

## Pantheon Report

Generated at 2018-10-10 02:20:49 (UTC).

Data path: GCE Sydney on `ens4` (*local*) → GCE Iowa on `ens4` (*remote*).

Repeated the test of 18 congestion control schemes 5 times.

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

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

### System info:

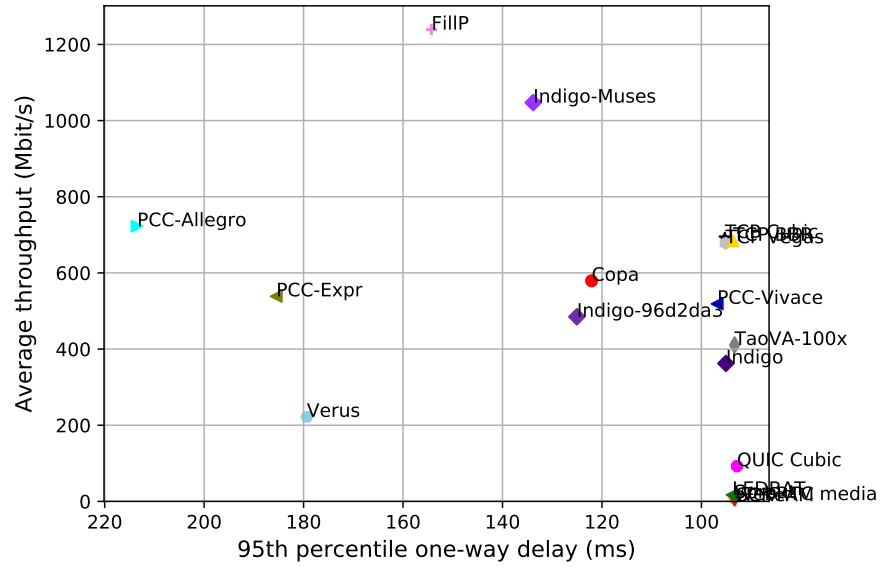
```
Linux 4.15.0-1021-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

### Git summary:

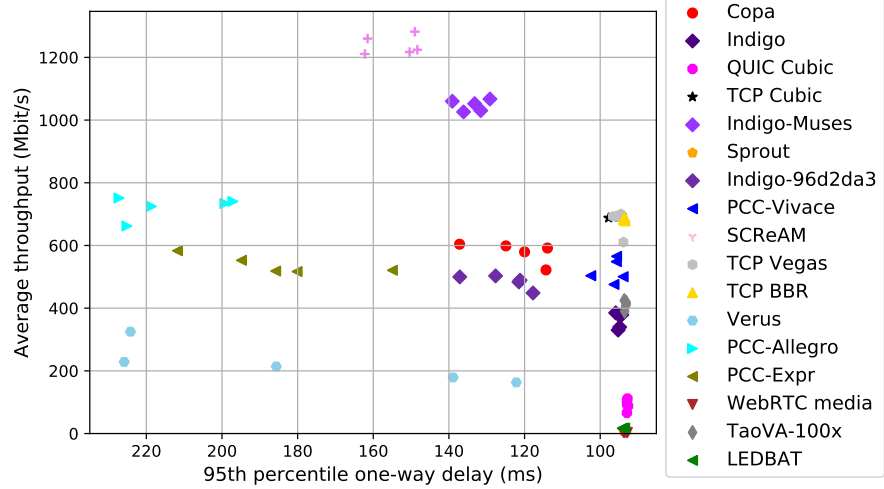
```
branch: muses @ 2e19c0464530faa92c63f8217c9971438a26a3be
third_party/fillp @ 5332fc9127c63565e13f4933b336c02d1aabdac6
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/indigo-96d2da3 @ 8413272d46f8aa0bcb967ed7048b6a8f994abb95
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 65ac1b19bbefed0c6349ae986009b4fa8643c40a
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
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
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
```

third\_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4  
third\_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851

test from GCE Sydney to GCE Iowa, 5 runs of 30s each per scheme  
 3 flows with 10s interval between flows (mean of all runs by scheme)



test from GCE Sydney to GCE Iowa, 5 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	5	353.40	340.35	313.51	93.51	93.92	93.52	0.00	0.00	0.00
Copa	5	305.07	290.32	242.92	117.45	118.90	142.81	0.01	0.02	0.04
TCP Cubic	5	358.67	345.07	309.87	94.69	95.73	97.02	0.00	0.00	0.07
FillP	5	678.86	605.93	472.61	158.74	138.37	104.82	1.72	0.65	0.08
Indigo	5	187.82	186.34	158.65	94.90	95.14	95.00	0.00	0.00	0.00
Indigo-96d2da3	5	257.94	246.00	196.74	128.14	126.71	112.51	0.30	0.12	0.19
LEDBAT	5	10.87	7.22	3.54	93.88	93.69	93.66	0.00	0.00	0.00
Indigo-Muses	5	591.23	509.64	363.79	134.53	137.03	128.91	0.11	0.09	0.15
PCC-Allegro	5	415.88	340.64	243.85	213.39	180.52	180.67	3.32	2.69	1.05
PCC-Expr	5	312.41	249.14	182.39	173.61	172.35	130.23	1.34	2.59	0.08
QUIC Cubic	5	52.80	46.31	27.65	92.82	92.62	92.73	0.00	0.00	0.00
SCReAM	5	0.21	0.21	0.22	92.93	92.93	92.95	0.00	0.00	0.00
Sprout	5	4.34	4.06	3.55	93.46	93.33	93.32	0.00	0.00	0.00
TaoVA-100x	5	210.94	199.63	201.22	93.11	93.56	93.75	0.00	0.00	0.00
TCP Vegas	5	355.91	326.67	314.49	94.56	95.24	97.12	0.00	0.03	0.00
Verus	5	132.59	106.57	58.20	178.55	135.23	125.97	1.86	0.04	0.00
PCC-Vivace	5	319.35	229.01	142.45	101.15	95.06	94.23	0.06	0.00	0.00
WebRTC media	5	1.91	1.14	0.41	93.32	93.29	92.92	0.00	0.00	0.00



Run 1: Statistics of TCP BBR

Start at: 2018-10-09 21:43:34

End at: 2018-10-09 21:44:04

Local clock offset: 0.345 ms

Remote clock offset: -0.27 ms

# Below is generated by plot.py at 2018-10-10 00:28:39

# Datalink statistics

-- Total of 3 flows:

Average throughput: 685.07 Mbit/s

95th percentile per-packet one-way delay: 93.792 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 353.69 Mbit/s

95th percentile per-packet one-way delay: 93.528 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 341.56 Mbit/s

95th percentile per-packet one-way delay: 95.034 ms

Loss rate: 0.00%

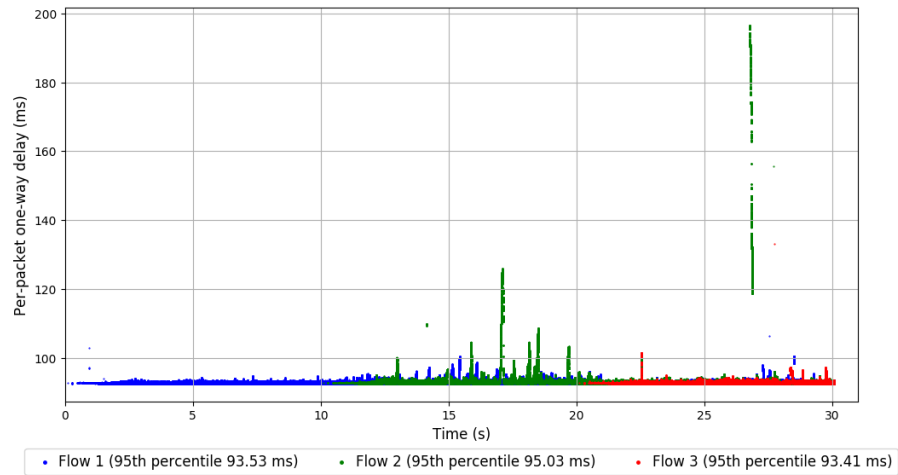
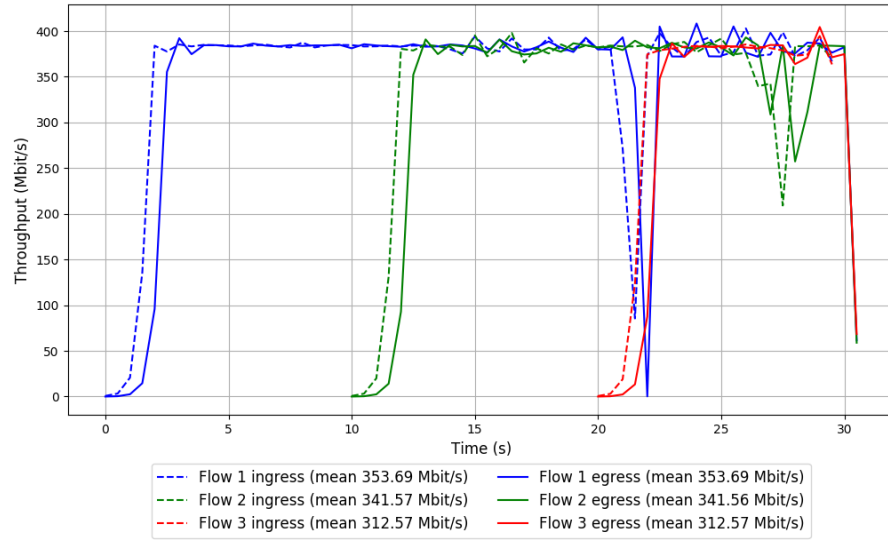
-- Flow 3:

Average throughput: 312.57 Mbit/s

95th percentile per-packet one-way delay: 93.408 ms

Loss rate: 0.00%

# Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-10-09 22:15:14

End at: 2018-10-09 22:15:44

Local clock offset: 0.718 ms

Remote clock offset: -0.97 ms

# Below is generated by plot.py at 2018-10-10 00:28:39

# Datalink statistics

-- Total of 3 flows:

Average throughput: 686.75 Mbit/s

95th percentile per-packet one-way delay: 93.705 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 354.87 Mbit/s

95th percentile per-packet one-way delay: 93.553 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 342.35 Mbit/s

95th percentile per-packet one-way delay: 93.875 ms

Loss rate: 0.00%

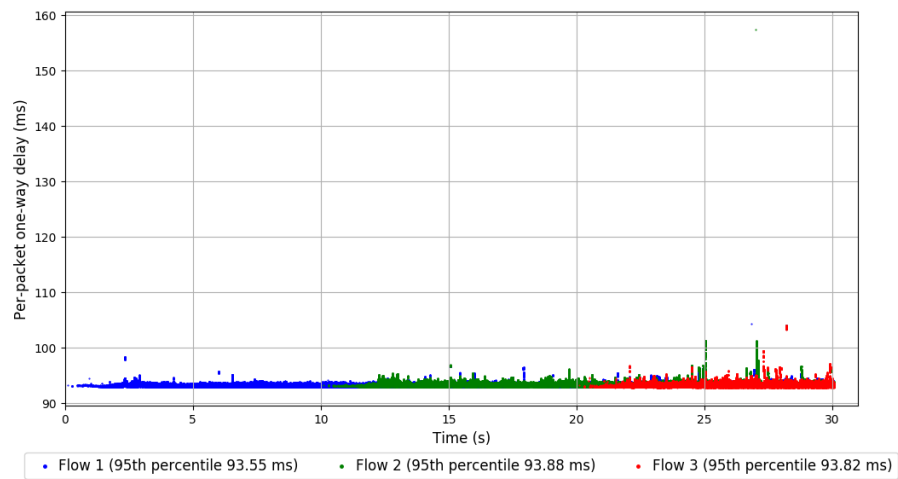
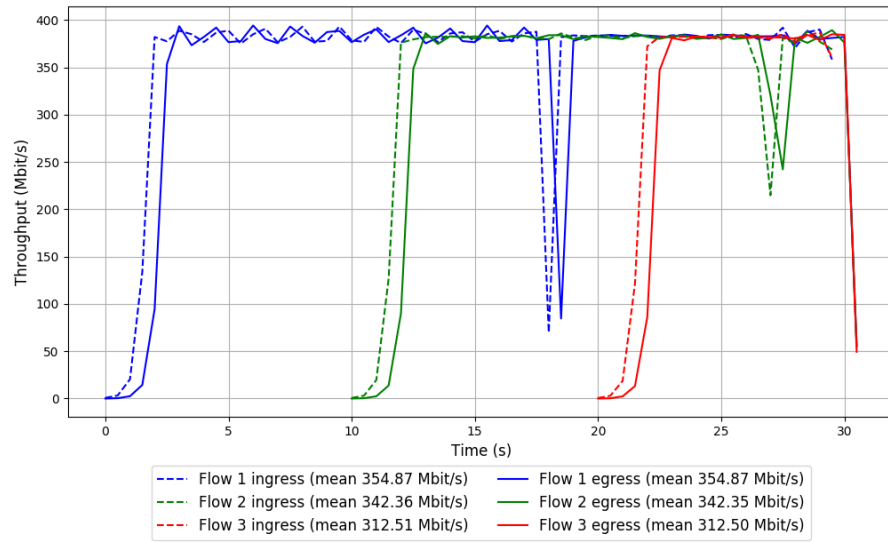
-- Flow 3:

Average throughput: 312.50 Mbit/s

95th percentile per-packet one-way delay: 93.823 ms

Loss rate: 0.00%

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

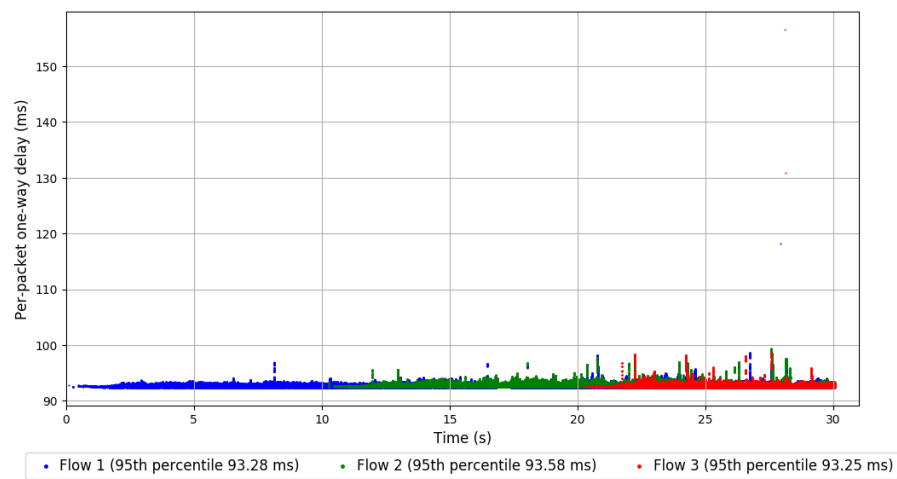
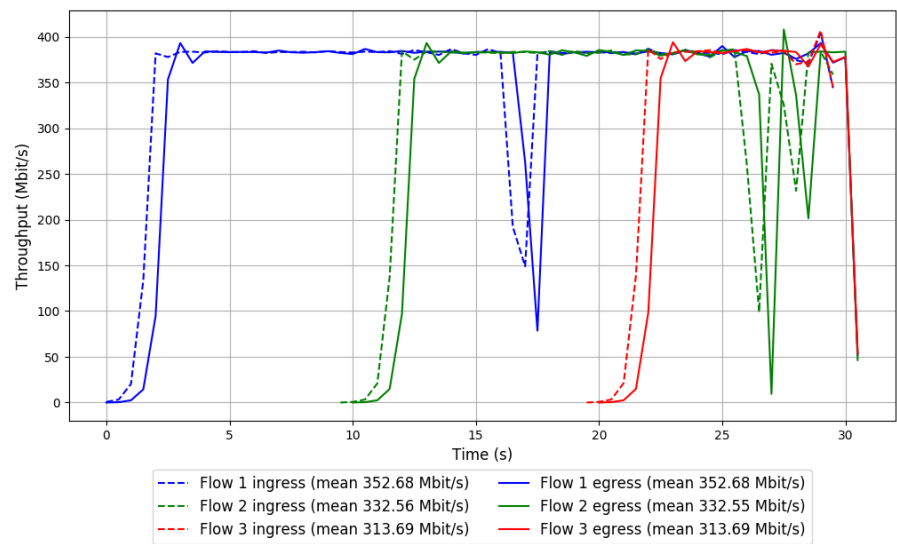


Run 3: Statistics of TCP BBR

Start at: 2018-10-09 22:47:02  
End at: 2018-10-09 22:47:32  
Local clock offset: 0.011 ms  
Remote clock offset: -0.057 ms

# Below is generated by plot.py at 2018-10-10 00:28:39  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 678.70 Mbit/s  
95th percentile per-packet one-way delay: 93.389 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 352.68 Mbit/s  
95th percentile per-packet one-way delay: 93.285 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 332.55 Mbit/s  
95th percentile per-packet one-way delay: 93.575 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 313.69 Mbit/s  
95th percentile per-packet one-way delay: 93.255 ms  
Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link

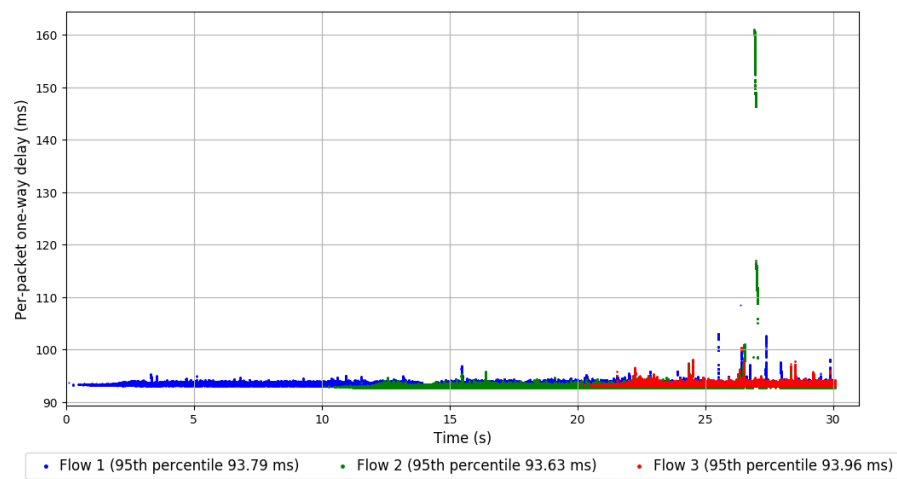
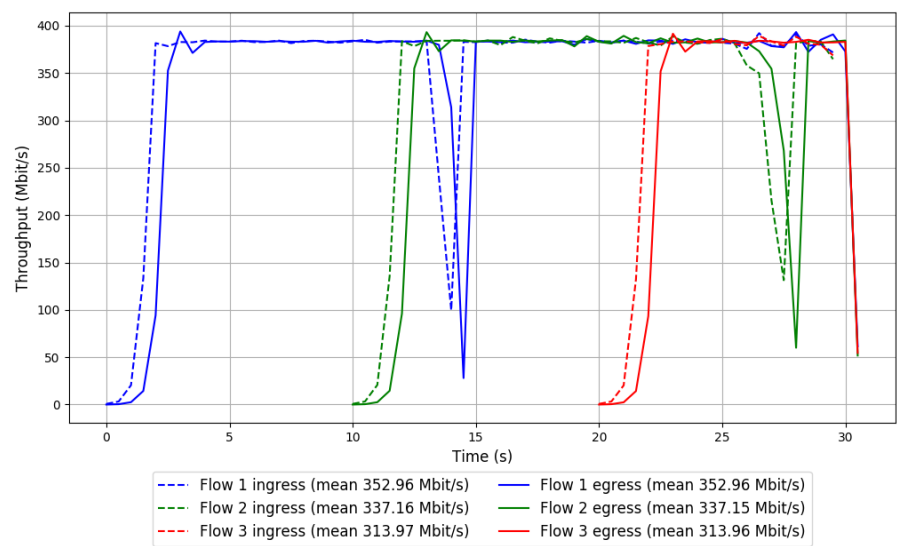


Run 4: Statistics of TCP BBR

Start at: 2018-10-09 23:18:31  
End at: 2018-10-09 23:19:01  
Local clock offset: -0.324 ms  
Remote clock offset: -0.002 ms

# Below is generated by plot.py at 2018-10-10 00:28:39  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 682.03 Mbit/s  
95th percentile per-packet one-way delay: 93.808 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 352.96 Mbit/s  
95th percentile per-packet one-way delay: 93.792 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 337.15 Mbit/s  
95th percentile per-packet one-way delay: 93.630 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 313.96 Mbit/s  
95th percentile per-packet one-way delay: 93.962 ms  
Loss rate: 0.00%

Run 4: Report of TCP BBR — Data Link



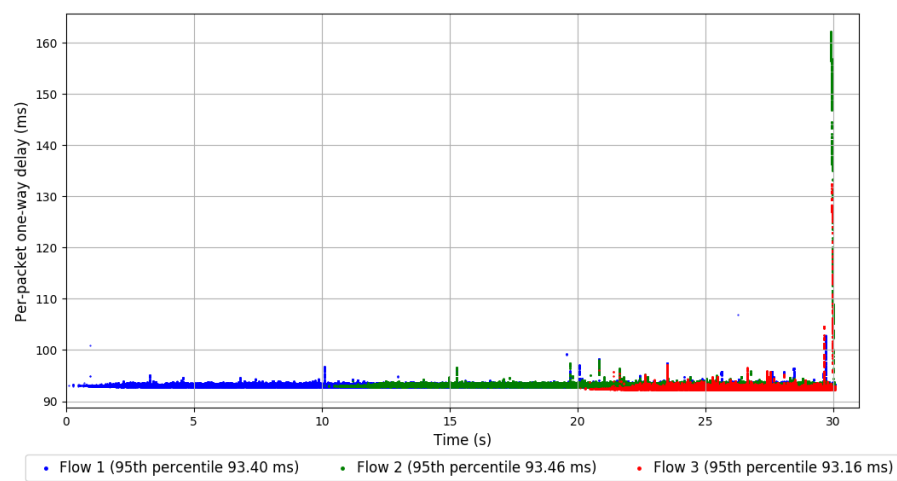
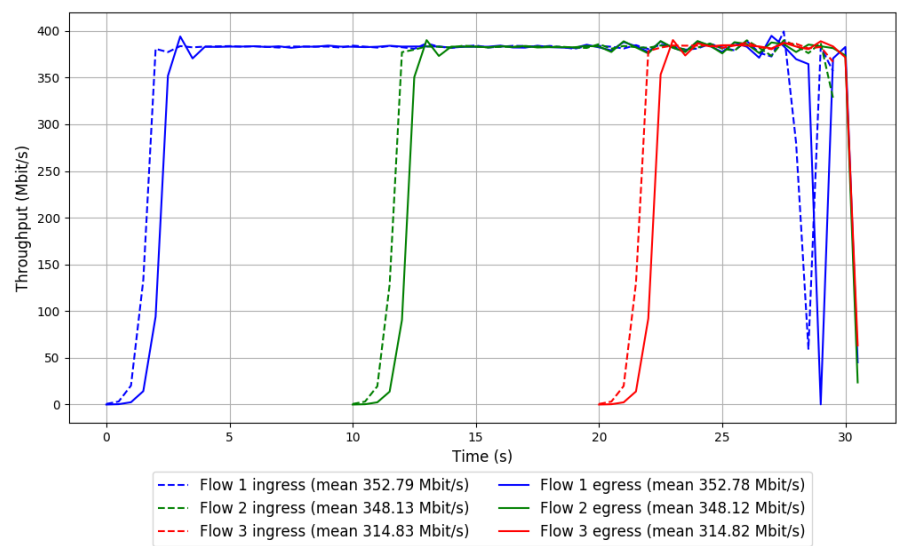


Run 5: Statistics of TCP BBR

Start at: 2018-10-09 23:50:23  
End at: 2018-10-09 23:50:53  
Local clock offset: 0.019 ms  
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2018-10-10 00:28:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 688.79 Mbit/s  
95th percentile per-packet one-way delay: 93.415 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 352.78 Mbit/s  
95th percentile per-packet one-way delay: 93.398 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 348.12 Mbit/s  
95th percentile per-packet one-way delay: 93.463 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 314.82 Mbit/s  
95th percentile per-packet one-way delay: 93.156 ms  
Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link

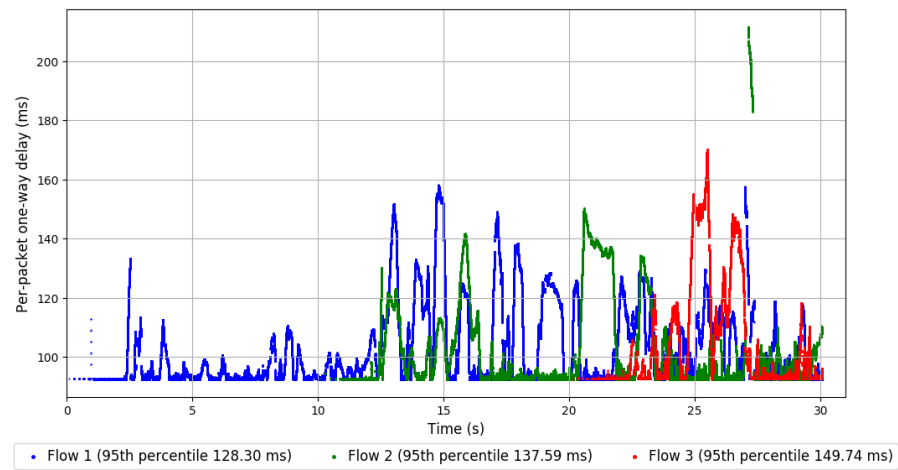
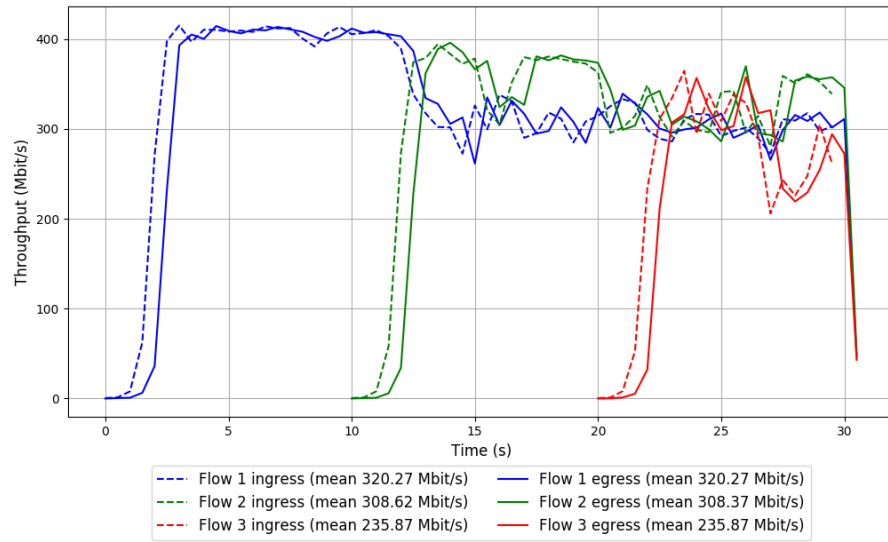


Run 1: Statistics of Copa

Start at: 2018-10-09 21:47:34  
End at: 2018-10-09 21:48:04  
Local clock offset: 0.456 ms  
Remote clock offset: -0.405 ms

# Below is generated by plot.py at 2018-10-10 00:36:26  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 603.97 Mbit/s  
95th percentile per-packet one-way delay: 137.186 ms  
Loss rate: 0.03%  
-- Flow 1:  
Average throughput: 320.27 Mbit/s  
95th percentile per-packet one-way delay: 128.303 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 308.37 Mbit/s  
95th percentile per-packet one-way delay: 137.594 ms  
Loss rate: 0.08%  
-- Flow 3:  
Average throughput: 235.87 Mbit/s  
95th percentile per-packet one-way delay: 149.743 ms  
Loss rate: 0.00%

## Run 1: Report of Copa — Data Link

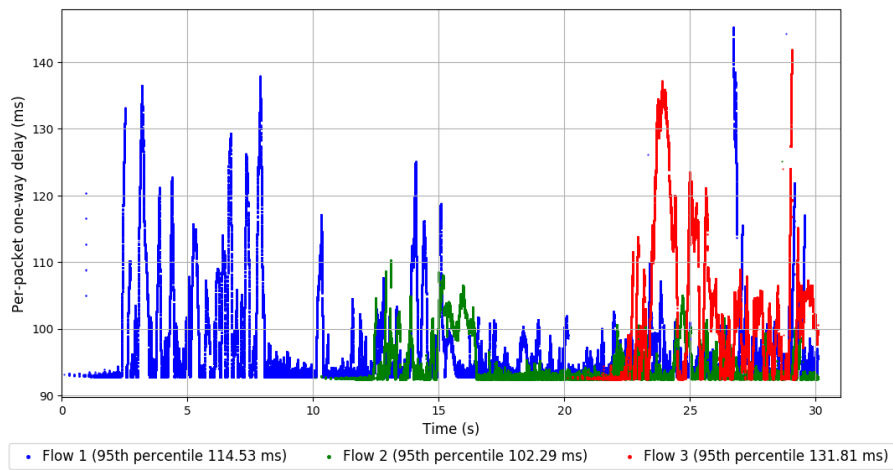
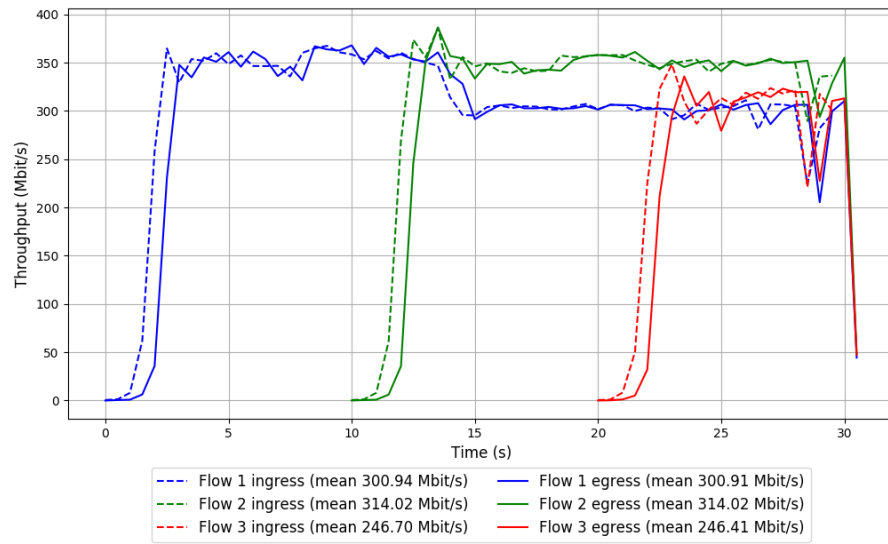


Run 2: Statistics of Copa

Start at: 2018-10-09 22:19:16  
End at: 2018-10-09 22:19:46  
Local clock offset: 0.876 ms  
Remote clock offset: -1.051 ms

# Below is generated by plot.py at 2018-10-10 00:36:26  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 591.86 Mbit/s  
95th percentile per-packet one-way delay: 113.942 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 300.91 Mbit/s  
95th percentile per-packet one-way delay: 114.531 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 314.02 Mbit/s  
95th percentile per-packet one-way delay: 102.292 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 246.41 Mbit/s  
95th percentile per-packet one-way delay: 131.815 ms  
Loss rate: 0.10%

## Run 2: Report of Copa — Data Link

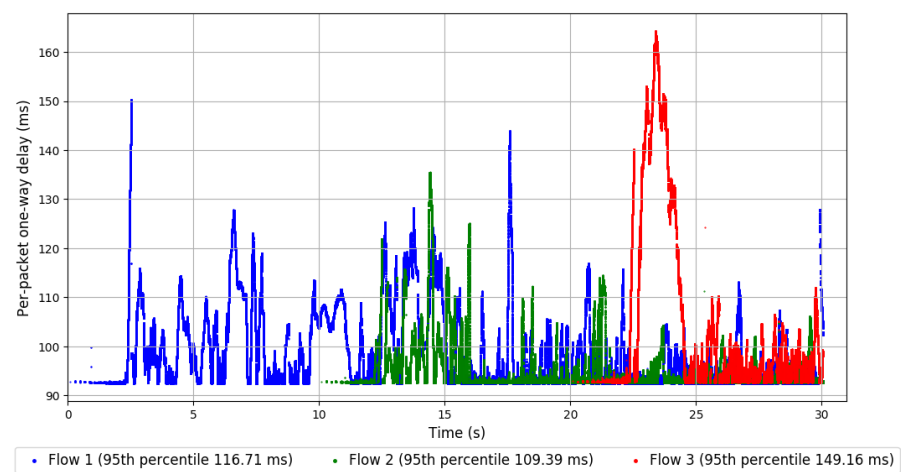
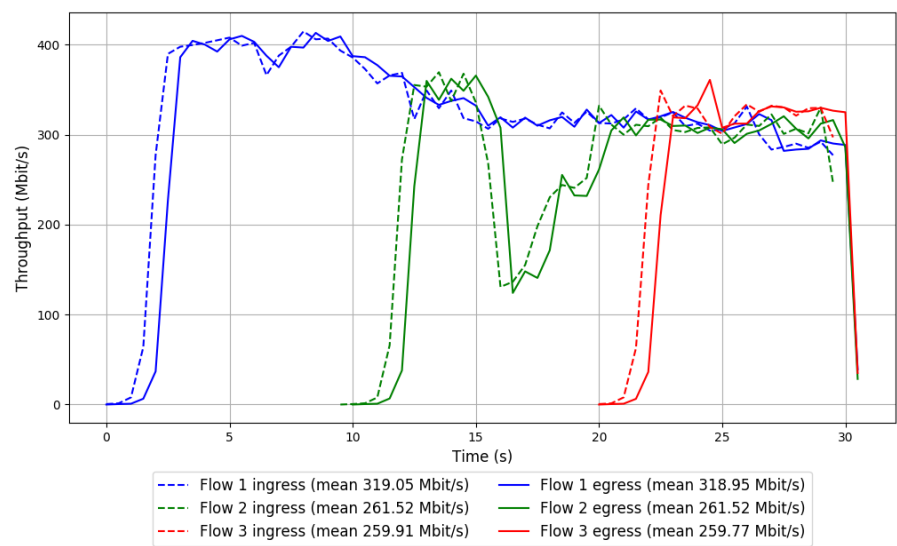


Run 3: Statistics of Copa

Start at: 2018-10-09 22:50:59  
End at: 2018-10-09 22:51:29  
Local clock offset: -0.05 ms  
Remote clock offset: -0.007 ms

# Below is generated by plot.py at 2018-10-10 00:36:26  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 579.59 Mbit/s  
95th percentile per-packet one-way delay: 119.997 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 318.95 Mbit/s  
95th percentile per-packet one-way delay: 116.713 ms  
Loss rate: 0.02%  
-- Flow 2:  
Average throughput: 261.52 Mbit/s  
95th percentile per-packet one-way delay: 109.392 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 259.77 Mbit/s  
95th percentile per-packet one-way delay: 149.158 ms  
Loss rate: 0.06%

Run 3: Report of Copa — Data Link



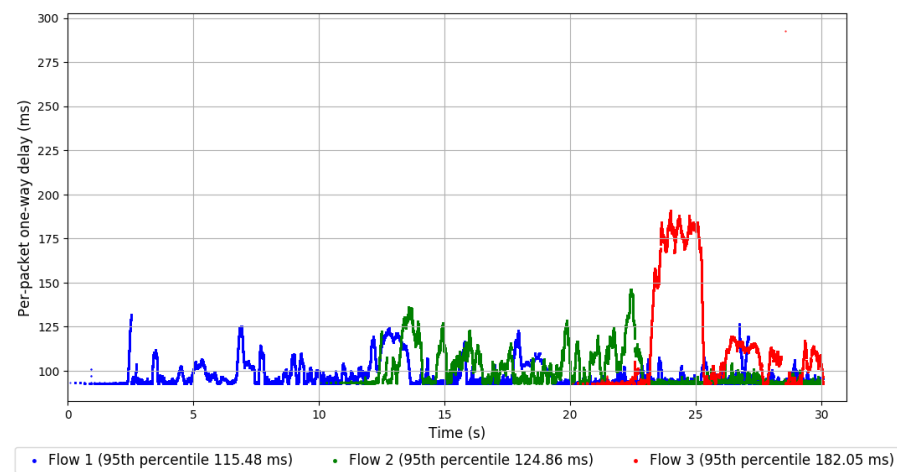
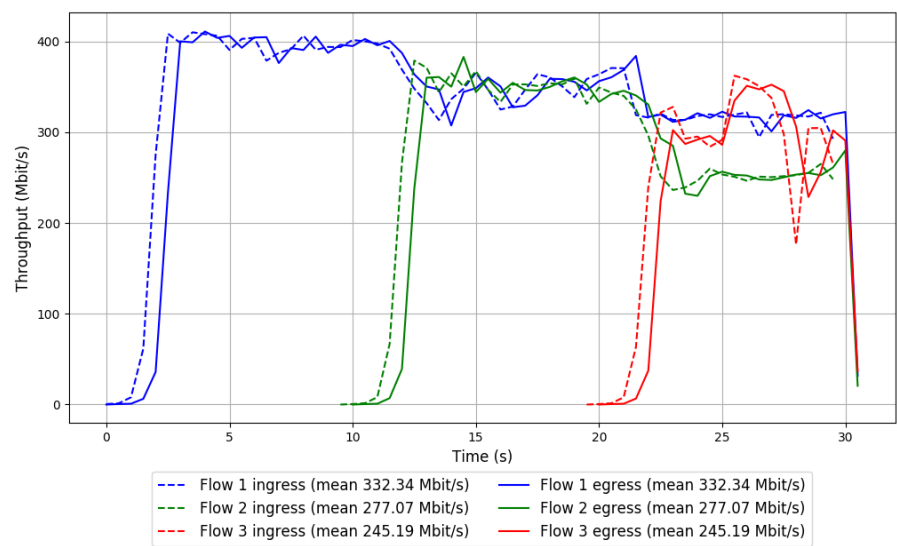


Run 4: Statistics of Copa

Start at: 2018-10-09 23:22:29  
End at: 2018-10-09 23:22:59  
Local clock offset: -0.104 ms  
Remote clock offset: -0.026 ms

# Below is generated by plot.py at 2018-10-10 00:48:20  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 598.62 Mbit/s  
95th percentile per-packet one-way delay: 124.926 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 332.34 Mbit/s  
95th percentile per-packet one-way delay: 115.481 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 277.07 Mbit/s  
95th percentile per-packet one-way delay: 124.857 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 245.19 Mbit/s  
95th percentile per-packet one-way delay: 182.048 ms  
Loss rate: 0.00%

Run 4: Report of Copa — Data Link

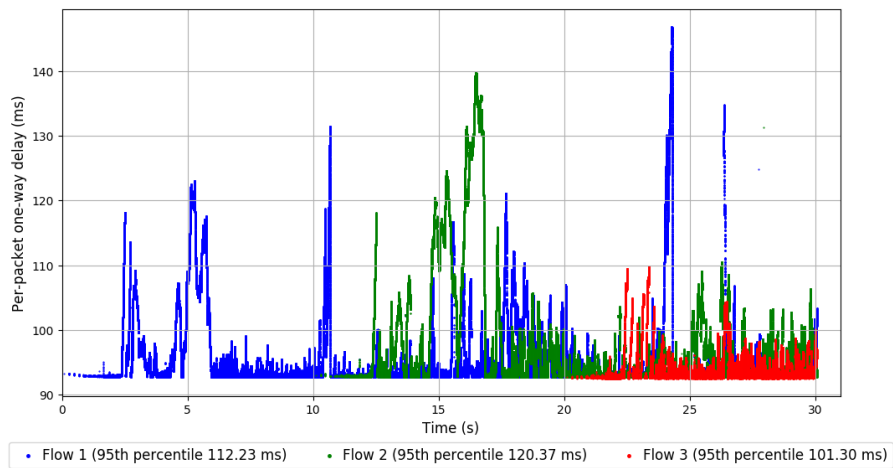
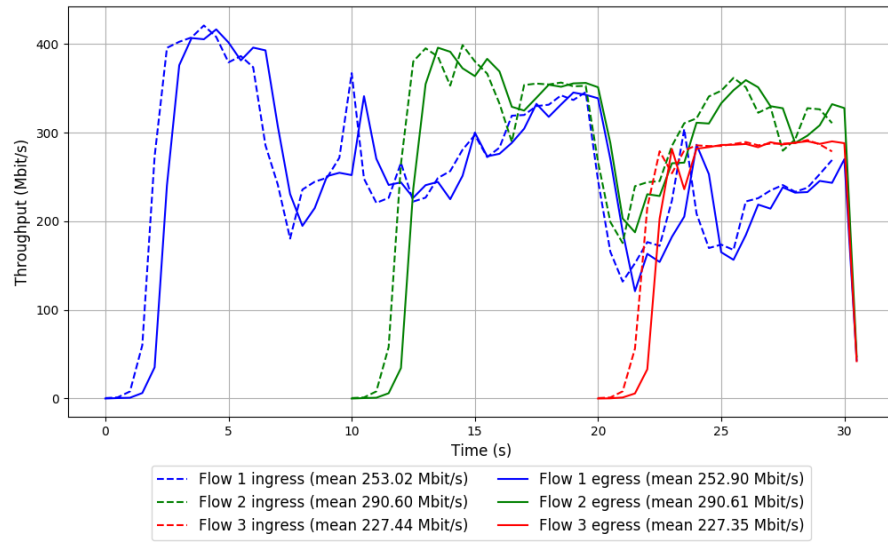


Run 5: Statistics of Copa

Start at: 2018-10-09 23:54:21  
End at: 2018-10-09 23:54:51  
Local clock offset: 0.022 ms  
Remote clock offset: -0.078 ms

# Below is generated by plot.py at 2018-10-10 00:48:20  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 522.04 Mbit/s  
95th percentile per-packet one-way delay: 114.328 ms  
Loss rate: 0.03%  
-- Flow 1:  
Average throughput: 252.90 Mbit/s  
95th percentile per-packet one-way delay: 112.233 ms  
Loss rate: 0.04%  
-- Flow 2:  
Average throughput: 290.61 Mbit/s  
95th percentile per-packet one-way delay: 120.369 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 227.35 Mbit/s  
95th percentile per-packet one-way delay: 101.303 ms  
Loss rate: 0.03%

## Run 5: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-10-09 21:28:00

End at: 2018-10-09 21:28:30

Local clock offset: 0.447 ms

Remote clock offset: 1.068 ms

# Below is generated by plot.py at 2018-10-10 00:48:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 687.90 Mbit/s

95th percentile per-packet one-way delay: 97.784 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 357.18 Mbit/s

95th percentile per-packet one-way delay: 97.211 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 343.43 Mbit/s

95th percentile per-packet one-way delay: 98.224 ms

Loss rate: 0.00%

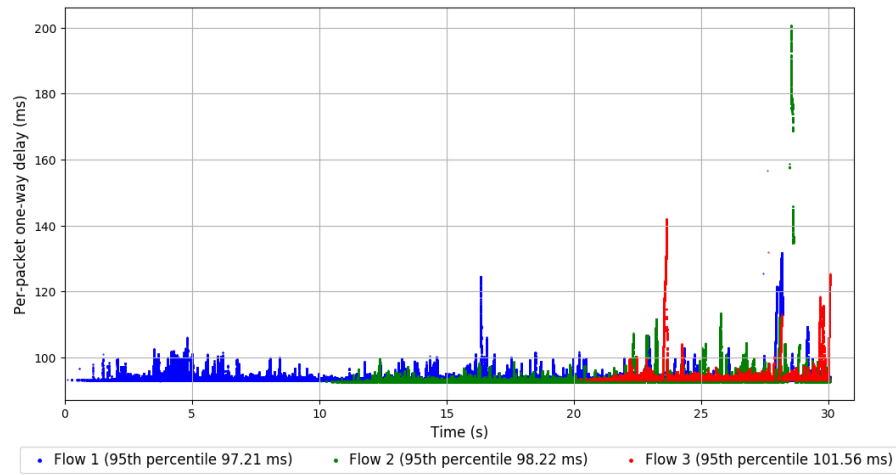
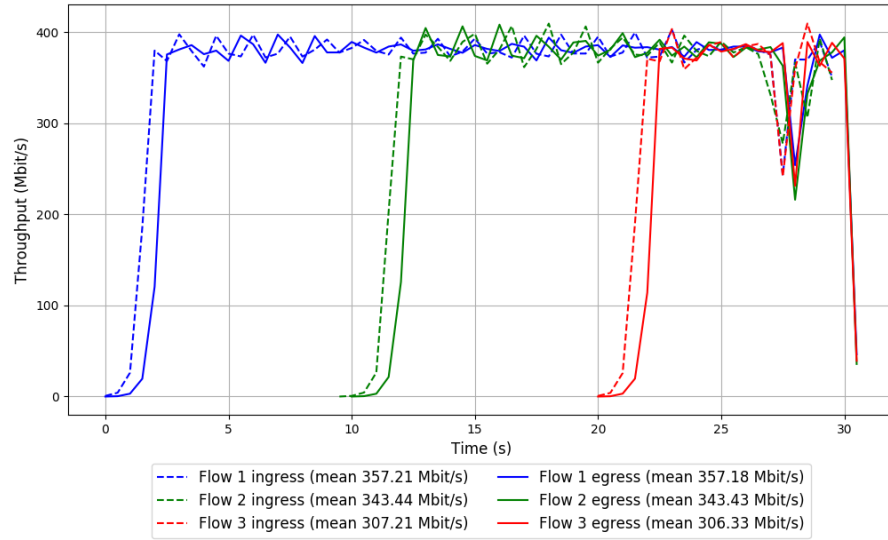
-- Flow 3:

Average throughput: 306.33 Mbit/s

95th percentile per-packet one-way delay: 101.561 ms

Loss rate: 0.28%

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

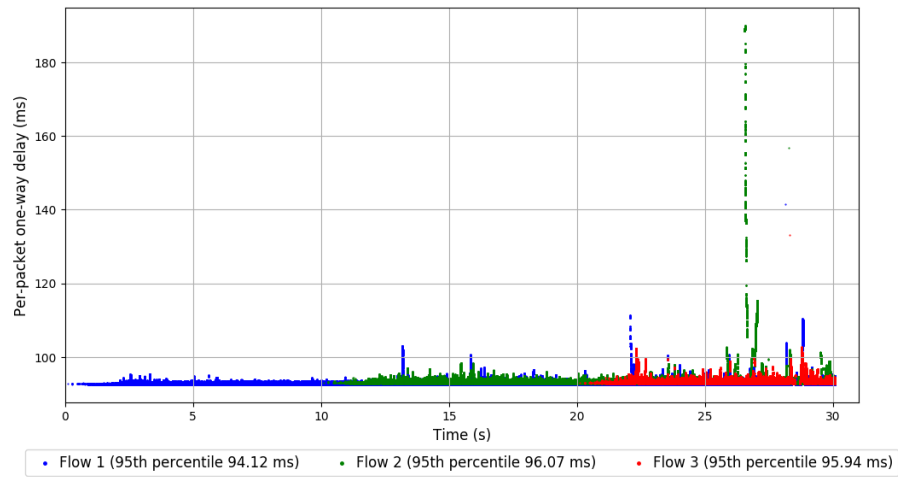
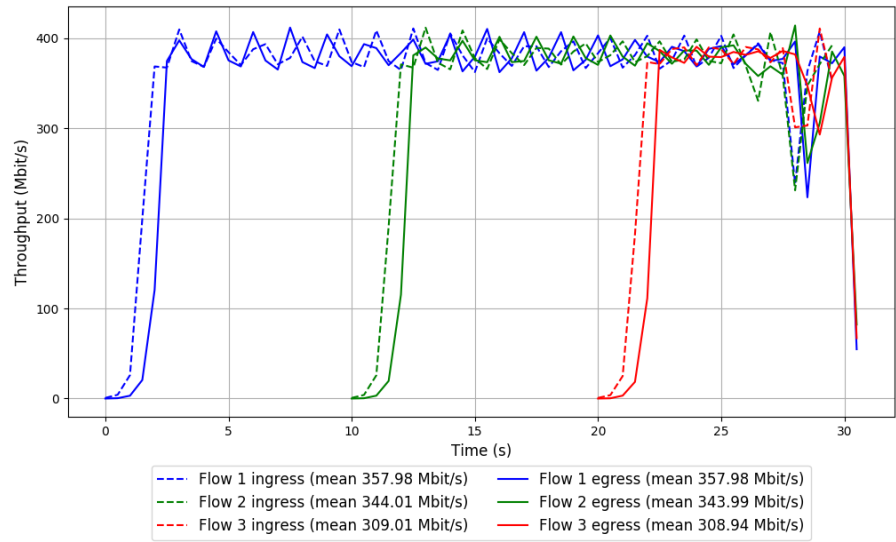


Run 2: Statistics of TCP Cubic

Start at: 2018-10-09 21:59:50  
End at: 2018-10-09 22:00:20  
Local clock offset: 0.538 ms  
Remote clock offset: -0.714 ms

# Below is generated by plot.py at 2018-10-10 00:48:20  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 689.82 Mbit/s  
95th percentile per-packet one-way delay: 95.076 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 357.98 Mbit/s  
95th percentile per-packet one-way delay: 94.119 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 343.99 Mbit/s  
95th percentile per-packet one-way delay: 96.066 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 308.94 Mbit/s  
95th percentile per-packet one-way delay: 95.943 ms  
Loss rate: 0.02%

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



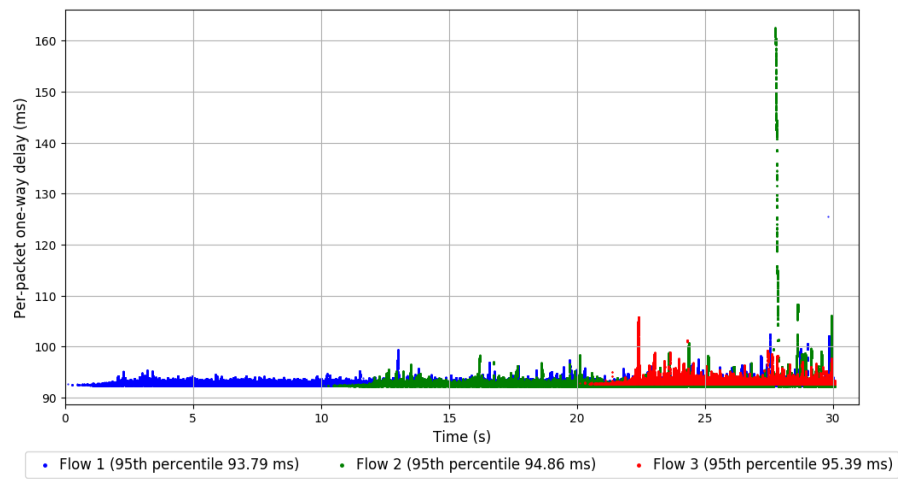
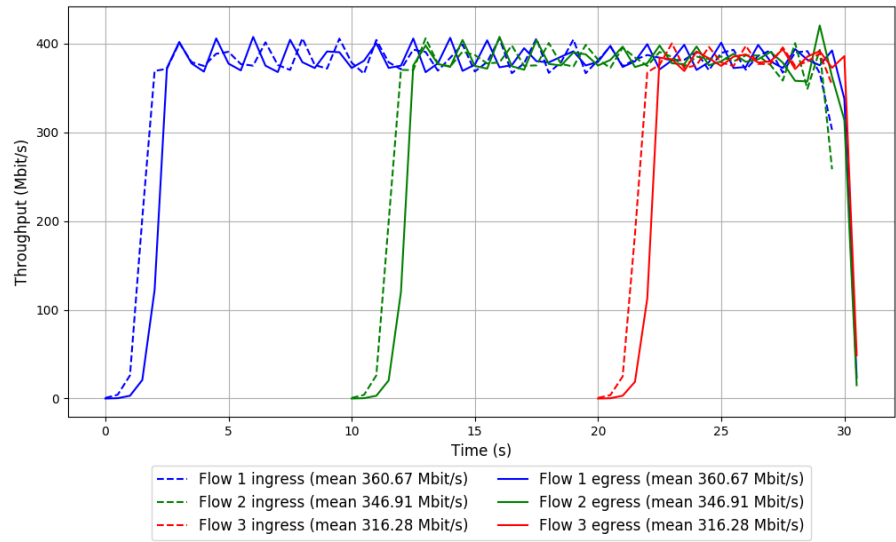


Run 3: Statistics of TCP Cubic

Start at: 2018-10-09 22:31:37  
End at: 2018-10-09 22:32:07  
Local clock offset: 0.523 ms  
Remote clock offset: -0.582 ms

# Below is generated by plot.py at 2018-10-10 00:48:20  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 696.34 Mbit/s  
95th percentile per-packet one-way delay: 94.386 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 360.67 Mbit/s  
95th percentile per-packet one-way delay: 93.790 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 346.91 Mbit/s  
95th percentile per-packet one-way delay: 94.861 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 316.28 Mbit/s  
95th percentile per-packet one-way delay: 95.387 ms  
Loss rate: 0.00%

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



Run 4: Statistics of TCP Cubic

Start at: 2018-10-09 23:03:06

End at: 2018-10-09 23:03:36

Local clock offset: -0.149 ms

Remote clock offset: 0.038 ms

# Below is generated by plot.py at 2018-10-10 00:48:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 691.94 Mbit/s

95th percentile per-packet one-way delay: 94.304 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 358.46 Mbit/s

95th percentile per-packet one-way delay: 93.989 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 346.11 Mbit/s

95th percentile per-packet one-way delay: 94.146 ms

Loss rate: 0.00%

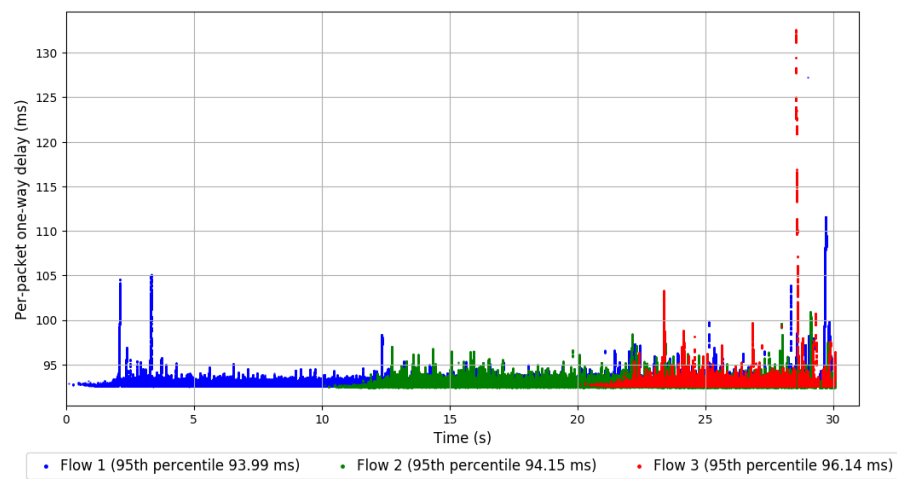
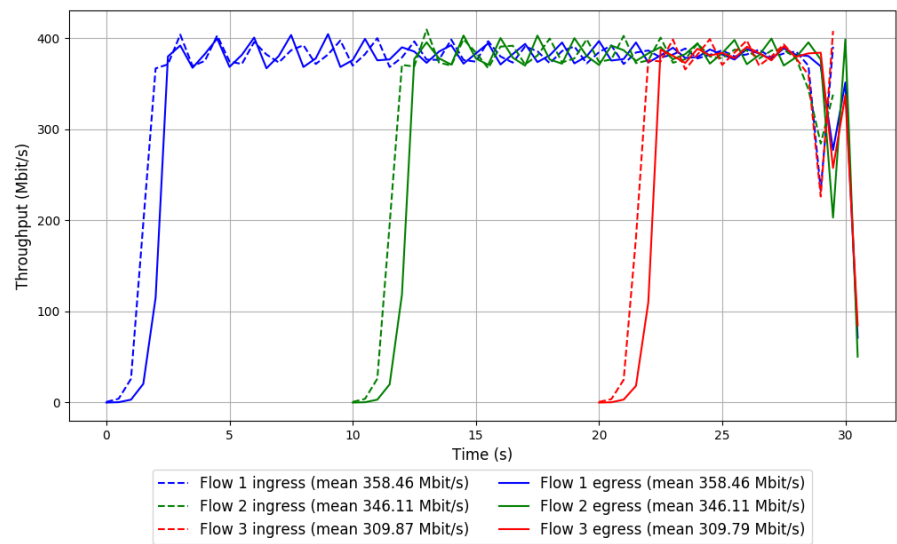
-- Flow 3:

Average throughput: 309.79 Mbit/s

95th percentile per-packet one-way delay: 96.136 ms

Loss rate: 0.03%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-10-09 23:34:48

End at: 2018-10-09 23:35:18

Local clock offset: -0.079 ms

Remote clock offset: 0.012 ms

# Below is generated by plot.py at 2018-10-10 00:48:29

# Datalink statistics

-- Total of 3 flows:

Average throughput: 691.13 Mbit/s

95th percentile per-packet one-way delay: 94.942 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 359.08 Mbit/s

95th percentile per-packet one-way delay: 94.321 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 344.90 Mbit/s

95th percentile per-packet one-way delay: 95.352 ms

Loss rate: 0.00%

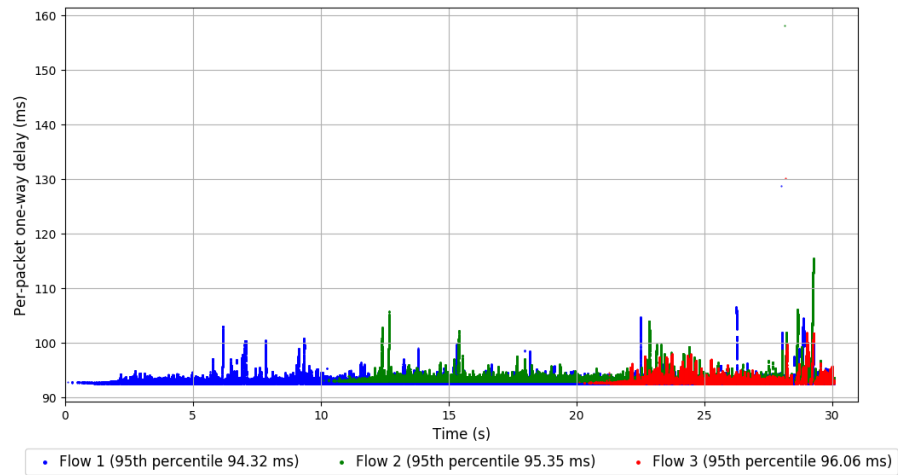
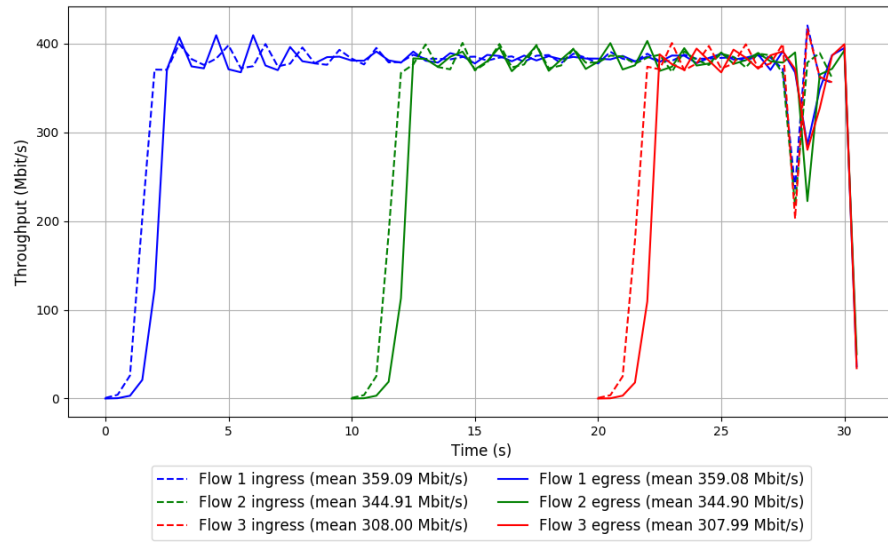
-- Flow 3:

Average throughput: 307.99 Mbit/s

95th percentile per-packet one-way delay: 96.058 ms

Loss rate: 0.00%

### Run 5: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2018-10-09 21:36:09

End at: 2018-10-09 21:36:39

Local clock offset: 0.316 ms

Remote clock offset: 0.127 ms

# Below is generated by plot.py at 2018-10-10 01:01:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1210.75 Mbit/s

95th percentile per-packet one-way delay: 162.216 ms

Loss rate: 1.63%

-- Flow 1:

Average throughput: 660.99 Mbit/s

95th percentile per-packet one-way delay: 164.267 ms

Loss rate: 2.06%

-- Flow 2:

Average throughput: 591.93 Mbit/s

95th percentile per-packet one-way delay: 167.403 ms

Loss rate: 1.55%

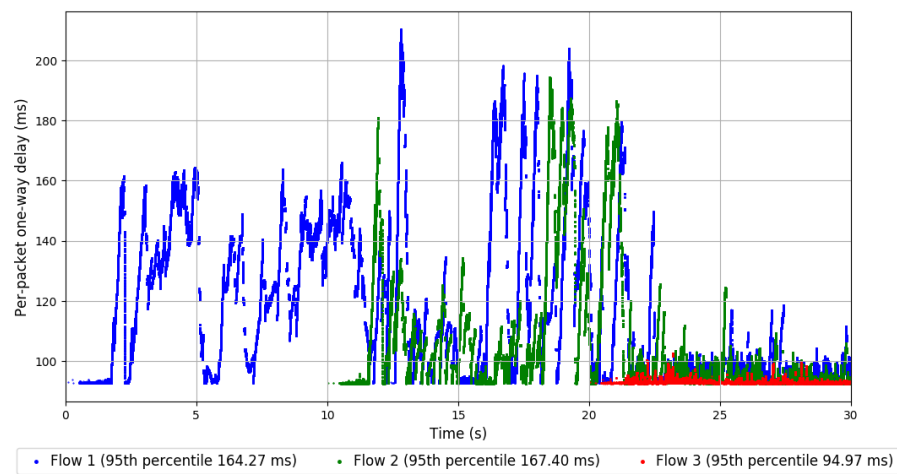
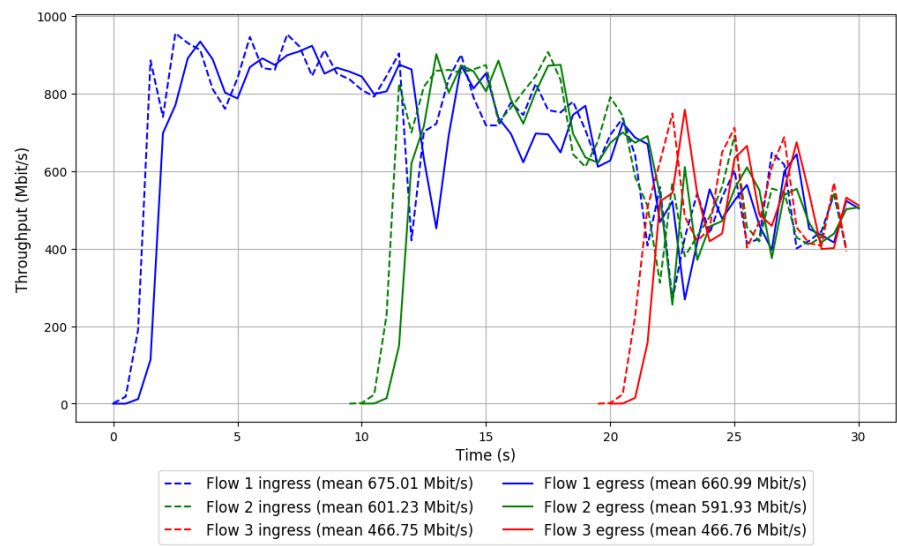
-- Flow 3:

Average throughput: 466.76 Mbit/s

95th percentile per-packet one-way delay: 94.968 ms

Loss rate: 0.00%

Run 1: Report of FillP — Data Link



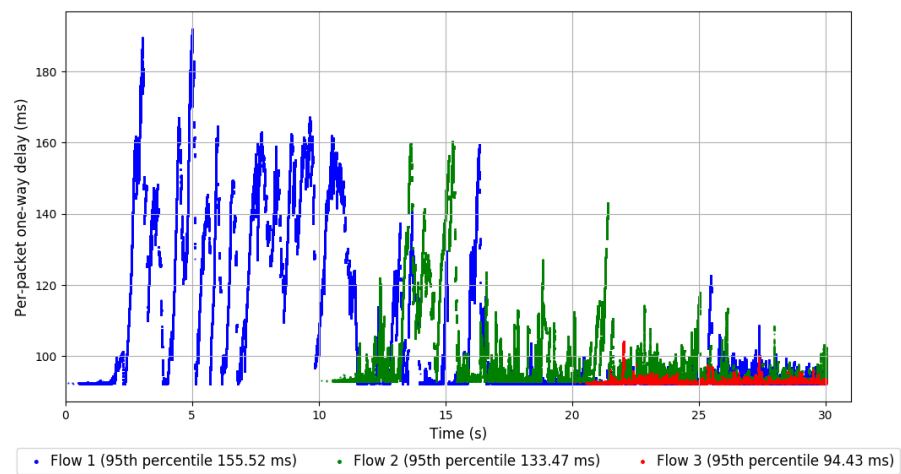
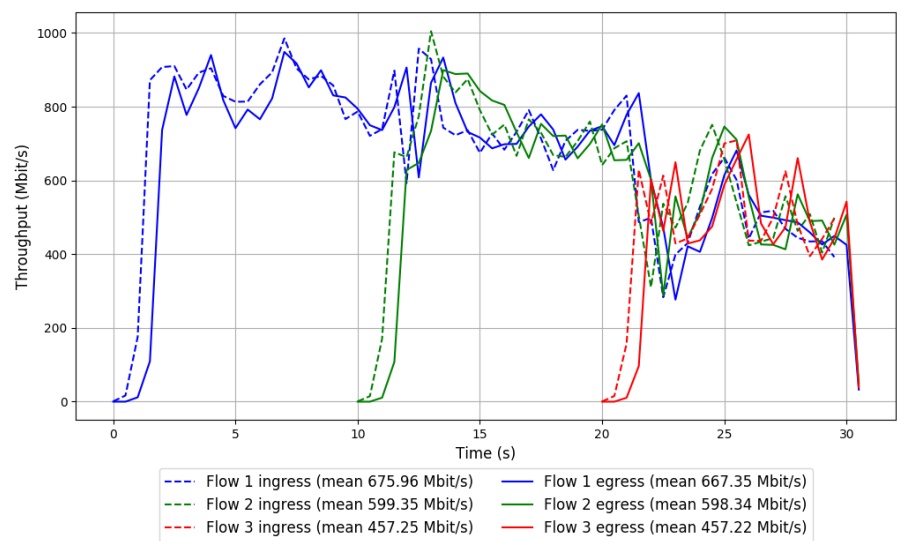


Run 2: Statistics of FillP

Start at: 2018-10-09 22:07:59  
End at: 2018-10-09 22:08:29  
Local clock offset: 0.904 ms  
Remote clock offset: -0.858 ms

# Below is generated by plot.py at 2018-10-10 01:06:40  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1217.00 Mbit/s  
95th percentile per-packet one-way delay: 150.378 ms  
Loss rate: 0.75%  
-- Flow 1:  
Average throughput: 667.35 Mbit/s  
95th percentile per-packet one-way delay: 155.516 ms  
Loss rate: 1.26%  
-- Flow 2:  
Average throughput: 598.34 Mbit/s  
95th percentile per-packet one-way delay: 133.466 ms  
Loss rate: 0.17%  
-- Flow 3:  
Average throughput: 457.22 Mbit/s  
95th percentile per-packet one-way delay: 94.427 ms  
Loss rate: 0.00%

Run 2: Report of FillP — Data Link

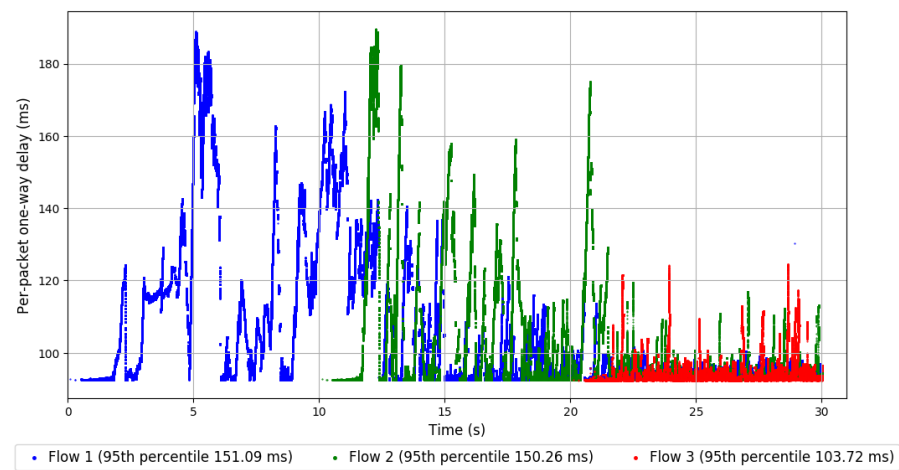
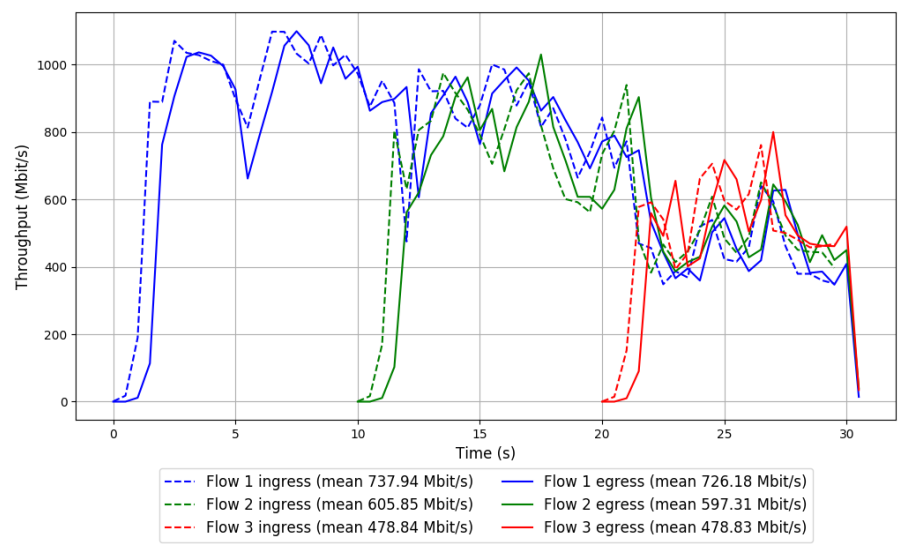


Run 3: Statistics of FillP

Start at: 2018-10-09 22:39:49  
End at: 2018-10-09 22:40:19  
Local clock offset: 0.131 ms  
Remote clock offset: -0.206 ms

# Below is generated by plot.py at 2018-10-10 01:08:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1282.10 Mbit/s  
95th percentile per-packet one-way delay: 149.007 ms  
Loss rate: 1.34%  
-- Flow 1:  
Average throughput: 726.18 Mbit/s  
95th percentile per-packet one-way delay: 151.093 ms  
Loss rate: 1.59%  
-- Flow 2:  
Average throughput: 597.31 Mbit/s  
95th percentile per-packet one-way delay: 150.264 ms  
Loss rate: 1.39%  
-- Flow 3:  
Average throughput: 478.83 Mbit/s  
95th percentile per-packet one-way delay: 103.718 ms  
Loss rate: 0.00%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-10-09 23:11:15

End at: 2018-10-09 23:11:45

Local clock offset: -0.208 ms

Remote clock offset: 0.029 ms

# Below is generated by plot.py at 2018-10-10 01:08:56

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1224.38 Mbit/s

95th percentile per-packet one-way delay: 148.344 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 666.33 Mbit/s

95th percentile per-packet one-way delay: 155.596 ms

Loss rate: 1.35%

-- Flow 2:

Average throughput: 593.54 Mbit/s

95th percentile per-packet one-way delay: 119.040 ms

Loss rate: 0.05%

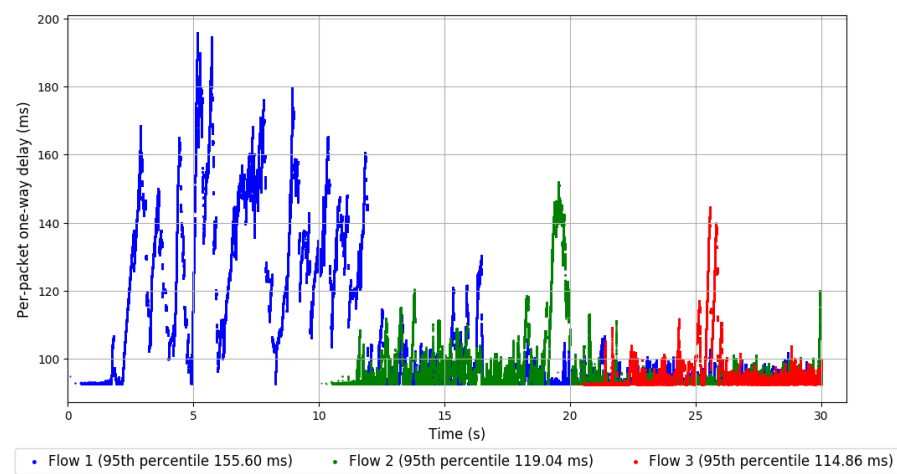
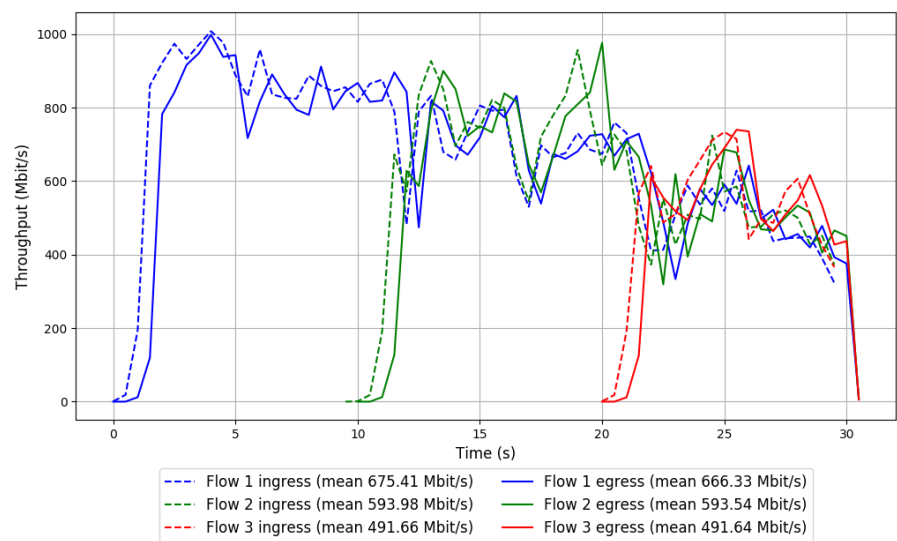
-- Flow 3:

Average throughput: 491.64 Mbit/s

95th percentile per-packet one-way delay: 114.857 ms

Loss rate: 0.00%

Run 4: Report of FillP — Data Link

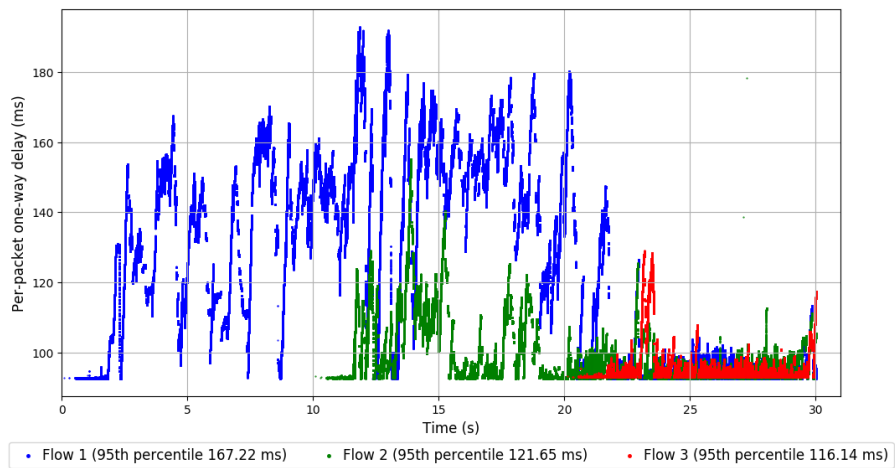
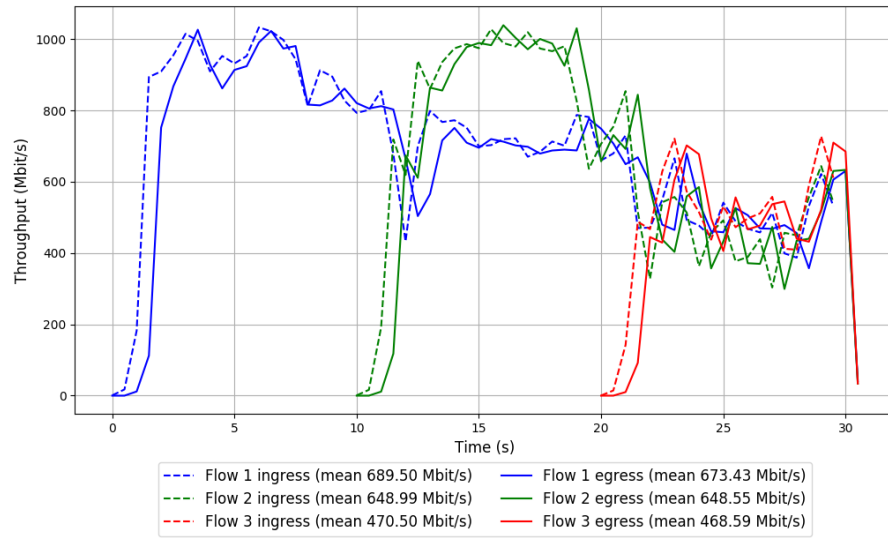


Run 5: Statistics of FillP

Start at: 2018-10-09 23:43:01  
End at: 2018-10-09 23:43:31  
Local clock offset: -0.193 ms  
Remote clock offset: -0.056 ms

# Below is generated by plot.py at 2018-10-10 01:14:05  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1259.95 Mbit/s  
95th percentile per-packet one-way delay: 161.500 ms  
Loss rate: 1.33%  
-- Flow 1:  
Average throughput: 673.43 Mbit/s  
95th percentile per-packet one-way delay: 167.222 ms  
Loss rate: 2.33%  
-- Flow 2:  
Average throughput: 648.55 Mbit/s  
95th percentile per-packet one-way delay: 121.652 ms  
Loss rate: 0.07%  
-- Flow 3:  
Average throughput: 468.59 Mbit/s  
95th percentile per-packet one-way delay: 116.141 ms  
Loss rate: 0.41%

# Run 5: Report of FillP — Data Link



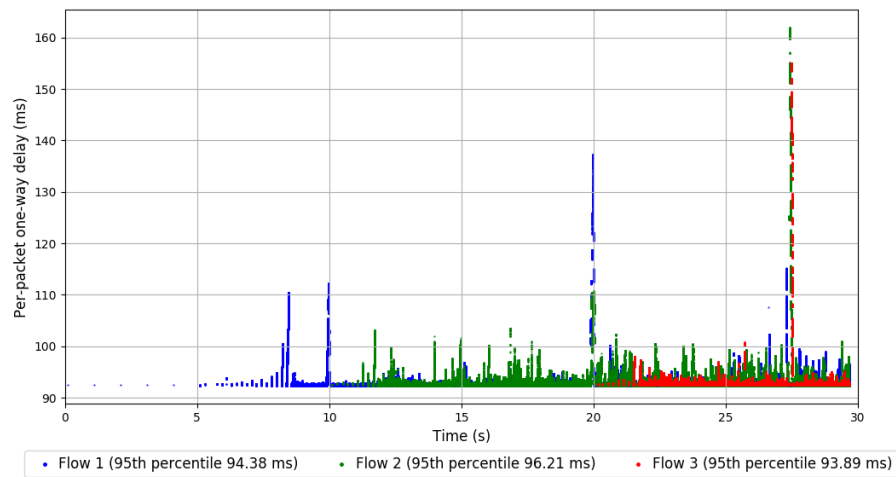
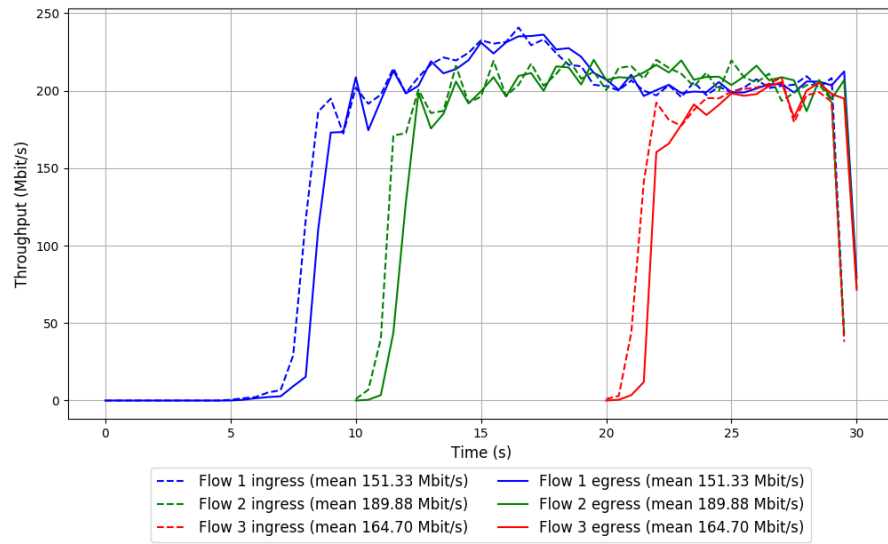


```
Run 1: Statistics of Indigo

Start at: 2018-10-09 21:33:06
End at: 2018-10-09 21:33:36
Local clock offset: 0.495 ms
Remote clock offset: 0.377 ms

# Below is generated by plot.py at 2018-10-10 01:14:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 330.07 Mbit/s
95th percentile per-packet one-way delay: 95.259 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 151.33 Mbit/s
95th percentile per-packet one-way delay: 94.383 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 189.88 Mbit/s
95th percentile per-packet one-way delay: 96.214 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 164.70 Mbit/s
95th percentile per-packet one-way delay: 93.894 ms
Loss rate: 0.00%
```

## Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-10-09 22:04:56

End at: 2018-10-09 22:05:26

Local clock offset: 0.367 ms

Remote clock offset: -0.81 ms

# Below is generated by plot.py at 2018-10-10 01:14:05

# Datalink statistics

-- Total of 3 flows:

Average throughput: 339.54 Mbit/s

95th percentile per-packet one-way delay: 94.839 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 172.95 Mbit/s

95th percentile per-packet one-way delay: 94.394 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 180.21 Mbit/s

95th percentile per-packet one-way delay: 94.732 ms

Loss rate: 0.00%

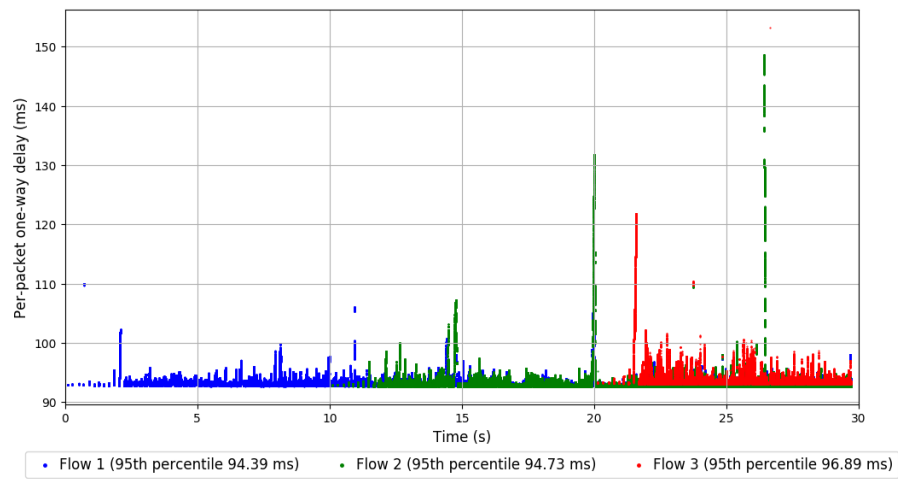
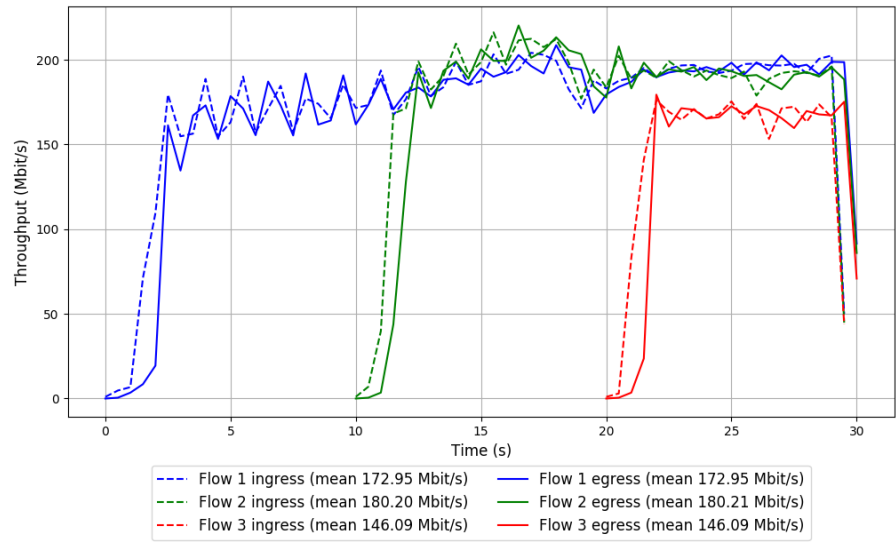
-- Flow 3:

Average throughput: 146.09 Mbit/s

95th percentile per-packet one-way delay: 96.885 ms

Loss rate: 0.00%

## Run 2: Report of Indigo — Data Link

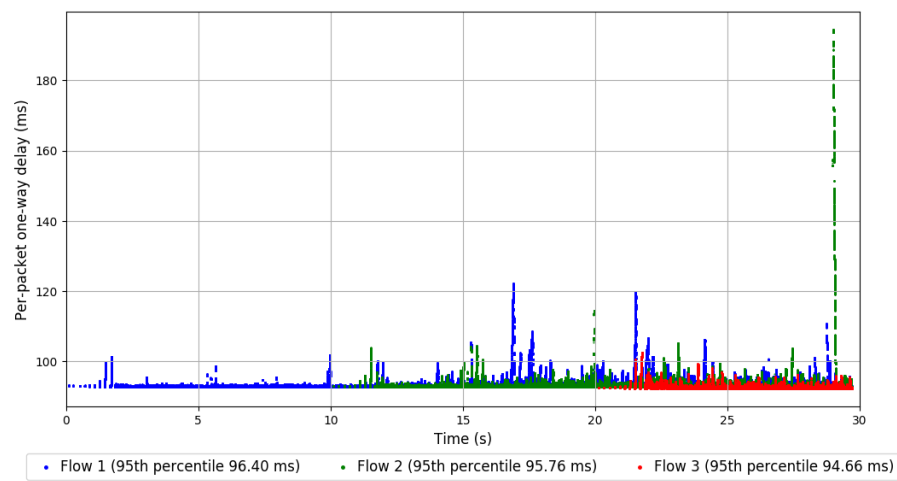
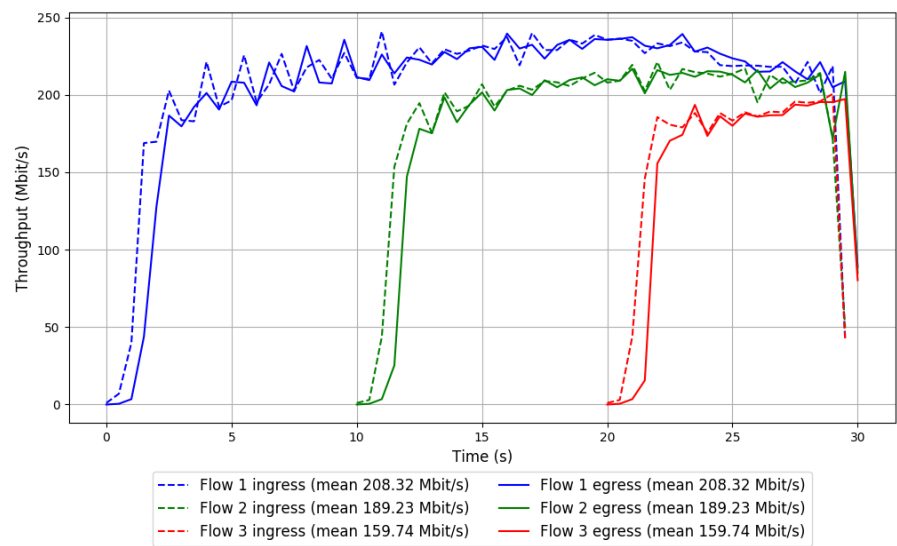


Run 3: Statistics of Indigo

Start at: 2018-10-09 22:36:42  
End at: 2018-10-09 22:37:12  
Local clock offset: 0.277 ms  
Remote clock offset: -0.292 ms

# Below is generated by plot.py at 2018-10-10 01:14:05  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 385.10 Mbit/s  
95th percentile per-packet one-way delay: 95.918 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 208.32 Mbit/s  
95th percentile per-packet one-way delay: 96.399 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 189.23 Mbit/s  
95th percentile per-packet one-way delay: 95.756 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 159.74 Mbit/s  
95th percentile per-packet one-way delay: 94.655 ms  
Loss rate: 0.00%

Run 3: Report of Indigo — Data Link

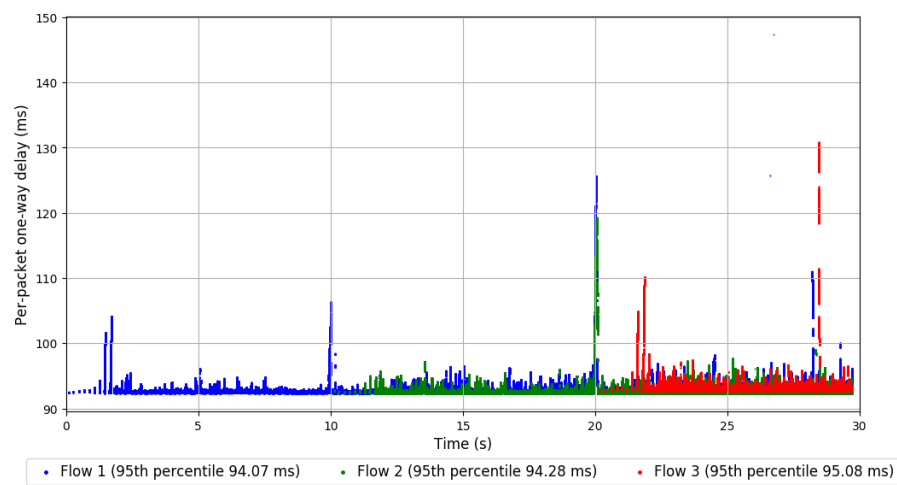
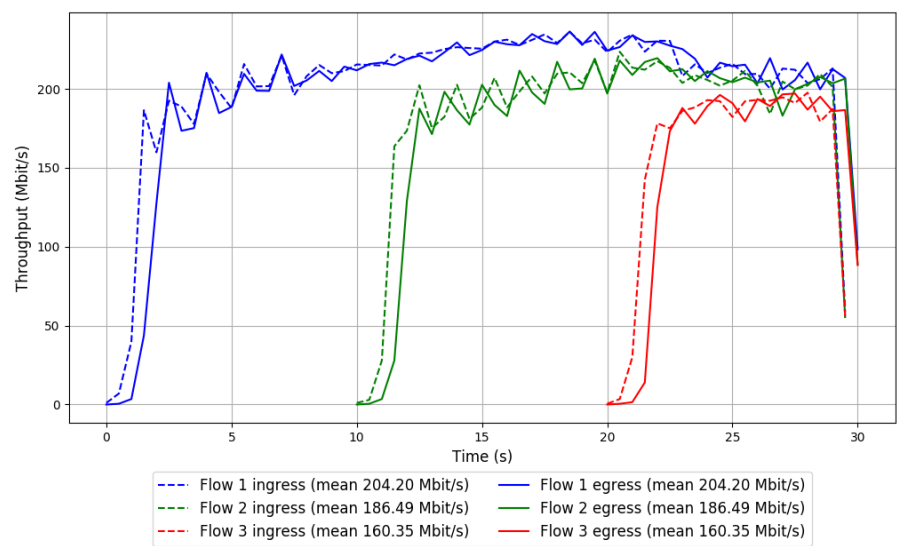


Run 4: Statistics of Indigo

Start at: 2018-10-09 23:08:09  
End at: 2018-10-09 23:08:39  
Local clock offset: -0.064 ms  
Remote clock offset: -0.005 ms

```
# Below is generated by plot.py at 2018-10-10 01:14:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 379.10 Mbit/s
95th percentile per-packet one-way delay: 94.279 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 204.20 Mbit/s
95th percentile per-packet one-way delay: 94.071 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 186.49 Mbit/s
95th percentile per-packet one-way delay: 94.278 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 160.35 Mbit/s
95th percentile per-packet one-way delay: 95.078 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo — Data Link



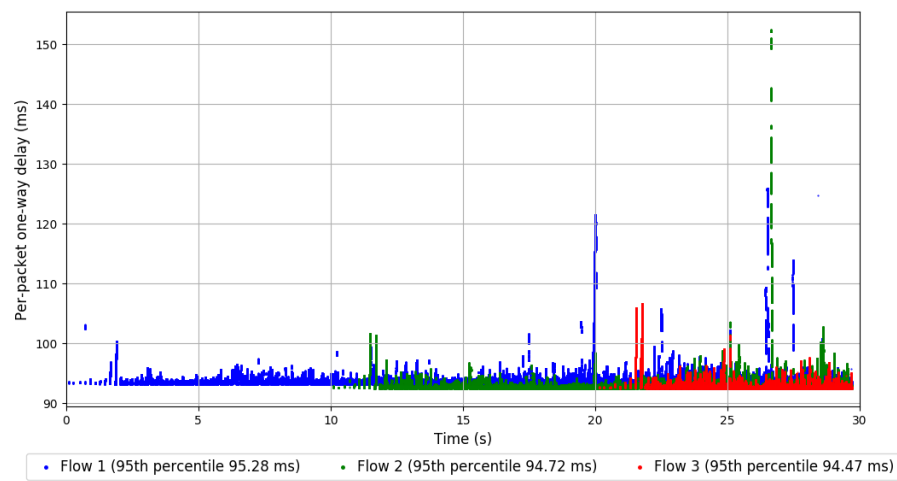
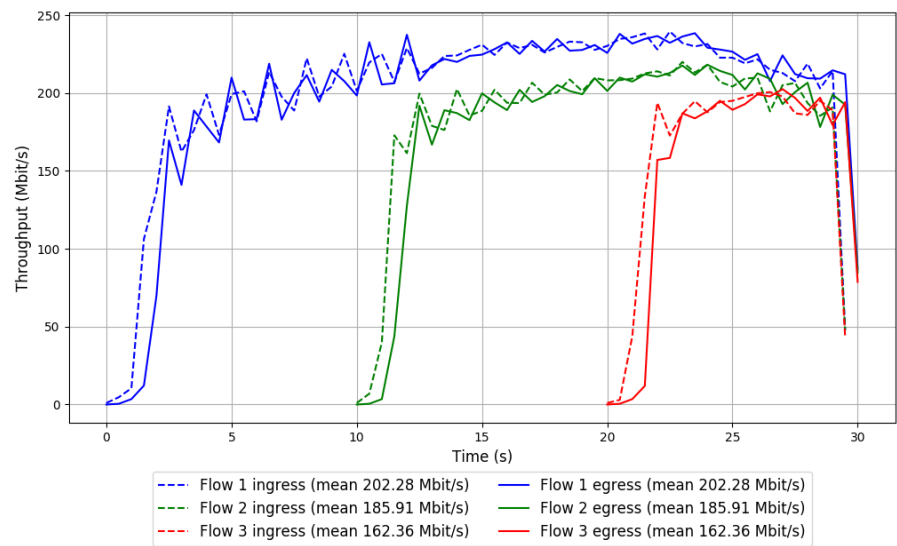


Run 5: Statistics of Indigo

Start at: 2018-10-09 23:39:53  
End at: 2018-10-09 23:40:23  
Local clock offset: -0.083 ms  
Remote clock offset: -0.032 ms

# Below is generated by plot.py at 2018-10-10 01:14:05  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 377.75 Mbit/s  
95th percentile per-packet one-way delay: 95.072 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 202.28 Mbit/s  
95th percentile per-packet one-way delay: 95.276 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 185.91 Mbit/s  
95th percentile per-packet one-way delay: 94.720 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 162.36 Mbit/s  
95th percentile per-packet one-way delay: 94.467 ms  
Loss rate: 0.00%

Run 5: Report of Indigo — Data Link

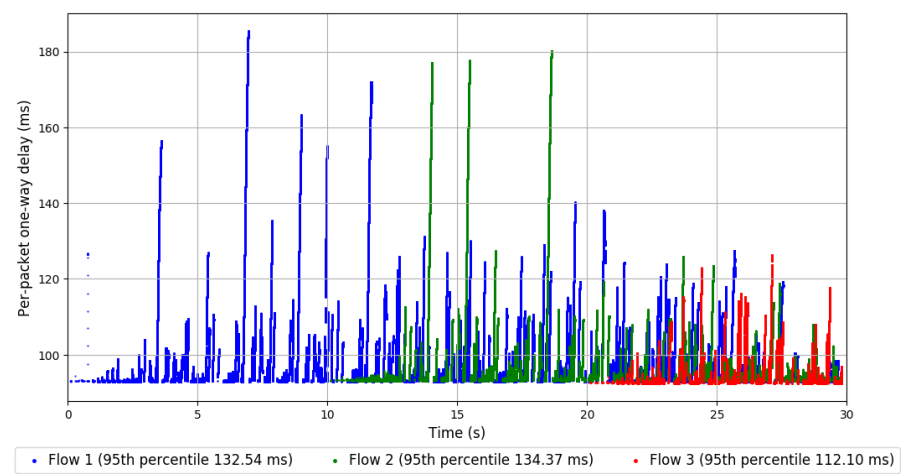
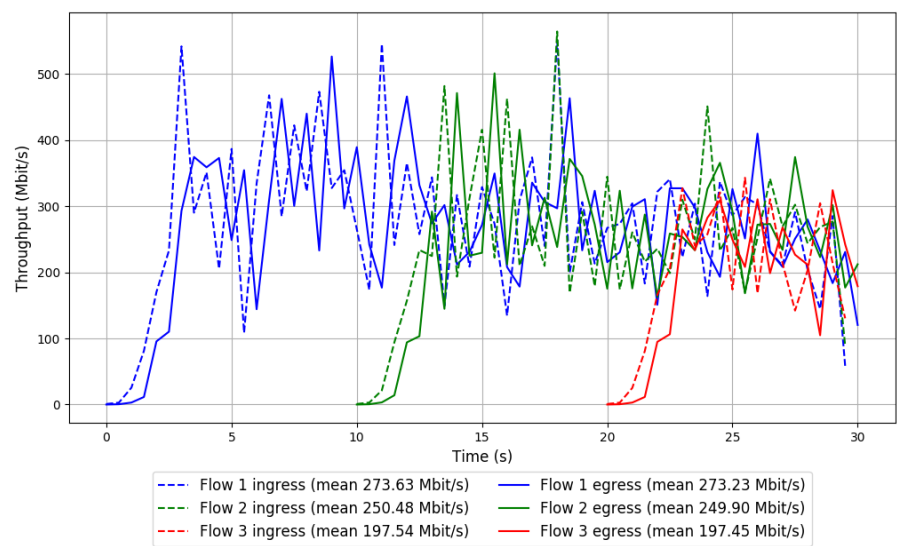


Run 1: Statistics of Indigo-96d2da3

Start at: 2018-10-09 21:55:39  
End at: 2018-10-09 21:56:09  
Local clock offset: 0.503 ms  
Remote clock offset: -0.614 ms

# Below is generated by plot.py at 2018-10-10 01:14:05  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 502.89 Mbit/s  
95th percentile per-packet one-way delay: 127.662 ms  
Loss rate: 0.16%  
-- Flow 1:  
Average throughput: 273.23 Mbit/s  
95th percentile per-packet one-way delay: 132.537 ms  
Loss rate: 0.15%  
-- Flow 2:  
Average throughput: 249.90 Mbit/s  
95th percentile per-packet one-way delay: 134.374 ms  
Loss rate: 0.23%  
-- Flow 3:  
Average throughput: 197.45 Mbit/s  
95th percentile per-packet one-way delay: 112.100 ms  
Loss rate: 0.04%

Run 1: Report of Indigo-96d2da3 — Data Link

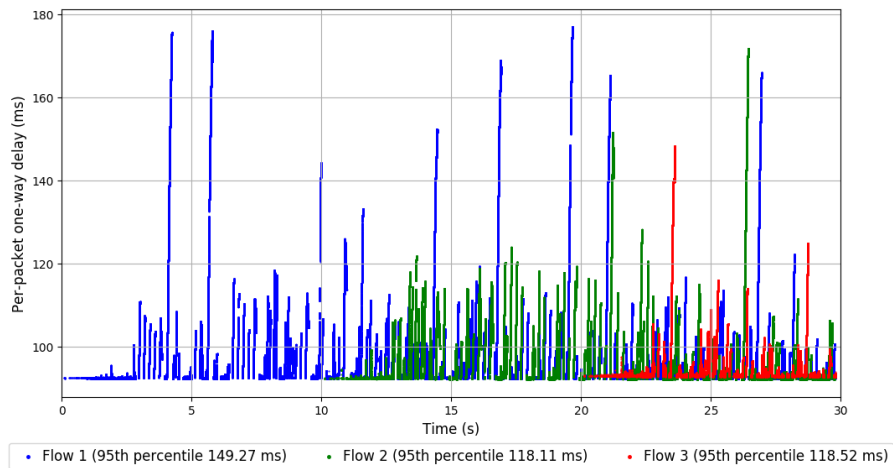
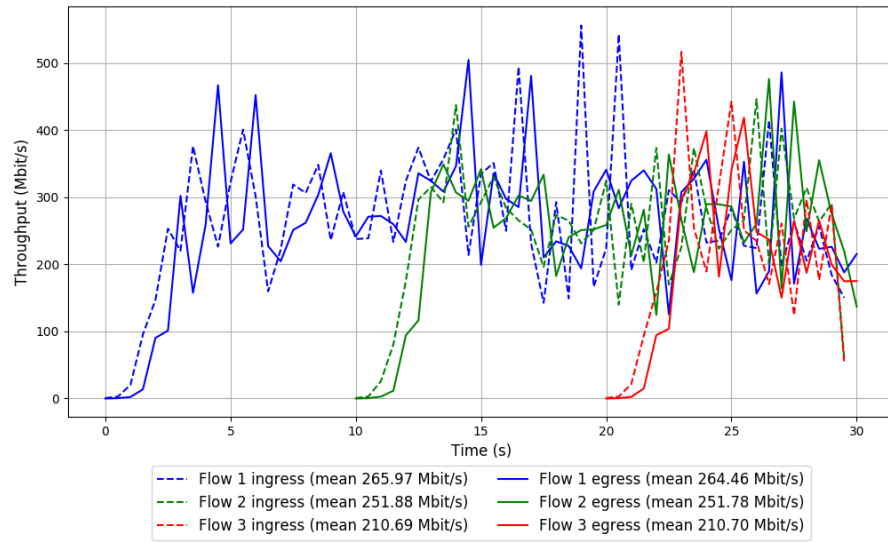


Run 2: Statistics of Indigo-96d2da3

Start at: 2018-10-09 22:27:26  
End at: 2018-10-09 22:27:56  
Local clock offset: 0.841 ms  
Remote clock offset: -0.915 ms

# Below is generated by plot.py at 2018-10-10 01:14:05  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 499.75 Mbit/s  
95th percentile per-packet one-way delay: 137.126 ms  
Loss rate: 0.31%  
-- Flow 1:  
Average throughput: 264.46 Mbit/s  
95th percentile per-packet one-way delay: 149.274 ms  
Loss rate: 0.57%  
-- Flow 2:  
Average throughput: 251.78 Mbit/s  
95th percentile per-packet one-way delay: 118.109 ms  
Loss rate: 0.04%  
-- Flow 3:  
Average throughput: 210.70 Mbit/s  
95th percentile per-packet one-way delay: 118.521 ms  
Loss rate: 0.00%

## Run 2: Report of Indigo-96d2da3 — Data Link



Run 3: Statistics of Indigo-96d2da3

Start at: 2018-10-09 22:58:56

End at: 2018-10-09 22:59:26

Local clock offset: -0.102 ms

Remote clock offset: 0.084 ms

# Below is generated by plot.py at 2018-10-10 01:16:09

# Datalink statistics

-- Total of 3 flows:

Average throughput: 483.74 Mbit/s

95th percentile per-packet one-way delay: 121.499 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 265.13 Mbit/s

95th percentile per-packet one-way delay: 122.536 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 236.29 Mbit/s

95th percentile per-packet one-way delay: 122.207 ms

Loss rate: 0.12%

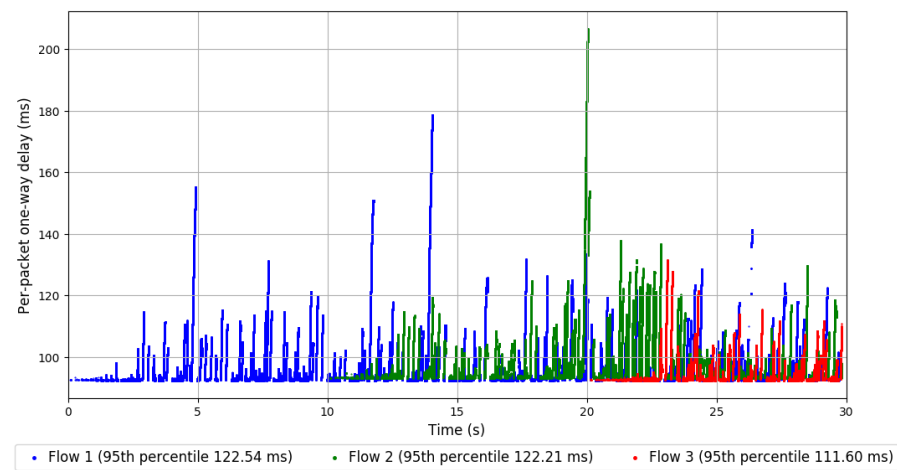
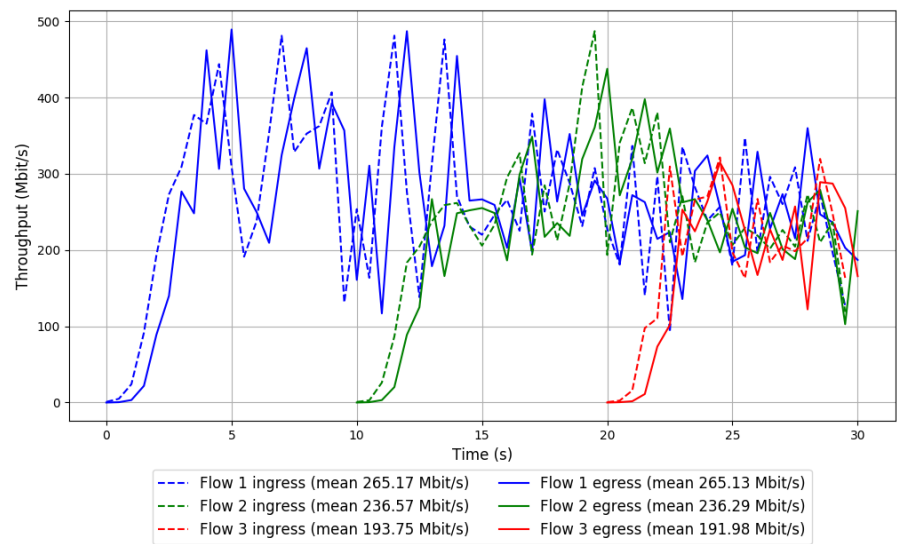
-- Flow 3:

Average throughput: 191.98 Mbit/s

95th percentile per-packet one-way delay: 111.604 ms

Loss rate: 0.91%

Run 3: Report of Indigo-96d2da3 — Data Link



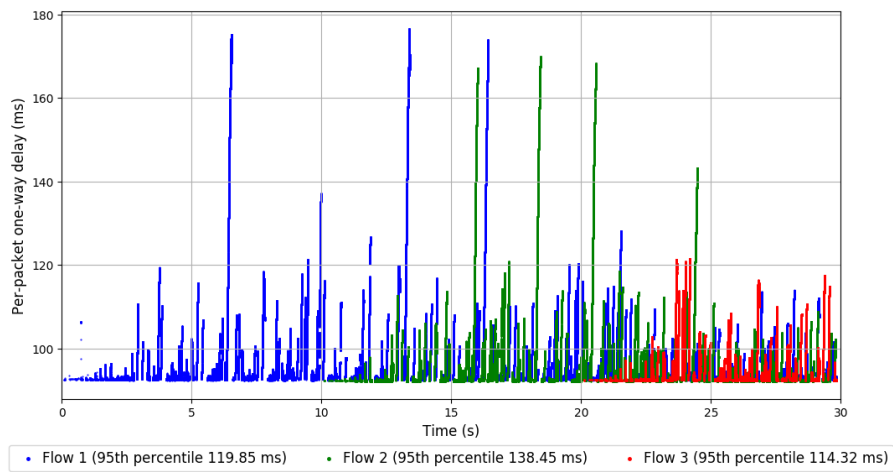
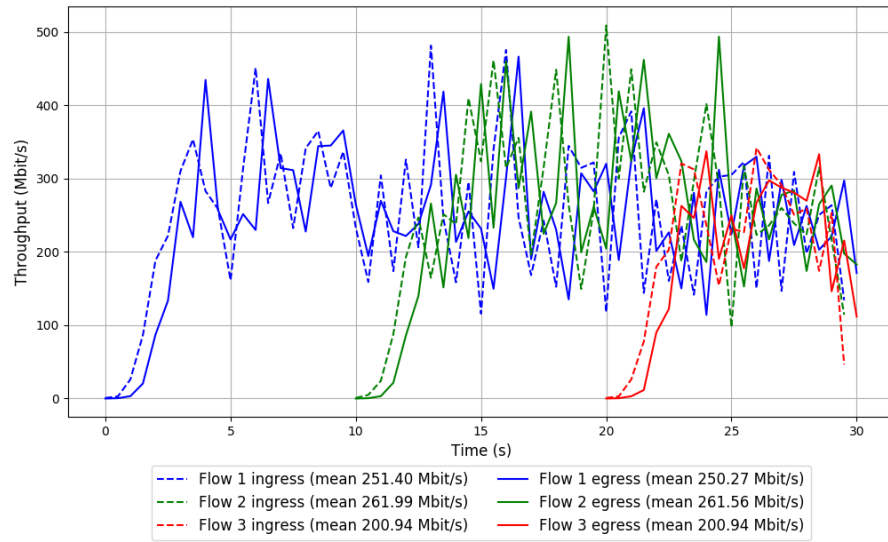


Run 4: Statistics of Indigo-96d2da3

Start at: 2018-10-09 23:30:37  
End at: 2018-10-09 23:31:07  
Local clock offset: 0.086 ms  
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2018-10-10 01:16:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 489.21 Mbit/s  
95th percentile per-packet one-way delay: 121.187 ms  
Loss rate: 0.27%  
-- Flow 1:  
Average throughput: 250.27 Mbit/s  
95th percentile per-packet one-way delay: 119.852 ms  
Loss rate: 0.44%  
-- Flow 2:  
Average throughput: 261.56 Mbit/s  
95th percentile per-packet one-way delay: 138.454 ms  
Loss rate: 0.13%  
-- Flow 3:  
Average throughput: 200.94 Mbit/s  
95th percentile per-packet one-way delay: 114.316 ms  
Loss rate: 0.00%

#### Run 4: Report of Indigo-96d2da3 — Data Link

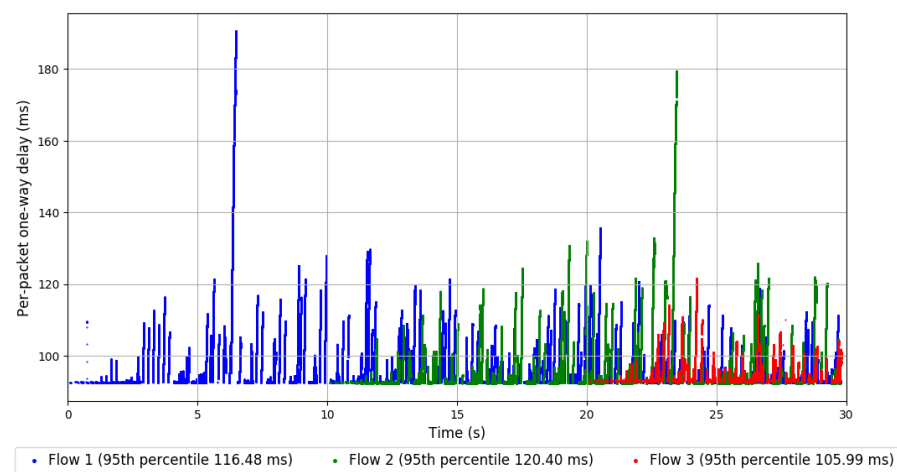
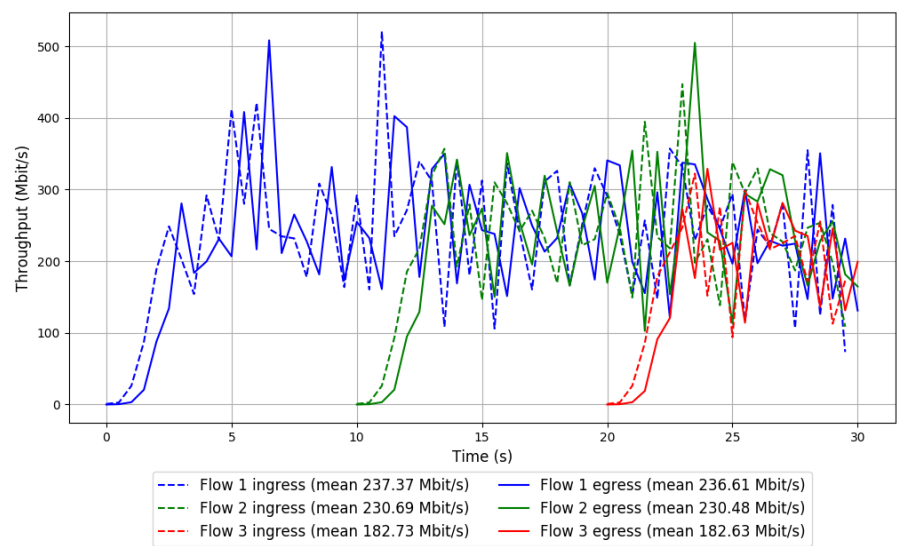


Run 5: Statistics of Indigo-96d2da3

Start at: 2018-10-10 00:02:20  
End at: 2018-10-10 00:02:50  
Local clock offset: -0.095 ms  
Remote clock offset: -0.077 ms

# Below is generated by plot.py at 2018-10-10 01:17:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 448.46 Mbit/s  
95th percentile per-packet one-way delay: 117.761 ms  
Loss rate: 0.20%  
-- Flow 1:  
Average throughput: 236.61 Mbit/s  
95th percentile per-packet one-way delay: 116.483 ms  
Loss rate: 0.32%  
-- Flow 2:  
Average throughput: 230.48 Mbit/s  
95th percentile per-packet one-way delay: 120.396 ms  
Loss rate: 0.09%  
-- Flow 3:  
Average throughput: 182.63 Mbit/s  
95th percentile per-packet one-way delay: 105.988 ms  
Loss rate: 0.00%

Run 5: Report of Indigo-96d2da3 — Data Link

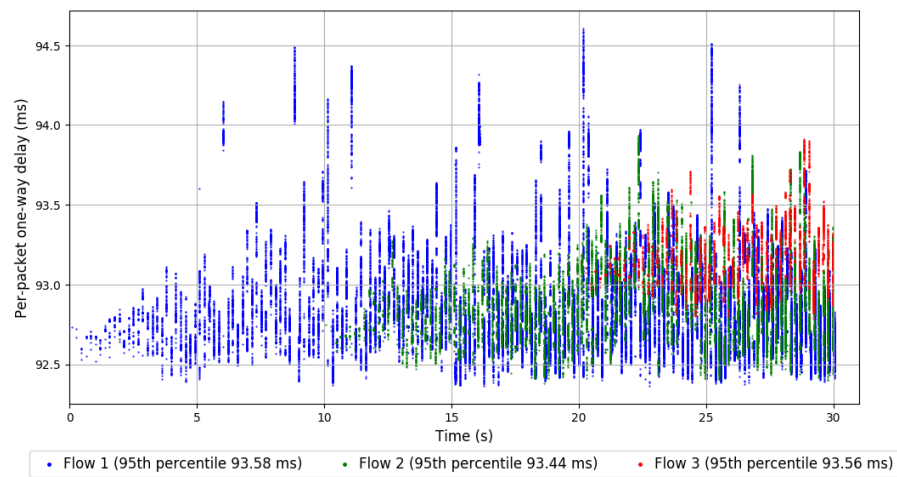
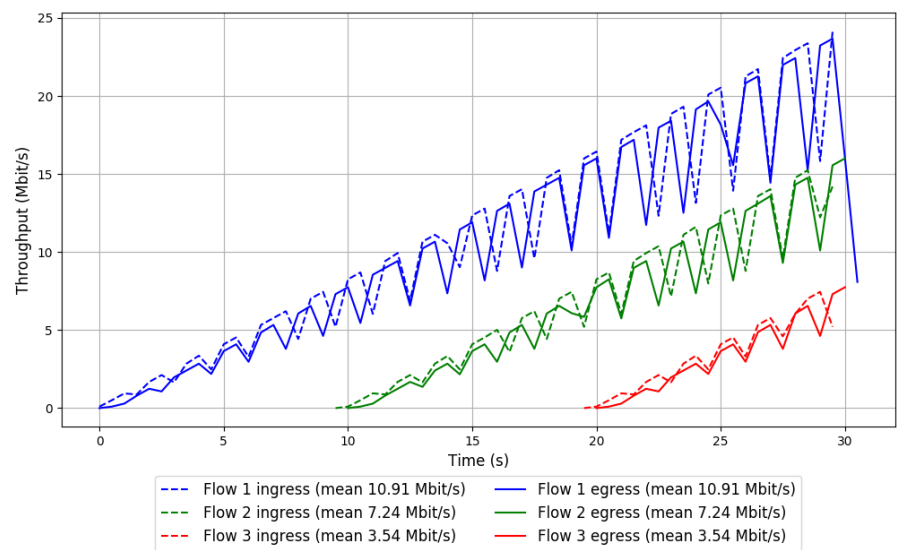


```
Run 1: Statistics of LEDBAT

Start at: 2018-10-09 21:29:53
End at: 2018-10-09 21:30:23
Local clock offset: 0.521 ms
Remote clock offset: 0.741 ms

# Below is generated by plot.py at 2018-10-10 01:17:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.89 Mbit/s
95th percentile per-packet one-way delay: 93.525 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 10.91 Mbit/s
95th percentile per-packet one-way delay: 93.579 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.24 Mbit/s
95th percentile per-packet one-way delay: 93.435 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.54 Mbit/s
95th percentile per-packet one-way delay: 93.559 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-10-09 22:01:42

End at: 2018-10-09 22:02:12

Local clock offset: 0.583 ms

Remote clock offset: -0.73 ms

# Below is generated by plot.py at 2018-10-10 01:17:13

# Datalink statistics

-- Total of 3 flows:

Average throughput: 16.89 Mbit/s

95th percentile per-packet one-way delay: 93.692 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 10.91 Mbit/s

95th percentile per-packet one-way delay: 93.698 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.23 Mbit/s

95th percentile per-packet one-way delay: 93.543 ms

Loss rate: 0.00%

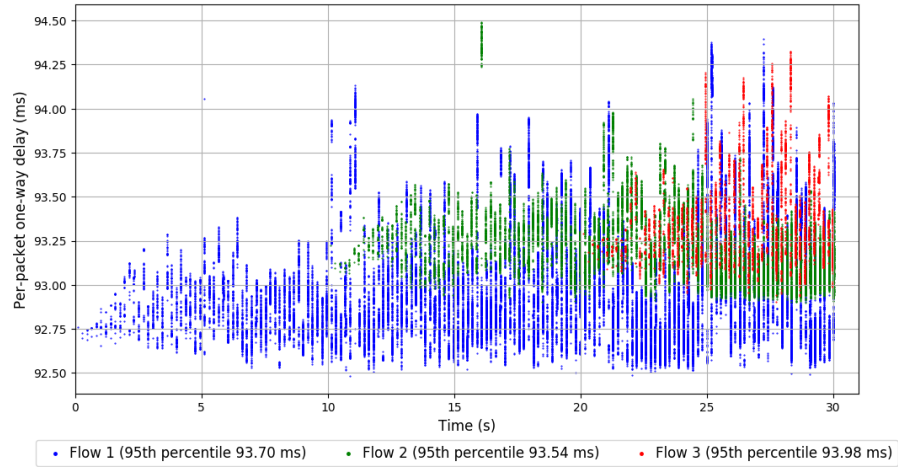
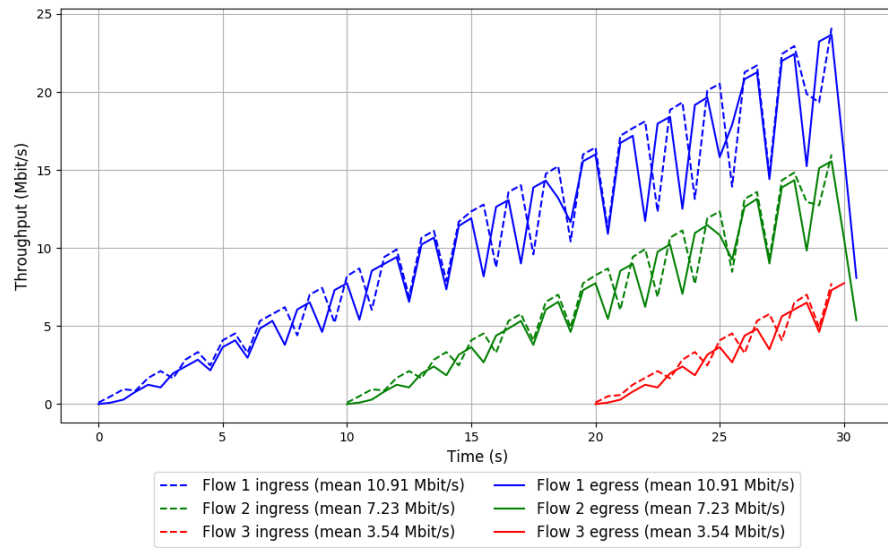
-- Flow 3:

Average throughput: 3.54 Mbit/s

95th percentile per-packet one-way delay: 93.980 ms

Loss rate: 0.00%

## Run 2: Report of LEDBAT — Data Link



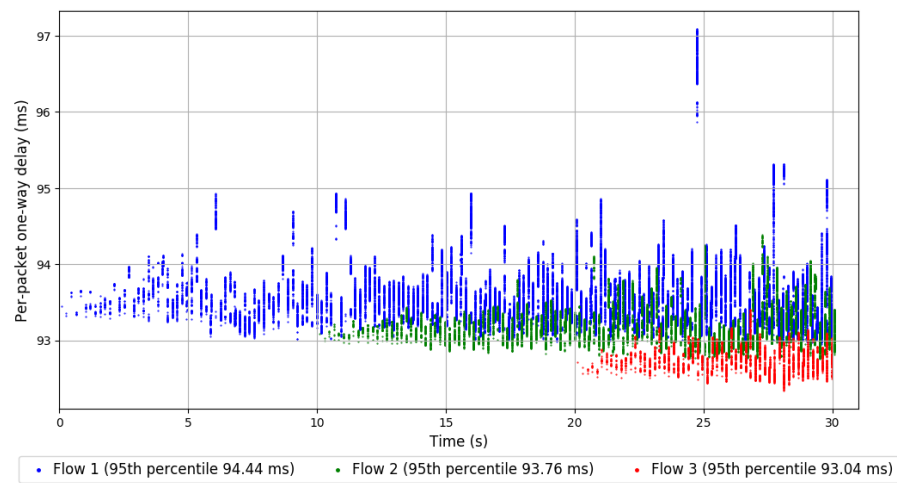
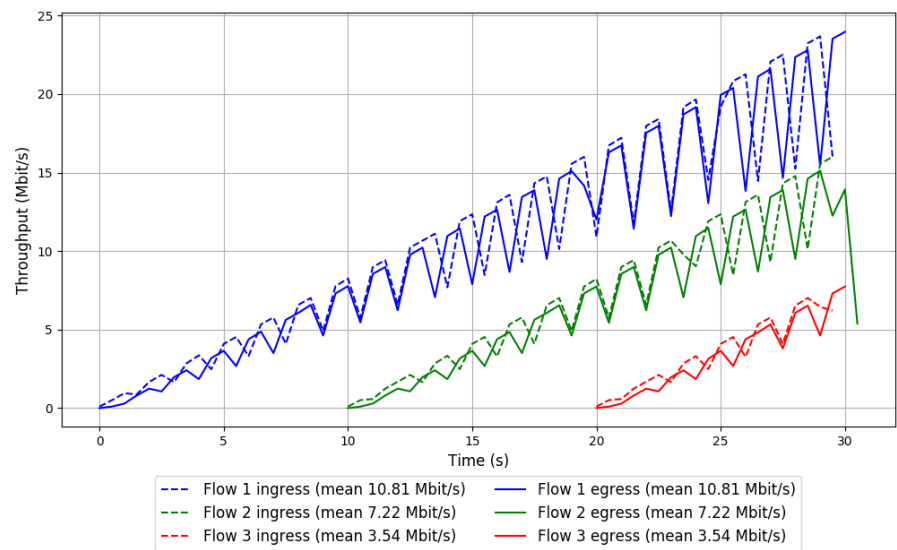


Run 3: Statistics of LEDBAT

Start at: 2018-10-09 22:33:29  
End at: 2018-10-09 22:33:59  
Local clock offset: 0.365 ms  
Remote clock offset: -0.493 ms

# Below is generated by plot.py at 2018-10-10 01:17:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 16.74 Mbit/s  
95th percentile per-packet one-way delay: 94.169 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 10.81 Mbit/s  
95th percentile per-packet one-way delay: 94.440 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 7.22 Mbit/s  
95th percentile per-packet one-way delay: 93.763 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 3.54 Mbit/s  
95th percentile per-packet one-way delay: 93.038 ms  
Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-10-09 23:04:58

End at: 2018-10-09 23:05:28

Local clock offset: -0.216 ms

Remote clock offset: 0.026 ms

# Below is generated by plot.py at 2018-10-10 01:17:13

# Datalink statistics

-- Total of 3 flows:

Average throughput: 16.76 Mbit/s

95th percentile per-packet one-way delay: 94.074 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 10.79 Mbit/s

95th percentile per-packet one-way delay: 94.192 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.24 Mbit/s

95th percentile per-packet one-way delay: 93.764 ms

Loss rate: 0.00%

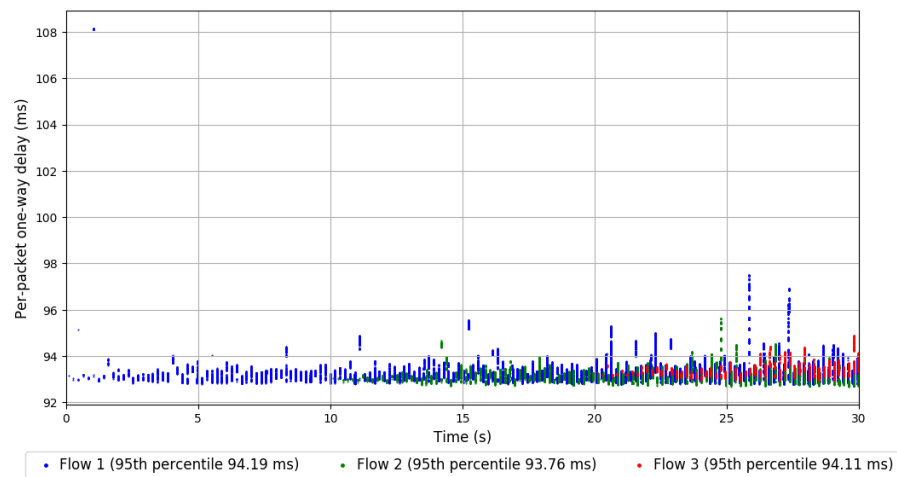
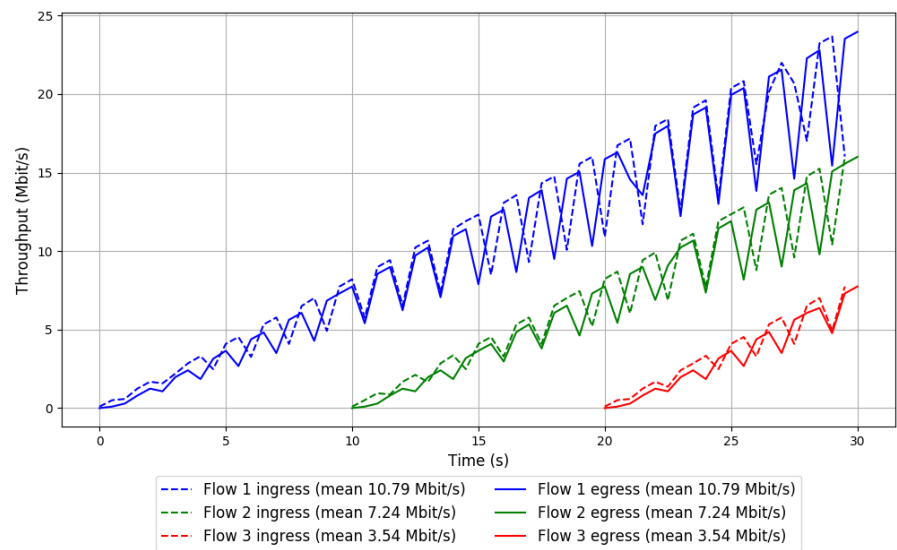
-- Flow 3:

Average throughput: 3.54 Mbit/s

95th percentile per-packet one-way delay: 94.105 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-10-09 23:36:40

End at: 2018-10-09 23:37:10

Local clock offset: -0.173 ms

Remote clock offset: -0.01 ms

# Below is generated by plot.py at 2018-10-10 01:17:13

# Datalink statistics

-- Total of 3 flows:

Average throughput: 16.87 Mbit/s

95th percentile per-packet one-way delay: 93.629 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 10.92 Mbit/s

95th percentile per-packet one-way delay: 93.491 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.18 Mbit/s

95th percentile per-packet one-way delay: 93.922 ms

Loss rate: 0.00%

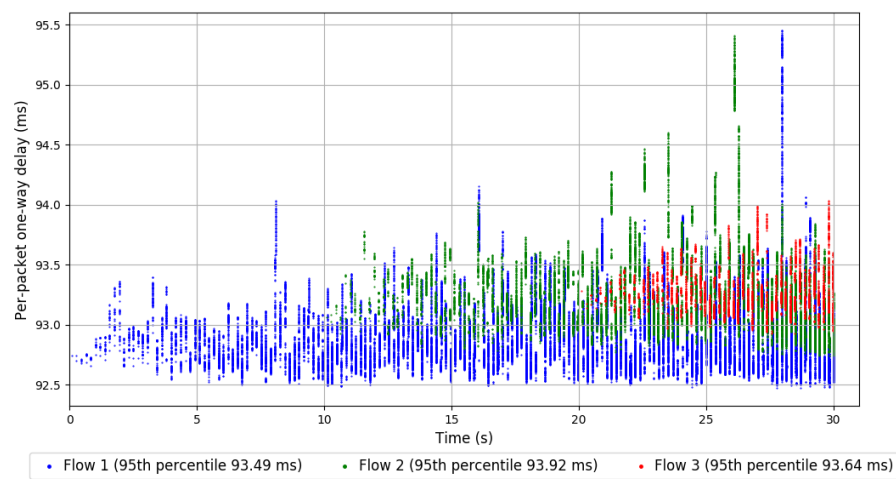
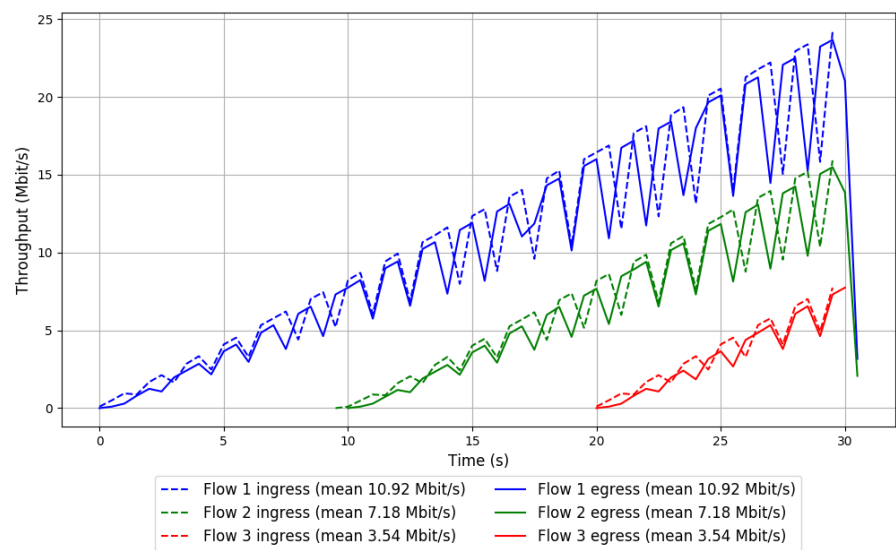
-- Flow 3:

Average throughput: 3.54 Mbit/s

95th percentile per-packet one-way delay: 93.636 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link

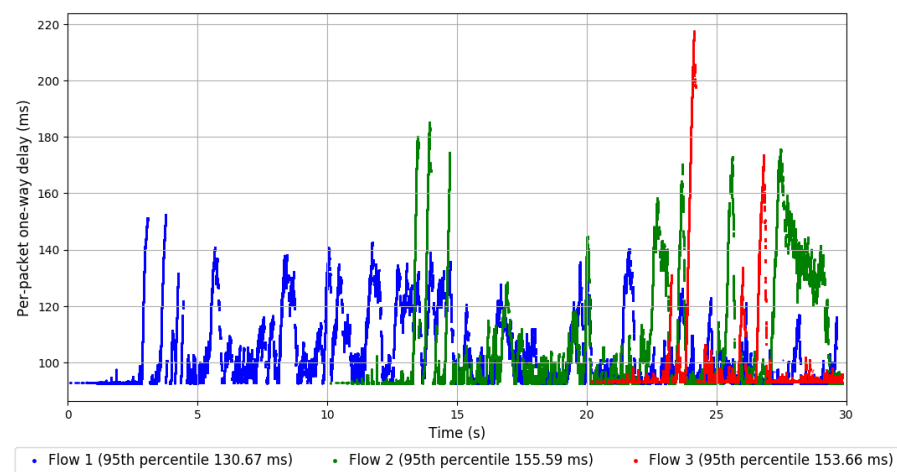
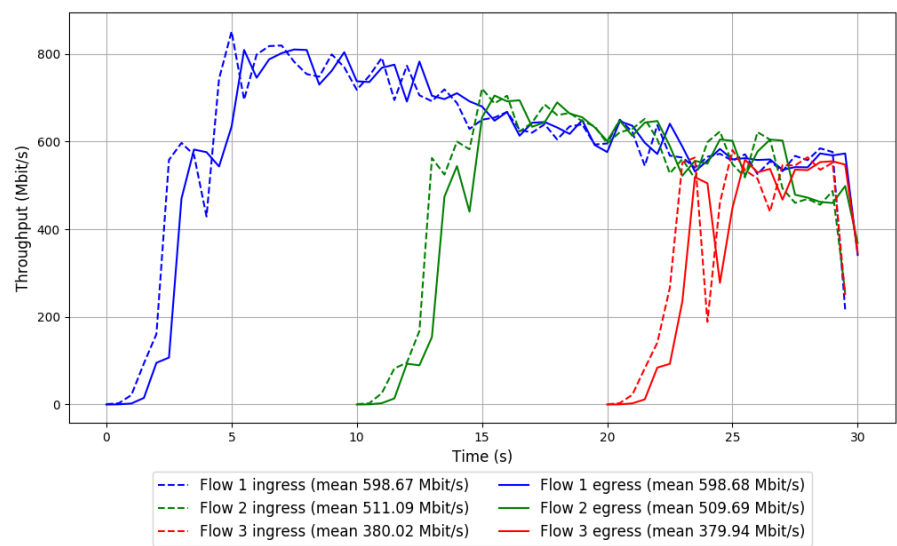


```
Run 1: Statistics of Indigo-Muses

Start at: 2018-10-09 21:41:24
End at: 2018-10-09 21:41:54
Local clock offset: 0.21 ms
Remote clock offset: -0.175 ms

# Below is generated by plot.py at 2018-10-10 01:29:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1060.09 Mbit/s
95th percentile per-packet one-way delay: 139.095 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 598.68 Mbit/s
95th percentile per-packet one-way delay: 130.670 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 509.69 Mbit/s
95th percentile per-packet one-way delay: 155.586 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 379.94 Mbit/s
95th percentile per-packet one-way delay: 153.662 ms
Loss rate: 0.03%
```

Run 1: Report of Indigo-Muses — Data Link



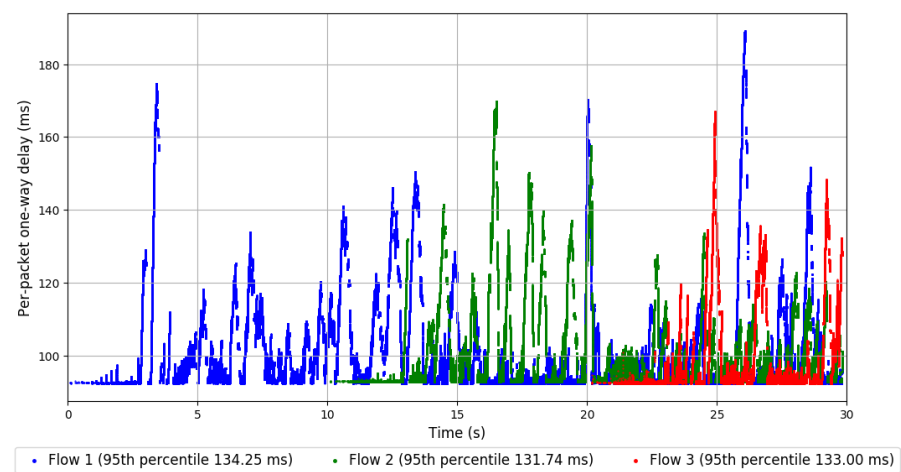
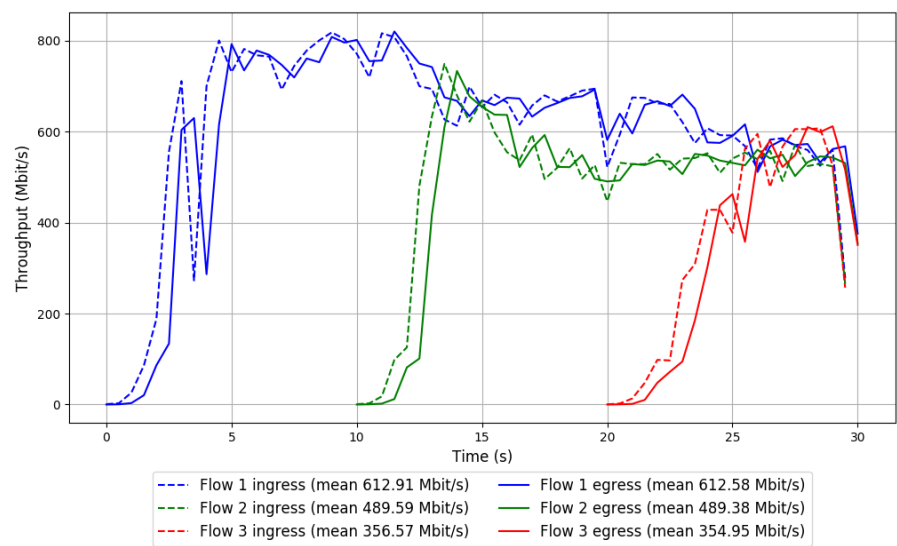


Run 2: Statistics of Indigo-Muses

Start at: 2018-10-09 22:13:02  
End at: 2018-10-09 22:13:32  
Local clock offset: 0.784 ms  
Remote clock offset: -0.958 ms

# Below is generated by plot.py at 2018-10-10 01:30:01  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1052.40 Mbit/s  
95th percentile per-packet one-way delay: 133.194 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 612.58 Mbit/s  
95th percentile per-packet one-way delay: 134.248 ms  
Loss rate: 0.05%  
-- Flow 2:  
Average throughput: 489.38 Mbit/s  
95th percentile per-packet one-way delay: 131.742 ms  
Loss rate: 0.05%  
-- Flow 3:  
Average throughput: 354.95 Mbit/s  
95th percentile per-packet one-way delay: 132.997 ms  
Loss rate: 0.41%

Run 2: Report of Indigo-Muses — Data Link

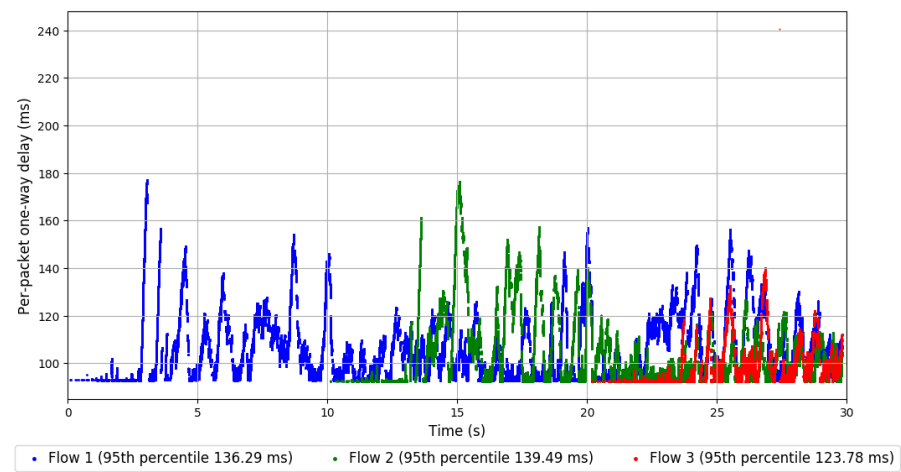
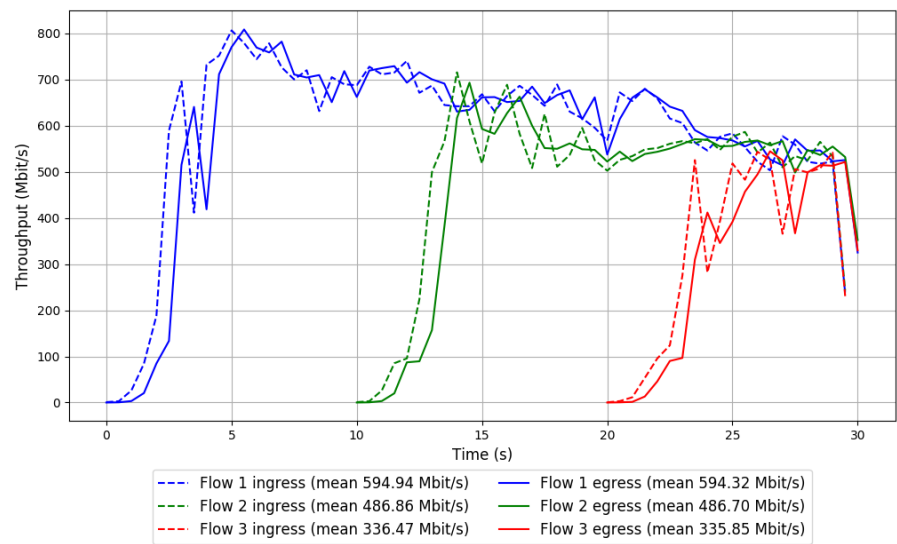


### Run 3: Statistics of Indigo-Muses

Start at: 2018-10-09 22:44:52  
End at: 2018-10-09 22:45:22  
Local clock offset: -0.014 ms  
Remote clock offset: -0.095 ms

```
# Below is generated by plot.py at 2018-10-10 01:30:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1026.01 Mbit/s
95th percentile per-packet one-way delay: 136.128 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 594.32 Mbit/s
95th percentile per-packet one-way delay: 136.289 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 486.70 Mbit/s
95th percentile per-packet one-way delay: 139.489 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 335.85 Mbit/s
95th percentile per-packet one-way delay: 123.777 ms
Loss rate: 0.18%
```

Run 3: Report of Indigo-Muses — Data Link

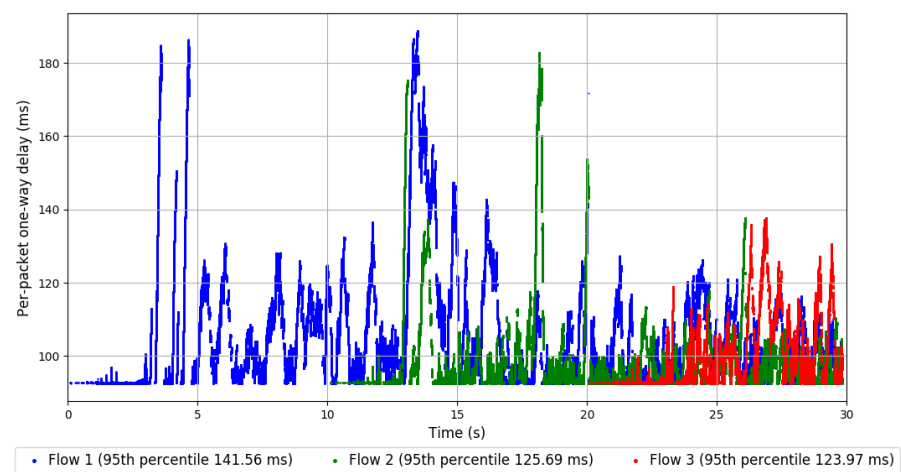
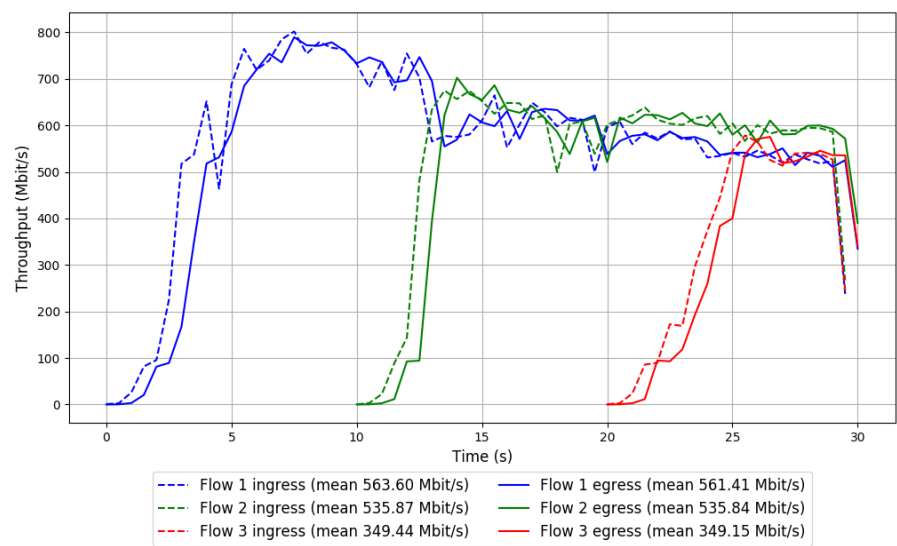


Run 4: Statistics of Indigo-Muses

Start at: 2018-10-09 23:16:22  
End at: 2018-10-09 23:16:52  
Local clock offset: -0.101 ms  
Remote clock offset: -0.024 ms

# Below is generated by plot.py at 2018-10-10 01:30:01  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1030.40 Mbit/s  
95th percentile per-packet one-way delay: 131.571 ms  
Loss rate: 0.22%  
-- Flow 1:  
Average throughput: 561.41 Mbit/s  
95th percentile per-packet one-way delay: 141.561 ms  
Loss rate: 0.38%  
-- Flow 2:  
Average throughput: 535.84 Mbit/s  
95th percentile per-packet one-way delay: 125.691 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 349.15 Mbit/s  
95th percentile per-packet one-way delay: 123.968 ms  
Loss rate: 0.08%

Run 4: Report of Indigo-Muses — Data Link

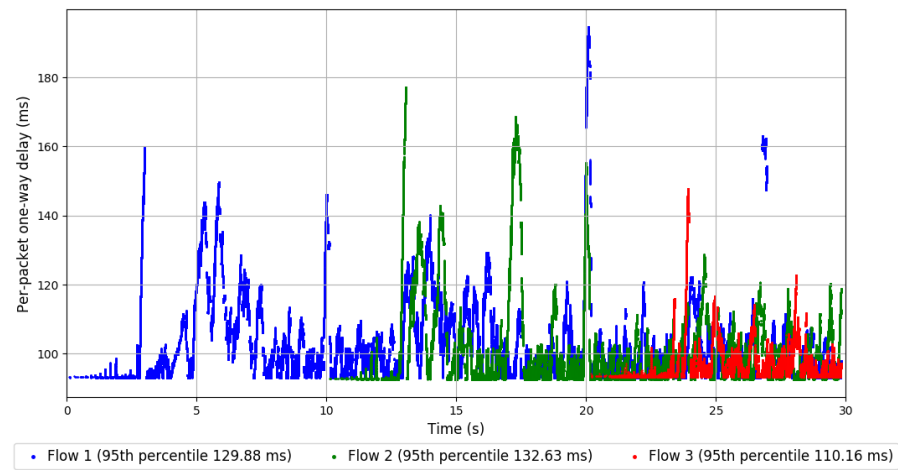
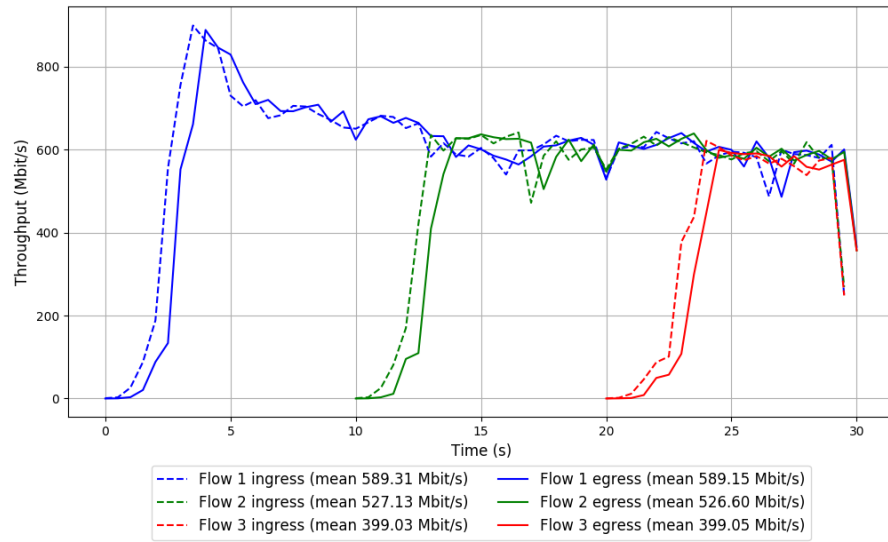


Run 5: Statistics of Indigo-Muses

Start at: 2018-10-09 23:48:12  
End at: 2018-10-09 23:48:42  
Local clock offset: -0.261 ms  
Remote clock offset: -0.052 ms

# Below is generated by plot.py at 2018-10-10 01:32:01  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1067.17 Mbit/s  
95th percentile per-packet one-way delay: 129.153 ms  
Loss rate: 0.05%  
-- Flow 1:  
Average throughput: 589.15 Mbit/s  
95th percentile per-packet one-way delay: 129.877 ms  
Loss rate: 0.03%  
-- Flow 2:  
Average throughput: 526.60 Mbit/s  
95th percentile per-packet one-way delay: 132.629 ms  
Loss rate: 0.09%  
-- Flow 3:  
Average throughput: 399.05 Mbit/s  
95th percentile per-packet one-way delay: 110.157 ms  
Loss rate: 0.04%

## Run 5: Report of Indigo-Muses — Data Link





Run 1: Statistics of PCC-Allegro

Start at: 2018-10-09 21:51:42

End at: 2018-10-09 21:52:12

Local clock offset: 0.466 ms

Remote clock offset: -0.54 ms

# Below is generated by plot.py at 2018-10-10 01:37:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 662.10 Mbit/s

95th percentile per-packet one-way delay: 225.135 ms

Loss rate: 3.94%

-- Flow 1:

Average throughput: 400.19 Mbit/s

95th percentile per-packet one-way delay: 230.178 ms

Loss rate: 5.34%

-- Flow 2:

Average throughput: 280.66 Mbit/s

95th percentile per-packet one-way delay: 138.755 ms

Loss rate: 1.02%

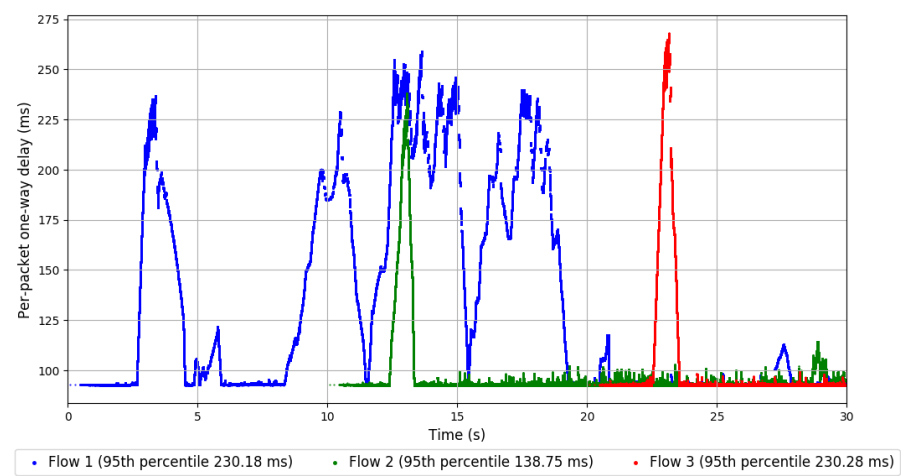
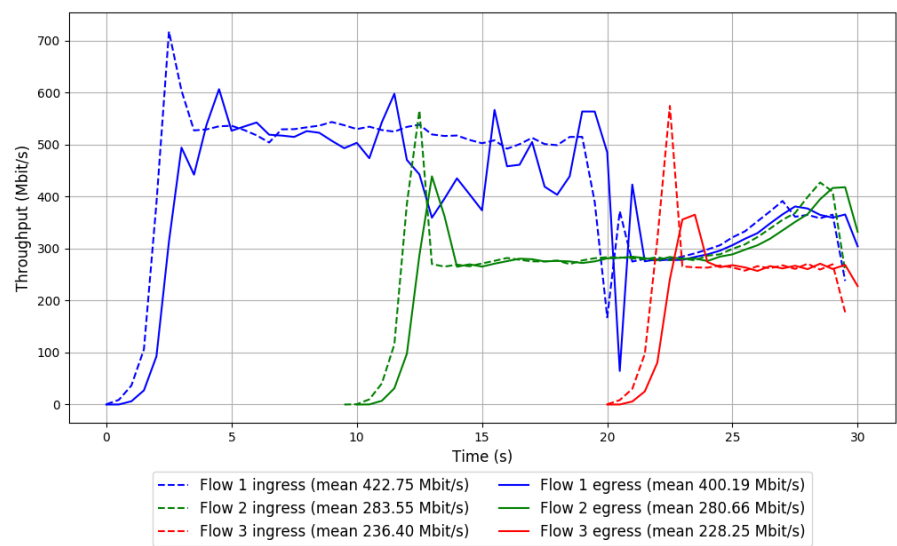
-- Flow 3:

Average throughput: 228.25 Mbit/s

95th percentile per-packet one-way delay: 230.282 ms

Loss rate: 3.45%

Run 1: Report of PCC-Allegro — Data Link

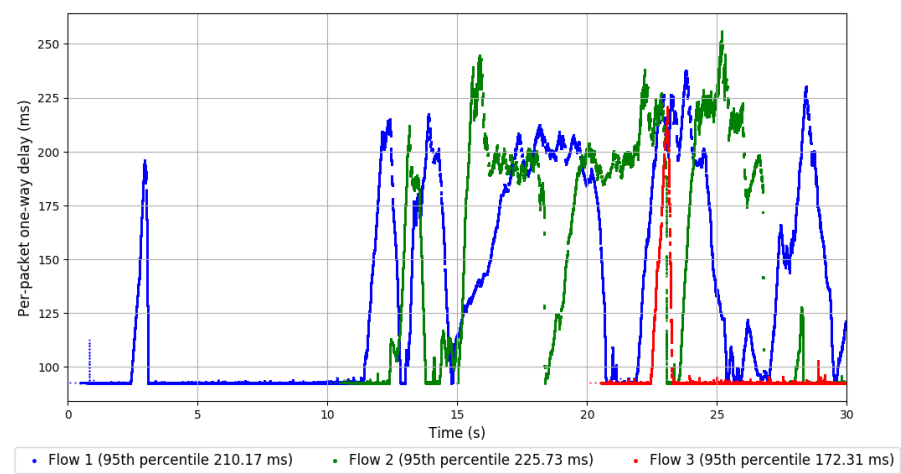
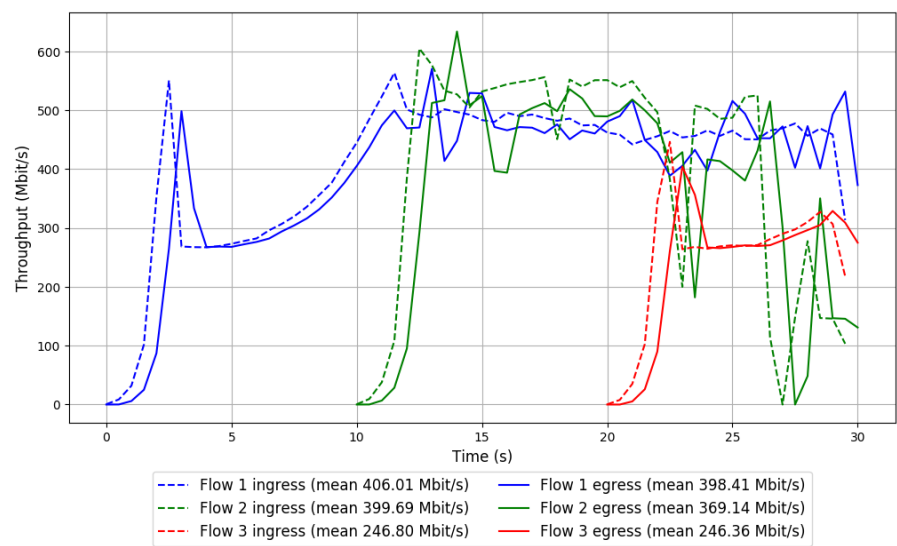


Run 2: Statistics of PCC-Allegro

Start at: 2018-10-09 22:23:22  
End at: 2018-10-09 22:23:52  
Local clock offset: 0.892 ms  
Remote clock offset: -1.134 ms

# Below is generated by plot.py at 2018-10-10 01:39:35  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 724.79 Mbit/s  
95th percentile per-packet one-way delay: 218.669 ms  
Loss rate: 3.72%  
-- Flow 1:  
Average throughput: 398.41 Mbit/s  
95th percentile per-packet one-way delay: 210.171 ms  
Loss rate: 1.87%  
-- Flow 2:  
Average throughput: 369.14 Mbit/s  
95th percentile per-packet one-way delay: 225.730 ms  
Loss rate: 7.64%  
-- Flow 3:  
Average throughput: 246.36 Mbit/s  
95th percentile per-packet one-way delay: 172.314 ms  
Loss rate: 0.18%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2018-10-09 22:54:59

End at: 2018-10-09 22:55:29

Local clock offset: -0.098 ms

Remote clock offset: 0.016 ms

# Below is generated by plot.py at 2018-10-10 01:40:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 734.08 Mbit/s

95th percentile per-packet one-way delay: 199.225 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 442.42 Mbit/s

95th percentile per-packet one-way delay: 200.090 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 316.83 Mbit/s

95th percentile per-packet one-way delay: 125.050 ms

Loss rate: 0.50%

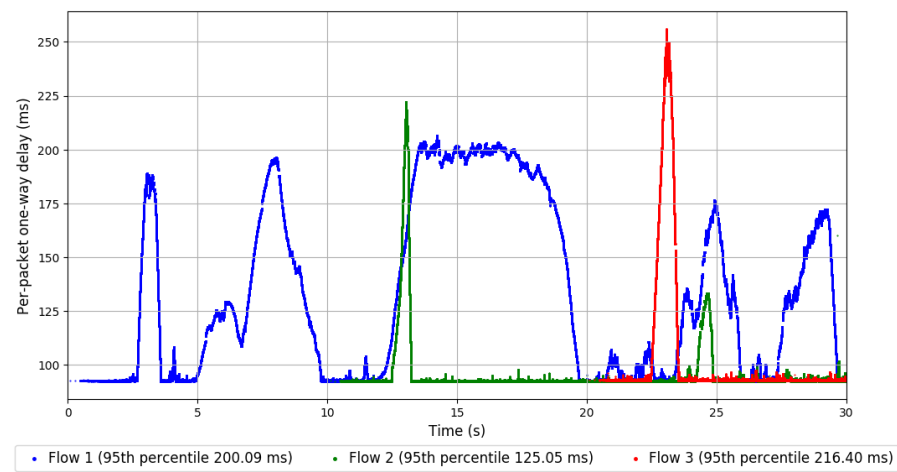
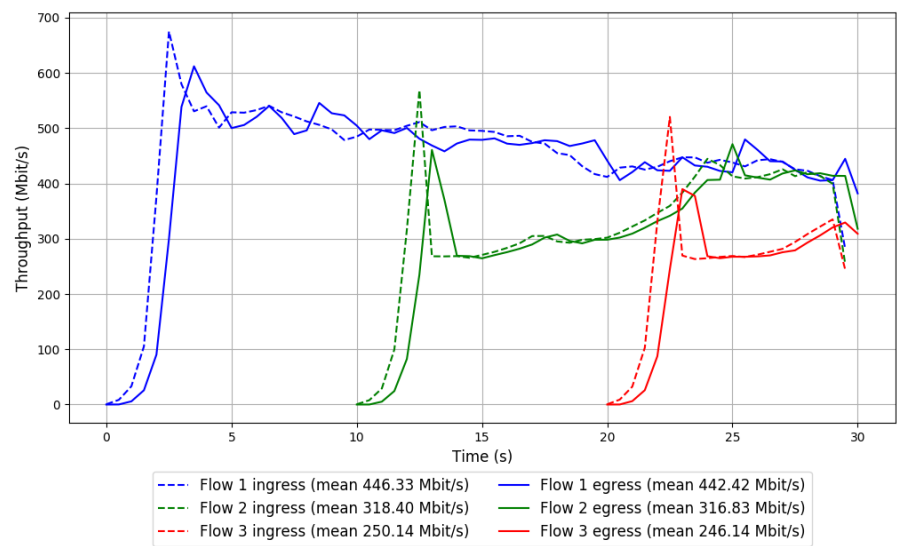
-- Flow 3:

Average throughput: 246.14 Mbit/s

95th percentile per-packet one-way delay: 216.402 ms

Loss rate: 1.60%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2018-10-09 23:26:36

End at: 2018-10-09 23:27:06

Local clock offset: -0.157 ms

Remote clock offset: 0.006 ms

# Below is generated by plot.py at 2018-10-10 01:55:51

# Datalink statistics

-- Total of 3 flows:

Average throughput: 751.42 Mbit/s

95th percentile per-packet one-way delay: 227.246 ms

Loss rate: 4.88%

-- Flow 1:

Average throughput: 411.70 Mbit/s

95th percentile per-packet one-way delay: 229.308 ms

Loss rate: 6.40%

-- Flow 2:

Average throughput: 388.69 Mbit/s

95th percentile per-packet one-way delay: 214.798 ms

Loss rate: 3.86%

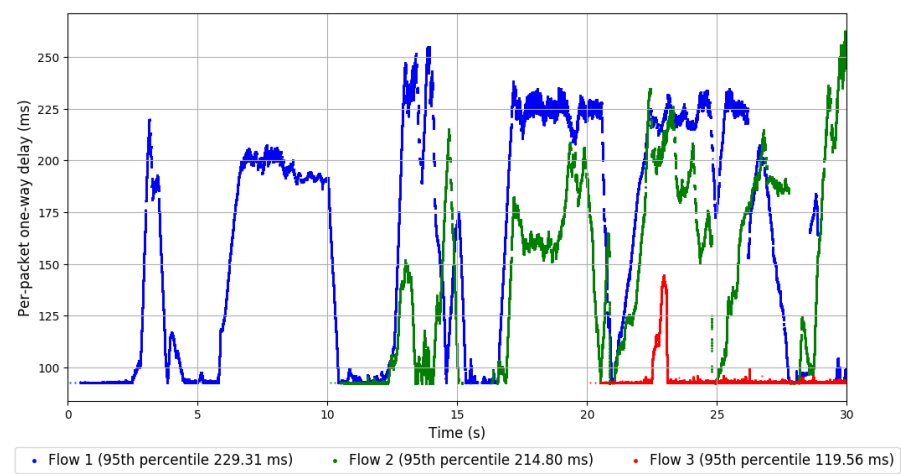
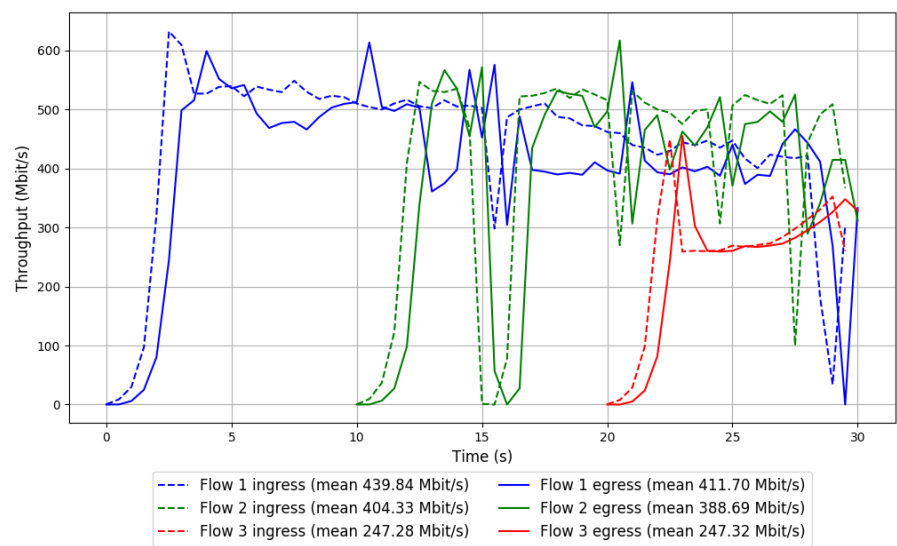
-- Flow 3:

Average throughput: 247.32 Mbit/s

95th percentile per-packet one-way delay: 119.564 ms

Loss rate: 0.00%

Run 4: Report of PCC-Allegro — Data Link



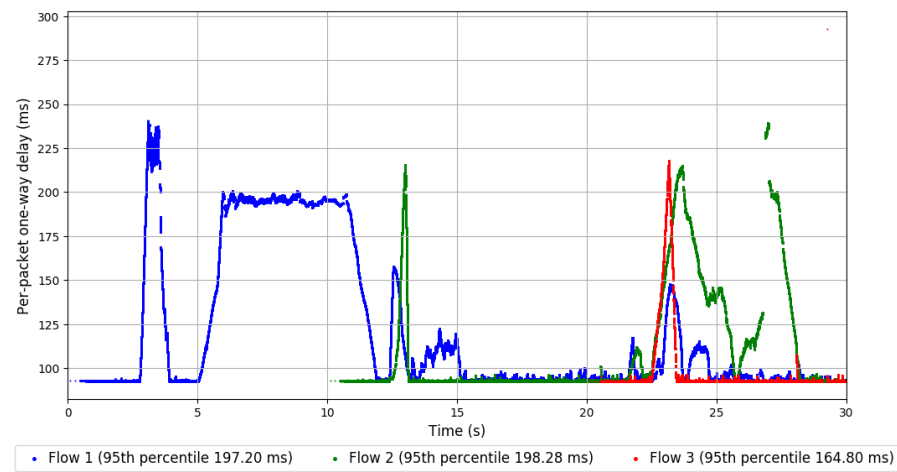
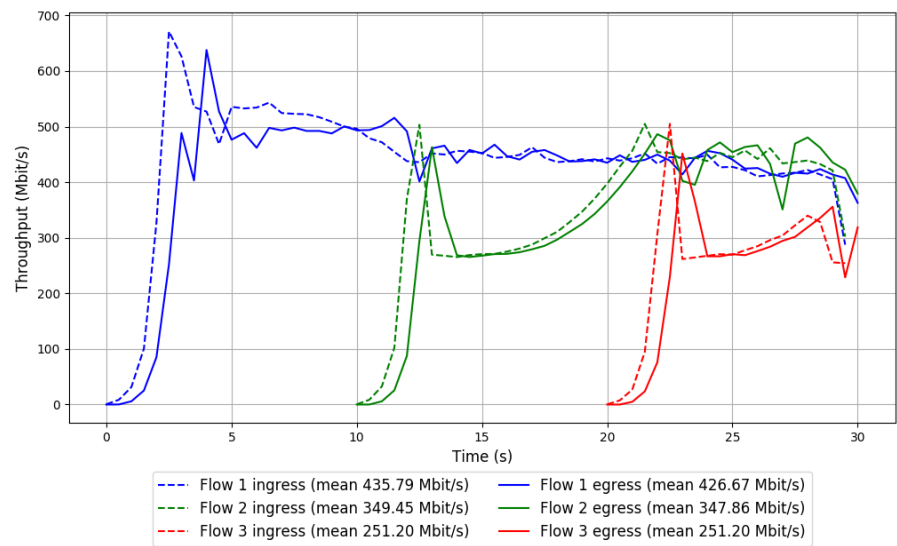


Run 5: Statistics of PCC-Allegro

Start at: 2018-10-09 23:58:20  
End at: 2018-10-09 23:58:50  
Local clock offset: -0.154 ms  
Remote clock offset: -0.068 ms

# Below is generated by plot.py at 2018-10-10 01:55:51  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 740.50 Mbit/s  
95th percentile per-packet one-way delay: 197.094 ms  
Loss rate: 1.36%  
-- Flow 1:  
Average throughput: 426.67 Mbit/s  
95th percentile per-packet one-way delay: 197.202 ms  
Loss rate: 2.09%  
-- Flow 2:  
Average throughput: 347.86 Mbit/s  
95th percentile per-packet one-way delay: 198.279 ms  
Loss rate: 0.45%  
-- Flow 3:  
Average throughput: 251.20 Mbit/s  
95th percentile per-packet one-way delay: 164.801 ms  
Loss rate: 0.00%

Run 5: Report of PCC-Allegro — Data Link

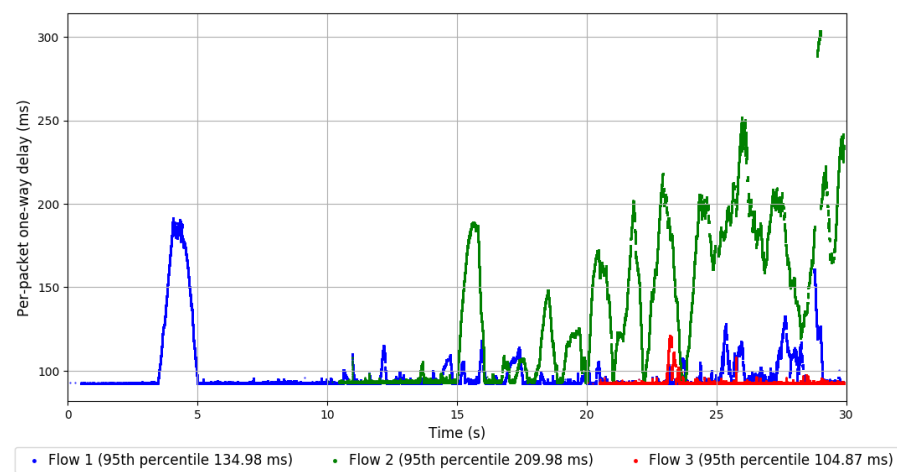
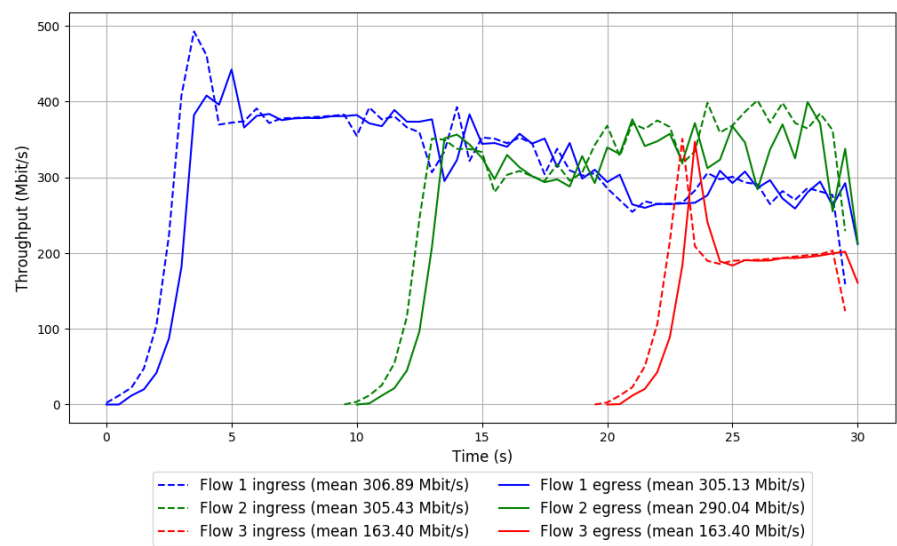


```
Run 1: Statistics of PCC-Expr

Start at: 2018-10-09 21:45:26
End at: 2018-10-09 21:45:56
Local clock offset: 0.439 ms
Remote clock offset: -0.353 ms

# Below is generated by plot.py at 2018-10-10 01:55:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 552.61 Mbit/s
95th percentile per-packet one-way delay: 194.852 ms
Loss rate: 2.13%
-- Flow 1:
Average throughput: 305.13 Mbit/s
95th percentile per-packet one-way delay: 134.977 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 290.04 Mbit/s
95th percentile per-packet one-way delay: 209.976 ms
Loss rate: 5.03%
-- Flow 3:
Average throughput: 163.40 Mbit/s
95th percentile per-packet one-way delay: 104.872 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

Start at: 2018-10-09 22:17:05

End at: 2018-10-09 22:17:35

Local clock offset: 0.799 ms

Remote clock offset: -1.0 ms

# Below is generated by plot.py at 2018-10-10 01:55:51

# Datalink statistics

-- Total of 3 flows:

Average throughput: 583.13 Mbit/s

95th percentile per-packet one-way delay: 211.774 ms

Loss rate: 4.08%

-- Flow 1:

Average throughput: 331.66 Mbit/s

95th percentile per-packet one-way delay: 202.970 ms

Loss rate: 3.14%

-- Flow 2:

Average throughput: 298.91 Mbit/s

95th percentile per-packet one-way delay: 223.615 ms

Loss rate: 6.61%

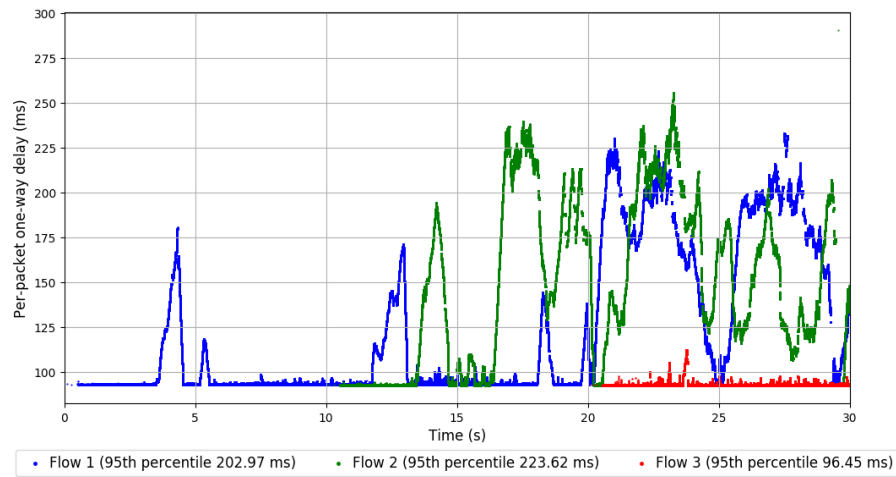
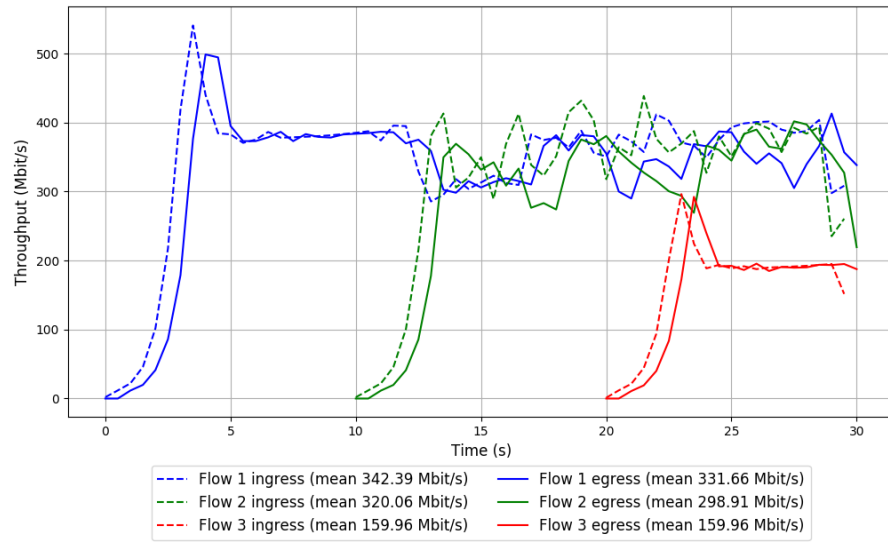
-- Flow 3:

Average throughput: 159.96 Mbit/s

95th percentile per-packet one-way delay: 96.452 ms

Loss rate: 0.01%

## Run 2: Report of PCC-Expr — Data Link

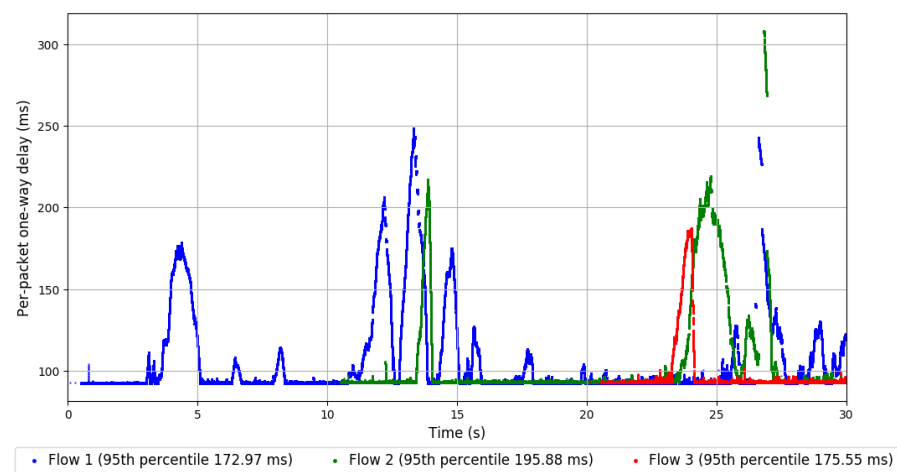
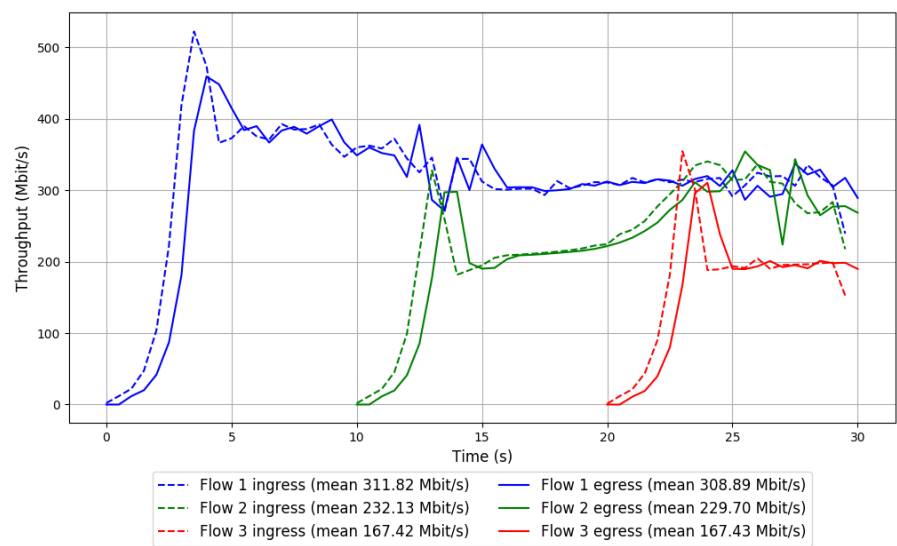


Run 3: Statistics of PCC-Expr

Start at: 2018-10-09 22:48:53  
End at: 2018-10-09 22:49:23  
Local clock offset: 0.029 ms  
Remote clock offset: -0.042 ms

# Below is generated by plot.py at 2018-10-10 01:55:51  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 516.84 Mbit/s  
95th percentile per-packet one-way delay: 180.144 ms  
Loss rate: 0.88%  
-- Flow 1:  
Average throughput: 308.89 Mbit/s  
95th percentile per-packet one-way delay: 172.967 ms  
Loss rate: 0.94%  
-- Flow 2:  
Average throughput: 229.70 Mbit/s  
95th percentile per-packet one-way delay: 195.883 ms  
Loss rate: 1.07%  
-- Flow 3:  
Average throughput: 167.43 Mbit/s  
95th percentile per-packet one-way delay: 175.553 ms  
Loss rate: 0.00%

Run 3: Report of PCC-Expr — Data Link



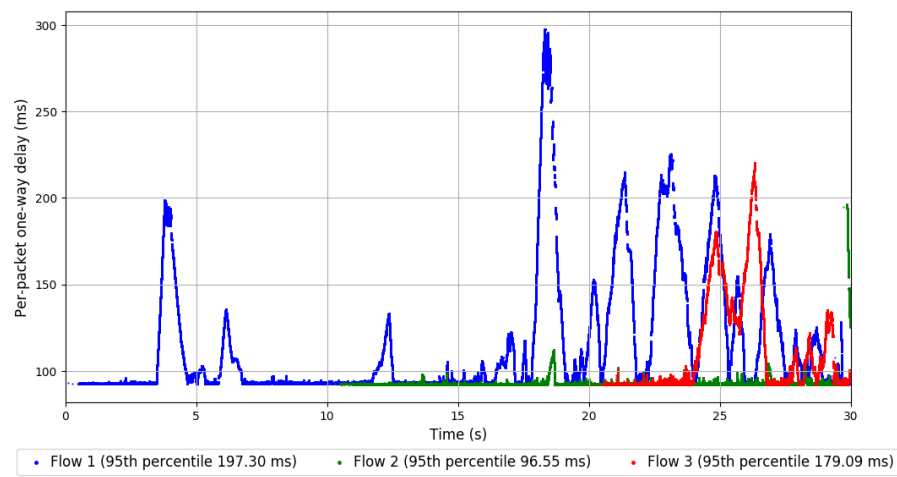
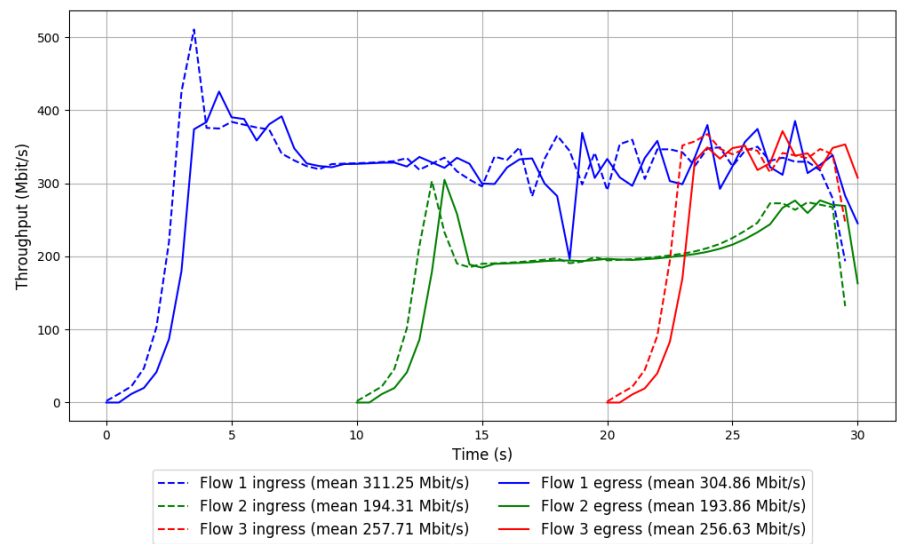


Run 4: Statistics of PCC-Expr

Start at: 2018-10-09 23:20:22  
End at: 2018-10-09 23:20:52  
Local clock offset: 0.046 ms  
Remote clock offset: -0.017 ms

# Below is generated by plot.py at 2018-10-10 01:55:51  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 518.46 Mbit/s  
95th percentile per-packet one-way delay: 185.813 ms  
Loss rate: 1.34%  
-- Flow 1:  
Average throughput: 304.86 Mbit/s  
95th percentile per-packet one-way delay: 197.299 ms  
Loss rate: 2.05%  
-- Flow 2:  
Average throughput: 193.86 Mbit/s  
95th percentile per-packet one-way delay: 96.545 ms  
Loss rate: 0.22%  
-- Flow 3:  
Average throughput: 256.63 Mbit/s  
95th percentile per-packet one-way delay: 179.095 ms  
Loss rate: 0.40%

Run 4: Report of PCC-Expr — Data Link

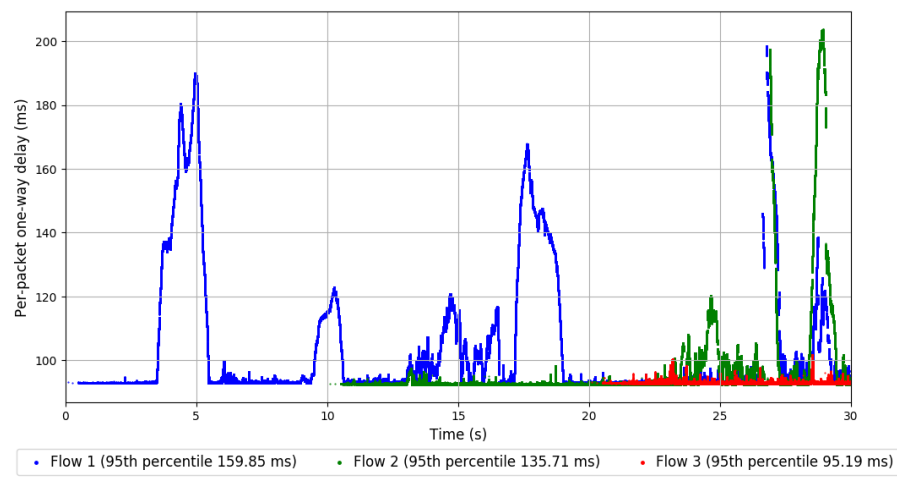
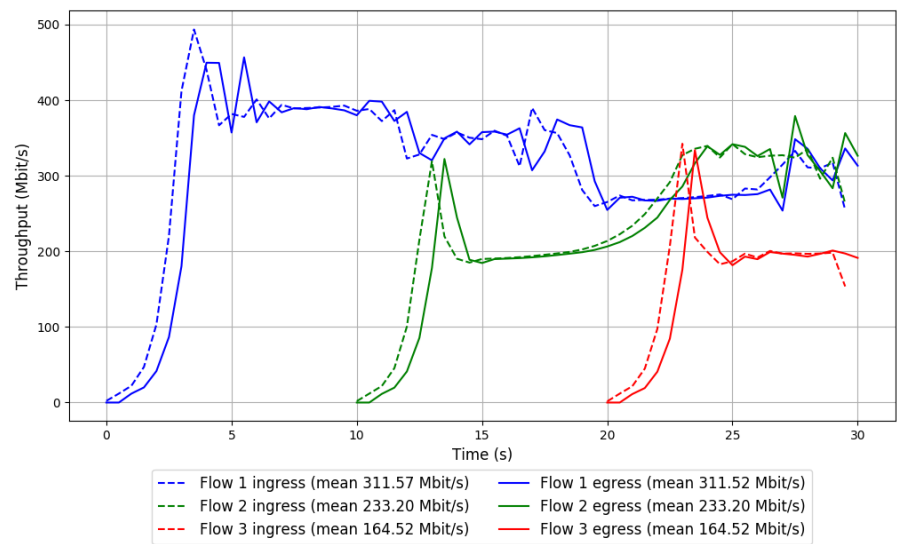


Run 5: Statistics of PCC-Expr

Start at: 2018-10-09 23:52:15  
End at: 2018-10-09 23:52:45  
Local clock offset: -0.025 ms  
Remote clock offset: -0.063 ms

# Below is generated by plot.py at 2018-10-10 01:57:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 520.87 Mbit/s  
95th percentile per-packet one-way delay: 154.945 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 311.52 Mbit/s  
95th percentile per-packet one-way delay: 159.846 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 233.20 Mbit/s  
95th percentile per-packet one-way delay: 135.707 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 164.52 Mbit/s  
95th percentile per-packet one-way delay: 95.186 ms  
Loss rate: 0.00%

Run 5: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-10-09 21:40:05

End at: 2018-10-09 21:40:35

Local clock offset: 0.474 ms

Remote clock offset: -0.13 ms

# Below is generated by plot.py at 2018-10-10 01:57:45

# Datalink statistics

-- Total of 3 flows:

Average throughput: 66.09 Mbit/s

95th percentile per-packet one-way delay: 92.937 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 29.41 Mbit/s

95th percentile per-packet one-way delay: 93.091 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.86 Mbit/s

95th percentile per-packet one-way delay: 92.665 ms

Loss rate: 0.00%

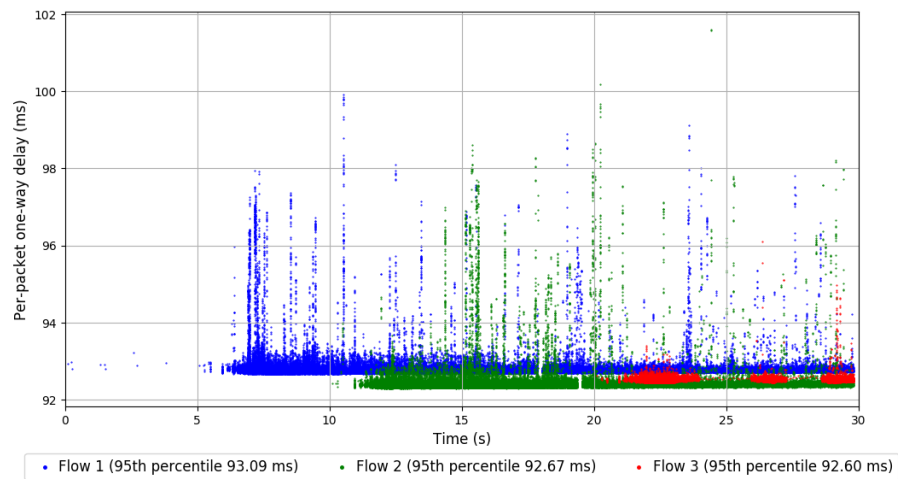
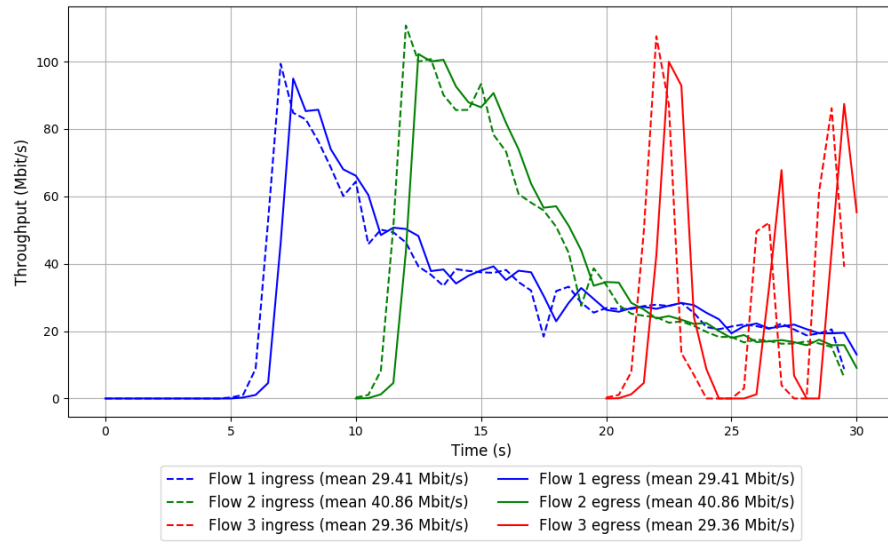
-- Flow 3:

Average throughput: 29.36 Mbit/s

95th percentile per-packet one-way delay: 92.603 ms

Loss rate: 0.00%

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

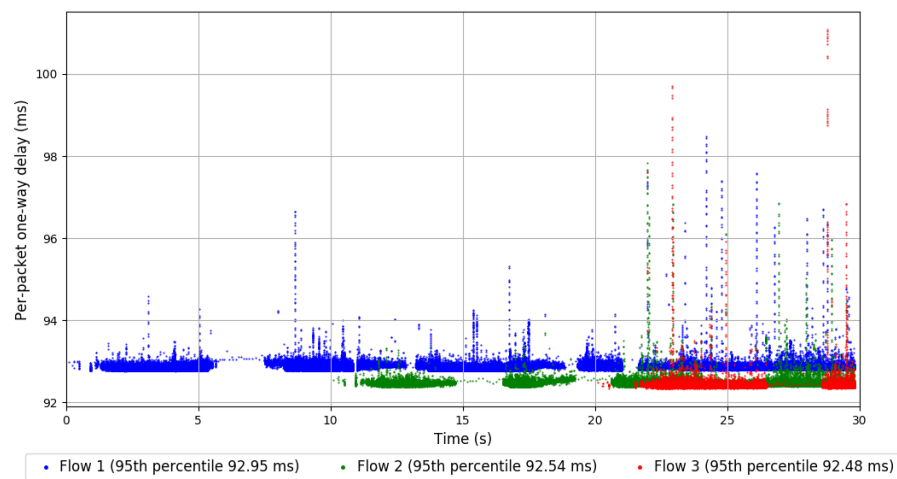
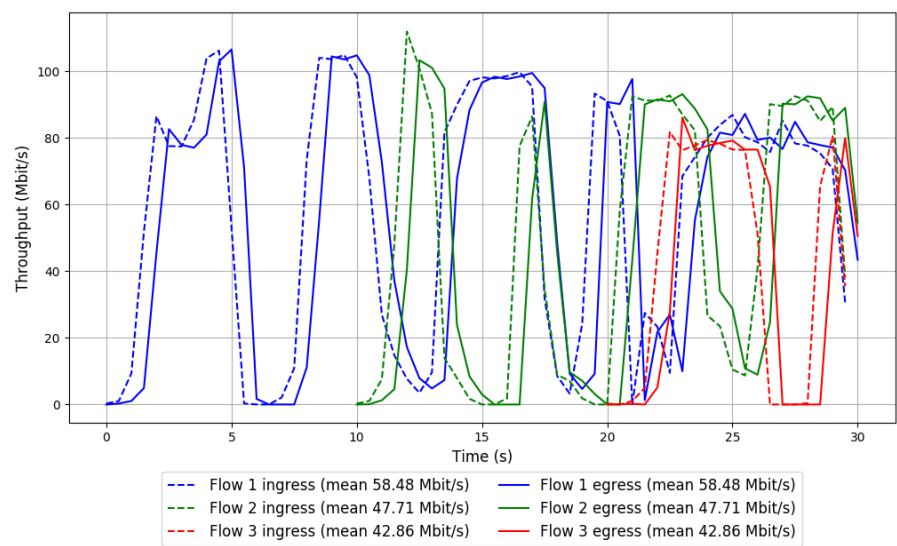


Run 2: Statistics of QUIC Cubic

Start at: 2018-10-09 22:11:41  
End at: 2018-10-09 22:12:11  
Local clock offset: 0.855 ms  
Remote clock offset: -0.914 ms

# Below is generated by plot.py at 2018-10-10 01:57:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 104.08 Mbit/s  
95th percentile per-packet one-way delay: 92.924 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 58.48 Mbit/s  
95th percentile per-packet one-way delay: 92.955 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 47.71 Mbit/s  
95th percentile per-packet one-way delay: 92.544 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 42.86 Mbit/s  
95th percentile per-packet one-way delay: 92.481 ms  
Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



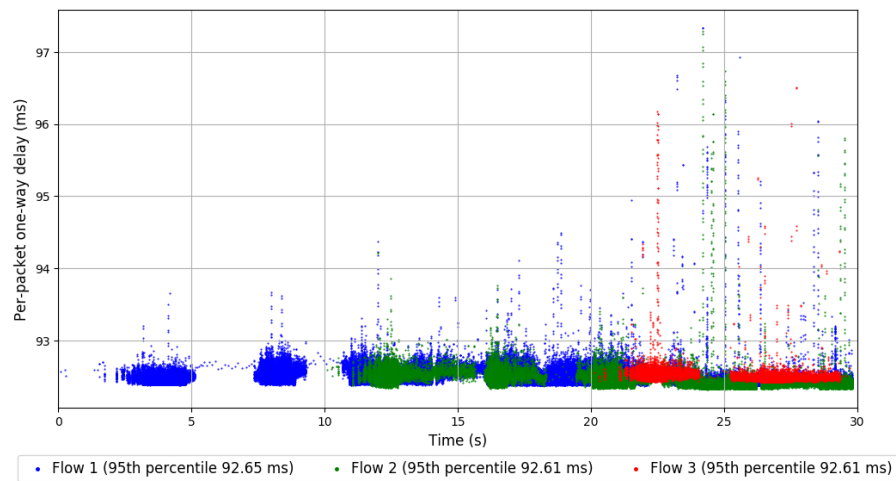
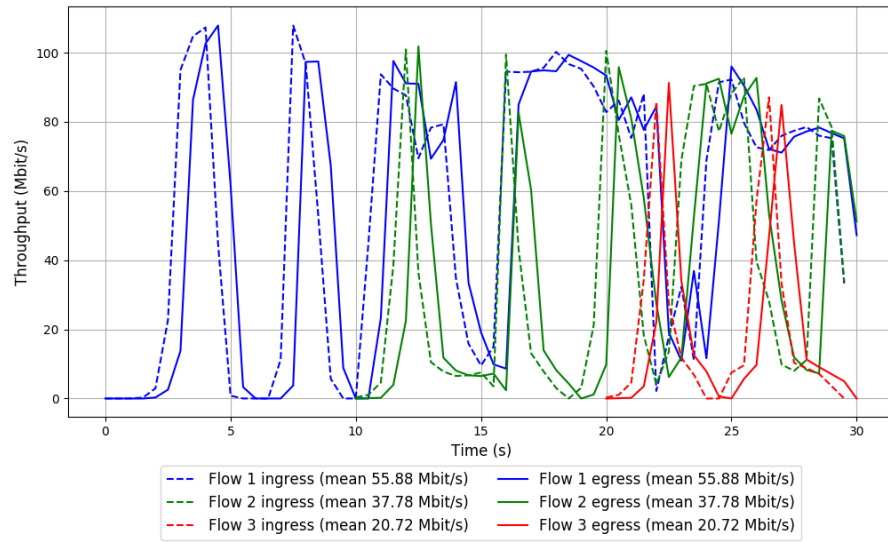


Run 3: Statistics of QUIC Cubic

Start at: 2018-10-09 22:43:32  
End at: 2018-10-09 22:44:02  
Local clock offset: 0.041 ms  
Remote clock offset: -0.145 ms

# Below is generated by plot.py at 2018-10-10 01:57:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 87.59 Mbit/s  
95th percentile per-packet one-way delay: 92.636 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 55.88 Mbit/s  
95th percentile per-packet one-way delay: 92.647 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 37.78 Mbit/s  
95th percentile per-packet one-way delay: 92.610 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 20.72 Mbit/s  
95th percentile per-packet one-way delay: 92.605 ms  
Loss rate: 0.00%

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



Run 4: Statistics of QUIC Cubic

Start at: 2018-10-09 23:15:01

End at: 2018-10-09 23:15:31

Local clock offset: -0.114 ms

Remote clock offset: -0.0 ms

# Below is generated by plot.py at 2018-10-10 01:57:45

# Datalink statistics

-- Total of 3 flows:

Average throughput: 93.02 Mbit/s

95th percentile per-packet one-way delay: 92.899 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 57.76 Mbit/s

95th percentile per-packet one-way delay: 92.608 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 43.48 Mbit/s

95th percentile per-packet one-way delay: 92.547 ms

Loss rate: 0.00%

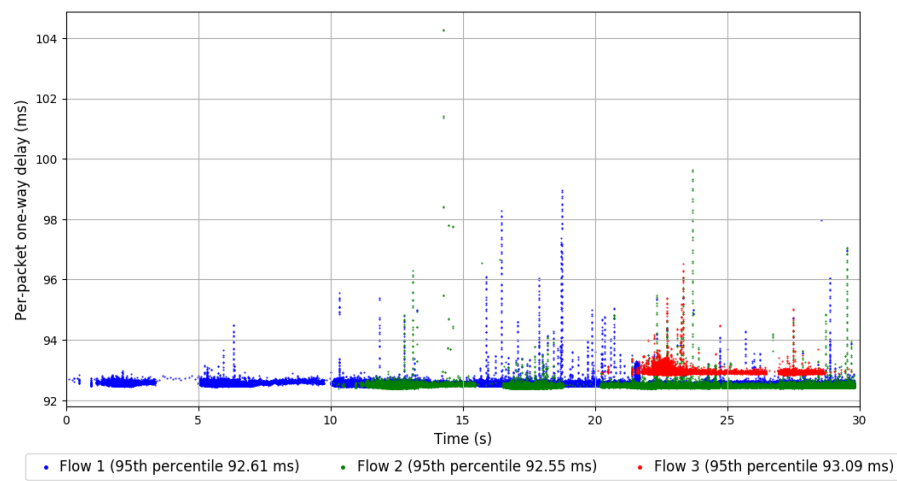
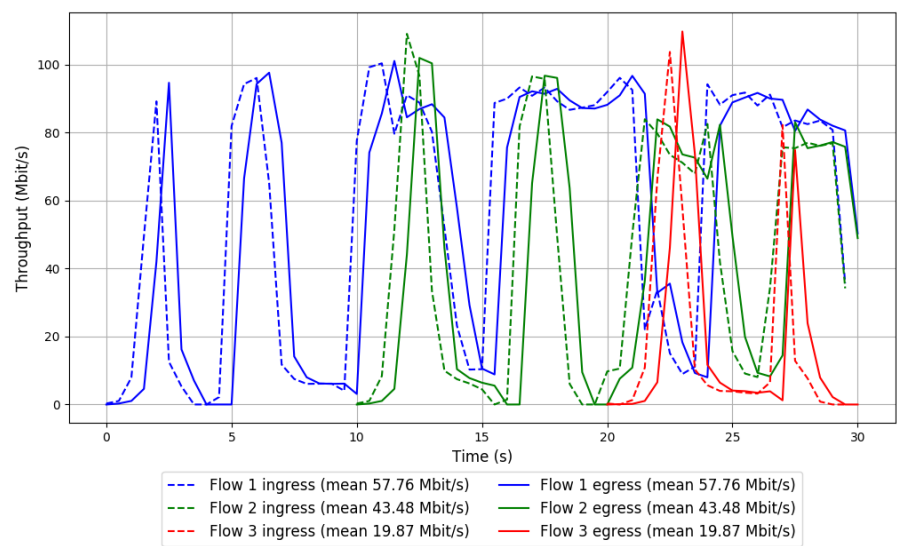
-- Flow 3:

Average throughput: 19.87 Mbit/s

95th percentile per-packet one-way delay: 93.094 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link

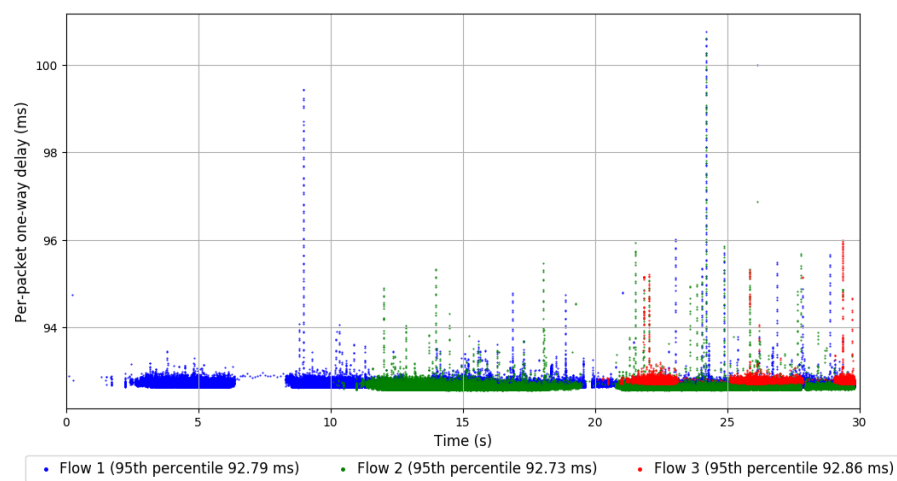
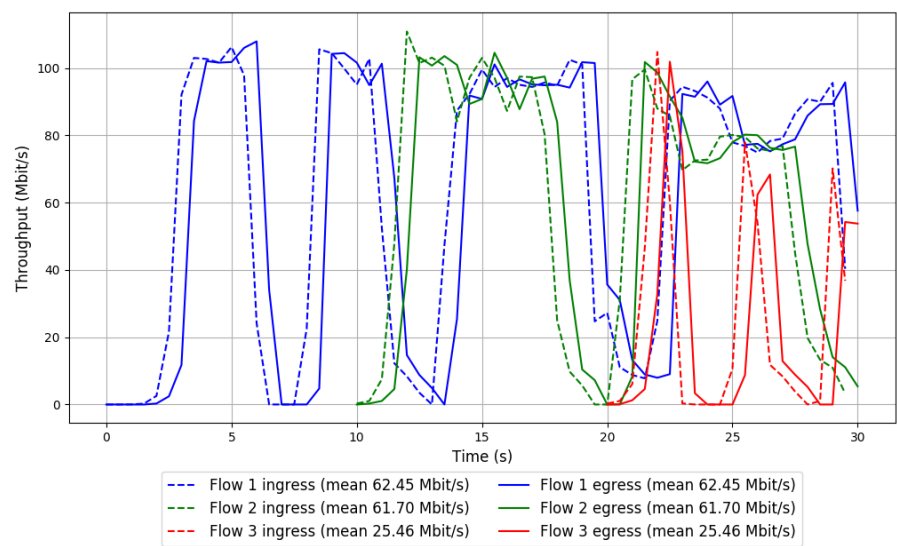


Run 5: Statistics of QUIC Cubic

Start at: 2018-10-09 23:46:50  
End at: 2018-10-09 23:47:20  
Local clock offset: -0.247 ms  
Remote clock offset: -0.027 ms

# Below is generated by plot.py at 2018-10-10 01:57:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 111.68 Mbit/s  
95th percentile per-packet one-way delay: 92.800 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 62.45 Mbit/s  
95th percentile per-packet one-way delay: 92.793 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 61.70 Mbit/s  
95th percentile per-packet one-way delay: 92.726 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 25.46 Mbit/s  
95th percentile per-packet one-way delay: 92.858 ms  
Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link

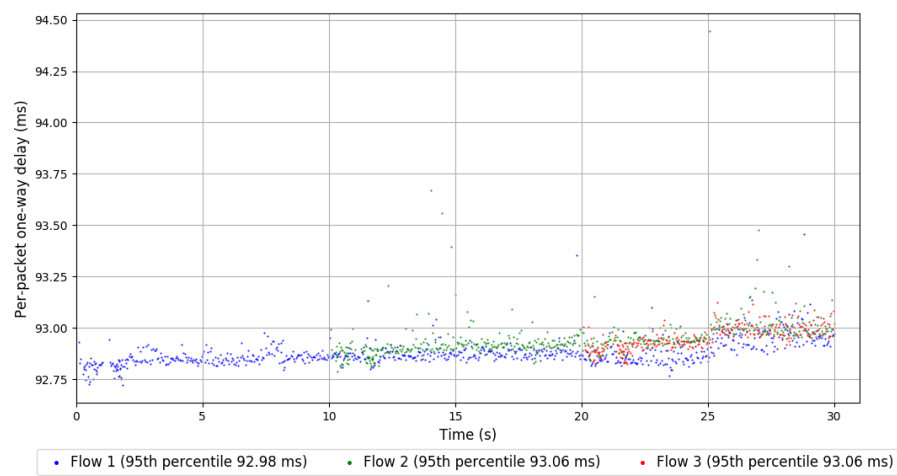
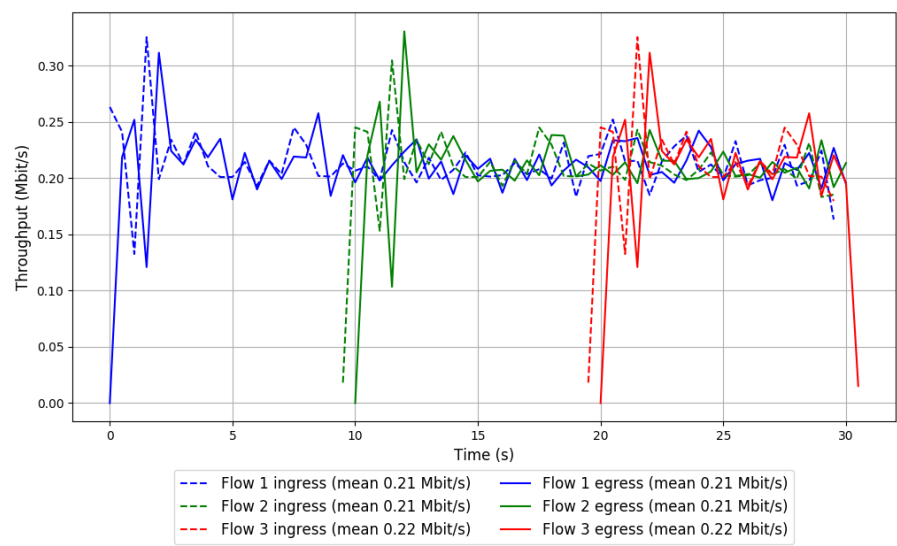


```
Run 1: Statistics of SReAM

Start at: 2018-10-09 21:25:31
End at: 2018-10-09 21:26:01
Local clock offset: 0.458 ms
Remote clock offset: 1.458 ms

# Below is generated by plot.py at 2018-10-10 01:57:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 93.035 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 92.985 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 93.057 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 93.058 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link



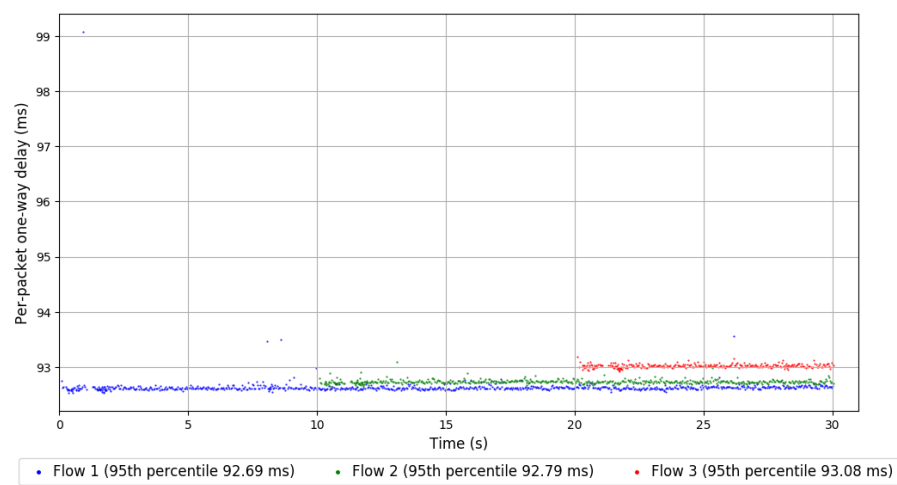
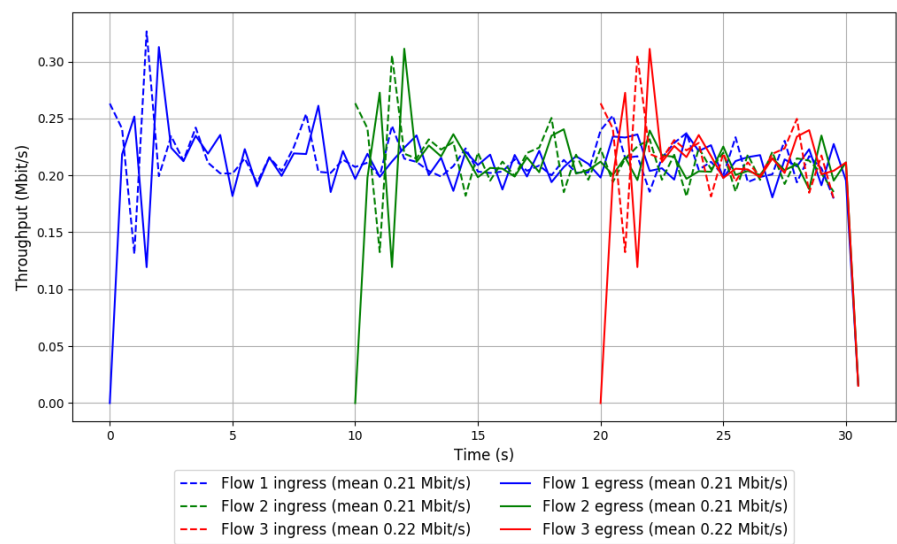


Run 2: Statistics of SReAM

Start at: 2018-10-09 21:57:21  
End at: 2018-10-09 21:57:51  
Local clock offset: 0.548 ms  
Remote clock offset: -0.68 ms

# Below is generated by plot.py at 2018-10-10 01:57:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 93.040 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 92.689 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 92.794 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 93.084 ms  
Loss rate: 0.00%

Run 2: Report of SReAM — Data Link

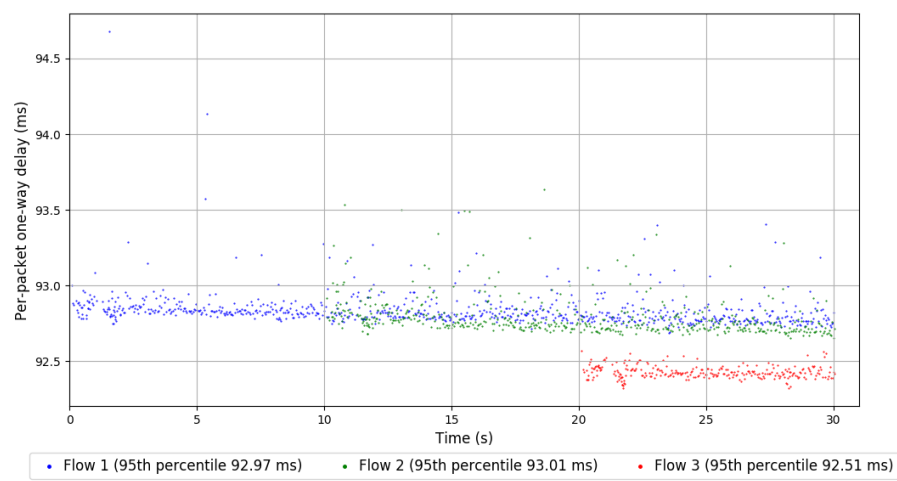
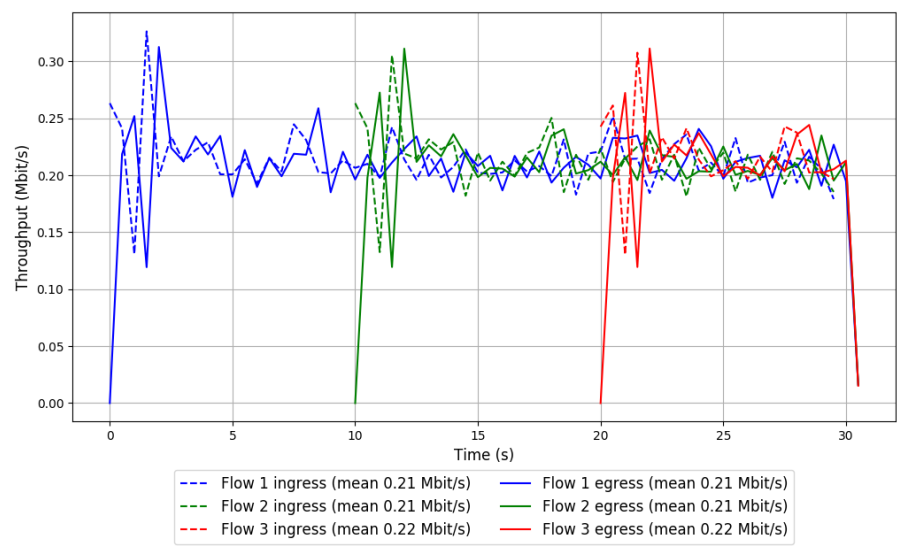


Run 3: Statistics of SReAM

Start at: 2018-10-09 22:29:08  
End at: 2018-10-09 22:29:38  
Local clock offset: 0.668 ms  
Remote clock offset: -0.776 ms

# Below is generated by plot.py at 2018-10-10 01:57:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 92.971 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 92.975 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 93.012 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 92.506 ms  
Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

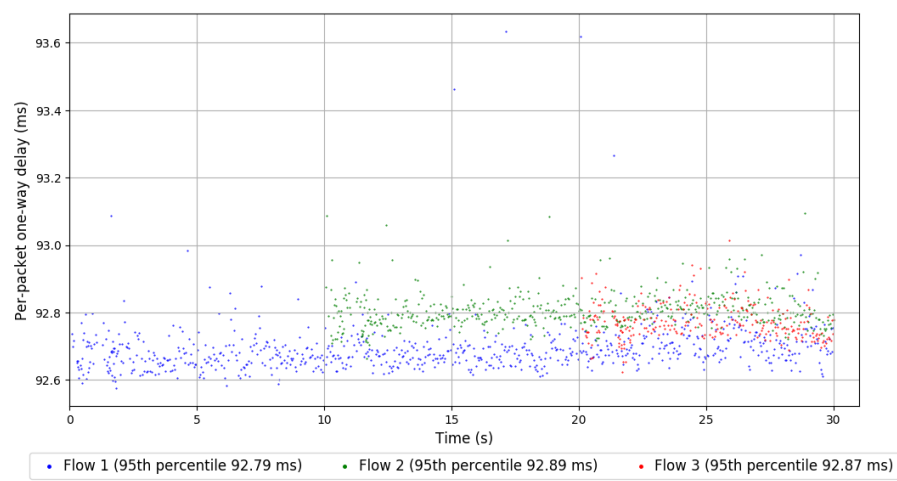
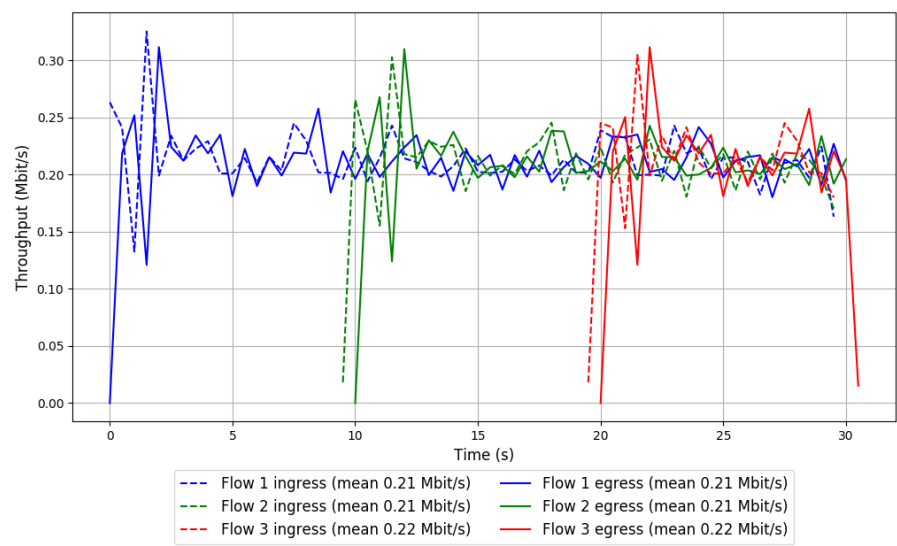


Run 4: Statistics of SReAM

Start at: 2018-10-09 23:00:37  
End at: 2018-10-09 23:01:07  
Local clock offset: -0.182 ms  
Remote clock offset: 0.058 ms

# Below is generated by plot.py at 2018-10-10 01:57:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 92.865 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 92.794 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 92.891 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 92.868 ms  
Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2018-10-09 23:32:19

End at: 2018-10-09 23:32:49

Local clock offset: -0.121 ms

Remote clock offset: 0.039 ms

# Below is generated by plot.py at 2018-10-10 01:57:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 93.176 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 93.184 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 92.891 ms

Loss rate: 0.00%

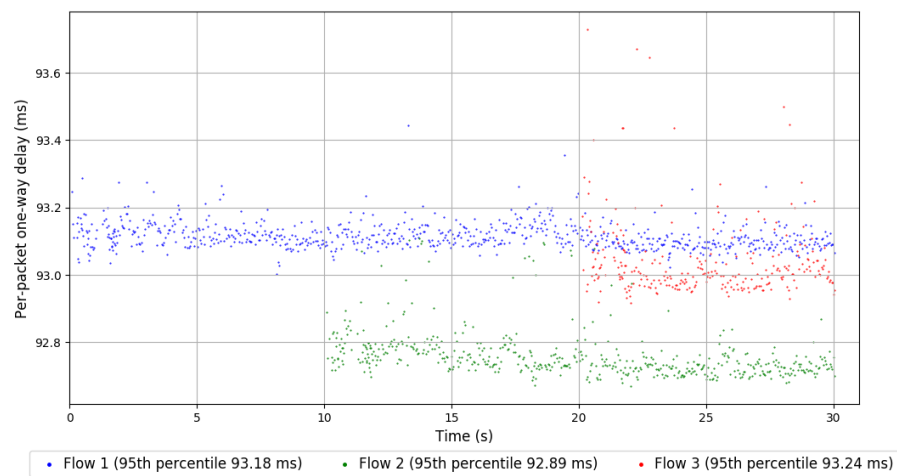
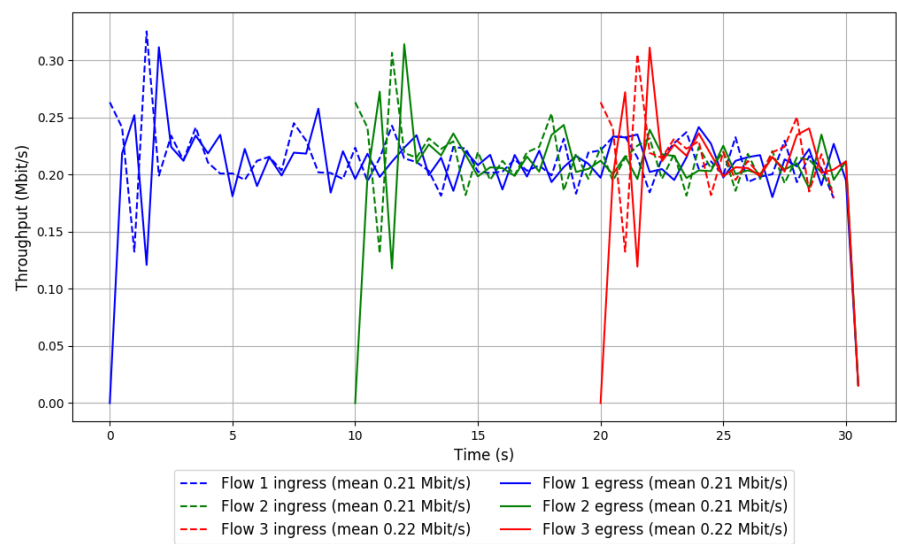
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 93.243 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link





Run 1: Statistics of Sprout

Start at: 2018-10-09 21:26:45

End at: 2018-10-09 21:27:15

Local clock offset: 0.479 ms

Remote clock offset: 1.227 ms

# Below is generated by plot.py at 2018-10-10 01:57:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 8.35 Mbit/s

95th percentile per-packet one-way delay: 93.645 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.31 Mbit/s

95th percentile per-packet one-way delay: 93.732 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 93.385 ms

Loss rate: 0.00%

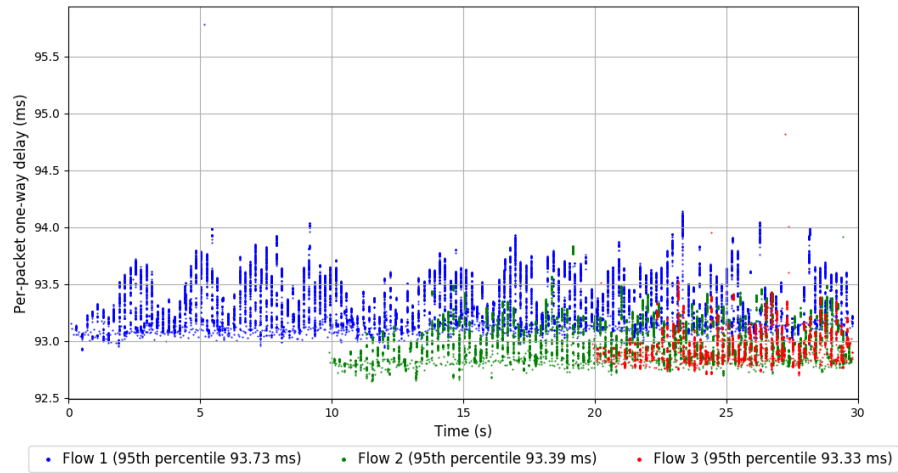
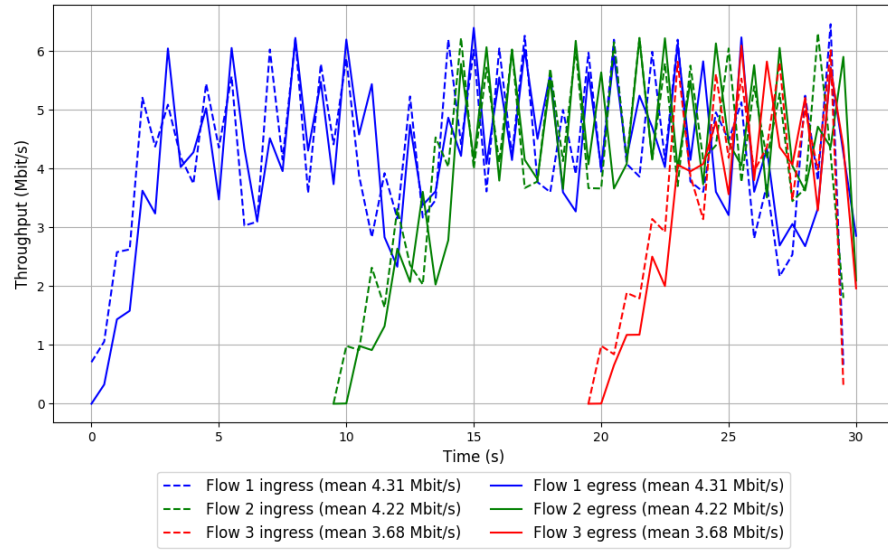
-- Flow 3:

Average throughput: 3.68 Mbit/s

95th percentile per-packet one-way delay: 93.335 ms

Loss rate: 0.00%

# Run 1: Report of Sprout — Data Link

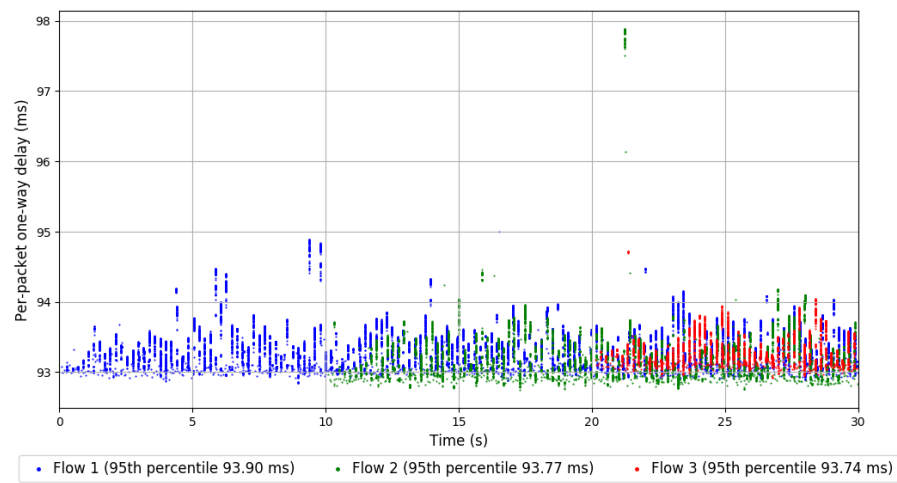
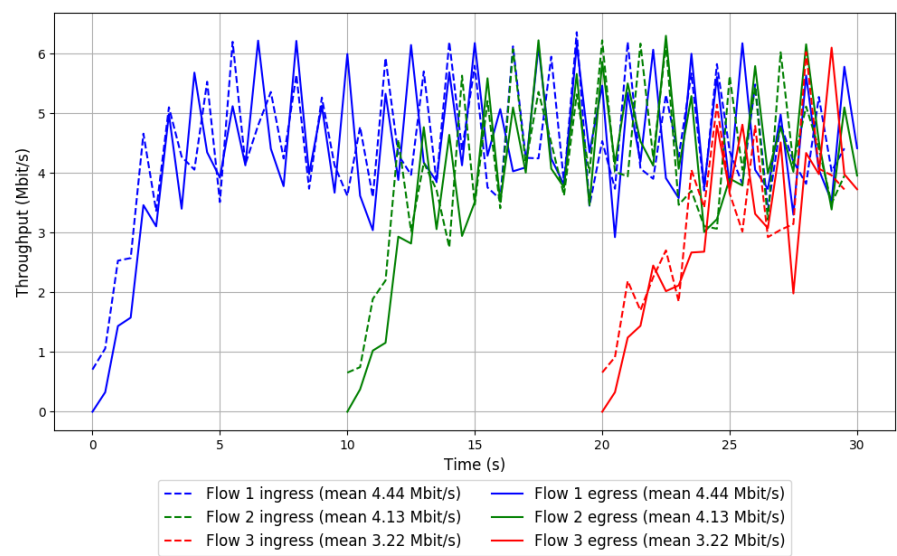


Run 2: Statistics of Sprout

Start at: 2018-10-09 21:58:35  
End at: 2018-10-09 21:59:05  
Local clock offset: 0.552 ms  
Remote clock offset: -0.652 ms

# Below is generated by plot.py at 2018-10-10 01:57:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.24 Mbit/s  
95th percentile per-packet one-way delay: 93.836 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 4.44 Mbit/s  
95th percentile per-packet one-way delay: 93.901 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 4.13 Mbit/s  
95th percentile per-packet one-way delay: 93.770 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 3.22 Mbit/s  
95th percentile per-packet one-way delay: 93.742 ms  
Loss rate: 0.00%

Run 2: Report of Sprout — Data Link

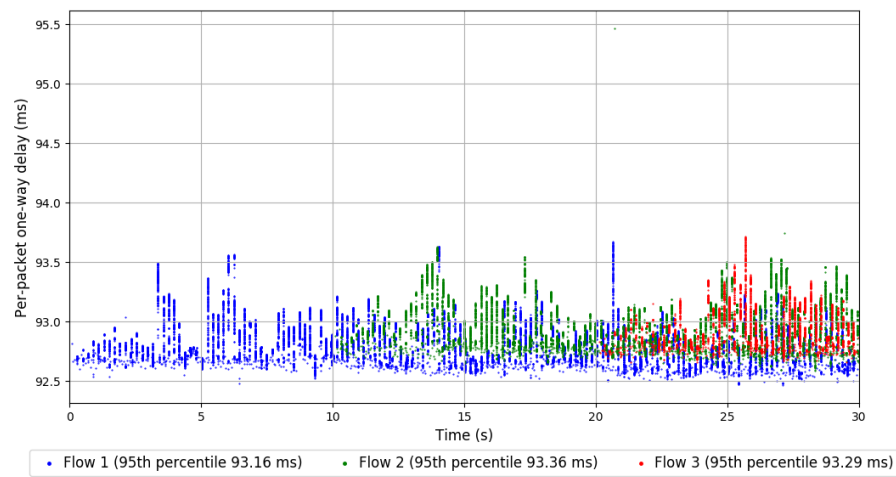
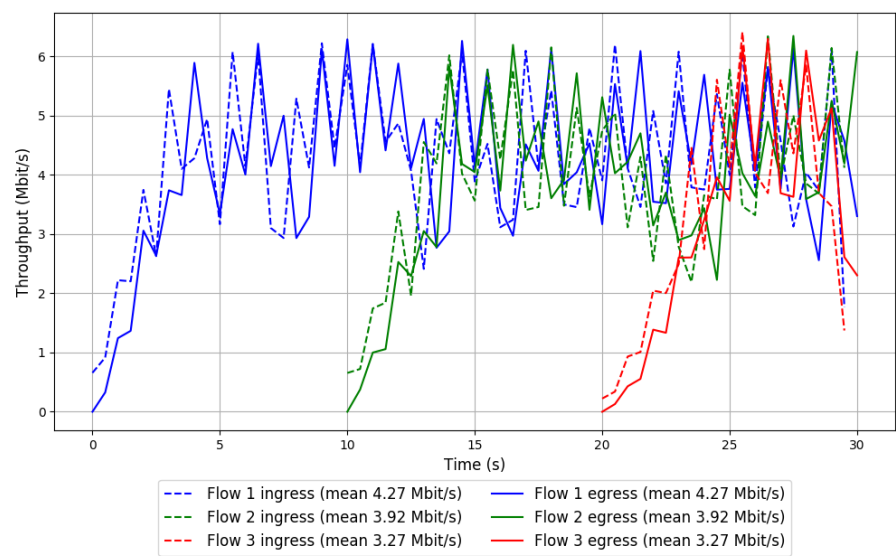


Run 3: Statistics of Sprout

Start at: 2018-10-09 22:30:22  
End at: 2018-10-09 22:30:52  
Local clock offset: 0.333 ms  
Remote clock offset: -0.687 ms

# Below is generated by plot.py at 2018-10-10 01:57:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 7.95 Mbit/s  
95th percentile per-packet one-way delay: 93.276 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 4.27 Mbit/s  
95th percentile per-packet one-way delay: 93.156 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 3.92 Mbit/s  
95th percentile per-packet one-way delay: 93.356 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 3.27 Mbit/s  
95th percentile per-packet one-way delay: 93.289 ms  
Loss rate: 0.00%

Run 3: Report of Sprout — Data Link

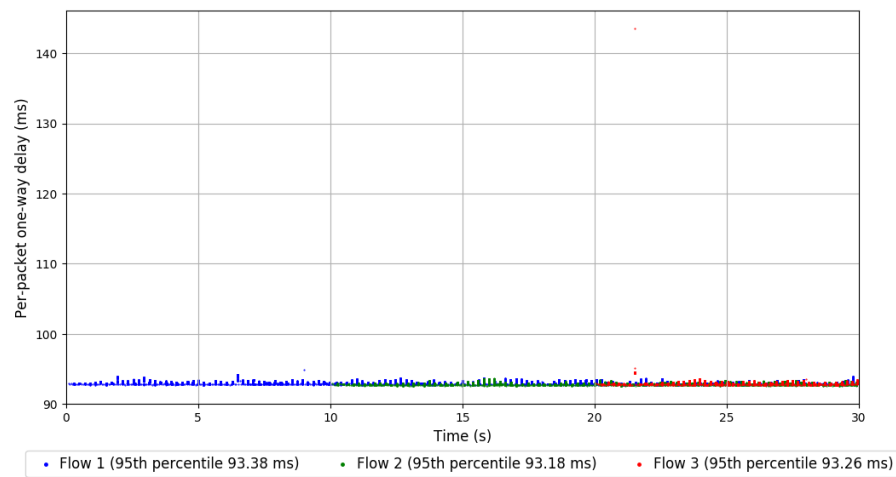
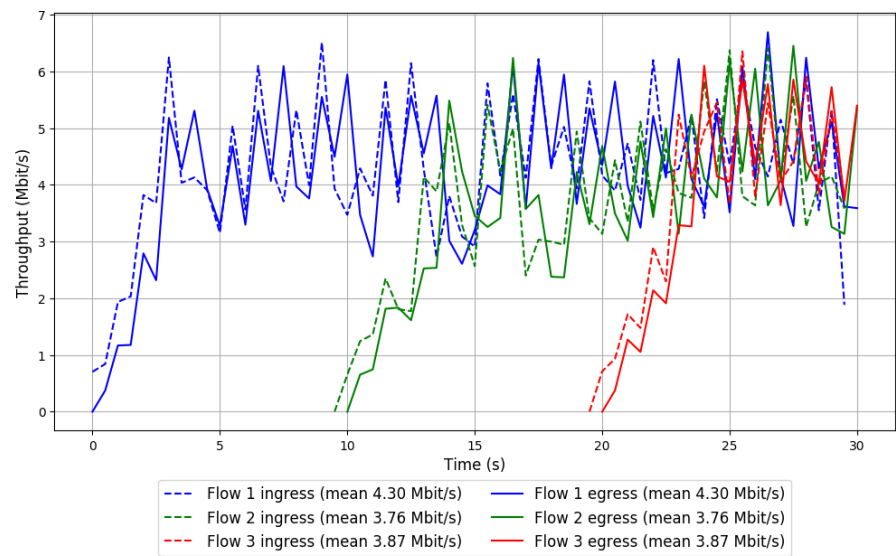


#### Run 4: Statistics of Sprout

Start at: 2018-10-09 23:01:51  
End at: 2018-10-09 23:02:21  
Local clock offset: -0.151 ms  
Remote clock offset: 0.051 ms

```
# Below is generated by plot.py at 2018-10-10 01:57:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.07 Mbit/s
95th percentile per-packet one-way delay: 93.336 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.30 Mbit/s
95th percentile per-packet one-way delay: 93.382 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.76 Mbit/s
95th percentile per-packet one-way delay: 93.177 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.87 Mbit/s
95th percentile per-packet one-way delay: 93.262 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link



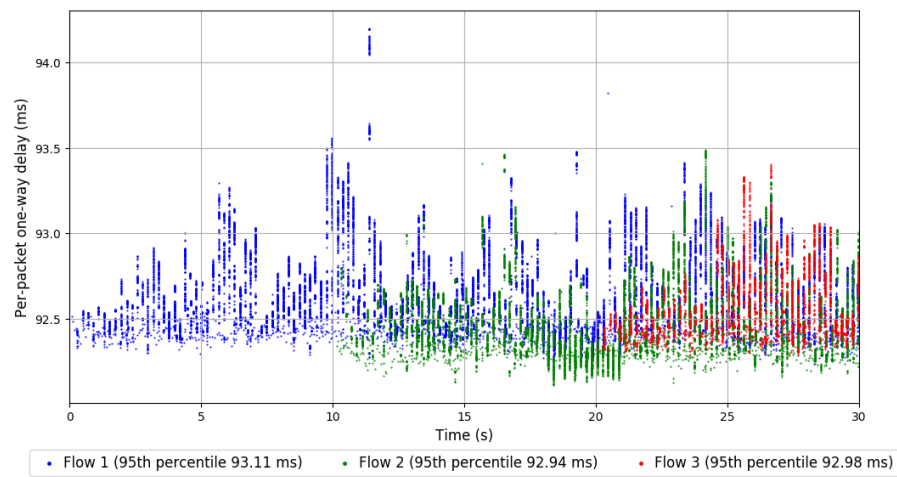
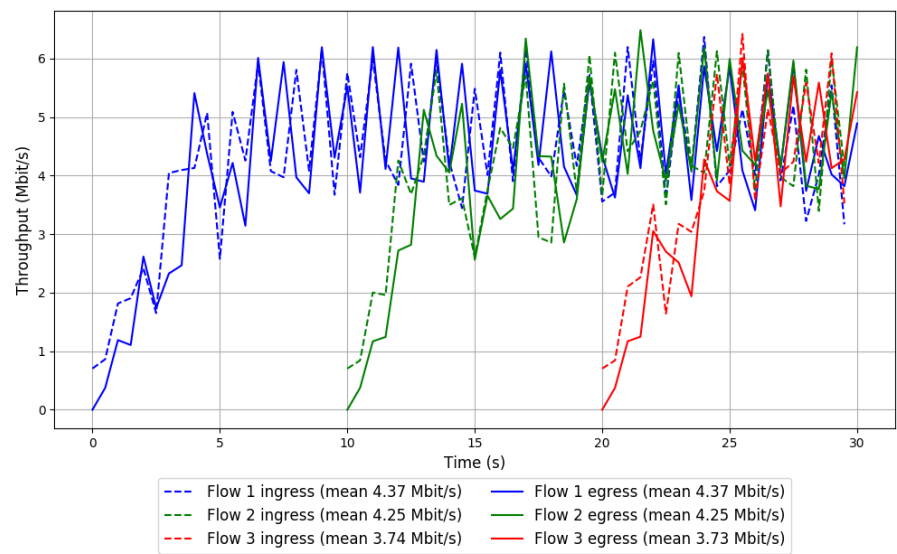


Run 5: Statistics of Sprout

Start at: 2018-10-09 23:33:33  
End at: 2018-10-09 23:34:03  
Local clock offset: 0.197 ms  
Remote clock offset: 0.023 ms

# Below is generated by plot.py at 2018-10-10 01:57:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.42 Mbit/s  
95th percentile per-packet one-way delay: 93.059 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 4.37 Mbit/s  
95th percentile per-packet one-way delay: 93.110 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 4.25 Mbit/s  
95th percentile per-packet one-way delay: 92.938 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 3.73 Mbit/s  
95th percentile per-packet one-way delay: 92.983 ms  
Loss rate: 0.00%

Run 5: Report of Sprout — Data Link

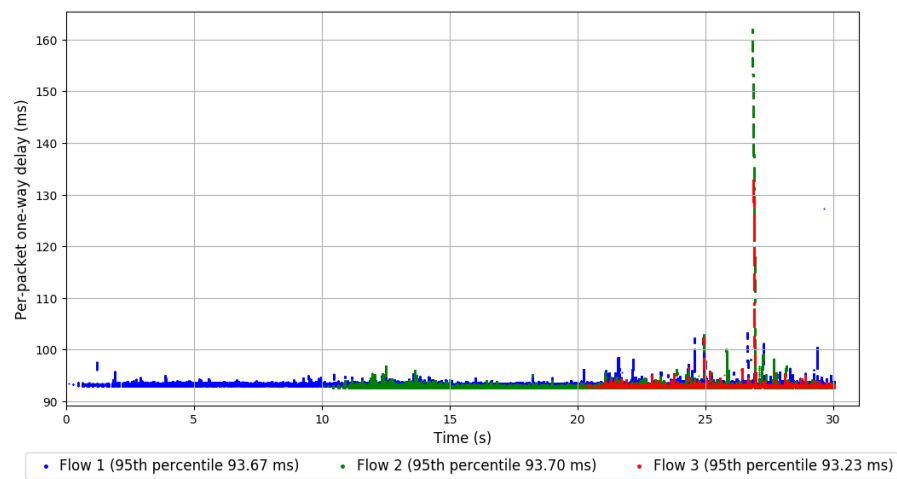
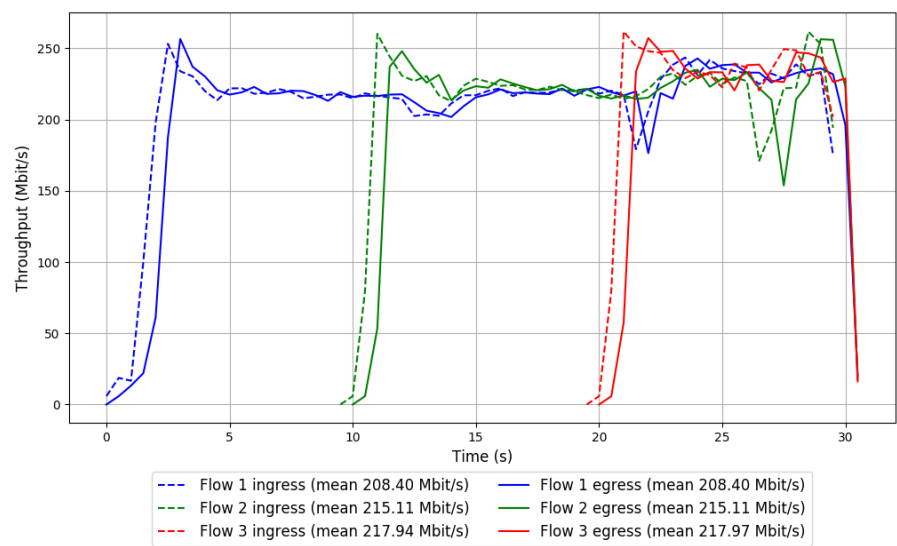


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-10-09 21:31:09
End at: 2018-10-09 21:31:39
Local clock offset: 0.257 ms
Remote clock offset: 0.582 ms

# Below is generated by plot.py at 2018-10-10 02:03:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 424.33 Mbit/s
95th percentile per-packet one-way delay: 93.641 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 208.40 Mbit/s
95th percentile per-packet one-way delay: 93.675 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 215.11 Mbit/s
95th percentile per-packet one-way delay: 93.697 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 217.97 Mbit/s
95th percentile per-packet one-way delay: 93.233 ms
Loss rate: 0.00%
```

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

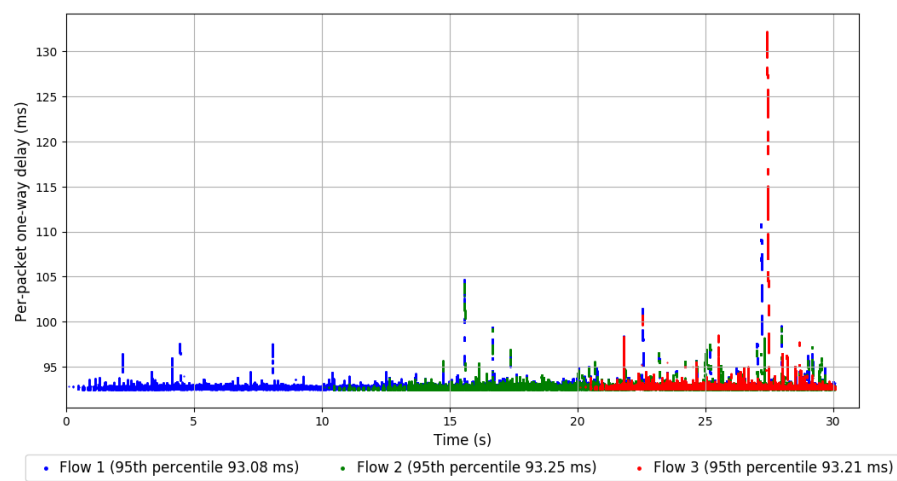
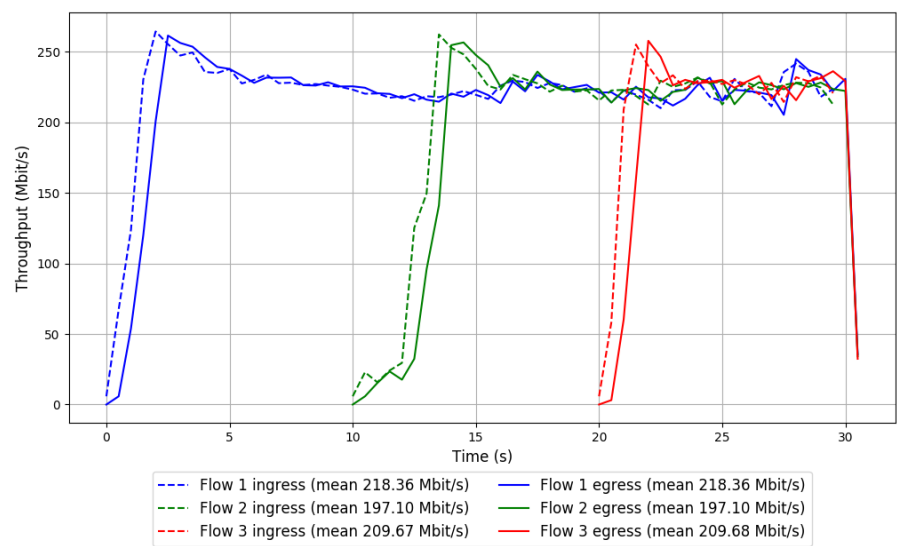


Run 2: Statistics of TaoVA-100x

Start at: 2018-10-09 22:02:58  
End at: 2018-10-09 22:03:28  
Local clock offset: 0.52 ms  
Remote clock offset: -0.773 ms

# Below is generated by plot.py at 2018-10-10 02:03:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 419.23 Mbit/s  
95th percentile per-packet one-way delay: 93.145 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 218.36 Mbit/s  
95th percentile per-packet one-way delay: 93.078 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 197.10 Mbit/s  
95th percentile per-packet one-way delay: 93.254 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 209.68 Mbit/s  
95th percentile per-packet one-way delay: 93.210 ms  
Loss rate: 0.00%

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

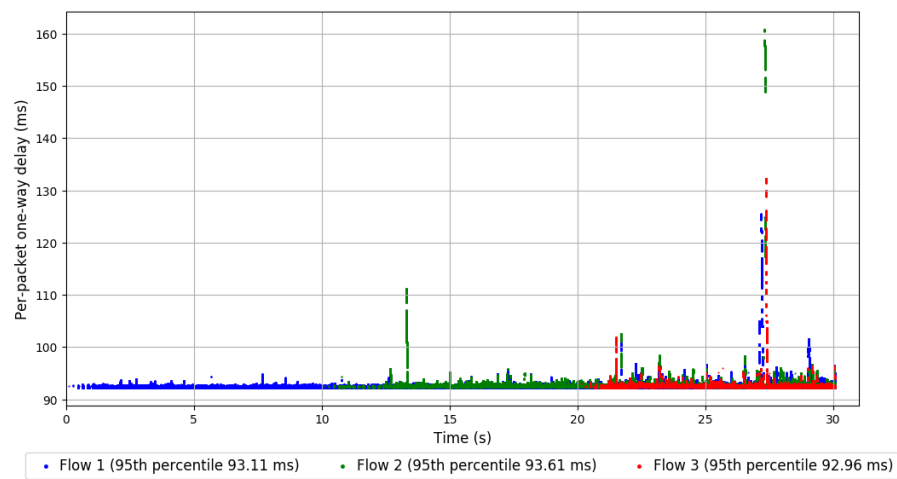
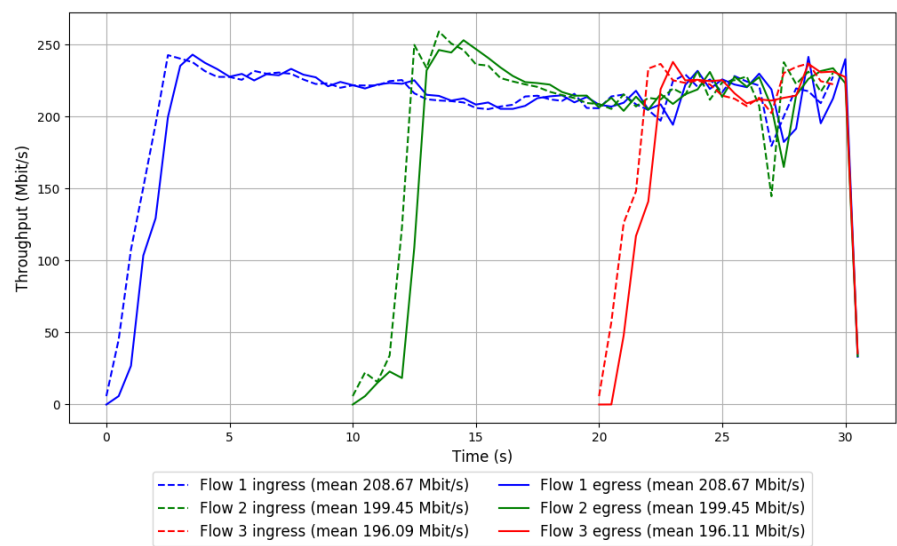


Run 3: Statistics of TaoVA-100x

Start at: 2018-10-09 22:34:45  
End at: 2018-10-09 22:35:15  
Local clock offset: 0.4 ms  
Remote clock offset: -0.373 ms

# Below is generated by plot.py at 2018-10-10 02:03:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 406.58 Mbit/s  
95th percentile per-packet one-way delay: 93.270 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 208.67 Mbit/s  
95th percentile per-packet one-way delay: 93.113 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 199.45 Mbit/s  
95th percentile per-packet one-way delay: 93.612 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 196.11 Mbit/s  
95th percentile per-packet one-way delay: 92.964 ms  
Loss rate: 0.00%

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





Run 4: Statistics of TaoVA-100x

Start at: 2018-10-09 23:06:15

End at: 2018-10-09 23:06:45

Local clock offset: -0.11 ms

Remote clock offset: 0.002 ms

# Below is generated by plot.py at 2018-10-10 02:03:56

# Datalink statistics

-- Total of 3 flows:

Average throughput: 390.36 Mbit/s

95th percentile per-packet one-way delay: 93.544 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 206.15 Mbit/s

95th percentile per-packet one-way delay: 92.979 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 192.45 Mbit/s

95th percentile per-packet one-way delay: 93.919 ms

Loss rate: 0.00%

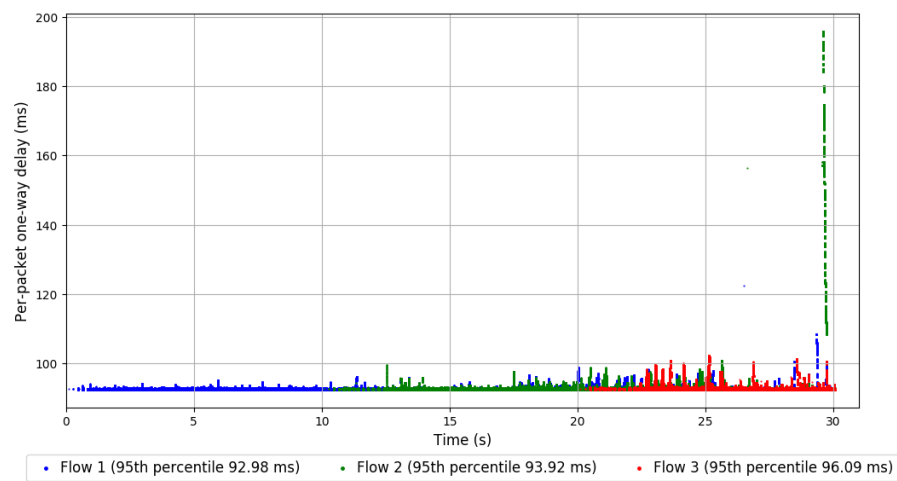
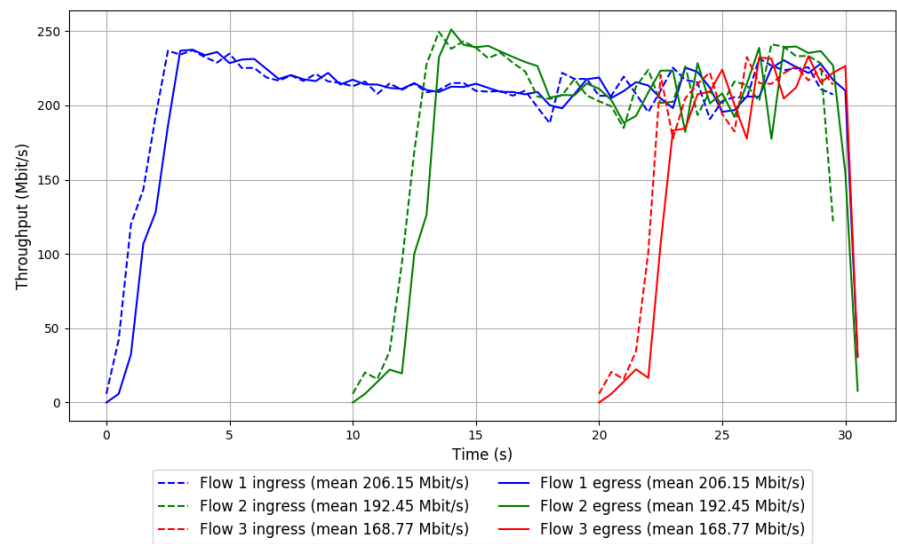
-- Flow 3:

Average throughput: 168.77 Mbit/s

95th percentile per-packet one-way delay: 96.090 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-10-09 23:37:57

End at: 2018-10-09 23:38:27

Local clock offset: -0.051 ms

Remote clock offset: 0.011 ms

# Below is generated by plot.py at 2018-10-10 02:09:48

# Datalink statistics

-- Total of 3 flows:

Average throughput: 413.24 Mbit/s

95th percentile per-packet one-way delay: 93.088 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 213.12 Mbit/s

95th percentile per-packet one-way delay: 92.686 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 194.02 Mbit/s

95th percentile per-packet one-way delay: 93.317 ms

Loss rate: 0.00%

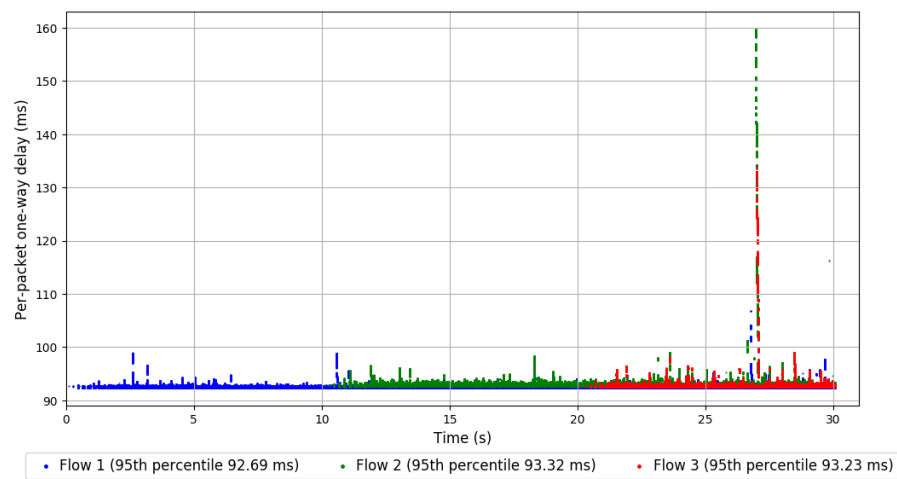
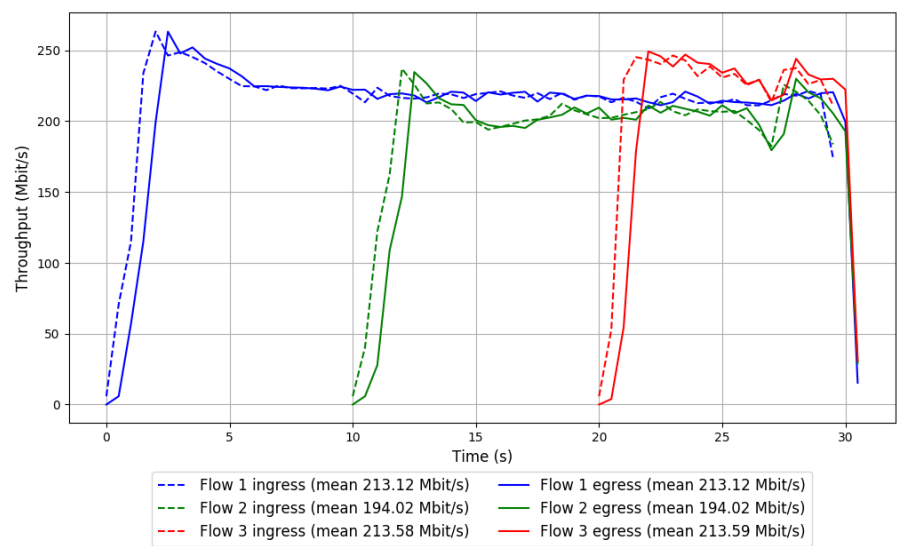
-- Flow 3:

Average throughput: 213.59 Mbit/s

95th percentile per-packet one-way delay: 93.233 ms

Loss rate: 0.00%

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

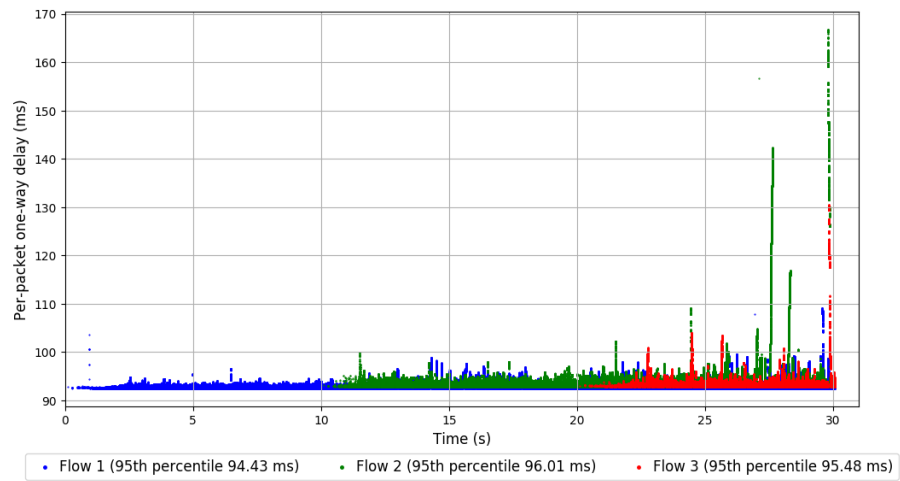
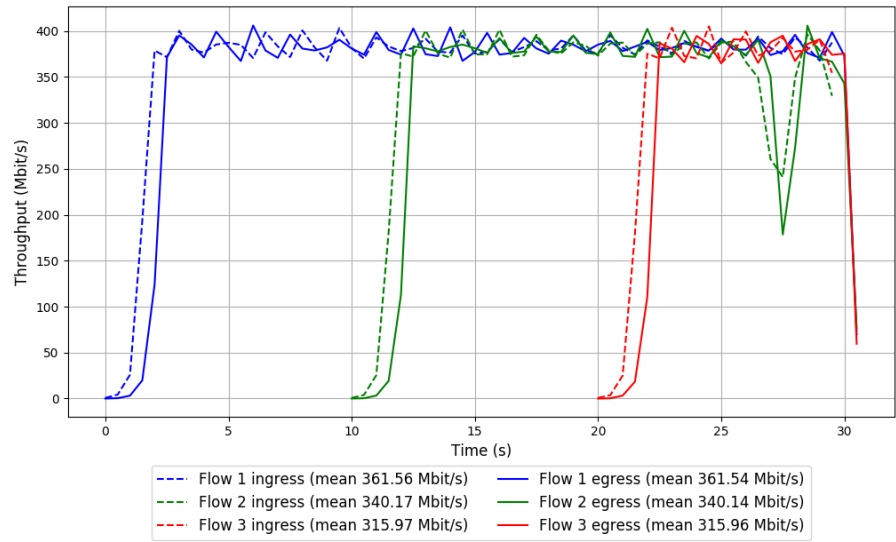


Run 1: Statistics of TCP Vegas

Start at: 2018-10-09 21:49:50  
End at: 2018-10-09 21:50:20  
Local clock offset: 0.444 ms  
Remote clock offset: -0.487 ms

# Below is generated by plot.py at 2018-10-10 02:09:48  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 693.09 Mbit/s  
95th percentile per-packet one-way delay: 95.114 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 361.54 Mbit/s  
95th percentile per-packet one-way delay: 94.428 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 340.14 Mbit/s  
95th percentile per-packet one-way delay: 96.009 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 315.96 Mbit/s  
95th percentile per-packet one-way delay: 95.481 ms  
Loss rate: 0.01%

# Run 1: Report of TCP Vegas — Data Link

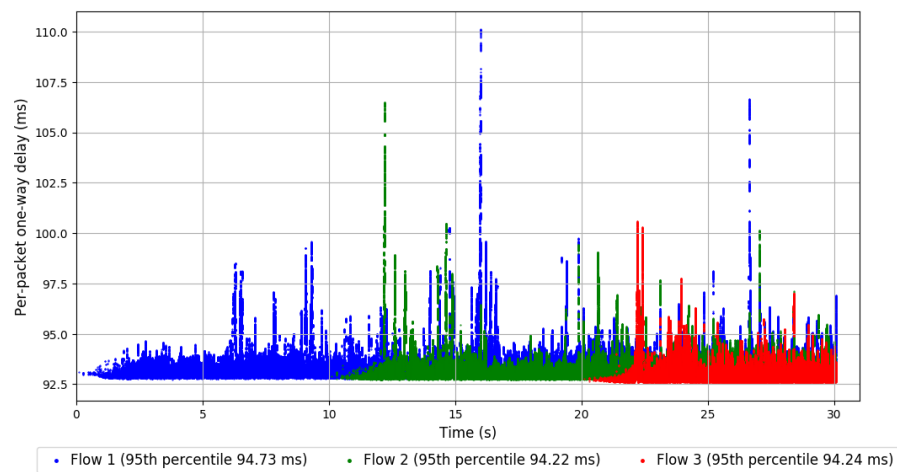
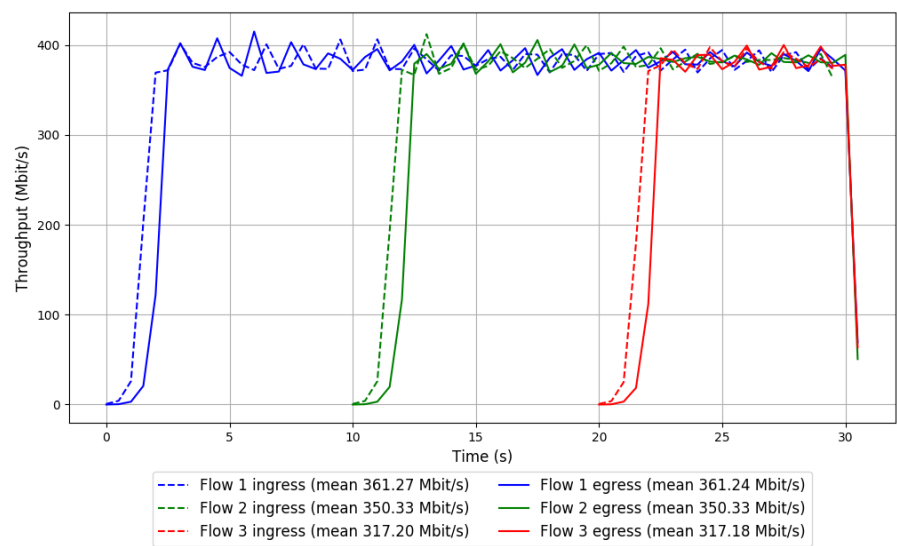


Run 2: Statistics of TCP Vegas

Start at: 2018-10-09 22:21:30  
End at: 2018-10-09 22:22:00  
Local clock offset: 0.7 ms  
Remote clock offset: -1.087 ms

# Below is generated by plot.py at 2018-10-10 02:09:48  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 699.97 Mbit/s  
95th percentile per-packet one-way delay: 94.506 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 361.24 Mbit/s  
95th percentile per-packet one-way delay: 94.734 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 350.33 Mbit/s  
95th percentile per-packet one-way delay: 94.221 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 317.18 Mbit/s  
95th percentile per-packet one-way delay: 94.237 ms  
Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



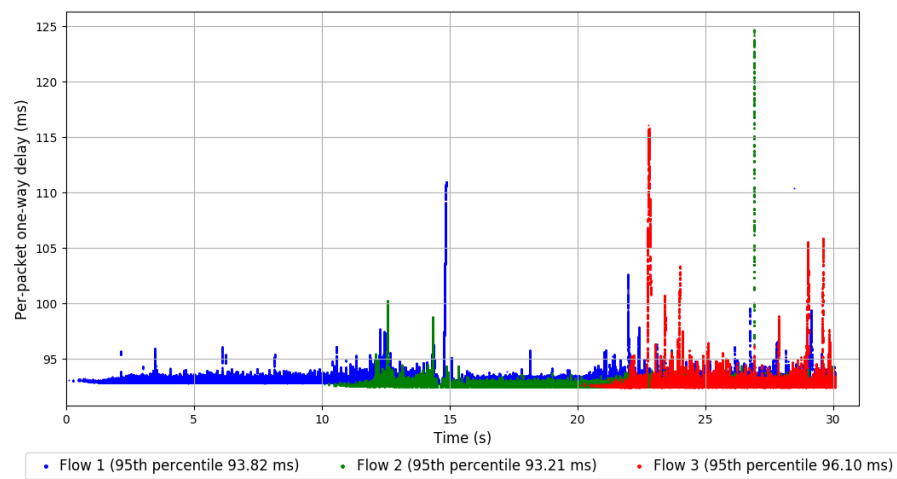
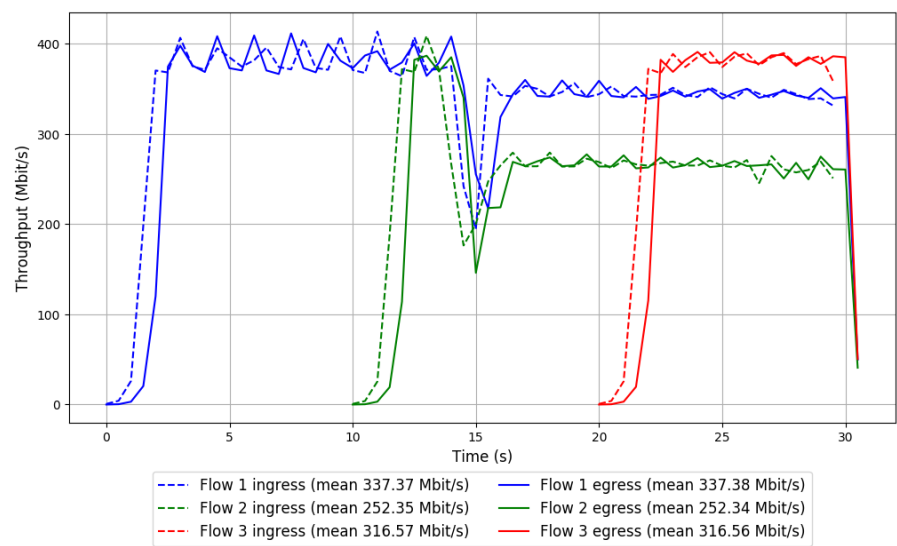


Run 3: Statistics of TCP Vegas

Start at: 2018-10-09 22:53:11  
End at: 2018-10-09 22:53:41  
Local clock offset: -0.107 ms  
Remote clock offset: -0.016 ms

# Below is generated by plot.py at 2018-10-10 02:09:48  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 610.68 Mbit/s  
95th percentile per-packet one-way delay: 93.854 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 337.38 Mbit/s  
95th percentile per-packet one-way delay: 93.820 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 252.34 Mbit/s  
95th percentile per-packet one-way delay: 93.208 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 316.56 Mbit/s  
95th percentile per-packet one-way delay: 96.099 ms  
Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-10-09 23:24:43

End at: 2018-10-09 23:25:13

Local clock offset: -0.103 ms

Remote clock offset: 0.041 ms

# Below is generated by plot.py at 2018-10-10 02:16:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 692.70 Mbit/s

95th percentile per-packet one-way delay: 96.636 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 358.95 Mbit/s

95th percentile per-packet one-way delay: 94.944 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 345.09 Mbit/s

95th percentile per-packet one-way delay: 97.044 ms

Loss rate: 0.16%

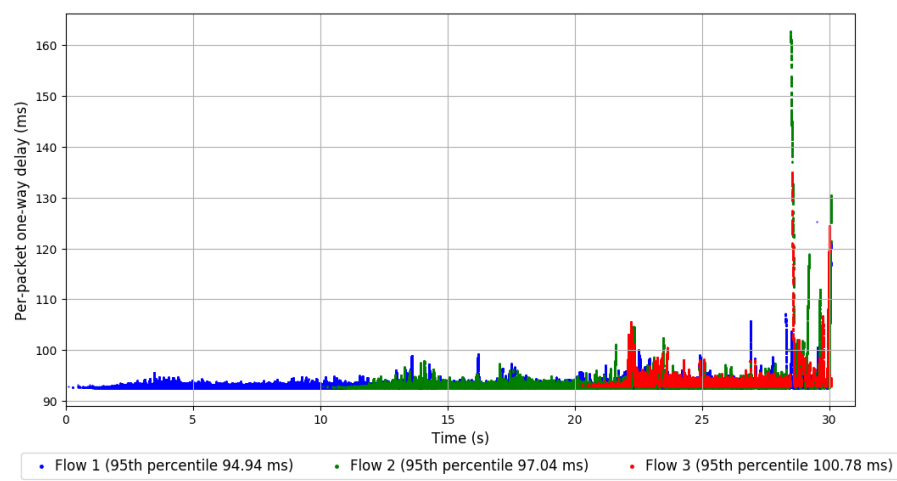
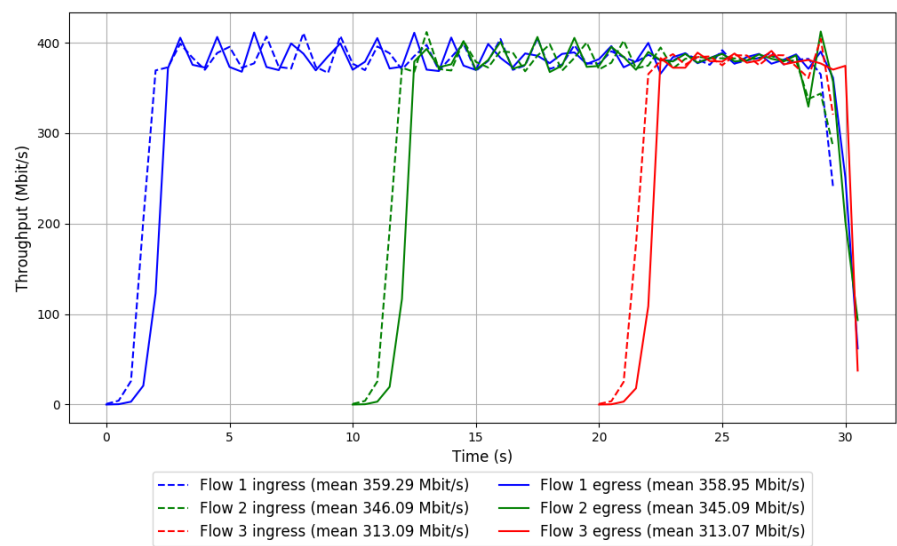
-- Flow 3:

Average throughput: 313.07 Mbit/s

95th percentile per-packet one-way delay: 100.776 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link

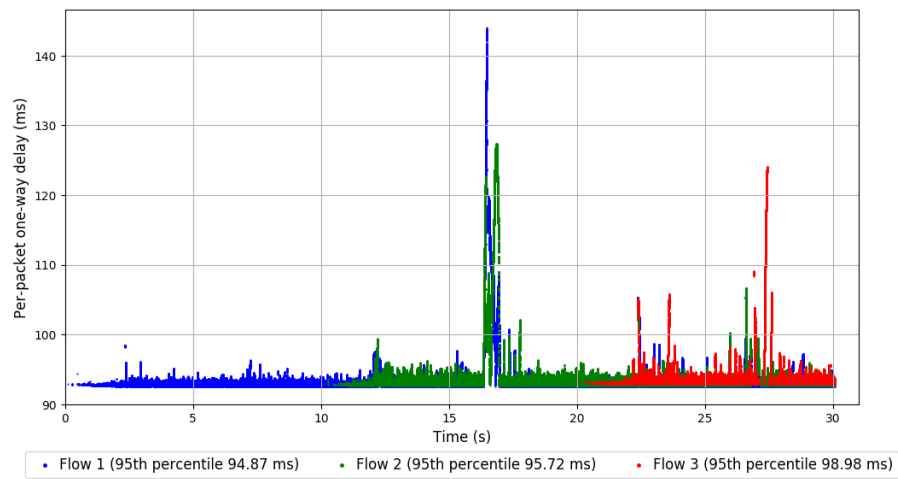
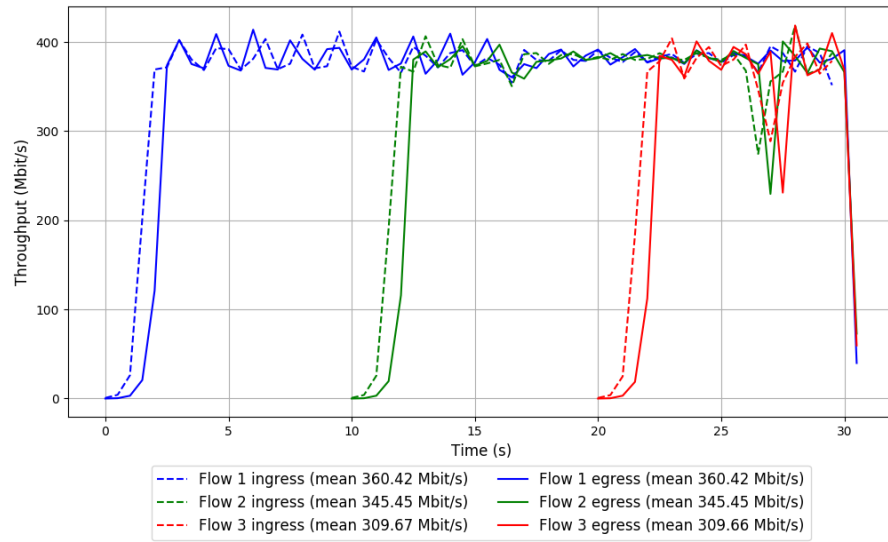


Run 5: Statistics of TCP Vegas

Start at: 2018-10-09 23:56:27  
End at: 2018-10-09 23:56:57  
Local clock offset: -0.131 ms  
Remote clock offset: -0.068 ms

# Below is generated by plot.py at 2018-10-10 02:16:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 693.30 Mbit/s  
95th percentile per-packet one-way delay: 95.729 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 360.42 Mbit/s  
95th percentile per-packet one-way delay: 94.869 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 345.45 Mbit/s  
95th percentile per-packet one-way delay: 95.722 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 309.66 Mbit/s  
95th percentile per-packet one-way delay: 98.982 ms  
Loss rate: 0.00%

# Run 5: Report of TCP Vegas — Data Link

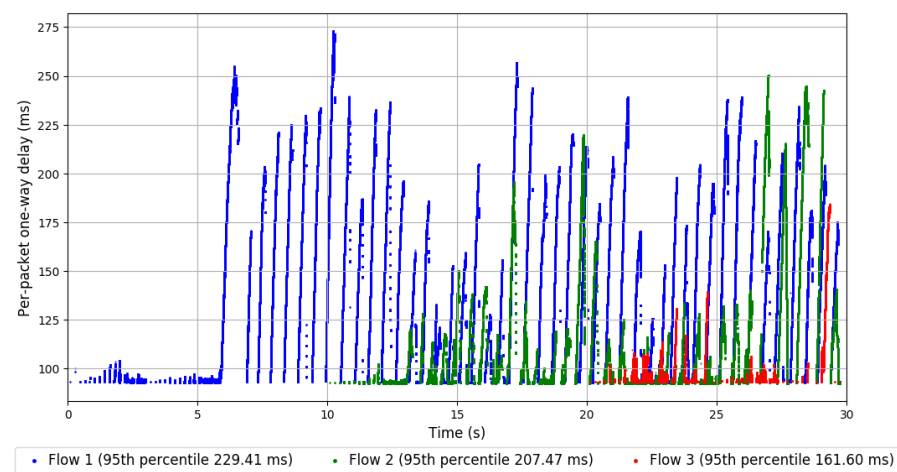
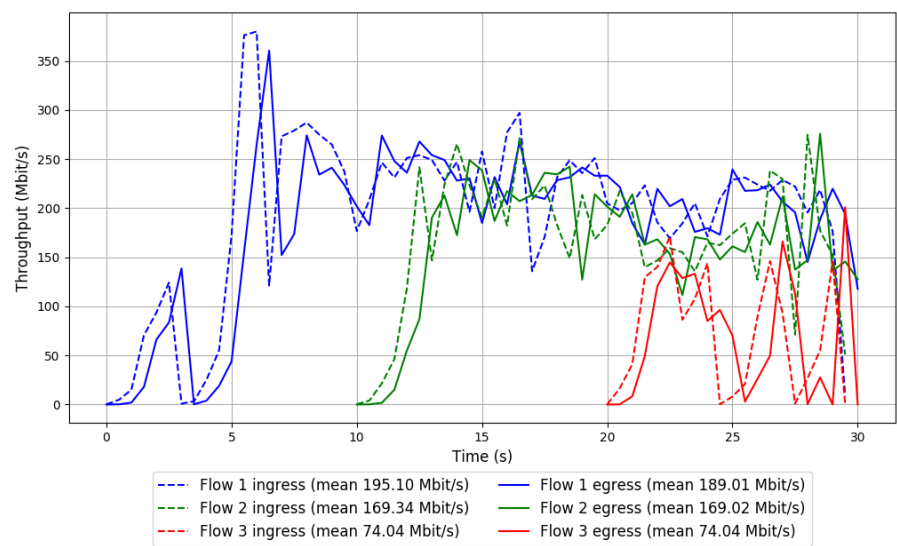


Run 1: Statistics of Verus

Start at: 2018-10-09 21:38:17  
End at: 2018-10-09 21:38:47  
Local clock offset: 0.424 ms  
Remote clock offset: -0.044 ms

# Below is generated by plot.py at 2018-10-10 02:16:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 324.94 Mbit/s  
95th percentile per-packet one-way delay: 224.206 ms  
Loss rate: 1.90%  
-- Flow 1:  
Average throughput: 189.01 Mbit/s  
95th percentile per-packet one-way delay: 229.410 ms  
Loss rate: 3.12%  
-- Flow 2:  
Average throughput: 169.02 Mbit/s  
95th percentile per-packet one-way delay: 207.474 ms  
Loss rate: 0.19%  
-- Flow 3:  
Average throughput: 74.04 Mbit/s  
95th percentile per-packet one-way delay: 161.596 ms  
Loss rate: 0.00%

Run 1: Report of Verus — Data Link



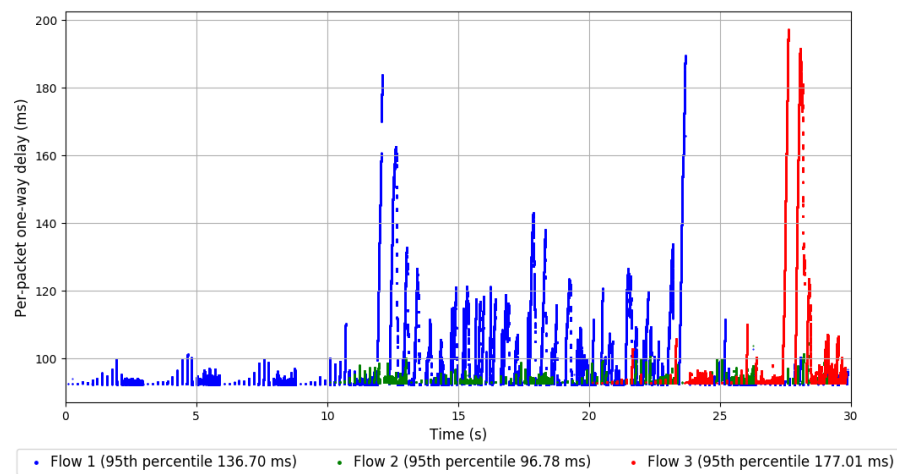
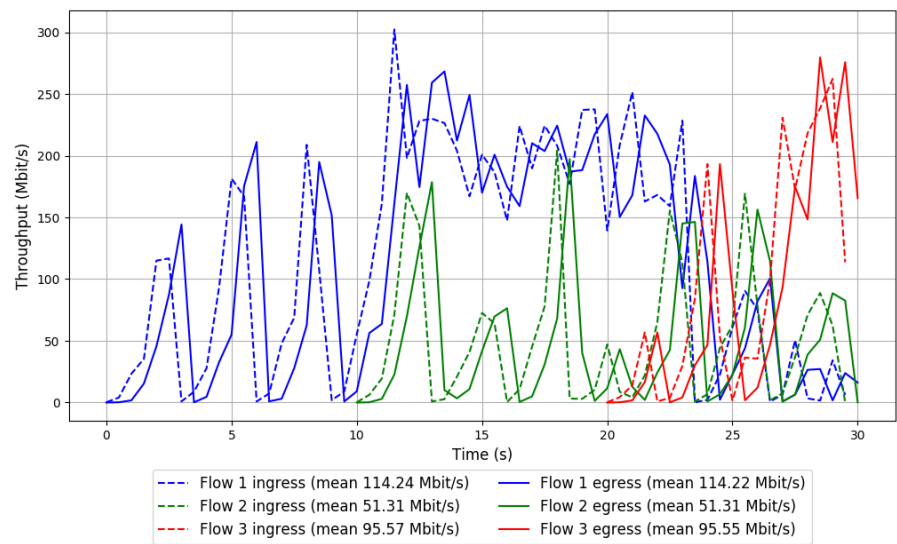


Run 2: Statistics of Verus

Start at: 2018-10-09 22:10:08  
End at: 2018-10-09 22:10:38  
Local clock offset: 0.742 ms  
Remote clock offset: -0.885 ms

# Below is generated by plot.py at 2018-10-10 02:16:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 179.08 Mbit/s  
95th percentile per-packet one-way delay: 138.880 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 114.22 Mbit/s  
95th percentile per-packet one-way delay: 136.701 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 51.31 Mbit/s  
95th percentile per-packet one-way delay: 96.783 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 95.55 Mbit/s  
95th percentile per-packet one-way delay: 177.008 ms  
Loss rate: 0.00%

Run 2: Report of Verus — Data Link

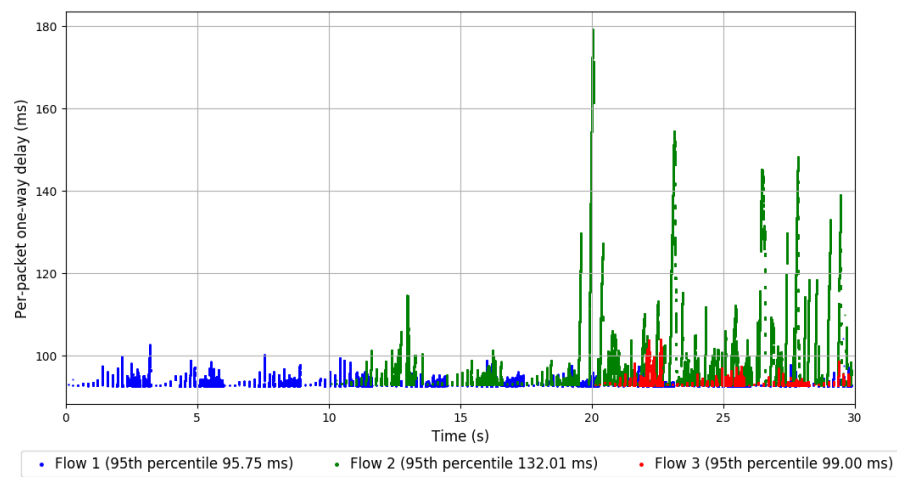
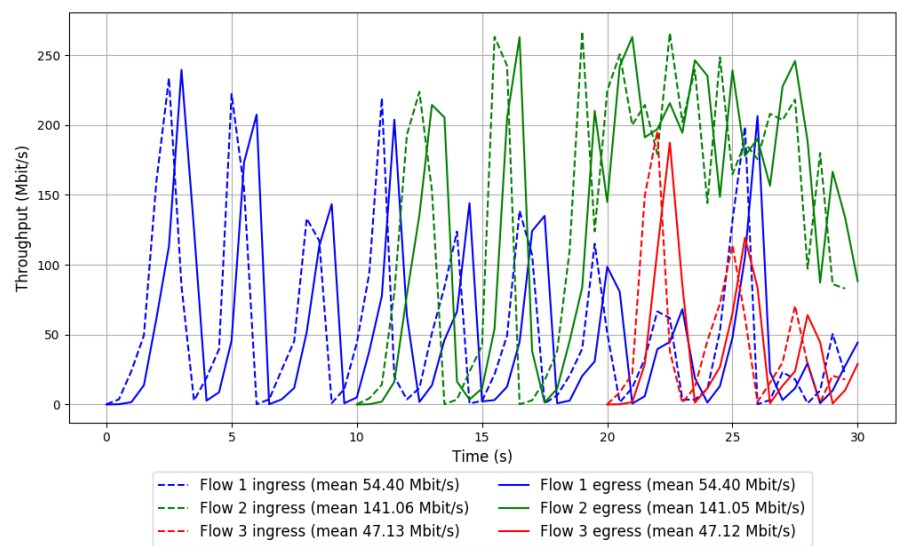


Run 3: Statistics of Verus

Start at: 2018-10-09 22:42:00  
End at: 2018-10-09 22:42:30  
Local clock offset: -0.108 ms  
Remote clock offset: -0.128 ms

# Below is generated by plot.py at 2018-10-10 02:16:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 163.28 Mbit/s  
95th percentile per-packet one-way delay: 122.174 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 54.40 Mbit/s  
95th percentile per-packet one-way delay: 95.753 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 141.05 Mbit/s  
95th percentile per-packet one-way delay: 132.009 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 47.12 Mbit/s  
95th percentile per-packet one-way delay: 99.002 ms  
Loss rate: 0.00%

Run 3: Report of Verus — Data Link

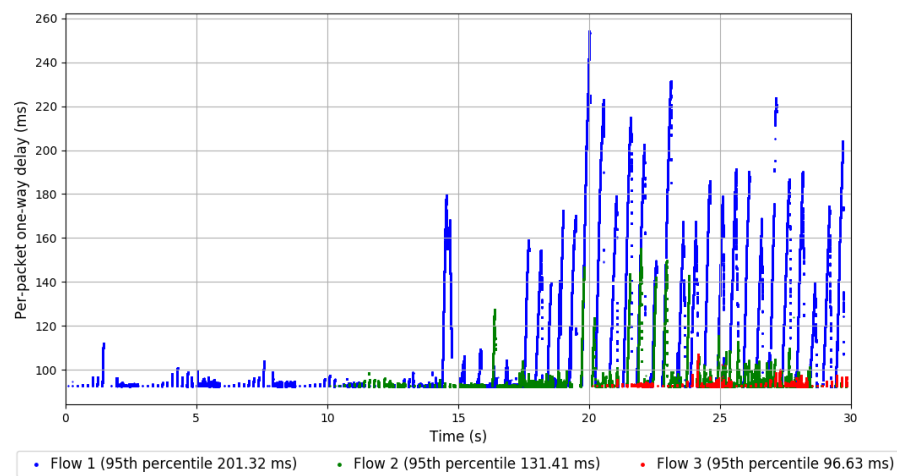
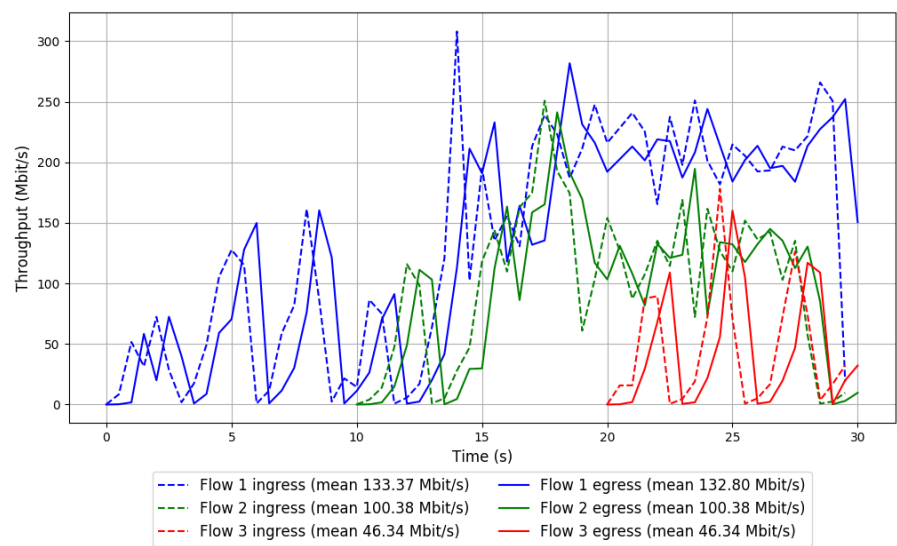


Run 4: Statistics of Verus

Start at: 2018-10-09 23:13:24  
End at: 2018-10-09 23:13:54  
Local clock offset: -0.183 ms  
Remote clock offset: 0.006 ms

# Below is generated by plot.py at 2018-10-10 02:16:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 213.82 Mbit/s  
95th percentile per-packet one-way delay: 185.645 ms  
Loss rate: 0.23%  
-- Flow 1:  
Average throughput: 132.80 Mbit/s  
95th percentile per-packet one-way delay: 201.318 ms  
Loss rate: 0.38%  
-- Flow 2:  
Average throughput: 100.38 Mbit/s  
95th percentile per-packet one-way delay: 131.413 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 46.34 Mbit/s  
95th percentile per-packet one-way delay: 96.629 ms  
Loss rate: 0.00%

Run 4: Report of Verus — Data Link

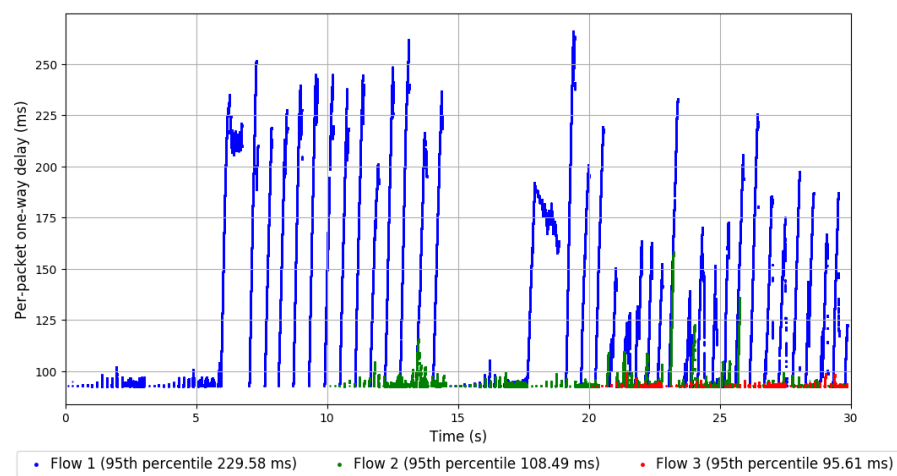
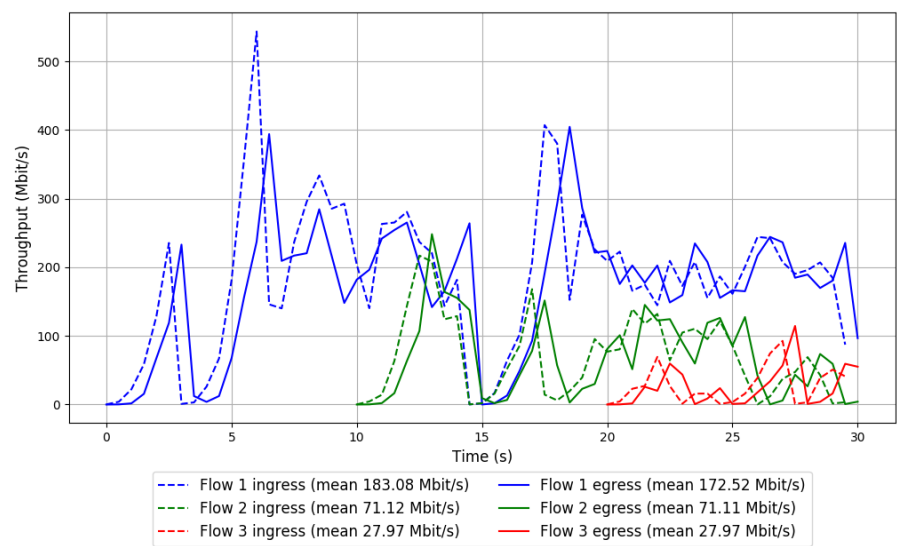


Run 5: Statistics of Verus

Start at: 2018-10-09 23:45:11  
End at: 2018-10-09 23:45:41  
Local clock offset: -0.231 ms  
Remote clock offset: -0.048 ms

# Below is generated by plot.py at 2018-10-10 02:17:40  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 228.51 Mbit/s  
95th percentile per-packet one-way delay: 225.859 ms  
Loss rate: 4.42%  
-- Flow 1:  
Average throughput: 172.52 Mbit/s  
95th percentile per-packet one-way delay: 229.581 ms  
Loss rate: 5.77%  
-- Flow 2:  
Average throughput: 71.11 Mbit/s  
95th percentile per-packet one-way delay: 108.487 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 27.97 Mbit/s  
95th percentile per-packet one-way delay: 95.605 ms  
Loss rate: 0.00%

Run 5: Report of Verus — Data Link



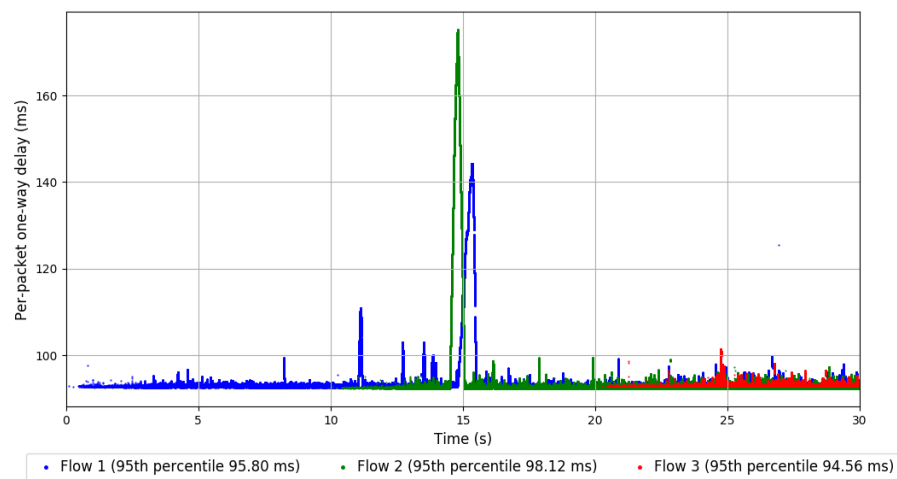
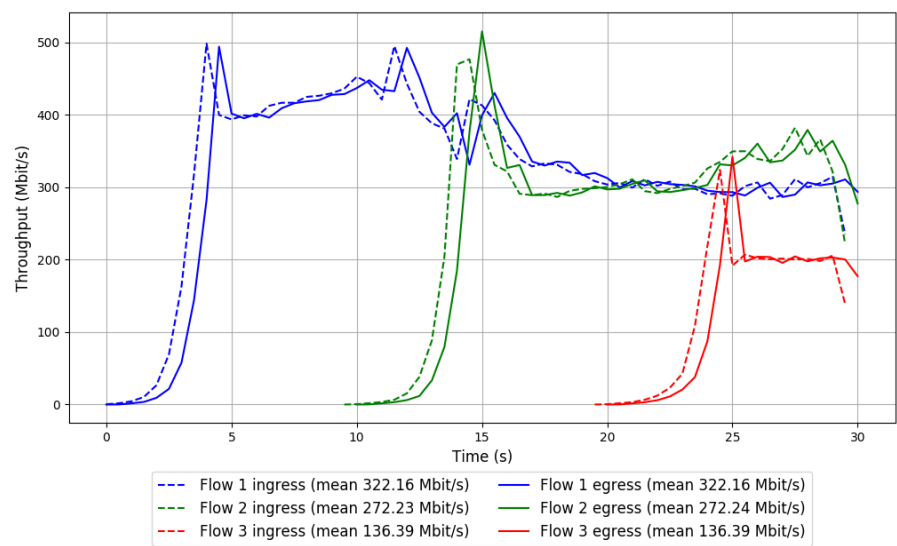


Run 1: Statistics of PCC-Vivace

Start at: 2018-10-09 21:53:44  
End at: 2018-10-09 21:54:14  
Local clock offset: 0.569 ms  
Remote clock offset: -0.585 ms

# Below is generated by plot.py at 2018-10-10 02:19:07  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 548.52 Mbit/s  
95th percentile per-packet one-way delay: 95.733 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 322.16 Mbit/s  
95th percentile per-packet one-way delay: 95.797 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 272.24 Mbit/s  
95th percentile per-packet one-way delay: 98.120 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 136.39 Mbit/s  
95th percentile per-packet one-way delay: 94.555 ms  
Loss rate: 0.00%

Run 1: Report of PCC-Vivace — Data Link

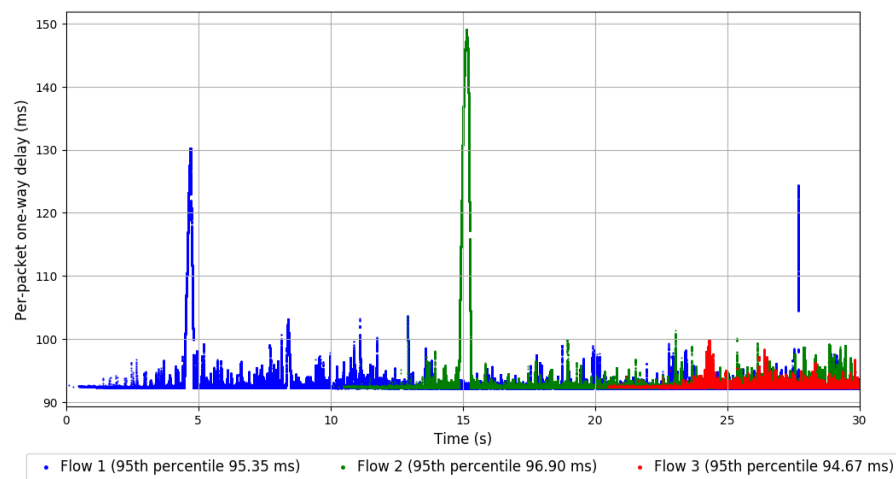
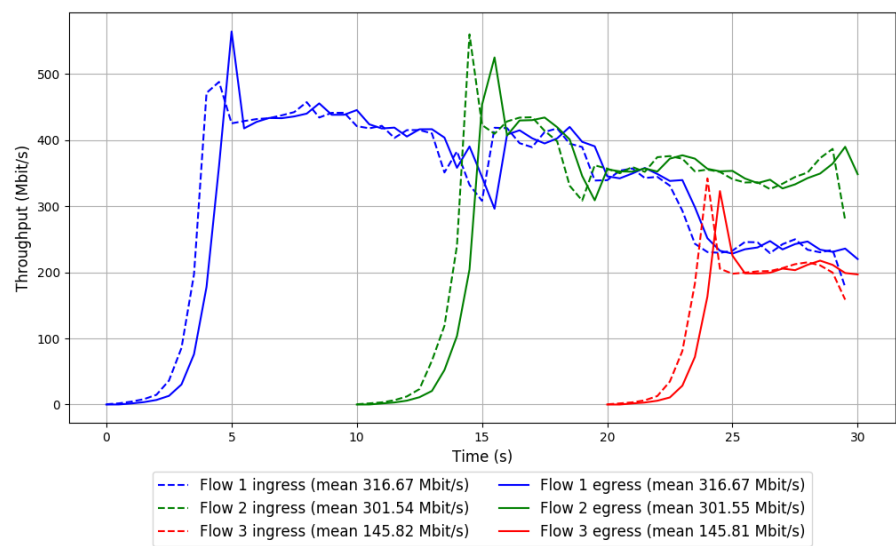


Run 2: Statistics of PCC-Vivace

Start at: 2018-10-09 22:25:30  
End at: 2018-10-09 22:26:00  
Local clock offset: 1.051 ms  
Remote clock offset: -1.145 ms

# Below is generated by plot.py at 2018-10-10 02:19:39  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 565.29 Mbit/s  
95th percentile per-packet one-way delay: 95.674 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 316.67 Mbit/s  
95th percentile per-packet one-way delay: 95.346 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 301.55 Mbit/s  
95th percentile per-packet one-way delay: 96.903 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 145.81 Mbit/s  
95th percentile per-packet one-way delay: 94.669 ms  
Loss rate: 0.00%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2018-10-09 22:57:06

End at: 2018-10-09 22:57:36

Local clock offset: -0.224 ms

Remote clock offset: 0.072 ms

# Below is generated by plot.py at 2018-10-10 02:20:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 475.75 Mbit/s

95th percentile per-packet one-way delay: 96.357 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 304.86 Mbit/s

95th percentile per-packet one-way delay: 112.193 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 185.54 Mbit/s

95th percentile per-packet one-way delay: 92.991 ms

Loss rate: 0.00%

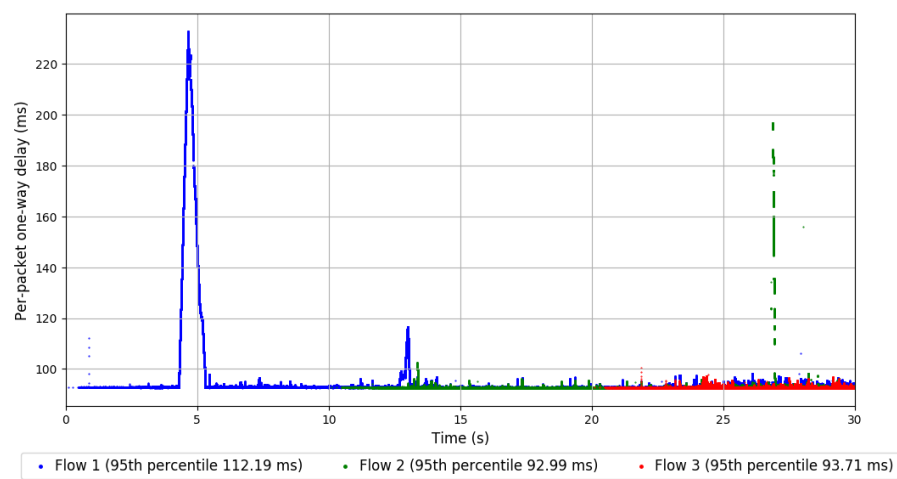
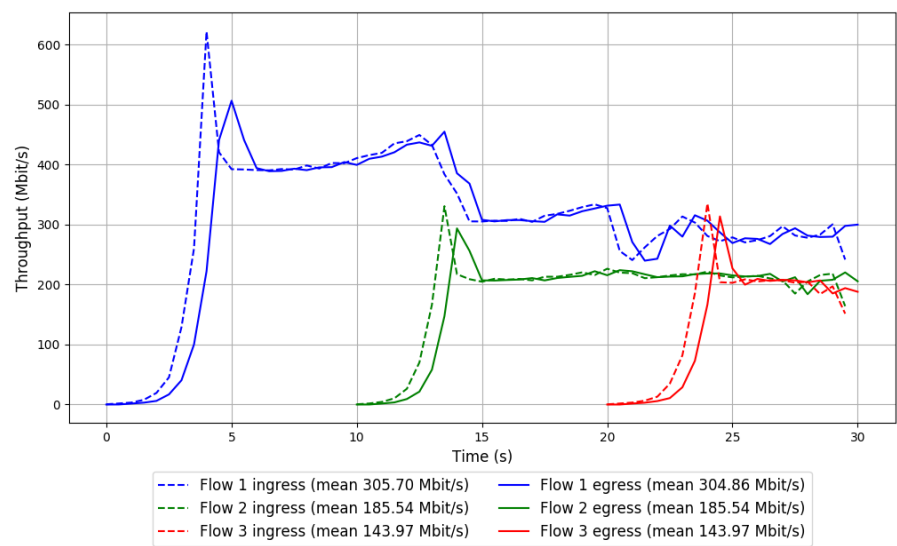
-- Flow 3:

Average throughput: 143.97 Mbit/s

95th percentile per-packet one-way delay: 93.710 ms

Loss rate: 0.00%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2018-10-09 23:28:44

End at: 2018-10-09 23:29:14

Local clock offset: -0.12 ms

Remote clock offset: 0.037 ms

# Below is generated by plot.py at 2018-10-10 02:20:39

# Datalink statistics

-- Total of 3 flows:

Average throughput: 503.55 Mbit/s

95th percentile per-packet one-way delay: 102.491 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 321.17 Mbit/s

95th percentile per-packet one-way delay: 108.266 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 205.43 Mbit/s

95th percentile per-packet one-way delay: 93.467 ms

Loss rate: 0.00%

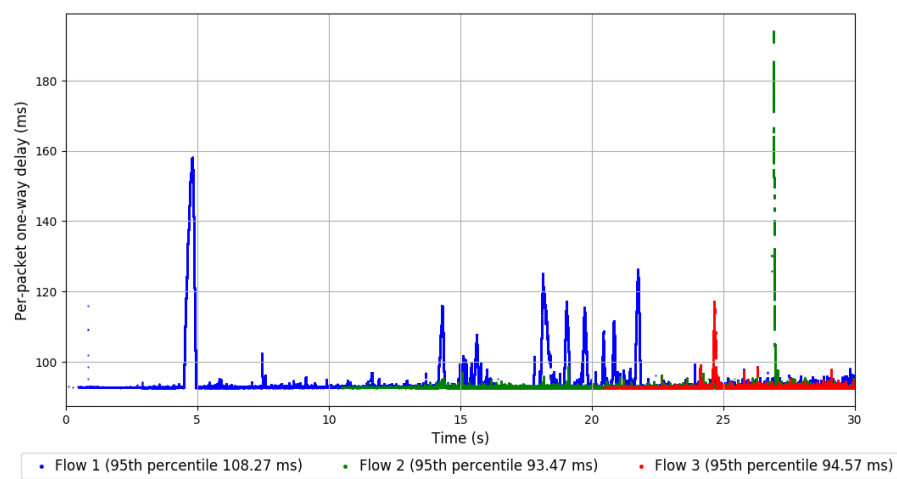
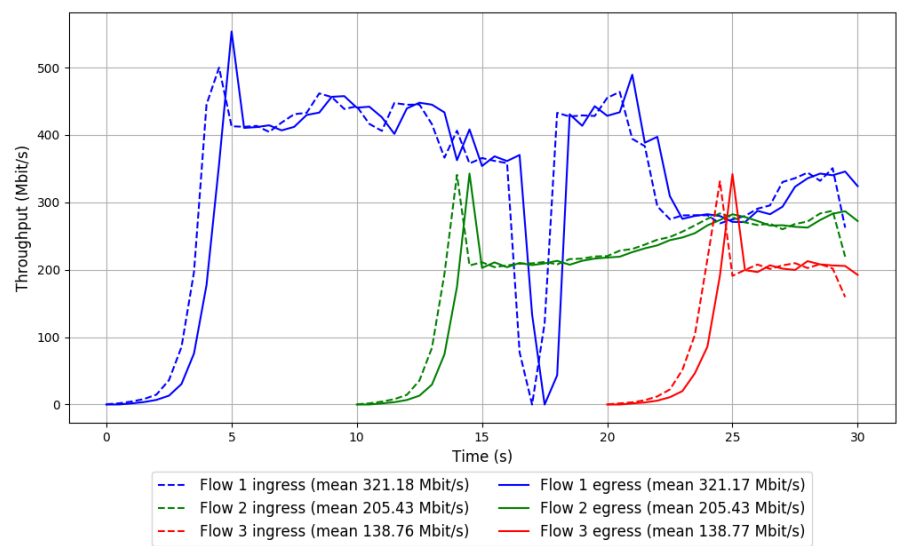
-- Flow 3:

Average throughput: 138.77 Mbit/s

95th percentile per-packet one-way delay: 94.566 ms

Loss rate: 0.00%

Run 4: Report of PCC-Vivace — Data Link



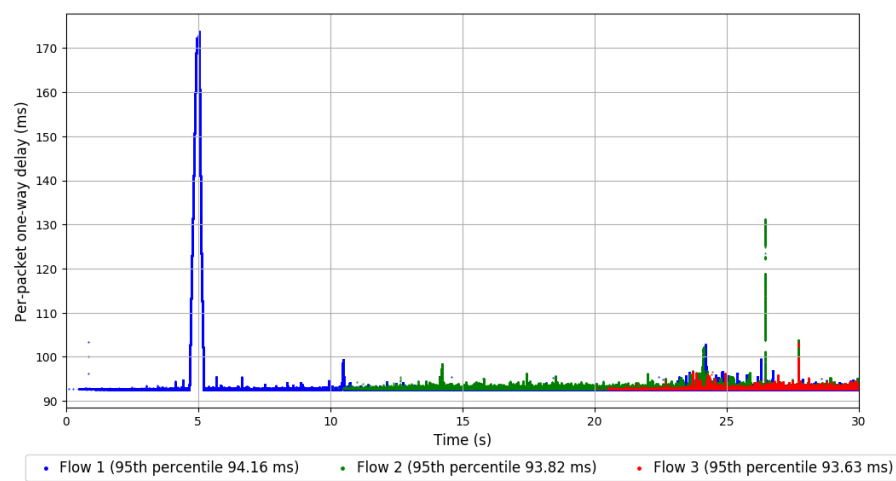
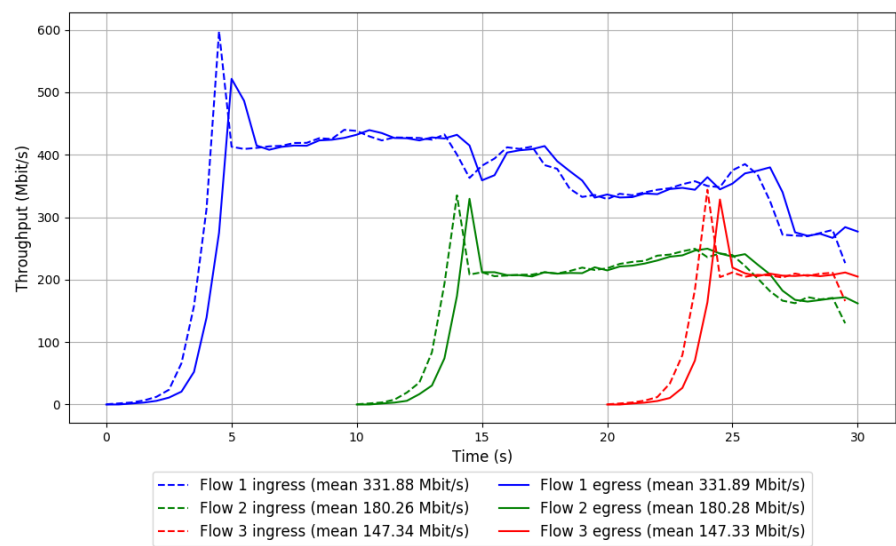


Run 5: Statistics of PCC-Vivace

Start at: 2018-10-10 00:00:28  
End at: 2018-10-10 00:00:58  
Local clock offset: -0.206 ms  
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2018-10-10 02:20:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 500.34 Mbit/s  
95th percentile per-packet one-way delay: 93.935 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 331.89 Mbit/s  
95th percentile per-packet one-way delay: 94.156 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 180.28 Mbit/s  
95th percentile per-packet one-way delay: 93.819 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 147.33 Mbit/s  
95th percentile per-packet one-way delay: 93.626 ms  
Loss rate: 0.01%

Run 5: Report of PCC-Vivace — Data Link

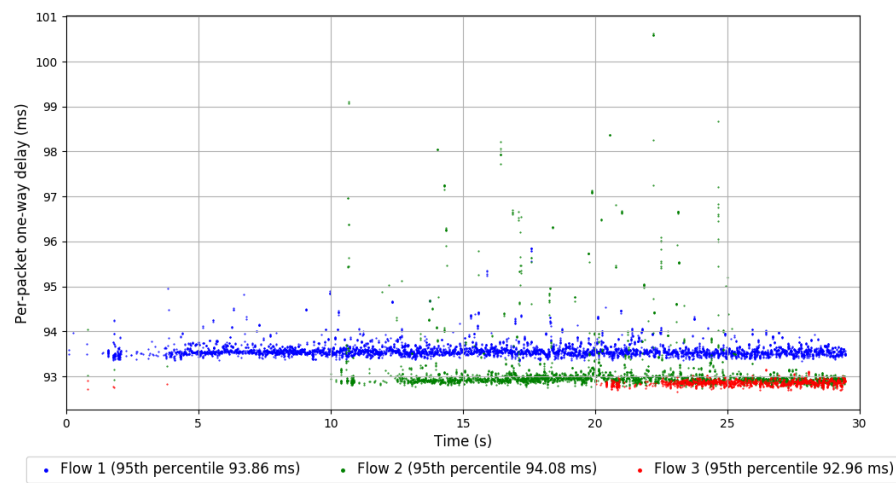
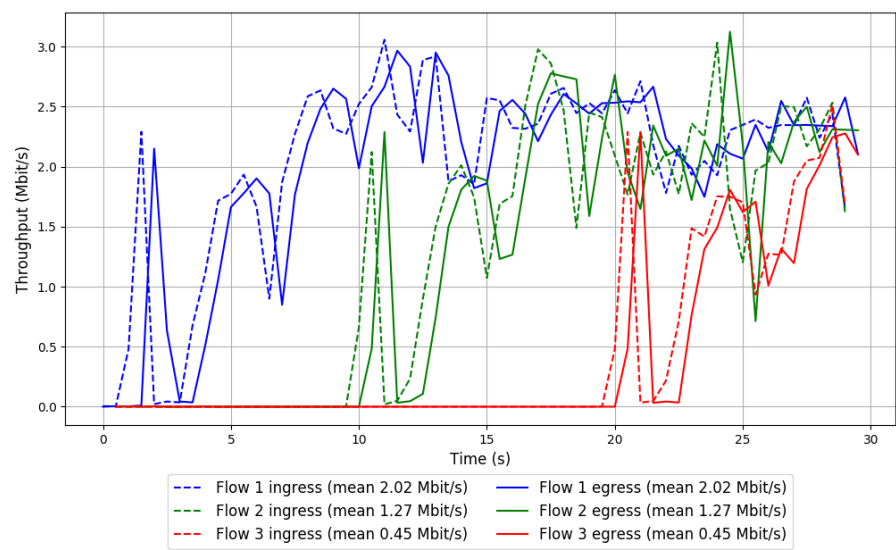


```
Run 1: Statistics of WebRTC media

Start at: 2018-10-09 21:34:54
End at: 2018-10-09 21:35:24
Local clock offset: 0.152 ms
Remote clock offset: 0.222 ms

# Below is generated by plot.py at 2018-10-10 02:20:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.70 Mbit/s
95th percentile per-packet one-way delay: 93.837 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 93.860 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.27 Mbit/s
95th percentile per-packet one-way delay: 94.083 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 92.958 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

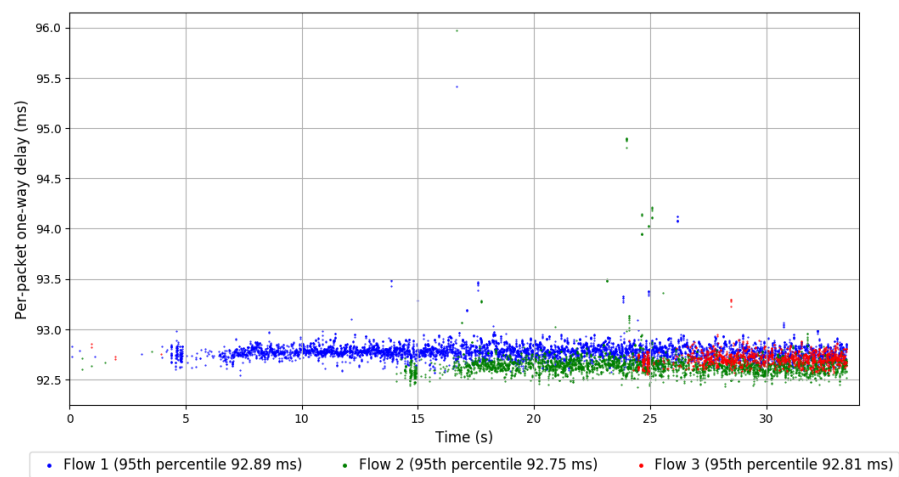
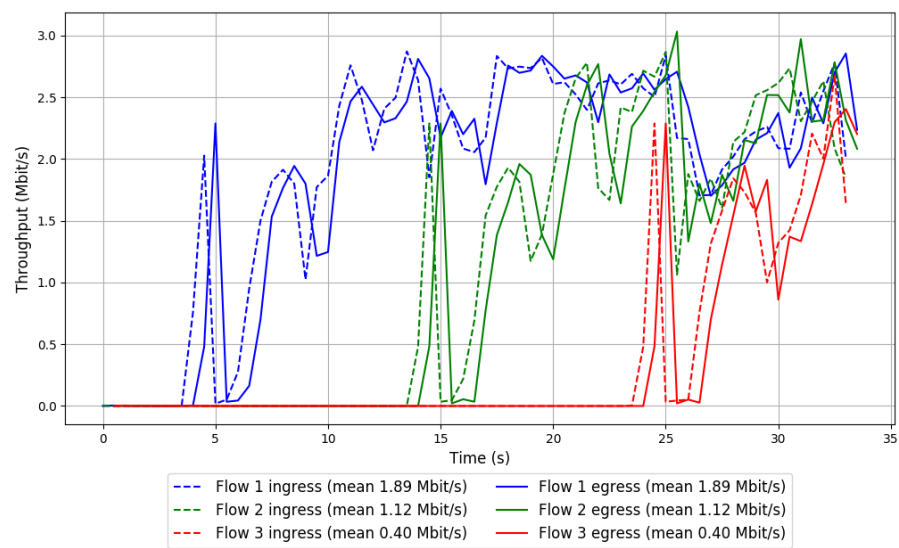


Run 2: Statistics of WebRTC media

Start at: 2018-10-09 22:06:45  
End at: 2018-10-09 22:07:15  
Local clock offset: 0.651 ms  
Remote clock offset: -0.845 ms

# Below is generated by plot.py at 2018-10-10 02:20:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.38 Mbit/s  
95th percentile per-packet one-way delay: 92.867 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 1.89 Mbit/s  
95th percentile per-packet one-way delay: 92.887 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.12 Mbit/s  
95th percentile per-packet one-way delay: 92.750 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.40 Mbit/s  
95th percentile per-packet one-way delay: 92.813 ms  
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-10-09 22:38:35

End at: 2018-10-09 22:39:05

Local clock offset: 0.176 ms

Remote clock offset: -0.24 ms

# Below is generated by plot.py at 2018-10-10 02:20:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.38 Mbit/s

95th percentile per-packet one-way delay: 92.869 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.89 Mbit/s

95th percentile per-packet one-way delay: 92.900 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.12 Mbit/s

95th percentile per-packet one-way delay: 92.663 ms

Loss rate: 0.00%

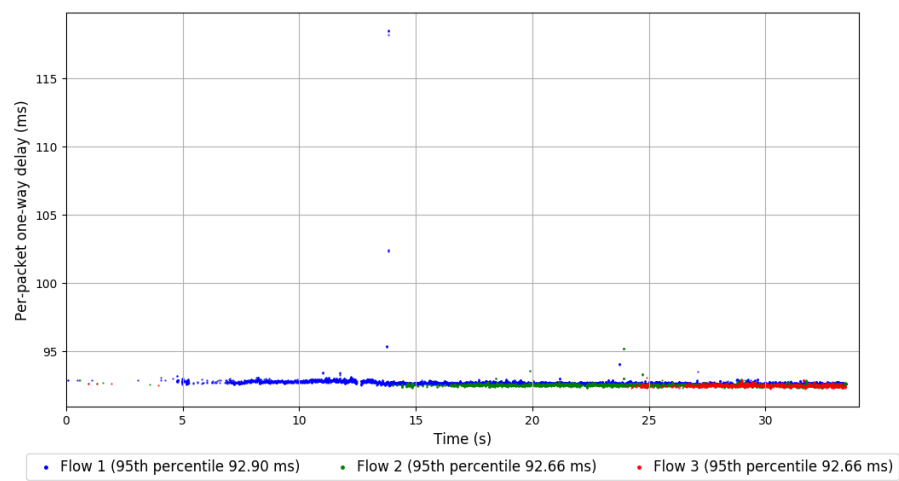
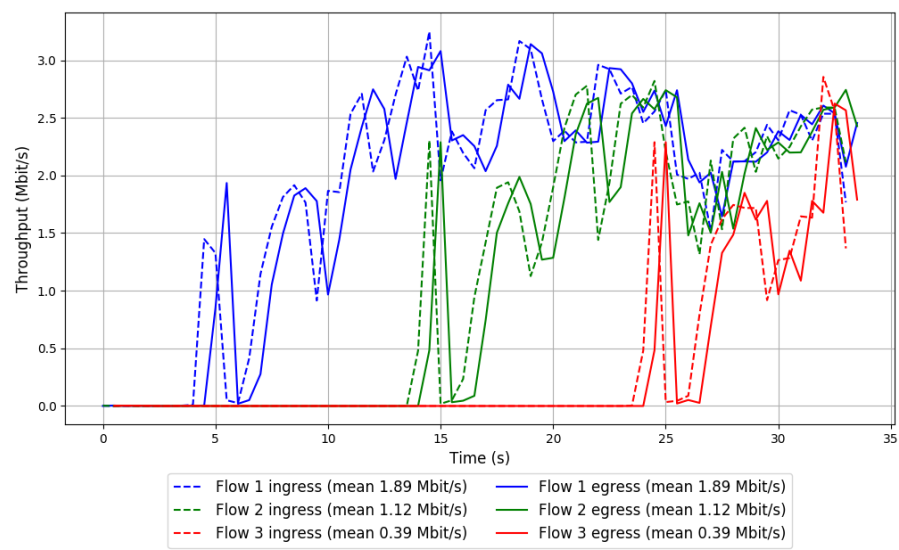
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 92.655 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link





Run 4: Statistics of WebRTC media

Start at: 2018-10-09 23:10:01

End at: 2018-10-09 23:10:31

Local clock offset: -0.179 ms

Remote clock offset: 0.011 ms

# Below is generated by plot.py at 2018-10-10 02:20:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.39 Mbit/s

95th percentile per-packet one-way delay: 93.588 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.90 Mbit/s

95th percentile per-packet one-way delay: 93.667 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.12 Mbit/s

95th percentile per-packet one-way delay: 93.252 ms

Loss rate: 0.00%

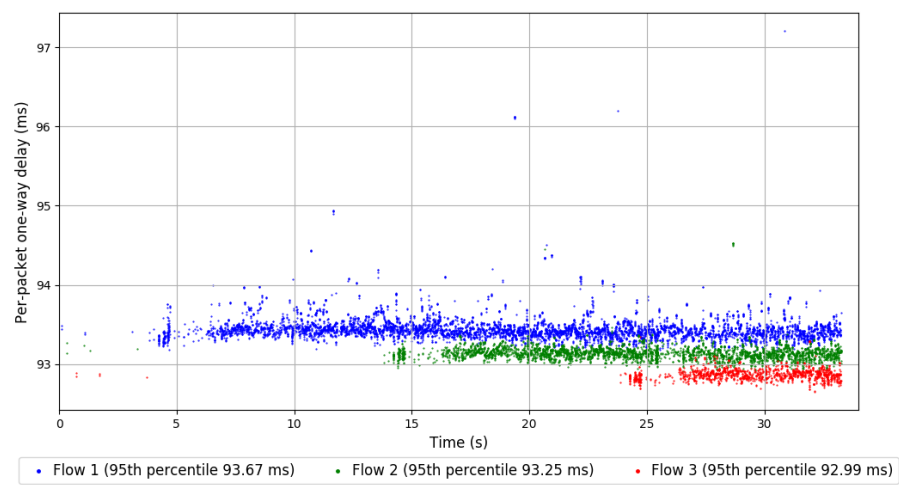
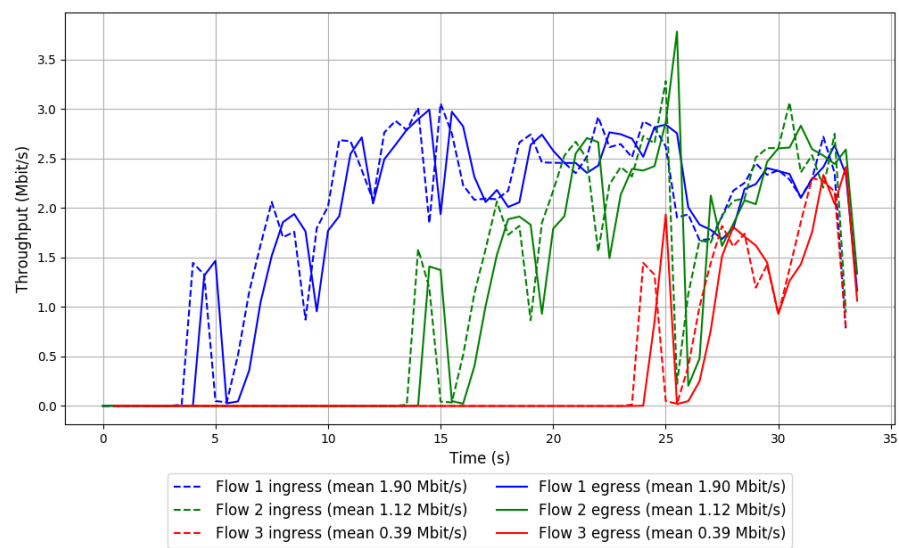
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 92.989 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-10-09 23:41:46  
End at: 2018-10-09 23:42:16  
Local clock offset: -0.174 ms  
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2018-10-10 02:20:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.32 Mbit/s  
95th percentile per-packet one-way delay: 93.541 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 1.86 Mbit/s  
95th percentile per-packet one-way delay: 93.268 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.09 Mbit/s  
95th percentile per-packet one-way delay: 93.689 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.40 Mbit/s  
95th percentile per-packet one-way delay: 93.208 ms  
Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

