

## Pantheon Report

Generated at 2019-07-13 08:27:26 (UTC).

Data path: GCE Tokyo on `ens4` (*remote*) → GCE Sydney 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:

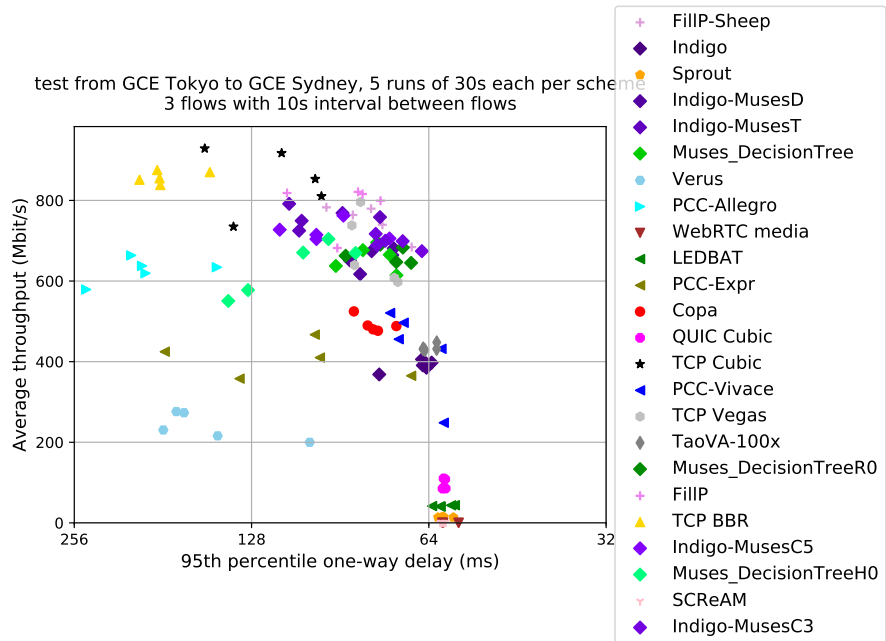
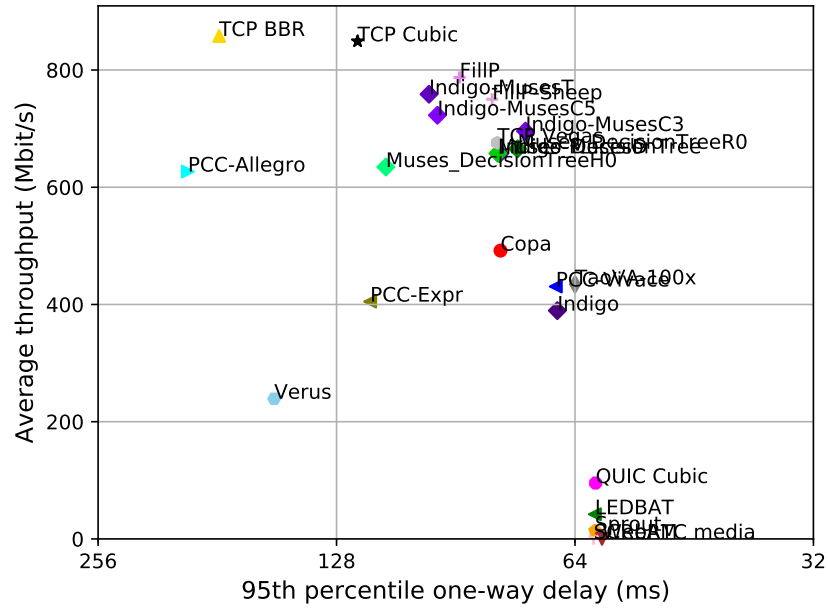
```
Linux 4.15.0-1034-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

### Git summary:

```
branch: muses @ 2076e1149a241f3edb4365d686df32342bf9561f
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/muses_dtree @ 8bb93ffff2b107204a92d8b72449fc0c55e15f00
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 Sydney, 5 runs of 30s each per scheme  
 3 flows with 10s interval between flows (mean of all runs by scheme)



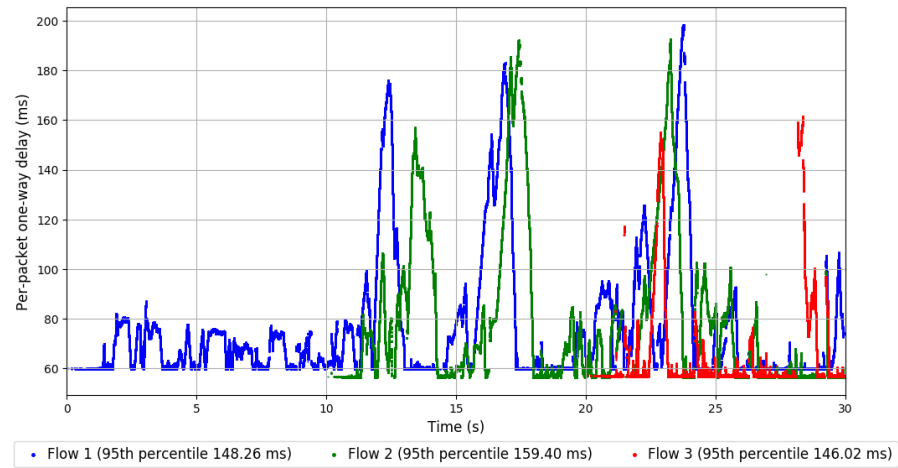
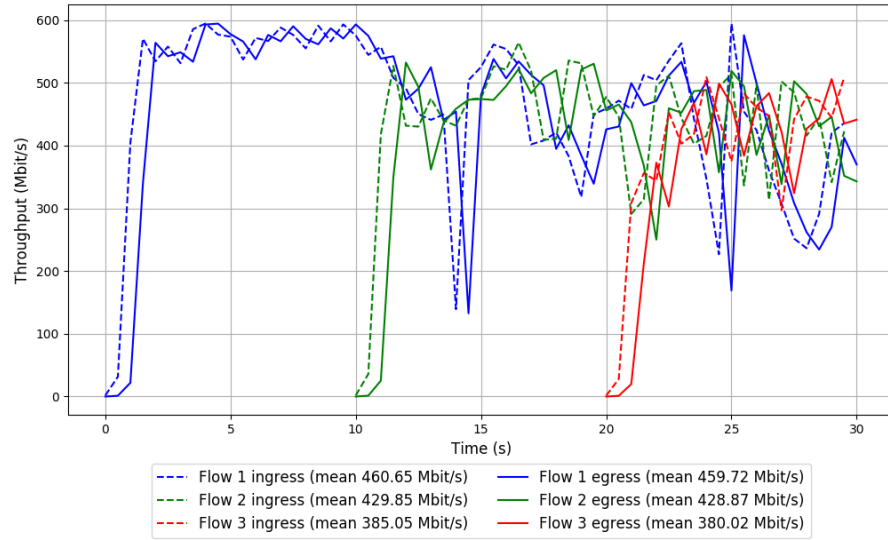
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	450.91	420.48	387.03	181.31	171.27	174.16	1.26	1.13	2.13
Copa	5	252.43	257.90	206.93	74.63	82.80	81.45	0.49	0.71	1.60
TCP Cubic	5	443.25	454.46	319.36	101.40	109.32	107.06	0.52	0.71	1.59
FillP	5	482.48	336.16	249.10	101.99	66.26	60.64	0.79	0.64	1.08
FillP-Sheep	5	465.24	309.77	242.06	84.37	63.27	63.31	0.40	0.66	1.61
Indigo	5	209.49	191.13	161.02	65.54	68.05	72.93	0.44	0.70	1.36
Indigo-MusesC3	5	419.29	340.50	240.06	77.42	67.00	62.71	0.39	0.73	2.54
Indigo-MusesC5	5	456.87	379.87	93.41	96.87	89.92	58.87	0.44	0.69	2.13
Indigo-MusesD	5	392.64	327.80	222.42	82.06	73.89	62.92	0.30	0.54	2.31
Indigo-MusesT	5	460.65	370.04	253.62	102.35	76.43	65.15	0.34	0.66	2.26
LEDBAT	5	27.28	18.05	8.78	60.00	59.83	58.82	0.62	1.18	2.40
Muses_DecisionTree	5	388.36	303.79	220.81	76.46	93.23	67.33	0.55	0.55	1.63
Muses_DecisionTreeH0	5	356.27	314.24	226.22	115.23	99.25	100.52	0.53	0.58	2.11
Muses_DecisionTreeR0	5	391.89	309.85	223.21	73.62	81.86	76.28	0.43	0.62	1.48
PCC-Allegro	5	361.12	280.65	243.53	198.86	173.18	158.60	4.28	4.77	1.91
PCC-Expr	5	229.45	225.06	79.61	94.11	113.09	62.84	0.58	2.40	2.93
QUIC Cubic	5	57.80	40.05	32.13	58.39	58.37	59.04	0.62	1.19	0.98
SCReAM	5	0.22	0.22	0.22	59.33	58.07	59.38	0.43	0.68	1.18
Sprout	5	7.10	7.08	6.71	59.90	58.51	60.64	0.33	0.58	1.23
TaoVA-100x	5	229.42	211.62	195.49	62.45	64.56	66.37	0.52	0.57	1.17
TCP Vegas	5	326.81	343.56	366.19	69.58	80.95	79.23	0.46	0.58	1.40
Verus	5	123.99	128.97	92.05	149.70	114.37	111.57	0.46	0.97	3.65
PCC-Vivace	5	274.00	181.62	110.37	69.39	67.19	66.81	0.53	0.99	1.91
WebRTC media	5	0.05	0.05	0.05	58.47	58.85	59.13	0.00	0.01	0.00

Run 1: Statistics of TCP BBR

Start at: 2019-07-13 01:53:42  
End at: 2019-07-13 01:54:12  
Local clock offset: -0.432 ms  
Remote clock offset: -0.099 ms

# Below is generated by plot.py at 2019-07-13 05:49:00  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 870.25 Mbit/s  
95th percentile per-packet one-way delay: 150.657 ms  
Loss rate: 0.95%  
-- Flow 1:  
Average throughput: 459.72 Mbit/s  
95th percentile per-packet one-way delay: 148.263 ms  
Loss rate: 0.60%  
-- Flow 2:  
Average throughput: 428.87 Mbit/s  
95th percentile per-packet one-way delay: 159.399 ms  
Loss rate: 0.82%  
-- Flow 3:  
Average throughput: 380.02 Mbit/s  
95th percentile per-packet one-way delay: 146.019 ms  
Loss rate: 2.48%

# Run 1: Report of TCP BBR — Data Link

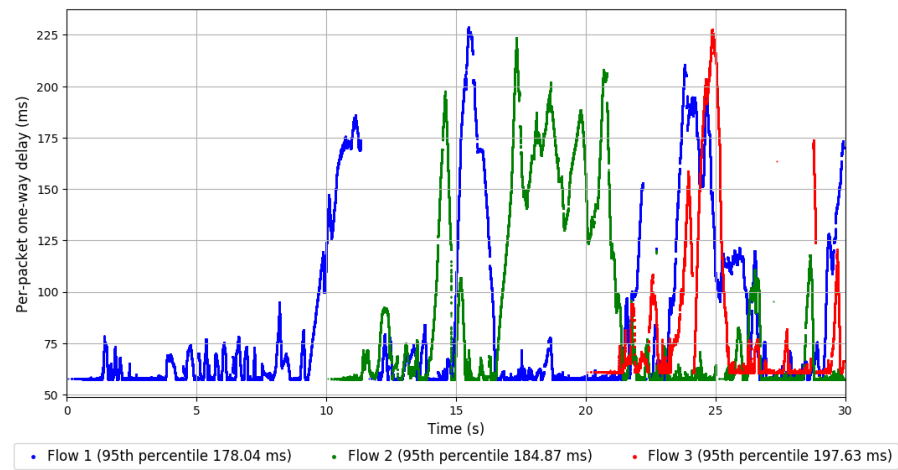
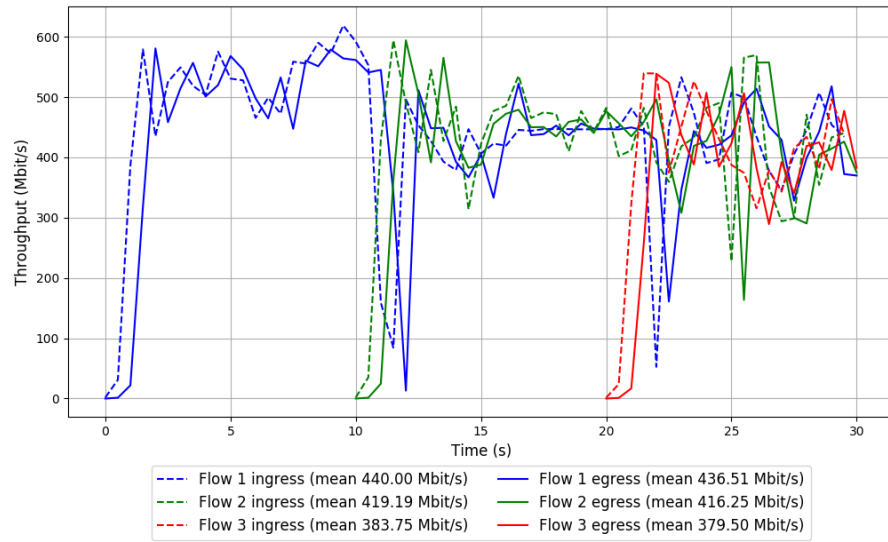


Run 2: Statistics of TCP BBR

Start at: 2019-07-13 02:34:40  
End at: 2019-07-13 02:35:10  
Local clock offset: 0.248 ms  
Remote clock offset: -0.088 ms

# Below is generated by plot.py at 2019-07-13 05:49:00  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 838.34 Mbit/s  
95th percentile per-packet one-way delay: 182.850 ms  
Loss rate: 1.40%  
-- Flow 1:  
Average throughput: 436.51 Mbit/s  
95th percentile per-packet one-way delay: 178.044 ms  
Loss rate: 1.19%  
-- Flow 2:  
Average throughput: 416.25 Mbit/s  
95th percentile per-packet one-way delay: 184.874 ms  
Loss rate: 1.29%  
-- Flow 3:  
Average throughput: 379.50 Mbit/s  
95th percentile per-packet one-way delay: 197.633 ms  
Loss rate: 2.34%

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

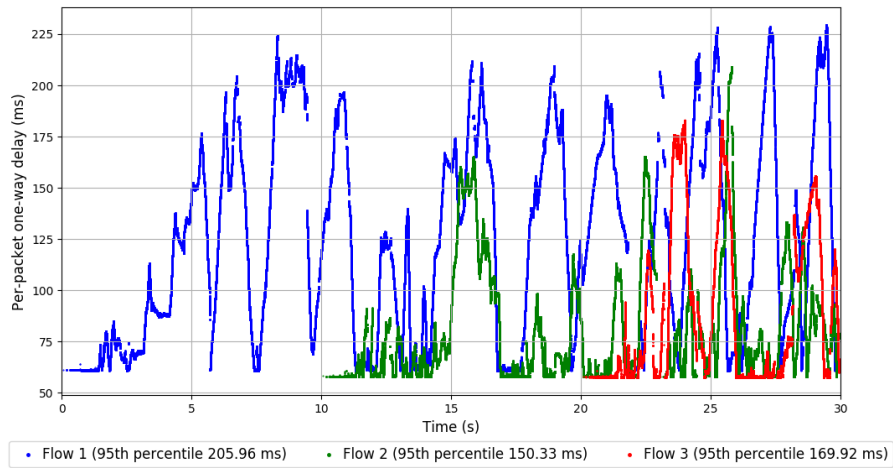
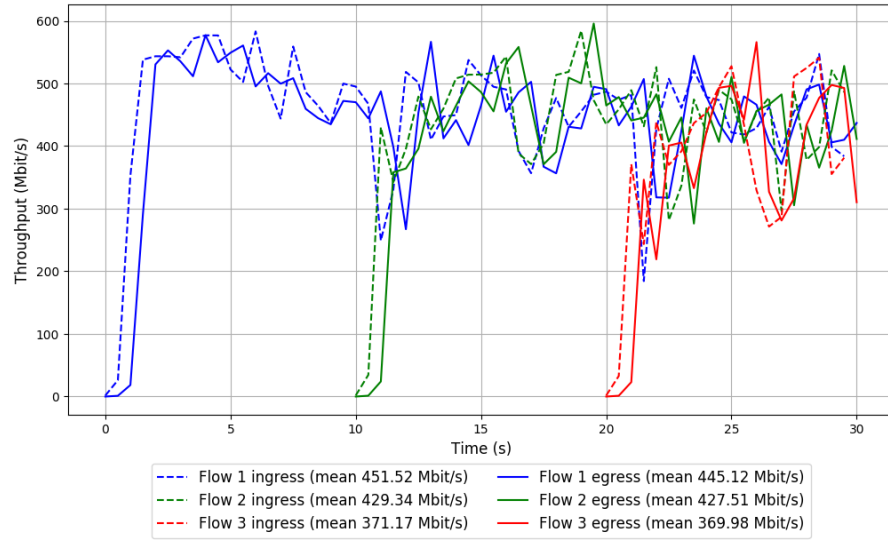


Run 3: Statistics of TCP BBR

Start at: 2019-07-13 03:15:17  
End at: 2019-07-13 03:15:47  
Local clock offset: 0.283 ms  
Remote clock offset: -0.423 ms

# Below is generated by plot.py at 2019-07-13 05:49:00  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 851.35 Mbit/s  
95th percentile per-packet one-way delay: 198.350 ms  
Loss rate: 1.50%  
-- Flow 1:  
Average throughput: 445.12 Mbit/s  
95th percentile per-packet one-way delay: 205.962 ms  
Loss rate: 1.82%  
-- Flow 2:  
Average throughput: 427.51 Mbit/s  
95th percentile per-packet one-way delay: 150.326 ms  
Loss rate: 1.00%  
-- Flow 3:  
Average throughput: 369.98 Mbit/s  
95th percentile per-packet one-way delay: 169.917 ms  
Loss rate: 1.51%

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

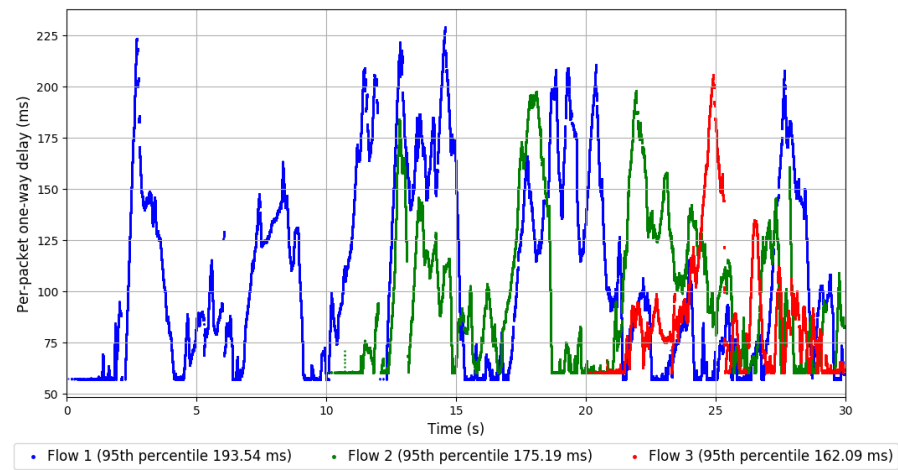
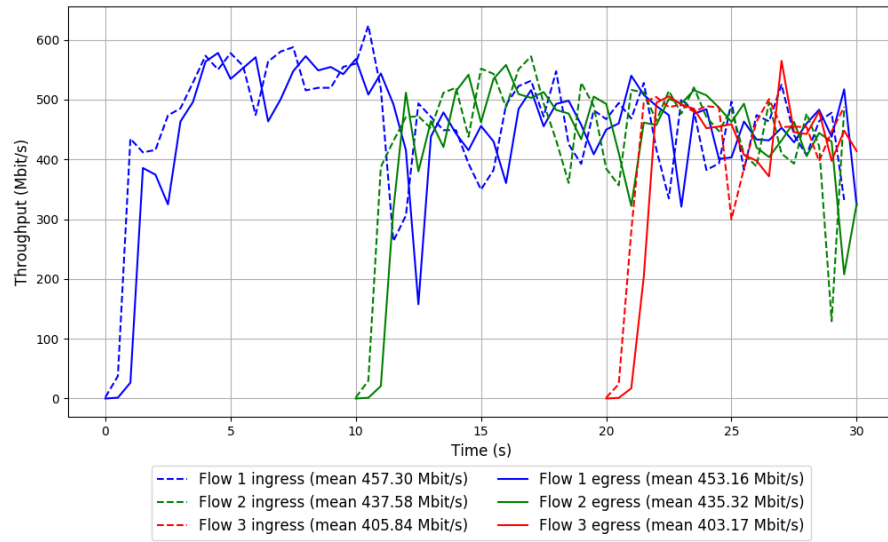


Run 4: Statistics of TCP BBR

Start at: 2019-07-13 03:55:50  
End at: 2019-07-13 03:56:20  
Local clock offset: -0.125 ms  
Remote clock offset: -0.219 ms

# Below is generated by plot.py at 2019-07-13 05:49:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 875.43 Mbit/s  
95th percentile per-packet one-way delay: 185.061 ms  
Loss rate: 1.33%  
-- Flow 1:  
Average throughput: 453.16 Mbit/s  
95th percentile per-packet one-way delay: 193.537 ms  
Loss rate: 1.30%  
-- Flow 2:  
Average throughput: 435.32 Mbit/s  
95th percentile per-packet one-way delay: 175.191 ms  
Loss rate: 1.12%  
-- Flow 3:  
Average throughput: 403.17 Mbit/s  
95th percentile per-packet one-way delay: 162.090 ms  
Loss rate: 1.87%

# Run 4: Report of TCP BBR — Data Link

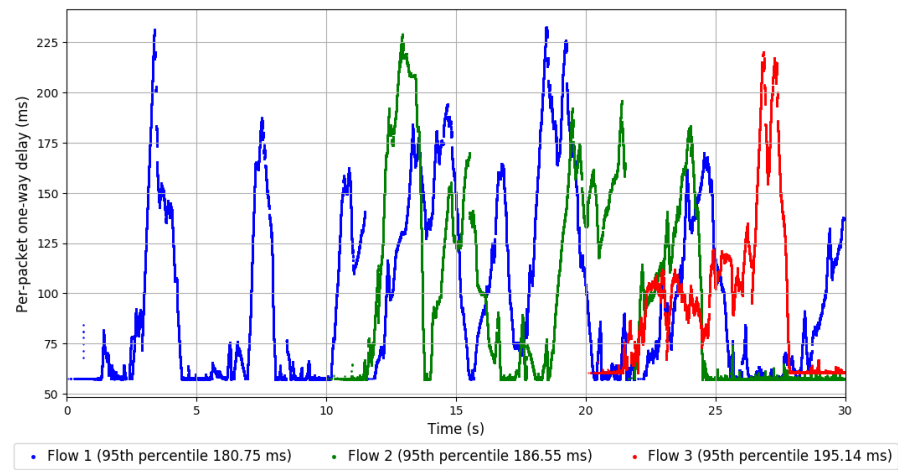
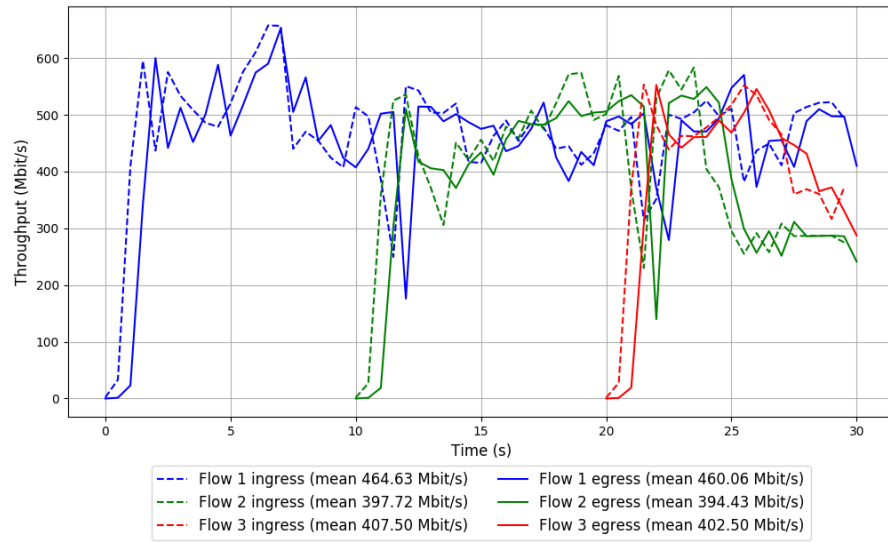


Run 5: Statistics of TCP BBR

Start at: 2019-07-13 04:37:11  
End at: 2019-07-13 04:37:41  
Local clock offset: 0.194 ms  
Remote clock offset: -0.025 ms

# Below is generated by plot.py at 2019-07-13 05:49:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 854.93 Mbit/s  
95th percentile per-packet one-way delay: 183.378 ms  
Loss rate: 1.55%  
-- Flow 1:  
Average throughput: 460.06 Mbit/s  
95th percentile per-packet one-way delay: 180.752 ms  
Loss rate: 1.37%  
-- Flow 2:  
Average throughput: 394.43 Mbit/s  
95th percentile per-packet one-way delay: 186.551 ms  
Loss rate: 1.41%  
-- Flow 3:  
Average throughput: 402.50 Mbit/s  
95th percentile per-packet one-way delay: 195.140 ms  
Loss rate: 2.43%

# Run 5: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2019-07-13 02:12:35

End at: 2019-07-13 02:13:06

Local clock offset: -0.239 ms

Remote clock offset: -0.66 ms

# Below is generated by plot.py at 2019-07-13 05:49:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 488.27 Mbit/s

95th percentile per-packet one-way delay: 72.666 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 251.62 Mbit/s

95th percentile per-packet one-way delay: 72.561 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 245.23 Mbit/s

95th percentile per-packet one-way delay: 69.066 ms

Loss rate: 0.86%

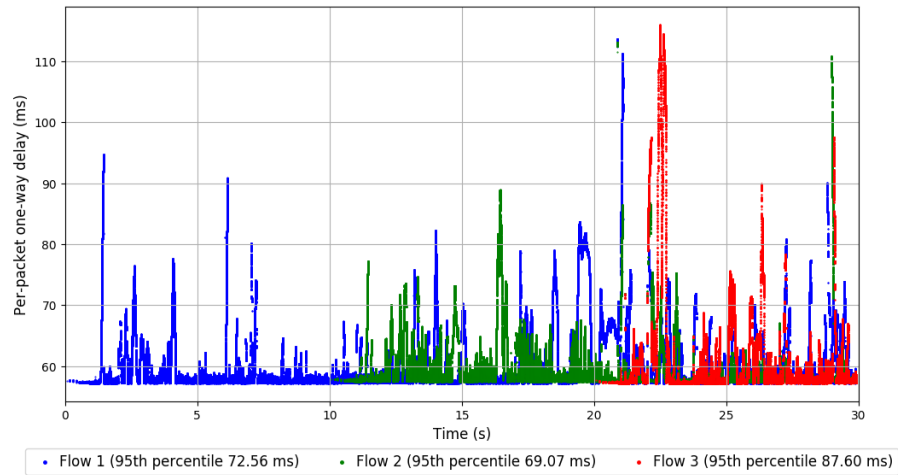
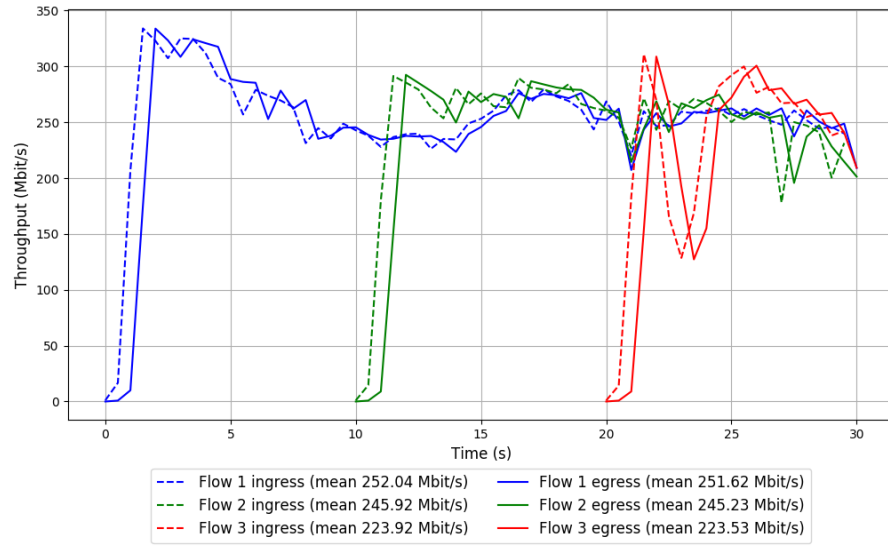
-- Flow 3:

Average throughput: 223.53 Mbit/s

95th percentile per-packet one-way delay: 87.603 ms

Loss rate: 1.36%

## Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2019-07-13 02:53:02

End at: 2019-07-13 02:53:32

Local clock offset: 0.0 ms

Remote clock offset: 0.061 ms

# Below is generated by plot.py at 2019-07-13 05:49:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 489.68 Mbit/s

95th percentile per-packet one-way delay: 81.282 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 250.66 Mbit/s

95th percentile per-packet one-way delay: 75.692 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 250.96 Mbit/s

95th percentile per-packet one-way delay: 87.331 ms

Loss rate: 0.66%

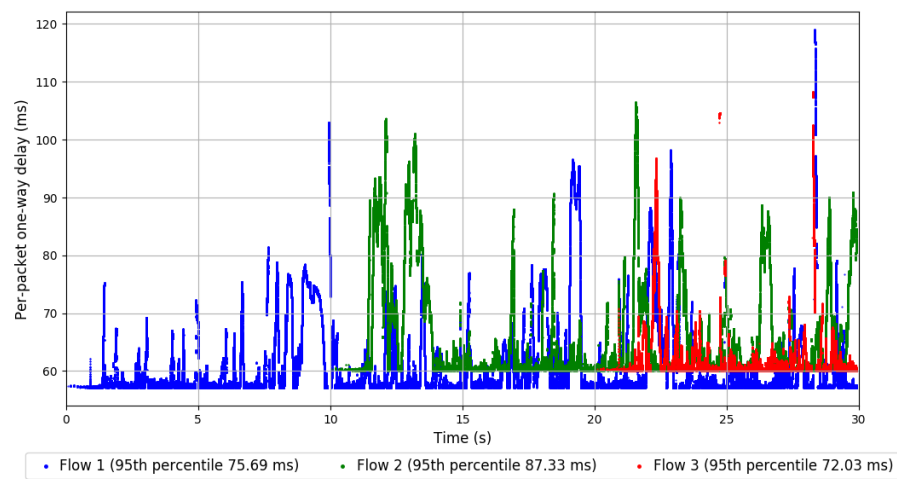
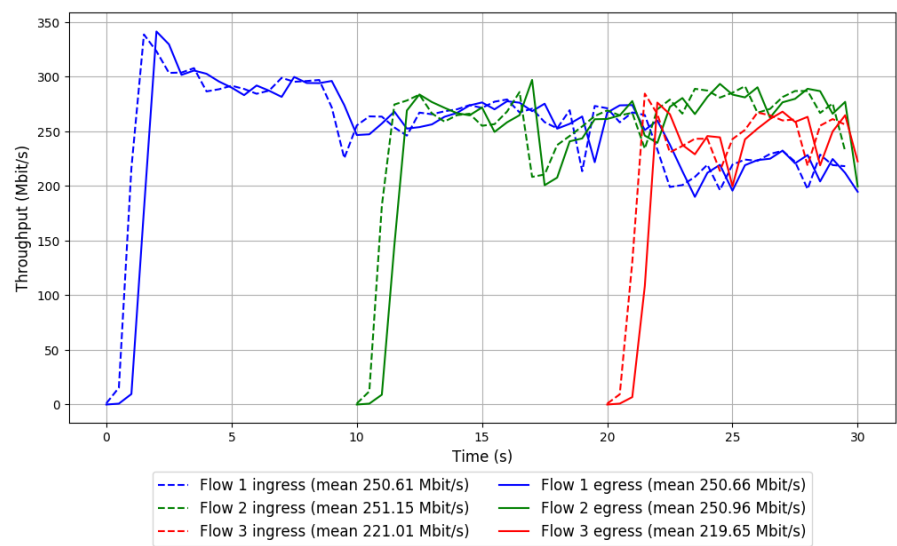
-- Flow 3:

Average throughput: 219.65 Mbit/s

95th percentile per-packet one-way delay: 72.029 ms

Loss rate: 1.82%

Run 2: Report of Copa — Data Link

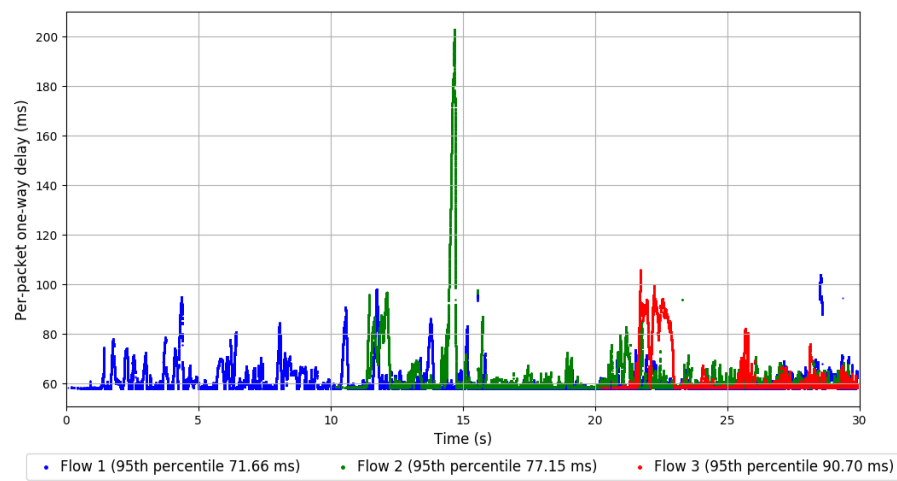
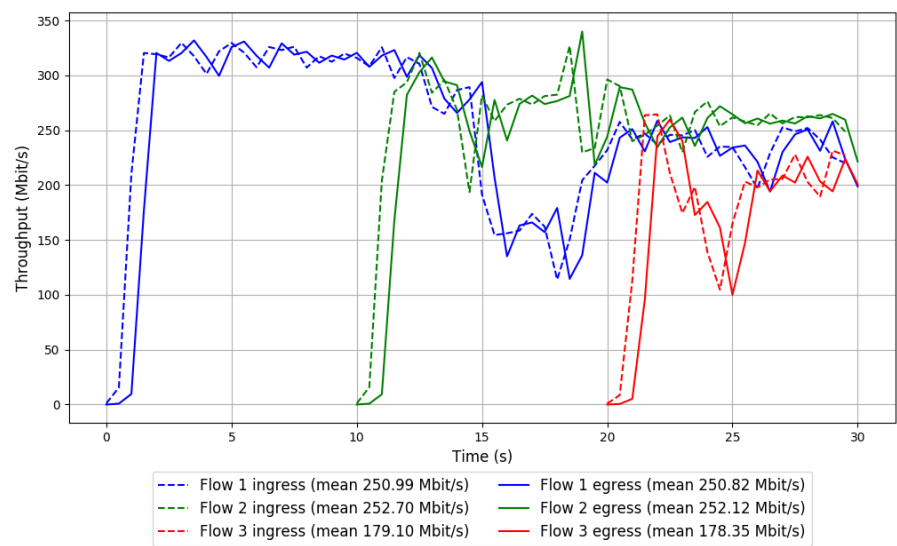


Run 3: Statistics of Copa

Start at: 2019-07-13 03:33:48  
End at: 2019-07-13 03:34:18  
Local clock offset: 0.281 ms  
Remote clock offset: -0.858 ms

# Below is generated by plot.py at 2019-07-13 05:49:50  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 476.66 Mbit/s  
95th percentile per-packet one-way delay: 78.091 ms  
Loss rate: 0.71%  
-- Flow 1:  
Average throughput: 250.82 Mbit/s  
95th percentile per-packet one-way delay: 71.660 ms  
Loss rate: 0.45%  
-- Flow 2:  
Average throughput: 252.12 Mbit/s  
95th percentile per-packet one-way delay: 77.151 ms  
Loss rate: 0.80%  
-- Flow 3:  
Average throughput: 178.35 Mbit/s  
95th percentile per-packet one-way delay: 90.703 ms  
Loss rate: 1.57%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2019-07-13 04:14:56

End at: 2019-07-13 04:15:26

Local clock offset: 0.3 ms

Remote clock offset: 0.73 ms

# Below is generated by plot.py at 2019-07-13 06:05:14

# Datalink statistics

-- Total of 3 flows:

Average throughput: 480.15 Mbit/s

95th percentile per-packet one-way delay: 79.559 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 237.39 Mbit/s

95th percentile per-packet one-way delay: 74.563 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 278.74 Mbit/s

95th percentile per-packet one-way delay: 90.799 ms

Loss rate: 0.63%

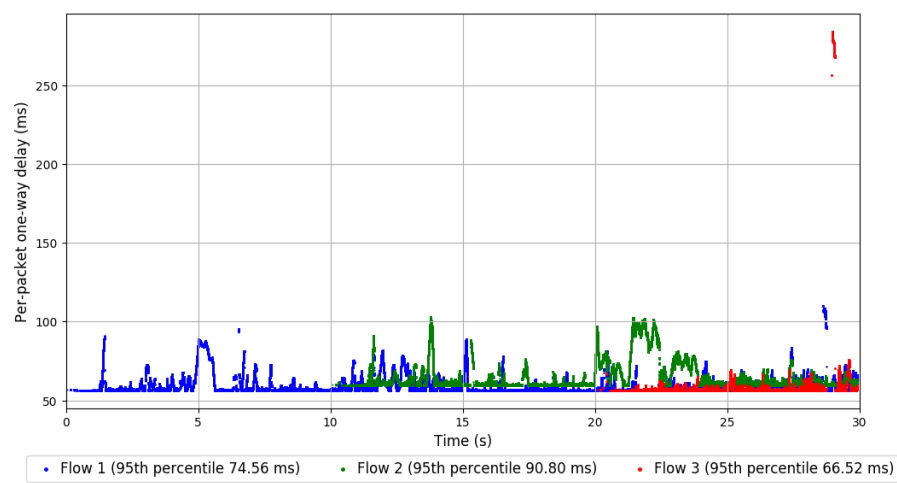
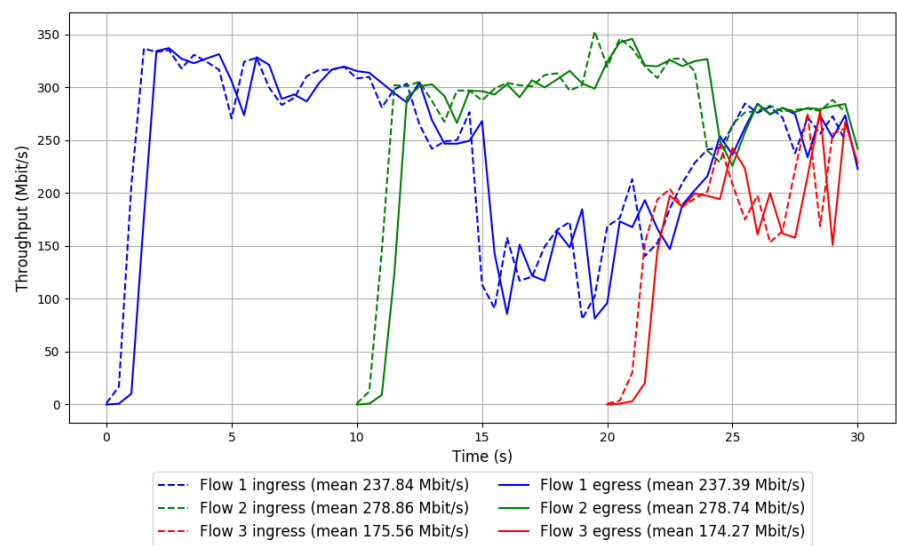
-- Flow 3:

Average throughput: 174.27 Mbit/s

95th percentile per-packet one-way delay: 66.521 ms

Loss rate: 1.87%

Run 4: Report of Copa — Data Link

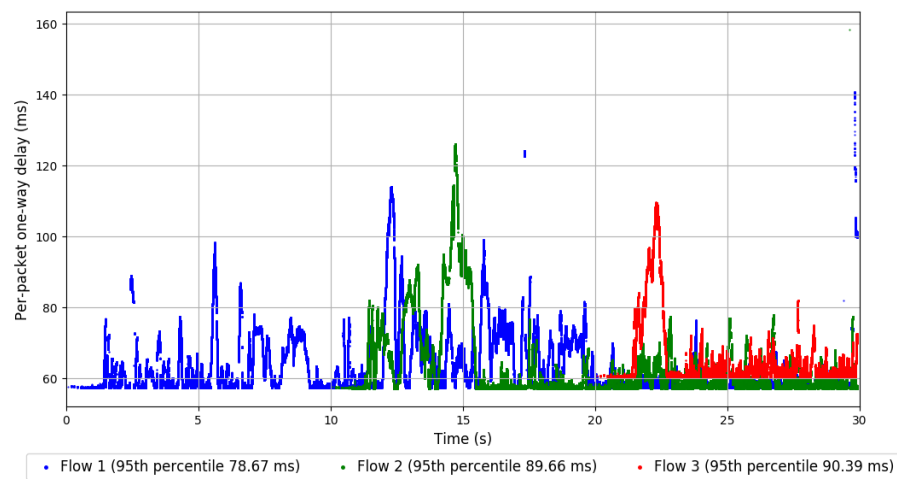
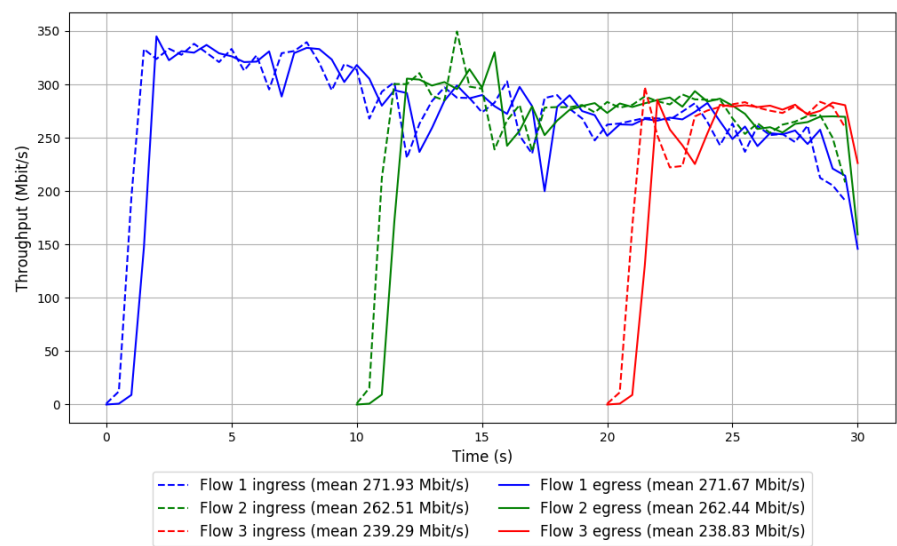


Run 5: Statistics of Copa

Start at: 2019-07-13 04:56:09  
End at: 2019-07-13 04:56:39  
Local clock offset: 0.275 ms  
Remote clock offset: -0.087 ms

# Below is generated by plot.py at 2019-07-13 06:07:10  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 524.69 Mbit/s  
95th percentile per-packet one-way delay: 85.783 ms  
Loss rate: 0.67%  
-- Flow 1:  
Average throughput: 271.67 Mbit/s  
95th percentile per-packet one-way delay: 78.669 ms  
Loss rate: 0.52%  
-- Flow 2:  
Average throughput: 262.44 Mbit/s  
95th percentile per-packet one-way delay: 89.663 ms  
Loss rate: 0.60%  
-- Flow 3:  
Average throughput: 238.83 Mbit/s  
95th percentile per-packet one-way delay: 90.390 ms  
Loss rate: 1.38%

Run 5: Report of Copa — Data Link

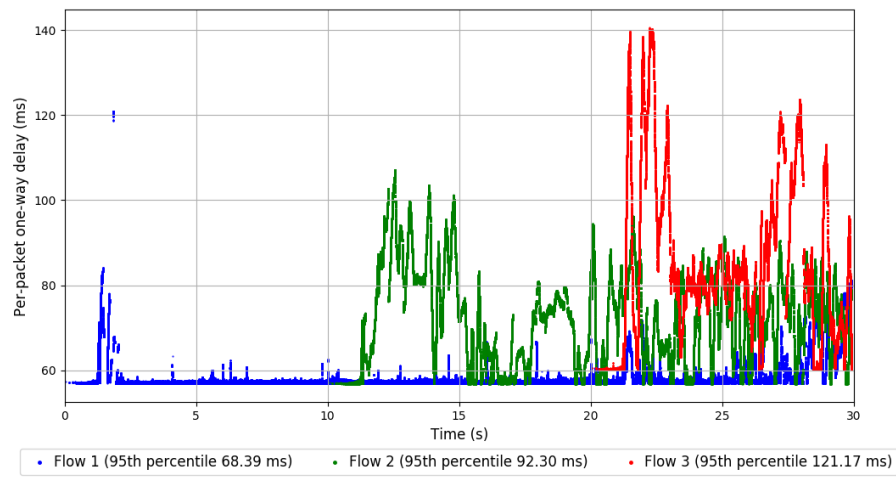
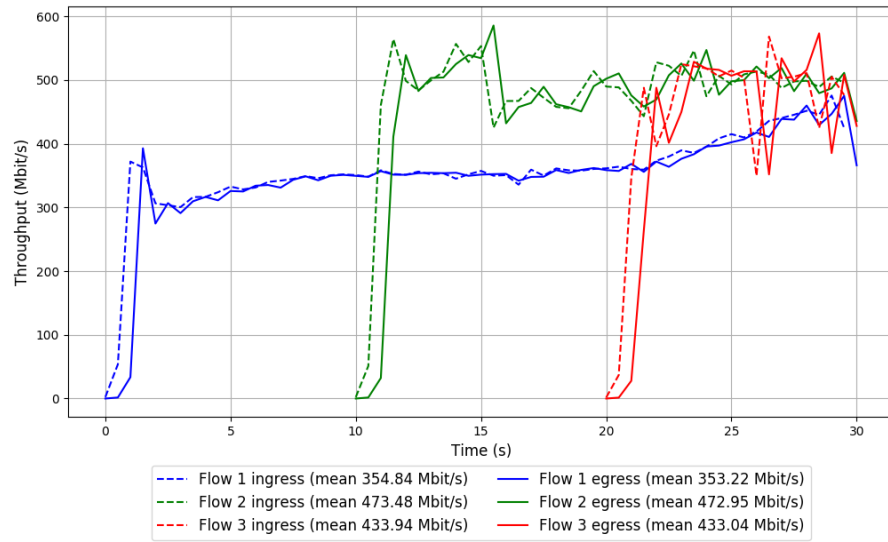


Run 1: Statistics of TCP Cubic

Start at: 2019-07-13 02:15:55  
End at: 2019-07-13 02:16:25  
Local clock offset: -0.313 ms  
Remote clock offset: -0.124 ms

# Below is generated by plot.py at 2019-07-13 06:07:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 810.38 Mbit/s  
95th percentile per-packet one-way delay: 97.386 ms  
Loss rate: 0.89%  
-- Flow 1:  
Average throughput: 353.22 Mbit/s  
95th percentile per-packet one-way delay: 68.385 ms  
Loss rate: 0.85%  
-- Flow 2:  
Average throughput: 472.95 Mbit/s  
95th percentile per-packet one-way delay: 92.297 ms  
Loss rate: 0.70%  
-- Flow 3:  
Average throughput: 433.04 Mbit/s  
95th percentile per-packet one-way delay: 121.167 ms  
Loss rate: 1.43%

# Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2019-07-13 02:56:20

End at: 2019-07-13 02:56:50

Local clock offset: 0.354 ms

Remote clock offset: 0.046 ms

# Below is generated by plot.py at 2019-07-13 06:07:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 928.82 Mbit/s

95th percentile per-packet one-way delay: 153.708 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 493.32 Mbit/s

95th percentile per-packet one-way delay: 160.697 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 448.60 Mbit/s

95th percentile per-packet one-way delay: 76.967 ms

Loss rate: 0.66%

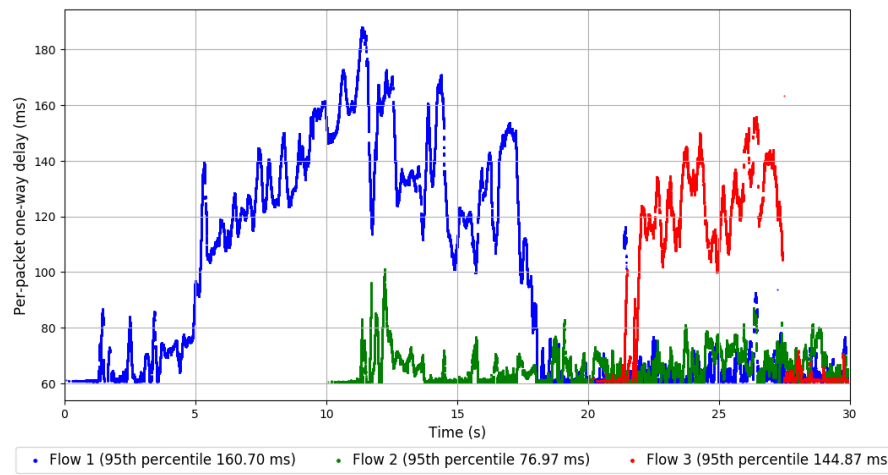
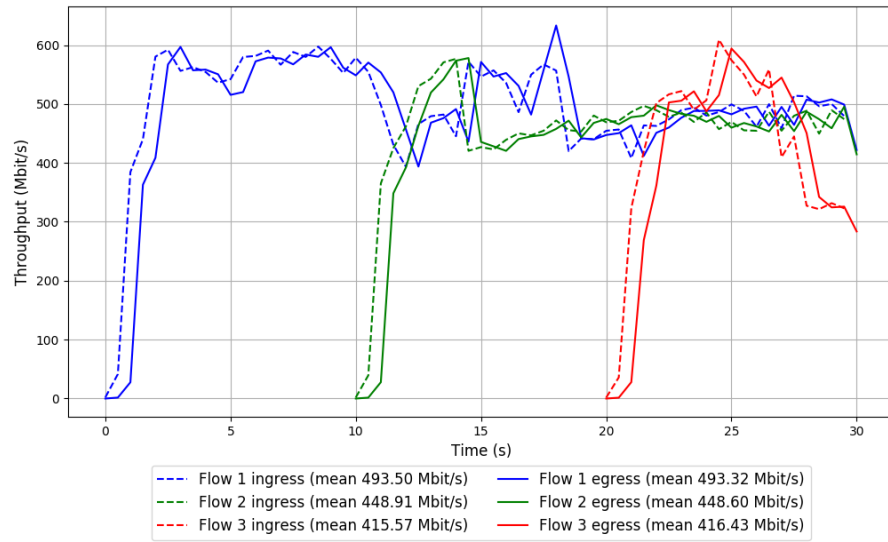
-- Flow 3:

Average throughput: 416.43 Mbit/s

95th percentile per-packet one-way delay: 144.874 ms

Loss rate: 0.98%

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



Run 3: Statistics of TCP Cubic

Start at: 2019-07-13 03:37:05

End at: 2019-07-13 03:37:35

Local clock offset: -0.083 ms

Remote clock offset: -0.25 ms

# Below is generated by plot.py at 2019-07-13 06:07:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 734.96 Mbit/s

95th percentile per-packet one-way delay: 137.367 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 430.46 Mbit/s

95th percentile per-packet one-way delay: 87.233 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 467.45 Mbit/s

95th percentile per-packet one-way delay: 145.531 ms

Loss rate: 0.93%

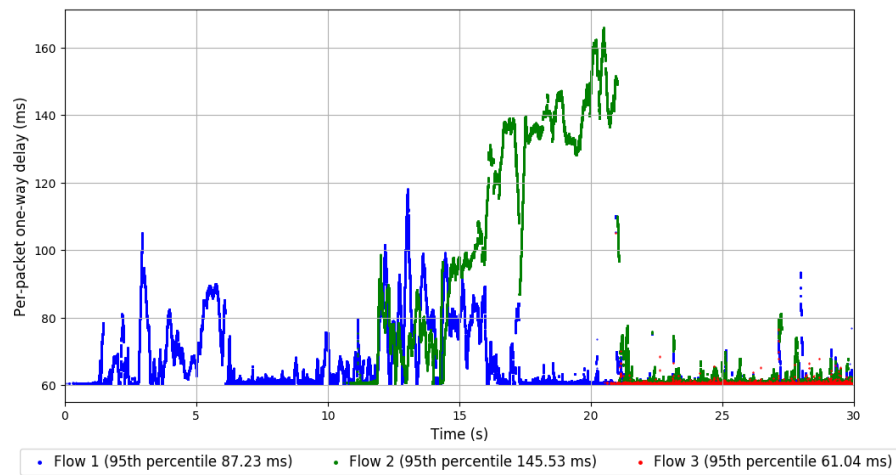
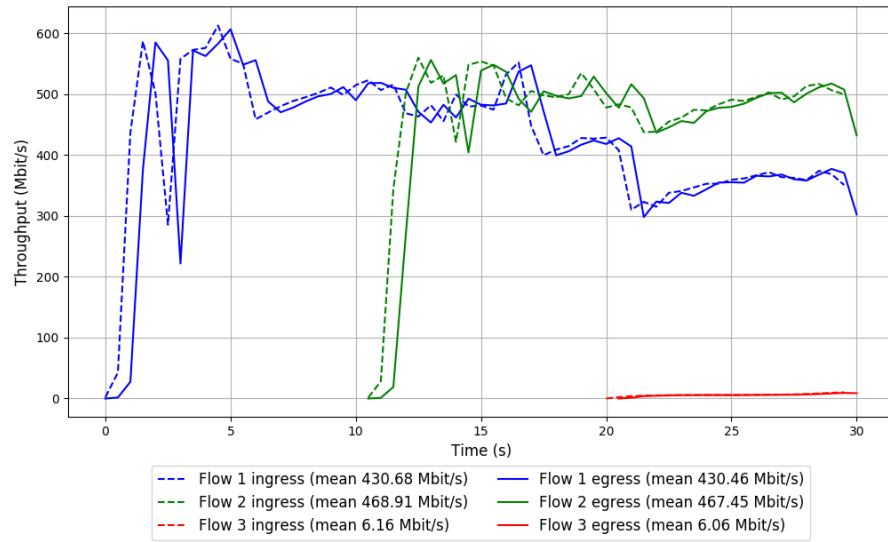
-- Flow 3:

Average throughput: 6.06 Mbit/s

95th percentile per-packet one-way delay: 61.037 ms

Loss rate: 2.71%

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

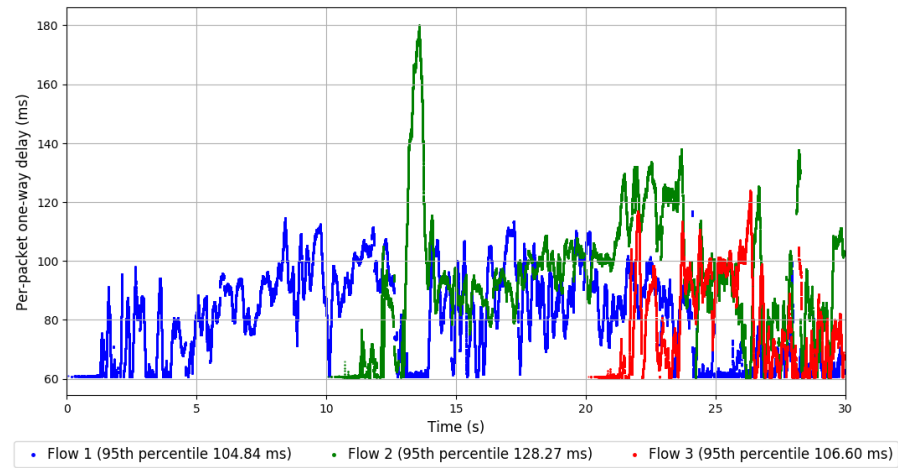
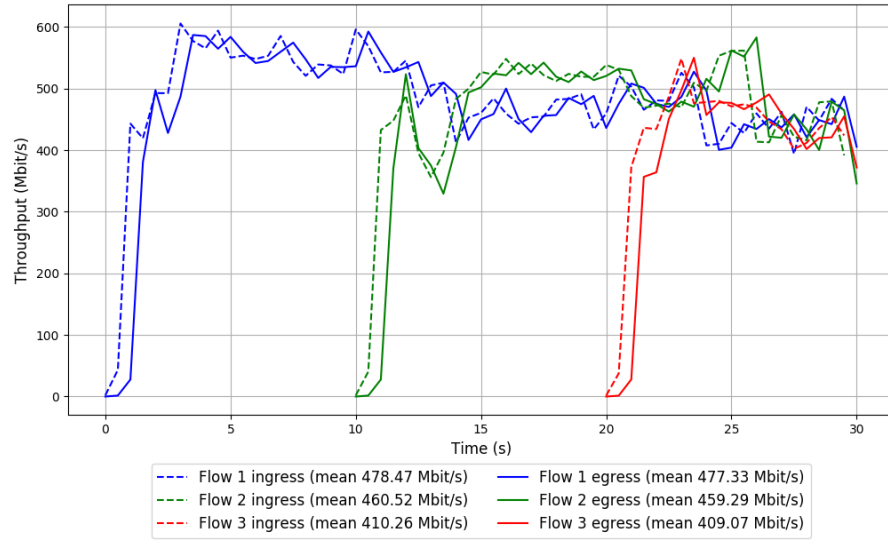


Run 4: Statistics of TCP Cubic

Start at: 2019-07-13 04:18:14  
End at: 2019-07-13 04:18:44  
Local clock offset: 0.316 ms  
Remote clock offset: -0.148 ms

# Below is generated by plot.py at 2019-07-13 06:07:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 917.50 Mbit/s  
95th percentile per-packet one-way delay: 113.798 ms  
Loss rate: 0.82%  
-- Flow 1:  
Average throughput: 477.33 Mbit/s  
95th percentile per-packet one-way delay: 104.836 ms  
Loss rate: 0.63%  
-- Flow 2:  
Average throughput: 459.29 Mbit/s  
95th percentile per-packet one-way delay: 128.269 ms  
Loss rate: 0.85%  
-- Flow 3:  
Average throughput: 409.07 Mbit/s  
95th percentile per-packet one-way delay: 106.597 ms  
Loss rate: 1.44%

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

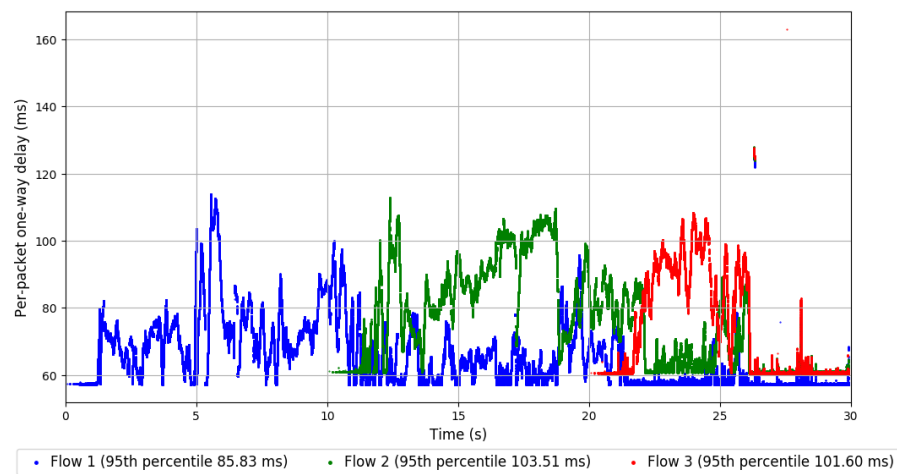
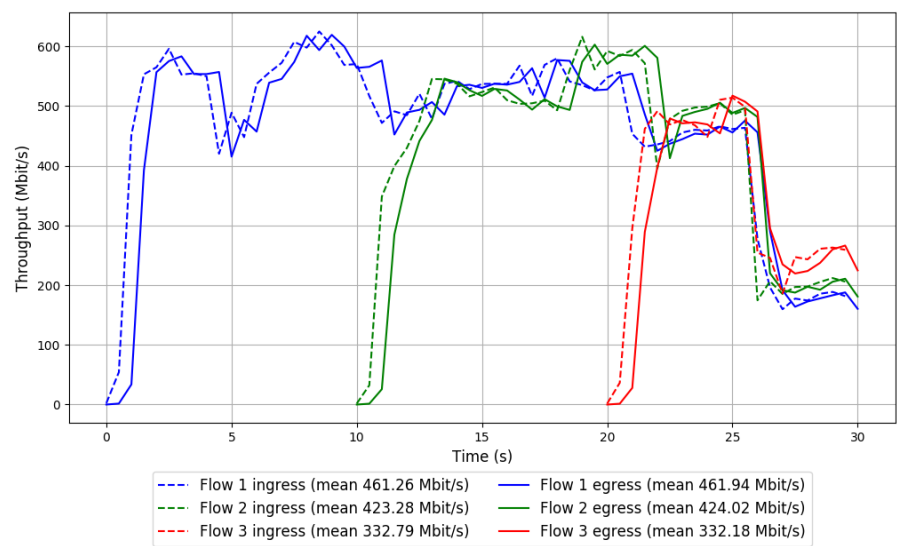


Run 5: Statistics of TCP Cubic

Start at: 2019-07-13 04:59:30  
End at: 2019-07-13 05:00:00  
Local clock offset: 0.314 ms  
Remote clock offset: -0.086 ms

# Below is generated by plot.py at 2019-07-13 06:07:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 853.25 Mbit/s  
95th percentile per-packet one-way delay: 99.782 ms  
Loss rate: 0.46%  
-- Flow 1:  
Average throughput: 461.94 Mbit/s  
95th percentile per-packet one-way delay: 85.831 ms  
Loss rate: 0.25%  
-- Flow 2:  
Average throughput: 424.02 Mbit/s  
95th percentile per-packet one-way delay: 103.514 ms  
Loss rate: 0.43%  
-- Flow 3:  
Average throughput: 332.18 Mbit/s  
95th percentile per-packet one-way delay: 101.602 ms  
Loss rate: 1.39%

Run 5: Report of TCP Cubic — Data Link

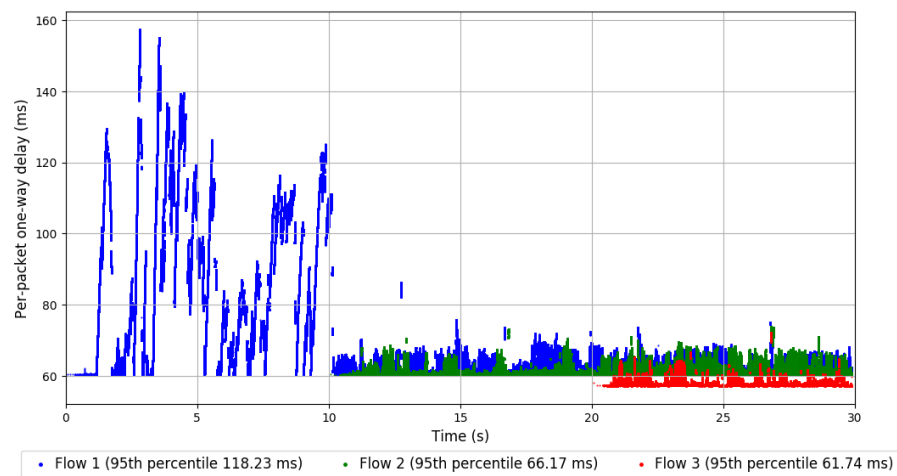
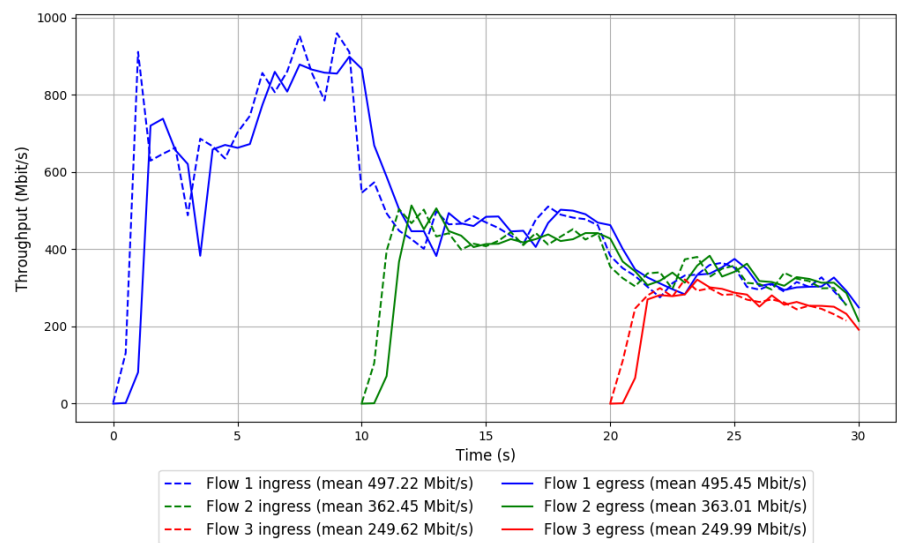


Run 1: Statistics of FillP

Start at: 2019-07-13 02:08:59  
End at: 2019-07-13 02:09:29  
Local clock offset: -0.031 ms  
Remote clock offset: -0.171 ms

# Below is generated by plot.py at 2019-07-13 06:08:32  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 818.44 Mbit/s  
95th percentile per-packet one-way delay: 111.415 ms  
Loss rate: 0.69%  
-- Flow 1:  
Average throughput: 495.45 Mbit/s  
95th percentile per-packet one-way delay: 118.228 ms  
Loss rate: 0.71%  
-- Flow 2:  
Average throughput: 363.01 Mbit/s  
95th percentile per-packet one-way delay: 66.170 ms  
Loss rate: 0.56%  
-- Flow 3:  
Average throughput: 249.99 Mbit/s  
95th percentile per-packet one-way delay: 61.741 ms  
Loss rate: 0.93%

Run 1: Report of FillP — Data Link

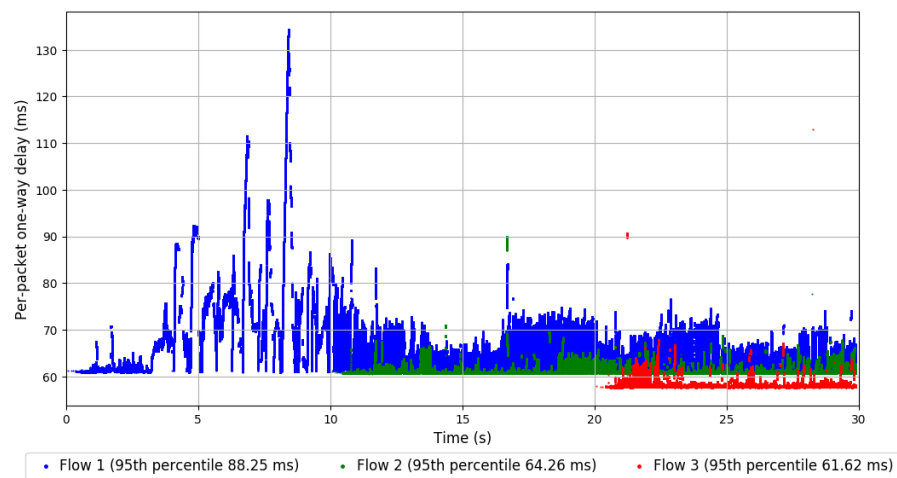
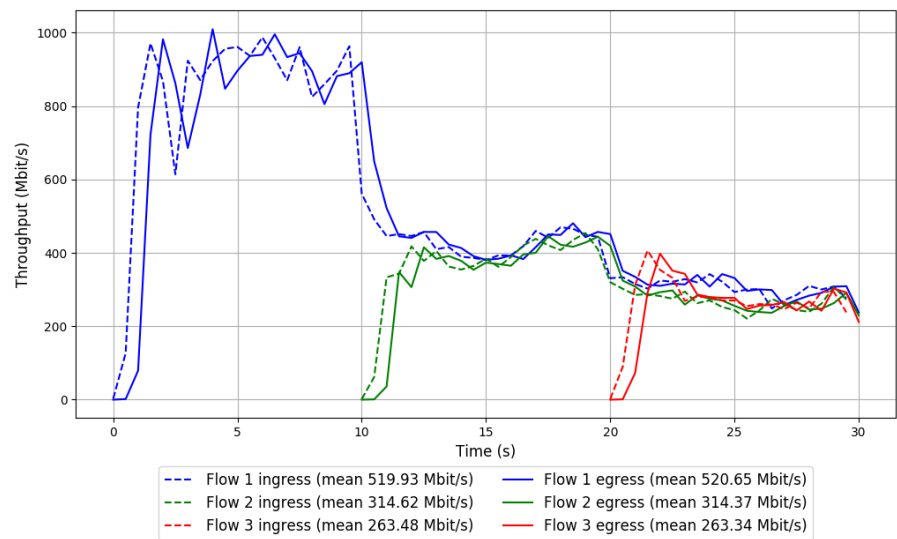


Run 2: Statistics of FillP

Start at: 2019-07-13 02:49:25  
End at: 2019-07-13 02:49:55  
Local clock offset: 0.38 ms  
Remote clock offset: -0.069 ms

# Below is generated by plot.py at 2019-07-13 06:21:37  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 816.00 Mbit/s  
95th percentile per-packet one-way delay: 82.935 ms  
Loss rate: 0.47%  
-- Flow 1:  
Average throughput: 520.65 Mbit/s  
95th percentile per-packet one-way delay: 88.254 ms  
Loss rate: 0.28%  
-- Flow 2:  
Average throughput: 314.37 Mbit/s  
95th percentile per-packet one-way delay: 64.259 ms  
Loss rate: 0.66%  
-- Flow 3:  
Average throughput: 263.34 Mbit/s  
95th percentile per-packet one-way delay: 61.625 ms  
Loss rate: 1.13%

Run 2: Report of FillP — Data Link

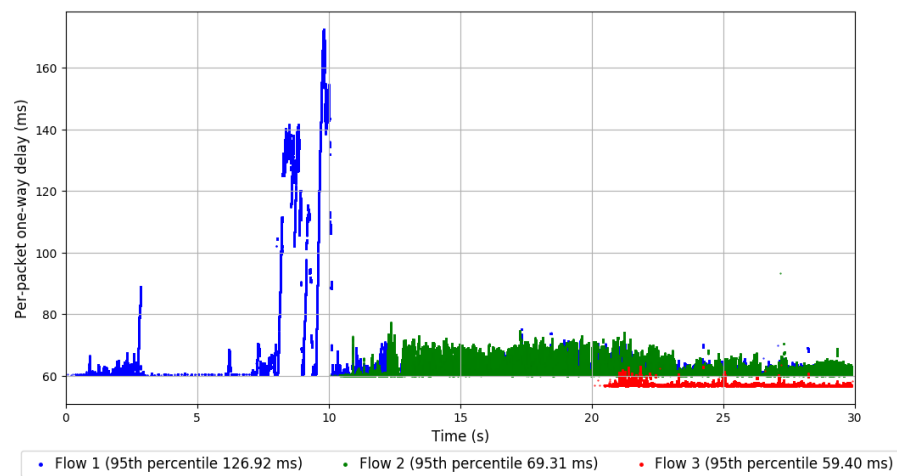
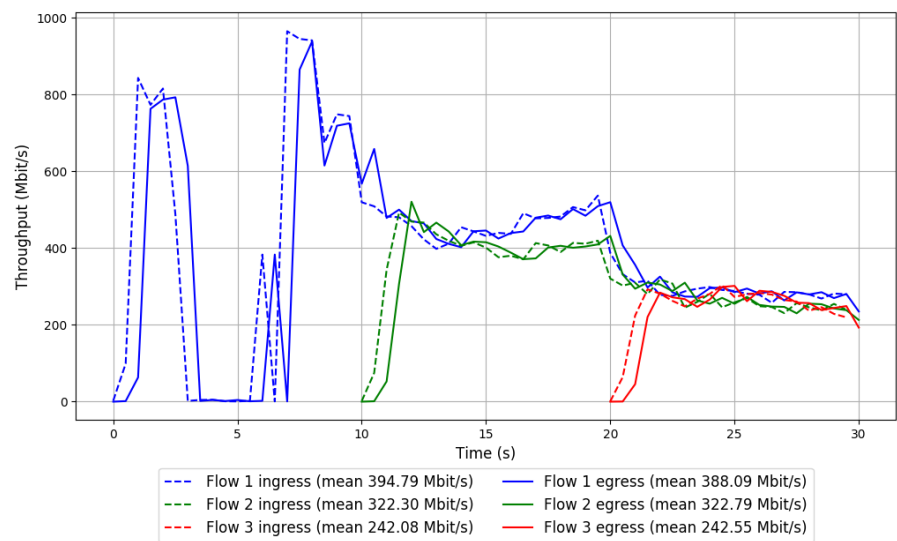


Run 3: Statistics of FillP

Start at: 2019-07-13 03:30:18  
End at: 2019-07-13 03:30:48  
Local clock offset: -0.139 ms  
Remote clock offset: -0.224 ms

# Below is generated by plot.py at 2019-07-13 06:21:37  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 682.03 Mbit/s  
95th percentile per-packet one-way delay: 91.538 ms  
Loss rate: 1.44%  
-- Flow 1:  
Average throughput: 388.09 Mbit/s  
95th percentile per-packet one-way delay: 126.923 ms  
Loss rate: 2.04%  
-- Flow 2:  
Average throughput: 322.79 Mbit/s  
95th percentile per-packet one-way delay: 69.310 ms  
Loss rate: 0.52%  
-- Flow 3:  
Average throughput: 242.55 Mbit/s  
95th percentile per-packet one-way delay: 59.402 ms  
Loss rate: 0.91%

Run 3: Report of FillP — Data Link

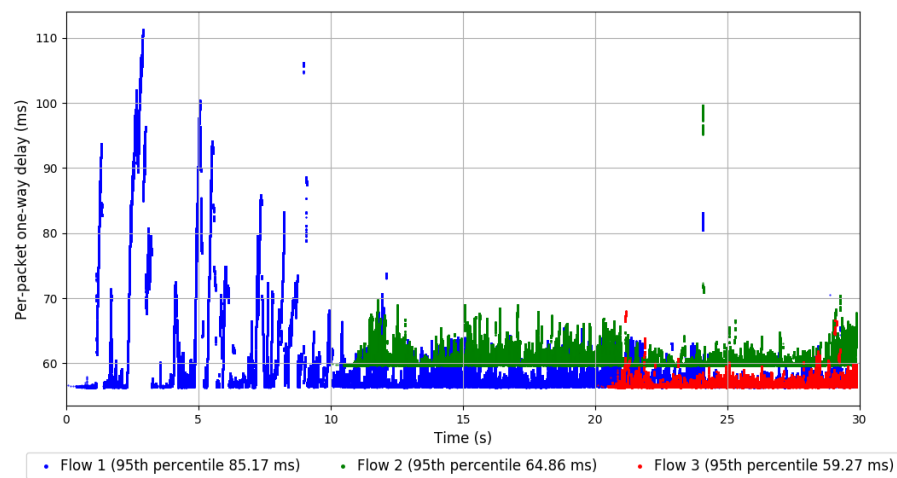
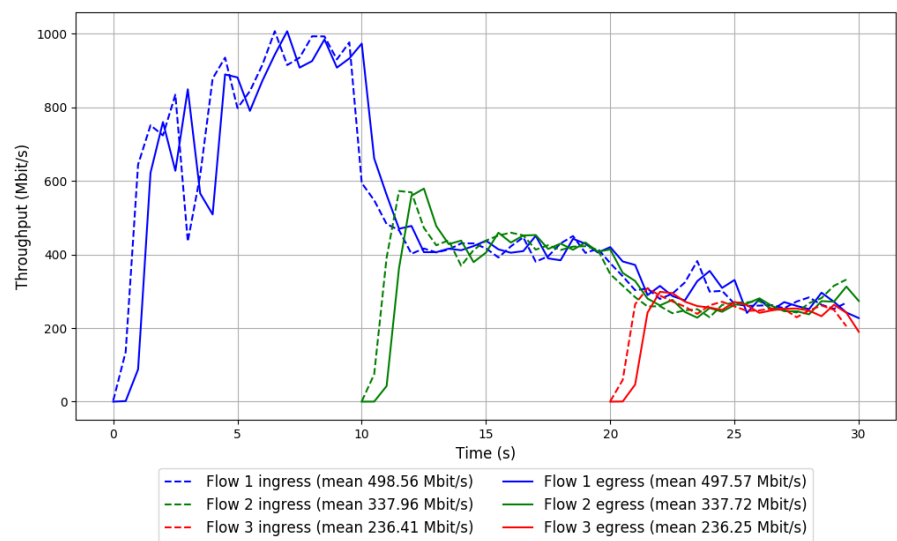


Run 4: Statistics of FillP

Start at: 2019-07-13 04:11:17  
End at: 2019-07-13 04:11:47  
Local clock offset: -0.524 ms  
Remote clock offset: -0.083 ms

# Below is generated by plot.py at 2019-07-13 06:23:33  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 799.25 Mbit/s  
95th percentile per-packet one-way delay: 77.303 ms  
Loss rate: 0.67%  
-- Flow 1:  
Average throughput: 497.57 Mbit/s  
95th percentile per-packet one-way delay: 85.174 ms  
Loss rate: 0.56%  
-- Flow 2:  
Average throughput: 337.72 Mbit/s  
95th percentile per-packet one-way delay: 64.860 ms  
Loss rate: 0.77%  
-- Flow 3:  
Average throughput: 236.25 Mbit/s  
95th percentile per-packet one-way delay: 59.266 ms  
Loss rate: 1.16%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2019-07-13 04:52:30

End at: 2019-07-13 04:53:00

Local clock offset: 0.318 ms

Remote clock offset: 0.408 ms

# Below is generated by plot.py at 2019-07-13 06:24:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 821.29 Mbit/s

95th percentile per-packet one-way delay: 84.401 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 510.63 Mbit/s

95th percentile per-packet one-way delay: 91.378 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 342.91 Mbit/s

95th percentile per-packet one-way delay: 66.689 ms

Loss rate: 0.71%

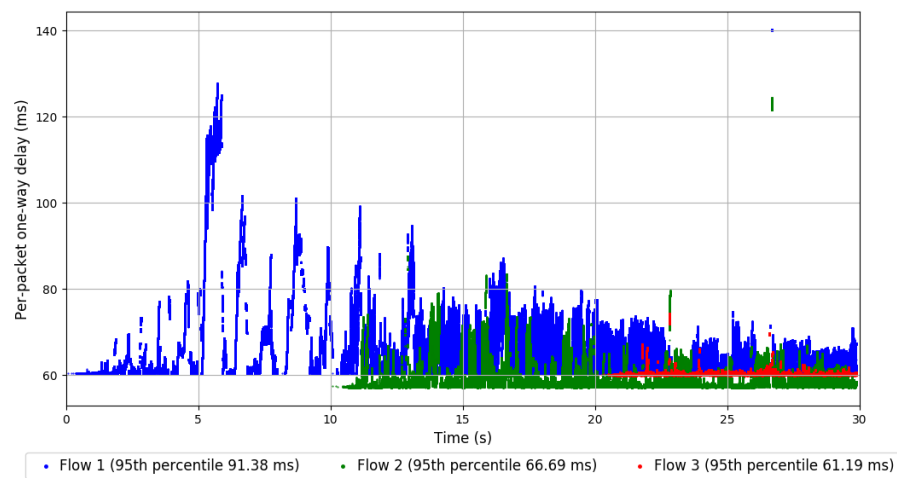
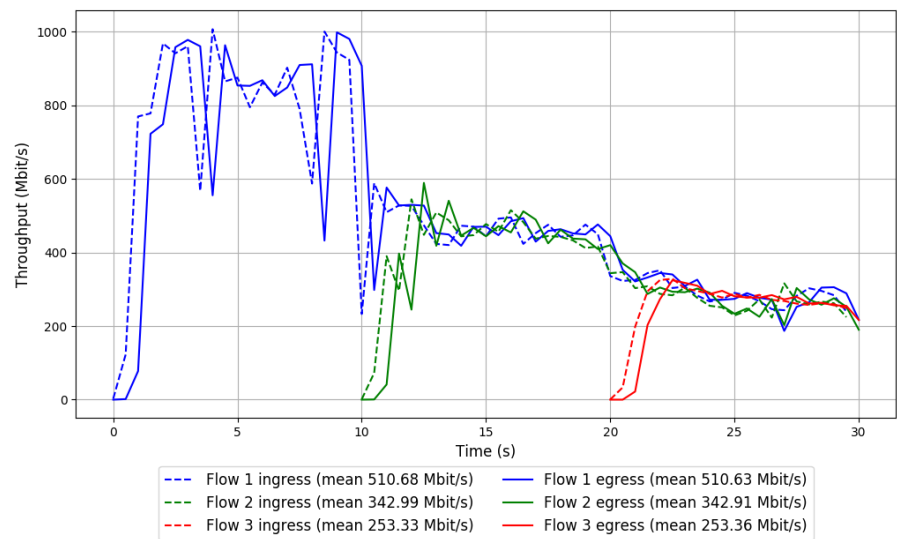
-- Flow 3:

Average throughput: 253.36 Mbit/s

95th percentile per-packet one-way delay: 61.189 ms

Loss rate: 1.27%

Run 5: Report of FillP — Data Link

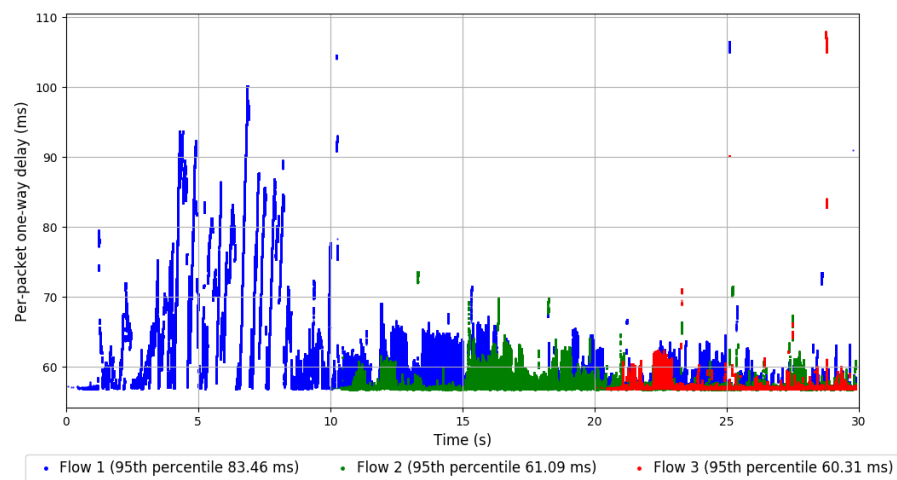
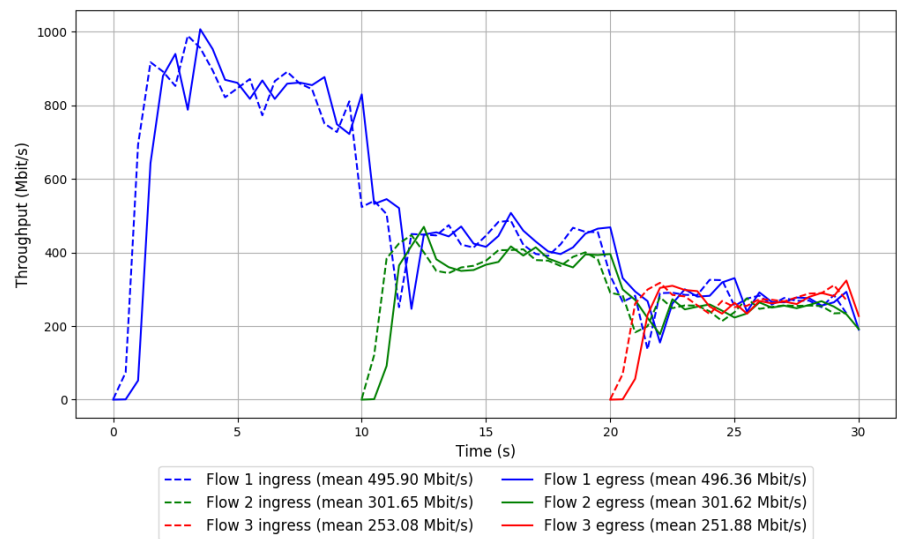


Run 1: Statistics of FillP-Sheep

Start at: 2019-07-13 02:26:01  
End at: 2019-07-13 02:26:31  
Local clock offset: -0.339 ms  
Remote clock offset: -0.065 ms

# Below is generated by plot.py at 2019-07-13 06:24:24  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 779.51 Mbit/s  
95th percentile per-packet one-way delay: 80.217 ms  
Loss rate: 0.51%  
-- Flow 1:  
Average throughput: 496.36 Mbit/s  
95th percentile per-packet one-way delay: 83.456 ms  
Loss rate: 0.27%  
-- Flow 2:  
Average throughput: 301.62 Mbit/s  
95th percentile per-packet one-way delay: 61.093 ms  
Loss rate: 0.57%  
-- Flow 3:  
Average throughput: 251.88 Mbit/s  
95th percentile per-packet one-way delay: 60.309 ms  
Loss rate: 1.82%

Run 1: Report of FillP-Sheep — Data Link



Run 2: Statistics of FillP-Sheep

Start at: 2019-07-13 03:06:30

End at: 2019-07-13 03:07:00

Local clock offset: 0.086 ms

Remote clock offset: 0.128 ms

# Below is generated by plot.py at 2019-07-13 06:24:45

# Datalink statistics

-- Total of 3 flows:

Average throughput: 782.88 Mbit/s

95th percentile per-packet one-way delay: 95.521 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 501.08 Mbit/s

95th percentile per-packet one-way delay: 97.903 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 307.29 Mbit/s

95th percentile per-packet one-way delay: 64.837 ms

Loss rate: 0.62%

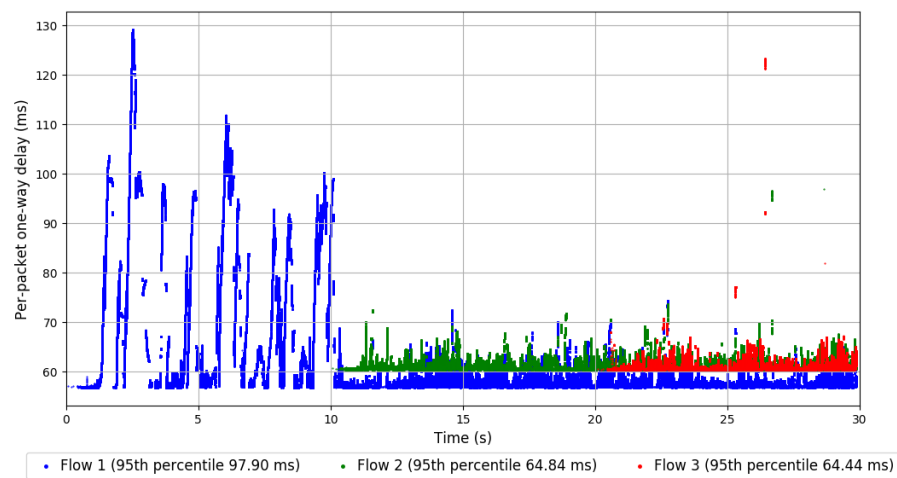
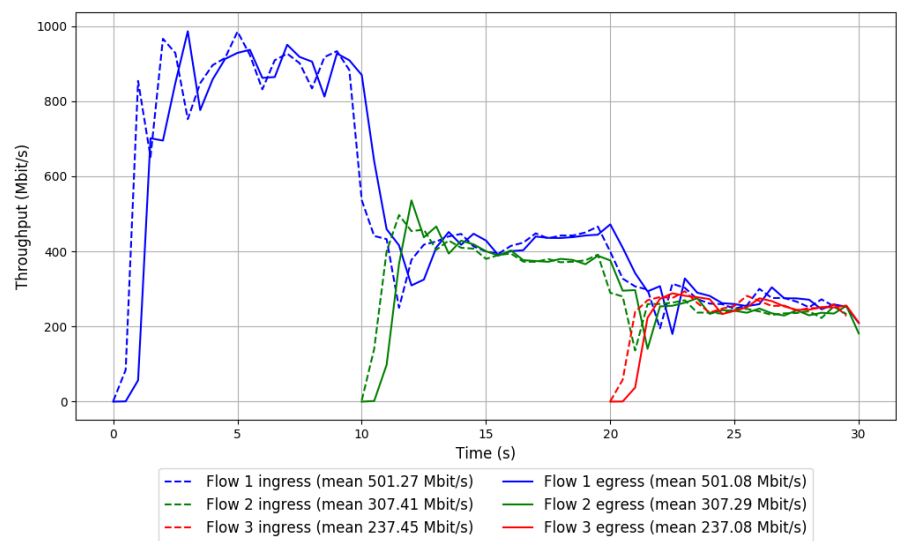
-- Flow 3:

Average throughput: 237.08 Mbit/s

95th percentile per-packet one-way delay: 64.441 ms

Loss rate: 1.49%

Run 2: Report of FillP-Sheep — Data Link

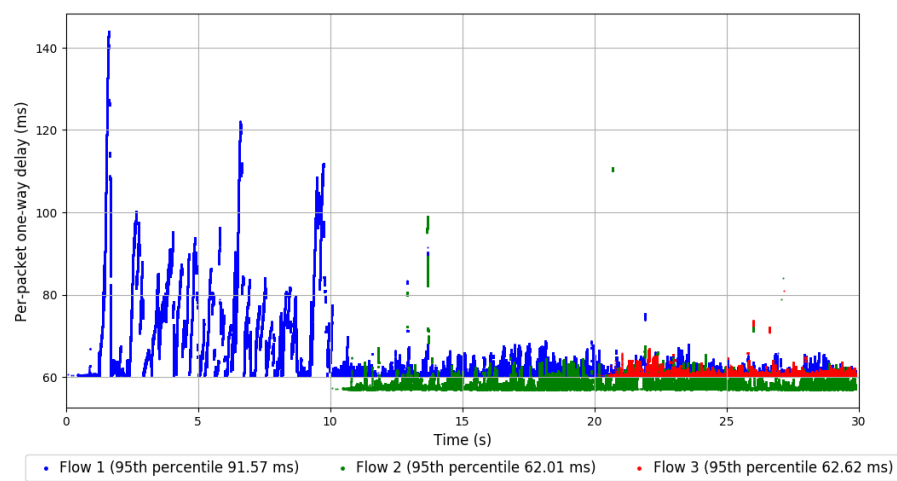
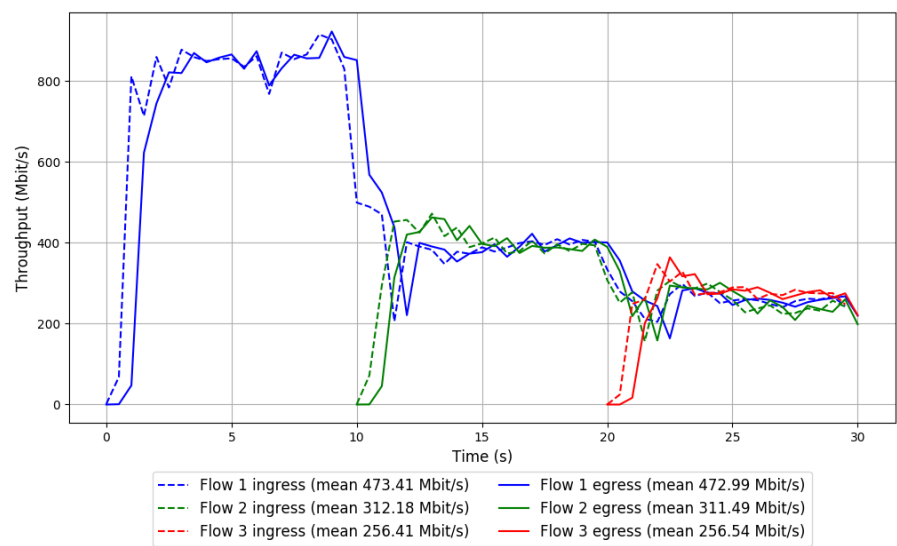


Run 3: Statistics of FillP-Sheep

Start at: 2019-07-13 03:47:06  
End at: 2019-07-13 03:47:36  
Local clock offset: 0.042 ms  
Remote clock offset: -0.198 ms

# Below is generated by plot.py at 2019-07-13 06:24:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 763.99 Mbit/s  
95th percentile per-packet one-way delay: 86.142 ms  
Loss rate: 0.63%  
-- Flow 1:  
Average throughput: 472.99 Mbit/s  
95th percentile per-packet one-way delay: 91.566 ms  
Loss rate: 0.44%  
-- Flow 2:  
Average throughput: 311.49 Mbit/s  
95th percentile per-packet one-way delay: 62.007 ms  
Loss rate: 0.78%  
-- Flow 3:  
Average throughput: 256.54 Mbit/s  
95th percentile per-packet one-way delay: 62.624 ms  
Loss rate: 1.32%

Run 3: Report of FillP-Sheep — Data Link



Run 4: Statistics of FillP-Sheep

Start at: 2019-07-13 04:28:32

End at: 2019-07-13 04:29:02

Local clock offset: -0.531 ms

Remote clock offset: 0.099 ms

# Below is generated by plot.py at 2019-07-13 06:24:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 684.32 Mbit/s

95th percentile per-packet one-way delay: 68.431 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 393.61 Mbit/s

95th percentile per-packet one-way delay: 68.773 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 317.58 Mbit/s

95th percentile per-packet one-way delay: 67.577 ms

Loss rate: 0.72%

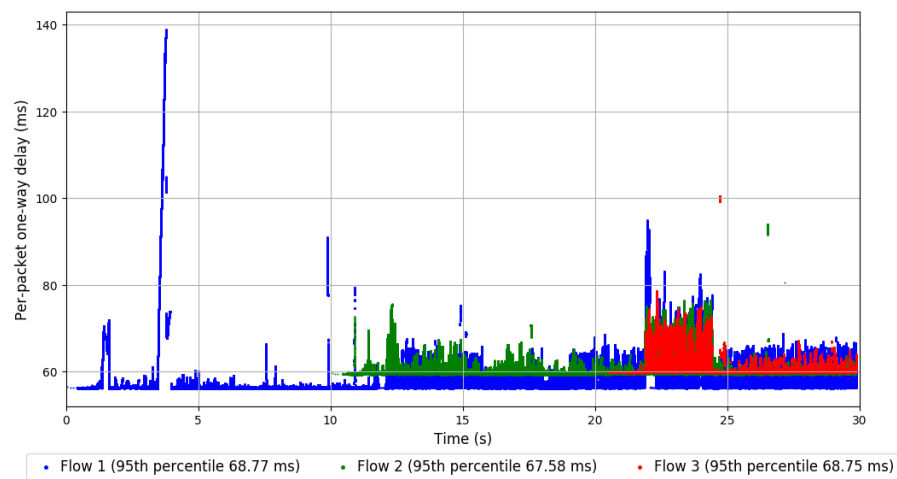
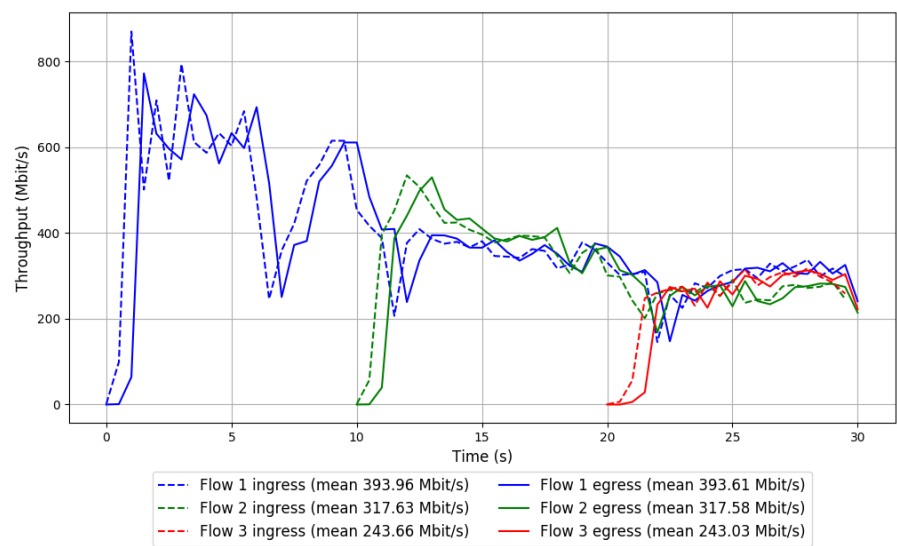
-- Flow 3:

Average throughput: 243.03 Mbit/s

95th percentile per-packet one-way delay: 68.753 ms

Loss rate: 1.40%

Run 4: Report of FillP-Sheep — Data Link



Run 5: Statistics of FillP-Sheep

Start at: 2019-07-13 05:09:33

End at: 2019-07-13 05:10:03

Local clock offset: -0.106 ms

Remote clock offset: -0.72 ms

# Below is generated by plot.py at 2019-07-13 06:38:06

# Datalink statistics

-- Total of 3 flows:

Average throughput: 739.58 Mbit/s

95th percentile per-packet one-way delay: 76.735 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 462.17 Mbit/s

95th percentile per-packet one-way delay: 80.159 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 310.88 Mbit/s

95th percentile per-packet one-way delay: 60.826 ms

Loss rate: 0.60%

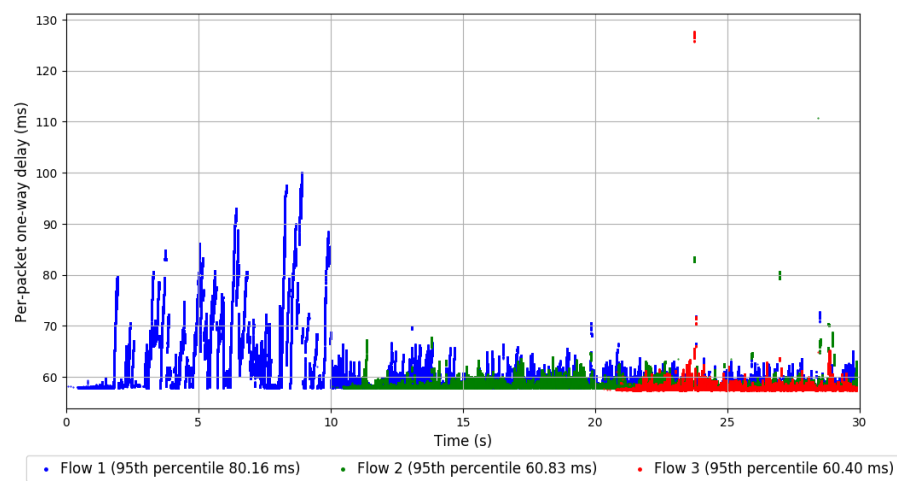
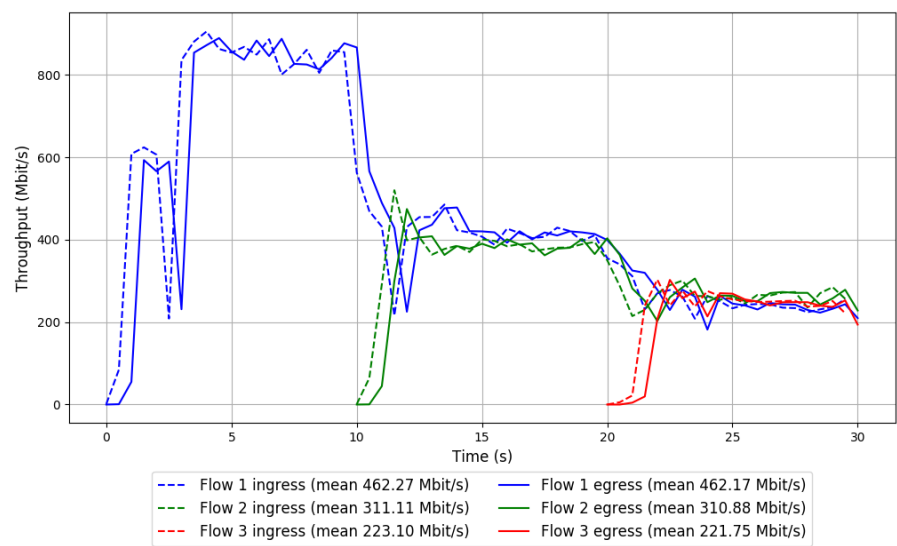
-- Flow 3:

Average throughput: 221.75 Mbit/s

95th percentile per-packet one-way delay: 60.403 ms

Loss rate: 2.04%

Run 5: Report of FillP-Sheep — Data Link

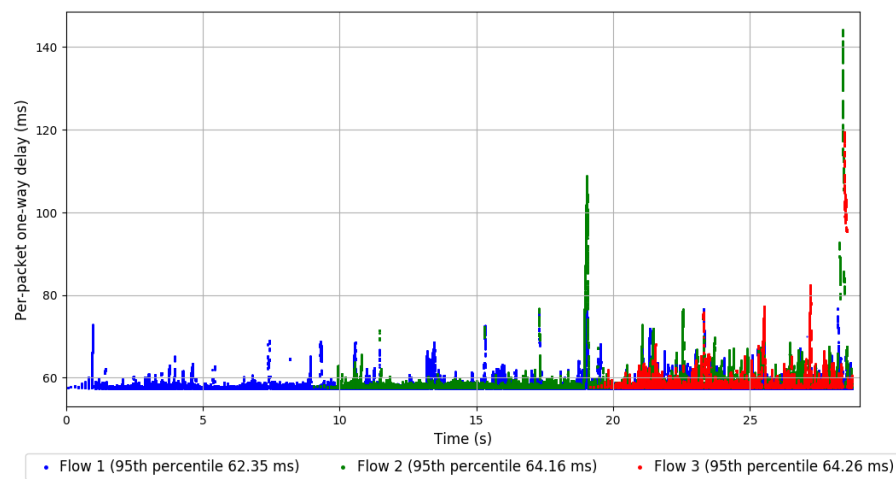
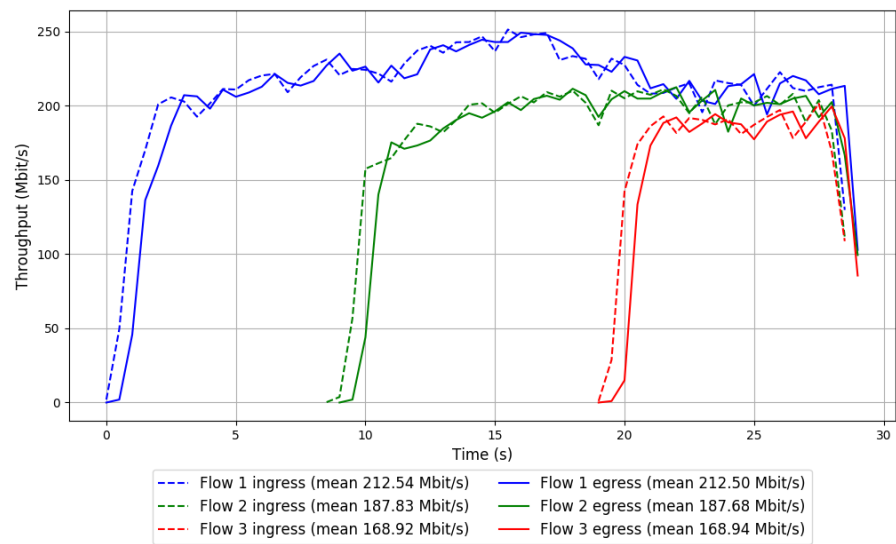


```
Run 1: Statistics of Indigo

Start at: 2019-07-13 02:10:46
End at: 2019-07-13 02:11:16
Local clock offset: -0.039 ms
Remote clock offset: -0.661 ms

# Below is generated by plot.py at 2019-07-13 06:38:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 397.68 Mbit/s
95th percentile per-packet one-way delay: 63.298 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 212.50 Mbit/s
95th percentile per-packet one-way delay: 62.352 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 187.68 Mbit/s
95th percentile per-packet one-way delay: 64.161 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 168.94 Mbit/s
95th percentile per-packet one-way delay: 64.258 ms
Loss rate: 1.22%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2019-07-13 02:51:12

End at: 2019-07-13 02:51:42

Local clock offset: -0.26 ms

Remote clock offset: -0.65 ms

# Below is generated by plot.py at 2019-07-13 06:38:06

# Datalink statistics

-- Total of 3 flows:

Average throughput: 384.93 Mbit/s

95th percentile per-packet one-way delay: 64.603 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 210.18 Mbit/s

95th percentile per-packet one-way delay: 65.406 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 182.46 Mbit/s

95th percentile per-packet one-way delay: 61.932 ms

Loss rate: 0.85%

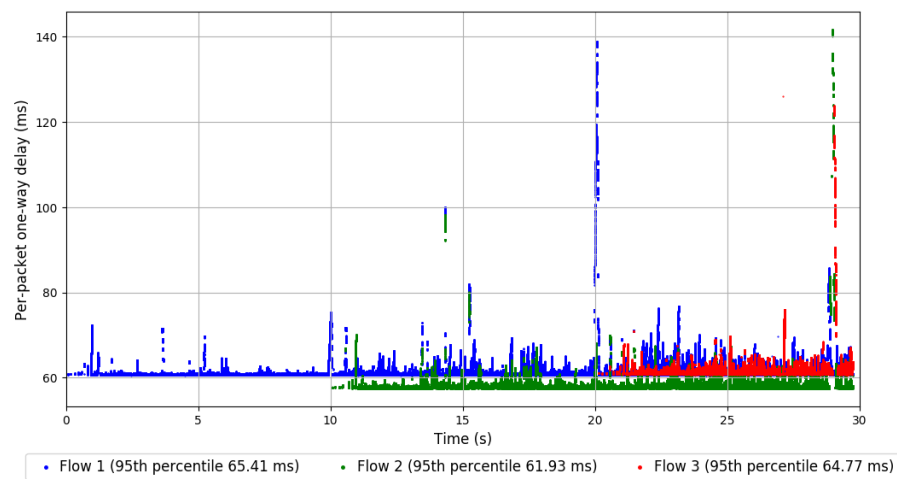
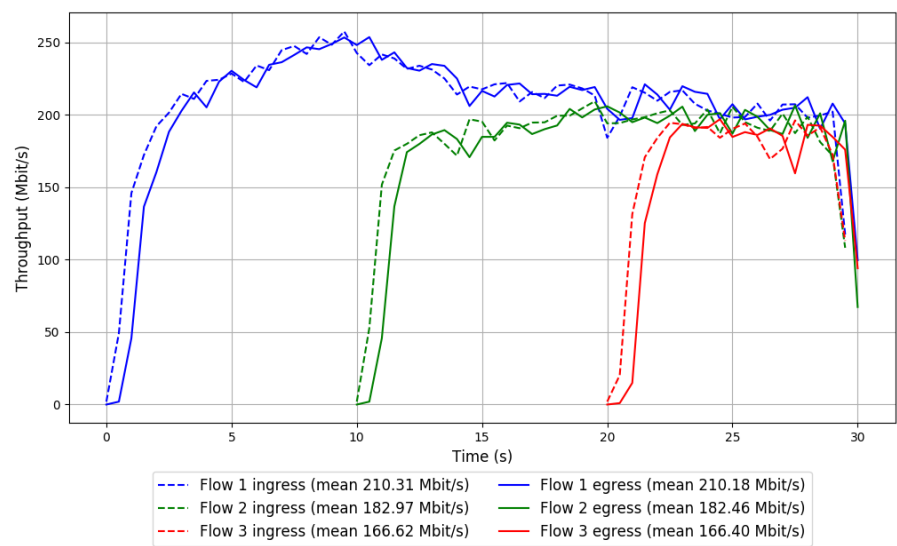
-- Flow 3:

Average throughput: 166.40 Mbit/s

95th percentile per-packet one-way delay: 64.765 ms

Loss rate: 1.38%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2019-07-13 03:32:00

End at: 2019-07-13 03:32:30

Local clock offset: -0.219 ms

Remote clock offset: -0.16 ms

# Below is generated by plot.py at 2019-07-13 06:38:06

# Datalink statistics

-- Total of 3 flows:

Average throughput: 368.28 Mbit/s

95th percentile per-packet one-way delay: 77.687 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 204.33 Mbit/s

95th percentile per-packet one-way delay: 69.137 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 178.03 Mbit/s

95th percentile per-packet one-way delay: 79.852 ms

Loss rate: 0.69%

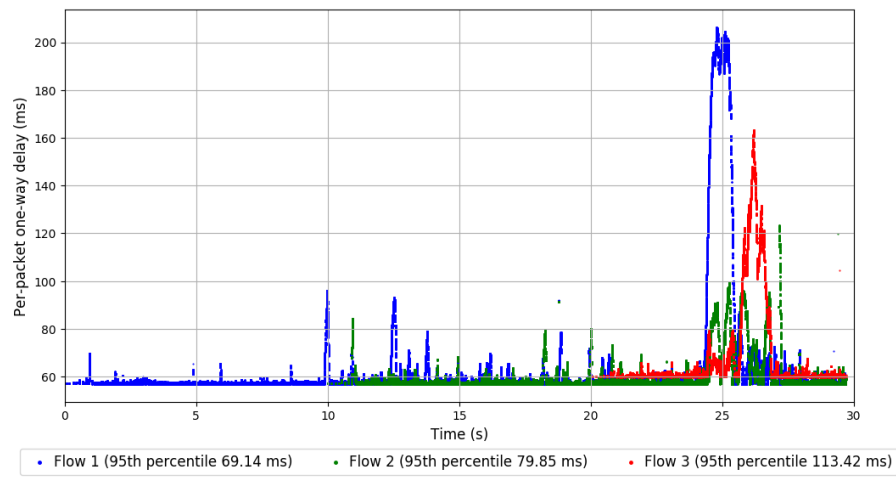
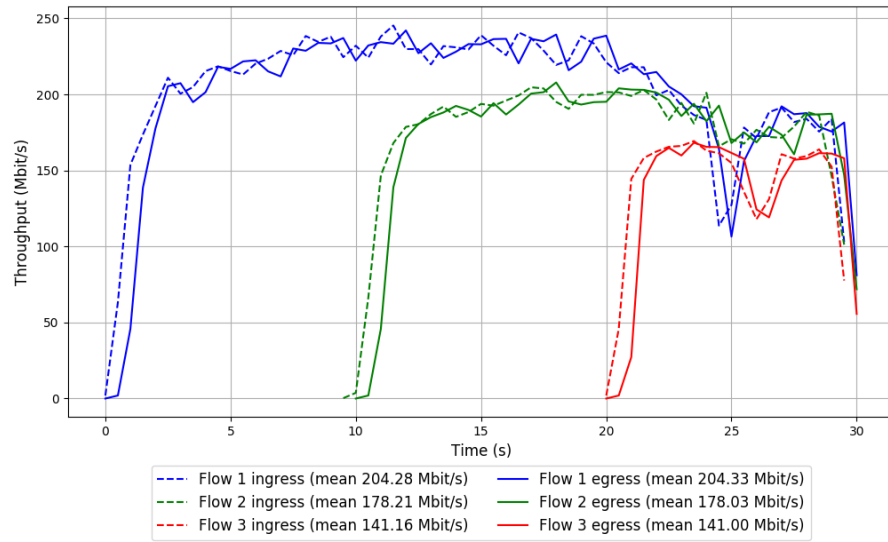
-- Flow 3:

Average throughput: 141.00 Mbit/s

95th percentile per-packet one-way delay: 113.423 ms

Loss rate: 1.34%

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

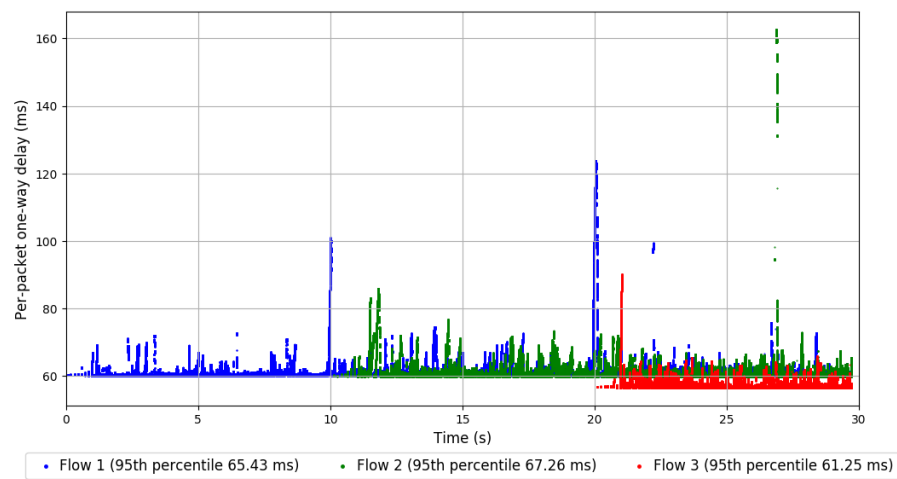
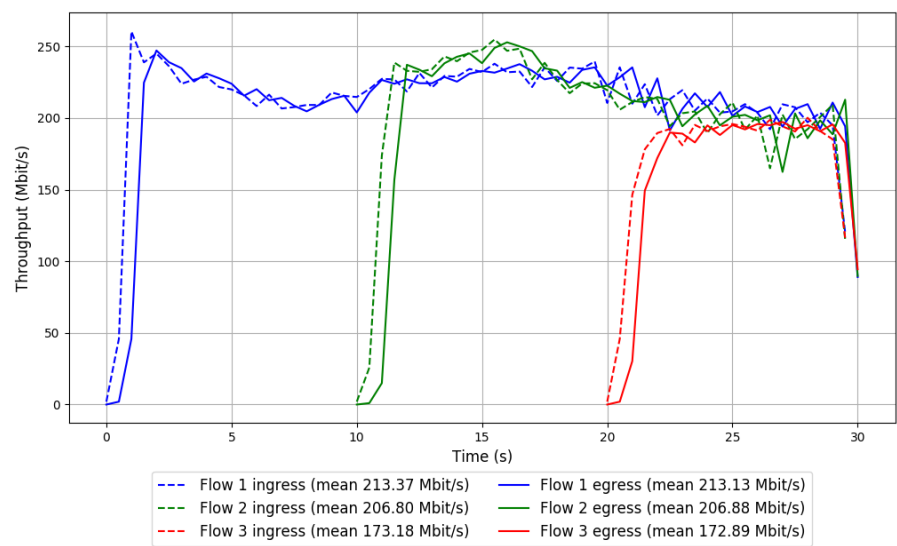


Run 4: Statistics of Indigo

Start at: 2019-07-13 04:13:04  
End at: 2019-07-13 04:13:34  
Local clock offset: -0.213 ms  
Remote clock offset: -0.144 ms

# Below is generated by plot.py at 2019-07-13 06:39:19  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 405.75 Mbit/s  
95th percentile per-packet one-way delay: 65.734 ms  
Loss rate: 0.68%  
-- Flow 1:  
Average throughput: 213.13 Mbit/s  
95th percentile per-packet one-way delay: 65.433 ms  
Loss rate: 0.53%  
-- Flow 2:  
Average throughput: 206.88 Mbit/s  
95th percentile per-packet one-way delay: 67.259 ms  
Loss rate: 0.62%  
-- Flow 3:  
Average throughput: 172.89 Mbit/s  
95th percentile per-packet one-way delay: 61.253 ms  
Loss rate: 1.42%

Run 4: Report of Indigo — Data Link

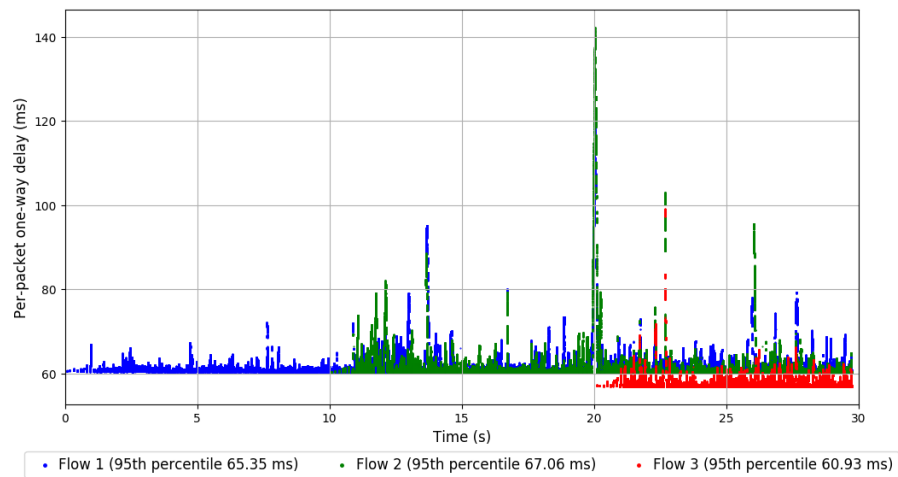
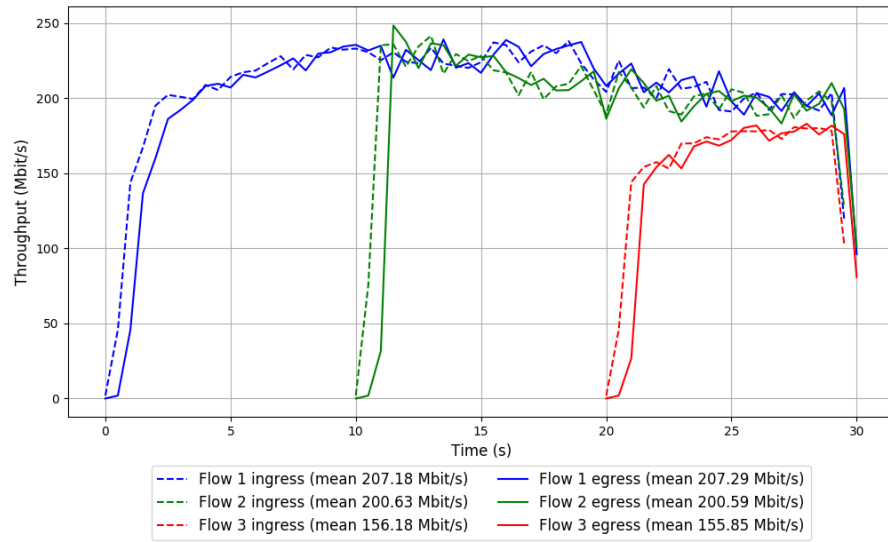


Run 5: Statistics of Indigo

Start at: 2019-07-13 04:54:19  
End at: 2019-07-13 04:54:49  
Local clock offset: 0.119 ms  
Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2019-07-13 06:39:19  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 390.82 Mbit/s  
95th percentile per-packet one-way delay: 65.527 ms  
Loss rate: 0.60%  
-- Flow 1:  
Average throughput: 207.29 Mbit/s  
95th percentile per-packet one-way delay: 65.351 ms  
Loss rate: 0.36%  
-- Flow 2:  
Average throughput: 200.59 Mbit/s  
95th percentile per-packet one-way delay: 67.059 ms  
Loss rate: 0.64%  
-- Flow 3:  
Average throughput: 155.85 Mbit/s  
95th percentile per-packet one-way delay: 60.933 ms  
Loss rate: 1.44%

## Run 5: Report of Indigo — Data Link

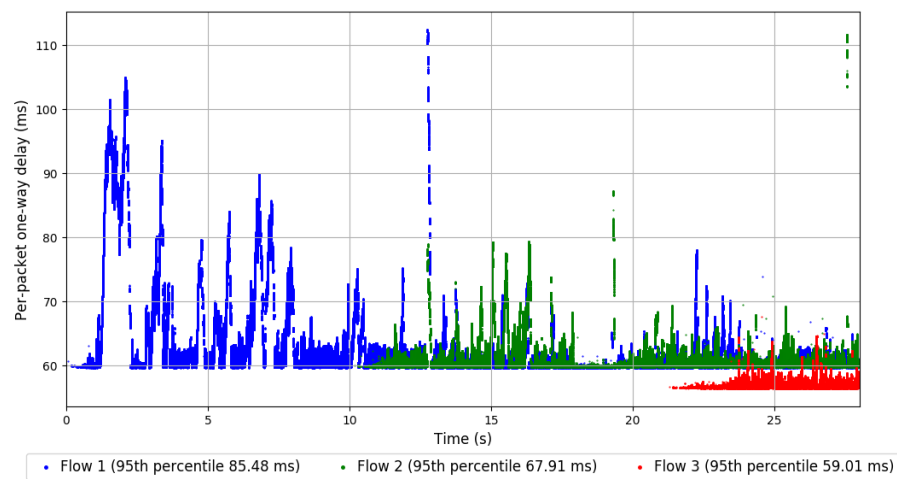
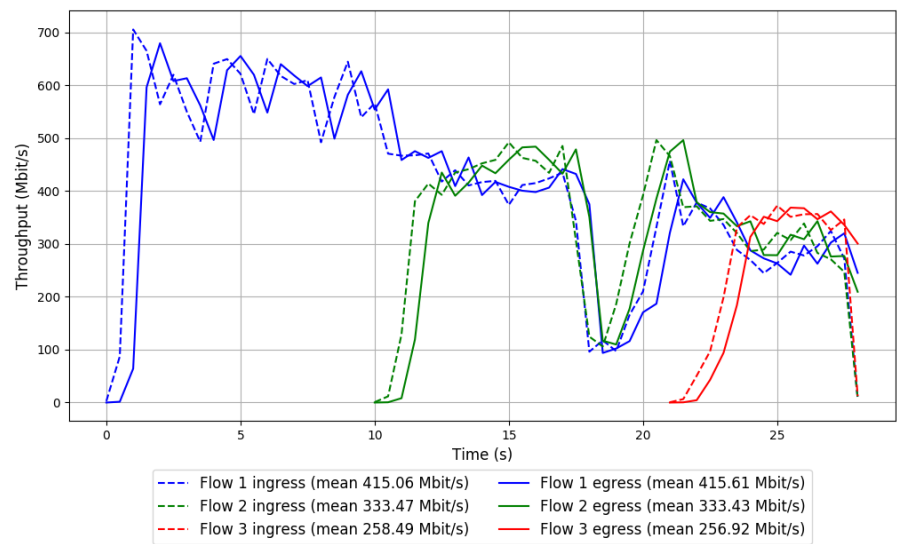


Run 1: Statistics of Indigo-MusesC3

Start at: 2019-07-13 01:59:27  
End at: 2019-07-13 01:59:57  
Local clock offset: -0.497 ms  
Remote clock offset: -0.168 ms

# Below is generated by plot.py at 2019-07-13 06:39:19  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 689.28 Mbit/s  
95th percentile per-packet one-way delay: 78.305 ms  
Loss rate: 0.61%  
-- Flow 1:  
Average throughput: 415.61 Mbit/s  
95th percentile per-packet one-way delay: 85.480 ms  
Loss rate: 0.30%  
-- Flow 2:  
Average throughput: 333.43 Mbit/s  
95th percentile per-packet one-way delay: 67.913 ms  
Loss rate: 0.69%  
-- Flow 3:  
Average throughput: 256.92 Mbit/s  
95th percentile per-packet one-way delay: 59.009 ms  
Loss rate: 2.37%

Run 1: Report of Indigo-MusesC3 — Data Link

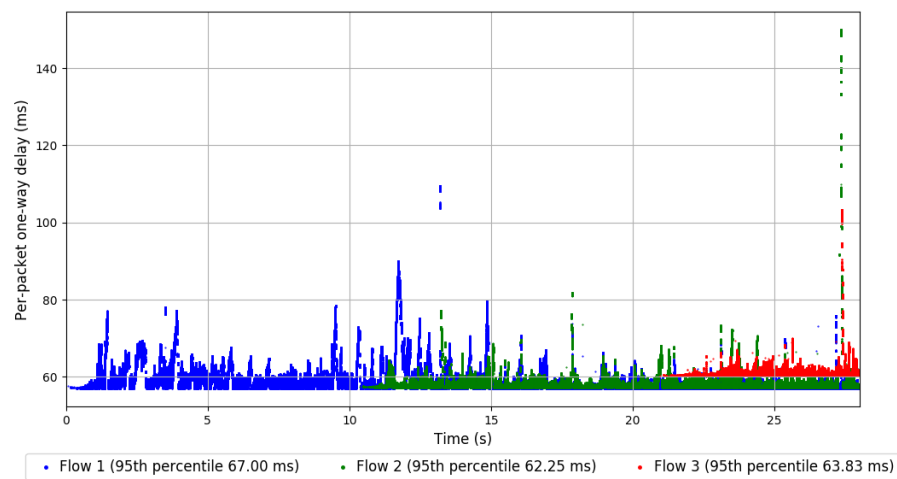
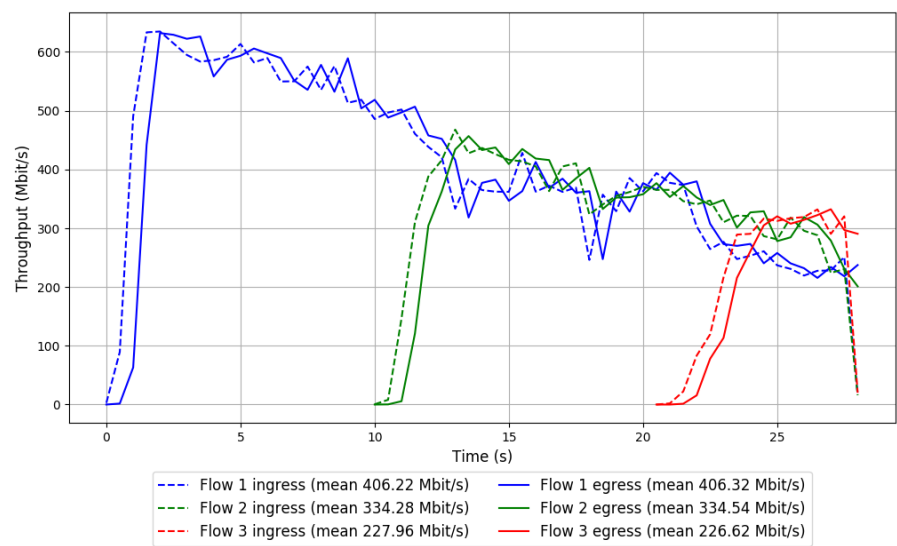


Run 2: Statistics of Indigo-MusesC3

Start at: 2019-07-13 02:40:11  
End at: 2019-07-13 02:40:41  
Local clock offset: -0.055 ms  
Remote clock offset: -0.147 ms

# Below is generated by plot.py at 2019-07-13 06:39:19  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 674.13 Mbit/s  
95th percentile per-packet one-way delay: 65.760 ms  
Loss rate: 0.63%  
-- Flow 1:  
Average throughput: 406.32 Mbit/s  
95th percentile per-packet one-way delay: 67.001 ms  
Loss rate: 0.41%  
-- Flow 2:  
Average throughput: 334.54 Mbit/s  
95th percentile per-packet one-way delay: 62.250 ms  
Loss rate: 0.59%  
-- Flow 3:  
Average throughput: 226.62 Mbit/s  
95th percentile per-packet one-way delay: 63.833 ms  
Loss rate: 2.36%

Run 2: Report of Indigo-MusesC3 — Data Link

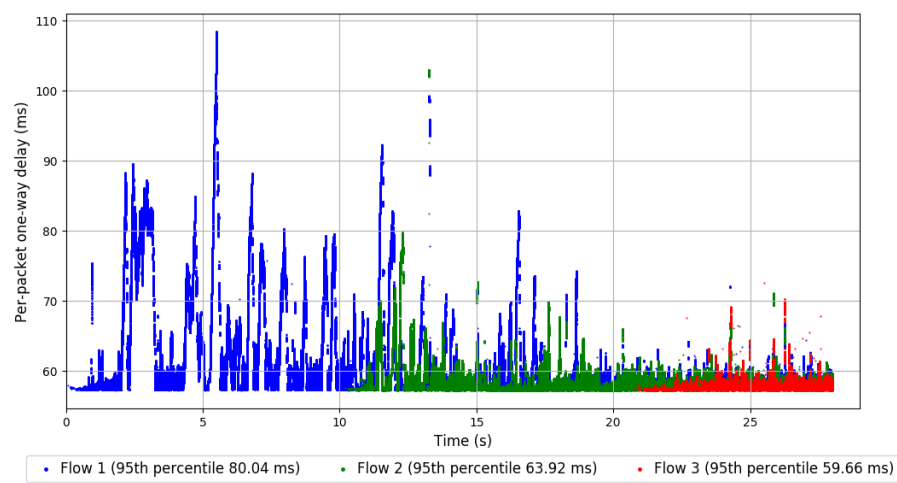
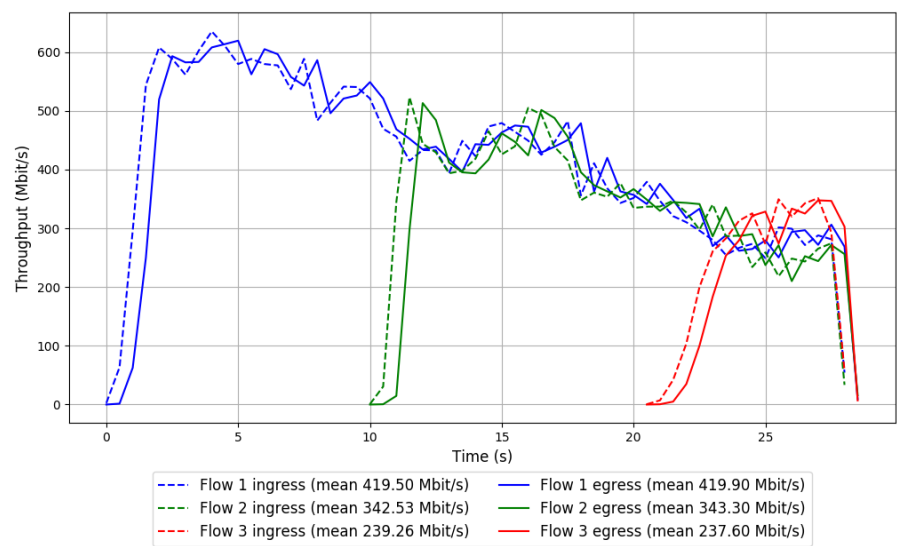


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-07-13 03:20:56  
End at: 2019-07-13 03:21:26  
Local clock offset: 0.101 ms  
Remote clock offset: -0.122 ms

# Below is generated by plot.py at 2019-07-13 06:50:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 699.98 Mbit/s  
95th percentile per-packet one-way delay: 75.856 ms  
Loss rate: 0.53%  
-- Flow 1:  
Average throughput: 419.90 Mbit/s  
95th percentile per-packet one-way delay: 80.042 ms  
Loss rate: 0.33%  
-- Flow 2:  
Average throughput: 343.30 Mbit/s  
95th percentile per-packet one-way delay: 63.920 ms  
Loss rate: 0.44%  
-- Flow 3:  
Average throughput: 237.60 Mbit/s  
95th percentile per-packet one-way delay: 59.655 ms  
Loss rate: 2.23%

Run 3: Report of Indigo-MusesC3 — Data Link

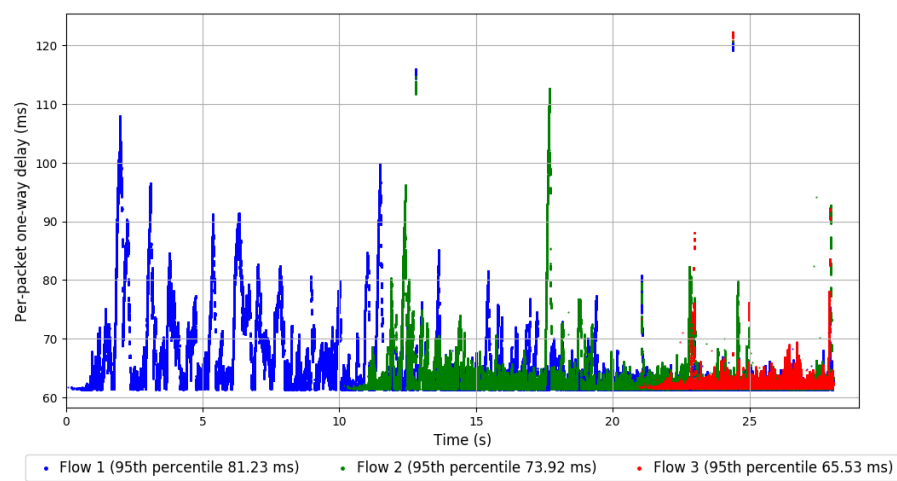
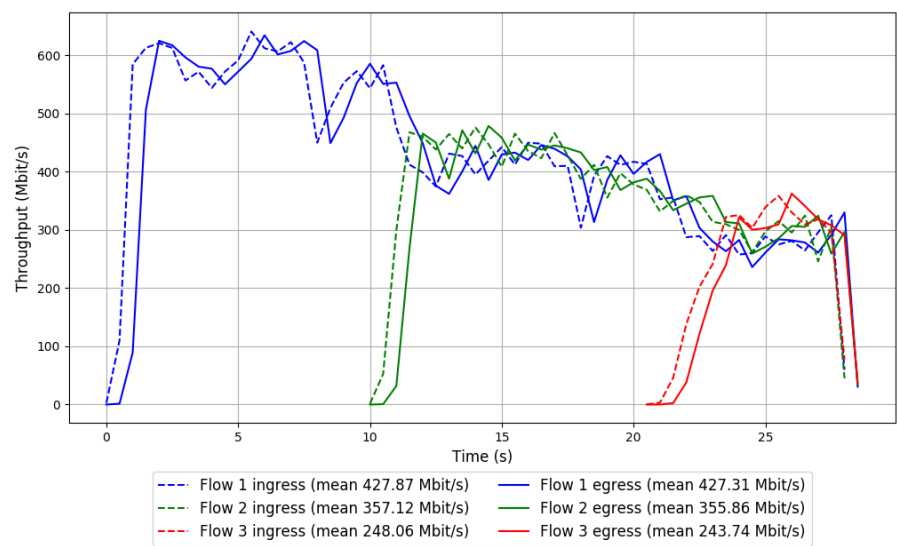


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-07-13 04:01:42  
End at: 2019-07-13 04:02:12  
Local clock offset: 0.275 ms  
Remote clock offset: -0.986 ms

# Below is generated by plot.py at 2019-07-13 06:51:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 717.01 Mbit/s  
95th percentile per-packet one-way delay: 78.763 ms  
Loss rate: 0.96%  
-- Flow 1:  
Average throughput: 427.31 Mbit/s  
95th percentile per-packet one-way delay: 81.228 ms  
Loss rate: 0.56%  
-- Flow 2:  
Average throughput: 355.86 Mbit/s  
95th percentile per-packet one-way delay: 73.915 ms  
Loss rate: 1.03%  
-- Flow 3:  
Average throughput: 243.74 Mbit/s  
95th percentile per-packet one-way delay: 65.526 ms  
Loss rate: 3.39%

Run 4: Report of Indigo-MusesC3 — Data Link

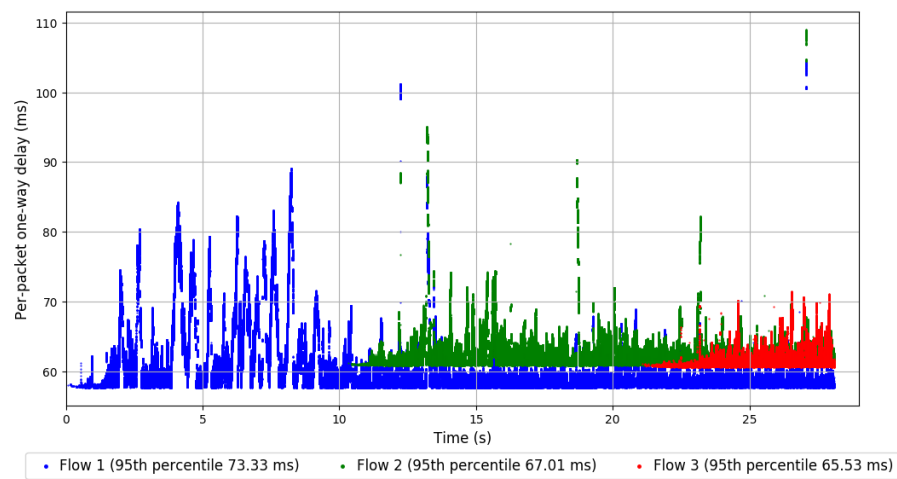
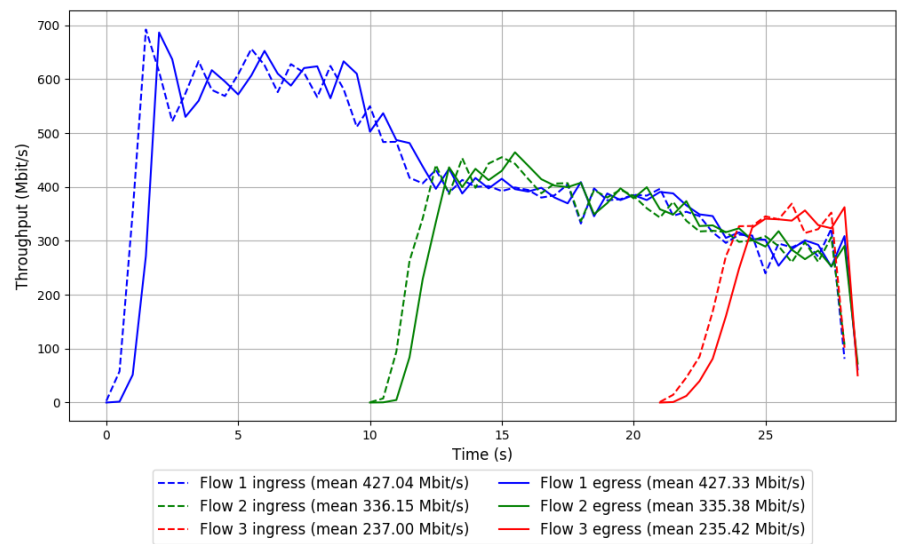


Run 5: Statistics of Indigo-MusesC3

Start at: 2019-07-13 04:42:58  
End at: 2019-07-13 04:43:28  
Local clock offset: 0.349 ms  
Remote clock offset: -0.232 ms

# Below is generated by plot.py at 2019-07-13 06:51:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 698.92 Mbit/s  
95th percentile per-packet one-way delay: 70.876 ms  
Loss rate: 0.69%  
-- Flow 1:  
Average throughput: 427.33 Mbit/s  
95th percentile per-packet one-way delay: 73.326 ms  
Loss rate: 0.35%  
-- Flow 2:  
Average throughput: 335.38 Mbit/s  
95th percentile per-packet one-way delay: 67.008 ms  
Loss rate: 0.91%  
-- Flow 3:  
Average throughput: 235.42 Mbit/s  
95th percentile per-packet one-way delay: 65.532 ms  
Loss rate: 2.34%

Run 5: Report of Indigo-MusesC3 — Data Link

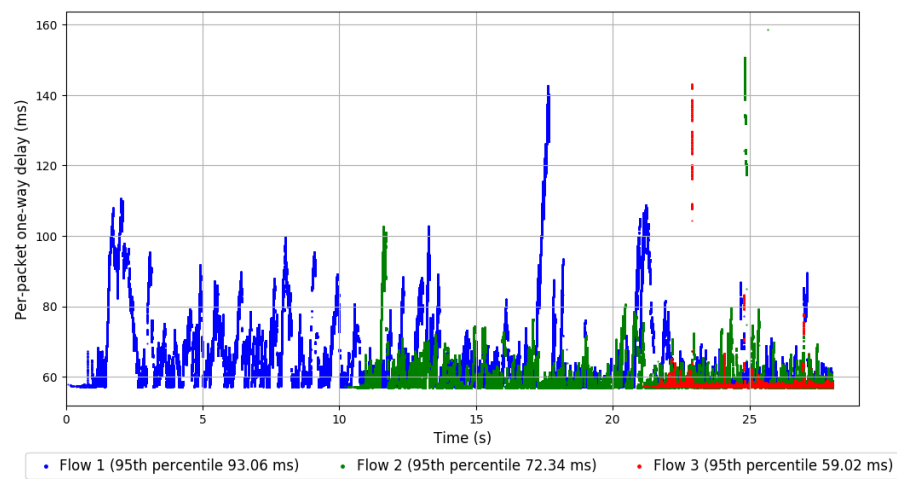
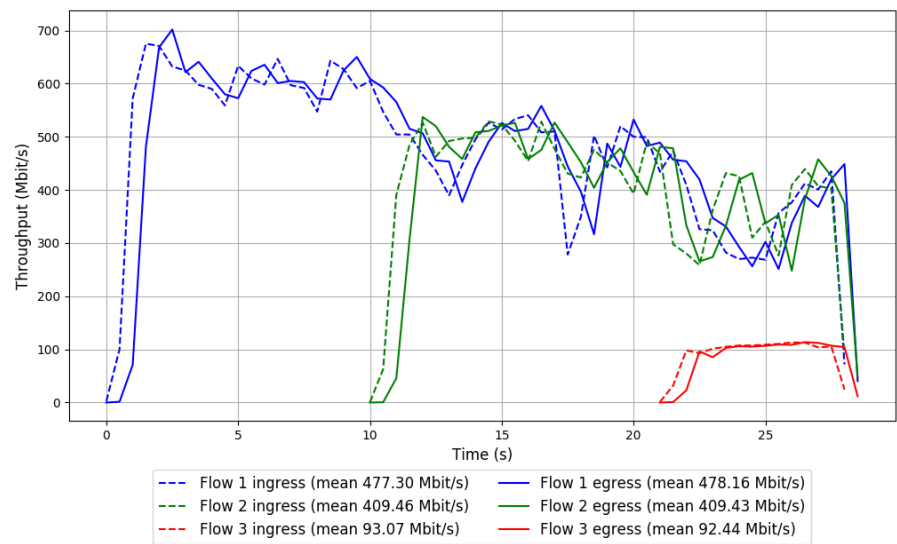


Run 1: Statistics of Indigo-MusesC5

Start at: 2019-07-13 02:22:32  
End at: 2019-07-13 02:23:02  
Local clock offset: 0.089 ms  
Remote clock offset: -0.075 ms

# Below is generated by plot.py at 2019-07-13 06:52:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 762.22 Mbit/s  
95th percentile per-packet one-way delay: 89.384 ms  
Loss rate: 0.48%  
-- Flow 1:  
Average throughput: 478.16 Mbit/s  
95th percentile per-packet one-way delay: 93.057 ms  
Loss rate: 0.28%  
-- Flow 2:  
Average throughput: 409.43 Mbit/s  
95th percentile per-packet one-way delay: 72.338 ms  
Loss rate: 0.68%  
-- Flow 3:  
Average throughput: 92.44 Mbit/s  
95th percentile per-packet one-way delay: 59.019 ms  
Loss rate: 2.33%

Run 1: Report of Indigo-MusesC5 — Data Link



Run 2: Statistics of Indigo-MusesC5

Start at: 2019-07-13 03:03:08

End at: 2019-07-13 03:03:38

Local clock offset: 0.303 ms

Remote clock offset: 0.038 ms

# Below is generated by plot.py at 2019-07-13 06:52:13

# Datalink statistics

-- Total of 3 flows:

Average throughput: 714.69 Mbit/s

95th percentile per-packet one-way delay: 99.339 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 438.61 Mbit/s

95th percentile per-packet one-way delay: 89.289 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 392.74 Mbit/s

95th percentile per-packet one-way delay: 125.661 ms

Loss rate: 0.46%

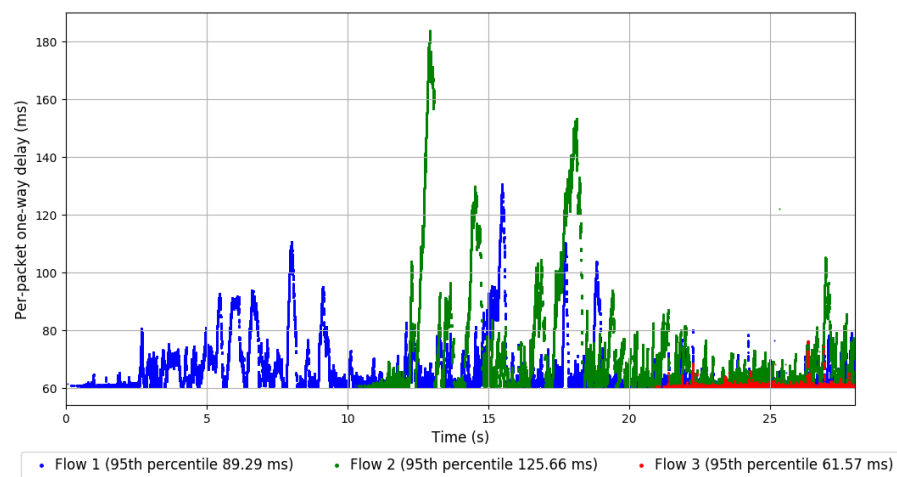
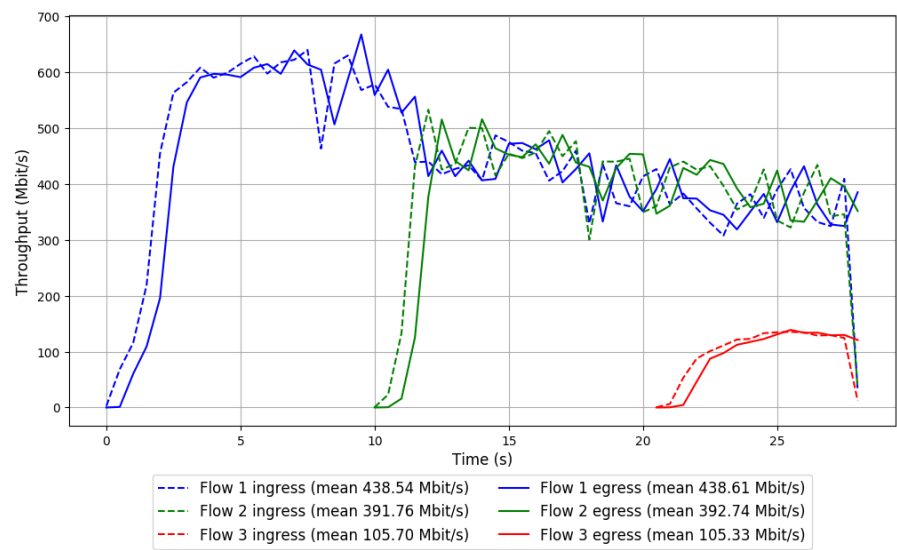
-- Flow 3:

Average throughput: 105.33 Mbit/s

95th percentile per-packet one-way delay: 61.574 ms

Loss rate: 2.00%

Run 2: Report of Indigo-MusesC5 — Data Link

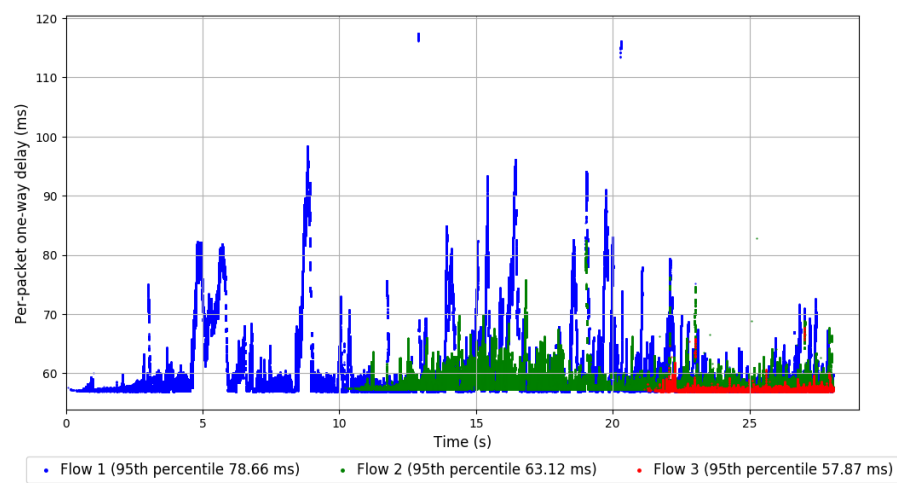
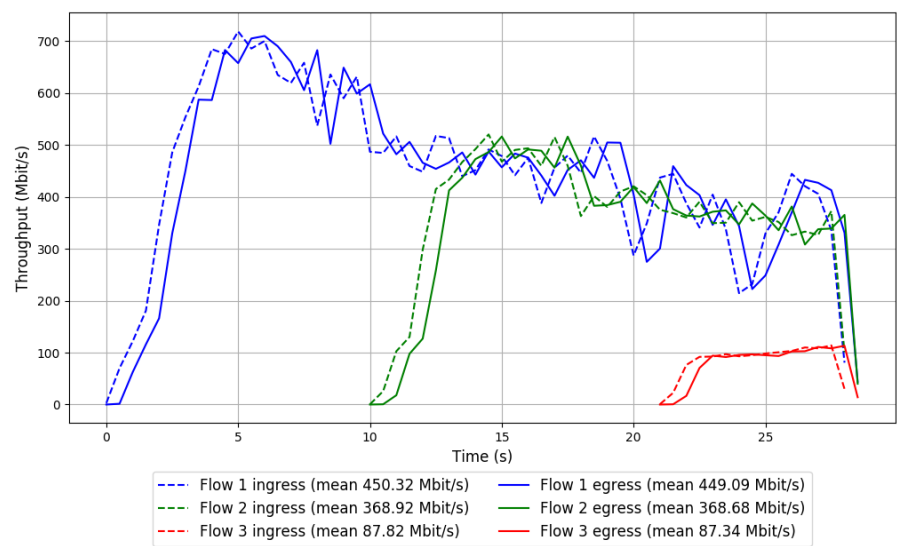


Run 3: Statistics of Indigo-MusesC5

Start at: 2019-07-13 03:43:42  
End at: 2019-07-13 03:44:12  
Local clock offset: 0.09 ms  
Remote clock offset: -0.174 ms

# Below is generated by plot.py at 2019-07-13 06:52:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 705.57 Mbit/s  
95th percentile per-packet one-way delay: 74.646 ms  
Loss rate: 0.76%  
-- Flow 1:  
Average throughput: 449.09 Mbit/s  
95th percentile per-packet one-way delay: 78.661 ms  
Loss rate: 0.70%  
-- Flow 2:  
Average throughput: 368.68 Mbit/s  
95th percentile per-packet one-way delay: 63.118 ms  
Loss rate: 0.75%  
-- Flow 3:  
Average throughput: 87.34 Mbit/s  
95th percentile per-packet one-way delay: 57.869 ms  
Loss rate: 2.25%

Run 3: Report of Indigo-MusesC5 — Data Link

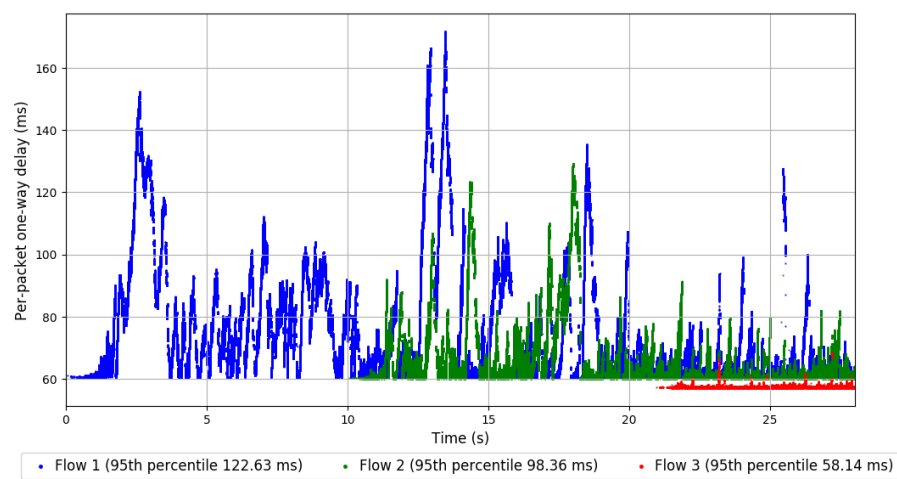
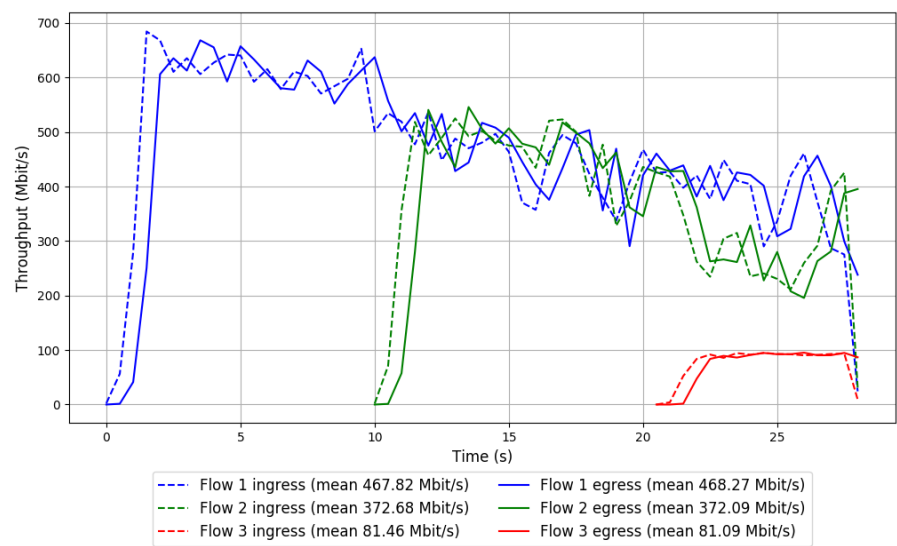


Run 4: Statistics of Indigo-MusesC5

Start at: 2019-07-13 04:25:03  
End at: 2019-07-13 04:25:33  
Local clock offset: -0.098 ms  
Remote clock offset: -0.227 ms

# Below is generated by plot.py at 2019-07-13 06:53:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 727.40 Mbit/s  
95th percentile per-packet one-way delay: 114.659 ms  
Loss rate: 0.53%  
-- Flow 1:  
Average throughput: 468.27 Mbit/s  
95th percentile per-packet one-way delay: 122.631 ms  
Loss rate: 0.31%  
-- Flow 2:  
Average throughput: 372.09 Mbit/s  
95th percentile per-packet one-way delay: 98.361 ms  
Loss rate: 0.83%  
-- Flow 3:  
Average throughput: 81.09 Mbit/s  
95th percentile per-packet one-way delay: 58.143 ms  
Loss rate: 2.09%

Run 4: Report of Indigo-MusesC5 — Data Link

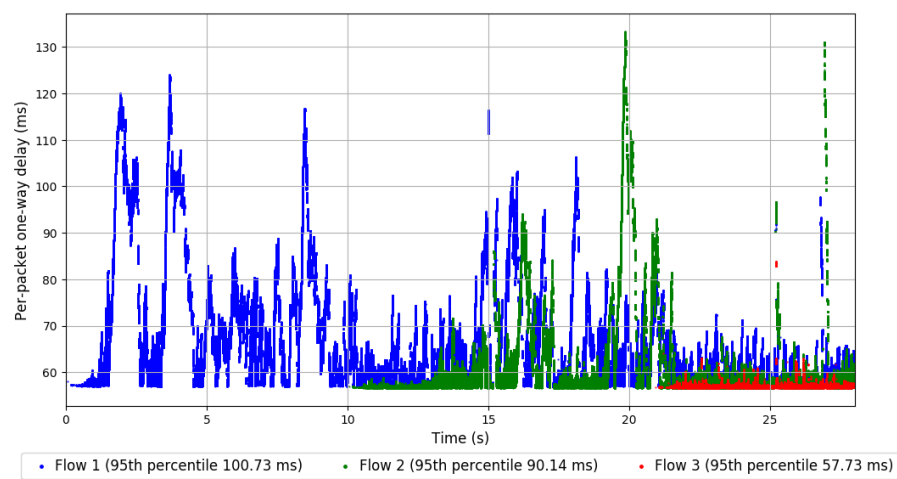
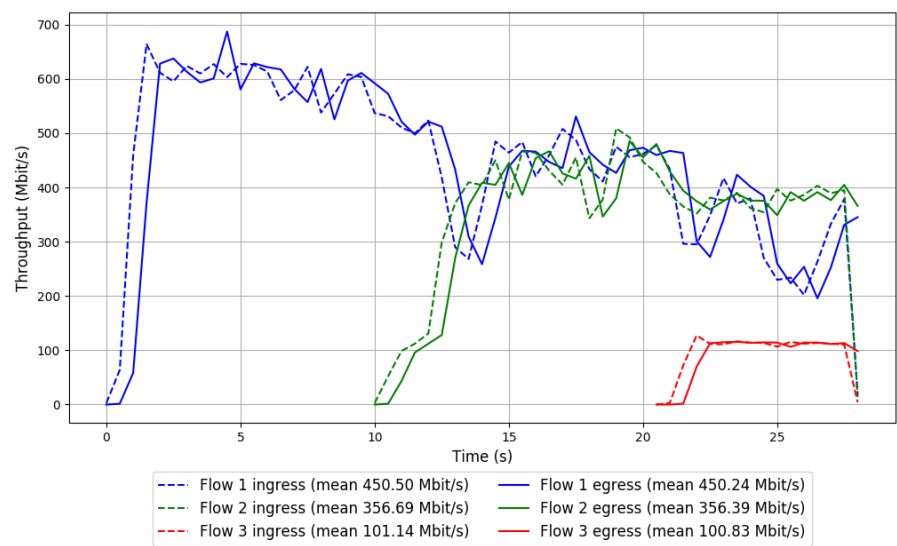


Run 5: Statistics of Indigo-MusesC5

Start at: 2019-07-13 05:06:09  
End at: 2019-07-13 05:06:39  
Local clock offset: -0.362 ms  
Remote clock offset: -0.235 ms

# Below is generated by plot.py at 2019-07-13 06:53:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 704.17 Mbit/s  
95th percentile per-packet one-way delay: 99.325 ms  
Loss rate: 0.63%  
-- Flow 1:  
Average throughput: 450.24 Mbit/s  
95th percentile per-packet one-way delay: 100.732 ms  
Loss rate: 0.49%  
-- Flow 2:  
Average throughput: 356.39 Mbit/s  
95th percentile per-packet one-way delay: 90.142 ms  
Loss rate: 0.75%  
-- Flow 3:  
Average throughput: 100.83 Mbit/s  
95th percentile per-packet one-way delay: 57.726 ms  
Loss rate: 1.99%

Run 5: Report of Indigo-MusesC5 — Data Link

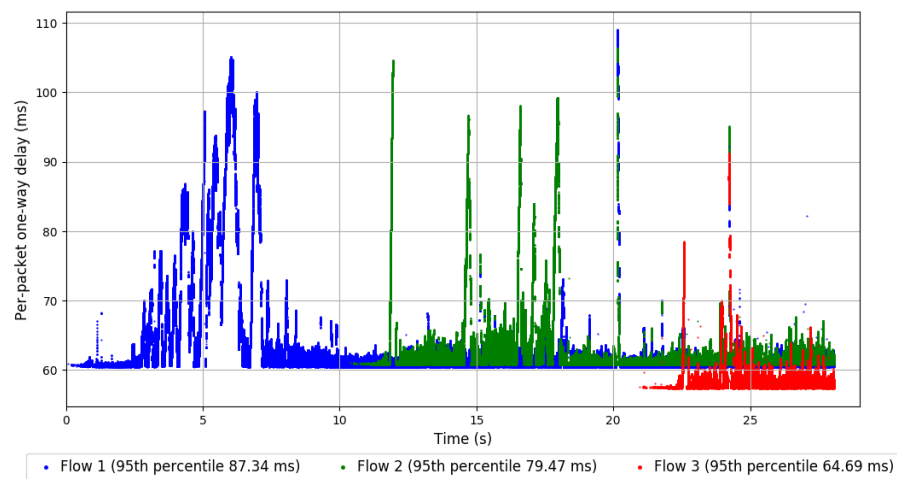
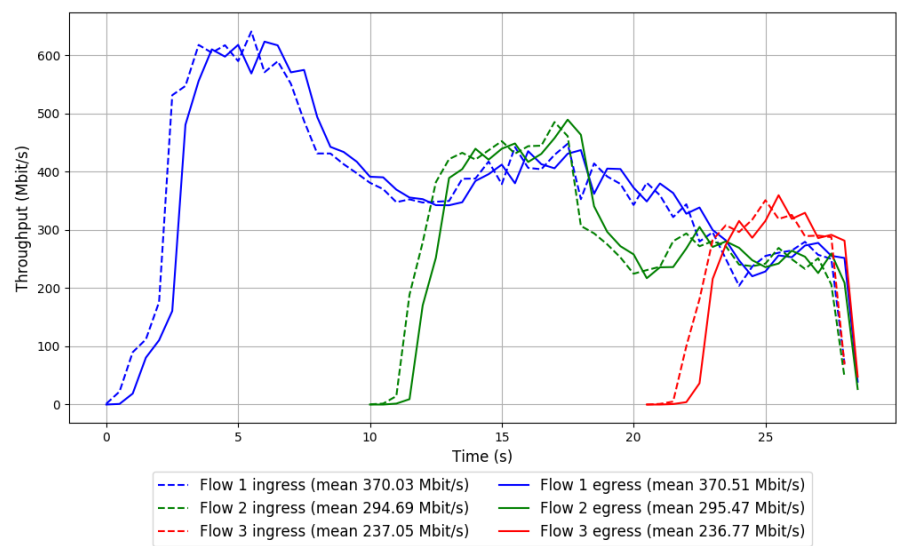


Run 1: Statistics of Indigo-MusesD

Start at: 2019-07-13 02:17:50  
End at: 2019-07-13 02:18:20  
Local clock offset: 0.195 ms  
Remote clock offset: -0.178 ms

# Below is generated by plot.py at 2019-07-13 07:01:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 617.14 Mbit/s  
95th percentile per-packet one-way delay: 83.722 ms  
Loss rate: 0.48%  
-- Flow 1:  
Average throughput: 370.51 Mbit/s  
95th percentile per-packet one-way delay: 87.339 ms  
Loss rate: 0.30%  
-- Flow 2:  
Average throughput: 295.47 Mbit/s  
95th percentile per-packet one-way delay: 79.469 ms  
Loss rate: 0.42%  
-- Flow 3:  
Average throughput: 236.77 Mbit/s  
95th percentile per-packet one-way delay: 64.694 ms  
Loss rate: 1.75%

Run 1: Report of Indigo-MusesD — Data Link

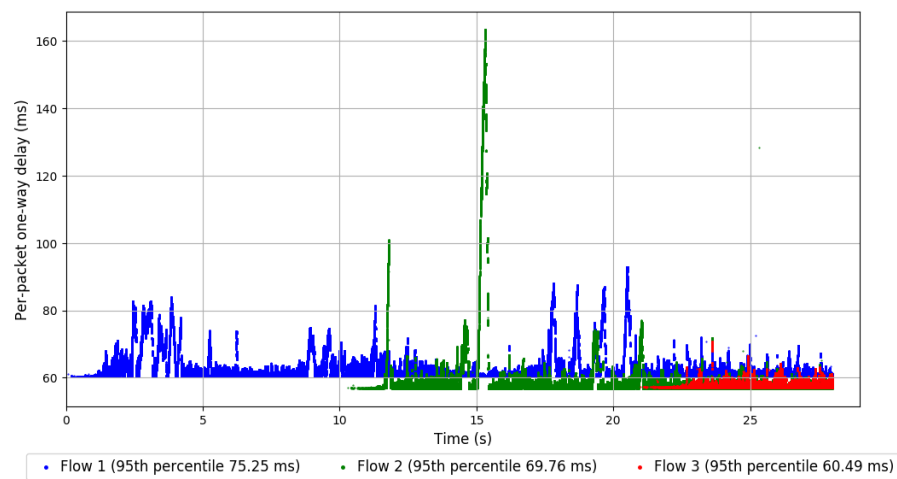
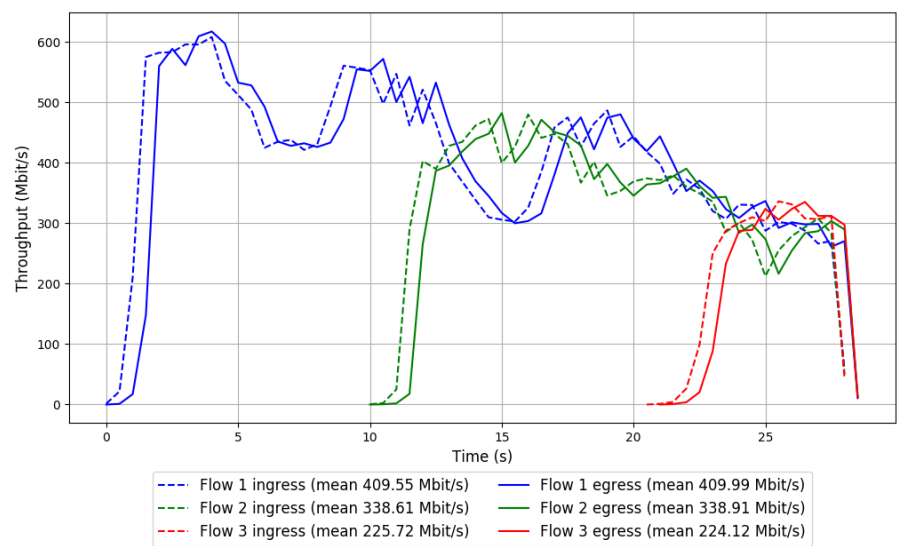


Run 2: Statistics of Indigo-MusesD

Start at: 2019-07-13 02:58:21  
End at: 2019-07-13 02:58:51  
Local clock offset: -0.233 ms  
Remote clock offset: -0.067 ms

# Below is generated by plot.py at 2019-07-13 07:03:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 681.11 Mbit/s  
95th percentile per-packet one-way delay: 73.410 ms  
Loss rate: 0.59%  
-- Flow 1:  
Average throughput: 409.99 Mbit/s  
95th percentile per-packet one-way delay: 75.251 ms  
Loss rate: 0.34%  
-- Flow 2:  
Average throughput: 338.91 Mbit/s  
95th percentile per-packet one-way delay: 69.763 ms  
Loss rate: 0.57%  
-- Flow 3:  
Average throughput: 224.12 Mbit/s  
95th percentile per-packet one-way delay: 60.489 ms  
Loss rate: 2.36%

Run 2: Report of Indigo-MusesD — Data Link

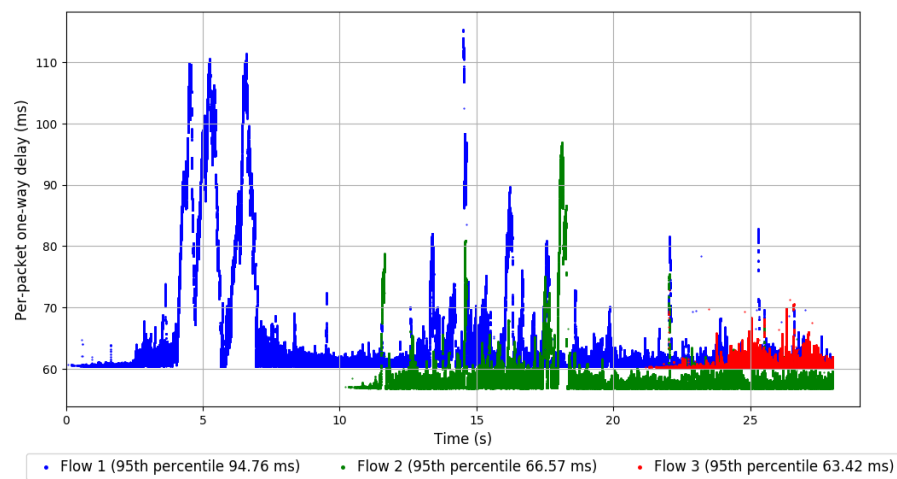
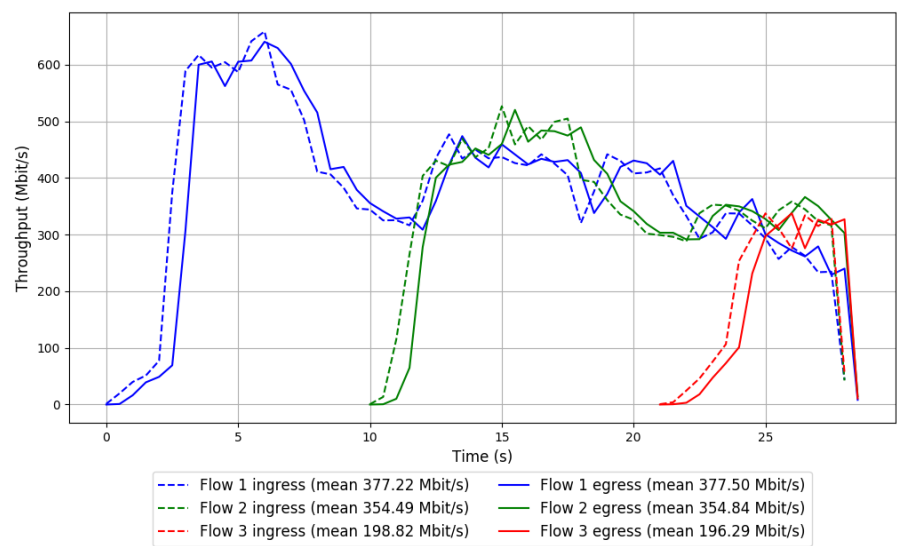


Run 3: Statistics of Indigo-MusesD

Start at: 2019-07-13 03:38:55  
End at: 2019-07-13 03:39:25  
Local clock offset: -0.104 ms  
Remote clock offset: -0.124 ms

# Below is generated by plot.py at 2019-07-13 07:03:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 651.41 Mbit/s  
95th percentile per-packet one-way delay: 87.157 ms  
Loss rate: 0.62%  
-- Flow 1:  
Average throughput: 377.50 Mbit/s  
95th percentile per-packet one-way delay: 94.760 ms  
Loss rate: 0.36%  
-- Flow 2:  
Average throughput: 354.84 Mbit/s  
95th percentile per-packet one-way delay: 66.568 ms  
Loss rate: 0.56%  
-- Flow 3:  
Average throughput: 196.29 Mbit/s  
95th percentile per-packet one-way delay: 63.424 ms  
Loss rate: 2.96%

Run 3: Report of Indigo-MusesD — Data Link



Run 4: Statistics of Indigo-MusesD

Start at: 2019-07-13 04:20:15

End at: 2019-07-13 04:20:45

Local clock offset: 0.349 ms

Remote clock offset: 0.005 ms

# Below is generated by plot.py at 2019-07-13 07:03:52

# Datalink statistics

-- Total of 3 flows:

Average throughput: 664.32 Mbit/s

95th percentile per-packet one-way delay: 73.839 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 397.52 Mbit/s

95th percentile per-packet one-way delay: 69.414 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 326.10 Mbit/s

95th percentile per-packet one-way delay: 81.692 ms

Loss rate: 0.61%

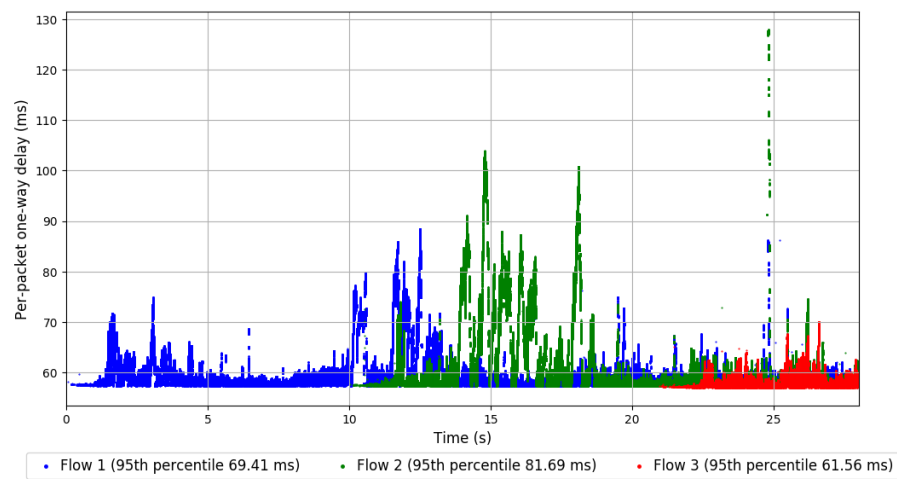
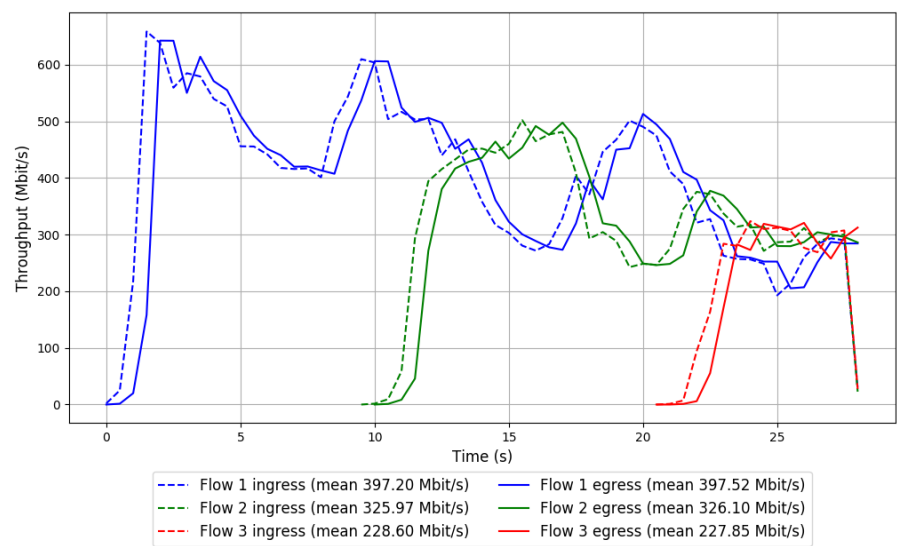
-- Flow 3:

Average throughput: 227.85 Mbit/s

95th percentile per-packet one-way delay: 61.558 ms

Loss rate: 1.98%

Run 4: Report of Indigo-MusesD — Data Link



Run 5: Statistics of Indigo-MusesD

Start at: 2019-07-13 05:01:26

End at: 2019-07-13 05:01:56

Local clock offset: -0.084 ms

Remote clock offset: 0.041 ms

# Below is generated by plot.py at 2019-07-13 07:04:01

# Datalink statistics

-- Total of 3 flows:

Average throughput: 674.07 Mbit/s

95th percentile per-packet one-way delay: 80.029 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 407.69 Mbit/s

95th percentile per-packet one-way delay: 83.523 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 323.70 Mbit/s

95th percentile per-packet one-way delay: 71.967 ms

Loss rate: 0.55%

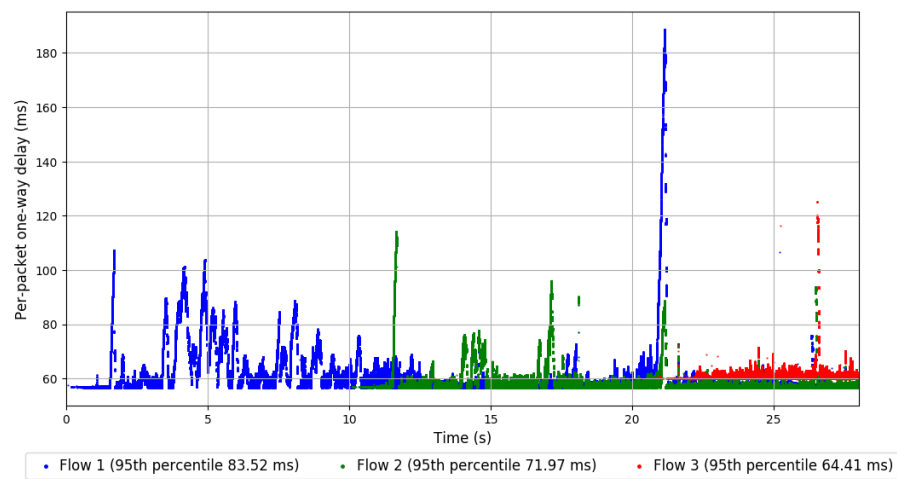
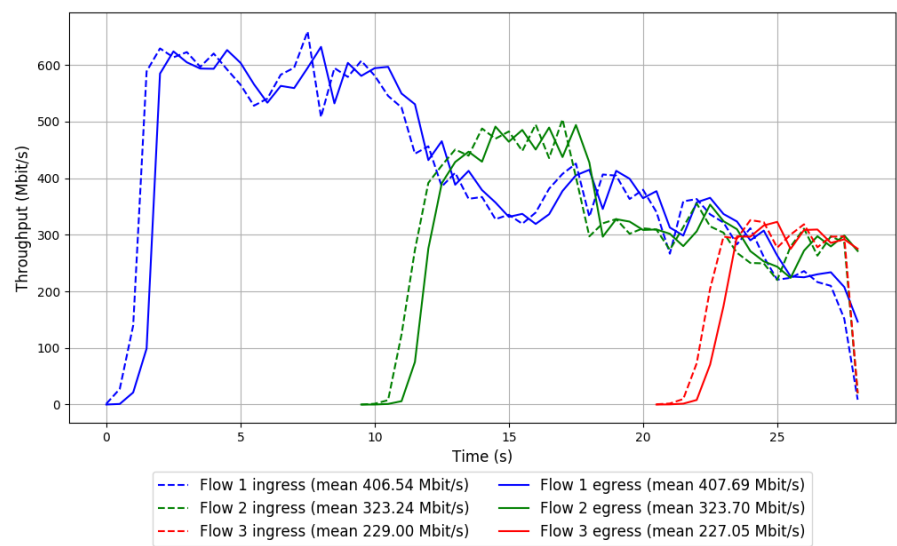
-- Flow 3:

Average throughput: 227.05 Mbit/s

95th percentile per-packet one-way delay: 64.412 ms

Loss rate: 2.49%

Run 5: Report of Indigo-MusesD — Data Link

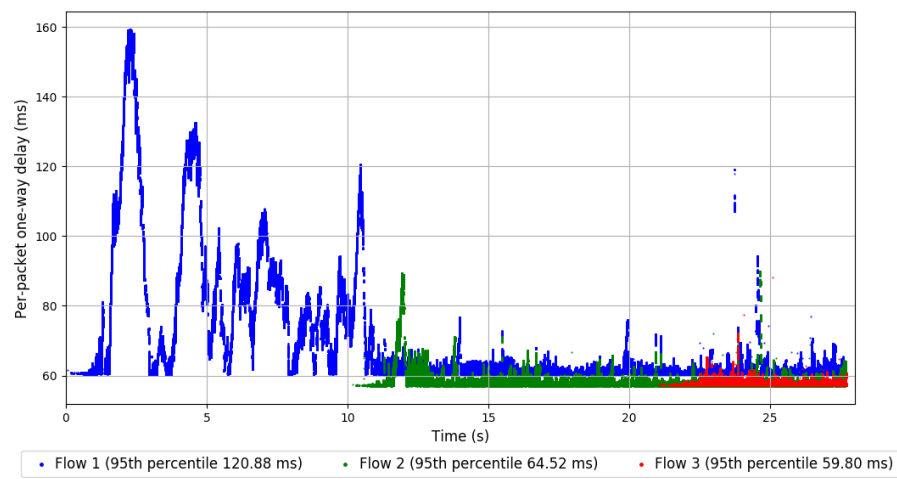
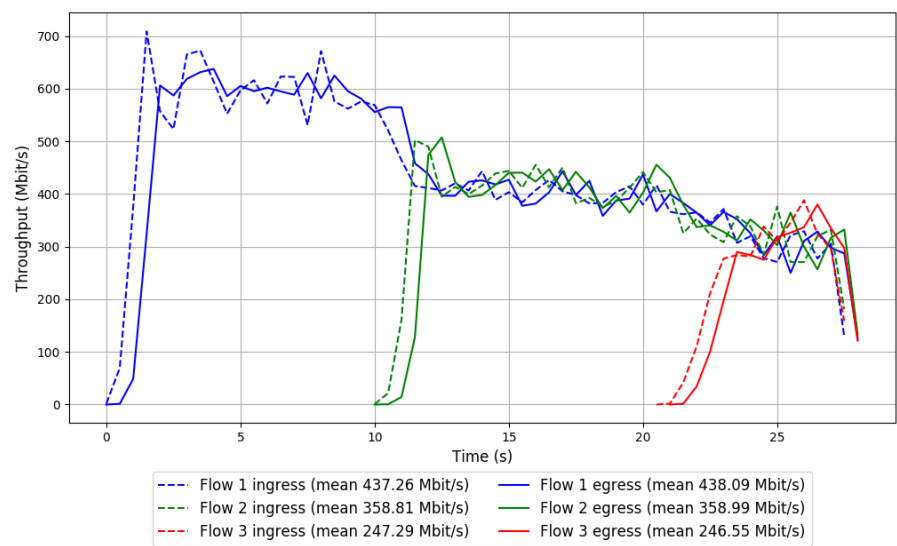


Run 1: Statistics of Indigo-MusesT

Start at: 2019-07-13 01:50:00  
End at: 2019-07-13 01:50:30  
Local clock offset: -0.086 ms  
Remote clock offset: -0.228 ms

# Below is generated by plot.py at 2019-07-13 07:05:36  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 725.02 Mbit/s  
95th percentile per-packet one-way delay: 106.268 ms  
Loss rate: 0.55%  
-- Flow 1:  
Average throughput: 438.09 Mbit/s  
95th percentile per-packet one-way delay: 120.882 ms  
Loss rate: 0.30%  
-- Flow 2:  
Average throughput: 358.99 Mbit/s  
95th percentile per-packet one-way delay: 64.522 ms  
Loss rate: 0.62%  
-- Flow 3:  
Average throughput: 246.55 Mbit/s  
95th percentile per-packet one-way delay: 59.803 ms  
Loss rate: 2.15%

Run 1: Report of Indigo-MusesT — Data Link

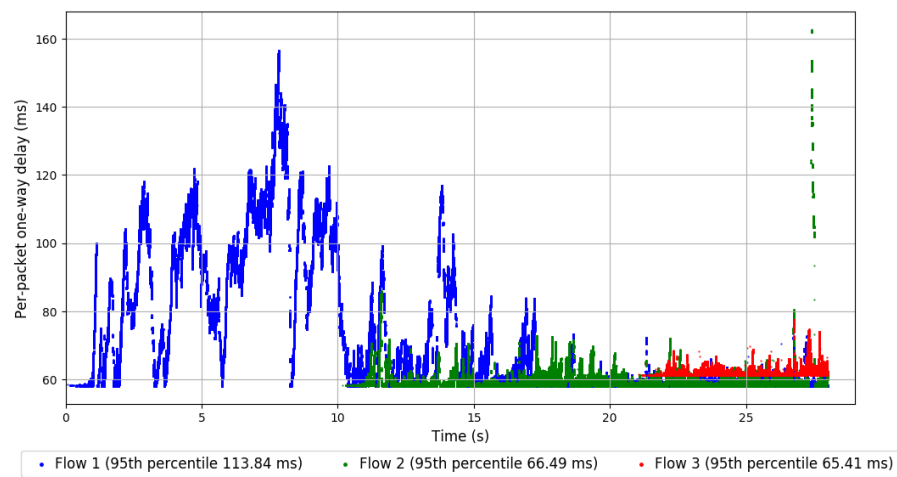
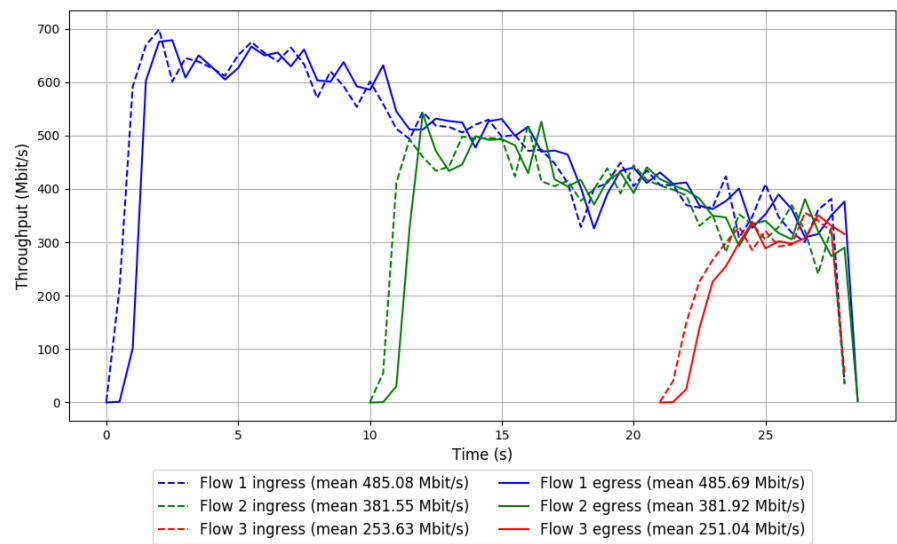


Run 2: Statistics of Indigo-MusesT

Start at: 2019-07-13 02:30:56  
End at: 2019-07-13 02:31:26  
Local clock offset: -0.009 ms  
Remote clock offset: -0.964 ms

# Below is generated by plot.py at 2019-07-13 07:07:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 791.57 Mbit/s  
95th percentile per-packet one-way delay: 110.500 ms  
Loss rate: 0.58%  
-- Flow 1:  
Average throughput: 485.69 Mbit/s  
95th percentile per-packet one-way delay: 113.842 ms  
Loss rate: 0.30%  
-- Flow 2:  
Average throughput: 381.92 Mbit/s  
95th percentile per-packet one-way delay: 66.493 ms  
Loss rate: 0.56%  
-- Flow 3:  
Average throughput: 251.04 Mbit/s  
95th percentile per-packet one-way delay: 65.413 ms  
Loss rate: 2.82%

Run 2: Report of Indigo-MusesT — Data Link



Run 3: Statistics of Indigo-MusesT

Start at: 2019-07-13 03:11:32

End at: 2019-07-13 03:12:02

Local clock offset: 0.247 ms

Remote clock offset: -0.71 ms

# Below is generated by plot.py at 2019-07-13 07:07:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 749.61 Mbit/s

95th percentile per-packet one-way delay: 105.221 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 454.15 Mbit/s

95th percentile per-packet one-way delay: 110.434 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 356.96 Mbit/s

95th percentile per-packet one-way delay: 76.591 ms

Loss rate: 1.00%

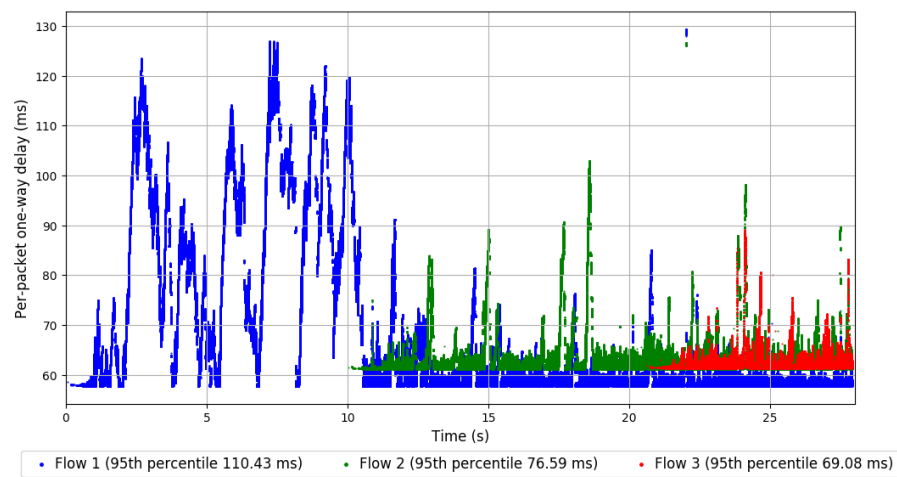
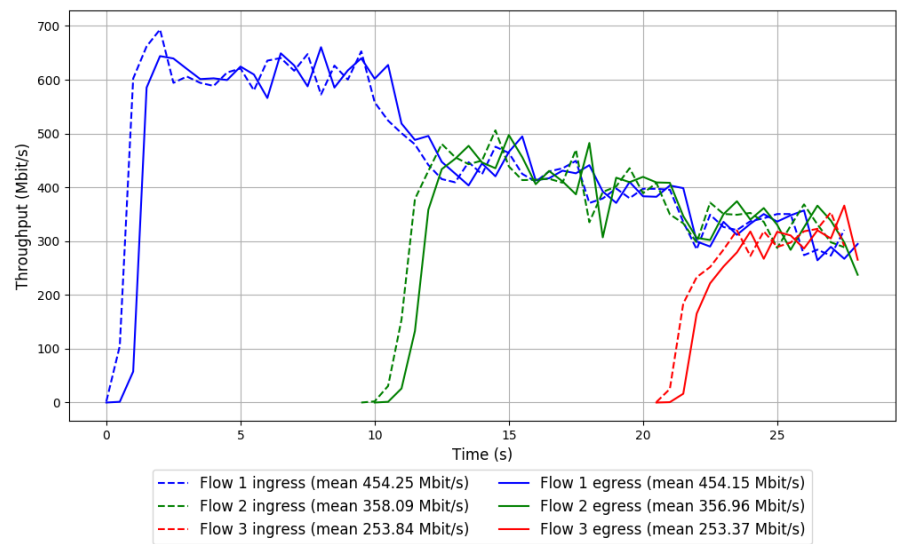
-- Flow 3:

Average throughput: 253.37 Mbit/s

95th percentile per-packet one-way delay: 69.078 ms

Loss rate: 1.86%

Run 3: Report of Indigo-MusesT — Data Link

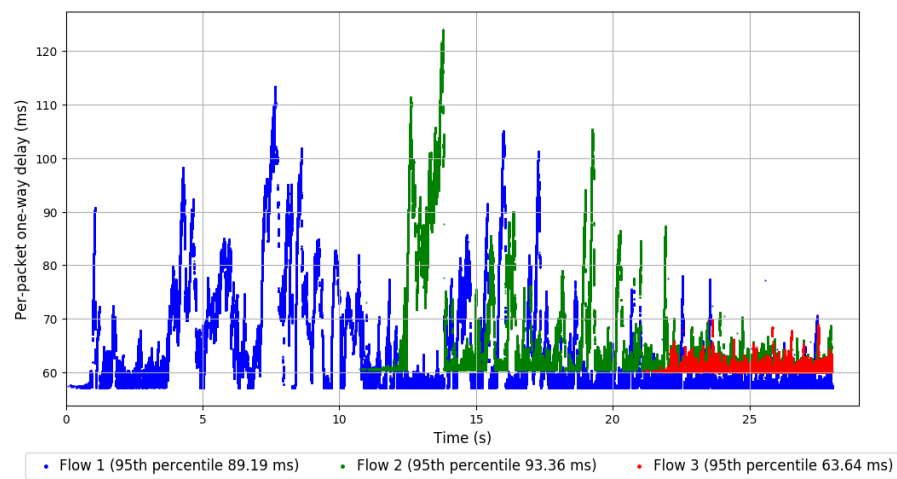
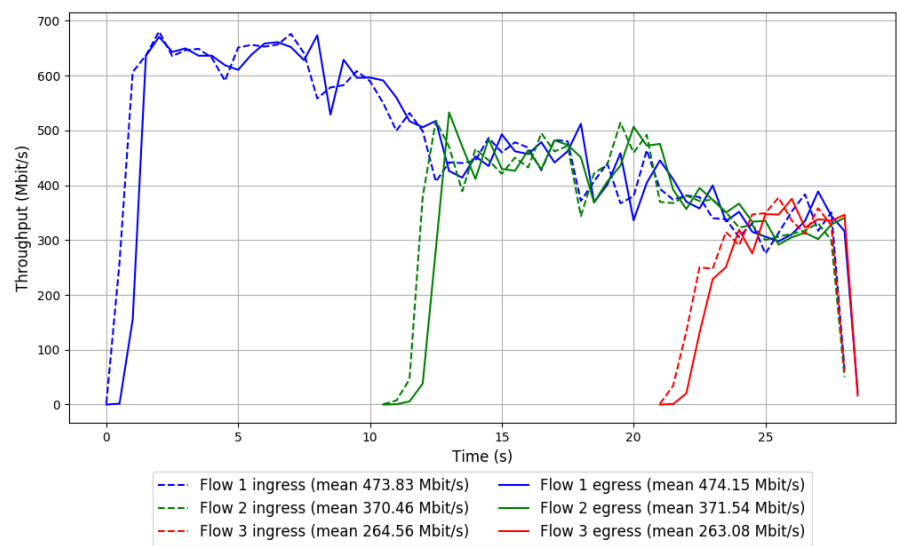


Run 4: Statistics of Indigo-MusesT

Start at: 2019-07-13 03:52:04  
End at: 2019-07-13 03:52:34  
Local clock offset: -0.157 ms  
Remote clock offset: -0.183 ms

# Below is generated by plot.py at 2019-07-13 07:15:26  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 768.81 Mbit/s  
95th percentile per-packet one-way delay: 89.689 ms  
Loss rate: 0.58%  
-- Flow 1:  
Average throughput: 474.15 Mbit/s  
95th percentile per-packet one-way delay: 89.193 ms  
Loss rate: 0.36%  
-- Flow 2:  
Average throughput: 371.54 Mbit/s  
95th percentile per-packet one-way delay: 93.360 ms  
Loss rate: 0.55%  
-- Flow 3:  
Average throughput: 263.08 Mbit/s  
95th percentile per-packet one-way delay: 63.638 ms  
Loss rate: 2.24%

Run 4: Report of Indigo-MusesT — Data Link

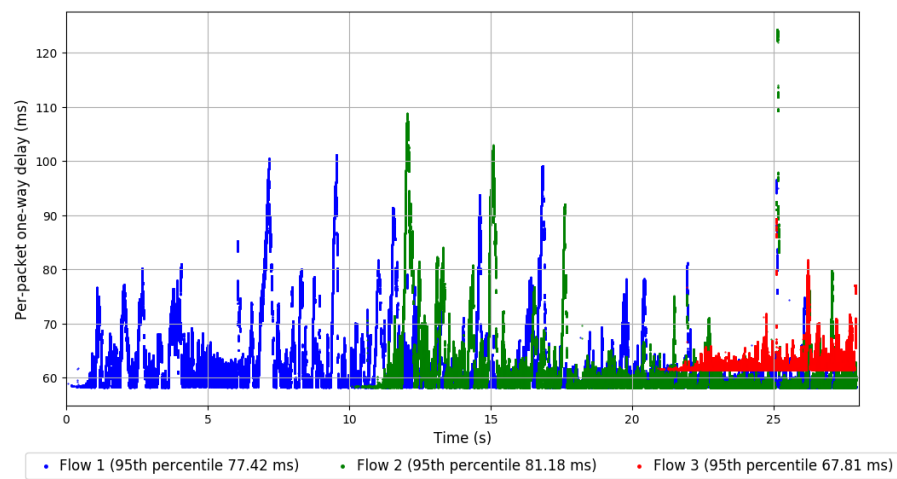
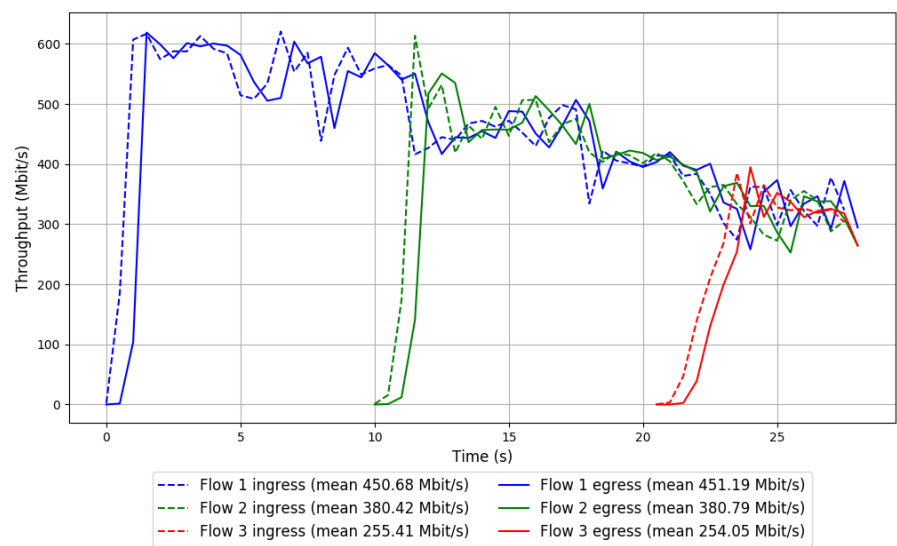


Run 5: Statistics of Indigo-MusesT

Start at: 2019-07-13 04:33:27  
End at: 2019-07-13 04:33:57  
Local clock offset: 0.339 ms  
Remote clock offset: -0.828 ms

# Below is generated by plot.py at 2019-07-13 07:17:22  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 758.59 Mbit/s  
95th percentile per-packet one-way delay: 77.462 ms  
Loss rate: 0.55%  
-- Flow 1:  
Average throughput: 451.19 Mbit/s  
95th percentile per-packet one-way delay: 77.423 ms  
Loss rate: 0.30%  
-- Flow 2:  
Average throughput: 380.79 Mbit/s  
95th percentile per-packet one-way delay: 81.180 ms  
Loss rate: 0.56%  
-- Flow 3:  
Average throughput: 254.05 Mbit/s  
95th percentile per-packet one-way delay: 67.815 ms  
Loss rate: 2.25%

Run 5: Report of Indigo-MusesT — Data Link

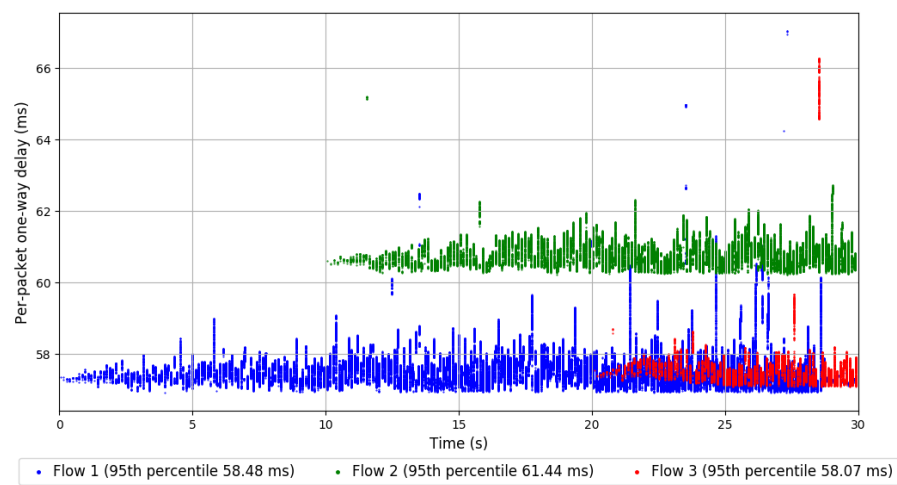
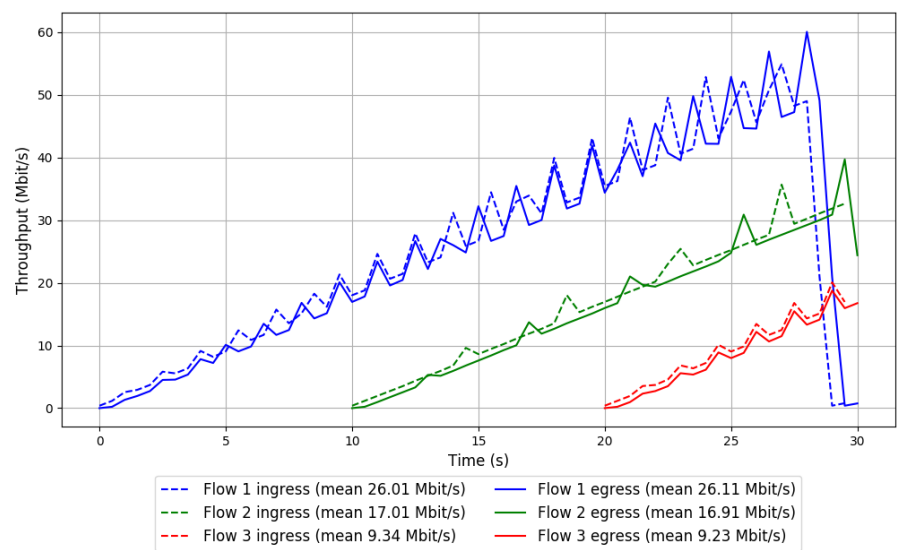


Run 1: Statistics of LEDBAT

Start at: 2019-07-13 01:48:43  
End at: 2019-07-13 01:49:13  
Local clock offset: -0.042 ms  
Remote clock offset: -0.269 ms

# Below is generated by plot.py at 2019-07-13 07:17:22  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 40.31 Mbit/s  
95th percentile per-packet one-way delay: 61.105 ms  
Loss rate: 0.52%  
-- Flow 1:  
Average throughput: 26.11 Mbit/s  
95th percentile per-packet one-way delay: 58.485 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 16.91 Mbit/s  
95th percentile per-packet one-way delay: 61.440 ms  
Loss rate: 1.21%  
-- Flow 3:  
Average throughput: 9.23 Mbit/s  
95th percentile per-packet one-way delay: 58.066 ms  
Loss rate: 2.32%

Run 1: Report of LEDBAT — Data Link

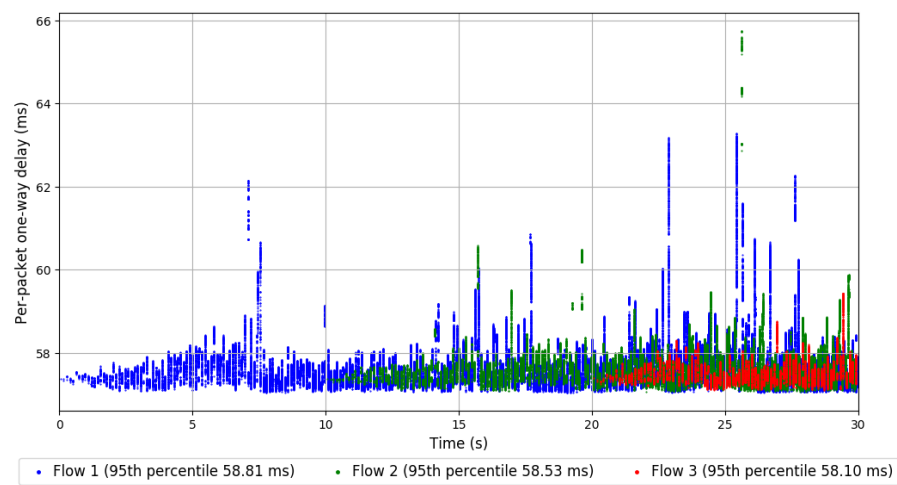
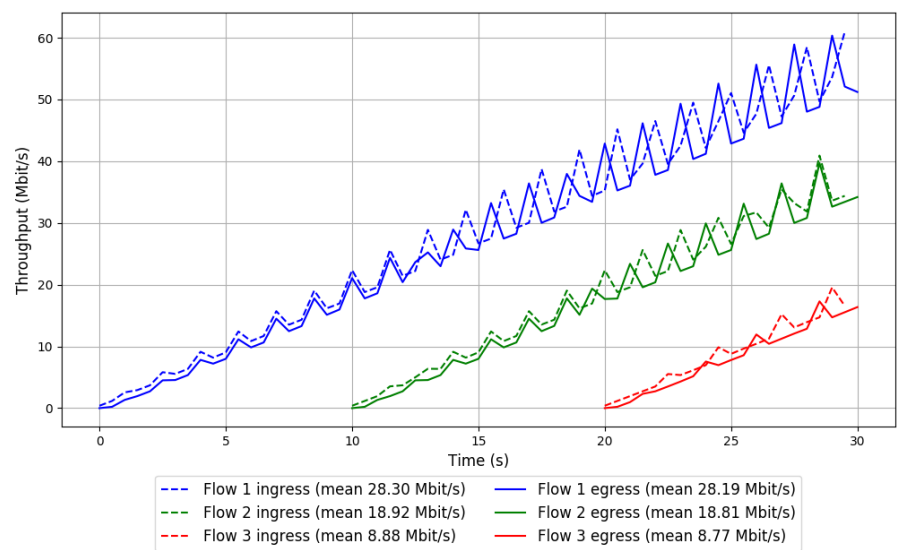


Run 2: Statistics of LEDBAT

Start at: 2019-07-13 02:29:39  
End at: 2019-07-13 02:30:09  
Local clock offset: -0.09 ms  
Remote clock offset: -0.089 ms

# Below is generated by plot.py at 2019-07-13 07:17:22  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 43.55 Mbit/s  
95th percentile per-packet one-way delay: 58.668 ms  
Loss rate: 0.98%  
-- Flow 1:  
Average throughput: 28.19 Mbit/s  
95th percentile per-packet one-way delay: 58.806 ms  
Loss rate: 0.76%  
-- Flow 2:  
Average throughput: 18.81 Mbit/s  
95th percentile per-packet one-way delay: 58.526 ms  
Loss rate: 1.15%  
-- Flow 3:  
Average throughput: 8.77 Mbit/s  
95th percentile per-packet one-way delay: 58.096 ms  
Loss rate: 2.38%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2019-07-13 03:10:15

End at: 2019-07-13 03:10:45

Local clock offset: 0.117 ms

Remote clock offset: -1.44 ms

# Below is generated by plot.py at 2019-07-13 07:17:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 41.69 Mbit/s

95th percentile per-packet one-way delay: 63.193 ms

Loss rate: 1.00%

-- Flow 1:

Average throughput: 26.67 Mbit/s

95th percentile per-packet one-way delay: 63.495 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 18.81 Mbit/s

95th percentile per-packet one-way delay: 60.222 ms

Loss rate: 1.15%

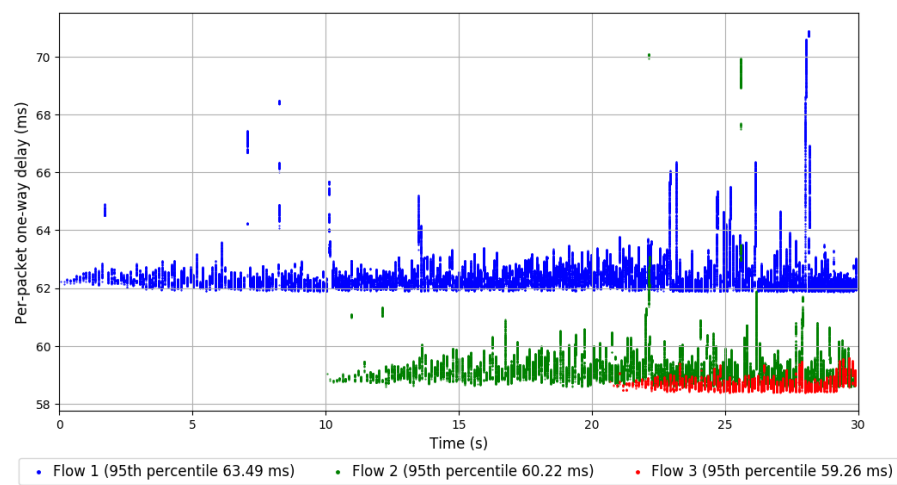
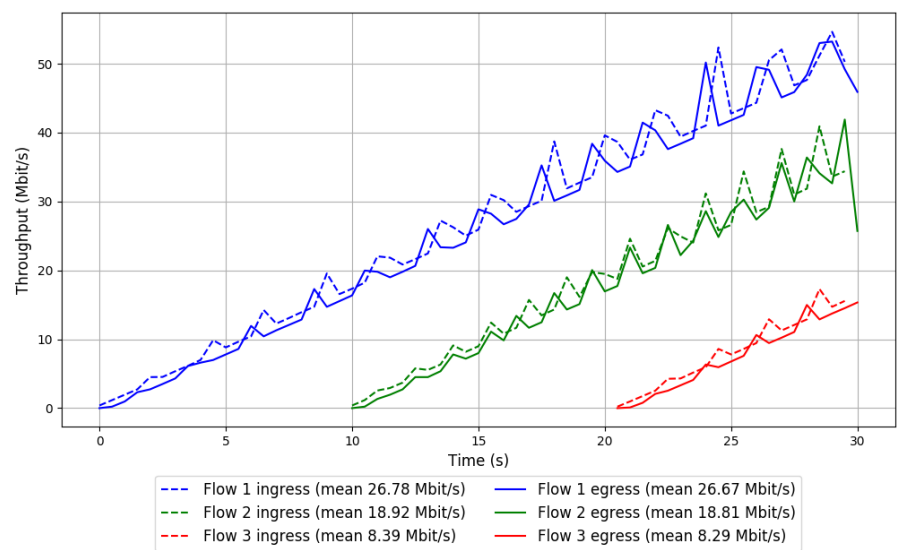
-- Flow 3:

Average throughput: 8.29 Mbit/s

95th percentile per-packet one-way delay: 59.262 ms

Loss rate: 2.54%

Run 3: Report of LEDBAT — Data Link

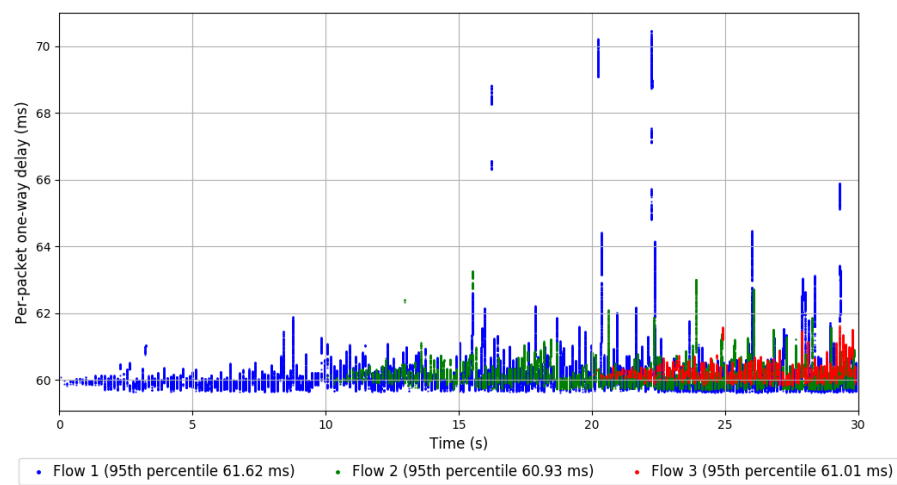
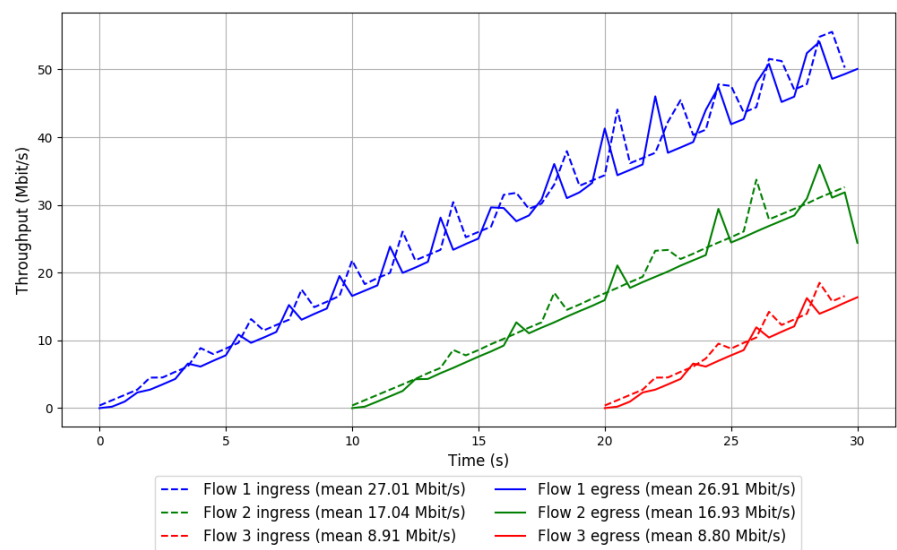


Run 4: Statistics of LEDBAT

Start at: 2019-07-13 03:50:46  
End at: 2019-07-13 03:51:16  
Local clock offset: -0.58 ms  
Remote clock offset: -0.239 ms

# Below is generated by plot.py at 2019-07-13 07:17:22  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 41.01 Mbit/s  
95th percentile per-packet one-way delay: 61.274 ms  
Loss rate: 1.01%  
-- Flow 1:  
Average throughput: 26.91 Mbit/s  
95th percentile per-packet one-way delay: 61.620 ms  
Loss rate: 0.78%  
-- Flow 2:  
Average throughput: 16.93 Mbit/s  
95th percentile per-packet one-way delay: 60.932 ms  
Loss rate: 1.22%  
-- Flow 3:  
Average throughput: 8.80 Mbit/s  
95th percentile per-packet one-way delay: 61.013 ms  
Loss rate: 2.38%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2019-07-13 04:32:09

End at: 2019-07-13 04:32:39

Local clock offset: -0.32 ms

Remote clock offset: -0.11 ms

# Below is generated by plot.py at 2019-07-13 07:17:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 43.88 Mbit/s

95th percentile per-packet one-way delay: 57.817 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 28.50 Mbit/s

95th percentile per-packet one-way delay: 57.599 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 18.81 Mbit/s

95th percentile per-packet one-way delay: 58.045 ms

Loss rate: 1.15%

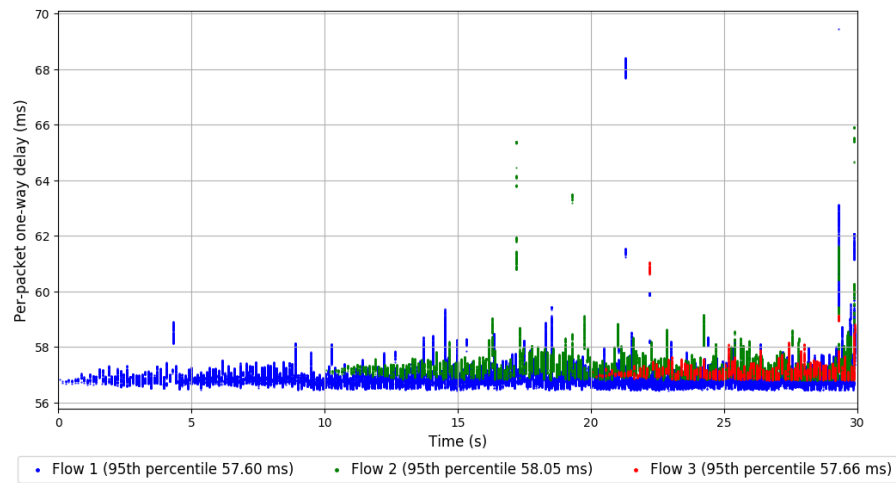
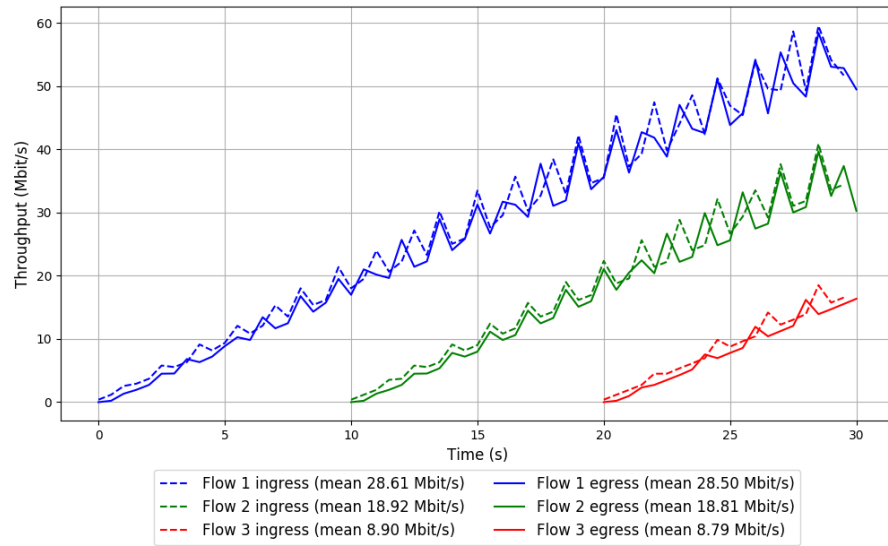
-- Flow 3:

Average throughput: 8.79 Mbit/s

95th percentile per-packet one-way delay: 57.660 ms

Loss rate: 2.38%

# Run 5: Report of LEDBAT — Data Link

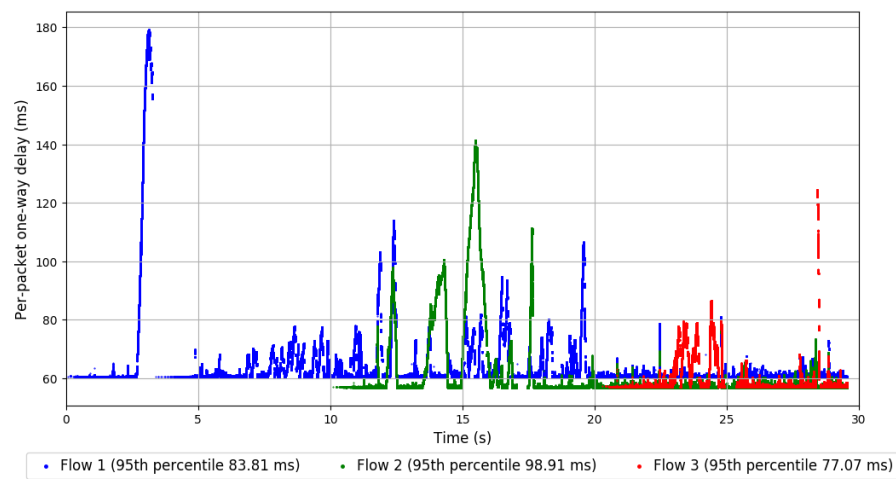
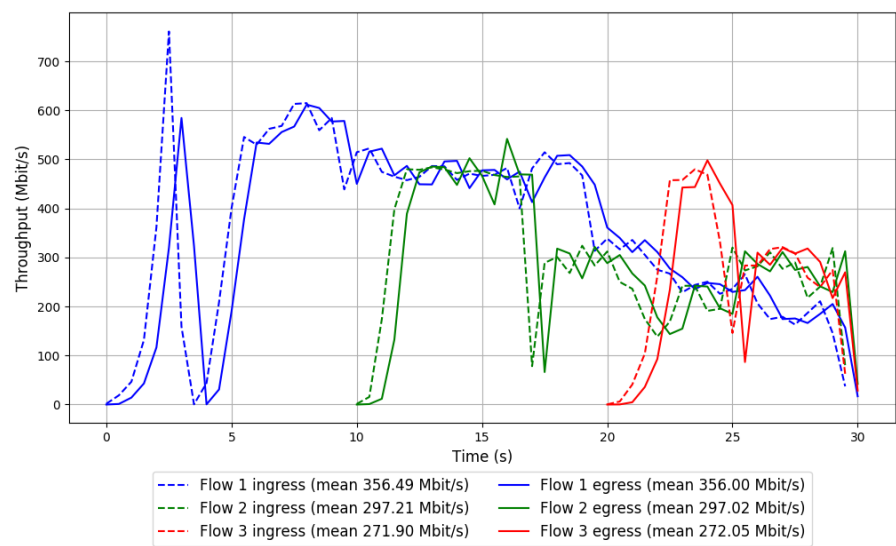


Run 1: Statistics of Muses\\_DecisionTree

Start at: 2019-07-13 02:20:46  
End at: 2019-07-13 02:21:16  
Local clock offset: -0.093 ms  
Remote clock offset: -0.115 ms

# Below is generated by plot.py at 2019-07-13 07:17:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 637.40 Mbit/s  
95th percentile per-packet one-way delay: 92.057 ms  
Loss rate: 0.67%  
-- Flow 1:  
Average throughput: 356.00 Mbit/s  
95th percentile per-packet one-way delay: 83.809 ms  
Loss rate: 0.54%  
-- Flow 2:  
Average throughput: 297.02 Mbit/s  
95th percentile per-packet one-way delay: 98.905 ms  
Loss rate: 0.67%  
-- Flow 3:  
Average throughput: 272.05 Mbit/s  
95th percentile per-packet one-way delay: 77.074 ms  
Loss rate: 1.21%

Run 1: Report of Muses\_DecisionTree — Data Link

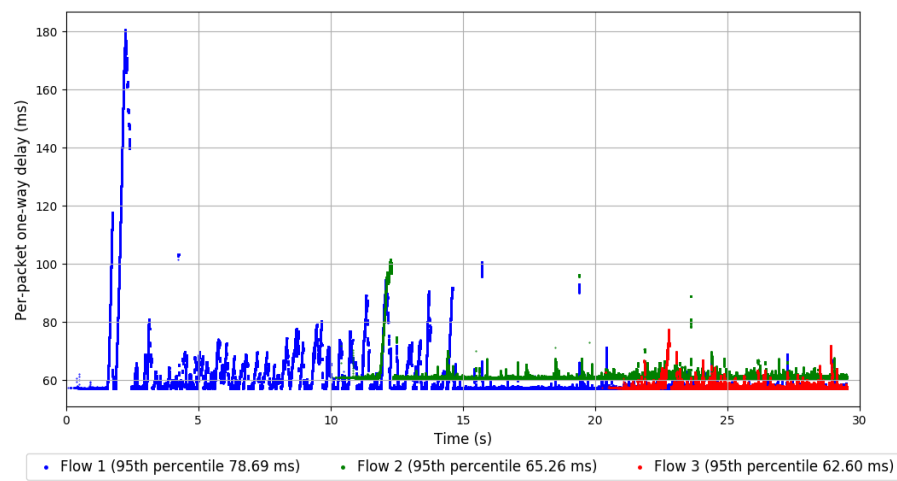
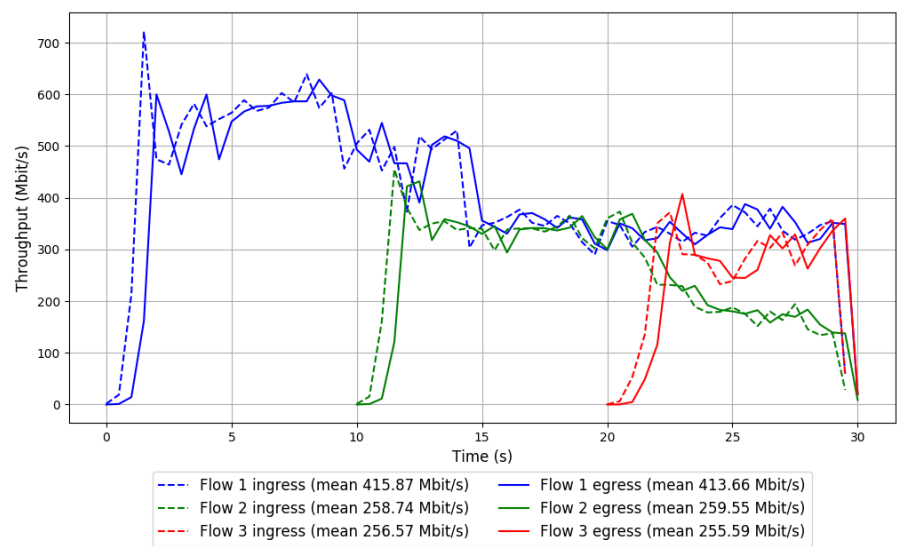


Run 2: Statistics of Muses\\_DecisionTree

Start at: 2019-07-13 03:01:22  
End at: 2019-07-13 03:01:52  
Local clock offset: 0.119 ms  
Remote clock offset: -0.088 ms

# Below is generated by plot.py at 2019-07-13 07:18:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 665.17 Mbit/s  
95th percentile per-packet one-way delay: 74.562 ms  
Loss rate: 0.86%  
-- Flow 1:  
Average throughput: 413.66 Mbit/s  
95th percentile per-packet one-way delay: 78.688 ms  
Loss rate: 0.93%  
-- Flow 2:  
Average throughput: 259.55 Mbit/s  
95th percentile per-packet one-way delay: 65.258 ms  
Loss rate: 0.34%  
-- Flow 3:  
Average throughput: 255.59 Mbit/s  
95th percentile per-packet one-way delay: 62.599 ms  
Loss rate: 1.63%

Run 2: Report of Muses\_DecisionTree — Data Link

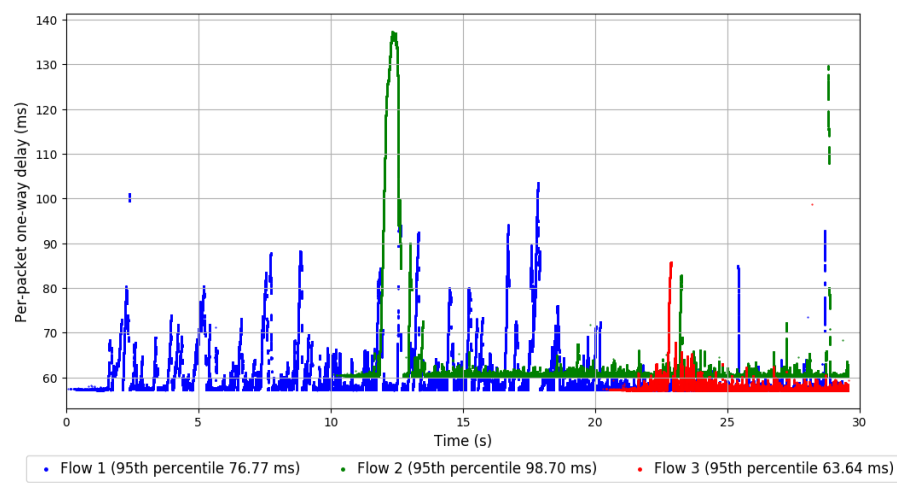
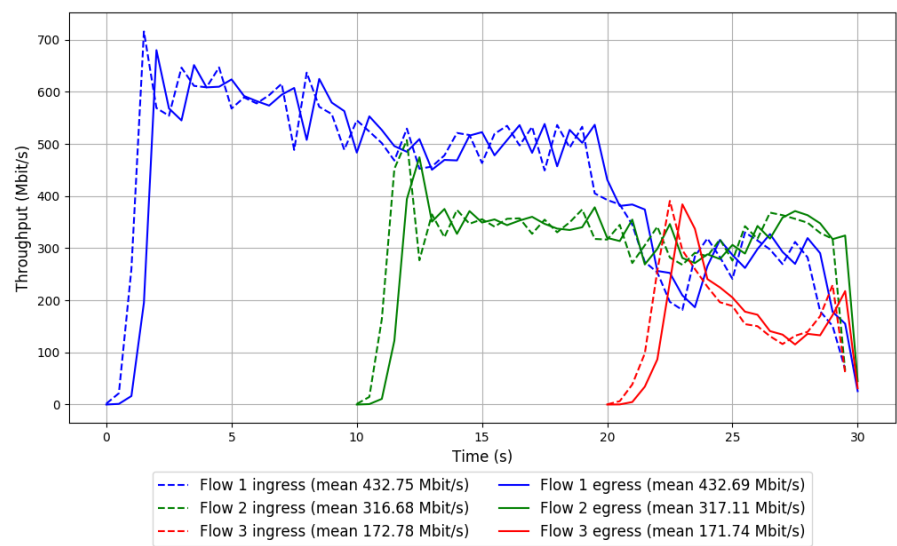


Run 3: Statistics of Muses\\_DecisionTree

Start at: 2019-07-13 03:41:54  
End at: 2019-07-13 03:42:24  
Local clock offset: -0.369 ms  
Remote clock offset: -0.504 ms

# Below is generated by plot.py at 2019-07-13 07:20:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 695.56 Mbit/s  
95th percentile per-packet one-way delay: 78.328 ms  
Loss rate: 0.54%  
-- Flow 1:  
Average throughput: 432.69 Mbit/s  
95th percentile per-packet one-way delay: 76.774 ms  
Loss rate: 0.41%  
-- Flow 2:  
Average throughput: 317.11 Mbit/s  
95th percentile per-packet one-way delay: 98.697 ms  
Loss rate: 0.49%  
-- Flow 3:  
Average throughput: 171.74 Mbit/s  
95th percentile per-packet one-way delay: 63.644 ms  
Loss rate: 1.79%

Run 3: Report of Muses\_DecisionTree — Data Link

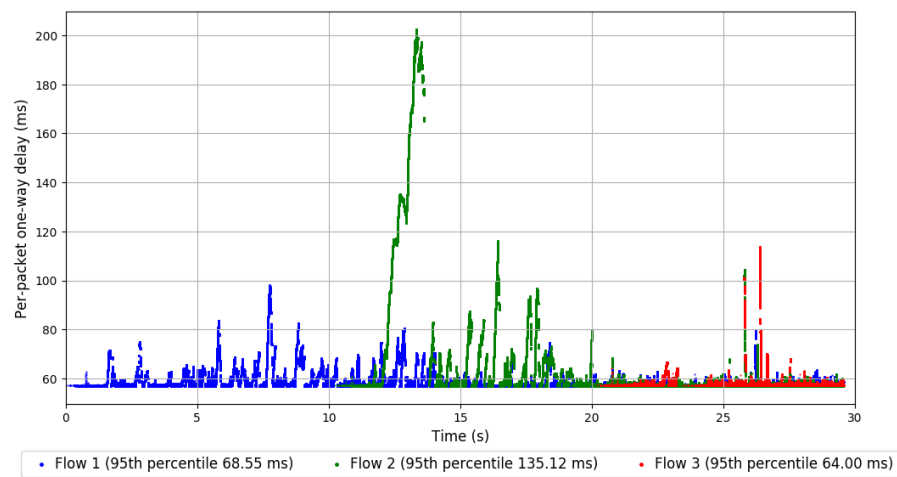
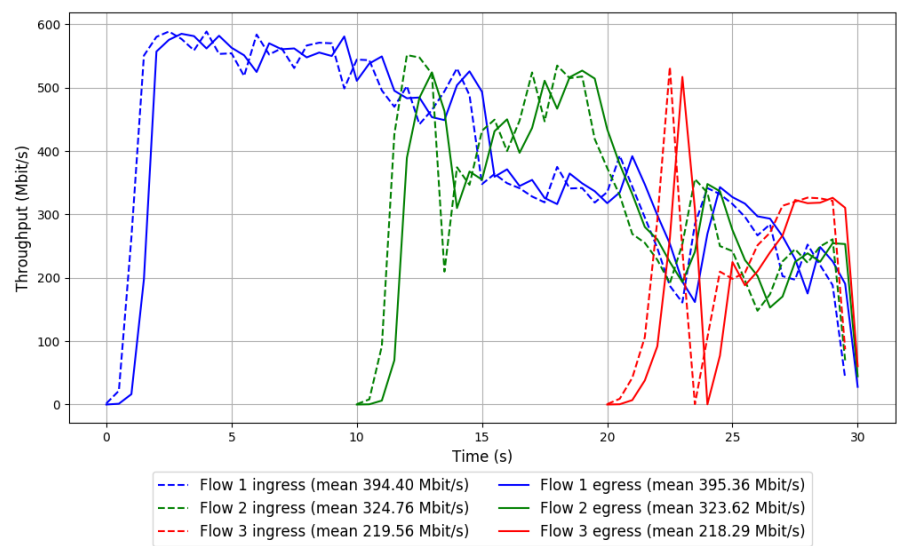


Run 4: Statistics of Muses\\_DecisionTree

Start at: 2019-07-13 04:23:15  
End at: 2019-07-13 04:23:45  
Local clock offset: -0.007 ms  
Remote clock offset: -0.177 ms

# Below is generated by plot.py at 2019-07-13 07:20:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 676.67 Mbit/s  
95th percentile per-packet one-way delay: 82.805 ms  
Loss rate: 0.58%  
-- Flow 1:  
Average throughput: 395.36 Mbit/s  
95th percentile per-packet one-way delay: 68.547 ms  
Loss rate: 0.16%  
-- Flow 2:  
Average throughput: 323.62 Mbit/s  
95th percentile per-packet one-way delay: 135.121 ms  
Loss rate: 0.95%  
-- Flow 3:  
Average throughput: 218.29 Mbit/s  
95th percentile per-packet one-way delay: 63.999 ms  
Loss rate: 1.81%

Run 4: Report of Muses\_DecisionTree — Data Link

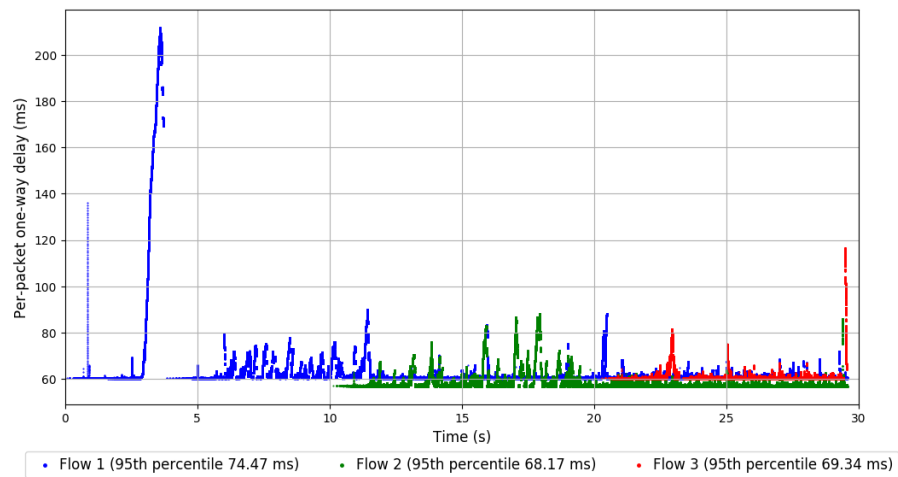
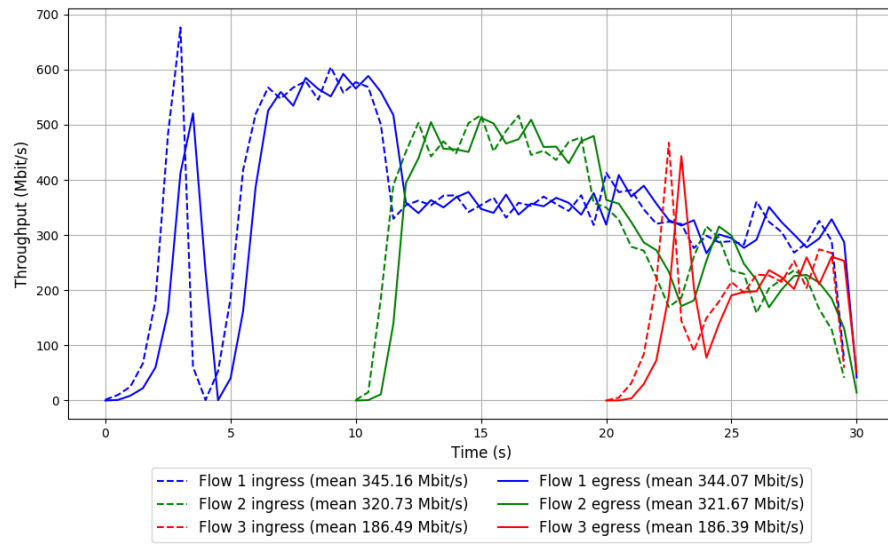


Run 5: Statistics of Muses\\_DecisionTree

Start at: 2019-07-13 05:04:25  
End at: 2019-07-13 05:04:55  
Local clock offset: -0.05 ms  
Remote clock offset: -0.035 ms

# Below is generated by plot.py at 2019-07-13 07:20:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 614.28 Mbit/s  
95th percentile per-packet one-way delay: 72.640 ms  
Loss rate: 0.67%  
-- Flow 1:  
Average throughput: 344.07 Mbit/s  
95th percentile per-packet one-way delay: 74.474 ms  
Loss rate: 0.72%  
-- Flow 2:  
Average throughput: 321.67 Mbit/s  
95th percentile per-packet one-way delay: 68.168 ms  
Loss rate: 0.29%  
-- Flow 3:  
Average throughput: 186.39 Mbit/s  
95th percentile per-packet one-way delay: 69.343 ms  
Loss rate: 1.69%

## Run 5: Report of Muses\_DecisionTree — Data Link

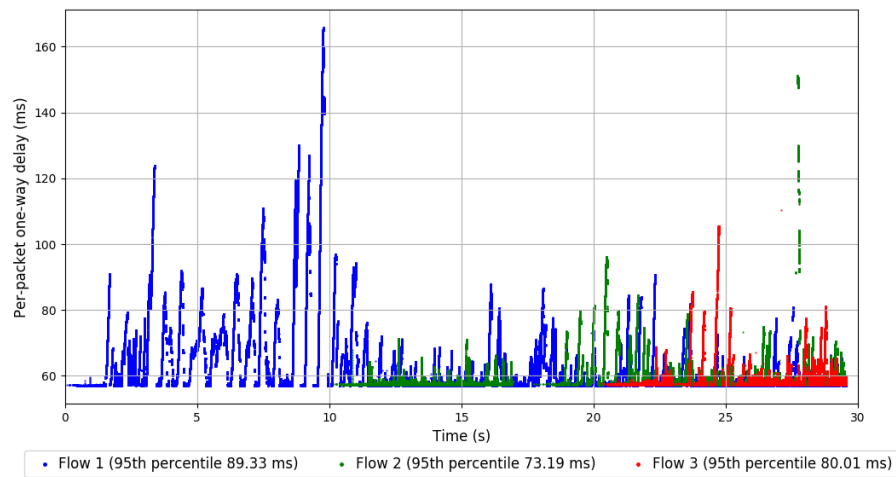
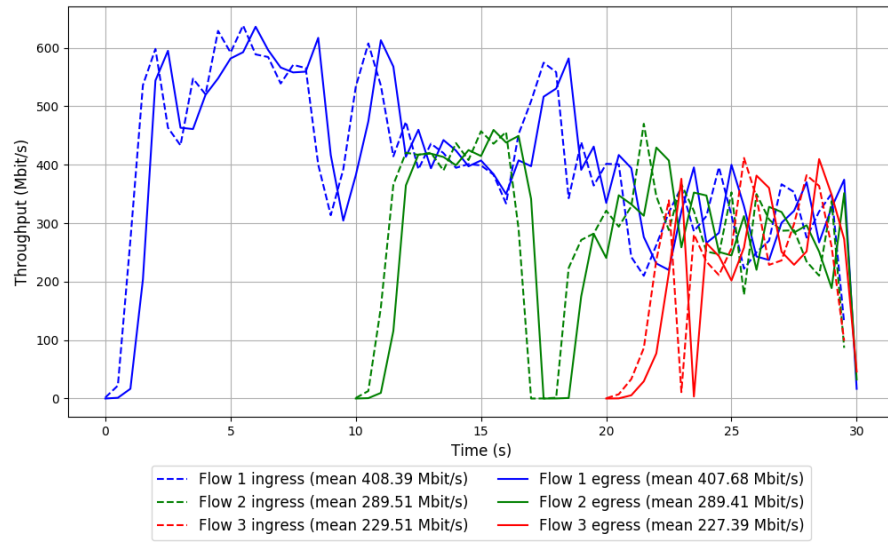


Run 1: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-07-13 02:02:25  
End at: 2019-07-13 02:02:55  
Local clock offset: -0.005 ms  
Remote clock offset: -0.113 ms

# Below is generated by plot.py at 2019-07-13 07:20:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 669.52 Mbit/s  
95th percentile per-packet one-way delay: 85.224 ms  
Loss rate: 0.79%  
-- Flow 1:  
Average throughput: 407.68 Mbit/s  
95th percentile per-packet one-way delay: 89.330 ms  
Loss rate: 0.59%  
-- Flow 2:  
Average throughput: 289.41 Mbit/s  
95th percentile per-packet one-way delay: 73.189 ms  
Loss rate: 0.69%  
-- Flow 3:  
Average throughput: 227.39 Mbit/s  
95th percentile per-packet one-way delay: 80.011 ms  
Loss rate: 2.18%

# Run 1: Report of Muses\_DecisionTreeH0 — Data Link

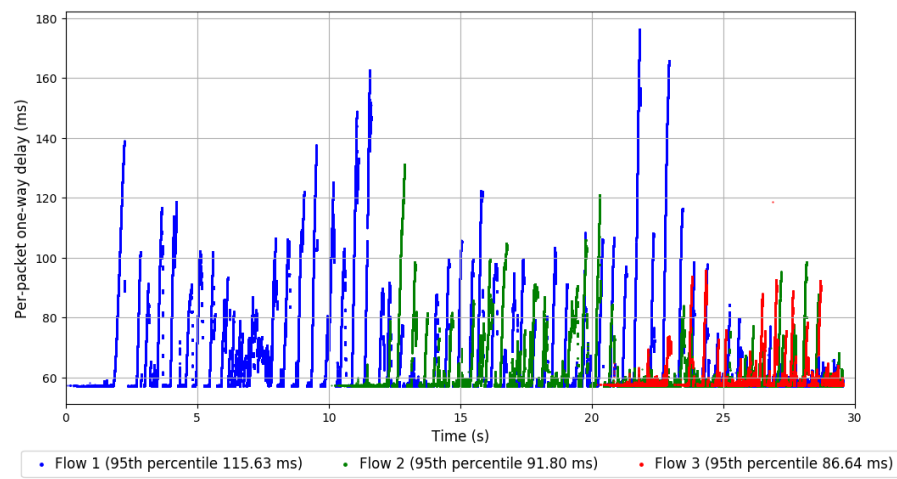
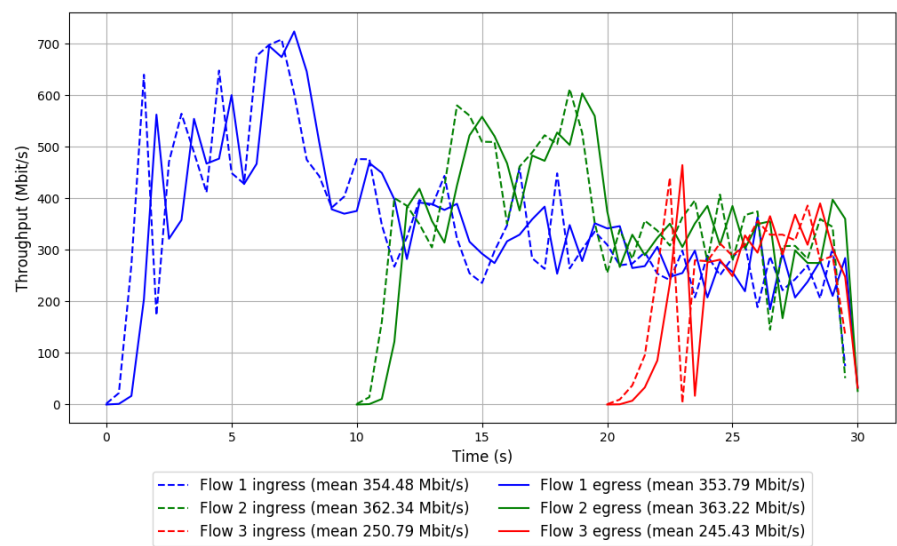


Run 2: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-07-13 02:43:09  
End at: 2019-07-13 02:43:39  
Local clock offset: -0.49 ms  
Remote clock offset: -0.779 ms

# Below is generated by plot.py at 2019-07-13 07:28:51  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 670.58 Mbit/s  
95th percentile per-packet one-way delay: 104.614 ms  
Loss rate: 0.81%  
-- Flow 1:  
Average throughput: 353.79 Mbit/s  
95th percentile per-packet one-way delay: 115.633 ms  
Loss rate: 0.50%  
-- Flow 2:  
Average throughput: 363.22 Mbit/s  
95th percentile per-packet one-way delay: 91.798 ms  
Loss rate: 0.42%  
-- Flow 3:  
Average throughput: 245.43 Mbit/s  
95th percentile per-packet one-way delay: 86.645 ms  
Loss rate: 3.33%

Run 2: Report of Muses\_DecisionTreeH0 — Data Link

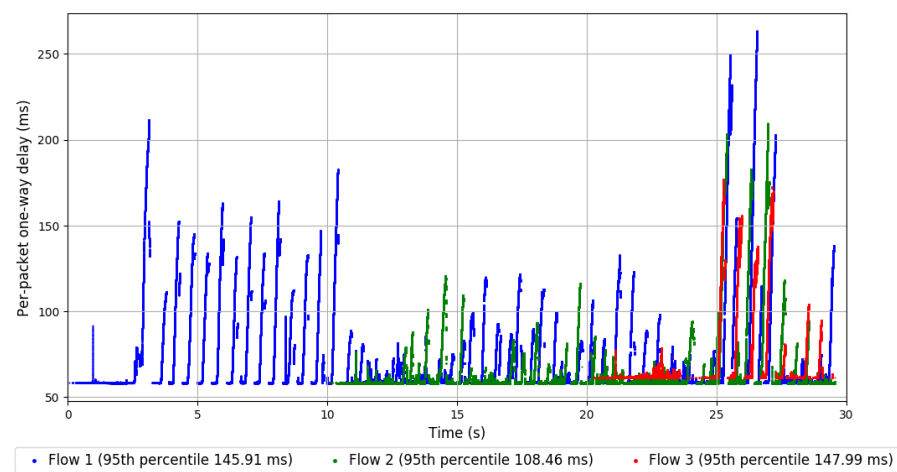
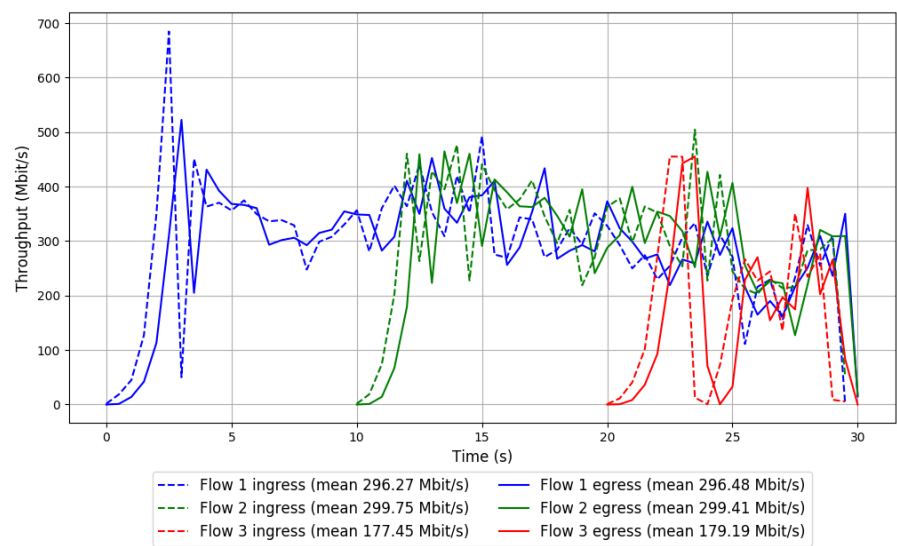


Run 3: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-07-13 03:23:55  
End at: 2019-07-13 03:24:25  
Local clock offset: 0.303 ms  
Remote clock offset: -0.987 ms

# Below is generated by plot.py at 2019-07-13 07:28:51  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 550.60 Mbit/s  
95th percentile per-packet one-way delay: 140.189 ms  
Loss rate: 0.46%  
-- Flow 1:  
Average throughput: 296.48 Mbit/s  
95th percentile per-packet one-way delay: 145.909 ms  
Loss rate: 0.45%  
-- Flow 2:  
Average throughput: 299.41 Mbit/s  
95th percentile per-packet one-way delay: 108.461 ms  
Loss rate: 0.55%  
-- Flow 3:  
Average throughput: 179.19 Mbit/s  
95th percentile per-packet one-way delay: 147.993 ms  
Loss rate: 0.24%

Run 3: Report of Muses\_DecisionTreeH0 — Data Link

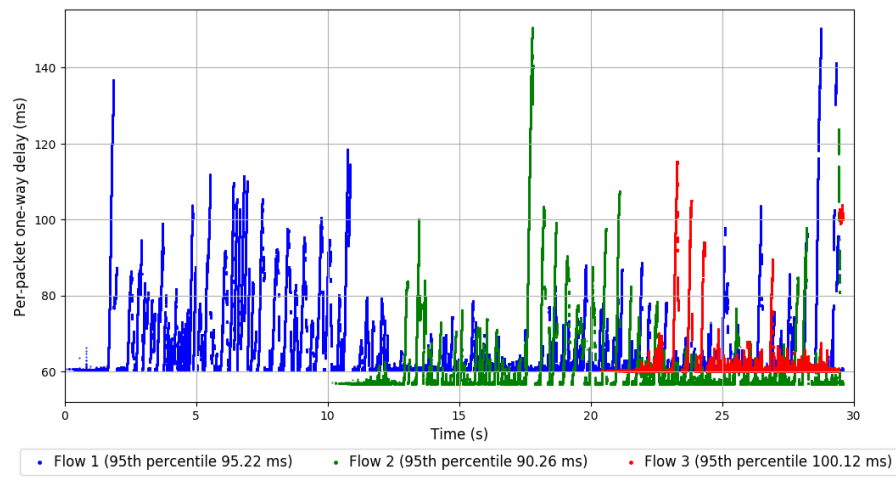
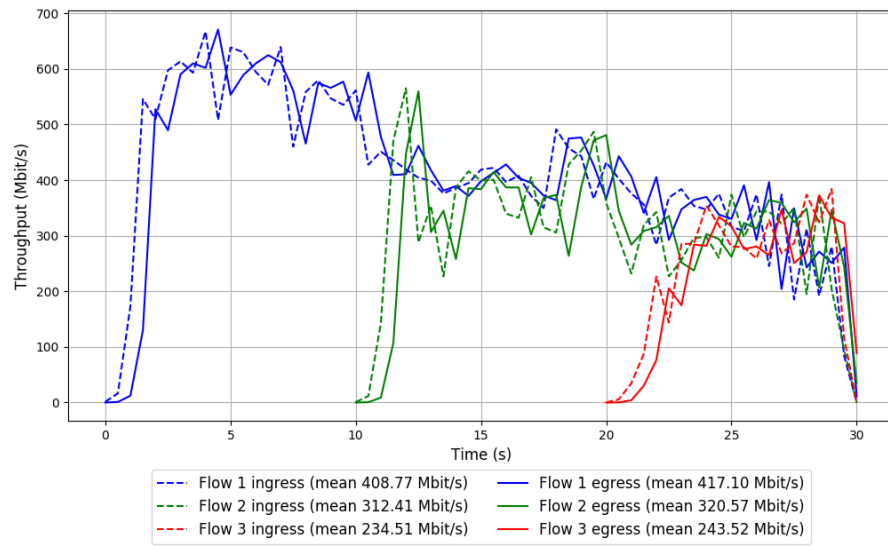


Run 4: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-07-13 04:04:42  
End at: 2019-07-13 04:05:12  
Local clock offset: -0.172 ms  
Remote clock offset: -0.177 ms

# Below is generated by plot.py at 2019-07-13 07:31:20  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 704.14 Mbit/s  
95th percentile per-packet one-way delay: 94.756 ms  
Loss rate: 0.67%  
-- Flow 1:  
Average throughput: 417.10 Mbit/s  
95th percentile per-packet one-way delay: 95.223 ms  
Loss rate: 0.32%  
-- Flow 2:  
Average throughput: 320.57 Mbit/s  
95th percentile per-packet one-way delay: 90.262 ms  
Loss rate: 0.58%  
-- Flow 3:  
Average throughput: 243.52 Mbit/s  
95th percentile per-packet one-way delay: 100.122 ms  
Loss rate: 2.76%

#### Run 4: Report of Muses\_DecisionTreeH0 — Data Link

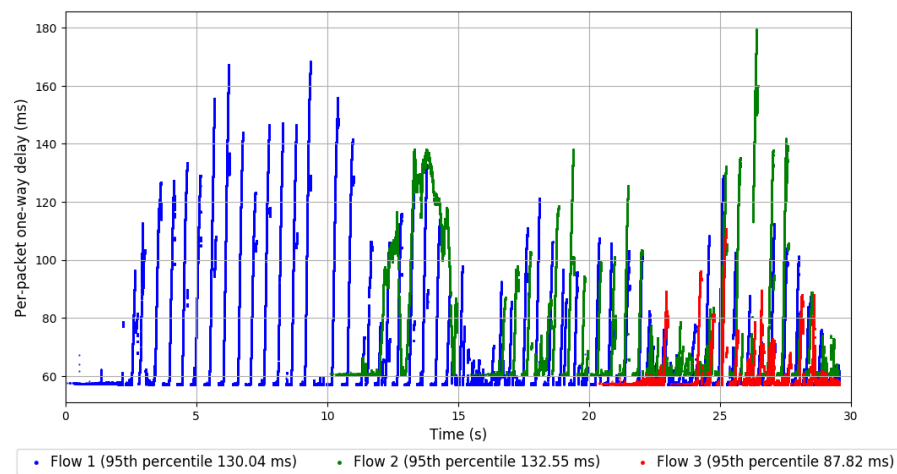
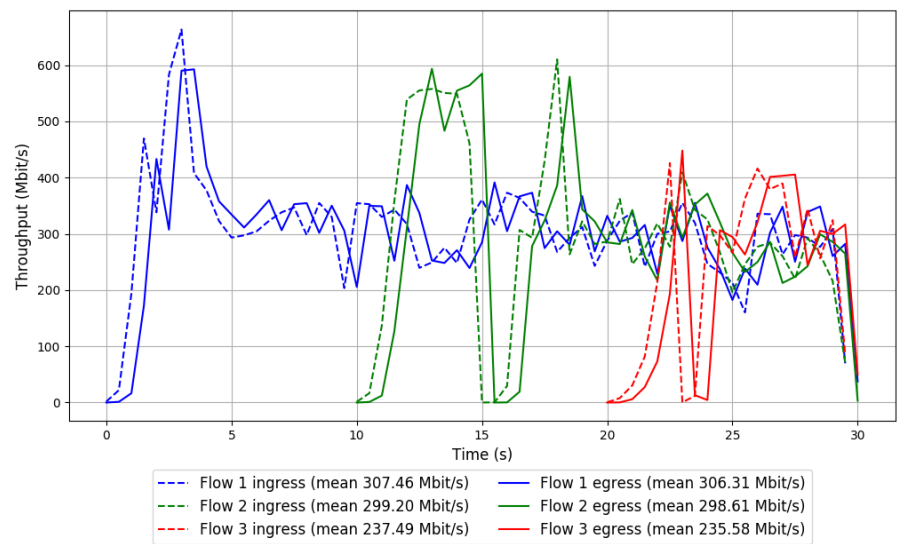


Run 5: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-07-13 04:45:57  
End at: 2019-07-13 04:46:27  
Local clock offset: 0.218 ms  
Remote clock offset: -0.102 ms

# Below is generated by plot.py at 2019-07-13 07:31:20  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 577.55 Mbit/s  
95th percentile per-packet one-way delay: 129.750 ms  
Loss rate: 0.89%  
-- Flow 1:  
Average throughput: 306.31 Mbit/s  
95th percentile per-packet one-way delay: 130.037 ms  
Loss rate: 0.77%  
-- Flow 2:  
Average throughput: 298.61 Mbit/s  
95th percentile per-packet one-way delay: 132.549 ms  
Loss rate: 0.65%  
-- Flow 3:  
Average throughput: 235.58 Mbit/s  
95th percentile per-packet one-way delay: 87.819 ms  
Loss rate: 2.05%

Run 5: Report of Muses\_DecisionTreeH0 — Data Link

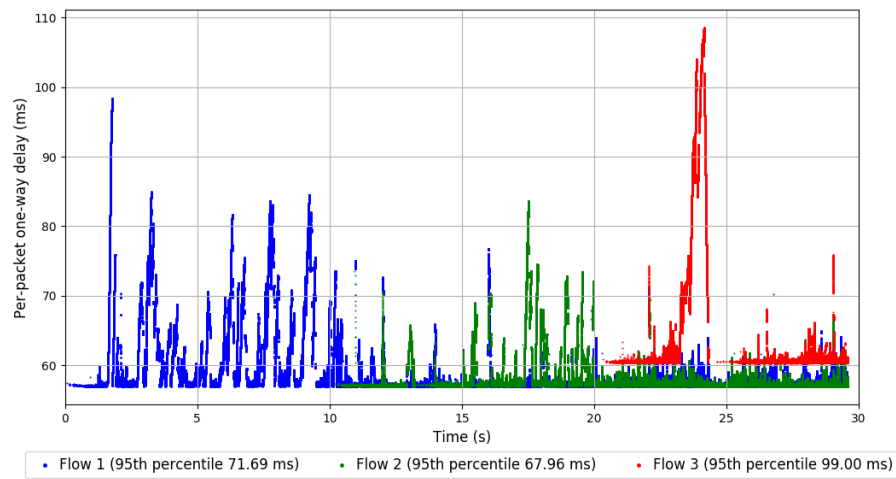
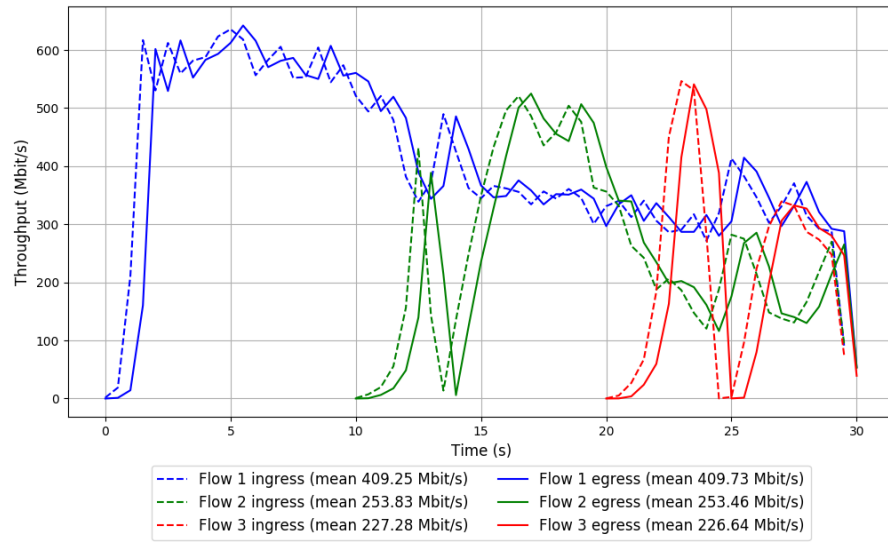


Run 1: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-07-13 02:04:12  
End at: 2019-07-13 02:04:42  
Local clock offset: -0.247 ms  
Remote clock offset: -0.182 ms

# Below is generated by plot.py at 2019-07-13 07:31:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 647.11 Mbit/s  
95th percentile per-packet one-way delay: 72.689 ms  
Loss rate: 0.55%  
-- Flow 1:  
Average throughput: 409.73 Mbit/s  
95th percentile per-packet one-way delay: 71.694 ms  
Loss rate: 0.28%  
-- Flow 2:  
Average throughput: 253.46 Mbit/s  
95th percentile per-packet one-way delay: 67.961 ms  
Loss rate: 0.75%  
-- Flow 3:  
Average throughput: 226.64 Mbit/s  
95th percentile per-packet one-way delay: 98.997 ms  
Loss rate: 1.57%

# Run 1: Report of Muses\_DecisionTreeR0 — Data Link

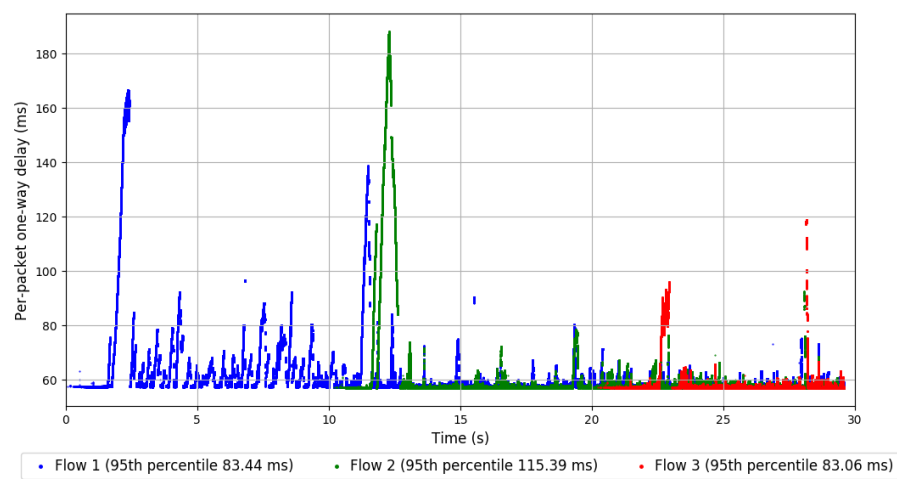
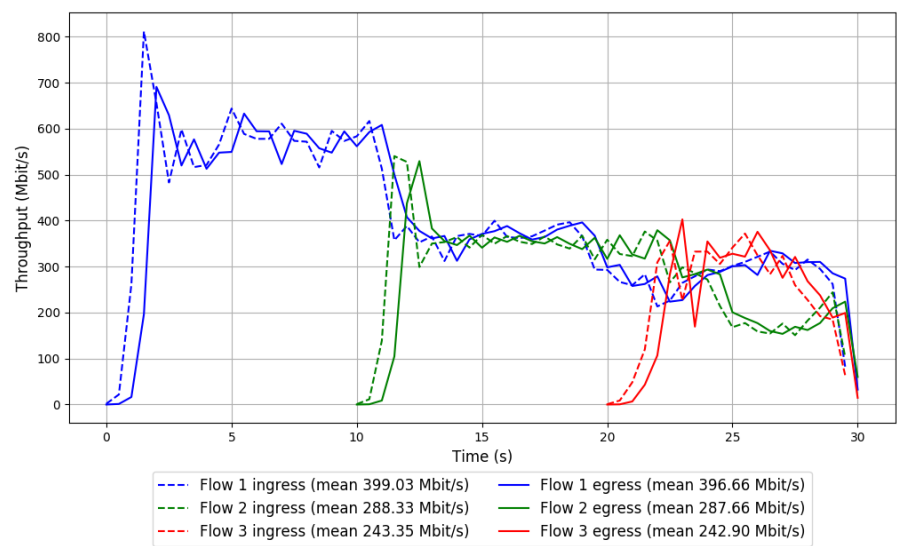


Run 2: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-07-13 02:44:56  
End at: 2019-07-13 02:45:26  
Local clock offset: -0.032 ms  
Remote clock offset: -0.124 ms

# Below is generated by plot.py at 2019-07-13 07:33:01  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 662.68 Mbit/s  
95th percentile per-packet one-way delay: 88.599 ms  
Loss rate: 0.99%  
-- Flow 1:  
Average throughput: 396.66 Mbit/s  
95th percentile per-packet one-way delay: 83.445 ms  
Loss rate: 0.99%  
-- Flow 2:  
Average throughput: 287.66 Mbit/s  
95th percentile per-packet one-way delay: 115.394 ms  
Loss rate: 0.84%  
-- Flow 3:  
Average throughput: 242.90 Mbit/s  
95th percentile per-packet one-way delay: 83.059 ms  
Loss rate: 1.32%

Run 2: Report of Muses\_DecisionTreeR0 — Data Link

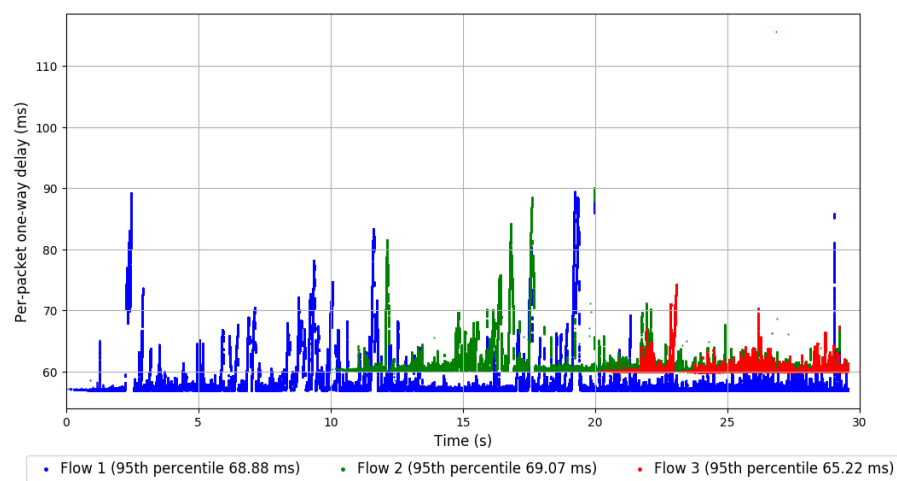
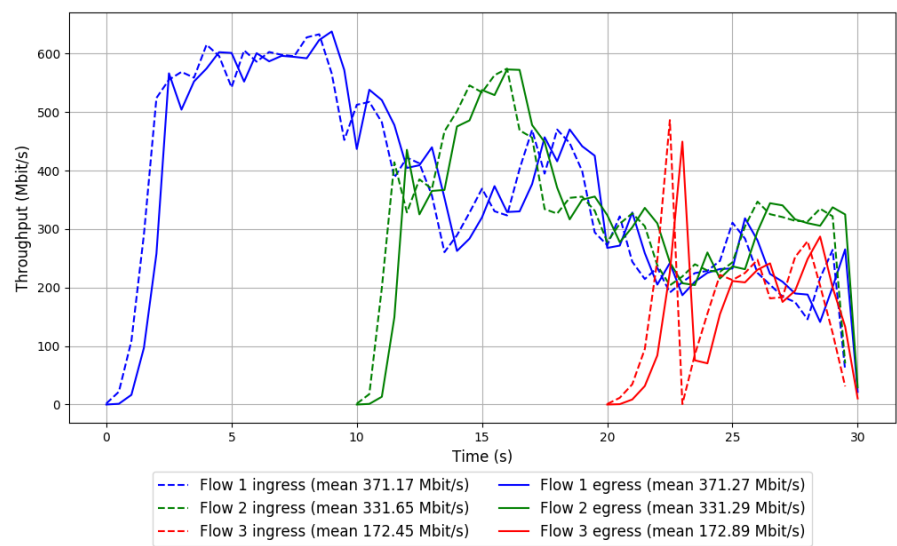


Run 3: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-07-13 03:25:36  
End at: 2019-07-13 03:26:06  
Local clock offset: -0.321 ms  
Remote clock offset: -0.218 ms

# Below is generated by plot.py at 2019-07-13 07:33:01  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 645.03 Mbit/s  
95th percentile per-packet one-way delay: 68.587 ms  
Loss rate: 0.55%  
-- Flow 1:  
Average throughput: 371.27 Mbit/s  
95th percentile per-packet one-way delay: 68.881 ms  
Loss rate: 0.37%  
-- Flow 2:  
Average throughput: 331.29 Mbit/s  
95th percentile per-packet one-way delay: 69.071 ms  
Loss rate: 0.72%  
-- Flow 3:  
Average throughput: 172.89 Mbit/s  
95th percentile per-packet one-way delay: 65.218 ms  
Loss rate: 1.07%

Run 3: Report of Muses\_DecisionTreeR0 — Data Link

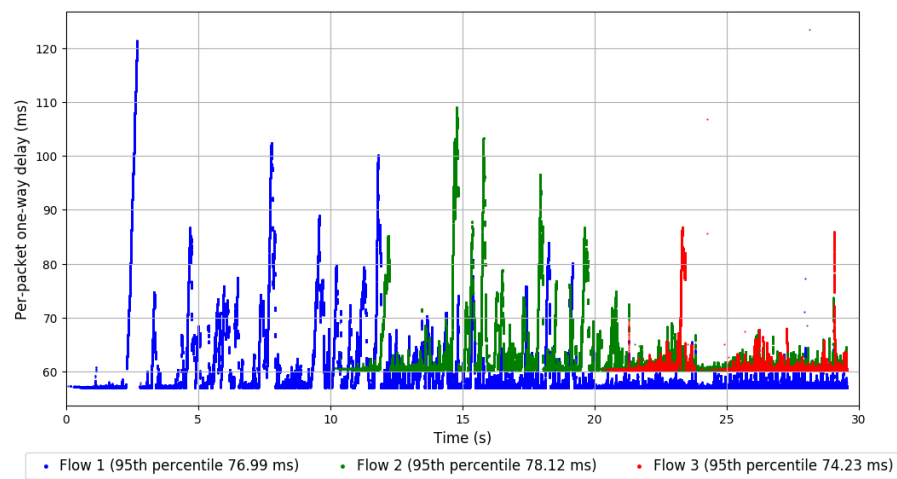
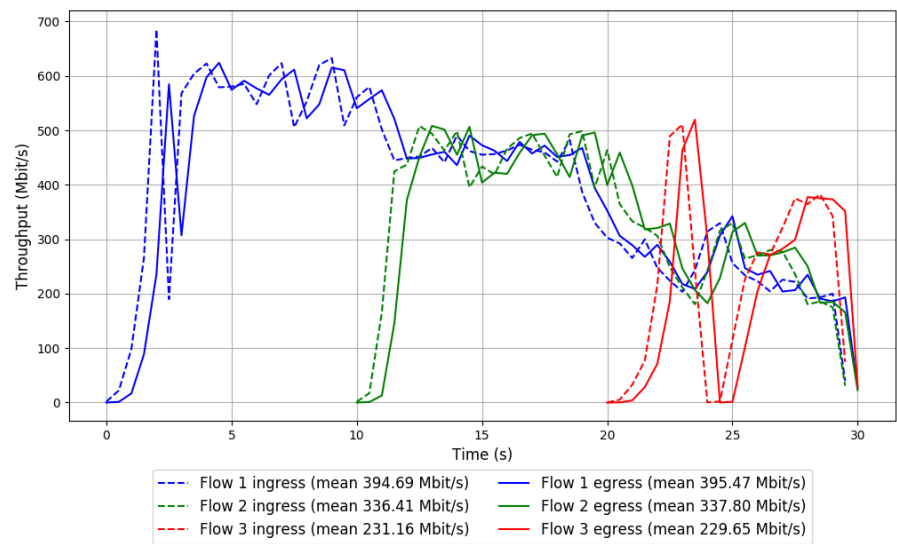


Run 4: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-07-13 04:06:32  
End at: 2019-07-13 04:07:02  
Local clock offset: -0.201 ms  
Remote clock offset: -0.414 ms

# Below is generated by plot.py at 2019-07-13 07:33:53  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 690.23 Mbit/s  
95th percentile per-packet one-way delay: 77.387 ms  
Loss rate: 0.40%  
-- Flow 1:  
Average throughput: 395.47 Mbit/s  
95th percentile per-packet one-way delay: 76.987 ms  
Loss rate: 0.20%  
-- Flow 2:  
Average throughput: 337.80 Mbit/s  
95th percentile per-packet one-way delay: 78.125 ms  
Loss rate: 0.25%  
-- Flow 3:  
Average throughput: 229.65 Mbit/s  
95th percentile per-packet one-way delay: 74.229 ms  
Loss rate: 1.96%

Run 4: Report of Muses\_DecisionTreeR0 — Data Link

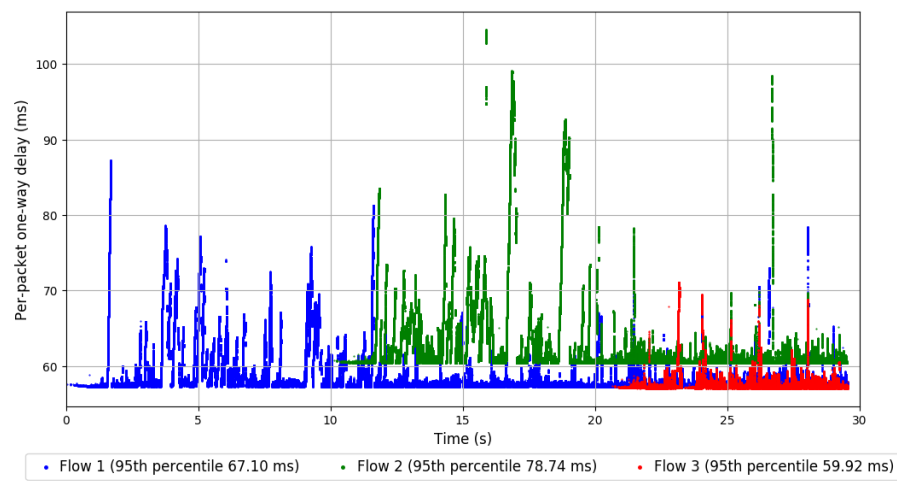
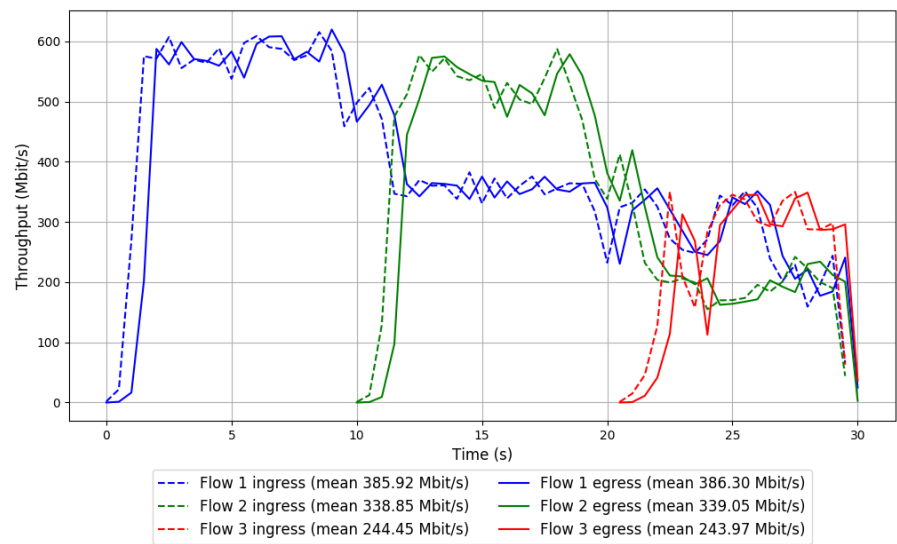


Run 5: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-07-13 04:47:40  
End at: 2019-07-13 04:48:10  
Local clock offset: 0.329 ms  
Remote clock offset: -0.085 ms

# Below is generated by plot.py at 2019-07-13 07:39:28  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 683.06 Mbit/s  
95th percentile per-packet one-way delay: 70.835 ms  
Loss rate: 0.52%  
-- Flow 1:  
Average throughput: 386.30 Mbit/s  
95th percentile per-packet one-way delay: 67.098 ms  
Loss rate: 0.30%  
-- Flow 2:  
Average throughput: 339.05 Mbit/s  
95th percentile per-packet one-way delay: 78.737 ms  
Loss rate: 0.56%  
-- Flow 3:  
Average throughput: 243.97 Mbit/s  
95th percentile per-packet one-way delay: 59.920 ms  
Loss rate: 1.50%

Run 5: Report of Muses\_DecisionTreeR0 — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2019-07-13 02:27:46

End at: 2019-07-13 02:28:16

Local clock offset: 0.282 ms

Remote clock offset: -0.07 ms

# Below is generated by plot.py at 2019-07-13 07:50:18

# Datalink statistics

-- Total of 3 flows:

Average throughput: 578.96 Mbit/s

95th percentile per-packet one-way delay: 244.319 ms

Loss rate: 8.70%

-- Flow 1:

Average throughput: 335.63 Mbit/s

95th percentile per-packet one-way delay: 237.598 ms

Loss rate: 4.37%

-- Flow 2:

Average throughput: 248.14 Mbit/s

95th percentile per-packet one-way delay: 272.352 ms

Loss rate: 18.74%

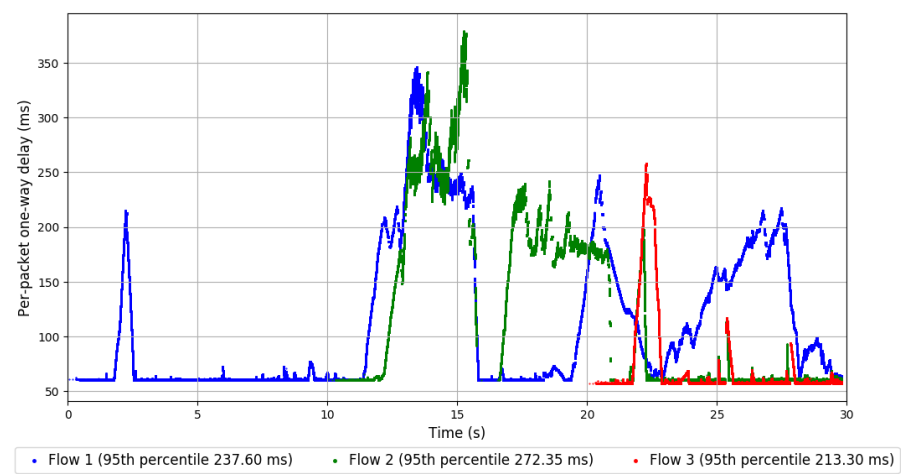
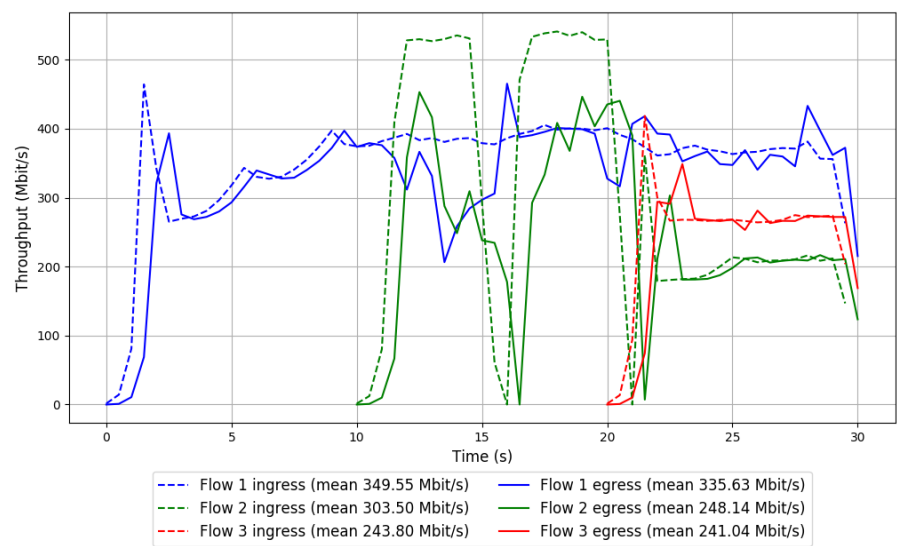
-- Flow 3:

Average throughput: 241.04 Mbit/s

95th percentile per-packet one-way delay: 213.302 ms

Loss rate: 2.32%

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2019-07-13 03:08:16

End at: 2019-07-13 03:08:46

Local clock offset: -0.205 ms

Remote clock offset: 0.046 ms

# Below is generated by plot.py at 2019-07-13 07:53:56

# Datalink statistics

-- Total of 3 flows:

Average throughput: 663.56 Mbit/s

95th percentile per-packet one-way delay: 204.909 ms

Loss rate: 7.30%

-- Flow 1:

Average throughput: 402.32 Mbit/s

95th percentile per-packet one-way delay: 209.701 ms

Loss rate: 10.84%

-- Flow 2:

Average throughput: 276.40 Mbit/s

95th percentile per-packet one-way delay: 89.530 ms

Loss rate: 1.20%

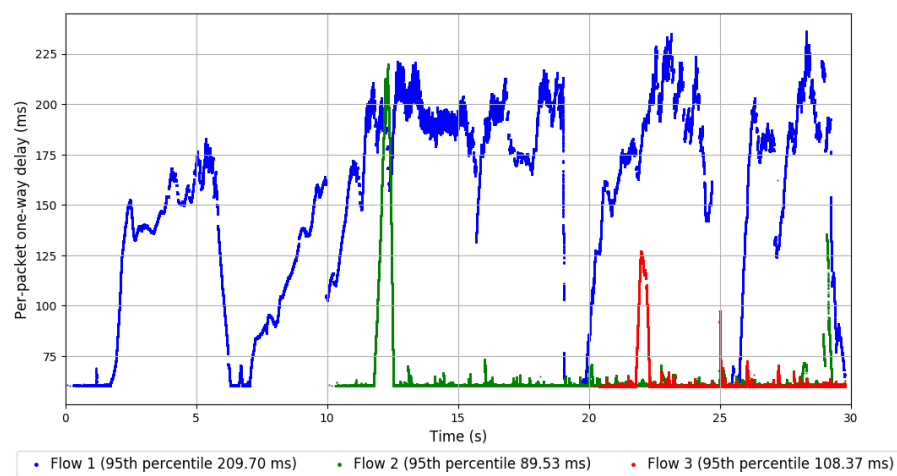
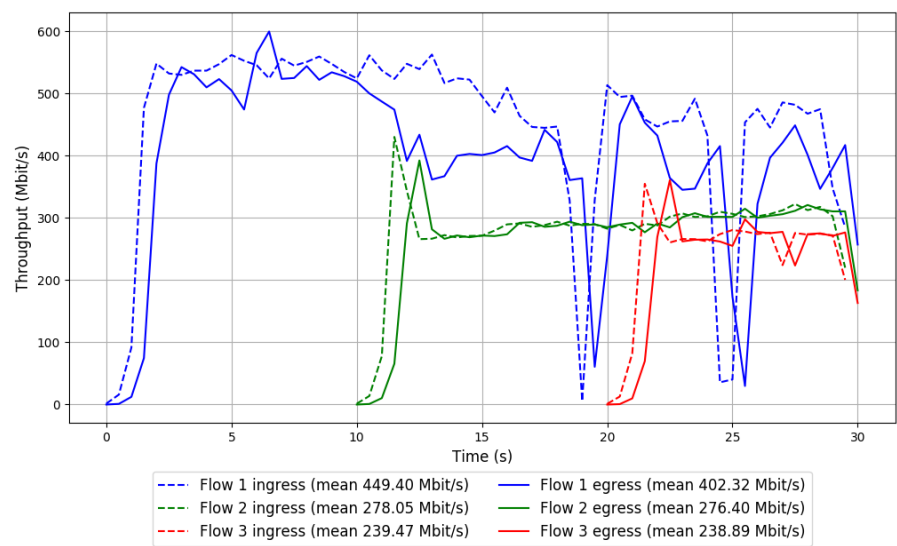
-- Flow 3:

Average throughput: 238.89 Mbit/s

95th percentile per-packet one-way delay: 108.373 ms

Loss rate: 1.45%

Run 2: Report of PCC-Allegro — Data Link

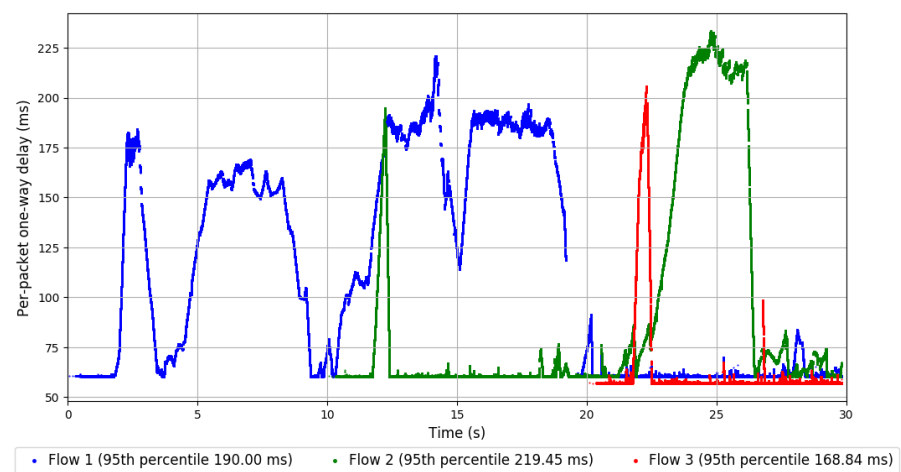
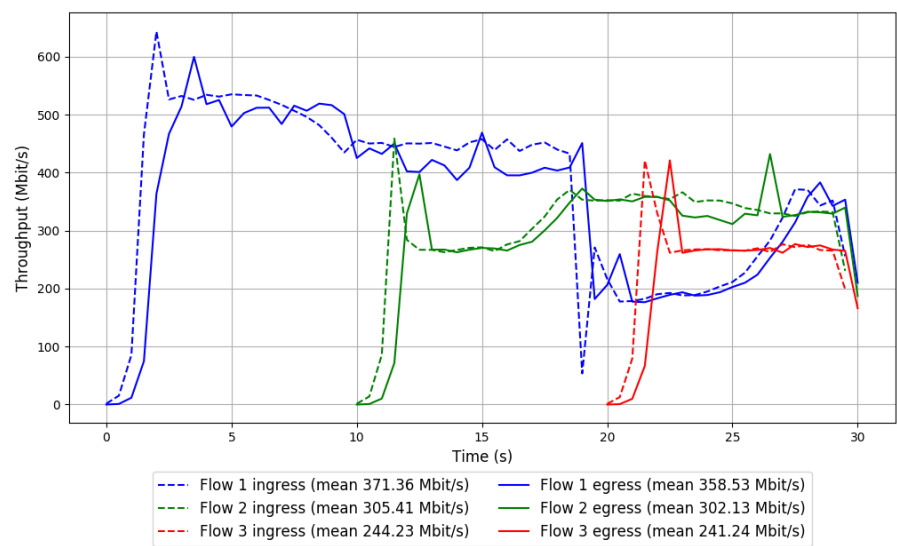


Run 3: Statistics of PCC-Allegro

Start at: 2019-07-13 03:48:51  
End at: 2019-07-13 03:49:21  
Local clock offset: 0.069 ms  
Remote clock offset: -0.112 ms

# Below is generated by plot.py at 2019-07-13 07:54:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 637.61 Mbit/s  
95th percentile per-packet one-way delay: 196.391 ms  
Loss rate: 2.99%  
-- Flow 1:  
Average throughput: 358.53 Mbit/s  
95th percentile per-packet one-way delay: 190.002 ms  
Loss rate: 3.84%  
-- Flow 2:  
Average throughput: 302.13 Mbit/s  
95th percentile per-packet one-way delay: 219.448 ms  
Loss rate: 1.68%  
-- Flow 3:  
Average throughput: 241.24 Mbit/s  
95th percentile per-packet one-way delay: 168.840 ms  
Loss rate: 2.39%

Run 3: Report of PCC-Allegro — Data Link

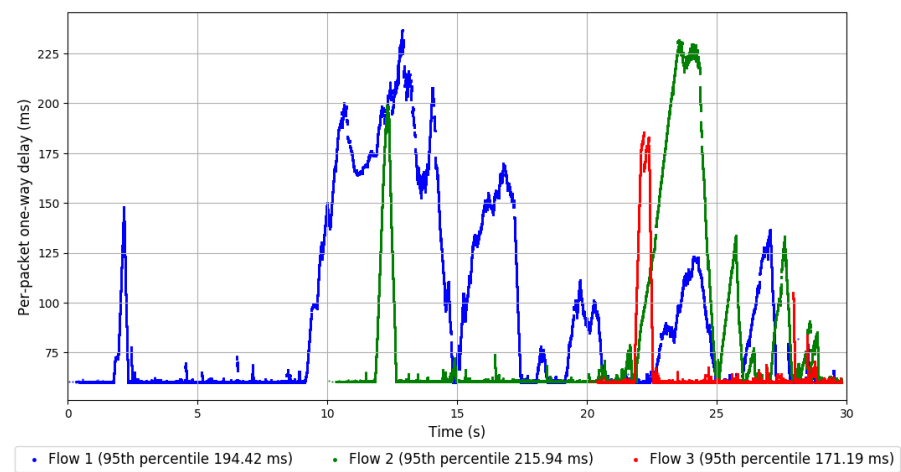
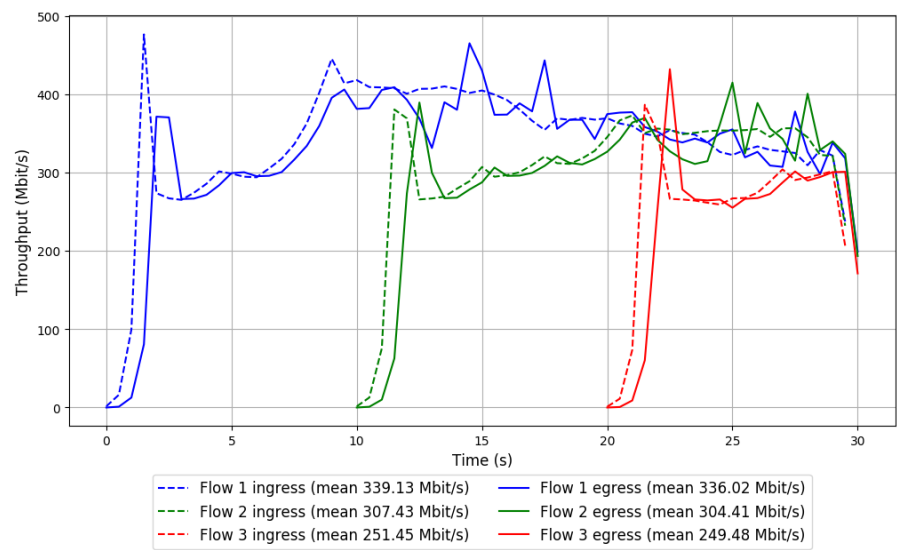


Run 4: Statistics of PCC-Allegro

Start at: 2019-07-13 04:30:14  
End at: 2019-07-13 04:30:44  
Local clock offset: -0.269 ms  
Remote clock offset: -0.212 ms

# Below is generated by plot.py at 2019-07-13 07:54:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 619.27 Mbit/s  
95th percentile per-packet one-way delay: 193.766 ms  
Loss rate: 1.50%  
-- Flow 1:  
Average throughput: 336.02 Mbit/s  
95th percentile per-packet one-way delay: 194.421 ms  
Loss rate: 1.32%  
-- Flow 2:  
Average throughput: 304.41 Mbit/s  
95th percentile per-packet one-way delay: 215.935 ms  
Loss rate: 1.59%  
-- Flow 3:  
Average throughput: 249.48 Mbit/s  
95th percentile per-packet one-way delay: 171.190 ms  
Loss rate: 2.01%

Run 4: Report of PCC-Allegro — Data Link

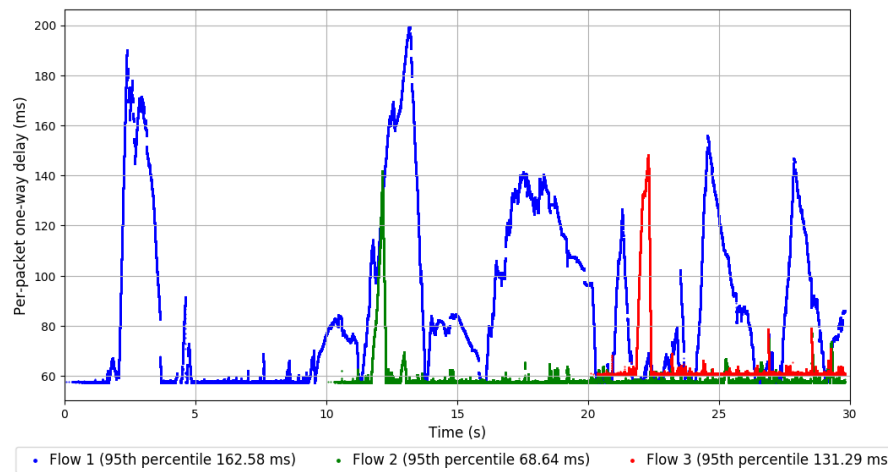
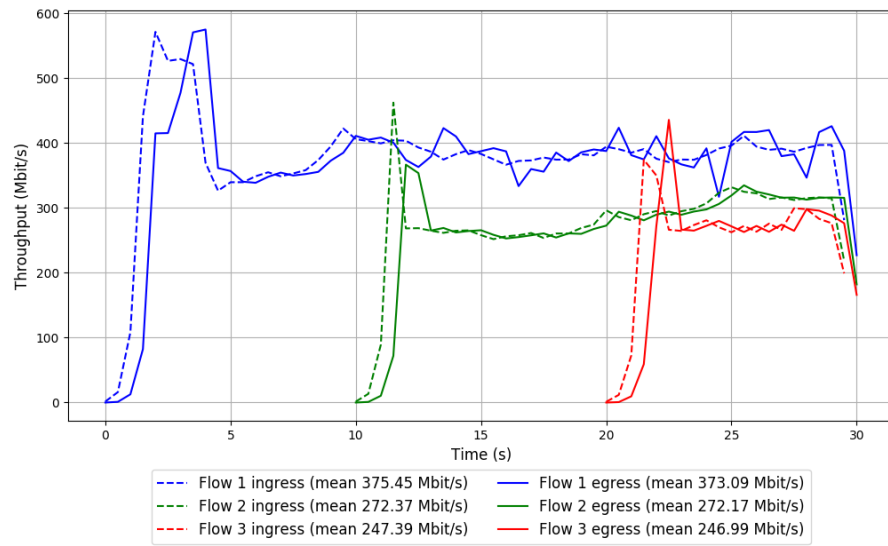


Run 5: Statistics of PCC-Allegro

Start at: 2019-07-13 05:11:18  
End at: 2019-07-13 05:11:48  
Local clock offset: -0.092 ms  
Remote clock offset: -0.792 ms

# Below is generated by plot.py at 2019-07-13 07:55:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 634.26 Mbit/s  
95th percentile per-packet one-way delay: 146.585 ms  
Loss rate: 0.97%  
-- Flow 1:  
Average throughput: 373.09 Mbit/s  
95th percentile per-packet one-way delay: 162.580 ms  
Loss rate: 1.02%  
-- Flow 2:  
Average throughput: 272.17 Mbit/s  
95th percentile per-packet one-way delay: 68.644 ms  
Loss rate: 0.66%  
-- Flow 3:  
Average throughput: 246.99 Mbit/s  
95th percentile per-packet one-way delay: 131.293 ms  
Loss rate: 1.39%

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

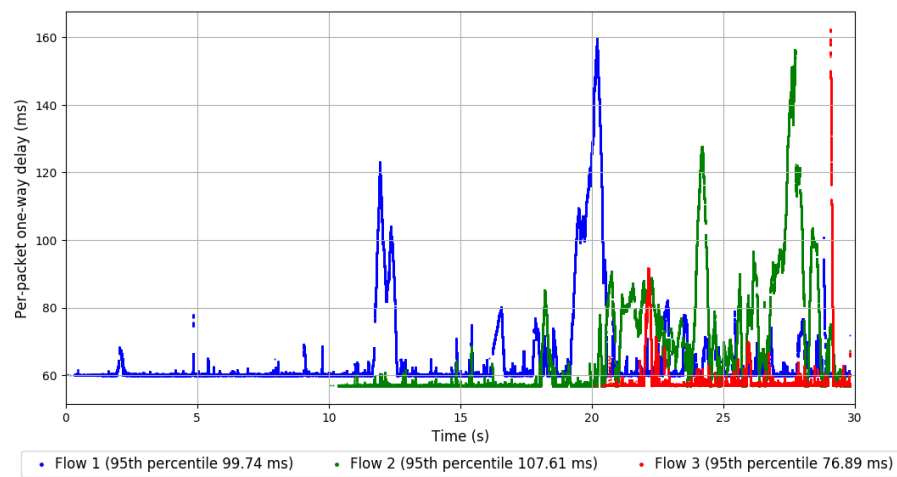
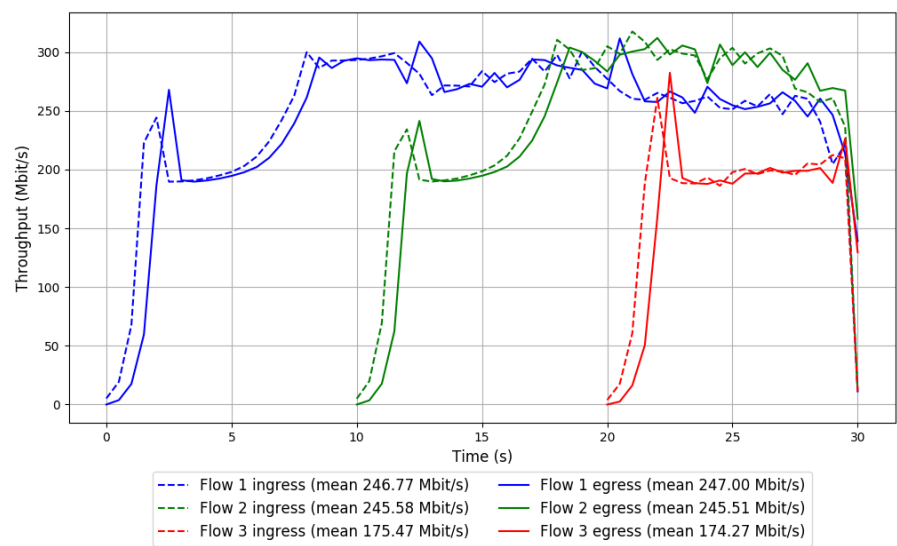


```
Run 1: Statistics of PCC-Expr

Start at: 2019-07-13 01:57:30
End at: 2019-07-13 01:58:00
Local clock offset: -0.43 ms
Remote clock offset: -0.269 ms

# Below is generated by plot.py at 2019-07-13 07:55:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 466.99 Mbit/s
95th percentile per-packet one-way delay: 99.969 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 247.00 Mbit/s
95th percentile per-packet one-way delay: 99.743 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 245.51 Mbit/s
95th percentile per-packet one-way delay: 107.609 ms
Loss rate: 1.33%
-- Flow 3:
Average throughput: 174.27 Mbit/s
95th percentile per-packet one-way delay: 76.885 ms
Loss rate: 3.28%
```

Run 1: Report of PCC-Expr — Data Link

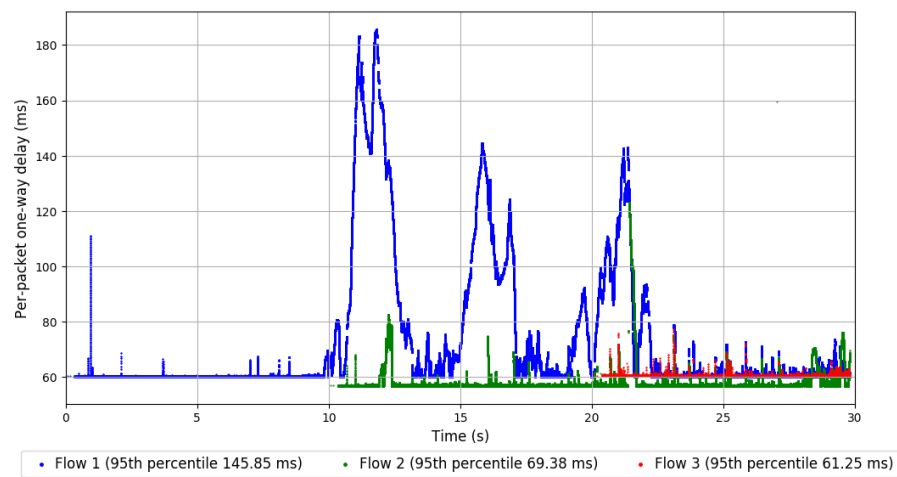
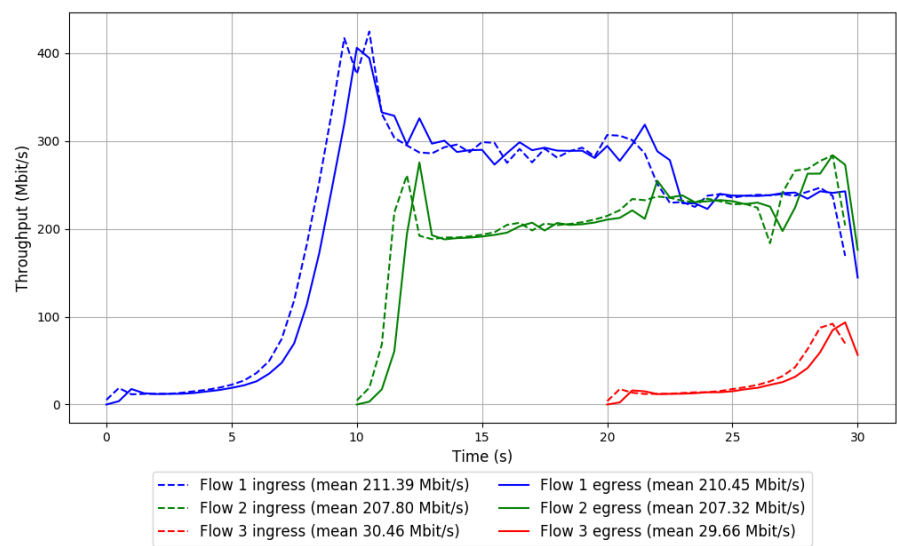


Run 2: Statistics of PCC-Expr

Start at: 2019-07-13 02:38:25  
End at: 2019-07-13 02:38:55  
Local clock offset: -0.115 ms  
Remote clock offset: -0.081 ms

# Below is generated by plot.py at 2019-07-13 07:55:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 357.77 Mbit/s  
95th percentile per-packet one-way delay: 134.148 ms  
Loss rate: 0.93%  
-- Flow 1:  
Average throughput: 210.45 Mbit/s  
95th percentile per-packet one-way delay: 145.850 ms  
Loss rate: 0.85%  
-- Flow 2:  
Average throughput: 207.32 Mbit/s  
95th percentile per-packet one-way delay: 69.383 ms  
Loss rate: 0.83%  
-- Flow 3:  
Average throughput: 29.66 Mbit/s  
95th percentile per-packet one-way delay: 61.247 ms  
Loss rate: 3.83%

Run 2: Report of PCC-Expr — Data Link

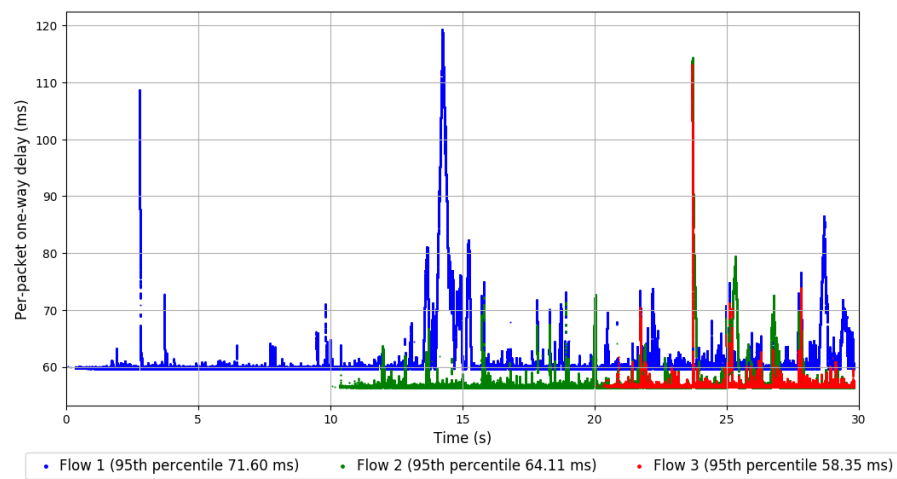
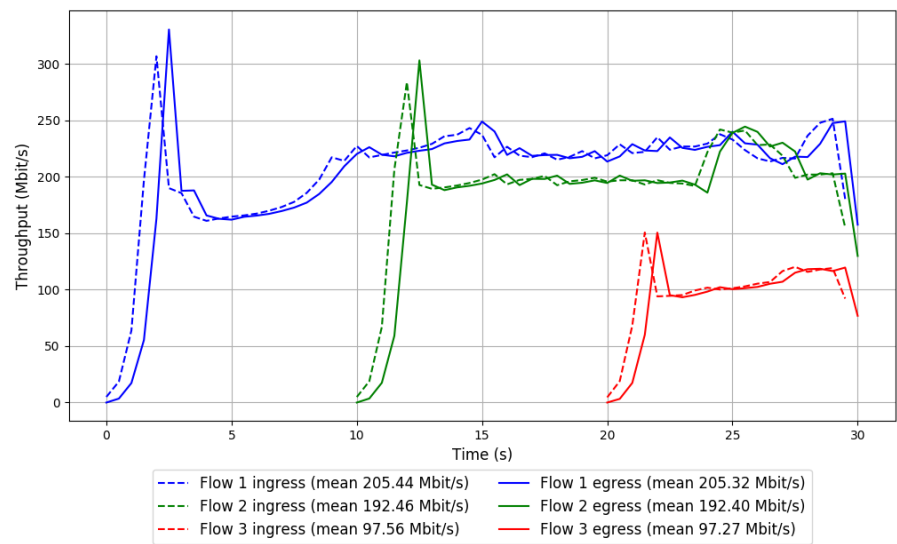


Run 3: Statistics of PCC-Expr

Start at: 2019-07-13 03:19:09  
End at: 2019-07-13 03:19:39  
Local clock offset: -0.533 ms  
Remote clock offset: -0.246 ms

# Below is generated by plot.py at 2019-07-13 07:55:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 364.90 Mbit/s  
95th percentile per-packet one-way delay: 68.579 ms  
Loss rate: 0.61%  
-- Flow 1:  
Average throughput: 205.32 Mbit/s  
95th percentile per-packet one-way delay: 71.597 ms  
Loss rate: 0.47%  
-- Flow 2:  
Average throughput: 192.40 Mbit/s  
95th percentile per-packet one-way delay: 64.113 ms  
Loss rate: 0.63%  
-- Flow 3:  
Average throughput: 97.27 Mbit/s  
95th percentile per-packet one-way delay: 58.354 ms  
Loss rate: 1.50%

Run 3: Report of PCC-Expr — Data Link

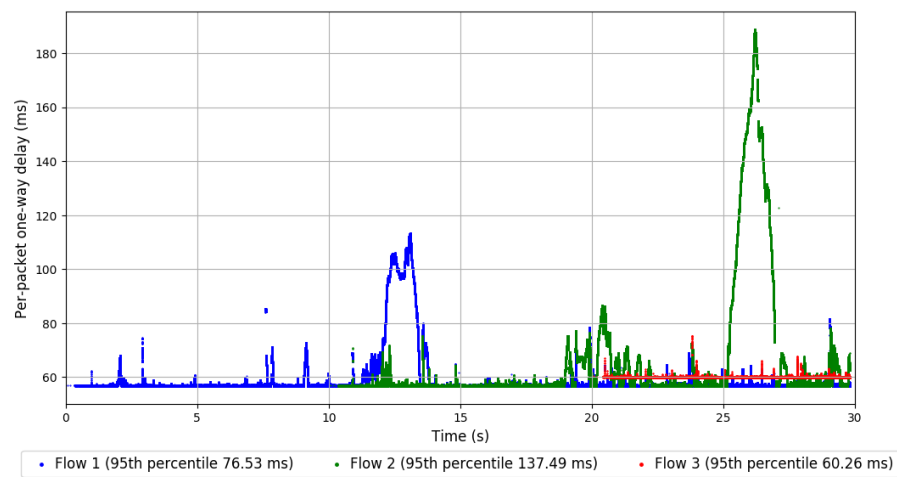
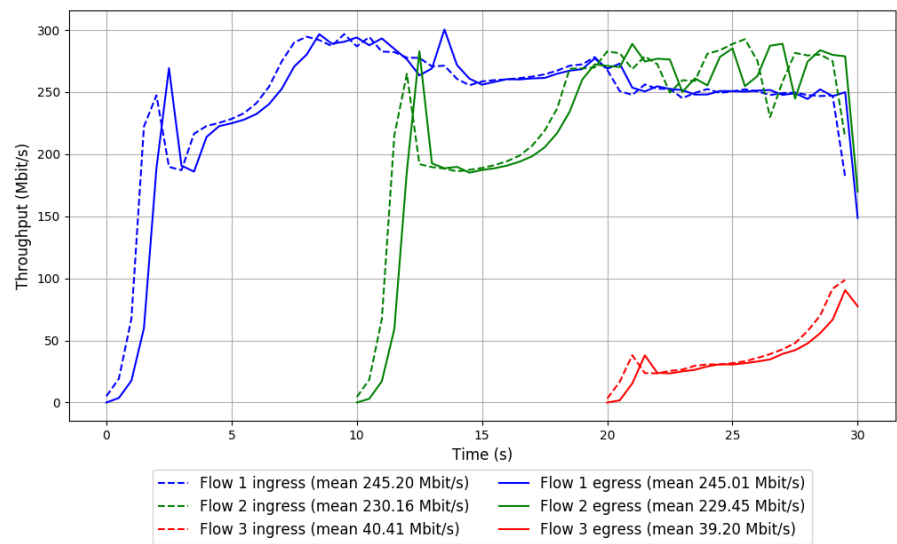


Run 4: Statistics of PCC-Expr

Start at: 2019-07-13 03:59:49  
End at: 2019-07-13 04:00:19  
Local clock offset: -0.219 ms  
Remote clock offset: -0.107 ms

# Below is generated by plot.py at 2019-07-13 08:01:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 410.07 Mbit/s  
95th percentile per-packet one-way delay: 97.993 ms  
Loss rate: 0.74%  
-- Flow 1:  
Average throughput: 245.01 Mbit/s  
95th percentile per-packet one-way delay: 76.532 ms  
Loss rate: 0.47%  
-- Flow 2:  
Average throughput: 229.45 Mbit/s  
95th percentile per-packet one-way delay: 137.487 ms  
Loss rate: 0.89%  
-- Flow 3:  
Average throughput: 39.20 Mbit/s  
95th percentile per-packet one-way delay: 60.261 ms  
Loss rate: 4.18%

Run 4: Report of PCC-Expr — Data Link

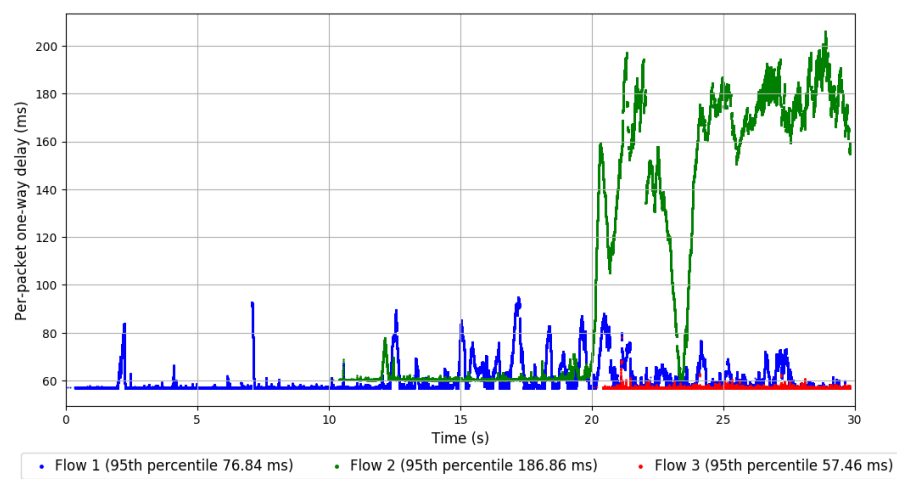
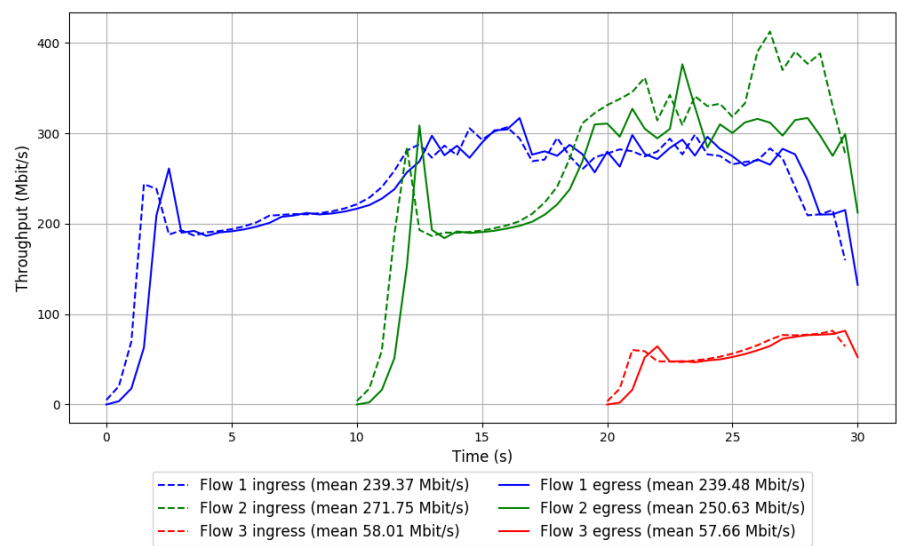


Run 5: Statistics of PCC-Expr

Start at: 2019-07-13 04:41:04  
End at: 2019-07-13 04:41:34  
Local clock offset: -0.298 ms  
Remote clock offset: -0.115 ms

# Below is generated by plot.py at 2019-07-13 08:04:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 424.70 Mbit/s  
95th percentile per-packet one-way delay: 179.728 ms  
Loss rate: 3.70%  
-- Flow 1:  
Average throughput: 239.48 Mbit/s  
95th percentile per-packet one-way delay: 76.837 ms  
Loss rate: 0.35%  
-- Flow 2:  
Average throughput: 250.63 Mbit/s  
95th percentile per-packet one-way delay: 186.858 ms  
Loss rate: 8.33%  
-- Flow 3:  
Average throughput: 57.66 Mbit/s  
95th percentile per-packet one-way delay: 57.456 ms  
Loss rate: 1.87%

Run 5: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2019-07-13 02:14:35

End at: 2019-07-13 02:15:05

Local clock offset: 0.101 ms

Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2019-07-13 08:04:14

# Datalink statistics

-- Total of 3 flows:

Average throughput: 110.34 Mbit/s

95th percentile per-packet one-way delay: 60.411 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 57.28 Mbit/s

95th percentile per-packet one-way delay: 57.063 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 51.15 Mbit/s

95th percentile per-packet one-way delay: 60.510 ms

Loss rate: 0.19%

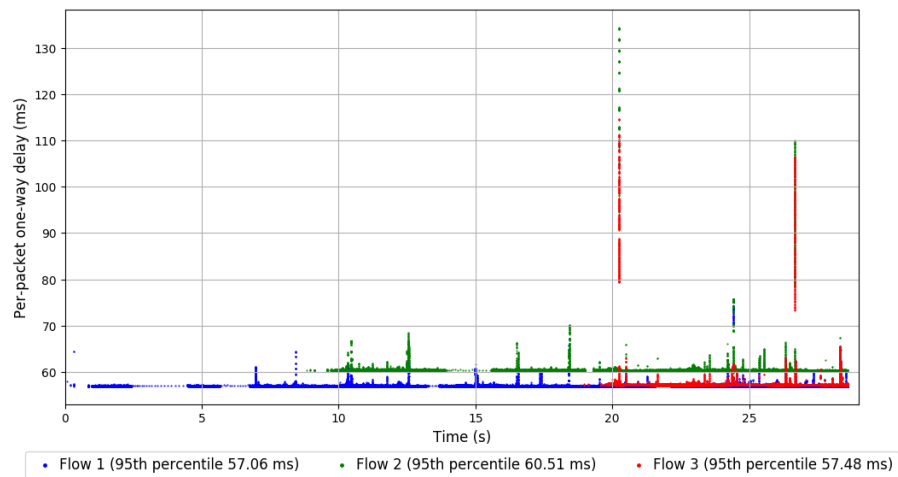
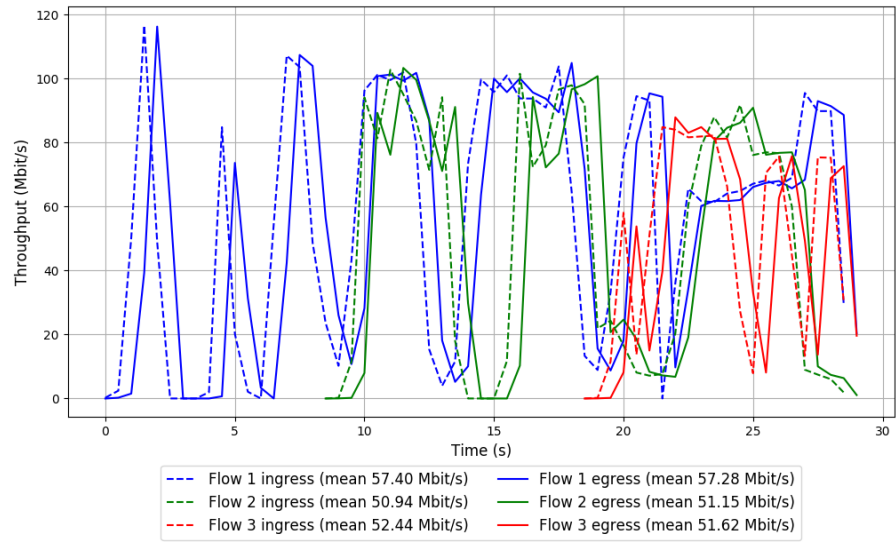
-- Flow 3:

Average throughput: 51.62 Mbit/s

95th percentile per-packet one-way delay: 57.478 ms

Loss rate: 2.73%

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



Run 2: Statistics of QUIC Cubic

Start at: 2019-07-13 02:55:01

End at: 2019-07-13 02:55:31

Local clock offset: -0.113 ms

Remote clock offset: 0.027 ms

# Below is generated by plot.py at 2019-07-13 08:04:14

# Datalink statistics

-- Total of 3 flows:

Average throughput: 108.41 Mbit/s

95th percentile per-packet one-way delay: 60.025 ms

Loss rate: 0.94%

-- Flow 1:

Average throughput: 64.65 Mbit/s

95th percentile per-packet one-way delay: 57.163 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 38.11 Mbit/s

95th percentile per-packet one-way delay: 60.098 ms

Loss rate: 1.06%

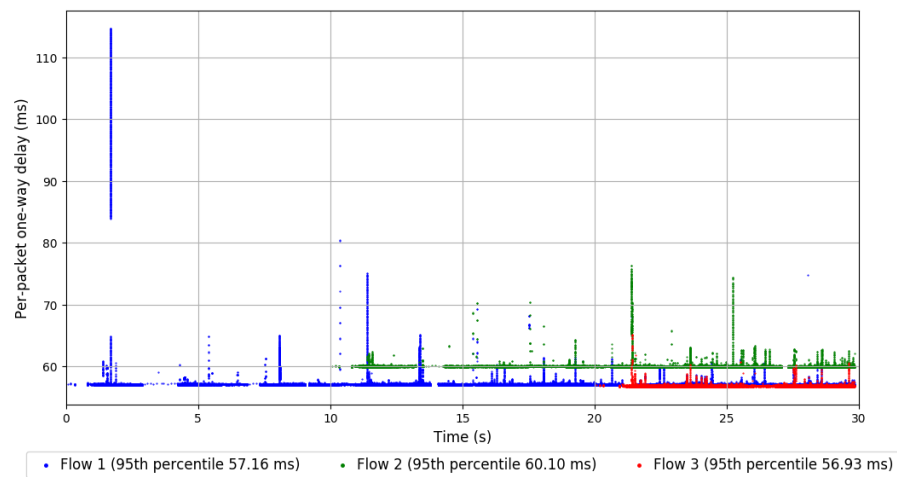
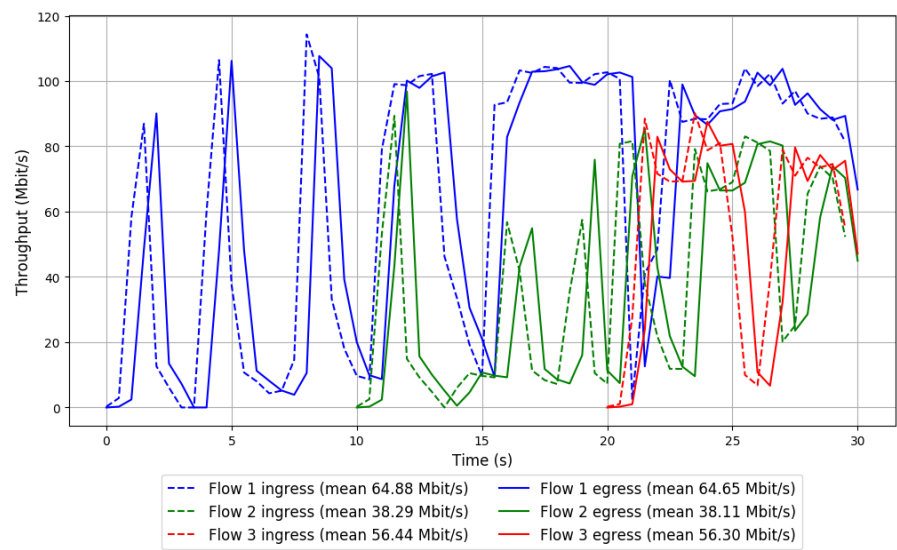
-- Flow 3:

Average throughput: 56.30 Mbit/s

95th percentile per-packet one-way delay: 56.931 ms

Loss rate: 1.41%

Run 2: Report of QUIC Cubic — Data Link

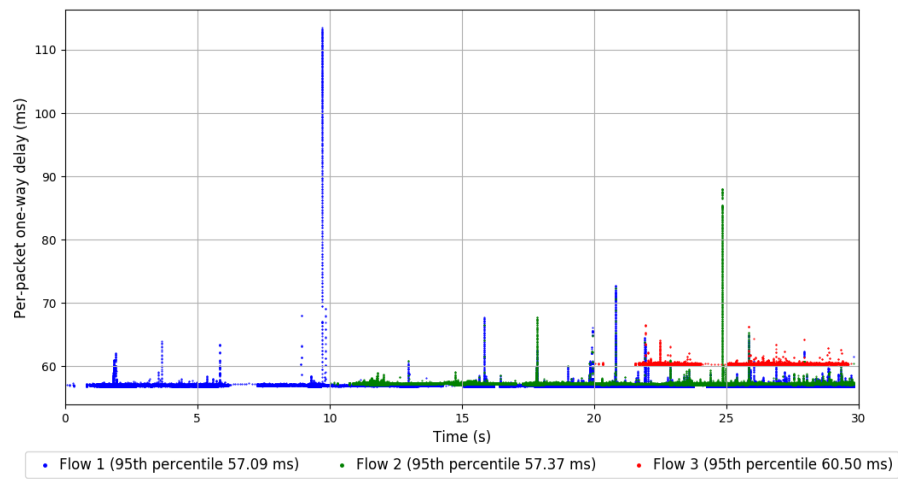
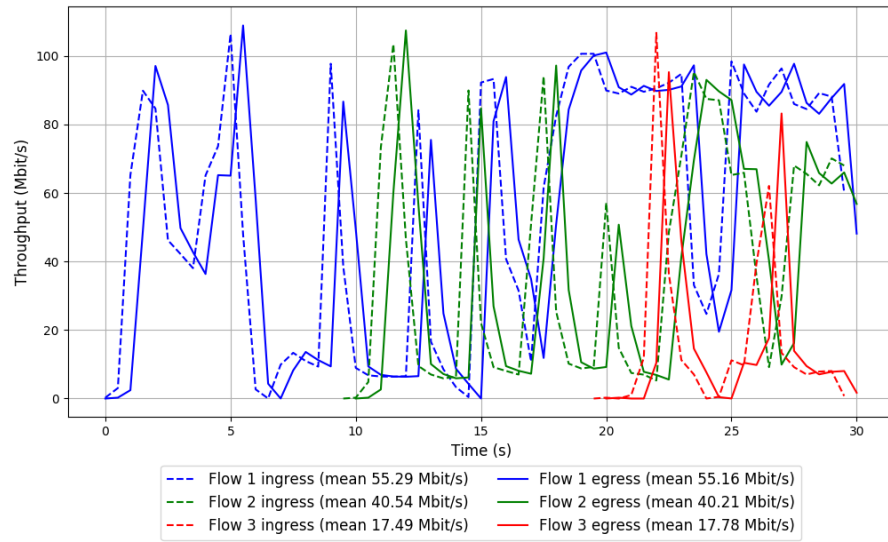


Run 3: Statistics of QUIC Cubic

Start at: 2019-07-13 03:35:47  
End at: 2019-07-13 03:36:17  
Local clock offset: -0.403 ms  
Remote clock offset: -0.546 ms

# Below is generated by plot.py at 2019-07-13 08:04:14  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 87.66 Mbit/s  
95th percentile per-packet one-way delay: 60.353 ms  
Loss rate: 0.81%  
-- Flow 1:  
Average throughput: 55.16 Mbit/s  
95th percentile per-packet one-way delay: 57.091 ms  
Loss rate: 0.61%  
-- Flow 2:  
Average throughput: 40.21 Mbit/s  
95th percentile per-packet one-way delay: 57.373 ms  
Loss rate: 1.37%  
-- Flow 3:  
Average throughput: 17.78 Mbit/s  
95th percentile per-packet one-way delay: 60.496 ms  
Loss rate: 0.00%

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

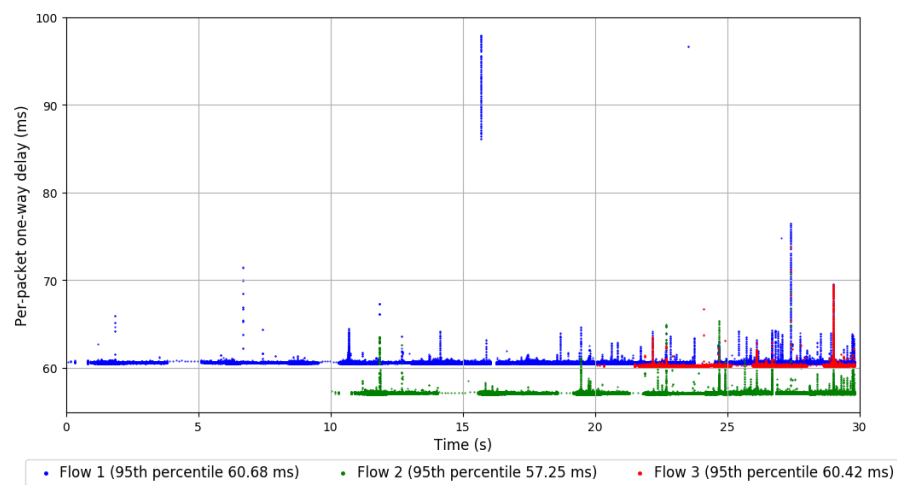
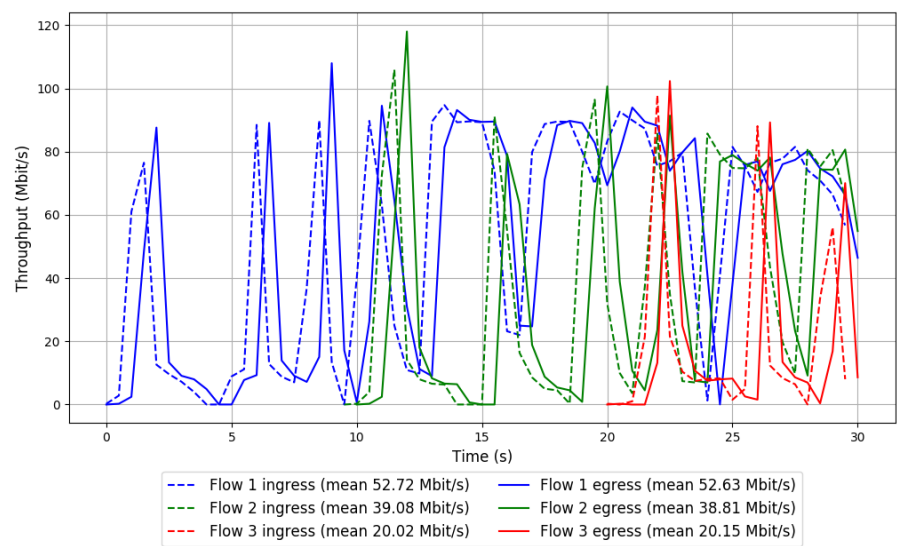


Run 4: Statistics of QUIC Cubic

Start at: 2019-07-13 04:16:56  
End at: 2019-07-13 04:17:26  
Local clock offset: 0.111 ms  
Remote clock offset: -0.094 ms

# Below is generated by plot.py at 2019-07-13 08:04:14  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 85.03 Mbit/s  
95th percentile per-packet one-way delay: 60.654 ms  
Loss rate: 0.79%  
-- Flow 1:  
Average throughput: 52.63 Mbit/s  
95th percentile per-packet one-way delay: 60.681 ms  
Loss rate: 0.59%  
-- Flow 2:  
Average throughput: 38.81 Mbit/s  
95th percentile per-packet one-way delay: 57.246 ms  
Loss rate: 1.27%  
-- Flow 3:  
Average throughput: 20.15 Mbit/s  
95th percentile per-packet one-way delay: 60.419 ms  
Loss rate: 0.55%

Run 4: Report of QUIC Cubic — Data Link

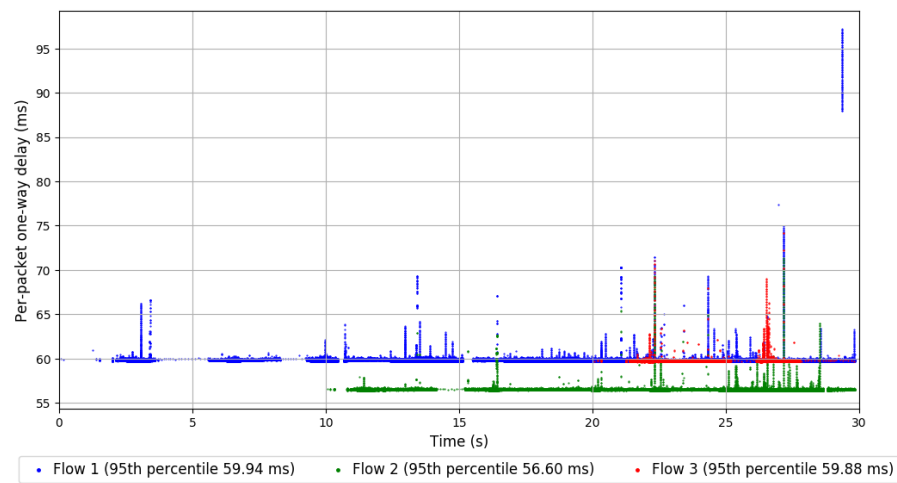
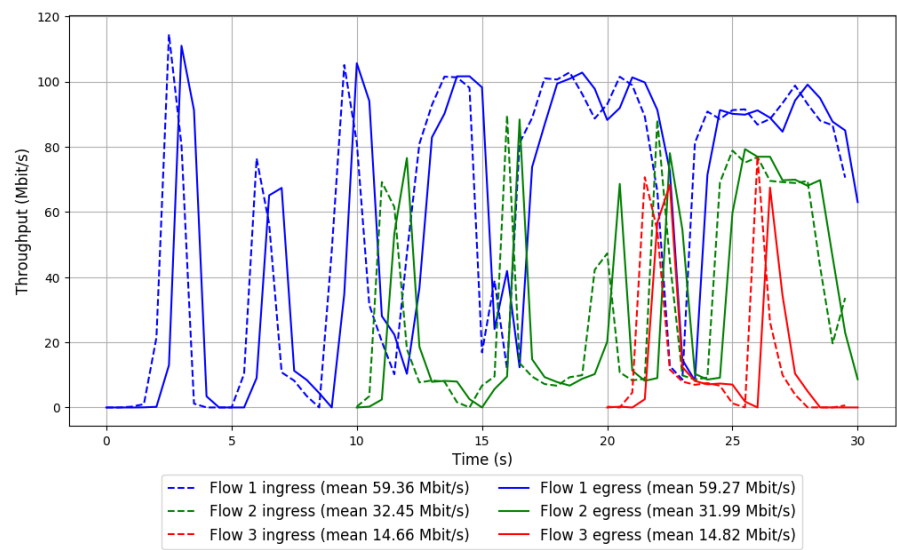


Run 5: Statistics of QUIC Cubic

Start at: 2019-07-13 04:58:12  
End at: 2019-07-13 04:58:42  
Local clock offset: -0.486 ms  
Remote clock offset: -0.127 ms

# Below is generated by plot.py at 2019-07-13 08:04:14  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 85.37 Mbit/s  
95th percentile per-packet one-way delay: 59.919 ms  
Loss rate: 0.90%  
-- Flow 1:  
Average throughput: 59.27 Mbit/s  
95th percentile per-packet one-way delay: 59.938 ms  
Loss rate: 0.54%  
-- Flow 2:  
Average throughput: 31.99 Mbit/s  
95th percentile per-packet one-way delay: 56.602 ms  
Loss rate: 2.04%  
-- Flow 3:  
Average throughput: 14.82 Mbit/s  
95th percentile per-packet one-way delay: 59.880 ms  
Loss rate: 0.22%

Run 5: Report of QUIC Cubic — Data Link

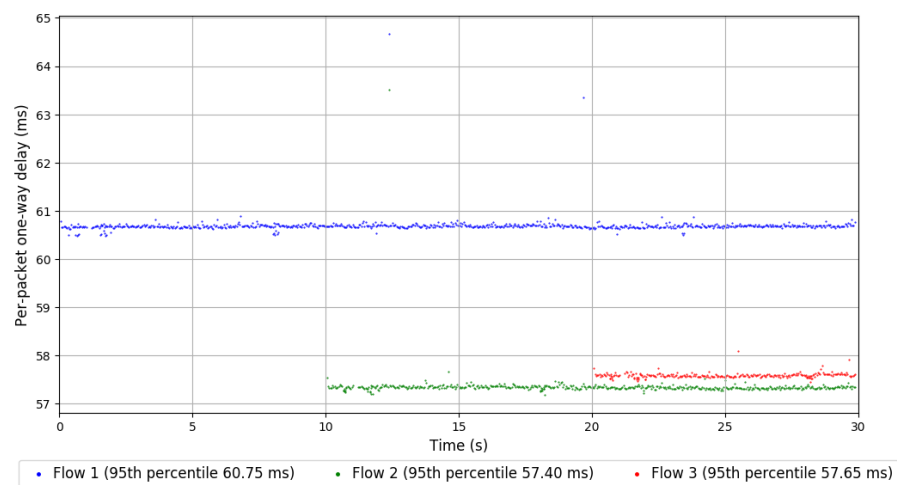
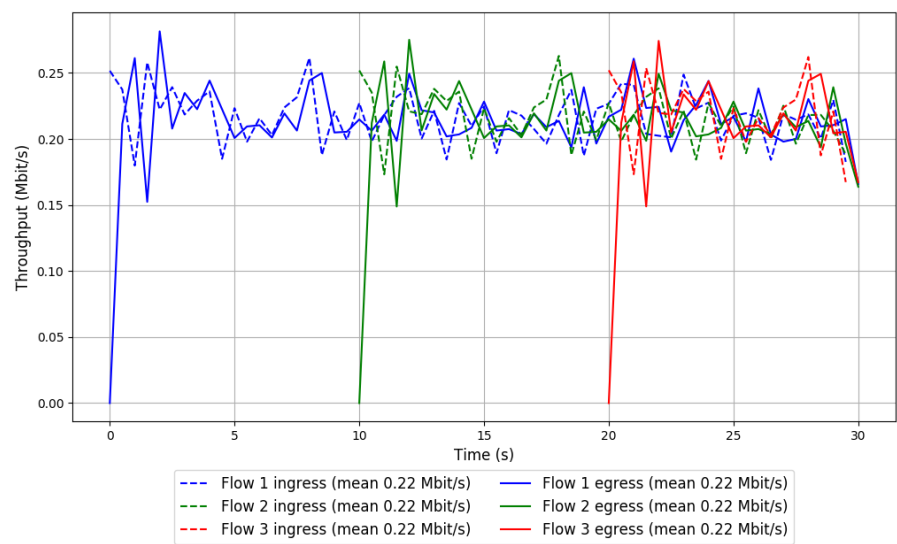


Run 1: Statistics of SReAM

Start at: 2019-07-13 02:01:13  
End at: 2019-07-13 02:01:43  
Local clock offset: 0.184 ms  
Remote clock offset: -0.228 ms

# Below is generated by plot.py at 2019-07-13 08:04:14  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 60.727 ms  
Loss rate: 0.52%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 60.751 ms  
Loss rate: 0.38%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 57.400 ms  
Loss rate: 0.61%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 57.648 ms  
Loss rate: 0.74%

Run 1: Report of SCReAM — Data Link

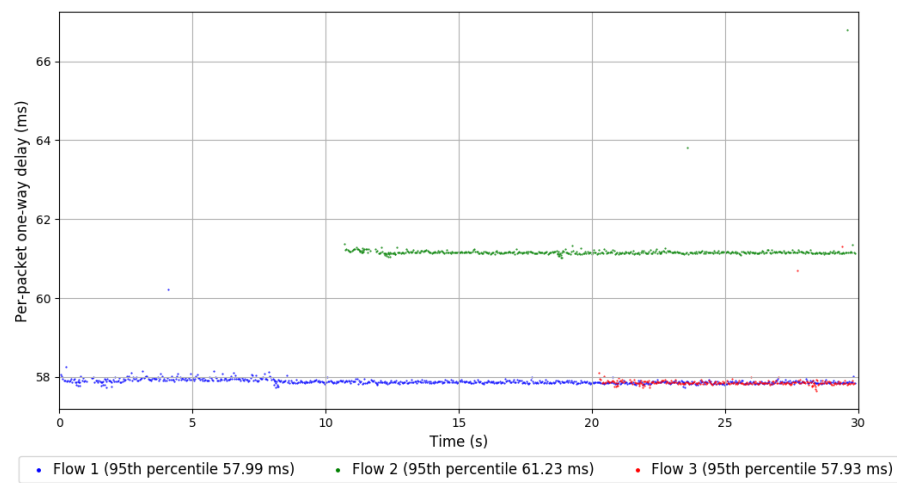
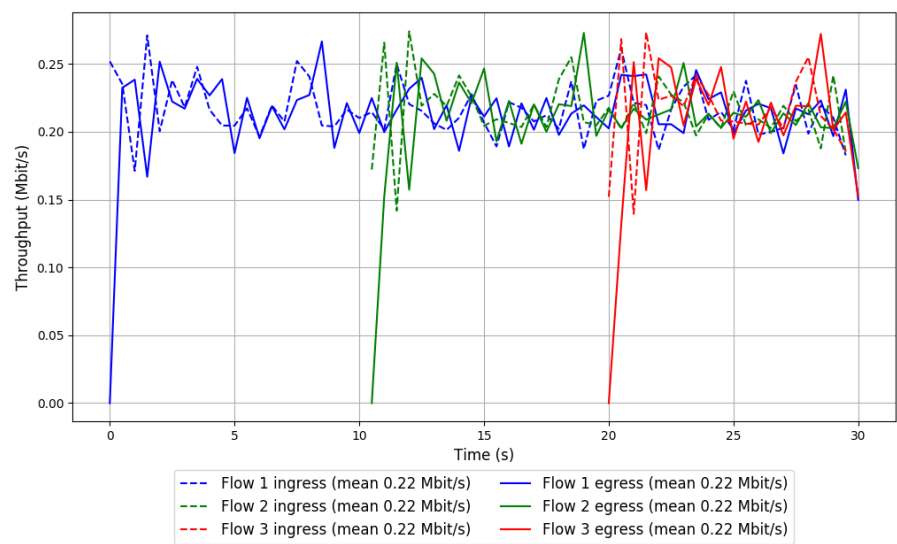


Run 2: Statistics of SReAM

Start at: 2019-07-13 02:41:57  
End at: 2019-07-13 02:42:27  
Local clock offset: -0.33 ms  
Remote clock offset: -0.828 ms

# Below is generated by plot.py at 2019-07-13 08:04:14  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 61.188 ms  
Loss rate: 0.57%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 57.991 ms  
Loss rate: 0.38%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 61.230 ms  
Loss rate: 0.57%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 57.929 ms  
Loss rate: 1.17%

Run 2: Report of SReAM — Data Link

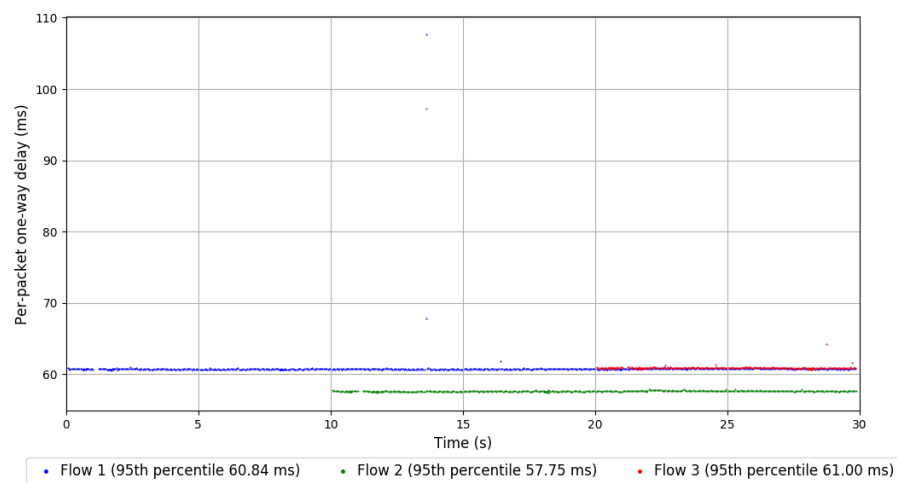
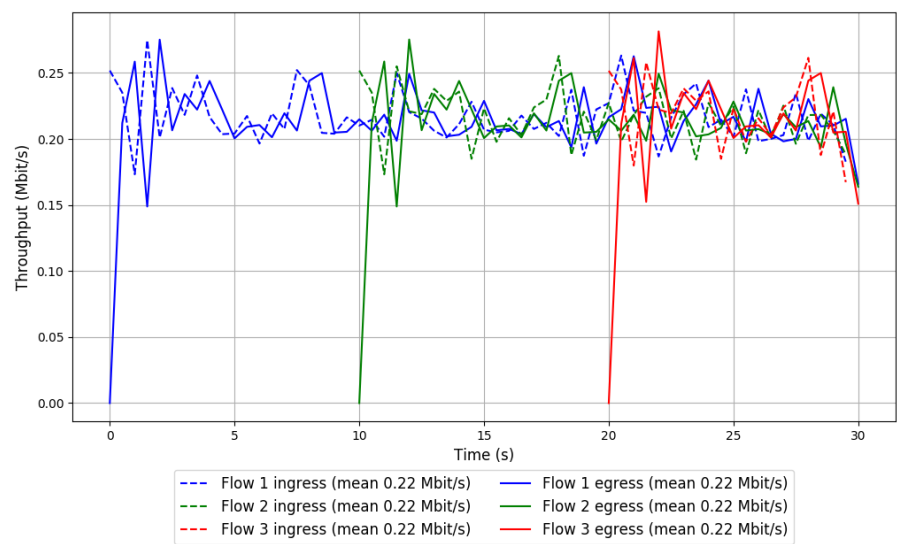


Run 3: Statistics of SReAM

Start at: 2019-07-13 03:22:43  
End at: 2019-07-13 03:23:13  
Local clock offset: 0.142 ms  
Remote clock offset: -0.311 ms

# Below is generated by plot.py at 2019-07-13 08:04:14  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 60.920 ms  
Loss rate: 0.58%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 60.838 ms  
Loss rate: 0.38%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 57.749 ms  
Loss rate: 0.61%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 61.000 ms  
Loss rate: 1.10%

Run 3: Report of SCSReAM — Data Link

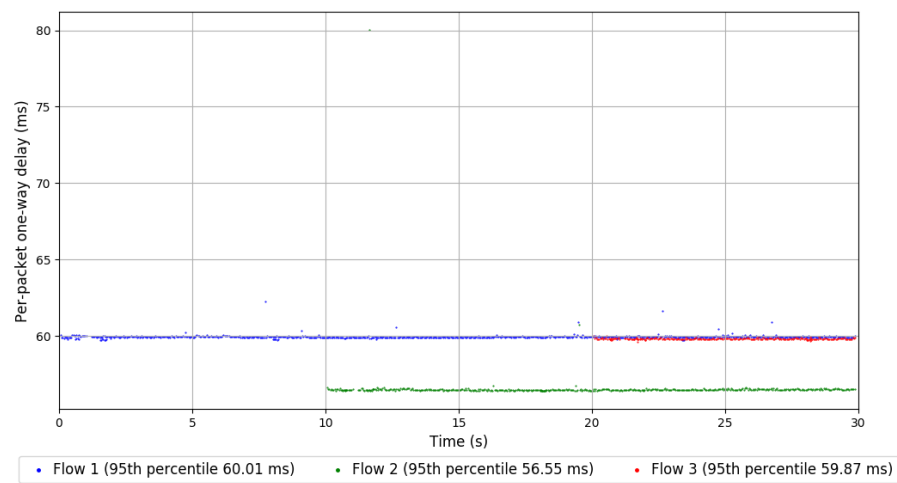
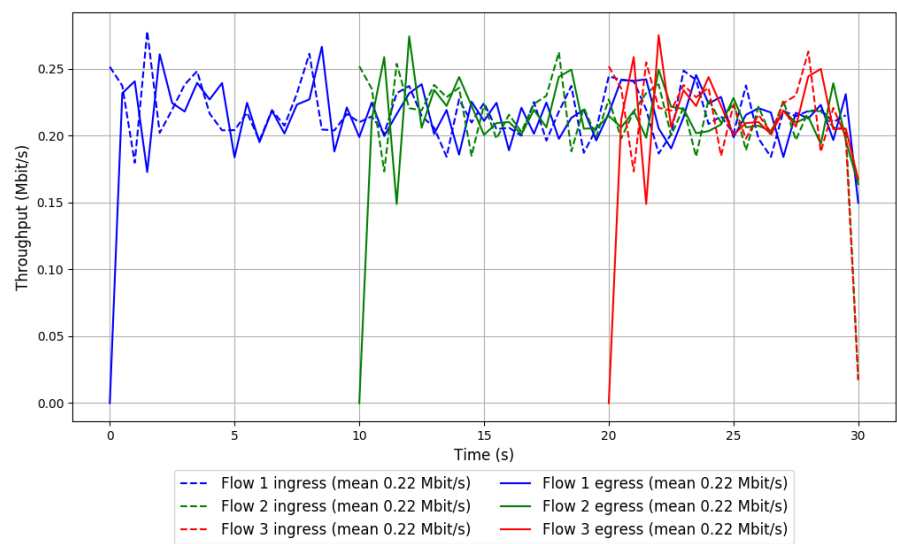


Run 4: Statistics of SReAM

Start at: 2019-07-13 04:03:30  
End at: 2019-07-13 04:04:00  
Local clock offset: -0.552 ms  
Remote clock offset: -0.089 ms

# Below is generated by plot.py at 2019-07-13 08:04:14  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 59.976 ms  
Loss rate: 0.96%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 60.007 ms  
Loss rate: 0.63%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 56.548 ms  
Loss rate: 1.01%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 59.870 ms  
Loss rate: 1.83%

Run 4: Report of SReAM — Data Link

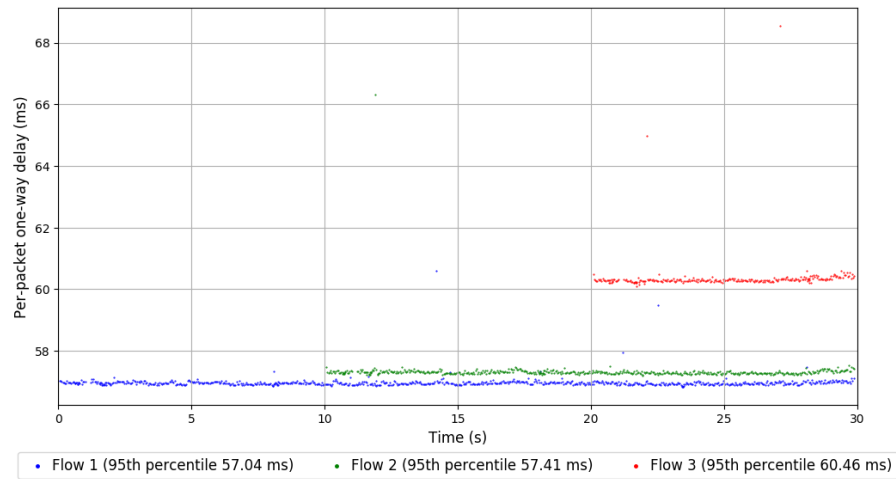
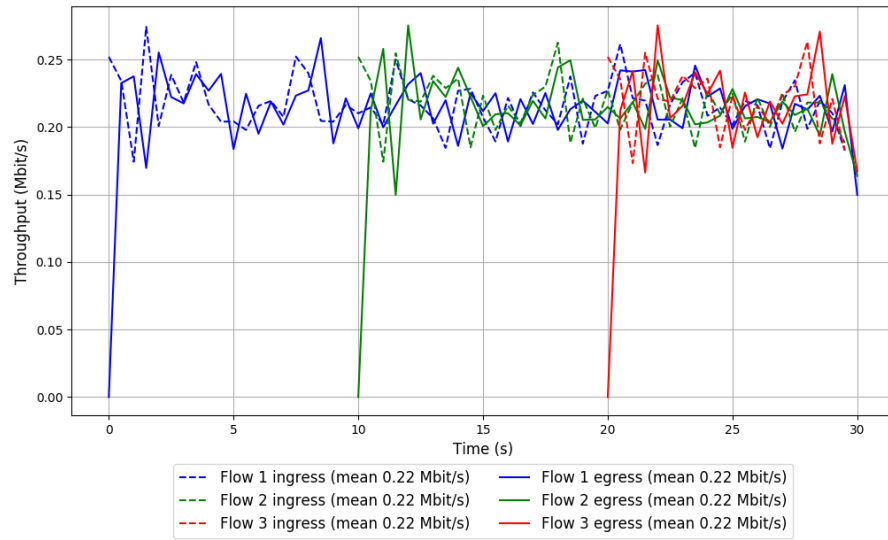


Run 5: Statistics of SReAM

Start at: 2019-07-13 04:44:44  
End at: 2019-07-13 04:45:14  
Local clock offset: -0.082 ms  
Remote clock offset: -0.131 ms

# Below is generated by plot.py at 2019-07-13 08:04:14  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 60.323 ms  
Loss rate: 0.58%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 57.040 ms  
Loss rate: 0.38%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 57.413 ms  
Loss rate: 0.61%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 60.461 ms  
Loss rate: 1.08%

## Run 5: Report of SReAM — Data Link

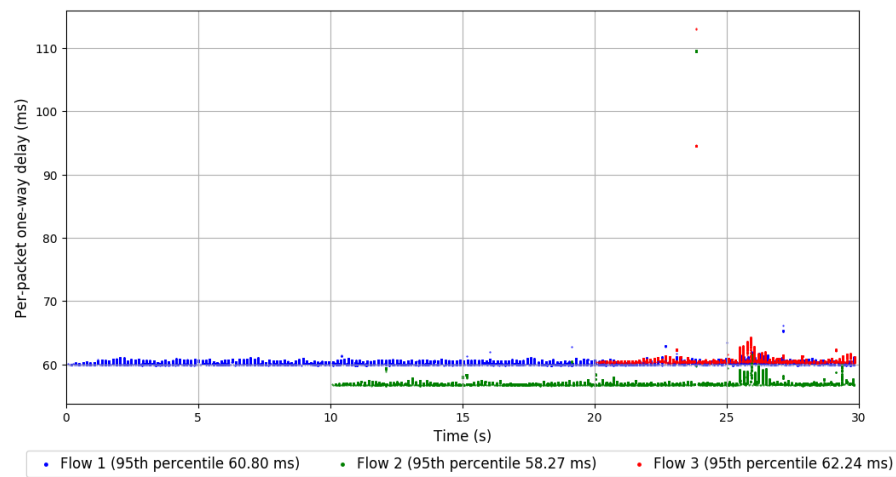
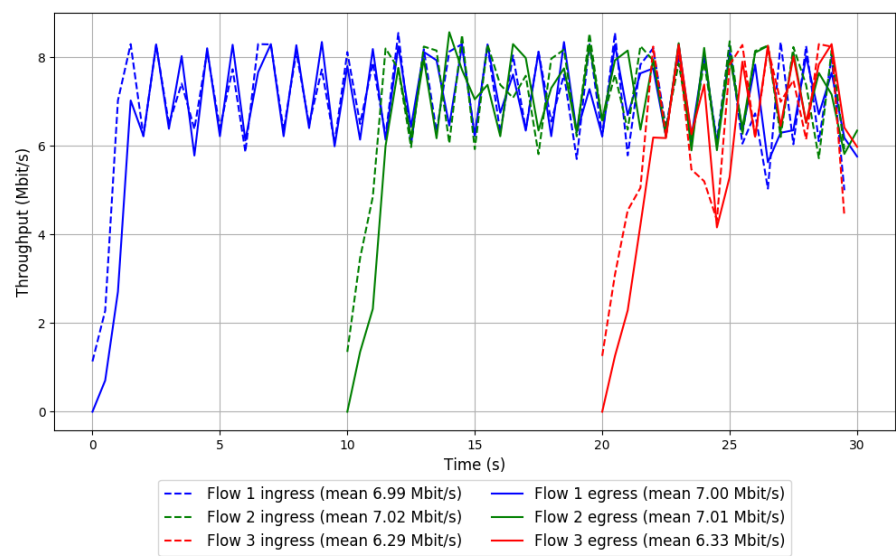


Run 1: Statistics of Sprout

Start at: 2019-07-13 02:19:32  
End at: 2019-07-13 02:20:02  
Local clock offset: -0.354 ms  
Remote clock offset: -0.113 ms

# Below is generated by plot.py at 2019-07-13 08:04:14  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 13.73 Mbit/s  
95th percentile per-packet one-way delay: 60.906 ms  
Loss rate: 0.40%  
-- Flow 1:  
Average throughput: 7.00 Mbit/s  
95th percentile per-packet one-way delay: 60.796 ms  
Loss rate: 0.26%  
-- Flow 2:  
Average throughput: 7.01 Mbit/s  
95th percentile per-packet one-way delay: 58.266 ms  
Loss rate: 0.69%  
-- Flow 3:  
Average throughput: 6.33 Mbit/s  
95th percentile per-packet one-way delay: 62.239 ms  
Loss rate: 0.21%

Run 1: Report of Sprout — Data Link

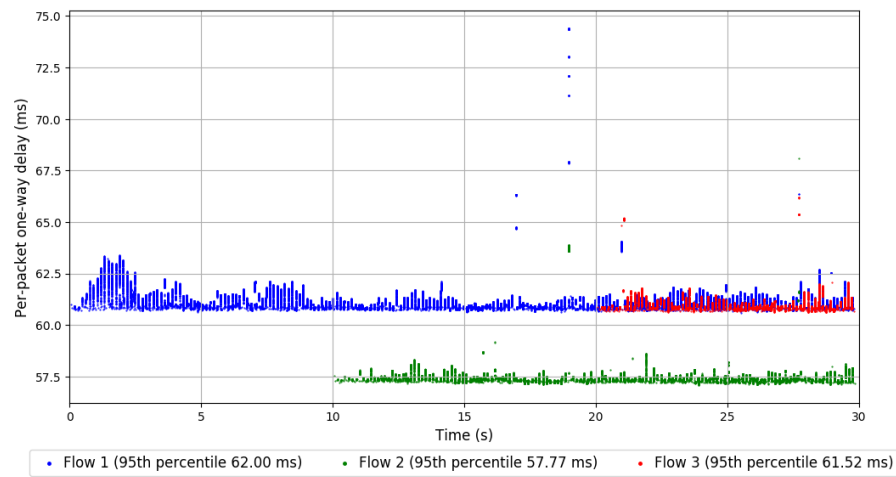
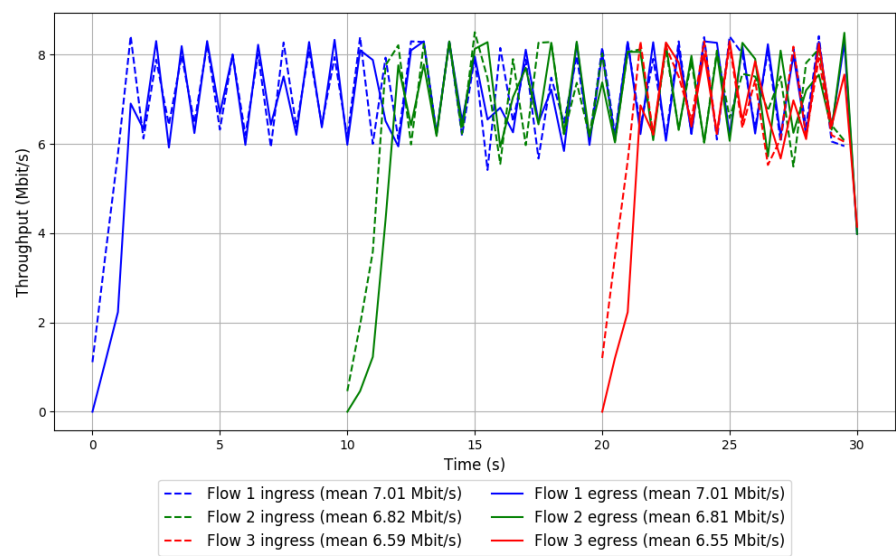


Run 2: Statistics of Sprout

Start at: 2019-07-13 03:00:07  
End at: 2019-07-13 03:00:37  
Local clock offset: 0.18 ms  
Remote clock offset: 0.058 ms

# Below is generated by plot.py at 2019-07-13 08:04:14  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 13.67 Mbit/s  
95th percentile per-packet one-way delay: 61.730 ms  
Loss rate: 0.75%  
-- Flow 1:  
Average throughput: 7.01 Mbit/s  
95th percentile per-packet one-way delay: 61.999 ms  
Loss rate: 0.47%  
-- Flow 2:  
Average throughput: 6.81 Mbit/s  
95th percentile per-packet one-way delay: 57.768 ms  
Loss rate: 0.77%  
-- Flow 3:  
Average throughput: 6.55 Mbit/s  
95th percentile per-packet one-way delay: 61.522 ms  
Loss rate: 1.60%

Run 2: Report of Sprout — Data Link

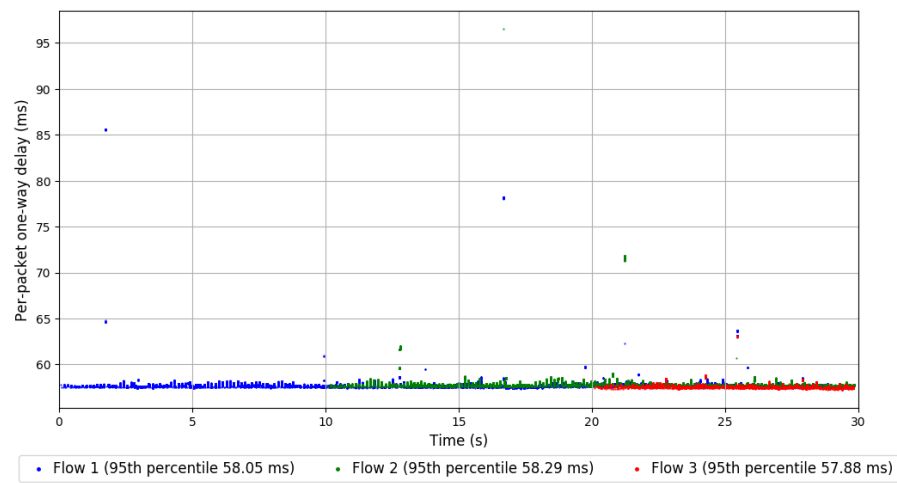
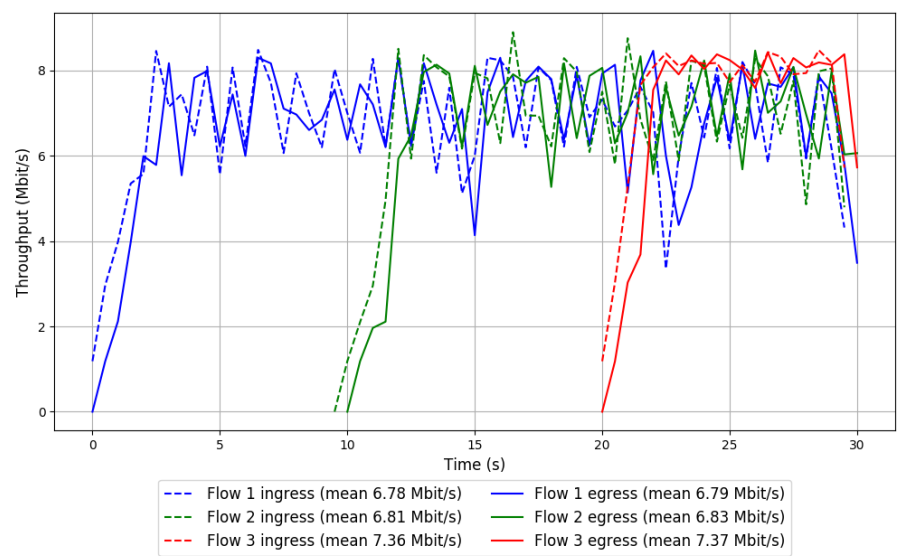


### Run 3: Statistics of Sprout

Start at: 2019-07-13 03:40:40  
End at: 2019-07-13 03:41:10  
Local clock offset: -0.097 ms  
Remote clock offset: -0.433 ms

```
# Below is generated by plot.py at 2019-07-13 08:04:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.72 Mbit/s
95th percentile per-packet one-way delay: 58.134 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 6.79 Mbit/s
95th percentile per-packet one-way delay: 58.045 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 6.83 Mbit/s
95th percentile per-packet one-way delay: 58.294 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 7.37 Mbit/s
95th percentile per-packet one-way delay: 57.875 ms
Loss rate: 1.21%
```

Run 3: Report of Sprout — Data Link

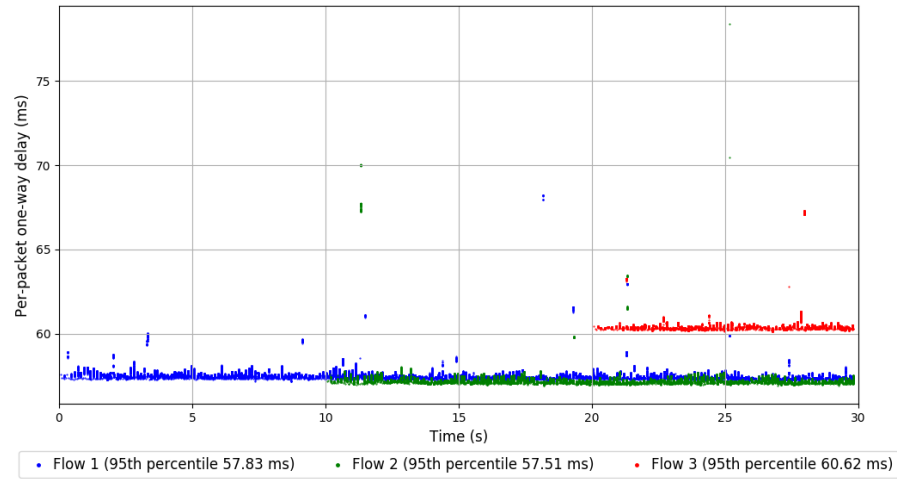
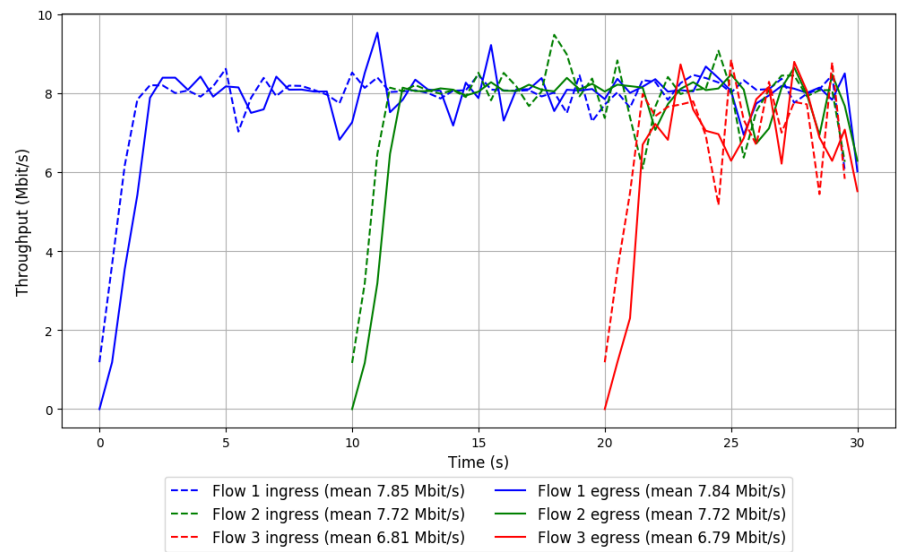


Run 4: Statistics of Sprout

Start at: 2019-07-13 04:22:01  
End at: 2019-07-13 04:22:31  
Local clock offset: -0.069 ms  
Remote clock offset: -0.171 ms

# Below is generated by plot.py at 2019-07-13 08:04:14  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 15.19 Mbit/s  
95th percentile per-packet one-way delay: 60.402 ms  
Loss rate: 0.65%  
-- Flow 1:  
Average throughput: 7.84 Mbit/s  
95th percentile per-packet one-way delay: 57.832 ms  
Loss rate: 0.43%  
-- Flow 2:  
Average throughput: 7.72 Mbit/s  
95th percentile per-packet one-way delay: 57.513 ms  
Loss rate: 0.60%  
-- Flow 3:  
Average throughput: 6.79 Mbit/s  
95th percentile per-packet one-way delay: 60.623 ms  
Loss rate: 1.50%

Run 4: Report of Sprout — Data Link

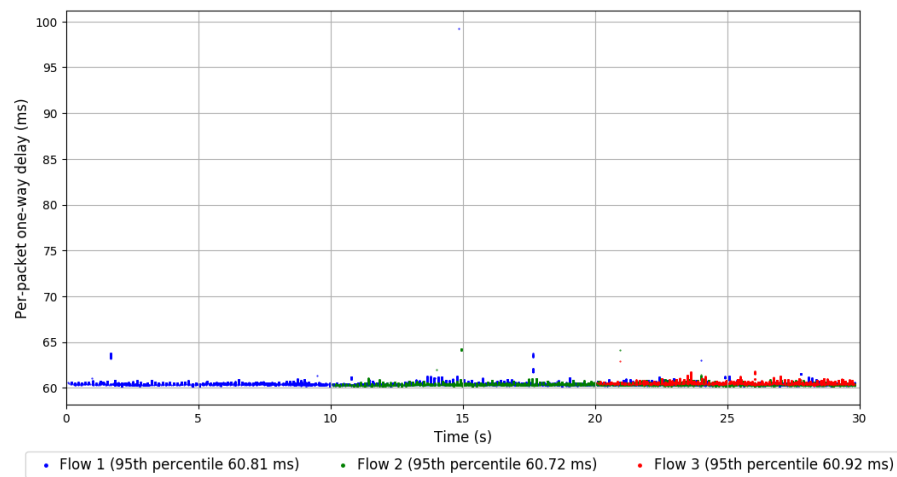
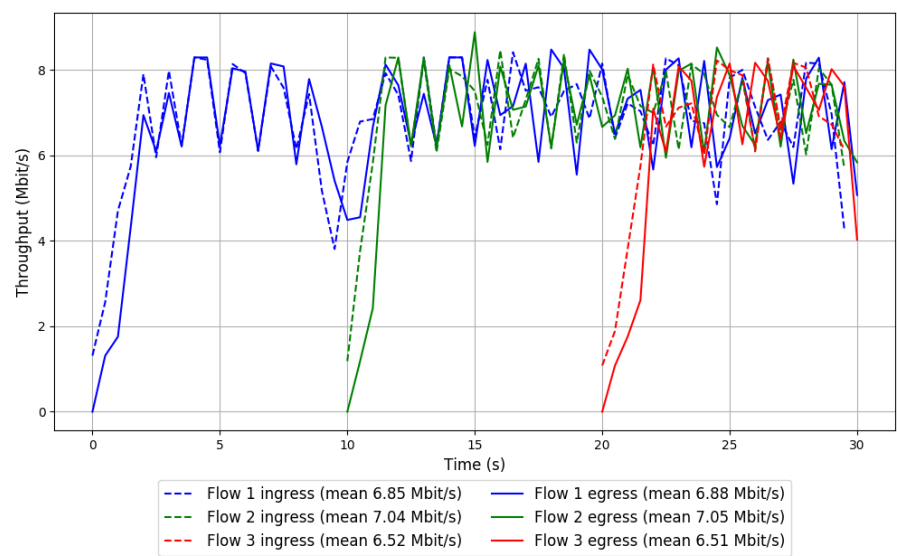


Run 5: Statistics of Sprout

Start at: 2019-07-13 05:03:11  
End at: 2019-07-13 05:03:41  
Local clock offset: -0.109 ms  
Remote clock offset: -0.181 ms

# Below is generated by plot.py at 2019-07-13 08:04:14  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 13.69 Mbit/s  
95th percentile per-packet one-way delay: 60.806 ms  
Loss rate: 0.50%  
-- Flow 1:  
Average throughput: 6.88 Mbit/s  
95th percentile per-packet one-way delay: 60.806 ms  
Loss rate: 0.11%  
-- Flow 2:  
Average throughput: 7.05 Mbit/s  
95th percentile per-packet one-way delay: 60.715 ms  
Loss rate: 0.55%  
-- Flow 3:  
Average throughput: 6.51 Mbit/s  
95th percentile per-packet one-way delay: 60.922 ms  
Loss rate: 1.64%

Run 5: Report of Sprout — Data Link

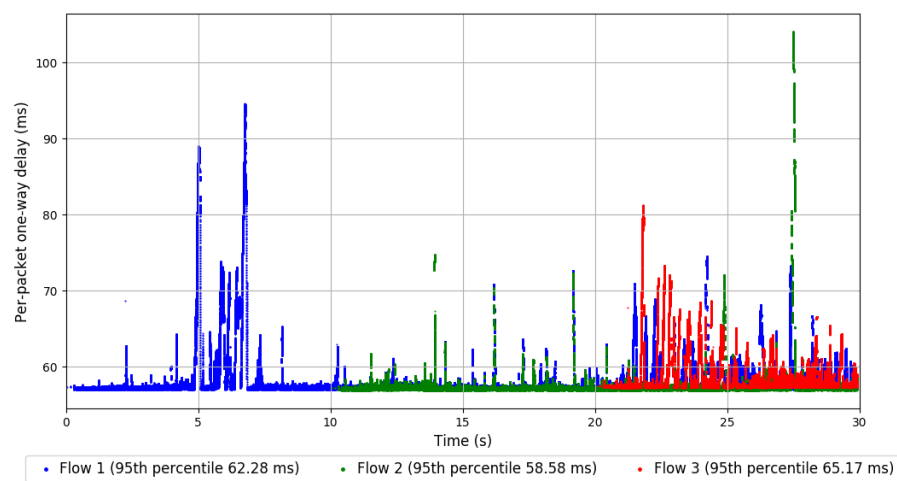
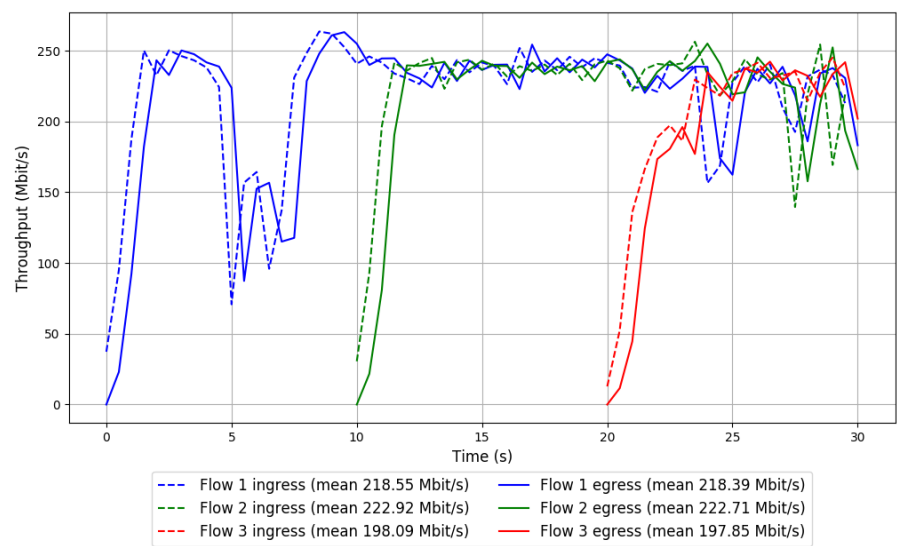


Run 1: Statistics of TaoVA-100x

Start at: 2019-07-13 01:51:48  
End at: 2019-07-13 01:52:18  
Local clock offset: 0.244 ms  
Remote clock offset: -0.126 ms

# Below is generated by plot.py at 2019-07-13 08:11:40  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 431.54 Mbit/s  
95th percentile per-packet one-way delay: 62.067 ms  
Loss rate: 0.65%  
-- Flow 1:  
Average throughput: 218.39 Mbit/s  
95th percentile per-packet one-way delay: 62.279 ms  
Loss rate: 0.43%  
-- Flow 2:  
Average throughput: 222.71 Mbit/s  
95th percentile per-packet one-way delay: 58.580 ms  
Loss rate: 0.66%  
-- Flow 3:  
Average throughput: 197.85 Mbit/s  
95th percentile per-packet one-way delay: 65.172 ms  
Loss rate: 1.32%

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

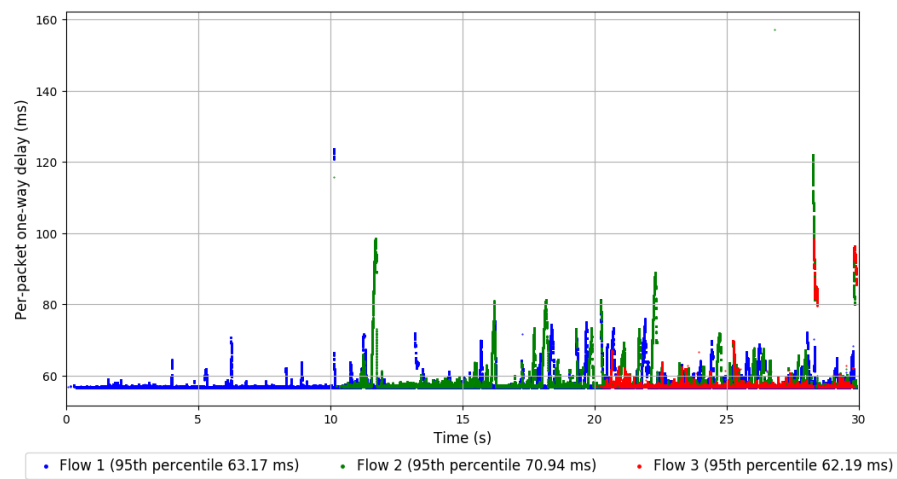
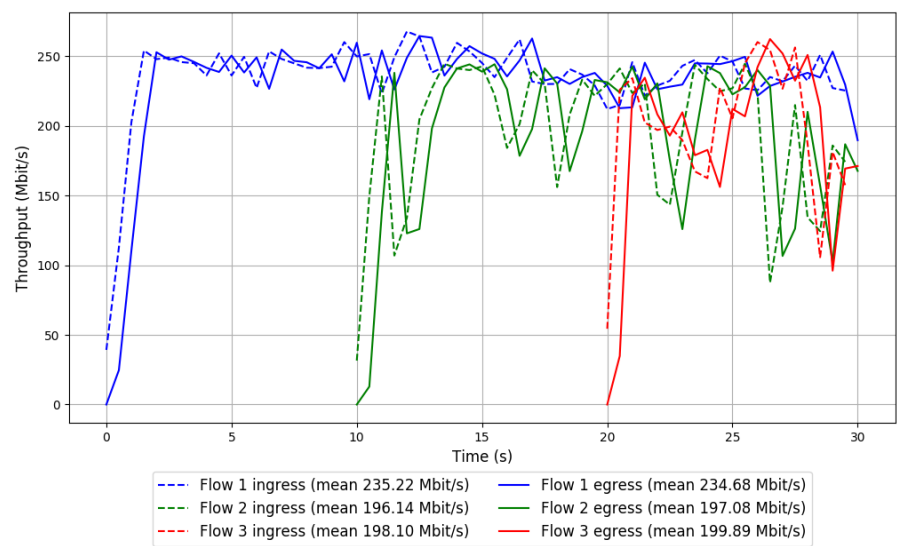


Run 2: Statistics of TaoVA-100x

Start at: 2019-07-13 02:32:46  
End at: 2019-07-13 02:33:16  
Local clock offset: -0.323 ms  
Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2019-07-13 08:11:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 431.10 Mbit/s  
95th percentile per-packet one-way delay: 65.482 ms  
Loss rate: 0.51%  
-- Flow 1:  
Average throughput: 234.68 Mbit/s  
95th percentile per-packet one-way delay: 63.167 ms  
Loss rate: 0.62%  
-- Flow 2:  
Average throughput: 197.08 Mbit/s  
95th percentile per-packet one-way delay: 70.939 ms  
Loss rate: 0.41%  
-- Flow 3:  
Average throughput: 199.89 Mbit/s  
95th percentile per-packet one-way delay: 62.189 ms  
Loss rate: 0.29%

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

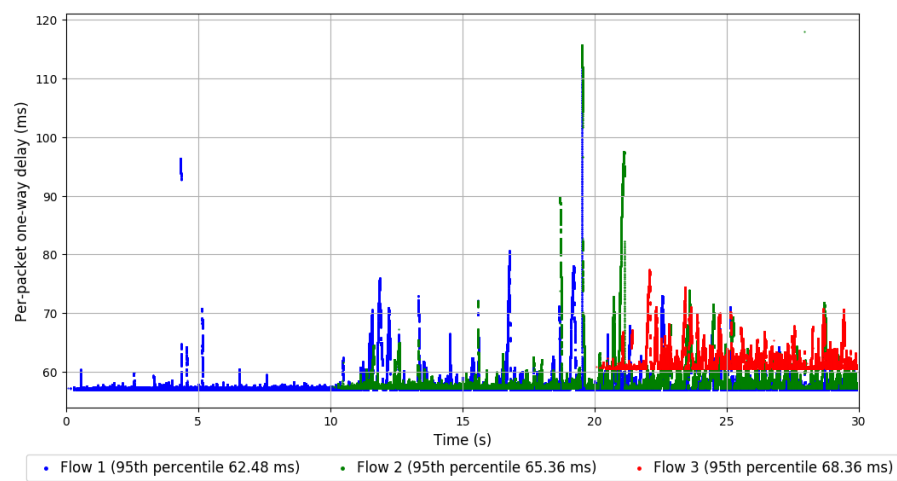
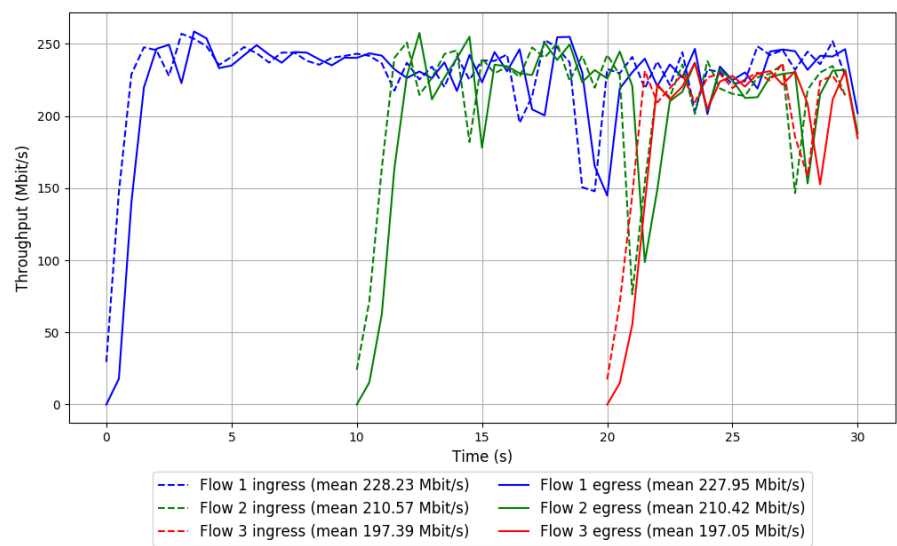


Run 3: Statistics of TaoVA-100x

Start at: 2019-07-13 03:13:22  
End at: 2019-07-13 03:13:52  
Local clock offset: 0.02 ms  
Remote clock offset: -0.096 ms

# Below is generated by plot.py at 2019-07-13 08:12:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 432.79 Mbit/s  
95th percentile per-packet one-way delay: 65.392 ms  
Loss rate: 0.69%  
-- Flow 1:  
Average throughput: 227.95 Mbit/s  
95th percentile per-packet one-way delay: 62.482 ms  
Loss rate: 0.51%  
-- Flow 2:  
Average throughput: 210.42 Mbit/s  
95th percentile per-packet one-way delay: 65.362 ms  
Loss rate: 0.66%  
-- Flow 3:  
Average throughput: 197.05 Mbit/s  
95th percentile per-packet one-way delay: 68.356 ms  
Loss rate: 1.40%

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

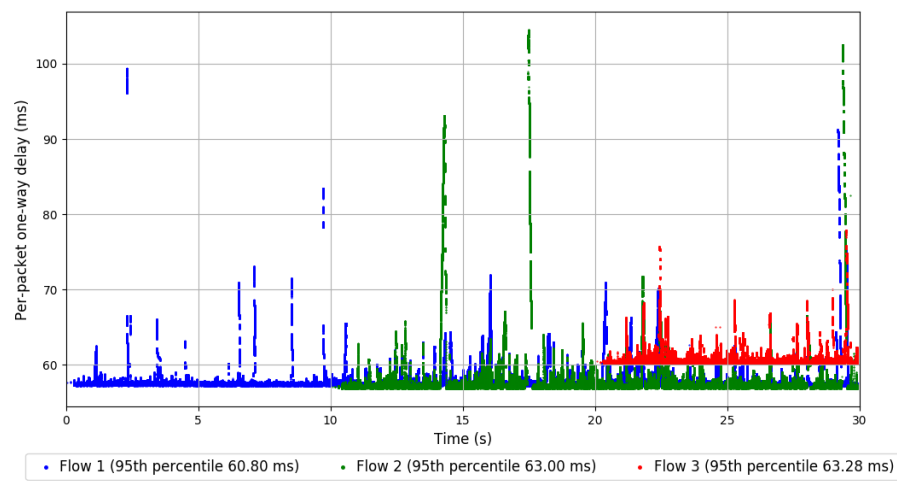
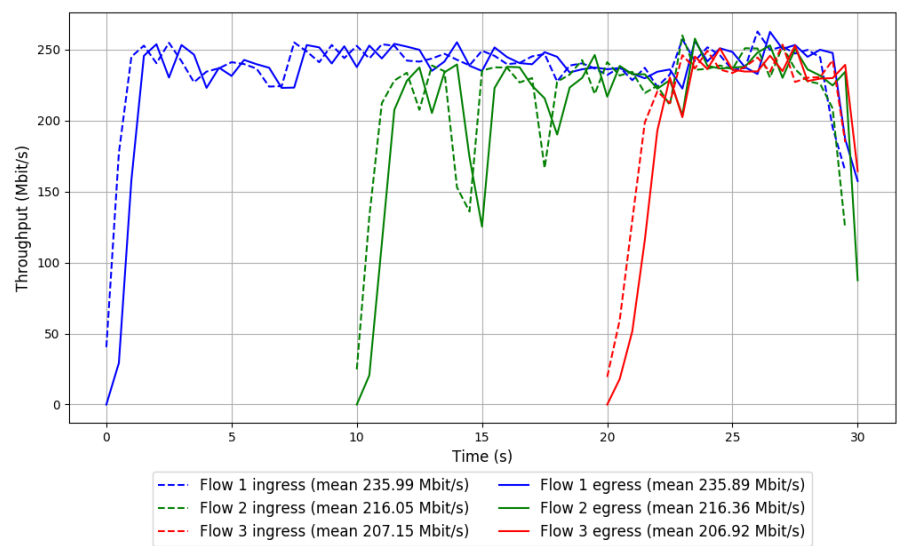


Run 4: Statistics of TaoVA-100x

Start at: 2019-07-13 03:53:54  
End at: 2019-07-13 03:54:24  
Local clock offset: -0.138 ms  
Remote clock offset: -0.276 ms

# Below is generated by plot.py at 2019-07-13 08:12:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 447.88 Mbit/s  
95th percentile per-packet one-way delay: 62.049 ms  
Loss rate: 0.57%  
-- Flow 1:  
Average throughput: 235.89 Mbit/s  
95th percentile per-packet one-way delay: 60.803 ms  
Loss rate: 0.43%  
-- Flow 2:  
Average throughput: 216.36 Mbit/s  
95th percentile per-packet one-way delay: 63.003 ms  
Loss rate: 0.45%  
-- Flow 3:  
Average throughput: 206.92 Mbit/s  
95th percentile per-packet one-way delay: 63.281 ms  
Loss rate: 1.32%

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



Run 5: Statistics of TaoVA-100x

Start at: 2019-07-13 04:35:16

End at: 2019-07-13 04:35:46

Local clock offset: -0.1 ms

Remote clock offset: -0.23 ms

# Below is generated by plot.py at 2019-07-13 08:12:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 428.71 Mbit/s

95th percentile per-packet one-way delay: 64.984 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 230.20 Mbit/s

95th percentile per-packet one-way delay: 63.494 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 211.54 Mbit/s

95th percentile per-packet one-way delay: 64.892 ms

Loss rate: 0.68%

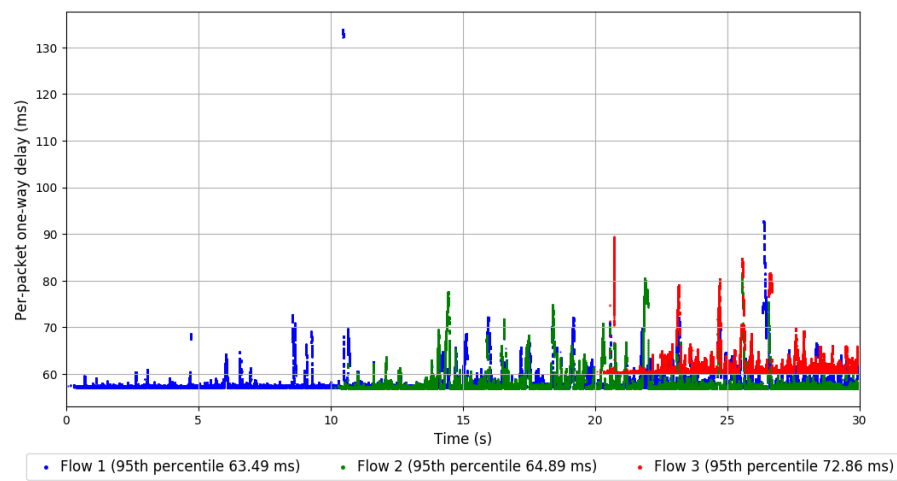
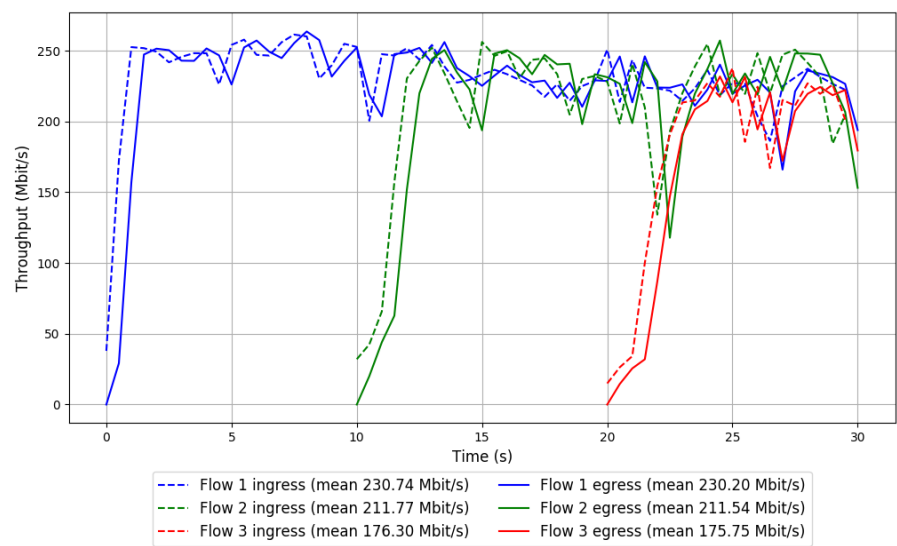
-- Flow 3:

Average throughput: 175.75 Mbit/s

95th percentile per-packet one-way delay: 72.857 ms

Loss rate: 1.50%

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

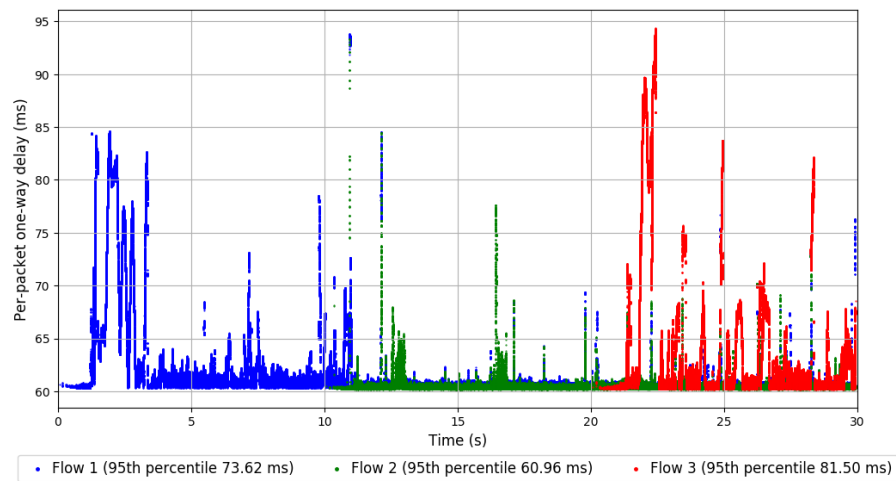
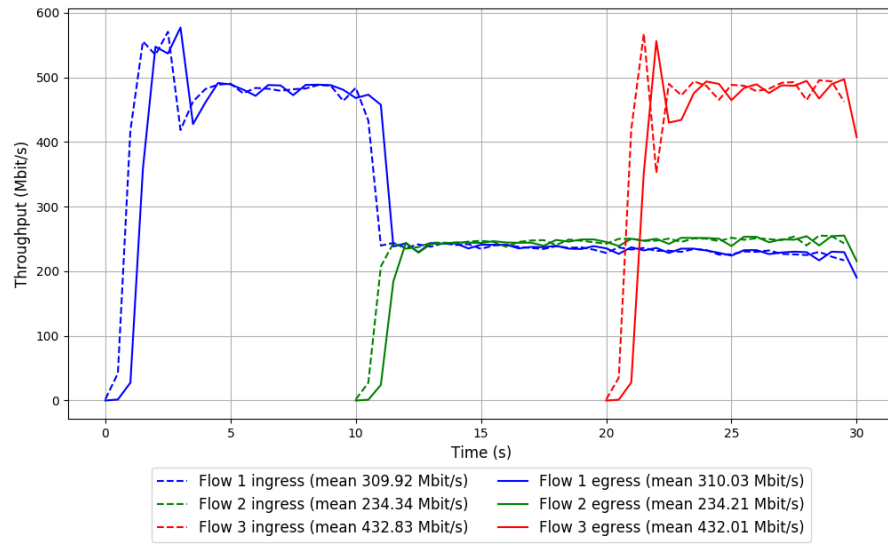


Run 1: Statistics of TCP Vegas

Start at: 2019-07-13 01:55:45  
End at: 2019-07-13 01:56:15  
Local clock offset: -0.474 ms  
Remote clock offset: -0.711 ms

# Below is generated by plot.py at 2019-07-13 08:12:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 608.08 Mbit/s  
95th percentile per-packet one-way delay: 73.247 ms  
Loss rate: 0.68%  
-- Flow 1:  
Average throughput: 310.03 Mbit/s  
95th percentile per-packet one-way delay: 73.619 ms  
Loss rate: 0.37%  
-- Flow 2:  
Average throughput: 234.21 Mbit/s  
95th percentile per-packet one-way delay: 60.961 ms  
Loss rate: 0.66%  
-- Flow 3:  
Average throughput: 432.01 Mbit/s  
95th percentile per-packet one-way delay: 81.505 ms  
Loss rate: 1.35%

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

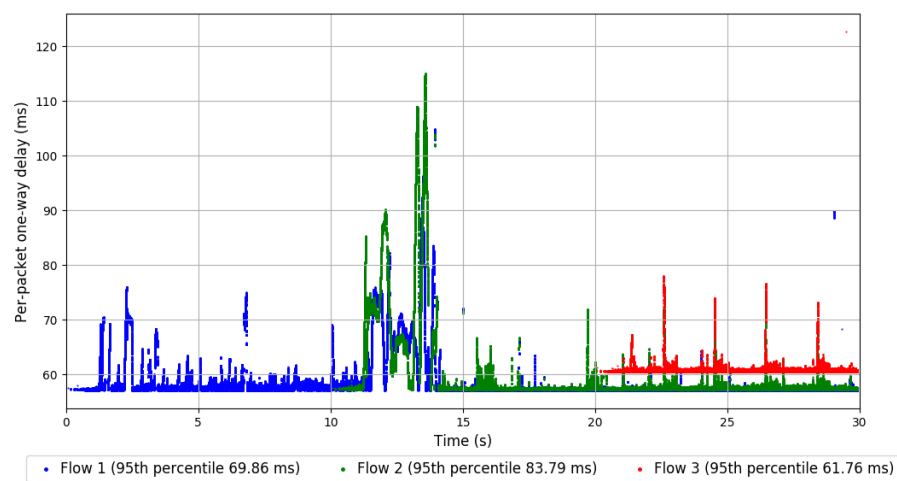
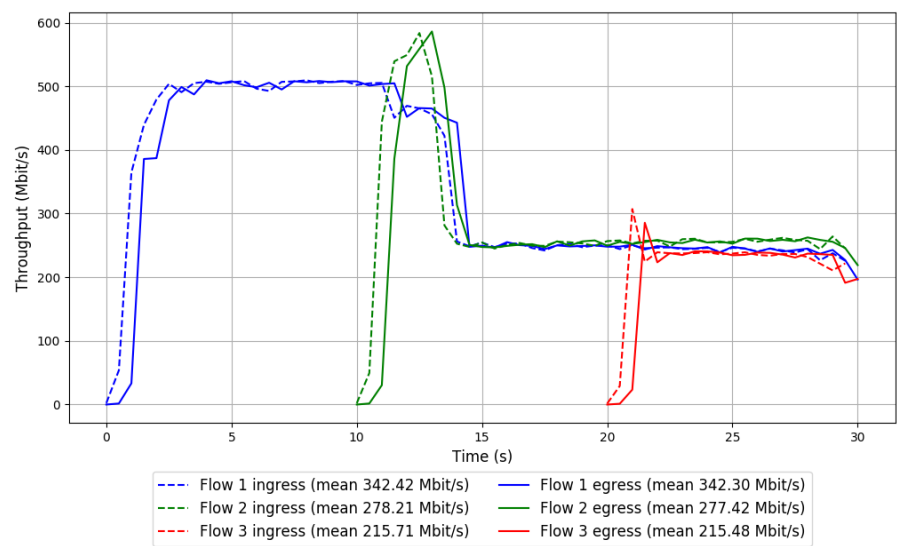


Run 2: Statistics of TCP Vegas

Start at: 2019-07-13 02:36:42  
End at: 2019-07-13 02:37:12  
Local clock offset: -0.073 ms  
Remote clock offset: -0.094 ms

# Below is generated by plot.py at 2019-07-13 08:13:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 597.65 Mbit/s  
95th percentile per-packet one-way delay: 72.254 ms  
Loss rate: 0.66%  
-- Flow 1:  
Average throughput: 342.30 Mbit/s  
95th percentile per-packet one-way delay: 69.861 ms  
Loss rate: 0.42%  
-- Flow 2:  
Average throughput: 277.42 Mbit/s  
95th percentile per-packet one-way delay: 83.790 ms  
Loss rate: 0.86%  
-- Flow 3:  
Average throughput: 215.48 Mbit/s  
95th percentile per-packet one-way delay: 61.755 ms  
Loss rate: 1.32%

Run 2: Report of TCP Vegas — Data Link

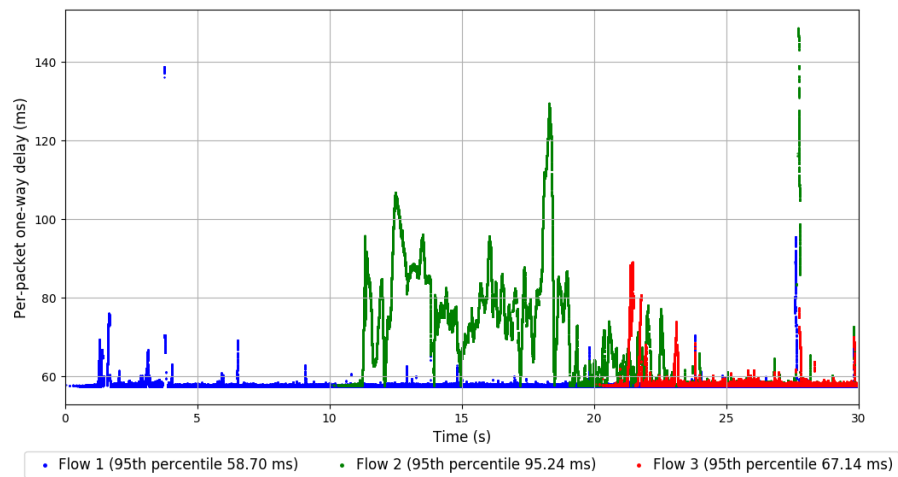
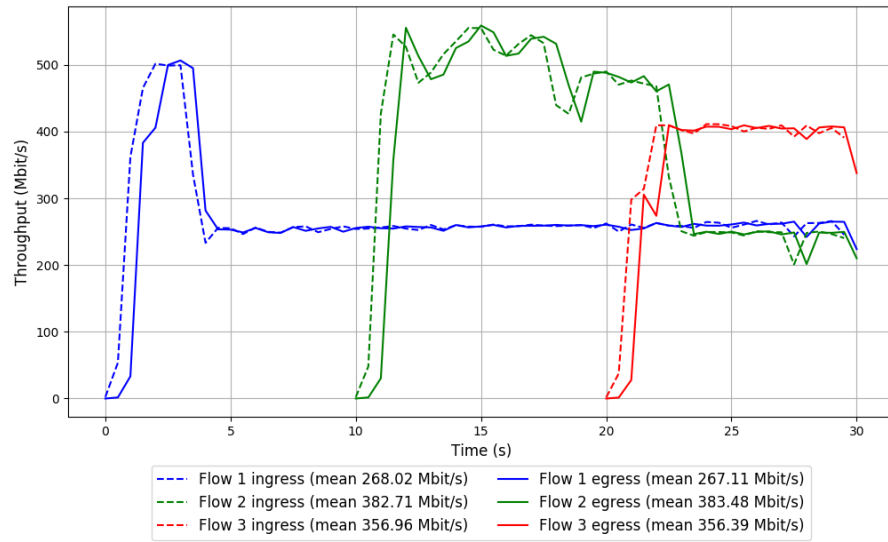


Run 3: Statistics of TCP Vegas

Start at: 2019-07-13 03:17:23  
End at: 2019-07-13 03:17:53  
Local clock offset: -0.314 ms  
Remote clock offset: -0.905 ms

# Below is generated by plot.py at 2019-07-13 08:17:48  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 639.57 Mbit/s  
95th percentile per-packet one-way delay: 85.583 ms  
Loss rate: 0.71%  
-- Flow 1:  
Average throughput: 267.11 Mbit/s  
95th percentile per-packet one-way delay: 58.704 ms  
Loss rate: 0.74%  
-- Flow 2:  
Average throughput: 383.48 Mbit/s  
95th percentile per-packet one-way delay: 95.240 ms  
Loss rate: 0.37%  
-- Flow 3:  
Average throughput: 356.39 Mbit/s  
95th percentile per-packet one-way delay: 67.138 ms  
Loss rate: 1.34%

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

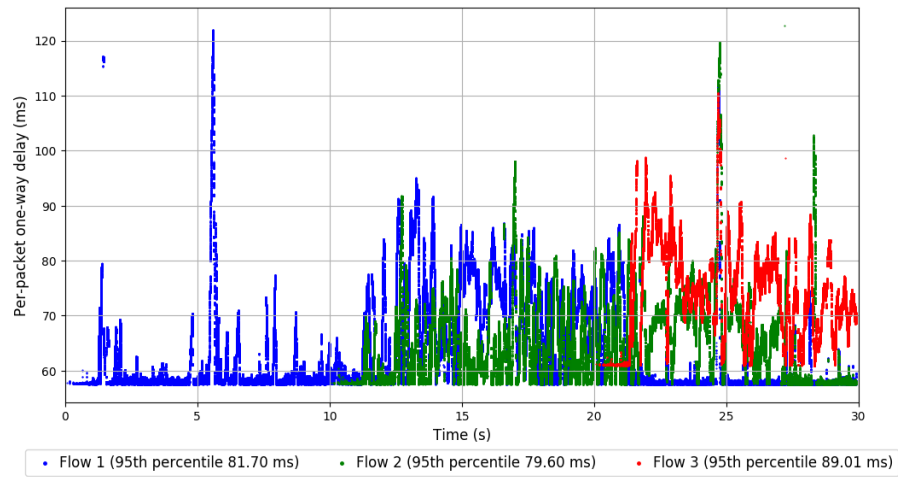
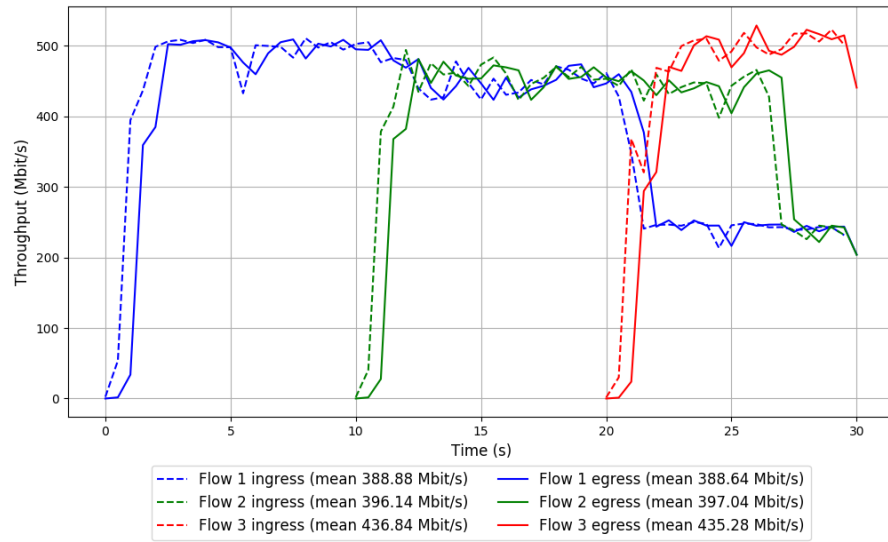


Run 4: Statistics of TCP Vegas

Start at: 2019-07-13 03:57:55  
End at: 2019-07-13 03:58:25  
Local clock offset: -0.147 ms  
Remote clock offset: -0.906 ms

# Below is generated by plot.py at 2019-07-13 08:24:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 796.04 Mbit/s  
95th percentile per-packet one-way delay: 83.587 ms  
Loss rate: 0.62%  
-- Flow 1:  
Average throughput: 388.64 Mbit/s  
95th percentile per-packet one-way delay: 81.700 ms  
Loss rate: 0.45%  
-- Flow 2:  
Average throughput: 397.04 Mbit/s  
95th percentile per-packet one-way delay: 79.602 ms  
Loss rate: 0.36%  
-- Flow 3:  
Average throughput: 435.28 Mbit/s  
95th percentile per-packet one-way delay: 89.014 ms  
Loss rate: 1.56%

# Run 4: Report of TCP Vegas — Data Link

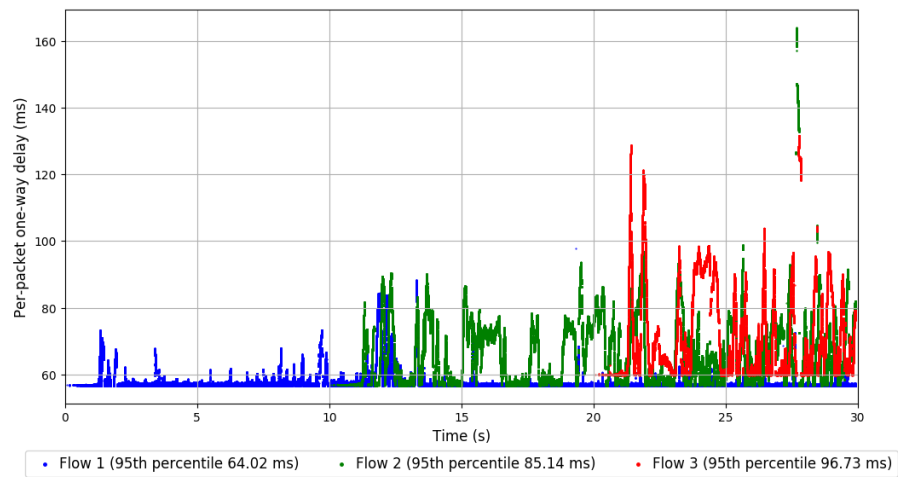
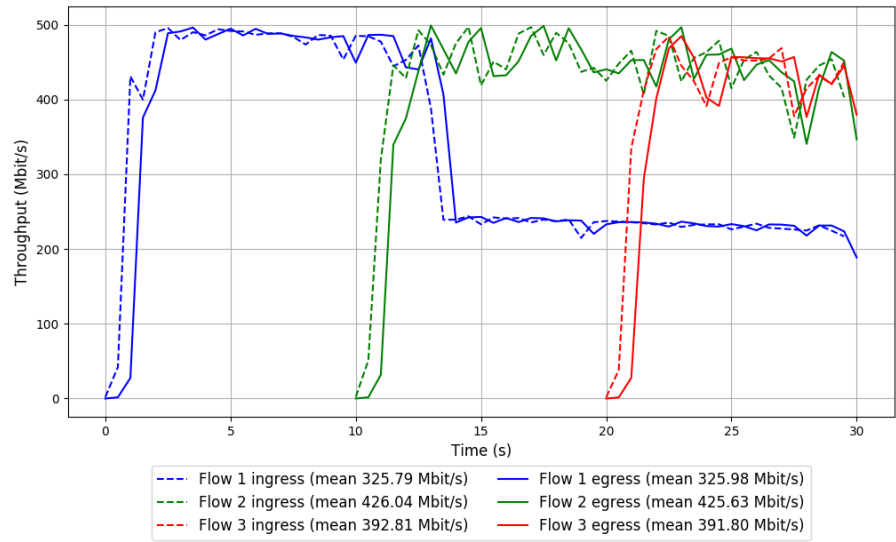


Run 5: Statistics of TCP Vegas

Start at: 2019-07-13 04:39:13  
End at: 2019-07-13 04:39:43  
Local clock offset: -0.258 ms  
Remote clock offset: -0.052 ms

# Below is generated by plot.py at 2019-07-13 08:25:21  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 738.12 Mbit/s  
95th percentile per-packet one-way delay: 86.464 ms  
Loss rate: 0.66%  
-- Flow 1:  
Average throughput: 325.98 Mbit/s  
95th percentile per-packet one-way delay: 64.016 ms  
Loss rate: 0.33%  
-- Flow 2:  
Average throughput: 425.63 Mbit/s  
95th percentile per-packet one-way delay: 85.144 ms  
Loss rate: 0.67%  
-- Flow 3:  
Average throughput: 391.80 Mbit/s  
95th percentile per-packet one-way delay: 96.735 ms  
Loss rate: 1.45%

# Run 5: Report of TCP Vegas — Data Link

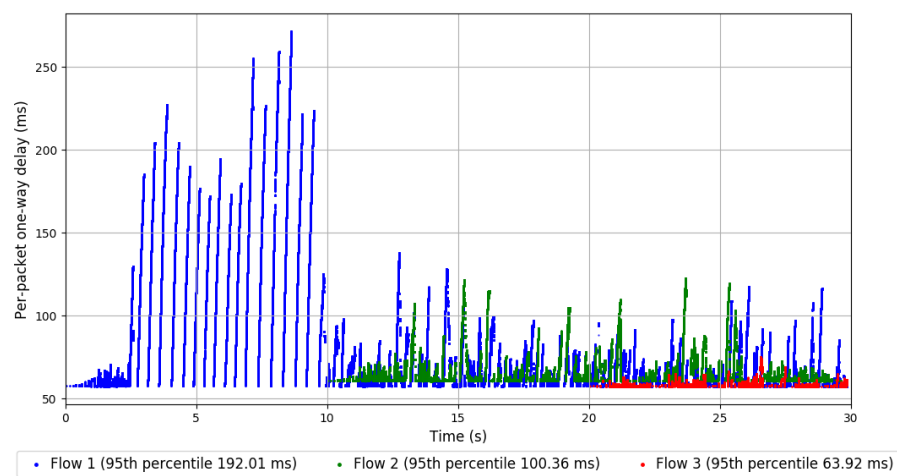
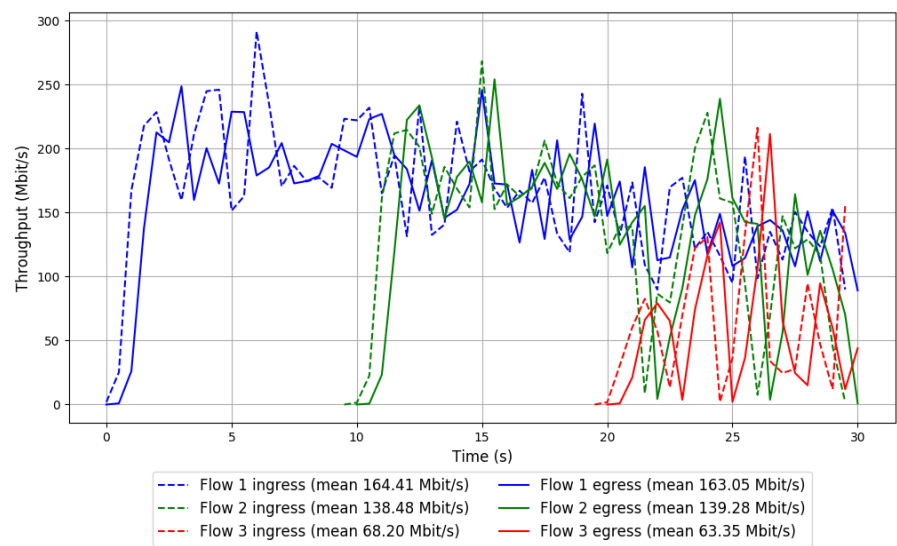


Run 1: Statistics of Verus

Start at: 2019-07-13 02:24:21  
End at: 2019-07-13 02:24:51  
Local clock offset: 0.145 ms  
Remote clock offset: -0.152 ms

# Below is generated by plot.py at 2019-07-13 08:25:21  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 276.10 Mbit/s  
95th percentile per-packet one-way delay: 171.745 ms  
Loss rate: 1.39%  
-- Flow 1:  
Average throughput: 163.05 Mbit/s  
95th percentile per-packet one-way delay: 192.010 ms  
Loss rate: 1.22%  
-- Flow 2:  
Average throughput: 139.28 Mbit/s  
95th percentile per-packet one-way delay: 100.364 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 63.35 Mbit/s  
95th percentile per-packet one-way delay: 63.921 ms  
Loss rate: 8.21%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2019-07-13 03:04:57

End at: 2019-07-13 03:05:27

Local clock offset: -0.519 ms

Remote clock offset: 0.025 ms

# Below is generated by plot.py at 2019-07-13 08:25:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 199.99 Mbit/s

95th percentile per-packet one-way delay: 101.954 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 84.83 Mbit/s

95th percentile per-packet one-way delay: 75.287 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 141.84 Mbit/s

95th percentile per-packet one-way delay: 109.246 ms

Loss rate: 1.29%

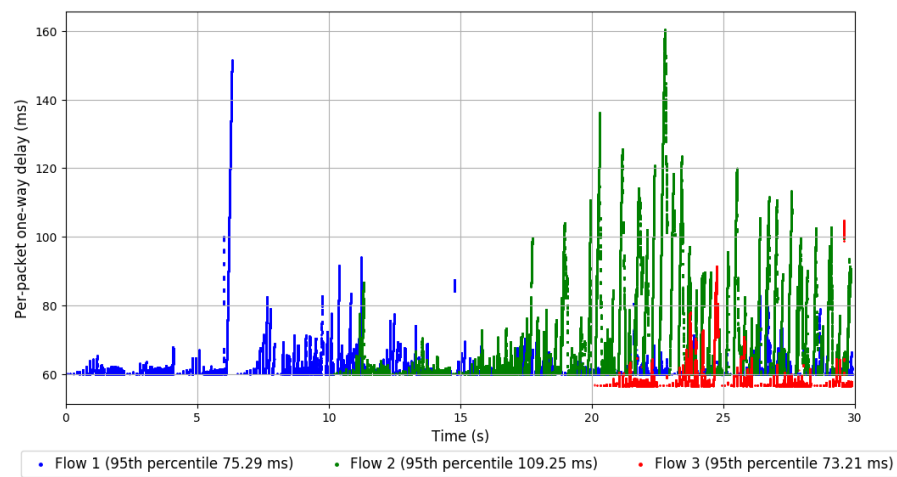
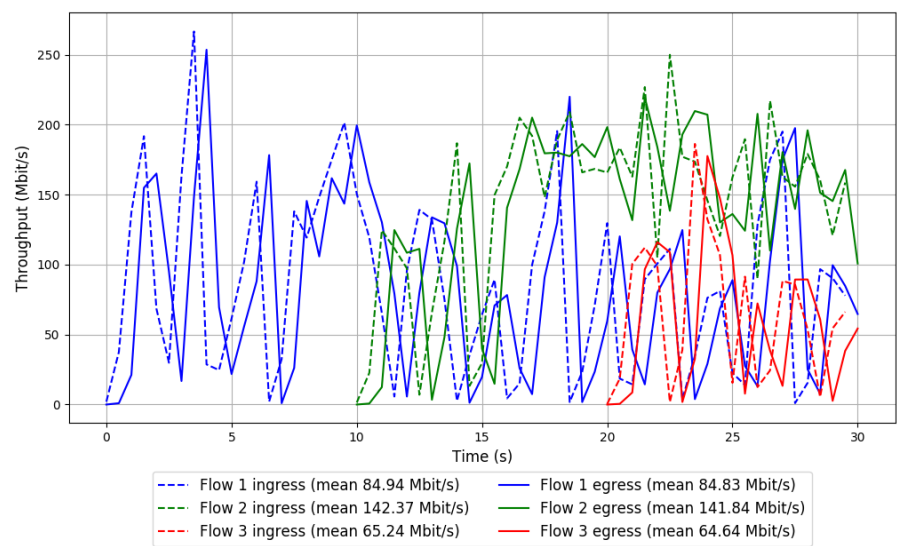
-- Flow 3:

Average throughput: 64.64 Mbit/s

95th percentile per-packet one-way delay: 73.206 ms

Loss rate: 2.37%

Run 2: Report of Verus — Data Link

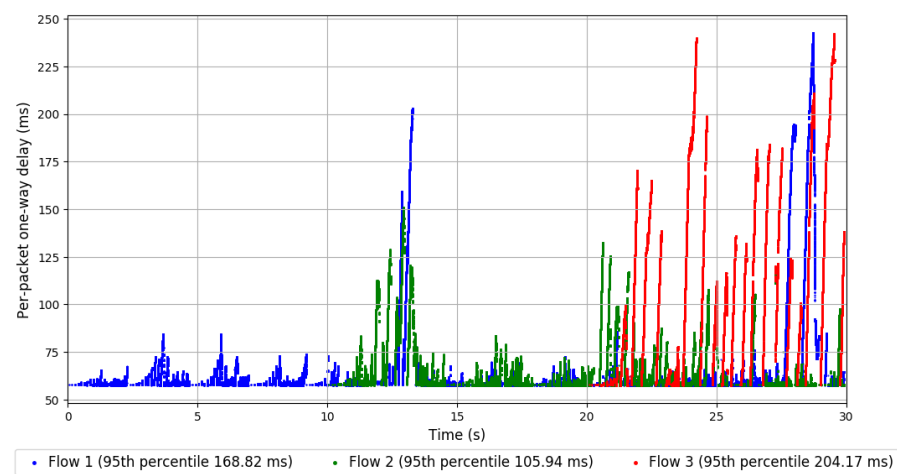
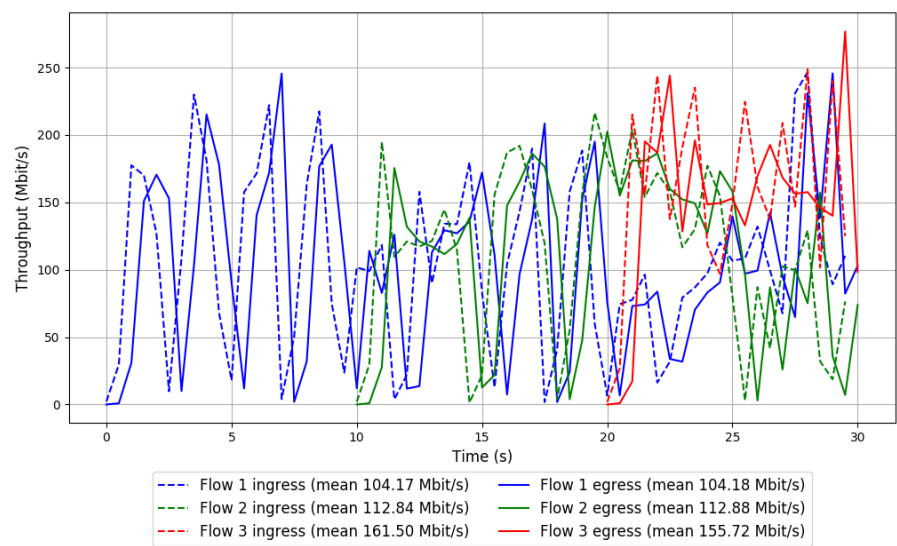


Run 3: Statistics of Verus

Start at: 2019-07-13 03:45:29  
End at: 2019-07-13 03:45:59  
Local clock offset: -0.403 ms  
Remote clock offset: -0.854 ms

# Below is generated by plot.py at 2019-07-13 08:25:21  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 230.43 Mbit/s  
95th percentile per-packet one-way delay: 180.736 ms  
Loss rate: 1.07%  
-- Flow 1:  
Average throughput: 104.18 Mbit/s  
95th percentile per-packet one-way delay: 168.824 ms  
Loss rate: 0.25%  
-- Flow 2:  
Average throughput: 112.88 Mbit/s  
95th percentile per-packet one-way delay: 105.936 ms  
Loss rate: 0.54%  
-- Flow 3:  
Average throughput: 155.72 Mbit/s  
95th percentile per-packet one-way delay: 204.173 ms  
Loss rate: 3.44%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2019-07-13 04:26:51

End at: 2019-07-13 04:27:21

Local clock offset: -0.55 ms

Remote clock offset: -0.01 ms

# Below is generated by plot.py at 2019-07-13 08:25:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 273.30 Mbit/s

95th percentile per-packet one-way delay: 166.684 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 150.16 Mbit/s

95th percentile per-packet one-way delay: 151.810 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 153.90 Mbit/s

95th percentile per-packet one-way delay: 184.671 ms

Loss rate: 2.58%

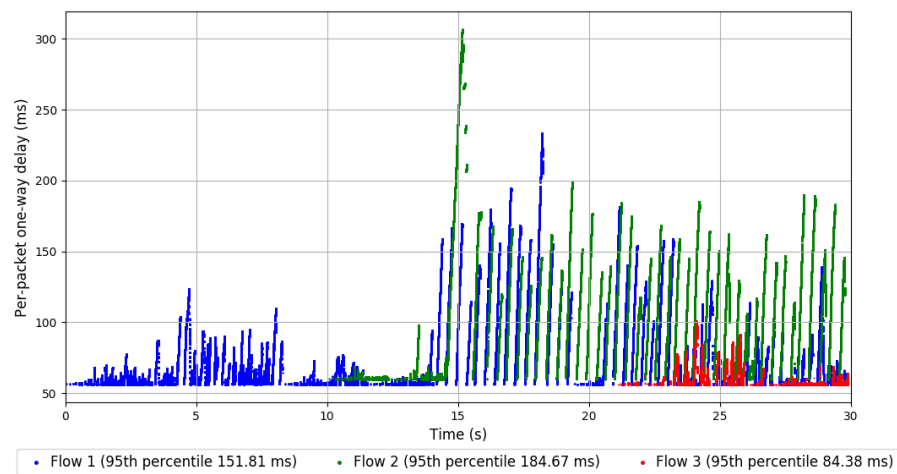
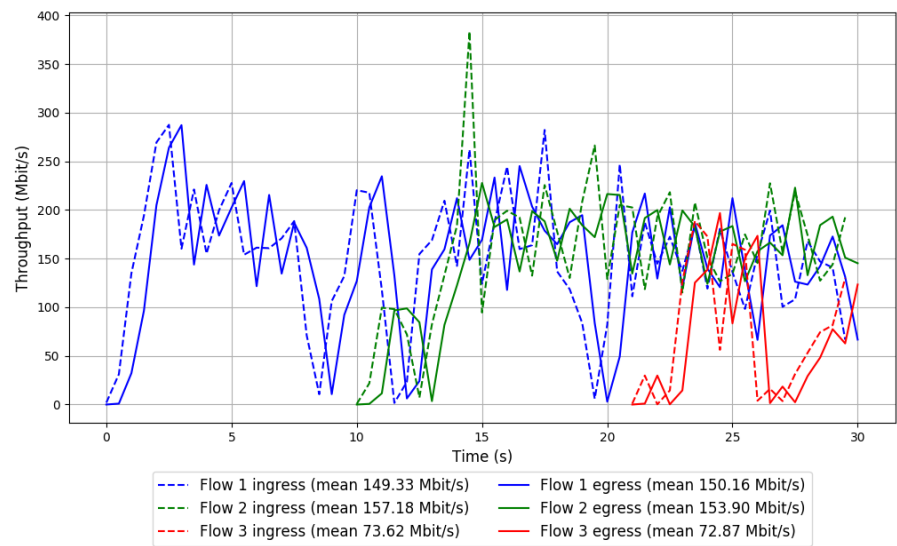
-- Flow 3:

Average throughput: 72.87 Mbit/s

95th percentile per-packet one-way delay: 84.375 ms

Loss rate: 2.33%

Run 4: Report of Verus — Data Link

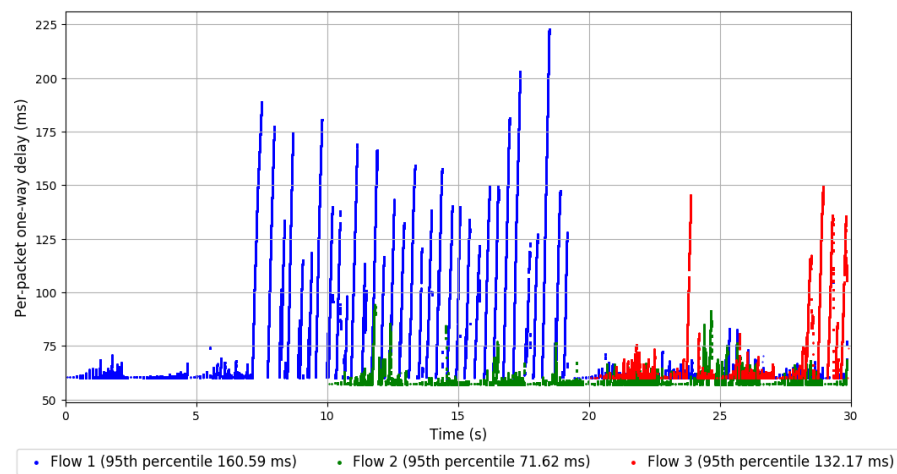
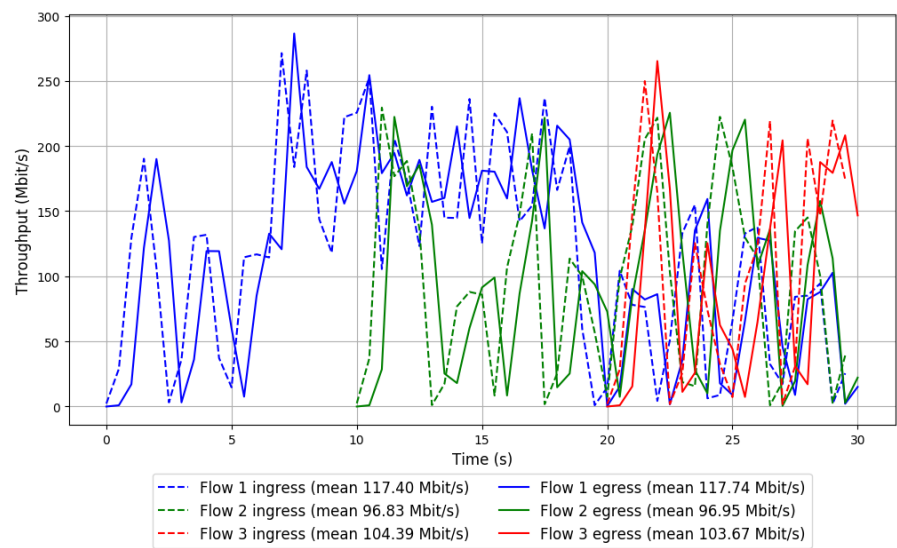


Run 5: Statistics of Verus

Start at: 2019-07-13 05:07:57  
End at: 2019-07-13 05:08:27  
Local clock offset: -0.262 ms  
Remote clock offset: -0.239 ms

# Below is generated by plot.py at 2019-07-13 08:25:21  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 215.98 Mbit/s  
95th percentile per-packet one-way delay: 146.121 ms  
Loss rate: 0.51%  
-- Flow 1:  
Average throughput: 117.74 Mbit/s  
95th percentile per-packet one-way delay: 160.589 ms  
Loss rate: 0.15%  
-- Flow 2:  
Average throughput: 96.95 Mbit/s  
95th percentile per-packet one-way delay: 71.623 ms  
Loss rate: 0.44%  
-- Flow 3:  
Average throughput: 103.67 Mbit/s  
95th percentile per-packet one-way delay: 132.171 ms  
Loss rate: 1.88%

Run 5: Report of Verus — Data Link

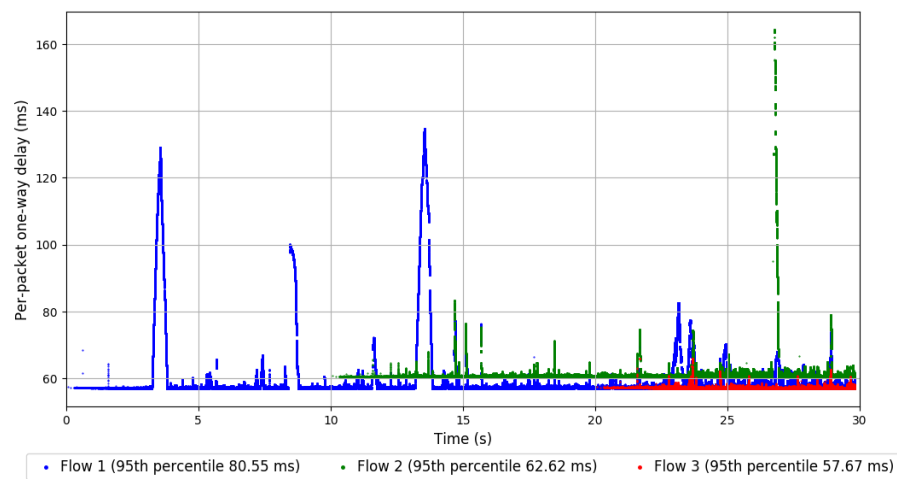
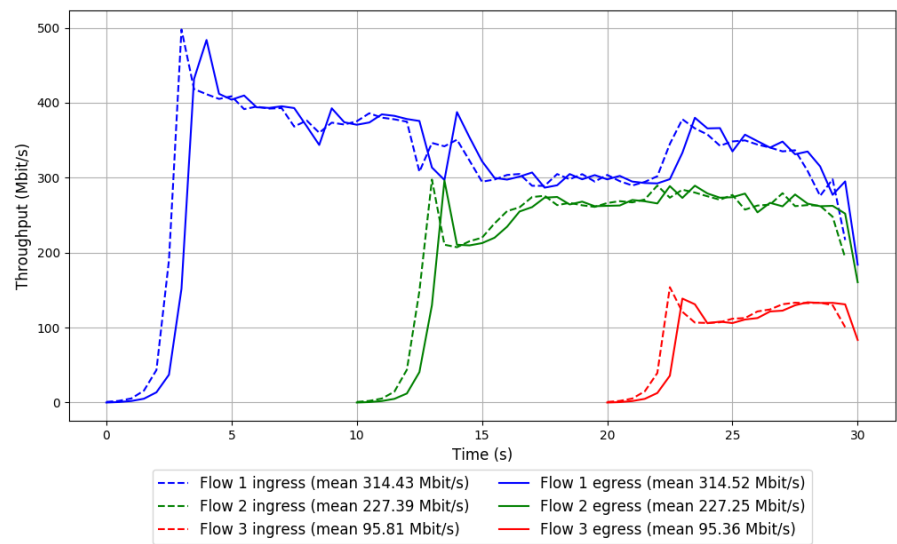


Run 1: Statistics of PCC-Vivace

Start at: 2019-07-13 02:07:11  
End at: 2019-07-13 02:07:41  
Local clock offset: -0.082 ms  
Remote clock offset: -0.187 ms

# Below is generated by plot.py at 2019-07-13 08:26:40  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 496.55 Mbit/s  
95th percentile per-packet one-way delay: 70.623 ms  
Loss rate: 0.54%  
-- Flow 1:  
Average throughput: 314.52 Mbit/s  
95th percentile per-packet one-way delay: 80.546 ms  
Loss rate: 0.36%  
-- Flow 2:  
Average throughput: 227.25 Mbit/s  
95th percentile per-packet one-way delay: 62.621 ms  
Loss rate: 0.67%  
-- Flow 3:  
Average throughput: 95.36 Mbit/s  
95th percentile per-packet one-way delay: 57.672 ms  
Loss rate: 1.66%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2019-07-13 02:47:54

End at: 2019-07-13 02:48:24

Local clock offset: -0.041 ms

Remote clock offset: 0.193 ms

# Below is generated by plot.py at 2019-07-13 08:26:40

# Datalink statistics

-- Total of 3 flows:

Average throughput: 248.41 Mbit/s

95th percentile per-packet one-way delay: 60.376 ms

Loss rate: 0.94%

-- Flow 1:

Average throughput: 151.45 Mbit/s

95th percentile per-packet one-way delay: 58.078 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 77.86 Mbit/s

95th percentile per-packet one-way delay: 60.416 ms

Loss rate: 0.97%

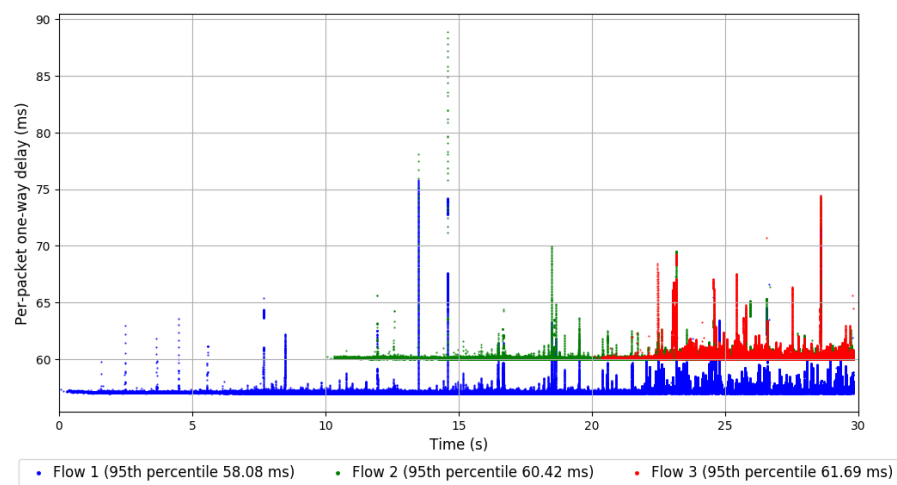
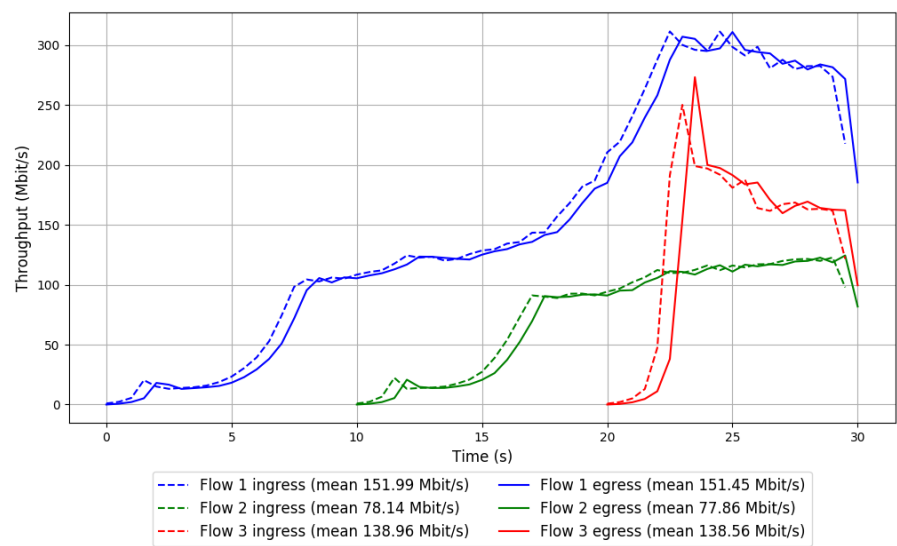
-- Flow 3:

Average throughput: 138.56 Mbit/s

95th percentile per-packet one-way delay: 61.689 ms

Loss rate: 1.51%

Run 2: Report of PCC-Vivace — Data Link

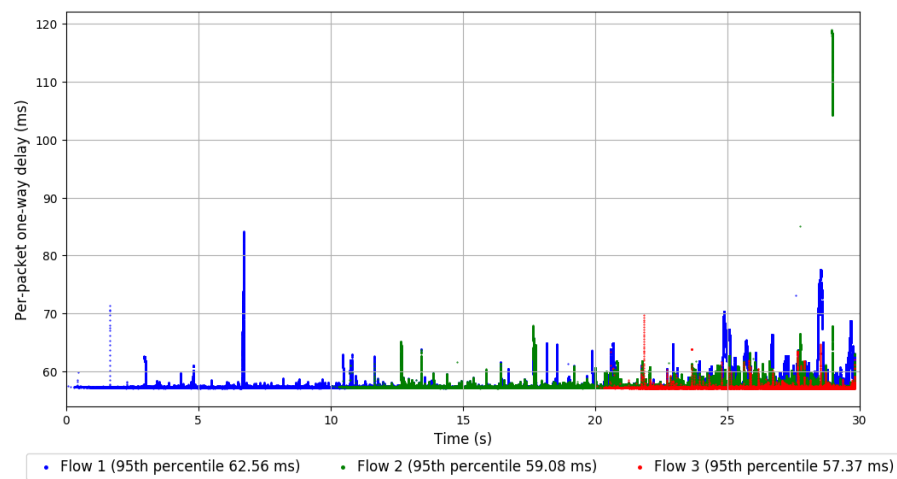
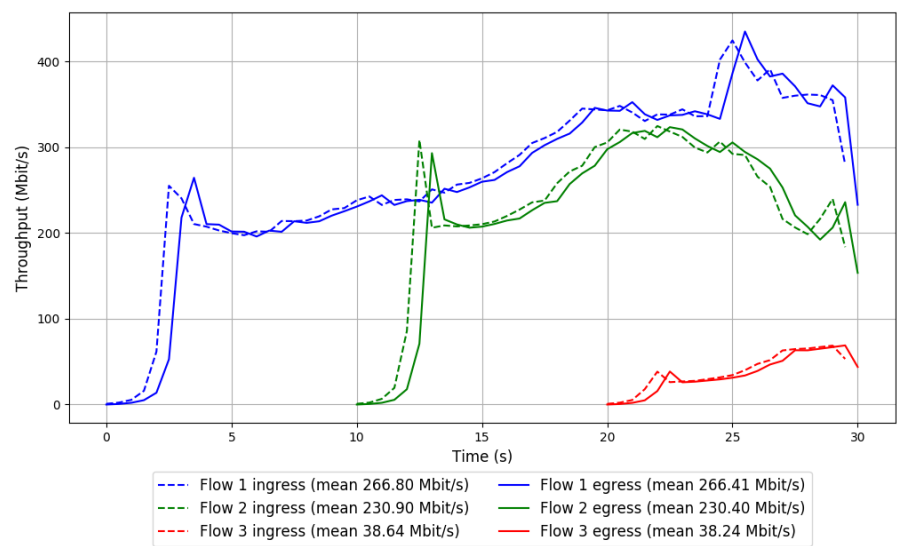


Run 3: Statistics of PCC-Vivace

Start at: 2019-07-13 03:28:35  
End at: 2019-07-13 03:29:05  
Local clock offset: -0.097 ms  
Remote clock offset: -0.257 ms

# Below is generated by plot.py at 2019-07-13 08:26:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 431.88 Mbit/s  
95th percentile per-packet one-way delay: 60.913 ms  
Loss rate: 0.69%  
-- Flow 1:  
Average throughput: 266.41 Mbit/s  
95th percentile per-packet one-way delay: 62.562 ms  
Loss rate: 0.54%  
-- Flow 2:  
Average throughput: 230.40 Mbit/s  
95th percentile per-packet one-way delay: 59.079 ms  
Loss rate: 0.81%  
-- Flow 3:  
Average throughput: 38.24 Mbit/s  
95th percentile per-packet one-way delay: 57.374 ms  
Loss rate: 2.23%

Run 3: Report of PCC-Vivace — Data Link

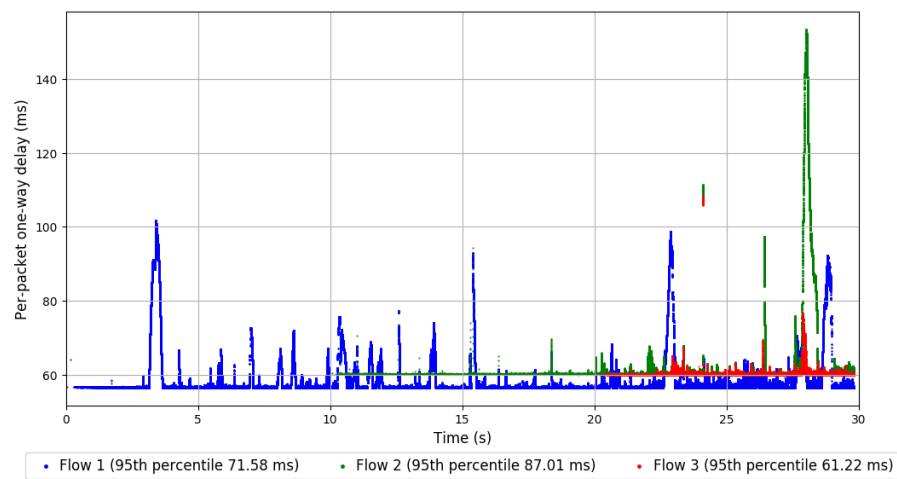
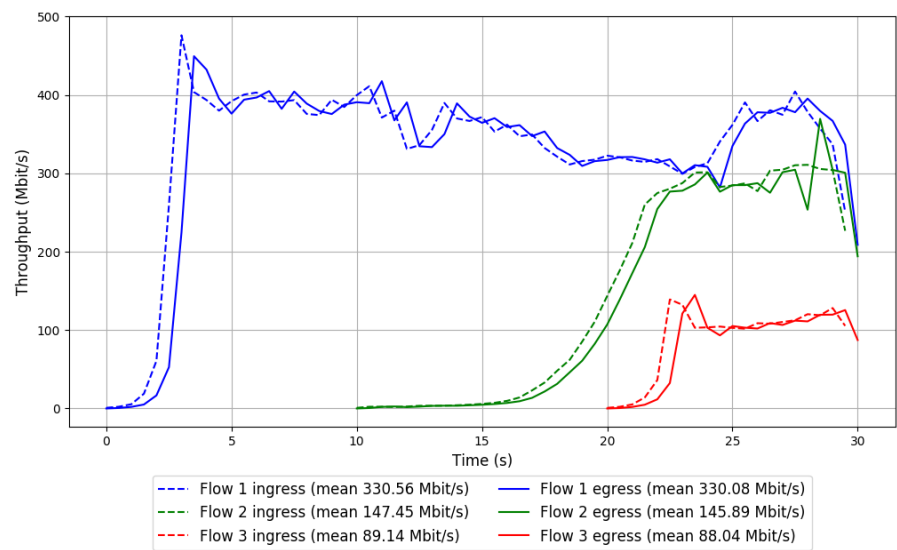


Run 4: Statistics of PCC-Vivace

Start at: 2019-07-13 04:09:32  
End at: 2019-07-13 04:10:02  
Local clock offset: -0.412 ms  
Remote clock offset: -0.188 ms

# Below is generated by plot.py at 2019-07-13 08:27:14  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 455.69 Mbit/s  
95th percentile per-packet one-way delay: 72.007 ms  
Loss rate: 0.90%  
-- Flow 1:  
Average throughput: 330.08 Mbit/s  
95th percentile per-packet one-way delay: 71.585 ms  
Loss rate: 0.54%  
-- Flow 2:  
Average throughput: 145.89 Mbit/s  
95th percentile per-packet one-way delay: 87.006 ms  
Loss rate: 1.66%  
-- Flow 3:  
Average throughput: 88.04 Mbit/s  
95th percentile per-packet one-way delay: 61.224 ms  
Loss rate: 2.46%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2019-07-13 04:50:40

End at: 2019-07-13 04:51:10

Local clock offset: -0.299 ms

Remote clock offset: -0.18 ms

# Below is generated by plot.py at 2019-07-13 08:27:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 520.73 Mbit/s

95th percentile per-packet one-way delay: 74.460 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 307.55 Mbit/s

95th percentile per-packet one-way delay: 74.160 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 226.72 Mbit/s

95th percentile per-packet one-way delay: 66.846 ms

Loss rate: 0.86%

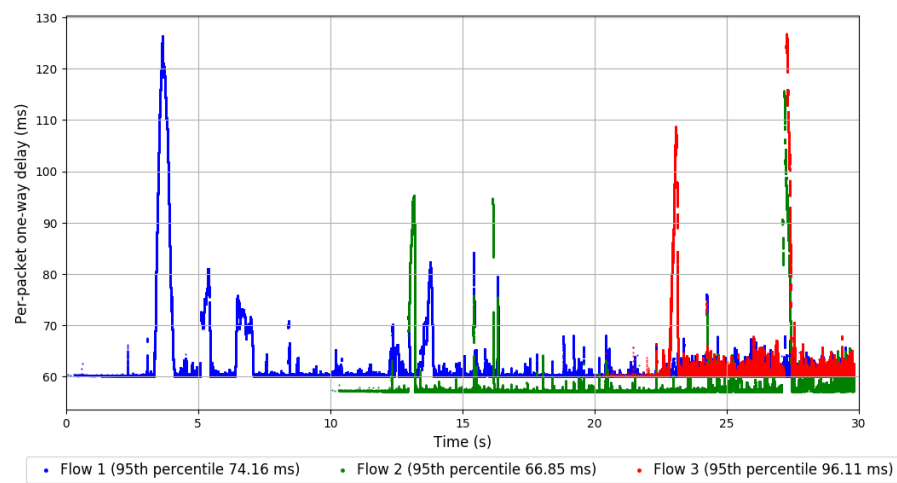
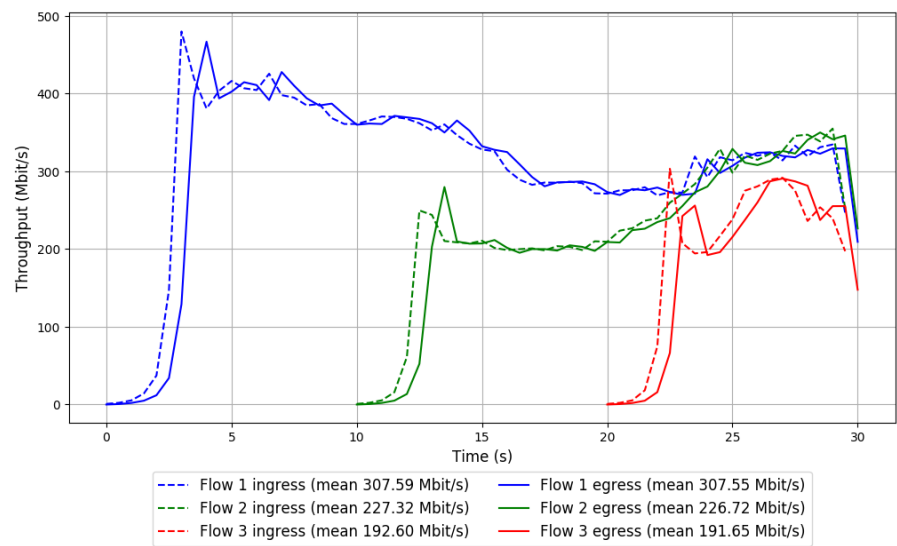
-- Flow 3:

Average throughput: 191.65 Mbit/s

95th percentile per-packet one-way delay: 96.112 ms

Loss rate: 1.71%

Run 5: Report of PCC-Vivace — Data Link

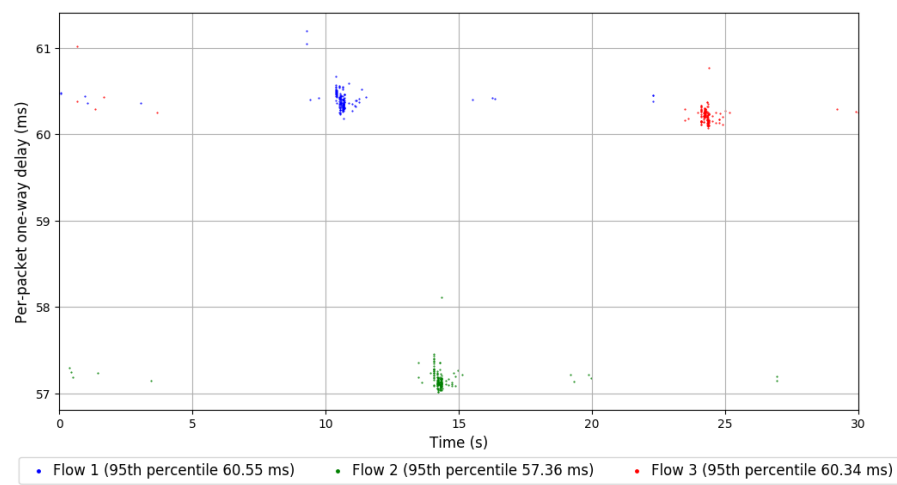
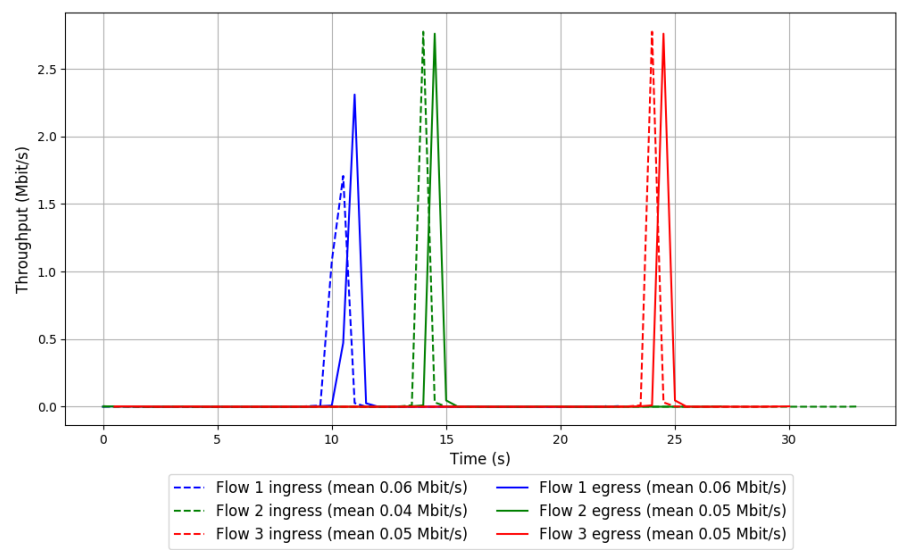


Run 1: Statistics of WebRTC media

Start at: 2019-07-13 02:05:59  
End at: 2019-07-13 02:06:29  
Local clock offset: -0.062 ms  
Remote clock offset: -0.063 ms

# Below is generated by plot.py at 2019-07-13 08:27:22  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.14 Mbit/s  
95th percentile per-packet one-way delay: 60.490 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 0.06 Mbit/s  
95th percentile per-packet one-way delay: 60.552 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 57.360 ms  
Loss rate: 0.05%  
-- Flow 3:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 60.335 ms  
Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link

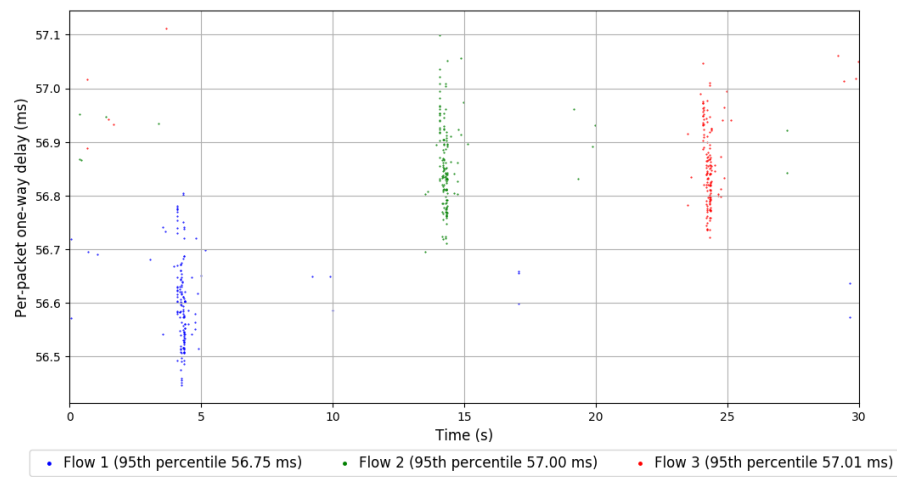
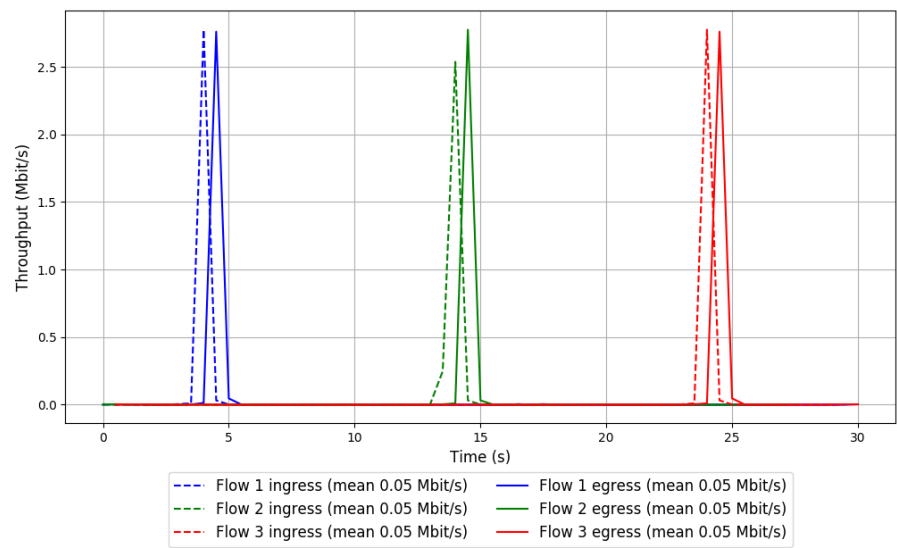


Run 2: Statistics of WebRTC media

Start at: 2019-07-13 02:46:42  
End at: 2019-07-13 02:47:12  
Local clock offset: -0.56 ms  
Remote clock offset: -0.012 ms

# Below is generated by plot.py at 2019-07-13 08:27:22  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.14 Mbit/s  
95th percentile per-packet one-way delay: 56.976 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 56.754 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 57.004 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 57.011 ms  
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

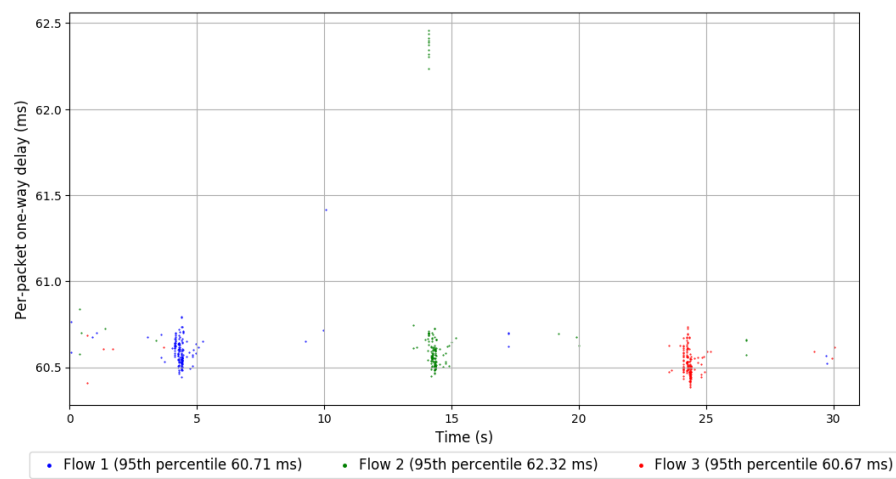
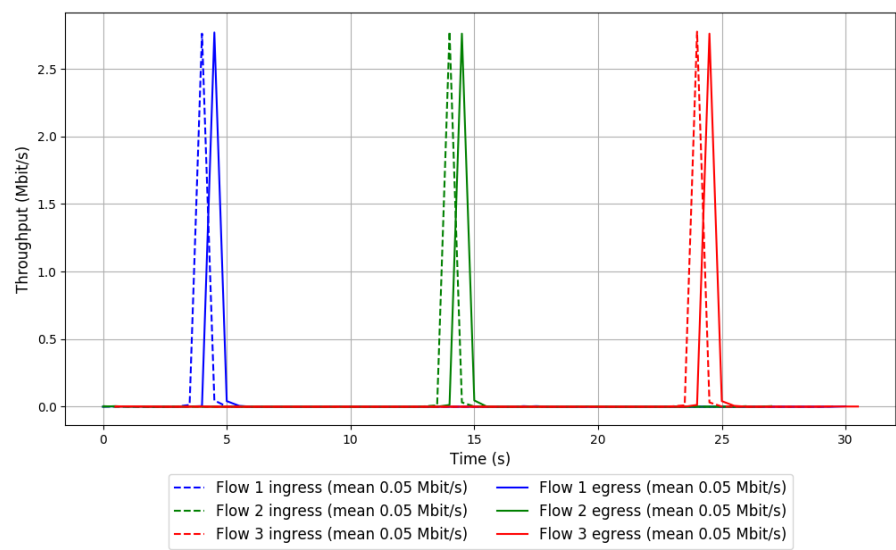


Run 3: Statistics of WebRTC media

Start at: 2019-07-13 03:27:23  
End at: 2019-07-13 03:27:53  
Local clock offset: -0.549 ms  
Remote clock offset: -0.928 ms

# Below is generated by plot.py at 2019-07-13 08:27:22  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.14 Mbit/s  
95th percentile per-packet one-way delay: 60.725 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 60.708 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 62.320 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 60.670 ms  
Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2019-07-13 04:08:20

End at: 2019-07-13 04:08:50

Local clock offset: 0.267 ms

Remote clock offset: 0.09 ms

# Below is generated by plot.py at 2019-07-13 08:27:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 60.670 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 57.348 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 60.686 ms

Loss rate: 0.00%

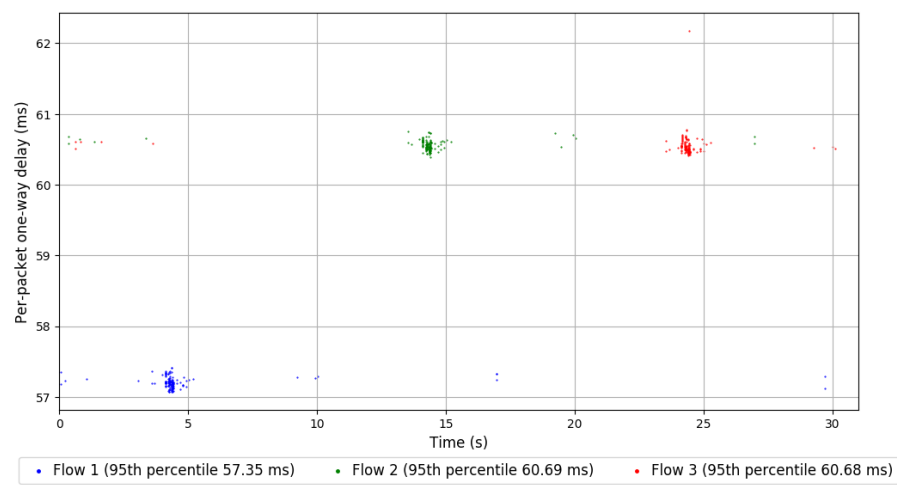
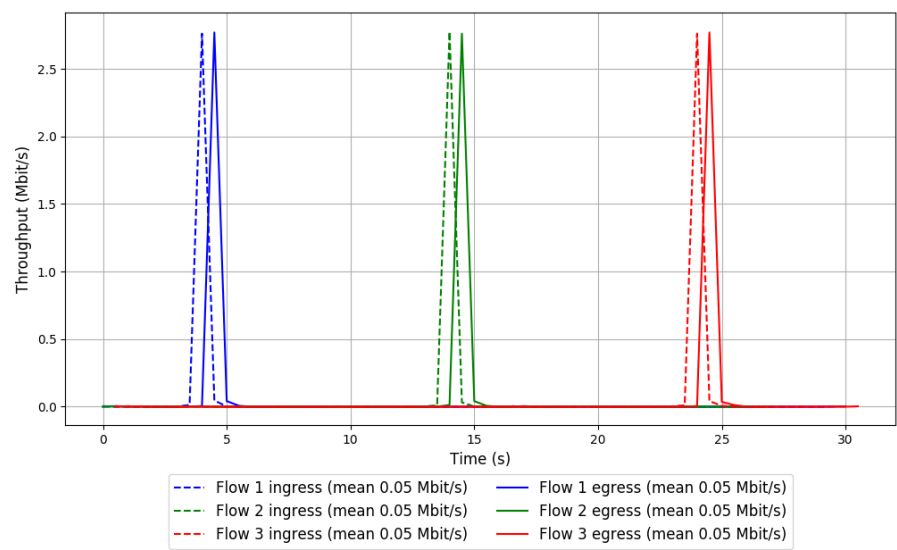
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 60.681 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-07-13 04:49:28

End at: 2019-07-13 04:49:58

Local clock offset: 0.198 ms

Remote clock offset: 0.386 ms

# Below is generated by plot.py at 2019-07-13 08:27:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 56.959 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 57.004 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 56.879 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 56.935 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

