

Pantheon Report

Generated at 2019-02-20 18:50:29 (UTC).

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

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 `time.google.com` and have been applied to correct the timestamps in logs.

System info:

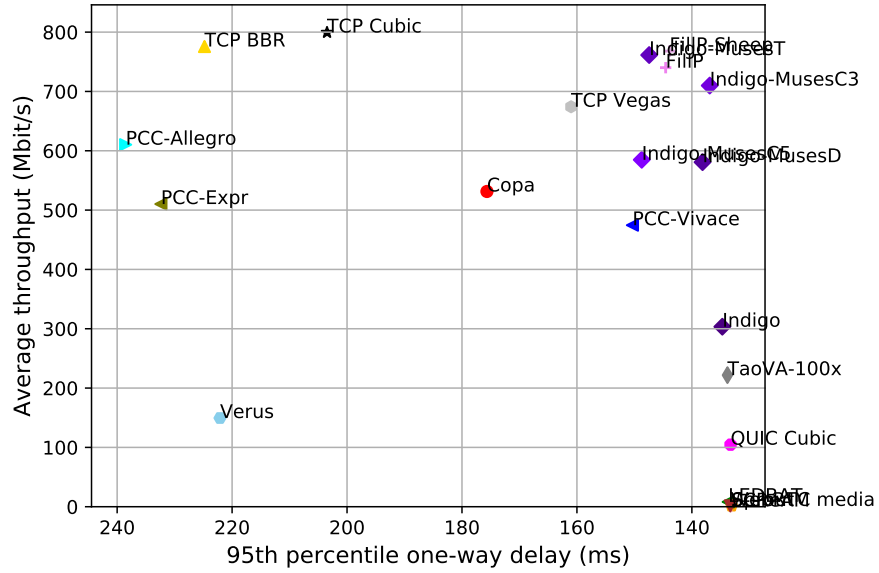
```
Linux 4.15.0-1026-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

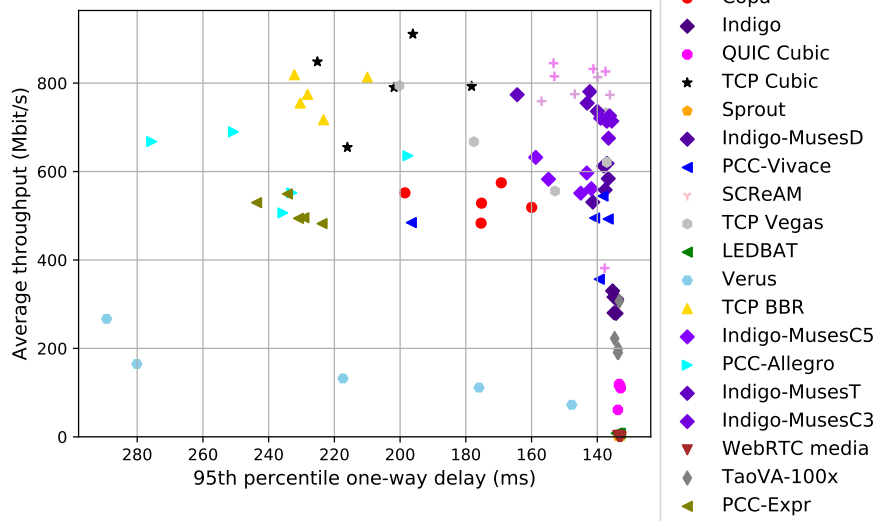
```
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
```

third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851

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



test from GCE Sydney to GCE London, 5 runs of 30s each per scheme
3 flows with 10s interval between flows



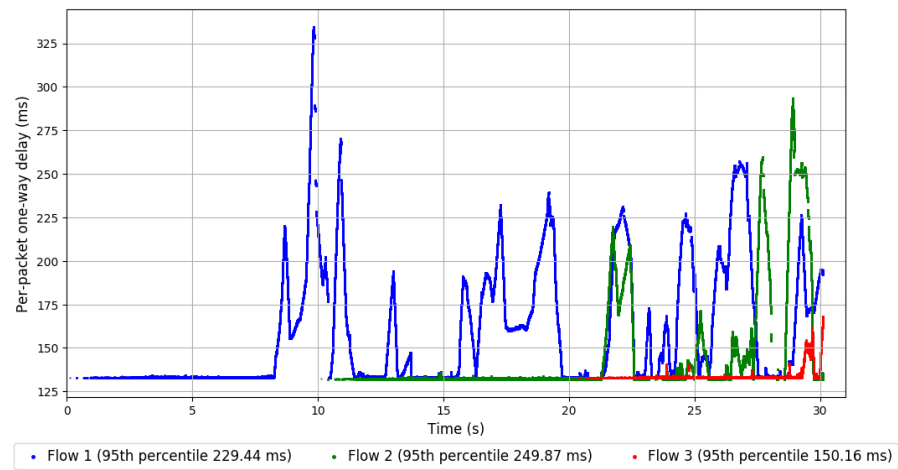
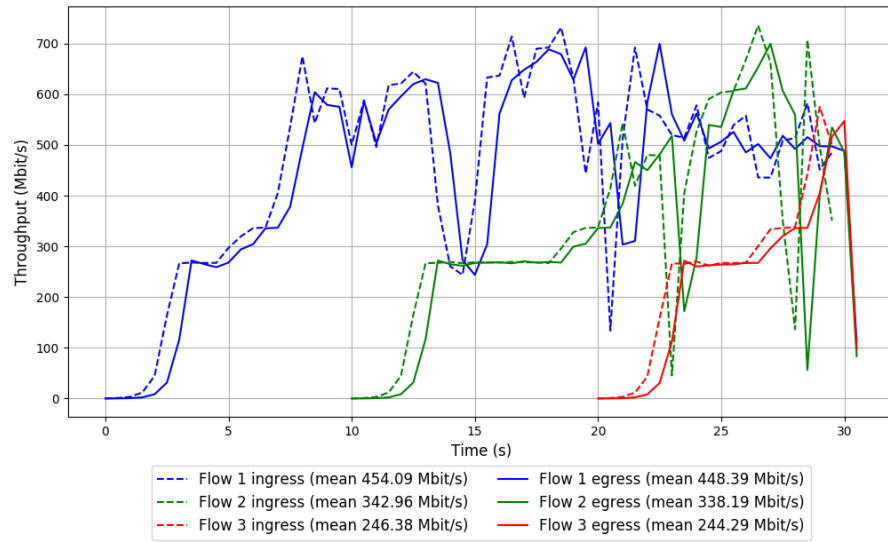
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	432.20	385.77	260.87	228.35	223.61	167.59	0.74	0.65	0.32
Copa	5	283.53	267.61	208.93	163.24	167.80	164.98	0.07	0.12	0.38
TCP Cubic	5	445.92	393.24	275.87	191.63	197.49	177.39	0.11	0.47	0.51
FillP	5	442.93	331.57	230.81	149.33	137.09	136.71	0.04	0.00	0.01
FillP-Sheep	5	490.75	323.63	187.46	148.15	136.09	136.31	0.06	0.00	0.00
Indigo	5	161.12	153.99	126.07	134.39	135.08	134.98	0.00	0.00	0.00
Indigo-MusesC3	5	416.54	357.08	257.91	136.65	137.69	136.44	0.00	0.00	0.03
Indigo-MusesC5	5	358.74	321.82	88.26	150.85	146.07	133.31	0.00	0.03	0.00
Indigo-MusesD	5	363.55	302.72	84.99	139.03	137.85	133.44	0.00	0.02	0.00
Indigo-MusesT	4	479.72	379.65	128.19	148.72	146.01	134.02	0.01	0.00	0.00
LEDBAT	5	5.26	3.48	1.71	133.50	133.56	133.54	0.00	0.00	0.00
PCC-Allegro	5	342.73	290.12	226.90	234.14	226.33	231.21	2.88	3.37	1.51
PCC-Expr	5	307.67	224.67	160.91	235.49	180.40	175.70	3.13	0.88	0.48
QUIC Cubic	5	46.80	60.06	55.63	133.34	133.03	133.26	0.00	0.00	0.00
SCReAM	5	0.15	0.15	0.16	133.16	133.08	132.97	0.00	0.00	0.00
Sprout	5	0.62	0.64	0.62	132.95	132.95	132.84	0.00	0.00	0.00
TaoVA-100x	5	109.94	114.63	106.83	133.65	134.19	133.46	0.00	0.00	0.00
TCP Vegas	5	379.01	327.44	231.60	160.16	149.61	182.30	0.00	0.00	0.01
Verus	5	87.90	54.77	79.79	216.13	201.80	202.92	3.25	0.62	0.27
PCC-Vivace	5	288.85	201.78	156.07	177.25	134.66	136.74	0.55	0.00	0.01
WebRTC media	5	0.80	0.49	0.12	133.14	133.06	133.29	0.00	0.01	0.01

Run 1: Statistics of TCP BBR

Start at: 2019-02-20 12:26:11
End at: 2019-02-20 12:26:41
Local clock offset: -0.001 ms
Remote clock offset: -0.108 ms

Below is generated by plot.py at 2019-02-20 16:42:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 754.84 Mbit/s
95th percentile per-packet one-way delay: 230.394 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 448.39 Mbit/s
95th percentile per-packet one-way delay: 229.443 ms
Loss rate: 1.25%
-- Flow 2:
Average throughput: 338.19 Mbit/s
95th percentile per-packet one-way delay: 249.873 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 244.29 Mbit/s
95th percentile per-packet one-way delay: 150.161 ms
Loss rate: 0.85%

Run 1: Report of TCP BBR — Data Link

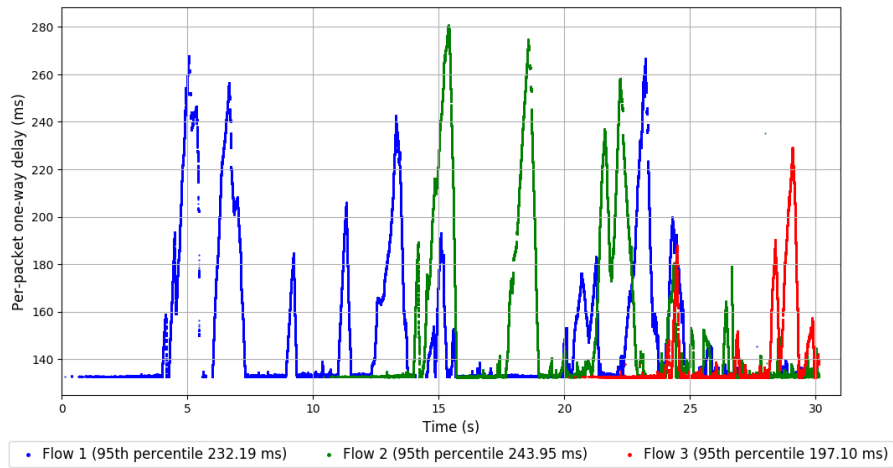
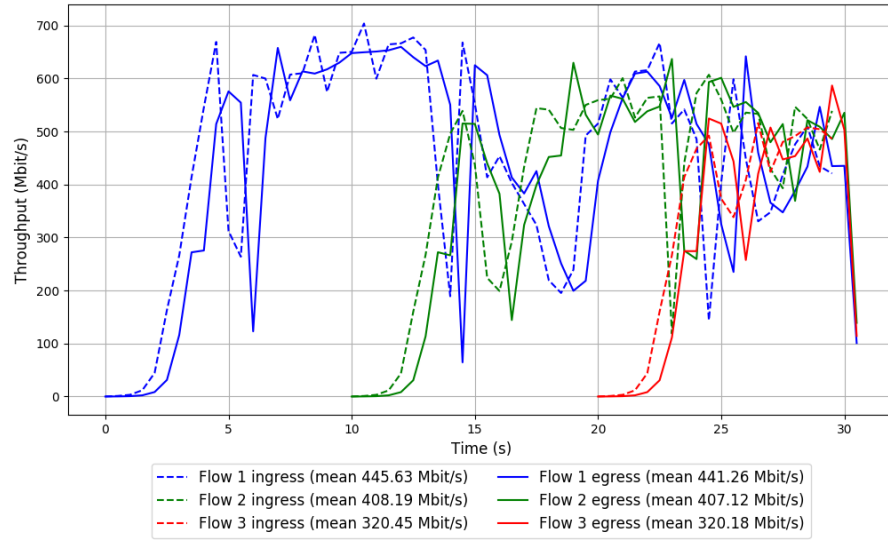


Run 2: Statistics of TCP BBR

Start at: 2019-02-20 13:15:21
End at: 2019-02-20 13:15:51
Local clock offset: 0.389 ms
Remote clock offset: -0.046 ms

Below is generated by plot.py at 2019-02-20 16:44:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 818.93 Mbit/s
95th percentile per-packet one-way delay: 232.174 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 441.26 Mbit/s
95th percentile per-packet one-way delay: 232.185 ms
Loss rate: 0.98%
-- Flow 2:
Average throughput: 407.12 Mbit/s
95th percentile per-packet one-way delay: 243.949 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 320.18 Mbit/s
95th percentile per-packet one-way delay: 197.105 ms
Loss rate: 0.07%

Run 2: Report of TCP BBR — Data Link

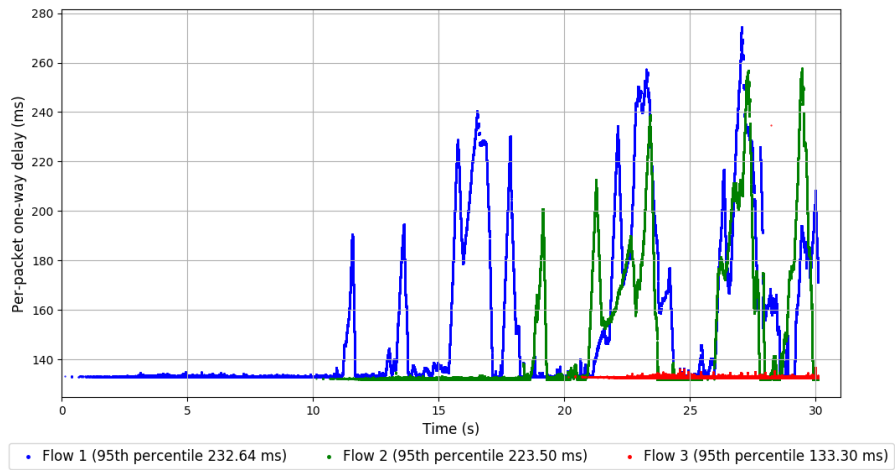
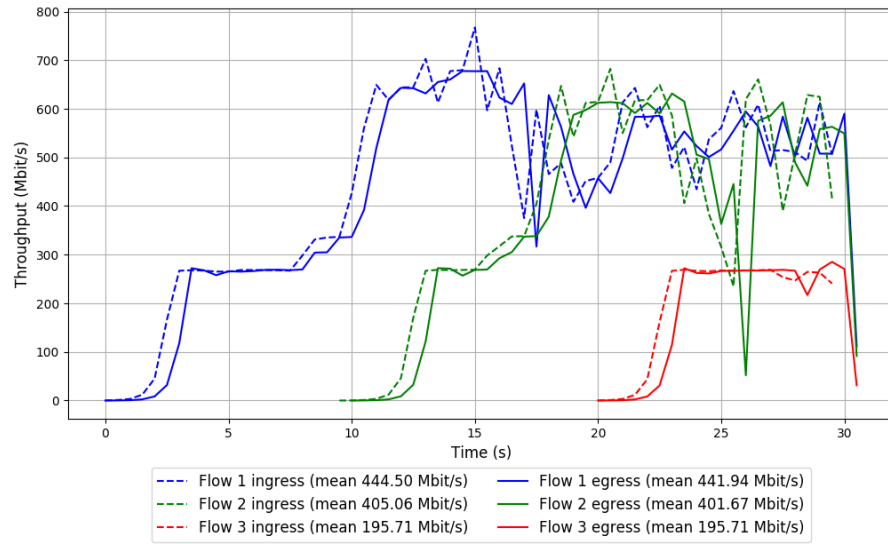


Run 3: Statistics of TCP BBR

Start at: 2019-02-20 14:07:01
End at: 2019-02-20 14:07:31
Local clock offset: 0.042 ms
Remote clock offset: -0.015 ms

Below is generated by plot.py at 2019-02-20 16:44:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 774.66 Mbit/s
95th percentile per-packet one-way delay: 228.169 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 441.94 Mbit/s
95th percentile per-packet one-way delay: 232.641 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 401.67 Mbit/s
95th percentile per-packet one-way delay: 223.497 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 195.71 Mbit/s
95th percentile per-packet one-way delay: 133.304 ms
Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2019-02-20 14:59:38

End at: 2019-02-20 15:00:08

Local clock offset: 0.015 ms

Remote clock offset: -0.17 ms

Below is generated by plot.py at 2019-02-20 16:44:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 717.19 Mbit/s

95th percentile per-packet one-way delay: 223.300 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 366.53 Mbit/s

95th percentile per-packet one-way delay: 246.524 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 375.80 Mbit/s

95th percentile per-packet one-way delay: 161.818 ms

Loss rate: 0.00%

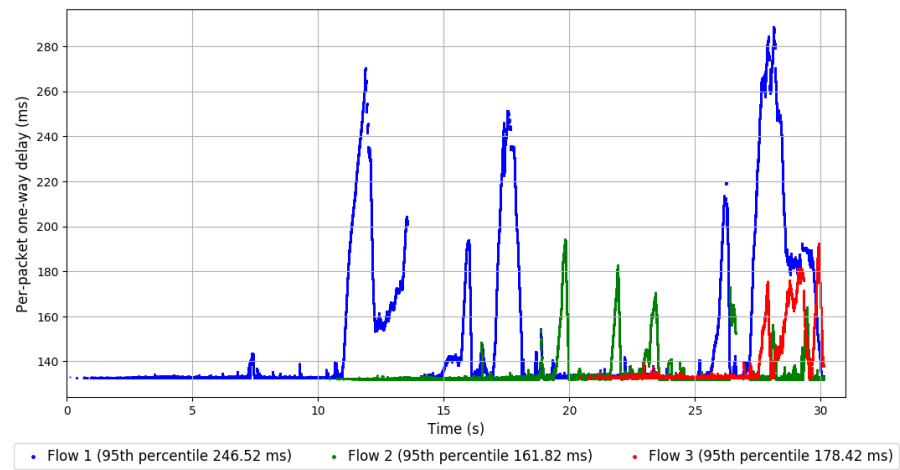
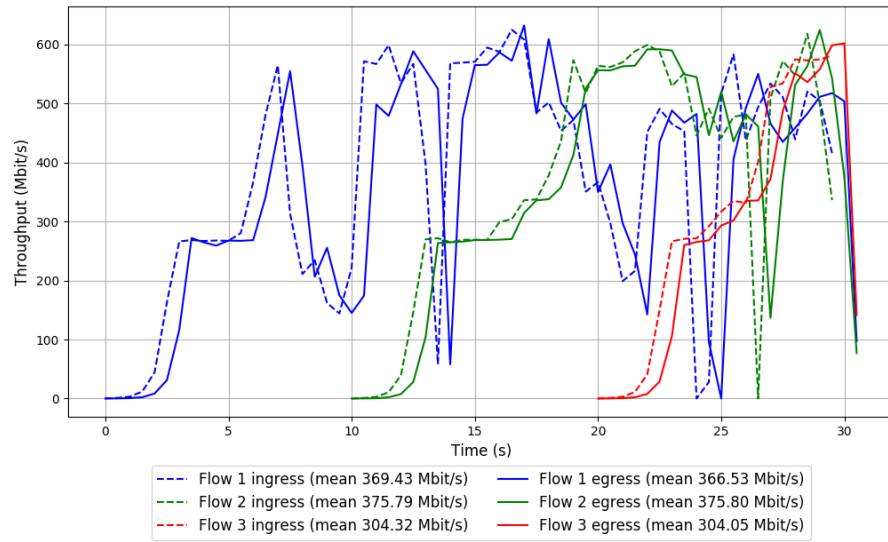
-- Flow 3:

Average throughput: 304.05 Mbit/s

95th percentile per-packet one-way delay: 178.423 ms

Loss rate: 0.09%

Run 4: Report of TCP BBR — Data Link

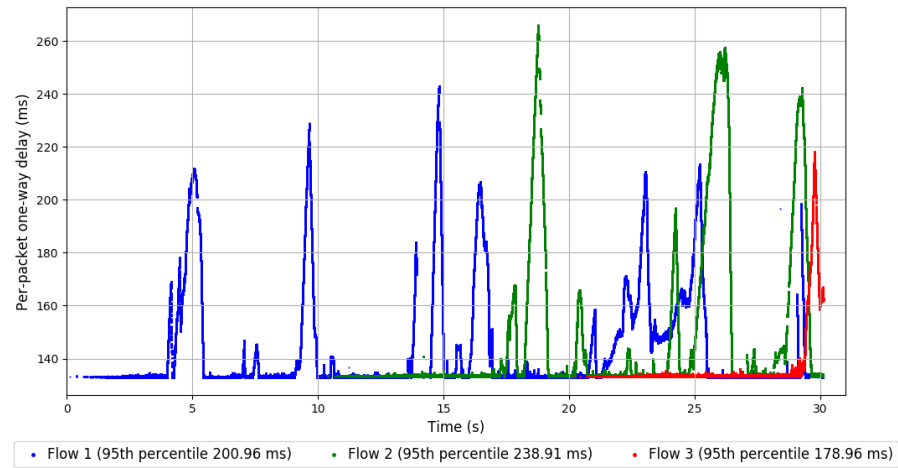
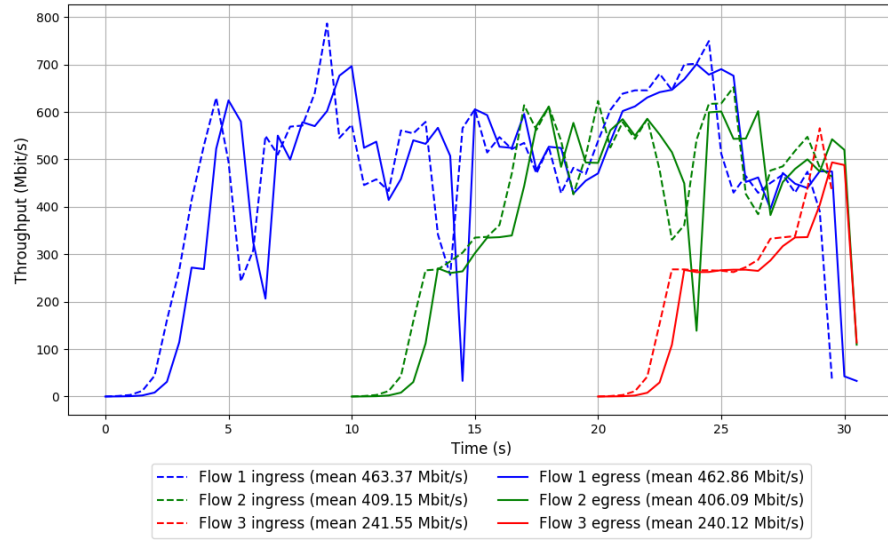


Run 5: Statistics of TCP BBR

Start at: 2019-02-20 15:51:02
End at: 2019-02-20 15:51:32
Local clock offset: -0.269 ms
Remote clock offset: -0.081 ms

Below is generated by plot.py at 2019-02-20 16:44:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 813.14 Mbit/s
95th percentile per-packet one-way delay: 209.970 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 462.86 Mbit/s
95th percentile per-packet one-way delay: 200.963 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 406.09 Mbit/s
95th percentile per-packet one-way delay: 238.915 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 240.12 Mbit/s
95th percentile per-packet one-way delay: 178.960 ms
Loss rate: 0.59%

Run 5: Report of TCP BBR — Data Link

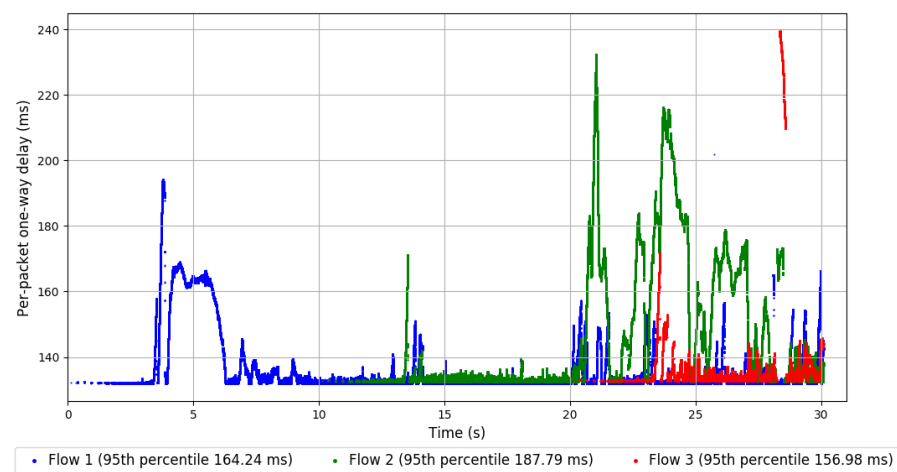
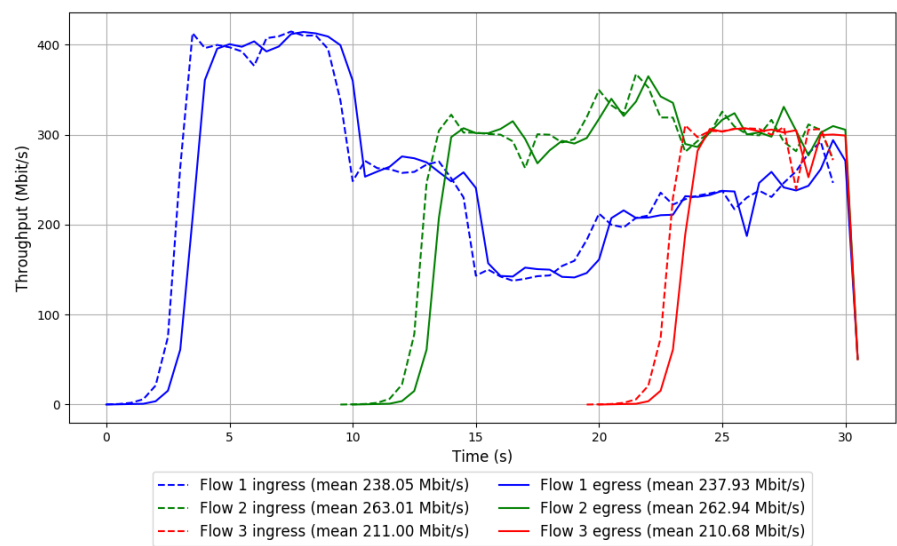


Run 1: Statistics of Copa

Start at: 2019-02-20 12:23:04
End at: 2019-02-20 12:23:34
Local clock offset: 0.402 ms
Remote clock offset: -0.058 ms

Below is generated by plot.py at 2019-02-20 16:45:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 483.25 Mbit/s
95th percentile per-packet one-way delay: 175.361 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 237.93 Mbit/s
95th percentile per-packet one-way delay: 164.244 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 262.94 Mbit/s
95th percentile per-packet one-way delay: 187.788 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 210.68 Mbit/s
95th percentile per-packet one-way delay: 156.978 ms
Loss rate: 0.13%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2019-02-20 13:12:12

End at: 2019-02-20 13:12:42

Local clock offset: 0.19 ms

Remote clock offset: 0.326 ms

Below is generated by plot.py at 2019-02-20 16:47:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 528.47 Mbit/s

95th percentile per-packet one-way delay: 175.225 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 281.62 Mbit/s

95th percentile per-packet one-way delay: 161.039 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 266.17 Mbit/s

95th percentile per-packet one-way delay: 179.811 ms

Loss rate: 0.00%

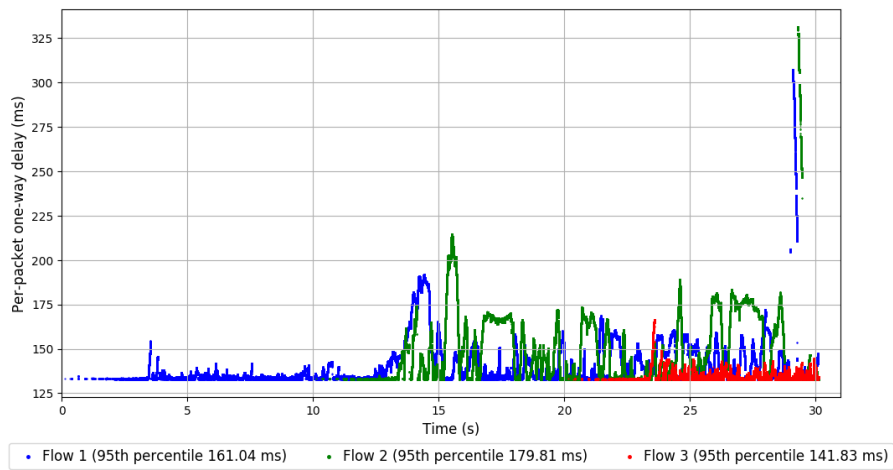
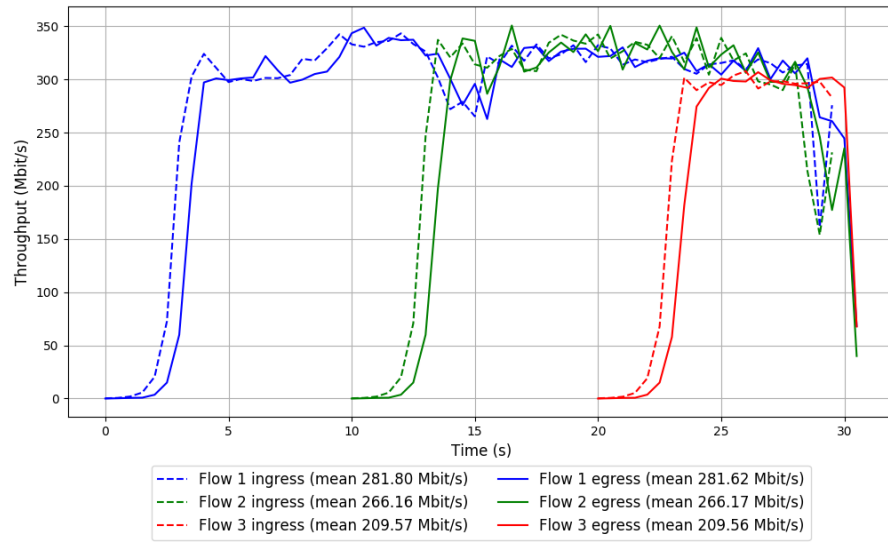
-- Flow 3:

Average throughput: 209.56 Mbit/s

95th percentile per-packet one-way delay: 141.832 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link

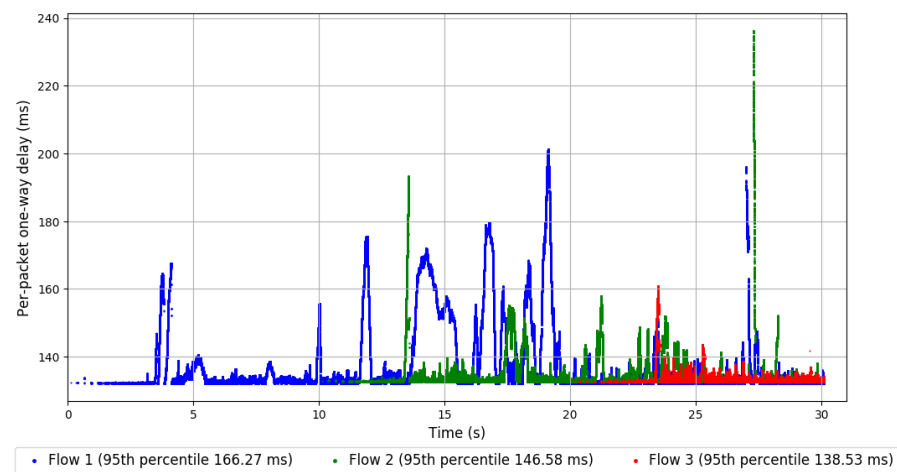
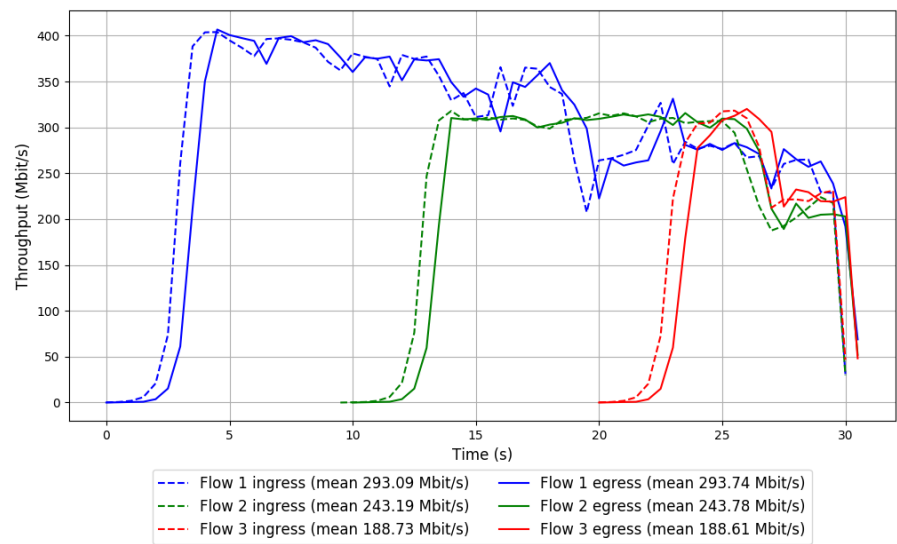


Run 3: Statistics of Copa

Start at: 2019-02-20 14:03:22
End at: 2019-02-20 14:03:52
Local clock offset: 0.091 ms
Remote clock offset: -0.114 ms

Below is generated by plot.py at 2019-02-20 16:47:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 518.94 Mbit/s
95th percentile per-packet one-way delay: 159.969 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 293.74 Mbit/s
95th percentile per-packet one-way delay: 166.266 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 243.78 Mbit/s
95th percentile per-packet one-way delay: 146.582 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 188.61 Mbit/s
95th percentile per-packet one-way delay: 138.532 ms
Loss rate: 1.63%

Run 3: Report of Copa — Data Link

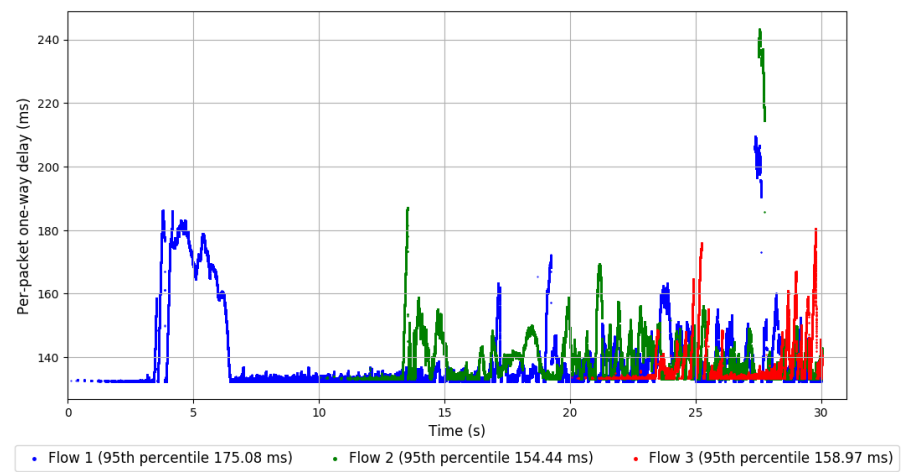
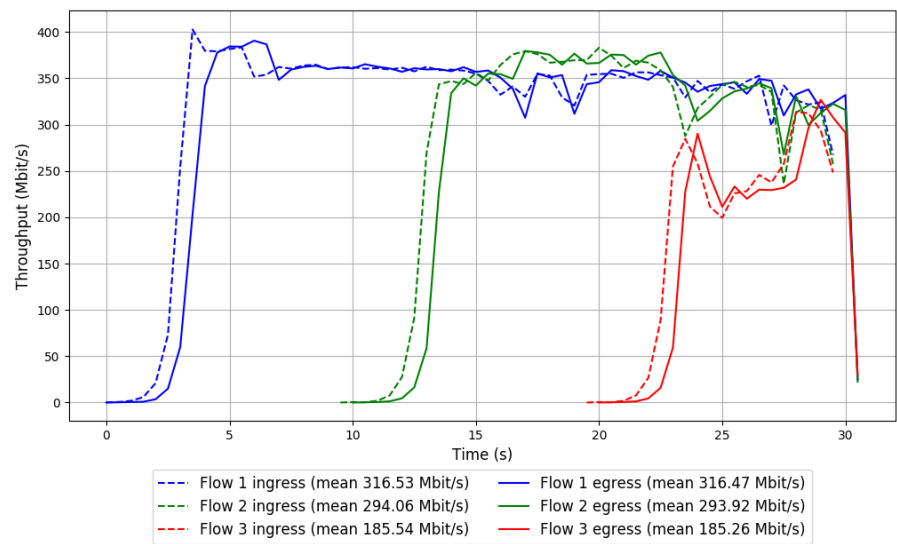


Run 4: Statistics of Copa

Start at: 2019-02-20 14:55:58
End at: 2019-02-20 14:56:28
Local clock offset: -0.577 ms
Remote clock offset: -0.092 ms

Below is generated by plot.py at 2019-02-20 17:03:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 574.51 Mbit/s
95th percentile per-packet one-way delay: 169.216 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 316.47 Mbit/s
95th percentile per-packet one-way delay: 175.076 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 293.92 Mbit/s
95th percentile per-packet one-way delay: 154.436 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 185.26 Mbit/s
95th percentile per-packet one-way delay: 158.972 ms
Loss rate: 0.15%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2019-02-20 15:47:51

End at: 2019-02-20 15:48:21

Local clock offset: -0.05 ms

Remote clock offset: 0.31 ms

Below is generated by plot.py at 2019-02-20 17:03:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 551.79 Mbit/s

95th percentile per-packet one-way delay: 198.522 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 287.90 Mbit/s

95th percentile per-packet one-way delay: 149.582 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 271.25 Mbit/s

95th percentile per-packet one-way delay: 170.384 ms

Loss rate: 0.00%

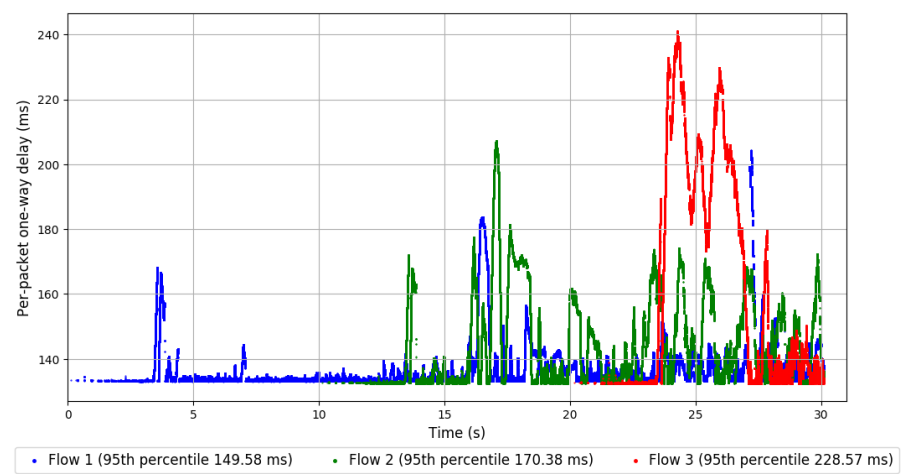
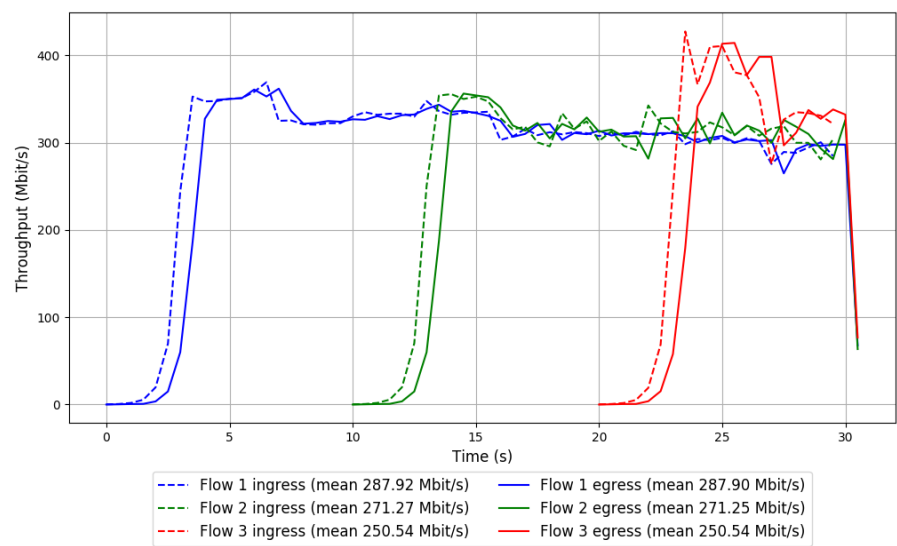
-- Flow 3:

Average throughput: 250.54 Mbit/s

95th percentile per-packet one-way delay: 228.569 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2019-02-20 12:10:19

End at: 2019-02-20 12:10:49

Local clock offset: 0.059 ms

Remote clock offset: 0.375 ms

Below is generated by plot.py at 2019-02-20 17:03:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 790.32 Mbit/s

95th percentile per-packet one-way delay: 201.850 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 403.68 Mbit/s

95th percentile per-packet one-way delay: 158.780 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 436.12 Mbit/s

95th percentile per-packet one-way delay: 241.072 ms

Loss rate: 0.10%

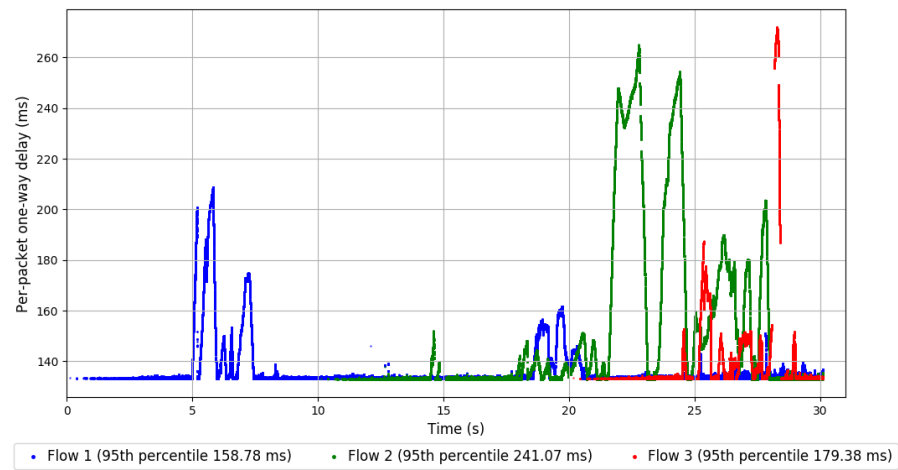
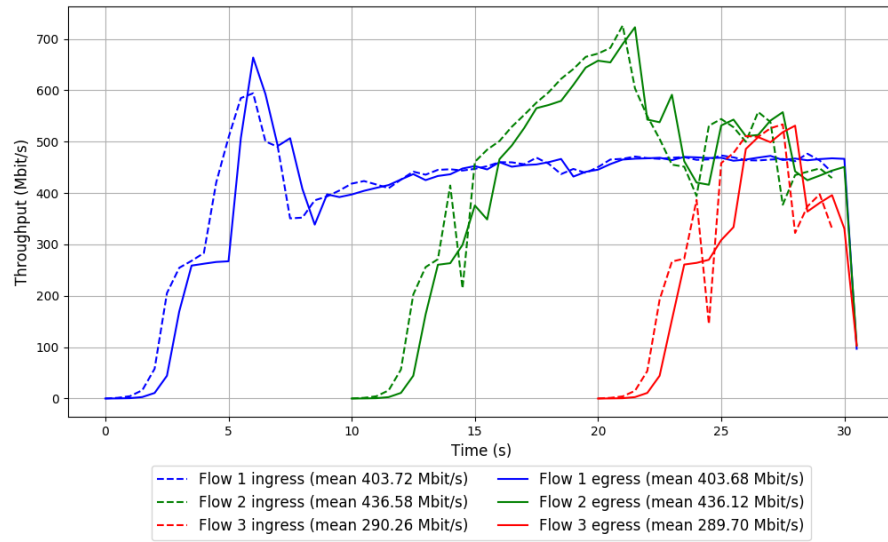
-- Flow 3:

Average throughput: 289.70 Mbit/s

95th percentile per-packet one-way delay: 179.375 ms

Loss rate: 0.20%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2019-02-20 12:58:51

End at: 2019-02-20 12:59:21

Local clock offset: -0.414 ms

Remote clock offset: 0.32 ms

Below is generated by plot.py at 2019-02-20 17:03:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 910.87 Mbit/s

95th percentile per-packet one-way delay: 196.125 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 512.09 Mbit/s

95th percentile per-packet one-way delay: 200.169 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 433.68 Mbit/s

95th percentile per-packet one-way delay: 172.141 ms

Loss rate: 0.07%

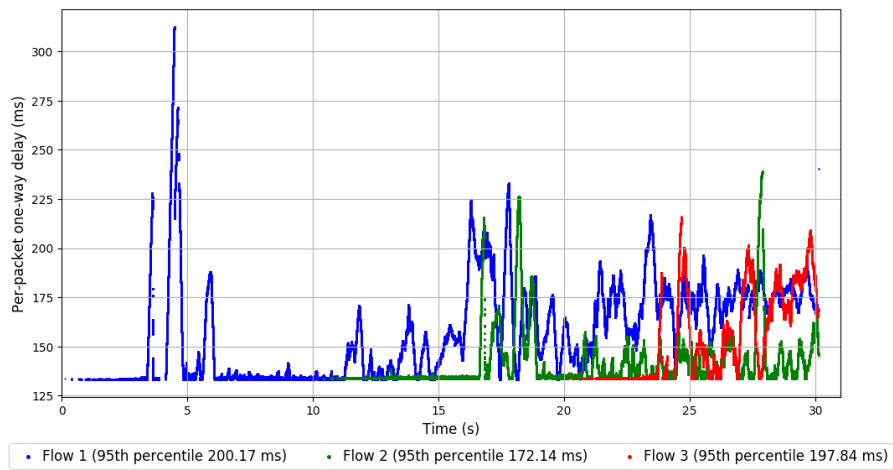
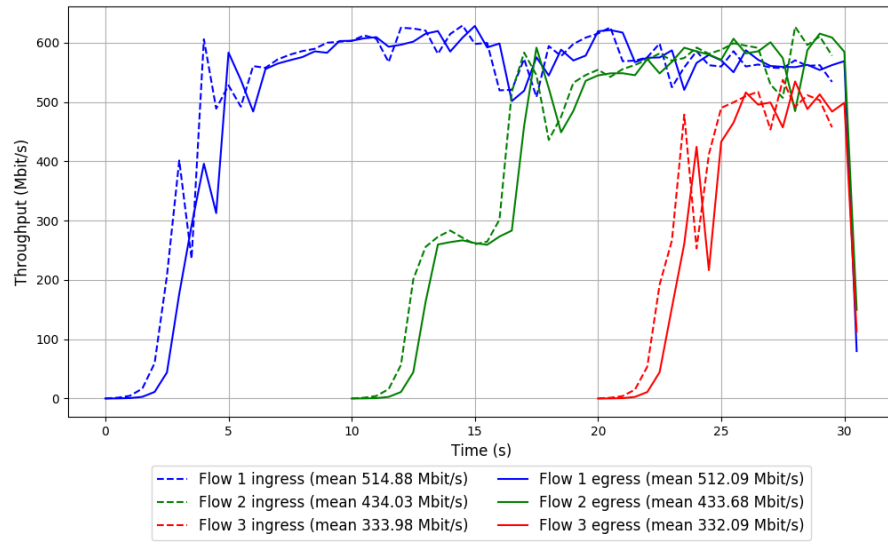
-- Flow 3:

Average throughput: 332.09 Mbit/s

95th percentile per-packet one-way delay: 197.842 ms

Loss rate: 0.56%

Run 2: Report of TCP Cubic — Data Link

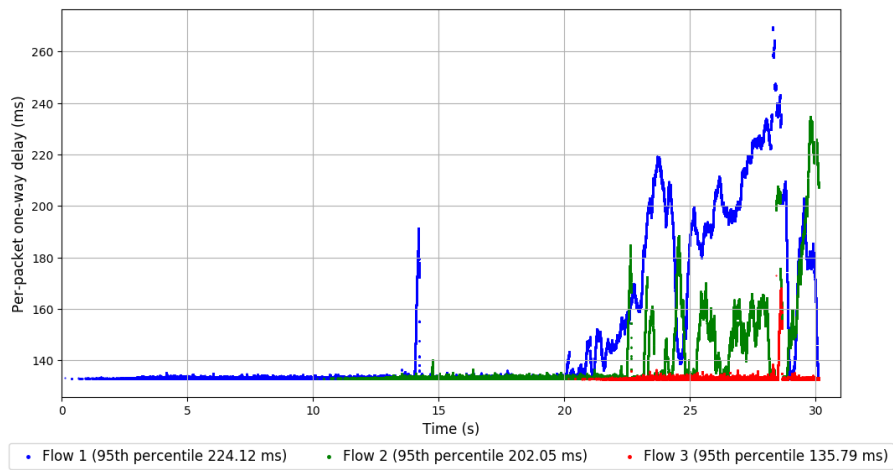
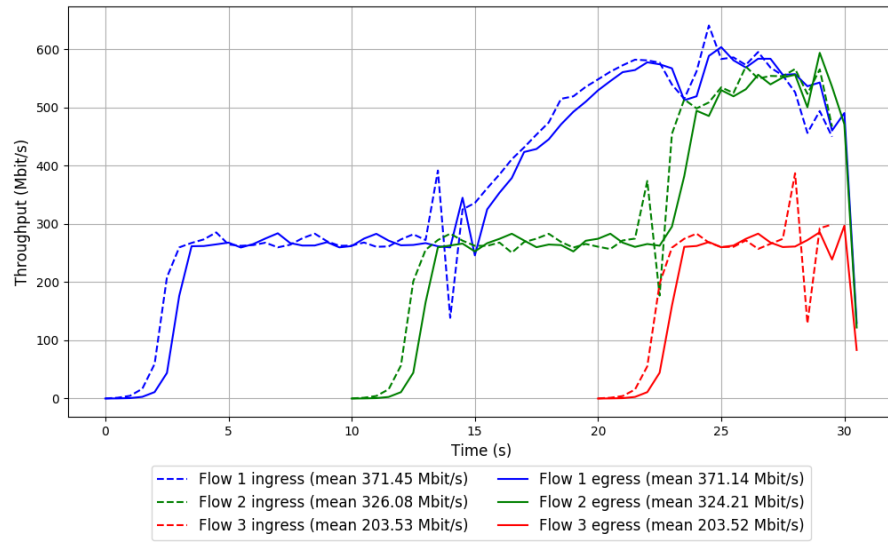


Run 3: Statistics of TCP Cubic

Start at: 2019-02-20 13:49:19
End at: 2019-02-20 13:49:49
Local clock offset: -0.174 ms
Remote clock offset: -0.112 ms

Below is generated by plot.py at 2019-02-20 17:03:23
Datalink statistics
-- Total of 3 flows:
Average throughput: 654.75 Mbit/s
95th percentile per-packet one-way delay: 216.037 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 371.14 Mbit/s
95th percentile per-packet one-way delay: 224.121 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 324.21 Mbit/s
95th percentile per-packet one-way delay: 202.046 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 203.52 Mbit/s
95th percentile per-packet one-way delay: 135.795 ms
Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2019-02-20 14:42:18

End at: 2019-02-20 14:42:48

Local clock offset: -0.418 ms

Remote clock offset: 0.279 ms

Below is generated by plot.py at 2019-02-20 17:03:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 848.33 Mbit/s

95th percentile per-packet one-way delay: 225.165 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 504.09 Mbit/s

95th percentile per-packet one-way delay: 229.258 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 348.56 Mbit/s

95th percentile per-packet one-way delay: 181.504 ms

Loss rate: 1.32%

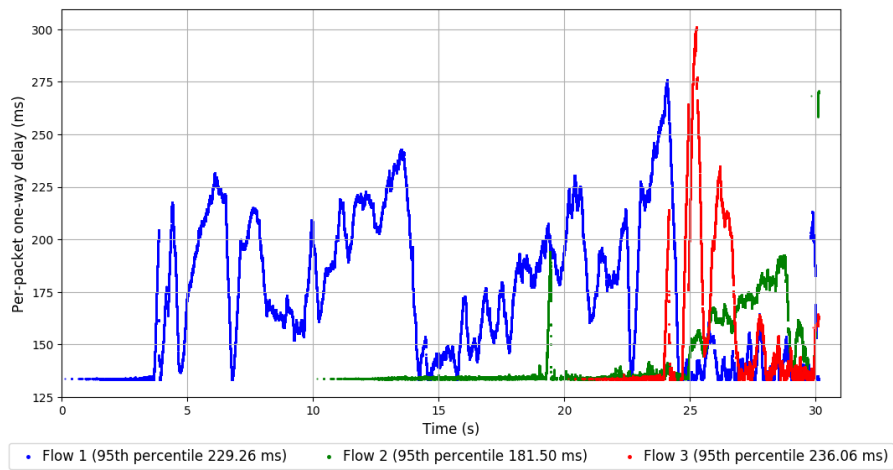
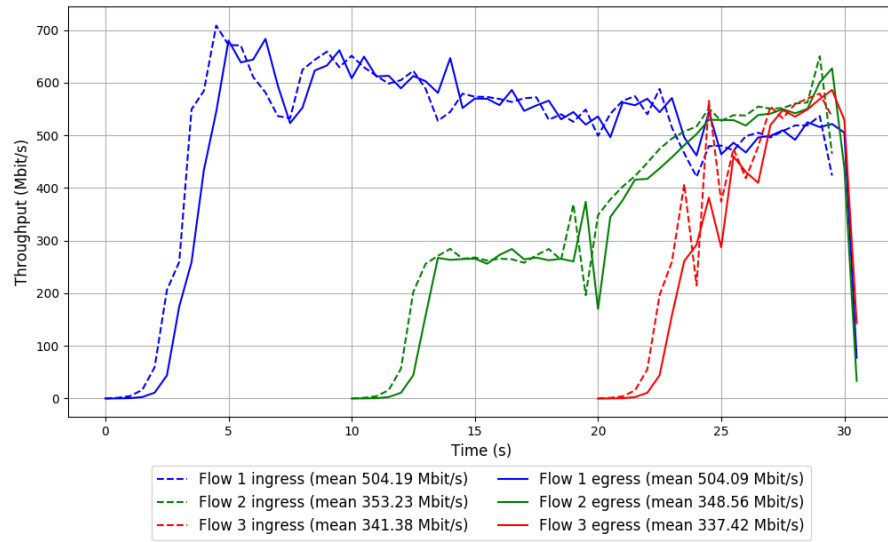
-- Flow 3:

Average throughput: 337.42 Mbit/s

95th percentile per-packet one-way delay: 236.058 ms

Loss rate: 1.15%

Run 4: Report of TCP Cubic — Data Link

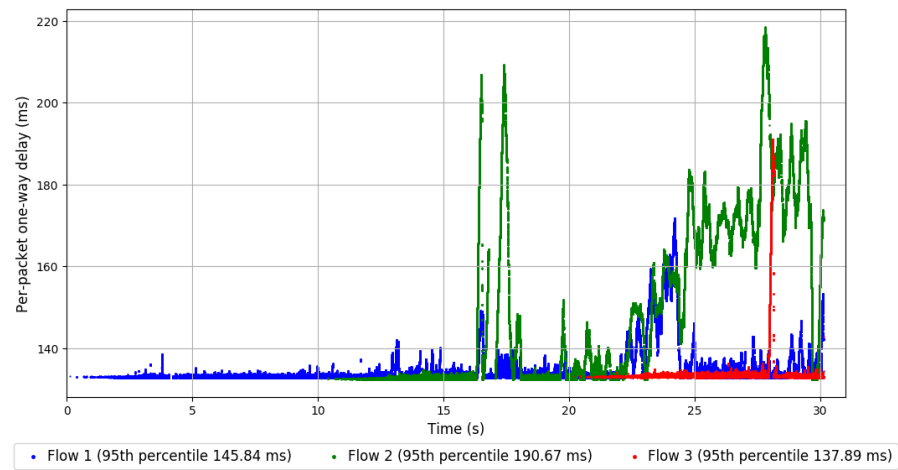
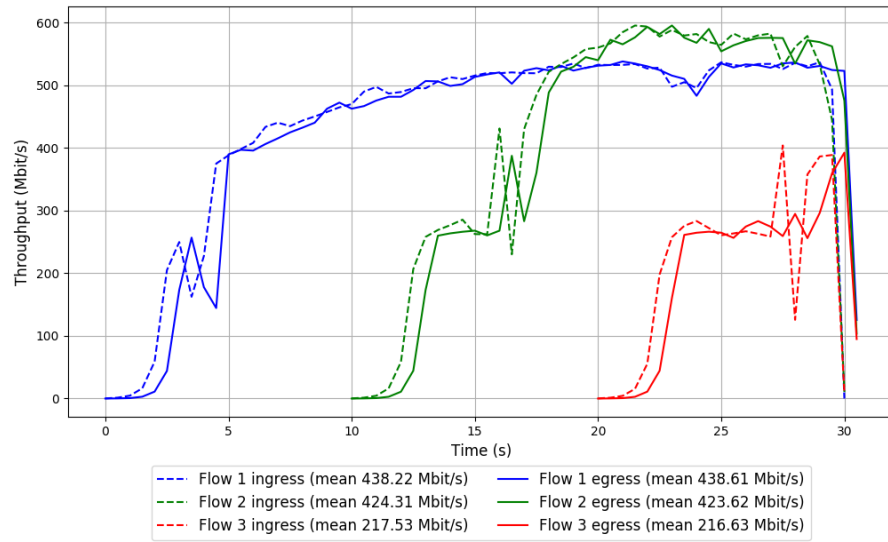


Run 5: Statistics of TCP Cubic

Start at: 2019-02-20 15:33:44
End at: 2019-02-20 15:34:14
Local clock offset: -0.308 ms
Remote clock offset: -0.016 ms

Below is generated by plot.py at 2019-02-20 17:03:23
Datalink statistics
-- Total of 3 flows:
Average throughput: 792.73 Mbit/s
95th percentile per-packet one-way delay: 178.229 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 438.61 Mbit/s
95th percentile per-packet one-way delay: 145.841 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 423.62 Mbit/s
95th percentile per-packet one-way delay: 190.666 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 216.63 Mbit/s
95th percentile per-packet one-way delay: 137.890 ms
Loss rate: 0.65%

Run 5: Report of TCP Cubic — Data Link

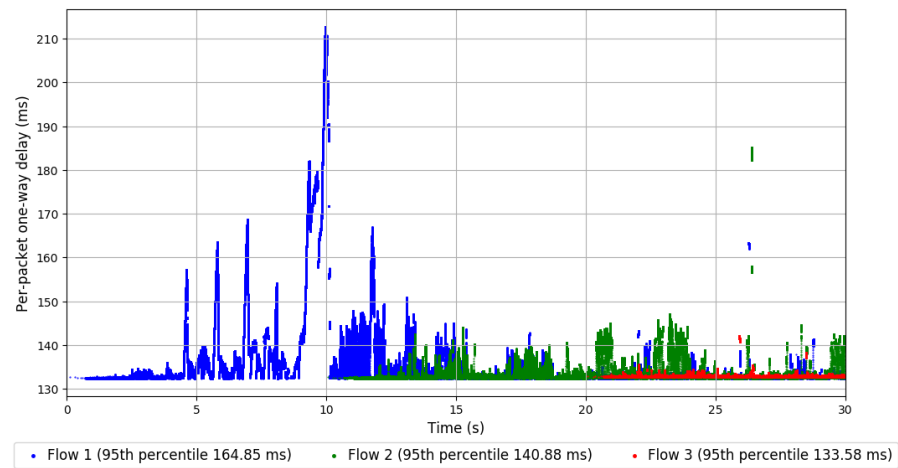
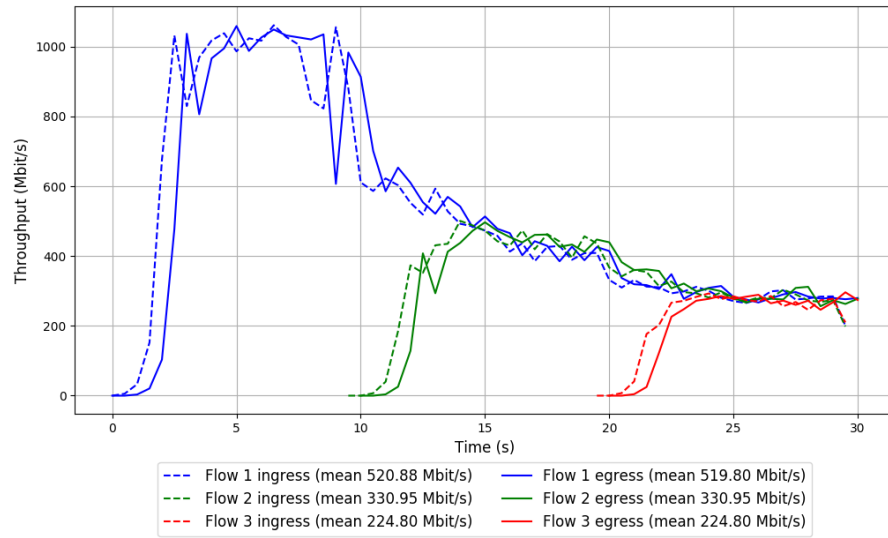


Run 1: Statistics of FillP

Start at: 2019-02-20 12:37:37
End at: 2019-02-20 12:38:07
Local clock offset: 0.026 ms
Remote clock offset: -0.485 ms

Below is generated by plot.py at 2019-02-20 17:05:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 815.29 Mbit/s
95th percentile per-packet one-way delay: 153.046 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 519.80 Mbit/s
95th percentile per-packet one-way delay: 164.851 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 330.95 Mbit/s
95th percentile per-packet one-way delay: 140.876 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 224.80 Mbit/s
95th percentile per-packet one-way delay: 133.576 ms
Loss rate: 0.00%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2019-02-20 13:26:51

End at: 2019-02-20 13:27:21

Local clock offset: -0.137 ms

Remote clock offset: -0.08 ms

Below is generated by plot.py at 2019-02-20 17:15:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 826.32 Mbit/s

95th percentile per-packet one-way delay: 137.495 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 539.53 Mbit/s

95th percentile per-packet one-way delay: 138.265 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 318.46 Mbit/s

95th percentile per-packet one-way delay: 135.528 ms

Loss rate: 0.00%

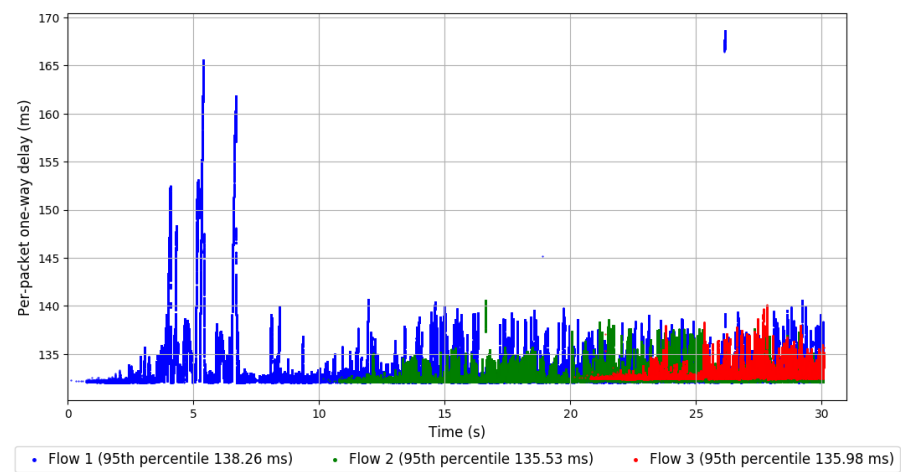
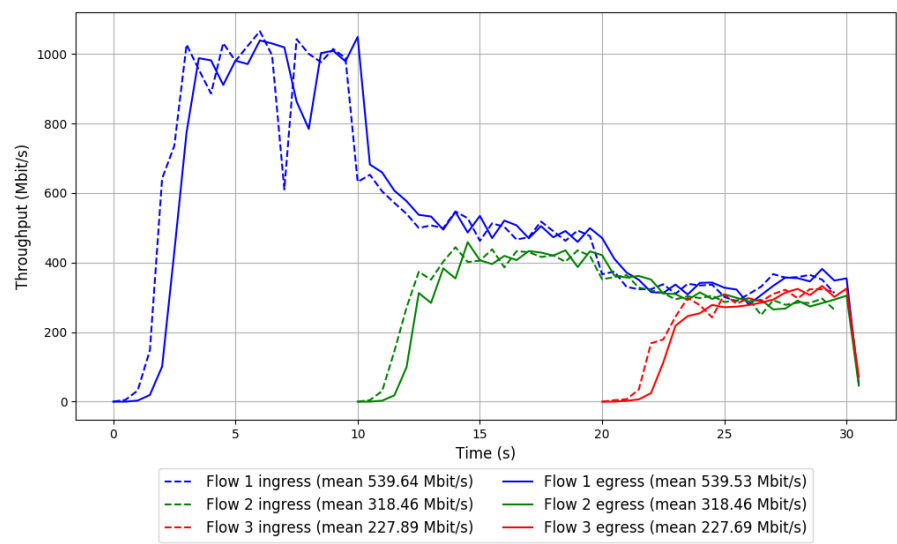
-- Flow 3:

Average throughput: 227.69 Mbit/s

95th percentile per-packet one-way delay: 135.981 ms

Loss rate: 0.07%

Run 2: Report of FillP — Data Link

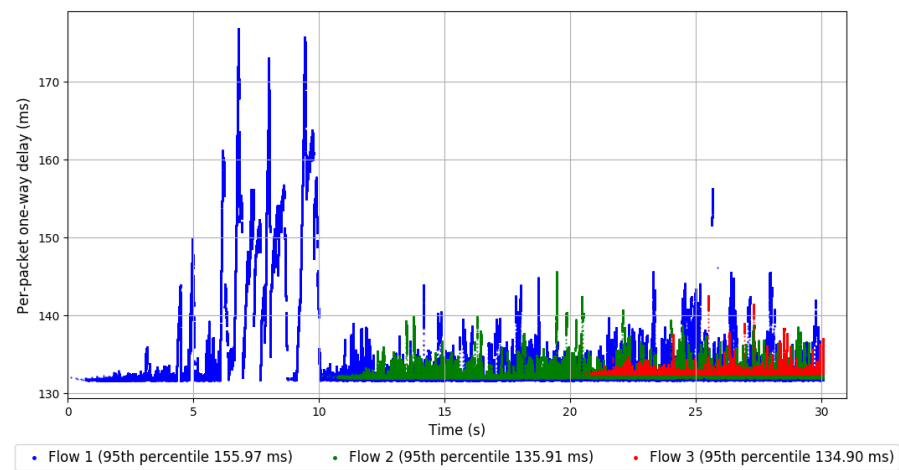
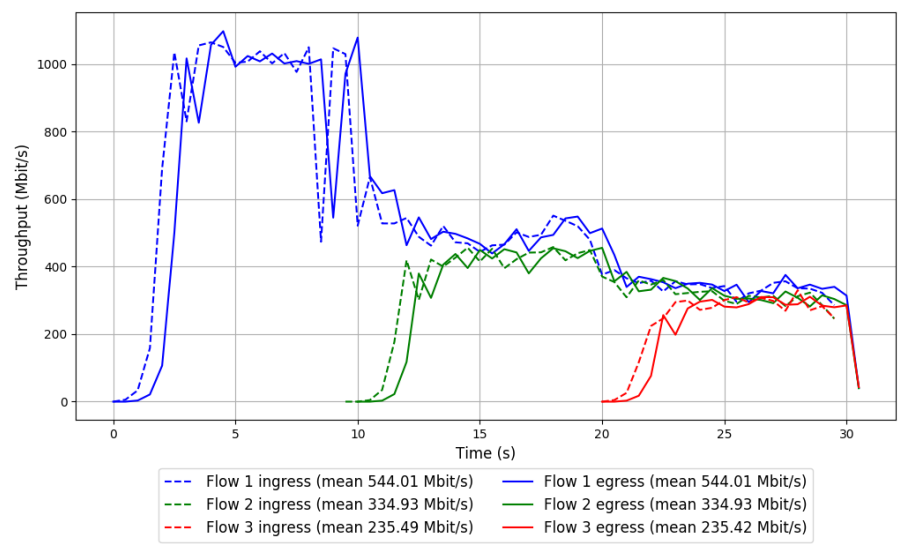


Run 3: Statistics of FillP

Start at: 2019-02-20 14:19:10
End at: 2019-02-20 14:19:40
Local clock offset: -0.142 ms
Remote clock offset: -0.473 ms

Below is generated by plot.py at 2019-02-20 17:17:54
Datalink statistics
-- Total of 3 flows:
Average throughput: 845.02 Mbit/s
95th percentile per-packet one-way delay: 153.303 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 544.01 Mbit/s
95th percentile per-packet one-way delay: 155.975 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 334.93 Mbit/s
95th percentile per-packet one-way delay: 135.915 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 235.42 Mbit/s
95th percentile per-packet one-way delay: 134.900 ms
Loss rate: 0.00%

Run 3: Report of FillP — Data Link

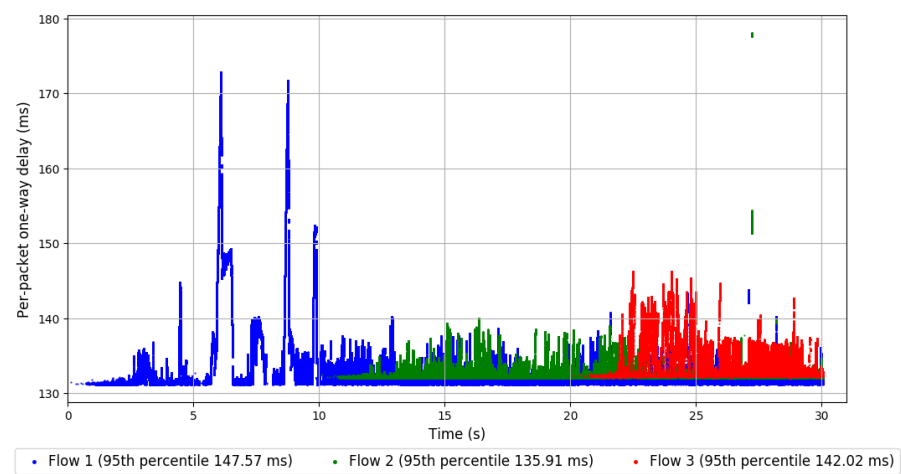
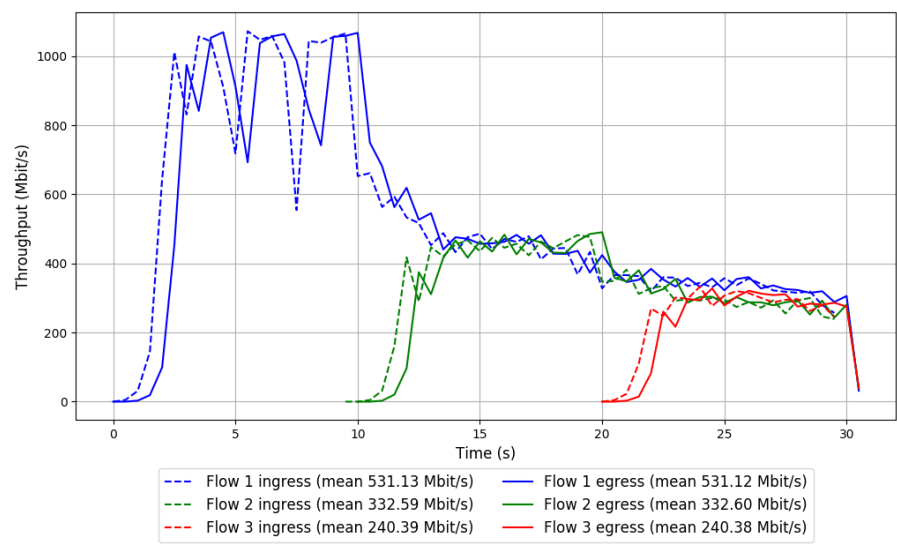


Run 4: Statistics of FillP

Start at: 2019-02-20 15:12:08
End at: 2019-02-20 15:12:38
Local clock offset: 0.21 ms
Remote clock offset: -0.417 ms

Below is generated by plot.py at 2019-02-20 17:21:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 832.14 Mbit/s
95th percentile per-packet one-way delay: 141.205 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 531.12 Mbit/s
95th percentile per-packet one-way delay: 147.573 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 332.60 Mbit/s
95th percentile per-packet one-way delay: 135.907 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 240.38 Mbit/s
95th percentile per-packet one-way delay: 142.017 ms
Loss rate: 0.00%

Run 4: Report of FillP — Data Link

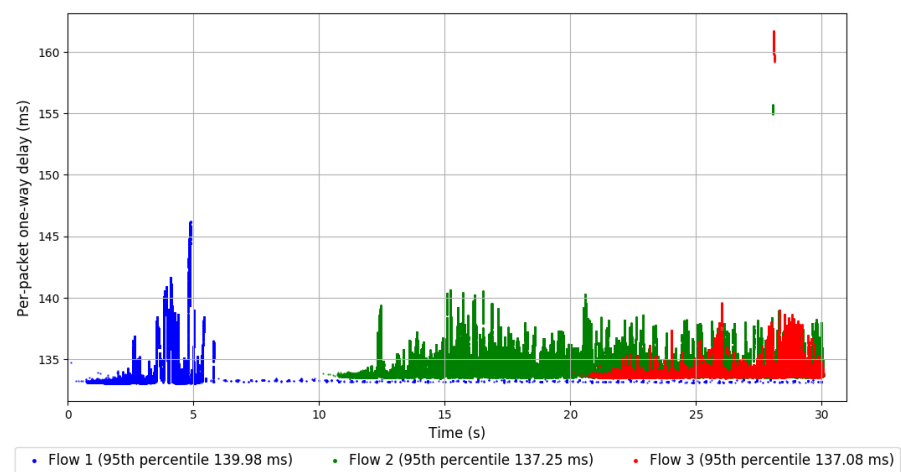
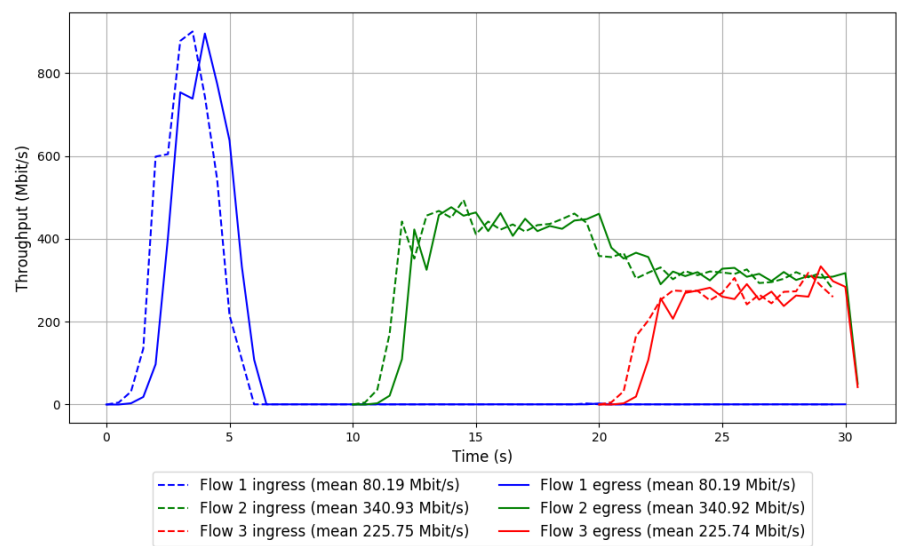


Run 5: Statistics of FillP

Start at: 2019-02-20 16:03:13
End at: 2019-02-20 16:03:43
Local clock offset: -0.521 ms
Remote clock offset: -0.025 ms

Below is generated by plot.py at 2019-02-20 17:21:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 381.54 Mbit/s
95th percentile per-packet one-way delay: 137.758 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 80.19 Mbit/s
95th percentile per-packet one-way delay: 139.980 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 340.92 Mbit/s
95th percentile per-packet one-way delay: 137.247 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 225.74 Mbit/s
95th percentile per-packet one-way delay: 137.080 ms
Loss rate: 0.00%

Run 5: Report of FillP — Data Link

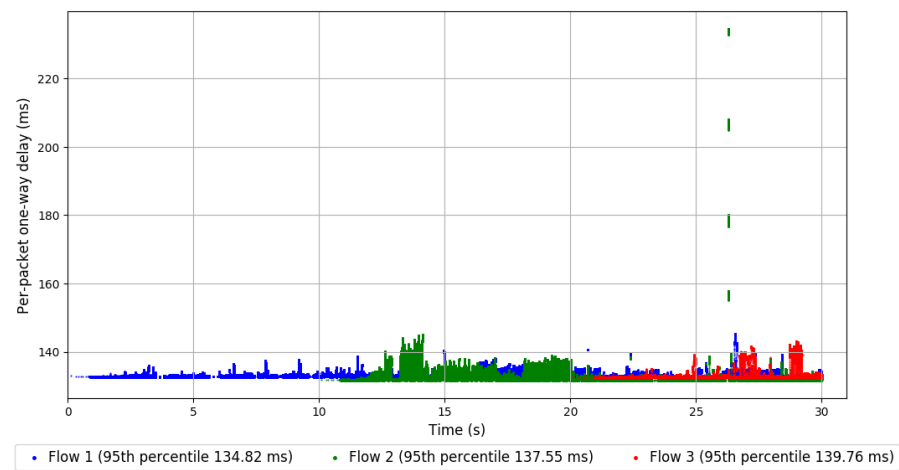
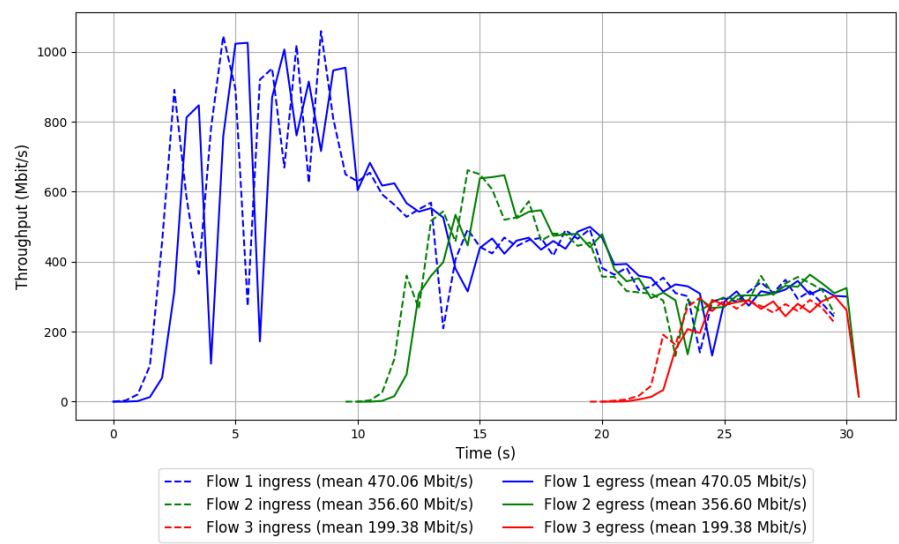


Run 1: Statistics of FillP-Sheep

Start at: 2019-02-20 11:58:52
End at: 2019-02-20 11:59:22
Local clock offset: 0.248 ms
Remote clock offset: -0.003 ms

Below is generated by plot.py at 2019-02-20 17:21:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 773.38 Mbit/s
95th percentile per-packet one-way delay: 136.152 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 470.05 Mbit/s
95th percentile per-packet one-way delay: 134.825 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 356.60 Mbit/s
95th percentile per-packet one-way delay: 137.548 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 199.38 Mbit/s
95th percentile per-packet one-way delay: 139.759 ms
Loss rate: 0.00%

Run 1: Report of FillP-Sheep — Data Link

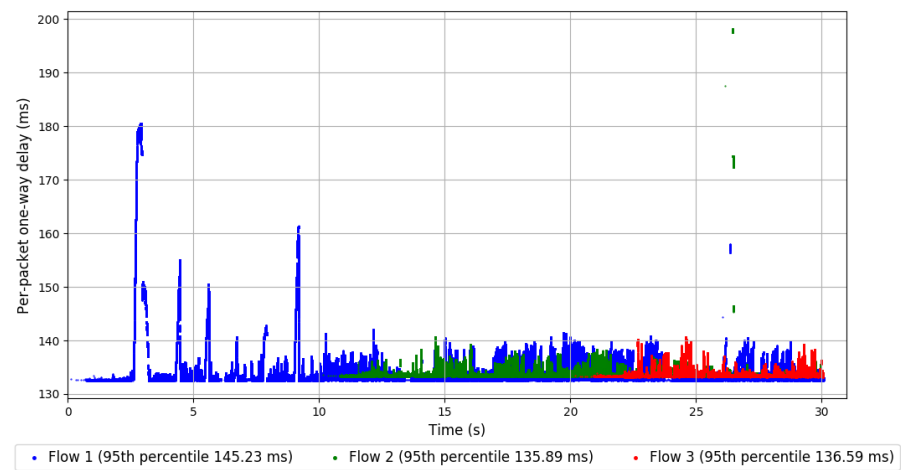
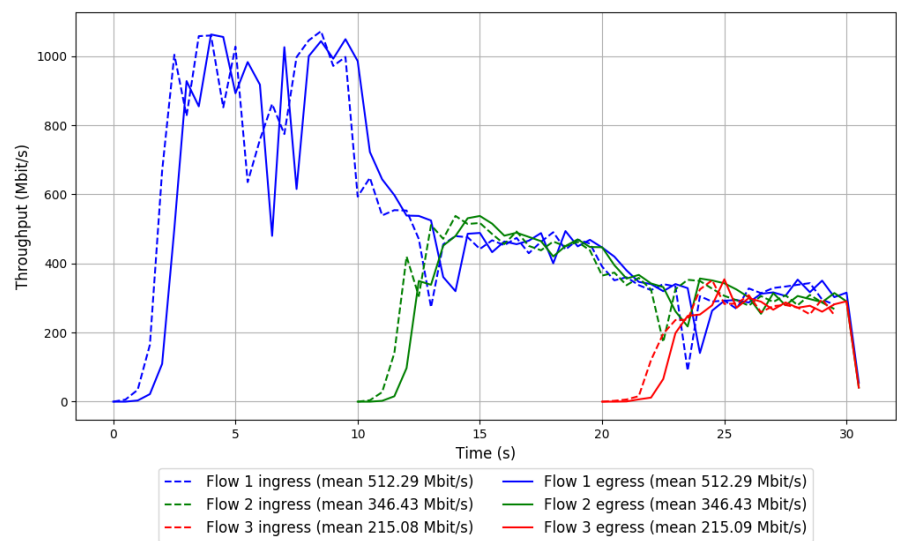


Run 2: Statistics of FillP-Sheep

Start at: 2019-02-20 12:47:35
End at: 2019-02-20 12:48:05
Local clock offset: -0.352 ms
Remote clock offset: -0.093 ms

Below is generated by plot.py at 2019-02-20 17:21:55
Datalink statistics
-- Total of 3 flows:
Average throughput: 813.58 Mbit/s
95th percentile per-packet one-way delay: 139.874 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 512.29 Mbit/s
95th percentile per-packet one-way delay: 145.230 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 346.43 Mbit/s
95th percentile per-packet one-way delay: 135.888 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 215.09 Mbit/s
95th percentile per-packet one-way delay: 136.594 ms
Loss rate: 0.00%

Run 2: Report of FillP-Sheep — Data Link



Run 3: Statistics of FillP-Sheep

Start at: 2019-02-20 13:37:43

End at: 2019-02-20 13:38:13

Local clock offset: -0.171 ms

Remote clock offset: 0.283 ms

Below is generated by plot.py at 2019-02-20 17:21:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 775.11 Mbit/s

95th percentile per-packet one-way delay: 146.852 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 496.27 Mbit/s

95th percentile per-packet one-way delay: 152.818 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 309.51 Mbit/s

95th percentile per-packet one-way delay: 134.277 ms

Loss rate: 0.00%

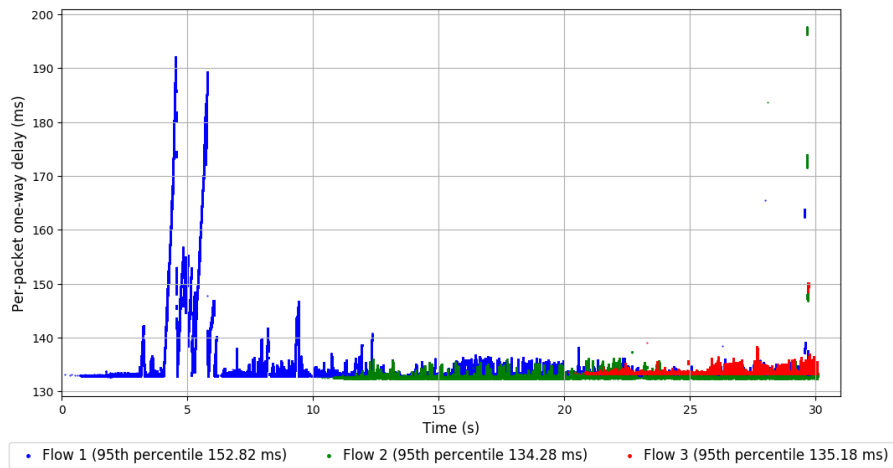
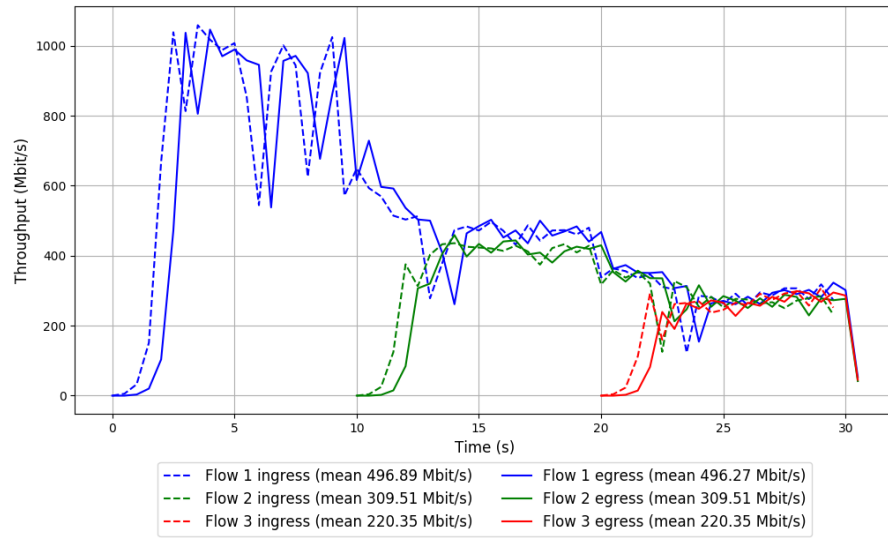
-- Flow 3:

Average throughput: 220.35 Mbit/s

95th percentile per-packet one-way delay: 135.179 ms

Loss rate: 0.00%

Run 3: Report of FillP-Sheep — Data Link



Run 4: Statistics of FillP-Sheep

Start at: 2019-02-20 14:30:04

End at: 2019-02-20 14:30:34

Local clock offset: -0.423 ms

Remote clock offset: 0.239 ms

Below is generated by plot.py at 2019-02-20 17:23:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 759.09 Mbit/s

95th percentile per-packet one-way delay: 156.961 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 492.13 Mbit/s

95th percentile per-packet one-way delay: 167.366 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 299.77 Mbit/s

95th percentile per-packet one-way delay: 135.794 ms

Loss rate: 0.00%

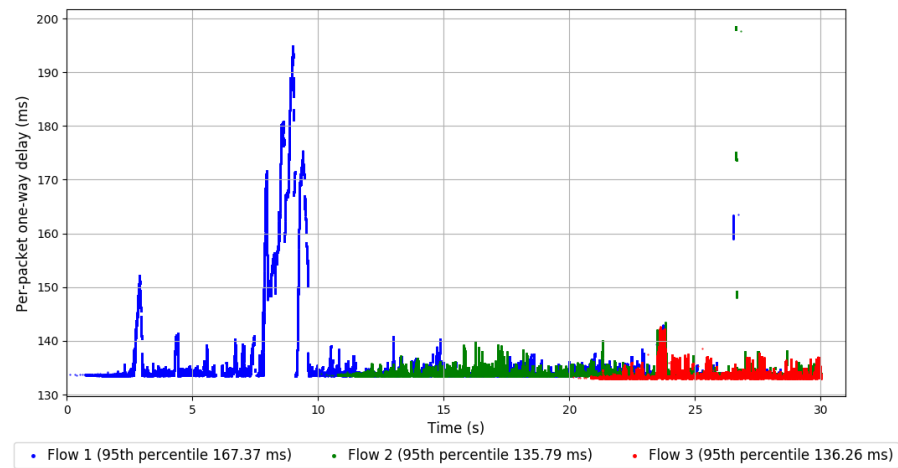
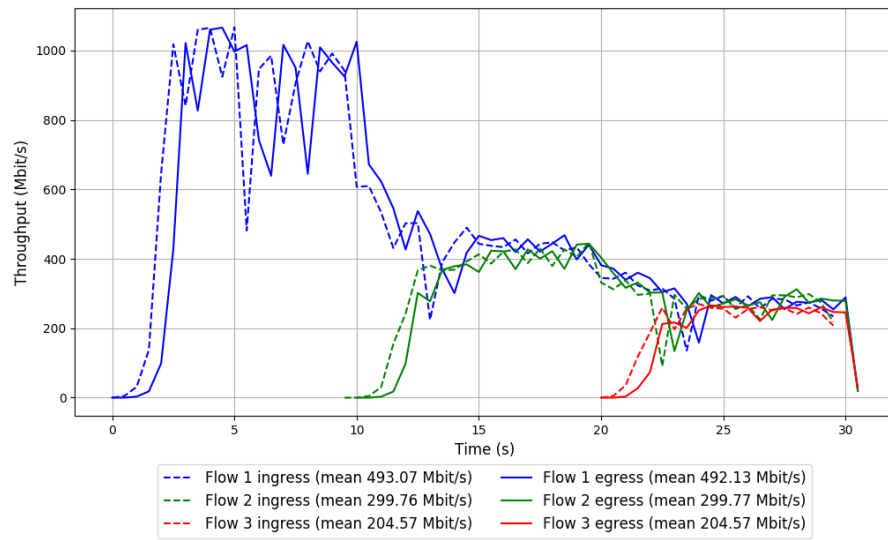
-- Flow 3:

Average throughput: 204.57 Mbit/s

95th percentile per-packet one-way delay: 136.257 ms

Loss rate: 0.00%

Run 4: Report of FillP-Sheep — Data Link

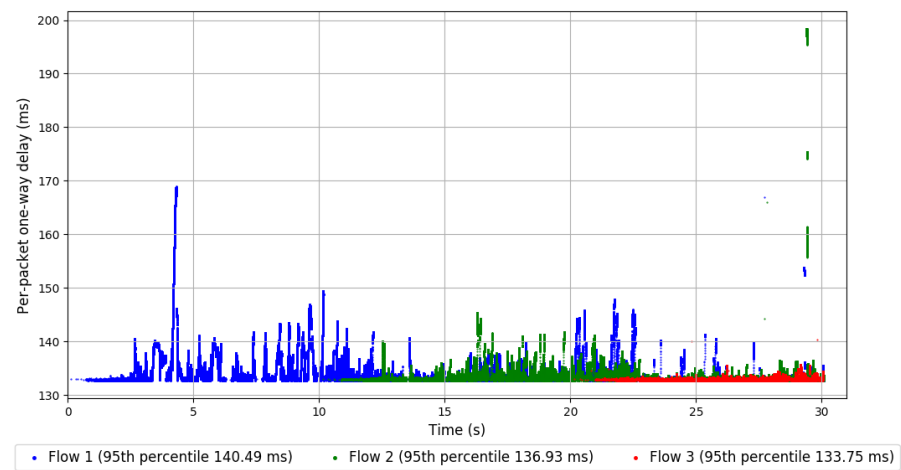
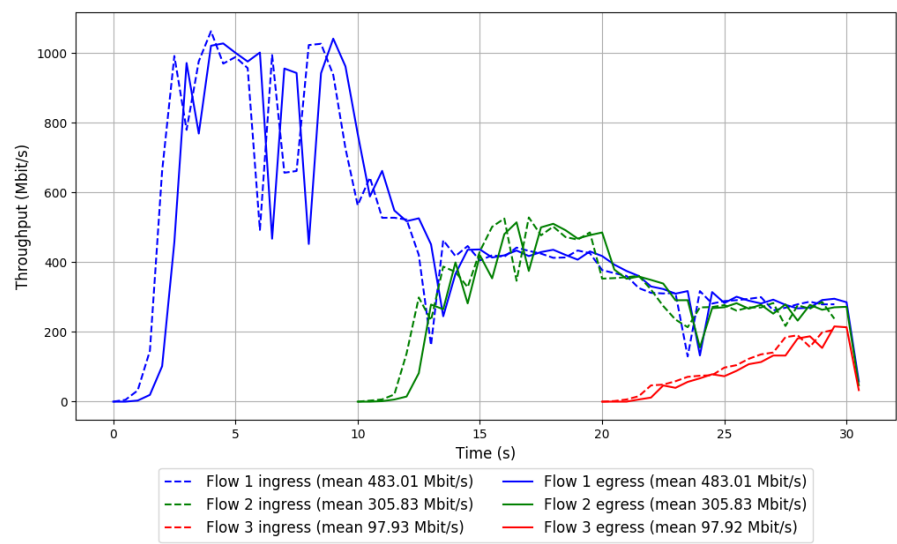


Run 5: Statistics of FillP-Sheep

Start at: 2019-02-20 15:22:36
End at: 2019-02-20 15:23:06
Local clock offset: -0.27 ms
Remote clock offset: -0.078 ms

Below is generated by plot.py at 2019-02-20 17:28:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 718.73 Mbit/s
95th percentile per-packet one-way delay: 139.663 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 483.01 Mbit/s
95th percentile per-packet one-way delay: 140.488 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 305.83 Mbit/s
95th percentile per-packet one-way delay: 136.929 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 97.92 Mbit/s
95th percentile per-packet one-way delay: 133.745 ms
Loss rate: 0.01%

Run 5: Report of FillP-Sheep — Data Link

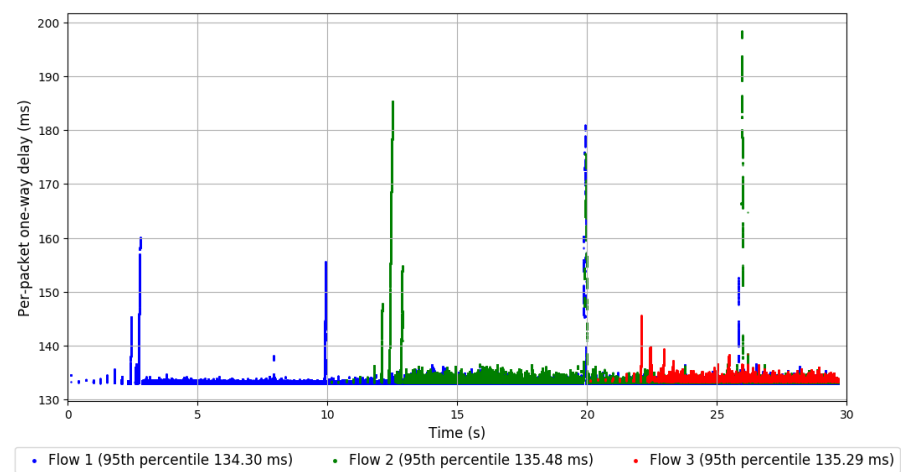
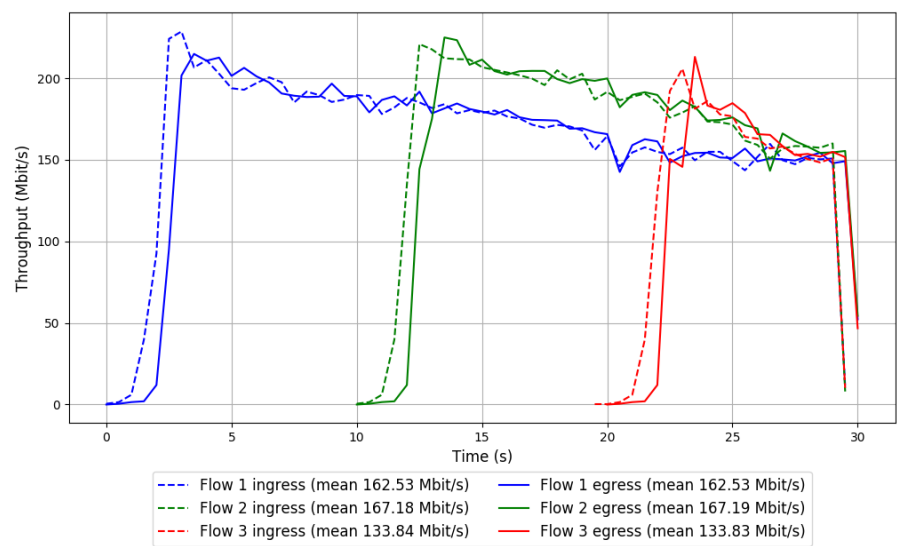


```
Run 1: Statistics of Indigo

Start at: 2019-02-20 12:33:13
End at: 2019-02-20 12:33:44
Local clock offset: 0.062 ms
Remote clock offset: 0.242 ms

# Below is generated by plot.py at 2019-02-20 17:28:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 316.30 Mbit/s
95th percentile per-packet one-way delay: 134.902 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 162.53 Mbit/s
95th percentile per-packet one-way delay: 134.302 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 167.19 Mbit/s
95th percentile per-packet one-way delay: 135.476 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 133.83 Mbit/s
95th percentile per-packet one-way delay: 135.295 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link

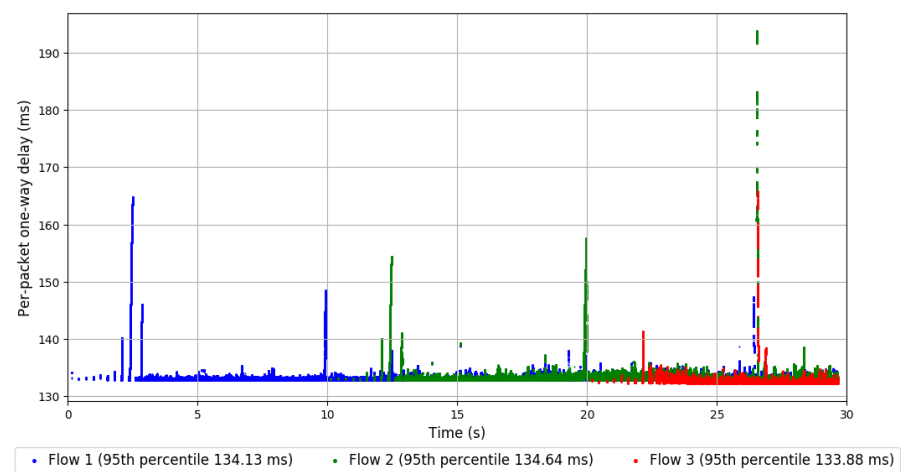
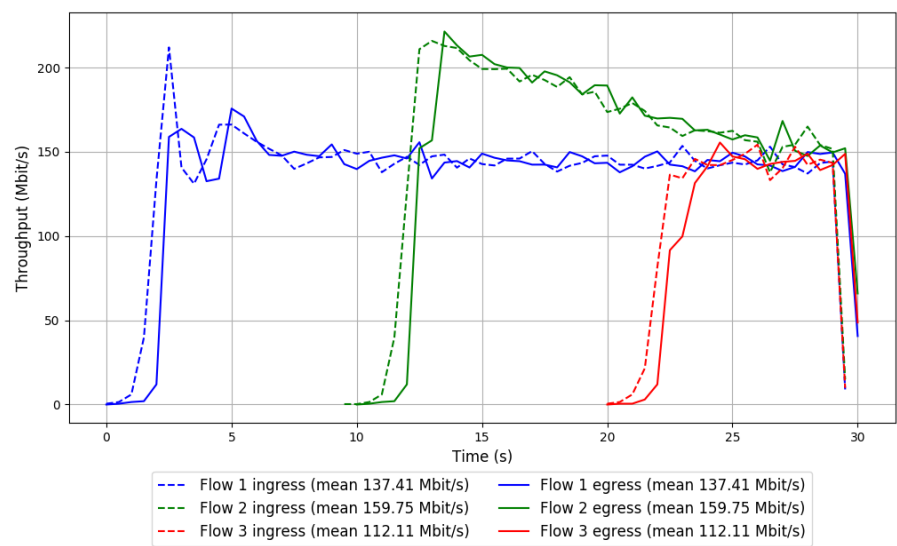


Run 2: Statistics of Indigo

Start at: 2019-02-20 13:22:37
End at: 2019-02-20 13:23:07
Local clock offset: -0.307 ms
Remote clock offset: -0.387 ms

Below is generated by plot.py at 2019-02-20 17:28:32
Datalink statistics
-- Total of 3 flows:
Average throughput: 279.12 Mbit/s
95th percentile per-packet one-way delay: 134.289 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 137.41 Mbit/s
95th percentile per-packet one-way delay: 134.131 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 159.75 Mbit/s
95th percentile per-packet one-way delay: 134.637 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 112.11 Mbit/s
95th percentile per-packet one-way delay: 133.875 ms
Loss rate: 0.00%

Run 2: Report of Indigo — Data Link

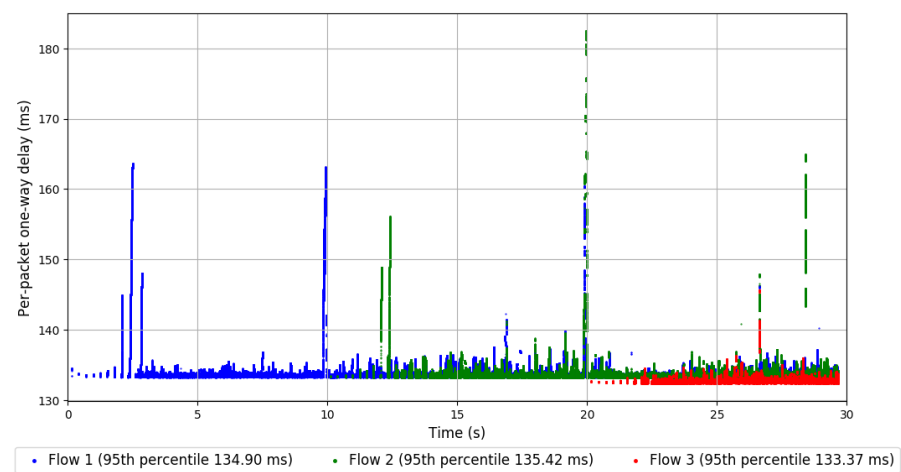
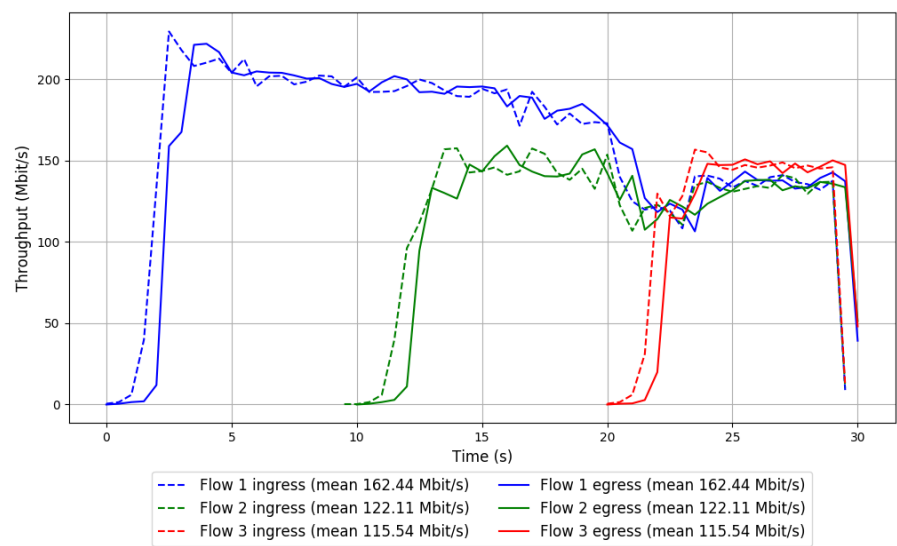


Run 3: Statistics of Indigo

Start at: 2019-02-20 14:14:40
End at: 2019-02-20 14:15:10
Local clock offset: -0.545 ms
Remote clock offset: -0.111 ms

Below is generated by plot.py at 2019-02-20 17:30:41
Datalink statistics
-- Total of 3 flows:
Average throughput: 280.41 Mbit/s
95th percentile per-packet one-way delay: 134.887 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 162.44 Mbit/s
95th percentile per-packet one-way delay: 134.904 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 122.11 Mbit/s
95th percentile per-packet one-way delay: 135.419 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 115.54 Mbit/s
95th percentile per-packet one-way delay: 133.367 ms
Loss rate: 0.00%

Run 3: Report of Indigo — Data Link

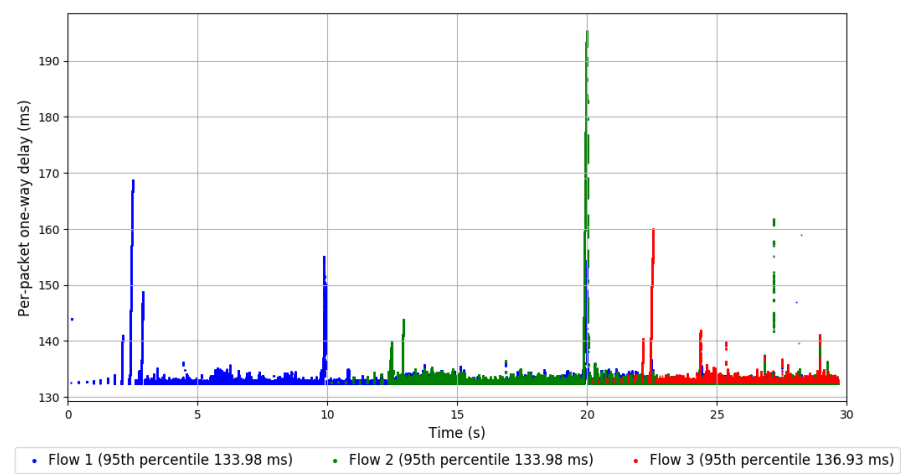
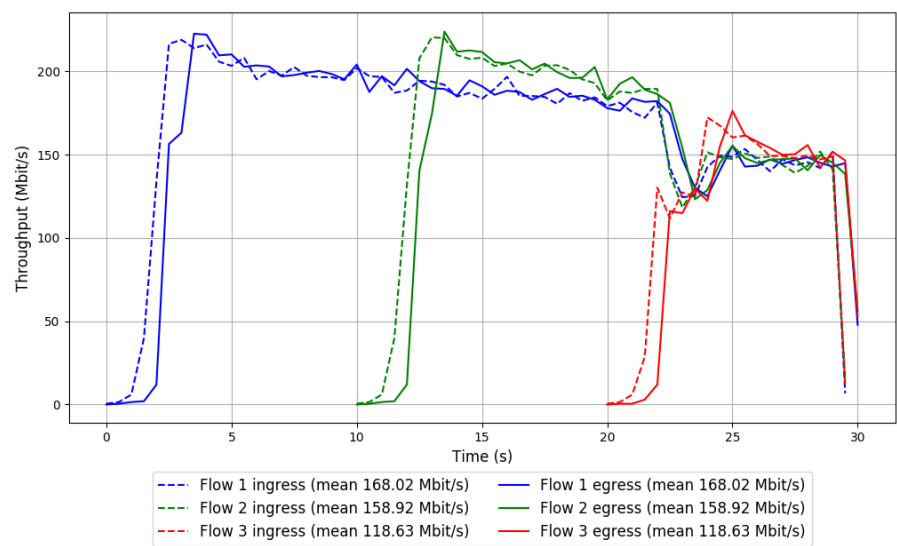


Run 4: Statistics of Indigo

Start at: 2019-02-20 15:07:00
End at: 2019-02-20 15:07:30
Local clock offset: -0.359 ms
Remote clock offset: -0.452 ms

Below is generated by plot.py at 2019-02-20 17:32:39
Datalink statistics
-- Total of 3 flows:
Average throughput: 311.22 Mbit/s
95th percentile per-packet one-way delay: 134.091 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 168.02 Mbit/s
95th percentile per-packet one-way delay: 133.980 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 158.92 Mbit/s
95th percentile per-packet one-way delay: 133.979 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 118.63 Mbit/s
95th percentile per-packet one-way delay: 136.932 ms
Loss rate: 0.00%

Run 4: Report of Indigo — Data Link

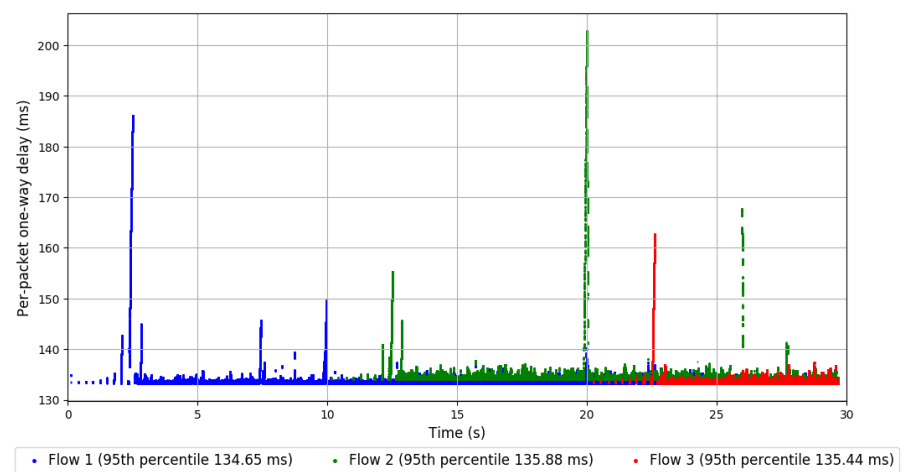
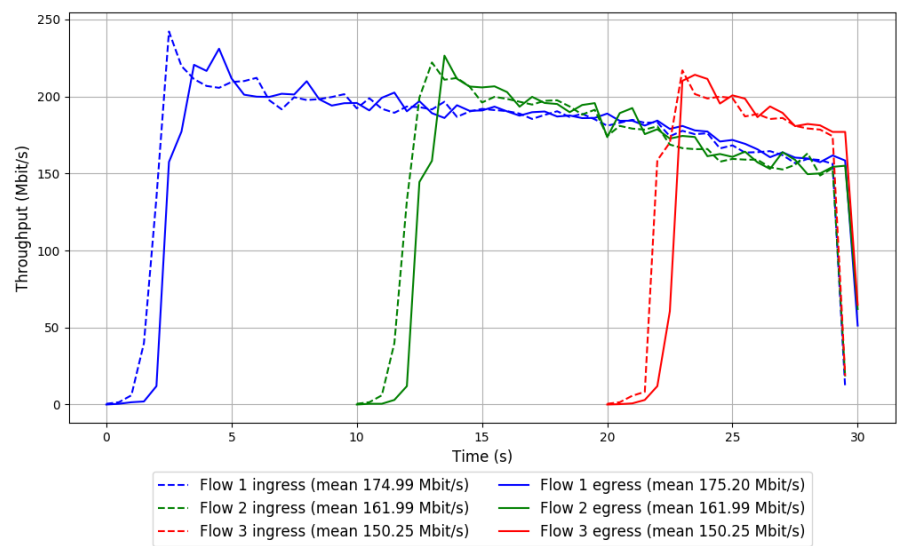


Run 5: Statistics of Indigo

Start at: 2019-02-20 15:58:24
End at: 2019-02-20 15:58:54
Local clock offset: -0.732 ms
Remote clock offset: -0.076 ms

Below is generated by plot.py at 2019-02-20 17:33:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 330.13 Mbit/s
95th percentile per-packet one-way delay: 135.339 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 175.20 Mbit/s
95th percentile per-packet one-way delay: 134.653 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 161.99 Mbit/s
95th percentile per-packet one-way delay: 135.879 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 150.25 Mbit/s
95th percentile per-packet one-way delay: 135.439 ms
Loss rate: 0.00%

Run 5: Report of Indigo — Data Link

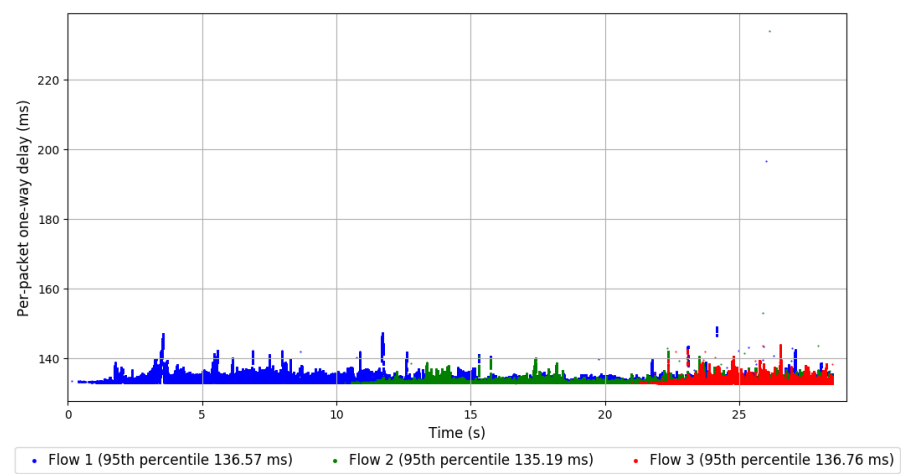
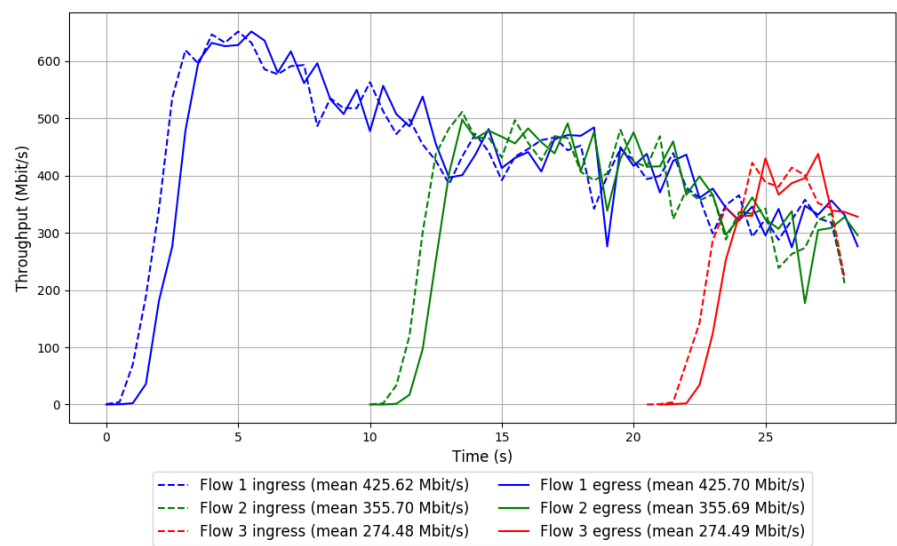


Run 1: Statistics of Indigo-MusesC3

Start at: 2019-02-20 12:44:59
End at: 2019-02-20 12:45:29
Local clock offset: 0.072 ms
Remote clock offset: -0.108 ms

Below is generated by plot.py at 2019-02-20 17:35:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 725.90 Mbit/s
95th percentile per-packet one-way delay: 136.247 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 425.70 Mbit/s
95th percentile per-packet one-way delay: 136.566 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 355.69 Mbit/s
95th percentile per-packet one-way delay: 135.194 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 274.49 Mbit/s
95th percentile per-packet one-way delay: 136.756 ms
Loss rate: 0.00%

Run 1: Report of Indigo-MusesC3 — Data Link

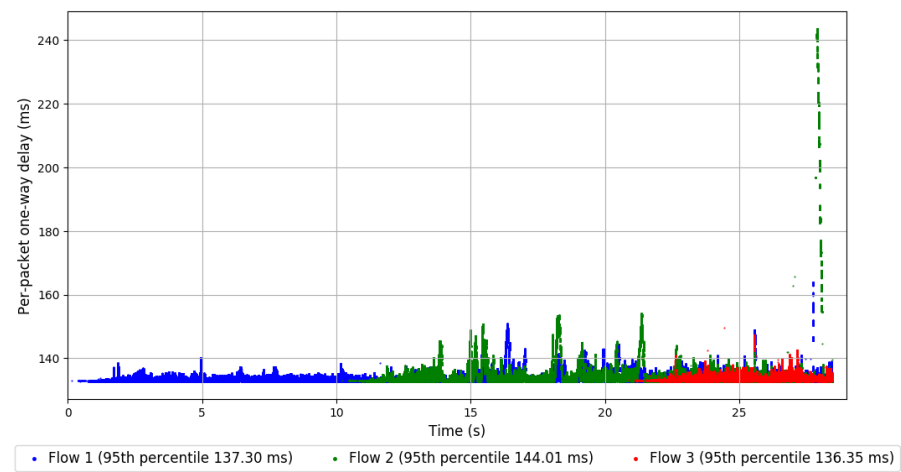
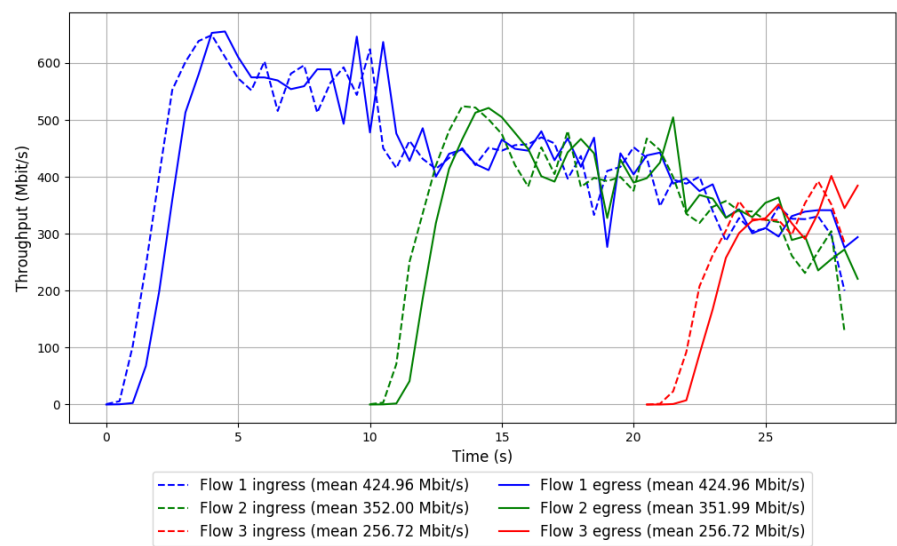


Run 2: Statistics of Indigo-MusesC3

Start at: 2019-02-20 13:34:57
End at: 2019-02-20 13:35:27
Local clock offset: -0.06 ms
Remote clock offset: -0.093 ms

Below is generated by plot.py at 2019-02-20 17:36:39
Datalink statistics
-- Total of 3 flows:
Average throughput: 720.68 Mbit/s
95th percentile per-packet one-way delay: 138.961 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 424.96 Mbit/s
95th percentile per-packet one-way delay: 137.303 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 351.99 Mbit/s
95th percentile per-packet one-way delay: 144.010 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 256.72 Mbit/s
95th percentile per-packet one-way delay: 136.351 ms
Loss rate: 0.04%

Run 2: Report of Indigo-MusesC3 — Data Link

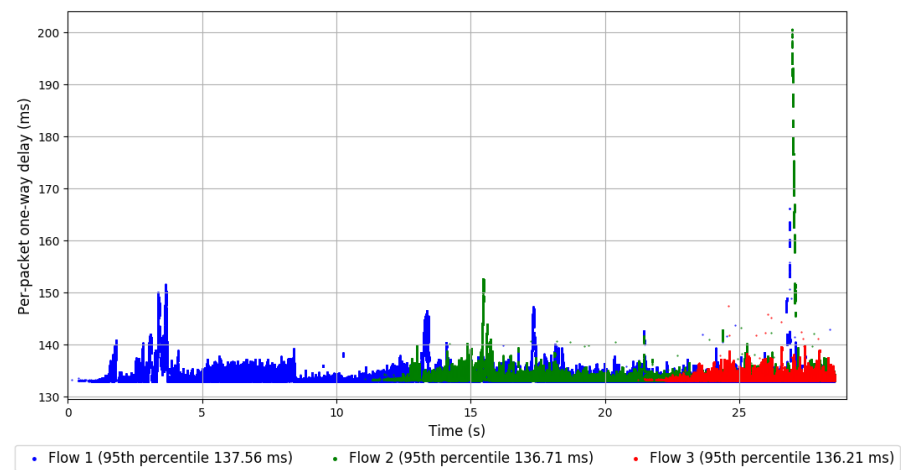
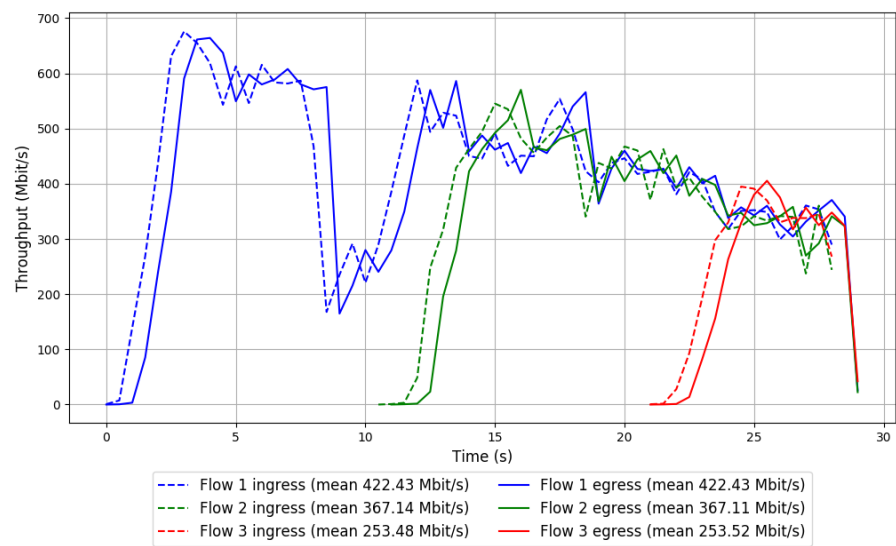


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-02-20 14:26:57
End at: 2019-02-20 14:27:27
Local clock offset: -0.16 ms
Remote clock offset: -0.098 ms

Below is generated by plot.py at 2019-02-20 17:41:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 713.66 Mbit/s
95th percentile per-packet one-way delay: 137.104 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 422.43 Mbit/s
95th percentile per-packet one-way delay: 137.559 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 367.11 Mbit/s
95th percentile per-packet one-way delay: 136.709 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 253.52 Mbit/s
95th percentile per-packet one-way delay: 136.209 ms
Loss rate: 0.00%

Run 3: Report of Indigo-MusesC3 — Data Link

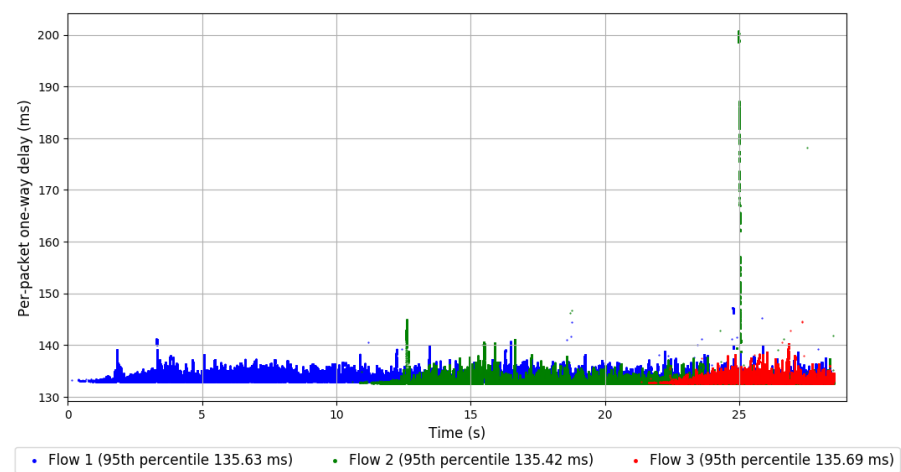
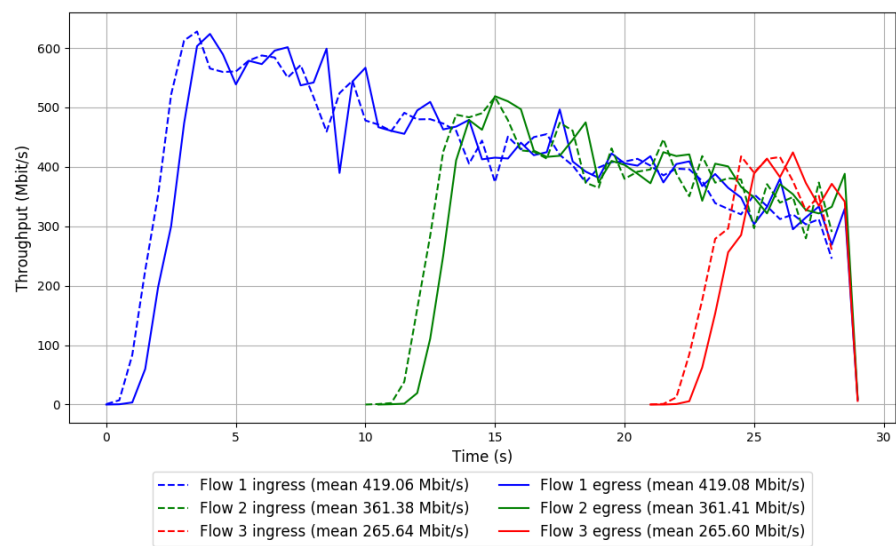


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-02-20 15:19:49
End at: 2019-02-20 15:20:19
Local clock offset: -0.1 ms
Remote clock offset: -0.041 ms

Below is generated by plot.py at 2019-02-20 17:42:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 714.07 Mbit/s
95th percentile per-packet one-way delay: 135.587 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 419.08 Mbit/s
95th percentile per-packet one-way delay: 135.626 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 361.41 Mbit/s
95th percentile per-packet one-way delay: 135.416 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 265.60 Mbit/s
95th percentile per-packet one-way delay: 135.688 ms
Loss rate: 0.00%

Run 4: Report of Indigo-MusesC3 — Data Link



Run 5: Statistics of Indigo-MusesC3

Start at: 2019-02-20 16:10:17

End at: 2019-02-20 16:10:47

Local clock offset: -0.283 ms

Remote clock offset: 0.325 ms

Below is generated by plot.py at 2019-02-20 17:42:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 675.34 Mbit/s

95th percentile per-packet one-way delay: 136.591 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 390.52 Mbit/s

95th percentile per-packet one-way delay: 136.207 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 349.19 Mbit/s

95th percentile per-packet one-way delay: 137.122 ms

Loss rate: 0.00%

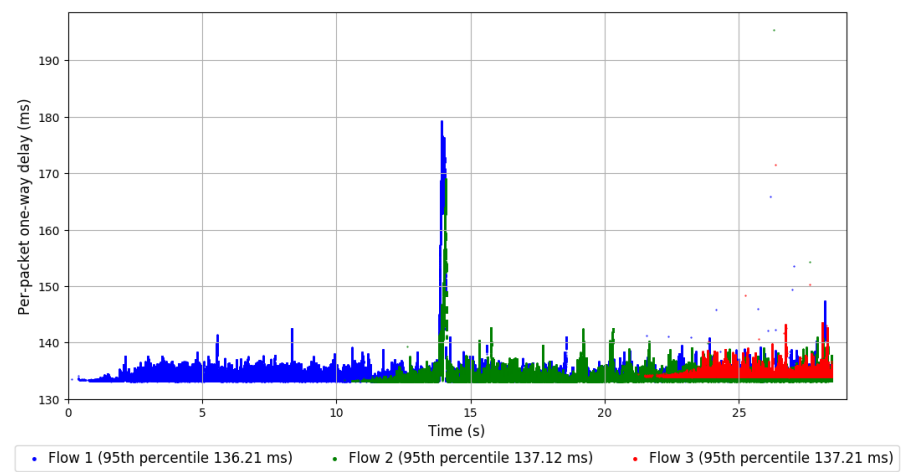
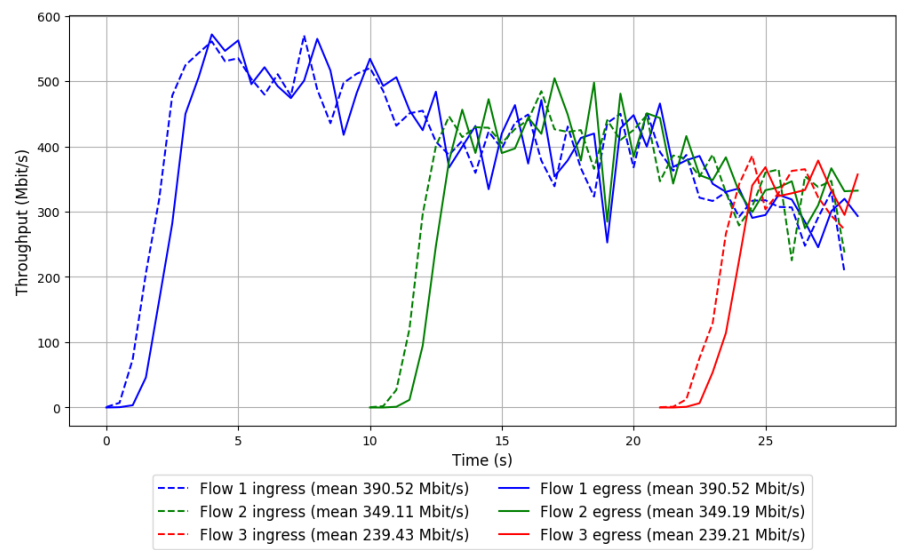
-- Flow 3:

Average throughput: 239.21 Mbit/s

95th percentile per-packet one-way delay: 137.211 ms

Loss rate: 0.12%

Run 5: Report of Indigo-MusesC3 — Data Link

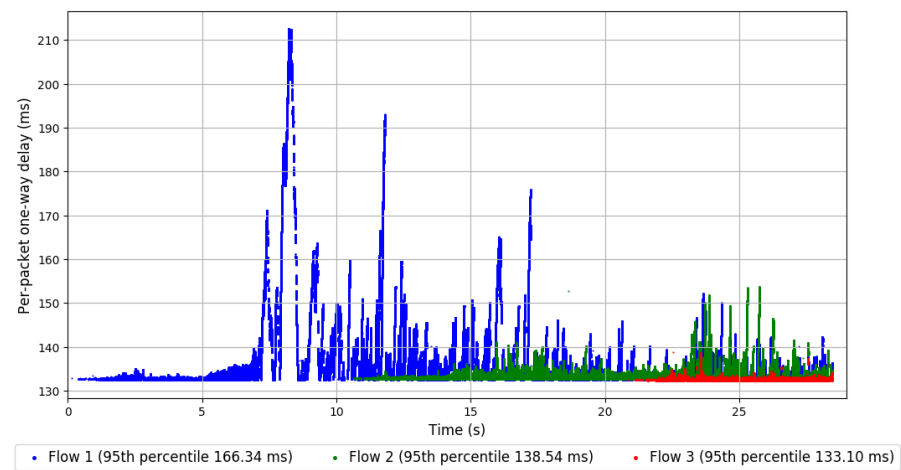
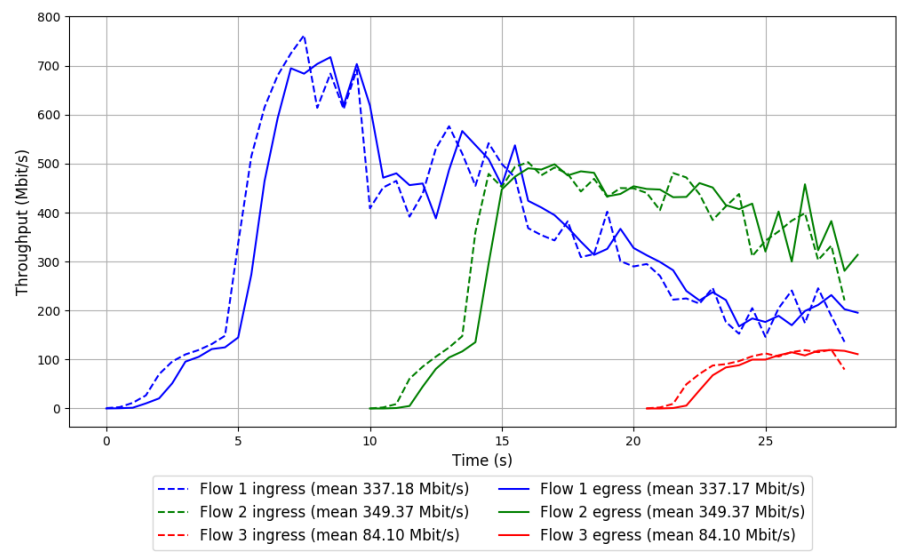


Run 1: Statistics of Indigo-MusesC5

Start at: 2019-02-20 12:42:38
End at: 2019-02-20 12:43:08
Local clock offset: 0.497 ms
Remote clock offset: -0.111 ms

Below is generated by plot.py at 2019-02-20 17:42:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 582.74 Mbit/s
95th percentile per-packet one-way delay: 154.851 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 337.17 Mbit/s
95th percentile per-packet one-way delay: 166.337 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 349.37 Mbit/s
95th percentile per-packet one-way delay: 138.543 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 84.10 Mbit/s
95th percentile per-packet one-way delay: 133.103 ms
Loss rate: 0.00%

Run 1: Report of Indigo-MusesC5 — Data Link

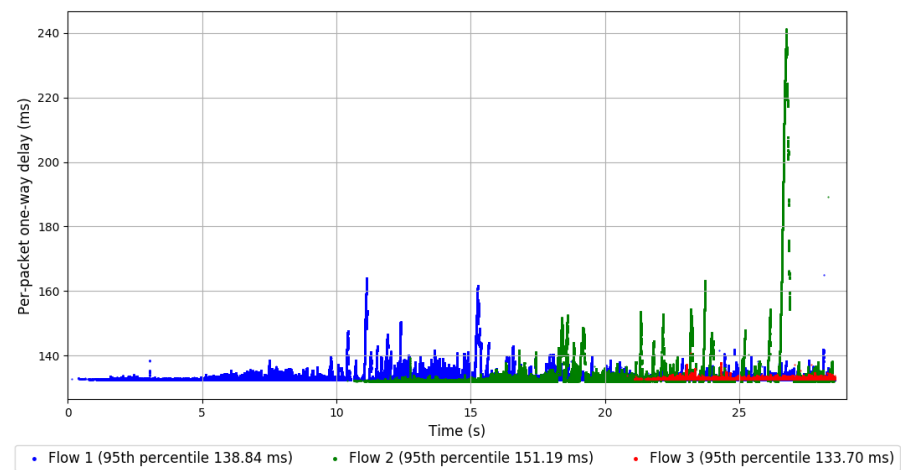
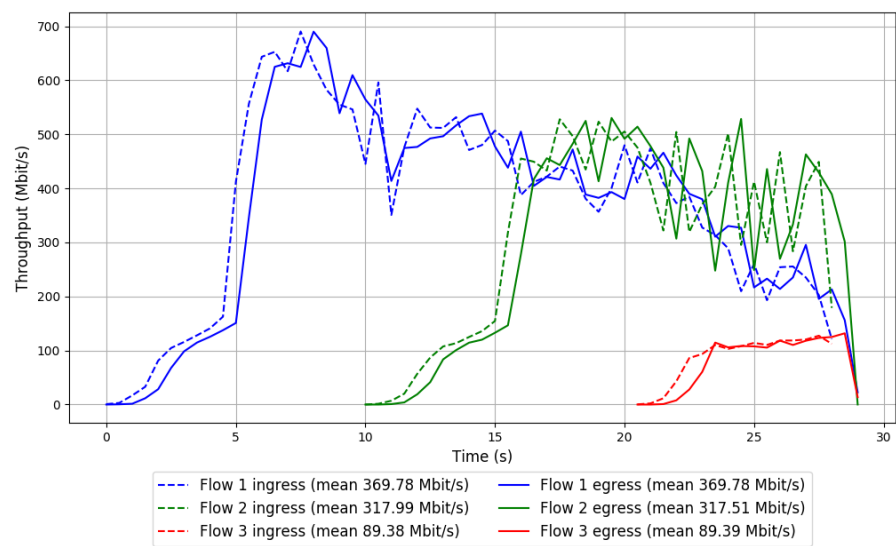


Run 2: Statistics of Indigo-MusesC5

Start at: 2019-02-20 13:32:21
End at: 2019-02-20 13:32:51
Local clock offset: 0.147 ms
Remote clock offset: -0.124 ms

Below is generated by plot.py at 2019-02-20 17:44:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 596.74 Mbit/s
95th percentile per-packet one-way delay: 143.198 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 369.78 Mbit/s
95th percentile per-packet one-way delay: 138.836 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 317.51 Mbit/s
95th percentile per-packet one-way delay: 151.193 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 89.39 Mbit/s
95th percentile per-packet one-way delay: 133.704 ms
Loss rate: 0.00%

Run 2: Report of Indigo-MusesC5 — Data Link

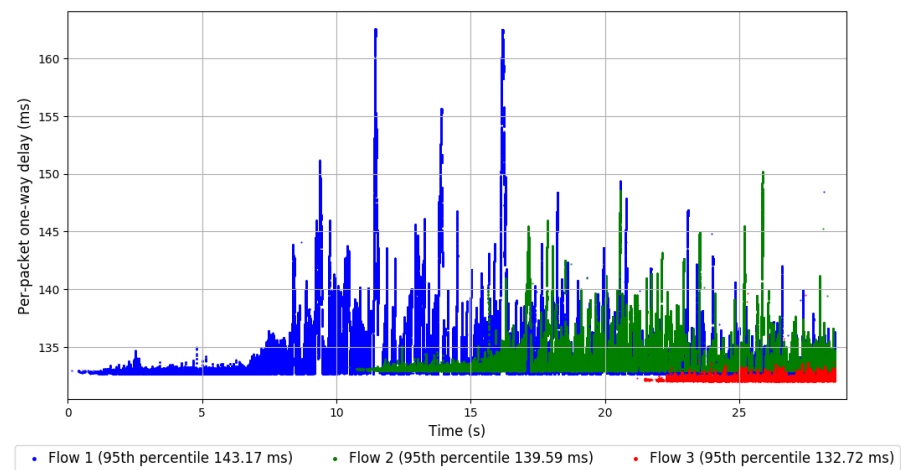
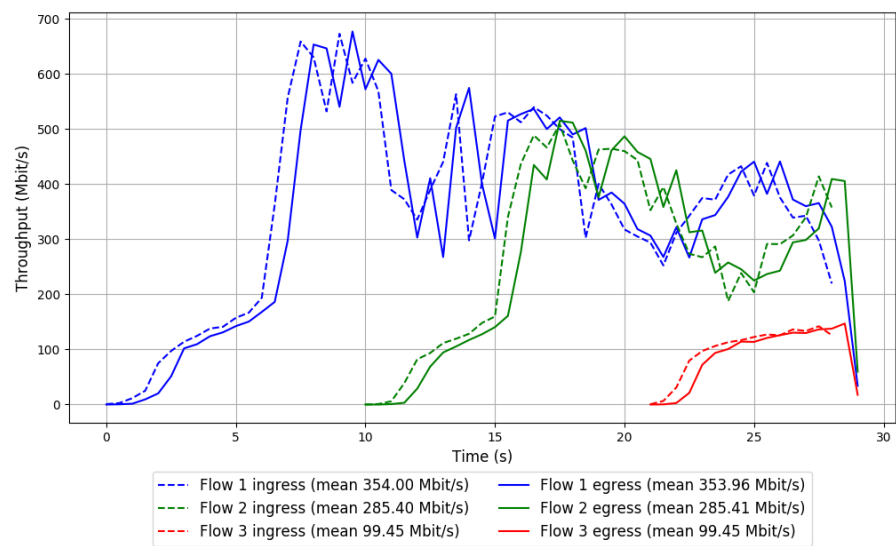


Run 3: Statistics of Indigo-MusesC5

Start at: 2019-02-20 14:24:31
End at: 2019-02-20 14:25:01
Local clock offset: -0.171 ms
Remote clock offset: -0.091 ms

Below is generated by plot.py at 2019-02-20 17:44:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 561.28 Mbit/s
95th percentile per-packet one-way delay: 141.802 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 353.96 Mbit/s
95th percentile per-packet one-way delay: 143.172 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 285.41 Mbit/s
95th percentile per-packet one-way delay: 139.587 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 99.45 Mbit/s
95th percentile per-packet one-way delay: 132.716 ms
Loss rate: 0.00%

Run 3: Report of Indigo-MusesC5 — Data Link



Run 4: Statistics of Indigo-MusesC5

Start at: 2019-02-20 15:17:13

End at: 2019-02-20 15:17:43

Local clock offset: -0.076 ms

Remote clock offset: -0.06 ms

Below is generated by plot.py at 2019-02-20 17:47:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 631.99 Mbit/s

95th percentile per-packet one-way delay: 158.739 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 404.25 Mbit/s

95th percentile per-packet one-way delay: 163.907 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 344.45 Mbit/s

95th percentile per-packet one-way delay: 144.219 ms

Loss rate: 0.01%

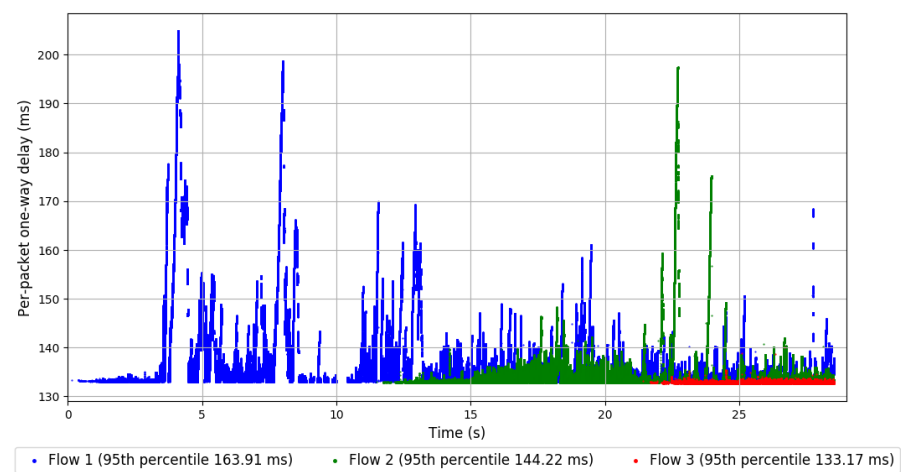
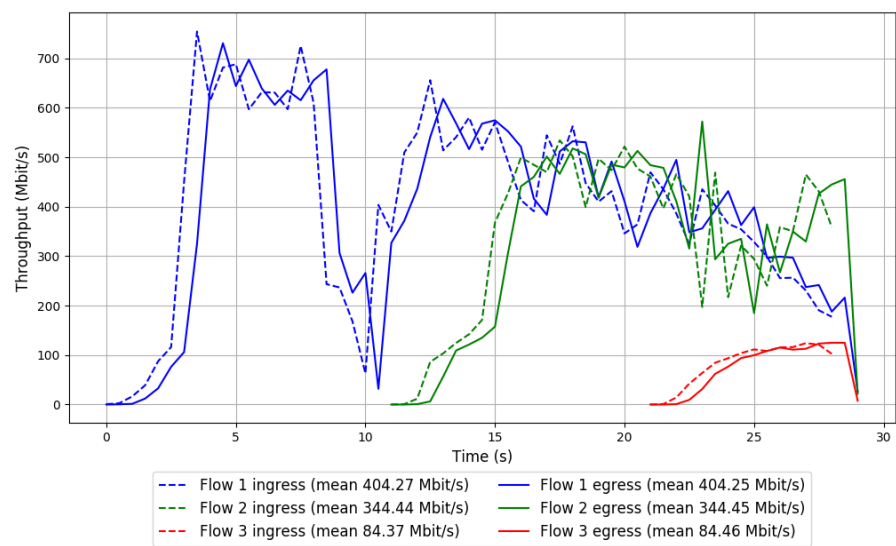
-- Flow 3:

Average throughput: 84.46 Mbit/s

95th percentile per-packet one-way delay: 133.167 ms

Loss rate: 0.00%

Run 4: Report of Indigo-MusesC5 — Data Link

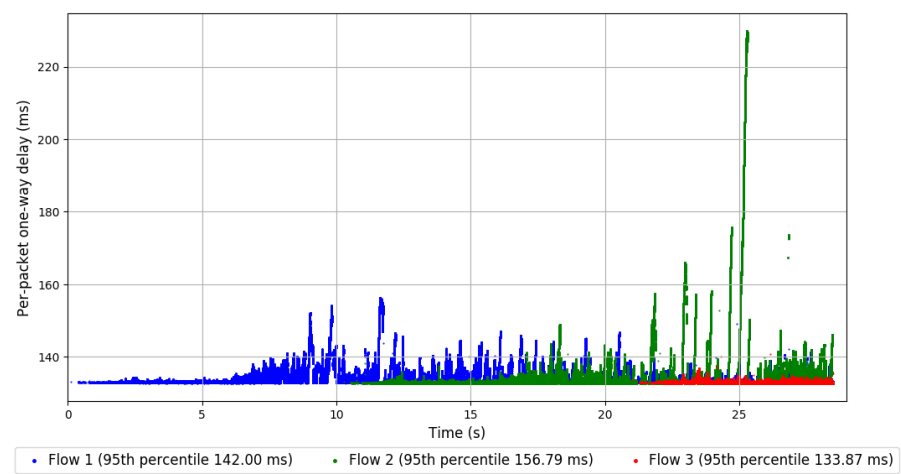
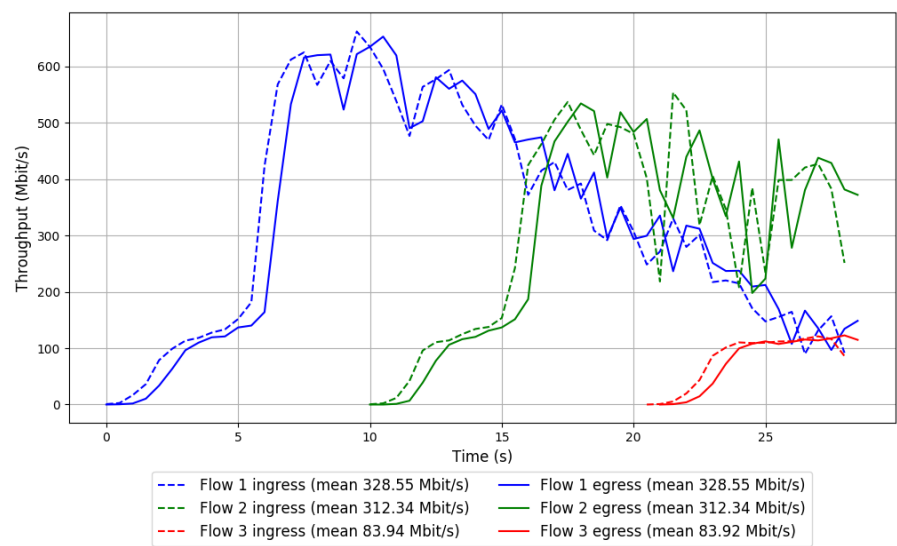


Run 5: Statistics of Indigo-MusesC5

Start at: 2019-02-20 16:07:45
End at: 2019-02-20 16:08:15
Local clock offset: -0.203 ms
Remote clock offset: -0.068 ms

Below is generated by plot.py at 2019-02-20 17:47:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 551.10 Mbit/s
95th percentile per-packet one-way delay: 145.040 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 328.55 Mbit/s
95th percentile per-packet one-way delay: 142.003 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 312.34 Mbit/s
95th percentile per-packet one-way delay: 156.791 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 83.92 Mbit/s
95th percentile per-packet one-way delay: 133.873 ms
Loss rate: 0.00%

Run 5: Report of Indigo-MusesC5 — Data Link

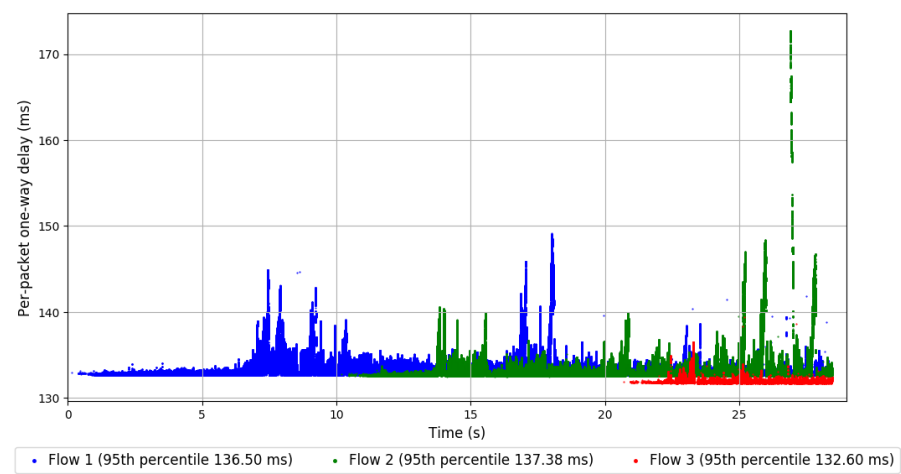
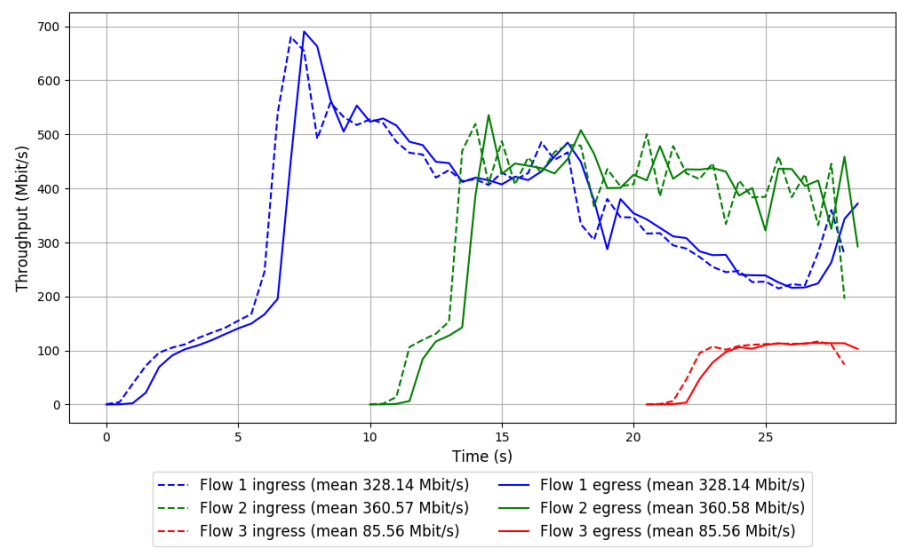


Run 1: Statistics of Indigo-MusesD

Start at: 2019-02-20 12:40:18
End at: 2019-02-20 12:40:48
Local clock offset: -0.008 ms
Remote clock offset: -0.502 ms

Below is generated by plot.py at 2019-02-20 17:52:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 584.02 Mbit/s
95th percentile per-packet one-way delay: 136.663 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 328.14 Mbit/s
95th percentile per-packet one-way delay: 136.495 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 360.58 Mbit/s
95th percentile per-packet one-way delay: 137.377 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 85.56 Mbit/s
95th percentile per-packet one-way delay: 132.603 ms
Loss rate: 0.00%

Run 1: Report of Indigo-MusesD — Data Link



Run 2: Statistics of Indigo-MusesD

Start at: 2019-02-20 13:29:41

End at: 2019-02-20 13:30:11

Local clock offset: -0.262 ms

Remote clock offset: 0.296 ms

Below is generated by plot.py at 2019-02-20 17:53:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 612.45 Mbit/s

95th percentile per-packet one-way delay: 138.048 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 422.54 Mbit/s

95th percentile per-packet one-way delay: 139.226 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 265.22 Mbit/s

95th percentile per-packet one-way delay: 135.793 ms

Loss rate: 0.00%

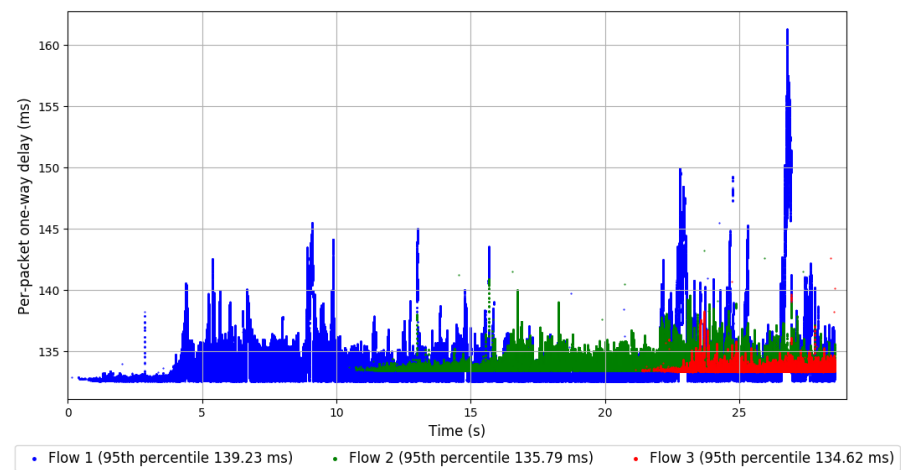
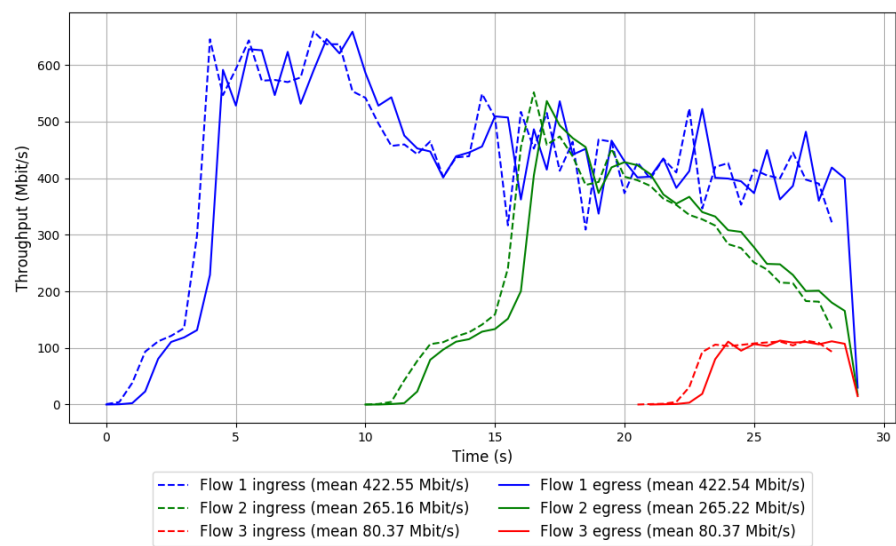
-- Flow 3:

Average throughput: 80.37 Mbit/s

95th percentile per-packet one-way delay: 134.620 ms

Loss rate: 0.00%

Run 2: Report of Indigo-MusesD — Data Link

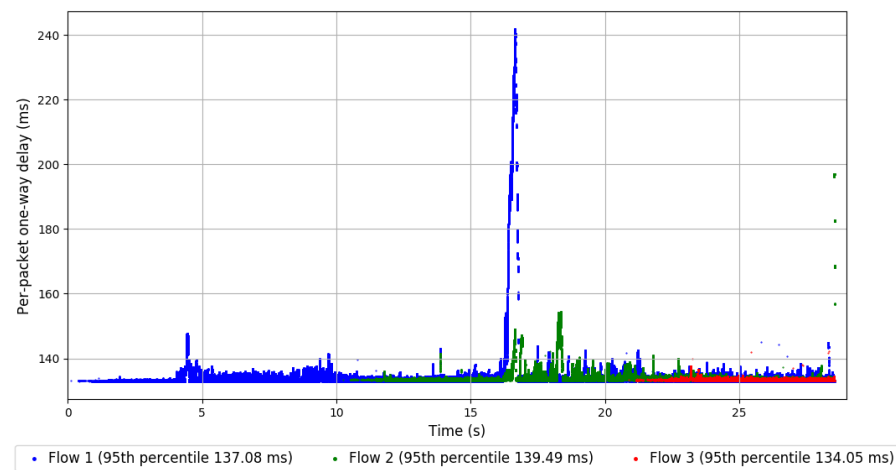
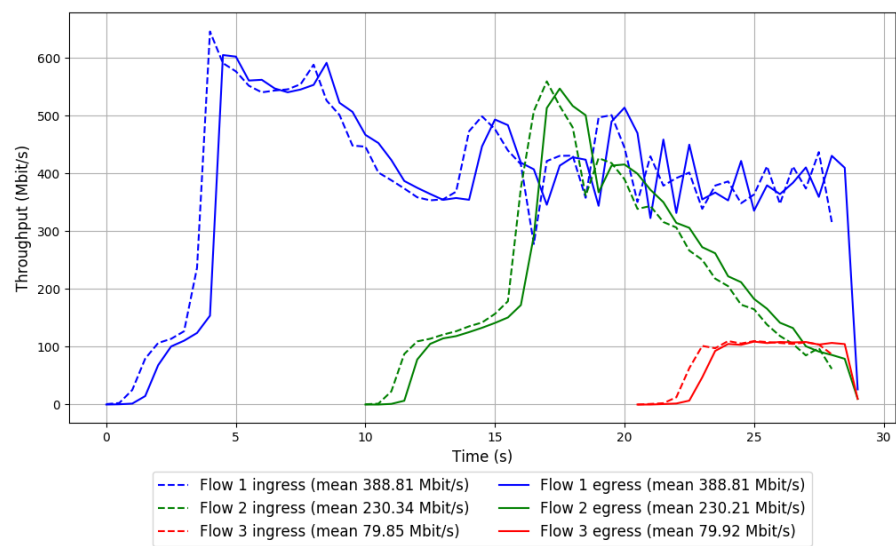


Run 3: Statistics of Indigo-MusesD

Start at: 2019-02-20 14:22:09
End at: 2019-02-20 14:22:39
Local clock offset: -0.384 ms
Remote clock offset: -0.108 ms

Below is generated by plot.py at 2019-02-20 17:53:35
Datalink statistics
-- Total of 3 flows:
Average throughput: 558.37 Mbit/s
95th percentile per-packet one-way delay: 137.609 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 388.81 Mbit/s
95th percentile per-packet one-way delay: 137.081 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 230.21 Mbit/s
95th percentile per-packet one-way delay: 139.491 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 79.92 Mbit/s
95th percentile per-packet one-way delay: 134.053 ms
Loss rate: 0.00%

Run 3: Report of Indigo-MusesD — Data Link

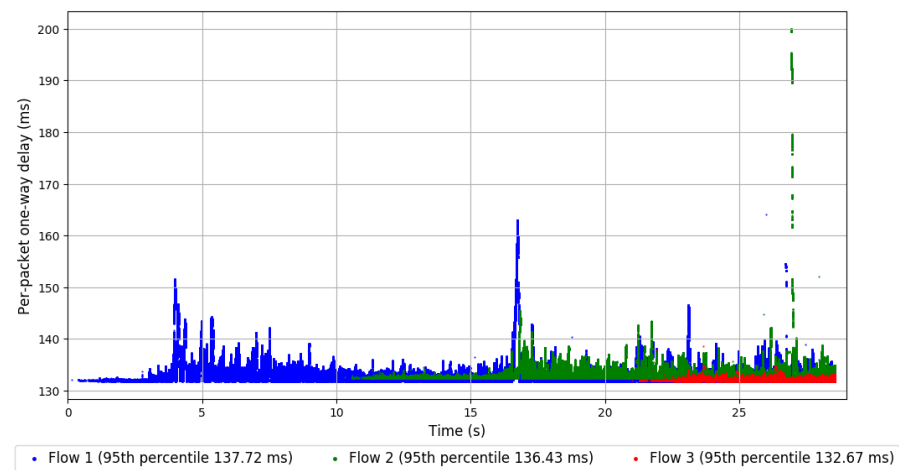
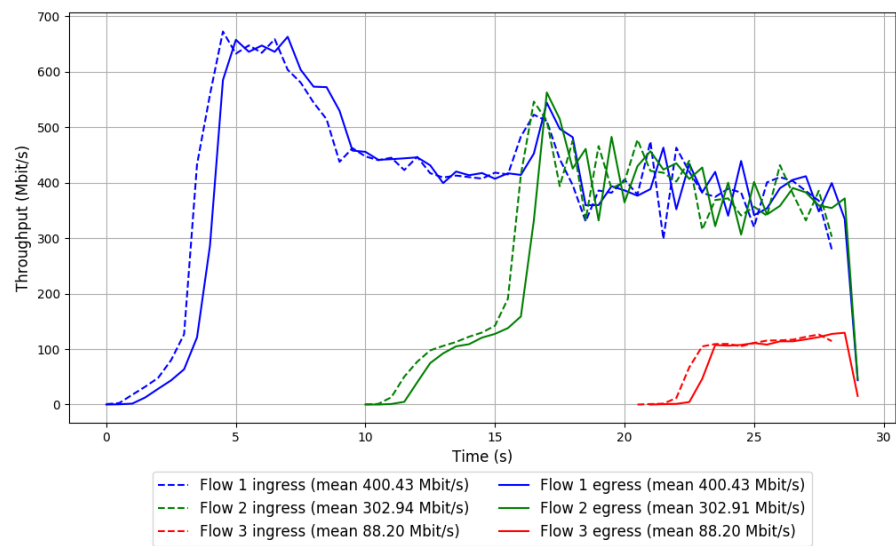


Run 4: Statistics of Indigo-MusesD

Start at: 2019-02-20 15:14:36
End at: 2019-02-20 15:15:06
Local clock offset: 0.2 ms
Remote clock offset: -0.059 ms

Below is generated by plot.py at 2019-02-20 17:53:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 618.30 Mbit/s
95th percentile per-packet one-way delay: 137.044 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 400.43 Mbit/s
95th percentile per-packet one-way delay: 137.721 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 302.91 Mbit/s
95th percentile per-packet one-way delay: 136.428 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 88.20 Mbit/s
95th percentile per-packet one-way delay: 132.671 ms
Loss rate: 0.00%

Run 4: Report of Indigo-MusesD — Data Link

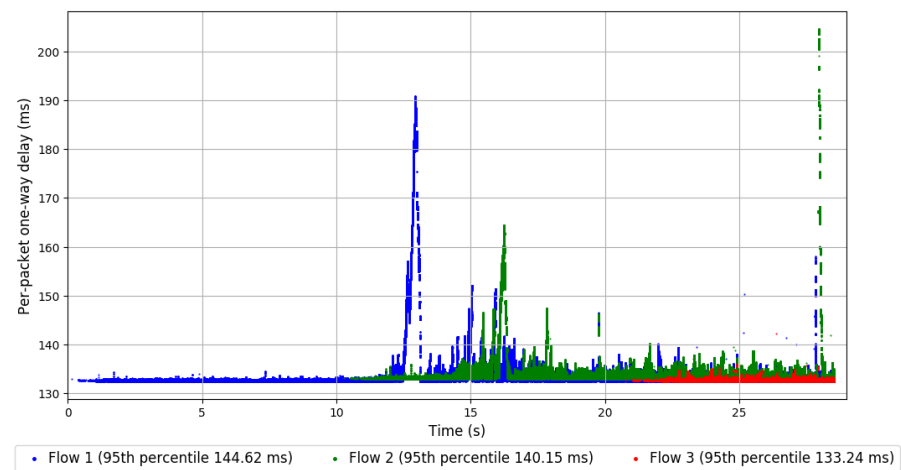
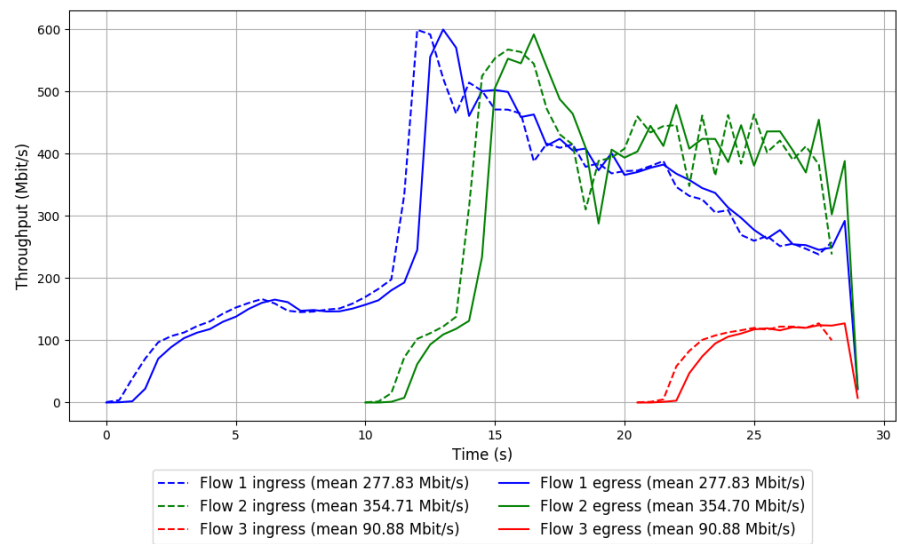


Run 5: Statistics of Indigo-MusesD

Start at: 2019-02-20 16:05:15
End at: 2019-02-20 16:05:45
Local clock offset: -0.045 ms
Remote clock offset: -0.087 ms

Below is generated by plot.py at 2019-02-20 17:54:35
Datalink statistics
-- Total of 3 flows:
Average throughput: 530.85 Mbit/s
95th percentile per-packet one-way delay: 141.357 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 277.83 Mbit/s
95th percentile per-packet one-way delay: 144.625 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 354.70 Mbit/s
95th percentile per-packet one-way delay: 140.150 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 90.88 Mbit/s
95th percentile per-packet one-way delay: 133.242 ms
Loss rate: 0.00%

Run 5: Report of Indigo-MusesD — Data Link



Run 1: Statistics of Indigo-MusesT

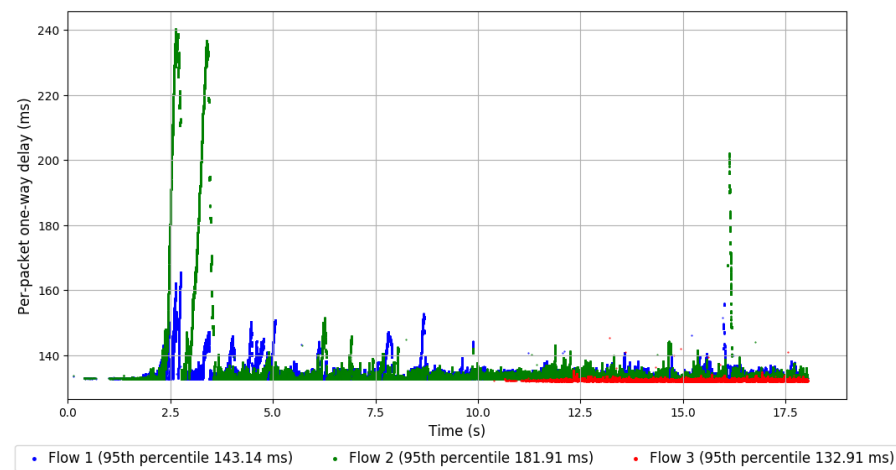
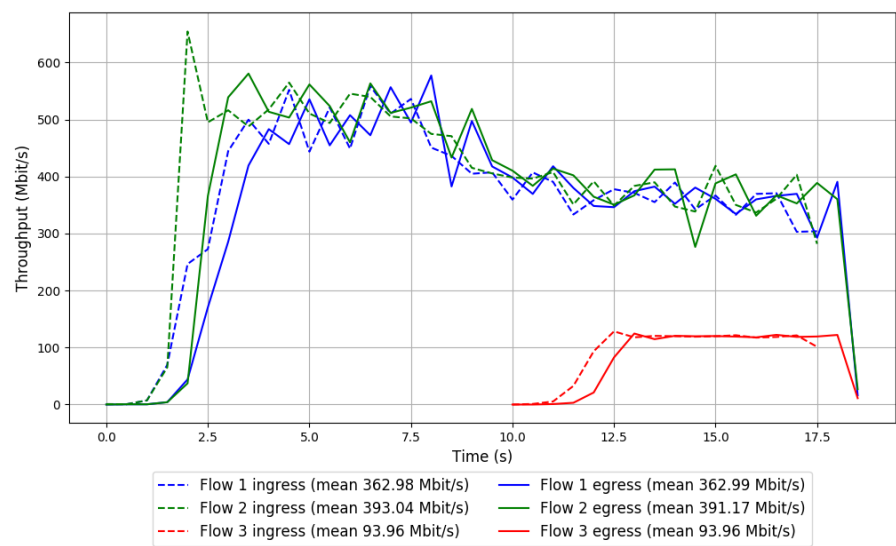
Start at: 2019-02-20 12:17:39

End at: 2019-02-20 12:18:09

Local clock offset: -0.386 ms

Remote clock offset: -0.404 ms

Run 1: Report of Indigo-MusesT — Data Link



Run 2: Statistics of Indigo-MusesT

Start at: 2019-02-20 13:06:19

End at: 2019-02-20 13:06:49

Local clock offset: 0.027 ms

Remote clock offset: 0.319 ms

Below is generated by plot.py at 2019-02-20 18:01:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 780.76 Mbit/s

95th percentile per-packet one-way delay: 142.278 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 502.31 Mbit/s

95th percentile per-packet one-way delay: 144.953 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 391.81 Mbit/s

95th percentile per-packet one-way delay: 136.784 ms

Loss rate: 0.00%

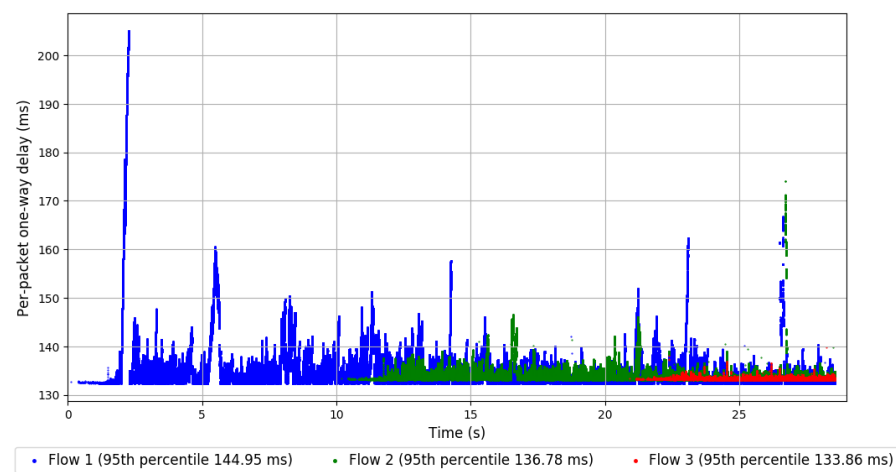
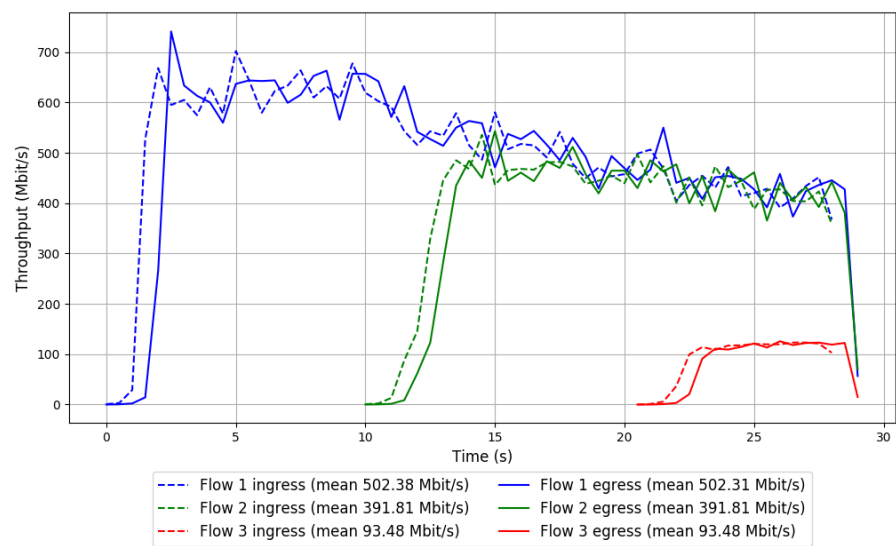
-- Flow 3:

Average throughput: 93.48 Mbit/s

95th percentile per-packet one-way delay: 133.857 ms

Loss rate: 0.00%

Run 2: Report of Indigo-MusesT — Data Link

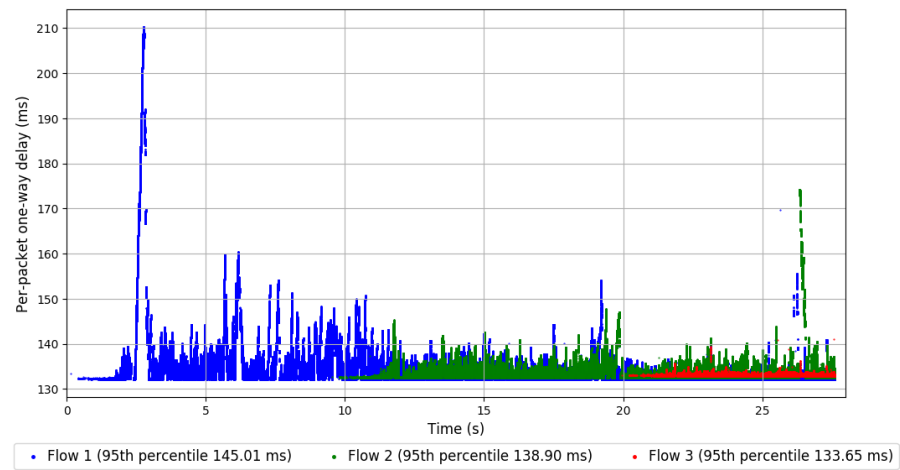
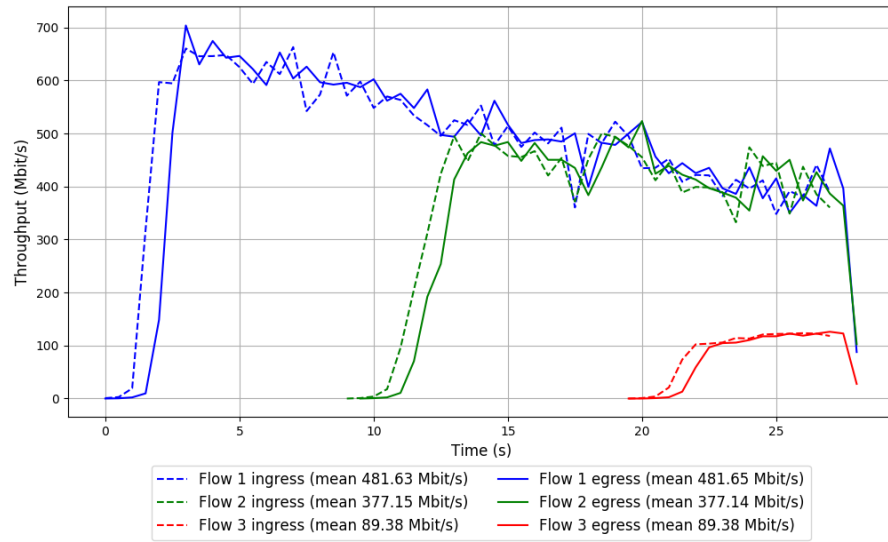


Run 3: Statistics of Indigo-MusesT

Start at: 2019-02-20 13:57:13
End at: 2019-02-20 13:57:43
Local clock offset: -0.152 ms
Remote clock offset: -0.077 ms

Below is generated by plot.py at 2019-02-20 18:01:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 754.69 Mbit/s
95th percentile per-packet one-way delay: 143.077 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 481.65 Mbit/s
95th percentile per-packet one-way delay: 145.011 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 377.14 Mbit/s
95th percentile per-packet one-way delay: 138.898 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 89.38 Mbit/s
95th percentile per-packet one-way delay: 133.645 ms
Loss rate: 0.00%

Run 3: Report of Indigo-MusesT — Data Link

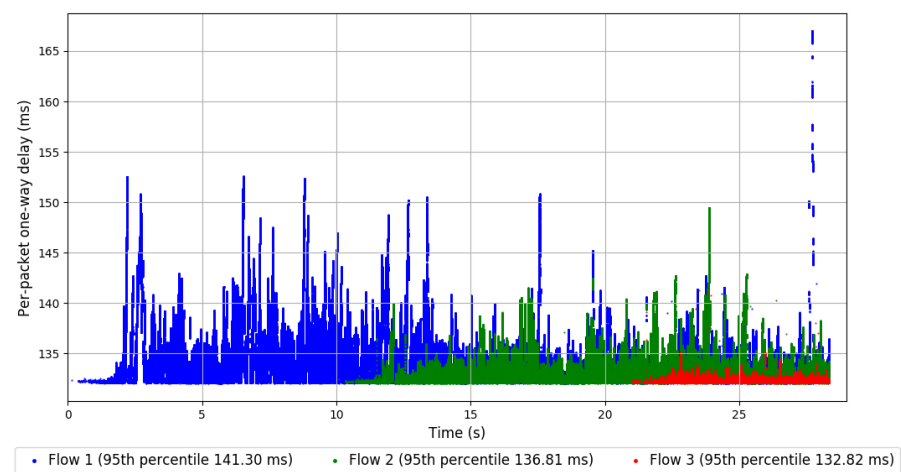
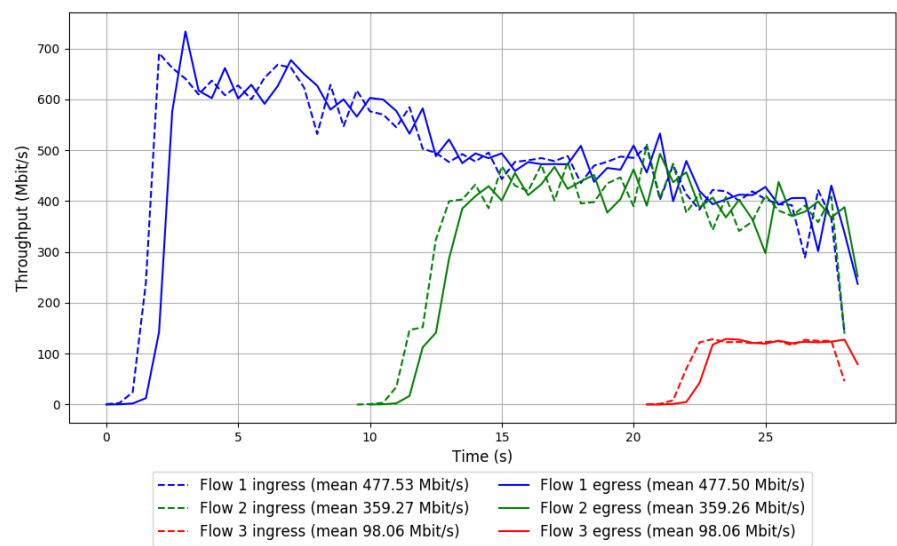


Run 4: Statistics of Indigo-MusesT

Start at: 2019-02-20 14:49:51
End at: 2019-02-20 14:50:21
Local clock offset: -0.173 ms
Remote clock offset: -0.094 ms

Below is generated by plot.py at 2019-02-20 18:04:35
Datalink statistics
-- Total of 3 flows:
Average throughput: 736.26 Mbit/s
95th percentile per-packet one-way delay: 139.990 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 477.50 Mbit/s
95th percentile per-packet one-way delay: 141.299 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 359.26 Mbit/s
95th percentile per-packet one-way delay: 136.808 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 98.06 Mbit/s
95th percentile per-packet one-way delay: 132.822 ms
Loss rate: 0.00%

Run 4: Report of Indigo-MusesT — Data Link

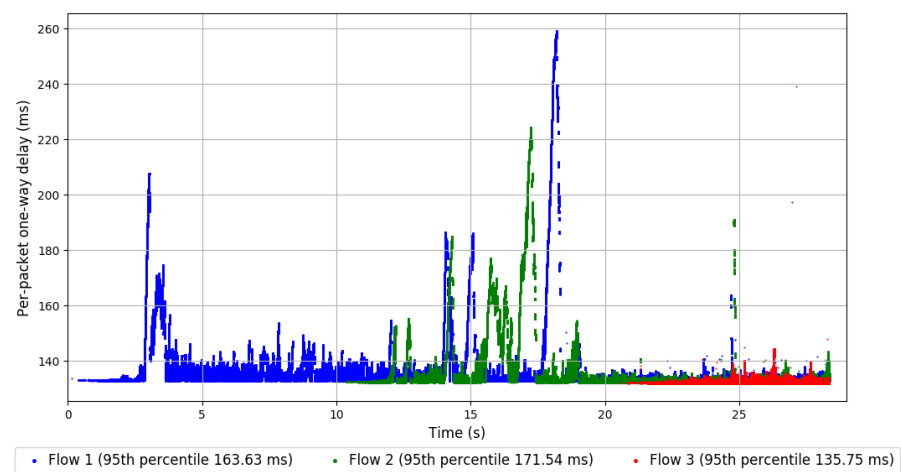
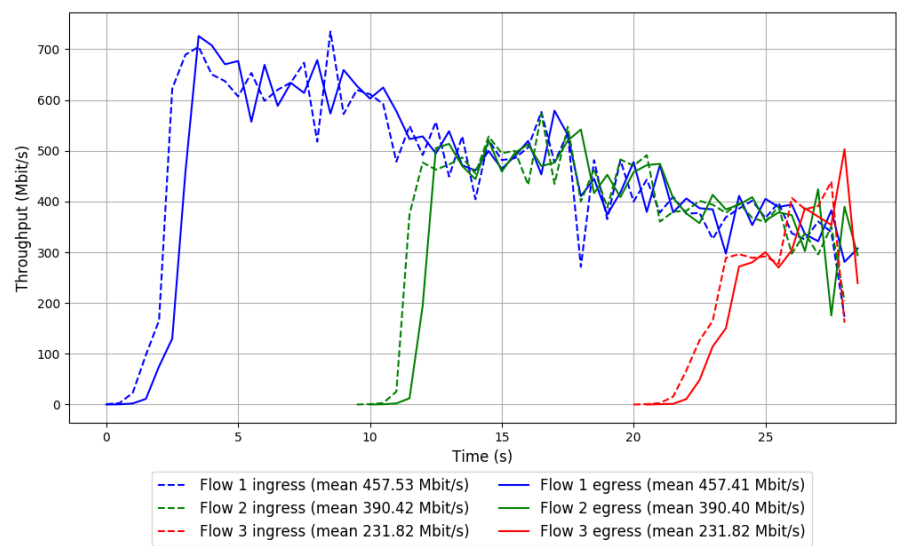


Run 5: Statistics of Indigo-MusesT

Start at: 2019-02-20 15:41:13
End at: 2019-02-20 15:41:43
Local clock offset: -0.309 ms
Remote clock offset: -0.037 ms

Below is generated by plot.py at 2019-02-20 18:05:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 773.77 Mbit/s
95th percentile per-packet one-way delay: 164.382 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 457.41 Mbit/s
95th percentile per-packet one-way delay: 163.632 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 390.40 Mbit/s
95th percentile per-packet one-way delay: 171.544 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 231.82 Mbit/s
95th percentile per-packet one-way delay: 135.745 ms
Loss rate: 0.00%

Run 5: Report of Indigo-MusesT — Data Link

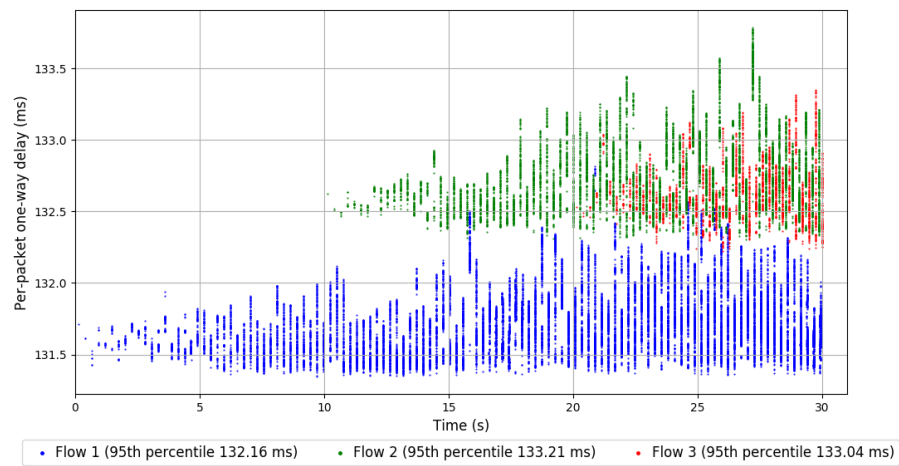
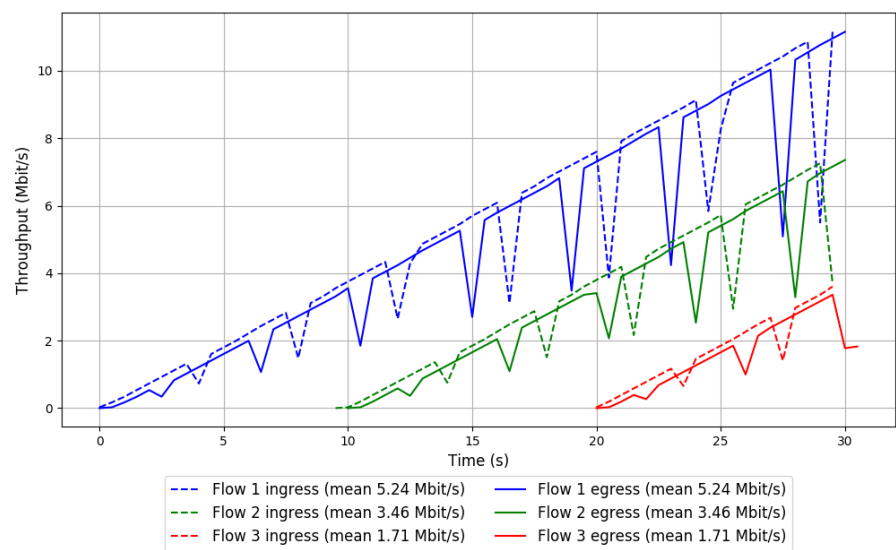


```
Run 1: Statistics of LEDBAT

Start at: 2019-02-20 12:21:44
End at: 2019-02-20 12:22:14
Local clock offset: 0.205 ms
Remote clock offset: -0.452 ms

# Below is generated by plot.py at 2019-02-20 18:05:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.08 Mbit/s
95th percentile per-packet one-way delay: 132.991 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.24 Mbit/s
95th percentile per-packet one-way delay: 132.165 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.46 Mbit/s
95th percentile per-packet one-way delay: 133.207 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 133.041 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

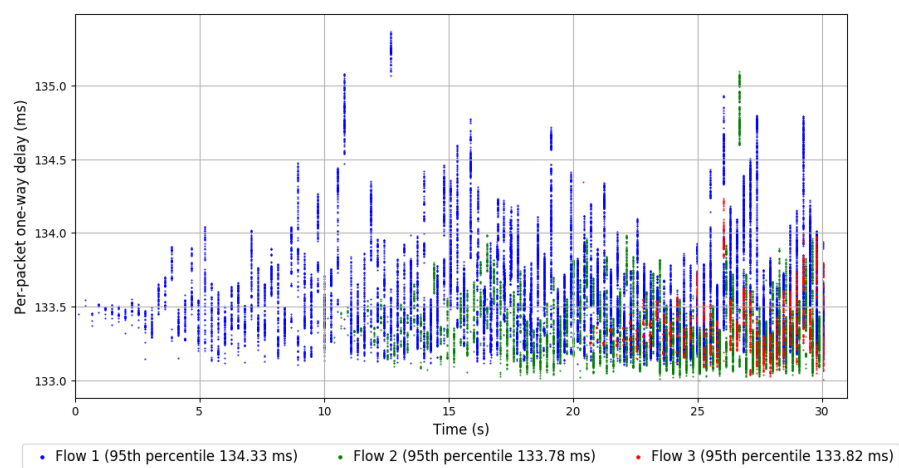
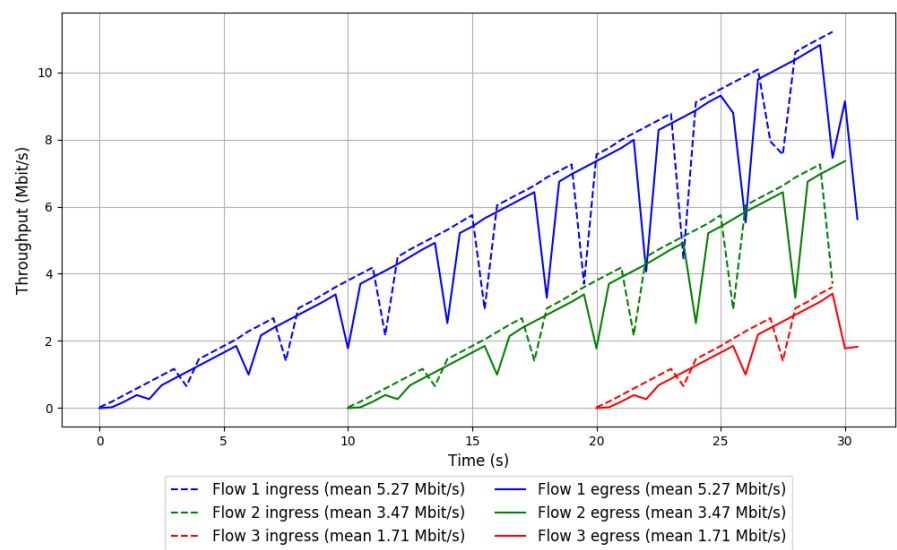


Run 2: Statistics of LEDBAT

Start at: 2019-02-20 13:10:52
End at: 2019-02-20 13:11:22
Local clock offset: -0.231 ms
Remote clock offset: -0.074 ms

Below is generated by plot.py at 2019-02-20 18:05:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.12 Mbit/s
95th percentile per-packet one-way delay: 134.225 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.27 Mbit/s
95th percentile per-packet one-way delay: 134.330 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.47 Mbit/s
95th percentile per-packet one-way delay: 133.781 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 133.819 ms
Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link

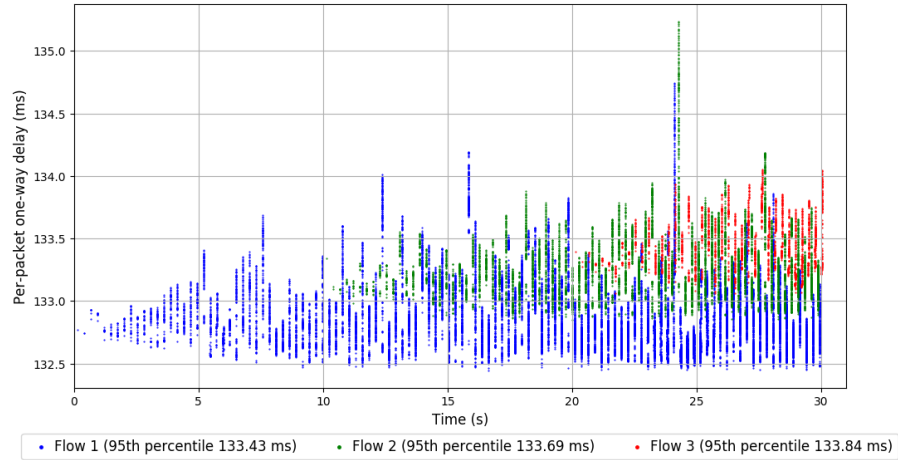
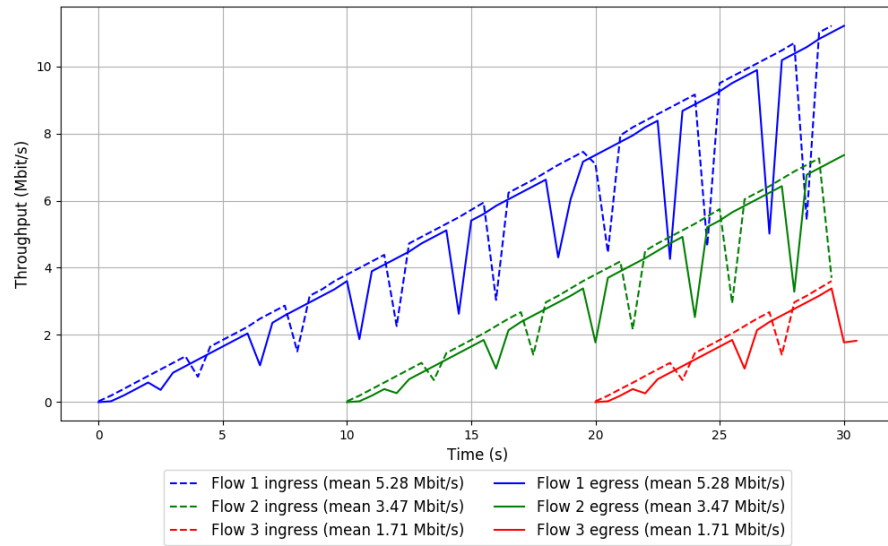


Run 3: Statistics of LEDBAT

Start at: 2019-02-20 14:02:01
End at: 2019-02-20 14:02:31
Local clock offset: -0.255 ms
Remote clock offset: -0.109 ms

Below is generated by plot.py at 2019-02-20 18:05:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.12 Mbit/s
95th percentile per-packet one-way delay: 133.644 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.28 Mbit/s
95th percentile per-packet one-way delay: 133.425 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.47 Mbit/s
95th percentile per-packet one-way delay: 133.687 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 133.845 ms
Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link

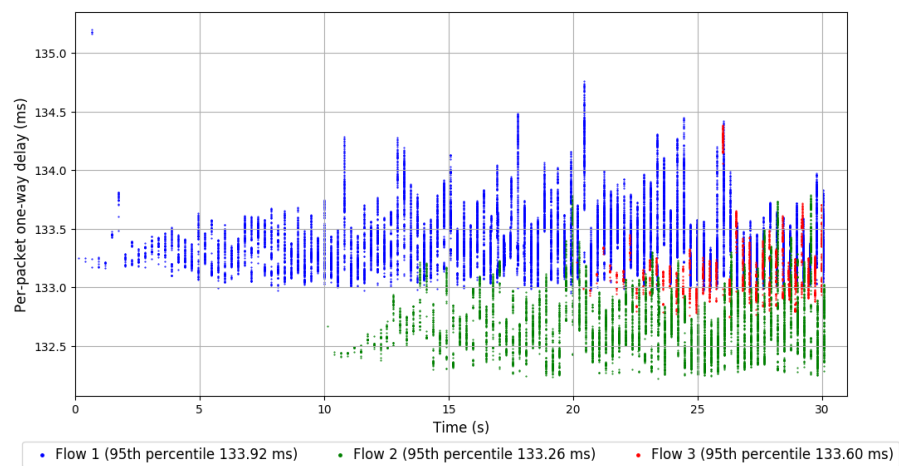
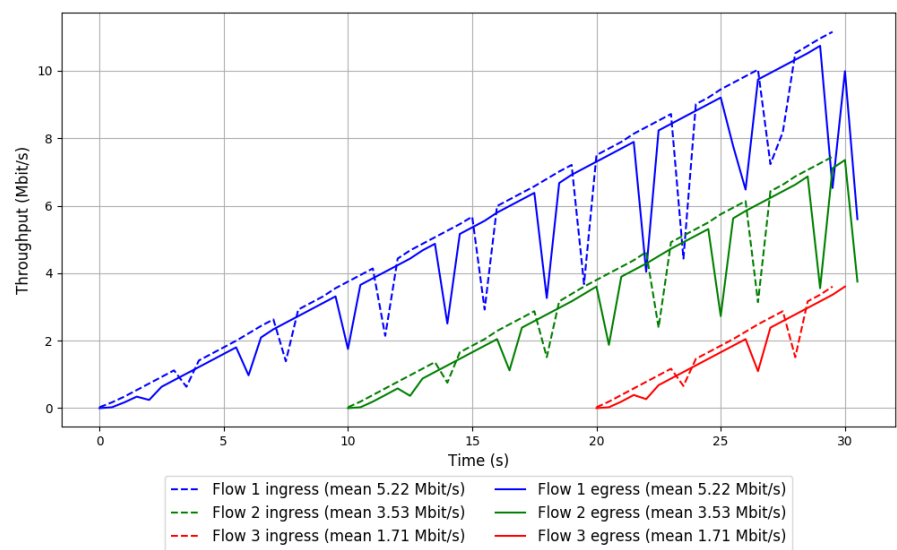


Run 4: Statistics of LEDBAT

Start at: 2019-02-20 14:54:37
End at: 2019-02-20 14:55:07
Local clock offset: -0.557 ms
Remote clock offset: -0.527 ms

Below is generated by plot.py at 2019-02-20 18:05:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.13 Mbit/s
95th percentile per-packet one-way delay: 133.815 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.22 Mbit/s
95th percentile per-packet one-way delay: 133.916 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.53 Mbit/s
95th percentile per-packet one-way delay: 133.258 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 133.601 ms
Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link

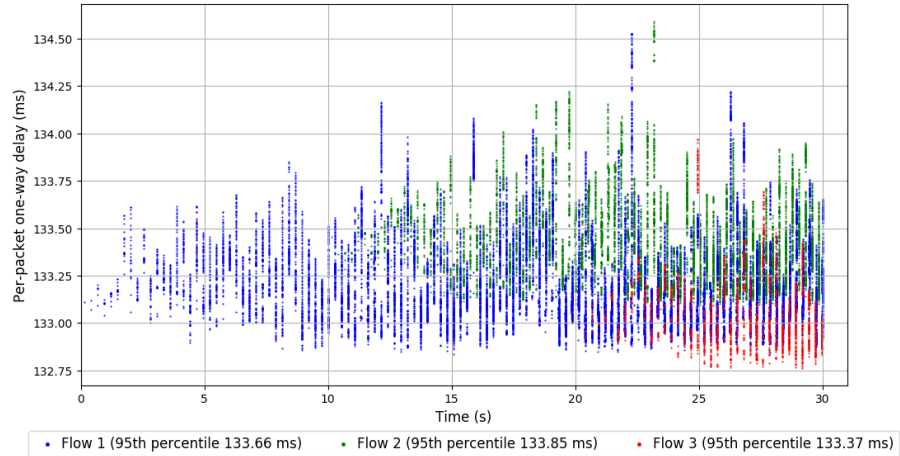
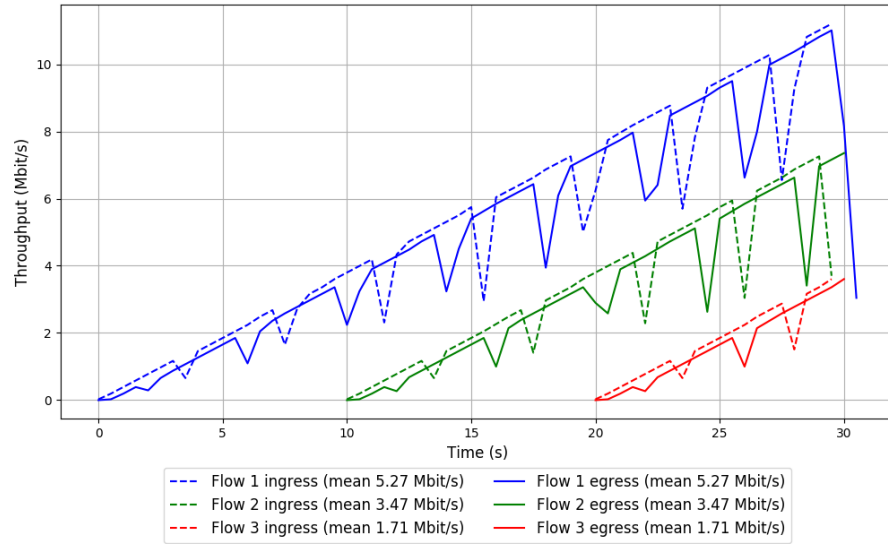


Run 5: Statistics of LEDBAT

Start at: 2019-02-20 15:46:30
End at: 2019-02-20 15:47:00
Local clock offset: -0.281 ms
Remote clock offset: -0.065 ms

Below is generated by plot.py at 2019-02-20 18:05:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.13 Mbit/s
95th percentile per-packet one-way delay: 133.743 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.27 Mbit/s
95th percentile per-packet one-way delay: 133.657 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.47 Mbit/s
95th percentile per-packet one-way delay: 133.852 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 133.373 ms
Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2019-02-20 12:30:18

End at: 2019-02-20 12:30:48

Local clock offset: 0.252 ms

Remote clock offset: 0.213 ms

Below is generated by plot.py at 2019-02-20 18:19:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 689.82 Mbit/s

95th percentile per-packet one-way delay: 250.716 ms

Loss rate: 3.12%

-- Flow 1:

Average throughput: 407.23 Mbit/s

95th percentile per-packet one-way delay: 253.298 ms

Loss rate: 3.96%

-- Flow 2:

Average throughput: 312.06 Mbit/s

95th percentile per-packet one-way delay: 202.417 ms

Loss rate: 1.43%

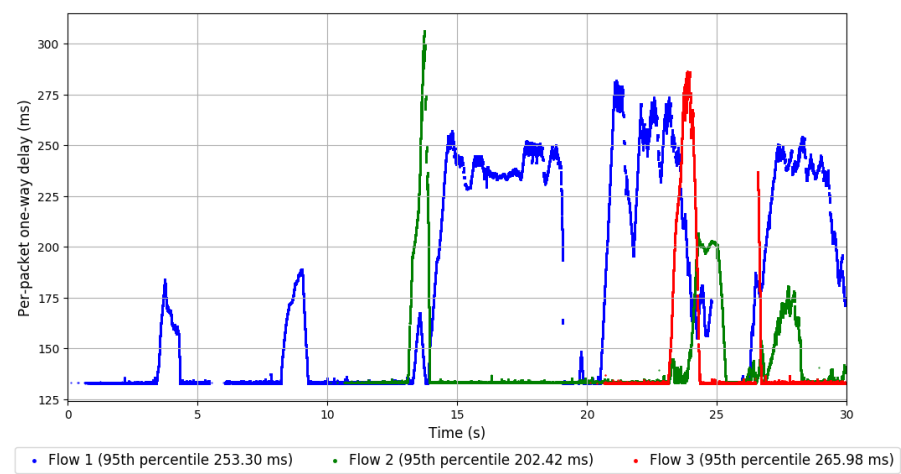
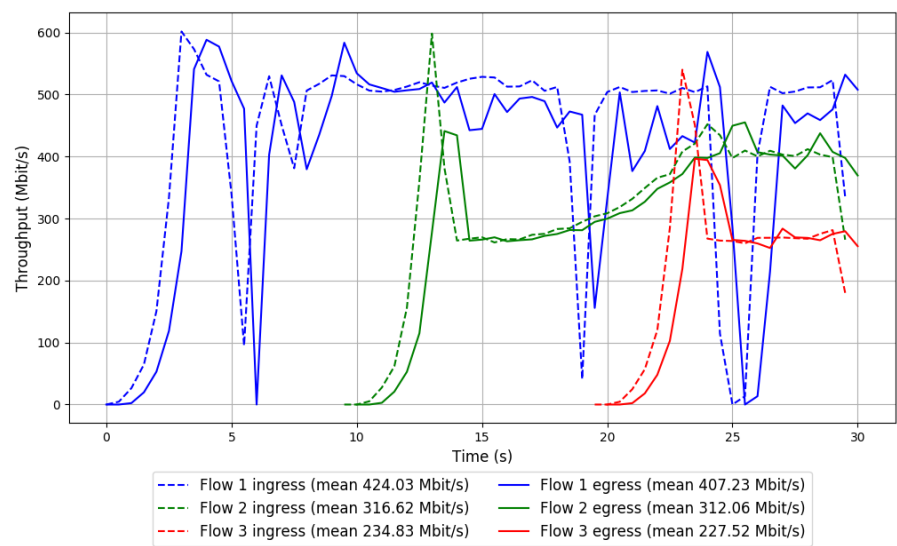
-- Flow 3:

Average throughput: 227.52 Mbit/s

95th percentile per-packet one-way delay: 265.978 ms

Loss rate: 3.11%

Run 1: Report of PCC-Allegro — Data Link

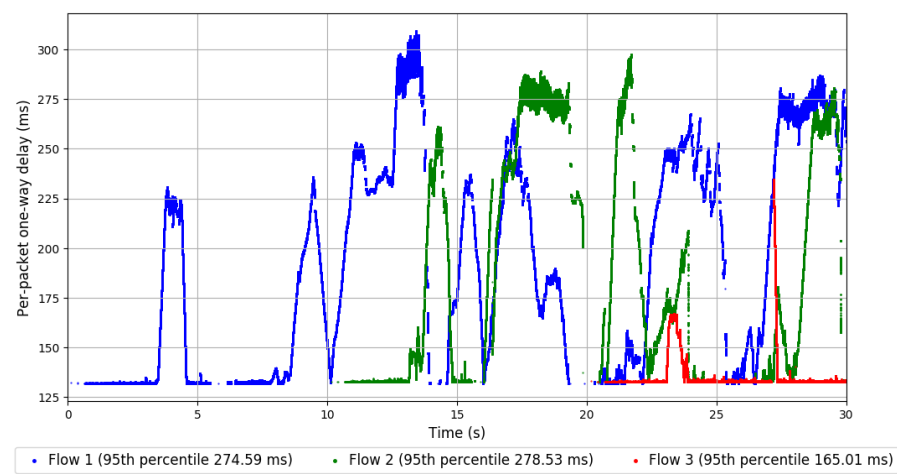
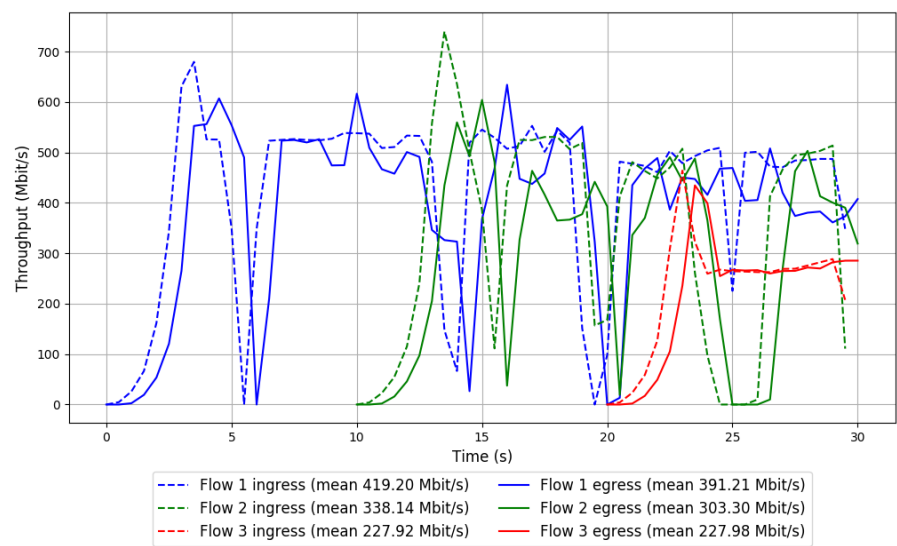


Run 2: Statistics of PCC-Allegro

Start at: 2019-02-20 13:19:37
End at: 2019-02-20 13:20:07
Local clock offset: 0.283 ms
Remote clock offset: -0.031 ms

Below is generated by plot.py at 2019-02-20 18:19:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 667.78 Mbit/s
95th percentile per-packet one-way delay: 275.587 ms
Loss rate: 7.11%
-- Flow 1:
Average throughput: 391.21 Mbit/s
95th percentile per-packet one-way delay: 274.586 ms
Loss rate: 6.67%
-- Flow 2:
Average throughput: 303.30 Mbit/s
95th percentile per-packet one-way delay: 278.531 ms
Loss rate: 10.30%
-- Flow 3:
Average throughput: 227.98 Mbit/s
95th percentile per-packet one-way delay: 165.015 ms
Loss rate: 0.00%

Run 2: Report of PCC-Allegro — Data Link

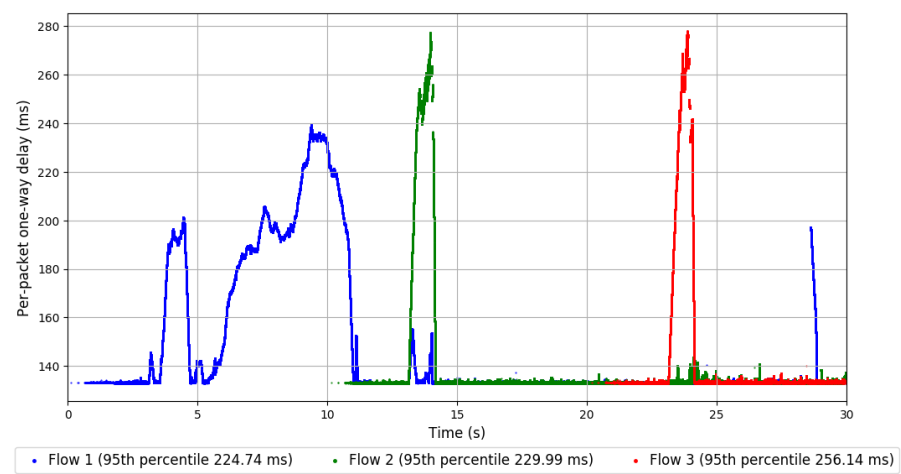
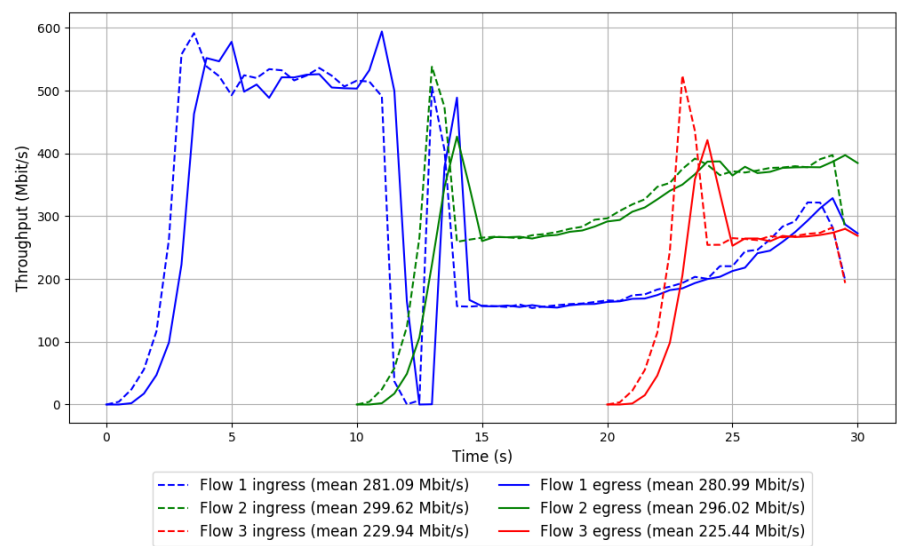


Run 3: Statistics of PCC-Allegro

Start at: 2019-02-20 14:11:32
End at: 2019-02-20 14:12:02
Local clock offset: -0.373 ms
Remote clock offset: -0.113 ms

Below is generated by plot.py at 2019-02-20 18:19:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 551.73 Mbit/s
95th percentile per-packet one-way delay: 232.968 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 280.99 Mbit/s
95th percentile per-packet one-way delay: 224.742 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 296.02 Mbit/s
95th percentile per-packet one-way delay: 229.992 ms
Loss rate: 1.35%
-- Flow 3:
Average throughput: 225.44 Mbit/s
95th percentile per-packet one-way delay: 256.139 ms
Loss rate: 2.27%

Run 3: Report of PCC-Allegro — Data Link

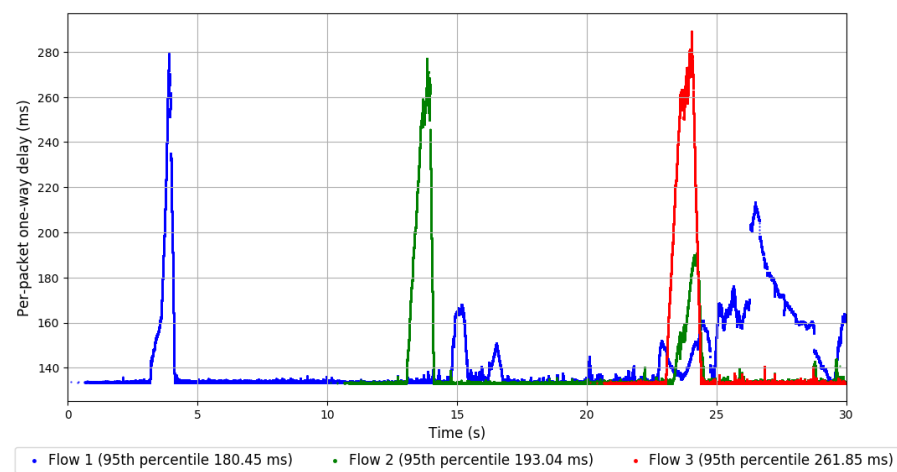
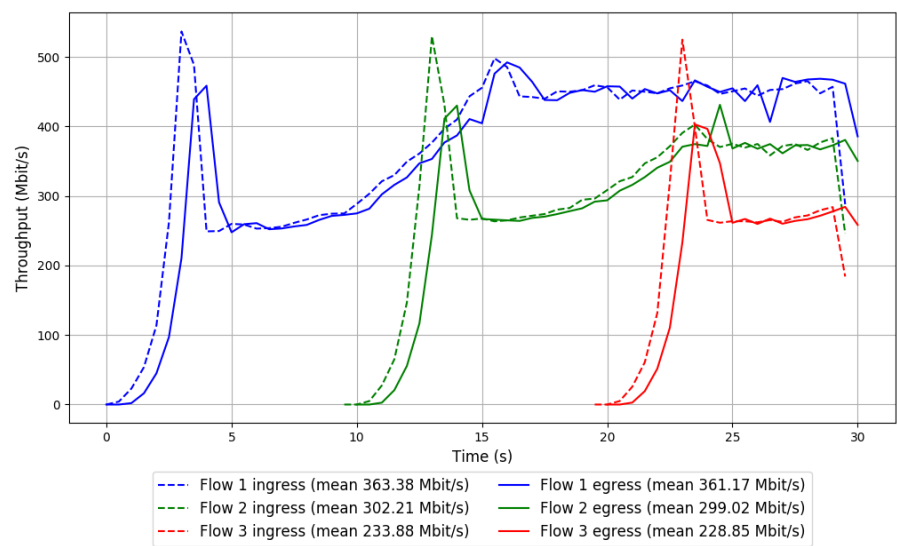


Run 4: Statistics of PCC-Allegro

Start at: 2019-02-20 15:04:01
End at: 2019-02-20 15:04:31
Local clock offset: -0.579 ms
Remote clock offset: -0.121 ms

Below is generated by plot.py at 2019-02-20 18:19:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 635.58 Mbit/s
95th percentile per-packet one-way delay: 197.637 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 361.17 Mbit/s
95th percentile per-packet one-way delay: 180.452 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 299.02 Mbit/s
95th percentile per-packet one-way delay: 193.037 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 228.85 Mbit/s
95th percentile per-packet one-way delay: 261.854 ms
Loss rate: 2.15%

Run 4: Report of PCC-Allegro — Data Link

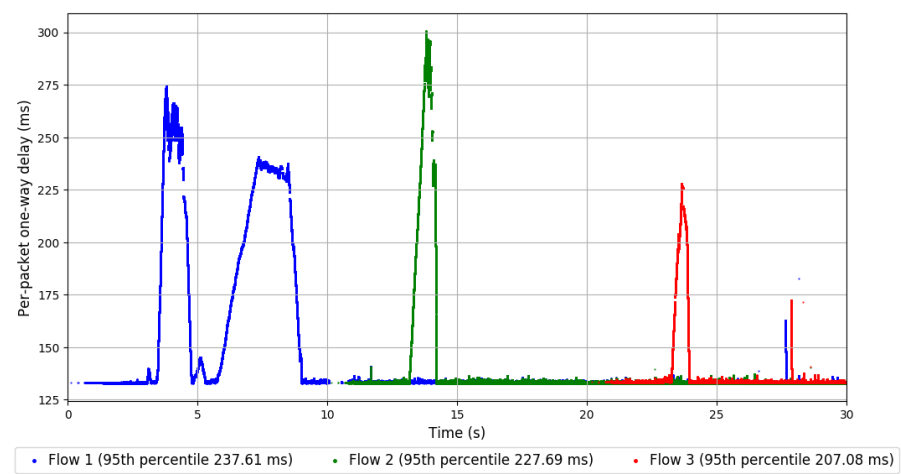
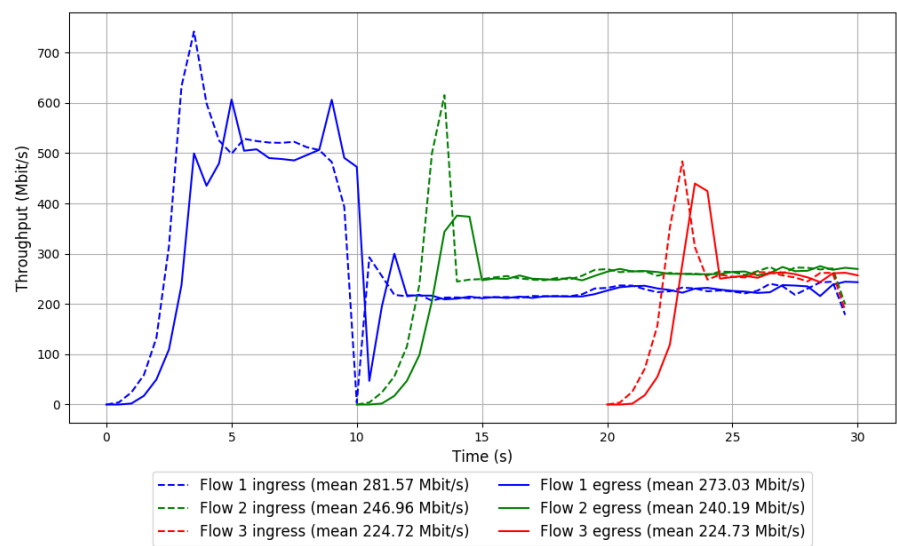


Run 5: Statistics of PCC-Allegro

Start at: 2019-02-20 15:55:46
End at: 2019-02-20 15:56:16
Local clock offset: -0.314 ms
Remote clock offset: -0.056 ms

Below is generated by plot.py at 2019-02-20 18:20:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 506.48 Mbit/s
95th percentile per-packet one-way delay: 235.668 ms
Loss rate: 2.51%
-- Flow 1:
Average throughput: 273.03 Mbit/s
95th percentile per-packet one-way delay: 237.614 ms
Loss rate: 3.04%
-- Flow 2:
Average throughput: 240.19 Mbit/s
95th percentile per-packet one-way delay: 227.686 ms
Loss rate: 2.74%
-- Flow 3:
Average throughput: 224.73 Mbit/s
95th percentile per-packet one-way delay: 207.082 ms
Loss rate: 0.00%

Run 5: Report of PCC-Allegro — Data Link

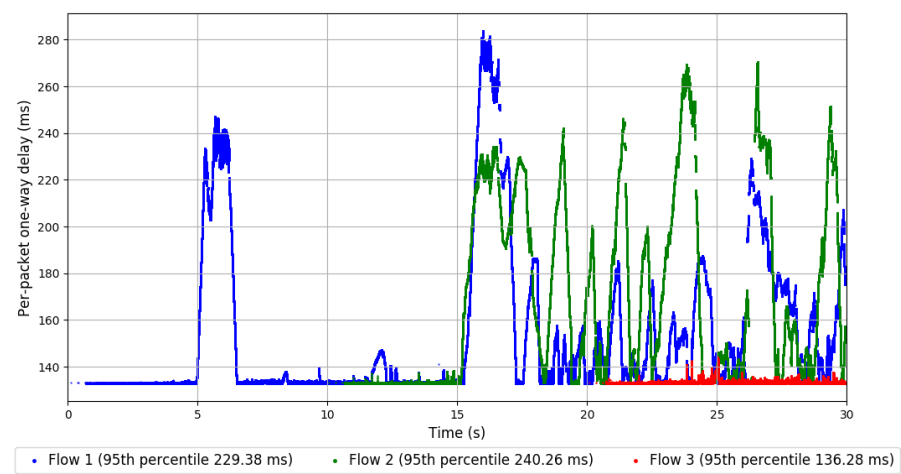
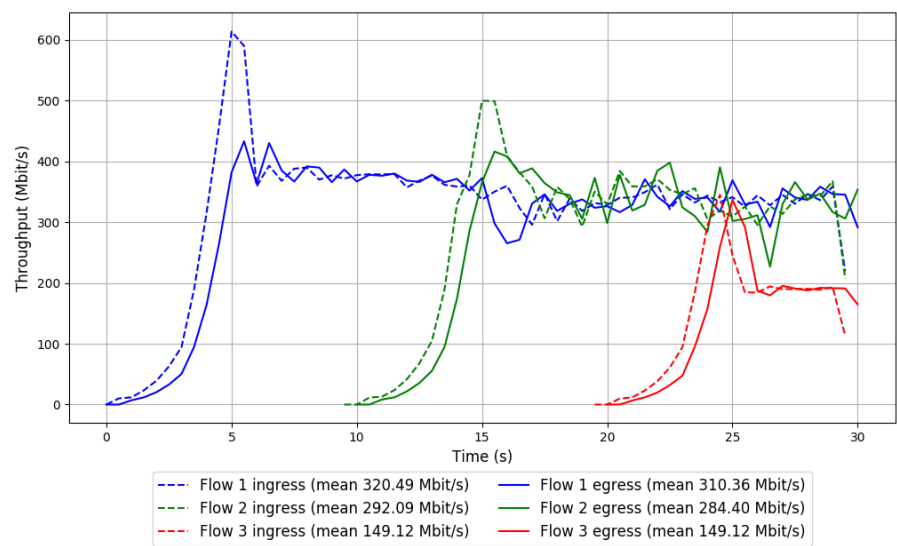



```
Run 1: Statistics of PCC-Expr

Start at: 2019-02-20 12:00:50
End at: 2019-02-20 12:01:20
Local clock offset: -0.153 ms
Remote clock offset: 0.003 ms

# Below is generated by plot.py at 2019-02-20 18:22:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 549.32 Mbit/s
95th percentile per-packet one-way delay: 234.303 ms
Loss rate: 2.70%
-- Flow 1:
Average throughput: 310.36 Mbit/s
95th percentile per-packet one-way delay: 229.384 ms
Loss rate: 3.16%
-- Flow 2:
Average throughput: 284.40 Mbit/s
95th percentile per-packet one-way delay: 240.256 ms
Loss rate: 2.63%
-- Flow 3:
Average throughput: 149.12 Mbit/s
95th percentile per-packet one-way delay: 136.276 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Expr — Data Link

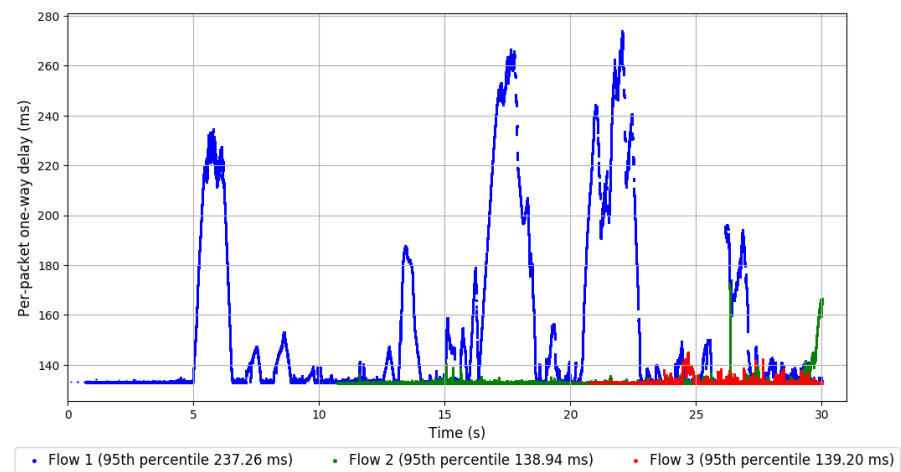
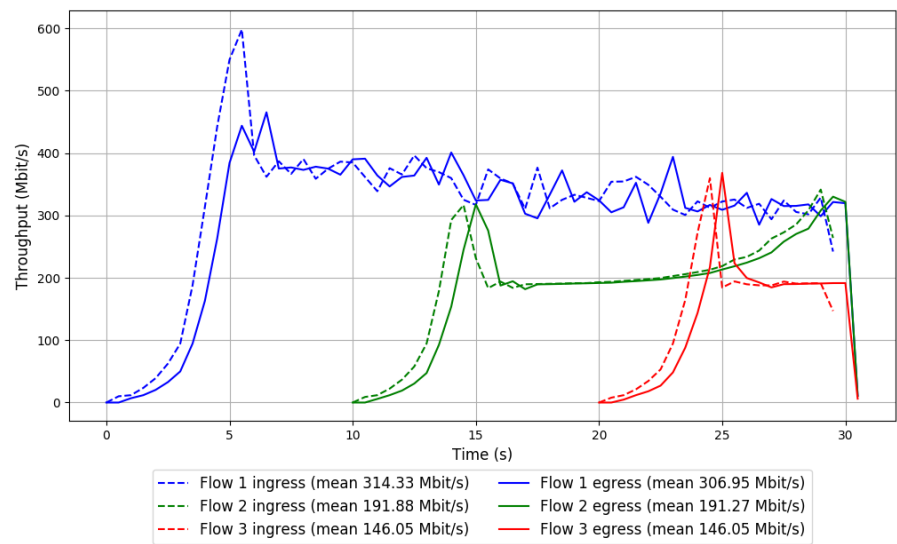


Run 2: Statistics of PCC-Expr

Start at: 2019-02-20 12:49:59
End at: 2019-02-20 12:50:29
Local clock offset: 0.189 ms
Remote clock offset: -0.102 ms

Below is generated by plot.py at 2019-02-20 18:23:41
Datalink statistics
-- Total of 3 flows:
Average throughput: 482.23 Mbit/s
95th percentile per-packet one-way delay: 223.756 ms
Loss rate: 1.59%
-- Flow 1:
Average throughput: 306.95 Mbit/s
95th percentile per-packet one-way delay: 237.261 ms
Loss rate: 2.35%
-- Flow 2:
Average throughput: 191.27 Mbit/s
95th percentile per-packet one-way delay: 138.940 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 146.05 Mbit/s
95th percentile per-packet one-way delay: 139.204 ms
Loss rate: 0.00%

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2019-02-20 13:40:26

End at: 2019-02-20 13:40:56

Local clock offset: -0.117 ms

Remote clock offset: 0.244 ms

Below is generated by plot.py at 2019-02-20 18:25:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 529.76 Mbit/s

95th percentile per-packet one-way delay: 243.679 ms

Loss rate: 2.26%

-- Flow 1:

Average throughput: 299.85 Mbit/s

95th percentile per-packet one-way delay: 244.751 ms

Loss rate: 3.09%

-- Flow 2:

Average throughput: 272.98 Mbit/s

95th percentile per-packet one-way delay: 244.731 ms

Loss rate: 1.47%

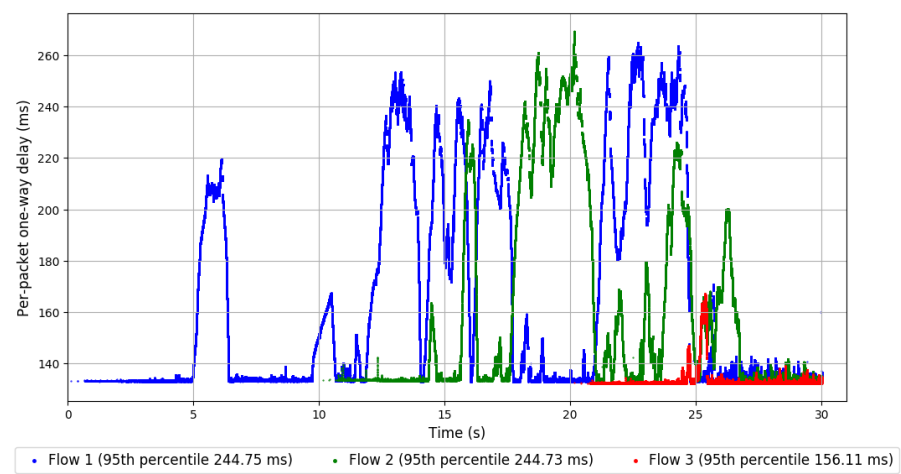
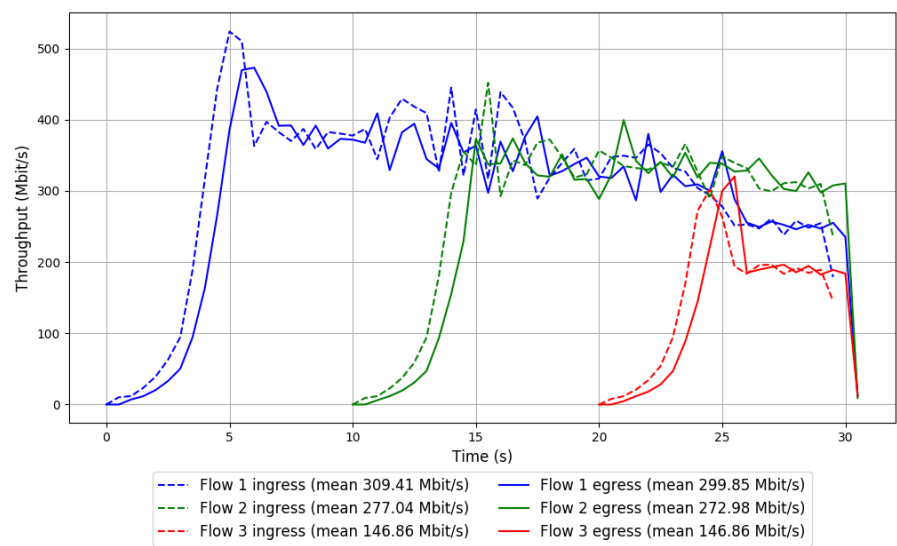
-- Flow 3:

Average throughput: 146.86 Mbit/s

95th percentile per-packet one-way delay: 156.112 ms

Loss rate: 0.00%

Run 3: Report of PCC-Expr — Data Link

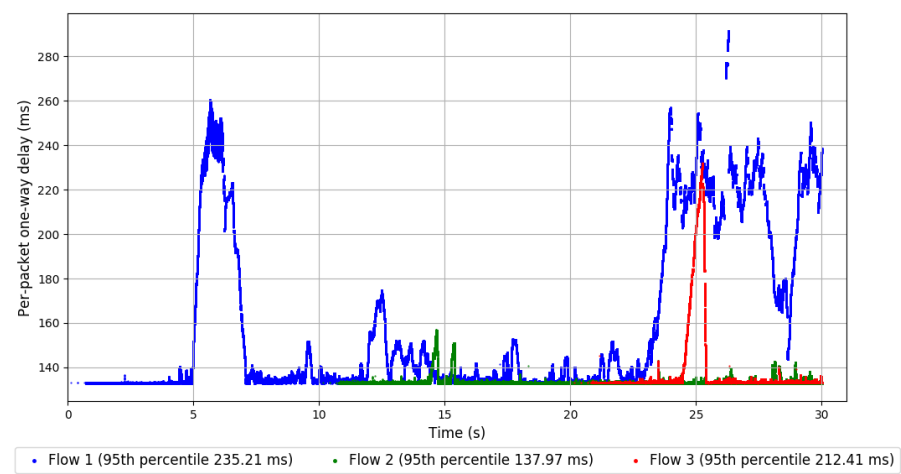
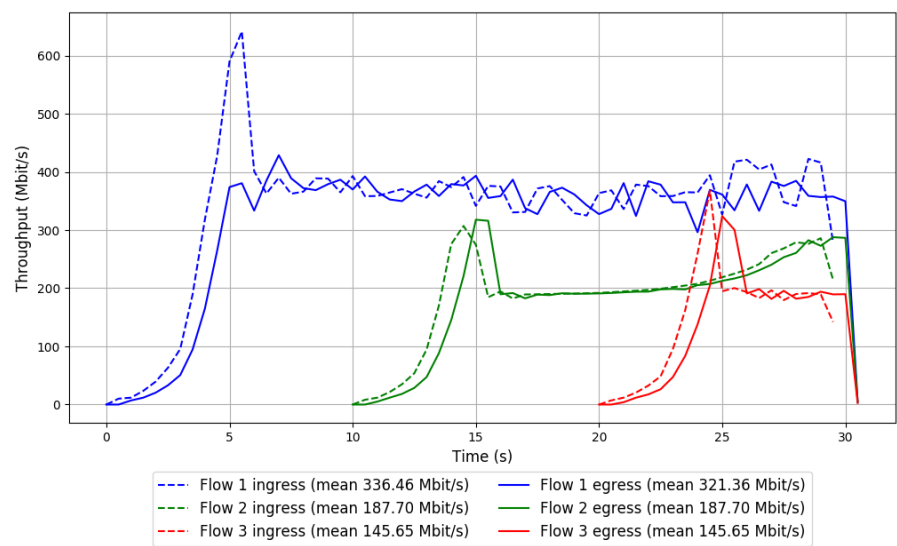


Run 4: Statistics of PCC-Expr

Start at: 2019-02-20 14:32:47
End at: 2019-02-20 14:33:17
Local clock offset: -0.125 ms
Remote clock offset: -0.122 ms

Below is generated by plot.py at 2019-02-20 18:32:54
Datalink statistics
-- Total of 3 flows:
Average throughput: 494.09 Mbit/s
95th percentile per-packet one-way delay: 230.935 ms
Loss rate: 2.96%
-- Flow 1:
Average throughput: 321.36 Mbit/s
95th percentile per-packet one-way delay: 235.213 ms
Loss rate: 4.48%
-- Flow 2:
Average throughput: 187.70 Mbit/s
95th percentile per-packet one-way delay: 137.970 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 145.65 Mbit/s
95th percentile per-packet one-way delay: 212.410 ms
Loss rate: 0.00%

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2019-02-20 15:25:15

End at: 2019-02-20 15:25:45

Local clock offset: -0.429 ms

Remote clock offset: 0.317 ms

Below is generated by plot.py at 2019-02-20 18:35:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 495.58 Mbit/s

95th percentile per-packet one-way delay: 229.278 ms

Loss rate: 1.90%

-- Flow 1:

Average throughput: 299.85 Mbit/s

95th percentile per-packet one-way delay: 230.845 ms

Loss rate: 2.56%

-- Flow 2:

Average throughput: 186.99 Mbit/s

95th percentile per-packet one-way delay: 140.094 ms

Loss rate: 0.00%

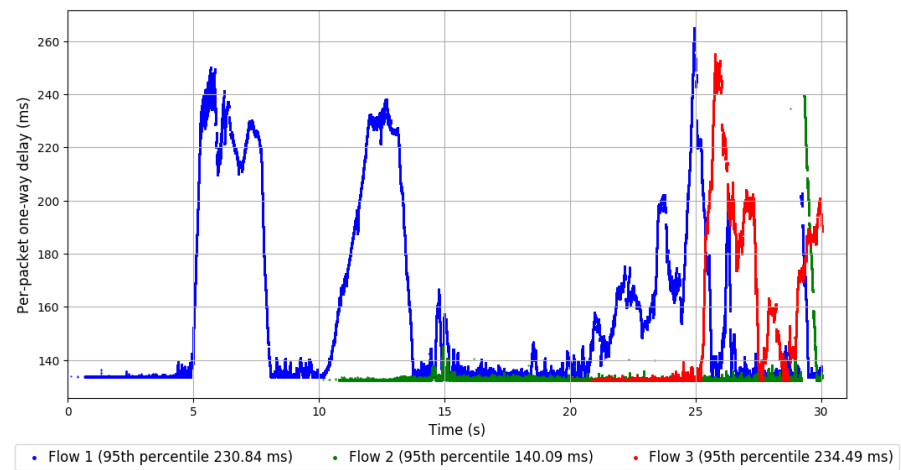
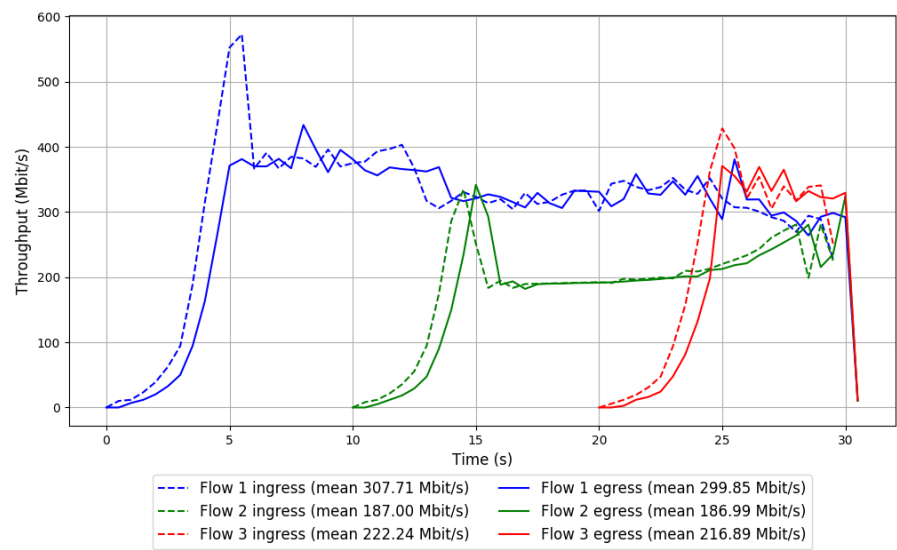
-- Flow 3:

Average throughput: 216.89 Mbit/s

95th percentile per-packet one-way delay: 234.494 ms

Loss rate: 2.40%

Run 5: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2019-02-20 12:16:14

End at: 2019-02-20 12:16:44

Local clock offset: -0.512 ms

Remote clock offset: 0.034 ms

Below is generated by plot.py at 2019-02-20 18:35:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 60.99 Mbit/s

95th percentile per-packet one-way delay: 133.726 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 134.871 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.73 Mbit/s

95th percentile per-packet one-way delay: 133.083 ms

Loss rate: 0.00%

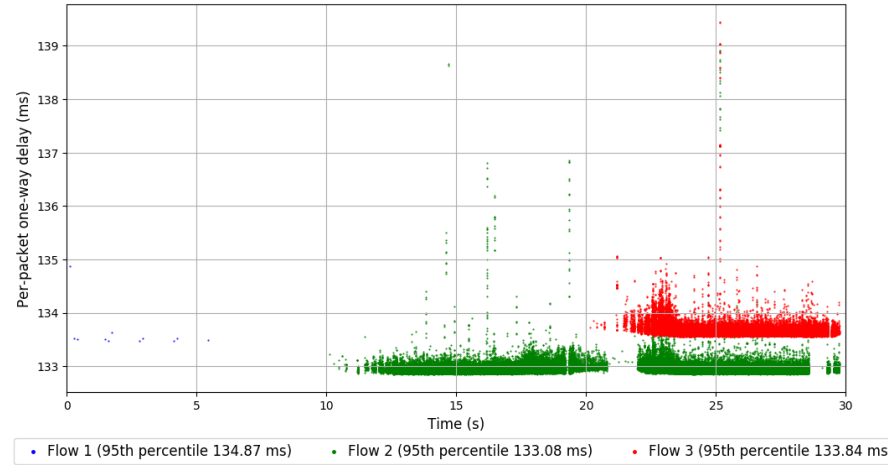
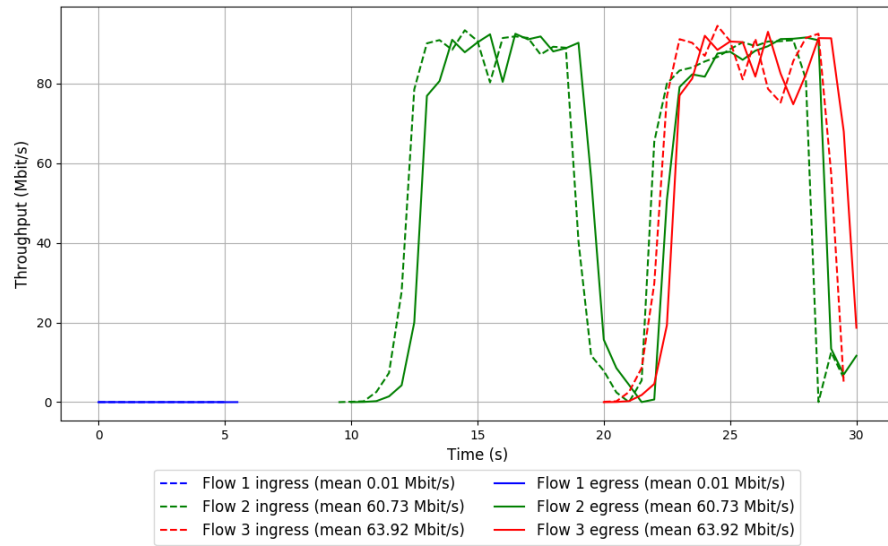
-- Flow 3:

Average throughput: 63.92 Mbit/s

95th percentile per-packet one-way delay: 133.841 ms

Loss rate: 0.00%

Run 1: Report of QUIC Cubic — Data Link

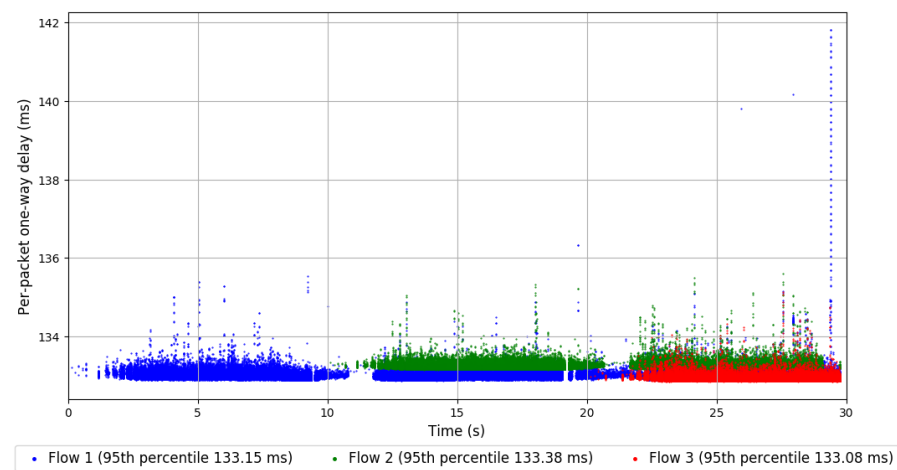
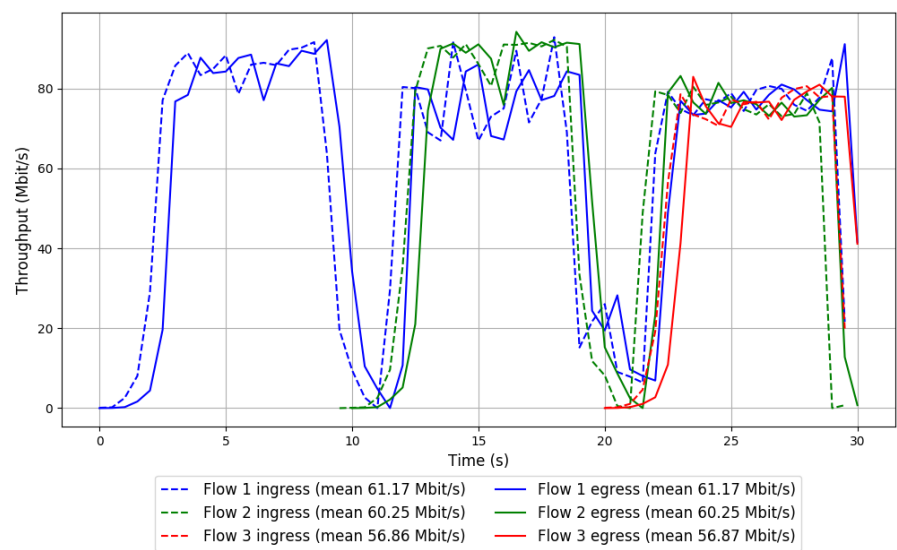


Run 2: Statistics of QUIC Cubic

Start at: 2019-02-20 13:04:44
End at: 2019-02-20 13:05:14
Local clock offset: -0.054 ms
Remote clock offset: -0.043 ms

Below is generated by plot.py at 2019-02-20 18:35:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 119.53 Mbit/s
95th percentile per-packet one-way delay: 133.315 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 61.17 Mbit/s
95th percentile per-packet one-way delay: 133.145 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 60.25 Mbit/s
95th percentile per-packet one-way delay: 133.384 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 56.87 Mbit/s
95th percentile per-packet one-way delay: 133.079 ms
Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2019-02-20 13:55:39

End at: 2019-02-20 13:56:09

Local clock offset: -0.55 ms

Remote clock offset: -0.09 ms

Below is generated by plot.py at 2019-02-20 18:35:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 117.31 Mbit/s

95th percentile per-packet one-way delay: 133.393 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 65.76 Mbit/s

95th percentile per-packet one-way delay: 132.680 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 58.30 Mbit/s

95th percentile per-packet one-way delay: 133.460 ms

Loss rate: 0.00%

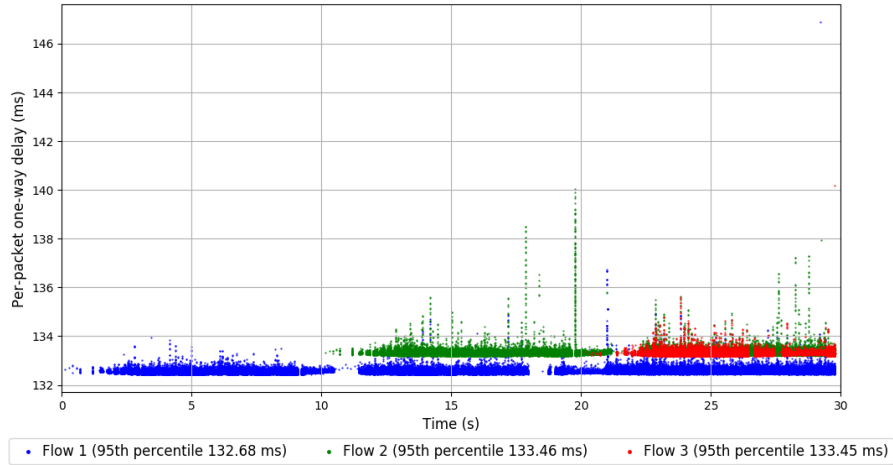
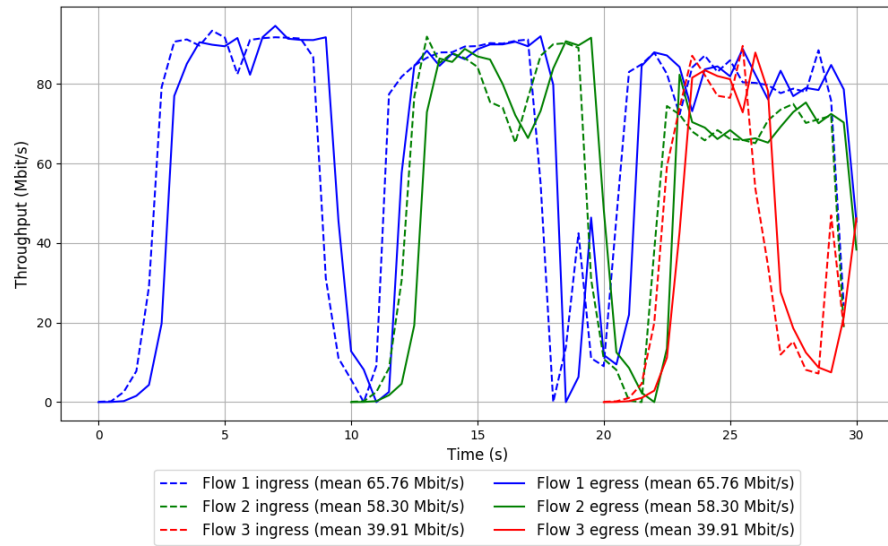
-- Flow 3:

Average throughput: 39.91 Mbit/s

95th percentile per-packet one-way delay: 133.447 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link

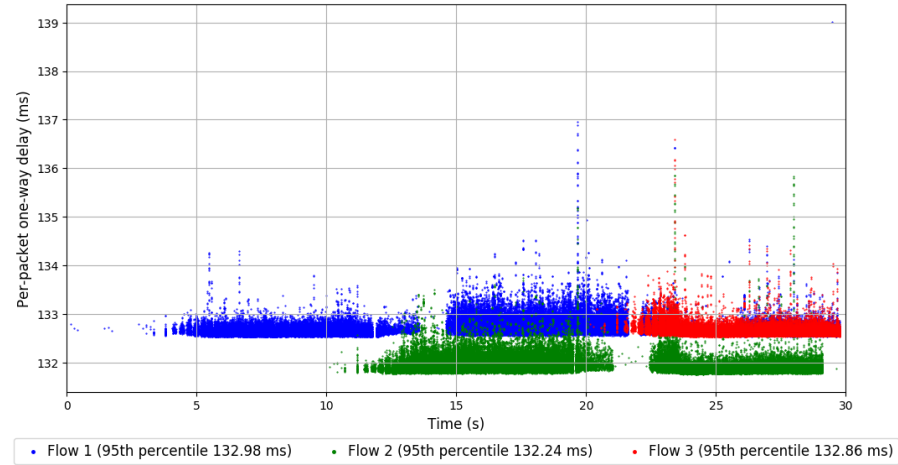
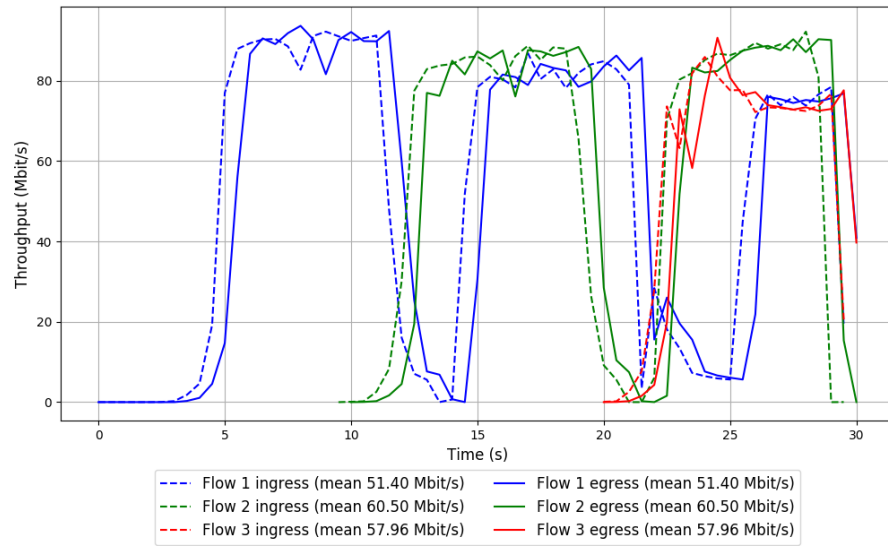


Run 4: Statistics of QUIC Cubic

Start at: 2019-02-20 14:48:15
End at: 2019-02-20 14:48:45
Local clock offset: 0.045 ms
Remote clock offset: -0.105 ms

Below is generated by plot.py at 2019-02-20 18:35:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 110.06 Mbit/s
95th percentile per-packet one-way delay: 132.891 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 51.40 Mbit/s
95th percentile per-packet one-way delay: 132.981 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 60.50 Mbit/s
95th percentile per-packet one-way delay: 132.240 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 57.96 Mbit/s
95th percentile per-packet one-way delay: 132.857 ms
Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link

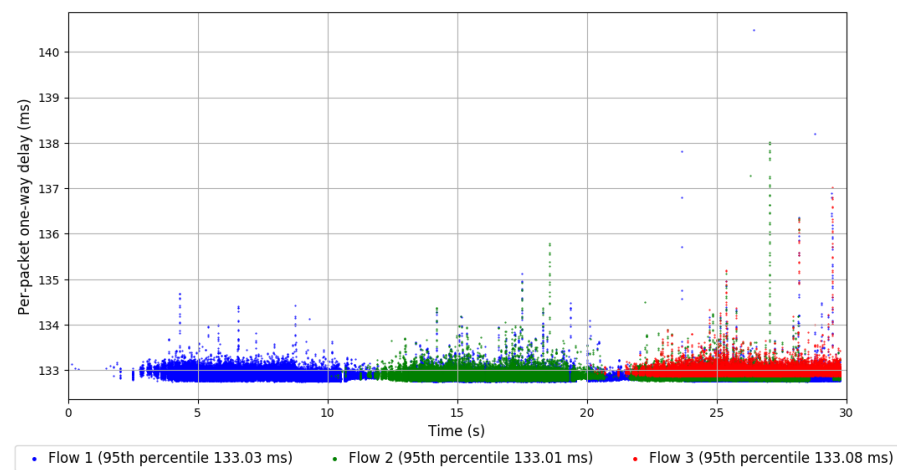
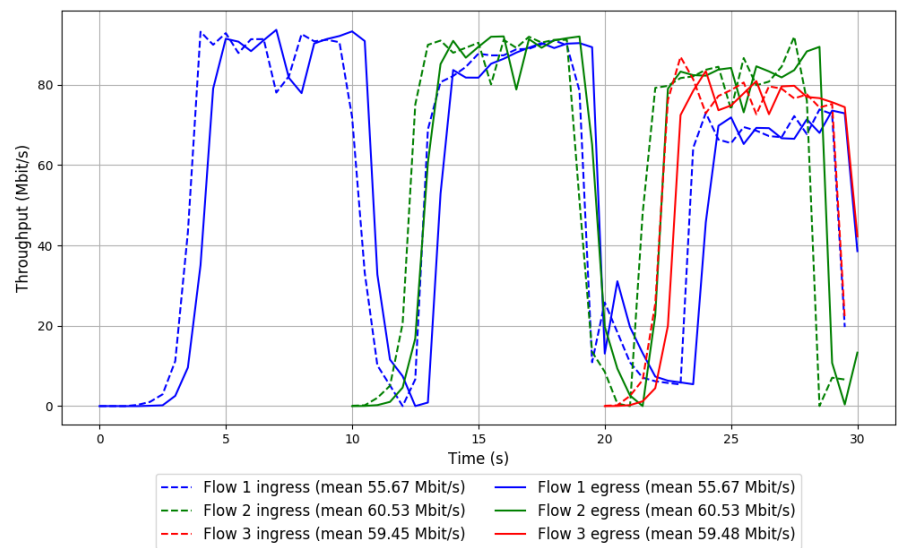


Run 5: Statistics of QUIC Cubic

Start at: 2019-02-20 15:39:35
End at: 2019-02-20 15:40:05
Local clock offset: -0.265 ms
Remote clock offset: -0.046 ms

Below is generated by plot.py at 2019-02-20 18:35:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 115.07 Mbit/s
95th percentile per-packet one-way delay: 133.034 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.67 Mbit/s
95th percentile per-packet one-way delay: 133.025 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 60.53 Mbit/s
95th percentile per-packet one-way delay: 133.007 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 59.48 Mbit/s
95th percentile per-packet one-way delay: 133.080 ms
Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link

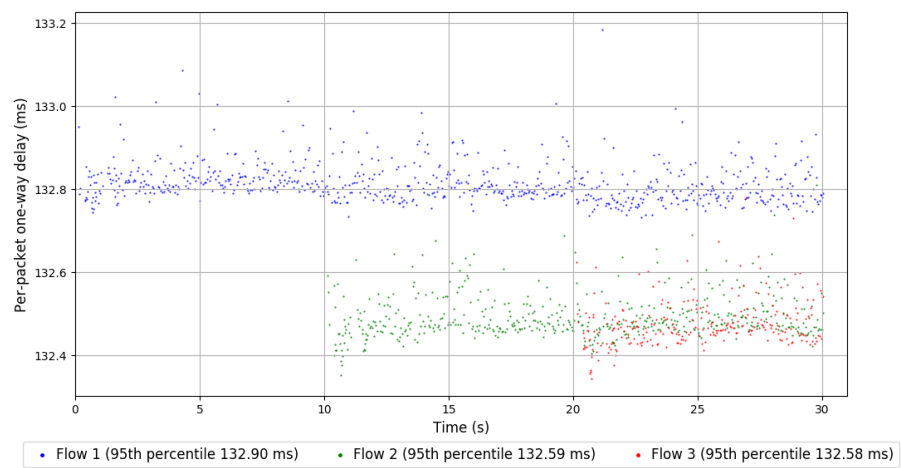
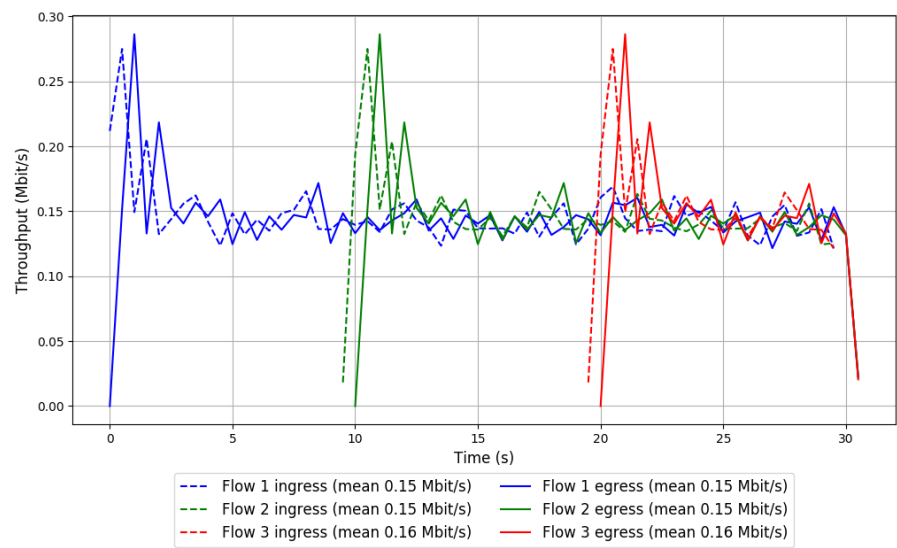


```
Run 1: Statistics of SCReAM

Start at: 2019-02-20 12:09:01
End at: 2019-02-20 12:09:31
Local clock offset: -0.095 ms
Remote clock offset: -0.349 ms

# Below is generated by plot.py at 2019-02-20 18:35:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 132.871 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 132.904 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 132.591 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 132.578 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

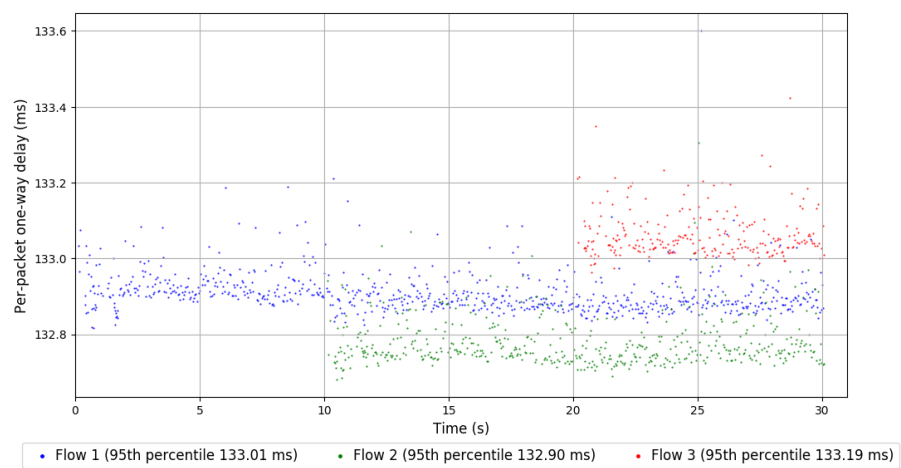
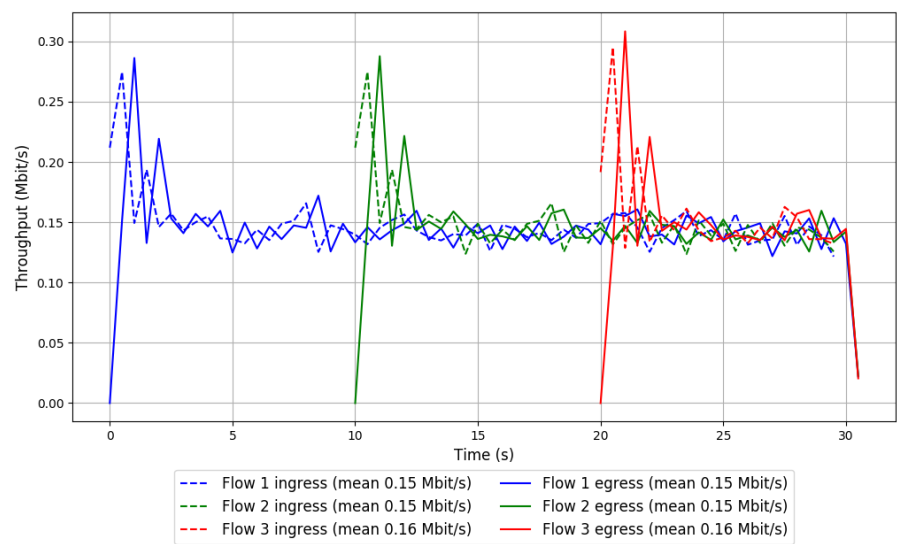


Run 2: Statistics of SCReAM

Start at: 2019-02-20 12:57:32
End at: 2019-02-20 12:58:02
Local clock offset: 0.203 ms
Remote clock offset: -0.052 ms

Below is generated by plot.py at 2019-02-20 18:35:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 133.085 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 133.009 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 132.899 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 133.194 ms
Loss rate: 0.00%

Run 2: Report of SReAM — Data Link

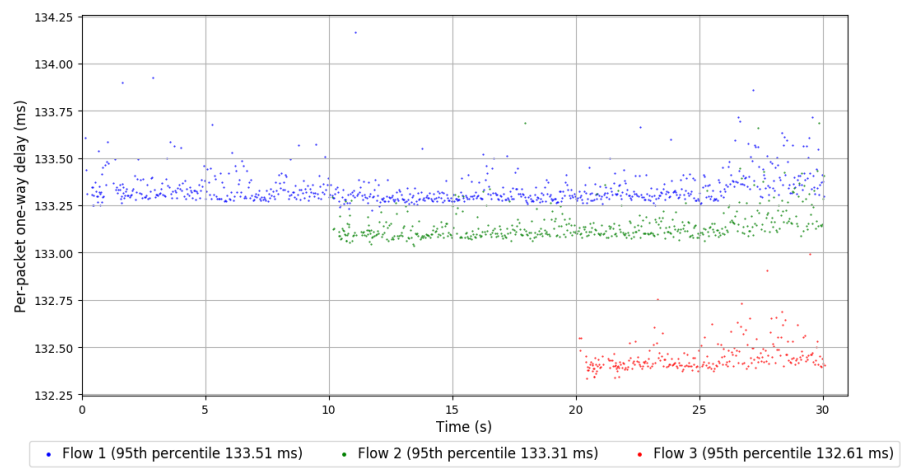
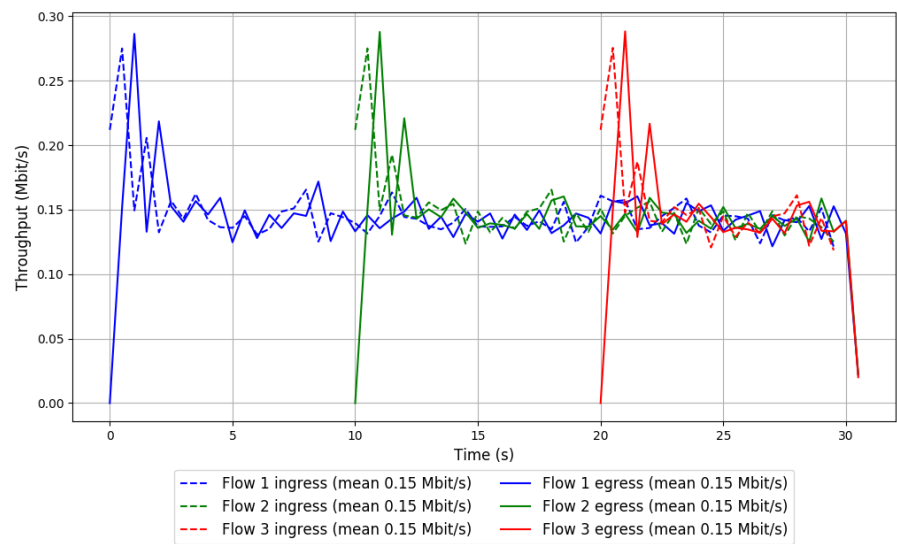


Run 3: Statistics of SCReAM

Start at: 2019-02-20 13:48:01
End at: 2019-02-20 13:48:31
Local clock offset: -0.318 ms
Remote clock offset: -0.124 ms

Below is generated by plot.py at 2019-02-20 18:35:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 133.442 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 133.507 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 133.307 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 132.611 ms
Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

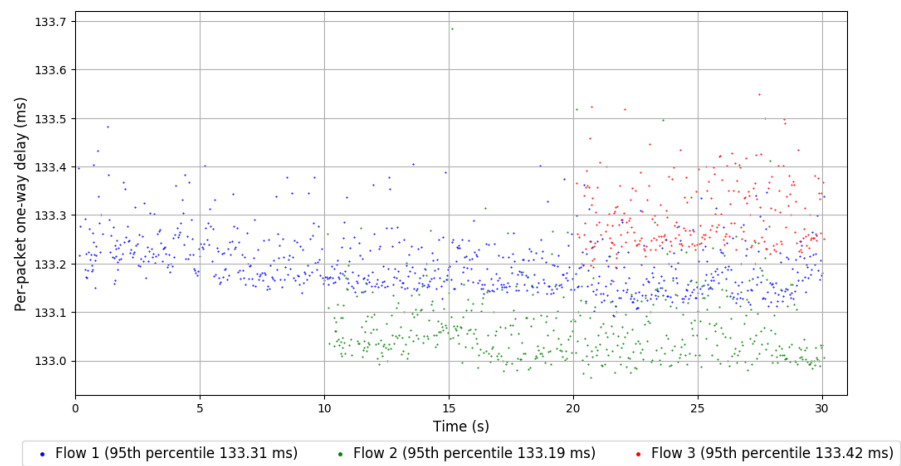
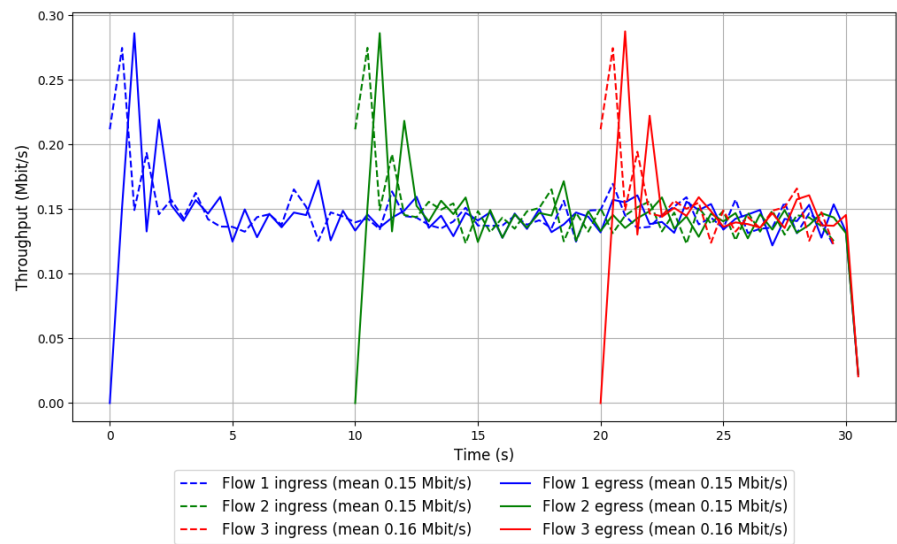


Run 4: Statistics of SCReAM

Start at: 2019-02-20 14:41:00
End at: 2019-02-20 14:41:30
Local clock offset: -0.388 ms
Remote clock offset: -0.112 ms

Below is generated by plot.py at 2019-02-20 18:35:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 133.357 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 133.312 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 133.188 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 133.423 ms
Loss rate: 0.00%

Run 4: Report of SReAM — Data Link

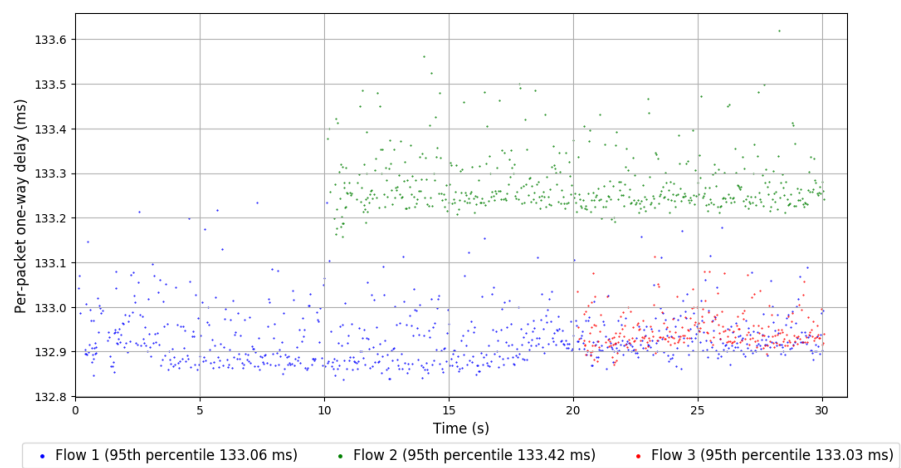
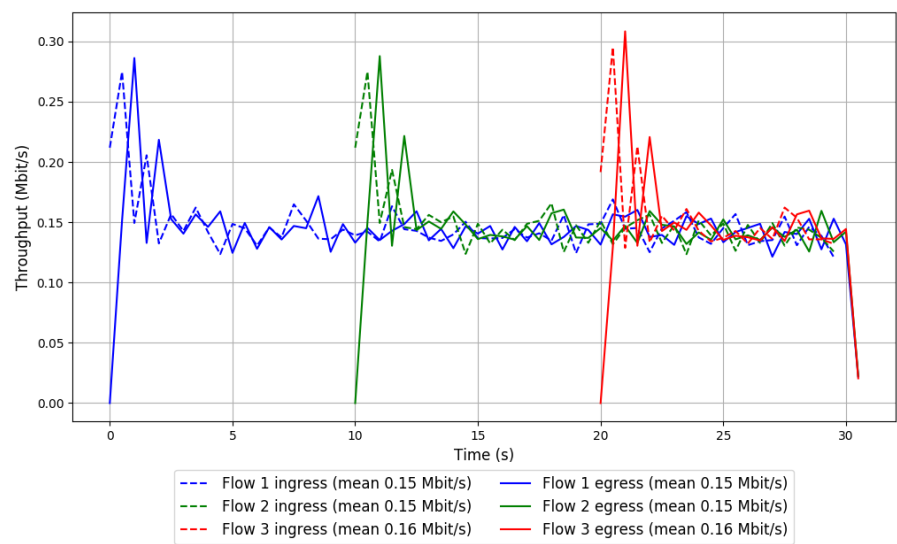


Run 5: Statistics of SCReAM

Start at: 2019-02-20 15:32:26
End at: 2019-02-20 15:32:56
Local clock offset: -0.259 ms
Remote clock offset: -0.039 ms

Below is generated by plot.py at 2019-02-20 18:35:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 133.333 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 133.055 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 133.421 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 133.030 ms
Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2019-02-20 12:07:42

End at: 2019-02-20 12:08:12

Local clock offset: -0.667 ms

Remote clock offset: 0.048 ms

Below is generated by plot.py at 2019-02-20 18:35:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 133.725 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.66 Mbit/s

95th percentile per-packet one-way delay: 133.739 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.66 Mbit/s

95th percentile per-packet one-way delay: 133.729 ms

Loss rate: 0.00%

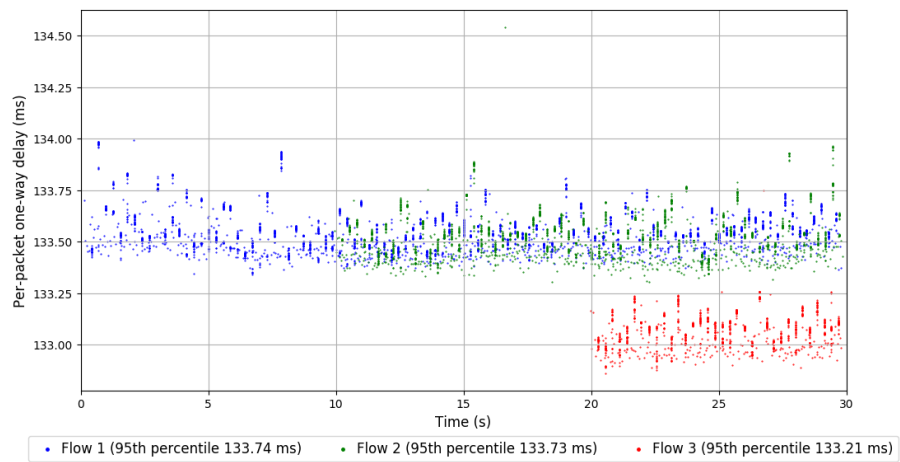
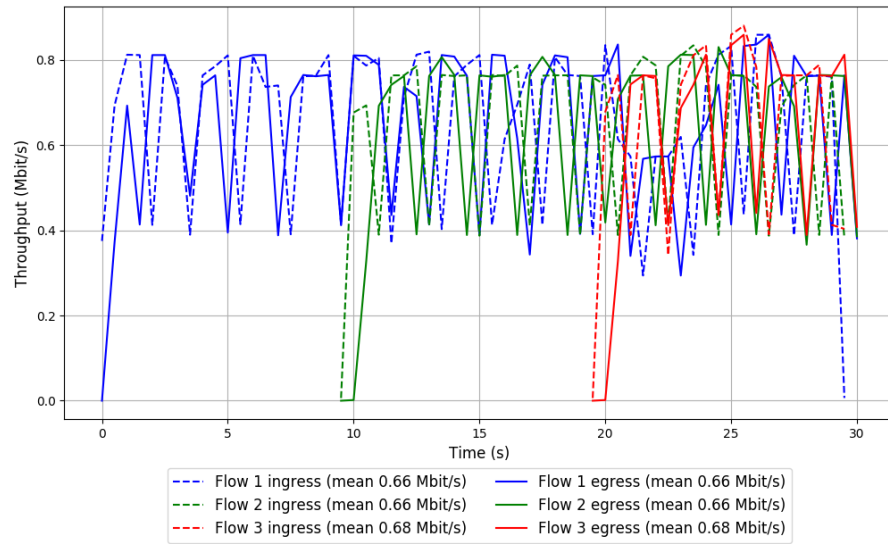
-- Flow 3:

Average throughput: 0.68 Mbit/s

95th percentile per-packet one-way delay: 133.213 ms

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link

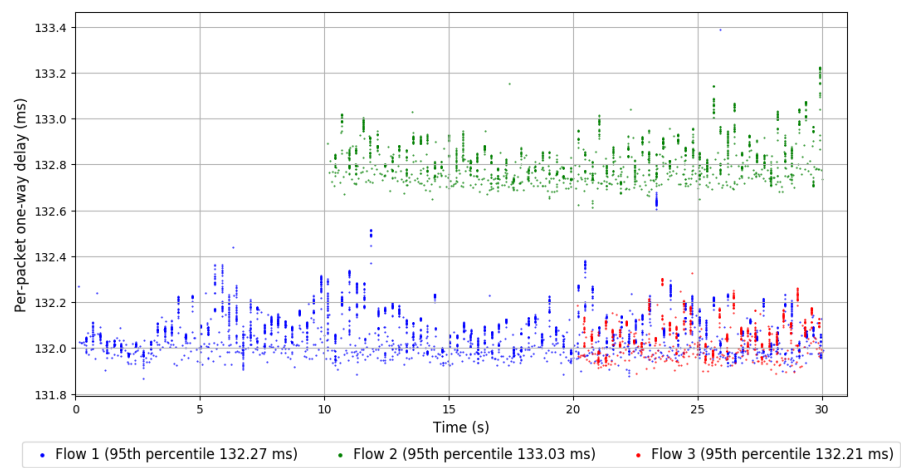
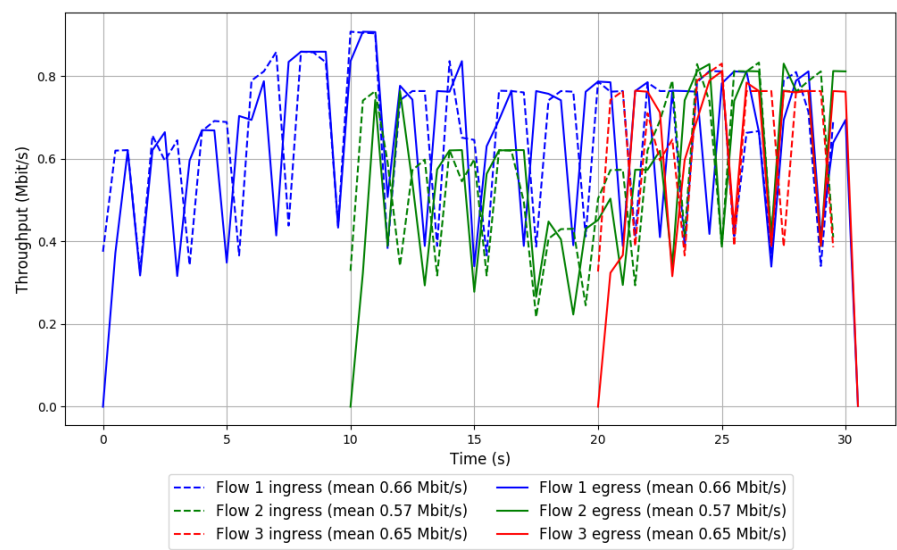


Run 2: Statistics of Sprout

Start at: 2019-02-20 12:56:14
End at: 2019-02-20 12:56:44
Local clock offset: 0.175 ms
Remote clock offset: -0.092 ms

Below is generated by plot.py at 2019-02-20 18:35:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.25 Mbit/s
95th percentile per-packet one-way delay: 132.926 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 132.269 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 133.028 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 132.209 ms
Loss rate: 0.00%

Run 2: Report of Sprout — Data Link

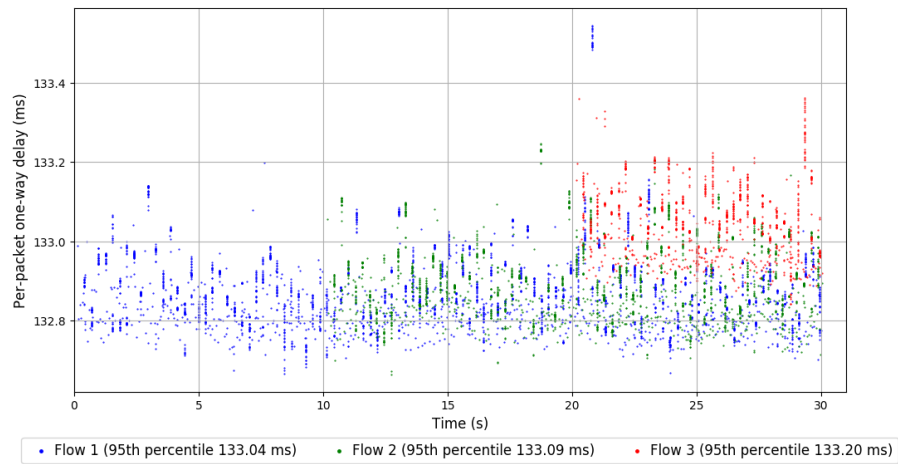
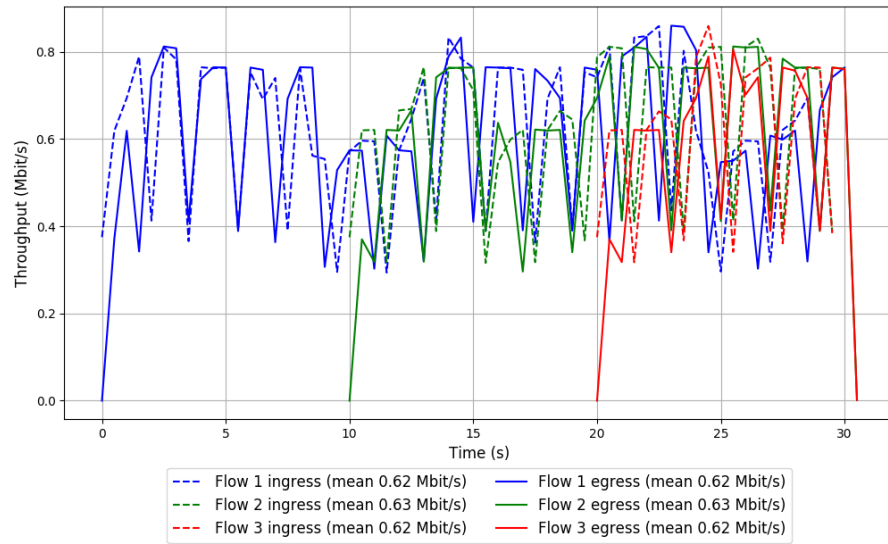


Run 3: Statistics of Sprout

Start at: 2019-02-20 13:46:41
End at: 2019-02-20 13:47:11
Local clock offset: -0.132 ms
Remote clock offset: -0.114 ms

```
# Below is generated by plot.py at 2019-02-20 18:35:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.24 Mbit/s
95th percentile per-packet one-way delay: 133.118 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 133.041 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.63 Mbit/s
95th percentile per-packet one-way delay: 133.086 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 133.201 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

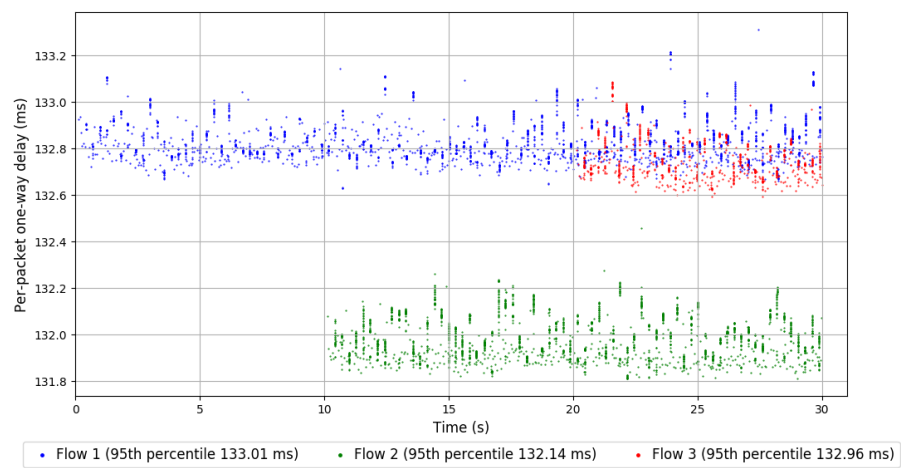
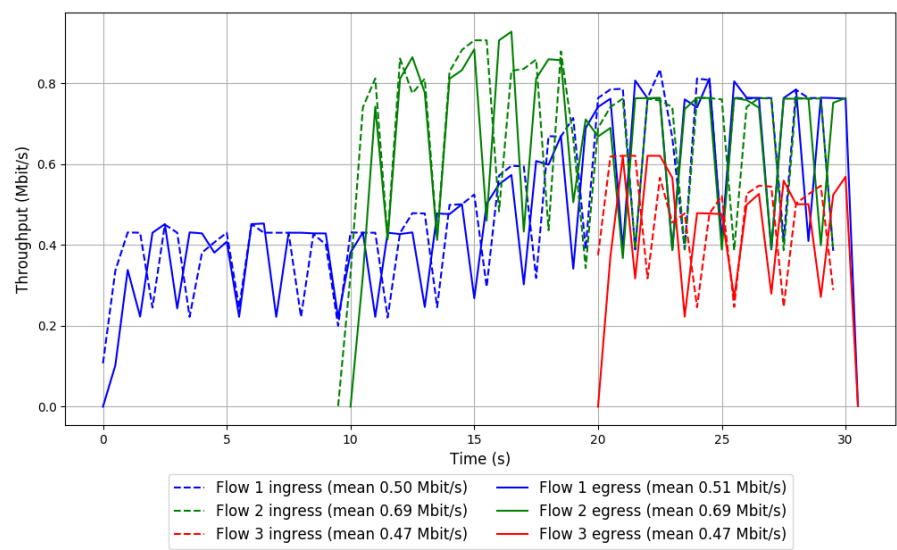


Run 4: Statistics of Sprout

Start at: 2019-02-20 14:39:41
End at: 2019-02-20 14:40:11
Local clock offset: 0.13 ms
Remote clock offset: -0.114 ms

```
# Below is generated by plot.py at 2019-02-20 18:35:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.12 Mbit/s
95th percentile per-packet one-way delay: 132.961 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 133.006 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.69 Mbit/s
95th percentile per-packet one-way delay: 132.143 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 132.961 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

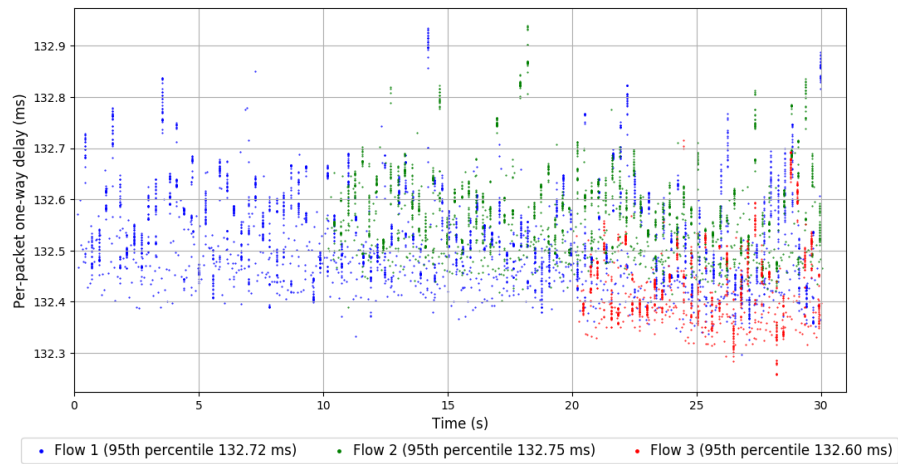
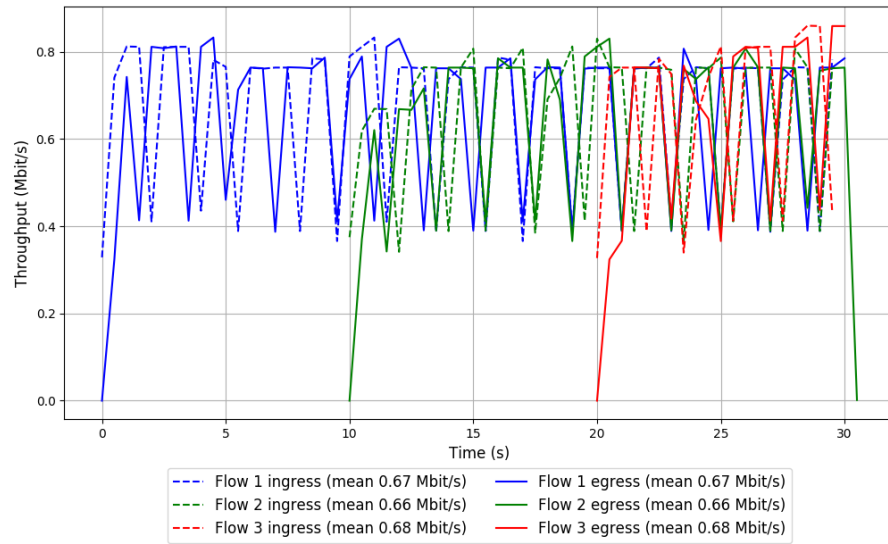


Run 5: Statistics of Sprout

Start at: 2019-02-20 15:31:07
End at: 2019-02-20 15:31:37
Local clock offset: -0.096 ms
Remote clock offset: -0.405 ms

Below is generated by plot.py at 2019-02-20 18:35:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.33 Mbit/s
95th percentile per-packet one-way delay: 132.708 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 132.716 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 132.750 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.68 Mbit/s
95th percentile per-packet one-way delay: 132.597 ms
Loss rate: 0.00%

Run 5: Report of Sprout — Data Link

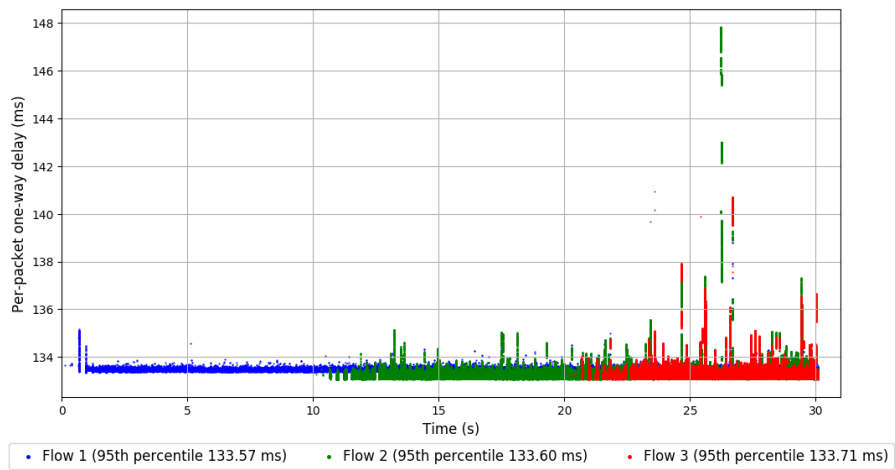
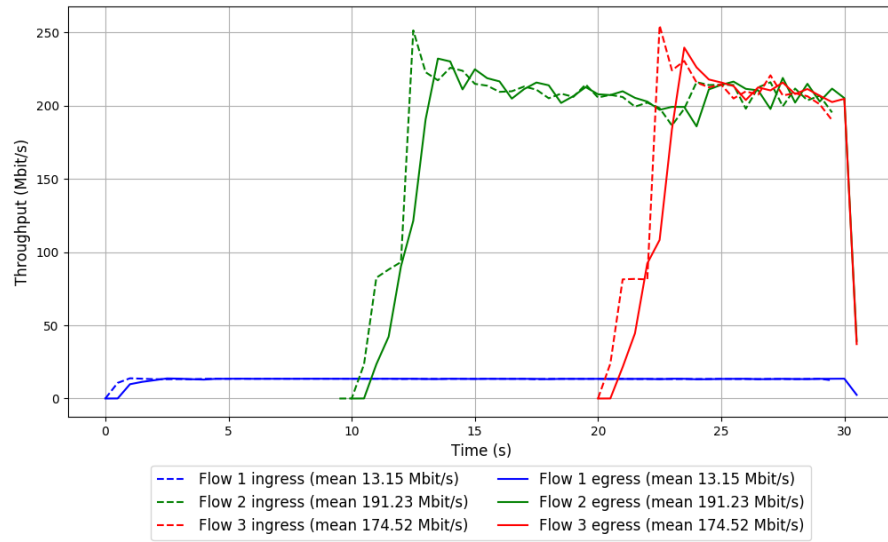



```
Run 1: Statistics of TaoVA-100x

Start at: 2019-02-20 12:35:34
End at: 2019-02-20 12:36:04
Local clock offset: 0.071 ms
Remote clock offset: 0.237 ms

# Below is generated by plot.py at 2019-02-20 18:35:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 198.57 Mbit/s
95th percentile per-packet one-way delay: 133.629 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.15 Mbit/s
95th percentile per-packet one-way delay: 133.575 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 191.23 Mbit/s
95th percentile per-packet one-way delay: 133.604 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 174.52 Mbit/s
95th percentile per-packet one-way delay: 133.714 ms
Loss rate: 0.00%
```

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



Run 2: Statistics of TaoVA-100x

Start at: 2019-02-20 13:24:56

End at: 2019-02-20 13:25:26

Local clock offset: -0.281 ms

Remote clock offset: -0.1 ms

Below is generated by plot.py at 2019-02-20 18:35:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 190.81 Mbit/s

95th percentile per-packet one-way delay: 133.808 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 13.13 Mbit/s

95th percentile per-packet one-way delay: 133.288 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 175.64 Mbit/s

95th percentile per-packet one-way delay: 133.594 ms

Loss rate: 0.00%

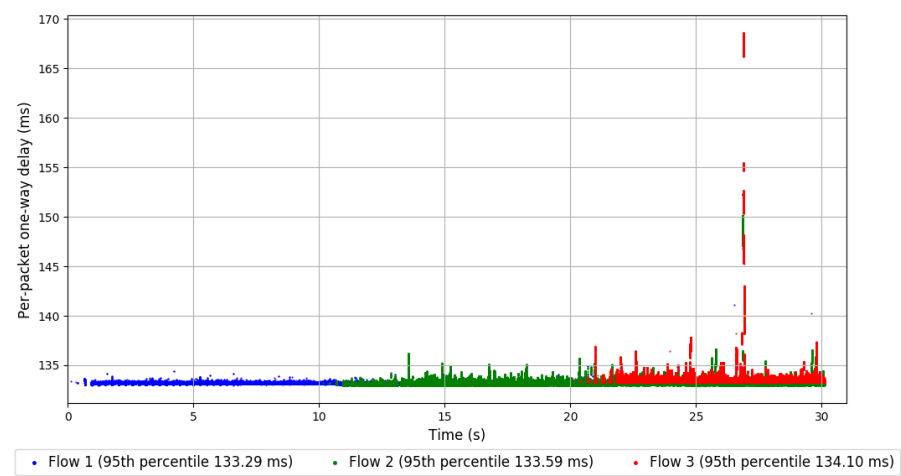
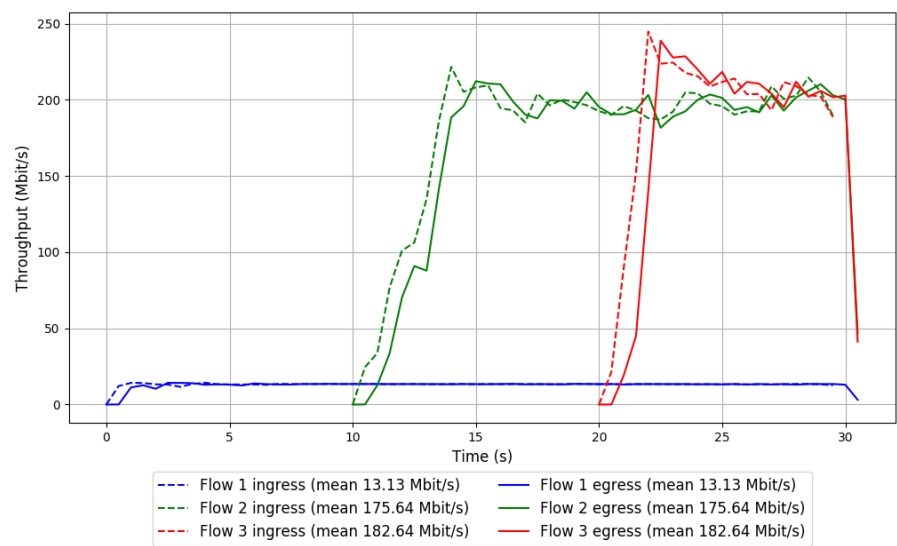
-- Flow 3:

Average throughput: 182.64 Mbit/s

95th percentile per-packet one-way delay: 134.096 ms

Loss rate: 0.00%

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



Run 3: Statistics of TaoVA-100x

Start at: 2019-02-20 14:17:09

End at: 2019-02-20 14:17:39

Local clock offset: -0.31 ms

Remote clock offset: -0.11 ms

Below is generated by plot.py at 2019-02-20 18:35:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 190.24 Mbit/s

95th percentile per-packet one-way delay: 133.621 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 177.40 Mbit/s

95th percentile per-packet one-way delay: 133.628 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 13.01 Mbit/s

95th percentile per-packet one-way delay: 133.599 ms

Loss rate: 0.00%

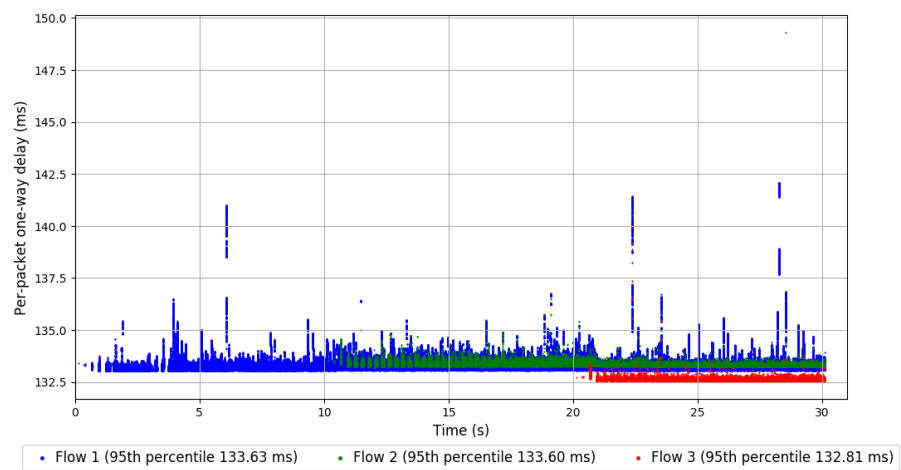
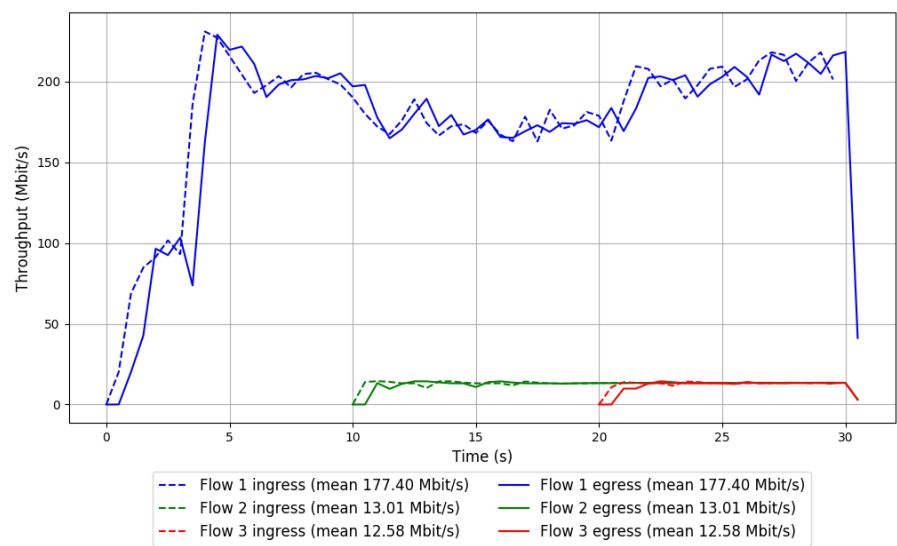
-- Flow 3:

Average throughput: 12.58 Mbit/s

95th percentile per-packet one-way delay: 132.810 ms

Loss rate: 0.00%

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



Run 4: Statistics of TaoVA-100x

Start at: 2019-02-20 15:09:36

End at: 2019-02-20 15:10:06

Local clock offset: 0.003 ms

Remote clock offset: 0.24 ms

Below is generated by plot.py at 2019-02-20 18:35:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 306.77 Mbit/s

95th percentile per-packet one-way delay: 133.290 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 187.19 Mbit/s

95th percentile per-packet one-way delay: 133.320 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 173.19 Mbit/s

95th percentile per-packet one-way delay: 133.213 ms

Loss rate: 0.00%

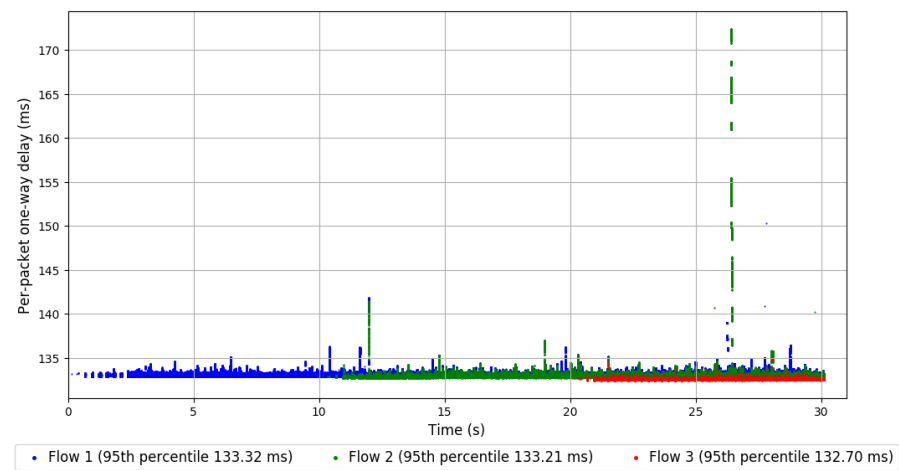
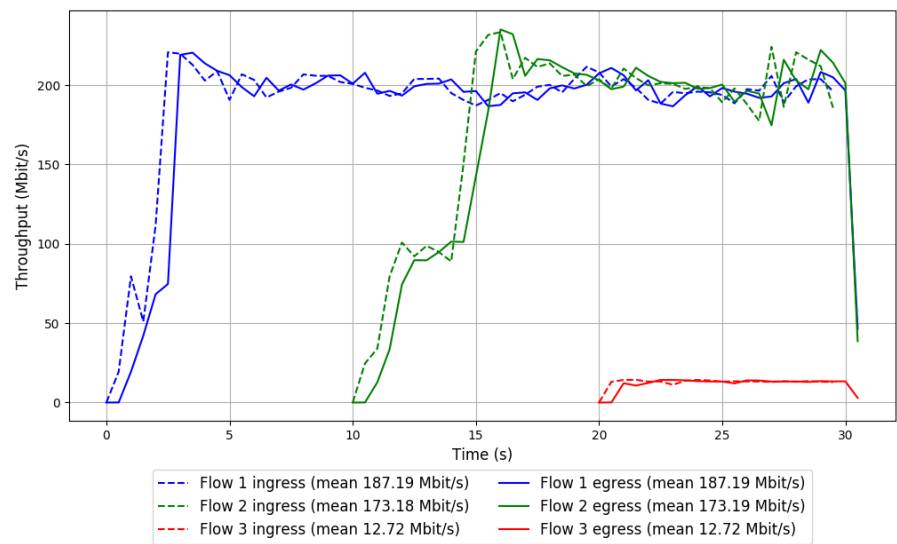
-- Flow 3:

Average throughput: 12.72 Mbit/s

95th percentile per-packet one-way delay: 132.702 ms

Loss rate: 0.00%

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

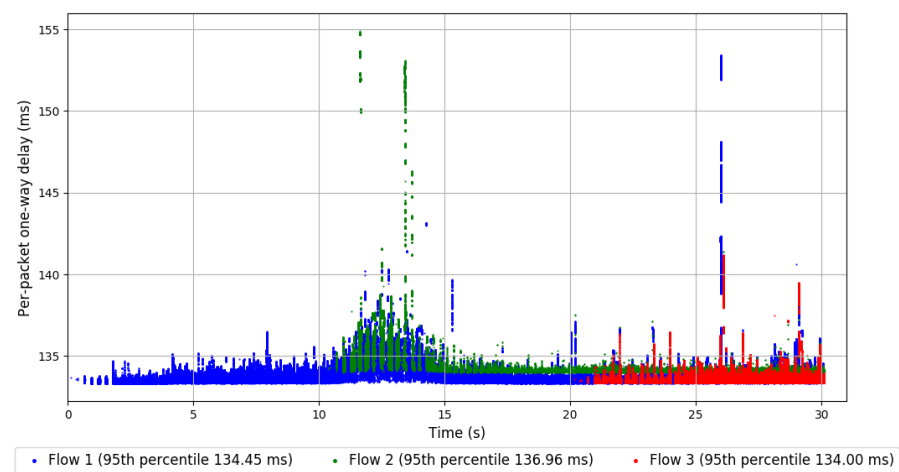
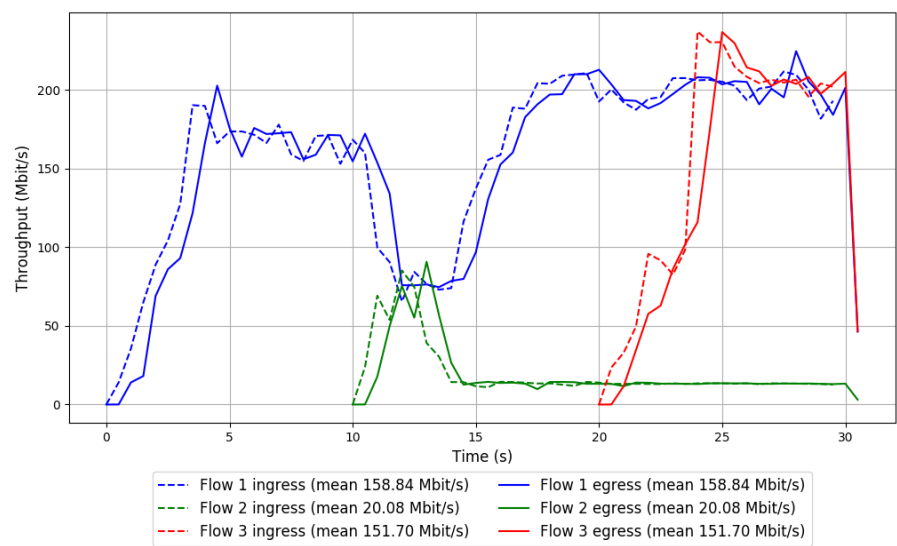


Run 5: Statistics of TaoVA-100x

Start at: 2019-02-20 16:01:02
End at: 2019-02-20 16:01:32
Local clock offset: -0.695 ms
Remote clock offset: -0.037 ms

Below is generated by plot.py at 2019-02-20 18:35:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 222.58 Mbit/s
95th percentile per-packet one-way delay: 134.714 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 158.84 Mbit/s
95th percentile per-packet one-way delay: 134.450 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 20.08 Mbit/s
95th percentile per-packet one-way delay: 136.964 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 151.70 Mbit/s
95th percentile per-packet one-way delay: 133.996 ms
Loss rate: 0.00%

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

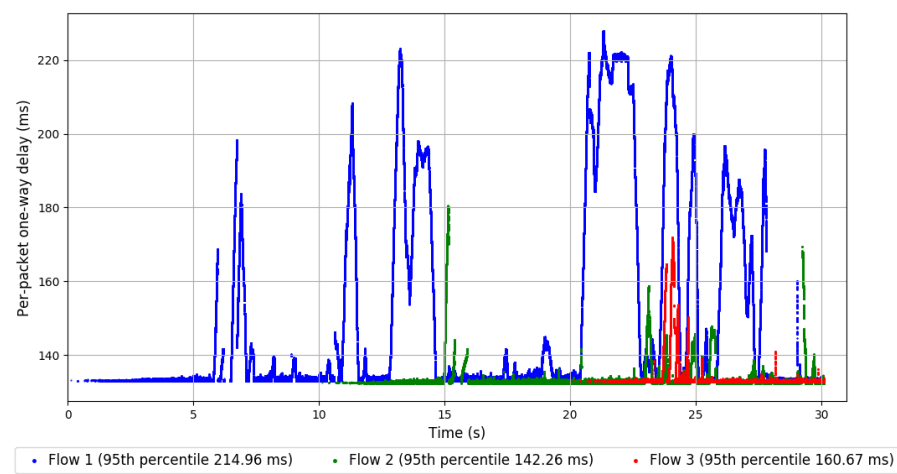
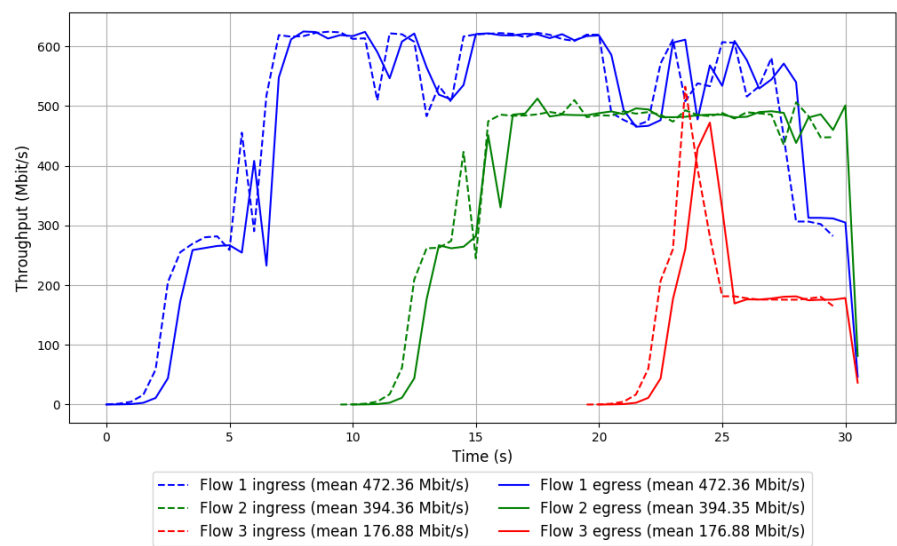


Run 1: Statistics of TCP Vegas

Start at: 2019-02-20 12:04:31
End at: 2019-02-20 12:05:01
Local clock offset: -0.217 ms
Remote clock offset: -0.011 ms

Below is generated by plot.py at 2019-02-20 18:42:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 794.09 Mbit/s
95th percentile per-packet one-way delay: 200.206 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 472.36 Mbit/s
95th percentile per-packet one-way delay: 214.958 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 394.35 Mbit/s
95th percentile per-packet one-way delay: 142.264 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 176.88 Mbit/s
95th percentile per-packet one-way delay: 160.670 ms
Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link

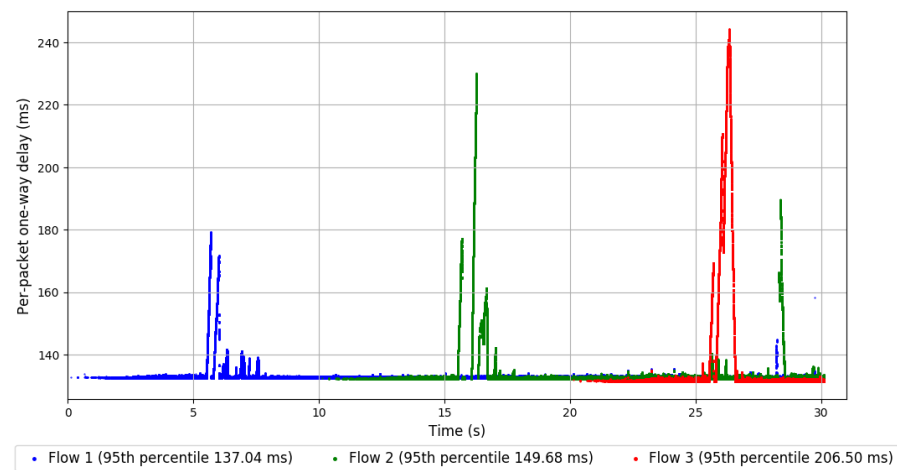
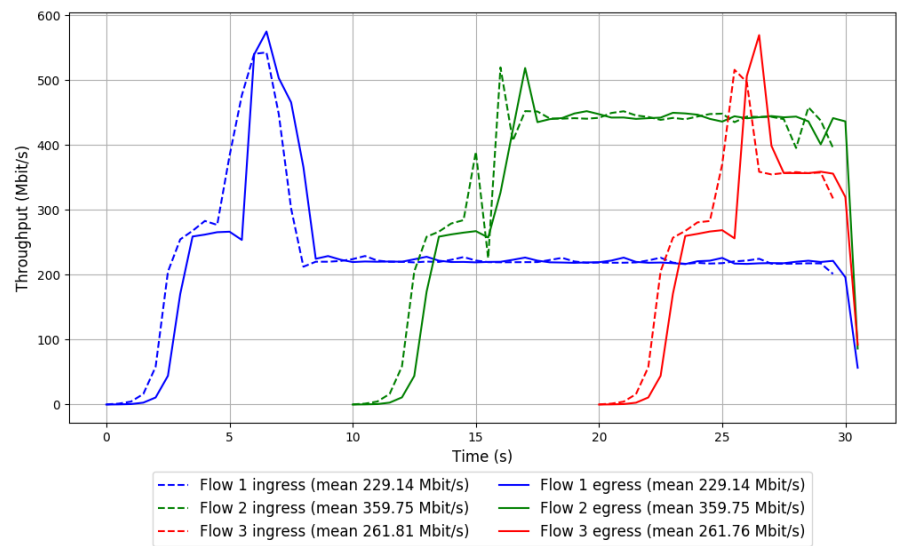


Run 2: Statistics of TCP Vegas

Start at: 2019-02-20 12:53:23
End at: 2019-02-20 12:53:53
Local clock offset: 0.176 ms
Remote clock offset: -0.465 ms

Below is generated by plot.py at 2019-02-20 18:42:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 555.89 Mbit/s
95th percentile per-packet one-way delay: 152.850 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 229.14 Mbit/s
95th percentile per-packet one-way delay: 137.043 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 359.75 Mbit/s
95th percentile per-packet one-way delay: 149.677 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 261.76 Mbit/s
95th percentile per-packet one-way delay: 206.496 ms
Loss rate: 0.03%

Run 2: Report of TCP Vegas — Data Link

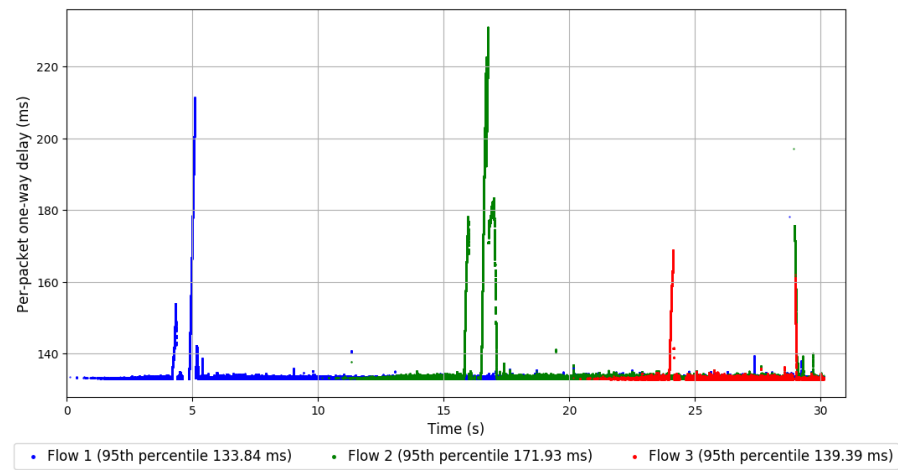
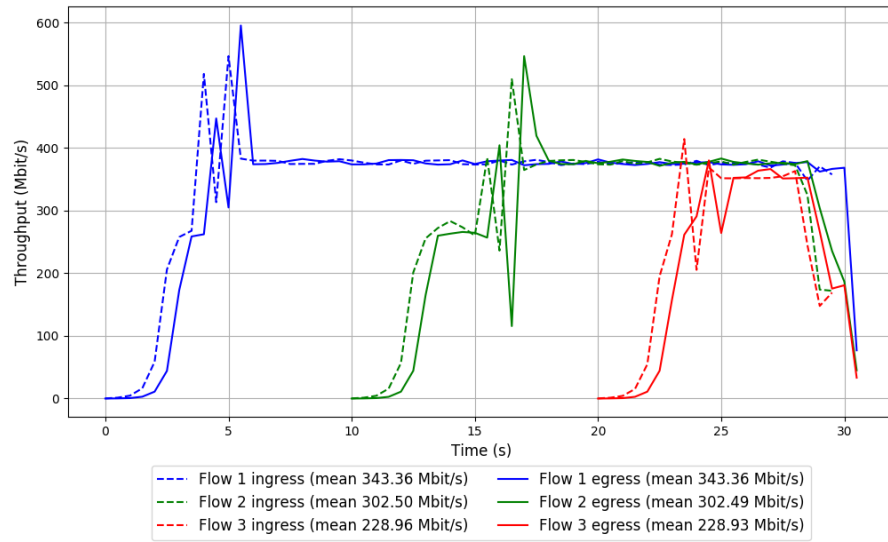


Run 3: Statistics of TCP Vegas

Start at: 2019-02-20 13:43:44
End at: 2019-02-20 13:44:14
Local clock offset: -0.339 ms
Remote clock offset: -0.119 ms

Below is generated by plot.py at 2019-02-20 18:43:21
Datalink statistics
-- Total of 3 flows:
Average throughput: 620.90 Mbit/s
95th percentile per-packet one-way delay: 137.097 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 343.36 Mbit/s
95th percentile per-packet one-way delay: 133.838 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 302.49 Mbit/s
95th percentile per-packet one-way delay: 171.930 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 228.93 Mbit/s
95th percentile per-packet one-way delay: 139.390 ms
Loss rate: 0.01%

Run 3: Report of TCP Vegas — Data Link

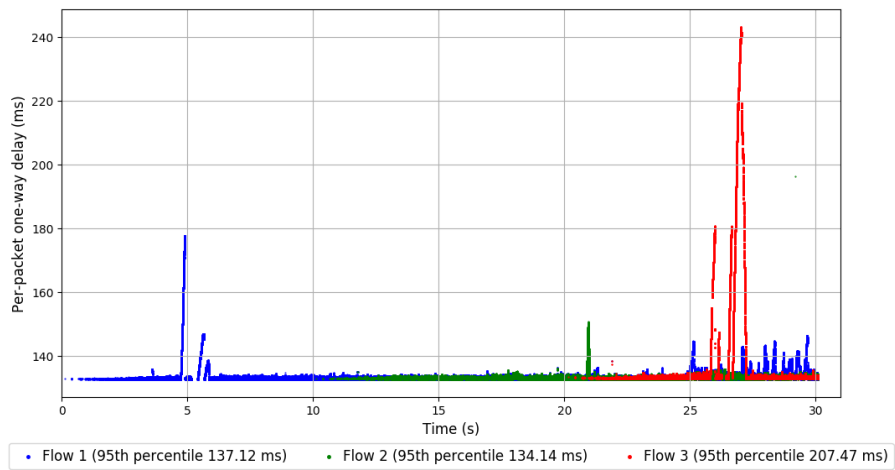
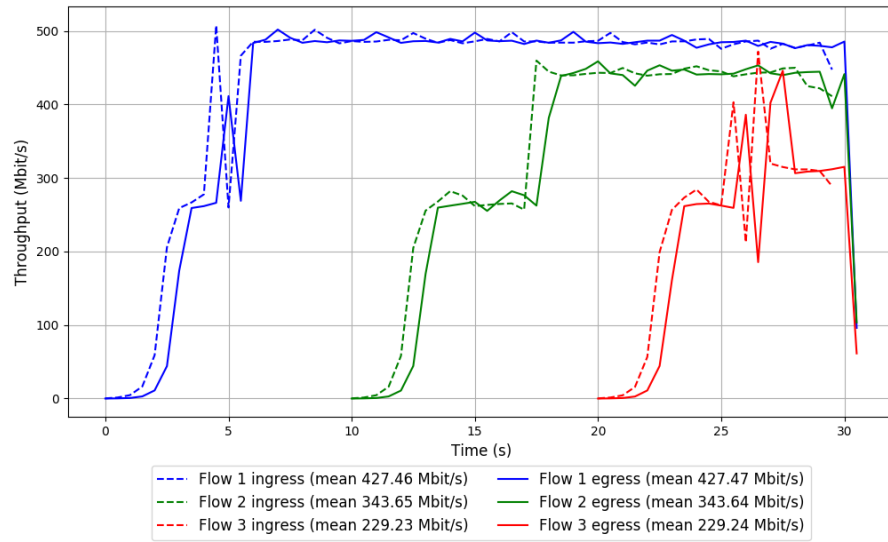


Run 4: Statistics of TCP Vegas

Start at: 2019-02-20 14:36:24
End at: 2019-02-20 14:36:54
Local clock offset: -0.168 ms
Remote clock offset: -0.098 ms

Below is generated by plot.py at 2019-02-20 18:45:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 732.58 Mbit/s
95th percentile per-packet one-way delay: 137.369 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 427.47 Mbit/s
95th percentile per-packet one-way delay: 137.125 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 343.64 Mbit/s
95th percentile per-packet one-way delay: 134.138 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 229.24 Mbit/s
95th percentile per-packet one-way delay: 207.473 ms
Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link

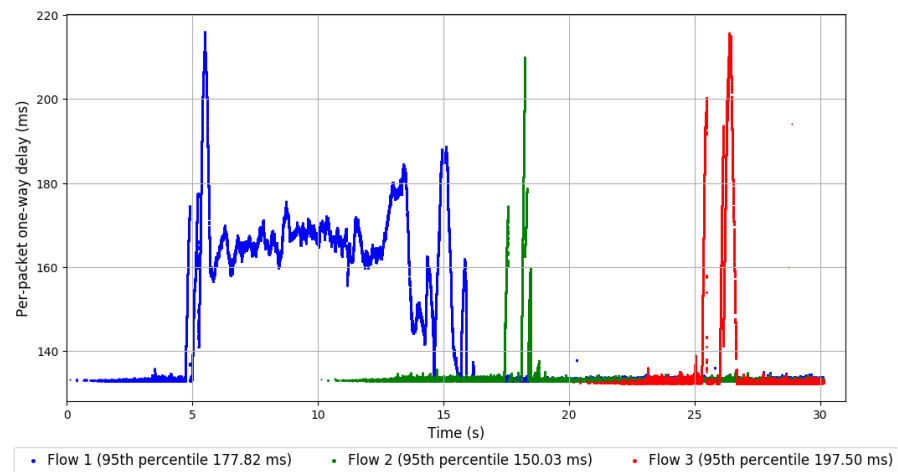
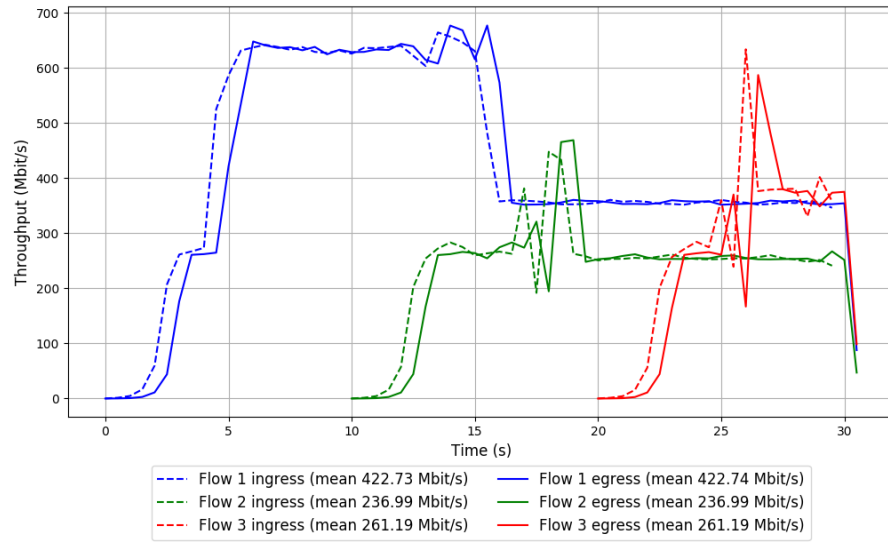


Run 5: Statistics of TCP Vegas

Start at: 2019-02-20 15:28:21
End at: 2019-02-20 15:28:51
Local clock offset: -0.259 ms
Remote clock offset: -0.019 ms

Below is generated by plot.py at 2019-02-20 18:46:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 667.39 Mbit/s
95th percentile per-packet one-way delay: 177.562 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 422.74 Mbit/s
95th percentile per-packet one-way delay: 177.825 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 236.99 Mbit/s
95th percentile per-packet one-way delay: 150.029 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 261.19 Mbit/s
95th percentile per-packet one-way delay: 197.495 ms
Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link

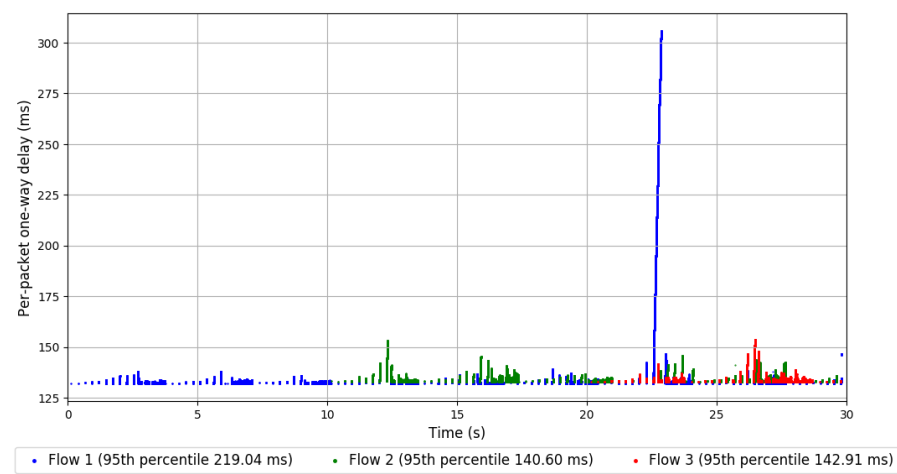
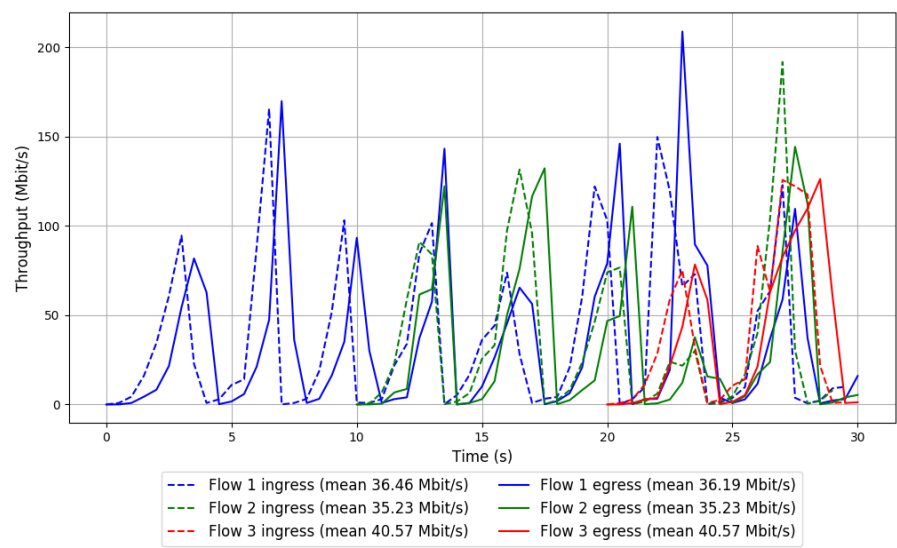


Run 1: Statistics of Verus

Start at: 2019-02-20 12:20:06
End at: 2019-02-20 12:20:36
Local clock offset: -0.038 ms
Remote clock offset: -0.083 ms

Below is generated by plot.py at 2019-02-20 18:46:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 72.43 Mbit/s
95th percentile per-packet one-way delay: 147.766 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 36.19 Mbit/s
95th percentile per-packet one-way delay: 219.037 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 35.23 Mbit/s
95th percentile per-packet one-way delay: 140.602 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 40.57 Mbit/s
95th percentile per-packet one-way delay: 142.912 ms
Loss rate: 0.00%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2019-02-20 13:08:57

End at: 2019-02-20 13:09:27

Local clock offset: -0.215 ms

Remote clock offset: -0.06 ms

Below is generated by plot.py at 2019-02-20 18:46:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 164.83 Mbit/s

95th percentile per-packet one-way delay: 280.111 ms

Loss rate: 3.07%

-- Flow 1:

Average throughput: 100.65 Mbit/s

95th percentile per-packet one-way delay: 279.582 ms

Loss rate: 3.94%

-- Flow 2:

Average throughput: 76.61 Mbit/s

95th percentile per-packet one-way delay: 287.916 ms

Loss rate: 2.09%

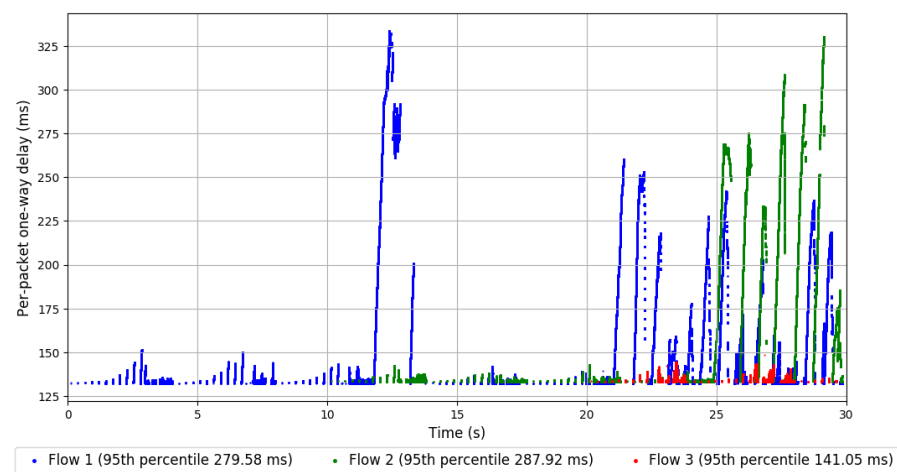
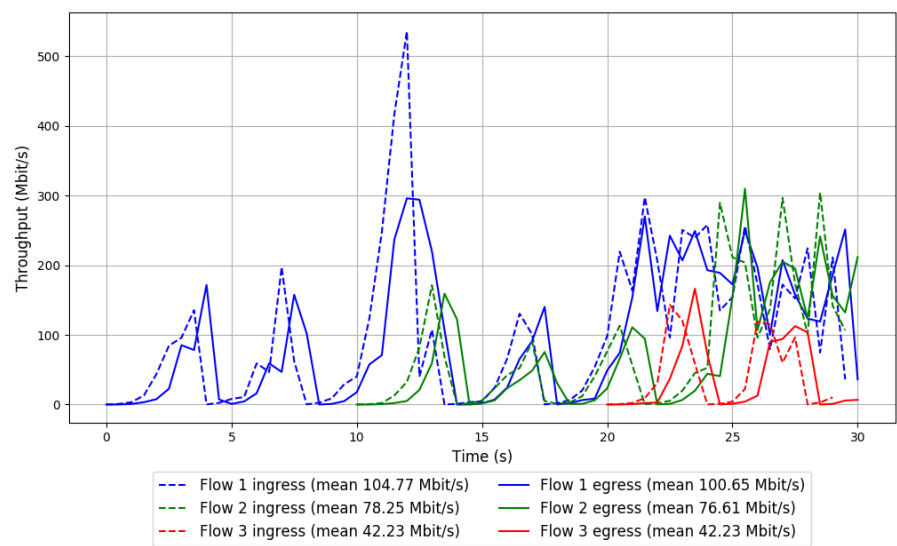
-- Flow 3:

Average throughput: 42.23 Mbit/s

95th percentile per-packet one-way delay: 141.050 ms

Loss rate: 0.00%

Run 2: Report of Verus — Data Link

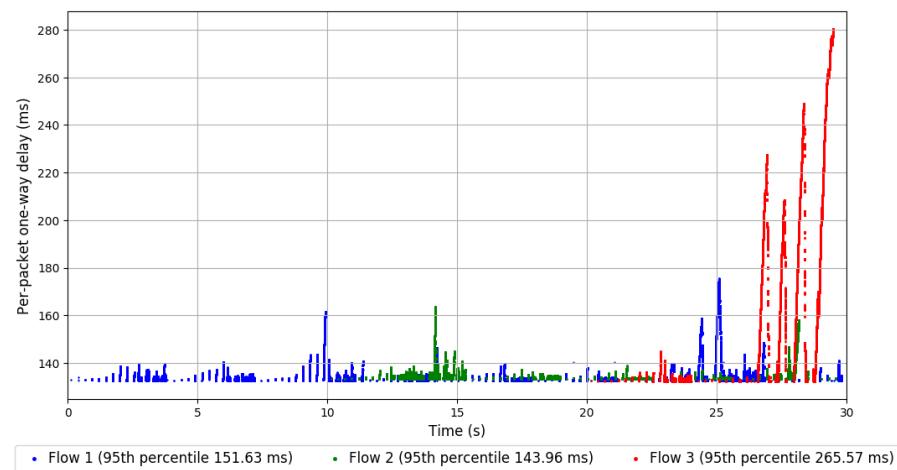
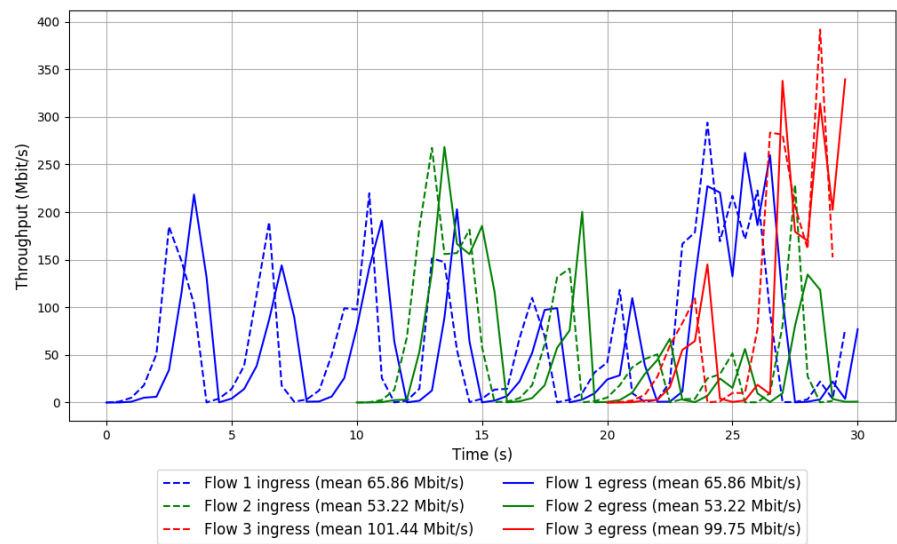


Run 3: Statistics of Verus

Start at: 2019-02-20 14:00:07
End at: 2019-02-20 14:00:37
Local clock offset: -0.367 ms
Remote clock offset: -0.109 ms

Below is generated by plot.py at 2019-02-20 18:46:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 132.08 Mbit/s
95th percentile per-packet one-way delay: 217.379 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 65.86 Mbit/s
95th percentile per-packet one-way delay: 151.626 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 53.22 Mbit/s
95th percentile per-packet one-way delay: 143.961 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 99.75 Mbit/s
95th percentile per-packet one-way delay: 265.571 ms
Loss rate: 0.12%

Run 3: Report of Verus — Data Link

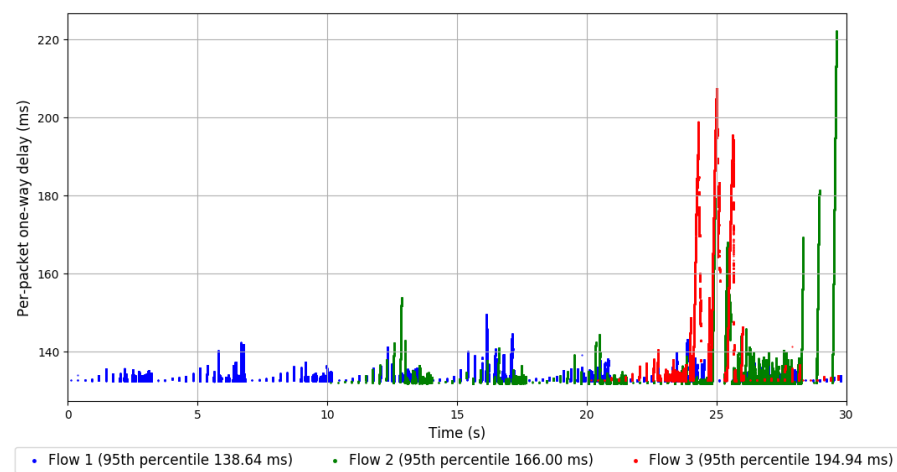
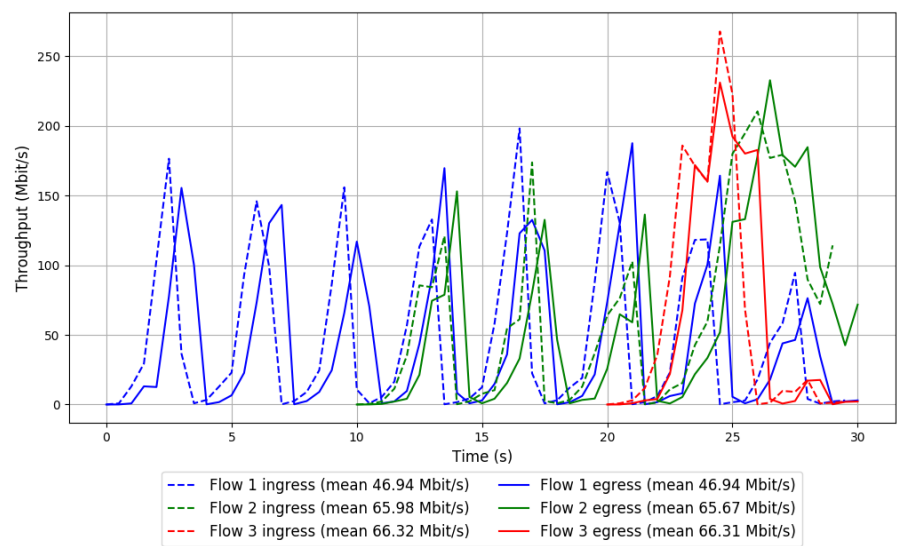


Run 4: Statistics of Verus

Start at: 2019-02-20 14:52:51
End at: 2019-02-20 14:53:21
Local clock offset: 0.261 ms
Remote clock offset: -0.123 ms

Below is generated by plot.py at 2019-02-20 18:46:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 111.38 Mbit/s
95th percentile per-packet one-way delay: 175.978 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.94 Mbit/s
95th percentile per-packet one-way delay: 138.644 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 65.67 Mbit/s
95th percentile per-packet one-way delay: 166.003 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 66.31 Mbit/s
95th percentile per-packet one-way delay: 194.945 ms
Loss rate: 0.00%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2019-02-20 15:43:56

End at: 2019-02-20 15:44:26

Local clock offset: -0.249 ms

Remote clock offset: 0.29 ms

Below is generated by plot.py at 2019-02-20 18:49:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 266.83 Mbit/s

95th percentile per-packet one-way delay: 289.300 ms

Loss rate: 8.81%

-- Flow 1:

Average throughput: 189.86 Mbit/s

95th percentile per-packet one-way delay: 291.760 ms

Loss rate: 11.59%

-- Flow 2:

Average throughput: 43.11 Mbit/s

95th percentile per-packet one-way delay: 270.501 ms

Loss rate: 1.02%

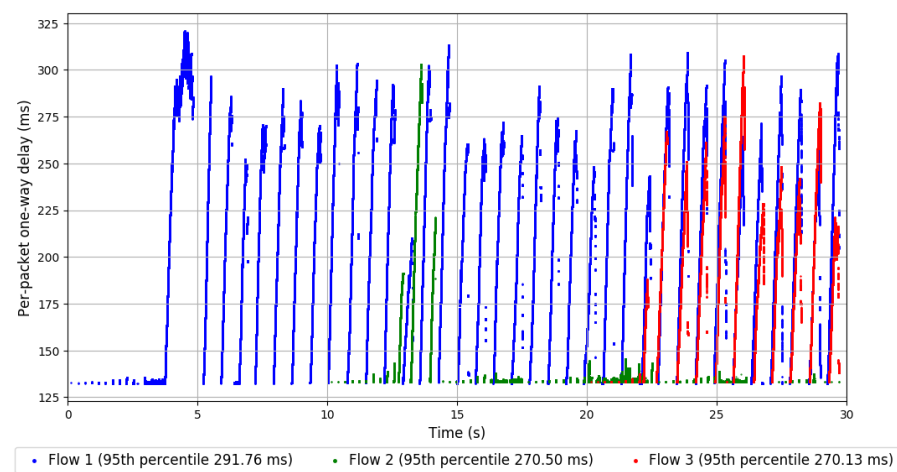
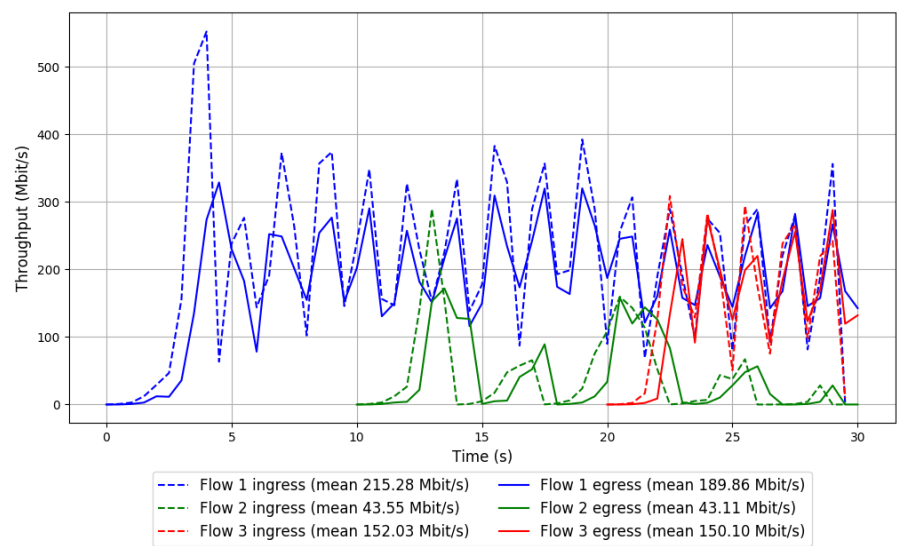
-- Flow 3:

Average throughput: 150.10 Mbit/s

95th percentile per-packet one-way delay: 270.133 ms

Loss rate: 1.22%

Run 5: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2019-02-20 12:13:15

End at: 2019-02-20 12:13:45

Local clock offset: -0.539 ms

Remote clock offset: 0.025 ms

Below is generated by plot.py at 2019-02-20 18:49:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 494.83 Mbit/s

95th percentile per-packet one-way delay: 140.815 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 329.27 Mbit/s

95th percentile per-packet one-way delay: 149.925 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 190.57 Mbit/s

95th percentile per-packet one-way delay: 134.239 ms

Loss rate: 0.00%

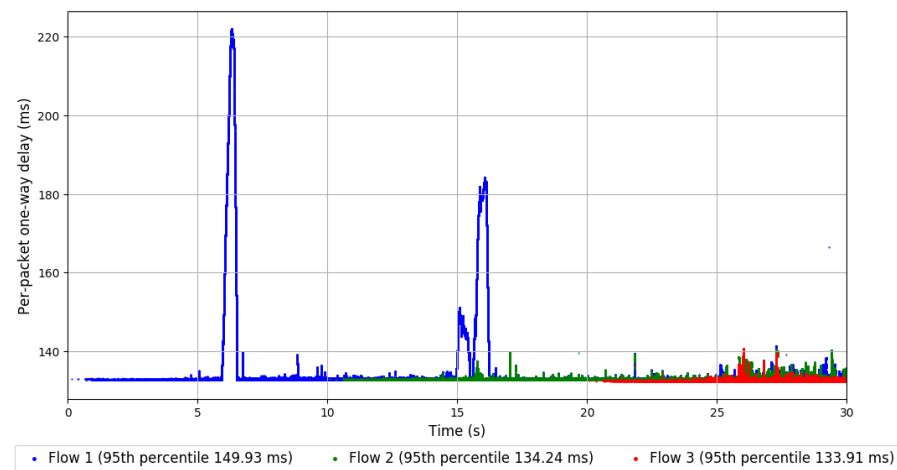
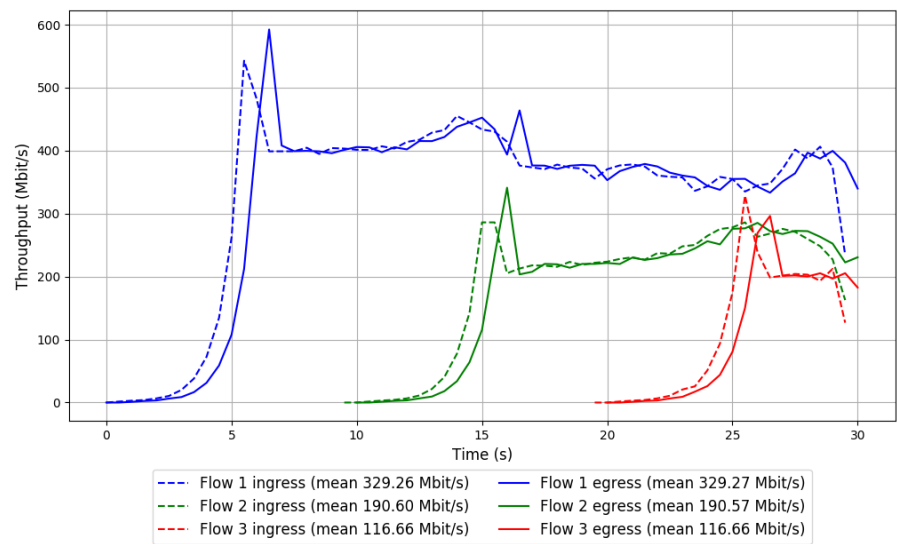
-- Flow 3:

Average throughput: 116.66 Mbit/s

95th percentile per-packet one-way delay: 133.915 ms

Loss rate: 0.00%

Run 1: Report of PCC-Vivace — Data Link

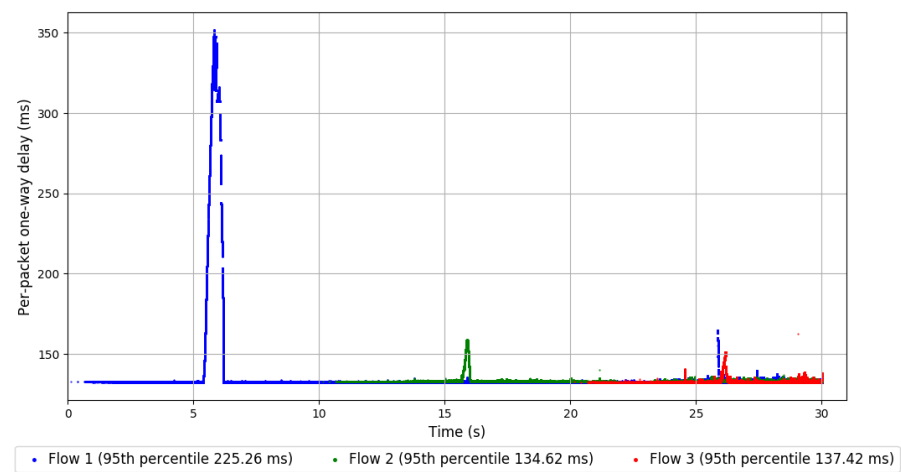
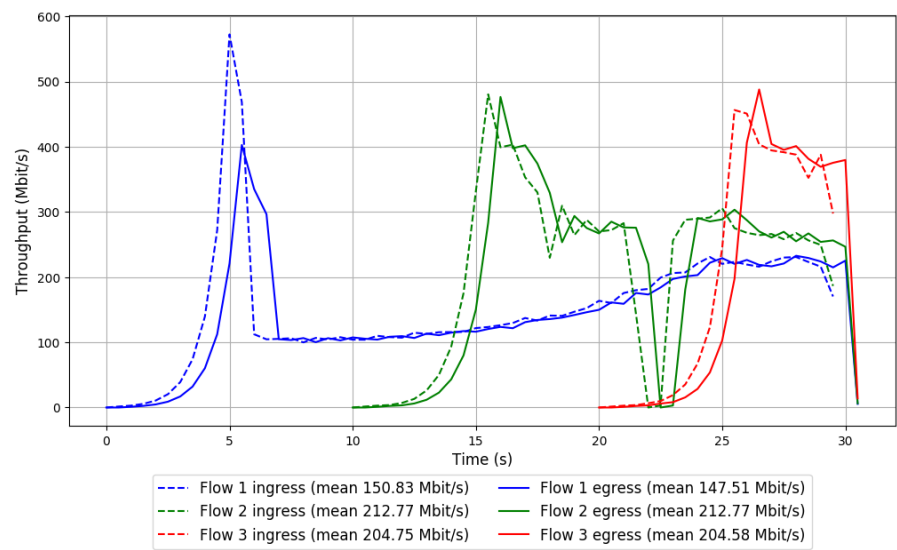


Run 2: Statistics of PCC-Vivace

Start at: 2019-02-20 13:02:16
End at: 2019-02-20 13:02:46
Local clock offset: 0.017 ms
Remote clock offset: -0.437 ms

Below is generated by plot.py at 2019-02-20 18:49:57
Datalink statistics
-- Total of 3 flows:
Average throughput: 356.47 Mbit/s
95th percentile per-packet one-way delay: 139.389 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 147.51 Mbit/s
95th percentile per-packet one-way delay: 225.264 ms
Loss rate: 2.20%
-- Flow 2:
Average throughput: 212.77 Mbit/s
95th percentile per-packet one-way delay: 134.621 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 204.58 Mbit/s
95th percentile per-packet one-way delay: 137.421 ms
Loss rate: 0.07%

Run 2: Report of PCC-Vivace — Data Link

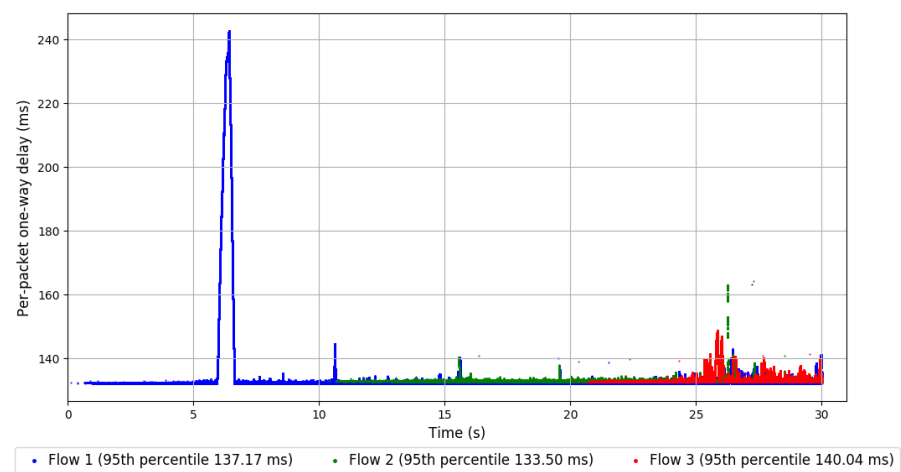
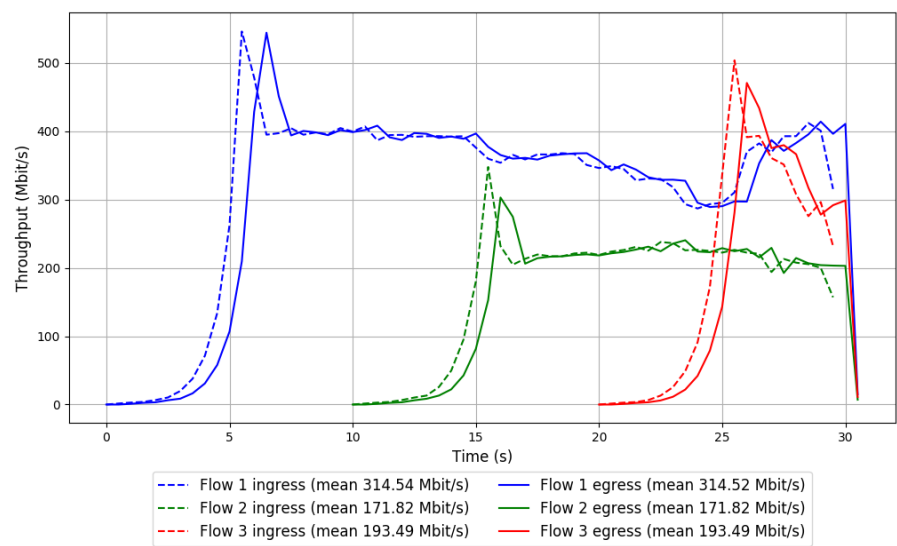


Run 3: Statistics of PCC-Vivace

Start at: 2019-02-20 13:52:31
End at: 2019-02-20 13:53:01
Local clock offset: 0.007 ms
Remote clock offset: -0.119 ms

Below is generated by plot.py at 2019-02-20 18:50:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 492.55 Mbit/s
95th percentile per-packet one-way delay: 136.679 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 314.52 Mbit/s
95th percentile per-packet one-way delay: 137.174 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 171.82 Mbit/s
95th percentile per-packet one-way delay: 133.495 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 193.49 Mbit/s
95th percentile per-packet one-way delay: 140.042 ms
Loss rate: 0.00%

Run 3: Report of PCC-Vivace — Data Link

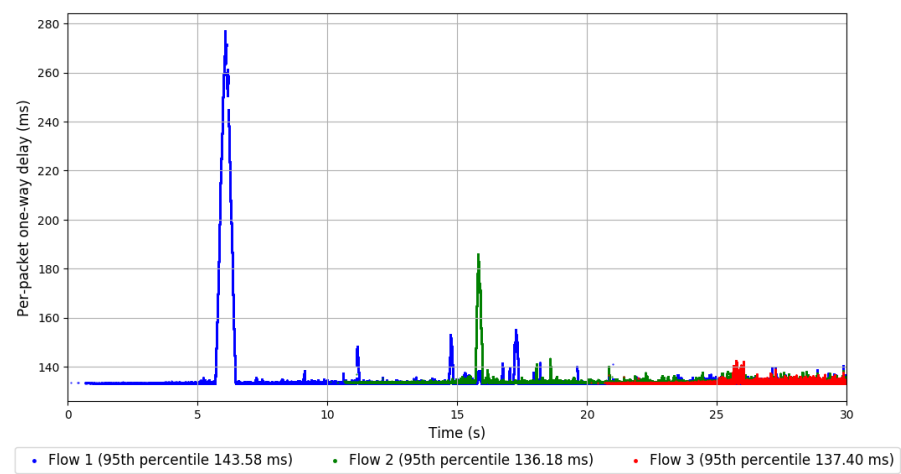
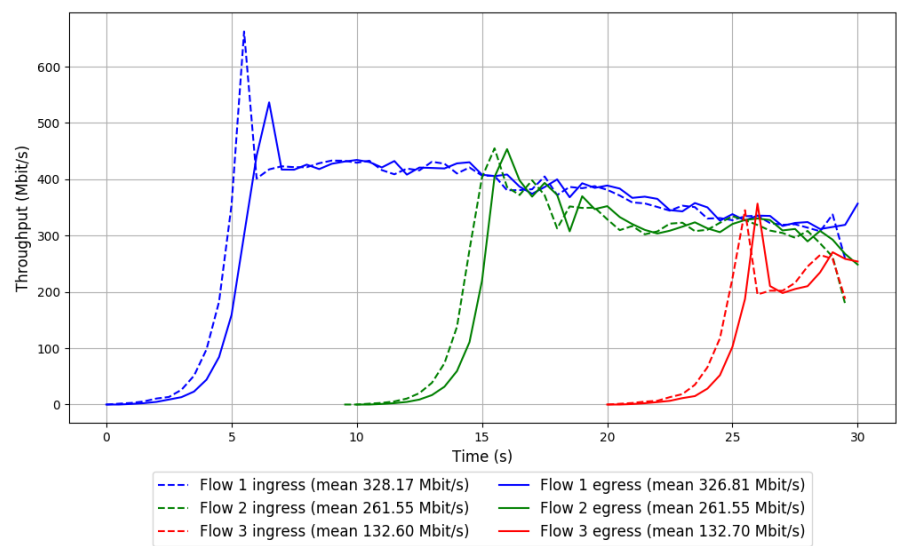


Run 4: Statistics of PCC-Vivace

Start at: 2019-02-20 14:45:43
End at: 2019-02-20 14:46:13
Local clock offset: -0.552 ms
Remote clock offset: -0.102 ms

Below is generated by plot.py at 2019-02-20 18:50:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 544.48 Mbit/s
95th percentile per-packet one-way delay: 138.252 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 326.81 Mbit/s
95th percentile per-packet one-way delay: 143.582 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 261.55 Mbit/s
95th percentile per-packet one-way delay: 136.183 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 132.70 Mbit/s
95th percentile per-packet one-way delay: 137.400 ms
Loss rate: 0.00%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2019-02-20 15:36:41

End at: 2019-02-20 15:37:11

Local clock offset: -0.438 ms

Remote clock offset: 0.01 ms

Below is generated by plot.py at 2019-02-20 18:50:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 484.49 Mbit/s

95th percentile per-packet one-way delay: 196.591 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 326.14 Mbit/s

95th percentile per-packet one-way delay: 230.308 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 172.20 Mbit/s

95th percentile per-packet one-way delay: 134.767 ms

Loss rate: 0.00%

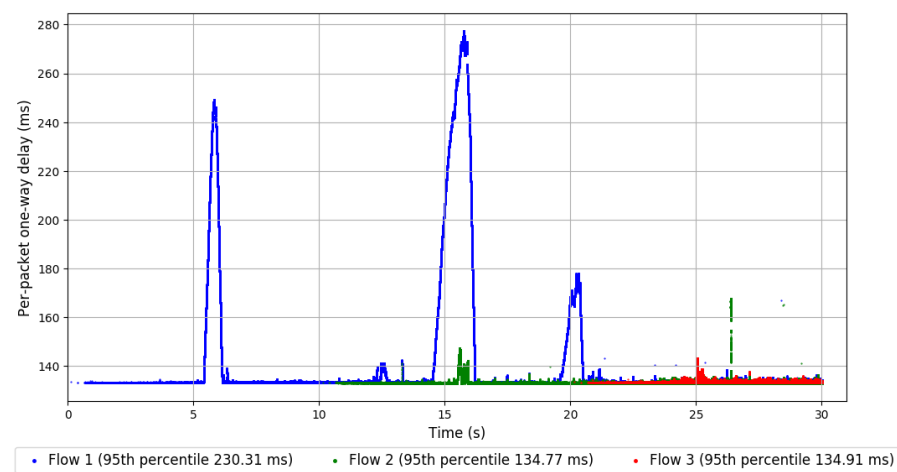
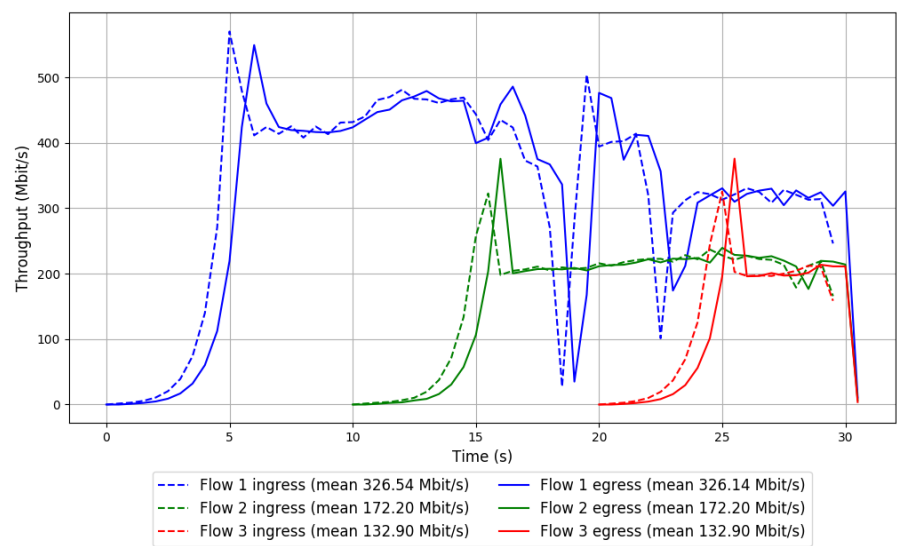
-- Flow 3:

Average throughput: 132.90 Mbit/s

95th percentile per-packet one-way delay: 134.910 ms

Loss rate: 0.00%

Run 5: Report of PCC-Vivace — Data Link

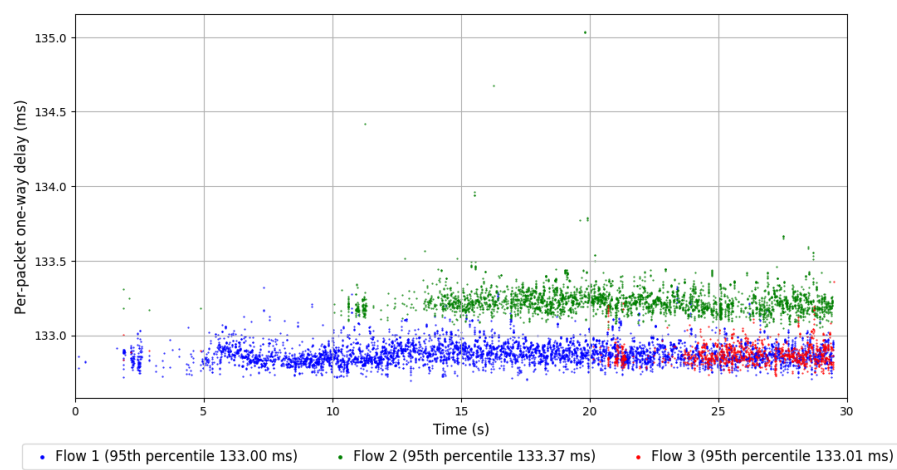
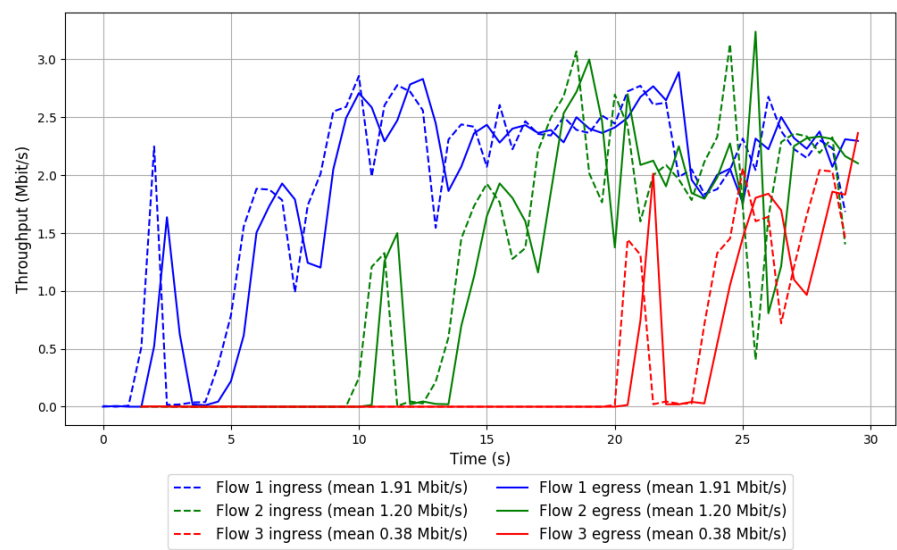


Run 1: Statistics of WebRTC media

Start at: 2019-02-20 12:28:59
End at: 2019-02-20 12:29:29
Local clock offset: 0.006 ms
Remote clock offset: -0.111 ms

Below is generated by plot.py at 2019-02-20 18:50:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.39 Mbit/s
95th percentile per-packet one-way delay: 133.297 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.91 Mbit/s
95th percentile per-packet one-way delay: 133.003 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.20 Mbit/s
95th percentile per-packet one-way delay: 133.365 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 133.010 ms
Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link

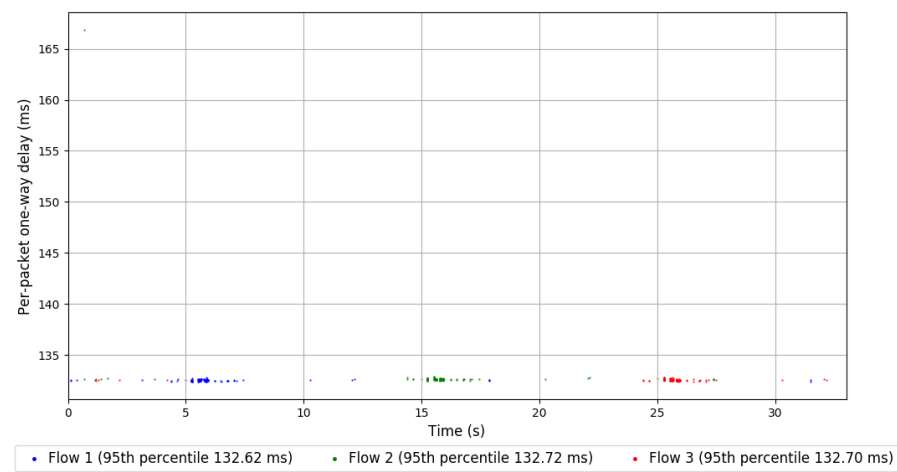
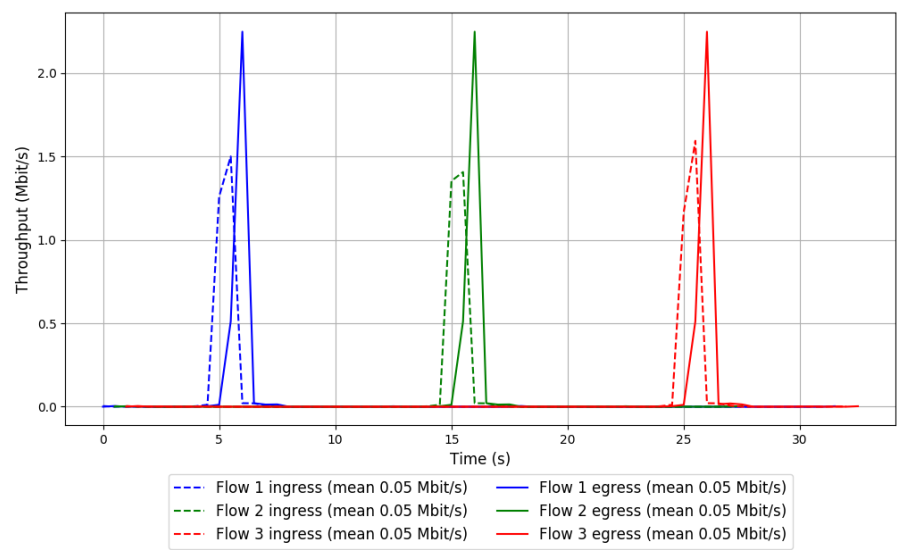


Run 2: Statistics of WebRTC media

Start at: 2019-02-20 13:18:19
End at: 2019-02-20 13:18:49
Local clock offset: 0.054 ms
Remote clock offset: -0.397 ms

Below is generated by plot.py at 2019-02-20 18:50:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 132.690 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 132.615 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 132.723 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 132.700 ms
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

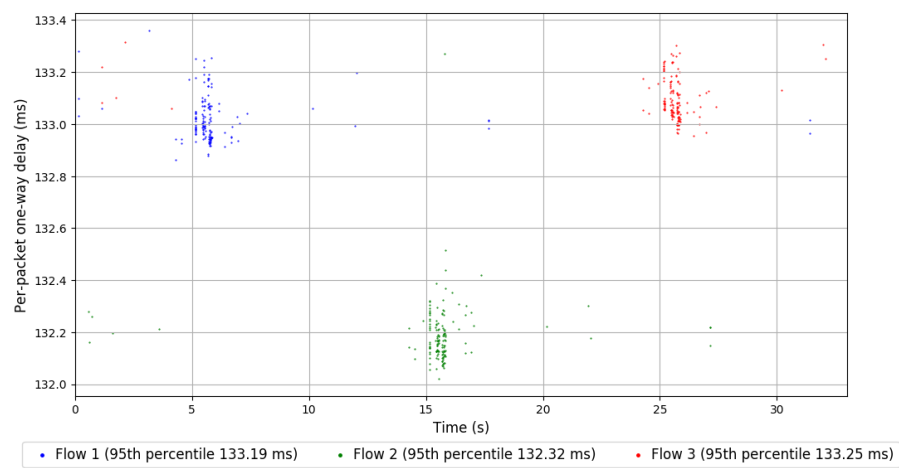
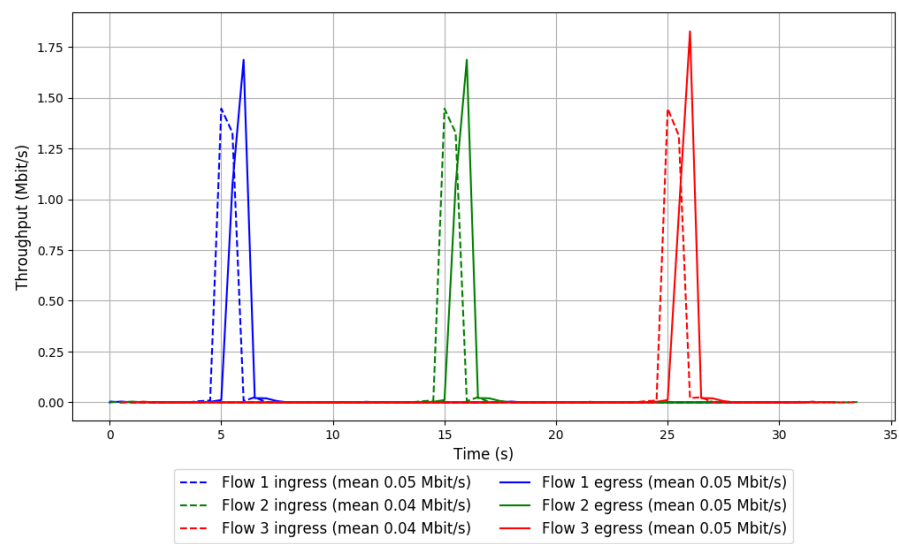


Run 3: Statistics of WebRTC media

Start at: 2019-02-20 14:10:13
End at: 2019-02-20 14:10:43
Local clock offset: -0.128 ms
Remote clock offset: -0.097 ms

Below is generated by plot.py at 2019-02-20 18:50:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 133.220 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.190 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 132.324 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.252 ms
Loss rate: 0.05%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2019-02-20 15:02:42

End at: 2019-02-20 15:03:12

Local clock offset: -0.418 ms

Remote clock offset: 0.269 ms

Below is generated by plot.py at 2019-02-20 18:50:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.11 Mbit/s

95th percentile per-packet one-way delay: 133.788 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 133.794 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.10 Mbit/s

95th percentile per-packet one-way delay: 133.757 ms

Loss rate: 0.00%

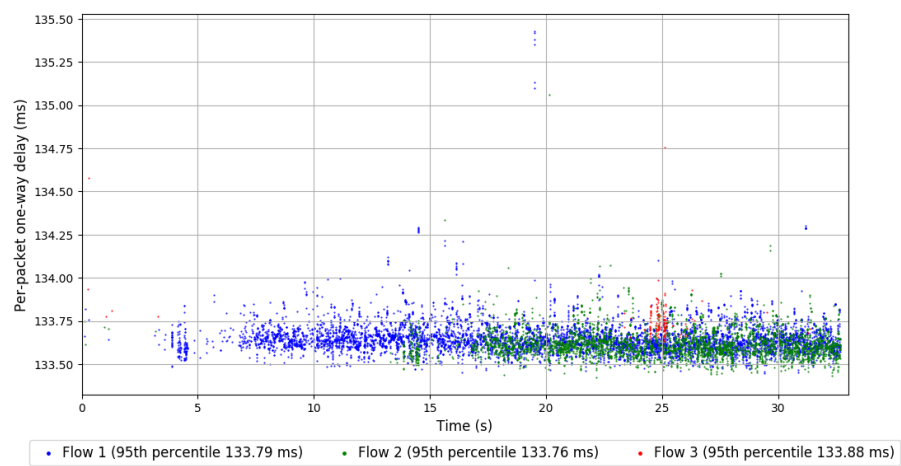
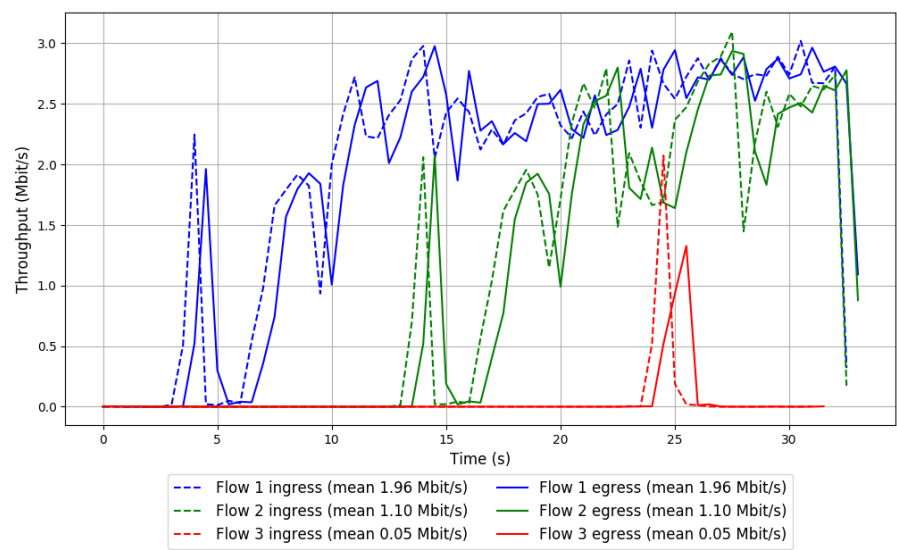
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 133.883 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-02-20 15:54:28
End at: 2019-02-20 15:54:58
Local clock offset: -0.273 ms
Remote clock offset: -0.033 ms

Below is generated by plot.py at 2019-02-20 18:50:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 133.541 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.084 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.136 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.590 ms
Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

