

## Pantheon Report

Generated at 2019-11-24 11:31:06 (UTC).

Data path: AWS California 1 on `ens5` (*local*) → Stanford on `eno1` (*remote*).

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.stanford.edu` and have been applied to correct the timestamps in logs.

### System info:

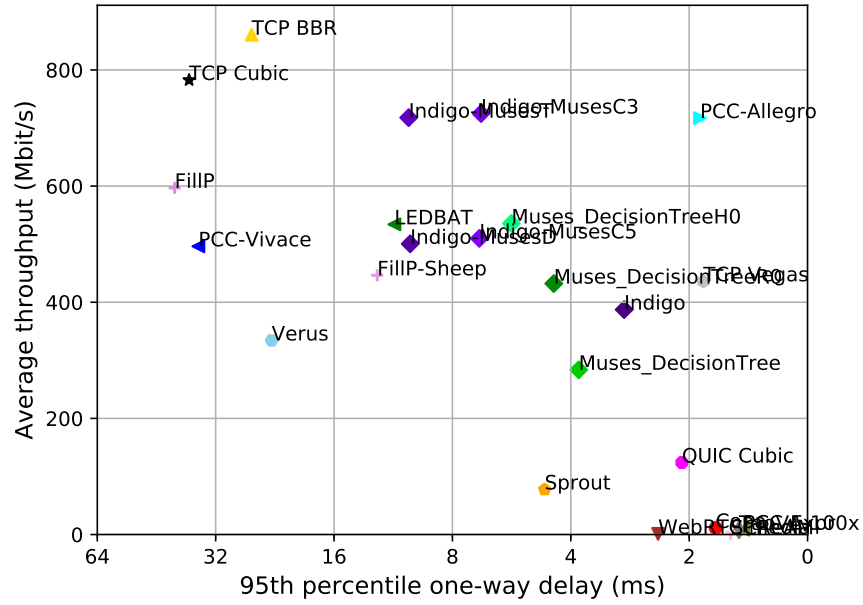
```
Linux 4.15.0-1051-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

### Git summary:

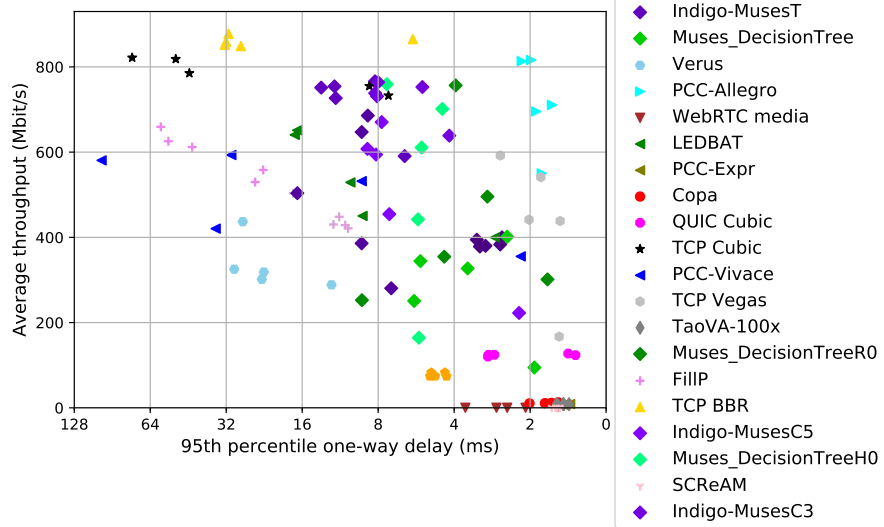
```
branch: muses @ de42328552b3776a75a932a94dfafd722537b0ec
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/muses_dtree @ 387225f7b5f61ddbe92d708a8869ffbb84eb3200
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
```

```
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

test from AWS California 1 to Stanford, 5 runs of 30s each per scheme  
 3 flows with 10s interval between flows (mean of all runs by scheme)



test from AWS California 1 to Stanford, 5 runs of 30s each per scheme  
 3 flows with 10s interval between flows



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	497.44	374.76	340.95	26.00	23.92	6.98	5.14	9.64	11.93
Copa	5	6.67	5.59	4.50	1.57	1.67	1.52	50.24	59.30	69.07
TCP Cubic	5	443.57	324.91	368.50	40.55	4.45	2.24	0.07	0.05	0.05
FillP	5	378.46	228.89	199.64	33.41	41.28	28.09	8.98	4.85	12.60
FillP-Sheep	5	285.64	214.50	54.20	12.73	9.58	10.03	1.92	7.47	7.49
Indigo	5	201.35	190.92	184.20	2.30	2.92	3.87	0.05	0.05	0.05
Indigo-MusesC3	5	455.64	336.69	178.38	8.19	3.47	2.26	0.94	1.60	0.88
Indigo-MusesC5	5	306.25	265.56	108.07	6.93	3.66	2.10	0.90	0.95	1.01
Indigo-MusesD	5	234.87	308.67	225.39	6.60	7.22	3.34	0.19	0.41	0.70
Indigo-MusesT	5	472.20	221.29	356.53	10.36	2.47	5.62	0.78	1.26	2.23
LEDBAT	5	296.22	249.81	226.03	8.37	5.31	3.87	0.09	0.13	0.27
Muses_DecisionTree	5	23.87	318.11	150.47	1.76	4.37	1.90	0.01	0.05	0.01
Muses_DecisionTreeH0	5	330.72	221.55	179.68	4.94	3.16	2.93	0.86	1.54	0.29
Muses_DecisionTreeR0	5	232.44	293.03	17.42	3.48	2.76	1.08	0.08	0.12	0.11
PCC-Allegro	5	444.36	302.72	216.97	1.78	1.78	1.85	0.12	0.18	0.25
PCC-Expr	5	0.37	9.55	6.18	1.17	1.09	1.09	85.71	37.04	39.15
QUIC Cubic	5	65.22	62.06	53.57	1.49	1.51	4.77	0.01	0.00	0.00
SCReAM	5	0.22	0.22	0.22	1.31	1.28	1.31	0.00	0.00	0.00
Sprout	5	39.81	34.68	44.51	4.61	4.48	4.38	0.09	0.07	0.07
TaoVA-100x	5	0.00	9.74	4.76	1.14	1.16	1.15	95.92	66.82	73.73
TCP Vegas	5	225.36	216.43	199.99	1.88	1.42	1.36	0.01	0.02	0.07
Verus	5	205.31	123.29	141.55	21.73	14.03	45.69	12.46	7.83	9.10
PCC-Vivace	5	285.67	256.97	120.29	18.70	59.40	16.97	0.13	0.69	0.56
WebRTC media	5	0.56	0.43	0.21	1.93	4.48	2.38	0.02	0.01	0.00



Run 1: Statistics of TCP BBR

Start at: 2019-11-24 07:28:48

End at: 2019-11-24 07:29:18

Local clock offset: 4.088 ms

Remote clock offset: 0.863 ms

# Below is generated by plot.py at 2019-11-24 10:30:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 848.87 Mbit/s

95th percentile per-packet one-way delay: 28.009 ms

Loss rate: 8.67%

-- Flow 1:

Average throughput: 469.72 Mbit/s

95th percentile per-packet one-way delay: 30.573 ms

Loss rate: 6.72%

-- Flow 2:

Average throughput: 376.01 Mbit/s

95th percentile per-packet one-way delay: 5.964 ms

Loss rate: 10.54%

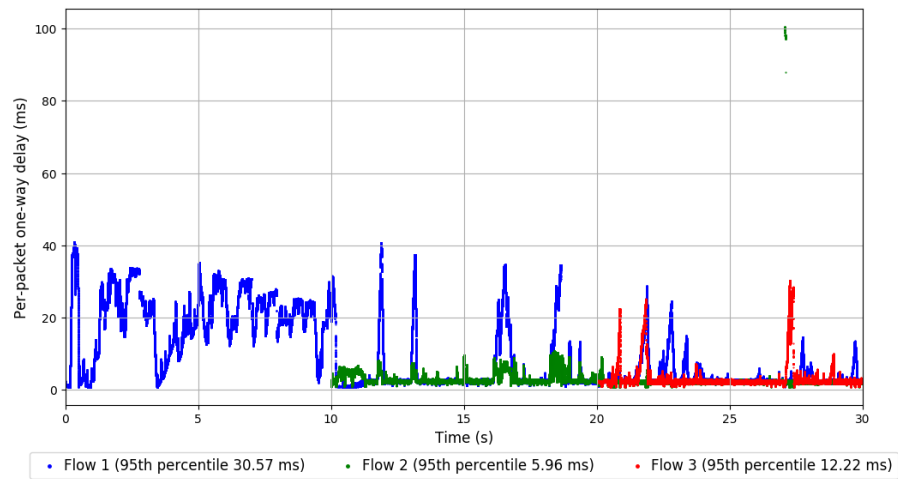
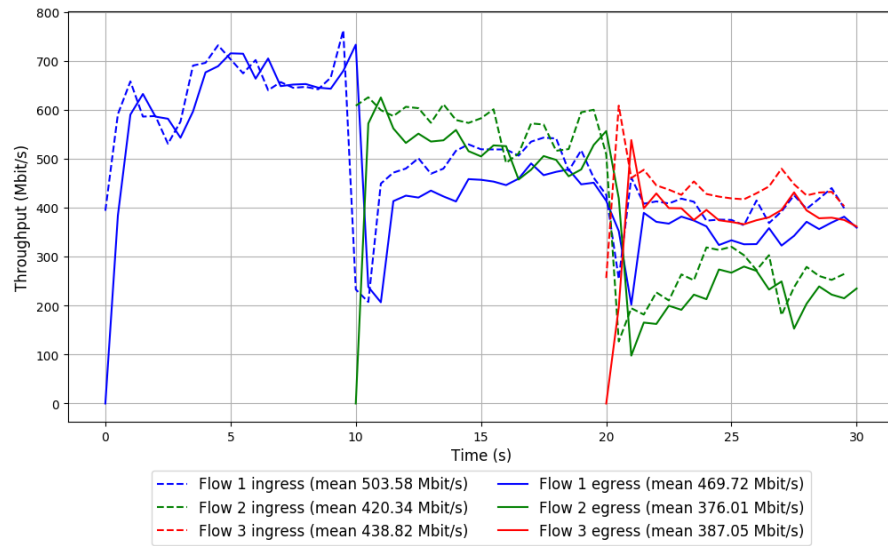
-- Flow 3:

Average throughput: 387.05 Mbit/s

95th percentile per-packet one-way delay: 12.225 ms

Loss rate: 11.80%

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



Run 2: Statistics of TCP BBR

Start at: 2019-11-24 08:03:43

End at: 2019-11-24 08:04:13

Local clock offset: 4.583 ms

Remote clock offset: 0.733 ms

# Below is generated by plot.py at 2019-11-24 10:31:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 865.07 Mbit/s

95th percentile per-packet one-way delay: 5.832 ms

Loss rate: 5.91%

-- Flow 1:

Average throughput: 513.19 Mbit/s

95th percentile per-packet one-way delay: 5.738 ms

Loss rate: 3.48%

-- Flow 2:

Average throughput: 402.50 Mbit/s

95th percentile per-packet one-way delay: 6.288 ms

Loss rate: 7.69%

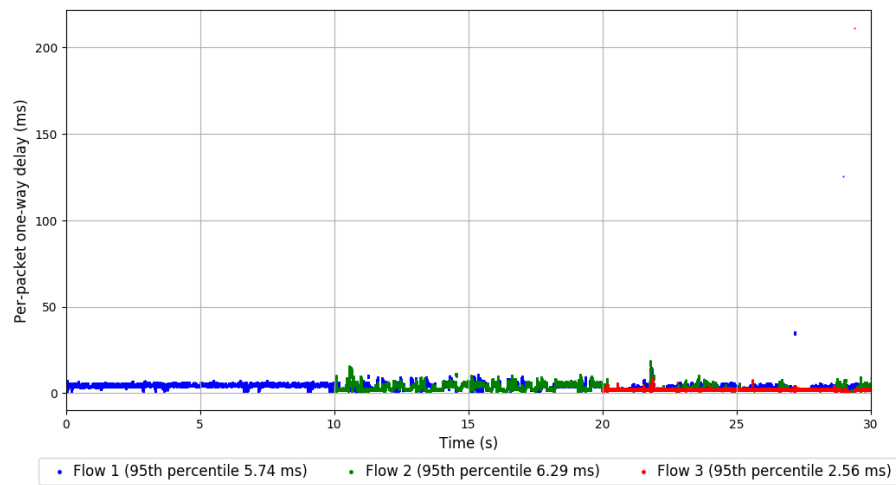
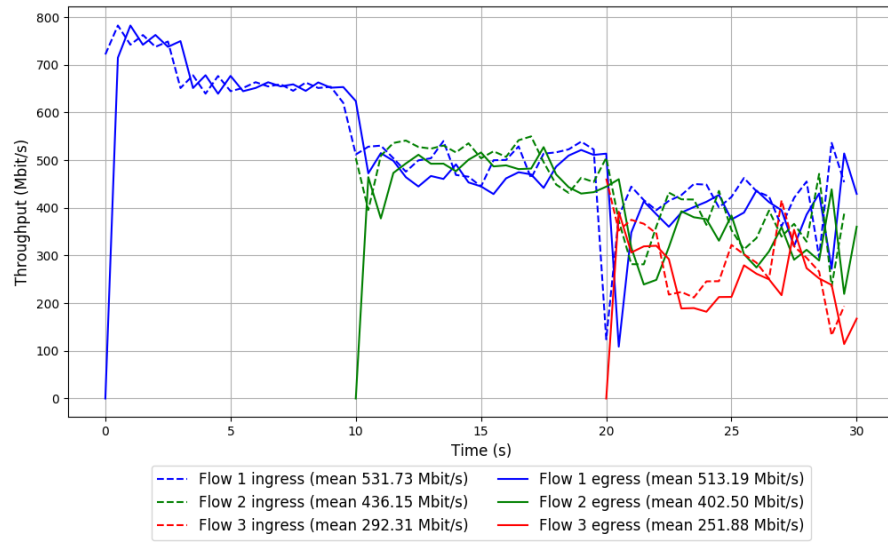
-- Flow 3:

Average throughput: 251.88 Mbit/s

95th percentile per-packet one-way delay: 2.558 ms

Loss rate: 13.82%

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



Run 3: Statistics of TCP BBR

Start at: 2019-11-24 08:38:58

End at: 2019-11-24 08:39:28

Local clock offset: 3.513 ms

Remote clock offset: 2.458 ms

# Below is generated by plot.py at 2019-11-24 10:31:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 877.83 Mbit/s

95th percentile per-packet one-way delay: 31.327 ms

Loss rate: 7.62%

-- Flow 1:

Average throughput: 522.12 Mbit/s

95th percentile per-packet one-way delay: 29.137 ms

Loss rate: 5.14%

-- Flow 2:

Average throughput: 376.97 Mbit/s

95th percentile per-packet one-way delay: 36.379 ms

Loss rate: 10.42%

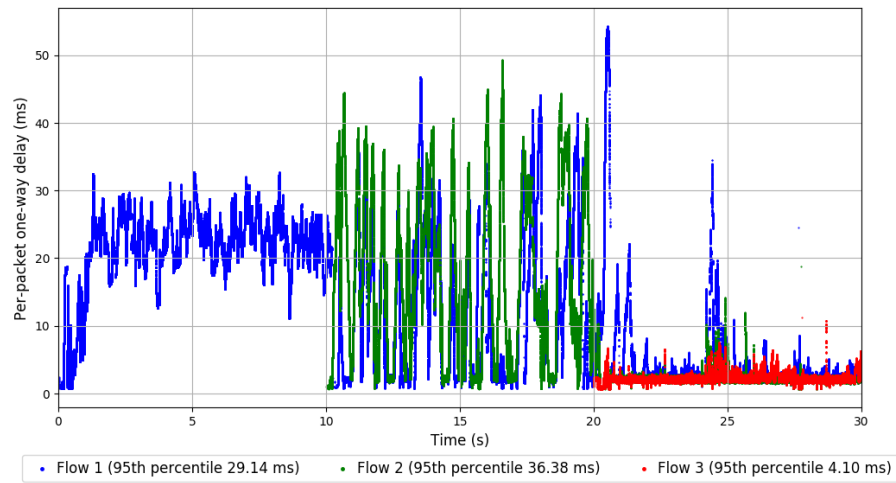
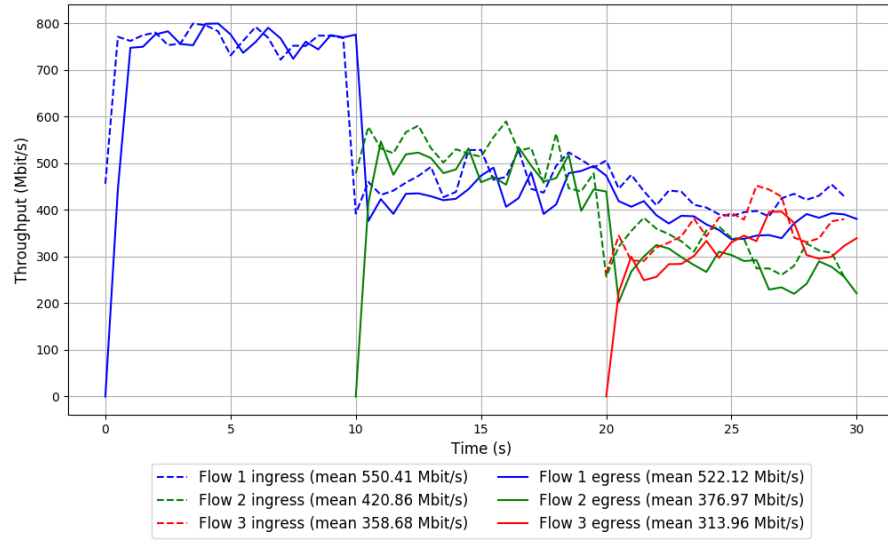
-- Flow 3:

Average throughput: 313.96 Mbit/s

95th percentile per-packet one-way delay: 4.100 ms

Loss rate: 12.46%

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

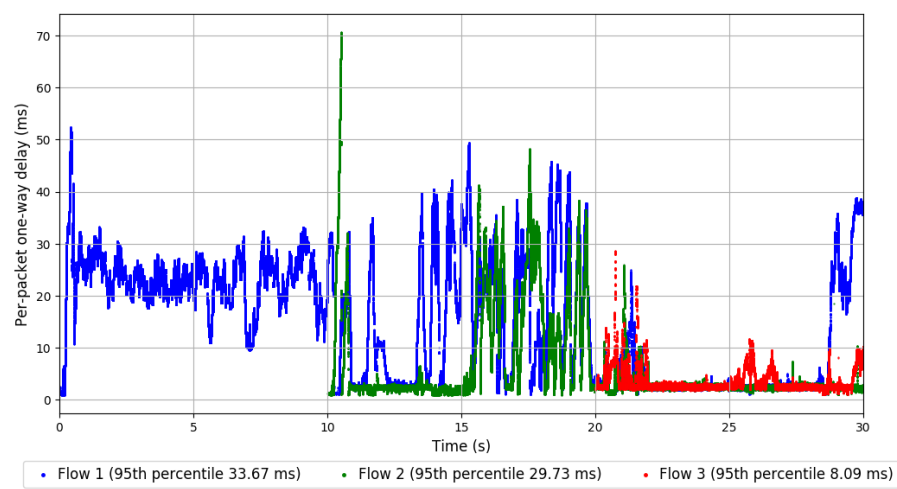
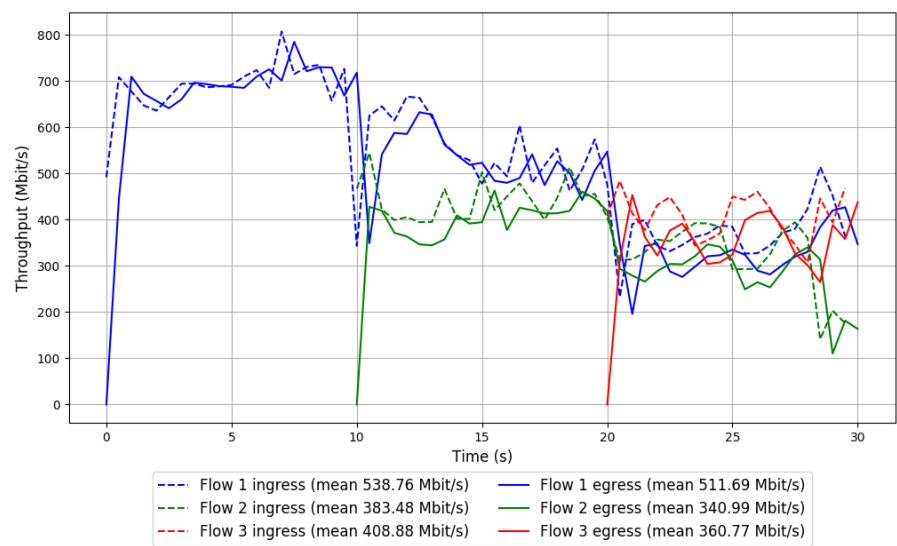


Run 4: Statistics of TCP BBR

Start at: 2019-11-24 09:14:32  
End at: 2019-11-24 09:15:02  
Local clock offset: 3.145 ms  
Remote clock offset: -1.833 ms

# Below is generated by plot.py at 2019-11-24 10:31:22  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 859.04 Mbit/s  
95th percentile per-packet one-way delay: 32.036 ms  
Loss rate: 7.67%  
-- Flow 1:  
Average throughput: 511.69 Mbit/s  
95th percentile per-packet one-way delay: 33.670 ms  
Loss rate: 5.02%  
-- Flow 2:  
Average throughput: 340.99 Mbit/s  
95th percentile per-packet one-way delay: 29.733 ms  
Loss rate: 11.08%  
-- Flow 3:  
Average throughput: 360.77 Mbit/s  
95th percentile per-packet one-way delay: 8.086 ms  
Loss rate: 11.76%

Run 4: Report of TCP BBR — Data Link



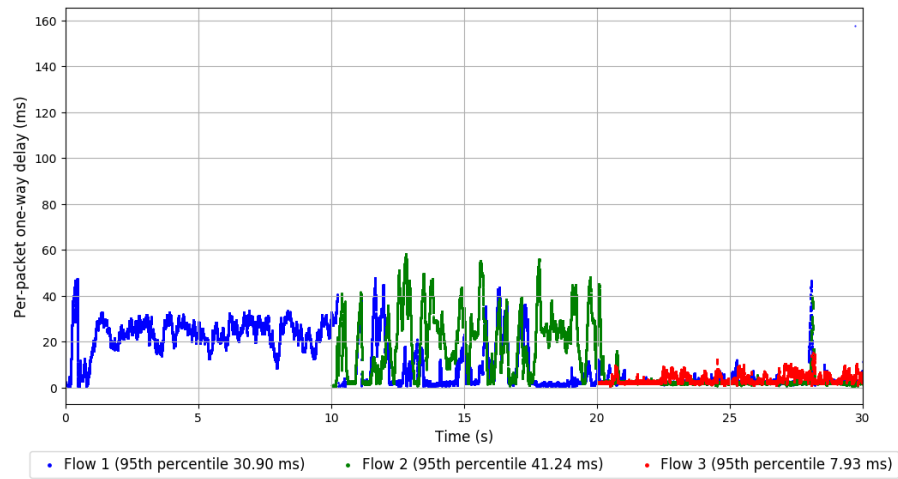
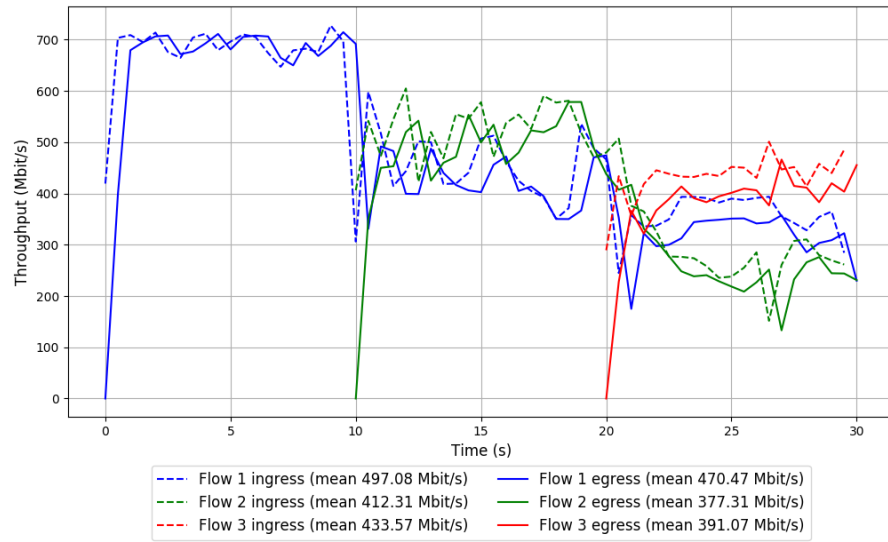


Run 5: Statistics of TCP BBR

Start at: 2019-11-24 09:49:40  
End at: 2019-11-24 09:50:10  
Local clock offset: 3.006 ms  
Remote clock offset: -5.864 ms

# Below is generated by plot.py at 2019-11-24 10:31:22  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 851.78 Mbit/s  
95th percentile per-packet one-way delay: 32.420 ms  
Loss rate: 6.98%  
-- Flow 1:  
Average throughput: 470.47 Mbit/s  
95th percentile per-packet one-way delay: 30.901 ms  
Loss rate: 5.34%  
-- Flow 2:  
Average throughput: 377.31 Mbit/s  
95th percentile per-packet one-way delay: 41.239 ms  
Loss rate: 8.49%  
-- Flow 3:  
Average throughput: 391.07 Mbit/s  
95th percentile per-packet one-way delay: 7.930 ms  
Loss rate: 9.80%

# Run 5: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2019-11-24 07:27:32

End at: 2019-11-24 07:28:02

Local clock offset: 4.058 ms

Remote clock offset: 0.838 ms

# Below is generated by plot.py at 2019-11-24 10:31:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 10.89 Mbit/s

95th percentile per-packet one-way delay: 1.610 ms

Loss rate: 56.37%

-- Flow 1:

Average throughput: 5.83 Mbit/s

95th percentile per-packet one-way delay: 1.475 ms

Loss rate: 46.08%

-- Flow 2:

Average throughput: 4.57 Mbit/s

95th percentile per-packet one-way delay: 1.619 ms

Loss rate: 57.61%

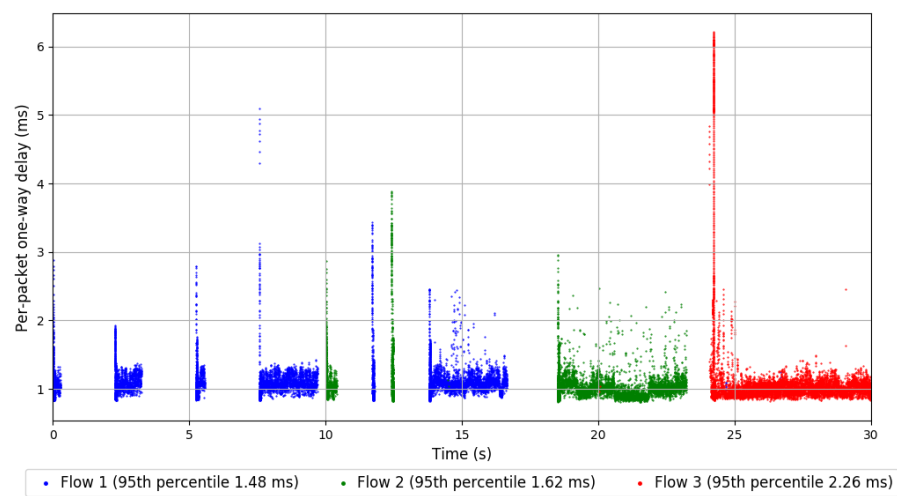
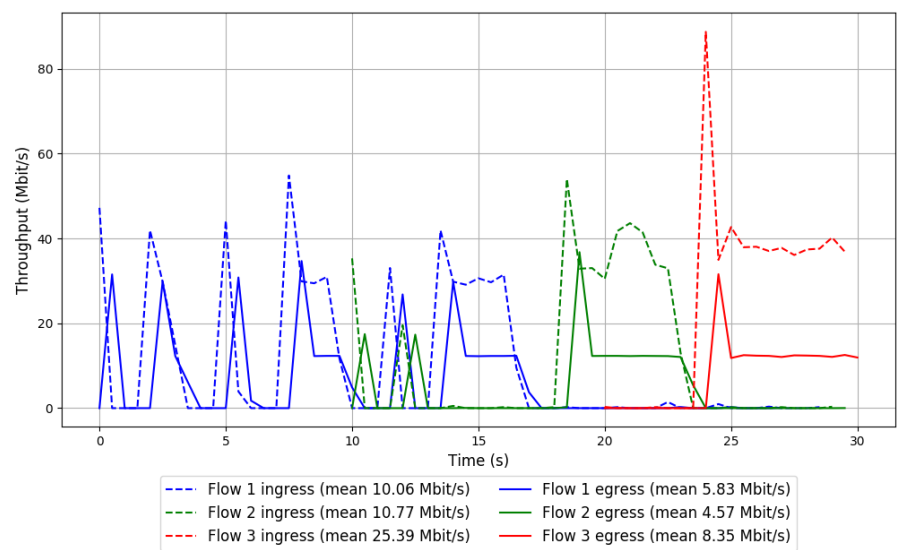
-- Flow 3:

Average throughput: 8.35 Mbit/s

95th percentile per-packet one-way delay: 2.256 ms

Loss rate: 67.11%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2019-11-24 08:02:27

End at: 2019-11-24 08:02:57

Local clock offset: 4.575 ms

Remote clock offset: 0.937 ms

# Below is generated by plot.py at 2019-11-24 10:31:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 10.87 Mbit/s

95th percentile per-packet one-way delay: 1.442 ms

Loss rate: 52.86%

-- Flow 1:

Average throughput: 6.14 Mbit/s

95th percentile per-packet one-way delay: 1.508 ms

Loss rate: 48.98%

-- Flow 2:

Average throughput: 5.89 Mbit/s

95th percentile per-packet one-way delay: 1.389 ms

Loss rate: 58.10%

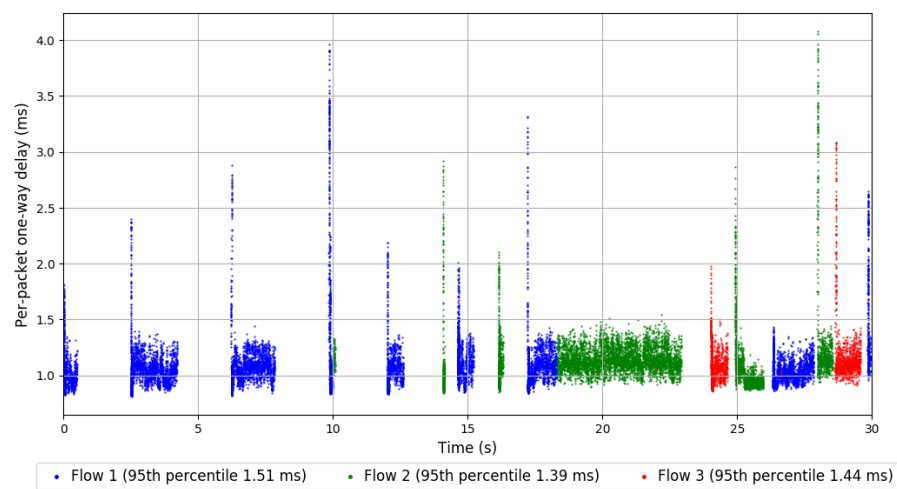
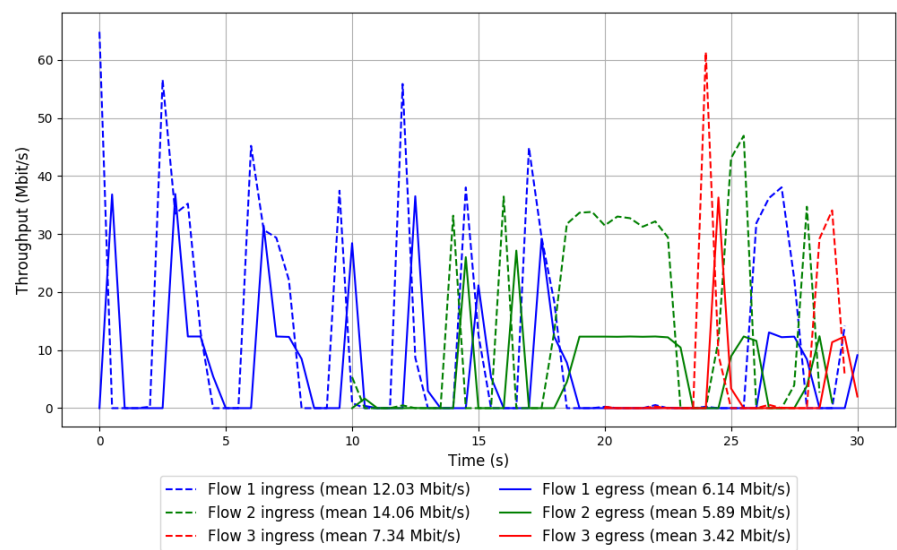
-- Flow 3:

Average throughput: 3.42 Mbit/s

95th percentile per-packet one-way delay: 1.436 ms

Loss rate: 53.34%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2019-11-24 08:37:43

End at: 2019-11-24 08:38:13

Local clock offset: 3.508 ms

Remote clock offset: 2.332 ms

# Below is generated by plot.py at 2019-11-24 10:31:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 12.71 Mbit/s

95th percentile per-packet one-way delay: 1.262 ms

Loss rate: 65.05%

-- Flow 1:

Average throughput: 10.28 Mbit/s

95th percentile per-packet one-way delay: 1.308 ms

Loss rate: 63.23%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 1.848 ms

Loss rate: 71.40%

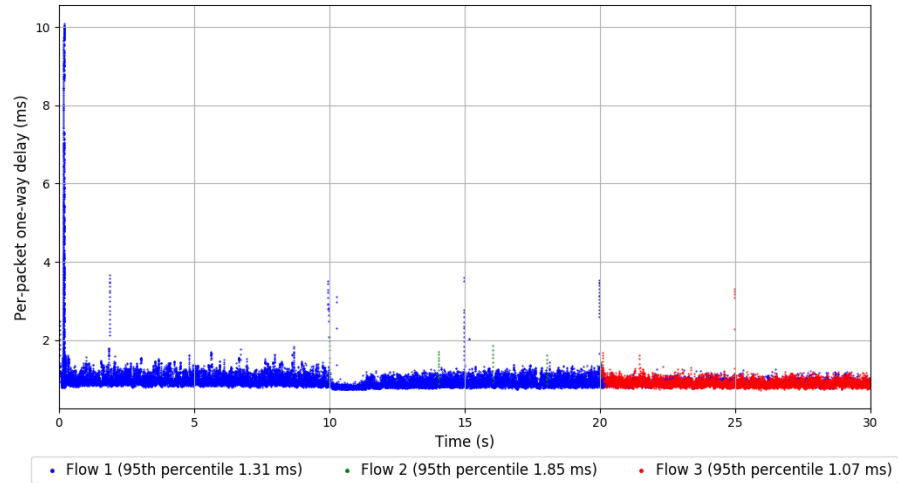
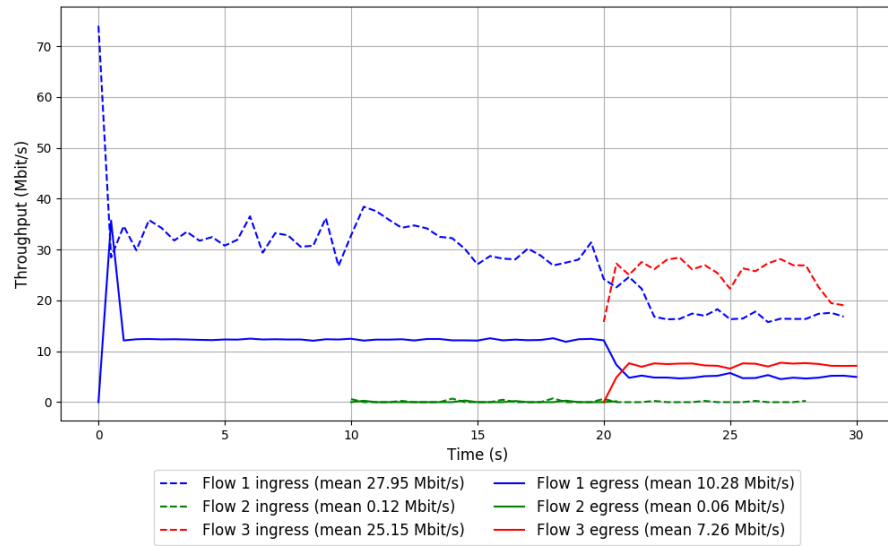
-- Flow 3:

Average throughput: 7.26 Mbit/s

95th percentile per-packet one-way delay: 1.074 ms

Loss rate: 71.11%

### Run 3: Report of Copa — Data Link



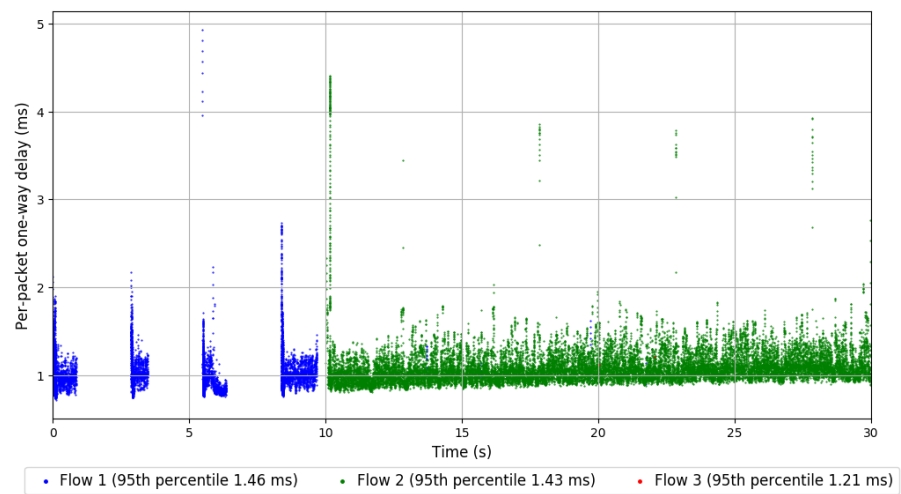
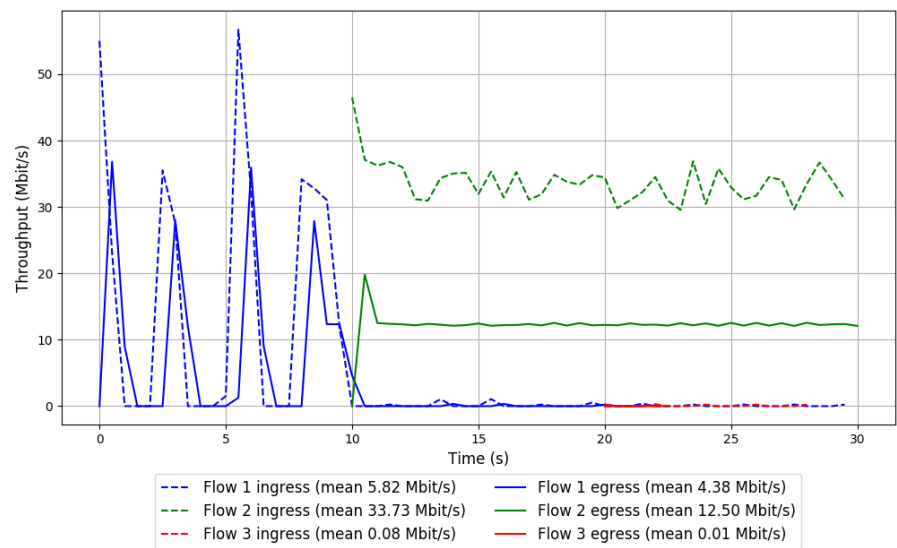


Run 4: Statistics of Copa

Start at: 2019-11-24 09:13:17  
End at: 2019-11-24 09:13:47  
Local clock offset: 3.172 ms  
Remote clock offset: -1.553 ms

# Below is generated by plot.py at 2019-11-24 10:31:22  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 11.50 Mbit/s  
95th percentile per-packet one-way delay: 1.439 ms  
Loss rate: 59.33%  
-- Flow 1:  
Average throughput: 4.38 Mbit/s  
95th percentile per-packet one-way delay: 1.463 ms  
Loss rate: 45.03%  
-- Flow 2:  
Average throughput: 12.50 Mbit/s  
95th percentile per-packet one-way delay: 1.431 ms  
Loss rate: 62.96%  
-- Flow 3:  
Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 1.205 ms  
Loss rate: 97.92%

Run 4: Report of Copa — Data Link

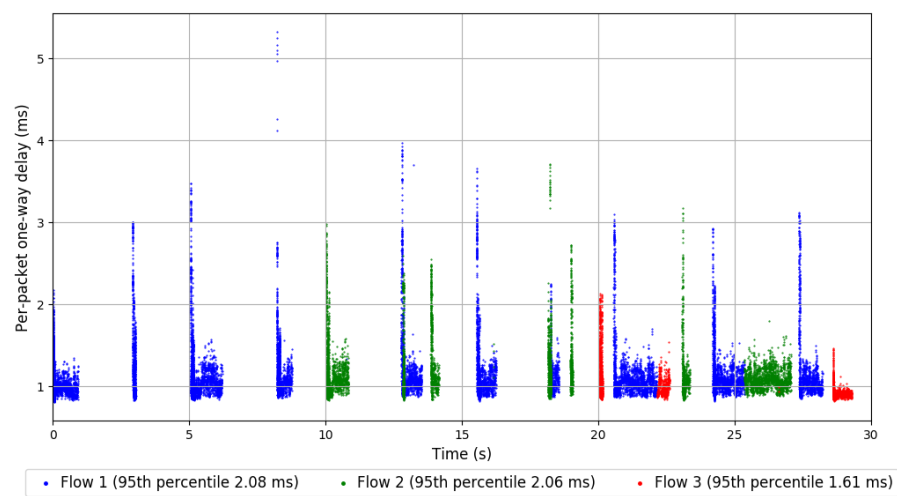
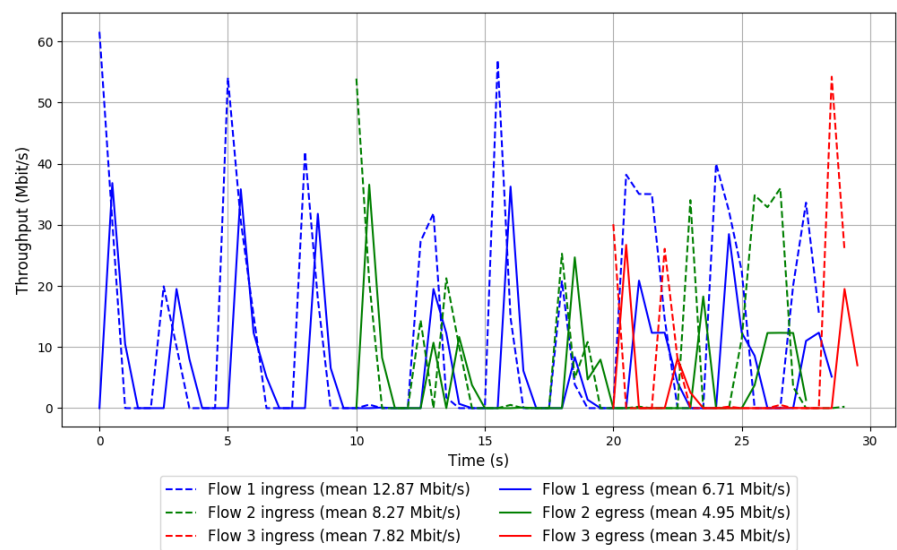


Run 5: Statistics of Copa

Start at: 2019-11-24 09:48:24  
End at: 2019-11-24 09:48:54  
Local clock offset: 2.976 ms  
Remote clock offset: -5.739 ms

```
# Below is generated by plot.py at 2019-11-24 10:31:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.43 Mbit/s
95th percentile per-packet one-way delay: 2.011 ms
Loss rate: 48.47%
-- Flow 1:
Average throughput: 6.71 Mbit/s
95th percentile per-packet one-way delay: 2.081 ms
Loss rate: 47.86%
-- Flow 2:
Average throughput: 4.95 Mbit/s
95th percentile per-packet one-way delay: 2.061 ms
Loss rate: 46.45%
-- Flow 3:
Average throughput: 3.45 Mbit/s
95th percentile per-packet one-way delay: 1.609 ms
Loss rate: 55.88%
```

Run 5: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2019-11-24 07:22:56

End at: 2019-11-24 07:23:26

Local clock offset: 3.815 ms

Remote clock offset: 0.463 ms

# Below is generated by plot.py at 2019-11-24 10:31:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 818.43 Mbit/s

95th percentile per-packet one-way delay: 50.718 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 463.43 Mbit/s

95th percentile per-packet one-way delay: 55.163 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 374.36 Mbit/s

95th percentile per-packet one-way delay: 2.458 ms

Loss rate: 0.10%

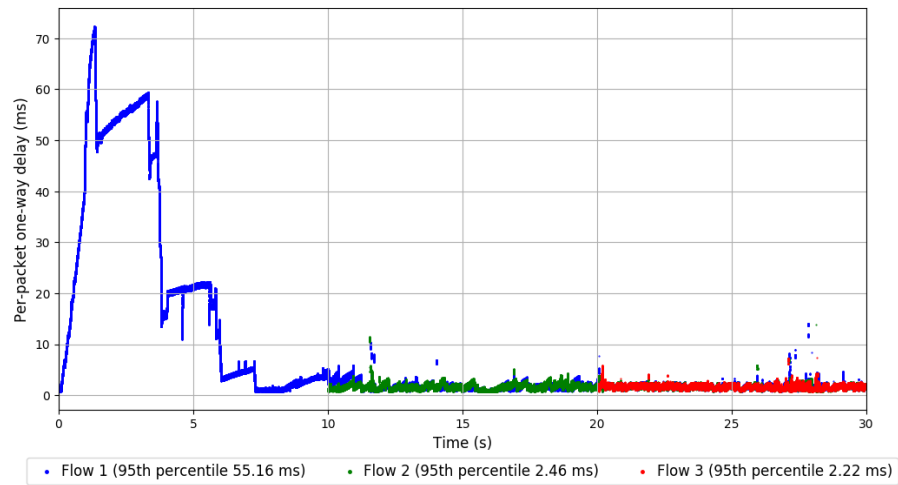
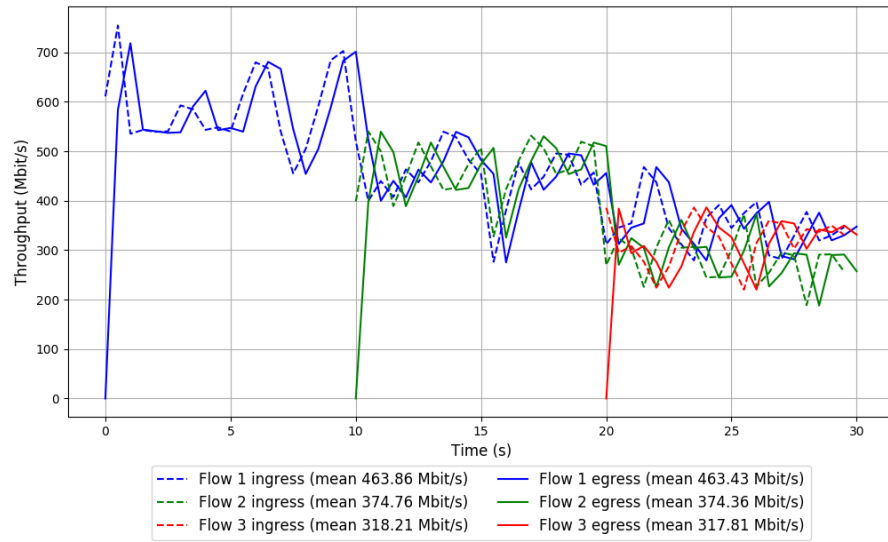
-- Flow 3:

Average throughput: 317.81 Mbit/s

95th percentile per-packet one-way delay: 2.221 ms

Loss rate: 0.13%

# Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2019-11-24 07:58:09

End at: 2019-11-24 07:58:39

Local clock offset: 4.519 ms

Remote clock offset: 1.277 ms

# Below is generated by plot.py at 2019-11-24 10:31:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 785.20 Mbit/s

95th percentile per-packet one-way delay: 44.788 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 566.80 Mbit/s

95th percentile per-packet one-way delay: 47.985 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 92.68 Mbit/s

95th percentile per-packet one-way delay: 1.846 ms

Loss rate: 0.06%

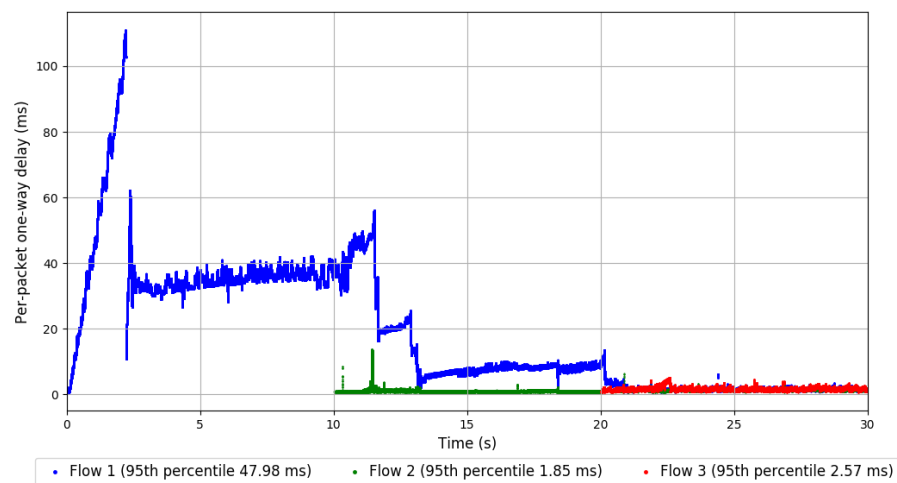
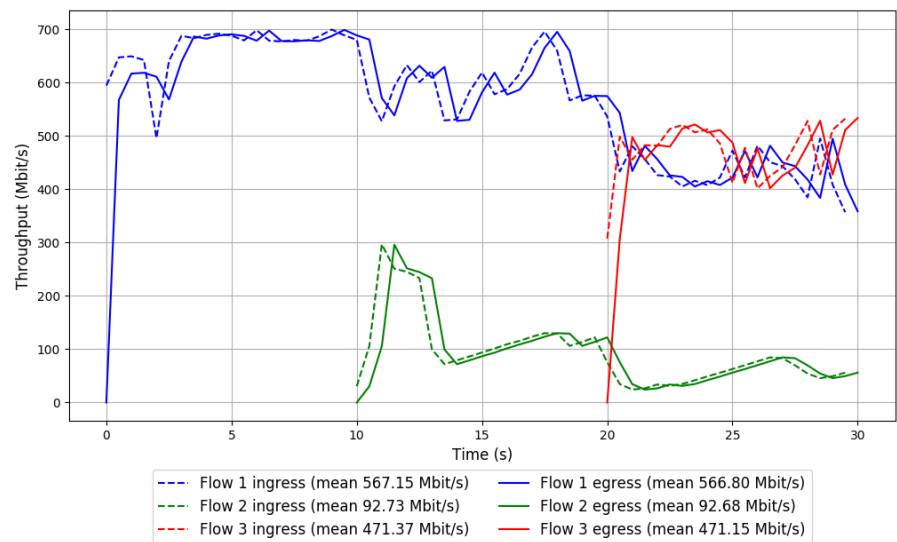
-- Flow 3:

Average throughput: 471.15 Mbit/s

95th percentile per-packet one-way delay: 2.572 ms

Loss rate: 0.04%

Run 2: Report of TCP Cubic — Data Link





Run 3: Statistics of TCP Cubic

Start at: 2019-11-24 08:33:14

End at: 2019-11-24 08:33:44

Local clock offset: 3.548 ms

Remote clock offset: 1.553 ms

# Below is generated by plot.py at 2019-11-24 10:31:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 821.63 Mbit/s

95th percentile per-packet one-way delay: 75.474 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 333.34 Mbit/s

95th percentile per-packet one-way delay: 83.577 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 515.68 Mbit/s

95th percentile per-packet one-way delay: 7.123 ms

Loss rate: 0.02%

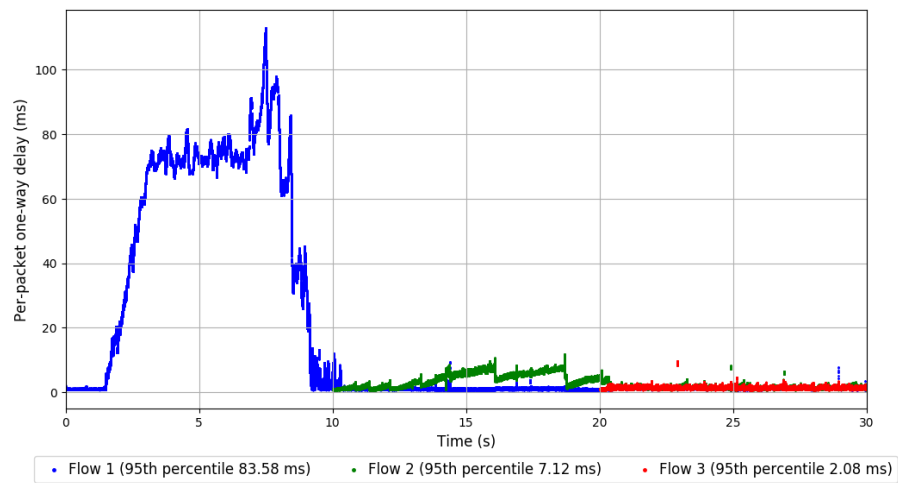
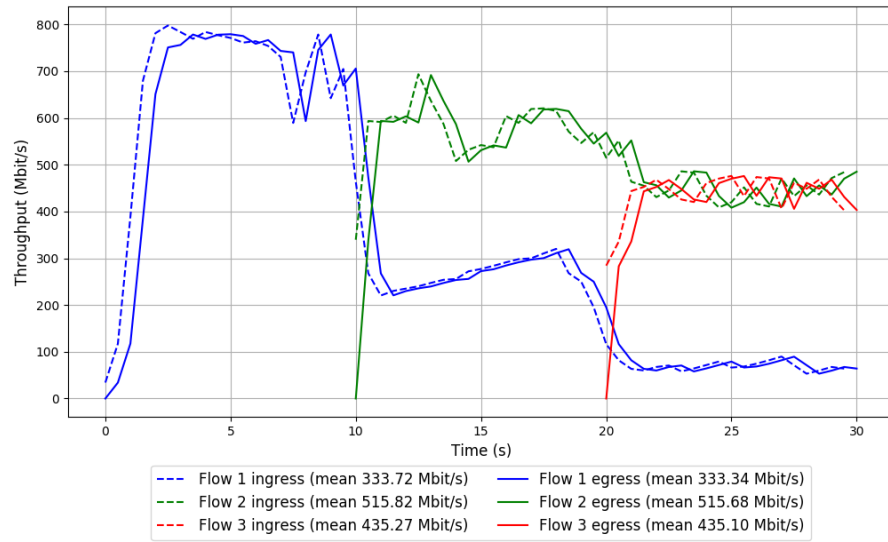
-- Flow 3:

Average throughput: 435.10 Mbit/s

95th percentile per-packet one-way delay: 2.082 ms

Loss rate: 0.03%

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



Run 4: Statistics of TCP Cubic

Start at: 2019-11-24 09:08:56

End at: 2019-11-24 09:09:26

Local clock offset: 3.268 ms

Remote clock offset: 0.084 ms

# Below is generated by plot.py at 2019-11-24 10:38:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 754.95 Mbit/s

95th percentile per-packet one-way delay: 8.668 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 323.51 Mbit/s

95th percentile per-packet one-way delay: 8.054 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 559.19 Mbit/s

95th percentile per-packet one-way delay: 8.969 ms

Loss rate: 0.05%

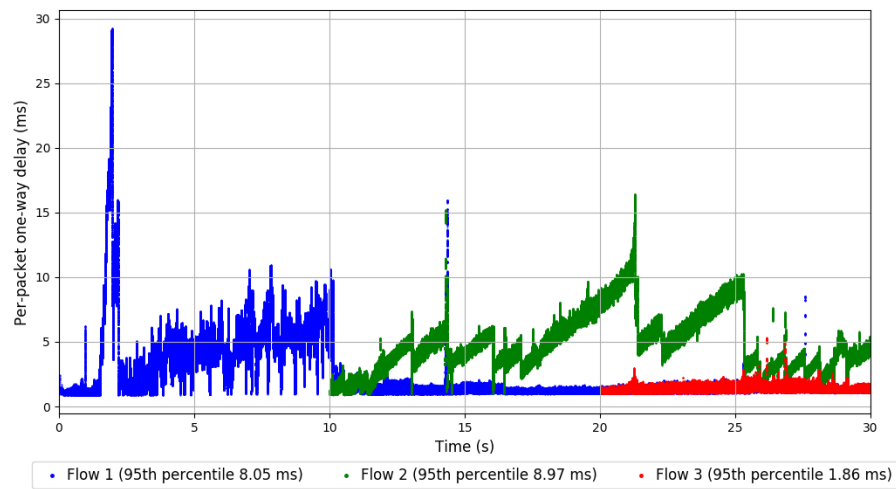
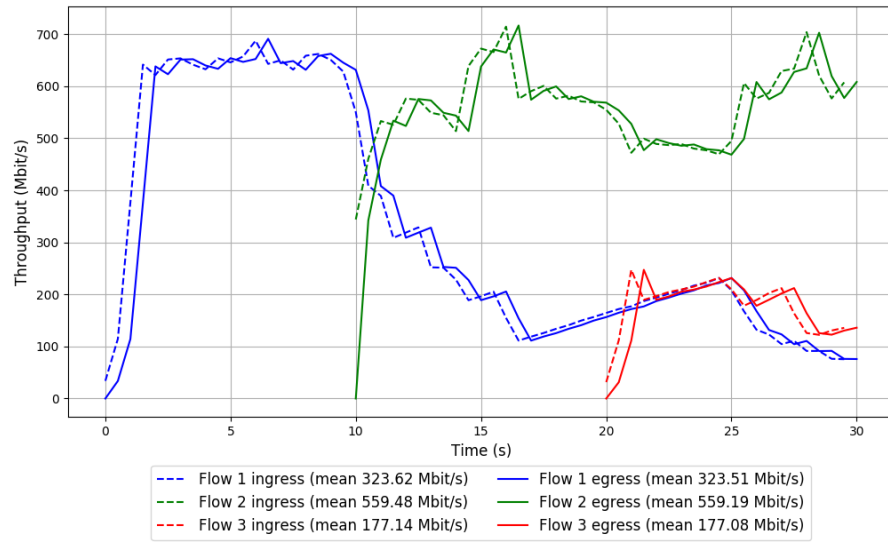
-- Flow 3:

Average throughput: 177.08 Mbit/s

95th percentile per-packet one-way delay: 1.857 ms

Loss rate: 0.02%

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

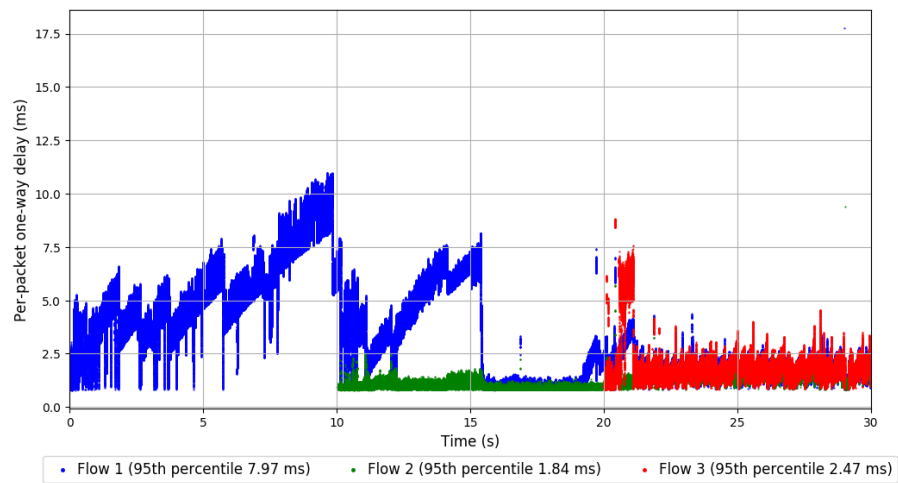
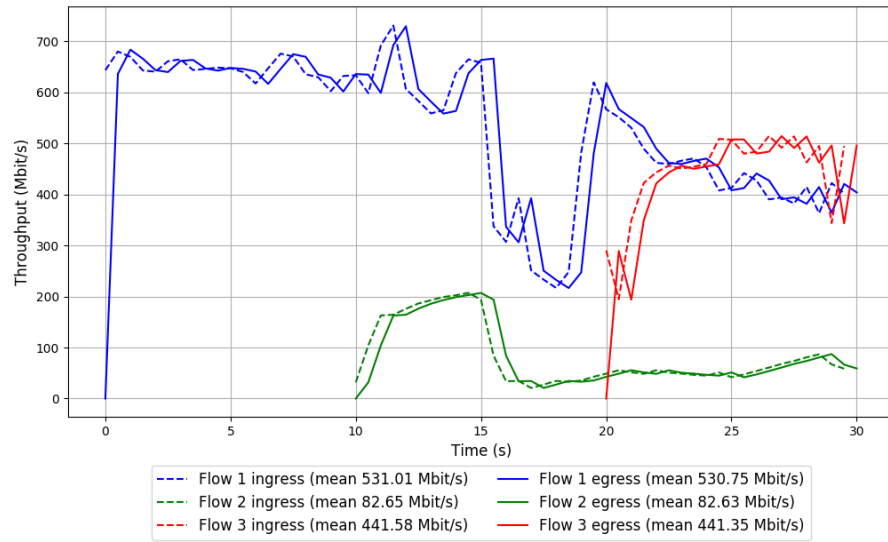


Run 5: Statistics of TCP Cubic

Start at: 2019-11-24 09:44:03  
End at: 2019-11-24 09:44:33  
Local clock offset: 2.917 ms  
Remote clock offset: -5.429 ms

# Below is generated by plot.py at 2019-11-24 10:38:37  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 732.70 Mbit/s  
95th percentile per-packet one-way delay: 7.285 ms  
Loss rate: 0.04%  
-- Flow 1:  
Average throughput: 530.75 Mbit/s  
95th percentile per-packet one-way delay: 7.968 ms  
Loss rate: 0.05%  
-- Flow 2:  
Average throughput: 82.63 Mbit/s  
95th percentile per-packet one-way delay: 1.839 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 441.35 Mbit/s  
95th percentile per-packet one-way delay: 2.470 ms  
Loss rate: 0.04%

# Run 5: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2019-11-24 07:34:46

End at: 2019-11-24 07:35:16

Local clock offset: 4.337 ms

Remote clock offset: 1.135 ms

# Below is generated by plot.py at 2019-11-24 10:38:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 529.79 Mbit/s

95th percentile per-packet one-way delay: 24.571 ms

Loss rate: 9.19%

-- Flow 1:

Average throughput: 428.13 Mbit/s

95th percentile per-packet one-way delay: 26.054 ms

Loss rate: 9.82%

-- Flow 2:

Average throughput: 127.14 Mbit/s

95th percentile per-packet one-way delay: 12.922 ms

Loss rate: 6.97%

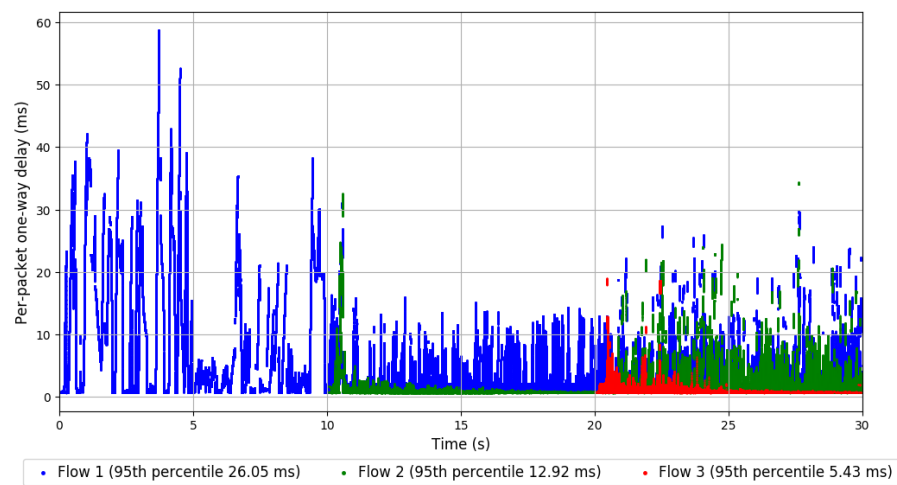
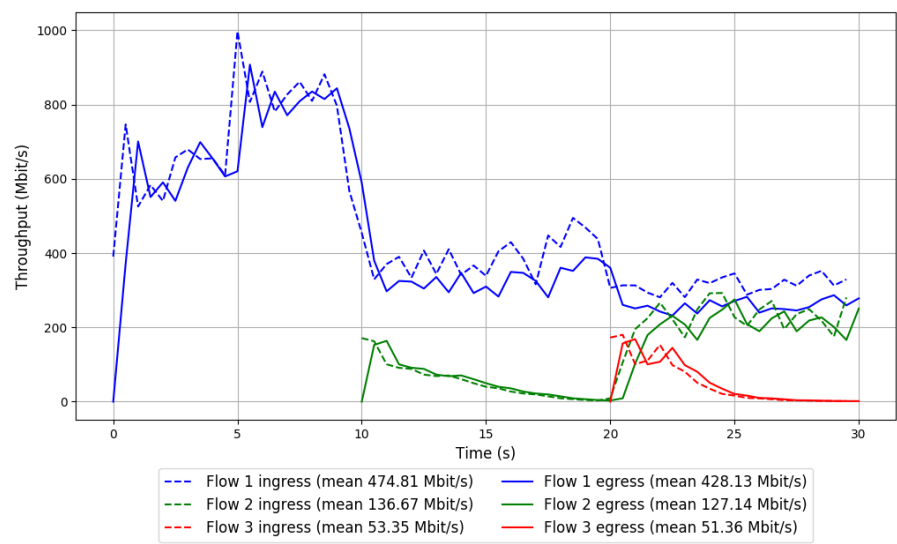
-- Flow 3:

Average throughput: 51.36 Mbit/s

95th percentile per-packet one-way delay: 5.431 ms

Loss rate: 3.72%

Run 1: Report of FillP — Data Link





Run 2: Statistics of FillP

Start at: 2019-11-24 08:09:43

End at: 2019-11-24 08:10:13

Local clock offset: 4.661 ms

Remote clock offset: 0.385 ms

# Below is generated by plot.py at 2019-11-24 10:40:10

# Datalink statistics

-- Total of 3 flows:

Average throughput: 659.36 Mbit/s

95th percentile per-packet one-way delay: 58.128 ms

Loss rate: 9.57%

-- Flow 1:

Average throughput: 353.02 Mbit/s

95th percentile per-packet one-way delay: 31.217 ms

Loss rate: 9.11%

-- Flow 2:

Average throughput: 339.77 Mbit/s

95th percentile per-packet one-way delay: 73.597 ms

Loss rate: 4.57%

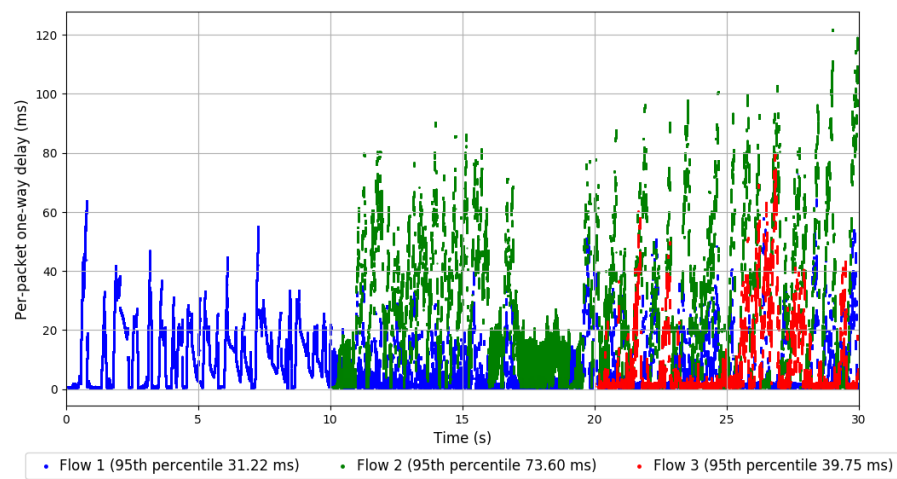
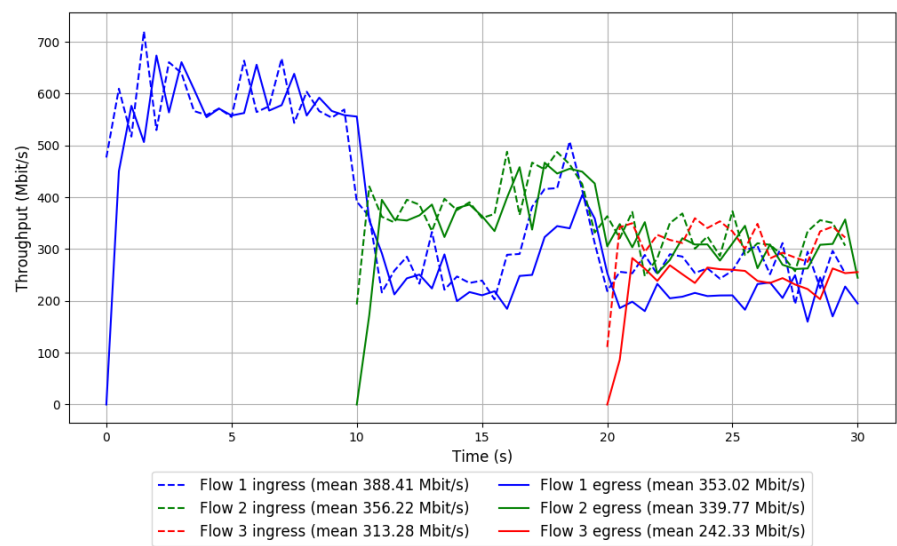
-- Flow 3:

Average throughput: 242.33 Mbit/s

95th percentile per-packet one-way delay: 39.750 ms

Loss rate: 22.66%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2019-11-24 08:45:01

End at: 2019-11-24 08:45:31

Local clock offset: 3.427 ms

Remote clock offset: 3.122 ms

# Below is generated by plot.py at 2019-11-24 10:40:10

# Datalink statistics

-- Total of 3 flows:

Average throughput: 611.79 Mbit/s

95th percentile per-packet one-way delay: 43.650 ms

Loss rate: 8.18%

-- Flow 1:

Average throughput: 382.82 Mbit/s

95th percentile per-packet one-way delay: 47.503 ms

Loss rate: 9.48%

-- Flow 2:

Average throughput: 237.97 Mbit/s

95th percentile per-packet one-way delay: 37.251 ms

Loss rate: 6.92%

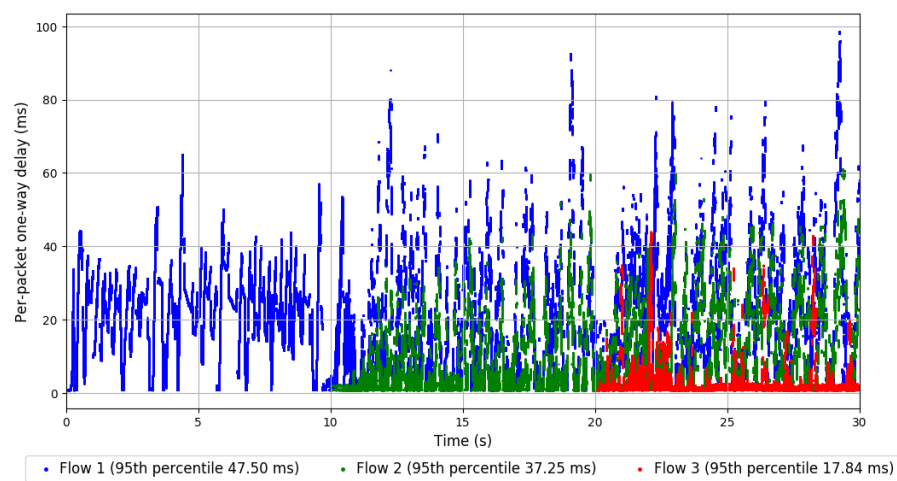
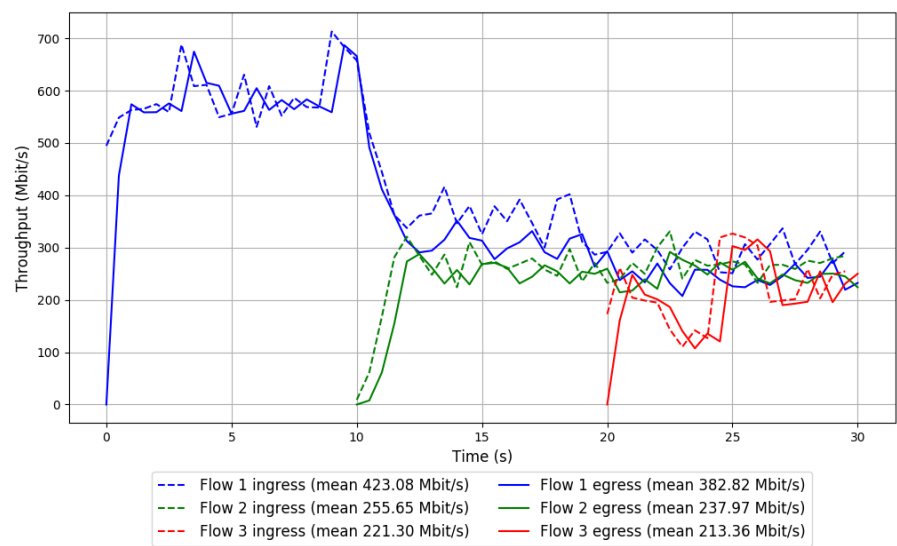
-- Flow 3:

Average throughput: 213.36 Mbit/s

95th percentile per-packet one-way delay: 17.839 ms

Loss rate: 3.59%

Run 3: Report of FillP — Data Link

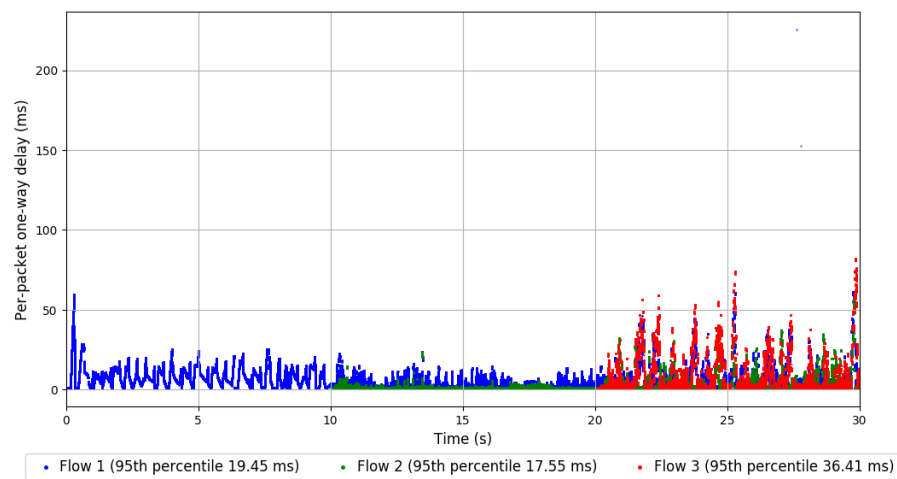
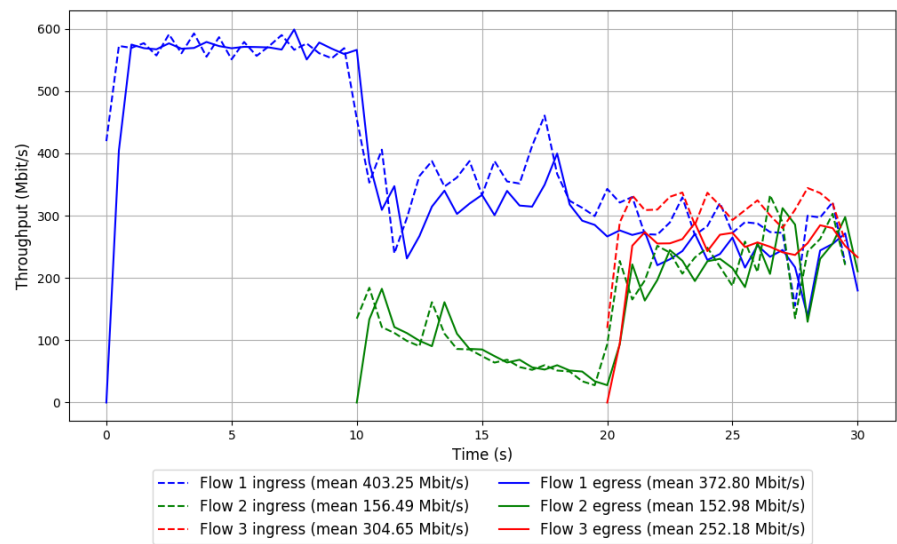


Run 4: Statistics of FillP

Start at: 2019-11-24 09:20:36  
End at: 2019-11-24 09:21:06  
Local clock offset: 2.981 ms  
Remote clock offset: -3.159 ms

# Below is generated by plot.py at 2019-11-24 10:40:10  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 558.16 Mbit/s  
95th percentile per-packet one-way delay: 22.834 ms  
Loss rate: 8.22%  
-- Flow 1:  
Average throughput: 372.80 Mbit/s  
95th percentile per-packet one-way delay: 19.445 ms  
Loss rate: 7.54%  
-- Flow 2:  
Average throughput: 152.98 Mbit/s  
95th percentile per-packet one-way delay: 17.554 ms  
Loss rate: 2.23%  
-- Flow 3:  
Average throughput: 252.18 Mbit/s  
95th percentile per-packet one-way delay: 36.410 ms  
Loss rate: 17.14%

Run 4: Report of FillP — Data Link

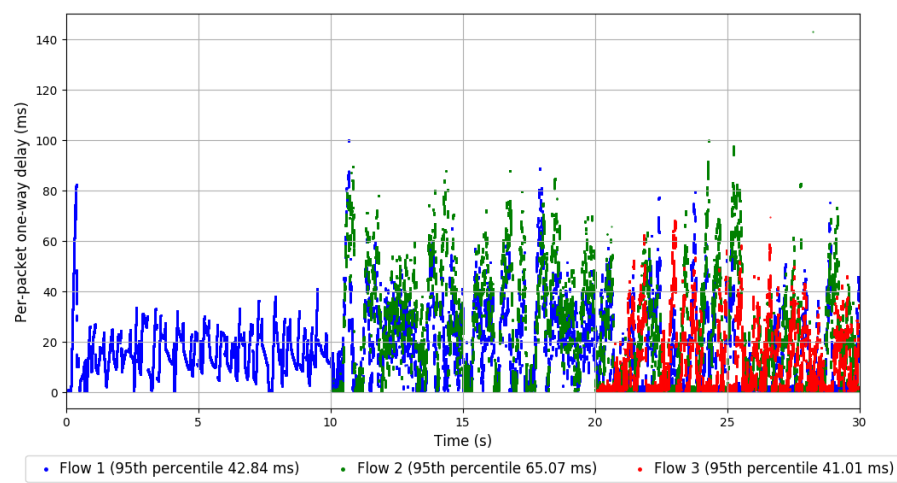
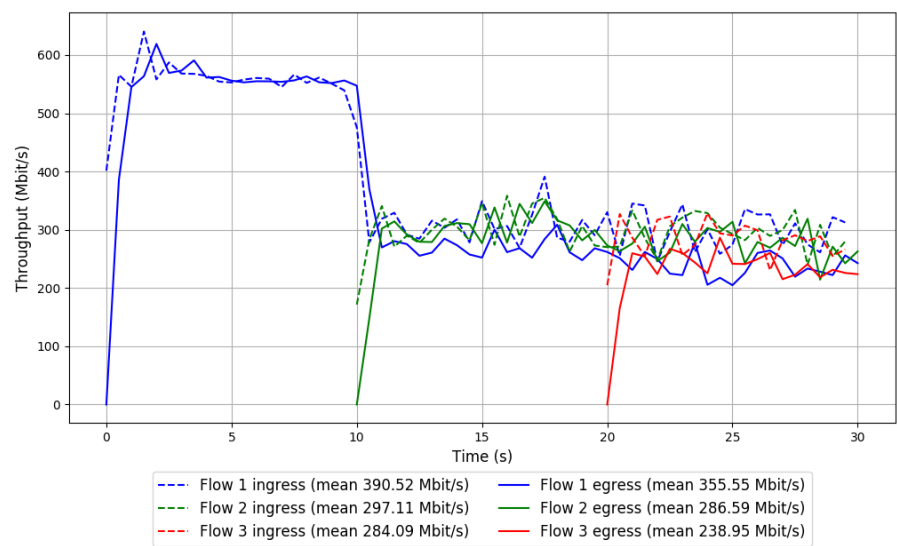


Run 5: Statistics of FillP

Start at: 2019-11-24 09:55:45  
End at: 2019-11-24 09:56:15  
Local clock offset: 3.032 ms  
Remote clock offset: -6.278 ms

# Below is generated by plot.py at 2019-11-24 10:40:10  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 625.58 Mbit/s  
95th percentile per-packet one-way delay: 54.236 ms  
Loss rate: 8.33%  
-- Flow 1:  
Average throughput: 355.55 Mbit/s  
95th percentile per-packet one-way delay: 42.839 ms  
Loss rate: 8.93%  
-- Flow 2:  
Average throughput: 286.59 Mbit/s  
95th percentile per-packet one-way delay: 65.069 ms  
Loss rate: 3.54%  
-- Flow 3:  
Average throughput: 238.95 Mbit/s  
95th percentile per-packet one-way delay: 41.009 ms  
Loss rate: 15.88%

Run 5: Report of FillP — Data Link





Run 1: Statistics of FillP-Sheep

Start at: 2019-11-24 07:39:19

End at: 2019-11-24 07:39:49

Local clock offset: 4.47 ms

Remote clock offset: 1.422 ms

# Below is generated by plot.py at 2019-11-24 10:40:10

# Datalink statistics

-- Total of 3 flows:

Average throughput: 428.64 Mbit/s

95th percentile per-packet one-way delay: 10.804 ms

Loss rate: 5.95%

-- Flow 1:

Average throughput: 261.66 Mbit/s

95th percentile per-packet one-way delay: 11.969 ms

Loss rate: 1.36%

-- Flow 2:

Average throughput: 238.56 Mbit/s

95th percentile per-packet one-way delay: 7.479 ms

Loss rate: 12.59%

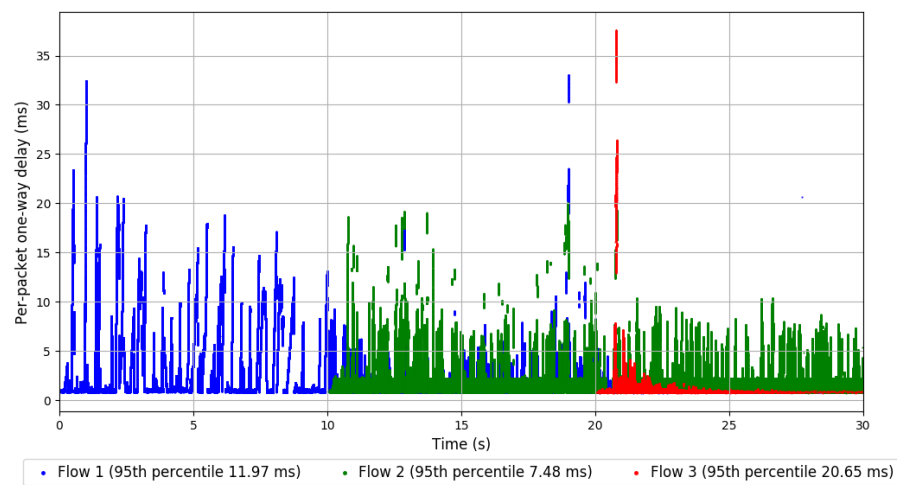
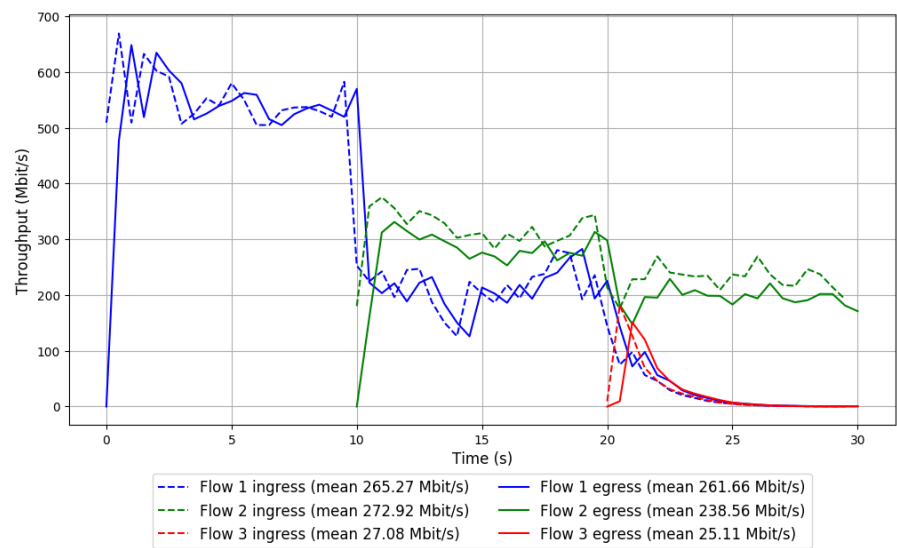
-- Flow 3:

Average throughput: 25.11 Mbit/s

95th percentile per-packet one-way delay: 20.650 ms

Loss rate: 7.28%

Run 1: Report of FillP-Sheep — Data Link



Run 2: Statistics of FillP-Sheep

Start at: 2019-11-24 08:14:15

End at: 2019-11-24 08:14:45

Local clock offset: 4.147 ms

Remote clock offset: 0.257 ms

# Below is generated by plot.py at 2019-11-24 10:43:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 421.13 Mbit/s

95th percentile per-packet one-way delay: 10.524 ms

Loss rate: 6.67%

-- Flow 1:

Average throughput: 206.79 Mbit/s

95th percentile per-packet one-way delay: 11.599 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 240.79 Mbit/s

95th percentile per-packet one-way delay: 8.058 ms

Loss rate: 11.36%

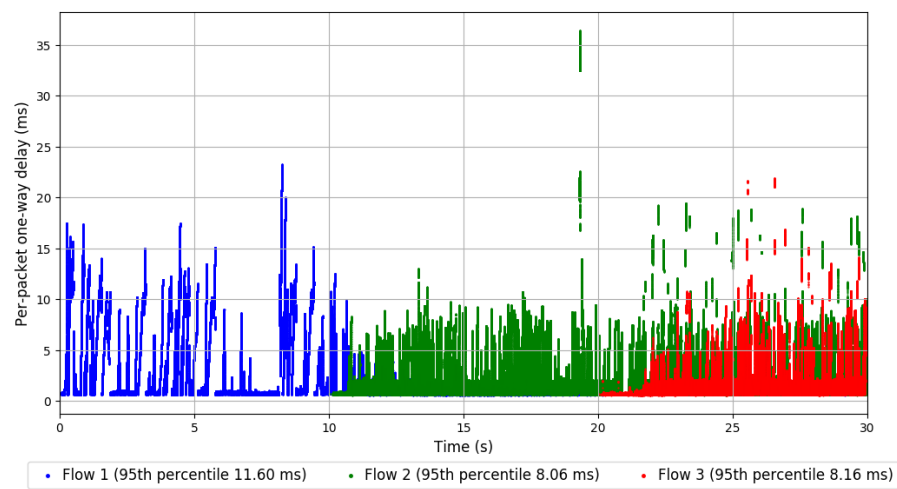
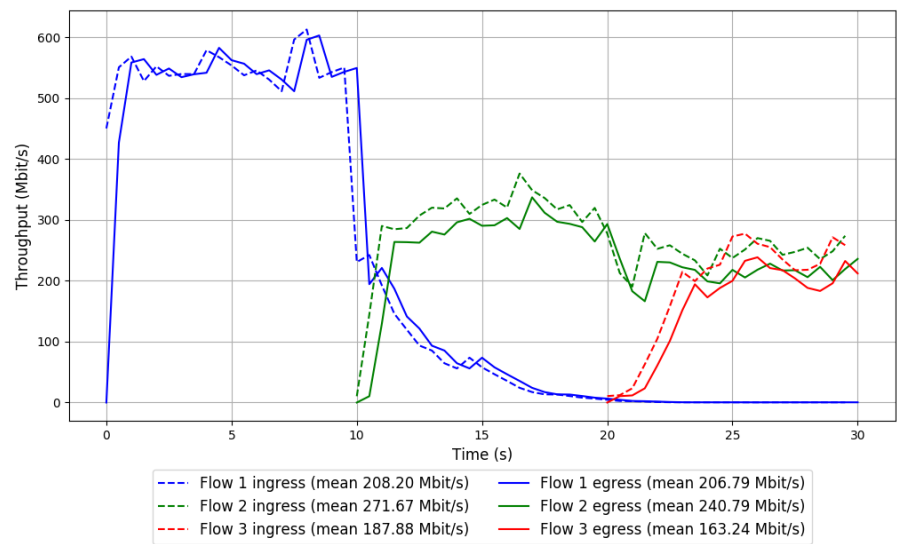
-- Flow 3:

Average throughput: 163.24 Mbit/s

95th percentile per-packet one-way delay: 8.156 ms

Loss rate: 13.07%

Run 2: Report of FillP-Sheep — Data Link



Run 3: Statistics of FillP-Sheep

Start at: 2019-11-24 08:49:34

End at: 2019-11-24 08:50:04

Local clock offset: 3.379 ms

Remote clock offset: 3.401 ms

# Below is generated by plot.py at 2019-11-24 10:45:19

# Datalink statistics

-- Total of 3 flows:

Average throughput: 503.19 Mbit/s

95th percentile per-packet one-way delay: 17.339 ms

Loss rate: 8.02%

-- Flow 1:

Average throughput: 332.40 Mbit/s

95th percentile per-packet one-way delay: 17.154 ms

Loss rate: 6.45%

-- Flow 2:

Average throughput: 241.60 Mbit/s

95th percentile per-packet one-way delay: 18.052 ms

Loss rate: 11.24%

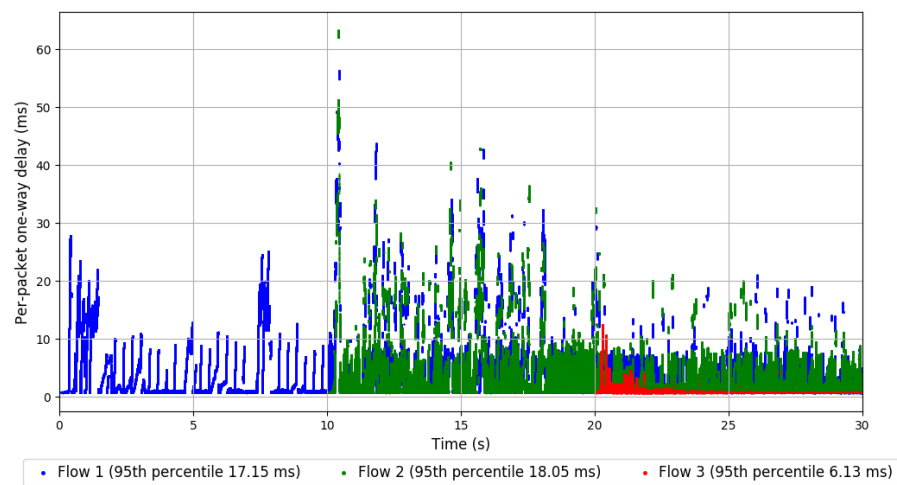
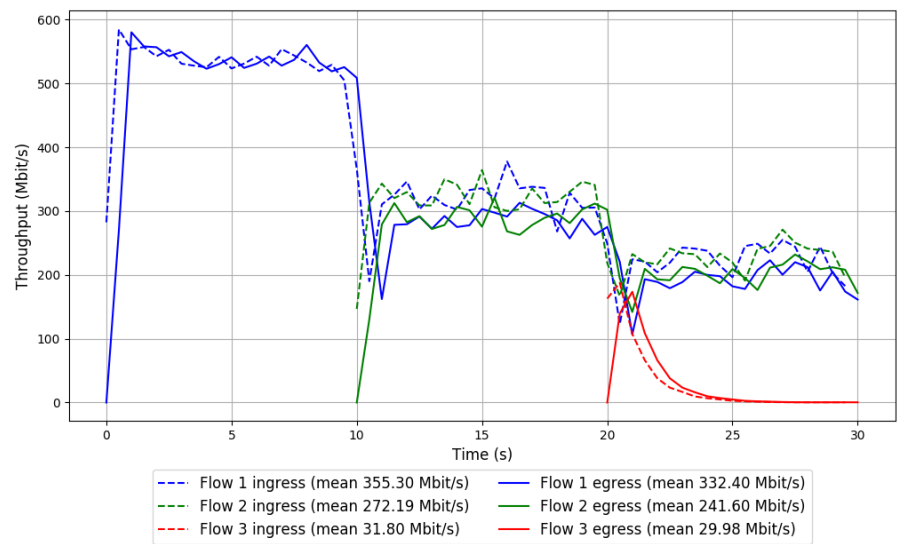
-- Flow 3:

Average throughput: 29.98 Mbit/s

95th percentile per-packet one-way delay: 6.129 ms

Loss rate: 5.73%

Run 3: Report of FillP-Sheep — Data Link

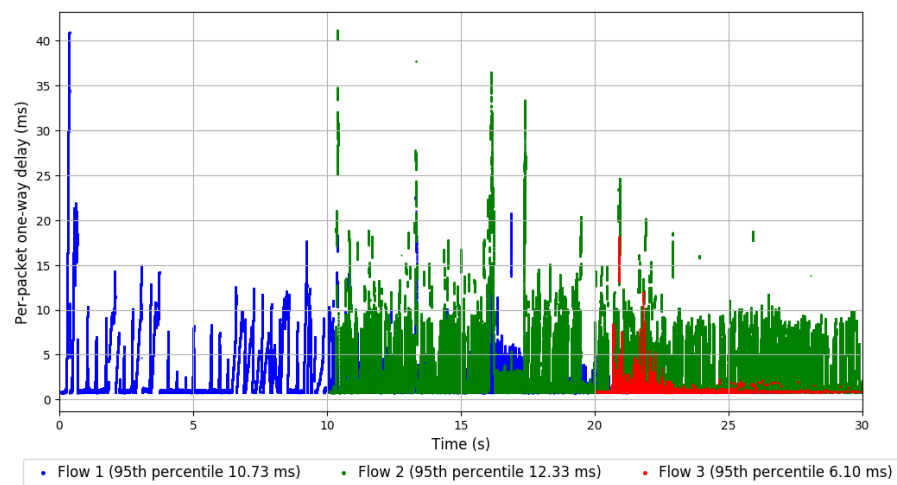
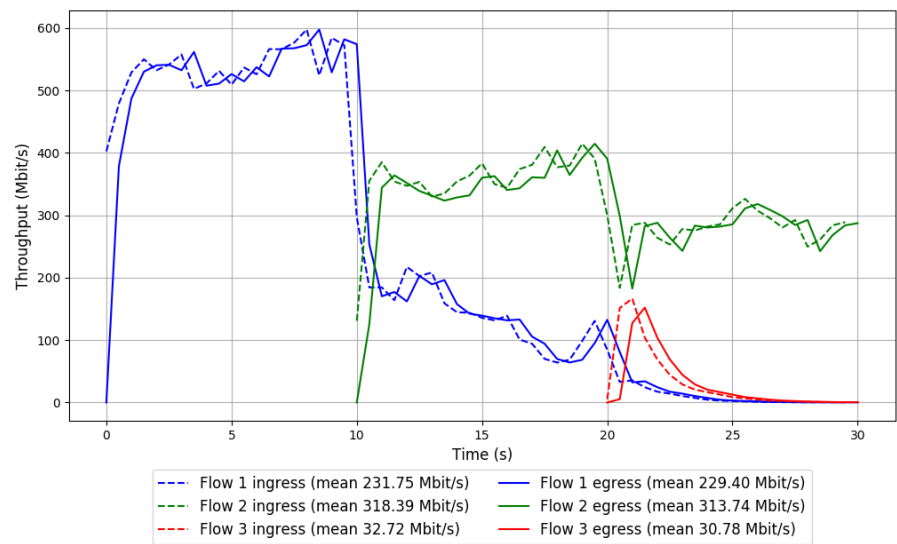


#### Run 4: Statistics of FillP-Sheep

Start at: 2019-11-24 09:25:07  
End at: 2019-11-24 09:25:37  
Local clock offset: 2.954 ms  
Remote clock offset: -3.766 ms

```
# Below is generated by plot.py at 2019-11-24 10:45:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 448.26 Mbit/s
95th percentile per-packet one-way delay: 11.418 ms
Loss rate: 1.34%
-- Flow 1:
Average throughput: 229.40 Mbit/s
95th percentile per-packet one-way delay: 10.733 ms
Loss rate: 1.01%
-- Flow 2:
Average throughput: 313.74 Mbit/s
95th percentile per-packet one-way delay: 12.326 ms
Loss rate: 1.46%
-- Flow 3:
Average throughput: 30.78 Mbit/s
95th percentile per-packet one-way delay: 6.104 ms
Loss rate: 5.95%
```

Run 4: Report of FillP-Sheep — Data Link



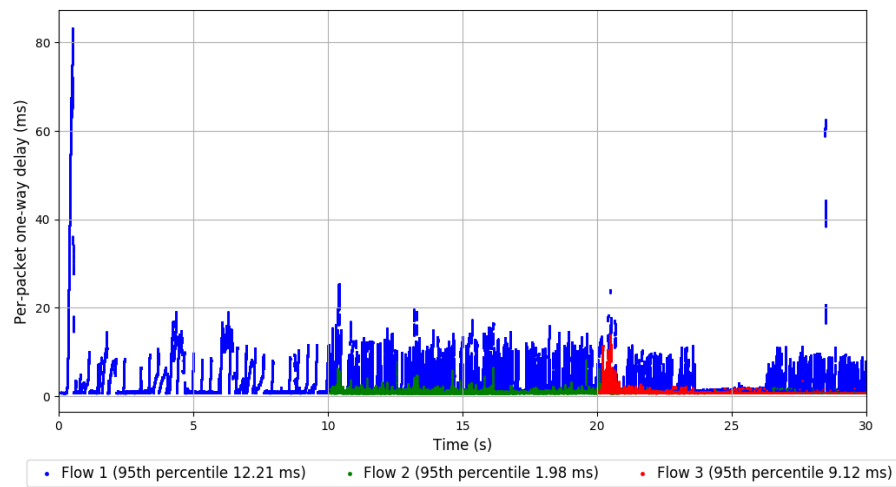
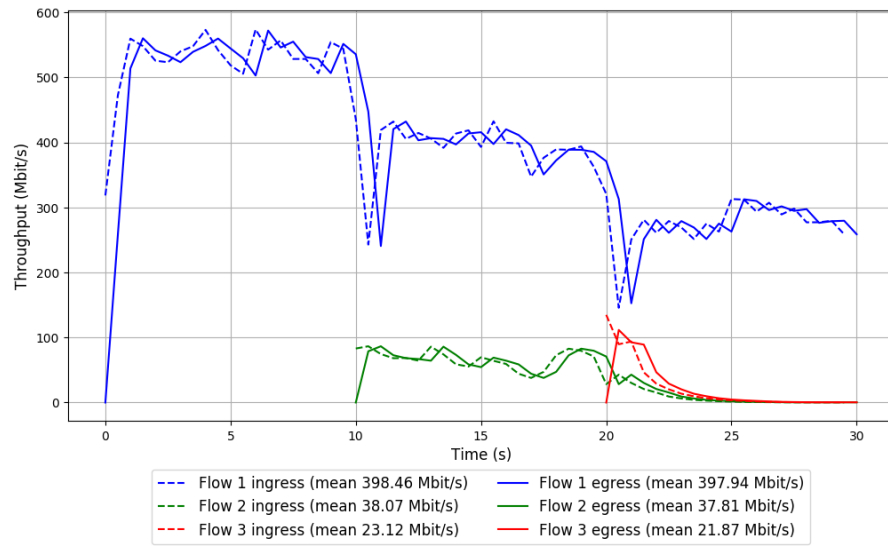


Run 5: Statistics of FillP-Sheep

Start at: 2019-11-24 10:00:29  
End at: 2019-11-24 10:00:59  
Local clock offset: 3.047 ms  
Remote clock offset: -6.601 ms

# Below is generated by plot.py at 2019-11-24 10:45:19  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 430.31 Mbit/s  
95th percentile per-packet one-way delay: 12.029 ms  
Loss rate: 0.24%  
-- Flow 1:  
Average throughput: 397.94 Mbit/s  
95th percentile per-packet one-way delay: 12.209 ms  
Loss rate: 0.11%  
-- Flow 2:  
Average throughput: 37.81 Mbit/s  
95th percentile per-packet one-way delay: 1.984 ms  
Loss rate: 0.70%  
-- Flow 3:  
Average throughput: 21.87 Mbit/s  
95th percentile per-packet one-way delay: 9.115 ms  
Loss rate: 5.43%

## Run 5: Report of FillP-Sheep — Data Link



Run 1: Statistics of Indigo

Start at: 2019-11-24 07:21:24

End at: 2019-11-24 07:21:54

Local clock offset: 3.699 ms

Remote clock offset: 0.278 ms

# Below is generated by plot.py at 2019-11-24 10:45:19

# Datalink statistics

-- Total of 3 flows:

Average throughput: 400.02 Mbit/s

95th percentile per-packet one-way delay: 2.586 ms

Loss rate: 0.25%

-- Flow 1:

Average throughput: 212.37 Mbit/s

95th percentile per-packet one-way delay: 1.561 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 193.82 Mbit/s

95th percentile per-packet one-way delay: 3.062 ms

Loss rate: 0.27%

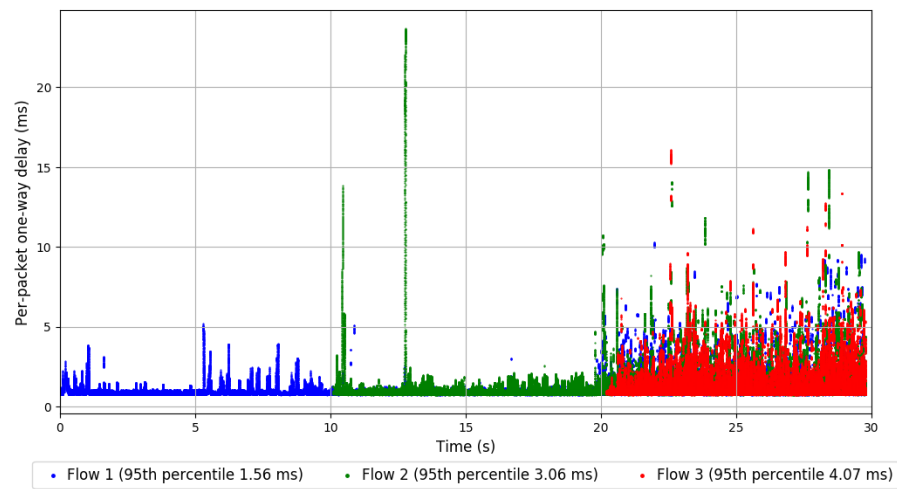
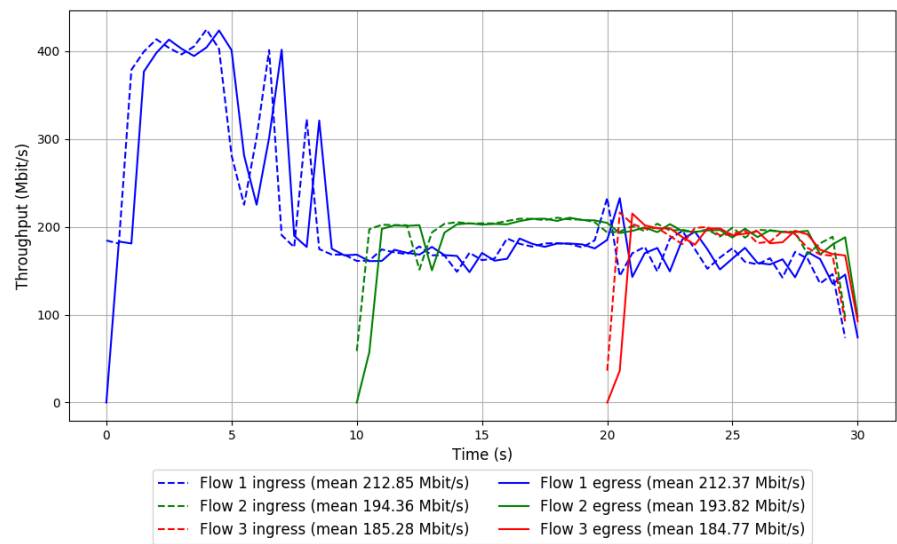
-- Flow 3:

Average throughput: 184.77 Mbit/s

95th percentile per-packet one-way delay: 4.070 ms

Loss rate: 0.26%

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2019-11-24 07:56:38

End at: 2019-11-24 07:57:08

Local clock offset: 4.506 ms

Remote clock offset: 1.509 ms

# Below is generated by plot.py at 2019-11-24 10:45:19

# Datalink statistics

-- Total of 3 flows:

Average throughput: 394.49 Mbit/s

95th percentile per-packet one-way delay: 3.253 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 201.74 Mbit/s

95th percentile per-packet one-way delay: 2.816 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 197.27 Mbit/s

95th percentile per-packet one-way delay: 3.208 ms

Loss rate: 0.00%

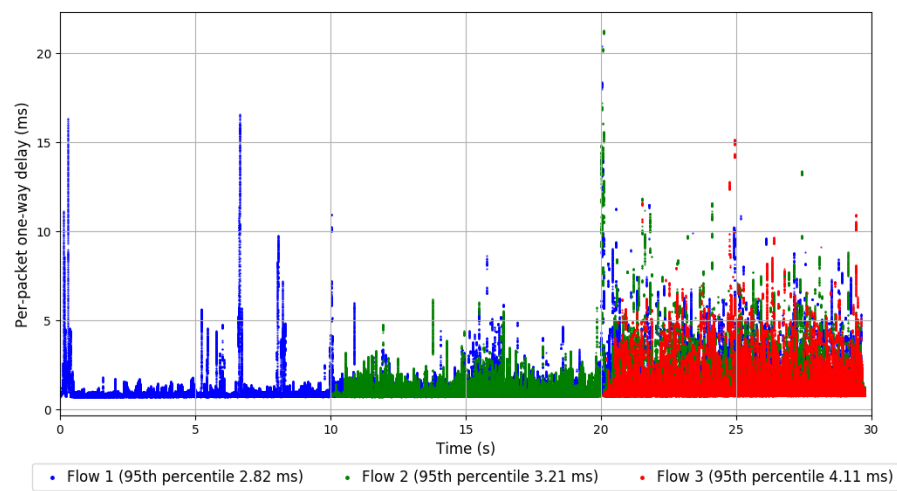
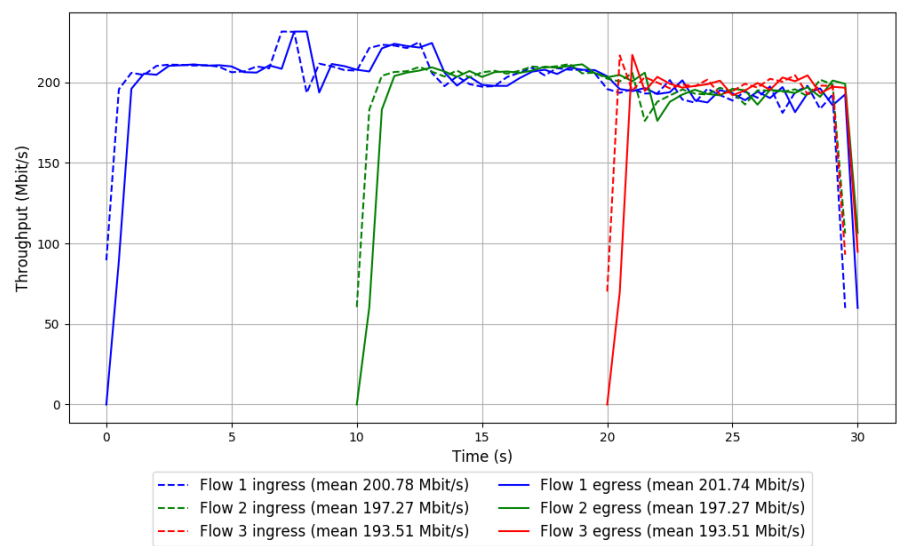
-- Flow 3:

Average throughput: 193.51 Mbit/s

95th percentile per-packet one-way delay: 4.107 ms

Loss rate: 0.00%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2019-11-24 08:31:43

End at: 2019-11-24 08:32:13

Local clock offset: 3.555 ms

Remote clock offset: 1.139 ms

# Below is generated by plot.py at 2019-11-24 10:45:19

# Datalink statistics

-- Total of 3 flows:

Average throughput: 383.38 Mbit/s

95th percentile per-packet one-way delay: 2.628 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 201.50 Mbit/s

95th percentile per-packet one-way delay: 2.656 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 182.64 Mbit/s

95th percentile per-packet one-way delay: 1.535 ms

Loss rate: 0.00%

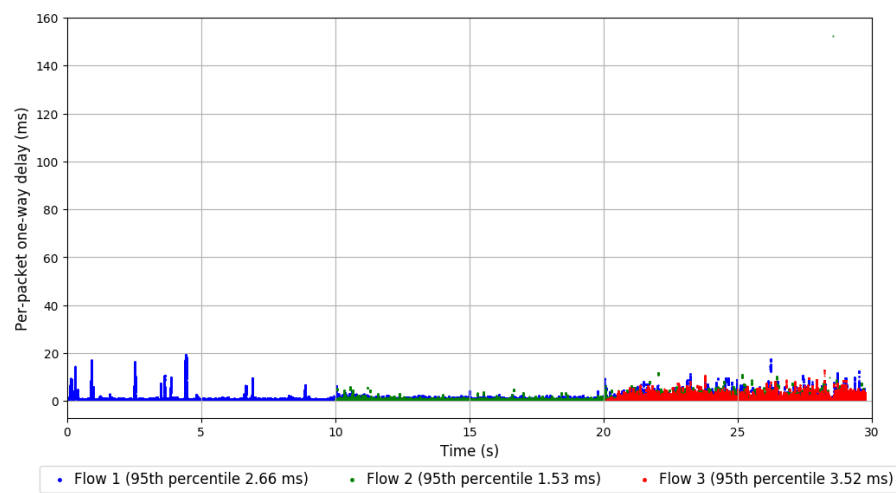
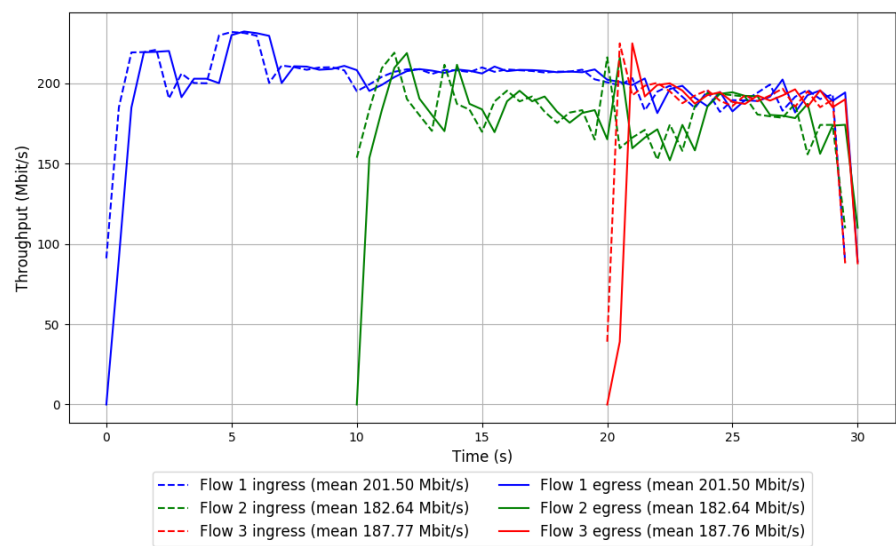
-- Flow 3:

Average throughput: 187.76 Mbit/s

95th percentile per-packet one-way delay: 3.519 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link





Run 4: Statistics of Indigo

Start at: 2019-11-24 09:07:25

End at: 2019-11-24 09:07:55

Local clock offset: 3.287 ms

Remote clock offset: 0.679 ms

# Below is generated by plot.py at 2019-11-24 10:45:19

# Datalink statistics

-- Total of 3 flows:

Average throughput: 378.48 Mbit/s

95th percentile per-packet one-way delay: 3.164 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 194.05 Mbit/s

95th percentile per-packet one-way delay: 1.549 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 189.54 Mbit/s

95th percentile per-packet one-way delay: 3.676 ms

Loss rate: 0.00%

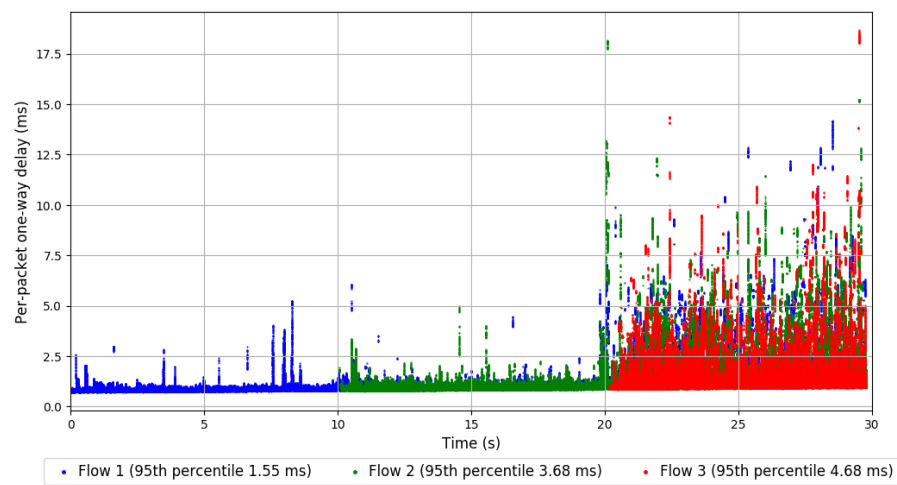
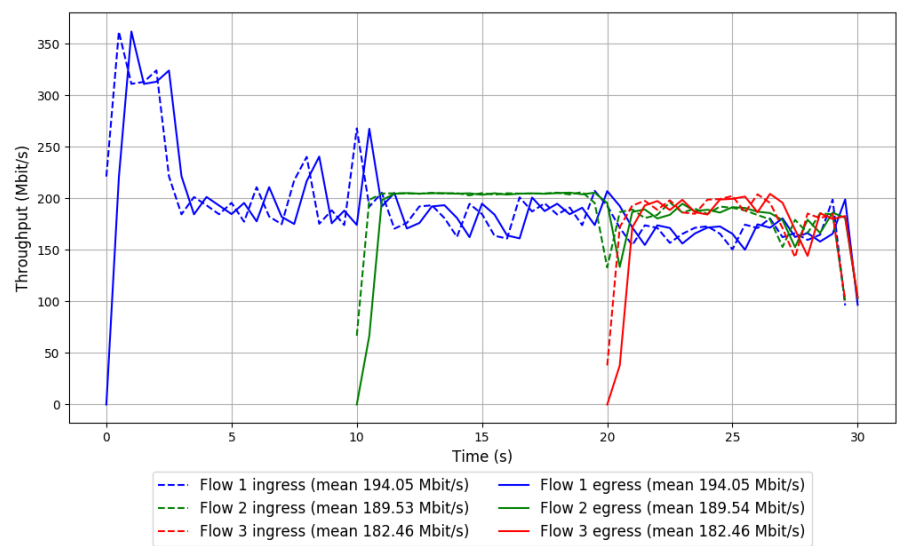
-- Flow 3:

Average throughput: 182.46 Mbit/s

95th percentile per-packet one-way delay: 4.683 ms

Loss rate: 0.01%

Run 4: Report of Indigo — Data Link

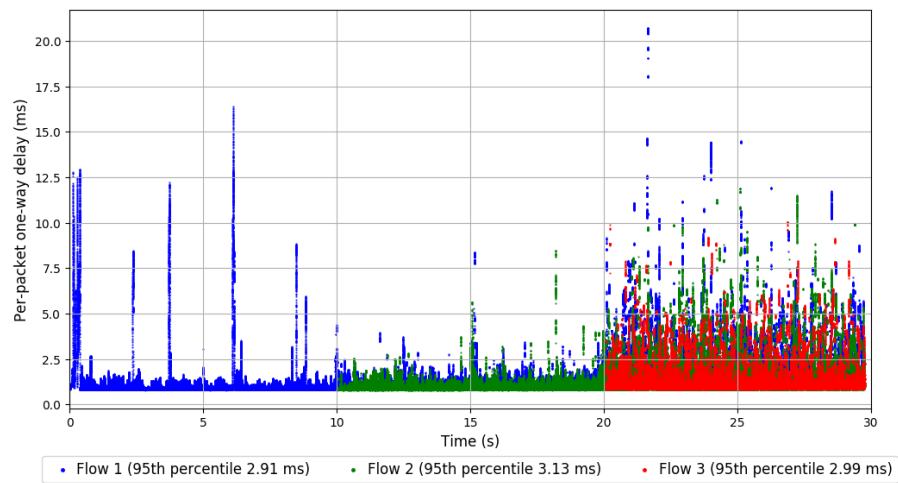
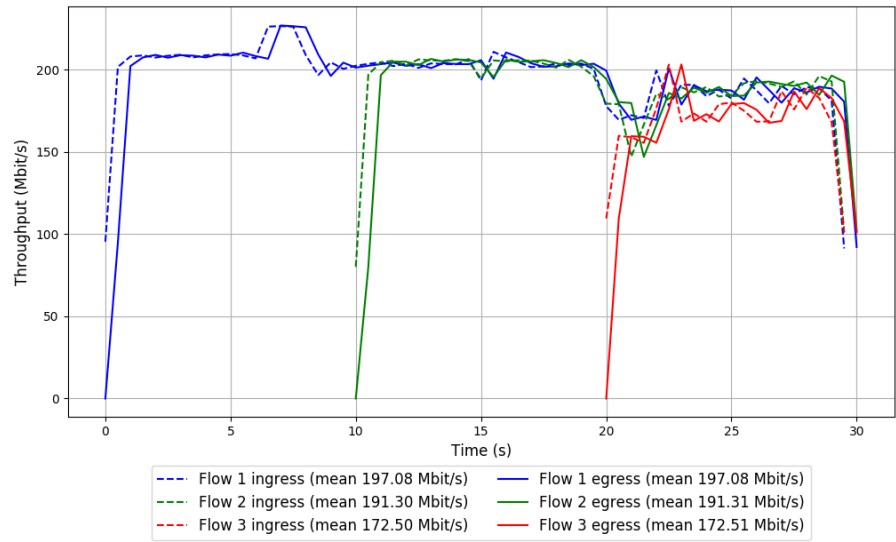


Run 5: Statistics of Indigo

Start at: 2019-11-24 09:42:32  
End at: 2019-11-24 09:43:02  
Local clock offset: 2.899 ms  
Remote clock offset: -5.304 ms

# Below is generated by plot.py at 2019-11-24 10:47:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 380.07 Mbit/s  
95th percentile per-packet one-way delay: 3.005 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 197.08 Mbit/s  
95th percentile per-packet one-way delay: 2.909 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 191.31 Mbit/s  
95th percentile per-packet one-way delay: 3.128 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 172.51 Mbit/s  
95th percentile per-packet one-way delay: 2.992 ms  
Loss rate: 0.00%

## Run 5: Report of Indigo — Data Link



Run 1: Statistics of Indigo-MusesC3

Start at: 2019-11-24 07:46:15

End at: 2019-11-24 07:46:45

Local clock offset: 4.424 ms

Remote clock offset: 1.729 ms

# Below is generated by plot.py at 2019-11-24 10:51:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 763.89 Mbit/s

95th percentile per-packet one-way delay: 8.002 ms

Loss rate: 2.35%

-- Flow 1:

Average throughput: 480.15 Mbit/s

95th percentile per-packet one-way delay: 9.680 ms

Loss rate: 1.83%

-- Flow 2:

Average throughput: 342.48 Mbit/s

95th percentile per-packet one-way delay: 3.736 ms

Loss rate: 3.60%

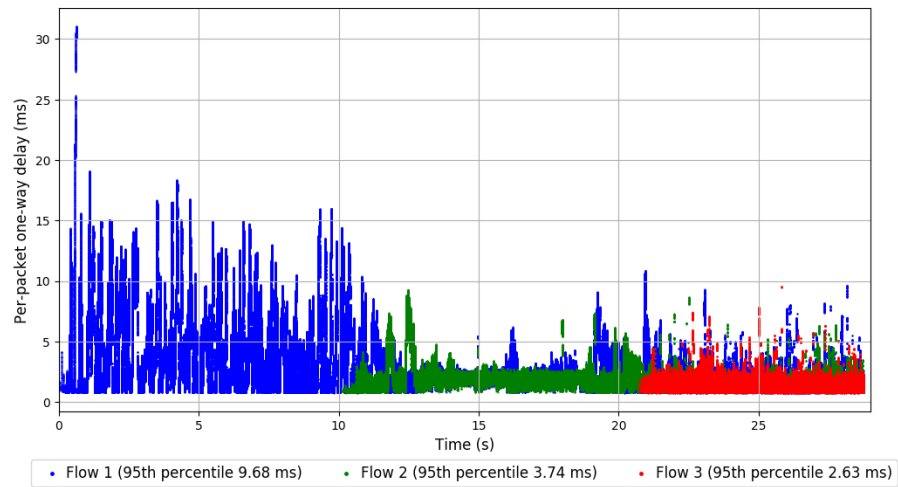
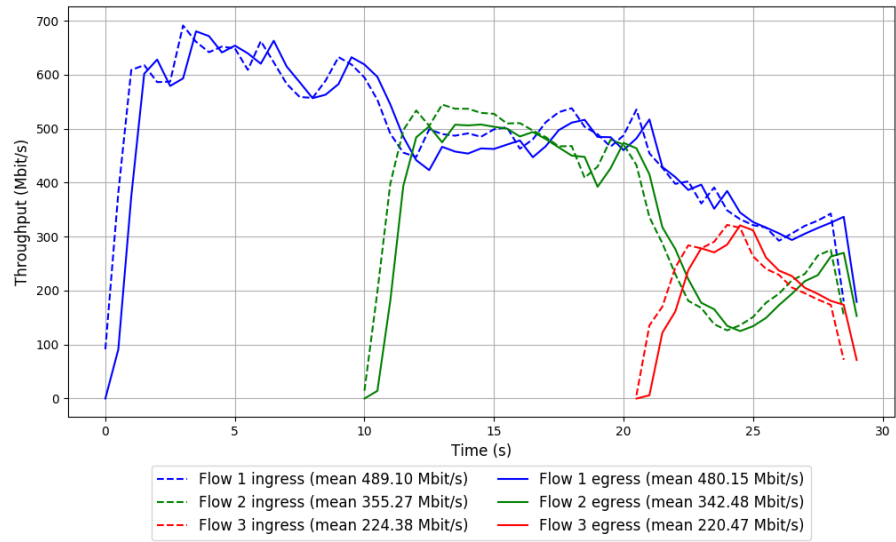
-- Flow 3:

Average throughput: 220.47 Mbit/s

95th percentile per-packet one-way delay: 2.634 ms

Loss rate: 1.75%

# Run 1: Report of Indigo-MusesC3 — Data Link



Run 2: Statistics of Indigo-MusesC3

Start at: 2019-11-24 08:21:25

End at: 2019-11-24 08:21:55

Local clock offset: 3.733 ms

Remote clock offset: 0.216 ms

# Below is generated by plot.py at 2019-11-24 10:52:10

# Datalink statistics

-- Total of 3 flows:

Average throughput: 738.34 Mbit/s

95th percentile per-packet one-way delay: 8.225 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 439.51 Mbit/s

95th percentile per-packet one-way delay: 10.055 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 423.76 Mbit/s

95th percentile per-packet one-way delay: 5.370 ms

Loss rate: 0.61%

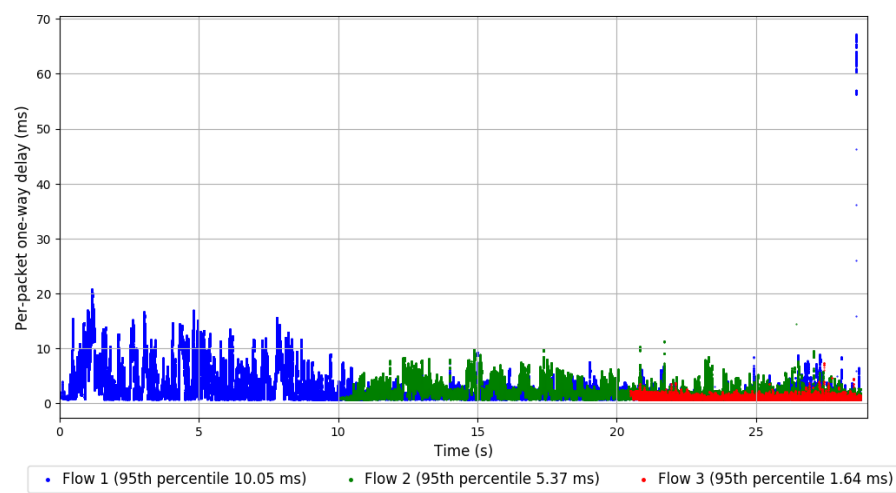
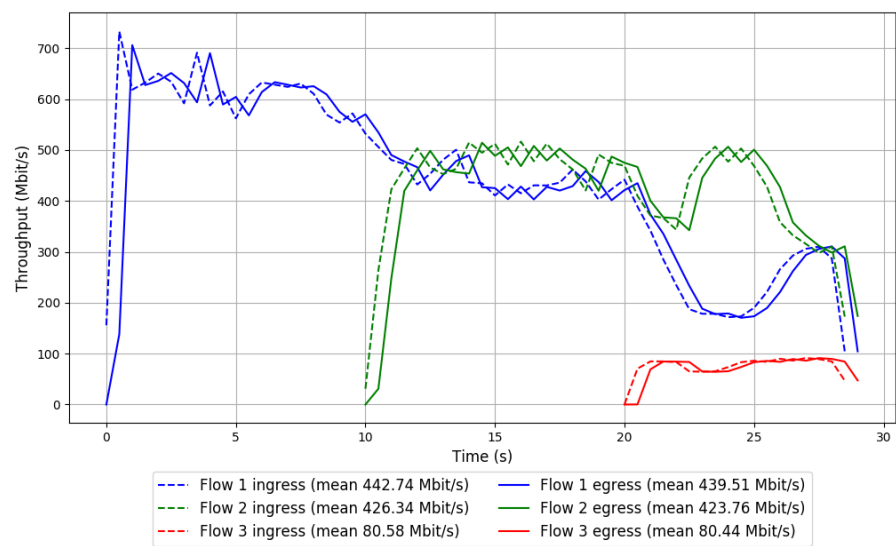
-- Flow 3:

Average throughput: 80.44 Mbit/s

95th percentile per-packet one-way delay: 1.635 ms

Loss rate: 0.19%

Run 2: Report of Indigo-MusesC3 — Data Link





Run 3: Statistics of Indigo-MusesC3

Start at: 2019-11-24 08:56:51

End at: 2019-11-24 08:57:21

Local clock offset: 3.351 ms

Remote clock offset: 3.771 ms

# Below is generated by plot.py at 2019-11-24 10:52:30

# Datalink statistics

-- Total of 3 flows:

Average throughput: 752.71 Mbit/s

95th percentile per-packet one-way delay: 5.344 ms

Loss rate: 1.15%

-- Flow 1:

Average throughput: 445.88 Mbit/s

95th percentile per-packet one-way delay: 6.544 ms

Loss rate: 0.86%

-- Flow 2:

Average throughput: 331.84 Mbit/s

95th percentile per-packet one-way delay: 2.373 ms

Loss rate: 1.77%

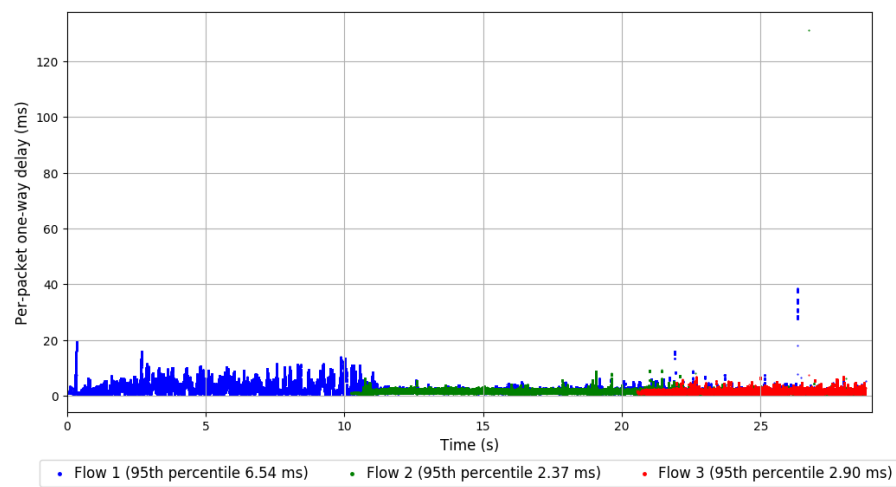
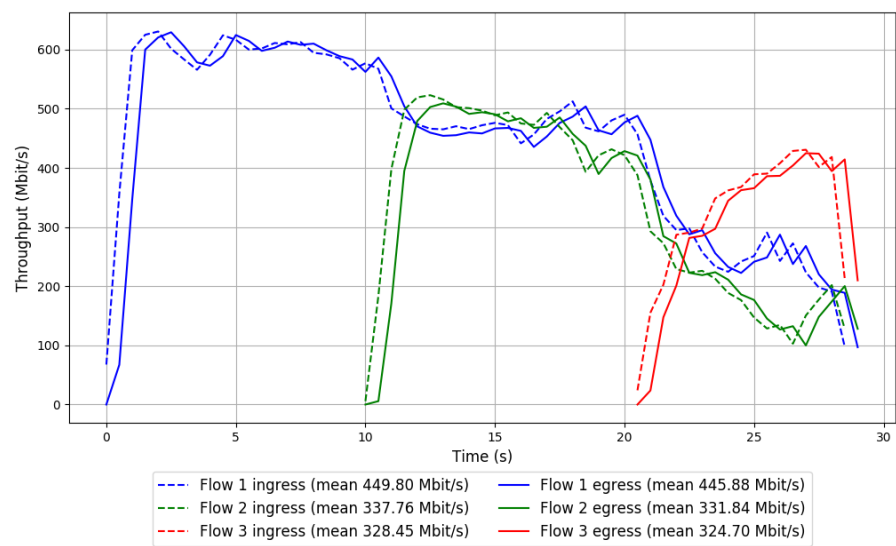
-- Flow 3:

Average throughput: 324.70 Mbit/s

95th percentile per-packet one-way delay: 2.904 ms

Loss rate: 1.13%

Run 3: Report of Indigo-MusesC3 — Data Link

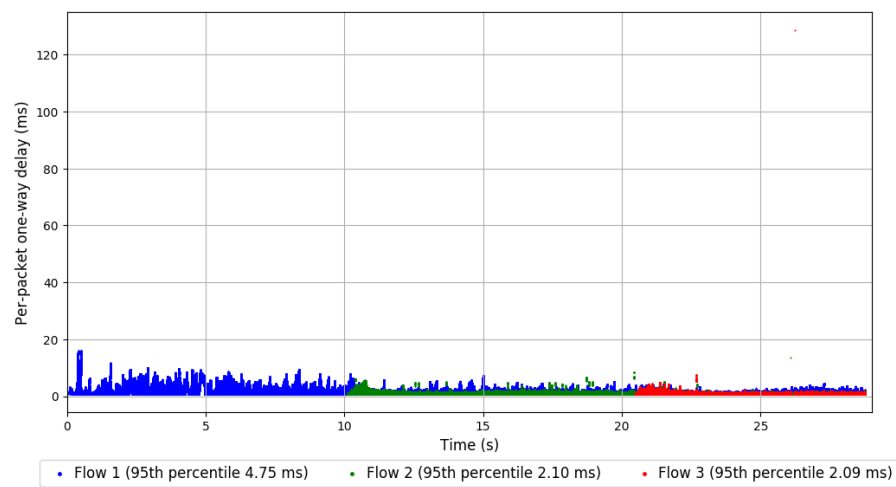
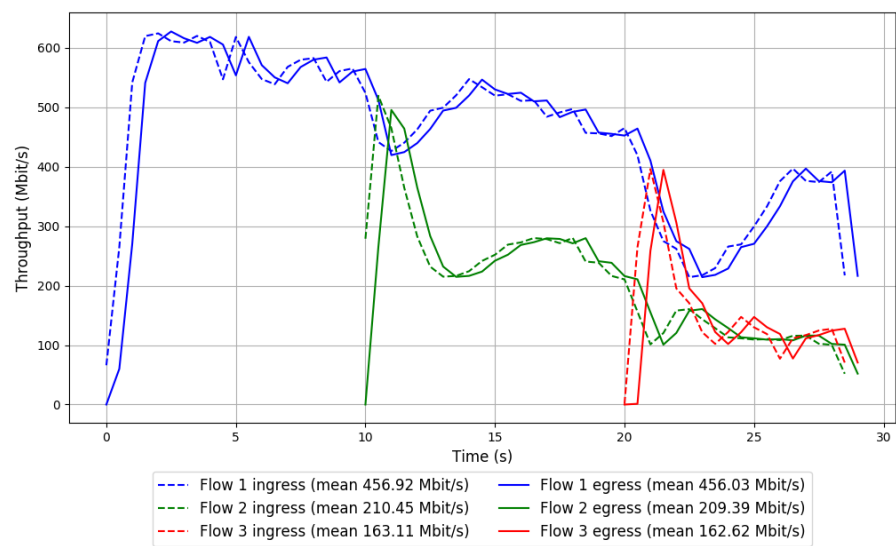


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-11-24 09:32:16  
End at: 2019-11-24 09:32:46  
Local clock offset: 2.898 ms  
Remote clock offset: -4.534 ms

# Below is generated by plot.py at 2019-11-24 10:52:30  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 638.70 Mbit/s  
95th percentile per-packet one-way delay: 4.181 ms  
Loss rate: 0.27%  
-- Flow 1:  
Average throughput: 456.03 Mbit/s  
95th percentile per-packet one-way delay: 4.746 ms  
Loss rate: 0.19%  
-- Flow 2:  
Average throughput: 209.39 Mbit/s  
95th percentile per-packet one-way delay: 2.103 ms  
Loss rate: 0.50%  
-- Flow 3:  
Average throughput: 162.62 Mbit/s  
95th percentile per-packet one-way delay: 2.091 ms  
Loss rate: 0.30%

Run 4: Report of Indigo-MusesC3 — Data Link

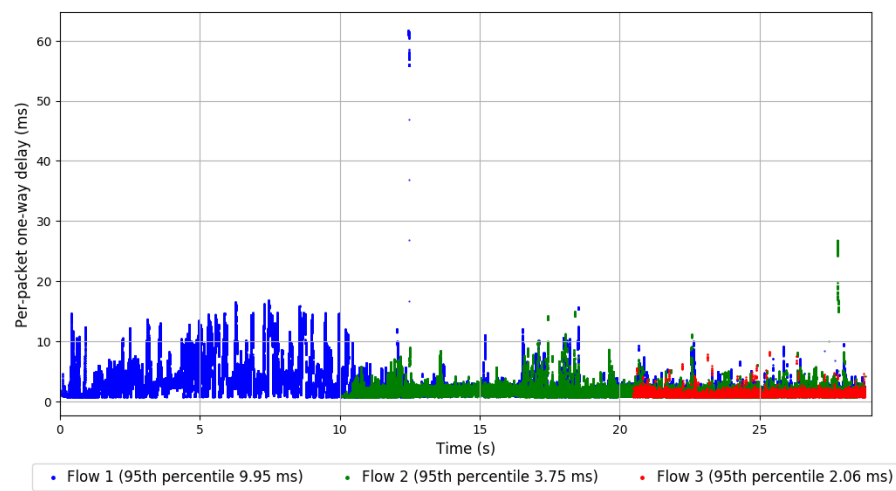
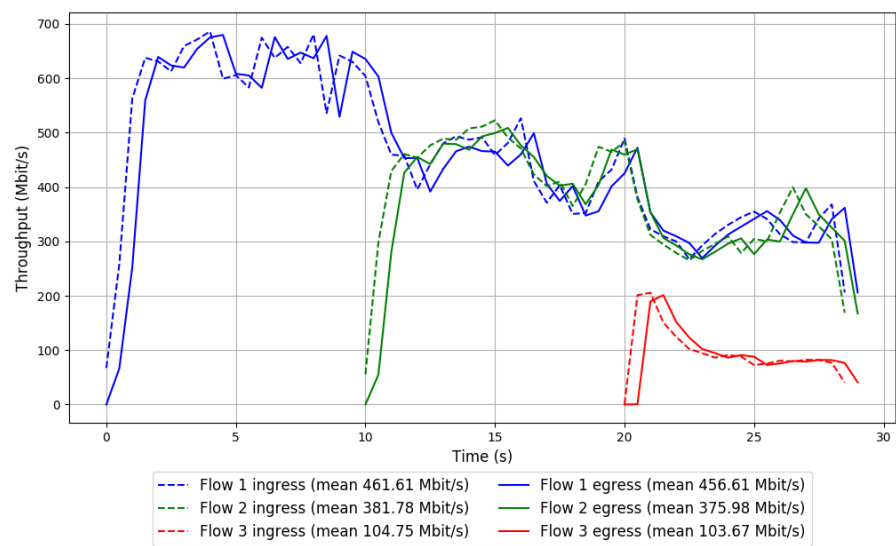


Run 5: Statistics of Indigo-MusesC3

Start at: 2019-11-24 10:07:35  
End at: 2019-11-24 10:08:05  
Local clock offset: 3.003 ms  
Remote clock offset: -7.105 ms

# Below is generated by plot.py at 2019-11-24 10:52:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 730.87 Mbit/s  
95th percentile per-packet one-way delay: 8.081 ms  
Loss rate: 1.22%  
-- Flow 1:  
Average throughput: 456.61 Mbit/s  
95th percentile per-packet one-way delay: 9.947 ms  
Loss rate: 1.09%  
-- Flow 2:  
Average throughput: 375.98 Mbit/s  
95th percentile per-packet one-way delay: 3.755 ms  
Loss rate: 1.50%  
-- Flow 3:  
Average throughput: 103.67 Mbit/s  
95th percentile per-packet one-way delay: 2.055 ms  
Loss rate: 1.03%

Run 5: Report of Indigo-MusesC3 — Data Link



Run 1: Statistics of Indigo-MusesC5

Start at: 2019-11-24 07:44:52

End at: 2019-11-24 07:45:22

Local clock offset: 4.455 ms

Remote clock offset: 1.515 ms

# Below is generated by plot.py at 2019-11-24 10:52:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 222.69 Mbit/s

95th percentile per-packet one-way delay: 2.212 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 70.68 Mbit/s

95th percentile per-packet one-way delay: 2.214 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 181.36 Mbit/s

95th percentile per-packet one-way delay: 2.426 ms

Loss rate: 0.08%

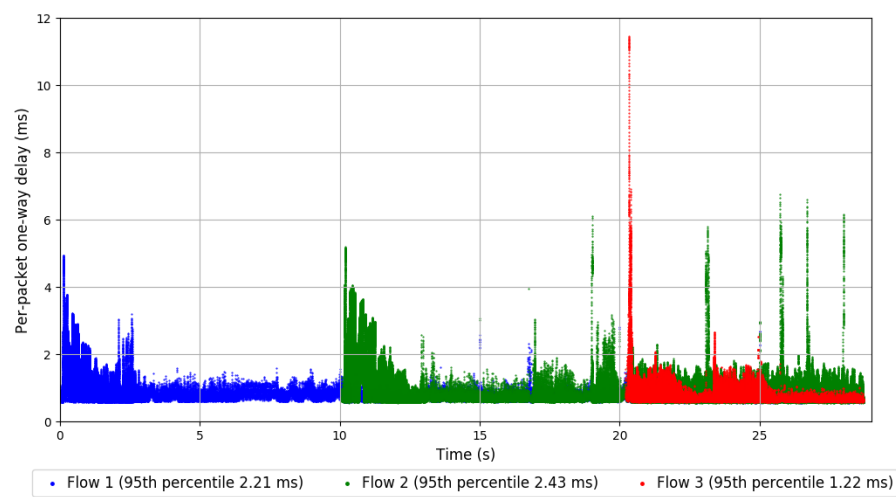
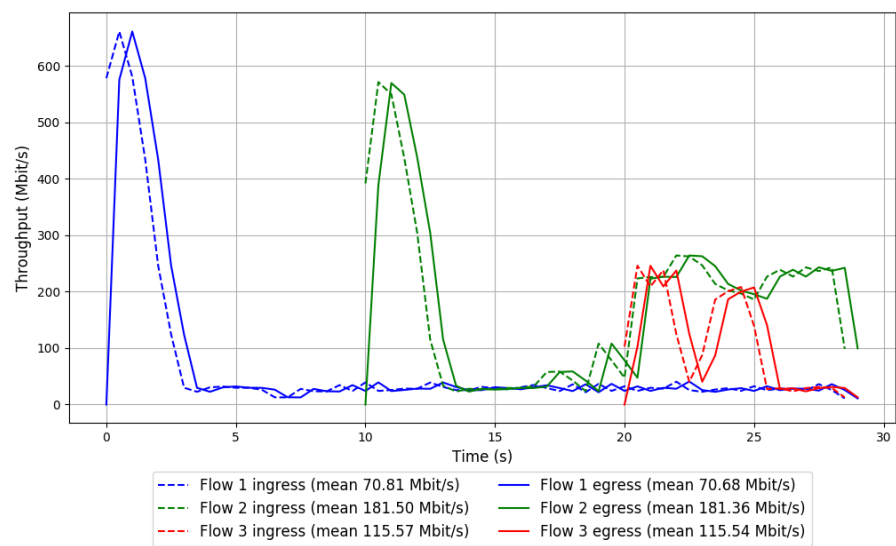
-- Flow 3:

Average throughput: 115.54 Mbit/s

95th percentile per-packet one-way delay: 1.220 ms

Loss rate: 0.03%

Run 1: Report of Indigo-MusesC5 — Data Link





Run 2: Statistics of Indigo-MusesC5

Start at: 2019-11-24 08:19:56

End at: 2019-11-24 08:20:26

Local clock offset: 3.815 ms

Remote clock offset: 0.299 ms

# Below is generated by plot.py at 2019-11-24 10:52:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 454.51 Mbit/s

95th percentile per-packet one-way delay: 7.230 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 77.70 Mbit/s

95th percentile per-packet one-way delay: 5.035 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 501.70 Mbit/s

95th percentile per-packet one-way delay: 7.925 ms

Loss rate: 0.64%

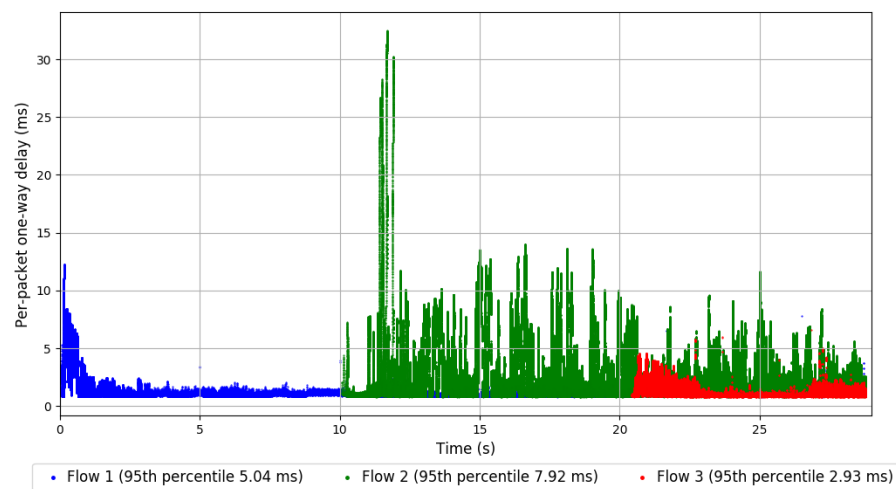
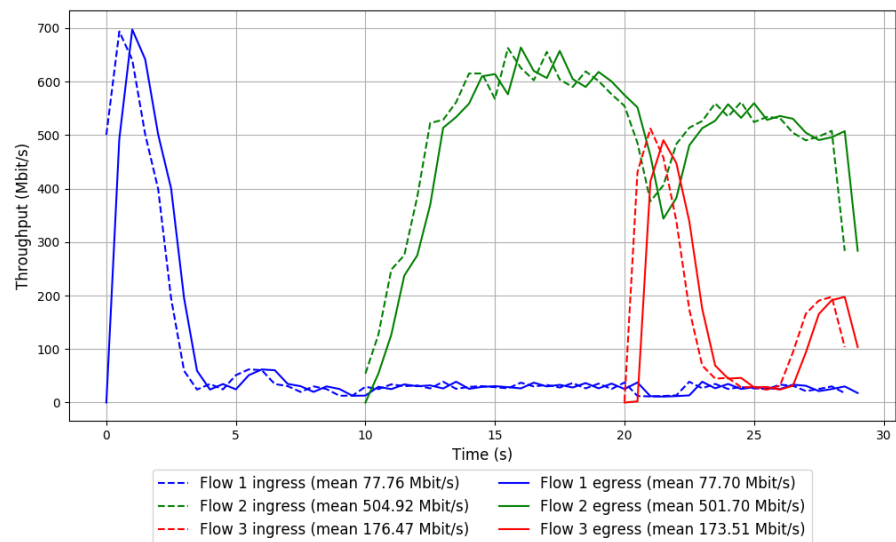
-- Flow 3:

Average throughput: 173.51 Mbit/s

95th percentile per-packet one-way delay: 2.932 ms

Loss rate: 1.67%

Run 2: Report of Indigo-MusesC5 — Data Link



Run 3: Statistics of Indigo-MusesC5

Start at: 2019-11-24 08:55:17

End at: 2019-11-24 08:55:47

Local clock offset: 3.336 ms

Remote clock offset: 3.642 ms

# Below is generated by plot.py at 2019-11-24 10:53:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 594.33 Mbit/s

95th percentile per-packet one-way delay: 8.156 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 504.63 Mbit/s

95th percentile per-packet one-way delay: 8.501 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 89.94 Mbit/s

95th percentile per-packet one-way delay: 1.286 ms

Loss rate: 0.21%

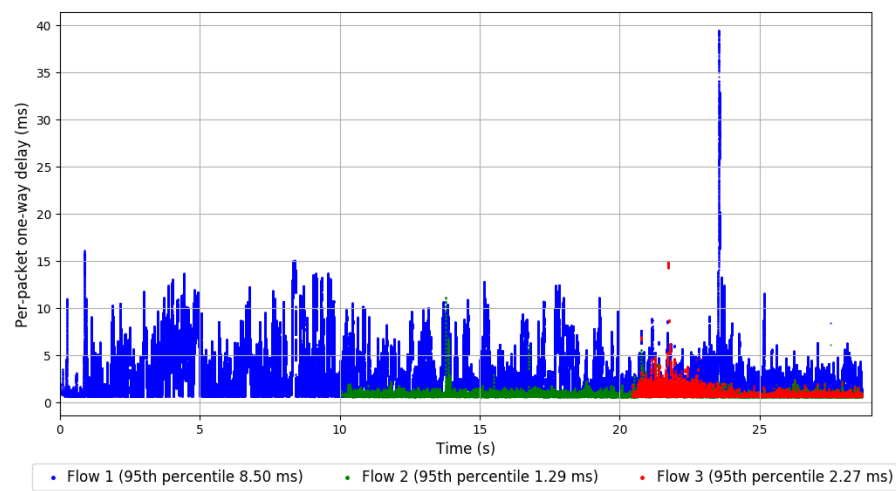
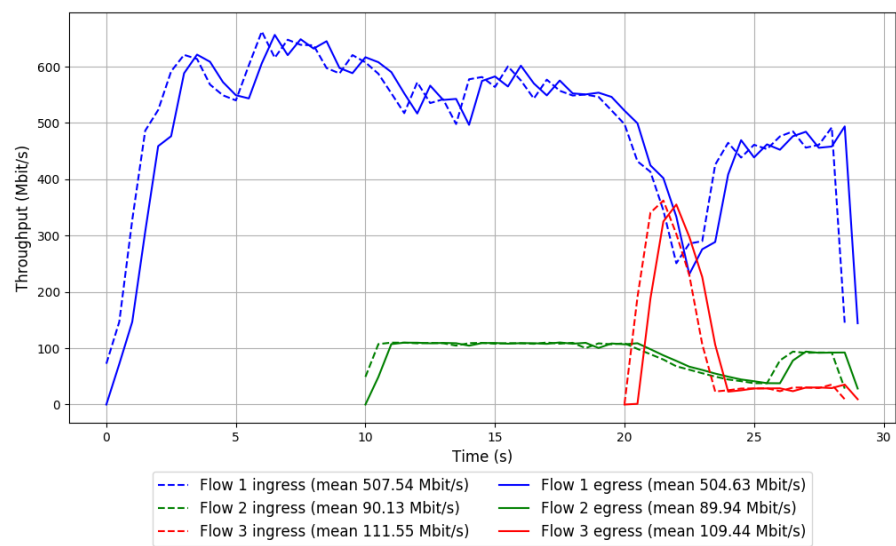
-- Flow 3:

Average throughput: 109.44 Mbit/s

95th percentile per-packet one-way delay: 2.275 ms

Loss rate: 1.90%

Run 3: Report of Indigo-MusesC5 — Data Link

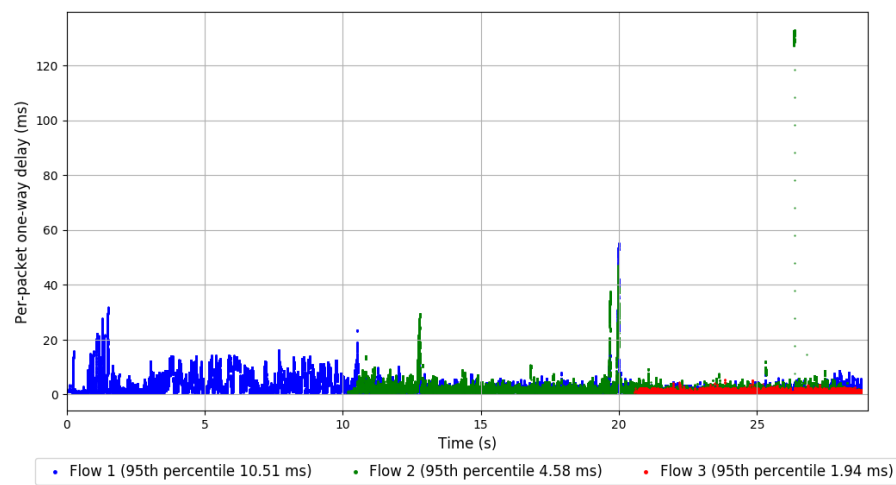
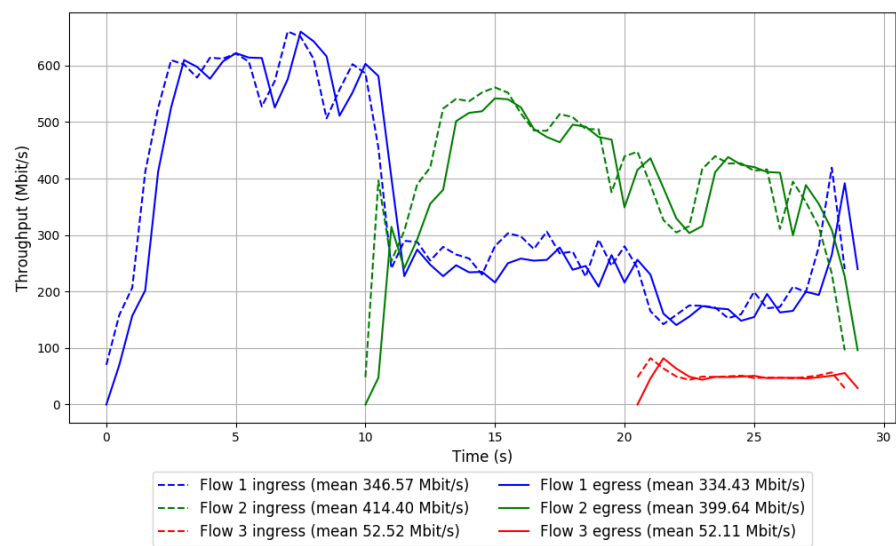


Run 4: Statistics of Indigo-MusesC5

Start at: 2019-11-24 09:30:41  
End at: 2019-11-24 09:31:11  
Local clock offset: 2.906 ms  
Remote clock offset: -4.368 ms

# Below is generated by plot.py at 2019-11-24 10:54:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 607.62 Mbit/s  
95th percentile per-packet one-way delay: 8.824 ms  
Loss rate: 3.48%  
-- Flow 1:  
Average throughput: 334.43 Mbit/s  
95th percentile per-packet one-way delay: 10.505 ms  
Loss rate: 3.50%  
-- Flow 2:  
Average throughput: 399.64 Mbit/s  
95th percentile per-packet one-way delay: 4.582 ms  
Loss rate: 3.60%  
-- Flow 3:  
Average throughput: 52.11 Mbit/s  
95th percentile per-packet one-way delay: 1.942 ms  
Loss rate: 0.84%

Run 4: Report of Indigo-MusesC5 — Data Link

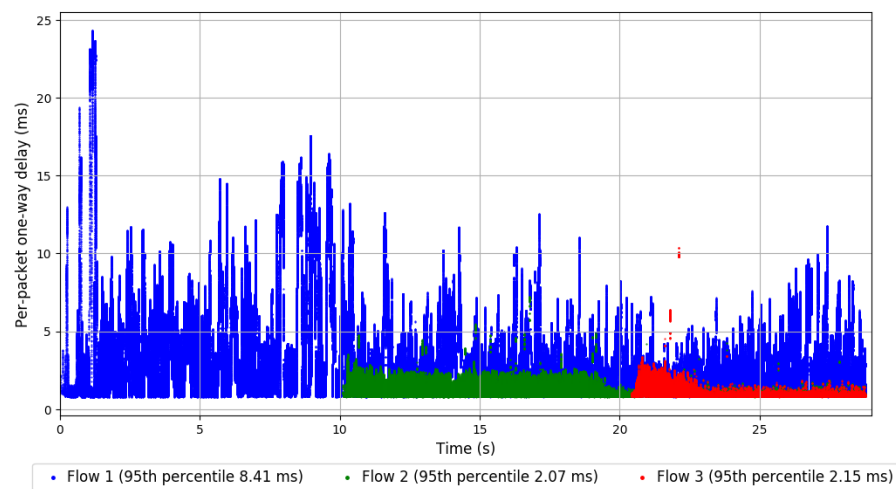
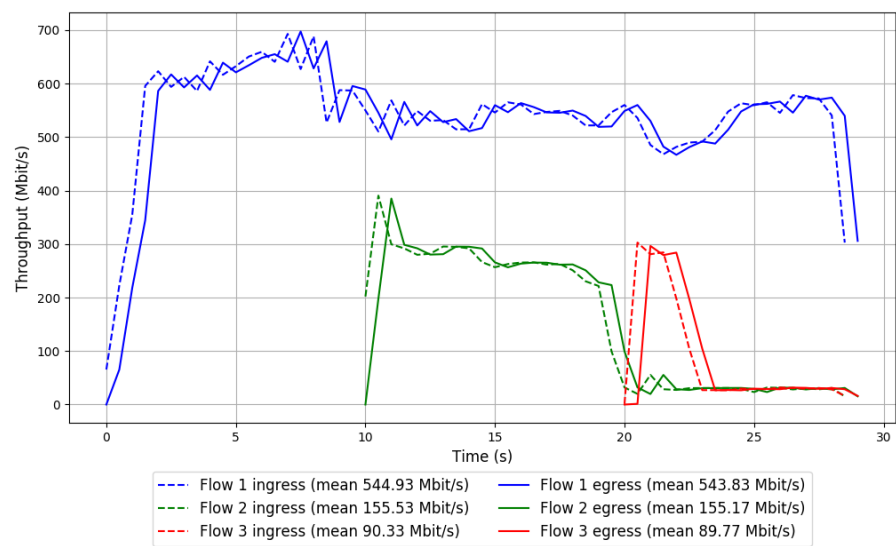


Run 5: Statistics of Indigo-MusesC5

Start at: 2019-11-24 10:05:59  
End at: 2019-11-24 10:06:29  
Local clock offset: 3.022 ms  
Remote clock offset: -6.933 ms

# Below is generated by plot.py at 2019-11-24 10:57:40  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 670.48 Mbit/s  
95th percentile per-packet one-way delay: 7.749 ms  
Loss rate: 0.22%  
-- Flow 1:  
Average throughput: 543.83 Mbit/s  
95th percentile per-packet one-way delay: 8.406 ms  
Loss rate: 0.20%  
-- Flow 2:  
Average throughput: 155.17 Mbit/s  
95th percentile per-packet one-way delay: 2.066 ms  
Loss rate: 0.23%  
-- Flow 3:  
Average throughput: 89.77 Mbit/s  
95th percentile per-packet one-way delay: 2.152 ms  
Loss rate: 0.61%

Run 5: Report of Indigo-MusesC5 — Data Link





Run 1: Statistics of Indigo-MusesD

Start at: 2019-11-24 07:47:54

End at: 2019-11-24 07:48:24

Local clock offset: 4.432 ms

Remote clock offset: 1.727 ms

# Below is generated by plot.py at 2019-11-24 10:57:40

# Datalink statistics

-- Total of 3 flows:

Average throughput: 385.95 Mbit/s

95th percentile per-packet one-way delay: 9.305 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 145.07 Mbit/s

95th percentile per-packet one-way delay: 9.175 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 335.32 Mbit/s

95th percentile per-packet one-way delay: 9.503 ms

Loss rate: 0.06%

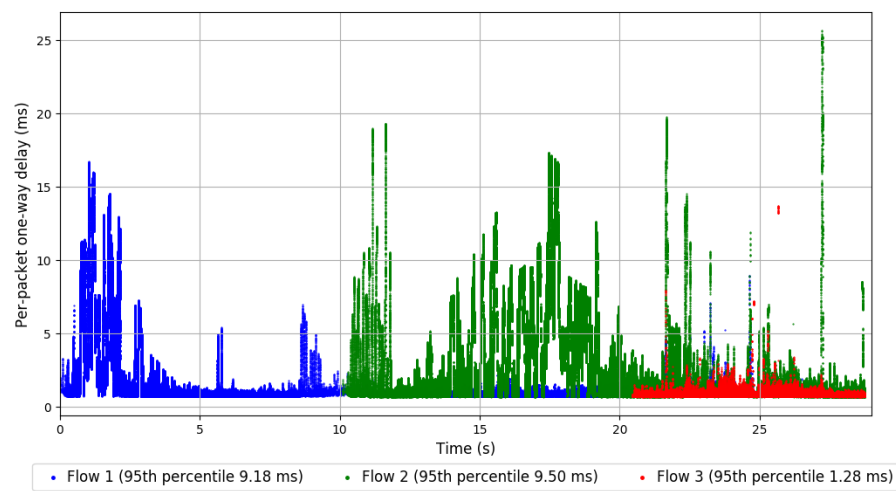
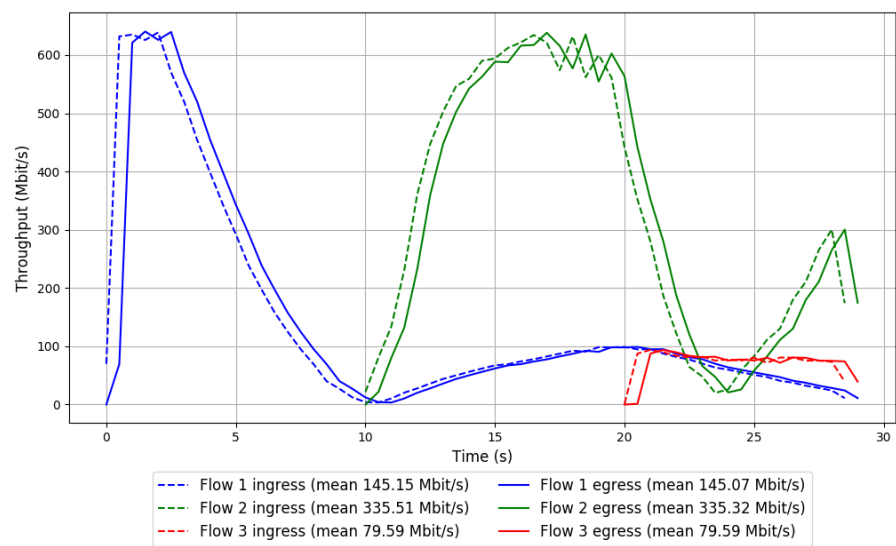
-- Flow 3:

Average throughput: 79.59 Mbit/s

95th percentile per-packet one-way delay: 1.282 ms

Loss rate: 0.00%

Run 1: Report of Indigo-MusesD — Data Link



Run 2: Statistics of Indigo-MusesD

Start at: 2019-11-24 08:23:03

End at: 2019-11-24 08:23:33

Local clock offset: 3.699 ms

Remote clock offset: 0.125 ms

# Below is generated by plot.py at 2019-11-24 10:59:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 685.71 Mbit/s

95th percentile per-packet one-way delay: 8.793 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 502.89 Mbit/s

95th percentile per-packet one-way delay: 9.626 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 233.45 Mbit/s

95th percentile per-packet one-way delay: 2.414 ms

Loss rate: 0.79%

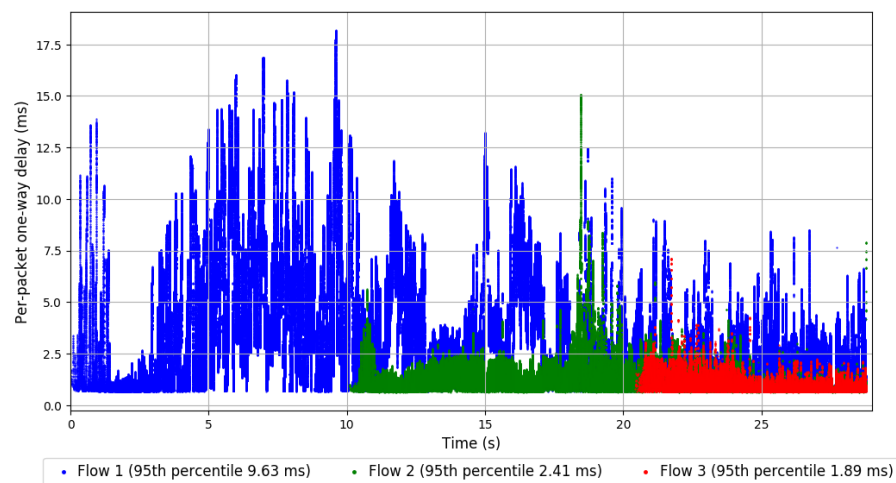
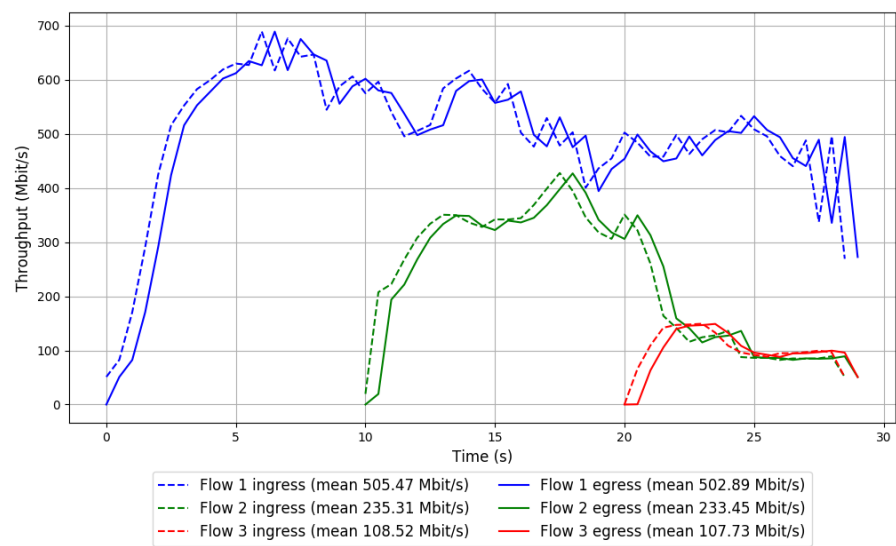
-- Flow 3:

Average throughput: 107.73 Mbit/s

95th percentile per-packet one-way delay: 1.888 ms

Loss rate: 0.73%

Run 2: Report of Indigo-MusesD — Data Link



Run 3: Statistics of Indigo-MusesD

Start at: 2019-11-24 08:58:30

End at: 2019-11-24 08:59:00

Local clock offset: 3.347 ms

Remote clock offset: 3.897 ms

# Below is generated by plot.py at 2019-11-24 10:59:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 647.13 Mbit/s

95th percentile per-packet one-way delay: 9.297 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 363.00 Mbit/s

95th percentile per-packet one-way delay: 11.274 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 321.90 Mbit/s

95th percentile per-packet one-way delay: 5.273 ms

Loss rate: 0.27%

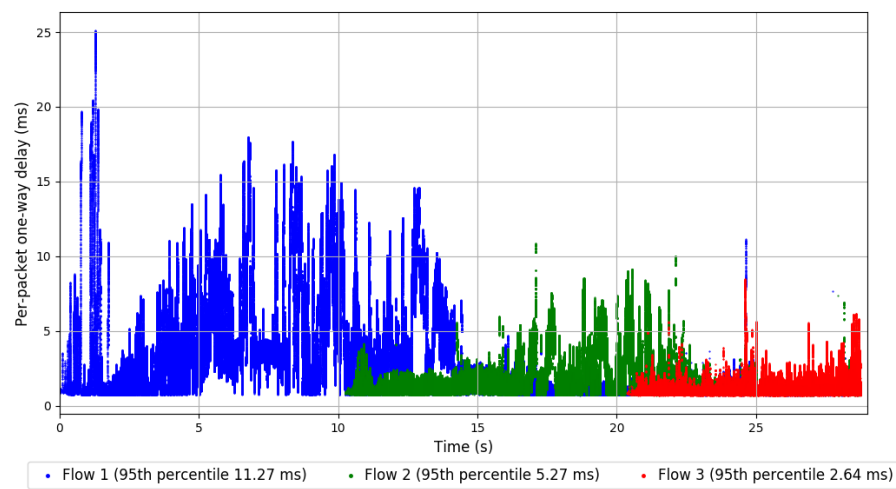
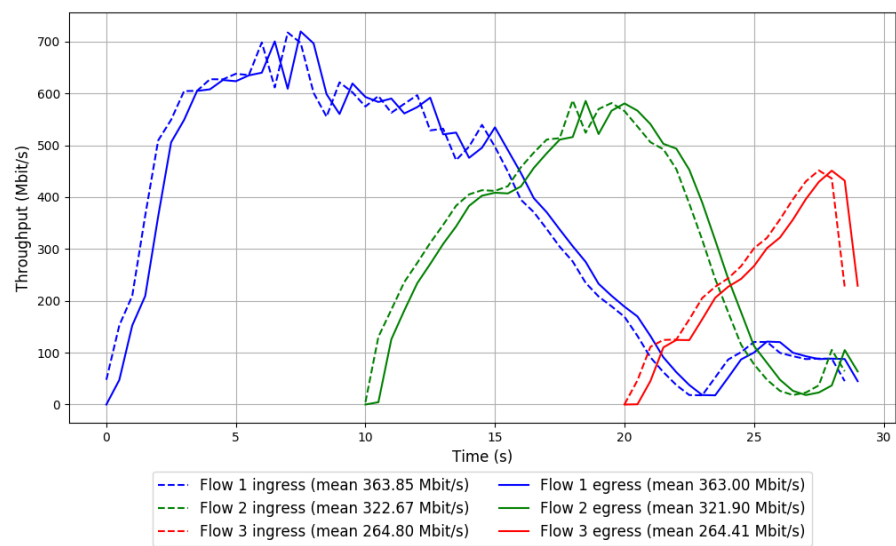
-- Flow 3:

Average throughput: 264.41 Mbit/s

95th percentile per-packet one-way delay: 2.644 ms

Loss rate: 0.14%

Run 3: Report of Indigo-MusesD — Data Link

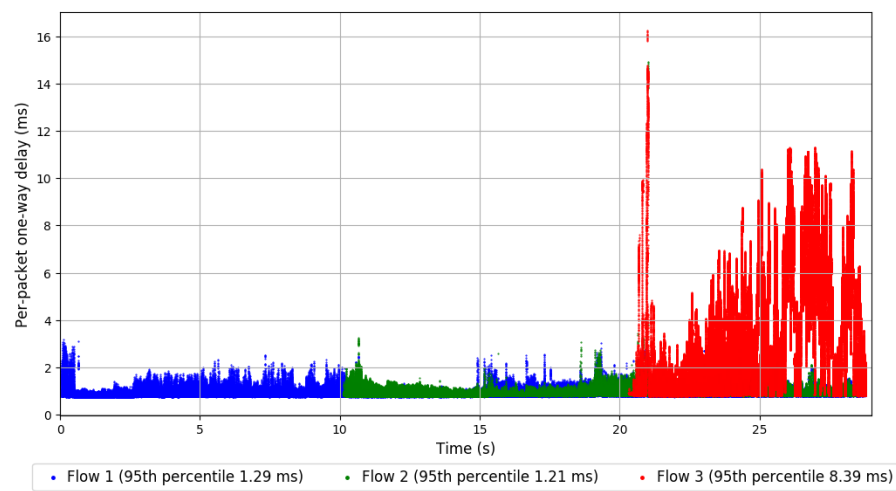
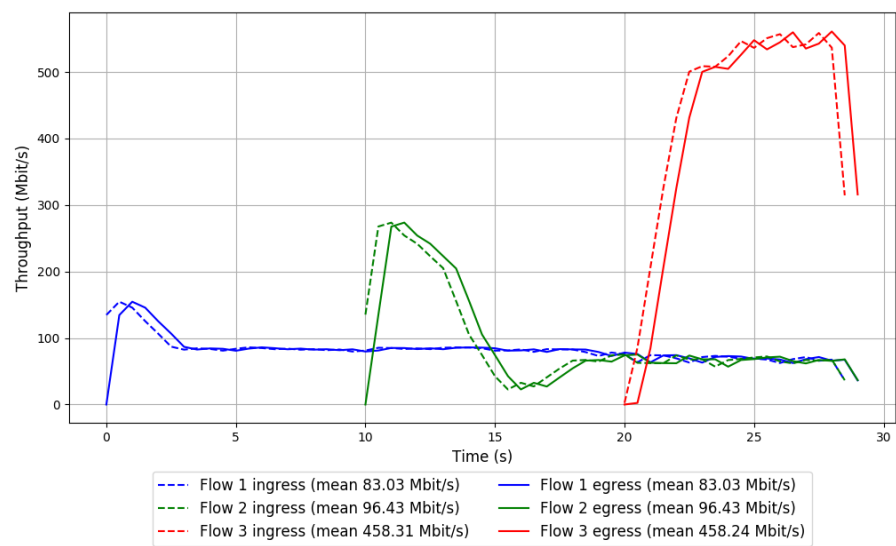


Run 4: Statistics of Indigo-MusesD

Start at: 2019-11-24 09:33:51  
End at: 2019-11-24 09:34:21  
Local clock offset: 2.859 ms  
Remote clock offset: -4.673 ms

# Below is generated by plot.py at 2019-11-24 10:59:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 280.54 Mbit/s  
95th percentile per-packet one-way delay: 7.102 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 83.03 Mbit/s  
95th percentile per-packet one-way delay: 1.286 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 96.43 Mbit/s  
95th percentile per-packet one-way delay: 1.212 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 458.24 Mbit/s  
95th percentile per-packet one-way delay: 8.391 ms  
Loss rate: 0.02%

Run 4: Report of Indigo-MusesD — Data Link



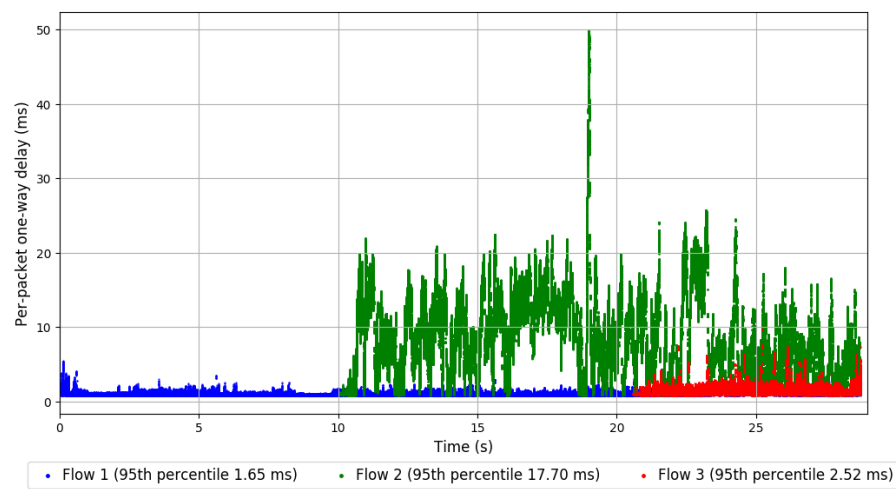
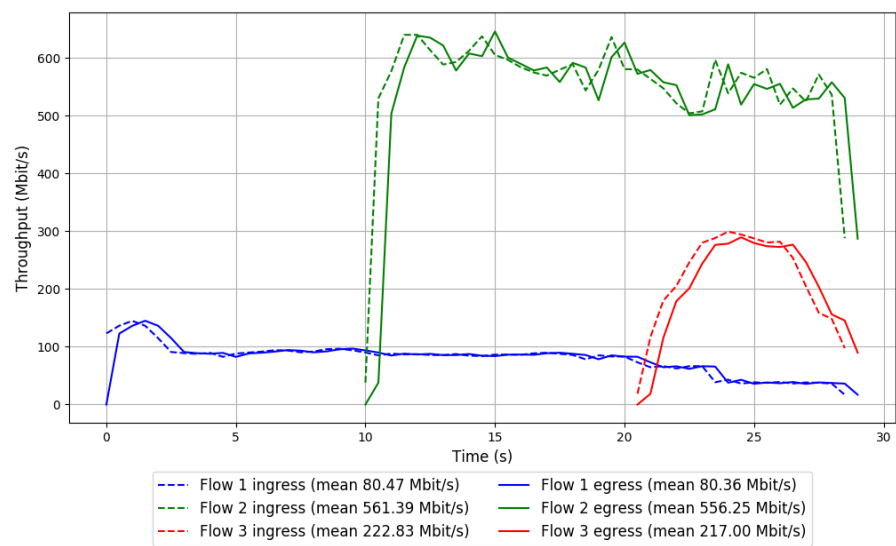


Run 5: Statistics of Indigo-MusesD

Start at: 2019-11-24 10:09:13  
End at: 2019-11-24 10:09:43  
Local clock offset: 3.005 ms  
Remote clock offset: -7.122 ms

# Below is generated by plot.py at 2019-11-24 10:59:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 503.68 Mbit/s  
95th percentile per-packet one-way delay: 16.725 ms  
Loss rate: 1.00%  
-- Flow 1:  
Average throughput: 80.36 Mbit/s  
95th percentile per-packet one-way delay: 1.651 ms  
Loss rate: 0.14%  
-- Flow 2:  
Average throughput: 556.25 Mbit/s  
95th percentile per-packet one-way delay: 17.699 ms  
Loss rate: 0.92%  
-- Flow 3:  
Average throughput: 217.00 Mbit/s  
95th percentile per-packet one-way delay: 2.518 ms  
Loss rate: 2.61%

Run 5: Report of Indigo-MusesD — Data Link



Run 1: Statistics of Indigo-MusesT

Start at: 2019-11-24 07:16:38

End at: 2019-11-24 07:17:08

Local clock offset: 3.34 ms

Remote clock offset: 0.095 ms

# Below is generated by plot.py at 2019-11-24 11:01:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 751.36 Mbit/s

95th percentile per-packet one-way delay: 13.452 ms

Loss rate: 1.28%

-- Flow 1:

Average throughput: 581.22 Mbit/s

95th percentile per-packet one-way delay: 15.087 ms

Loss rate: 1.02%

-- Flow 2:

Average throughput: 151.47 Mbit/s

95th percentile per-packet one-way delay: 2.113 ms

Loss rate: 1.40%

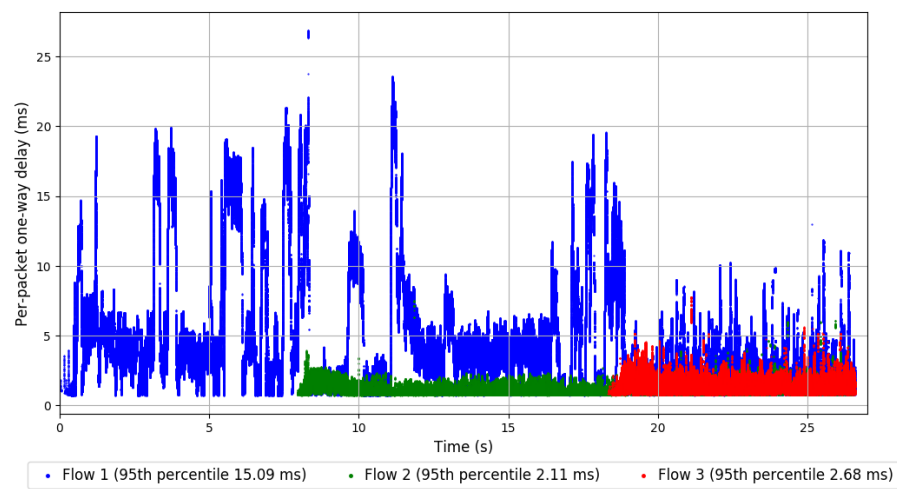
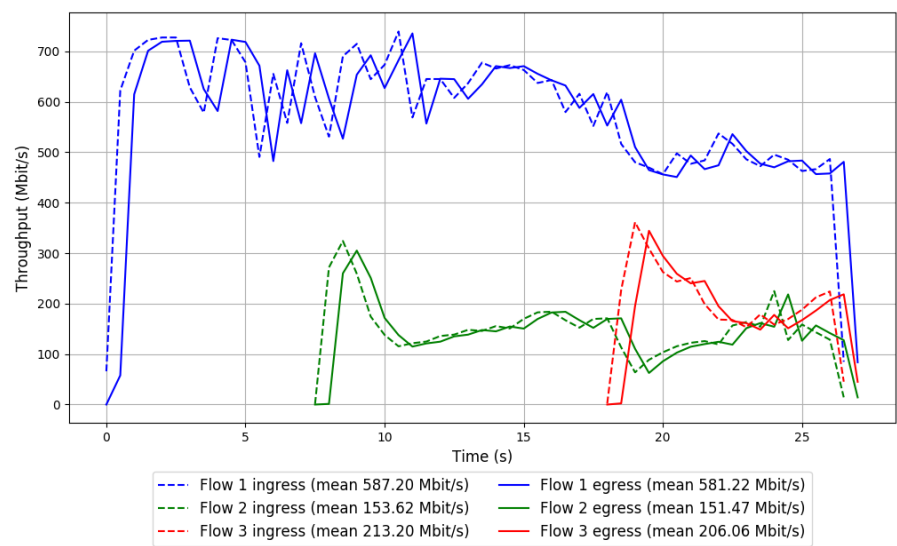
-- Flow 3:

Average throughput: 206.06 Mbit/s

95th percentile per-packet one-way delay: 2.680 ms

Loss rate: 3.34%

Run 1: Report of Indigo-MusesT — Data Link



Run 2: Statistics of Indigo-MusesT

Start at: 2019-11-24 07:51:55

End at: 2019-11-24 07:52:25

Local clock offset: 4.437 ms

Remote clock offset: 1.924 ms

# Below is generated by plot.py at 2019-11-24 11:02:55

# Datalink statistics

-- Total of 3 flows:

Average throughput: 766.07 Mbit/s

95th percentile per-packet one-way delay: 8.236 ms

Loss rate: 1.78%

-- Flow 1:

Average throughput: 442.03 Mbit/s

95th percentile per-packet one-way delay: 9.471 ms

Loss rate: 1.22%

-- Flow 2:

Average throughput: 314.49 Mbit/s

95th percentile per-packet one-way delay: 4.083 ms

Loss rate: 2.86%

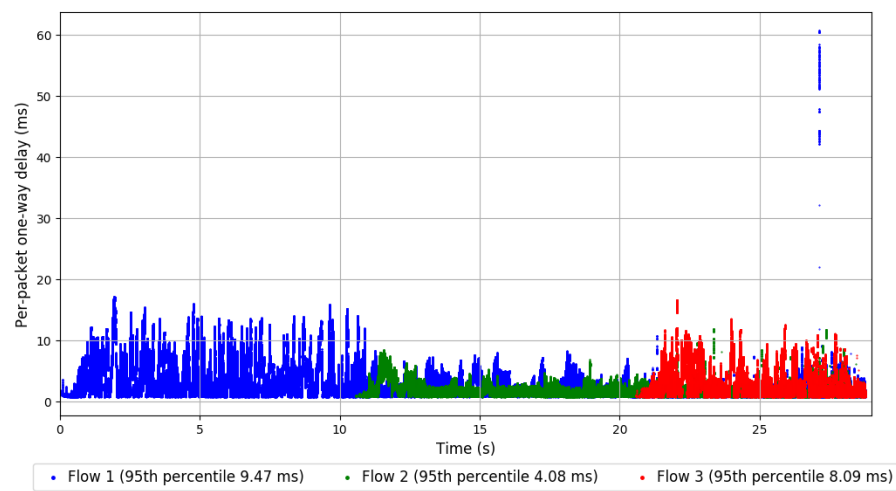
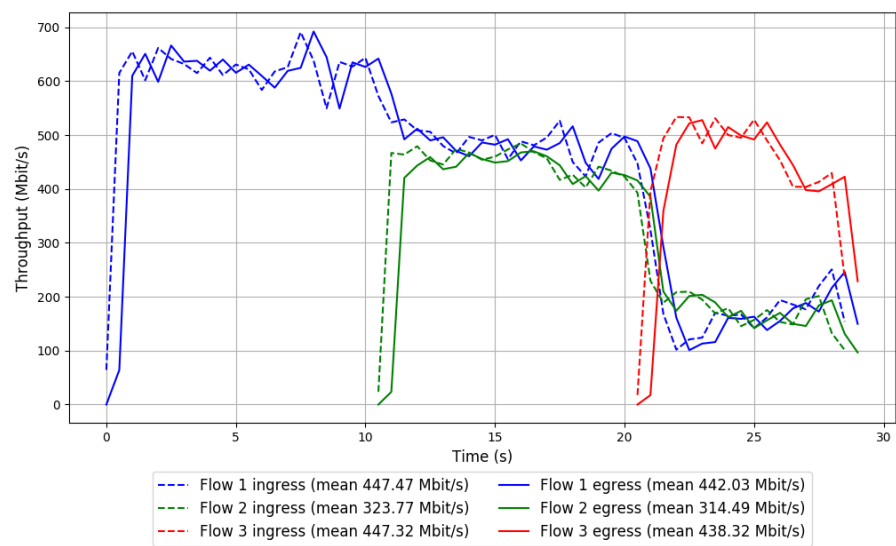
-- Flow 3:

Average throughput: 438.32 Mbit/s

95th percentile per-packet one-way delay: 8.087 ms

Loss rate: 2.01%

Run 2: Report of Indigo-MusesT — Data Link



Run 3: Statistics of Indigo-MusesT

Start at: 2019-11-24 08:27:14

End at: 2019-11-24 08:27:44

Local clock offset: 3.607 ms

Remote clock offset: 0.141 ms

# Below is generated by plot.py at 2019-11-24 11:03:29

# Datalink statistics

-- Total of 3 flows:

Average throughput: 726.79 Mbit/s

95th percentile per-packet one-way delay: 11.787 ms

Loss rate: 0.97%

-- Flow 1:

Average throughput: 535.77 Mbit/s

95th percentile per-packet one-way delay: 12.603 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 188.32 Mbit/s

95th percentile per-packet one-way delay: 2.059 ms

Loss rate: 1.06%

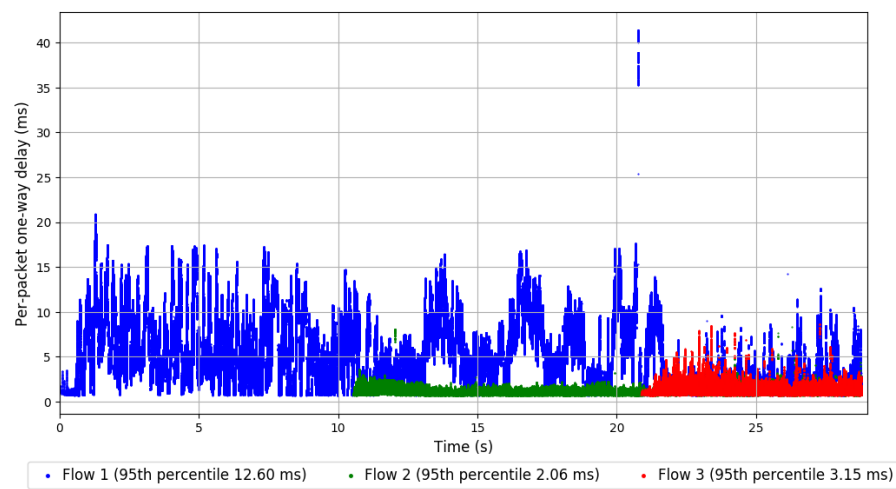
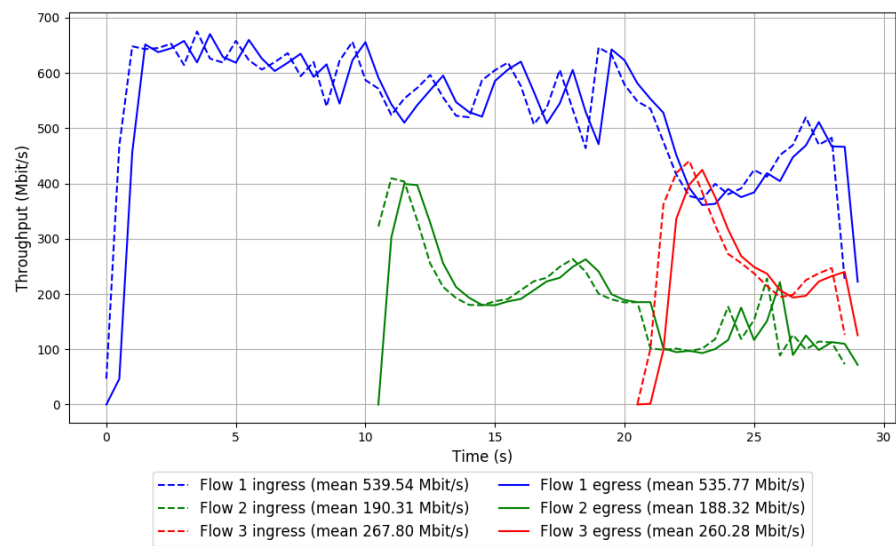
-- Flow 3:

Average throughput: 260.28 Mbit/s

95th percentile per-packet one-way delay: 3.149 ms

Loss rate: 2.80%

Run 3: Report of Indigo-MusesT — Data Link





Run 4: Statistics of Indigo-MusesT

Start at: 2019-11-24 09:02:39

End at: 2019-11-24 09:03:09

Local clock offset: 3.305 ms

Remote clock offset: 3.98 ms

# Below is generated by plot.py at 2019-11-24 11:04:02

# Datalink statistics

-- Total of 3 flows:

Average throughput: 754.33 Mbit/s

95th percentile per-packet one-way delay: 11.916 ms

Loss rate: 1.03%

-- Flow 1:

Average throughput: 517.07 Mbit/s

95th percentile per-packet one-way delay: 13.109 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 179.50 Mbit/s

95th percentile per-packet one-way delay: 2.390 ms

Loss rate: 0.78%

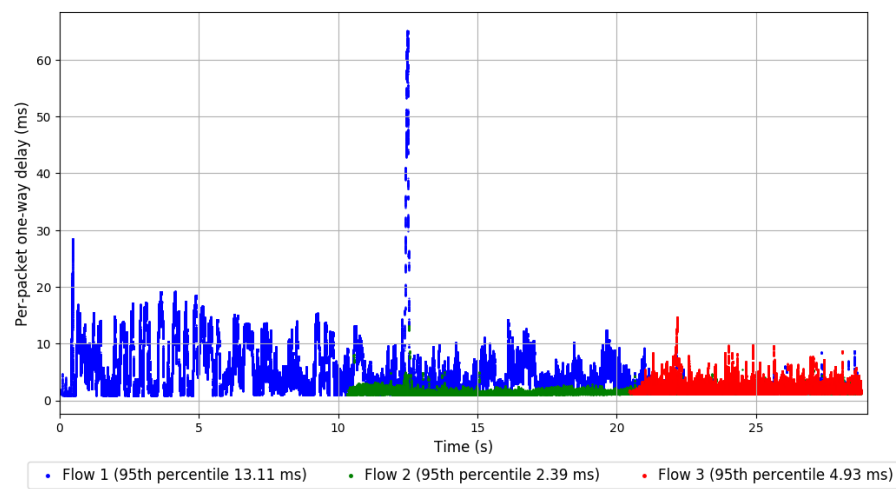
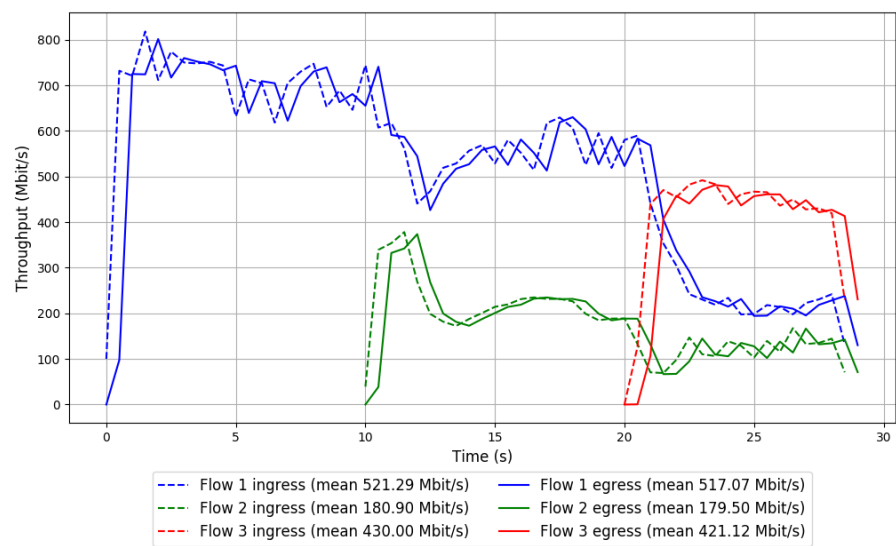
-- Flow 3:

Average throughput: 421.12 Mbit/s

95th percentile per-packet one-way delay: 4.935 ms

Loss rate: 2.07%

Run 4: Report of Indigo-MusesT — Data Link

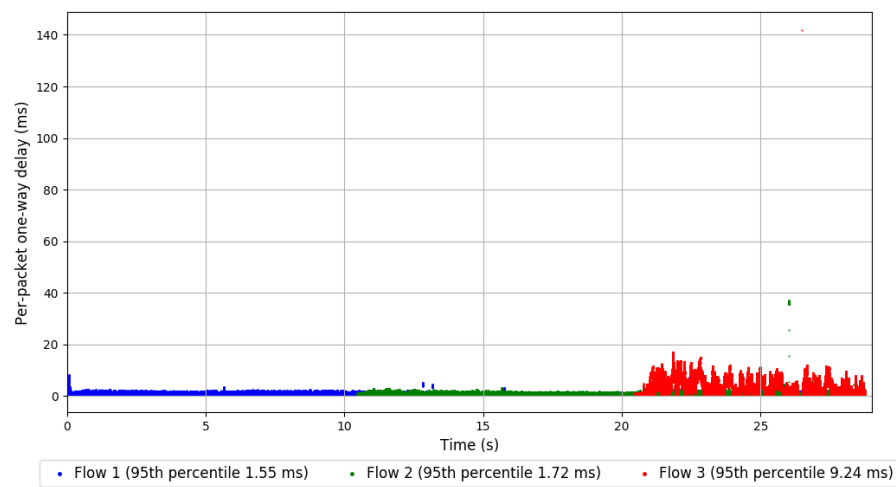
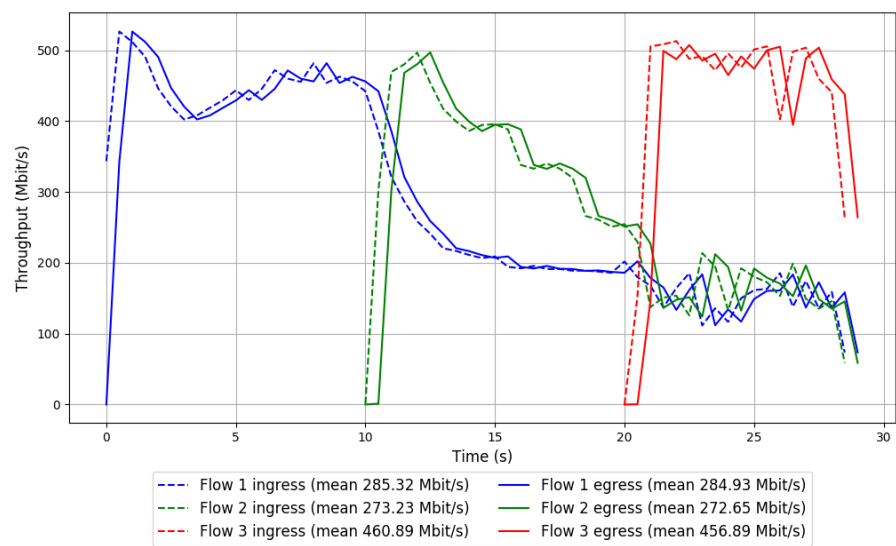


Run 5: Statistics of Indigo-MusesT

Start at: 2019-11-24 09:37:49  
End at: 2019-11-24 09:38:19  
Local clock offset: 2.857 ms  
Remote clock offset: -5.043 ms

# Below is generated by plot.py at 2019-11-24 11:04:09  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 590.67 Mbit/s  
95th percentile per-packet one-way delay: 6.284 ms  
Loss rate: 0.34%  
-- Flow 1:  
Average throughput: 284.93 Mbit/s  
95th percentile per-packet one-way delay: 1.552 ms  
Loss rate: 0.14%  
-- Flow 2:  
Average throughput: 272.65 Mbit/s  
95th percentile per-packet one-way delay: 1.718 ms  
Loss rate: 0.21%  
-- Flow 3:  
Average throughput: 456.89 Mbit/s  
95th percentile per-packet one-way delay: 9.241 ms  
Loss rate: 0.94%

Run 5: Report of Indigo-MusesT — Data Link

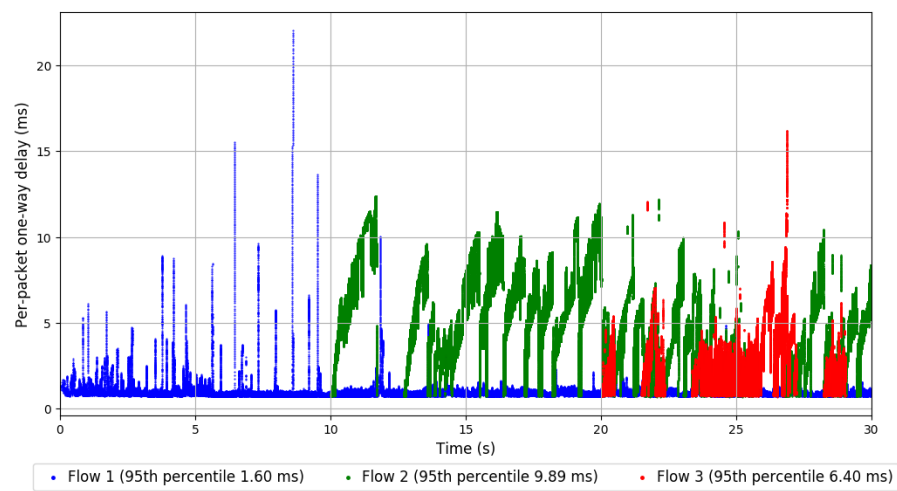
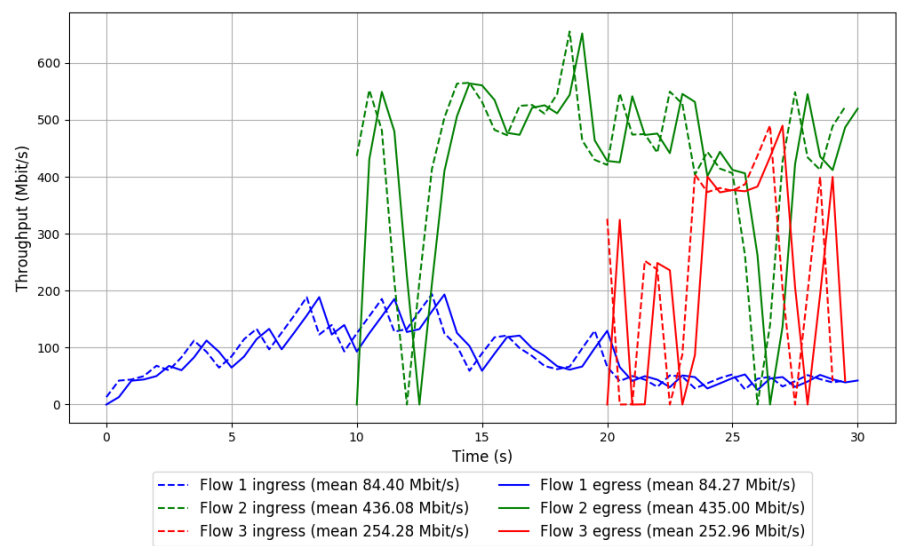


```
Run 1: Statistics of LEDBAT

Start at: 2019-11-24 07:42:02
End at: 2019-11-24 07:42:32
Local clock offset: 4.438 ms
Remote clock offset: 1.535 ms

# Below is generated by plot.py at 2019-11-24 11:04:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 450.25 Mbit/s
95th percentile per-packet one-way delay: 9.228 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 84.27 Mbit/s
95th percentile per-packet one-way delay: 1.604 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 435.00 Mbit/s
95th percentile per-packet one-way delay: 9.890 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 252.96 Mbit/s
95th percentile per-packet one-way delay: 6.400 ms
Loss rate: 0.52%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2019-11-24 08:16:58

End at: 2019-11-24 08:17:28

Local clock offset: 3.969 ms

Remote clock offset: 0.252 ms

# Below is generated by plot.py at 2019-11-24 11:06:52

# Datalink statistics

-- Total of 3 flows:

Average throughput: 640.54 Mbit/s

95th percentile per-packet one-way delay: 17.133 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 525.65 Mbit/s

95th percentile per-packet one-way delay: 17.465 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 123.78 Mbit/s

95th percentile per-packet one-way delay: 1.447 ms

Loss rate: 0.07%

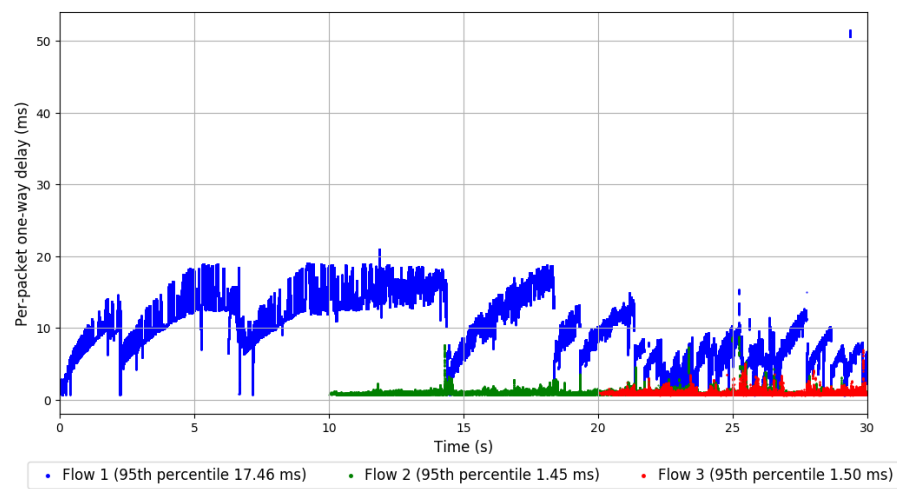
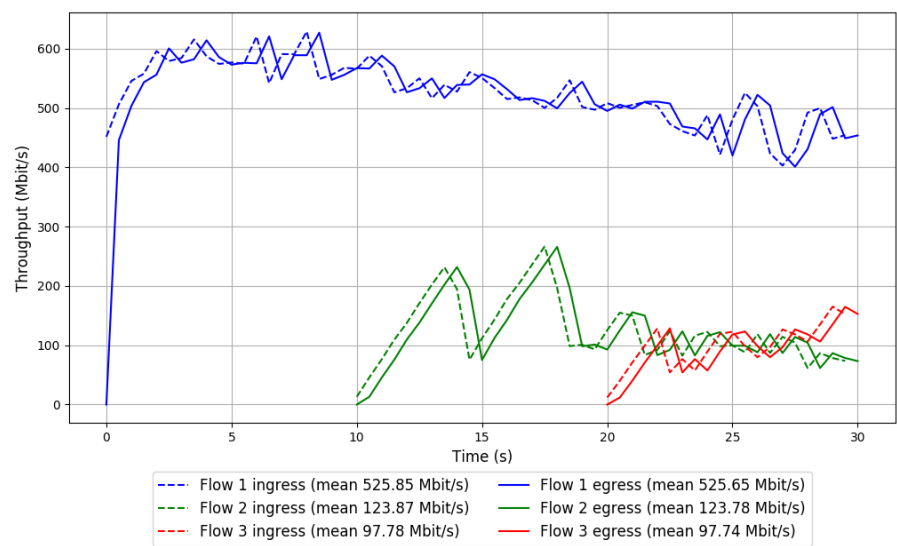
-- Flow 3:

Average throughput: 97.74 Mbit/s

95th percentile per-packet one-way delay: 1.498 ms

Loss rate: 0.04%

Run 2: Report of LEDBAT — Data Link





Run 3: Statistics of LEDBAT

Start at: 2019-11-24 08:52:20

End at: 2019-11-24 08:52:50

Local clock offset: 3.405 ms

Remote clock offset: 3.569 ms

# Below is generated by plot.py at 2019-11-24 11:07:01

# Datalink statistics

-- Total of 3 flows:

Average throughput: 651.18 Mbit/s

95th percentile per-packet one-way delay: 16.765 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 477.41 Mbit/s

95th percentile per-packet one-way delay: 17.123 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 95.57 Mbit/s

95th percentile per-packet one-way delay: 1.637 ms

Loss rate: 0.08%

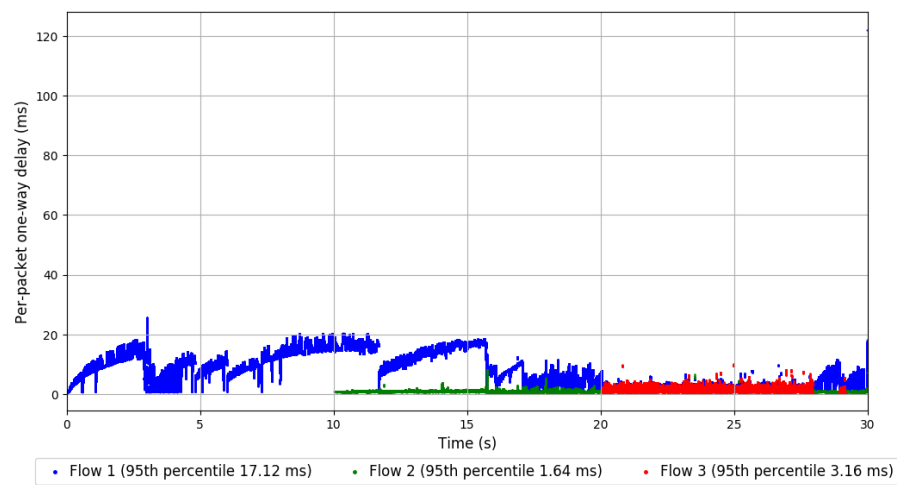
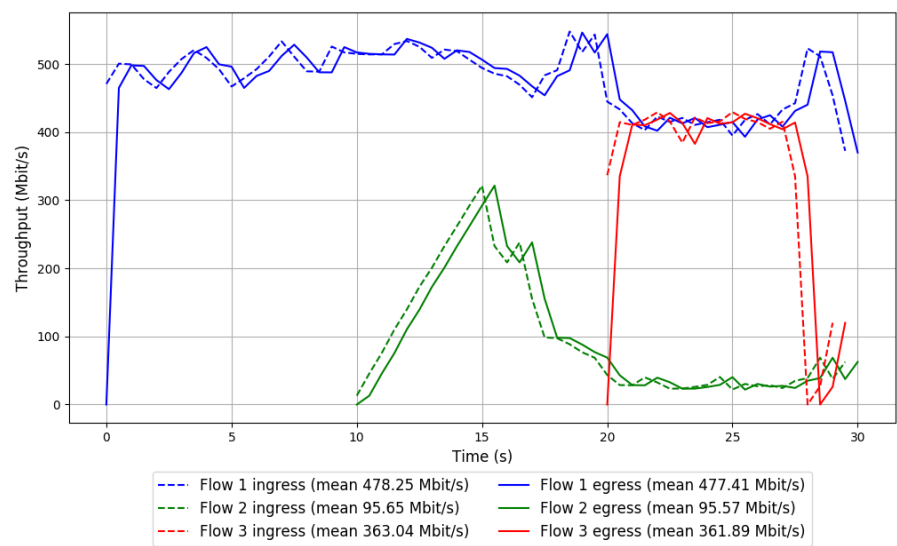
-- Flow 3:

Average throughput: 361.89 Mbit/s

95th percentile per-packet one-way delay: 3.157 ms

Loss rate: 0.32%

Run 3: Report of LEDBAT — Data Link

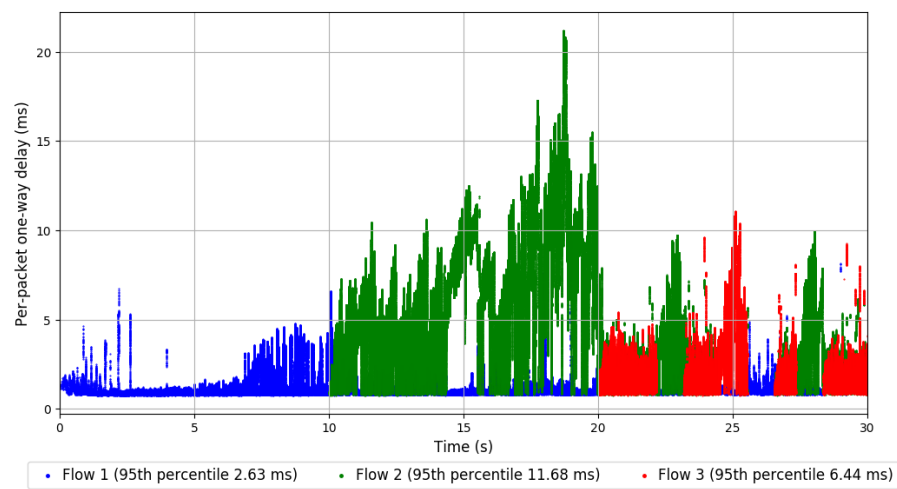
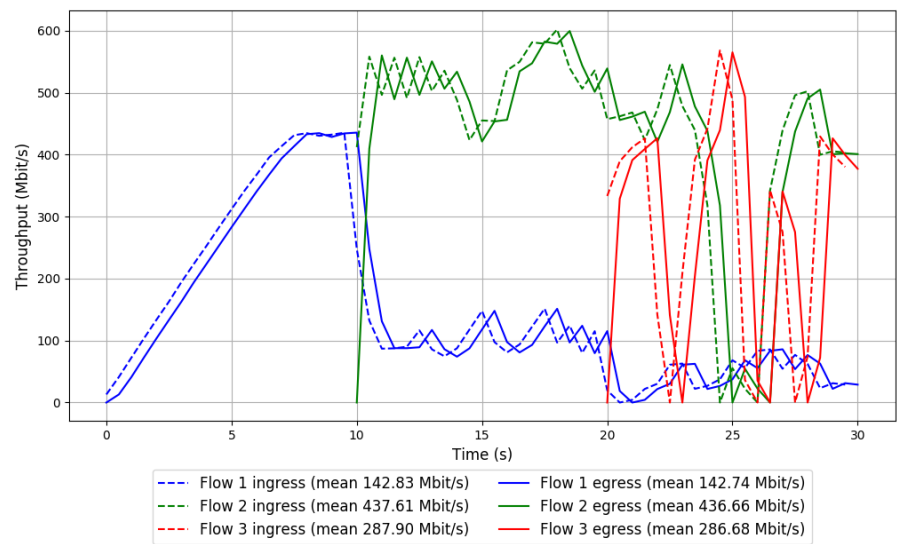


Run 4: Statistics of LEDBAT

Start at: 2019-11-24 09:27:49  
End at: 2019-11-24 09:28:19  
Local clock offset: 2.926 ms  
Remote clock offset: -4.074 ms

# Below is generated by plot.py at 2019-11-24 11:07:50  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 528.90 Mbit/s  
95th percentile per-packet one-way delay: 10.310 ms  
Loss rate: 0.21%  
-- Flow 1:  
Average throughput: 142.74 Mbit/s  
95th percentile per-packet one-way delay: 2.632 ms  
Loss rate: 0.06%  
-- Flow 2:  
Average throughput: 436.66 Mbit/s  
95th percentile per-packet one-way delay: 11.682 ms  
Loss rate: 0.21%  
-- Flow 3:  
Average throughput: 286.68 Mbit/s  
95th percentile per-packet one-way delay: 6.438 ms  
Loss rate: 0.42%

Run 4: Report of LEDBAT — Data Link

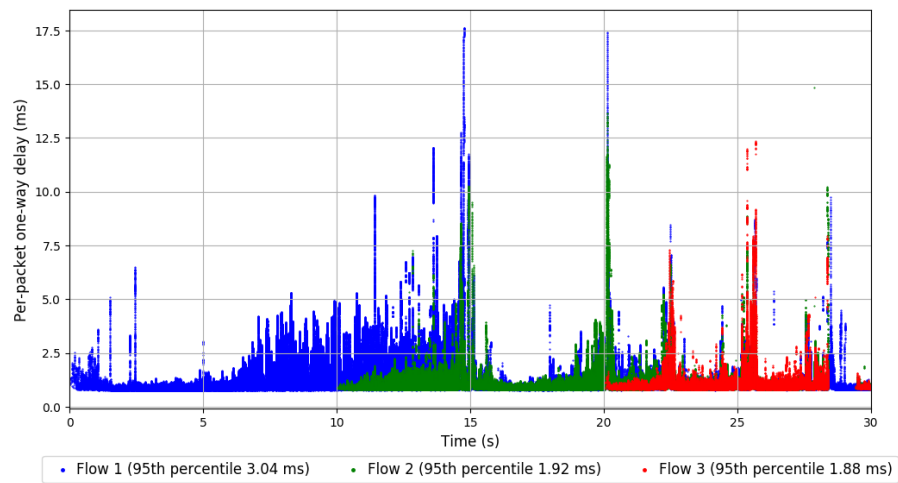
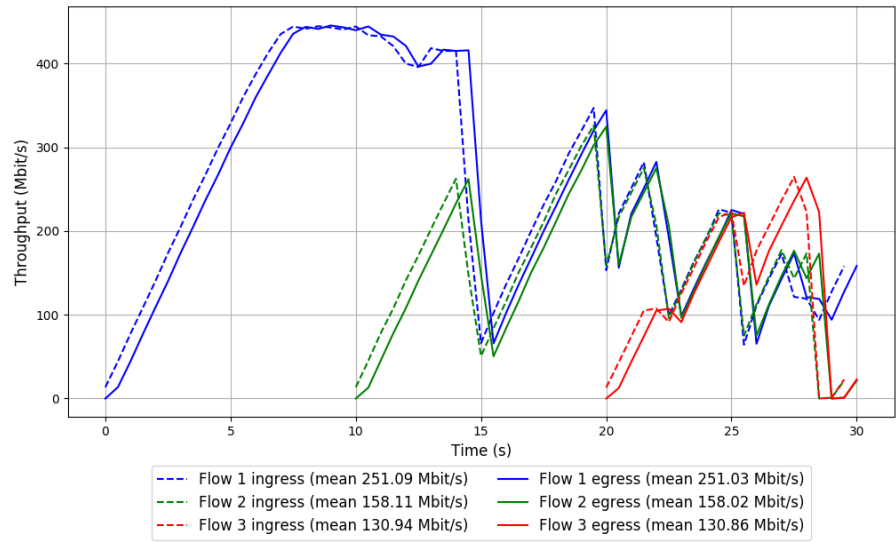


Run 5: Statistics of LEDBAT

Start at: 2019-11-24 10:03:11  
End at: 2019-11-24 10:03:41  
Local clock offset: 3.03 ms  
Remote clock offset: -6.752 ms

# Below is generated by plot.py at 2019-11-24 11:07:50  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 399.71 Mbit/s  
95th percentile per-packet one-way delay: 2.759 ms  
Loss rate: 0.04%  
-- Flow 1:  
Average throughput: 251.03 Mbit/s  
95th percentile per-packet one-way delay: 3.037 ms  
Loss rate: 0.03%  
-- Flow 2:  
Average throughput: 158.02 Mbit/s  
95th percentile per-packet one-way delay: 1.919 ms  
Loss rate: 0.06%  
-- Flow 3:  
Average throughput: 130.86 Mbit/s  
95th percentile per-packet one-way delay: 1.877 ms  
Loss rate: 0.06%

## Run 5: Report of LEDBAT — Data Link



Run 1: Statistics of Muses\\_DecisionTree

Start at: 2019-11-24 07:36:17

End at: 2019-11-24 07:36:47

Local clock offset: 4.401 ms

Remote clock offset: 1.308 ms

# Below is generated by plot.py at 2019-11-24 11:07:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 250.77 Mbit/s

95th percentile per-packet one-way delay: 5.764 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 11.27 Mbit/s

95th percentile per-packet one-way delay: 1.257 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 124.51 Mbit/s

95th percentile per-packet one-way delay: 6.549 ms

Loss rate: 0.20%

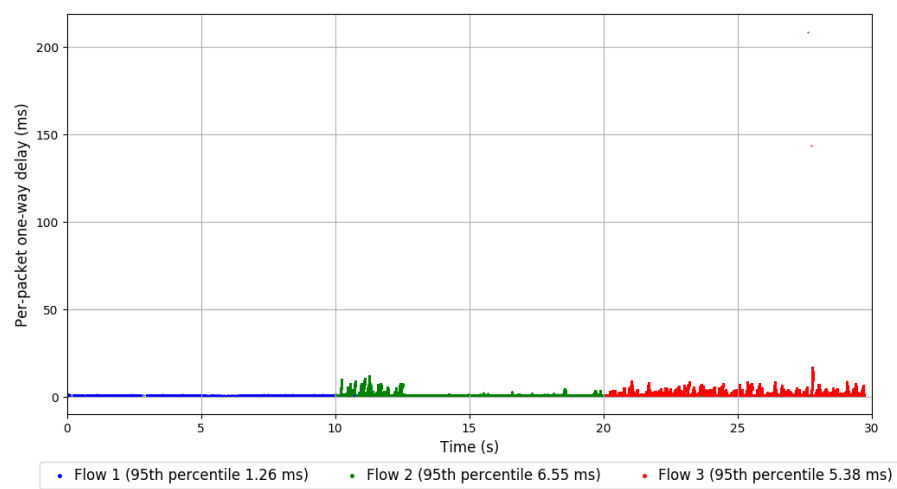
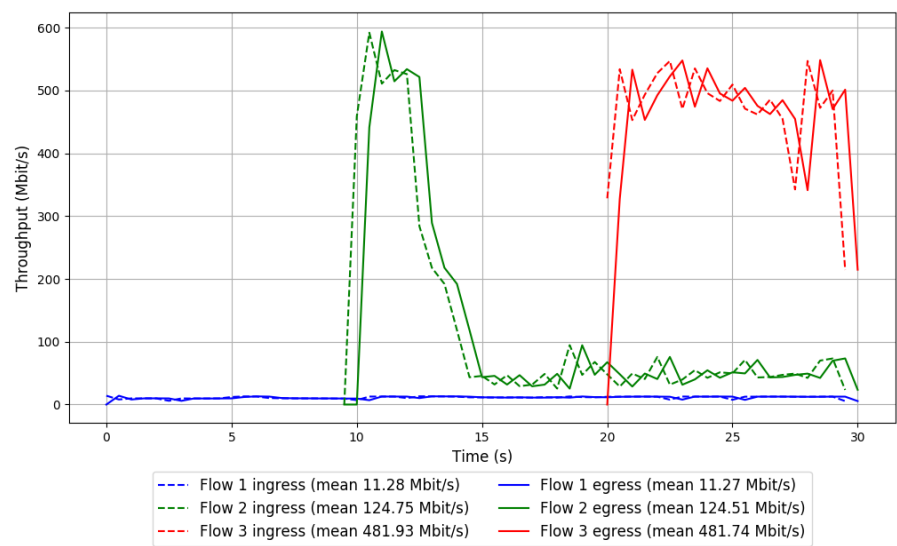
-- Flow 3:

Average throughput: 481.74 Mbit/s

95th percentile per-packet one-way delay: 5.380 ms

Loss rate: 0.04%

Run 1: Report of Muses\_DecisionTree — Data Link





Run 2: Statistics of Muses\\_DecisionTree

Start at: 2019-11-24 08:11:18

End at: 2019-11-24 08:11:48

Local clock offset: 4.444 ms

Remote clock offset: 0.392 ms

# Below is generated by plot.py at 2019-11-24 11:07:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 327.07 Mbit/s

95th percentile per-packet one-way delay: 3.536 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 11.74 Mbit/s

95th percentile per-packet one-way delay: 1.140 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 468.93 Mbit/s

95th percentile per-packet one-way delay: 3.641 ms

Loss rate: 0.02%

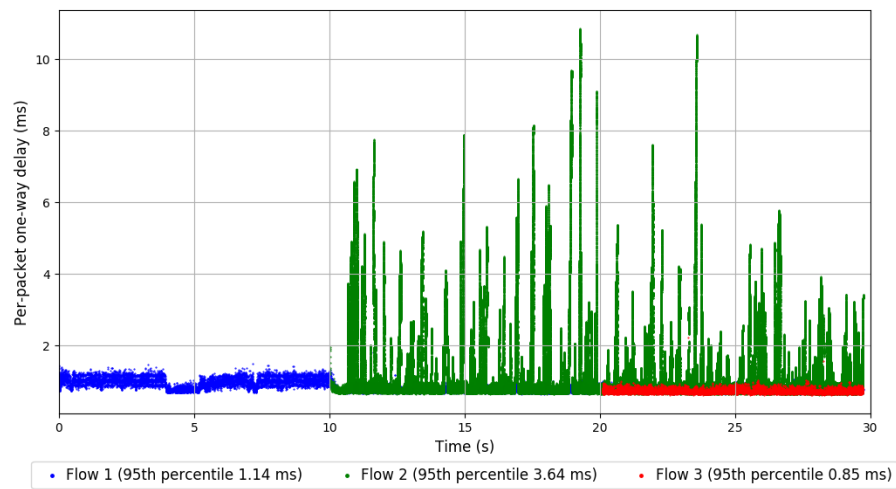
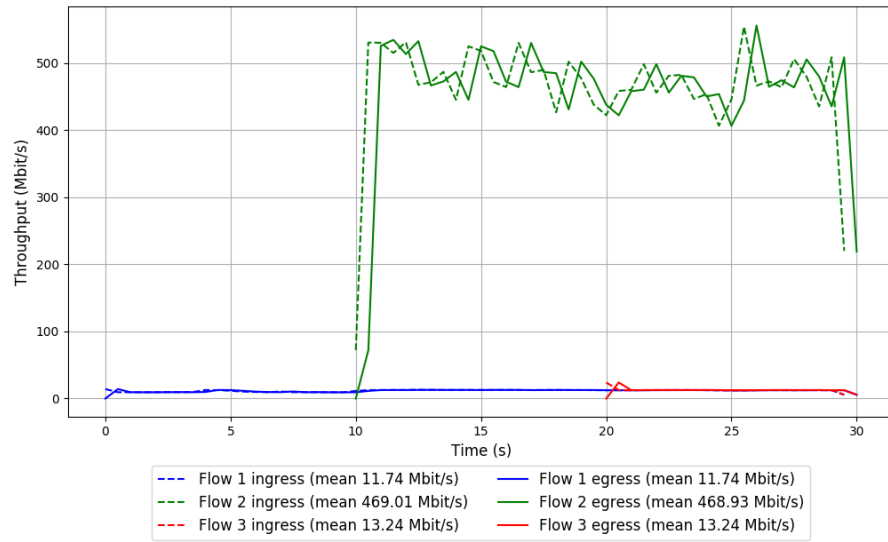
-- Flow 3:

Average throughput: 13.24 Mbit/s

95th percentile per-packet one-way delay: 0.849 ms

Loss rate: 0.00%

## Run 2: Report of Muses\_DecisionTree — Data Link



Run 3: Statistics of Muses\\_DecisionTree

Start at: 2019-11-24 08:46:34

End at: 2019-11-24 08:47:04

Local clock offset: 3.422 ms

Remote clock offset: 3.178 ms

# Below is generated by plot.py at 2019-11-24 11:08:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 344.27 Mbit/s

95th percentile per-packet one-way delay: 5.441 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 11.67 Mbit/s

95th percentile per-packet one-way delay: 1.174 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 495.04 Mbit/s

95th percentile per-packet one-way delay: 5.527 ms

Loss rate: 0.00%

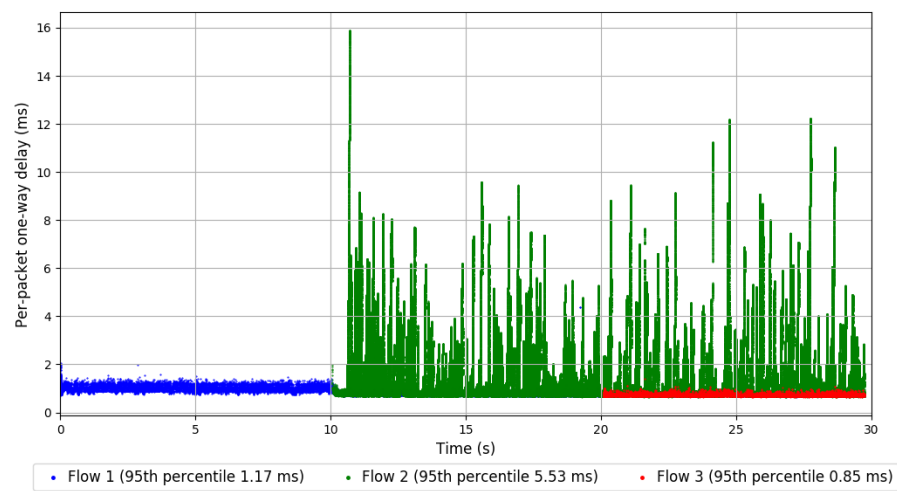
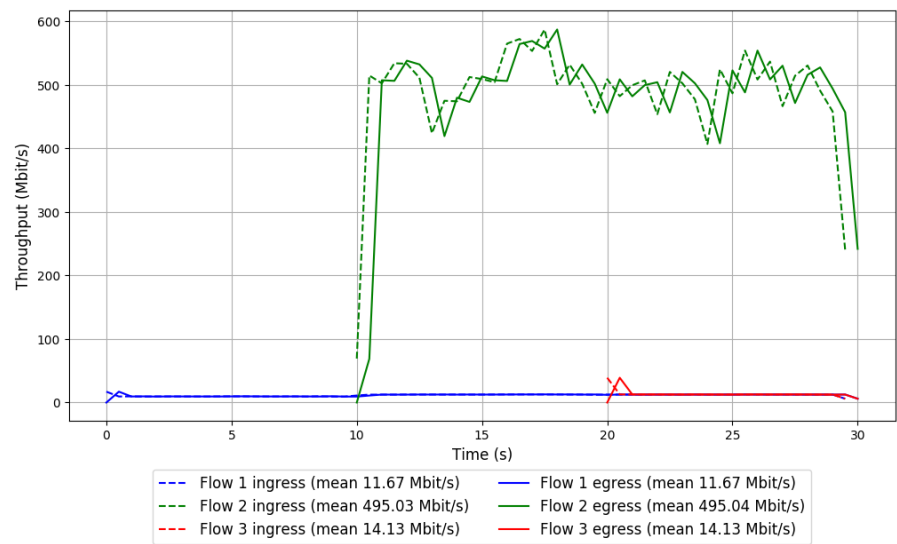
-- Flow 3:

Average throughput: 14.13 Mbit/s

95th percentile per-packet one-way delay: 0.850 ms

Loss rate: 0.01%

Run 3: Report of Muses\_DecisionTree — Data Link



Run 4: Statistics of Muses\\_DecisionTree

Start at: 2019-11-24 09:22:07

End at: 2019-11-24 09:22:37

Local clock offset: 2.977 ms

Remote clock offset: -3.35 ms

# Below is generated by plot.py at 2019-11-24 11:08:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 94.59 Mbit/s

95th percentile per-packet one-way delay: 1.888 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 11.39 Mbit/s

95th percentile per-packet one-way delay: 1.293 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 118.17 Mbit/s

95th percentile per-packet one-way delay: 3.518 ms

Loss rate: 0.00%

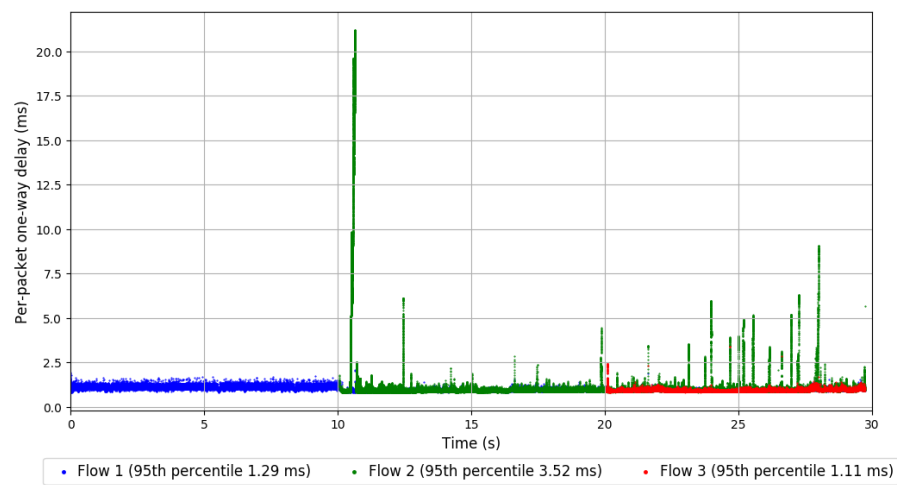
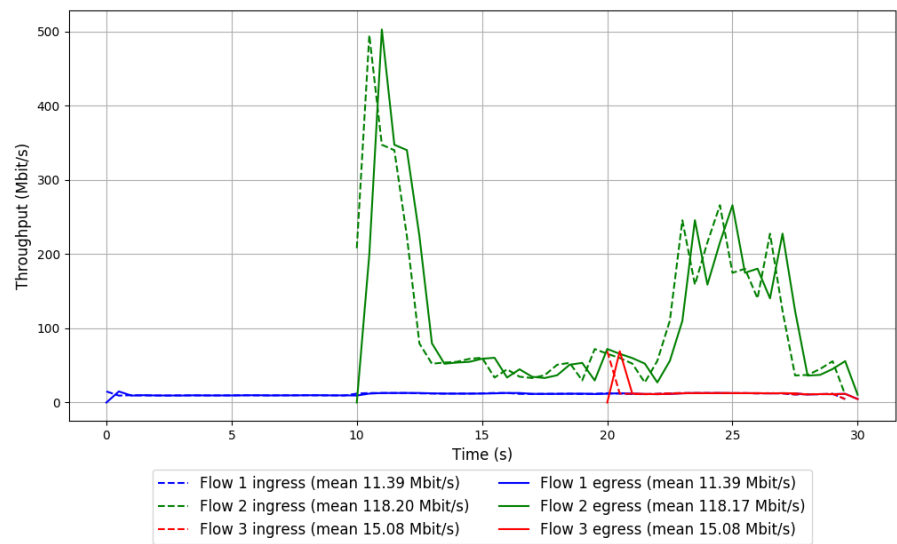
-- Flow 3:

Average throughput: 15.08 Mbit/s

95th percentile per-packet one-way delay: 1.108 ms

Loss rate: 0.00%

Run 4: Report of Muses\_DecisionTree — Data Link

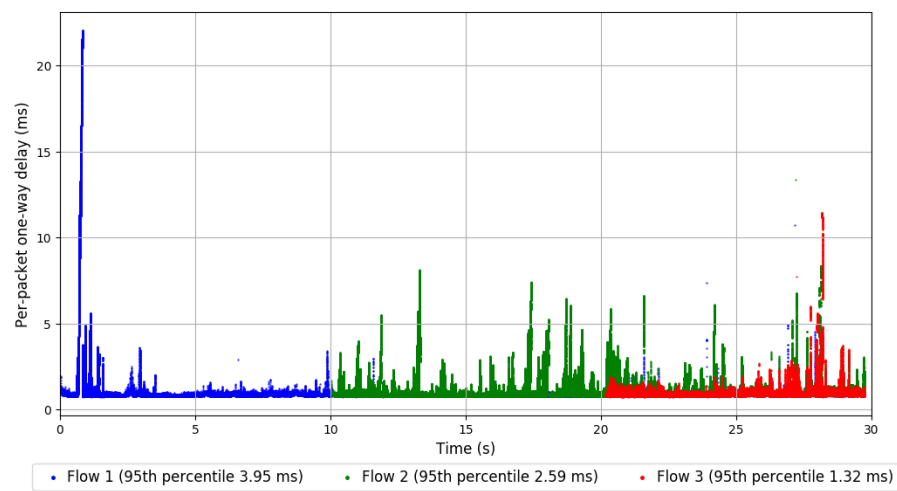
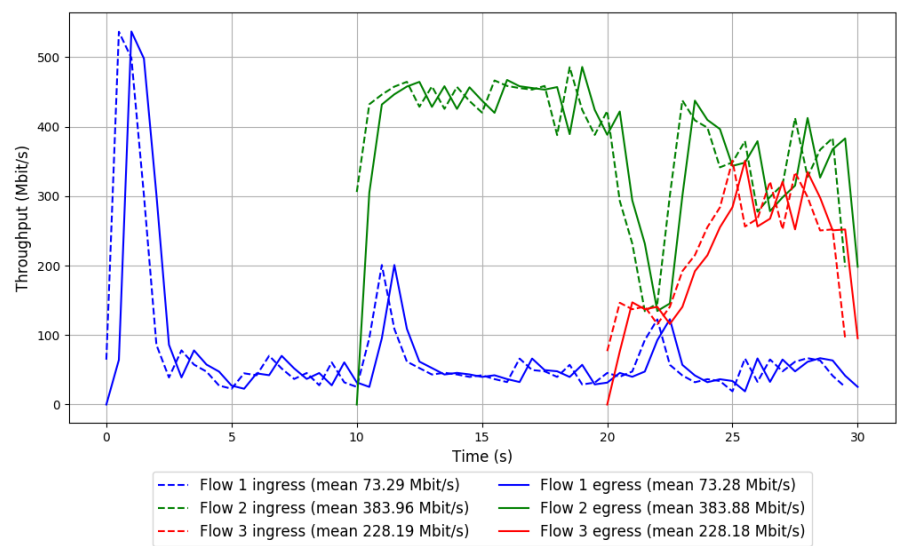


Run 5: Statistics of Muses\\_DecisionTree

Start at: 2019-11-24 09:57:19  
End at: 2019-11-24 09:57:49  
Local clock offset: 3.021 ms  
Remote clock offset: -6.402 ms

# Below is generated by plot.py at 2019-11-24 11:09:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 401.40 Mbit/s  
95th percentile per-packet one-way delay: 2.467 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 73.28 Mbit/s  
95th percentile per-packet one-way delay: 3.950 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 383.88 Mbit/s  
95th percentile per-packet one-way delay: 2.592 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 228.18 Mbit/s  
95th percentile per-packet one-way delay: 1.321 ms  
Loss rate: 0.01%

Run 5: Report of Muses\_DecisionTree — Data Link





Run 1: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-11-24 07:19:46

End at: 2019-11-24 07:20:16

Local clock offset: 3.628 ms

Remote clock offset: 0.108 ms

# Below is generated by plot.py at 2019-11-24 11:14:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 701.31 Mbit/s

95th percentile per-packet one-way delay: 4.458 ms

Loss rate: 1.77%

-- Flow 1:

Average throughput: 329.76 Mbit/s

95th percentile per-packet one-way delay: 3.782 ms

Loss rate: 1.30%

-- Flow 2:

Average throughput: 395.62 Mbit/s

95th percentile per-packet one-way delay: 5.030 ms

Loss rate: 2.84%

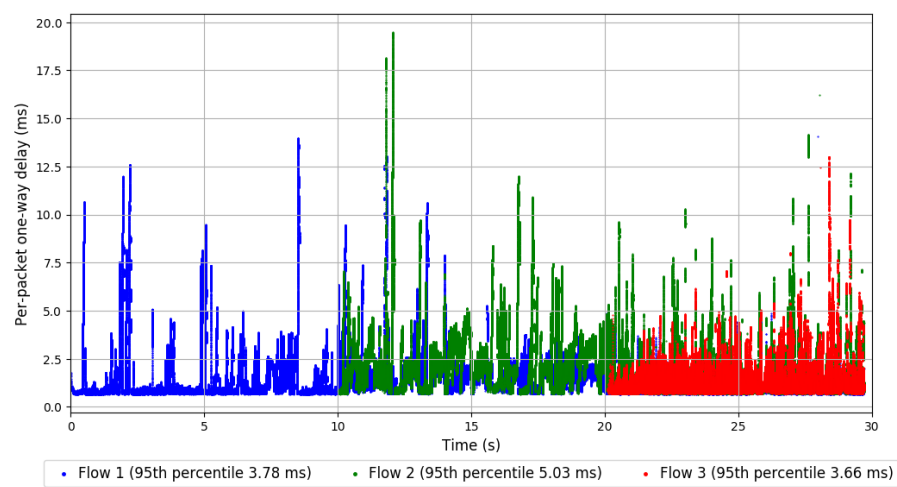
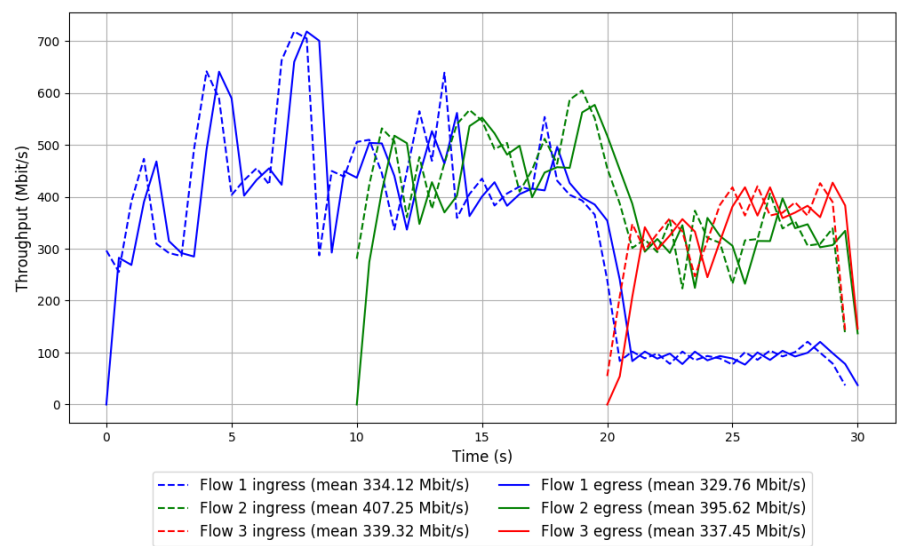
-- Flow 3:

Average throughput: 337.45 Mbit/s

95th percentile per-packet one-way delay: 3.660 ms

Loss rate: 0.57%

Run 1: Report of Muses\_DecisionTreeH0 — Data Link



Run 2: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-11-24 07:55:08

End at: 2019-11-24 07:55:38

Local clock offset: 4.475 ms

Remote clock offset: 1.813 ms

# Below is generated by plot.py at 2019-11-24 11:14:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 442.24 Mbit/s

95th percentile per-packet one-way delay: 5.565 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 427.40 Mbit/s

95th percentile per-packet one-way delay: 5.659 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 15.03 Mbit/s

95th percentile per-packet one-way delay: 1.031 ms

Loss rate: 0.00%

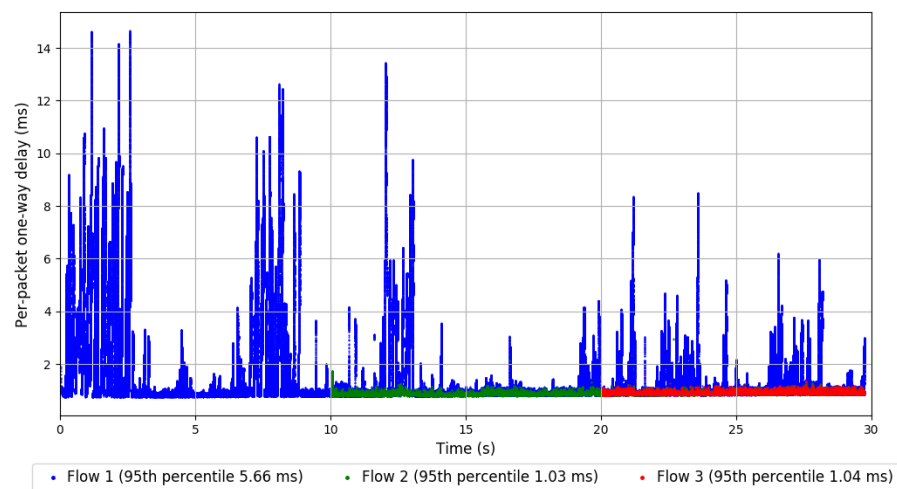
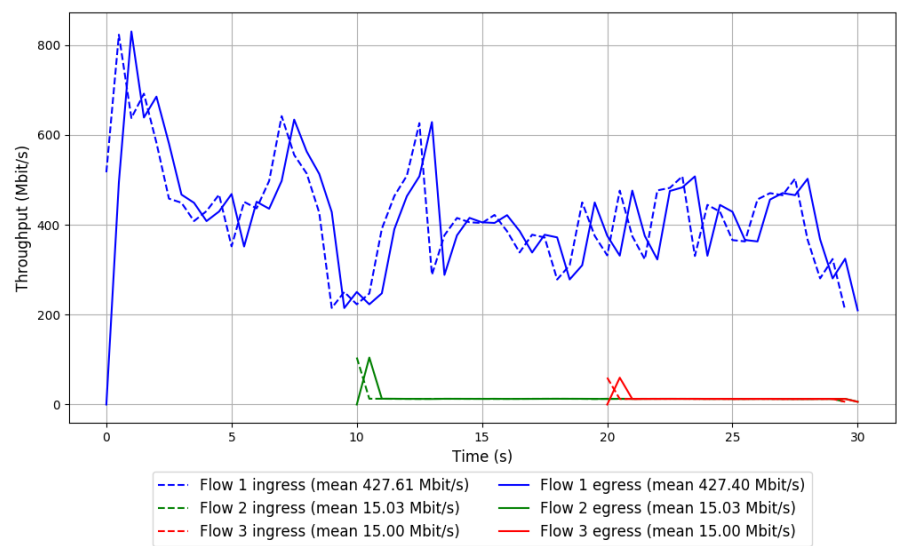
-- Flow 3:

Average throughput: 15.00 Mbit/s

95th percentile per-packet one-way delay: 1.044 ms

Loss rate: 0.00%

Run 2: Report of Muses\_DecisionTreeH0 — Data Link



Run 3: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-11-24 08:30:23

End at: 2019-11-24 08:30:53

Local clock offset: 3.559 ms

Remote clock offset: 0.706 ms

# Below is generated by plot.py at 2019-11-24 11:14:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 164.46 Mbit/s

95th percentile per-packet one-way delay: 5.516 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 11.23 Mbit/s

95th percentile per-packet one-way delay: 1.087 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 11.36 Mbit/s

95th percentile per-packet one-way delay: 0.989 ms

Loss rate: 0.00%

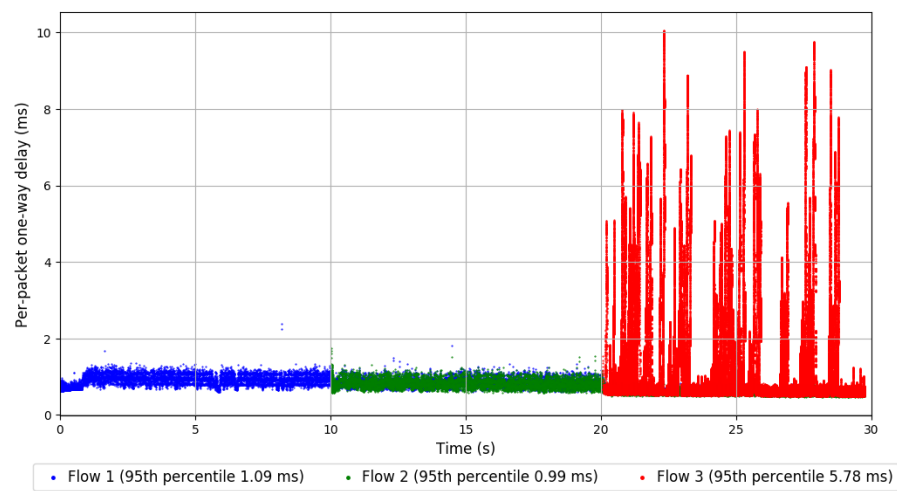
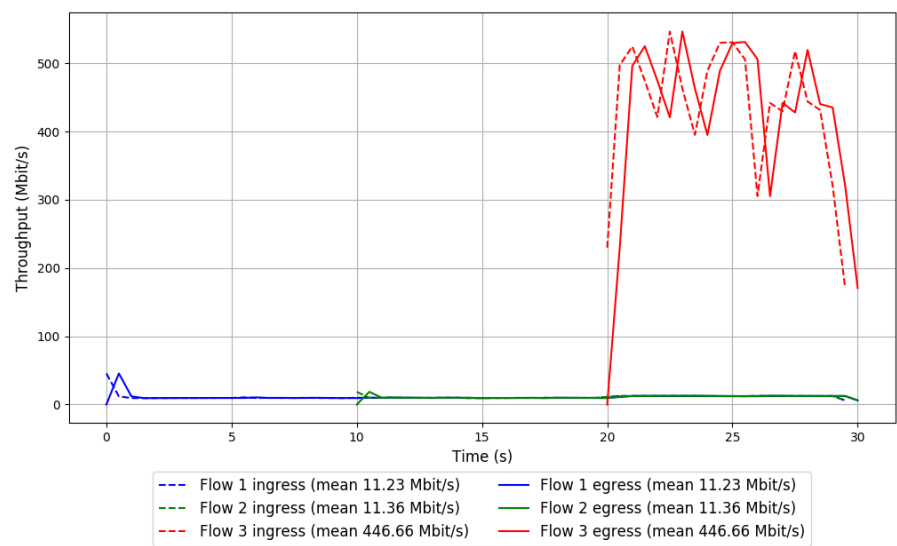
-- Flow 3:

Average throughput: 446.66 Mbit/s

95th percentile per-packet one-way delay: 5.775 ms

Loss rate: 0.00%

Run 3: Report of Muses\_DecisionTreeH0 — Data Link



Run 4: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-11-24 09:05:46

End at: 2019-11-24 09:06:16

Local clock offset: 3.306 ms

Remote clock offset: 1.83 ms

# Below is generated by plot.py at 2019-11-24 11:16:10

# Datalink statistics

-- Total of 3 flows:

Average throughput: 759.51 Mbit/s

95th percentile per-packet one-way delay: 7.394 ms

Loss rate: 3.38%

-- Flow 1:

Average throughput: 455.21 Mbit/s

95th percentile per-packet one-way delay: 8.089 ms

Loss rate: 2.68%

-- Flow 2:

Average throughput: 456.92 Mbit/s

95th percentile per-packet one-way delay: 6.377 ms

Loss rate: 4.45%

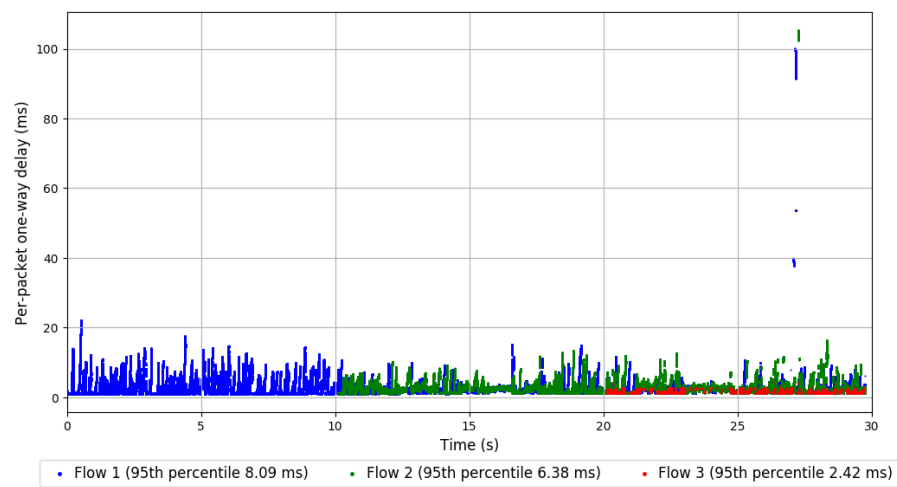
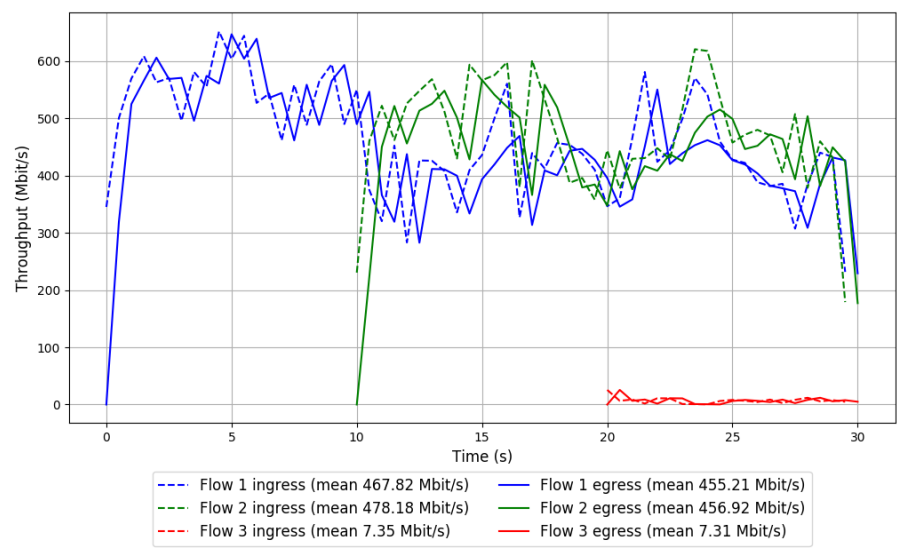
-- Flow 3:

Average throughput: 7.31 Mbit/s

95th percentile per-packet one-way delay: 2.415 ms

Loss rate: 0.68%

Run 4: Report of Muses\_DecisionTreeH0 — Data Link



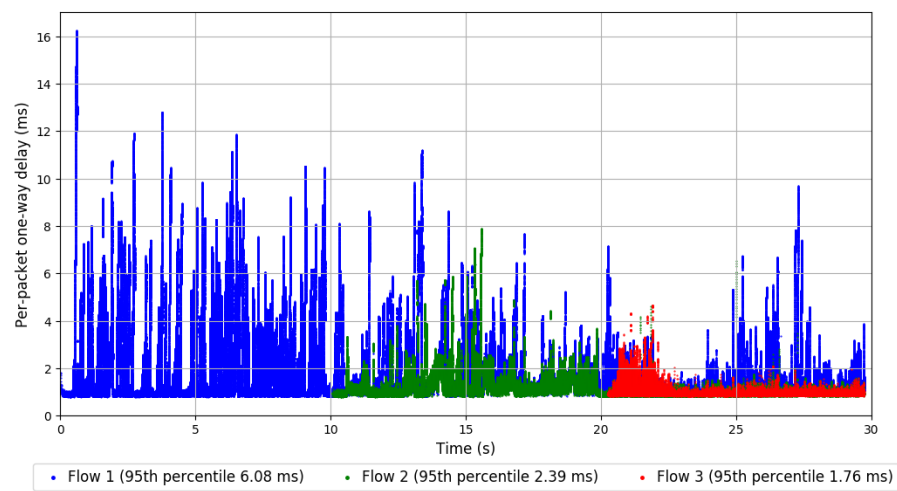
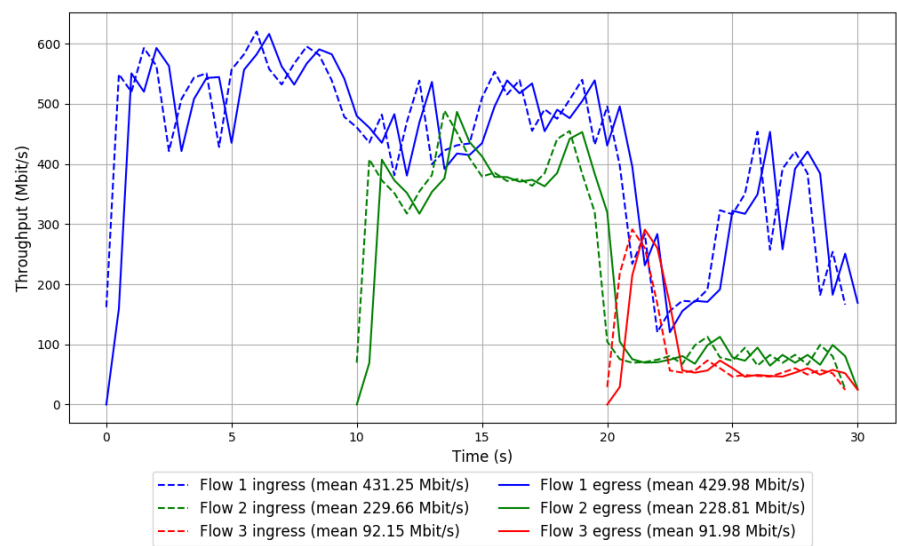


Run 5: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-11-24 09:40:57  
End at: 2019-11-24 09:41:27  
Local clock offset: 2.854 ms  
Remote clock offset: -5.196 ms

# Below is generated by plot.py at 2019-11-24 11:16:10  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 610.76 Mbit/s  
95th percentile per-packet one-way delay: 5.381 ms  
Loss rate: 0.31%  
-- Flow 1:  
Average throughput: 429.98 Mbit/s  
95th percentile per-packet one-way delay: 6.076 ms  
Loss rate: 0.29%  
-- Flow 2:  
Average throughput: 228.81 Mbit/s  
95th percentile per-packet one-way delay: 2.393 ms  
Loss rate: 0.39%  
-- Flow 3:  
Average throughput: 91.98 Mbit/s  
95th percentile per-packet one-way delay: 1.756 ms  
Loss rate: 0.18%

Run 5: Report of Muses\_DecisionTreeH0 — Data Link

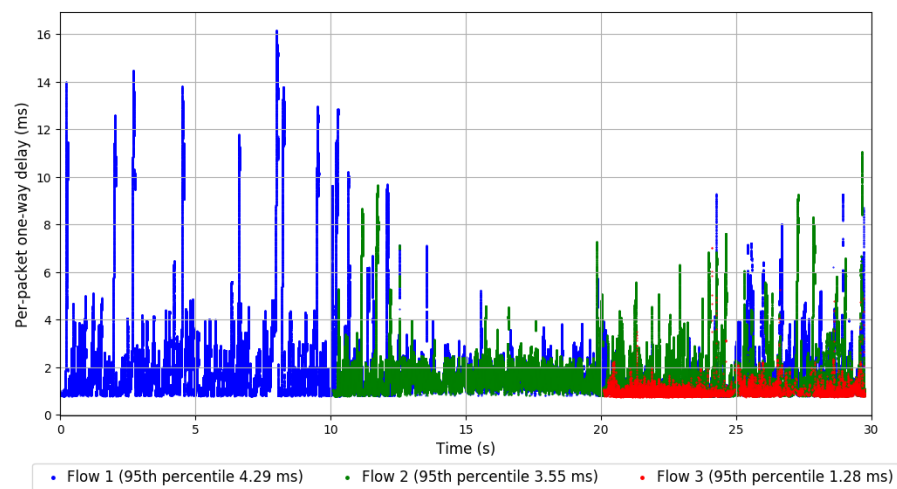
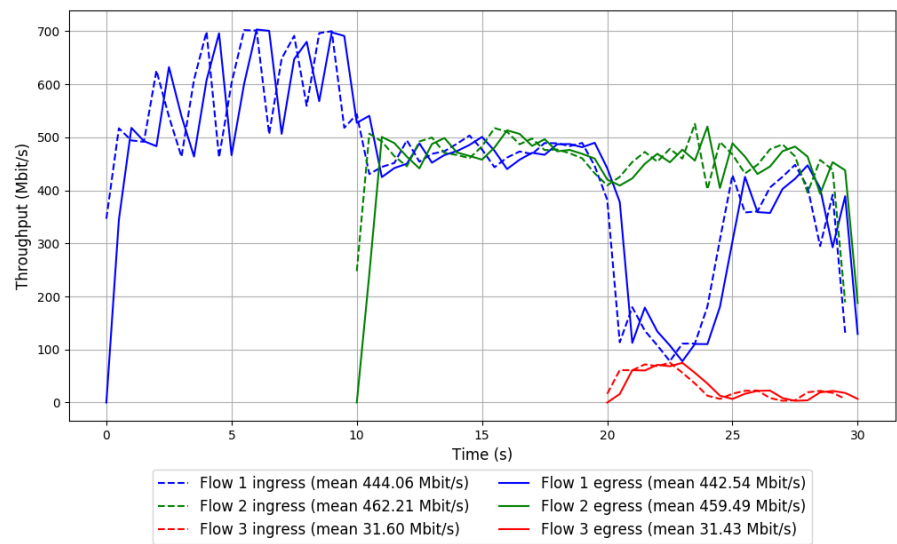


```
Run 1: Statistics of Muses\_DecisionTreeR0

Start at: 2019-11-24 07:25:53
End at: 2019-11-24 07:26:23
Local clock offset: 3.957 ms
Remote clock offset: 0.69 ms

# Below is generated by plot.py at 2019-11-24 11:16:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 756.56 Mbit/s
95th percentile per-packet one-way delay: 3.946 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 442.54 Mbit/s
95th percentile per-packet one-way delay: 4.285 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 459.49 Mbit/s
95th percentile per-packet one-way delay: 3.554 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 31.43 Mbit/s
95th percentile per-packet one-way delay: 1.284 ms
Loss rate: 0.54%
```

Run 1: Report of Muses\_DecisionTreeR0 — Data Link



Run 2: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-11-24 08:01:04

End at: 2019-11-24 08:01:34

Local clock offset: 4.546 ms

Remote clock offset: 1.054 ms

# Below is generated by plot.py at 2019-11-24 11:16:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 252.59 Mbit/s

95th percentile per-packet one-way delay: 9.278 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 240.41 Mbit/s

95th percentile per-packet one-way delay: 9.390 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 12.55 Mbit/s

95th percentile per-packet one-way delay: 1.100 ms

Loss rate: 0.00%

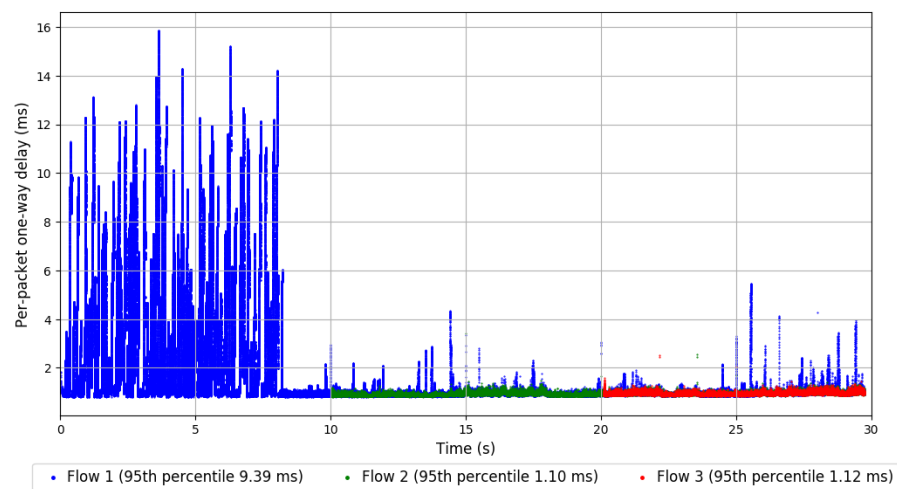
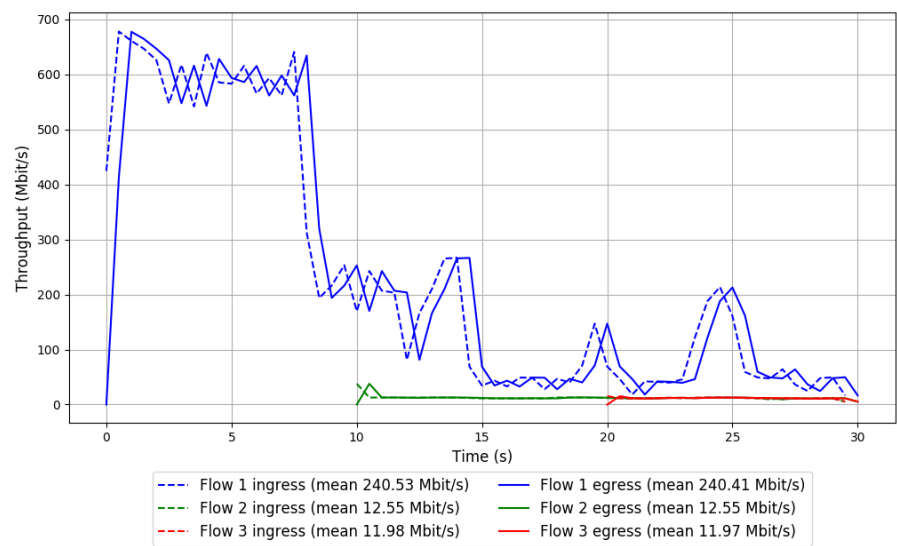
-- Flow 3:

Average throughput: 11.97 Mbit/s

95th percentile per-packet one-way delay: 1.118 ms

Loss rate: 0.00%

Run 2: Report of Muses\_DecisionTreeR0 — Data Link



Run 3: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-11-24 08:36:11

End at: 2019-11-24 08:36:41

Local clock offset: 3.518 ms

Remote clock offset: 2.084 ms

# Below is generated by plot.py at 2019-11-24 11:16:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 495.56 Mbit/s

95th percentile per-packet one-way delay: 2.953 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 179.65 Mbit/s

95th percentile per-packet one-way delay: 0.957 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 470.94 Mbit/s

95th percentile per-packet one-way delay: 3.529 ms

Loss rate: 0.00%

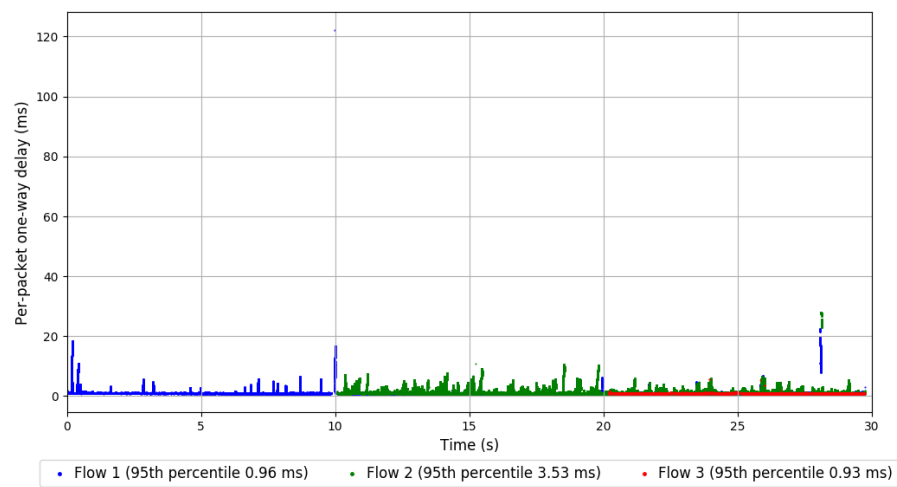
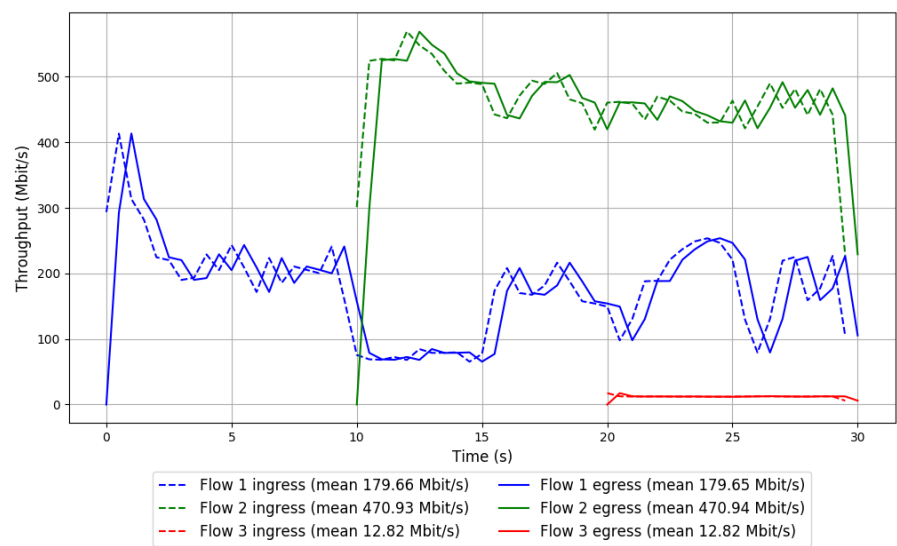
-- Flow 3:

Average throughput: 12.82 Mbit/s

95th percentile per-packet one-way delay: 0.927 ms

Loss rate: 0.00%

Run 3: Report of Muses\_DecisionTreeR0 — Data Link



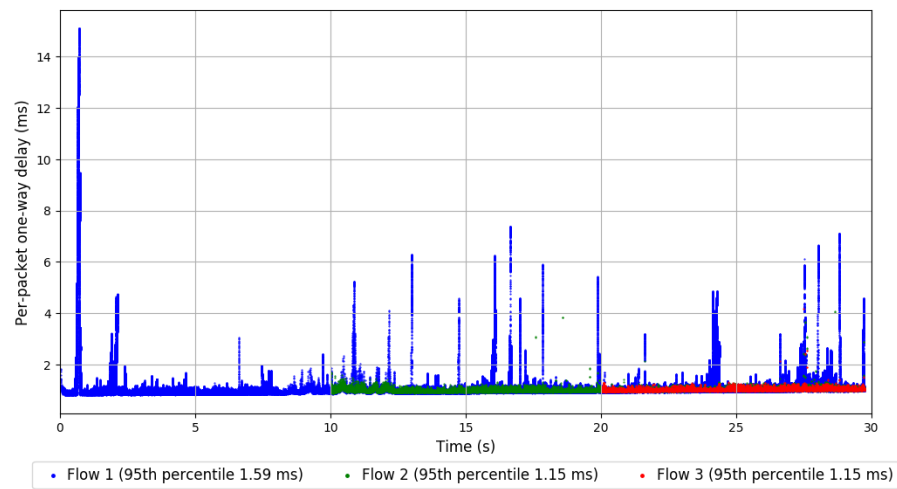
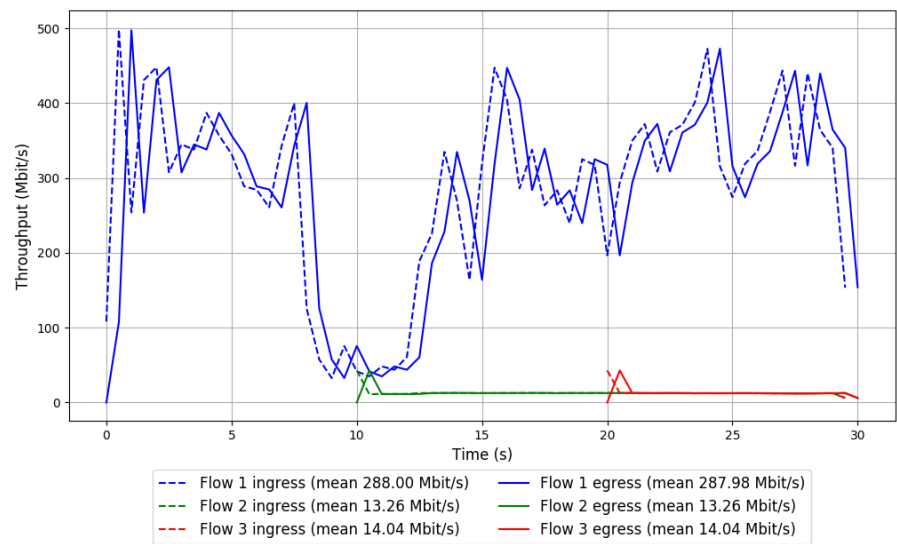


Run 4: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-11-24 09:11:52  
End at: 2019-11-24 09:12:22  
Local clock offset: 3.2 ms  
Remote clock offset: -1.009 ms

# Below is generated by plot.py at 2019-11-24 11:16:21  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 301.34 Mbit/s  
95th percentile per-packet one-way delay: 1.543 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 287.98 Mbit/s  
95th percentile per-packet one-way delay: 1.589 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 13.26 Mbit/s  
95th percentile per-packet one-way delay: 1.153 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 14.04 Mbit/s  
95th percentile per-packet one-way delay: 1.145 ms  
Loss rate: 0.00%

Run 4: Report of Muses\_DecisionTreeR0 — Data Link

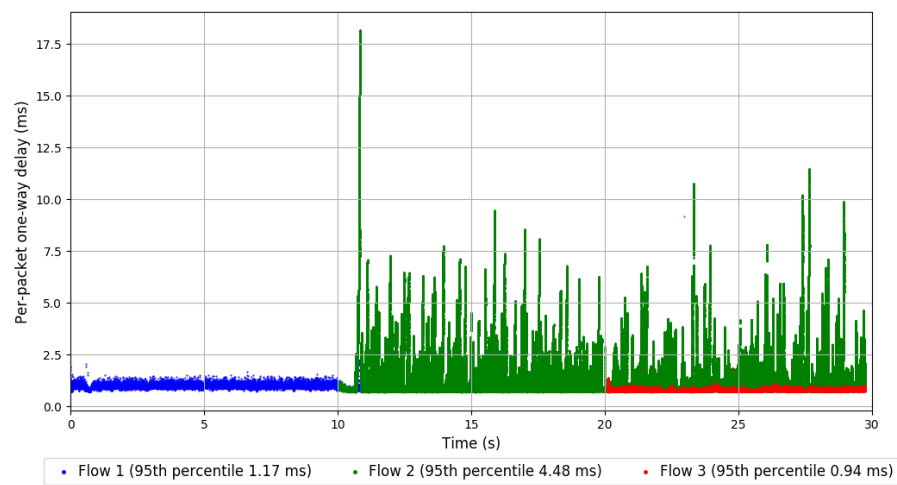
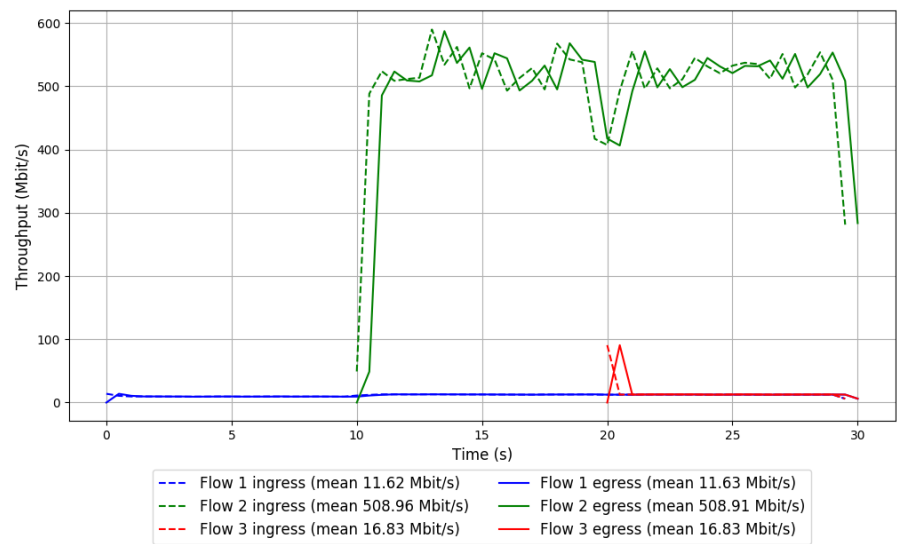


Run 5: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-11-24 09:46:58  
End at: 2019-11-24 09:47:28  
Local clock offset: 2.965 ms  
Remote clock offset: -5.725 ms

# Below is generated by plot.py at 2019-11-24 11:16:21  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 354.66 Mbit/s  
95th percentile per-packet one-way delay: 4.378 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 11.63 Mbit/s  
95th percentile per-packet one-way delay: 1.170 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 508.91 Mbit/s  
95th percentile per-packet one-way delay: 4.478 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 16.83 Mbit/s  
95th percentile per-packet one-way delay: 0.944 ms  
Loss rate: 0.00%

Run 5: Report of Muses\_DecisionTreeR0 — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2019-11-24 07:18:15

End at: 2019-11-24 07:18:45

Local clock offset: 3.472 ms

Remote clock offset: 0.08 ms

# Below is generated by plot.py at 2019-11-24 11:20:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 710.66 Mbit/s

95th percentile per-packet one-way delay: 1.424 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 404.23 Mbit/s

95th percentile per-packet one-way delay: 1.803 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 424.31 Mbit/s

95th percentile per-packet one-way delay: 1.240 ms

Loss rate: 0.06%

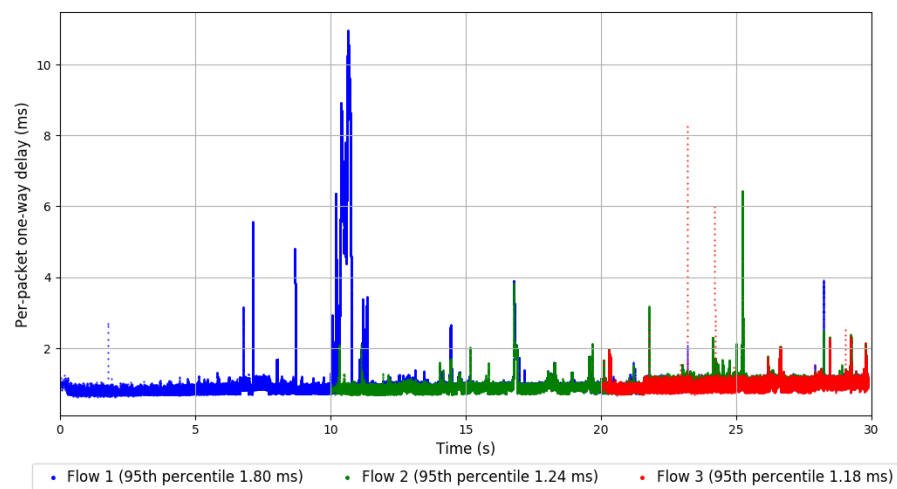
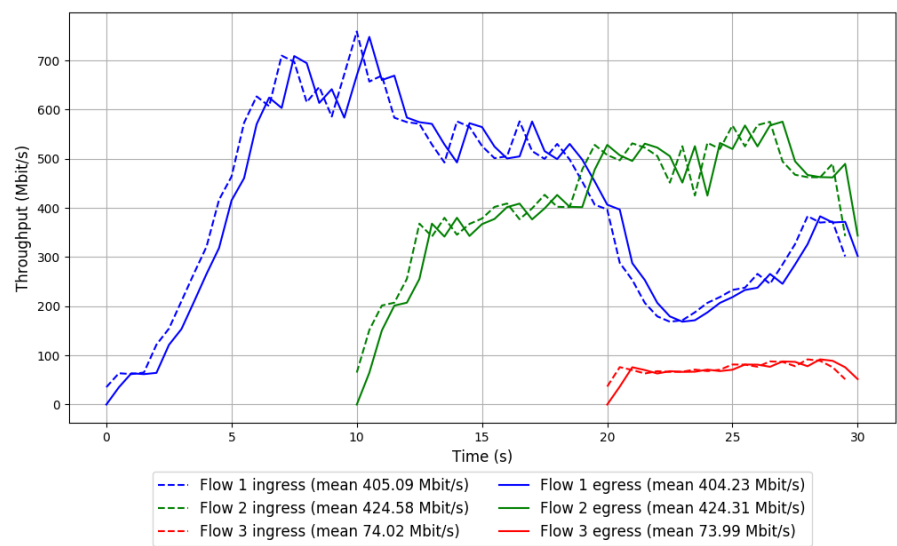
-- Flow 3:

Average throughput: 73.99 Mbit/s

95th percentile per-packet one-way delay: 1.183 ms

Loss rate: 0.04%

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2019-11-24 07:53:34

End at: 2019-11-24 07:54:04

Local clock offset: 4.441 ms

Remote clock offset: 1.97 ms

# Below is generated by plot.py at 2019-11-24 11:23:05

# Datalink statistics

-- Total of 3 flows:

Average throughput: 813.34 Mbit/s

95th percentile per-packet one-way delay: 2.158 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 486.24 Mbit/s

95th percentile per-packet one-way delay: 2.090 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 475.24 Mbit/s

95th percentile per-packet one-way delay: 2.205 ms

Loss rate: 0.26%

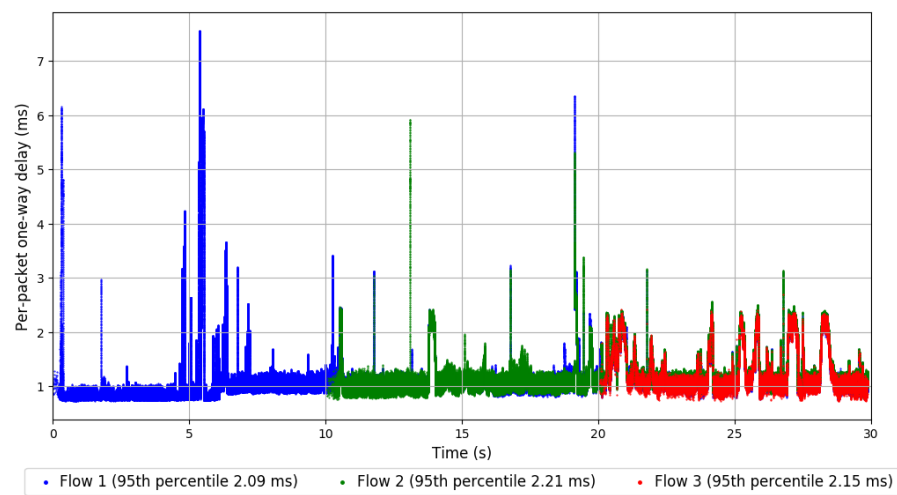
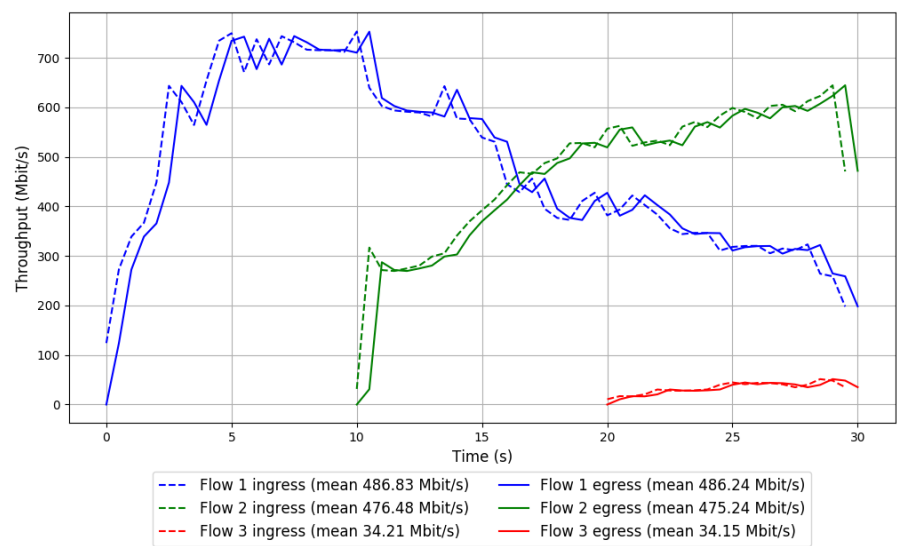
-- Flow 3:

Average throughput: 34.15 Mbit/s

95th percentile per-packet one-way delay: 2.153 ms

Loss rate: 0.19%

Run 2: Report of PCC-Allegro — Data Link





Run 3: Statistics of PCC-Allegro

Start at: 2019-11-24 08:28:52

End at: 2019-11-24 08:29:22

Local clock offset: 3.62 ms

Remote clock offset: 0.337 ms

# Below is generated by plot.py at 2019-11-24 11:23:05

# Datalink statistics

-- Total of 3 flows:

Average throughput: 695.45 Mbit/s

95th percentile per-packet one-way delay: 1.839 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 364.14 Mbit/s

95th percentile per-packet one-way delay: 1.469 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 353.70 Mbit/s

95th percentile per-packet one-way delay: 1.885 ms

Loss rate: 0.38%

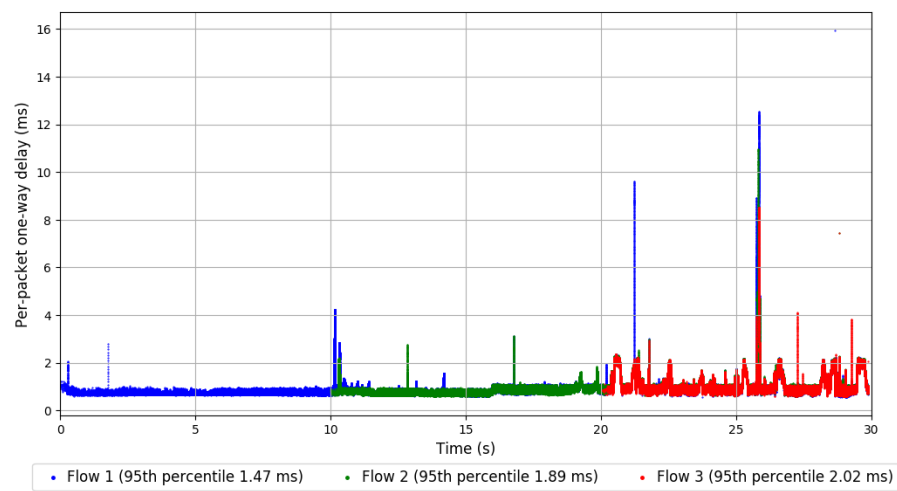
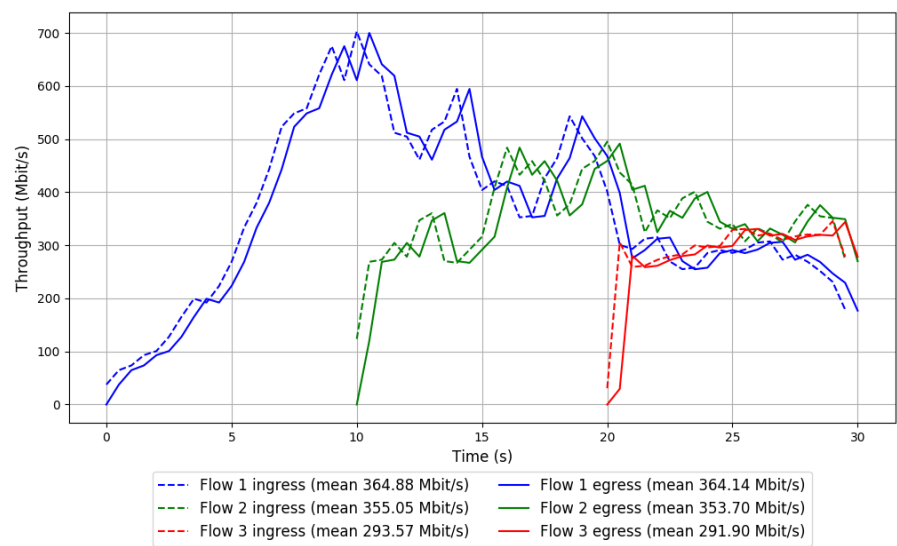
-- Flow 3:

Average throughput: 291.90 Mbit/s

95th percentile per-packet one-way delay: 2.022 ms

Loss rate: 0.56%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2019-11-24 09:04:18

End at: 2019-11-24 09:04:48

Local clock offset: 3.274 ms

Remote clock offset: 2.846 ms

# Below is generated by plot.py at 2019-11-24 11:23:05

# Datalink statistics

-- Total of 3 flows:

Average throughput: 550.04 Mbit/s

95th percentile per-packet one-way delay: 1.692 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 389.57 Mbit/s

95th percentile per-packet one-way delay: 1.659 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 44.48 Mbit/s

95th percentile per-packet one-way delay: 1.673 ms

Loss rate: 0.05%

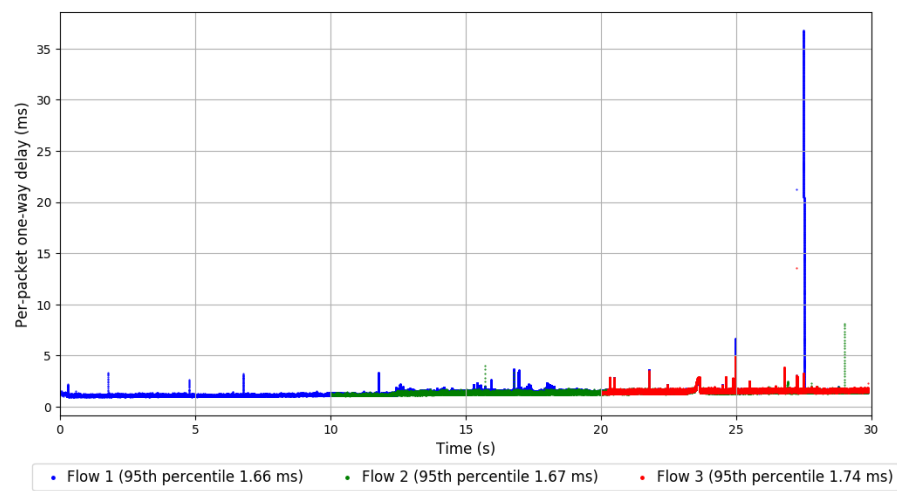
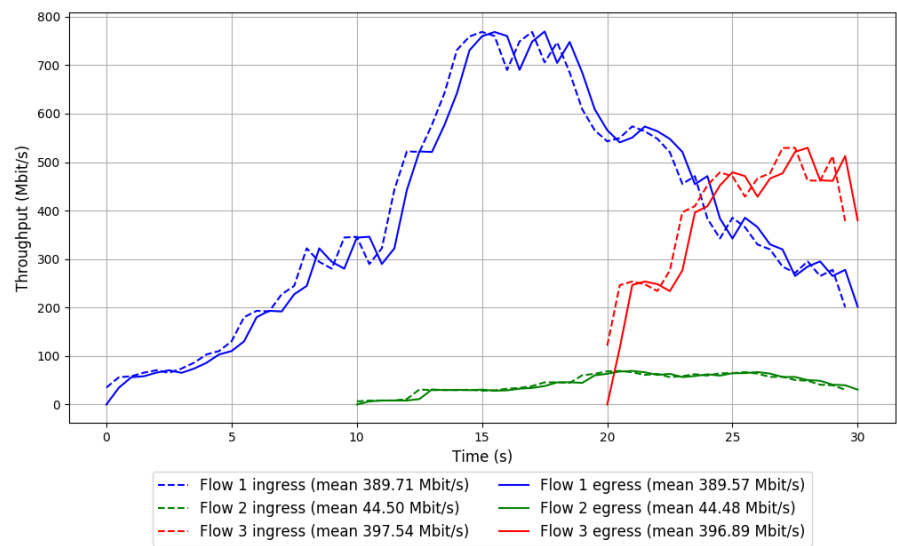
-- Flow 3:

Average throughput: 396.89 Mbit/s

95th percentile per-packet one-way delay: 1.738 ms

Loss rate: 0.15%

Run 4: Report of PCC-Allegro — Data Link

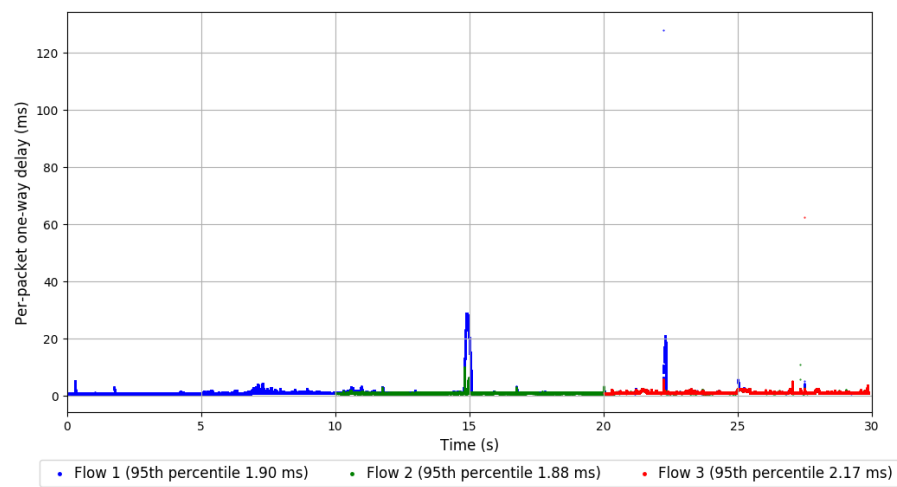
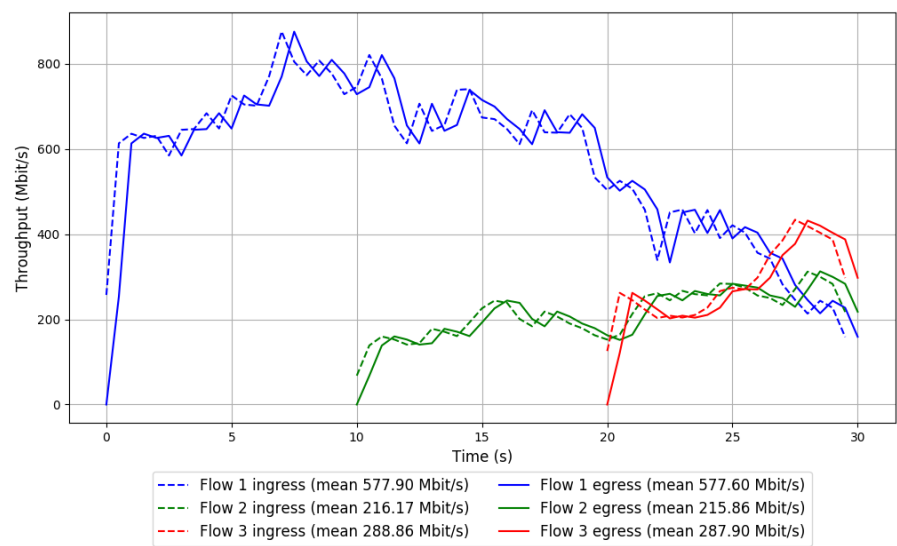


Run 5: Statistics of PCC-Allegro

Start at: 2019-11-24 09:39:23  
End at: 2019-11-24 09:39:53  
Local clock offset: 2.843 ms  
Remote clock offset: -5.172 ms

# Below is generated by plot.py at 2019-11-24 11:24:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 816.10 Mbit/s  
95th percentile per-packet one-way delay: 1.970 ms  
Loss rate: 0.10%  
-- Flow 1:  
Average throughput: 577.60 Mbit/s  
95th percentile per-packet one-way delay: 1.895 ms  
Loss rate: 0.05%  
-- Flow 2:  
Average throughput: 215.86 Mbit/s  
95th percentile per-packet one-way delay: 1.877 ms  
Loss rate: 0.15%  
-- Flow 3:  
Average throughput: 287.90 Mbit/s  
95th percentile per-packet one-way delay: 2.165 ms  
Loss rate: 0.33%

Run 5: Report of PCC-Allegro — Data Link

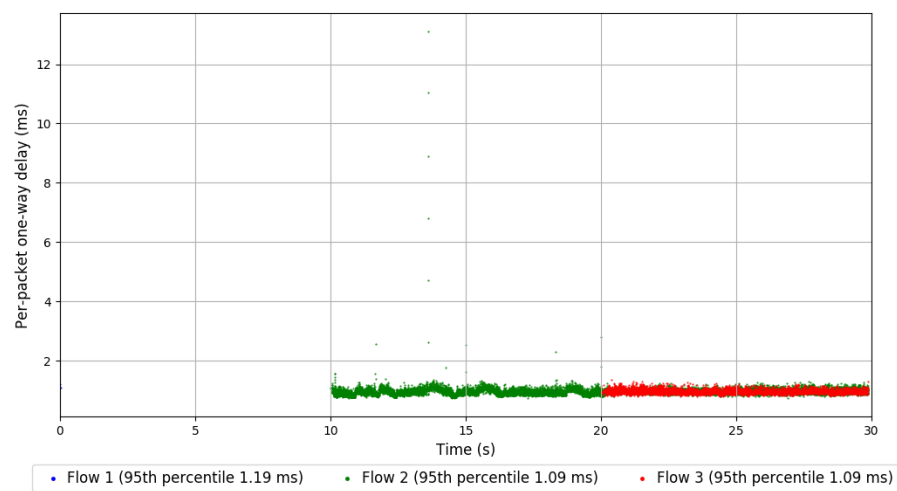
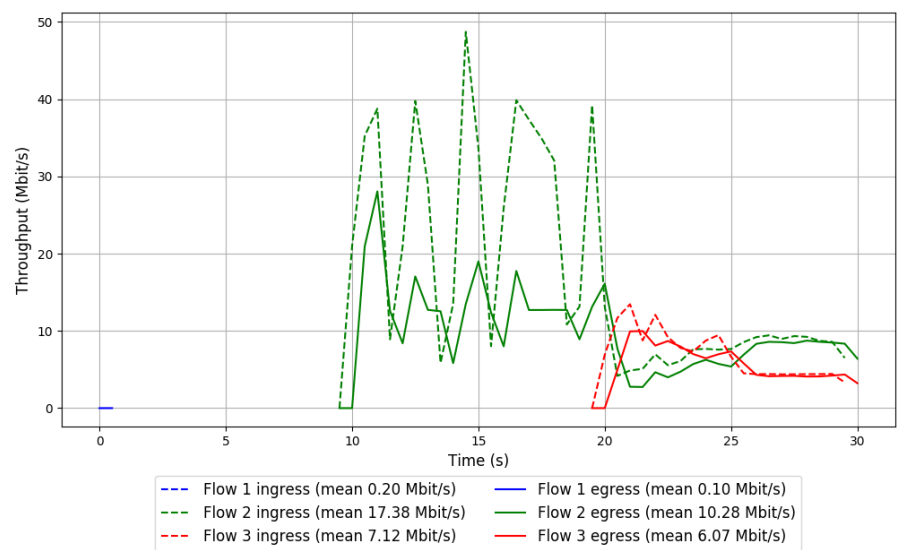


```
Run 1: Statistics of PCC-Expr

Start at: 2019-11-24 07:40:47
End at: 2019-11-24 07:41:17
Local clock offset: 4.48 ms
Remote clock offset: 1.488 ms

# Below is generated by plot.py at 2019-11-24 11:24:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.85 Mbit/s
95th percentile per-packet one-way delay: 1.090 ms
Loss rate: 36.46%
-- Flow 1:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 1.188 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 10.28 Mbit/s
95th percentile per-packet one-way delay: 1.089 ms
Loss rate: 40.88%
-- Flow 3:
Average throughput: 6.07 Mbit/s
95th percentile per-packet one-way delay: 1.092 ms
Loss rate: 14.73%
```

Run 1: Report of PCC-Expr — Data Link





Run 2: Statistics of PCC-Expr

Start at: 2019-11-24 08:15:43

End at: 2019-11-24 08:16:13

Local clock offset: 4.069 ms

Remote clock offset: 0.365 ms

# Below is generated by plot.py at 2019-11-24 11:24:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 7.08 Mbit/s

95th percentile per-packet one-way delay: 1.123 ms

Loss rate: 25.02%

-- Flow 1:

Average throughput: 0.76 Mbit/s

95th percentile per-packet one-way delay: 1.129 ms

Loss rate: 85.71%

-- Flow 2:

Average throughput: 6.69 Mbit/s

95th percentile per-packet one-way delay: 1.143 ms

Loss rate: 21.40%

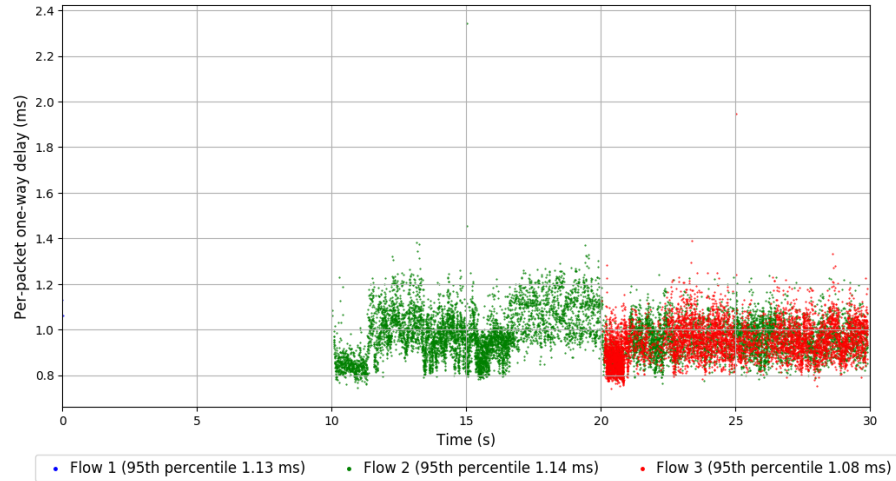
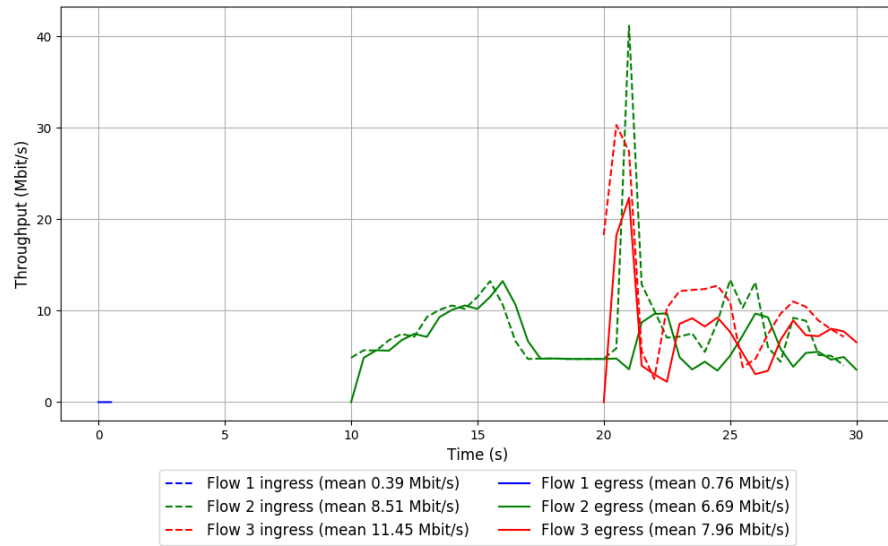
-- Flow 3:

Average throughput: 7.96 Mbit/s

95th percentile per-packet one-way delay: 1.080 ms

Loss rate: 30.43%

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



Run 3: Statistics of PCC-Expr

Start at: 2019-11-24 08:51:04

End at: 2019-11-24 08:51:34

Local clock offset: 3.388 ms

Remote clock offset: 3.494 ms

# Below is generated by plot.py at 2019-11-24 11:24:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 8.74 Mbit/s

95th percentile per-packet one-way delay: 1.051 ms

Loss rate: 30.31%

-- Flow 1:

Average throughput: 0.78 Mbit/s

95th percentile per-packet one-way delay: 1.132 ms

Loss rate: 85.71%

-- Flow 2:

Average throughput: 10.41 Mbit/s

95th percentile per-packet one-way delay: 1.051 ms

Loss rate: 26.29%

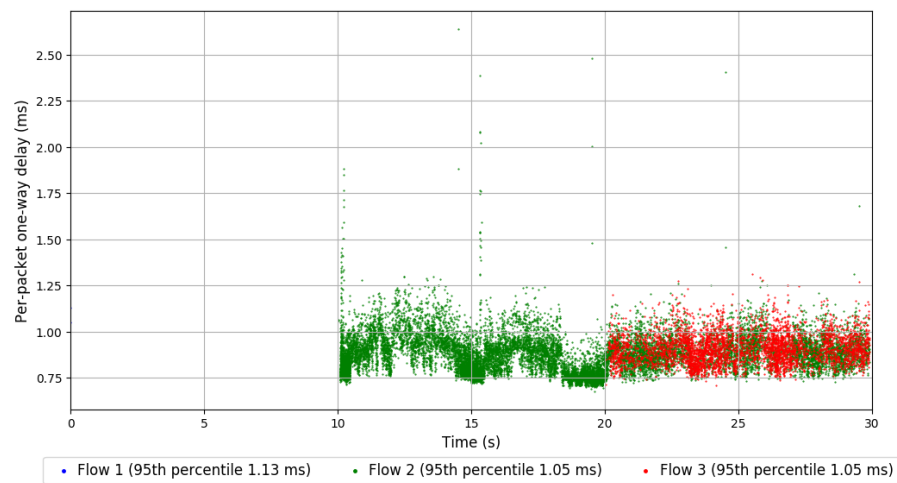
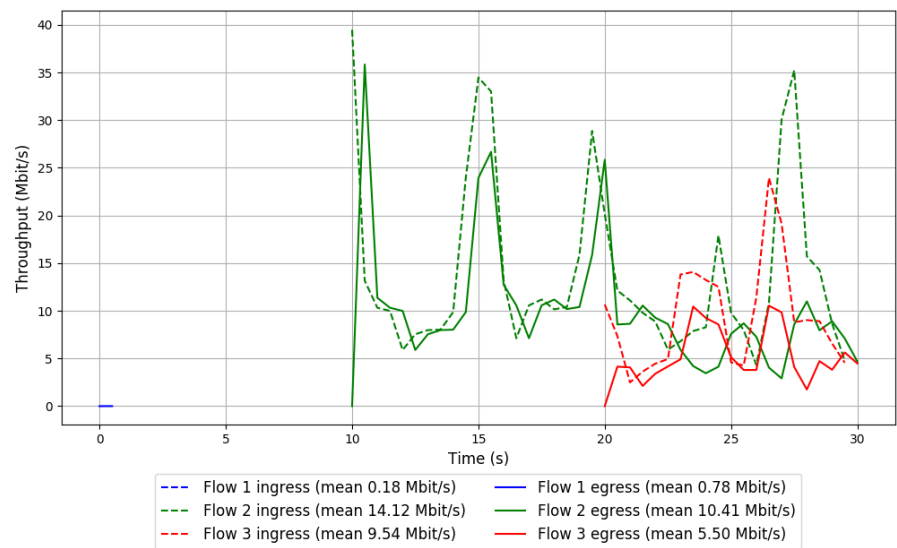
-- Flow 3:

Average throughput: 5.50 Mbit/s

95th percentile per-packet one-way delay: 1.051 ms

Loss rate: 42.30%

Run 3: Report of PCC-Expr — Data Link

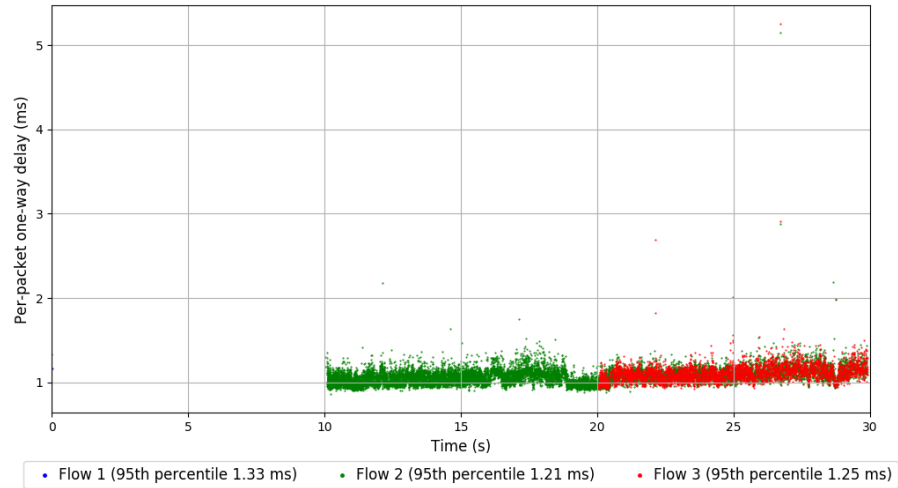
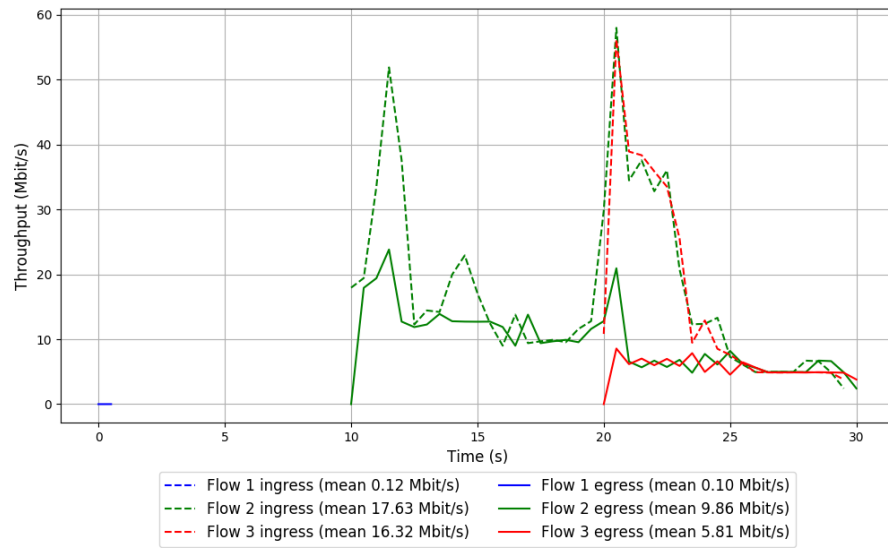


Run 4: Statistics of PCC-Expr

Start at: 2019-11-24 09:26:34  
End at: 2019-11-24 09:27:04  
Local clock offset: 2.918 ms  
Remote clock offset: -3.883 ms

# Below is generated by plot.py at 2019-11-24 11:24:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.48 Mbit/s  
95th percentile per-packet one-way delay: 1.223 ms  
Loss rate: 50.45%  
-- Flow 1:  
Average throughput: 0.10 Mbit/s  
95th percentile per-packet one-way delay: 1.332 ms  
Loss rate: 85.71%  
-- Flow 2:  
Average throughput: 9.86 Mbit/s  
95th percentile per-packet one-way delay: 1.210 ms  
Loss rate: 44.04%  
-- Flow 3:  
Average throughput: 5.81 Mbit/s  
95th percentile per-packet one-way delay: 1.250 ms  
Loss rate: 64.39%

#### Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2019-11-24 10:01:55

End at: 2019-11-24 10:02:25

Local clock offset: 3.045 ms

Remote clock offset: -6.81 ms

# Below is generated by plot.py at 2019-11-24 11:24:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 8.83 Mbit/s

95th percentile per-packet one-way delay: 0.947 ms

Loss rate: 51.04%

-- Flow 1:

Average throughput: 0.10 Mbit/s

95th percentile per-packet one-way delay: 1.067 ms

Loss rate: 85.71%

-- Flow 2:

Average throughput: 10.52 Mbit/s

95th percentile per-packet one-way delay: 0.937 ms

Loss rate: 52.61%

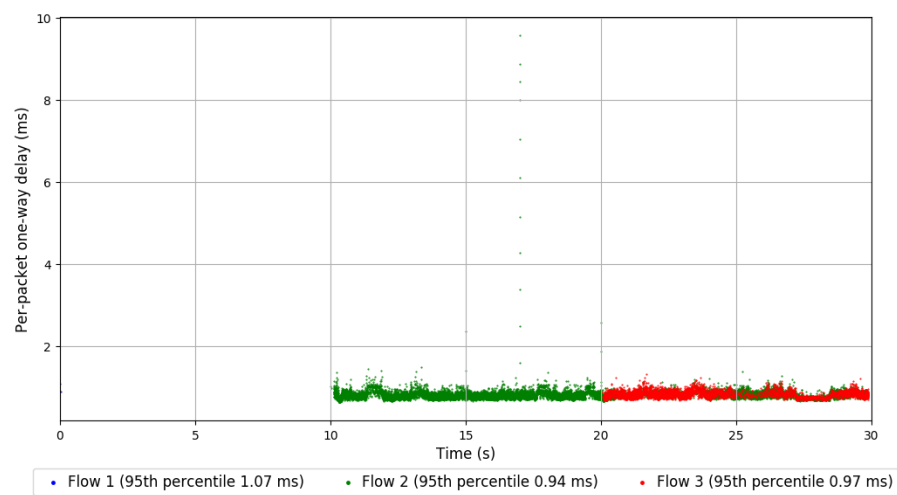
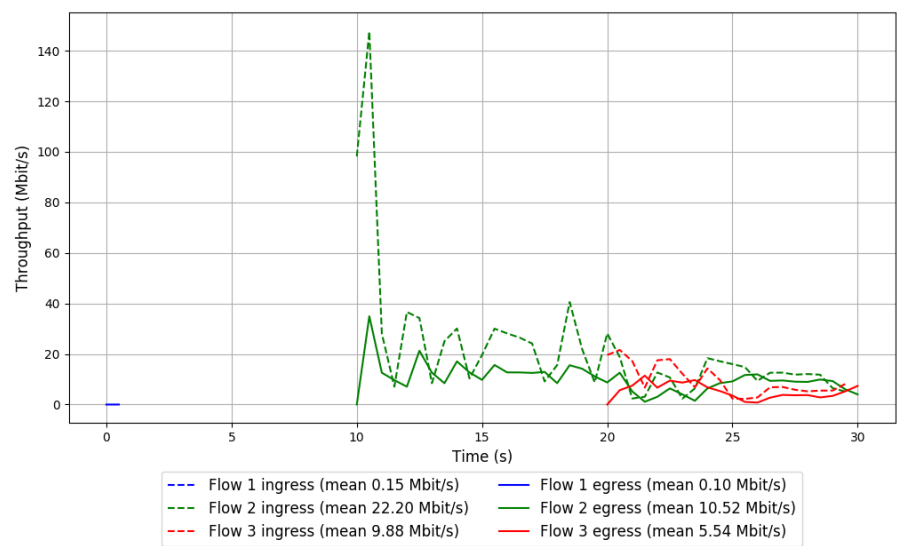
-- Flow 3:

Average throughput: 5.54 Mbit/s

95th percentile per-packet one-way delay: 0.967 ms

Loss rate: 43.90%

Run 5: Report of PCC-Expr — Data Link





Run 1: Statistics of QUIC Cubic

Start at: 2019-11-24 07:49:21

End at: 2019-11-24 07:49:51

Local clock offset: 4.415 ms

Remote clock offset: 1.782 ms

# Below is generated by plot.py at 2019-11-24 11:24:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 120.22 Mbit/s

95th percentile per-packet one-way delay: 2.938 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 58.71 Mbit/s

95th percentile per-packet one-way delay: 0.915 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 66.66 Mbit/s

95th percentile per-packet one-way delay: 3.935 ms

Loss rate: 0.00%

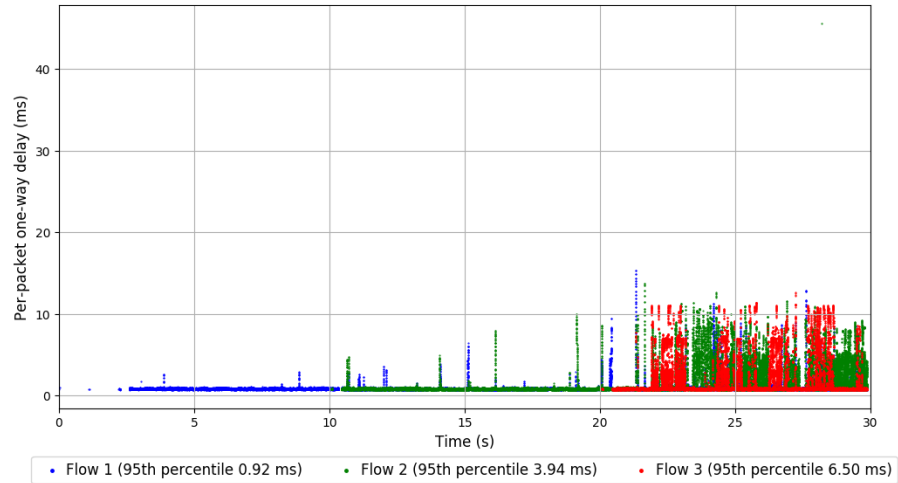
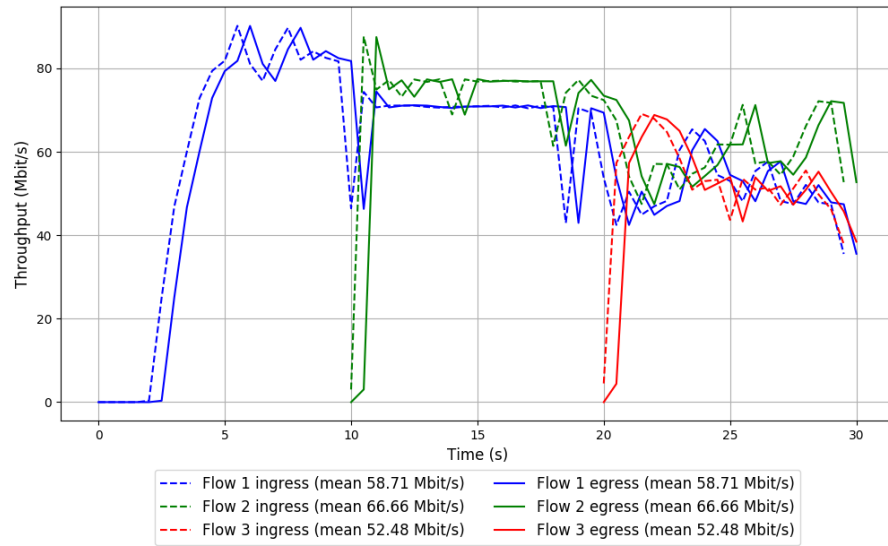
-- Flow 3:

Average throughput: 52.48 Mbit/s

95th percentile per-packet one-way delay: 6.502 ms

Loss rate: 0.00%

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



Run 2: Statistics of QUIC Cubic

Start at: 2019-11-24 08:24:40

End at: 2019-11-24 08:25:10

Local clock offset: 3.645 ms

Remote clock offset: 0.206 ms

# Below is generated by plot.py at 2019-11-24 11:24:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 124.36 Mbit/s

95th percentile per-packet one-way delay: 2.921 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 66.91 Mbit/s

95th percentile per-packet one-way delay: 1.501 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 57.36 Mbit/s

95th percentile per-packet one-way delay: 1.006 ms

Loss rate: 0.00%

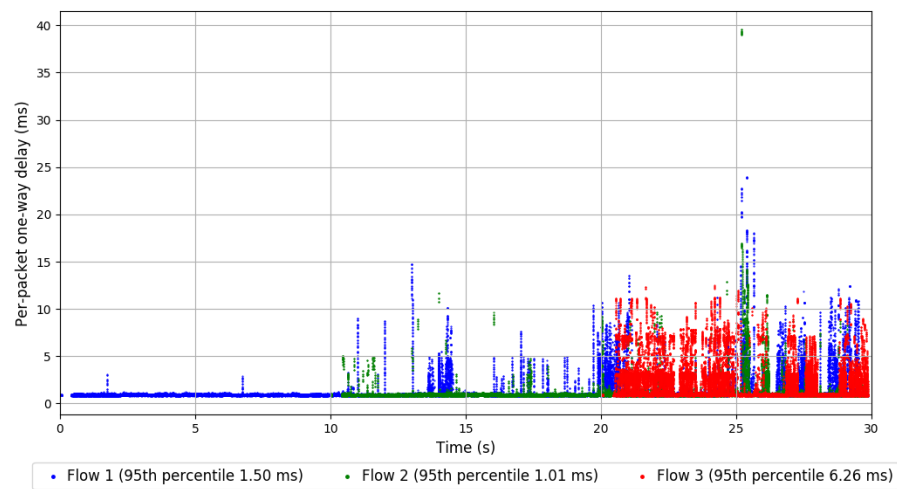
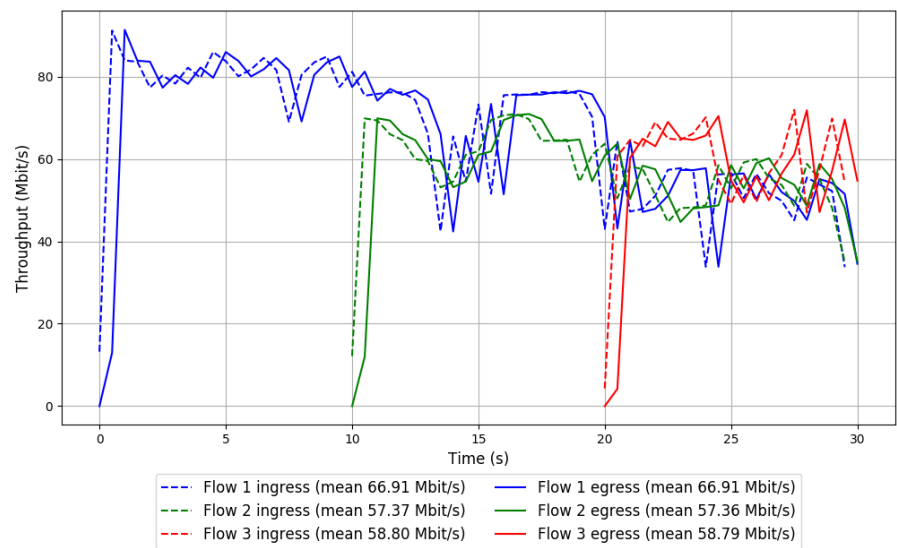
-- Flow 3:

Average throughput: 58.79 Mbit/s

95th percentile per-packet one-way delay: 6.261 ms

Loss rate: 0.01%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2019-11-24 09:00:05

End at: 2019-11-24 09:00:35

Local clock offset: 3.324 ms

Remote clock offset: 3.924 ms

# Below is generated by plot.py at 2019-11-24 11:24:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 124.43 Mbit/s

95th percentile per-packet one-way delay: 2.772 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 63.11 Mbit/s

95th percentile per-packet one-way delay: 3.276 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 65.93 Mbit/s

95th percentile per-packet one-way delay: 0.892 ms

Loss rate: 0.00%

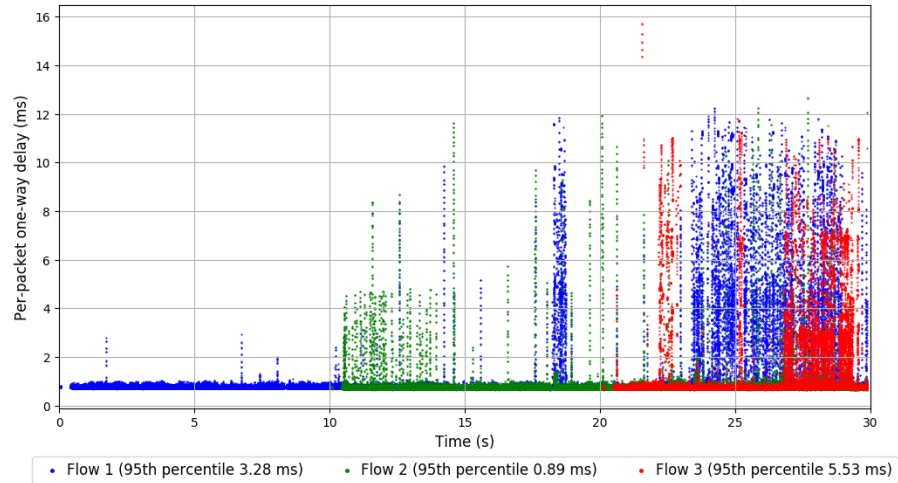
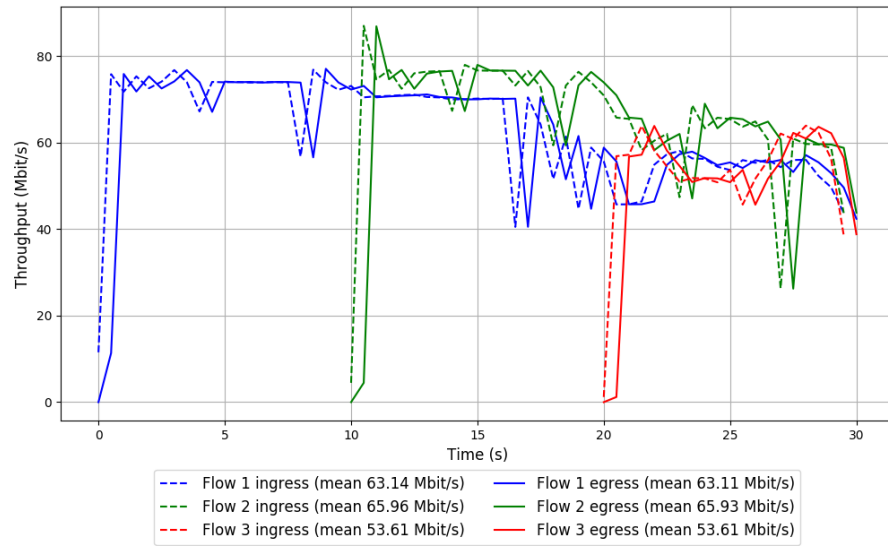
-- Flow 3:

Average throughput: 53.61 Mbit/s

95th percentile per-packet one-way delay: 5.530 ms

Loss rate: 0.00%

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

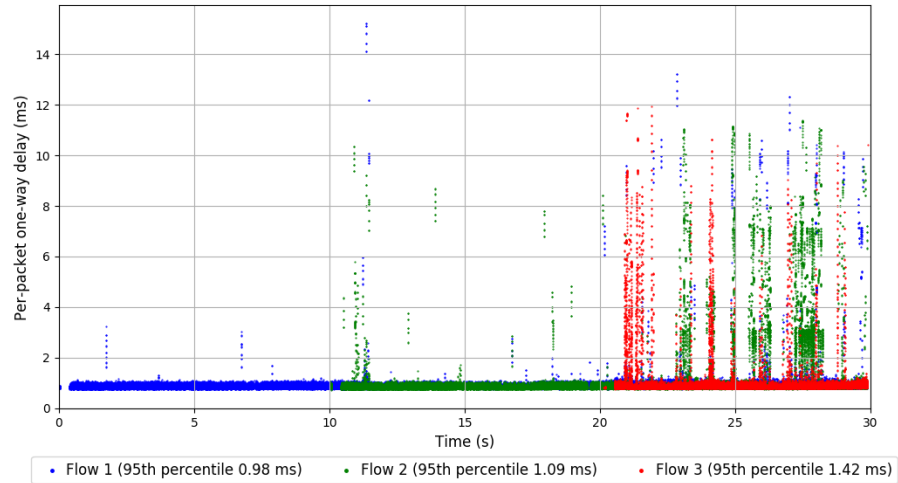
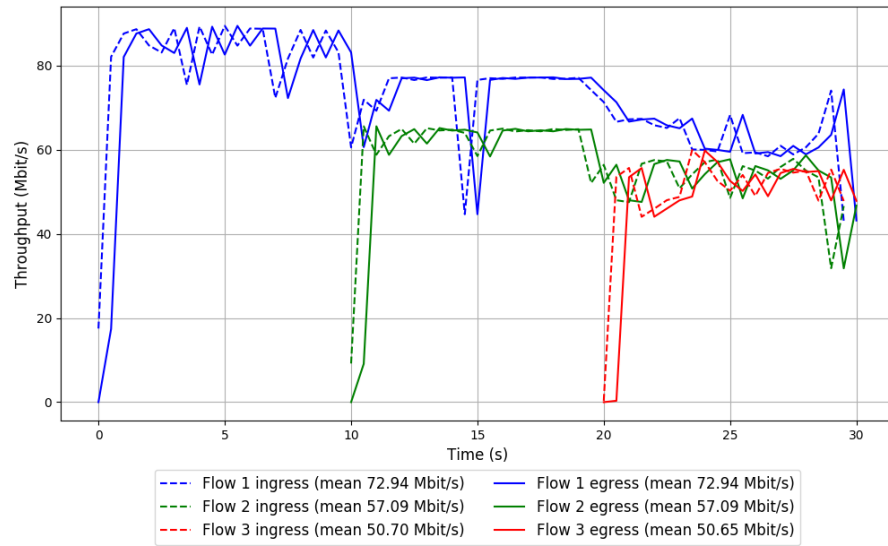


Run 4: Statistics of QUIC Cubic

Start at: 2019-11-24 09:35:15  
End at: 2019-11-24 09:35:45  
Local clock offset: 2.84 ms  
Remote clock offset: -4.823 ms

# Below is generated by plot.py at 2019-11-24 11:24:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 127.37 Mbit/s  
95th percentile per-packet one-way delay: 0.998 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 72.94 Mbit/s  
95th percentile per-packet one-way delay: 0.976 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 57.09 Mbit/s  
95th percentile per-packet one-way delay: 1.089 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 50.65 Mbit/s  
95th percentile per-packet one-way delay: 1.418 ms  
Loss rate: 0.00%

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



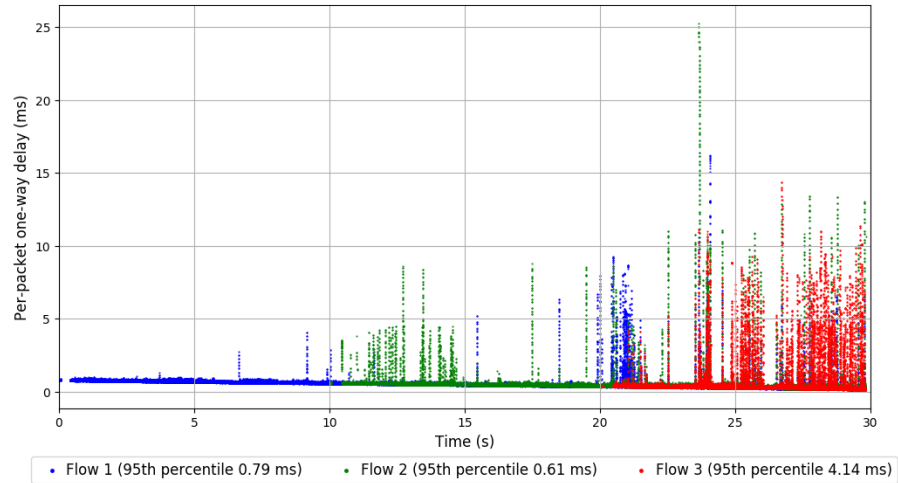
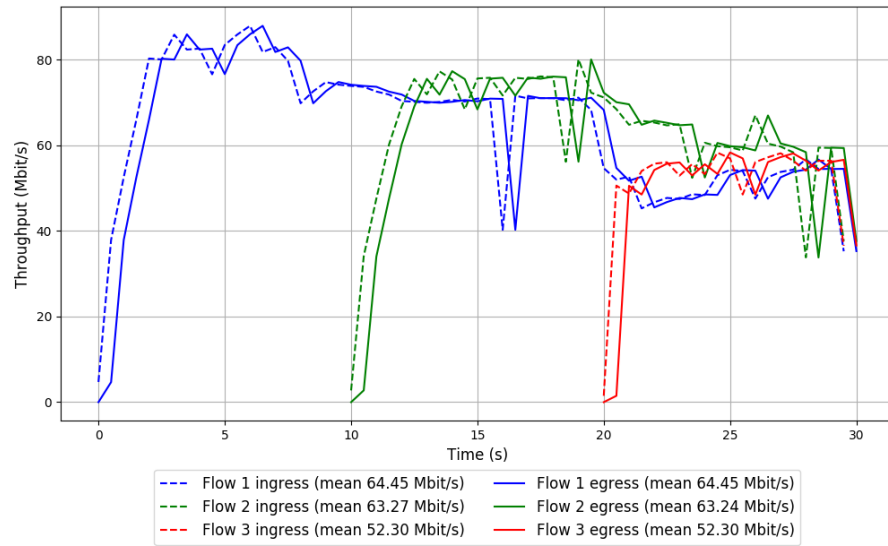


Run 5: Statistics of QUIC Cubic

Start at: 2019-11-24 10:10:44  
End at: 2019-11-24 10:11:14  
Local clock offset: 2.994 ms  
Remote clock offset: -7.283 ms

# Below is generated by plot.py at 2019-11-24 11:24:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 123.60 Mbit/s  
95th percentile per-packet one-way delay: 0.807 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 64.45 Mbit/s  
95th percentile per-packet one-way delay: 0.789 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 63.24 Mbit/s  
95th percentile per-packet one-way delay: 0.608 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 52.30 Mbit/s  
95th percentile per-packet one-way delay: 4.145 ms  
Loss rate: 0.00%

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



Run 1: Statistics of SReAM

Start at: 2019-11-24 07:30:37

End at: 2019-11-24 07:31:07

Local clock offset: 4.212 ms

Remote clock offset: 1.036 ms

# Below is generated by plot.py at 2019-11-24 11:24:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 1.293 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.303 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.280 ms

Loss rate: 0.00%

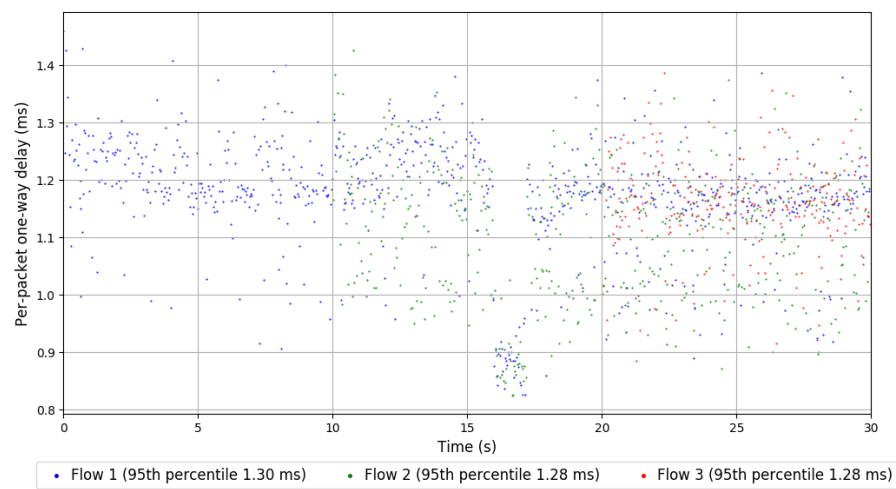
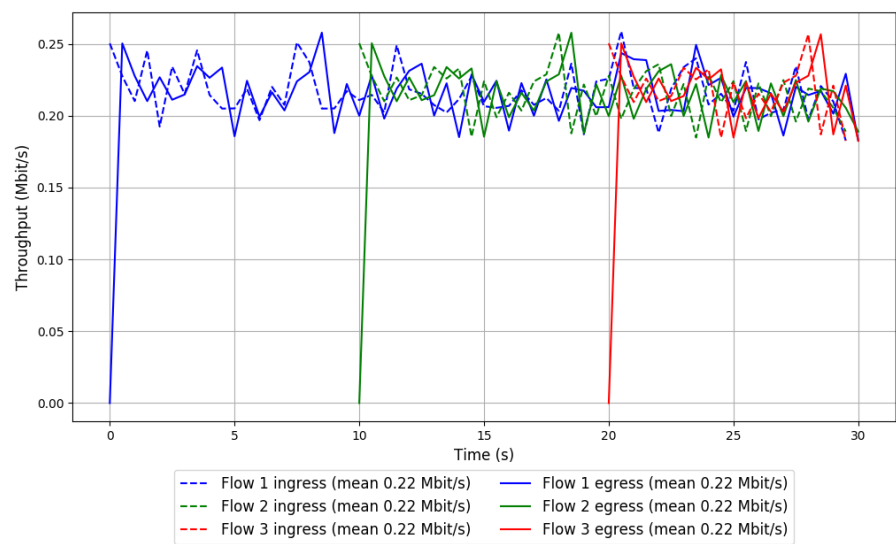
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.283 ms

Loss rate: 0.00%

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SReAM

Start at: 2019-11-24 08:05:30

End at: 2019-11-24 08:06:00

Local clock offset: 4.642 ms

Remote clock offset: 0.635 ms

# Below is generated by plot.py at 2019-11-24 11:24:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 1.216 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.193 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.228 ms

Loss rate: 0.00%

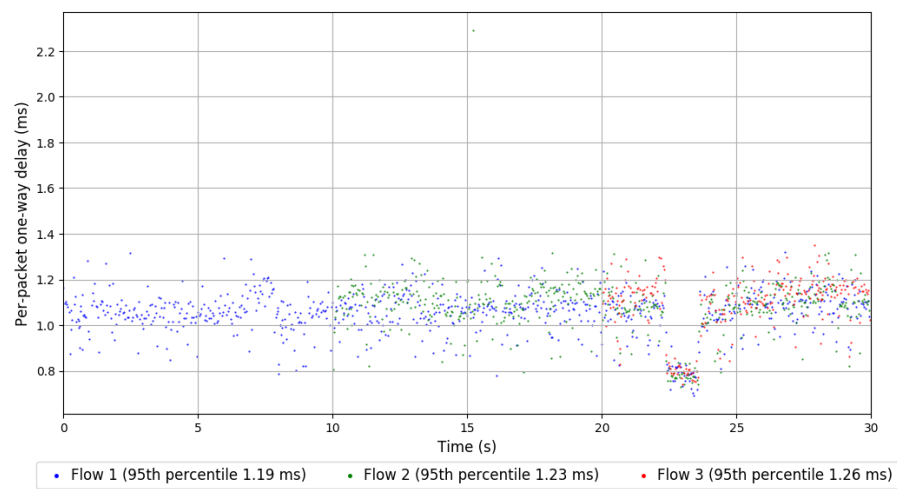
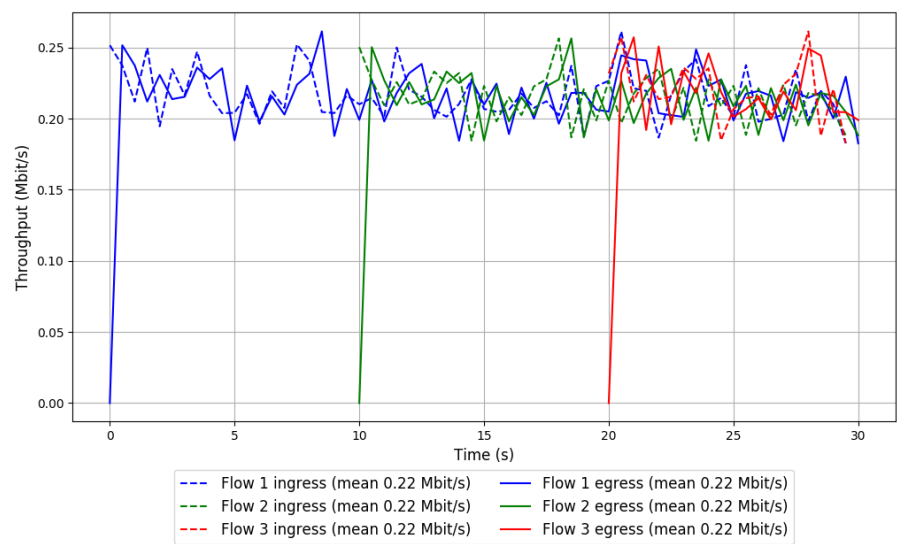
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.258 ms

Loss rate: 0.00%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SReAM

Start at: 2019-11-24 08:40:48

End at: 2019-11-24 08:41:18

Local clock offset: 3.461 ms

Remote clock offset: 2.705 ms

# Below is generated by plot.py at 2019-11-24 11:24:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 1.224 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.236 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.207 ms

Loss rate: 0.00%

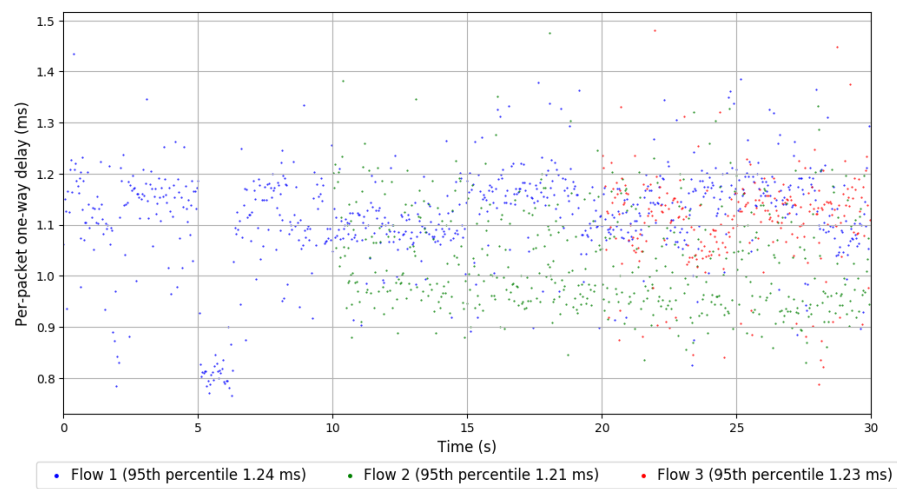
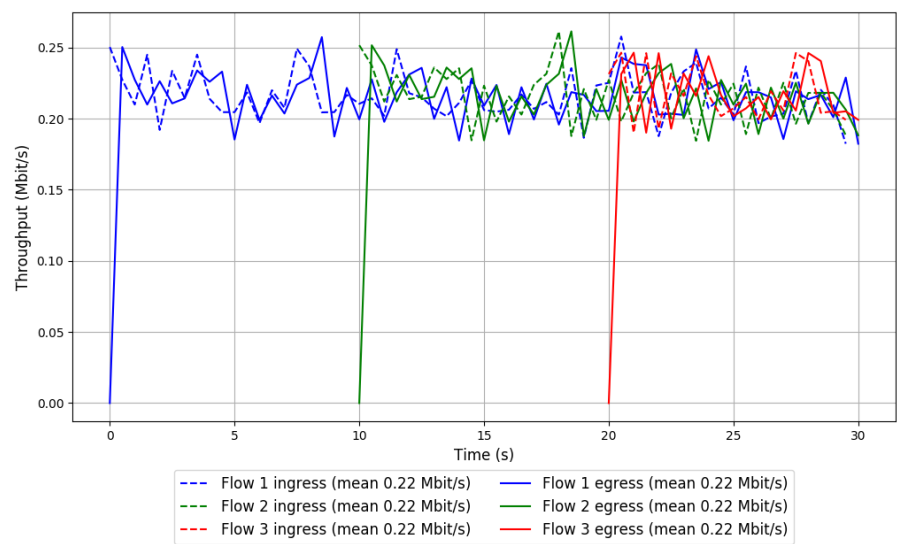
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.225 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



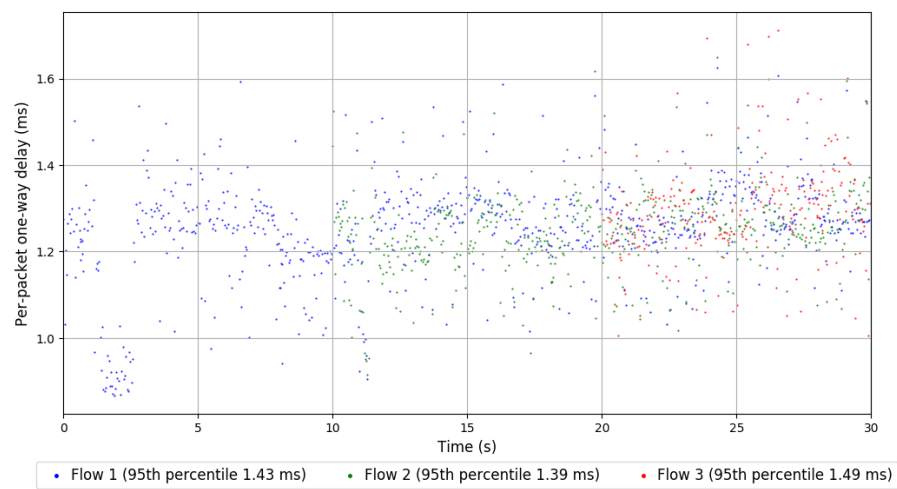
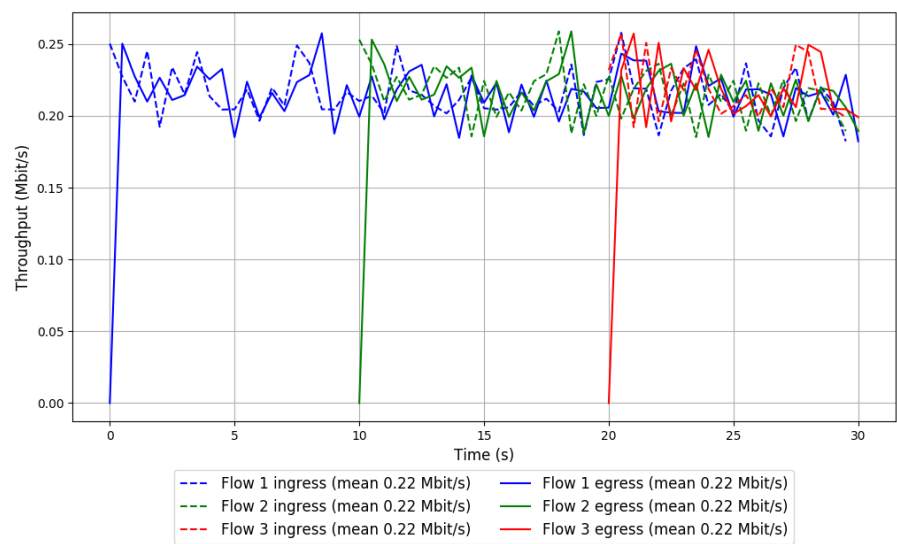


Run 4: Statistics of SReAM

Start at: 2019-11-24 09:16:21  
End at: 2019-11-24 09:16:51  
Local clock offset: 3.073 ms  
Remote clock offset: -2.293 ms

# Below is generated by plot.py at 2019-11-24 11:24:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 1.433 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 1.431 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 1.386 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 1.486 ms  
Loss rate: 0.00%

Run 4: Report of SReAM — Data Link

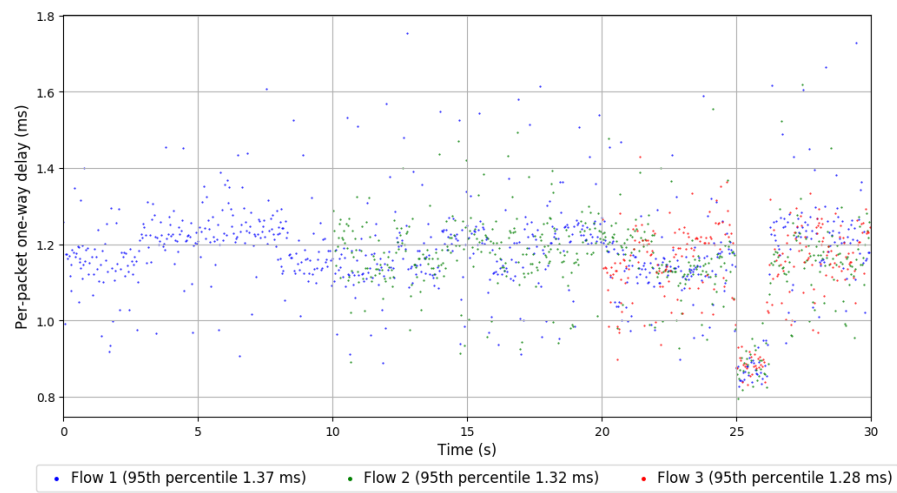
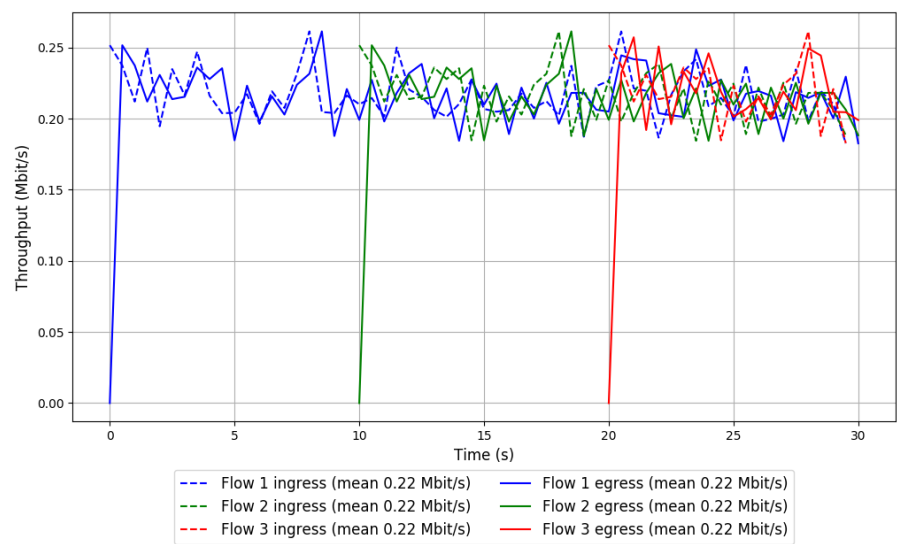


Run 5: Statistics of SReAM

Start at: 2019-11-24 09:51:28  
End at: 2019-11-24 09:51:58  
Local clock offset: 3.025 ms  
Remote clock offset: -5.966 ms

# Below is generated by plot.py at 2019-11-24 11:24:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 1.332 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 1.374 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 1.320 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 1.283 ms  
Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2019-11-24 07:43:36

End at: 2019-11-24 07:44:06

Local clock offset: 4.437 ms

Remote clock offset: 1.553 ms

# Below is generated by plot.py at 2019-11-24 11:24:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 74.07 Mbit/s

95th percentile per-packet one-way delay: 4.288 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 49.76 Mbit/s

95th percentile per-packet one-way delay: 4.463 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 24.55 Mbit/s

95th percentile per-packet one-way delay: 3.802 ms

Loss rate: 0.23%

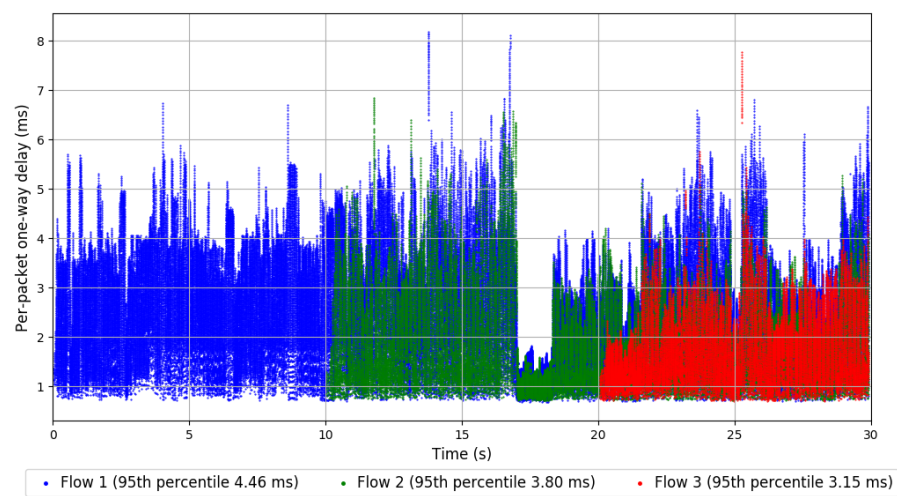
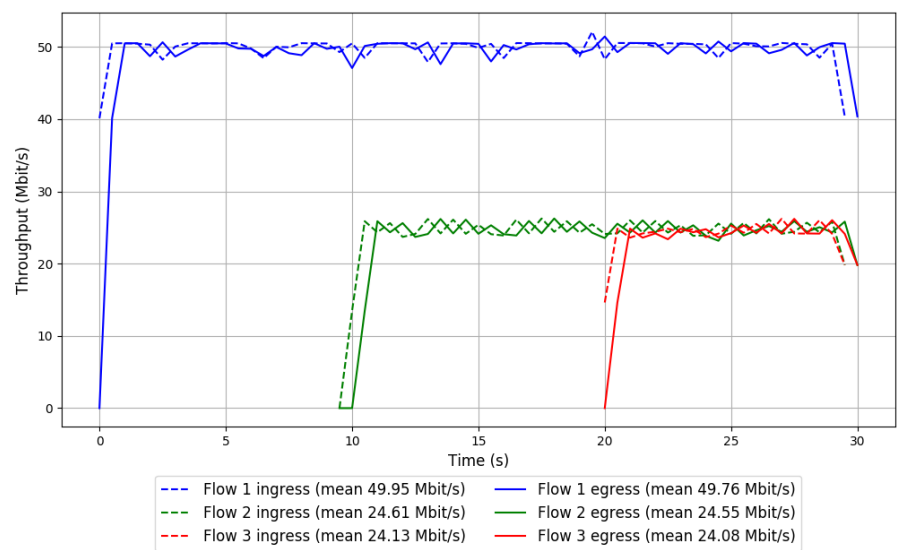
-- Flow 3:

Average throughput: 24.08 Mbit/s

95th percentile per-packet one-way delay: 3.148 ms

Loss rate: 0.22%

Run 1: Report of Sprout — Data Link



## Run 2: Statistics of Sprout

Start at: 2019-11-24 08:18:39

End at: 2019-11-24 08:19:09

Local clock offset: 3.868 ms

Remote clock offset: 0.184 ms

# Below is generated by plot.py at 2019-11-24 11:24:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 74.27 Mbit/s

95th percentile per-packet one-way delay: 4.756 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 24.69 Mbit/s

95th percentile per-packet one-way delay: 4.390 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 49.86 Mbit/s

95th percentile per-packet one-way delay: 4.927 ms

Loss rate: 0.03%

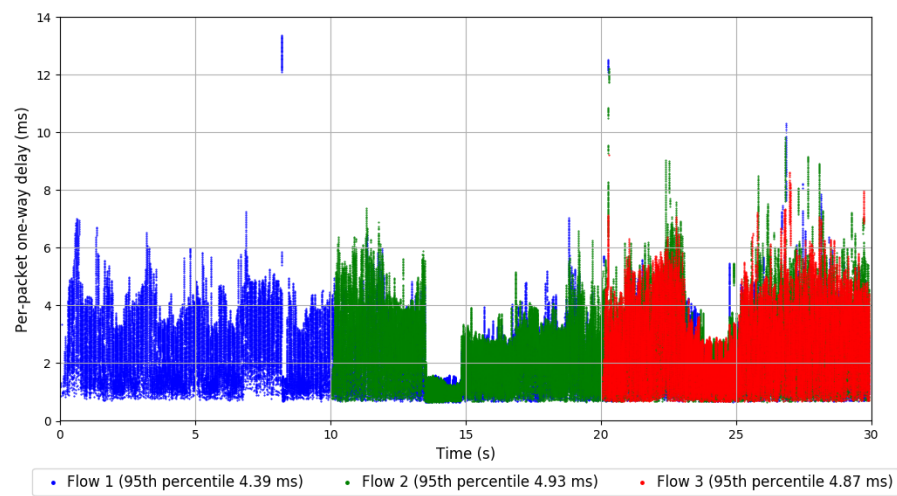
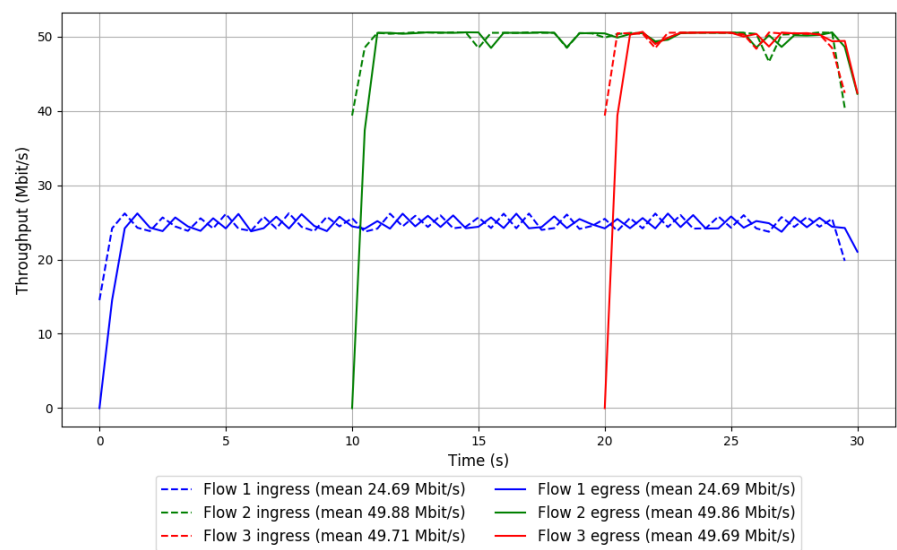
-- Flow 3:

Average throughput: 49.69 Mbit/s

95th percentile per-packet one-way delay: 4.870 ms

Loss rate: 0.02%

Run 2: Report of Sprout — Data Link



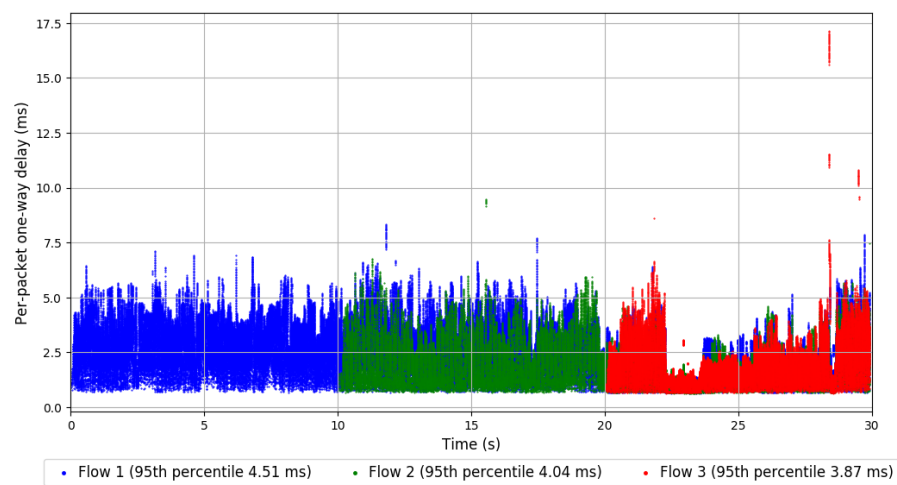
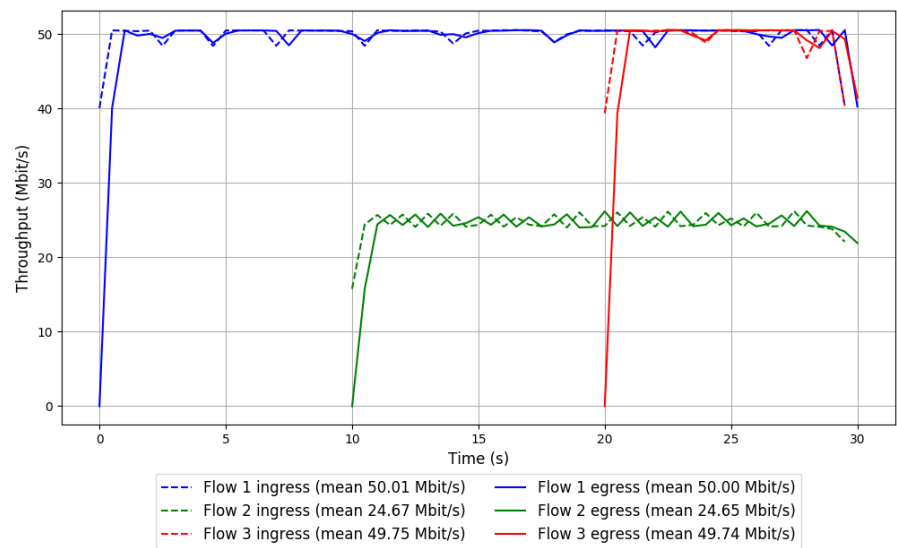


### Run 3: Statistics of Sprout

Start at: 2019-11-24 08:54:00  
End at: 2019-11-24 08:54:30  
Local clock offset: 3.378 ms  
Remote clock offset: 3.61 ms

```
# Below is generated by plot.py at 2019-11-24 11:24:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.80 Mbit/s
95th percentile per-packet one-way delay: 4.352 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 50.00 Mbit/s
95th percentile per-packet one-way delay: 4.510 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.65 Mbit/s
95th percentile per-packet one-way delay: 4.036 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 49.74 Mbit/s
95th percentile per-packet one-way delay: 3.872 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

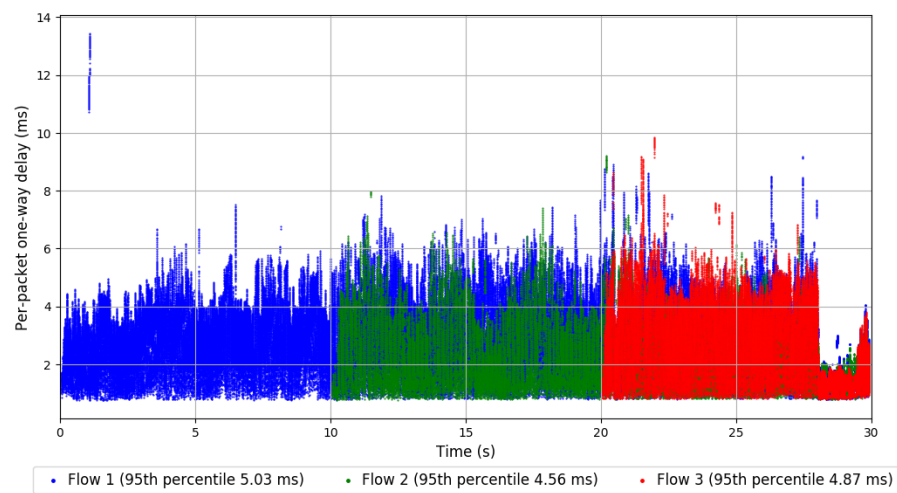
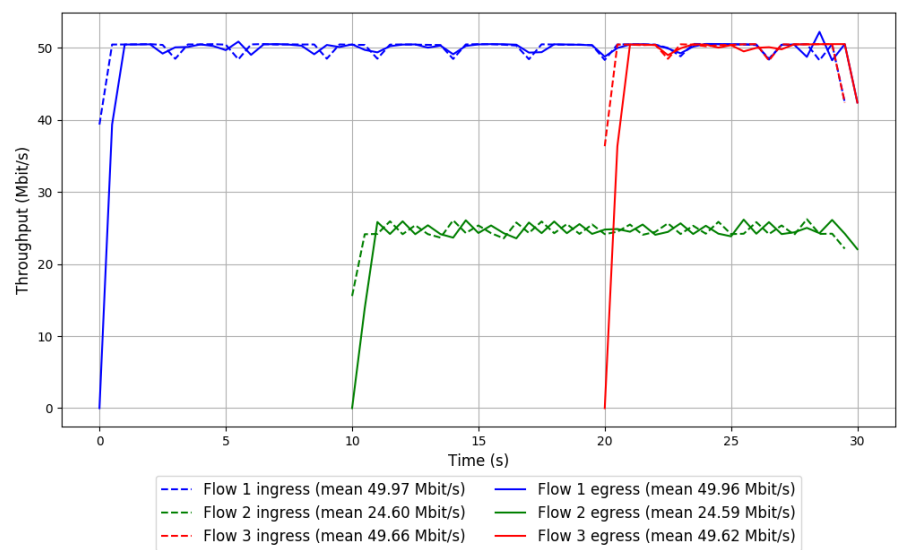


#### Run 4: Statistics of Sprout

Start at: 2019-11-24 09:29:25  
End at: 2019-11-24 09:29:55  
Local clock offset: 2.923 ms  
Remote clock offset: -4.273 ms

```
# Below is generated by plot.py at 2019-11-24 11:24:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.72 Mbit/s
95th percentile per-packet one-way delay: 4.930 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 49.96 Mbit/s
95th percentile per-packet one-way delay: 5.029 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.59 Mbit/s
95th percentile per-packet one-way delay: 4.560 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 49.62 Mbit/s
95th percentile per-packet one-way delay: 4.870 ms
Loss rate: 0.05%
```

Run 4: Report of Sprout — Data Link

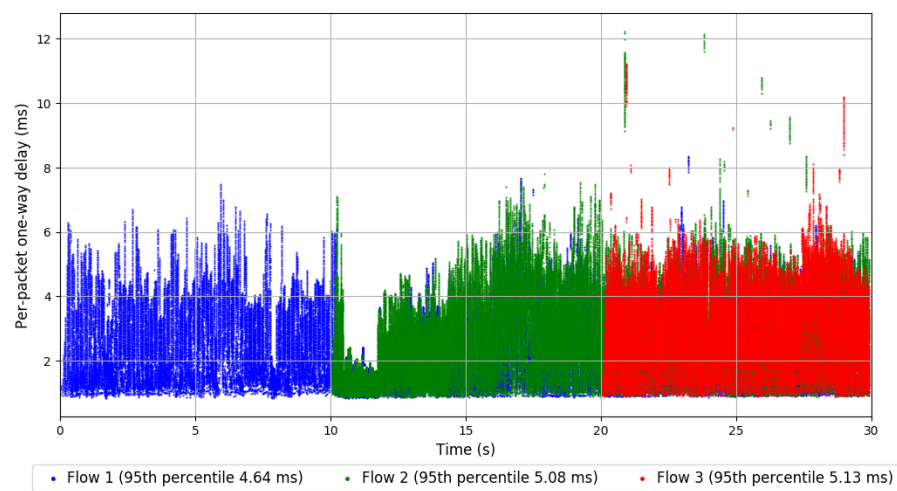
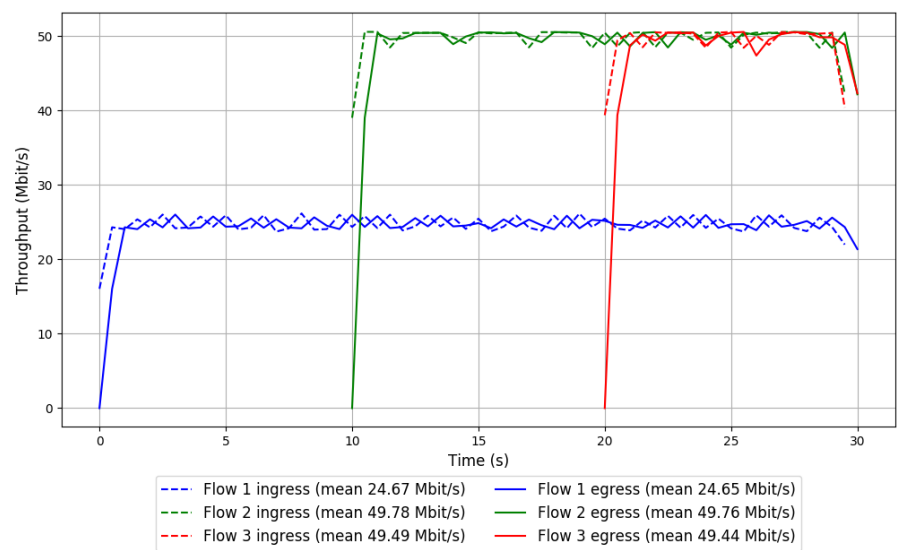


Run 5: Statistics of Sprout

Start at: 2019-11-24 10:04:42  
End at: 2019-11-24 10:05:12  
Local clock offset: 3.014 ms  
Remote clock offset: -6.816 ms

```
# Below is generated by plot.py at 2019-11-24 11:24:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.09 Mbit/s
95th percentile per-packet one-way delay: 4.989 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 24.65 Mbit/s
95th percentile per-packet one-way delay: 4.638 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 49.76 Mbit/s
95th percentile per-packet one-way delay: 5.077 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 49.44 Mbit/s
95th percentile per-packet one-way delay: 5.127 ms
Loss rate: 0.08%
```

Run 5: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2019-11-24 07:24:37

End at: 2019-11-24 07:25:07

Local clock offset: 3.898 ms

Remote clock offset: 0.599 ms

# Below is generated by plot.py at 2019-11-24 11:24:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 8.62 Mbit/s

95th percentile per-packet one-way delay: 1.114 ms

Loss rate: 79.63%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 1.311 ms

Loss rate: 95.92%

-- Flow 2:

Average throughput: 11.84 Mbit/s

95th percentile per-packet one-way delay: 1.112 ms

Loss rate: 72.62%

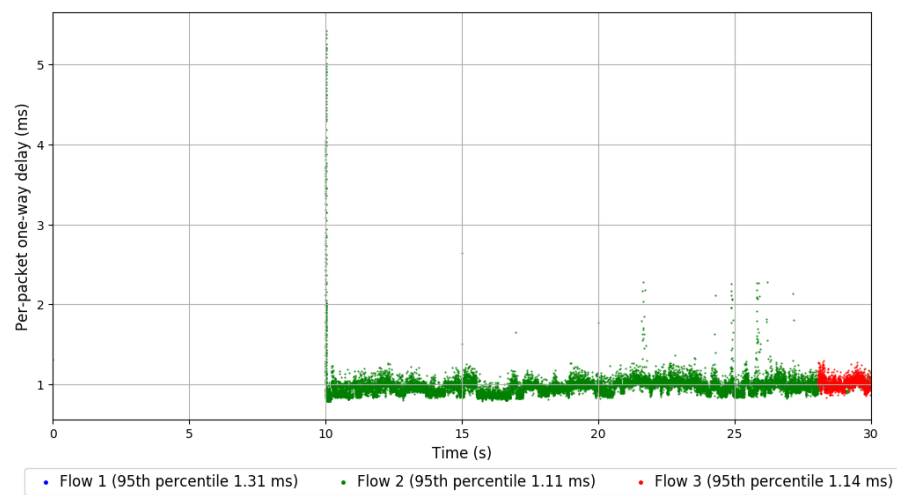
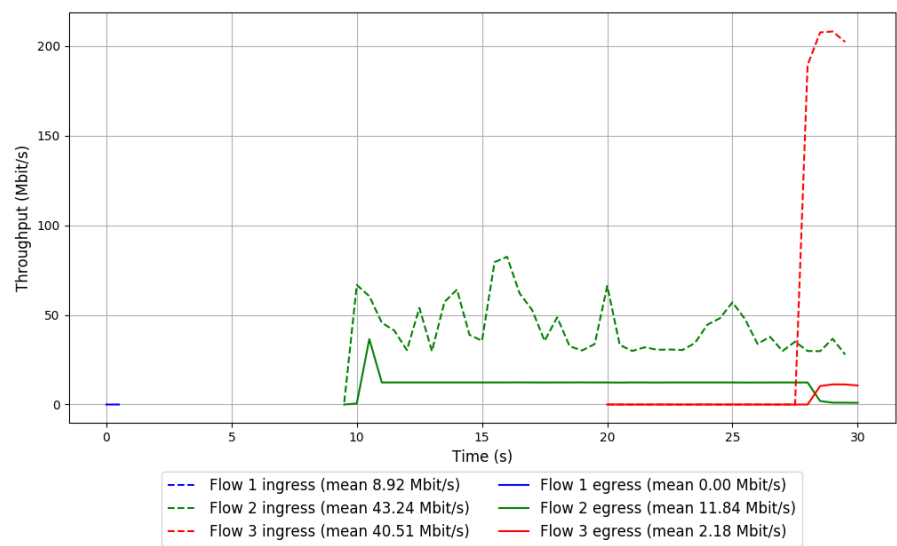
-- Flow 3:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 1.137 ms

Loss rate: 94.62%

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





Run 2: Statistics of TaoVA-100x

Start at: 2019-11-24 07:59:49

End at: 2019-11-24 08:00:19

Local clock offset: 4.533 ms

Remote clock offset: 1.143 ms

# Below is generated by plot.py at 2019-11-24 11:24:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.94 Mbit/s

95th percentile per-packet one-way delay: 1.267 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 1.082 ms

Loss rate: 95.92%

-- Flow 2:

Average throughput: 5.04 Mbit/s

95th percentile per-packet one-way delay: 1.287 ms

Loss rate: 0.00%

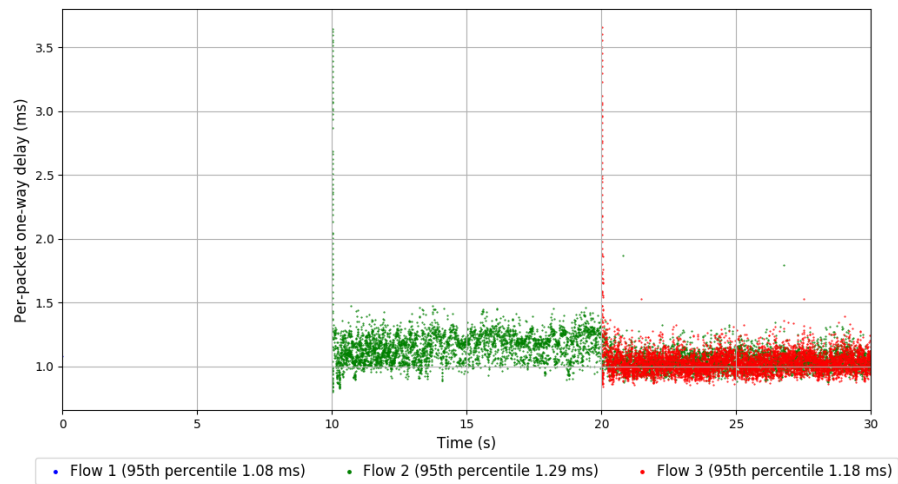
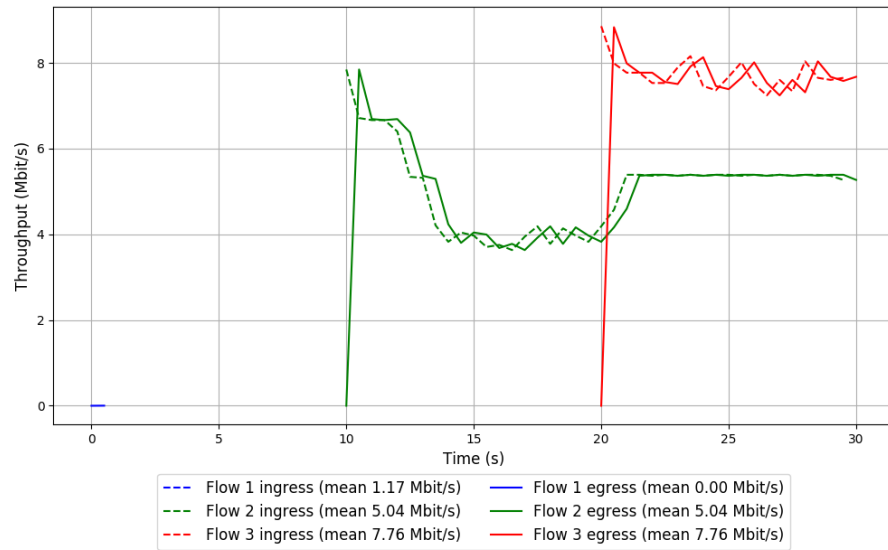
-- Flow 3:

Average throughput: 7.76 Mbit/s

95th percentile per-packet one-way delay: 1.177 ms

Loss rate: 0.00%

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



Run 3: Statistics of TaoVA-100x

Start at: 2019-11-24 08:34:56

End at: 2019-11-24 08:35:26

Local clock offset: 3.518 ms

Remote clock offset: 1.805 ms

# Below is generated by plot.py at 2019-11-24 11:24:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 8.60 Mbit/s

95th percentile per-packet one-way delay: 0.977 ms

Loss rate: 87.26%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 1.102 ms

Loss rate: 95.92%

-- Flow 2:

Average throughput: 8.83 Mbit/s

95th percentile per-packet one-way delay: 0.980 ms

Loss rate: 88.30%

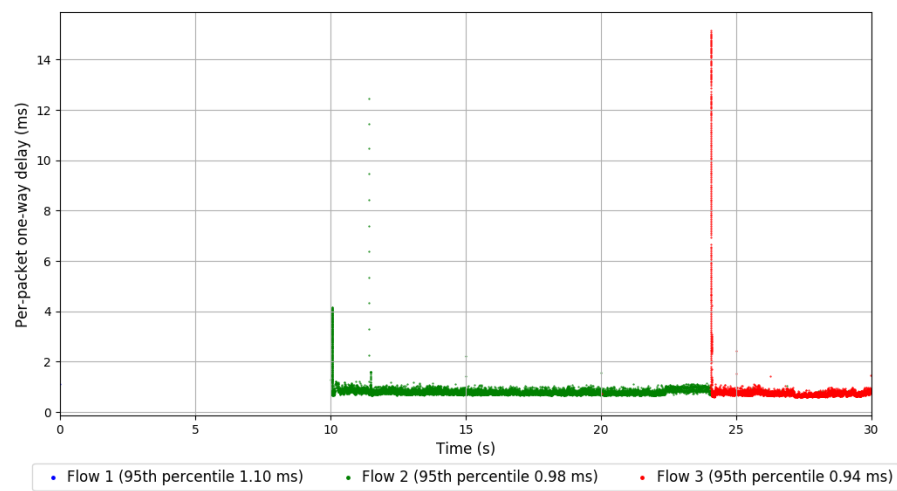
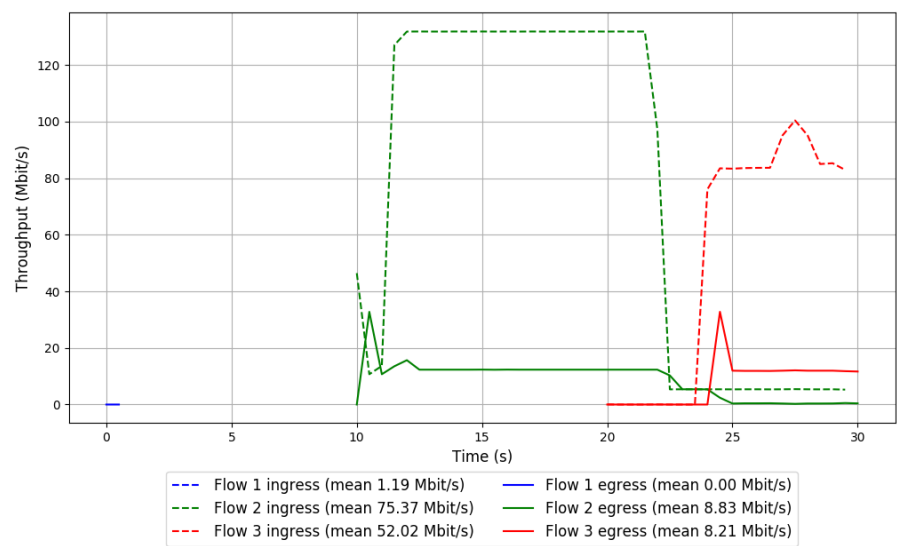
-- Flow 3:

Average throughput: 8.21 Mbit/s

95th percentile per-packet one-way delay: 0.941 ms

Loss rate: 84.22%

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

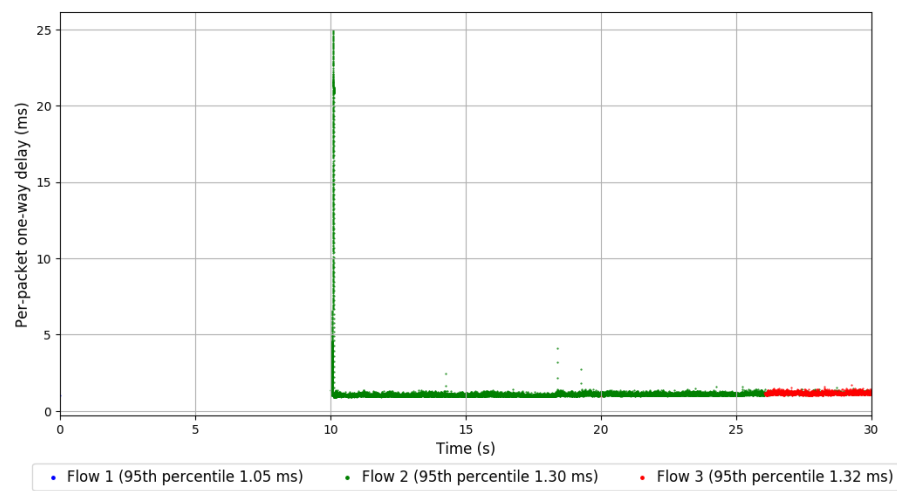
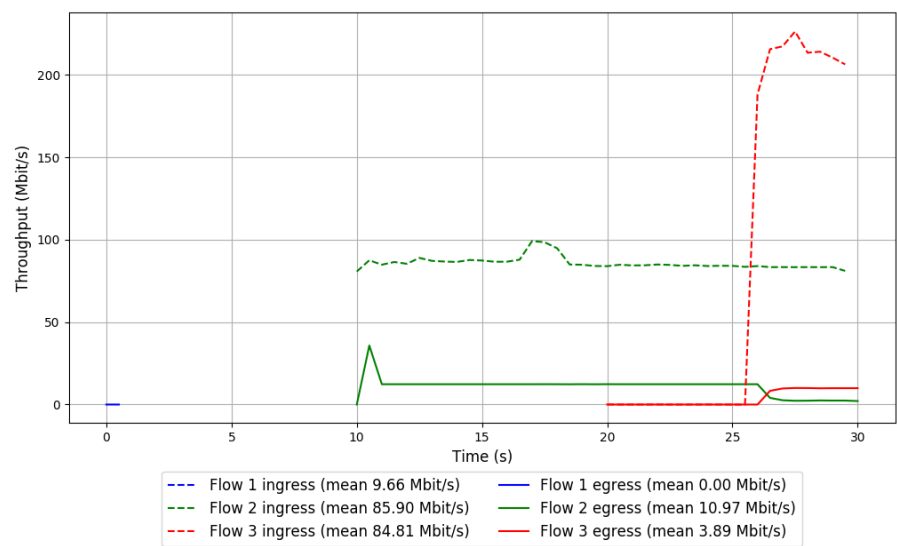


Run 4: Statistics of TaoVA-100x

Start at: 2019-11-24 09:10:36  
End at: 2019-11-24 09:11:06  
Local clock offset: 3.255 ms  
Remote clock offset: -0.555 ms

# Below is generated by plot.py at 2019-11-24 11:24:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.60 Mbit/s  
95th percentile per-packet one-way delay: 1.307 ms  
Loss rate: 89.93%  
-- Flow 1:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 1.048 ms  
Loss rate: 95.92%  
-- Flow 2:  
Average throughput: 10.97 Mbit/s  
95th percentile per-packet one-way delay: 1.300 ms  
Loss rate: 87.23%  
-- Flow 3:  
Average throughput: 3.89 Mbit/s  
95th percentile per-packet one-way delay: 1.317 ms  
Loss rate: 95.41%

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



Run 5: Statistics of TaoVA-100x

Start at: 2019-11-24 09:45:42

End at: 2019-11-24 09:46:12

Local clock offset: 2.938 ms

Remote clock offset: -5.54 ms

# Below is generated by plot.py at 2019-11-24 11:24:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 8.61 Mbit/s

95th percentile per-packet one-way delay: 1.127 ms

Loss rate: 87.25%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 1.167 ms

Loss rate: 95.92%

-- Flow 2:

Average throughput: 12.04 Mbit/s

95th percentile per-packet one-way delay: 1.119 ms

Loss rate: 85.94%

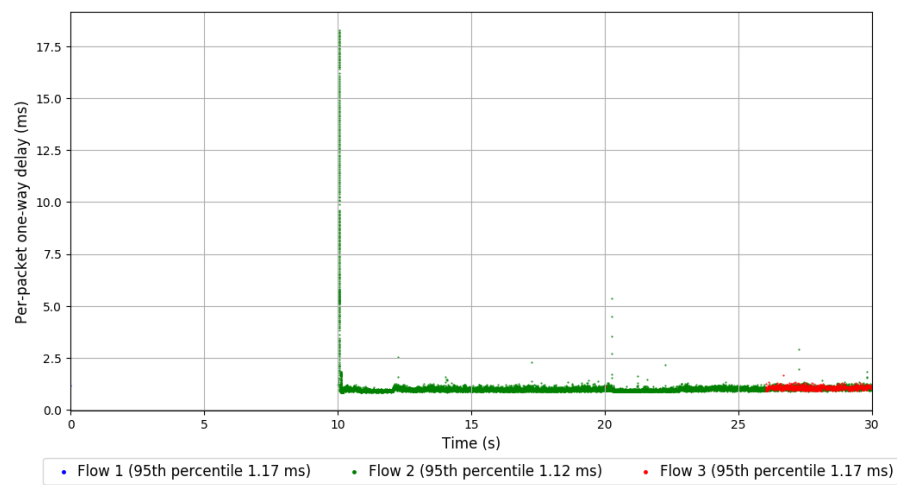
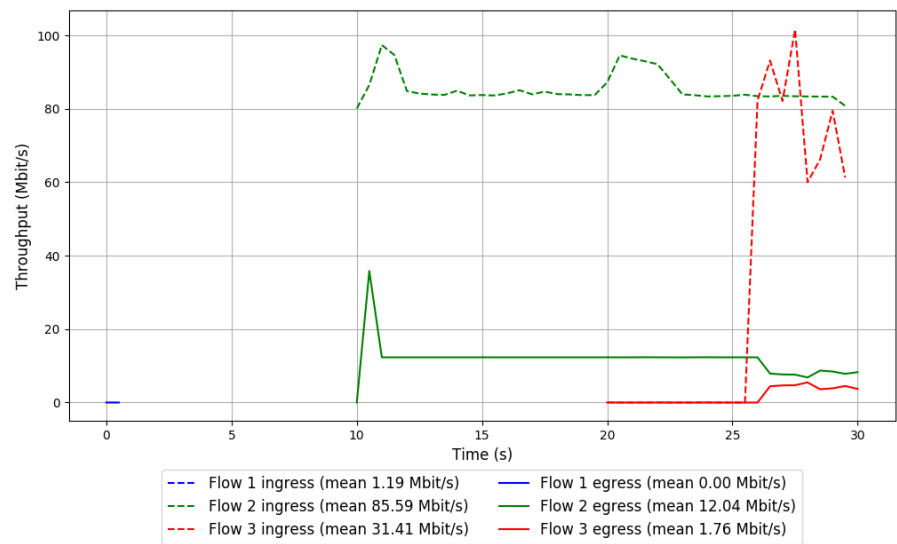
-- Flow 3:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 1.169 ms

Loss rate: 94.41%

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





Run 1: Statistics of TCP Vegas

Start at: 2019-11-24 07:33:26

End at: 2019-11-24 07:33:56

Local clock offset: 4.297 ms

Remote clock offset: 1.083 ms

# Below is generated by plot.py at 2019-11-24 11:24:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 167.06 Mbit/s

95th percentile per-packet one-way delay: 1.236 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 67.70 Mbit/s

95th percentile per-packet one-way delay: 1.153 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 111.82 Mbit/s

95th percentile per-packet one-way delay: 1.247 ms

Loss rate: 0.04%

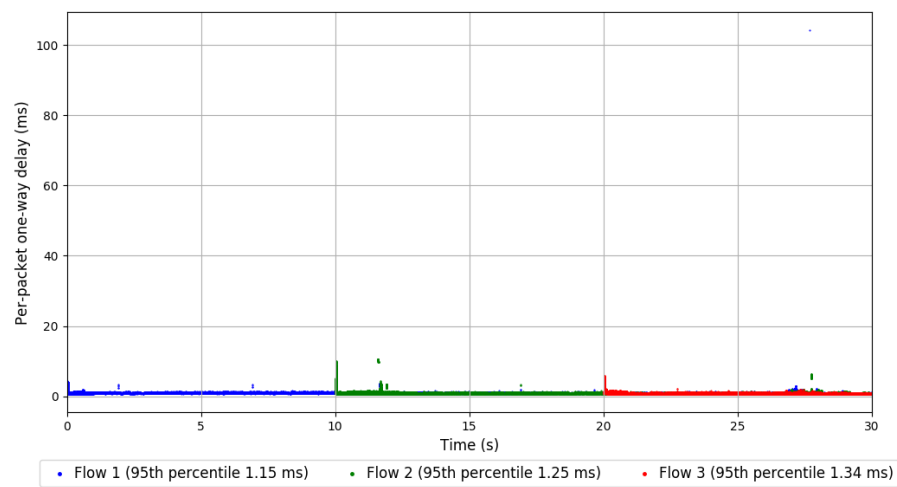
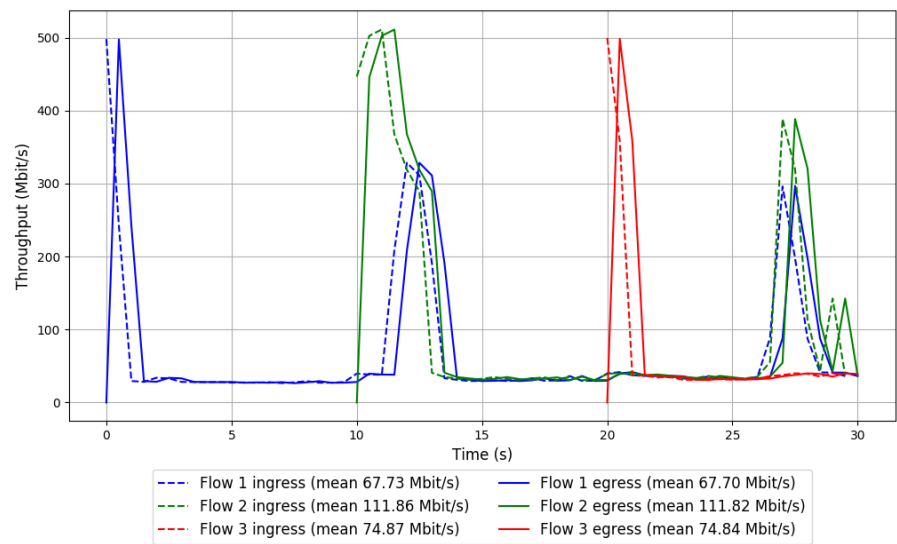
-- Flow 3:

Average throughput: 74.84 Mbit/s

95th percentile per-packet one-way delay: 1.341 ms

Loss rate: 0.04%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2019-11-24 08:08:14

End at: 2019-11-24 08:08:44

Local clock offset: 4.679 ms

Remote clock offset: 0.544 ms

# Below is generated by plot.py at 2019-11-24 11:25:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 438.49 Mbit/s

95th percentile per-packet one-way delay: 1.211 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 244.87 Mbit/s

95th percentile per-packet one-way delay: 1.195 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 191.48 Mbit/s

95th percentile per-packet one-way delay: 1.255 ms

Loss rate: 0.02%

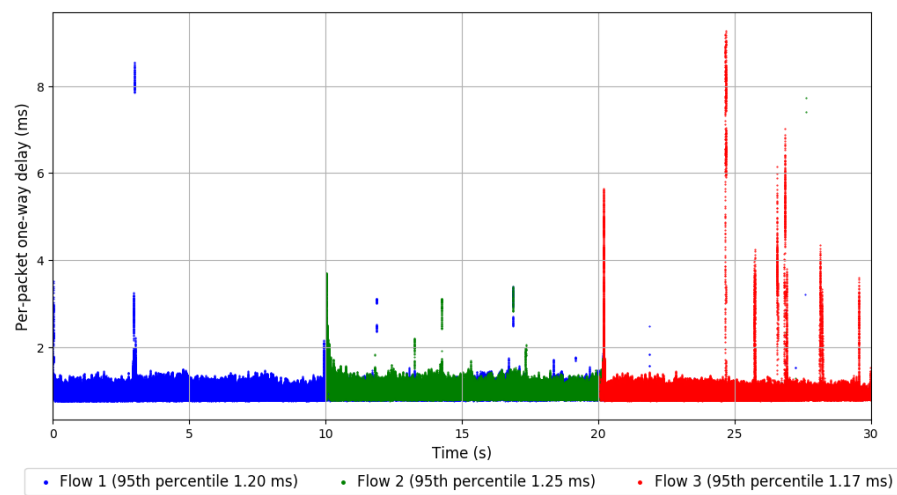
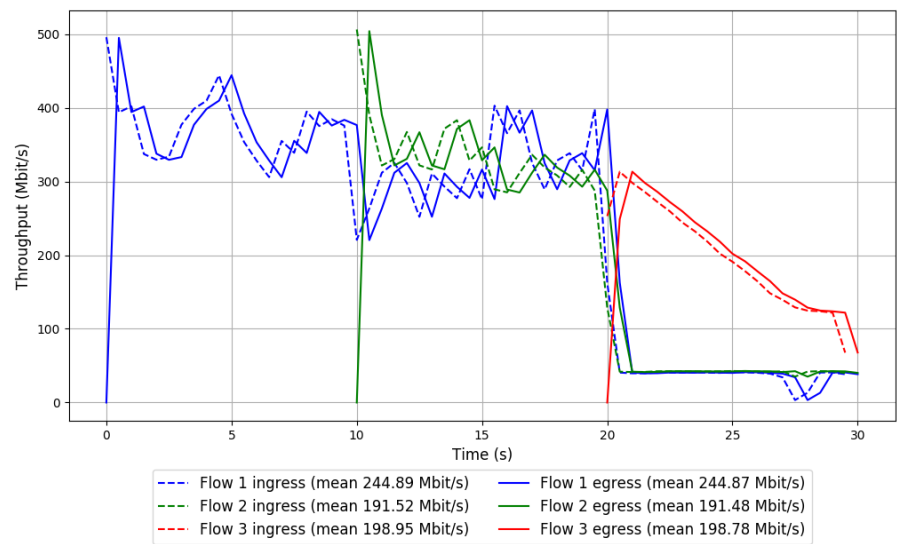
-- Flow 3:

Average throughput: 198.78 Mbit/s

95th percentile per-packet one-way delay: 1.168 ms

Loss rate: 0.08%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2019-11-24 08:43:32

End at: 2019-11-24 08:44:02

Local clock offset: 3.43 ms

Remote clock offset: 2.984 ms

# Below is generated by plot.py at 2019-11-24 11:25:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 441.42 Mbit/s

95th percentile per-packet one-way delay: 2.020 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 282.47 Mbit/s

95th percentile per-packet one-way delay: 2.349 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 184.70 Mbit/s

95th percentile per-packet one-way delay: 1.200 ms

Loss rate: 0.01%

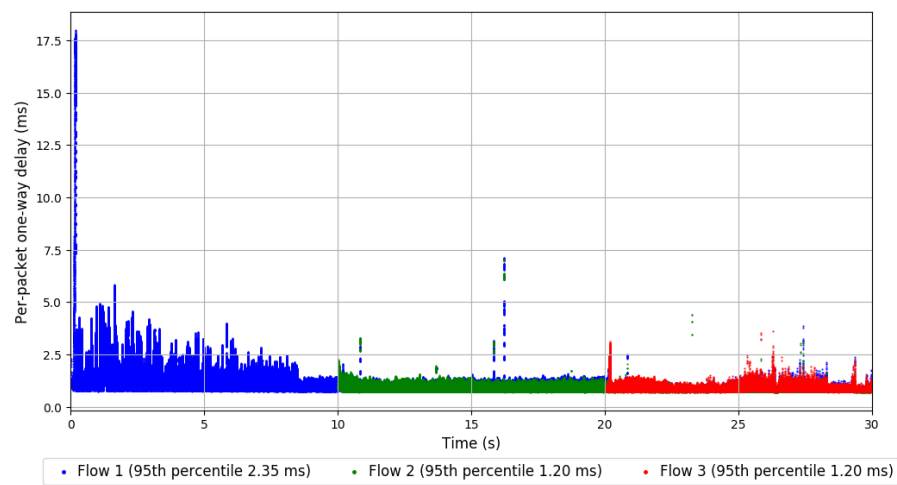
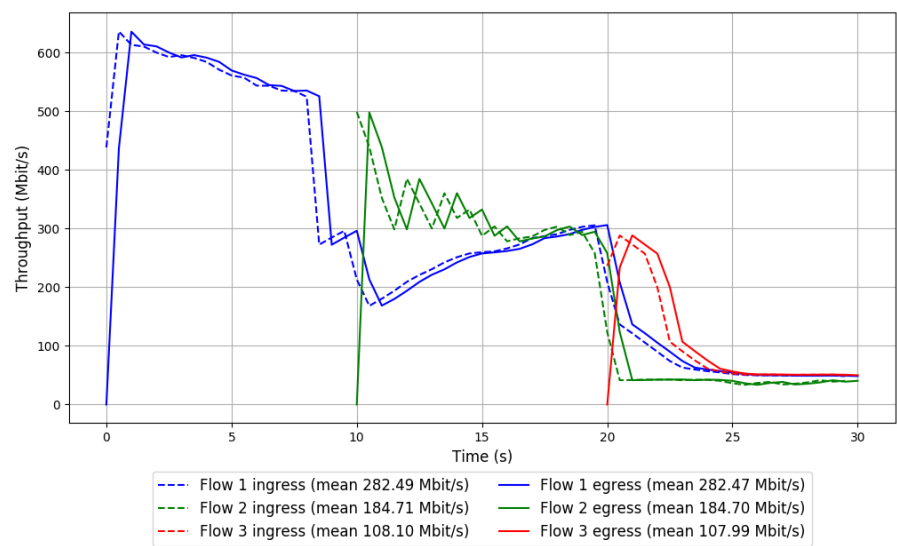
-- Flow 3:

Average throughput: 107.99 Mbit/s

95th percentile per-packet one-way delay: 1.201 ms

Loss rate: 0.10%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2019-11-24 09:19:04

End at: 2019-11-24 09:19:34

Local clock offset: 3.017 ms

Remote clock offset: -2.82 ms

# Below is generated by plot.py at 2019-11-24 11:26:55

# Datalink statistics

-- Total of 3 flows:

Average throughput: 541.28 Mbit/s

95th percentile per-packet one-way delay: 1.718 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 216.25 Mbit/s

95th percentile per-packet one-way delay: 1.395 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 318.06 Mbit/s

95th percentile per-packet one-way delay: 2.045 ms

Loss rate: 0.04%

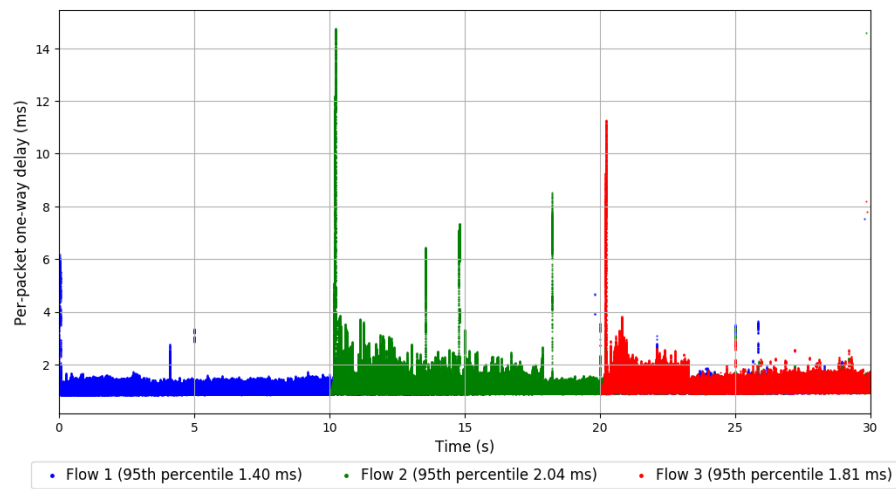
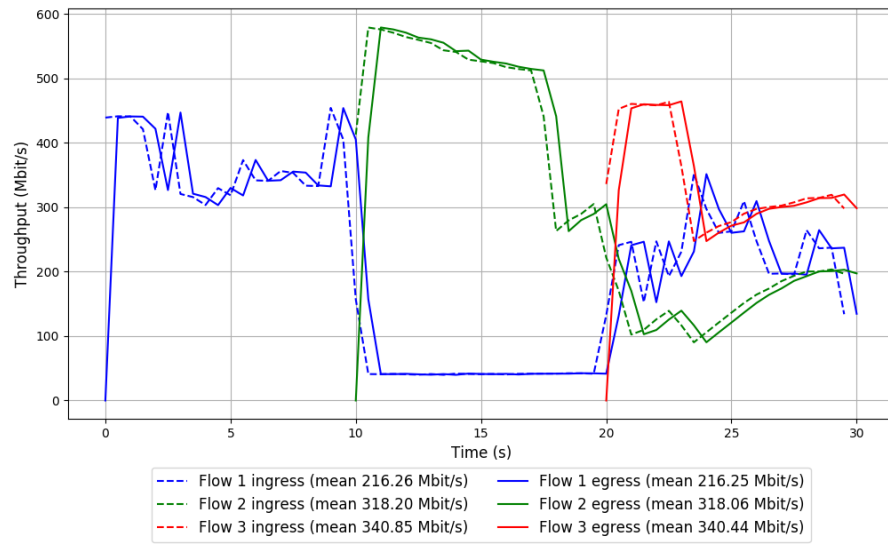
-- Flow 3:

Average throughput: 340.44 Mbit/s

95th percentile per-packet one-way delay: 1.807 ms

Loss rate: 0.12%

# Run 4: Report of TCP Vegas — Data Link



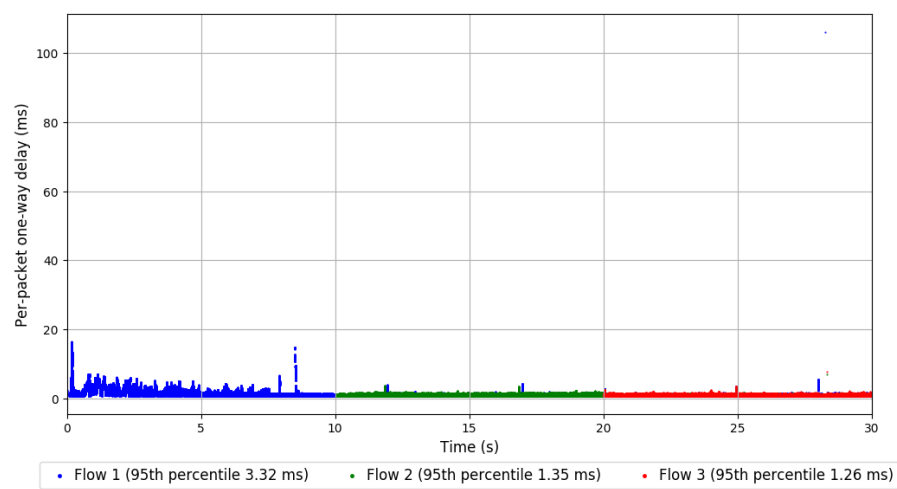
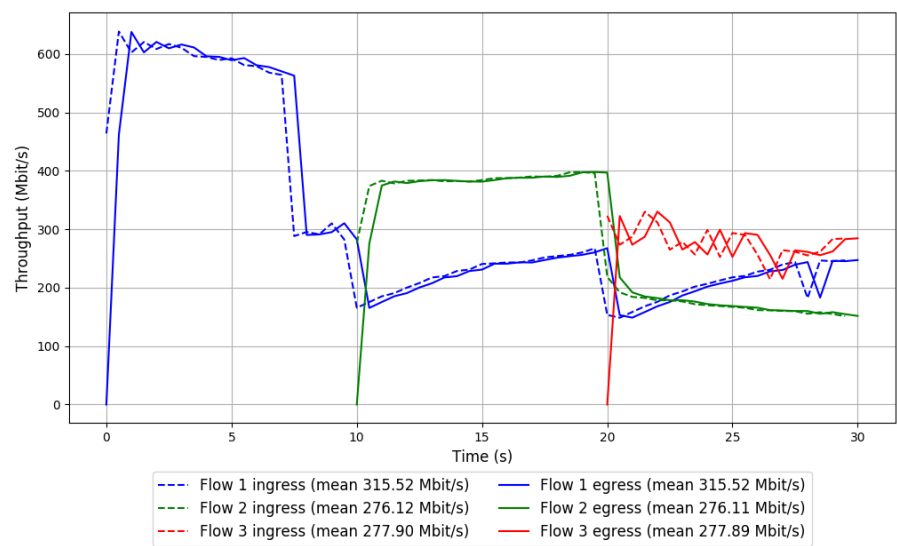


Run 5: Statistics of TCP Vegas

Start at: 2019-11-24 09:54:11  
End at: 2019-11-24 09:54:41  
Local clock offset: 3.045 ms  
Remote clock offset: -6.172 ms

# Below is generated by plot.py at 2019-11-24 11:27:39  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 591.87 Mbit/s  
95th percentile per-packet one-way delay: 2.625 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 315.52 Mbit/s  
95th percentile per-packet one-way delay: 3.321 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 276.11 Mbit/s  
95th percentile per-packet one-way delay: 1.354 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 277.89 Mbit/s  
95th percentile per-packet one-way delay: 1.262 ms  
Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2019-11-24 07:31:52

End at: 2019-11-24 07:32:22

Local clock offset: 4.235 ms

Remote clock offset: 0.999 ms

# Below is generated by plot.py at 2019-11-24 11:27:42

# Datalink statistics

-- Total of 3 flows:

Average throughput: 436.75 Mbit/s

95th percentile per-packet one-way delay: 27.506 ms

Loss rate: 9.44%

-- Flow 1:

Average throughput: 264.97 Mbit/s

95th percentile per-packet one-way delay: 21.725 ms

Loss rate: 8.24%

-- Flow 2:

Average throughput: 163.68 Mbit/s

95th percentile per-packet one-way delay: 17.666 ms

Loss rate: 8.96%

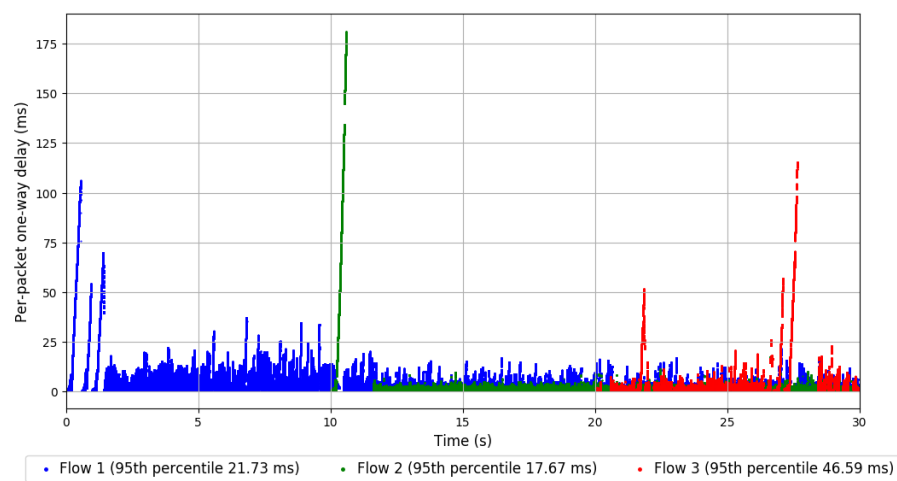
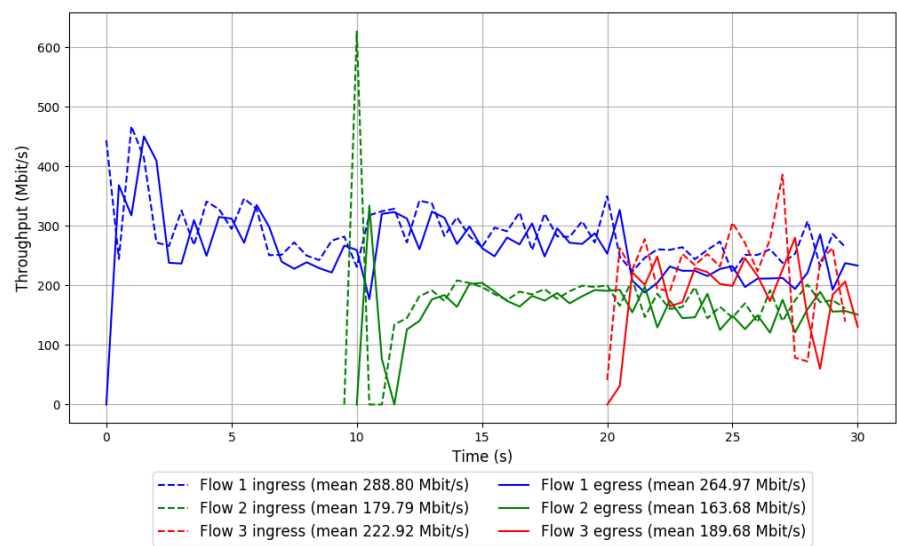
-- Flow 3:

Average throughput: 189.68 Mbit/s

95th percentile per-packet one-way delay: 46.588 ms

Loss rate: 14.91%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2019-11-24 08:06:45

End at: 2019-11-24 08:07:15

Local clock offset: 4.632 ms

Remote clock offset: 0.562 ms

# Below is generated by plot.py at 2019-11-24 11:27:42

# Datalink statistics

-- Total of 3 flows:

Average throughput: 318.63 Mbit/s

95th percentile per-packet one-way delay: 22.711 ms

Loss rate: 14.19%

-- Flow 1:

Average throughput: 213.70 Mbit/s

95th percentile per-packet one-way delay: 23.263 ms

Loss rate: 16.20%

-- Flow 2:

Average throughput: 104.99 Mbit/s

95th percentile per-packet one-way delay: 20.927 ms

Loss rate: 10.53%

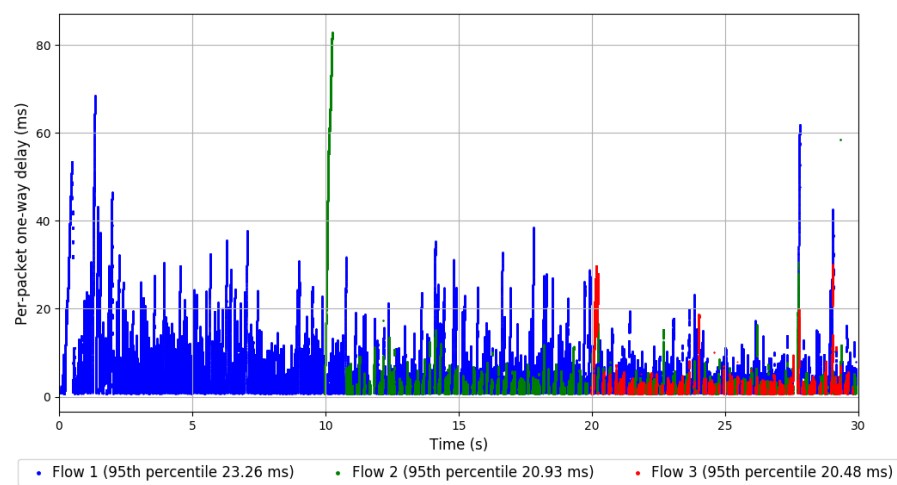
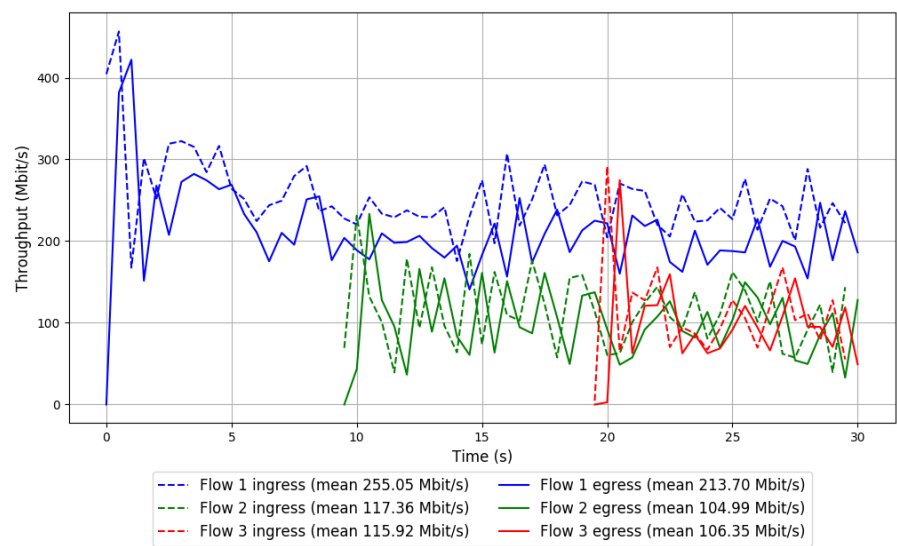
-- Flow 3:

Average throughput: 106.35 Mbit/s

95th percentile per-packet one-way delay: 20.481 ms

Loss rate: 8.24%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2019-11-24 08:42:03

End at: 2019-11-24 08:42:33

Local clock offset: 3.471 ms

Remote clock offset: 2.859 ms

# Below is generated by plot.py at 2019-11-24 11:27:42

# Datalink statistics

-- Total of 3 flows:

Average throughput: 325.33 Mbit/s

95th percentile per-packet one-way delay: 29.736 ms

Loss rate: 15.80%

-- Flow 1:

Average throughput: 191.98 Mbit/s

95th percentile per-packet one-way delay: 29.978 ms

Loss rate: 19.78%

-- Flow 2:

Average throughput: 108.51 Mbit/s

95th percentile per-packet one-way delay: 12.159 ms

Loss rate: 8.92%

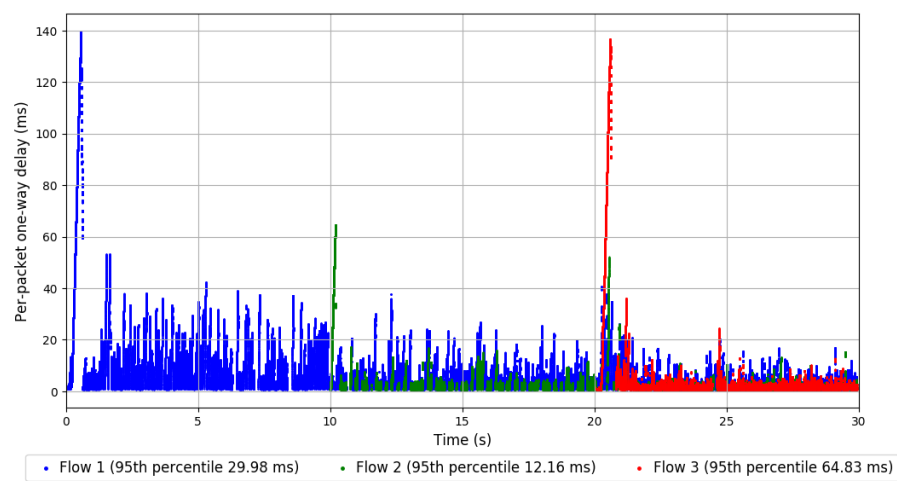
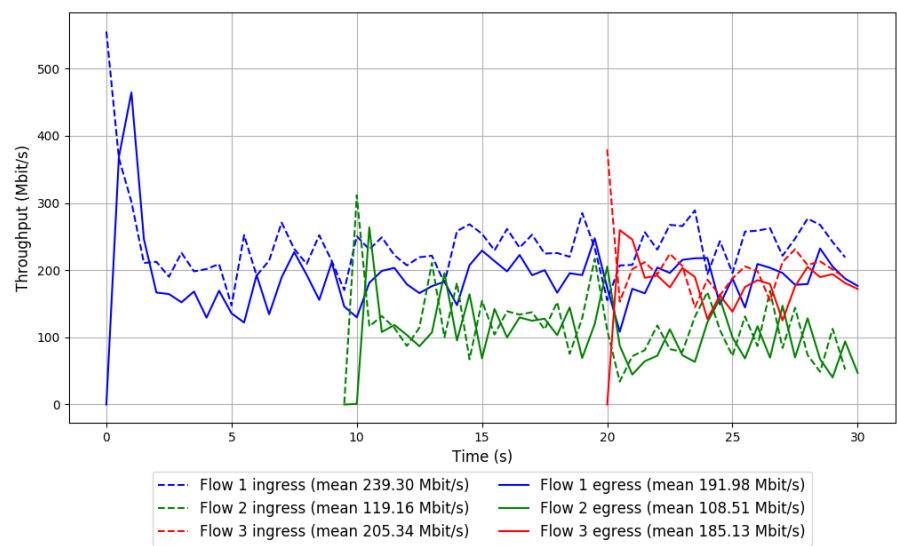
-- Flow 3:

Average throughput: 185.13 Mbit/s

95th percentile per-packet one-way delay: 64.835 ms

Loss rate: 9.85%

Run 3: Report of Verus — Data Link



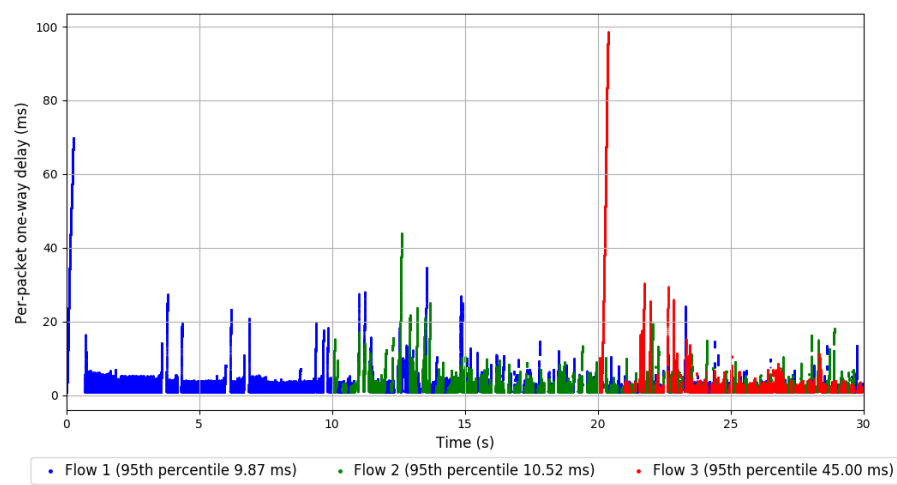
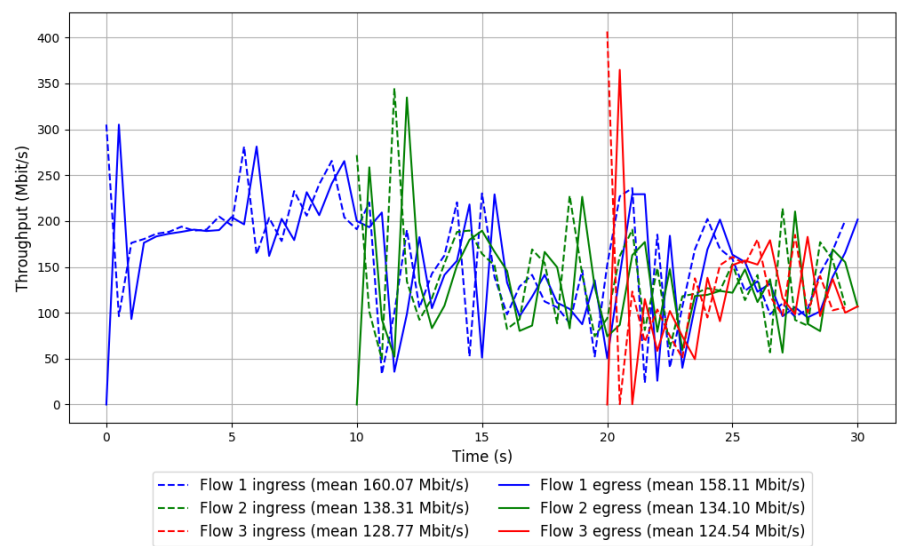


Run 4: Statistics of Verus

Start at: 2019-11-24 09:17:36  
End at: 2019-11-24 09:18:06  
Local clock offset: 3.078 ms  
Remote clock offset: -2.534 ms

# Below is generated by plot.py at 2019-11-24 11:27:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 288.59 Mbit/s  
95th percentile per-packet one-way delay: 12.245 ms  
Loss rate: 2.09%  
-- Flow 1:  
Average throughput: 158.11 Mbit/s  
95th percentile per-packet one-way delay: 9.870 ms  
Loss rate: 1.23%  
-- Flow 2:  
Average throughput: 134.10 Mbit/s  
95th percentile per-packet one-way delay: 10.524 ms  
Loss rate: 3.05%  
-- Flow 3:  
Average throughput: 124.54 Mbit/s  
95th percentile per-packet one-way delay: 45.002 ms  
Loss rate: 3.28%

Run 4: Report of Verus — Data Link

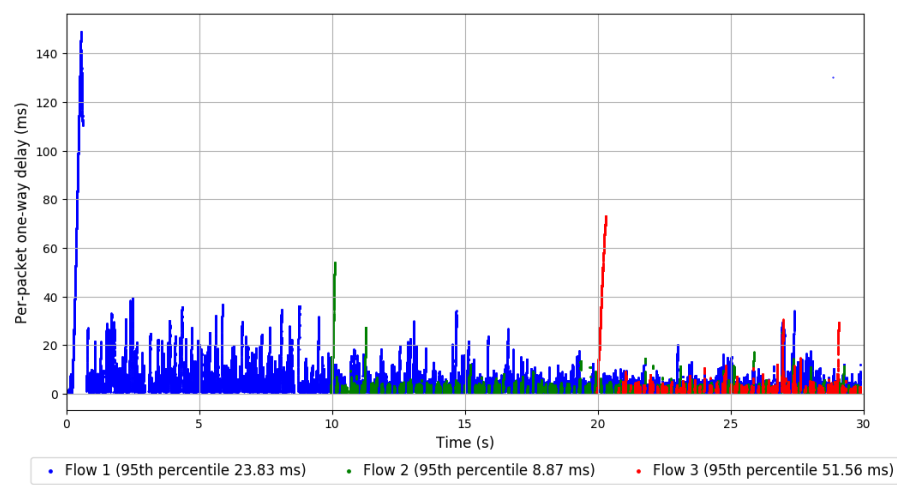
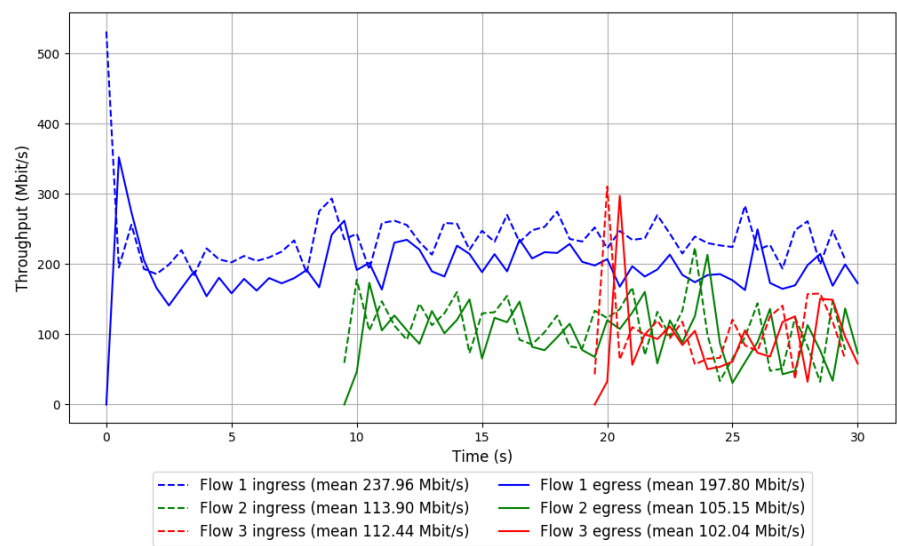


Run 5: Statistics of Verus

Start at: 2019-11-24 09:52:42  
End at: 2019-11-24 09:53:12  
Local clock offset: 3.013 ms  
Remote clock offset: -6.027 ms

# Below is generated by plot.py at 2019-11-24 11:28:48  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 301.51 Mbit/s  
95th percentile per-packet one-way delay: 23.114 ms  
Loss rate: 14.06%  
-- Flow 1:  
Average throughput: 197.80 Mbit/s  
95th percentile per-packet one-way delay: 23.828 ms  
Loss rate: 16.85%  
-- Flow 2:  
Average throughput: 105.15 Mbit/s  
95th percentile per-packet one-way delay: 8.867 ms  
Loss rate: 7.68%  
-- Flow 3:  
Average throughput: 102.04 Mbit/s  
95th percentile per-packet one-way delay: 51.564 ms  
Loss rate: 9.23%

Run 5: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2019-11-24 07:37:40

End at: 2019-11-24 07:38:10

Local clock offset: 4.443 ms

Remote clock offset: 1.257 ms

# Below is generated by plot.py at 2019-11-24 11:30:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 531.83 Mbit/s

95th percentile per-packet one-way delay: 9.300 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 323.10 Mbit/s

95th percentile per-packet one-way delay: 4.275 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 278.99 Mbit/s

95th percentile per-packet one-way delay: 16.829 ms

Loss rate: 0.38%

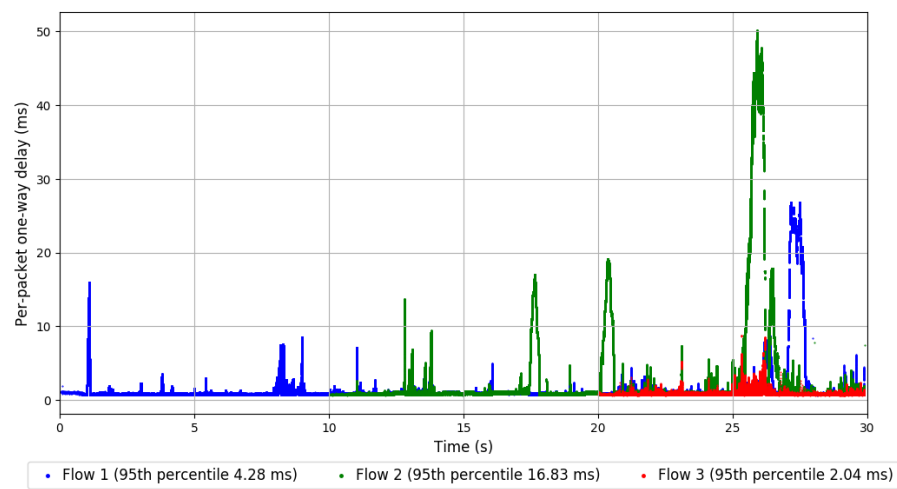
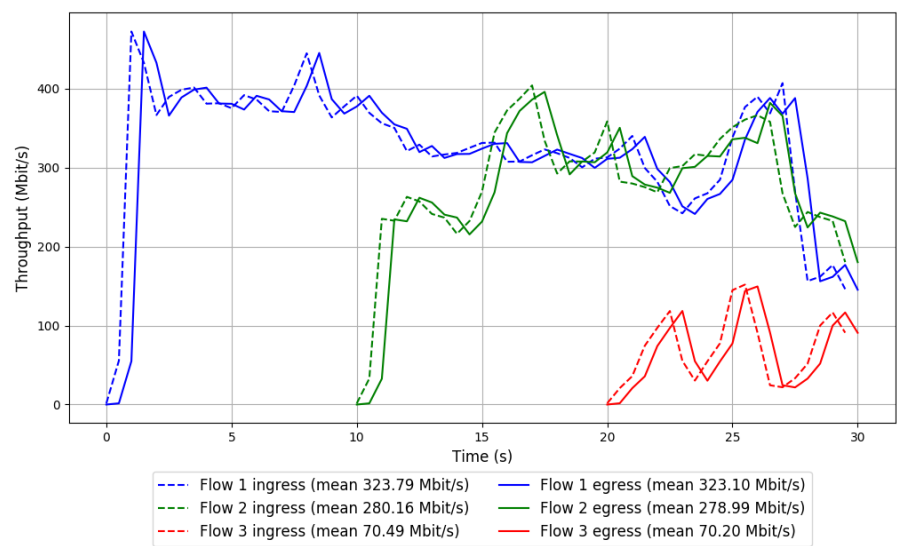
-- Flow 3:

Average throughput: 70.20 Mbit/s

95th percentile per-packet one-way delay: 2.037 ms

Loss rate: 0.42%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2019-11-24 08:12:44

End at: 2019-11-24 08:13:14

Local clock offset: 4.285 ms

Remote clock offset: 0.387 ms

# Below is generated by plot.py at 2019-11-24 11:30:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 355.30 Mbit/s

95th percentile per-packet one-way delay: 2.180 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 197.12 Mbit/s

95th percentile per-packet one-way delay: 3.773 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 180.79 Mbit/s

95th percentile per-packet one-way delay: 1.479 ms

Loss rate: 0.00%

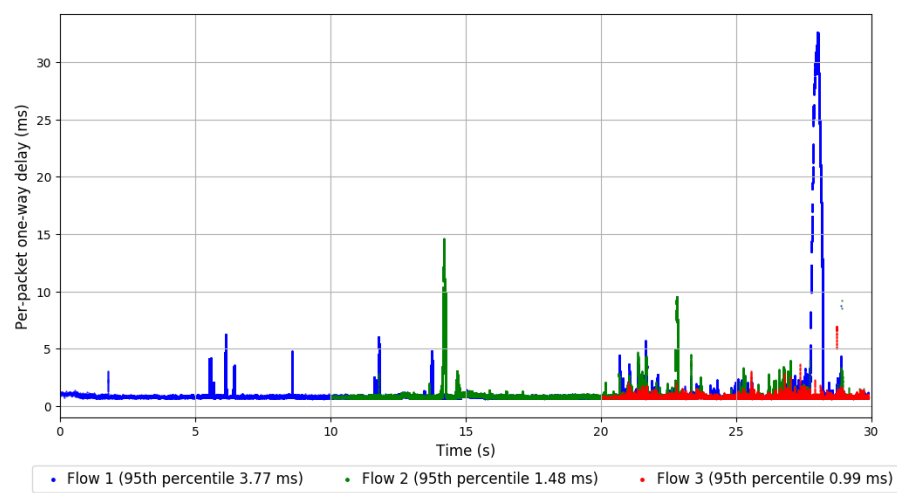
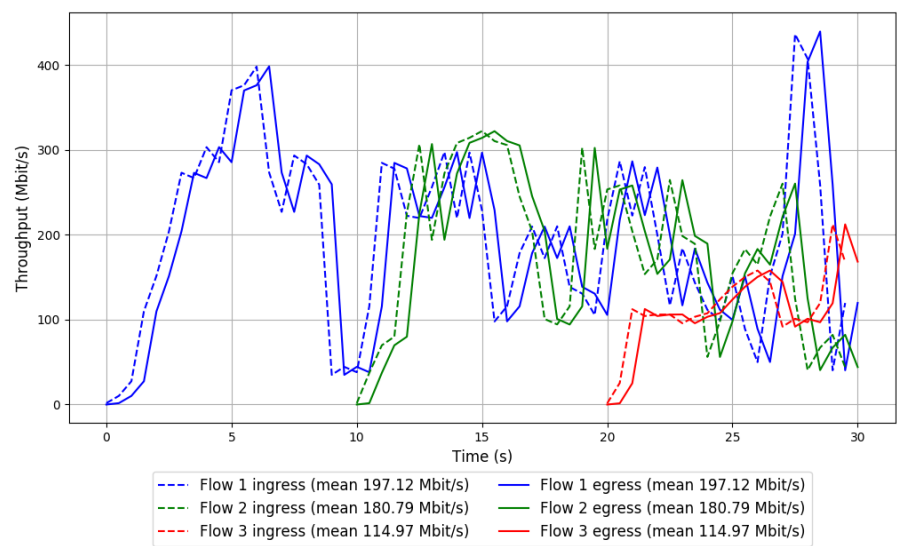
-- Flow 3:

Average throughput: 114.97 Mbit/s

95th percentile per-packet one-way delay: 0.986 ms

Loss rate: 0.00%

Run 2: Report of PCC-Vivace — Data Link





Run 3: Statistics of PCC-Vivace

Start at: 2019-11-24 08:48:00

End at: 2019-11-24 08:48:30

Local clock offset: 3.403 ms

Remote clock offset: 3.26 ms

# Below is generated by plot.py at 2019-11-24 11:30:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 420.43 Mbit/s

95th percentile per-packet one-way delay: 35.250 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 243.23 Mbit/s

95th percentile per-packet one-way delay: 51.319 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 175.03 Mbit/s

95th percentile per-packet one-way delay: 1.529 ms

Loss rate: 0.04%

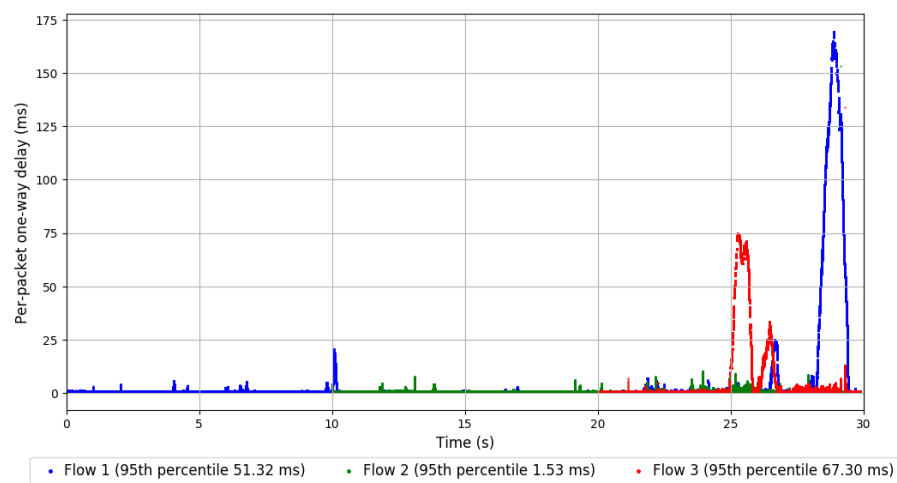
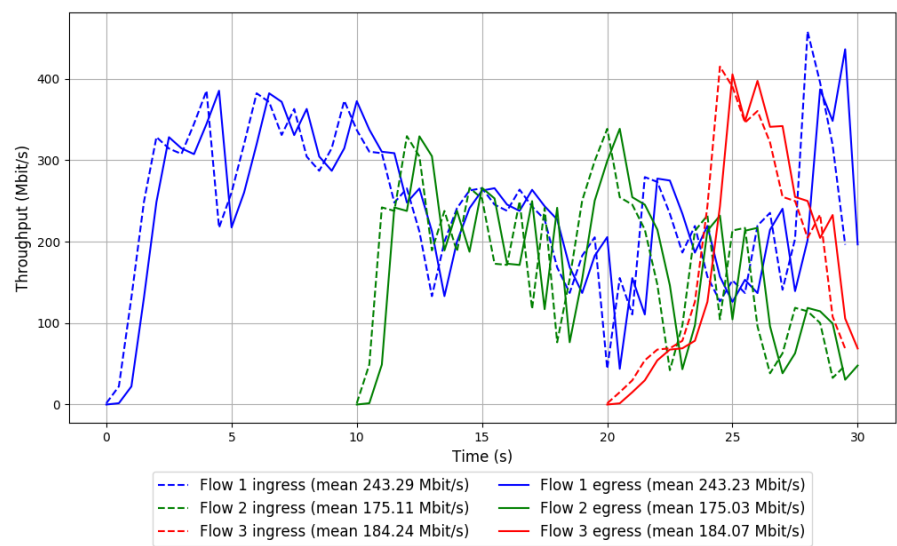
-- Flow 3:

Average throughput: 184.07 Mbit/s

95th percentile per-packet one-way delay: 67.301 ms

Loss rate: 0.09%

Run 3: Report of PCC-Vivace — Data Link

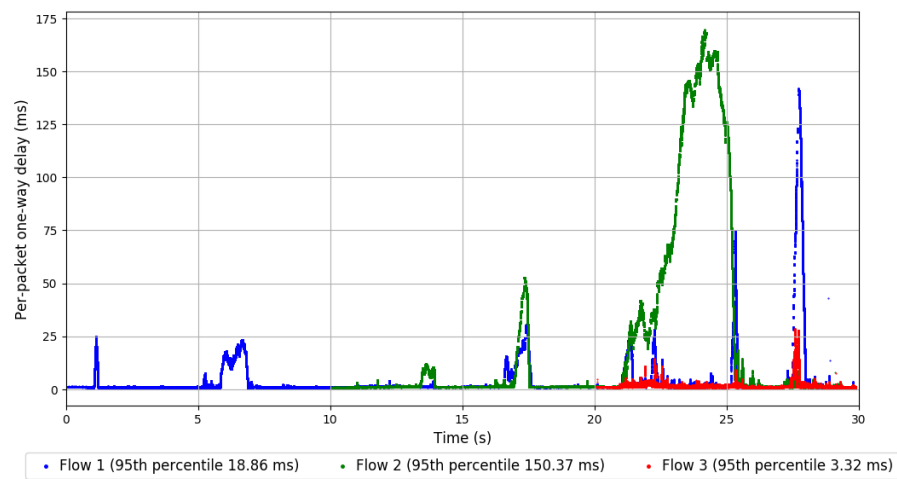
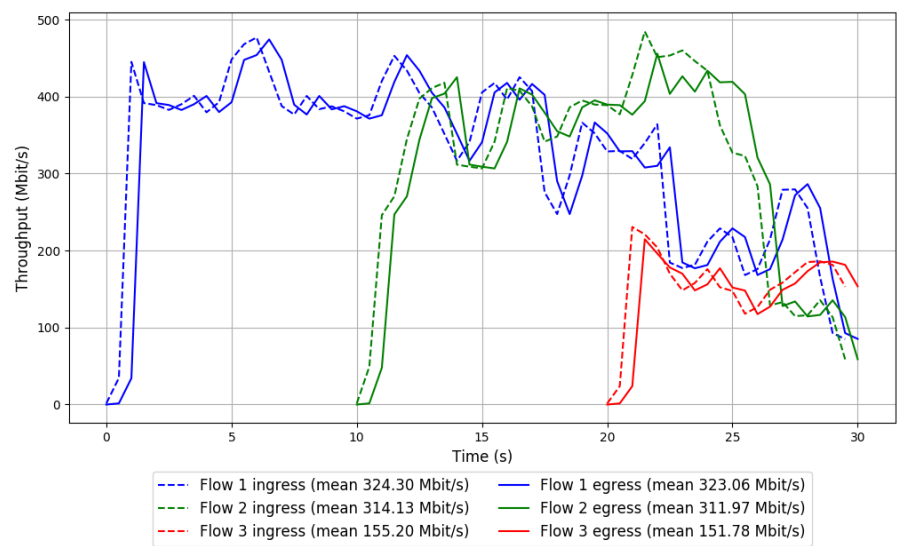


Run 4: Statistics of PCC-Vivace

Start at: 2019-11-24 09:23:25  
End at: 2019-11-24 09:23:55  
Local clock offset: 2.957 ms  
Remote clock offset: -3.583 ms

# Below is generated by plot.py at 2019-11-24 11:31:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 580.61 Mbit/s  
95th percentile per-packet one-way delay: 99.798 ms  
Loss rate: 0.65%  
-- Flow 1:  
Average throughput: 323.06 Mbit/s  
95th percentile per-packet one-way delay: 18.861 ms  
Loss rate: 0.38%  
-- Flow 2:  
Average throughput: 311.97 Mbit/s  
95th percentile per-packet one-way delay: 150.367 ms  
Loss rate: 0.69%  
-- Flow 3:  
Average throughput: 151.78 Mbit/s  
95th percentile per-packet one-way delay: 3.322 ms  
Loss rate: 2.20%

Run 4: Report of PCC-Vivace — Data Link

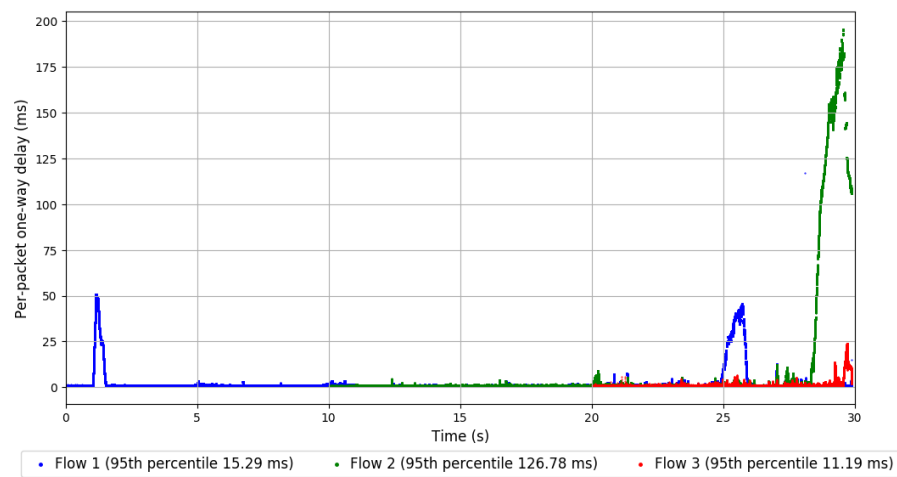
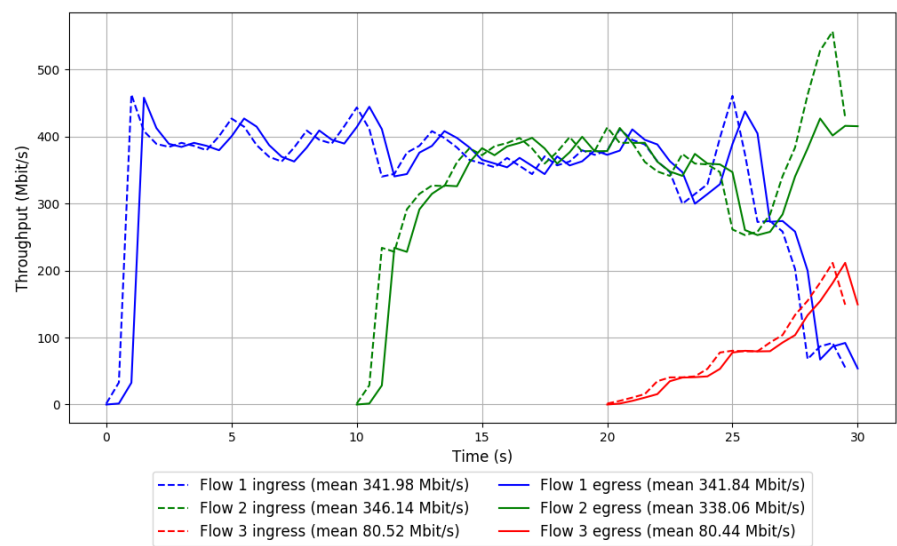


Run 5: Statistics of PCC-Vivace

Start at: 2019-11-24 09:58:47  
End at: 2019-11-24 09:59:17  
Local clock offset: 3.026 ms  
Remote clock offset: -6.482 ms

# Below is generated by plot.py at 2019-11-24 11:31:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 593.21 Mbit/s  
95th percentile per-packet one-way delay: 30.547 ms  
Loss rate: 0.92%  
-- Flow 1:  
Average throughput: 341.84 Mbit/s  
95th percentile per-packet one-way delay: 15.285 ms  
Loss rate: 0.03%  
-- Flow 2:  
Average throughput: 338.06 Mbit/s  
95th percentile per-packet one-way delay: 126.776 ms  
Loss rate: 2.33%  
-- Flow 3:  
Average throughput: 80.44 Mbit/s  
95th percentile per-packet one-way delay: 11.192 ms  
Loss rate: 0.10%

Run 5: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2019-11-24 07:15:23

End at: 2019-11-24 07:15:53

Local clock offset: 3.158 ms

Remote clock offset: 0.052 ms

# Below is generated by plot.py at 2019-11-24 11:31:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.91 Mbit/s

95th percentile per-packet one-way delay: 1.117 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 2.60 Mbit/s

95th percentile per-packet one-way delay: 1.118 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 1.94 Mbit/s

95th percentile per-packet one-way delay: 1.091 ms

Loss rate: 0.05%

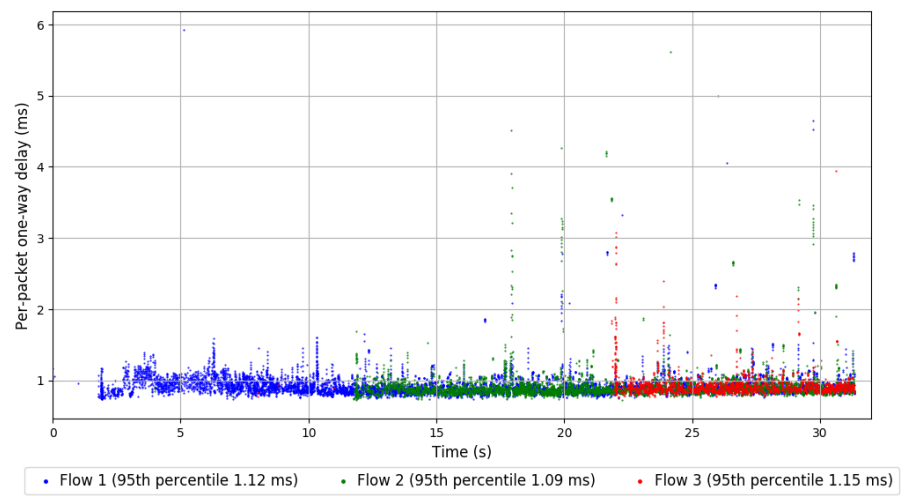
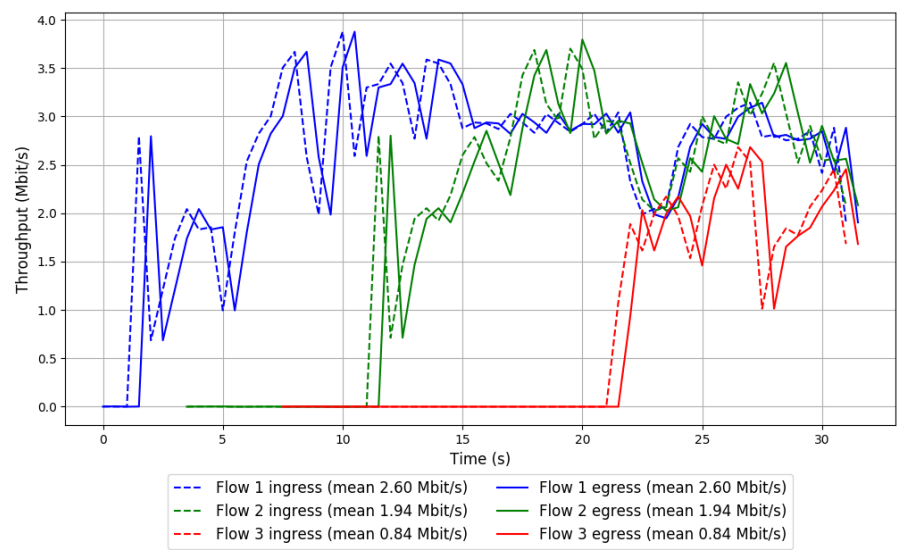
-- Flow 3:

Average throughput: 0.84 Mbit/s

95th percentile per-packet one-way delay: 1.149 ms

Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link





Run 2: Statistics of WebRTC media

Start at: 2019-11-24 07:50:40

End at: 2019-11-24 07:51:10

Local clock offset: 4.437 ms

Remote clock offset: 1.841 ms

# Below is generated by plot.py at 2019-11-24 11:31:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 2.085 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 2.012 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 1.867 ms

Loss rate: 0.00%

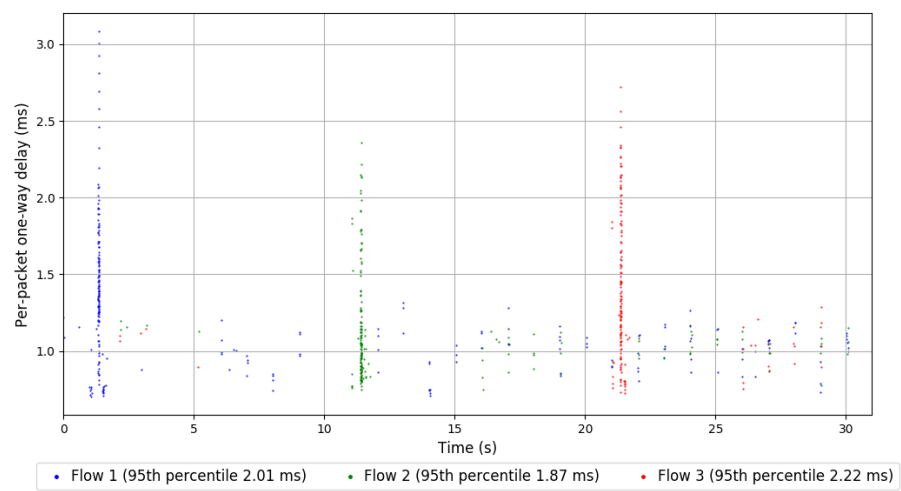
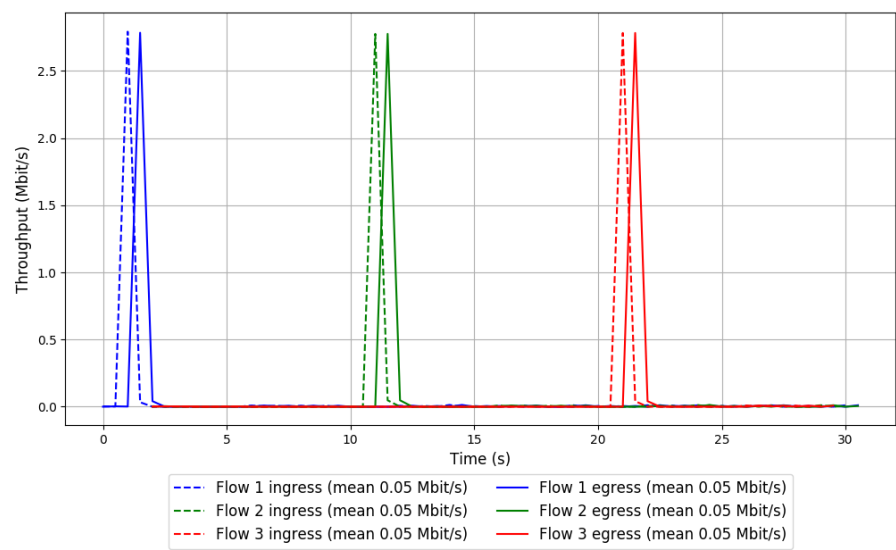
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 2.223 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2019-11-24 08:25:59

End at: 2019-11-24 08:26:29

Local clock offset: 3.612 ms

Remote clock offset: 0.178 ms

# Below is generated by plot.py at 2019-11-24 11:31:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 3.610 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 3.228 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 13.656 ms

Loss rate: 0.00%

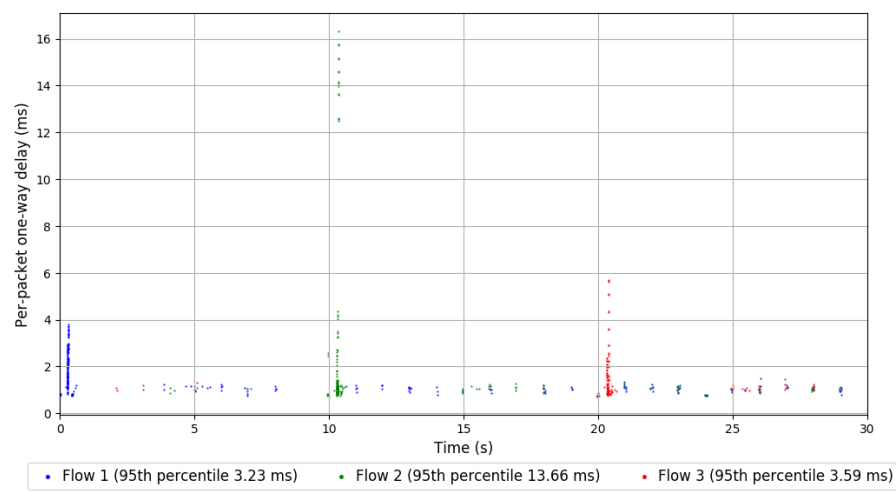
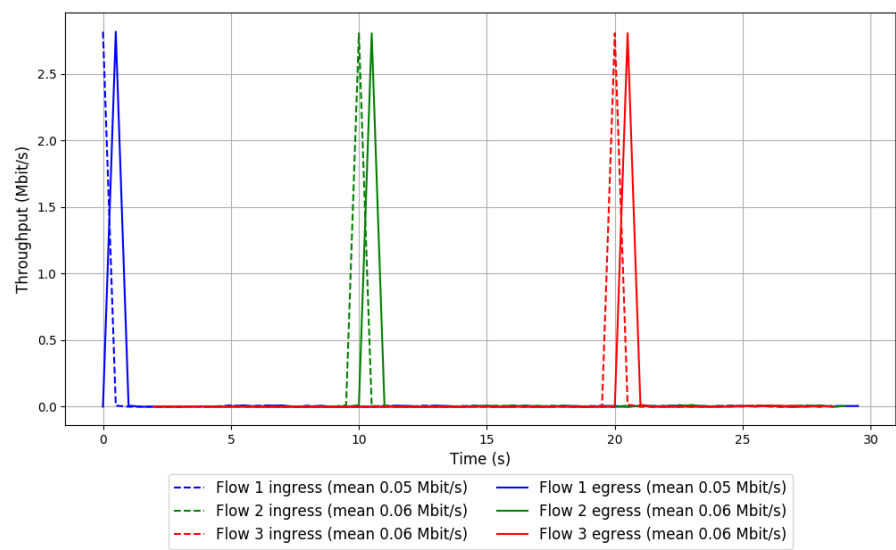
-- Flow 3:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 3.592 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2019-11-24 09:01:24

End at: 2019-11-24 09:01:54

Local clock offset: 3.294 ms

Remote clock offset: 3.991 ms

# Below is generated by plot.py at 2019-11-24 11:31:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 2.465 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 1.279 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 2.845 ms

Loss rate: 0.00%

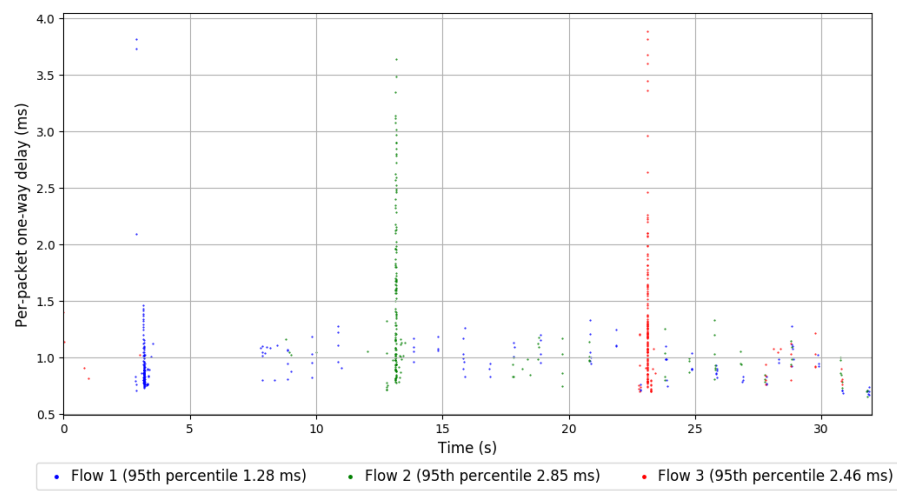
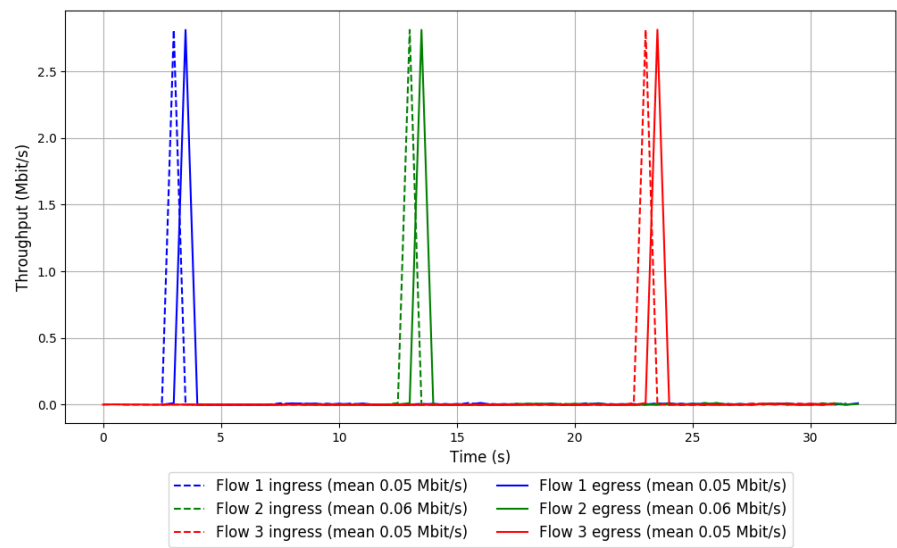
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 2.465 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-11-24 09:36:34

End at: 2019-11-24 09:37:04

Local clock offset: 2.844 ms

Remote clock offset: -4.88 ms

# Below is generated by plot.py at 2019-11-24 11:31:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 2.719 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 2.000 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 2.921 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 2.446 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

