

## Pantheon Report

Generated at 2018-06-20 04:29:47 (UTC).

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

Repeated the test of 16 congestion control schemes 10 times.

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

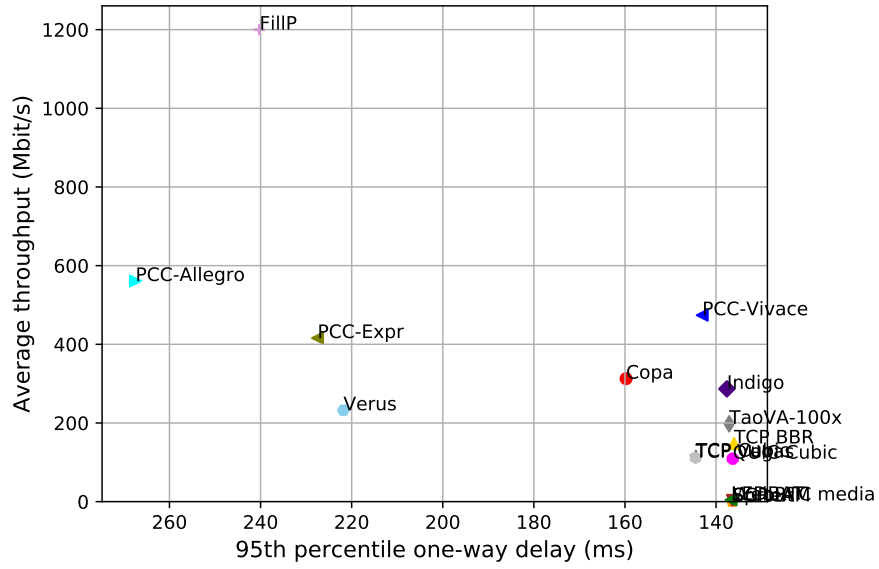
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

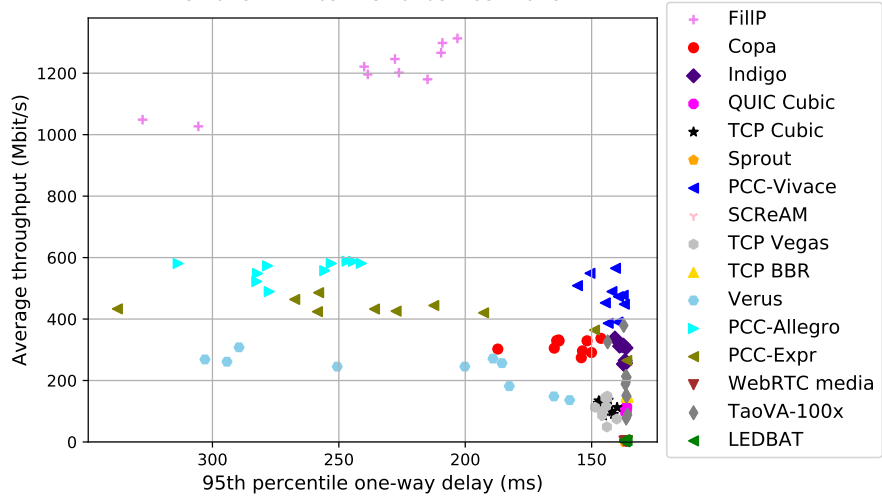
Git summary:

```
branch: master @ 9141c5f9450c85ea5ea2ea755a8e946998d3abf3
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/genericCC @ c7966e494a929986eaa5a9c169a7f381fe1bbbe5
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

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



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



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	76.16	75.95	66.09	136.03	136.06	135.95	0.85	1.49	3.39
Copa	10	179.32	146.36	111.50	154.57	156.52	155.26	0.65	1.51	3.00
TCP Cubic	10	67.89	50.66	40.31	144.15	145.17	143.44	1.10	2.59	4.35
FillP	10	660.84	578.64	479.45	239.25	240.91	206.42	3.69	3.22	3.76
Indigo	10	155.77	132.99	131.76	137.12	137.96	139.08	0.93	1.50	3.49
LEDBAT	10	2.87	1.73	0.90	136.65	136.61	136.45	1.80	3.61	5.38
PCC-Allegro	10	468.34	113.78	53.79	269.09	255.49	253.57	4.65	4.81	7.85
PCC-Expr	10	270.61	174.05	92.89	233.10	195.81	182.98	2.58	2.45	4.25
QUIC Cubic	10	60.62	55.17	37.13	136.26	136.22	135.99	1.13	1.45	2.76
SCReAM	10	0.22	0.22	0.22	136.37	136.15	136.11	0.89	1.43	2.56
Sprout	10	0.17	0.18	0.21	136.12	136.38	136.39	0.74	1.26	2.01
TaoVA-100x	10	48.02	158.33	137.64	137.14	136.78	137.66	0.87	1.47	3.28
TCP Vegas	10	62.18	61.86	27.74	144.44	144.01	143.19	0.91	1.51	2.97
Verus	10	144.68	93.44	80.23	206.48	229.20	221.77	1.55	3.62	5.36
PCC-Vivace	10	298.88	204.91	122.07	146.04	141.32	154.34	1.10	1.58	4.48
WebRTC media	10	1.79	1.09	0.37	136.24	136.09	136.22	1.56	1.95	4.96

Run 1: Statistics of TCP BBR

Start at: 2018-06-19 22:33:00

End at: 2018-06-19 22:33:30

Local clock offset: -0.008 ms

Remote clock offset: 0.06 ms

# Below is generated by plot.py at 2018-06-20 02:36:19

# Datalink statistics

-- Total of 3 flows:

Average throughput: 147.09 Mbit/s

95th percentile per-packet one-way delay: 136.182 ms

Loss rate: 1.53%

-- Flow 1:

Average throughput: 74.95 Mbit/s

95th percentile per-packet one-way delay: 136.131 ms

Loss rate: 0.95%

-- Flow 2:

Average throughput: 77.22 Mbit/s

95th percentile per-packet one-way delay: 136.254 ms

Loss rate: 1.60%

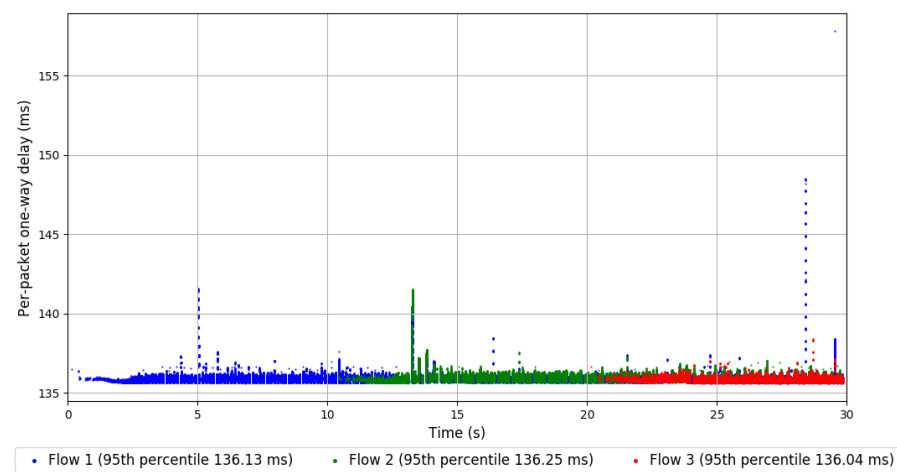
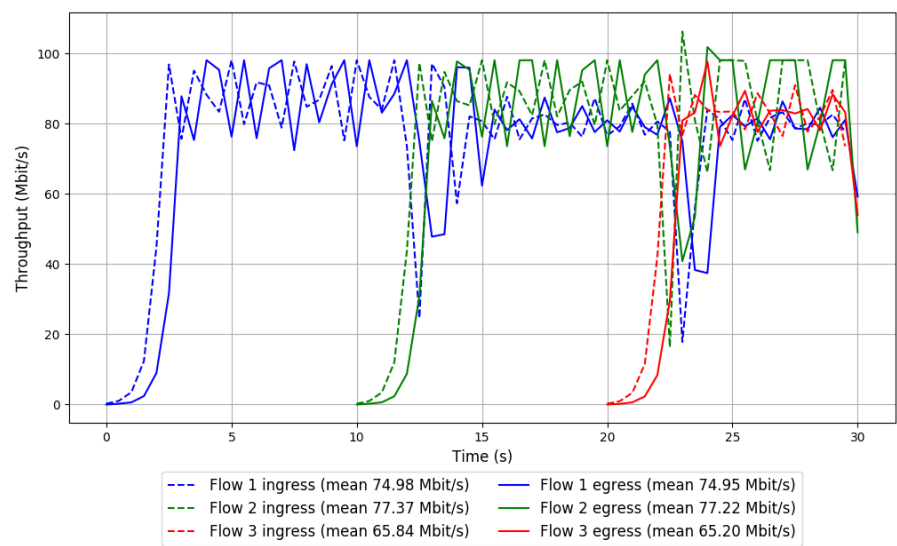
-- Flow 3:

Average throughput: 65.20 Mbit/s

95th percentile per-packet one-way delay: 136.042 ms

Loss rate: 3.37%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-06-19 22:58:09

End at: 2018-06-19 22:58:39

Local clock offset: -0.001 ms

Remote clock offset: 0.056 ms

# Below is generated by plot.py at 2018-06-20 02:36:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 148.94 Mbit/s

95th percentile per-packet one-way delay: 136.179 ms

Loss rate: 1.40%

-- Flow 1:

Average throughput: 76.96 Mbit/s

95th percentile per-packet one-way delay: 136.198 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 77.15 Mbit/s

95th percentile per-packet one-way delay: 136.191 ms

Loss rate: 1.59%

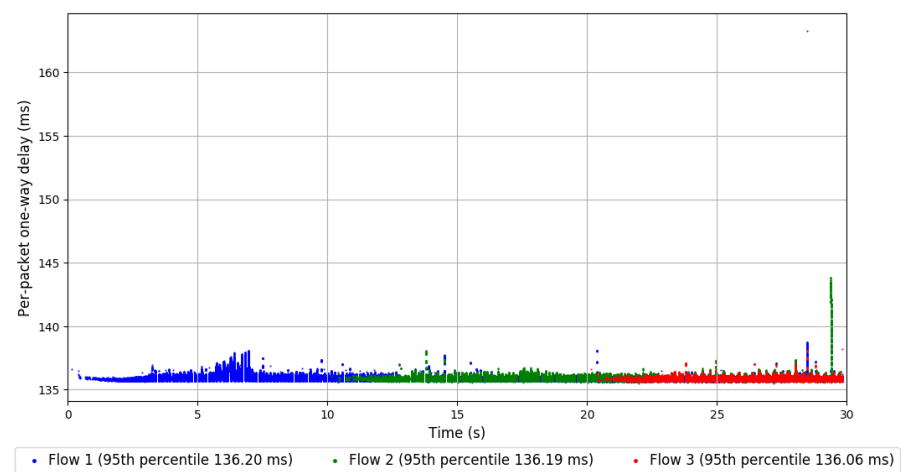
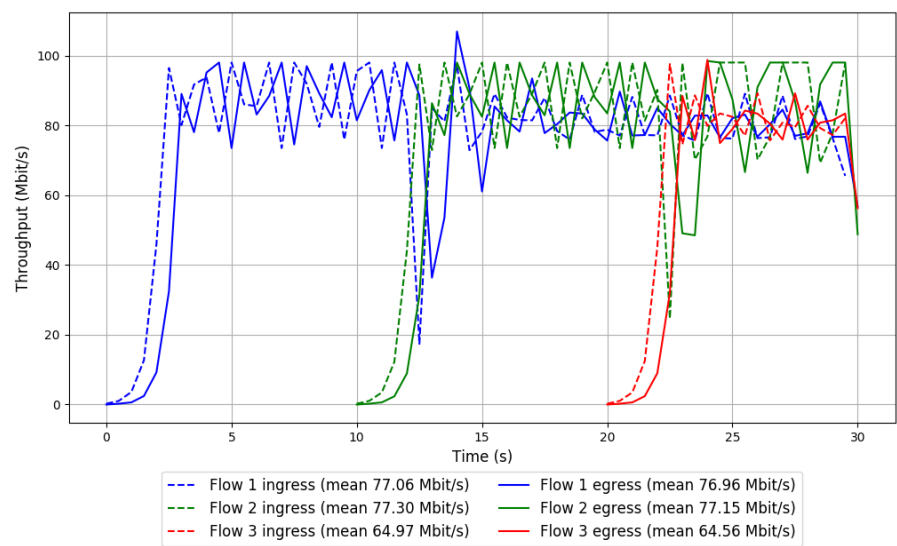
-- Flow 3:

Average throughput: 64.56 Mbit/s

95th percentile per-packet one-way delay: 136.056 ms

Loss rate: 3.32%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-06-19 23:22:53

End at: 2018-06-19 23:23:23

Local clock offset: -0.047 ms

Remote clock offset: 0.002 ms

# Below is generated by plot.py at 2018-06-20 02:36:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 145.47 Mbit/s

95th percentile per-packet one-way delay: 136.018 ms

Loss rate: 1.53%

-- Flow 1:

Average throughput: 74.99 Mbit/s

95th percentile per-packet one-way delay: 135.996 ms

Loss rate: 0.95%

-- Flow 2:

Average throughput: 72.38 Mbit/s

95th percentile per-packet one-way delay: 135.978 ms

Loss rate: 1.47%

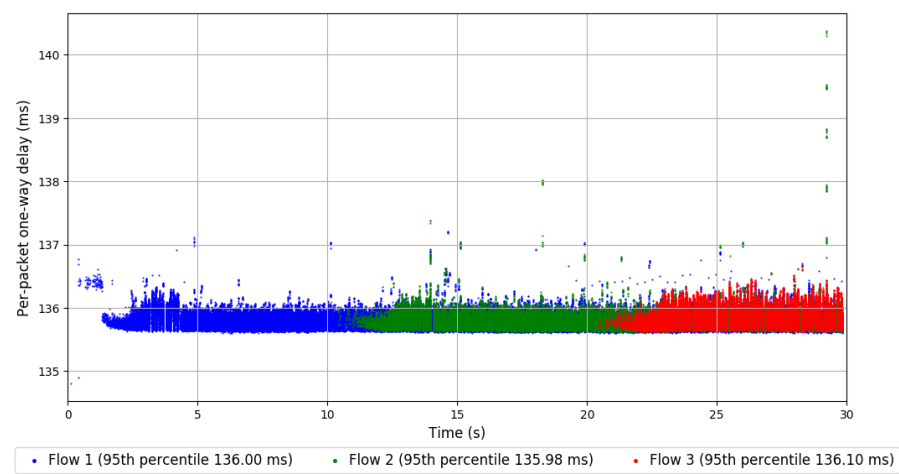
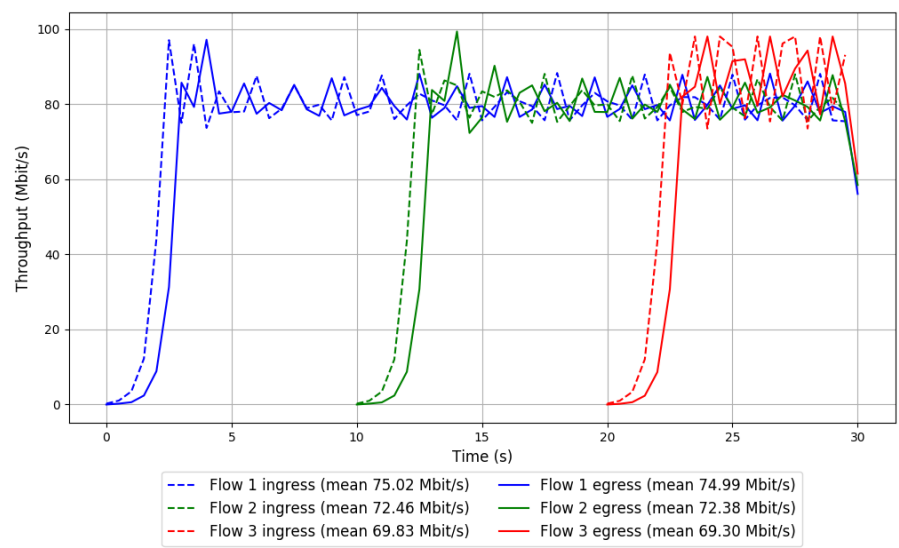
-- Flow 3:

Average throughput: 69.30 Mbit/s

95th percentile per-packet one-way delay: 136.104 ms

Loss rate: 3.54%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-06-19 23:47:31

End at: 2018-06-19 23:48:01

Local clock offset: -0.145 ms

Remote clock offset: 0.409 ms

# Below is generated by plot.py at 2018-06-20 02:36:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 145.39 Mbit/s

95th percentile per-packet one-way delay: 135.581 ms

Loss rate: 1.43%

-- Flow 1:

Average throughput: 73.74 Mbit/s

95th percentile per-packet one-way delay: 135.503 ms

Loss rate: 0.94%

-- Flow 2:

Average throughput: 76.53 Mbit/s

95th percentile per-packet one-way delay: 135.651 ms

Loss rate: 1.38%

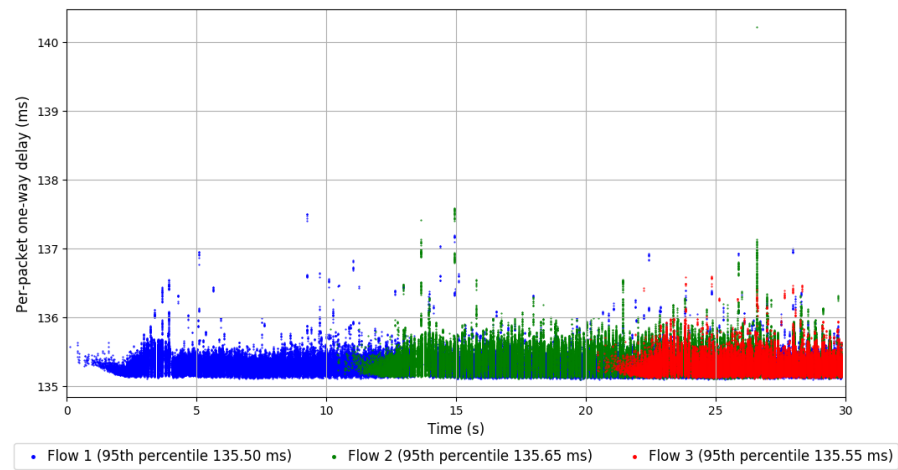
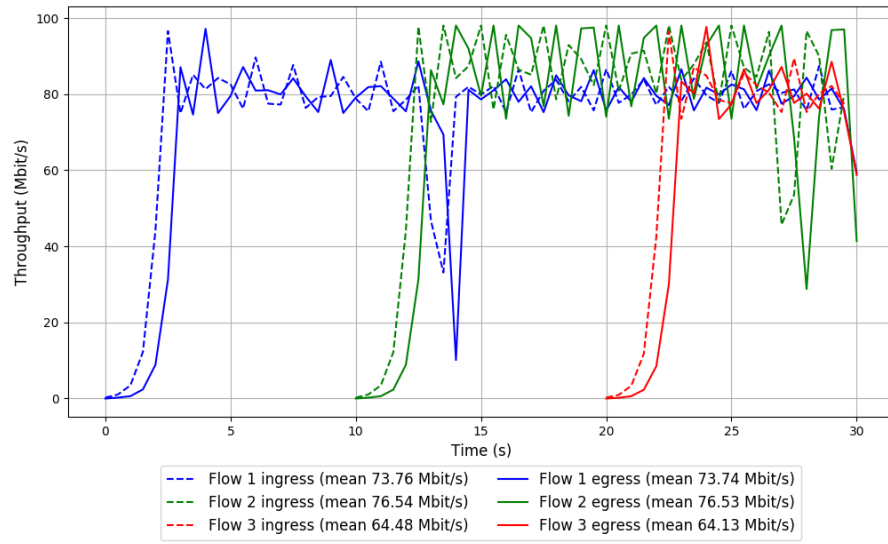
-- Flow 3:

Average throughput: 64.13 Mbit/s

95th percentile per-packet one-way delay: 135.547 ms

Loss rate: 3.27%

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



Run 5: Statistics of TCP BBR

Start at: 2018-06-20 00:12:31

End at: 2018-06-20 00:13:01

Local clock offset: -0.038 ms

Remote clock offset: 0.003 ms

# Below is generated by plot.py at 2018-06-20 02:36:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 150.83 Mbit/s

95th percentile per-packet one-way delay: 136.132 ms

Loss rate: 1.55%

-- Flow 1:

Average throughput: 81.08 Mbit/s

95th percentile per-packet one-way delay: 136.142 ms

Loss rate: 1.01%

-- Flow 2:

Average throughput: 71.39 Mbit/s

95th percentile per-packet one-way delay: 136.024 ms

Loss rate: 1.50%

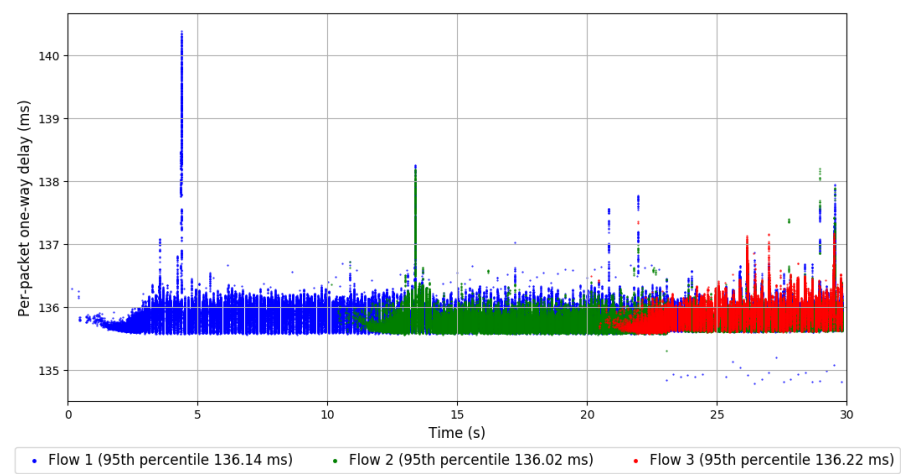
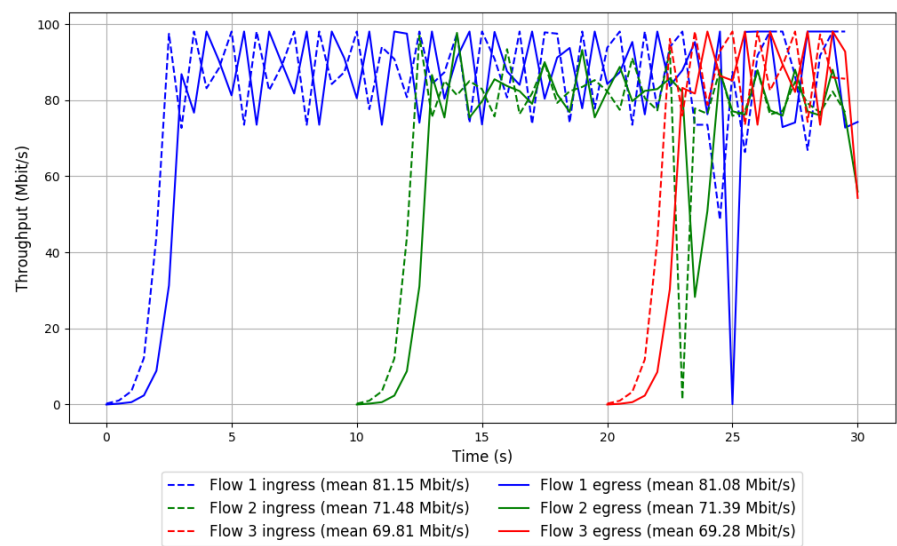
-- Flow 3:

Average throughput: 69.28 Mbit/s

95th percentile per-packet one-way delay: 136.218 ms

Loss rate: 3.54%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-06-20 00:37:22

End at: 2018-06-20 00:37:52

Local clock offset: 0.129 ms

Remote clock offset: 0.011 ms

# Below is generated by plot.py at 2018-06-20 02:36:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 147.07 Mbit/s

95th percentile per-packet one-way delay: 136.222 ms

Loss rate: 1.45%

-- Flow 1:

Average throughput: 76.38 Mbit/s

95th percentile per-packet one-way delay: 136.255 ms

Loss rate: 0.94%

-- Flow 2:

Average throughput: 74.67 Mbit/s

95th percentile per-packet one-way delay: 136.145 ms

Loss rate: 1.47%

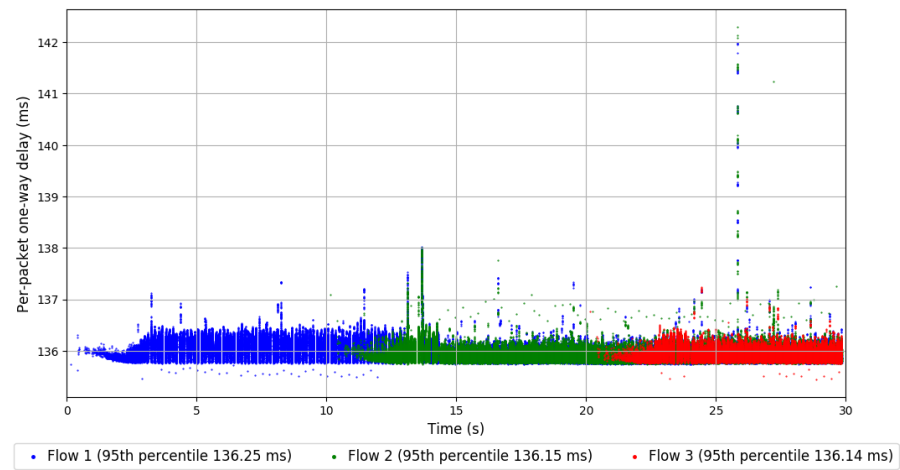
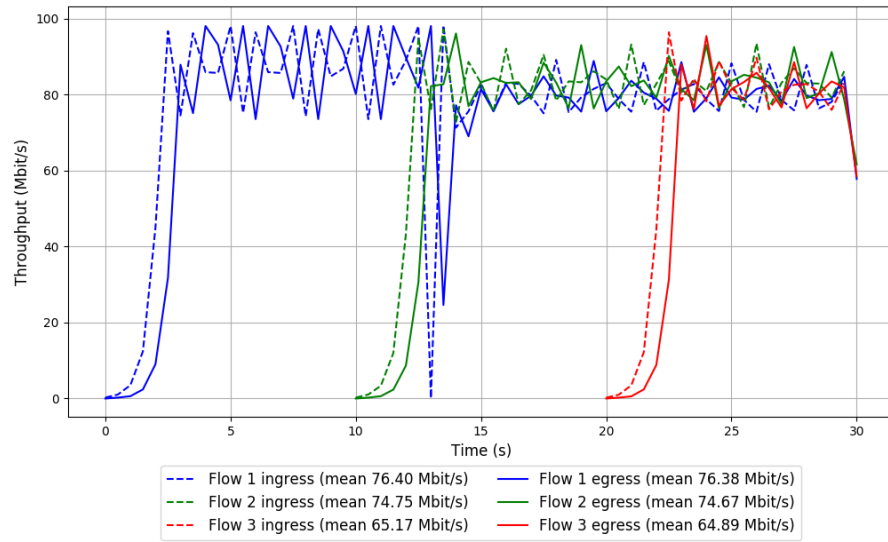
-- Flow 3:

Average throughput: 64.89 Mbit/s

95th percentile per-packet one-way delay: 136.143 ms

Loss rate: 3.21%

# Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-06-20 01:02:26

End at: 2018-06-20 01:02:56

Local clock offset: 0.072 ms

Remote clock offset: 0.008 ms

# Below is generated by plot.py at 2018-06-20 02:36:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 146.16 Mbit/s

95th percentile per-packet one-way delay: 136.282 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 76.91 Mbit/s

95th percentile per-packet one-way delay: 136.334 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 72.91 Mbit/s

95th percentile per-packet one-way delay: 136.192 ms

Loss rate: 1.61%

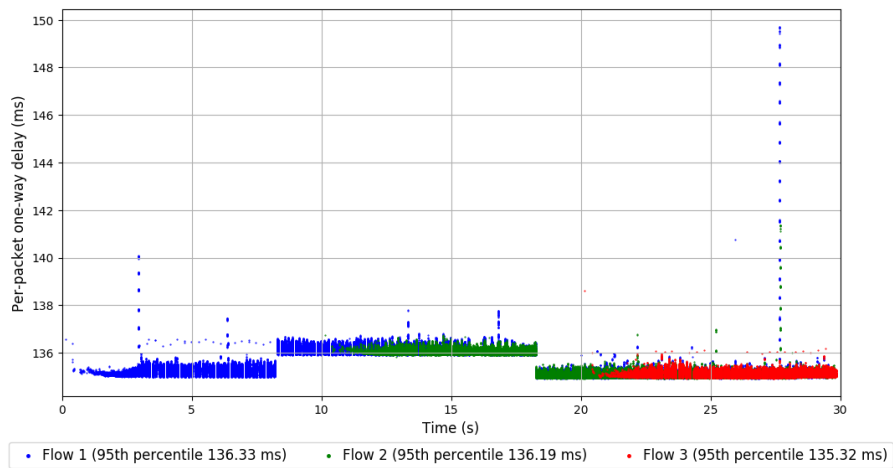
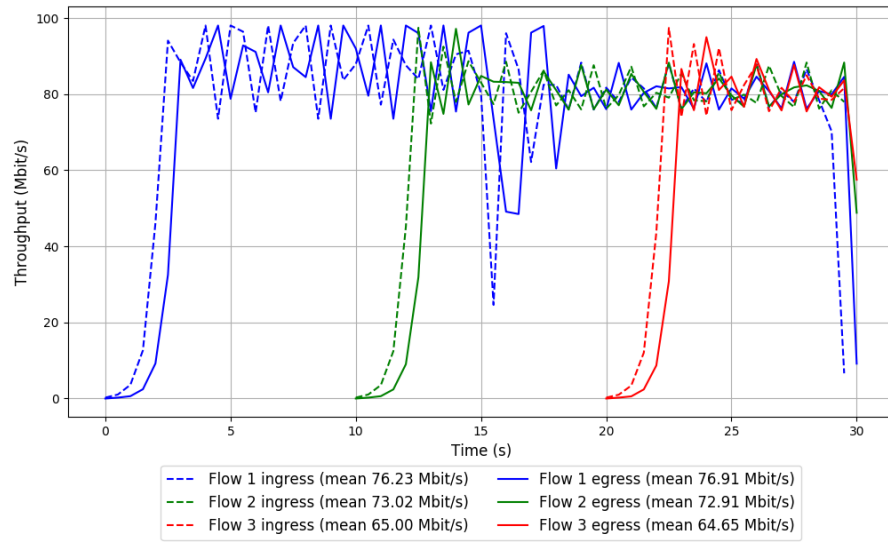
-- Flow 3:

Average throughput: 64.65 Mbit/s

95th percentile per-packet one-way delay: 135.325 ms

Loss rate: 3.27%

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

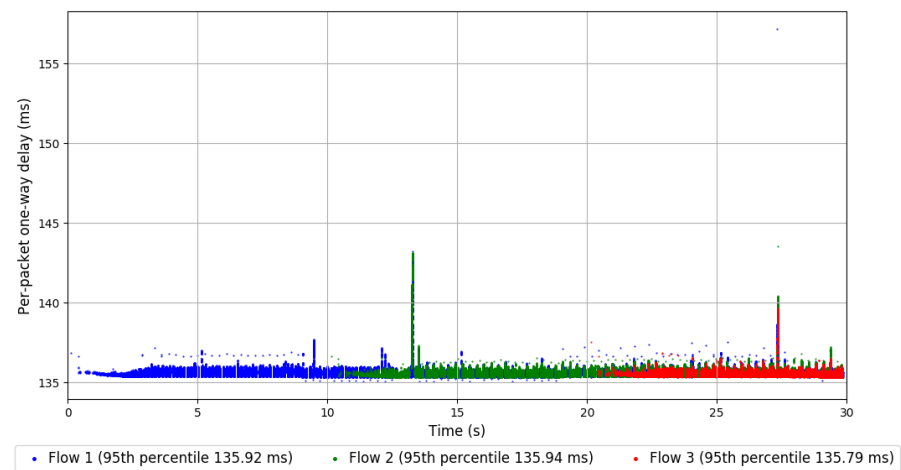
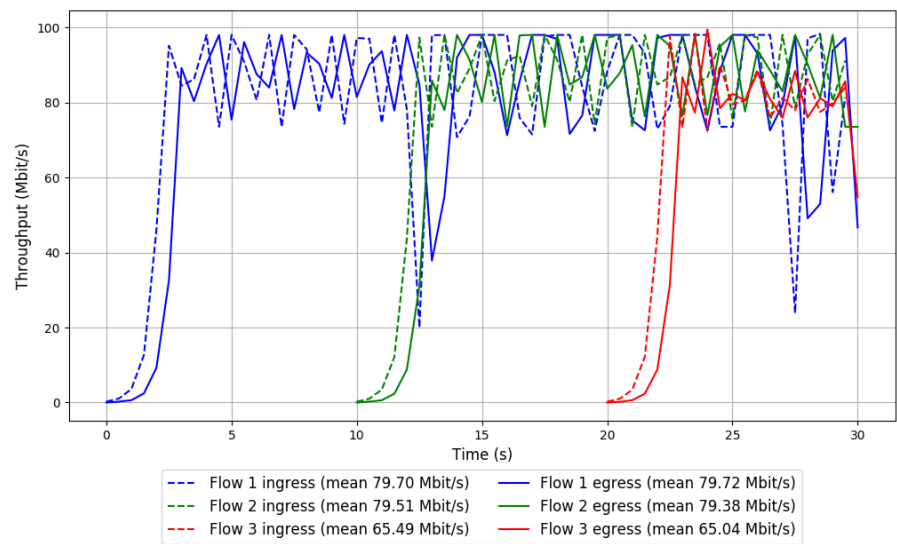


Run 8: Statistics of TCP BBR

Start at: 2018-06-20 01:27:35  
End at: 2018-06-20 01:28:05  
Local clock offset: 0.1 ms  
Remote clock offset: -0.345 ms

# Below is generated by plot.py at 2018-06-20 02:36:27  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 153.46 Mbit/s  
95th percentile per-packet one-way delay: 135.913 ms  
Loss rate: 1.49%  
-- Flow 1:  
Average throughput: 79.72 Mbit/s  
95th percentile per-packet one-way delay: 135.916 ms  
Loss rate: 0.88%  
-- Flow 2:  
Average throughput: 79.38 Mbit/s  
95th percentile per-packet one-way delay: 135.939 ms  
Loss rate: 1.55%  
-- Flow 3:  
Average throughput: 65.04 Mbit/s  
95th percentile per-packet one-way delay: 135.795 ms  
Loss rate: 3.59%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-06-20 01:52:17

End at: 2018-06-20 01:52:47

Local clock offset: 0.117 ms

Remote clock offset: 0.422 ms

# Below is generated by plot.py at 2018-06-20 02:38:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 149.08 Mbit/s

95th percentile per-packet one-way delay: 136.000 ms

Loss rate: 1.56%

-- Flow 1:

Average throughput: 74.48 Mbit/s

95th percentile per-packet one-way delay: 135.789 ms

Loss rate: 0.96%

-- Flow 2:

Average throughput: 78.85 Mbit/s

95th percentile per-packet one-way delay: 136.056 ms

Loss rate: 1.56%

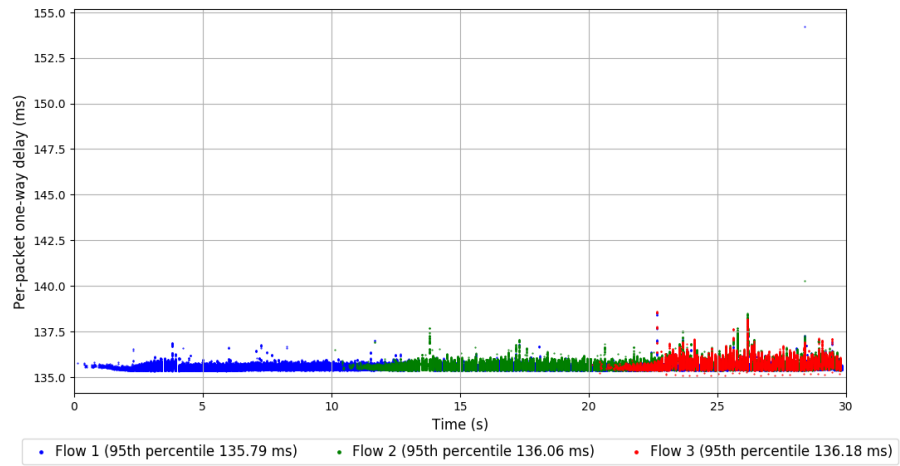
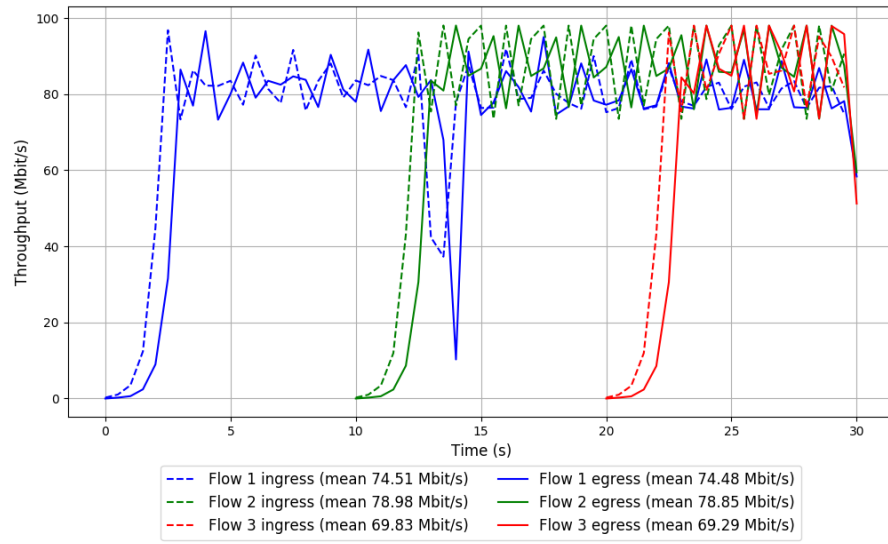
-- Flow 3:

Average throughput: 69.29 Mbit/s

95th percentile per-packet one-way delay: 136.175 ms

Loss rate: 3.54%

# Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-06-20 02:17:43

End at: 2018-06-20 02:18:13

Local clock offset: -0.011 ms

Remote clock offset: 0.121 ms

# Below is generated by plot.py at 2018-06-20 02:38:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 145.56 Mbit/s

95th percentile per-packet one-way delay: 136.118 ms

Loss rate: 1.41%

-- Flow 1:

Average throughput: 72.36 Mbit/s

95th percentile per-packet one-way delay: 136.032 ms

Loss rate: 1.01%

-- Flow 2:

Average throughput: 78.97 Mbit/s

95th percentile per-packet one-way delay: 136.172 ms

Loss rate: 1.19%

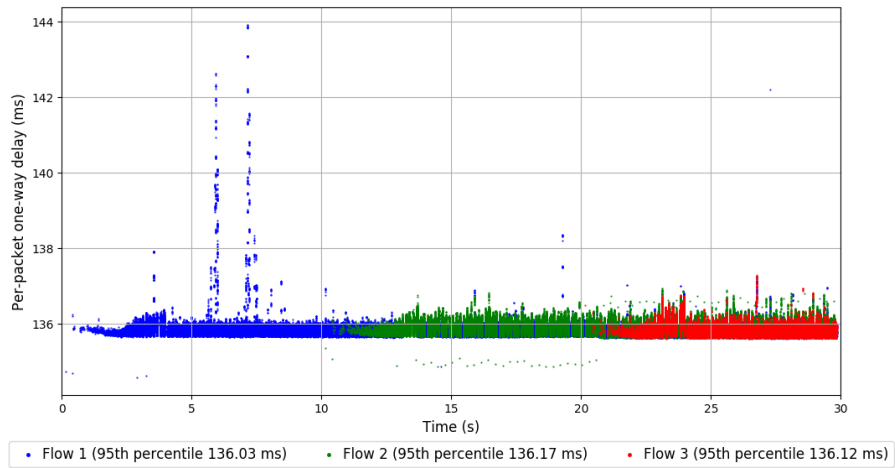
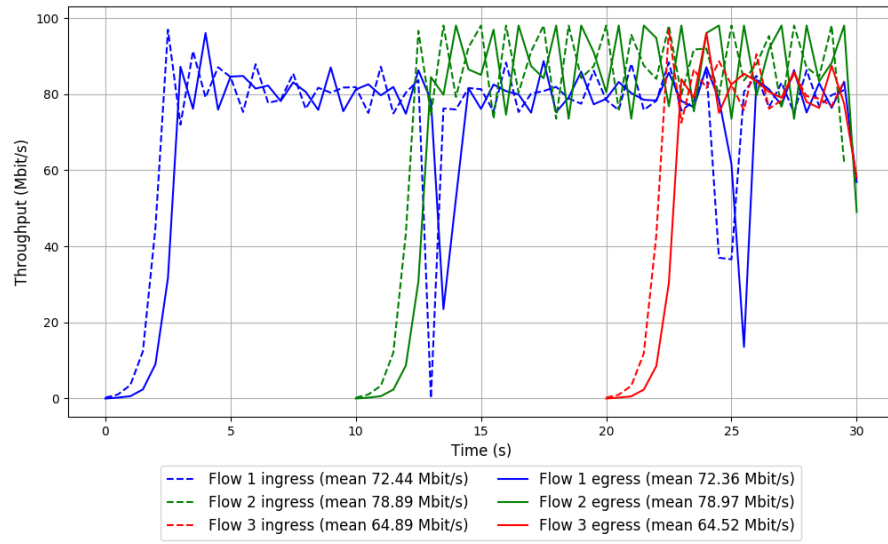
-- Flow 3:

Average throughput: 64.52 Mbit/s

95th percentile per-packet one-way delay: 136.123 ms

Loss rate: 3.30%

# Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2018-06-19 22:26:45

End at: 2018-06-19 22:27:15

Local clock offset: -0.031 ms

Remote clock offset: 0.445 ms

# Below is generated by plot.py at 2018-06-20 02:44:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 291.05 Mbit/s

95th percentile per-packet one-way delay: 150.048 ms

Loss rate: 1.31%

-- Flow 1:

Average throughput: 169.18 Mbit/s

95th percentile per-packet one-way delay: 146.141 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 123.74 Mbit/s

95th percentile per-packet one-way delay: 153.762 ms

Loss rate: 1.37%

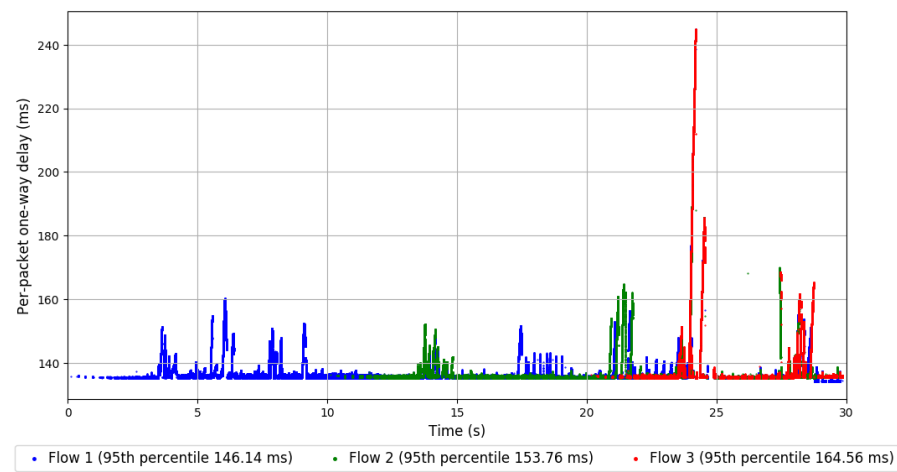
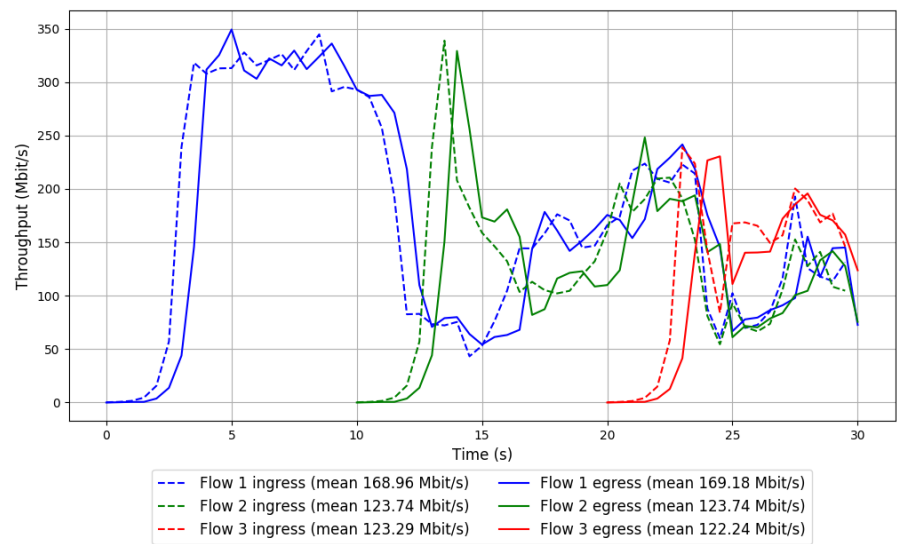
-- Flow 3:

Average throughput: 122.24 Mbit/s

95th percentile per-packet one-way delay: 164.563 ms

Loss rate: 3.57%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-06-19 22:51:44

End at: 2018-06-19 22:52:14

Local clock offset: 0.077 ms

Remote clock offset: 0.089 ms

# Below is generated by plot.py at 2018-06-20 02:46:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 328.94 Mbit/s

95th percentile per-packet one-way delay: 162.891 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 212.84 Mbit/s

95th percentile per-packet one-way delay: 163.107 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 130.31 Mbit/s

95th percentile per-packet one-way delay: 168.749 ms

Loss rate: 1.20%

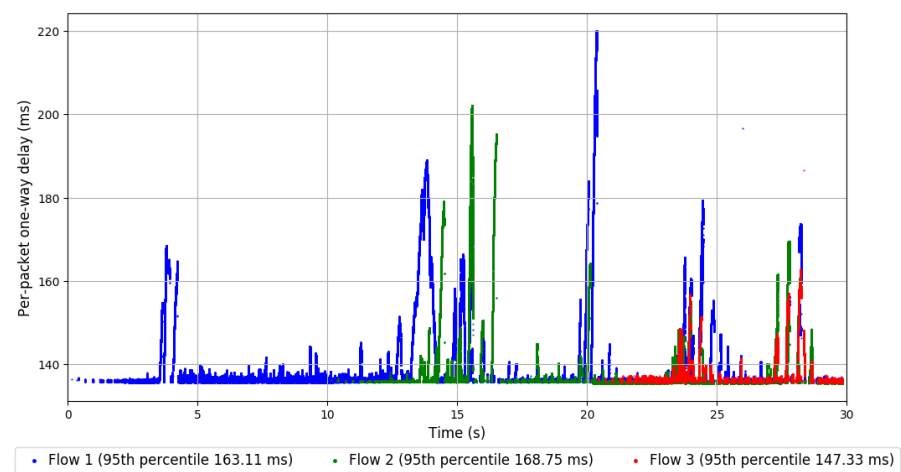
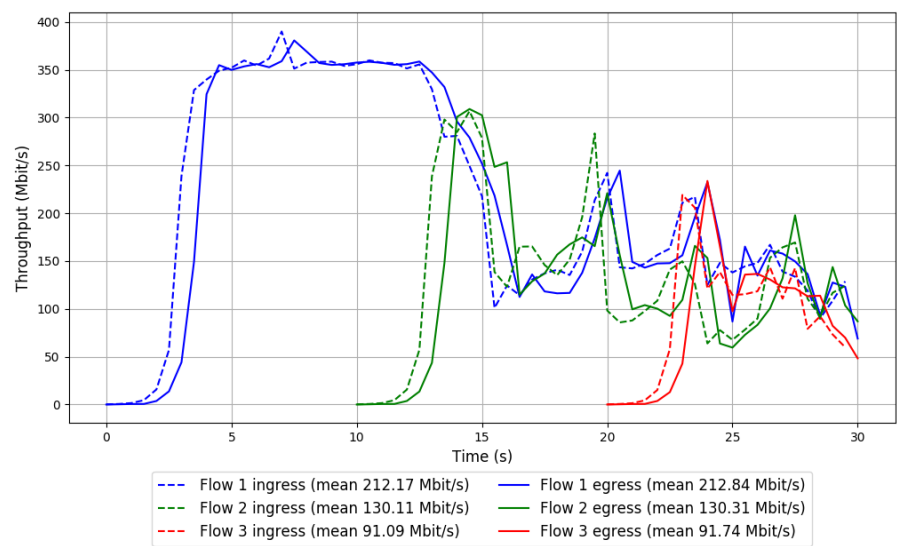
-- Flow 3:

Average throughput: 91.74 Mbit/s

95th percentile per-packet one-way delay: 147.327 ms

Loss rate: 2.04%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-06-19 23:16:55

End at: 2018-06-19 23:17:25

Local clock offset: 0.031 ms

Remote clock offset: 0.032 ms

# Below is generated by plot.py at 2018-06-20 02:46:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 296.50 Mbit/s

95th percentile per-packet one-way delay: 153.631 ms

Loss rate: 1.53%

-- Flow 1:

Average throughput: 201.59 Mbit/s

95th percentile per-packet one-way delay: 156.460 ms

Loss rate: 1.47%

-- Flow 2:

Average throughput: 96.91 Mbit/s

95th percentile per-packet one-way delay: 140.096 ms

Loss rate: 2.31%

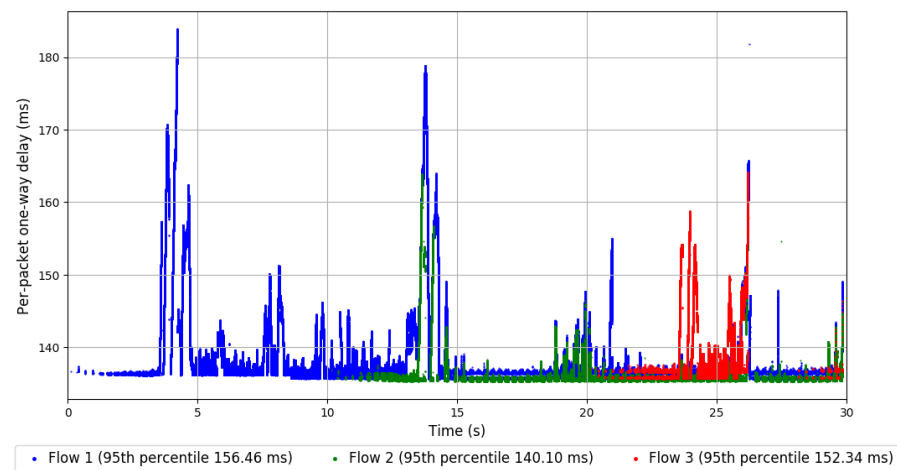
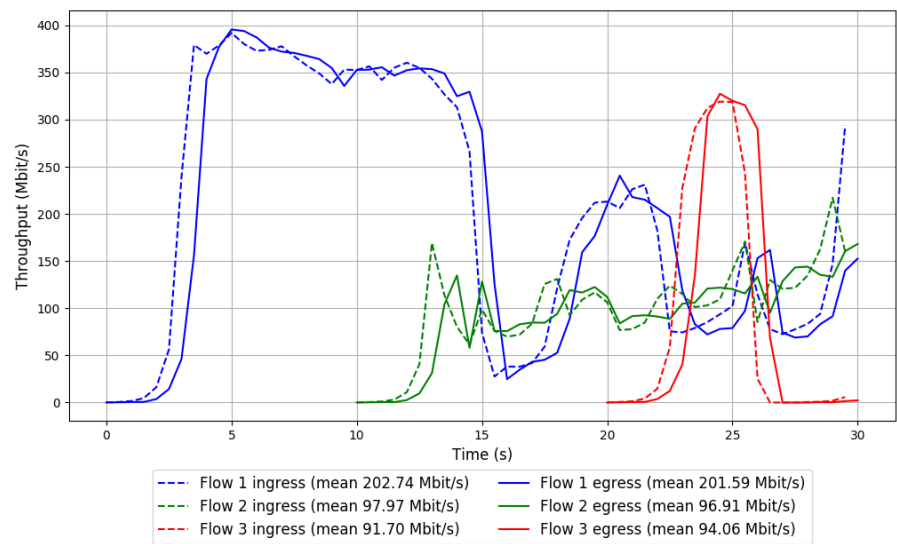
-- Flow 3:

Average throughput: 94.06 Mbit/s

95th percentile per-packet one-way delay: 152.345 ms

Loss rate: 0.24%

Run 3: Report of Copa — Data Link

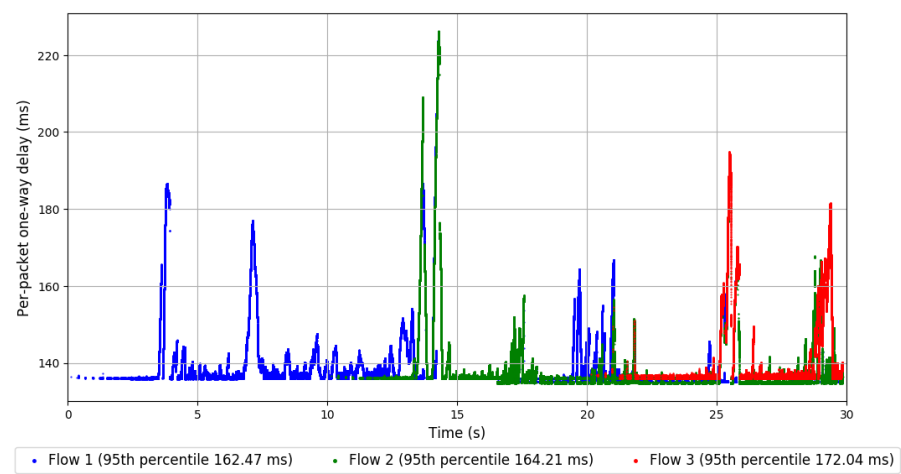
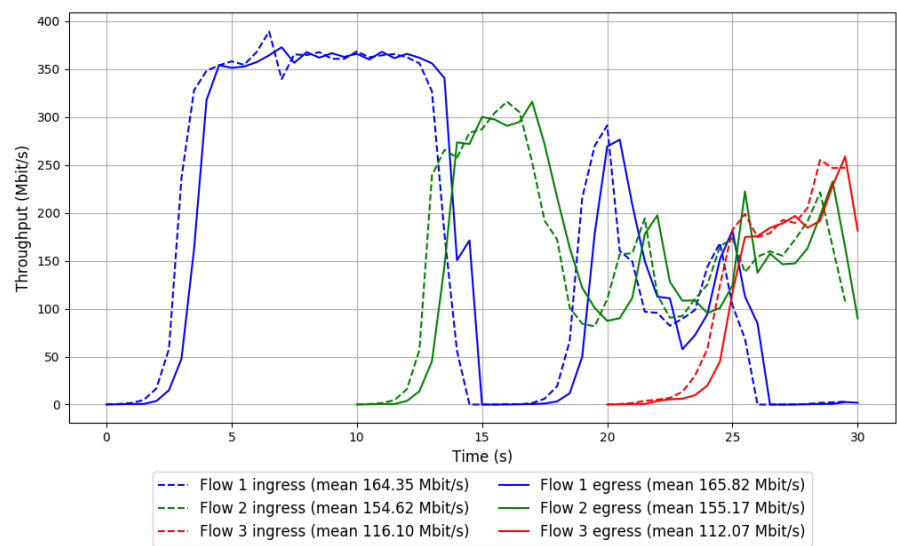


Run 4: Statistics of Copa

Start at: 2018-06-19 23:41:27  
End at: 2018-06-19 23:41:57  
Local clock offset: -0.125 ms  
Remote clock offset: -0.335 ms

# Below is generated by plot.py at 2018-06-20 02:46:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 305.32 Mbit/s  
95th percentile per-packet one-way delay: 164.782 ms  
Loss rate: 1.12%  
-- Flow 1:  
Average throughput: 165.82 Mbit/s  
95th percentile per-packet one-way delay: 162.465 ms  
Loss rate: 0.02%  
-- Flow 2:  
Average throughput: 155.17 Mbit/s  
95th percentile per-packet one-way delay: 164.209 ms  
Loss rate: 1.01%  
-- Flow 3:  
Average throughput: 112.07 Mbit/s  
95th percentile per-packet one-way delay: 172.045 ms  
Loss rate: 6.10%

Run 4: Report of Copa — Data Link

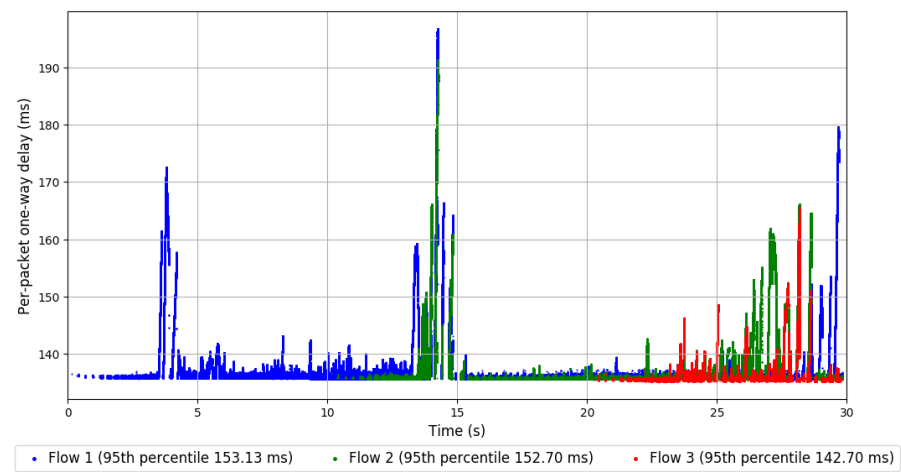
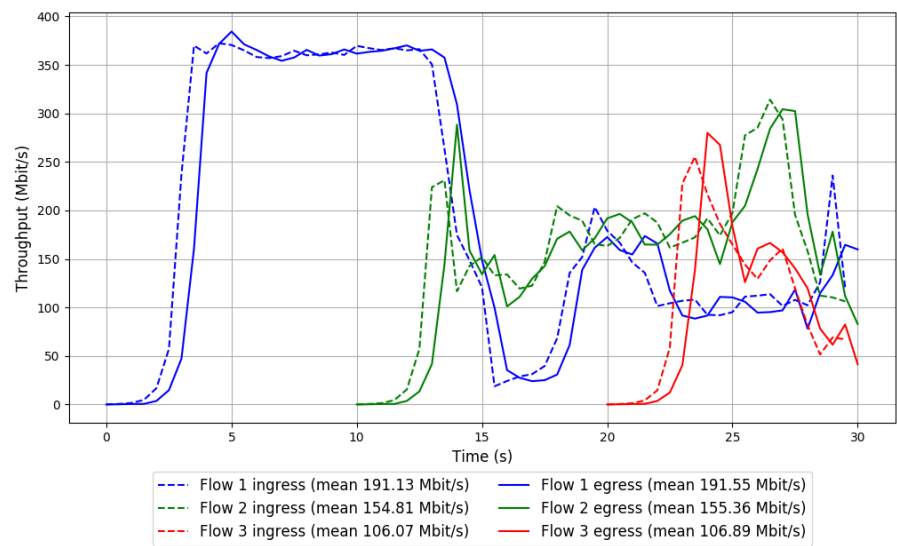


Run 5: Statistics of Copa

Start at: 2018-06-20 00:06:15  
End at: 2018-06-20 00:06:45  
Local clock offset: -0.033 ms  
Remote clock offset: -0.002 ms

# Below is generated by plot.py at 2018-06-20 02:46:14  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 329.25 Mbit/s  
95th percentile per-packet one-way delay: 151.824 ms  
Loss rate: 0.93%  
-- Flow 1:  
Average throughput: 191.55 Mbit/s  
95th percentile per-packet one-way delay: 153.128 ms  
Loss rate: 0.69%  
-- Flow 2:  
Average throughput: 155.36 Mbit/s  
95th percentile per-packet one-way delay: 152.700 ms  
Loss rate: 1.01%  
-- Flow 3:  
Average throughput: 106.89 Mbit/s  
95th percentile per-packet one-way delay: 142.697 ms  
Loss rate: 1.99%

Run 5: Report of Copa — Data Link

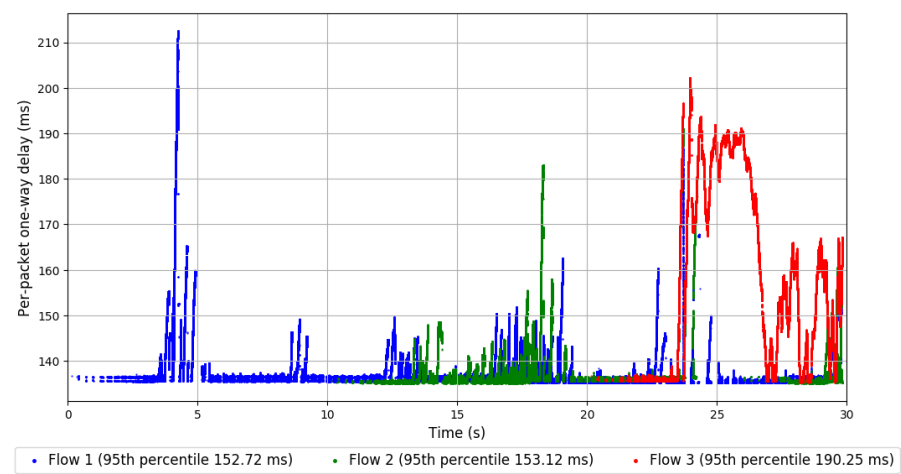
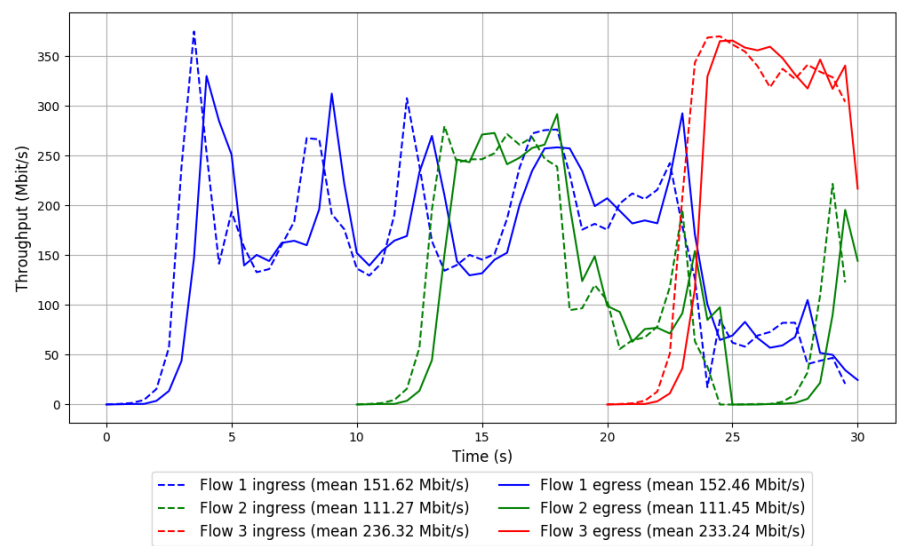


Run 6: Statistics of Copa

Start at: 2018-06-20 00:31:06  
End at: 2018-06-20 00:31:36  
Local clock offset: 0.215 ms  
Remote clock offset: 0.36 ms

# Below is generated by plot.py at 2018-06-20 02:46:14  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 302.34 Mbit/s  
95th percentile per-packet one-way delay: 187.119 ms  
Loss rate: 1.38%  
-- Flow 1:  
Average throughput: 152.46 Mbit/s  
95th percentile per-packet one-way delay: 152.725 ms  
Loss rate: 0.25%  
-- Flow 2:  
Average throughput: 111.45 Mbit/s  
95th percentile per-packet one-way delay: 153.115 ms  
Loss rate: 0.90%  
-- Flow 3:  
Average throughput: 233.24 Mbit/s  
95th percentile per-packet one-way delay: 190.246 ms  
Loss rate: 4.00%

Run 6: Report of Copa — Data Link

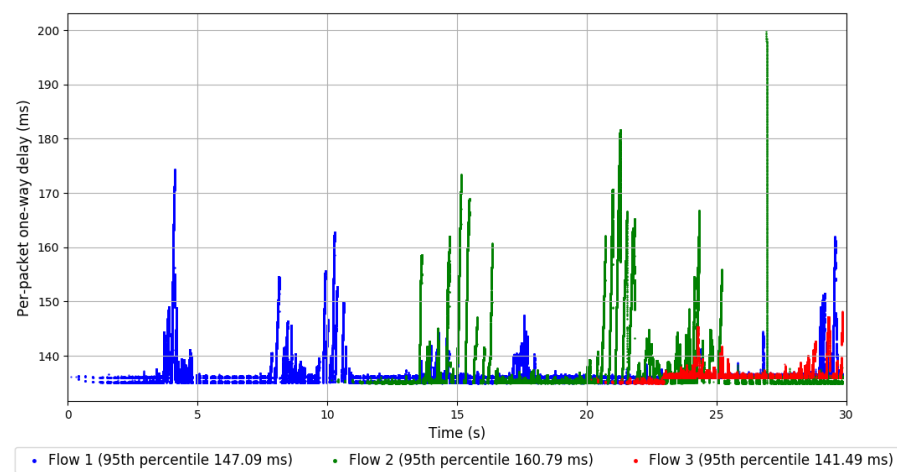
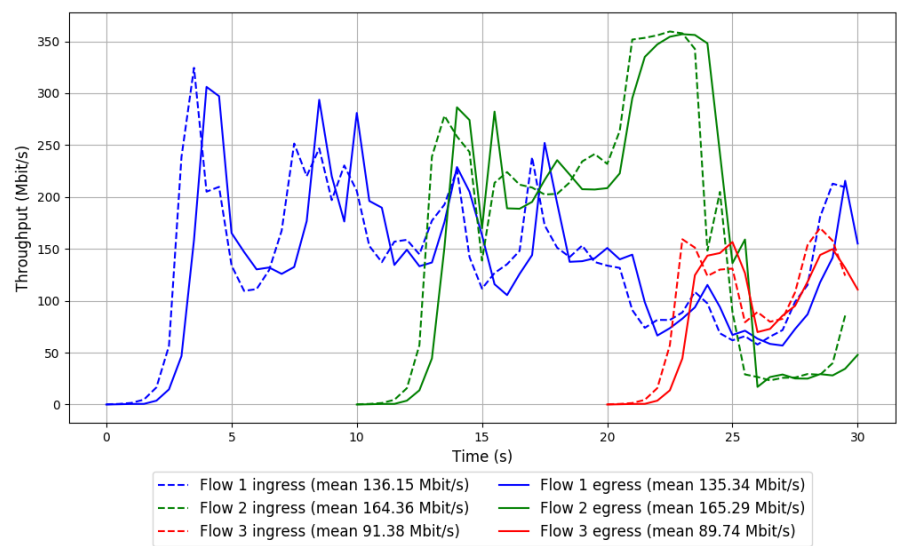


Run 7: Statistics of Copa

Start at: 2018-06-20 00:56:11  
End at: 2018-06-20 00:56:41  
Local clock offset: 0.08 ms  
Remote clock offset: -0.009 ms

# Below is generated by plot.py at 2018-06-20 02:47:05  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 274.21 Mbit/s  
95th percentile per-packet one-way delay: 154.090 ms  
Loss rate: 1.54%  
-- Flow 1:  
Average throughput: 135.34 Mbit/s  
95th percentile per-packet one-way delay: 147.091 ms  
Loss rate: 1.49%  
-- Flow 2:  
Average throughput: 165.29 Mbit/s  
95th percentile per-packet one-way delay: 160.795 ms  
Loss rate: 0.79%  
-- Flow 3:  
Average throughput: 89.74 Mbit/s  
95th percentile per-packet one-way delay: 141.489 ms  
Loss rate: 4.46%

Run 7: Report of Copa — Data Link

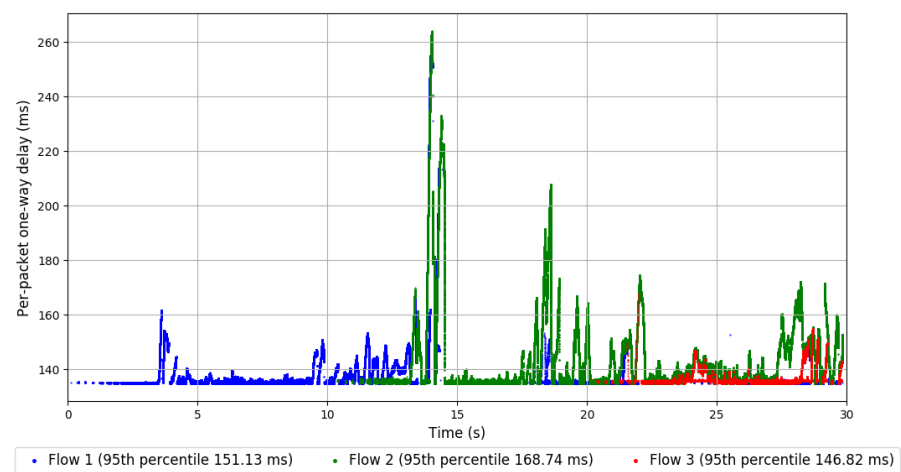
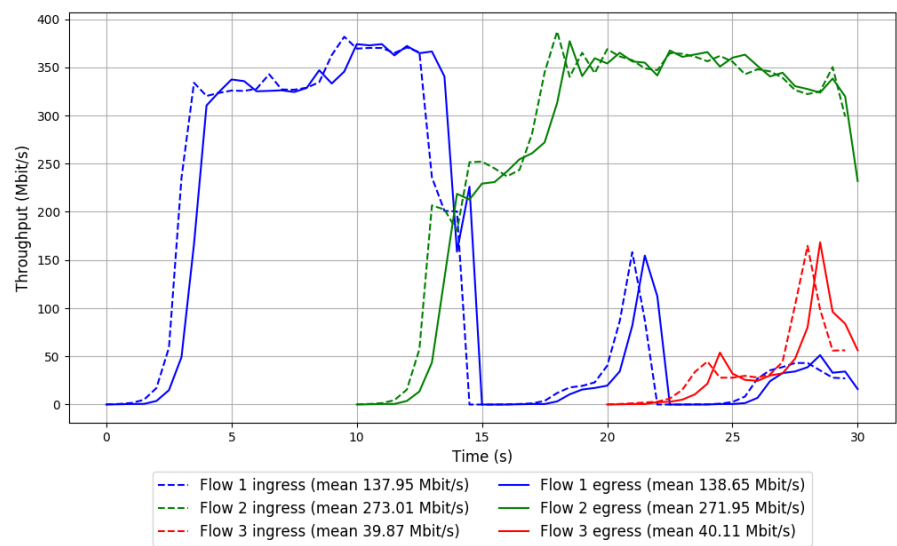


Run 8: Statistics of Copa

Start at: 2018-06-20 01:21:13  
End at: 2018-06-20 01:21:43  
Local clock offset: -0.016 ms  
Remote clock offset: -0.001 ms

# Below is generated by plot.py at 2018-06-20 02:49:06  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 331.98 Mbit/s  
95th percentile per-packet one-way delay: 163.051 ms  
Loss rate: 1.12%  
-- Flow 1:  
Average throughput: 138.65 Mbit/s  
95th percentile per-packet one-way delay: 151.130 ms  
Loss rate: 0.40%  
-- Flow 2:  
Average throughput: 271.95 Mbit/s  
95th percentile per-packet one-way delay: 168.740 ms  
Loss rate: 1.75%  
-- Flow 3:  
Average throughput: 40.11 Mbit/s  
95th percentile per-packet one-way delay: 146.825 ms  
Loss rate: 0.01%

Run 8: Report of Copa — Data Link

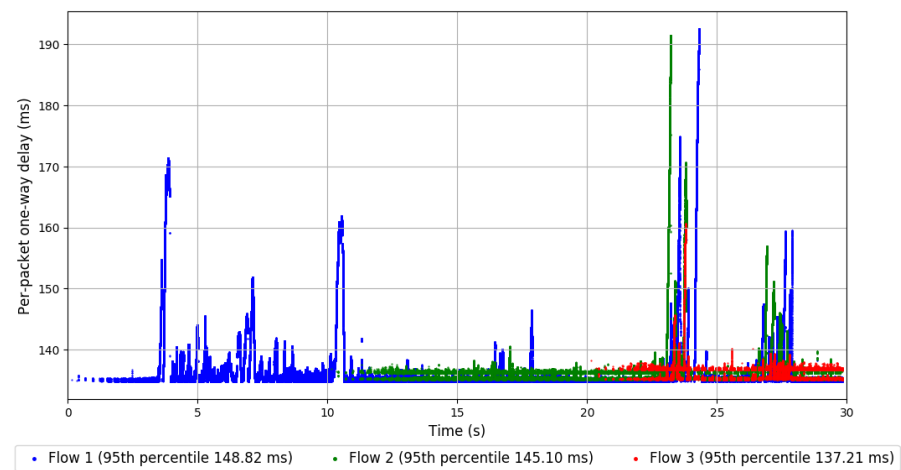
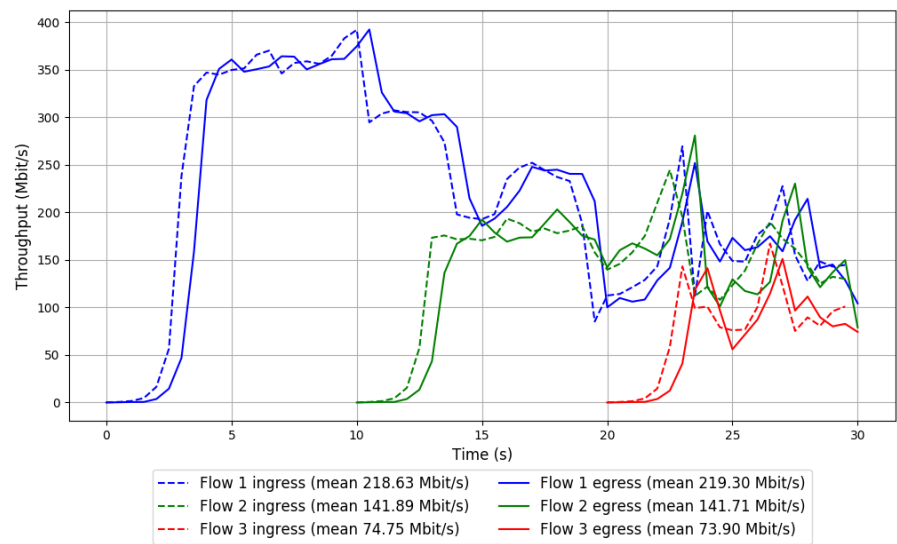


Run 9: Statistics of Copa

Start at: 2018-06-20 01:46:08  
End at: 2018-06-20 01:46:38  
Local clock offset: -0.011 ms  
Remote clock offset: -0.3 ms

# Below is generated by plot.py at 2018-06-20 02:54:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 337.24 Mbit/s  
95th percentile per-packet one-way delay: 146.312 ms  
Loss rate: 1.10%  
-- Flow 1:  
Average throughput: 219.30 Mbit/s  
95th percentile per-packet one-way delay: 148.817 ms  
Loss rate: 0.60%  
-- Flow 2:  
Average throughput: 141.71 Mbit/s  
95th percentile per-packet one-way delay: 145.098 ms  
Loss rate: 1.51%  
-- Flow 3:  
Average throughput: 73.90 Mbit/s  
95th percentile per-packet one-way delay: 137.209 ms  
Loss rate: 3.86%

Run 9: Report of Copa — Data Link

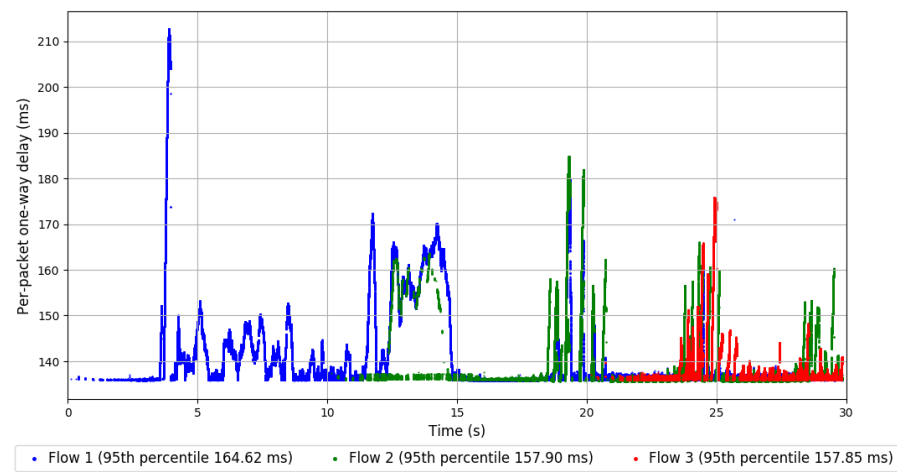
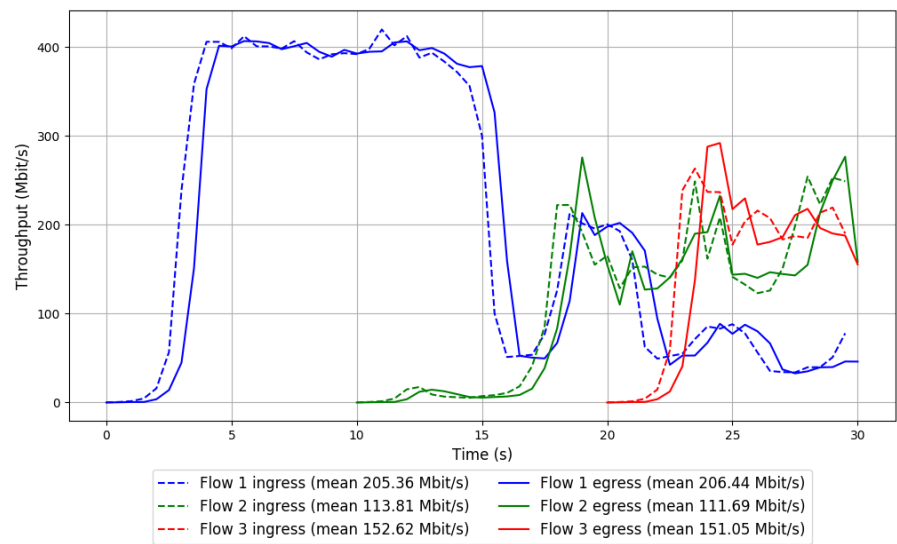


Run 10: Statistics of Copa

Start at: 2018-06-20 02:11:05  
End at: 2018-06-20 02:11:35  
Local clock offset: -0.164 ms  
Remote clock offset: -0.288 ms

# Below is generated by plot.py at 2018-06-20 02:54:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 329.76 Mbit/s  
95th percentile per-packet one-way delay: 163.828 ms  
Loss rate: 1.54%  
-- Flow 1:  
Average throughput: 206.44 Mbit/s  
95th percentile per-packet one-way delay: 164.615 ms  
Loss rate: 0.38%  
-- Flow 2:  
Average throughput: 111.69 Mbit/s  
95th percentile per-packet one-way delay: 157.904 ms  
Loss rate: 3.20%  
-- Flow 3:  
Average throughput: 151.05 Mbit/s  
95th percentile per-packet one-way delay: 157.854 ms  
Loss rate: 3.74%

Run 10: Report of Copa — Data Link

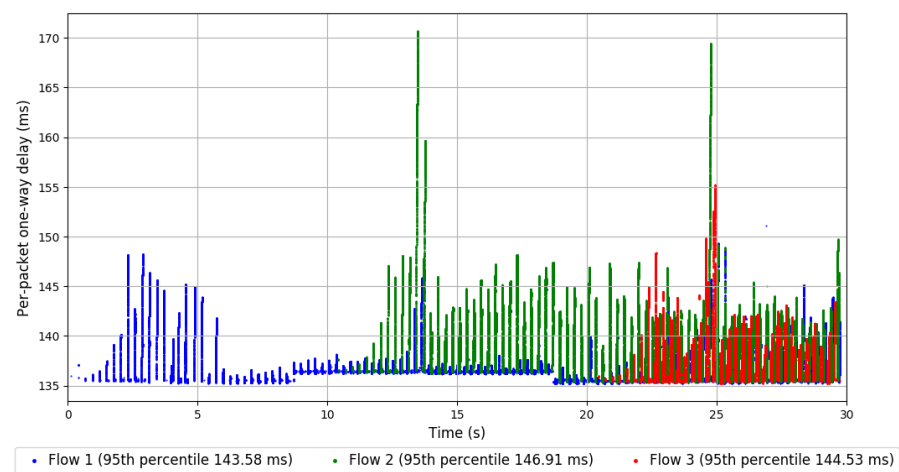
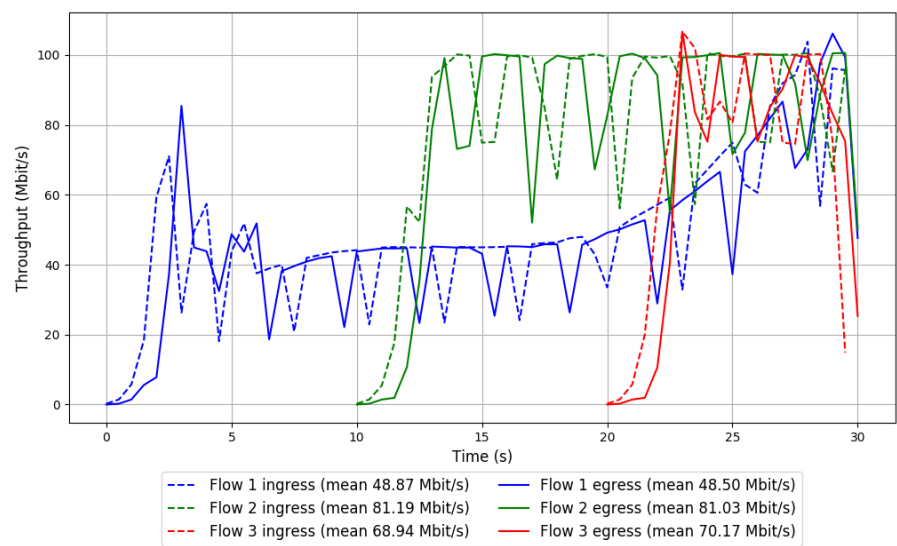


Run 1: Statistics of TCP Cubic

Start at: 2018-06-19 22:12:25  
End at: 2018-06-19 22:12:55  
Local clock offset: 0.004 ms  
Remote clock offset: -0.355 ms

# Below is generated by plot.py at 2018-06-20 02:54:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 124.69 Mbit/s  
95th percentile per-packet one-way delay: 145.625 ms  
Loss rate: 1.50%  
-- Flow 1:  
Average throughput: 48.50 Mbit/s  
95th percentile per-packet one-way delay: 143.584 ms  
Loss rate: 1.64%  
-- Flow 2:  
Average throughput: 81.03 Mbit/s  
95th percentile per-packet one-way delay: 146.909 ms  
Loss rate: 1.54%  
-- Flow 3:  
Average throughput: 70.17 Mbit/s  
95th percentile per-packet one-way delay: 144.525 ms  
Loss rate: 1.09%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-06-19 22:37:26

End at: 2018-06-19 22:37:56

Local clock offset: -0.079 ms

Remote clock offset: 0.437 ms

# Below is generated by plot.py at 2018-06-20 02:54:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 106.07 Mbit/s

95th percentile per-packet one-way delay: 145.590 ms

Loss rate: 1.85%

-- Flow 1:

Average throughput: 84.02 Mbit/s

95th percentile per-packet one-way delay: 145.833 ms

Loss rate: 0.99%

-- Flow 2:

Average throughput: 13.51 Mbit/s

95th percentile per-packet one-way delay: 143.549 ms

Loss rate: 6.66%

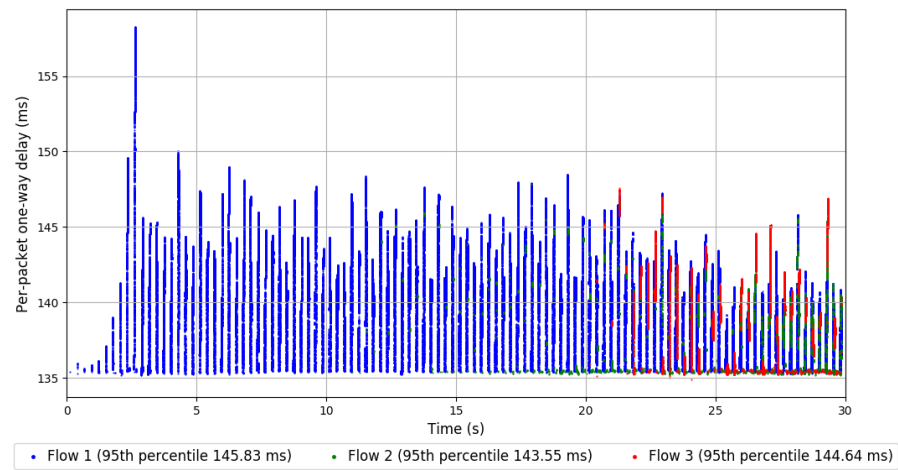
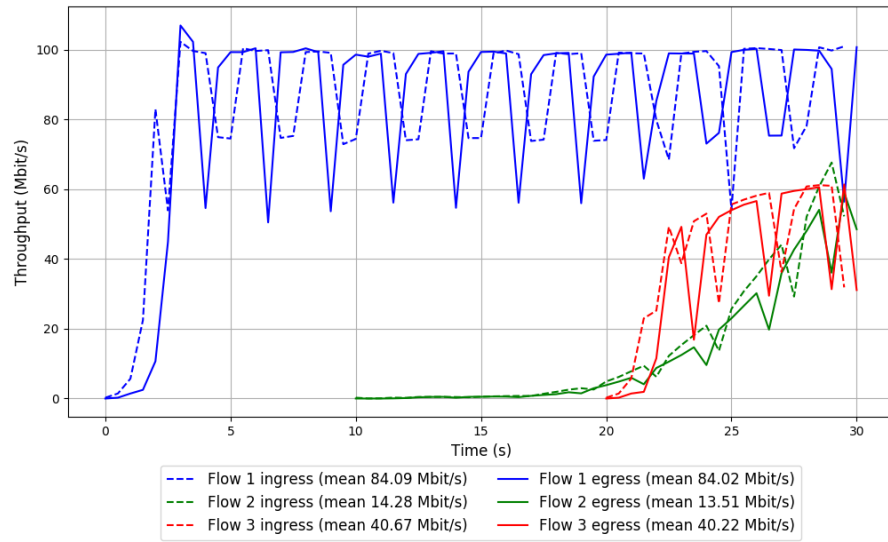
-- Flow 3:

Average throughput: 40.22 Mbit/s

95th percentile per-packet one-way delay: 144.637 ms

Loss rate: 3.81%

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



Run 3: Statistics of TCP Cubic

Start at: 2018-06-19 23:02:37

End at: 2018-06-19 23:03:07

Local clock offset: 0.155 ms

Remote clock offset: 0.11 ms

# Below is generated by plot.py at 2018-06-20 02:54:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 129.96 Mbit/s

95th percentile per-packet one-way delay: 146.642 ms

Loss rate: 1.41%

-- Flow 1:

Average throughput: 83.93 Mbit/s

95th percentile per-packet one-way delay: 146.168 ms

Loss rate: 0.99%

-- Flow 2:

Average throughput: 53.19 Mbit/s

95th percentile per-packet one-way delay: 148.913 ms

Loss rate: 1.77%

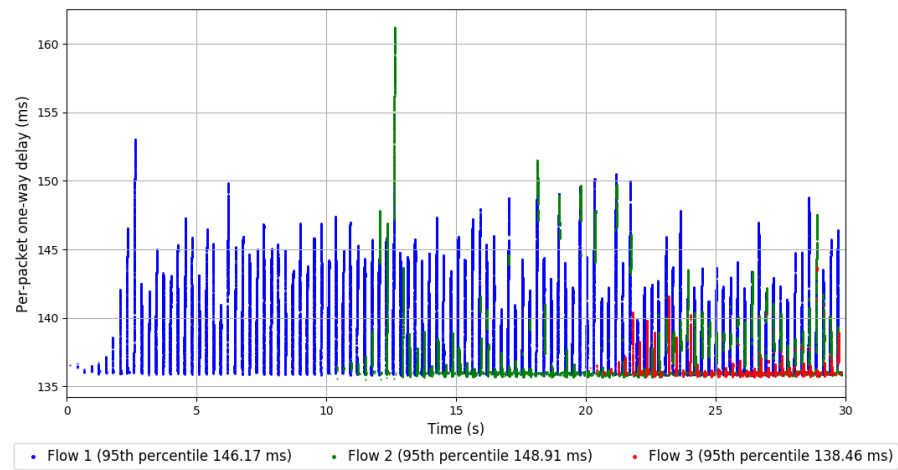
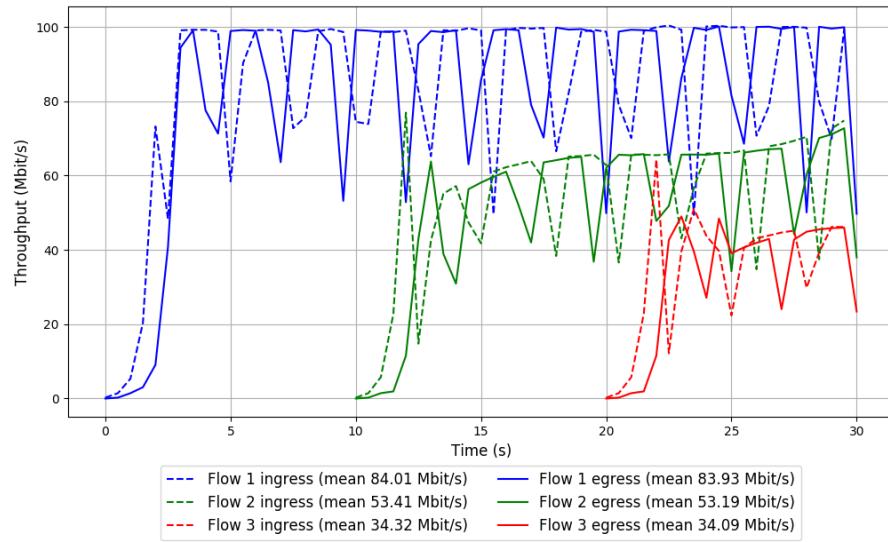
-- Flow 3:

Average throughput: 34.09 Mbit/s

95th percentile per-packet one-way delay: 138.460 ms

Loss rate: 3.40%

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



Run 4: Statistics of TCP Cubic

Start at: 2018-06-19 23:27:15

End at: 2018-06-19 23:27:45

Local clock offset: 0.02 ms

Remote clock offset: 0.039 ms

# Below is generated by plot.py at 2018-06-20 02:54:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 89.97 Mbit/s

95th percentile per-packet one-way delay: 141.349 ms

Loss rate: 1.92%

-- Flow 1:

Average throughput: 48.77 Mbit/s

95th percentile per-packet one-way delay: 141.827 ms

Loss rate: 1.64%

-- Flow 2:

Average throughput: 44.63 Mbit/s

95th percentile per-packet one-way delay: 141.051 ms

Loss rate: 1.66%

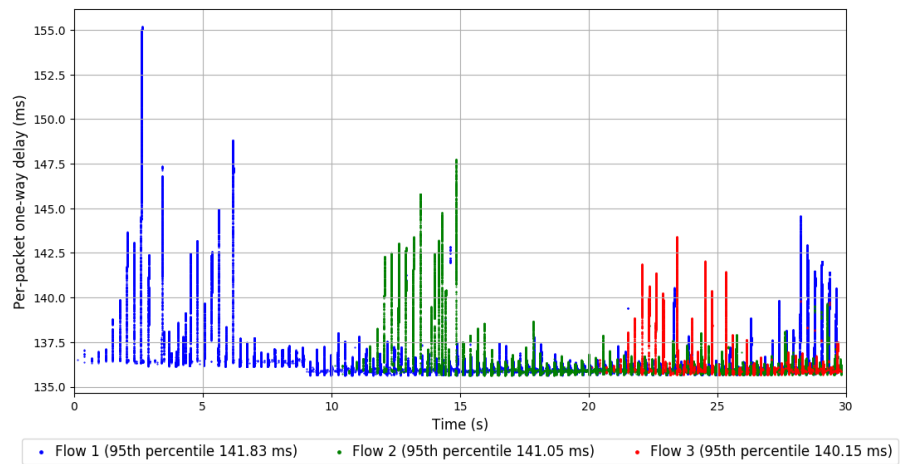
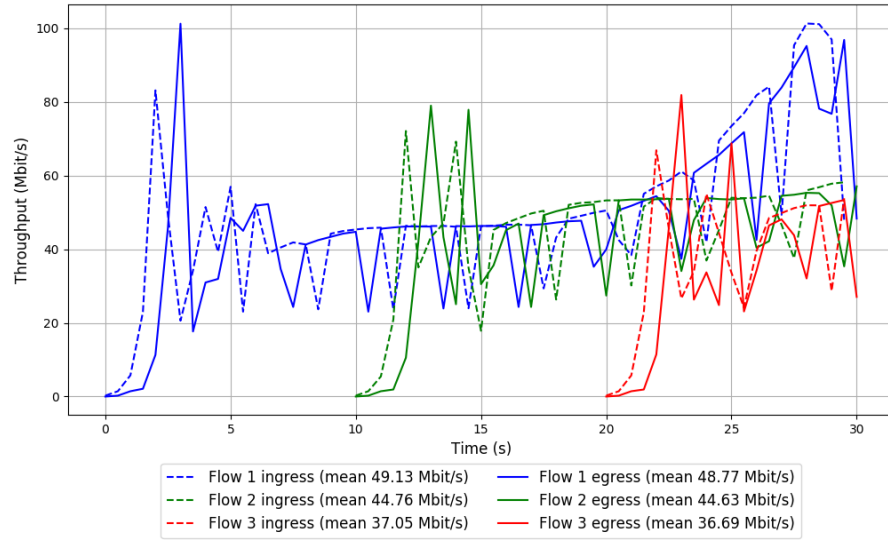
-- Flow 3:

Average throughput: 36.69 Mbit/s

95th percentile per-packet one-way delay: 140.149 ms

Loss rate: 3.69%

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



Run 5: Statistics of TCP Cubic

Start at: 2018-06-19 23:52:01

End at: 2018-06-19 23:52:31

Local clock offset: 0.015 ms

Remote clock offset: 0.029 ms

# Below is generated by plot.py at 2018-06-20 02:54:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 98.37 Mbit/s

95th percentile per-packet one-way delay: 141.996 ms

Loss rate: 1.86%

-- Flow 1:

Average throughput: 53.37 Mbit/s

95th percentile per-packet one-way delay: 142.201 ms

Loss rate: 1.50%

-- Flow 2:

Average throughput: 47.30 Mbit/s

95th percentile per-packet one-way delay: 142.629 ms

Loss rate: 1.67%

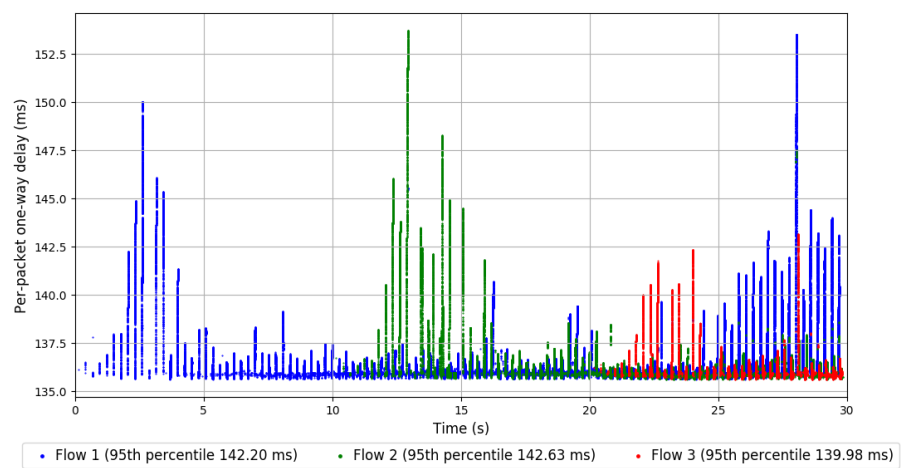
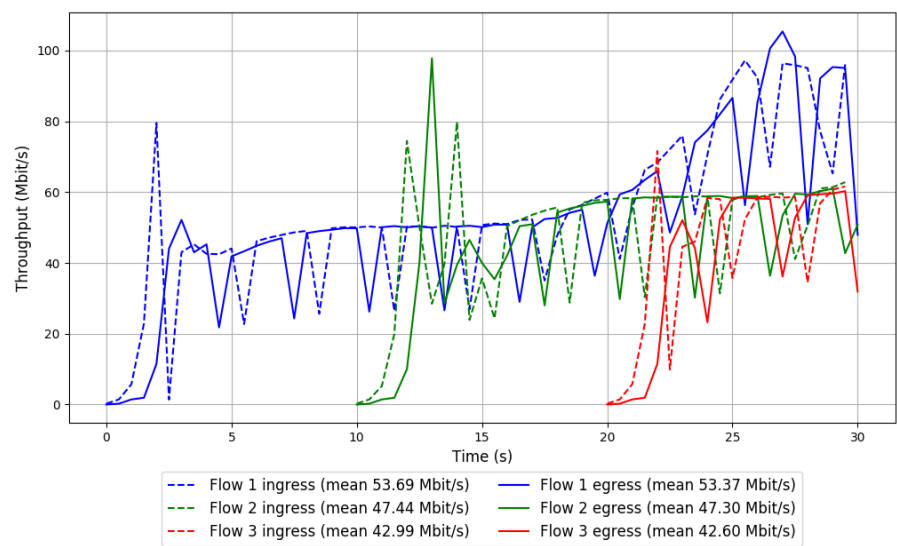
-- Flow 3:

Average throughput: 42.60 Mbit/s

95th percentile per-packet one-way delay: 139.977 ms

Loss rate: 3.63%

Run 5: Report of TCP Cubic — Data Link

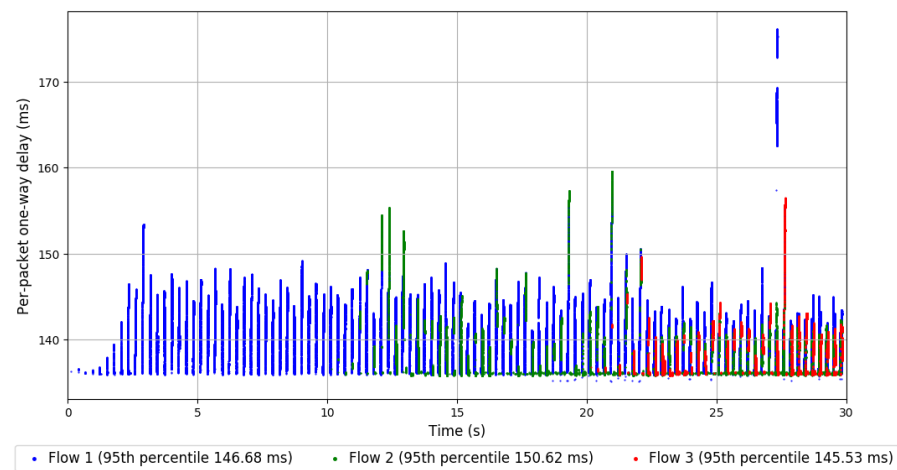
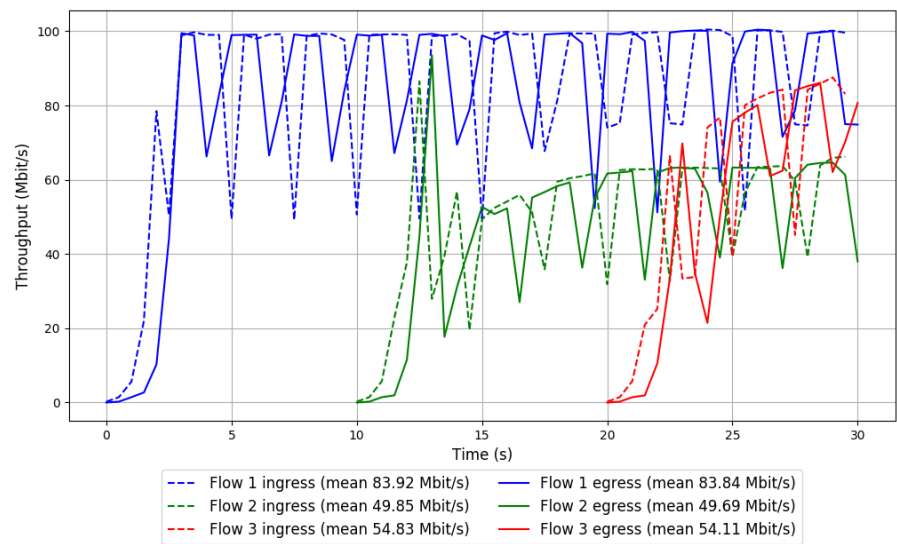


Run 6: Statistics of TCP Cubic

Start at: 2018-06-20 00:16:56  
End at: 2018-06-20 00:17:26  
Local clock offset: 0.182 ms  
Remote clock offset: -0.001 ms

# Below is generated by plot.py at 2018-06-20 02:54:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 134.33 Mbit/s  
95th percentile per-packet one-way delay: 147.169 ms  
Loss rate: 1.57%  
-- Flow 1:  
Average throughput: 83.84 Mbit/s  
95th percentile per-packet one-way delay: 146.679 ms  
Loss rate: 0.99%  
-- Flow 2:  
Average throughput: 49.69 Mbit/s  
95th percentile per-packet one-way delay: 150.620 ms  
Loss rate: 1.69%  
-- Flow 3:  
Average throughput: 54.11 Mbit/s  
95th percentile per-packet one-way delay: 145.533 ms  
Loss rate: 4.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-06-20 00:41:47

End at: 2018-06-20 00:42:17

Local clock offset: -0.07 ms

Remote clock offset: 0.012 ms

# Below is generated by plot.py at 2018-06-20 02:54:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 85.32 Mbit/s

95th percentile per-packet one-way delay: 145.283 ms

Loss rate: 1.97%

-- Flow 1:

Average throughput: 62.77 Mbit/s

95th percentile per-packet one-way delay: 145.859 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 16.23 Mbit/s

95th percentile per-packet one-way delay: 137.930 ms

Loss rate: 6.30%

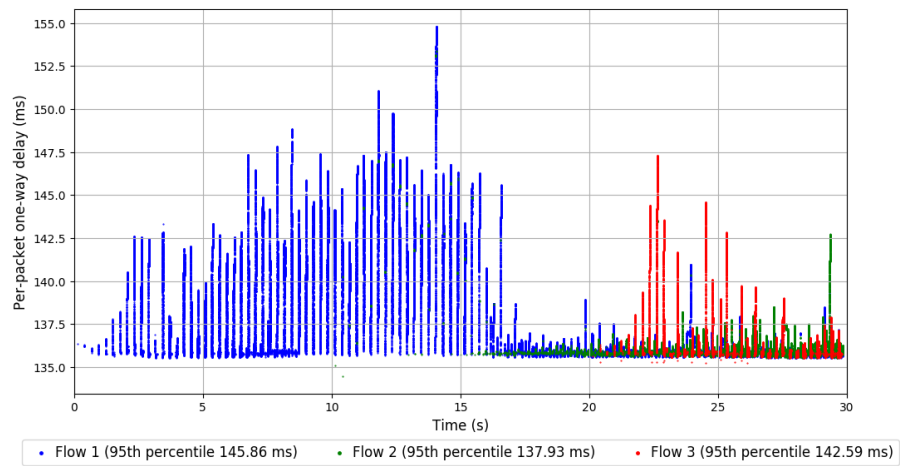
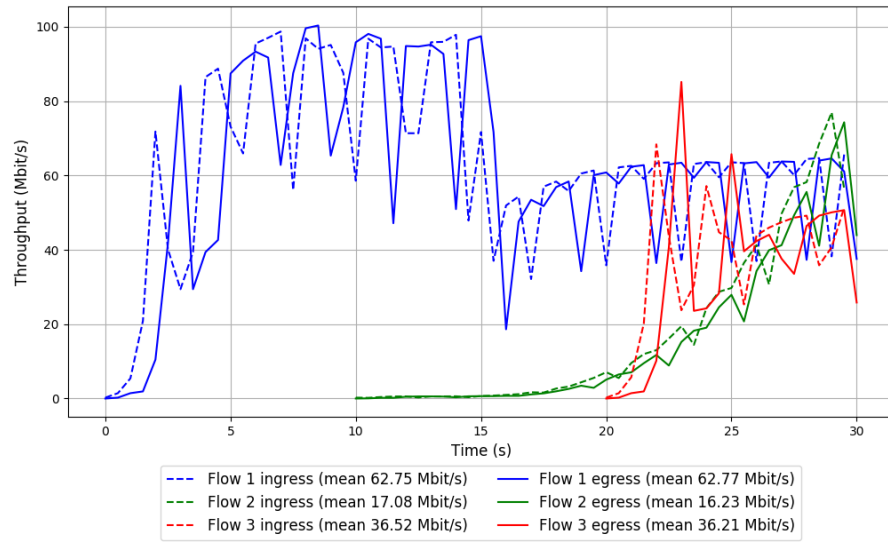
-- Flow 3:

Average throughput: 36.21 Mbit/s

95th percentile per-packet one-way delay: 142.585 ms

Loss rate: 3.55%

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



Run 8: Statistics of TCP Cubic

Start at: 2018-06-20 01:06:54

End at: 2018-06-20 01:07:24

Local clock offset: 0.139 ms

Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2018-06-20 02:54:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 136.67 Mbit/s

95th percentile per-packet one-way delay: 143.352 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 82.80 Mbit/s

95th percentile per-packet one-way delay: 143.214 ms

Loss rate: 0.99%

-- Flow 2:

Average throughput: 81.65 Mbit/s

95th percentile per-packet one-way delay: 143.694 ms

Loss rate: 1.53%

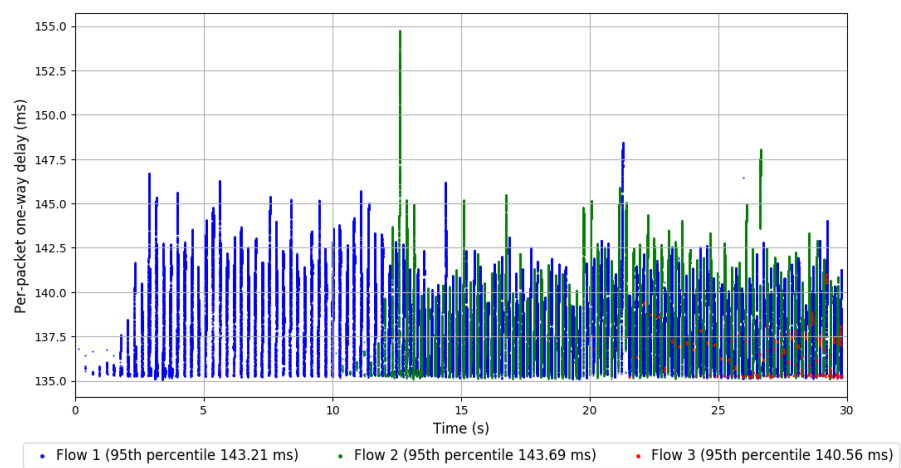
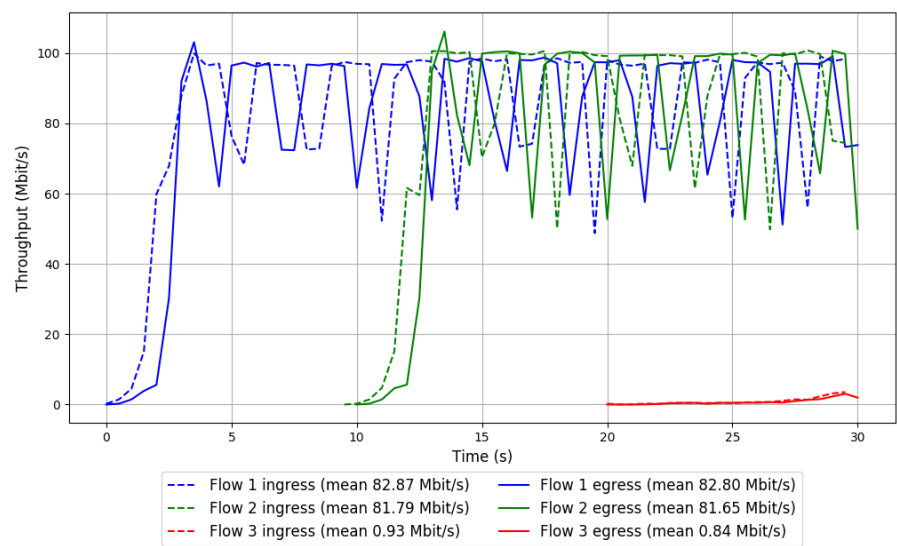
-- Flow 3:

Average throughput: 0.84 Mbit/s

95th percentile per-packet one-way delay: 140.557 ms

Loss rate: 12.68%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-06-20 01:32:05

End at: 2018-06-20 01:32:35

Local clock offset: -0.096 ms

Remote clock offset: 0.045 ms

# Below is generated by plot.py at 2018-06-20 02:54:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 112.57 Mbit/s

95th percentile per-packet one-way delay: 139.932 ms

Loss rate: 1.68%

-- Flow 1:

Average throughput: 47.29 Mbit/s

95th percentile per-packet one-way delay: 139.375 ms

Loss rate: 1.10%

-- Flow 2:

Average throughput: 72.79 Mbit/s

95th percentile per-packet one-way delay: 141.321 ms

Loss rate: 1.43%

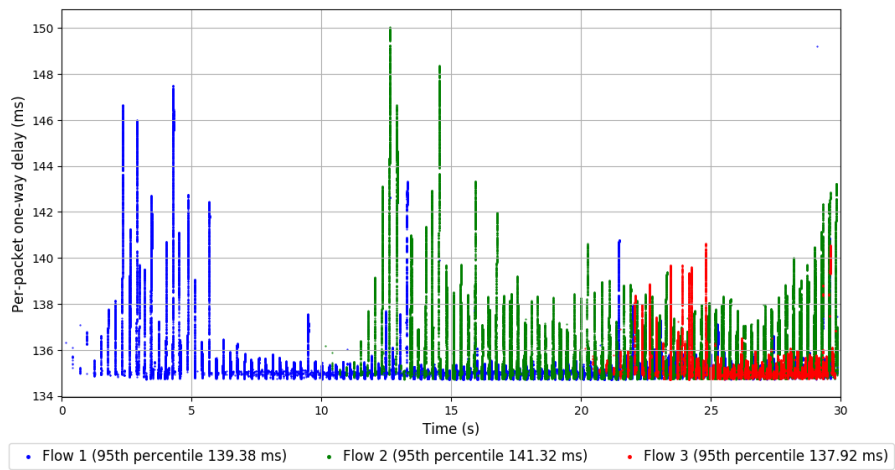
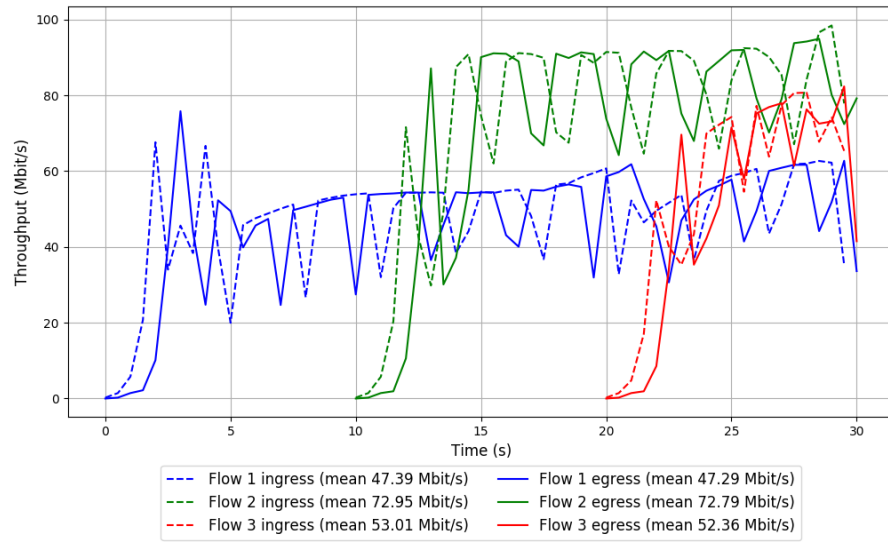
-- Flow 3:

Average throughput: 52.36 Mbit/s

95th percentile per-packet one-way delay: 137.920 ms

Loss rate: 3.94%

# Run 9: Report of TCP Cubic — Data Link

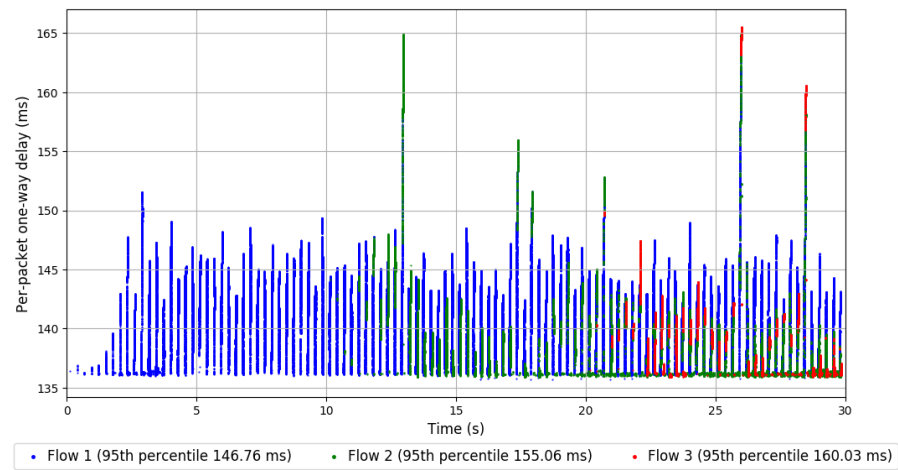
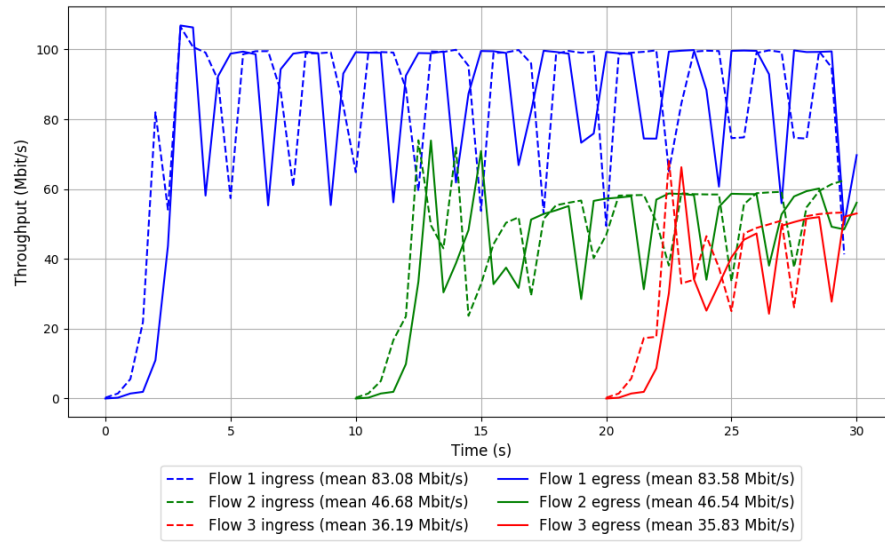


Run 10: Statistics of TCP Cubic

Start at: 2018-06-20 01:56:48  
End at: 2018-06-20 01:57:18  
Local clock offset: -0.084 ms  
Remote clock offset: -0.318 ms

# Below is generated by plot.py at 2018-06-20 02:54:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 125.98 Mbit/s  
95th percentile per-packet one-way delay: 147.423 ms  
Loss rate: 0.99%  
-- Flow 1:  
Average throughput: 83.58 Mbit/s  
95th percentile per-packet one-way delay: 146.762 ms  
Loss rate: 0.33%  
-- Flow 2:  
Average throughput: 46.54 Mbit/s  
95th percentile per-packet one-way delay: 155.060 ms  
Loss rate: 1.69%  
-- Flow 3:  
Average throughput: 35.83 Mbit/s  
95th percentile per-packet one-way delay: 160.035 ms  
Loss rate: 3.71%

# Run 10: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2018-06-19 22:23:09

End at: 2018-06-19 22:23:39

Local clock offset: 0.105 ms

Remote clock offset: 0.047 ms

# Below is generated by plot.py at 2018-06-20 03:12:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1180.12 Mbit/s

95th percentile per-packet one-way delay: 214.903 ms

Loss rate: 4.77%

-- Flow 1:

Average throughput: 657.29 Mbit/s

95th percentile per-packet one-way delay: 212.177 ms

Loss rate: 4.55%

-- Flow 2:

Average throughput: 568.03 Mbit/s

95th percentile per-packet one-way delay: 222.600 ms

Loss rate: 5.00%

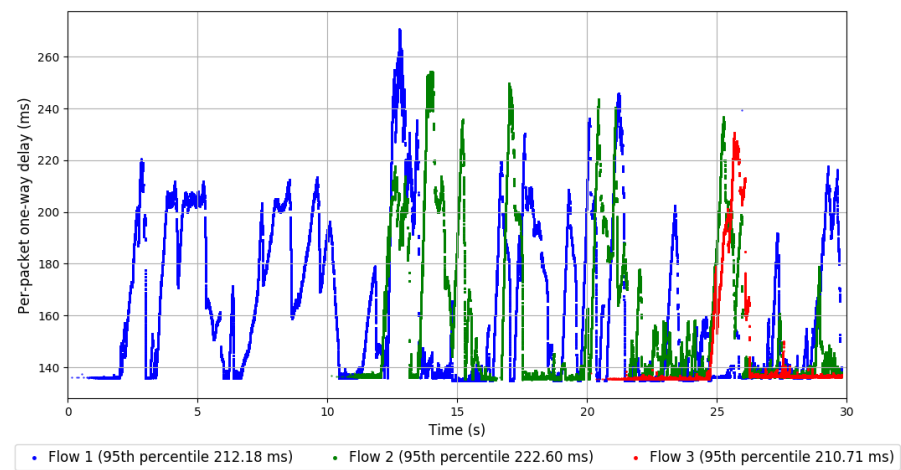
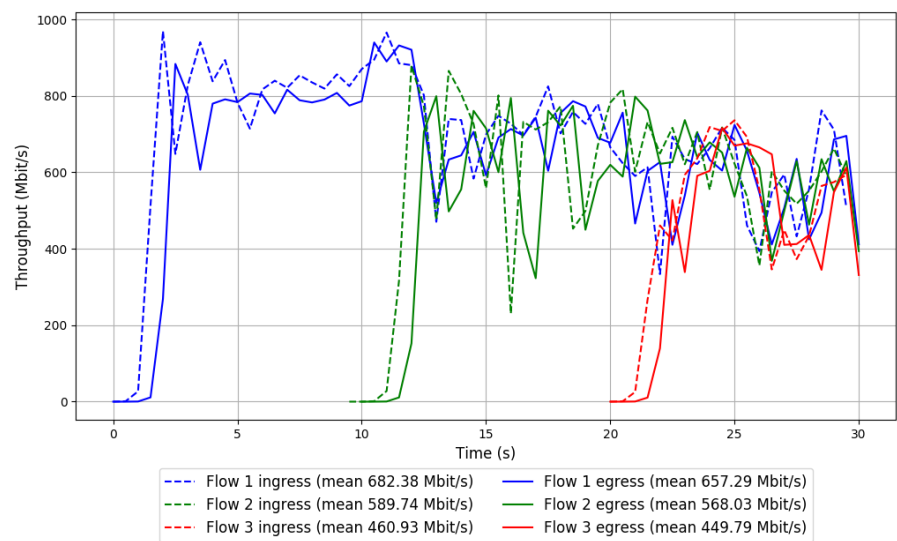
-- Flow 3:

Average throughput: 449.79 Mbit/s

95th percentile per-packet one-way delay: 210.712 ms

Loss rate: 5.12%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-06-19 22:48:06

End at: 2018-06-19 22:48:36

Local clock offset: 0.026 ms

Remote clock offset: 0.072 ms

# Below is generated by plot.py at 2018-06-20 03:13:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1221.34 Mbit/s

95th percentile per-packet one-way delay: 239.985 ms

Loss rate: 3.26%

-- Flow 1:

Average throughput: 687.07 Mbit/s

95th percentile per-packet one-way delay: 237.834 ms

Loss rate: 2.69%

-- Flow 2:

Average throughput: 580.75 Mbit/s

95th percentile per-packet one-way delay: 234.130 ms

Loss rate: 3.55%

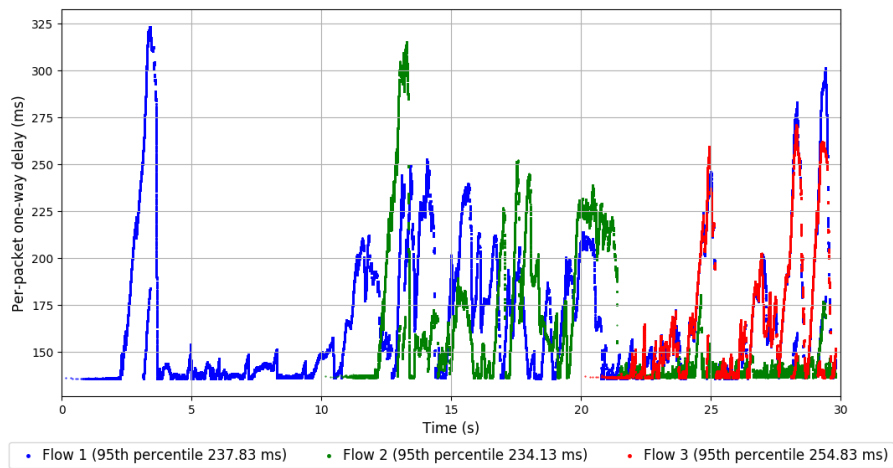
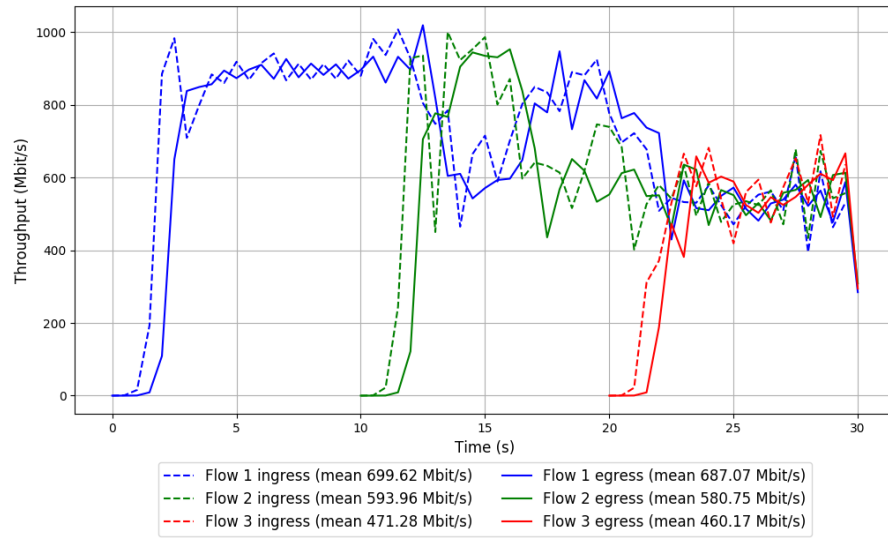
-- Flow 3:

Average throughput: 460.17 Mbit/s

95th percentile per-packet one-way delay: 254.832 ms

Loss rate: 5.07%

## Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-06-19 23:13:15

End at: 2018-06-19 23:13:45

Local clock offset: -0.036 ms

Remote clock offset: 0.039 ms

# Below is generated by plot.py at 2018-06-20 03:15:45

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1298.44 Mbit/s

95th percentile per-packet one-way delay: 209.033 ms

Loss rate: 1.92%

-- Flow 1:

Average throughput: 714.16 Mbit/s

95th percentile per-packet one-way delay: 204.923 ms

Loss rate: 1.23%

-- Flow 2:

Average throughput: 648.54 Mbit/s

95th percentile per-packet one-way delay: 217.817 ms

Loss rate: 2.51%

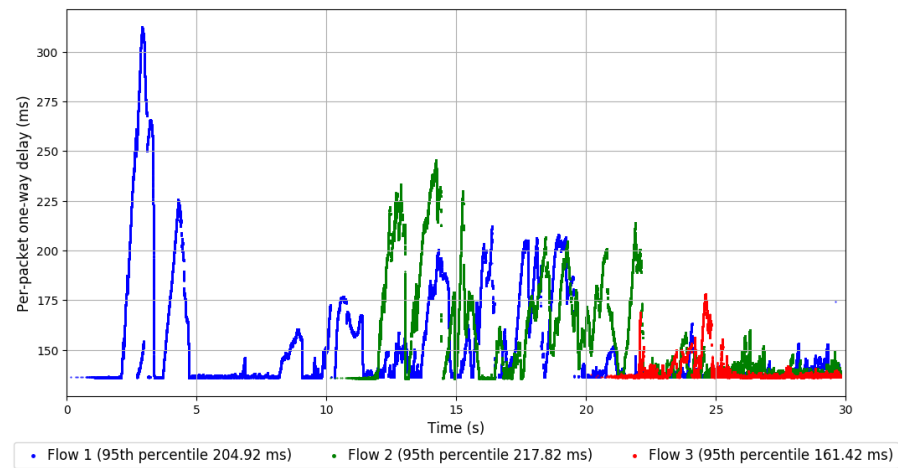
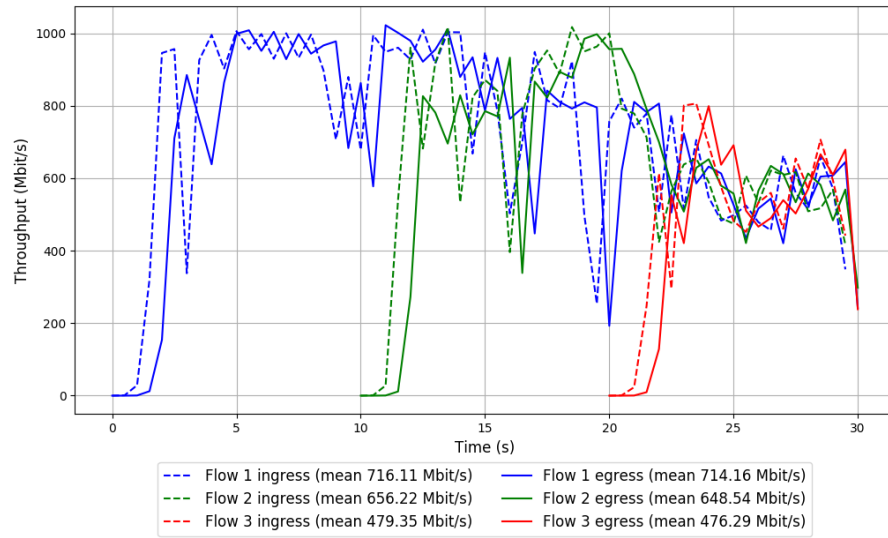
-- Flow 3:

Average throughput: 476.29 Mbit/s

95th percentile per-packet one-way delay: 161.420 ms

Loss rate: 3.37%

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



Run 4: Statistics of FillP

Start at: 2018-06-19 23:37:57

End at: 2018-06-19 23:38:27

Local clock offset: 0.142 ms

Remote clock offset: 0.438 ms

# Below is generated by plot.py at 2018-06-20 03:15:45

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1048.77 Mbit/s

95th percentile per-packet one-way delay: 327.628 ms

Loss rate: 3.03%

-- Flow 1:

Average throughput: 631.15 Mbit/s

95th percentile per-packet one-way delay: 349.160 ms

Loss rate: 3.02%

-- Flow 2:

Average throughput: 383.48 Mbit/s

95th percentile per-packet one-way delay: 287.697 ms

Loss rate: 2.16%

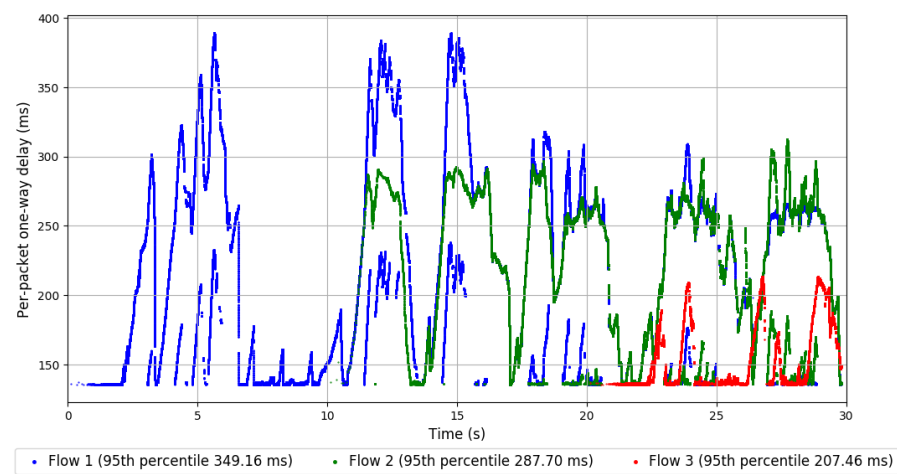
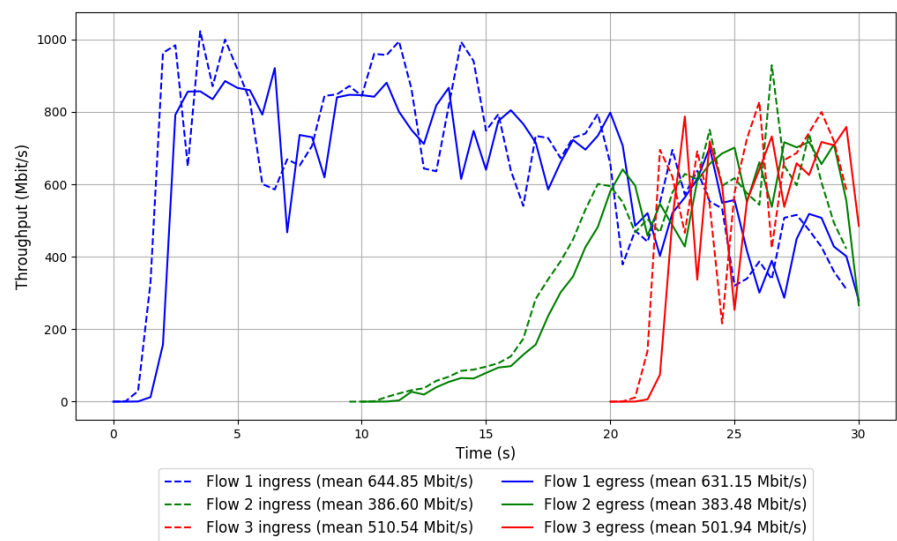
-- Flow 3:

Average throughput: 501.94 Mbit/s

95th percentile per-packet one-way delay: 207.456 ms

Loss rate: 4.39%

Run 4: Report of FillP — Data Link

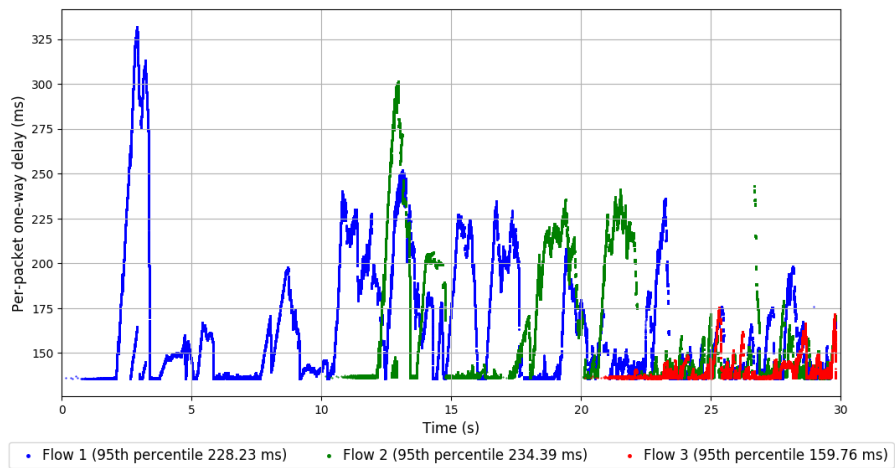
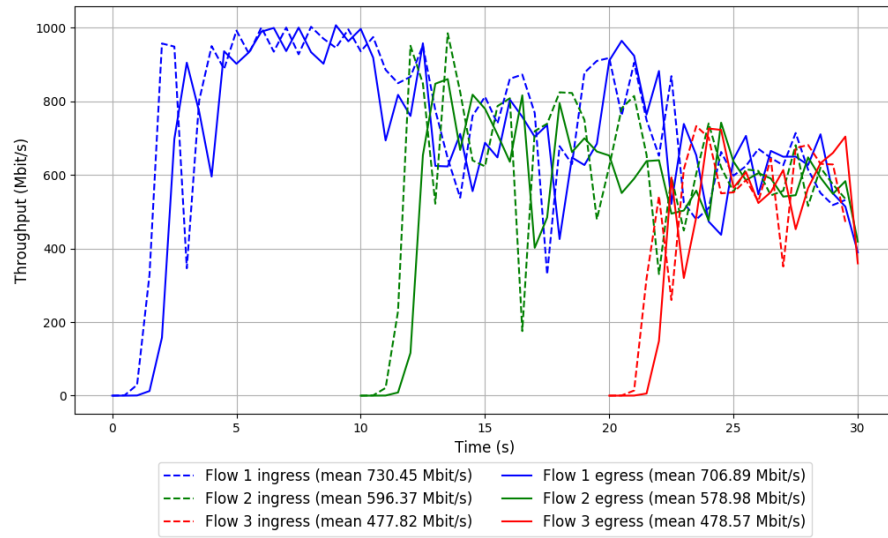


Run 5: Statistics of FillP

Start at: 2018-06-20 00:02:35  
End at: 2018-06-20 00:03:05  
Local clock offset: 0.056 ms  
Remote clock offset: -0.007 ms

# Below is generated by plot.py at 2018-06-20 03:15:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1246.03 Mbit/s  
95th percentile per-packet one-way delay: 227.806 ms  
Loss rate: 3.96%  
-- Flow 1:  
Average throughput: 706.89 Mbit/s  
95th percentile per-packet one-way delay: 228.227 ms  
Loss rate: 4.11%  
-- Flow 2:  
Average throughput: 578.98 Mbit/s  
95th percentile per-packet one-way delay: 234.393 ms  
Loss rate: 4.25%  
-- Flow 3:  
Average throughput: 478.57 Mbit/s  
95th percentile per-packet one-way delay: 159.764 ms  
Loss rate: 2.59%

# Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-06-20 00:27:38

End at: 2018-06-20 00:28:08

Local clock offset: 0.058 ms

Remote clock offset: 0.024 ms

# Below is generated by plot.py at 2018-06-20 03:15:45

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1027.05 Mbit/s

95th percentile per-packet one-way delay: 305.581 ms

Loss rate: 4.07%

-- Flow 1:

Average throughput: 546.19 Mbit/s

95th percentile per-packet one-way delay: 298.737 ms

Loss rate: 4.12%

-- Flow 2:

Average throughput: 520.33 Mbit/s

95th percentile per-packet one-way delay: 320.625 ms

Loss rate: 4.18%

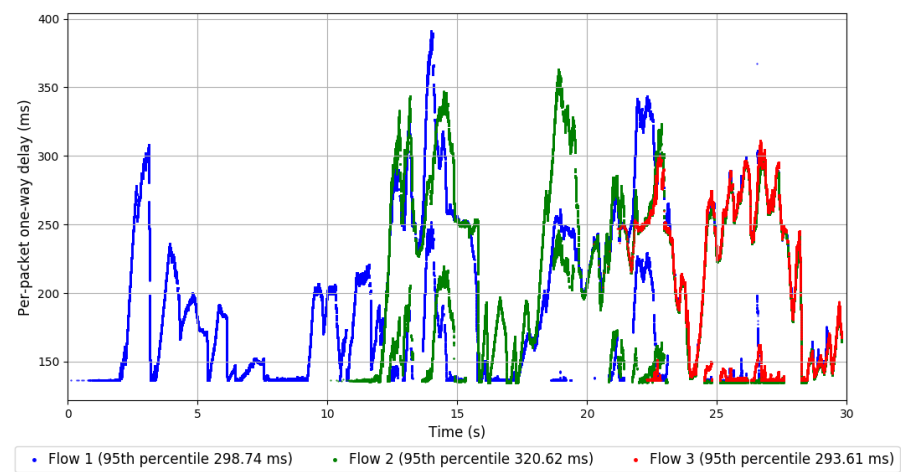
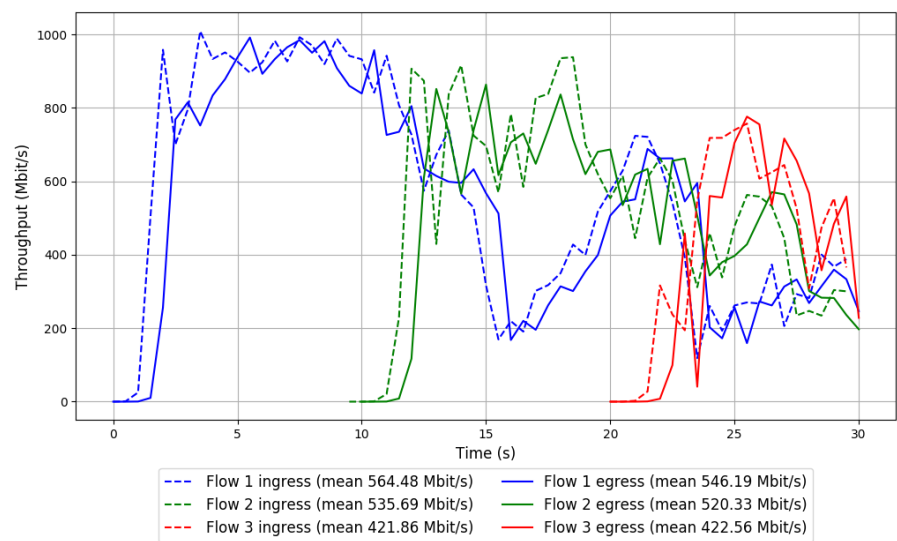
-- Flow 3:

Average throughput: 422.56 Mbit/s

95th percentile per-packet one-way delay: 293.614 ms

Loss rate: 3.60%

Run 6: Report of FillP — Data Link

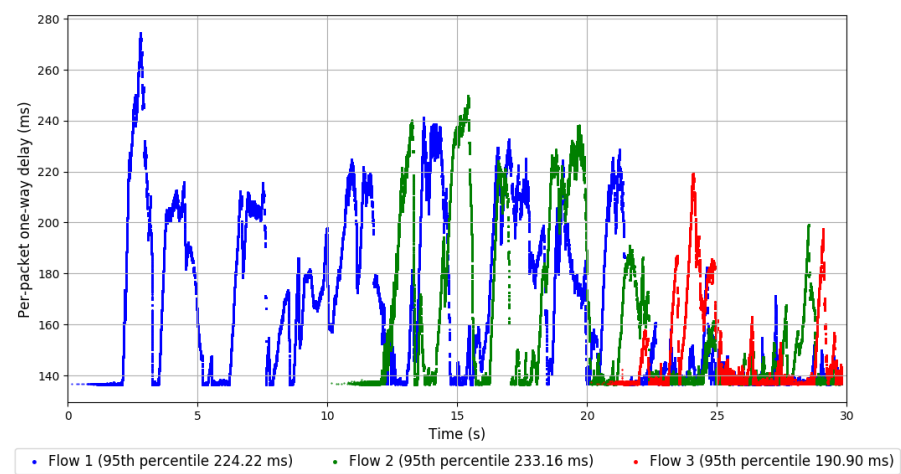
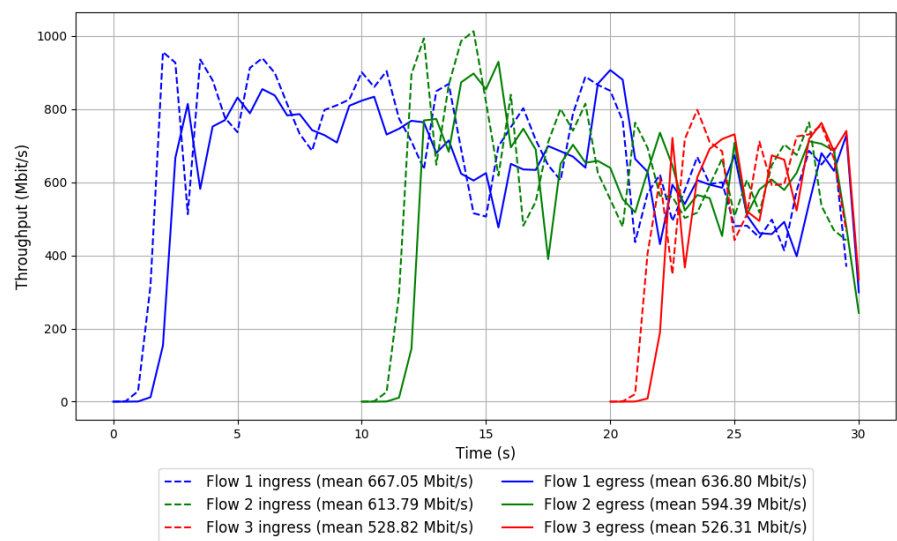


Run 7: Statistics of FillP

Start at: 2018-06-20 00:52:35  
End at: 2018-06-20 00:53:05  
Local clock offset: -0.007 ms  
Remote clock offset: -0.376 ms

# Below is generated by plot.py at 2018-06-20 03:20:53  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1201.69 Mbit/s  
95th percentile per-packet one-way delay: 226.222 ms  
Loss rate: 4.78%  
-- Flow 1:  
Average throughput: 636.80 Mbit/s  
95th percentile per-packet one-way delay: 224.220 ms  
Loss rate: 5.38%  
-- Flow 2:  
Average throughput: 594.39 Mbit/s  
95th percentile per-packet one-way delay: 233.158 ms  
Loss rate: 4.49%  
-- Flow 3:  
Average throughput: 526.31 Mbit/s  
95th percentile per-packet one-way delay: 190.904 ms  
Loss rate: 3.22%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-06-20 01:17:32

End at: 2018-06-20 01:18:02

Local clock offset: -0.12 ms

Remote clock offset: 0.014 ms

# Below is generated by plot.py at 2018-06-20 03:22:56

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1313.35 Mbit/s

95th percentile per-packet one-way delay: 203.086 ms

Loss rate: 2.37%

-- Flow 1:

Average throughput: 711.58 Mbit/s

95th percentile per-packet one-way delay: 205.448 ms

Loss rate: 2.93%

-- Flow 2:

Average throughput: 661.68 Mbit/s

95th percentile per-packet one-way delay: 197.813 ms

Loss rate: 1.06%

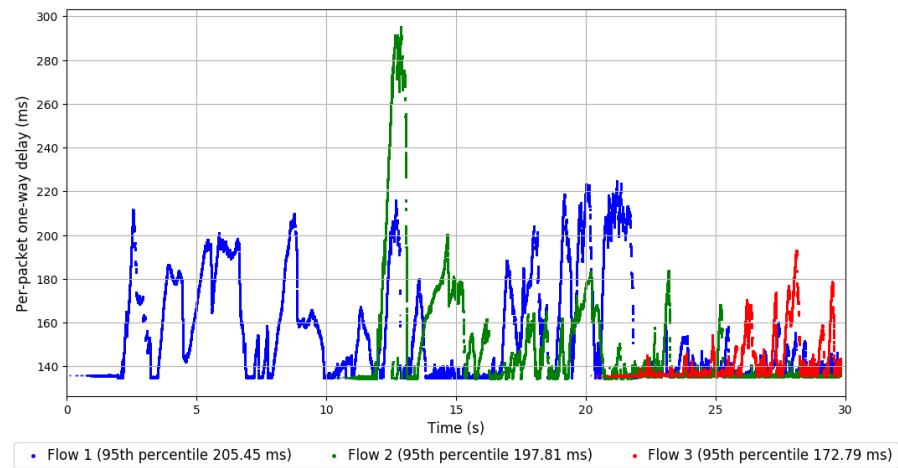
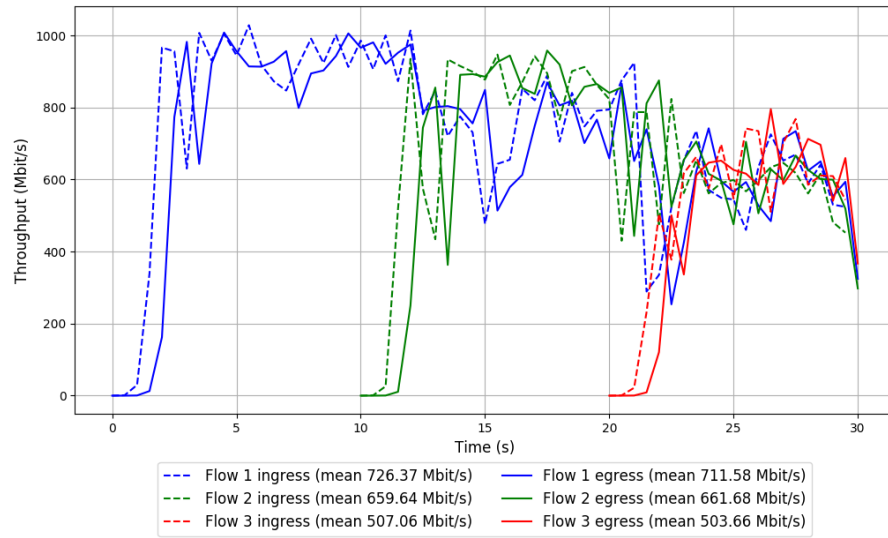
-- Flow 3:

Average throughput: 503.66 Mbit/s

95th percentile per-packet one-way delay: 172.787 ms

Loss rate: 3.41%

## Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-06-20 01:42:30

End at: 2018-06-20 01:43:00

Local clock offset: 0.015 ms

Remote clock offset: 0.428 ms

# Below is generated by plot.py at 2018-06-20 03:38:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1266.34 Mbit/s

95th percentile per-packet one-way delay: 209.551 ms

Loss rate: 2.63%

-- Flow 1:

Average throughput: 677.84 Mbit/s

95th percentile per-packet one-way delay: 210.404 ms

Loss rate: 3.09%

-- Flow 2:

Average throughput: 636.28 Mbit/s

95th percentile per-packet one-way delay: 214.378 ms

Loss rate: 2.04%

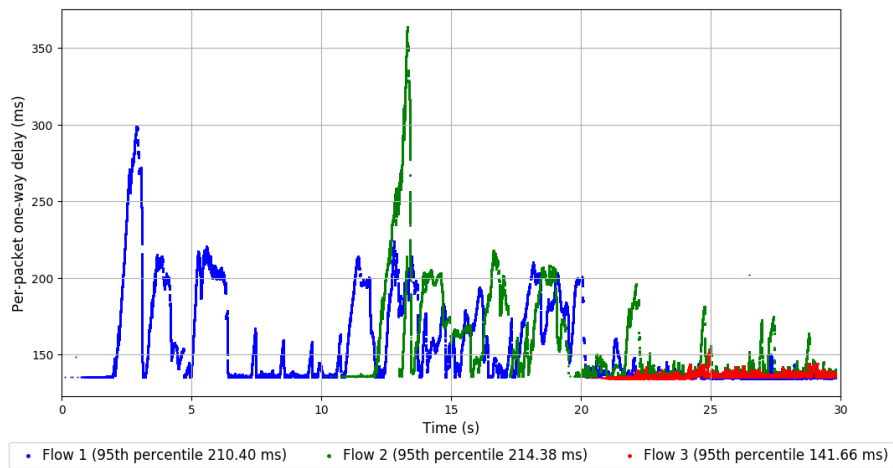
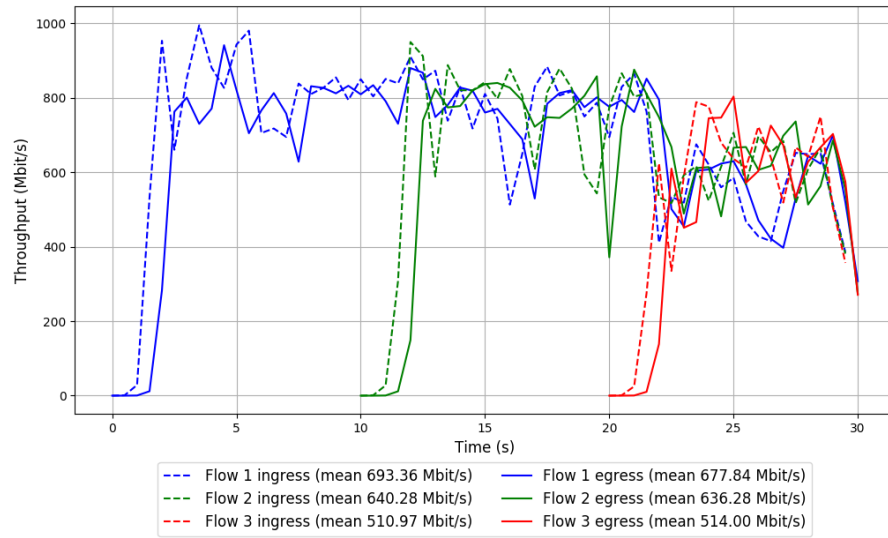
-- Flow 3:

Average throughput: 514.00 Mbit/s

95th percentile per-packet one-way delay: 141.655 ms

Loss rate: 2.18%

## Run 9: Report of FillP — Data Link

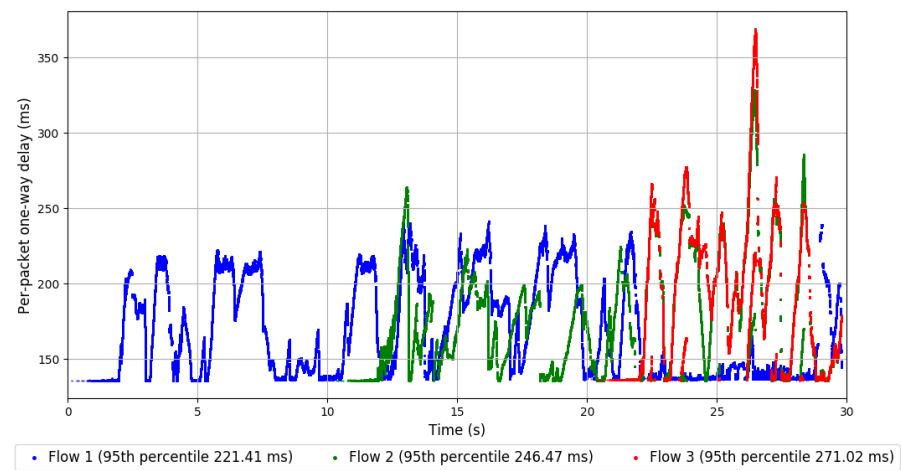
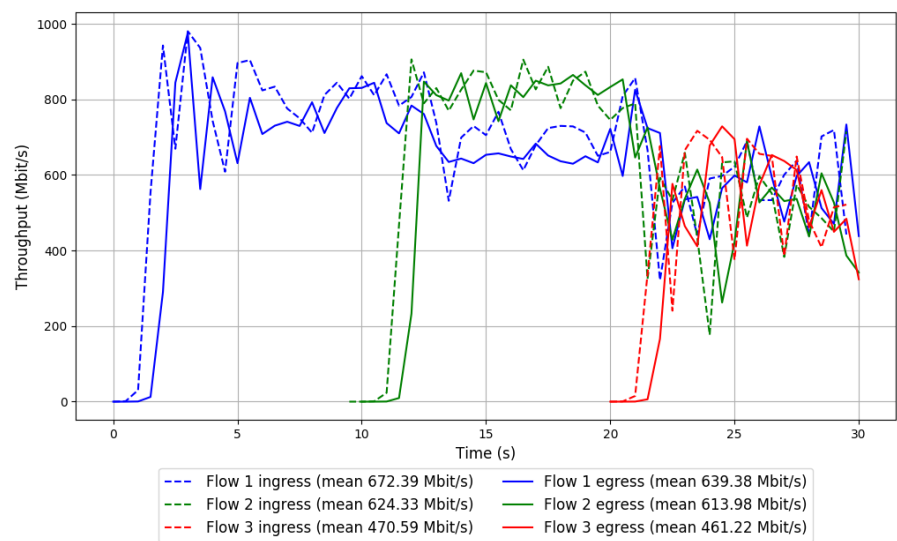


Run 10: Statistics of FillP

Start at: 2018-06-20 02:07:29  
End at: 2018-06-20 02:07:59  
Local clock offset: -0.262 ms  
Remote clock offset: -0.294 ms

# Below is generated by plot.py at 2018-06-20 03:38:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1196.26 Mbit/s  
95th percentile per-packet one-way delay: 238.533 ms  
Loss rate: 4.71%  
-- Flow 1:  
Average throughput: 639.38 Mbit/s  
95th percentile per-packet one-way delay: 221.407 ms  
Loss rate: 5.78%  
-- Flow 2:  
Average throughput: 613.98 Mbit/s  
95th percentile per-packet one-way delay: 246.467 ms  
Loss rate: 3.00%  
-- Flow 3:  
Average throughput: 461.22 Mbit/s  
95th percentile per-packet one-way delay: 271.025 ms  
Loss rate: 4.67%

Run 10: Report of FillP — Data Link

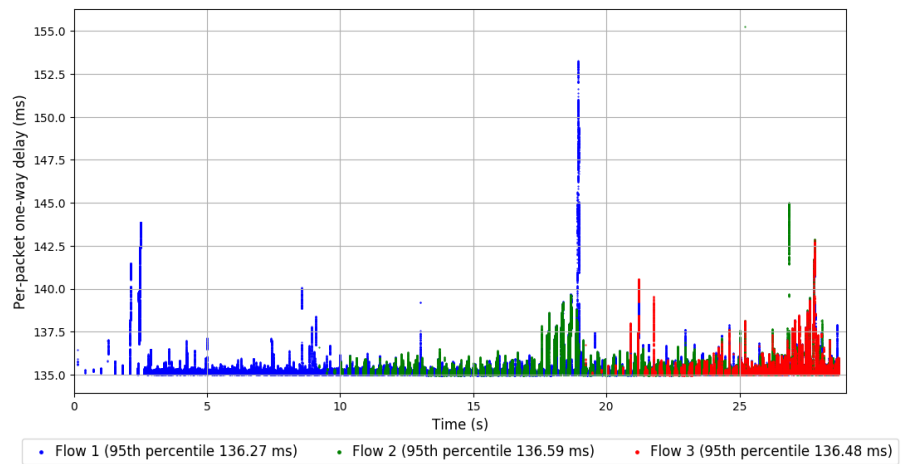
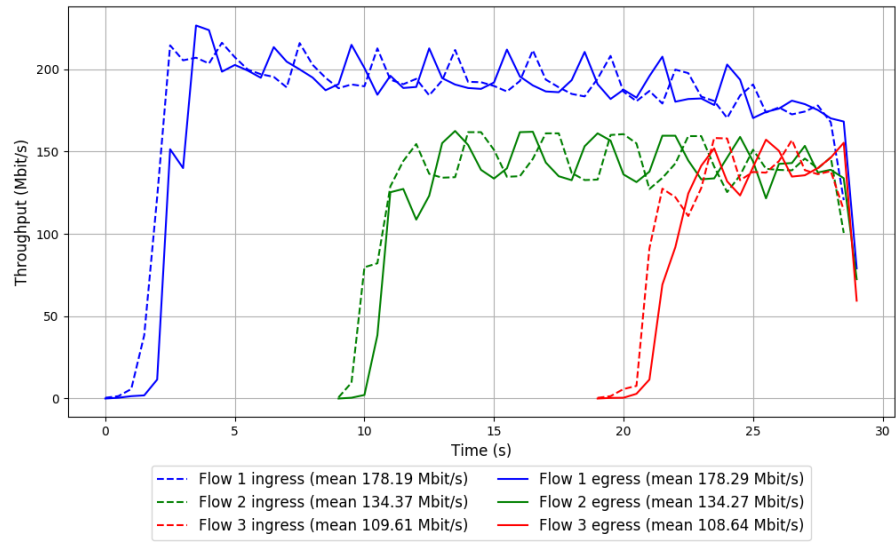


```
Run 1: Statistics of Indigo

Start at: 2018-06-19 22:19:30
End at: 2018-06-19 22:20:00
Local clock offset: 0.154 ms
Remote clock offset: 0.046 ms

# Below is generated by plot.py at 2018-06-20 03:38:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 306.15 Mbit/s
95th percentile per-packet one-way delay: 136.415 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 178.29 Mbit/s
95th percentile per-packet one-way delay: 136.269 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 134.27 Mbit/s
95th percentile per-packet one-way delay: 136.587 ms
Loss rate: 1.44%
-- Flow 3:
Average throughput: 108.64 Mbit/s
95th percentile per-packet one-way delay: 136.478 ms
Loss rate: 3.64%
```

## Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-06-19 22:44:23

End at: 2018-06-19 22:44:53

Local clock offset: 0.268 ms

Remote clock offset: 0.039 ms

# Below is generated by plot.py at 2018-06-20 03:38:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 311.86 Mbit/s

95th percentile per-packet one-way delay: 138.936 ms

Loss rate: 1.43%

-- Flow 1:

Average throughput: 177.48 Mbit/s

95th percentile per-packet one-way delay: 137.685 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 128.58 Mbit/s

95th percentile per-packet one-way delay: 139.877 ms

Loss rate: 1.53%

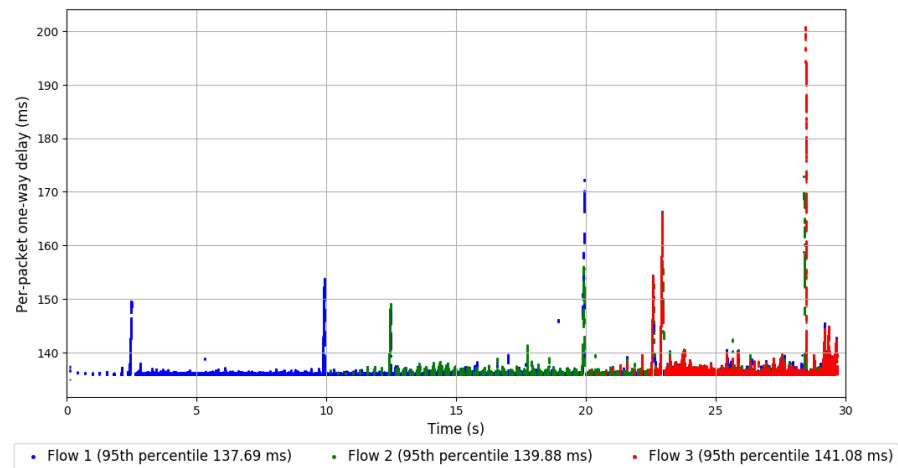
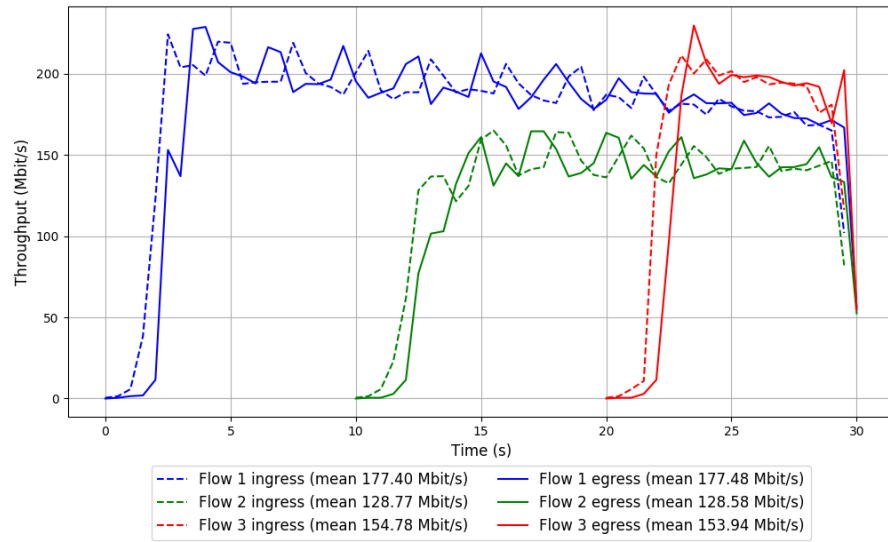
-- Flow 3:

Average throughput: 153.94 Mbit/s

95th percentile per-packet one-way delay: 141.076 ms

Loss rate: 3.32%

## Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-06-19 23:09:41

End at: 2018-06-19 23:10:11

Local clock offset: -0.113 ms

Remote clock offset: 0.046 ms

# Below is generated by plot.py at 2018-06-20 03:38:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 254.50 Mbit/s

95th percentile per-packet one-way delay: 137.067 ms

Loss rate: 1.55%

-- Flow 1:

Average throughput: 132.66 Mbit/s

95th percentile per-packet one-way delay: 136.722 ms

Loss rate: 0.96%

-- Flow 2:

Average throughput: 130.69 Mbit/s

95th percentile per-packet one-way delay: 137.067 ms

Loss rate: 1.55%

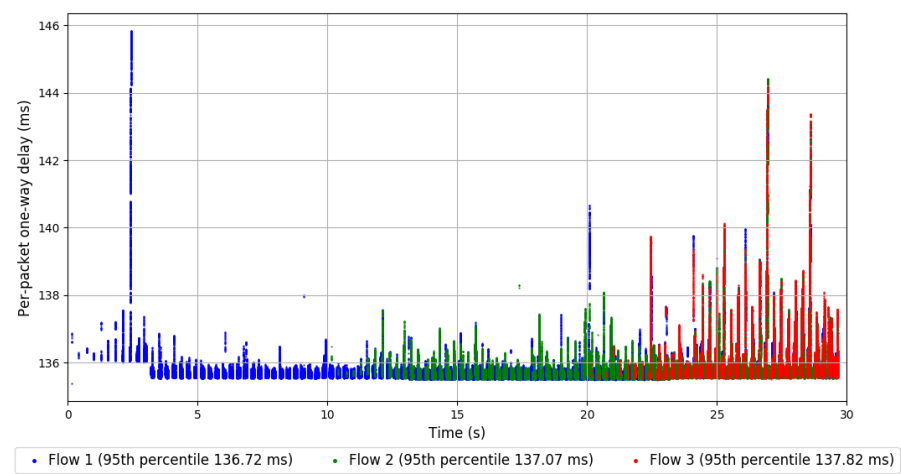
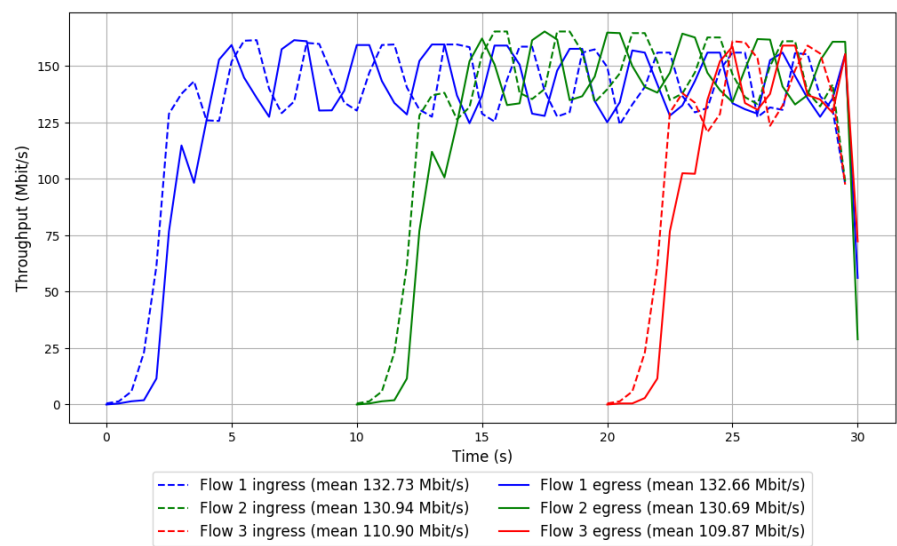
-- Flow 3:

Average throughput: 109.87 Mbit/s

95th percentile per-packet one-way delay: 137.823 ms

Loss rate: 3.66%

Run 3: Report of Indigo — Data Link

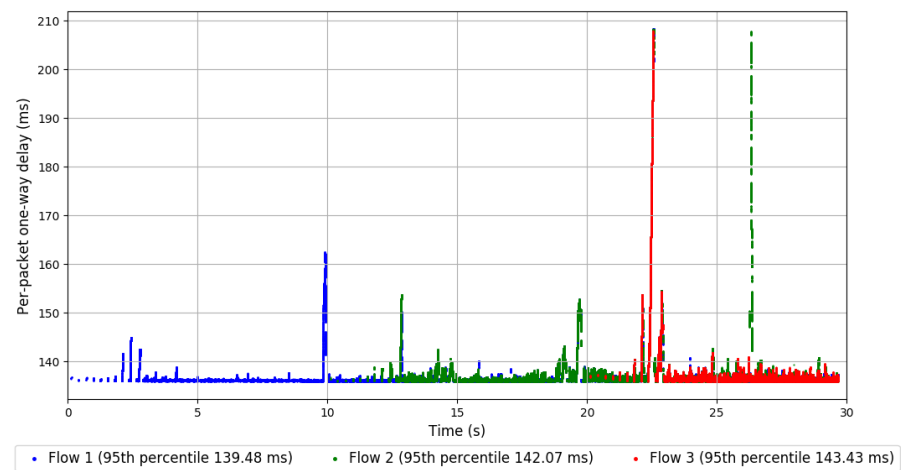
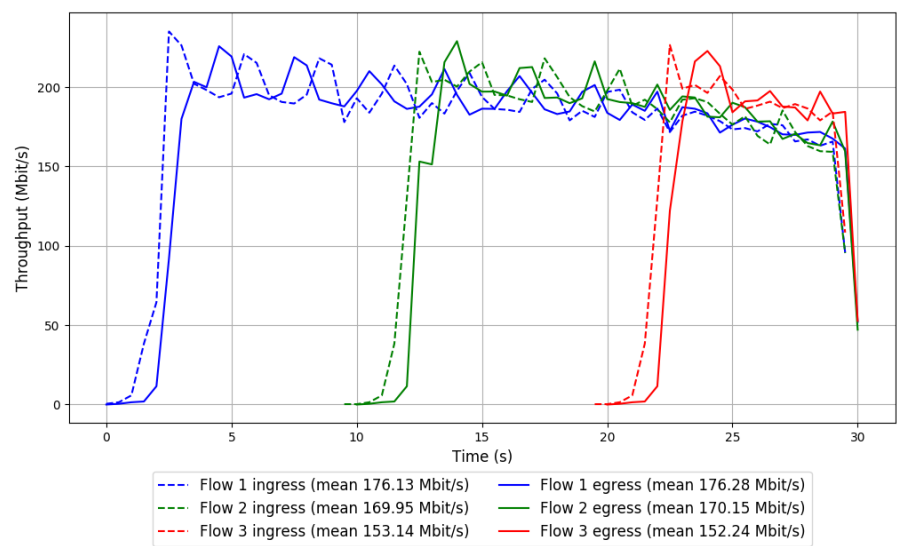


Run 4: Statistics of Indigo

Start at: 2018-06-19 23:34:15  
End at: 2018-06-19 23:34:45  
Local clock offset: -0.019 ms  
Remote clock offset: -0.351 ms

# Below is generated by plot.py at 2018-06-20 03:38:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 338.05 Mbit/s  
95th percentile per-packet one-way delay: 140.785 ms  
Loss rate: 1.35%  
-- Flow 1:  
Average throughput: 176.28 Mbit/s  
95th percentile per-packet one-way delay: 139.478 ms  
Loss rate: 0.83%  
-- Flow 2:  
Average throughput: 170.15 Mbit/s  
95th percentile per-packet one-way delay: 142.071 ms  
Loss rate: 1.27%  
-- Flow 3:  
Average throughput: 152.24 Mbit/s  
95th percentile per-packet one-way delay: 143.433 ms  
Loss rate: 3.35%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-06-19 23:58:56

End at: 2018-06-19 23:59:26

Local clock offset: -0.014 ms

Remote clock offset: 0.422 ms

# Below is generated by plot.py at 2018-06-20 03:38:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 265.19 Mbit/s

95th percentile per-packet one-way delay: 136.755 ms

Loss rate: 1.59%

-- Flow 1:

Average throughput: 131.71 Mbit/s

95th percentile per-packet one-way delay: 136.329 ms

Loss rate: 0.98%

-- Flow 2:

Average throughput: 126.46 Mbit/s

95th percentile per-packet one-way delay: 136.695 ms

Loss rate: 1.56%

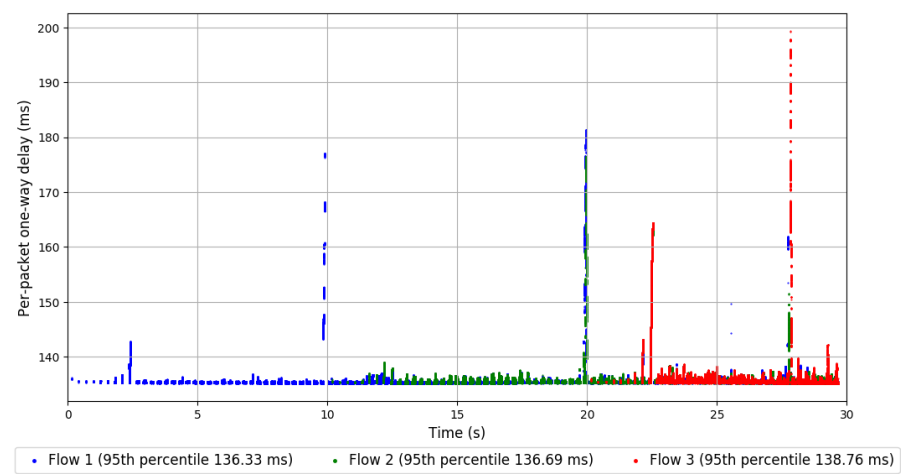
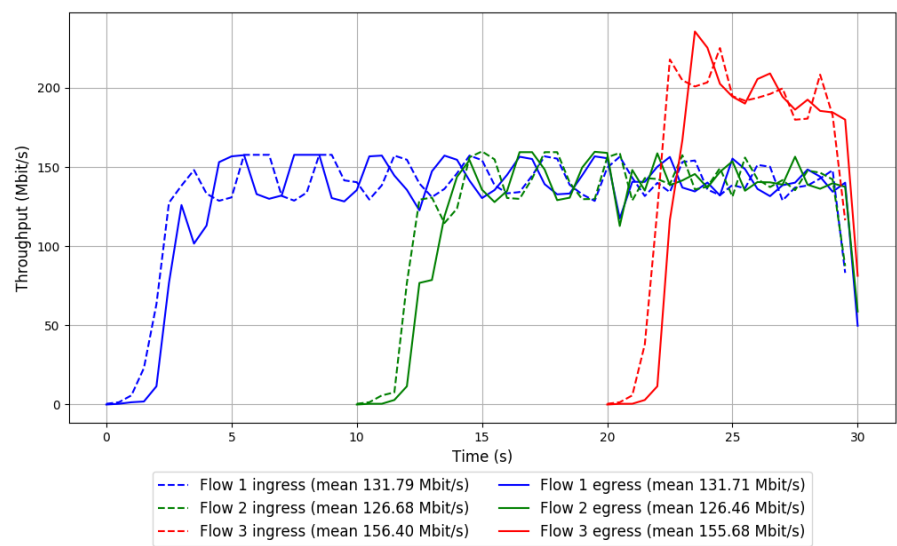
-- Flow 3:

Average throughput: 155.68 Mbit/s

95th percentile per-packet one-way delay: 138.758 ms

Loss rate: 3.22%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-06-20 00:23:58

End at: 2018-06-20 00:24:28

Local clock offset: -0.104 ms

Remote clock offset: 0.016 ms

# Below is generated by plot.py at 2018-06-20 03:38:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 313.24 Mbit/s

95th percentile per-packet one-way delay: 137.843 ms

Loss rate: 1.46%

-- Flow 1:

Average throughput: 179.66 Mbit/s

95th percentile per-packet one-way delay: 137.355 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 126.84 Mbit/s

95th percentile per-packet one-way delay: 137.782 ms

Loss rate: 1.55%

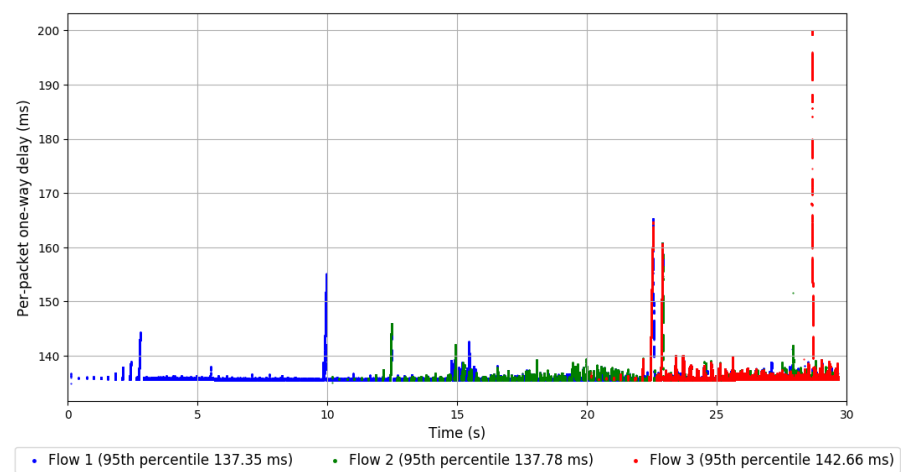
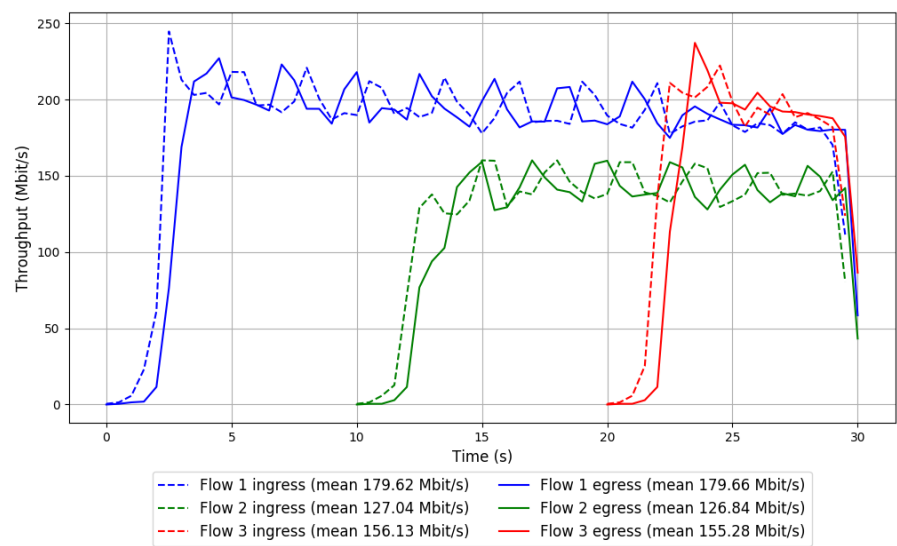
-- Flow 3:

Average throughput: 155.28 Mbit/s

95th percentile per-packet one-way delay: 142.663 ms

Loss rate: 3.32%

Run 6: Report of Indigo — Data Link

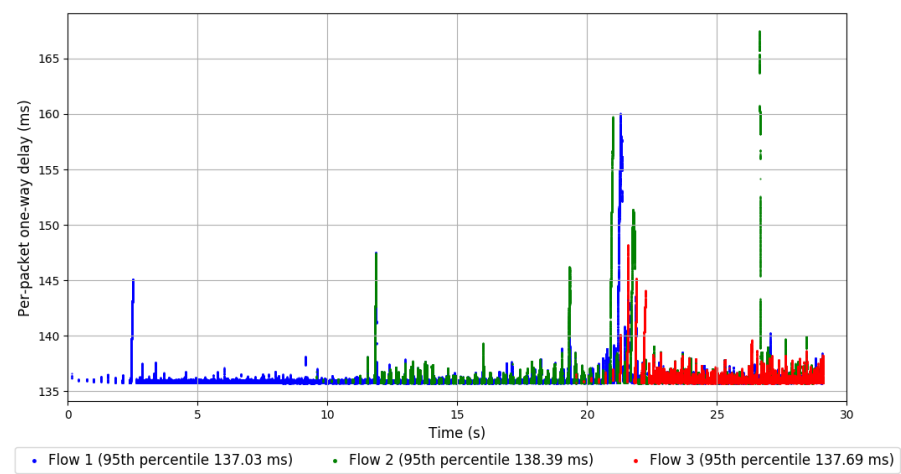
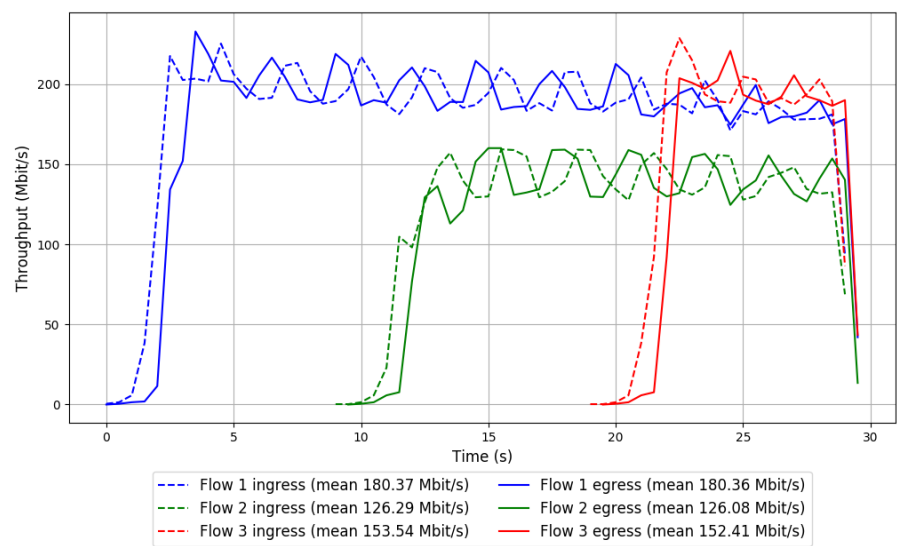


Run 7: Statistics of Indigo

Start at: 2018-06-20 00:48:55  
End at: 2018-06-20 00:49:25  
Local clock offset: 0.017 ms  
Remote clock offset: -0.038 ms

# Below is generated by plot.py at 2018-06-20 03:38:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 315.23 Mbit/s  
95th percentile per-packet one-way delay: 137.443 ms  
Loss rate: 1.51%  
-- Flow 1:  
Average throughput: 180.36 Mbit/s  
95th percentile per-packet one-way delay: 137.029 ms  
Loss rate: 0.93%  
-- Flow 2:  
Average throughput: 126.08 Mbit/s  
95th percentile per-packet one-way delay: 138.389 ms  
Loss rate: 1.54%  
-- Flow 3:  
Average throughput: 152.41 Mbit/s  
95th percentile per-packet one-way delay: 137.687 ms  
Loss rate: 3.49%

Run 7: Report of Indigo — Data Link

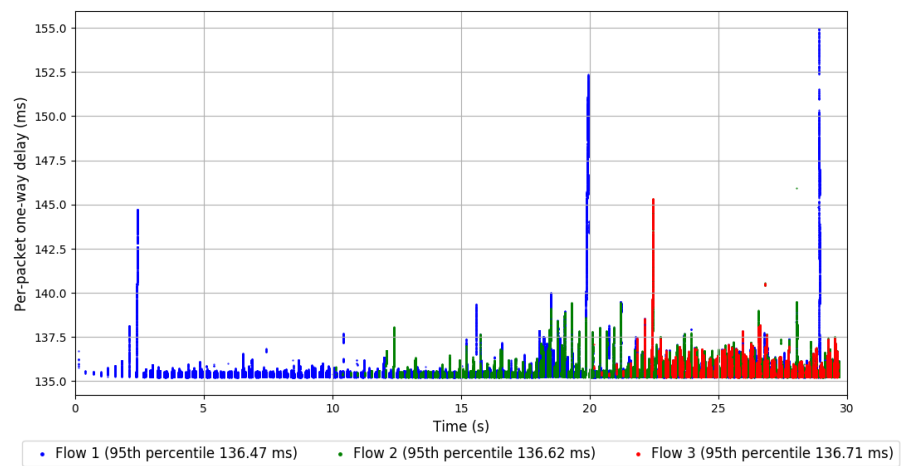
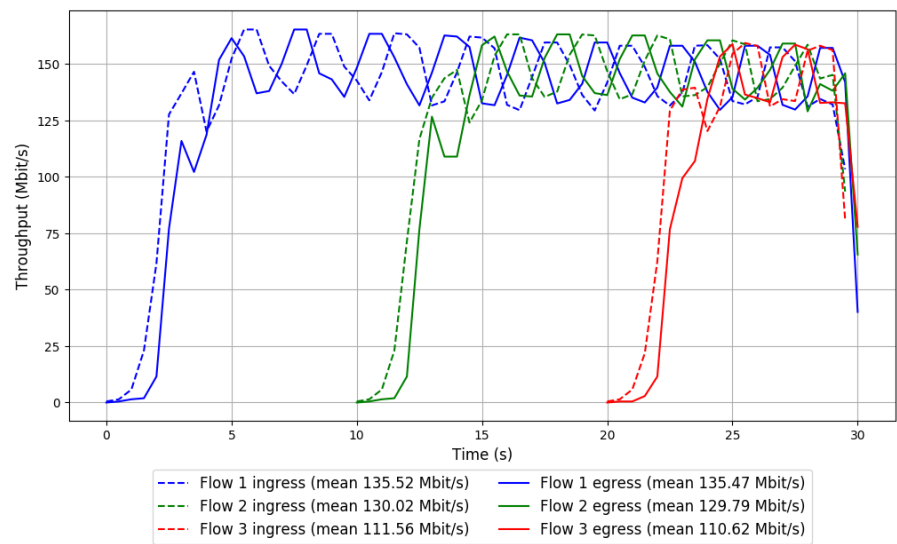


Run 8: Statistics of Indigo

Start at: 2018-06-20 01:14:03  
End at: 2018-06-20 01:14:33  
Local clock offset: 0.005 ms  
Remote clock offset: -0.324 ms

# Below is generated by plot.py at 2018-06-20 03:38:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 256.77 Mbit/s  
95th percentile per-packet one-way delay: 136.585 ms  
Loss rate: 1.53%  
-- Flow 1:  
Average throughput: 135.47 Mbit/s  
95th percentile per-packet one-way delay: 136.475 ms  
Loss rate: 0.96%  
-- Flow 2:  
Average throughput: 129.79 Mbit/s  
95th percentile per-packet one-way delay: 136.622 ms  
Loss rate: 1.54%  
-- Flow 3:  
Average throughput: 110.62 Mbit/s  
95th percentile per-packet one-way delay: 136.714 ms  
Loss rate: 3.63%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-06-20 01:39:10

End at: 2018-06-20 01:39:40

Local clock offset: -0.015 ms

Remote clock offset: 0.038 ms

# Below is generated by plot.py at 2018-06-20 03:38:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 252.24 Mbit/s

95th percentile per-packet one-way delay: 137.048 ms

Loss rate: 1.53%

-- Flow 1:

Average throughput: 133.13 Mbit/s

95th percentile per-packet one-way delay: 136.733 ms

Loss rate: 0.98%

-- Flow 2:

Average throughput: 127.13 Mbit/s

95th percentile per-packet one-way delay: 136.918 ms

Loss rate: 1.50%

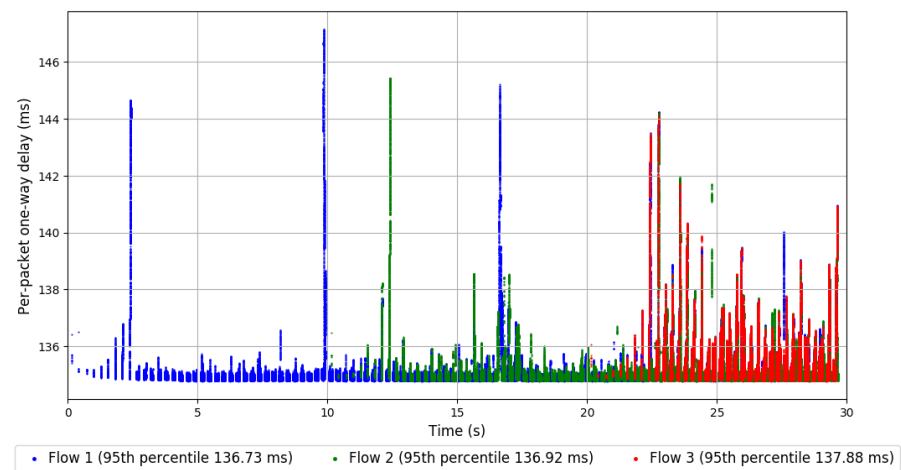
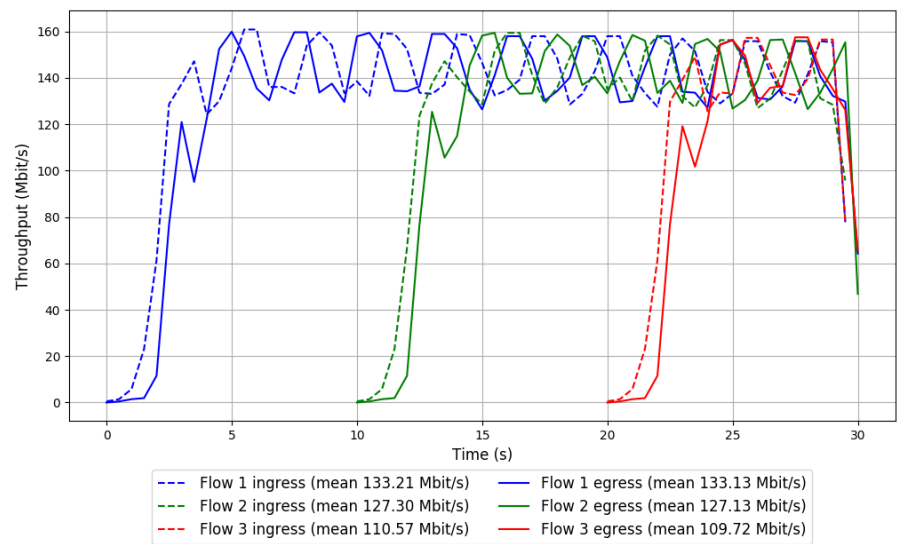
-- Flow 3:

Average throughput: 109.72 Mbit/s

95th percentile per-packet one-way delay: 137.879 ms

Loss rate: 3.61%

Run 9: Report of Indigo — Data Link

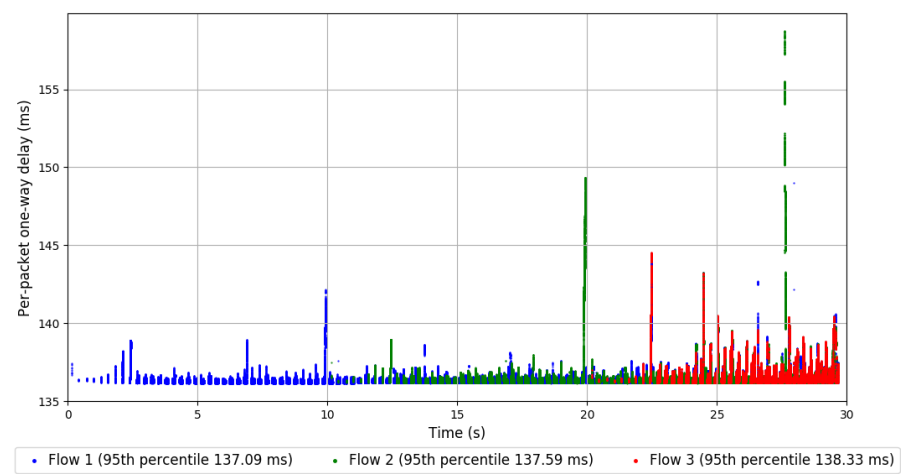
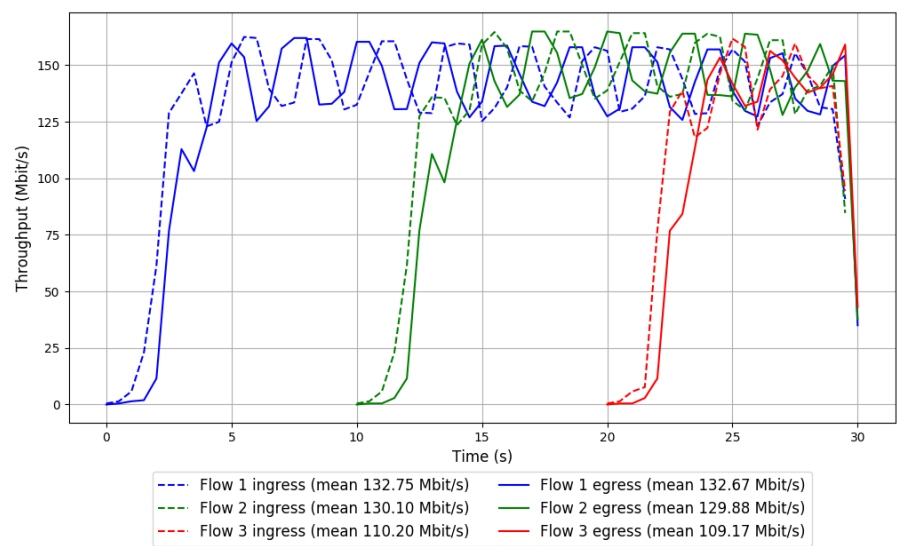


Run 10: Statistics of Indigo

Start at: 2018-06-20 02:03:53  
End at: 2018-06-20 02:04:23  
Local clock offset: 0.154 ms  
Remote clock offset: -0.291 ms

# Below is generated by plot.py at 2018-06-20 03:38:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 253.63 Mbit/s  
95th percentile per-packet one-way delay: 137.416 ms  
Loss rate: 1.55%  
-- Flow 1:  
Average throughput: 132.67 Mbit/s  
95th percentile per-packet one-way delay: 137.094 ms  
Loss rate: 0.98%  
-- Flow 2:  
Average throughput: 129.88 Mbit/s  
95th percentile per-packet one-way delay: 137.591 ms  
Loss rate: 1.54%  
-- Flow 3:  
Average throughput: 109.17 Mbit/s  
95th percentile per-packet one-way delay: 138.328 ms  
Loss rate: 3.70%

Run 10: Report of Indigo — Data Link

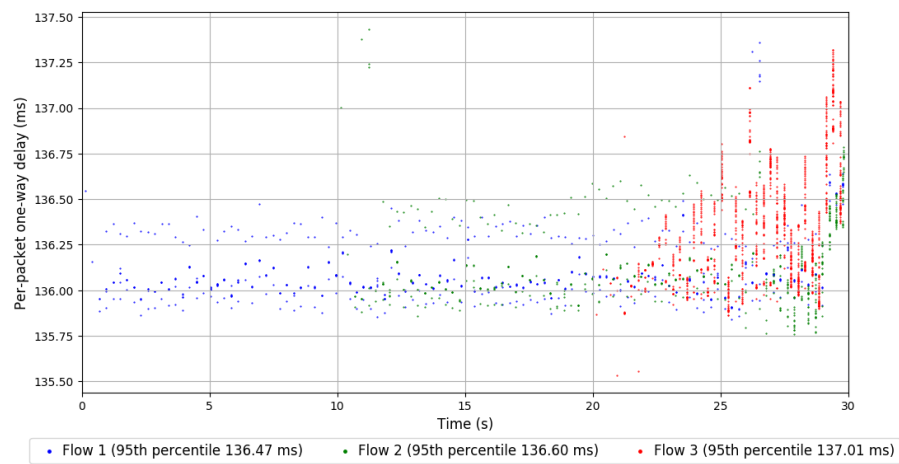
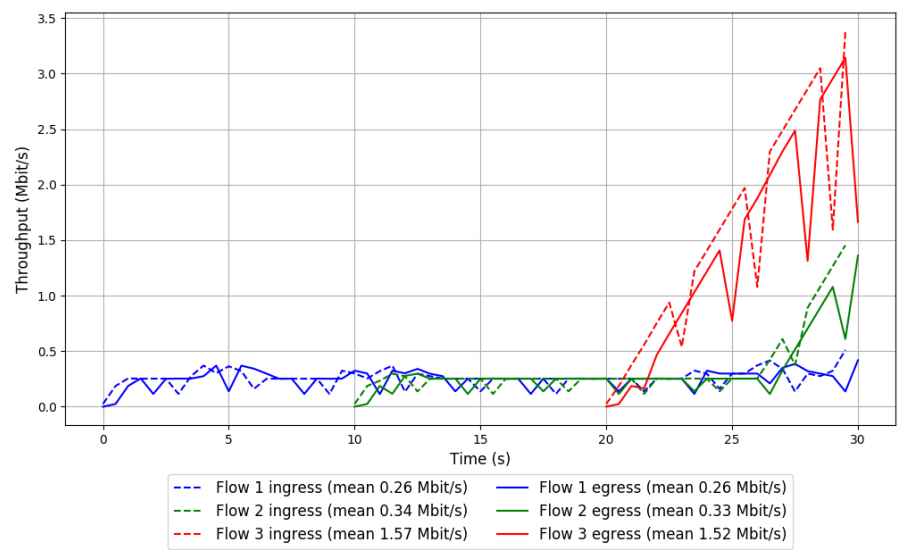


```
Run 1: Statistics of LEDBAT

Start at: 2018-06-19 22:31:45
End at: 2018-06-19 22:32:15
Local clock offset: 0.023 ms
Remote clock offset: 0.042 ms

# Below is generated by plot.py at 2018-06-20 03:38:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.96 Mbit/s
95th percentile per-packet one-way delay: 136.870 ms
Loss rate: 4.58%
-- Flow 1:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 136.468 ms
Loss rate: 1.80%
-- Flow 2:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 136.601 ms
Loss rate: 5.53%
-- Flow 3:
Average throughput: 1.52 Mbit/s
95th percentile per-packet one-way delay: 137.012 ms
Loss rate: 5.56%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-06-19 22:56:53

End at: 2018-06-19 22:57:23

Local clock offset: -0.143 ms

Remote clock offset: 0.076 ms

# Below is generated by plot.py at 2018-06-20 03:38:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.88 Mbit/s

95th percentile per-packet one-way delay: 136.832 ms

Loss rate: 2.43%

-- Flow 1:

Average throughput: 4.85 Mbit/s

95th percentile per-packet one-way delay: 136.886 ms

Loss rate: 1.82%

-- Flow 2:

Average throughput: 0.84 Mbit/s

95th percentile per-packet one-way delay: 136.380 ms

Loss rate: 4.87%

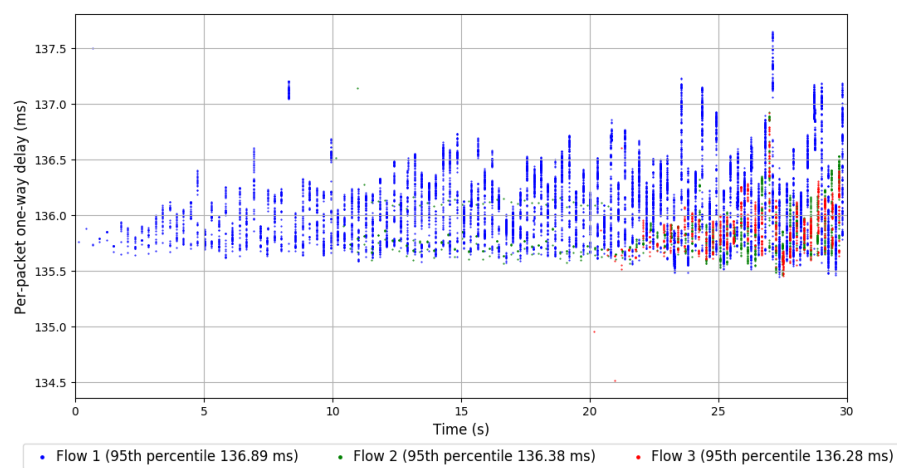
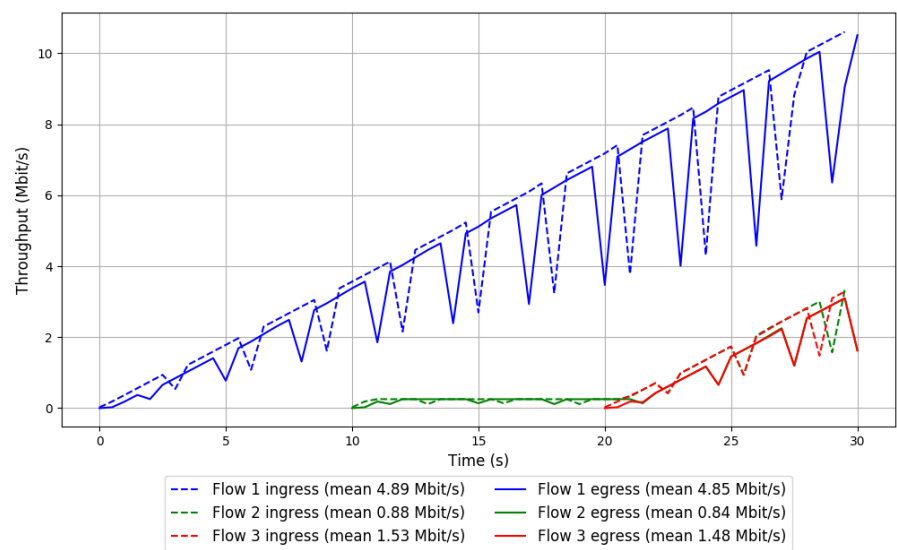
-- Flow 3:

Average throughput: 1.48 Mbit/s

95th percentile per-packet one-way delay: 136.283 ms

Loss rate: 5.56%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-06-19 23:21:37

End at: 2018-06-19 23:22:07

Local clock offset: 0.062 ms

Remote clock offset: 0.034 ms

# Below is generated by plot.py at 2018-06-20 03:38:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 7.02 Mbit/s

95th percentile per-packet one-way delay: 137.003 ms

Loss rate: 2.10%

-- Flow 1:

Average throughput: 4.85 Mbit/s

95th percentile per-packet one-way delay: 137.043 ms

Loss rate: 1.82%

-- Flow 2:

Average throughput: 3.18 Mbit/s

95th percentile per-packet one-way delay: 136.839 ms

Loss rate: 2.74%

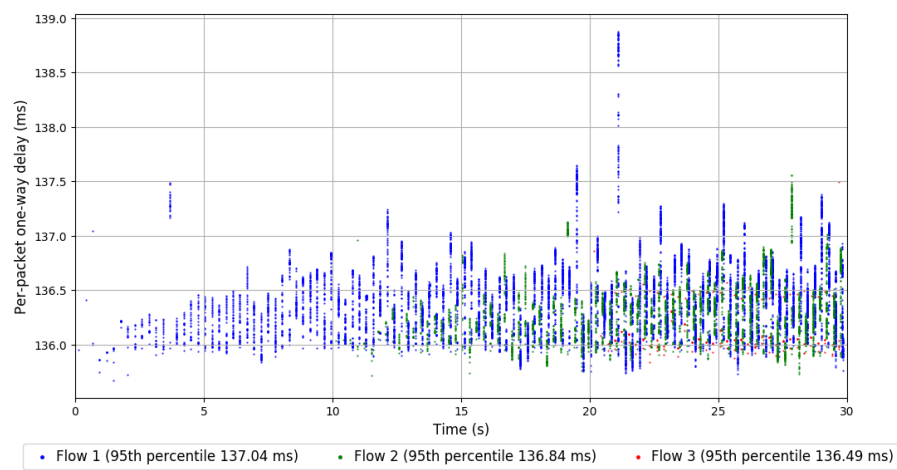
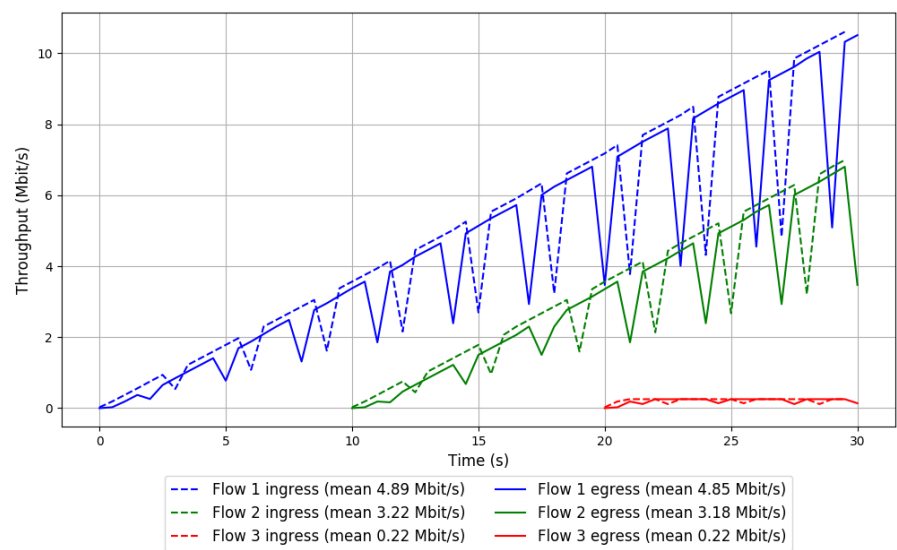
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.489 ms

Loss rate: 2.63%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-06-19 23:46:15

End at: 2018-06-19 23:46:45

Local clock offset: 0.02 ms

Remote clock offset: 0.038 ms

# Below is generated by plot.py at 2018-06-20 03:38:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 6.20 Mbit/s

95th percentile per-packet one-way delay: 136.874 ms

Loss rate: 2.17%

-- Flow 1:

Average throughput: 4.85 Mbit/s

95th percentile per-packet one-way delay: 136.896 ms

Loss rate: 1.82%

-- Flow 2:

Average throughput: 1.92 Mbit/s

95th percentile per-packet one-way delay: 136.712 ms

Loss rate: 3.43%

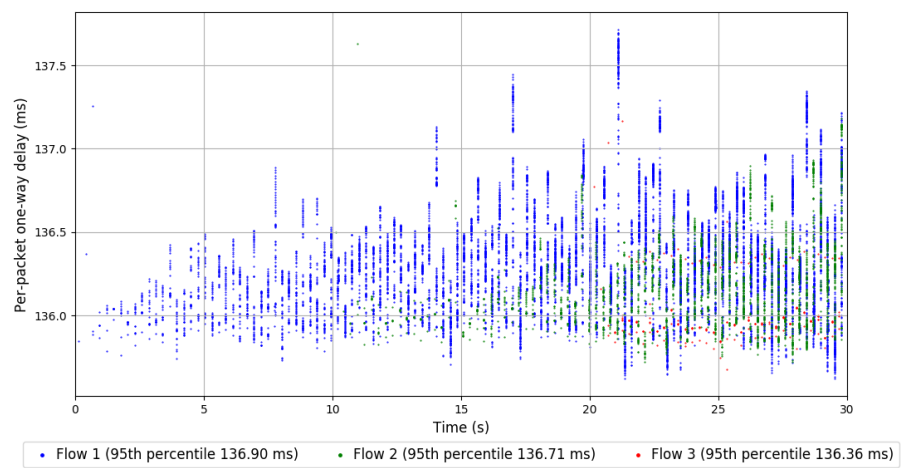
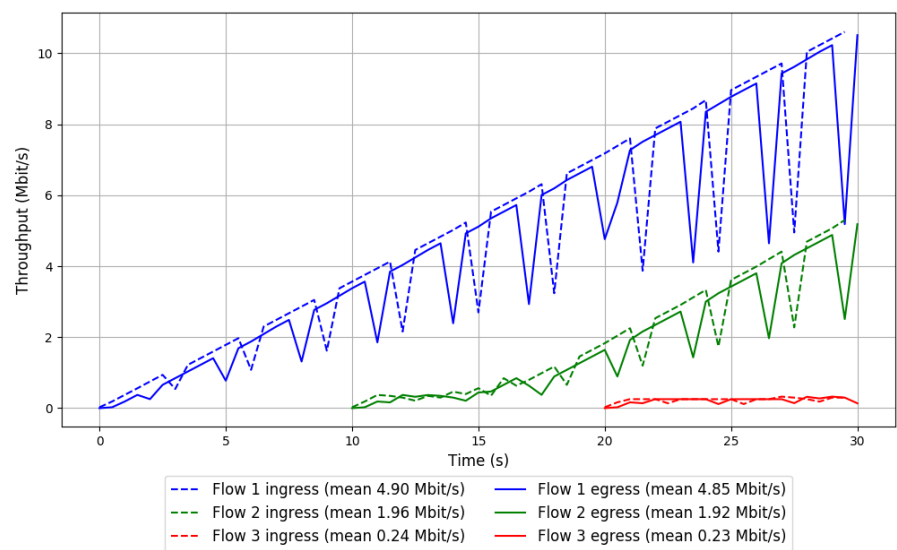
-- Flow 3:

Average throughput: 0.23 Mbit/s

95th percentile per-packet one-way delay: 136.359 ms

Loss rate: 3.48%

Run 4: Report of LEDBAT — Data Link

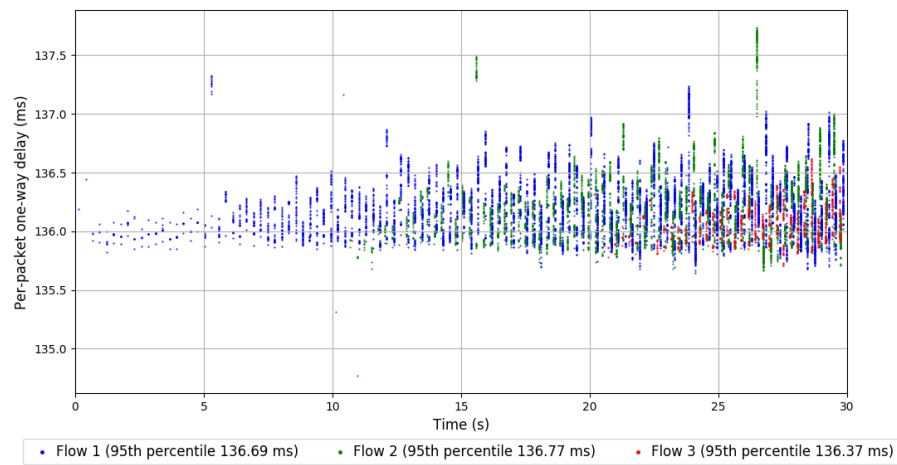
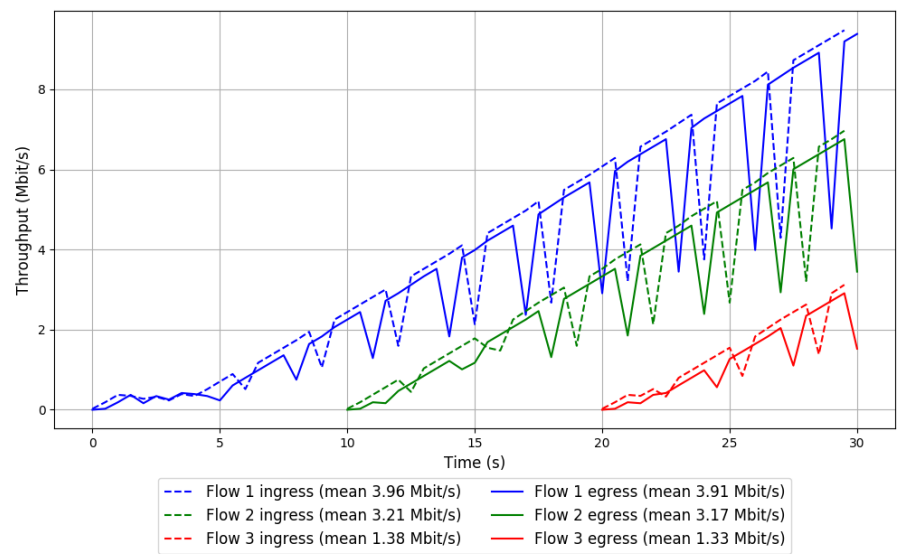


Run 5: Statistics of LEDBAT

Start at: 2018-06-20 00:11:15  
End at: 2018-06-20 00:11:45  
Local clock offset: 0.028 ms  
Remote clock offset: -0.004 ms

# Below is generated by plot.py at 2018-06-20 03:38:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 6.43 Mbit/s  
95th percentile per-packet one-way delay: 136.711 ms  
Loss rate: 2.52%  
-- Flow 1:  
Average throughput: 3.91 Mbit/s  
95th percentile per-packet one-way delay: 136.694 ms  
Loss rate: 2.01%  
-- Flow 2:  
Average throughput: 3.17 Mbit/s  
95th percentile per-packet one-way delay: 136.773 ms  
Loss rate: 2.75%  
-- Flow 3:  
Average throughput: 1.33 Mbit/s  
95th percentile per-packet one-way delay: 136.371 ms  
Loss rate: 5.89%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-06-20 00:36:06

End at: 2018-06-20 00:36:36

Local clock offset: -0.122 ms

Remote clock offset: -0.01 ms

# Below is generated by plot.py at 2018-06-20 03:38:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.40 Mbit/s

95th percentile per-packet one-way delay: 136.608 ms

Loss rate: 3.03%

-- Flow 1:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 136.666 ms

Loss rate: 2.31%

-- Flow 2:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 136.402 ms

Loss rate: 3.87%

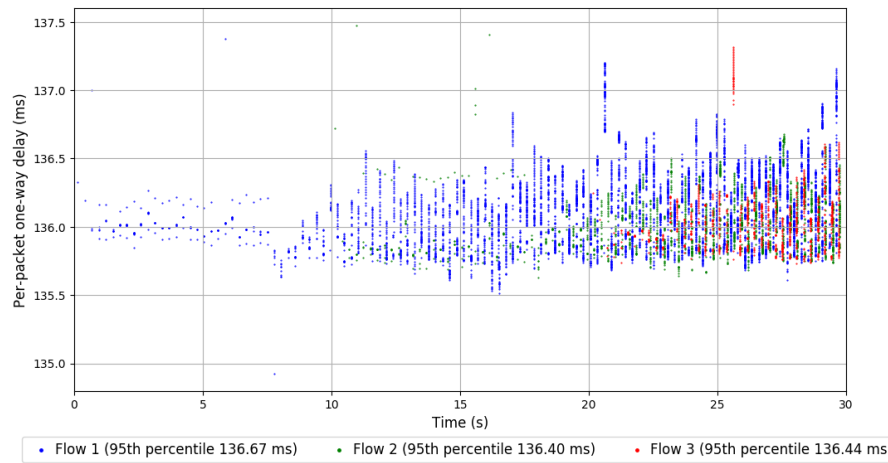
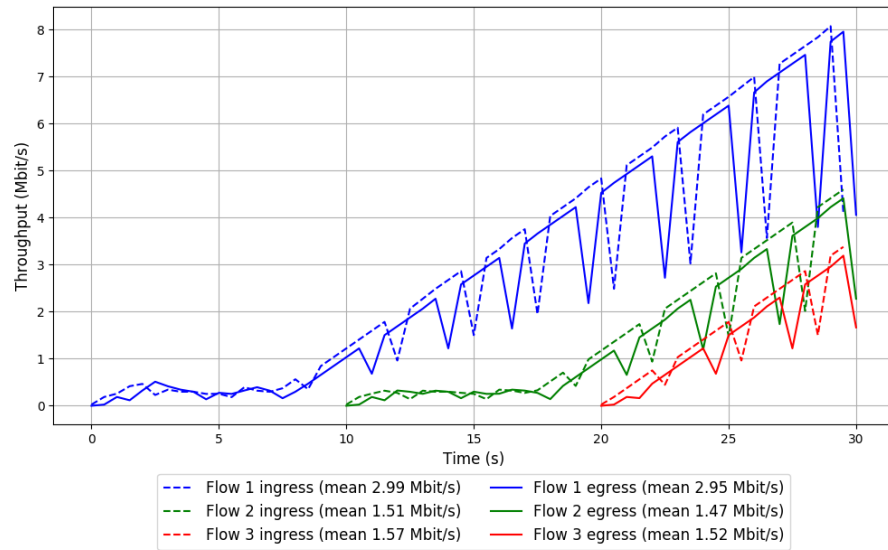
-- Flow 3:

Average throughput: 1.52 Mbit/s

95th percentile per-packet one-way delay: 136.443 ms

Loss rate: 5.55%

# Run 6: Report of LEDBAT — Data Link

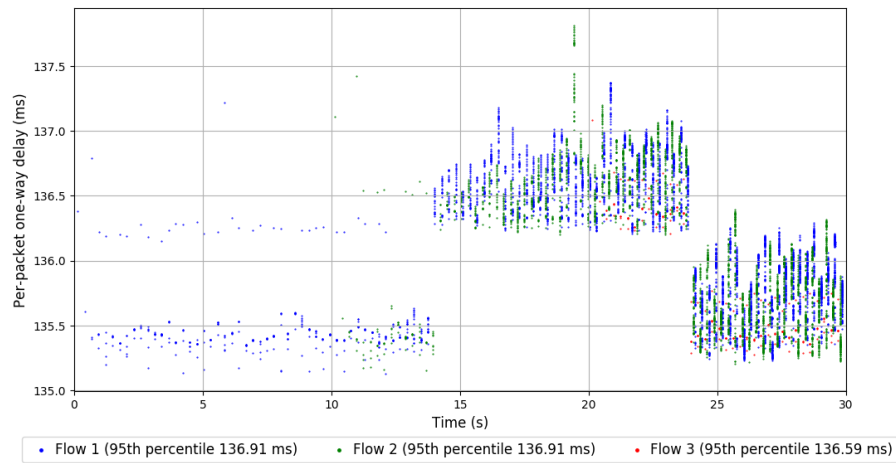
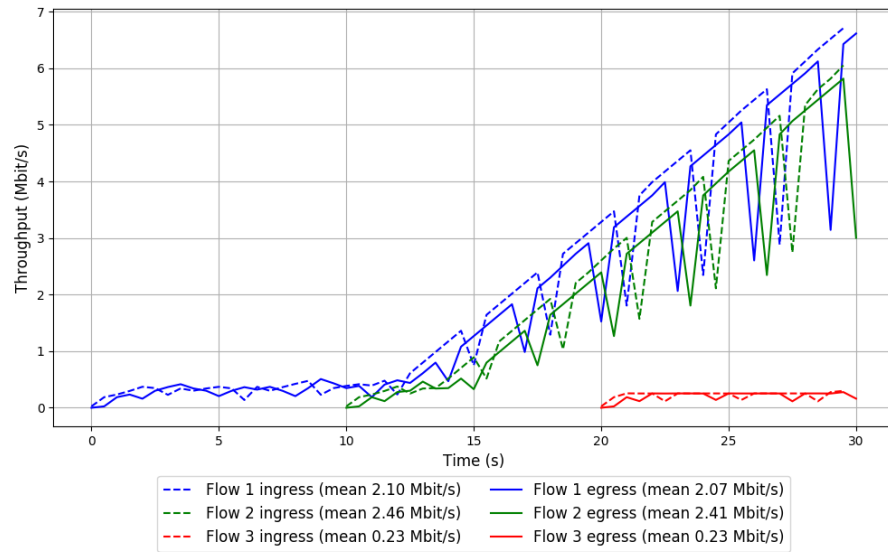


Run 7: Statistics of LEDBAT

Start at: 2018-06-20 01:01:10  
End at: 2018-06-20 01:01:40  
Local clock offset: -0.145 ms  
Remote clock offset: -0.377 ms

# Below is generated by plot.py at 2018-06-20 03:38:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.73 Mbit/s  
95th percentile per-packet one-way delay: 136.908 ms  
Loss rate: 2.87%  
-- Flow 1:  
Average throughput: 2.07 Mbit/s  
95th percentile per-packet one-way delay: 136.913 ms  
Loss rate: 2.68%  
-- Flow 2:  
Average throughput: 2.41 Mbit/s  
95th percentile per-packet one-way delay: 136.907 ms  
Loss rate: 3.12%  
-- Flow 3:  
Average throughput: 0.23 Mbit/s  
95th percentile per-packet one-way delay: 136.592 ms  
Loss rate: 3.10%

## Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-06-20 01:26:19

End at: 2018-06-20 01:26:49

Local clock offset: 0.021 ms

Remote clock offset: 0.013 ms

# Below is generated by plot.py at 2018-06-20 03:38:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.81 Mbit/s

95th percentile per-packet one-way delay: 135.994 ms

Loss rate: 2.10%

-- Flow 1:

Average throughput: 4.47 Mbit/s

95th percentile per-packet one-way delay: 136.001 ms

Loss rate: 1.89%

-- Flow 2:

Average throughput: 0.27 Mbit/s

95th percentile per-packet one-way delay: 135.935 ms

Loss rate: 1.50%

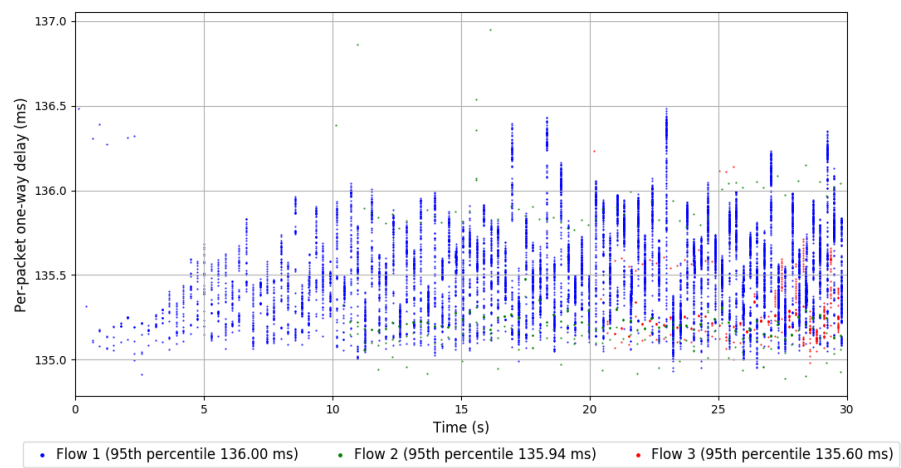
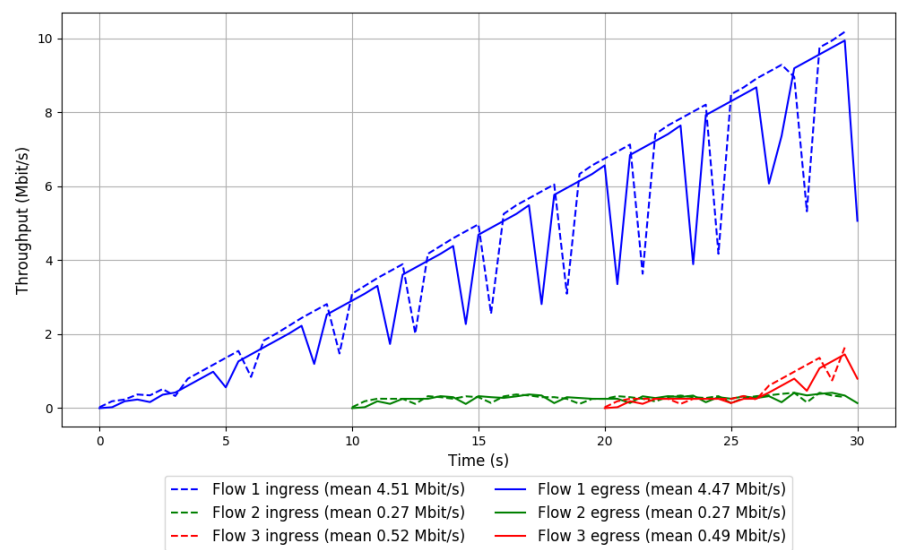
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 135.598 ms

Loss rate: 8.25%

Run 8: Report of LEDBAT — Data Link

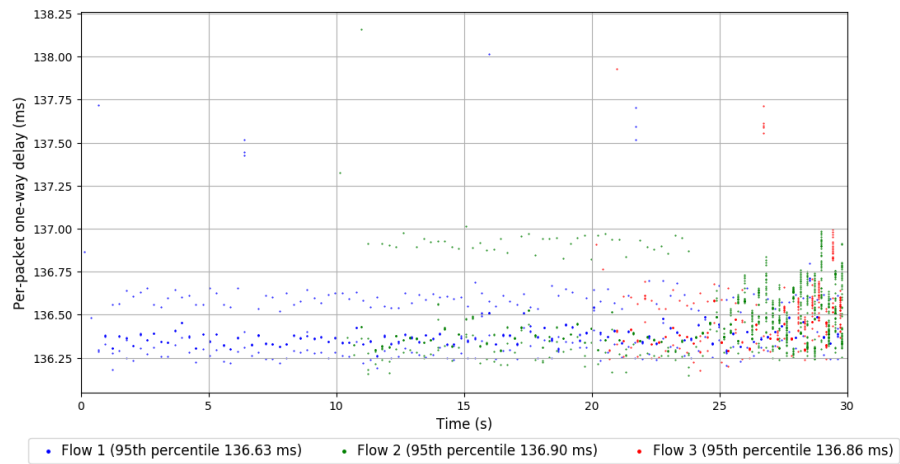
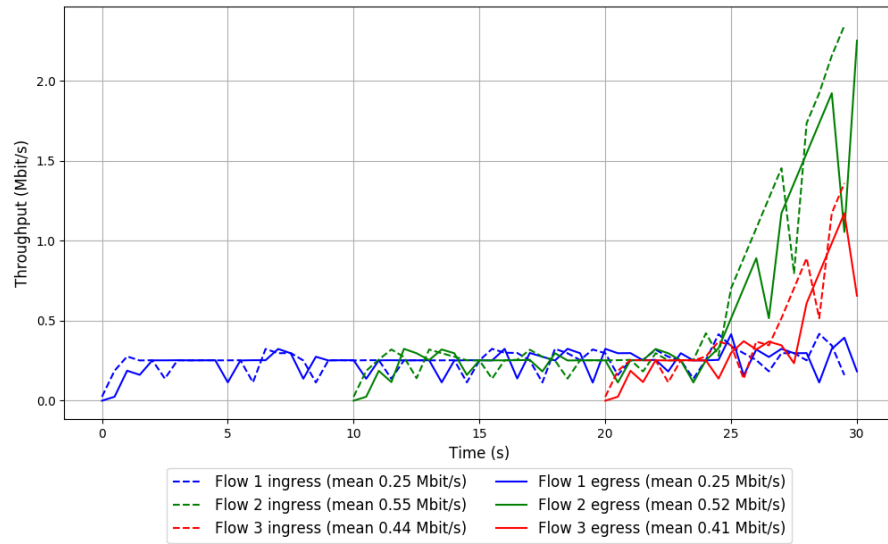


Run 9: Statistics of LEDBAT

Start at: 2018-06-20 01:51:03  
End at: 2018-06-20 01:51:33  
Local clock offset: 0.049 ms  
Remote clock offset: -0.329 ms

# Below is generated by plot.py at 2018-06-20 03:38:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.73 Mbit/s  
95th percentile per-packet one-way delay: 136.827 ms  
Loss rate: 4.54%  
-- Flow 1:  
Average throughput: 0.25 Mbit/s  
95th percentile per-packet one-way delay: 136.632 ms  
Loss rate: 1.07%  
-- Flow 2:  
Average throughput: 0.52 Mbit/s  
95th percentile per-packet one-way delay: 136.896 ms  
Loss rate: 5.49%  
-- Flow 3:  
Average throughput: 0.41 Mbit/s  
95th percentile per-packet one-way delay: 136.861 ms  
Loss rate: 8.18%

# Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-06-20 02:16:28

End at: 2018-06-20 02:16:58

Local clock offset: -0.015 ms

Remote clock offset: 0.112 ms

# Below is generated by plot.py at 2018-06-20 03:38:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 2.81 Mbit/s

95th percentile per-packet one-way delay: 136.596 ms

Loss rate: 3.10%

-- Flow 1:

Average throughput: 0.24 Mbit/s

95th percentile per-packet one-way delay: 136.301 ms

Loss rate: 0.82%

-- Flow 2:

Average throughput: 3.15 Mbit/s

95th percentile per-packet one-way delay: 136.652 ms

Loss rate: 2.75%

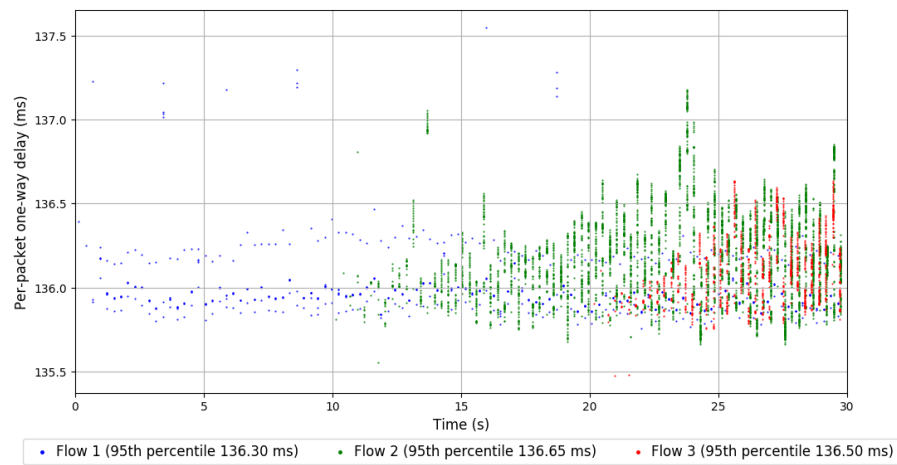
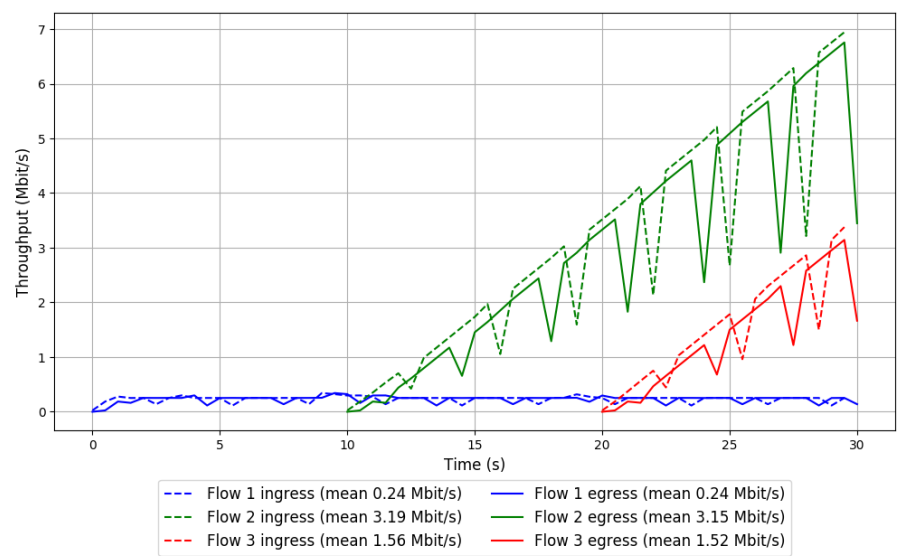
-- Flow 3:

Average throughput: 1.52 Mbit/s

95th percentile per-packet one-way delay: 136.504 ms

Loss rate: 5.57%

Run 10: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2018-06-19 22:34:24

End at: 2018-06-19 22:34:54

Local clock offset: -0.078 ms

Remote clock offset: 0.071 ms

# Below is generated by plot.py at 2018-06-20 03:38:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 557.38 Mbit/s

95th percentile per-packet one-way delay: 255.579 ms

Loss rate: 3.29%

-- Flow 1:

Average throughput: 496.27 Mbit/s

95th percentile per-packet one-way delay: 257.571 ms

Loss rate: 3.19%

-- Flow 2:

Average throughput: 62.72 Mbit/s

95th percentile per-packet one-way delay: 247.714 ms

Loss rate: 3.12%

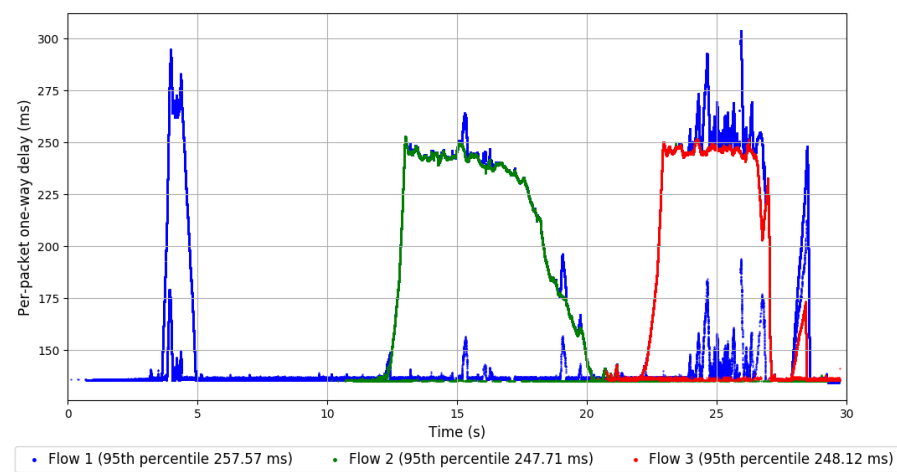
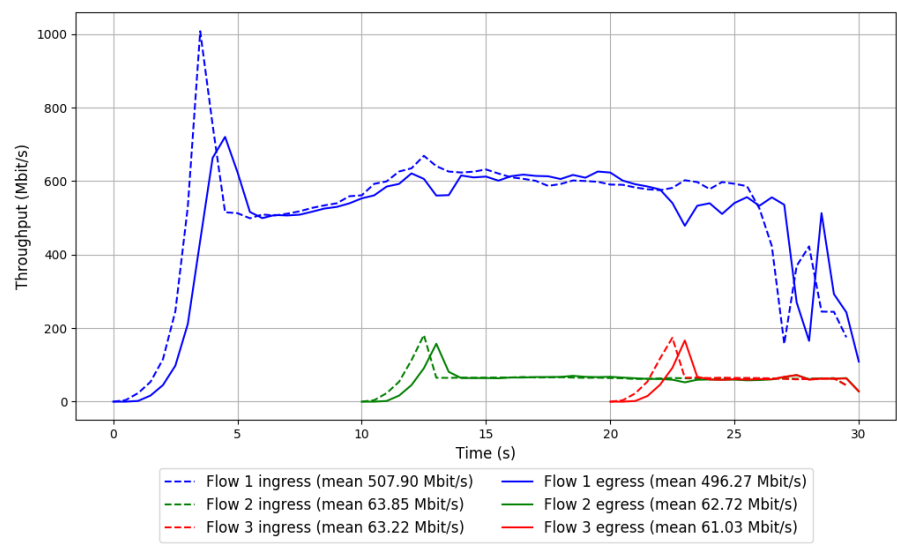
-- Flow 3:

Average throughput: 61.03 Mbit/s

95th percentile per-packet one-way delay: 248.118 ms

Loss rate: 6.10%

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2018-06-19 22:59:33

End at: 2018-06-19 23:00:03

Local clock offset: 0.271 ms

Remote clock offset: 0.062 ms

# Below is generated by plot.py at 2018-06-20 03:38:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 581.32 Mbit/s

95th percentile per-packet one-way delay: 241.096 ms

Loss rate: 2.99%

-- Flow 1:

Average throughput: 494.38 Mbit/s

95th percentile per-packet one-way delay: 241.206 ms

Loss rate: 3.03%

-- Flow 2:

Average throughput: 127.52 Mbit/s

95th percentile per-packet one-way delay: 240.801 ms

Loss rate: 2.79%

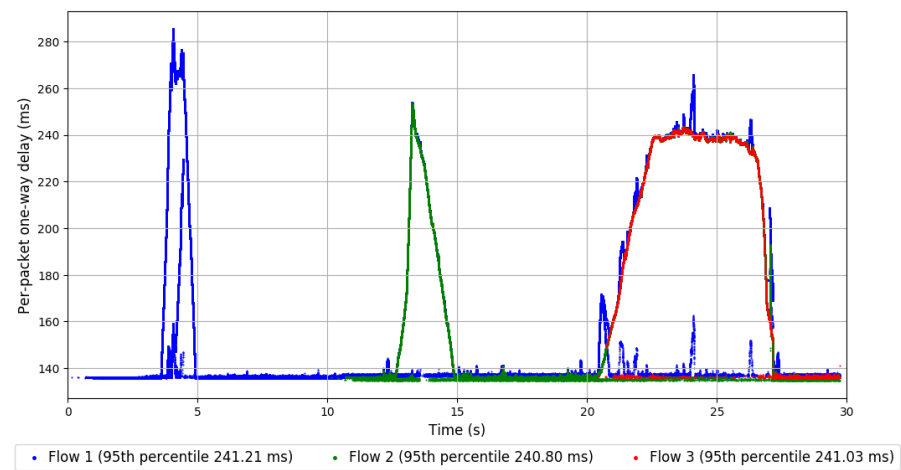
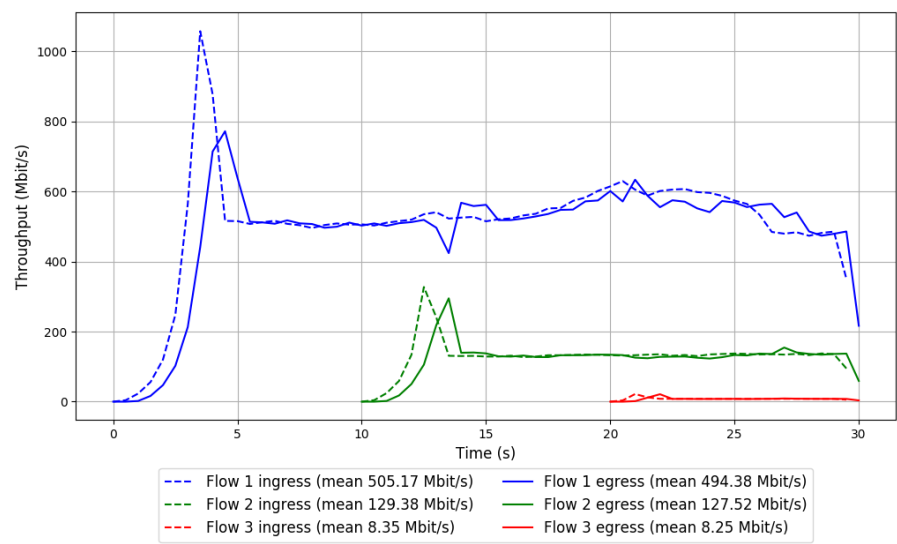
-- Flow 3:

Average throughput: 8.25 Mbit/s

95th percentile per-packet one-way delay: 241.035 ms

Loss rate: 3.86%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2018-06-19 23:24:17

End at: 2018-06-19 23:24:47

Local clock offset: 0.157 ms

Remote clock offset: 0.024 ms

# Below is generated by plot.py at 2018-06-20 03:38:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 548.24 Mbit/s

95th percentile per-packet one-way delay: 282.175 ms

Loss rate: 5.58%

-- Flow 1:

Average throughput: 465.82 Mbit/s

95th percentile per-packet one-way delay: 281.919 ms

Loss rate: 5.52%

-- Flow 2:

Average throughput: 123.63 Mbit/s

95th percentile per-packet one-way delay: 282.637 ms

Loss rate: 5.89%

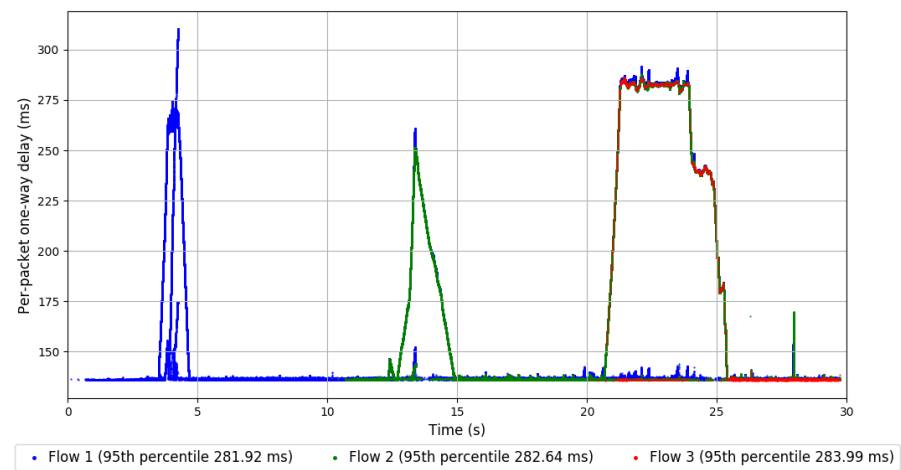
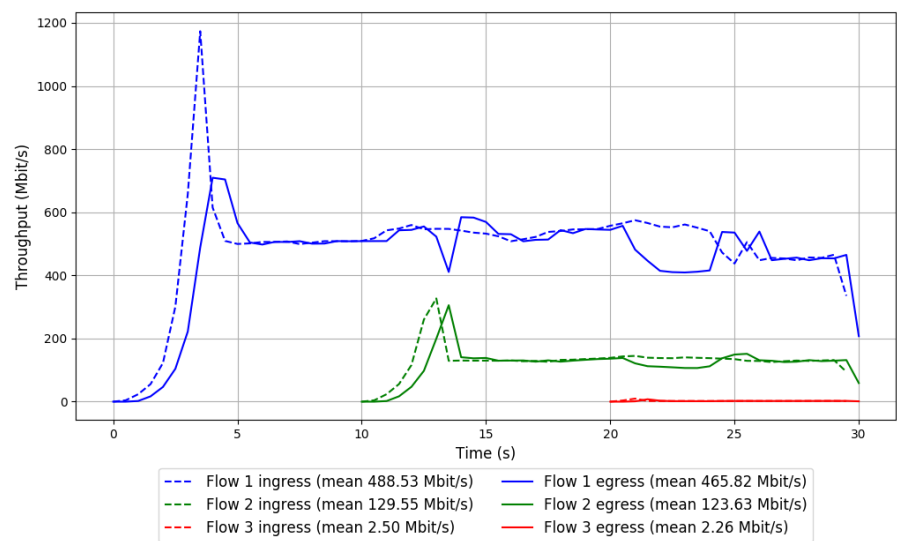
-- Flow 3:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 283.985 ms

Loss rate: 12.09%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2018-06-19 23:48:55

End at: 2018-06-19 23:49:25

Local clock offset: -0.135 ms

Remote clock offset: 0.031 ms

# Below is generated by plot.py at 2018-06-20 03:38:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 588.33 Mbit/s

95th percentile per-packet one-way delay: 246.783 ms

Loss rate: 4.36%

-- Flow 1:

Average throughput: 466.83 Mbit/s

95th percentile per-packet one-way delay: 248.894 ms

Loss rate: 4.03%

-- Flow 2:

Average throughput: 128.51 Mbit/s

95th percentile per-packet one-way delay: 235.497 ms

Loss rate: 4.14%

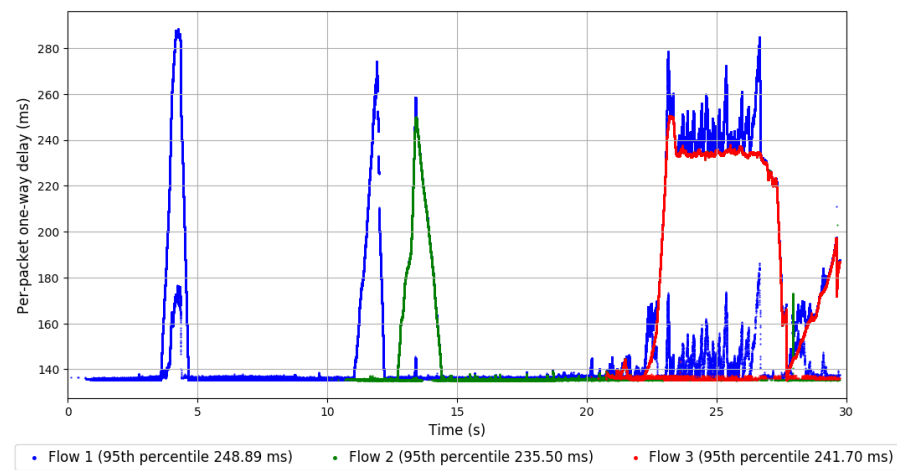
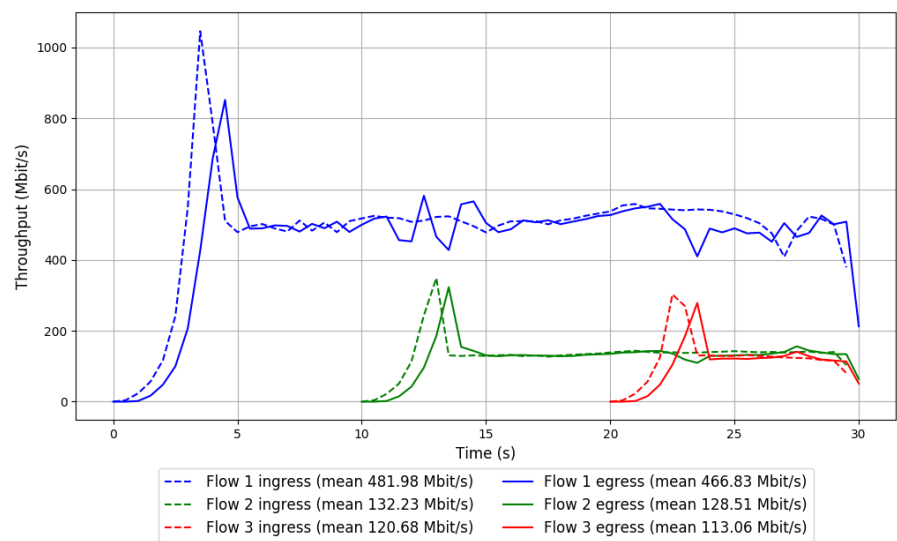
-- Flow 3:

Average throughput: 113.06 Mbit/s

95th percentile per-packet one-way delay: 241.704 ms

Loss rate: 8.92%

Run 4: Report of PCC-Allegro — Data Link

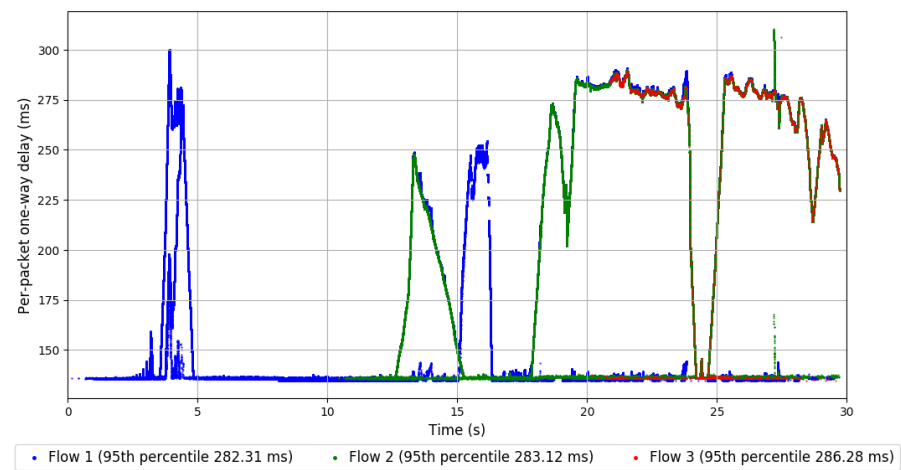
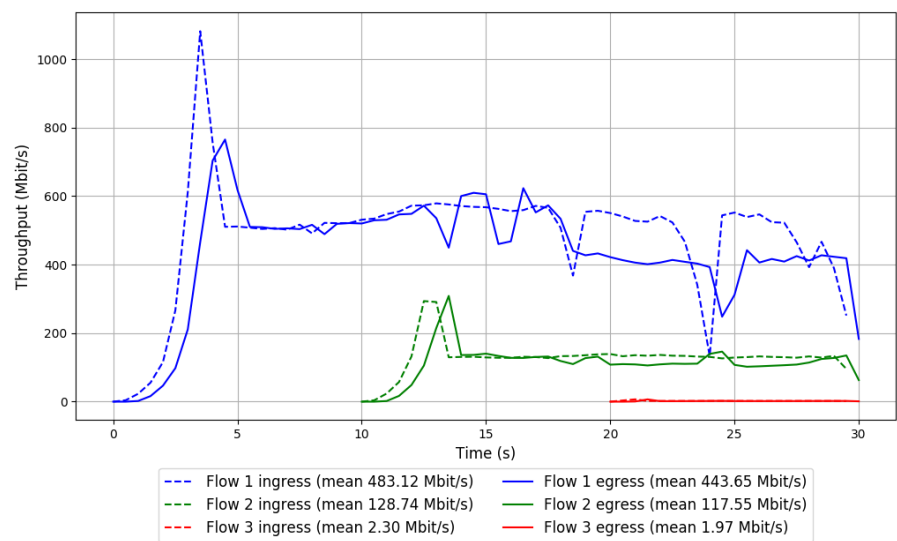


Run 5: Statistics of PCC-Allegro

Start at: 2018-06-20 00:13:56  
End at: 2018-06-20 00:14:26  
Local clock offset: 0.103 ms  
Remote clock offset: -0.002 ms

# Below is generated by plot.py at 2018-06-20 03:38:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 522.05 Mbit/s  
95th percentile per-packet one-way delay: 282.453 ms  
Loss rate: 9.16%  
-- Flow 1:  
Average throughput: 443.65 Mbit/s  
95th percentile per-packet one-way delay: 282.315 ms  
Loss rate: 9.01%  
-- Flow 2:  
Average throughput: 117.55 Mbit/s  
95th percentile per-packet one-way delay: 283.120 ms  
Loss rate: 9.95%  
-- Flow 3:  
Average throughput: 1.97 Mbit/s  
95th percentile per-packet one-way delay: 286.283 ms  
Loss rate: 16.74%

Run 5: Report of PCC-Allegro — Data Link

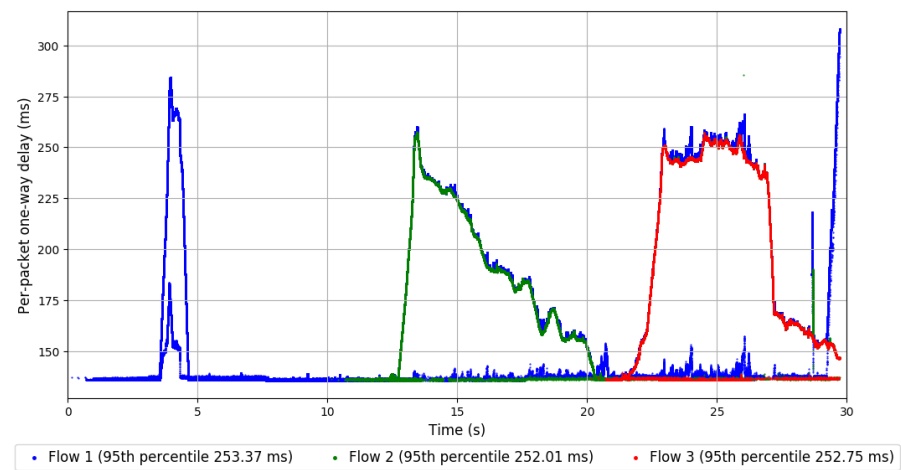
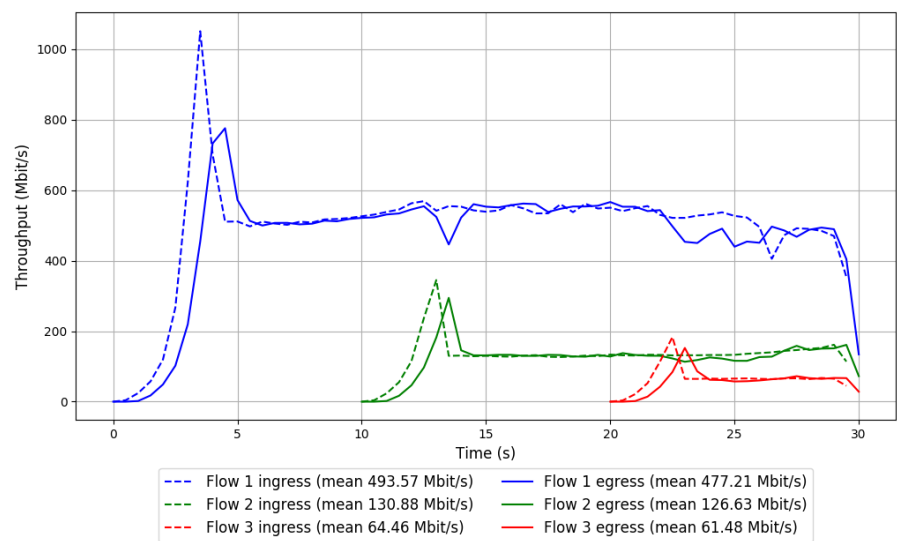


Run 6: Statistics of PCC-Allegro

Start at: 2018-06-20 00:38:46  
End at: 2018-06-20 00:39:16  
Local clock offset: -0.112 ms  
Remote clock offset: -0.372 ms

# Below is generated by plot.py at 2018-06-20 03:38:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 580.86 Mbit/s  
95th percentile per-packet one-way delay: 252.993 ms  
Loss rate: 4.37%  
-- Flow 1:  
Average throughput: 477.21 Mbit/s  
95th percentile per-packet one-way delay: 253.367 ms  
Loss rate: 4.20%  
-- Flow 2:  
Average throughput: 126.63 Mbit/s  
95th percentile per-packet one-way delay: 252.007 ms  
Loss rate: 4.58%  
-- Flow 3:  
Average throughput: 61.48 Mbit/s  
95th percentile per-packet one-way delay: 252.753 ms  
Loss rate: 7.27%

Run 6: Report of PCC-Allegro — Data Link

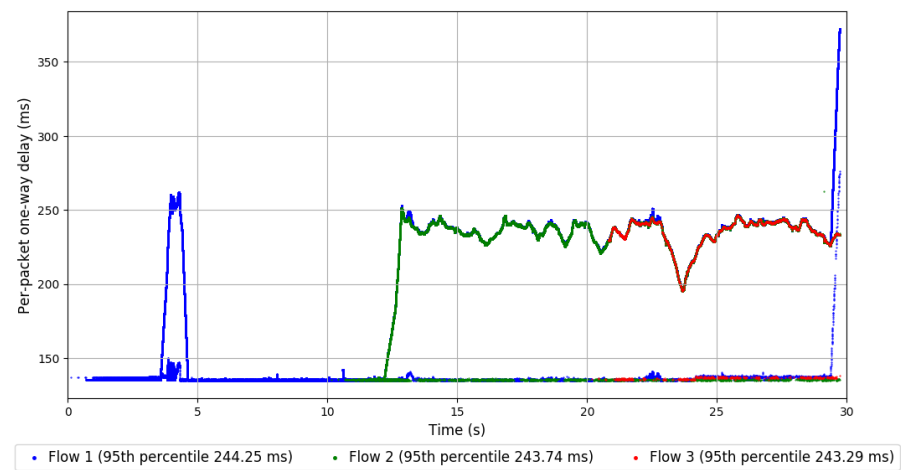
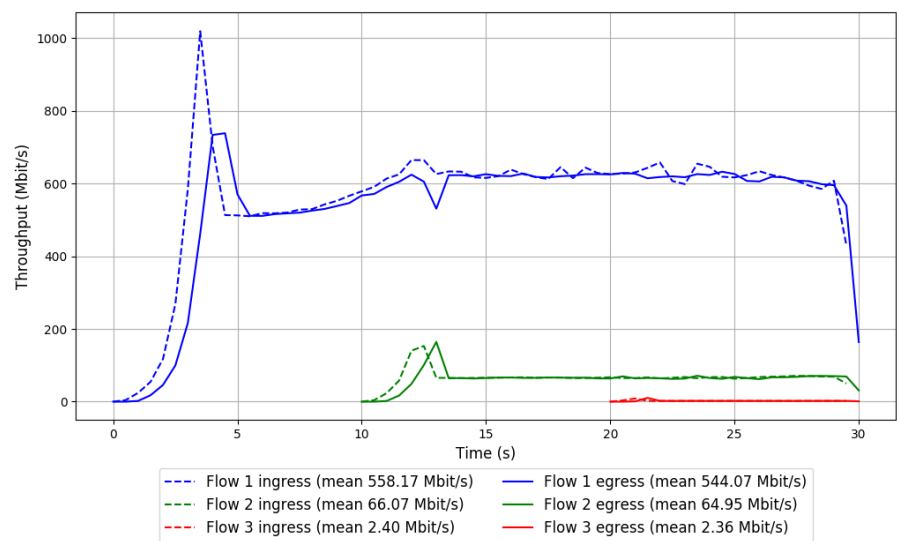


Run 7: Statistics of PCC-Allegro

Start at: 2018-06-20 01:03:50  
End at: 2018-06-20 01:04:20  
Local clock offset: 0.001 ms  
Remote clock offset: -0.327 ms

# Below is generated by plot.py at 2018-06-20 03:44:14  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 587.77 Mbit/s  
95th percentile per-packet one-way delay: 244.187 ms  
Loss rate: 3.39%  
-- Flow 1:  
Average throughput: 544.07 Mbit/s  
95th percentile per-packet one-way delay: 244.254 ms  
Loss rate: 3.42%  
-- Flow 2:  
Average throughput: 64.95 Mbit/s  
95th percentile per-packet one-way delay: 243.736 ms  
Loss rate: 3.03%  
-- Flow 3:  
Average throughput: 2.36 Mbit/s  
95th percentile per-packet one-way delay: 243.289 ms  
Loss rate: 4.21%

Run 7: Report of PCC-Allegro — Data Link



Run 8: Statistics of PCC-Allegro

Start at: 2018-06-20 01:29:00

End at: 2018-06-20 01:29:30

Local clock offset: -0.235 ms

Remote clock offset: 0.039 ms

# Below is generated by plot.py at 2018-06-20 03:44:29

# Datalink statistics

-- Total of 3 flows:

Average throughput: 580.85 Mbit/s

95th percentile per-packet one-way delay: 313.555 ms

Loss rate: 3.33%

-- Flow 1:

Average throughput: 493.22 Mbit/s

95th percentile per-packet one-way delay: 318.634 ms

Loss rate: 3.34%

-- Flow 2:

Average throughput: 131.29 Mbit/s

95th percentile per-packet one-way delay: 240.582 ms

Loss rate: 3.29%

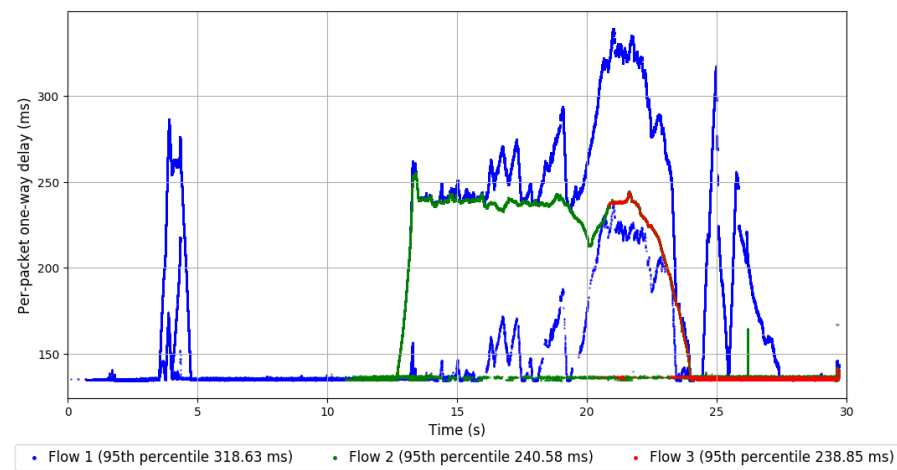
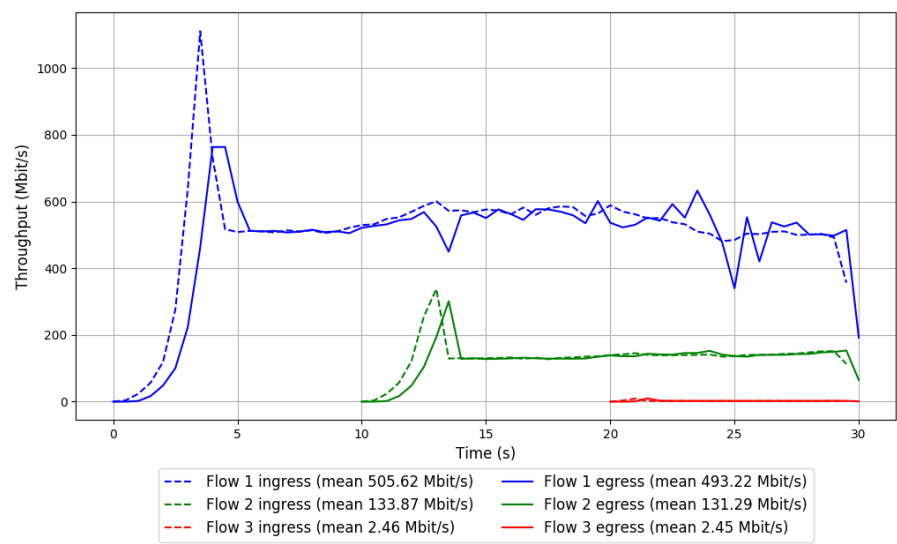
-- Flow 3:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 238.851 ms

Loss rate: 3.18%

Run 8: Report of PCC-Allegro — Data Link



Run 9: Statistics of PCC-Allegro

Start at: 2018-06-20 01:53:42

End at: 2018-06-20 01:54:12

Local clock offset: -0.046 ms

Remote clock offset: 0.056 ms

# Below is generated by plot.py at 2018-06-20 03:44:39

# Datalink statistics

-- Total of 3 flows:

Average throughput: 573.09 Mbit/s

95th percentile per-packet one-way delay: 278.206 ms

Loss rate: 5.02%

-- Flow 1:

Average throughput: 459.93 Mbit/s

95th percentile per-packet one-way delay: 284.761 ms

Loss rate: 4.84%

-- Flow 2:

Average throughput: 141.40 Mbit/s

95th percentile per-packet one-way delay: 251.253 ms

Loss rate: 5.04%

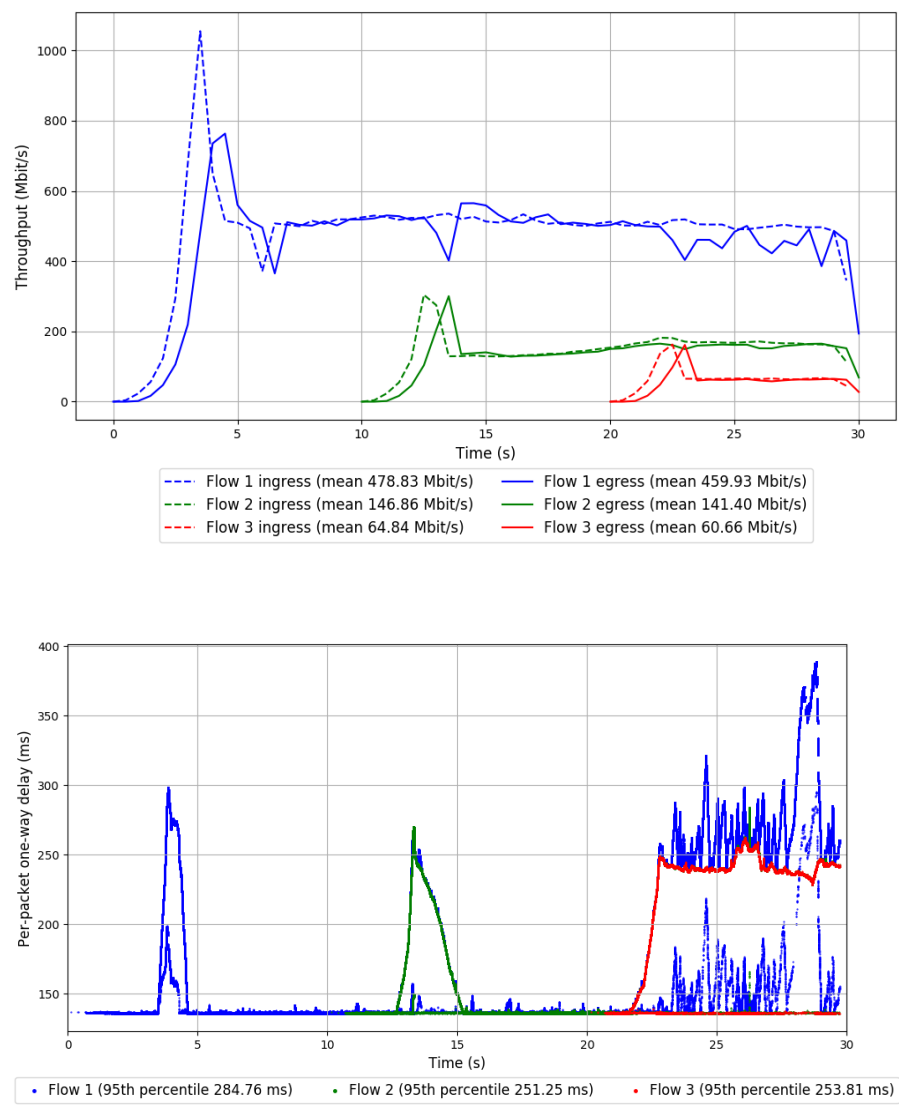
-- Flow 3:

Average throughput: 60.66 Mbit/s

95th percentile per-packet one-way delay: 253.810 ms

Loss rate: 9.02%

Run 9: Report of PCC-Allegro — Data Link



Run 10: Statistics of PCC-Allegro

Start at: 2018-06-20 02:19:07

End at: 2018-06-20 02:19:37

Local clock offset: 0.061 ms

Remote clock offset: 0.541 ms

# Below is generated by plot.py at 2018-06-20 03:44:39

# Datalink statistics

-- Total of 3 flows:

Average throughput: 489.37 Mbit/s

95th percentile per-packet one-way delay: 277.533 ms

Loss rate: 6.19%

-- Flow 1:

Average throughput: 341.98 Mbit/s

95th percentile per-packet one-way delay: 277.950 ms

Loss rate: 5.97%

-- Flow 2:

Average throughput: 113.56 Mbit/s

95th percentile per-packet one-way delay: 277.566 ms

Loss rate: 6.26%

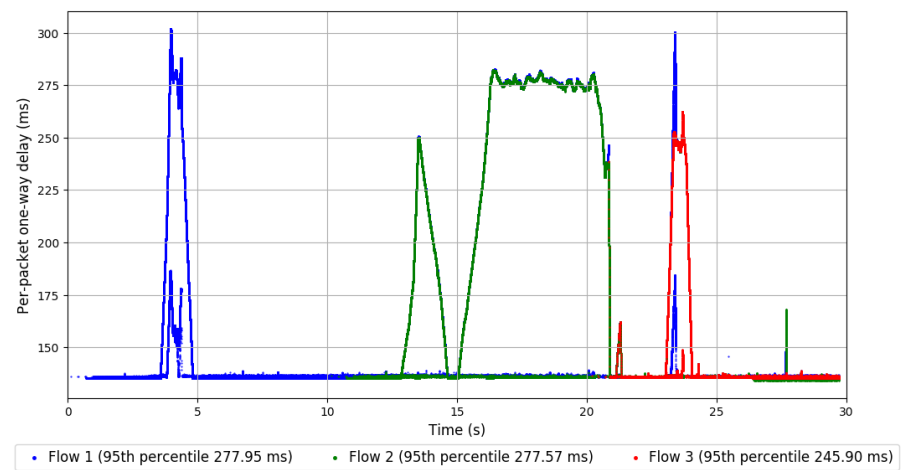
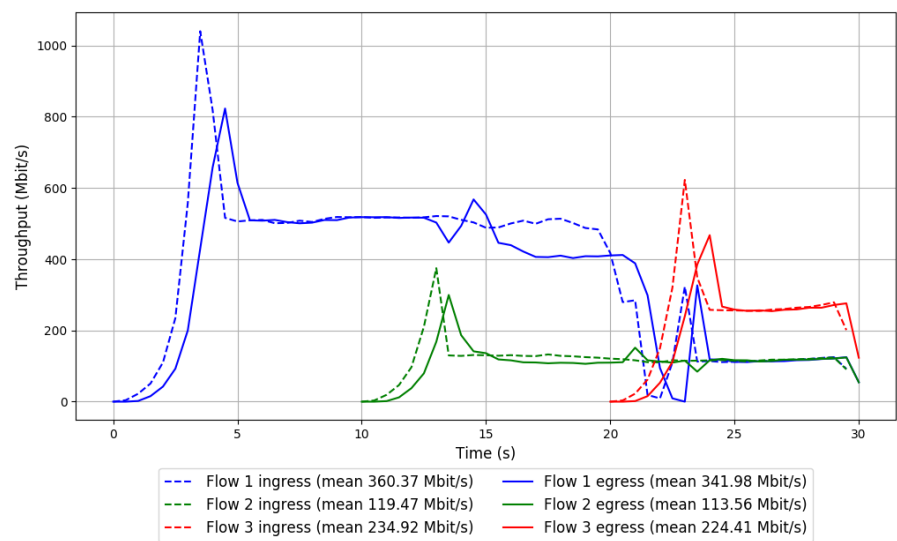
-- Flow 3:

Average throughput: 224.41 Mbit/s

95th percentile per-packet one-way delay: 245.900 ms

Loss rate: 7.15%

Run 10: Report of PCC-Allegro — Data Link

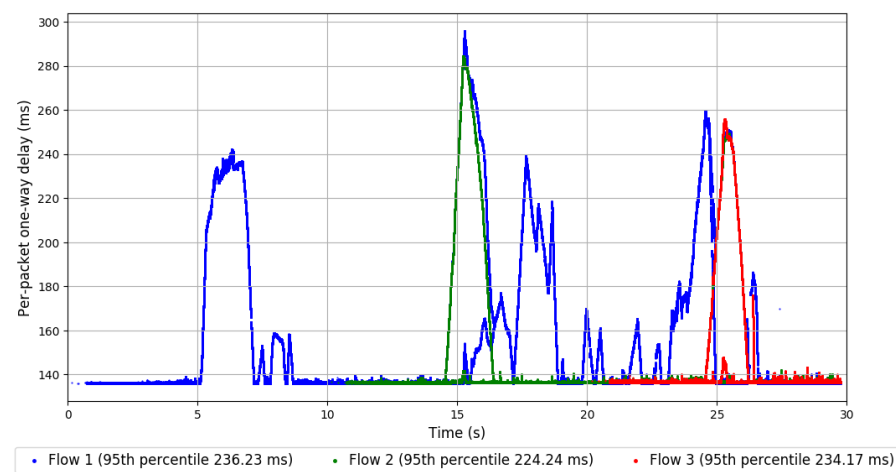
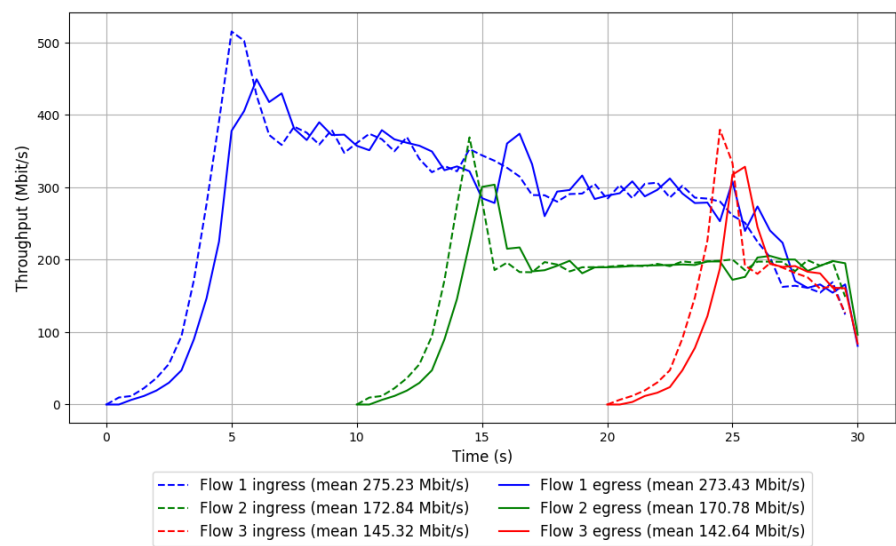


```
Run 1: Statistics of PCC-Expr

Start at: 2018-06-19 22:21:09
End at: 2018-06-19 22:21:39
Local clock offset: 0.165 ms
Remote clock offset: -0.336 ms

# Below is generated by plot.py at 2018-06-20 03:49:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 432.57 Mbit/s
95th percentile per-packet one-way delay: 235.907 ms
Loss rate: 2.15%
-- Flow 1:
Average throughput: 273.43 Mbit/s
95th percentile per-packet one-way delay: 236.233 ms
Loss rate: 1.56%
-- Flow 2:
Average throughput: 170.78 Mbit/s
95th percentile per-packet one-way delay: 224.241 ms
Loss rate: 2.55%
-- Flow 3:
Average throughput: 142.64 Mbit/s
95th percentile per-packet one-way delay: 234.174 ms
Loss rate: 4.57%
```

Run 1: Report of PCC-Expr — Data Link

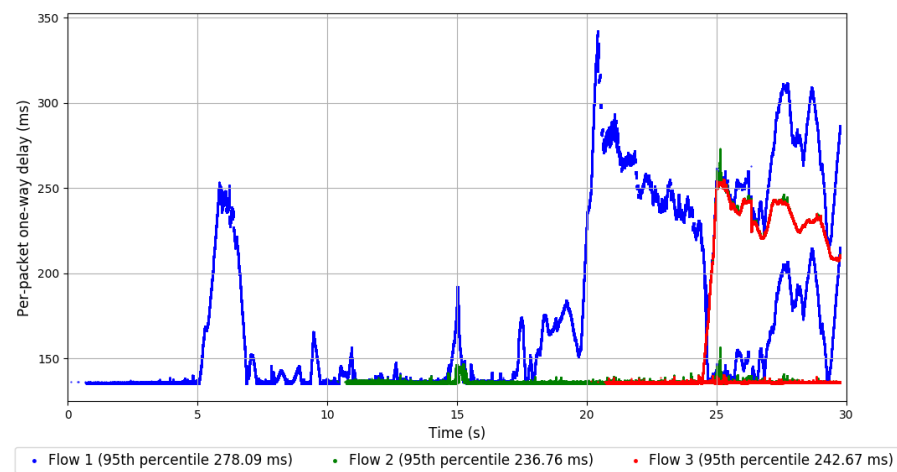
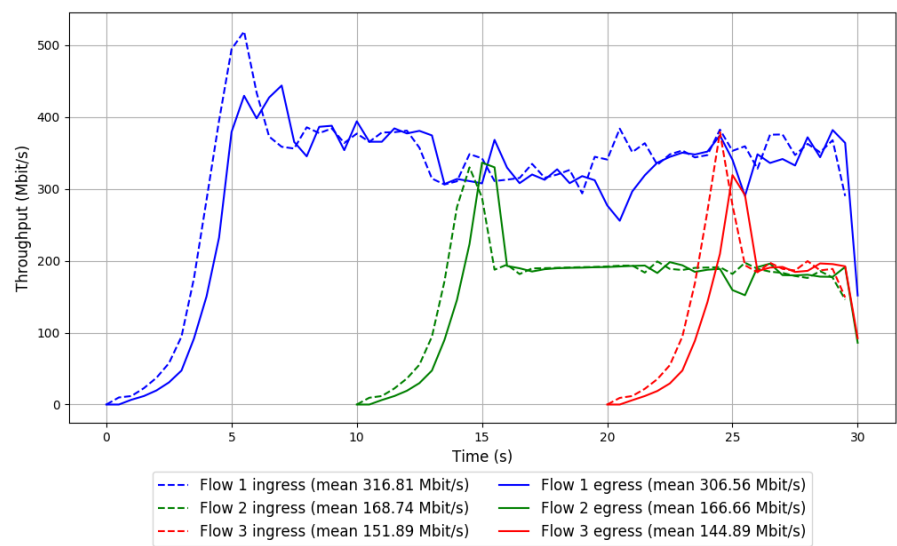


```
Run 2: Statistics of PCC-Expr

Start at: 2018-06-19 22:46:04
End at: 2018-06-19 22:46:34
Local clock offset: 0.067 ms
Remote clock offset: 0.416 ms

# Below is generated by plot.py at 2018-06-20 03:51:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 463.85 Mbit/s
95th percentile per-packet one-way delay: 267.463 ms
Loss rate: 4.09%
-- Flow 1:
Average throughput: 306.56 Mbit/s
95th percentile per-packet one-way delay: 278.088 ms
Loss rate: 4.12%
-- Flow 2:
Average throughput: 166.66 Mbit/s
95th percentile per-packet one-way delay: 236.757 ms
Loss rate: 2.60%
-- Flow 3:
Average throughput: 144.89 Mbit/s
95th percentile per-packet one-way delay: 242.668 ms
Loss rate: 7.25%
```

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2018-06-19 23:11:16

End at: 2018-06-19 23:11:46

Local clock offset: 0.032 ms

Remote clock offset: 0.024 ms

# Below is generated by plot.py at 2018-06-20 03:51:51

# Datalink statistics

-- Total of 3 flows:

Average throughput: 420.26 Mbit/s

95th percentile per-packet one-way delay: 192.746 ms

Loss rate: 2.07%

-- Flow 1:

Average throughput: 282.01 Mbit/s

95th percentile per-packet one-way delay: 206.634 ms

Loss rate: 2.15%

-- Flow 2:

Average throughput: 168.77 Mbit/s

95th percentile per-packet one-way delay: 161.972 ms

Loss rate: 1.57%

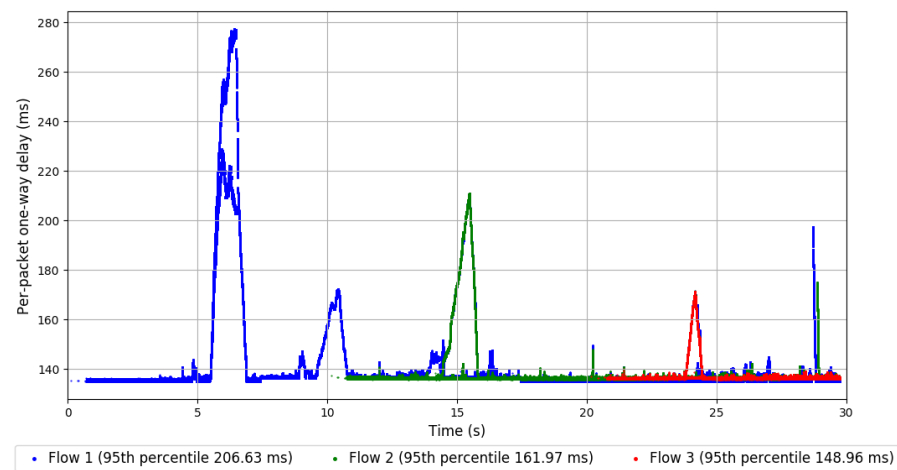
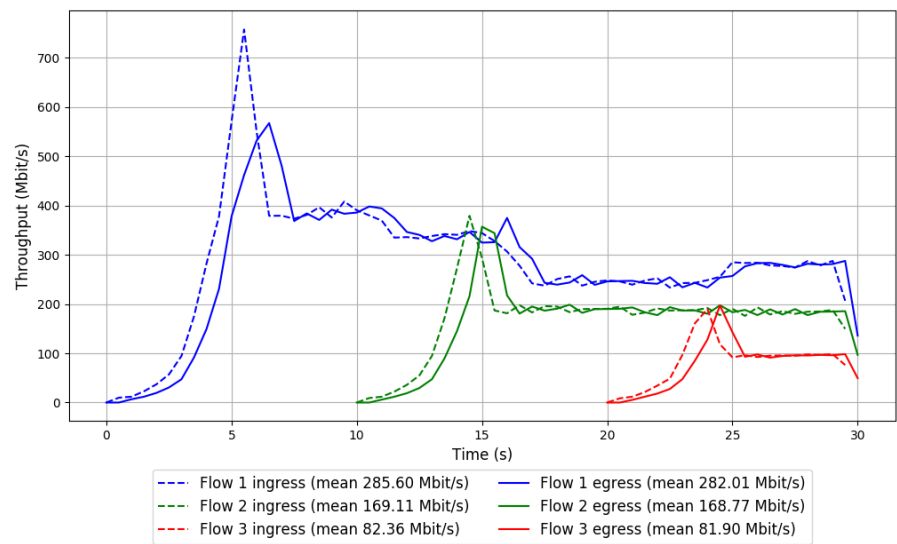
-- Flow 3:

Average throughput: 81.90 Mbit/s

95th percentile per-packet one-way delay: 148.963 ms

Loss rate: 3.30%

Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2018-06-19 23:35:57

End at: 2018-06-19 23:36:27

Local clock offset: -0.108 ms

Remote clock offset: 0.062 ms

# Below is generated by plot.py at 2018-06-20 03:51:51

# Datalink statistics

-- Total of 3 flows:

Average throughput: 424.09 Mbit/s

95th percentile per-packet one-way delay: 258.476 ms

Loss rate: 2.28%

-- Flow 1:

Average throughput: 287.04 Mbit/s

95th percentile per-packet one-way delay: 270.573 ms

Loss rate: 2.46%

-- Flow 2:

Average throughput: 167.00 Mbit/s

95th percentile per-packet one-way delay: 137.230 ms

Loss rate: 1.58%

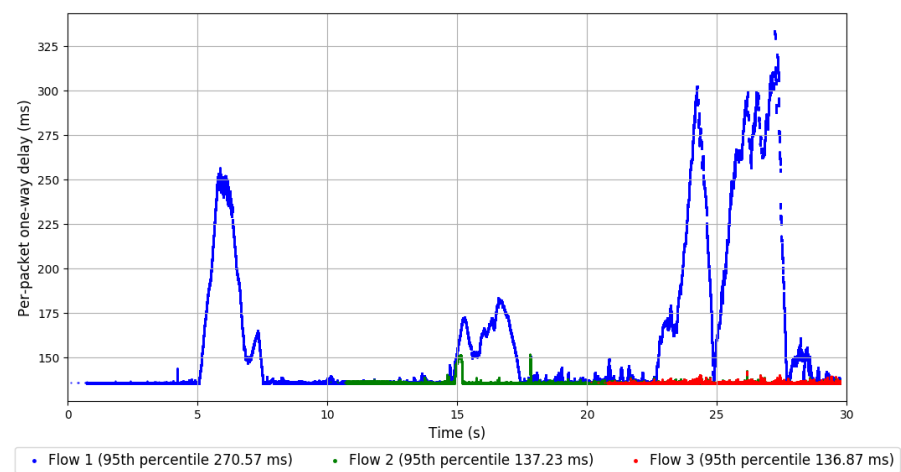
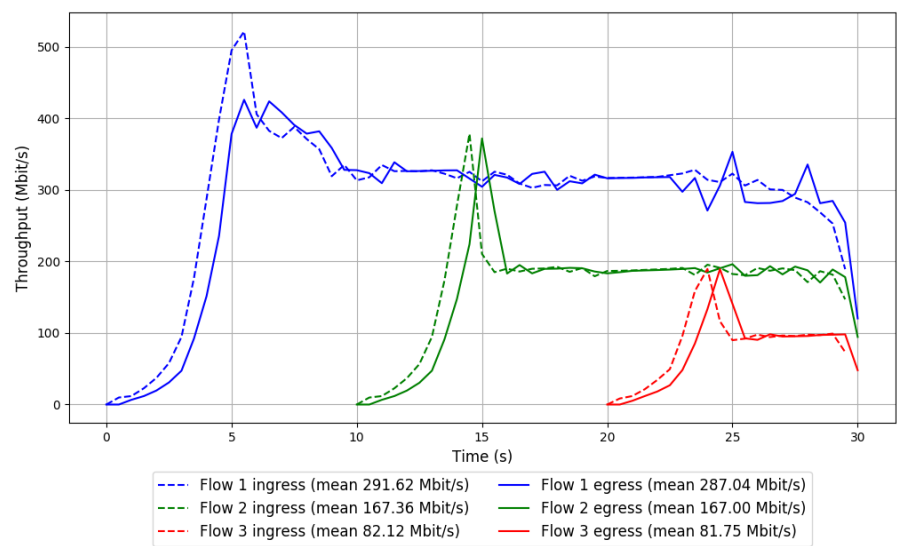
-- Flow 3:

Average throughput: 81.75 Mbit/s

95th percentile per-packet one-way delay: 136.869 ms

Loss rate: 3.23%

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2018-06-20 00:00:33

End at: 2018-06-20 00:01:03

Local clock offset: -0.068 ms

Remote clock offset: 0.012 ms

# Below is generated by plot.py at 2018-06-20 03:58:51

# Datalink statistics

-- Total of 3 flows:

Average throughput: 444.18 Mbit/s

95th percentile per-packet one-way delay: 212.442 ms

Loss rate: 1.83%

-- Flow 1:

Average throughput: 305.16 Mbit/s

95th percentile per-packet one-way delay: 220.995 ms

Loss rate: 1.82%

-- Flow 2:

Average throughput: 170.31 Mbit/s

95th percentile per-packet one-way delay: 137.940 ms

Loss rate: 1.49%

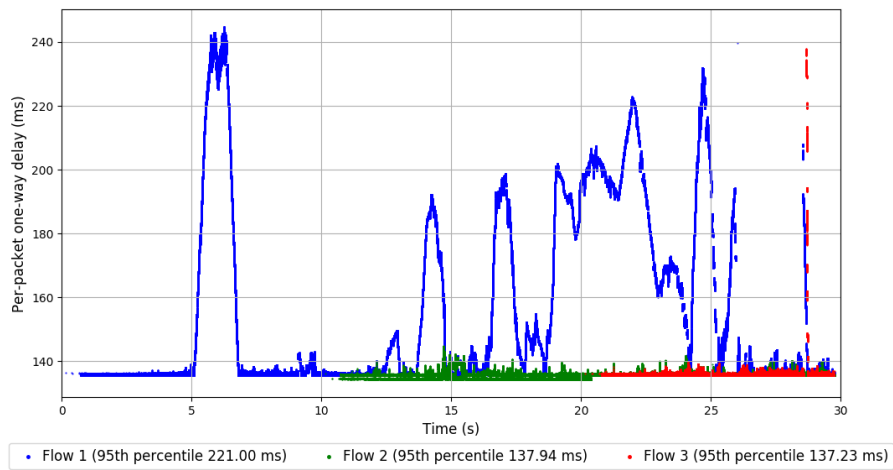
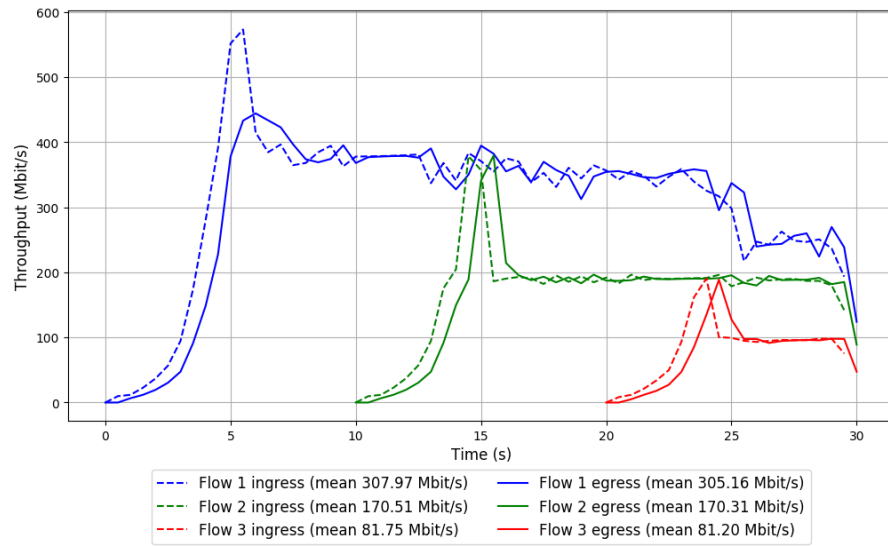
-- Flow 3:

Average throughput: 81.20 Mbit/s

95th percentile per-packet one-way delay: 137.234 ms

Loss rate: 3.40%

# Run 5: Report of PCC-Expr — Data Link



Run 6: Statistics of PCC-Expr

Start at: 2018-06-20 00:25:38

End at: 2018-06-20 00:26:08

Local clock offset: 0.041 ms

Remote clock offset: 0.015 ms

# Below is generated by plot.py at 2018-06-20 04:01:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 485.85 Mbit/s

95th percentile per-packet one-way delay: 258.000 ms

Loss rate: 3.19%

-- Flow 1:

Average throughput: 285.08 Mbit/s

95th percentile per-packet one-way delay: 248.609 ms

Loss rate: 1.86%

-- Flow 2:

Average throughput: 299.51 Mbit/s

95th percentile per-packet one-way delay: 293.856 ms

Loss rate: 5.04%

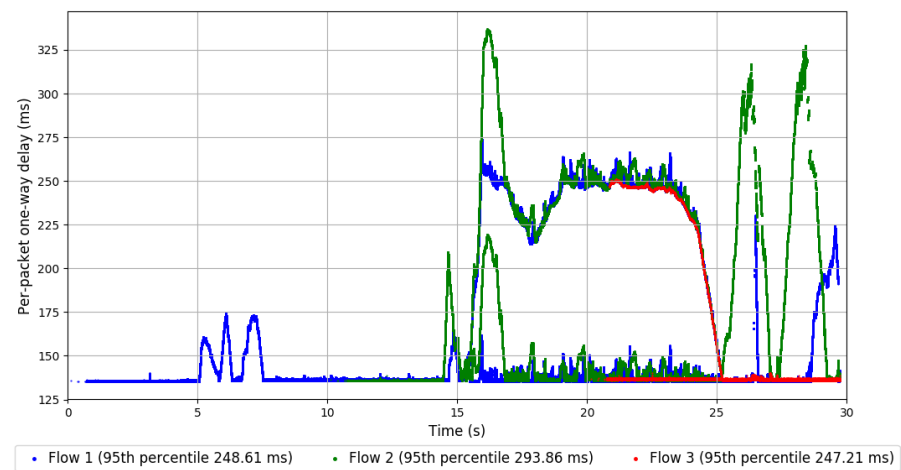
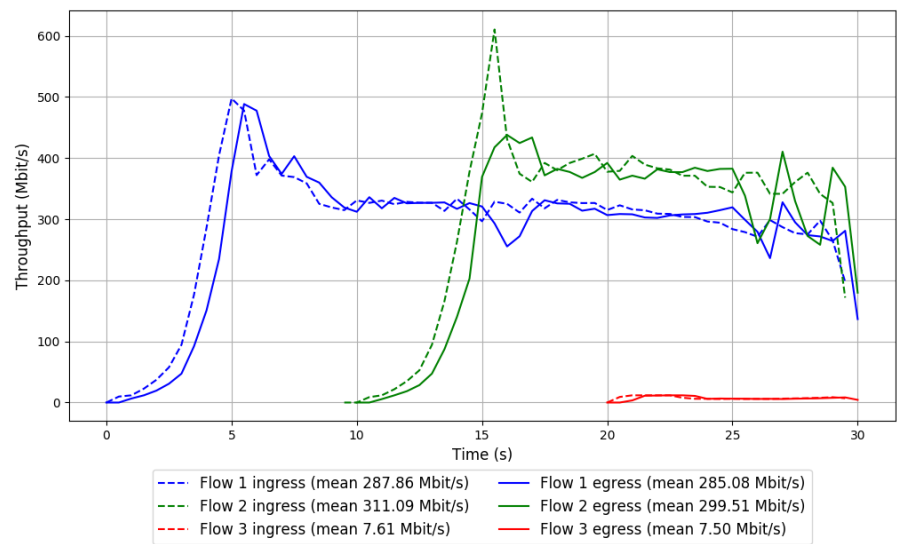
-- Flow 3:

Average throughput: 7.50 Mbit/s

95th percentile per-packet one-way delay: 247.212 ms

Loss rate: 4.10%

Run 6: Report of PCC-Expr — Data Link

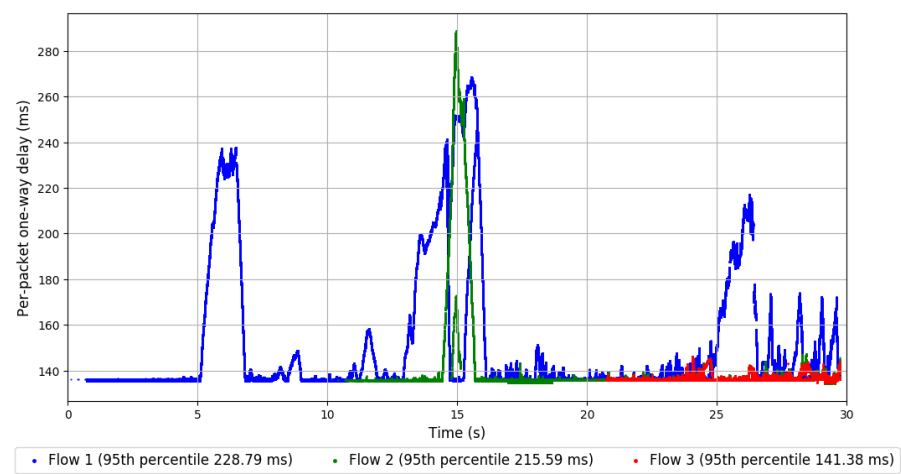
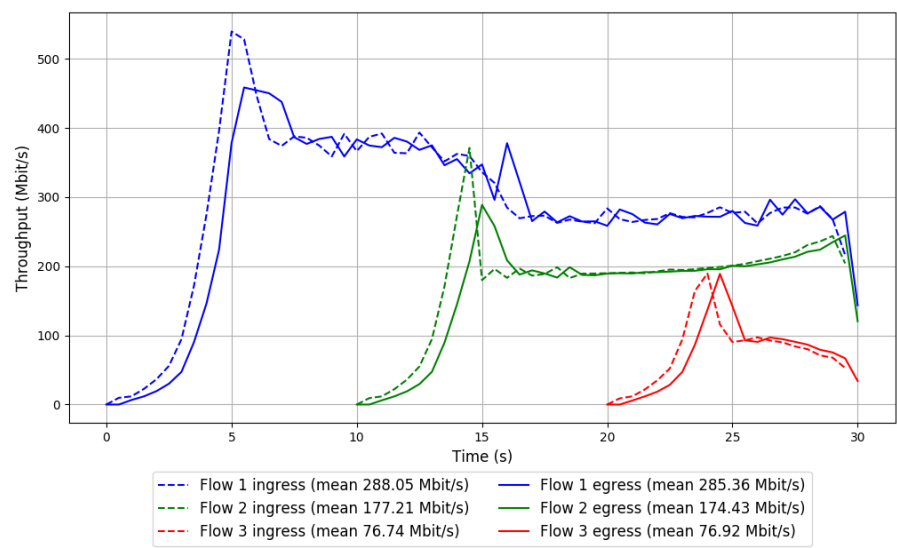


```
Run 7: Statistics of PCC-Expr

Start at: 2018-06-20 00:50:35
End at: 2018-06-20 00:51:05
Local clock offset: -0.076 ms
Remote clock offset: 0.048 ms

# Below is generated by plot.py at 2018-06-20 04:01:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 425.71 Mbit/s
95th percentile per-packet one-way delay: 227.361 ms
Loss rate: 2.17%
-- Flow 1:
Average throughput: 285.36 Mbit/s
95th percentile per-packet one-way delay: 228.794 ms
Loss rate: 1.84%
-- Flow 2:
Average throughput: 174.43 Mbit/s
95th percentile per-packet one-way delay: 215.588 ms
Loss rate: 2.91%
-- Flow 3:
Average throughput: 76.92 Mbit/s
95th percentile per-packet one-way delay: 141.382 ms
Loss rate: 2.53%
```

Run 7: Report of PCC-Expr — Data Link



Run 8: Statistics of PCC-Expr

Start at: 2018-06-20 01:15:39

End at: 2018-06-20 01:16:09

Local clock offset: -0.033 ms

Remote clock offset: 0.029 ms

# Below is generated by plot.py at 2018-06-20 04:01:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 364.28 Mbit/s

95th percentile per-packet one-way delay: 148.863 ms

Loss rate: 1.54%

-- Flow 1:

Average throughput: 192.13 Mbit/s

95th percentile per-packet one-way delay: 137.242 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 185.12 Mbit/s

95th percentile per-packet one-way delay: 164.287 ms

Loss rate: 1.82%

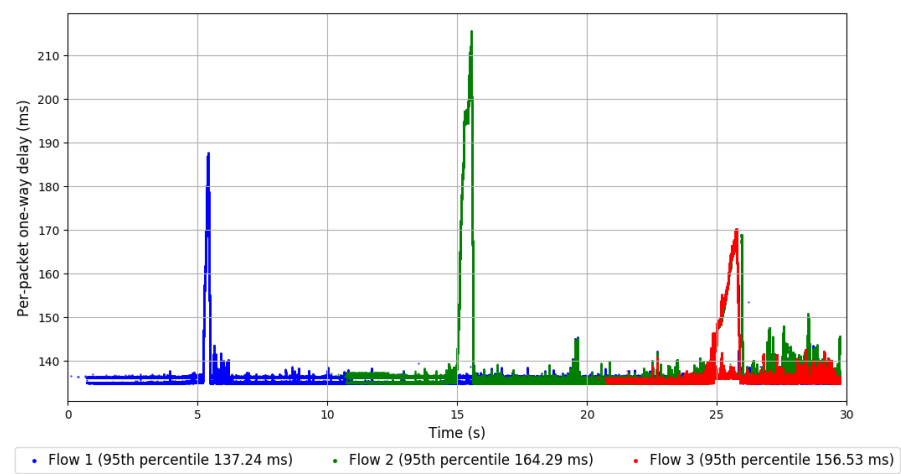
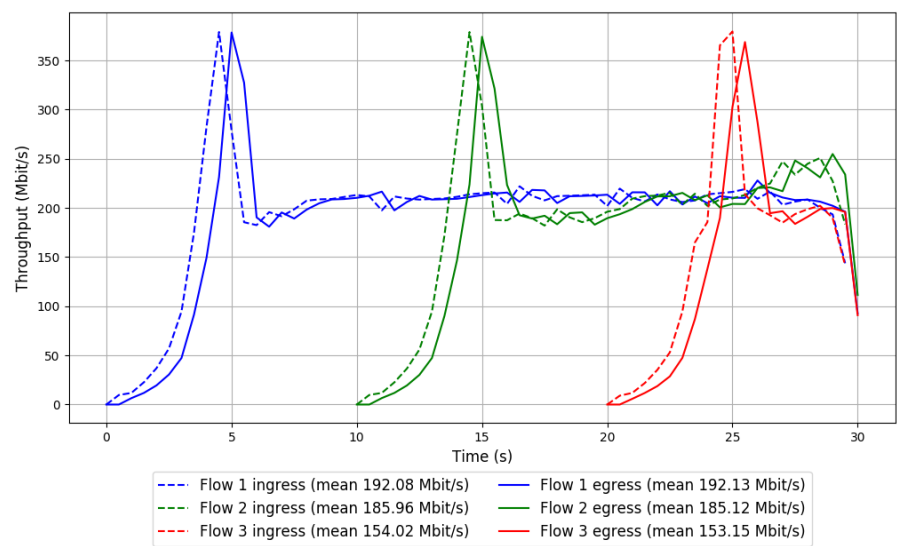
-- Flow 3:

Average throughput: 153.15 Mbit/s

95th percentile per-packet one-way delay: 156.525 ms

Loss rate: 3.31%

Run 8: Report of PCC-Expr — Data Link



Run 9: Statistics of PCC-Expr

Start at: 2018-06-20 01:40:45

End at: 2018-06-20 01:41:15

Local clock offset: 0.026 ms

Remote clock offset: 0.472 ms

# Below is generated by plot.py at 2018-06-20 04:01:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 265.14 Mbit/s

95th percentile per-packet one-way delay: 136.114 ms

Loss rate: 1.28%

-- Flow 1:

Average throughput: 179.35 Mbit/s

95th percentile per-packet one-way delay: 136.131 ms

Loss rate: 0.96%

-- Flow 2:

Average throughput: 89.40 Mbit/s

95th percentile per-packet one-way delay: 136.075 ms

Loss rate: 1.31%

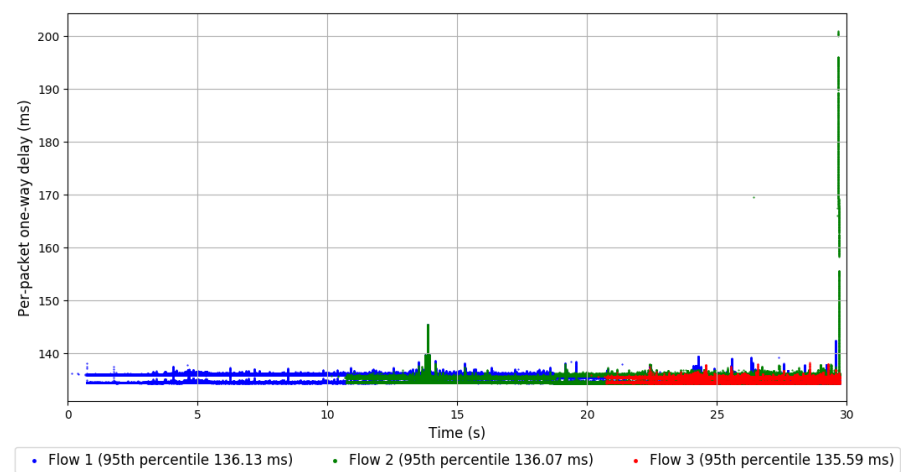
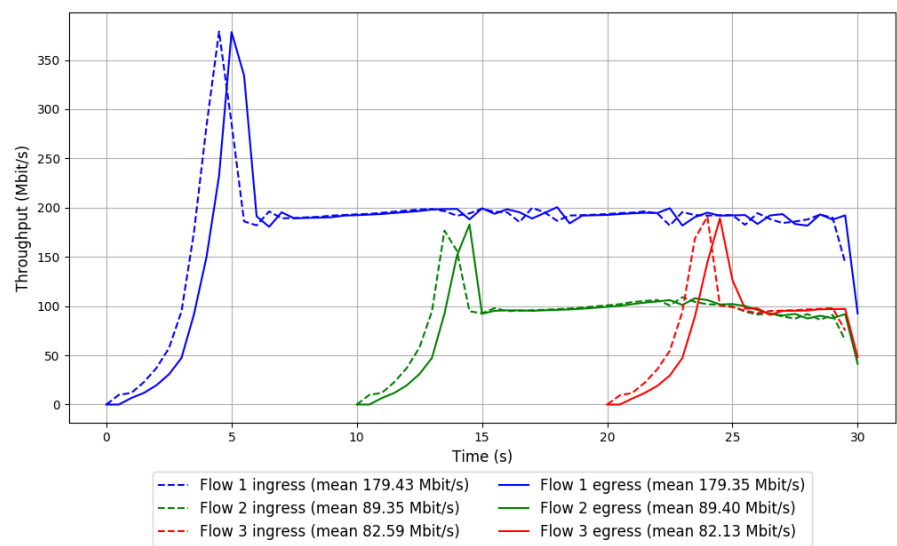
-- Flow 3:

Average throughput: 82.13 Mbit/s

95th percentile per-packet one-way delay: 135.592 ms

Loss rate: 3.32%

Run 9: Report of PCC-Expr — Data Link



Run 10: Statistics of PCC-Expr

Start at: 2018-06-20 02:05:29

End at: 2018-06-20 02:05:59

Local clock offset: -0.019 ms

Remote clock offset: 0.105 ms

# Below is generated by plot.py at 2018-06-20 04:06:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 433.16 Mbit/s

95th percentile per-packet one-way delay: 337.619 ms

Loss rate: 7.12%

-- Flow 1:

Average throughput: 309.95 Mbit/s

95th percentile per-packet one-way delay: 367.693 ms

Loss rate: 8.14%

-- Flow 2:

Average throughput: 148.50 Mbit/s

95th percentile per-packet one-way delay: 250.112 ms

Loss rate: 3.65%

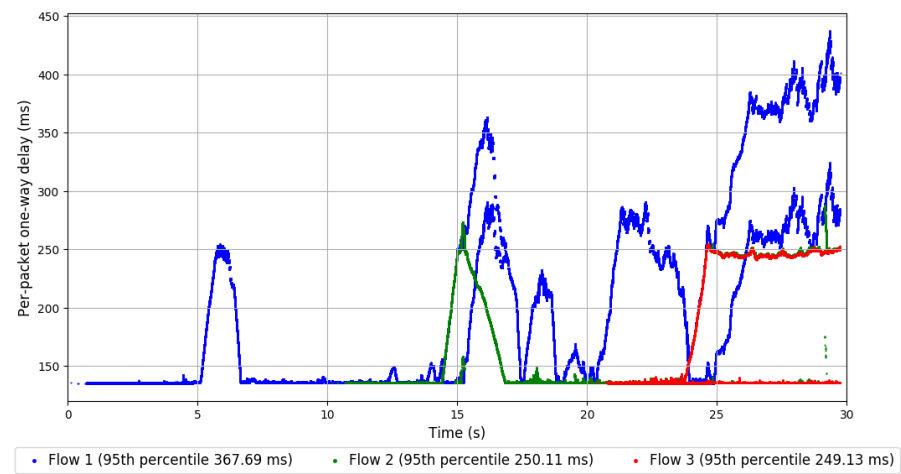
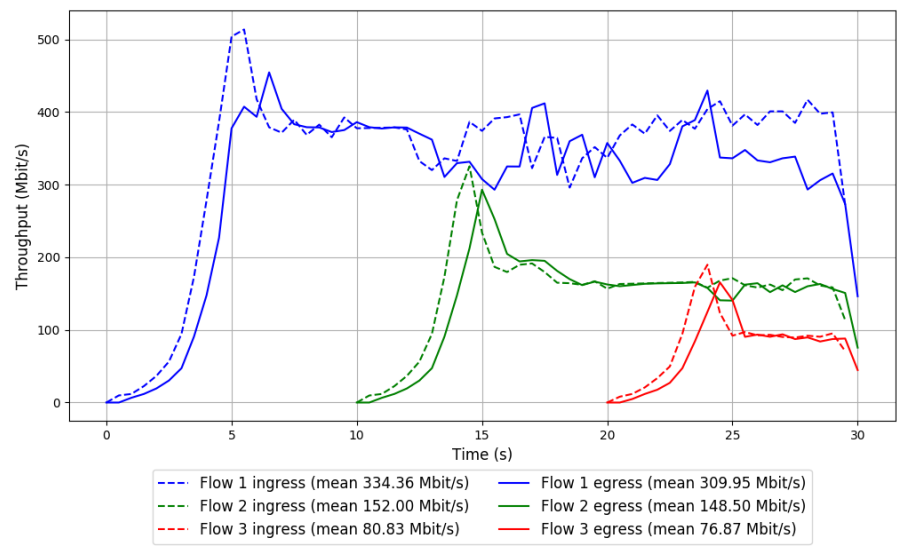
-- Flow 3:

Average throughput: 76.87 Mbit/s

95th percentile per-packet one-way delay: 249.133 ms

Loss rate: 7.53%

Run 10: Report of PCC-Expr — Data Link

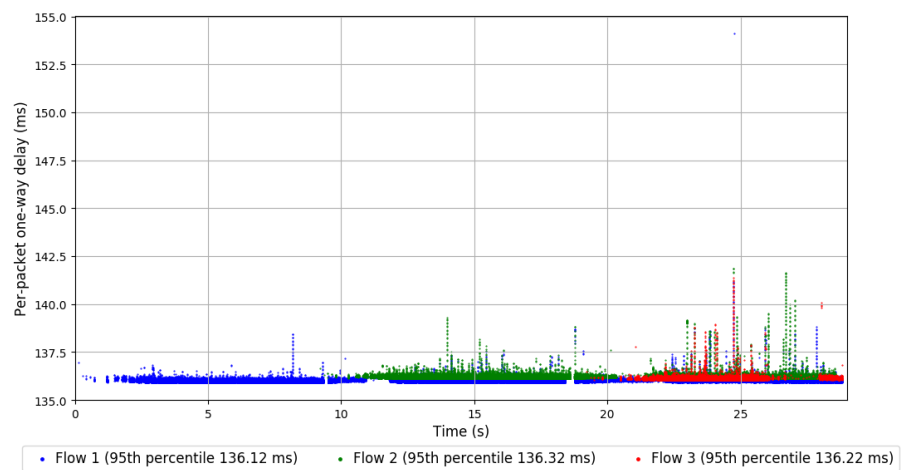
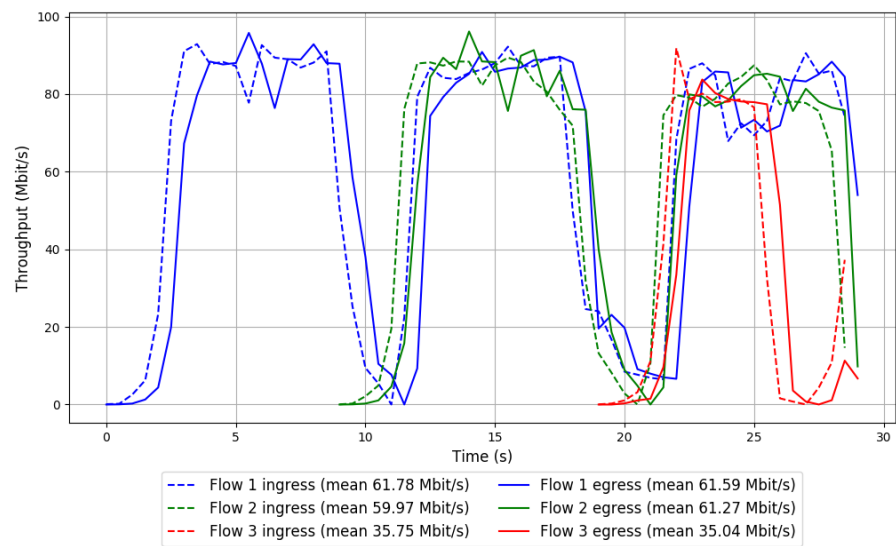


Run 1: Statistics of QUIC Cubic

Start at: 2018-06-19 22:25:23  
End at: 2018-06-19 22:25:53  
Local clock offset: -0.008 ms  
Remote clock offset: -0.337 ms

# Below is generated by plot.py at 2018-06-20 04:06:07  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 114.62 Mbit/s  
95th percentile per-packet one-way delay: 136.274 ms  
Loss rate: 1.38%  
-- Flow 1:  
Average throughput: 61.59 Mbit/s  
95th percentile per-packet one-way delay: 136.121 ms  
Loss rate: 1.24%  
-- Flow 2:  
Average throughput: 61.27 Mbit/s  
95th percentile per-packet one-way delay: 136.318 ms  
Loss rate: 0.61%  
-- Flow 3:  
Average throughput: 35.04 Mbit/s  
95th percentile per-packet one-way delay: 136.216 ms  
Loss rate: 4.72%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-06-19 22:50:21

End at: 2018-06-19 22:50:51

Local clock offset: 0.155 ms

Remote clock offset: 0.059 ms

# Below is generated by plot.py at 2018-06-20 04:06:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 113.04 Mbit/s

95th percentile per-packet one-way delay: 136.452 ms

Loss rate: 0.94%

-- Flow 1:

Average throughput: 61.86 Mbit/s

95th percentile per-packet one-way delay: 136.418 ms

Loss rate: 1.31%

-- Flow 2:

Average throughput: 60.55 Mbit/s

95th percentile per-packet one-way delay: 136.487 ms

Loss rate: 0.62%

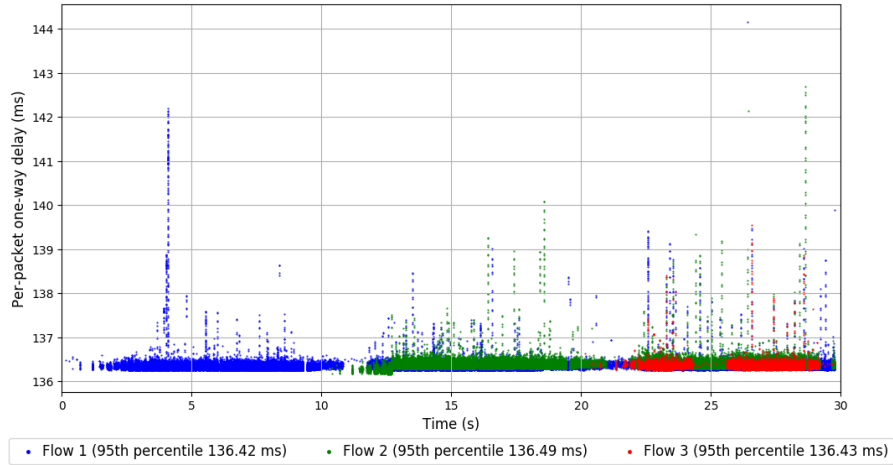
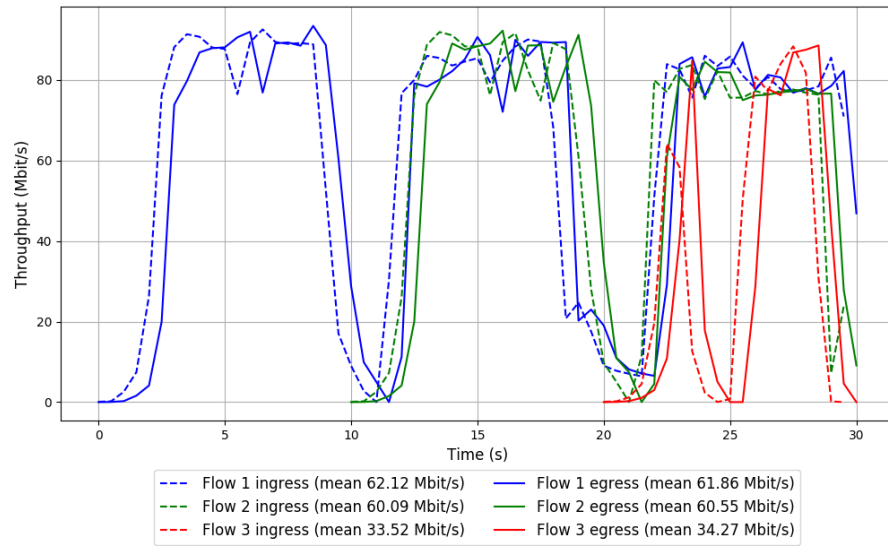
-- Flow 3:

Average throughput: 34.27 Mbit/s

95th percentile per-packet one-way delay: 136.427 ms

Loss rate: 0.00%

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



Run 3: Statistics of QUIC Cubic

Start at: 2018-06-19 23:15:33

End at: 2018-06-19 23:16:03

Local clock offset: -0.038 ms

Remote clock offset: 0.035 ms

# Below is generated by plot.py at 2018-06-20 04:06:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 111.61 Mbit/s

95th percentile per-packet one-way delay: 136.518 ms

Loss rate: 1.08%

-- Flow 1:

Average throughput: 60.03 Mbit/s

95th percentile per-packet one-way delay: 136.528 ms

Loss rate: 1.35%

-- Flow 2:

Average throughput: 61.77 Mbit/s

95th percentile per-packet one-way delay: 136.514 ms

Loss rate: 0.72%

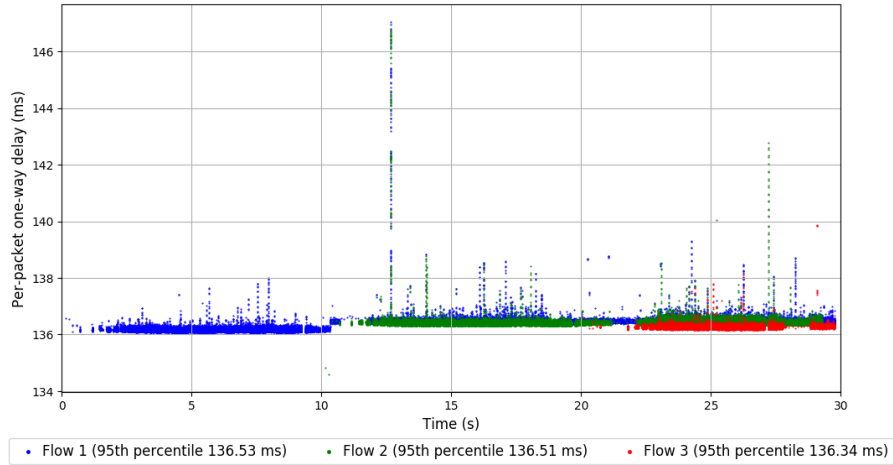
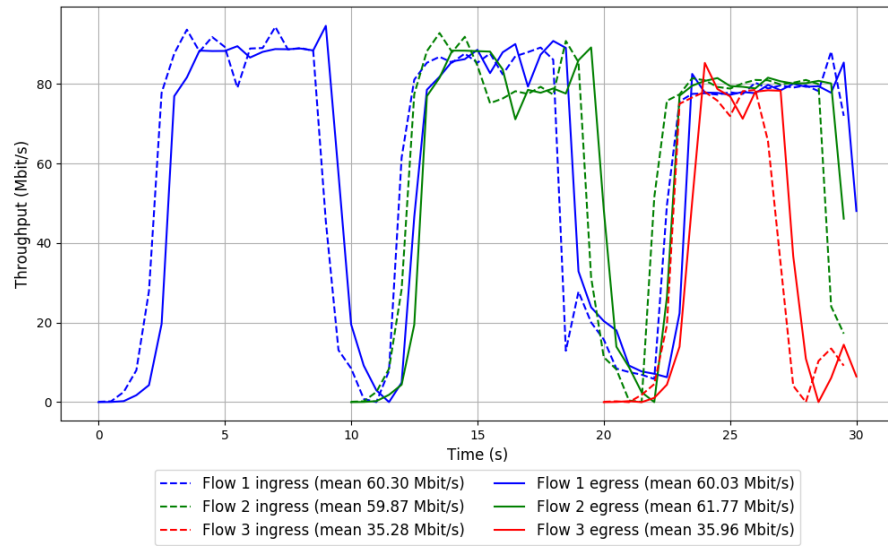
-- Flow 3:

Average throughput: 35.96 Mbit/s

95th percentile per-packet one-way delay: 136.335 ms

Loss rate: 0.87%

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



Run 4: Statistics of QUIC Cubic

Start at: 2018-06-19 23:40:06

End at: 2018-06-19 23:40:36

Local clock offset: 0.097 ms

Remote clock offset: 0.406 ms

# Below is generated by plot.py at 2018-06-20 04:06:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 100.44 Mbit/s

95th percentile per-packet one-way delay: 136.176 ms

Loss rate: 1.29%

-- Flow 1:

Average throughput: 59.62 Mbit/s

95th percentile per-packet one-way delay: 136.196 ms

Loss rate: 1.03%

-- Flow 2:

Average throughput: 45.00 Mbit/s

95th percentile per-packet one-way delay: 135.891 ms

Loss rate: 2.27%

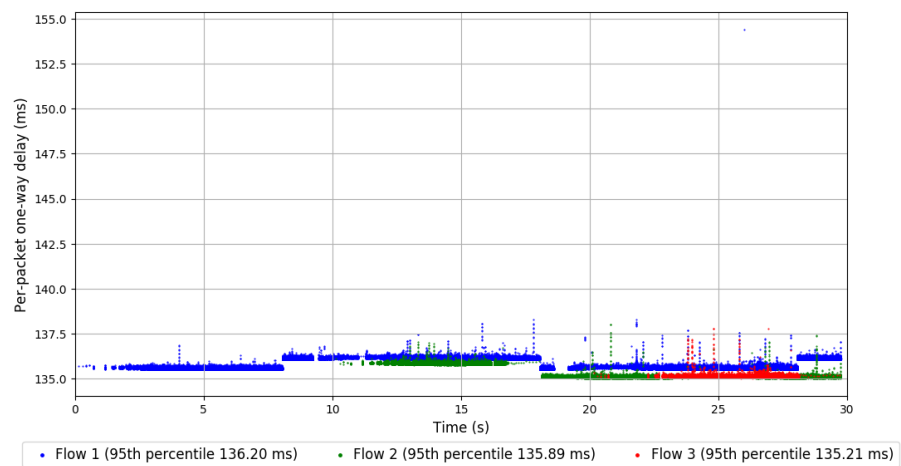
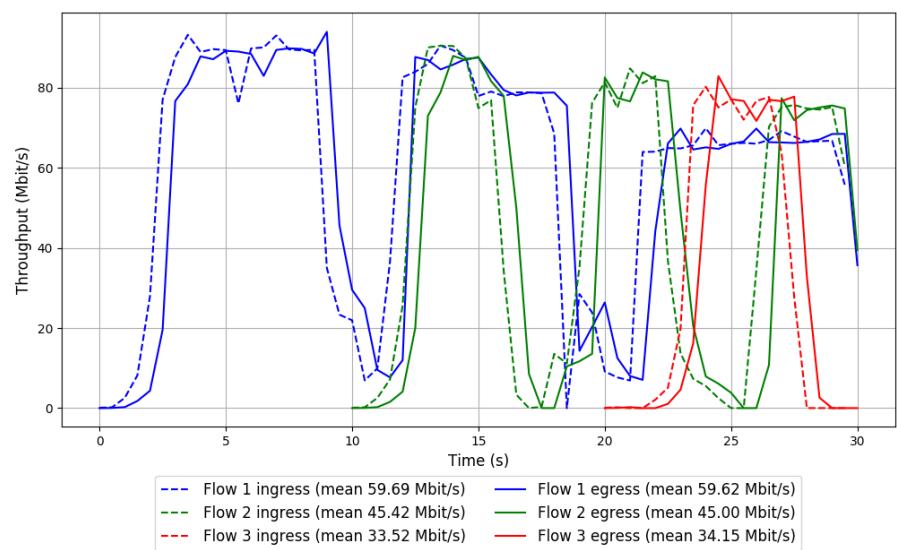
-- Flow 3:

Average throughput: 34.15 Mbit/s

95th percentile per-packet one-way delay: 135.209 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-06-20 00:04:52

End at: 2018-06-20 00:05:22

Local clock offset: 0.025 ms

Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2018-06-20 04:06:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 111.51 Mbit/s

95th percentile per-packet one-way delay: 136.356 ms

Loss rate: 1.84%

-- Flow 1:

Average throughput: 65.30 Mbit/s

95th percentile per-packet one-way delay: 136.360 ms

Loss rate: 1.07%

-- Flow 2:

Average throughput: 51.09 Mbit/s

95th percentile per-packet one-way delay: 136.361 ms

Loss rate: 2.00%

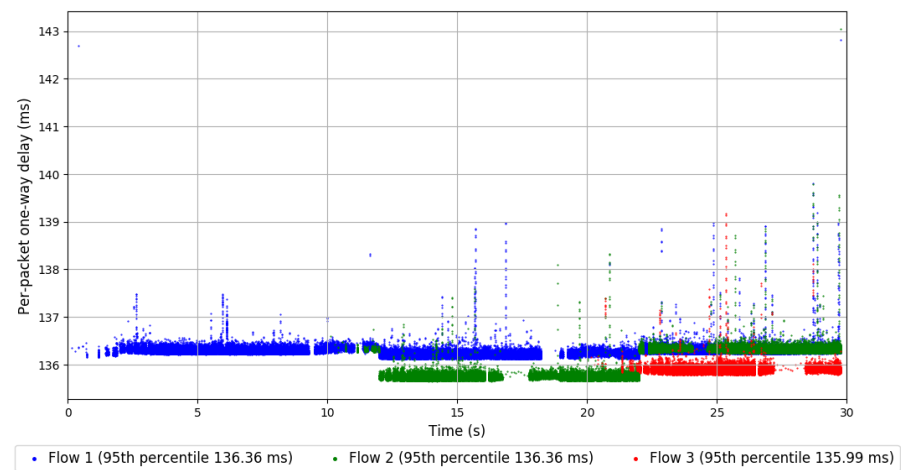
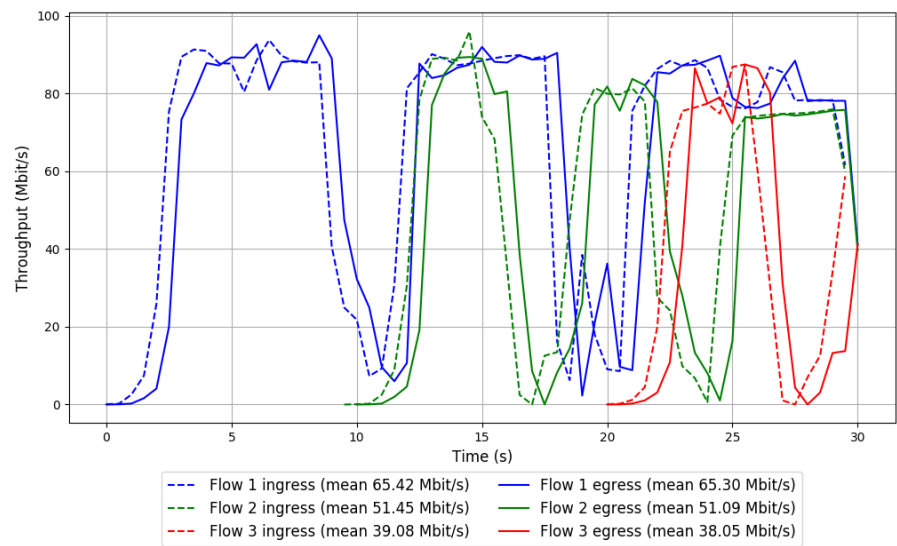
-- Flow 3:

Average throughput: 38.05 Mbit/s

95th percentile per-packet one-way delay: 135.989 ms

Loss rate: 5.32%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-06-20 00:29:45

End at: 2018-06-20 00:30:15

Local clock offset: -0.098 ms

Remote clock offset: -0.36 ms

# Below is generated by plot.py at 2018-06-20 04:06:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 95.58 Mbit/s

95th percentile per-packet one-way delay: 136.639 ms

Loss rate: 1.45%

-- Flow 1:

Average throughput: 53.09 Mbit/s

95th percentile per-packet one-way delay: 136.642 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 49.24 Mbit/s

95th percentile per-packet one-way delay: 136.209 ms

Loss rate: 1.72%

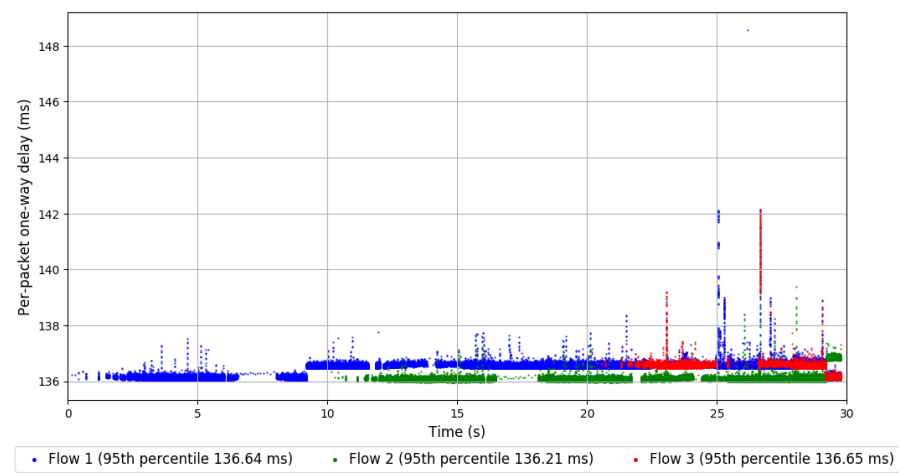
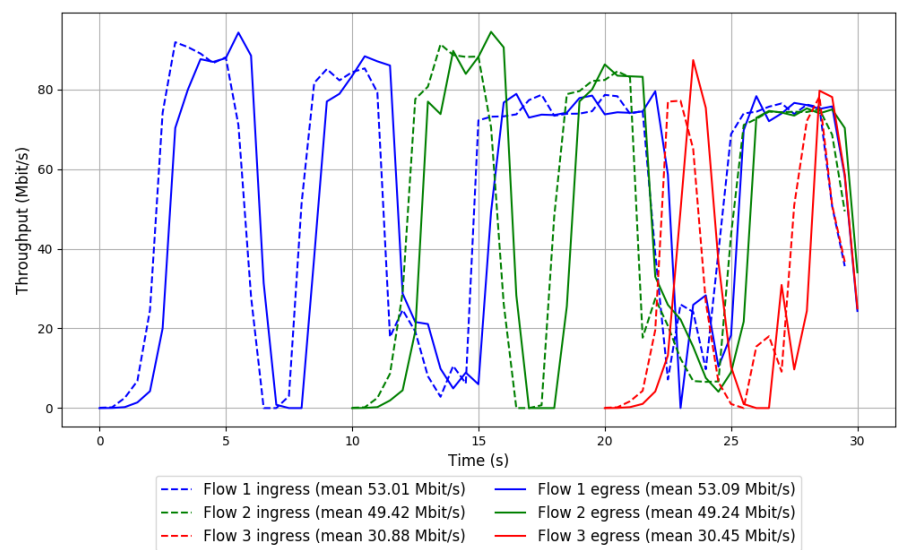
-- Flow 3:

Average throughput: 30.45 Mbit/s

95th percentile per-packet one-way delay: 136.654 ms

Loss rate: 4.11%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-06-20 00:54:48

End at: 2018-06-20 00:55:18

Local clock offset: -0.149 ms

Remote clock offset: 0.005 ms

# Below is generated by plot.py at 2018-06-20 04:06:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 112.69 Mbit/s

95th percentile per-packet one-way delay: 136.026 ms

Loss rate: 1.83%

-- Flow 1:

Average throughput: 63.27 Mbit/s

95th percentile per-packet one-way delay: 135.856 ms

Loss rate: 1.09%

-- Flow 2:

Average throughput: 54.31 Mbit/s

95th percentile per-packet one-way delay: 135.280 ms

Loss rate: 1.90%

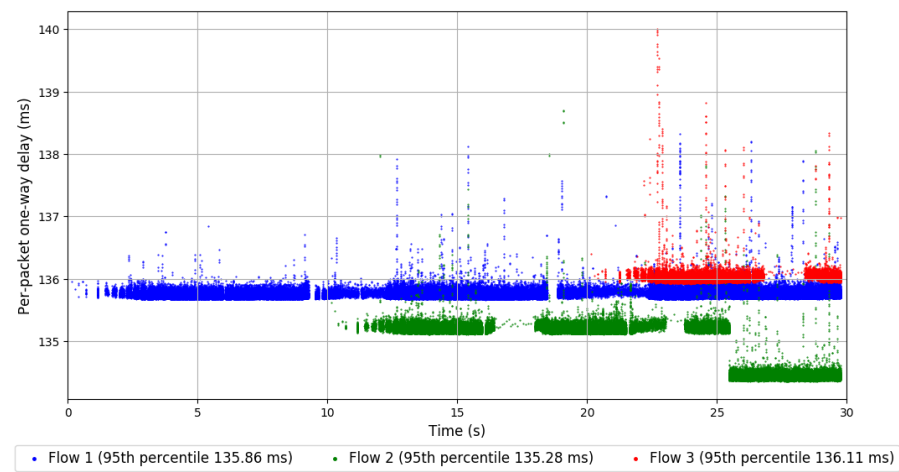
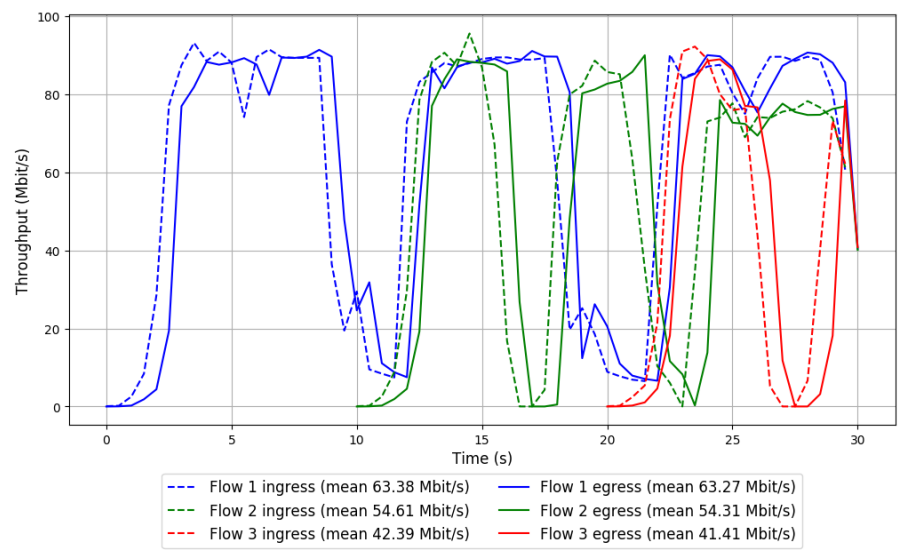
-- Flow 3:

Average throughput: 41.41 Mbit/s

95th percentile per-packet one-way delay: 136.108 ms

Loss rate: 4.98%

Run 7: Report of QUIC Cubic — Data Link

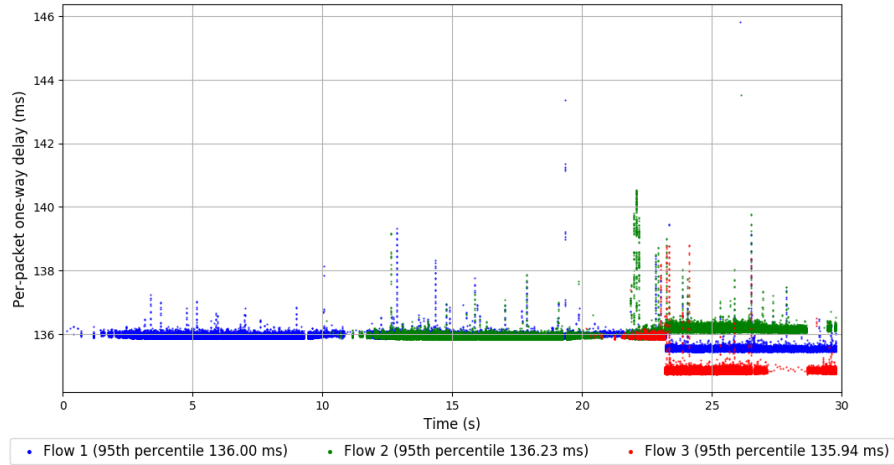
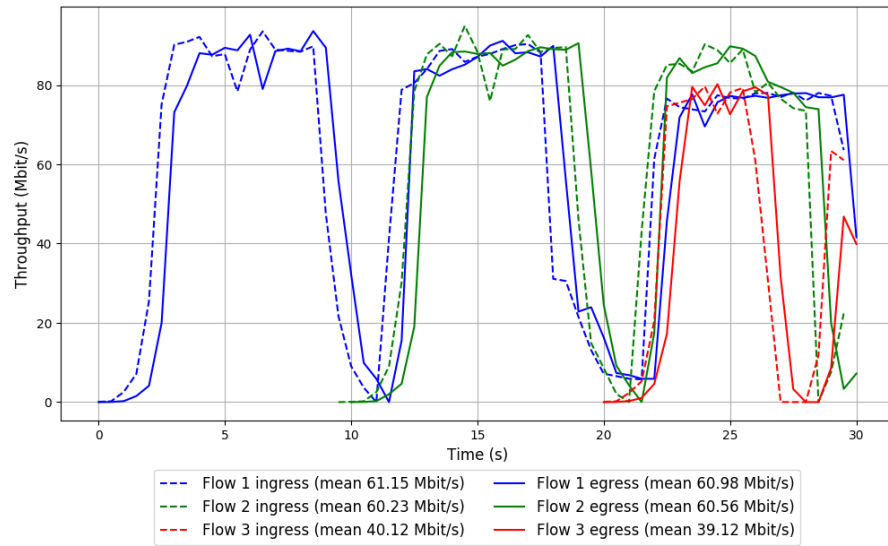


Run 8: Statistics of QUIC Cubic

Start at: 2018-06-20 01:19:51  
End at: 2018-06-20 01:20:21  
Local clock offset: -0.182 ms  
Remote clock offset: -0.357 ms

# Below is generated by plot.py at 2018-06-20 04:06:07  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 113.78 Mbit/s  
95th percentile per-packet one-way delay: 136.164 ms  
Loss rate: 1.51%  
-- Flow 1:  
Average throughput: 60.98 Mbit/s  
95th percentile per-packet one-way delay: 136.002 ms  
Loss rate: 1.18%  
-- Flow 2:  
Average throughput: 60.56 Mbit/s  
95th percentile per-packet one-way delay: 136.227 ms  
Loss rate: 0.81%  
-- Flow 3:  
Average throughput: 39.12 Mbit/s  
95th percentile per-packet one-way delay: 135.940 ms  
Loss rate: 5.16%

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



Run 9: Statistics of QUIC Cubic

Start at: 2018-06-20 01:44:46

End at: 2018-06-20 01:45:16

Local clock offset: 0.164 ms

Remote clock offset: 0.047 ms

# Below is generated by plot.py at 2018-06-20 04:06:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 103.99 Mbit/s

95th percentile per-packet one-way delay: 136.602 ms

Loss rate: 1.37%

-- Flow 1:

Average throughput: 62.05 Mbit/s

95th percentile per-packet one-way delay: 136.306 ms

Loss rate: 1.16%

-- Flow 2:

Average throughput: 53.62 Mbit/s

95th percentile per-packet one-way delay: 136.642 ms

Loss rate: 1.88%

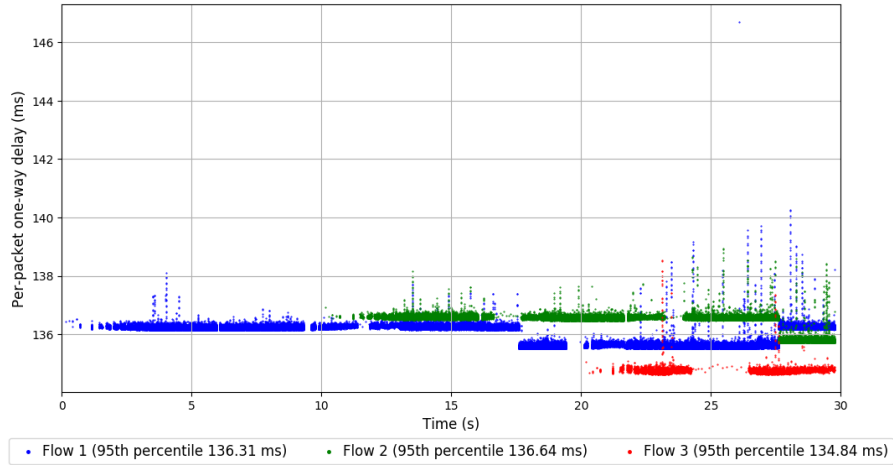
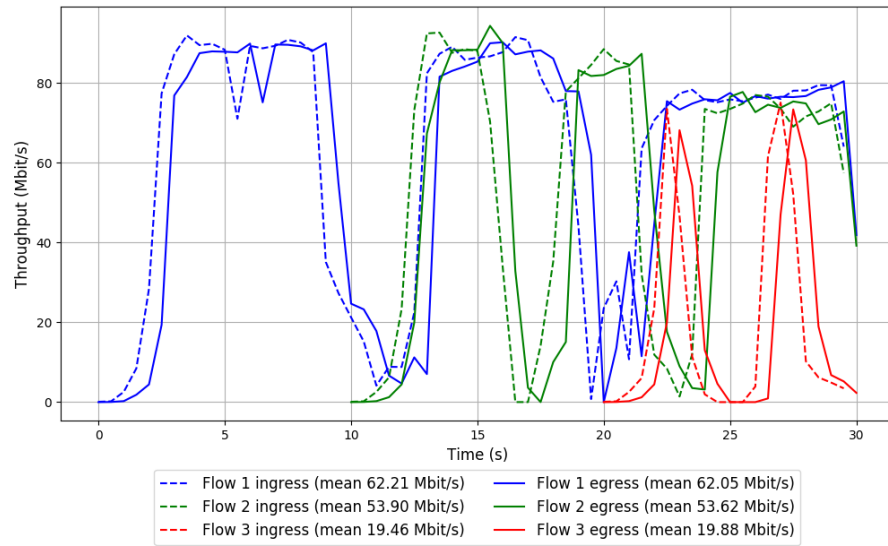
-- Flow 3:

Average throughput: 19.88 Mbit/s

95th percentile per-packet one-way delay: 134.838 ms

Loss rate: 0.61%

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



Run 10: Statistics of QUIC Cubic

Start at: 2018-06-20 02:09:43

End at: 2018-06-20 02:10:13

Local clock offset: -0.132 ms

Remote clock offset: 0.142 ms

# Below is generated by plot.py at 2018-06-20 04:06:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 114.80 Mbit/s

95th percentile per-packet one-way delay: 136.223 ms

Loss rate: 1.52%

-- Flow 1:

Average throughput: 58.42 Mbit/s

95th percentile per-packet one-way delay: 136.142 ms

Loss rate: 1.14%

-- Flow 2:

Average throughput: 54.28 Mbit/s

95th percentile per-packet one-way delay: 136.284 ms

Loss rate: 1.94%

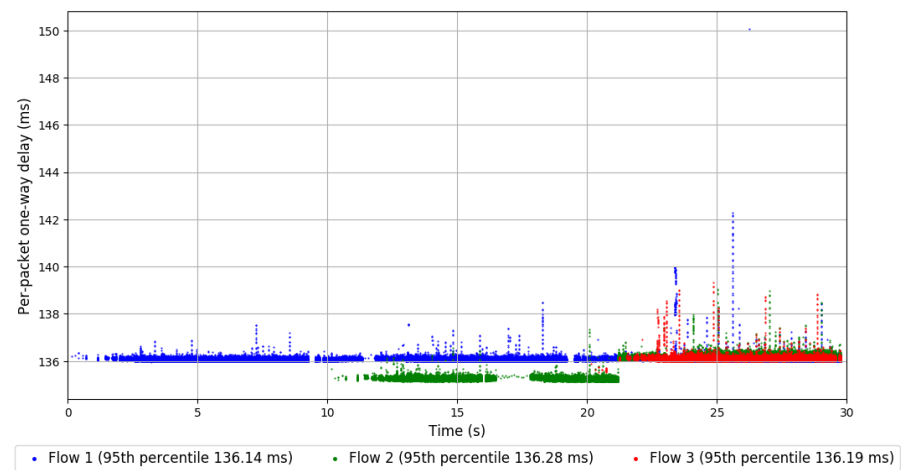
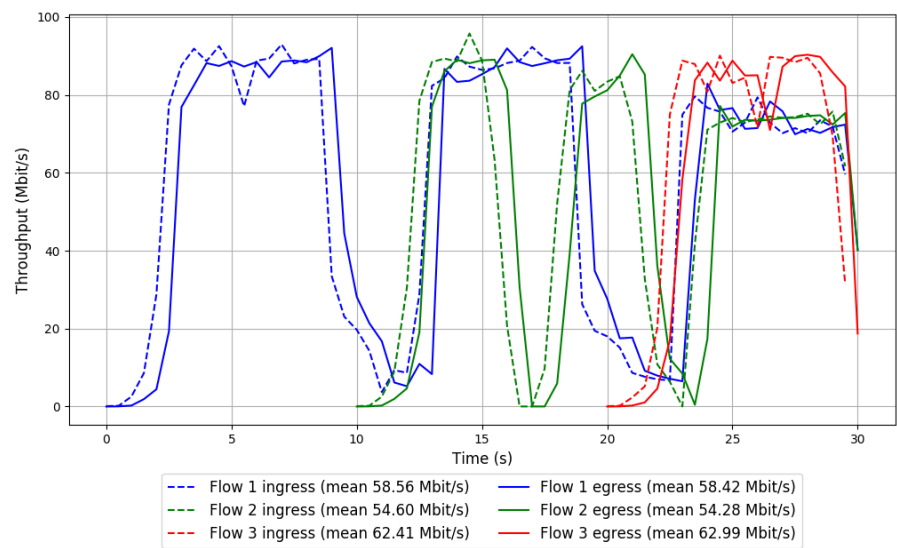
-- Flow 3:

Average throughput: 62.99 Mbit/s

95th percentile per-packet one-way delay: 136.188 ms

Loss rate: 1.84%

Run 10: Report of QUIC Cubic — Data Link

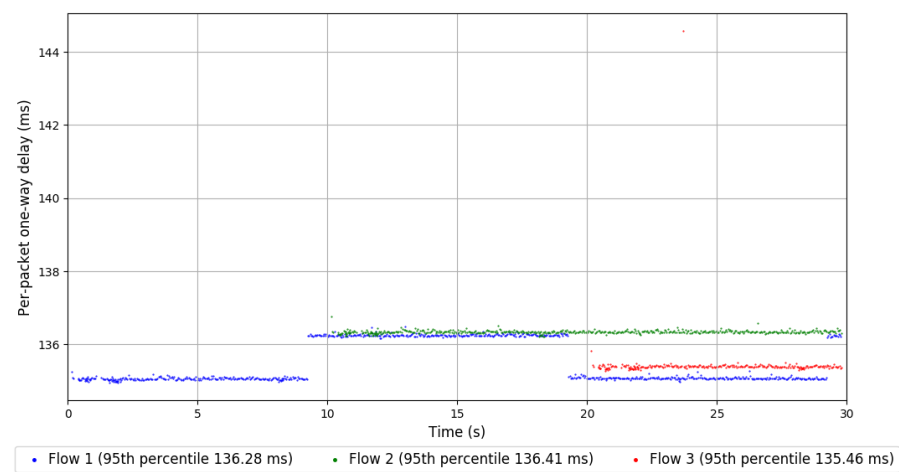
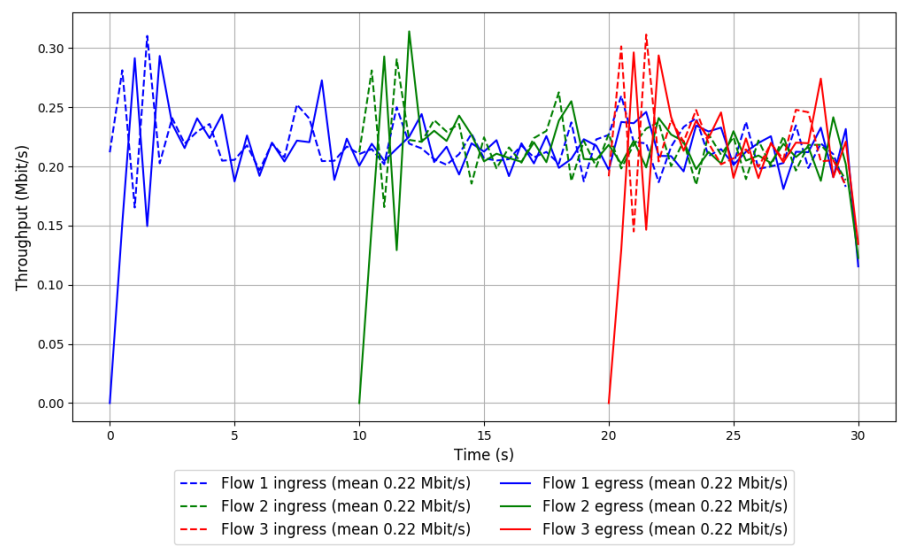


```
Run 1: Statistics of SReAM

Start at: 2018-06-19 22:18:15
End at: 2018-06-19 22:18:45
Local clock offset: 0.008 ms
Remote clock offset: -0.291 ms

# Below is generated by plot.py at 2018-06-20 04:06:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 136.378 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.281 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.407 ms
Loss rate: 1.43%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.460 ms
Loss rate: 2.25%
```

Run 1: Report of SReAM — Data Link

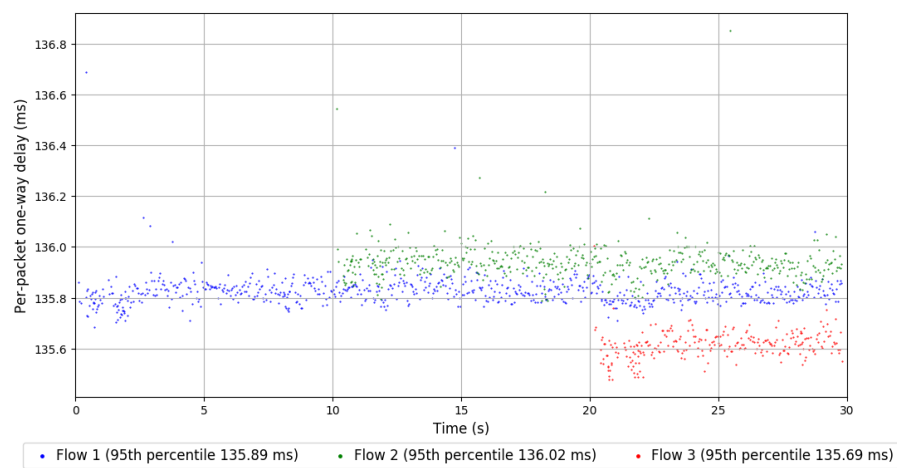
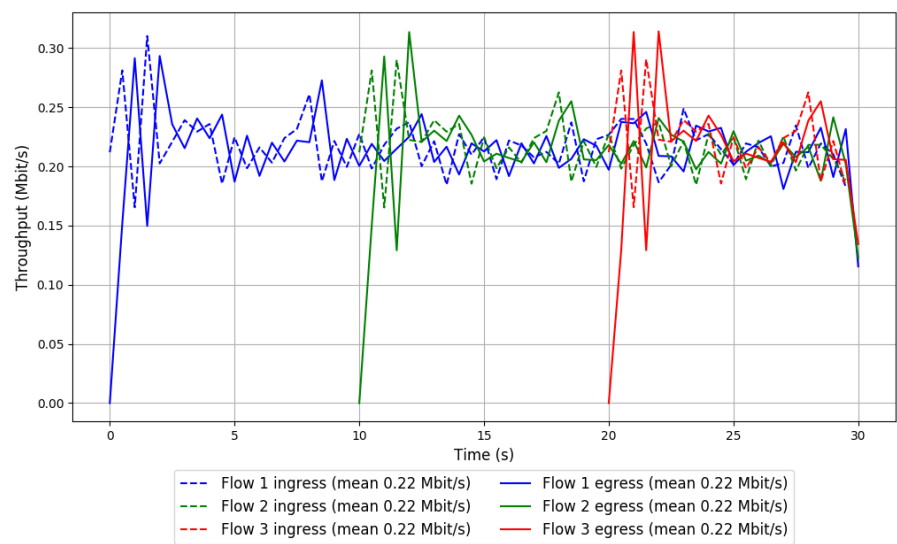


```
Run 2: Statistics of SReAM

Start at: 2018-06-19 22:43:08
End at: 2018-06-19 22:43:38
Local clock offset: -0.034 ms
Remote clock offset: 0.089 ms

# Below is generated by plot.py at 2018-06-20 04:06:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 135.988 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.893 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.020 ms
Loss rate: 1.43%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.691 ms
Loss rate: 2.59%
```

Run 2: Report of SCReAM — Data Link



Run 3: Statistics of SReAM

Start at: 2018-06-19 23:08:26

End at: 2018-06-19 23:08:56

Local clock offset: 0.248 ms

Remote clock offset: 0.063 ms

# Below is generated by plot.py at 2018-06-20 04:06:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 136.811 ms

Loss rate: 1.36%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.564 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.626 ms

Loss rate: 1.43%

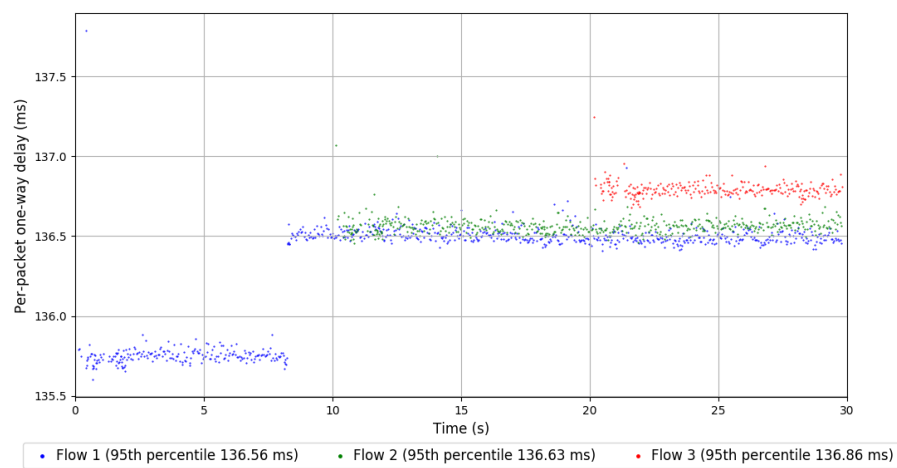
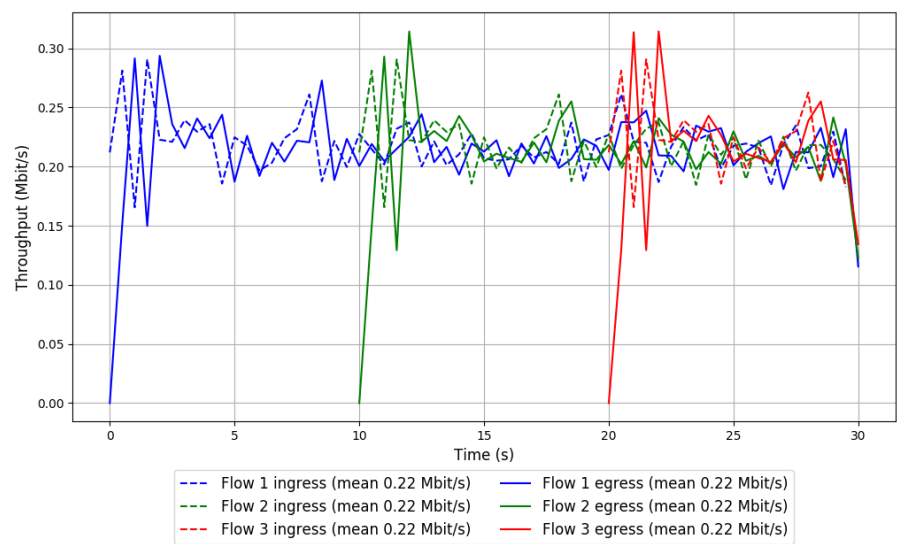
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.859 ms

Loss rate: 2.59%

Run 3: Report of SReAM — Data Link

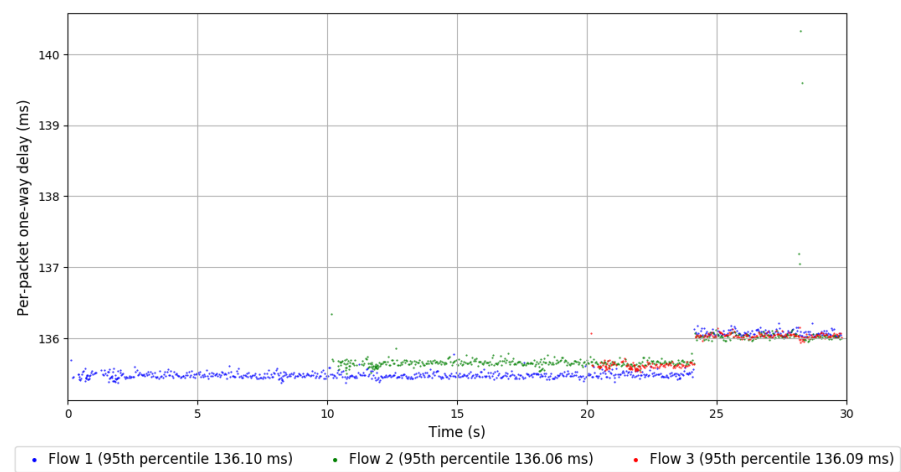
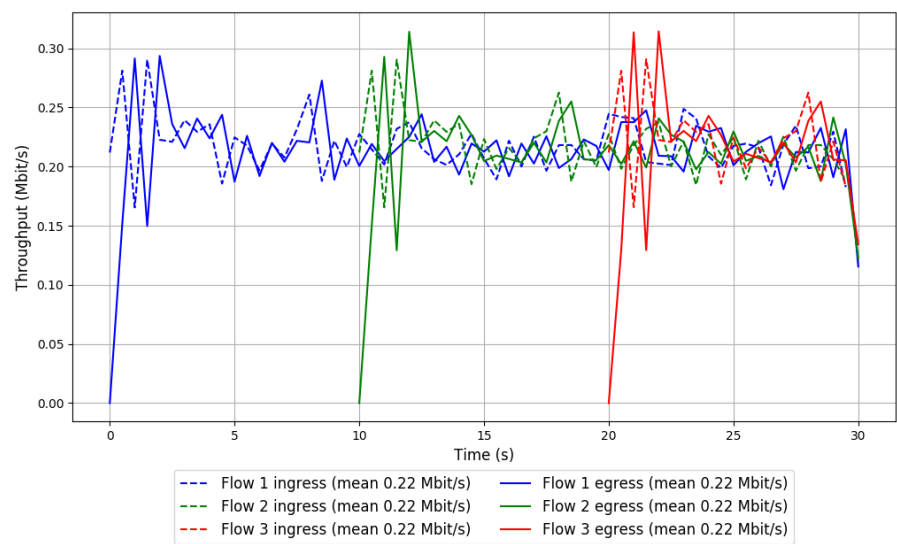


Run 4: Statistics of SReAM

Start at: 2018-06-19 23:33:00  
End at: 2018-06-19 23:33:30  
Local clock offset: -0.001 ms  
Remote clock offset: 0.022 ms

# Below is generated by plot.py at 2018-06-20 04:06:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 136.087 ms  
Loss rate: 1.36%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 136.100 ms  
Loss rate: 0.89%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 136.060 ms  
Loss rate: 1.43%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 136.085 ms  
Loss rate: 2.59%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2018-06-19 23:57:41

End at: 2018-06-19 23:58:11

Local clock offset: -0.12 ms

Remote clock offset: 0.012 ms

# Below is generated by plot.py at 2018-06-20 04:06:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 136.590 ms

Loss rate: 1.36%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 135.984 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.621 ms

Loss rate: 1.43%

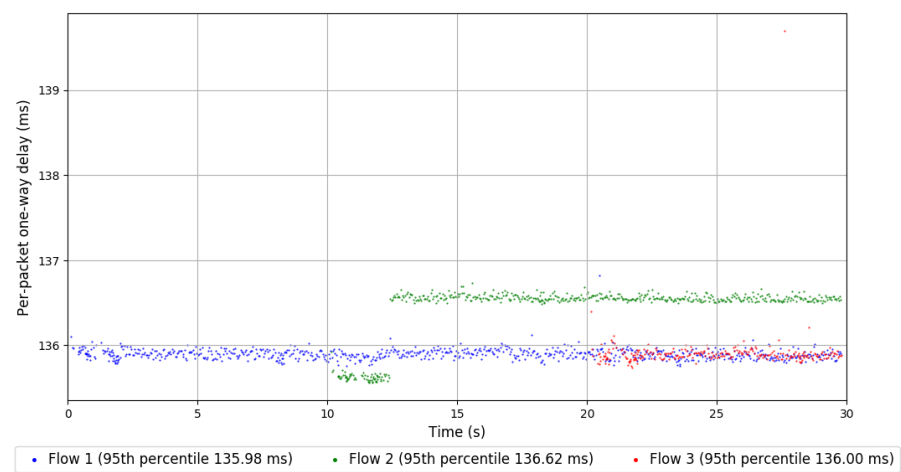
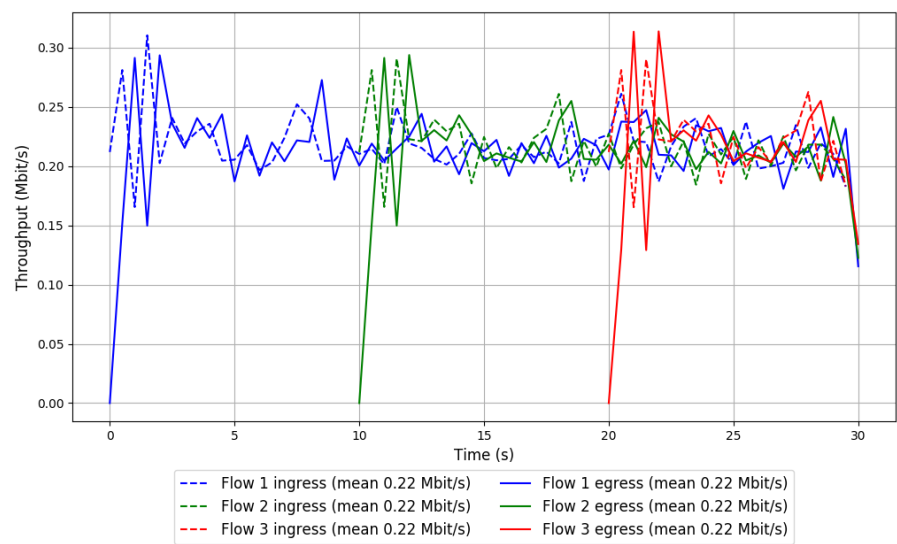
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.001 ms

Loss rate: 2.59%

Run 5: Report of SReAM — Data Link

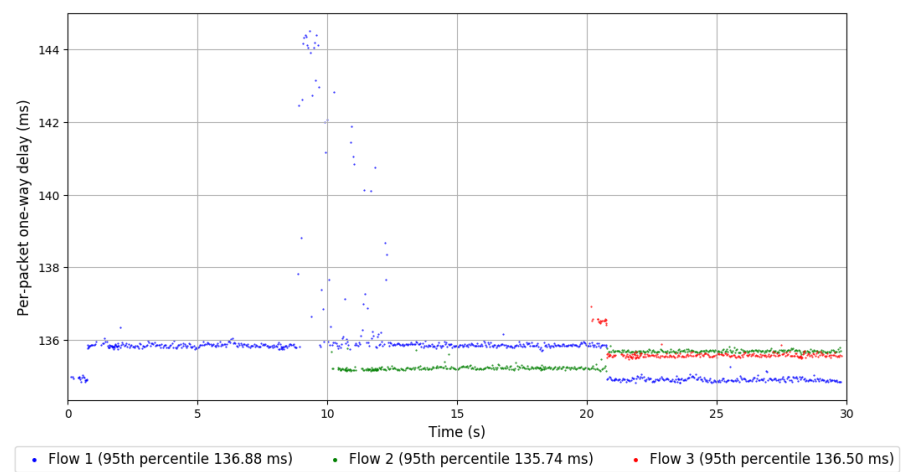
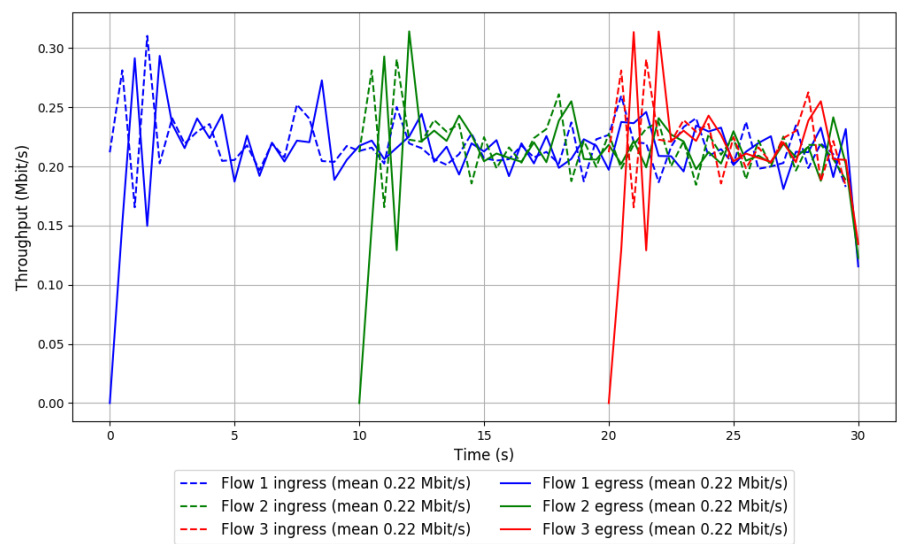


Run 6: Statistics of SReAM

Start at: 2018-06-20 00:22:43  
End at: 2018-06-20 00:23:13  
Local clock offset: 0.168 ms  
Remote clock offset: -0.005 ms

# Below is generated by plot.py at 2018-06-20 04:06:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 135.988 ms  
Loss rate: 1.36%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 136.884 ms  
Loss rate: 0.89%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 135.735 ms  
Loss rate: 1.43%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 136.503 ms  
Loss rate: 2.59%

Run 6: Report of SReAM — Data Link

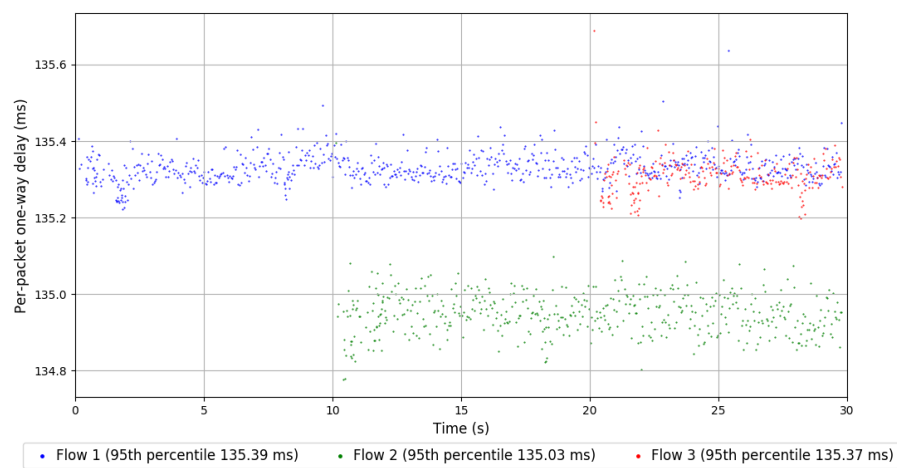
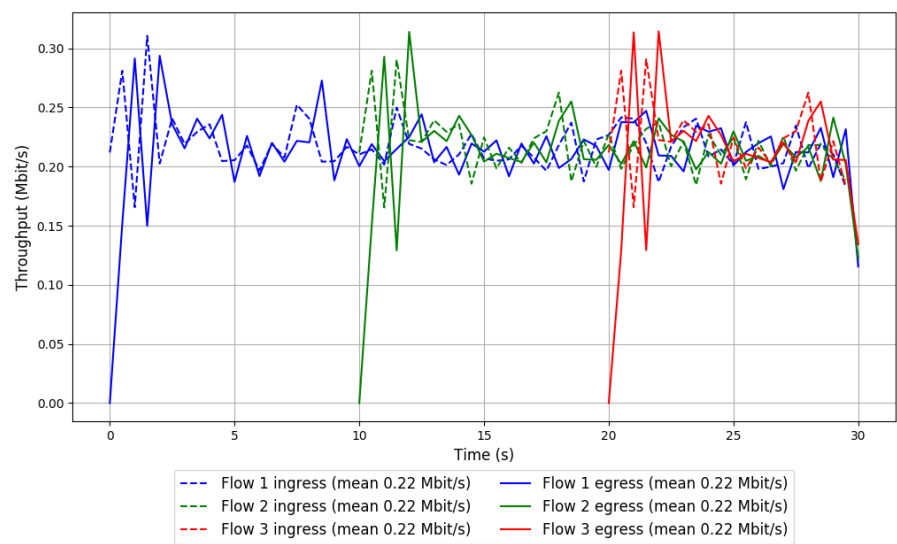


Run 7: Statistics of SReAM

Start at: 2018-06-20 00:47:40  
End at: 2018-06-20 00:48:10  
Local clock offset: -0.161 ms  
Remote clock offset: -0.008 ms

# Below is generated by plot.py at 2018-06-20 04:06:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 135.379 ms  
Loss rate: 1.36%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 135.390 ms  
Loss rate: 0.89%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 135.029 ms  
Loss rate: 1.43%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 135.371 ms  
Loss rate: 2.59%

Run 7: Report of SReAM — Data Link

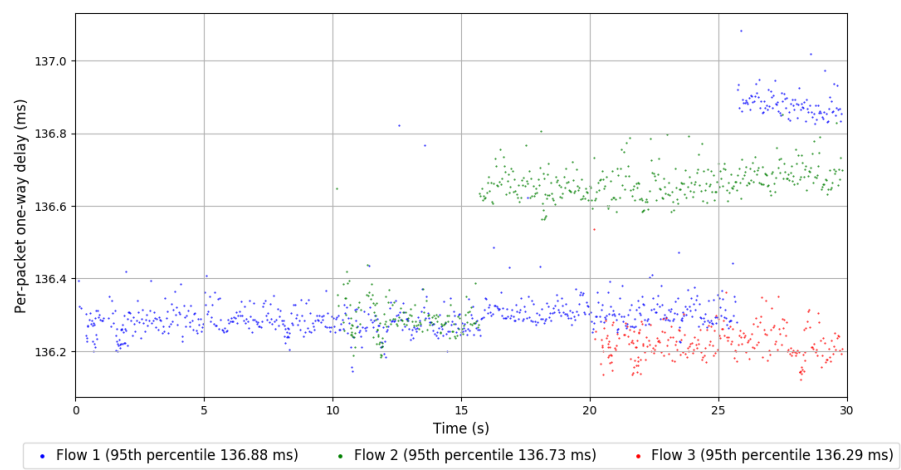
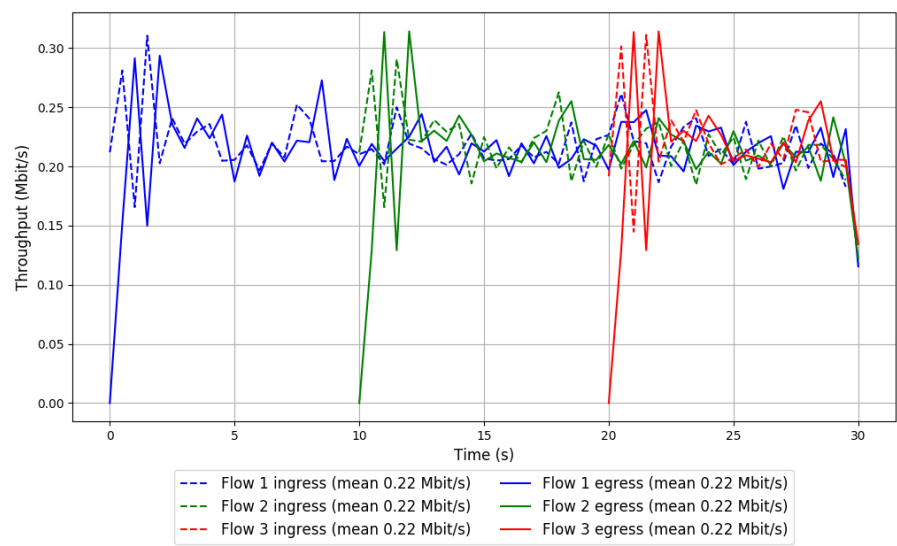


Run 8: Statistics of SReAM

Start at: 2018-06-20 01:12:48  
End at: 2018-06-20 01:13:18  
Local clock offset: -0.169 ms  
Remote clock offset: -0.375 ms

# Below is generated by plot.py at 2018-06-20 04:06:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 136.859 ms  
Loss rate: 1.36%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 136.885 ms  
Loss rate: 0.89%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 136.730 ms  
Loss rate: 1.43%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 136.290 ms  
Loss rate: 2.59%

Run 8: Report of SCReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-06-20 01:37:55

End at: 2018-06-20 01:38:25

Local clock offset: 0.168 ms

Remote clock offset: 0.072 ms

# Below is generated by plot.py at 2018-06-20 04:06:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 136.876 ms

Loss rate: 1.36%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.894 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.101 ms

Loss rate: 1.43%

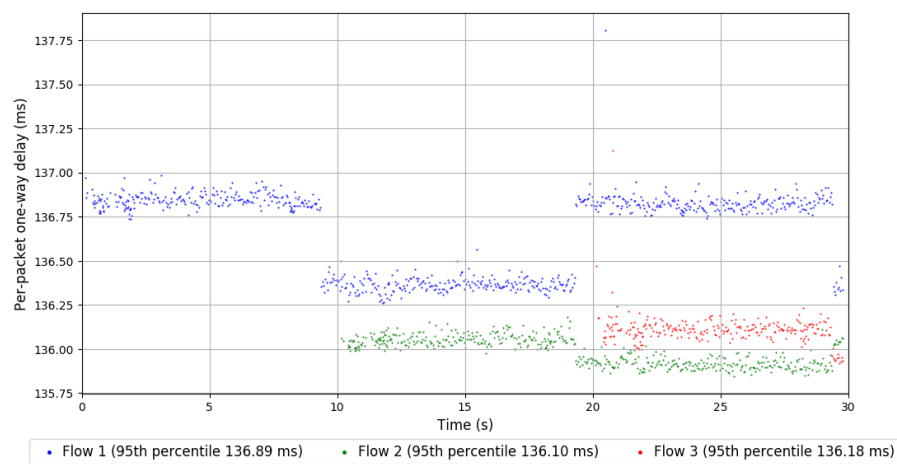
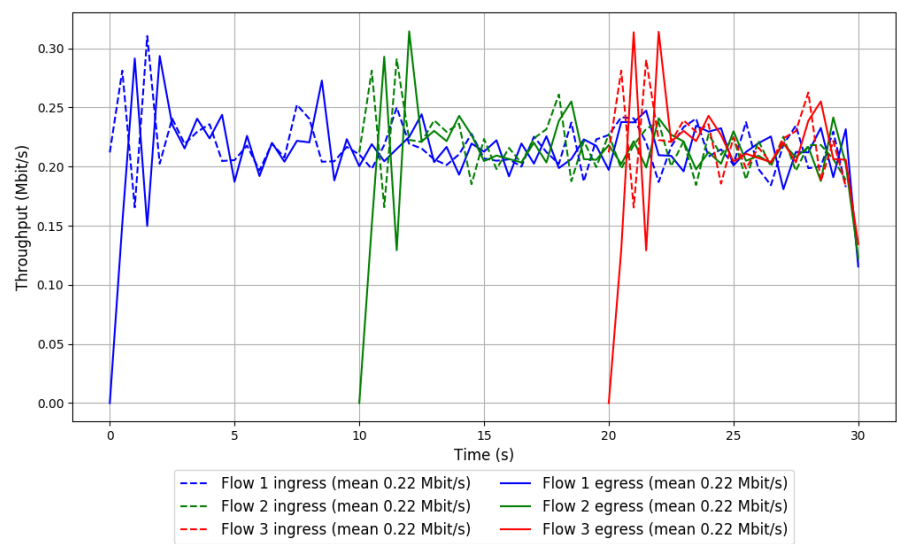
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.184 ms

Loss rate: 2.59%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-06-20 02:02:38

End at: 2018-06-20 02:03:08

Local clock offset: 0.221 ms

Remote clock offset: 0.079 ms

# Below is generated by plot.py at 2018-06-20 04:06:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 136.812 ms

Loss rate: 1.36%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.834 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.152 ms

Loss rate: 1.43%

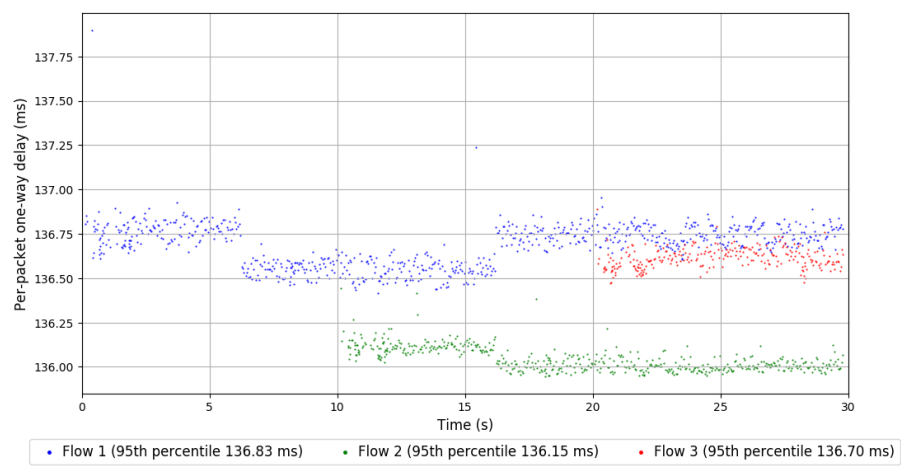
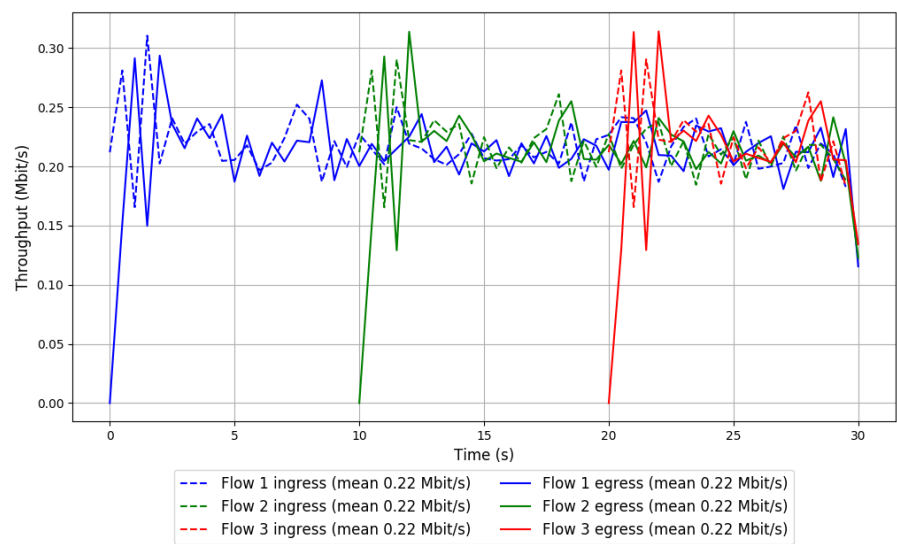
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.701 ms

Loss rate: 2.59%

Run 10: Report of SCReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2018-06-19 22:17:00

End at: 2018-06-19 22:17:30

Local clock offset: 0.024 ms

Remote clock offset: 0.417 ms

# Below is generated by plot.py at 2018-06-20 04:06:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 136.076 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 135.982 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 136.112 ms

Loss rate: 1.03%

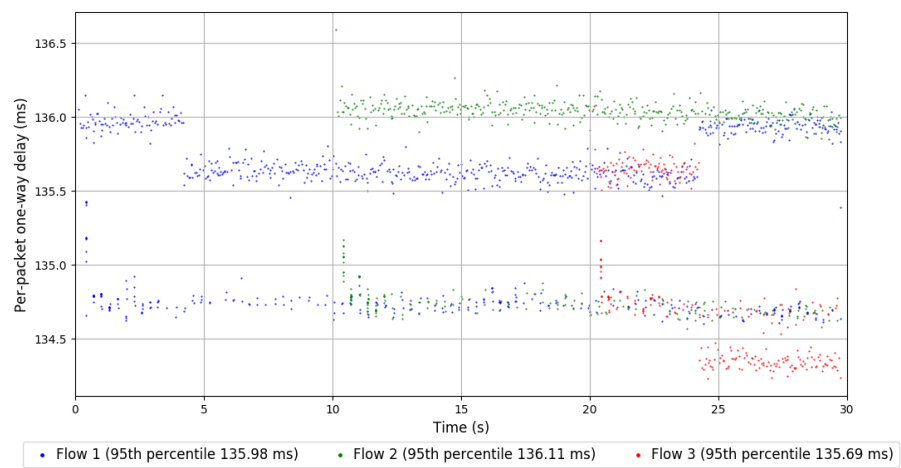
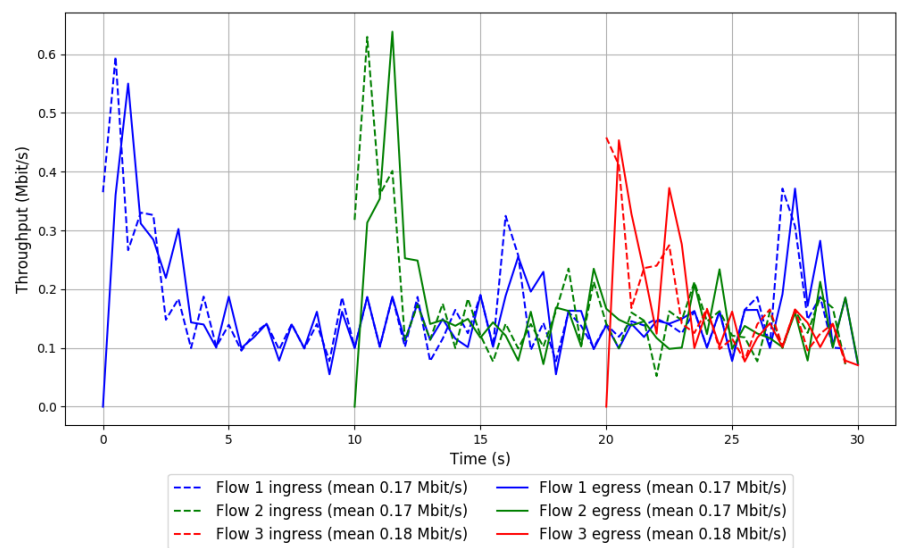
-- Flow 3:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 135.692 ms

Loss rate: 2.00%

Run 1: Report of Sprout — Data Link

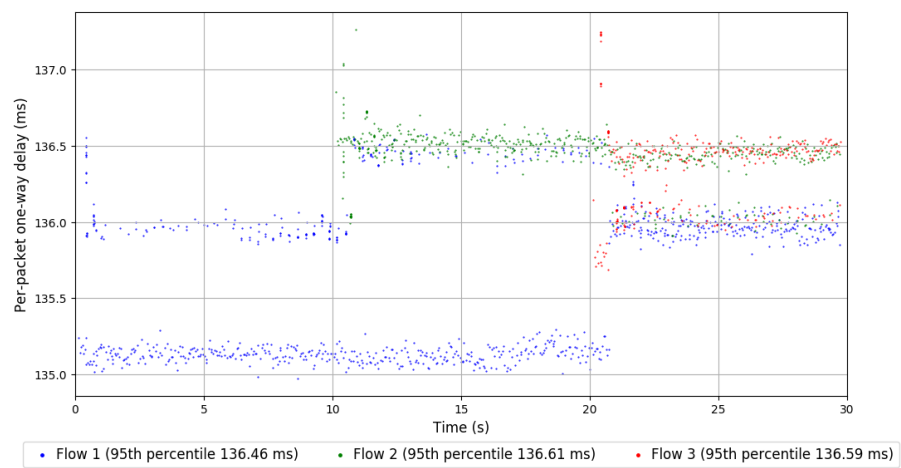
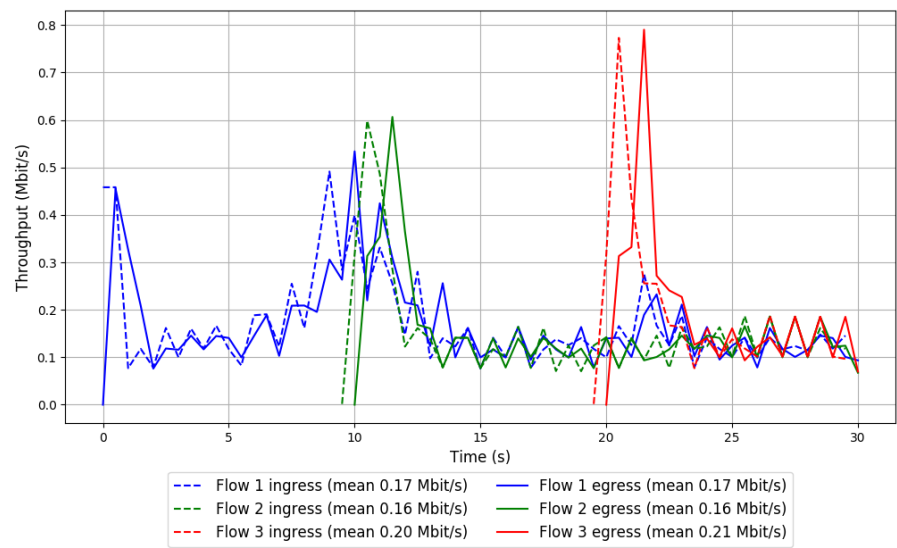


## Run 2: Statistics of Sprout

Start at: 2018-06-19 22:41:53  
End at: 2018-06-19 22:42:23  
Local clock offset: 0.137 ms  
Remote clock offset: 0.055 ms

```
# Below is generated by plot.py at 2018-06-20 04:06:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 136.567 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 136.456 ms
Loss rate: 0.95%
-- Flow 2:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 136.610 ms
Loss rate: 1.53%
-- Flow 3:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 136.594 ms
Loss rate: 0.79%
```

Run 2: Report of Sprout — Data Link

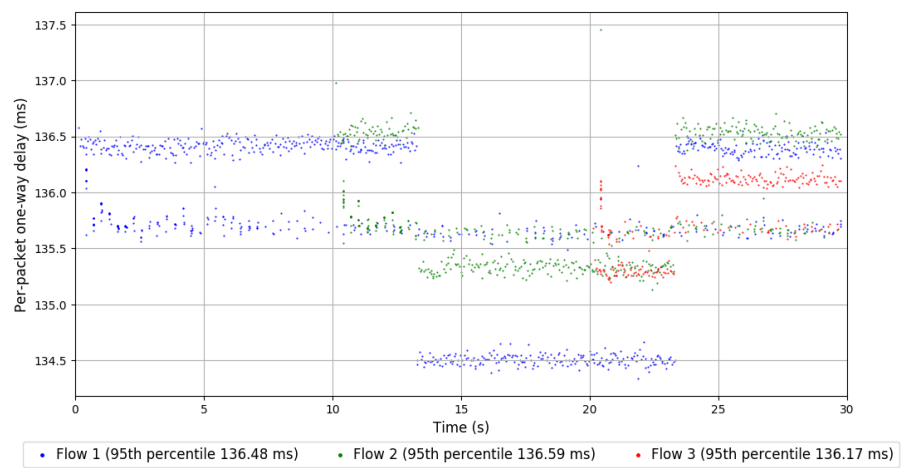
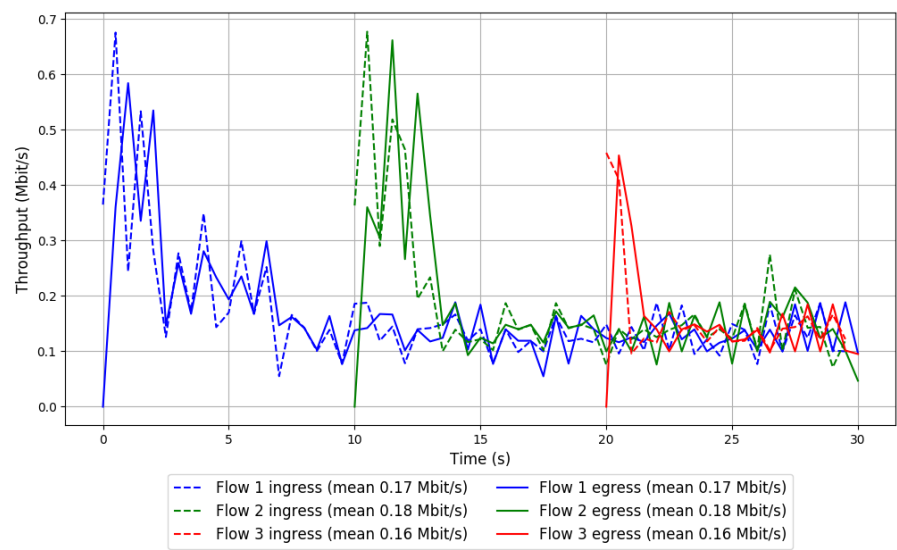


### Run 3: Statistics of Sprout

Start at: 2018-06-19 23:07:11  
End at: 2018-06-19 23:07:41  
Local clock offset: 0.205 ms  
Remote clock offset: 0.422 ms

```
# Below is generated by plot.py at 2018-06-20 04:06:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 136.545 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 136.477 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 136.593 ms
Loss rate: 1.26%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 136.174 ms
Loss rate: 2.92%
```

Run 3: Report of Sprout — Data Link

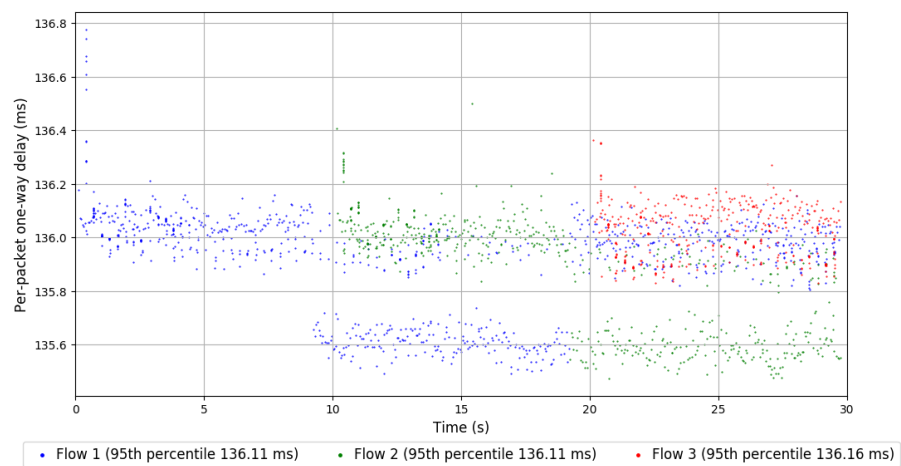
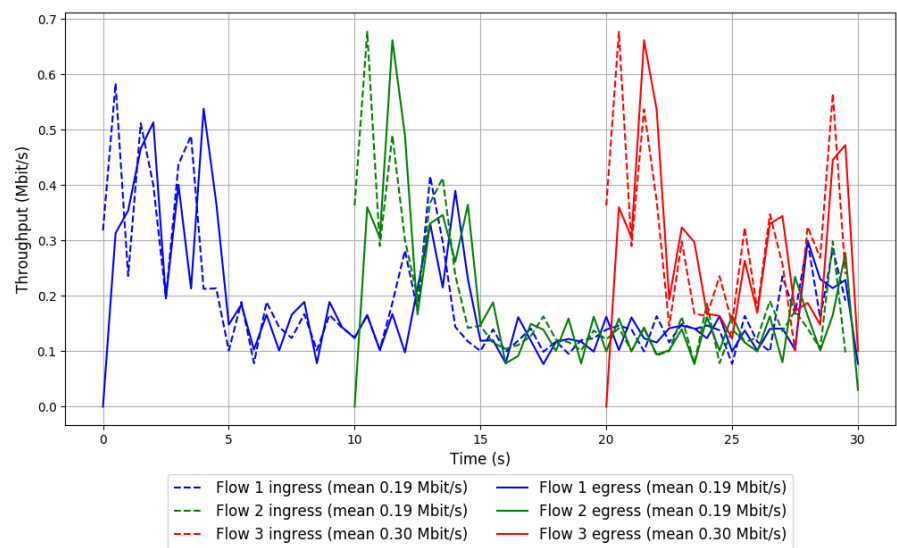


#### Run 4: Statistics of Sprout

Start at: 2018-06-19 23:31:45  
End at: 2018-06-19 23:32:15  
Local clock offset: 0.099 ms  
Remote clock offset: 0.04 ms

```
# Below is generated by plot.py at 2018-06-20 04:06:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 136.134 ms
Loss rate: 2.09%
-- Flow 1:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 136.113 ms
Loss rate: 1.66%
-- Flow 2:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 136.110 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 136.159 ms
Loss rate: 3.94%
```

Run 4: Report of Sprout — Data Link

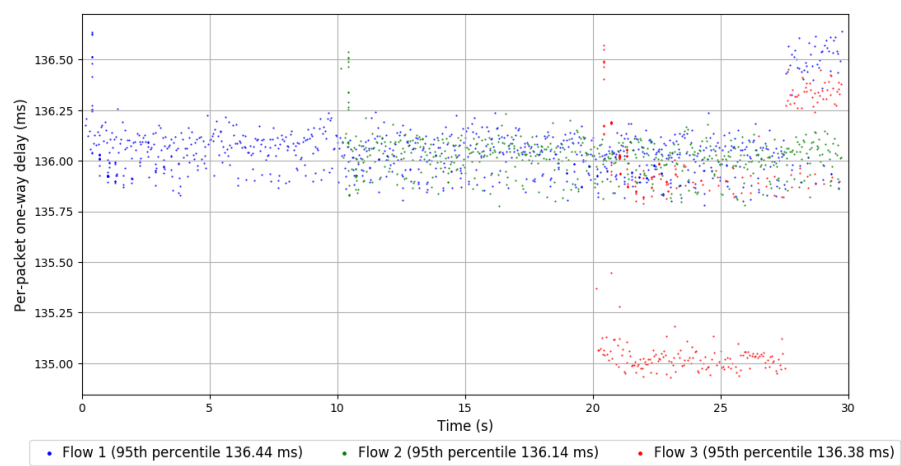
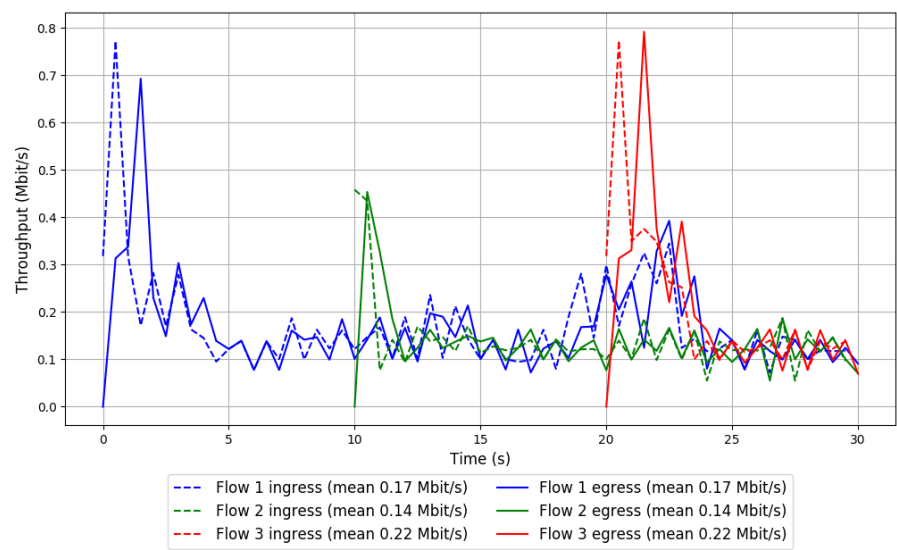


Run 5: Statistics of Sprout

Start at: 2018-06-19 23:56:26  
End at: 2018-06-19 23:56:56  
Local clock offset: 0.059 ms  
Remote clock offset: -0.001 ms

# Below is generated by plot.py at 2018-06-20 04:06:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.34 Mbit/s  
95th percentile per-packet one-way delay: 136.335 ms  
Loss rate: 1.27%  
-- Flow 1:  
Average throughput: 0.17 Mbit/s  
95th percentile per-packet one-way delay: 136.437 ms  
Loss rate: 0.68%  
-- Flow 2:  
Average throughput: 0.14 Mbit/s  
95th percentile per-packet one-way delay: 136.137 ms  
Loss rate: 1.65%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 136.383 ms  
Loss rate: 2.20%

Run 5: Report of Sprout — Data Link

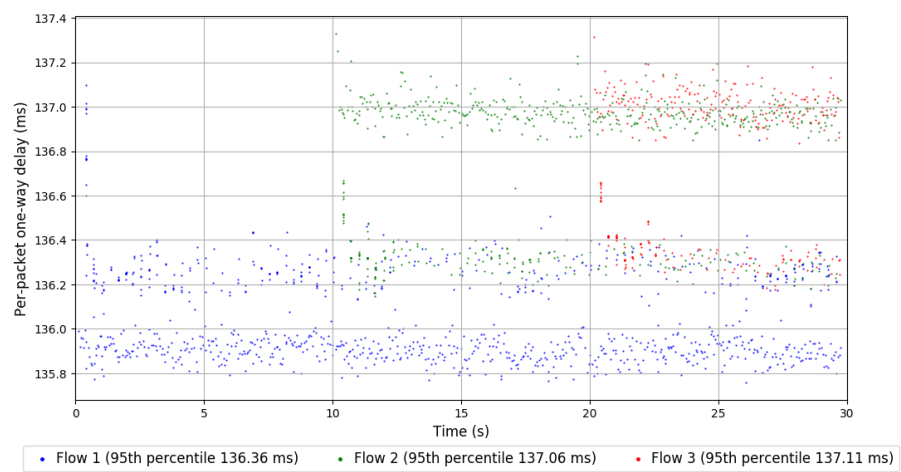
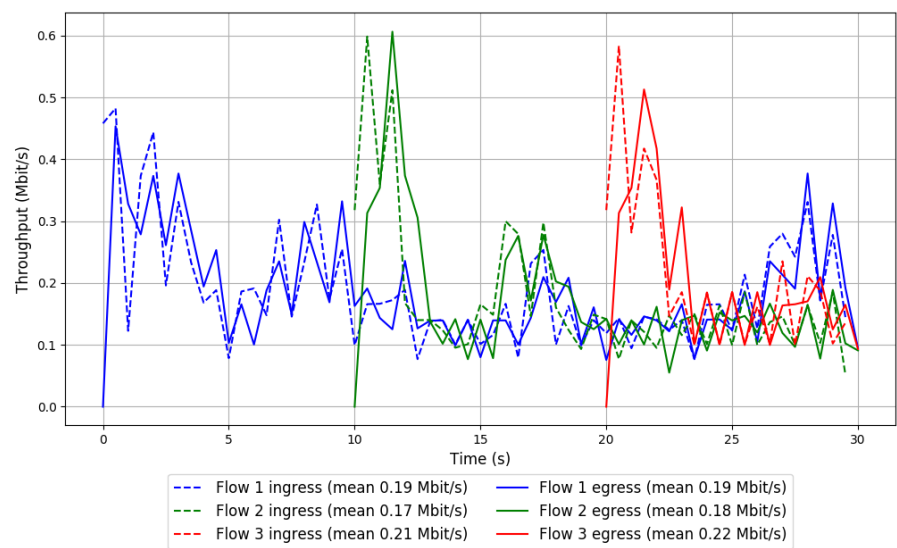


Run 6: Statistics of Sprout

Start at: 2018-06-20 00:21:28  
End at: 2018-06-20 00:21:58  
Local clock offset: 0.035 ms  
Remote clock offset: -0.359 ms

# Below is generated by plot.py at 2018-06-20 04:06:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.38 Mbit/s  
95th percentile per-packet one-way delay: 137.047 ms  
Loss rate: 1.05%  
-- Flow 1:  
Average throughput: 0.19 Mbit/s  
95th percentile per-packet one-way delay: 136.359 ms  
Loss rate: 1.23%  
-- Flow 2:  
Average throughput: 0.18 Mbit/s  
95th percentile per-packet one-way delay: 137.060 ms  
Loss rate: 0.70%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 137.106 ms  
Loss rate: 1.12%

Run 6: Report of Sprout — Data Link

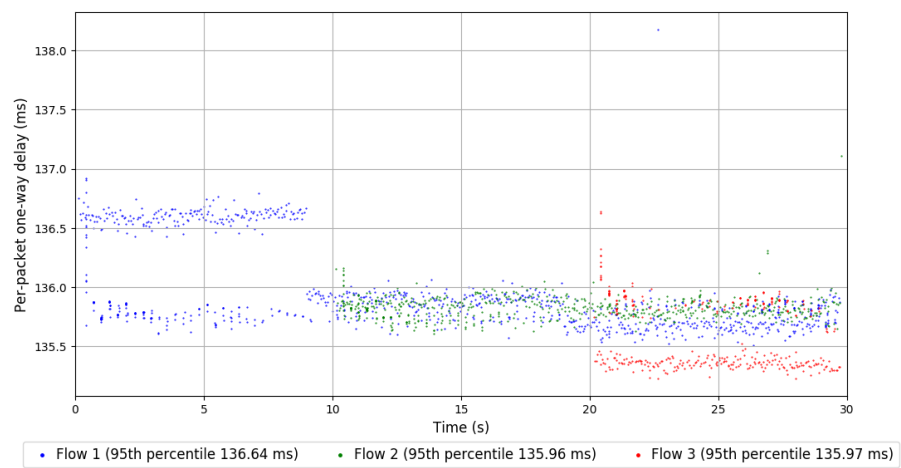
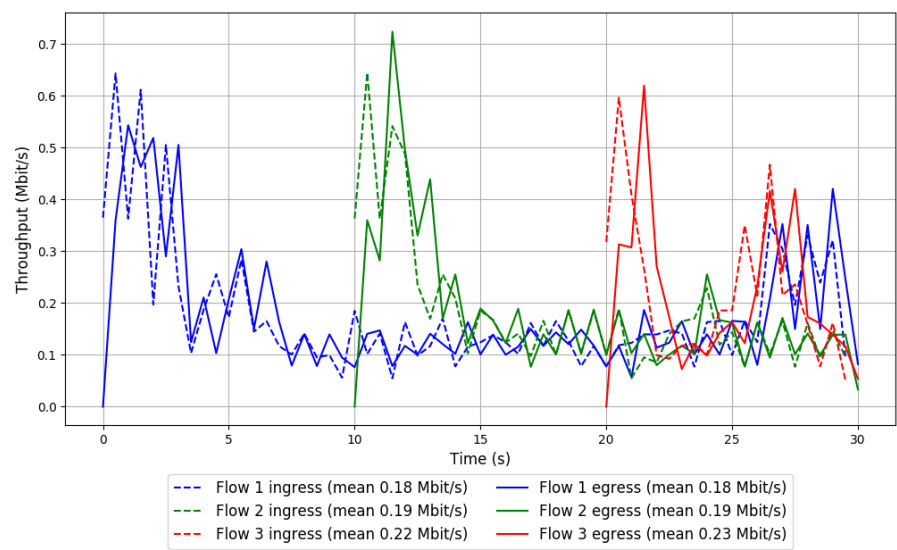


Run 7: Statistics of Sprout

Start at: 2018-06-20 00:46:25  
End at: 2018-06-20 00:46:55  
Local clock offset: -0.144 ms  
Remote clock offset: -0.006 ms

# Below is generated by plot.py at 2018-06-20 04:06:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.38 Mbit/s  
95th percentile per-packet one-way delay: 136.605 ms  
Loss rate: 1.03%  
-- Flow 1:  
Average throughput: 0.18 Mbit/s  
95th percentile per-packet one-way delay: 136.638 ms  
Loss rate: 0.87%  
-- Flow 2:  
Average throughput: 0.19 Mbit/s  
95th percentile per-packet one-way delay: 135.958 ms  
Loss rate: 1.23%  
-- Flow 3:  
Average throughput: 0.23 Mbit/s  
95th percentile per-packet one-way delay: 135.972 ms  
Loss rate: 1.10%

Run 7: Report of Sprout — Data Link

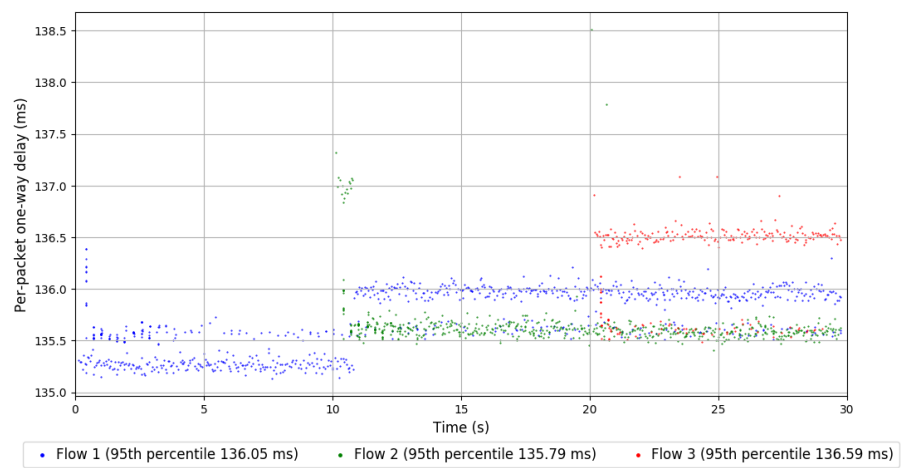
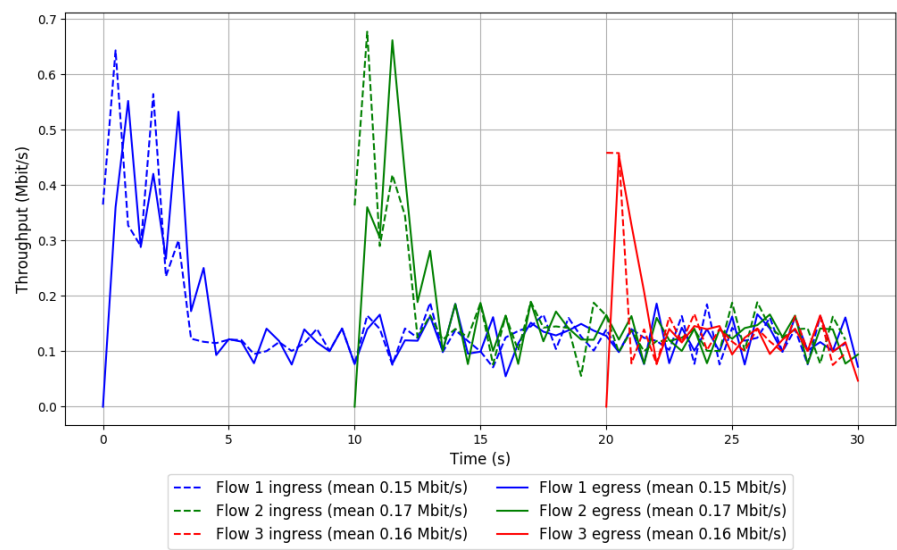


Run 8: Statistics of Sprout

Start at: 2018-06-20 01:11:33  
End at: 2018-06-20 01:12:03  
Local clock offset: 0.191 ms  
Remote clock offset: -0.301 ms

# Below is generated by plot.py at 2018-06-20 04:06:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.32 Mbit/s  
95th percentile per-packet one-way delay: 136.530 ms  
Loss rate: 1.25%  
-- Flow 1:  
Average throughput: 0.15 Mbit/s  
95th percentile per-packet one-way delay: 136.052 ms  
Loss rate: 0.50%  
-- Flow 2:  
Average throughput: 0.17 Mbit/s  
95th percentile per-packet one-way delay: 135.794 ms  
Loss rate: 1.72%  
-- Flow 3:  
Average throughput: 0.16 Mbit/s  
95th percentile per-packet one-way delay: 136.592 ms  
Loss rate: 2.46%

Run 8: Report of Sprout — Data Link

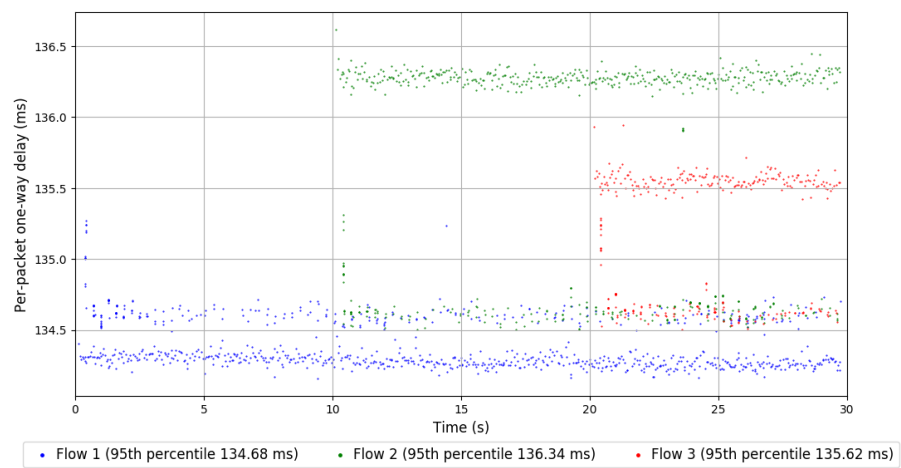
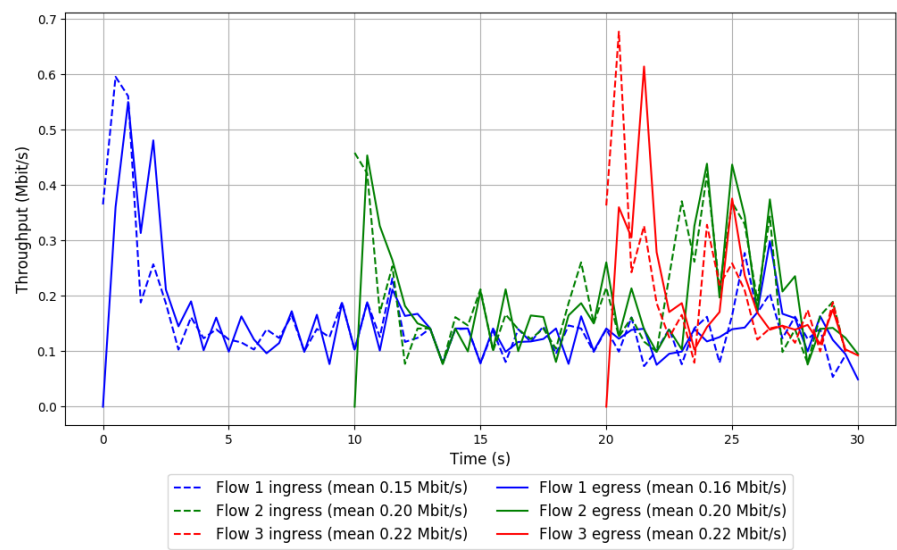


Run 9: Statistics of Sprout

Start at: 2018-06-20 01:36:39  
End at: 2018-06-20 01:37:09  
Local clock offset: 0.008 ms  
Remote clock offset: 0.439 ms

# Below is generated by plot.py at 2018-06-20 04:06:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.36 Mbit/s  
95th percentile per-packet one-way delay: 136.313 ms  
Loss rate: 1.13%  
-- Flow 1:  
Average throughput: 0.16 Mbit/s  
95th percentile per-packet one-way delay: 134.675 ms  
Loss rate: 0.52%  
-- Flow 2:  
Average throughput: 0.20 Mbit/s  
95th percentile per-packet one-way delay: 136.336 ms  
Loss rate: 1.23%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 135.621 ms  
Loss rate: 2.25%

Run 9: Report of Sprout — Data Link

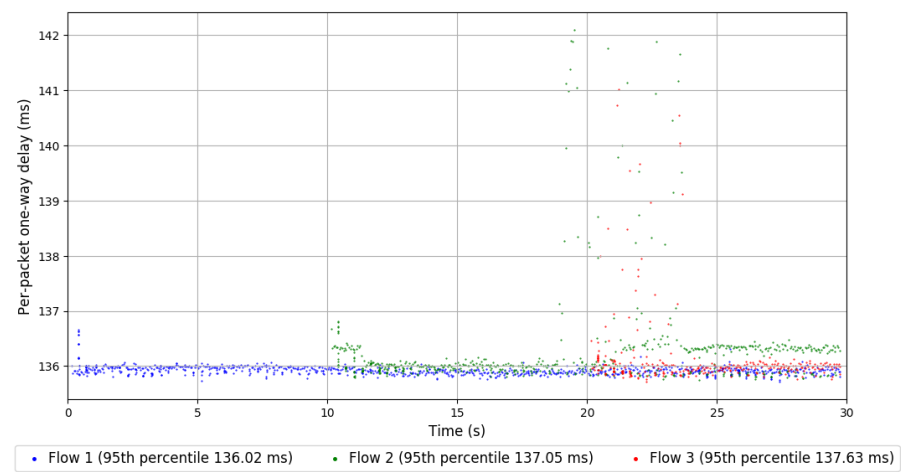
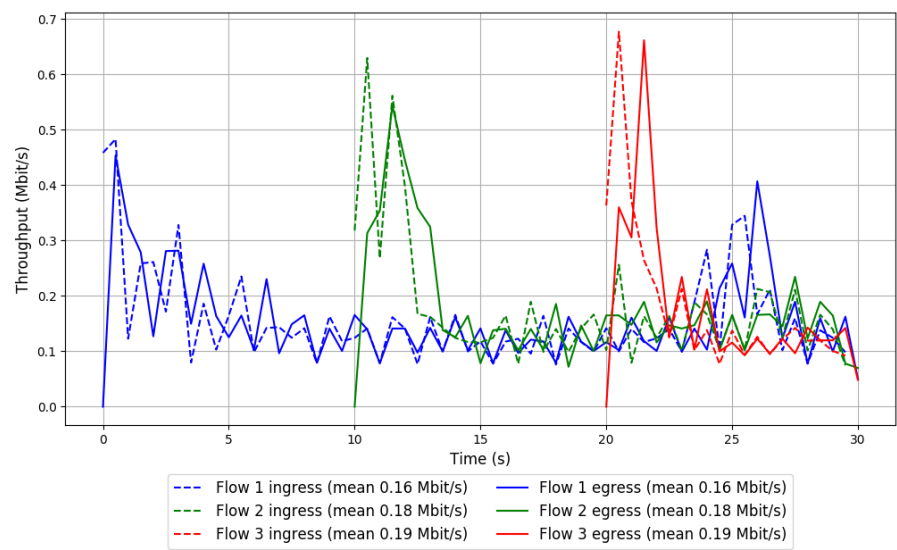


Run 10: Statistics of Sprout

Start at: 2018-06-20 02:01:23  
End at: 2018-06-20 02:01:53  
Local clock offset: 0.034 ms  
Remote clock offset: 0.074 ms

# Below is generated by plot.py at 2018-06-20 04:06:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.34 Mbit/s  
95th percentile per-packet one-way delay: 136.452 ms  
Loss rate: 0.86%  
-- Flow 1:  
Average throughput: 0.16 Mbit/s  
95th percentile per-packet one-way delay: 136.019 ms  
Loss rate: 0.57%  
-- Flow 2:  
Average throughput: 0.18 Mbit/s  
95th percentile per-packet one-way delay: 137.051 ms  
Loss rate: 1.00%  
-- Flow 3:  
Average throughput: 0.19 Mbit/s  
95th percentile per-packet one-way delay: 137.631 ms  
Loss rate: 1.31%

Run 10: Report of Sprout — Data Link

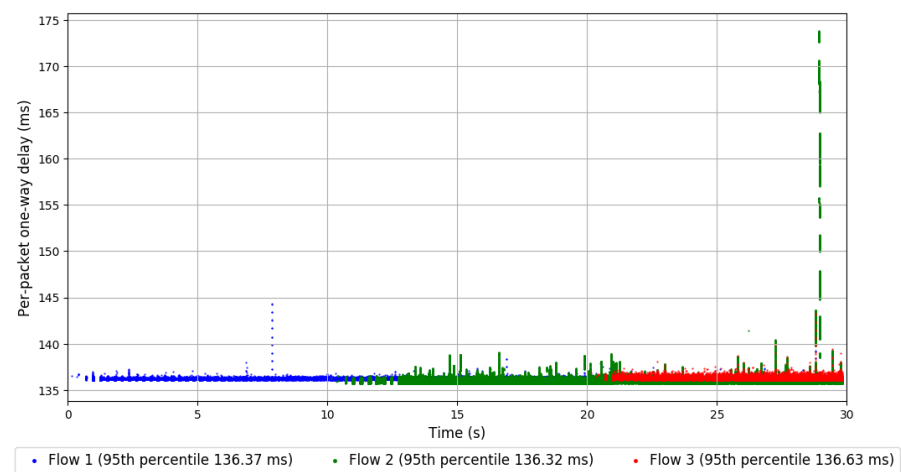
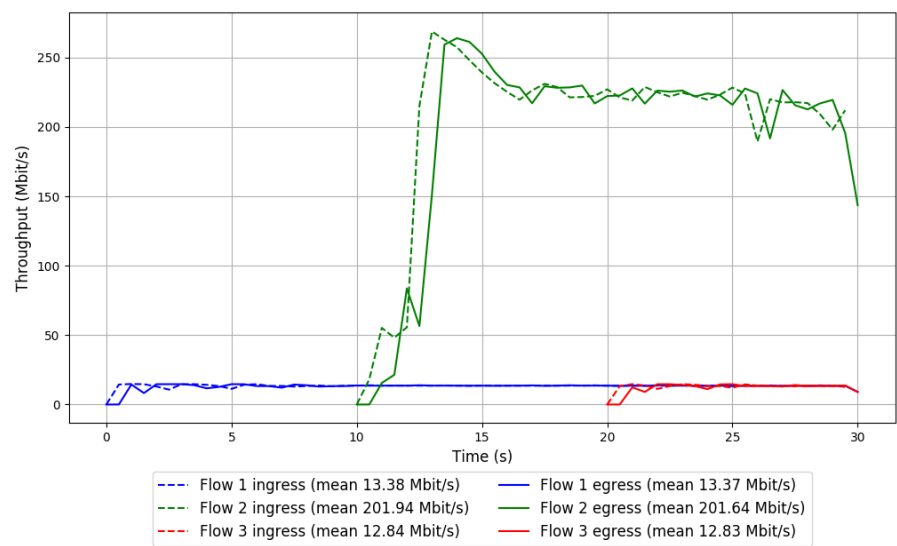


Run 1: Statistics of TaoVA-100x

Start at: 2018-06-19 22:28:32  
End at: 2018-06-19 22:29:02  
Local clock offset: 0.044 ms  
Remote clock offset: -0.331 ms

# Below is generated by plot.py at 2018-06-20 04:06:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 151.23 Mbit/s  
95th percentile per-packet one-way delay: 136.365 ms  
Loss rate: 1.51%  
-- Flow 1:  
Average throughput: 13.37 Mbit/s  
95th percentile per-packet one-way delay: 136.373 ms  
Loss rate: 0.93%  
-- Flow 2:  
Average throughput: 201.64 Mbit/s  
95th percentile per-packet one-way delay: 136.324 ms  
Loss rate: 1.52%  
-- Flow 3:  
Average throughput: 12.83 Mbit/s  
95th percentile per-packet one-way delay: 136.632 ms  
Loss rate: 2.84%

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-06-19 22:53:34

End at: 2018-06-19 22:54:04

Local clock offset: 0.078 ms

Remote clock offset: 0.42 ms

# Below is generated by plot.py at 2018-06-20 04:10:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 325.82 Mbit/s

95th percentile per-packet one-way delay: 143.681 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 178.60 Mbit/s

95th percentile per-packet one-way delay: 143.926 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 153.78 Mbit/s

95th percentile per-packet one-way delay: 140.656 ms

Loss rate: 0.97%

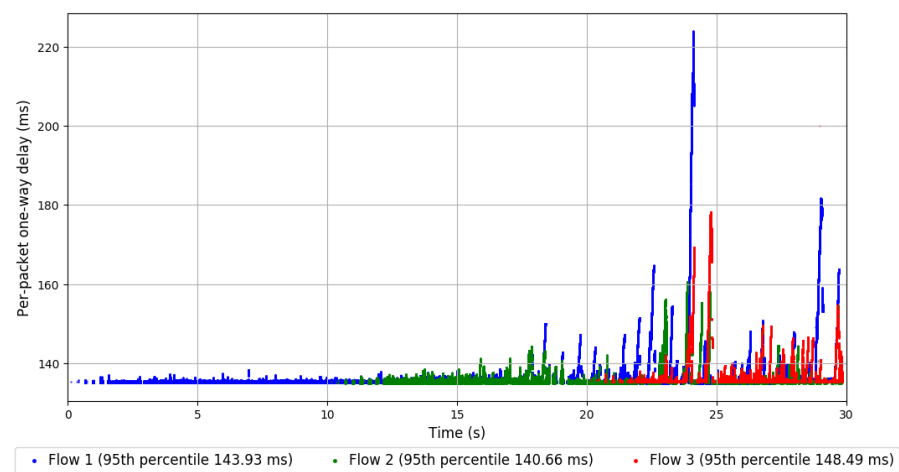
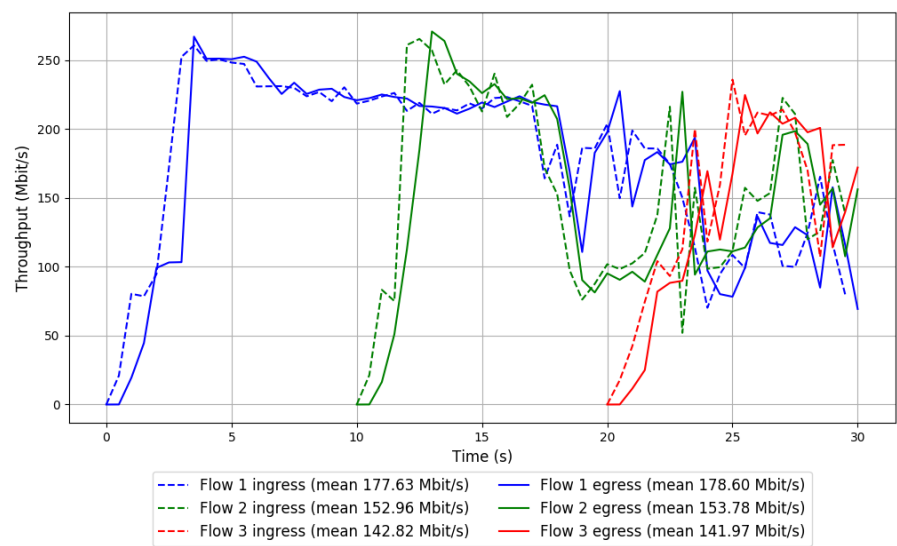
-- Flow 3:

Average throughput: 141.97 Mbit/s

95th percentile per-packet one-way delay: 148.488 ms

Loss rate: 3.33%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-06-19 23:18:42

End at: 2018-06-19 23:19:12

Local clock offset: 0.025 ms

Remote clock offset: 0.068 ms

# Below is generated by plot.py at 2018-06-20 04:10:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 77.93 Mbit/s

95th percentile per-packet one-way delay: 136.322 ms

Loss rate: 2.82%

-- Flow 1:

Average throughput: 8.81 Mbit/s

95th percentile per-packet one-way delay: 136.226 ms

Loss rate: 0.81%

-- Flow 2:

Average throughput: 13.24 Mbit/s

95th percentile per-packet one-way delay: 136.286 ms

Loss rate: 1.42%

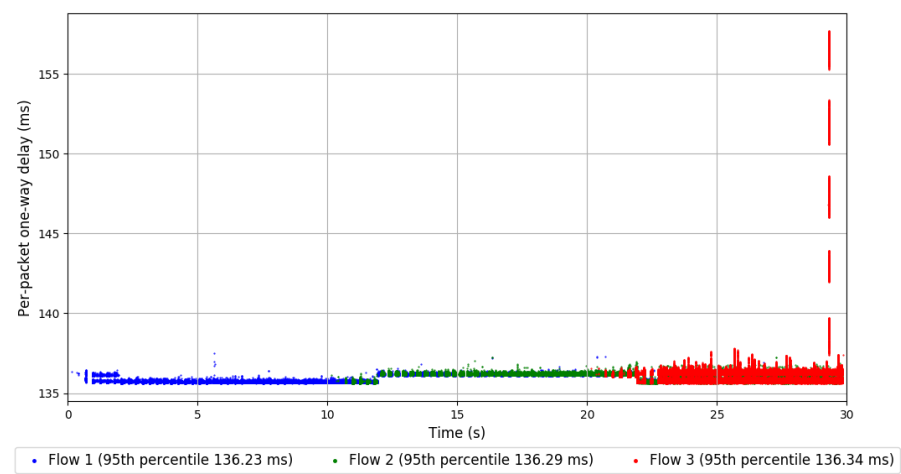
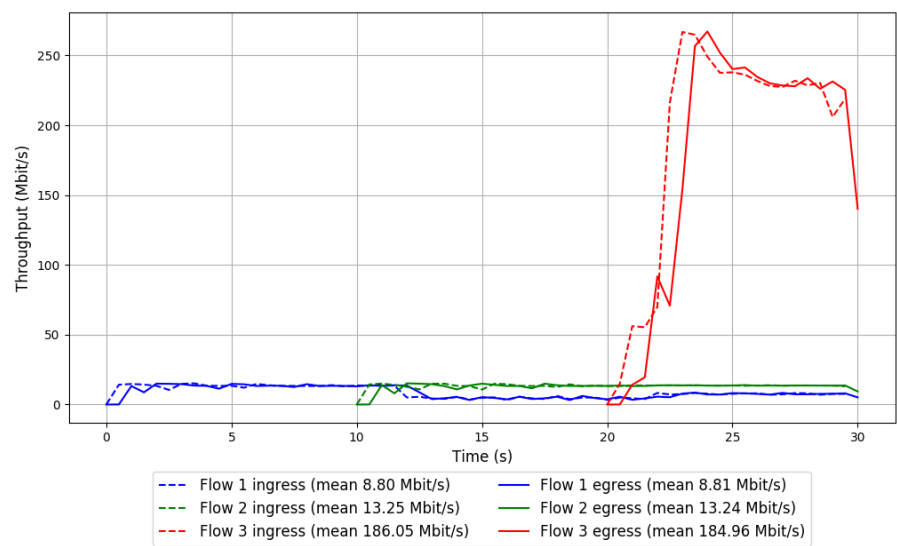
-- Flow 3:

Average throughput: 184.96 Mbit/s

95th percentile per-packet one-way delay: 136.335 ms

Loss rate: 3.31%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-06-19 23:43:15

End at: 2018-06-19 23:43:45

Local clock offset: -0.131 ms

Remote clock offset: 0.017 ms

# Below is generated by plot.py at 2018-06-20 04:10:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 87.85 Mbit/s

95th percentile per-packet one-way delay: 135.789 ms

Loss rate: 2.25%

-- Flow 1:

Average throughput: 13.38 Mbit/s

95th percentile per-packet one-way delay: 135.889 ms

Loss rate: 0.92%

-- Flow 2:

Average throughput: 13.19 Mbit/s

95th percentile per-packet one-way delay: 135.684 ms

Loss rate: 1.39%

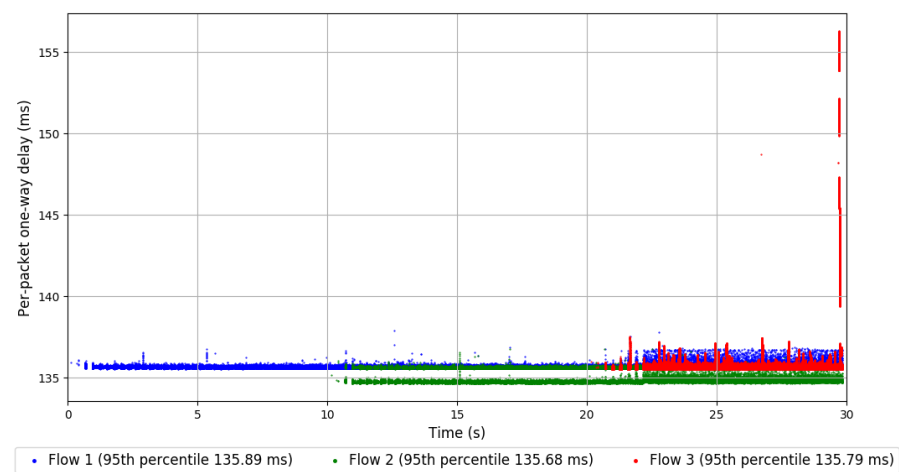
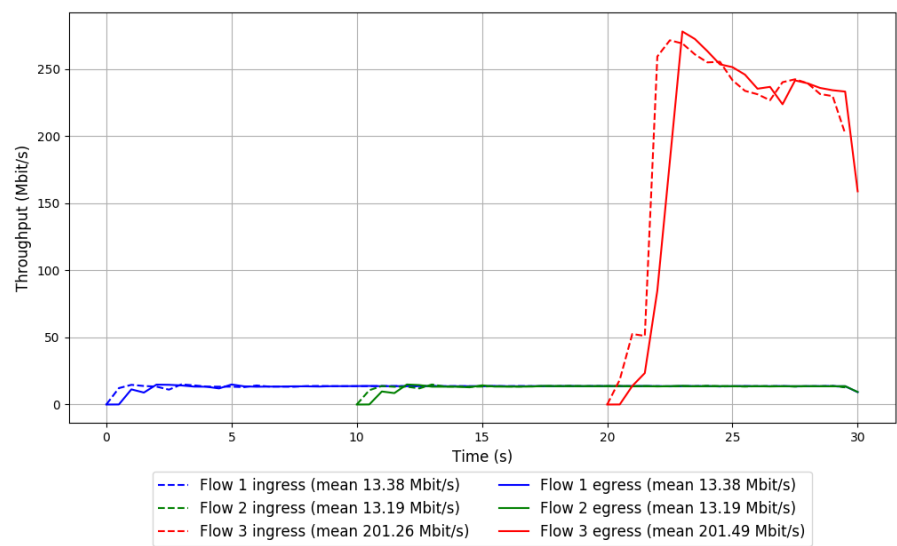
-- Flow 3:

Average throughput: 201.49 Mbit/s

95th percentile per-packet one-way delay: 135.786 ms

Loss rate: 2.62%

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

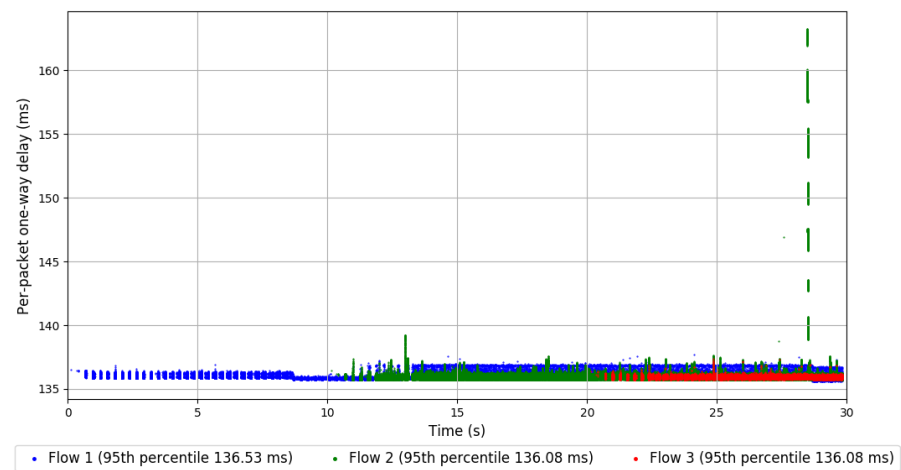
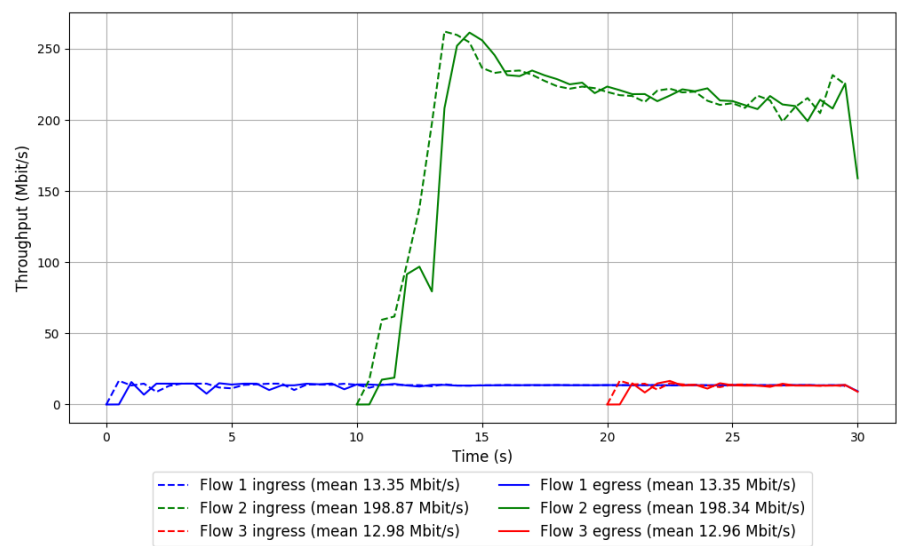


Run 5: Statistics of TaoVA-100x

Start at: 2018-06-20 00:08:05  
End at: 2018-06-20 00:08:35  
Local clock offset: 0.03 ms  
Remote clock offset: -0.026 ms

# Below is generated by plot.py at 2018-06-20 04:10:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 149.14 Mbit/s  
95th percentile per-packet one-way delay: 136.121 ms  
Loss rate: 1.60%  
-- Flow 1:  
Average throughput: 13.35 Mbit/s  
95th percentile per-packet one-way delay: 136.526 ms  
Loss rate: 0.92%  
-- Flow 2:  
Average throughput: 198.34 Mbit/s  
95th percentile per-packet one-way delay: 136.084 ms  
Loss rate: 1.62%  
-- Flow 3:  
Average throughput: 12.96 Mbit/s  
95th percentile per-packet one-way delay: 136.078 ms  
Loss rate: 2.86%

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

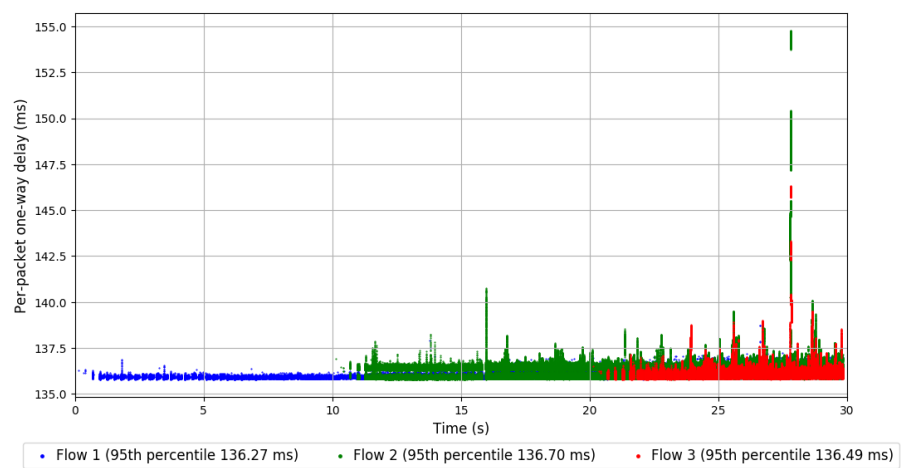
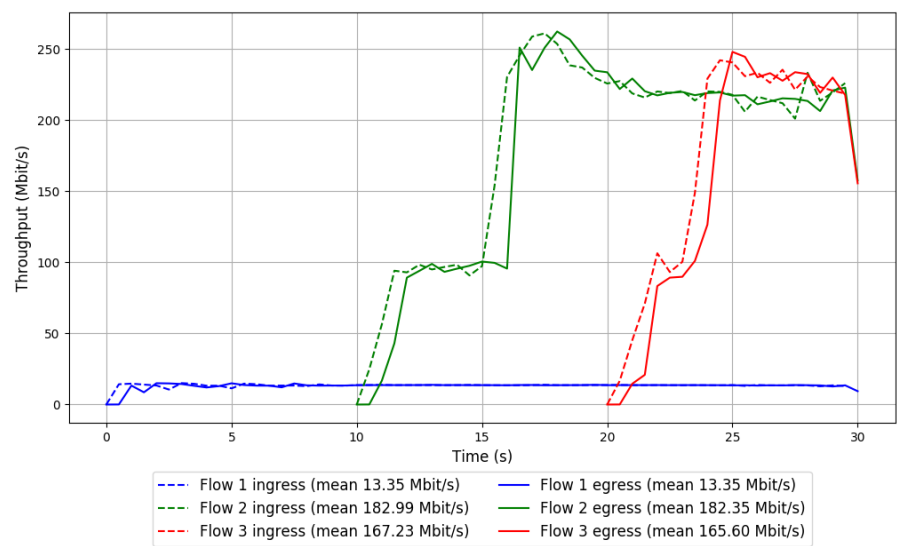


Run 6: Statistics of TaoVA-100x

Start at: 2018-06-20 00:32:53  
End at: 2018-06-20 00:33:23  
Local clock offset: 0.17 ms  
Remote clock offset: -0.008 ms

# Below is generated by plot.py at 2018-06-20 04:10:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 188.32 Mbit/s  
95th percentile per-packet one-way delay: 136.652 ms  
Loss rate: 2.23%  
-- Flow 1:  
Average throughput: 13.35 Mbit/s  
95th percentile per-packet one-way delay: 136.268 ms  
Loss rate: 0.90%  
-- Flow 2:  
Average throughput: 182.35 Mbit/s  
95th percentile per-packet one-way delay: 136.698 ms  
Loss rate: 1.72%  
-- Flow 3:  
Average throughput: 165.60 Mbit/s  
95th percentile per-packet one-way delay: 136.491 ms  
Loss rate: 3.69%

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

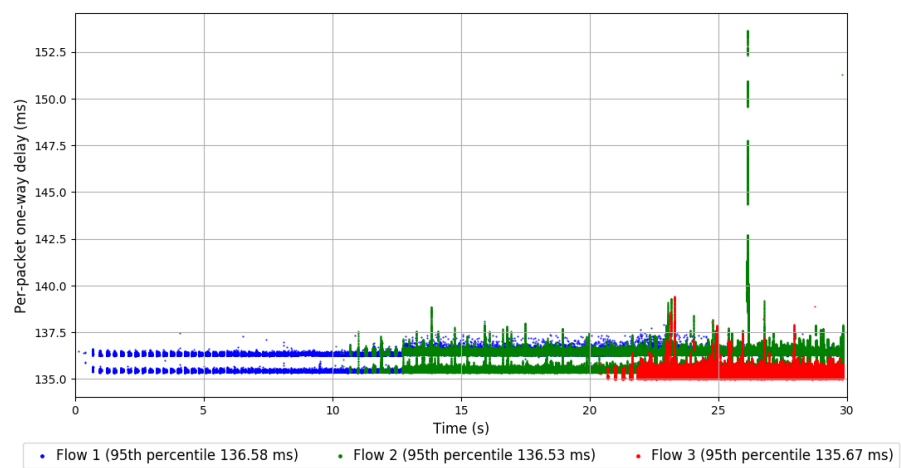
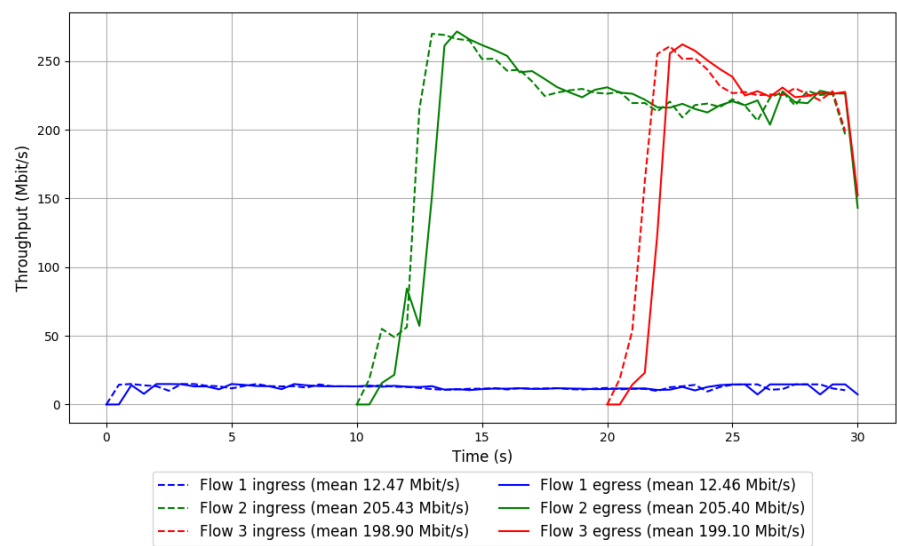


Run 7: Statistics of TaoVA-100x

Start at: 2018-06-20 00:57:55  
End at: 2018-06-20 00:58:25  
Local clock offset: 0.079 ms  
Remote clock offset: -0.364 ms

# Below is generated by plot.py at 2018-06-20 04:10:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 213.56 Mbit/s  
95th percentile per-packet one-way delay: 136.507 ms  
Loss rate: 1.75%  
-- Flow 1:  
Average throughput: 12.46 Mbit/s  
95th percentile per-packet one-way delay: 136.581 ms  
Loss rate: 1.00%  
-- Flow 2:  
Average throughput: 205.40 Mbit/s  
95th percentile per-packet one-way delay: 136.534 ms  
Loss rate: 1.38%  
-- Flow 3:  
Average throughput: 199.10 Mbit/s  
95th percentile per-packet one-way delay: 135.666 ms  
Loss rate: 2.66%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-06-20 01:23:05

End at: 2018-06-20 01:23:35

Local clock offset: 0.047 ms

Remote clock offset: 0.028 ms

# Below is generated by plot.py at 2018-06-20 04:10:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 210.69 Mbit/s

95th percentile per-packet one-way delay: 136.075 ms

Loss rate: 2.05%

-- Flow 1:

Average throughput: 13.20 Mbit/s

95th percentile per-packet one-way delay: 136.330 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 208.16 Mbit/s

95th percentile per-packet one-way delay: 136.067 ms

Loss rate: 1.54%

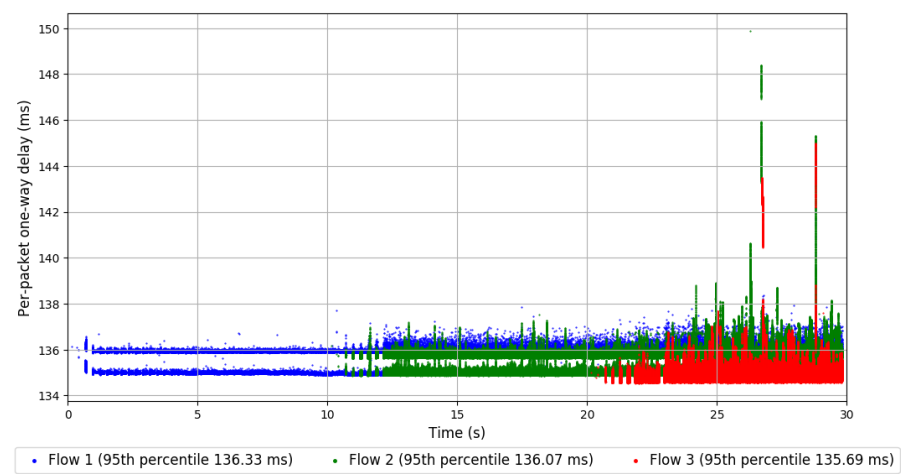
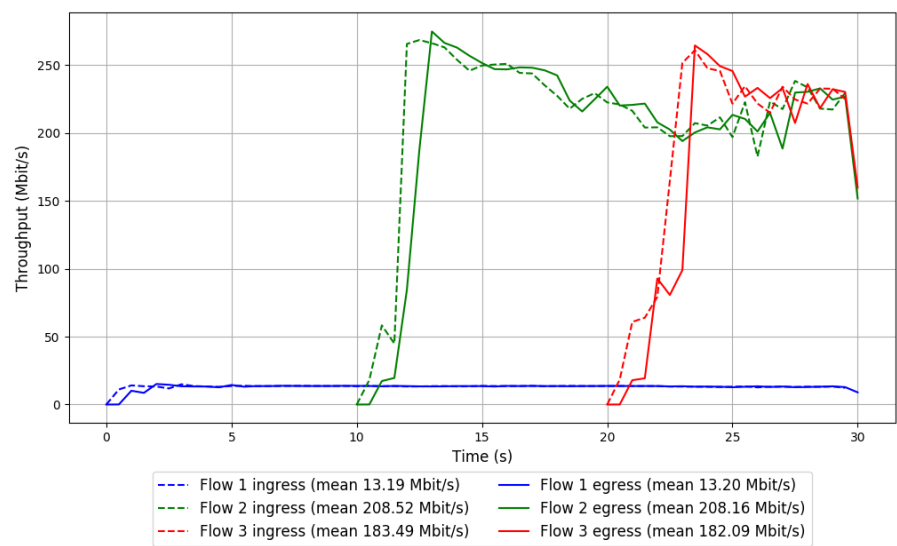
-- Flow 3:

Average throughput: 182.09 Mbit/s

95th percentile per-packet one-way delay: 135.695 ms

Loss rate: 3.47%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-06-20 01:47:59

End at: 2018-06-20 01:48:29

Local clock offset: 0.005 ms

Remote clock offset: 0.036 ms

# Below is generated by plot.py at 2018-06-20 04:10:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 194.45 Mbit/s

95th percentile per-packet one-way delay: 136.390 ms

Loss rate: 1.92%

-- Flow 1:

Average throughput: 13.39 Mbit/s

95th percentile per-packet one-way delay: 136.455 ms

Loss rate: 0.92%

-- Flow 2:

Average throughput: 210.78 Mbit/s

95th percentile per-packet one-way delay: 136.047 ms

Loss rate: 1.47%

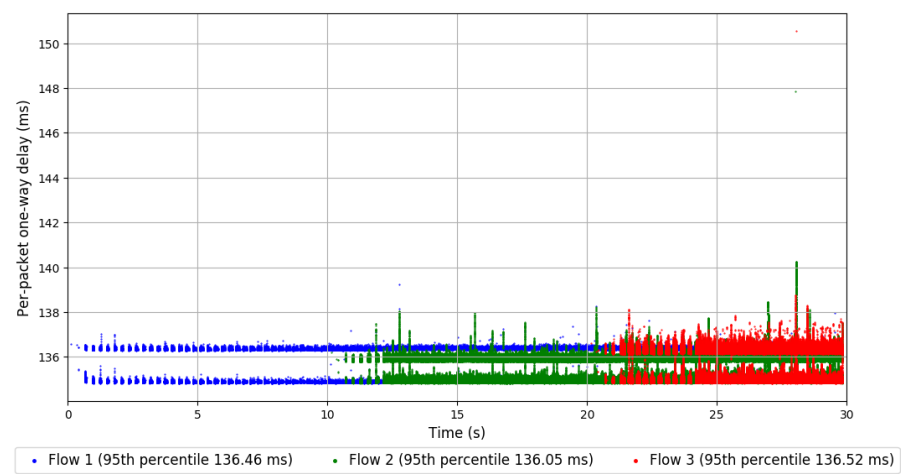
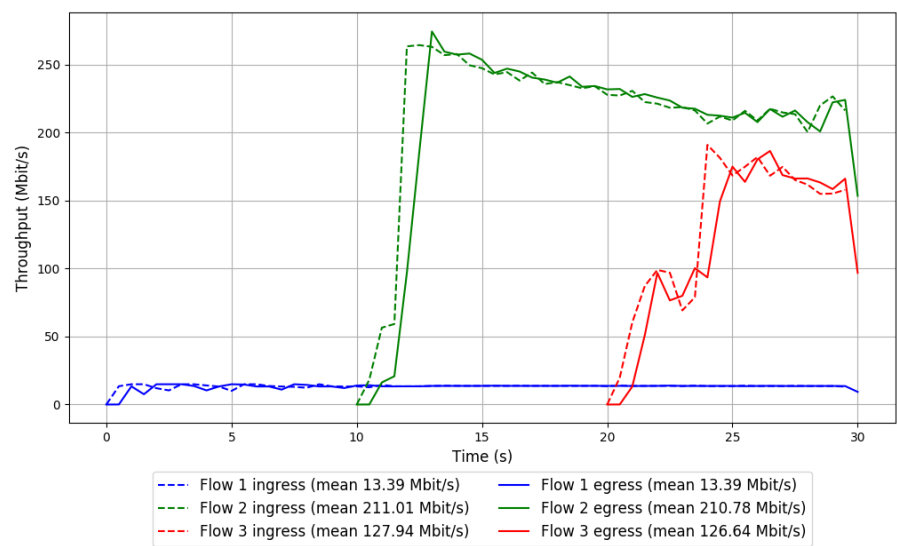
-- Flow 3:

Average throughput: 126.64 Mbit/s

95th percentile per-packet one-way delay: 136.517 ms

Loss rate: 3.72%

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



Run 10: Statistics of TaoVA-100x

Start at: 2018-06-20 02:12:56

End at: 2018-06-20 02:13:26

Local clock offset: 0.208 ms

Remote clock offset: 0.124 ms

# Below is generated by plot.py at 2018-06-20 04:17:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 379.12 Mbit/s

95th percentile per-packet one-way delay: 137.315 ms

Loss rate: 1.56%

-- Flow 1:

Average throughput: 200.33 Mbit/s

95th percentile per-packet one-way delay: 136.871 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 196.41 Mbit/s

95th percentile per-packet one-way delay: 137.458 ms

Loss rate: 1.69%

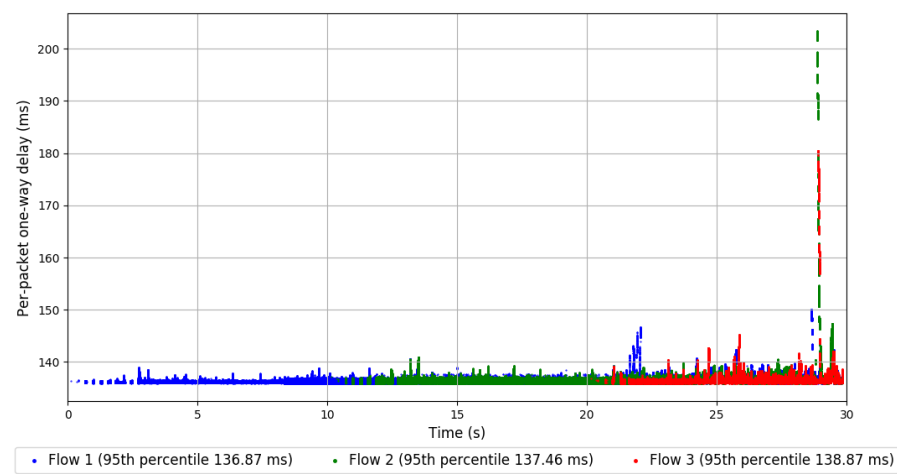
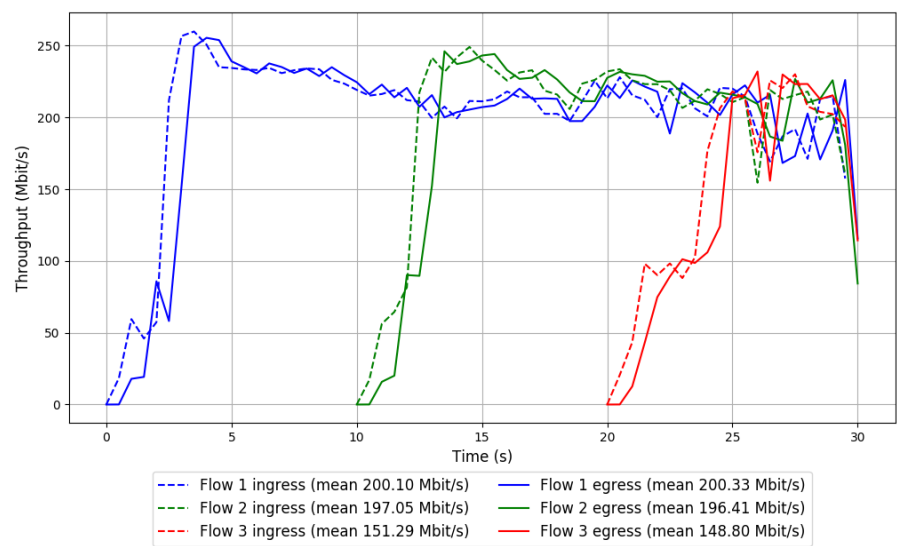
-- Flow 3:

Average throughput: 148.80 Mbit/s

95th percentile per-packet one-way delay: 138.870 ms

Loss rate: 4.34%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-06-19 22:11:00

End at: 2018-06-19 22:11:30

Local clock offset: -0.203 ms

Remote clock offset: 0.041 ms

# Below is generated by plot.py at 2018-06-20 04:17:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 144.85 Mbit/s

95th percentile per-packet one-way delay: 143.779 ms

Loss rate: 1.31%

-- Flow 1:

Average throughput: 84.33 Mbit/s

95th percentile per-packet one-way delay: 143.912 ms

Loss rate: 1.00%

-- Flow 2:

Average throughput: 79.98 Mbit/s

95th percentile per-packet one-way delay: 143.849 ms

Loss rate: 1.53%

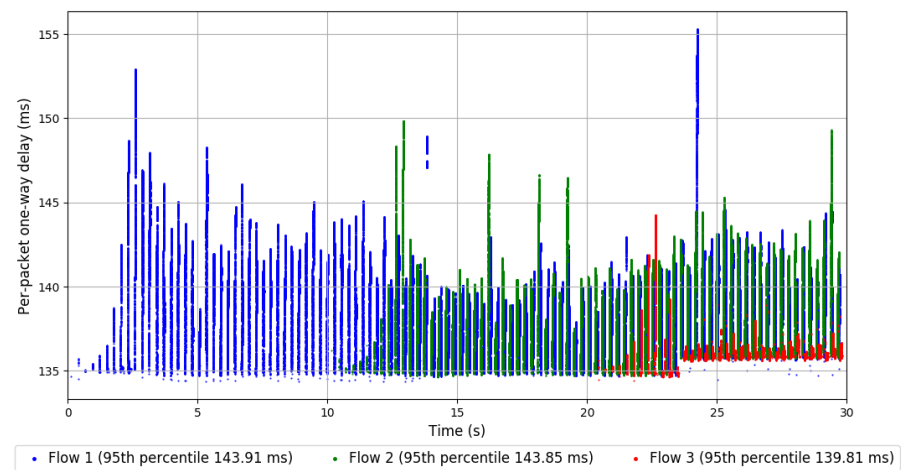
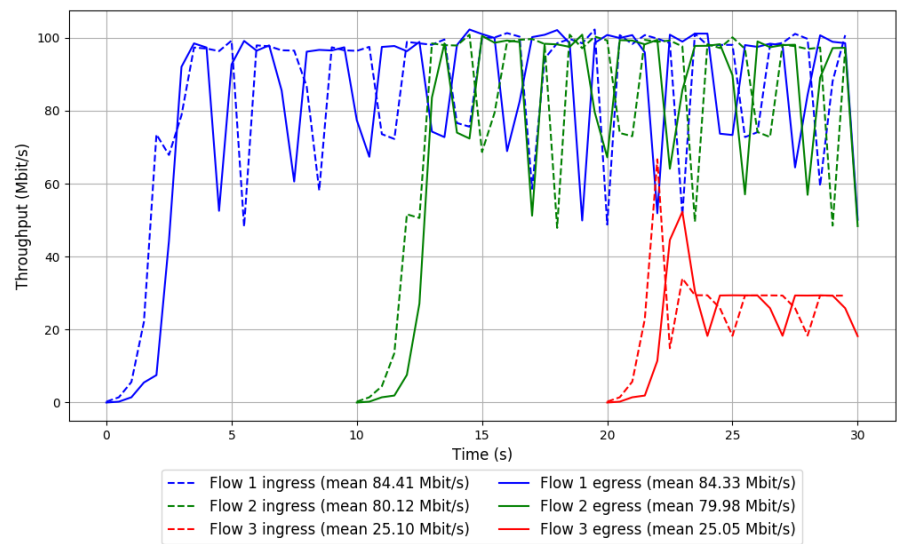
-- Flow 3:

Average throughput: 25.05 Mbit/s

95th percentile per-packet one-way delay: 139.810 ms

Loss rate: 2.95%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-06-19 22:36:05

End at: 2018-06-19 22:36:35

Local clock offset: -0.079 ms

Remote clock offset: 0.098 ms

# Below is generated by plot.py at 2018-06-20 04:17:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 100.12 Mbit/s

95th percentile per-packet one-way delay: 145.956 ms

Loss rate: 1.47%

-- Flow 1:

Average throughput: 37.78 Mbit/s

95th percentile per-packet one-way delay: 145.621 ms

Loss rate: 1.01%

-- Flow 2:

Average throughput: 80.45 Mbit/s

95th percentile per-packet one-way delay: 145.972 ms

Loss rate: 1.51%

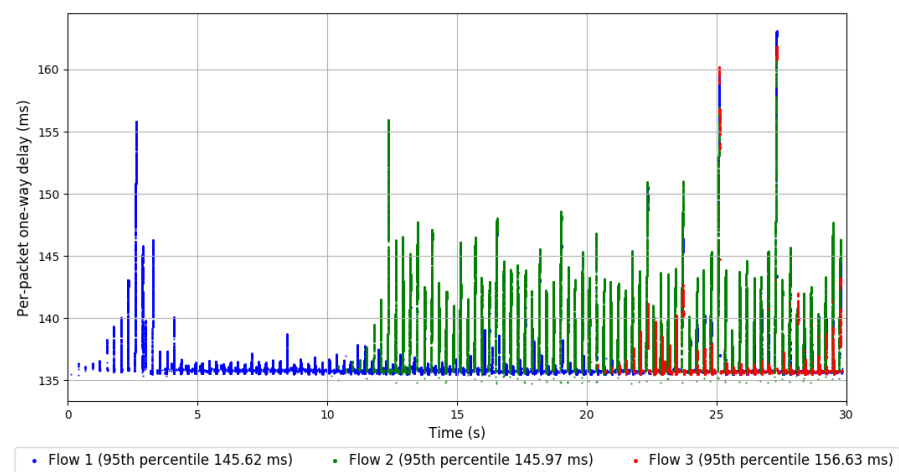
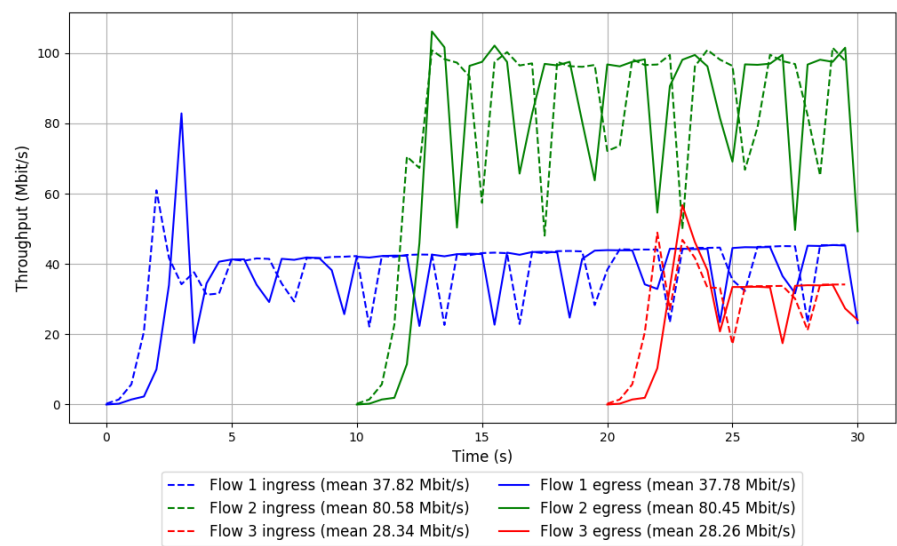
-- Flow 3:

Average throughput: 28.26 Mbit/s

95th percentile per-packet one-way delay: 156.634 ms

Loss rate: 3.04%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-06-19 23:01:14

End at: 2018-06-19 23:01:44

Local clock offset: 0.062 ms

Remote clock offset: 0.083 ms

# Below is generated by plot.py at 2018-06-20 04:17:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 113.02 Mbit/s

95th percentile per-packet one-way delay: 148.681 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 77.59 Mbit/s

95th percentile per-packet one-way delay: 148.720 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 40.15 Mbit/s

95th percentile per-packet one-way delay: 150.621 ms

Loss rate: 1.53%

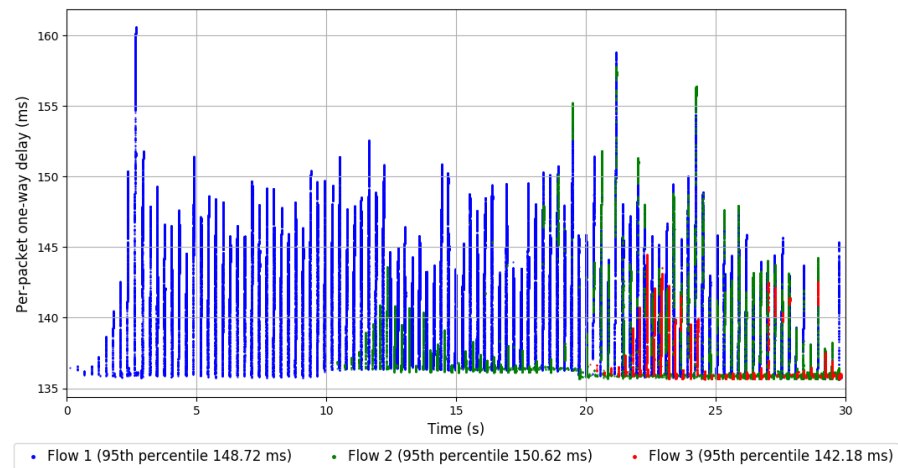
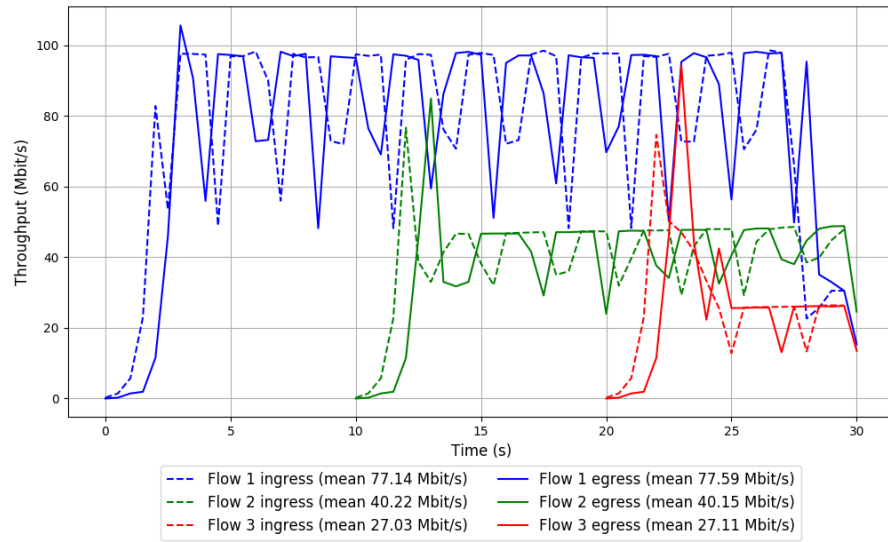
-- Flow 3:

Average throughput: 27.11 Mbit/s

95th percentile per-packet one-way delay: 142.180 ms

Loss rate: 2.46%

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



Run 4: Statistics of TCP Vegas

Start at: 2018-06-19 23:25:56

End at: 2018-06-19 23:26:26

Local clock offset: -0.039 ms

Remote clock offset: 0.035 ms

# Below is generated by plot.py at 2018-06-20 04:17:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 49.09 Mbit/s

95th percentile per-packet one-way delay: 143.947 ms

Loss rate: 1.36%

-- Flow 1:

Average throughput: 25.36 Mbit/s

95th percentile per-packet one-way delay: 142.113 ms

Loss rate: 0.98%

-- Flow 2:

Average throughput: 23.58 Mbit/s

95th percentile per-packet one-way delay: 144.181 ms

Loss rate: 1.39%

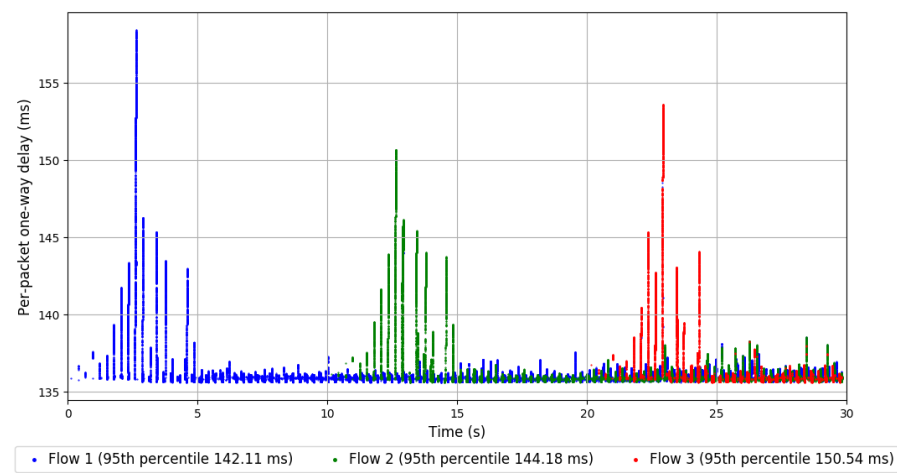
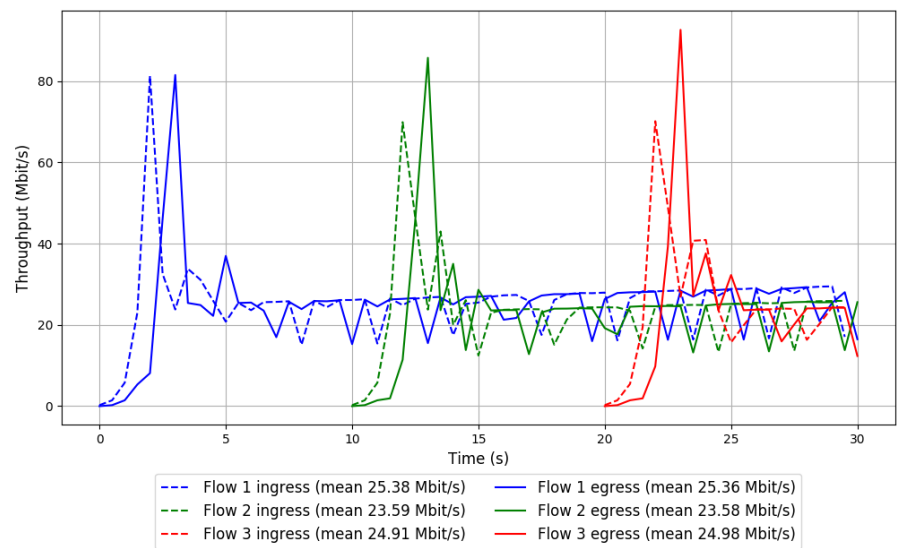
-- Flow 3:

Average throughput: 24.98 Mbit/s

95th percentile per-packet one-way delay: 150.540 ms

Loss rate: 2.48%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-06-19 23:50:37

End at: 2018-06-19 23:51:07

Local clock offset: -0.018 ms

Remote clock offset: 0.005 ms

# Below is generated by plot.py at 2018-06-20 04:17:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 143.83 Mbit/s

95th percentile per-packet one-way delay: 144.597 ms

Loss rate: 1.32%

-- Flow 1:

Average throughput: 83.24 Mbit/s

95th percentile per-packet one-way delay: 145.004 ms

Loss rate: 1.01%

-- Flow 2:

Average throughput: 81.43 Mbit/s

95th percentile per-packet one-way delay: 143.237 ms

Loss rate: 1.57%

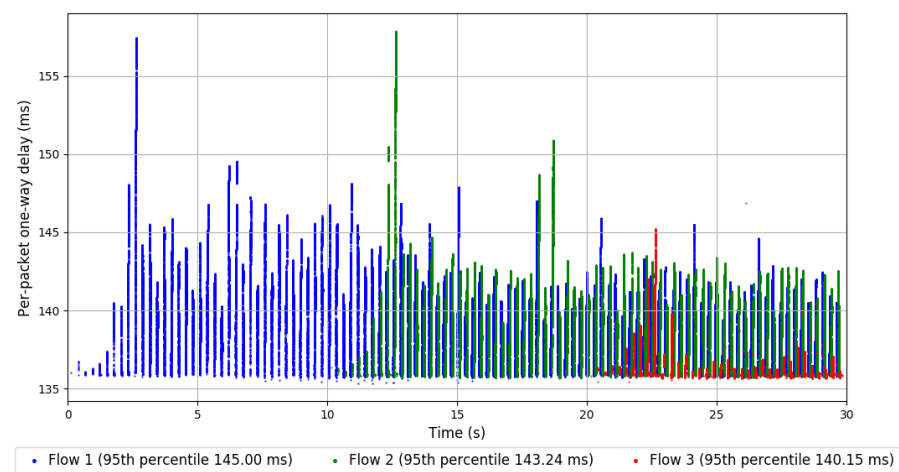
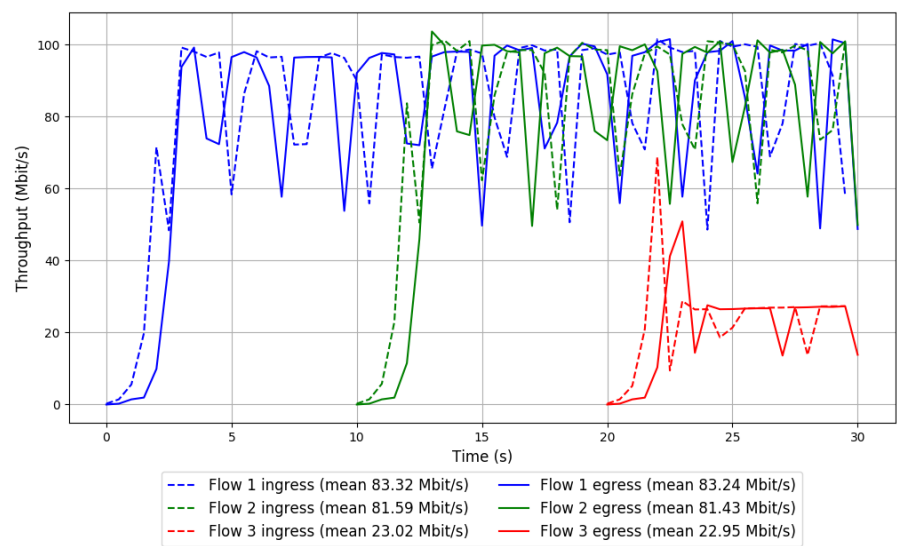
-- Flow 3:

Average throughput: 22.95 Mbit/s

95th percentile per-packet one-way delay: 140.154 ms

Loss rate: 3.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-06-20 00:15:35

End at: 2018-06-20 00:16:05

Local clock offset: 0.076 ms

Remote clock offset: 0.027 ms

# Below is generated by plot.py at 2018-06-20 04:17:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 86.42 Mbit/s

95th percentile per-packet one-way delay: 145.819 ms

Loss rate: 1.46%

-- Flow 1:

Average throughput: 25.67 Mbit/s

95th percentile per-packet one-way delay: 145.711 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 79.88 Mbit/s

95th percentile per-packet one-way delay: 145.907 ms

Loss rate: 1.52%

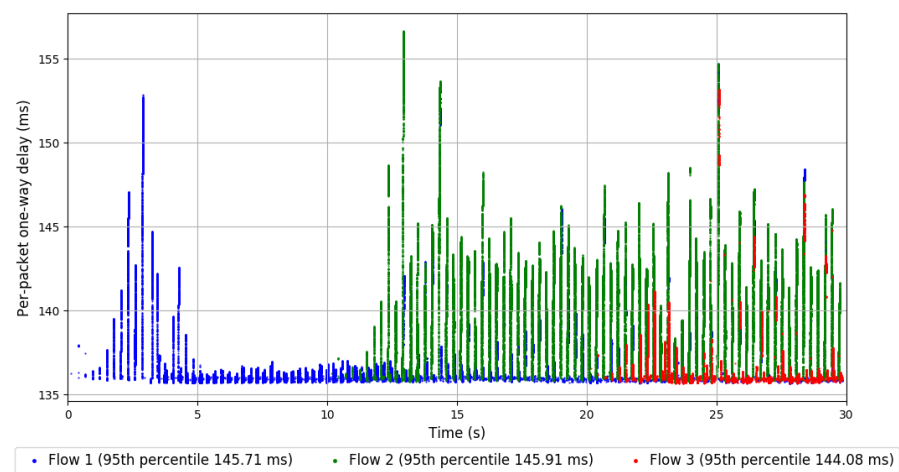
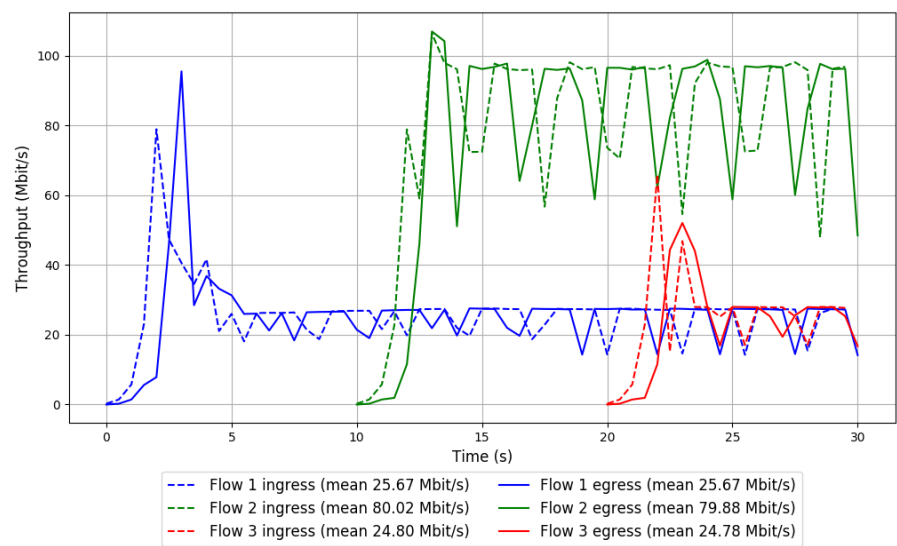
-- Flow 3:

Average throughput: 24.78 Mbit/s

95th percentile per-packet one-way delay: 144.083 ms

Loss rate: 2.83%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-06-20 00:40:27

End at: 2018-06-20 00:40:57

Local clock offset: -0.118 ms

Remote clock offset: 0.01 ms

# Below is generated by plot.py at 2018-06-20 04:17:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 74.82 Mbit/s

95th percentile per-packet one-way delay: 140.105 ms

Loss rate: 1.46%

-- Flow 1:

Average throughput: 37.68 Mbit/s

95th percentile per-packet one-way delay: 140.038 ms

Loss rate: 0.91%

-- Flow 2:

Average throughput: 38.87 Mbit/s

95th percentile per-packet one-way delay: 139.901 ms

Loss rate: 1.51%

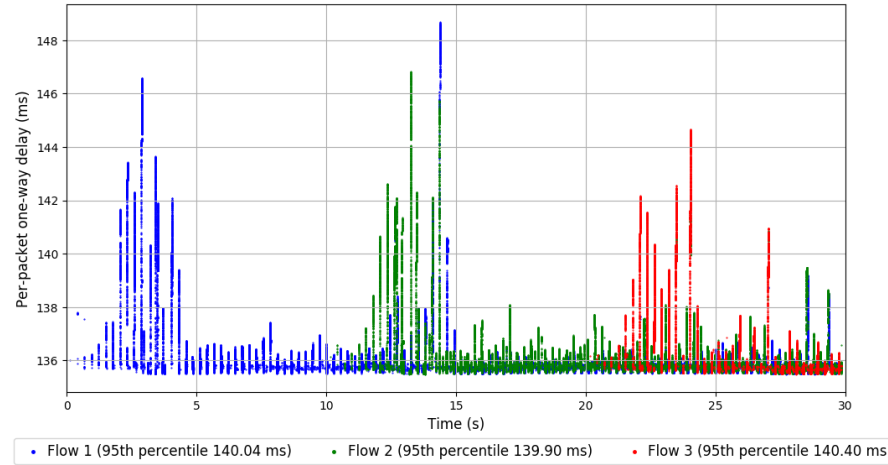
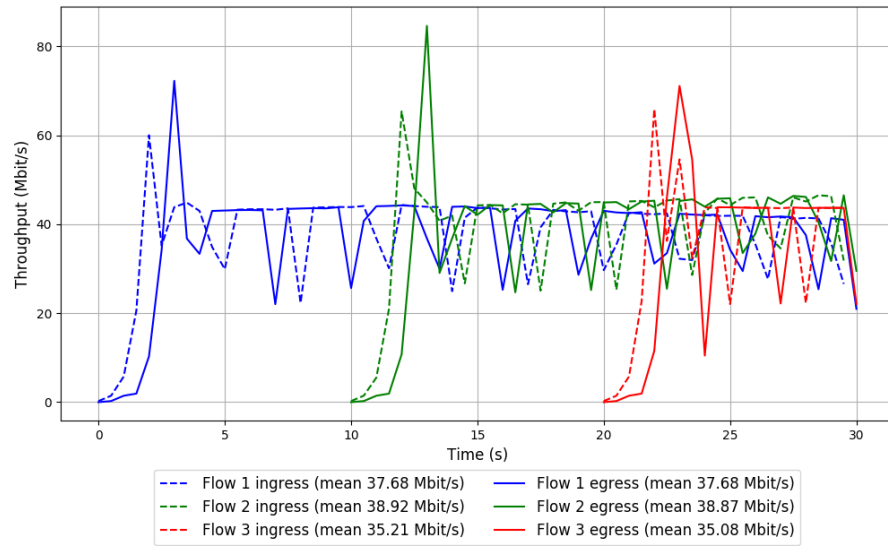
-- Flow 3:

Average throughput: 35.08 Mbit/s

95th percentile per-packet one-way delay: 140.398 ms

Loss rate: 3.12%

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



Run 8: Statistics of TCP Vegas

Start at: 2018-06-20 01:05:31

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

Local clock offset: 0.022 ms

Remote clock offset: 0.026 ms

# Below is generated by plot.py at 2018-06-20 04:17:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 115.73 Mbit/s

95th percentile per-packet one-way delay: 144.290 ms

Loss rate: 1.29%

-- Flow 1:

Average throughput: 83.66 Mbit/s

95th percentile per-packet one-way delay: 144.780 ms

Loss rate: 0.99%

-- Flow 2:

Average throughput: 32.47 Mbit/s

95th percentile per-packet one-way delay: 139.556 ms

Loss rate: 1.46%

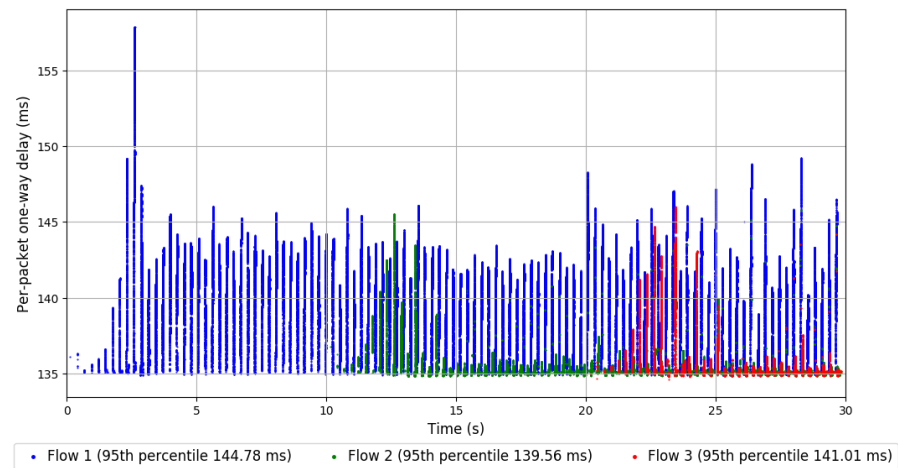
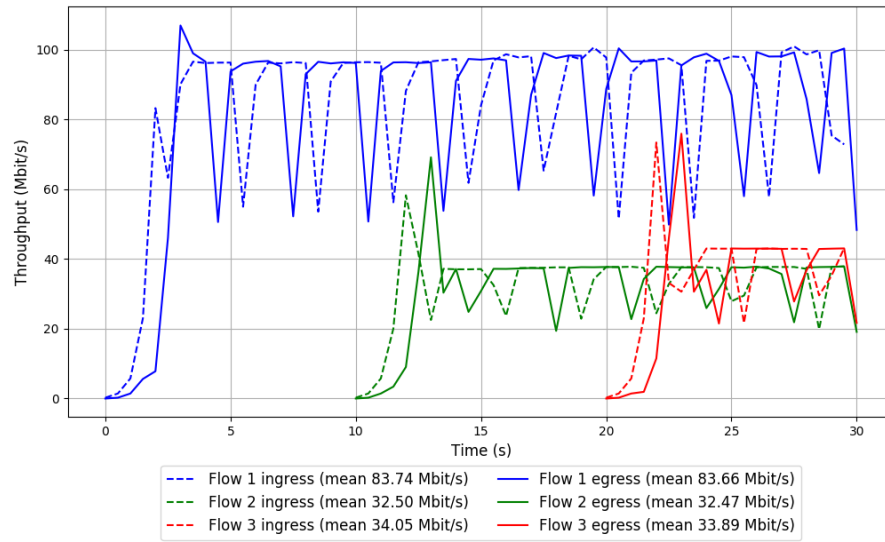
-- Flow 3:

Average throughput: 33.89 Mbit/s

95th percentile per-packet one-way delay: 141.006 ms

Loss rate: 3.19%

# Run 8: Report of TCP Vegas — Data Link

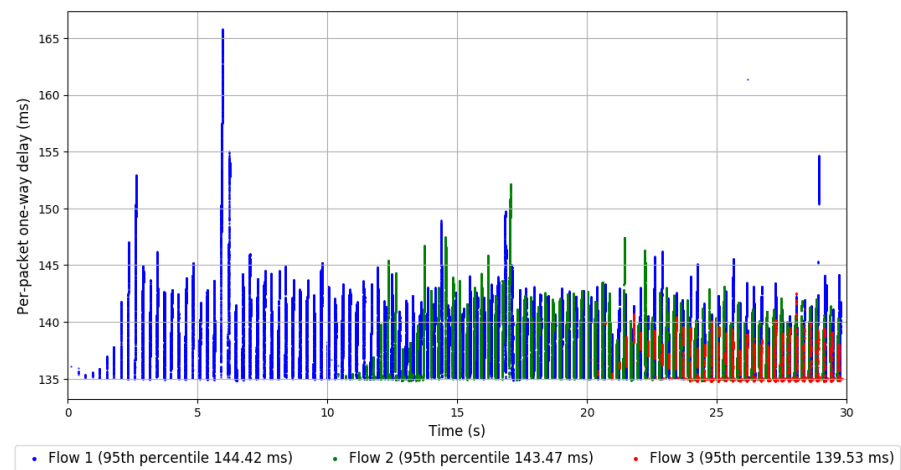
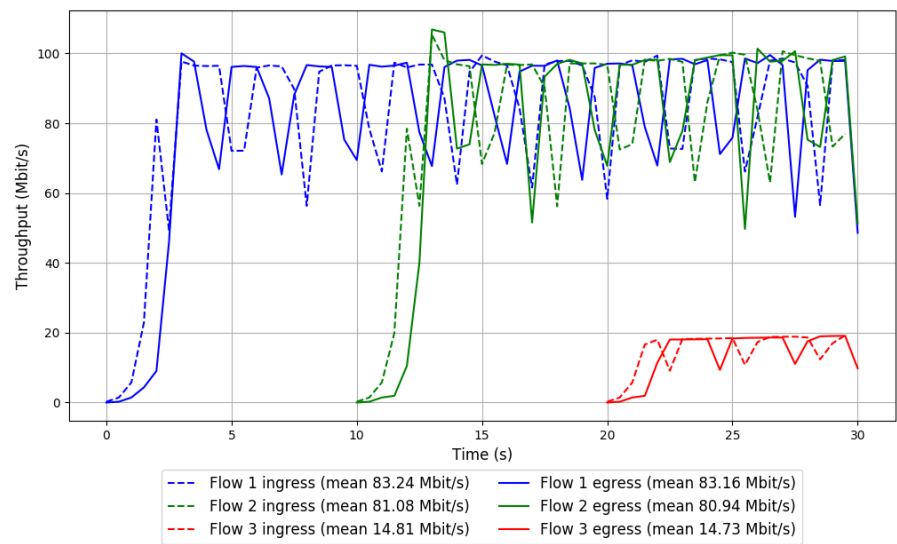


Run 9: Statistics of TCP Vegas

Start at: 2018-06-20 01:30:40  
End at: 2018-06-20 01:31:10  
Local clock offset: -0.017 ms  
Remote clock offset: 0.041 ms

# Below is generated by plot.py at 2018-06-20 04:17:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 141.02 Mbit/s  
95th percentile per-packet one-way delay: 144.104 ms  
Loss rate: 1.28%  
-- Flow 1:  
Average throughput: 83.16 Mbit/s  
95th percentile per-packet one-way delay: 144.419 ms  
Loss rate: 1.00%  
-- Flow 2:  
Average throughput: 80.94 Mbit/s  
95th percentile per-packet one-way delay: 143.473 ms  
Loss rate: 1.54%  
-- Flow 3:  
Average throughput: 14.73 Mbit/s  
95th percentile per-packet one-way delay: 139.532 ms  
Loss rate: 3.28%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-06-20 01:55:24

End at: 2018-06-20 01:55:54

Local clock offset: -0.213 ms

Remote clock offset: 0.059 ms

# Below is generated by plot.py at 2018-06-20 04:17:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 149.14 Mbit/s

95th percentile per-packet one-way delay: 143.819 ms

Loss rate: 1.41%

-- Flow 1:

Average throughput: 83.30 Mbit/s

95th percentile per-packet one-way delay: 144.121 ms

Loss rate: 1.00%

-- Flow 2:

Average throughput: 80.87 Mbit/s

95th percentile per-packet one-way delay: 143.446 ms

Loss rate: 1.53%

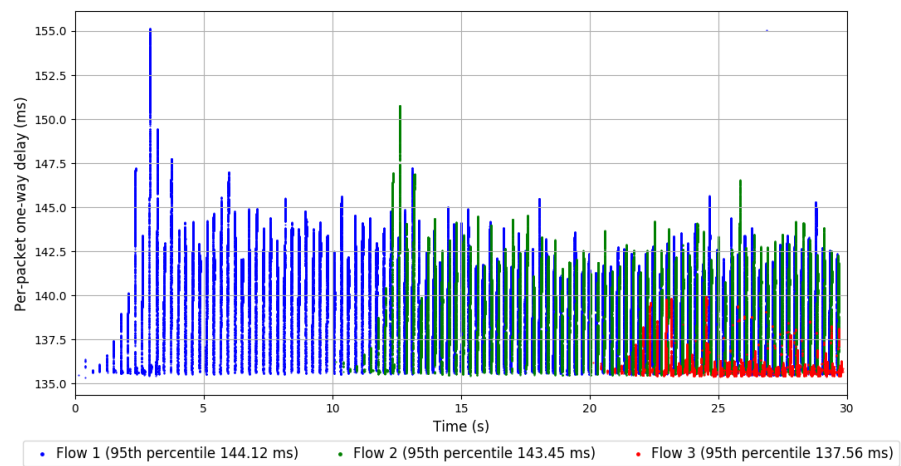
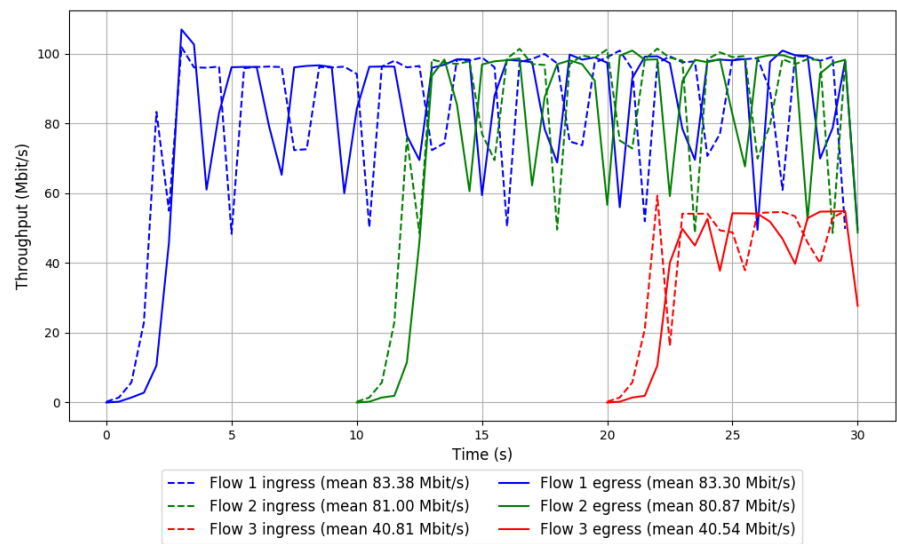
-- Flow 3:

Average throughput: 40.54 Mbit/s

95th percentile per-packet one-way delay: 137.559 ms

Loss rate: 3.39%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-06-19 22:30:04

End at: 2018-06-19 22:30:34

Local clock offset: -0.013 ms

Remote clock offset: 0.101 ms

# Below is generated by plot.py at 2018-06-20 04:17:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 308.05 Mbit/s

95th percentile per-packet one-way delay: 289.482 ms

Loss rate: 3.53%

-- Flow 1:

Average throughput: 213.39 Mbit/s

95th percentile per-packet one-way delay: 245.314 ms

Loss rate: 1.70%

-- Flow 2:

Average throughput: 70.47 Mbit/s

95th percentile per-packet one-way delay: 360.595 ms

Loss rate: 11.24%

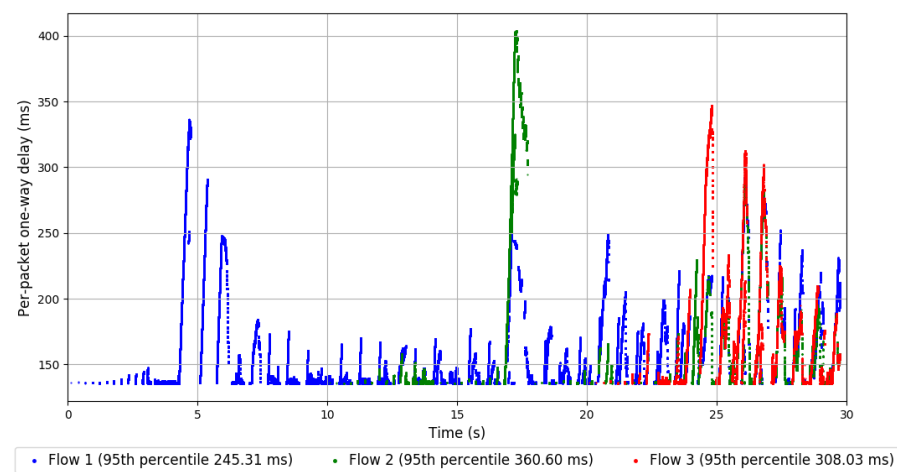
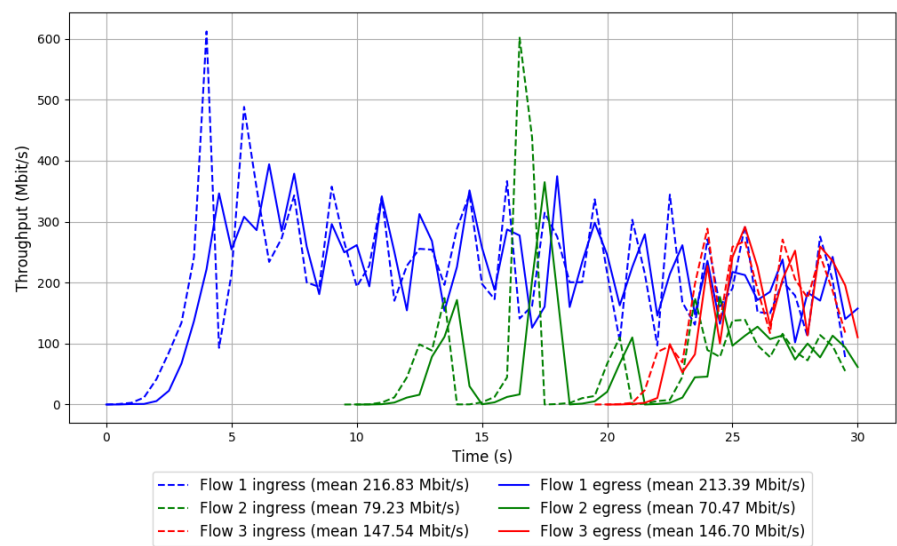
-- Flow 3:

Average throughput: 146.70 Mbit/s

95th percentile per-packet one-way delay: 308.032 ms

Loss rate: 3.32%

Run 1: Report of Verus — Data Link

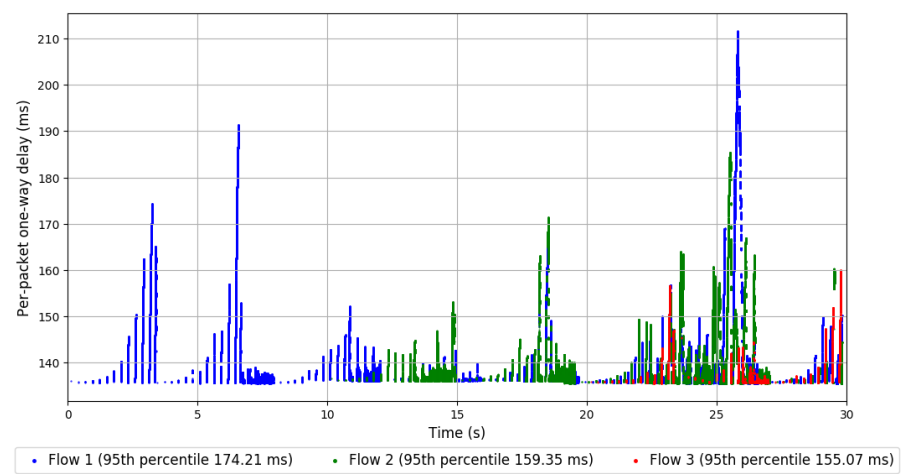
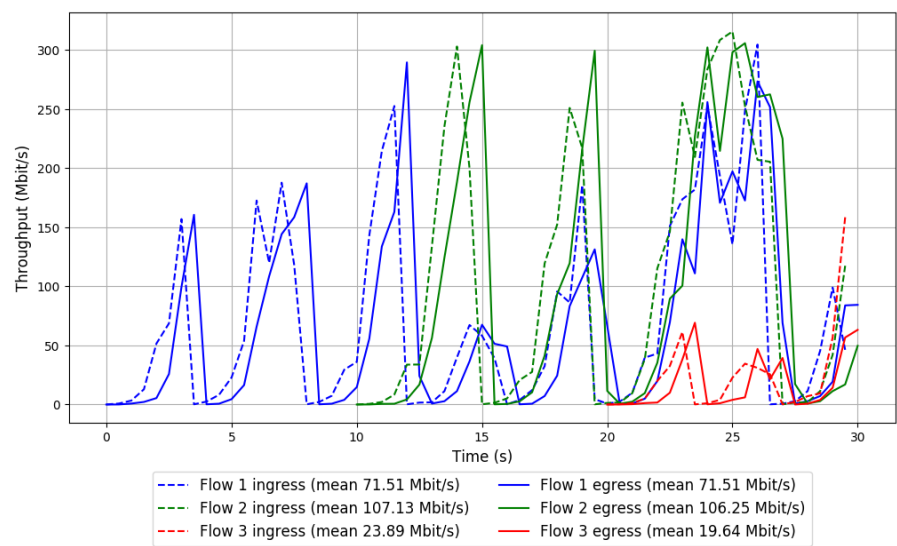


Run 2: Statistics of Verus

Start at: 2018-06-19 22:55:25  
End at: 2018-06-19 22:55:55  
Local clock offset: -0.036 ms  
Remote clock offset: 0.06 ms

# Below is generated by plot.py at 2018-06-20 04:17:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 148.32 Mbit/s  
95th percentile per-packet one-way delay: 164.931 ms  
Loss rate: 2.17%  
-- Flow 1:  
Average throughput: 71.51 Mbit/s  
95th percentile per-packet one-way delay: 174.212 ms  
Loss rate: 0.17%  
-- Flow 2:  
Average throughput: 106.25 Mbit/s  
95th percentile per-packet one-way delay: 159.346 ms  
Loss rate: 2.17%  
-- Flow 3:  
Average throughput: 19.64 Mbit/s  
95th percentile per-packet one-way delay: 155.074 ms  
Loss rate: 20.10%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-06-19 23:20:06

End at: 2018-06-19 23:20:36

Local clock offset: -0.118 ms

Remote clock offset: 0.056 ms

# Below is generated by plot.py at 2018-06-20 04:17:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 181.67 Mbit/s

95th percentile per-packet one-way delay: 182.567 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 94.10 Mbit/s

95th percentile per-packet one-way delay: 158.113 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 111.36 Mbit/s

95th percentile per-packet one-way delay: 170.420 ms

Loss rate: 1.38%

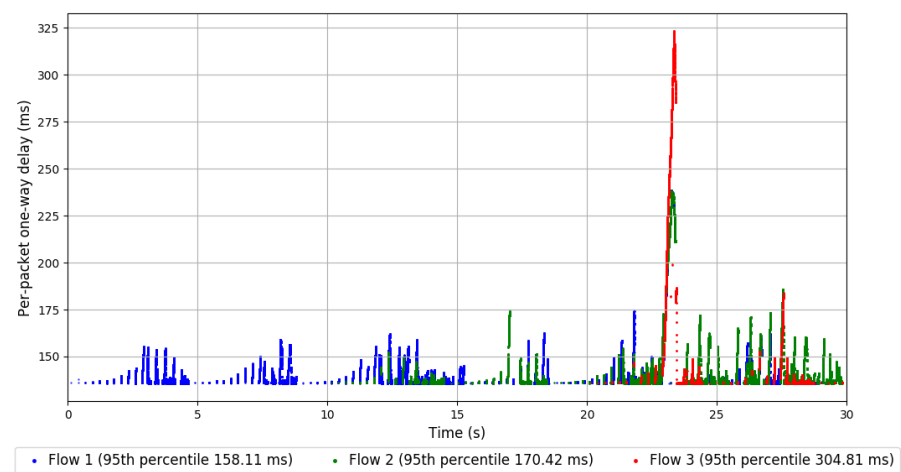
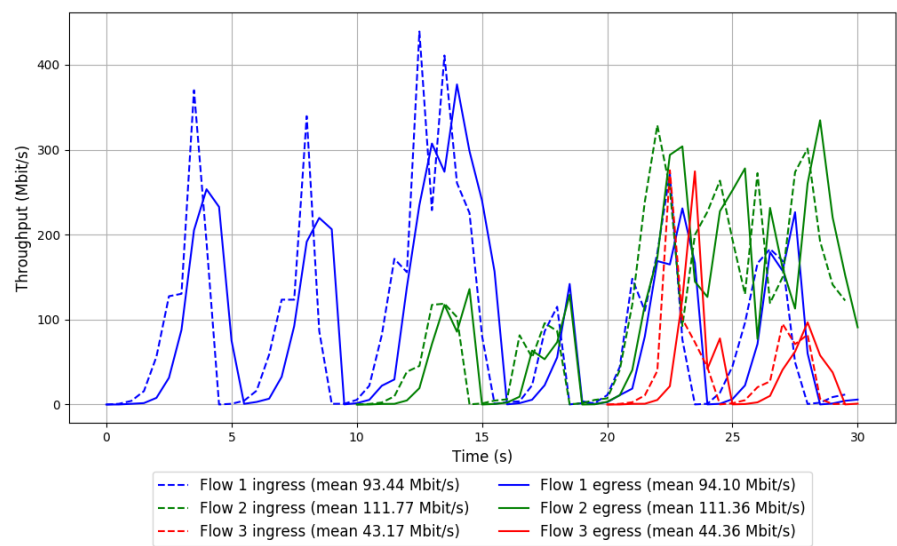
-- Flow 3:

Average throughput: 44.36 Mbit/s

95th percentile per-packet one-way delay: 304.814 ms

Loss rate: 0.06%

Run 3: Report of Verus — Data Link

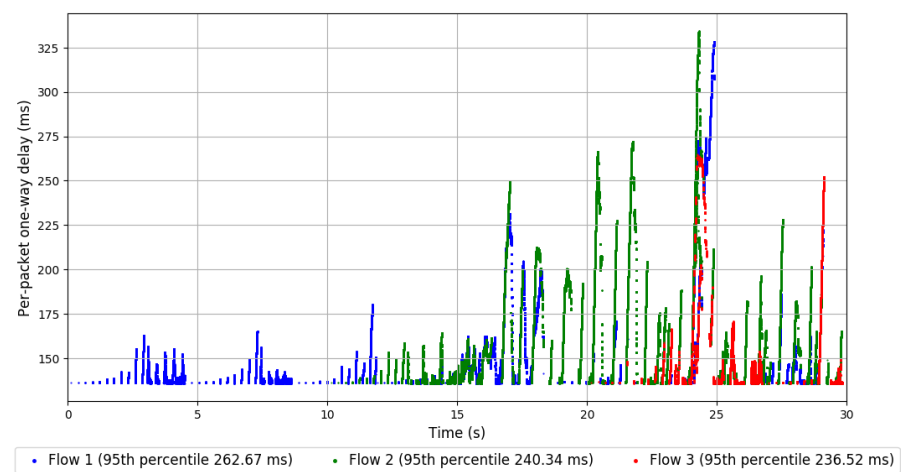
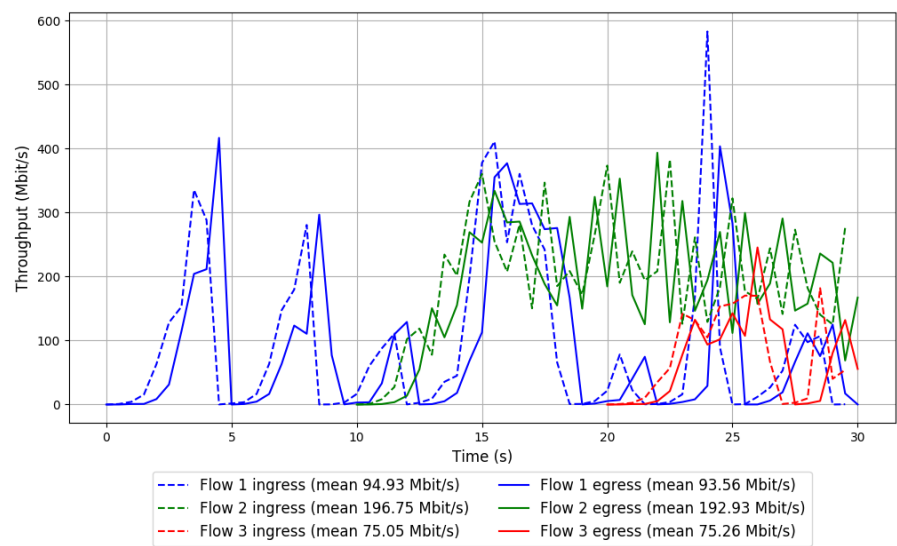


Run 4: Statistics of Verus

Start at: 2018-06-19 23:44:39  
End at: 2018-06-19 23:45:09  
Local clock offset: 0.011 ms  
Remote clock offset: -0.353 ms

# Below is generated by plot.py at 2018-06-20 04:17:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 245.20 Mbit/s  
95th percentile per-packet one-way delay: 250.629 ms  
Loss rate: 2.93%  
-- Flow 1:  
Average throughput: 93.56 Mbit/s  
95th percentile per-packet one-way delay: 262.670 ms  
Loss rate: 2.34%  
-- Flow 2:  
Average throughput: 192.93 Mbit/s  
95th percentile per-packet one-way delay: 240.340 ms  
Loss rate: 3.43%  
-- Flow 3:  
Average throughput: 75.26 Mbit/s  
95th percentile per-packet one-way delay: 236.521 ms  
Loss rate: 2.46%

Run 4: Report of Verus — Data Link

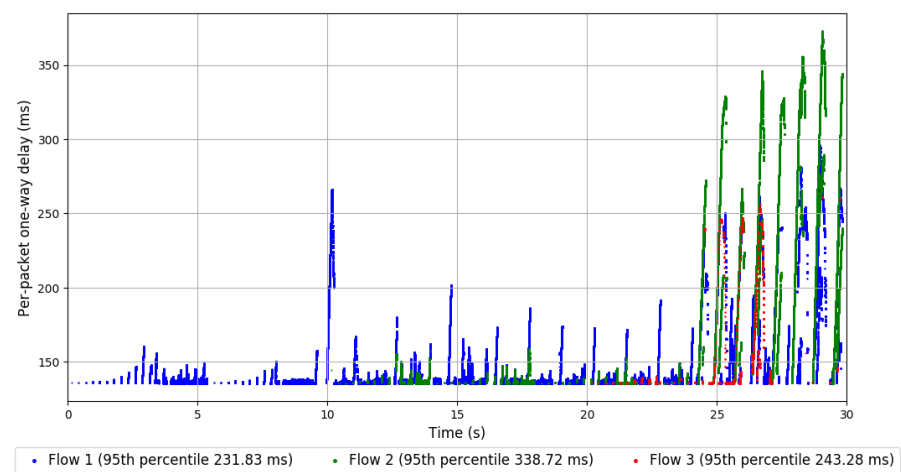
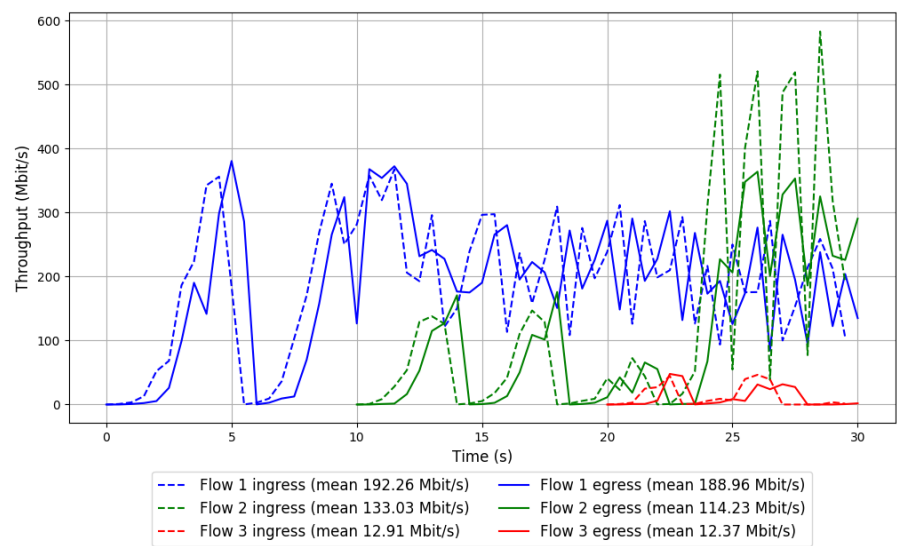


Run 5: Statistics of Verus

Start at: 2018-06-20 00:09:37  
End at: 2018-06-20 00:10:07  
Local clock offset: -0.018 ms  
Remote clock offset: 0.019 ms

# Below is generated by plot.py at 2018-06-20 04:17:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 268.63 Mbit/s  
95th percentile per-packet one-way delay: 302.964 ms  
Loss rate: 5.55%  
-- Flow 1:  
Average throughput: 188.96 Mbit/s  
95th percentile per-packet one-way delay: 231.827 ms  
Loss rate: 1.66%  
-- Flow 2:  
Average throughput: 114.23 Mbit/s  
95th percentile per-packet one-way delay: 338.723 ms  
Loss rate: 13.96%  
-- Flow 3:  
Average throughput: 12.37 Mbit/s  
95th percentile per-packet one-way delay: 243.280 ms  
Loss rate: 6.88%

Run 5: Report of Verus — Data Link

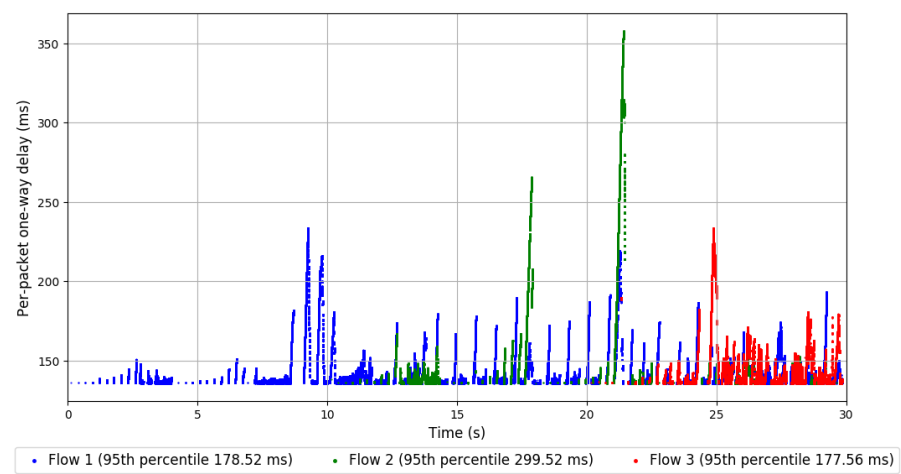
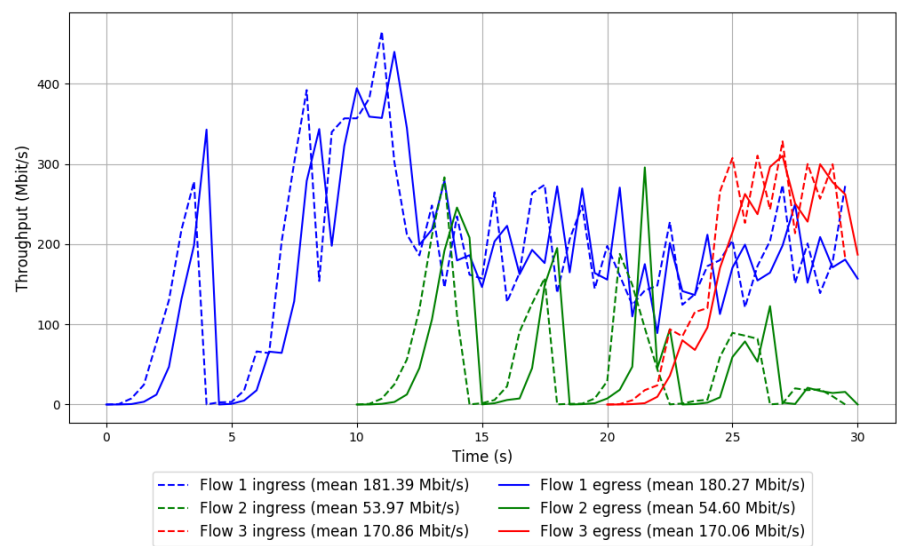


Run 6: Statistics of Verus

Start at: 2018-06-20 00:34:29  
End at: 2018-06-20 00:34:59  
Local clock offset: 0.009 ms  
Remote clock offset: -0.004 ms

# Below is generated by plot.py at 2018-06-20 04:18:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 271.43 Mbit/s  
95th percentile per-packet one-way delay: 189.026 ms  
Loss rate: 1.61%  
-- Flow 1:  
Average throughput: 180.27 Mbit/s  
95th percentile per-packet one-way delay: 178.520 ms  
Loss rate: 1.39%  
-- Flow 2:  
Average throughput: 54.60 Mbit/s  
95th percentile per-packet one-way delay: 299.522 ms  
Loss rate: 0.24%  
-- Flow 3:  
Average throughput: 170.06 Mbit/s  
95th percentile per-packet one-way delay: 177.562 ms  
Loss rate: 3.19%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-06-20 00:59:33

End at: 2018-06-20 01:00:03

Local clock offset: 0.065 ms

Remote clock offset: 0.011 ms

# Below is generated by plot.py at 2018-06-20 04:18:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 261.13 Mbit/s

95th percentile per-packet one-way delay: 294.246 ms

Loss rate: 7.14%

-- Flow 1:

Average throughput: 154.70 Mbit/s

95th percentile per-packet one-way delay: 251.068 ms

Loss rate: 4.89%

-- Flow 2:

Average throughput: 52.83 Mbit/s

95th percentile per-packet one-way delay: 233.860 ms

Loss rate: 1.66%

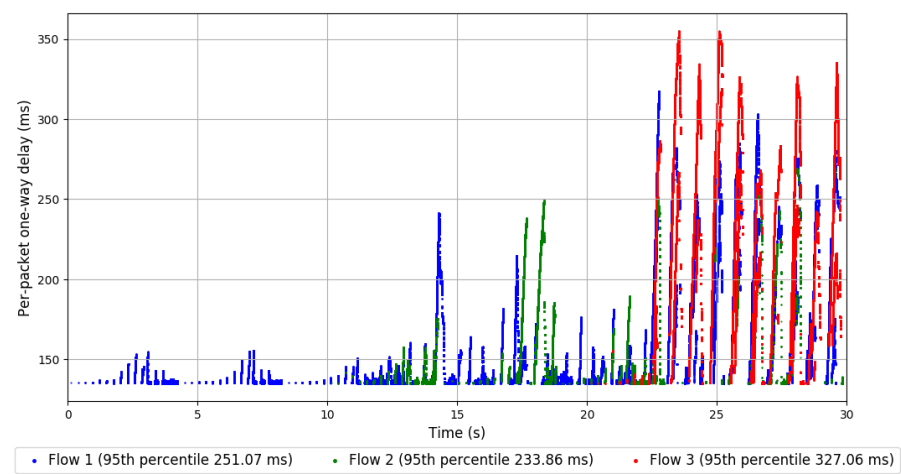
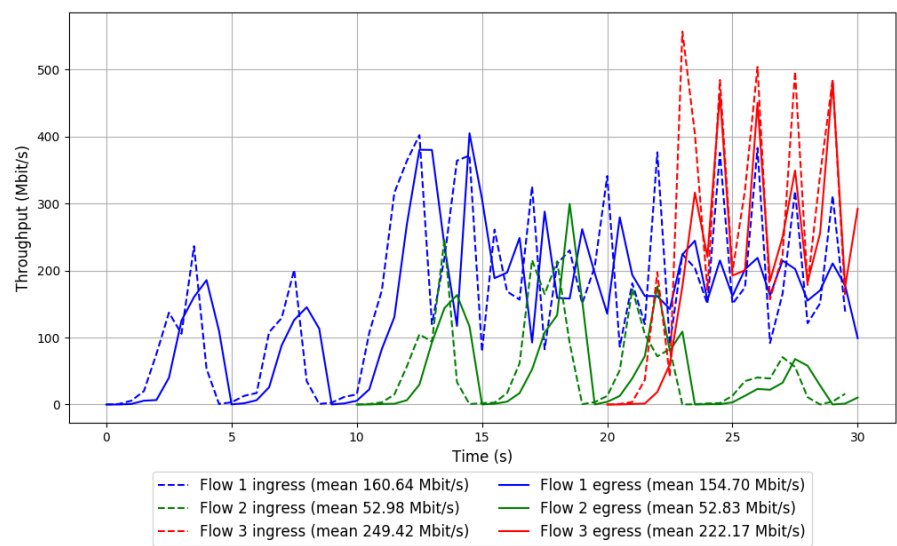
-- Flow 3:

Average throughput: 222.17 Mbit/s

95th percentile per-packet one-way delay: 327.058 ms

Loss rate: 13.86%

Run 7: Report of Verus — Data Link

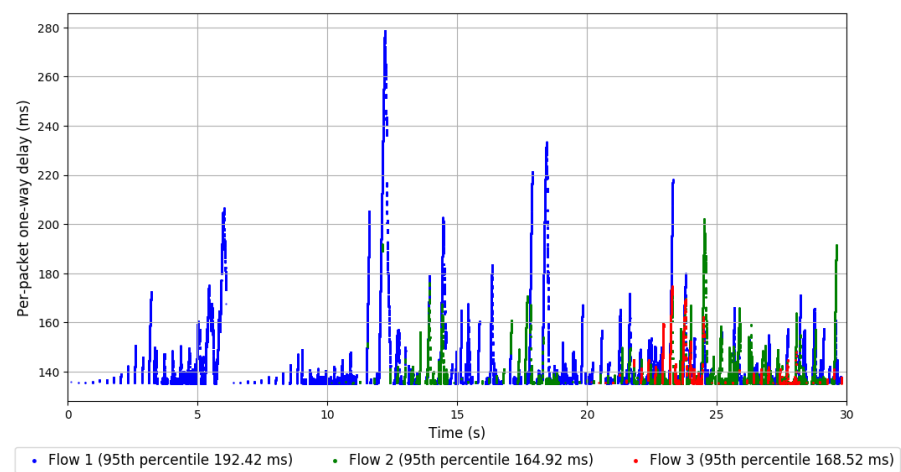
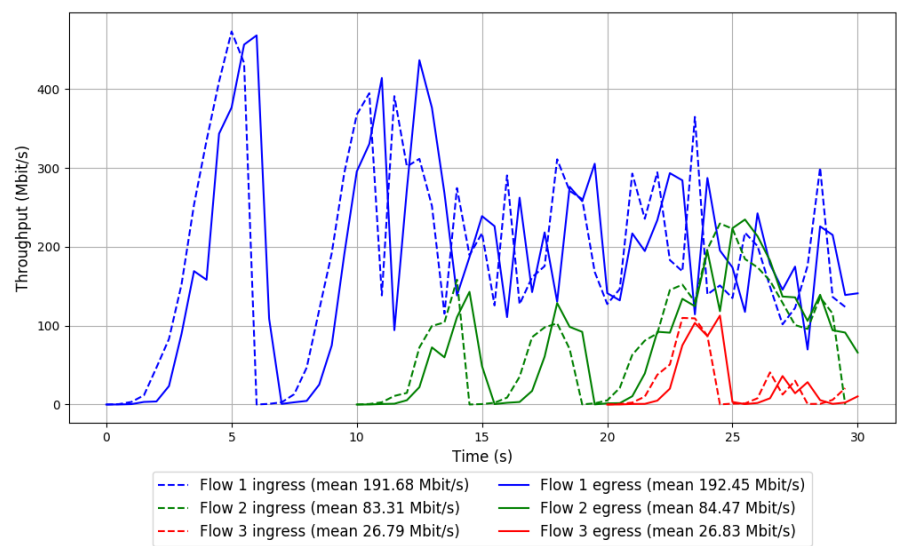


Run 8: Statistics of Verus

Start at: 2018-06-20 01:24:43  
End at: 2018-06-20 01:25:13  
Local clock offset: 0.037 ms  
Remote clock offset: -0.342 ms

# Below is generated by plot.py at 2018-06-20 04:18:33  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 256.52 Mbit/s  
95th percentile per-packet one-way delay: 185.469 ms  
Loss rate: 0.64%  
-- Flow 1:  
Average throughput: 192.45 Mbit/s  
95th percentile per-packet one-way delay: 192.424 ms  
Loss rate: 0.74%  
-- Flow 2:  
Average throughput: 84.47 Mbit/s  
95th percentile per-packet one-way delay: 164.922 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 26.83 Mbit/s  
95th percentile per-packet one-way delay: 168.523 ms  
Loss rate: 2.60%

Run 8: Report of Verus — Data Link

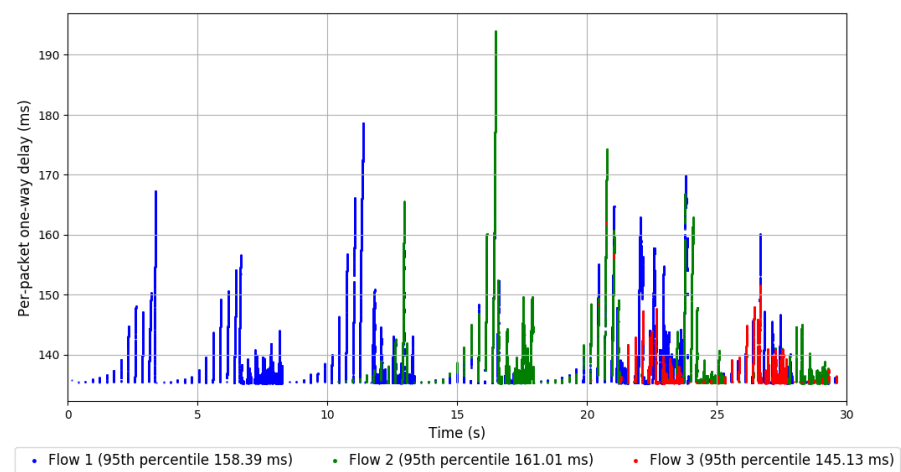
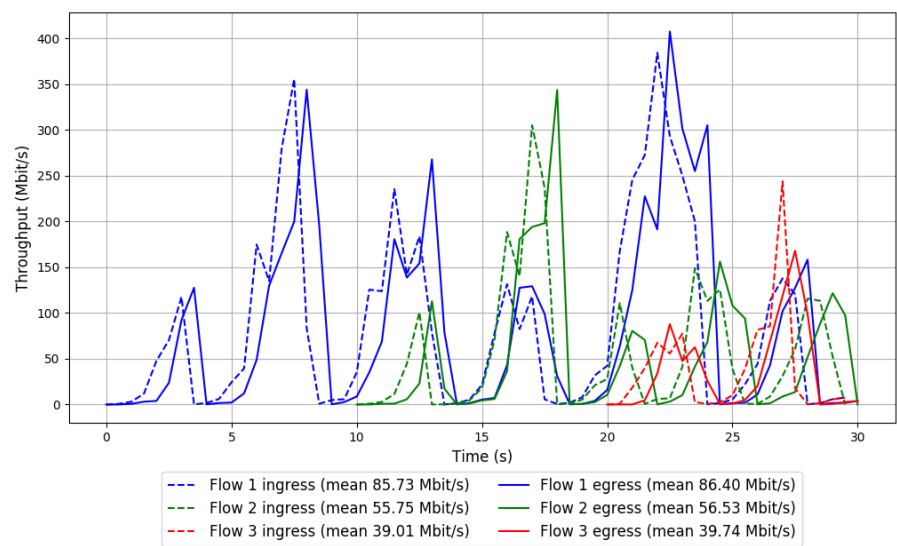


Run 9: Statistics of Verus

Start at: 2018-06-20 01:49:36  
End at: 2018-06-20 01:50:06  
Local clock offset: 0.015 ms  
Remote clock offset: -0.337 ms

# Below is generated by plot.py at 2018-06-20 04:18:33  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 136.28 Mbit/s  
95th percentile per-packet one-way delay: 158.691 ms  
Loss rate: 0.19%  
-- Flow 1:  
Average throughput: 86.40 Mbit/s  
95th percentile per-packet one-way delay: 158.393 ms  
Loss rate: 0.15%  
-- Flow 2:  
Average throughput: 56.53 Mbit/s  
95th percentile per-packet one-way delay: 161.006 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 39.74 Mbit/s  
95th percentile per-packet one-way delay: 145.130 ms  
Loss rate: 1.00%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-06-20 02:14:52

End at: 2018-06-20 02:15:22

Local clock offset: -0.054 ms

Remote clock offset: 0.108 ms

# Below is generated by plot.py at 2018-06-20 04:20:39

# Datalink statistics

-- Total of 3 flows:

Average throughput: 245.41 Mbit/s

95th percentile per-packet one-way delay: 200.146 ms

Loss rate: 2.07%

-- Flow 1:

Average throughput: 171.48 Mbit/s

95th percentile per-packet one-way delay: 212.270 ms

Loss rate: 2.22%

-- Flow 2:

Average throughput: 90.73 Mbit/s

95th percentile per-packet one-way delay: 163.311 ms

Loss rate: 2.11%

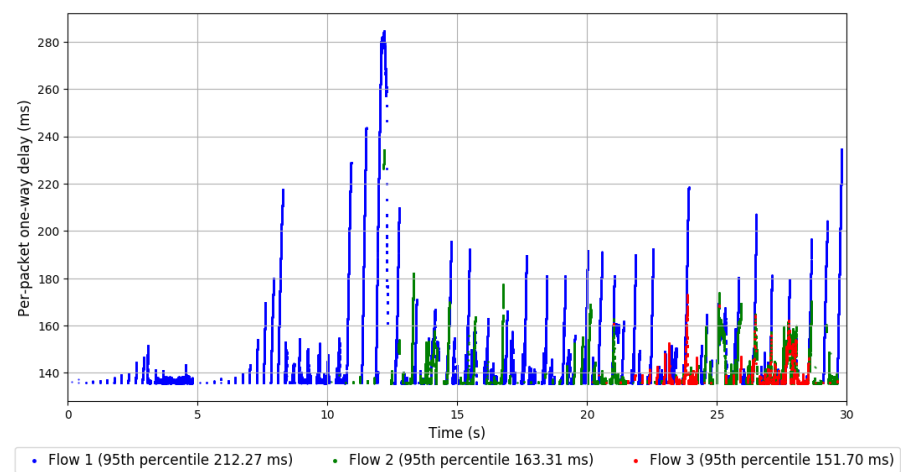
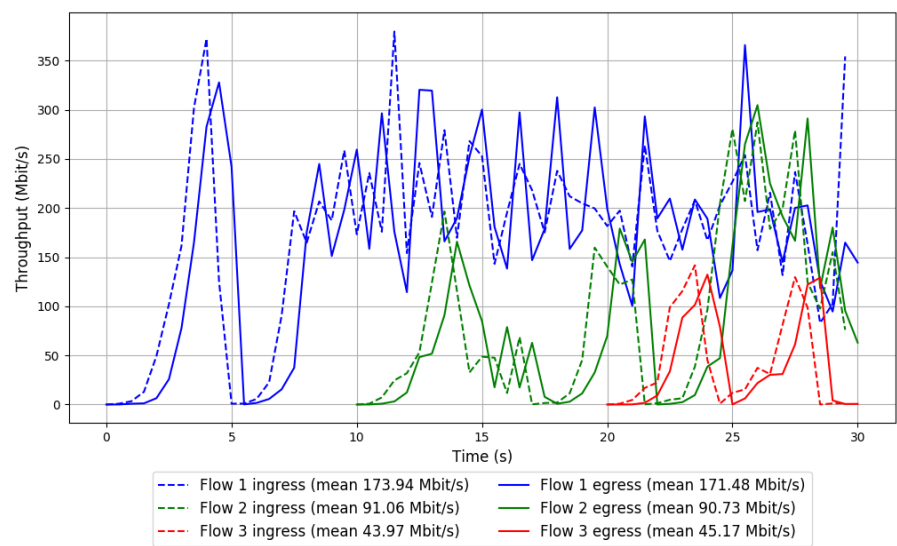
-- Flow 3:

Average throughput: 45.17 Mbit/s

95th percentile per-packet one-way delay: 151.703 ms

Loss rate: 0.15%

Run 10: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2018-06-19 22:13:48

End at: 2018-06-19 22:14:18

Local clock offset: -0.166 ms

Remote clock offset: 0.033 ms

# Below is generated by plot.py at 2018-06-20 04:25:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 477.38 Mbit/s

95th percentile per-packet one-way delay: 137.520 ms

Loss rate: 1.49%

-- Flow 1:

Average throughput: 320.26 Mbit/s

95th percentile per-packet one-way delay: 138.879 ms

Loss rate: 0.93%

-- Flow 2:

Average throughput: 182.67 Mbit/s

95th percentile per-packet one-way delay: 136.236 ms

Loss rate: 1.77%

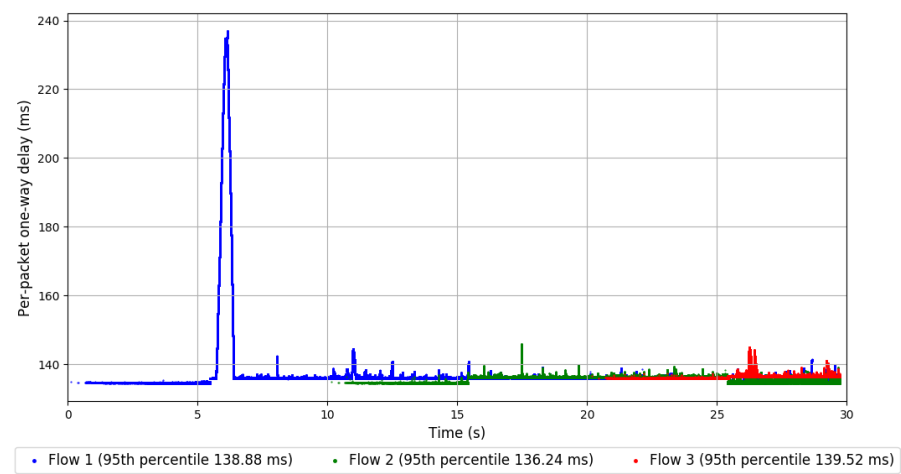
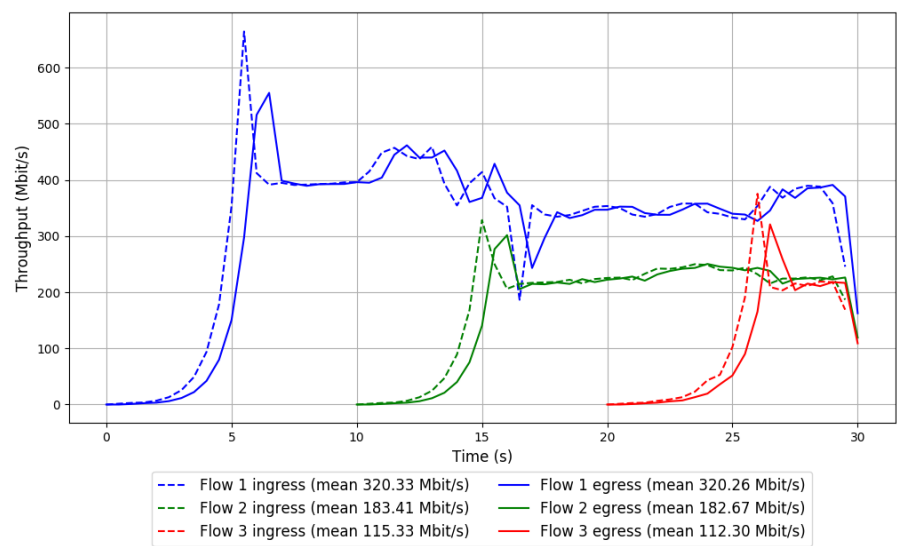
-- Flow 3:

Average throughput: 112.30 Mbit/s

95th percentile per-packet one-way delay: 139.524 ms

Loss rate: 5.31%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2018-06-19 22:38:49

End at: 2018-06-19 22:39:19

Local clock offset: 0.191 ms

Remote clock offset: 0.381 ms

# Below is generated by plot.py at 2018-06-20 04:25:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 386.22 Mbit/s

95th percentile per-packet one-way delay: 143.466 ms

Loss rate: 2.16%

-- Flow 1:

Average throughput: 246.31 Mbit/s

95th percentile per-packet one-way delay: 153.291 ms

Loss rate: 1.97%

-- Flow 2:

Average throughput: 179.82 Mbit/s

95th percentile per-packet one-way delay: 139.655 ms

Loss rate: 2.14%

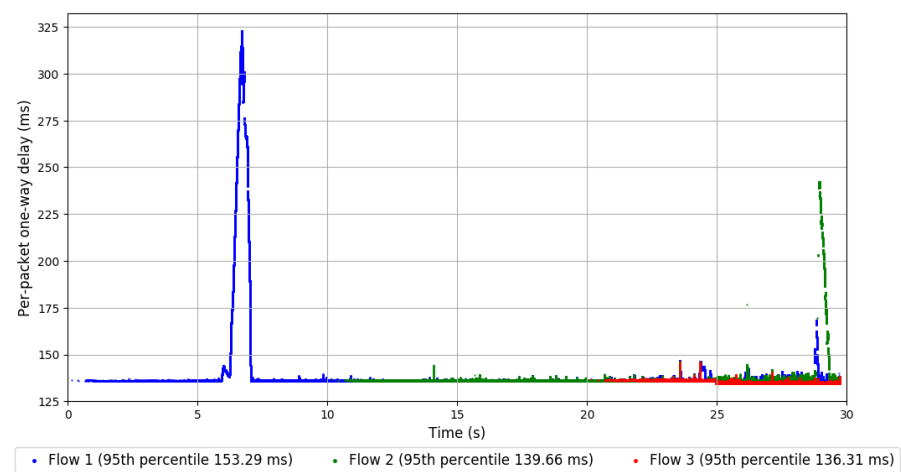
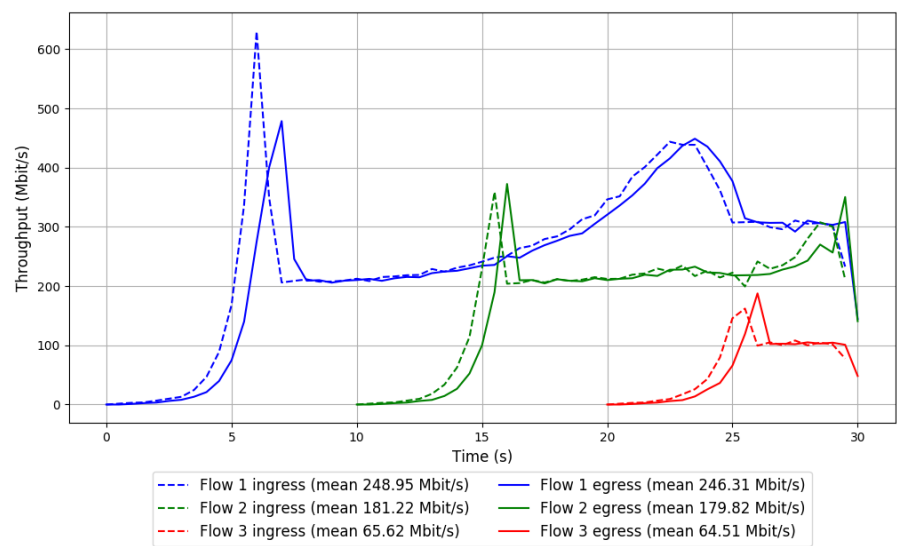
-- Flow 3:

Average throughput: 64.51 Mbit/s

95th percentile per-packet one-way delay: 136.308 ms

Loss rate: 4.41%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2018-06-19 23:04:00

End at: 2018-06-19 23:04:30

Local clock offset: 0.15 ms

Remote clock offset: 0.079 ms

# Below is generated by plot.py at 2018-06-20 04:26:42

# Datalink statistics

-- Total of 3 flows:

Average throughput: 473.00 Mbit/s

95th percentile per-packet one-way delay: 139.412 ms

Loss rate: 1.40%

-- Flow 1:

Average throughput: 317.40 Mbit/s

95th percentile per-packet one-way delay: 141.084 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 181.77 Mbit/s

95th percentile per-packet one-way delay: 137.339 ms

Loss rate: 1.90%

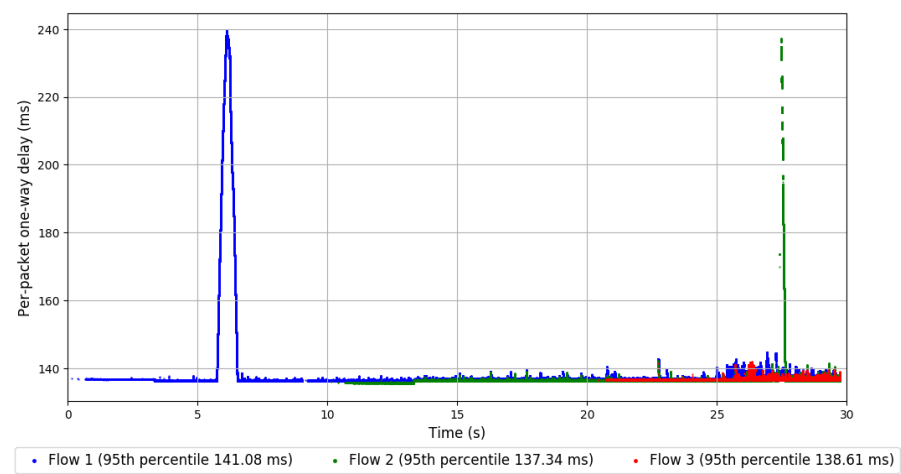
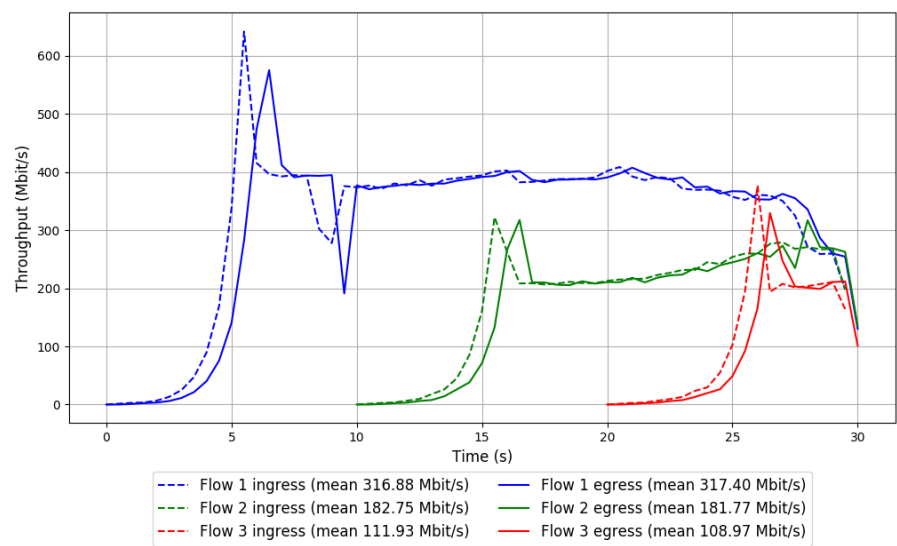
-- Flow 3:

Average throughput: 108.97 Mbit/s

95th percentile per-packet one-way delay: 138.606 ms

Loss rate: 5.34%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2018-06-19 23:28:36

End at: 2018-06-19 23:29:06

Local clock offset: 0.13 ms

Remote clock offset: 0.032 ms

# Below is generated by plot.py at 2018-06-20 04:27:01

# Datalink statistics

-- Total of 3 flows:

Average throughput: 452.68 Mbit/s

95th percentile per-packet one-way delay: 144.587 ms

Loss rate: 1.37%

-- Flow 1:

Average throughput: 295.79 Mbit/s

95th percentile per-packet one-way delay: 149.485 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 177.20 Mbit/s

95th percentile per-packet one-way delay: 138.911 ms

Loss rate: 1.02%

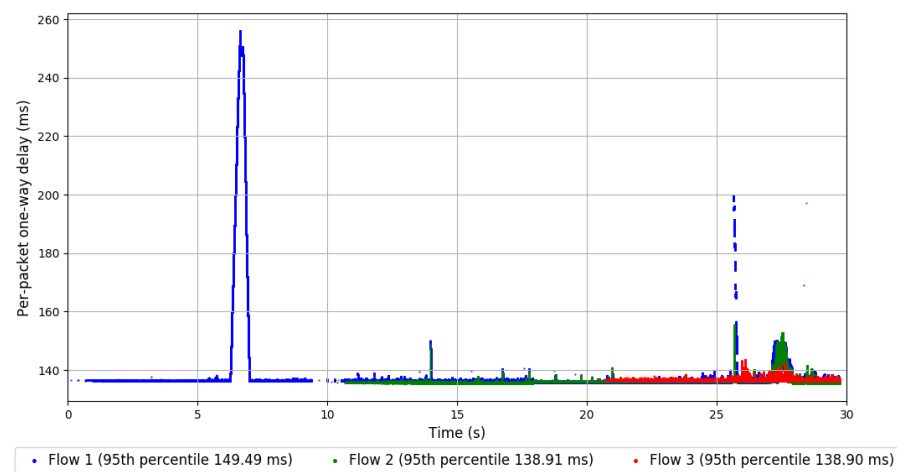
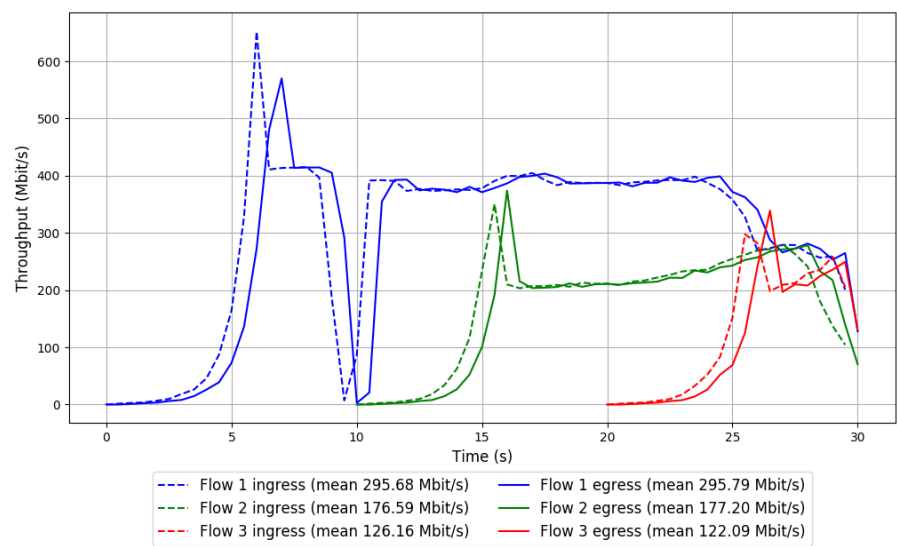
-- Flow 3:

Average throughput: 122.09 Mbit/s

95th percentile per-packet one-way delay: 138.904 ms

Loss rate: 5.89%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2018-06-19 23:53:22

End at: 2018-06-19 23:53:52

Local clock offset: -0.03 ms

Remote clock offset: 0.018 ms

# Below is generated by plot.py at 2018-06-20 04:27:01

# Datalink statistics

-- Total of 3 flows:

Average throughput: 390.09 Mbit/s

95th percentile per-packet one-way delay: 139.572 ms

Loss rate: 1.38%

-- Flow 1:

Average throughput: 243.73 Mbit/s

95th percentile per-packet one-way delay: 139.564 ms

Loss rate: 1.06%

-- Flow 2:

Average throughput: 173.47 Mbit/s

95th percentile per-packet one-way delay: 136.525 ms

Loss rate: 1.59%

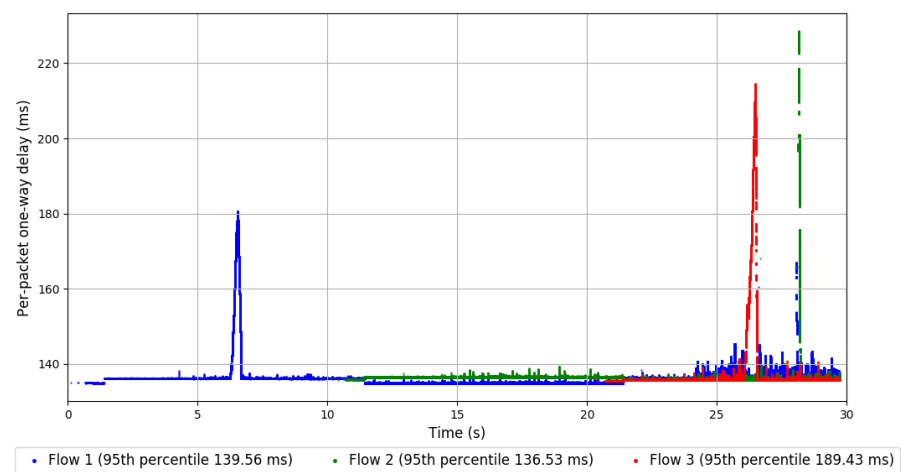
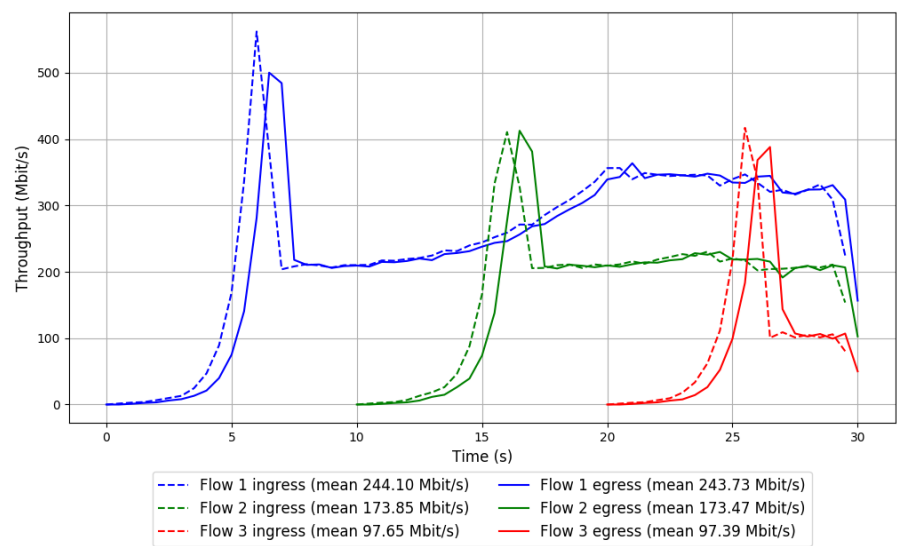
-- Flow 3:

Average throughput: 97.39 Mbit/s

95th percentile per-packet one-way delay: 189.425 ms

Loss rate: 3.02%

Run 5: Report of PCC-Vivace — Data Link

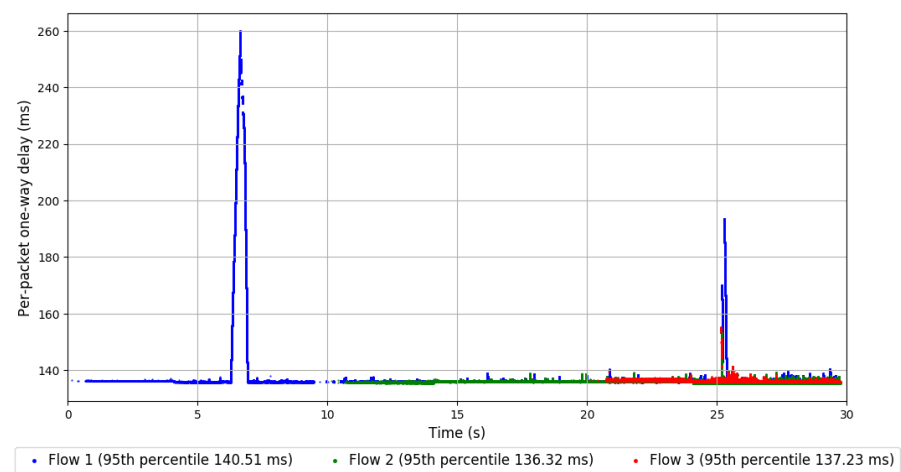
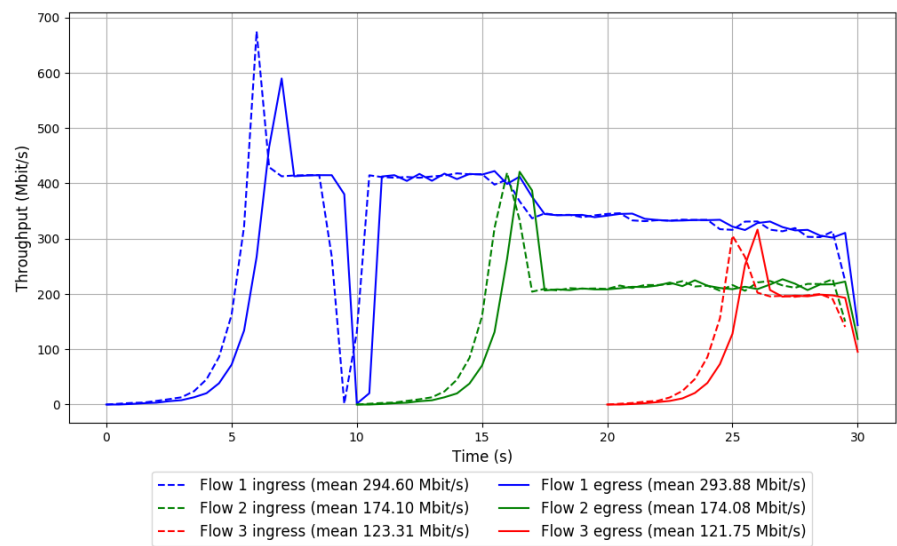


Run 6: Statistics of PCC-Vivace

Start at: 2018-06-20 00:18:20  
End at: 2018-06-20 00:18:50  
Local clock offset: -0.083 ms  
Remote clock offset: -0.035 ms

# Below is generated by plot.py at 2018-06-20 04:27:14  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 448.34 Mbit/s  
95th percentile per-packet one-way delay: 137.065 ms  
Loss rate: 1.52%  
-- Flow 1:  
Average throughput: 293.88 Mbit/s  
95th percentile per-packet one-way delay: 140.508 ms  
Loss rate: 1.22%  
-- Flow 2:  
Average throughput: 174.08 Mbit/s  
95th percentile per-packet one-way delay: 136.316 ms  
Loss rate: 1.39%  
-- Flow 3:  
Average throughput: 121.75 Mbit/s  
95th percentile per-packet one-way delay: 137.228 ms  
Loss rate: 4.01%

Run 6: Report of PCC-Vivace — Data Link



Run 7: Statistics of PCC-Vivace

Start at: 2018-06-20 00:43:08

End at: 2018-06-20 00:43:38

Local clock offset: 0.035 ms

Remote clock offset: 0.059 ms

# Below is generated by plot.py at 2018-06-20 04:28:18

# Datalink statistics

-- Total of 3 flows:

Average throughput: 565.16 Mbit/s

95th percentile per-packet one-way delay: 140.578 ms

Loss rate: 1.63%

-- Flow 1:

Average throughput: 335.43 Mbit/s

95th percentile per-packet one-way delay: 143.818 ms

Loss rate: 1.39%

-- Flow 2:

Average throughput: 287.44 Mbit/s

95th percentile per-packet one-way delay: 138.238 ms

Loss rate: 1.50%

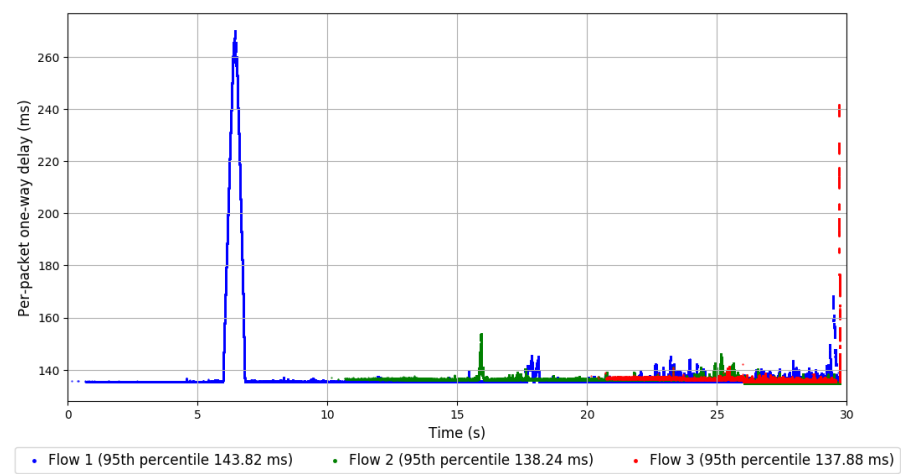
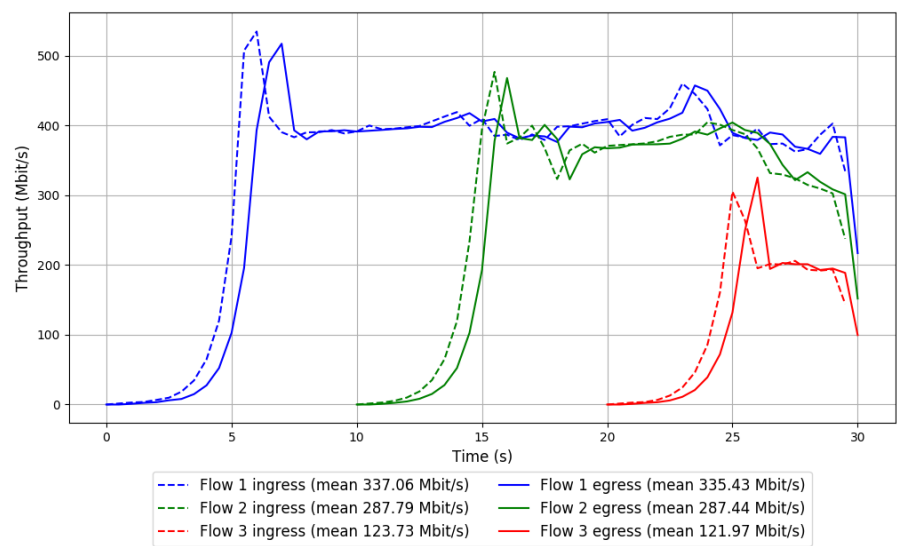
-- Flow 3:

Average throughput: 121.97 Mbit/s

95th percentile per-packet one-way delay: 137.876 ms

Loss rate: 4.17%

Run 7: Report of PCC-Vivace — Data Link



Run 8: Statistics of PCC-Vivace

Start at: 2018-06-20 01:08:17

End at: 2018-06-20 01:08:47

Local clock offset: -0.095 ms

Remote clock offset: 0.03 ms

# Below is generated by plot.py at 2018-06-20 04:29:05

# Datalink statistics

-- Total of 3 flows:

Average throughput: 548.87 Mbit/s

95th percentile per-packet one-way delay: 150.668 ms

Loss rate: 1.43%

-- Flow 1:

Average throughput: 326.87 Mbit/s

95th percentile per-packet one-way delay: 166.848 ms

Loss rate: 1.07%

-- Flow 2:

Average throughput: 277.60 Mbit/s

95th percentile per-packet one-way delay: 139.276 ms

Loss rate: 1.52%

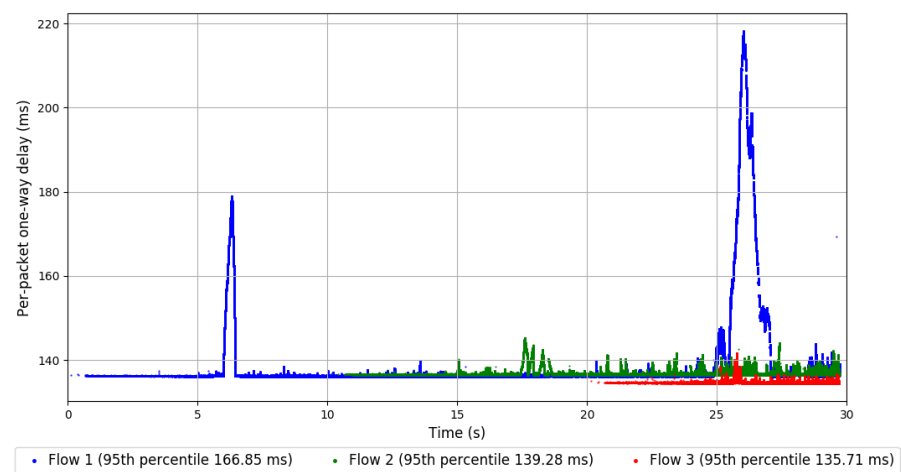
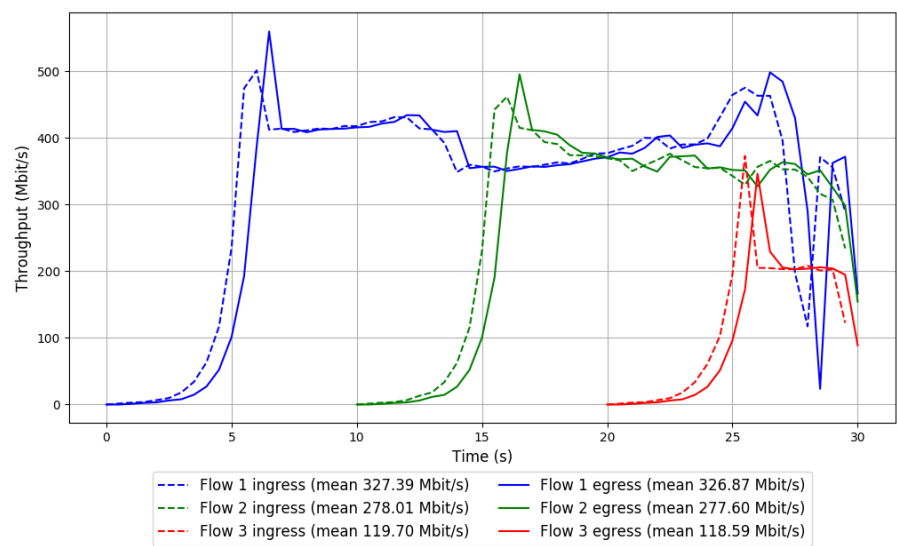
-- Flow 3:

Average throughput: 118.59 Mbit/s

95th percentile per-packet one-way delay: 135.712 ms

Loss rate: 4.03%

Run 8: Report of PCC-Vivace — Data Link

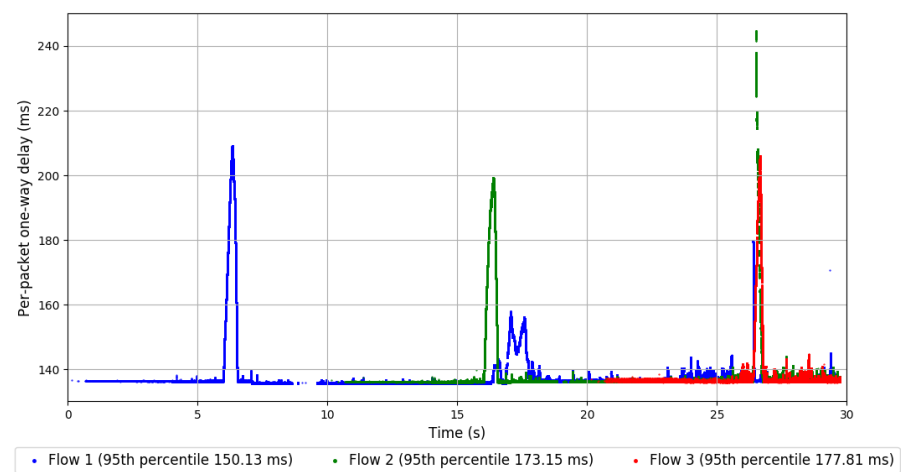
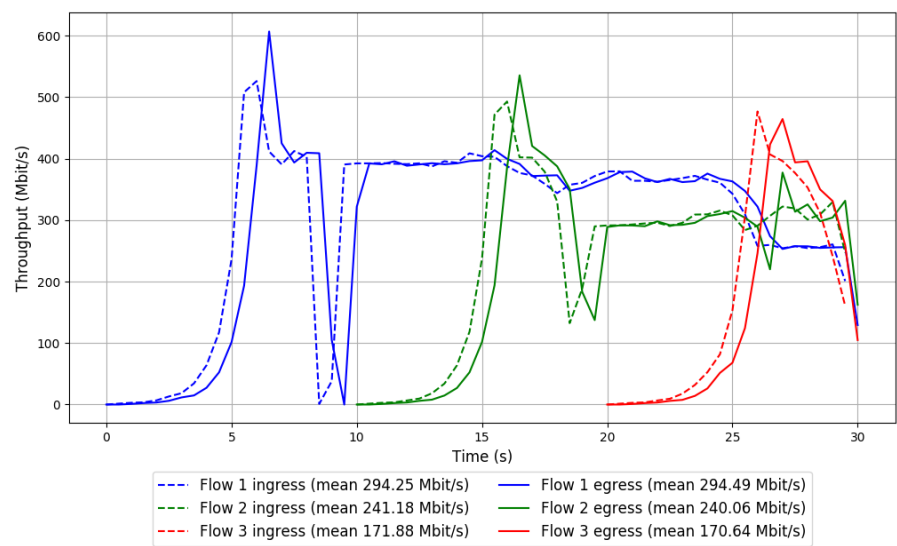


Run 9: Statistics of PCC-Vivace

Start at: 2018-06-20 01:33:27  
End at: 2018-06-20 01:33:57  
Local clock offset: -0.037 ms  
Remote clock offset: -0.291 ms

# Below is generated by plot.py at 2018-06-20 04:29:40  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 508.65 Mbit/s  
95th percentile per-packet one-way delay: 155.622 ms  
Loss rate: 1.44%  
-- Flow 1:  
Average throughput: 294.49 Mbit/s  
95th percentile per-packet one-way delay: 150.130 ms  
Loss rate: 0.83%  
-- Flow 2:  
Average throughput: 240.06 Mbit/s  
95th percentile per-packet one-way delay: 173.147 ms  
Loss rate: 1.83%  
-- Flow 3:  
Average throughput: 170.64 Mbit/s  
95th percentile per-packet one-way delay: 177.811 ms  
Loss rate: 3.47%

Run 9: Report of PCC-Vivace — Data Link



Run 10: Statistics of PCC-Vivace

Start at: 2018-06-20 01:58:12

End at: 2018-06-20 01:58:42

Local clock offset: 0.053 ms

Remote clock offset: -0.29 ms

# Below is generated by plot.py at 2018-06-20 04:29:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 489.49 Mbit/s

95th percentile per-packet one-way delay: 141.984 ms

Loss rate: 1.54%

-- Flow 1:

Average throughput: 314.64 Mbit/s

95th percentile per-packet one-way delay: 136.754 ms

Loss rate: 0.96%

-- Flow 2:

Average throughput: 174.95 Mbit/s

95th percentile per-packet one-way delay: 137.589 ms

Loss rate: 1.19%

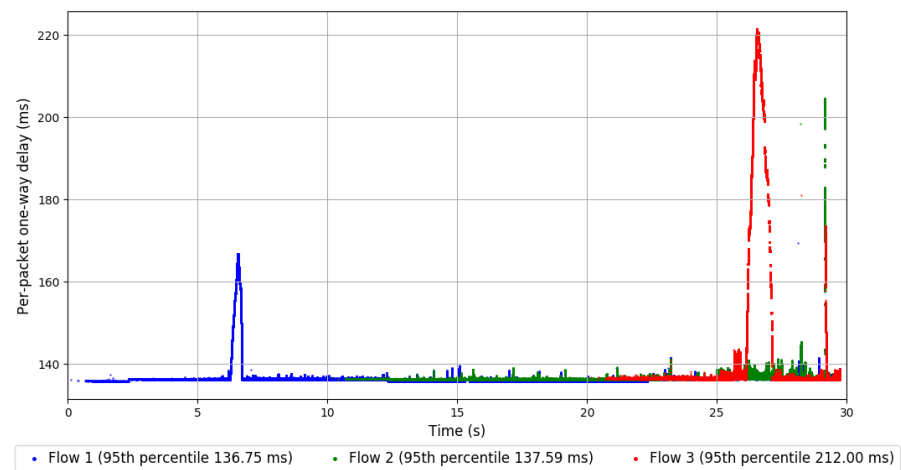
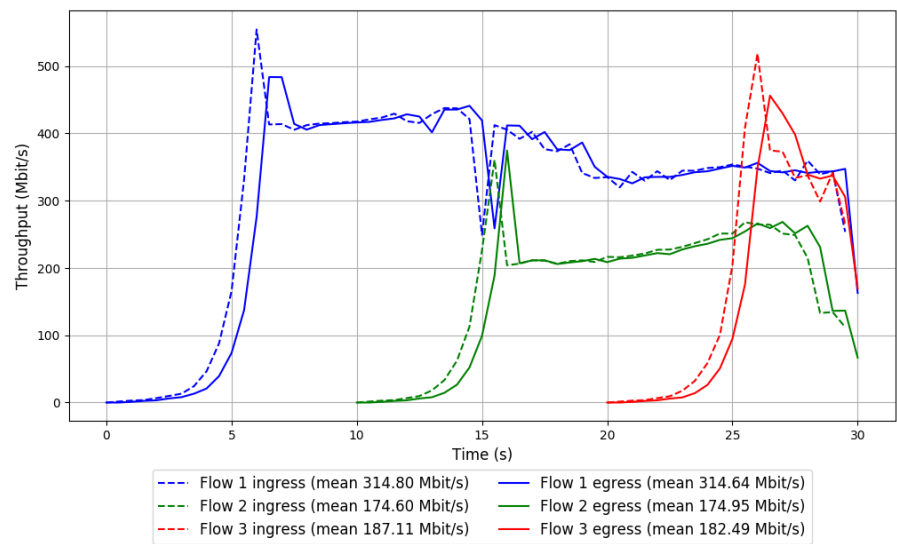
-- Flow 3:

Average throughput: 182.49 Mbit/s

95th percentile per-packet one-way delay: 211.995 ms

Loss rate: 5.16%

Run 10: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2018-06-19 22:15:44

End at: 2018-06-19 22:16:14

Local clock offset: 0.146 ms

Remote clock offset: 0.037 ms

# Below is generated by plot.py at 2018-06-20 04:29:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 136.264 ms

Loss rate: 2.06%

-- Flow 1:

Average throughput: 1.52 Mbit/s

95th percentile per-packet one-way delay: 136.235 ms

Loss rate: 1.20%

-- Flow 2:

Average throughput: 1.10 Mbit/s

95th percentile per-packet one-way delay: 136.223 ms

Loss rate: 2.00%

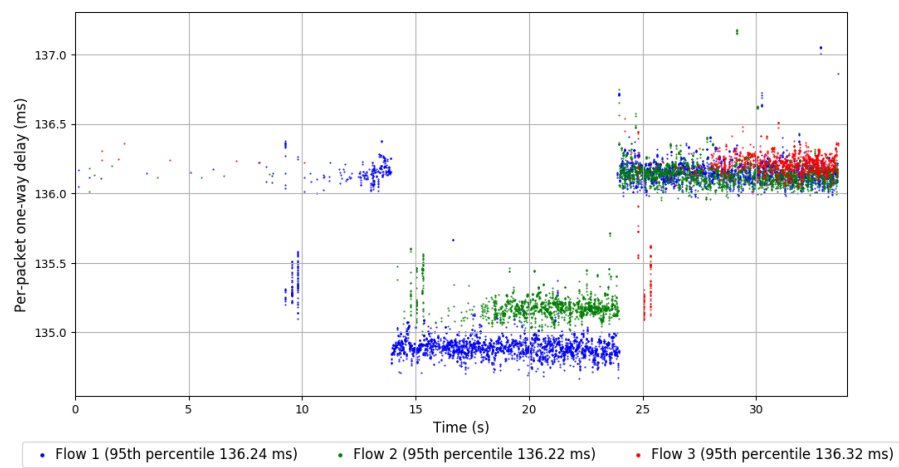
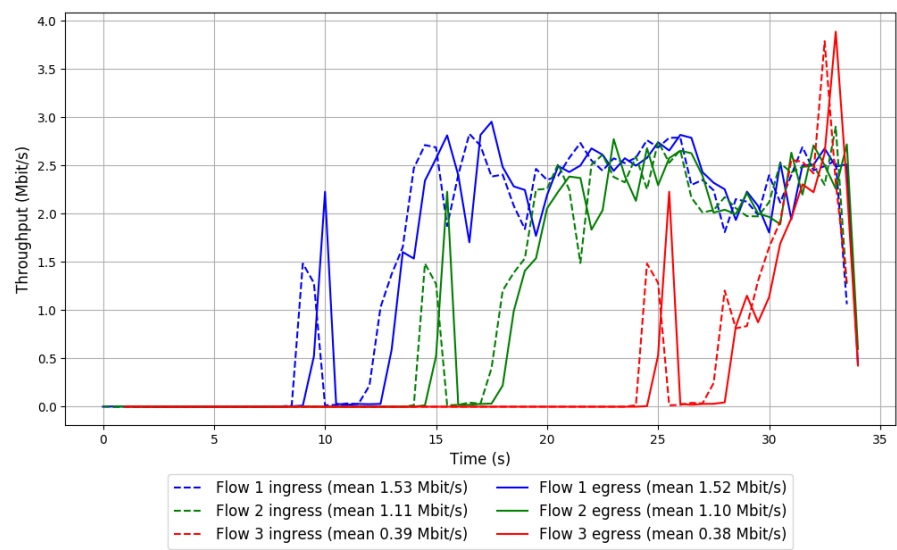
-- Flow 3:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 136.321 ms

Loss rate: 5.68%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-06-19 22:40:37

End at: 2018-06-19 22:41:07

Local clock offset: -0.007 ms

Remote clock offset: 0.053 ms

# Below is generated by plot.py at 2018-06-20 04:29:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.27 Mbit/s

95th percentile per-packet one-way delay: 136.539 ms

Loss rate: 2.05%

-- Flow 1:

Average throughput: 1.84 Mbit/s

95th percentile per-packet one-way delay: 135.890 ms

Loss rate: 1.53%

-- Flow 2:

Average throughput: 1.09 Mbit/s

95th percentile per-packet one-way delay: 136.596 ms

Loss rate: 1.91%

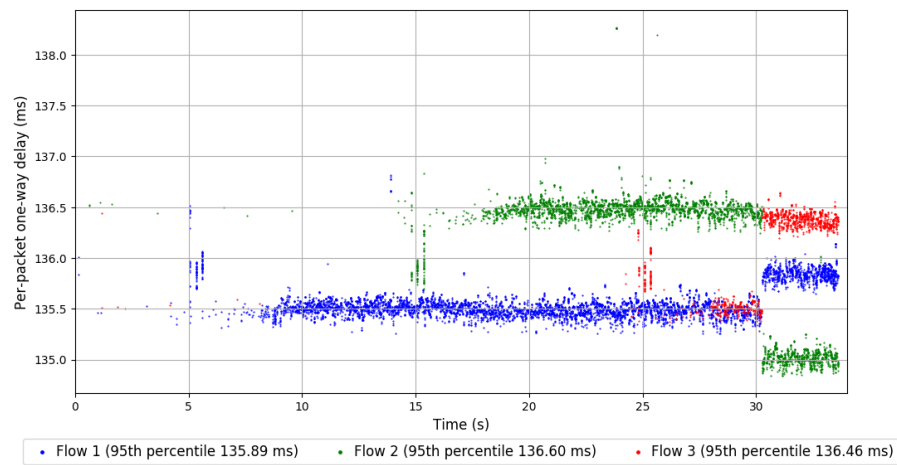
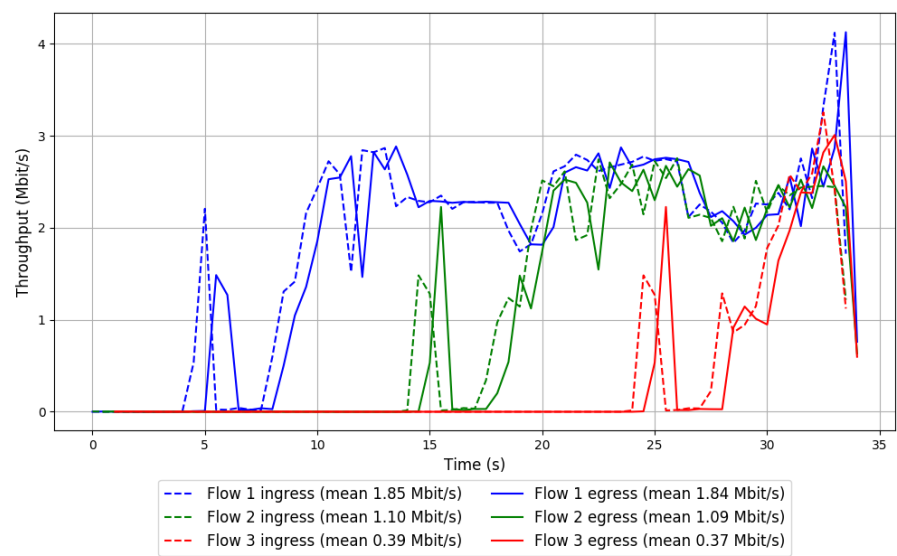
-- Flow 3:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 136.461 ms

Loss rate: 5.05%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-06-19 23:05:55

End at: 2018-06-19 23:06:25

Local clock offset: -0.01 ms

Remote clock offset: 0.462 ms

# Below is generated by plot.py at 2018-06-20 04:29:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.25 Mbit/s

95th percentile per-packet one-way delay: 135.975 ms

Loss rate: 2.24%

-- Flow 1:

Average throughput: 1.82 Mbit/s

95th percentile per-packet one-way delay: 135.986 ms

Loss rate: 1.68%

-- Flow 2:

Average throughput: 1.08 Mbit/s

95th percentile per-packet one-way delay: 135.418 ms

Loss rate: 2.20%

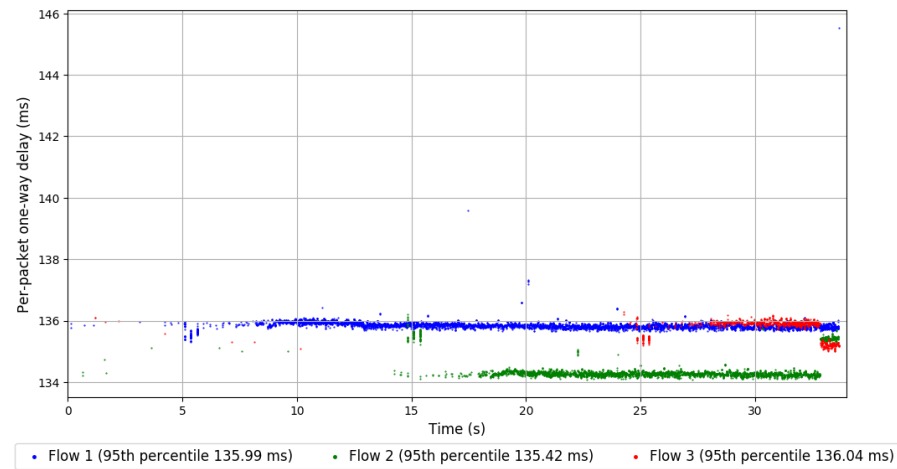
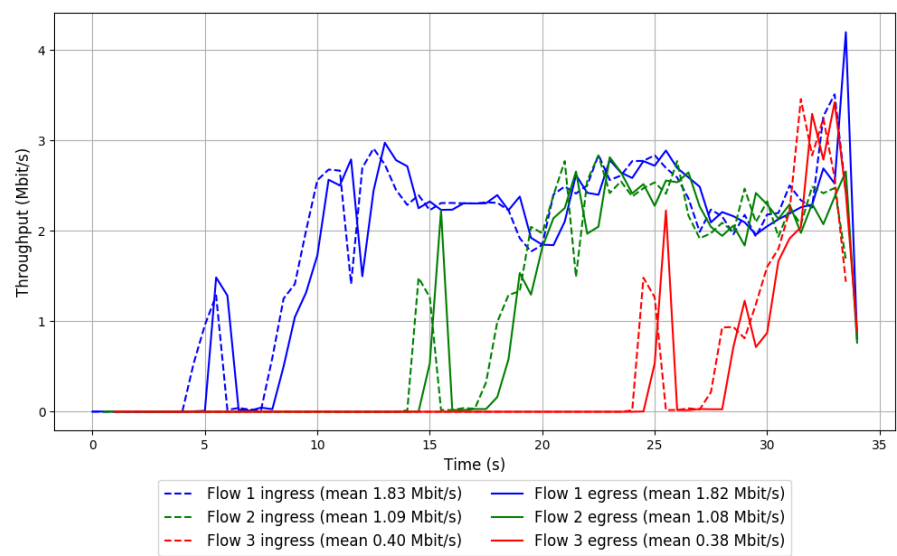
-- Flow 3:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 136.038 ms

Loss rate: 4.93%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-06-19 23:30:29

End at: 2018-06-19 23:30:59

Local clock offset: -0.054 ms

Remote clock offset: 0.029 ms

# Below is generated by plot.py at 2018-06-20 04:29:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.26 Mbit/s

95th percentile per-packet one-way delay: 136.063 ms

Loss rate: 2.05%

-- Flow 1:

Average throughput: 1.83 Mbit/s

95th percentile per-packet one-way delay: 136.090 ms

Loss rate: 1.59%

-- Flow 2:

Average throughput: 1.10 Mbit/s

95th percentile per-packet one-way delay: 135.831 ms

Loss rate: 1.69%

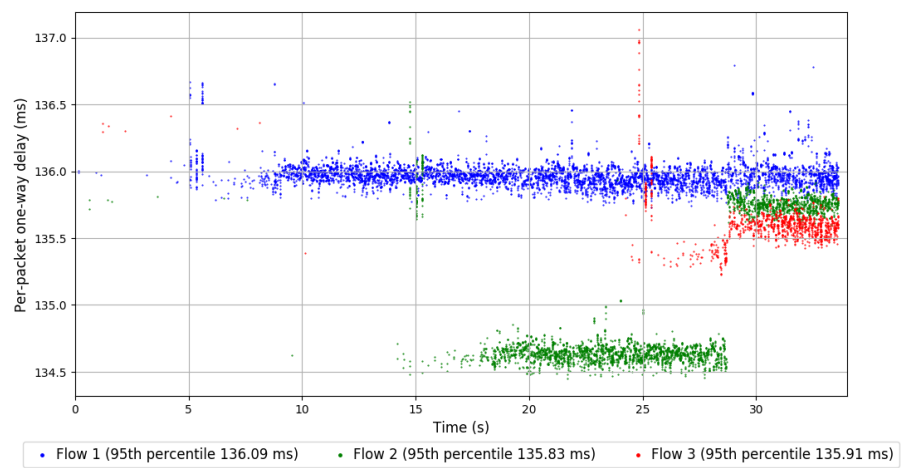
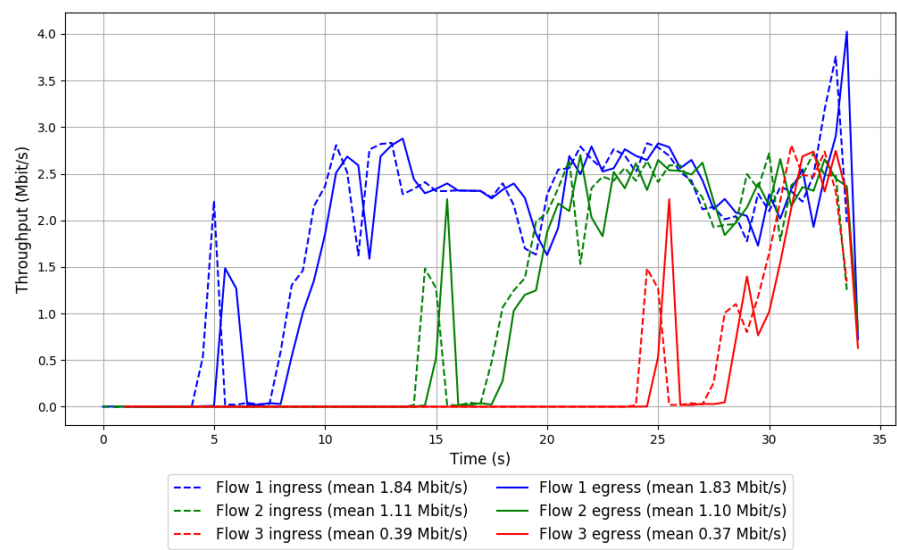
-- Flow 3:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 135.913 ms

Loss rate: 5.31%

Run 4: Report of WebRTC media — Data Link

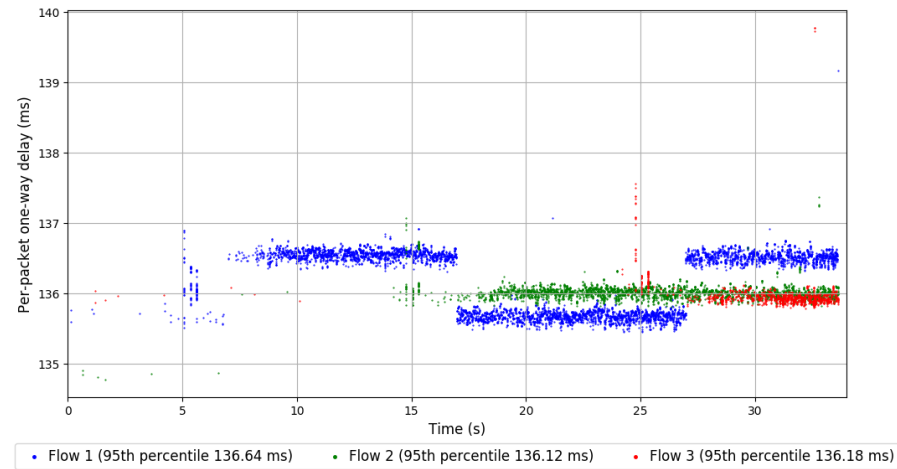
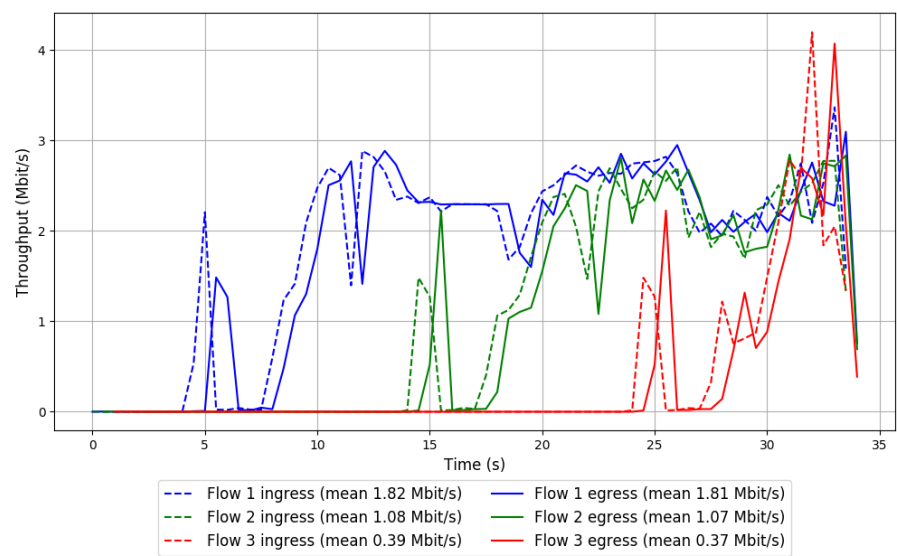


Run 5: Statistics of WebRTC media

Start at: 2018-06-19 23:55:11  
End at: 2018-06-19 23:55:41  
Local clock offset: 0.116 ms  
Remote clock offset: -0.002 ms

# Below is generated by plot.py at 2018-06-20 04:29:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.22 Mbit/s  
95th percentile per-packet one-way delay: 136.619 ms  
Loss rate: 2.01%  
-- Flow 1:  
Average throughput: 1.81 Mbit/s  
95th percentile per-packet one-way delay: 136.640 ms  
Loss rate: 1.43%  
-- Flow 2:  
Average throughput: 1.07 Mbit/s  
95th percentile per-packet one-way delay: 136.122 ms  
Loss rate: 1.85%  
-- Flow 3:  
Average throughput: 0.37 Mbit/s  
95th percentile per-packet one-way delay: 136.175 ms  
Loss rate: 5.32%

Run 5: Report of WebRTC media — Data Link

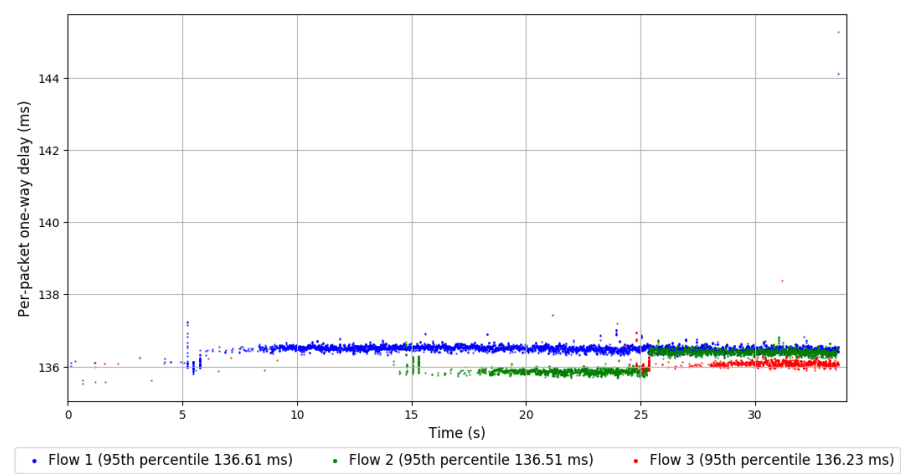
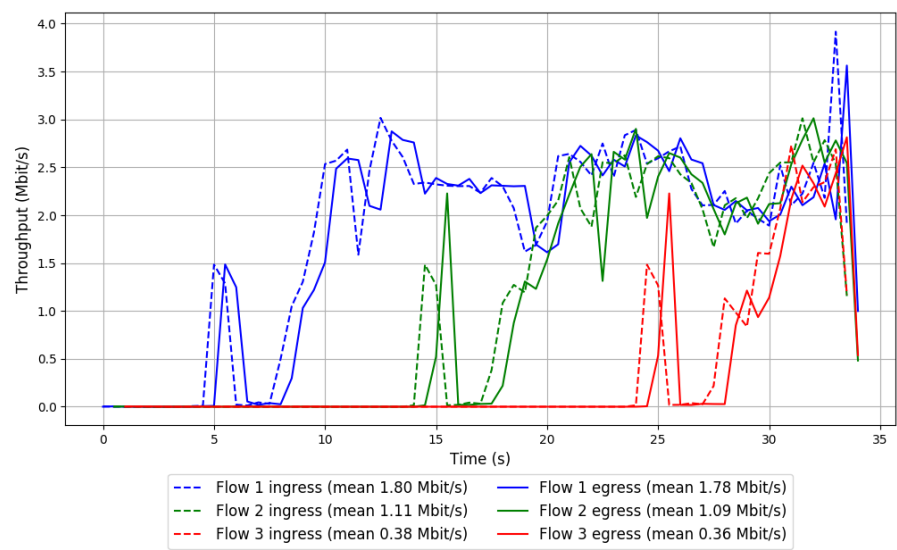


Run 6: Statistics of WebRTC media

Start at: 2018-06-20 00:20:12  
End at: 2018-06-20 00:20:42  
Local clock offset: 0.135 ms  
Remote clock offset: -0.002 ms

# Below is generated by plot.py at 2018-06-20 04:29:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.21 Mbit/s  
95th percentile per-packet one-way delay: 136.596 ms  
Loss rate: 2.15%  
-- Flow 1:  
Average throughput: 1.78 Mbit/s  
95th percentile per-packet one-way delay: 136.614 ms  
Loss rate: 1.80%  
-- Flow 2:  
Average throughput: 1.09 Mbit/s  
95th percentile per-packet one-way delay: 136.507 ms  
Loss rate: 1.86%  
-- Flow 3:  
Average throughput: 0.36 Mbit/s  
95th percentile per-packet one-way delay: 136.229 ms  
Loss rate: 4.75%

Run 6: Report of WebRTC media — Data Link

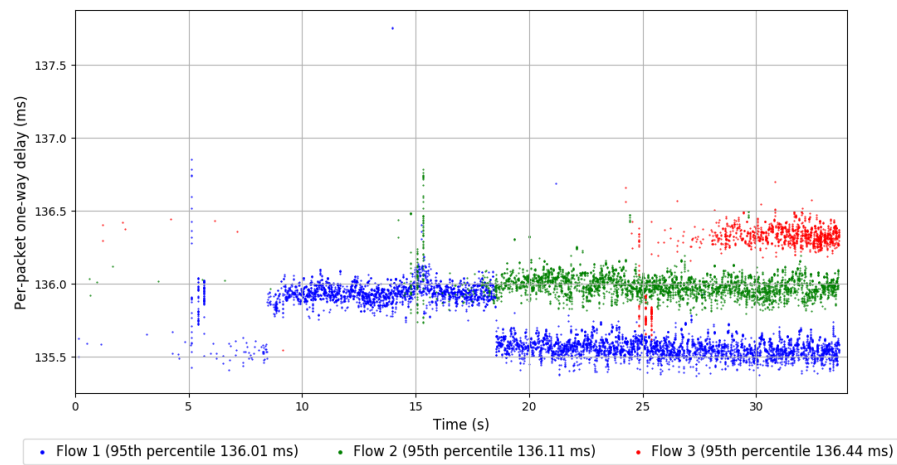
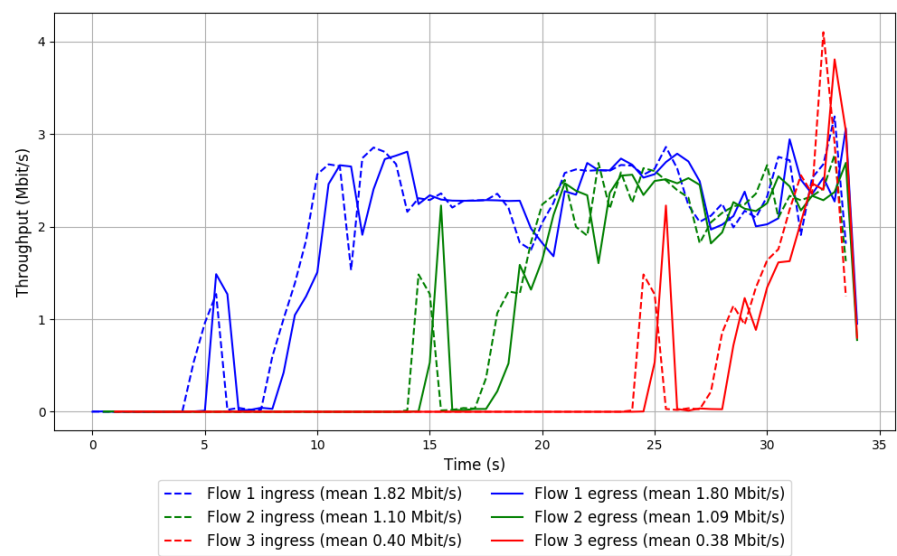


Run 7: Statistics of WebRTC media

Start at: 2018-06-20 00:45:09  
End at: 2018-06-20 00:45:39  
Local clock offset: -0.08 ms  
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2018-06-20 04:29:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.24 Mbit/s  
95th percentile per-packet one-way delay: 136.338 ms  
Loss rate: 2.11%  
-- Flow 1:  
Average throughput: 1.80 Mbit/s  
95th percentile per-packet one-way delay: 136.007 ms  
Loss rate: 1.48%  
-- Flow 2:  
Average throughput: 1.09 Mbit/s  
95th percentile per-packet one-way delay: 136.111 ms  
Loss rate: 2.22%  
-- Flow 3:  
Average throughput: 0.38 Mbit/s  
95th percentile per-packet one-way delay: 136.437 ms  
Loss rate: 4.78%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-06-20 01:10:17

End at: 2018-06-20 01:10:47

Local clock offset: 0.128 ms

Remote clock offset: 0.399 ms

# Below is generated by plot.py at 2018-06-20 04:29:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.26 Mbit/s

95th percentile per-packet one-way delay: 135.854 ms

Loss rate: 2.12%

-- Flow 1:

Average throughput: 1.83 Mbit/s

95th percentile per-packet one-way delay: 135.874 ms

Loss rate: 1.89%

-- Flow 2:

Average throughput: 1.09 Mbit/s

95th percentile per-packet one-way delay: 134.881 ms

Loss rate: 1.70%

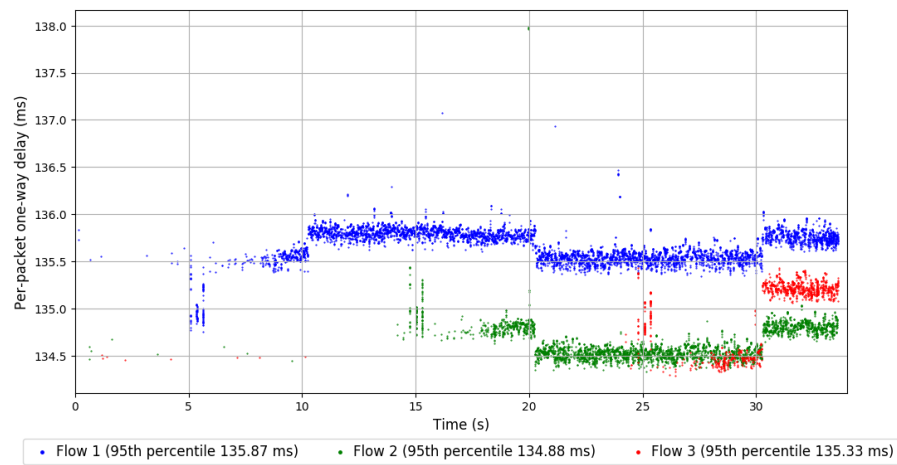
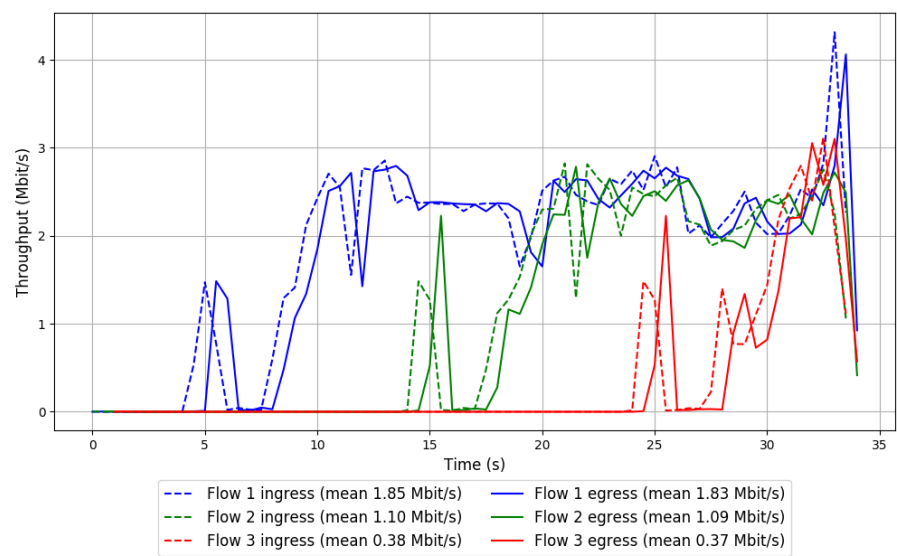
-- Flow 3:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 135.330 ms

Loss rate: 4.49%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-06-20 01:35:24

End at: 2018-06-20 01:35:54

Local clock offset: 0.006 ms

Remote clock offset: 0.077 ms

# Below is generated by plot.py at 2018-06-20 04:29:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.29 Mbit/s

95th percentile per-packet one-way delay: 136.667 ms

Loss rate: 2.17%

-- Flow 1:

Average throughput: 1.85 Mbit/s

95th percentile per-packet one-way delay: 136.694 ms

Loss rate: 1.77%

-- Flow 2:

Average throughput: 1.09 Mbit/s

95th percentile per-packet one-way delay: 136.008 ms

Loss rate: 2.17%

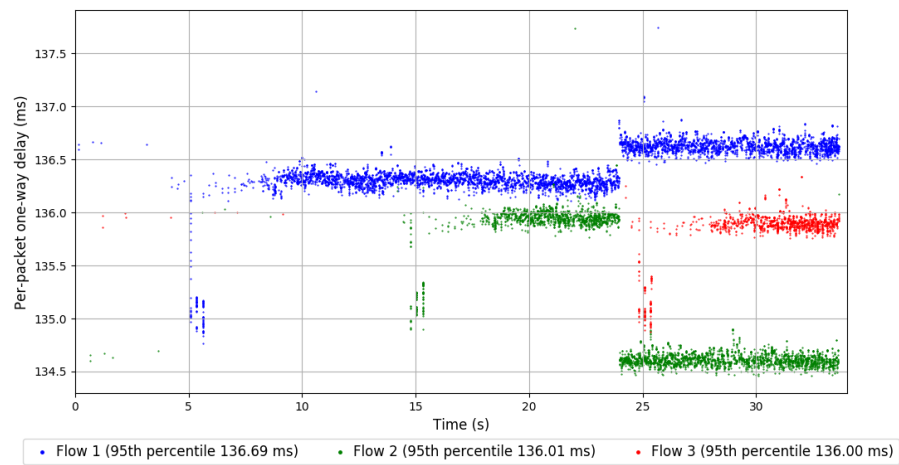
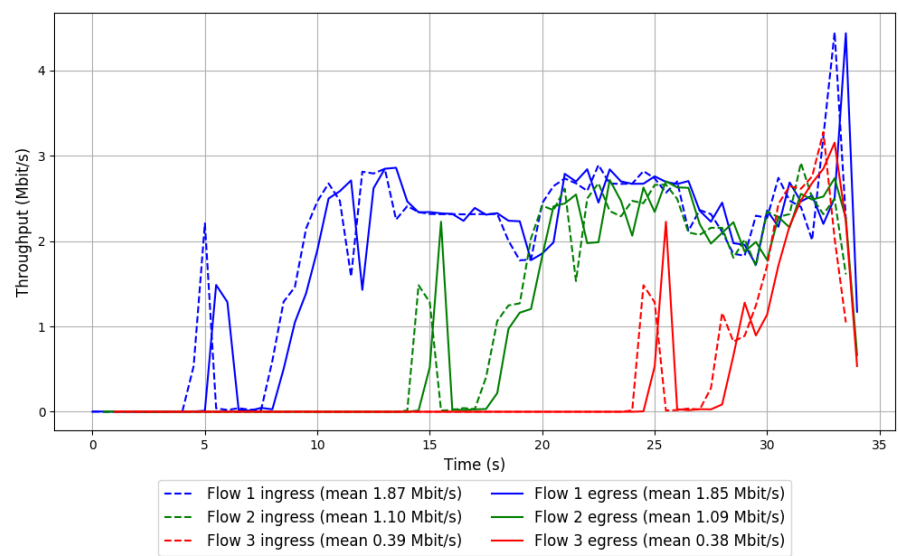
-- Flow 3:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 135.999 ms

Loss rate: 4.06%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-06-20 02:00:07  
End at: 2018-06-20 02:00:37  
Local clock offset: 0.261 ms  
Remote clock offset: -0.312 ms

# Below is generated by plot.py at 2018-06-20 04:29:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.25 Mbit/s  
95th percentile per-packet one-way delay: 137.196 ms  
Loss rate: 1.94%  
-- Flow 1:  
Average throughput: 1.82 Mbit/s  
95th percentile per-packet one-way delay: 136.357 ms  
Loss rate: 1.28%  
-- Flow 2:  
Average throughput: 1.09 Mbit/s  
95th percentile per-packet one-way delay: 137.227 ms  
Loss rate: 1.93%  
-- Flow 3:  
Average throughput: 0.37 Mbit/s  
95th percentile per-packet one-way delay: 137.248 ms  
Loss rate: 5.22%

Run 10: Report of WebRTC media — Data Link

