

Pantheon Report

Generated at 2019-05-30 14:11:21 (UTC).

Data path: Saudi Arabia on `enp2s0` (*remote*) → AWS India 2 on `ens5` (*local*).

Repeated the test of 21 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 `nets.org.sg` and have been applied to correct the timestamps in logs.

System info:

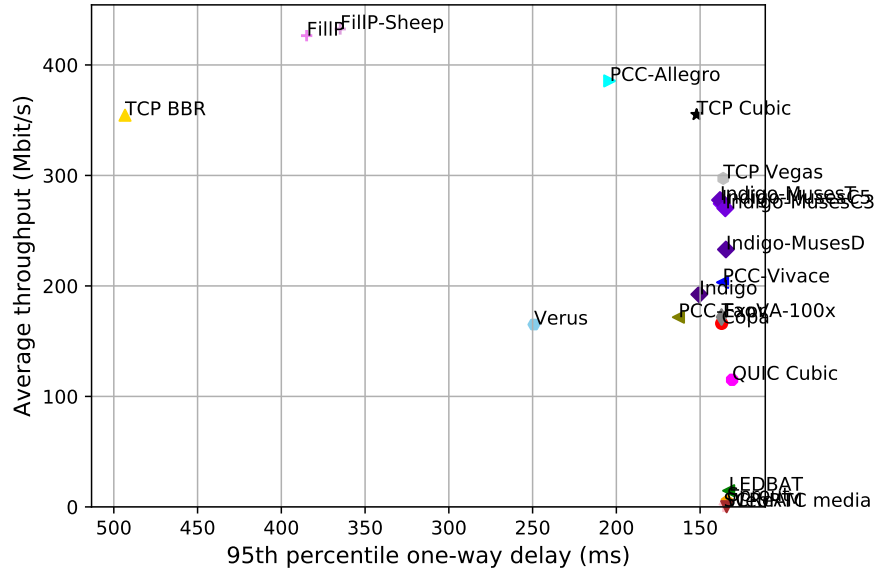
```
Linux 4.15.0-1035-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

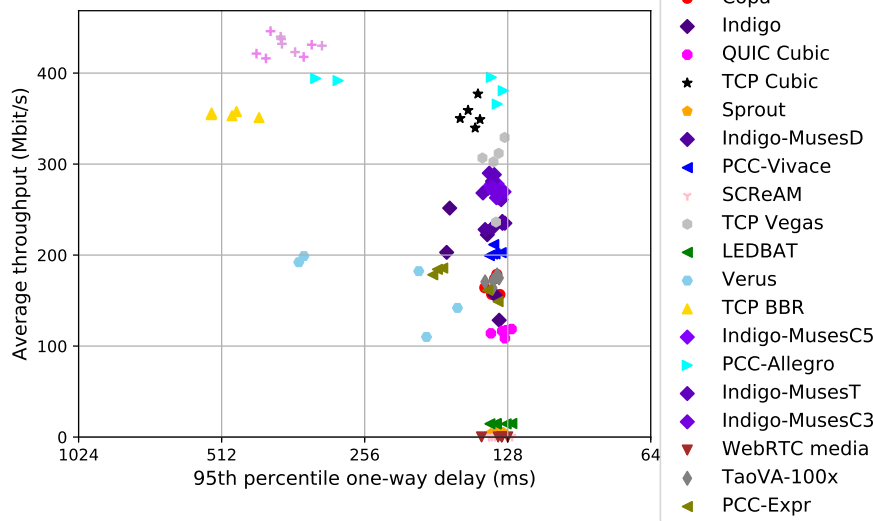
```
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/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 Saudi Arabia to AWS India 2, 5 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



test from Saudi Arabia to AWS India 2, 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	239.73	140.13	86.82	496.63	478.15	379.62	3.19	8.25	7.44
Copa	5	119.57	52.93	34.82	137.11	136.66	140.61	0.34	1.15	3.86
TCP Cubic	5	222.89	151.12	102.74	143.74	164.57	218.86	0.36	0.83	3.33
FillP	5	261.19	187.16	135.69	377.76	400.99	278.84	3.06	7.51	6.65
FillP-Sheep	5	268.32	185.21	134.70	346.72	363.16	393.85	2.71	6.36	8.10
Indigo	5	95.75	99.55	94.33	142.90	150.73	167.86	0.72	1.01	2.43
Indigo-MusesC3	5	181.65	124.93	44.96	134.83	135.58	132.59	0.19	0.70	5.35
Indigo-MusesC5	5	224.12	58.19	54.76	137.62	134.20	133.74	0.24	1.66	3.80
Indigo-MusesD	5	176.12	79.28	28.89	134.91	132.32	130.80	0.32	0.41	4.38
Indigo-MusesT	5	202.87	98.58	53.15	138.33	137.78	138.37	0.36	1.00	3.97
LEDBAT	5	9.52	6.29	3.04	132.97	132.94	132.94	1.28	1.96	3.97
PCC-Allegro	5	368.86	20.82	8.99	204.44	134.76	134.68	0.78	1.02	1.54
PCC-Expr	5	157.56	17.93	6.96	168.31	139.19	139.55	0.71	1.07	1.60
QUIC Cubic	5	59.29	57.74	53.34	130.79	130.82	131.18	0.61	1.00	2.51
SCReAM	5	0.22	0.22	0.22	135.90	135.95	136.01	0.64	1.03	1.77
Sprout	5	2.97	2.54	2.05	133.92	133.94	133.97	1.12	1.29	2.67
TaoVA-100x	5	103.02	75.82	56.44	136.52	137.60	139.03	0.36	0.91	2.09
TCP Vegas	5	202.71	97.79	91.53	135.76	141.72	142.79	0.34	0.97	2.32
Verus	5	105.86	58.15	66.87	234.95	213.05	218.47	0.64	0.92	6.04
PCC-Vivace	5	170.10	33.53	33.46	136.55	136.42	140.30	0.49	1.33	2.74
WebRTC media	5	0.05	0.05	0.05	134.16	134.21	134.13	0.01	0.00	0.00

Run 1: Statistics of TCP BBR

Start at: 2019-05-30 11:13:12
End at: 2019-05-30 11:13:42
Local clock offset: 3.054 ms
Remote clock offset: -36.916 ms

Below is generated by plot.py at 2019-05-30 13:38:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 356.07 Mbit/s
95th percentile per-packet one-way delay: 537.420 ms
Loss rate: 7.48%

-- Flow 1:

Average throughput: 251.30 Mbit/s
95th percentile per-packet one-way delay: 543.434 ms
Loss rate: 4.27%

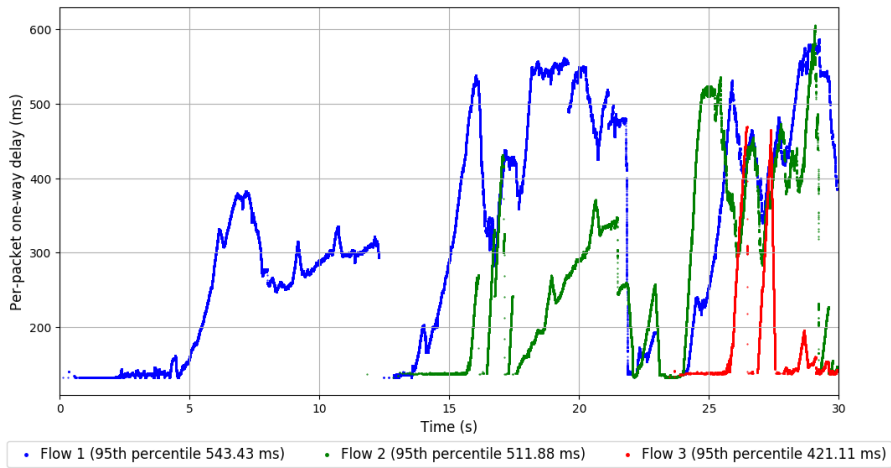
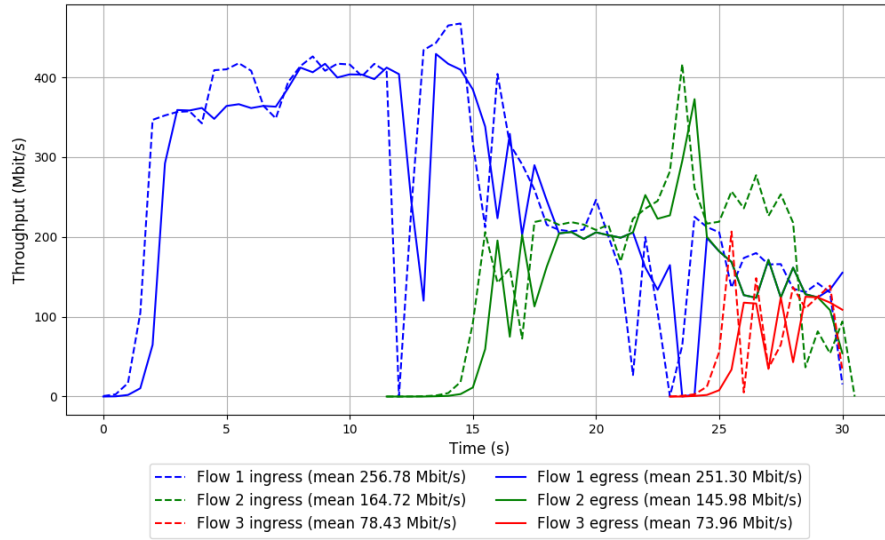
-- Flow 2:

Average throughput: 145.98 Mbit/s
95th percentile per-packet one-way delay: 511.881 ms
Loss rate: 14.93%

-- Flow 3:

Average throughput: 73.96 Mbit/s
95th percentile per-packet one-way delay: 421.111 ms
Loss rate: 11.21%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2019-05-30 11:44:21
End at: 2019-05-30 11:44:51
Local clock offset: 3.648 ms
Remote clock offset: -38.12 ms

Below is generated by plot.py at 2019-05-30 13:38:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 353.20 Mbit/s
95th percentile per-packet one-way delay: 486.891 ms
Loss rate: 5.34%

-- Flow 1:

Average throughput: 266.65 Mbit/s
95th percentile per-packet one-way delay: 465.150 ms
Loss rate: 3.88%

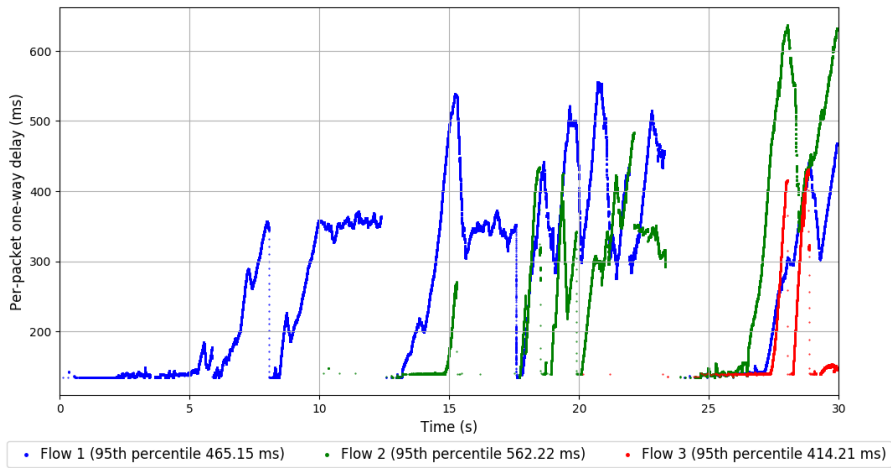
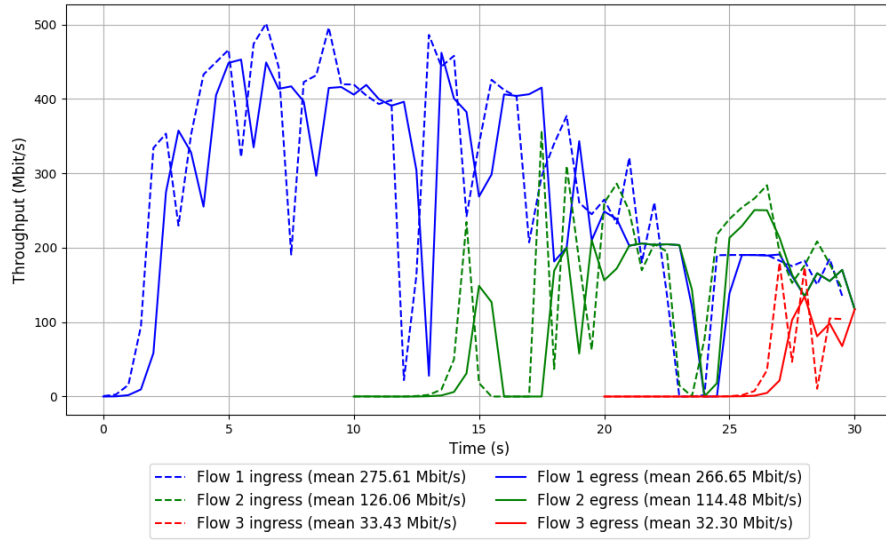
-- Flow 2:

Average throughput: 114.48 Mbit/s
95th percentile per-packet one-way delay: 562.223 ms
Loss rate: 10.11%

-- Flow 3:

Average throughput: 32.30 Mbit/s
95th percentile per-packet one-way delay: 414.208 ms
Loss rate: 5.29%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2019-05-30 12:15:31
End at: 2019-05-30 12:16:01
Local clock offset: -0.355 ms
Remote clock offset: -40.81 ms

Below is generated by plot.py at 2019-05-30 13:38:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 354.39 Mbit/s
95th percentile per-packet one-way delay: 538.529 ms
Loss rate: 4.16%

-- Flow 1:

Average throughput: 237.55 Mbit/s
95th percentile per-packet one-way delay: 548.233 ms
Loss rate: 2.90%

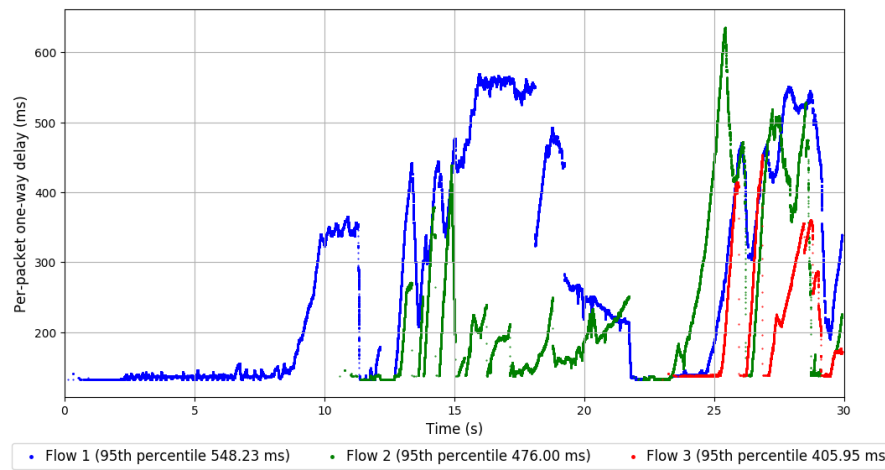
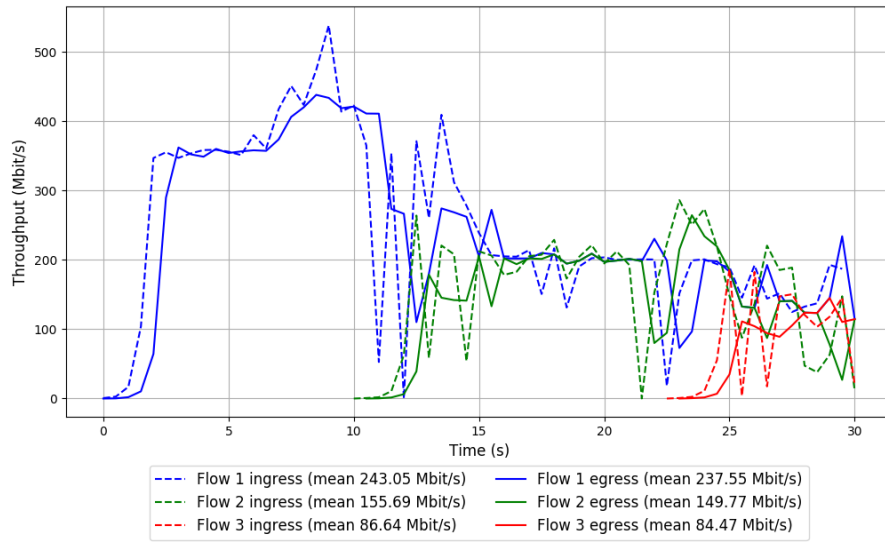
-- Flow 2:

Average throughput: 149.77 Mbit/s
95th percentile per-packet one-way delay: 475.997 ms
Loss rate: 6.34%

-- Flow 3:

Average throughput: 84.47 Mbit/s
95th percentile per-packet one-way delay: 405.954 ms
Loss rate: 7.98%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2019-05-30 12:47:00
End at: 2019-05-30 12:47:30
Local clock offset: -1.222 ms
Remote clock offset: -36.136 ms

Below is generated by plot.py at 2019-05-30 13:38:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 351.15 Mbit/s
95th percentile per-packet one-way delay: 427.149 ms
Loss rate: 3.94%

-- Flow 1:

Average throughput: 215.23 Mbit/s
95th percentile per-packet one-way delay: 430.647 ms
Loss rate: 2.39%

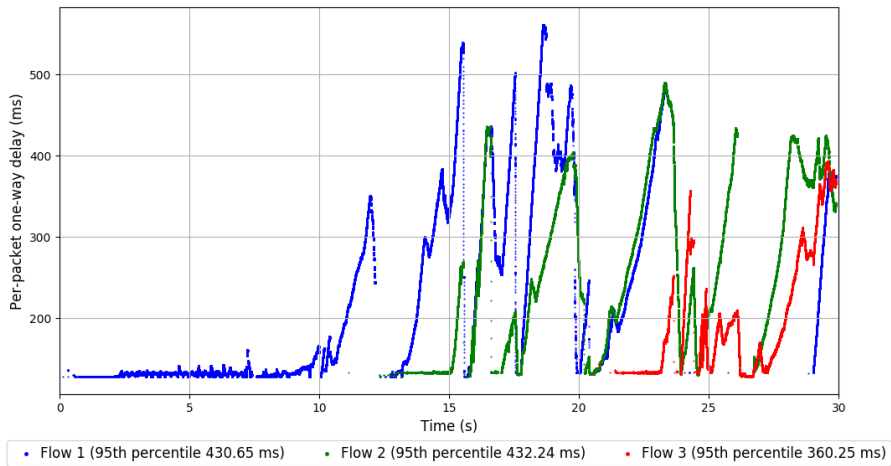
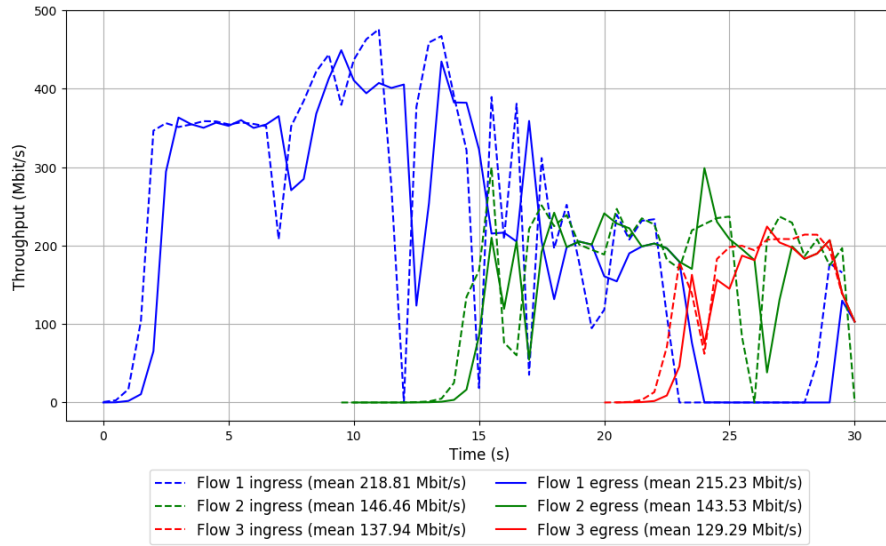
-- Flow 2:

Average throughput: 143.53 Mbit/s
95th percentile per-packet one-way delay: 432.243 ms
Loss rate: 5.48%

-- Flow 3:

Average throughput: 129.29 Mbit/s
95th percentile per-packet one-way delay: 360.252 ms
Loss rate: 8.16%

Run 4: Report of TCP BBR — Data Link

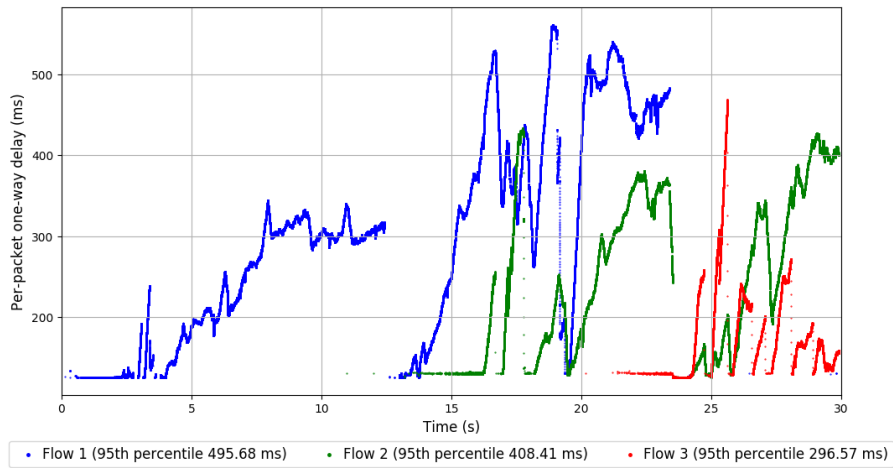
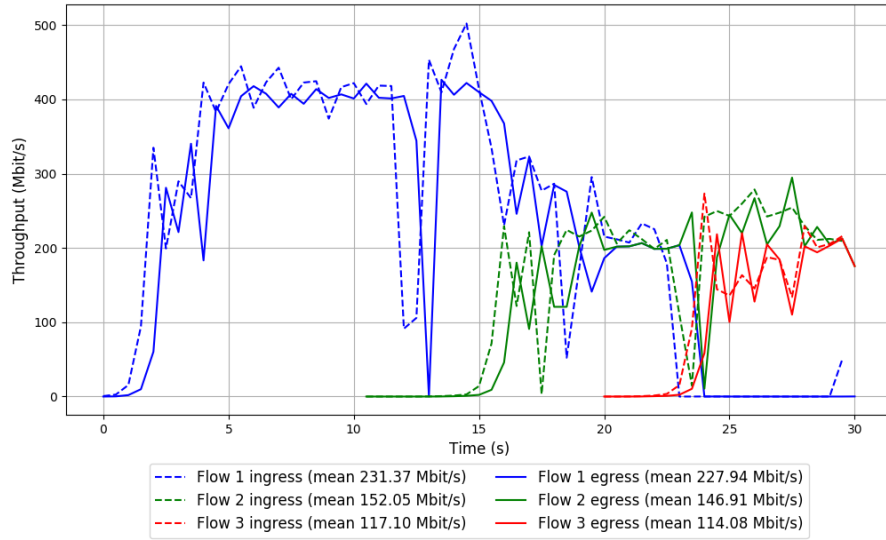


Run 5: Statistics of TCP BBR

Start at: 2019-05-30 13:18:16
End at: 2019-05-30 13:18:46
Local clock offset: -1.429 ms
Remote clock offset: -33.798 ms

```
# Below is generated by plot.py at 2019-05-30 13:38:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 357.77 Mbit/s
95th percentile per-packet one-way delay: 476.536 ms
Loss rate: 3.22%
-- Flow 1:
Average throughput: 227.94 Mbit/s
95th percentile per-packet one-way delay: 495.684 ms
Loss rate: 2.51%
-- Flow 2:
Average throughput: 146.91 Mbit/s
95th percentile per-packet one-way delay: 408.412 ms
Loss rate: 4.39%
-- Flow 3:
Average throughput: 114.08 Mbit/s
95th percentile per-packet one-way delay: 296.569 ms
Loss rate: 4.54%
```

Run 5: Report of TCP BBR — Data Link

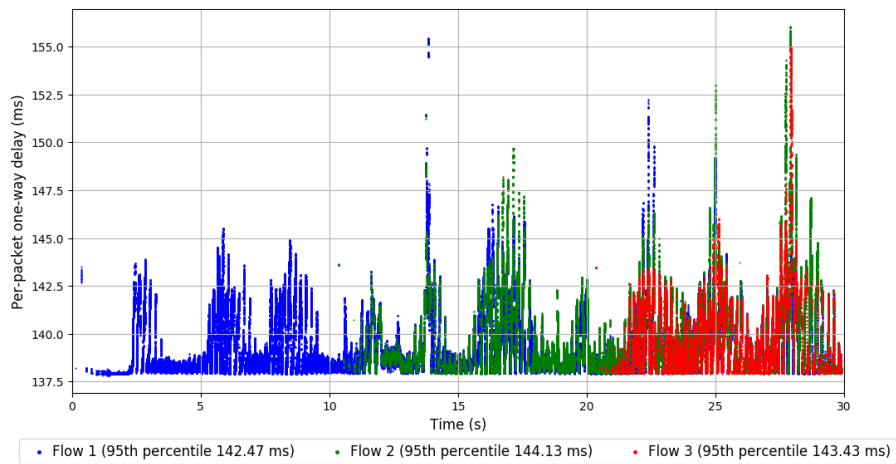
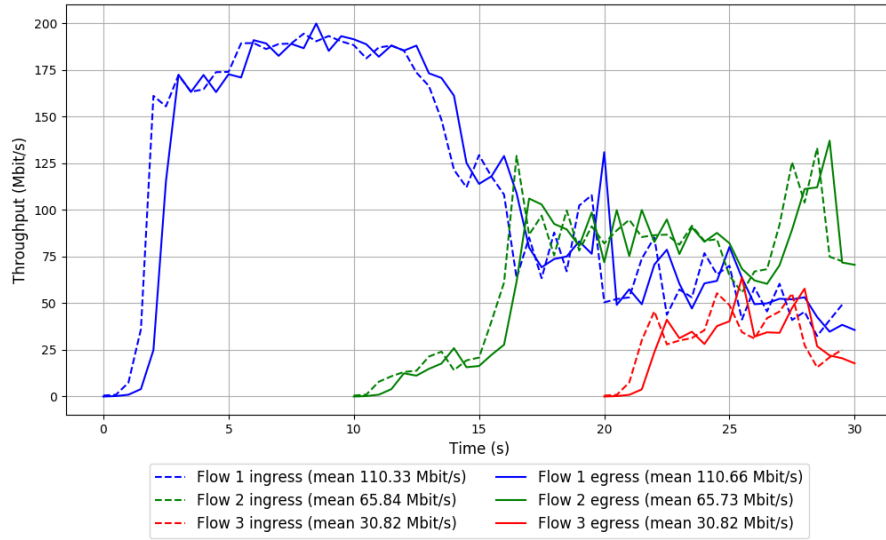


Run 1: Statistics of Copa

Start at: 2019-05-30 11:02:58
End at: 2019-05-30 11:03:28
Local clock offset: 3.046 ms
Remote clock offset: -42.565 ms

```
# Below is generated by plot.py at 2019-05-30 13:38:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 164.17 Mbit/s
95th percentile per-packet one-way delay: 143.051 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 110.66 Mbit/s
95th percentile per-packet one-way delay: 142.470 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 65.73 Mbit/s
95th percentile per-packet one-way delay: 144.132 ms
Loss rate: 1.13%
-- Flow 3:
Average throughput: 30.82 Mbit/s
95th percentile per-packet one-way delay: 143.430 ms
Loss rate: 2.03%
```

Run 1: Report of Copa — Data Link

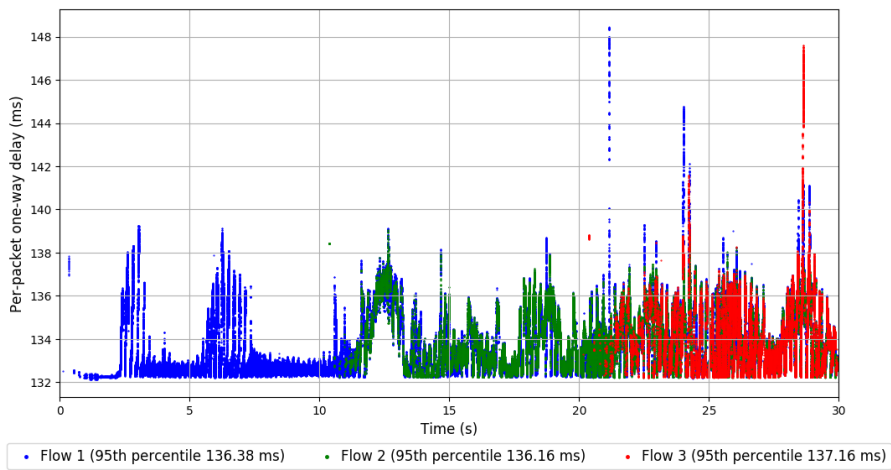
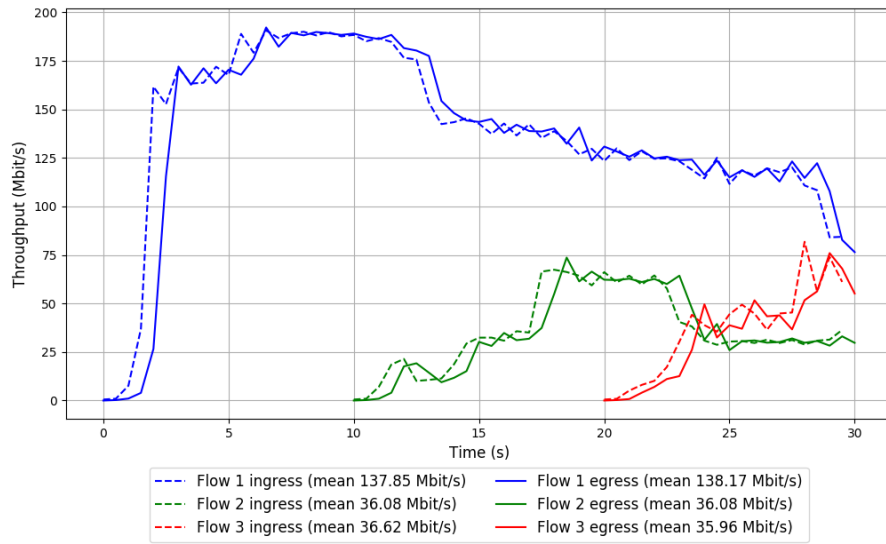


Run 2: Statistics of Copa

Start at: 2019-05-30 11:34:02
End at: 2019-05-30 11:34:32
Local clock offset: -1.221 ms
Remote clock offset: -40.527 ms

```
# Below is generated by plot.py at 2019-05-30 13:38:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 173.91 Mbit/s
95th percentile per-packet one-way delay: 136.389 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 138.17 Mbit/s
95th percentile per-packet one-way delay: 136.385 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 36.08 Mbit/s
95th percentile per-packet one-way delay: 136.161 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 35.96 Mbit/s
95th percentile per-packet one-way delay: 137.155 ms
Loss rate: 3.70%
```

Run 2: Report of Copa — Data Link

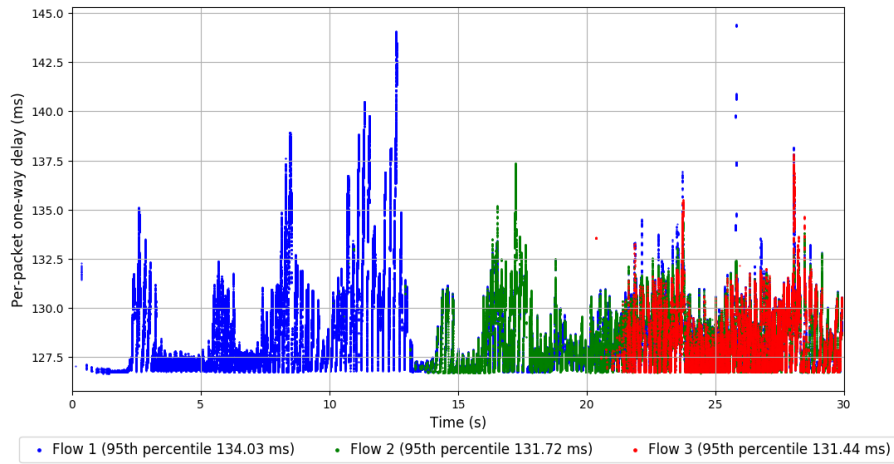
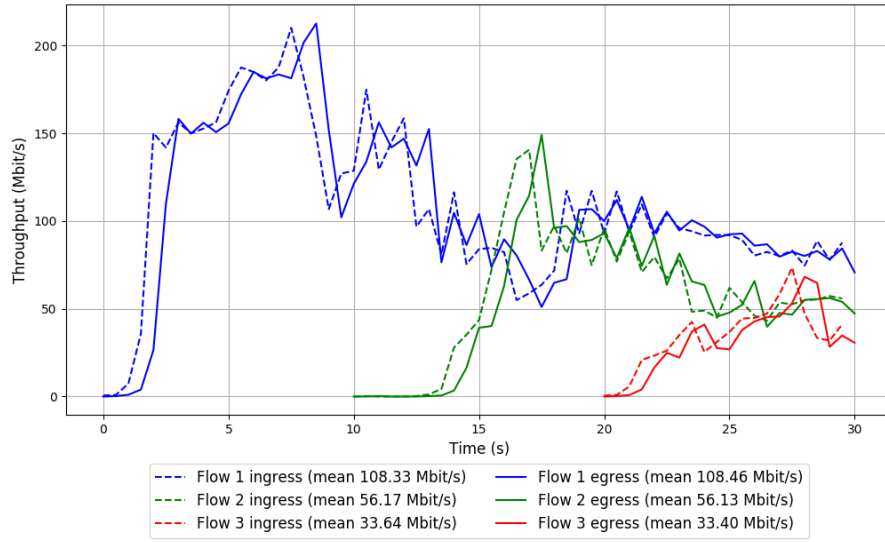


Run 3: Statistics of Copa

Start at: 2019-05-30 12:05:15
End at: 2019-05-30 12:05:45
Local clock offset: -0.202 ms
Remote clock offset: -34.601 ms

```
# Below is generated by plot.py at 2019-05-30 13:38:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 156.66 Mbit/s
95th percentile per-packet one-way delay: 132.983 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 108.46 Mbit/s
95th percentile per-packet one-way delay: 134.026 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 56.13 Mbit/s
95th percentile per-packet one-way delay: 131.722 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 33.40 Mbit/s
95th percentile per-packet one-way delay: 131.443 ms
Loss rate: 2.67%
```

Run 3: Report of Copa — Data Link

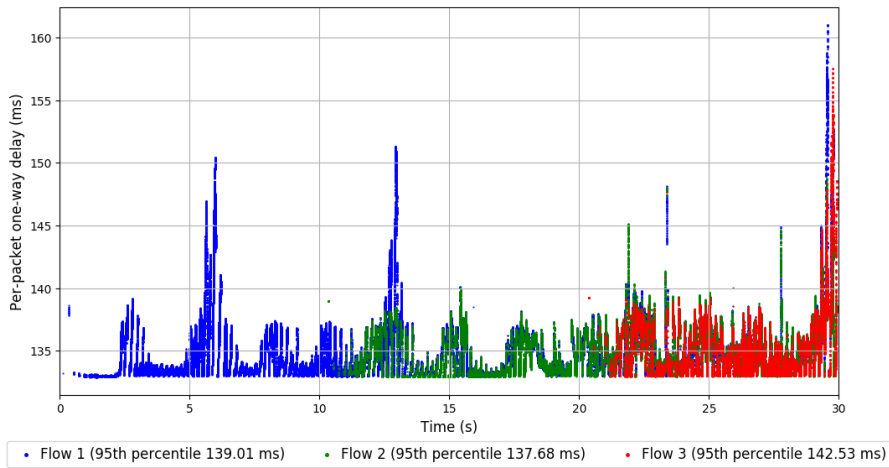
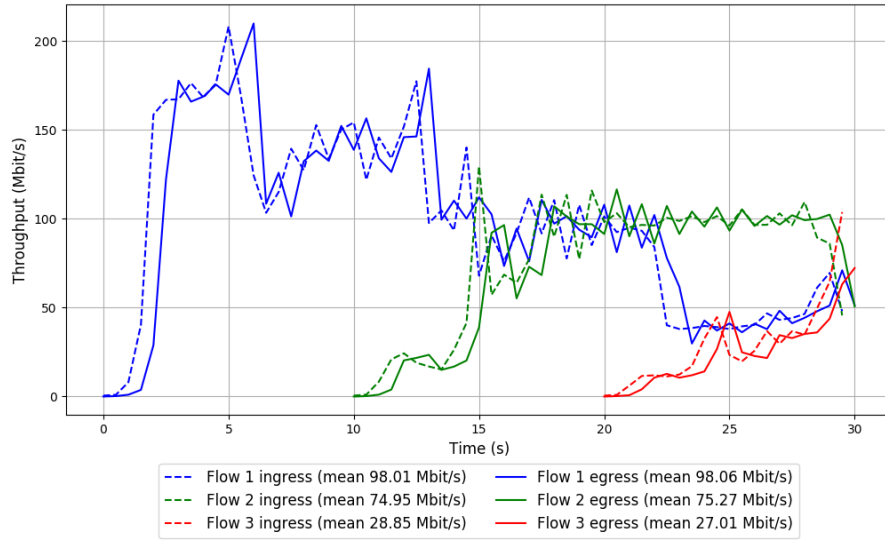


Run 4: Statistics of Copa

Start at: 2019-05-30 12:36:44
End at: 2019-05-30 12:37:14
Local clock offset: -0.365 ms
Remote clock offset: -42.192 ms

```
# Below is generated by plot.py at 2019-05-30 13:41:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 156.89 Mbit/s
95th percentile per-packet one-way delay: 138.381 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 98.06 Mbit/s
95th percentile per-packet one-way delay: 139.015 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 75.27 Mbit/s
95th percentile per-packet one-way delay: 137.677 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 27.01 Mbit/s
95th percentile per-packet one-way delay: 142.533 ms
Loss rate: 8.24%
```

Run 4: Report of Copa — Data Link

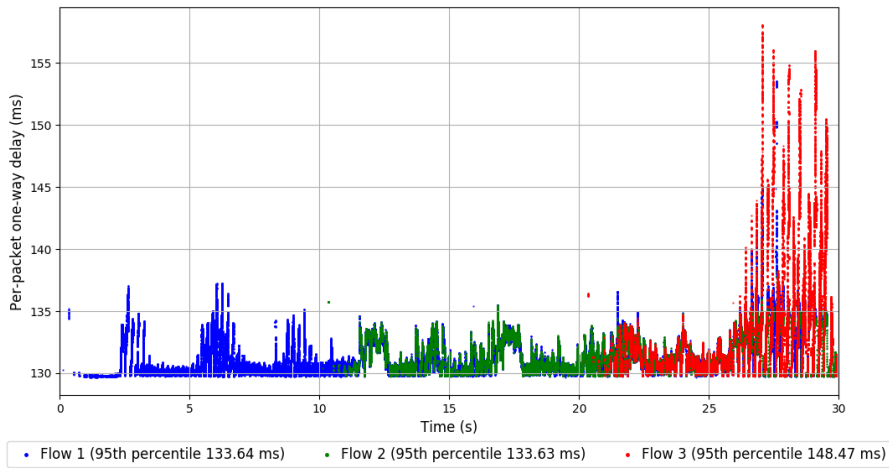
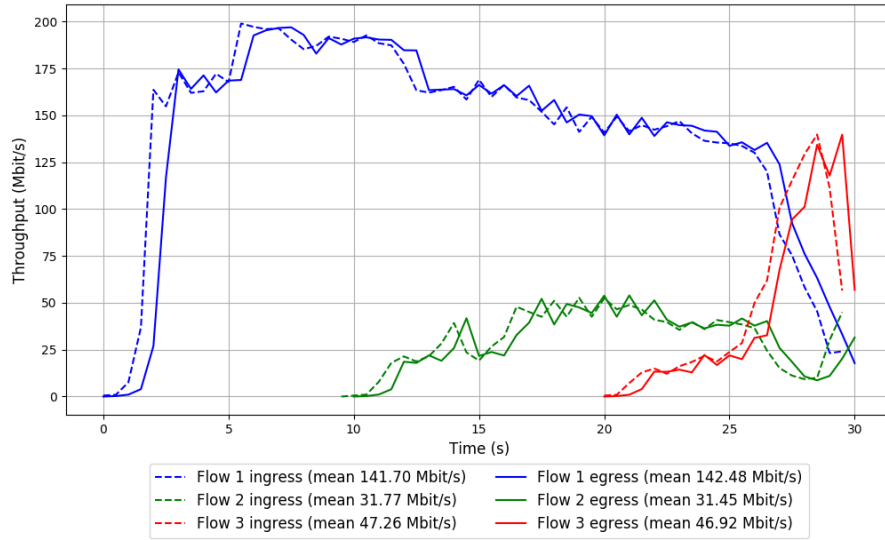


Run 5: Statistics of Copa

Start at: 2019-05-30 13:07:57
End at: 2019-05-30 13:08:27
Local clock offset: -1.114 ms
Remote clock offset: -37.668 ms

```
# Below is generated by plot.py at 2019-05-30 13:41:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 178.74 Mbit/s
95th percentile per-packet one-way delay: 134.930 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 142.48 Mbit/s
95th percentile per-packet one-way delay: 133.638 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 31.45 Mbit/s
95th percentile per-packet one-way delay: 133.632 ms
Loss rate: 2.02%
-- Flow 3:
Average throughput: 46.92 Mbit/s
95th percentile per-packet one-way delay: 148.474 ms
Loss rate: 2.64%
```

Run 5: Report of Copa — Data Link

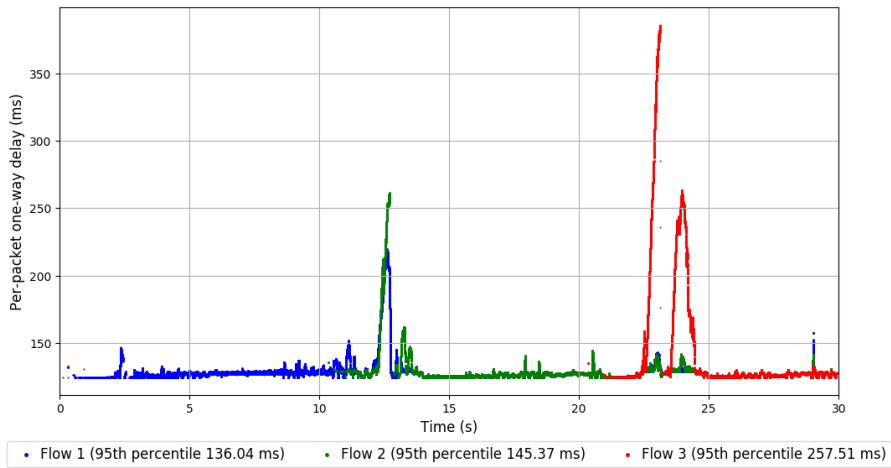
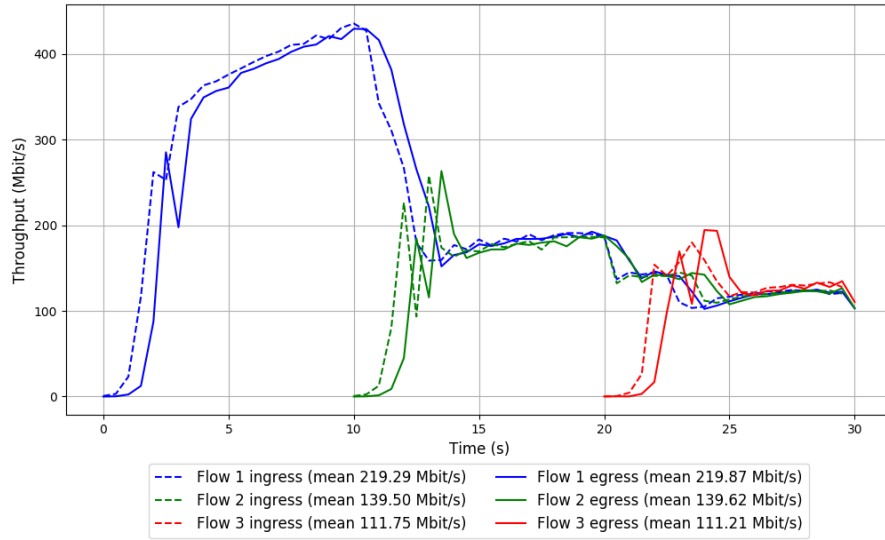


Run 1: Statistics of TCP Cubic

Start at: 2019-05-30 10:59:52
End at: 2019-05-30 11:00:22
Local clock offset: -0.99 ms
Remote clock offset: -33.19 ms

```
# Below is generated by plot.py at 2019-05-30 13:42:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 349.01 Mbit/s
95th percentile per-packet one-way delay: 146.407 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 219.87 Mbit/s
95th percentile per-packet one-way delay: 136.045 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 139.62 Mbit/s
95th percentile per-packet one-way delay: 145.372 ms
Loss rate: 0.89%
-- Flow 3:
Average throughput: 111.21 Mbit/s
95th percentile per-packet one-way delay: 257.514 ms
Loss rate: 2.43%
```

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2019-05-30 11:30:57
End at: 2019-05-30 11:31:27
Local clock offset: 2.425 ms
Remote clock offset: -39.376 ms

Below is generated by plot.py at 2019-05-30 13:42:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 350.19 Mbit/s
95th percentile per-packet one-way delay: 161.212 ms
Loss rate: 0.74%

-- Flow 1:

Average throughput: 226.06 Mbit/s
95th percentile per-packet one-way delay: 147.394 ms
Loss rate: 0.37%

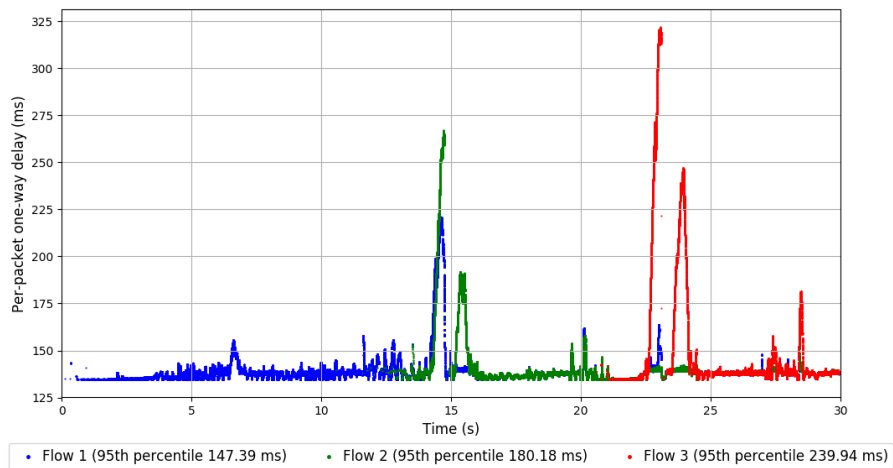
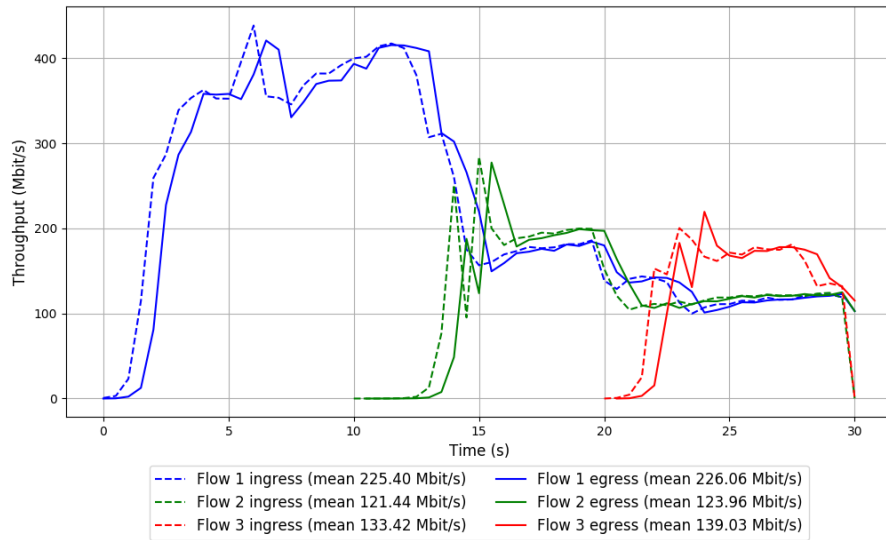
-- Flow 2:

Average throughput: 123.96 Mbit/s
95th percentile per-packet one-way delay: 180.183 ms
Loss rate: 1.02%

-- Flow 3:

Average throughput: 139.03 Mbit/s
95th percentile per-packet one-way delay: 239.942 ms
Loss rate: 2.13%

Run 2: Report of TCP Cubic — Data Link

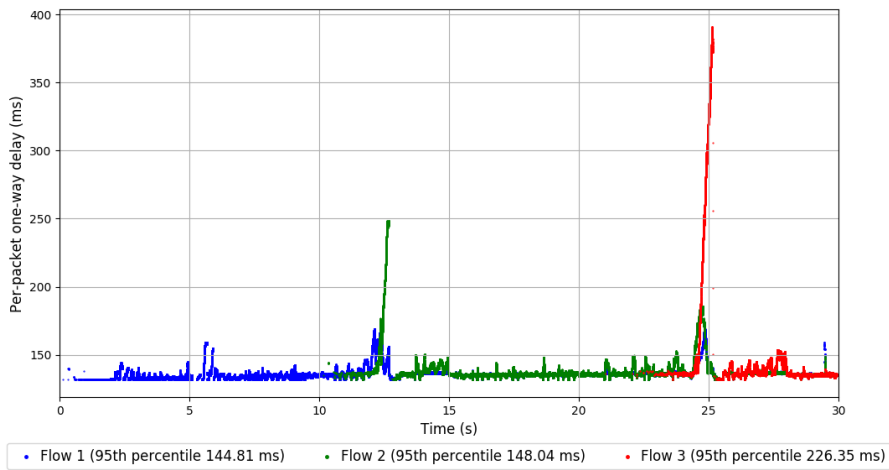
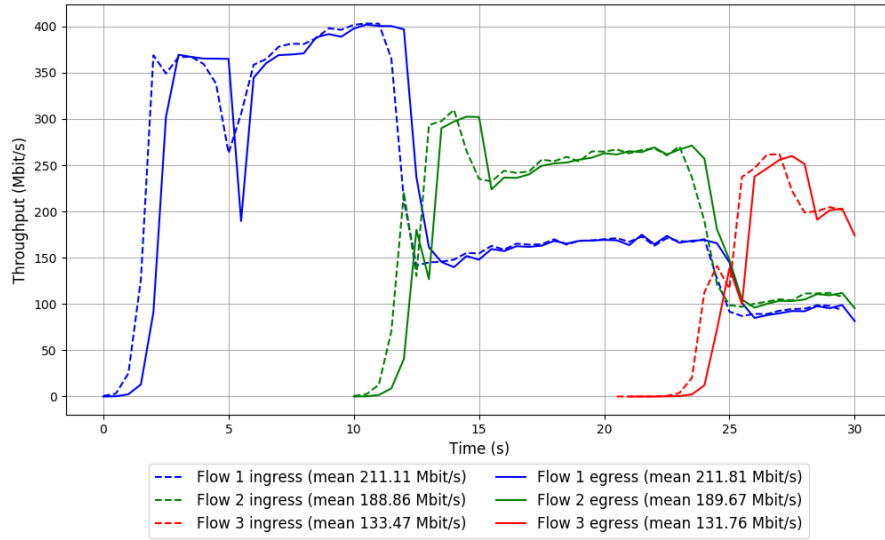


Run 3: Statistics of TCP Cubic

Start at: 2019-05-30 12:02:07
End at: 2019-05-30 12:02:37
Local clock offset: -0.09 ms
Remote clock offset: -39.671 ms

```
# Below is generated by plot.py at 2019-05-30 13:42:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 377.14 Mbit/s
95th percentile per-packet one-way delay: 147.887 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 211.81 Mbit/s
95th percentile per-packet one-way delay: 144.808 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 189.67 Mbit/s
95th percentile per-packet one-way delay: 148.036 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 131.76 Mbit/s
95th percentile per-packet one-way delay: 226.355 ms
Loss rate: 3.43%
```

Run 3: Report of TCP Cubic — Data Link

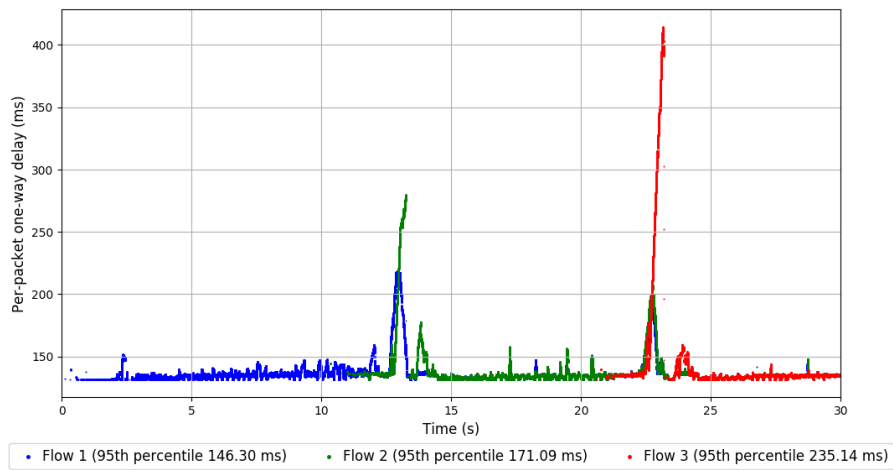
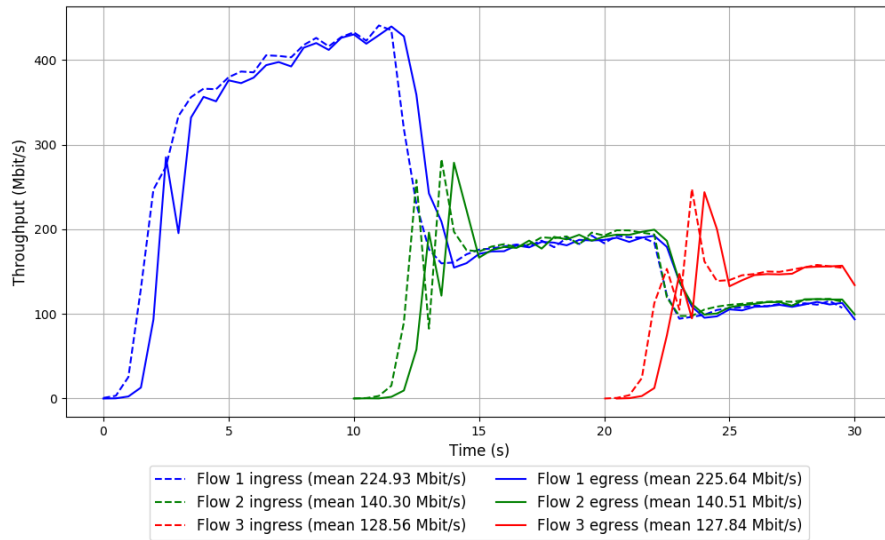


Run 4: Statistics of TCP Cubic

Start at: 2019-05-30 12:33:38
End at: 2019-05-30 12:34:08
Local clock offset: 4.097 ms
Remote clock offset: -36.292 ms

```
# Below is generated by plot.py at 2019-05-30 13:42:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 359.08 Mbit/s
95th percentile per-packet one-way delay: 155.109 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 225.64 Mbit/s
95th percentile per-packet one-way delay: 146.296 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 140.51 Mbit/s
95th percentile per-packet one-way delay: 171.095 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 127.84 Mbit/s
95th percentile per-packet one-way delay: 235.142 ms
Loss rate: 2.57%
```

Run 4: Report of TCP Cubic — Data Link

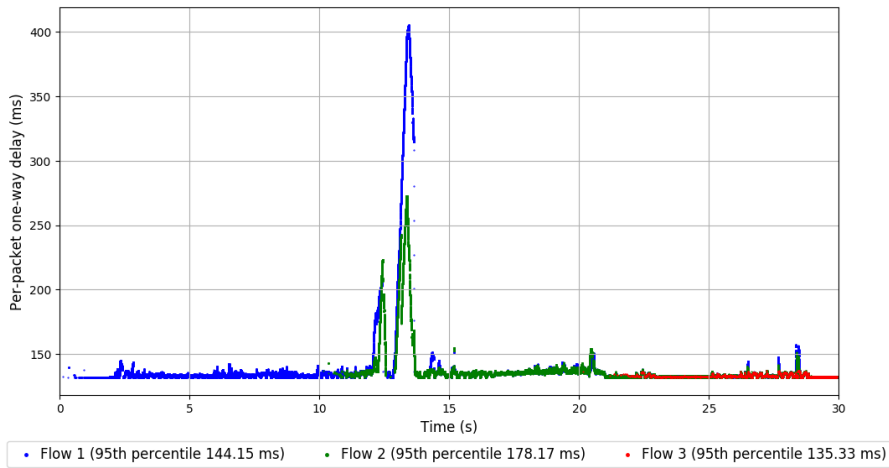
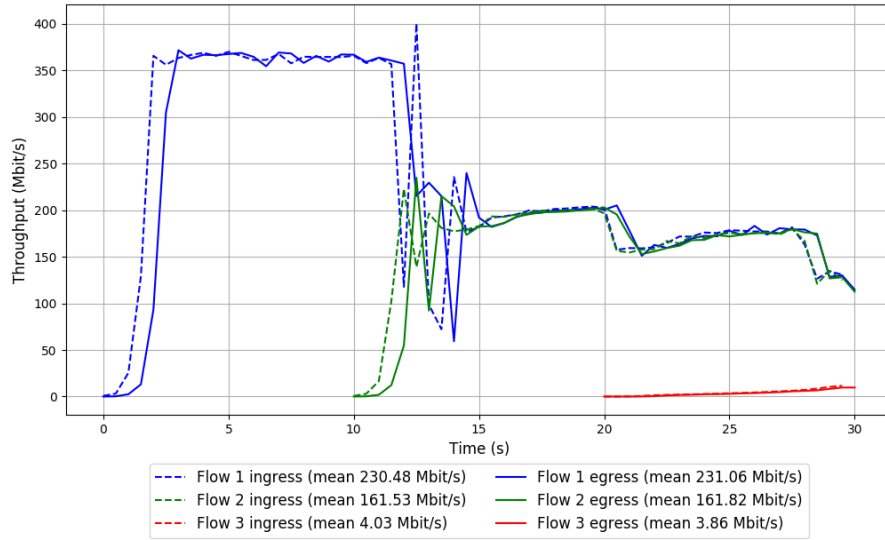


Run 5: Statistics of TCP Cubic

Start at: 2019-05-30 13:04:51
End at: 2019-05-30 13:05:21
Local clock offset: -2.438 ms
Remote clock offset: -41.084 ms

```
# Below is generated by plot.py at 2019-05-30 13:42:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 339.77 Mbit/s
95th percentile per-packet one-way delay: 149.873 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 231.06 Mbit/s
95th percentile per-packet one-way delay: 144.148 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 161.82 Mbit/s
95th percentile per-packet one-way delay: 178.166 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 3.86 Mbit/s
95th percentile per-packet one-way delay: 135.327 ms
Loss rate: 6.08%
```

Run 5: Report of TCP Cubic — Data Link

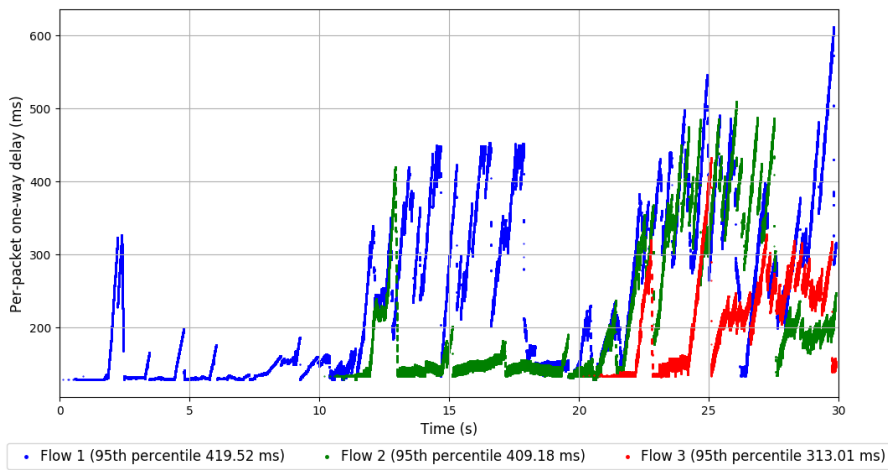
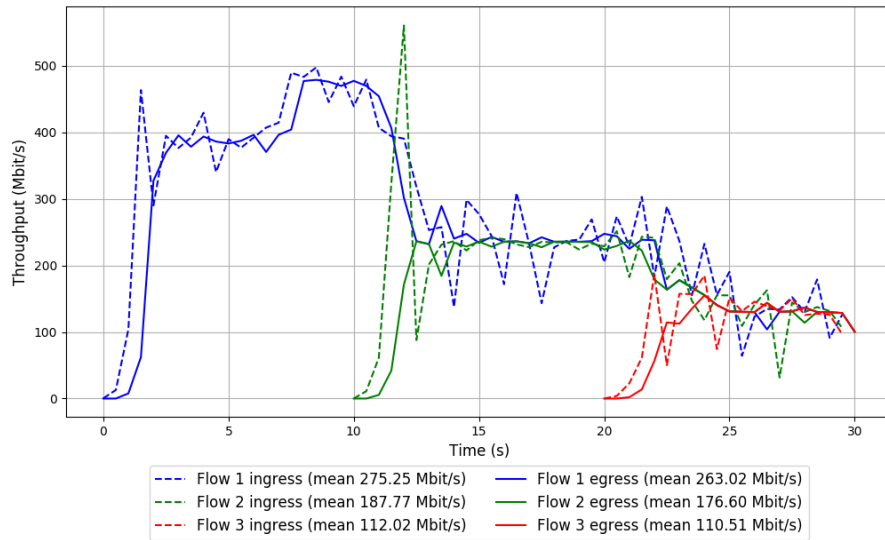


Run 1: Statistics of FillP

Start at: 2019-05-30 11:14:49
End at: 2019-05-30 11:15:19
Local clock offset: 2.787 ms
Remote clock offset: -33.791 ms

```
# Below is generated by plot.py at 2019-05-30 13:44:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 416.14 Mbit/s
95th percentile per-packet one-way delay: 413.134 ms
Loss rate: 5.41%
-- Flow 1:
Average throughput: 263.02 Mbit/s
95th percentile per-packet one-way delay: 419.519 ms
Loss rate: 5.07%
-- Flow 2:
Average throughput: 176.60 Mbit/s
95th percentile per-packet one-way delay: 409.179 ms
Loss rate: 6.80%
-- Flow 3:
Average throughput: 110.51 Mbit/s
95th percentile per-packet one-way delay: 313.014 ms
Loss rate: 3.28%
```

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2019-05-30 11:45:56
End at: 2019-05-30 11:46:26
Local clock offset: -0.365 ms
Remote clock offset: -39.304 ms

Below is generated by plot.py at 2019-05-30 13:47:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 446.06 Mbit/s
95th percentile per-packet one-way delay: 403.952 ms
Loss rate: 4.54%

-- Flow 1:

Average throughput: 284.31 Mbit/s
95th percentile per-packet one-way delay: 378.439 ms
Loss rate: 2.95%

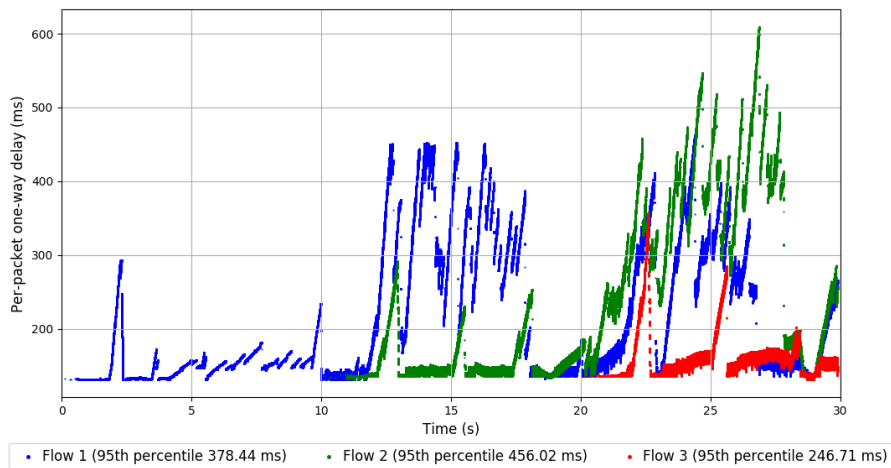
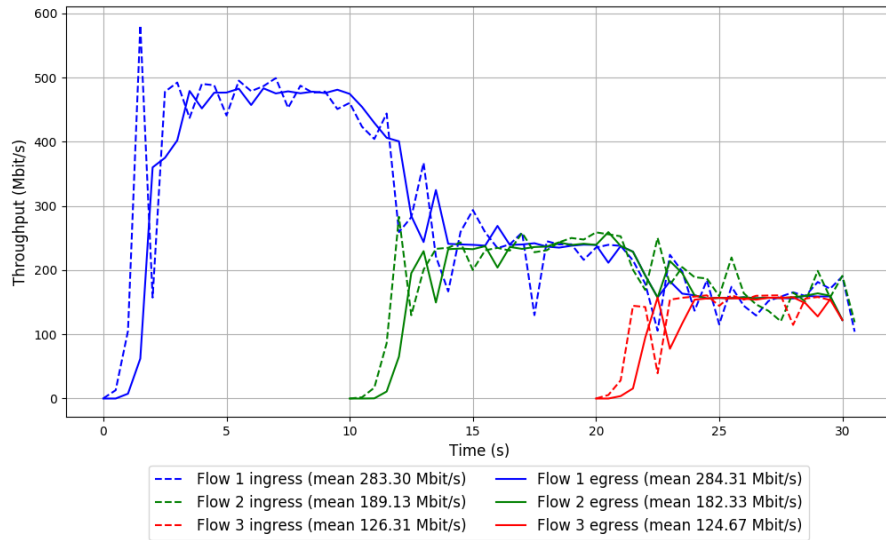
-- Flow 2:

Average throughput: 182.33 Mbit/s
95th percentile per-packet one-way delay: 456.024 ms
Loss rate: 8.36%

-- Flow 3:

Average throughput: 124.67 Mbit/s
95th percentile per-packet one-way delay: 246.706 ms
Loss rate: 3.57%

Run 2: Report of FillP — Data Link

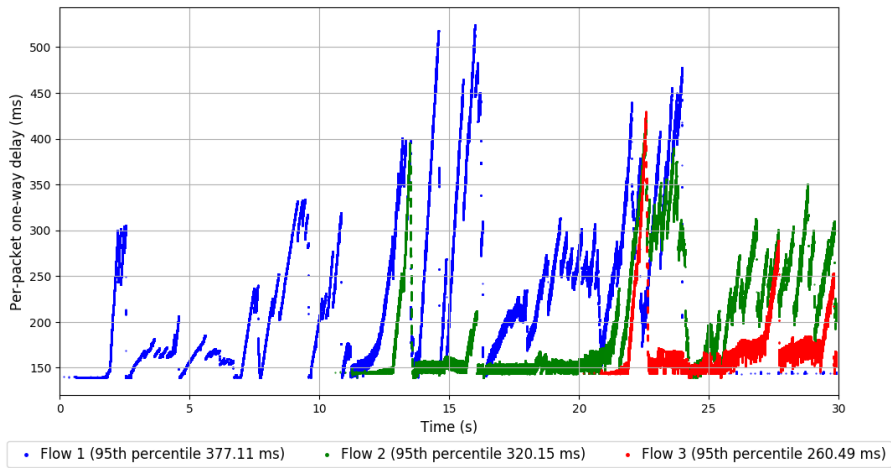
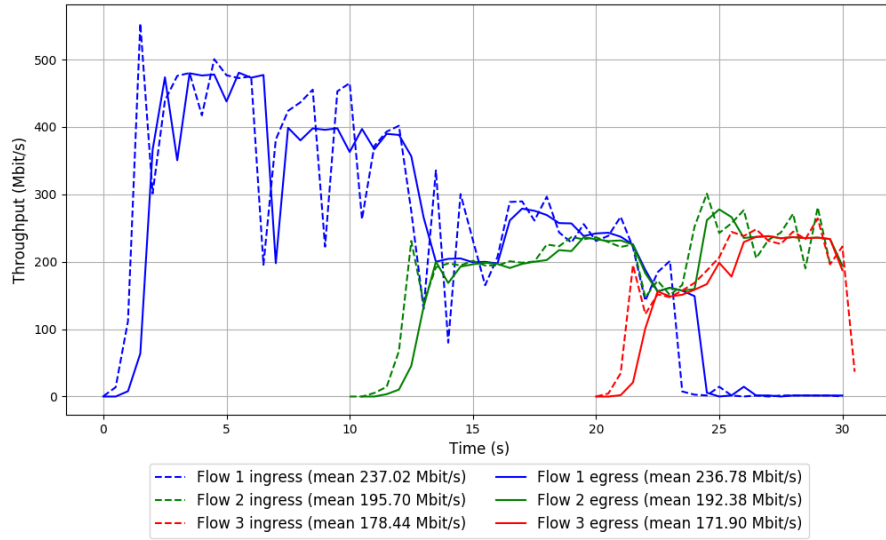


Run 3: Statistics of FillP

Start at: 2019-05-30 12:17:08
End at: 2019-05-30 12:17:38
Local clock offset: 4.085 ms
Remote clock offset: -43.153 ms

```
# Below is generated by plot.py at 2019-05-30 13:47:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 417.79 Mbit/s
95th percentile per-packet one-way delay: 344.019 ms
Loss rate: 3.23%
-- Flow 1:
Average throughput: 236.78 Mbit/s
95th percentile per-packet one-way delay: 377.107 ms
Loss rate: 1.38%
-- Flow 2:
Average throughput: 192.38 Mbit/s
95th percentile per-packet one-way delay: 320.151 ms
Loss rate: 2.87%
-- Flow 3:
Average throughput: 171.90 Mbit/s
95th percentile per-packet one-way delay: 260.487 ms
Loss rate: 10.96%
```

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2019-05-30 12:48:36
End at: 2019-05-30 12:49:06
Local clock offset: 3.077 ms
Remote clock offset: -35.534 ms

Below is generated by plot.py at 2019-05-30 13:47:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 421.42 Mbit/s
95th percentile per-packet one-way delay: 432.473 ms
Loss rate: 7.23%

-- Flow 1:

Average throughput: 278.59 Mbit/s
95th percentile per-packet one-way delay: 369.030 ms
Loss rate: 4.41%

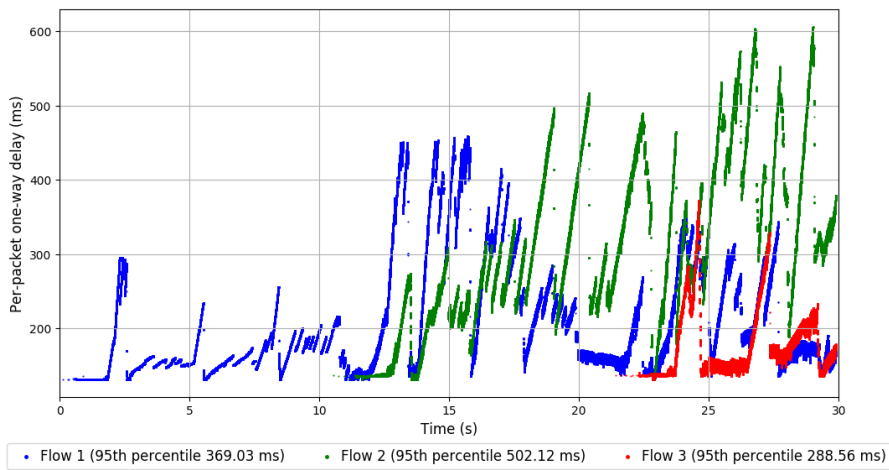
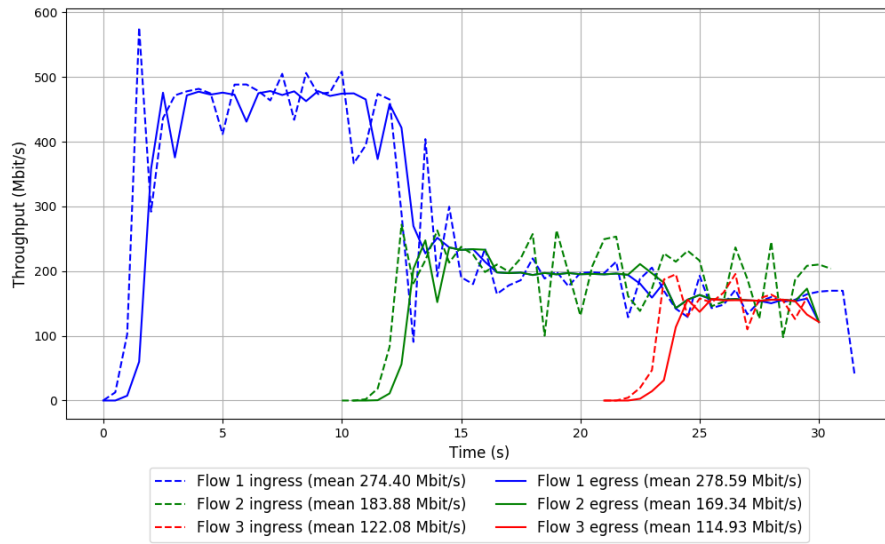
-- Flow 2:

Average throughput: 169.34 Mbit/s
95th percentile per-packet one-way delay: 502.119 ms
Loss rate: 13.41%

-- Flow 3:

Average throughput: 114.93 Mbit/s
95th percentile per-packet one-way delay: 288.559 ms
Loss rate: 8.27%

Run 4: Report of FillP — Data Link

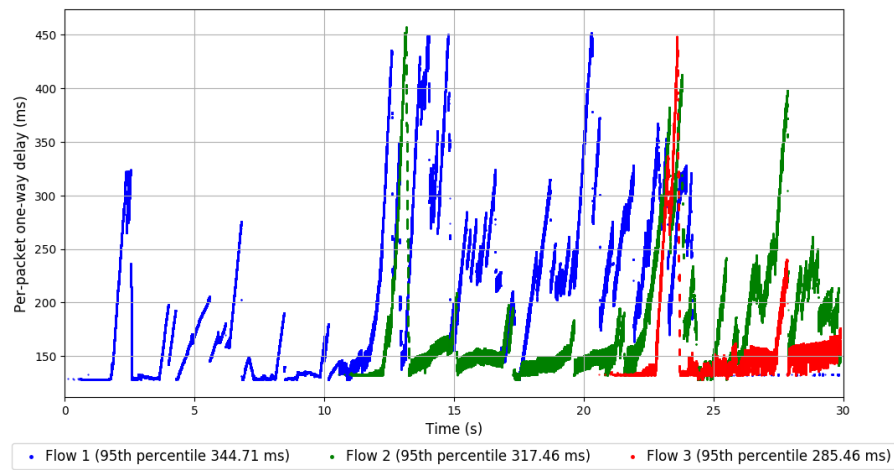
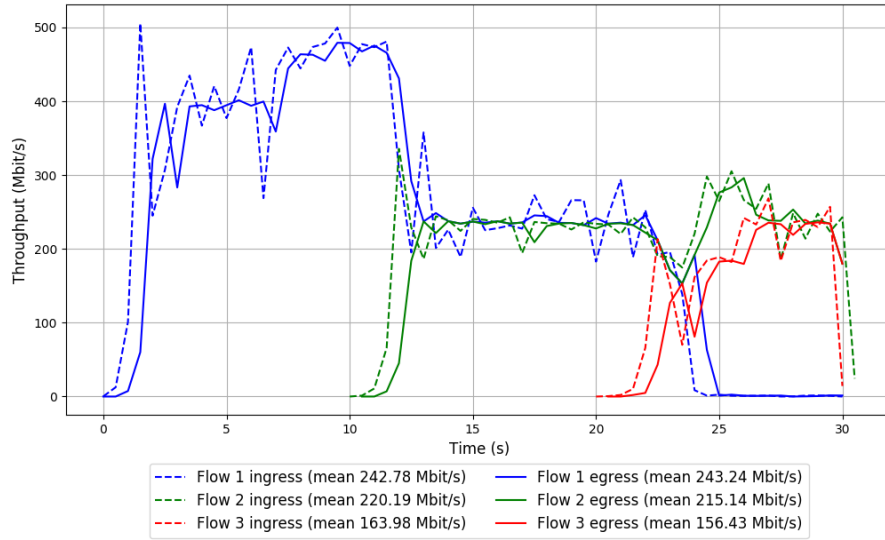


Run 5: Statistics of FillP

Start at: 2019-05-30 13:20:02
End at: 2019-05-30 13:20:32
Local clock offset: -2.269 ms
Remote clock offset: -37.51 ms

```
# Below is generated by plot.py at 2019-05-30 13:48:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 431.18 Mbit/s
95th percentile per-packet one-way delay: 330.880 ms
Loss rate: 3.70%
-- Flow 1:
Average throughput: 243.24 Mbit/s
95th percentile per-packet one-way delay: 344.715 ms
Loss rate: 1.49%
-- Flow 2:
Average throughput: 215.14 Mbit/s
95th percentile per-packet one-way delay: 317.456 ms
Loss rate: 6.10%
-- Flow 3:
Average throughput: 156.43 Mbit/s
95th percentile per-packet one-way delay: 285.456 ms
Loss rate: 7.19%
```

Run 5: Report of FillP — Data Link



Run 1: Statistics of FillP-Sheep

Start at: 2019-05-30 11:19:10
End at: 2019-05-30 11:19:40
Local clock offset: -0.531 ms
Remote clock offset: -32.739 ms

Below is generated by plot.py at 2019-05-30 13:48:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 423.07 Mbit/s
95th percentile per-packet one-way delay: 358.625 ms
Loss rate: 3.31%

-- Flow 1:

Average throughput: 269.34 Mbit/s
95th percentile per-packet one-way delay: 334.401 ms
Loss rate: 2.13%

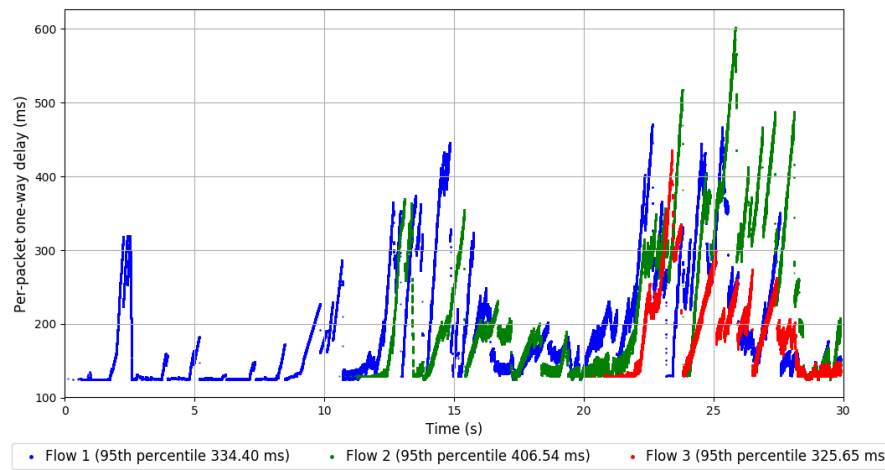
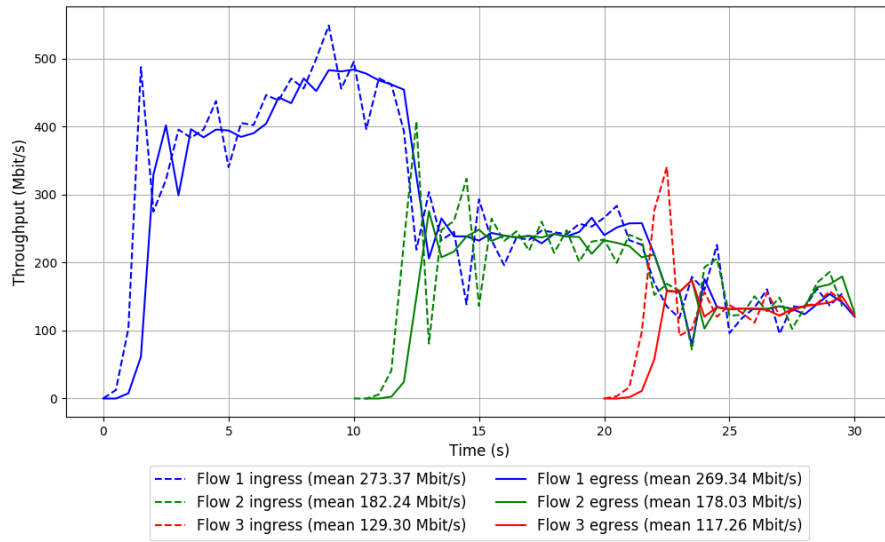
-- Flow 2:

Average throughput: 178.03 Mbit/s
95th percentile per-packet one-way delay: 406.542 ms
Loss rate: 3.23%

-- Flow 3:

Average throughput: 117.26 Mbit/s
95th percentile per-packet one-way delay: 325.654 ms
Loss rate: 11.09%

Run 1: Report of FillP-Sheep — Data Link

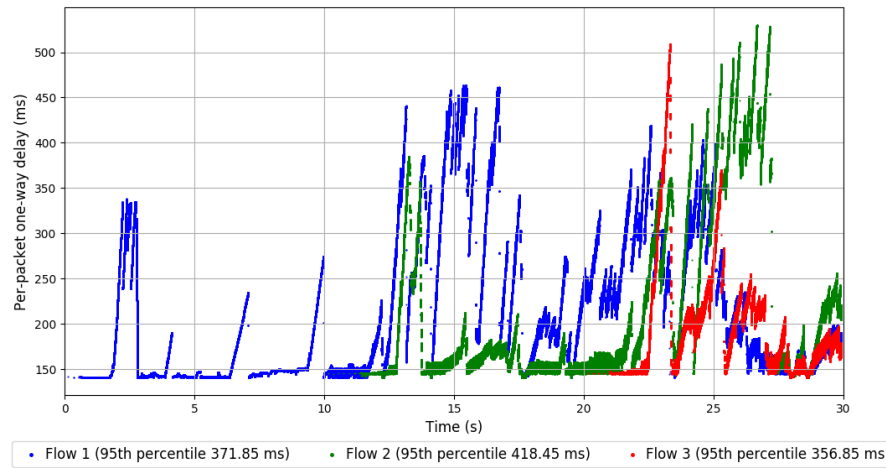
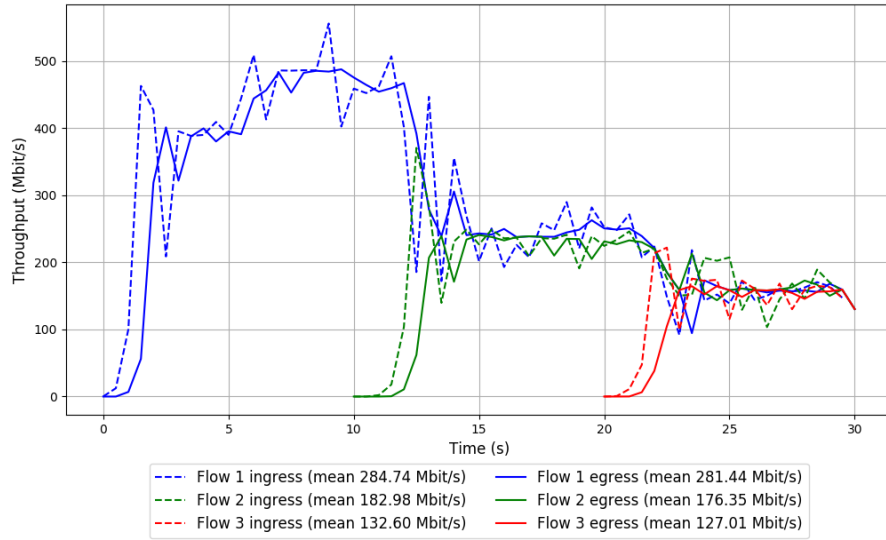


Run 2: Statistics of FillP-Sheep

Start at: 2019-05-30 11:50:20
End at: 2019-05-30 11:50:50
Local clock offset: 3.562 ms
Remote clock offset: -45.417 ms

```
# Below is generated by plot.py at 2019-05-30 13:48:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 440.03 Mbit/s
95th percentile per-packet one-way delay: 384.635 ms
Loss rate: 2.95%
-- Flow 1:
Average throughput: 281.44 Mbit/s
95th percentile per-packet one-way delay: 371.847 ms
Loss rate: 1.78%
-- Flow 2:
Average throughput: 176.35 Mbit/s
95th percentile per-packet one-way delay: 418.454 ms
Loss rate: 4.58%
-- Flow 3:
Average throughput: 127.01 Mbit/s
95th percentile per-packet one-way delay: 356.850 ms
Loss rate: 6.02%
```

Run 2: Report of FillP-Sheep — Data Link

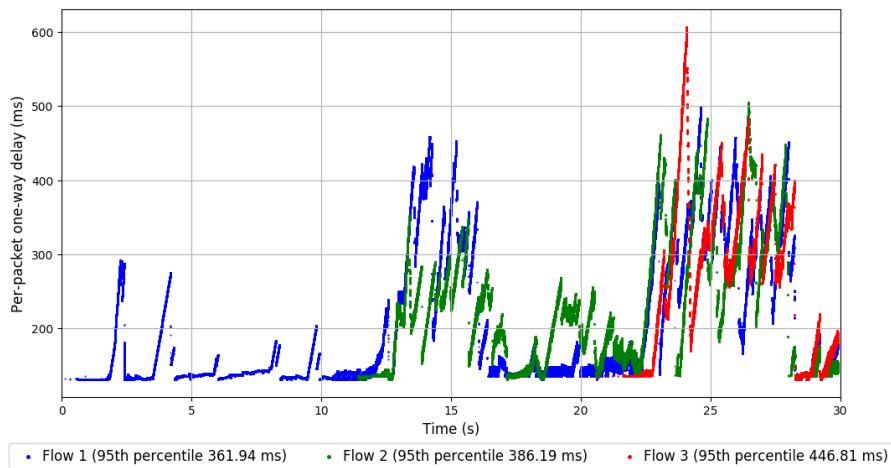
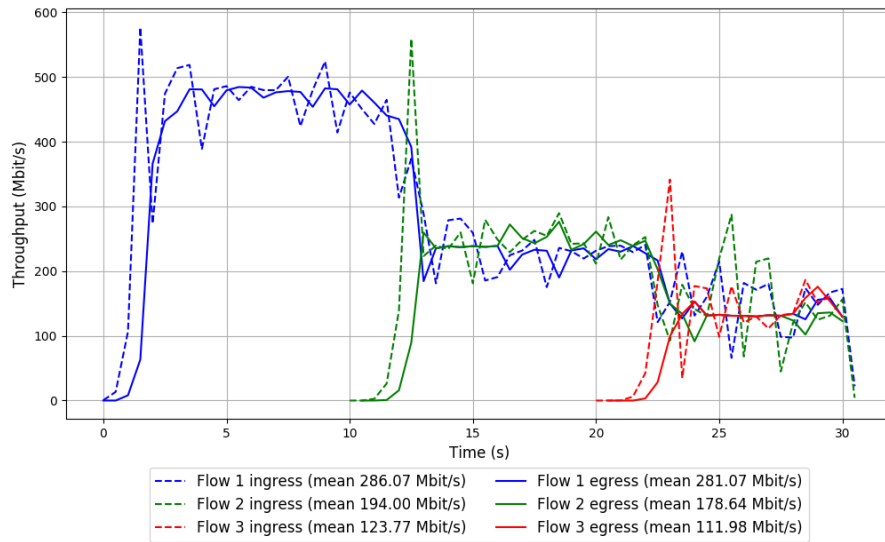


Run 3: Statistics of FillP-Sheep

Start at: 2019-05-30 12:21:41
End at: 2019-05-30 12:22:11
Local clock offset: 3.781 ms
Remote clock offset: -35.706 ms

```
# Below is generated by plot.py at 2019-05-30 13:48:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 432.20 Mbit/s
95th percentile per-packet one-way delay: 382.301 ms
Loss rate: 6.92%
-- Flow 1:
Average throughput: 281.07 Mbit/s
95th percentile per-packet one-way delay: 361.935 ms
Loss rate: 4.29%
-- Flow 2:
Average throughput: 178.64 Mbit/s
95th percentile per-packet one-way delay: 386.189 ms
Loss rate: 11.38%
-- Flow 3:
Average throughput: 111.98 Mbit/s
95th percentile per-packet one-way delay: 446.807 ms
Loss rate: 11.60%
```

Run 3: Report of FillP-Sheep — Data Link



Run 4: Statistics of FillP-Sheep

Start at: 2019-05-30 12:53:01

End at: 2019-05-30 12:53:31

Local clock offset: 1.988 ms

Remote clock offset: -34.715 ms

Below is generated by plot.py at 2019-05-30 13:50:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 430.10 Mbit/s

95th percentile per-packet one-way delay: 314.907 ms

Loss rate: 1.94%

-- Flow 1:

Average throughput: 230.98 Mbit/s

95th percentile per-packet one-way delay: 329.388 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 209.96 Mbit/s

95th percentile per-packet one-way delay: 236.781 ms

Loss rate: 3.67%

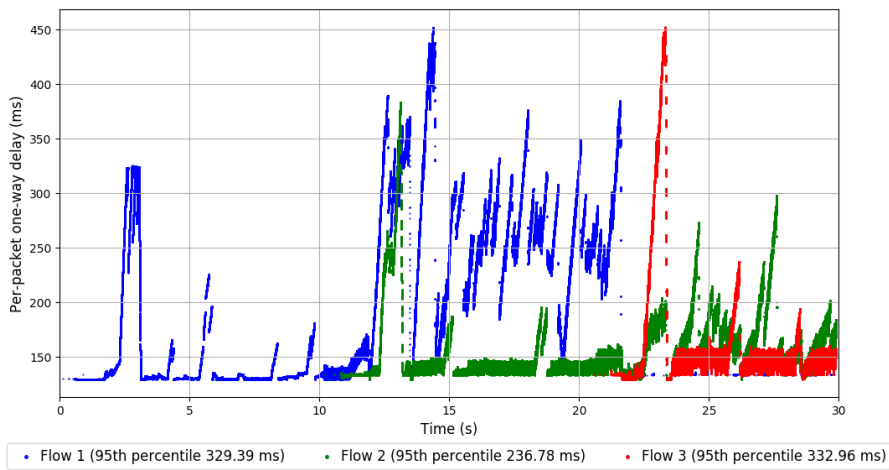
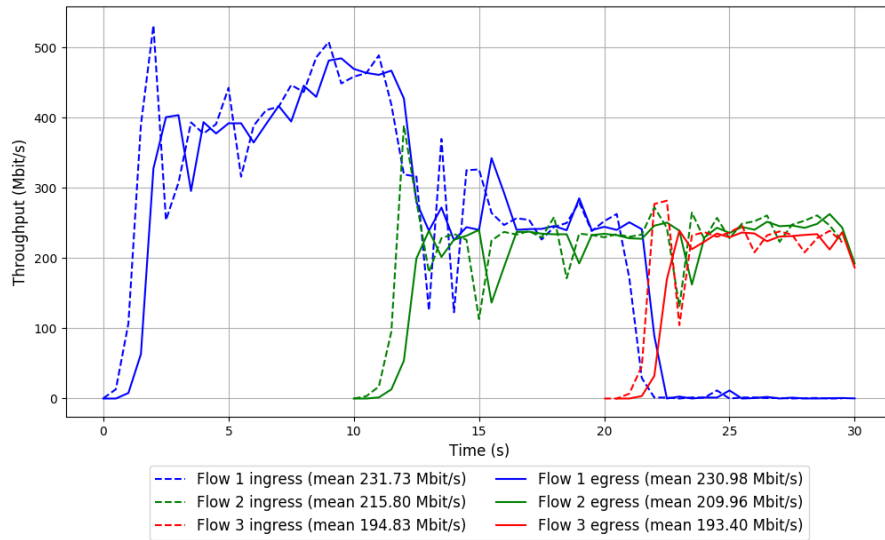
-- Flow 3:

Average throughput: 193.40 Mbit/s

95th percentile per-packet one-way delay: 332.960 ms

Loss rate: 2.77%

Run 4: Report of FillP-Sheep — Data Link

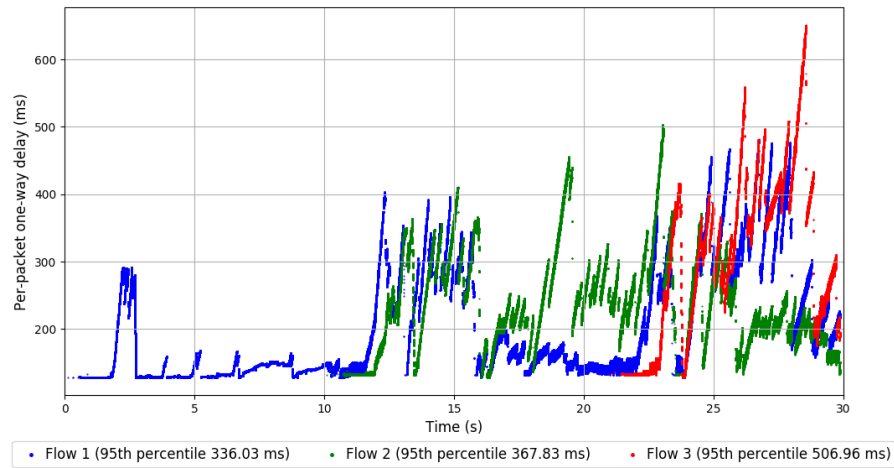
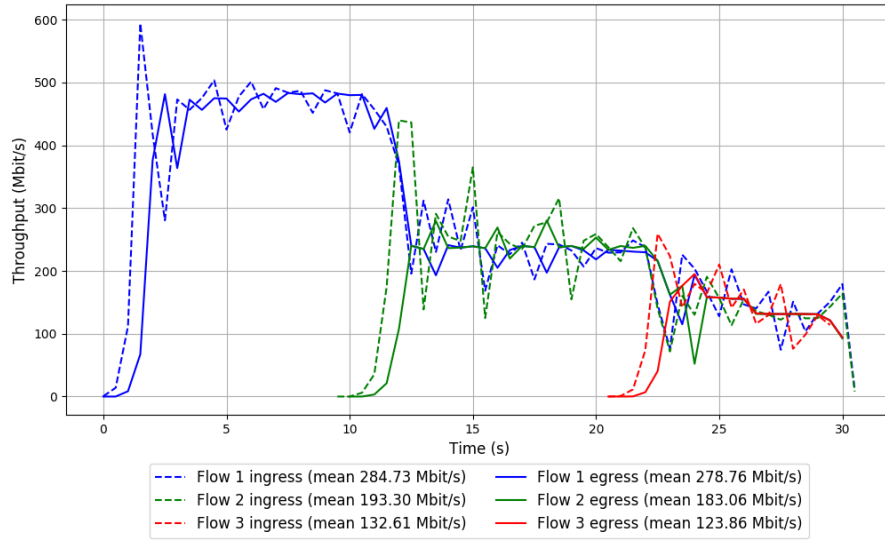


Run 5: Statistics of FillP-Sheep

Start at: 2019-05-30 13:24:36
End at: 2019-05-30 13:25:06
Local clock offset: -1.974 ms
Remote clock offset: -36.473 ms

```
# Below is generated by plot.py at 2019-05-30 13:53:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 437.38 Mbit/s
95th percentile per-packet one-way delay: 383.806 ms
Loss rate: 6.29%
-- Flow 1:
Average throughput: 278.76 Mbit/s
95th percentile per-packet one-way delay: 336.026 ms
Loss rate: 4.69%
-- Flow 2:
Average throughput: 183.06 Mbit/s
95th percentile per-packet one-way delay: 367.826 ms
Loss rate: 8.95%
-- Flow 3:
Average throughput: 123.86 Mbit/s
95th percentile per-packet one-way delay: 506.960 ms
Loss rate: 9.01%
```

Run 5: Report of FillP-Sheep — Data Link

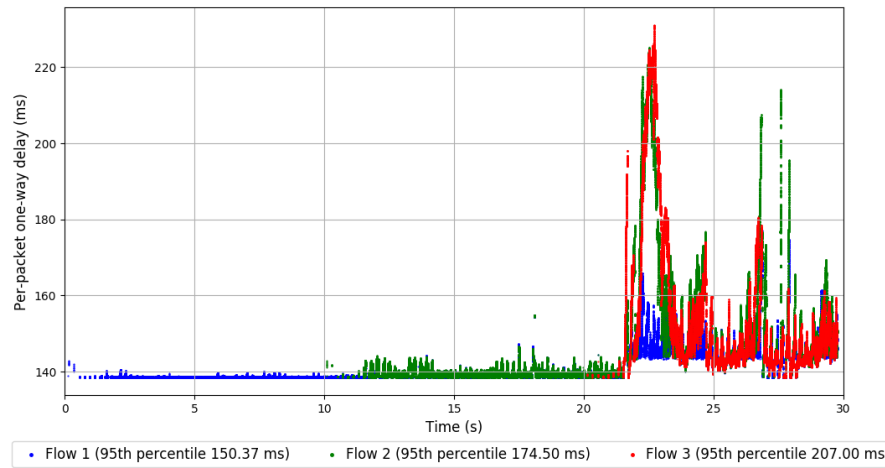
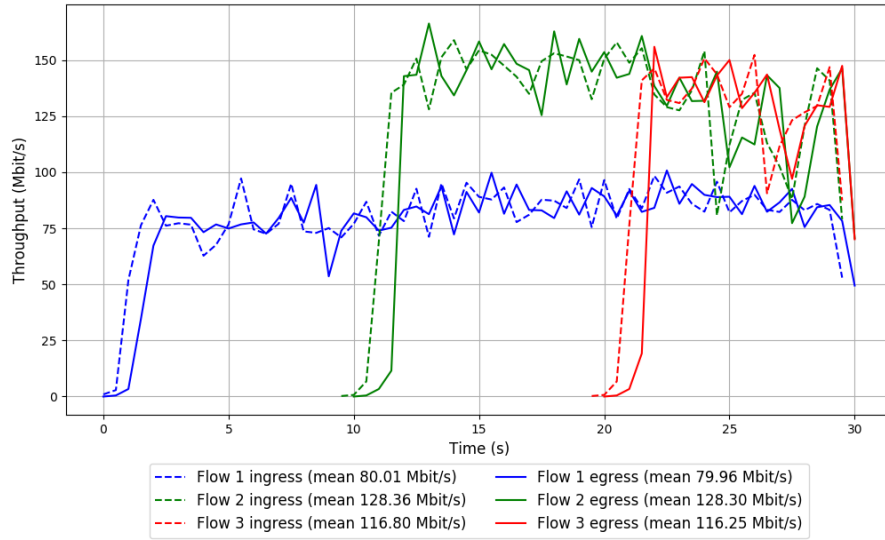


Run 1: Statistics of Indigo

Start at: 2019-05-30 10:56:54
End at: 2019-05-30 10:57:24
Local clock offset: -1.619 ms
Remote clock offset: -47.873 ms

```
# Below is generated by plot.py at 2019-05-30 13:53:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 202.98 Mbit/s
95th percentile per-packet one-way delay: 172.080 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 79.96 Mbit/s
95th percentile per-packet one-way delay: 150.365 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 128.30 Mbit/s
95th percentile per-packet one-way delay: 174.504 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 116.25 Mbit/s
95th percentile per-packet one-way delay: 207.002 ms
Loss rate: 2.44%
```

Run 1: Report of Indigo — Data Link

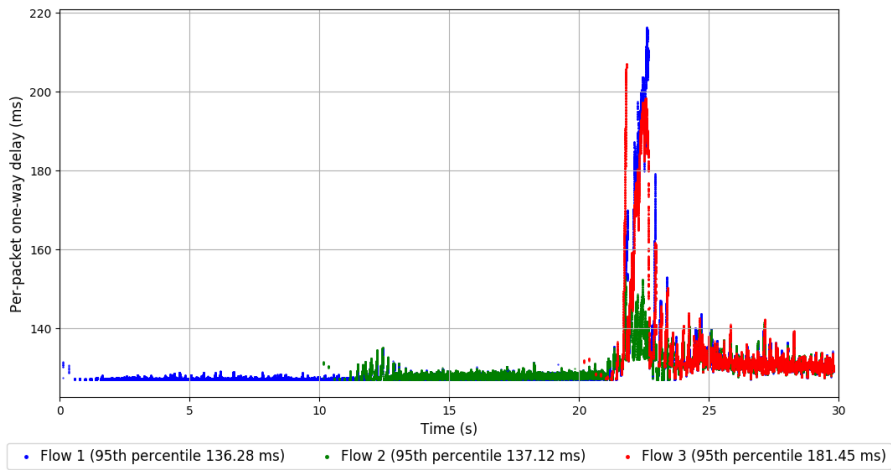
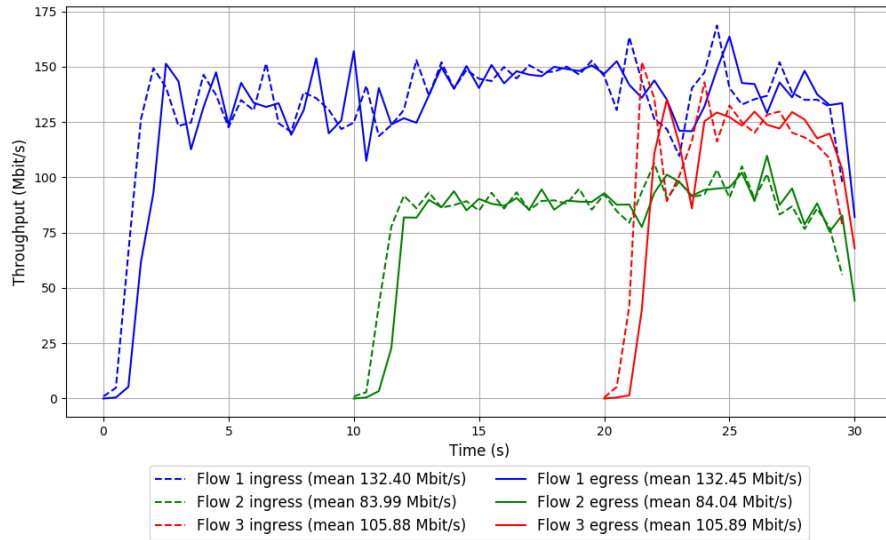


Run 2: Statistics of Indigo

Start at: 2019-05-30 11:27:57
End at: 2019-05-30 11:28:27
Local clock offset: -1.315 ms
Remote clock offset: -35.69 ms

```
# Below is generated by plot.py at 2019-05-30 13:53:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 222.37 Mbit/s
95th percentile per-packet one-way delay: 141.319 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 132.45 Mbit/s
95th percentile per-packet one-way delay: 136.279 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 84.04 Mbit/s
95th percentile per-packet one-way delay: 137.120 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 105.89 Mbit/s
95th percentile per-packet one-way delay: 181.453 ms
Loss rate: 2.02%
```

Run 2: Report of Indigo — Data Link

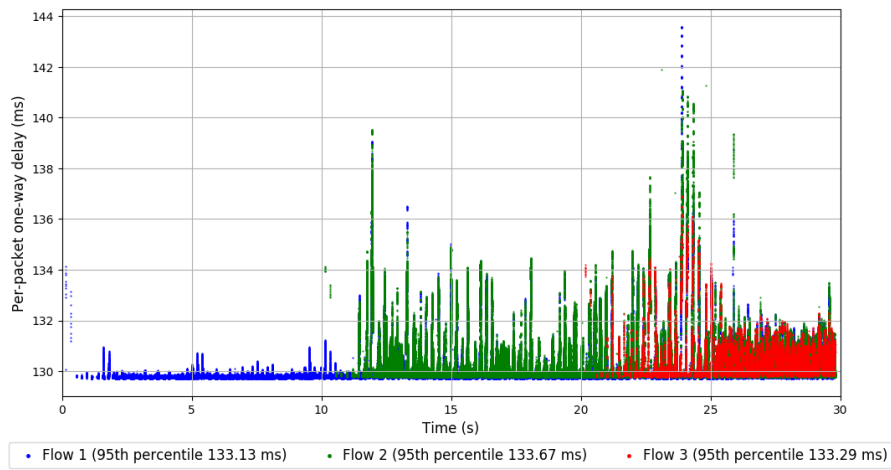
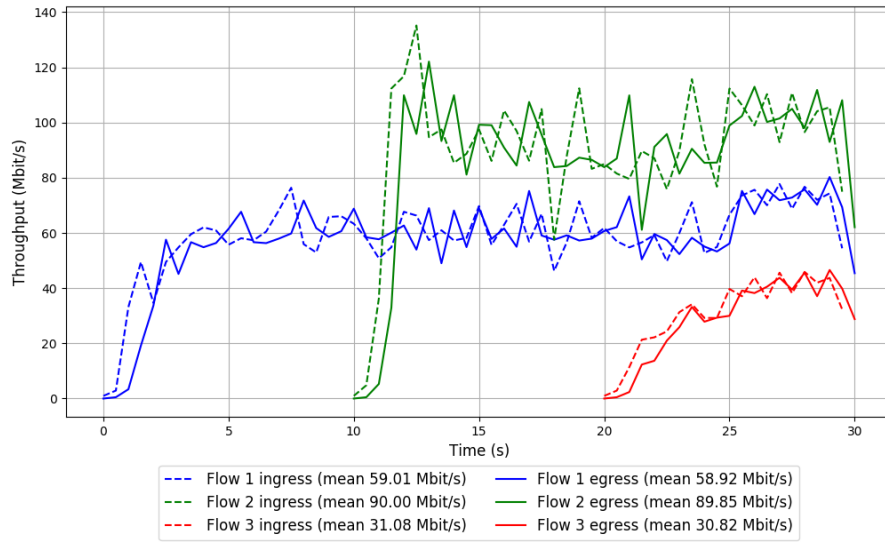


Run 3: Statistics of Indigo

Start at: 2019-05-30 11:59:11
End at: 2019-05-30 11:59:41
Local clock offset: 3.675 ms
Remote clock offset: -33.811 ms

```
# Below is generated by plot.py at 2019-05-30 13:53:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 128.42 Mbit/s
95th percentile per-packet one-way delay: 133.399 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 58.92 Mbit/s
95th percentile per-packet one-way delay: 133.135 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 89.85 Mbit/s
95th percentile per-packet one-way delay: 133.674 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 30.82 Mbit/s
95th percentile per-packet one-way delay: 133.294 ms
Loss rate: 2.72%
```

Run 3: Report of Indigo — Data Link

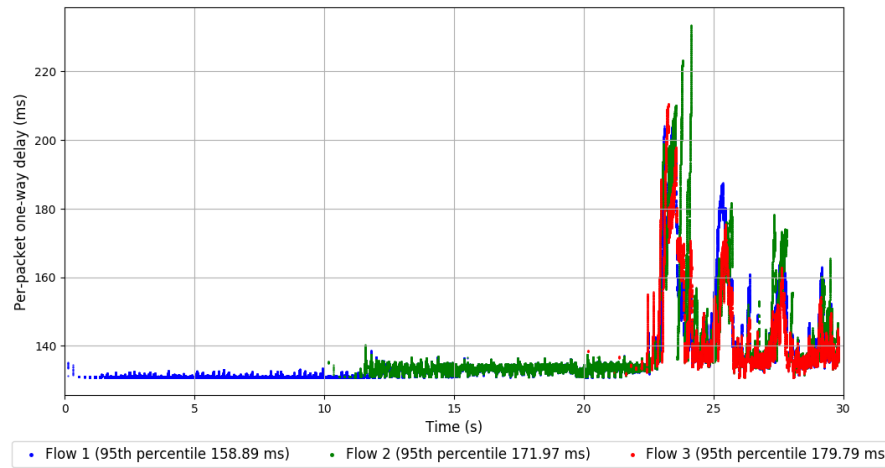
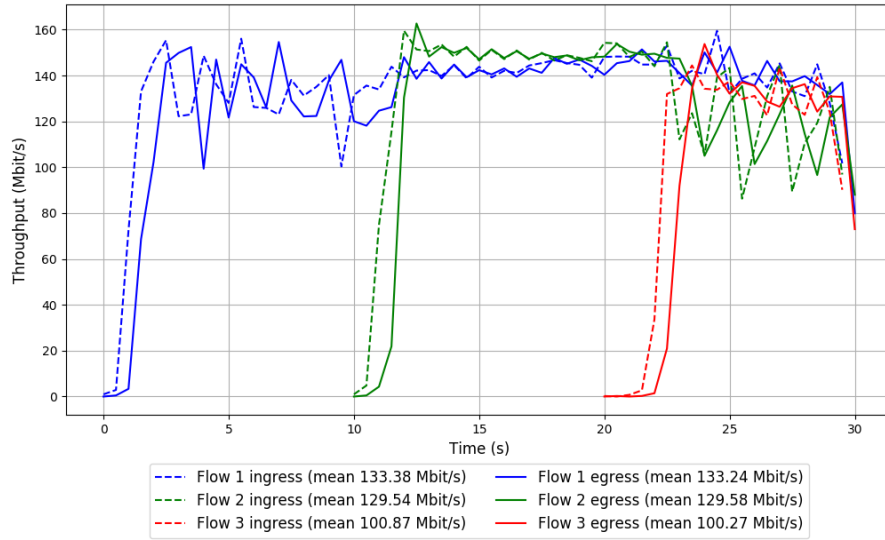


Run 4: Statistics of Indigo

Start at: 2019-05-30 12:30:36
End at: 2019-05-30 12:31:06
Local clock offset: 3.705 ms
Remote clock offset: -35.944 ms

```
# Below is generated by plot.py at 2019-05-30 13:53:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 251.63 Mbit/s
95th percentile per-packet one-way delay: 169.565 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 133.24 Mbit/s
95th percentile per-packet one-way delay: 158.894 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 129.58 Mbit/s
95th percentile per-packet one-way delay: 171.975 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 100.27 Mbit/s
95th percentile per-packet one-way delay: 179.789 ms
Loss rate: 2.62%
```

Run 4: Report of Indigo — Data Link

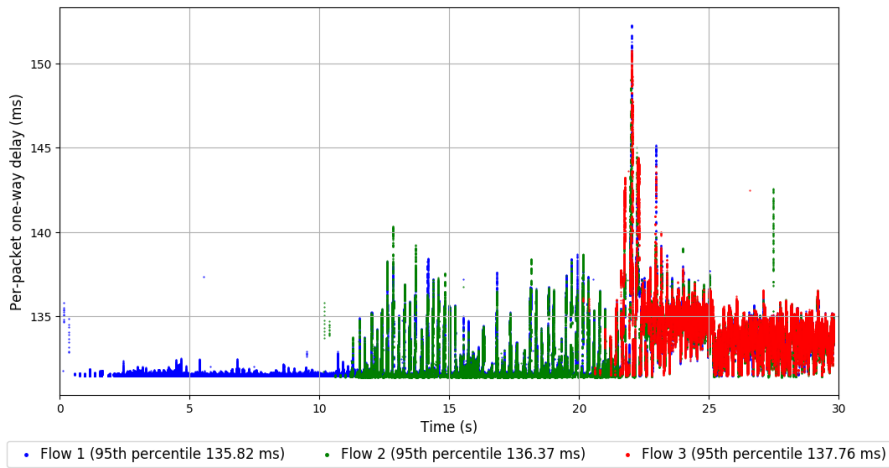
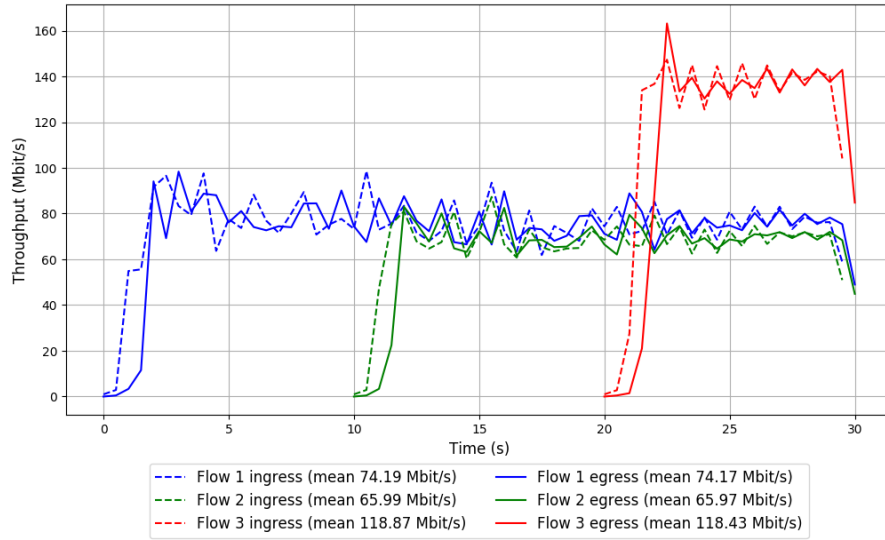


Run 5: Statistics of Indigo

Start at: 2019-05-30 13:01:53
End at: 2019-05-30 13:02:23
Local clock offset: 2.057 ms
Remote clock offset: -36.217 ms

```
# Below is generated by plot.py at 2019-05-30 13:53:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 156.32 Mbit/s
95th percentile per-packet one-way delay: 136.265 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 74.17 Mbit/s
95th percentile per-packet one-way delay: 135.819 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 65.97 Mbit/s
95th percentile per-packet one-way delay: 136.370 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 118.43 Mbit/s
95th percentile per-packet one-way delay: 137.765 ms
Loss rate: 2.36%
```

Run 5: Report of Indigo — Data Link

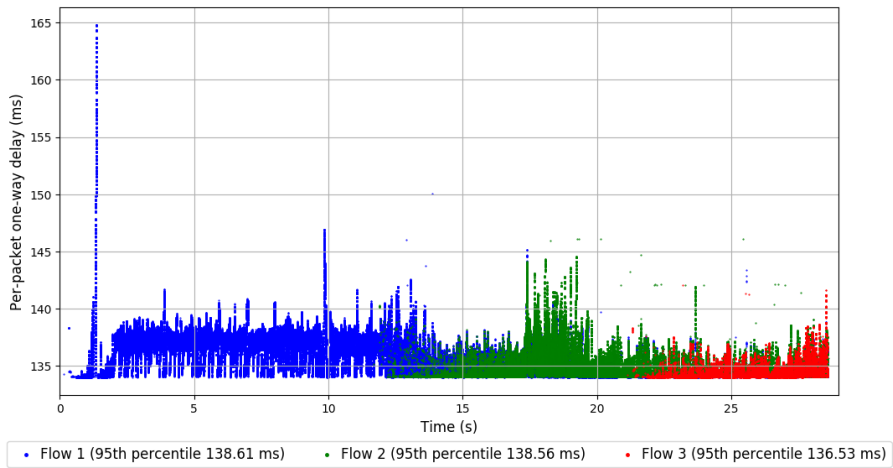
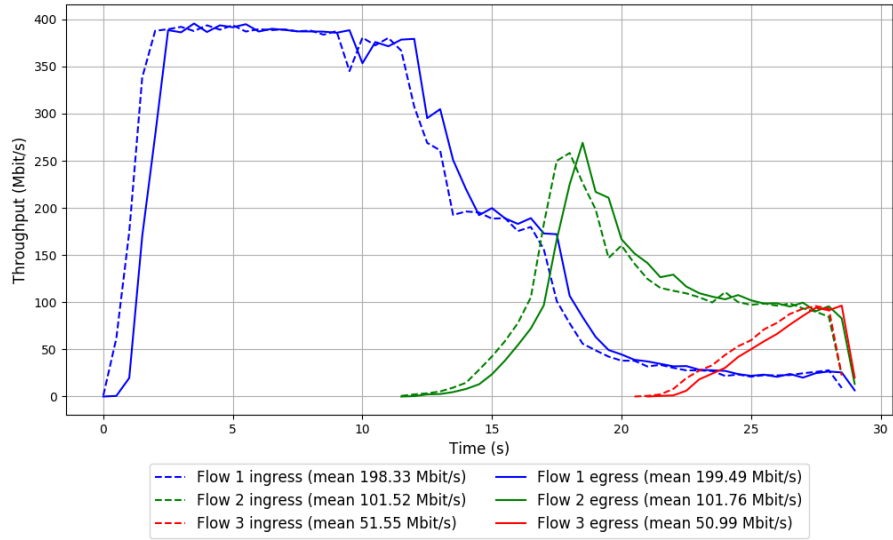


Run 1: Statistics of Indigo-MusesC3

Start at: 2019-05-30 11:22:04
End at: 2019-05-30 11:22:34
Local clock offset: -1.519 ms
Remote clock offset: -42.927 ms

```
# Below is generated by plot.py at 2019-05-30 13:53:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 273.27 Mbit/s
95th percentile per-packet one-way delay: 138.562 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 199.49 Mbit/s
95th percentile per-packet one-way delay: 138.607 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 101.76 Mbit/s
95th percentile per-packet one-way delay: 138.564 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 50.99 Mbit/s
95th percentile per-packet one-way delay: 136.532 ms
Loss rate: 3.56%
```

Run 1: Report of Indigo-MusesC3 — Data Link

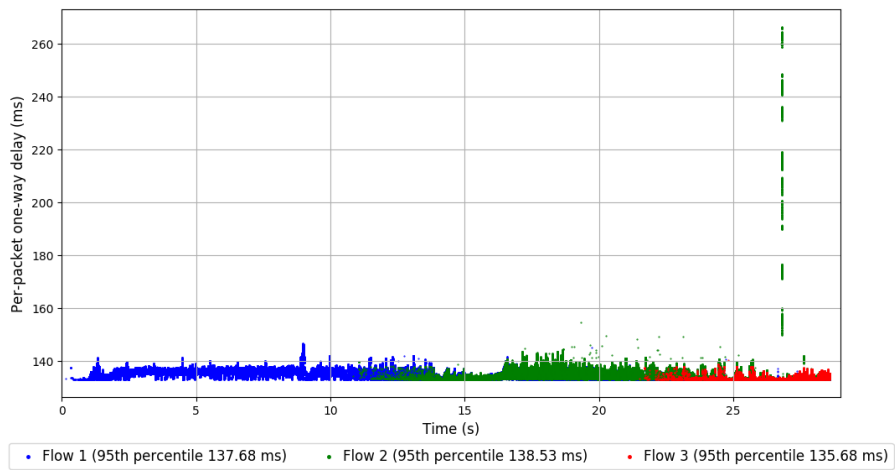
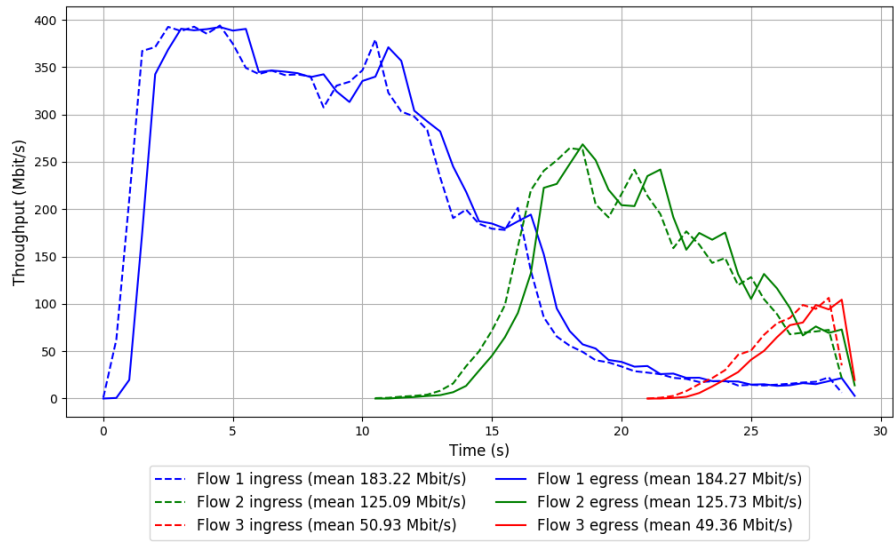


Run 2: Statistics of Indigo-MusesC3

Start at: 2019-05-30 11:53:15
End at: 2019-05-30 11:53:46
Local clock offset: -0.147 ms
Remote clock offset: -41.009 ms

```
# Below is generated by plot.py at 2019-05-30 13:53:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 274.90 Mbit/s
95th percentile per-packet one-way delay: 137.830 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 184.27 Mbit/s
95th percentile per-packet one-way delay: 137.675 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 125.73 Mbit/s
95th percentile per-packet one-way delay: 138.525 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 49.36 Mbit/s
95th percentile per-packet one-way delay: 135.679 ms
Loss rate: 5.65%
```

Run 2: Report of Indigo-MusesC3 — Data Link

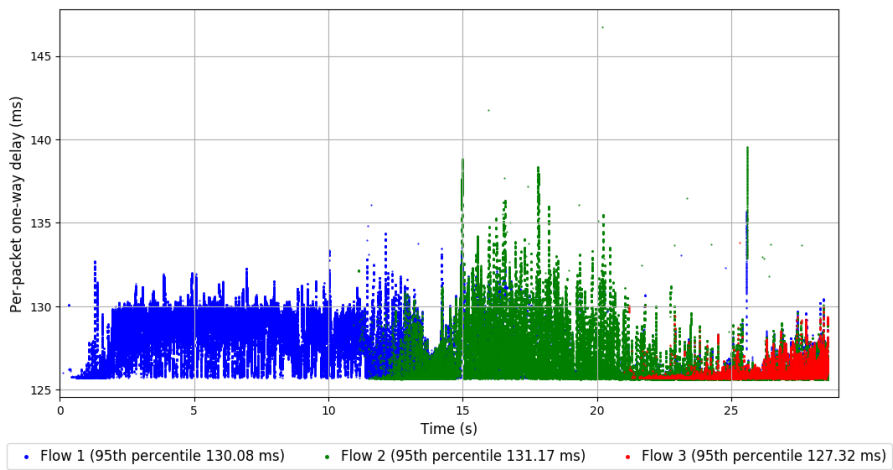
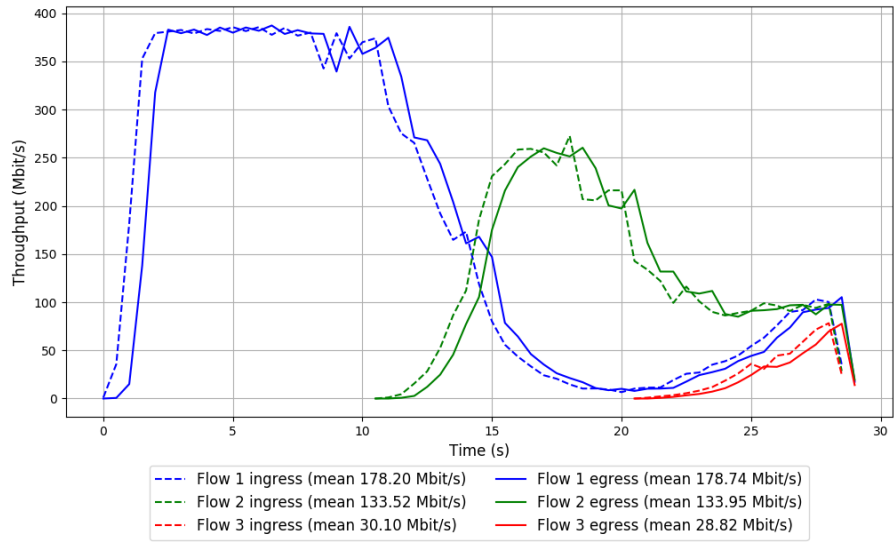


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-05-30 12:24:37
End at: 2019-05-30 12:25:07
Local clock offset: -0.279 ms
Remote clock offset: -34.295 ms

```
# Below is generated by plot.py at 2019-05-30 13:53:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 269.50 Mbit/s
95th percentile per-packet one-way delay: 130.299 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 178.74 Mbit/s
95th percentile per-packet one-way delay: 130.078 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 133.95 Mbit/s
95th percentile per-packet one-way delay: 131.172 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 28.82 Mbit/s
95th percentile per-packet one-way delay: 127.316 ms
Loss rate: 6.54%
```

Run 3: Report of Indigo-MusesC3 — Data Link

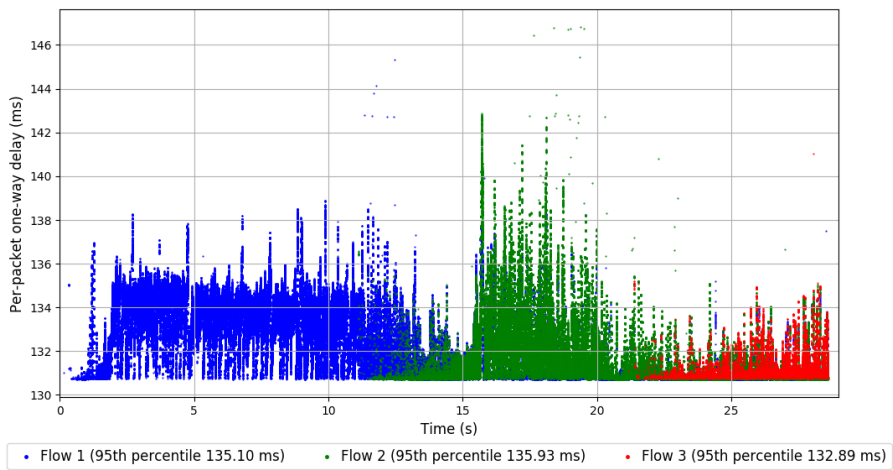
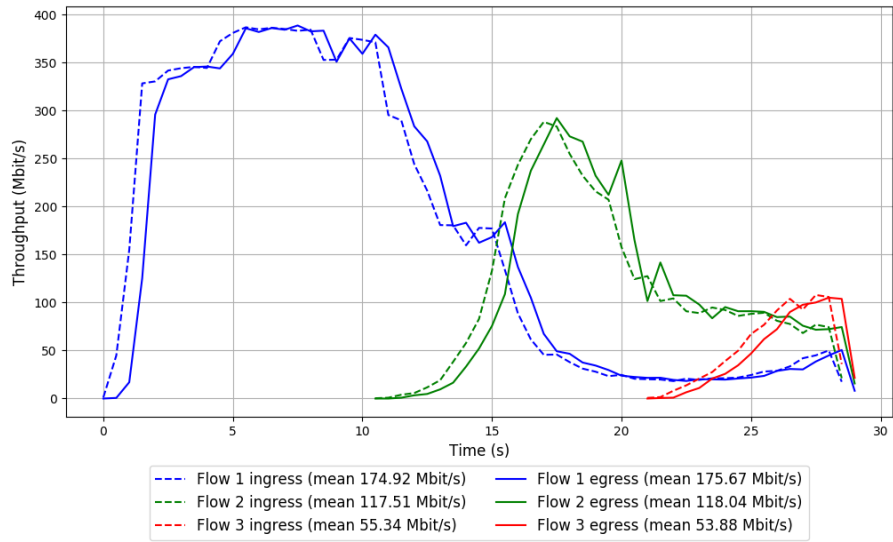


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-05-30 12:55:55
End at: 2019-05-30 12:56:25
Local clock offset: 2.849 ms
Remote clock offset: -34.589 ms

```
# Below is generated by plot.py at 2019-05-30 13:53:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 263.05 Mbit/s
95th percentile per-packet one-way delay: 135.196 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 175.67 Mbit/s
95th percentile per-packet one-way delay: 135.102 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 118.04 Mbit/s
95th percentile per-packet one-way delay: 135.932 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 53.88 Mbit/s
95th percentile per-packet one-way delay: 132.886 ms
Loss rate: 5.19%
```

Run 4: Report of Indigo-MusesC3 — Data Link

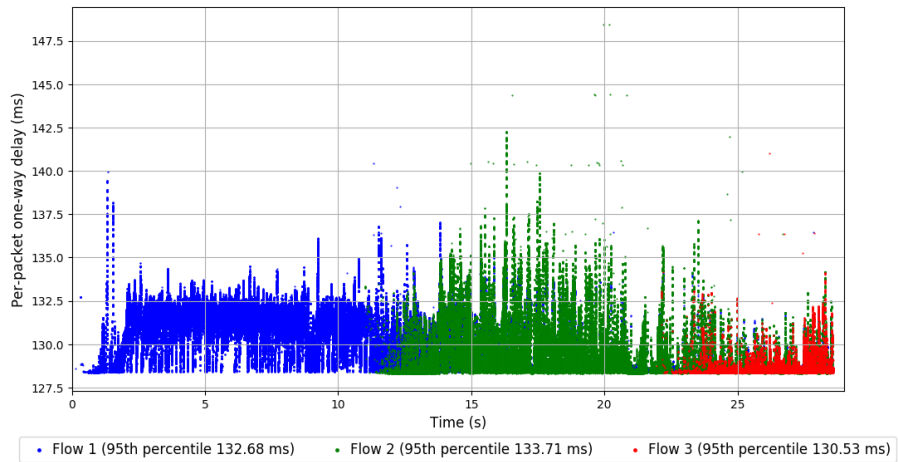
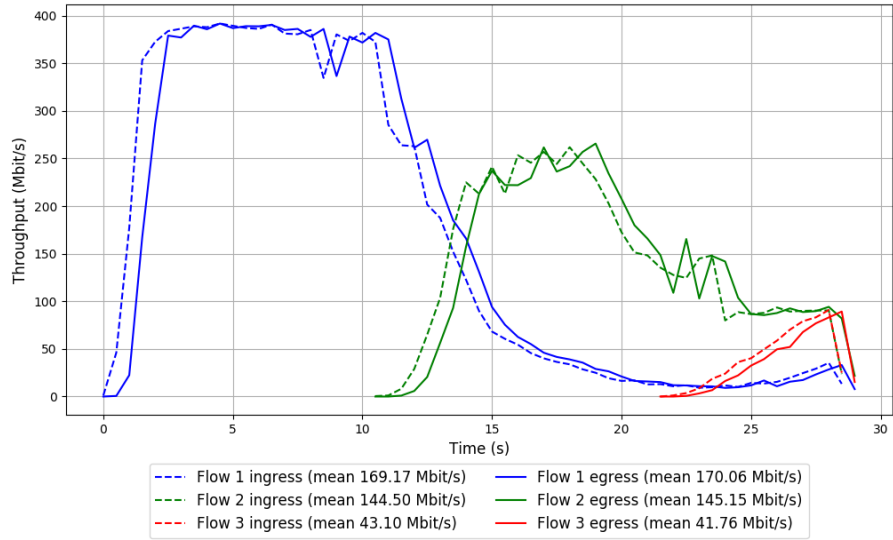


Run 5: Statistics of Indigo-MusesC3

Start at: 2019-05-30 13:27:32
End at: 2019-05-30 13:28:02
Local clock offset: -2.584 ms
Remote clock offset: -37.547 ms

```
# Below is generated by plot.py at 2019-05-30 13:53:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 270.30 Mbit/s
95th percentile per-packet one-way delay: 132.938 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 170.06 Mbit/s
95th percentile per-packet one-way delay: 132.684 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 145.15 Mbit/s
95th percentile per-packet one-way delay: 133.710 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 41.76 Mbit/s
95th percentile per-packet one-way delay: 130.526 ms
Loss rate: 5.82%
```

Run 5: Report of Indigo-MusesC3 — Data Link

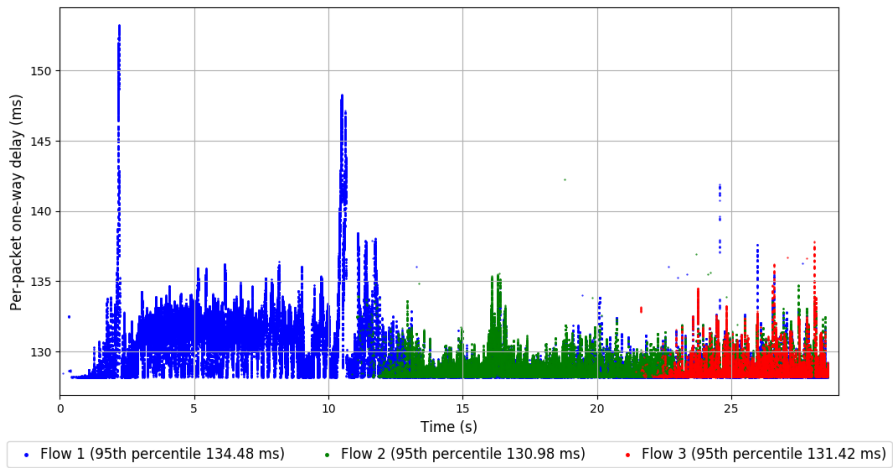
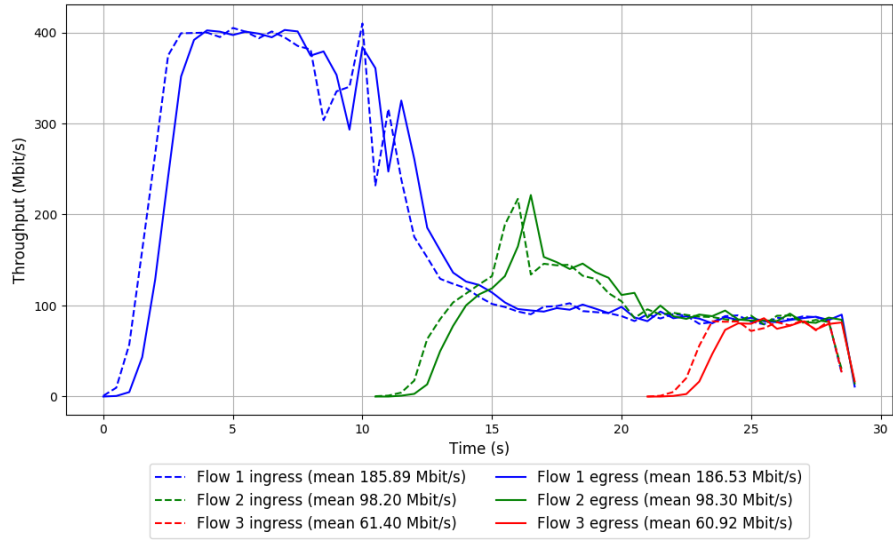


Run 1: Statistics of Indigo-MusesC5

Start at: 2019-05-30 10:55:23
End at: 2019-05-30 10:55:53
Local clock offset: -0.565 ms
Remote clock offset: -36.545 ms

```
# Below is generated by plot.py at 2019-05-30 13:53:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 262.99 Mbit/s
95th percentile per-packet one-way delay: 133.729 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 186.53 Mbit/s
95th percentile per-packet one-way delay: 134.482 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 98.30 Mbit/s
95th percentile per-packet one-way delay: 130.982 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 60.92 Mbit/s
95th percentile per-packet one-way delay: 131.422 ms
Loss rate: 3.32%
```

Run 1: Report of Indigo-MusesC5 — Data Link

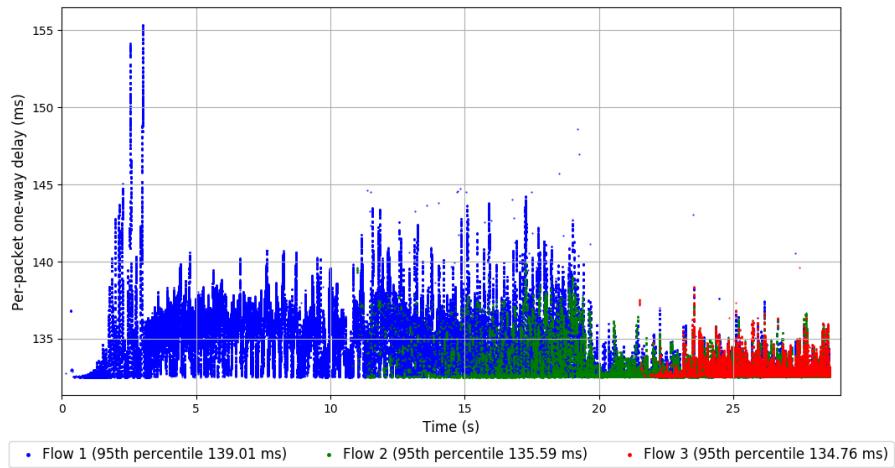
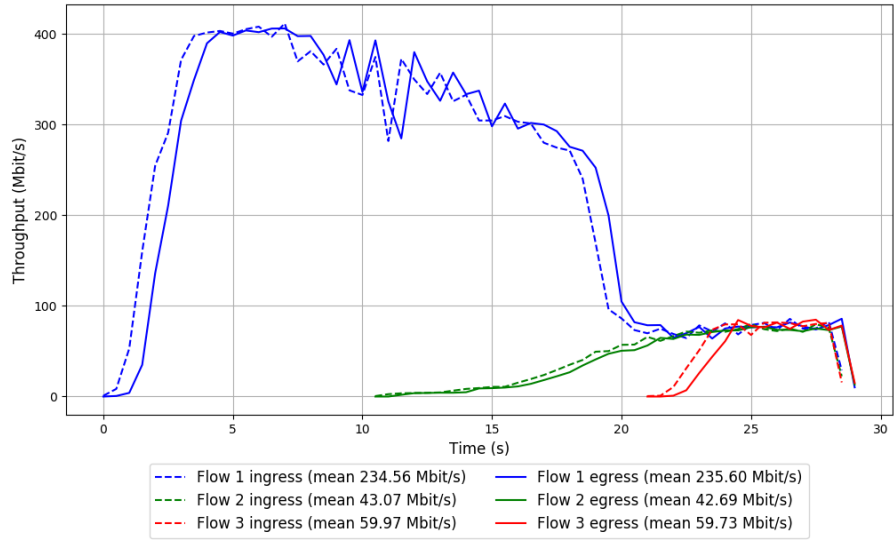


Run 2: Statistics of Indigo-MusesC5

Start at: 2019-05-30 11:26:26
End at: 2019-05-30 11:26:56
Local clock offset: 2.933 ms
Remote clock offset: -36.833 ms

```
# Below is generated by plot.py at 2019-05-30 13:54:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 277.44 Mbit/s
95th percentile per-packet one-way delay: 138.695 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 235.60 Mbit/s
95th percentile per-packet one-way delay: 139.013 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 42.69 Mbit/s
95th percentile per-packet one-way delay: 135.591 ms
Loss rate: 2.00%
-- Flow 3:
Average throughput: 59.73 Mbit/s
95th percentile per-packet one-way delay: 134.763 ms
Loss rate: 2.92%
```

Run 2: Report of Indigo-MusesC5 — Data Link

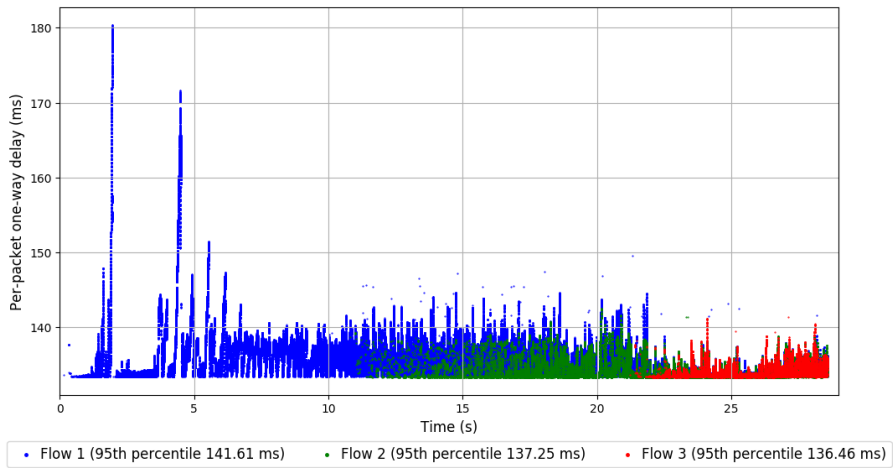
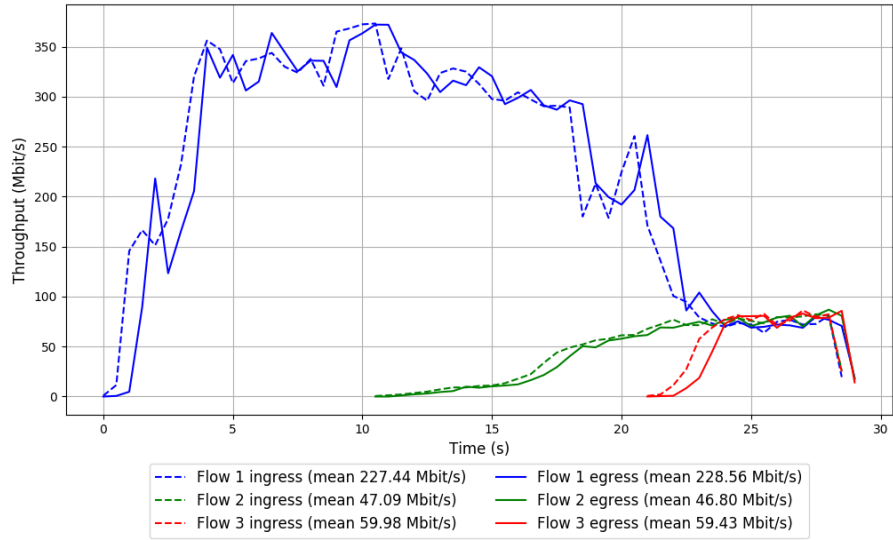


Run 3: Statistics of Indigo-MusesC5

Start at: 2019-05-30 11:57:40
End at: 2019-05-30 11:58:10
Local clock offset: 4.405 ms
Remote clock offset: -36.723 ms

```
# Below is generated by plot.py at 2019-05-30 13:54:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 273.17 Mbit/s
95th percentile per-packet one-way delay: 140.894 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 228.56 Mbit/s
95th percentile per-packet one-way delay: 141.612 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 46.80 Mbit/s
95th percentile per-packet one-way delay: 137.255 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 59.43 Mbit/s
95th percentile per-packet one-way delay: 136.463 ms
Loss rate: 3.44%
```

Run 3: Report of Indigo-MusesC5 — Data Link

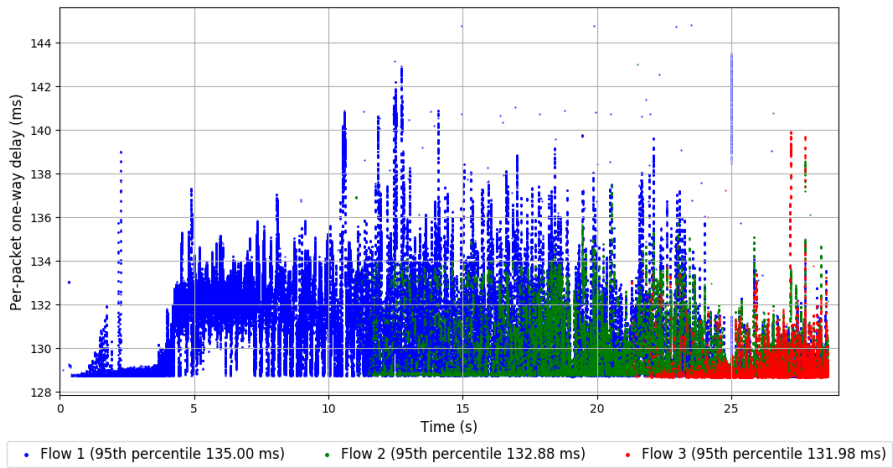
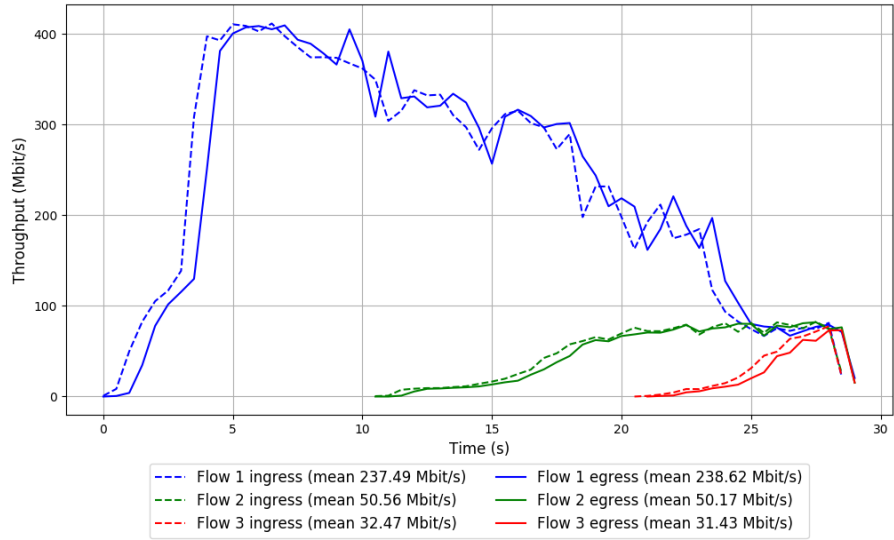


Run 4: Statistics of Indigo-MusesC5

Start at: 2019-05-30 12:29:04
End at: 2019-05-30 12:29:34
Local clock offset: 0.385 ms
Remote clock offset: -37.034 ms

```
# Below is generated by plot.py at 2019-05-30 13:55:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 278.17 Mbit/s
95th percentile per-packet one-way delay: 134.776 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 238.62 Mbit/s
95th percentile per-packet one-way delay: 134.997 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 50.17 Mbit/s
95th percentile per-packet one-way delay: 132.878 ms
Loss rate: 1.71%
-- Flow 3:
Average throughput: 31.43 Mbit/s
95th percentile per-packet one-way delay: 131.983 ms
Loss rate: 5.62%
```

Run 4: Report of Indigo-MusesC5 — Data Link

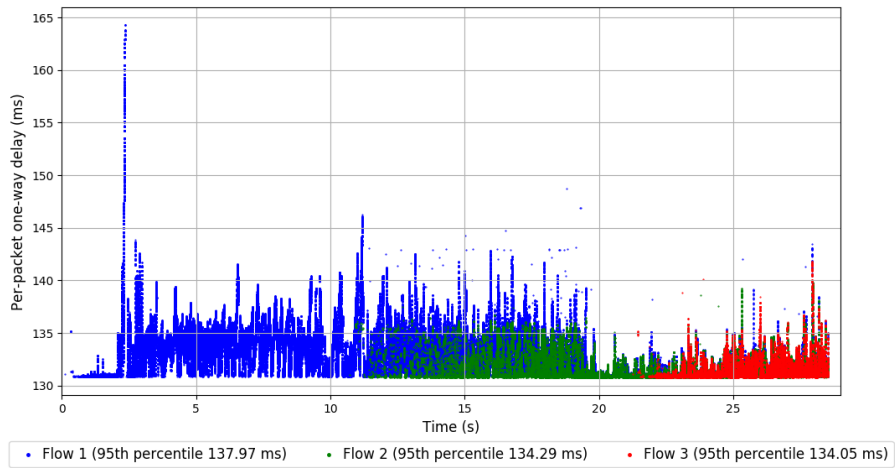
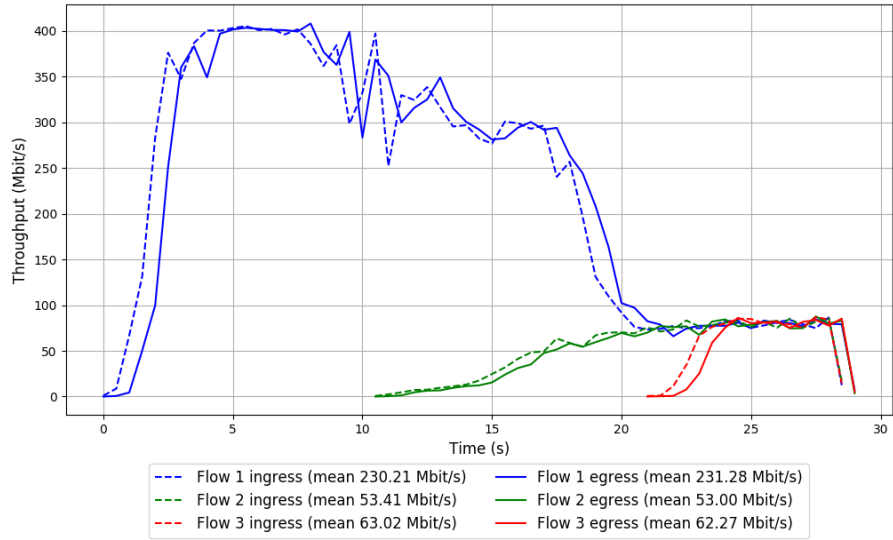


Run 5: Statistics of Indigo-MusesC5

Start at: 2019-05-30 13:00:21
End at: 2019-05-30 13:00:51
Local clock offset: -1.484 ms
Remote clock offset: -39.122 ms

```
# Below is generated by plot.py at 2019-05-30 13:56:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 280.42 Mbit/s
95th percentile per-packet one-way delay: 137.619 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 231.28 Mbit/s
95th percentile per-packet one-way delay: 137.971 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 53.00 Mbit/s
95th percentile per-packet one-way delay: 134.293 ms
Loss rate: 1.84%
-- Flow 3:
Average throughput: 62.27 Mbit/s
95th percentile per-packet one-way delay: 134.053 ms
Loss rate: 3.71%
```

Run 5: Report of Indigo-MusesC5 — Data Link

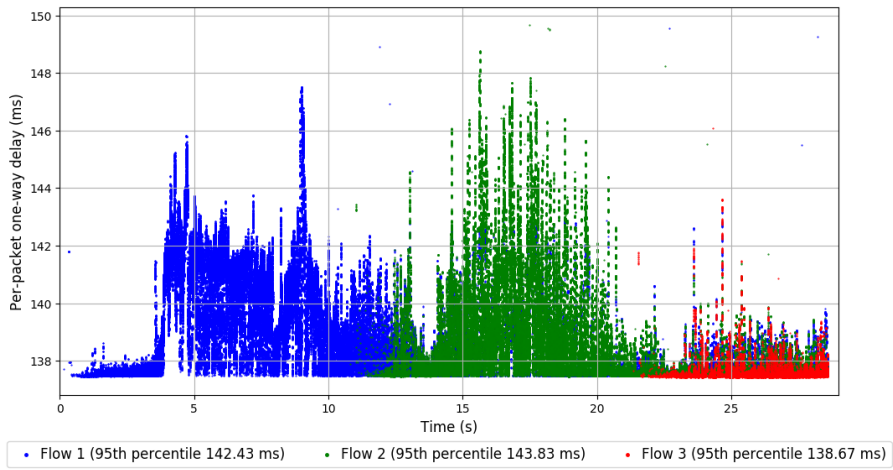
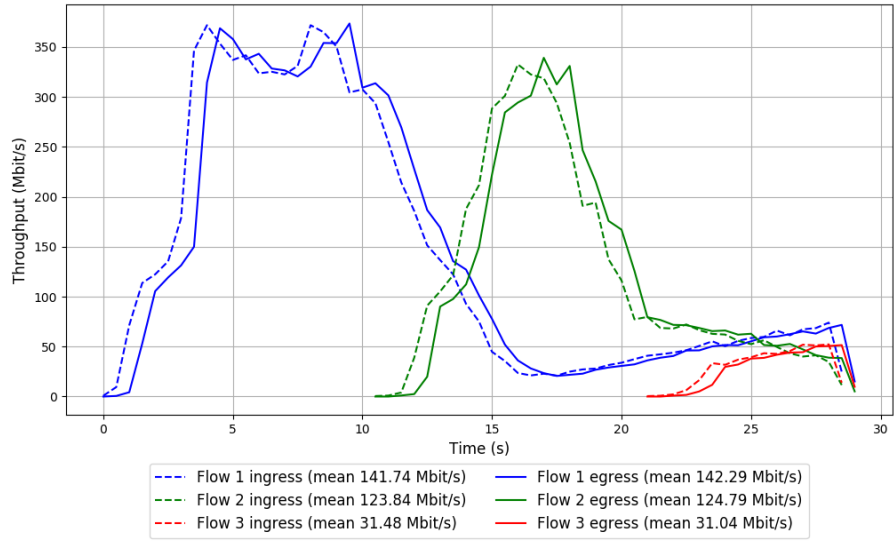


Run 1: Statistics of Indigo-MusesD

Start at: 2019-05-30 10:58:23
End at: 2019-05-30 10:58:53
Local clock offset: 2.924 ms
Remote clock offset: -42.302 ms

```
# Below is generated by plot.py at 2019-05-30 13:56:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 228.11 Mbit/s
95th percentile per-packet one-way delay: 142.835 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 142.29 Mbit/s
95th percentile per-packet one-way delay: 142.429 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 124.79 Mbit/s
95th percentile per-packet one-way delay: 143.828 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 31.04 Mbit/s
95th percentile per-packet one-way delay: 138.673 ms
Loss rate: 3.91%
```

Run 1: Report of Indigo-MusesD — Data Link

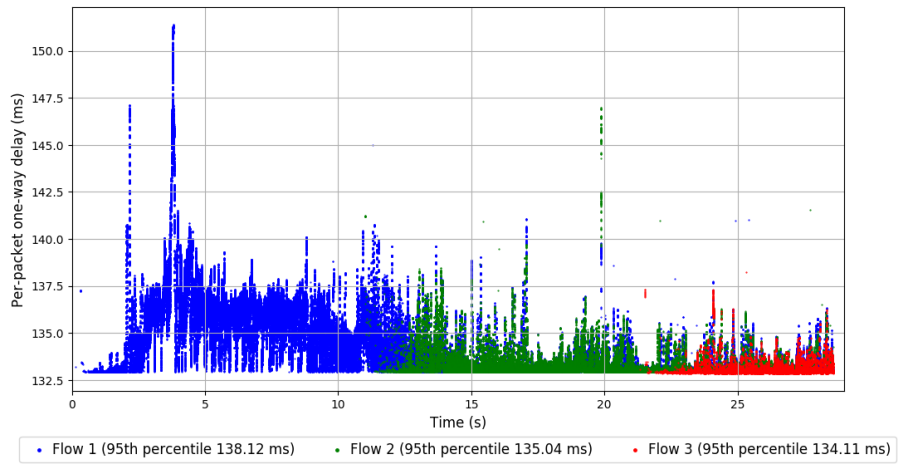
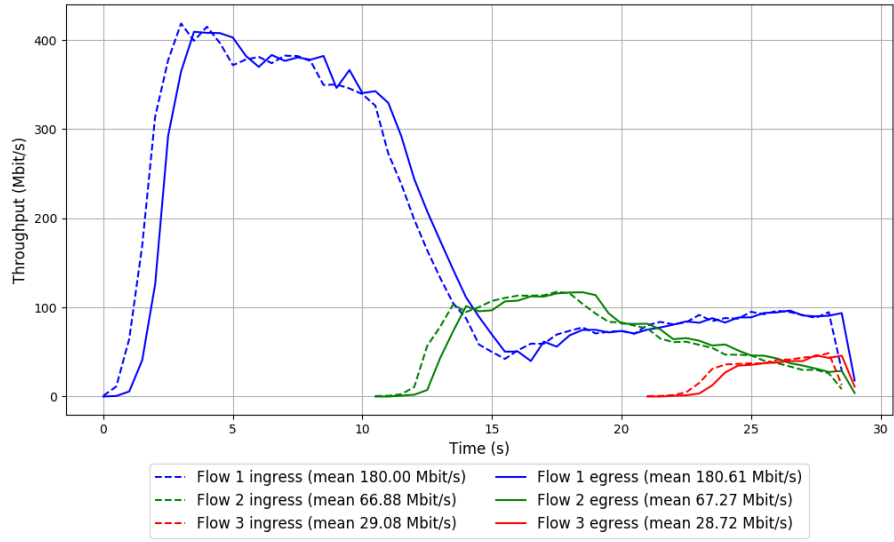


Run 2: Statistics of Indigo-MusesD

Start at: 2019-05-30 11:29:28
End at: 2019-05-30 11:29:58
Local clock offset: -0.902 ms
Remote clock offset: -40.959 ms

```
# Below is generated by plot.py at 2019-05-30 13:56:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 229.94 Mbit/s
95th percentile per-packet one-way delay: 137.761 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 180.61 Mbit/s
95th percentile per-packet one-way delay: 138.120 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 67.27 Mbit/s
95th percentile per-packet one-way delay: 135.044 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 28.72 Mbit/s
95th percentile per-packet one-way delay: 134.112 ms
Loss rate: 3.77%
```

Run 2: Report of Indigo-MusesD — Data Link

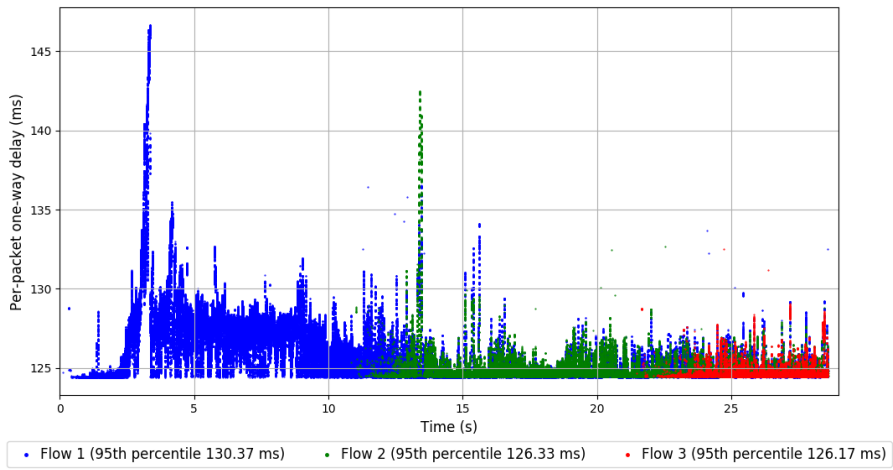
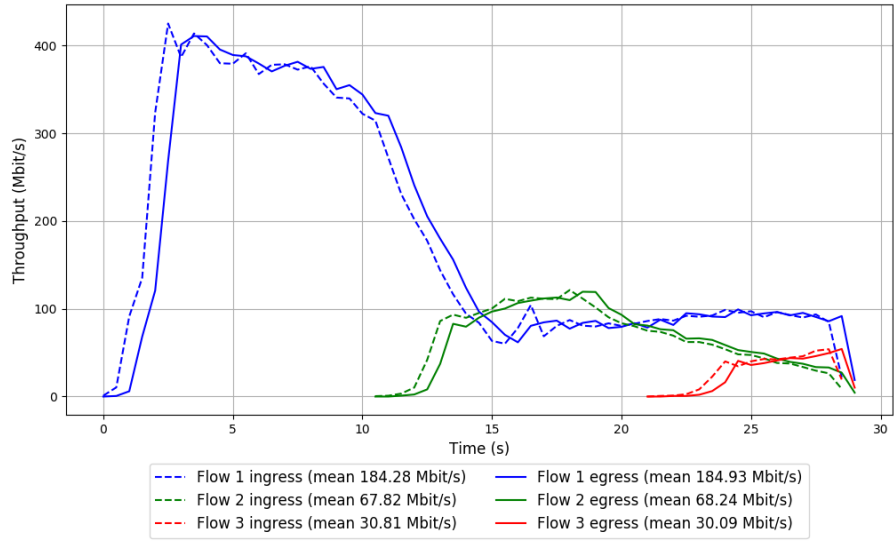


Run 3: Statistics of Indigo-MusesD

Start at: 2019-05-30 12:00:38
End at: 2019-05-30 12:01:08
Local clock offset: -0.602 ms
Remote clock offset: -32.747 ms

```
# Below is generated by plot.py at 2019-05-30 13:56:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 235.02 Mbit/s
95th percentile per-packet one-way delay: 129.784 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 184.93 Mbit/s
95th percentile per-packet one-way delay: 130.374 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 68.24 Mbit/s
95th percentile per-packet one-way delay: 126.329 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 30.09 Mbit/s
95th percentile per-packet one-way delay: 126.171 ms
Loss rate: 4.91%
```

Run 3: Report of Indigo-MusesD — Data Link

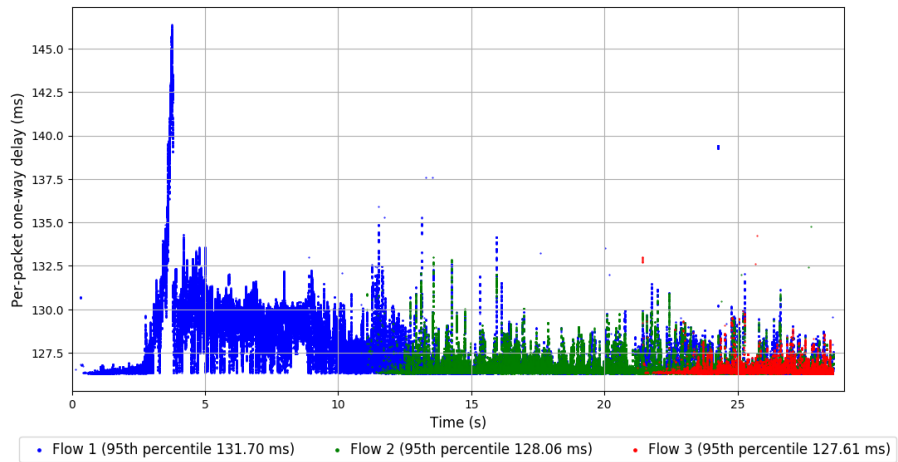
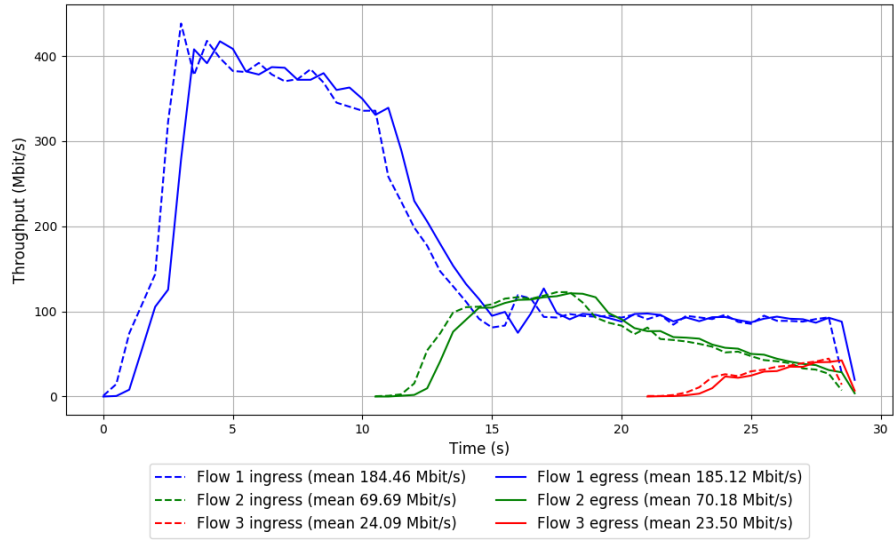


Run 4: Statistics of Indigo-MusesD

Start at: 2019-05-30 12:32:09
End at: 2019-05-30 12:32:39
Local clock offset: -3.096 ms
Remote clock offset: -38.286 ms

```
# Below is generated by plot.py at 2019-05-30 13:56:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 234.87 Mbit/s
95th percentile per-packet one-way delay: 131.294 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 185.12 Mbit/s
95th percentile per-packet one-way delay: 131.699 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 70.18 Mbit/s
95th percentile per-packet one-way delay: 128.061 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 23.50 Mbit/s
95th percentile per-packet one-way delay: 127.613 ms
Loss rate: 5.00%
```

Run 4: Report of Indigo-MusesD — Data Link

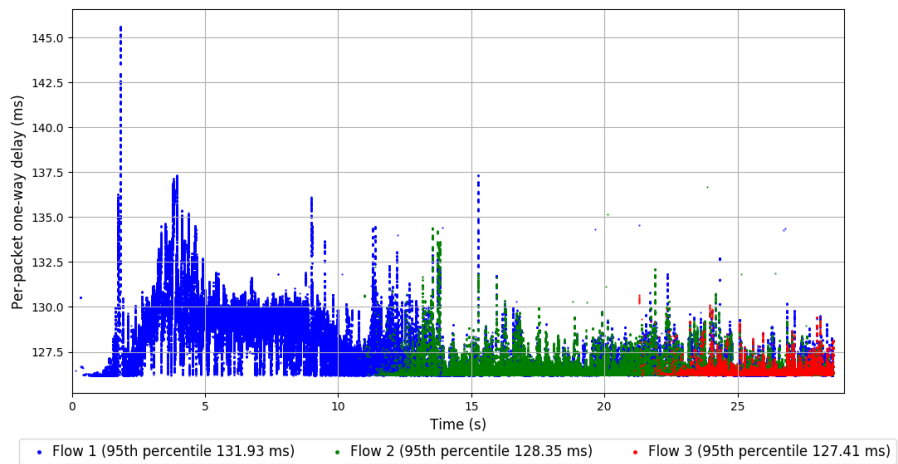
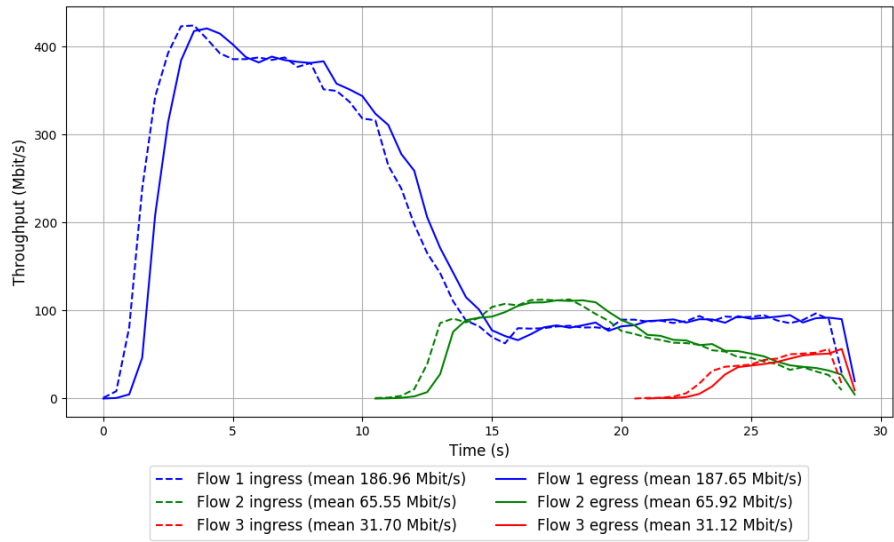


Run 5: Statistics of Indigo-MusesD

Start at: 2019-05-30 13:03:22
End at: 2019-05-30 13:03:52
Local clock offset: -1.443 ms
Remote clock offset: -34.51 ms

```
# Below is generated by plot.py at 2019-05-30 13:56:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 236.98 Mbit/s
95th percentile per-packet one-way delay: 131.376 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 187.65 Mbit/s
95th percentile per-packet one-way delay: 131.925 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 65.92 Mbit/s
95th percentile per-packet one-way delay: 128.346 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 31.12 Mbit/s
95th percentile per-packet one-way delay: 127.412 ms
Loss rate: 4.29%
```

Run 5: Report of Indigo-MusesD — Data Link

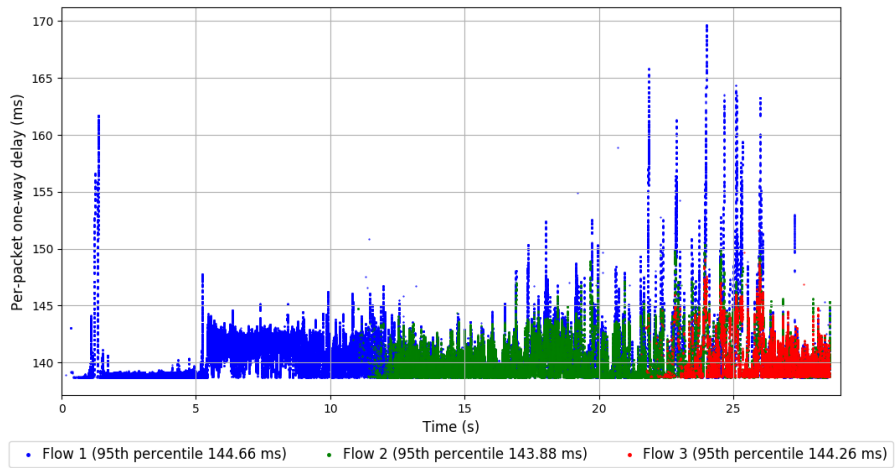
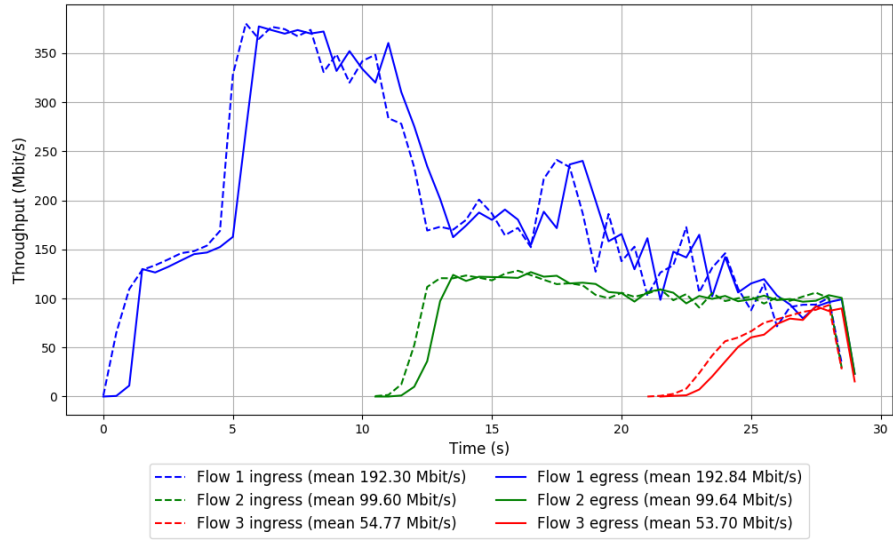


Run 1: Statistics of Indigo-MuseST

Start at: 2019-05-30 11:16:24
End at: 2019-05-30 11:16:54
Local clock offset: 2.704 ms
Remote clock offset: -43.497 ms

```
# Below is generated by plot.py at 2019-05-30 13:57:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 268.25 Mbit/s
95th percentile per-packet one-way delay: 144.308 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 192.84 Mbit/s
95th percentile per-packet one-way delay: 144.658 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 99.64 Mbit/s
95th percentile per-packet one-way delay: 143.877 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 53.70 Mbit/s
95th percentile per-packet one-way delay: 144.262 ms
Loss rate: 4.74%
```

Run 1: Report of Indigo-MusesT — Data Link

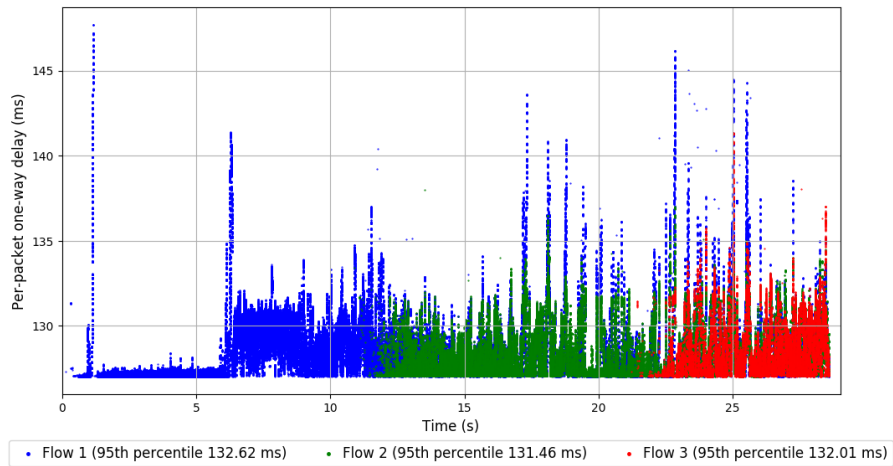
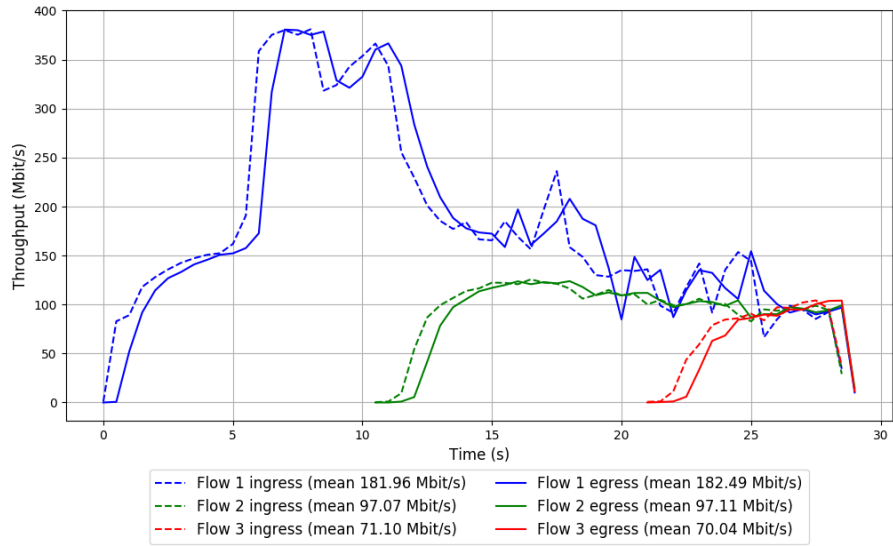


Run 2: Statistics of Indigo-MuseST

Start at: 2019-05-30 11:47:33
End at: 2019-05-30 11:48:03
Local clock offset: -0.157 ms
Remote clock offset: -34.589 ms

```
# Below is generated by plot.py at 2019-05-30 13:58:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 260.91 Mbit/s
95th percentile per-packet one-way delay: 132.123 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 182.49 Mbit/s
95th percentile per-packet one-way delay: 132.624 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 97.11 Mbit/s
95th percentile per-packet one-way delay: 131.460 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 70.04 Mbit/s
95th percentile per-packet one-way delay: 132.006 ms
Loss rate: 3.97%
```

Run 2: Report of Indigo-MusesT — Data Link

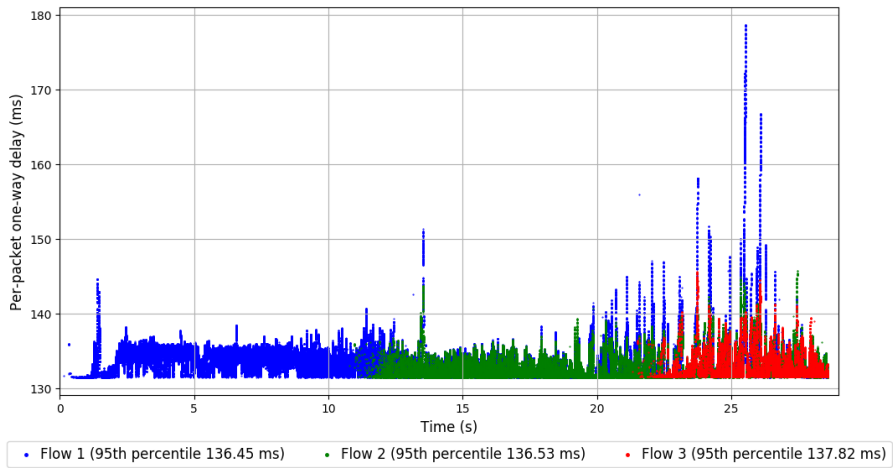
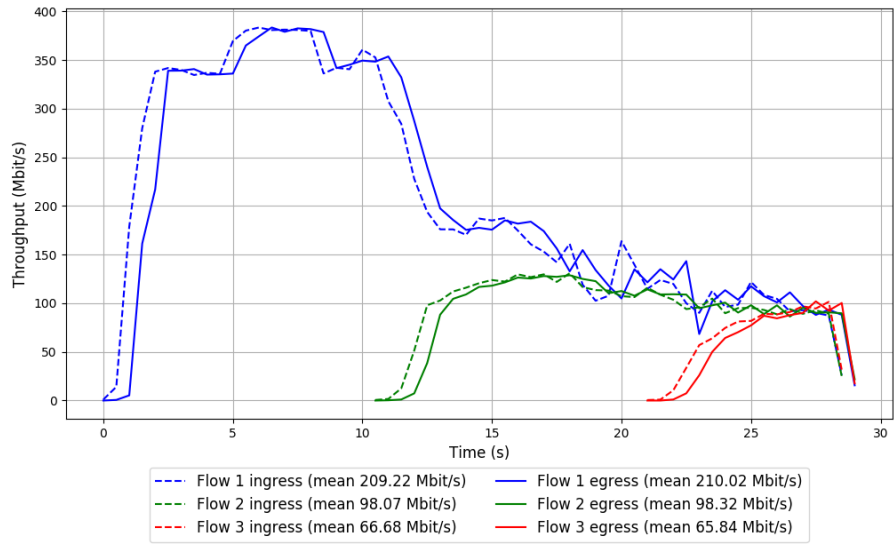


Run 3: Statistics of Indigo-MuseST

Start at: 2019-05-30 12:18:53
End at: 2019-05-30 12:19:23
Local clock offset: -0.205 ms
Remote clock offset: -39.472 ms

```
# Below is generated by plot.py at 2019-05-30 13:58:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 288.40 Mbit/s
95th percentile per-packet one-way delay: 136.573 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 210.02 Mbit/s
95th percentile per-packet one-way delay: 136.451 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 98.32 Mbit/s
95th percentile per-packet one-way delay: 136.532 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 65.84 Mbit/s
95th percentile per-packet one-way delay: 137.821 ms
Loss rate: 3.93%
```

Run 3: Report of Indigo-MusesT — Data Link

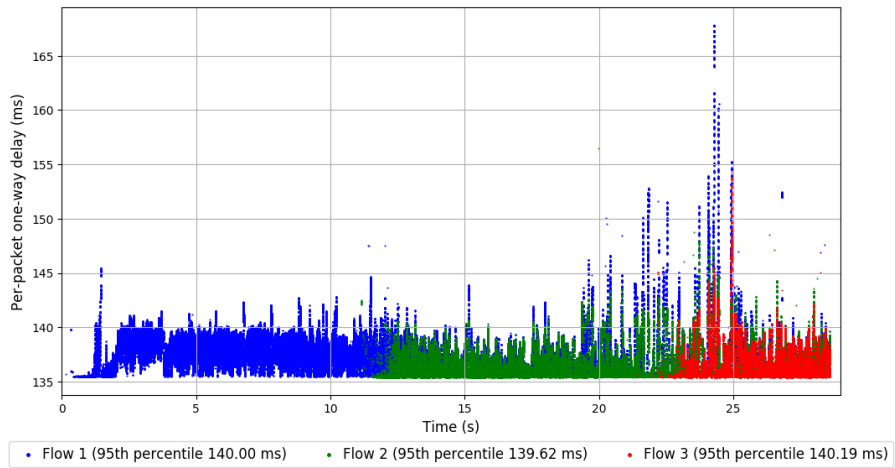
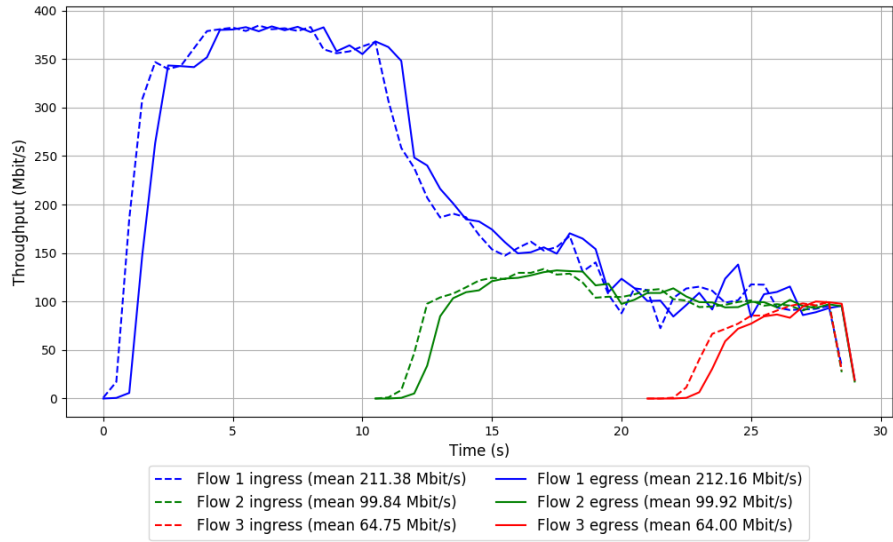


Run 4: Statistics of Indigo-MuseST

Start at: 2019-05-30 12:50:14
End at: 2019-05-30 12:50:44
Local clock offset: -0.939 ms
Remote clock offset: -43.399 ms

```
# Below is generated by plot.py at 2019-05-30 13:58:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 290.02 Mbit/s
95th percentile per-packet one-way delay: 139.964 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 212.16 Mbit/s
95th percentile per-packet one-way delay: 140.001 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 99.92 Mbit/s
95th percentile per-packet one-way delay: 139.624 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 64.00 Mbit/s
95th percentile per-packet one-way delay: 140.194 ms
Loss rate: 3.85%
```

Run 4: Report of Indigo-MusesT — Data Link

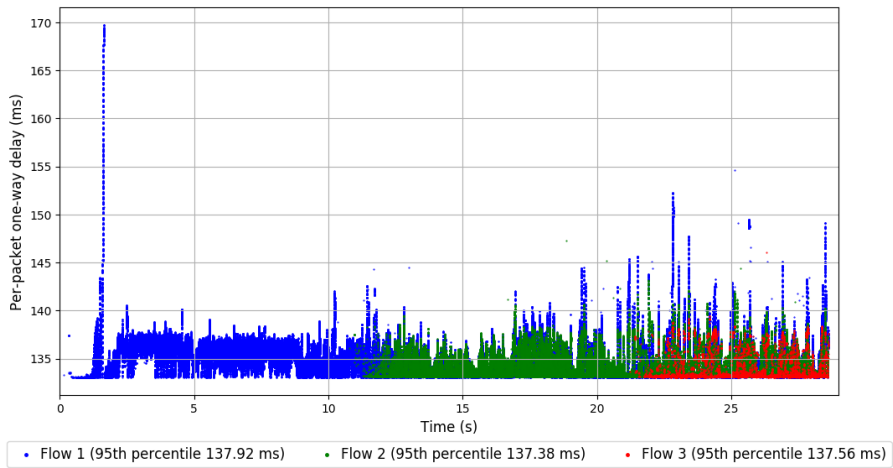
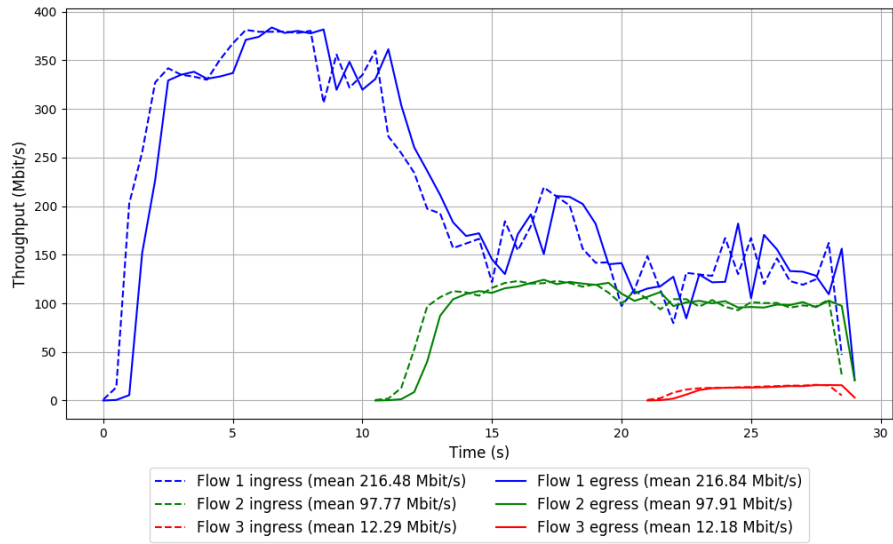


Run 5: Statistics of Indigo-MuseST

Start at: 2019-05-30 13:21:48
End at: 2019-05-30 13:22:18
Local clock offset: -2.206 ms
Remote clock offset: -42.003 ms

```
# Below is generated by plot.py at 2019-05-30 13:58:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 281.30 Mbit/s
95th percentile per-packet one-way delay: 137.750 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 216.84 Mbit/s
95th percentile per-packet one-way delay: 137.920 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 97.91 Mbit/s
95th percentile per-packet one-way delay: 137.384 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 12.18 Mbit/s
95th percentile per-packet one-way delay: 137.558 ms
Loss rate: 3.34%
```

Run 5: Report of Indigo-MusesT — Data Link

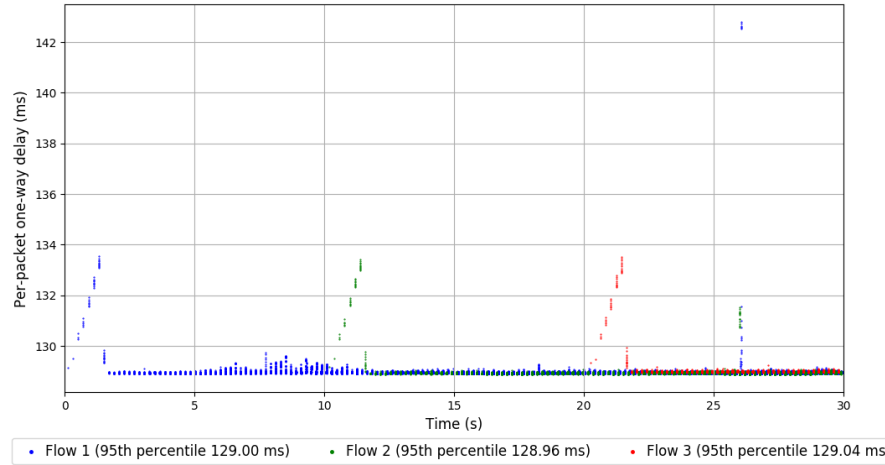
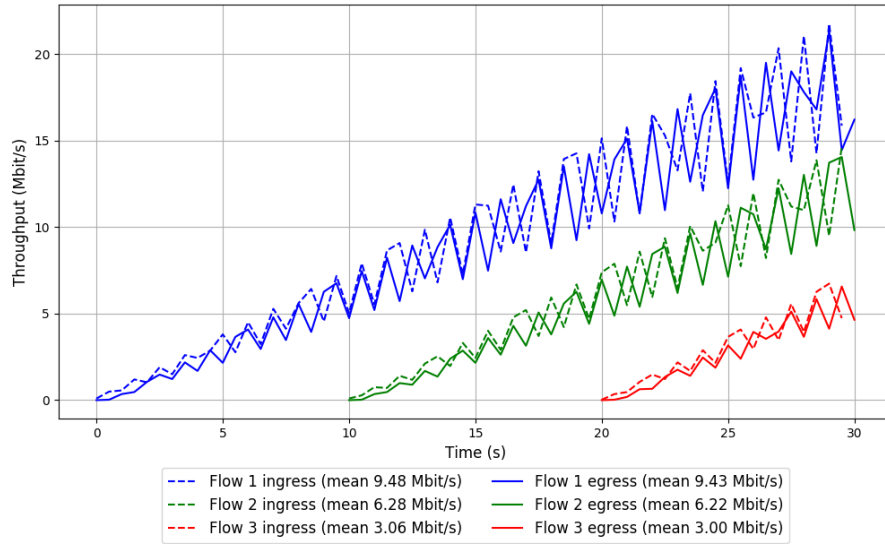


Run 1: Statistics of LEDBAT

Start at: 2019-05-30 11:20:45
End at: 2019-05-30 11:21:15
Local clock offset: -0.899 ms
Remote clock offset: -37.18 ms

```
# Below is generated by plot.py at 2019-05-30 13:58:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.50 Mbit/s
95th percentile per-packet one-way delay: 128.999 ms
Loss rate: 1.62%
-- Flow 1:
Average throughput: 9.43 Mbit/s
95th percentile per-packet one-way delay: 128.997 ms
Loss rate: 1.22%
-- Flow 2:
Average throughput: 6.22 Mbit/s
95th percentile per-packet one-way delay: 128.960 ms
Loss rate: 1.97%
-- Flow 3:
Average throughput: 3.00 Mbit/s
95th percentile per-packet one-way delay: 129.038 ms
Loss rate: 4.01%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2019-05-30 11:51:56
End at: 2019-05-30 11:52:26
Local clock offset: 0.21 ms
Remote clock offset: -46.853 ms

Below is generated by plot.py at 2019-05-30 13:58:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 14.59 Mbit/s
95th percentile per-packet one-way delay: 139.558 ms
Loss rate: 1.67%

-- Flow 1:

Average throughput: 9.37 Mbit/s
95th percentile per-packet one-way delay: 139.567 ms
Loss rate: 1.31%

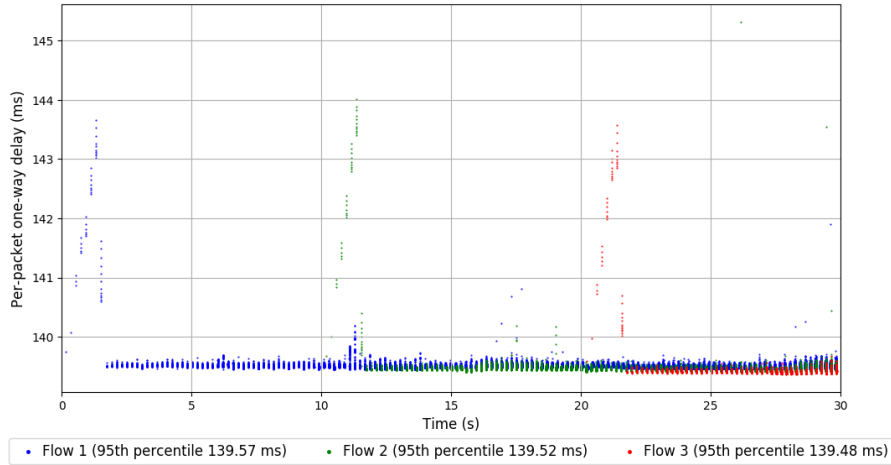
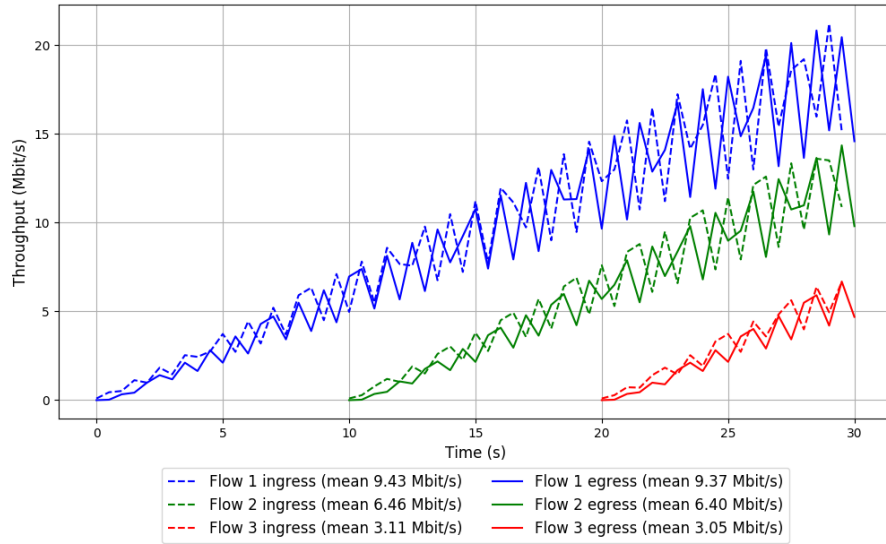
-- Flow 2:

Average throughput: 6.40 Mbit/s
95th percentile per-packet one-way delay: 139.524 ms
Loss rate: 1.94%

-- Flow 3:

Average throughput: 3.05 Mbit/s
95th percentile per-packet one-way delay: 139.484 ms
Loss rate: 3.95%

Run 2: Report of LEDBAT — Data Link

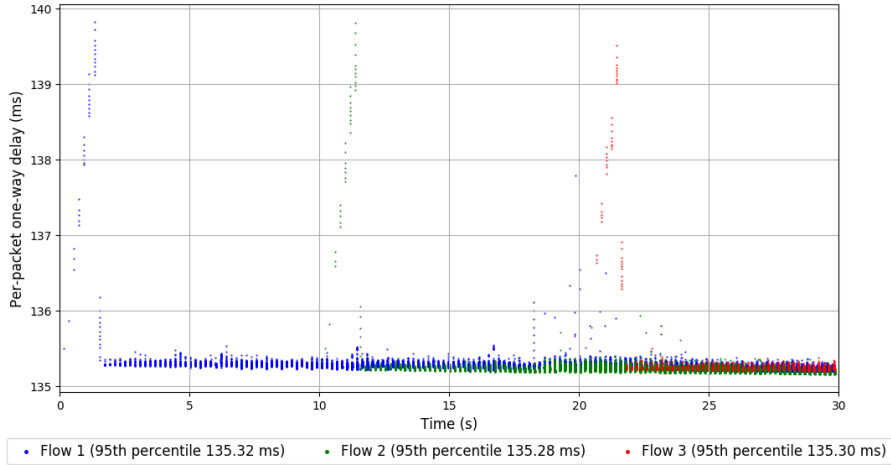
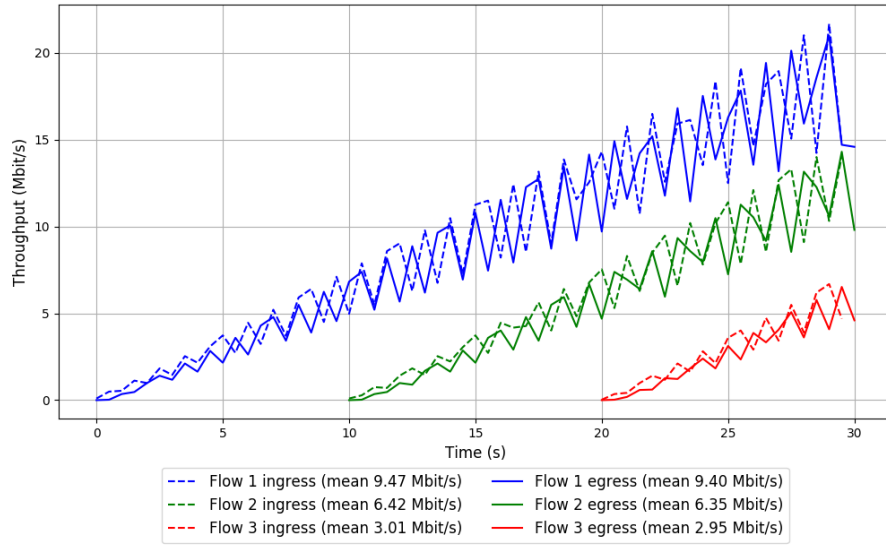


Run 3: Statistics of LEDBAT

Start at: 2019-05-30 12:23:18
End at: 2019-05-30 12:23:48
Local clock offset: 4.698 ms
Remote clock offset: -38.624 ms

```
# Below is generated by plot.py at 2019-05-30 13:58:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.53 Mbit/s
95th percentile per-packet one-way delay: 135.312 ms
Loss rate: 1.68%
-- Flow 1:
Average throughput: 9.40 Mbit/s
95th percentile per-packet one-way delay: 135.319 ms
Loss rate: 1.31%
-- Flow 2:
Average throughput: 6.35 Mbit/s
95th percentile per-packet one-way delay: 135.279 ms
Loss rate: 1.95%
-- Flow 3:
Average throughput: 2.95 Mbit/s
95th percentile per-packet one-way delay: 135.303 ms
Loss rate: 4.04%
```

Run 3: Report of LEDBAT — Data Link

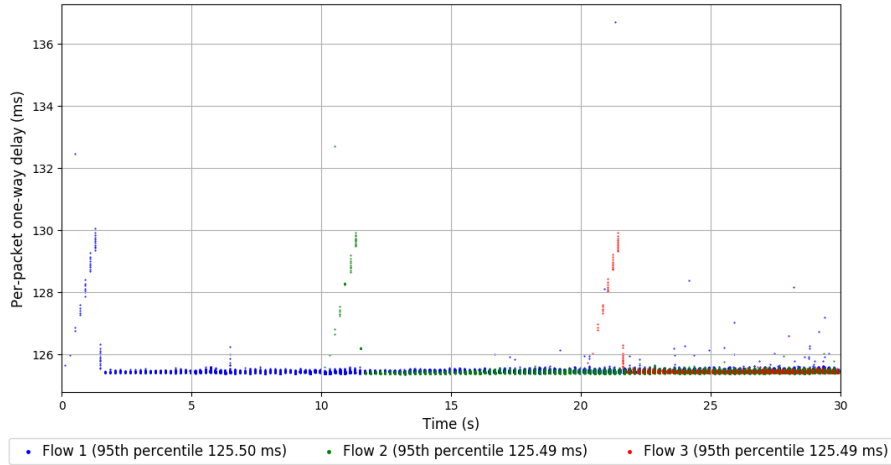
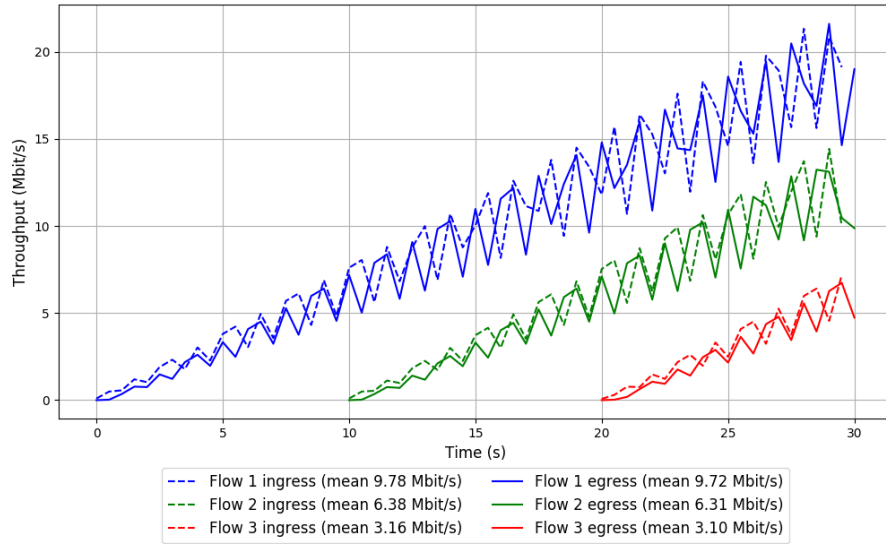


Run 4: Statistics of LEDBAT

Start at: 2019-05-30 12:54:36
End at: 2019-05-30 12:55:06
Local clock offset: -1.555 ms
Remote clock offset: -33.67 ms

```
# Below is generated by plot.py at 2019-05-30 13:58:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.91 Mbit/s
95th percentile per-packet one-way delay: 125.498 ms
Loss rate: 1.65%
-- Flow 1:
Average throughput: 9.72 Mbit/s
95th percentile per-packet one-way delay: 125.502 ms
Loss rate: 1.28%
-- Flow 2:
Average throughput: 6.31 Mbit/s
95th percentile per-packet one-way delay: 125.488 ms
Loss rate: 1.95%
-- Flow 3:
Average throughput: 3.10 Mbit/s
95th percentile per-packet one-way delay: 125.488 ms
Loss rate: 3.93%
```

Run 4: Report of LEDBAT — Data Link

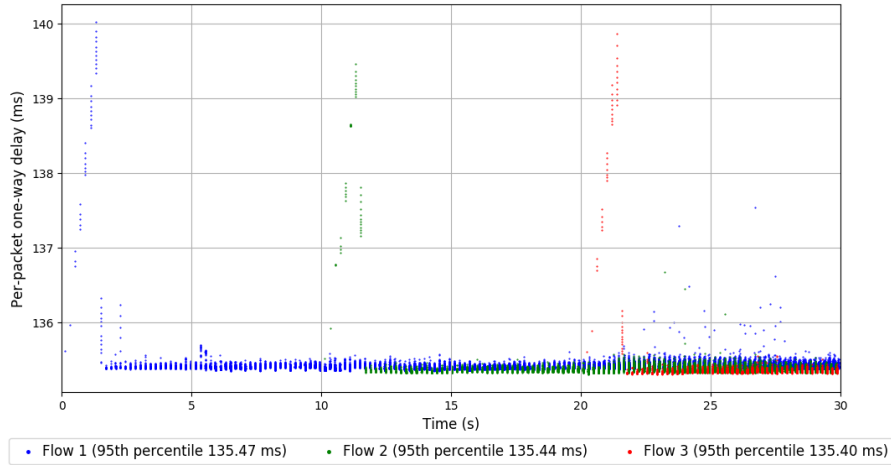
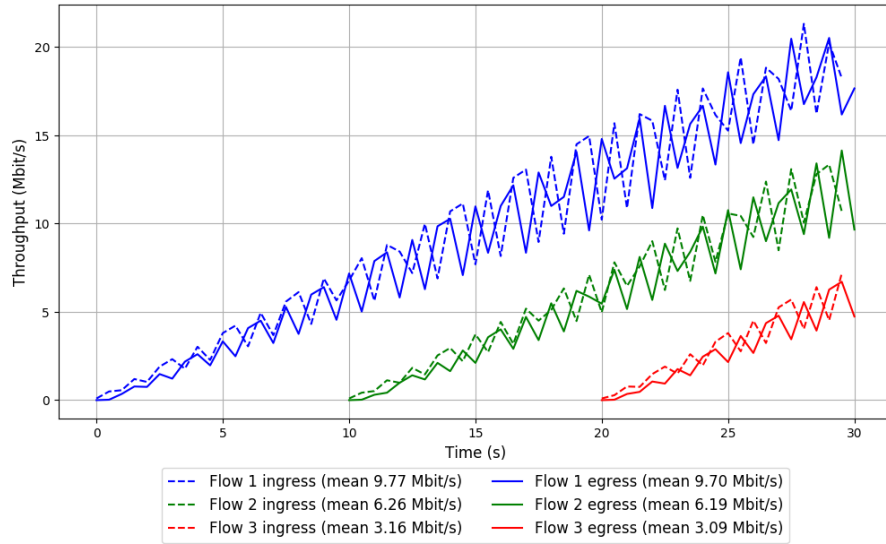


Run 5: Statistics of LEDBAT

Start at: 2019-05-30 13:26:13
End at: 2019-05-30 13:26:43
Local clock offset: 2.854 ms
Remote clock offset: -39.084 ms

```
# Below is generated by plot.py at 2019-05-30 13:58:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.80 Mbit/s
95th percentile per-packet one-way delay: 135.465 ms
Loss rate: 1.66%
-- Flow 1:
Average throughput: 9.70 Mbit/s
95th percentile per-packet one-way delay: 135.473 ms
Loss rate: 1.28%
-- Flow 2:
Average throughput: 6.19 Mbit/s
95th percentile per-packet one-way delay: 135.440 ms
Loss rate: 1.97%
-- Flow 3:
Average throughput: 3.09 Mbit/s
95th percentile per-packet one-way delay: 135.403 ms
Loss rate: 3.93%
```

Run 5: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2019-05-30 11:08:32
End at: 2019-05-30 11:09:02
Local clock offset: -0.772 ms
Remote clock offset: -40.656 ms

Below is generated by plot.py at 2019-05-30 14:01:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 394.12 Mbit/s
95th percentile per-packet one-way delay: 324.523 ms
Loss rate: 0.88%

-- Flow 1:

Average throughput: 383.02 Mbit/s
95th percentile per-packet one-way delay: 324.839 ms
Loss rate: 0.88%

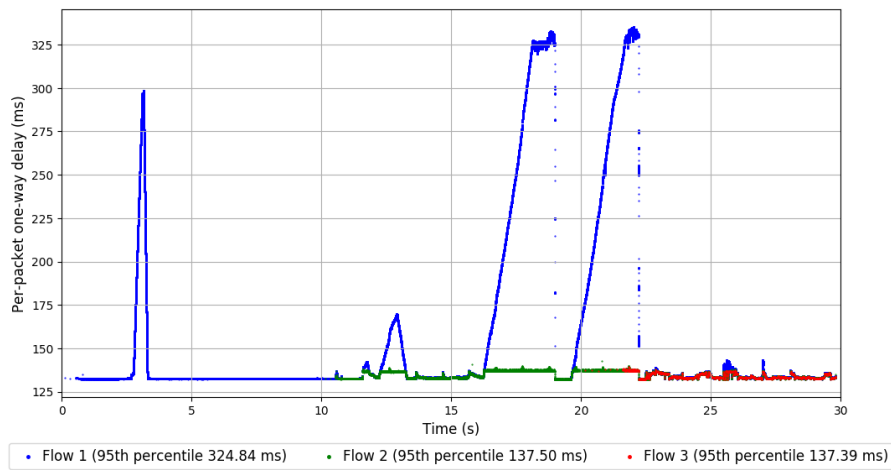
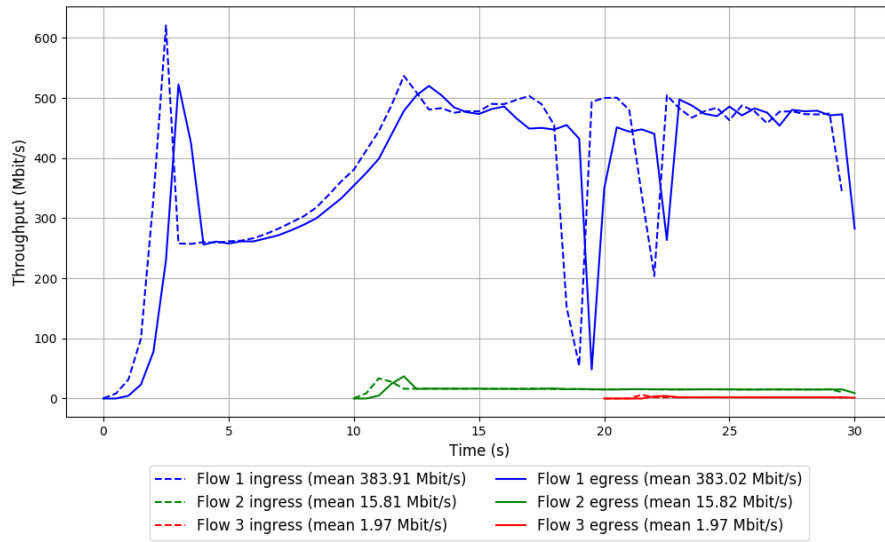
-- Flow 2:

Average throughput: 15.82 Mbit/s
95th percentile per-packet one-way delay: 137.501 ms
Loss rate: 0.91%

-- Flow 3:

Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 137.394 ms
Loss rate: 1.94%

Run 1: Report of PCC-Allegro — Data Link

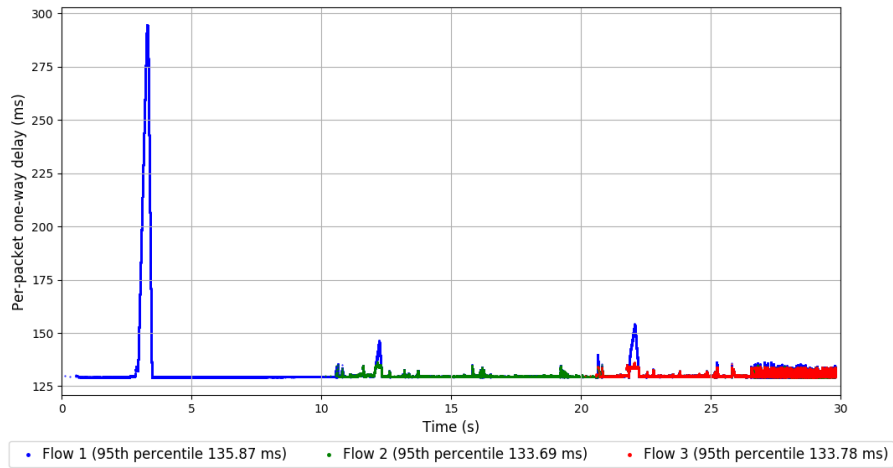
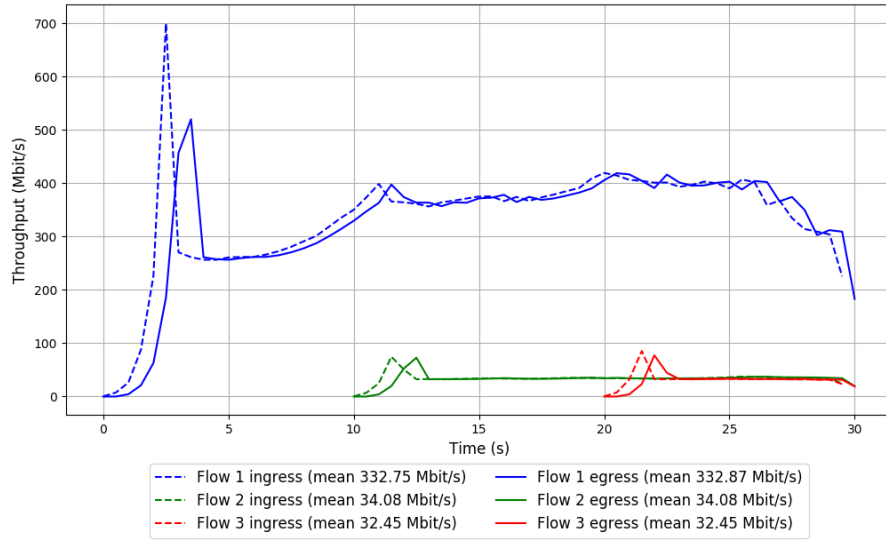


Run 2: Statistics of PCC-Allegro

Start at: 2019-05-30 11:39:42
End at: 2019-05-30 11:40:12
Local clock offset: 3.157 ms
Remote clock offset: -33.33 ms

```
# Below is generated by plot.py at 2019-05-30 14:01:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 365.93 Mbit/s
95th percentile per-packet one-way delay: 134.650 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 332.87 Mbit/s
95th percentile per-packet one-way delay: 135.873 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 34.08 Mbit/s
95th percentile per-packet one-way delay: 133.688 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 32.45 Mbit/s
95th percentile per-packet one-way delay: 133.776 ms
Loss rate: 1.96%
```

Run 2: Report of PCC-Allegro — Data Link

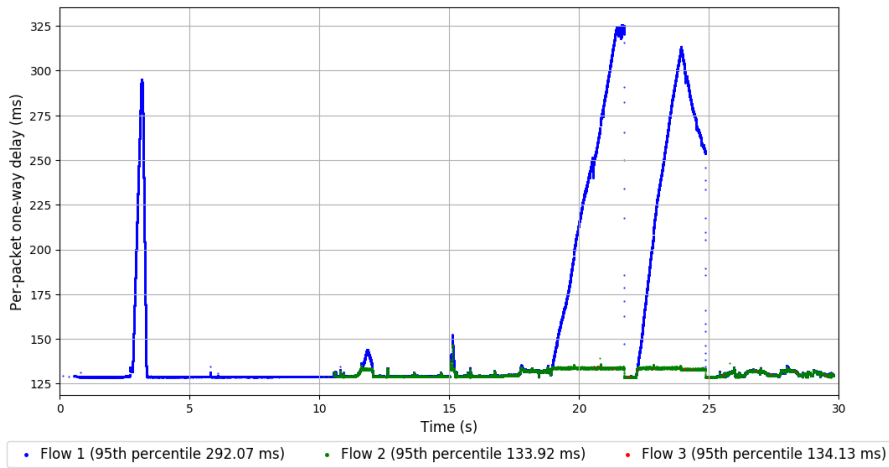
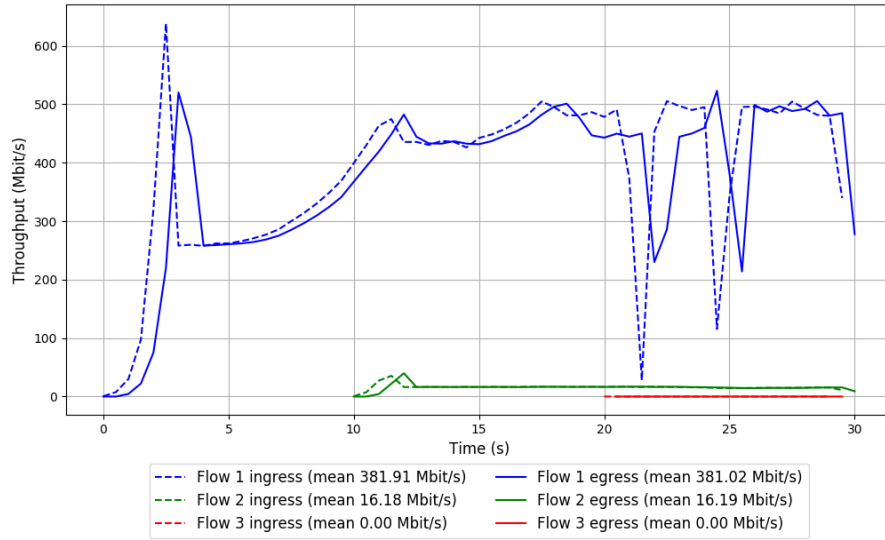


Run 3: Statistics of PCC-Allegro

Start at: 2019-05-30 12:10:53
End at: 2019-05-30 12:11:23
Local clock offset: 3.888 ms
Remote clock offset: -32.49 ms

```
# Below is generated by plot.py at 2019-05-30 14:01:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 391.74 Mbit/s
95th percentile per-packet one-way delay: 291.192 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 381.02 Mbit/s
95th percentile per-packet one-way delay: 292.069 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 16.19 Mbit/s
95th percentile per-packet one-way delay: 133.920 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 134.132 ms
Loss rate: 0.00%
```

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2019-05-30 12:42:23

End at: 2019-05-30 12:42:53

Local clock offset: 3.4 ms

Remote clock offset: -38.831 ms

Below is generated by plot.py at 2019-05-30 14:02:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 395.32 Mbit/s

95th percentile per-packet one-way delay: 138.544 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 380.10 Mbit/s

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

Loss rate: 0.69%

-- Flow 2:

Average throughput: 18.88 Mbit/s

95th percentile per-packet one-way delay: 138.296 ms

Loss rate: 1.08%

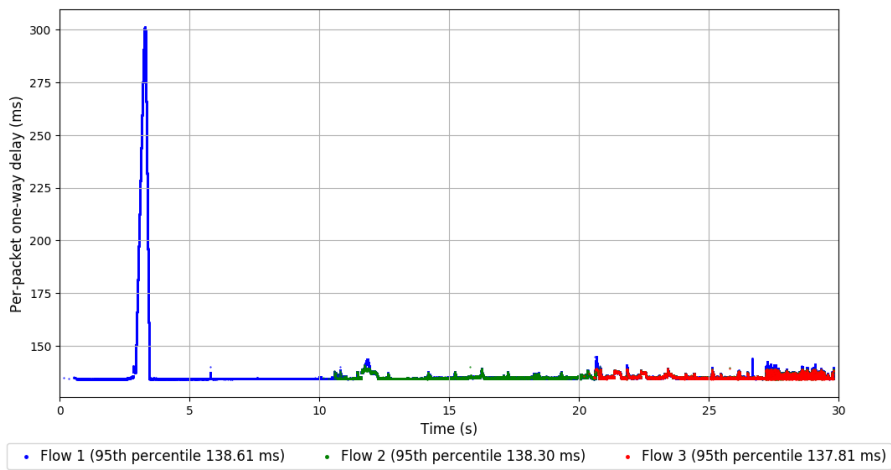
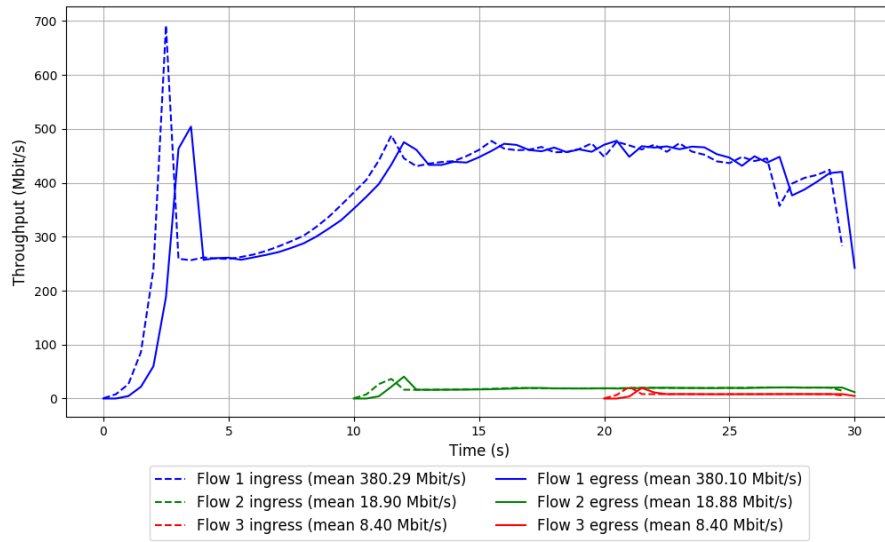
-- Flow 3:

Average throughput: 8.40 Mbit/s

95th percentile per-packet one-way delay: 137.806 ms

Loss rate: 1.96%

Run 4: Report of PCC-Allegro — Data Link

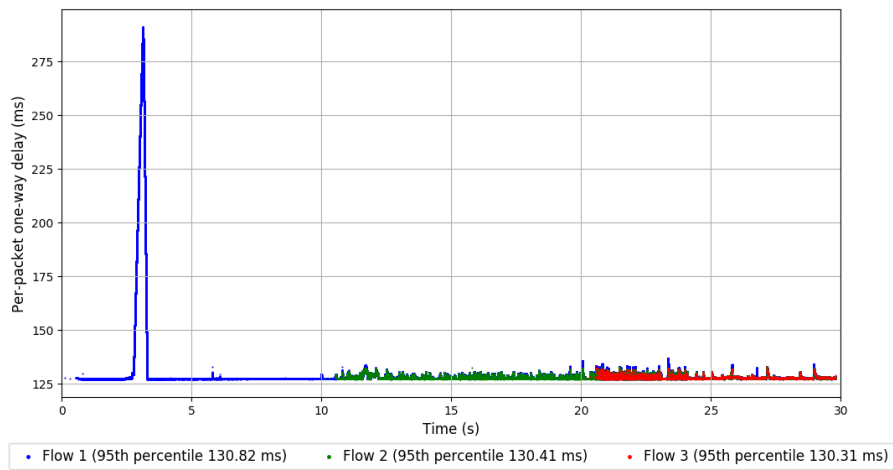
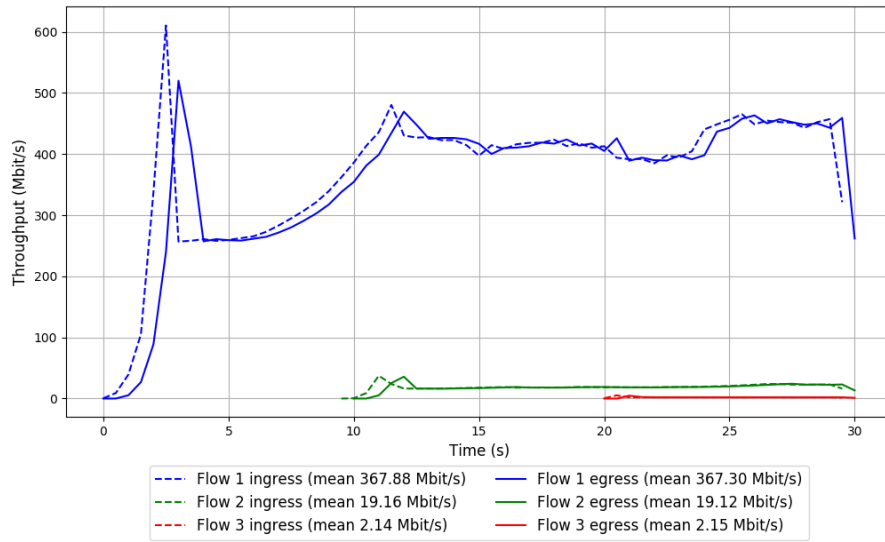


Run 5: Statistics of PCC-Allegro

Start at: 2019-05-30 13:13:36
End at: 2019-05-30 13:14:06
Local clock offset: -2.115 ms
Remote clock offset: -36.291 ms

```
# Below is generated by plot.py at 2019-05-30 14:02:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 380.65 Mbit/s
95th percentile per-packet one-way delay: 130.794 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 367.30 Mbit/s
95th percentile per-packet one-way delay: 130.822 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 19.12 Mbit/s
95th percentile per-packet one-way delay: 130.414 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 130.309 ms
Loss rate: 1.84%
```

Run 5: Report of PCC-Allegro — Data Link

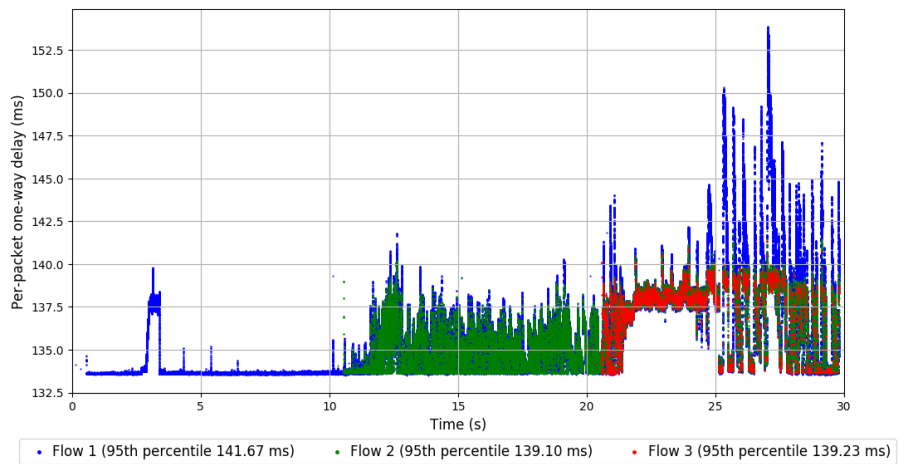
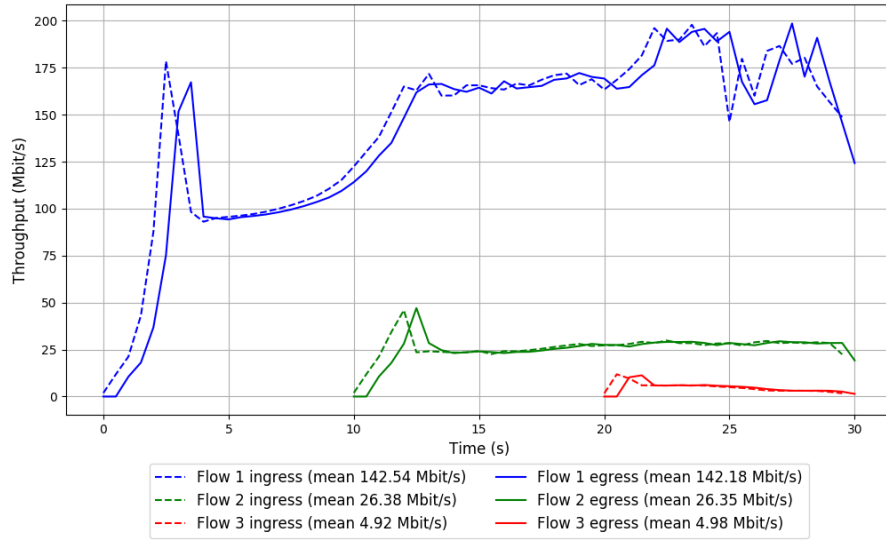


Run 1: Statistics of PCC-Expr

Start at: 2019-05-30 11:11:40
End at: 2019-05-30 11:12:10
Local clock offset: -1.278 ms
Remote clock offset: -42.36 ms

```
# Below is generated by plot.py at 2019-05-30 14:02:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 161.25 Mbit/s
95th percentile per-packet one-way delay: 141.109 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 142.18 Mbit/s
95th percentile per-packet one-way delay: 141.671 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 26.35 Mbit/s
95th percentile per-packet one-way delay: 139.096 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 4.98 Mbit/s
95th percentile per-packet one-way delay: 139.229 ms
Loss rate: 0.92%
```

Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

Start at: 2019-05-30 11:42:47
End at: 2019-05-30 11:43:17
Local clock offset: 3.021 ms
Remote clock offset: -34.124 ms

Below is generated by plot.py at 2019-05-30 14:02:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 178.36 Mbit/s
95th percentile per-packet one-way delay: 184.099 ms
Loss rate: 0.65%

-- Flow 1:

Average throughput: 166.30 Mbit/s
95th percentile per-packet one-way delay: 195.196 ms
Loss rate: 0.61%

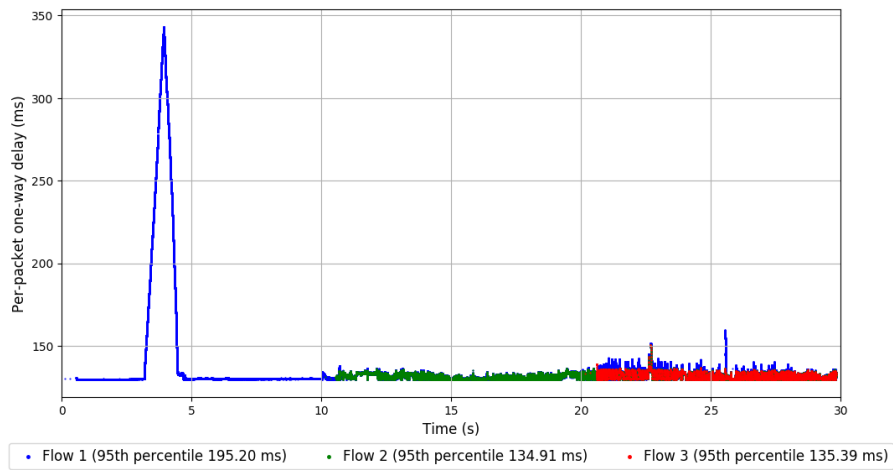
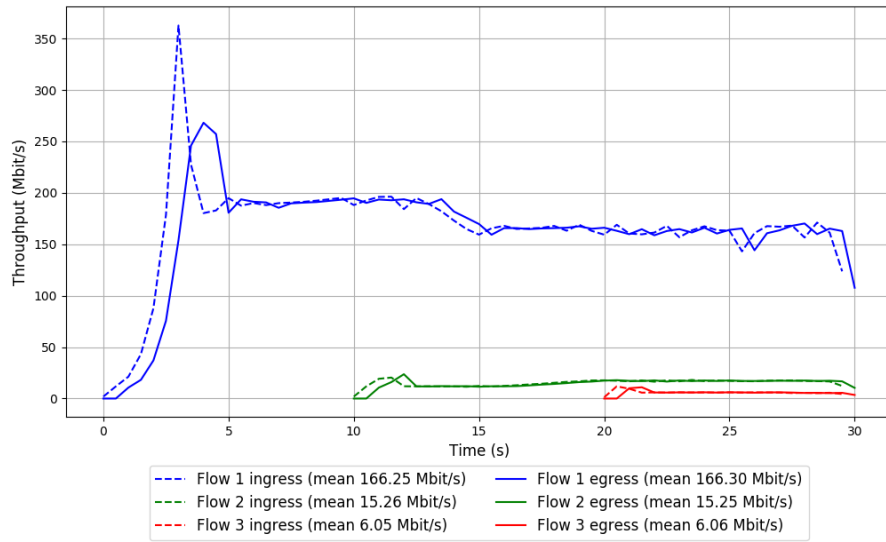
-- Flow 2:

Average throughput: 15.25 Mbit/s
95th percentile per-packet one-way delay: 134.908 ms
Loss rate: 1.01%

-- Flow 3:

Average throughput: 6.06 Mbit/s
95th percentile per-packet one-way delay: 135.388 ms
Loss rate: 1.98%

Run 2: Report of PCC-Expr — Data Link

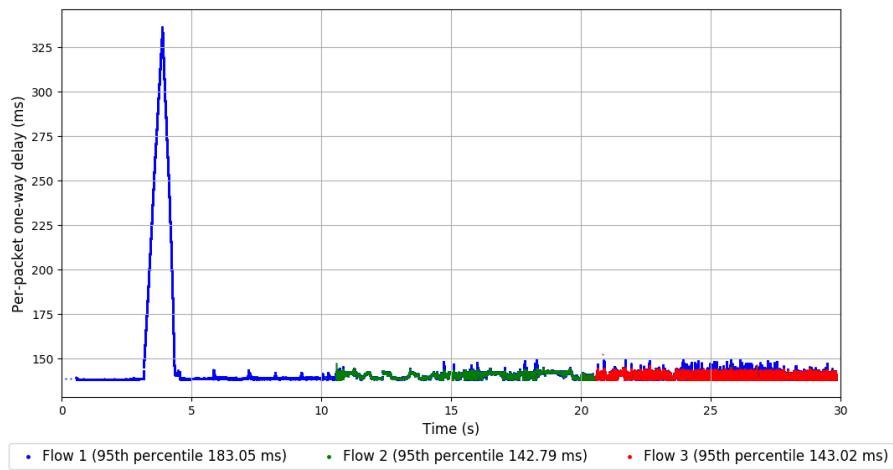
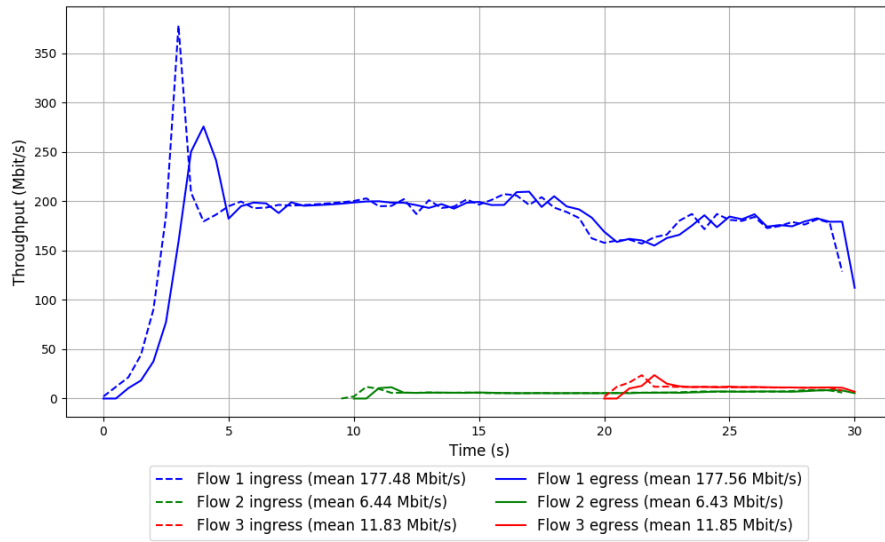


Run 3: Statistics of PCC-Expr

Start at: 2019-05-30 12:13:57
End at: 2019-05-30 12:14:27
Local clock offset: -0.054 ms
Remote clock offset: -45.967 ms

```
# Below is generated by plot.py at 2019-05-30 14:03:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 185.68 Mbit/s
95th percentile per-packet one-way delay: 175.405 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 177.56 Mbit/s
95th percentile per-packet one-way delay: 183.052 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 6.43 Mbit/s
95th percentile per-packet one-way delay: 142.786 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 11.85 Mbit/s
95th percentile per-packet one-way delay: 143.020 ms
Loss rate: 1.74%
```

Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2019-05-30 12:45:29
End at: 2019-05-30 12:45:59
Local clock offset: -0.44 ms
Remote clock offset: -37.638 ms

Below is generated by plot.py at 2019-05-30 14:04:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 148.85 Mbit/s
95th percentile per-packet one-way delay: 134.143 ms
Loss rate: 0.86%

-- Flow 1:

Average throughput: 127.30 Mbit/s
95th percentile per-packet one-way delay: 134.121 ms
Loss rate: 0.78%

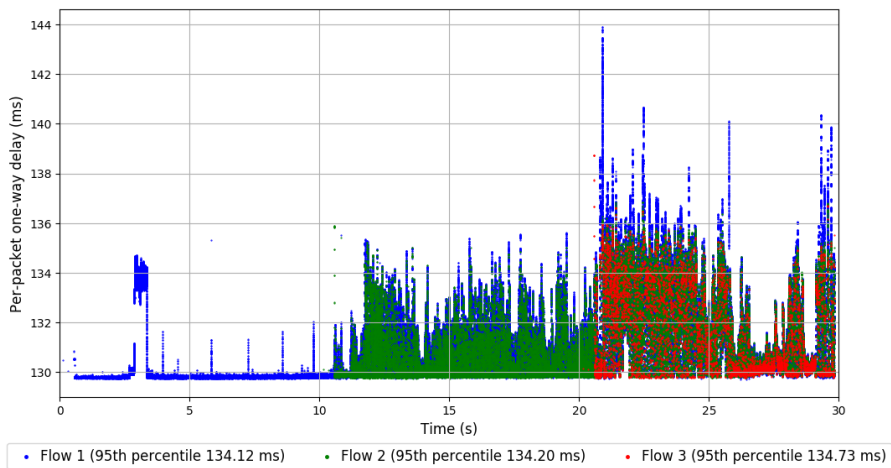
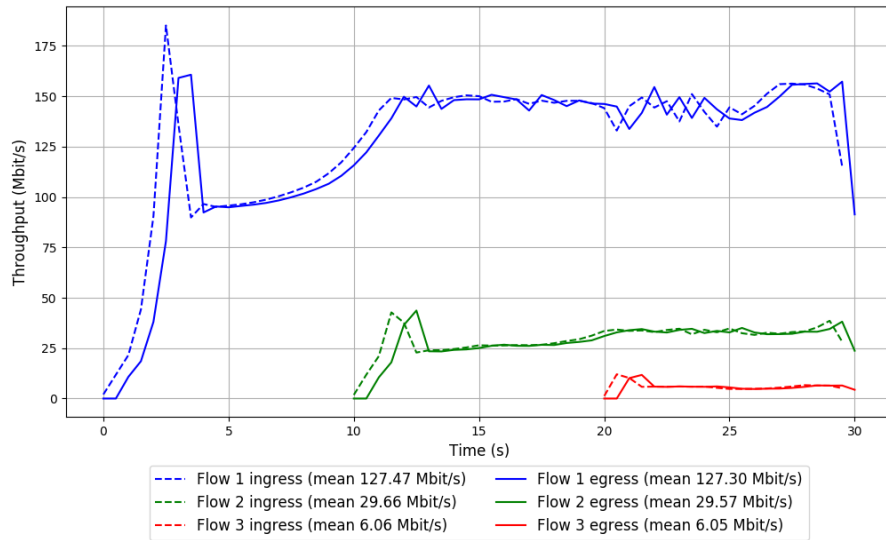
-- Flow 2:

Average throughput: 29.57 Mbit/s
95th percentile per-packet one-way delay: 134.197 ms
Loss rate: 1.23%

-- Flow 3:

Average throughput: 6.05 Mbit/s
95th percentile per-packet one-way delay: 134.730 ms
Loss rate: 2.08%

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2019-05-30 13:16:41

End at: 2019-05-30 13:17:11

Local clock offset: 1.648 ms

Remote clock offset: -45.7 ms

Below is generated by plot.py at 2019-05-30 14:05:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 184.31 Mbit/s

95th percentile per-packet one-way delay: 179.970 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 174.44 Mbit/s

95th percentile per-packet one-way delay: 187.493 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 12.03 Mbit/s

95th percentile per-packet one-way delay: 144.965 ms

Loss rate: 0.83%

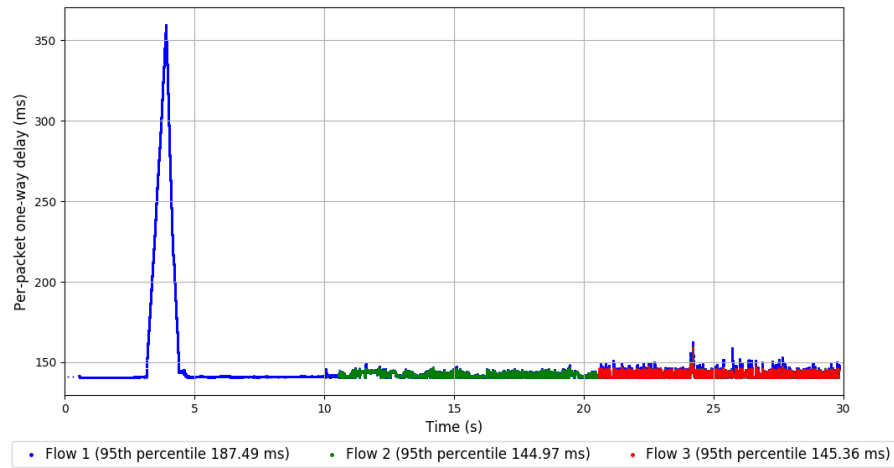
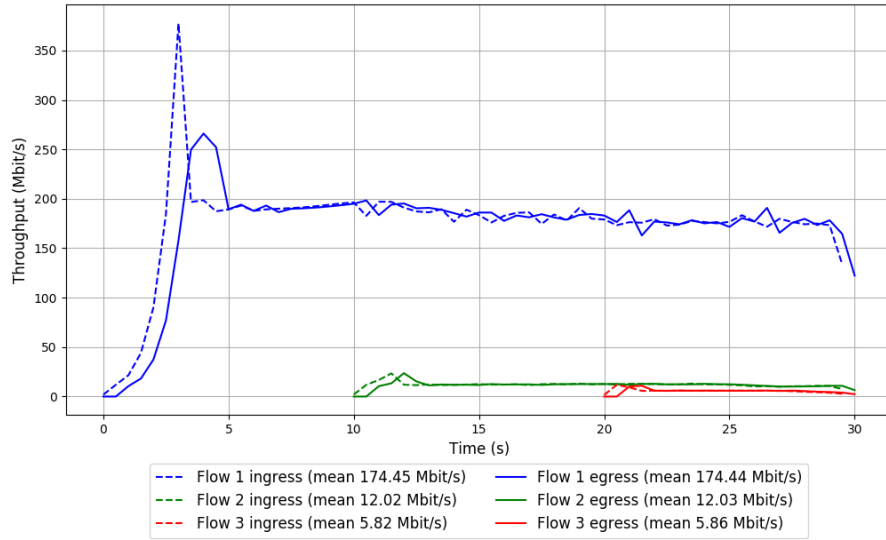
-- Flow 3:

Average throughput: 5.86 Mbit/s

95th percentile per-packet one-way delay: 145.364 ms

Loss rate: 1.27%

Run 5: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2019-05-30 11:23:35
End at: 2019-05-30 11:24:05
Local clock offset: 3.455 ms
Remote clock offset: -42.242 ms

Below is generated by plot.py at 2019-05-30 14:05:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 114.00 Mbit/s
95th percentile per-packet one-way delay: 138.876 ms
Loss rate: 1.02%

-- Flow 1:

Average throughput: 57.57 Mbit/s
95th percentile per-packet one-way delay: 138.591 ms
Loss rate: 0.63%

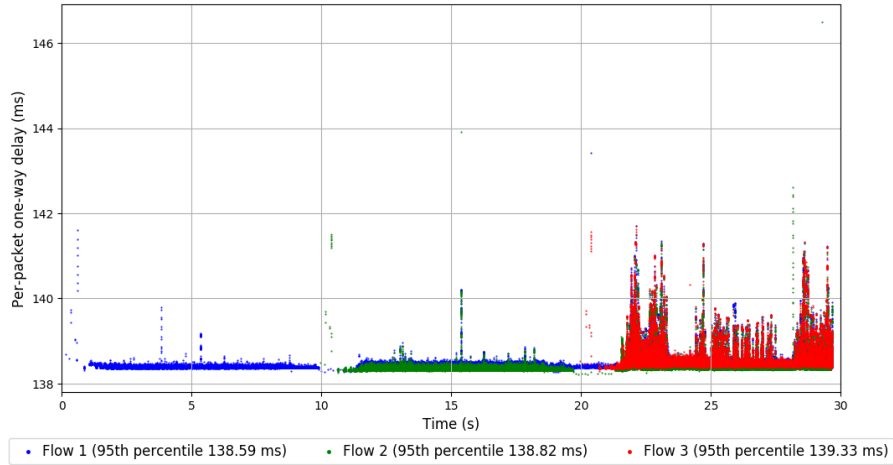
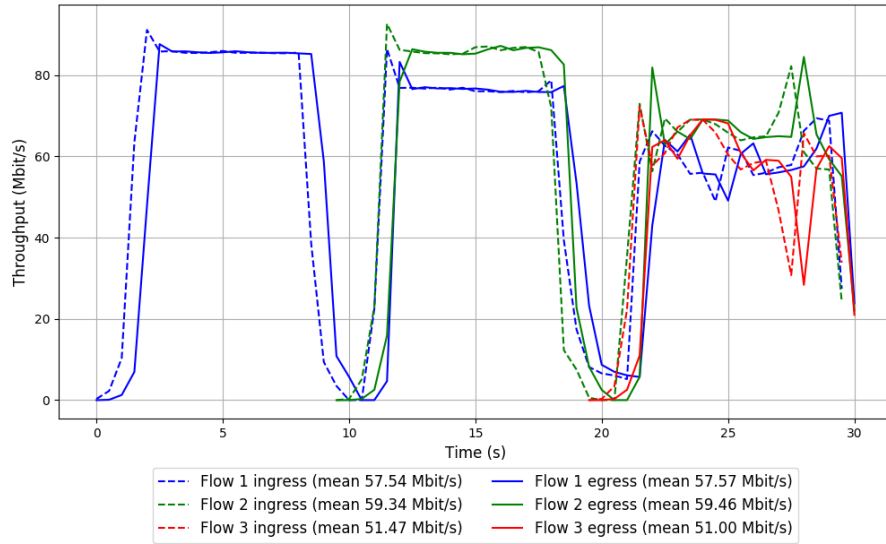
-- Flow 2:

Average throughput: 59.46 Mbit/s
95th percentile per-packet one-way delay: 138.823 ms
Loss rate: 0.79%

-- Flow 3:

Average throughput: 51.00 Mbit/s
95th percentile per-packet one-way delay: 139.331 ms
Loss rate: 2.90%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2019-05-30 11:54:47
End at: 2019-05-30 11:55:17
Local clock offset: -0.454 ms
Remote clock offset: -37.622 ms

Below is generated by plot.py at 2019-05-30 14:05:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.54 Mbit/s
95th percentile per-packet one-way delay: 129.750 ms
Loss rate: 1.08%

-- Flow 1:

Average throughput: 54.17 Mbit/s
95th percentile per-packet one-way delay: 129.583 ms
Loss rate: 0.68%

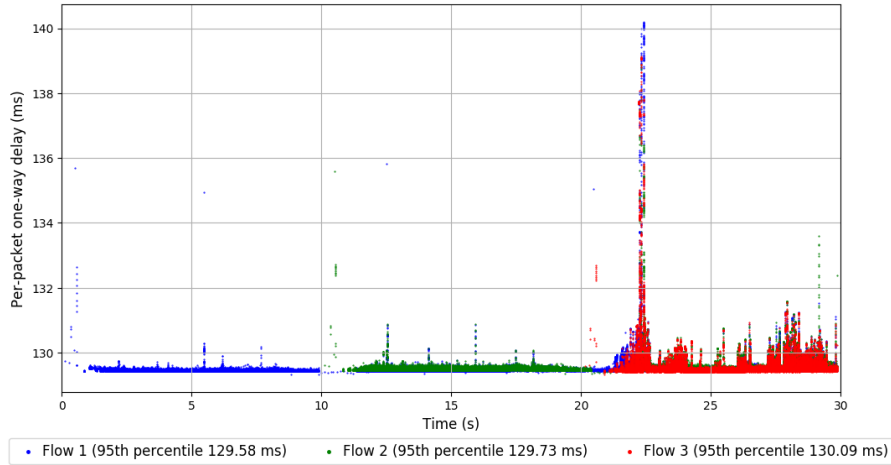
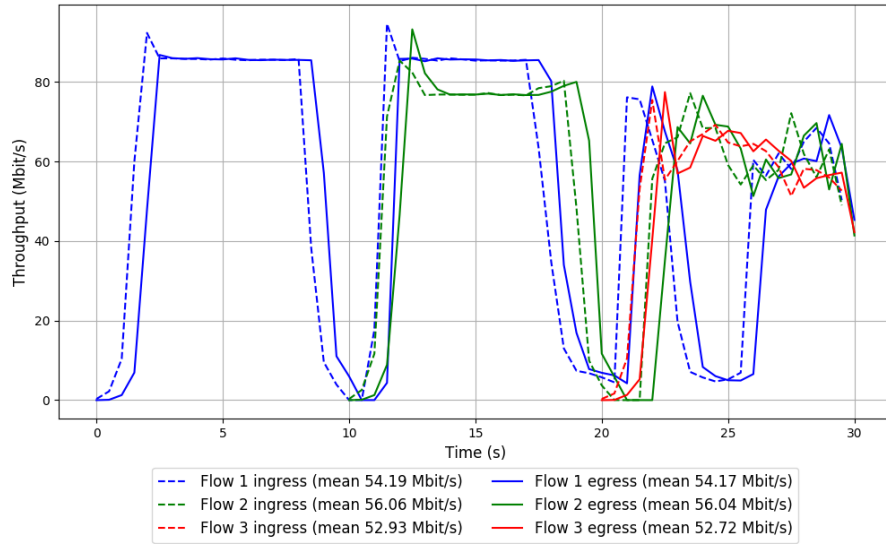
-- Flow 2:

Average throughput: 56.04 Mbit/s
95th percentile per-packet one-way delay: 129.732 ms
Loss rate: 1.02%

-- Flow 3:

Average throughput: 52.72 Mbit/s
95th percentile per-packet one-way delay: 130.093 ms
Loss rate: 2.43%

Run 2: Report of QUIC Cubic — Data Link

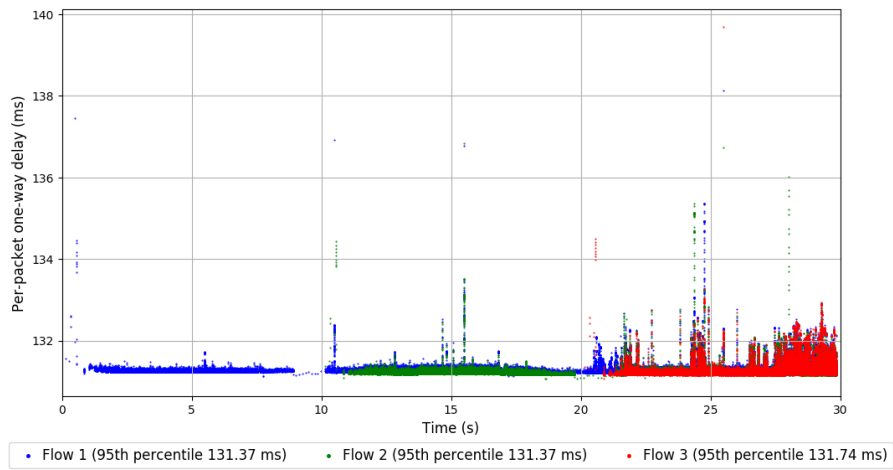
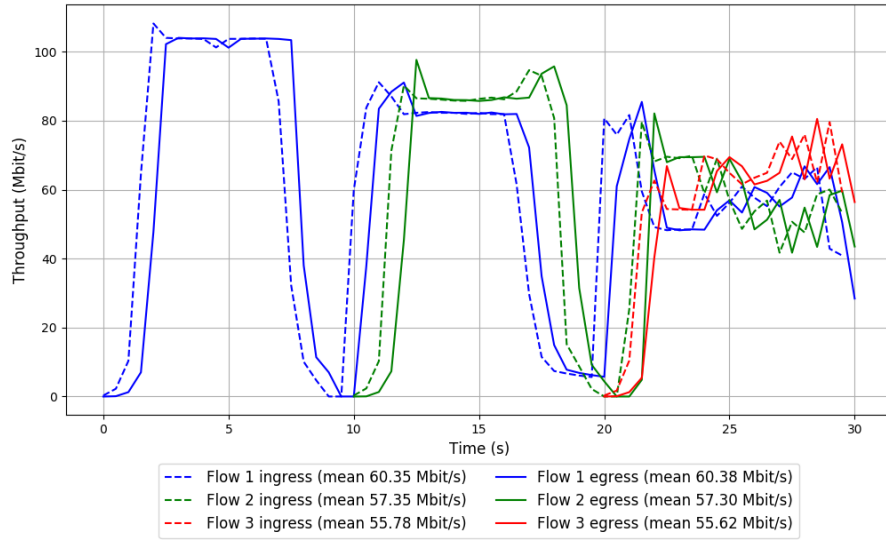


Run 3: Statistics of QUIC Cubic

Start at: 2019-05-30 12:26:08
End at: 2019-05-30 12:26:38
Local clock offset: -0.206 ms
Remote clock offset: -39.873 ms

Below is generated by plot.py at 2019-05-30 14:05:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 116.54 Mbit/s
95th percentile per-packet one-way delay: 131.469 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 60.38 Mbit/s
95th percentile per-packet one-way delay: 131.367 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 57.30 Mbit/s
95th percentile per-packet one-way delay: 131.374 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 55.62 Mbit/s
95th percentile per-packet one-way delay: 131.740 ms
Loss rate: 2.27%

Run 3: Report of QUIC Cubic — Data Link

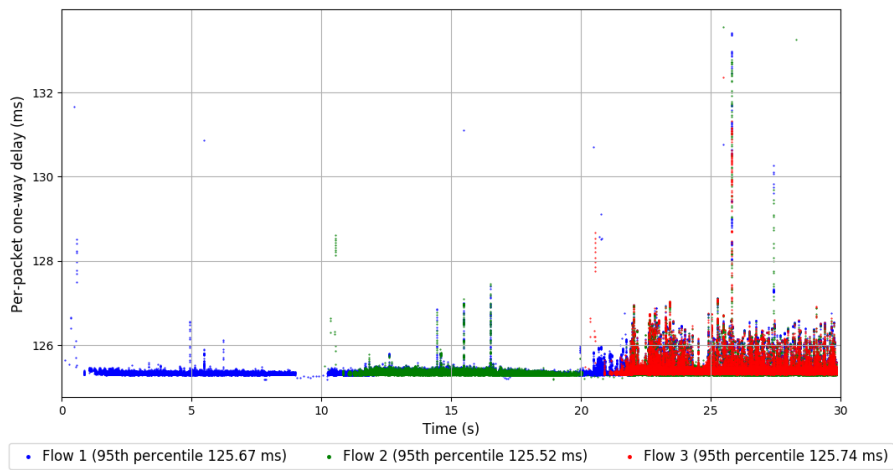
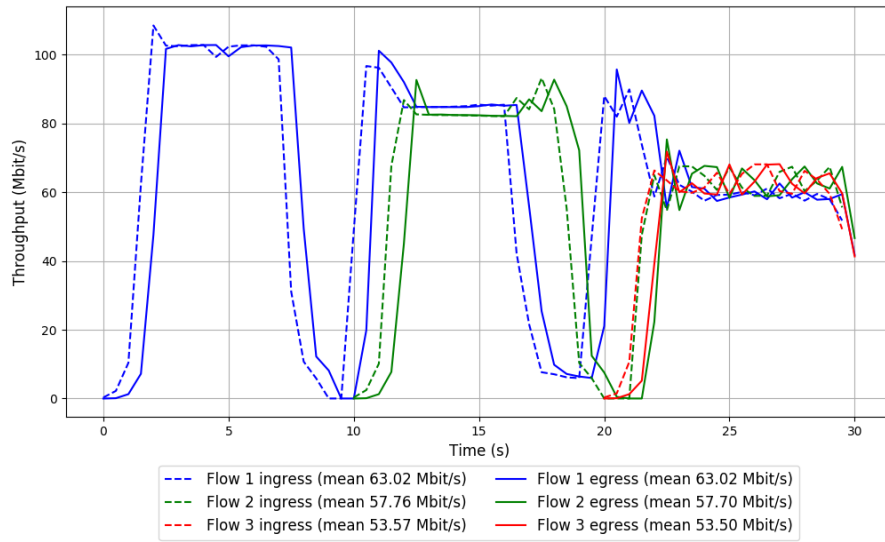


Run 4: Statistics of QUIC Cubic

Start at: 2019-05-30 12:57:26
End at: 2019-05-30 12:57:56
Local clock offset: -1.8 ms
Remote clock offset: -33.866 ms

```
# Below is generated by plot.py at 2019-05-30 14:05:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 118.75 Mbit/s
95th percentile per-packet one-way delay: 125.645 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 63.02 Mbit/s
95th percentile per-packet one-way delay: 125.665 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 57.70 Mbit/s
95th percentile per-packet one-way delay: 125.520 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 53.50 Mbit/s
95th percentile per-packet one-way delay: 125.743 ms
Loss rate: 2.15%
```

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2019-05-30 13:29:04
End at: 2019-05-30 13:29:34
Local clock offset: 1.49 ms
Remote clock offset: -33.439 ms

Below is generated by plot.py at 2019-05-30 14:05:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 117.46 Mbit/s
95th percentile per-packet one-way delay: 128.769 ms
Loss rate: 1.00%

-- Flow 1:

Average throughput: 61.29 Mbit/s
95th percentile per-packet one-way delay: 128.763 ms
Loss rate: 0.50%

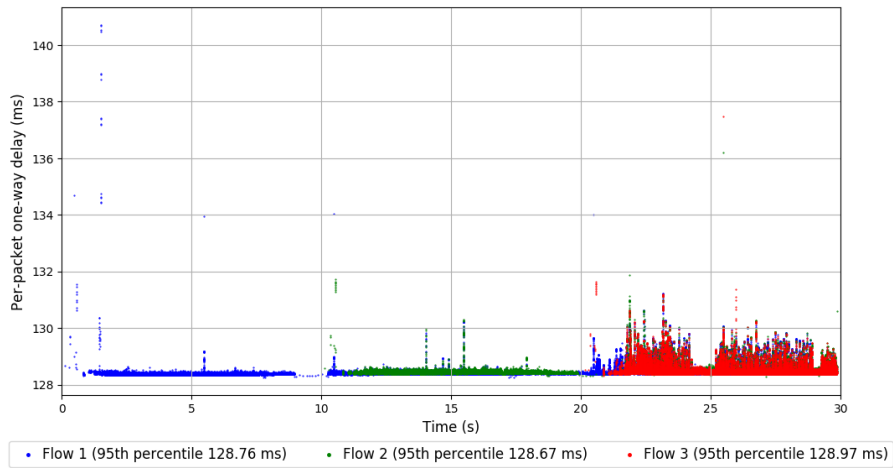
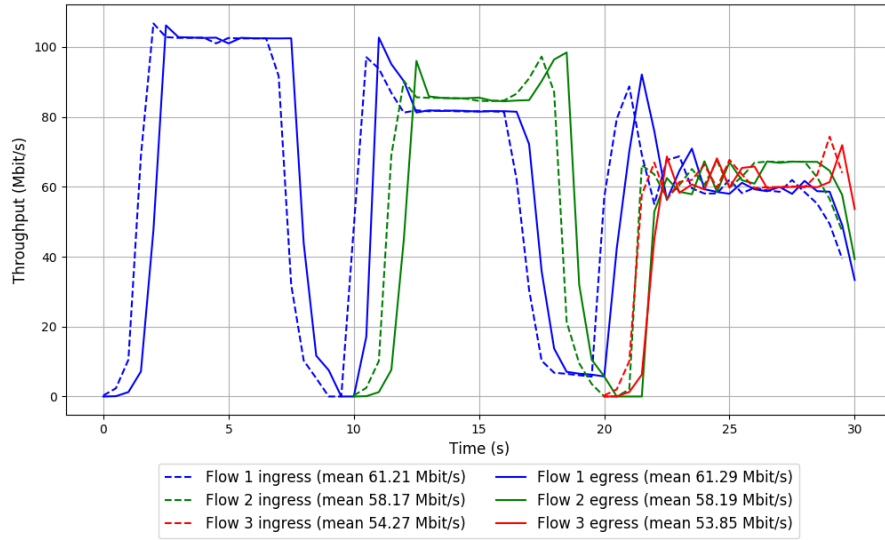
-- Flow 2:

Average throughput: 58.19 Mbit/s
95th percentile per-packet one-way delay: 128.669 ms
Loss rate: 0.96%

-- Flow 3:

Average throughput: 53.85 Mbit/s
95th percentile per-packet one-way delay: 128.970 ms
Loss rate: 2.81%

Run 5: Report of QUIC Cubic — Data Link

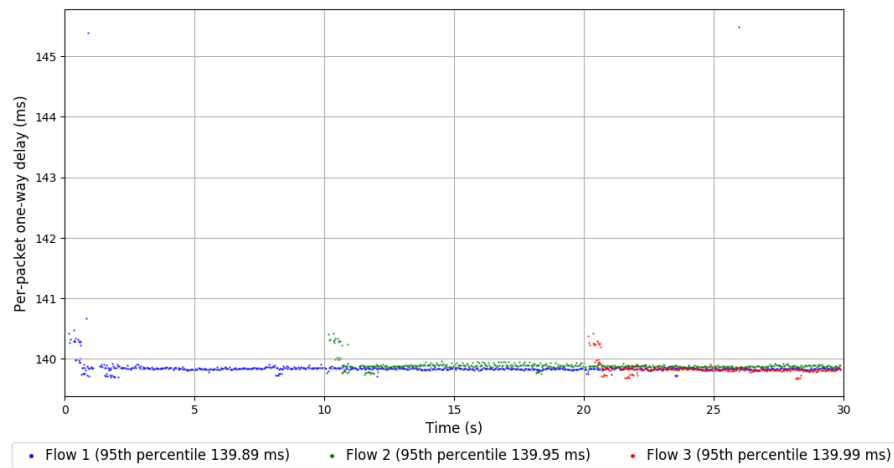
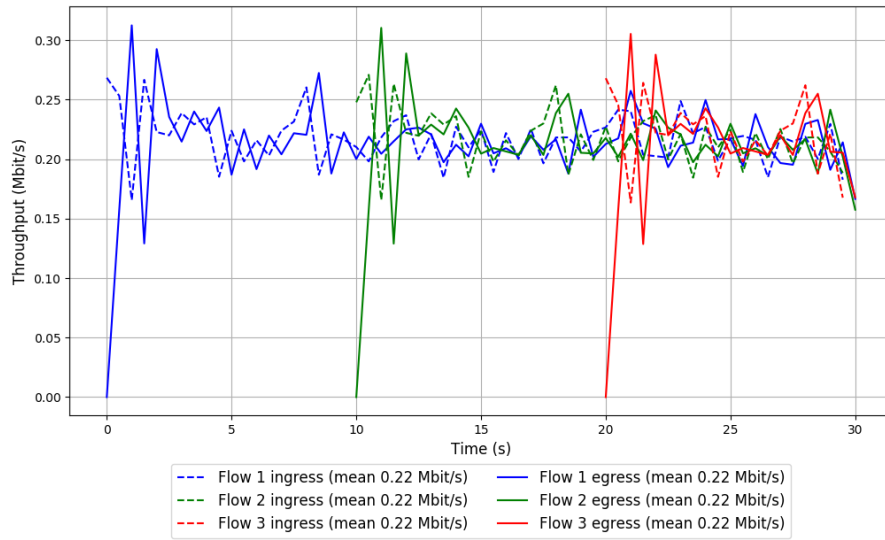


Run 1: Statistics of SCReAM

Start at: 2019-05-30 11:17:54
End at: 2019-05-30 11:18:24
Local clock offset: 1.906 ms
Remote clock offset: -45.291 ms

Below is generated by plot.py at 2019-05-30 14:05:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 139.937 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 139.886 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 139.946 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 139.991 ms
Loss rate: 1.49%

Run 1: Report of SCReAM — Data Link

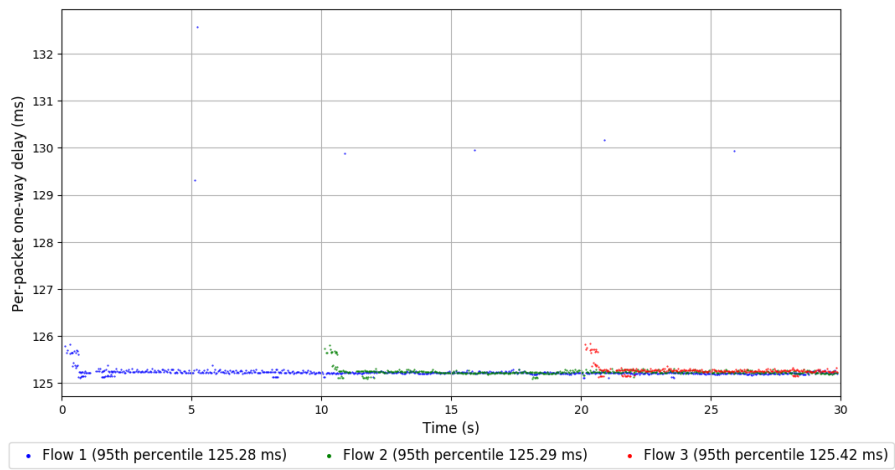
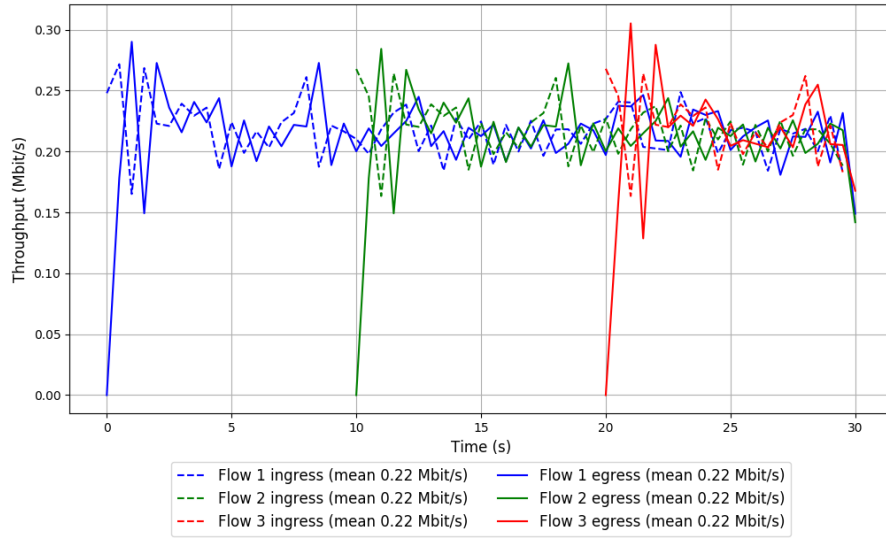


Run 2: Statistics of SCReAM

Start at: 2019-05-30 11:49:04
End at: 2019-05-30 11:49:34
Local clock offset: -1.167 ms
Remote clock offset: -33.817 ms

```
# Below is generated by plot.py at 2019-05-30 14:05:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 125.304 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 125.285 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 125.290 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 125.422 ms
Loss rate: 1.84%
```

Run 2: Report of SCReAM — Data Link

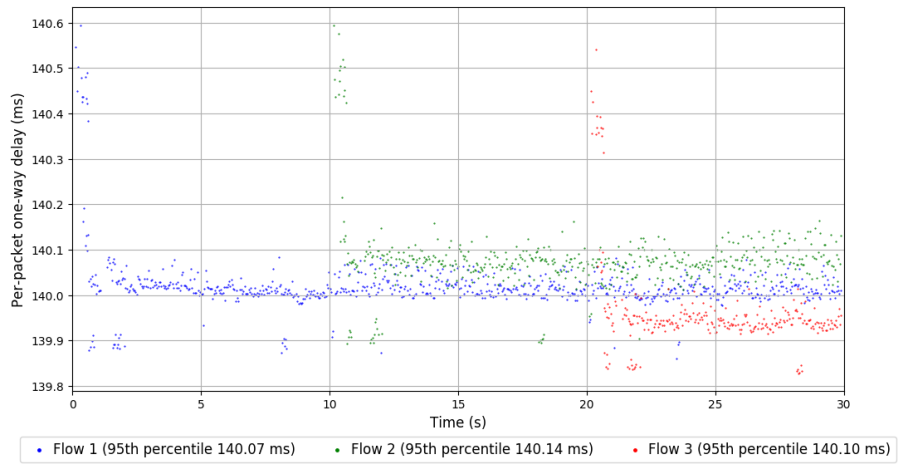
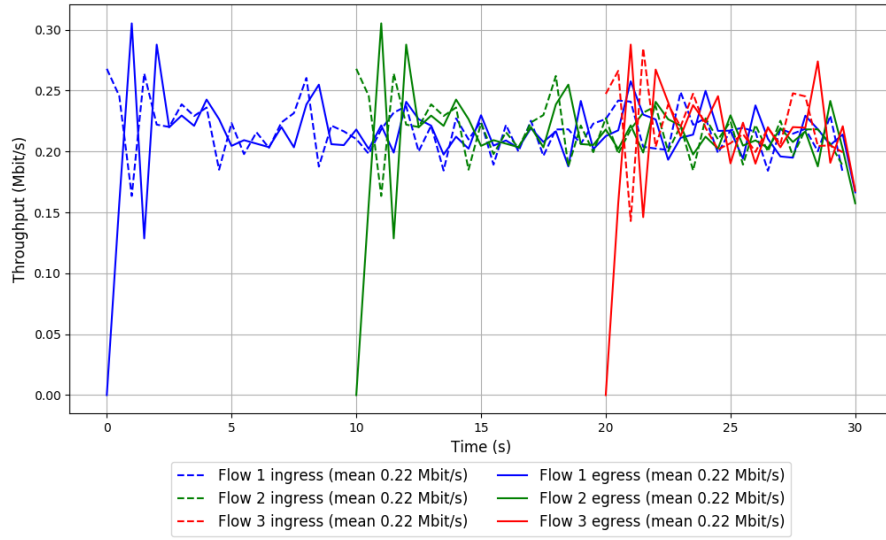


Run 3: Statistics of SCReAM

Start at: 2019-05-30 12:20:26
End at: 2019-05-30 12:20:56
Local clock offset: 4.873 ms
Remote clock offset: -42.803 ms

```
# Below is generated by plot.py at 2019-05-30 14:05:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 140.123 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 140.067 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 140.139 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 140.101 ms
Loss rate: 1.84%
```

Run 3: Report of SCReAM — Data Link

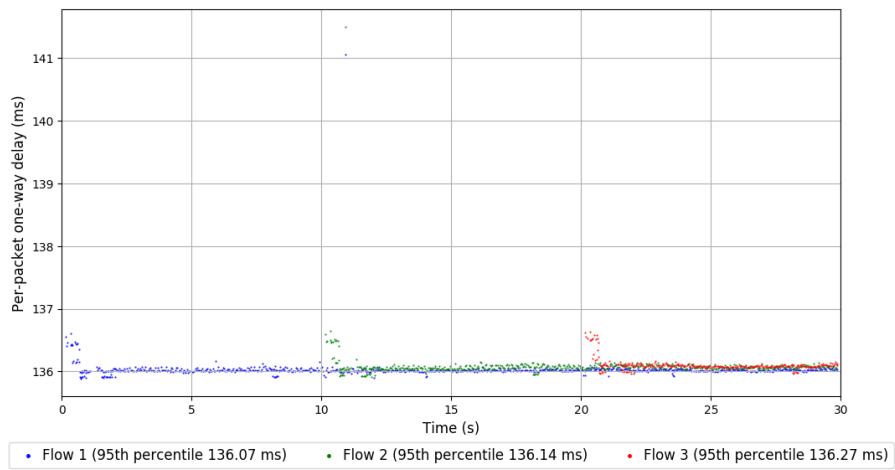
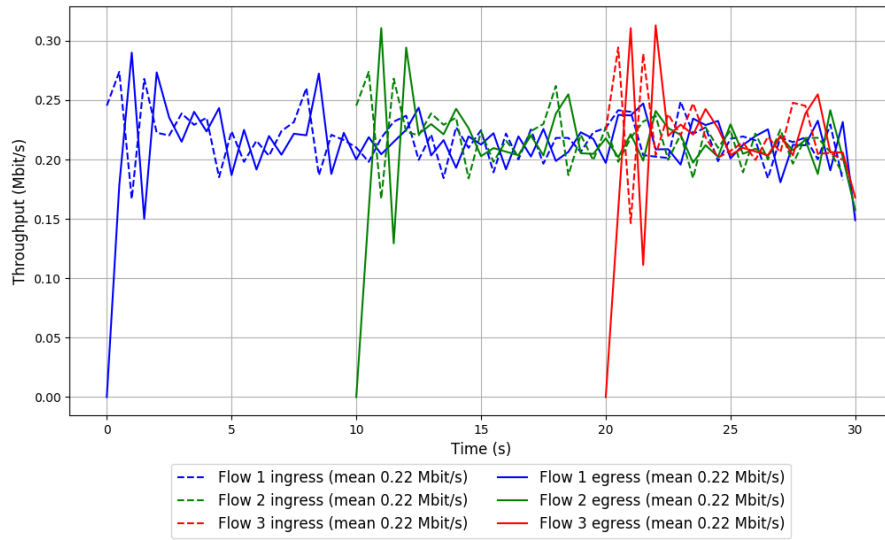


Run 4: Statistics of SCReAM

Start at: 2019-05-30 12:51:45
End at: 2019-05-30 12:52:15
Local clock offset: 2.554 ms
Remote clock offset: -40.304 ms

```
# Below is generated by plot.py at 2019-05-30 14:05:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 136.134 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.071 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.137 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.268 ms
Loss rate: 1.83%
```

Run 4: Report of SCReAM — Data Link

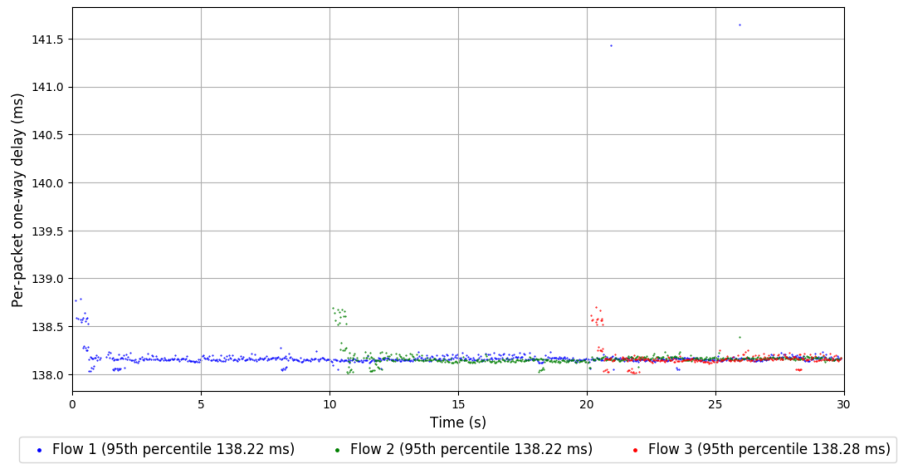
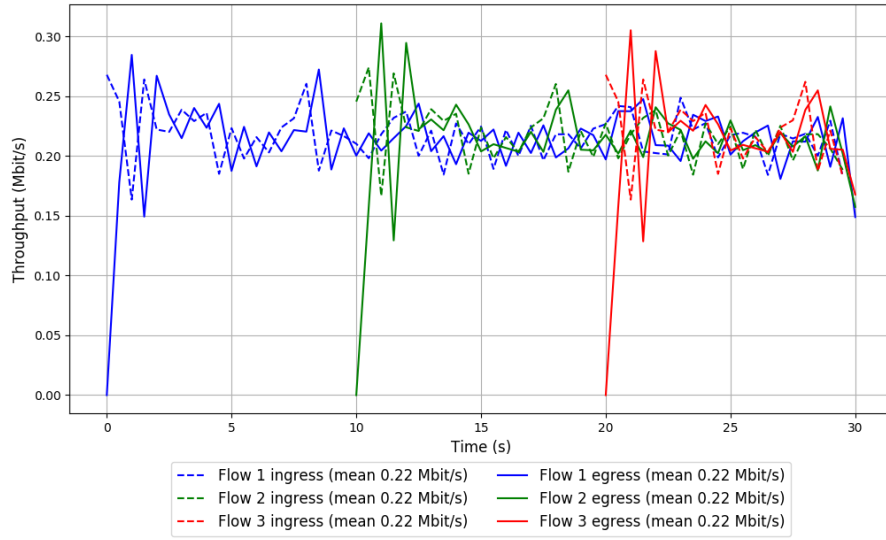


Run 5: Statistics of SCReAM

Start at: 2019-05-30 13:23:20
End at: 2019-05-30 13:23:50
Local clock offset: 2.979 ms
Remote clock offset: -41.764 ms

```
# Below is generated by plot.py at 2019-05-30 14:05:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 138.223 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 138.215 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 138.224 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 138.283 ms
Loss rate: 1.84%
```

Run 5: Report of SCReAM — Data Link

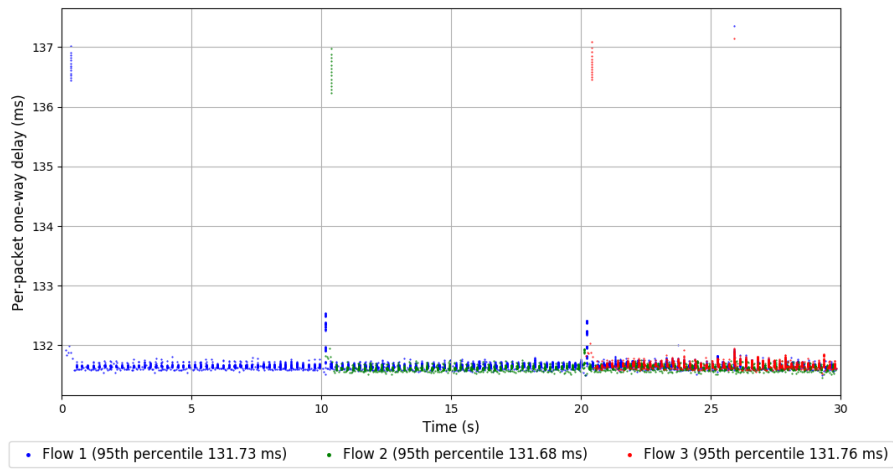
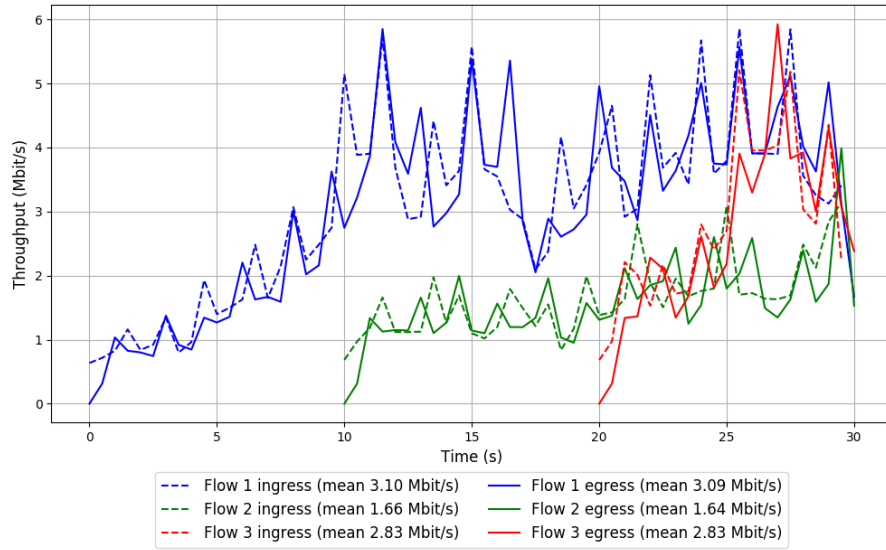


Run 1: Statistics of Sprout

Start at: 2019-05-30 11:04:30
End at: 2019-05-30 11:05:00
Local clock offset: -1.621 ms
Remote clock offset: -40.894 ms

```
# Below is generated by plot.py at 2019-05-30 14:05:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.09 Mbit/s
95th percentile per-packet one-way delay: 131.731 ms
Loss rate: 1.46%
-- Flow 1:
Average throughput: 3.09 Mbit/s
95th percentile per-packet one-way delay: 131.729 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 1.64 Mbit/s
95th percentile per-packet one-way delay: 131.683 ms
Loss rate: 2.45%
-- Flow 3:
Average throughput: 2.83 Mbit/s
95th percentile per-packet one-way delay: 131.759 ms
Loss rate: 2.03%
```

Run 1: Report of Sprout — Data Link

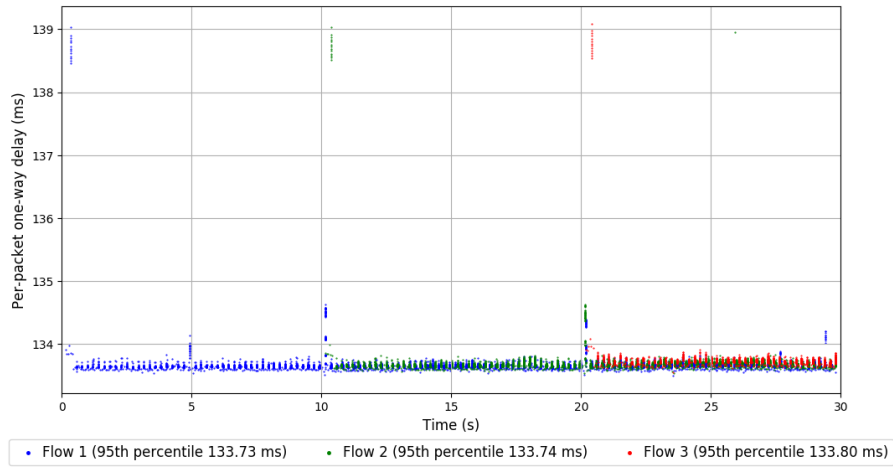
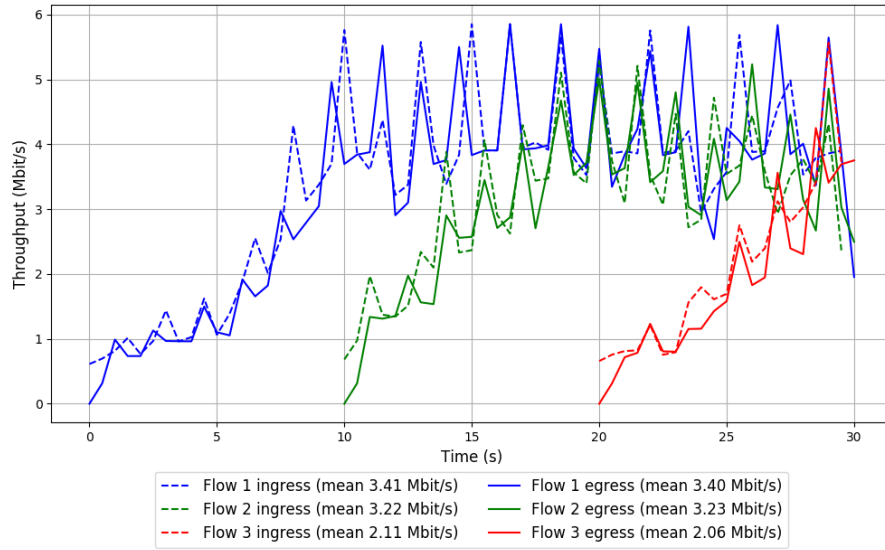


Run 2: Statistics of Sprout

Start at: 2019-05-30 11:35:36
End at: 2019-05-30 11:36:06
Local clock offset: -1.909 ms
Remote clock offset: -42.593 ms

```
# Below is generated by plot.py at 2019-05-30 14:05:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.21 Mbit/s
95th percentile per-packet one-way delay: 133.757 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 3.40 Mbit/s
95th percentile per-packet one-way delay: 133.728 ms
Loss rate: 0.96%
-- Flow 2:
Average throughput: 3.23 Mbit/s
95th percentile per-packet one-way delay: 133.740 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 133.799 ms
Loss rate: 4.47%
```

Run 2: Report of Sprout — Data Link

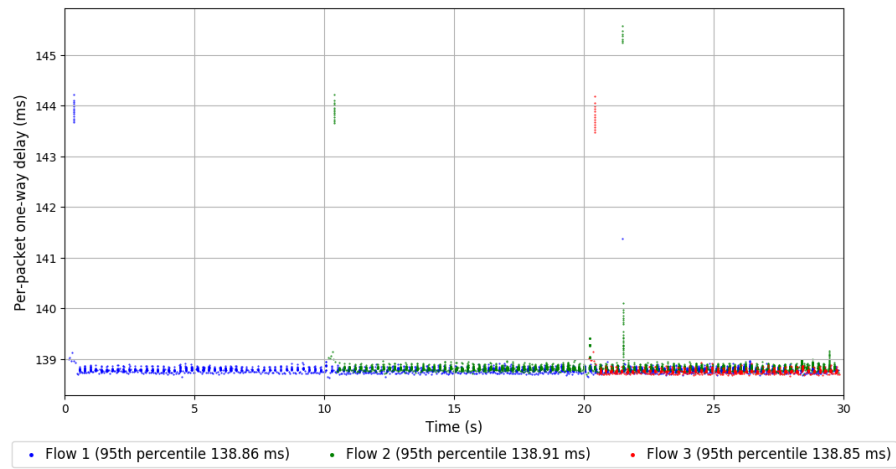
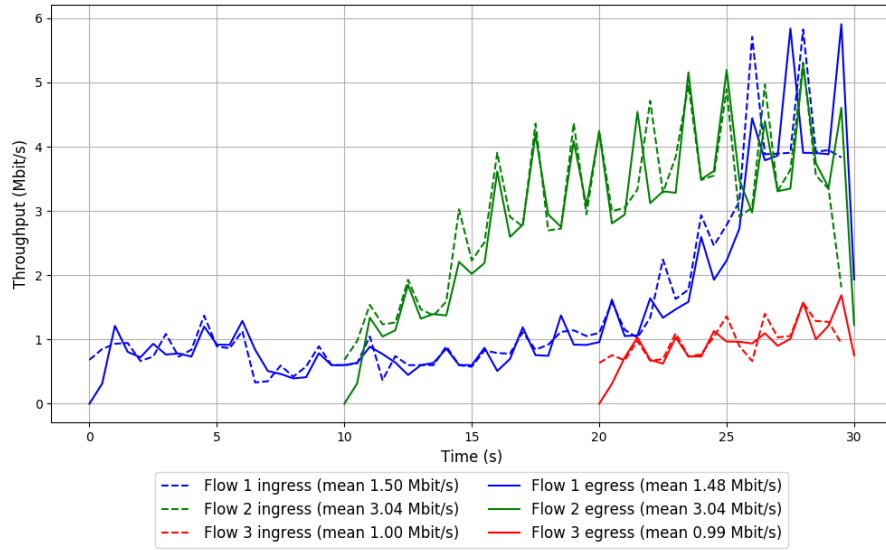


Run 3: Statistics of Sprout

Start at: 2019-05-30 12:06:47
End at: 2019-05-30 12:07:17
Local clock offset: 3.733 ms
Remote clock offset: -42.656 ms

```
# Below is generated by plot.py at 2019-05-30 14:05:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.81 Mbit/s
95th percentile per-packet one-way delay: 138.886 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 138.861 ms
Loss rate: 2.13%
-- Flow 2:
Average throughput: 3.04 Mbit/s
95th percentile per-packet one-way delay: 138.909 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 0.99 Mbit/s
95th percentile per-packet one-way delay: 138.852 ms
Loss rate: 2.10%
```

Run 3: Report of Sprout — Data Link

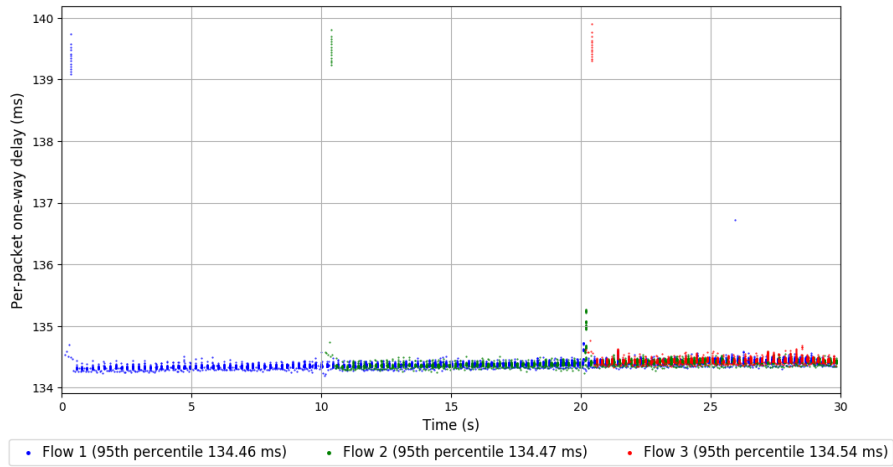
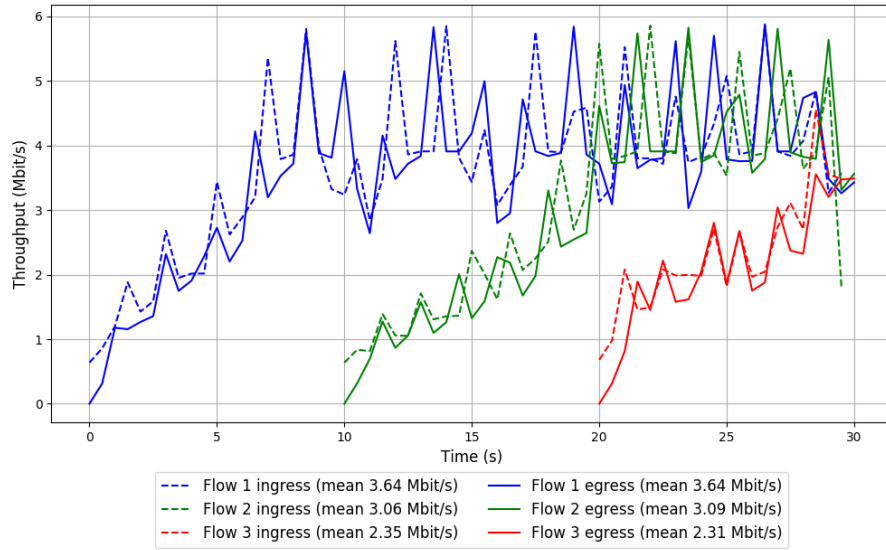


Run 4: Statistics of Sprout

Start at: 2019-05-30 12:38:17
End at: 2019-05-30 12:38:47
Local clock offset: -0.43 ms
Remote clock offset: -43.238 ms

```
# Below is generated by plot.py at 2019-05-30 14:05:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.42 Mbit/s
95th percentile per-packet one-way delay: 134.474 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 3.64 Mbit/s
95th percentile per-packet one-way delay: 134.457 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 3.09 Mbit/s
95th percentile per-packet one-way delay: 134.472 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 134.538 ms
Loss rate: 3.75%
```

Run 4: Report of Sprout — Data Link

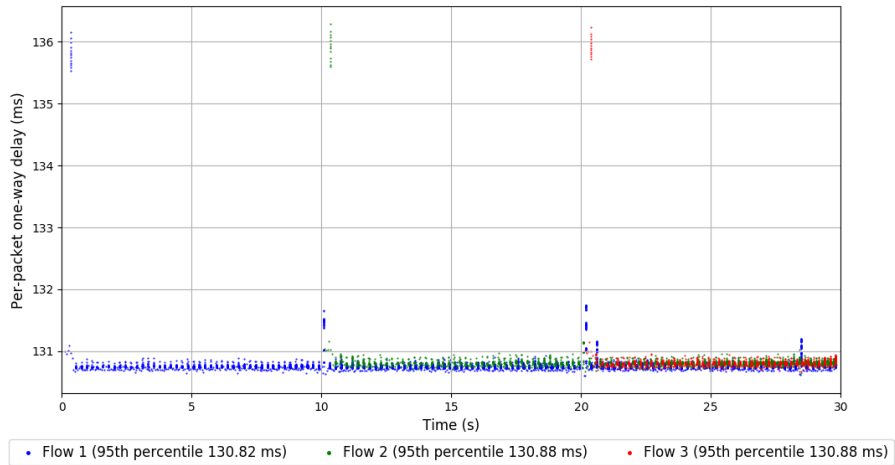
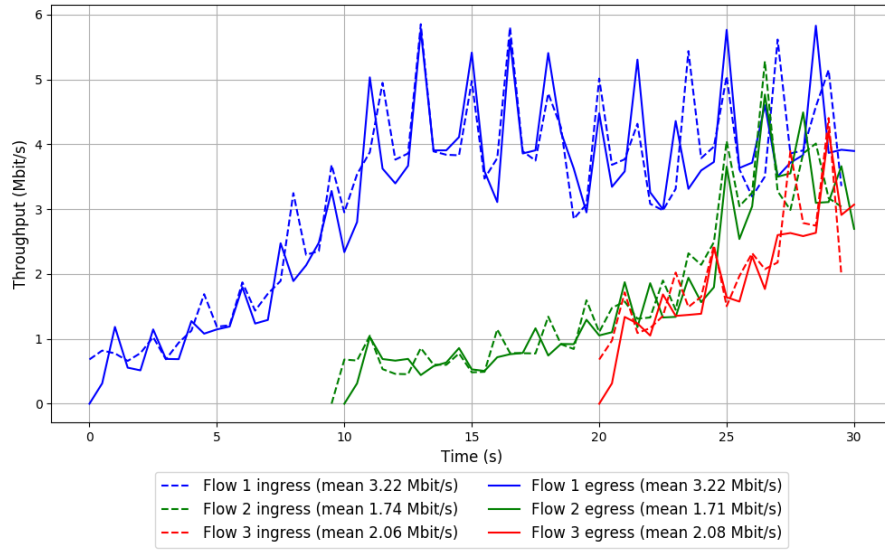


Run 5: Statistics of Sprout

Start at: 2019-05-30 13:09:31
End at: 2019-05-30 13:10:01
Local clock offset: -3.188 ms
Remote clock offset: -40.712 ms

```
# Below is generated by plot.py at 2019-05-30 14:05:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.02 Mbit/s
95th percentile per-packet one-way delay: 130.863 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 3.22 Mbit/s
95th percentile per-packet one-way delay: 130.824 ms
Loss rate: 0.73%
-- Flow 2:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 130.885 ms
Loss rate: 2.20%
-- Flow 3:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 130.883 ms
Loss rate: 1.02%
```

Run 5: Report of Sprout — Data Link

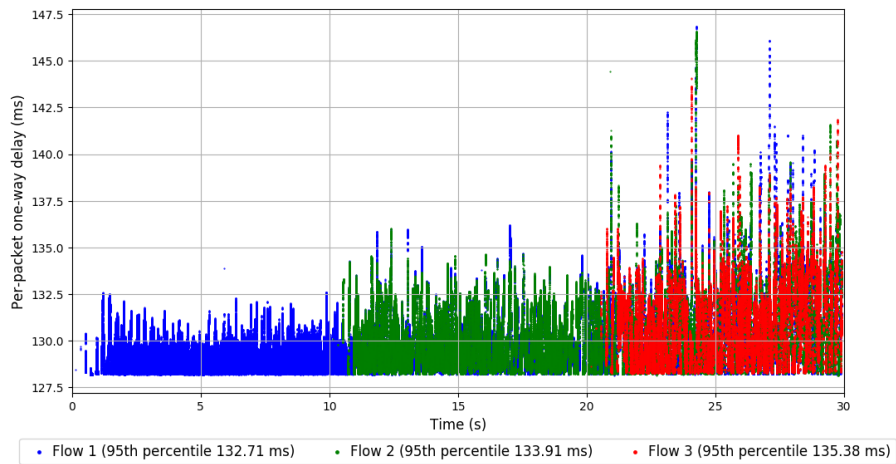
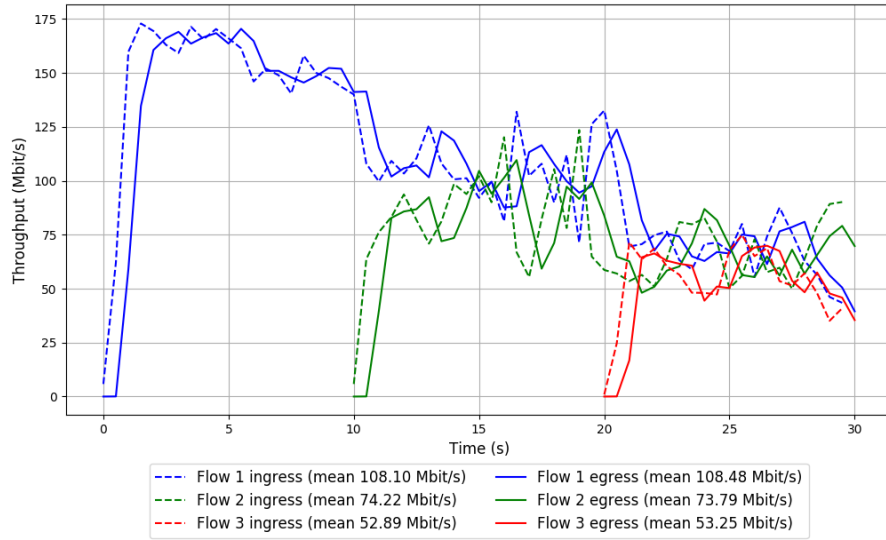


Run 1: Statistics of TaoVA-100x

Start at: 2019-05-30 11:10:06
End at: 2019-05-30 11:10:36
Local clock offset: -2.042 ms
Remote clock offset: -37.797 ms

```
# Below is generated by plot.py at 2019-05-30 14:06:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 174.90 Mbit/s
95th percentile per-packet one-way delay: 133.448 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 108.48 Mbit/s
95th percentile per-packet one-way delay: 132.711 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 73.79 Mbit/s
95th percentile per-packet one-way delay: 133.906 ms
Loss rate: 1.50%
-- Flow 3:
Average throughput: 53.25 Mbit/s
95th percentile per-packet one-way delay: 135.376 ms
Loss rate: 1.29%
```

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



Run 2: Statistics of TaoVA-100x

Start at: 2019-05-30 11:41:13
End at: 2019-05-30 11:41:43
Local clock offset: 3.639 ms
Remote clock offset: -36.073 ms

Below is generated by plot.py at 2019-05-30 14:06:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 171.70 Mbit/s
95th percentile per-packet one-way delay: 137.432 ms
Loss rate: 0.69%

-- Flow 1:

Average throughput: 99.44 Mbit/s
95th percentile per-packet one-way delay: 136.714 ms
Loss rate: 0.29%

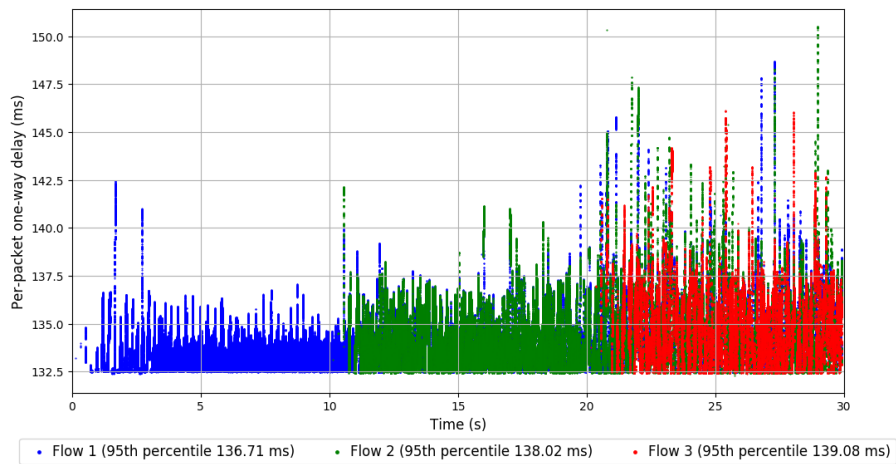
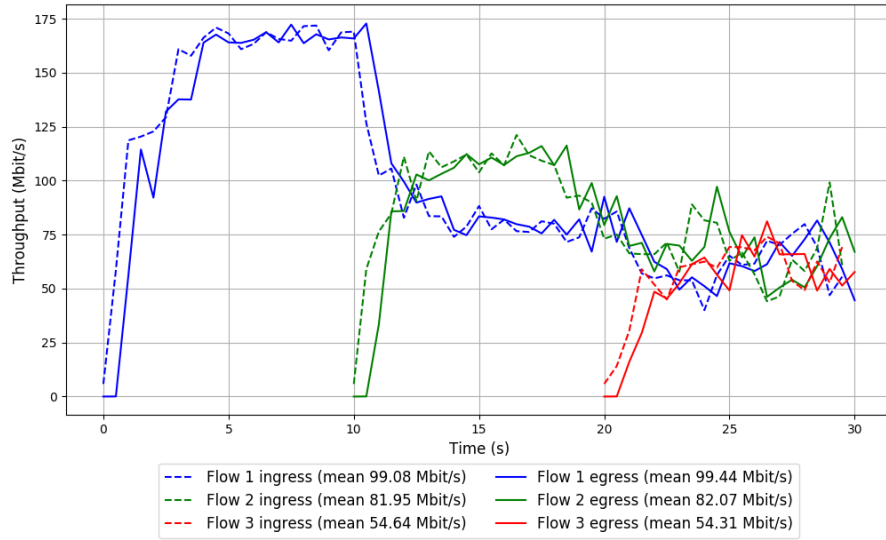
-- Flow 2:

Average throughput: 82.07 Mbit/s
95th percentile per-packet one-way delay: 138.024 ms
Loss rate: 0.76%

-- Flow 3:

Average throughput: 54.31 Mbit/s
95th percentile per-packet one-way delay: 139.083 ms
Loss rate: 2.67%

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



Run 3: Statistics of TaoVA-100x

Start at: 2019-05-30 12:12:24
End at: 2019-05-30 12:12:54
Local clock offset: 3.628 ms
Remote clock offset: -36.261 ms

Below is generated by plot.py at 2019-05-30 14:07:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 163.96 Mbit/s
95th percentile per-packet one-way delay: 137.656 ms
Loss rate: 0.80%

-- Flow 1:

Average throughput: 103.67 Mbit/s
95th percentile per-packet one-way delay: 137.037 ms
Loss rate: 0.38%

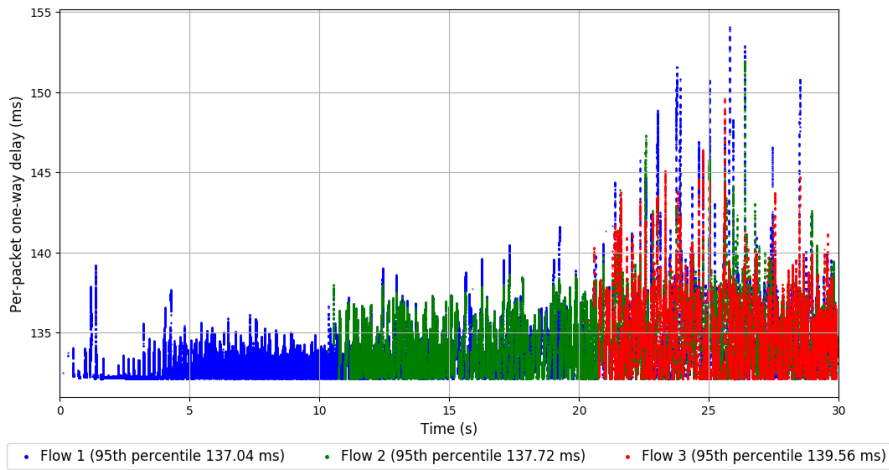
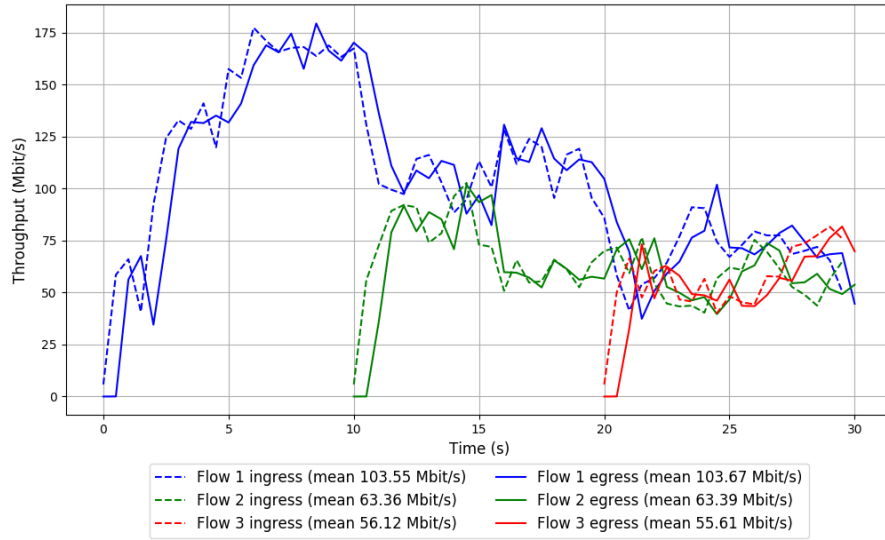
-- Flow 2:

Average throughput: 63.39 Mbit/s
95th percentile per-packet one-way delay: 137.717 ms
Loss rate: 0.95%

-- Flow 3:

Average throughput: 55.61 Mbit/s
95th percentile per-packet one-way delay: 139.556 ms
Loss rate: 2.84%

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



Run 4: Statistics of TaoVA-100x

Start at: 2019-05-30 12:43:55
End at: 2019-05-30 12:44:25
Local clock offset: 4.316 ms
Remote clock offset: -40.498 ms

Below is generated by plot.py at 2019-05-30 14:07:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 170.52 Mbit/s
95th percentile per-packet one-way delay: 142.817 ms
Loss rate: 0.64%

-- Flow 1:

Average throughput: 99.80 Mbit/s
95th percentile per-packet one-way delay: 142.024 ms
Loss rate: 0.51%

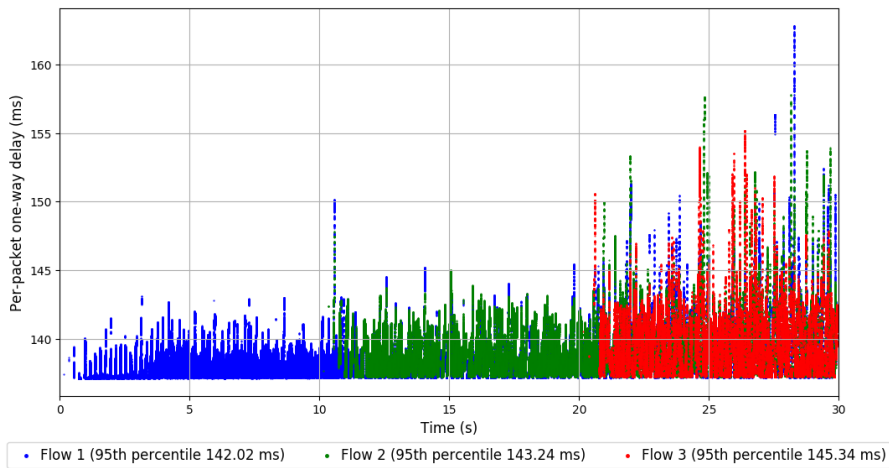
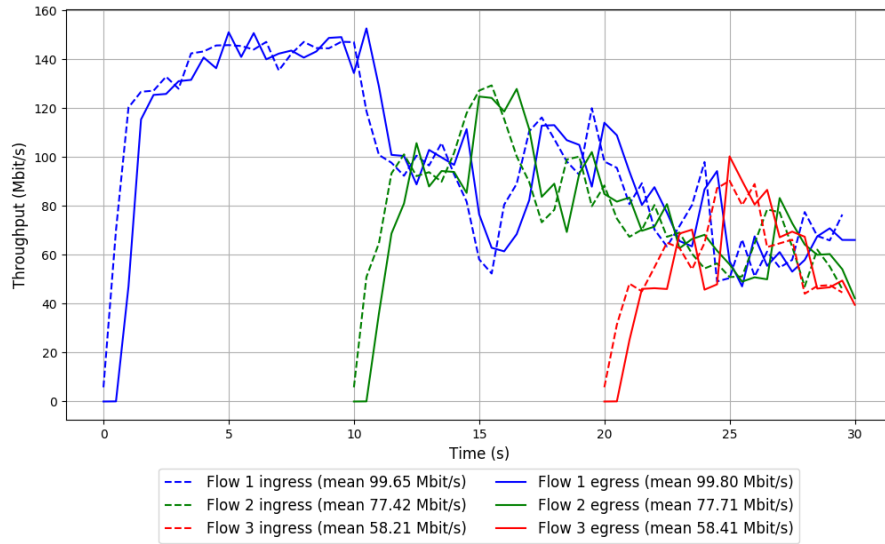
-- Flow 2:

Average throughput: 77.71 Mbit/s
95th percentile per-packet one-way delay: 143.236 ms
Loss rate: 0.59%

-- Flow 3:

Average throughput: 58.41 Mbit/s
95th percentile per-packet one-way delay: 145.335 ms
Loss rate: 1.46%

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

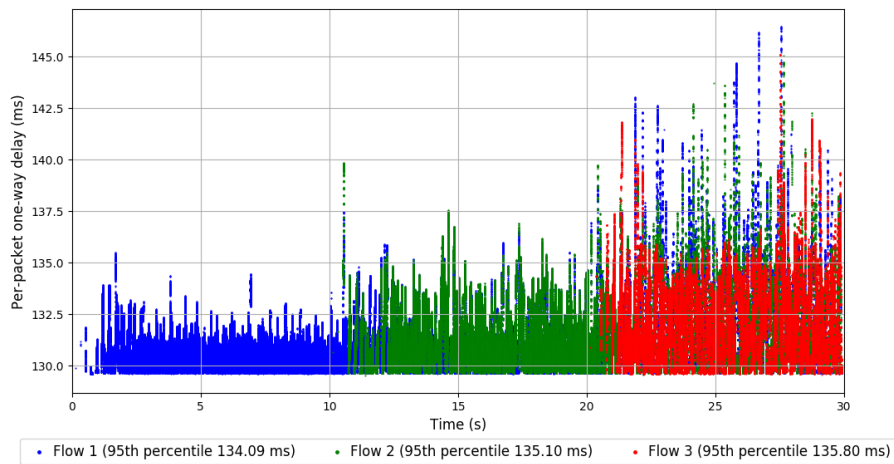
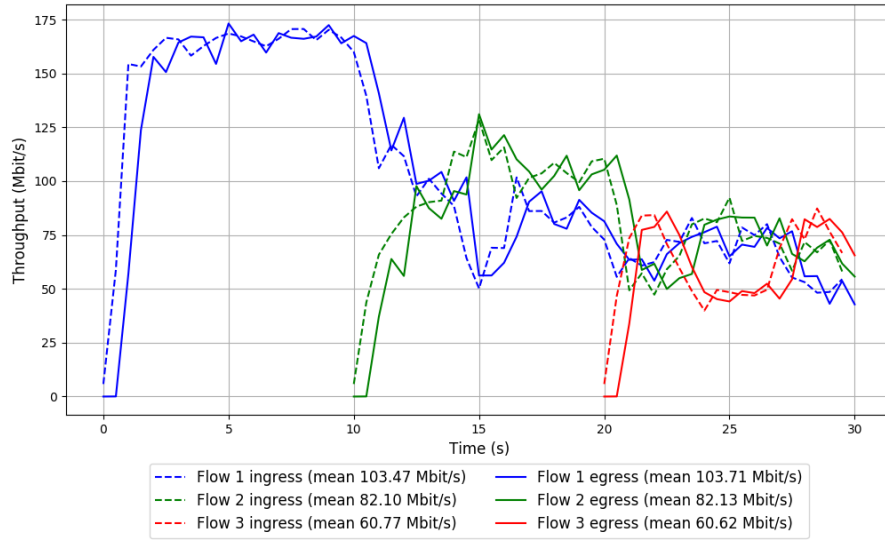


Run 5: Statistics of TaoVA-100x

Start at: 2019-05-30 13:15:07
End at: 2019-05-30 13:15:37
Local clock offset: 1.971 ms
Remote clock offset: -34.406 ms

```
# Below is generated by plot.py at 2019-05-30 14:08:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 178.10 Mbit/s
95th percentile per-packet one-way delay: 134.736 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 103.71 Mbit/s
95th percentile per-packet one-way delay: 134.093 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 82.13 Mbit/s
95th percentile per-packet one-way delay: 135.103 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 60.62 Mbit/s
95th percentile per-packet one-way delay: 135.801 ms
Loss rate: 2.21%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2019-05-30 11:05:47
End at: 2019-05-30 11:06:17
Local clock offset: 2.94 ms
Remote clock offset: -33.415 ms

Below is generated by plot.py at 2019-05-30 14:08:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 236.31 Mbit/s
95th percentile per-packet one-way delay: 135.478 ms
Loss rate: 0.68%

-- Flow 1:

Average throughput: 158.14 Mbit/s
95th percentile per-packet one-way delay: 132.953 ms
Loss rate: 0.34%

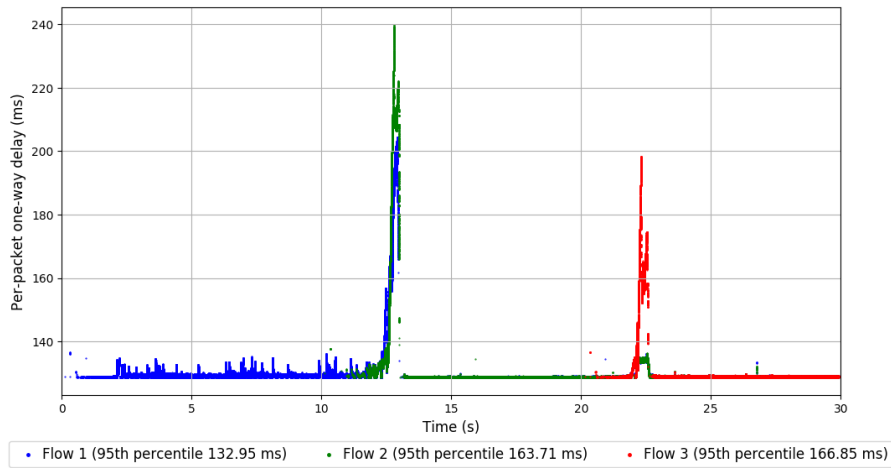
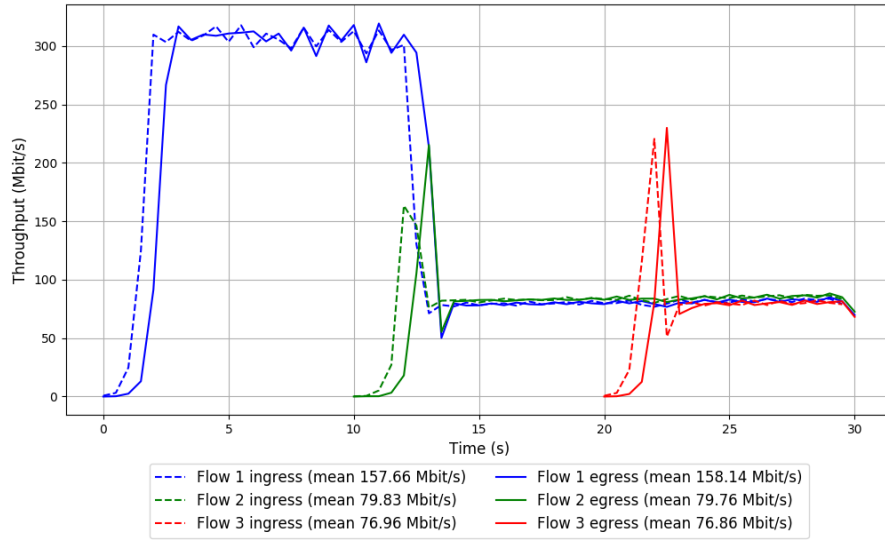
-- Flow 2:

Average throughput: 79.76 Mbit/s
95th percentile per-packet one-way delay: 163.711 ms
Loss rate: 1.05%

-- Flow 3:

Average throughput: 76.86 Mbit/s
95th percentile per-packet one-way delay: 166.850 ms
Loss rate: 2.04%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2019-05-30 11:36:53
End at: 2019-05-30 11:37:23
Local clock offset: 4.102 ms
Remote clock offset: -41.992 ms

Below is generated by plot.py at 2019-05-30 14:08:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 306.71 Mbit/s
95th percentile per-packet one-way delay: 144.690 ms
Loss rate: 0.66%

-- Flow 1:

Average throughput: 181.06 Mbit/s
95th percentile per-packet one-way delay: 144.011 ms
Loss rate: 0.28%

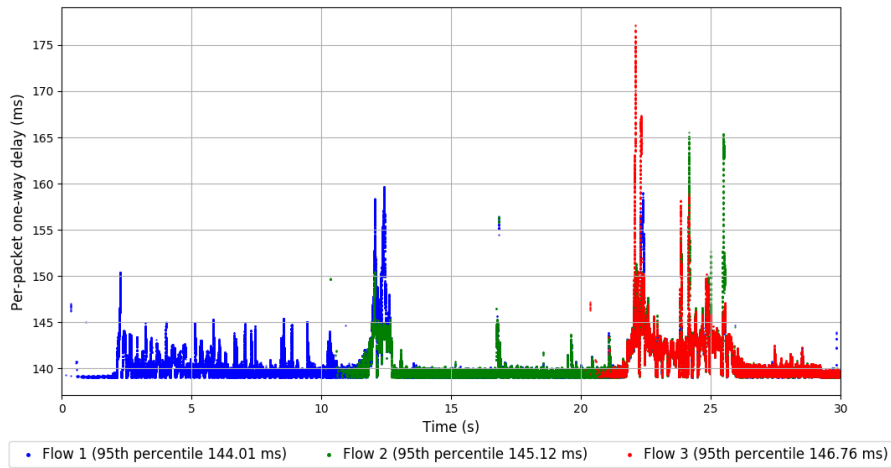
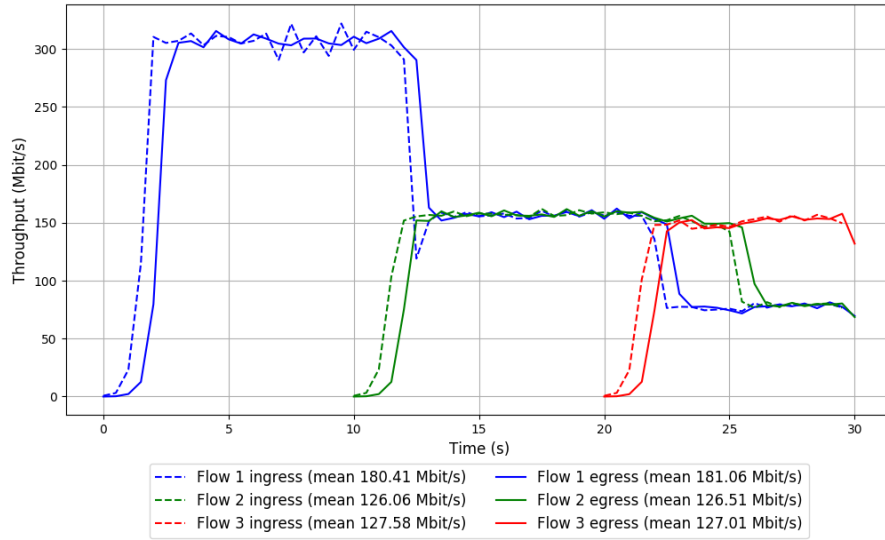
-- Flow 2:

Average throughput: 126.51 Mbit/s
95th percentile per-packet one-way delay: 145.123 ms
Loss rate: 0.61%

-- Flow 3:

Average throughput: 127.01 Mbit/s
95th percentile per-packet one-way delay: 146.758 ms
Loss rate: 2.35%

Run 2: Report of TCP Vegas — Data Link

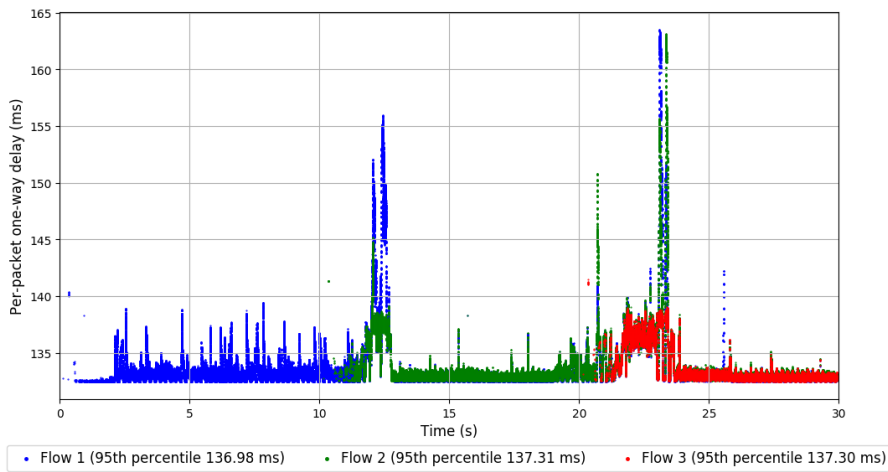
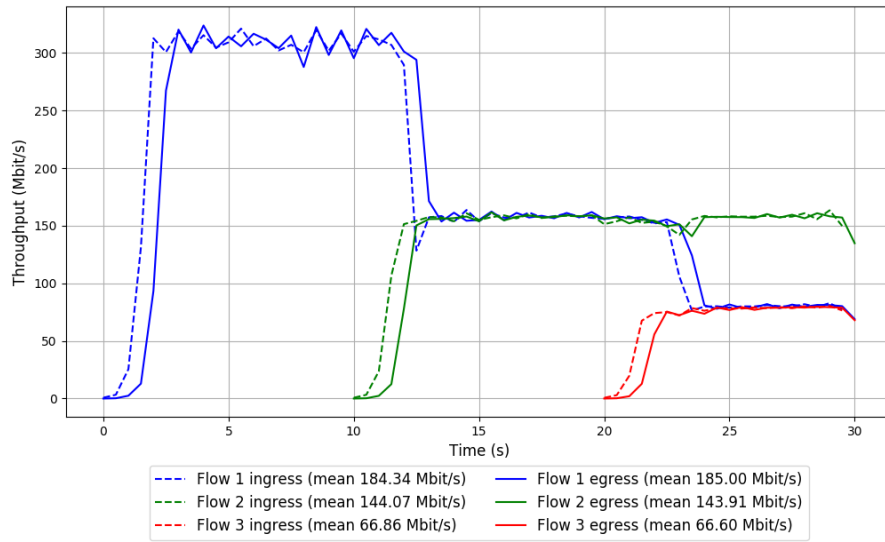


Run 3: Statistics of TCP Vegas

Start at: 2019-05-30 12:08:04
End at: 2019-05-30 12:08:34
Local clock offset: -0.85 ms
Remote clock offset: -41.007 ms

```
# Below is generated by plot.py at 2019-05-30 14:08:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 302.43 Mbit/s
95th percentile per-packet one-way delay: 137.166 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 185.00 Mbit/s
95th percentile per-packet one-way delay: 136.976 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 143.91 Mbit/s
95th percentile per-packet one-way delay: 137.314 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 66.60 Mbit/s
95th percentile per-packet one-way delay: 137.296 ms
Loss rate: 2.30%
```

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2019-05-30 12:39:34
End at: 2019-05-30 12:40:04
Local clock offset: -0.021 ms
Remote clock offset: -32.935 ms

Below is generated by plot.py at 2019-05-30 14:10:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 329.28 Mbit/s
95th percentile per-packet one-way delay: 129.943 ms
Loss rate: 0.60%

-- Flow 1:

Average throughput: 265.00 Mbit/s
95th percentile per-packet one-way delay: 130.421 ms
Loss rate: 0.38%

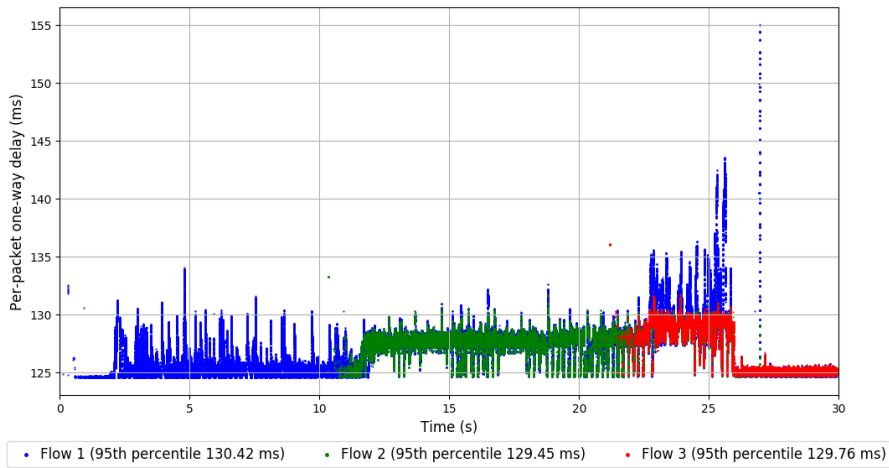
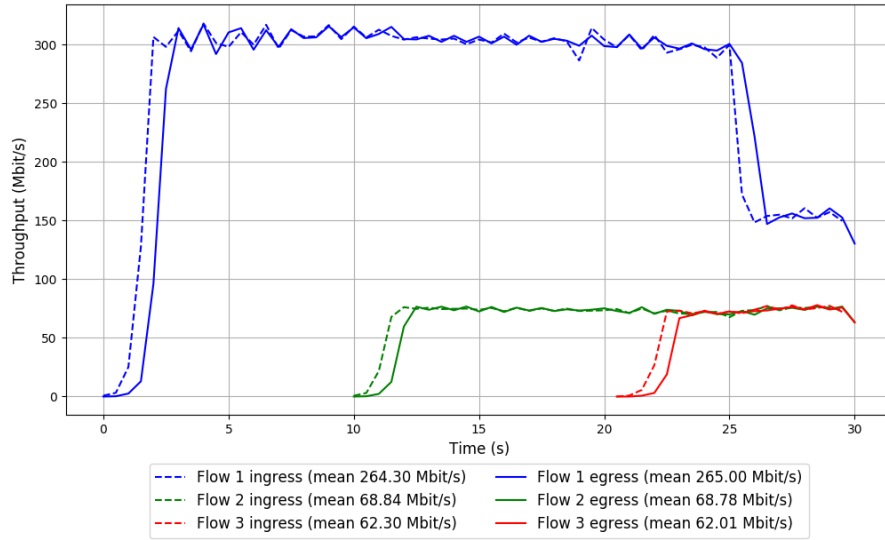
-- Flow 2:

Average throughput: 68.78 Mbit/s
95th percentile per-packet one-way delay: 129.452 ms
Loss rate: 1.06%

-- Flow 3:

Average throughput: 62.01 Mbit/s
95th percentile per-packet one-way delay: 129.761 ms
Loss rate: 2.57%

Run 4: Report of TCP Vegas — Data Link

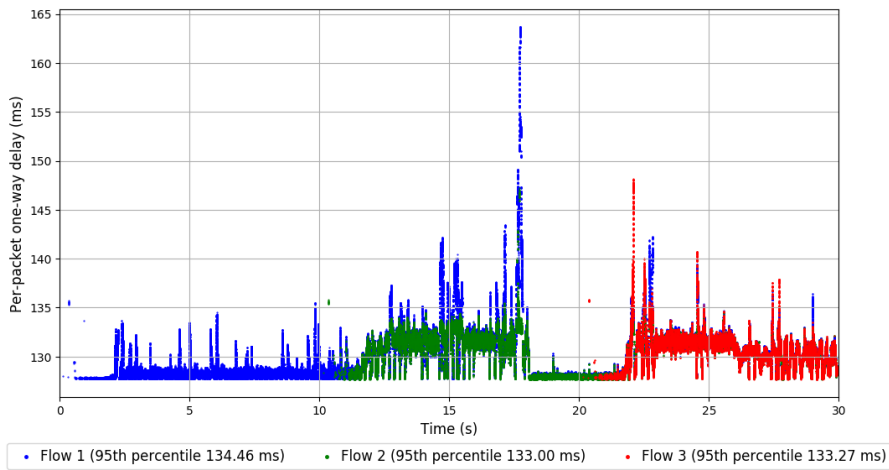
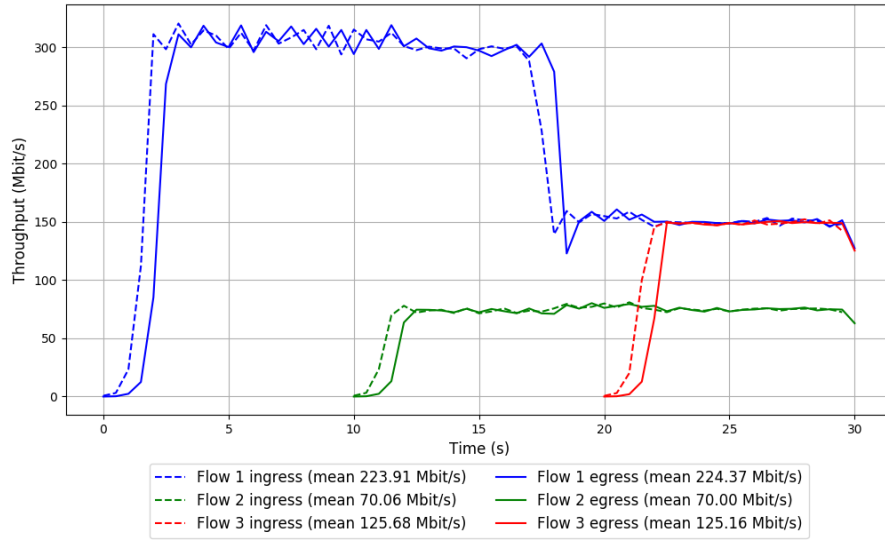


Run 5: Statistics of TCP Vegas

Start at: 2019-05-30 13:10:48
End at: 2019-05-30 13:11:18
Local clock offset: -2.974 ms
Remote clock offset: -37.475 ms

```
# Below is generated by plot.py at 2019-05-30 14:10:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 311.86 Mbit/s
95th percentile per-packet one-way delay: 133.719 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 224.37 Mbit/s
95th percentile per-packet one-way delay: 134.460 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 70.00 Mbit/s
95th percentile per-packet one-way delay: 133.001 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 125.16 Mbit/s
95th percentile per-packet one-way delay: 133.267 ms
Loss rate: 2.34%
```

Run 5: Report of TCP Vegas — Data Link

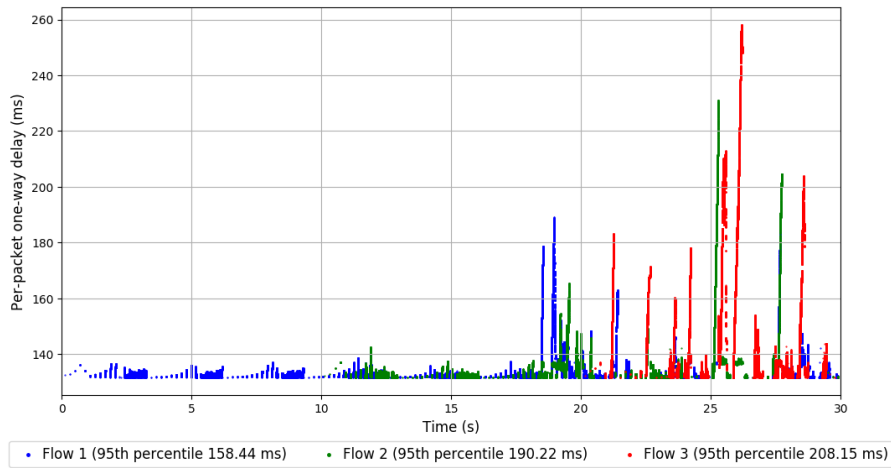
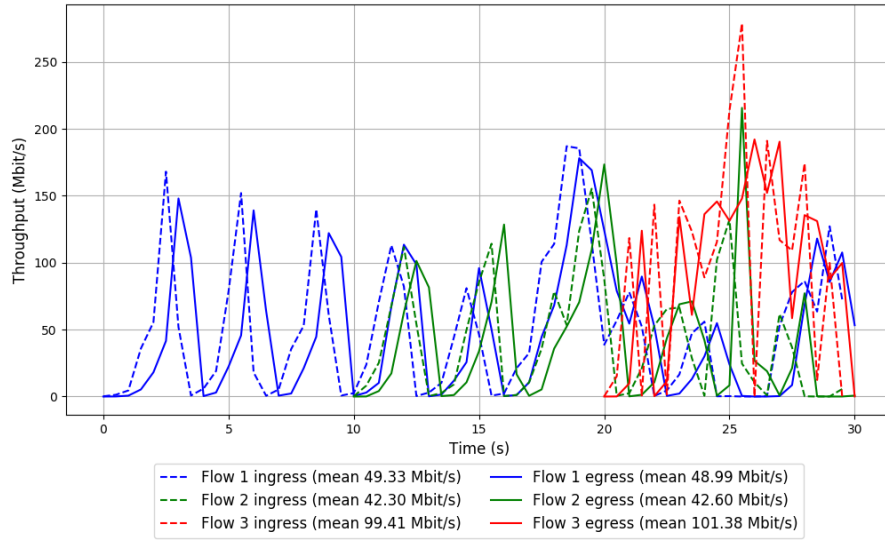


Run 1: Statistics of Verus

Start at: 2019-05-30 10:53:58
End at: 2019-05-30 10:54:28
Local clock offset: 3.244 ms
Remote clock offset: -36.177 ms

```
# Below is generated by plot.py at 2019-05-30 14:10:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 110.01 Mbit/s
95th percentile per-packet one-way delay: 189.722 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 48.99 Mbit/s
95th percentile per-packet one-way delay: 158.439 ms
Loss rate: 1.32%
-- Flow 2:
Average throughput: 42.60 Mbit/s
95th percentile per-packet one-way delay: 190.222 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 101.38 Mbit/s
95th percentile per-packet one-way delay: 208.153 ms
Loss rate: 0.02%
```

Run 1: Report of Verus — Data Link

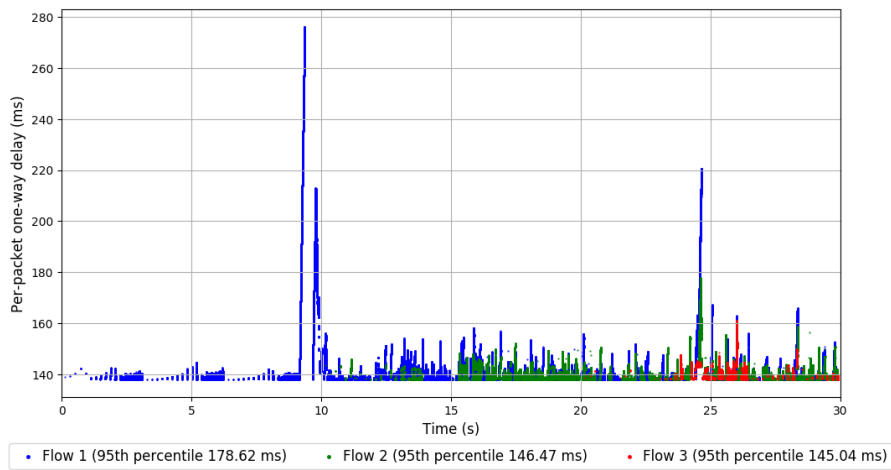
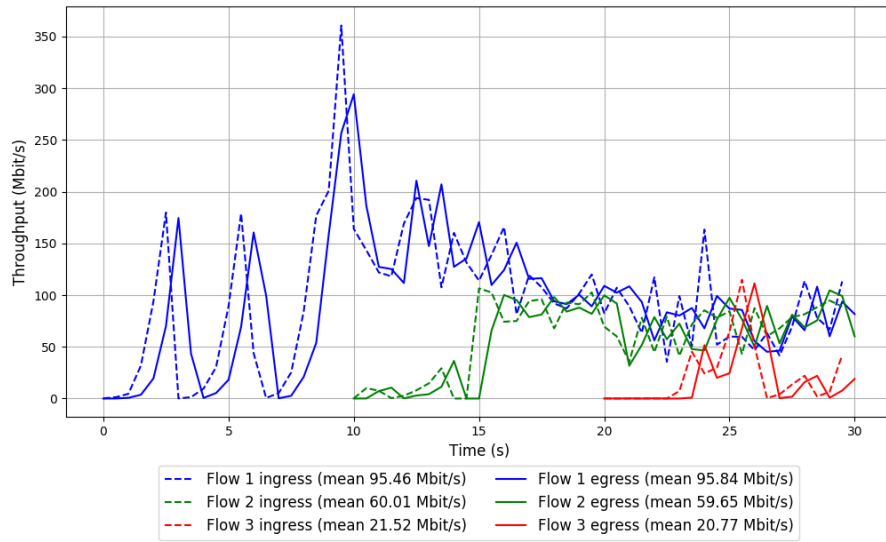


Run 2: Statistics of Verus

Start at: 2019-05-30 11:24:58
End at: 2019-05-30 11:25:28
Local clock offset: 2.844 ms
Remote clock offset: -42.536 ms

```
# Below is generated by plot.py at 2019-05-30 14:10:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 141.94 Mbit/s
95th percentile per-packet one-way delay: 163.286 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 95.84 Mbit/s
95th percentile per-packet one-way delay: 178.616 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 59.65 Mbit/s
95th percentile per-packet one-way delay: 146.467 ms
Loss rate: 1.59%
-- Flow 3:
Average throughput: 20.77 Mbit/s
95th percentile per-packet one-way delay: 145.040 ms
Loss rate: 5.36%
```

Run 2: Report of Verus — Data Link

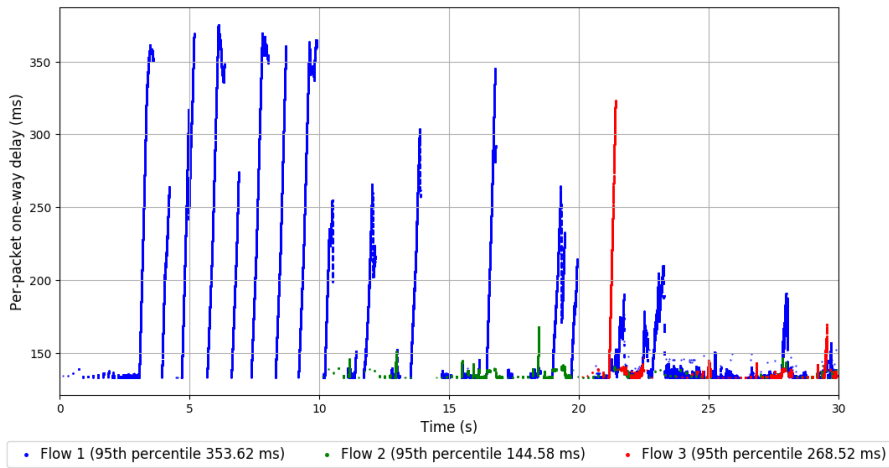
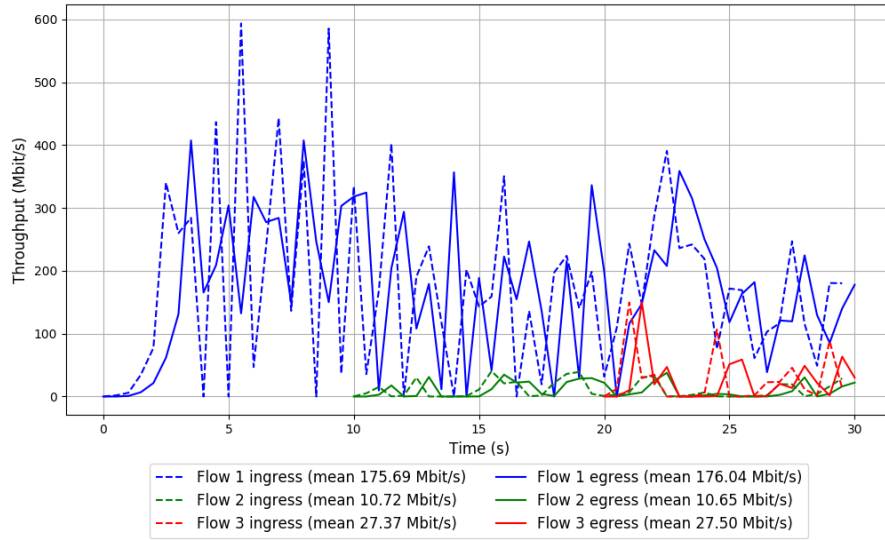


Run 3: Statistics of Verus

Start at: 2019-05-30 11:56:10
End at: 2019-05-30 11:56:40
Local clock offset: 4.667 ms
Remote clock offset: -36.404 ms

```
# Below is generated by plot.py at 2019-05-30 14:10:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 192.14 Mbit/s
95th percentile per-packet one-way delay: 352.278 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 176.04 Mbit/s
95th percentile per-packet one-way delay: 353.618 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 10.65 Mbit/s
95th percentile per-packet one-way delay: 144.577 ms
Loss rate: 1.61%
-- Flow 3:
Average throughput: 27.50 Mbit/s
95th percentile per-packet one-way delay: 268.521 ms
Loss rate: 1.49%
```

Run 3: Report of Verus — Data Link

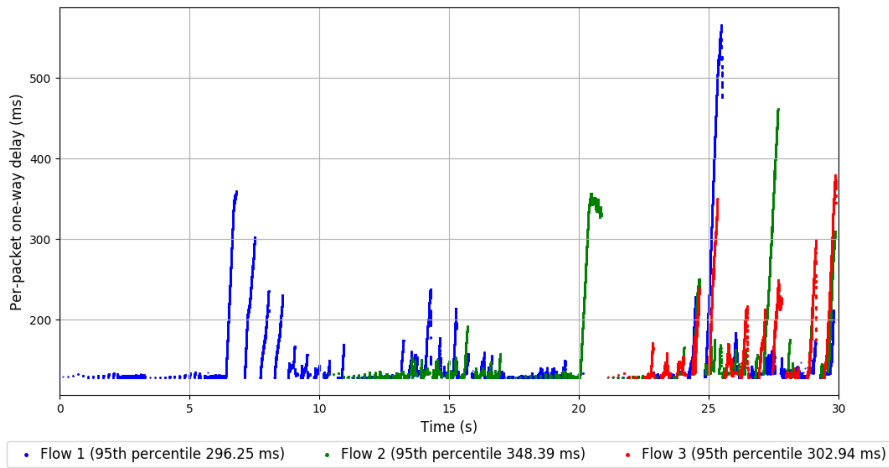
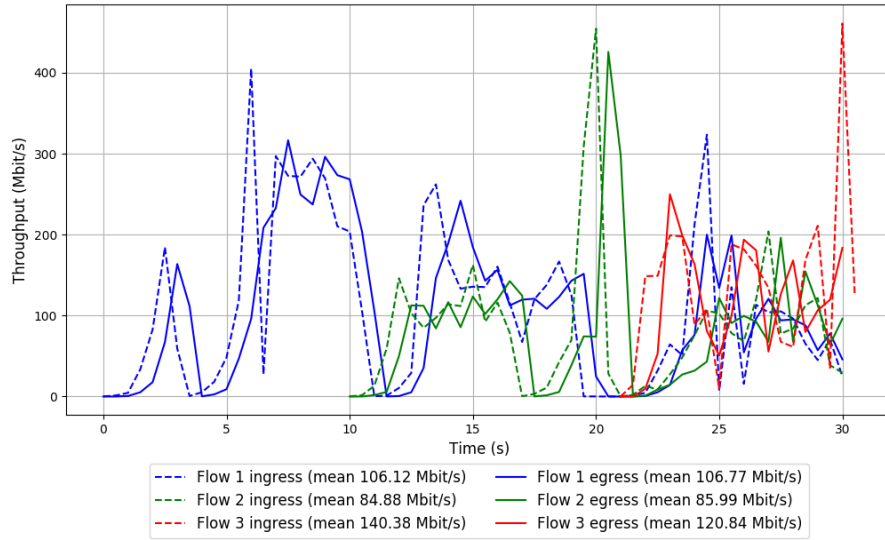


Run 4: Statistics of Verus

Start at: 2019-05-30 12:27:33
End at: 2019-05-30 12:28:03
Local clock offset: 4.36 ms
Remote clock offset: -32.552 ms

```
# Below is generated by plot.py at 2019-05-30 14:10:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 198.88 Mbit/s
95th percentile per-packet one-way delay: 343.653 ms
Loss rate: 5.43%
-- Flow 1:
Average throughput: 106.77 Mbit/s
95th percentile per-packet one-way delay: 296.246 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 85.99 Mbit/s
95th percentile per-packet one-way delay: 348.392 ms
Loss rate: 0.89%
-- Flow 3:
Average throughput: 120.84 Mbit/s
95th percentile per-packet one-way delay: 302.935 ms
Loss rate: 21.88%
```

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2019-05-30 12:58:51
End at: 2019-05-30 12:59:21
Local clock offset: -1.996 ms
Remote clock offset: -38.198 ms

Below is generated by plot.py at 2019-05-30 14:10:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 182.35 Mbit/s
95th percentile per-packet one-way delay: 196.971 ms
Loss rate: 0.24%

-- Flow 1:

Average throughput: 101.64 Mbit/s
95th percentile per-packet one-way delay: 187.829 ms
Loss rate: 0.00%

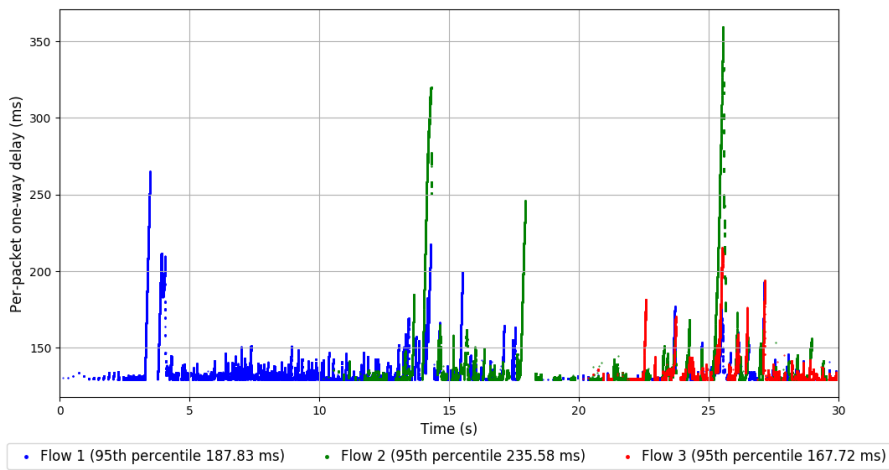
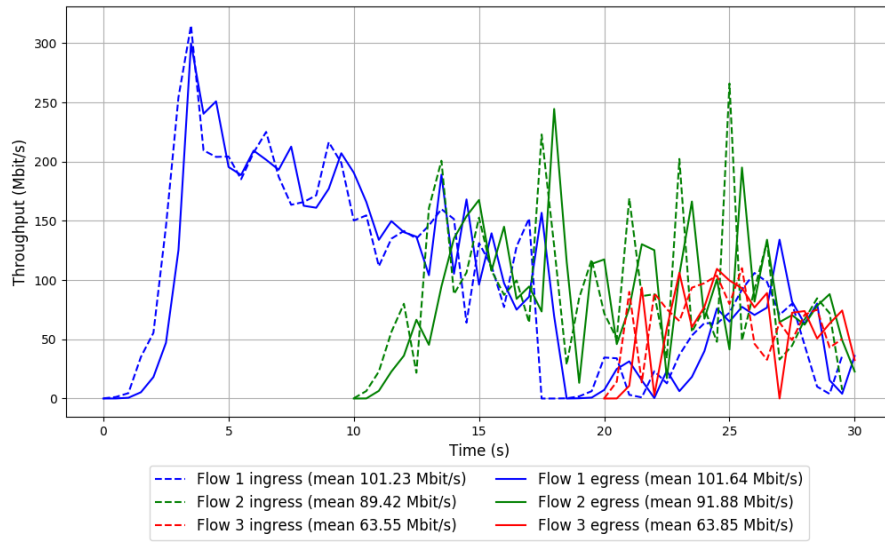
-- Flow 2:

Average throughput: 91.88 Mbit/s
95th percentile per-packet one-way delay: 235.577 ms
Loss rate: 0.21%

-- Flow 3:

Average throughput: 63.85 Mbit/s
95th percentile per-packet one-way delay: 167.717 ms
Loss rate: 1.45%

Run 5: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2019-05-30 11:01:26
End at: 2019-05-30 11:01:56
Local clock offset: 3.388 ms
Remote clock offset: -33.225 ms

Below is generated by plot.py at 2019-05-30 14:10:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 202.66 Mbit/s
95th percentile per-packet one-way delay: 132.149 ms
Loss rate: 0.62%

-- Flow 1:

Average throughput: 172.13 Mbit/s
95th percentile per-packet one-way delay: 132.241 ms
Loss rate: 0.47%

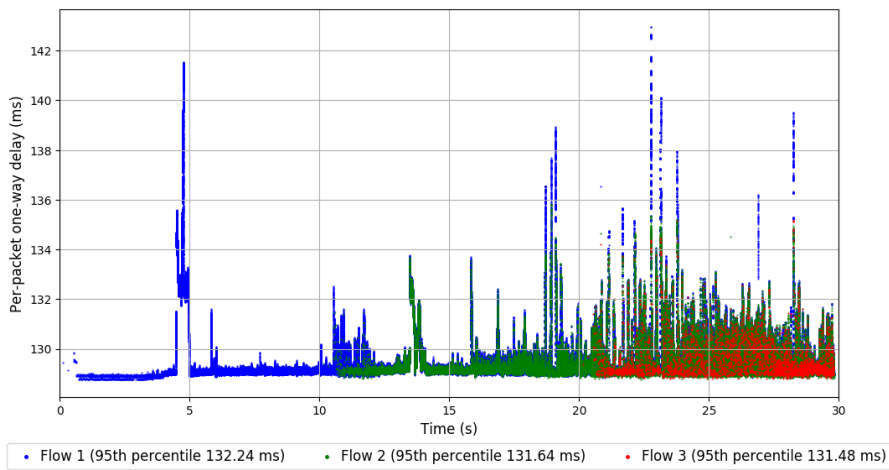
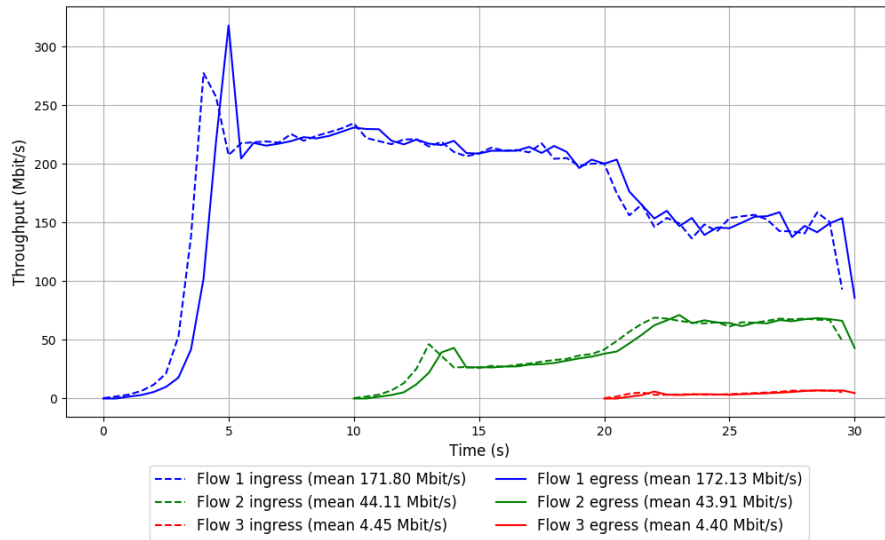
-- Flow 2:

Average throughput: 43.91 Mbit/s
95th percentile per-packet one-way delay: 131.637 ms
Loss rate: 1.42%

-- Flow 3:

Average throughput: 4.40 Mbit/s
95th percentile per-packet one-way delay: 131.477 ms
Loss rate: 2.92%

Run 1: Report of PCC-Vivace — Data Link

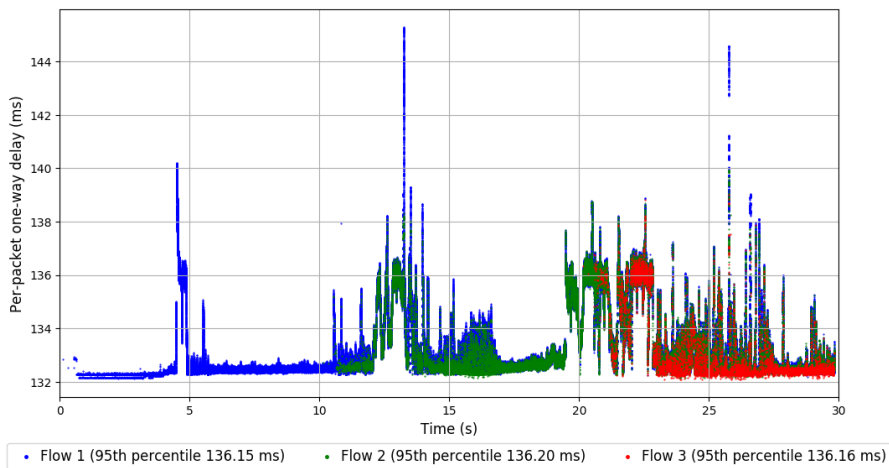
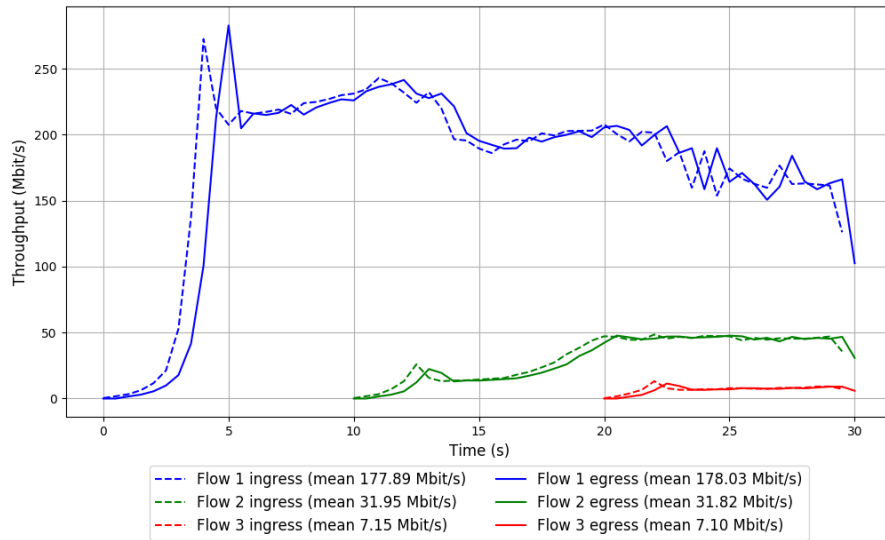


Run 2: Statistics of PCC-Vivace

Start at: 2019-05-30 11:32:31
End at: 2019-05-30 11:33:01
Local clock offset: -1.867 ms
Remote clock offset: -41.199 ms

```
# Below is generated by plot.py at 2019-05-30 14:10:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 201.43 Mbit/s
95th percentile per-packet one-way delay: 136.154 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 178.03 Mbit/s
95th percentile per-packet one-way delay: 136.146 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 31.82 Mbit/s
95th percentile per-packet one-way delay: 136.203 ms
Loss rate: 1.38%
-- Flow 3:
Average throughput: 7.10 Mbit/s
95th percentile per-packet one-way delay: 136.157 ms
Loss rate: 2.75%
```

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2019-05-30 12:03:43
End at: 2019-05-30 12:04:13
Local clock offset: 4.669 ms
Remote clock offset: -36.416 ms

Below is generated by plot.py at 2019-05-30 14:11:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 211.51 Mbit/s
95th percentile per-packet one-way delay: 136.985 ms
Loss rate: 0.73%

-- Flow 1:

Average throughput: 185.47 Mbit/s
95th percentile per-packet one-way delay: 136.989 ms
Loss rate: 0.64%

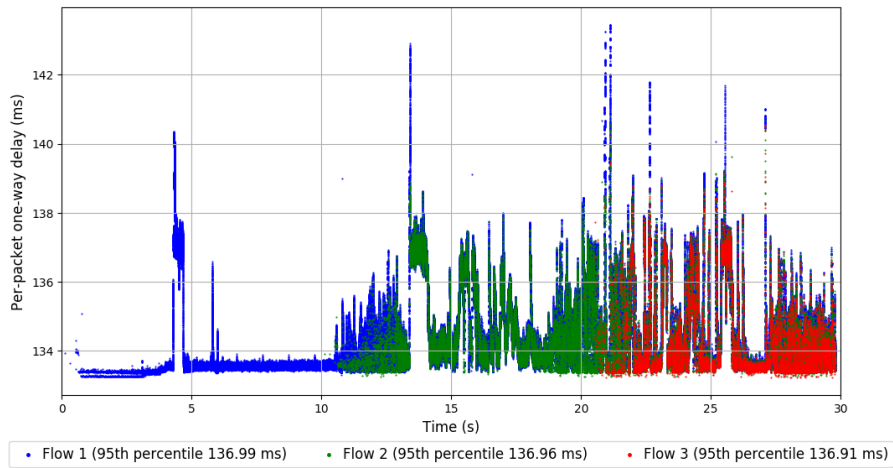
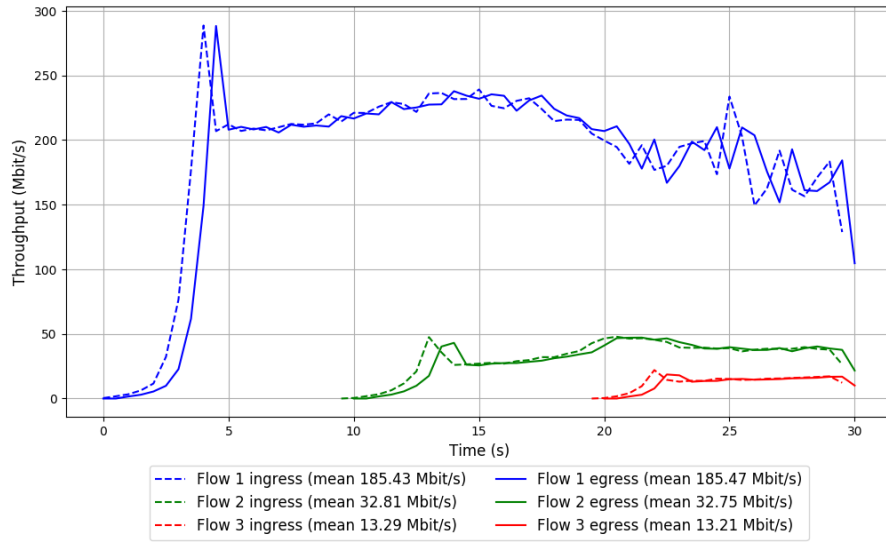
-- Flow 2:

Average throughput: 32.75 Mbit/s
95th percentile per-packet one-way delay: 136.963 ms
Loss rate: 1.13%

-- Flow 3:

Average throughput: 13.21 Mbit/s
95th percentile per-packet one-way delay: 136.912 ms
Loss rate: 2.61%

Run 3: Report of PCC-Vivace — Data Link

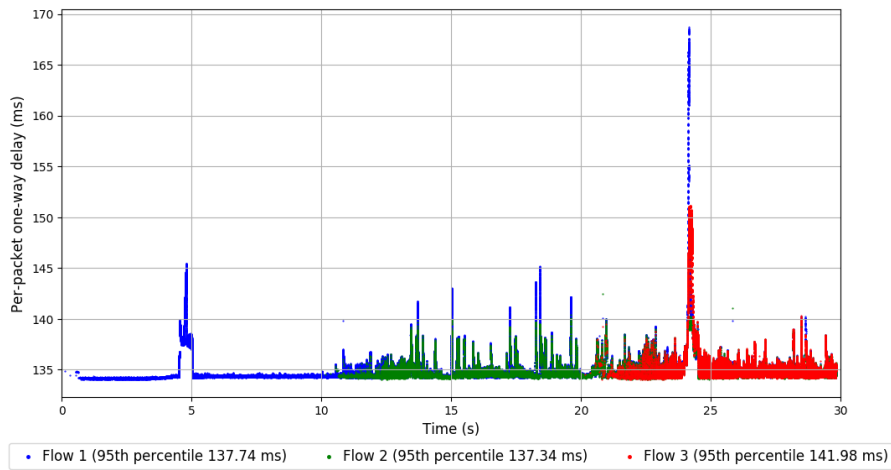
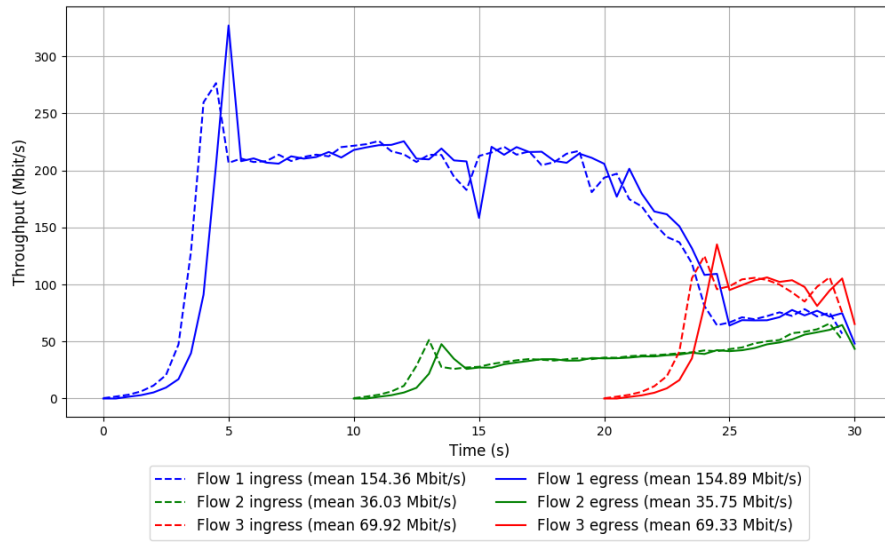


Run 4: Statistics of PCC-Vivace

Start at: 2019-05-30 12:35:13
End at: 2019-05-30 12:35:43
Local clock offset: 0.15 ms
Remote clock offset: -42.961 ms

```
# Below is generated by plot.py at 2019-05-30 14:11:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 201.16 Mbit/s
95th percentile per-packet one-way delay: 137.785 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 154.89 Mbit/s
95th percentile per-packet one-way delay: 137.740 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 35.75 Mbit/s
95th percentile per-packet one-way delay: 137.336 ms
Loss rate: 1.78%
-- Flow 3:
Average throughput: 69.33 Mbit/s
95th percentile per-packet one-way delay: 141.981 ms
Loss rate: 2.80%
```

Run 4: Report of PCC-Vivace — Data Link

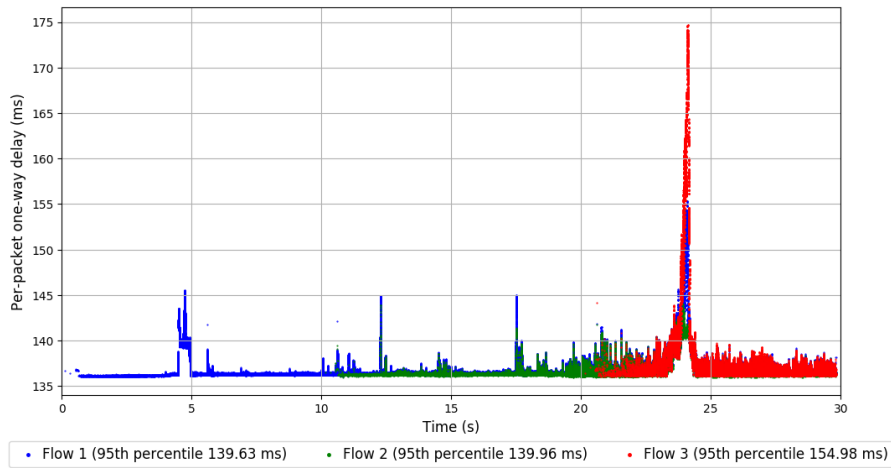
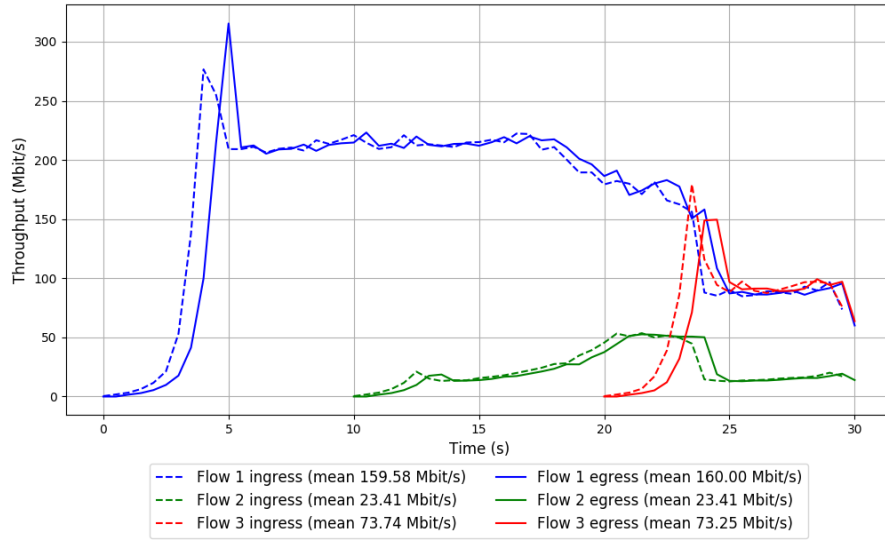


Run 5: Statistics of PCC-Vivace

Start at: 2019-05-30 13:06:25
End at: 2019-05-30 13:06:55
Local clock offset: 2.535 ms
Remote clock offset: -40.382 ms

```
# Below is generated by plot.py at 2019-05-30 14:11:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 199.39 Mbit/s
95th percentile per-packet one-way delay: 139.930 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 160.00 Mbit/s
95th percentile per-packet one-way delay: 139.634 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 23.41 Mbit/s
95th percentile per-packet one-way delay: 139.958 ms
Loss rate: 0.96%
-- Flow 3:
Average throughput: 73.25 Mbit/s
95th percentile per-packet one-way delay: 154.979 ms
Loss rate: 2.61%
```

Run 5: Report of PCC-Vivace — Data Link

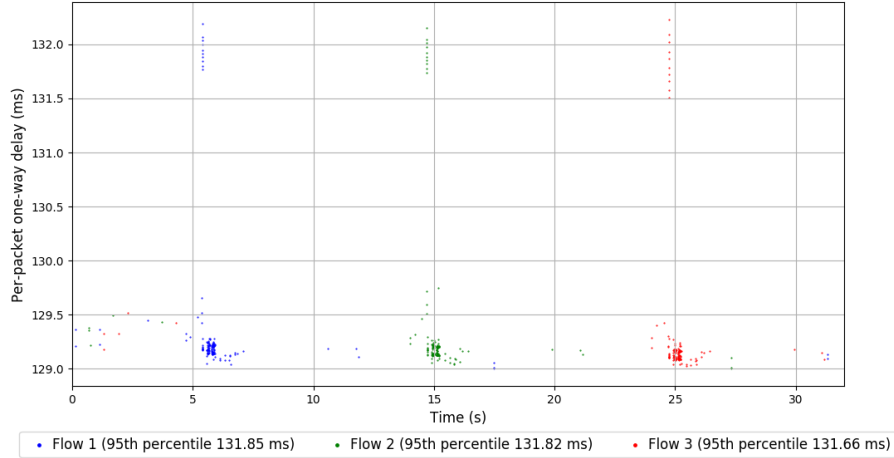
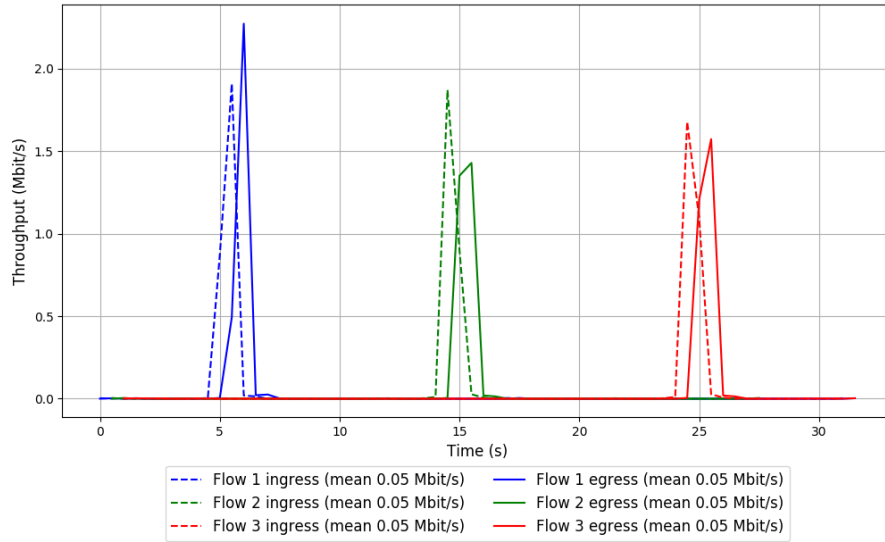


Run 1: Statistics of WebRTC media

Start at: 2019-05-30 11:07:17
End at: 2019-05-30 11:07:47
Local clock offset: 3.137 ms
Remote clock offset: -33.551 ms

```
# Below is generated by plot.py at 2019-05-30 14:11:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 131.784 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 131.846 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 131.817 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 131.657 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

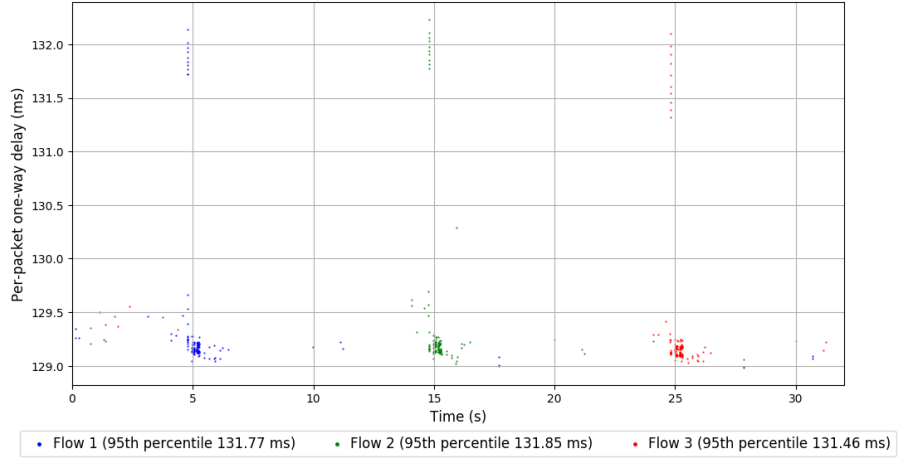
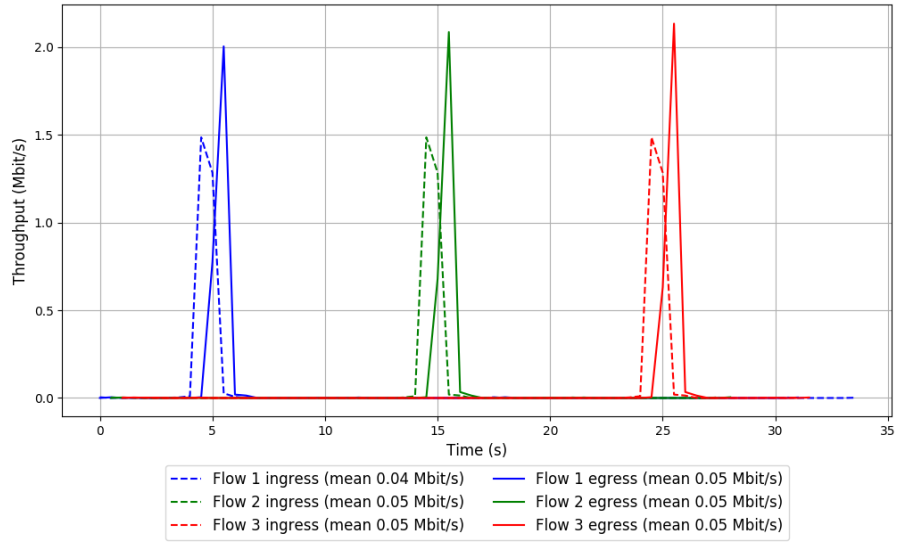


Run 2: Statistics of WebRTC media

Start at: 2019-05-30 11:38:26
End at: 2019-05-30 11:38:56
Local clock offset: 2.807 ms
Remote clock offset: -33.454 ms

```
# Below is generated by plot.py at 2019-05-30 14:11:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 131.723 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 131.768 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 131.850 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 131.459 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

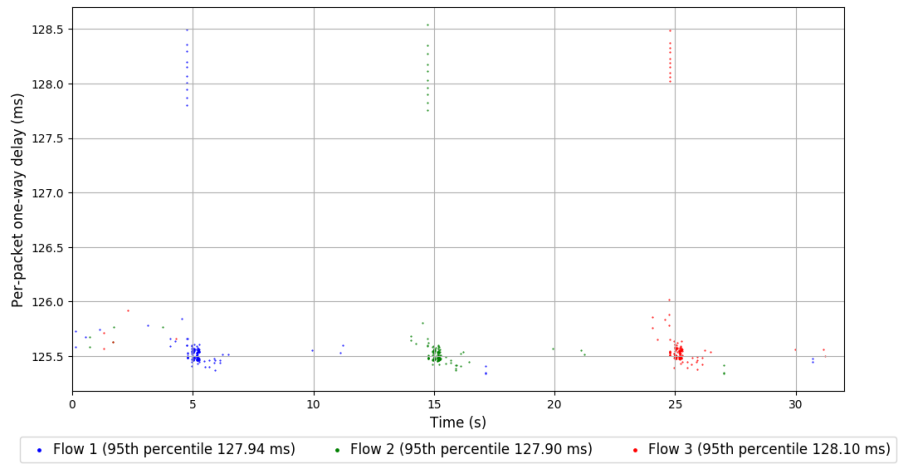
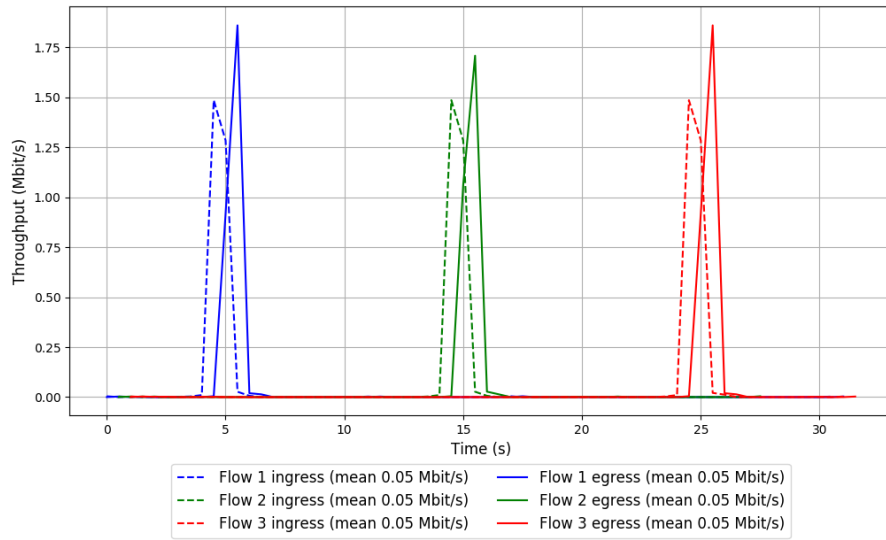


Run 3: Statistics of WebRTC media

Start at: 2019-05-30 12:09:38
End at: 2019-05-30 12:10:08
Local clock offset: 0.492 ms
Remote clock offset: -32.604 ms

```
# Below is generated by plot.py at 2019-05-30 14:11:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 128.006 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 127.943 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 127.900 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 128.098 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

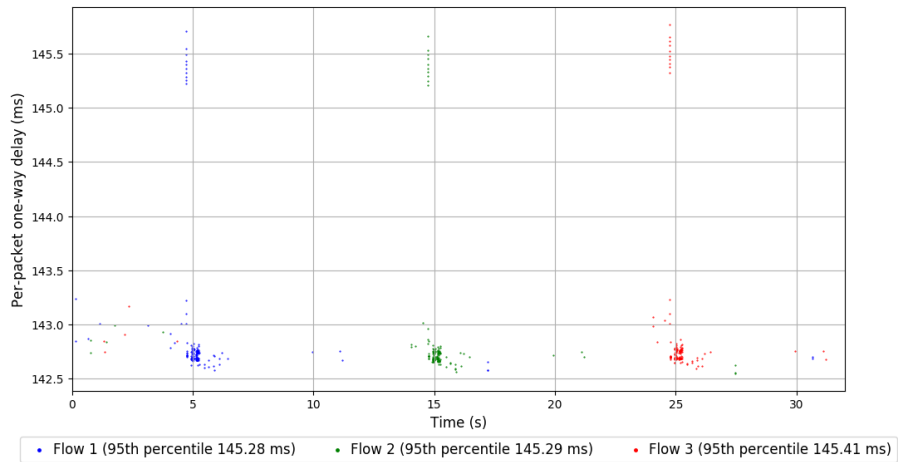
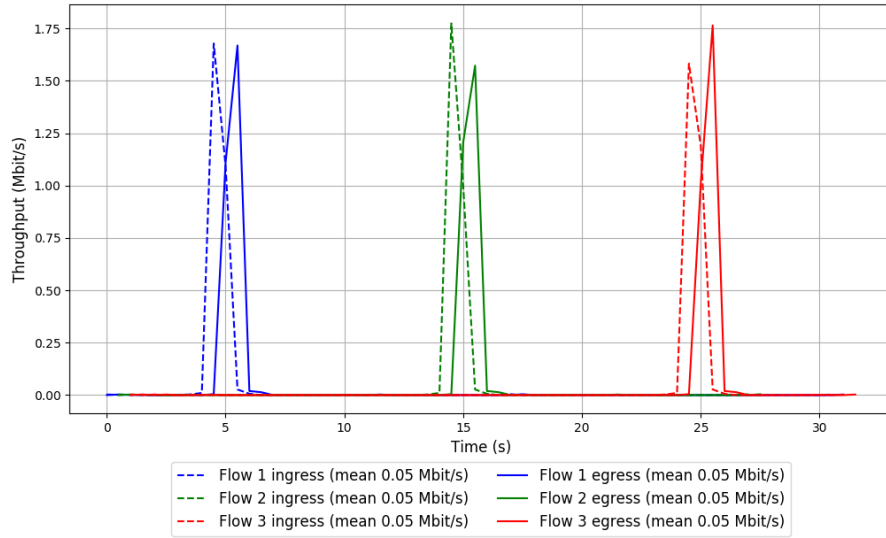


Run 4: Statistics of WebRTC media

Start at: 2019-05-30 12:41:08
End at: 2019-05-30 12:41:38
Local clock offset: 3.62 ms
Remote clock offset: -47.06 ms

```
# Below is generated by plot.py at 2019-05-30 14:11:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 145.321 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 145.282 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 145.293 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 145.405 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-05-30 13:12:21
End at: 2019-05-30 13:12:51
Local clock offset: -1.959 ms
Remote clock offset: -40.207 ms

```
# Below is generated by plot.py at 2019-05-30 14:11:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 134.037 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.937 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 134.197 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 134.037 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

