

## Pantheon Report

Generated at 2019-09-18 22:49:29 (UTC).

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

Repeated the test of 24 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:

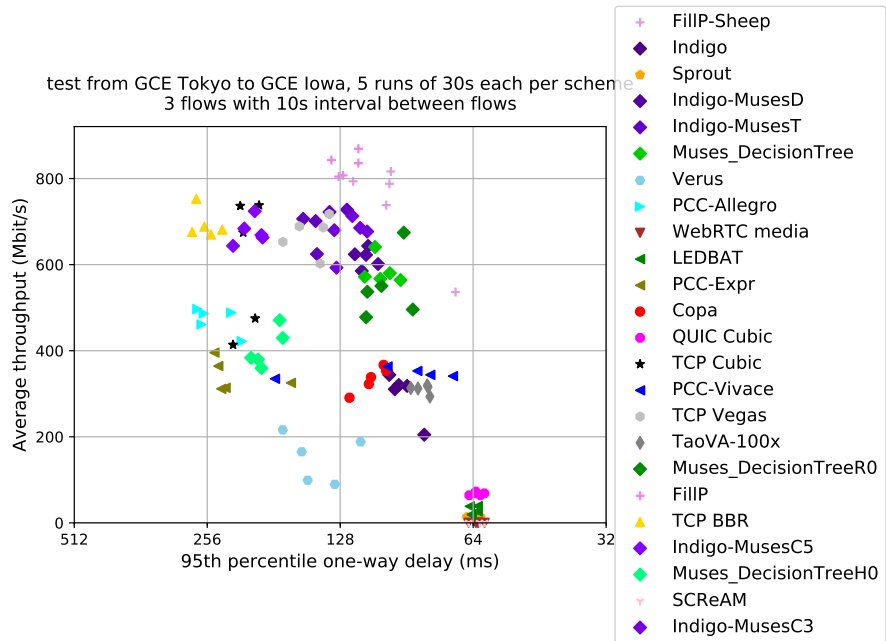
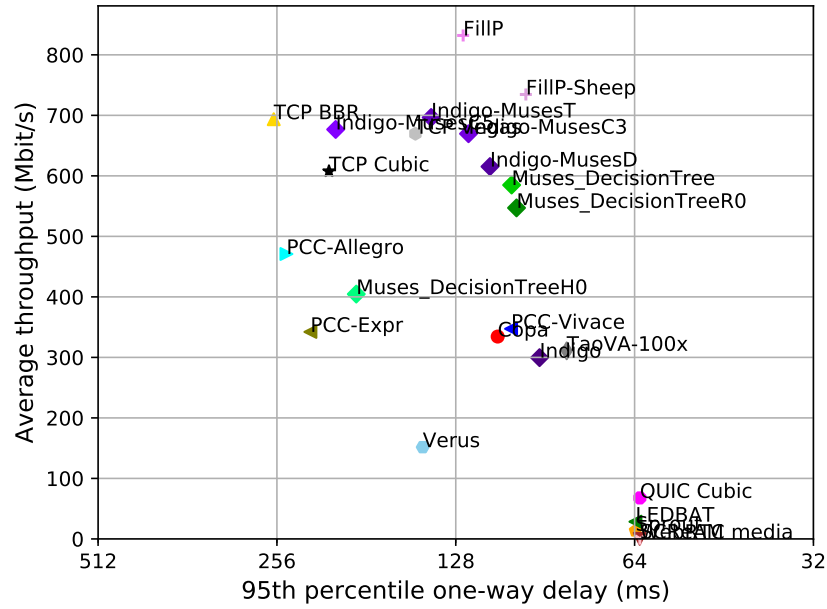
```
Linux 4.15.0-1040-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

### Git summary:

```
branch: muses @ de42328552b3776a75a932a94dfafd722537b0ec
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/muses_dtree @ 387225f7b5f61ddbe92d708a8869ffbb84eb3200
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 Tokyo to GCE Iowa, 5 runs of 30s each per scheme  
 3 flows with 10s interval between flows (mean of all runs by scheme)



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	370.30	334.85	305.73	243.69	276.69	227.64	1.73	2.77	3.68
Copa	5	169.52	173.40	150.78	104.39	110.81	112.39	0.44	0.66	1.40
TCP Cubic	5	269.53	368.60	281.91	148.28	215.97	171.60	0.60	1.42	2.20
FillP	5	511.53	347.05	274.23	130.45	94.68	71.77	2.21	0.56	1.26
FillP-Sheep	5	433.42	323.82	261.65	103.91	77.05	70.93	0.90	0.56	1.31
Indigo	5	148.70	164.89	125.44	93.90	89.24	82.24	0.34	0.69	1.50
Indigo-MusesC3	5	392.06	336.69	239.82	119.30	130.78	109.97	0.33	0.58	2.28
Indigo-MusesC5	5	412.17	365.11	118.56	201.37	205.69	67.02	1.19	1.80	2.25
Indigo-MusesD	5	369.83	292.54	228.53	117.24	102.00	92.22	0.34	0.67	2.33
Indigo-MusesT	5	406.66	349.61	266.22	143.22	139.76	124.24	0.51	0.68	2.46
LEDBAT	5	15.14	16.36	7.80	63.31	64.04	62.63	0.62	1.23	2.33
Muses_DecisionTree	5	340.12	276.96	197.56	108.36	92.91	111.55	0.36	0.52	1.81
Muses_DecisionTreeH0	5	213.03	192.15	205.45	190.78	187.35	152.75	5.50	2.21	1.88
Muses_DecisionTreeR0	5	306.34	275.09	188.89	102.67	103.08	97.79	0.35	0.69	1.81
PCC-Allegro	5	243.70	246.54	194.74	213.82	274.28	227.76	2.64	5.03	4.88
PCC-Expr	5	199.03	160.52	111.82	230.34	201.77	115.16	3.56	1.46	1.47
QUIC Cubic	5	42.00	29.84	16.93	60.56	62.73	61.34	0.58	1.00	0.60
SCReAM	5	0.22	0.22	0.22	62.68	61.16	60.45	0.38	0.61	1.08
Sprout	5	6.92	6.78	6.50	62.40	63.50	61.94	0.49	0.73	1.55
TaoVA-100x	5	161.88	153.38	142.69	84.37	80.35	85.15	0.43	0.61	1.23
TCP Vegas	5	367.56	338.02	234.58	149.86	150.38	128.19	0.54	0.85	1.30
Verus	5	82.13	63.28	86.73	140.27	141.30	165.55	1.45	0.46	1.17
PCC-Vivace	5	189.74	179.24	117.77	92.40	124.20	107.21	0.41	1.09	1.66
WebRTC media	5	0.05	0.05	0.05	62.17	60.58	61.74	0.00	0.01	0.00

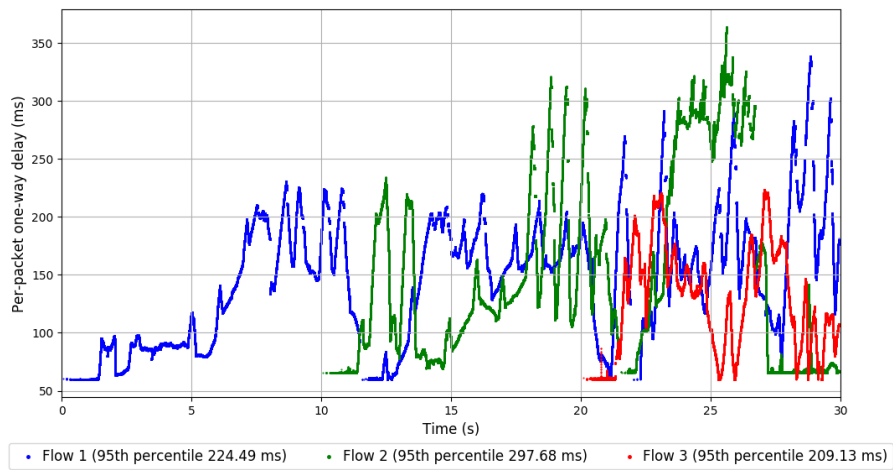
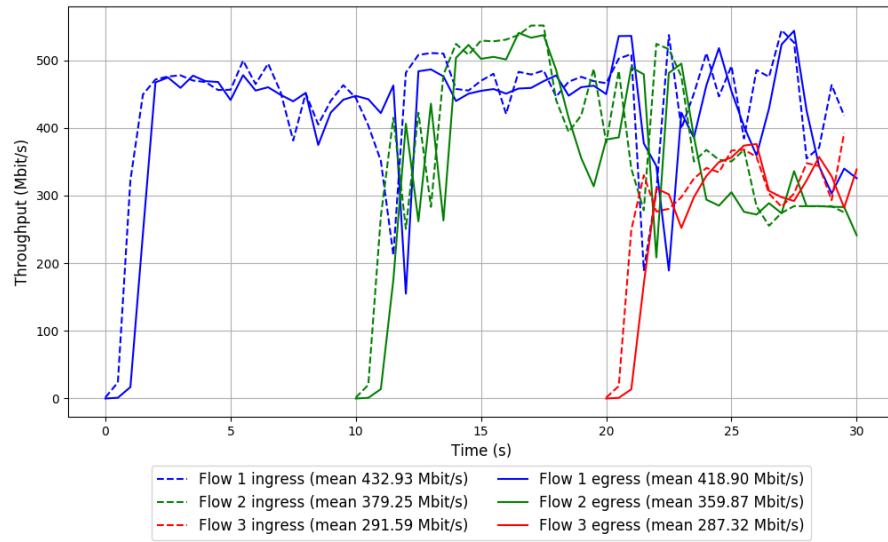


Run 1: Statistics of TCP BBR

Start at: 2019-09-18 15:57:54  
End at: 2019-09-18 15:58:24  
Local clock offset: 0.057 ms  
Remote clock offset: -0.024 ms

# Below is generated by plot.py at 2019-09-18 19:38:10  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 752.78 Mbit/s  
95th percentile per-packet one-way delay: 271.043 ms  
Loss rate: 4.19%  
-- Flow 1:  
Average throughput: 418.90 Mbit/s  
95th percentile per-packet one-way delay: 224.489 ms  
Loss rate: 3.63%  
-- Flow 2:  
Average throughput: 359.87 Mbit/s  
95th percentile per-packet one-way delay: 297.682 ms  
Loss rate: 5.71%  
-- Flow 3:  
Average throughput: 287.32 Mbit/s  
95th percentile per-packet one-way delay: 209.126 ms  
Loss rate: 2.69%

# Run 1: Report of TCP BBR — Data Link

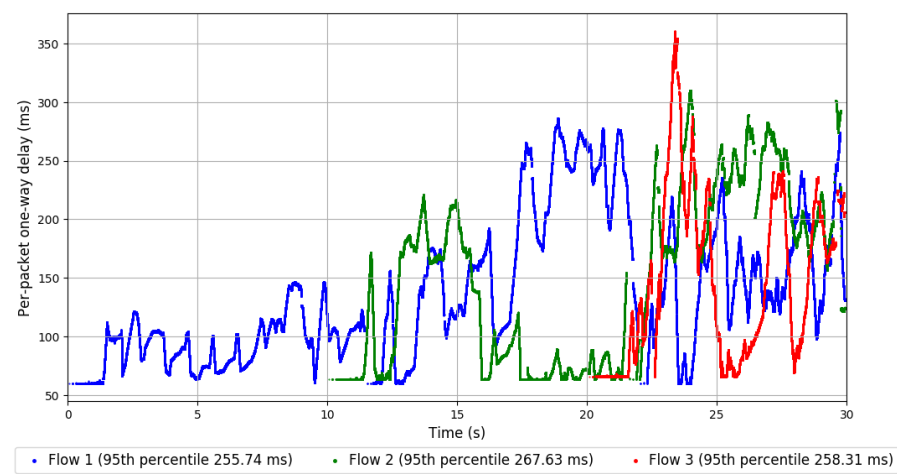
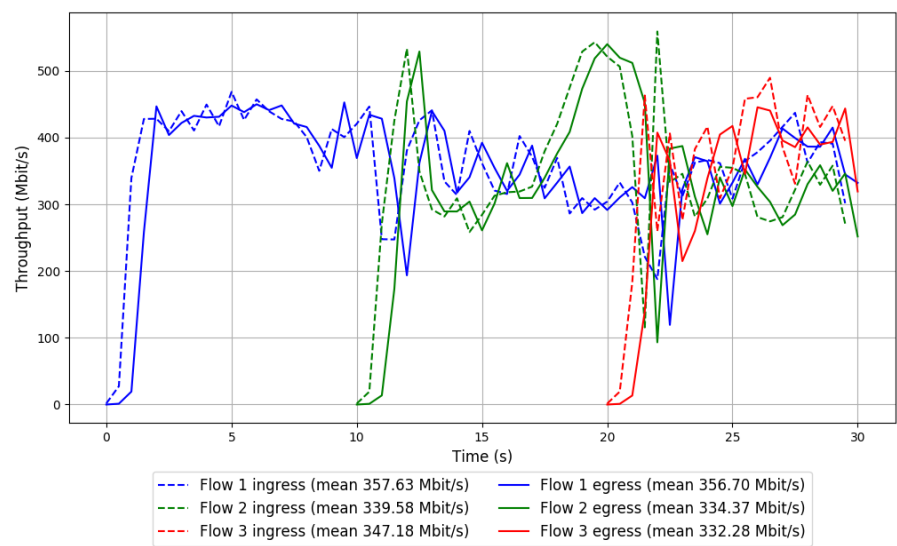


Run 2: Statistics of TCP BBR

Start at: 2019-09-18 16:37:05  
End at: 2019-09-18 16:37:35  
Local clock offset: 0.015 ms  
Remote clock offset: -0.028 ms

# Below is generated by plot.py at 2019-09-18 19:38:10  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 688.41 Mbit/s  
95th percentile per-packet one-way delay: 259.766 ms  
Loss rate: 1.95%  
-- Flow 1:  
Average throughput: 356.70 Mbit/s  
95th percentile per-packet one-way delay: 255.738 ms  
Loss rate: 0.67%  
-- Flow 2:  
Average throughput: 334.37 Mbit/s  
95th percentile per-packet one-way delay: 267.629 ms  
Loss rate: 2.15%  
-- Flow 3:  
Average throughput: 332.28 Mbit/s  
95th percentile per-packet one-way delay: 258.307 ms  
Loss rate: 5.53%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2019-09-18 17:16:45

End at: 2019-09-18 17:17:15

Local clock offset: -0.196 ms

Remote clock offset: 0.007 ms

# Below is generated by plot.py at 2019-09-18 19:38:10

# Datalink statistics

-- Total of 3 flows:

Average throughput: 670.01 Mbit/s

95th percentile per-packet one-way delay: 251.218 ms

Loss rate: 1.68%

-- Flow 1:

Average throughput: 367.06 Mbit/s

95th percentile per-packet one-way delay: 224.219 ms

Loss rate: 1.10%

-- Flow 2:

Average throughput: 320.52 Mbit/s

95th percentile per-packet one-way delay: 267.748 ms

Loss rate: 2.42%

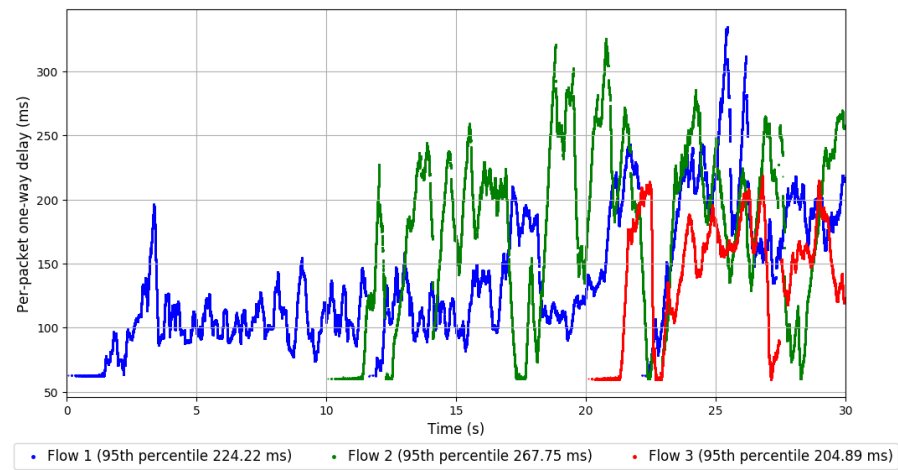
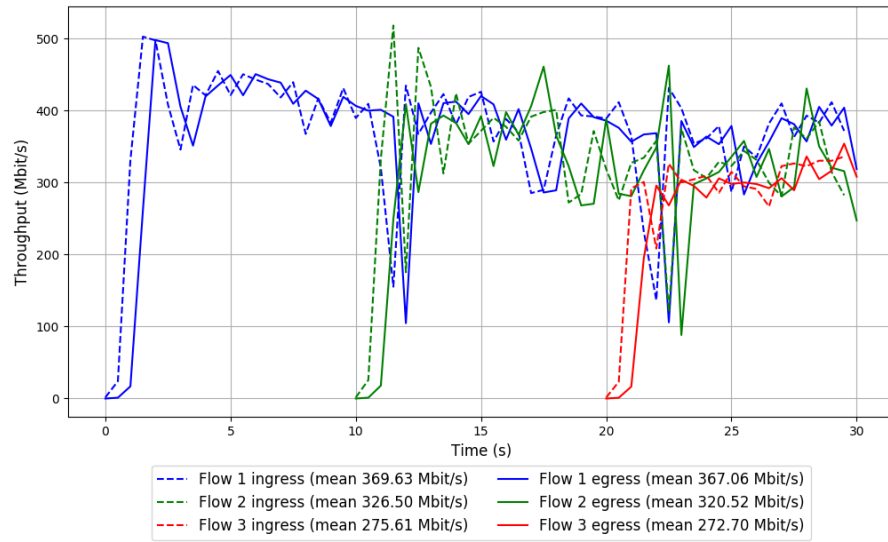
-- Flow 3:

Average throughput: 272.70 Mbit/s

95th percentile per-packet one-way delay: 204.890 ms

Loss rate: 2.27%

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

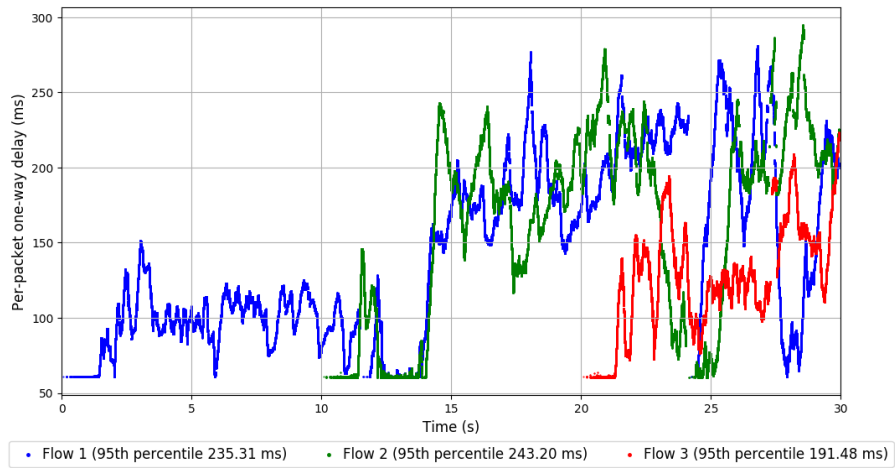
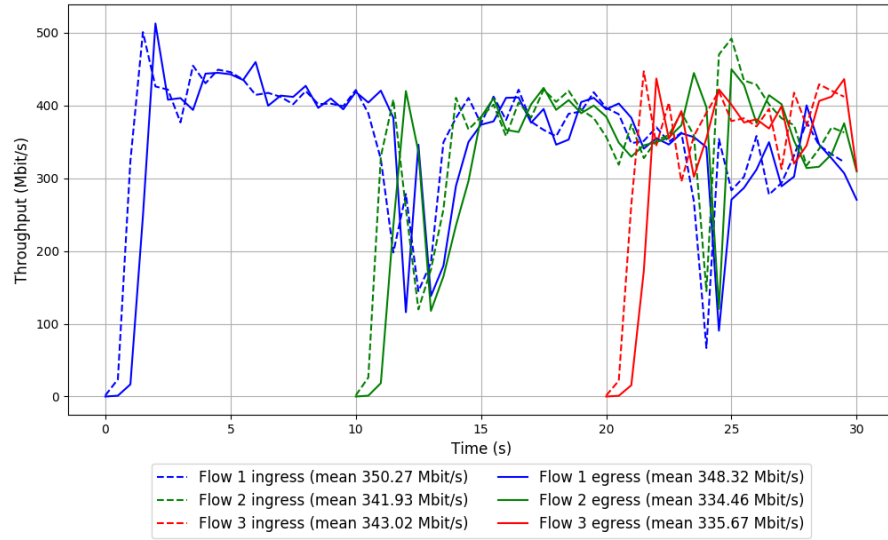


Run 4: Statistics of TCP BBR

Start at: 2019-09-18 17:55:54  
End at: 2019-09-18 17:56:24  
Local clock offset: -0.113 ms  
Remote clock offset: -0.799 ms

# Below is generated by plot.py at 2019-09-18 19:38:10  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 681.28 Mbit/s  
95th percentile per-packet one-way delay: 236.816 ms  
Loss rate: 1.95%  
-- Flow 1:  
Average throughput: 348.32 Mbit/s  
95th percentile per-packet one-way delay: 235.310 ms  
Loss rate: 0.96%  
-- Flow 2:  
Average throughput: 334.46 Mbit/s  
95th percentile per-packet one-way delay: 243.197 ms  
Loss rate: 2.77%  
-- Flow 3:  
Average throughput: 335.67 Mbit/s  
95th percentile per-packet one-way delay: 191.478 ms  
Loss rate: 3.34%

# Run 4: Report of TCP BBR — Data Link





Run 5: Statistics of TCP BBR

Start at: 2019-09-18 18:35:09

End at: 2019-09-18 18:35:39

Local clock offset: -0.012 ms

Remote clock offset: 0.767 ms

# Below is generated by plot.py at 2019-09-18 19:38:10

# Datalink statistics

-- Total of 3 flows:

Average throughput: 675.65 Mbit/s

95th percentile per-packet one-way delay: 277.050 ms

Loss rate: 2.15%

-- Flow 1:

Average throughput: 360.50 Mbit/s

95th percentile per-packet one-way delay: 278.712 ms

Loss rate: 2.28%

-- Flow 2:

Average throughput: 325.01 Mbit/s

95th percentile per-packet one-way delay: 307.209 ms

Loss rate: 0.78%

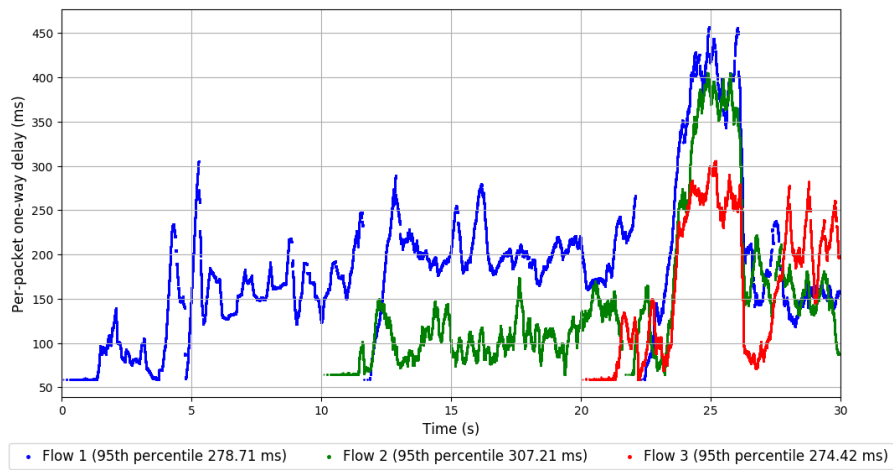
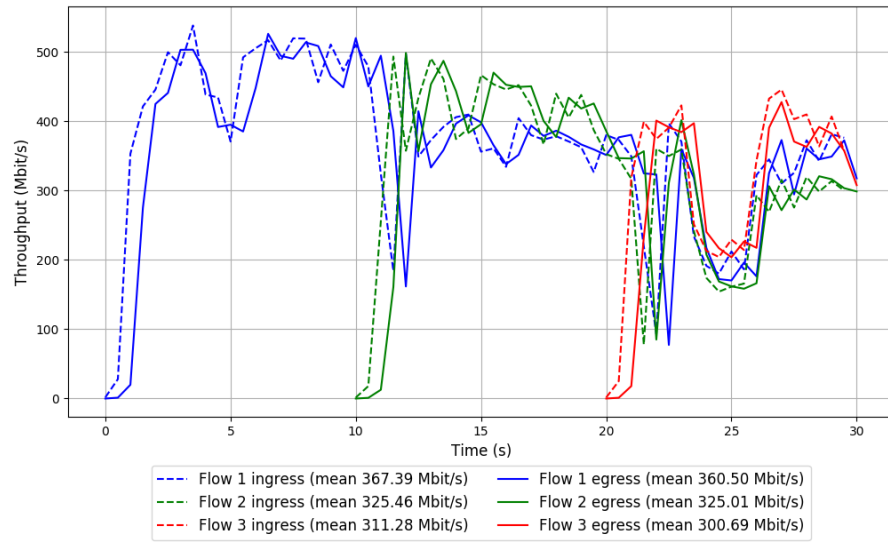
-- Flow 3:

Average throughput: 300.69 Mbit/s

95th percentile per-packet one-way delay: 274.424 ms

Loss rate: 4.59%

# Run 5: Report of TCP BBR — Data Link

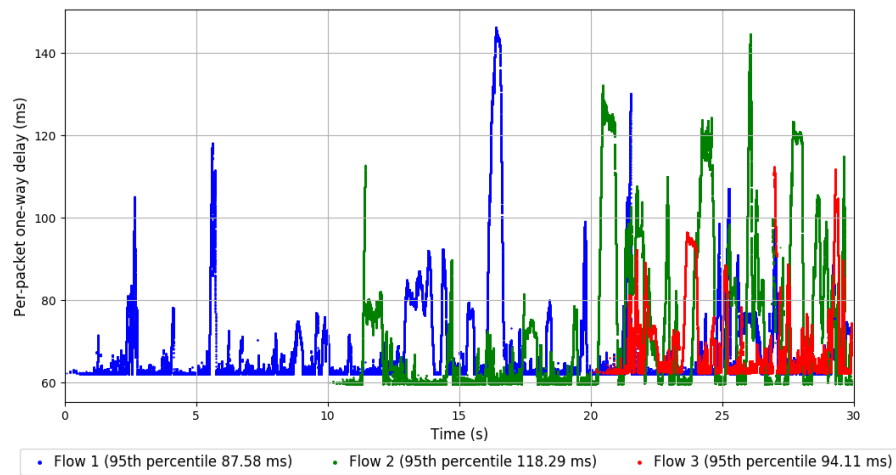
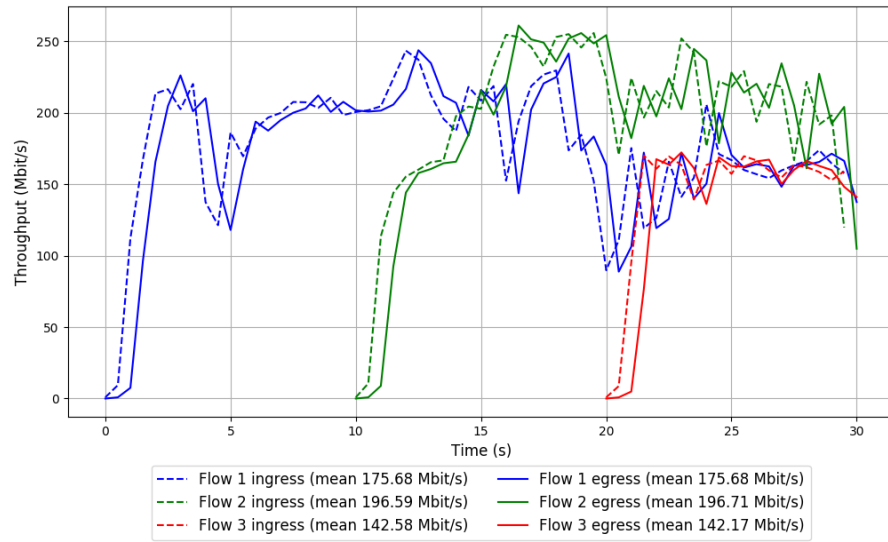


Run 1: Statistics of Copa

Start at: 2019-09-18 15:46:42  
End at: 2019-09-18 15:47:12  
Local clock offset: 0.009 ms  
Remote clock offset: -0.042 ms

# Below is generated by plot.py at 2019-09-18 19:38:10  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 353.31 Mbit/s  
95th percentile per-packet one-way delay: 100.742 ms  
Loss rate: 0.60%  
-- Flow 1:  
Average throughput: 175.68 Mbit/s  
95th percentile per-packet one-way delay: 87.576 ms  
Loss rate: 0.41%  
-- Flow 2:  
Average throughput: 196.71 Mbit/s  
95th percentile per-packet one-way delay: 118.291 ms  
Loss rate: 0.53%  
-- Flow 3:  
Average throughput: 142.17 Mbit/s  
95th percentile per-packet one-way delay: 94.108 ms  
Loss rate: 1.52%

## Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2019-09-18 16:26:10

End at: 2019-09-18 16:26:40

Local clock offset: -0.001 ms

Remote clock offset: 0.092 ms

# Below is generated by plot.py at 2019-09-18 19:38:10

# Datalink statistics

-- Total of 3 flows:

Average throughput: 322.55 Mbit/s

95th percentile per-packet one-way delay: 110.240 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 153.73 Mbit/s

95th percentile per-packet one-way delay: 121.900 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 183.23 Mbit/s

95th percentile per-packet one-way delay: 99.738 ms

Loss rate: 0.70%

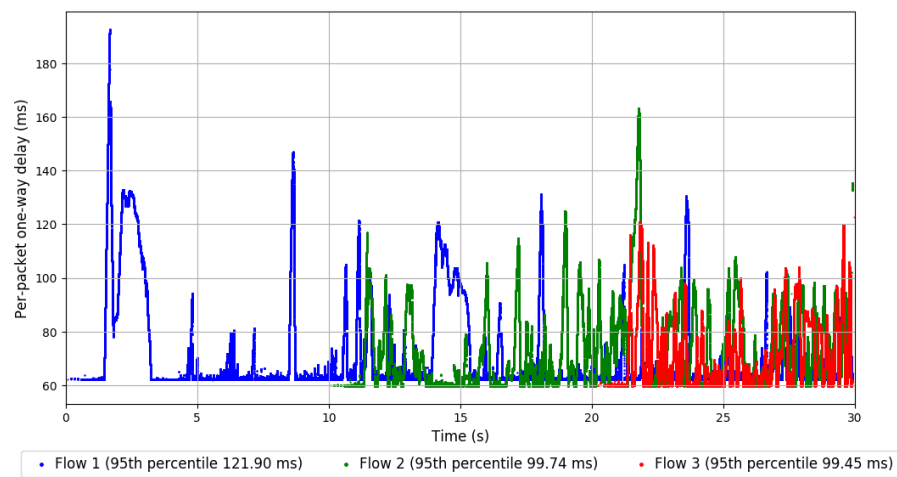
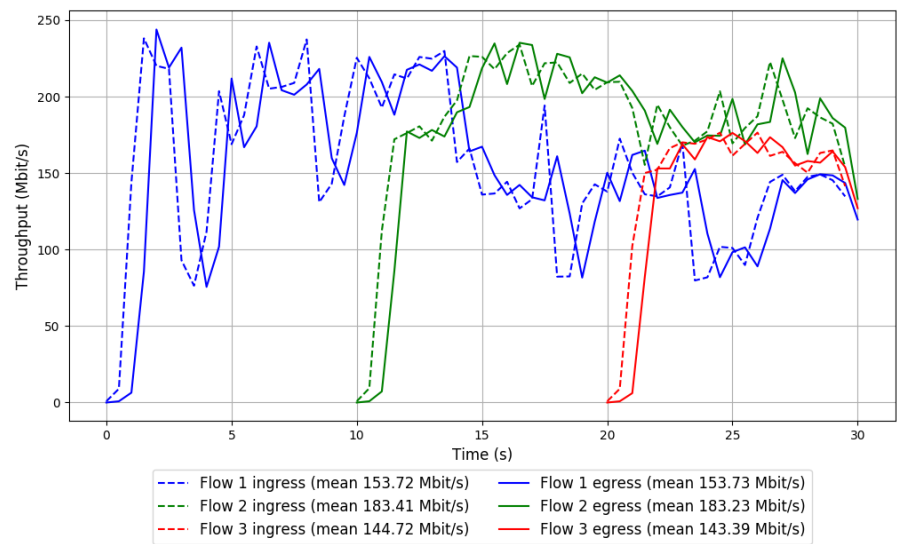
-- Flow 3:

Average throughput: 143.39 Mbit/s

95th percentile per-packet one-way delay: 99.447 ms

Loss rate: 1.53%

Run 2: Report of Copa — Data Link

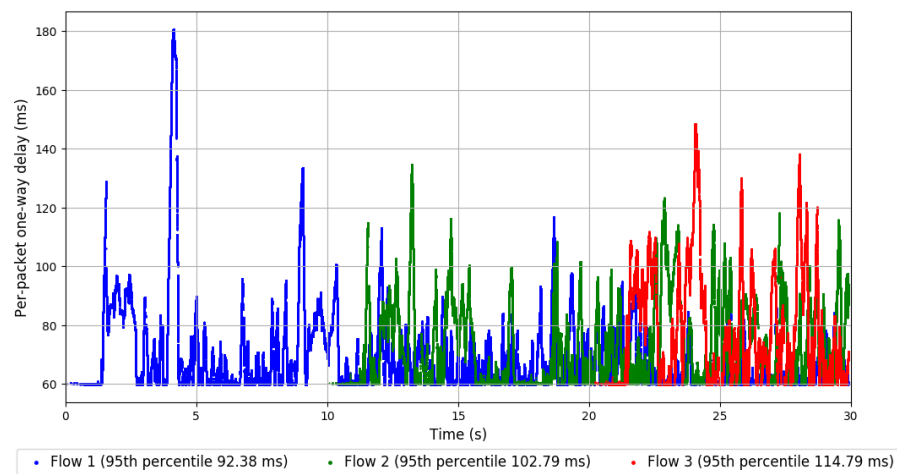
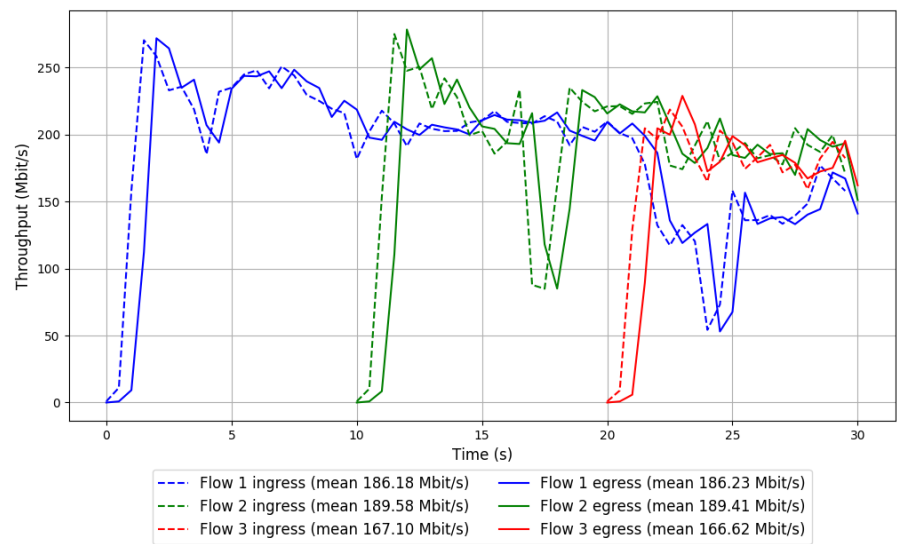


Run 3: Statistics of Copa

Start at: 2019-09-18 17:05:41  
End at: 2019-09-18 17:06:11  
Local clock offset: 0.001 ms  
Remote clock offset: -0.052 ms

# Below is generated by plot.py at 2019-09-18 19:38:10  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 366.97 Mbit/s  
95th percentile per-packet one-way delay: 102.085 ms  
Loss rate: 0.65%  
-- Flow 1:  
Average throughput: 186.23 Mbit/s  
95th percentile per-packet one-way delay: 92.379 ms  
Loss rate: 0.38%  
-- Flow 2:  
Average throughput: 189.41 Mbit/s  
95th percentile per-packet one-way delay: 102.789 ms  
Loss rate: 0.69%  
-- Flow 3:  
Average throughput: 166.62 Mbit/s  
95th percentile per-packet one-way delay: 114.786 ms  
Loss rate: 1.48%

Run 3: Report of Copa — Data Link



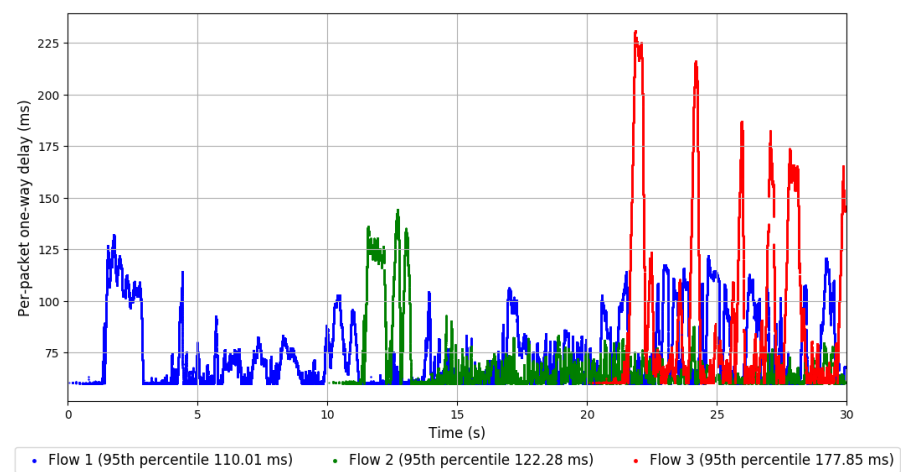
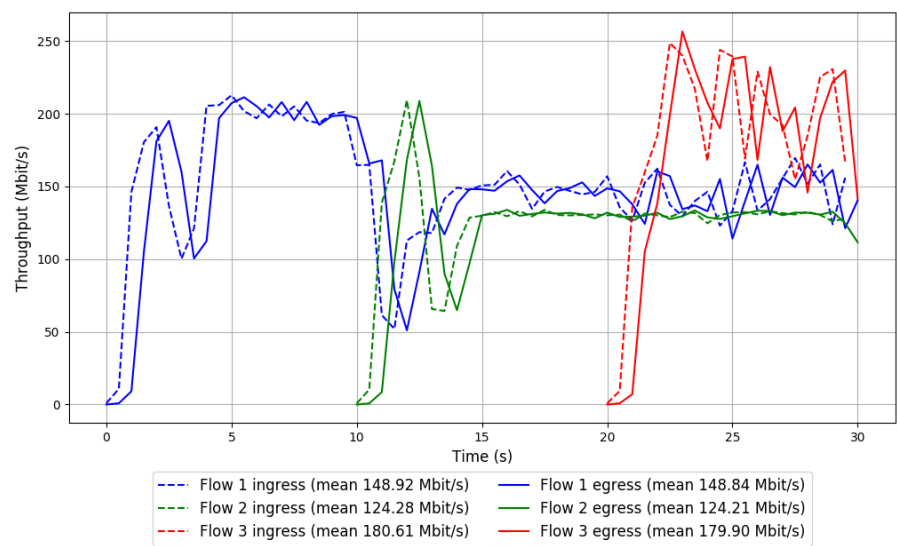


Run 4: Statistics of Copa

Start at: 2019-09-18 17:45:10  
End at: 2019-09-18 17:45:40  
Local clock offset: -0.161 ms  
Remote clock offset: -0.356 ms

# Below is generated by plot.py at 2019-09-18 19:48:05  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 290.72 Mbit/s  
95th percentile per-packet one-way delay: 121.932 ms  
Loss rate: 0.75%  
-- Flow 1:  
Average throughput: 148.84 Mbit/s  
95th percentile per-packet one-way delay: 110.012 ms  
Loss rate: 0.46%  
-- Flow 2:  
Average throughput: 124.21 Mbit/s  
95th percentile per-packet one-way delay: 122.282 ms  
Loss rate: 0.66%  
-- Flow 3:  
Average throughput: 179.90 Mbit/s  
95th percentile per-packet one-way delay: 177.851 ms  
Loss rate: 1.62%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2019-09-18 18:24:16

End at: 2019-09-18 18:24:46

Local clock offset: -0.027 ms

Remote clock offset: -0.15 ms

# Below is generated by plot.py at 2019-09-18 19:52:28

# Datalink statistics

-- Total of 3 flows:

Average throughput: 338.60 Mbit/s

95th percentile per-packet one-way delay: 109.018 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 183.11 Mbit/s

95th percentile per-packet one-way delay: 110.107 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 173.43 Mbit/s

95th percentile per-packet one-way delay: 110.961 ms

Loss rate: 0.70%

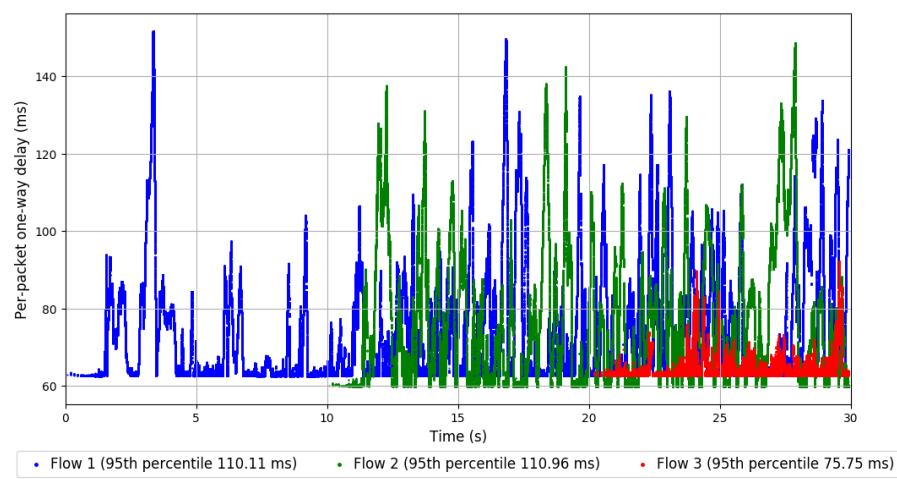
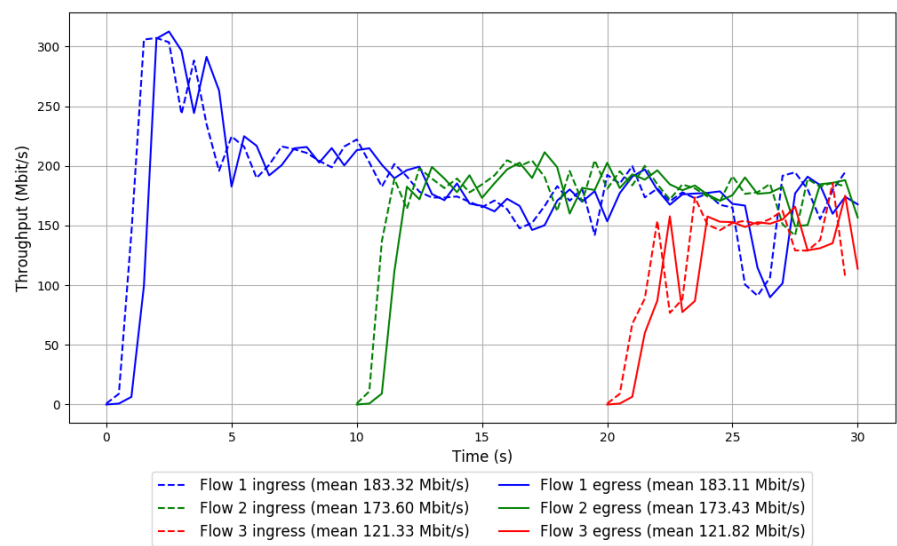
-- Flow 3:

Average throughput: 121.82 Mbit/s

95th percentile per-packet one-way delay: 75.753 ms

Loss rate: 0.86%

Run 5: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2019-09-18 16:06:50

End at: 2019-09-18 16:07:20

Local clock offset: -0.005 ms

Remote clock offset: 0.17 ms

# Below is generated by plot.py at 2019-09-18 19:52:28

# Datalink statistics

-- Total of 3 flows:

Average throughput: 475.04 Mbit/s

95th percentile per-packet one-way delay: 199.367 ms

Loss rate: 1.30%

-- Flow 1:

Average throughput: 70.93 Mbit/s

95th percentile per-packet one-way delay: 65.707 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 443.92 Mbit/s

95th percentile per-packet one-way delay: 210.097 ms

Loss rate: 1.26%

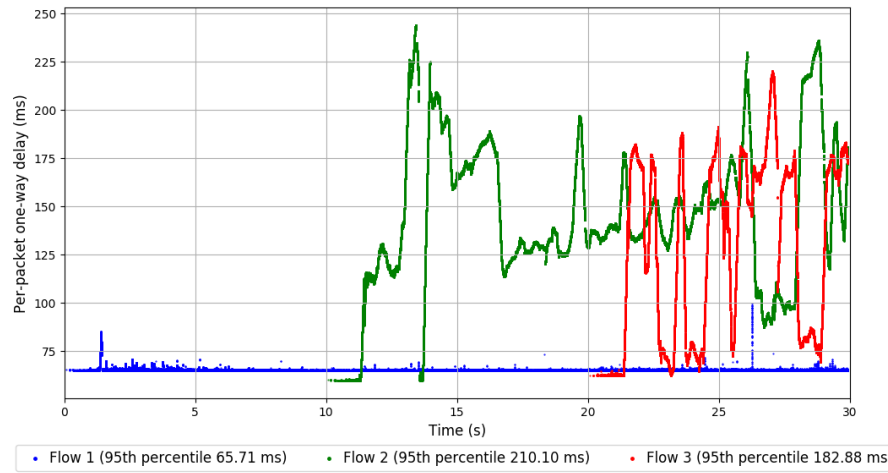
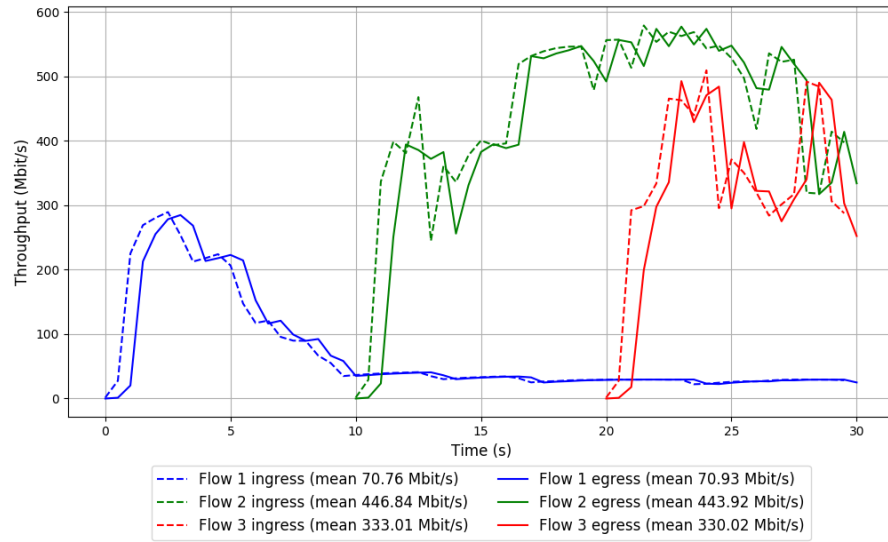
-- Flow 3:

Average throughput: 330.02 Mbit/s

95th percentile per-packet one-way delay: 182.884 ms

Loss rate: 2.13%

# Run 1: Report of TCP Cubic — Data Link

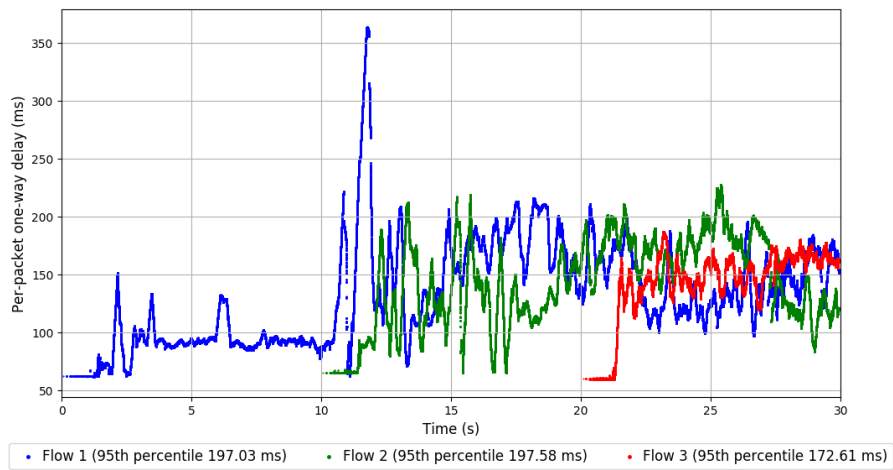
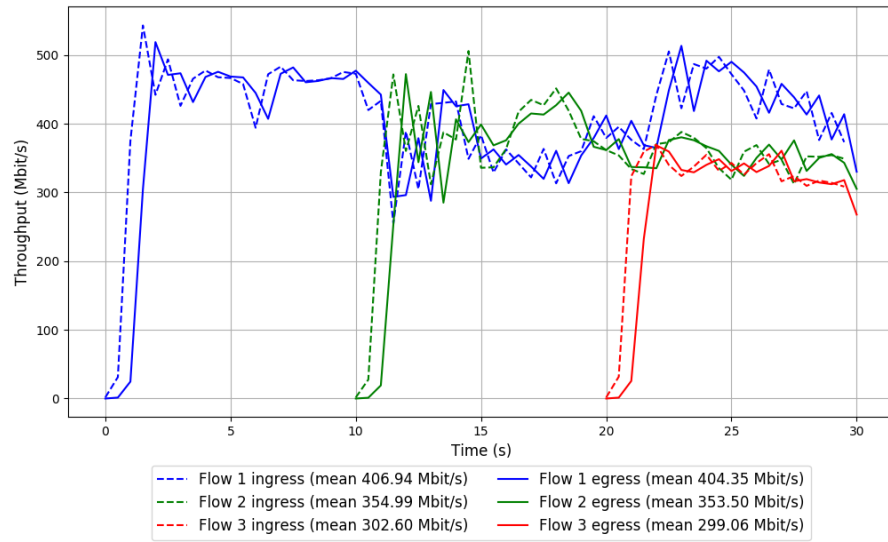


Run 2: Statistics of TCP Cubic

Start at: 2019-09-18 16:45:52  
End at: 2019-09-18 16:46:22  
Local clock offset: -0.004 ms  
Remote clock offset: -0.024 ms

# Below is generated by plot.py at 2019-09-18 19:56:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 737.95 Mbit/s  
95th percentile per-packet one-way delay: 195.392 ms  
Loss rate: 1.22%  
-- Flow 1:  
Average throughput: 404.35 Mbit/s  
95th percentile per-packet one-way delay: 197.035 ms  
Loss rate: 1.05%  
-- Flow 2:  
Average throughput: 353.50 Mbit/s  
95th percentile per-packet one-way delay: 197.583 ms  
Loss rate: 1.04%  
-- Flow 3:  
Average throughput: 299.06 Mbit/s  
95th percentile per-packet one-way delay: 172.613 ms  
Loss rate: 2.36%

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





Run 3: Statistics of TCP Cubic

Start at: 2019-09-18 17:25:30

End at: 2019-09-18 17:26:00

Local clock offset: -0.241 ms

Remote clock offset: 0.037 ms

# Below is generated by plot.py at 2019-09-18 19:56:13

# Datalink statistics

-- Total of 3 flows:

Average throughput: 736.44 Mbit/s

95th percentile per-packet one-way delay: 215.491 ms

Loss rate: 1.41%

-- Flow 1:

Average throughput: 389.81 Mbit/s

95th percentile per-packet one-way delay: 204.488 ms

Loss rate: 0.84%

-- Flow 2:

Average throughput: 343.92 Mbit/s

95th percentile per-packet one-way delay: 226.880 ms

Loss rate: 1.46%

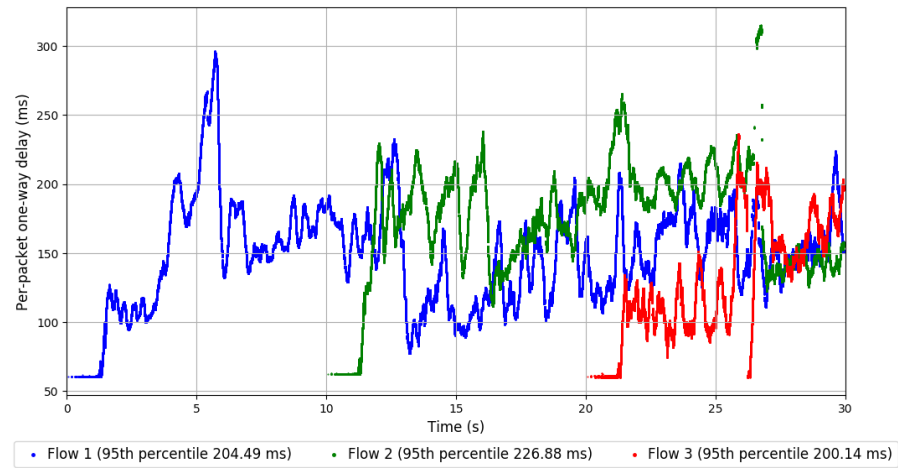
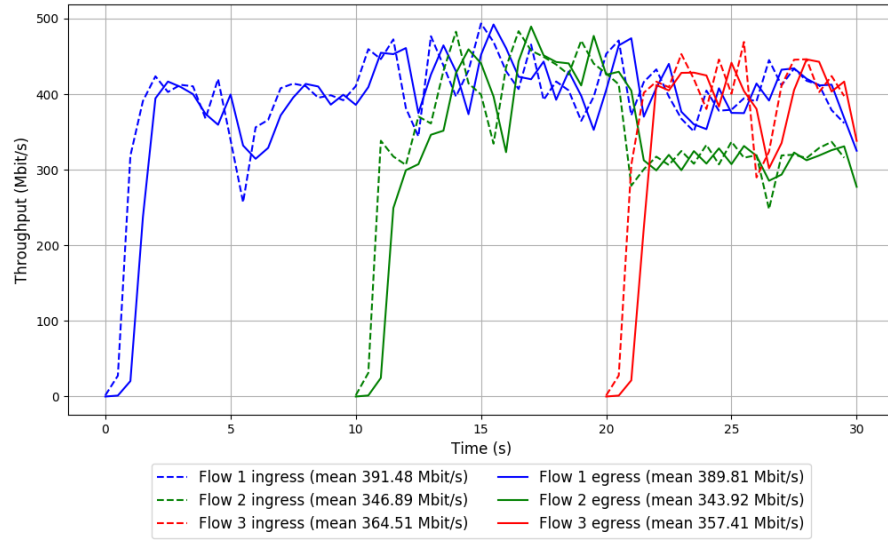
-- Flow 3:

Average throughput: 357.41 Mbit/s

95th percentile per-packet one-way delay: 200.137 ms

Loss rate: 3.16%

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

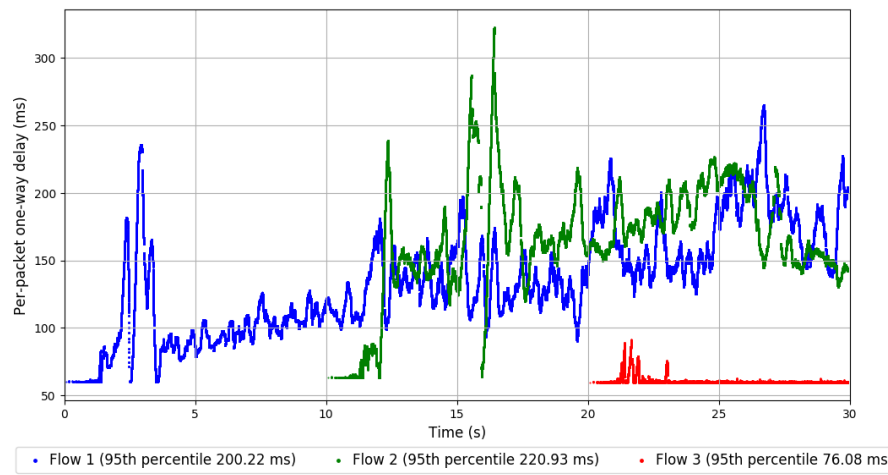
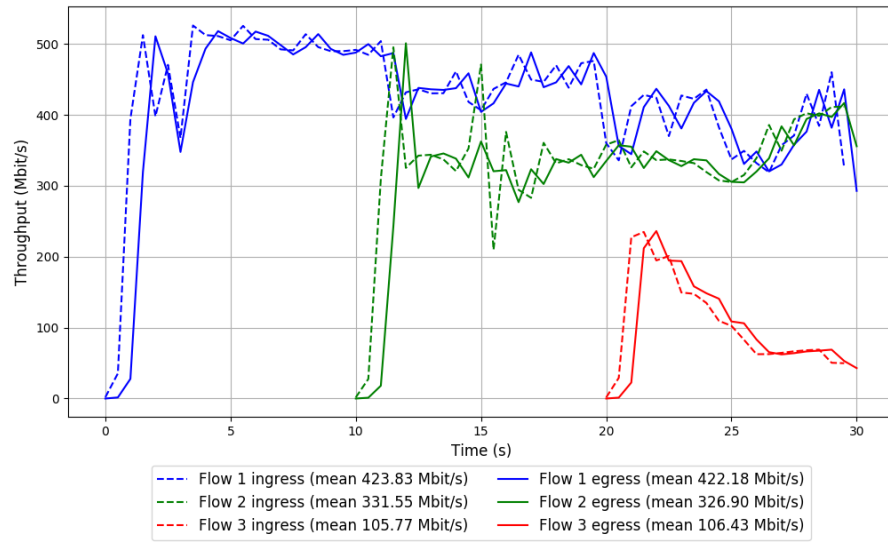


Run 4: Statistics of TCP Cubic

Start at: 2019-09-18 18:04:38  
End at: 2019-09-18 18:05:08  
Local clock offset: -0.067 ms  
Remote clock offset: -0.029 ms

# Below is generated by plot.py at 2019-09-18 19:56:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 674.57 Mbit/s  
95th percentile per-packet one-way delay: 212.228 ms  
Loss rate: 1.18%  
-- Flow 1:  
Average throughput: 422.18 Mbit/s  
95th percentile per-packet one-way delay: 200.220 ms  
Loss rate: 0.79%  
-- Flow 2:  
Average throughput: 326.90 Mbit/s  
95th percentile per-packet one-way delay: 220.931 ms  
Loss rate: 2.02%  
-- Flow 3:  
Average throughput: 106.43 Mbit/s  
95th percentile per-packet one-way delay: 76.076 ms  
Loss rate: 0.61%

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

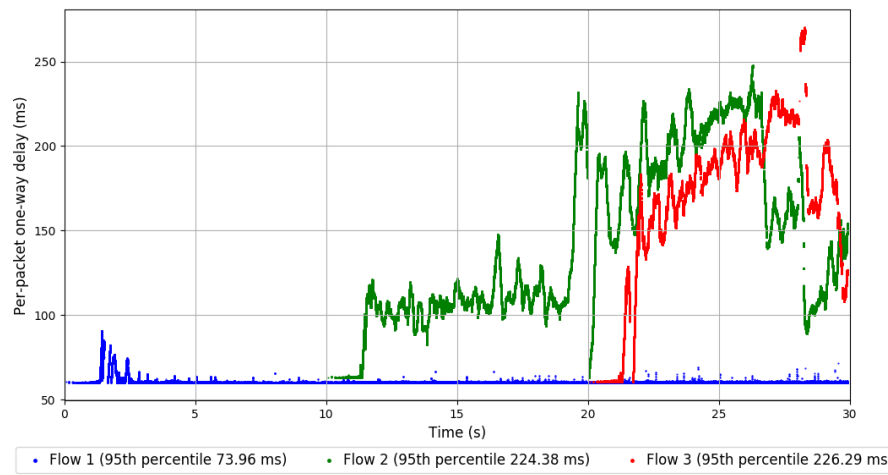
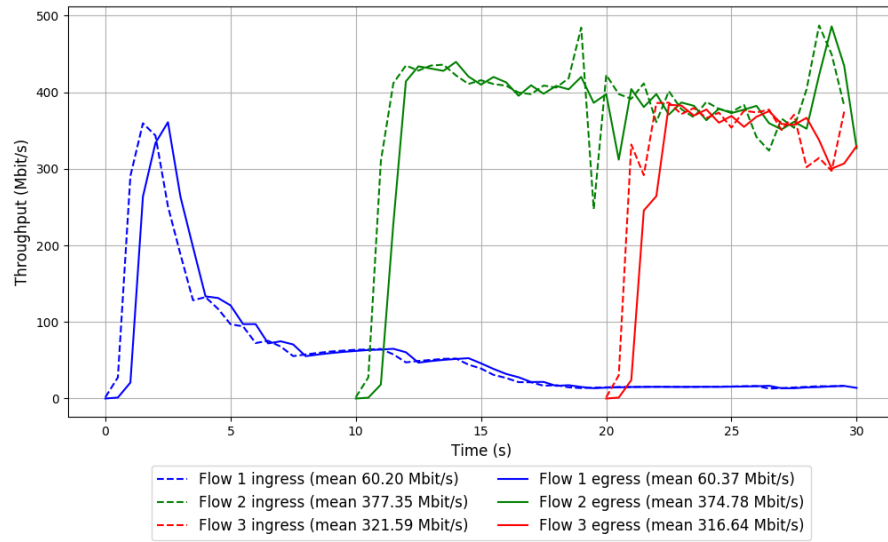


Run 5: Statistics of TCP Cubic

Start at: 2019-09-18 18:43:57  
End at: 2019-09-18 18:44:27  
Local clock offset: 0.03 ms  
Remote clock offset: -0.049 ms

# Below is generated by plot.py at 2019-09-18 19:56:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 413.81 Mbit/s  
95th percentile per-packet one-way delay: 223.745 ms  
Loss rate: 1.50%  
-- Flow 1:  
Average throughput: 60.37 Mbit/s  
95th percentile per-packet one-way delay: 73.963 ms  
Loss rate: 0.13%  
-- Flow 2:  
Average throughput: 374.78 Mbit/s  
95th percentile per-packet one-way delay: 224.376 ms  
Loss rate: 1.31%  
-- Flow 3:  
Average throughput: 316.64 Mbit/s  
95th percentile per-packet one-way delay: 226.295 ms  
Loss rate: 2.74%

# Run 5: Report of TCP Cubic — Data Link

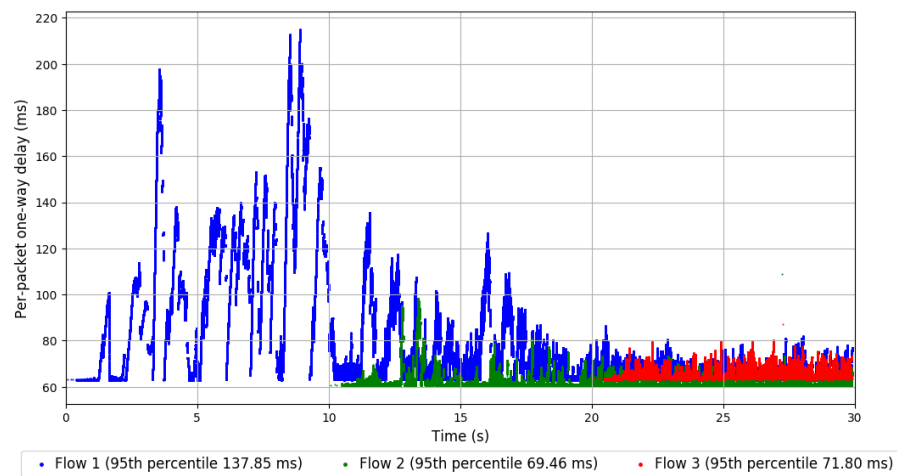
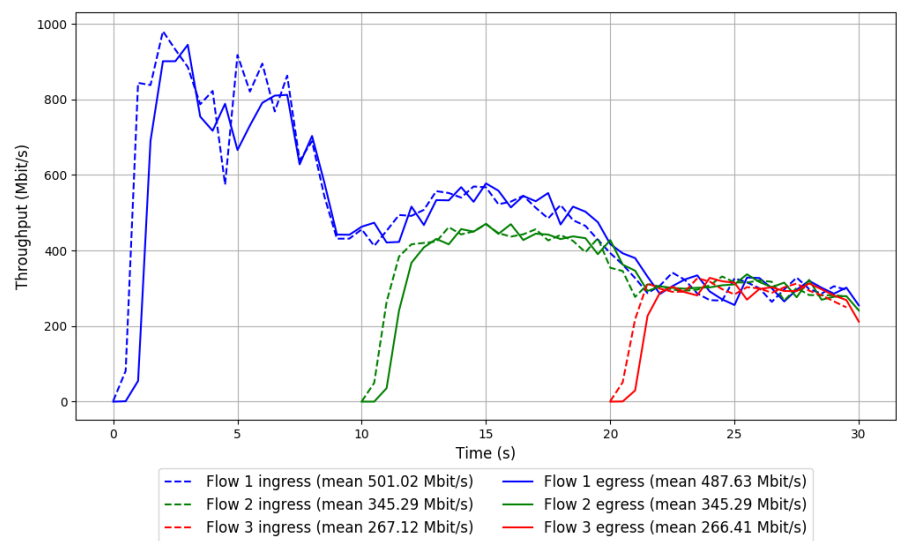


Run 1: Statistics of FillP

Start at: 2019-09-18 16:19:53  
End at: 2019-09-18 16:20:23  
Local clock offset: -0.008 ms  
Remote clock offset: -0.448 ms

# Below is generated by plot.py at 2019-09-18 20:03:19  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 804.46 Mbit/s  
95th percentile per-packet one-way delay: 128.990 ms  
Loss rate: 2.19%  
-- Flow 1:  
Average throughput: 487.63 Mbit/s  
95th percentile per-packet one-way delay: 137.847 ms  
Loss rate: 3.07%  
-- Flow 2:  
Average throughput: 345.29 Mbit/s  
95th percentile per-packet one-way delay: 69.457 ms  
Loss rate: 0.54%  
-- Flow 3:  
Average throughput: 266.41 Mbit/s  
95th percentile per-packet one-way delay: 71.799 ms  
Loss rate: 1.47%

Run 1: Report of FillP — Data Link



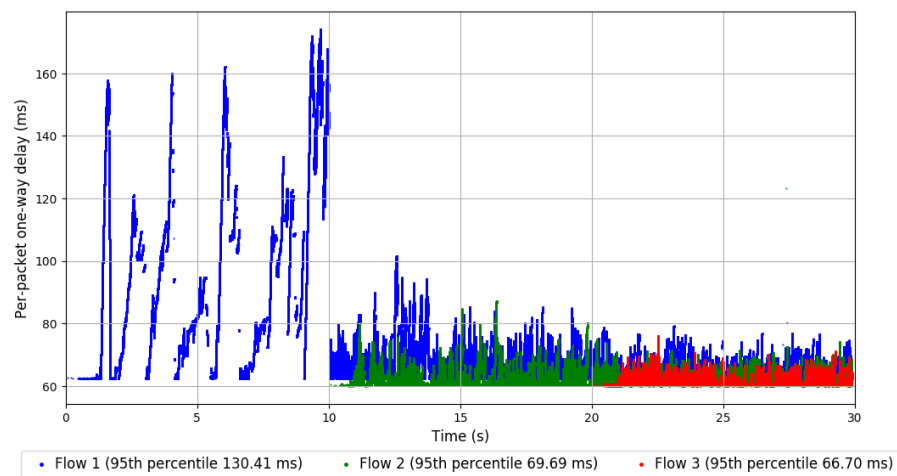
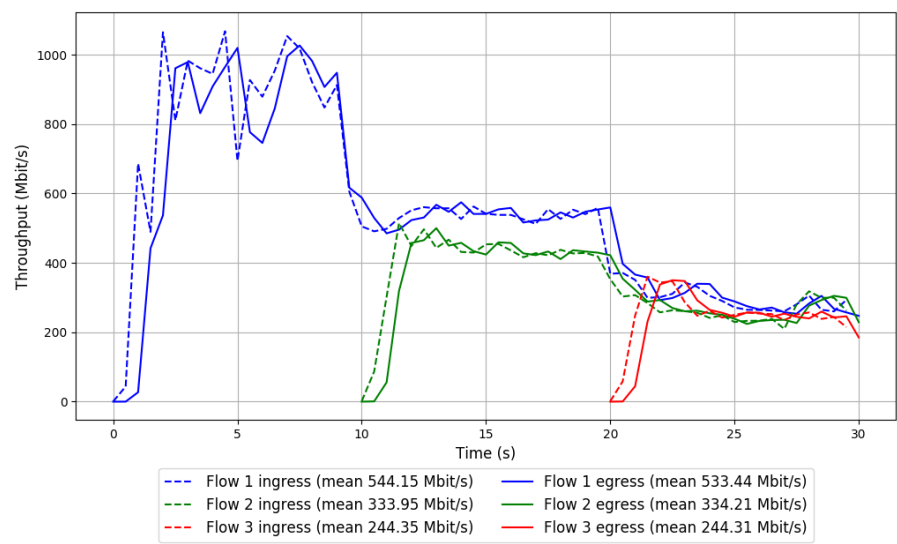


Run 2: Statistics of FillP

Start at: 2019-09-18 16:59:15  
End at: 2019-09-18 16:59:45  
Local clock offset: 0.011 ms  
Remote clock offset: -0.067 ms

# Below is generated by plot.py at 2019-09-18 20:15:39  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 835.87 Mbit/s  
95th percentile per-packet one-way delay: 116.419 ms  
Loss rate: 1.76%  
-- Flow 1:  
Average throughput: 533.44 Mbit/s  
95th percentile per-packet one-way delay: 130.405 ms  
Loss rate: 2.35%  
-- Flow 2:  
Average throughput: 334.21 Mbit/s  
95th percentile per-packet one-way delay: 69.694 ms  
Loss rate: 0.57%  
-- Flow 3:  
Average throughput: 244.31 Mbit/s  
95th percentile per-packet one-way delay: 66.703 ms  
Loss rate: 1.08%

Run 2: Report of FillP — Data Link

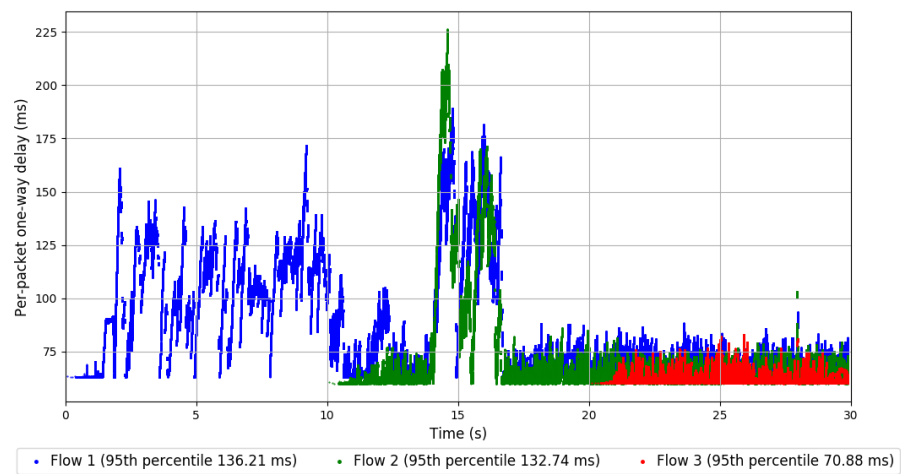
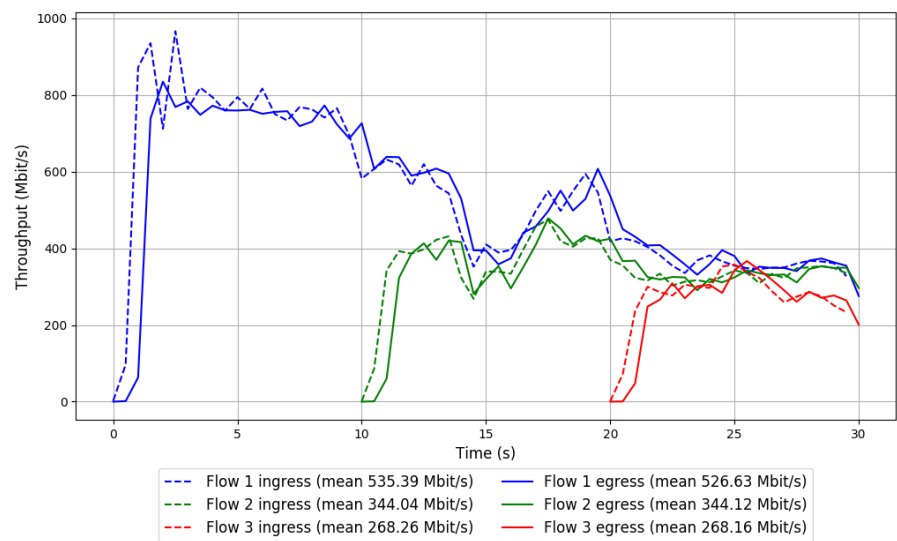


Run 3: Statistics of FillP

Start at: 2019-09-18 17:38:57  
End at: 2019-09-18 17:39:27  
Local clock offset: -0.317 ms  
Remote clock offset: -0.089 ms

# Below is generated by plot.py at 2019-09-18 20:16:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 843.04 Mbit/s  
95th percentile per-packet one-way delay: 134.018 ms  
Loss rate: 1.57%  
-- Flow 1:  
Average throughput: 526.63 Mbit/s  
95th percentile per-packet one-way delay: 136.210 ms  
Loss rate: 2.05%  
-- Flow 2:  
Average throughput: 344.12 Mbit/s  
95th percentile per-packet one-way delay: 132.737 ms  
Loss rate: 0.60%  
-- Flow 3:  
Average throughput: 268.16 Mbit/s  
95th percentile per-packet one-way delay: 70.884 ms  
Loss rate: 1.10%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2019-09-18 18:17:54

End at: 2019-09-18 18:18:24

Local clock offset: -0.032 ms

Remote clock offset: 0.014 ms

# Below is generated by plot.py at 2019-09-18 20:16:52

# Datalink statistics

-- Total of 3 flows:

Average throughput: 807.36 Mbit/s

95th percentile per-packet one-way delay: 126.107 ms

Loss rate: 1.72%

-- Flow 1:

Average throughput: 480.78 Mbit/s

95th percentile per-packet one-way delay: 131.598 ms

Loss rate: 2.41%

-- Flow 2:

Average throughput: 357.01 Mbit/s

95th percentile per-packet one-way delay: 74.919 ms

Loss rate: 0.50%

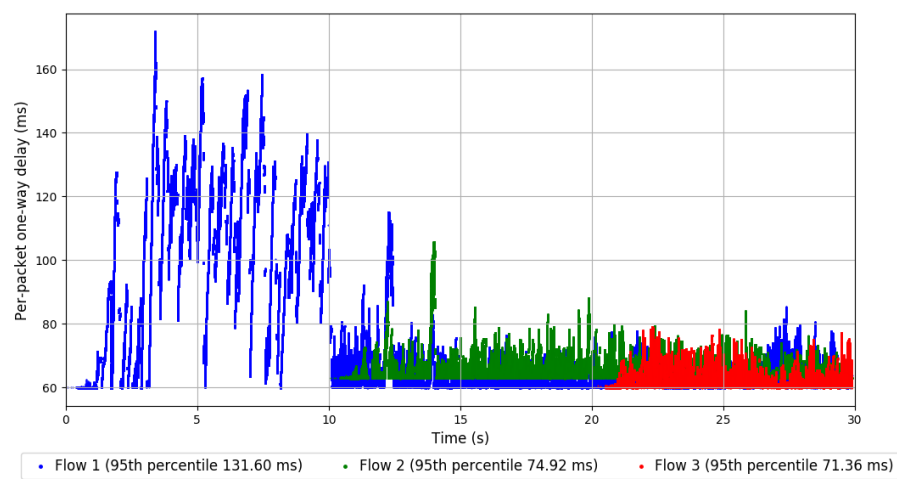
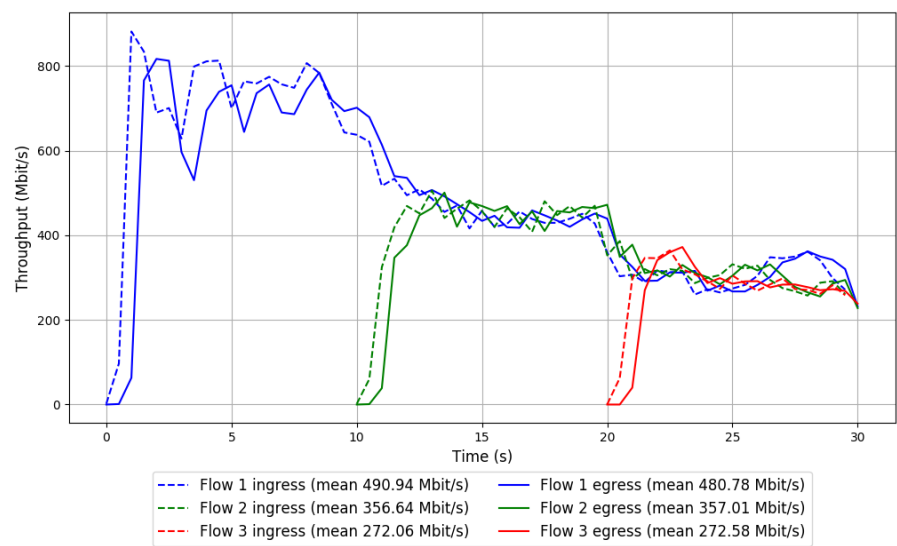
-- Flow 3:

Average throughput: 272.58 Mbit/s

95th percentile per-packet one-way delay: 71.362 ms

Loss rate: 1.16%

Run 4: Report of FillP — Data Link

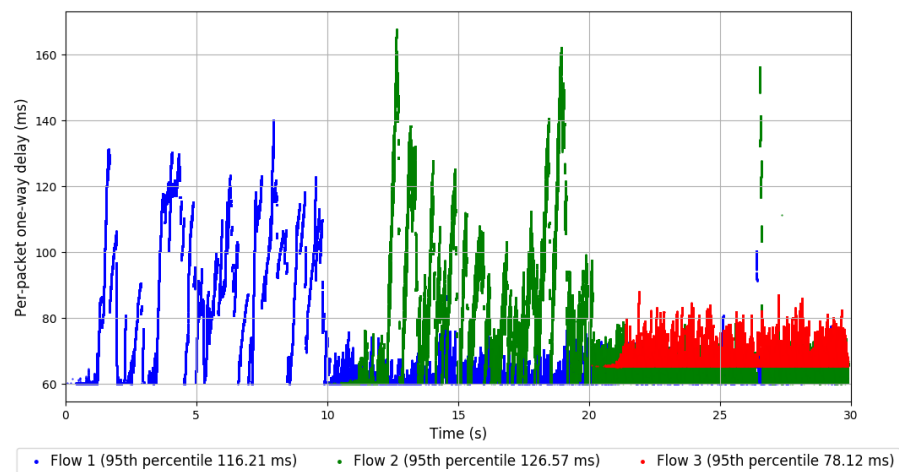
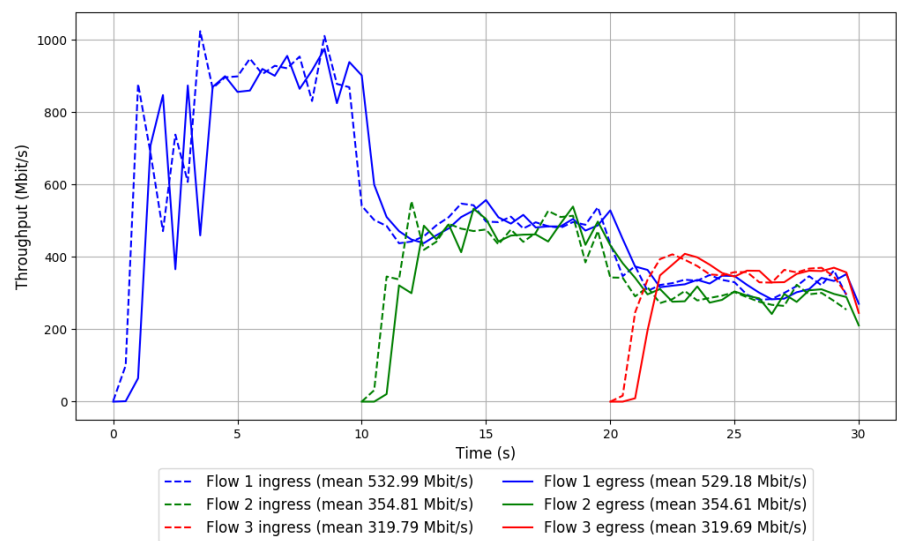


Run 5: Statistics of FillP

Start at: 2019-09-18 18:57:06  
End at: 2019-09-18 18:57:36  
Local clock offset: -0.003 ms  
Remote clock offset: -0.123 ms

# Below is generated by plot.py at 2019-09-18 20:21:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 869.23 Mbit/s  
95th percentile per-packet one-way delay: 116.395 ms  
Loss rate: 1.04%  
-- Flow 1:  
Average throughput: 529.18 Mbit/s  
95th percentile per-packet one-way delay: 116.211 ms  
Loss rate: 1.15%  
-- Flow 2:  
Average throughput: 354.61 Mbit/s  
95th percentile per-packet one-way delay: 126.569 ms  
Loss rate: 0.60%  
-- Flow 3:  
Average throughput: 319.69 Mbit/s  
95th percentile per-packet one-way delay: 78.122 ms  
Loss rate: 1.47%

Run 5: Report of FillP — Data Link



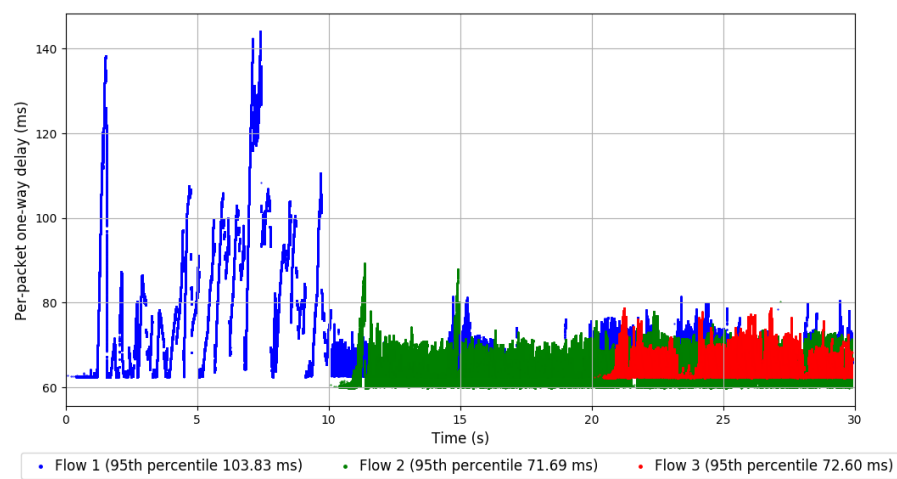
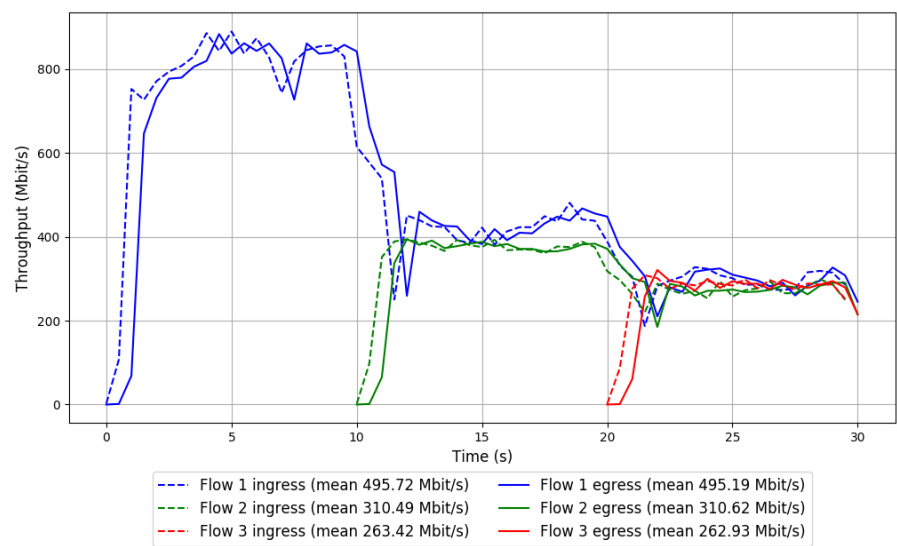


Run 1: Statistics of FillP-Sheep

Start at: 2019-09-18 15:56:07  
End at: 2019-09-18 15:56:37  
Local clock offset: 0.058 ms  
Remote clock offset: -0.064 ms

# Below is generated by plot.py at 2019-09-18 20:21:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 787.90 Mbit/s  
95th percentile per-packet one-way delay: 98.995 ms  
Loss rate: 0.62%  
-- Flow 1:  
Average throughput: 495.19 Mbit/s  
95th percentile per-packet one-way delay: 103.830 ms  
Loss rate: 0.49%  
-- Flow 2:  
Average throughput: 310.62 Mbit/s  
95th percentile per-packet one-way delay: 71.686 ms  
Loss rate: 0.60%  
-- Flow 3:  
Average throughput: 262.93 Mbit/s  
95th percentile per-packet one-way delay: 72.599 ms  
Loss rate: 1.44%

Run 1: Report of FillP-Sheep — Data Link

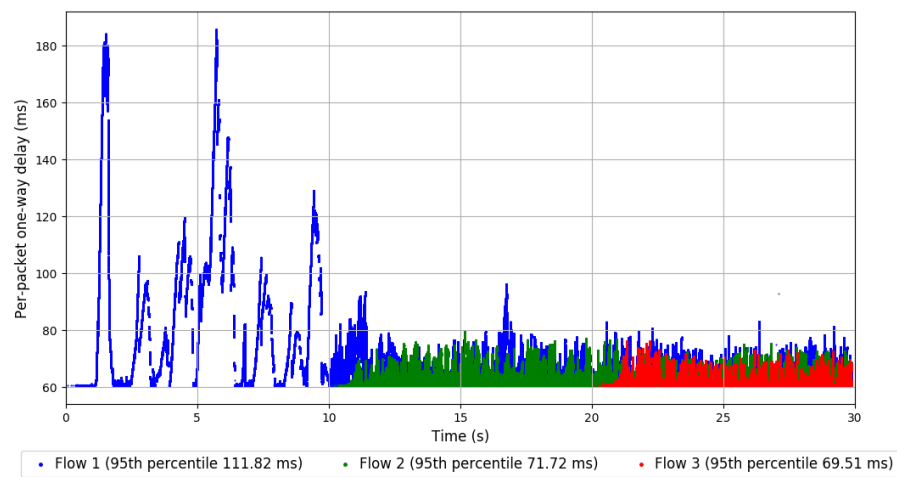
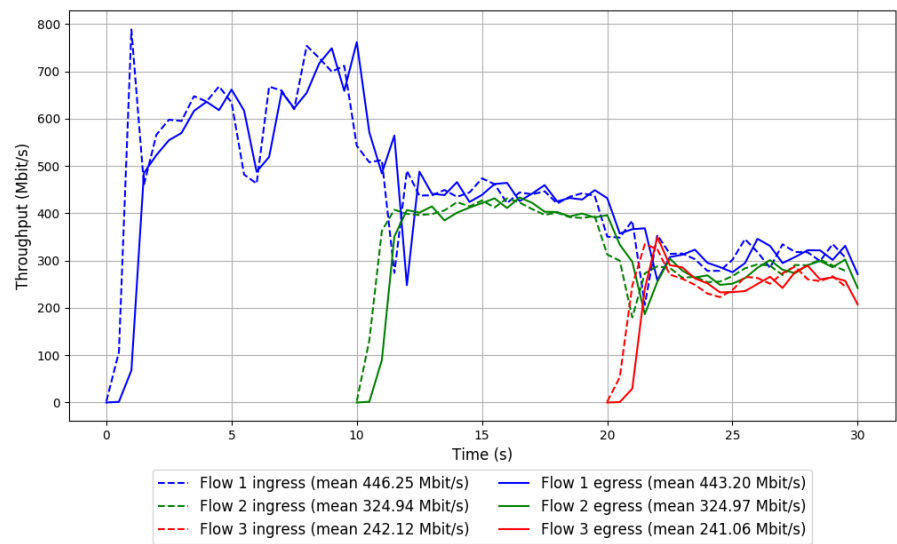


Run 2: Statistics of FillP-Sheep

Start at: 2019-09-18 16:35:21  
End at: 2019-09-18 16:35:51  
Local clock offset: -0.016 ms  
Remote clock offset: -0.655 ms

# Below is generated by plot.py at 2019-09-18 20:21:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 738.19 Mbit/s  
95th percentile per-packet one-way delay: 100.672 ms  
Loss rate: 1.00%  
-- Flow 1:  
Average throughput: 443.20 Mbit/s  
95th percentile per-packet one-way delay: 111.822 ms  
Loss rate: 1.12%  
-- Flow 2:  
Average throughput: 324.97 Mbit/s  
95th percentile per-packet one-way delay: 71.720 ms  
Loss rate: 0.53%  
-- Flow 3:  
Average throughput: 241.06 Mbit/s  
95th percentile per-packet one-way delay: 69.508 ms  
Loss rate: 1.60%

Run 2: Report of FillP-Sheep — Data Link



Run 3: Statistics of FillP-Sheep

Start at: 2019-09-18 17:14:57

End at: 2019-09-18 17:15:27

Local clock offset: -0.191 ms

Remote clock offset: 0.109 ms

# Below is generated by plot.py at 2019-09-18 20:23:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 816.41 Mbit/s

95th percentile per-packet one-way delay: 98.290 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 493.70 Mbit/s

95th percentile per-packet one-way delay: 108.972 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 342.67 Mbit/s

95th percentile per-packet one-way delay: 72.493 ms

Loss rate: 0.48%

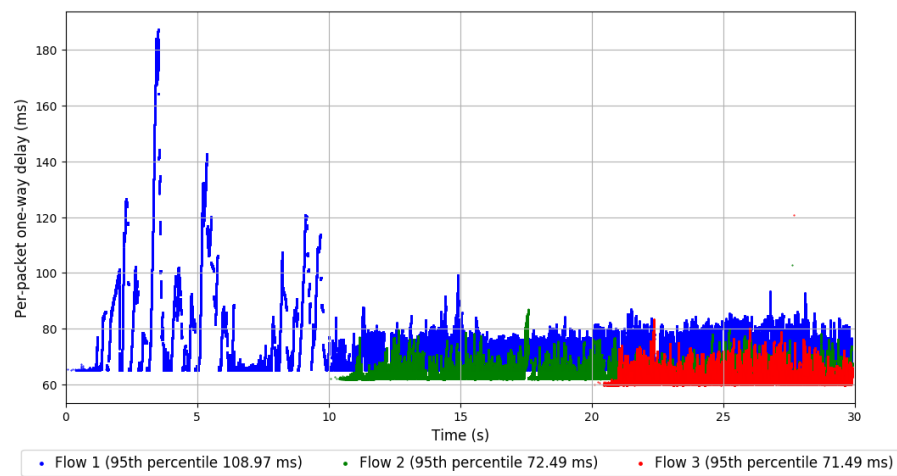
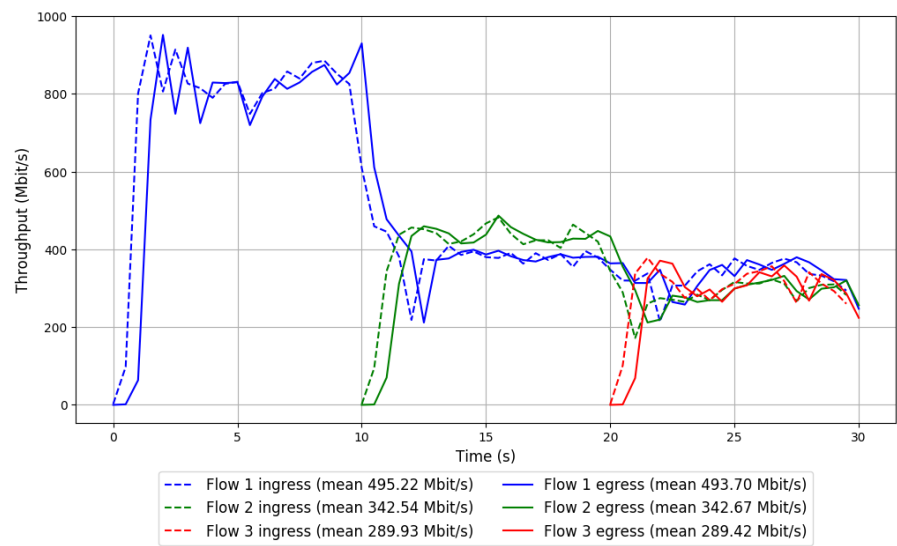
-- Flow 3:

Average throughput: 289.42 Mbit/s

95th percentile per-packet one-way delay: 71.489 ms

Loss rate: 1.27%

Run 3: Report of FillP-Sheep — Data Link



Run 4: Statistics of FillP-Sheep

Start at: 2019-09-18 17:54:06

End at: 2019-09-18 17:54:36

Local clock offset: -0.097 ms

Remote clock offset: 0.664 ms

# Below is generated by plot.py at 2019-09-18 20:31:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 793.65 Mbit/s

95th percentile per-packet one-way delay: 119.670 ms

Loss rate: 1.25%

-- Flow 1:

Average throughput: 502.26 Mbit/s

95th percentile per-packet one-way delay: 124.793 ms

Loss rate: 1.55%

-- Flow 2:

Average throughput: 319.11 Mbit/s

95th percentile per-packet one-way delay: 99.492 ms

Loss rate: 0.58%

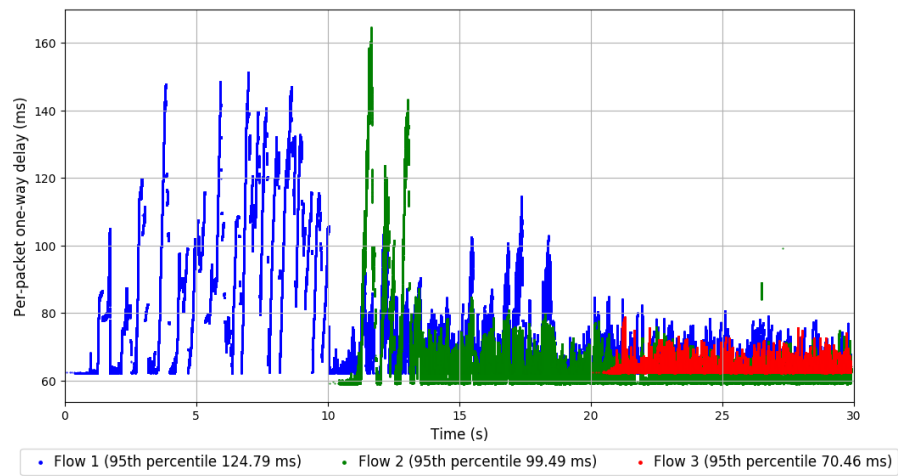
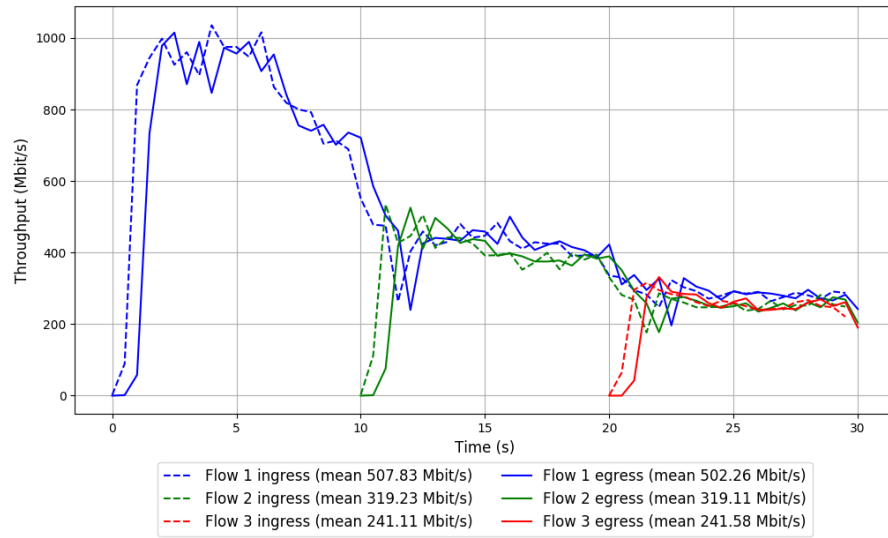
-- Flow 3:

Average throughput: 241.58 Mbit/s

95th percentile per-packet one-way delay: 70.457 ms

Loss rate: 1.10%

#### Run 4: Report of FillP-Sheep — Data Link



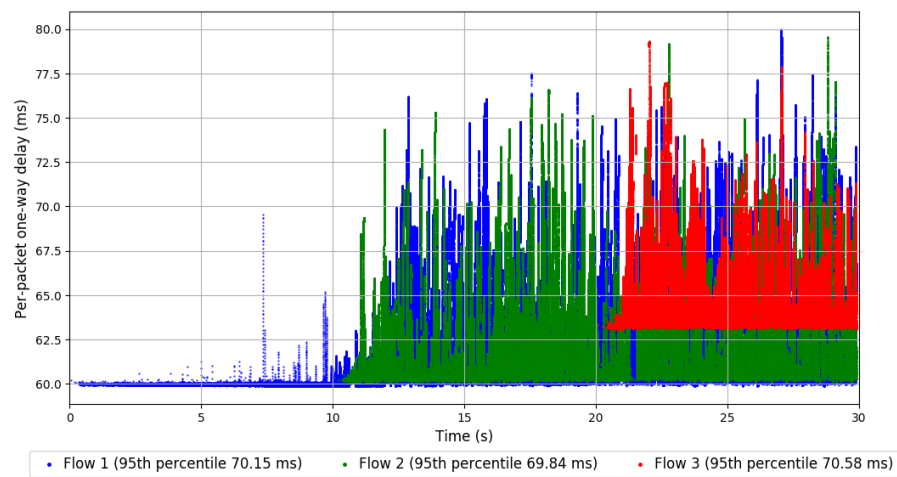
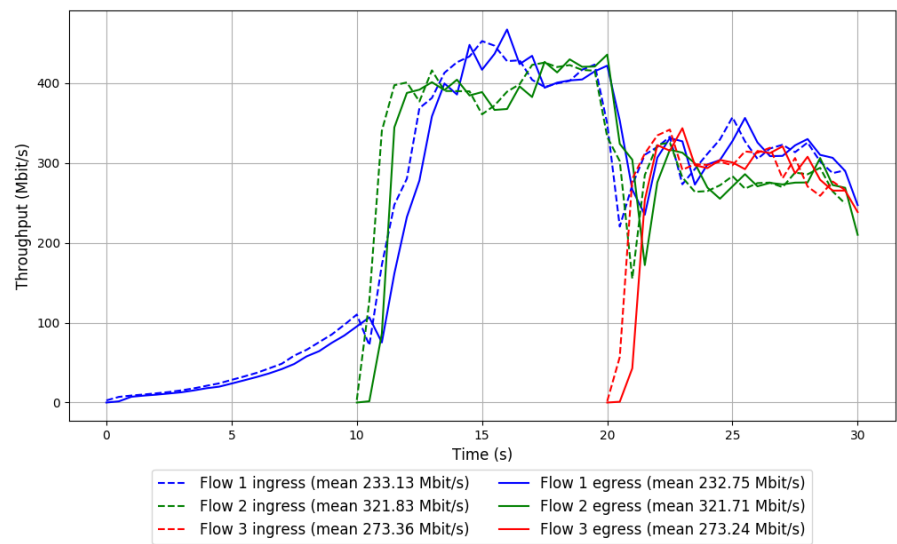


Run 5: Statistics of FillP-Sheep

Start at: 2019-09-18 18:33:32  
End at: 2019-09-18 18:34:02  
Local clock offset: -0.022 ms  
Remote clock offset: -0.287 ms

# Below is generated by plot.py at 2019-09-18 20:33:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 536.22 Mbit/s  
95th percentile per-packet one-way delay: 70.137 ms  
Loss rate: 0.70%  
-- Flow 1:  
Average throughput: 232.75 Mbit/s  
95th percentile per-packet one-way delay: 70.146 ms  
Loss rate: 0.61%  
-- Flow 2:  
Average throughput: 321.71 Mbit/s  
95th percentile per-packet one-way delay: 69.838 ms  
Loss rate: 0.62%  
-- Flow 3:  
Average throughput: 273.24 Mbit/s  
95th percentile per-packet one-way delay: 70.577 ms  
Loss rate: 1.13%

Run 5: Report of FillP-Sheep — Data Link

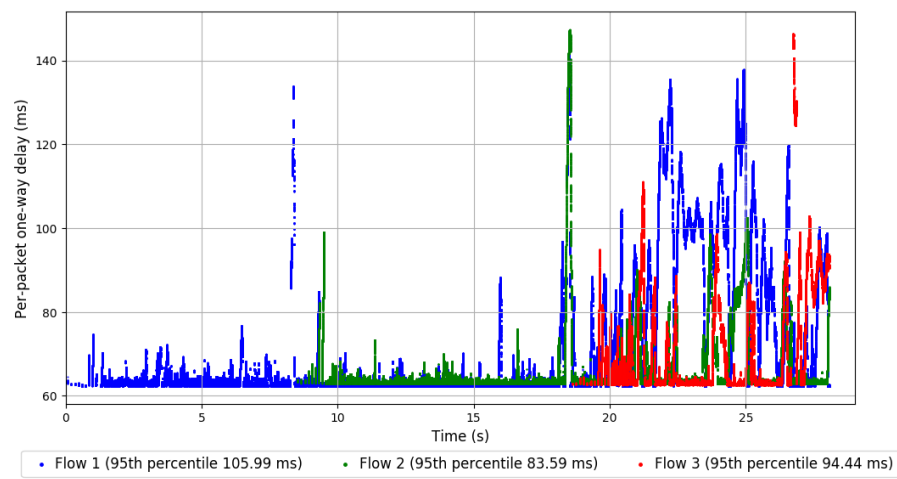
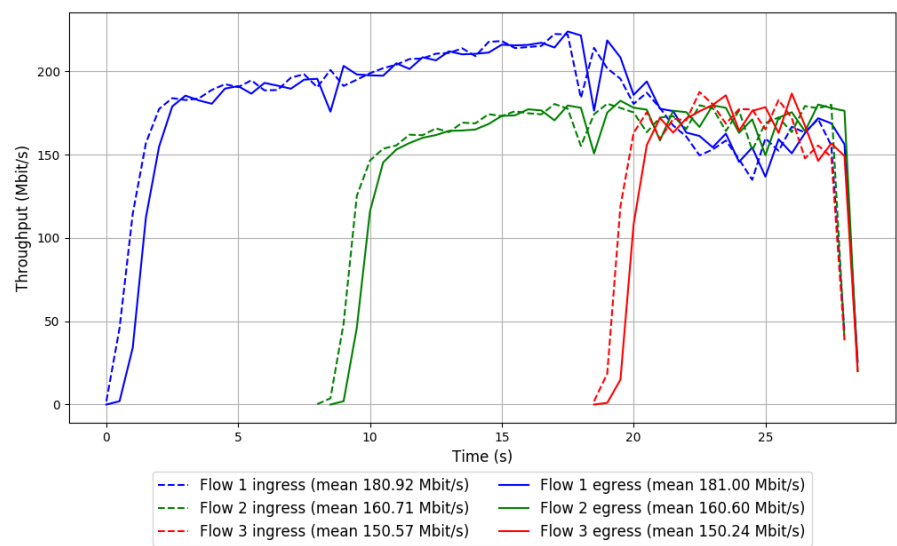


Run 1: Statistics of Indigo

Start at: 2019-09-18 15:53:10  
End at: 2019-09-18 15:53:40  
Local clock offset: 0.06 ms  
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2019-09-18 20:33:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 343.82 Mbit/s  
95th percentile per-packet one-way delay: 99.096 ms  
Loss rate: 0.67%  
-- Flow 1:  
Average throughput: 181.00 Mbit/s  
95th percentile per-packet one-way delay: 105.988 ms  
Loss rate: 0.41%  
-- Flow 2:  
Average throughput: 160.60 Mbit/s  
95th percentile per-packet one-way delay: 83.592 ms  
Loss rate: 0.70%  
-- Flow 3:  
Average throughput: 150.24 Mbit/s  
95th percentile per-packet one-way delay: 94.439 ms  
Loss rate: 1.53%

Run 1: Report of Indigo — Data Link

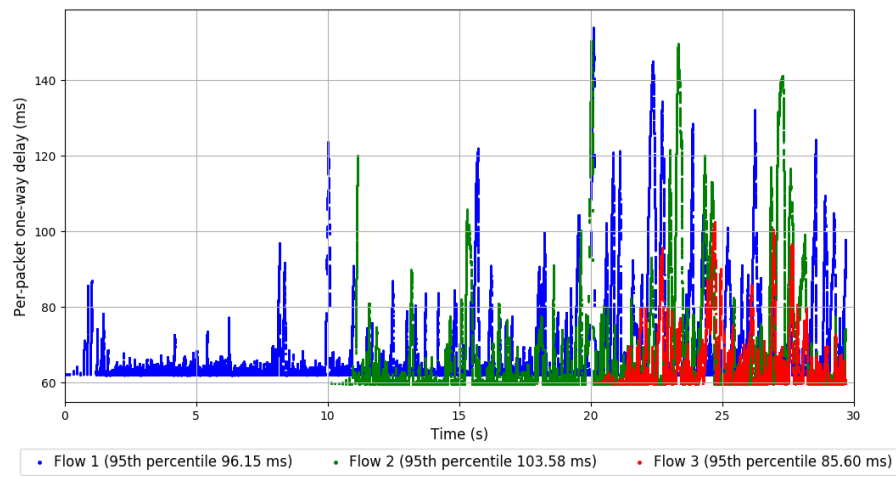
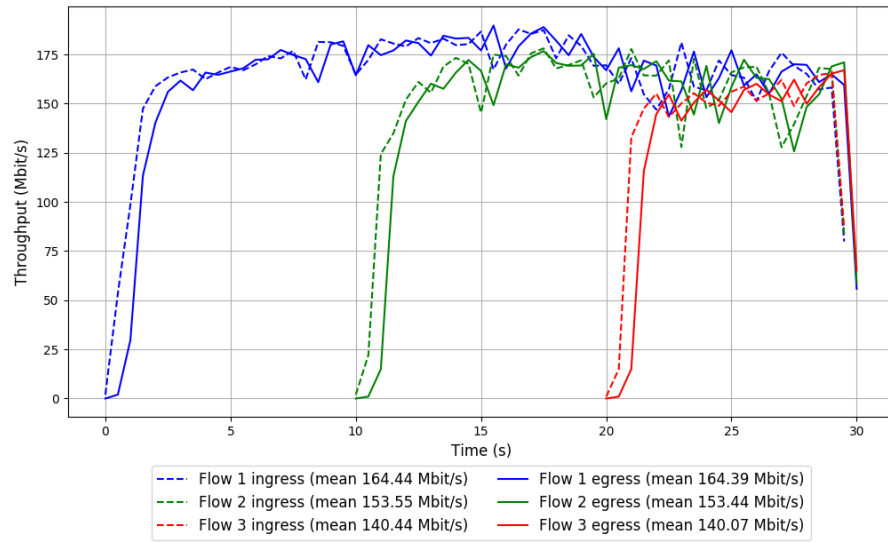


Run 2: Statistics of Indigo

Start at: 2019-09-18 16:32:25  
End at: 2019-09-18 16:32:55  
Local clock offset: -0.009 ms  
Remote clock offset: 0.075 ms

# Below is generated by plot.py at 2019-09-18 20:33:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 310.59 Mbit/s  
95th percentile per-packet one-way delay: 96.267 ms  
Loss rate: 0.68%  
-- Flow 1:  
Average throughput: 164.39 Mbit/s  
95th percentile per-packet one-way delay: 96.154 ms  
Loss rate: 0.44%  
-- Flow 2:  
Average throughput: 153.44 Mbit/s  
95th percentile per-packet one-way delay: 103.581 ms  
Loss rate: 0.69%  
-- Flow 3:  
Average throughput: 140.07 Mbit/s  
95th percentile per-packet one-way delay: 85.601 ms  
Loss rate: 1.51%

## Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2019-09-18 17:11:59

End at: 2019-09-18 17:12:29

Local clock offset: -0.143 ms

Remote clock offset: 0.138 ms

# Below is generated by plot.py at 2019-09-18 20:37:55

# Datalink statistics

-- Total of 3 flows:

Average throughput: 320.36 Mbit/s

95th percentile per-packet one-way delay: 94.296 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 175.89 Mbit/s

95th percentile per-packet one-way delay: 97.209 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 149.07 Mbit/s

95th percentile per-packet one-way delay: 85.377 ms

Loss rate: 0.68%

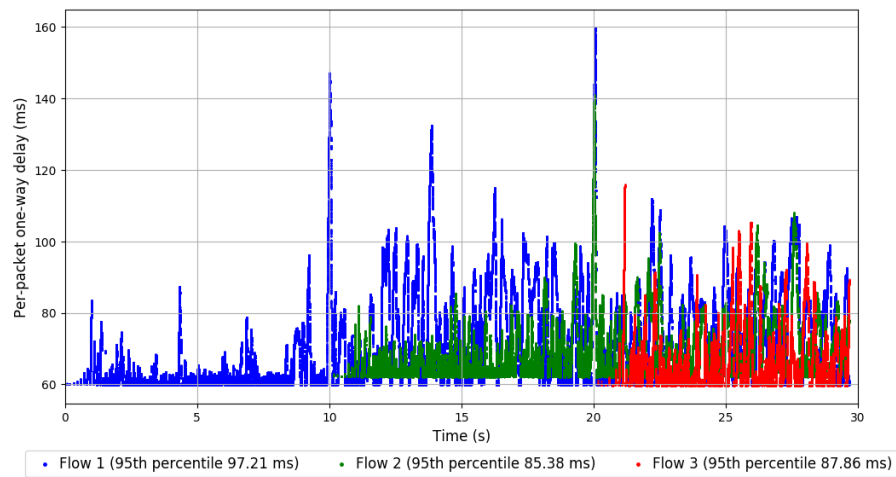
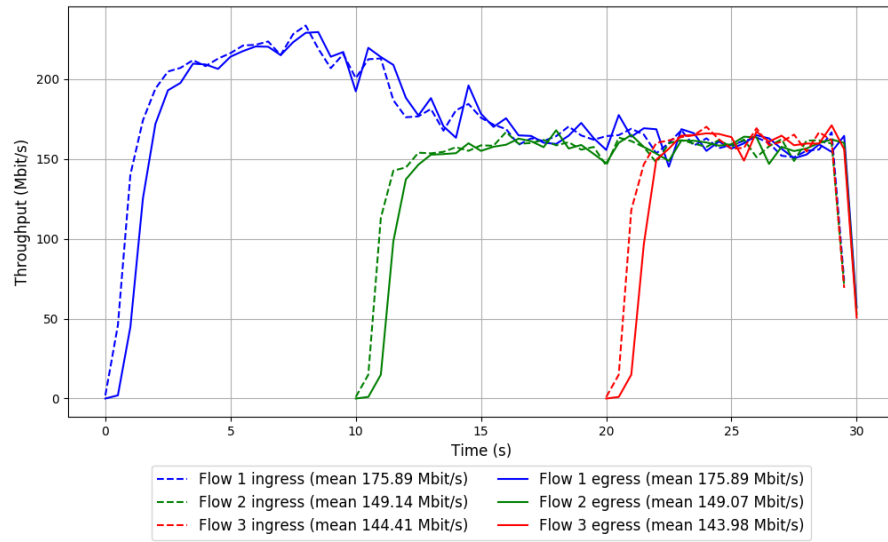
-- Flow 3:

Average throughput: 143.98 Mbit/s

95th percentile per-packet one-way delay: 87.856 ms

Loss rate: 1.52%

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



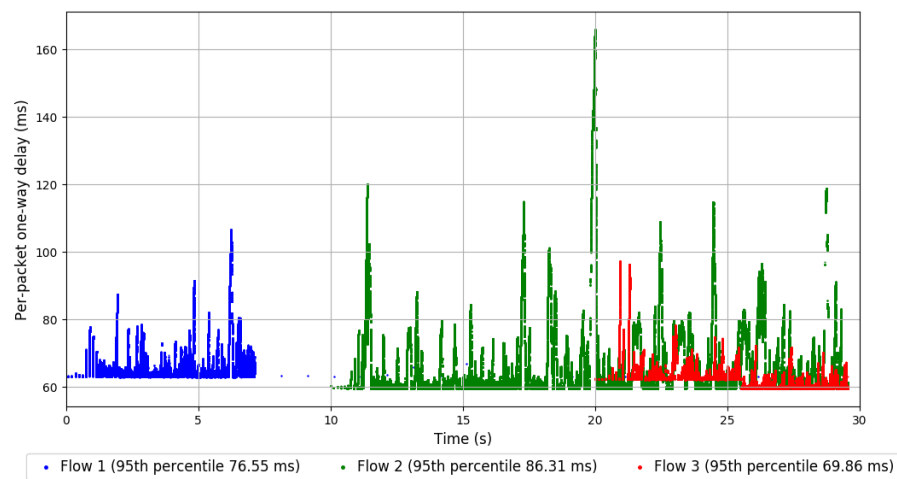
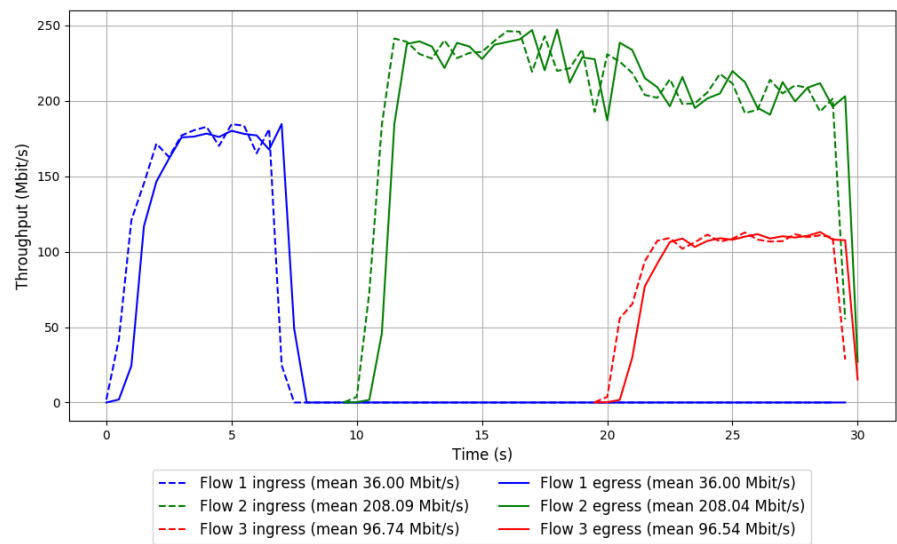


Run 4: Statistics of Indigo

Start at: 2019-09-18 17:51:19  
End at: 2019-09-18 17:51:49  
Local clock offset: -0.141 ms  
Remote clock offset: 0.345 ms

# Below is generated by plot.py at 2019-09-18 20:37:55  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 204.81 Mbit/s  
95th percentile per-packet one-way delay: 82.590 ms  
Loss rate: 0.65%  
-- Flow 1:  
Average throughput: 36.00 Mbit/s  
95th percentile per-packet one-way delay: 76.550 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 208.04 Mbit/s  
95th percentile per-packet one-way delay: 86.306 ms  
Loss rate: 0.64%  
-- Flow 3:  
Average throughput: 96.54 Mbit/s  
95th percentile per-packet one-way delay: 69.863 ms  
Loss rate: 1.43%

Run 4: Report of Indigo — Data Link

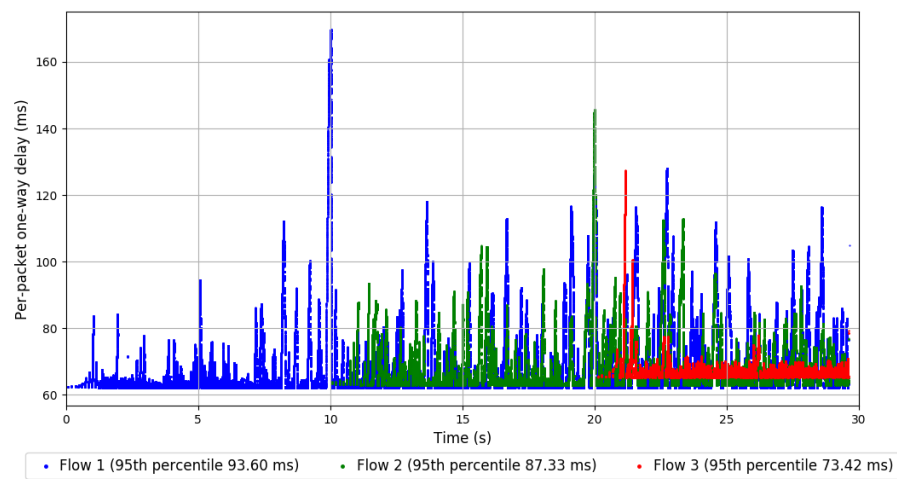
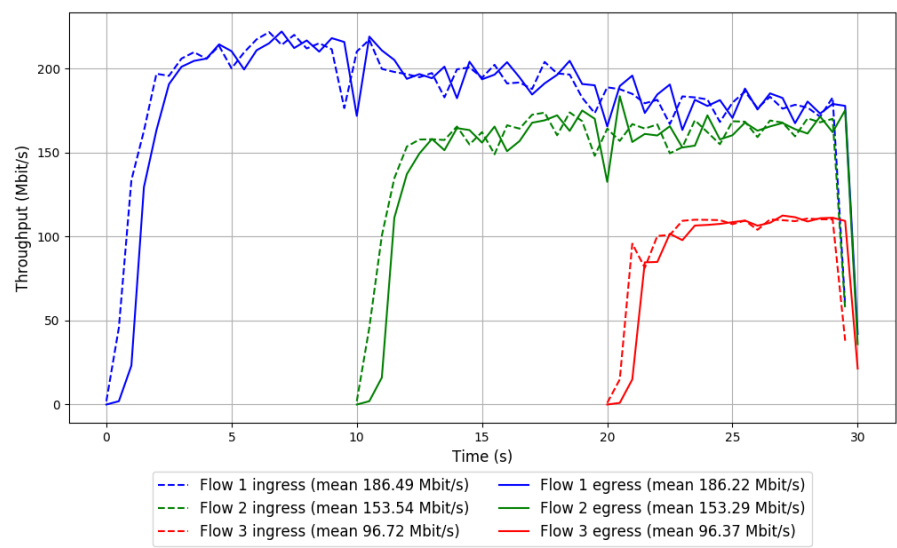


Run 5: Statistics of Indigo

Start at: 2019-09-18 18:30:33  
End at: 2019-09-18 18:31:03  
Local clock offset: -0.015 ms  
Remote clock offset: -0.116 ms

# Below is generated by plot.py at 2019-09-18 20:38:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 318.32 Mbit/s  
95th percentile per-packet one-way delay: 90.298 ms  
Loss rate: 0.63%  
-- Flow 1:  
Average throughput: 186.22 Mbit/s  
95th percentile per-packet one-way delay: 93.604 ms  
Loss rate: 0.43%  
-- Flow 2:  
Average throughput: 153.29 Mbit/s  
95th percentile per-packet one-way delay: 87.330 ms  
Loss rate: 0.74%  
-- Flow 3:  
Average throughput: 96.37 Mbit/s  
95th percentile per-packet one-way delay: 73.425 ms  
Loss rate: 1.52%

Run 5: Report of Indigo — Data Link

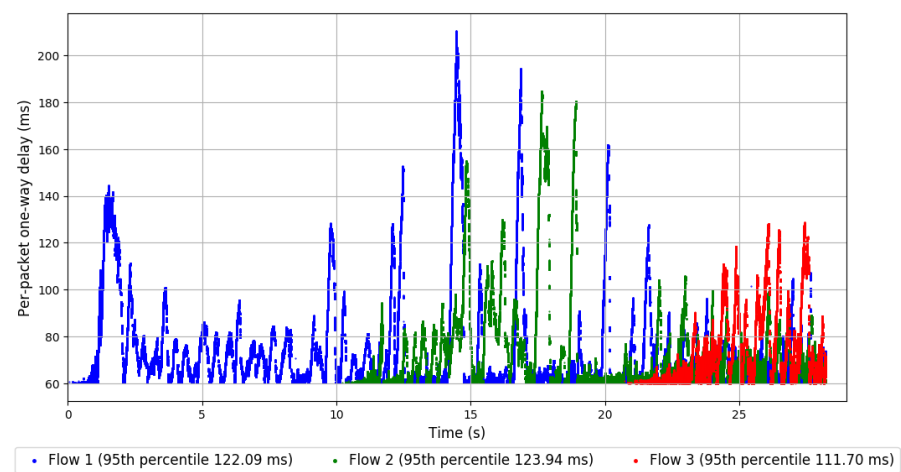
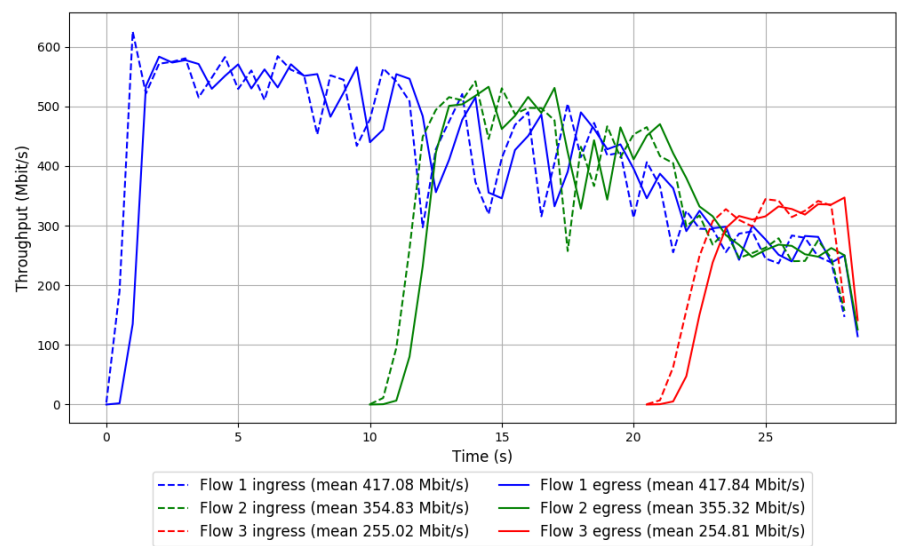


Run 1: Statistics of Indigo-MusesC3

Start at: 2019-09-18 16:01:30  
End at: 2019-09-18 16:02:00  
Local clock offset: 0.021 ms  
Remote clock offset: -0.018 ms

# Below is generated by plot.py at 2019-09-18 20:41:58  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 712.88 Mbit/s  
95th percentile per-packet one-way delay: 120.148 ms  
Loss rate: 0.51%  
-- Flow 1:  
Average throughput: 417.84 Mbit/s  
95th percentile per-packet one-way delay: 122.092 ms  
Loss rate: 0.28%  
-- Flow 2:  
Average throughput: 355.32 Mbit/s  
95th percentile per-packet one-way delay: 123.944 ms  
Loss rate: 0.55%  
-- Flow 3:  
Average throughput: 254.81 Mbit/s  
95th percentile per-packet one-way delay: 111.704 ms  
Loss rate: 1.76%

Run 1: Report of Indigo-MusesC3 — Data Link

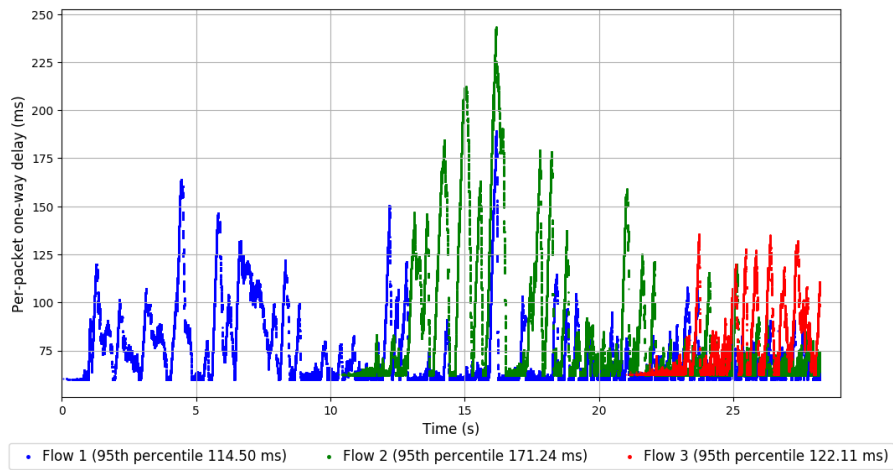
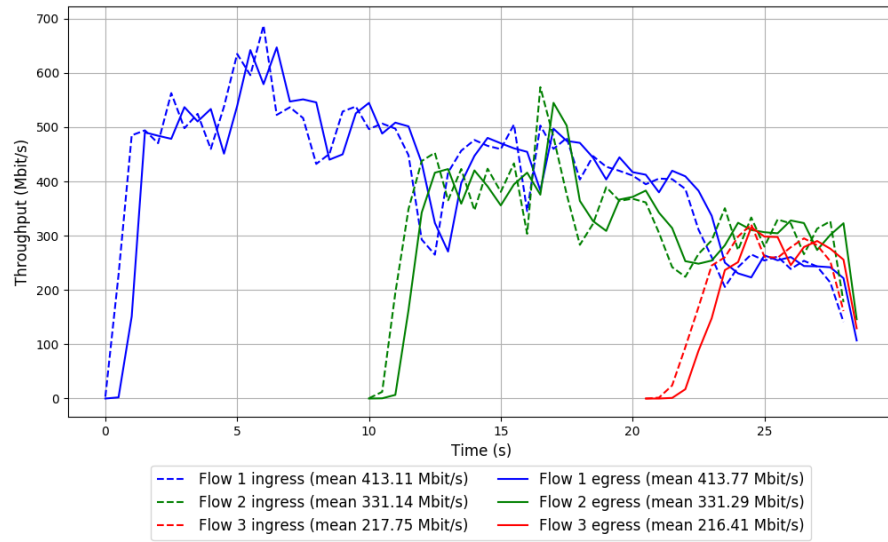


Run 2: Statistics of Indigo-MusesC3

Start at: 2019-09-18 16:40:36  
End at: 2019-09-18 16:41:06  
Local clock offset: -0.021 ms  
Remote clock offset: -0.072 ms

# Below is generated by plot.py at 2019-09-18 20:49:36  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 679.99 Mbit/s  
95th percentile per-packet one-way delay: 131.964 ms  
Loss rate: 0.57%  
-- Flow 1:  
Average throughput: 413.77 Mbit/s  
95th percentile per-packet one-way delay: 114.496 ms  
Loss rate: 0.28%  
-- Flow 2:  
Average throughput: 331.29 Mbit/s  
95th percentile per-packet one-way delay: 171.241 ms  
Loss rate: 0.65%  
-- Flow 3:  
Average throughput: 216.41 Mbit/s  
95th percentile per-packet one-way delay: 122.108 ms  
Loss rate: 2.31%

## Run 2: Report of Indigo-MusesC3 — Data Link



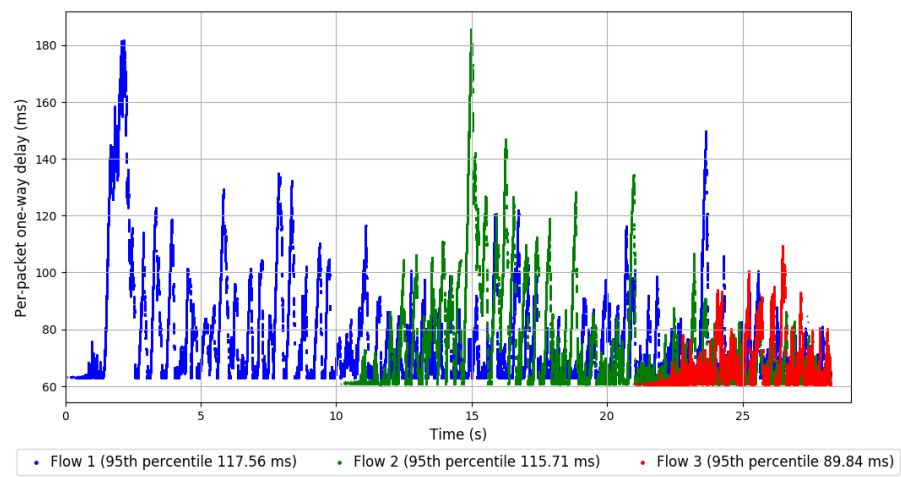
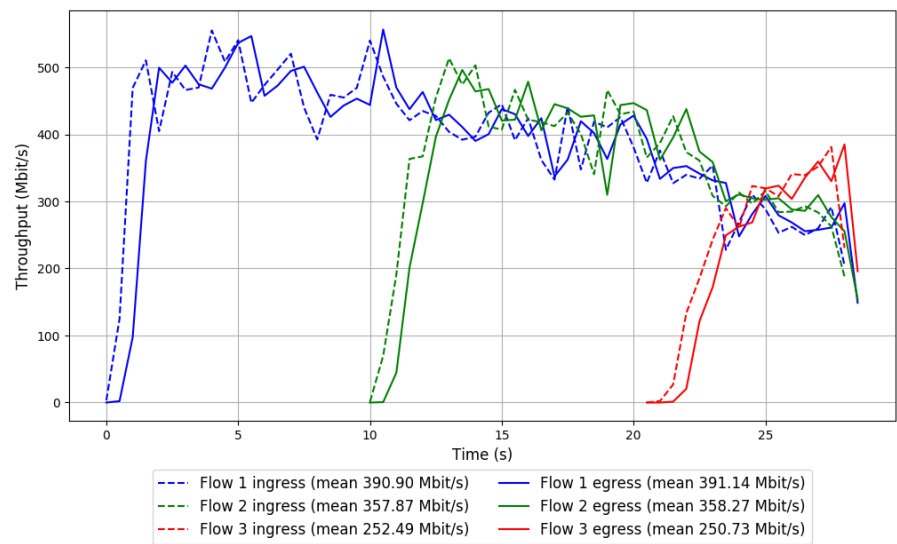


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-09-18 17:20:14  
End at: 2019-09-18 17:20:44  
Local clock offset: -0.207 ms  
Remote clock offset: -0.329 ms

# Below is generated by plot.py at 2019-09-18 20:50:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 685.43 Mbit/s  
95th percentile per-packet one-way delay: 115.343 ms  
Loss rate: 0.63%  
-- Flow 1:  
Average throughput: 391.14 Mbit/s  
95th percentile per-packet one-way delay: 117.565 ms  
Loss rate: 0.38%  
-- Flow 2:  
Average throughput: 358.27 Mbit/s  
95th percentile per-packet one-way delay: 115.710 ms  
Loss rate: 0.56%  
-- Flow 3:  
Average throughput: 250.73 Mbit/s  
95th percentile per-packet one-way delay: 89.836 ms  
Loss rate: 2.35%

Run 3: Report of Indigo-MusesC3 — Data Link

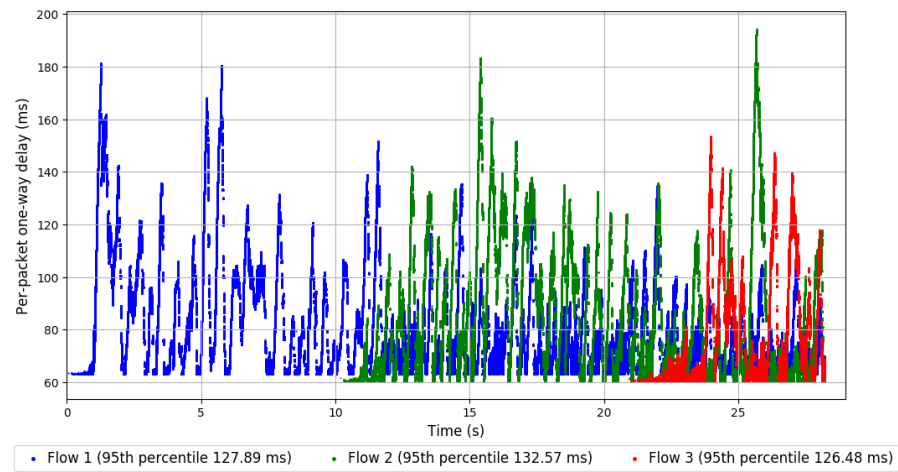
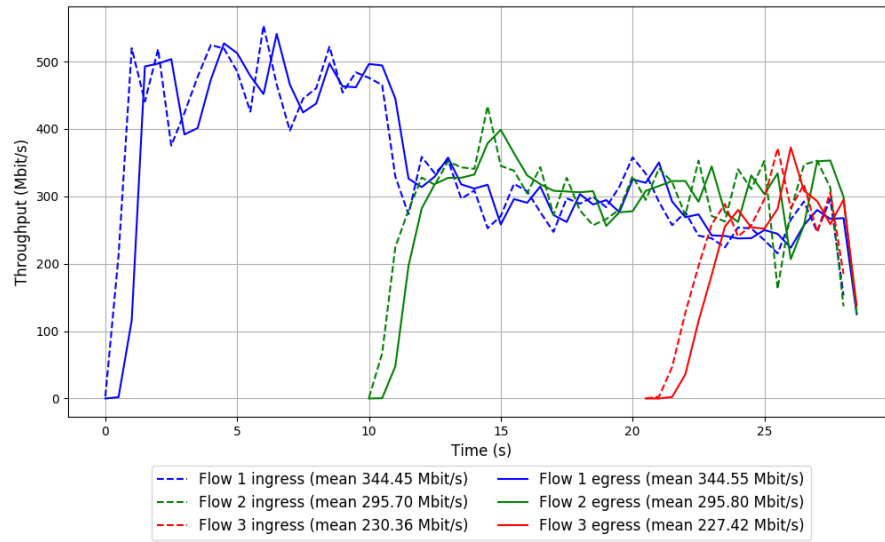


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-09-18 17:59:25  
End at: 2019-09-18 17:59:55  
Local clock offset: -0.095 ms  
Remote clock offset: -0.677 ms

# Below is generated by plot.py at 2019-09-18 20:50:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 592.93 Mbit/s  
95th percentile per-packet one-way delay: 130.505 ms  
Loss rate: 0.76%  
-- Flow 1:  
Average throughput: 344.55 Mbit/s  
95th percentile per-packet one-way delay: 127.888 ms  
Loss rate: 0.43%  
-- Flow 2:  
Average throughput: 295.80 Mbit/s  
95th percentile per-packet one-way delay: 132.572 ms  
Loss rate: 0.65%  
-- Flow 3:  
Average throughput: 227.42 Mbit/s  
95th percentile per-packet one-way delay: 126.480 ms  
Loss rate: 2.91%

# Run 4: Report of Indigo-MusesC3 — Data Link

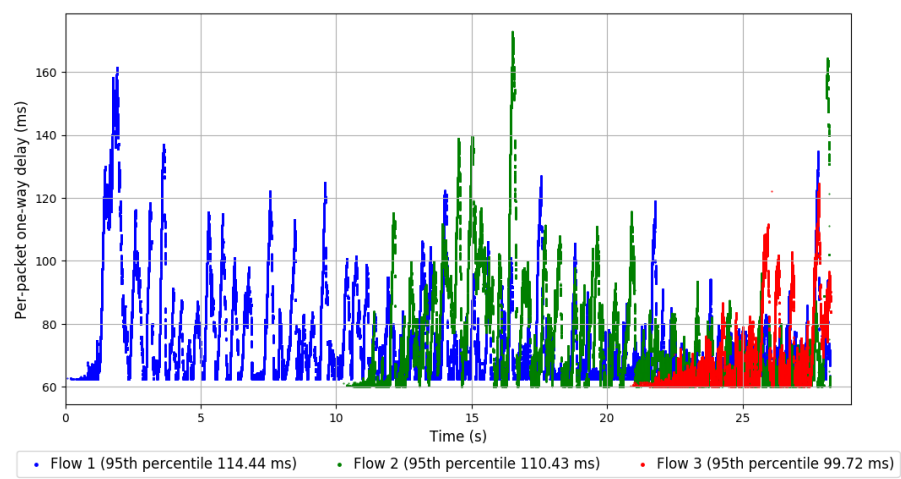
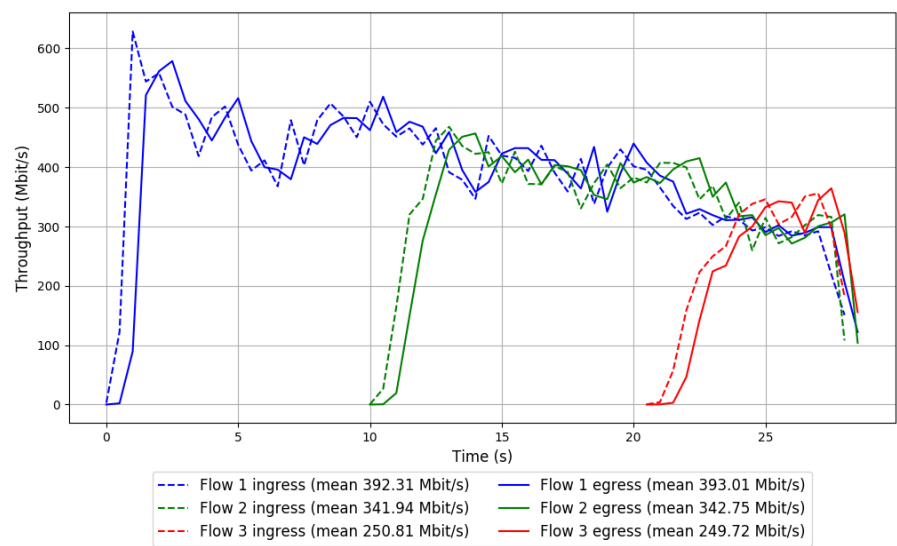


Run 5: Statistics of Indigo-MusesC3

Start at: 2019-09-18 18:38:39  
End at: 2019-09-18 18:39:09  
Local clock offset: -0.009 ms  
Remote clock offset: -0.302 ms

# Below is generated by plot.py at 2019-09-18 20:51:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 676.90 Mbit/s  
95th percentile per-packet one-way delay: 111.193 ms  
Loss rate: 0.52%  
-- Flow 1:  
Average throughput: 393.01 Mbit/s  
95th percentile per-packet one-way delay: 114.441 ms  
Loss rate: 0.28%  
-- Flow 2:  
Average throughput: 342.75 Mbit/s  
95th percentile per-packet one-way delay: 110.430 ms  
Loss rate: 0.47%  
-- Flow 3:  
Average throughput: 249.72 Mbit/s  
95th percentile per-packet one-way delay: 99.721 ms  
Loss rate: 2.07%

Run 5: Report of Indigo-MusesC3 — Data Link

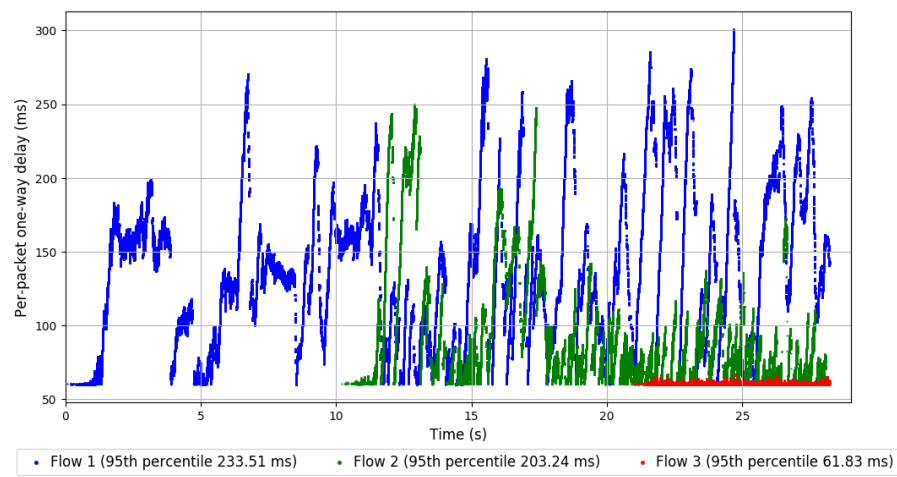
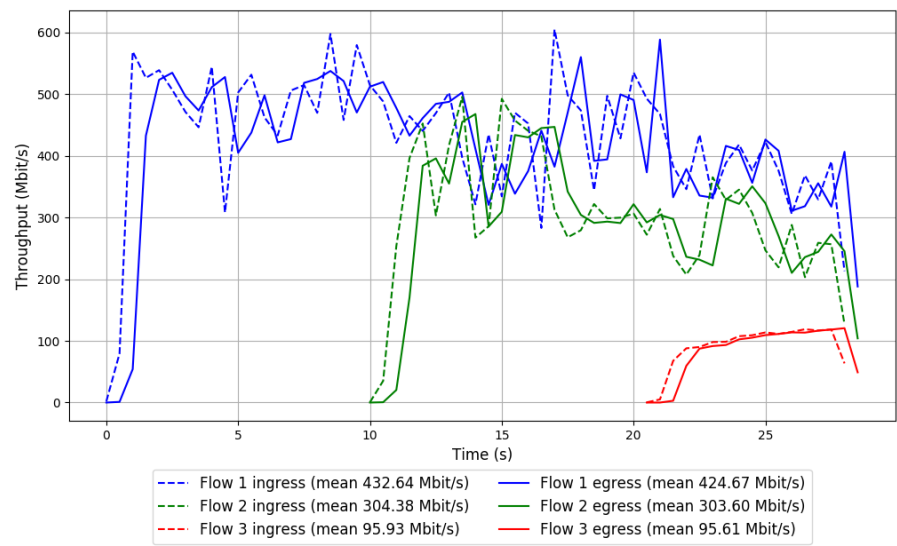


Run 1: Statistics of Indigo-MusesC5

Start at: 2019-09-18 16:16:17  
End at: 2019-09-18 16:16:47  
Local clock offset: 0.029 ms  
Remote clock offset: -0.044 ms

# Below is generated by plot.py at 2019-09-18 20:51:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 643.62 Mbit/s  
95th percentile per-packet one-way delay: 223.771 ms  
Loss rate: 1.84%  
-- Flow 1:  
Average throughput: 424.67 Mbit/s  
95th percentile per-packet one-way delay: 233.513 ms  
Loss rate: 2.26%  
-- Flow 2:  
Average throughput: 303.60 Mbit/s  
95th percentile per-packet one-way delay: 203.238 ms  
Loss rate: 0.89%  
-- Flow 3:  
Average throughput: 95.61 Mbit/s  
95th percentile per-packet one-way delay: 61.831 ms  
Loss rate: 1.91%

Run 1: Report of Indigo-MusesC5 — Data Link





Run 2: Statistics of Indigo-MusesC5

Start at: 2019-09-18 16:55:36

End at: 2019-09-18 16:56:06

Local clock offset: 0.02 ms

Remote clock offset: 0.016 ms

# Below is generated by plot.py at 2019-09-18 20:57:06

# Datalink statistics

-- Total of 3 flows:

Average throughput: 724.26 Mbit/s

95th percentile per-packet one-way delay: 199.838 ms

Loss rate: 1.63%

-- Flow 1:

Average throughput: 442.87 Mbit/s

95th percentile per-packet one-way delay: 200.765 ms

Loss rate: 1.89%

-- Flow 2:

Average throughput: 371.38 Mbit/s

95th percentile per-packet one-way delay: 200.703 ms

Loss rate: 0.69%

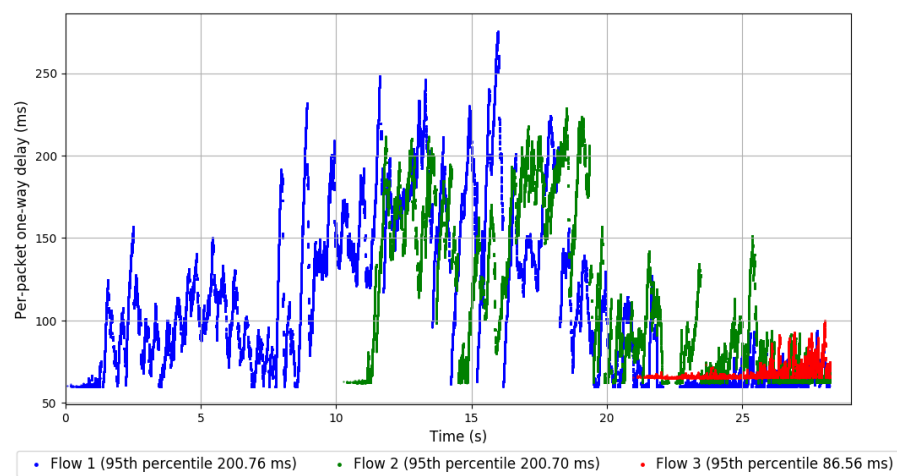
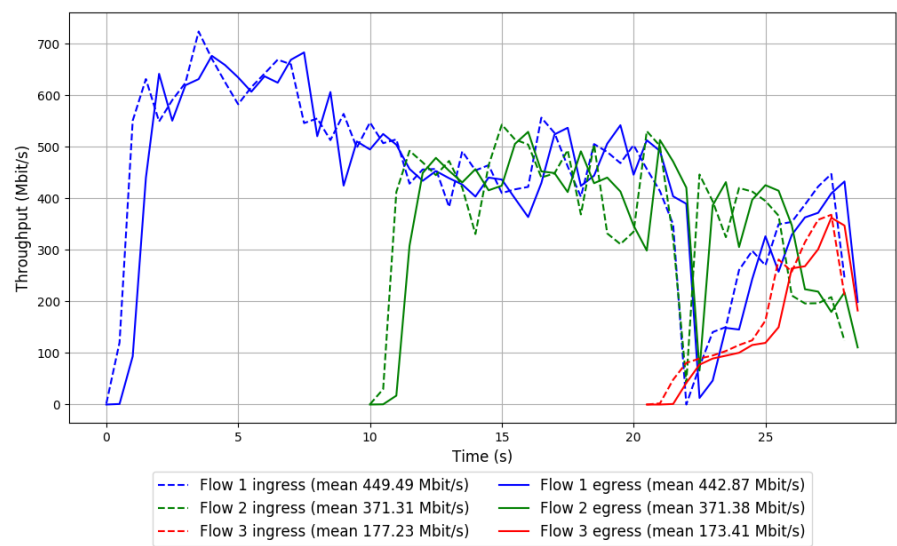
-- Flow 3:

Average throughput: 173.41 Mbit/s

95th percentile per-packet one-way delay: 86.565 ms

Loss rate: 3.81%

Run 2: Report of Indigo-MusesC5 — Data Link



Run 3: Statistics of Indigo-MusesC5

Start at: 2019-09-18 17:35:20

End at: 2019-09-18 17:35:50

Local clock offset: -0.292 ms

Remote clock offset: 0.635 ms

# Below is generated by plot.py at 2019-09-18 20:57:06

# Datalink statistics

-- Total of 3 flows:

Average throughput: 662.92 Mbit/s

95th percentile per-packet one-way delay: 191.843 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 391.17 Mbit/s

95th percentile per-packet one-way delay: 190.578 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 379.59 Mbit/s

95th percentile per-packet one-way delay: 197.063 ms

Loss rate: 1.03%

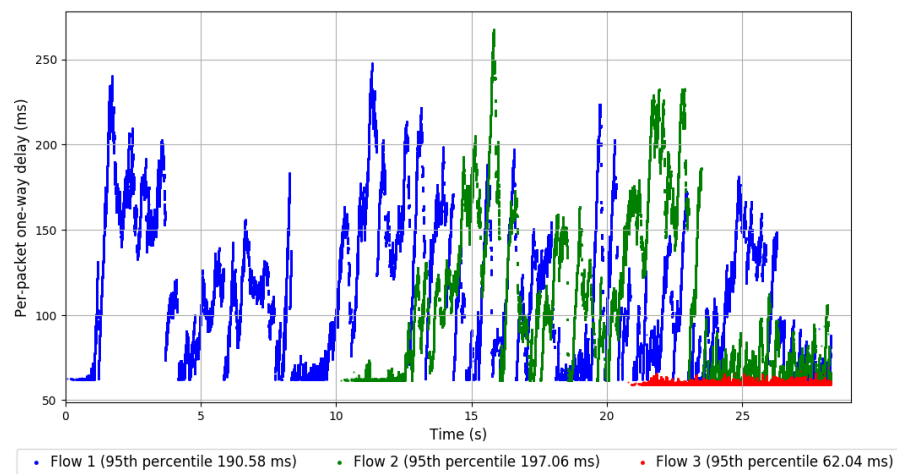
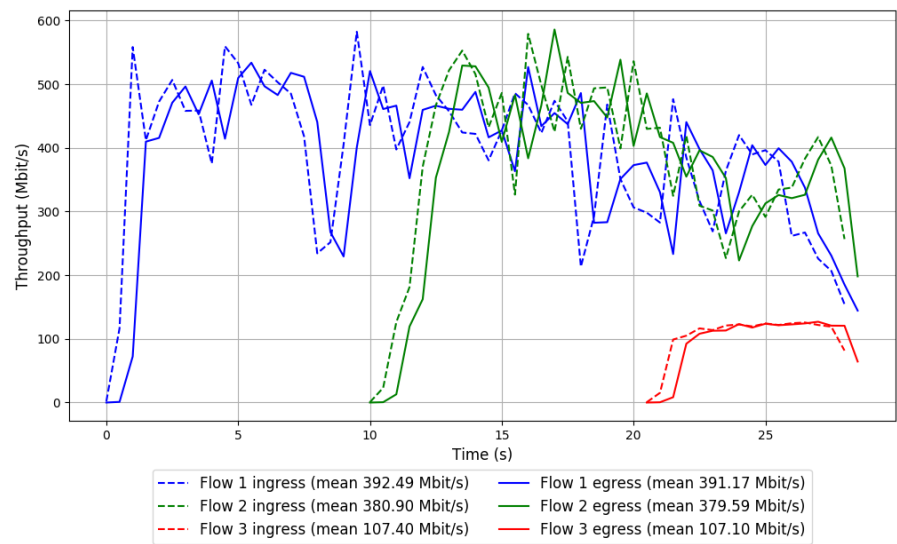
-- Flow 3:

Average throughput: 107.10 Mbit/s

95th percentile per-packet one-way delay: 62.040 ms

Loss rate: 1.91%

Run 3: Report of Indigo-MusesC5 — Data Link



Run 4: Statistics of Indigo-MusesC5

Start at: 2019-09-18 18:14:20

End at: 2019-09-18 18:14:50

Local clock offset: -0.04 ms

Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2019-09-18 20:59:51

# Datalink statistics

-- Total of 3 flows:

Average throughput: 668.70 Mbit/s

95th percentile per-packet one-way delay: 192.944 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 405.93 Mbit/s

95th percentile per-packet one-way delay: 191.057 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 364.23 Mbit/s

95th percentile per-packet one-way delay: 205.304 ms

Loss rate: 1.29%

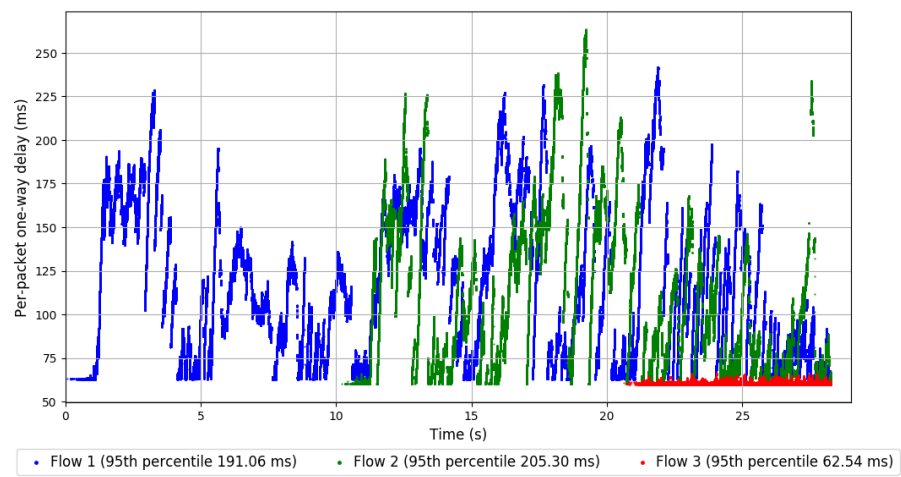
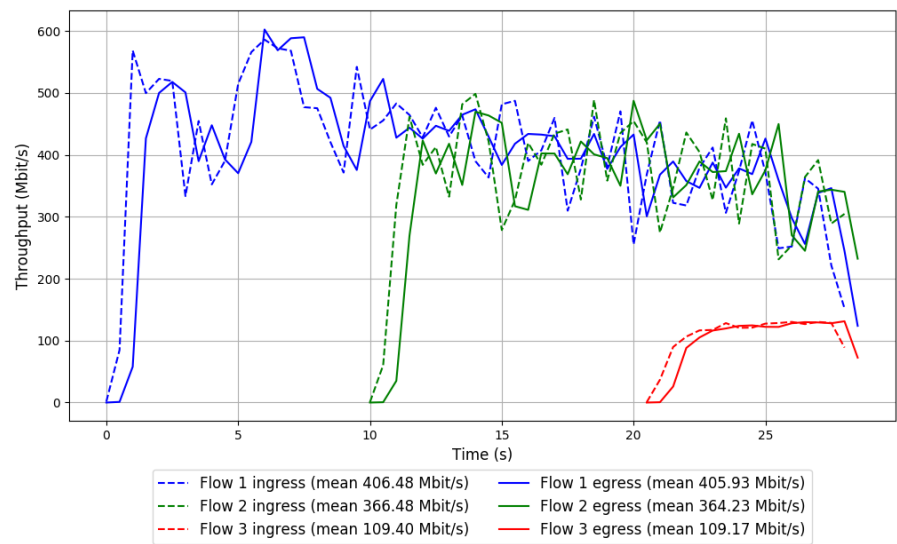
-- Flow 3:

Average throughput: 109.17 Mbit/s

95th percentile per-packet one-way delay: 62.541 ms

Loss rate: 1.79%

Run 4: Report of Indigo-MusesC5 — Data Link



Run 5: Statistics of Indigo-MusesC5

Start at: 2019-09-18 18:53:28

End at: 2019-09-18 18:53:58

Local clock offset: 0.004 ms

Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2019-09-18 21:07:45

# Datalink statistics

-- Total of 3 flows:

Average throughput: 683.80 Mbit/s

95th percentile per-packet one-way delay: 211.035 ms

Loss rate: 2.32%

-- Flow 1:

Average throughput: 396.21 Mbit/s

95th percentile per-packet one-way delay: 190.941 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 406.73 Mbit/s

95th percentile per-packet one-way delay: 222.145 ms

Loss rate: 5.11%

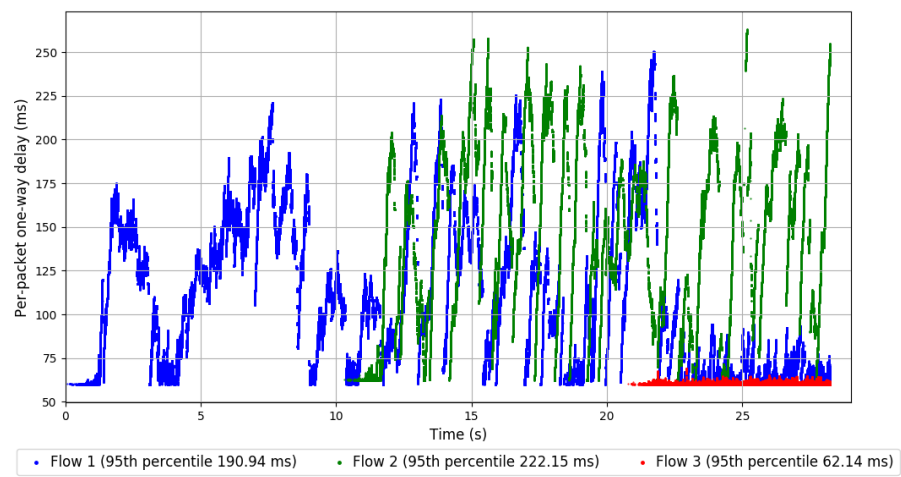
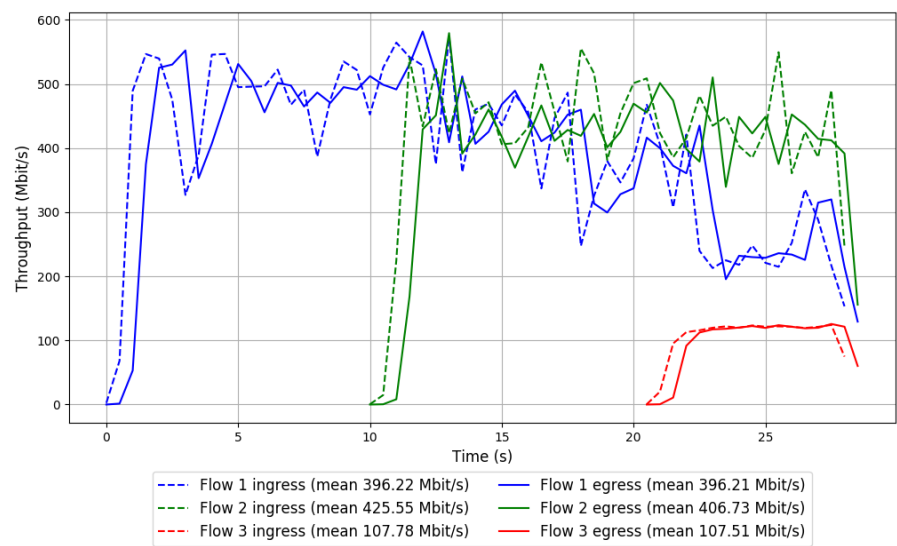
-- Flow 3:

Average throughput: 107.51 Mbit/s

95th percentile per-packet one-way delay: 62.140 ms

Loss rate: 1.85%

Run 5: Report of Indigo-MusesC5 — Data Link



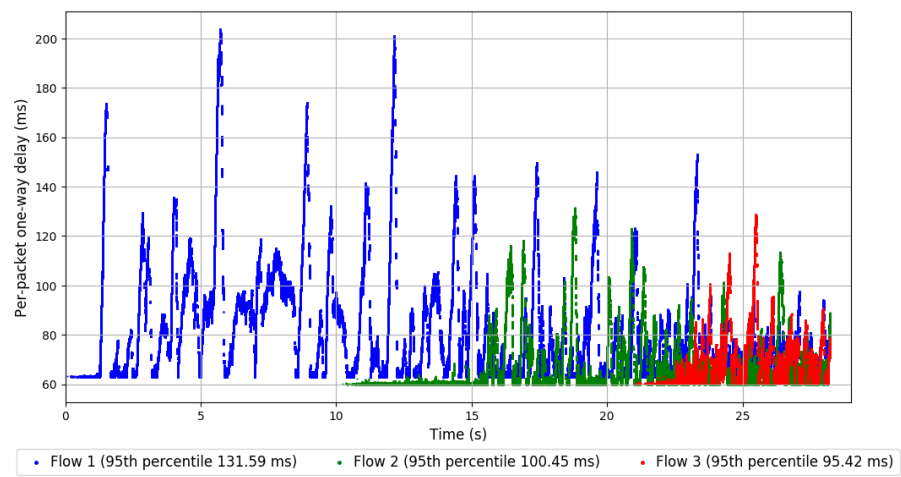
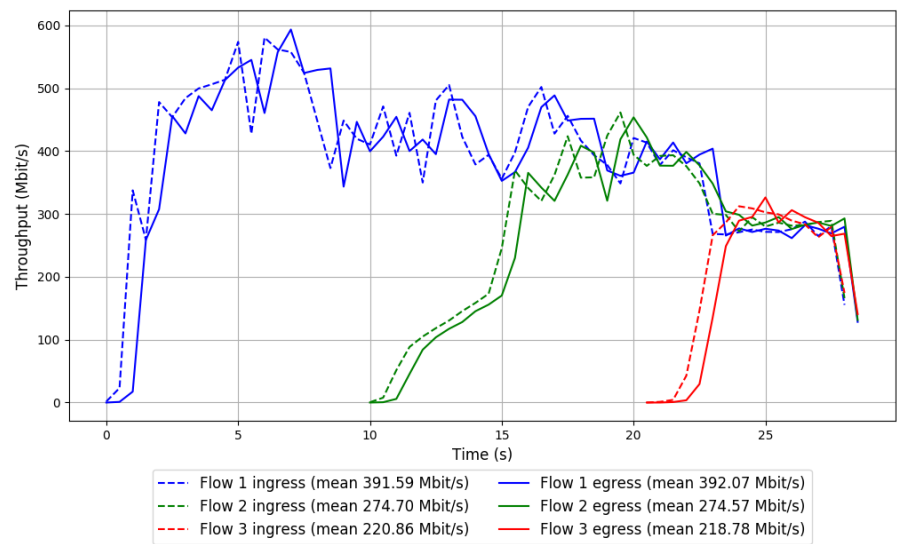


Run 1: Statistics of Indigo-MusesD

Start at: 2019-09-18 16:13:18  
End at: 2019-09-18 16:13:48  
Local clock offset: 0.005 ms  
Remote clock offset: -0.099 ms

# Below is generated by plot.py at 2019-09-18 21:07:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 624.00 Mbit/s  
95th percentile per-packet one-way delay: 118.565 ms  
Loss rate: 0.63%  
-- Flow 1:  
Average throughput: 392.07 Mbit/s  
95th percentile per-packet one-way delay: 131.590 ms  
Loss rate: 0.31%  
-- Flow 2:  
Average throughput: 274.57 Mbit/s  
95th percentile per-packet one-way delay: 100.449 ms  
Loss rate: 0.70%  
-- Flow 3:  
Average throughput: 218.78 Mbit/s  
95th percentile per-packet one-way delay: 95.415 ms  
Loss rate: 2.55%

Run 1: Report of Indigo-MusesD — Data Link



Run 2: Statistics of Indigo-MusesD

Start at: 2019-09-18 16:52:40

End at: 2019-09-18 16:53:10

Local clock offset: -0.024 ms

Remote clock offset: 0.148 ms

# Below is generated by plot.py at 2019-09-18 21:07:45

# Datalink statistics

-- Total of 3 flows:

Average throughput: 585.34 Mbit/s

95th percentile per-packet one-way delay: 114.375 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 340.26 Mbit/s

95th percentile per-packet one-way delay: 120.377 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 278.46 Mbit/s

95th percentile per-packet one-way delay: 105.930 ms

Loss rate: 0.70%

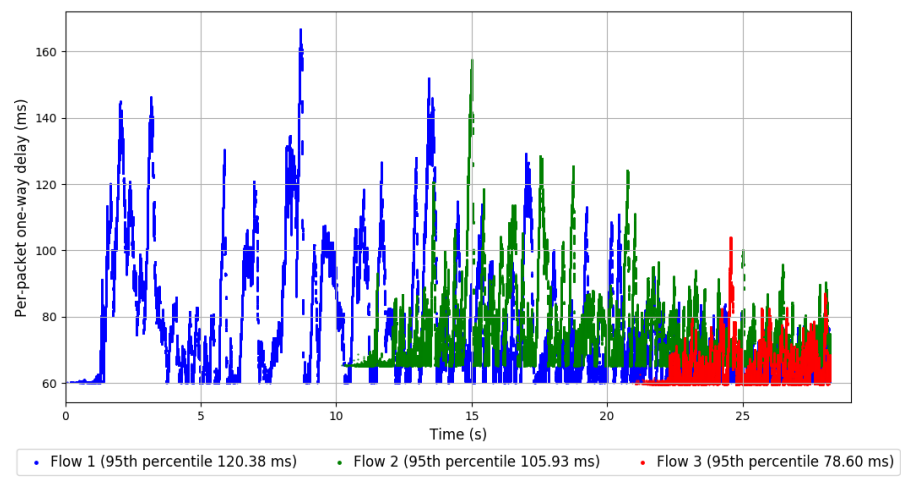
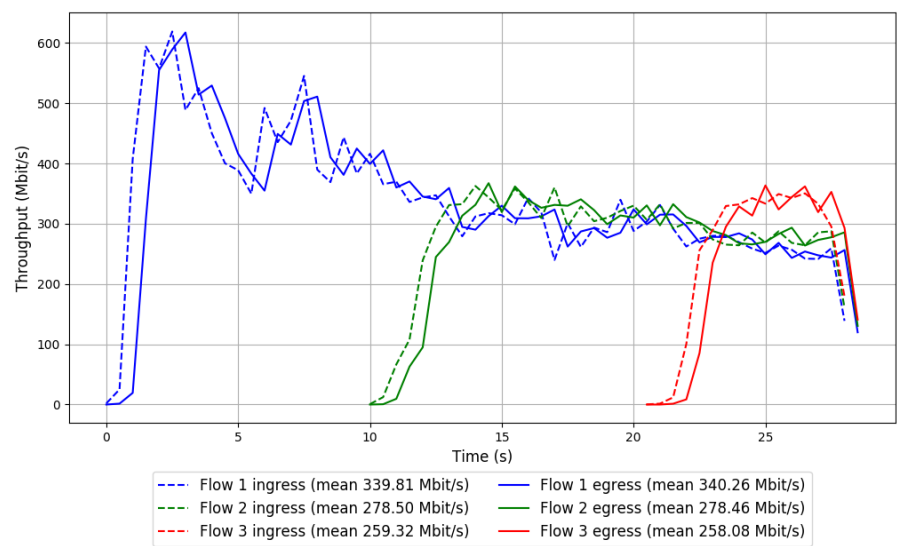
-- Flow 3:

Average throughput: 258.08 Mbit/s

95th percentile per-packet one-way delay: 78.596 ms

Loss rate: 2.09%

Run 2: Report of Indigo-MusesD — Data Link

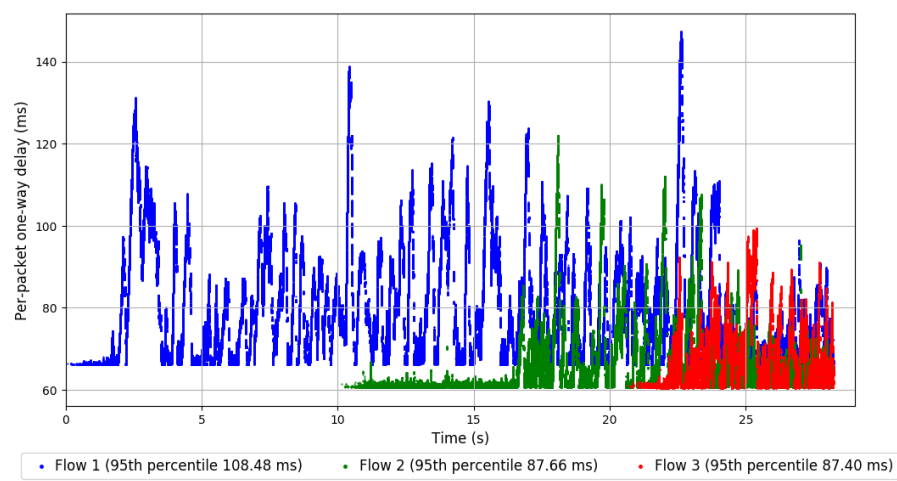
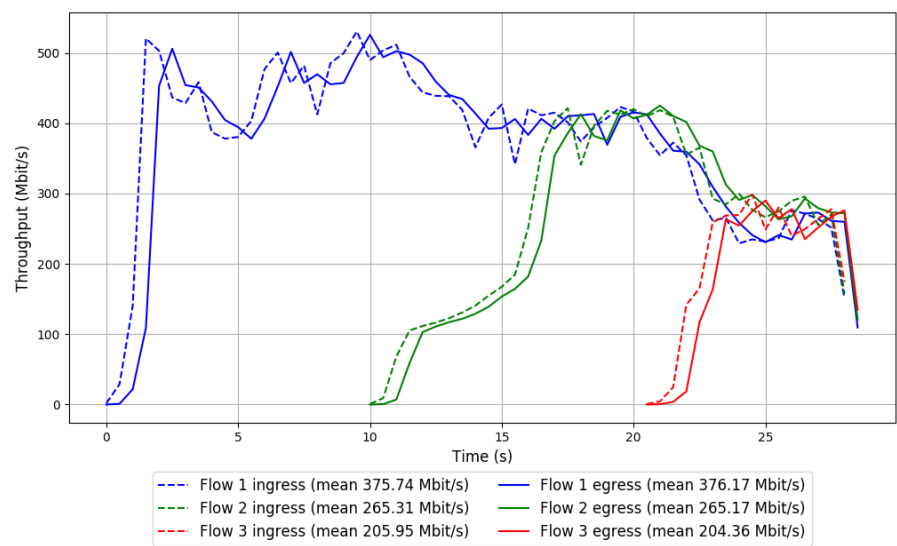


Run 3: Statistics of Indigo-MusesD

Start at: 2019-09-18 17:32:22  
End at: 2019-09-18 17:32:52  
Local clock offset: -0.295 ms  
Remote clock offset: -0.692 ms

# Below is generated by plot.py at 2019-09-18 21:07:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 601.34 Mbit/s  
95th percentile per-packet one-way delay: 105.072 ms  
Loss rate: 0.64%  
-- Flow 1:  
Average throughput: 376.17 Mbit/s  
95th percentile per-packet one-way delay: 108.478 ms  
Loss rate: 0.34%  
-- Flow 2:  
Average throughput: 265.17 Mbit/s  
95th percentile per-packet one-way delay: 87.655 ms  
Loss rate: 0.73%  
-- Flow 3:  
Average throughput: 204.36 Mbit/s  
95th percentile per-packet one-way delay: 87.397 ms  
Loss rate: 2.35%

Run 3: Report of Indigo-MusesD — Data Link



Run 4: Statistics of Indigo-MusesD

Start at: 2019-09-18 18:11:21

End at: 2019-09-18 18:11:51

Local clock offset: -0.044 ms

Remote clock offset: 0.565 ms

# Below is generated by plot.py at 2019-09-18 21:08:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 622.69 Mbit/s

95th percentile per-packet one-way delay: 111.879 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 373.33 Mbit/s

95th percentile per-packet one-way delay: 115.235 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 307.84 Mbit/s

95th percentile per-packet one-way delay: 101.915 ms

Loss rate: 0.48%

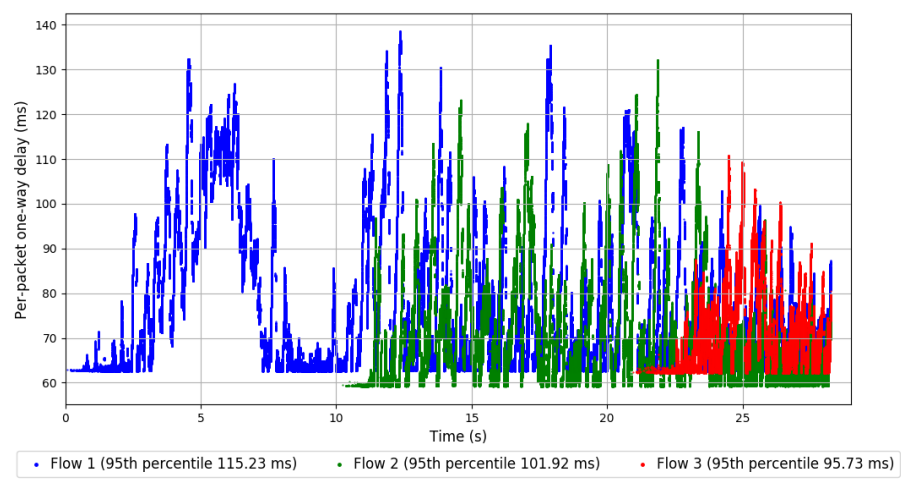
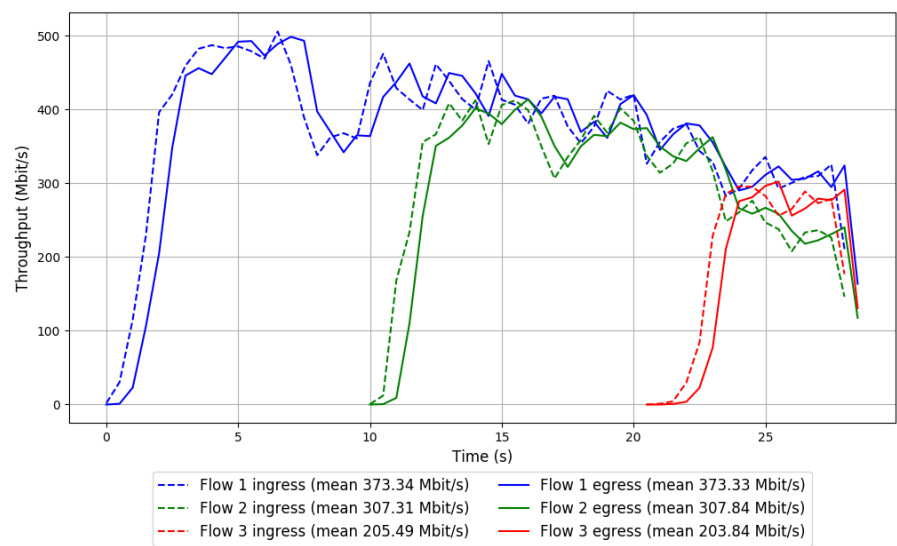
-- Flow 3:

Average throughput: 203.84 Mbit/s

95th percentile per-packet one-way delay: 95.733 ms

Loss rate: 2.47%

Run 4: Report of Indigo-MusesD — Data Link



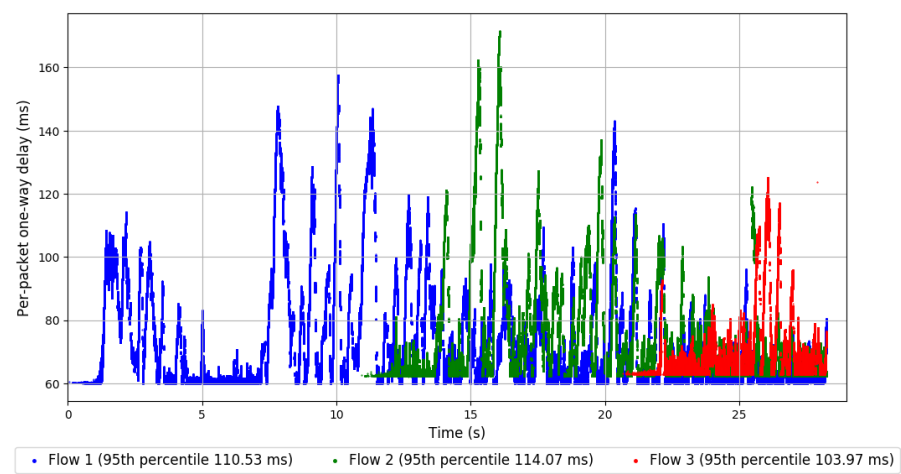
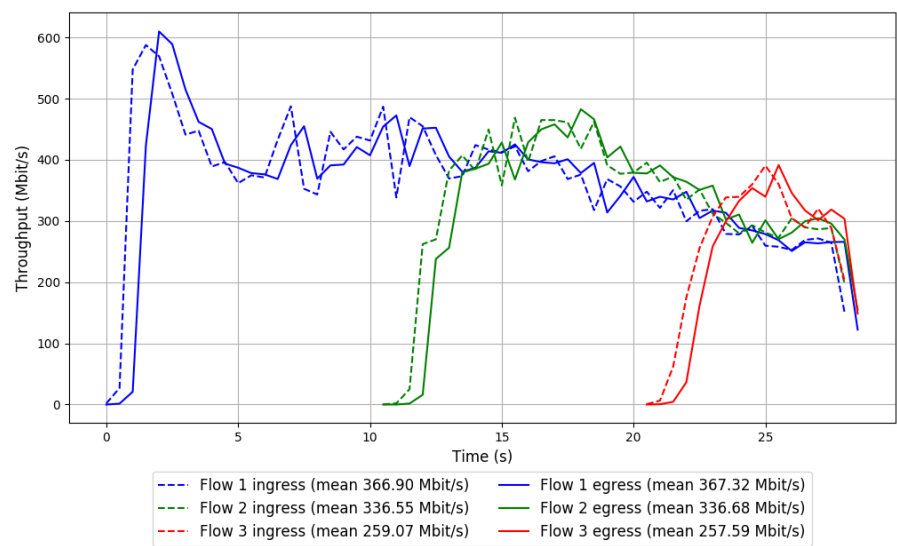


Run 5: Statistics of Indigo-MusesD

Start at: 2019-09-18 18:50:26  
End at: 2019-09-18 18:50:56  
Local clock offset: 0.008 ms  
Remote clock offset: -0.063 ms

# Below is generated by plot.py at 2019-09-18 21:14:21  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 643.48 Mbit/s  
95th percentile per-packet one-way delay: 110.634 ms  
Loss rate: 0.65%  
-- Flow 1:  
Average throughput: 367.32 Mbit/s  
95th percentile per-packet one-way delay: 110.530 ms  
Loss rate: 0.32%  
-- Flow 2:  
Average throughput: 336.68 Mbit/s  
95th percentile per-packet one-way delay: 114.069 ms  
Loss rate: 0.72%  
-- Flow 3:  
Average throughput: 257.59 Mbit/s  
95th percentile per-packet one-way delay: 103.973 ms  
Loss rate: 2.19%

Run 5: Report of Indigo-MusesD — Data Link

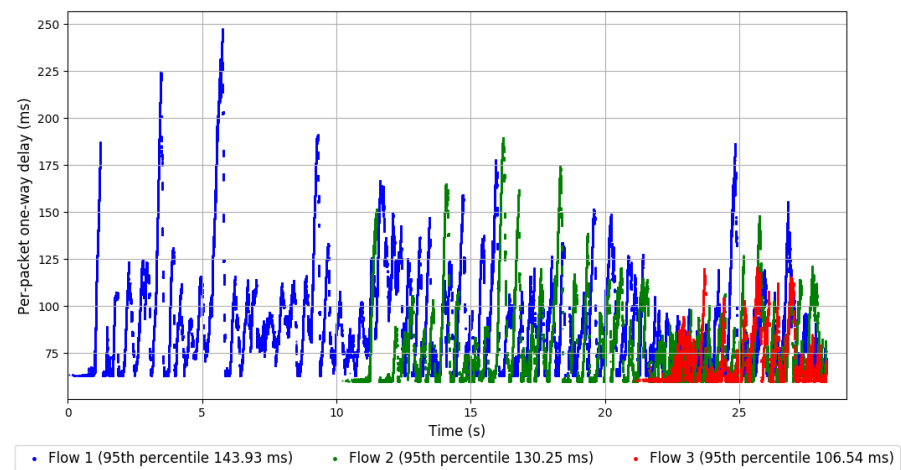
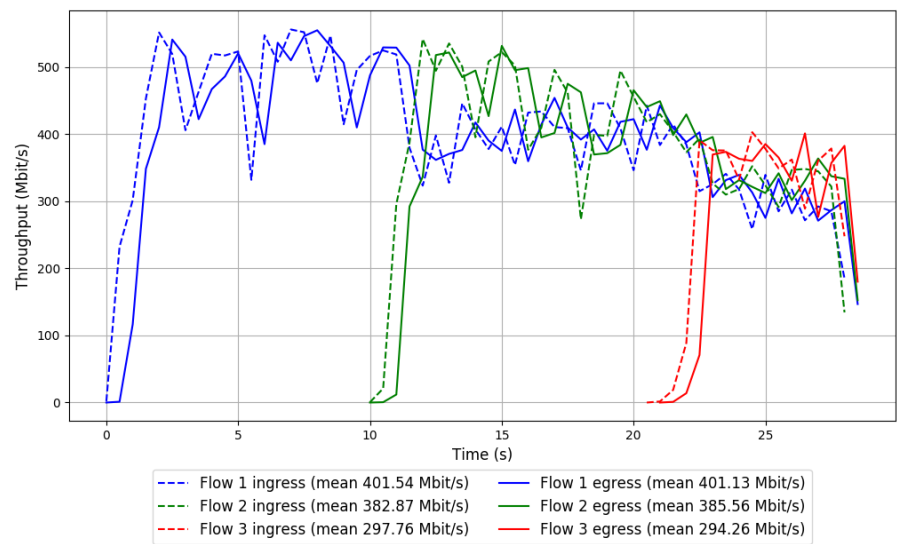


Run 1: Statistics of Indigo-MusesT

Start at: 2019-09-18 16:18:03  
End at: 2019-09-18 16:18:33  
Local clock offset: -0.021 ms  
Remote clock offset: -0.029 ms

# Below is generated by plot.py at 2019-09-18 21:16:20  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 722.36 Mbit/s  
95th percentile per-packet one-way delay: 135.313 ms  
Loss rate: 0.64%  
-- Flow 1:  
Average throughput: 401.13 Mbit/s  
95th percentile per-packet one-way delay: 143.932 ms  
Loss rate: 0.53%  
-- Flow 2:  
Average throughput: 385.56 Mbit/s  
95th percentile per-packet one-way delay: 130.253 ms  
Loss rate: 0.15%  
-- Flow 3:  
Average throughput: 294.26 Mbit/s  
95th percentile per-packet one-way delay: 106.536 ms  
Loss rate: 2.77%

Run 1: Report of Indigo-MusesT — Data Link



Run 2: Statistics of Indigo-MusesT

Start at: 2019-09-18 16:57:26

End at: 2019-09-18 16:57:56

Local clock offset: -0.009 ms

Remote clock offset: 0.02 ms

# Below is generated by plot.py at 2019-09-18 21:19:13

# Datalink statistics

-- Total of 3 flows:

Average throughput: 701.27 Mbit/s

95th percentile per-packet one-way delay: 145.500 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 434.97 Mbit/s

95th percentile per-packet one-way delay: 148.085 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 327.81 Mbit/s

95th percentile per-packet one-way delay: 136.073 ms

Loss rate: 0.63%

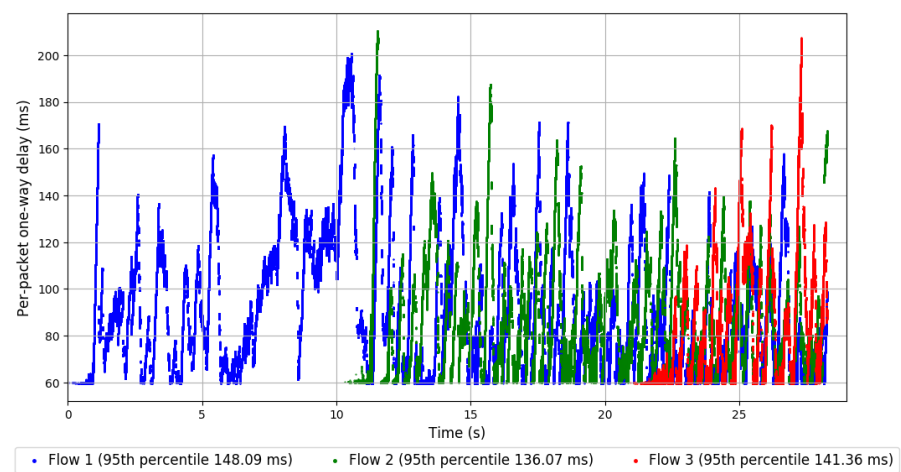
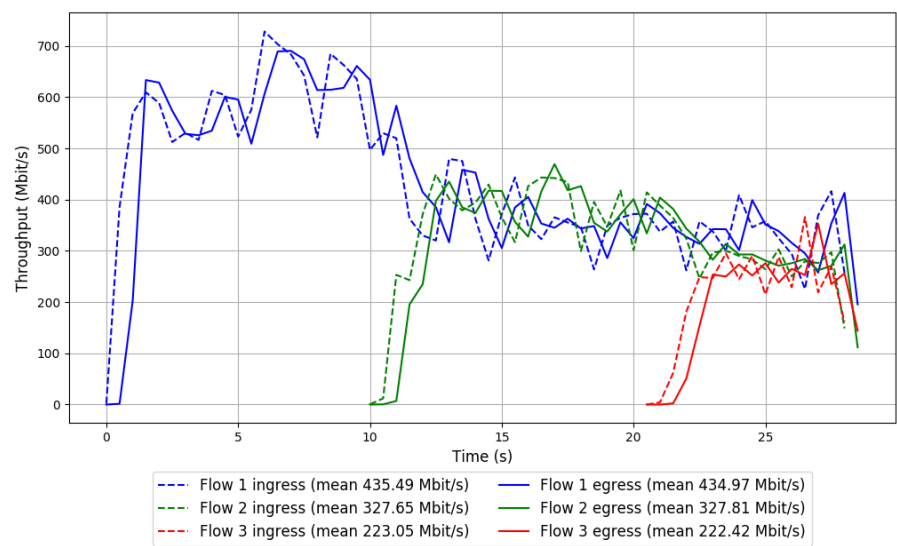
-- Flow 3:

Average throughput: 222.42 Mbit/s

95th percentile per-packet one-way delay: 141.358 ms

Loss rate: 1.95%

Run 2: Report of Indigo-MusesT — Data Link

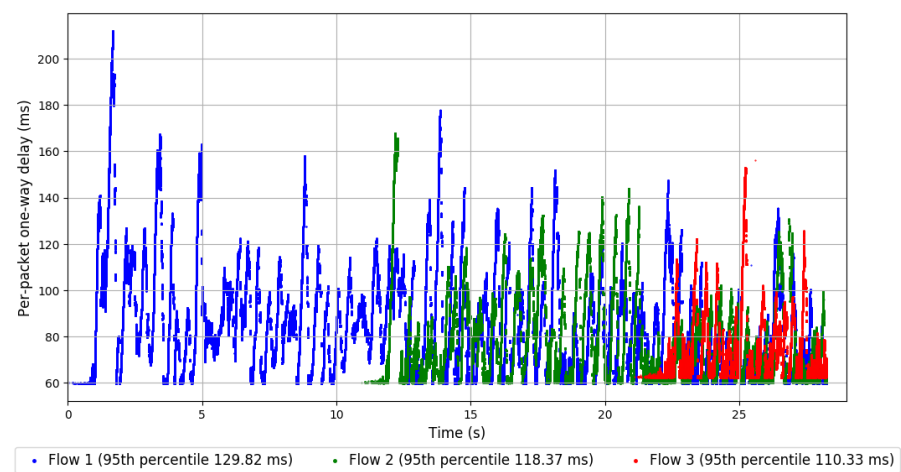
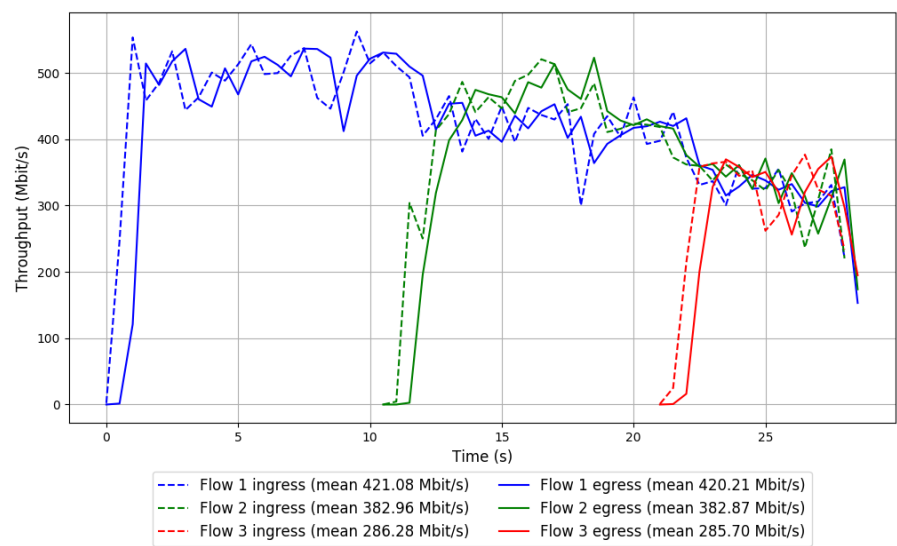


Run 3: Statistics of Indigo-MusesT

Start at: 2019-09-18 17:37:07  
End at: 2019-09-18 17:37:37  
Local clock offset: -0.31 ms  
Remote clock offset: -0.018 ms

# Below is generated by plot.py at 2019-09-18 21:25:35  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 727.76 Mbit/s  
95th percentile per-packet one-way delay: 123.570 ms  
Loss rate: 0.78%  
-- Flow 1:  
Average throughput: 420.21 Mbit/s  
95th percentile per-packet one-way delay: 129.820 ms  
Loss rate: 0.60%  
-- Flow 2:  
Average throughput: 382.87 Mbit/s  
95th percentile per-packet one-way delay: 118.373 ms  
Loss rate: 0.73%  
-- Flow 3:  
Average throughput: 285.70 Mbit/s  
95th percentile per-packet one-way delay: 110.329 ms  
Loss rate: 1.98%

Run 3: Report of Indigo-MusesT — Data Link





Run 4: Statistics of Indigo-MusesT

Start at: 2019-09-18 18:16:09

End at: 2019-09-18 18:16:39

Local clock offset: -0.017 ms

Remote clock offset: 0.101 ms

# Below is generated by plot.py at 2019-09-18 21:25:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 624.55 Mbit/s

95th percentile per-packet one-way delay: 144.475 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 358.56 Mbit/s

95th percentile per-packet one-way delay: 138.593 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 299.14 Mbit/s

95th percentile per-packet one-way delay: 154.149 ms

Loss rate: 0.98%

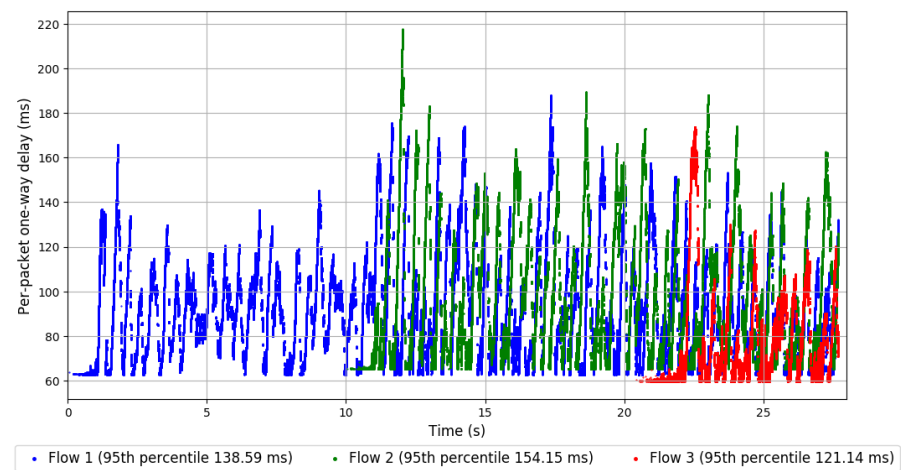
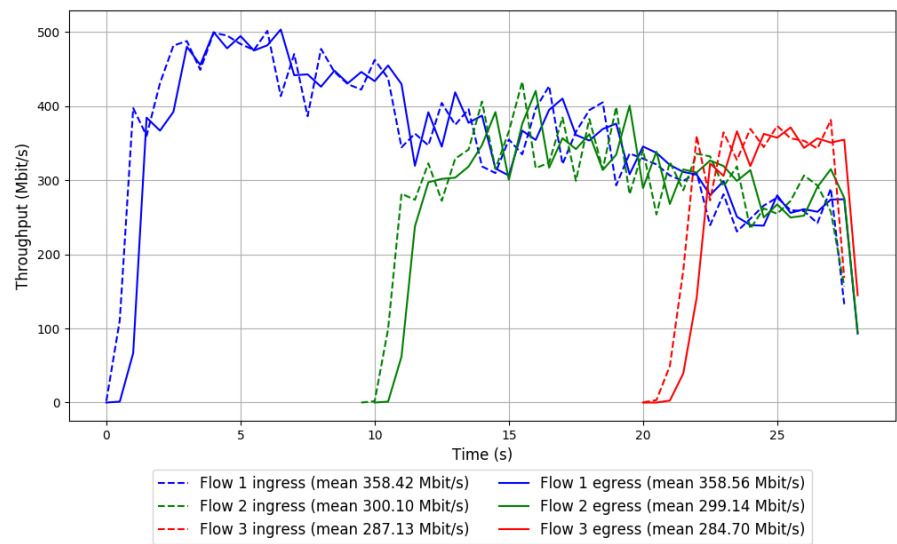
-- Flow 3:

Average throughput: 284.70 Mbit/s

95th percentile per-packet one-way delay: 121.138 ms

Loss rate: 2.50%

Run 4: Report of Indigo-MusesT — Data Link

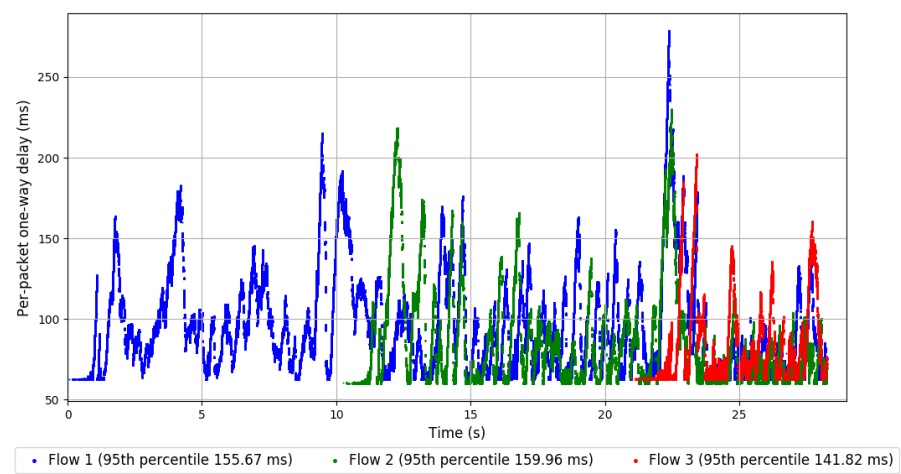
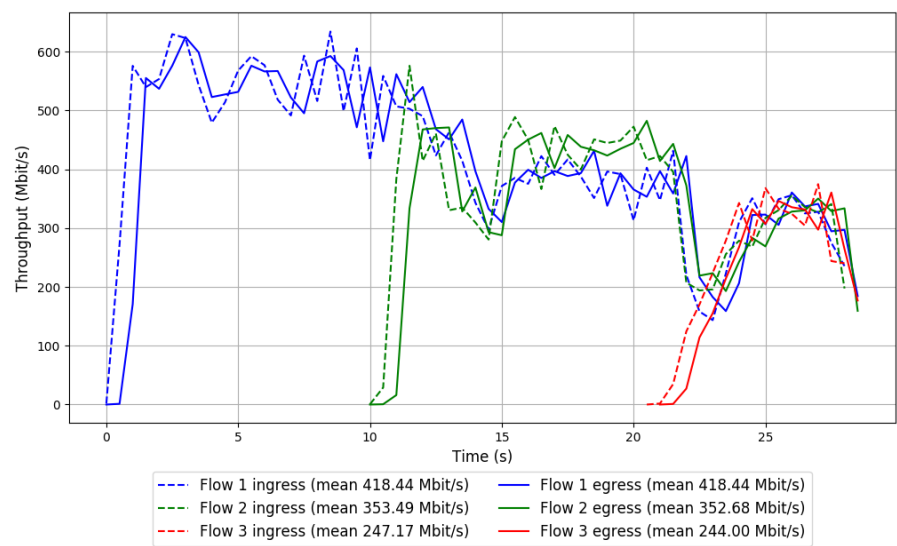


Run 5: Statistics of Indigo-MusesT

Start at: 2019-09-18 18:55:16  
End at: 2019-09-18 18:55:46  
Local clock offset: 0.012 ms  
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2019-09-18 21:26:24  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 706.37 Mbit/s  
95th percentile per-packet one-way delay: 155.235 ms  
Loss rate: 0.84%  
-- Flow 1:  
Average throughput: 418.44 Mbit/s  
95th percentile per-packet one-way delay: 155.669 ms  
Loss rate: 0.46%  
-- Flow 2:  
Average throughput: 352.68 Mbit/s  
95th percentile per-packet one-way delay: 159.955 ms  
Loss rate: 0.91%  
-- Flow 3:  
Average throughput: 244.00 Mbit/s  
95th percentile per-packet one-way delay: 141.816 ms  
Loss rate: 3.08%

Run 5: Report of Indigo-MusesT — Data Link

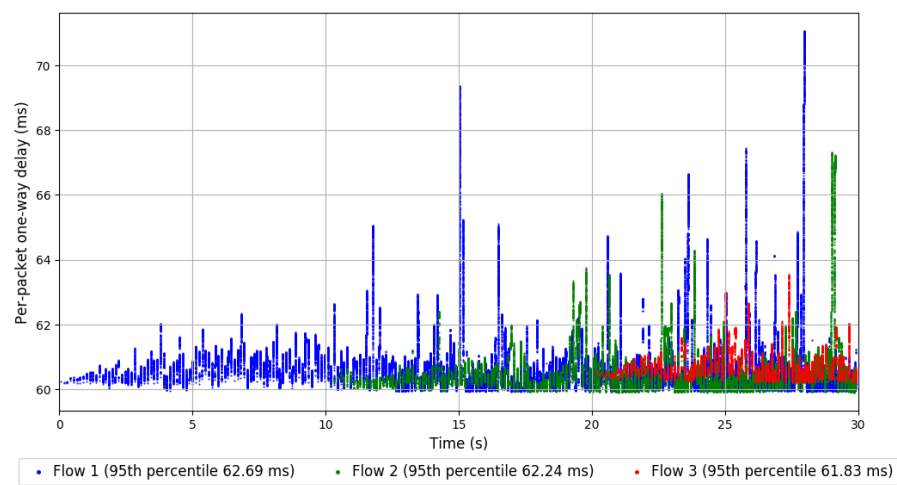
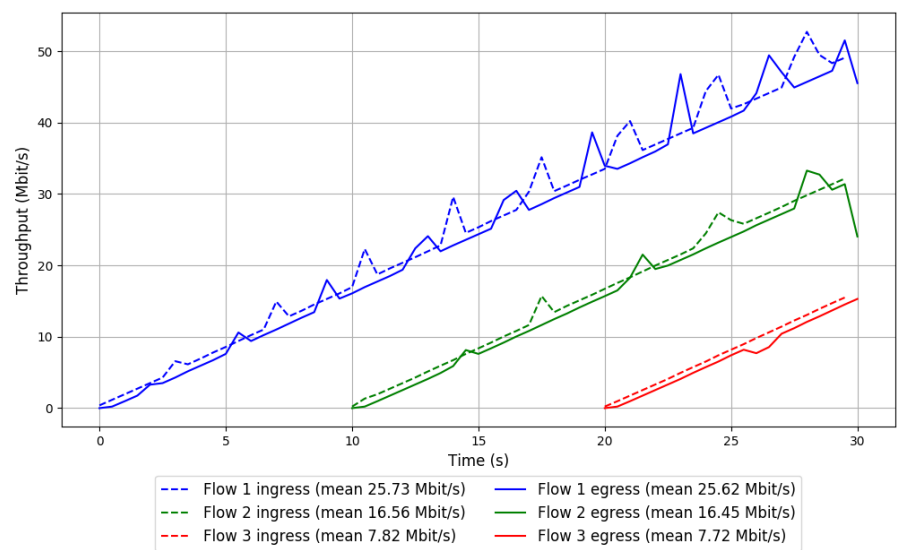


Run 1: Statistics of LEDBAT

Start at: 2019-09-18 16:21:41  
End at: 2019-09-18 16:22:11  
Local clock offset: 0.012 ms  
Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2019-09-18 21:26:24  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 39.06 Mbit/s  
95th percentile per-packet one-way delay: 62.473 ms  
Loss rate: 1.03%  
-- Flow 1:  
Average throughput: 25.62 Mbit/s  
95th percentile per-packet one-way delay: 62.690 ms  
Loss rate: 0.80%  
-- Flow 2:  
Average throughput: 16.45 Mbit/s  
95th percentile per-packet one-way delay: 62.239 ms  
Loss rate: 1.23%  
-- Flow 3:  
Average throughput: 7.72 Mbit/s  
95th percentile per-packet one-way delay: 61.833 ms  
Loss rate: 2.53%

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2019-09-18 17:01:05

End at: 2019-09-18 17:01:35

Local clock offset: -0.002 ms

Remote clock offset: 0.048 ms

# Below is generated by plot.py at 2019-09-18 21:26:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 20.12 Mbit/s

95th percentile per-packet one-way delay: 64.407 ms

Loss rate: 1.13%

-- Flow 1:

Average throughput: 6.45 Mbit/s

95th percentile per-packet one-way delay: 64.580 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 16.43 Mbit/s

95th percentile per-packet one-way delay: 64.641 ms

Loss rate: 1.23%

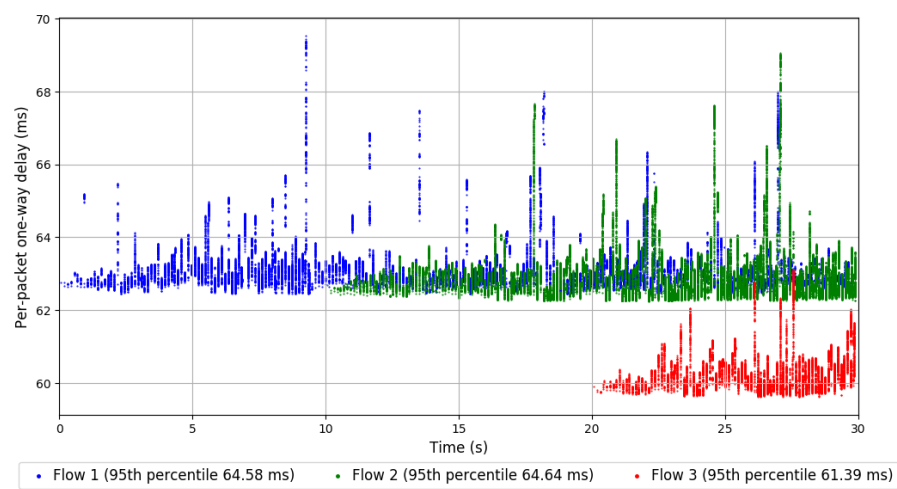
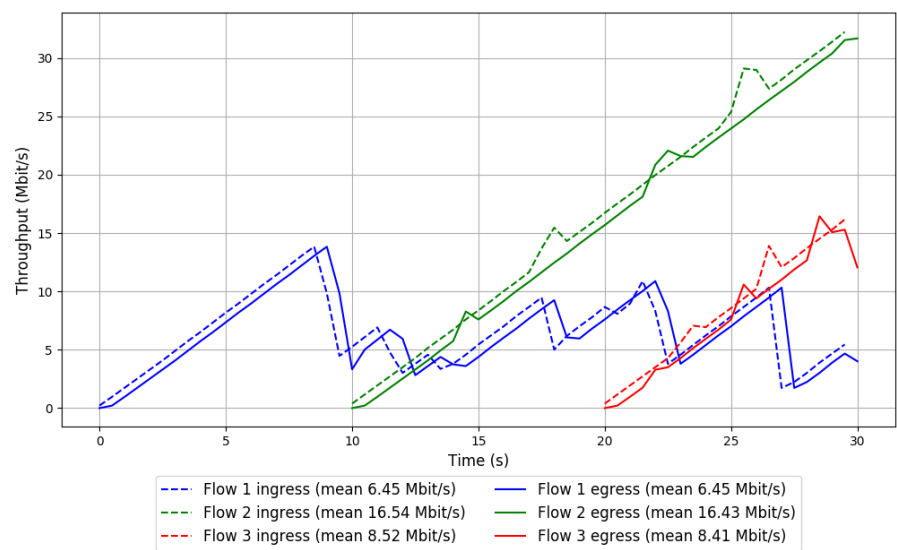
-- Flow 3:

Average throughput: 8.41 Mbit/s

95th percentile per-packet one-way delay: 61.393 ms

Loss rate: 2.45%

Run 2: Report of LEDBAT — Data Link





Run 3: Statistics of LEDBAT

Start at: 2019-09-18 17:40:48

End at: 2019-09-18 17:41:18

Local clock offset: -0.274 ms

Remote clock offset: 0.372 ms

# Below is generated by plot.py at 2019-09-18 21:26:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 26.43 Mbit/s

95th percentile per-packet one-way delay: 62.494 ms

Loss rate: 1.00%

-- Flow 1:

Average throughput: 12.48 Mbit/s

95th percentile per-packet one-way delay: 61.217 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 17.04 Mbit/s

95th percentile per-packet one-way delay: 62.012 ms

Loss rate: 1.21%

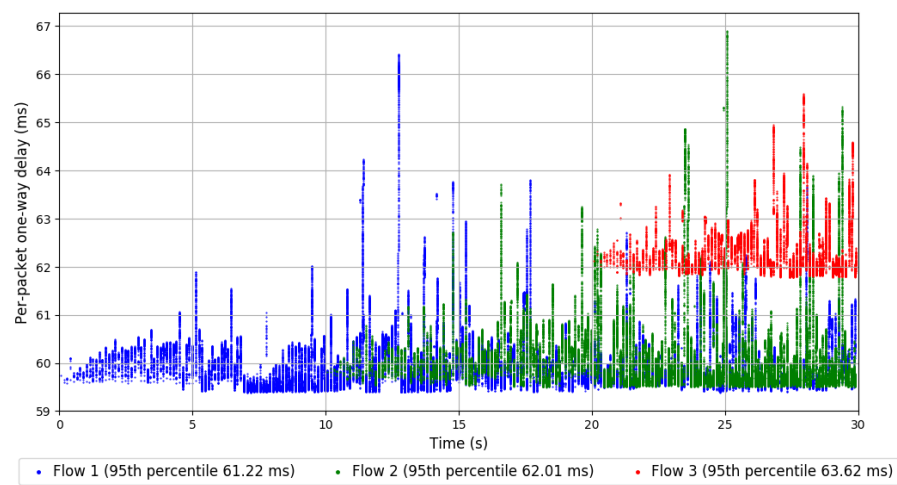
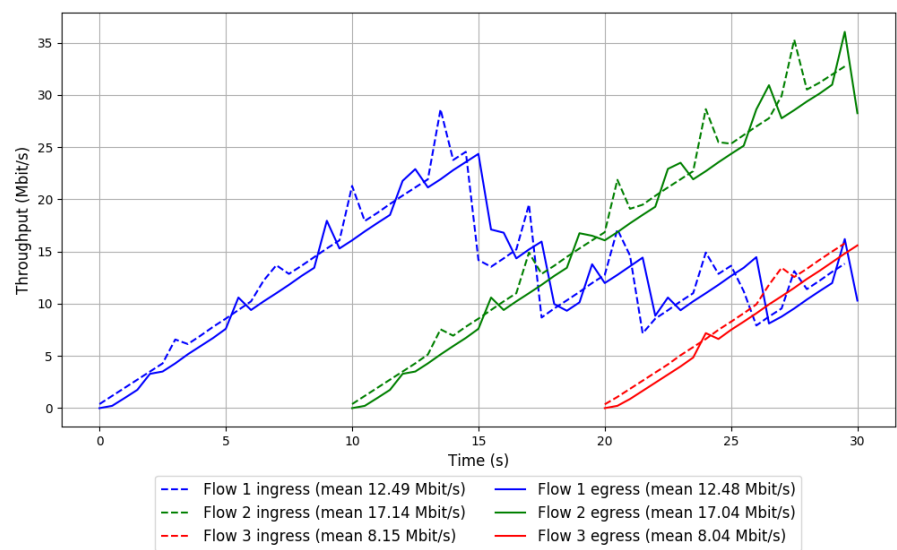
-- Flow 3:

Average throughput: 8.04 Mbit/s

95th percentile per-packet one-way delay: 63.623 ms

Loss rate: 2.48%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2019-09-18 18:19:44

End at: 2019-09-18 18:20:14

Local clock offset: -0.053 ms

Remote clock offset: -0.0 ms

# Below is generated by plot.py at 2019-09-18 21:26:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 18.64 Mbit/s

95th percentile per-packet one-way delay: 64.488 ms

Loss rate: 1.26%

-- Flow 1:

Average throughput: 5.52 Mbit/s

95th percentile per-packet one-way delay: 64.524 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 15.62 Mbit/s

95th percentile per-packet one-way delay: 64.841 ms

Loss rate: 1.26%

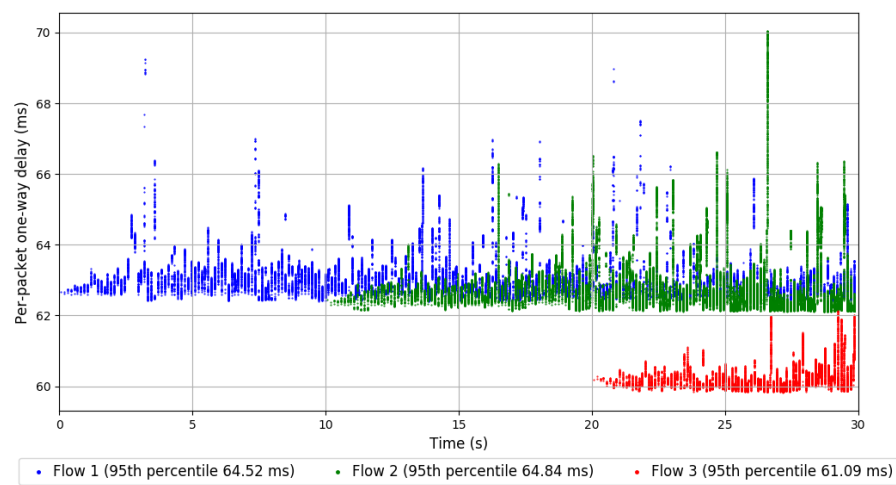
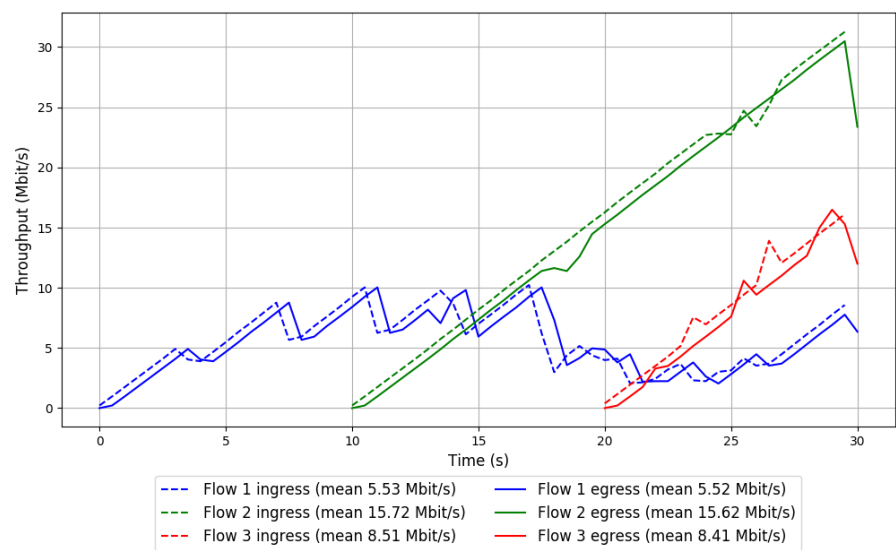
-- Flow 3:

Average throughput: 8.41 Mbit/s

95th percentile per-packet one-way delay: 61.095 ms

Loss rate: 2.45%

Run 4: Report of LEDBAT — Data Link

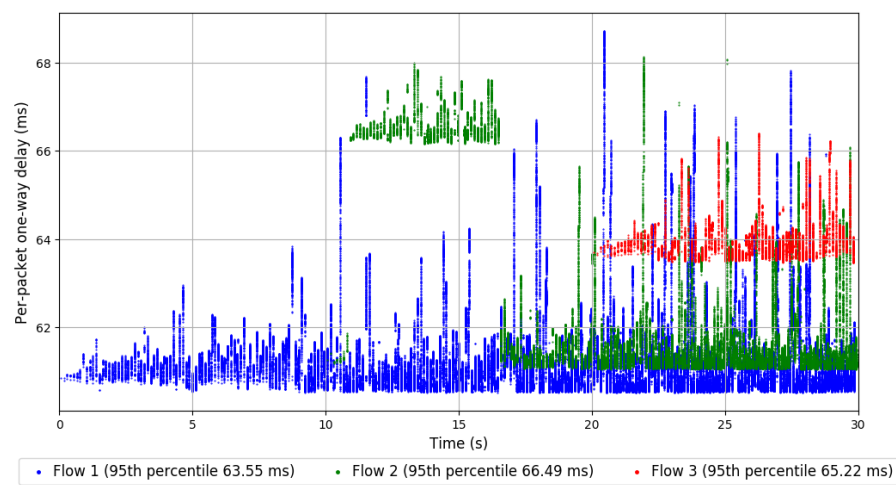
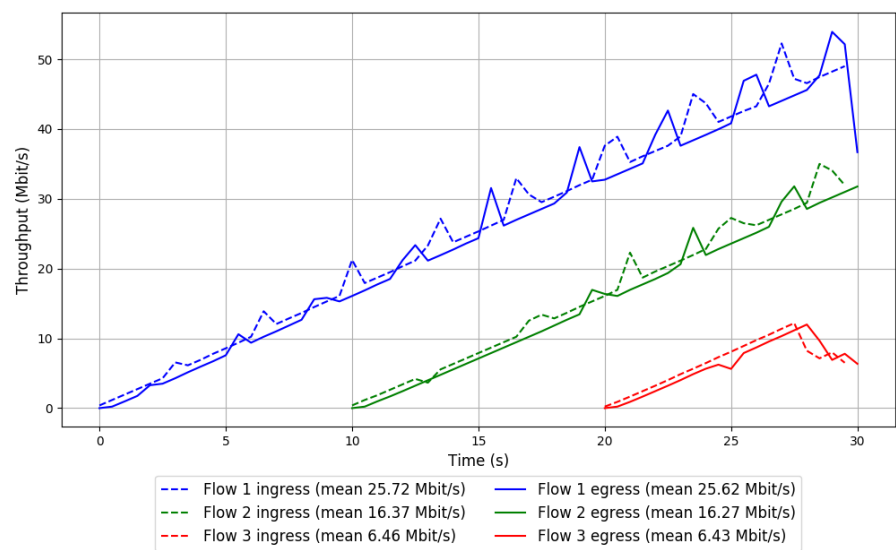


Run 5: Statistics of LEDBAT

Start at: 2019-09-18 18:58:58  
End at: 2019-09-18 18:59:28  
Local clock offset: 0.008 ms  
Remote clock offset: -0.679 ms

# Below is generated by plot.py at 2019-09-18 21:26:24  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 38.47 Mbit/s  
95th percentile per-packet one-way delay: 65.145 ms  
Loss rate: 0.98%  
-- Flow 1:  
Average throughput: 25.62 Mbit/s  
95th percentile per-packet one-way delay: 63.547 ms  
Loss rate: 0.80%  
-- Flow 2:  
Average throughput: 16.27 Mbit/s  
95th percentile per-packet one-way delay: 66.491 ms  
Loss rate: 1.23%  
-- Flow 3:  
Average throughput: 6.43 Mbit/s  
95th percentile per-packet one-way delay: 65.216 ms  
Loss rate: 1.76%

Run 5: Report of LEDBAT — Data Link

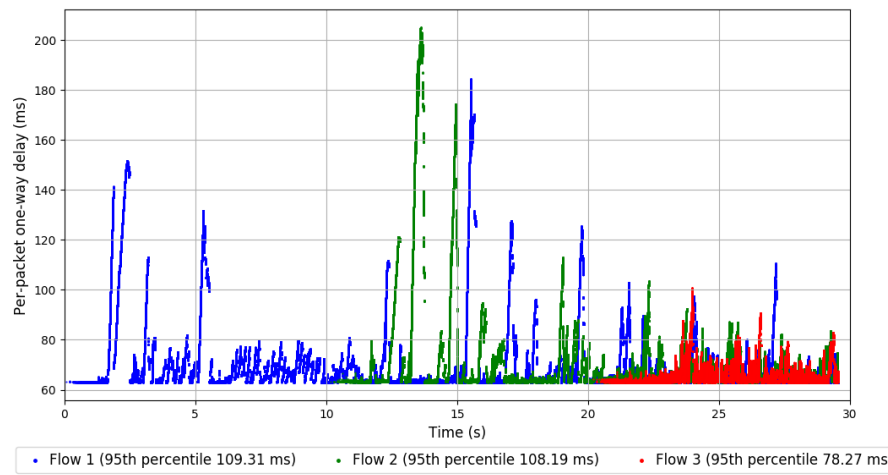
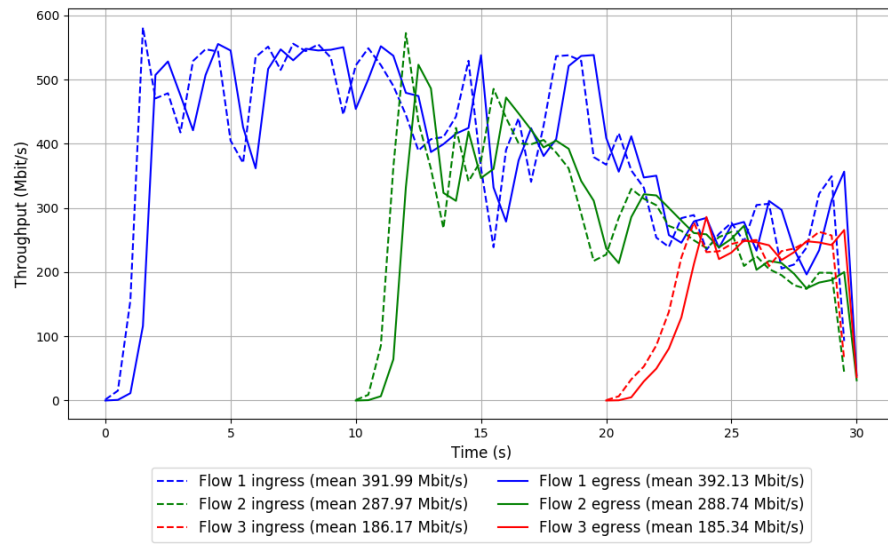


Run 1: Statistics of Muses\\_DecisionTree

Start at: 2019-09-18 16:03:19  
End at: 2019-09-18 16:03:49  
Local clock offset: 0.006 ms  
Remote clock offset: -0.158 ms

# Below is generated by plot.py at 2019-09-18 21:29:20  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 640.93 Mbit/s  
95th percentile per-packet one-way delay: 106.770 ms  
Loss rate: 0.52%  
-- Flow 1:  
Average throughput: 392.13 Mbit/s  
95th percentile per-packet one-way delay: 109.310 ms  
Loss rate: 0.39%  
-- Flow 2:  
Average throughput: 288.74 Mbit/s  
95th percentile per-packet one-way delay: 108.187 ms  
Loss rate: 0.38%  
-- Flow 3:  
Average throughput: 185.34 Mbit/s  
95th percentile per-packet one-way delay: 78.274 ms  
Loss rate: 1.78%

# Run 1: Report of Muses\_DecisionTree — Data Link



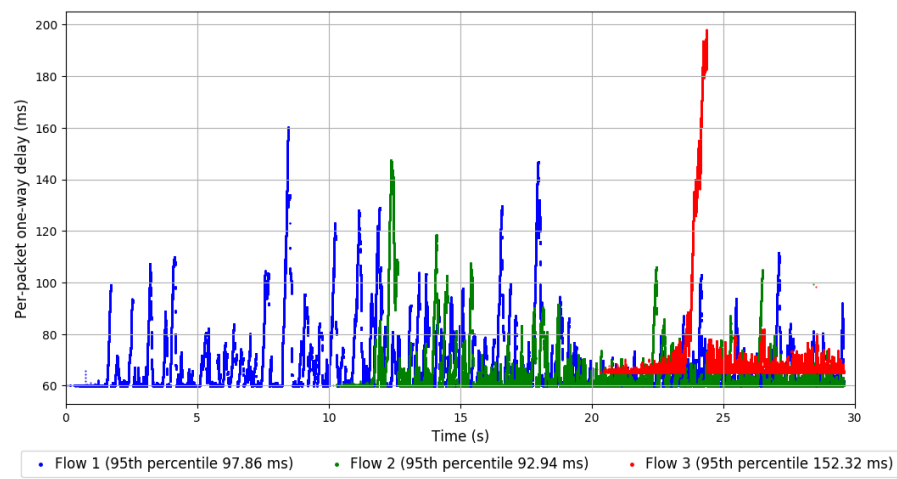
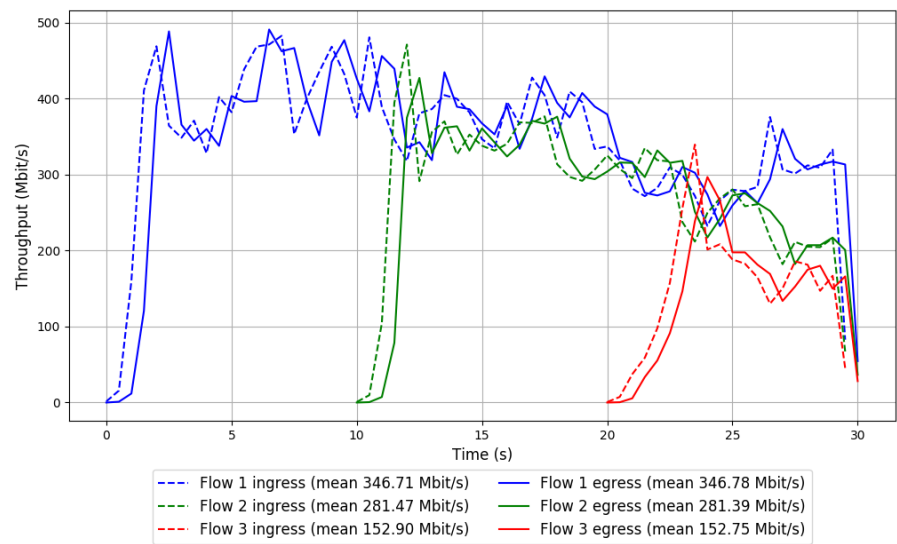


Run 2: Statistics of Muses\\_DecisionTree

Start at: 2019-09-18 16:42:23  
End at: 2019-09-18 16:42:53  
Local clock offset: -0.015 ms  
Remote clock offset: -0.038 ms

# Below is generated by plot.py at 2019-09-18 21:29:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 580.16 Mbit/s  
95th percentile per-packet one-way delay: 98.795 ms  
Loss rate: 0.54%  
-- Flow 1:  
Average throughput: 346.78 Mbit/s  
95th percentile per-packet one-way delay: 97.856 ms  
Loss rate: 0.39%  
-- Flow 2:  
Average throughput: 281.39 Mbit/s  
95th percentile per-packet one-way delay: 92.941 ms  
Loss rate: 0.56%  
-- Flow 3:  
Average throughput: 152.75 Mbit/s  
95th percentile per-packet one-way delay: 152.316 ms  
Loss rate: 1.45%

Run 2: Report of Muses\_DecisionTree — Data Link



Run 3: Statistics of Muses\\_DecisionTree

Start at: 2019-09-18 17:22:03

End at: 2019-09-18 17:22:33

Local clock offset: -0.252 ms

Remote clock offset: 0.06 ms

# Below is generated by plot.py at 2019-09-18 21:30:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 564.19 Mbit/s

95th percentile per-packet one-way delay: 93.442 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 302.05 Mbit/s

95th percentile per-packet one-way delay: 99.564 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 298.15 Mbit/s

95th percentile per-packet one-way delay: 87.269 ms

Loss rate: 0.64%

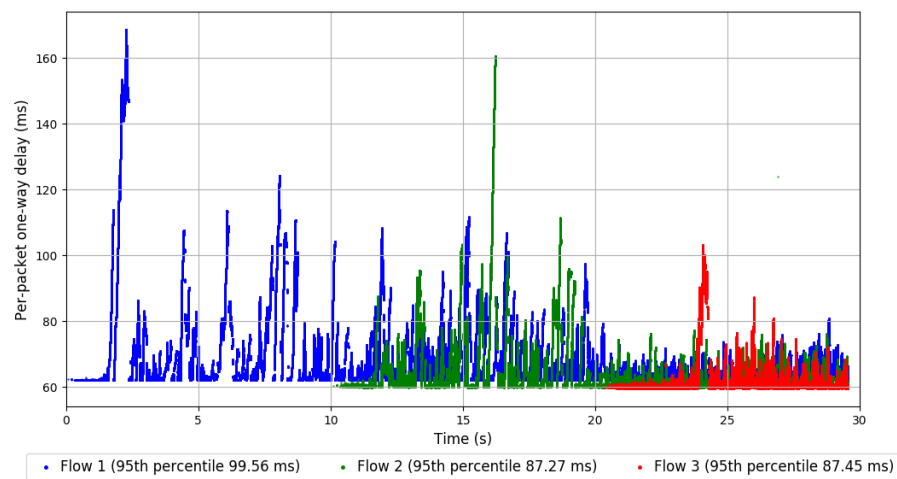
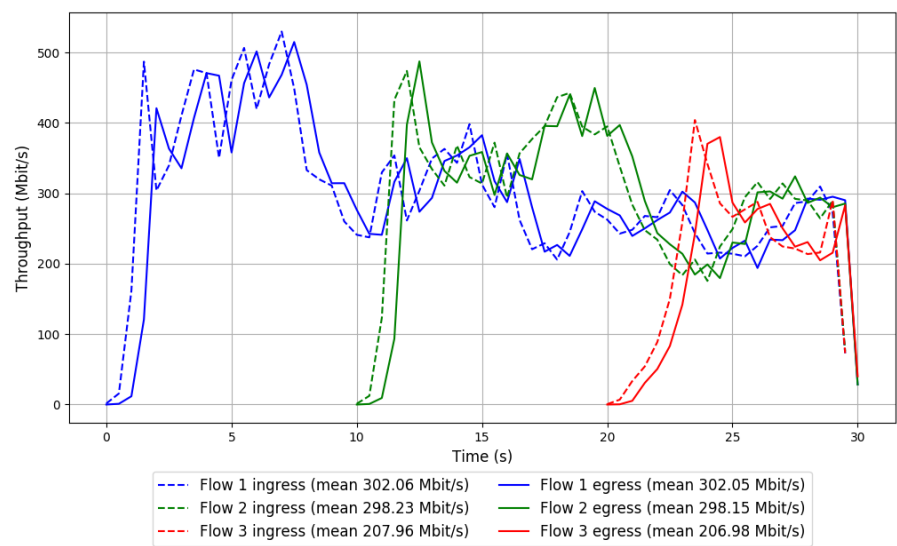
-- Flow 3:

Average throughput: 206.98 Mbit/s

95th percentile per-packet one-way delay: 87.452 ms

Loss rate: 1.80%

Run 3: Report of Muses\_DecisionTree — Data Link

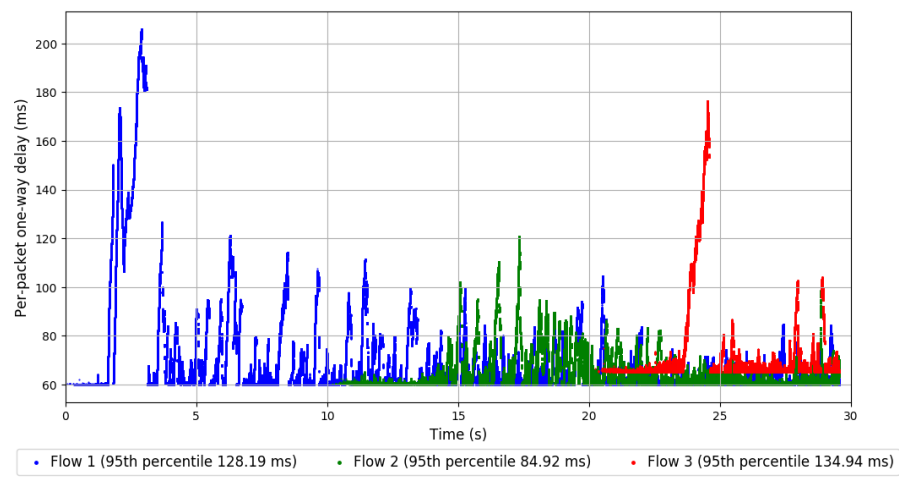
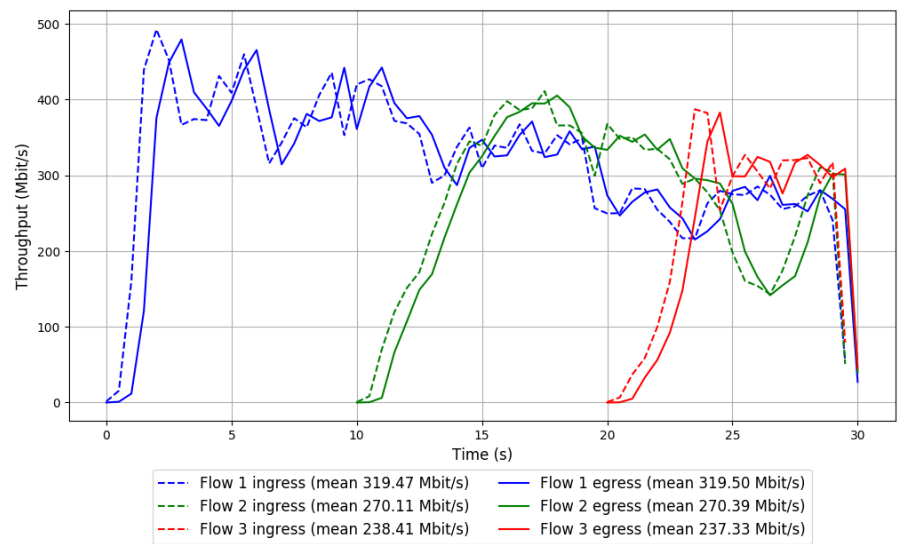


Run 4: Statistics of Muses\\_DecisionTree

Start at: 2019-09-18 18:01:09  
End at: 2019-09-18 18:01:39  
Local clock offset: -0.087 ms  
Remote clock offset: -0.043 ms

# Below is generated by plot.py at 2019-09-18 21:33:00  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 571.97 Mbit/s  
95th percentile per-packet one-way delay: 112.578 ms  
Loss rate: 0.63%  
-- Flow 1:  
Average throughput: 319.50 Mbit/s  
95th percentile per-packet one-way delay: 128.190 ms  
Loss rate: 0.41%  
-- Flow 2:  
Average throughput: 270.39 Mbit/s  
95th percentile per-packet one-way delay: 84.924 ms  
Loss rate: 0.53%  
-- Flow 3:  
Average throughput: 237.33 Mbit/s  
95th percentile per-packet one-way delay: 134.945 ms  
Loss rate: 1.80%

Run 4: Report of Muses\_DecisionTree — Data Link



Run 5: Statistics of Muses\\_DecisionTree

Start at: 2019-09-18 18:40:27

End at: 2019-09-18 18:40:57

Local clock offset: -0.006 ms

Remote clock offset: 0.301 ms

# Below is generated by plot.py at 2019-09-18 21:35:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 567.01 Mbit/s

95th percentile per-packet one-way delay: 103.833 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 340.14 Mbit/s

95th percentile per-packet one-way delay: 106.865 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 246.15 Mbit/s

95th percentile per-packet one-way delay: 91.219 ms

Loss rate: 0.50%

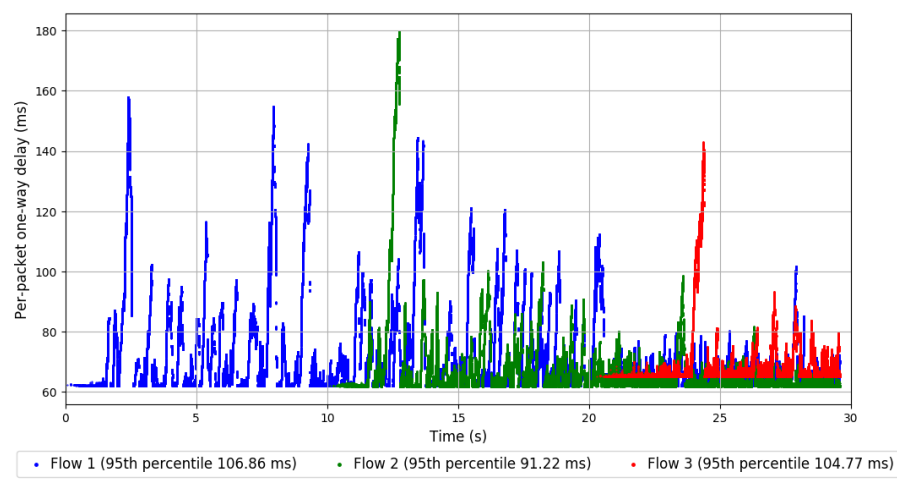
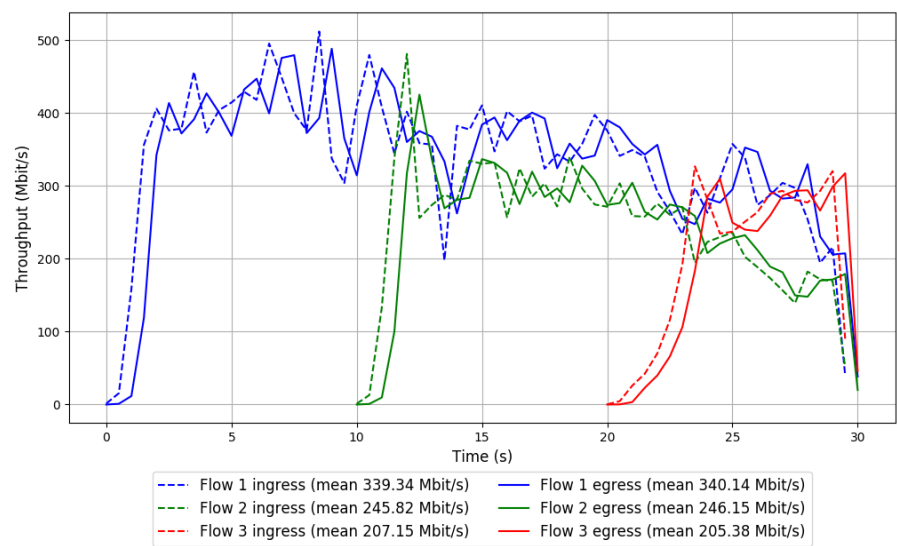
-- Flow 3:

Average throughput: 205.38 Mbit/s

95th percentile per-packet one-way delay: 104.774 ms

Loss rate: 2.20%

Run 5: Report of Muses\_DecisionTree — Data Link





Run 1: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-09-18 15:48:31

End at: 2019-09-18 15:49:01

Local clock offset: 0.018 ms

Remote clock offset: 1.333 ms

# Below is generated by plot.py at 2019-09-18 21:36:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 470.88 Mbit/s

95th percentile per-packet one-way delay: 175.450 ms

Loss rate: 3.43%

-- Flow 1:

Average throughput: 239.34 Mbit/s

95th percentile per-packet one-way delay: 182.979 ms

Loss rate: 5.10%

-- Flow 2:

Average throughput: 214.03 Mbit/s

95th percentile per-packet one-way delay: 168.835 ms

Loss rate: 1.88%

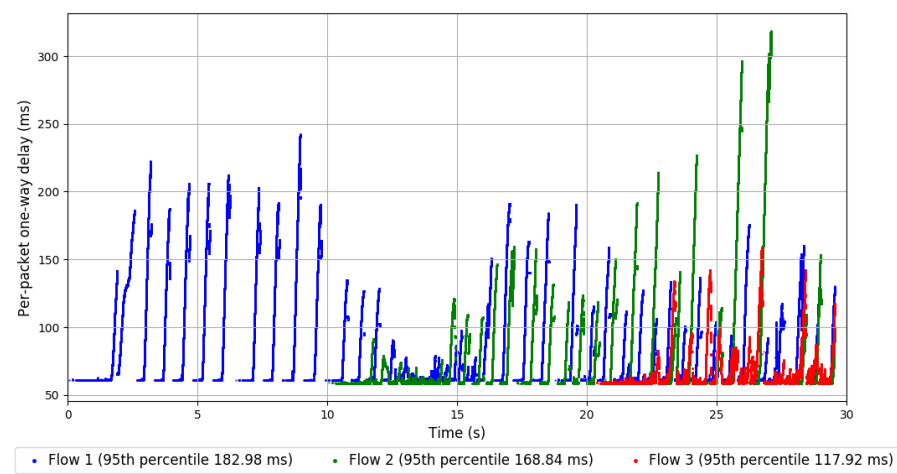
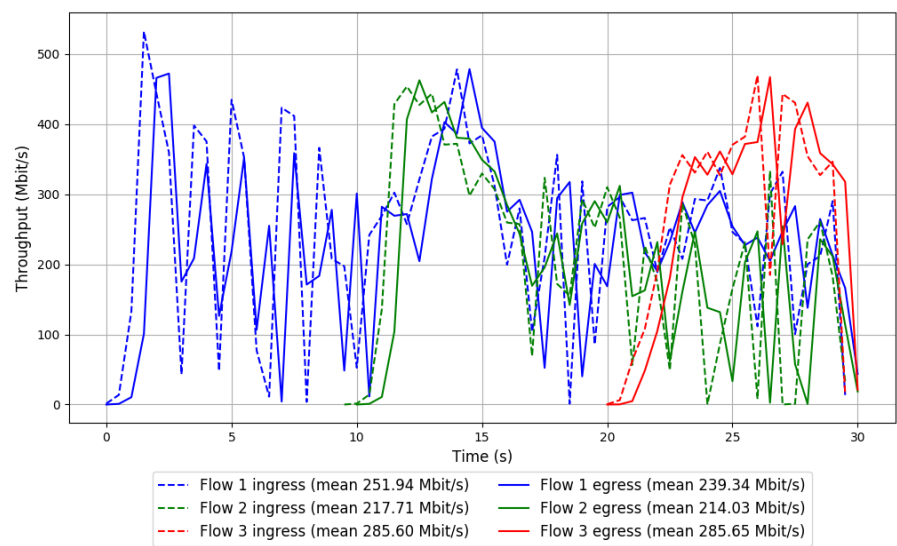
-- Flow 3:

Average throughput: 285.65 Mbit/s

95th percentile per-packet one-way delay: 117.915 ms

Loss rate: 1.29%

Run 1: Report of Muses\_DecisionTreeH0 — Data Link

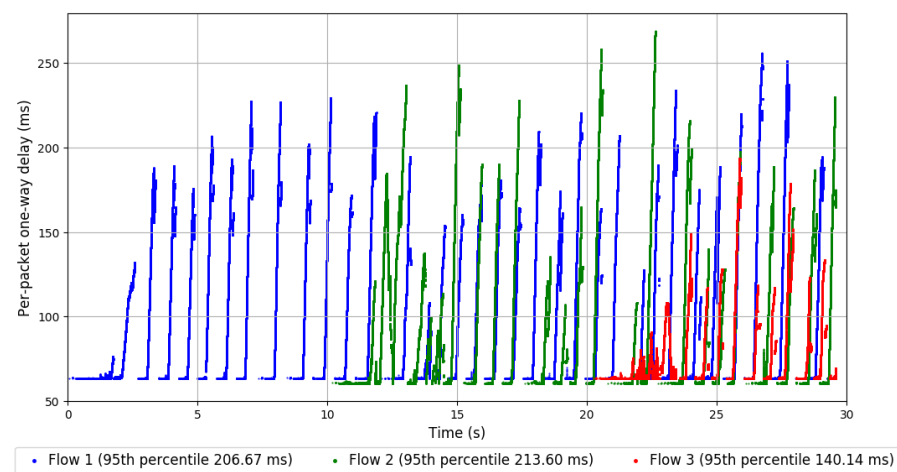
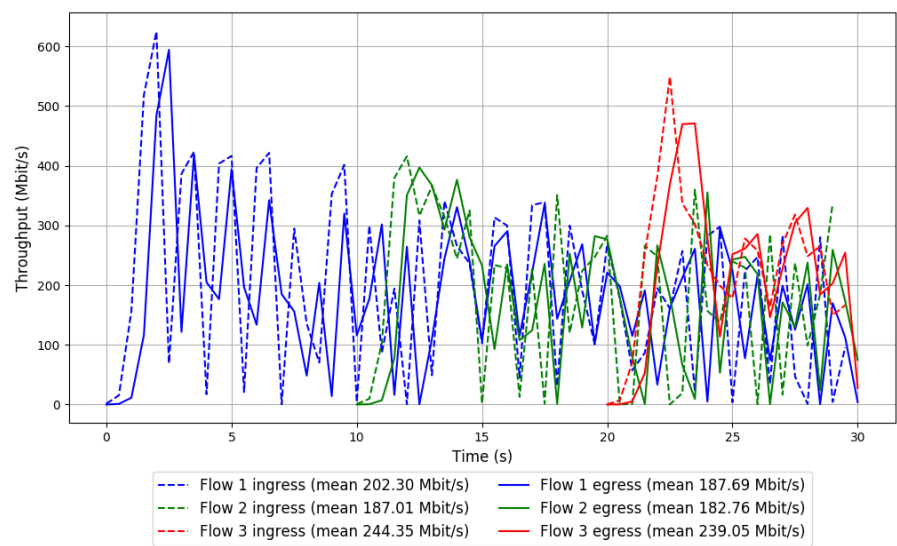


Run 2: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-09-18 16:27:56  
End at: 2019-09-18 16:28:26  
Local clock offset: -0.009 ms  
Remote clock offset: -0.647 ms

# Below is generated by plot.py at 2019-09-18 21:36:36  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 383.45 Mbit/s  
95th percentile per-packet one-way delay: 203.610 ms  
Loss rate: 5.04%  
-- Flow 1:  
Average throughput: 187.69 Mbit/s  
95th percentile per-packet one-way delay: 206.674 ms  
Loss rate: 7.61%  
-- Flow 2:  
Average throughput: 182.76 Mbit/s  
95th percentile per-packet one-way delay: 213.598 ms  
Loss rate: 1.80%  
-- Flow 3:  
Average throughput: 239.05 Mbit/s  
95th percentile per-packet one-way delay: 140.142 ms  
Loss rate: 3.47%

Run 2: Report of Muses\_DecisionTreeH0 — Data Link

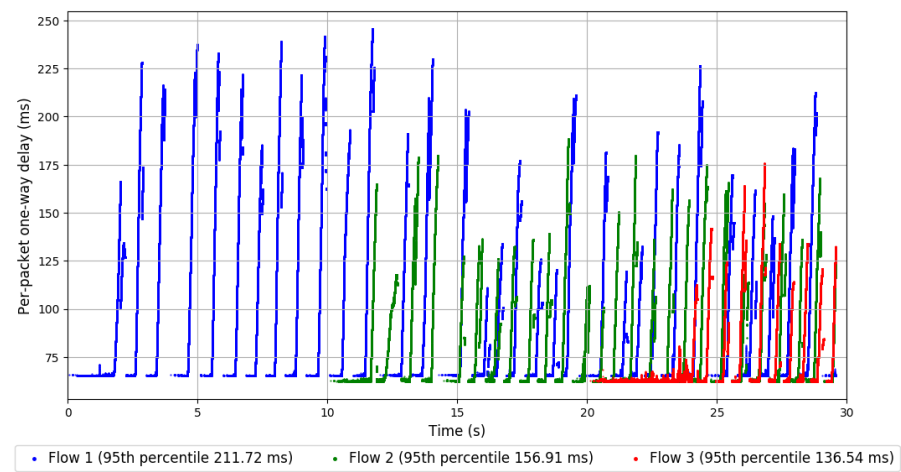
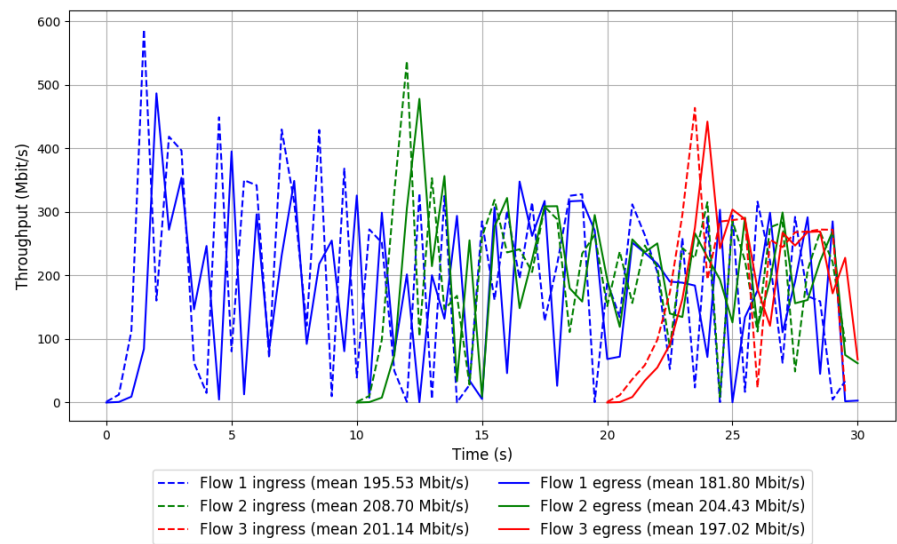


Run 3: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-09-18 17:07:31  
End at: 2019-09-18 17:08:01  
Local clock offset: -0.083 ms  
Remote clock offset: -0.069 ms

# Below is generated by plot.py at 2019-09-18 21:37:22  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 379.58 Mbit/s  
95th percentile per-packet one-way delay: 196.430 ms  
Loss rate: 4.92%  
-- Flow 1:  
Average throughput: 181.80 Mbit/s  
95th percentile per-packet one-way delay: 211.719 ms  
Loss rate: 7.43%  
-- Flow 2:  
Average throughput: 204.43 Mbit/s  
95th percentile per-packet one-way delay: 156.915 ms  
Loss rate: 2.52%  
-- Flow 3:  
Average throughput: 197.02 Mbit/s  
95th percentile per-packet one-way delay: 136.537 ms  
Loss rate: 2.45%

Run 3: Report of Muses\_DecisionTreeH0 — Data Link

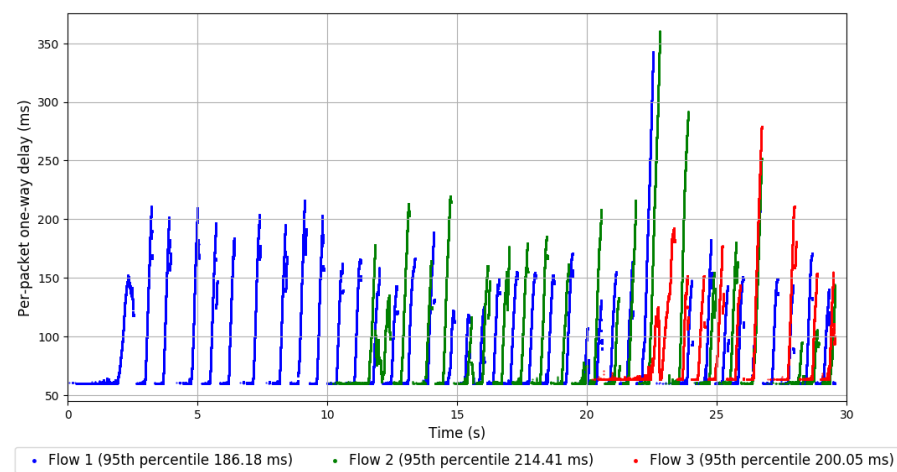
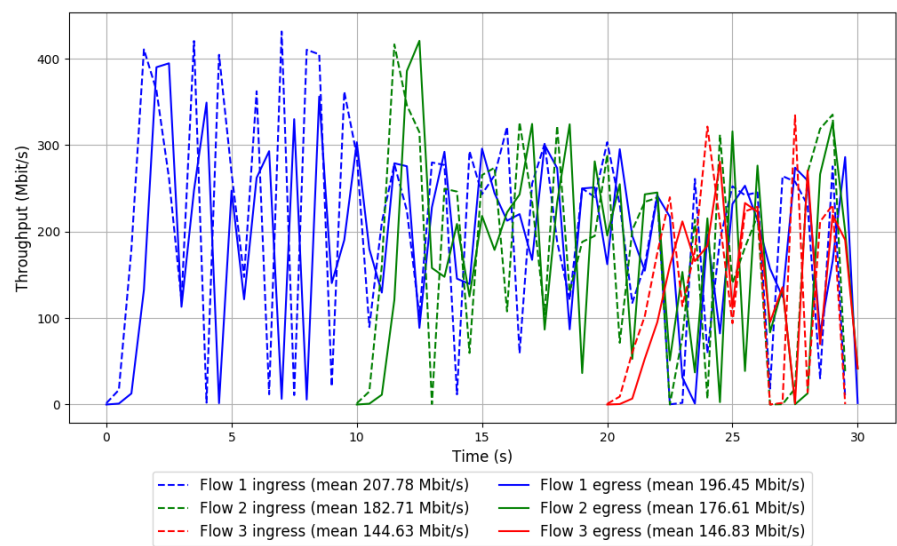


Run 4: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-09-18 17:46:53  
End at: 2019-09-18 17:47:23  
Local clock offset: -0.158 ms  
Remote clock offset: -0.132 ms

# Below is generated by plot.py at 2019-09-18 21:39:36  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 359.65 Mbit/s  
95th percentile per-packet one-way delay: 192.999 ms  
Loss rate: 4.37%  
-- Flow 1:  
Average throughput: 196.45 Mbit/s  
95th percentile per-packet one-way delay: 186.178 ms  
Loss rate: 5.85%  
-- Flow 2:  
Average throughput: 176.61 Mbit/s  
95th percentile per-packet one-way delay: 214.413 ms  
Loss rate: 3.50%  
-- Flow 3:  
Average throughput: 146.83 Mbit/s  
95th percentile per-packet one-way delay: 200.052 ms  
Loss rate: 0.02%

Run 4: Report of Muses\_DecisionTreeH0 — Data Link



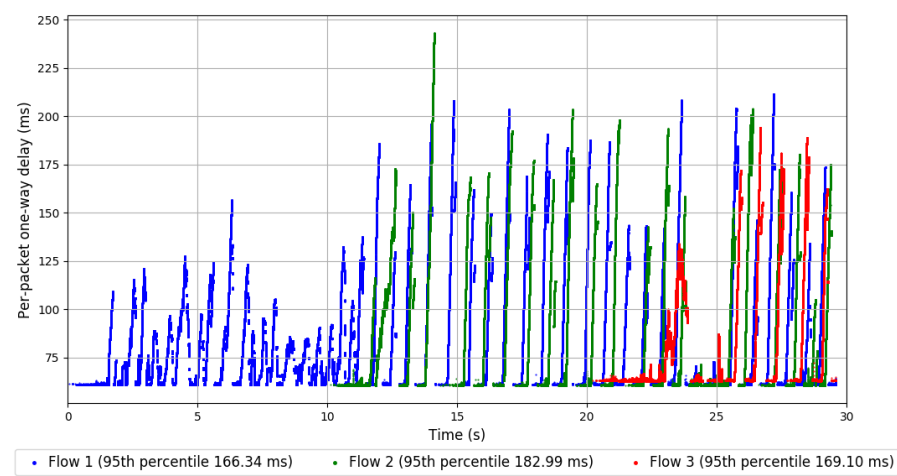
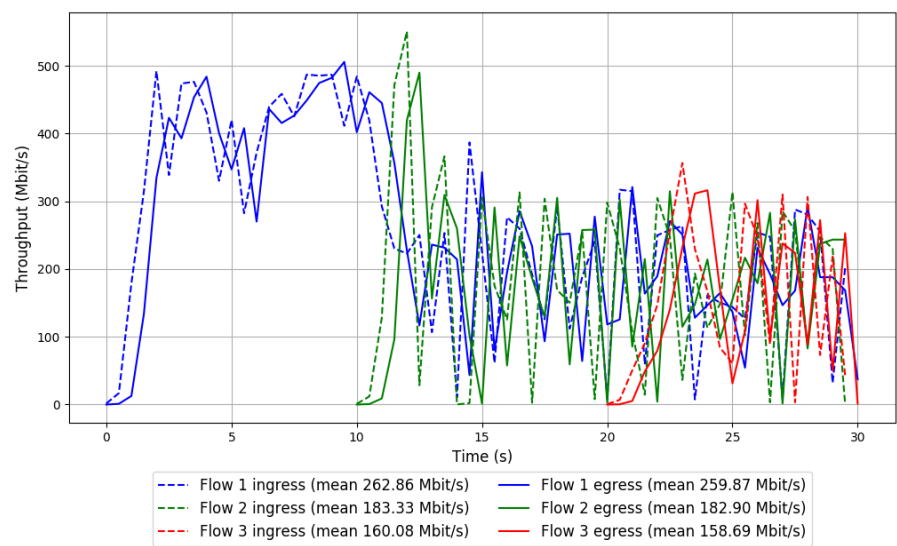


Run 5: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-09-18 18:26:04  
End at: 2019-09-18 18:26:34  
Local clock offset: -0.035 ms  
Remote clock offset: -0.743 ms

# Below is generated by plot.py at 2019-09-18 21:41:42  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 429.56 Mbit/s  
95th percentile per-packet one-way delay: 172.644 ms  
Loss rate: 1.56%  
-- Flow 1:  
Average throughput: 259.87 Mbit/s  
95th percentile per-packet one-way delay: 166.342 ms  
Loss rate: 1.53%  
-- Flow 2:  
Average throughput: 182.90 Mbit/s  
95th percentile per-packet one-way delay: 182.994 ms  
Loss rate: 1.36%  
-- Flow 3:  
Average throughput: 158.69 Mbit/s  
95th percentile per-packet one-way delay: 169.101 ms  
Loss rate: 2.15%

Run 5: Report of Muses\_DecisionTreeH0 — Data Link

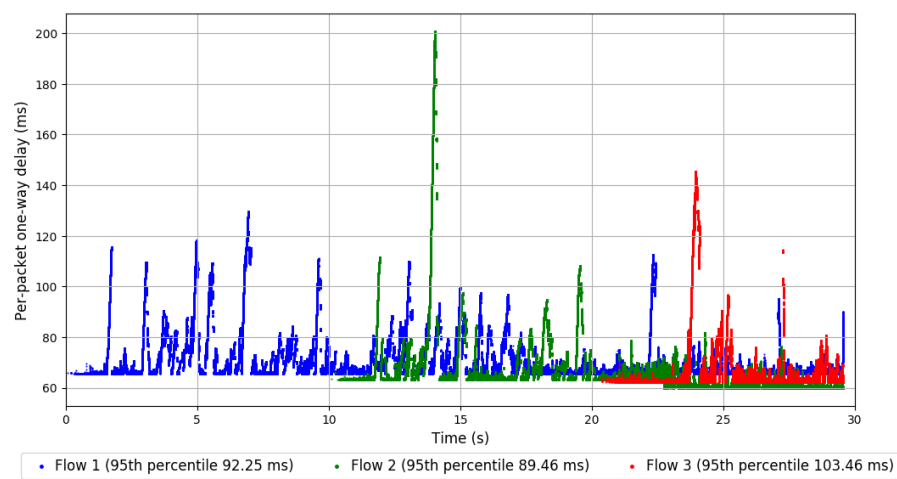
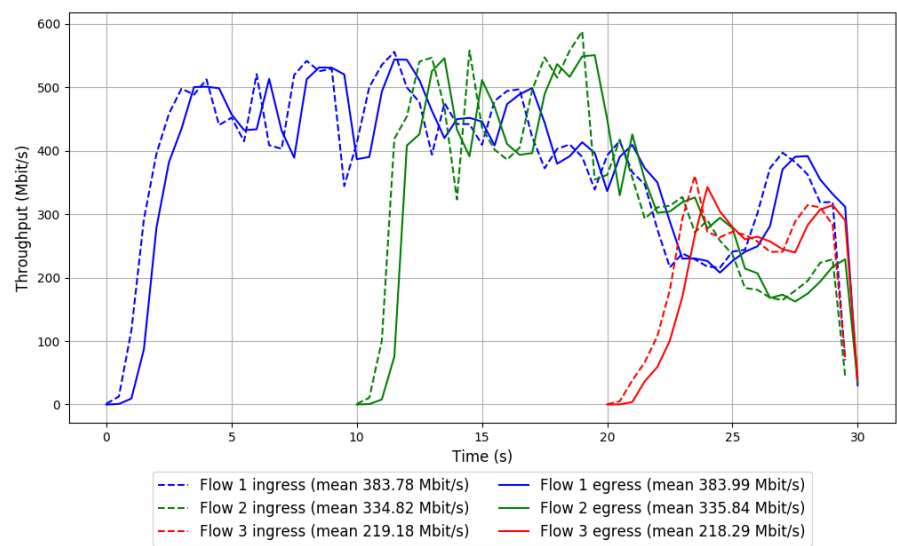


Run 1: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-09-18 15:51:22  
End at: 2019-09-18 15:51:52  
Local clock offset: 0.019 ms  
Remote clock offset: -0.023 ms

# Below is generated by plot.py at 2019-09-18 21:49:27  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 674.33 Mbit/s  
95th percentile per-packet one-way delay: 91.875 ms  
Loss rate: 0.51%  
-- Flow 1:  
Average throughput: 383.99 Mbit/s  
95th percentile per-packet one-way delay: 92.252 ms  
Loss rate: 0.38%  
-- Flow 2:  
Average throughput: 335.84 Mbit/s  
95th percentile per-packet one-way delay: 89.456 ms  
Loss rate: 0.33%  
-- Flow 3:  
Average throughput: 218.29 Mbit/s  
95th percentile per-packet one-way delay: 103.461 ms  
Loss rate: 1.75%

Run 1: Report of Muses\_DecisionTreeR0 — Data Link



Run 2: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-09-18 16:30:42

End at: 2019-09-18 16:31:12

Local clock offset: -0.003 ms

Remote clock offset: 0.006 ms

# Below is generated by plot.py at 2019-09-18 21:49:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 550.44 Mbit/s

95th percentile per-packet one-way delay: 103.241 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 294.00 Mbit/s

95th percentile per-packet one-way delay: 102.599 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 300.56 Mbit/s

95th percentile per-packet one-way delay: 89.663 ms

Loss rate: 0.54%

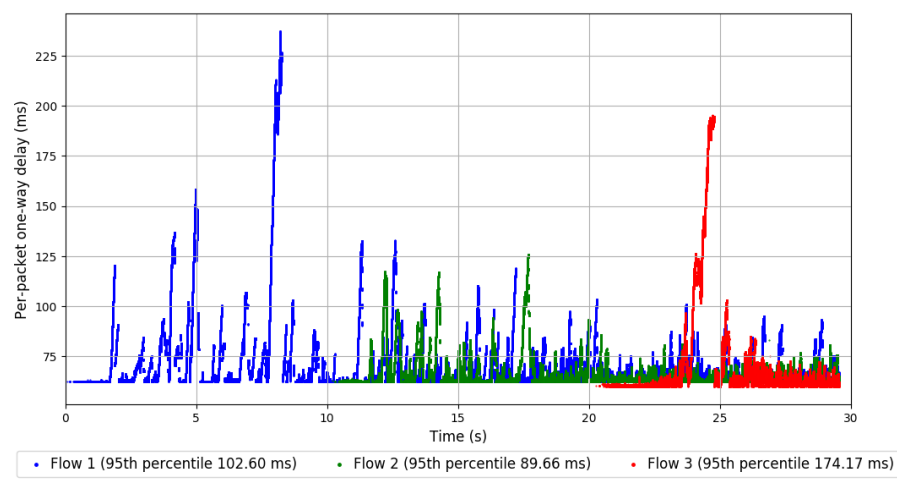
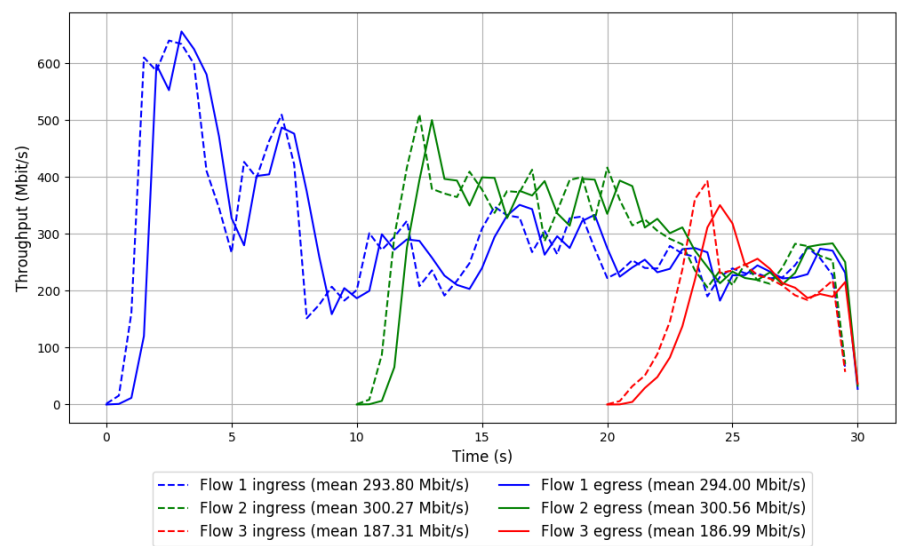
-- Flow 3:

Average throughput: 186.99 Mbit/s

95th percentile per-packet one-way delay: 174.170 ms

Loss rate: 1.45%

Run 2: Report of Muses\_DecisionTreeR0 — Data Link

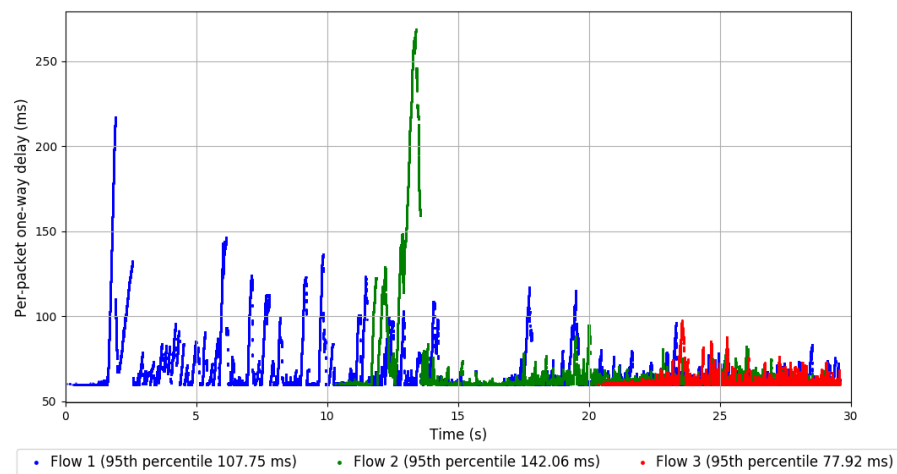
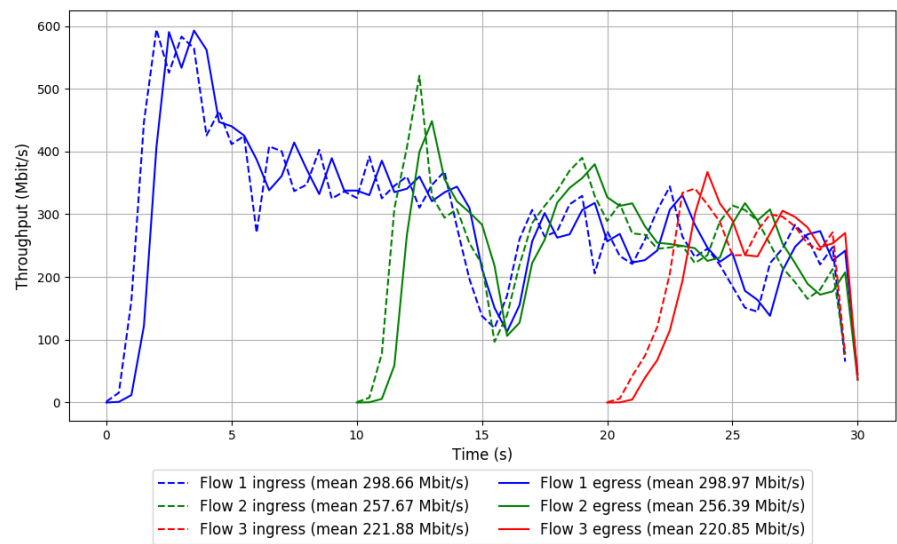


Run 3: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-09-18 17:10:17  
End at: 2019-09-18 17:10:47  
Local clock offset: -0.101 ms  
Remote clock offset: -0.014 ms

# Below is generated by plot.py at 2019-09-18 21:50:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 536.94 Mbit/s  
95th percentile per-packet one-way delay: 111.110 ms  
Loss rate: 0.75%  
-- Flow 1:  
Average throughput: 298.97 Mbit/s  
95th percentile per-packet one-way delay: 107.748 ms  
Loss rate: 0.31%  
-- Flow 2:  
Average throughput: 256.39 Mbit/s  
95th percentile per-packet one-way delay: 142.063 ms  
Loss rate: 1.14%  
-- Flow 3:  
Average throughput: 220.85 Mbit/s  
95th percentile per-packet one-way delay: 77.915 ms  
Loss rate: 1.70%

Run 3: Report of Muses\_DecisionTreeR0 — Data Link





Run 4: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-09-18 17:49:39

End at: 2019-09-18 17:50:09

Local clock offset: -0.122 ms

Remote clock offset: 0.0 ms

# Below is generated by plot.py at 2019-09-18 21:50:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 495.73 Mbit/s

95th percentile per-packet one-way delay: 87.664 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 275.56 Mbit/s

95th percentile per-packet one-way delay: 89.279 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 230.32 Mbit/s

95th percentile per-packet one-way delay: 92.513 ms

Loss rate: 0.53%

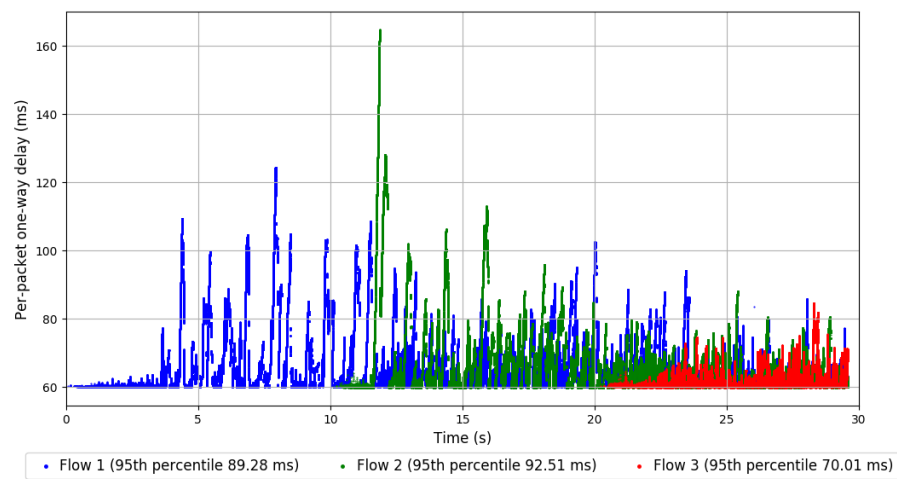
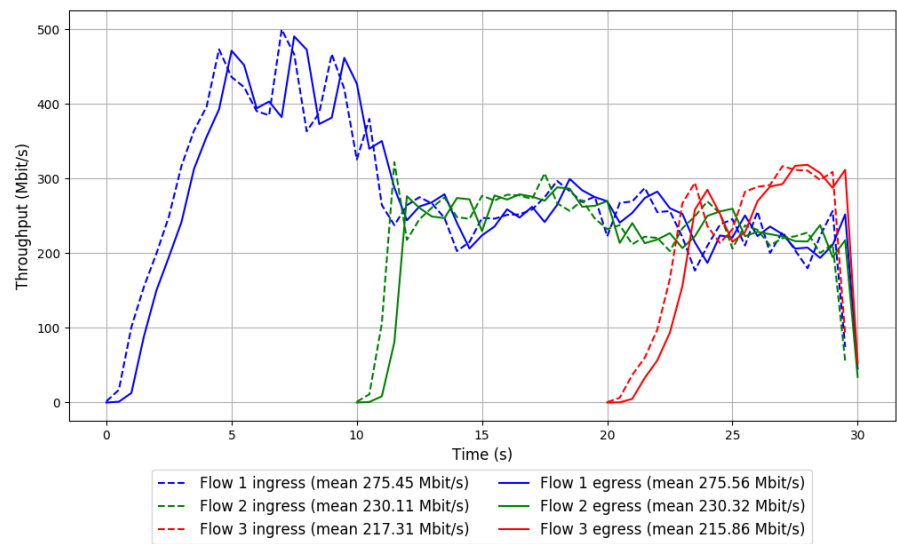
-- Flow 3:

Average throughput: 215.86 Mbit/s

95th percentile per-packet one-way delay: 70.014 ms

Loss rate: 1.96%

Run 4: Report of Muses\_DecisionTreeR0 — Data Link

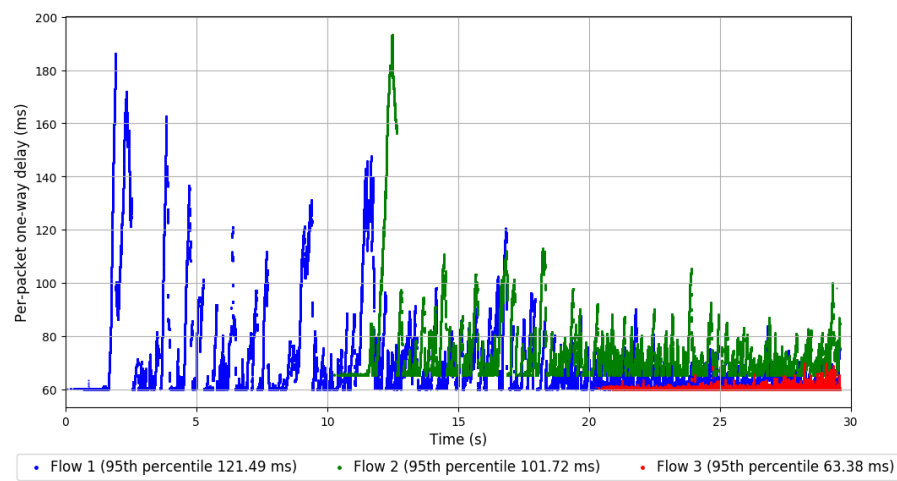
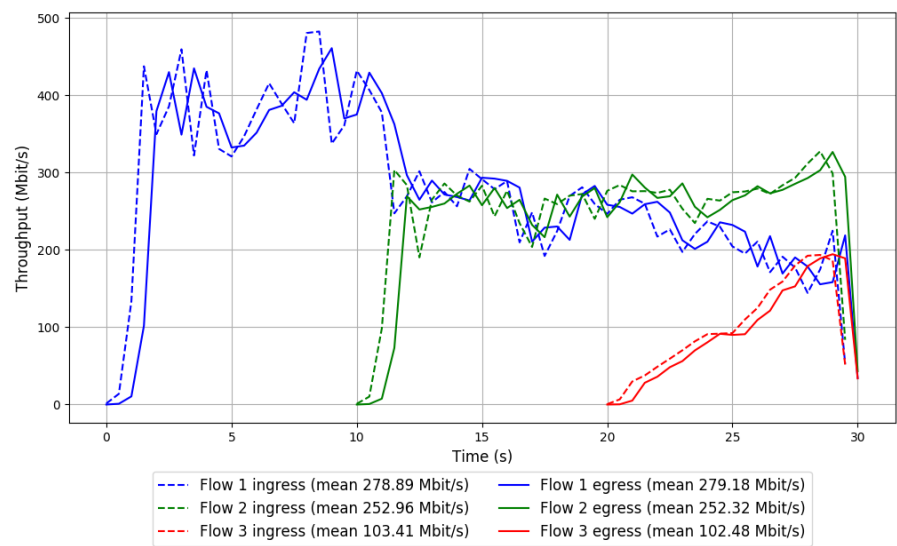


Run 5: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-09-18 18:28:54  
End at: 2019-09-18 18:29:24  
Local clock offset: -0.009 ms  
Remote clock offset: -0.144 ms

# Below is generated by plot.py at 2019-09-18 21:50:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 477.78 Mbit/s  
95th percentile per-packet one-way delay: 111.815 ms  
Loss rate: 0.66%  
-- Flow 1:  
Average throughput: 279.18 Mbit/s  
95th percentile per-packet one-way delay: 121.488 ms  
Loss rate: 0.32%  
-- Flow 2:  
Average throughput: 252.32 Mbit/s  
95th percentile per-packet one-way delay: 101.724 ms  
Loss rate: 0.91%  
-- Flow 3:  
Average throughput: 102.48 Mbit/s  
95th percentile per-packet one-way delay: 63.383 ms  
Loss rate: 2.19%

Run 5: Report of Muses\_DecisionTreeR0 — Data Link

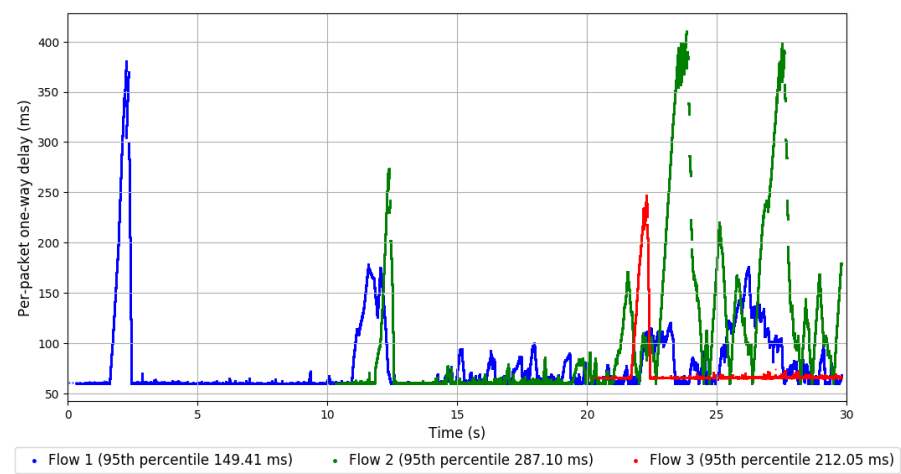
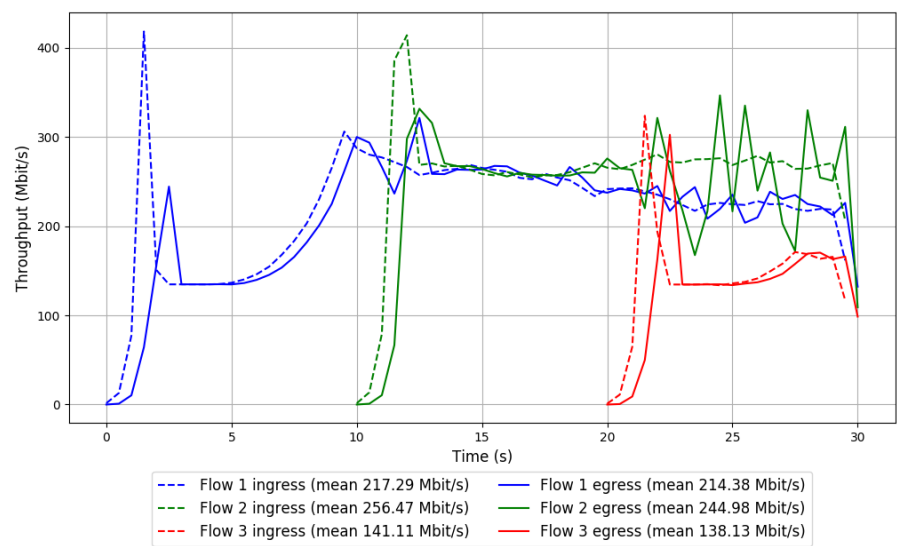


```
Run 1: Statistics of PCC-Allegro

Start at: 2019-09-18 16:11:35
End at: 2019-09-18 16:12:05
Local clock offset: 0.011 ms
Remote clock offset: -0.012 ms

# Below is generated by plot.py at 2019-09-18 21:59:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 422.00 Mbit/s
95th percentile per-packet one-way delay: 213.859 ms
Loss rate: 3.21%
-- Flow 1:
Average throughput: 214.38 Mbit/s
95th percentile per-packet one-way delay: 149.414 ms
Loss rate: 1.73%
-- Flow 2:
Average throughput: 244.98 Mbit/s
95th percentile per-packet one-way delay: 287.102 ms
Loss rate: 5.05%
-- Flow 3:
Average throughput: 138.13 Mbit/s
95th percentile per-packet one-way delay: 212.053 ms
Loss rate: 3.35%
```

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2019-09-18 16:50:52

End at: 2019-09-18 16:51:22

Local clock offset: 0.007 ms

Remote clock offset: -0.1 ms

# Below is generated by plot.py at 2019-09-18 22:06:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 488.34 Mbit/s

95th percentile per-packet one-way delay: 225.985 ms

Loss rate: 3.40%

-- Flow 1:

Average throughput: 243.60 Mbit/s

95th percentile per-packet one-way delay: 124.999 ms

Loss rate: 2.44%

-- Flow 2:

Average throughput: 252.15 Mbit/s

95th percentile per-packet one-way delay: 233.338 ms

Loss rate: 3.56%

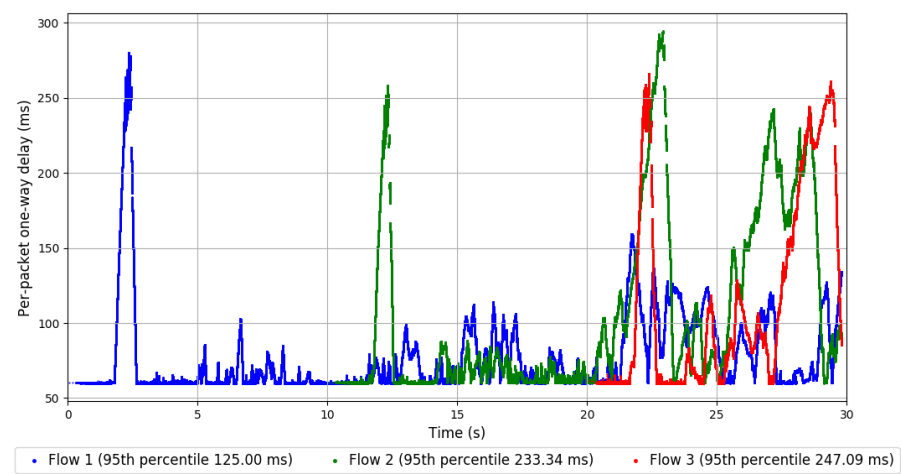
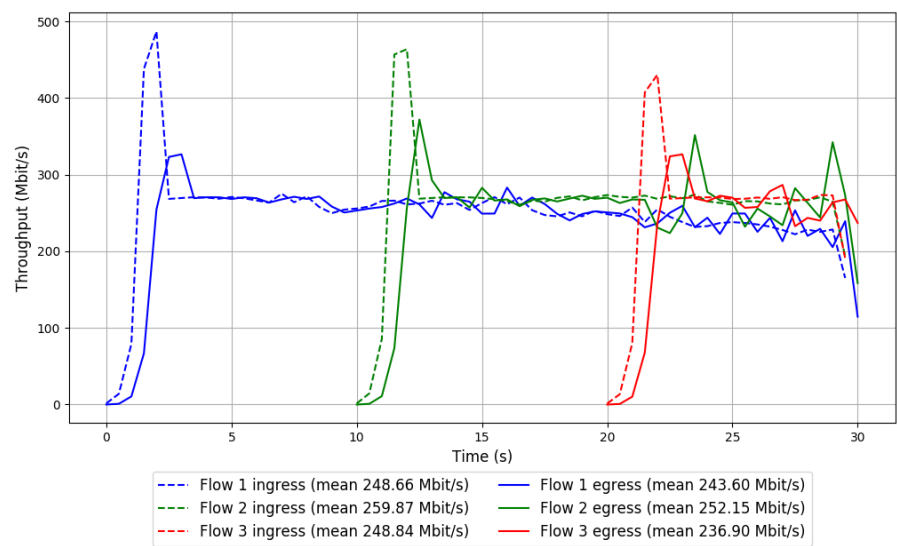
-- Flow 3:

Average throughput: 236.90 Mbit/s

95th percentile per-packet one-way delay: 247.086 ms

Loss rate: 5.98%

Run 2: Report of PCC-Allegro — Data Link



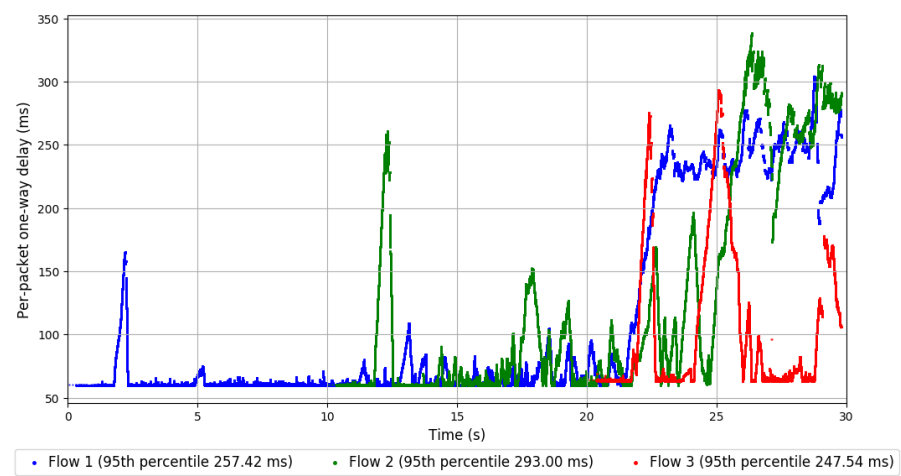
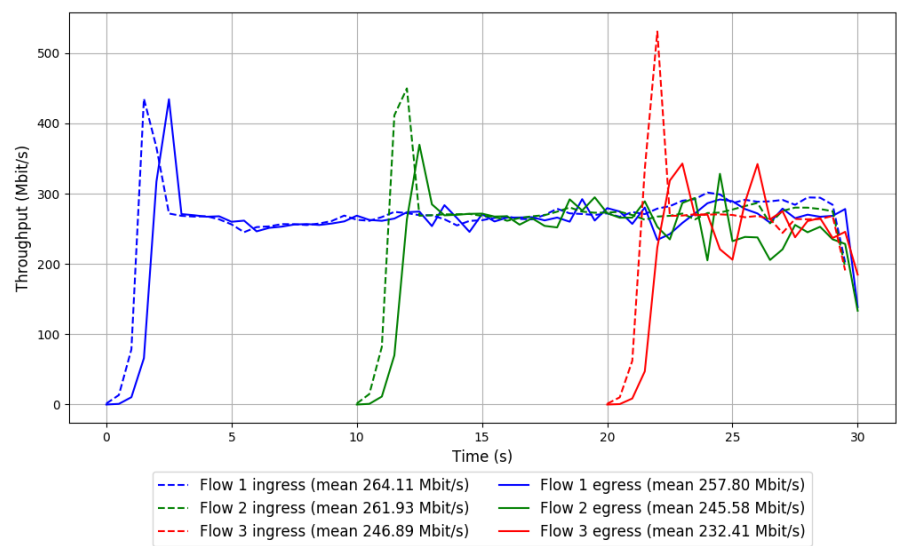


Run 3: Statistics of PCC-Allegro

Start at: 2019-09-18 17:30:32  
End at: 2019-09-18 17:31:02  
Local clock offset: -0.289 ms  
Remote clock offset: -0.047 ms

# Below is generated by plot.py at 2019-09-18 22:09:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 496.53 Mbit/s  
95th percentile per-packet one-way delay: 269.494 ms  
Loss rate: 4.81%  
-- Flow 1:  
Average throughput: 257.80 Mbit/s  
95th percentile per-packet one-way delay: 257.424 ms  
Loss rate: 2.79%  
-- Flow 2:  
Average throughput: 245.58 Mbit/s  
95th percentile per-packet one-way delay: 292.996 ms  
Loss rate: 6.82%  
-- Flow 3:  
Average throughput: 232.41 Mbit/s  
95th percentile per-packet one-way delay: 247.536 ms  
Loss rate: 7.07%

Run 3: Report of PCC-Allegro — Data Link

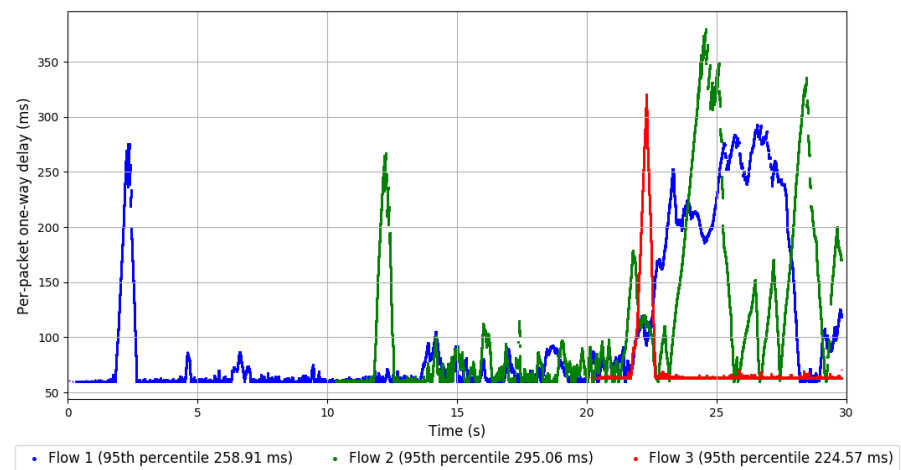
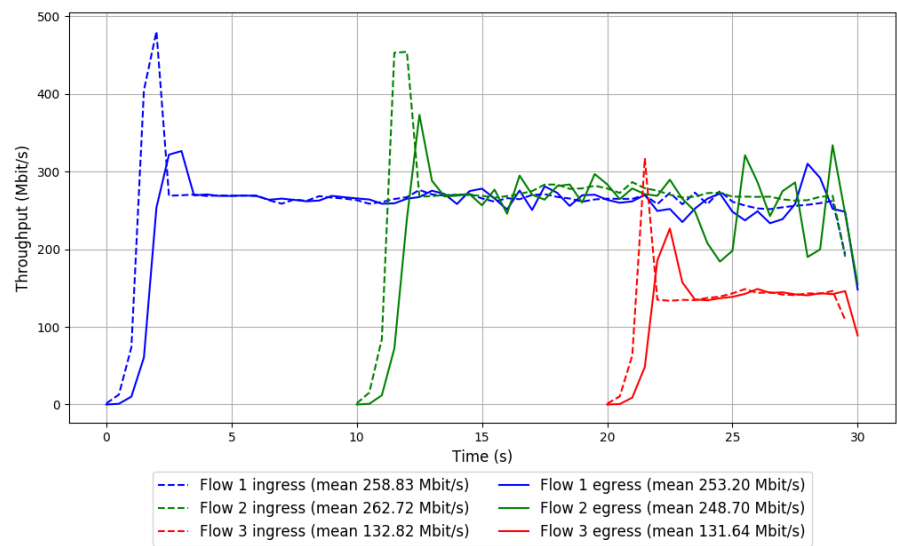


Run 4: Statistics of PCC-Allegro

Start at: 2019-09-18 18:09:36  
End at: 2019-09-18 18:10:06  
Local clock offset: -0.039 ms  
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2019-09-18 22:14:33  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 461.04 Mbit/s  
95th percentile per-packet one-way delay: 263.726 ms  
Loss rate: 3.77%  
-- Flow 1:  
Average throughput: 253.20 Mbit/s  
95th percentile per-packet one-way delay: 258.913 ms  
Loss rate: 2.58%  
-- Flow 2:  
Average throughput: 248.70 Mbit/s  
95th percentile per-packet one-way delay: 295.057 ms  
Loss rate: 5.93%  
-- Flow 3:  
Average throughput: 131.64 Mbit/s  
95th percentile per-packet one-way delay: 224.574 ms  
Loss rate: 2.11%

Run 4: Report of PCC-Allegro — Data Link

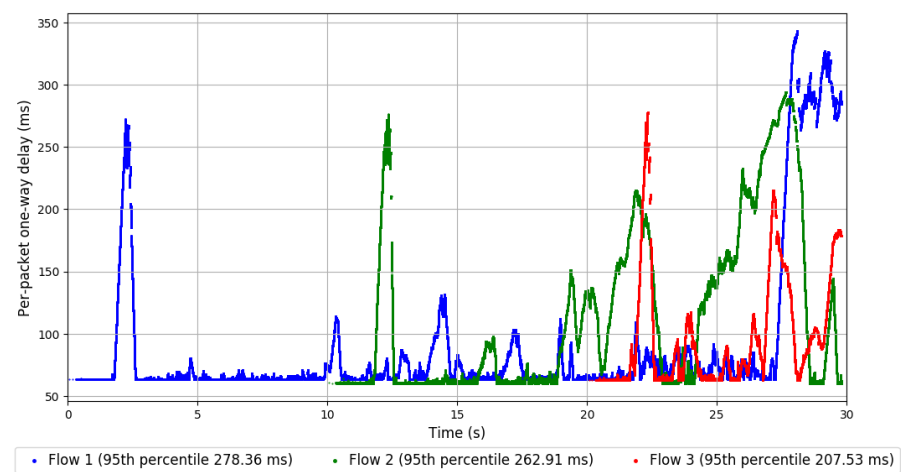
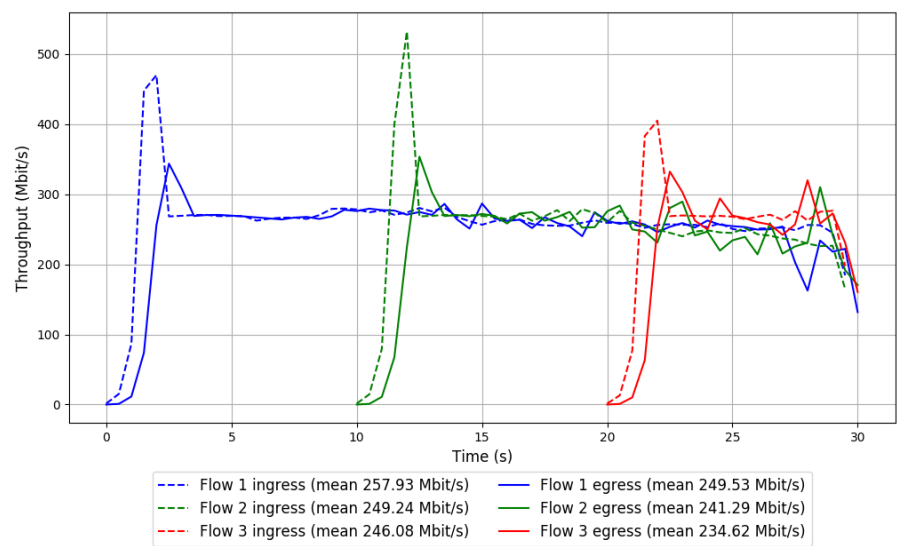


Run 5: Statistics of PCC-Allegro

Start at: 2019-09-18 18:48:38  
End at: 2019-09-18 18:49:08  
Local clock offset: 0.013 ms  
Remote clock offset: -0.239 ms

# Below is generated by plot.py at 2019-09-18 22:16:28  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 486.39 Mbit/s  
95th percentile per-packet one-way delay: 260.604 ms  
Loss rate: 4.06%  
-- Flow 1:  
Average throughput: 249.53 Mbit/s  
95th percentile per-packet one-way delay: 278.362 ms  
Loss rate: 3.67%  
-- Flow 2:  
Average throughput: 241.29 Mbit/s  
95th percentile per-packet one-way delay: 262.912 ms  
Loss rate: 3.79%  
-- Flow 3:  
Average throughput: 234.62 Mbit/s  
95th percentile per-packet one-way delay: 207.527 ms  
Loss rate: 5.87%

Run 5: Report of PCC-Allegro — Data Link

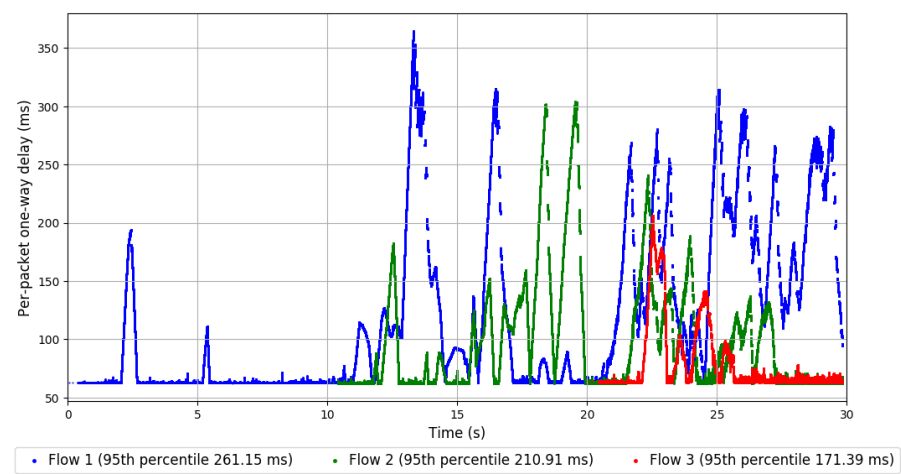
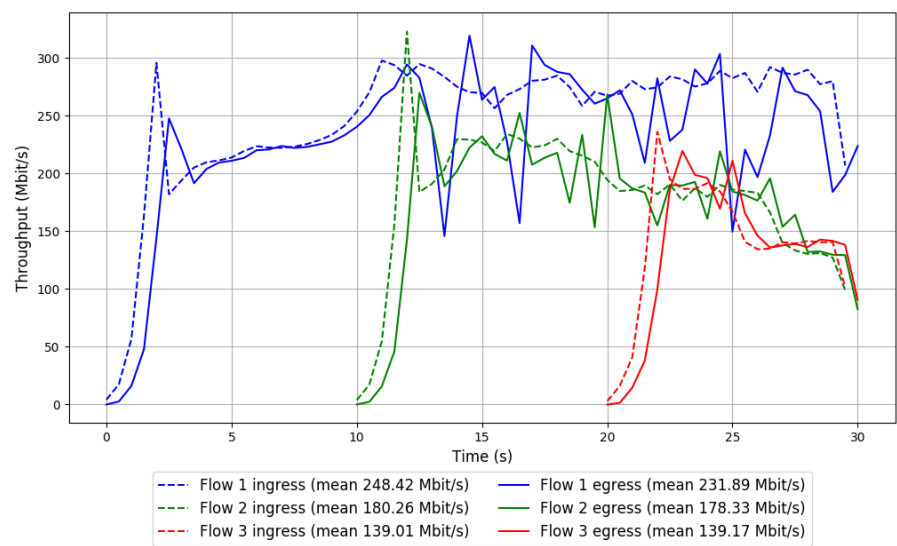


```
Run 1: Statistics of PCC-Expr

Start at: 2019-09-18 15:43:21
End at: 2019-09-18 15:43:51
Local clock offset: -0.005 ms
Remote clock offset: -0.125 ms

# Below is generated by plot.py at 2019-09-18 22:16:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 395.68 Mbit/s
95th percentile per-packet one-way delay: 246.564 ms
Loss rate: 4.83%
-- Flow 1:
Average throughput: 231.89 Mbit/s
95th percentile per-packet one-way delay: 261.148 ms
Loss rate: 7.04%
-- Flow 2:
Average throughput: 178.33 Mbit/s
95th percentile per-packet one-way delay: 210.909 ms
Loss rate: 1.68%
-- Flow 3:
Average throughput: 139.17 Mbit/s
95th percentile per-packet one-way delay: 171.391 ms
Loss rate: 1.16%
```

Run 1: Report of PCC-Expr — Data Link





Run 2: Statistics of PCC-Expr

Start at: 2019-09-18 16:22:59

End at: 2019-09-18 16:23:29

Local clock offset: -0.032 ms

Remote clock offset: 0.066 ms

# Below is generated by plot.py at 2019-09-18 22:16:28

# Datalink statistics

-- Total of 3 flows:

Average throughput: 364.35 Mbit/s

95th percentile per-packet one-way delay: 241.676 ms

Loss rate: 3.99%

-- Flow 1:

Average throughput: 215.61 Mbit/s

95th percentile per-packet one-way delay: 253.926 ms

Loss rate: 5.77%

-- Flow 2:

Average throughput: 179.62 Mbit/s

95th percentile per-packet one-way delay: 210.861 ms

Loss rate: 1.24%

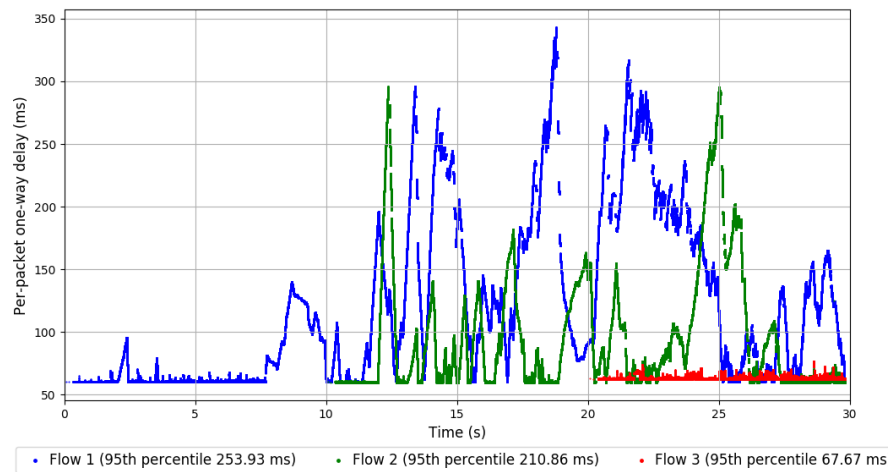
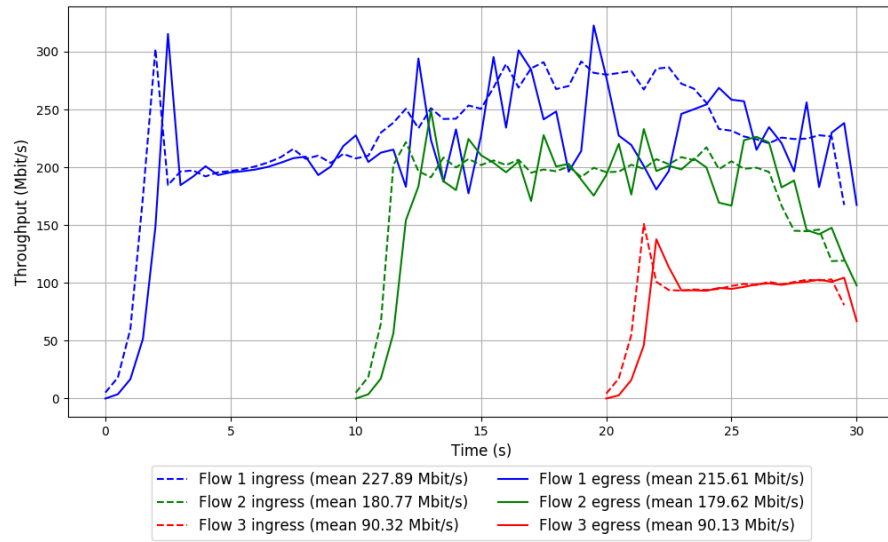
-- Flow 3:

Average throughput: 90.13 Mbit/s

95th percentile per-packet one-way delay: 67.666 ms

Loss rate: 1.47%

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

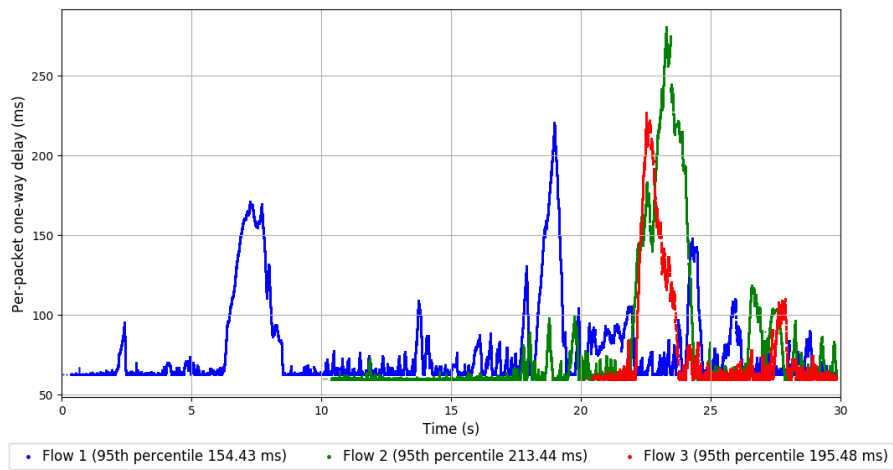
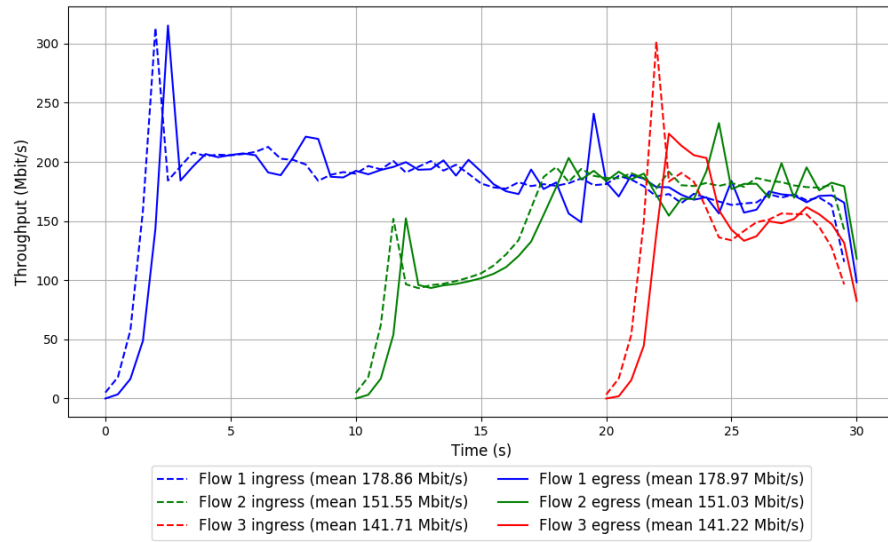


```
Run 3: Statistics of PCC-Expr

Start at: 2019-09-18 17:02:20
End at: 2019-09-18 17:02:50
Local clock offset: -0.009 ms
Remote clock offset: 0.175 ms

# Below is generated by plot.py at 2019-09-18 22:16:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 325.35 Mbit/s
95th percentile per-packet one-way delay: 165.486 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 178.97 Mbit/s
95th percentile per-packet one-way delay: 154.430 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 151.03 Mbit/s
95th percentile per-packet one-way delay: 213.440 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 141.22 Mbit/s
95th percentile per-packet one-way delay: 195.484 ms
Loss rate: 1.56%
```

### Run 3: Report of PCC-Expr — Data Link

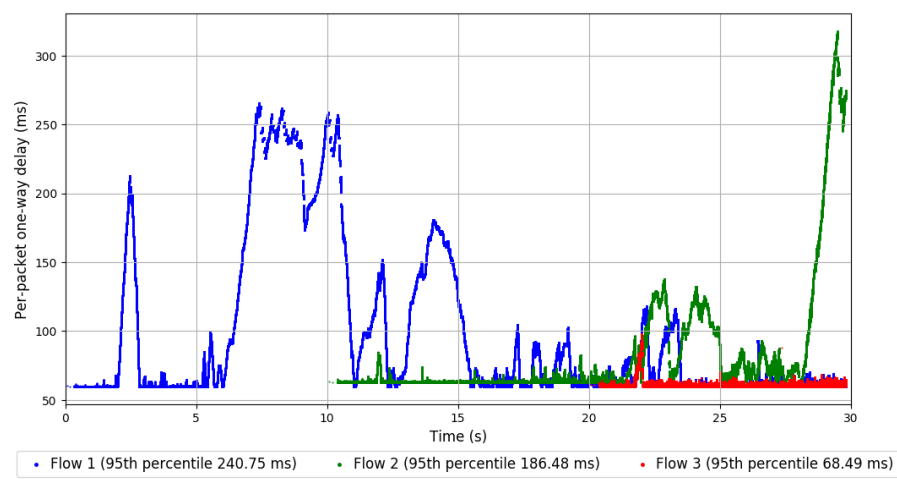
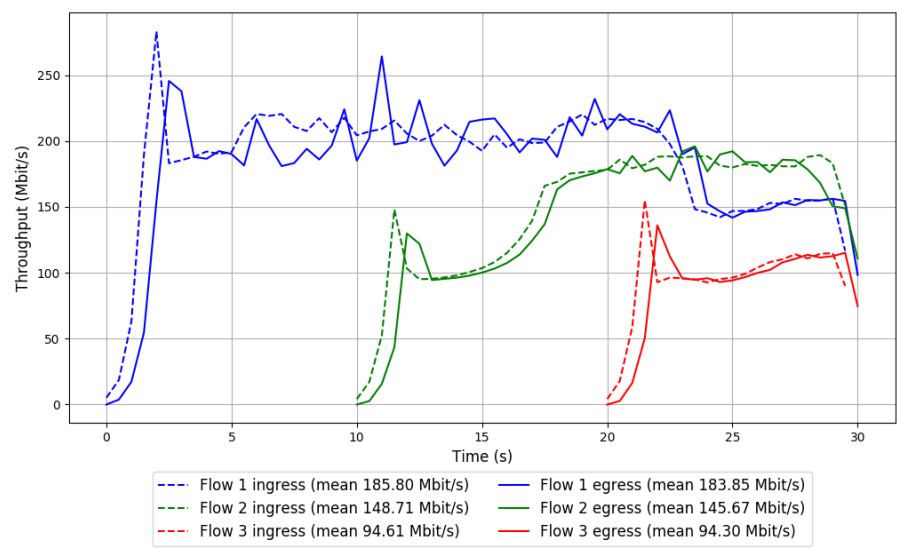


```
Run 4: Statistics of PCC-Expr

Start at: 2019-09-18 17:42:04
End at: 2019-09-18 17:42:34
Local clock offset: -0.227 ms
Remote clock offset: 0.031 ms

# Below is generated by plot.py at 2019-09-18 22:16:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 311.37 Mbit/s
95th percentile per-packet one-way delay: 237.967 ms
Loss rate: 1.84%
-- Flow 1:
Average throughput: 183.85 Mbit/s
95th percentile per-packet one-way delay: 240.752 ms
Loss rate: 1.45%
-- Flow 2:
Average throughput: 145.67 Mbit/s
95th percentile per-packet one-way delay: 186.484 ms
Loss rate: 2.66%
-- Flow 3:
Average throughput: 94.30 Mbit/s
95th percentile per-packet one-way delay: 68.490 ms
Loss rate: 1.57%
```

Run 4: Report of PCC-Expr — Data Link

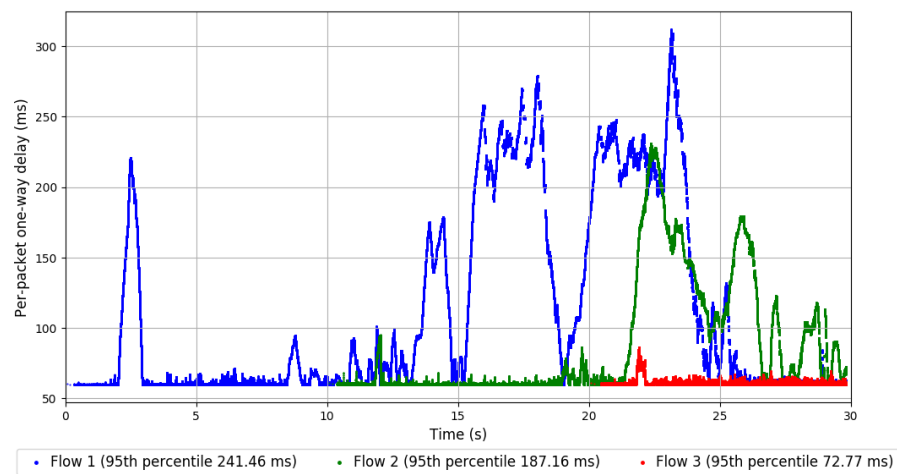
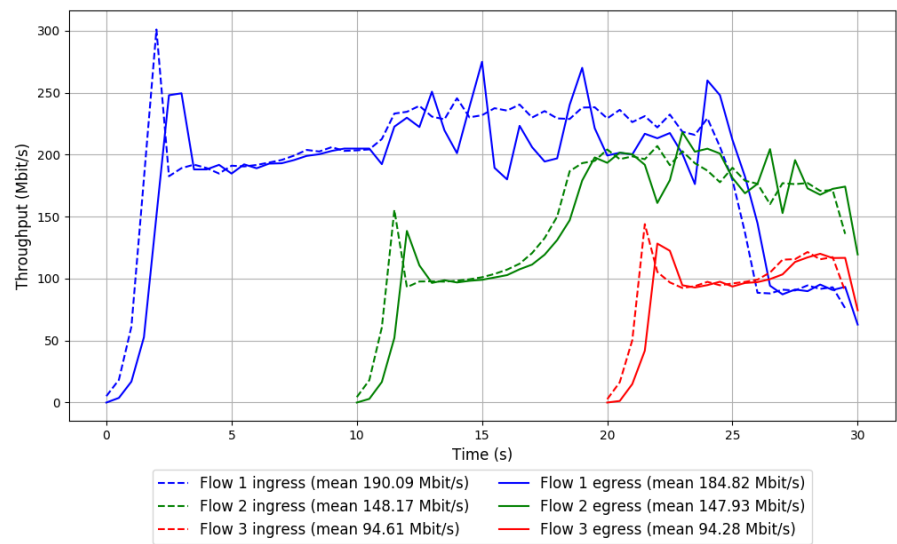


Run 5: Statistics of PCC-Expr

Start at: 2019-09-18 18:20:59  
End at: 2019-09-18 18:21:29  
Local clock offset: -0.009 ms  
Remote clock offset: -0.028 ms

# Below is generated by plot.py at 2019-09-18 22:22:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 313.84 Mbit/s  
95th percentile per-packet one-way delay: 232.646 ms  
Loss rate: 2.28%  
-- Flow 1:  
Average throughput: 184.82 Mbit/s  
95th percentile per-packet one-way delay: 241.458 ms  
Loss rate: 3.17%  
-- Flow 2:  
Average throughput: 147.93 Mbit/s  
95th percentile per-packet one-way delay: 187.161 ms  
Loss rate: 0.78%  
-- Flow 3:  
Average throughput: 94.28 Mbit/s  
95th percentile per-packet one-way delay: 72.774 ms  
Loss rate: 1.58%

Run 5: Report of PCC-Expr — Data Link



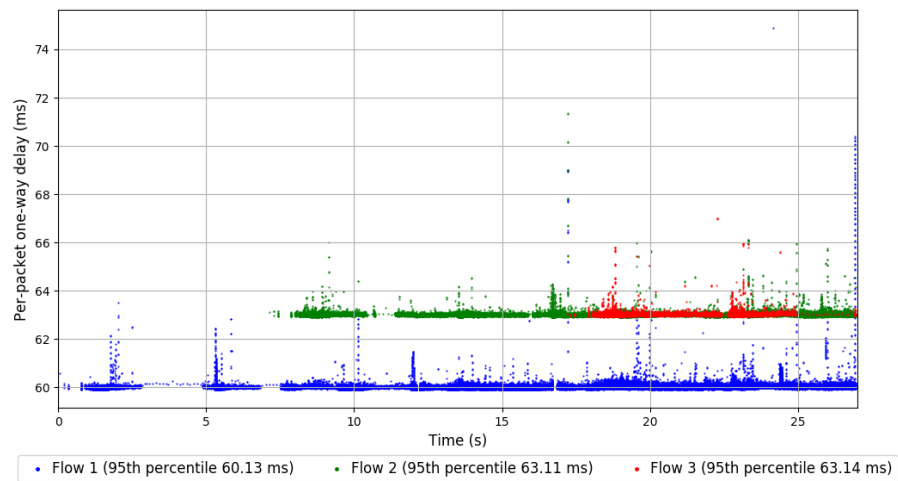
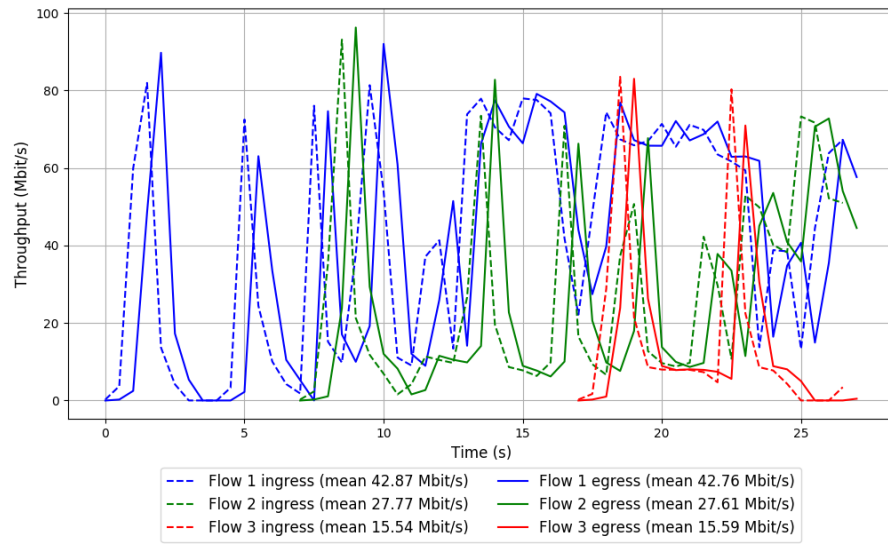


Run 1: Statistics of QUIC Cubic

Start at: 2019-09-18 16:10:19  
End at: 2019-09-18 16:10:49  
Local clock offset: -0.003 ms  
Remote clock offset: -0.151 ms

# Below is generated by plot.py at 2019-09-18 22:22:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 68.74 Mbit/s  
95th percentile per-packet one-way delay: 63.061 ms  
Loss rate: 0.87%  
-- Flow 1:  
Average throughput: 42.76 Mbit/s  
95th percentile per-packet one-way delay: 60.135 ms  
Loss rate: 0.71%  
-- Flow 2:  
Average throughput: 27.61 Mbit/s  
95th percentile per-packet one-way delay: 63.108 ms  
Loss rate: 1.17%  
-- Flow 3:  
Average throughput: 15.59 Mbit/s  
95th percentile per-packet one-way delay: 63.140 ms  
Loss rate: 0.97%

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

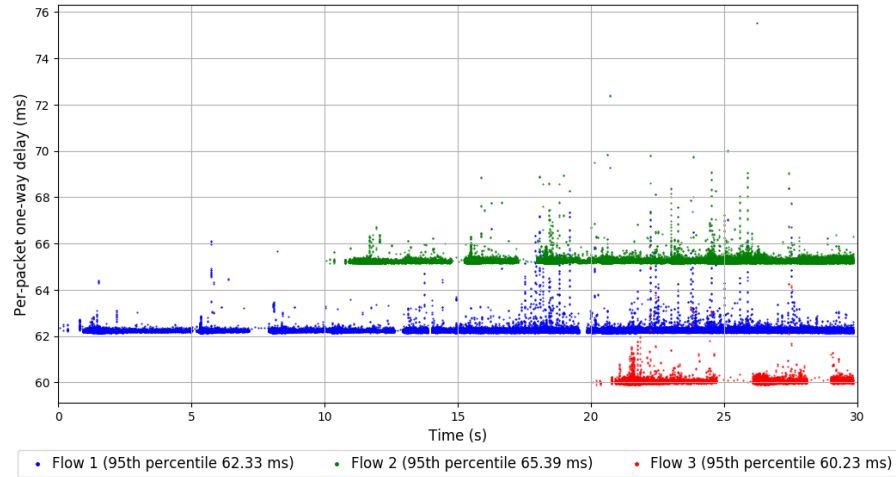
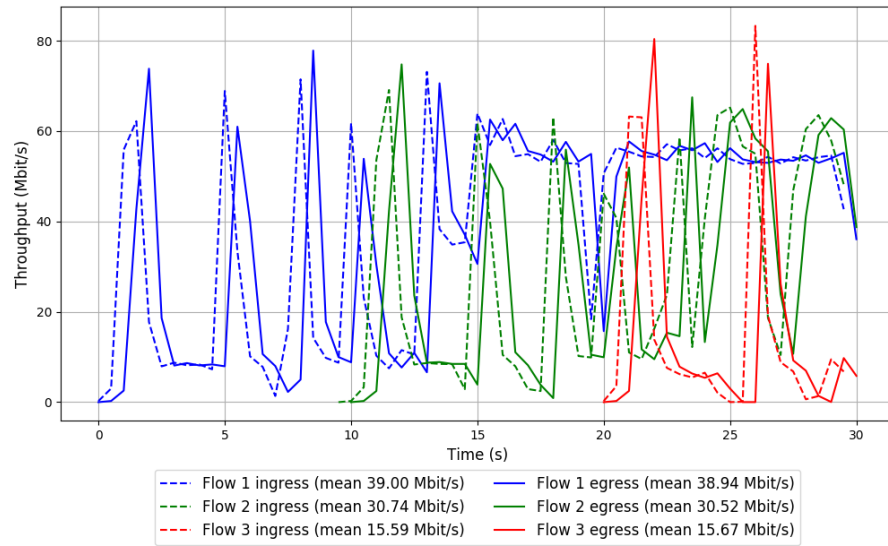


Run 2: Statistics of QUIC Cubic

Start at: 2019-09-18 16:49:35  
End at: 2019-09-18 16:50:05  
Local clock offset: 0.002 ms  
Remote clock offset: -0.064 ms

# Below is generated by plot.py at 2019-09-18 22:22:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 64.35 Mbit/s  
95th percentile per-packet one-way delay: 65.308 ms  
Loss rate: 0.80%  
-- Flow 1:  
Average throughput: 38.94 Mbit/s  
95th percentile per-packet one-way delay: 62.326 ms  
Loss rate: 0.56%  
-- Flow 2:  
Average throughput: 30.52 Mbit/s  
95th percentile per-packet one-way delay: 65.388 ms  
Loss rate: 1.32%  
-- Flow 3:  
Average throughput: 15.67 Mbit/s  
95th percentile per-packet one-way delay: 60.234 ms  
Loss rate: 0.65%

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



Run 3: Statistics of QUIC Cubic

Start at: 2019-09-18 17:29:15

End at: 2019-09-18 17:29:45

Local clock offset: -0.27 ms

Remote clock offset: -0.32 ms

# Below is generated by plot.py at 2019-09-18 22:22:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 68.69 Mbit/s

95th percentile per-packet one-way delay: 60.392 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 42.92 Mbit/s

95th percentile per-packet one-way delay: 60.379 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 31.37 Mbit/s

95th percentile per-packet one-way delay: 60.397 ms

Loss rate: 0.81%

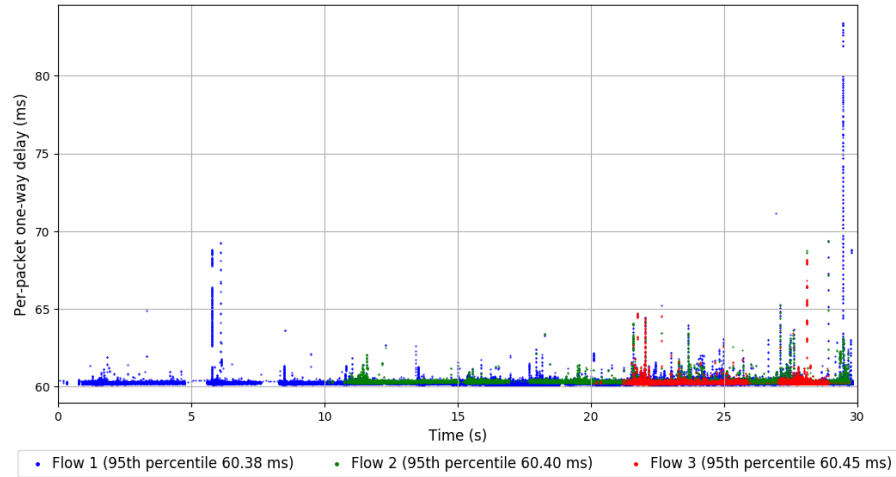
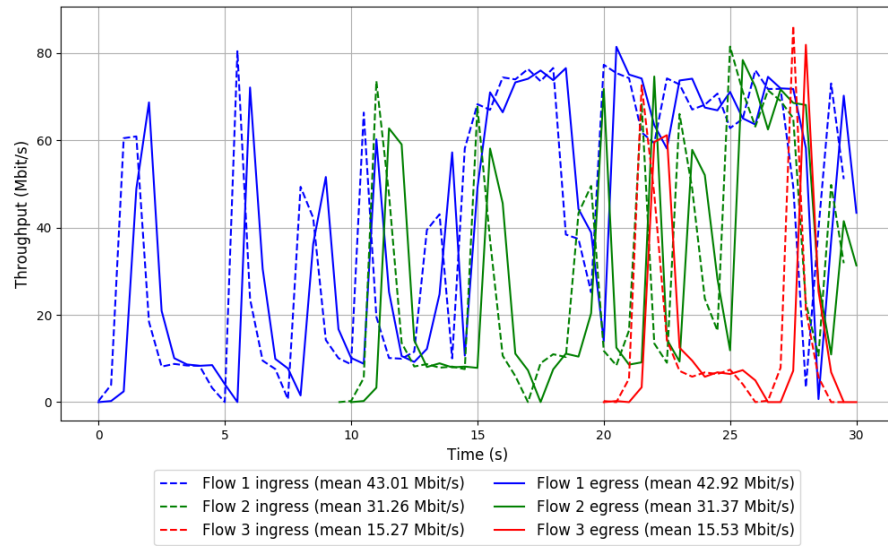
-- Flow 3:

Average throughput: 15.53 Mbit/s

95th percentile per-packet one-way delay: 60.453 ms

Loss rate: 0.00%

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



Run 4: Statistics of QUIC Cubic

Start at: 2019-09-18 18:08:18

End at: 2019-09-18 18:08:48

Local clock offset: -0.028 ms

Remote clock offset: 0.68 ms

# Below is generated by plot.py at 2019-09-18 22:22:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 64.49 Mbit/s

95th percentile per-packet one-way delay: 61.664 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 38.47 Mbit/s

95th percentile per-packet one-way delay: 59.729 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 31.23 Mbit/s

95th percentile per-packet one-way delay: 61.754 ms

Loss rate: 0.12%

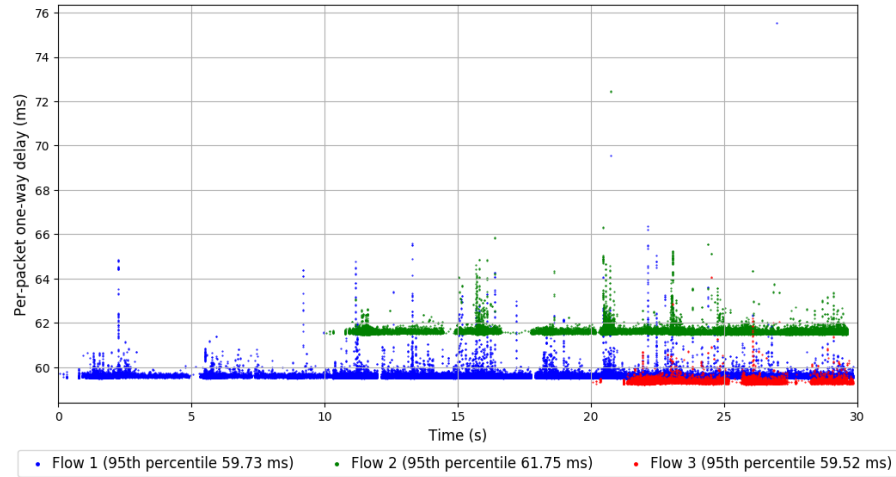
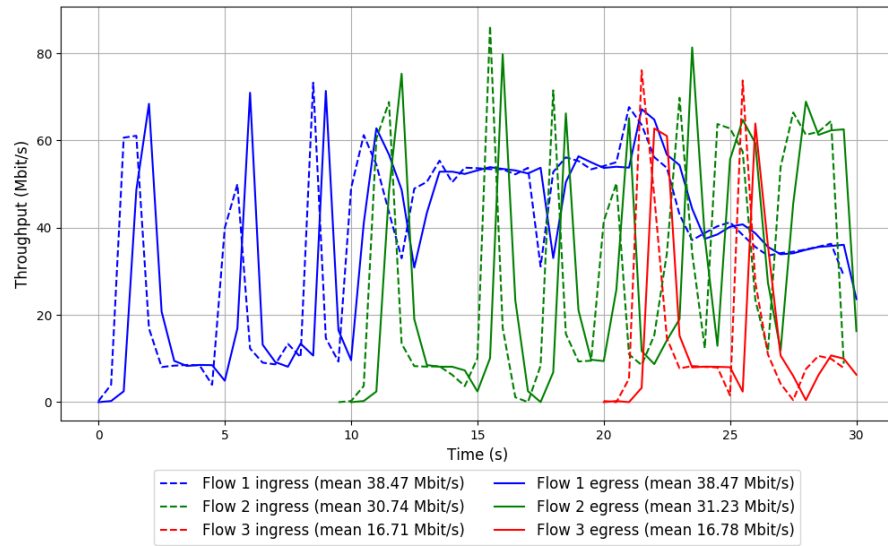
-- Flow 3:

Average throughput: 16.78 Mbit/s

95th percentile per-packet one-way delay: 59.524 ms

Loss rate: 0.84%

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



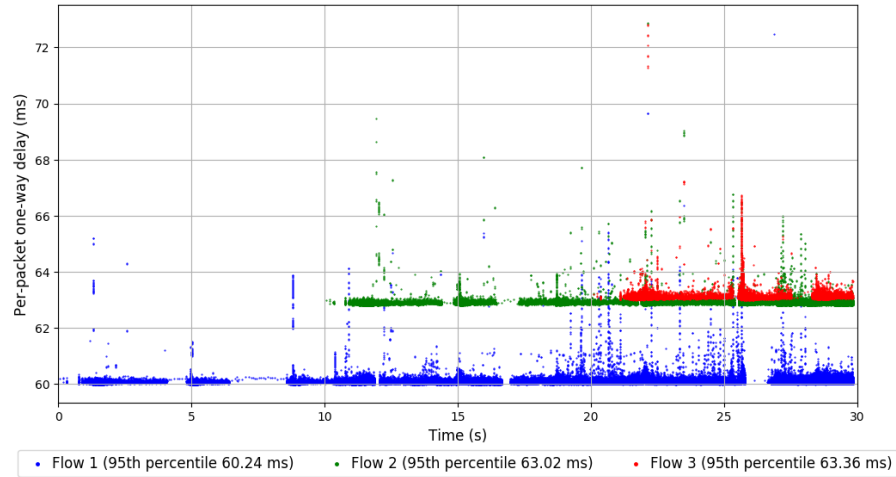
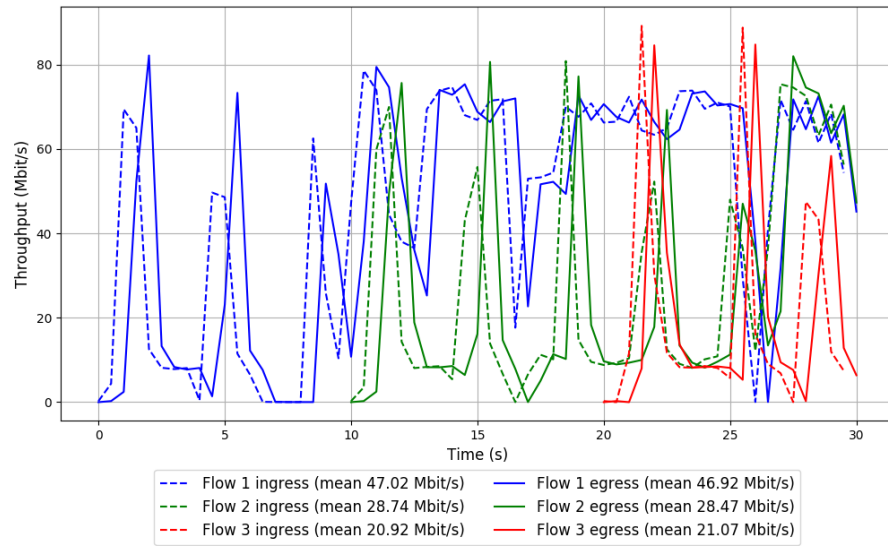


Run 5: Statistics of QUIC Cubic

Start at: 2019-09-18 18:47:20  
End at: 2019-09-18 18:47:50  
Local clock offset: 0.012 ms  
Remote clock offset: -0.159 ms

# Below is generated by plot.py at 2019-09-18 22:22:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 72.72 Mbit/s  
95th percentile per-packet one-way delay: 63.123 ms  
Loss rate: 0.85%  
-- Flow 1:  
Average throughput: 46.92 Mbit/s  
95th percentile per-packet one-way delay: 60.244 ms  
Loss rate: 0.61%  
-- Flow 2:  
Average throughput: 28.47 Mbit/s  
95th percentile per-packet one-way delay: 63.017 ms  
Loss rate: 1.56%  
-- Flow 3:  
Average throughput: 21.07 Mbit/s  
95th percentile per-packet one-way delay: 63.358 ms  
Loss rate: 0.55%

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



Run 1: Statistics of SReAM

Start at: 2019-09-18 15:50:09

End at: 2019-09-18 15:50:39

Local clock offset: 0.039 ms

Remote clock offset: 0.088 ms

# Below is generated by plot.py at 2019-09-18 22:22:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 60.322 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 60.337 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 59.807 ms

Loss rate: 0.61%

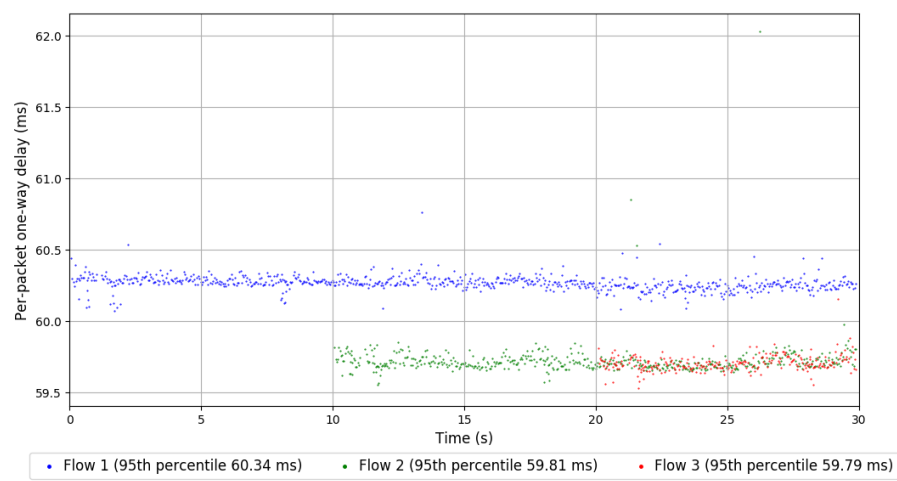
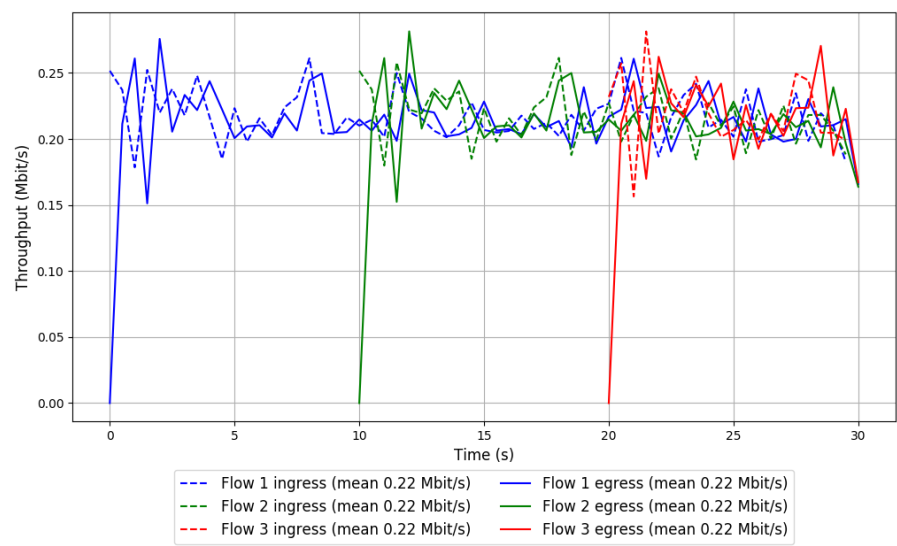
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 59.786 ms

Loss rate: 1.08%

Run 1: Report of SReAM — Data Link

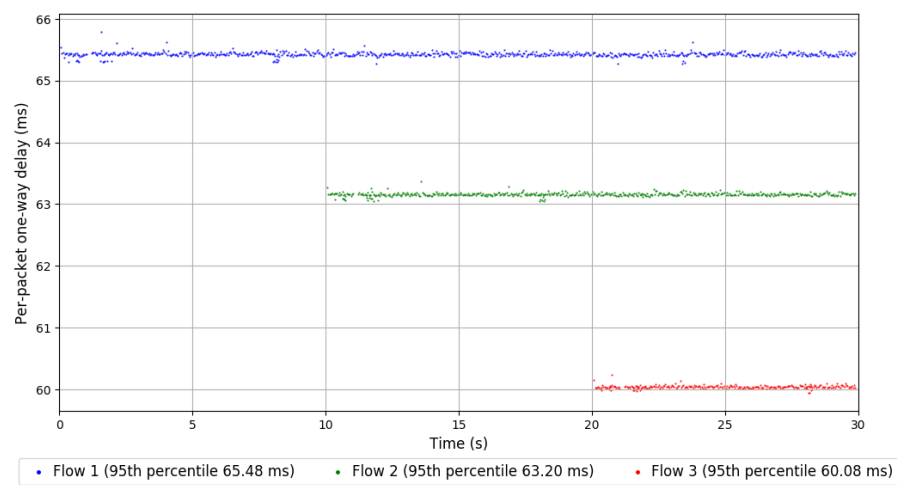
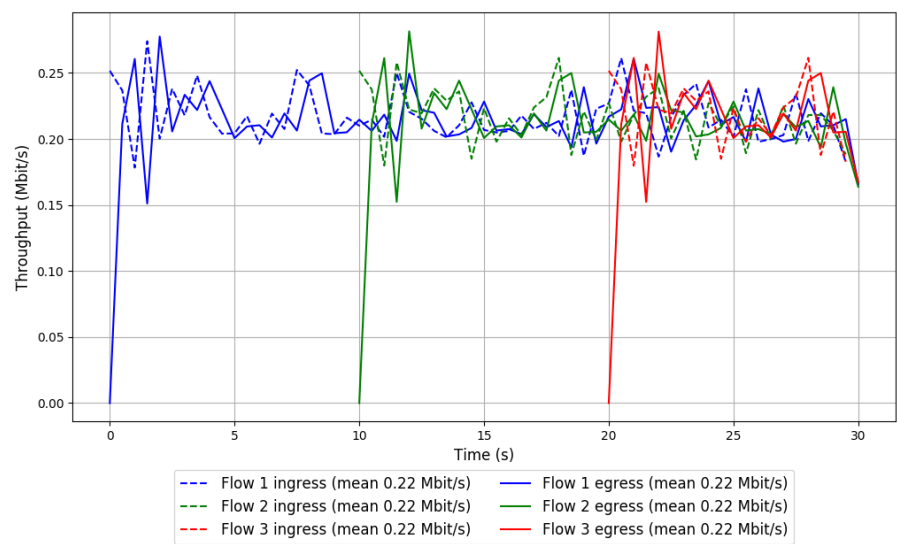


Run 2: Statistics of SReAM

Start at: 2019-09-18 16:29:30  
End at: 2019-09-18 16:30:00  
Local clock offset: -0.024 ms  
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2019-09-18 22:22:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 65.461 ms  
Loss rate: 0.57%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 65.476 ms  
Loss rate: 0.38%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 63.201 ms  
Loss rate: 0.61%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 60.079 ms  
Loss rate: 1.08%

Run 2: Report of SReAM — Data Link

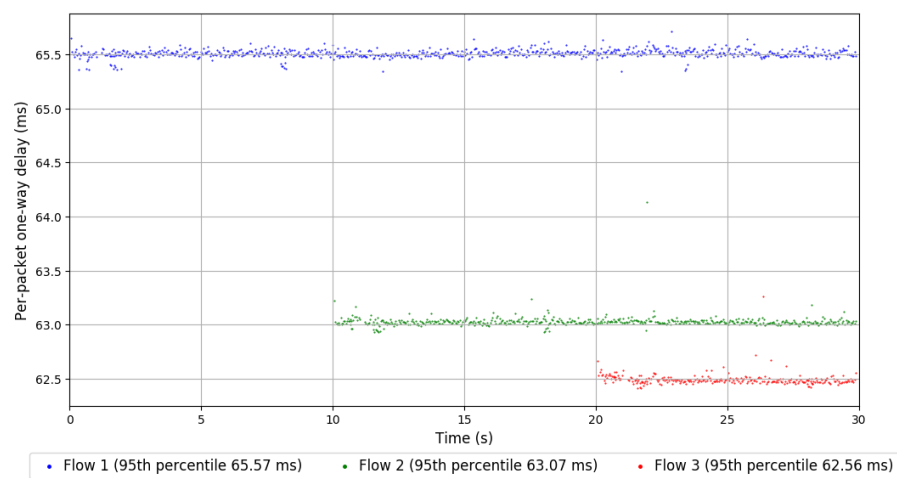
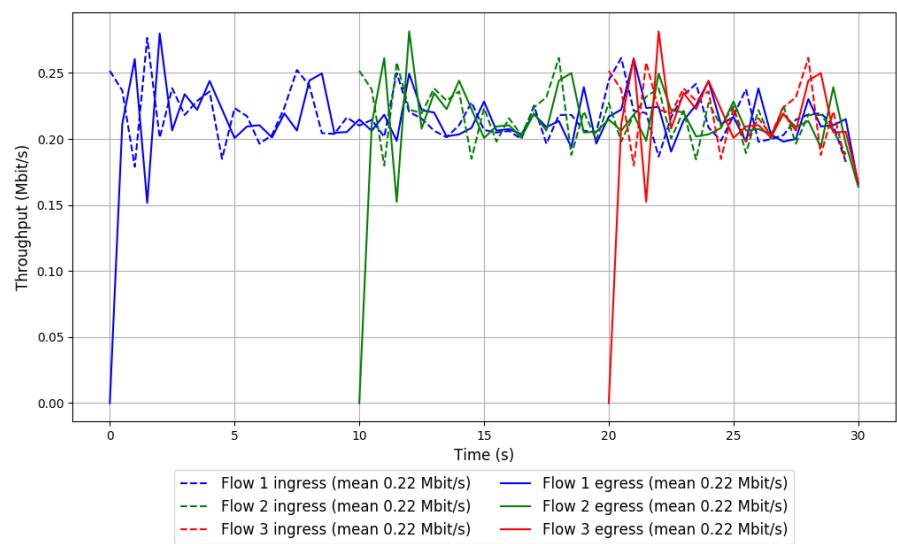


Run 3: Statistics of SCReAM

Start at: 2019-09-18 17:09:05  
End at: 2019-09-18 17:09:35  
Local clock offset: -0.097 ms  
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2019-09-18 22:22:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 65.550 ms  
Loss rate: 0.57%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 65.568 ms  
Loss rate: 0.38%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 63.071 ms  
Loss rate: 0.61%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 62.559 ms  
Loss rate: 1.08%

Run 3: Report of SReAM — Data Link





Run 4: Statistics of SReAM

Start at: 2019-09-18 17:48:26

End at: 2019-09-18 17:48:56

Local clock offset: -0.152 ms

Remote clock offset: 0.607 ms

# Below is generated by plot.py at 2019-09-18 22:22:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 61.866 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.907 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 59.384 ms

Loss rate: 0.61%

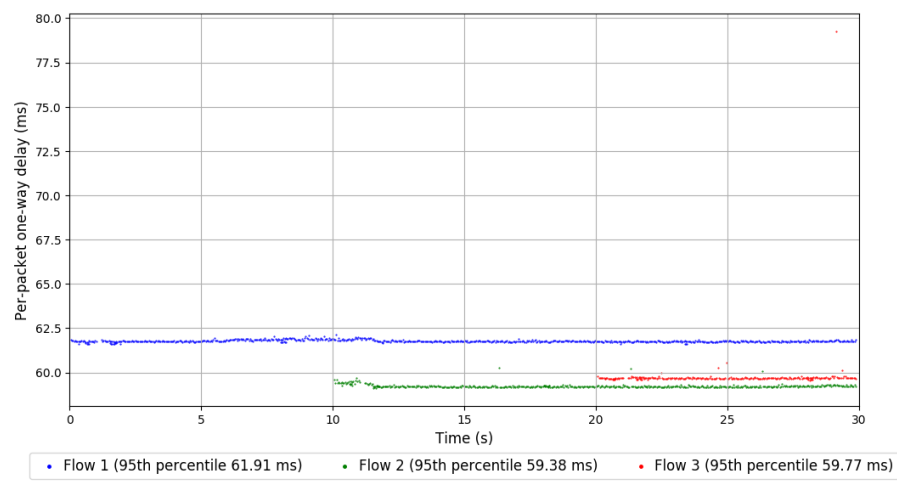
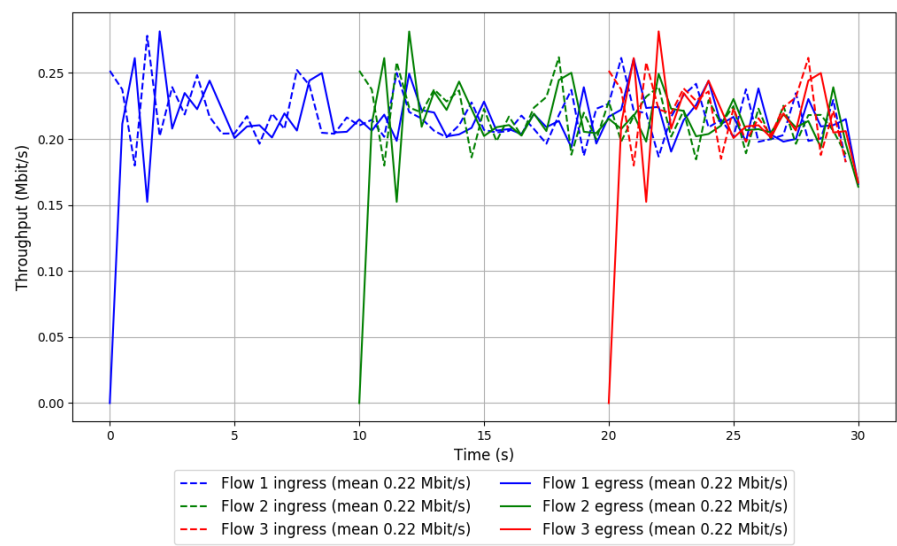
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 59.773 ms

Loss rate: 1.08%

Run 4: Report of SReAM — Data Link

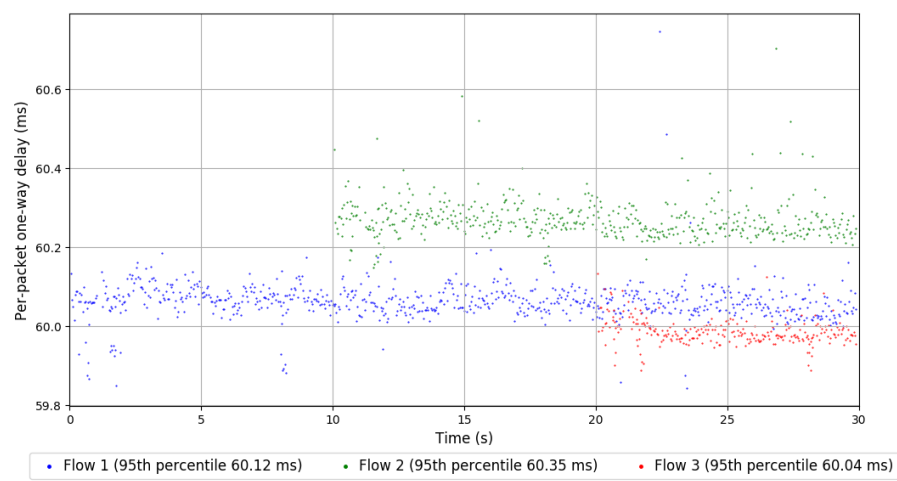
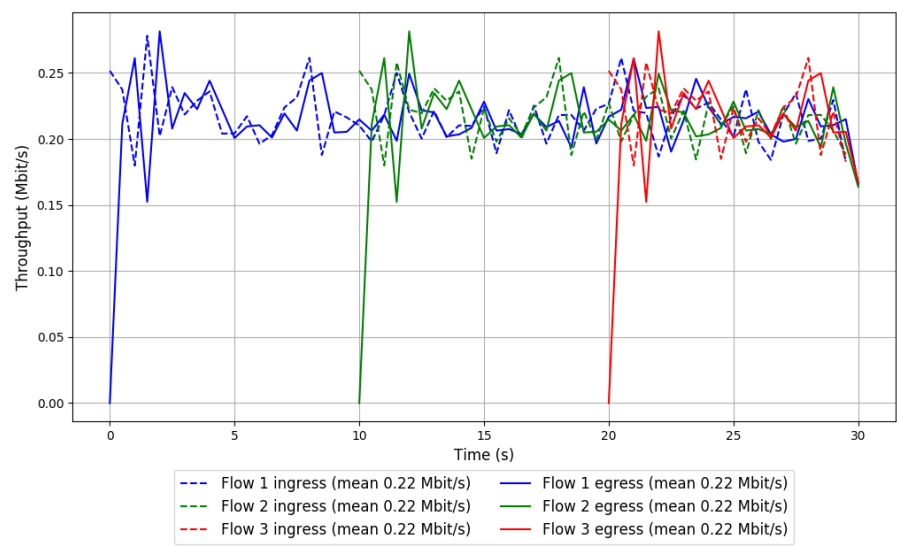


Run 5: Statistics of SReAM

Start at: 2019-09-18 18:27:41  
End at: 2019-09-18 18:28:11  
Local clock offset: -0.056 ms  
Remote clock offset: -0.086 ms

# Below is generated by plot.py at 2019-09-18 22:22:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 60.305 ms  
Loss rate: 0.57%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 60.122 ms  
Loss rate: 0.38%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 60.346 ms  
Loss rate: 0.61%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 60.041 ms  
Loss rate: 1.08%

Run 5: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2019-09-18 16:15:03

End at: 2019-09-18 16:15:33

Local clock offset: -0.025 ms

Remote clock offset: 0.087 ms

# Below is generated by plot.py at 2019-09-18 22:22:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 13.13 Mbit/s

95th percentile per-packet one-way delay: 63.807 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 6.65 Mbit/s

95th percentile per-packet one-way delay: 61.859 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 6.65 Mbit/s

95th percentile per-packet one-way delay: 64.249 ms

Loss rate: 0.61%

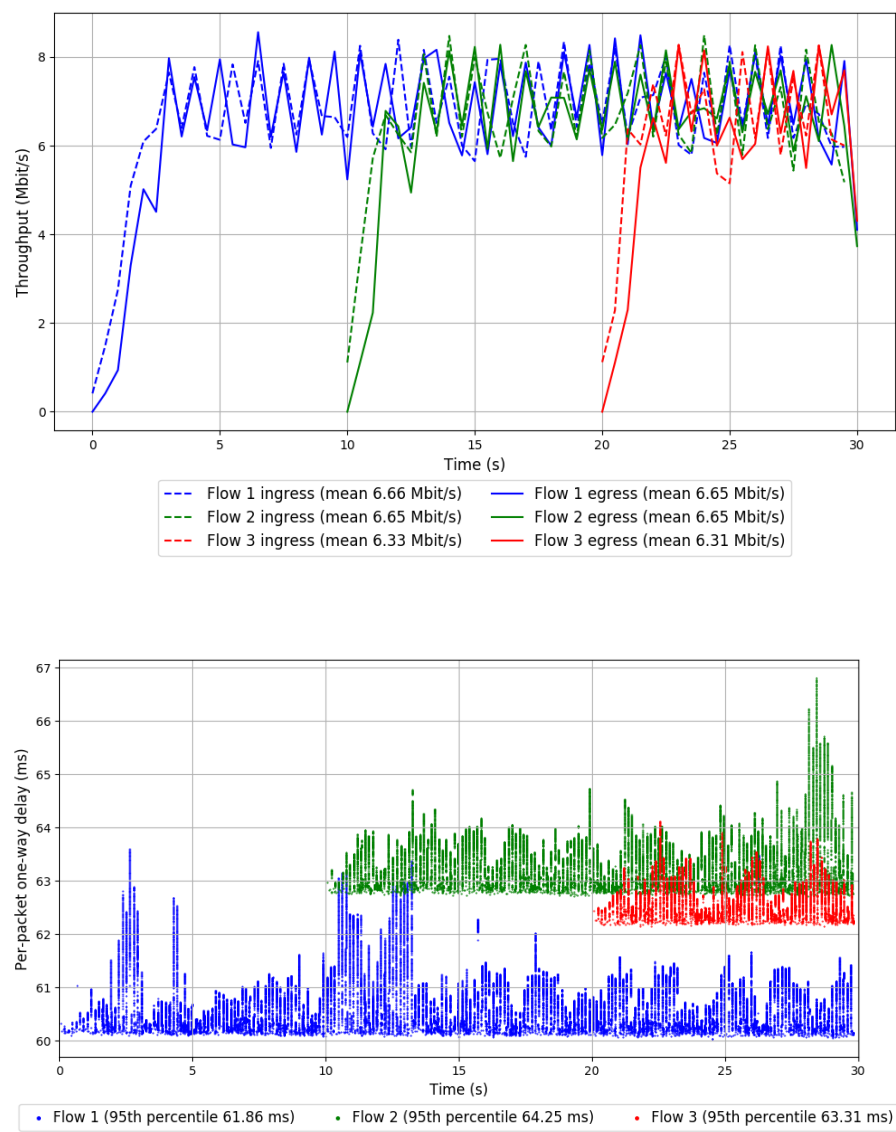
-- Flow 3:

Average throughput: 6.31 Mbit/s

95th percentile per-packet one-way delay: 63.310 ms

Loss rate: 1.36%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2019-09-18 16:54:22

End at: 2019-09-18 16:54:52

Local clock offset: -0.005 ms

Remote clock offset: 0.036 ms

# Below is generated by plot.py at 2019-09-18 22:22:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 13.51 Mbit/s

95th percentile per-packet one-way delay: 66.153 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 6.94 Mbit/s

95th percentile per-packet one-way delay: 61.296 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 6.67 Mbit/s

95th percentile per-packet one-way delay: 66.472 ms

Loss rate: 0.81%

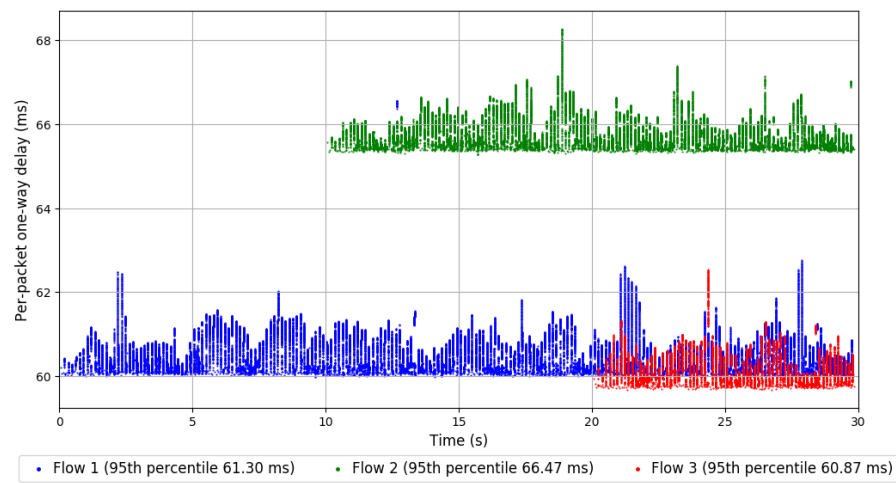
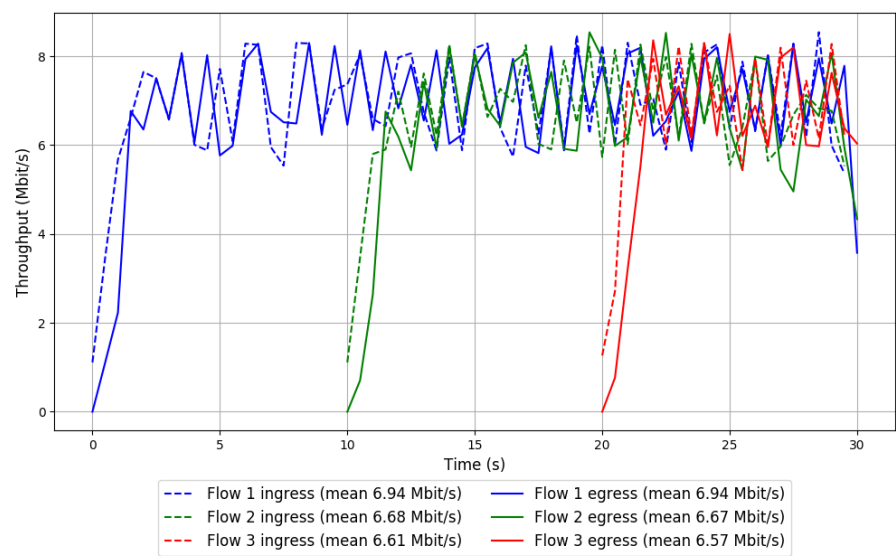
-- Flow 3:

Average throughput: 6.57 Mbit/s

95th percentile per-packet one-way delay: 60.871 ms

Loss rate: 1.59%

Run 2: Report of Sprout — Data Link



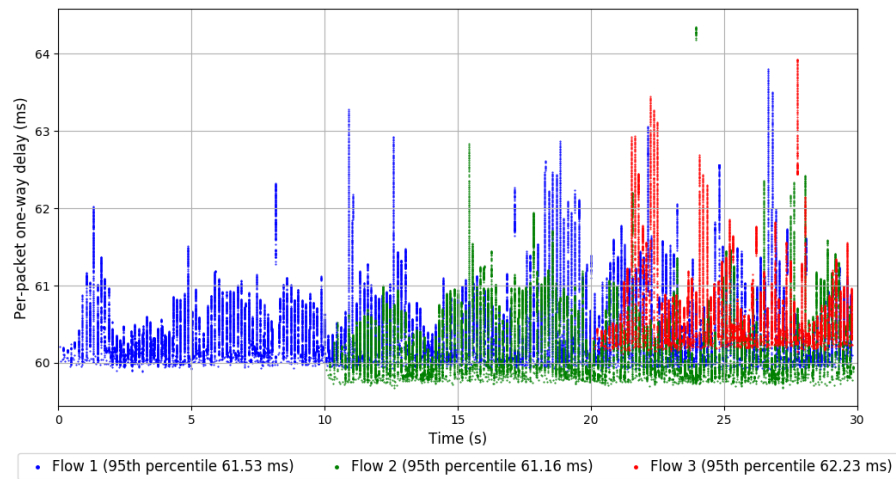
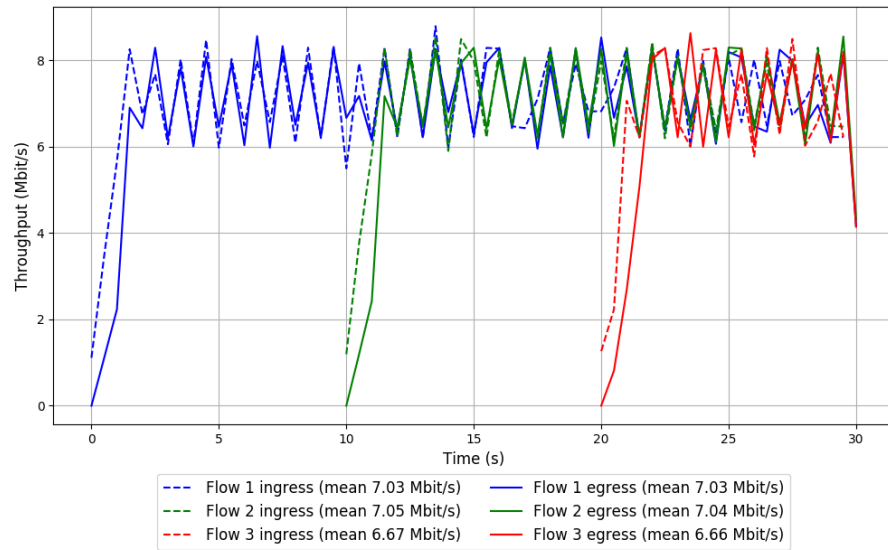


### Run 3: Statistics of Sprout

Start at: 2019-09-18 17:34:06  
End at: 2019-09-18 17:34:36  
Local clock offset: -0.298 ms  
Remote clock offset: 0.016 ms

```
# Below is generated by plot.py at 2019-09-18 22:22:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.88 Mbit/s
95th percentile per-packet one-way delay: 61.542 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 7.03 Mbit/s
95th percentile per-packet one-way delay: 61.531 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 7.04 Mbit/s
95th percentile per-packet one-way delay: 61.162 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 6.66 Mbit/s
95th percentile per-packet one-way delay: 62.230 ms
Loss rate: 1.57%
```

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

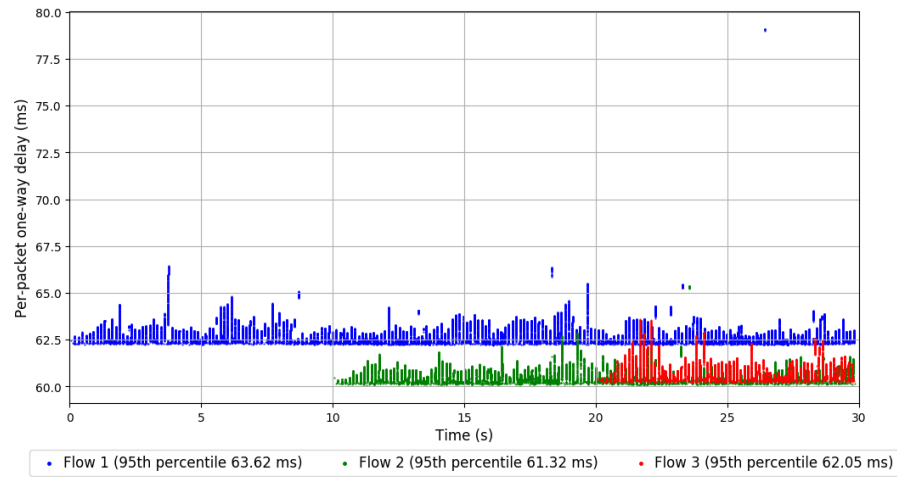
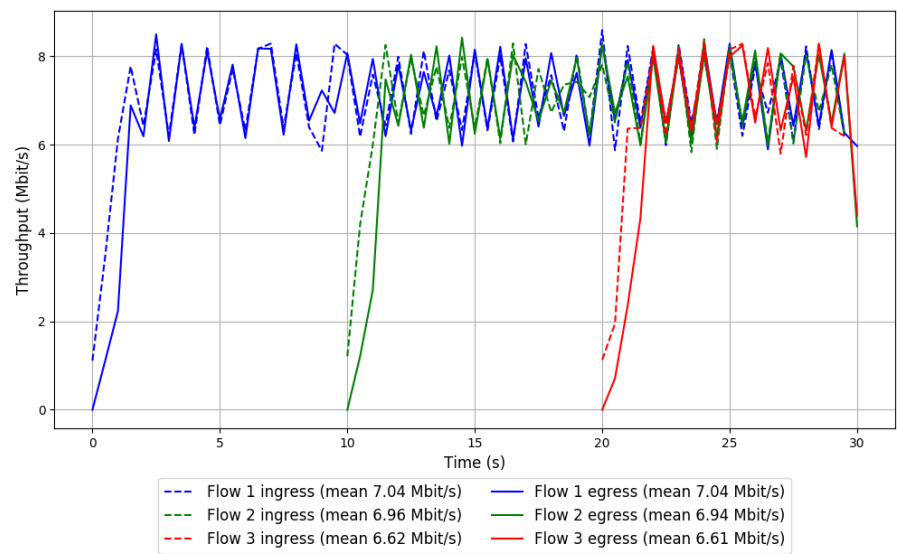


#### Run 4: Statistics of Sprout

Start at: 2019-09-18 18:13:06  
End at: 2019-09-18 18:13:36  
Local clock offset: -0.038 ms  
Remote clock offset: -0.031 ms

```
# Below is generated by plot.py at 2019-09-18 22:22:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.80 Mbit/s
95th percentile per-packet one-way delay: 63.412 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 7.04 Mbit/s
95th percentile per-packet one-way delay: 63.620 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 6.94 Mbit/s
95th percentile per-packet one-way delay: 61.316 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 6.61 Mbit/s
95th percentile per-packet one-way delay: 62.055 ms
Loss rate: 1.54%
```

Run 4: Report of Sprout — Data Link

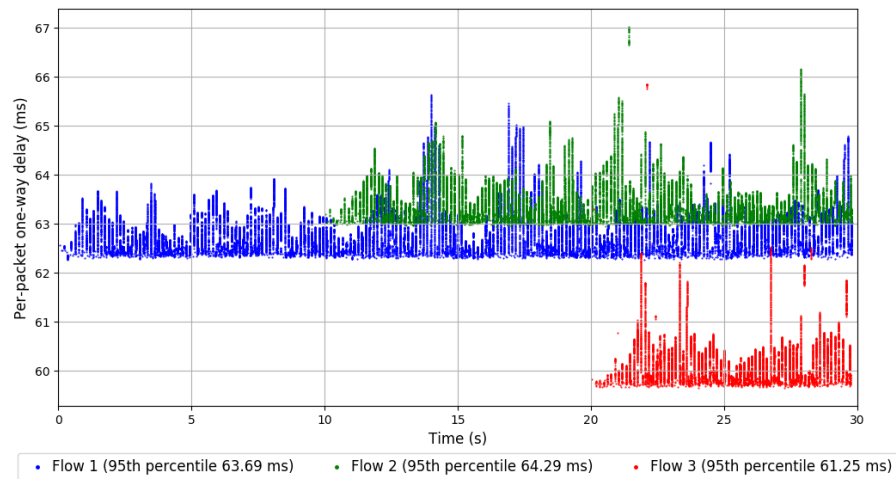
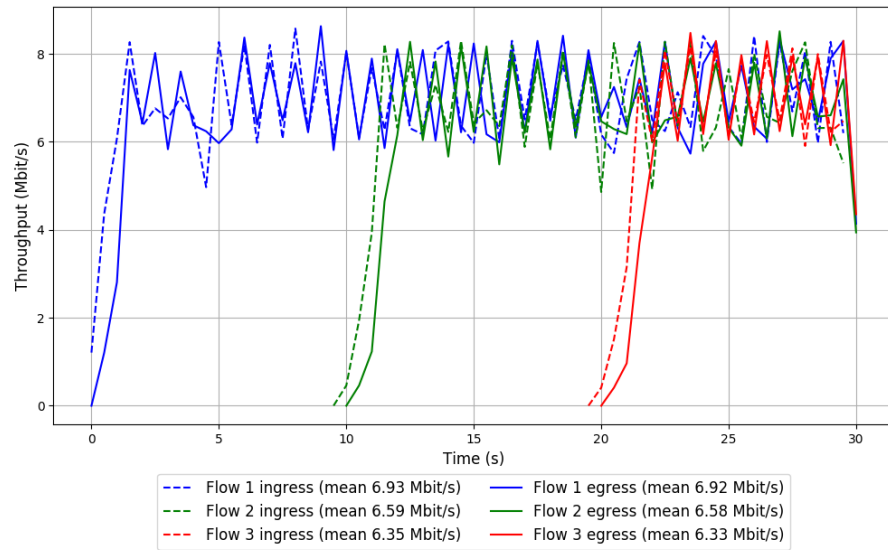


Run 5: Statistics of Sprout

Start at: 2019-09-18 18:52:14  
End at: 2019-09-18 18:52:44  
Local clock offset: -0.012 ms  
Remote clock offset: -0.015 ms

# Below is generated by plot.py at 2019-09-18 22:22:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 13.36 Mbit/s  
95th percentile per-packet one-way delay: 64.001 ms  
Loss rate: 0.76%  
-- Flow 1:  
Average throughput: 6.92 Mbit/s  
95th percentile per-packet one-way delay: 63.691 ms  
Loss rate: 0.50%  
-- Flow 2:  
Average throughput: 6.58 Mbit/s  
95th percentile per-packet one-way delay: 64.292 ms  
Loss rate: 0.71%  
-- Flow 3:  
Average throughput: 6.33 Mbit/s  
95th percentile per-packet one-way delay: 61.247 ms  
Loss rate: 1.70%

## Run 5: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2019-09-18 16:05:06

End at: 2019-09-18 16:05:36

Local clock offset: 0.004 ms

Remote clock offset: 0.041 ms

# Below is generated by plot.py at 2019-09-18 22:29:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 313.09 Mbit/s

95th percentile per-packet one-way delay: 88.586 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 162.10 Mbit/s

95th percentile per-packet one-way delay: 91.365 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 161.96 Mbit/s

95th percentile per-packet one-way delay: 85.652 ms

Loss rate: 0.79%

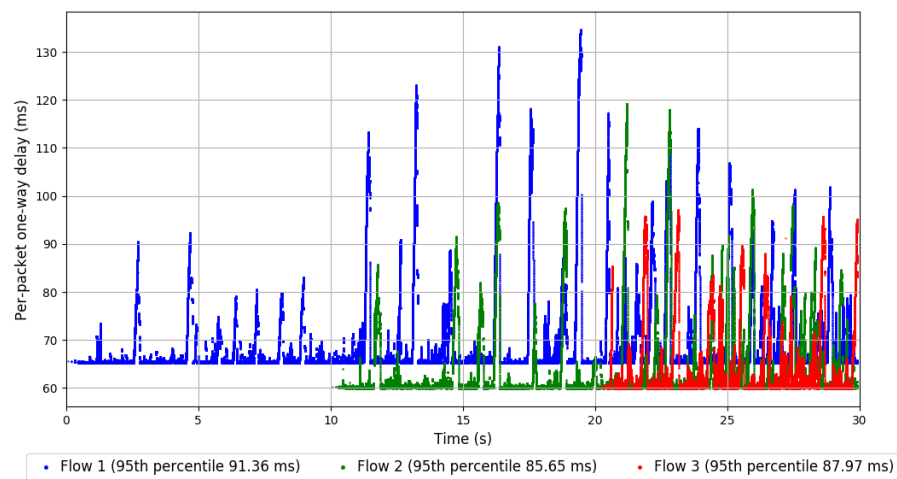
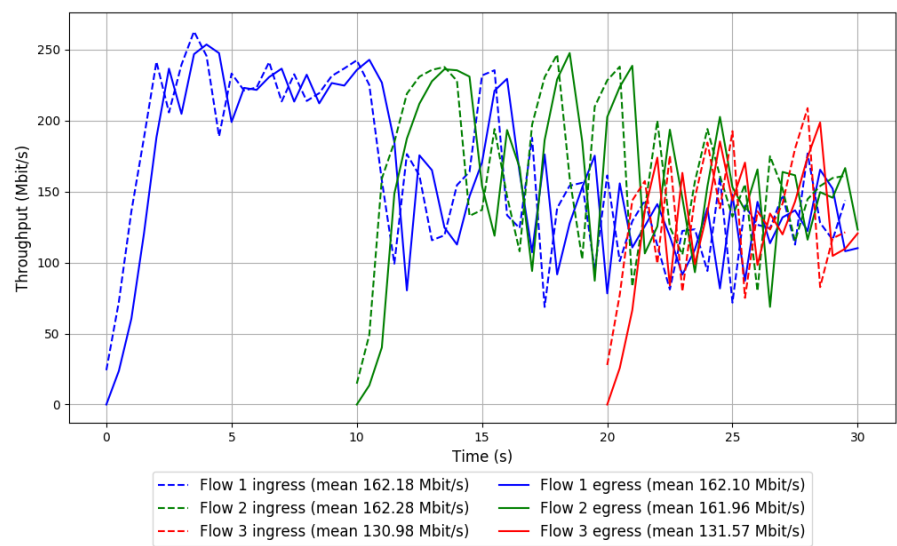
-- Flow 3:

Average throughput: 131.57 Mbit/s

95th percentile per-packet one-way delay: 87.969 ms

Loss rate: 0.79%

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



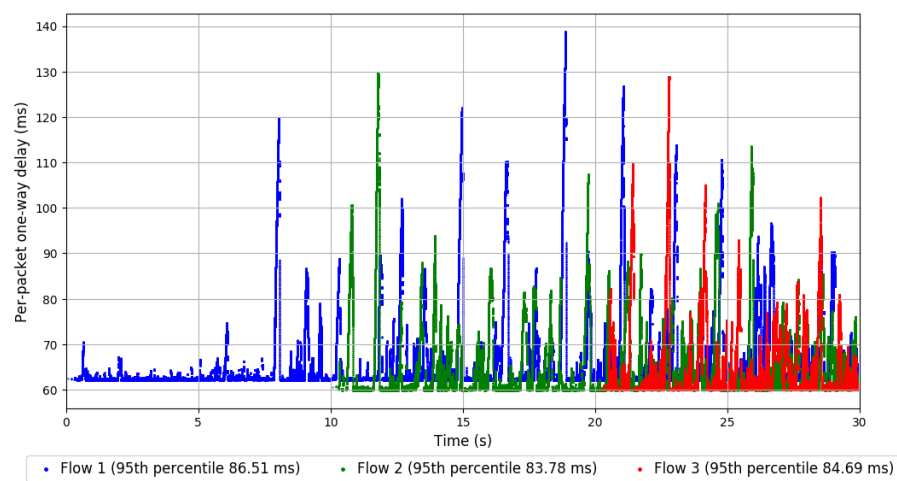
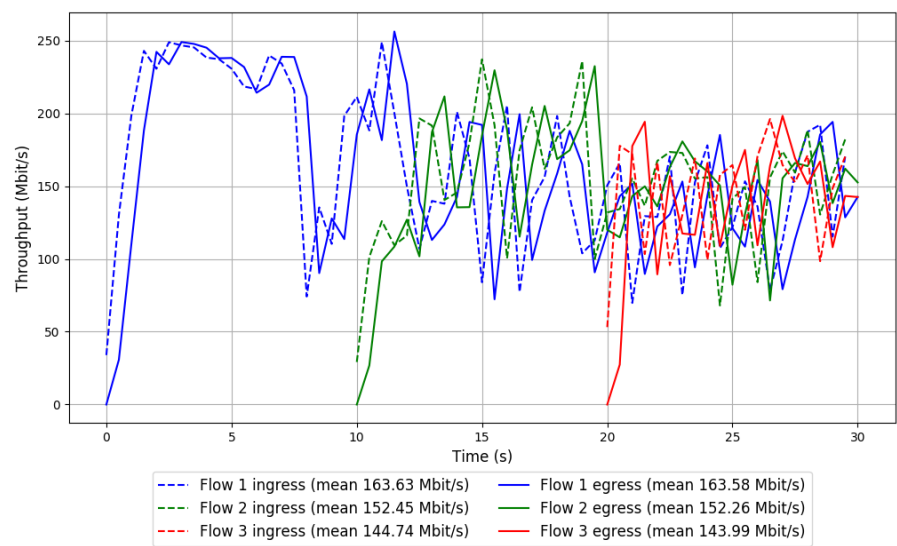


Run 2: Statistics of TaoVA-100x

Start at: 2019-09-18 16:44:07  
End at: 2019-09-18 16:44:37  
Local clock offset: 0.01 ms  
Remote clock offset: -0.036 ms

# Below is generated by plot.py at 2019-09-18 22:30:40  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 312.24 Mbit/s  
95th percentile per-packet one-way delay: 85.329 ms  
Loss rate: 0.74%  
-- Flow 1:  
Average throughput: 163.58 Mbit/s  
95th percentile per-packet one-way delay: 86.510 ms  
Loss rate: 0.45%  
-- Flow 2:  
Average throughput: 152.26 Mbit/s  
95th percentile per-packet one-way delay: 83.779 ms  
Loss rate: 0.75%  
-- Flow 3:  
Average throughput: 143.99 Mbit/s  
95th percentile per-packet one-way delay: 84.693 ms  
Loss rate: 1.71%

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



Run 3: Statistics of TaoVA-100x

Start at: 2019-09-18 17:23:46

End at: 2019-09-18 17:24:16

Local clock offset: -0.244 ms

Remote clock offset: 0.073 ms

# Below is generated by plot.py at 2019-09-18 22:30:40

# Datalink statistics

-- Total of 3 flows:

Average throughput: 293.59 Mbit/s

95th percentile per-packet one-way delay: 80.175 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 152.00 Mbit/s

95th percentile per-packet one-way delay: 82.798 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 129.69 Mbit/s

95th percentile per-packet one-way delay: 76.039 ms

Loss rate: 0.76%

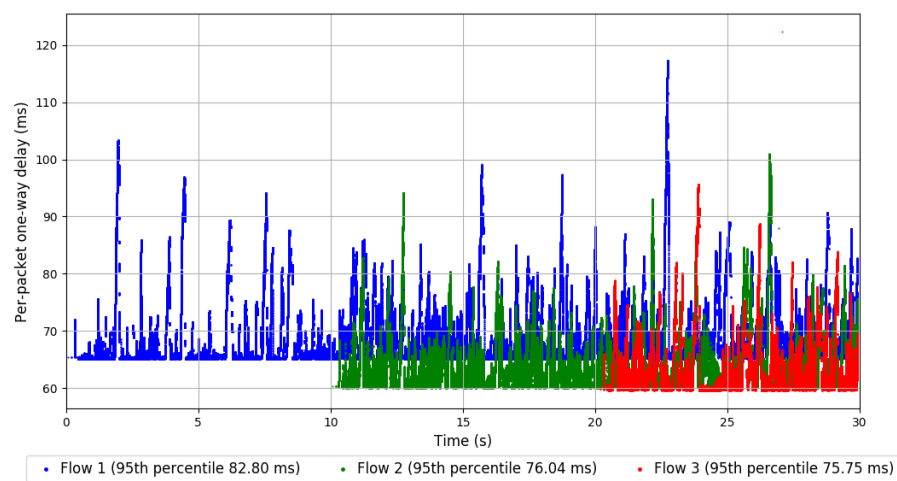
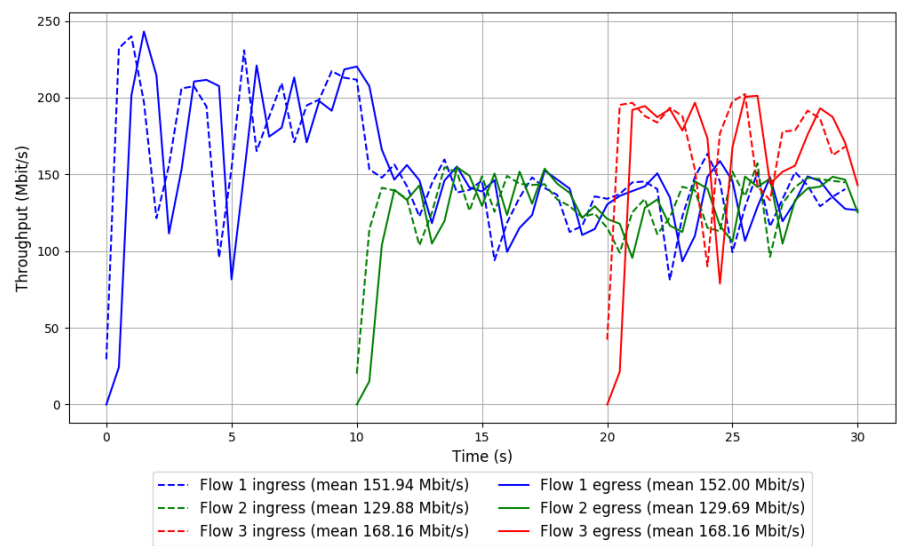
-- Flow 3:

Average throughput: 168.16 Mbit/s

95th percentile per-packet one-way delay: 75.751 ms

Loss rate: 1.24%

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

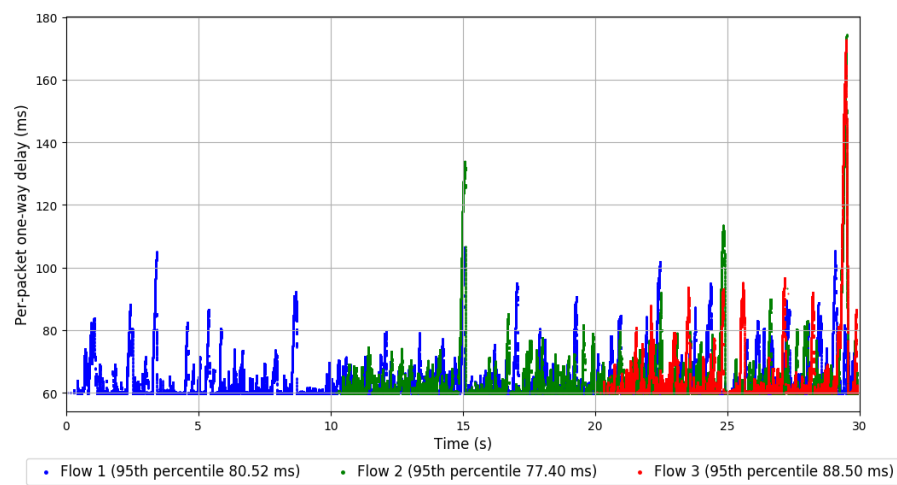
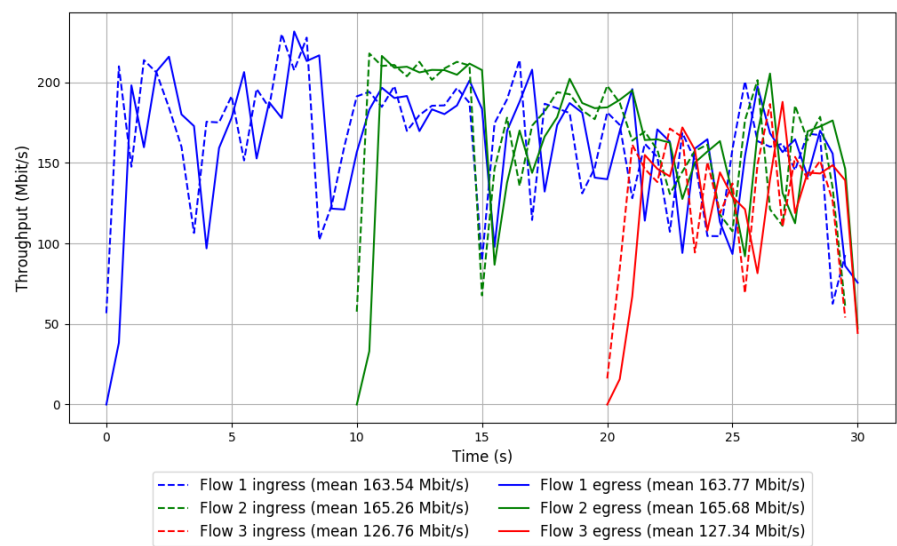


Run 4: Statistics of TaoVA-100x

Start at: 2019-09-18 18:02:52  
End at: 2019-09-18 18:03:22  
Local clock offset: -0.054 ms  
Remote clock offset: -0.028 ms

# Below is generated by plot.py at 2019-09-18 22:30:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 315.86 Mbit/s  
95th percentile per-packet one-way delay: 80.946 ms  
Loss rate: 0.37%  
-- Flow 1:  
Average throughput: 163.77 Mbit/s  
95th percentile per-packet one-way delay: 80.520 ms  
Loss rate: 0.27%  
-- Flow 2:  
Average throughput: 165.68 Mbit/s  
95th percentile per-packet one-way delay: 77.401 ms  
Loss rate: 0.36%  
-- Flow 3:  
Average throughput: 127.34 Mbit/s  
95th percentile per-packet one-way delay: 88.497 ms  
Loss rate: 0.76%

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

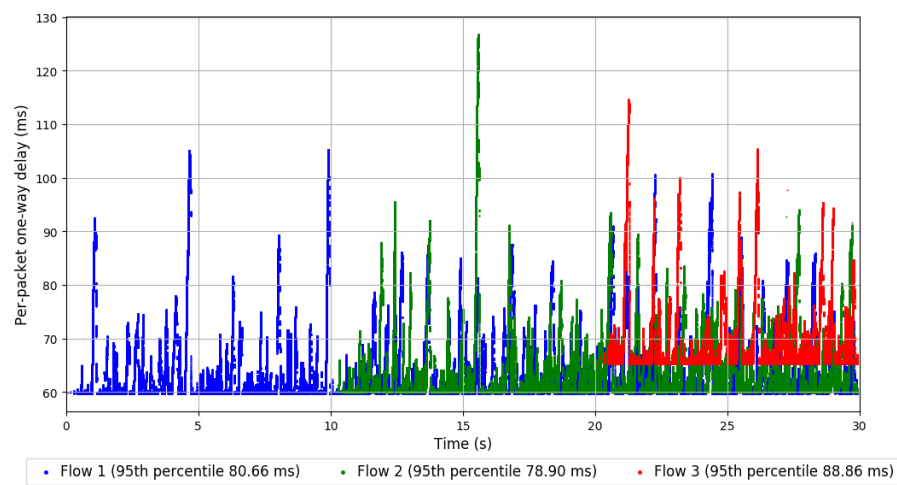
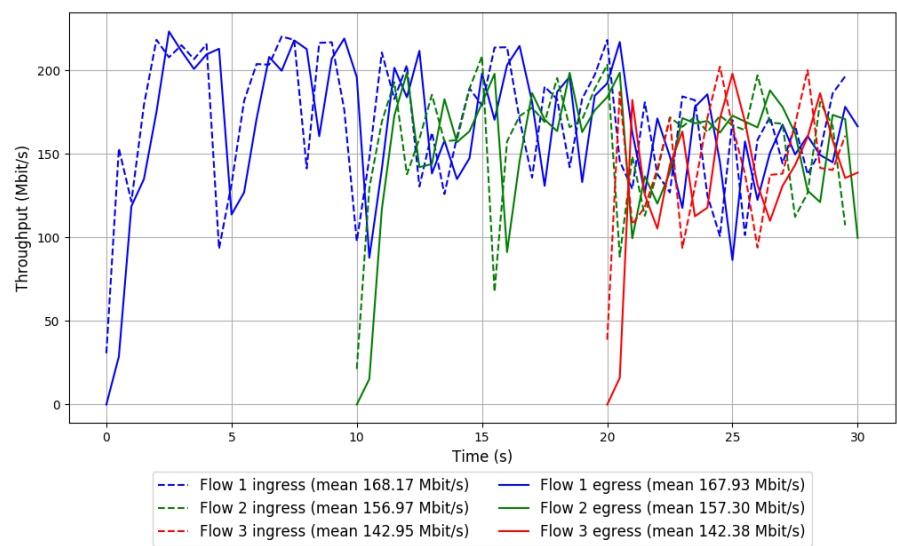


Run 5: Statistics of TaoVA-100x

Start at: 2019-09-18 18:42:12  
End at: 2019-09-18 18:42:42  
Local clock offset: 0.007 ms  
Remote clock offset: -0.143 ms

# Below is generated by plot.py at 2019-09-18 22:31:24  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 319.37 Mbit/s  
95th percentile per-packet one-way delay: 81.289 ms  
Loss rate: 0.67%  
-- Flow 1:  
Average throughput: 167.93 Mbit/s  
95th percentile per-packet one-way delay: 80.659 ms  
Loss rate: 0.55%  
-- Flow 2:  
Average throughput: 157.30 Mbit/s  
95th percentile per-packet one-way delay: 78.898 ms  
Loss rate: 0.41%  
-- Flow 3:  
Average throughput: 142.38 Mbit/s  
95th percentile per-packet one-way delay: 88.863 ms  
Loss rate: 1.65%

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





Run 1: Statistics of TCP Vegas

Start at: 2019-09-18 16:08:29

End at: 2019-09-18 16:08:59

Local clock offset: 0.039 ms

Remote clock offset: 0.003 ms

# Below is generated by plot.py at 2019-09-18 22:35:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 688.91 Mbit/s

95th percentile per-packet one-way delay: 158.386 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 350.24 Mbit/s

95th percentile per-packet one-way delay: 149.946 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 353.04 Mbit/s

95th percentile per-packet one-way delay: 144.758 ms

Loss rate: 0.76%

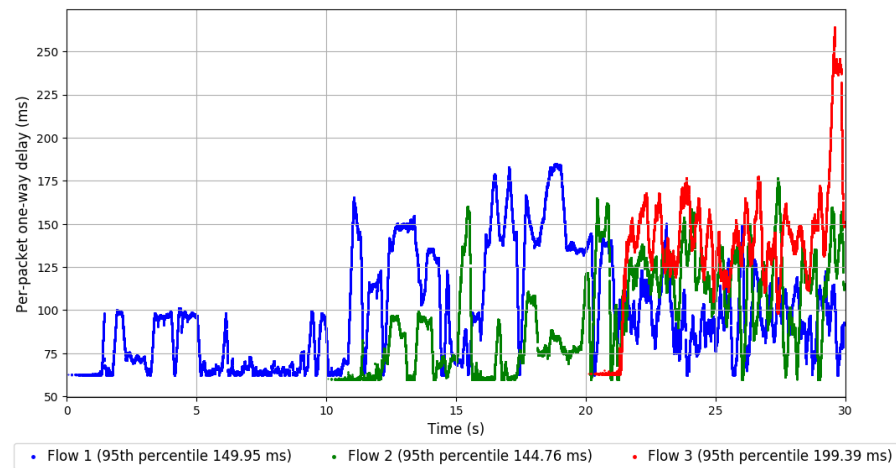
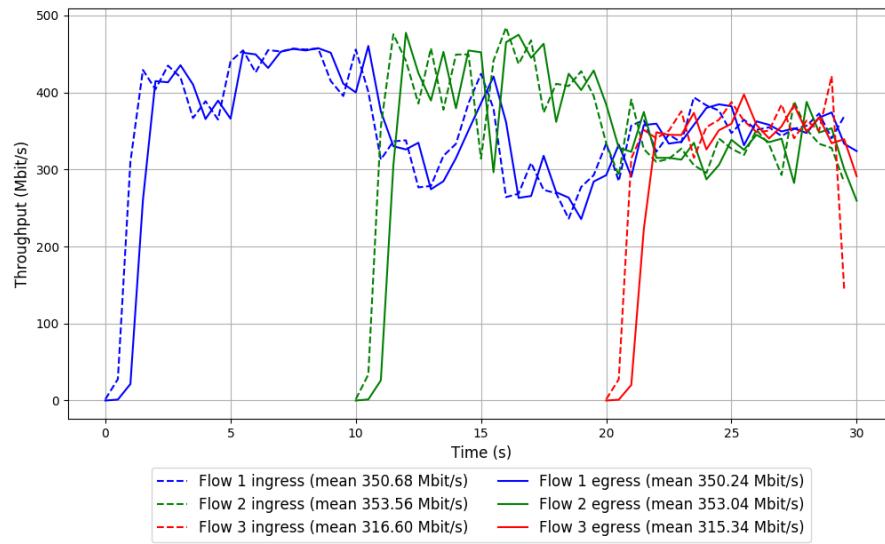
-- Flow 3:

Average throughput: 315.34 Mbit/s

95th percentile per-packet one-way delay: 199.394 ms

Loss rate: 0.67%

# Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2019-09-18 16:47:46

End at: 2019-09-18 16:48:16

Local clock offset: 0.0 ms

Remote clock offset: 0.501 ms

# Below is generated by plot.py at 2019-09-18 22:35:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 686.33 Mbit/s

95th percentile per-packet one-way delay: 139.812 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 390.61 Mbit/s

95th percentile per-packet one-way delay: 131.690 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 337.39 Mbit/s

95th percentile per-packet one-way delay: 182.956 ms

Loss rate: 1.18%

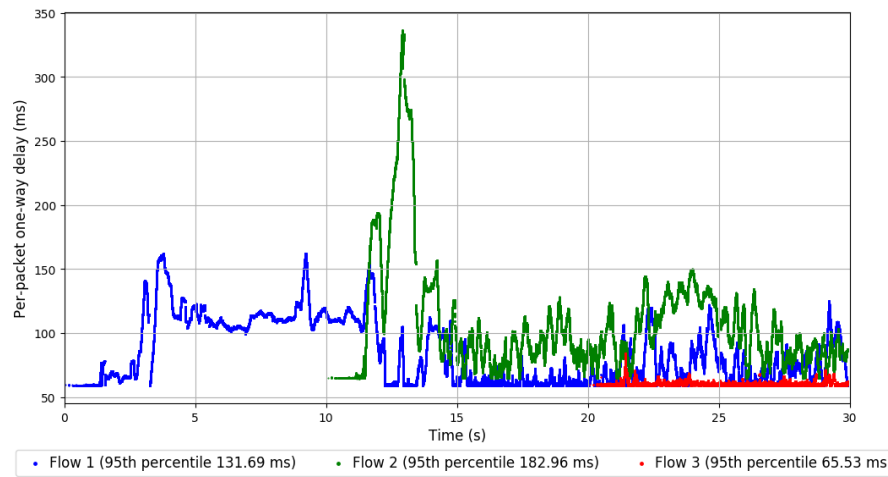
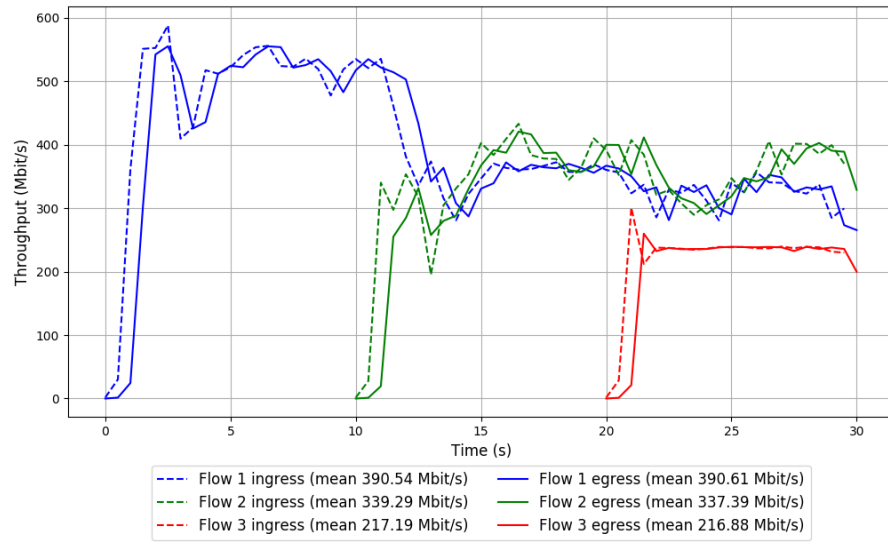
-- Flow 3:

Average throughput: 216.88 Mbit/s

95th percentile per-packet one-way delay: 65.535 ms

Loss rate: 1.37%

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



Run 3: Statistics of TCP Vegas

Start at: 2019-09-18 17:27:23

End at: 2019-09-18 17:27:53

Local clock offset: -0.259 ms

Remote clock offset: 0.909 ms

# Below is generated by plot.py at 2019-09-18 22:43:57

# Datalink statistics

-- Total of 3 flows:

Average throughput: 717.68 Mbit/s

95th percentile per-packet one-way delay: 135.559 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 384.74 Mbit/s

95th percentile per-packet one-way delay: 146.425 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 332.97 Mbit/s

95th percentile per-packet one-way delay: 126.400 ms

Loss rate: 0.84%

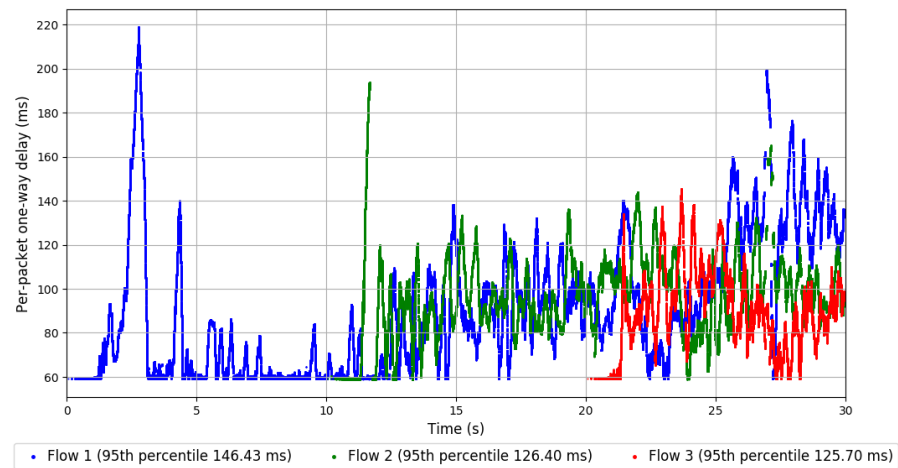
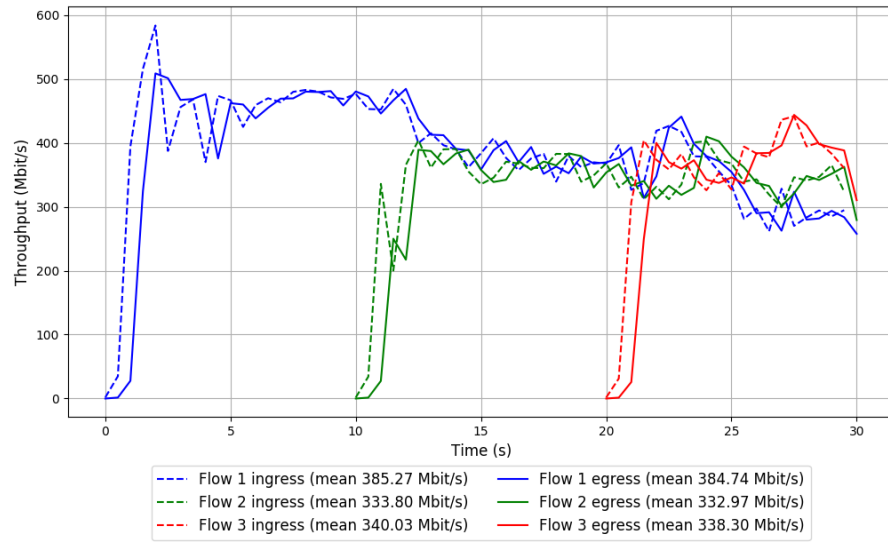
-- Flow 3:

Average throughput: 338.30 Mbit/s

95th percentile per-packet one-way delay: 125.698 ms

Loss rate: 1.72%

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



Run 4: Statistics of TCP Vegas

Start at: 2019-09-18 18:06:28

End at: 2019-09-18 18:06:58

Local clock offset: -0.053 ms

Remote clock offset: 0.074 ms

# Below is generated by plot.py at 2019-09-18 22:48:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 652.96 Mbit/s

95th percentile per-packet one-way delay: 172.574 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 357.90 Mbit/s

95th percentile per-packet one-way delay: 170.094 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 313.17 Mbit/s

95th percentile per-packet one-way delay: 184.112 ms

Loss rate: 0.70%

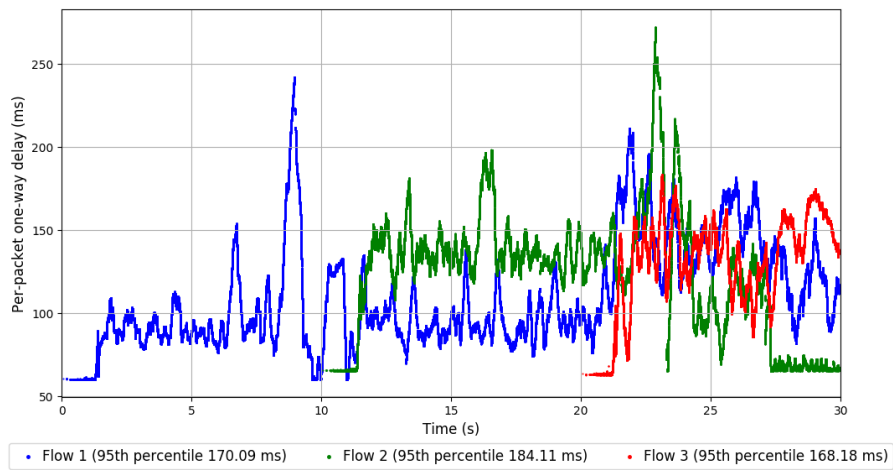
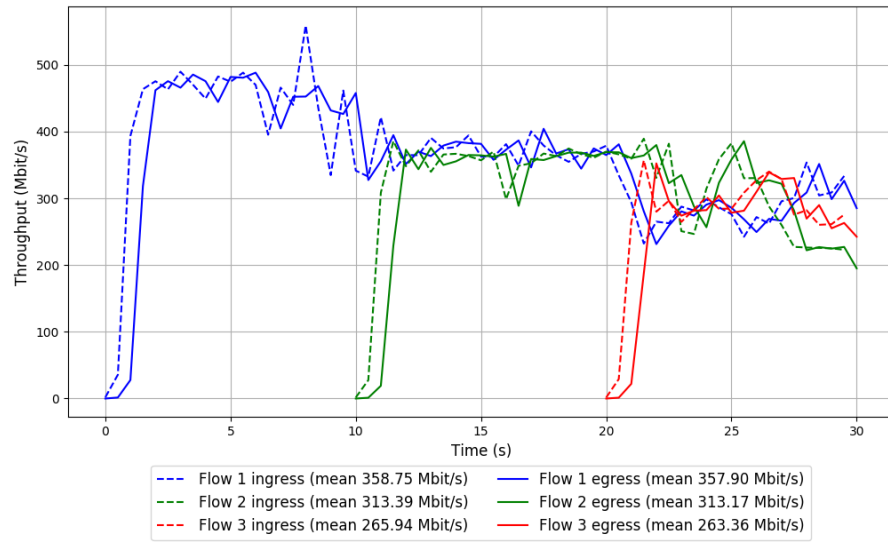
-- Flow 3:

Average throughput: 263.36 Mbit/s

95th percentile per-packet one-way delay: 168.177 ms

Loss rate: 2.19%

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



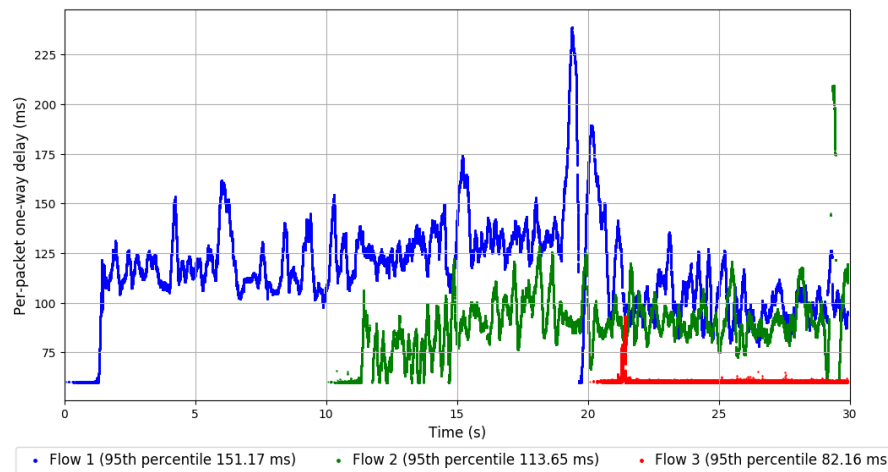
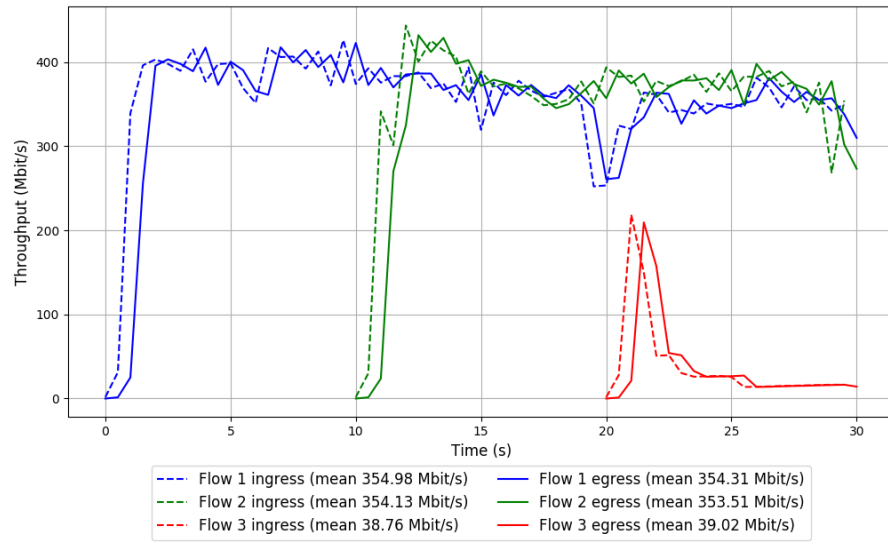


Run 5: Statistics of TCP Vegas

Start at: 2019-09-18 18:45:34  
End at: 2019-09-18 18:46:04  
Local clock offset: 0.019 ms  
Remote clock offset: -0.036 ms

# Below is generated by plot.py at 2019-09-18 22:48:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 602.21 Mbit/s  
95th percentile per-packet one-way delay: 142.070 ms  
Loss rate: 0.67%  
-- Flow 1:  
Average throughput: 354.31 Mbit/s  
95th percentile per-packet one-way delay: 151.169 ms  
Loss rate: 0.60%  
-- Flow 2:  
Average throughput: 353.51 Mbit/s  
95th percentile per-packet one-way delay: 113.652 ms  
Loss rate: 0.79%  
-- Flow 3:  
Average throughput: 39.02 Mbit/s  
95th percentile per-packet one-way delay: 82.159 ms  
Loss rate: 0.56%

# Run 5: Report of TCP Vegas — Data Link

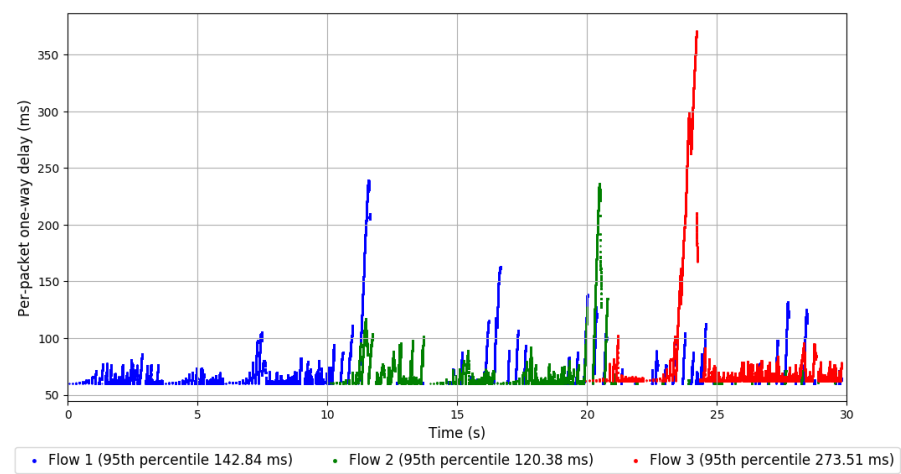
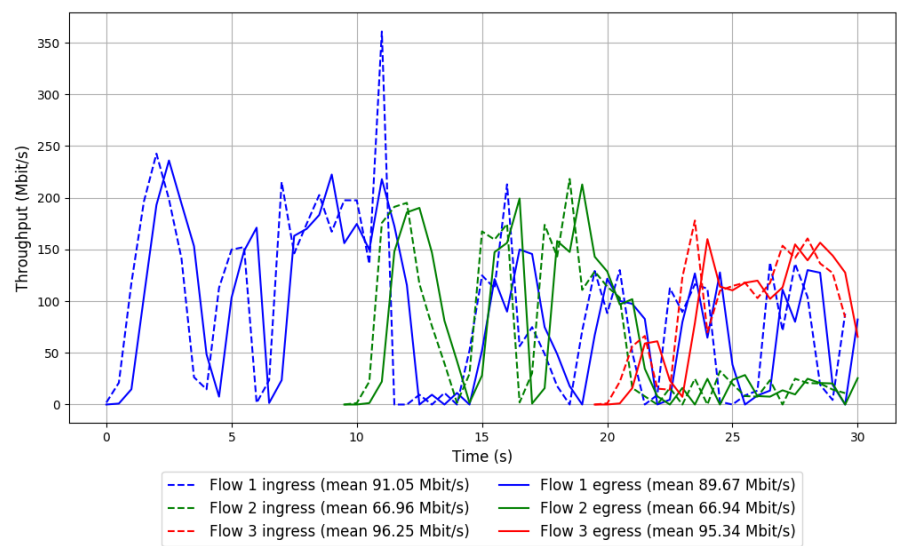


Run 1: Statistics of Verus

Start at: 2019-09-18 15:45:13  
End at: 2019-09-18 15:45:43  
Local clock offset: 0.038 ms  
Remote clock offset: -0.141 ms

# Below is generated by plot.py at 2019-09-18 22:48:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 165.28 Mbit/s  
95th percentile per-packet one-way delay: 156.425 ms  
Loss rate: 1.25%  
-- Flow 1:  
Average throughput: 89.67 Mbit/s  
95th percentile per-packet one-way delay: 142.842 ms  
Loss rate: 1.53%  
-- Flow 2:  
Average throughput: 66.94 Mbit/s  
95th percentile per-packet one-way delay: 120.379 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 95.34 Mbit/s  
95th percentile per-packet one-way delay: 273.506 ms  
Loss rate: 2.15%

Run 1: Report of Verus — Data Link

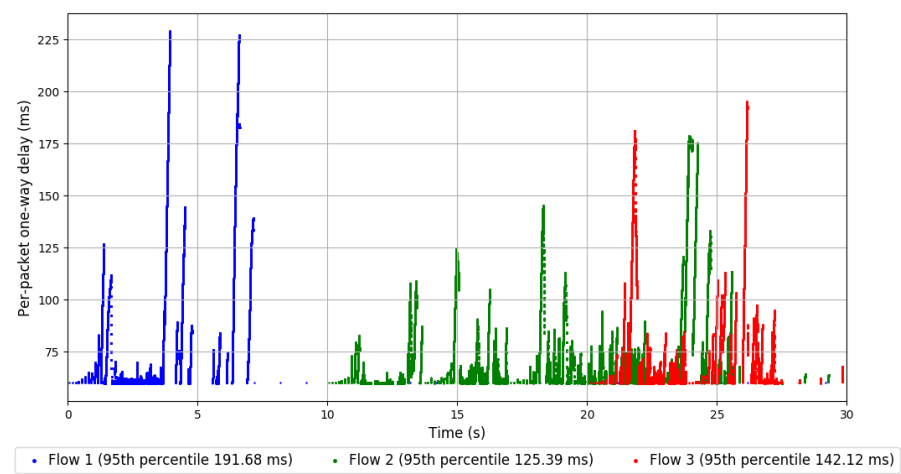
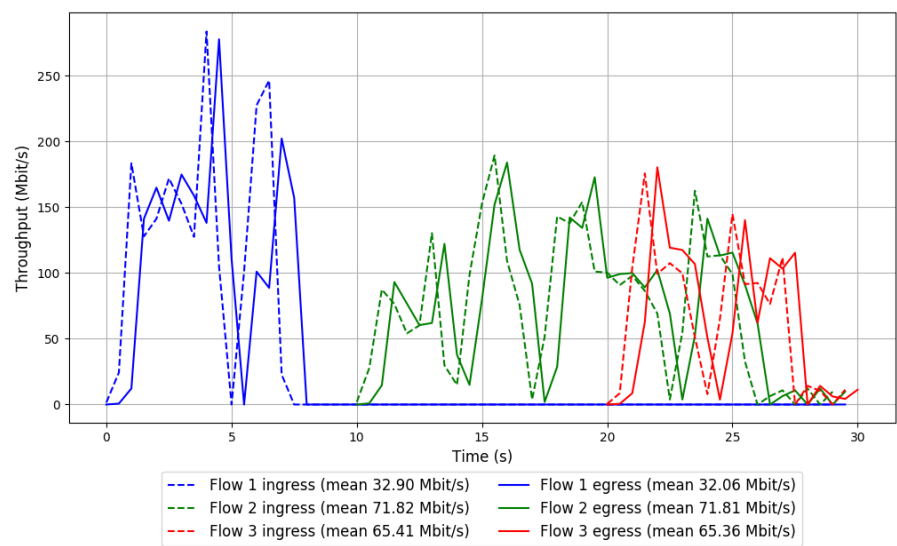


Run 2: Statistics of Verus

Start at: 2019-09-18 16:24:47  
End at: 2019-09-18 16:25:17  
Local clock offset: -0.007 ms  
Remote clock offset: -0.013 ms

# Below is generated by plot.py at 2019-09-18 22:48:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 99.09 Mbit/s  
95th percentile per-packet one-way delay: 151.638 ms  
Loss rate: 0.82%  
-- Flow 1:  
Average throughput: 32.06 Mbit/s  
95th percentile per-packet one-way delay: 191.680 ms  
Loss rate: 2.53%  
-- Flow 2:  
Average throughput: 71.81 Mbit/s  
95th percentile per-packet one-way delay: 125.388 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 65.36 Mbit/s  
95th percentile per-packet one-way delay: 142.124 ms  
Loss rate: 0.00%

Run 2: Report of Verus — Data Link

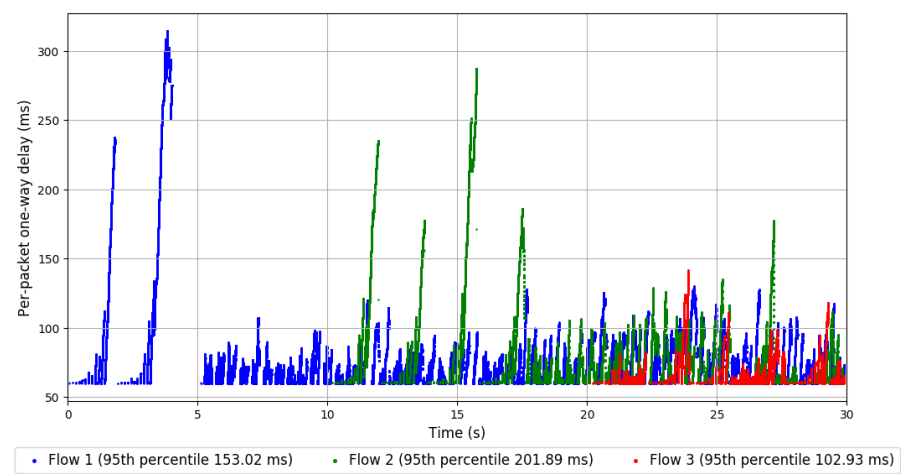
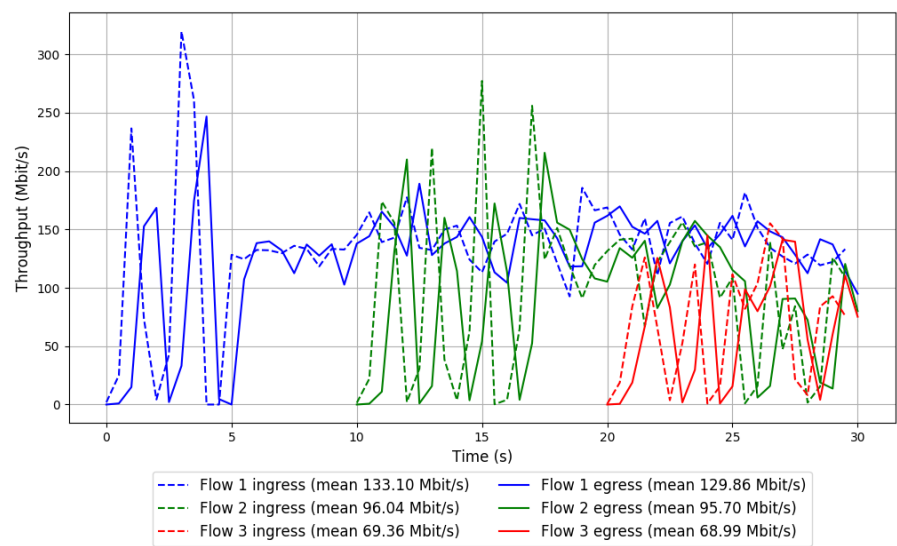


Run 3: Statistics of Verus

Start at: 2019-09-18 17:04:06  
End at: 2019-09-18 17:04:36  
Local clock offset: 0.013 ms  
Remote clock offset: -0.087 ms

# Below is generated by plot.py at 2019-09-18 22:48:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 216.17 Mbit/s  
95th percentile per-packet one-way delay: 172.656 ms  
Loss rate: 2.04%  
-- Flow 1:  
Average throughput: 129.86 Mbit/s  
95th percentile per-packet one-way delay: 153.018 ms  
Loss rate: 2.77%  
-- Flow 2:  
Average throughput: 95.70 Mbit/s  
95th percentile per-packet one-way delay: 201.886 ms  
Loss rate: 0.94%  
-- Flow 3:  
Average throughput: 68.99 Mbit/s  
95th percentile per-packet one-way delay: 102.934 ms  
Loss rate: 0.83%

Run 3: Report of Verus — Data Link



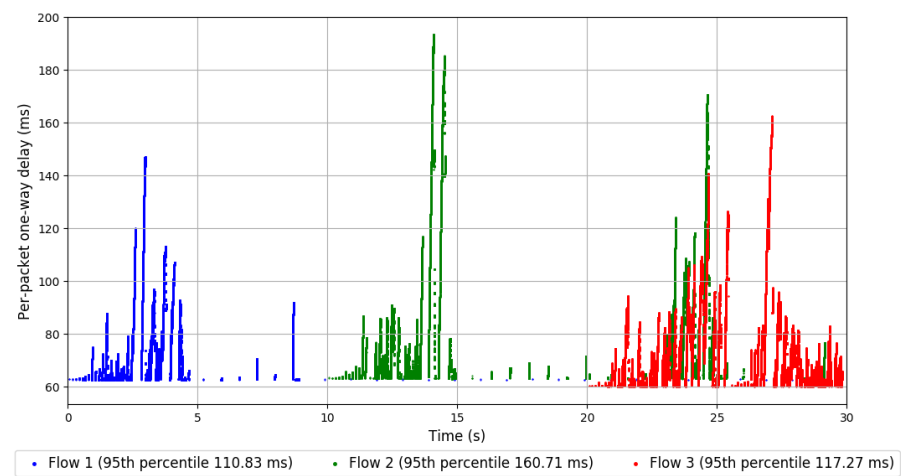
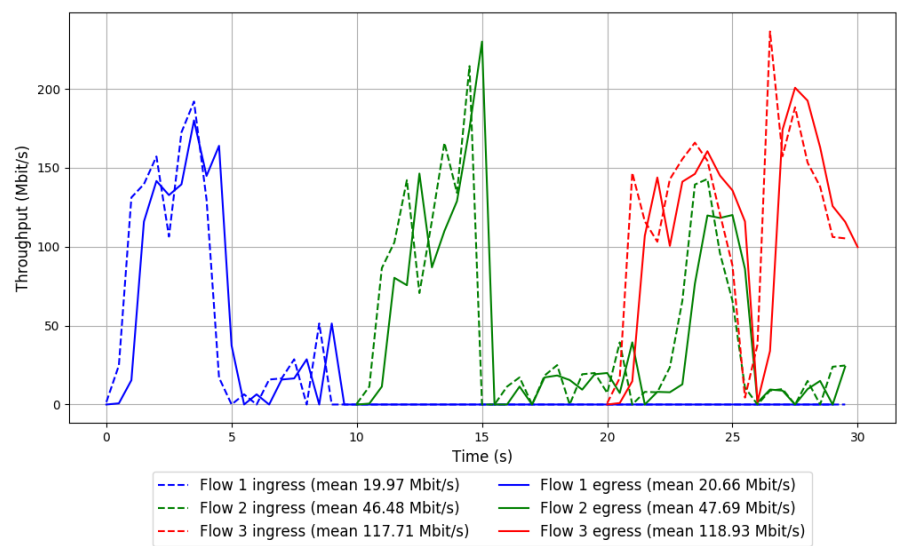


Run 4: Statistics of Verus

Start at: 2019-09-18 17:43:48  
End at: 2019-09-18 17:44:18  
Local clock offset: -0.202 ms  
Remote clock offset: -0.134 ms

# Below is generated by plot.py at 2019-09-18 22:48:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 89.57 Mbit/s  
95th percentile per-packet one-way delay: 131.649 ms  
Loss rate: 0.83%  
-- Flow 1:  
Average throughput: 20.66 Mbit/s  
95th percentile per-packet one-way delay: 110.833 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 47.69 Mbit/s  
95th percentile per-packet one-way delay: 160.709 ms  
Loss rate: 1.34%  
-- Flow 3:  
Average throughput: 118.93 Mbit/s  
95th percentile per-packet one-way delay: 117.272 ms  
Loss rate: 0.85%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2019-09-18 18:22:43

End at: 2019-09-18 18:23:13

Local clock offset: -0.028 ms

Remote clock offset: 0.688 ms

# Below is generated by plot.py at 2019-09-18 22:48:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 188.25 Mbit/s

95th percentile per-packet one-way delay: 115.089 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 138.41 Mbit/s

95th percentile per-packet one-way delay: 102.990 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 34.28 Mbit/s

95th percentile per-packet one-way delay: 98.129 ms

Loss rate: 0.00%

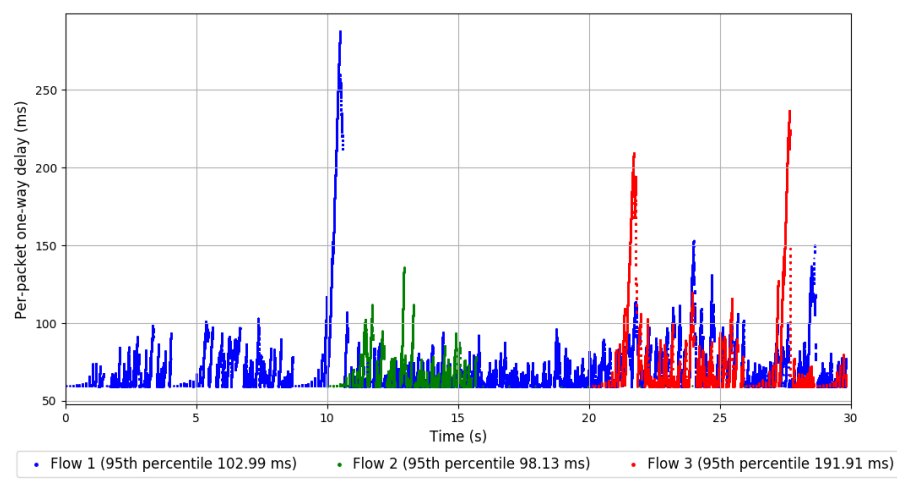
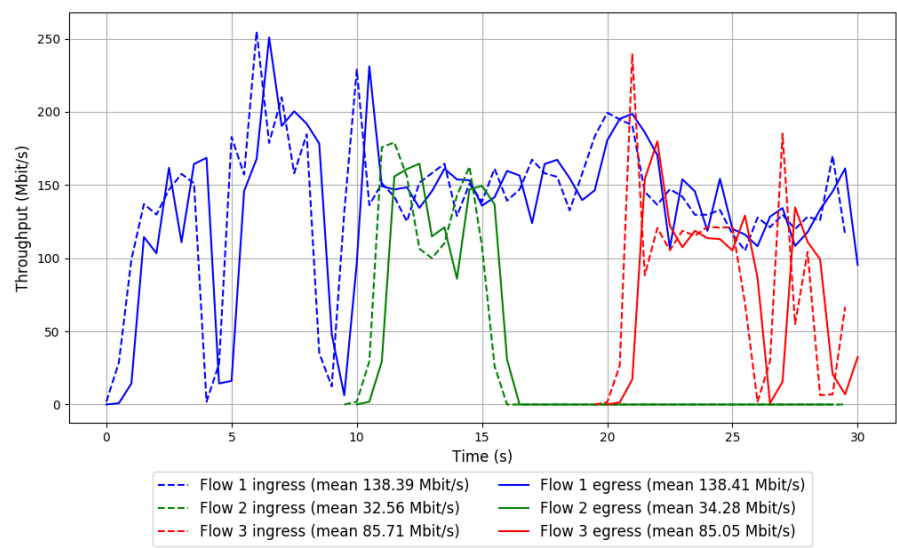
-- Flow 3:

Average throughput: 85.05 Mbit/s

95th percentile per-packet one-way delay: 191.907 ms

Loss rate: 2.01%

Run 5: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2019-09-18 15:59:50

End at: 2019-09-18 16:00:20

Local clock offset: 0.037 ms

Remote clock offset: 0.02 ms

# Below is generated by plot.py at 2019-09-18 22:48:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 363.39 Mbit/s

95th percentile per-packet one-way delay: 100.011 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 183.55 Mbit/s

95th percentile per-packet one-way delay: 87.289 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 194.07 Mbit/s

95th percentile per-packet one-way delay: 108.346 ms

Loss rate: 0.65%

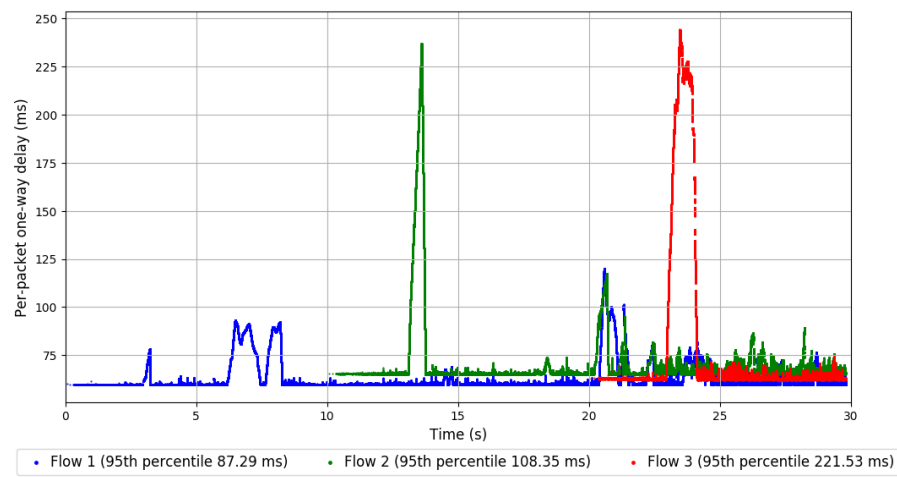
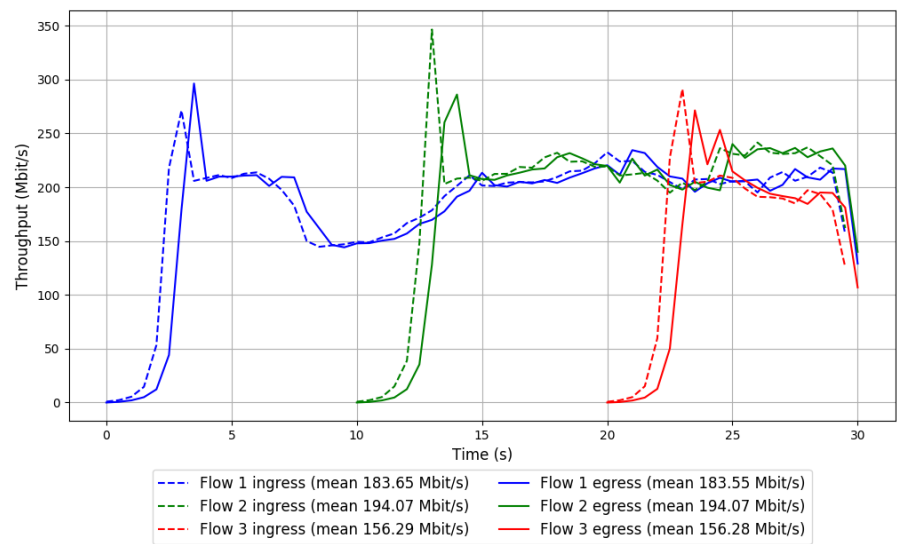
-- Flow 3:

Average throughput: 156.28 Mbit/s

95th percentile per-packet one-way delay: 221.531 ms

Loss rate: 1.34%

Run 1: Report of PCC-Vivace — Data Link

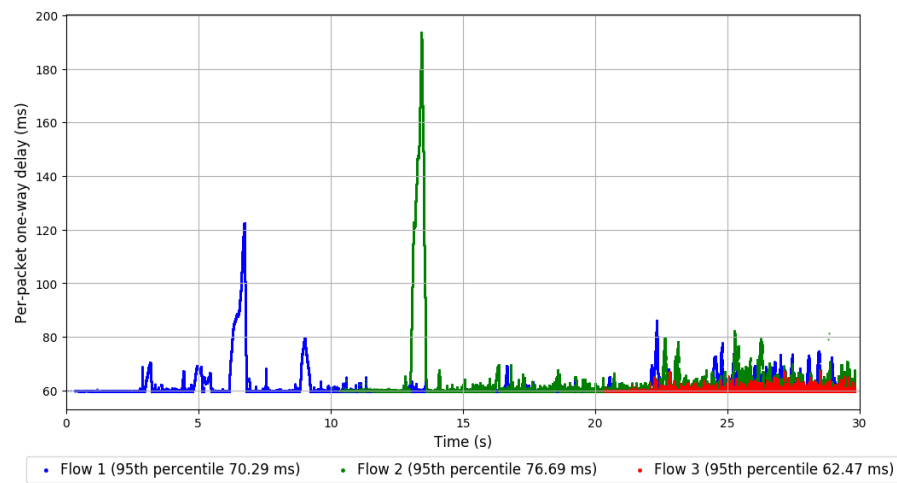
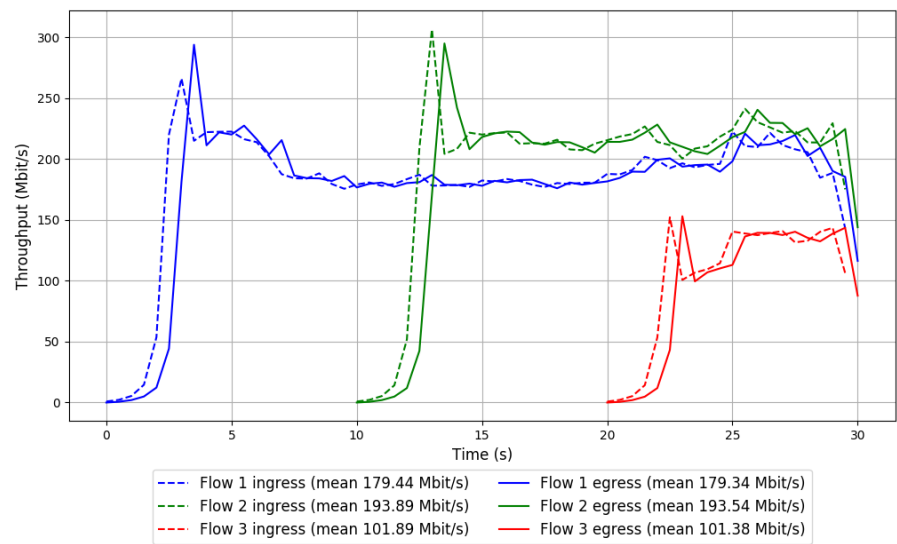


Run 2: Statistics of PCC-Vivace

Start at: 2019-09-18 16:38:58  
End at: 2019-09-18 16:39:28  
Local clock offset: -0.007 ms  
Remote clock offset: -0.064 ms

# Below is generated by plot.py at 2019-09-18 22:48:33  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 340.97 Mbit/s  
95th percentile per-packet one-way delay: 71.108 ms  
Loss rate: 0.72%  
-- Flow 1:  
Average throughput: 179.34 Mbit/s  
95th percentile per-packet one-way delay: 70.291 ms  
Loss rate: 0.46%  
-- Flow 2:  
Average throughput: 193.54 Mbit/s  
95th percentile per-packet one-way delay: 76.688 ms  
Loss rate: 0.81%  
-- Flow 3:  
Average throughput: 101.38 Mbit/s  
95th percentile per-packet one-way delay: 62.467 ms  
Loss rate: 1.74%

Run 2: Report of PCC-Vivace — Data Link





Run 3: Statistics of PCC-Vivace

Start at: 2019-09-18 17:18:35

End at: 2019-09-18 17:19:05

Local clock offset: -0.198 ms

Remote clock offset: 0.111 ms

# Below is generated by plot.py at 2019-09-18 22:48:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 334.77 Mbit/s

95th percentile per-packet one-way delay: 179.824 ms

Loss rate: 1.32%

-- Flow 1:

Average throughput: 194.14 Mbit/s

95th percentile per-packet one-way delay: 143.699 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 169.94 Mbit/s

95th percentile per-packet one-way delay: 252.326 ms

Loss rate: 2.81%

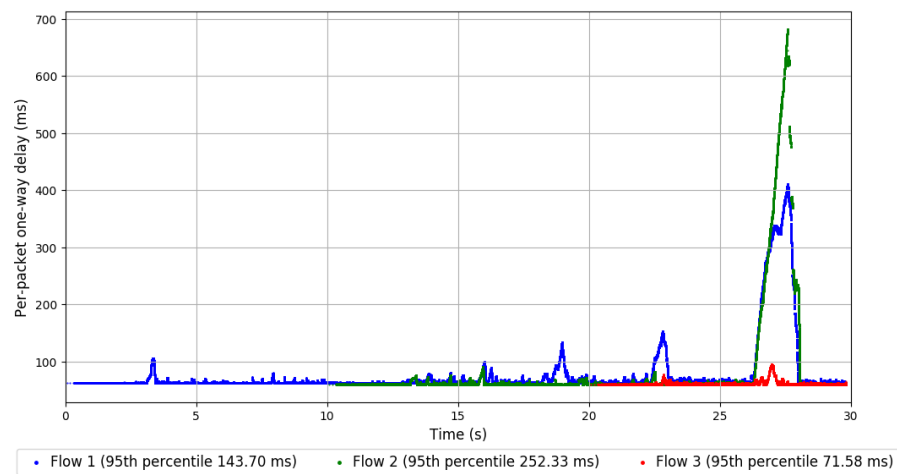
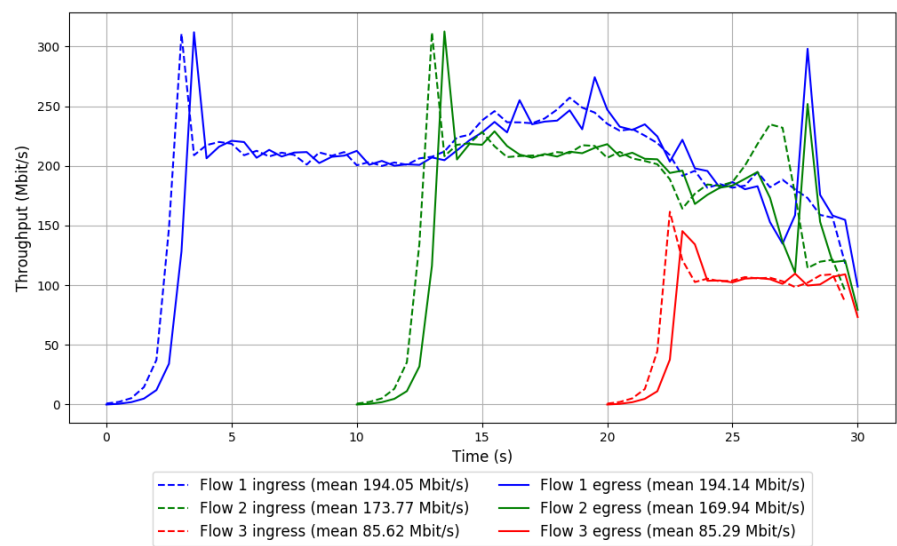
-- Flow 3:

Average throughput: 85.29 Mbit/s

95th percentile per-packet one-way delay: 71.580 ms

Loss rate: 1.57%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2019-09-18 17:57:45

End at: 2019-09-18 17:58:15

Local clock offset: -0.095 ms

Remote clock offset: 0.603 ms

# Below is generated by plot.py at 2019-09-18 22:49:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 353.05 Mbit/s

95th percentile per-packet one-way delay: 85.608 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 193.22 Mbit/s

95th percentile per-packet one-way delay: 82.581 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 165.60 Mbit/s

95th percentile per-packet one-way delay: 79.394 ms

Loss rate: 0.64%

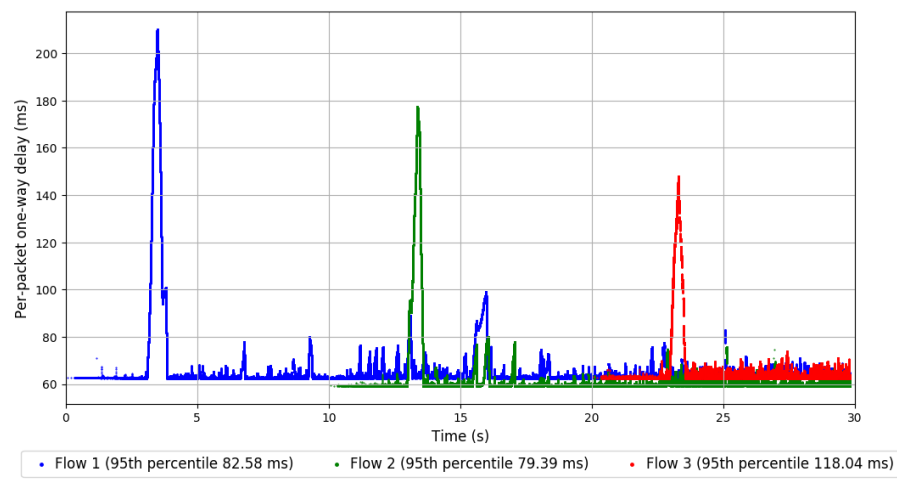
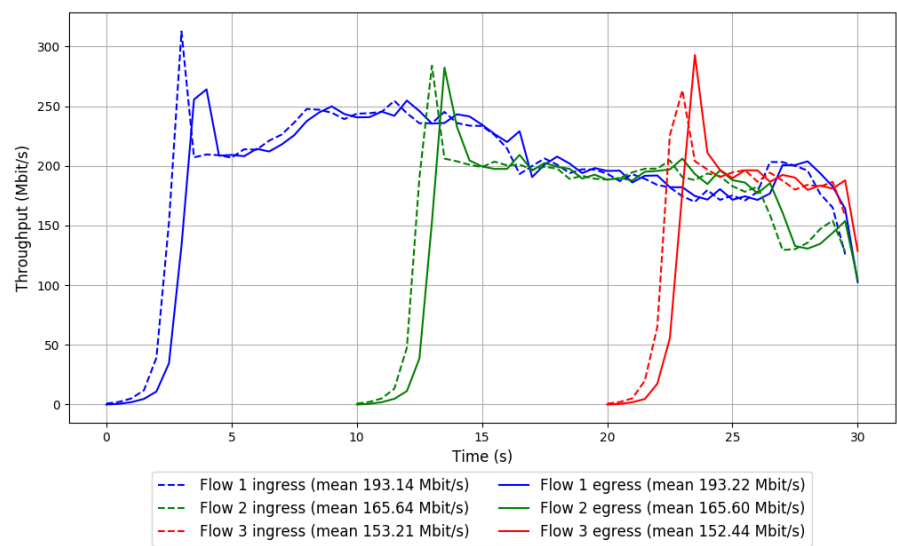
-- Flow 3:

Average throughput: 152.44 Mbit/s

95th percentile per-packet one-way delay: 118.038 ms

Loss rate: 1.77%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2019-09-18 18:37:01

End at: 2019-09-18 18:37:31

Local clock offset: -0.023 ms

Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2019-09-18 22:49:23

# Datalink statistics

-- Total of 3 flows:

Average throughput: 343.89 Mbit/s

95th percentile per-packet one-way delay: 80.023 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 198.46 Mbit/s

95th percentile per-packet one-way delay: 78.158 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 173.04 Mbit/s

95th percentile per-packet one-way delay: 104.254 ms

Loss rate: 0.55%

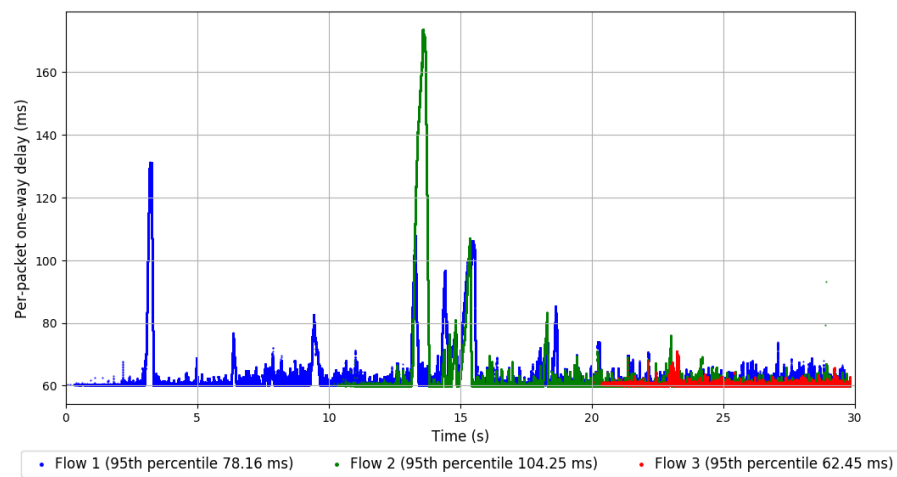
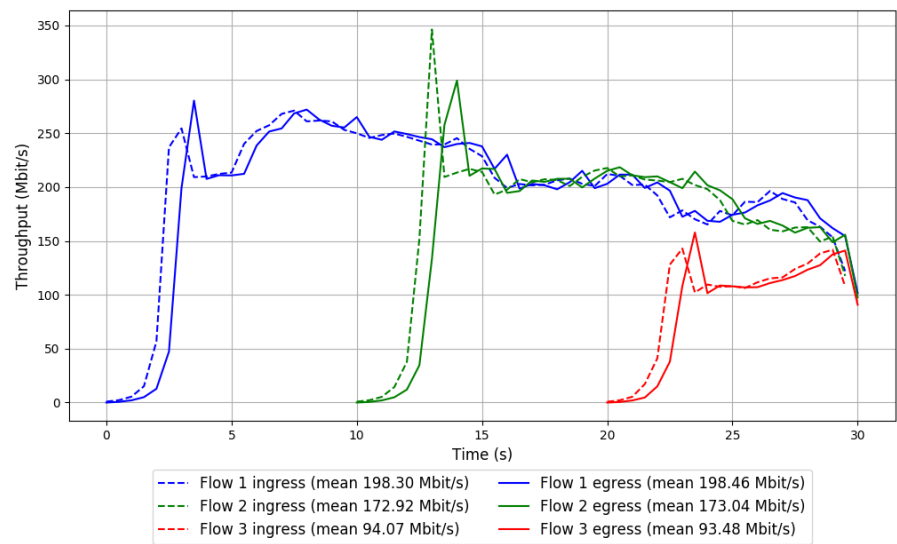
-- Flow 3:

Average throughput: 93.48 Mbit/s

95th percentile per-packet one-way delay: 62.445 ms

Loss rate: 1.87%

Run 5: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2019-09-18 15:54:54

End at: 2019-09-18 15:55:24

Local clock offset: 0.055 ms

Remote clock offset: 0.039 ms

# Below is generated by plot.py at 2019-09-18 22:49:23

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 62.244 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 62.261 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 62.274 ms

Loss rate: 0.05%

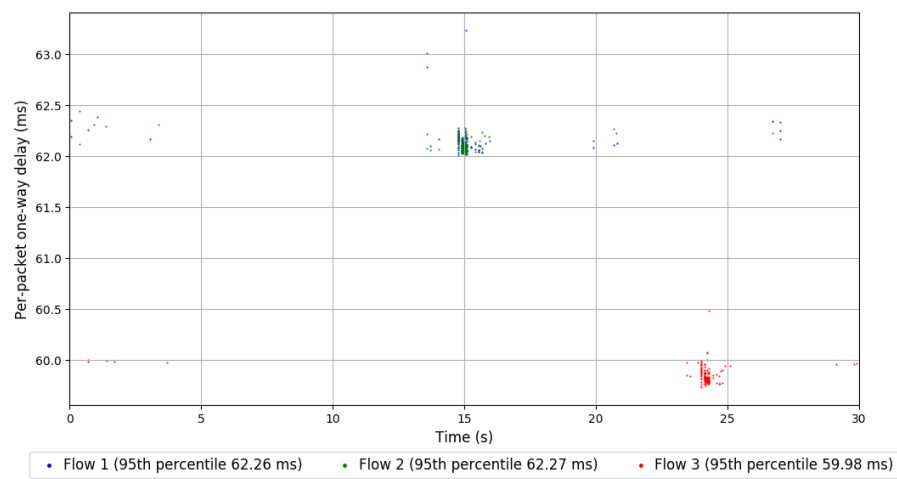
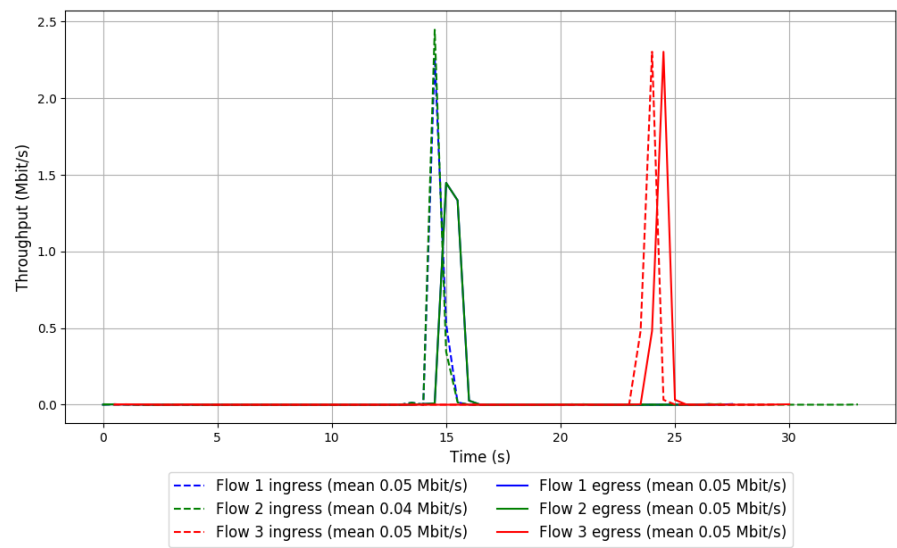
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 59.983 ms

Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link



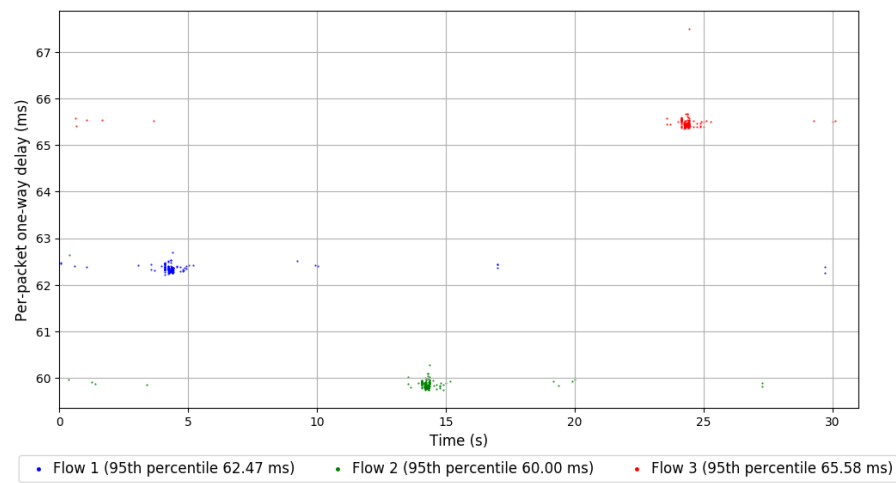
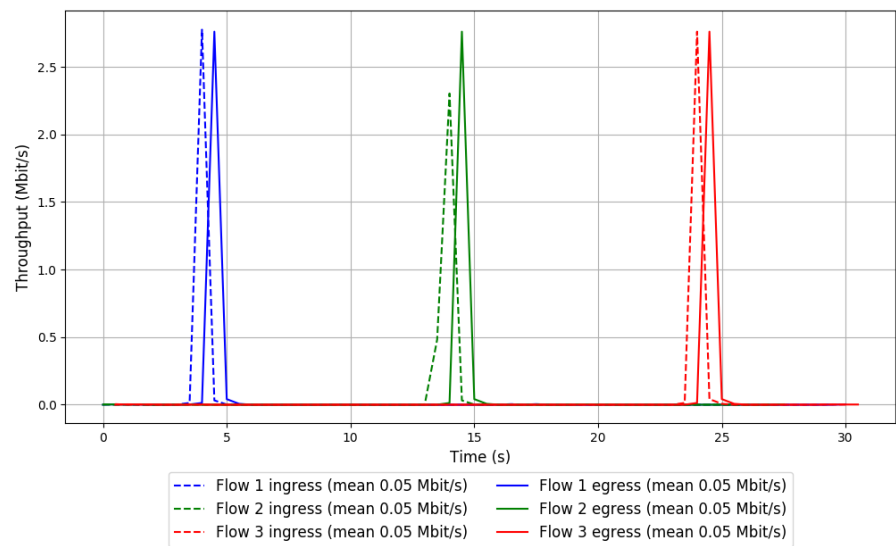


Run 2: Statistics of WebRTC media

Start at: 2019-09-18 16:34:08  
End at: 2019-09-18 16:34:38  
Local clock offset: -0.007 ms  
Remote clock offset: -0.047 ms

# Below is generated by plot.py at 2019-09-18 22:49:23  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.14 Mbit/s  
95th percentile per-packet one-way delay: 65.532 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 62.471 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 59.999 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 65.583 ms  
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2019-09-18 17:13:44

End at: 2019-09-18 17:14:14

Local clock offset: -0.134 ms

Remote clock offset: 0.049 ms

# Below is generated by plot.py at 2019-09-18 22:49:23

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 62.543 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 60.200 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 59.999 ms

Loss rate: 0.00%

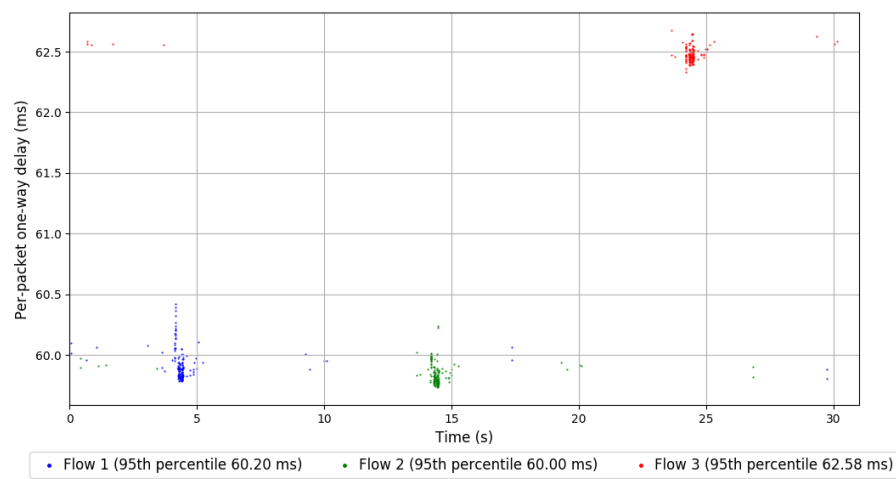
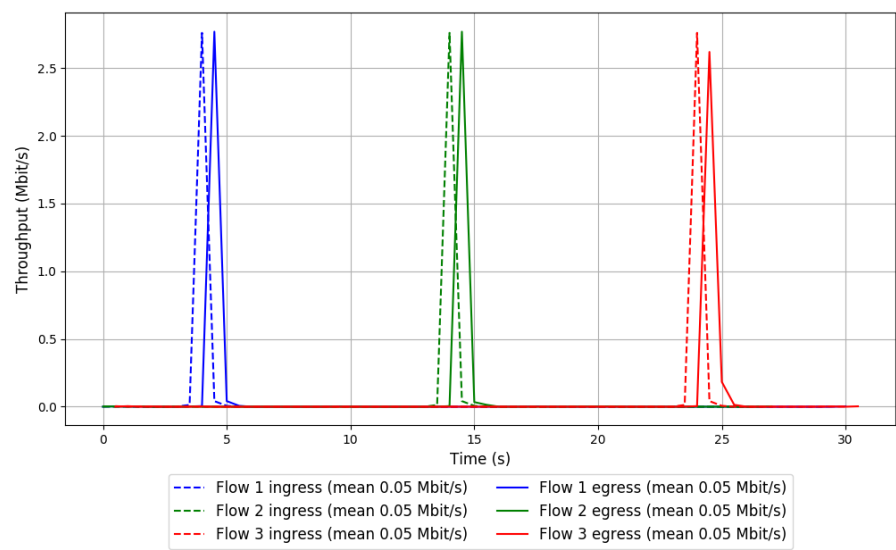
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 62.583 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

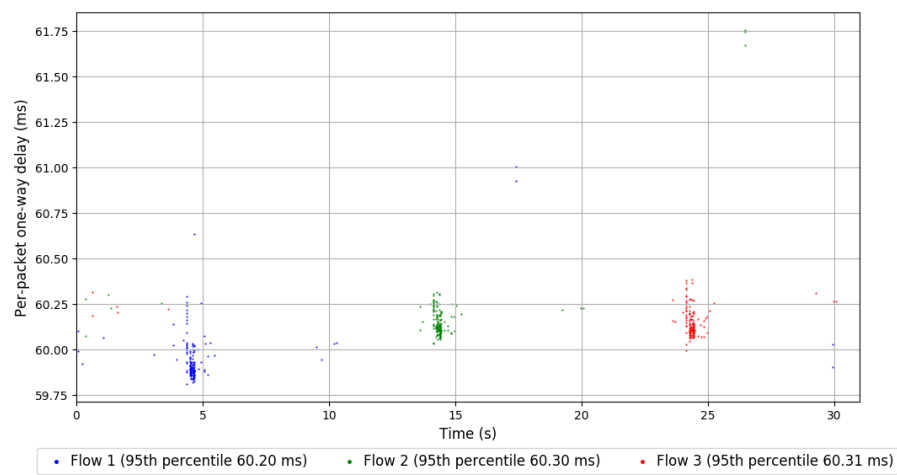
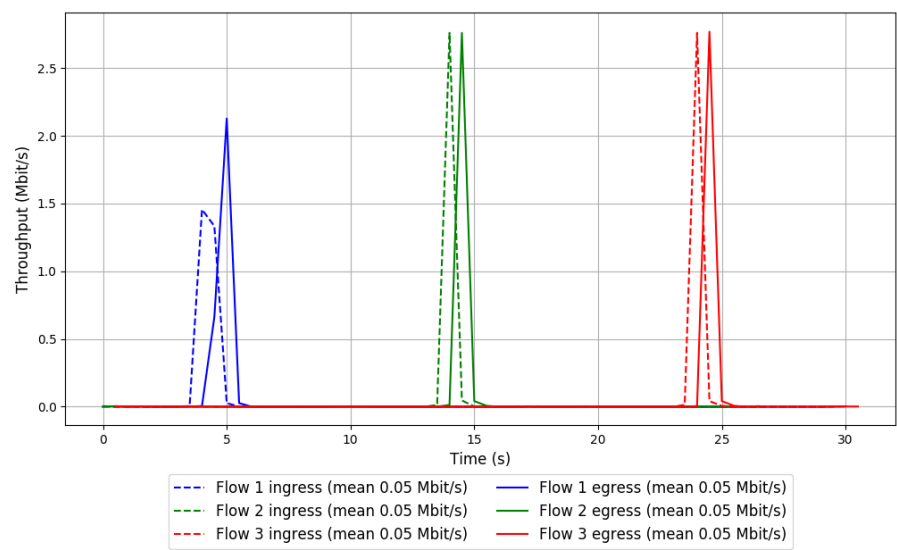


Run 4: Statistics of WebRTC media

Start at: 2019-09-18 17:52:53  
End at: 2019-09-18 17:53:23  
Local clock offset: -0.108 ms  
Remote clock offset: -0.135 ms

```
# Below is generated by plot.py at 2019-09-18 22:49:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 60.292 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.199 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.301 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.313 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-09-18 18:32:20  
End at: 2019-09-18 18:32:50  
Local clock offset: 0.016 ms  
Remote clock offset: -0.048 ms

# Below is generated by plot.py at 2019-09-18 22:49:23  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.14 Mbit/s  
95th percentile per-packet one-way delay: 63.140 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 65.737 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 60.314 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 60.217 ms  
Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

