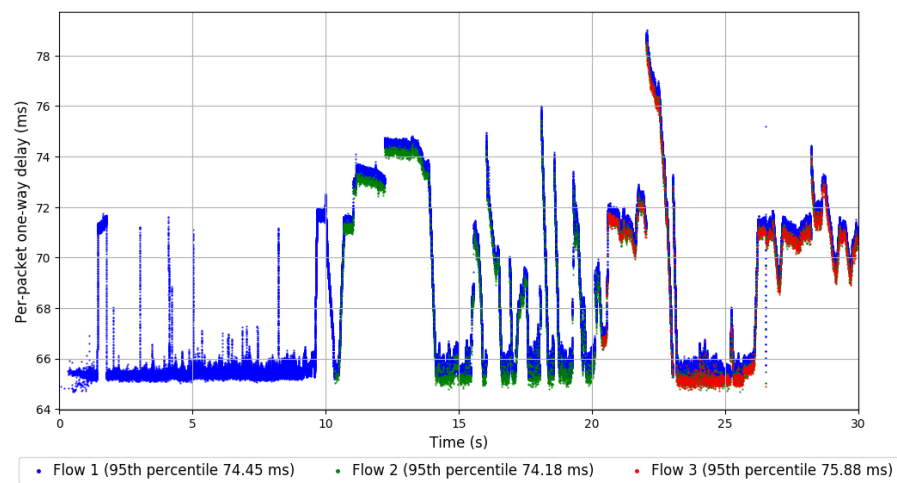
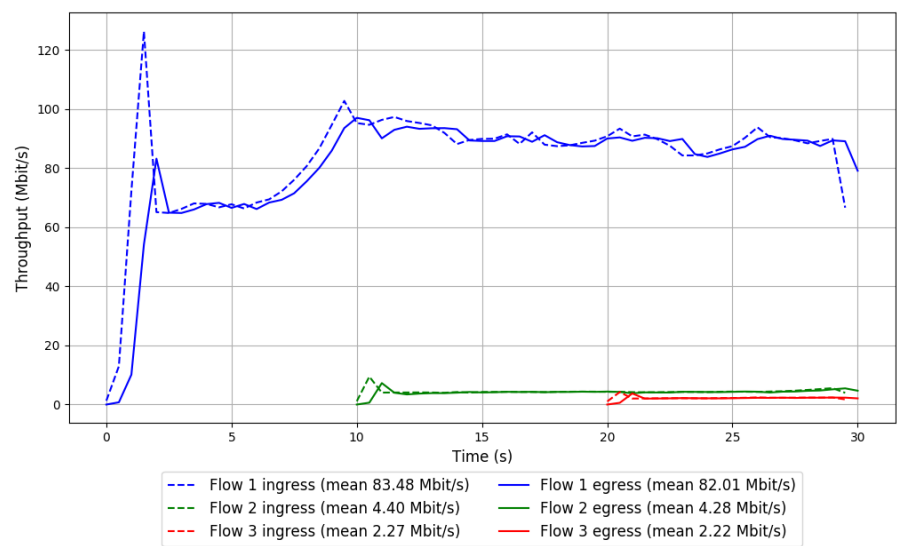
-- Flow 3:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 75.882 ms

Loss rate: 2.05%

Run 2: Report of PCC-Allegro — Data Link

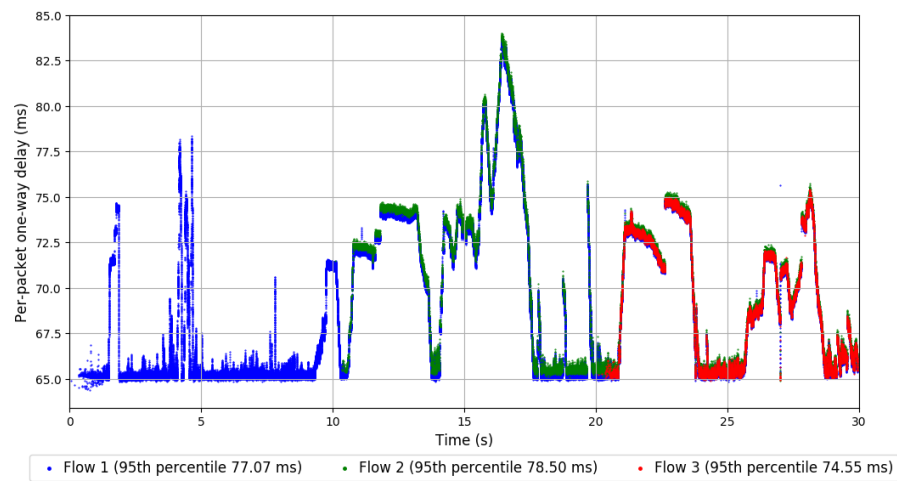
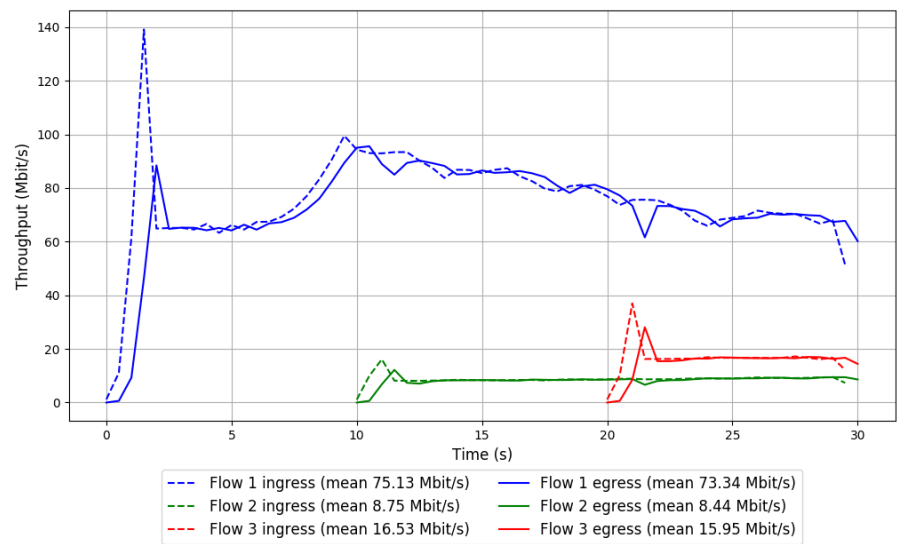


Run 3: Statistics of PCC-Allegro

Start at: 2018-06-05 12:29:01  
End at: 2018-06-05 12:29:31  
Local clock offset: 5.59 ms  
Remote clock offset: -5.449 ms

# Below is generated by plot.py at 2018-06-05 15:17:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 84.21 Mbit/s  
95th percentile per-packet one-way delay: 76.728 ms  
Loss rate: 2.53%  
-- Flow 1:  
Average throughput: 73.34 Mbit/s  
95th percentile per-packet one-way delay: 77.068 ms  
Loss rate: 2.38%  
-- Flow 2:  
Average throughput: 8.44 Mbit/s  
95th percentile per-packet one-way delay: 78.500 ms  
Loss rate: 3.54%  
-- Flow 3:  
Average throughput: 15.95 Mbit/s  
95th percentile per-packet one-way delay: 74.552 ms  
Loss rate: 3.49%

Run 3: Report of PCC-Allegro — Data Link

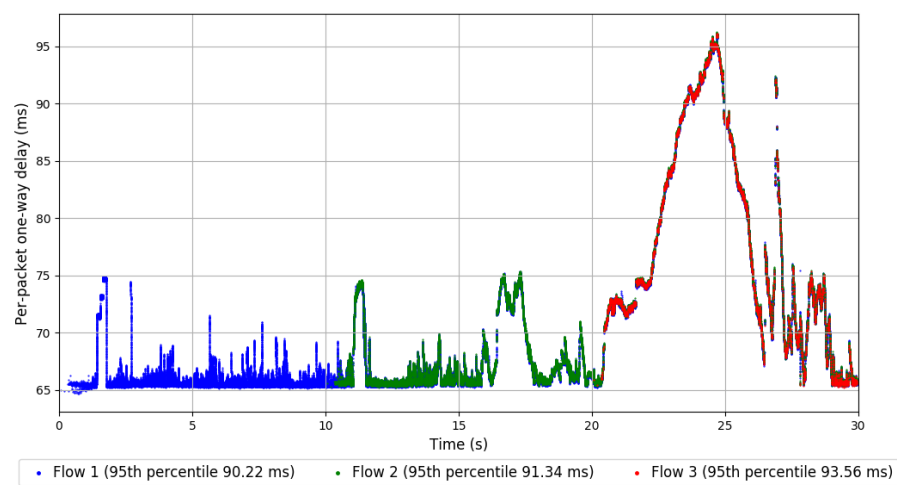
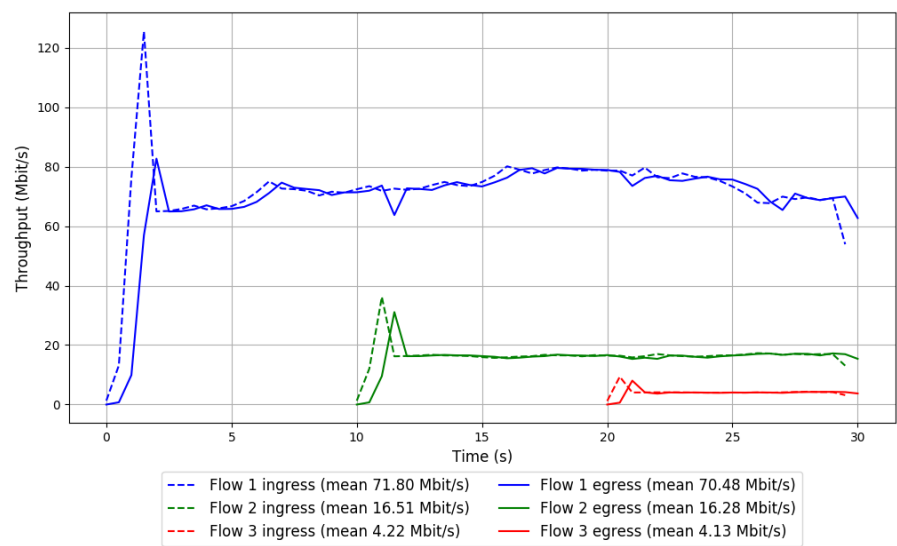


Run 4: Statistics of PCC-Allegro

Start at: 2018-06-05 12:51:24  
End at: 2018-06-05 12:51:54  
Local clock offset: 5.402 ms  
Remote clock offset: -5.516 ms

# Below is generated by plot.py at 2018-06-05 15:17:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 82.66 Mbit/s  
95th percentile per-packet one-way delay: 90.612 ms  
Loss rate: 1.79%  
-- Flow 1:  
Average throughput: 70.48 Mbit/s  
95th percentile per-packet one-way delay: 90.225 ms  
Loss rate: 1.83%  
-- Flow 2:  
Average throughput: 16.28 Mbit/s  
95th percentile per-packet one-way delay: 91.341 ms  
Loss rate: 1.42%  
-- Flow 3:  
Average throughput: 4.13 Mbit/s  
95th percentile per-packet one-way delay: 93.563 ms  
Loss rate: 2.17%

Run 4: Report of PCC-Allegro — Data Link

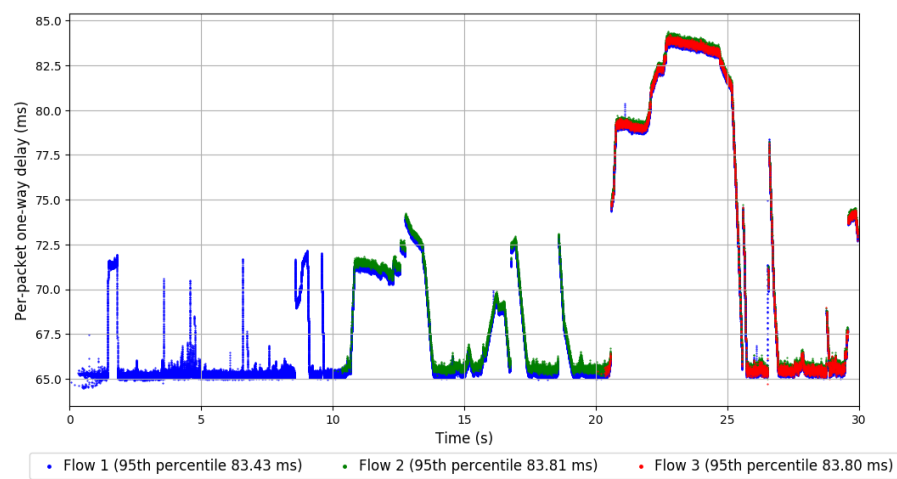
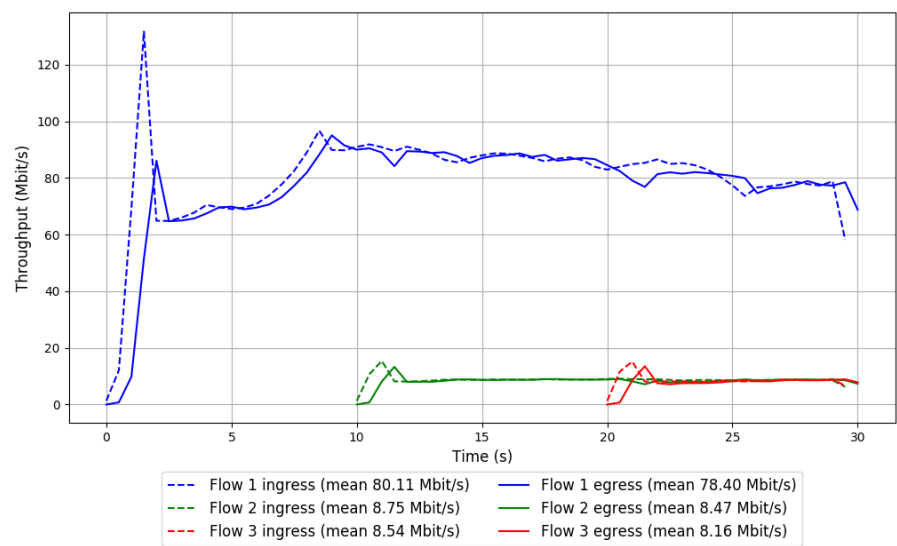


Run 5: Statistics of PCC-Allegro

Start at: 2018-06-05 13:13:32  
End at: 2018-06-05 13:14:02  
Local clock offset: 4.769 ms  
Remote clock offset: -5.759 ms

# Below is generated by plot.py at 2018-06-05 15:17:37  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 86.73 Mbit/s  
95th percentile per-packet one-way delay: 83.496 ms  
Loss rate: 2.25%  
-- Flow 1:  
Average throughput: 78.40 Mbit/s  
95th percentile per-packet one-way delay: 83.432 ms  
Loss rate: 2.11%  
-- Flow 2:  
Average throughput: 8.47 Mbit/s  
95th percentile per-packet one-way delay: 83.810 ms  
Loss rate: 3.07%  
-- Flow 3:  
Average throughput: 8.16 Mbit/s  
95th percentile per-packet one-way delay: 83.795 ms  
Loss rate: 4.41%

Run 5: Report of PCC-Allegro — Data Link

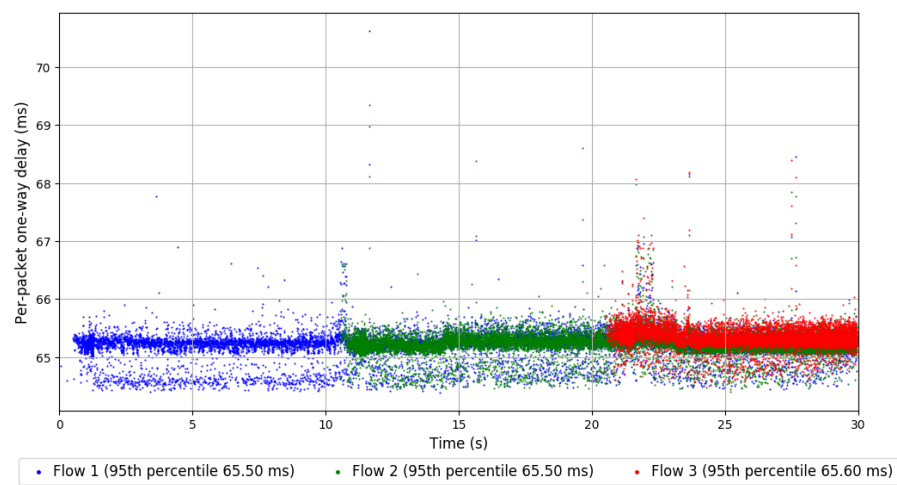
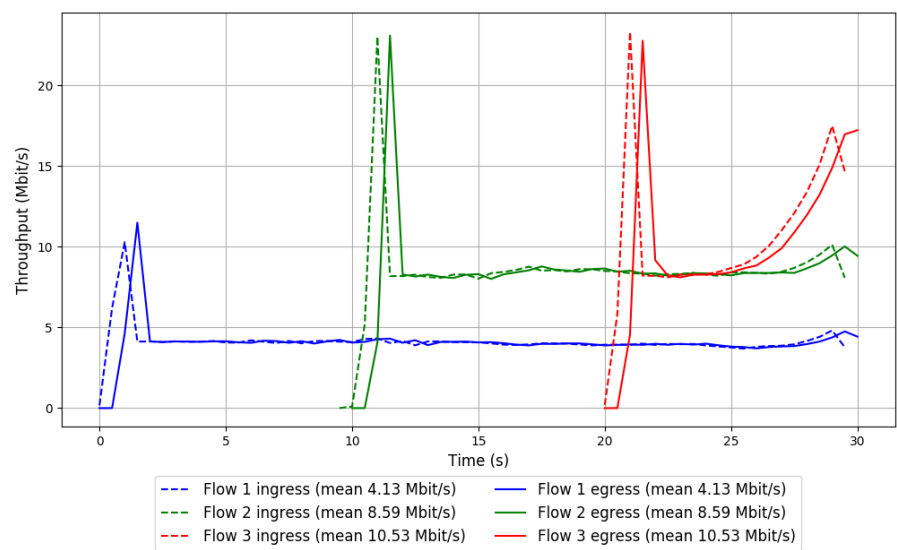


Run 6: Statistics of PCC-Allegro

Start at: 2018-06-05 13:35:38  
End at: 2018-06-05 13:36:08  
Local clock offset: 4.027 ms  
Remote clock offset: -5.716 ms

# Below is generated by plot.py at 2018-06-05 15:17:37  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 13.32 Mbit/s  
95th percentile per-packet one-way delay: 65.539 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 4.13 Mbit/s  
95th percentile per-packet one-way delay: 65.498 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 8.59 Mbit/s  
95th percentile per-packet one-way delay: 65.499 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 10.53 Mbit/s  
95th percentile per-packet one-way delay: 65.604 ms  
Loss rate: 0.00%

Run 6: Report of PCC-Allegro — Data Link

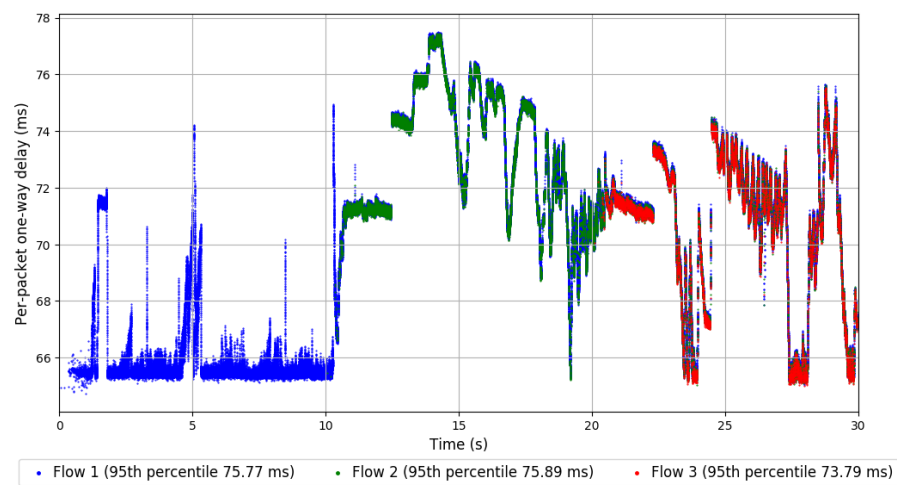
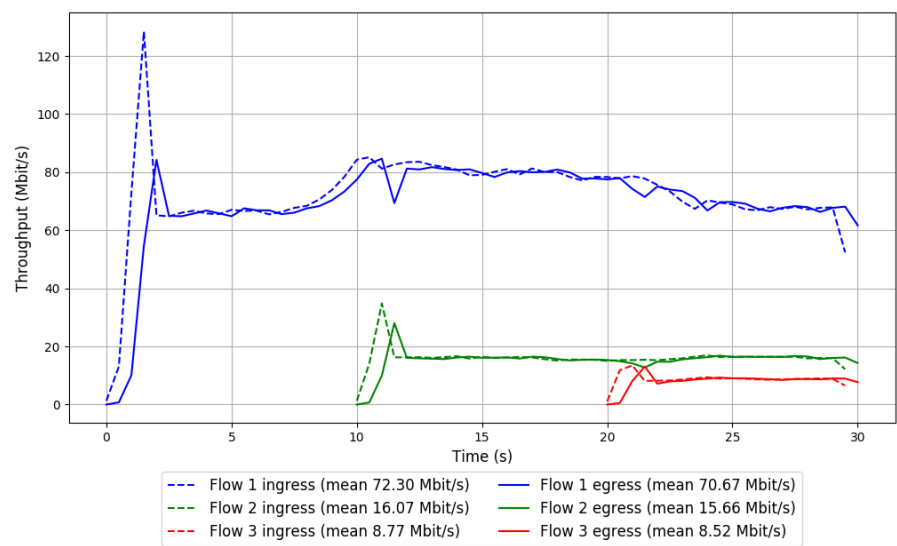


Run 7: Statistics of PCC-Allegro

Start at: 2018-06-05 13:58:21  
End at: 2018-06-05 13:58:51  
Local clock offset: 3.97 ms  
Remote clock offset: -5.292 ms

# Below is generated by plot.py at 2018-06-05 15:17:48  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 83.89 Mbit/s  
95th percentile per-packet one-way delay: 75.766 ms  
Loss rate: 2.30%  
-- Flow 1:  
Average throughput: 70.67 Mbit/s  
95th percentile per-packet one-way delay: 75.769 ms  
Loss rate: 2.24%  
-- Flow 2:  
Average throughput: 15.66 Mbit/s  
95th percentile per-packet one-way delay: 75.885 ms  
Loss rate: 2.56%  
-- Flow 3:  
Average throughput: 8.52 Mbit/s  
95th percentile per-packet one-way delay: 73.790 ms  
Loss rate: 2.86%

Run 7: Report of PCC-Allegro — Data Link

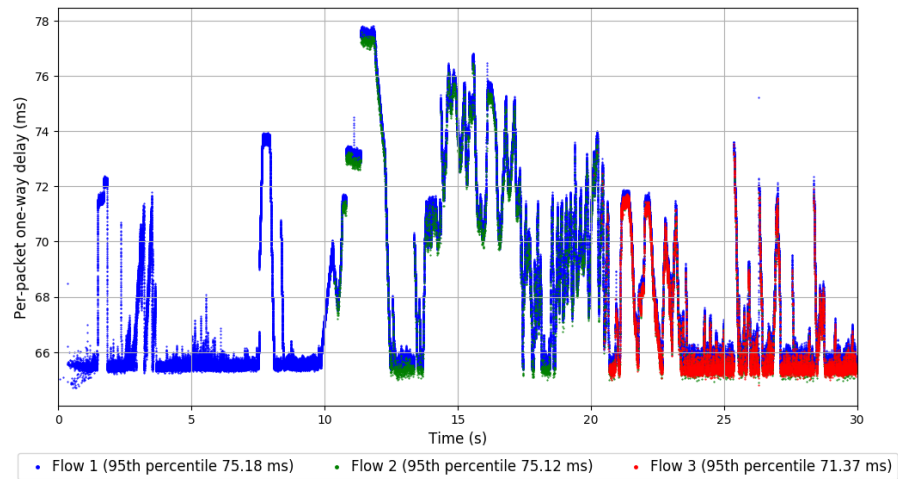
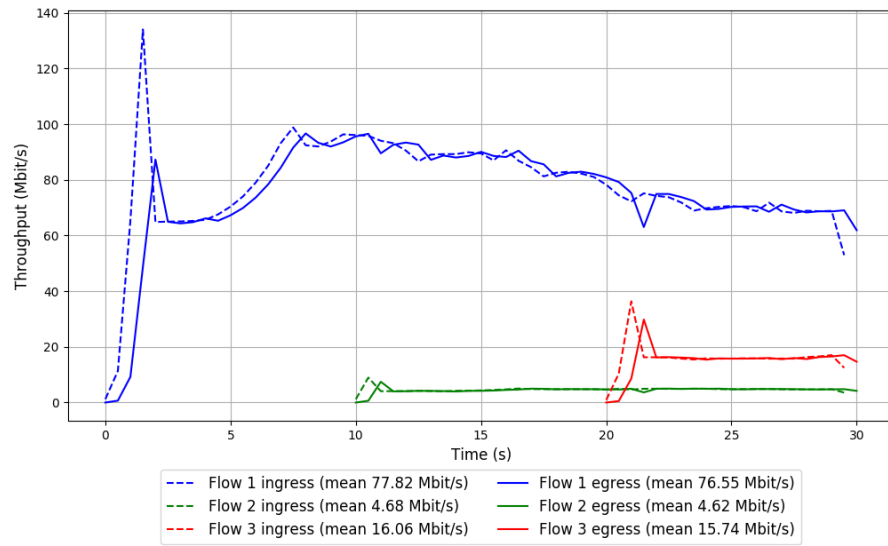


Run 8: Statistics of PCC-Allegro

Start at: 2018-06-05 14:20:14  
End at: 2018-06-05 14:20:44  
Local clock offset: 5.873 ms  
Remote clock offset: -1.266 ms

# Below is generated by plot.py at 2018-06-05 15:17:50  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 84.81 Mbit/s  
95th percentile per-packet one-way delay: 75.066 ms  
Loss rate: 1.65%  
-- Flow 1:  
Average throughput: 76.55 Mbit/s  
95th percentile per-packet one-way delay: 75.176 ms  
Loss rate: 1.63%  
-- Flow 2:  
Average throughput: 4.62 Mbit/s  
95th percentile per-packet one-way delay: 75.123 ms  
Loss rate: 1.41%  
-- Flow 3:  
Average throughput: 15.74 Mbit/s  
95th percentile per-packet one-way delay: 71.369 ms  
Loss rate: 2.06%

# Run 8: Report of PCC-Allegro — Data Link

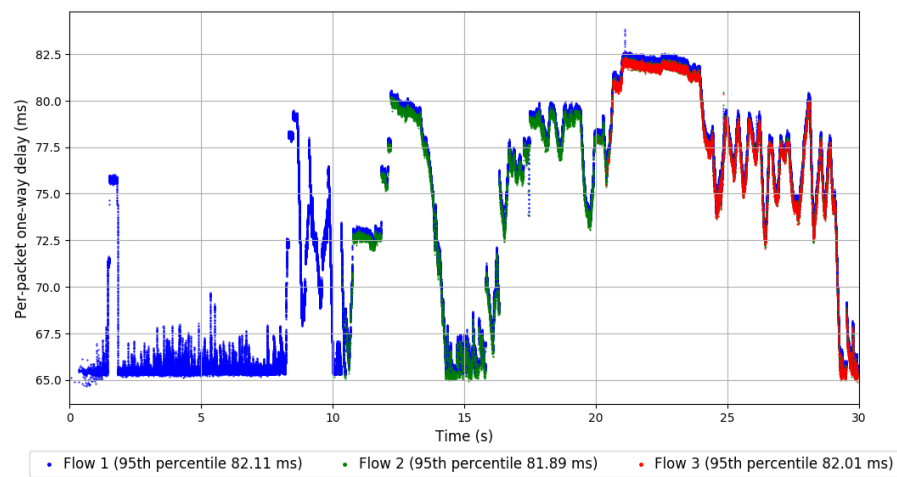
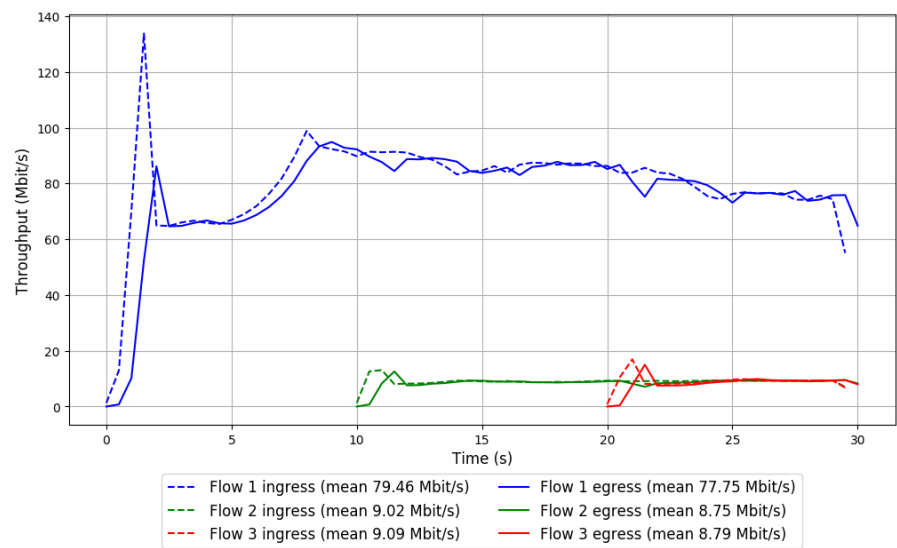


Run 9: Statistics of PCC-Allegro

Start at: 2018-06-05 14:42:12  
End at: 2018-06-05 14:42:42  
Local clock offset: 6.669 ms  
Remote clock offset: -4.066 ms

# Below is generated by plot.py at 2018-06-05 15:17:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 86.46 Mbit/s  
95th percentile per-packet one-way delay: 82.088 ms  
Loss rate: 2.26%  
-- Flow 1:  
Average throughput: 77.75 Mbit/s  
95th percentile per-packet one-way delay: 82.105 ms  
Loss rate: 2.16%  
-- Flow 2:  
Average throughput: 8.75 Mbit/s  
95th percentile per-packet one-way delay: 81.886 ms  
Loss rate: 3.00%  
-- Flow 3:  
Average throughput: 8.79 Mbit/s  
95th percentile per-packet one-way delay: 82.006 ms  
Loss rate: 3.46%

Run 9: Report of PCC-Allegro — Data Link

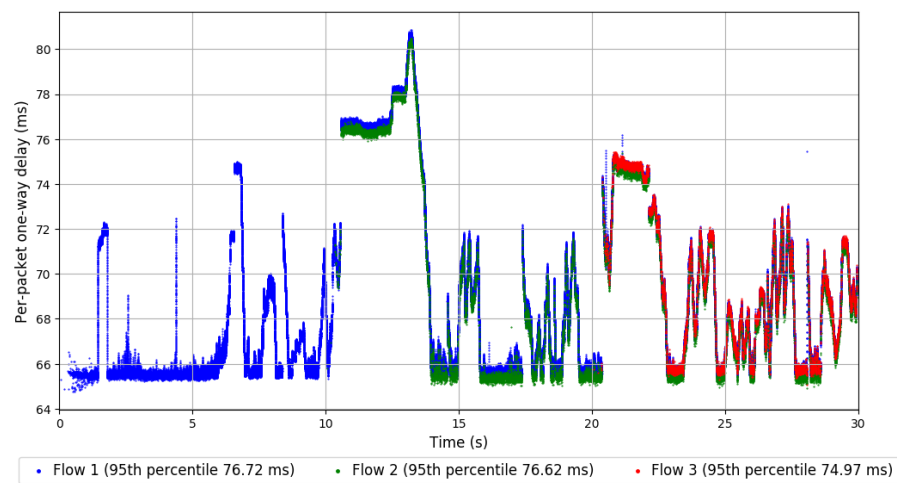
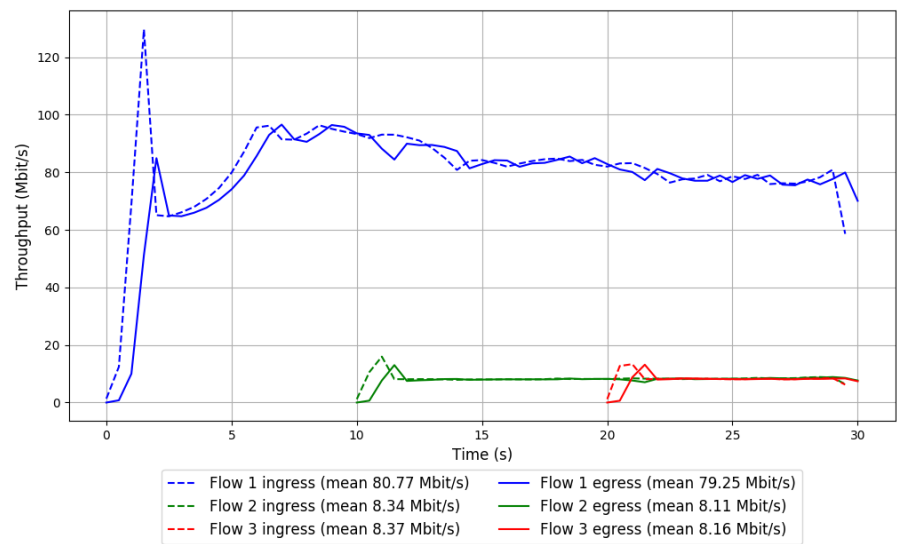


Run 10: Statistics of PCC-Allegro

Start at: 2018-06-05 15:04:19  
End at: 2018-06-05 15:04:49  
Local clock offset: 4.904 ms  
Remote clock offset: -5.459 ms

# Below is generated by plot.py at 2018-06-05 15:18:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 87.34 Mbit/s  
95th percentile per-packet one-way delay: 76.711 ms  
Loss rate: 1.93%  
-- Flow 1:  
Average throughput: 79.25 Mbit/s  
95th percentile per-packet one-way delay: 76.725 ms  
Loss rate: 1.87%  
-- Flow 2:  
Average throughput: 8.11 Mbit/s  
95th percentile per-packet one-way delay: 76.623 ms  
Loss rate: 2.63%  
-- Flow 3:  
Average throughput: 8.16 Mbit/s  
95th percentile per-packet one-way delay: 74.967 ms  
Loss rate: 2.44%

Run 10: Report of PCC-Allegro — Data Link

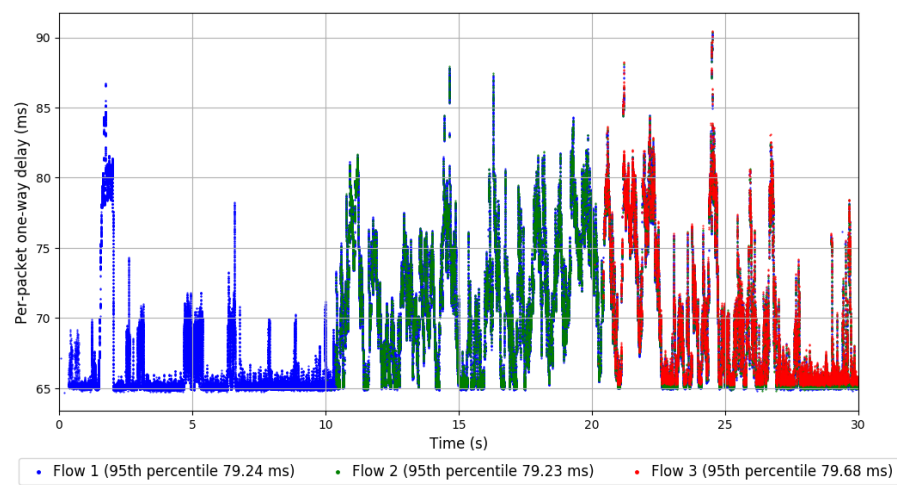
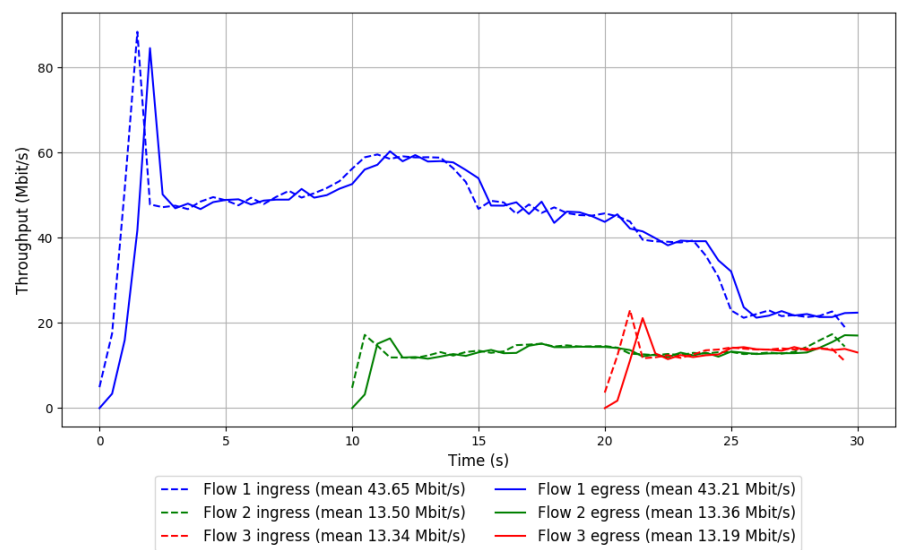


```
Run 1: Statistics of PCC-Expr

Start at: 2018-06-05 11:38:02
End at: 2018-06-05 11:38:32
Local clock offset: 7.859 ms
Remote clock offset: -5.58 ms

# Below is generated by plot.py at 2018-06-05 15:18:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.45 Mbit/s
95th percentile per-packet one-way delay: 79.286 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 43.21 Mbit/s
95th percentile per-packet one-way delay: 79.238 ms
Loss rate: 1.00%
-- Flow 2:
Average throughput: 13.36 Mbit/s
95th percentile per-packet one-way delay: 79.234 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 13.19 Mbit/s
95th percentile per-packet one-way delay: 79.681 ms
Loss rate: 1.21%
```

Run 1: Report of PCC-Expr — Data Link

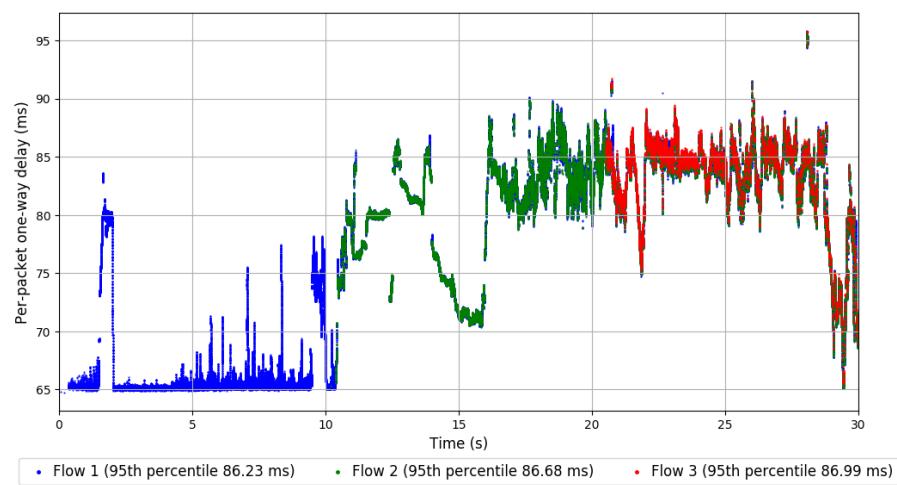
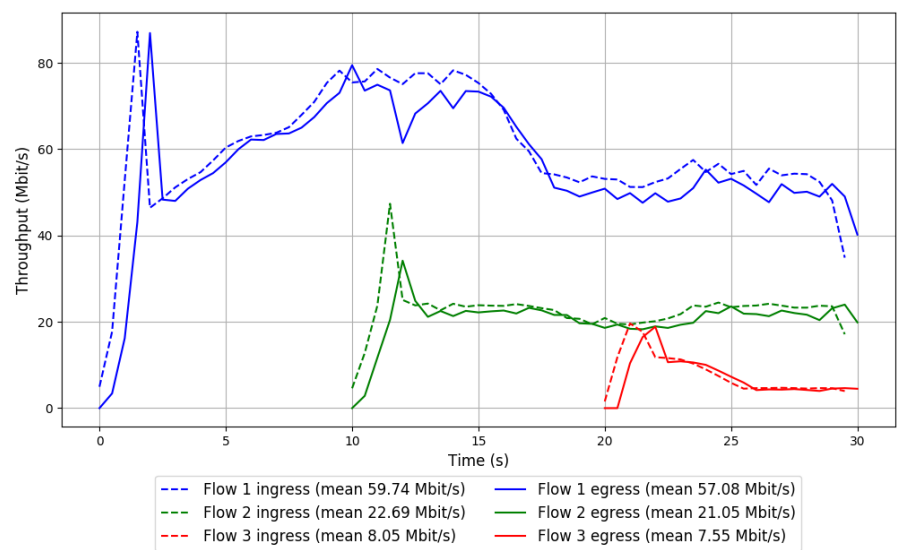


Run 2: Statistics of PCC-Expr

Start at: 2018-06-05 12:01:12  
End at: 2018-06-05 12:01:42  
Local clock offset: 7.715 ms  
Remote clock offset: -4.584 ms

# Below is generated by plot.py at 2018-06-05 15:19:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 73.57 Mbit/s  
95th percentile per-packet one-way delay: 86.384 ms  
Loss rate: 5.04%  
-- Flow 1:  
Average throughput: 57.08 Mbit/s  
95th percentile per-packet one-way delay: 86.226 ms  
Loss rate: 4.44%  
-- Flow 2:  
Average throughput: 21.05 Mbit/s  
95th percentile per-packet one-way delay: 86.684 ms  
Loss rate: 7.19%  
-- Flow 3:  
Average throughput: 7.55 Mbit/s  
95th percentile per-packet one-way delay: 86.989 ms  
Loss rate: 6.34%

Run 2: Report of PCC-Expr — Data Link

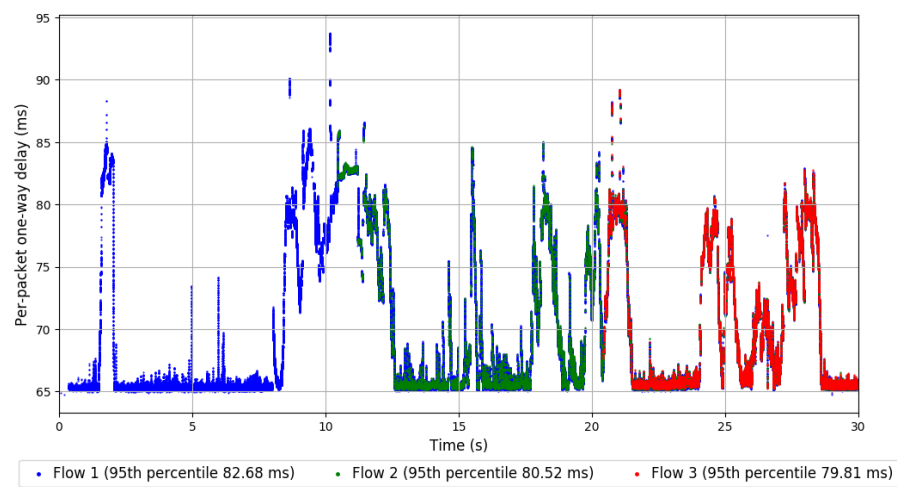
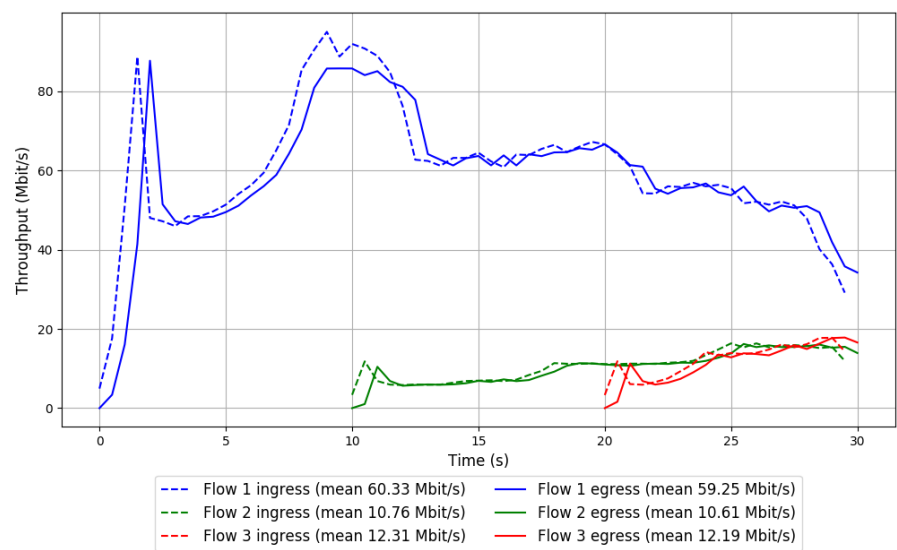


Run 3: Statistics of PCC-Expr

Start at: 2018-06-05 12:23:19  
End at: 2018-06-05 12:23:49  
Local clock offset: 5.778 ms  
Remote clock offset: -5.138 ms

# Below is generated by plot.py at 2018-06-05 15:19:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 70.33 Mbit/s  
95th percentile per-packet one-way delay: 82.592 ms  
Loss rate: 1.71%  
-- Flow 1:  
Average throughput: 59.25 Mbit/s  
95th percentile per-packet one-way delay: 82.682 ms  
Loss rate: 1.78%  
-- Flow 2:  
Average throughput: 10.61 Mbit/s  
95th percentile per-packet one-way delay: 80.517 ms  
Loss rate: 1.50%  
-- Flow 3:  
Average throughput: 12.19 Mbit/s  
95th percentile per-packet one-way delay: 79.811 ms  
Loss rate: 1.04%

Run 3: Report of PCC-Expr — Data Link

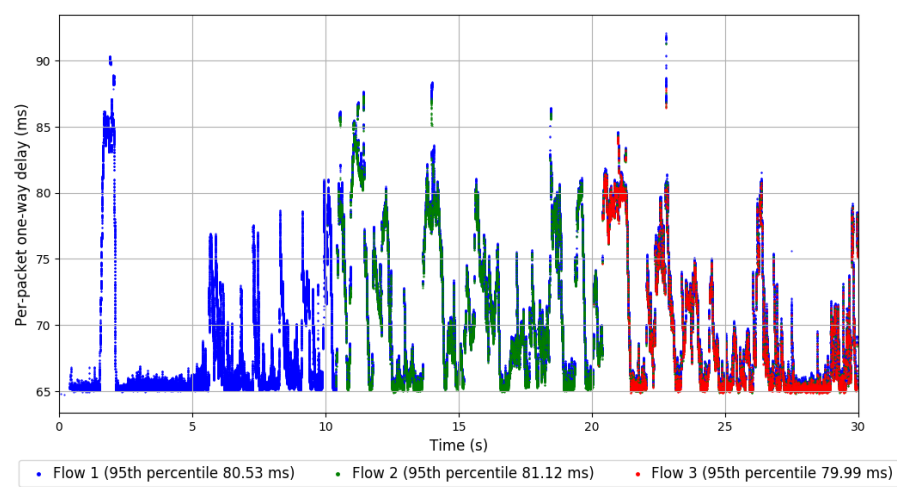
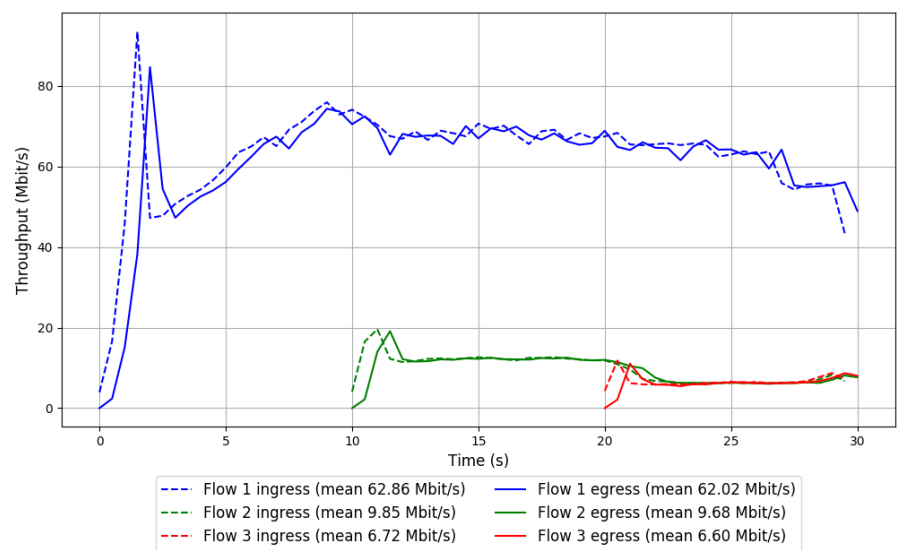


Run 4: Statistics of PCC-Expr

Start at: 2018-06-05 12:45:43  
End at: 2018-06-05 12:46:13  
Local clock offset: 5.503 ms  
Remote clock offset: -5.616 ms

# Below is generated by plot.py at 2018-06-05 15:19:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 70.64 Mbit/s  
95th percentile per-packet one-way delay: 80.546 ms  
Loss rate: 1.35%  
-- Flow 1:  
Average throughput: 62.02 Mbit/s  
95th percentile per-packet one-way delay: 80.533 ms  
Loss rate: 1.29%  
-- Flow 2:  
Average throughput: 9.68 Mbit/s  
95th percentile per-packet one-way delay: 81.124 ms  
Loss rate: 1.76%  
-- Flow 3:  
Average throughput: 6.60 Mbit/s  
95th percentile per-packet one-way delay: 79.986 ms  
Loss rate: 1.77%

Run 4: Report of PCC-Expr — Data Link

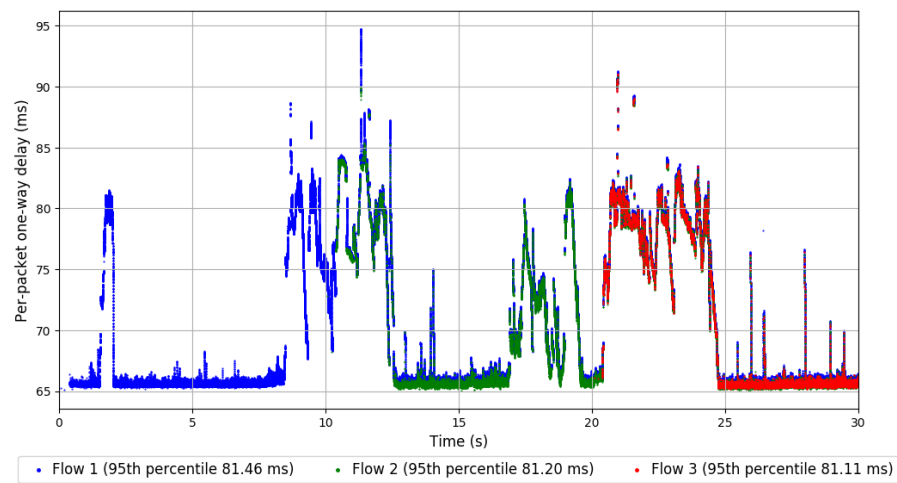
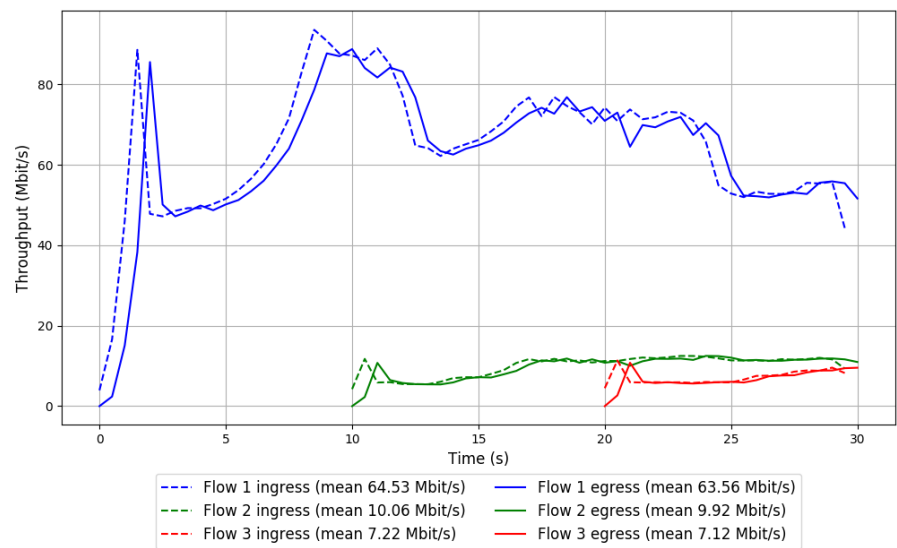


Run 5: Statistics of PCC-Expr

Start at: 2018-06-05 13:08:00  
End at: 2018-06-05 13:08:30  
Local clock offset: 5.09 ms  
Remote clock offset: -5.649 ms

# Below is generated by plot.py at 2018-06-05 15:19:29  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 72.51 Mbit/s  
95th percentile per-packet one-way delay: 81.412 ms  
Loss rate: 1.49%  
-- Flow 1:  
Average throughput: 63.56 Mbit/s  
95th percentile per-packet one-way delay: 81.456 ms  
Loss rate: 1.51%  
-- Flow 2:  
Average throughput: 9.92 Mbit/s  
95th percentile per-packet one-way delay: 81.198 ms  
Loss rate: 1.41%  
-- Flow 3:  
Average throughput: 7.12 Mbit/s  
95th percentile per-packet one-way delay: 81.105 ms  
Loss rate: 1.42%

Run 5: Report of PCC-Expr — Data Link

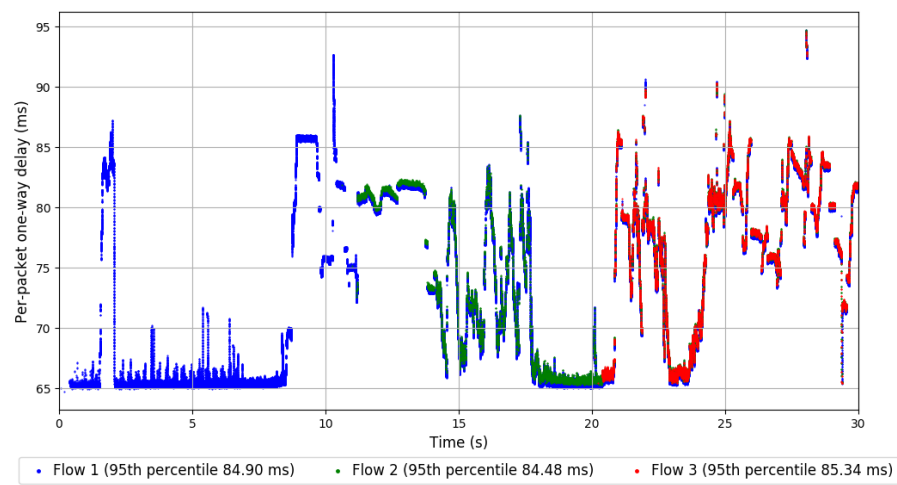
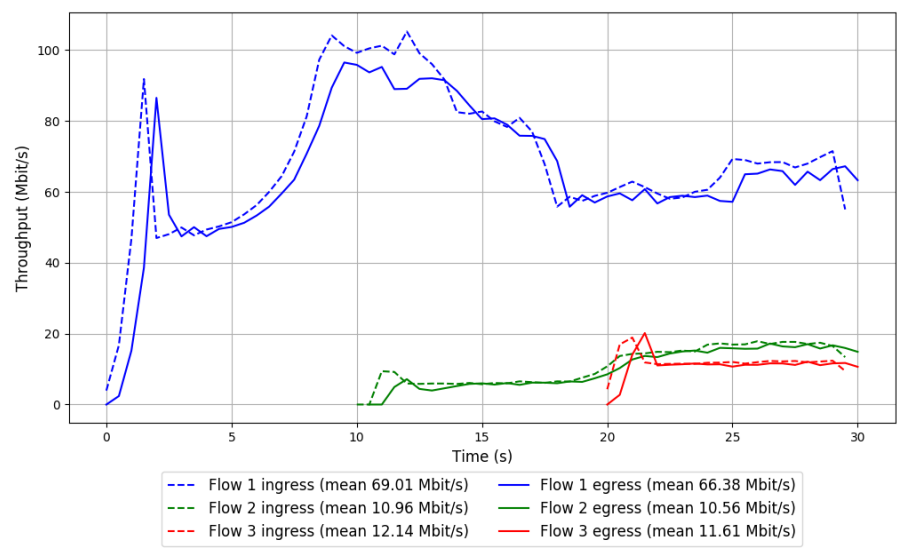


Run 6: Statistics of PCC-Expr

Start at: 2018-06-05 13:30:04  
End at: 2018-06-05 13:30:34  
Local clock offset: 4.098 ms  
Remote clock offset: -5.763 ms

# Below is generated by plot.py at 2018-06-05 15:19:34  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 77.06 Mbit/s  
95th percentile per-packet one-way delay: 84.867 ms  
Loss rate: 4.00%  
-- Flow 1:  
Average throughput: 66.38 Mbit/s  
95th percentile per-packet one-way delay: 84.899 ms  
Loss rate: 3.76%  
-- Flow 2:  
Average throughput: 10.56 Mbit/s  
95th percentile per-packet one-way delay: 84.476 ms  
Loss rate: 6.09%  
-- Flow 3:  
Average throughput: 11.61 Mbit/s  
95th percentile per-packet one-way delay: 85.340 ms  
Loss rate: 4.23%

Run 6: Report of PCC-Expr — Data Link

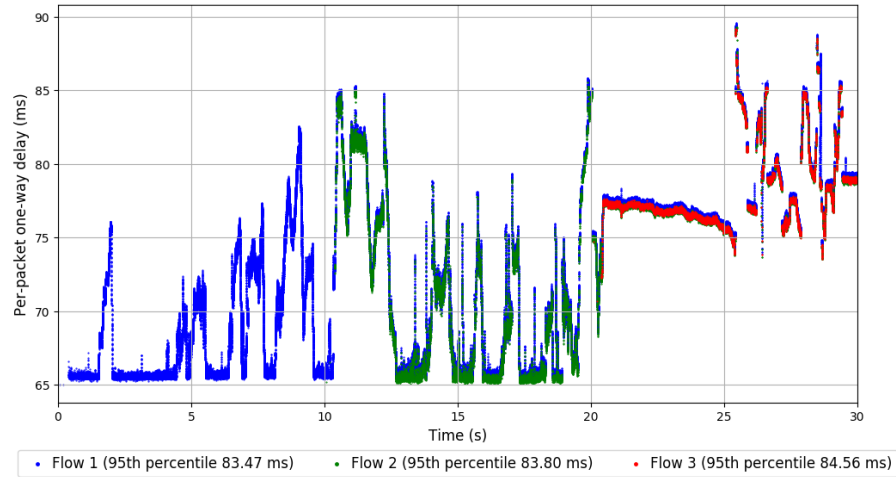
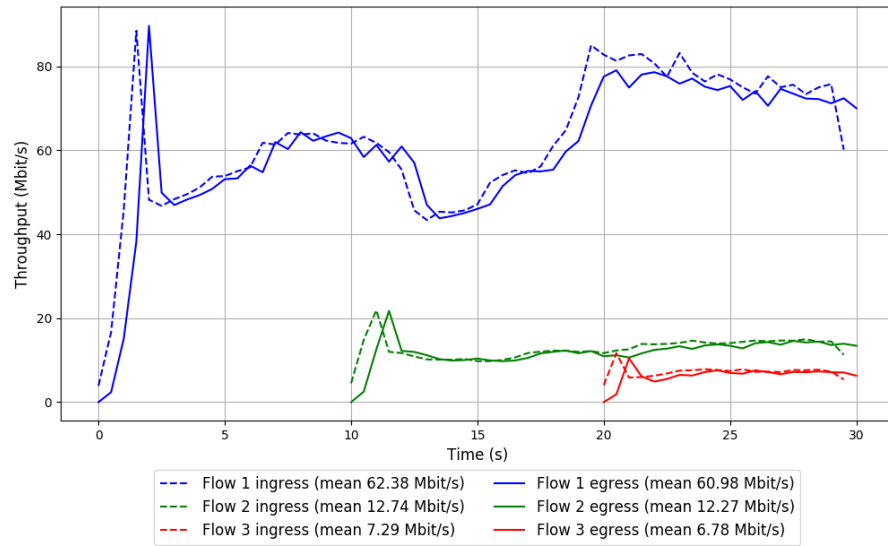


Run 7: Statistics of PCC-Expr

Start at: 2018-06-05 13:52:50  
End at: 2018-06-05 13:53:20  
Local clock offset: 3.962 ms  
Remote clock offset: -5.774 ms

# Below is generated by plot.py at 2018-06-05 15:19:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 71.37 Mbit/s  
95th percentile per-packet one-way delay: 83.600 ms  
Loss rate: 2.53%  
-- Flow 1:  
Average throughput: 60.98 Mbit/s  
95th percentile per-packet one-way delay: 83.469 ms  
Loss rate: 2.21%  
-- Flow 2:  
Average throughput: 12.27 Mbit/s  
95th percentile per-packet one-way delay: 83.799 ms  
Loss rate: 3.61%  
-- Flow 3:  
Average throughput: 6.78 Mbit/s  
95th percentile per-packet one-way delay: 84.556 ms  
Loss rate: 7.04%

# Run 7: Report of PCC-Expr — Data Link

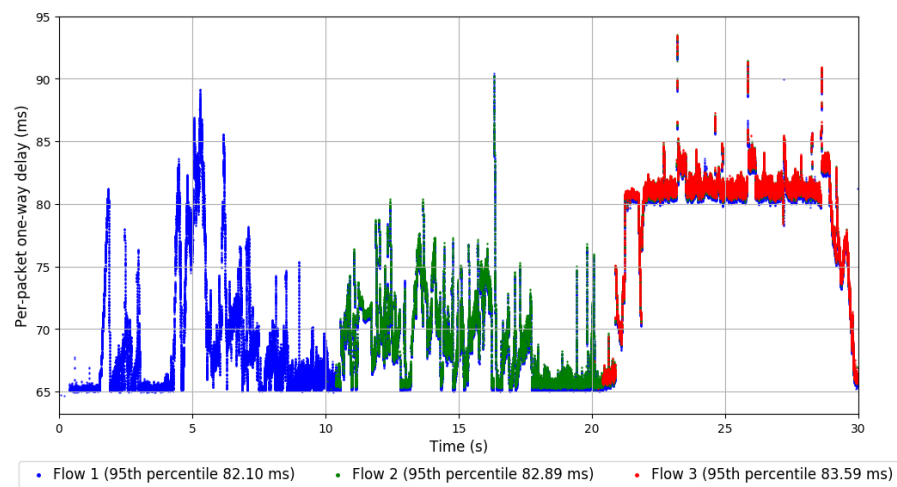
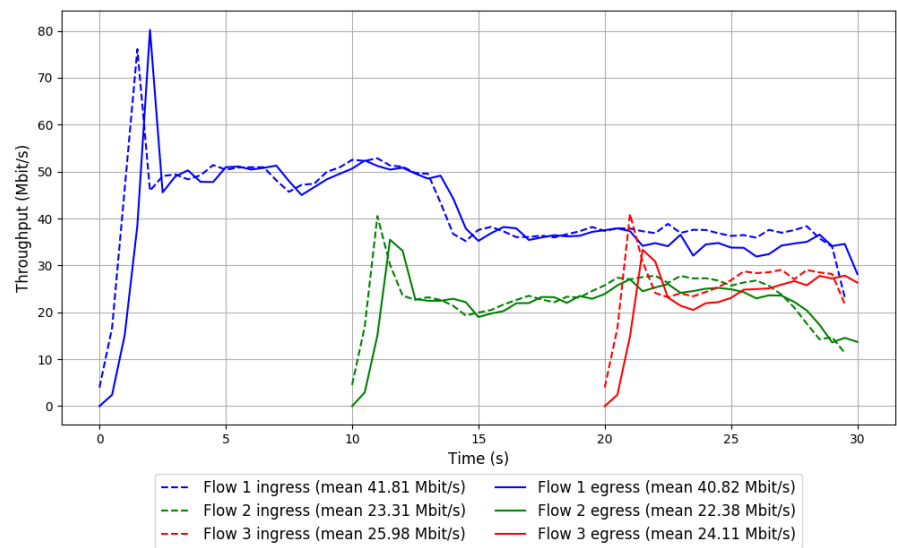


Run 8: Statistics of PCC-Expr

Start at: 2018-06-05 14:14:45  
End at: 2018-06-05 14:15:15  
Local clock offset: 5.138 ms  
Remote clock offset: -1.724 ms

# Below is generated by plot.py at 2018-06-05 15:20:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 63.64 Mbit/s  
95th percentile per-packet one-way delay: 82.799 ms  
Loss rate: 3.35%  
-- Flow 1:  
Average throughput: 40.82 Mbit/s  
95th percentile per-packet one-way delay: 82.098 ms  
Loss rate: 2.32%  
-- Flow 2:  
Average throughput: 22.38 Mbit/s  
95th percentile per-packet one-way delay: 82.893 ms  
Loss rate: 4.02%  
-- Flow 3:  
Average throughput: 24.11 Mbit/s  
95th percentile per-packet one-way delay: 83.590 ms  
Loss rate: 7.19%

Run 8: Report of PCC-Expr — Data Link

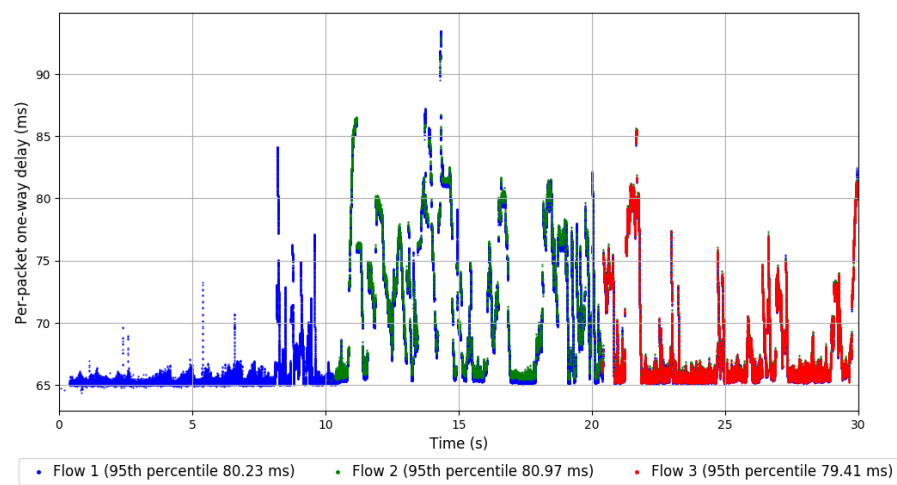
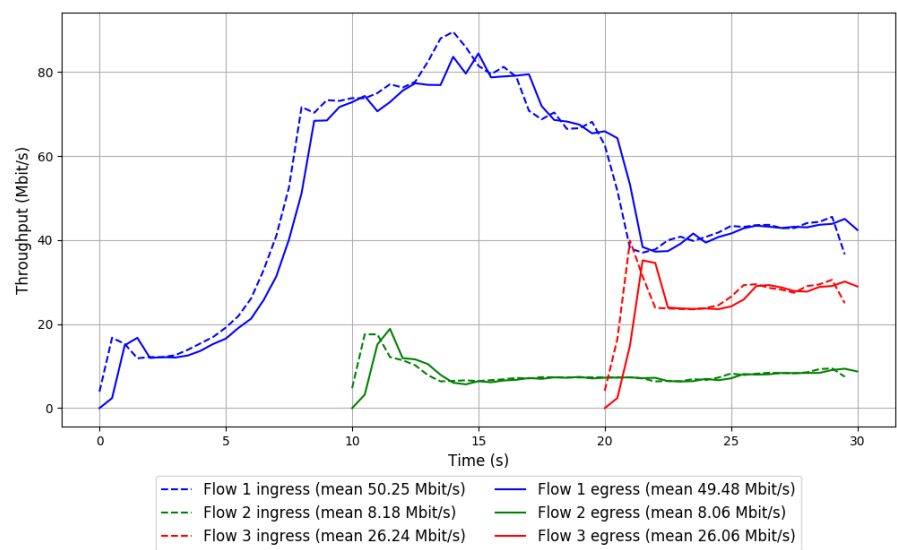


Run 9: Statistics of PCC-Expr

Start at: 2018-06-05 14:36:43  
End at: 2018-06-05 14:37:13  
Local clock offset: 7.132 ms  
Remote clock offset: -2.832 ms

# Below is generated by plot.py at 2018-06-05 15:20:20  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 63.46 Mbit/s  
95th percentile per-packet one-way delay: 80.065 ms  
Loss rate: 1.35%  
-- Flow 1:  
Average throughput: 49.48 Mbit/s  
95th percentile per-packet one-way delay: 80.226 ms  
Loss rate: 1.48%  
-- Flow 2:  
Average throughput: 8.06 Mbit/s  
95th percentile per-packet one-way delay: 80.974 ms  
Loss rate: 1.33%  
-- Flow 3:  
Average throughput: 26.06 Mbit/s  
95th percentile per-packet one-way delay: 79.412 ms  
Loss rate: 0.58%

Run 9: Report of PCC-Expr — Data Link

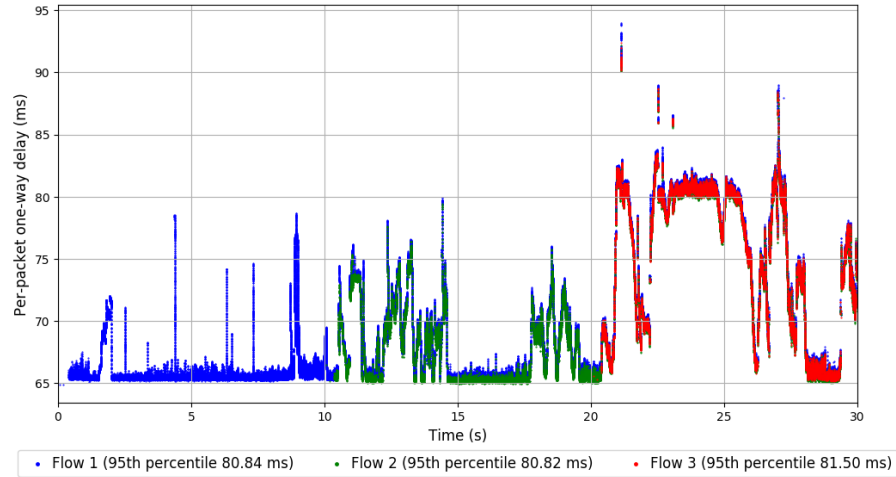
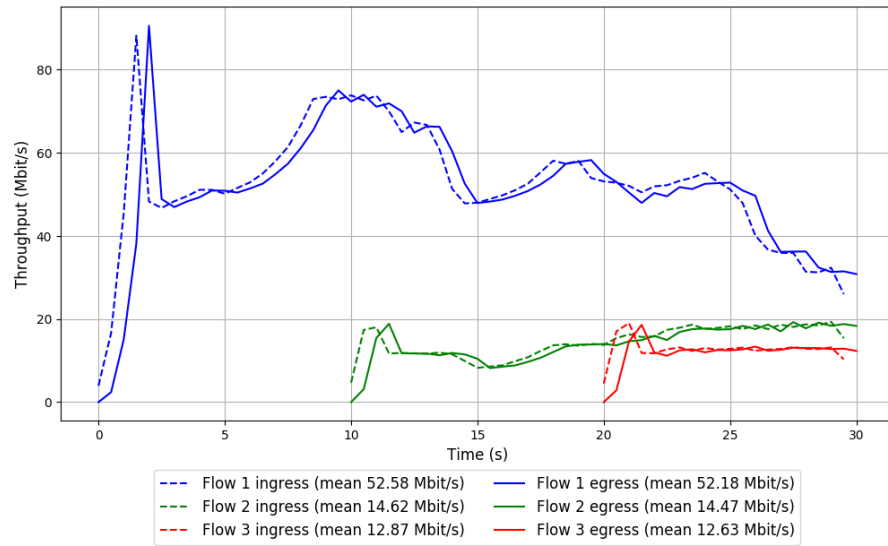


Run 10: Statistics of PCC-Expr

Start at: 2018-06-05 14:58:47  
End at: 2018-06-05 14:59:17  
Local clock offset: 5.021 ms  
Remote clock offset: -5.407 ms

# Below is generated by plot.py at 2018-06-05 15:20:55  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 65.98 Mbit/s  
95th percentile per-packet one-way delay: 80.880 ms  
Loss rate: 0.84%  
-- Flow 1:  
Average throughput: 52.18 Mbit/s  
95th percentile per-packet one-way delay: 80.841 ms  
Loss rate: 0.72%  
-- Flow 2:  
Average throughput: 14.47 Mbit/s  
95th percentile per-packet one-way delay: 80.823 ms  
Loss rate: 1.01%  
-- Flow 3:  
Average throughput: 12.63 Mbit/s  
95th percentile per-packet one-way delay: 81.497 ms  
Loss rate: 1.81%

# Run 10: Report of PCC-Expr — Data Link

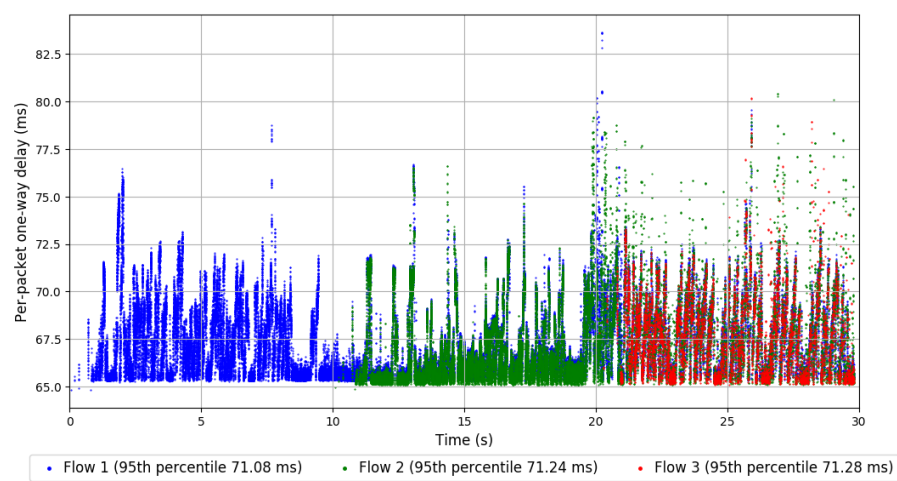
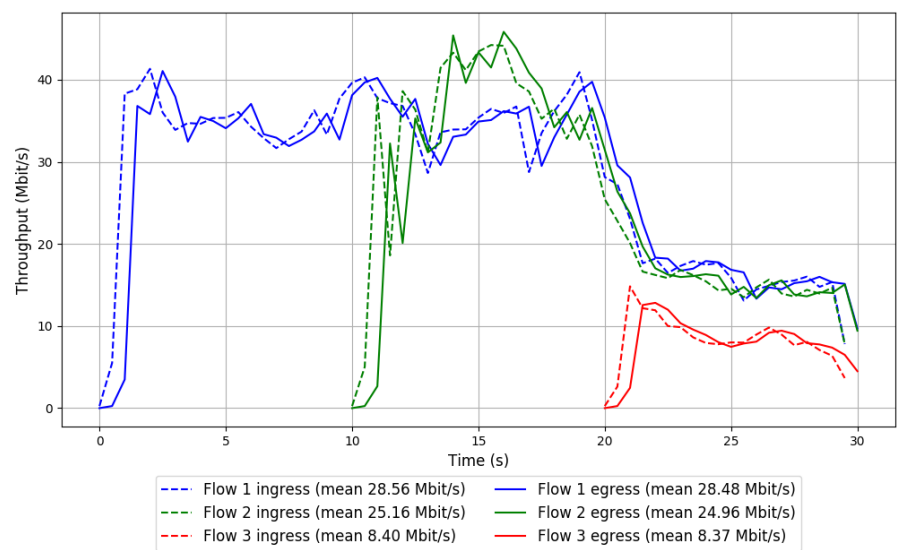


Run 1: Statistics of QUIC Cubic

Start at: 2018-06-05 11:28:21  
End at: 2018-06-05 11:28:51  
Local clock offset: 7.609 ms  
Remote clock offset: -5.688 ms

# Below is generated by plot.py at 2018-06-05 15:20:55  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 47.75 Mbit/s  
95th percentile per-packet one-way delay: 71.150 ms  
Loss rate: 0.47%  
-- Flow 1:  
Average throughput: 28.48 Mbit/s  
95th percentile per-packet one-way delay: 71.081 ms  
Loss rate: 0.29%  
-- Flow 2:  
Average throughput: 24.96 Mbit/s  
95th percentile per-packet one-way delay: 71.237 ms  
Loss rate: 0.80%  
-- Flow 3:  
Average throughput: 8.37 Mbit/s  
95th percentile per-packet one-way delay: 71.284 ms  
Loss rate: 0.33%

Run 1: Report of QUIC Cubic — Data Link

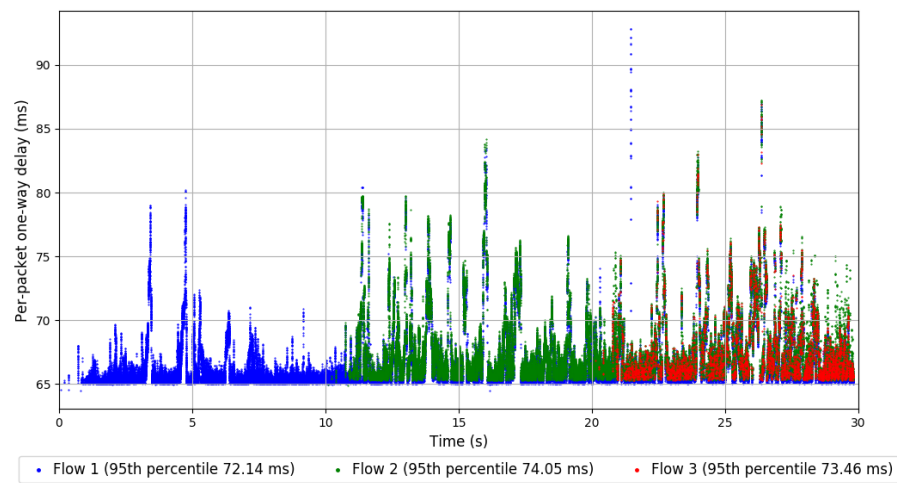
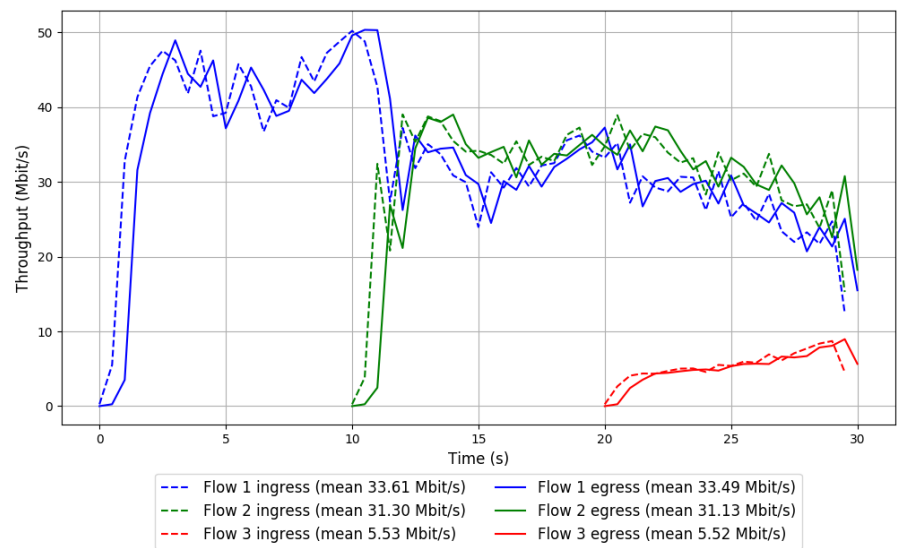


Run 2: Statistics of QUIC Cubic

Start at: 2018-06-05 11:51:06  
End at: 2018-06-05 11:51:36  
Local clock offset: 7.674 ms  
Remote clock offset: -4.847 ms

# Below is generated by plot.py at 2018-06-05 15:20:55  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 55.91 Mbit/s  
95th percentile per-packet one-way delay: 73.025 ms  
Loss rate: 0.41%  
-- Flow 1:  
Average throughput: 33.49 Mbit/s  
95th percentile per-packet one-way delay: 72.136 ms  
Loss rate: 0.35%  
-- Flow 2:  
Average throughput: 31.13 Mbit/s  
95th percentile per-packet one-way delay: 74.051 ms  
Loss rate: 0.52%  
-- Flow 3:  
Average throughput: 5.52 Mbit/s  
95th percentile per-packet one-way delay: 73.464 ms  
Loss rate: 0.27%

Run 2: Report of QUIC Cubic — Data Link

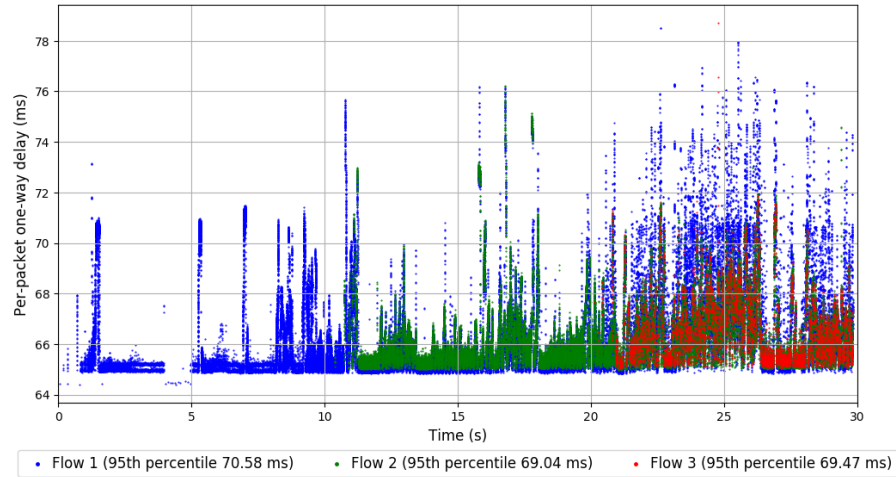
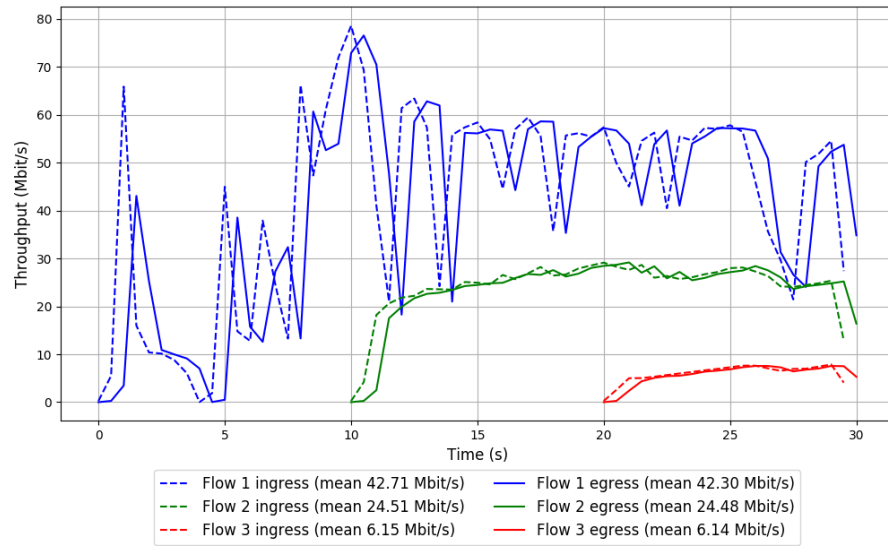


Run 3: Statistics of QUIC Cubic

Start at: 2018-06-05 12:13:29  
End at: 2018-06-05 12:13:59  
Local clock offset: 7.01 ms  
Remote clock offset: -4.409 ms

# Below is generated by plot.py at 2018-06-05 15:20:55  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 60.52 Mbit/s  
95th percentile per-packet one-way delay: 70.338 ms  
Loss rate: 0.71%  
-- Flow 1:  
Average throughput: 42.30 Mbit/s  
95th percentile per-packet one-way delay: 70.576 ms  
Loss rate: 0.96%  
-- Flow 2:  
Average throughput: 24.48 Mbit/s  
95th percentile per-packet one-way delay: 69.037 ms  
Loss rate: 0.14%  
-- Flow 3:  
Average throughput: 6.14 Mbit/s  
95th percentile per-packet one-way delay: 69.466 ms  
Loss rate: 0.15%

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

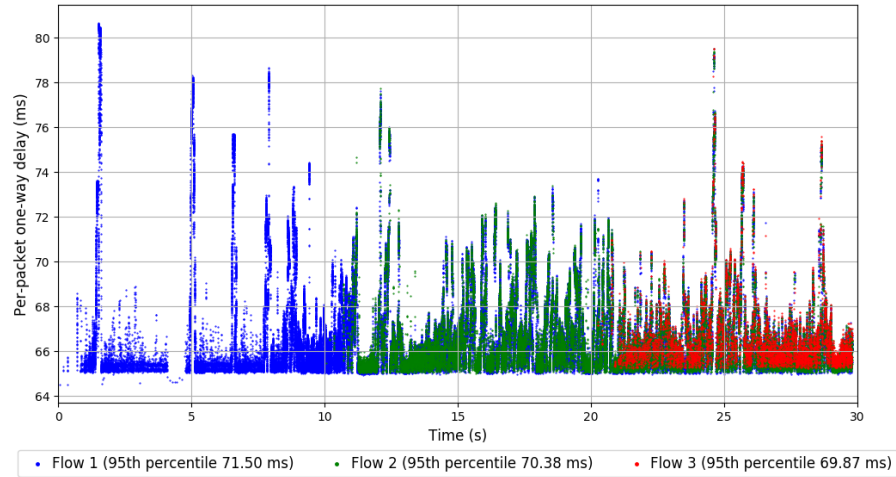
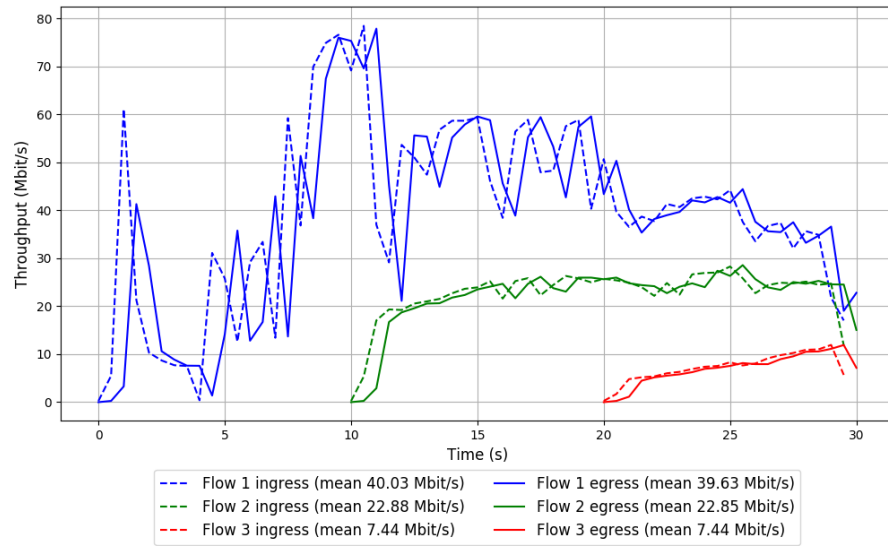


Run 4: Statistics of QUIC Cubic

Start at: 2018-06-05 12:35:50  
End at: 2018-06-05 12:36:20  
Local clock offset: 5.398 ms  
Remote clock offset: -5.523 ms

# Below is generated by plot.py at 2018-06-05 15:20:55  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 57.21 Mbit/s  
95th percentile per-packet one-way delay: 71.150 ms  
Loss rate: 0.73%  
-- Flow 1:  
Average throughput: 39.63 Mbit/s  
95th percentile per-packet one-way delay: 71.497 ms  
Loss rate: 0.99%  
-- Flow 2:  
Average throughput: 22.85 Mbit/s  
95th percentile per-packet one-way delay: 70.382 ms  
Loss rate: 0.16%  
-- Flow 3:  
Average throughput: 7.44 Mbit/s  
95th percentile per-packet one-way delay: 69.869 ms  
Loss rate: 0.11%

# Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-06-05 12:58:15

End at: 2018-06-05 12:58:45

Local clock offset: 5.344 ms

Remote clock offset: -5.53 ms

# Below is generated by plot.py at 2018-06-05 15:20:55

# Datalink statistics

-- Total of 3 flows:

Average throughput: 59.77 Mbit/s

95th percentile per-packet one-way delay: 70.038 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 34.61 Mbit/s

95th percentile per-packet one-way delay: 68.478 ms

Loss rate: 1.24%

-- Flow 2:

Average throughput: 21.58 Mbit/s

95th percentile per-packet one-way delay: 68.902 ms

Loss rate: 0.71%

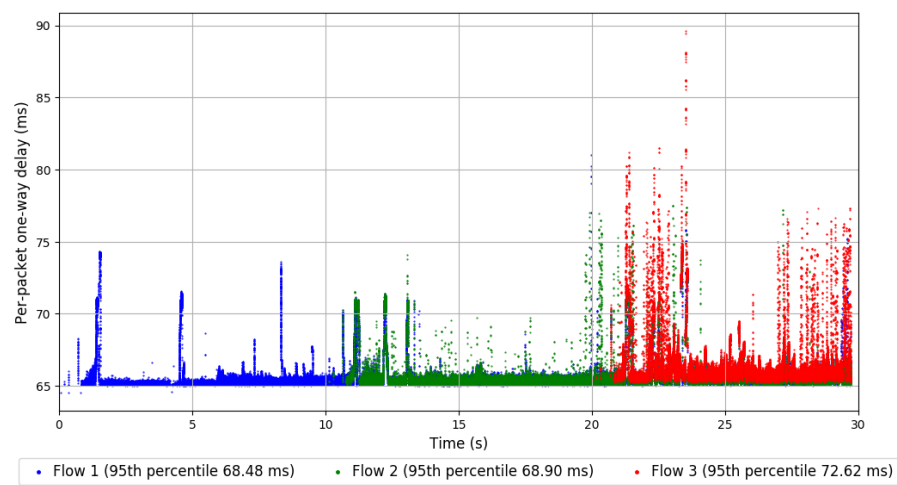
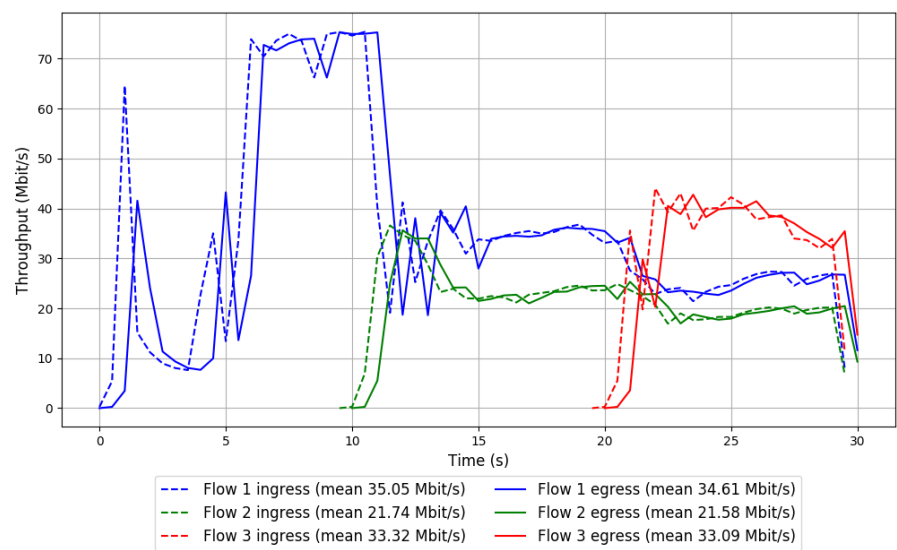
-- Flow 3:

Average throughput: 33.09 Mbit/s

95th percentile per-packet one-way delay: 72.617 ms

Loss rate: 0.70%

Run 5: Report of QUIC Cubic — Data Link

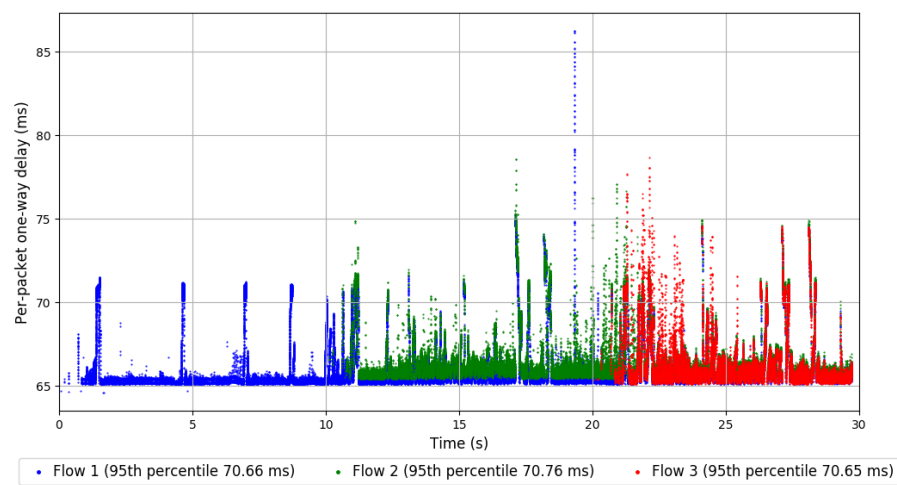
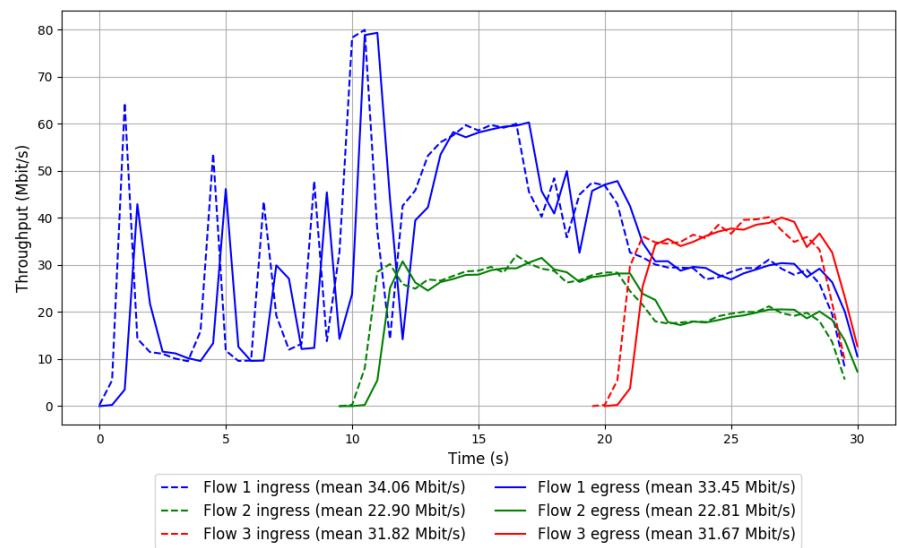


Run 6: Statistics of QUIC Cubic

Start at: 2018-06-05 13:20:23  
End at: 2018-06-05 13:20:53  
Local clock offset: 4.298 ms  
Remote clock offset: -5.896 ms

# Below is generated by plot.py at 2018-06-05 15:20:55  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 58.96 Mbit/s  
95th percentile per-packet one-way delay: 70.673 ms  
Loss rate: 1.20%  
-- Flow 1:  
Average throughput: 33.45 Mbit/s  
95th percentile per-packet one-way delay: 70.664 ms  
Loss rate: 1.78%  
-- Flow 2:  
Average throughput: 22.81 Mbit/s  
95th percentile per-packet one-way delay: 70.758 ms  
Loss rate: 0.40%  
-- Flow 3:  
Average throughput: 31.67 Mbit/s  
95th percentile per-packet one-way delay: 70.654 ms  
Loss rate: 0.49%

Run 6: Report of QUIC Cubic — Data Link

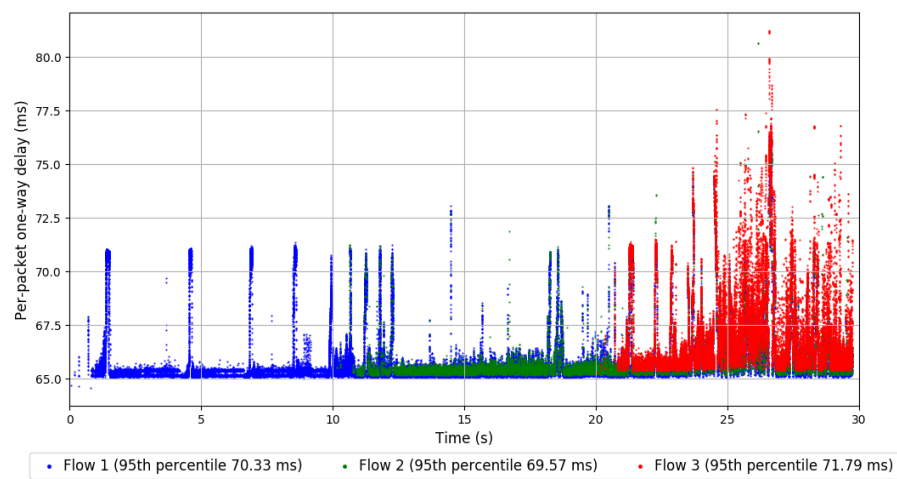
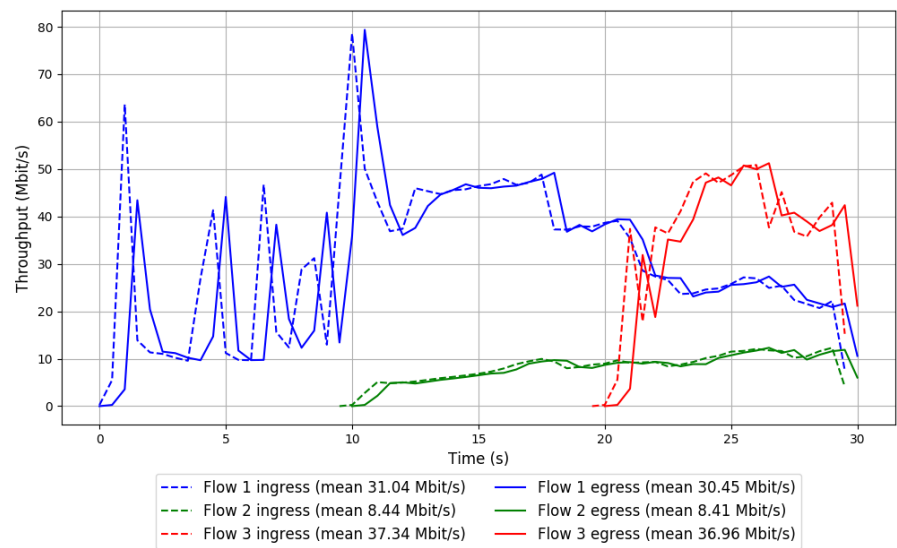


Run 7: Statistics of QUIC Cubic

Start at: 2018-06-05 13:43:05  
End at: 2018-06-05 13:43:35  
Local clock offset: 4.028 ms  
Remote clock offset: -5.679 ms

# Below is generated by plot.py at 2018-06-05 15:20:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 48.10 Mbit/s  
95th percentile per-packet one-way delay: 70.702 ms  
Loss rate: 1.47%  
-- Flow 1:  
Average throughput: 30.45 Mbit/s  
95th percentile per-packet one-way delay: 70.335 ms  
Loss rate: 1.89%  
-- Flow 2:  
Average throughput: 8.41 Mbit/s  
95th percentile per-packet one-way delay: 69.569 ms  
Loss rate: 0.29%  
-- Flow 3:  
Average throughput: 36.96 Mbit/s  
95th percentile per-packet one-way delay: 71.794 ms  
Loss rate: 0.96%

Run 7: Report of QUIC Cubic — Data Link

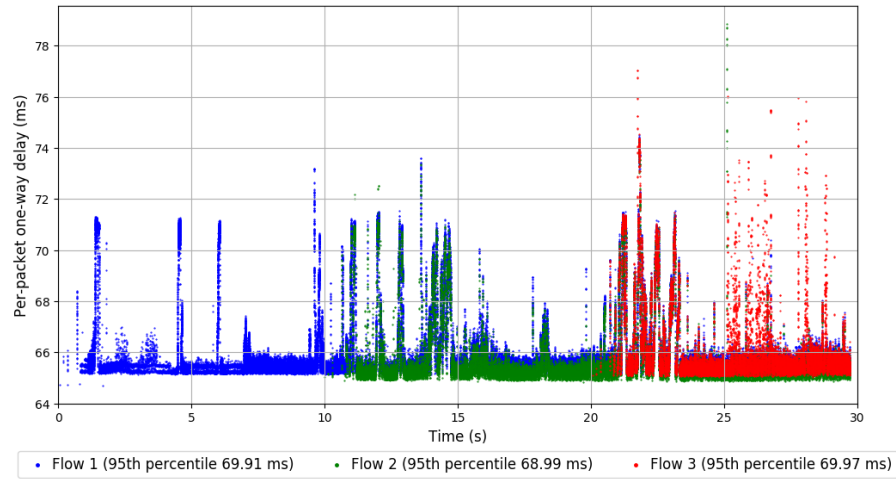
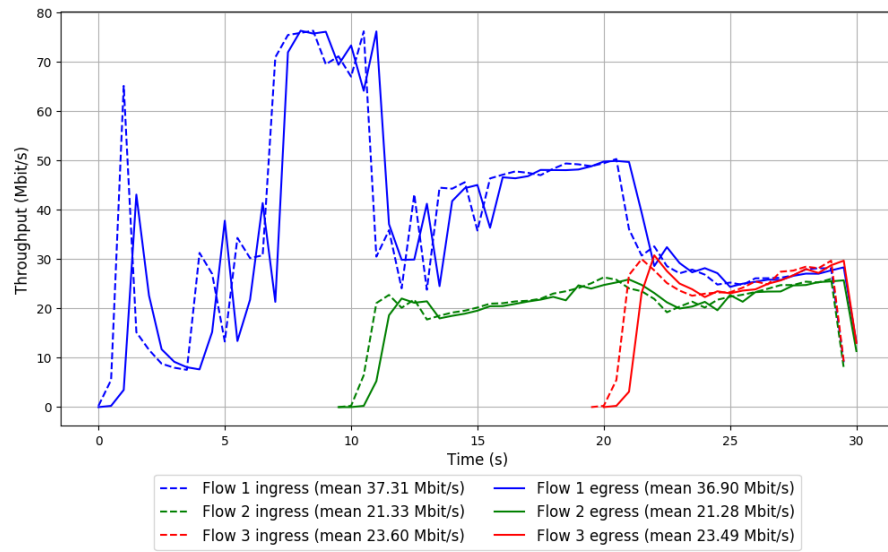


Run 8: Statistics of QUIC Cubic

Start at: 2018-06-05 14:05:07  
End at: 2018-06-05 14:05:37  
Local clock offset: 4.086 ms  
Remote clock offset: -3.227 ms

# Below is generated by plot.py at 2018-06-05 15:21:07  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 58.71 Mbit/s  
95th percentile per-packet one-way delay: 69.692 ms  
Loss rate: 0.80%  
-- Flow 1:  
Average throughput: 36.90 Mbit/s  
95th percentile per-packet one-way delay: 69.907 ms  
Loss rate: 1.09%  
-- Flow 2:  
Average throughput: 21.28 Mbit/s  
95th percentile per-packet one-way delay: 68.992 ms  
Loss rate: 0.25%  
-- Flow 3:  
Average throughput: 23.49 Mbit/s  
95th percentile per-packet one-way delay: 69.965 ms  
Loss rate: 0.46%

## Run 8: Report of QUIC Cubic — Data Link

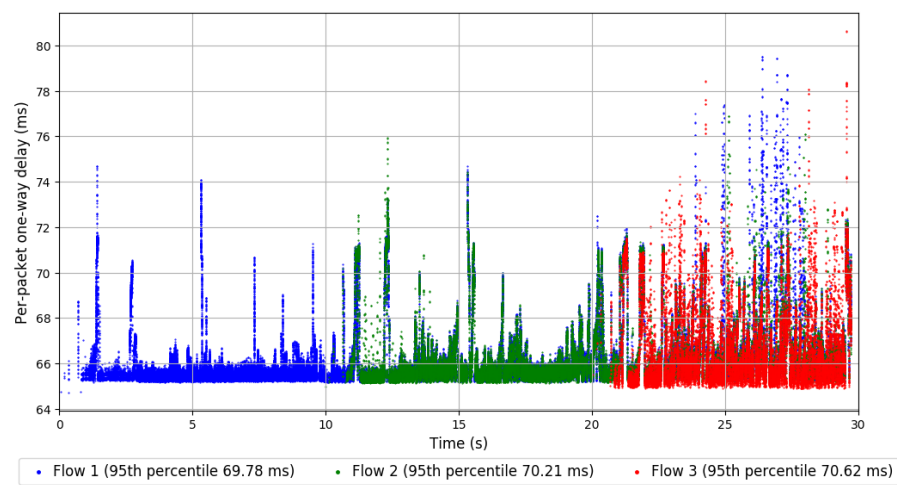
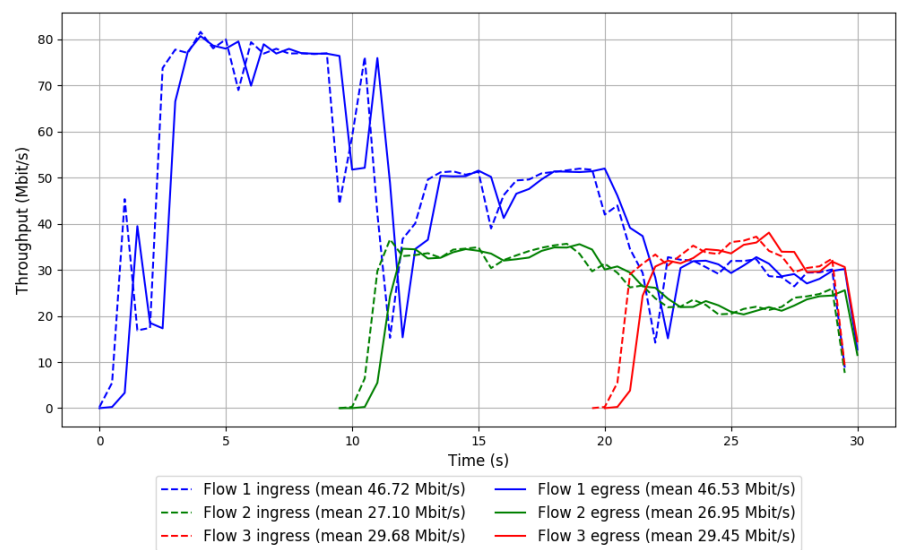


Run 9: Statistics of QUIC Cubic

Start at: 2018-06-05 14:27:00  
End at: 2018-06-05 14:27:30  
Local clock offset: 6.595 ms  
Remote clock offset: -0.734 ms

# Below is generated by plot.py at 2018-06-05 15:21:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 74.07 Mbit/s  
95th percentile per-packet one-way delay: 70.139 ms  
Loss rate: 0.45%  
-- Flow 1:  
Average throughput: 46.53 Mbit/s  
95th percentile per-packet one-way delay: 69.776 ms  
Loss rate: 0.37%  
-- Flow 2:  
Average throughput: 26.95 Mbit/s  
95th percentile per-packet one-way delay: 70.213 ms  
Loss rate: 0.52%  
-- Flow 3:  
Average throughput: 29.45 Mbit/s  
95th percentile per-packet one-way delay: 70.623 ms  
Loss rate: 0.73%

Run 9: Report of QUIC Cubic — Data Link

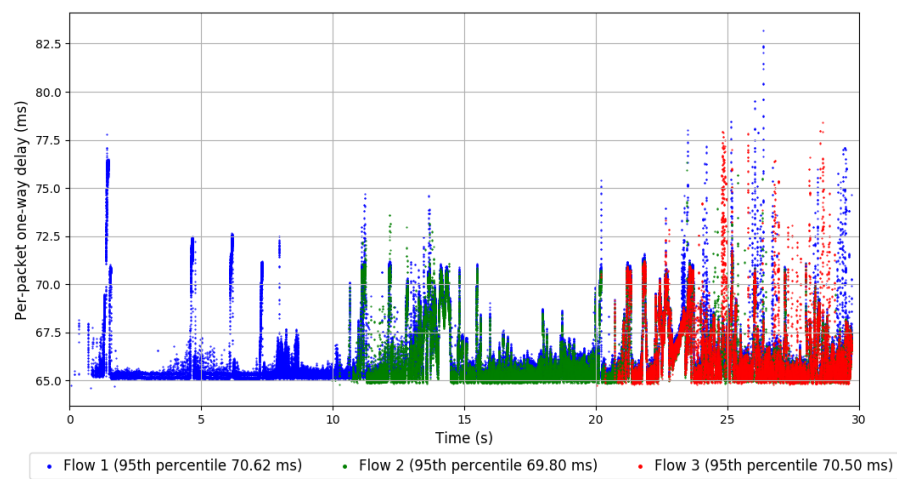
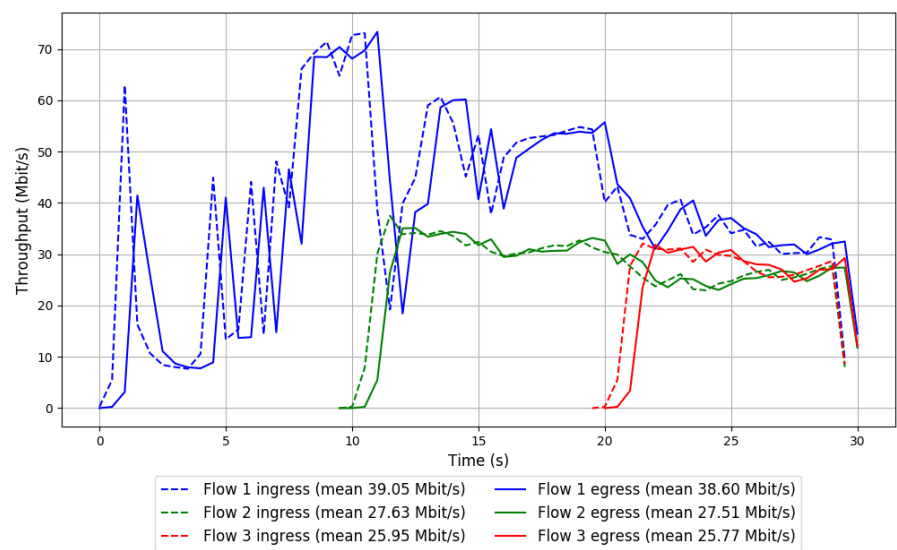


Run 10: Statistics of QUIC Cubic

Start at: 2018-06-05 14:49:01  
End at: 2018-06-05 14:49:31  
Local clock offset: 5.724 ms  
Remote clock offset: -4.921 ms

# Below is generated by plot.py at 2018-06-05 15:21:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 65.32 Mbit/s  
95th percentile per-packet one-way delay: 70.396 ms  
Loss rate: 0.87%  
-- Flow 1:  
Average throughput: 38.60 Mbit/s  
95th percentile per-packet one-way delay: 70.620 ms  
Loss rate: 1.11%  
-- Flow 2:  
Average throughput: 27.51 Mbit/s  
95th percentile per-packet one-way delay: 69.796 ms  
Loss rate: 0.45%  
-- Flow 3:  
Average throughput: 25.77 Mbit/s  
95th percentile per-packet one-way delay: 70.496 ms  
Loss rate: 0.66%

Run 10: Report of QUIC Cubic — Data Link

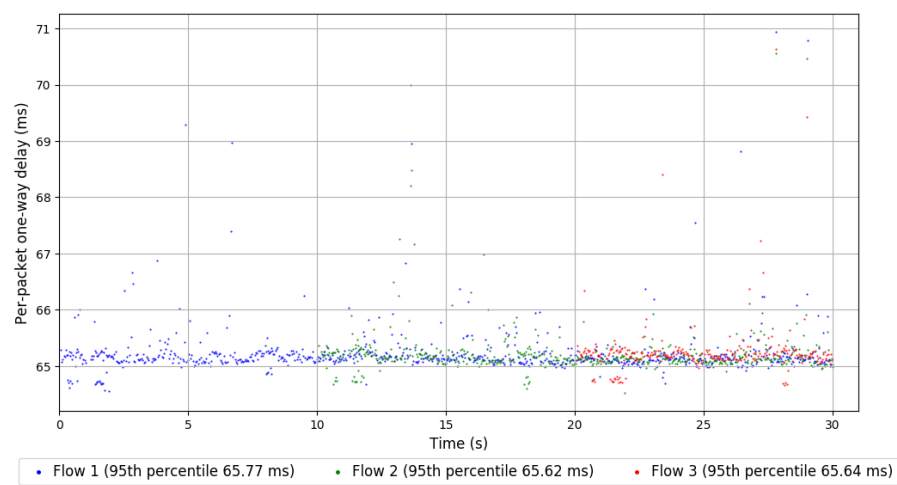
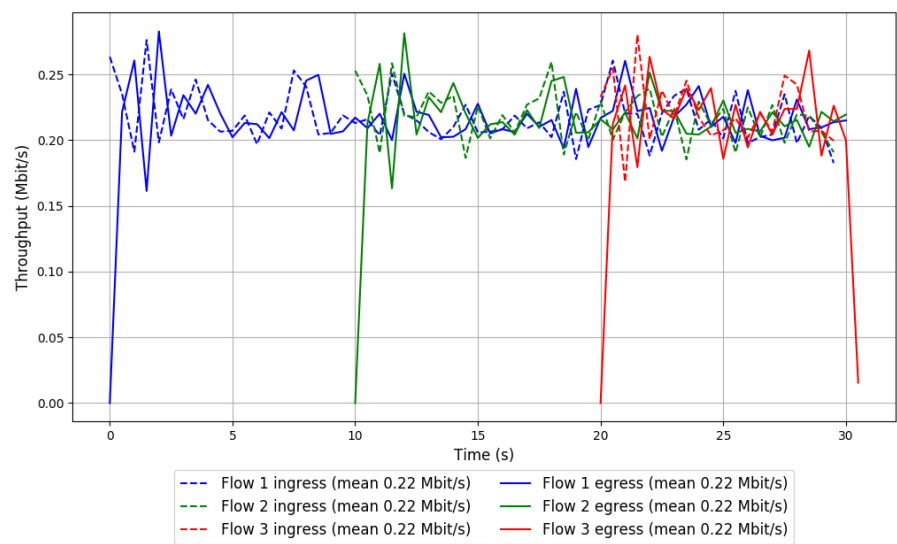


```
Run 1: Statistics of SReAM

Start at: 2018-06-05 11:45:04
End at: 2018-06-05 11:45:34
Local clock offset: 7.569 ms
Remote clock offset: -5.217 ms

# Below is generated by plot.py at 2018-06-05 15:21:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 65.688 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 65.770 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 65.621 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 65.638 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link

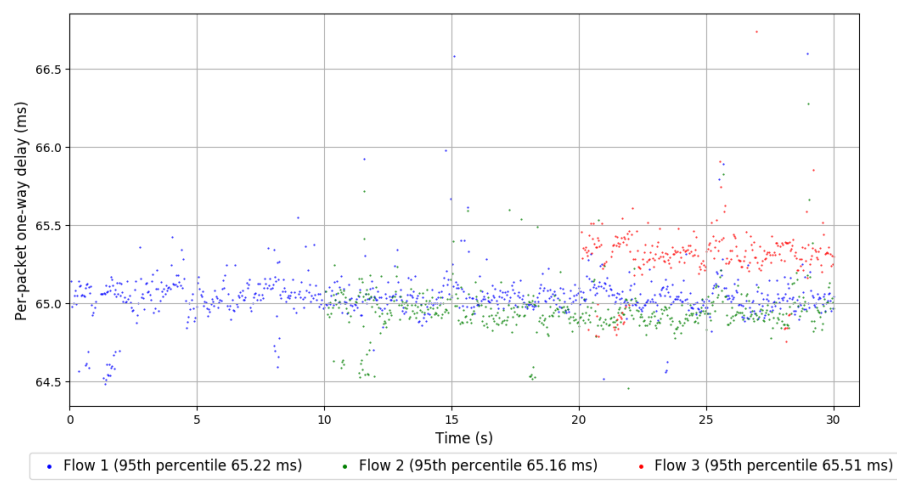
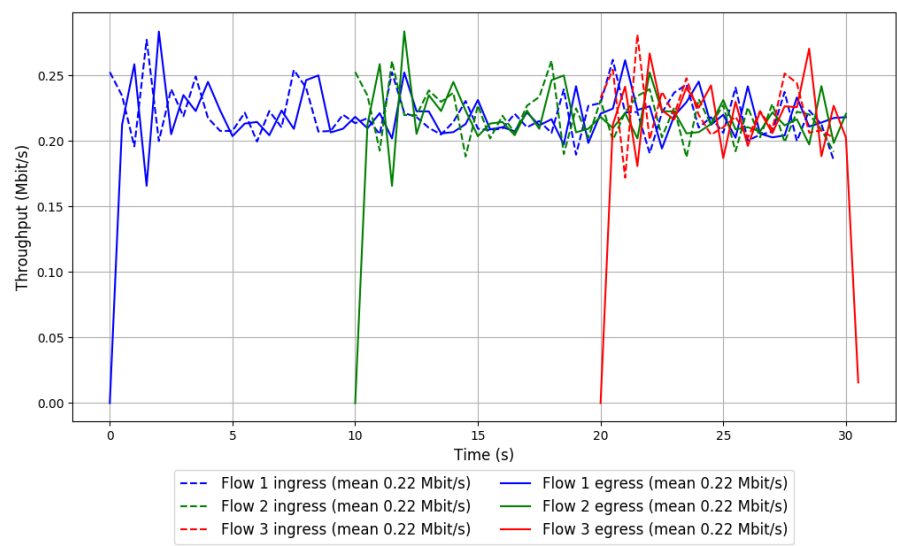


Run 2: Statistics of SReAM

Start at: 2018-06-05 12:08:03  
End at: 2018-06-05 12:08:33  
Local clock offset: 7.763 ms  
Remote clock offset: -4.534 ms

# Below is generated by plot.py at 2018-06-05 15:21:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 65.389 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 65.221 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 65.160 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 65.512 ms  
Loss rate: 0.00%

Run 2: Report of SReAM — Data Link

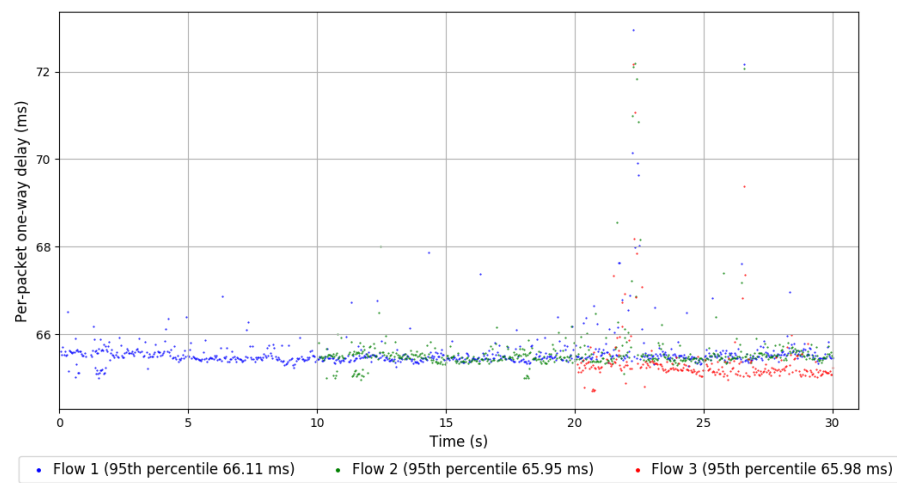
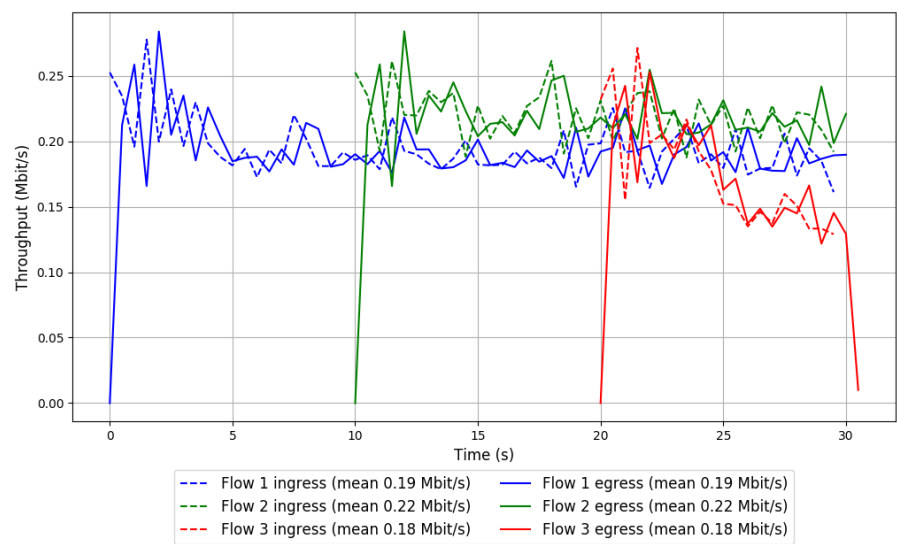


Run 3: Statistics of SReAM

Start at: 2018-06-05 12:30:27  
End at: 2018-06-05 12:30:57  
Local clock offset: 5.423 ms  
Remote clock offset: -5.455 ms

# Below is generated by plot.py at 2018-06-05 15:21:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.40 Mbit/s  
95th percentile per-packet one-way delay: 66.029 ms  
Loss rate: 0.13%  
-- Flow 1:  
Average throughput: 0.19 Mbit/s  
95th percentile per-packet one-way delay: 66.106 ms  
Loss rate: 0.16%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 65.950 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.18 Mbit/s  
95th percentile per-packet one-way delay: 65.983 ms  
Loss rate: 0.40%

Run 3: Report of SReAM — Data Link

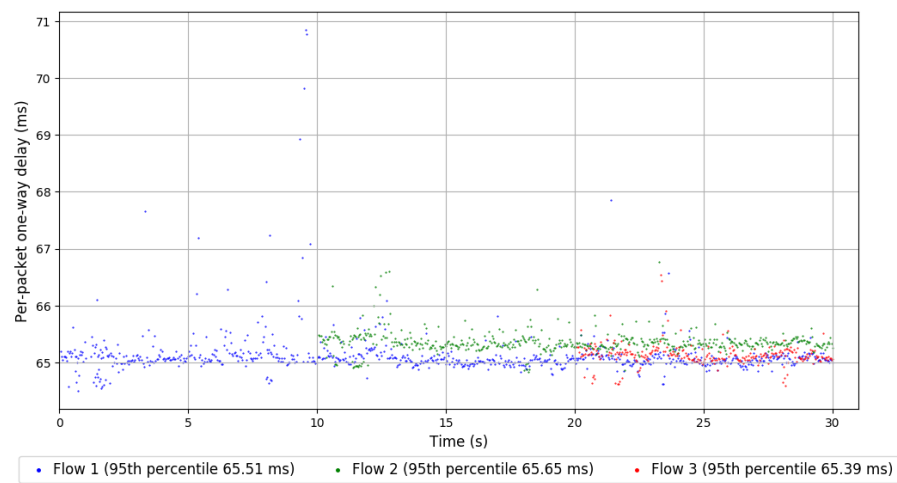
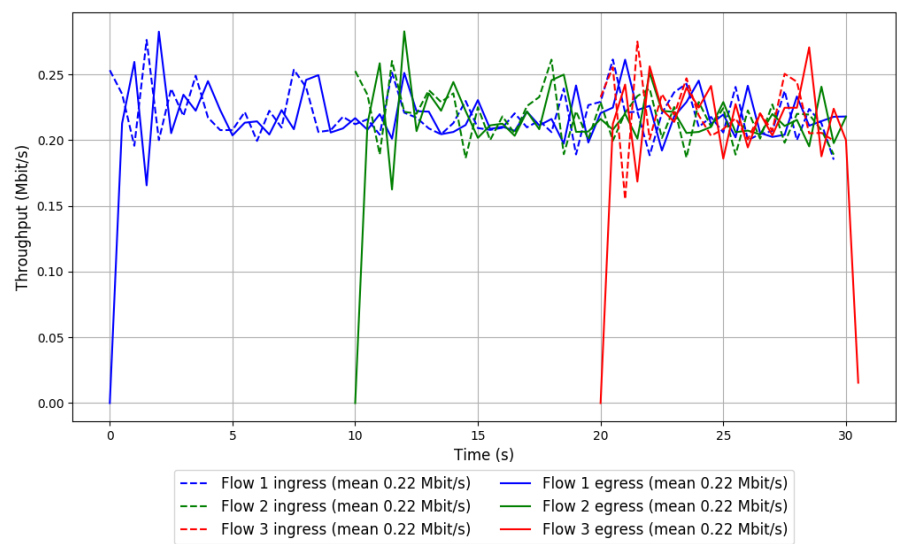


Run 4: Statistics of SReAM

Start at: 2018-06-05 12:52:47  
End at: 2018-06-05 12:53:17  
Local clock offset: 5.421 ms  
Remote clock offset: -5.513 ms

# Below is generated by plot.py at 2018-06-05 15:21:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 65.573 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 65.510 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 65.654 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 65.394 ms  
Loss rate: 0.00%

Run 4: Report of SCReAM — Data Link

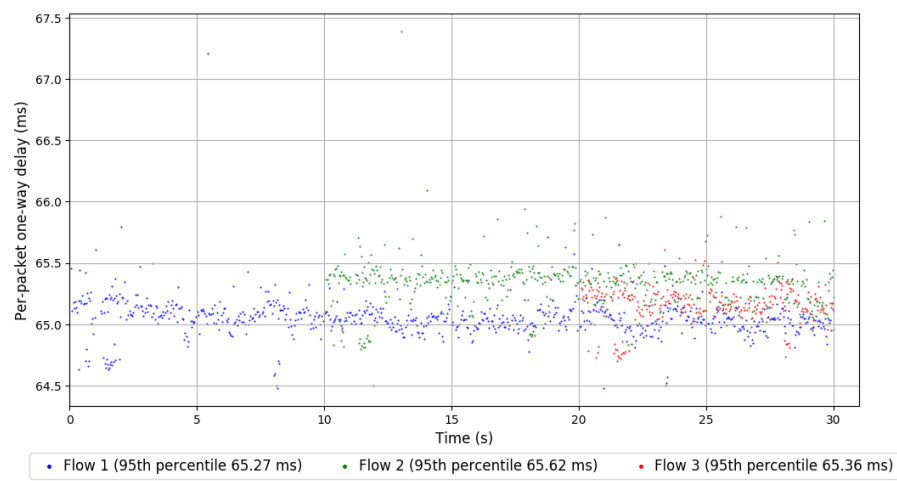
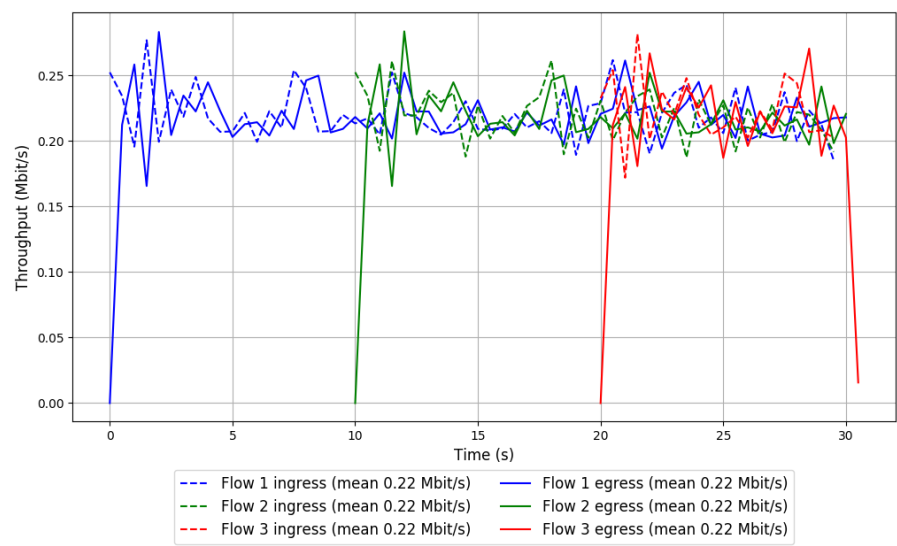


Run 5: Statistics of SReAM

Start at: 2018-06-05 13:14:56  
End at: 2018-06-05 13:15:26  
Local clock offset: 4.789 ms  
Remote clock offset: -5.781 ms

# Below is generated by plot.py at 2018-06-05 15:21:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 65.457 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 65.265 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 65.621 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 65.359 ms  
Loss rate: 0.00%

Run 5: Report of SCReAM — Data Link

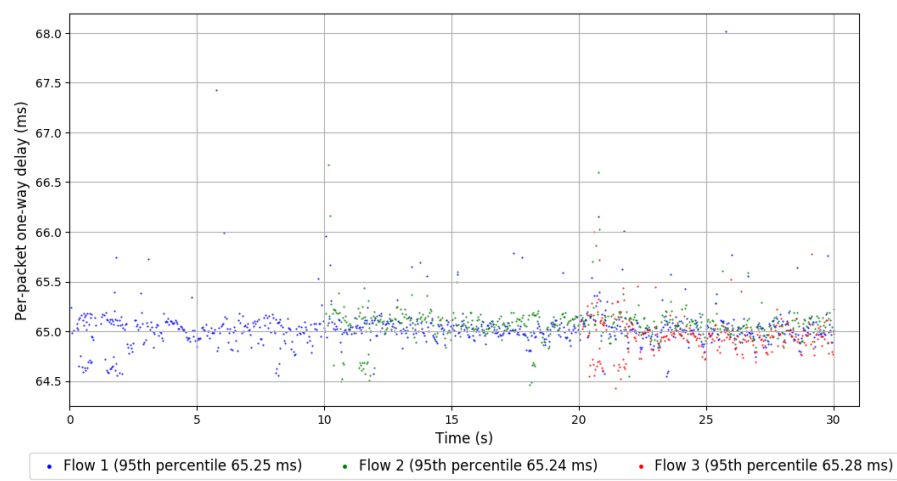
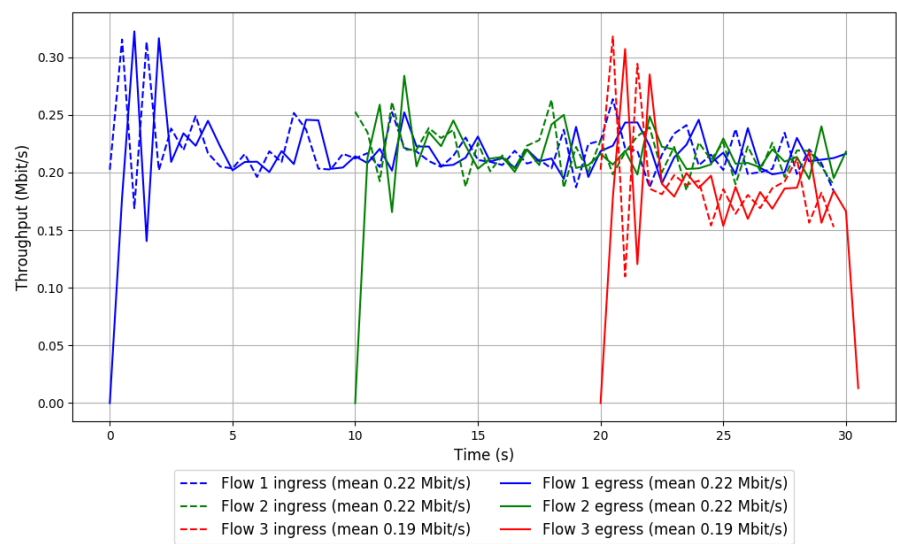


Run 6: Statistics of SCReAM

Start at: 2018-06-05 13:37:04  
End at: 2018-06-05 13:37:34  
Local clock offset: 4.14 ms  
Remote clock offset: -5.702 ms

# Below is generated by plot.py at 2018-06-05 15:21:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 65.251 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 65.255 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 65.238 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.19 Mbit/s  
95th percentile per-packet one-way delay: 65.283 ms  
Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SReAM

Start at: 2018-06-05 13:59:43

End at: 2018-06-05 14:00:13

Local clock offset: 3.875 ms

Remote clock offset: -4.86 ms

# Below is generated by plot.py at 2018-06-05 15:21:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 65.646 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 65.653 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 65.734 ms

Loss rate: 0.00%

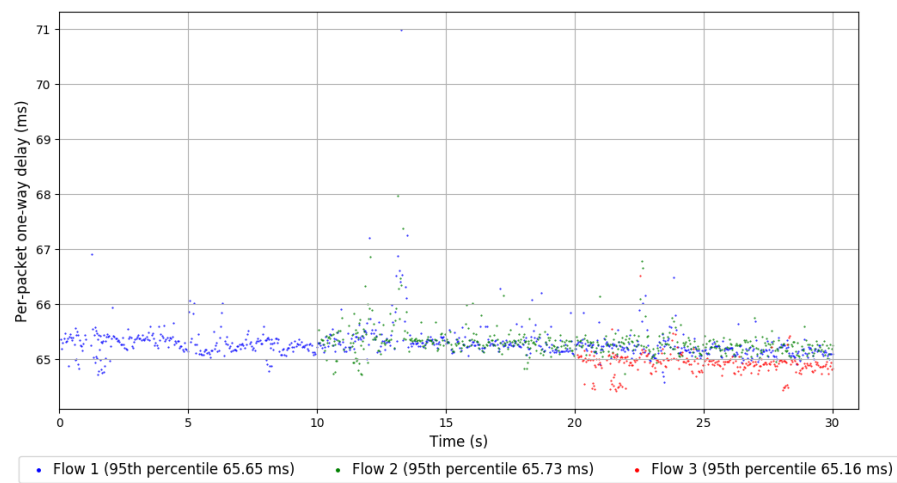
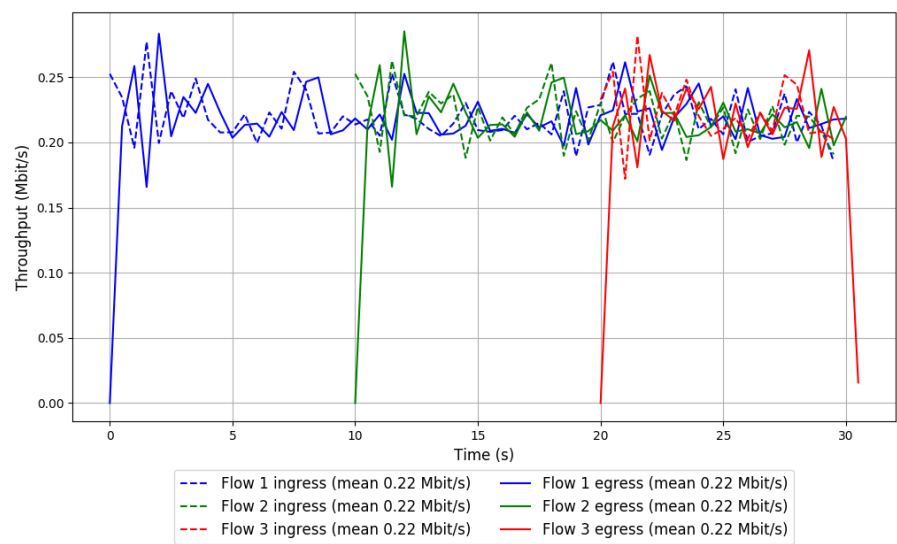
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 65.157 ms

Loss rate: 0.00%

Run 7: Report of SCReAM — Data Link

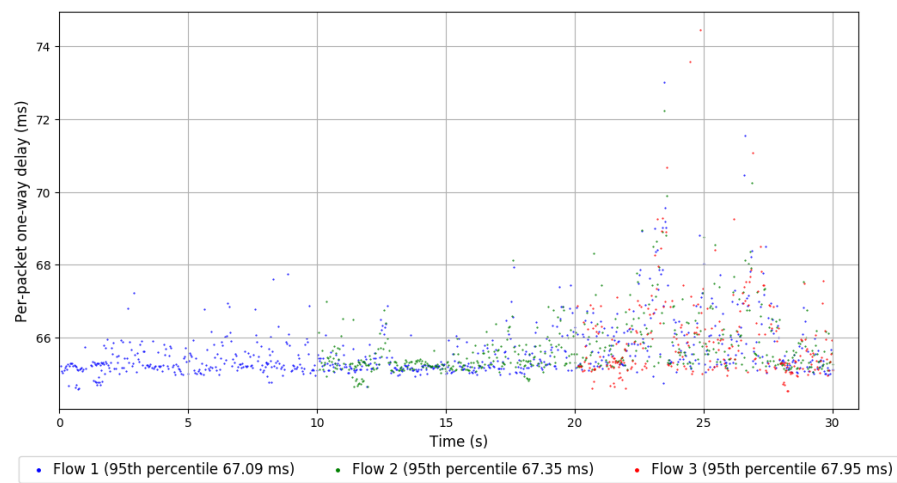
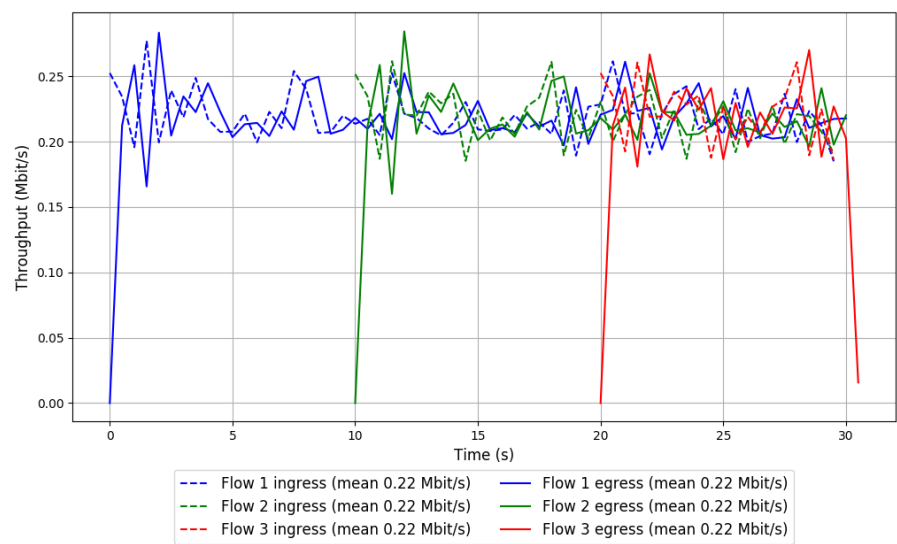


Run 8: Statistics of SReAM

Start at: 2018-06-05 14:21:36  
End at: 2018-06-05 14:22:06  
Local clock offset: 5.974 ms  
Remote clock offset: -1.117 ms

# Below is generated by plot.py at 2018-06-05 15:21:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 67.434 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 67.089 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 67.352 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 67.953 ms  
Loss rate: 0.00%

Run 8: Report of SReAM — Data Link

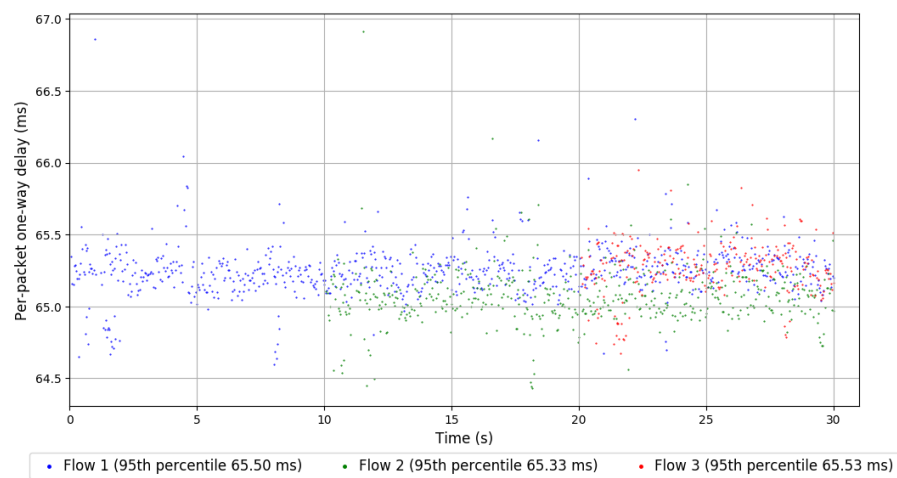
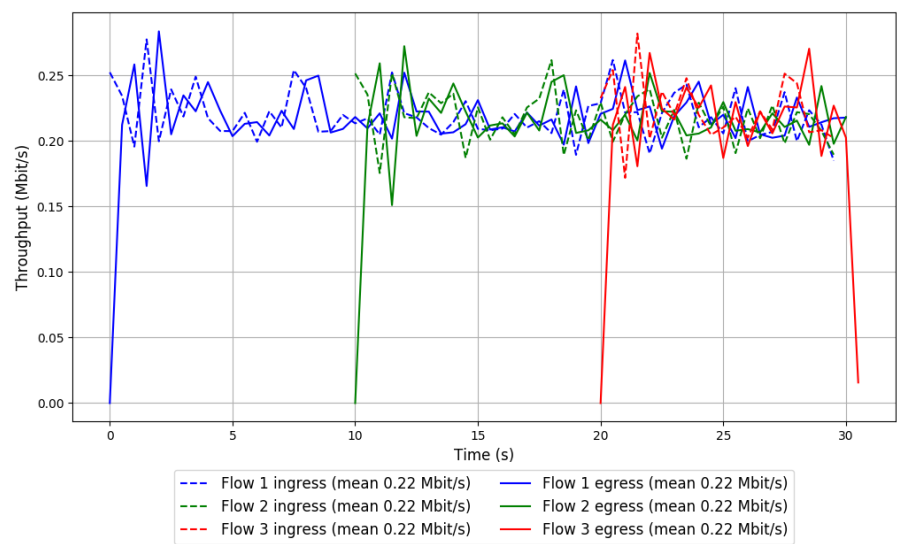


Run 9: Statistics of SReAM

Start at: 2018-06-05 14:43:34  
End at: 2018-06-05 14:44:04  
Local clock offset: 6.432 ms  
Remote clock offset: -4.255 ms

# Below is generated by plot.py at 2018-06-05 15:21:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 65.486 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 65.498 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 65.329 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 65.535 ms  
Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

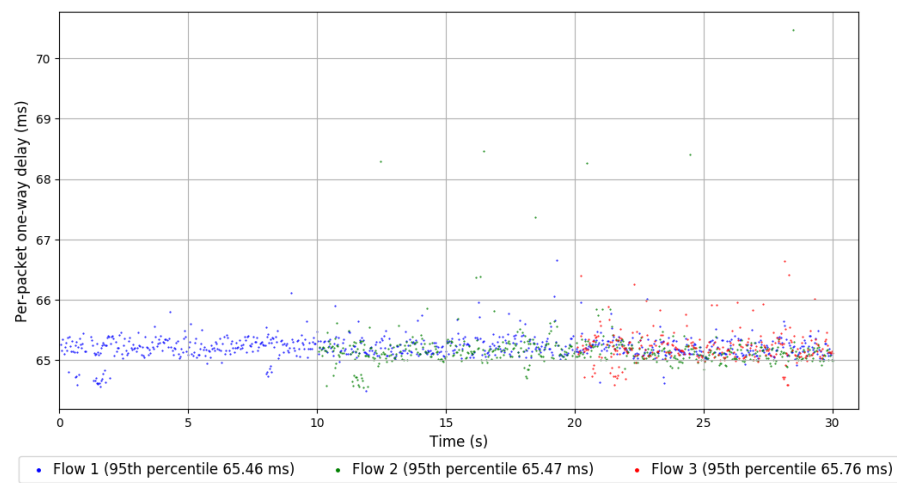
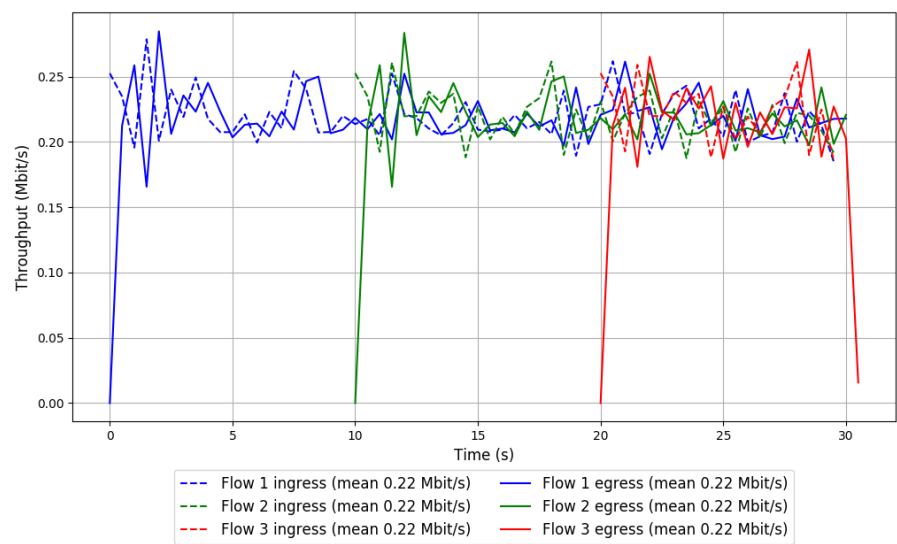


Run 10: Statistics of SCReAM

Start at: 2018-06-05 15:05:41  
End at: 2018-06-05 15:06:11  
Local clock offset: 4.905 ms  
Remote clock offset: -5.549 ms

# Below is generated by plot.py at 2018-06-05 15:21:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 65.490 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 65.457 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 65.466 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 65.760 ms  
Loss rate: 0.00%

Run 10: Report of SCReAM — Data Link

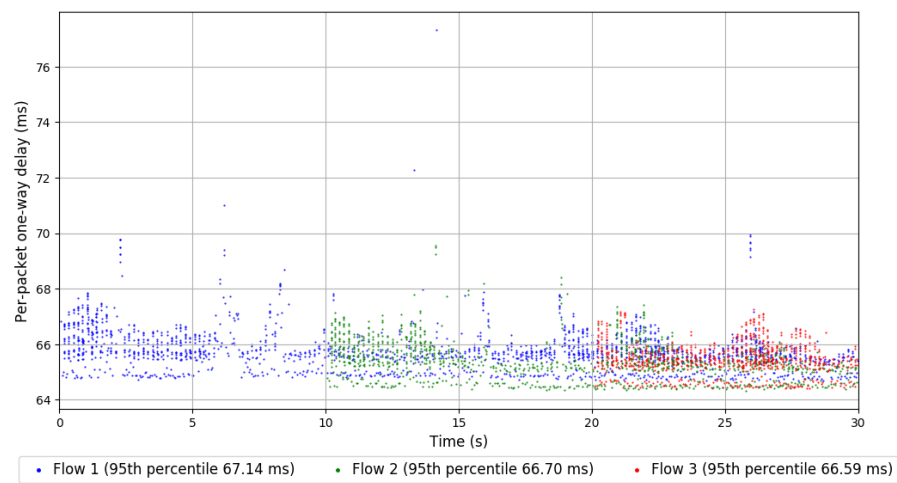
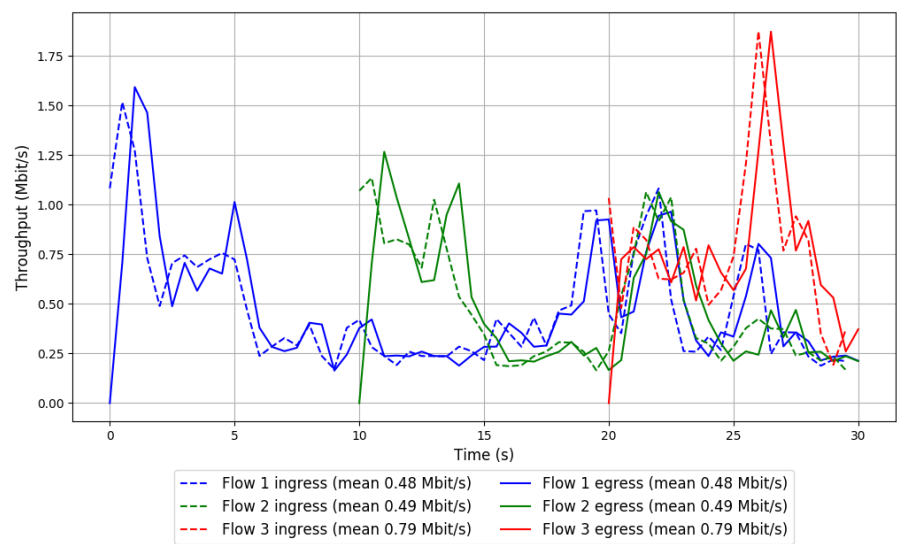


Run 1: Statistics of Sprout

Start at: 2018-06-05 11:36:43  
End at: 2018-06-05 11:37:13  
Local clock offset: 7.741 ms  
Remote clock offset: -5.619 ms

# Below is generated by plot.py at 2018-06-05 15:21:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1.07 Mbit/s  
95th percentile per-packet one-way delay: 66.867 ms  
Loss rate: 0.04%  
-- Flow 1:  
Average throughput: 0.48 Mbit/s  
95th percentile per-packet one-way delay: 67.138 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.49 Mbit/s  
95th percentile per-packet one-way delay: 66.702 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.79 Mbit/s  
95th percentile per-packet one-way delay: 66.593 ms  
Loss rate: 0.15%

Run 1: Report of Sprout — Data Link

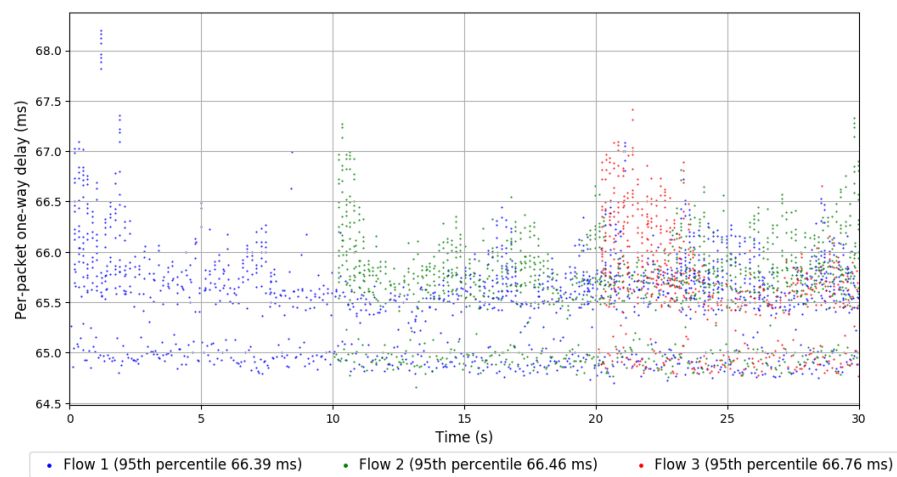
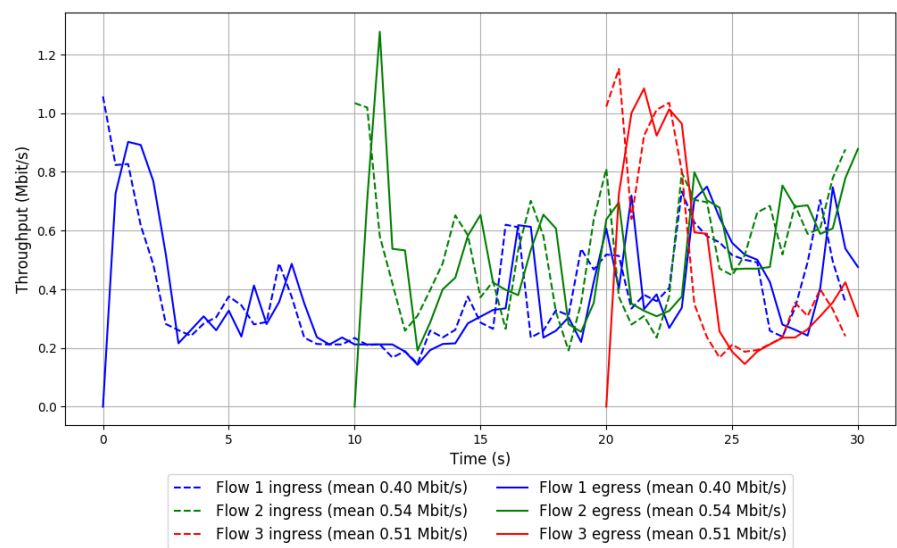


Run 2: Statistics of Sprout

Start at: 2018-06-05 11:59:53  
End at: 2018-06-05 12:00:23  
Local clock offset: 7.587 ms  
Remote clock offset: -4.613 ms

# Below is generated by plot.py at 2018-06-05 15:21:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.93 Mbit/s  
95th percentile per-packet one-way delay: 66.499 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.40 Mbit/s  
95th percentile per-packet one-way delay: 66.387 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.54 Mbit/s  
95th percentile per-packet one-way delay: 66.461 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.51 Mbit/s  
95th percentile per-packet one-way delay: 66.758 ms  
Loss rate: 0.00%

Run 2: Report of Sprout — Data Link

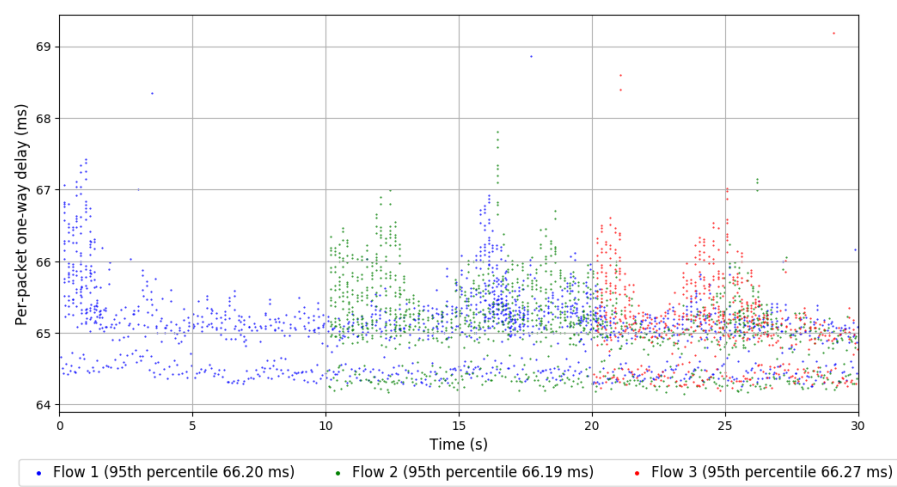
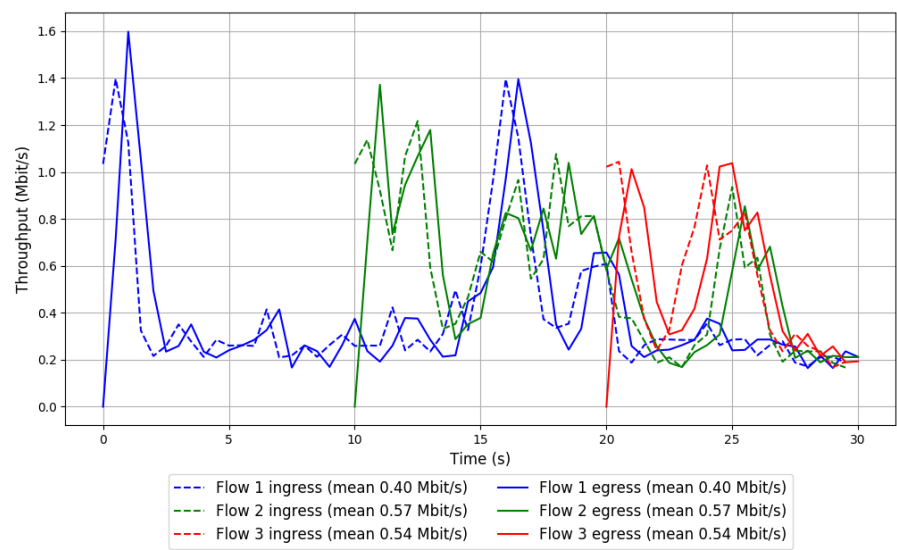


### Run 3: Statistics of Sprout

Start at: 2018-06-05 12:22:00  
End at: 2018-06-05 12:22:30  
Local clock offset: 6.116 ms  
Remote clock offset: -5.107 ms

```
# Below is generated by plot.py at 2018-06-05 15:21:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.95 Mbit/s
95th percentile per-packet one-way delay: 66.220 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 66.199 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 66.190 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 66.273 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

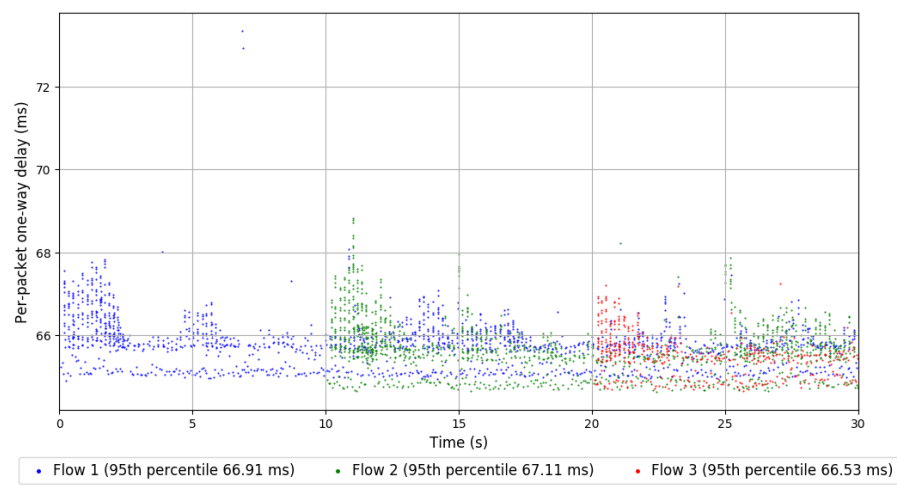
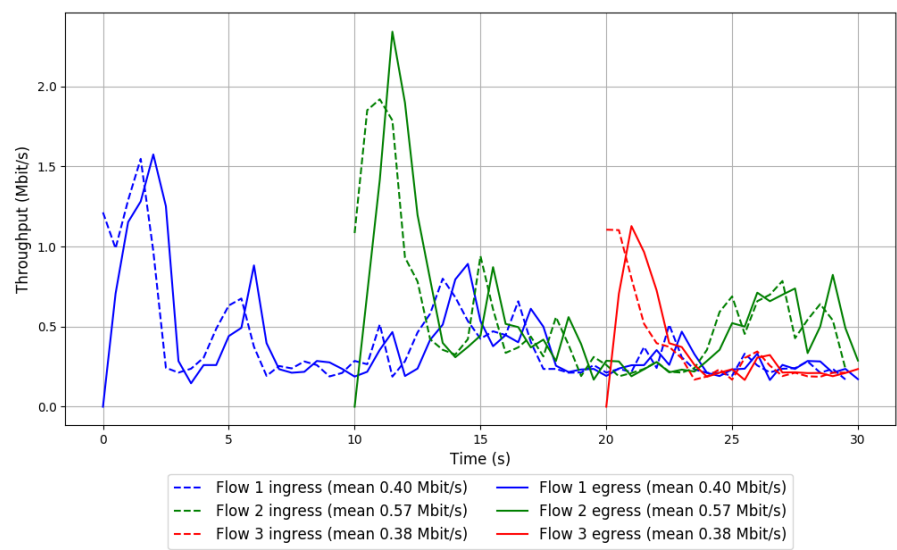


Run 4: Statistics of Sprout

Start at: 2018-06-05 12:44:24  
End at: 2018-06-05 12:44:54  
Local clock offset: 5.322 ms  
Remote clock offset: -5.449 ms

# Below is generated by plot.py at 2018-06-05 15:21:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.91 Mbit/s  
95th percentile per-packet one-way delay: 66.895 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.40 Mbit/s  
95th percentile per-packet one-way delay: 66.912 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.57 Mbit/s  
95th percentile per-packet one-way delay: 67.106 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.38 Mbit/s  
95th percentile per-packet one-way delay: 66.531 ms  
Loss rate: 0.00%

Run 4: Report of Sprout — Data Link

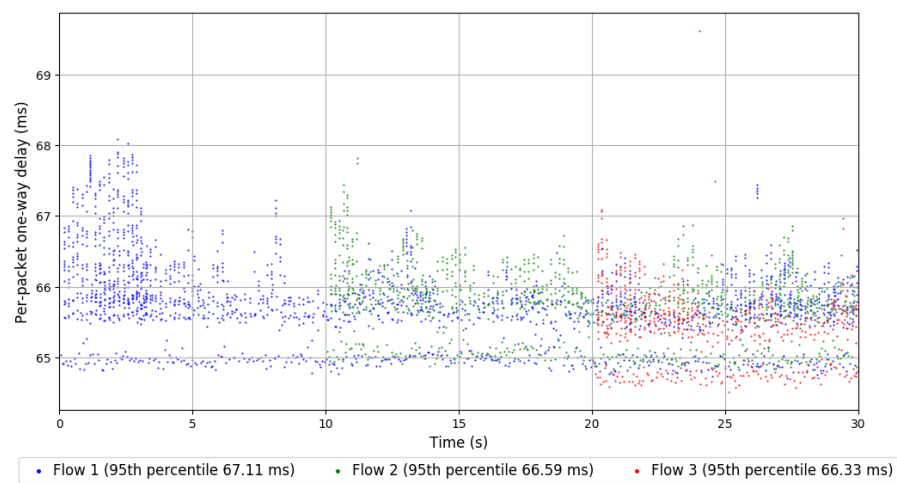
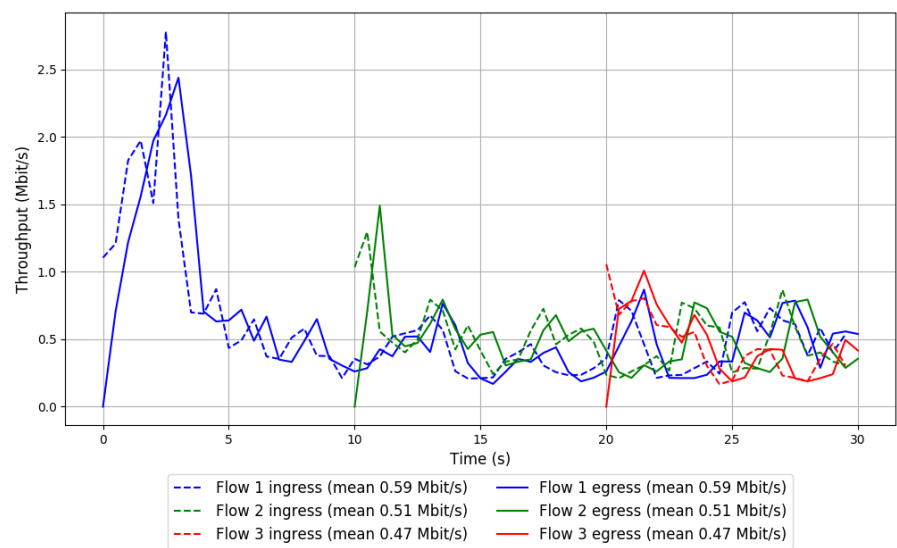


Run 5: Statistics of Sprout

Start at: 2018-06-05 13:06:41  
End at: 2018-06-05 13:07:11  
Local clock offset: 5.262 ms  
Remote clock offset: -5.51 ms

```
# Below is generated by plot.py at 2018-06-05 15:21:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.09 Mbit/s
95th percentile per-packet one-way delay: 66.787 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 67.114 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 66.593 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 66.326 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

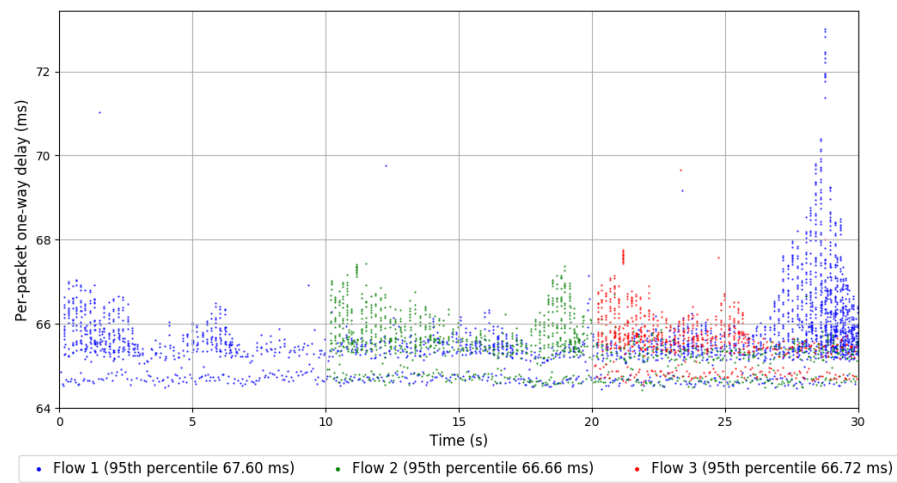
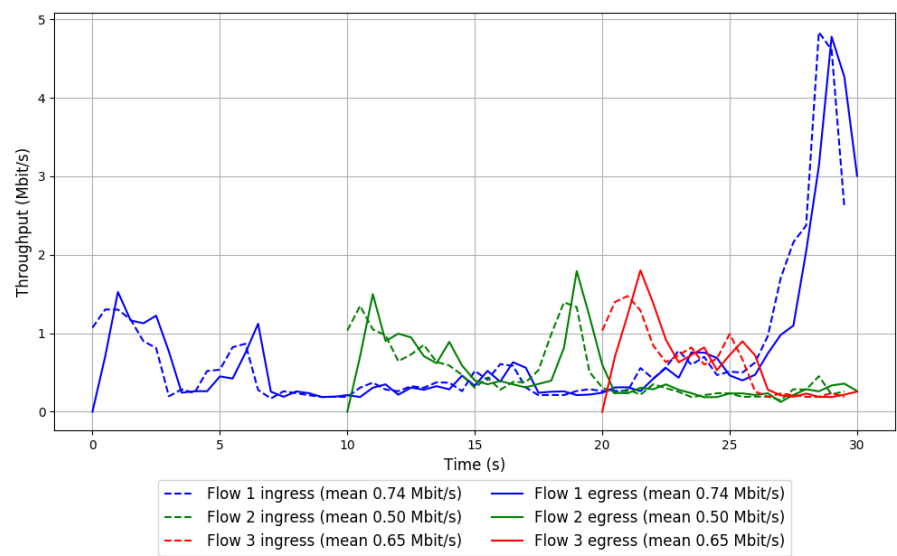


Run 6: Statistics of Sprout

Start at: 2018-06-05 13:28:44  
End at: 2018-06-05 13:29:15  
Local clock offset: 4.244 ms  
Remote clock offset: -5.666 ms

# Below is generated by plot.py at 2018-06-05 15:21:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1.28 Mbit/s  
95th percentile per-packet one-way delay: 67.139 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.74 Mbit/s  
95th percentile per-packet one-way delay: 67.603 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.50 Mbit/s  
95th percentile per-packet one-way delay: 66.662 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.65 Mbit/s  
95th percentile per-packet one-way delay: 66.725 ms  
Loss rate: 0.00%

Run 6: Report of Sprout — Data Link

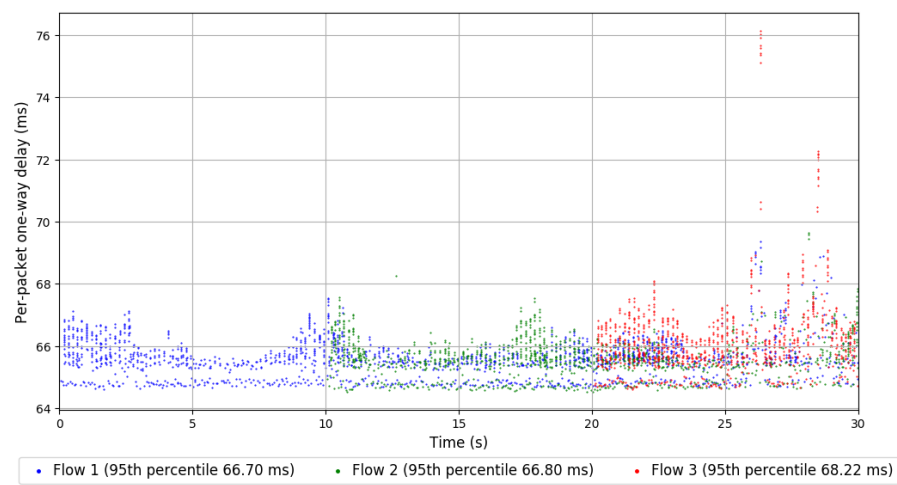
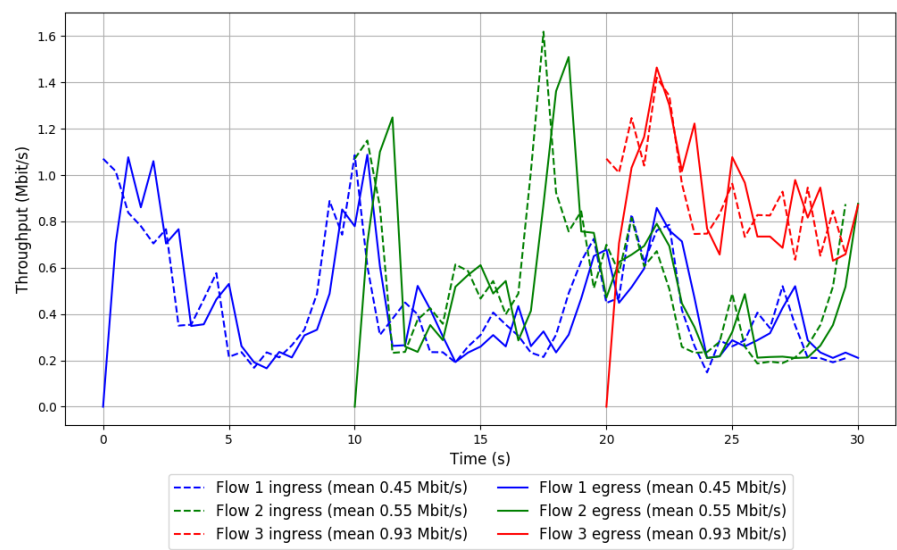


Run 7: Statistics of Sprout

Start at: 2018-06-05 13:51:31  
End at: 2018-06-05 13:52:01  
Local clock offset: 4.111 ms  
Remote clock offset: -5.849 ms

# Below is generated by plot.py at 2018-06-05 15:21:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1.12 Mbit/s  
95th percentile per-packet one-way delay: 67.048 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.45 Mbit/s  
95th percentile per-packet one-way delay: 66.697 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.55 Mbit/s  
95th percentile per-packet one-way delay: 66.802 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.93 Mbit/s  
95th percentile per-packet one-way delay: 68.224 ms  
Loss rate: 0.00%

Run 7: Report of Sprout — Data Link

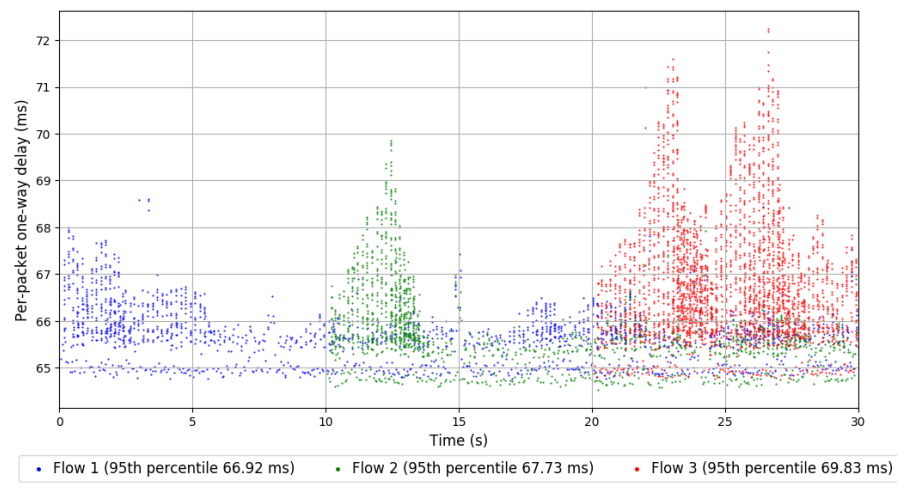
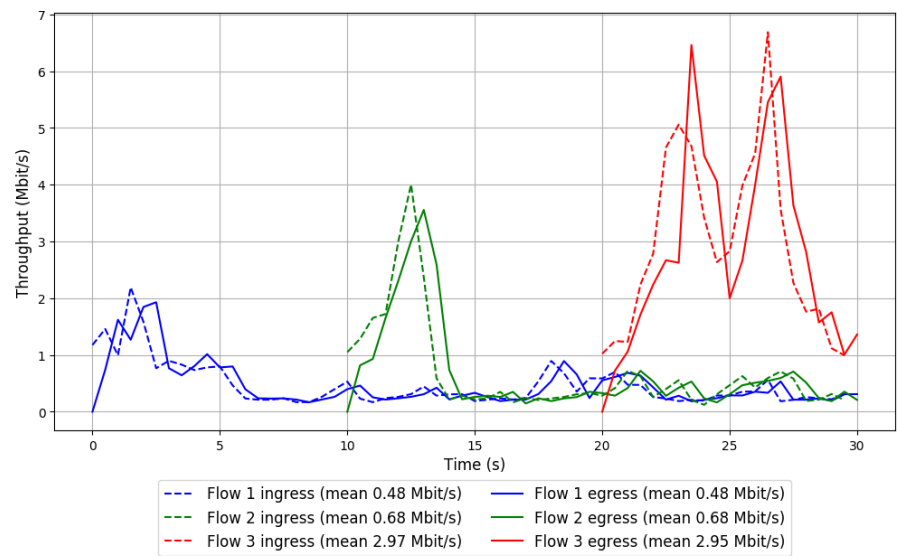


Run 8: Statistics of Sprout

Start at: 2018-06-05 14:13:26  
End at: 2018-06-05 14:13:56  
Local clock offset: 4.741 ms  
Remote clock offset: -1.973 ms

```
# Below is generated by plot.py at 2018-06-05 15:21:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 68.855 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 66.924 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.68 Mbit/s
95th percentile per-packet one-way delay: 67.733 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.95 Mbit/s
95th percentile per-packet one-way delay: 69.830 ms
Loss rate: 0.56%
```

Run 8: Report of Sprout — Data Link

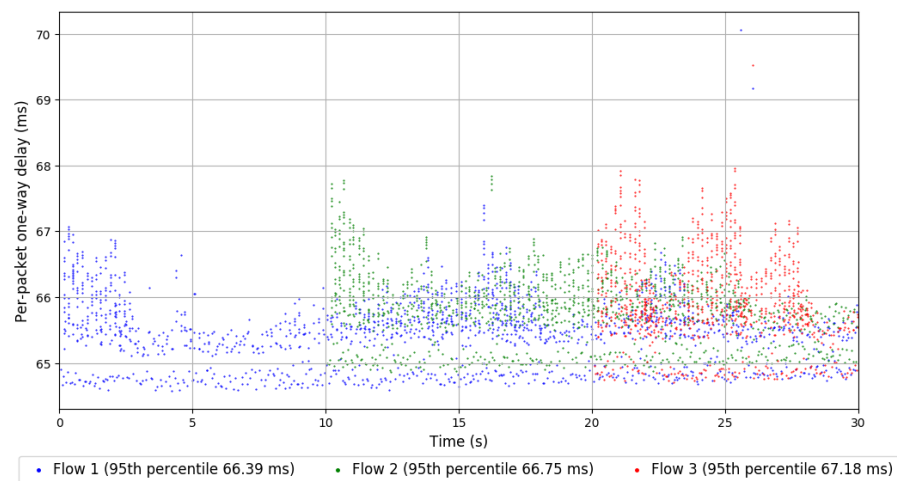
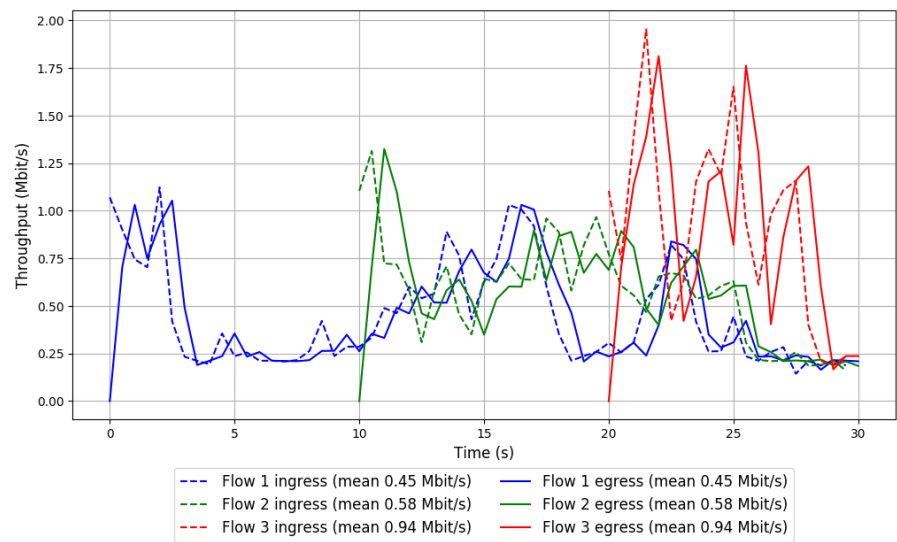


Run 9: Statistics of Sprout

Start at: 2018-06-05 14:35:24  
End at: 2018-06-05 14:35:54  
Local clock offset: 6.983 ms  
Remote clock offset: -2.415 ms

# Below is generated by plot.py at 2018-06-05 15:21:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1.14 Mbit/s  
95th percentile per-packet one-way delay: 66.838 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.45 Mbit/s  
95th percentile per-packet one-way delay: 66.391 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.58 Mbit/s  
95th percentile per-packet one-way delay: 66.749 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.94 Mbit/s  
95th percentile per-packet one-way delay: 67.184 ms  
Loss rate: 0.00%

Run 9: Report of Sprout — Data Link

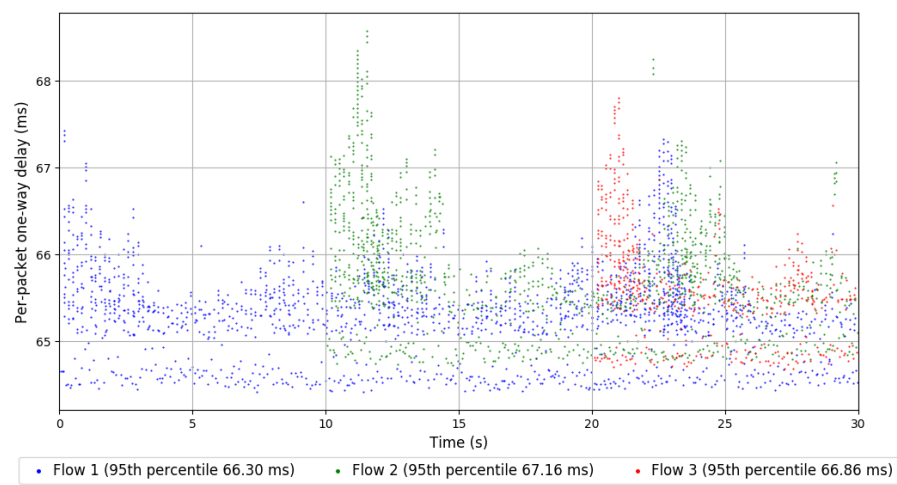
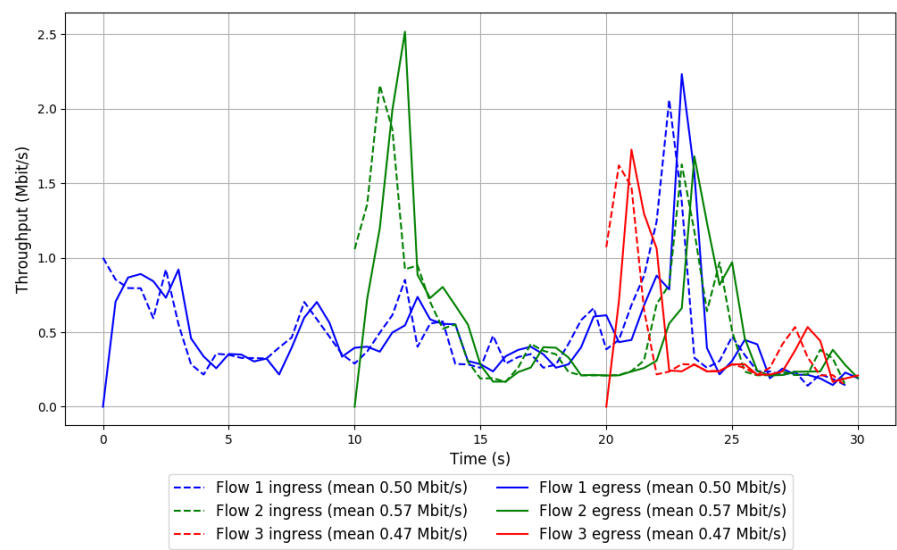


Run 10: Statistics of Sprout

Start at: 2018-06-05 14:57:27  
End at: 2018-06-05 14:57:57  
Local clock offset: 5.054 ms  
Remote clock offset: -5.359 ms

# Below is generated by plot.py at 2018-06-05 15:21:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1.03 Mbit/s  
95th percentile per-packet one-way delay: 66.822 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.50 Mbit/s  
95th percentile per-packet one-way delay: 66.295 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.57 Mbit/s  
95th percentile per-packet one-way delay: 67.158 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.47 Mbit/s  
95th percentile per-packet one-way delay: 66.865 ms  
Loss rate: 0.02%

Run 10: Report of Sprout — Data Link

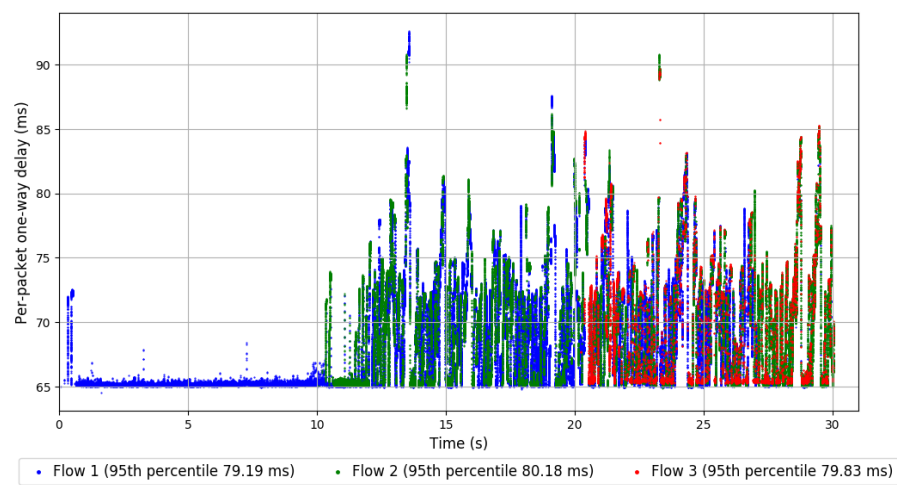
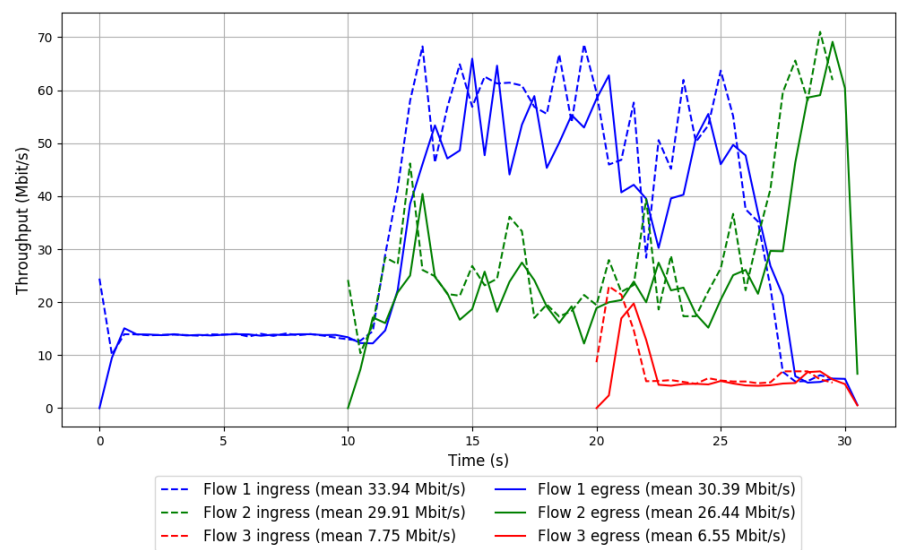


Run 1: Statistics of TaoVA-100x

Start at: 2018-06-05 11:26:58  
End at: 2018-06-05 11:27:28  
Local clock offset: 7.634 ms  
Remote clock offset: -5.847 ms

# Below is generated by plot.py at 2018-06-05 15:22:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 50.18 Mbit/s  
95th percentile per-packet one-way delay: 79.495 ms  
Loss rate: 11.07%  
-- Flow 1:  
Average throughput: 30.39 Mbit/s  
95th percentile per-packet one-way delay: 79.193 ms  
Loss rate: 10.45%  
-- Flow 2:  
Average throughput: 26.44 Mbit/s  
95th percentile per-packet one-way delay: 80.179 ms  
Loss rate: 11.57%  
-- Flow 3:  
Average throughput: 6.55 Mbit/s  
95th percentile per-packet one-way delay: 79.828 ms  
Loss rate: 15.49%

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

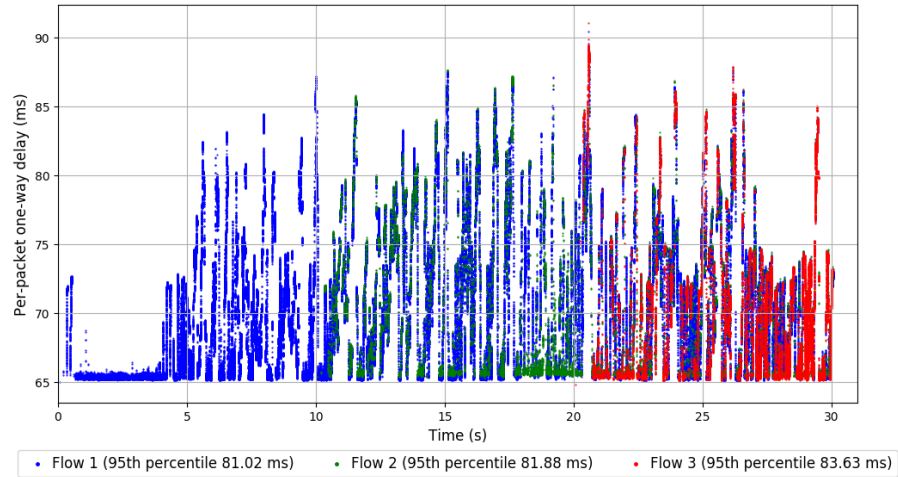
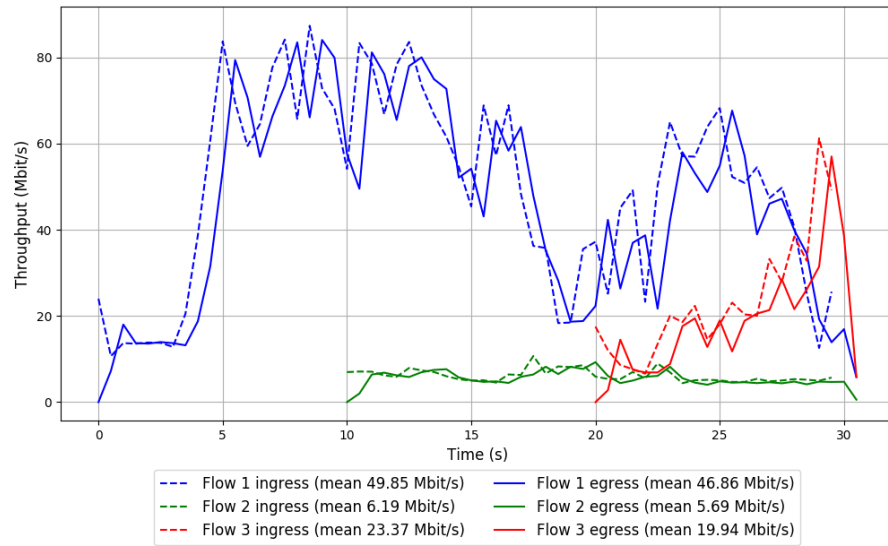


Run 2: Statistics of TaoVA-100x

Start at: 2018-06-05 11:49:40  
End at: 2018-06-05 11:50:10  
Local clock offset: 7.555 ms  
Remote clock offset: -4.954 ms

# Below is generated by plot.py at 2018-06-05 15:22:15  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 57.28 Mbit/s  
95th percentile per-packet one-way delay: 81.382 ms  
Loss rate: 7.19%  
-- Flow 1:  
Average throughput: 46.86 Mbit/s  
95th percentile per-packet one-way delay: 81.024 ms  
Loss rate: 5.97%  
-- Flow 2:  
Average throughput: 5.69 Mbit/s  
95th percentile per-packet one-way delay: 81.875 ms  
Loss rate: 8.09%  
-- Flow 3:  
Average throughput: 19.94 Mbit/s  
95th percentile per-packet one-way delay: 83.629 ms  
Loss rate: 14.58%

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

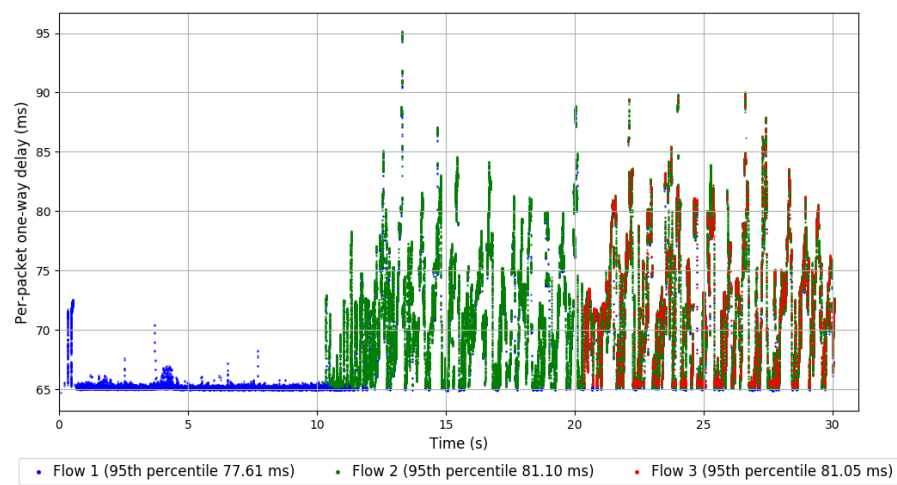
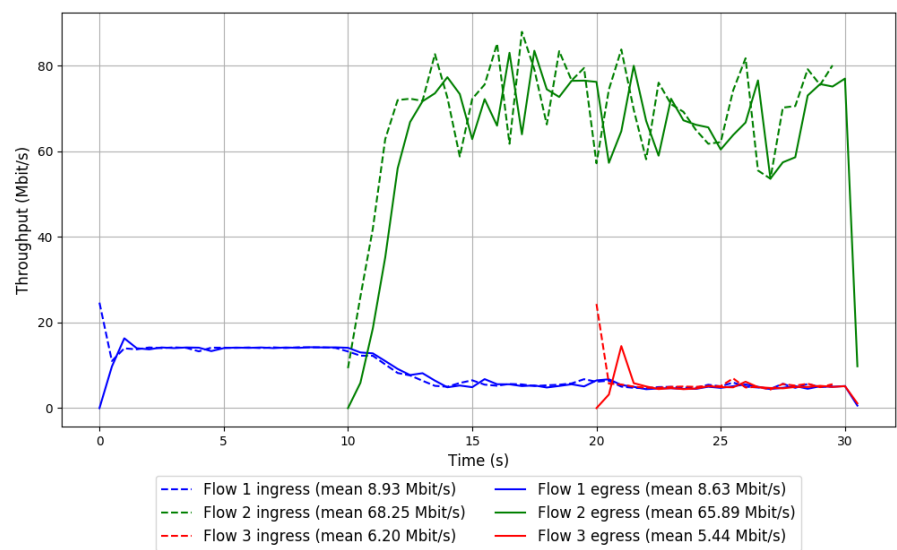


Run 3: Statistics of TaoVA-100x

Start at: 2018-06-05 12:12:06  
End at: 2018-06-05 12:12:36  
Local clock offset: 7.3 ms  
Remote clock offset: -4.379 ms

# Below is generated by plot.py at 2018-06-05 15:22:15  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 54.34 Mbit/s  
95th percentile per-packet one-way delay: 80.858 ms  
Loss rate: 3.72%  
-- Flow 1:  
Average throughput: 8.63 Mbit/s  
95th percentile per-packet one-way delay: 77.608 ms  
Loss rate: 3.26%  
-- Flow 2:  
Average throughput: 65.89 Mbit/s  
95th percentile per-packet one-way delay: 81.101 ms  
Loss rate: 3.42%  
-- Flow 3:  
Average throughput: 5.44 Mbit/s  
95th percentile per-packet one-way delay: 81.054 ms  
Loss rate: 12.35%

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

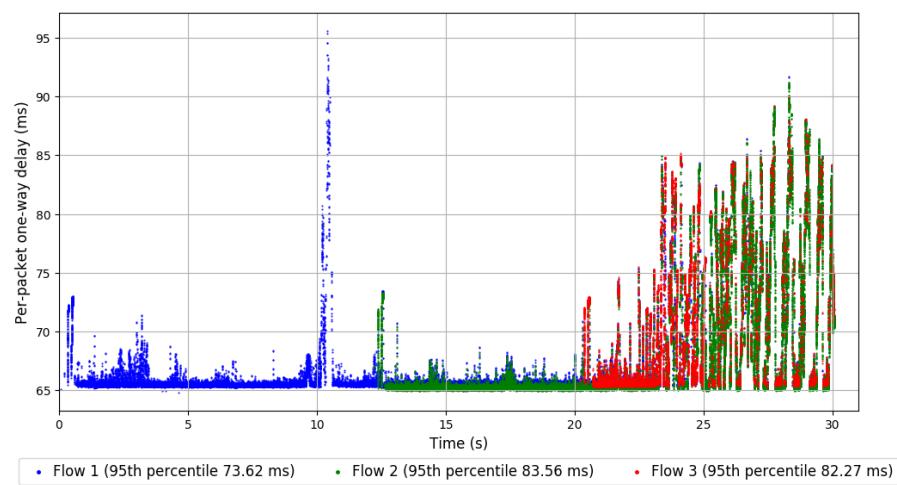
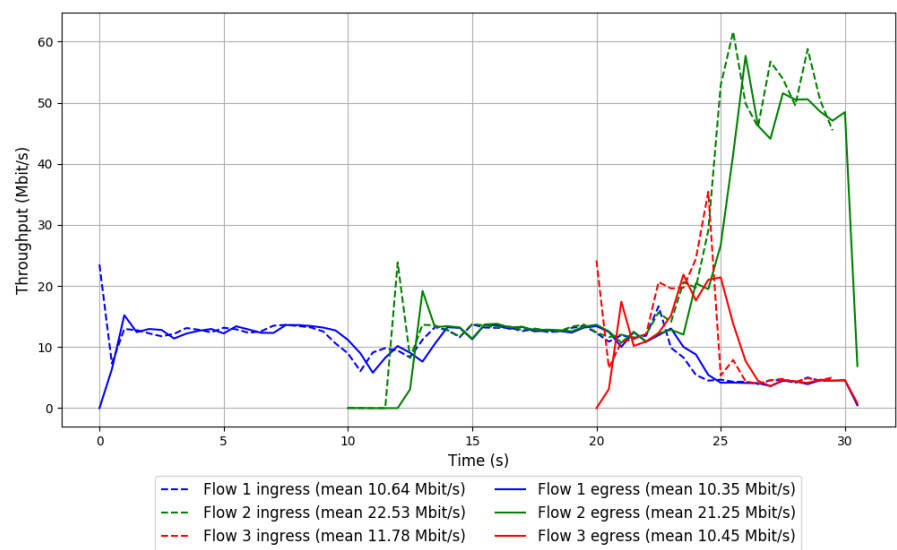


Run 4: Statistics of TaoVA-100x

Start at: 2018-06-05 12:34:29  
End at: 2018-06-05 12:34:59  
Local clock offset: 5.462 ms  
Remote clock offset: -5.529 ms

# Below is generated by plot.py at 2018-06-05 15:22:15  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 27.97 Mbit/s  
95th percentile per-packet one-way delay: 82.342 ms  
Loss rate: 5.34%  
-- Flow 1:  
Average throughput: 10.35 Mbit/s  
95th percentile per-packet one-way delay: 73.625 ms  
Loss rate: 2.75%  
-- Flow 2:  
Average throughput: 21.25 Mbit/s  
95th percentile per-packet one-way delay: 83.560 ms  
Loss rate: 5.67%  
-- Flow 3:  
Average throughput: 10.45 Mbit/s  
95th percentile per-packet one-way delay: 82.269 ms  
Loss rate: 11.16%

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

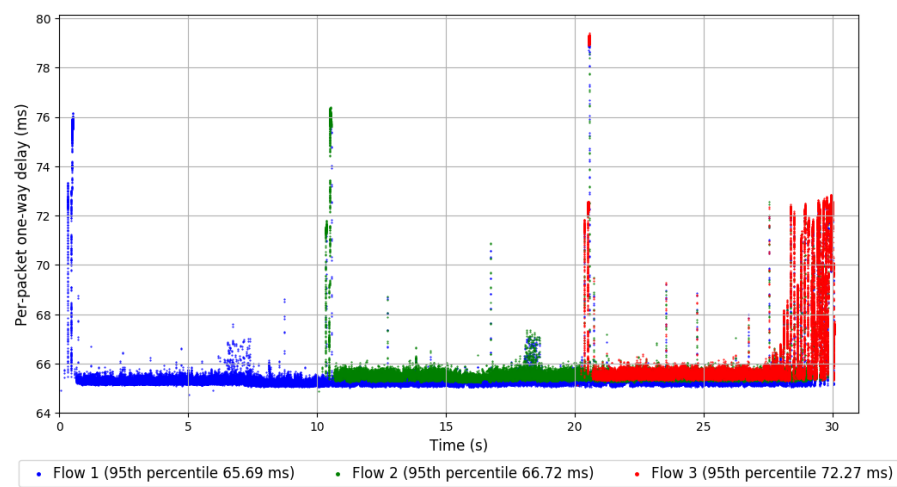
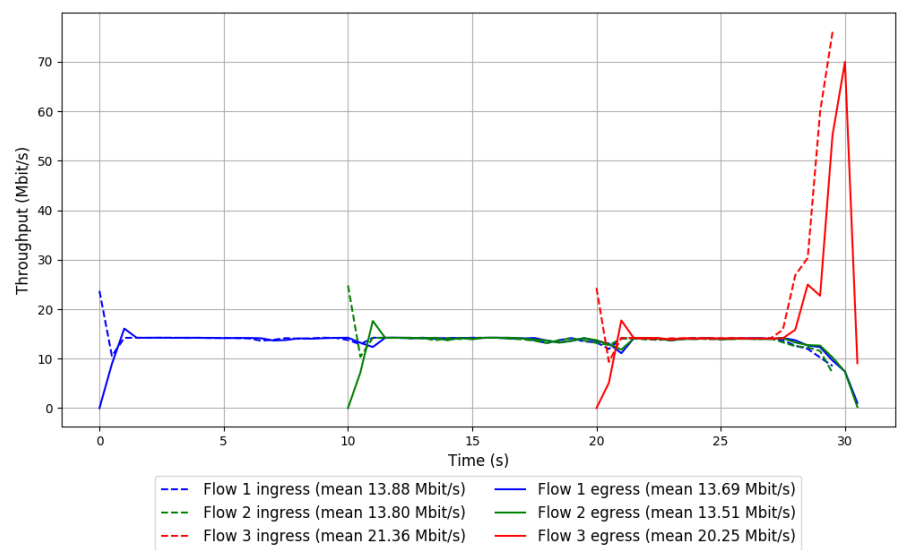


Run 5: Statistics of TaoVA-100x

Start at: 2018-06-05 12:56:53  
End at: 2018-06-05 12:57:23  
Local clock offset: 5.362 ms  
Remote clock offset: -5.549 ms

# Below is generated by plot.py at 2018-06-05 15:22:15  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 29.42 Mbit/s  
95th percentile per-packet one-way delay: 71.173 ms  
Loss rate: 2.49%  
-- Flow 1:  
Average throughput: 13.69 Mbit/s  
95th percentile per-packet one-way delay: 65.686 ms  
Loss rate: 1.40%  
-- Flow 2:  
Average throughput: 13.51 Mbit/s  
95th percentile per-packet one-way delay: 66.719 ms  
Loss rate: 2.09%  
-- Flow 3:  
Average throughput: 20.25 Mbit/s  
95th percentile per-packet one-way delay: 72.268 ms  
Loss rate: 5.15%

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

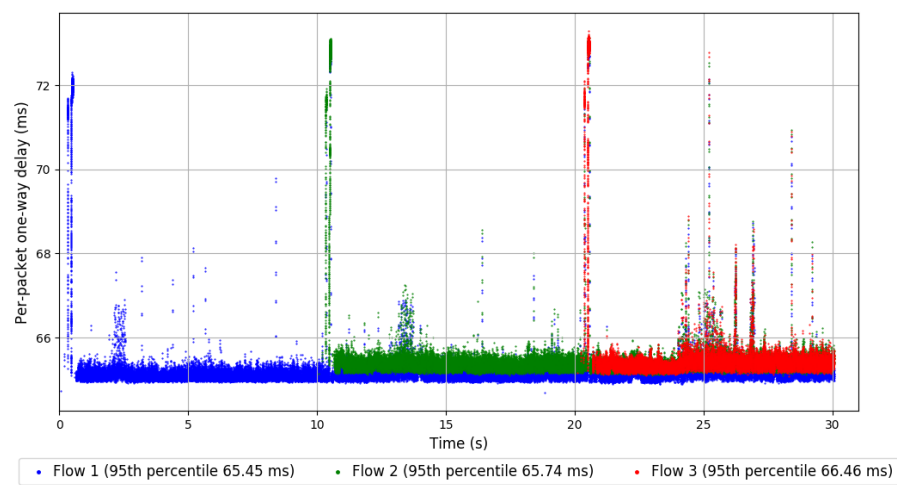
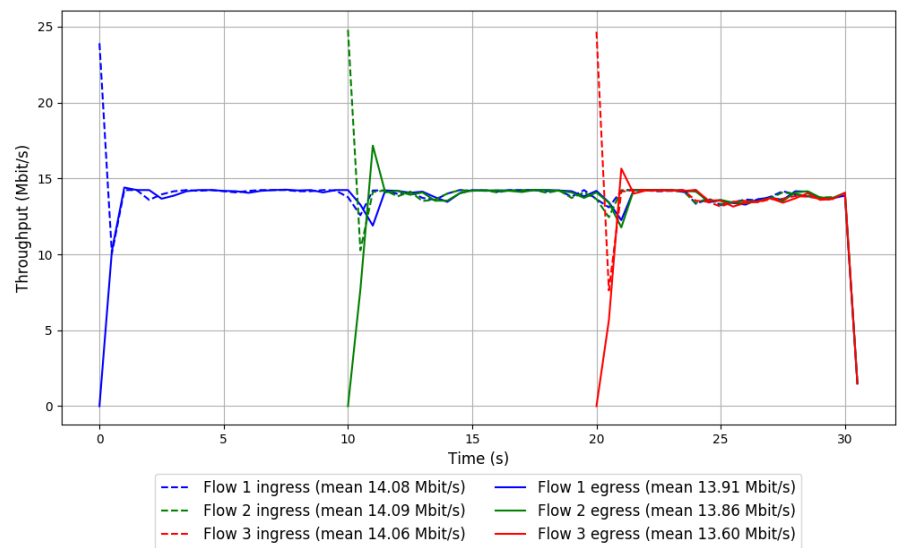


Run 6: Statistics of TaoVA-100x

Start at: 2018-06-05 13:19:01  
End at: 2018-06-05 13:19:31  
Local clock offset: 4.545 ms  
Remote clock offset: -5.877 ms

# Below is generated by plot.py at 2018-06-05 15:22:15  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 27.67 Mbit/s  
95th percentile per-packet one-way delay: 65.680 ms  
Loss rate: 1.68%  
-- Flow 1:  
Average throughput: 13.91 Mbit/s  
95th percentile per-packet one-way delay: 65.451 ms  
Loss rate: 1.15%  
-- Flow 2:  
Average throughput: 13.86 Mbit/s  
95th percentile per-packet one-way delay: 65.736 ms  
Loss rate: 1.65%  
-- Flow 3:  
Average throughput: 13.60 Mbit/s  
95th percentile per-packet one-way delay: 66.464 ms  
Loss rate: 3.30%

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

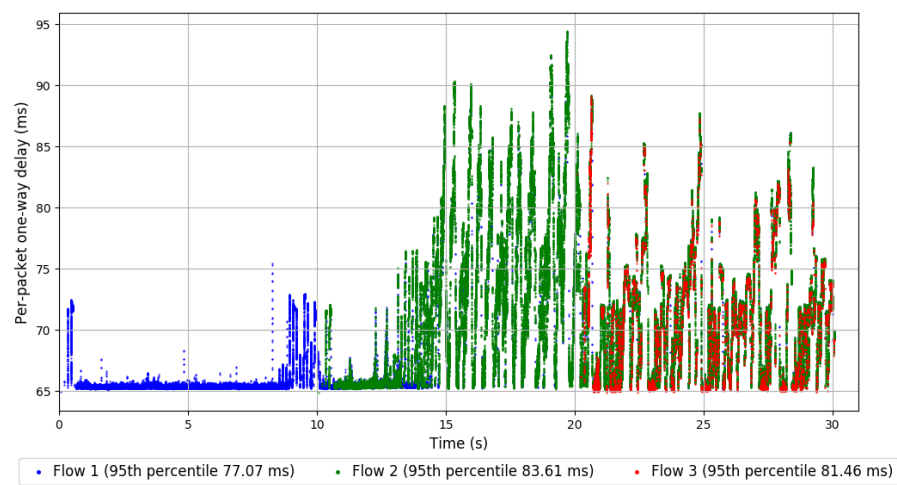
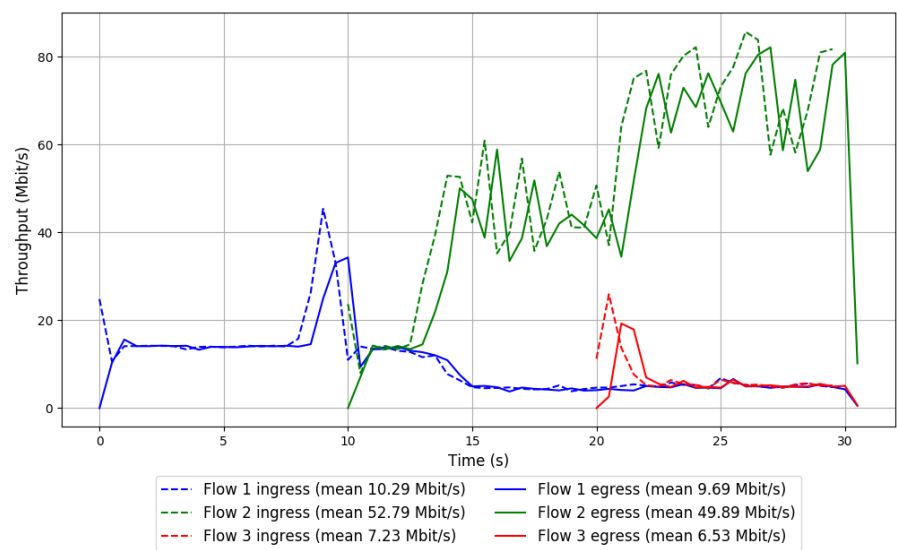


Run 7: Statistics of TaoVA-100x

Start at: 2018-06-05 13:41:40  
End at: 2018-06-05 13:42:10  
Local clock offset: 4.126 ms  
Remote clock offset: -5.776 ms

# Below is generated by plot.py at 2018-06-05 15:22:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 45.10 Mbit/s  
95th percentile per-packet one-way delay: 82.874 ms  
Loss rate: 5.75%  
-- Flow 1:  
Average throughput: 9.69 Mbit/s  
95th percentile per-packet one-way delay: 77.068 ms  
Loss rate: 5.81%  
-- Flow 2:  
Average throughput: 49.89 Mbit/s  
95th percentile per-packet one-way delay: 83.614 ms  
Loss rate: 5.47%  
-- Flow 3:  
Average throughput: 6.53 Mbit/s  
95th percentile per-packet one-way delay: 81.462 ms  
Loss rate: 9.71%

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

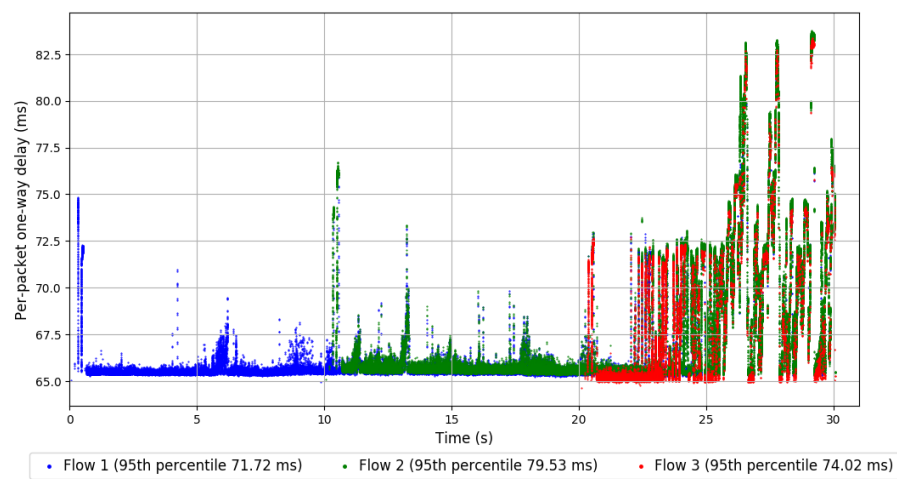
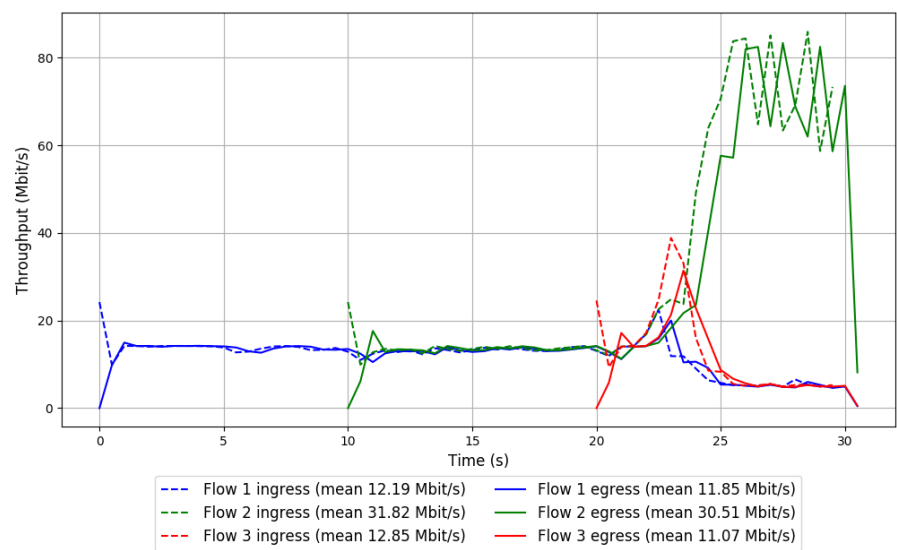


Run 8: Statistics of TaoVA-100x

Start at: 2018-06-05 14:03:45  
End at: 2018-06-05 14:04:15  
Local clock offset: 3.855 ms  
Remote clock offset: -3.629 ms

# Below is generated by plot.py at 2018-06-05 15:22:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 35.85 Mbit/s  
95th percentile per-packet one-way delay: 76.424 ms  
Loss rate: 4.78%  
-- Flow 1:  
Average throughput: 11.85 Mbit/s  
95th percentile per-packet one-way delay: 71.715 ms  
Loss rate: 2.77%  
-- Flow 2:  
Average throughput: 30.51 Mbit/s  
95th percentile per-packet one-way delay: 79.535 ms  
Loss rate: 4.11%  
-- Flow 3:  
Average throughput: 11.07 Mbit/s  
95th percentile per-packet one-way delay: 74.024 ms  
Loss rate: 13.83%

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

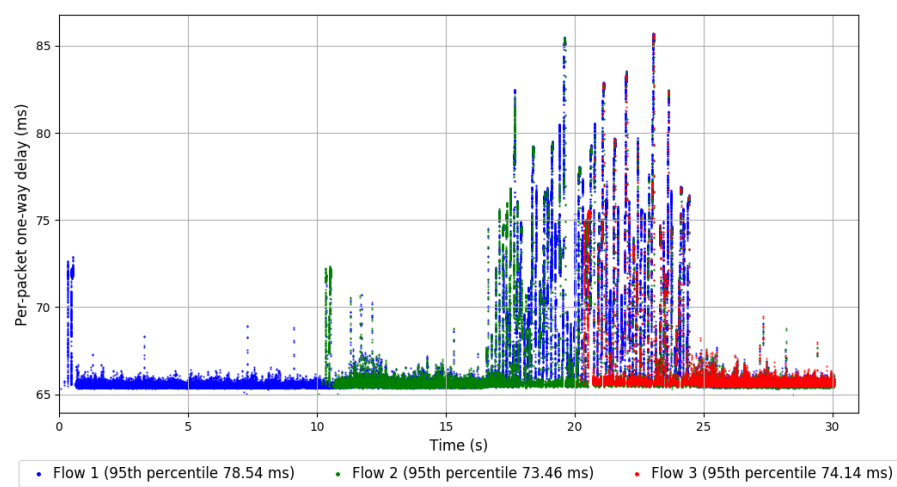
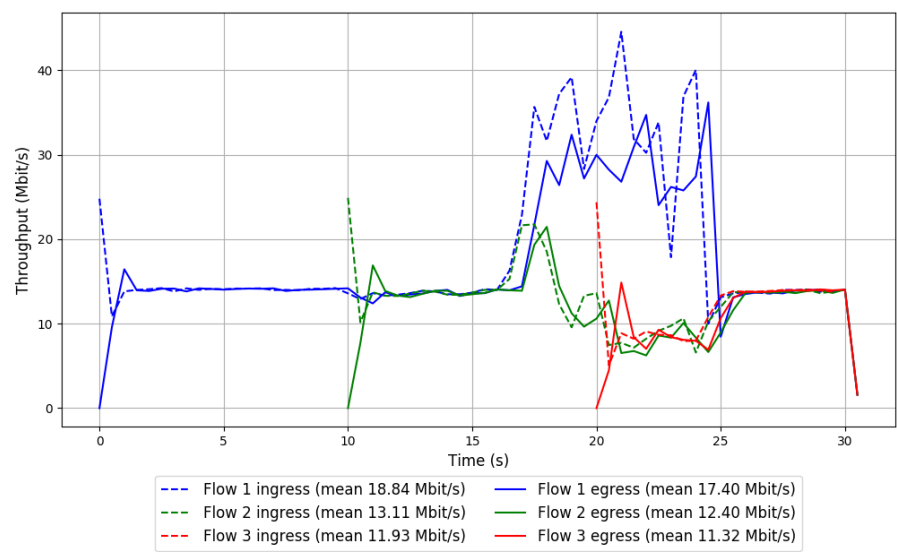


Run 9: Statistics of TaoVA-100x

Start at: 2018-06-05 14:25:38  
End at: 2018-06-05 14:26:08  
Local clock offset: 6.378 ms  
Remote clock offset: -0.798 ms

# Below is generated by plot.py at 2018-06-05 15:22:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 29.43 Mbit/s  
95th percentile per-packet one-way delay: 76.625 ms  
Loss rate: 6.69%  
-- Flow 1:  
Average throughput: 17.40 Mbit/s  
95th percentile per-packet one-way delay: 78.536 ms  
Loss rate: 7.63%  
-- Flow 2:  
Average throughput: 12.40 Mbit/s  
95th percentile per-packet one-way delay: 73.464 ms  
Loss rate: 5.38%  
-- Flow 3:  
Average throughput: 11.32 Mbit/s  
95th percentile per-packet one-way delay: 74.145 ms  
Loss rate: 5.09%

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



Run 10: Statistics of TaoVA-100x

Start at: 2018-06-05 14:47:37

End at: 2018-06-05 14:48:07

Local clock offset: 5.724 ms

Remote clock offset: -4.77 ms

# Below is generated by plot.py at 2018-06-05 15:22:56

# Datalink statistics

-- Total of 3 flows:

Average throughput: 50.96 Mbit/s

95th percentile per-packet one-way delay: 81.564 ms

Loss rate: 5.26%

-- Flow 1:

Average throughput: 9.20 Mbit/s

95th percentile per-packet one-way delay: 76.291 ms

Loss rate: 4.91%

-- Flow 2:

Average throughput: 59.83 Mbit/s

95th percentile per-packet one-way delay: 81.940 ms

Loss rate: 4.94%

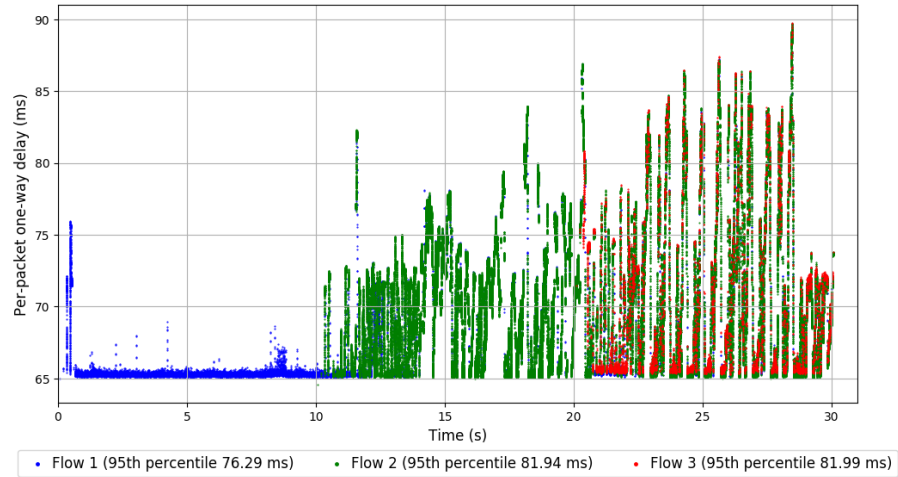
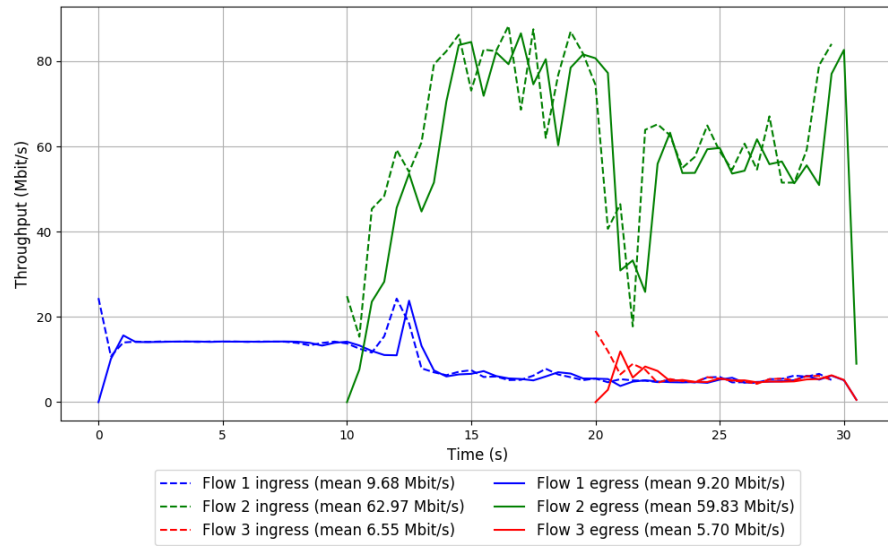
-- Flow 3:

Average throughput: 5.70 Mbit/s

95th percentile per-packet one-way delay: 81.990 ms

Loss rate: 12.89%

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

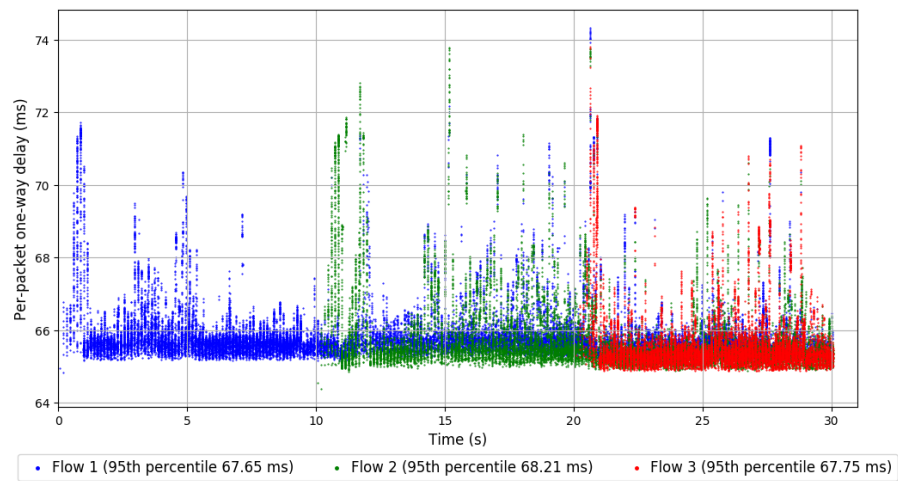
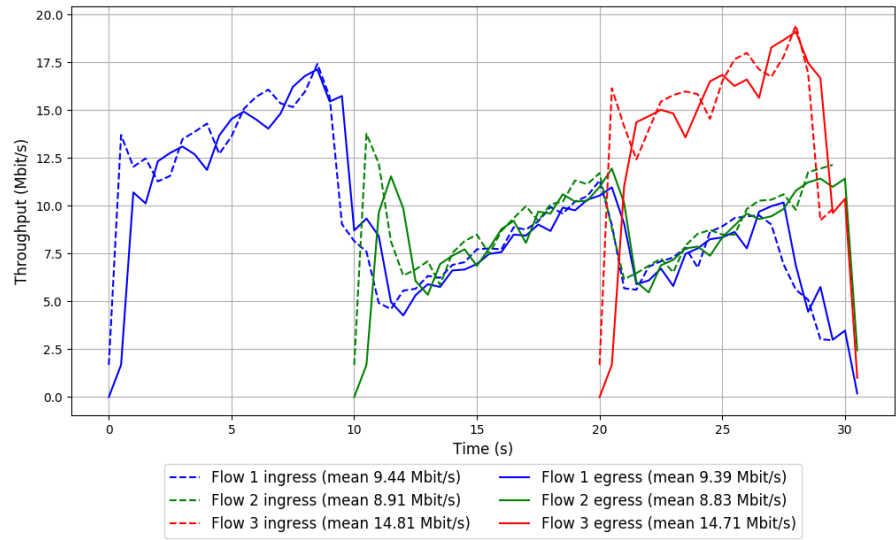


Run 1: Statistics of TCP Vegas

Start at: 2018-06-05 11:25:38  
End at: 2018-06-05 11:26:08  
Local clock offset: 7.761 ms  
Remote clock offset: -5.775 ms

# Below is generated by plot.py at 2018-06-05 15:22:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 20.16 Mbit/s  
95th percentile per-packet one-way delay: 67.894 ms  
Loss rate: 0.66%  
-- Flow 1:  
Average throughput: 9.39 Mbit/s  
95th percentile per-packet one-way delay: 67.650 ms  
Loss rate: 0.50%  
-- Flow 2:  
Average throughput: 8.83 Mbit/s  
95th percentile per-packet one-way delay: 68.207 ms  
Loss rate: 0.93%  
-- Flow 3:  
Average throughput: 14.71 Mbit/s  
95th percentile per-packet one-way delay: 67.750 ms  
Loss rate: 0.66%

# Run 1: Report of TCP Vegas — Data Link

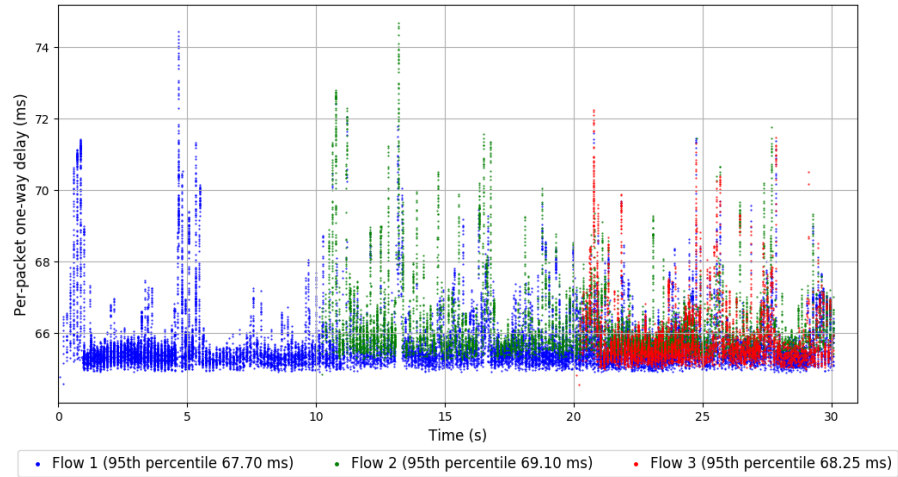
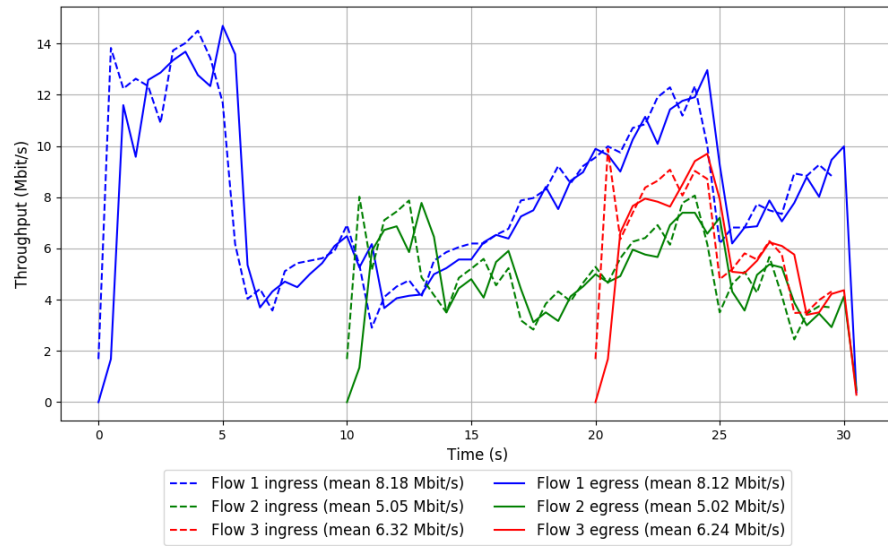


Run 2: Statistics of TCP Vegas

Start at: 2018-06-05 11:48:20  
End at: 2018-06-05 11:48:50  
Local clock offset: 7.692 ms  
Remote clock offset: -5.017 ms

# Below is generated by plot.py at 2018-06-05 15:22:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 13.54 Mbit/s  
95th percentile per-packet one-way delay: 68.287 ms  
Loss rate: 0.74%  
-- Flow 1:  
Average throughput: 8.12 Mbit/s  
95th percentile per-packet one-way delay: 67.701 ms  
Loss rate: 0.69%  
-- Flow 2:  
Average throughput: 5.02 Mbit/s  
95th percentile per-packet one-way delay: 69.102 ms  
Loss rate: 0.58%  
-- Flow 3:  
Average throughput: 6.24 Mbit/s  
95th percentile per-packet one-way delay: 68.255 ms  
Loss rate: 1.18%

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

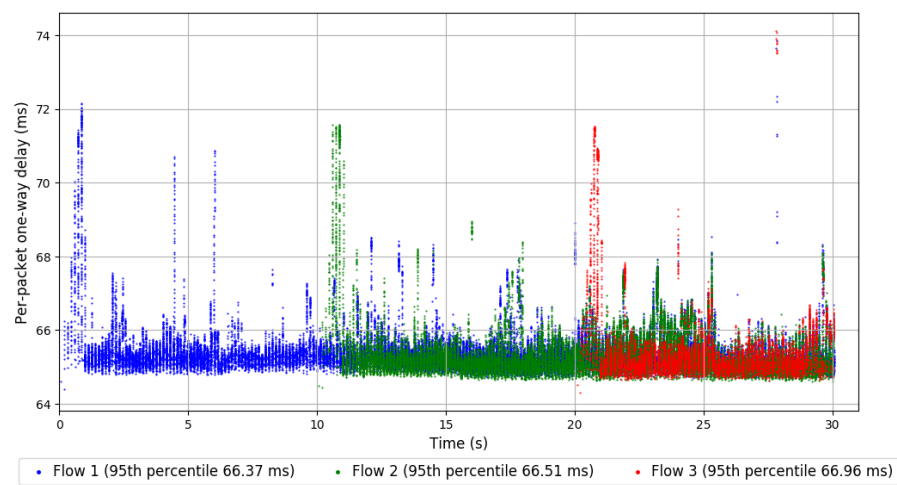
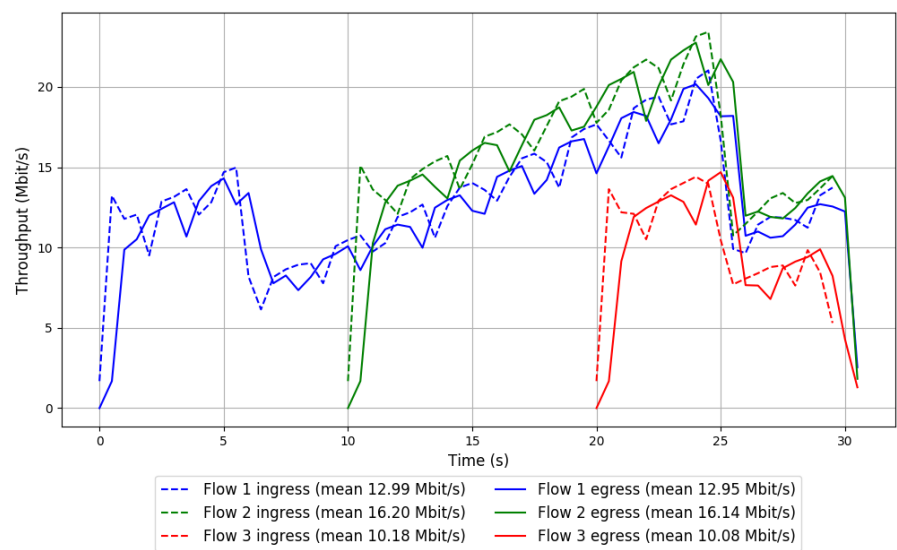


Run 3: Statistics of TCP Vegas

Start at: 2018-06-05 12:10:45  
End at: 2018-06-05 12:11:15  
Local clock offset: 7.626 ms  
Remote clock offset: -4.535 ms

# Below is generated by plot.py at 2018-06-05 15:22:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 27.03 Mbit/s  
95th percentile per-packet one-way delay: 66.476 ms  
Loss rate: 0.42%  
-- Flow 1:  
Average throughput: 12.95 Mbit/s  
95th percentile per-packet one-way delay: 66.374 ms  
Loss rate: 0.29%  
-- Flow 2:  
Average throughput: 16.14 Mbit/s  
95th percentile per-packet one-way delay: 66.509 ms  
Loss rate: 0.39%  
-- Flow 3:  
Average throughput: 10.08 Mbit/s  
95th percentile per-packet one-way delay: 66.960 ms  
Loss rate: 1.00%

Run 3: Report of TCP Vegas — Data Link

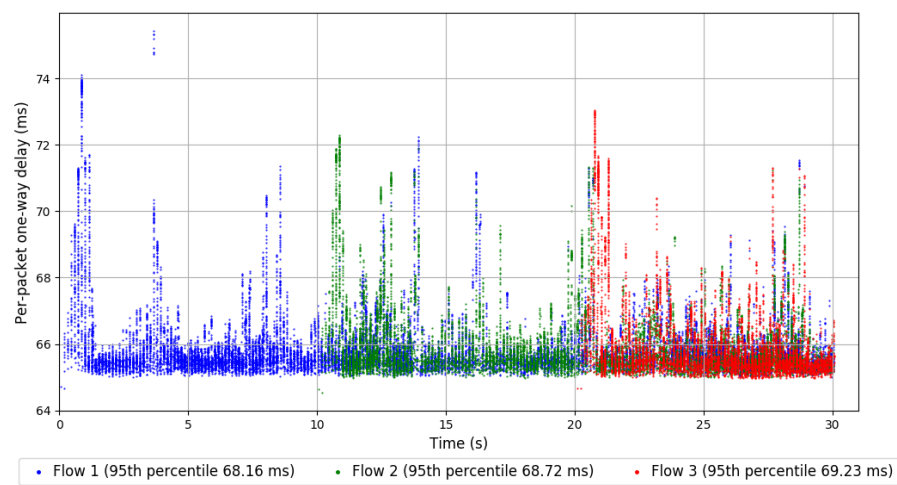
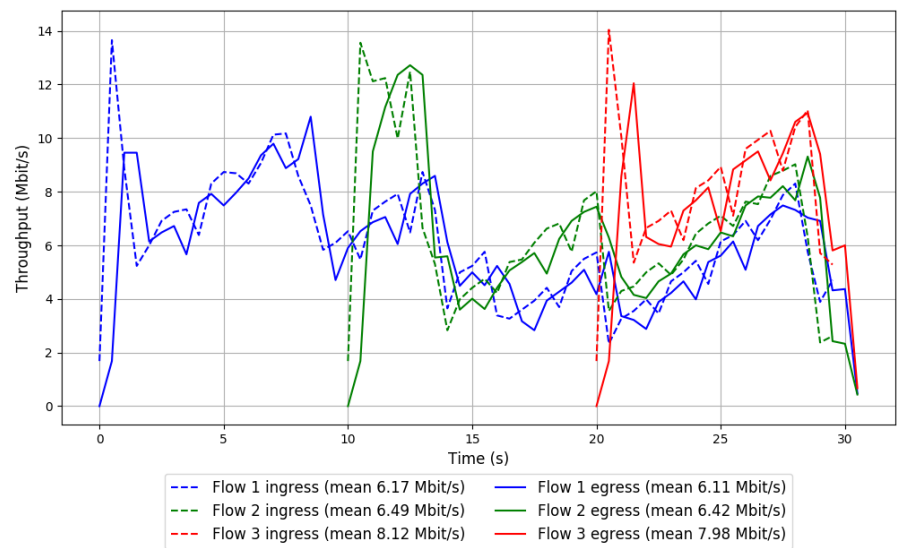


Run 4: Statistics of TCP Vegas

Start at: 2018-06-05 12:33:09  
End at: 2018-06-05 12:33:39  
Local clock offset: 5.468 ms  
Remote clock offset: -5.526 ms

# Below is generated by plot.py at 2018-06-05 15:22:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 13.03 Mbit/s  
95th percentile per-packet one-way delay: 68.610 ms  
Loss rate: 1.17%  
-- Flow 1:  
Average throughput: 6.11 Mbit/s  
95th percentile per-packet one-way delay: 68.163 ms  
Loss rate: 0.95%  
-- Flow 2:  
Average throughput: 6.42 Mbit/s  
95th percentile per-packet one-way delay: 68.720 ms  
Loss rate: 1.17%  
-- Flow 3:  
Average throughput: 7.98 Mbit/s  
95th percentile per-packet one-way delay: 69.235 ms  
Loss rate: 1.69%

Run 4: Report of TCP Vegas — Data Link

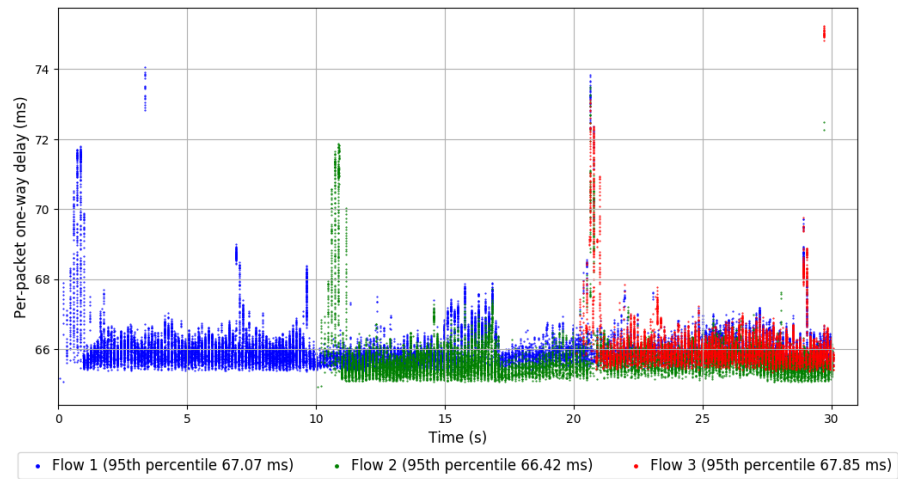
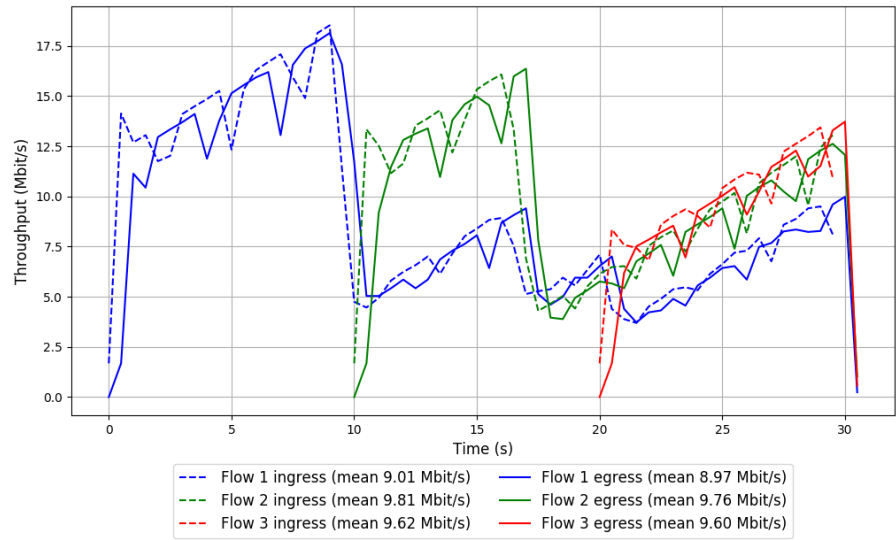


Run 5: Statistics of TCP Vegas

Start at: 2018-06-05 12:55:32  
End at: 2018-06-05 12:56:02  
Local clock offset: 5.311 ms  
Remote clock offset: -5.556 ms

# Below is generated by plot.py at 2018-06-05 15:22:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 18.66 Mbit/s  
95th percentile per-packet one-way delay: 66.973 ms  
Loss rate: 0.43%  
-- Flow 1:  
Average throughput: 8.97 Mbit/s  
95th percentile per-packet one-way delay: 67.073 ms  
Loss rate: 0.45%  
-- Flow 2:  
Average throughput: 9.76 Mbit/s  
95th percentile per-packet one-way delay: 66.420 ms  
Loss rate: 0.54%  
-- Flow 3:  
Average throughput: 9.60 Mbit/s  
95th percentile per-packet one-way delay: 67.849 ms  
Loss rate: 0.18%

# Run 5: Report of TCP Vegas — Data Link

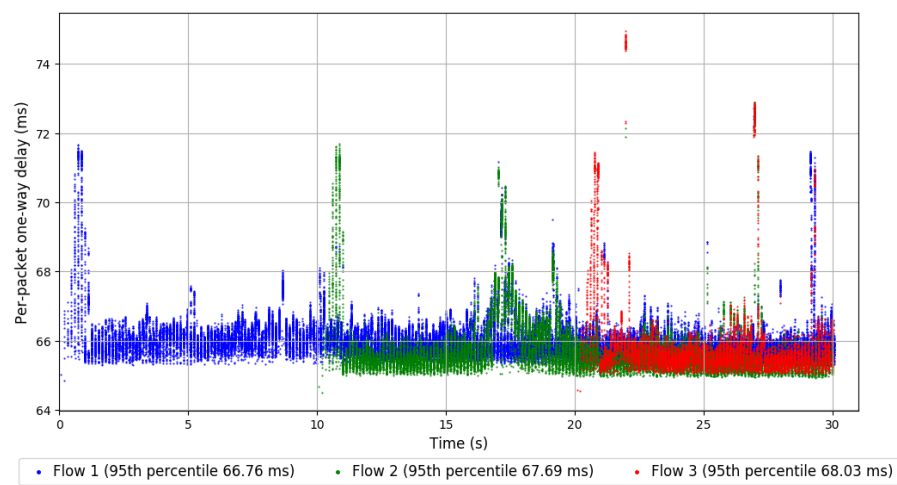
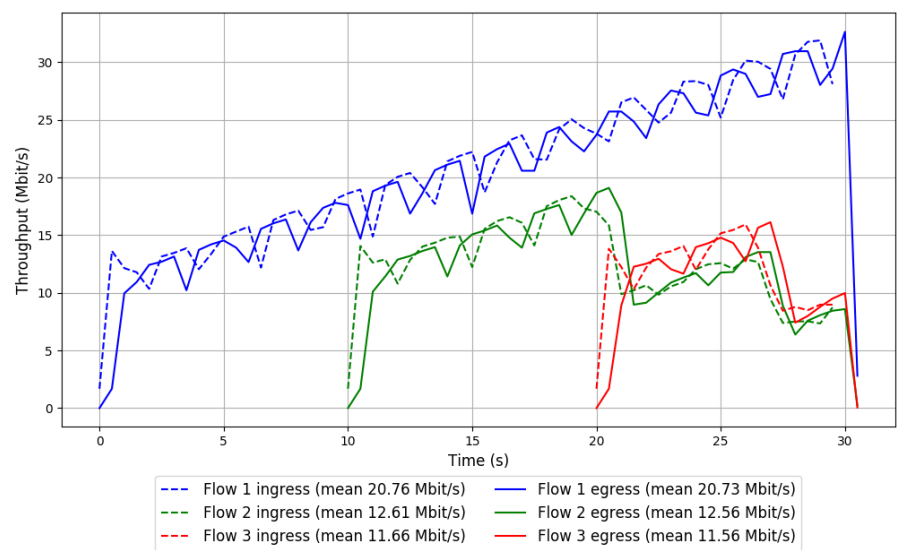


Run 6: Statistics of TCP Vegas

Start at: 2018-06-05 13:17:40  
End at: 2018-06-05 13:18:10  
Local clock offset: 4.558 ms  
Remote clock offset: -5.823 ms

# Below is generated by plot.py at 2018-06-05 15:22:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 32.91 Mbit/s  
95th percentile per-packet one-way delay: 67.008 ms  
Loss rate: 0.30%  
-- Flow 1:  
Average throughput: 20.73 Mbit/s  
95th percentile per-packet one-way delay: 66.756 ms  
Loss rate: 0.14%  
-- Flow 2:  
Average throughput: 12.56 Mbit/s  
95th percentile per-packet one-way delay: 67.692 ms  
Loss rate: 0.44%  
-- Flow 3:  
Average throughput: 11.56 Mbit/s  
95th percentile per-packet one-way delay: 68.029 ms  
Loss rate: 0.83%

Run 6: Report of TCP Vegas — Data Link

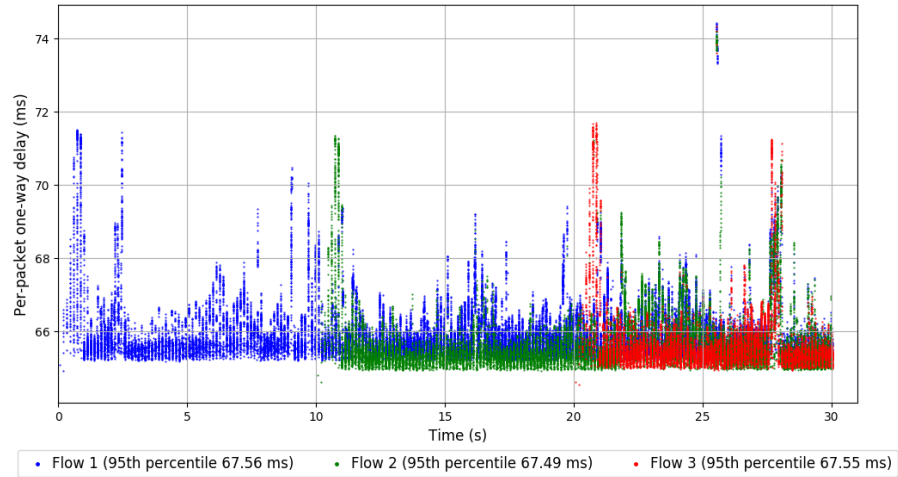
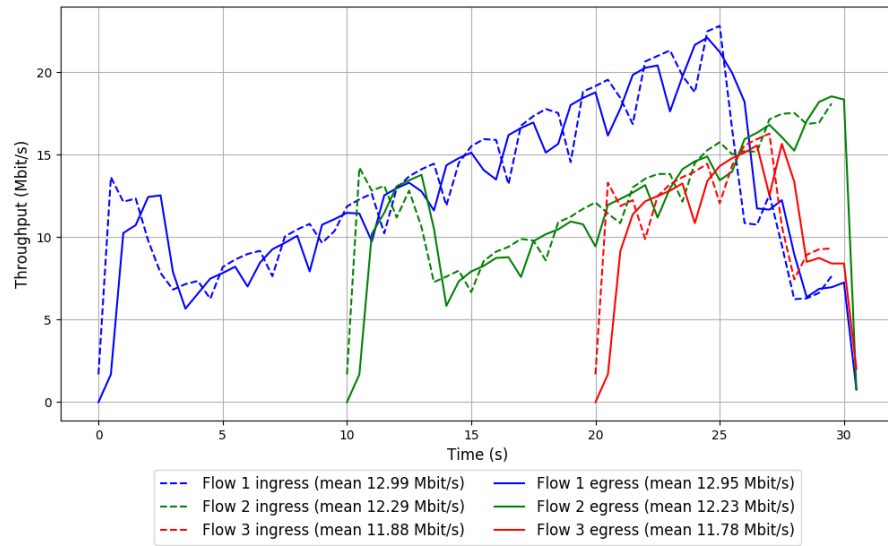


Run 7: Statistics of TCP Vegas

Start at: 2018-06-05 13:40:14  
End at: 2018-06-05 13:40:44  
Local clock offset: 4.134 ms  
Remote clock offset: -5.769 ms

# Below is generated by plot.py at 2018-06-05 15:22:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 25.01 Mbit/s  
95th percentile per-packet one-way delay: 67.541 ms  
Loss rate: 0.41%  
-- Flow 1:  
Average throughput: 12.95 Mbit/s  
95th percentile per-packet one-way delay: 67.560 ms  
Loss rate: 0.26%  
-- Flow 2:  
Average throughput: 12.23 Mbit/s  
95th percentile per-packet one-way delay: 67.489 ms  
Loss rate: 0.44%  
-- Flow 3:  
Average throughput: 11.78 Mbit/s  
95th percentile per-packet one-way delay: 67.549 ms  
Loss rate: 0.84%

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

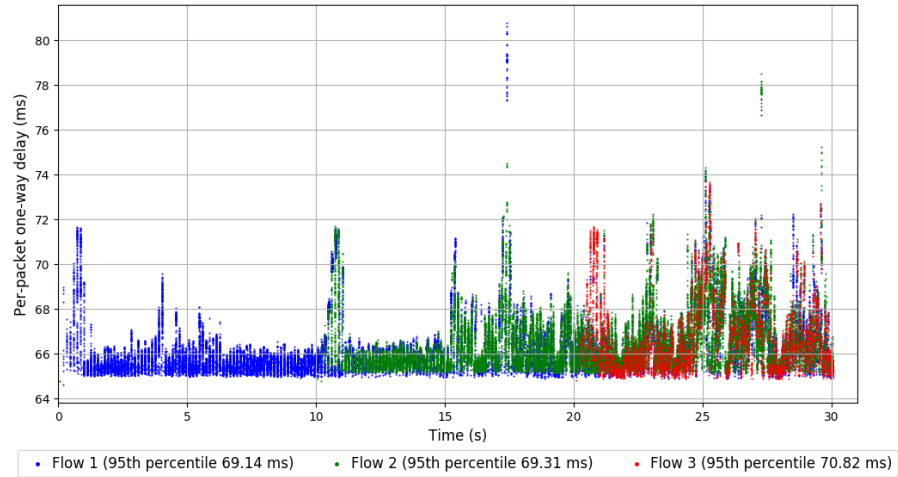
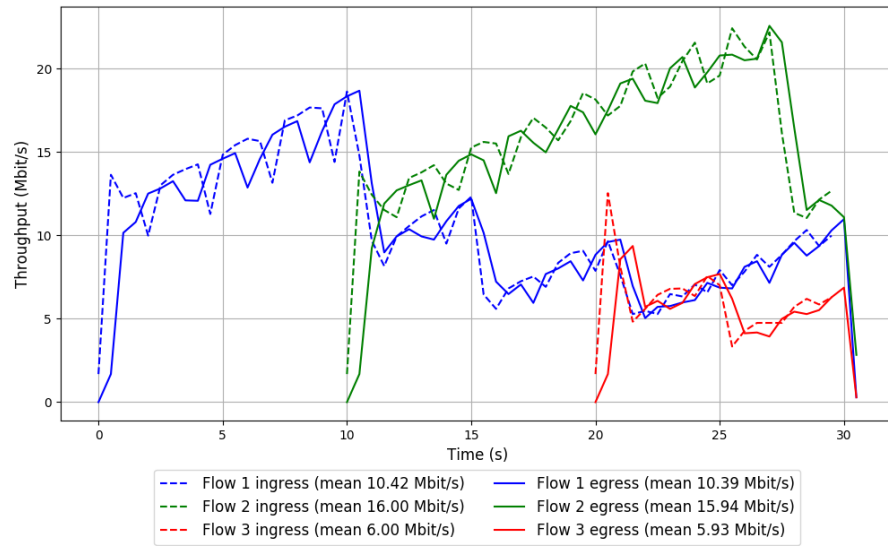


Run 8: Statistics of TCP Vegas

Start at: 2018-06-05 14:02:25  
End at: 2018-06-05 14:02:55  
Local clock offset: 4.108 ms  
Remote clock offset: -3.858 ms

# Below is generated by plot.py at 2018-06-05 15:22:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 22.98 Mbit/s  
95th percentile per-packet one-way delay: 69.474 ms  
Loss rate: 0.39%  
-- Flow 1:  
Average throughput: 10.39 Mbit/s  
95th percentile per-packet one-way delay: 69.140 ms  
Loss rate: 0.32%  
-- Flow 2:  
Average throughput: 15.94 Mbit/s  
95th percentile per-packet one-way delay: 69.307 ms  
Loss rate: 0.33%  
-- Flow 3:  
Average throughput: 5.93 Mbit/s  
95th percentile per-packet one-way delay: 70.817 ms  
Loss rate: 1.12%

# Run 8: Report of TCP Vegas — Data Link

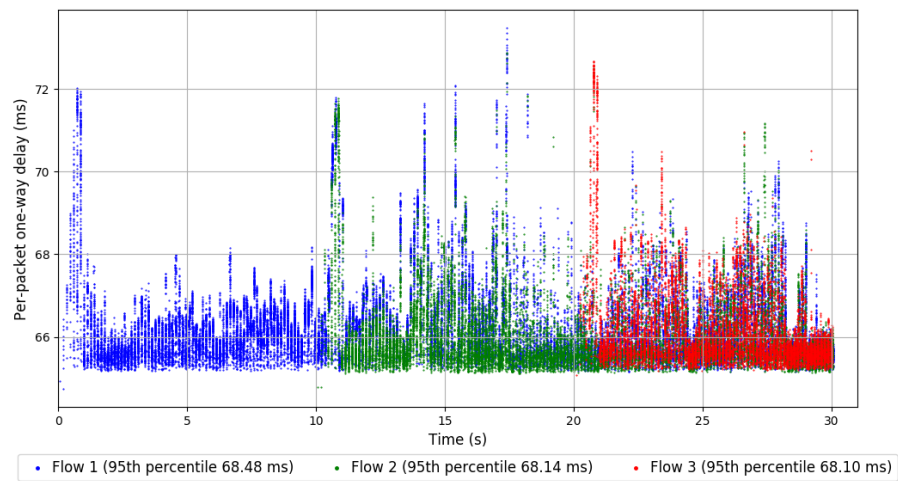
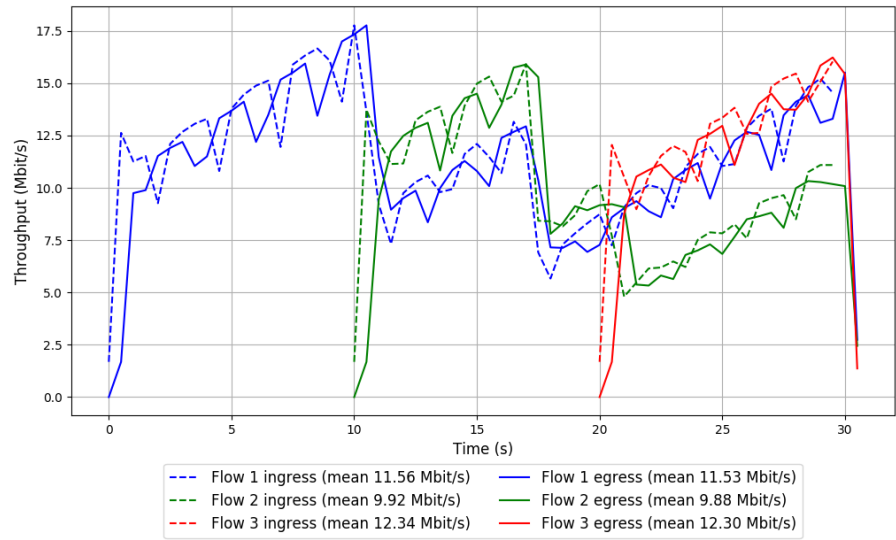


Run 9: Statistics of TCP Vegas

Start at: 2018-06-05 14:24:18  
End at: 2018-06-05 14:24:48  
Local clock offset: 6.136 ms  
Remote clock offset: -0.986 ms

# Below is generated by plot.py at 2018-06-05 15:22:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 22.19 Mbit/s  
95th percentile per-packet one-way delay: 68.264 ms  
Loss rate: 0.31%  
-- Flow 1:  
Average throughput: 11.53 Mbit/s  
95th percentile per-packet one-way delay: 68.478 ms  
Loss rate: 0.24%  
-- Flow 2:  
Average throughput: 9.88 Mbit/s  
95th percentile per-packet one-way delay: 68.141 ms  
Loss rate: 0.45%  
-- Flow 3:  
Average throughput: 12.30 Mbit/s  
95th percentile per-packet one-way delay: 68.096 ms  
Loss rate: 0.27%

# Run 9: Report of TCP Vegas — Data Link

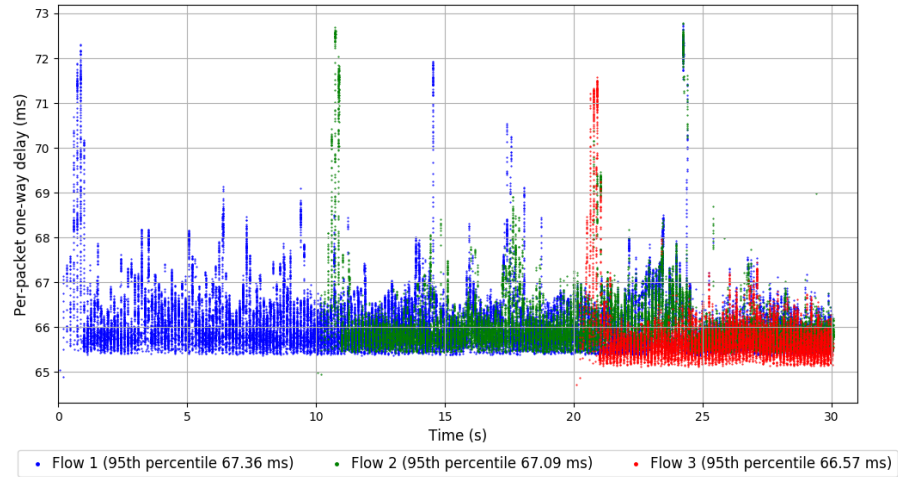
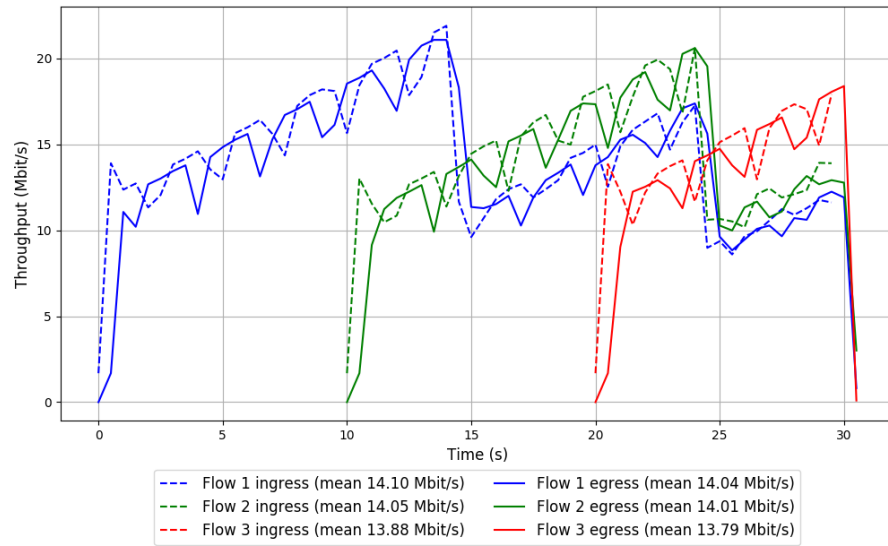


Run 10: Statistics of TCP Vegas

Start at: 2018-06-05 14:46:16  
End at: 2018-06-05 14:46:46  
Local clock offset: 5.798 ms  
Remote clock offset: -4.625 ms

# Below is generated by plot.py at 2018-06-05 15:22:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 27.95 Mbit/s  
95th percentile per-packet one-way delay: 67.220 ms  
Loss rate: 0.40%  
-- Flow 1:  
Average throughput: 14.04 Mbit/s  
95th percentile per-packet one-way delay: 67.361 ms  
Loss rate: 0.42%  
-- Flow 2:  
Average throughput: 14.01 Mbit/s  
95th percentile per-packet one-way delay: 67.086 ms  
Loss rate: 0.24%  
-- Flow 3:  
Average throughput: 13.79 Mbit/s  
95th percentile per-packet one-way delay: 66.572 ms  
Loss rate: 0.65%

# Run 10: Report of TCP Vegas — Data Link

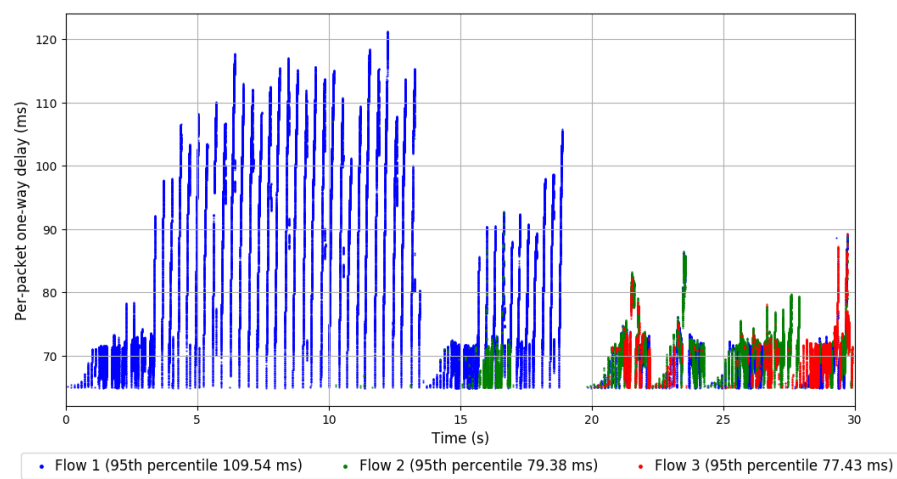
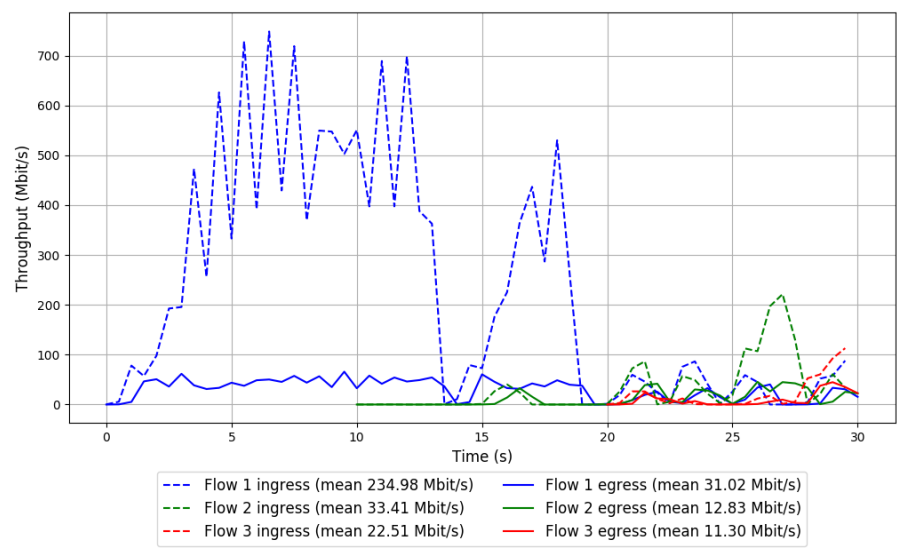


Run 1: Statistics of Verus

Start at: 2018-06-05 11:31:07  
End at: 2018-06-05 11:31:37  
Local clock offset: 7.698 ms  
Remote clock offset: -5.751 ms

# Below is generated by plot.py at 2018-06-05 15:23:48  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 43.03 Mbit/s  
95th percentile per-packet one-way delay: 107.842 ms  
Loss rate: 83.63%  
-- Flow 1:  
Average throughput: 31.02 Mbit/s  
95th percentile per-packet one-way delay: 109.540 ms  
Loss rate: 86.79%  
-- Flow 2:  
Average throughput: 12.83 Mbit/s  
95th percentile per-packet one-way delay: 79.378 ms  
Loss rate: 61.65%  
-- Flow 3:  
Average throughput: 11.30 Mbit/s  
95th percentile per-packet one-way delay: 77.434 ms  
Loss rate: 49.76%

Run 1: Report of Verus — Data Link

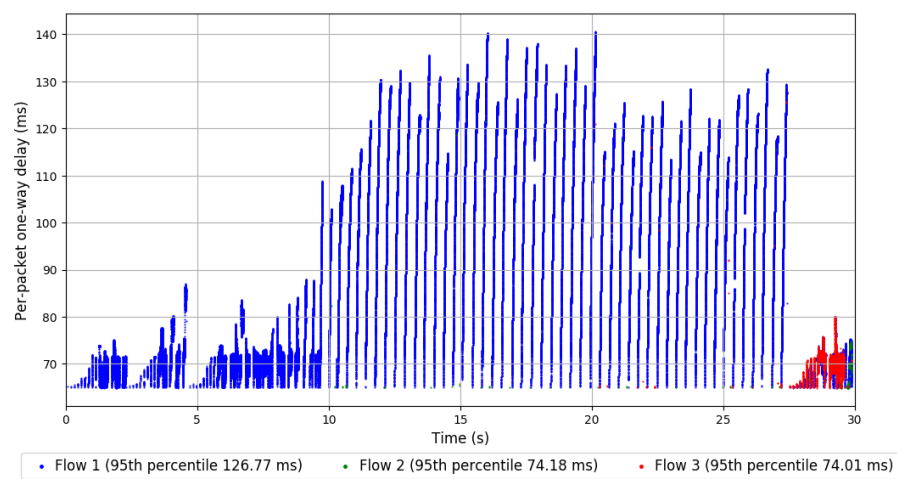
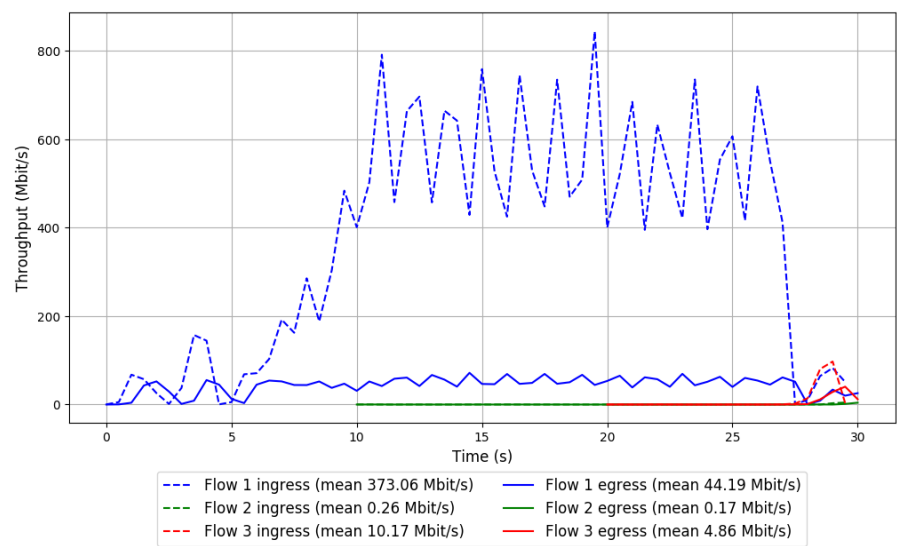


Run 2: Statistics of Verus

Start at: 2018-06-05 11:54:11  
End at: 2018-06-05 11:54:41  
Local clock offset: 7.819 ms  
Remote clock offset: -4.752 ms

# Below is generated by plot.py at 2018-06-05 15:24:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 45.89 Mbit/s  
95th percentile per-packet one-way delay: 126.555 ms  
Loss rate: 87.81%  
-- Flow 1:  
Average throughput: 44.19 Mbit/s  
95th percentile per-packet one-way delay: 126.774 ms  
Loss rate: 88.15%  
-- Flow 2:  
Average throughput: 0.17 Mbit/s  
95th percentile per-packet one-way delay: 74.176 ms  
Loss rate: 33.41%  
-- Flow 3:  
Average throughput: 4.86 Mbit/s  
95th percentile per-packet one-way delay: 74.009 ms  
Loss rate: 52.47%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-06-05 12:16:16

End at: 2018-06-05 12:16:46

Local clock offset: 6.616 ms

Remote clock offset: -4.57 ms

# Below is generated by plot.py at 2018-06-05 15:24:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 49.47 Mbit/s

95th percentile per-packet one-way delay: 134.254 ms

Loss rate: 85.73%

-- Flow 1:

Average throughput: 24.82 Mbit/s

95th percentile per-packet one-way delay: 125.037 ms

Loss rate: 73.26%

-- Flow 2:

Average throughput: 39.10 Mbit/s

95th percentile per-packet one-way delay: 141.982 ms

Loss rate: 89.96%

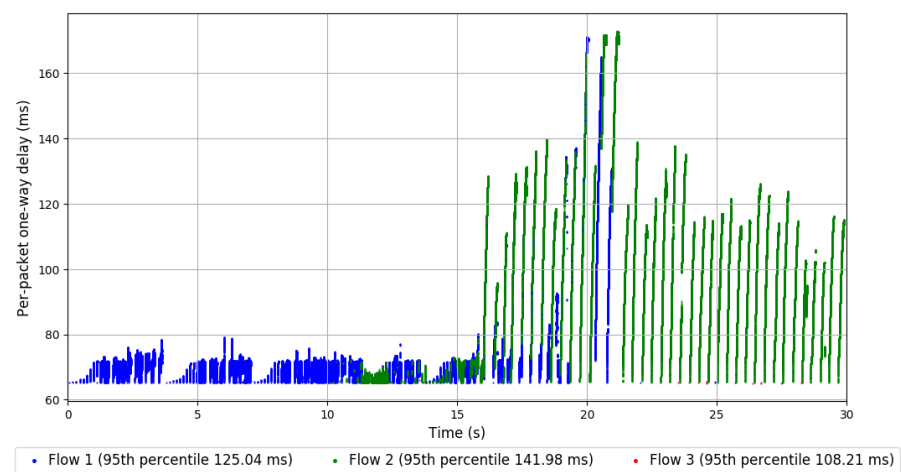
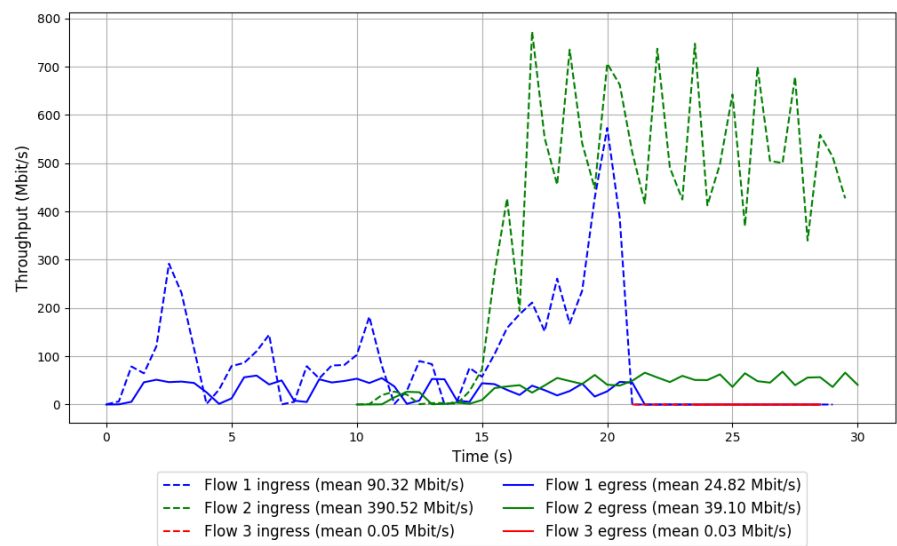
-- Flow 3:

Average throughput: 0.03 Mbit/s

95th percentile per-packet one-way delay: 108.212 ms

Loss rate: 64.52%

Run 3: Report of Verus — Data Link

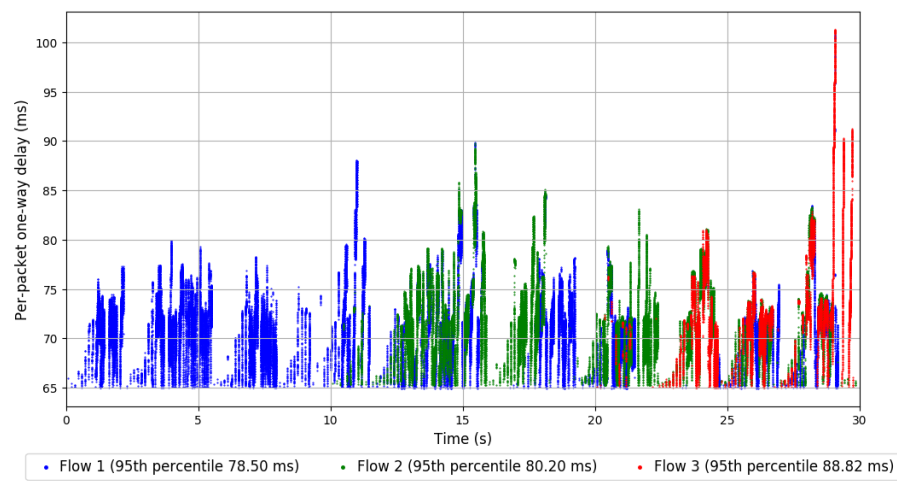
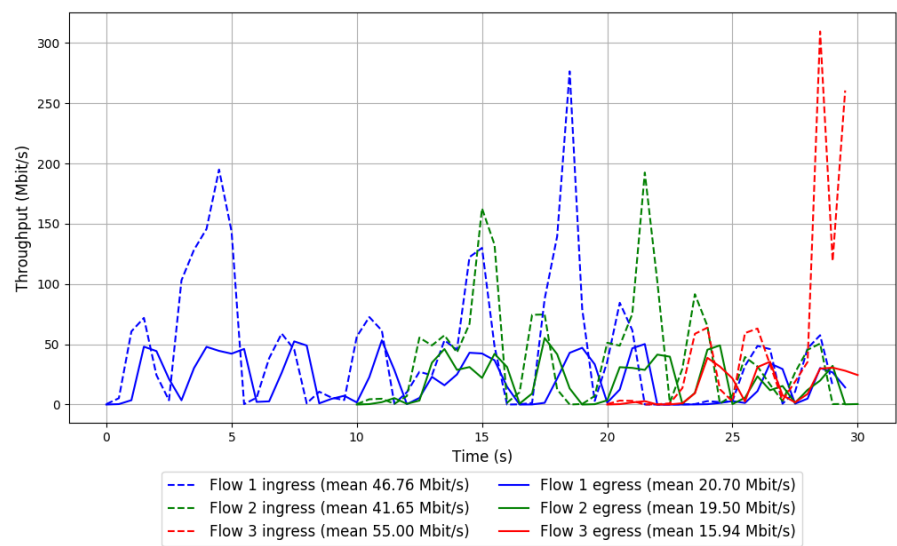


Run 4: Statistics of Verus

Start at: 2018-06-05 12:38:47  
End at: 2018-06-05 12:39:17  
Local clock offset: 5.357 ms  
Remote clock offset: -5.542 ms

# Below is generated by plot.py at 2018-06-05 15:24:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 38.34 Mbit/s  
95th percentile per-packet one-way delay: 80.129 ms  
Loss rate: 58.07%  
-- Flow 1:  
Average throughput: 20.70 Mbit/s  
95th percentile per-packet one-way delay: 78.497 ms  
Loss rate: 55.99%  
-- Flow 2:  
Average throughput: 19.50 Mbit/s  
95th percentile per-packet one-way delay: 80.205 ms  
Loss rate: 53.18%  
-- Flow 3:  
Average throughput: 15.94 Mbit/s  
95th percentile per-packet one-way delay: 88.822 ms  
Loss rate: 71.02%

Run 4: Report of Verus — Data Link

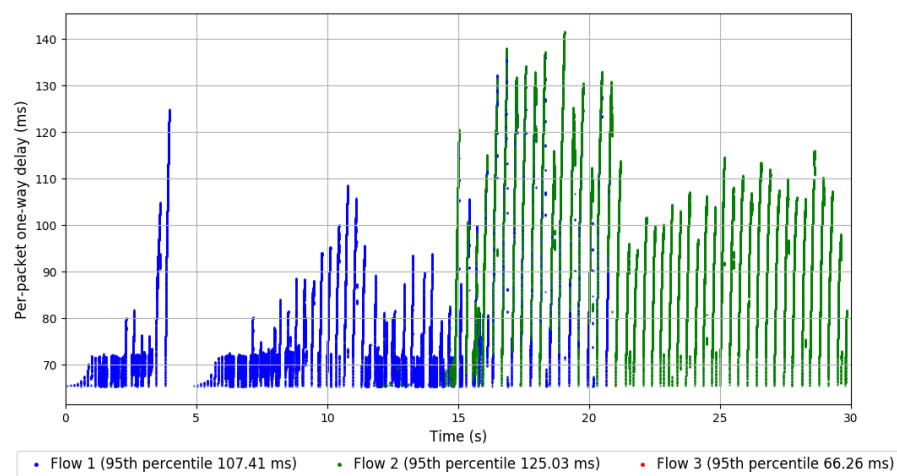
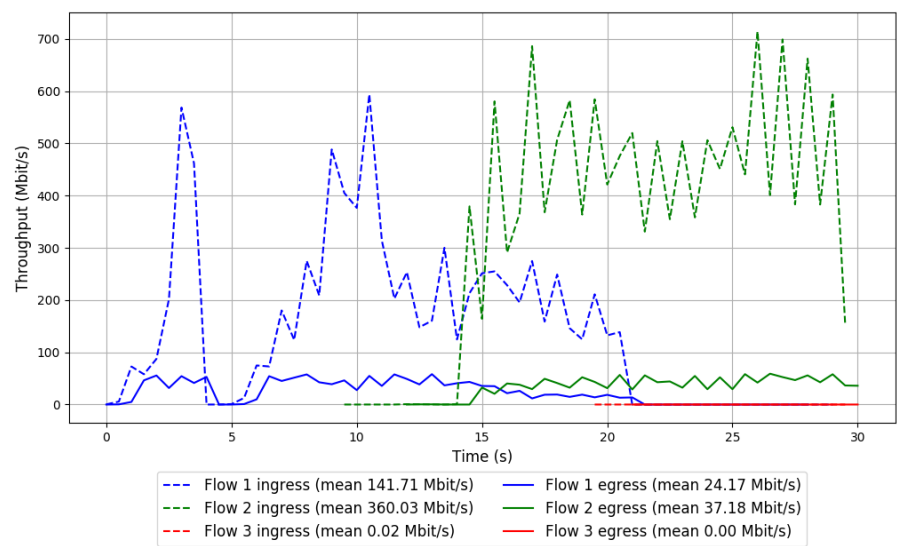


Run 5: Statistics of Verus

Start at: 2018-06-05 13:01:04  
End at: 2018-06-05 13:01:34  
Local clock offset: 5.182 ms  
Remote clock offset: -5.599 ms

# Below is generated by plot.py at 2018-06-05 15:24:22  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 44.73 Mbit/s  
95th percentile per-packet one-way delay: 120.661 ms  
Loss rate: 88.23%  
-- Flow 1:  
Average throughput: 24.17 Mbit/s  
95th percentile per-packet one-way delay: 107.414 ms  
Loss rate: 83.98%  
-- Flow 2:  
Average throughput: 37.18 Mbit/s  
95th percentile per-packet one-way delay: 125.032 ms  
Loss rate: 90.71%  
-- Flow 3:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 66.260 ms  
Loss rate: 84.62%

Run 5: Report of Verus — Data Link

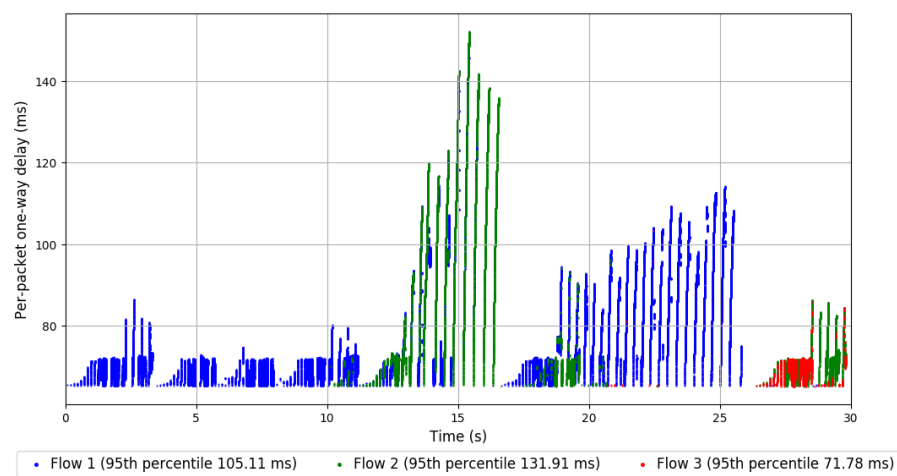
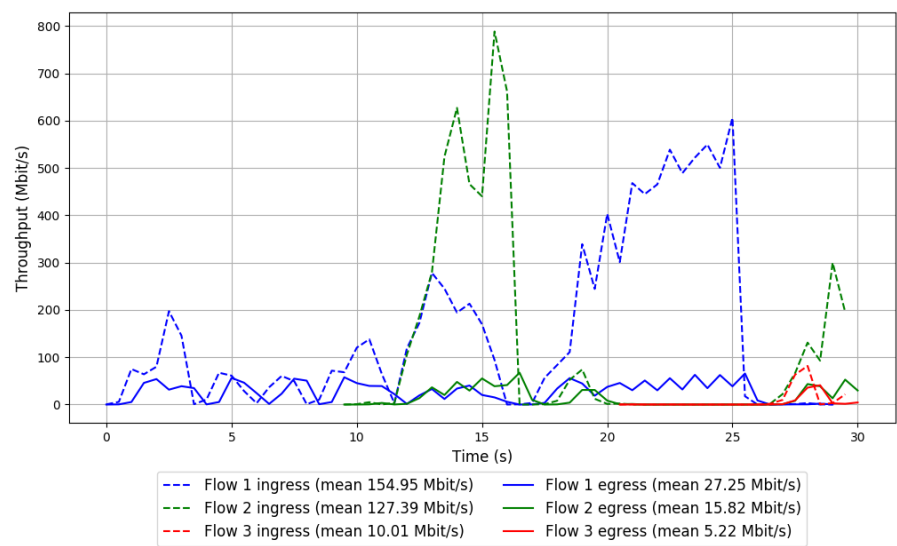


Run 6: Statistics of Verus

Start at: 2018-06-05 13:23:10  
End at: 2018-06-05 13:23:40  
Local clock offset: 4.322 ms  
Remote clock offset: -5.895 ms

# Below is generated by plot.py at 2018-06-05 15:24:22  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 38.60 Mbit/s  
95th percentile per-packet one-way delay: 113.610 ms  
Loss rate: 83.85%  
-- Flow 1:  
Average throughput: 27.25 Mbit/s  
95th percentile per-packet one-way delay: 105.109 ms  
Loss rate: 82.49%  
-- Flow 2:  
Average throughput: 15.82 Mbit/s  
95th percentile per-packet one-way delay: 131.911 ms  
Loss rate: 87.57%  
-- Flow 3:  
Average throughput: 5.22 Mbit/s  
95th percentile per-packet one-way delay: 71.784 ms  
Loss rate: 47.82%

Run 6: Report of Verus — Data Link

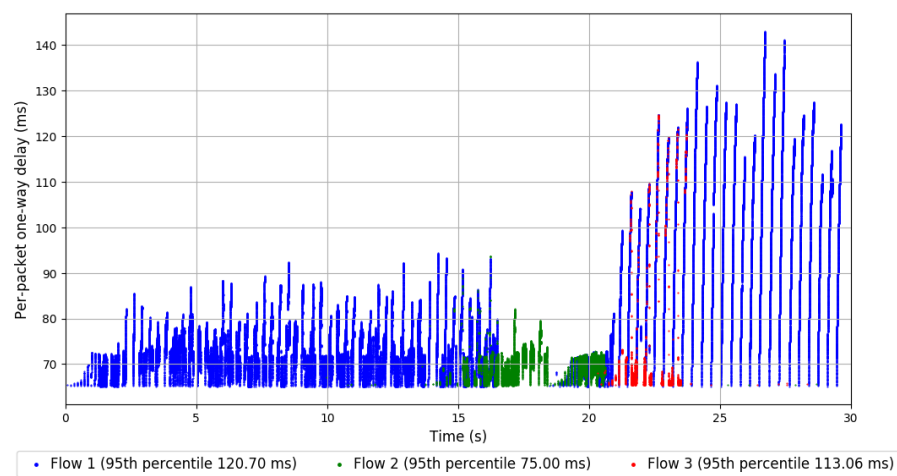
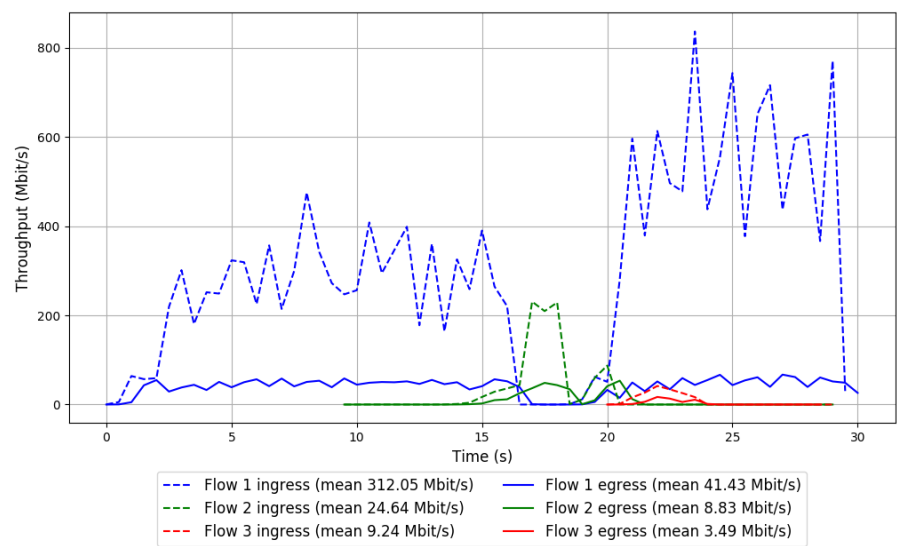


Run 7: Statistics of Verus

Start at: 2018-06-05 13:45:54  
End at: 2018-06-05 13:46:24  
Local clock offset: 3.941 ms  
Remote clock offset: -5.824 ms

# Below is generated by plot.py at 2018-06-05 15:24:22  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 47.96 Mbit/s  
95th percentile per-packet one-way delay: 119.306 ms  
Loss rate: 85.49%  
-- Flow 1:  
Average throughput: 41.43 Mbit/s  
95th percentile per-packet one-way delay: 120.704 ms  
Loss rate: 86.70%  
-- Flow 2:  
Average throughput: 8.83 Mbit/s  
95th percentile per-packet one-way delay: 75.003 ms  
Loss rate: 65.61%  
-- Flow 3:  
Average throughput: 3.49 Mbit/s  
95th percentile per-packet one-way delay: 113.059 ms  
Loss rate: 65.60%

Run 7: Report of Verus — Data Link

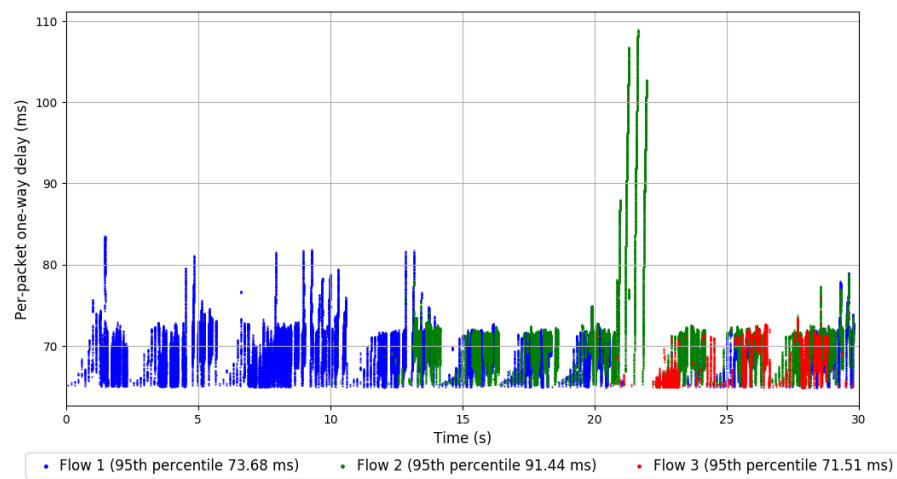
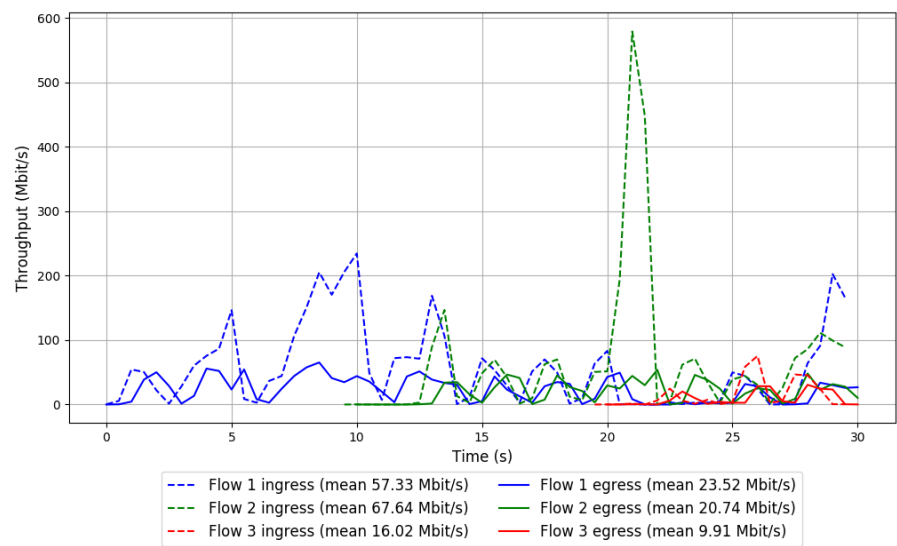


Run 8: Statistics of Verus

Start at: 2018-06-05 14:07:54  
End at: 2018-06-05 14:08:24  
Local clock offset: 3.961 ms  
Remote clock offset: -2.775 ms

```
# Below is generated by plot.py at 2018-06-05 15:24:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.57 Mbit/s
95th percentile per-packet one-way delay: 76.028 ms
Loss rate: 62.29%
-- Flow 1:
Average throughput: 23.52 Mbit/s
95th percentile per-packet one-way delay: 73.682 ms
Loss rate: 58.95%
-- Flow 2:
Average throughput: 20.74 Mbit/s
95th percentile per-packet one-way delay: 91.439 ms
Loss rate: 69.33%
-- Flow 3:
Average throughput: 9.91 Mbit/s
95th percentile per-packet one-way delay: 71.511 ms
Loss rate: 38.22%
```

Run 8: Report of Verus — Data Link

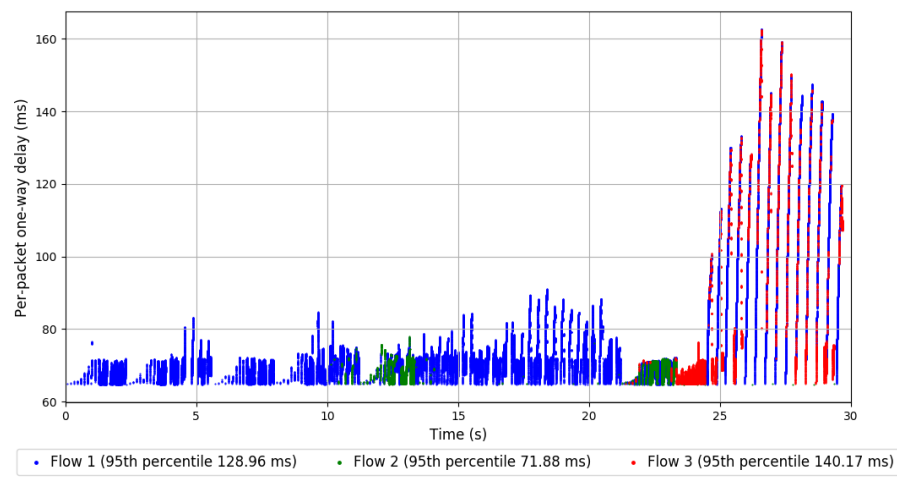
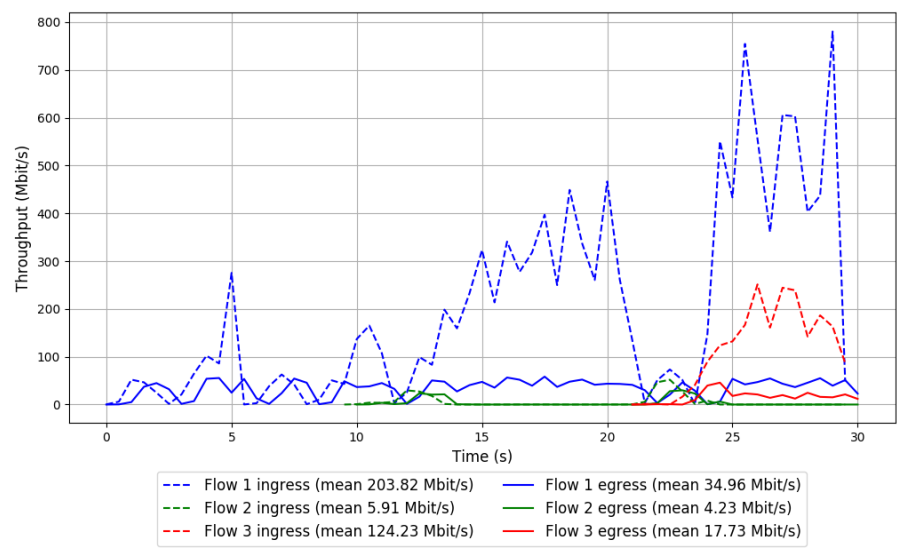


Run 9: Statistics of Verus

Start at: 2018-06-05 14:29:48  
End at: 2018-06-05 14:30:18  
Local clock offset: 6.79 ms  
Remote clock offset: -0.716 ms

# Below is generated by plot.py at 2018-06-05 15:24:32  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 42.66 Mbit/s  
95th percentile per-packet one-way delay: 129.731 ms  
Loss rate: 82.35%  
-- Flow 1:  
Average throughput: 34.96 Mbit/s  
95th percentile per-packet one-way delay: 128.957 ms  
Loss rate: 82.82%  
-- Flow 2:  
Average throughput: 4.23 Mbit/s  
95th percentile per-packet one-way delay: 71.881 ms  
Loss rate: 28.90%  
-- Flow 3:  
Average throughput: 17.73 Mbit/s  
95th percentile per-packet one-way delay: 140.172 ms  
Loss rate: 85.65%

Run 9: Report of Verus — Data Link

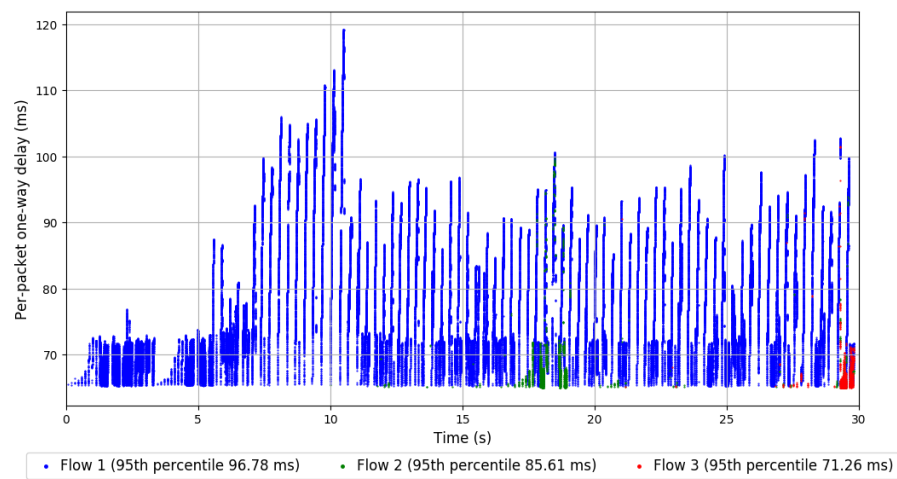
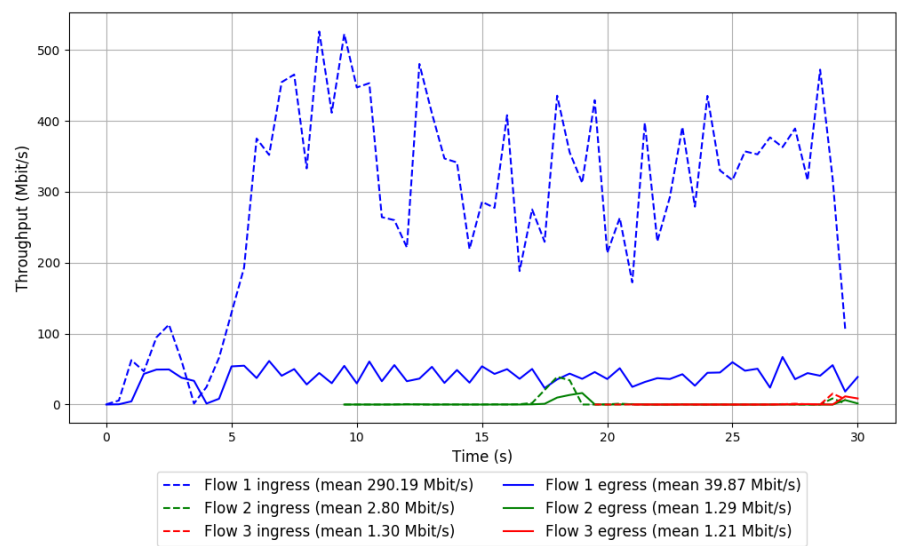


Run 10: Statistics of Verus

Start at: 2018-06-05 14:51:51  
End at: 2018-06-05 14:52:21  
Local clock offset: 5.291 ms  
Remote clock offset: -5.138 ms

# Below is generated by plot.py at 2018-06-05 15:24:57  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 41.09 Mbit/s  
95th percentile per-packet one-way delay: 96.646 ms  
Loss rate: 85.95%  
-- Flow 1:  
Average throughput: 39.87 Mbit/s  
95th percentile per-packet one-way delay: 96.781 ms  
Loss rate: 86.26%  
-- Flow 2:  
Average throughput: 1.29 Mbit/s  
95th percentile per-packet one-way delay: 85.605 ms  
Loss rate: 53.90%  
-- Flow 3:  
Average throughput: 1.21 Mbit/s  
95th percentile per-packet one-way delay: 71.262 ms  
Loss rate: 16.01%

Run 10: Report of Verus — Data Link

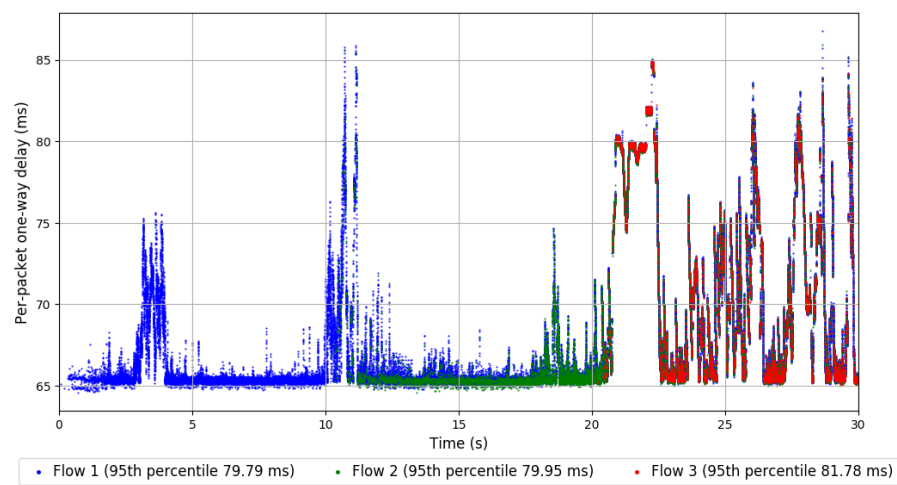
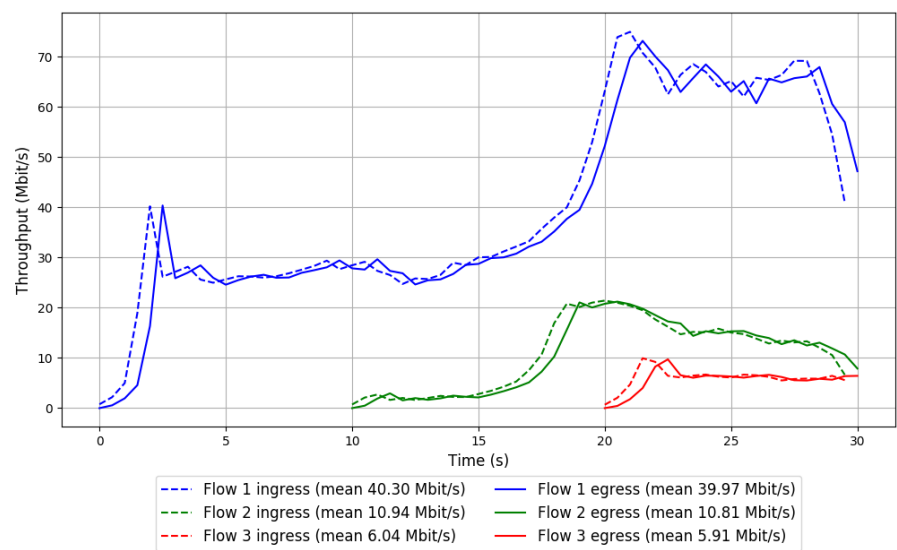


Run 1: Statistics of PCC-Vivace

Start at: 2018-06-05 11:35:17  
End at: 2018-06-05 11:35:47  
Local clock offset: 7.592 ms  
Remote clock offset: -5.633 ms

# Below is generated by plot.py at 2018-06-05 15:24:57  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 49.12 Mbit/s  
95th percentile per-packet one-way delay: 79.842 ms  
Loss rate: 0.91%  
-- Flow 1:  
Average throughput: 39.97 Mbit/s  
95th percentile per-packet one-way delay: 79.788 ms  
Loss rate: 0.80%  
-- Flow 2:  
Average throughput: 10.81 Mbit/s  
95th percentile per-packet one-way delay: 79.953 ms  
Loss rate: 1.18%  
-- Flow 3:  
Average throughput: 5.91 Mbit/s  
95th percentile per-packet one-way delay: 81.785 ms  
Loss rate: 2.08%

Run 1: Report of PCC-Vivace — Data Link

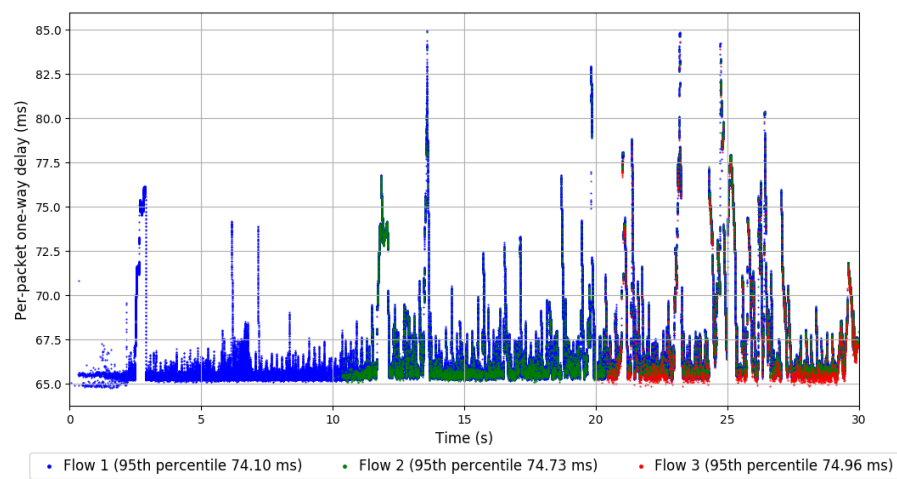
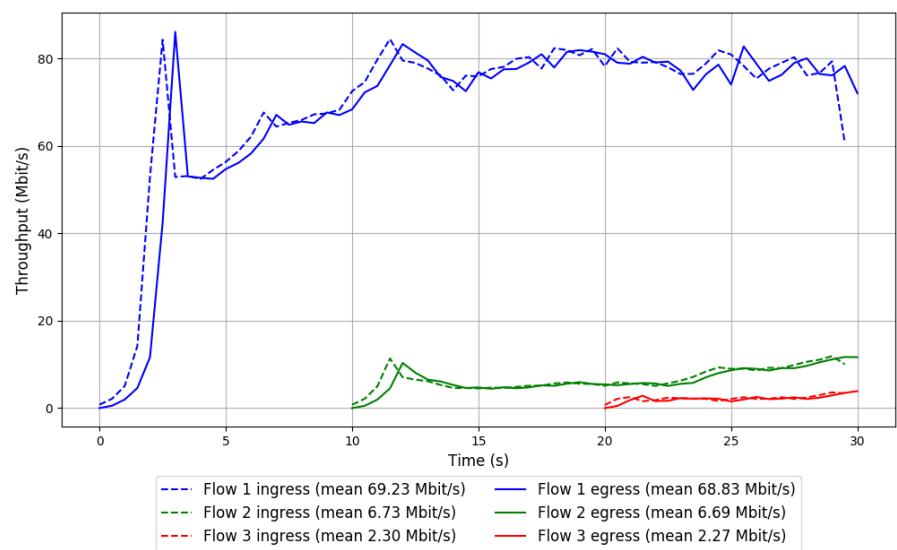


Run 2: Statistics of PCC-Vivace

Start at: 2018-06-05 11:58:29  
End at: 2018-06-05 11:58:59  
Local clock offset: 7.684 ms  
Remote clock offset: -4.684 ms

# Below is generated by plot.py at 2018-06-05 15:24:57  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 74.03 Mbit/s  
95th percentile per-packet one-way delay: 74.166 ms  
Loss rate: 0.58%  
-- Flow 1:  
Average throughput: 68.83 Mbit/s  
95th percentile per-packet one-way delay: 74.100 ms  
Loss rate: 0.58%  
-- Flow 2:  
Average throughput: 6.69 Mbit/s  
95th percentile per-packet one-way delay: 74.729 ms  
Loss rate: 0.60%  
-- Flow 3:  
Average throughput: 2.27 Mbit/s  
95th percentile per-packet one-way delay: 74.957 ms  
Loss rate: 0.92%

Run 2: Report of PCC-Vivace — Data Link

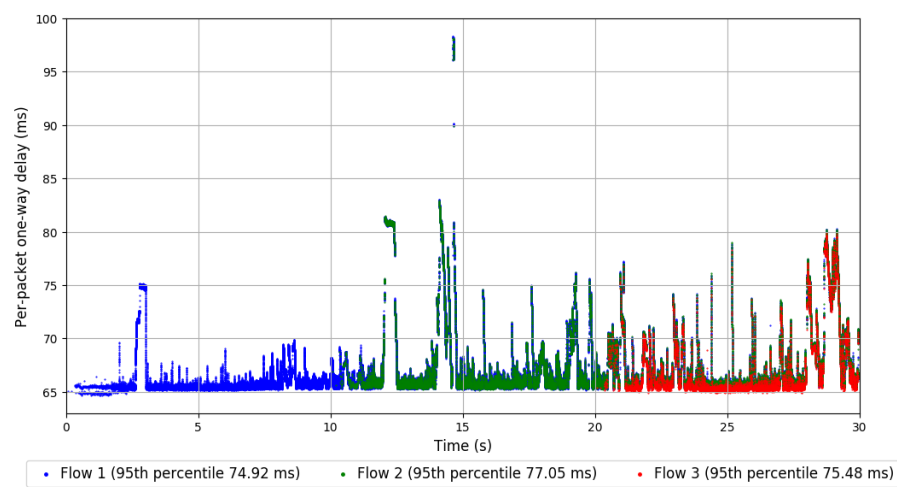
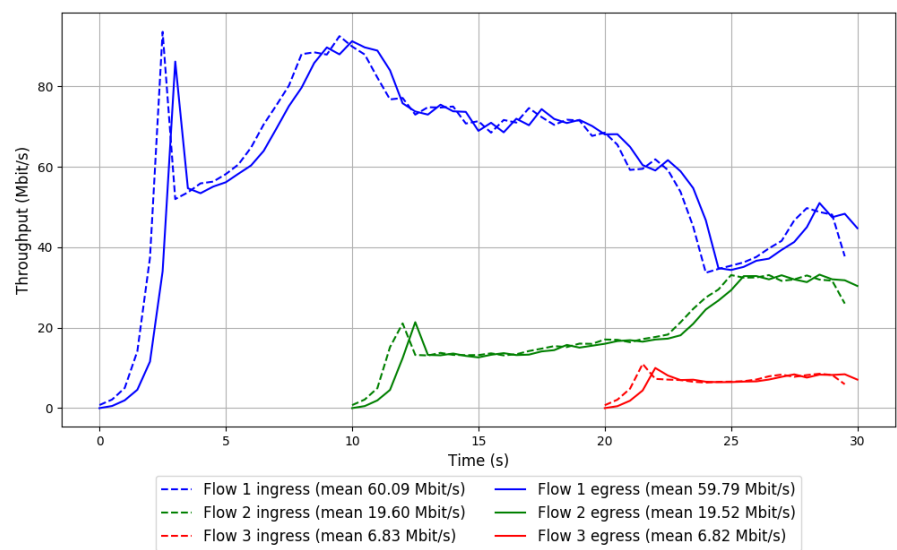


Run 3: Statistics of PCC-Vivace

Start at: 2018-06-05 12:20:35  
End at: 2018-06-05 12:21:05  
Local clock offset: 6.061 ms  
Remote clock offset: -4.972 ms

# Below is generated by plot.py at 2018-06-05 15:25:18  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 75.02 Mbit/s  
95th percentile per-packet one-way delay: 75.125 ms  
Loss rate: 0.47%  
-- Flow 1:  
Average throughput: 59.79 Mbit/s  
95th percentile per-packet one-way delay: 74.915 ms  
Loss rate: 0.49%  
-- Flow 2:  
Average throughput: 19.52 Mbit/s  
95th percentile per-packet one-way delay: 77.046 ms  
Loss rate: 0.43%  
-- Flow 3:  
Average throughput: 6.82 Mbit/s  
95th percentile per-packet one-way delay: 75.481 ms  
Loss rate: 0.17%

Run 3: Report of PCC-Vivace — Data Link

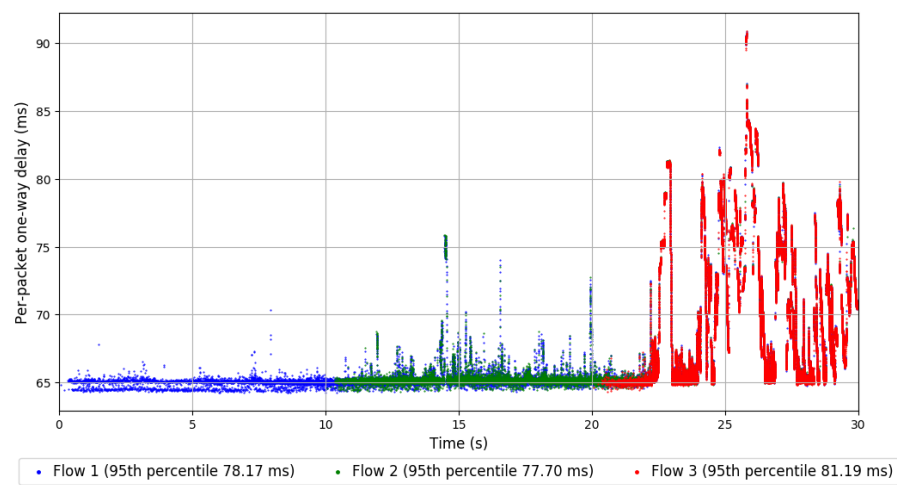
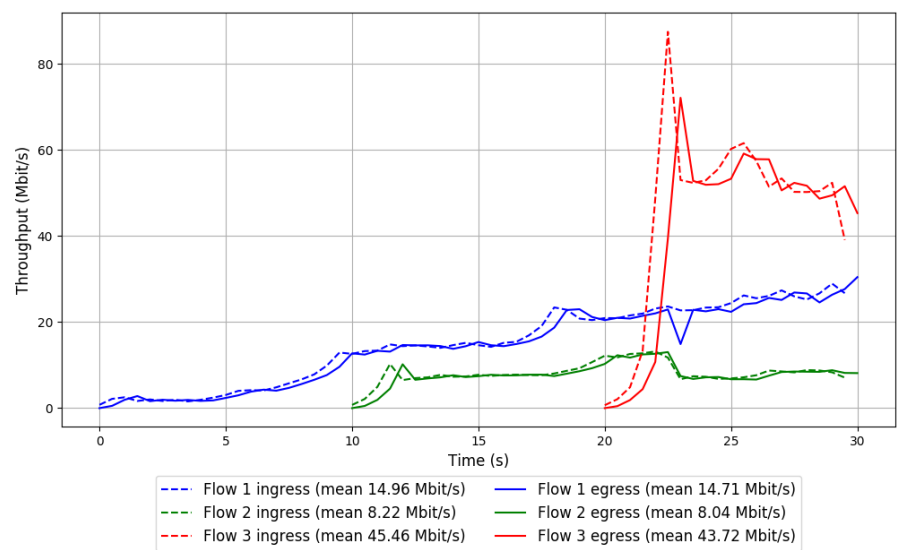


Run 4: Statistics of PCC-Vivace

Start at: 2018-06-05 12:43:01  
End at: 2018-06-05 12:43:31  
Local clock offset: 5.49 ms  
Remote clock offset: -5.575 ms

# Below is generated by plot.py at 2018-06-05 15:25:18  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 34.51 Mbit/s  
95th percentile per-packet one-way delay: 79.658 ms  
Loss rate: 2.62%  
-- Flow 1:  
Average throughput: 14.71 Mbit/s  
95th percentile per-packet one-way delay: 78.169 ms  
Loss rate: 1.64%  
-- Flow 2:  
Average throughput: 8.04 Mbit/s  
95th percentile per-packet one-way delay: 77.700 ms  
Loss rate: 2.15%  
-- Flow 3:  
Average throughput: 43.72 Mbit/s  
95th percentile per-packet one-way delay: 81.195 ms  
Loss rate: 3.77%

Run 4: Report of PCC-Vivace — Data Link

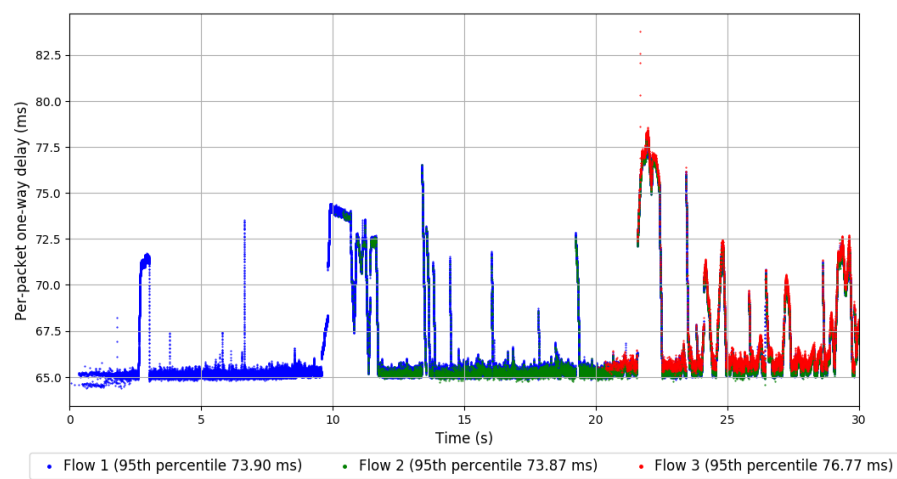
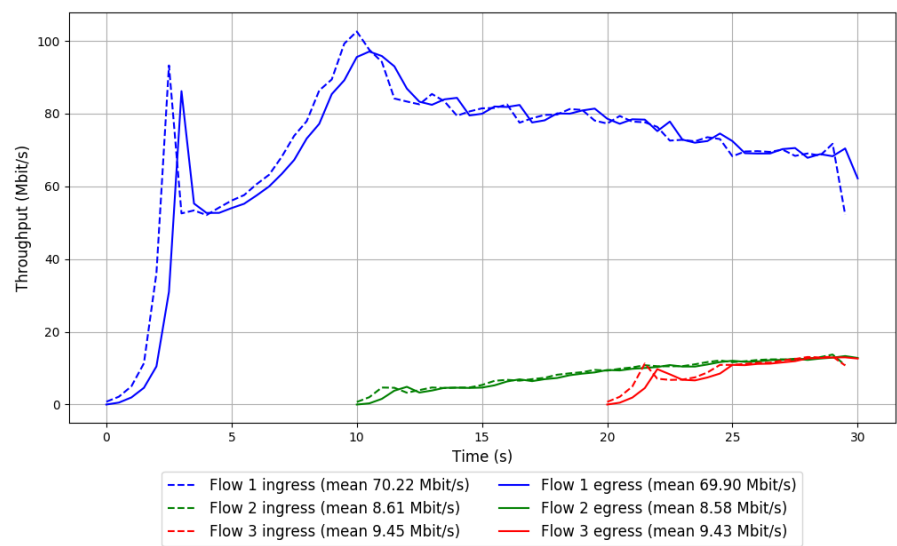


Run 5: Statistics of PCC-Vivace

Start at: 2018-06-05 13:05:15  
End at: 2018-06-05 13:05:45  
Local clock offset: 5.413 ms  
Remote clock offset: -5.564 ms

# Below is generated by plot.py at 2018-06-05 15:25:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 78.72 Mbit/s  
95th percentile per-packet one-way delay: 73.926 ms  
Loss rate: 0.43%  
-- Flow 1:  
Average throughput: 69.90 Mbit/s  
95th percentile per-packet one-way delay: 73.903 ms  
Loss rate: 0.44%  
-- Flow 2:  
Average throughput: 8.58 Mbit/s  
95th percentile per-packet one-way delay: 73.869 ms  
Loss rate: 0.43%  
-- Flow 3:  
Average throughput: 9.43 Mbit/s  
95th percentile per-packet one-way delay: 76.773 ms  
Loss rate: 0.27%

Run 5: Report of PCC-Vivace — Data Link

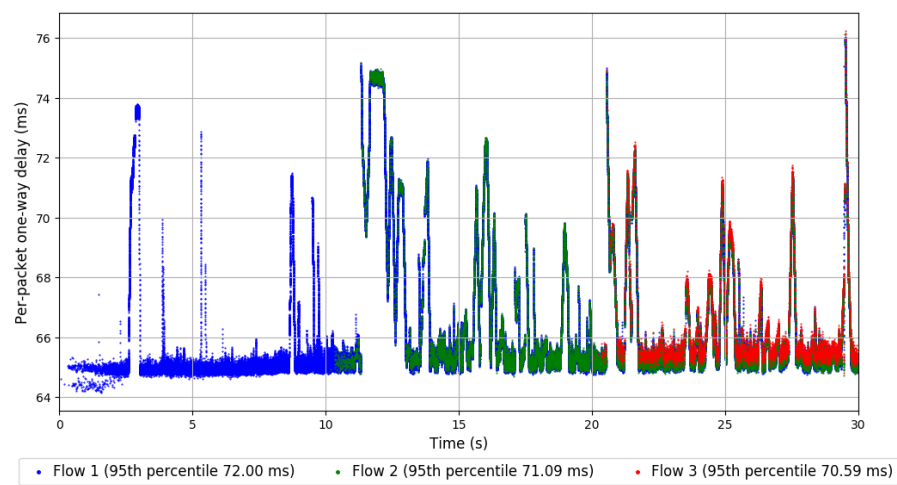
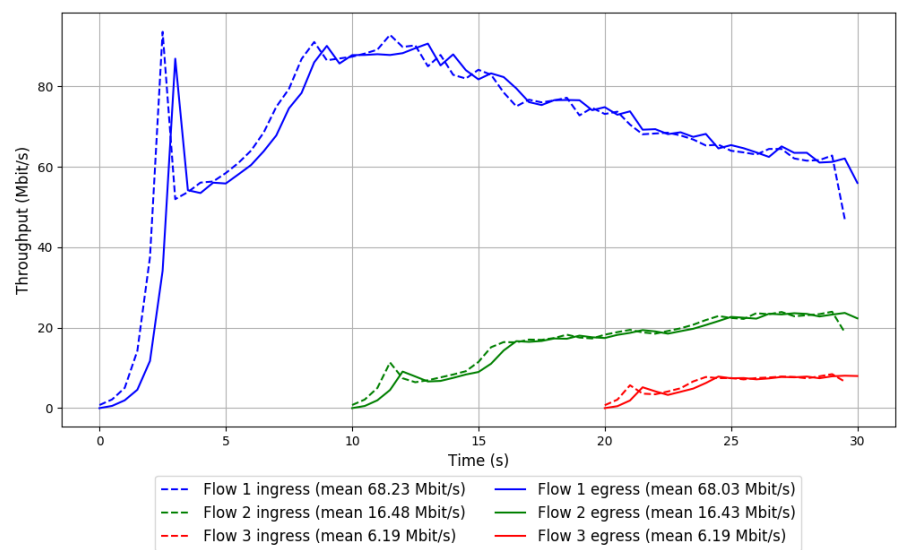


Run 6: Statistics of PCC-Vivace

Start at: 2018-06-05 13:27:20  
End at: 2018-06-05 13:27:50  
Local clock offset: 4.409 ms  
Remote clock offset: -5.787 ms

# Below is generated by plot.py at 2018-06-05 15:25:33  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 81.00 Mbit/s  
95th percentile per-packet one-way delay: 71.754 ms  
Loss rate: 0.28%  
-- Flow 1:  
Average throughput: 68.03 Mbit/s  
95th percentile per-packet one-way delay: 71.995 ms  
Loss rate: 0.29%  
-- Flow 2:  
Average throughput: 16.43 Mbit/s  
95th percentile per-packet one-way delay: 71.093 ms  
Loss rate: 0.29%  
-- Flow 3:  
Average throughput: 6.19 Mbit/s  
95th percentile per-packet one-way delay: 70.590 ms  
Loss rate: 0.02%

Run 6: Report of PCC-Vivace — Data Link

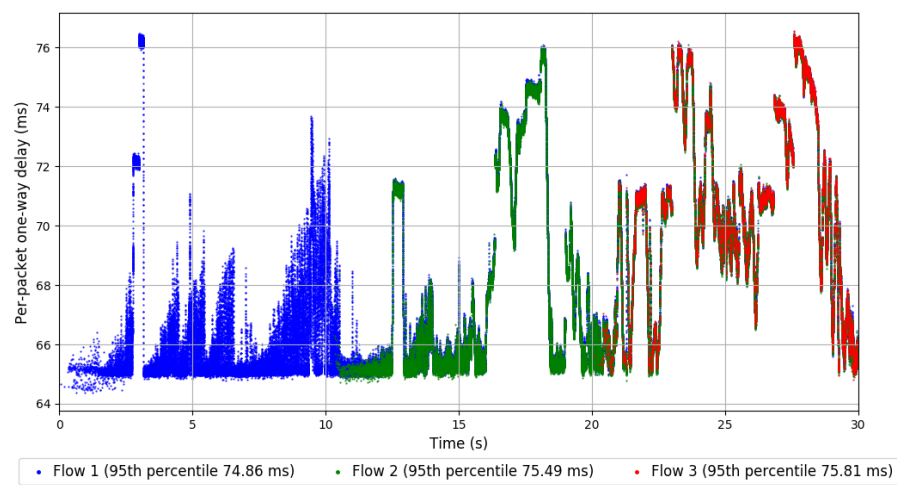
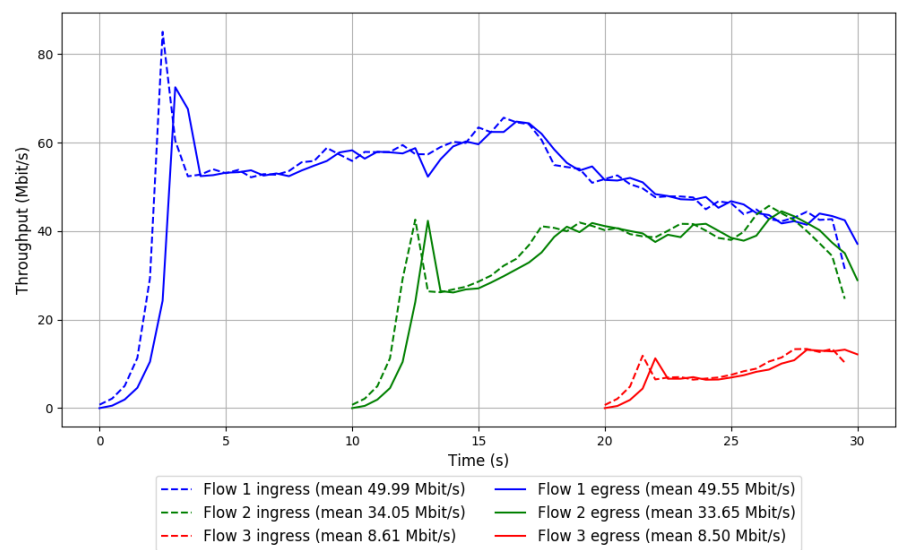


Run 7: Statistics of PCC-Vivace

Start at: 2018-06-05 13:50:06  
End at: 2018-06-05 13:50:36  
Local clock offset: 4.07 ms  
Remote clock offset: -5.889 ms

# Below is generated by plot.py at 2018-06-05 15:25:35  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 74.74 Mbit/s  
95th percentile per-packet one-way delay: 75.250 ms  
Loss rate: 0.97%  
-- Flow 1:  
Average throughput: 49.55 Mbit/s  
95th percentile per-packet one-way delay: 74.855 ms  
Loss rate: 0.88%  
-- Flow 2:  
Average throughput: 33.65 Mbit/s  
95th percentile per-packet one-way delay: 75.494 ms  
Loss rate: 1.15%  
-- Flow 3:  
Average throughput: 8.50 Mbit/s  
95th percentile per-packet one-way delay: 75.809 ms  
Loss rate: 1.22%

Run 7: Report of PCC-Vivace — Data Link

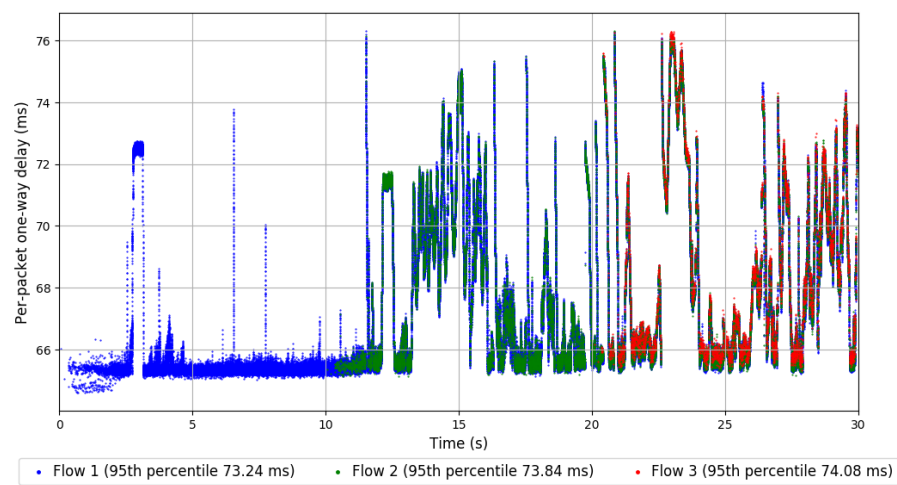
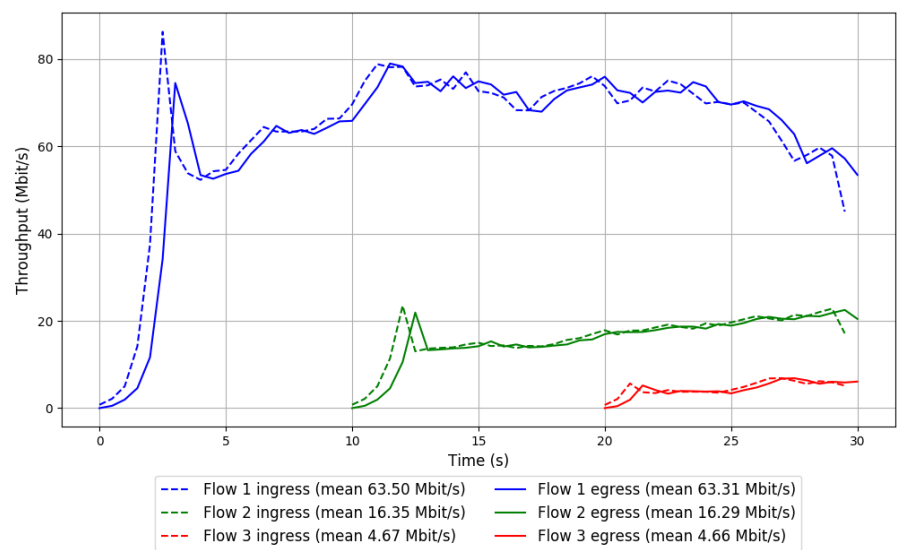


Run 8: Statistics of PCC-Vivace

Start at: 2018-06-05 14:12:02  
End at: 2018-06-05 14:12:32  
Local clock offset: 4.451 ms  
Remote clock offset: -2.043 ms

# Below is generated by plot.py at 2018-06-05 15:25:40  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 75.68 Mbit/s  
95th percentile per-packet one-way delay: 73.382 ms  
Loss rate: 0.29%  
-- Flow 1:  
Average throughput: 63.31 Mbit/s  
95th percentile per-packet one-way delay: 73.236 ms  
Loss rate: 0.29%  
-- Flow 2:  
Average throughput: 16.29 Mbit/s  
95th percentile per-packet one-way delay: 73.837 ms  
Loss rate: 0.33%  
-- Flow 3:  
Average throughput: 4.66 Mbit/s  
95th percentile per-packet one-way delay: 74.079 ms  
Loss rate: 0.16%

Run 8: Report of PCC-Vivace — Data Link

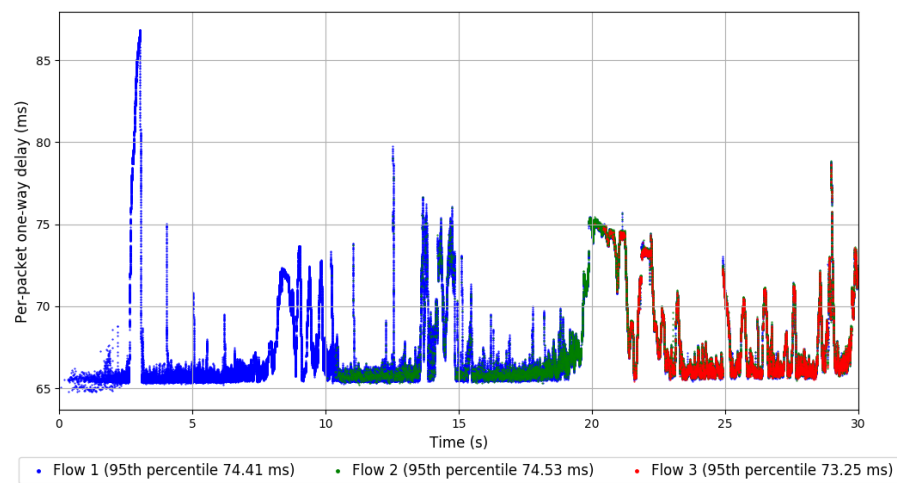
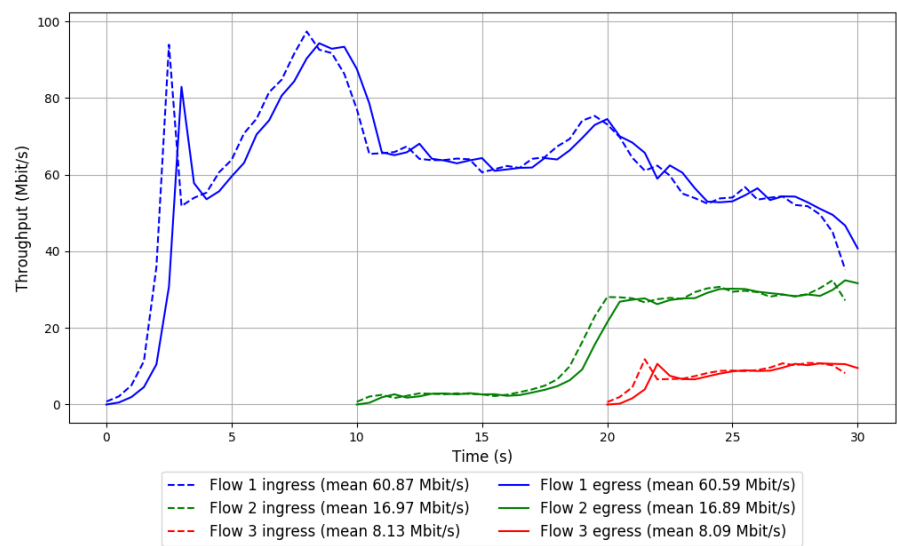


Run 9: Statistics of PCC-Vivace

Start at: 2018-06-05 14:33:59  
End at: 2018-06-05 14:34:29  
Local clock offset: 6.926 ms  
Remote clock offset: -1.885 ms

# Below is generated by plot.py at 2018-06-05 15:25:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 74.49 Mbit/s  
95th percentile per-packet one-way delay: 74.418 ms  
Loss rate: 0.45%  
-- Flow 1:  
Average throughput: 60.59 Mbit/s  
95th percentile per-packet one-way delay: 74.409 ms  
Loss rate: 0.44%  
-- Flow 2:  
Average throughput: 16.89 Mbit/s  
95th percentile per-packet one-way delay: 74.534 ms  
Loss rate: 0.45%  
-- Flow 3:  
Average throughput: 8.09 Mbit/s  
95th percentile per-packet one-way delay: 73.245 ms  
Loss rate: 0.55%

Run 9: Report of PCC-Vivace — Data Link

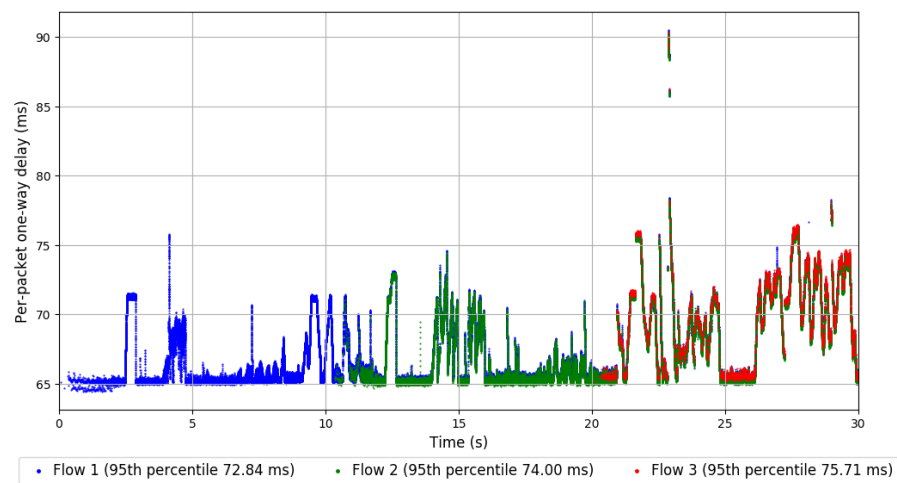
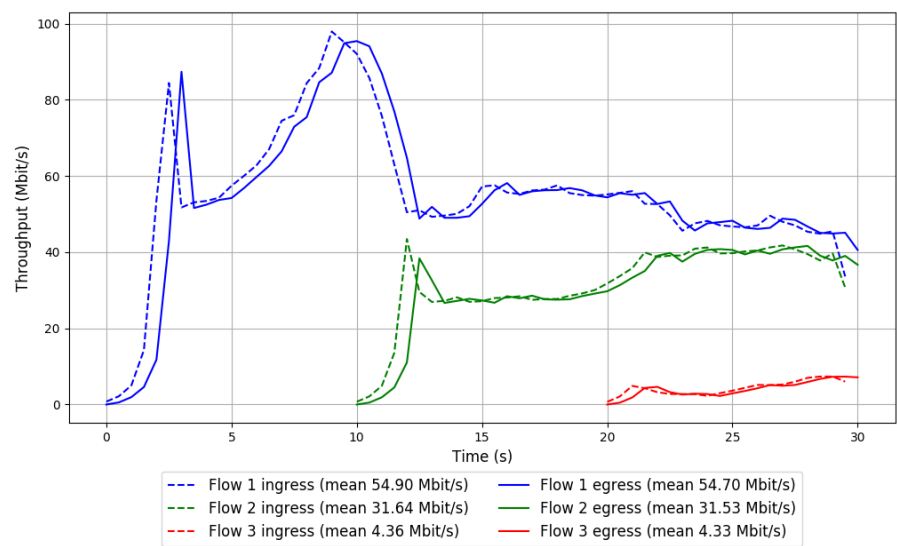


Run 10: Statistics of PCC-Vivace

Start at: 2018-06-05 14:56:02  
End at: 2018-06-05 14:56:32  
Local clock offset: 5.122 ms  
Remote clock offset: -5.347 ms

# Below is generated by plot.py at 2018-06-05 15:25:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 77.10 Mbit/s  
95th percentile per-packet one-way delay: 73.419 ms  
Loss rate: 0.37%  
-- Flow 1:  
Average throughput: 54.70 Mbit/s  
95th percentile per-packet one-way delay: 72.843 ms  
Loss rate: 0.36%  
-- Flow 2:  
Average throughput: 31.53 Mbit/s  
95th percentile per-packet one-way delay: 74.003 ms  
Loss rate: 0.38%  
-- Flow 3:  
Average throughput: 4.33 Mbit/s  
95th percentile per-packet one-way delay: 75.708 ms  
Loss rate: 0.64%

Run 10: Report of PCC-Vivace — Data Link

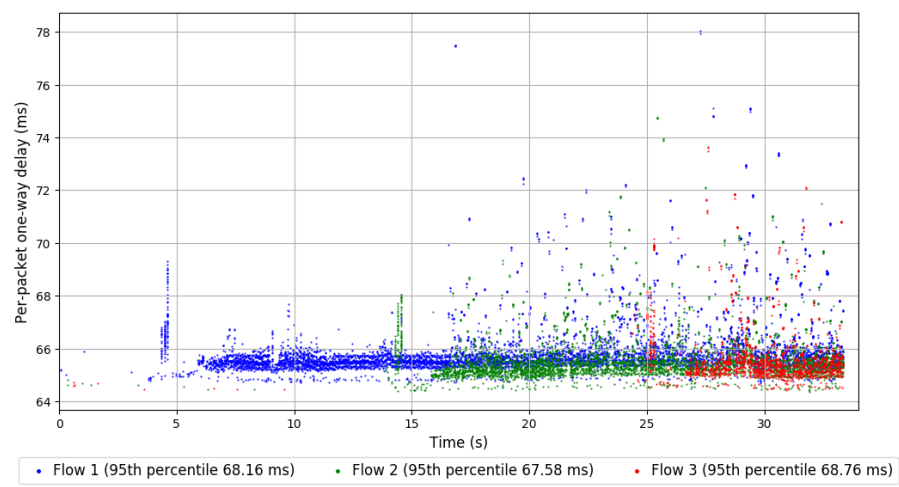
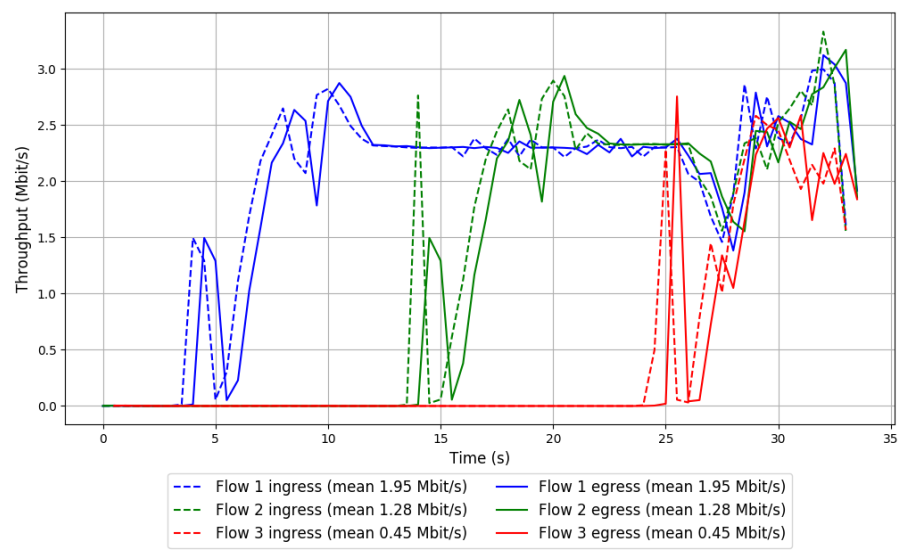


Run 1: Statistics of WebRTC media

Start at: 2018-06-05 11:32:33  
End at: 2018-06-05 11:33:03  
Local clock offset: 7.707 ms  
Remote clock offset: -5.674 ms

# Below is generated by plot.py at 2018-06-05 15:25:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.66 Mbit/s  
95th percentile per-packet one-way delay: 67.953 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 1.95 Mbit/s  
95th percentile per-packet one-way delay: 68.155 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.28 Mbit/s  
95th percentile per-packet one-way delay: 67.577 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.45 Mbit/s  
95th percentile per-packet one-way delay: 68.758 ms  
Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link

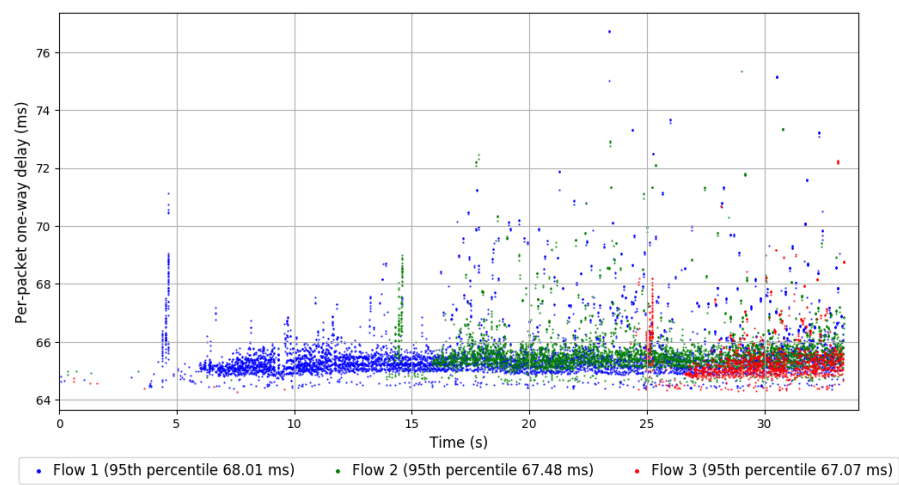
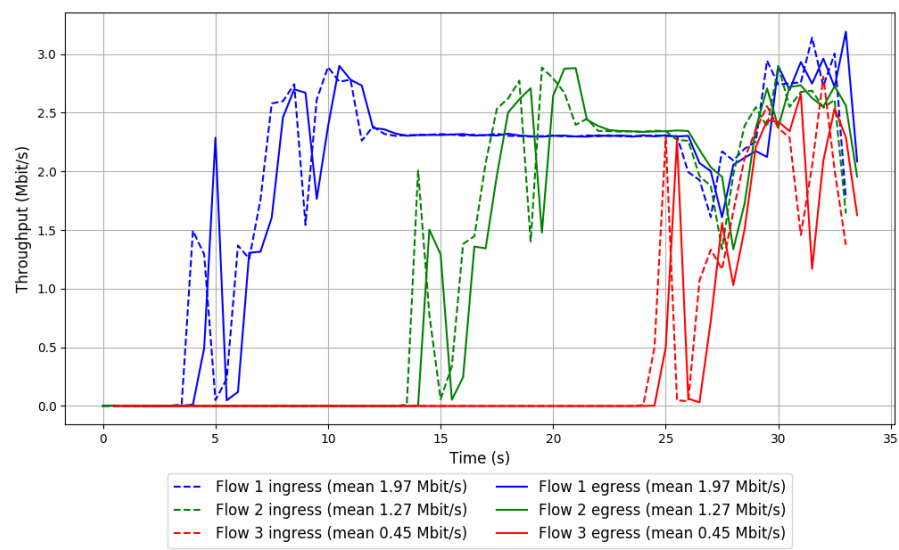


Run 2: Statistics of WebRTC media

Start at: 2018-06-05 11:55:44  
End at: 2018-06-05 11:56:14  
Local clock offset: 7.689 ms  
Remote clock offset: -4.758 ms

# Below is generated by plot.py at 2018-06-05 15:25:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.66 Mbit/s  
95th percentile per-packet one-way delay: 67.744 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 1.97 Mbit/s  
95th percentile per-packet one-way delay: 68.007 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.27 Mbit/s  
95th percentile per-packet one-way delay: 67.481 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.45 Mbit/s  
95th percentile per-packet one-way delay: 67.068 ms  
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

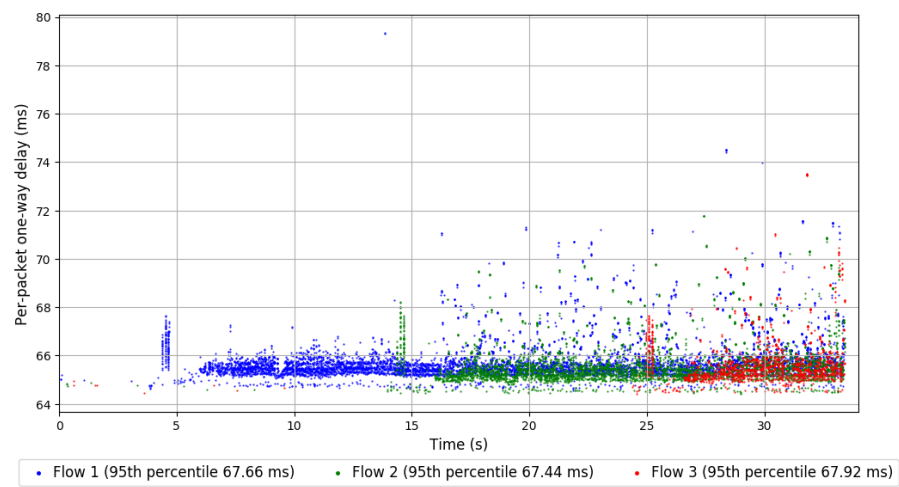
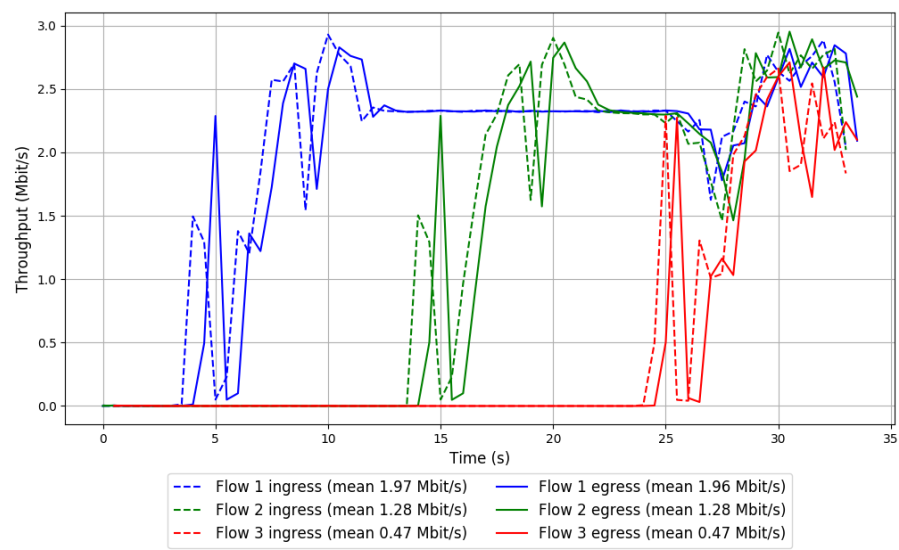


Run 3: Statistics of WebRTC media

Start at: 2018-06-05 12:17:49  
End at: 2018-06-05 12:18:19  
Local clock offset: 6.393 ms  
Remote clock offset: -4.717 ms

# Below is generated by plot.py at 2018-06-05 15:25:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.69 Mbit/s  
95th percentile per-packet one-way delay: 67.614 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 1.96 Mbit/s  
95th percentile per-packet one-way delay: 67.661 ms  
Loss rate: 0.16%  
-- Flow 2:  
Average throughput: 1.28 Mbit/s  
95th percentile per-packet one-way delay: 67.443 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.47 Mbit/s  
95th percentile per-packet one-way delay: 67.915 ms  
Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

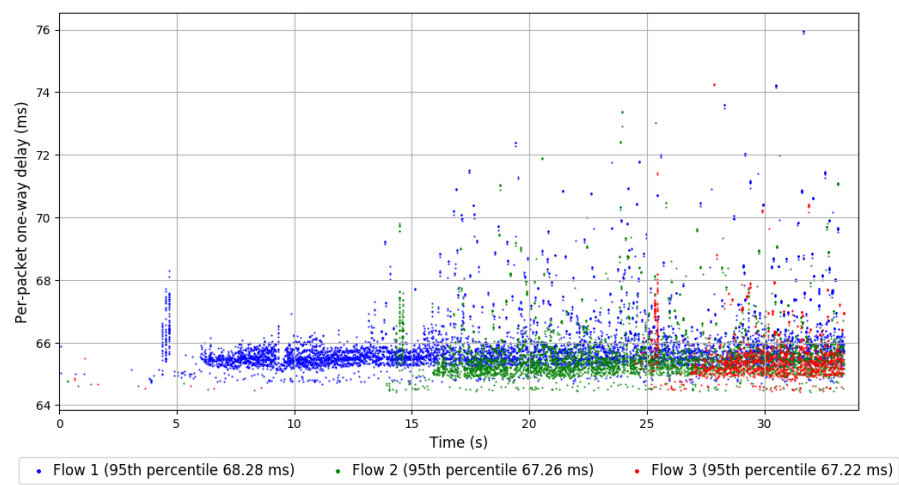
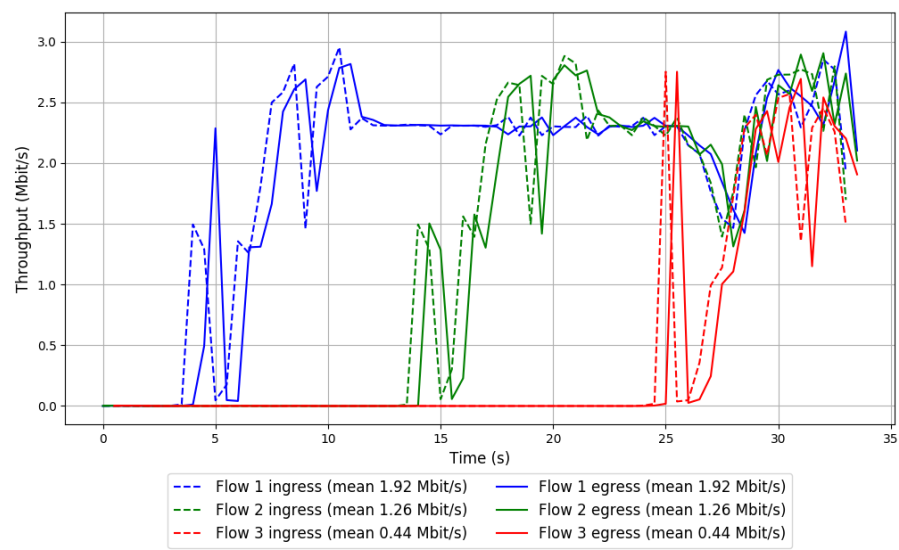


Run 4: Statistics of WebRTC media

Start at: 2018-06-05 12:40:13  
End at: 2018-06-05 12:40:43  
Local clock offset: 5.31 ms  
Remote clock offset: -5.579 ms

# Below is generated by plot.py at 2018-06-05 15:25:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.61 Mbit/s  
95th percentile per-packet one-way delay: 67.732 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 1.92 Mbit/s  
95th percentile per-packet one-way delay: 68.285 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.26 Mbit/s  
95th percentile per-packet one-way delay: 67.263 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 67.223 ms  
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link

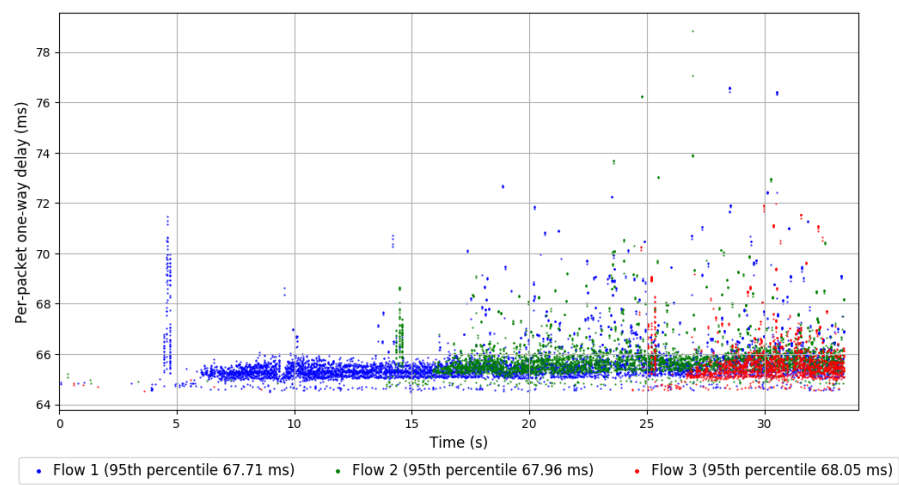
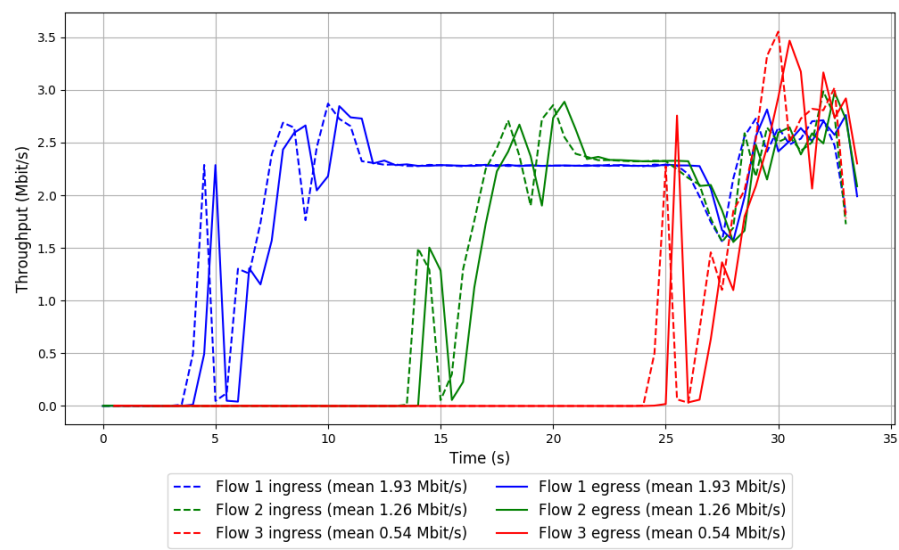


Run 5: Statistics of WebRTC media

Start at: 2018-06-05 13:02:31  
End at: 2018-06-05 13:03:01  
Local clock offset: 5.31 ms  
Remote clock offset: -5.542 ms

# Below is generated by plot.py at 2018-06-05 15:25:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.71 Mbit/s  
95th percentile per-packet one-way delay: 67.810 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 1.93 Mbit/s  
95th percentile per-packet one-way delay: 67.707 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.26 Mbit/s  
95th percentile per-packet one-way delay: 67.956 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.54 Mbit/s  
95th percentile per-packet one-way delay: 68.049 ms  
Loss rate: 0.16%

Run 5: Report of WebRTC media — Data Link

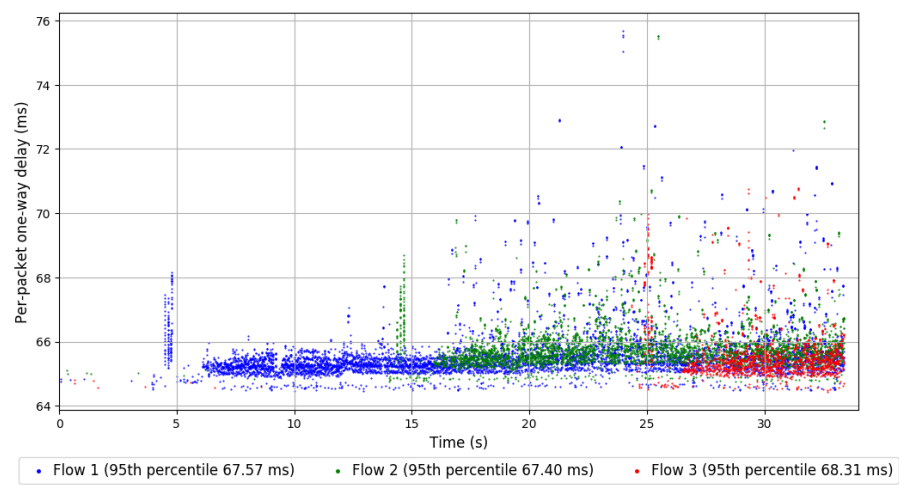
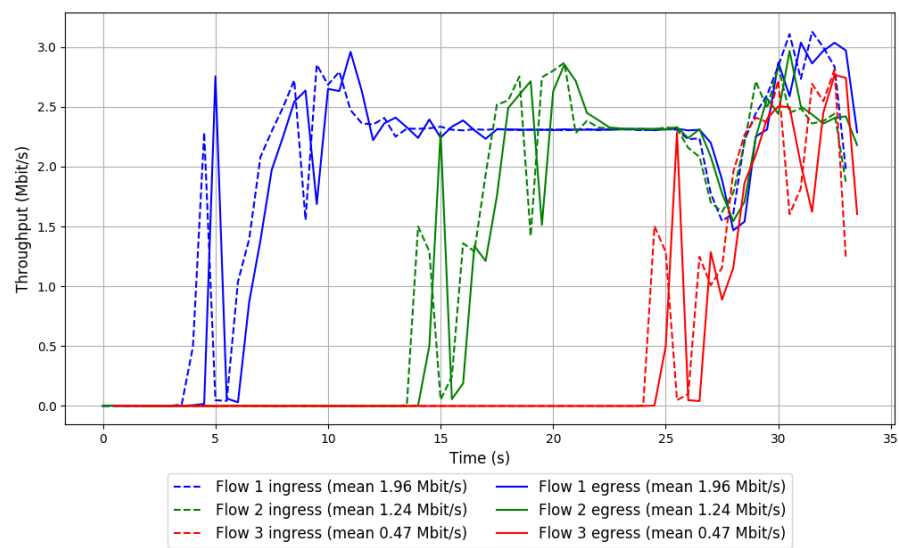


Run 6: Statistics of WebRTC media

Start at: 2018-06-05 13:24:35  
End at: 2018-06-05 13:25:05  
Local clock offset: 4.263 ms  
Remote clock offset: -5.866 ms

# Below is generated by plot.py at 2018-06-05 15:25:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.65 Mbit/s  
95th percentile per-packet one-way delay: 67.610 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 1.96 Mbit/s  
95th percentile per-packet one-way delay: 67.571 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.24 Mbit/s  
95th percentile per-packet one-way delay: 67.399 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.47 Mbit/s  
95th percentile per-packet one-way delay: 68.310 ms  
Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link

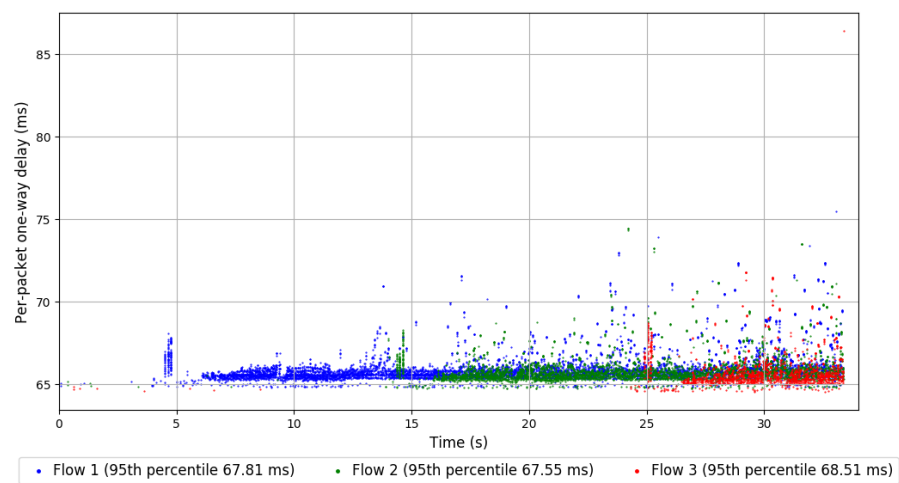
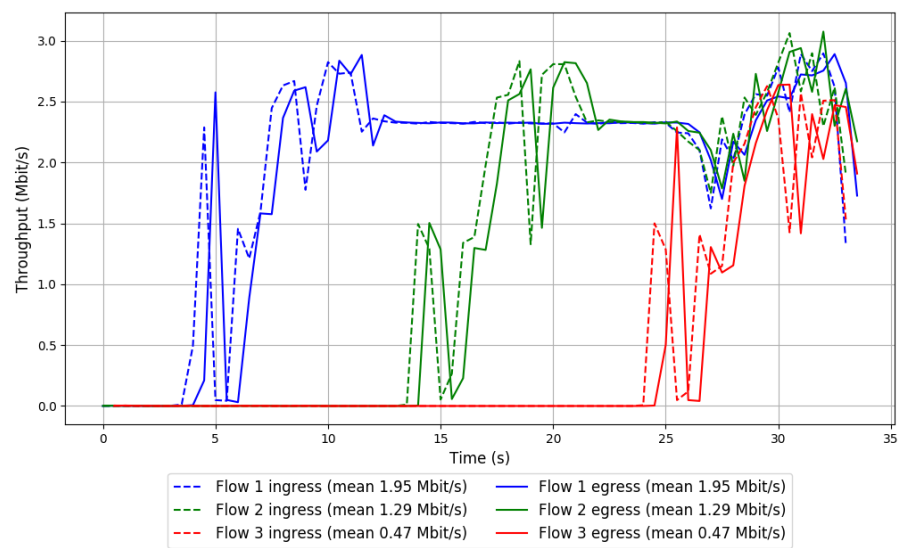


Run 7: Statistics of WebRTC media

Start at: 2018-06-05 13:47:21  
End at: 2018-06-05 13:47:51  
Local clock offset: 4.082 ms  
Remote clock offset: -5.738 ms

# Below is generated by plot.py at 2018-06-05 15:25:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.69 Mbit/s  
95th percentile per-packet one-way delay: 67.756 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 1.95 Mbit/s  
95th percentile per-packet one-way delay: 67.812 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.29 Mbit/s  
95th percentile per-packet one-way delay: 67.550 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.47 Mbit/s  
95th percentile per-packet one-way delay: 68.506 ms  
Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link

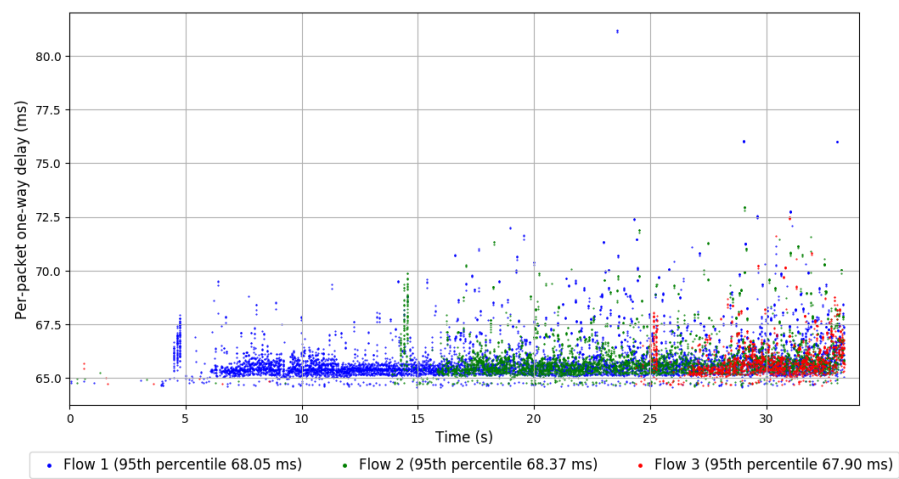
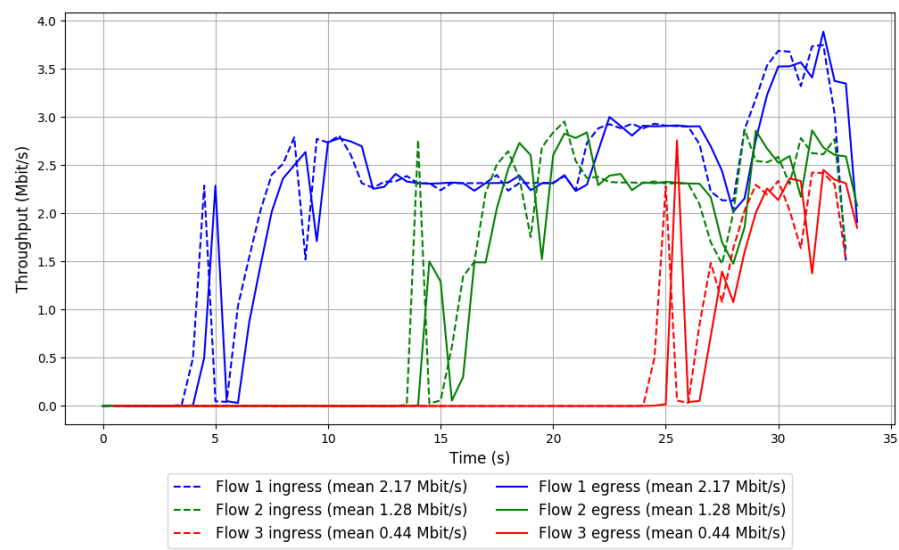


Run 8: Statistics of WebRTC media

Start at: 2018-06-05 14:09:17  
End at: 2018-06-05 14:09:47  
Local clock offset: 4.04 ms  
Remote clock offset: -2.462 ms

# Below is generated by plot.py at 2018-06-05 15:25:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.87 Mbit/s  
95th percentile per-packet one-way delay: 68.114 ms  
Loss rate: 0.03%  
-- Flow 1:  
Average throughput: 2.17 Mbit/s  
95th percentile per-packet one-way delay: 68.051 ms  
Loss rate: 0.05%  
-- Flow 2:  
Average throughput: 1.28 Mbit/s  
95th percentile per-packet one-way delay: 68.371 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 67.898 ms  
Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link

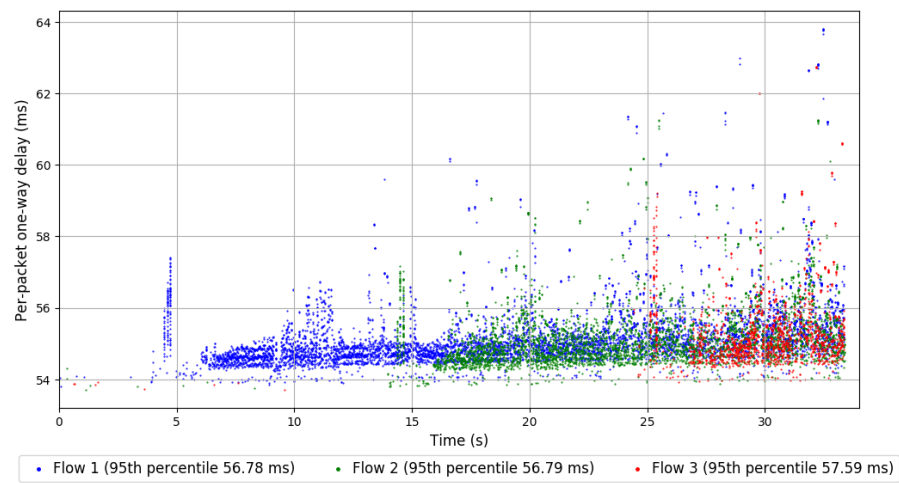
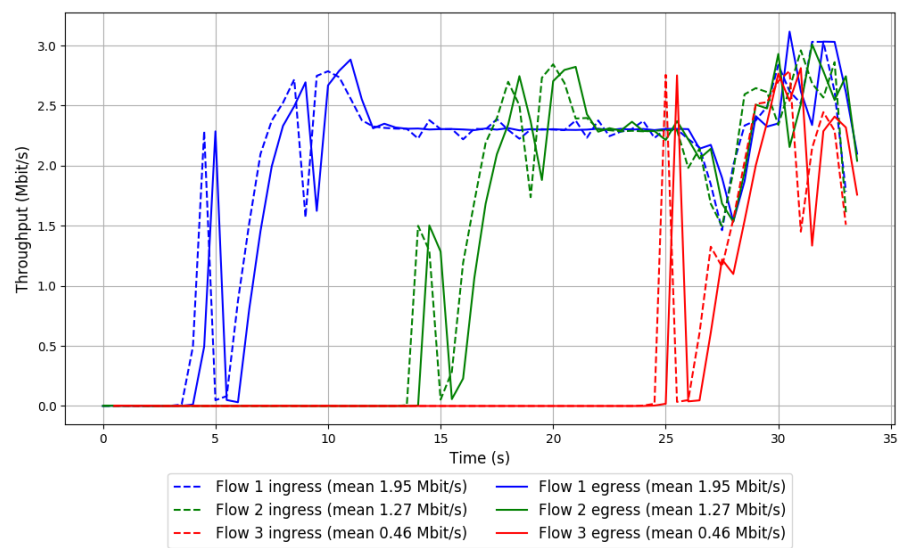


Run 9: Statistics of WebRTC media

Start at: 2018-06-05 14:31:13  
End at: 2018-06-05 14:31:43  
Local clock offset: 6.687 ms  
Remote clock offset: -11.493 ms

# Below is generated by plot.py at 2018-06-05 15:25:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.65 Mbit/s  
95th percentile per-packet one-way delay: 56.894 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 1.95 Mbit/s  
95th percentile per-packet one-way delay: 56.782 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.27 Mbit/s  
95th percentile per-packet one-way delay: 56.789 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.46 Mbit/s  
95th percentile per-packet one-way delay: 57.588 ms  
Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-06-05 14:53:16  
End at: 2018-06-05 14:53:46  
Local clock offset: 5.353 ms  
Remote clock offset: -5.291 ms

# Below is generated by plot.py at 2018-06-05 15:25:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.68 Mbit/s  
95th percentile per-packet one-way delay: 66.949 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 1.94 Mbit/s  
95th percentile per-packet one-way delay: 66.824 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.28 Mbit/s  
95th percentile per-packet one-way delay: 67.144 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.47 Mbit/s  
95th percentile per-packet one-way delay: 67.001 ms  
Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

