

Pantheon Report

Generated at 2019-03-09 06:04:32 (UTC).

Data path: GCE Sydney on **ens4** (*local*) → GCE Iowa 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:

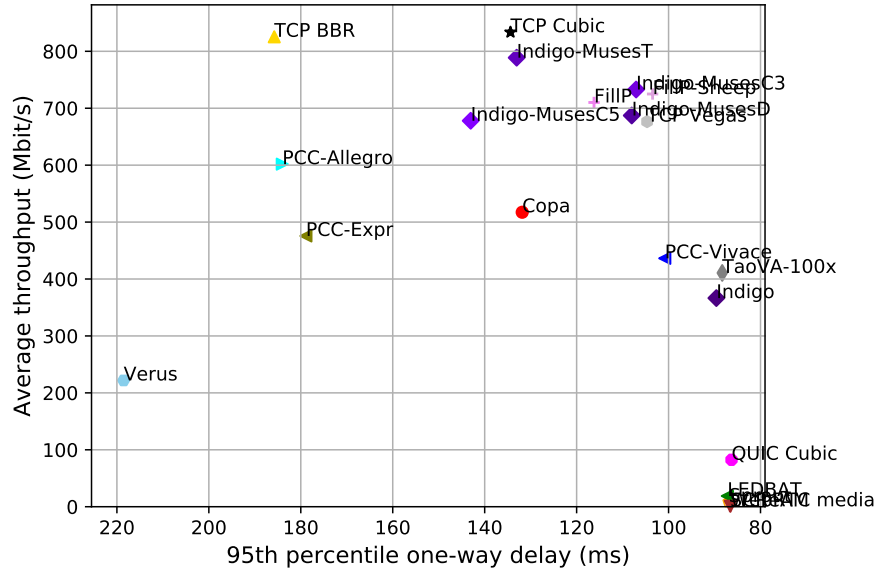
```
Linux 4.15.0-1026-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

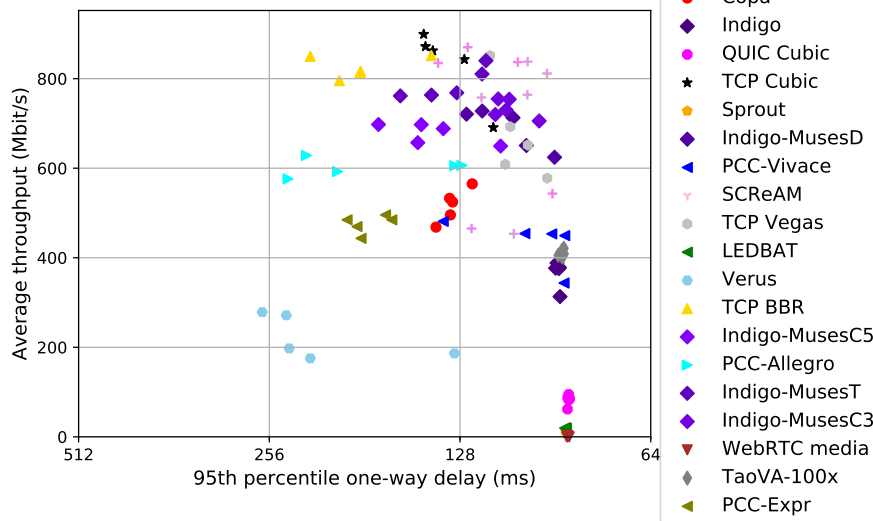
```
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
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 Iowa, 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 Iowa, 5 runs of 30s each per scheme
3 flows with 10s interval between flows



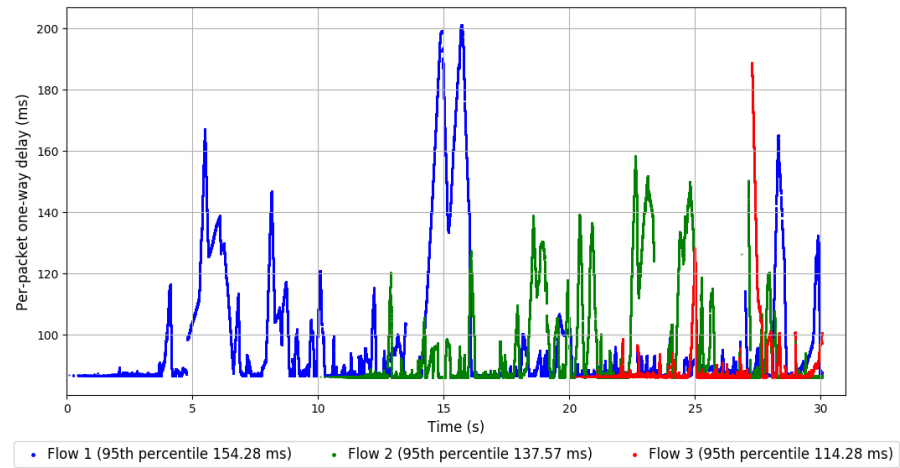
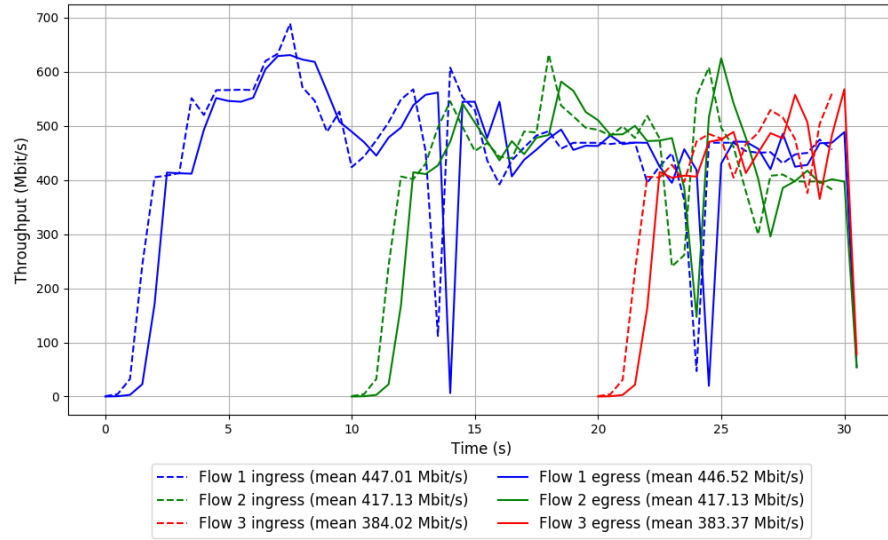
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	438.11	399.88	366.11	169.62	194.11	155.07	0.45	0.94	0.67
Copa	5	282.64	250.78	203.56	125.66	141.47	122.70	0.01	0.00	0.01
TCP Cubic	5	441.03	403.29	372.26	126.58	136.94	132.96	0.00	0.05	0.04
FillP	5	392.71	347.50	259.85	127.00	90.34	89.70	0.38	0.01	0.03
FillP-Sheep	5	441.54	307.79	237.84	111.50	89.14	89.07	0.22	0.00	0.01
Indigo	5	190.10	188.75	159.42	88.69	91.37	89.24	0.00	0.00	0.00
Indigo-MusesC3	5	433.21	358.77	260.25	110.35	102.59	91.08	0.00	0.00	0.02
Indigo-MusesC5	5	431.58	331.70	127.90	152.01	108.31	87.72	0.16	0.00	0.02
Indigo-MusesD	5	395.39	361.40	207.95	111.07	103.55	92.16	0.02	0.00	0.00
Indigo-MusesT	5	472.70	386.27	255.62	141.33	117.04	91.83	0.03	0.00	0.03
LEDBAT	5	11.94	8.34	4.10	87.30	87.00	86.81	0.00	0.00	0.00
PCC-Allegro	5	324.19	301.57	234.20	185.17	151.66	190.47	1.69	1.13	0.77
PCC-Expr	5	279.98	212.30	164.76	169.78	137.33	150.13	0.78	0.49	0.30
QUIC Cubic	5	38.30	50.34	32.91	86.21	86.21	86.25	0.00	0.00	0.00
SCReAM	5	0.22	0.22	0.22	86.57	86.35	86.49	0.00	0.00	0.00
Sprout	5	4.38	4.31	3.60	86.88	86.84	86.66	0.00	0.00	0.00
TaoVA-100x	5	213.22	204.63	184.15	88.05	88.26	89.28	0.00	0.00	0.00
TCP Vegas	5	337.23	350.69	318.18	92.29	104.21	115.68	0.00	0.05	0.03
Verus	5	151.04	91.09	32.48	224.03	169.65	92.57	3.78	0.99	0.01
PCC-Vivace	5	268.79	192.06	120.67	95.97	87.71	110.33	0.00	0.00	0.00
WebRTC media	5	0.42	0.25	0.13	86.52	86.36	86.38	0.03	0.00	0.01

Run 1: Statistics of TCP BBR

Start at: 2019-03-09 00:23:11
End at: 2019-03-09 00:23:41
Local clock offset: -0.322 ms
Remote clock offset: -0.004 ms

Below is generated by plot.py at 2019-03-09 03:52:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 851.86 Mbit/s
95th percentile per-packet one-way delay: 142.042 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 446.52 Mbit/s
95th percentile per-packet one-way delay: 154.279 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 417.13 Mbit/s
95th percentile per-packet one-way delay: 137.570 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 383.37 Mbit/s
95th percentile per-packet one-way delay: 114.284 ms
Loss rate: 0.15%

Run 1: Report of TCP BBR — Data Link

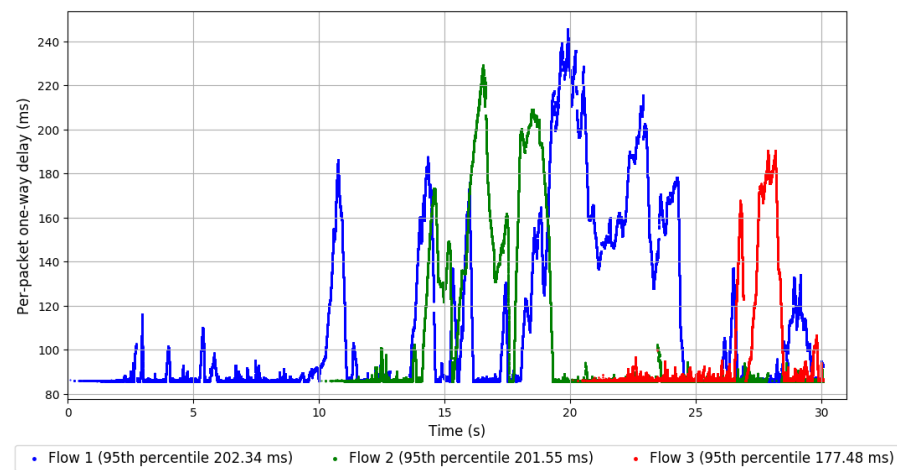
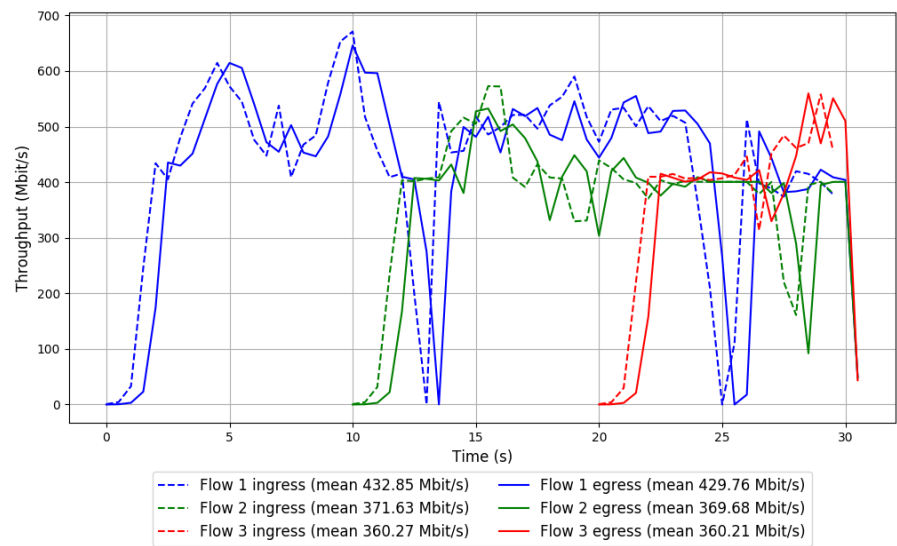


Run 2: Statistics of TCP BBR

Start at: 2019-03-09 01:00:01
End at: 2019-03-09 01:00:31
Local clock offset: 0.05 ms
Remote clock offset: -0.008 ms

Below is generated by plot.py at 2019-03-09 03:52:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 795.54 Mbit/s
95th percentile per-packet one-way delay: 198.452 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 429.76 Mbit/s
95th percentile per-packet one-way delay: 202.342 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 369.68 Mbit/s
95th percentile per-packet one-way delay: 201.552 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 360.21 Mbit/s
95th percentile per-packet one-way delay: 177.477 ms
Loss rate: 0.01%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2019-03-09 01:37:30

End at: 2019-03-09 01:38:00

Local clock offset: -0.607 ms

Remote clock offset: -0.05 ms

Below is generated by plot.py at 2019-03-09 03:52:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 849.82 Mbit/s

95th percentile per-packet one-way delay: 220.555 ms

Loss rate: 1.45%

-- Flow 1:

Average throughput: 449.78 Mbit/s

95th percentile per-packet one-way delay: 187.151 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 418.79 Mbit/s

95th percentile per-packet one-way delay: 235.789 ms

Loss rate: 2.73%

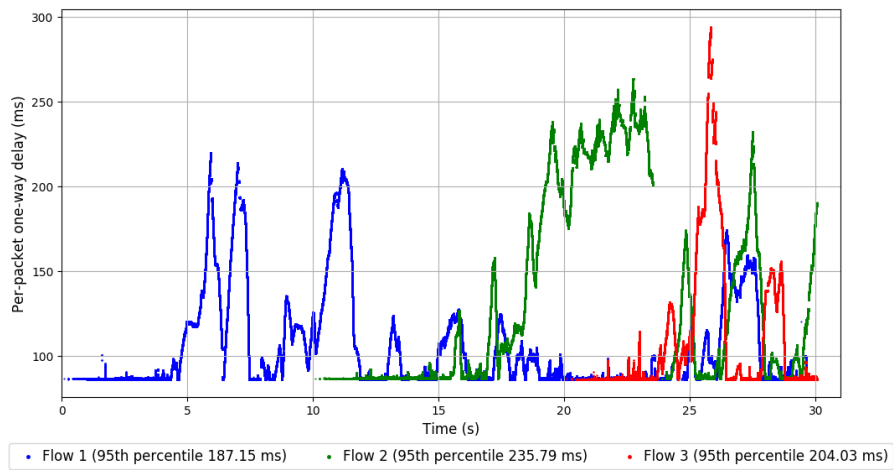
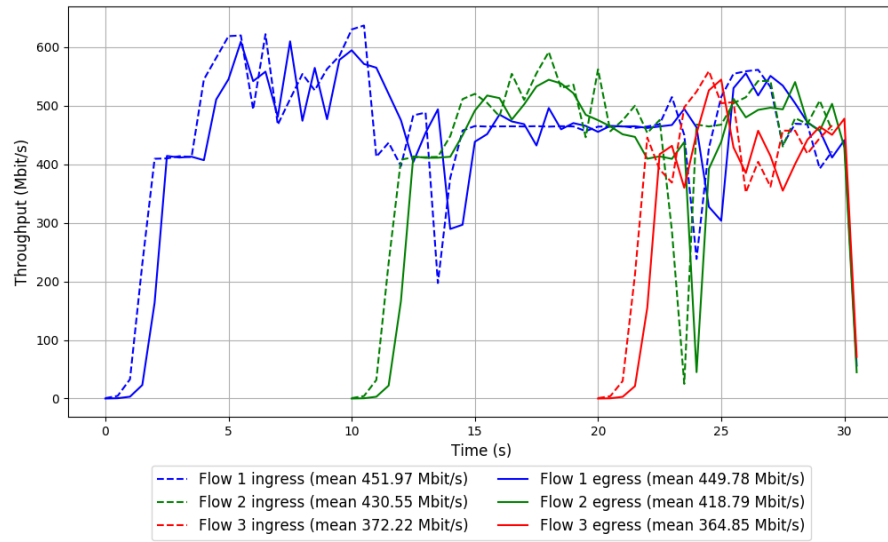
-- Flow 3:

Average throughput: 364.85 Mbit/s

95th percentile per-packet one-way delay: 204.031 ms

Loss rate: 1.98%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2019-03-09 02:14:51

End at: 2019-03-09 02:15:21

Local clock offset: -0.447 ms

Remote clock offset: 0.004 ms

Below is generated by plot.py at 2019-03-09 03:52:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 813.81 Mbit/s

95th percentile per-packet one-way delay: 184.122 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 425.40 Mbit/s

95th percentile per-packet one-way delay: 129.550 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 399.90 Mbit/s

95th percentile per-packet one-way delay: 193.553 ms

Loss rate: 0.42%

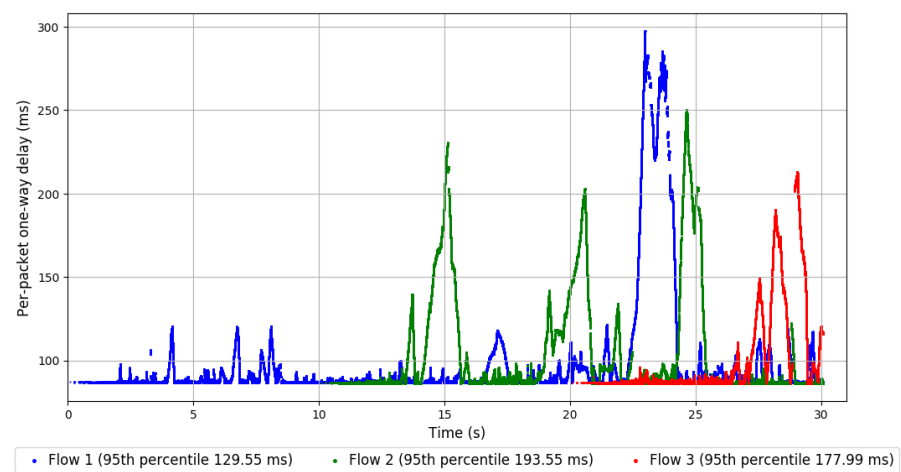
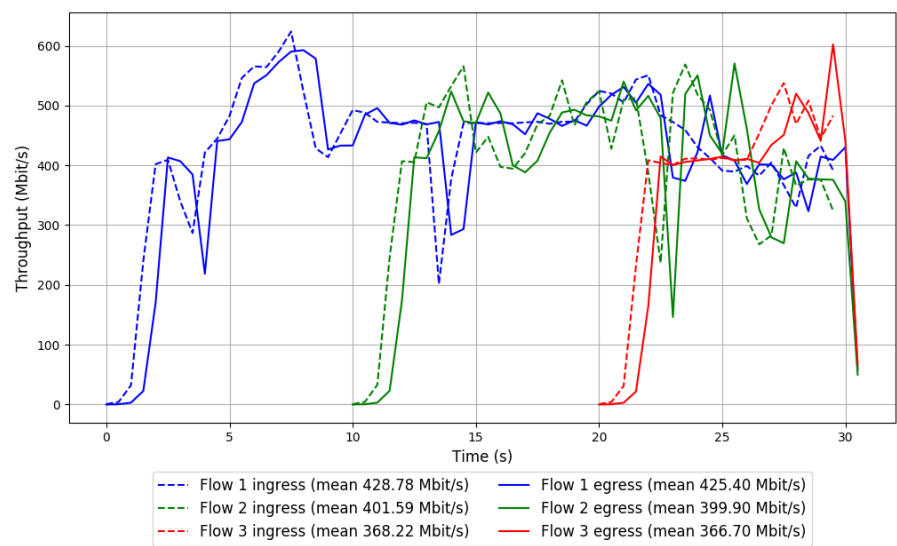
-- Flow 3:

Average throughput: 366.70 Mbit/s

95th percentile per-packet one-way delay: 177.988 ms

Loss rate: 0.42%

Run 4: Report of TCP BBR — Data Link

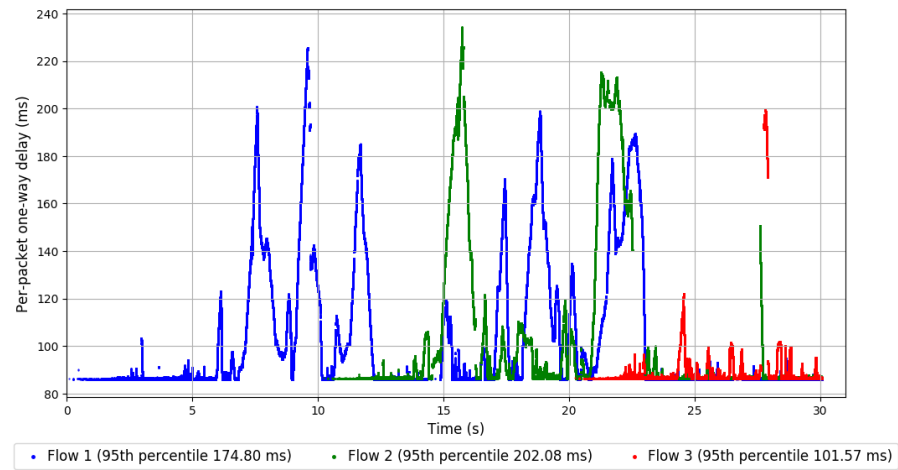
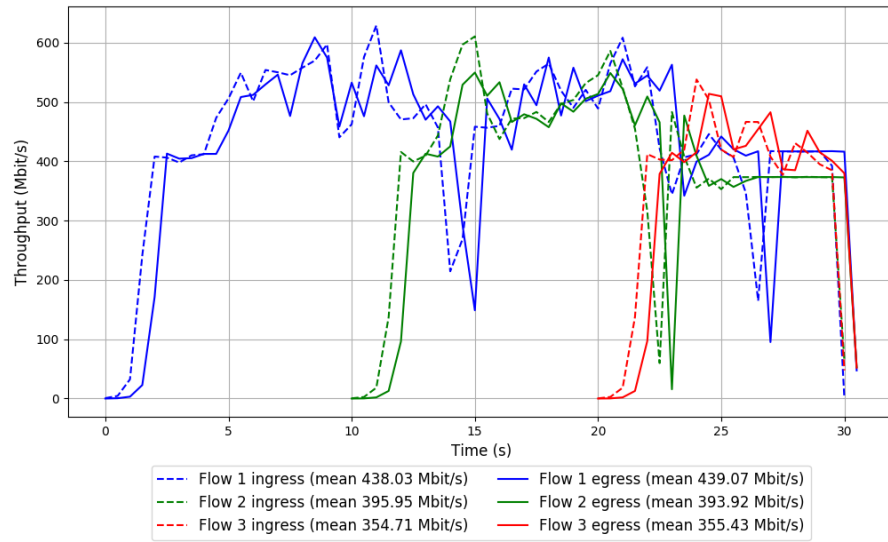


Run 5: Statistics of TCP BBR

Start at: 2019-03-09 02:52:29
End at: 2019-03-09 02:52:59
Local clock offset: -0.088 ms
Remote clock offset: -0.008 ms

Below is generated by plot.py at 2019-03-09 03:52:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 816.21 Mbit/s
95th percentile per-packet one-way delay: 183.681 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 439.07 Mbit/s
95th percentile per-packet one-way delay: 174.796 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 393.92 Mbit/s
95th percentile per-packet one-way delay: 202.078 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 355.43 Mbit/s
95th percentile per-packet one-way delay: 101.573 ms
Loss rate: 0.81%

Run 5: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2019-03-09 00:25:21

End at: 2019-03-09 00:25:51

Local clock offset: -0.321 ms

Remote clock offset: 0.015 ms

Below is generated by plot.py at 2019-03-09 03:52:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 468.43 Mbit/s

95th percentile per-packet one-way delay: 139.696 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 278.42 Mbit/s

95th percentile per-packet one-way delay: 117.884 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 212.50 Mbit/s

95th percentile per-packet one-way delay: 173.043 ms

Loss rate: 0.00%

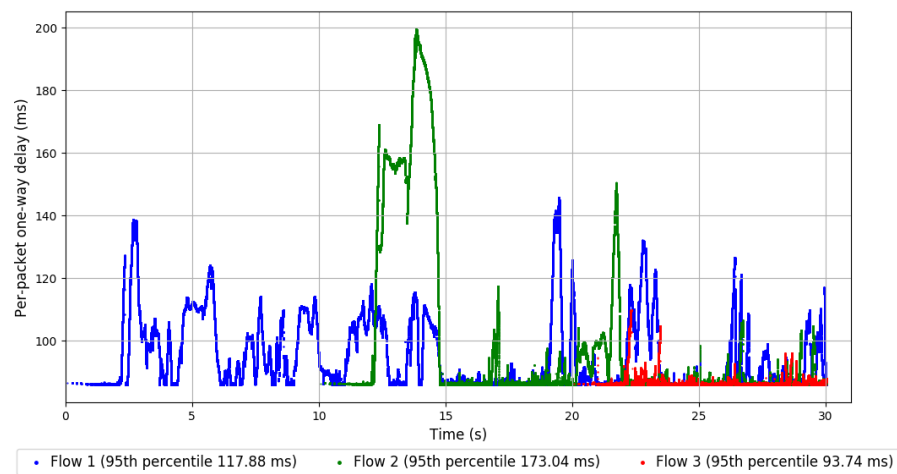
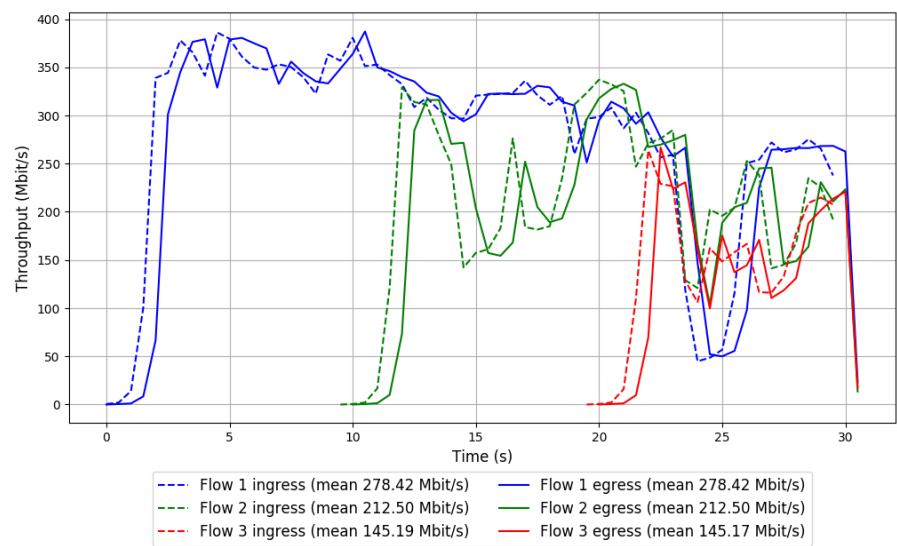
-- Flow 3:

Average throughput: 145.17 Mbit/s

95th percentile per-packet one-way delay: 93.743 ms

Loss rate: 0.00%

Run 1: Report of Copa — Data Link

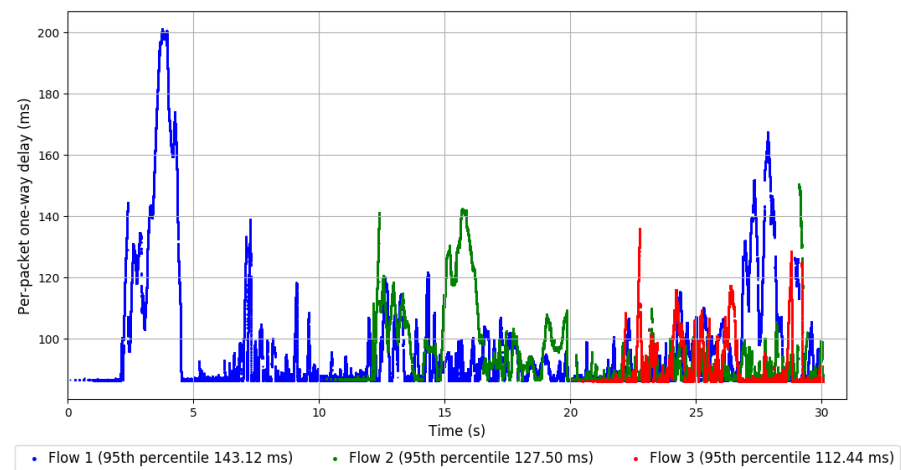
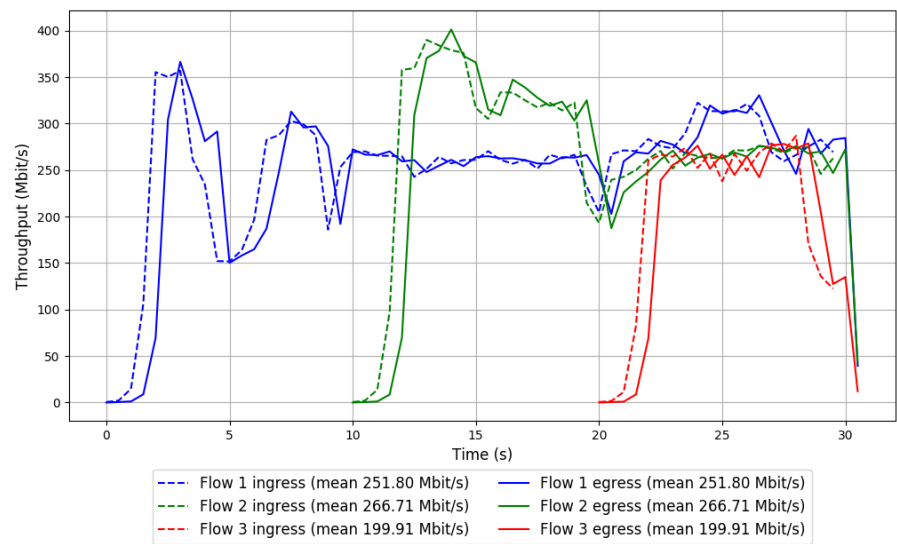


Run 2: Statistics of Copa

Start at: 2019-03-09 01:02:07
End at: 2019-03-09 01:02:37
Local clock offset: -0.509 ms
Remote clock offset: -0.032 ms

Below is generated by plot.py at 2019-03-09 03:53:37
Datalink statistics
-- Total of 3 flows:
Average throughput: 495.66 Mbit/s
95th percentile per-packet one-way delay: 132.571 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 251.80 Mbit/s
95th percentile per-packet one-way delay: 143.117 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 266.71 Mbit/s
95th percentile per-packet one-way delay: 127.504 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 199.91 Mbit/s
95th percentile per-packet one-way delay: 112.440 ms
Loss rate: 0.00%

Run 2: Report of Copa — Data Link

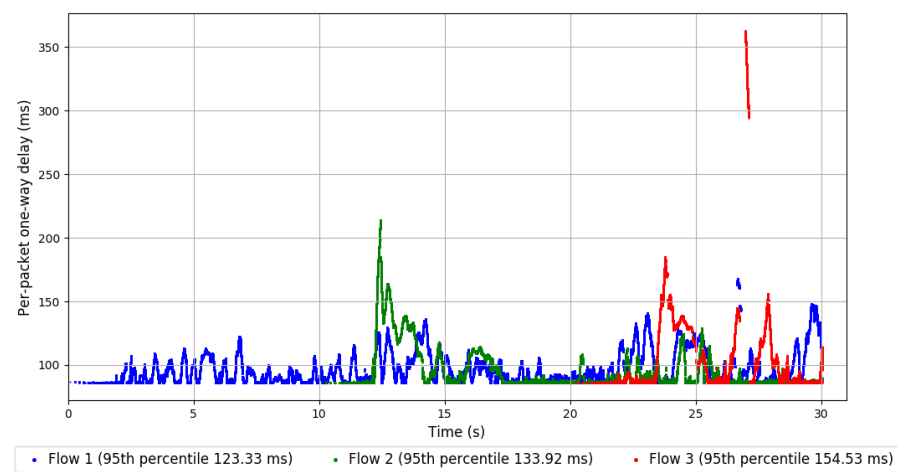
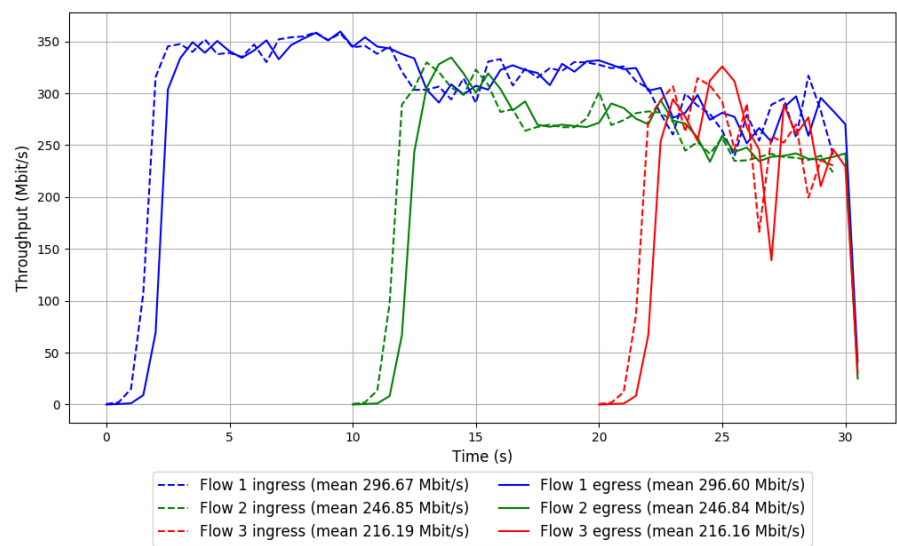


Run 3: Statistics of Copa

Start at: 2019-03-09 01:39:38
End at: 2019-03-09 01:40:08
Local clock offset: -0.164 ms
Remote clock offset: -0.042 ms

Below is generated by plot.py at 2019-03-09 03:54:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 532.73 Mbit/s
95th percentile per-packet one-way delay: 132.950 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 296.60 Mbit/s
95th percentile per-packet one-way delay: 123.333 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 246.84 Mbit/s
95th percentile per-packet one-way delay: 133.924 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 216.16 Mbit/s
95th percentile per-packet one-way delay: 154.534 ms
Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2019-03-09 02:16:57

End at: 2019-03-09 02:17:27

Local clock offset: -0.047 ms

Remote clock offset: 0.01 ms

Below is generated by plot.py at 2019-03-09 04:10:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 565.07 Mbit/s

95th percentile per-packet one-way delay: 122.450 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 308.95 Mbit/s

95th percentile per-packet one-way delay: 112.003 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 268.95 Mbit/s

95th percentile per-packet one-way delay: 141.677 ms

Loss rate: 0.00%

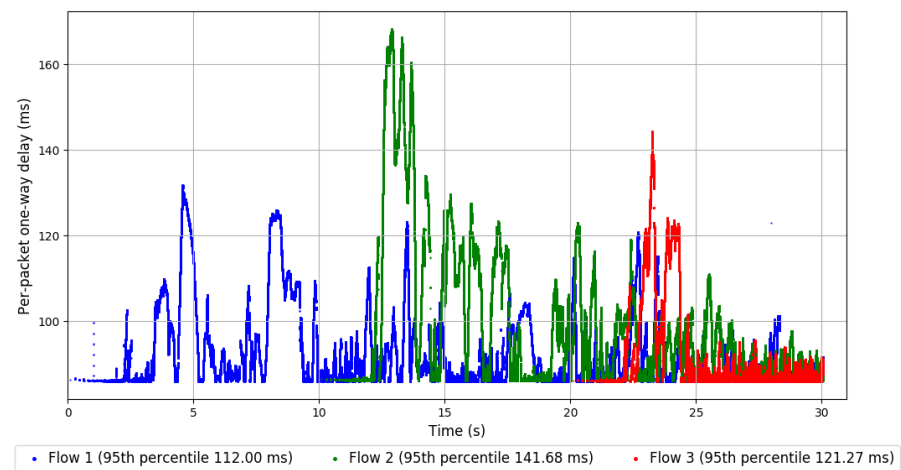
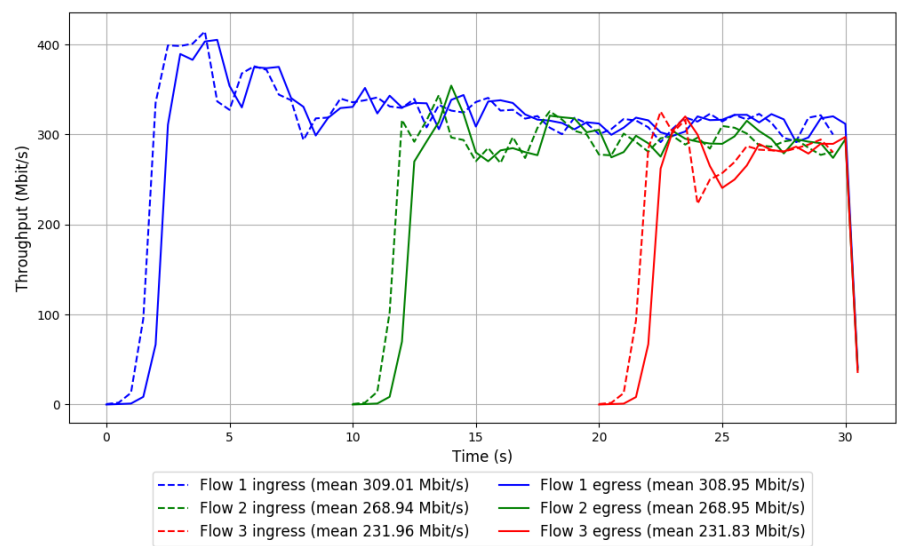
-- Flow 3:

Average throughput: 231.83 Mbit/s

95th percentile per-packet one-way delay: 121.269 ms

Loss rate: 0.04%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2019-03-09 02:54:48

End at: 2019-03-09 02:55:18

Local clock offset: -0.325 ms

Remote clock offset: -0.03 ms

Below is generated by plot.py at 2019-03-09 04:10:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 524.52 Mbit/s

95th percentile per-packet one-way delay: 131.516 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 277.45 Mbit/s

95th percentile per-packet one-way delay: 131.959 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 258.90 Mbit/s

95th percentile per-packet one-way delay: 131.199 ms

Loss rate: 0.02%

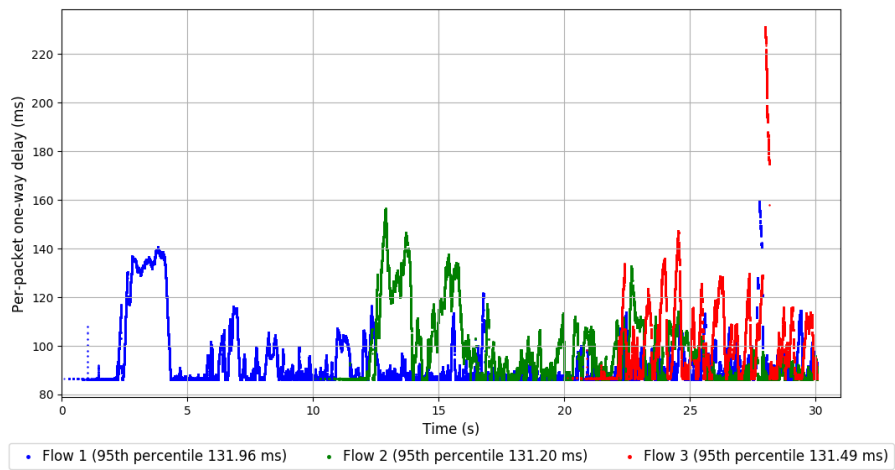
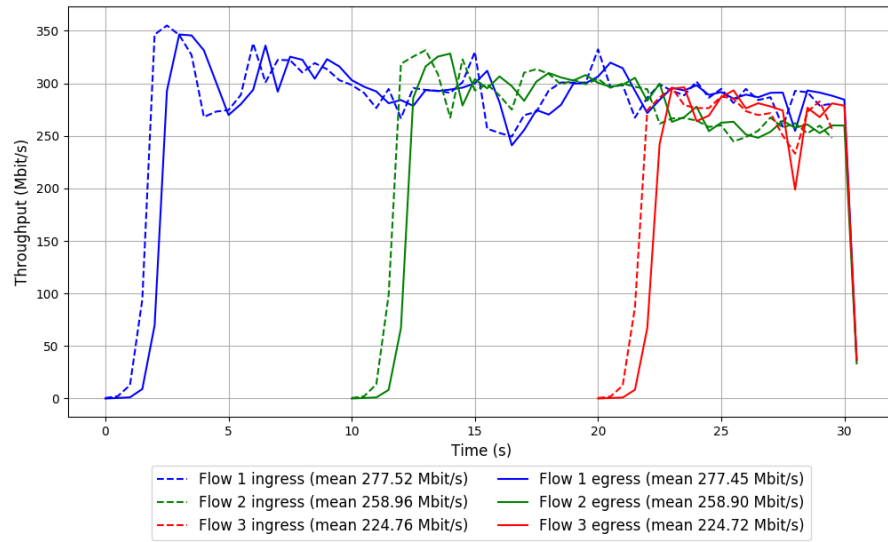
-- Flow 3:

Average throughput: 224.72 Mbit/s

95th percentile per-packet one-way delay: 131.494 ms

Loss rate: 0.01%

Run 5: Report of Copa — Data Link

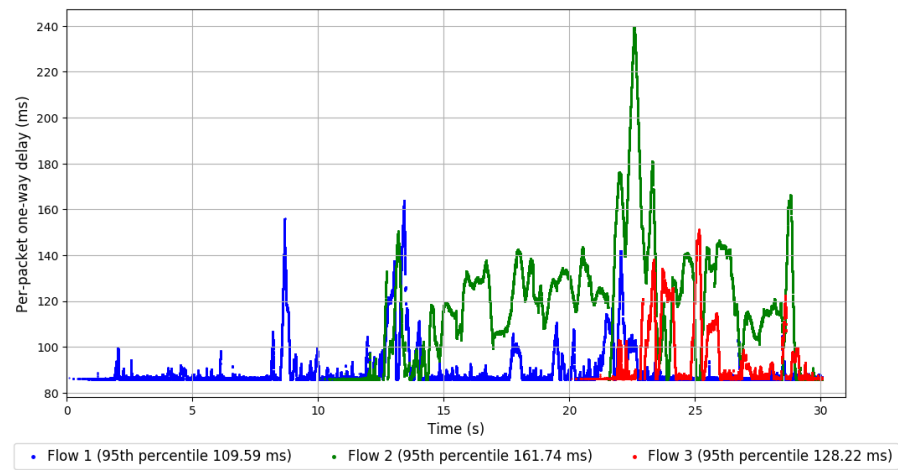
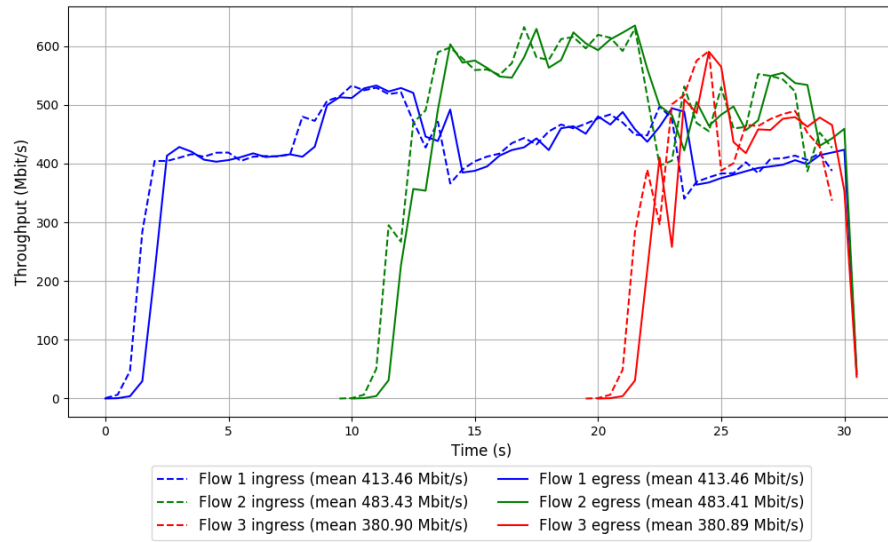


Run 1: Statistics of TCP Cubic

Start at: 2019-03-09 00:21:06
End at: 2019-03-09 00:21:36
Local clock offset: -0.082 ms
Remote clock offset: -0.023 ms

Below is generated by plot.py at 2019-03-09 04:10:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 862.43 Mbit/s
95th percentile per-packet one-way delay: 141.345 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 413.46 Mbit/s
95th percentile per-packet one-way delay: 109.587 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 483.41 Mbit/s
95th percentile per-packet one-way delay: 161.744 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 380.89 Mbit/s
95th percentile per-packet one-way delay: 128.219 ms
Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link

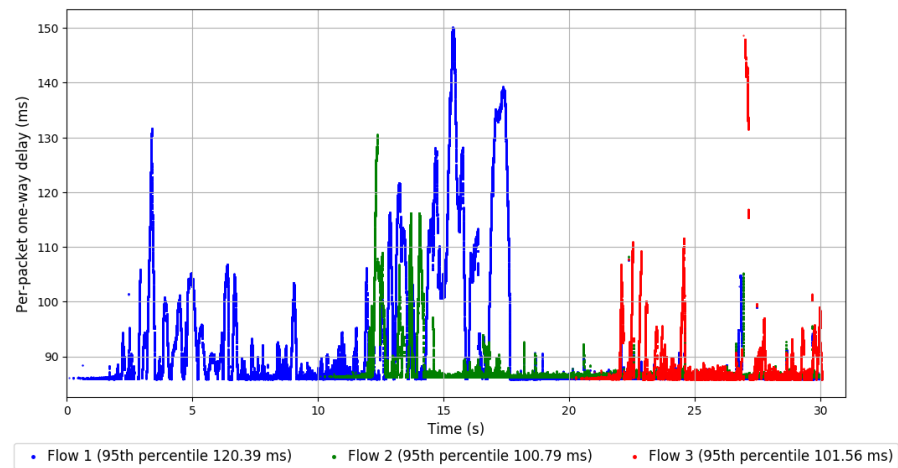
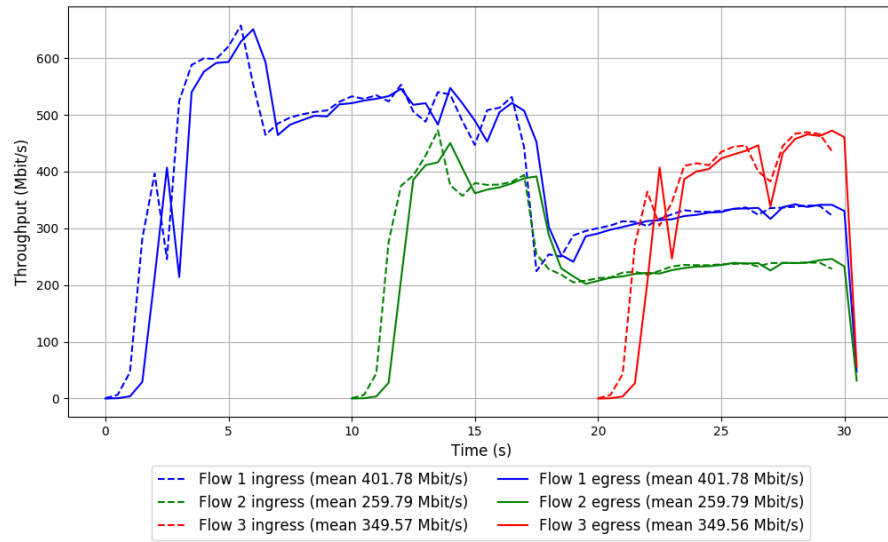


Run 2: Statistics of TCP Cubic

Start at: 2019-03-09 00:58:07
End at: 2019-03-09 00:58:37
Local clock offset: -0.095 ms
Remote clock offset: -0.008 ms

Below is generated by plot.py at 2019-03-09 04:10:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 690.93 Mbit/s
95th percentile per-packet one-way delay: 113.411 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 401.78 Mbit/s
95th percentile per-packet one-way delay: 120.394 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 259.79 Mbit/s
95th percentile per-packet one-way delay: 100.790 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 349.56 Mbit/s
95th percentile per-packet one-way delay: 101.557 ms
Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link

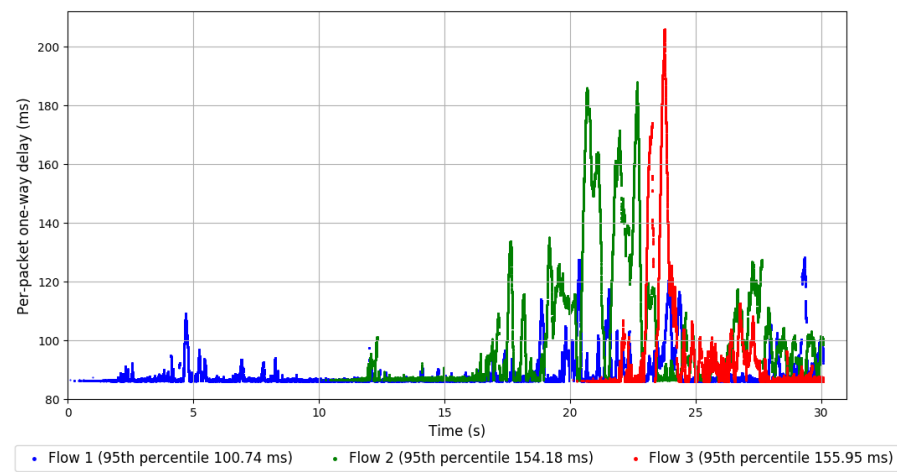
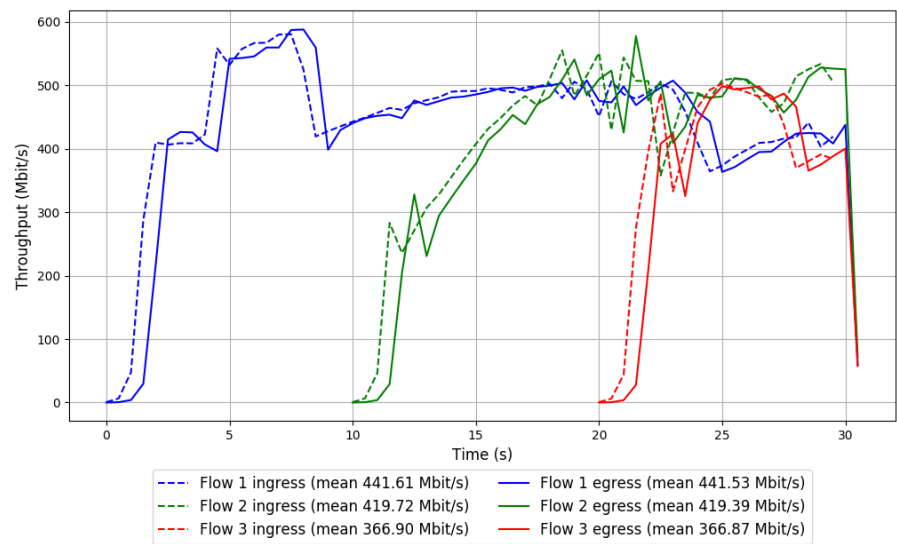


Run 3: Statistics of TCP Cubic

Start at: 2019-03-09 01:35:28
End at: 2019-03-09 01:35:58
Local clock offset: -0.442 ms
Remote clock offset: -0.026 ms

Below is generated by plot.py at 2019-03-09 04:10:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 842.99 Mbit/s
95th percentile per-packet one-way delay: 125.994 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 441.53 Mbit/s
95th percentile per-packet one-way delay: 100.736 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 419.39 Mbit/s
95th percentile per-packet one-way delay: 154.181 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 366.87 Mbit/s
95th percentile per-packet one-way delay: 155.954 ms
Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2019-03-09 02:12:45

End at: 2019-03-09 02:13:15

Local clock offset: 0.127 ms

Remote clock offset: 0.006 ms

Below is generated by plot.py at 2019-03-09 04:10:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 871.95 Mbit/s

95th percentile per-packet one-way delay: 145.127 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 446.00 Mbit/s

95th percentile per-packet one-way delay: 153.942 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 438.66 Mbit/s

95th percentile per-packet one-way delay: 127.126 ms

Loss rate: 0.00%

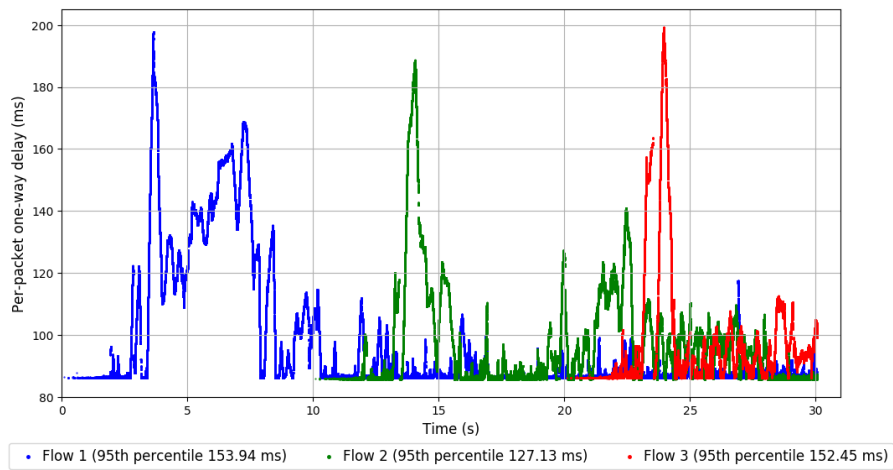
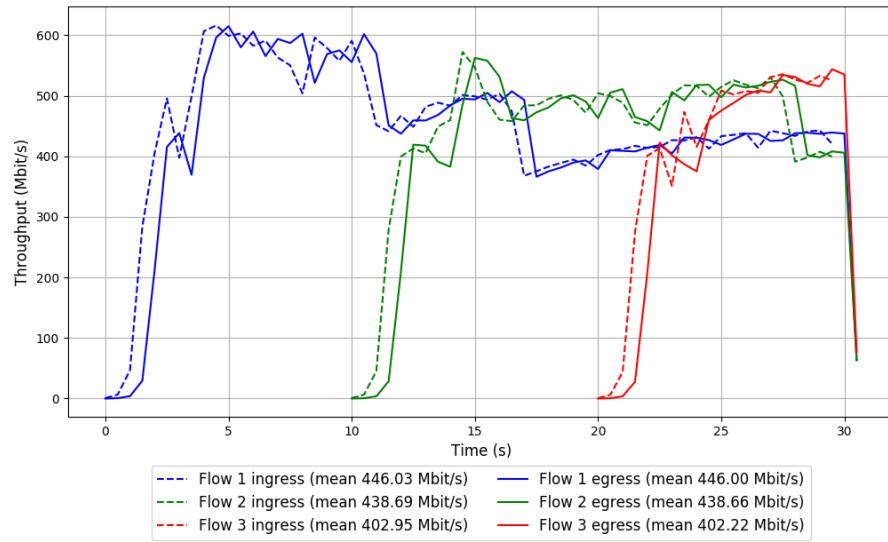
-- Flow 3:

Average throughput: 402.22 Mbit/s

95th percentile per-packet one-way delay: 152.450 ms

Loss rate: 0.18%

Run 4: Report of TCP Cubic — Data Link

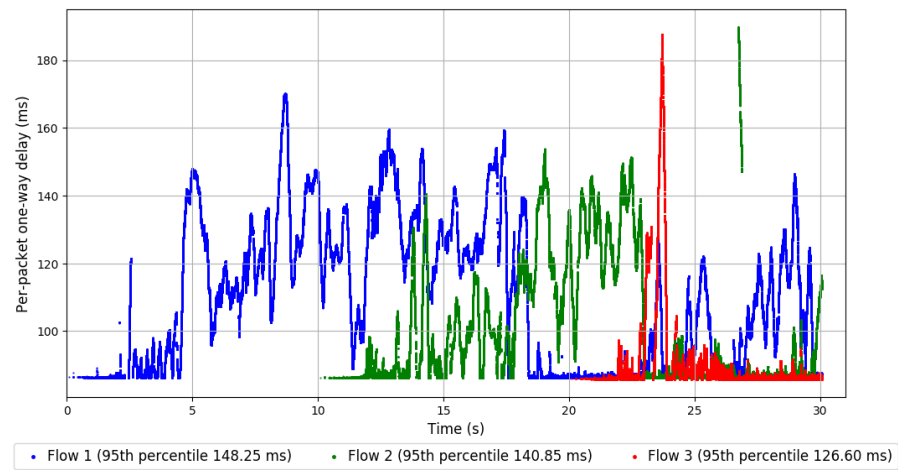
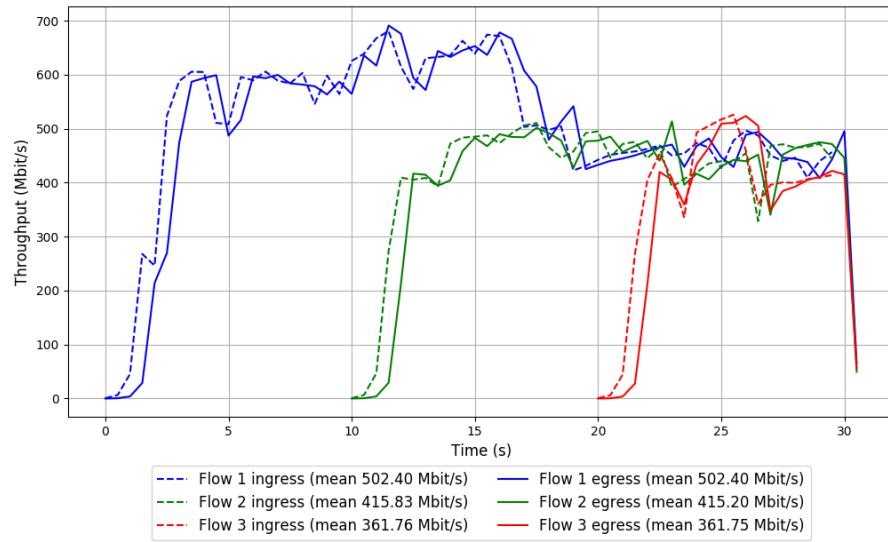


Run 5: Statistics of TCP Cubic

Start at: 2019-03-09 02:50:23
End at: 2019-03-09 02:50:53
Local clock offset: -0.039 ms
Remote clock offset: -0.048 ms

Below is generated by plot.py at 2019-03-09 04:10:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 899.30 Mbit/s
95th percentile per-packet one-way delay: 146.074 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 502.40 Mbit/s
95th percentile per-packet one-way delay: 148.252 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 415.20 Mbit/s
95th percentile per-packet one-way delay: 140.849 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 361.75 Mbit/s
95th percentile per-packet one-way delay: 126.604 ms
Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2019-03-09 00:31:48

End at: 2019-03-09 00:32:18

Local clock offset: 0.141 ms

Remote clock offset: 0.013 ms

Below is generated by plot.py at 2019-03-09 04:13:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 834.96 Mbit/s

95th percentile per-packet one-way delay: 138.612 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 519.42 Mbit/s

95th percentile per-packet one-way delay: 141.789 ms

Loss rate: 1.02%

-- Flow 2:

Average throughput: 336.46 Mbit/s

95th percentile per-packet one-way delay: 88.868 ms

Loss rate: 0.00%

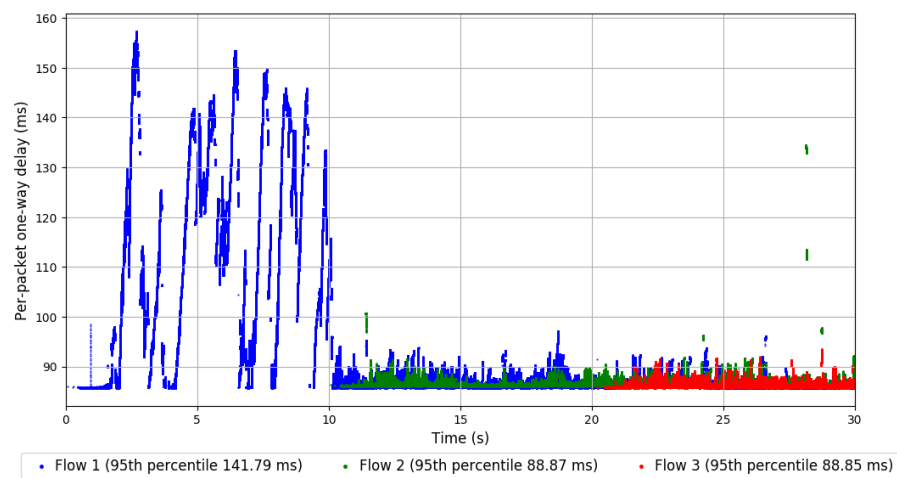
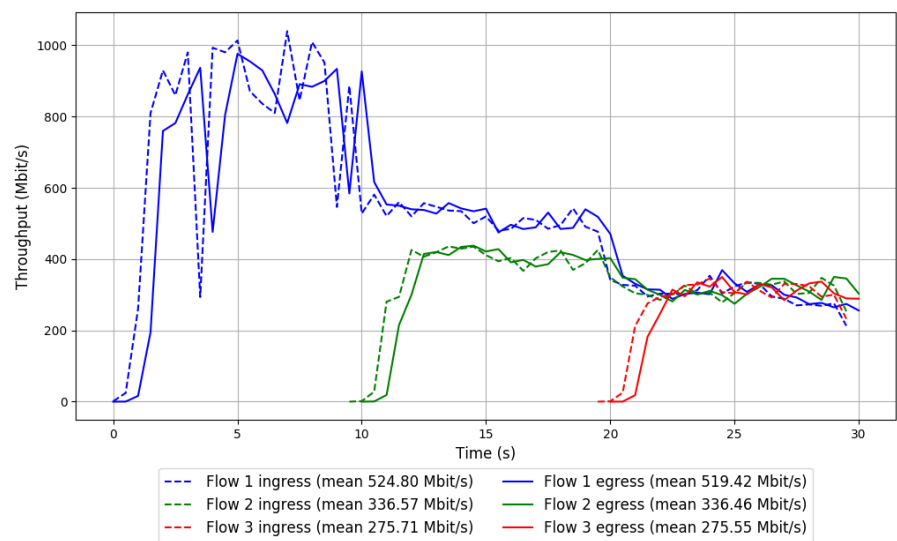
-- Flow 3:

Average throughput: 275.55 Mbit/s

95th percentile per-packet one-way delay: 88.846 ms

Loss rate: 0.06%

Run 1: Report of FillP — Data Link

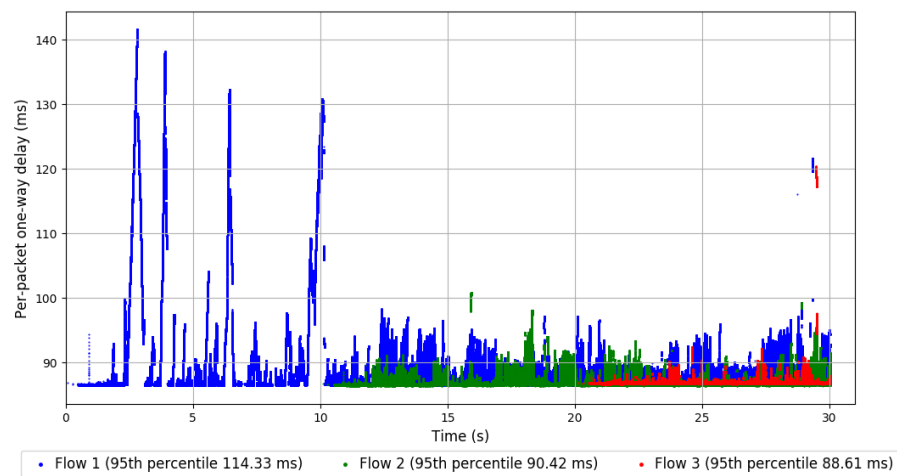
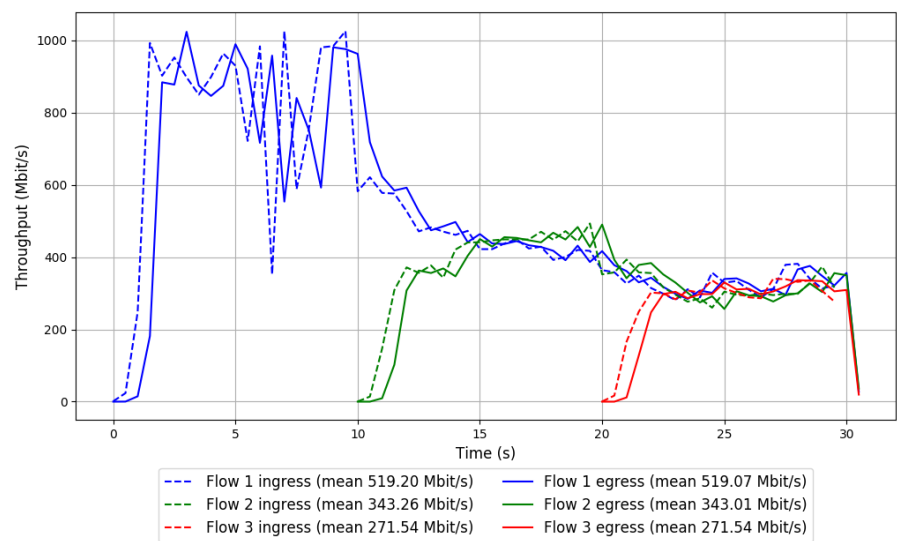


Run 2: Statistics of FillP

Start at: 2019-03-09 01:09:01
End at: 2019-03-09 01:09:31
Local clock offset: -0.548 ms
Remote clock offset: -0.022 ms

Below is generated by plot.py at 2019-03-09 04:23:50
Datalink statistics
-- Total of 3 flows:
Average throughput: 837.00 Mbit/s
95th percentile per-packet one-way delay: 103.760 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 519.07 Mbit/s
95th percentile per-packet one-way delay: 114.328 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 343.01 Mbit/s
95th percentile per-packet one-way delay: 90.421 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 271.54 Mbit/s
95th percentile per-packet one-way delay: 88.613 ms
Loss rate: 0.00%

Run 2: Report of FillP — Data Link

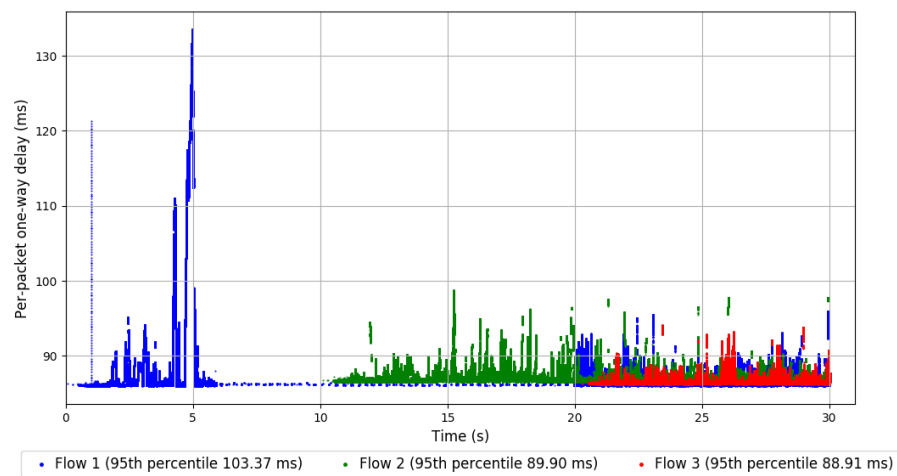
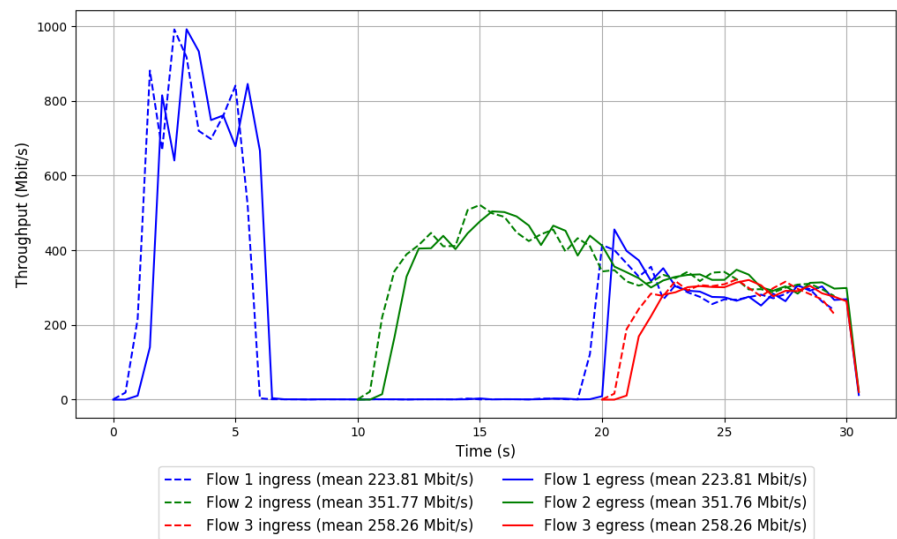


Run 3: Statistics of FillP

Start at: 2019-03-09 01:46:40
End at: 2019-03-09 01:47:10
Local clock offset: -0.193 ms
Remote clock offset: -0.05 ms

Below is generated by plot.py at 2019-03-09 04:23:50
Datalink statistics
-- Total of 3 flows:
Average throughput: 543.29 Mbit/s
95th percentile per-packet one-way delay: 91.480 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 223.81 Mbit/s
95th percentile per-packet one-way delay: 103.368 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 351.76 Mbit/s
95th percentile per-packet one-way delay: 89.903 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 258.26 Mbit/s
95th percentile per-packet one-way delay: 88.908 ms
Loss rate: 0.00%

Run 3: Report of FillP — Data Link

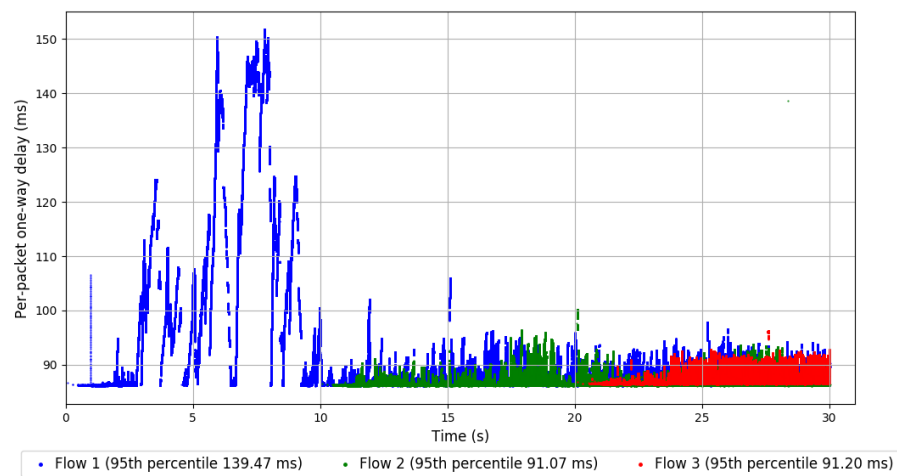
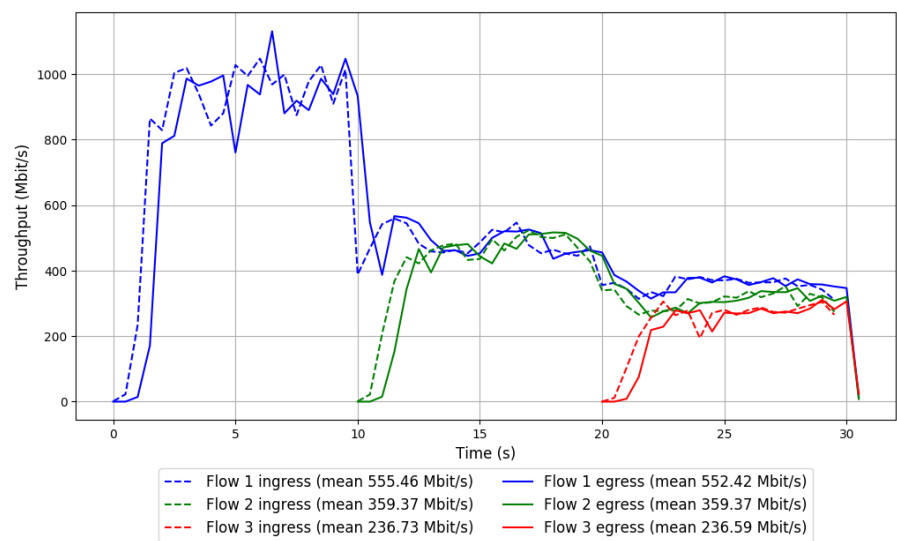


Run 4: Statistics of FillP

Start at: 2019-03-09 02:23:40
End at: 2019-03-09 02:24:10
Local clock offset: -0.237 ms
Remote clock offset: 0.01 ms

Below is generated by plot.py at 2019-03-09 04:27:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 870.11 Mbit/s
95th percentile per-packet one-way delay: 124.457 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 552.42 Mbit/s
95th percentile per-packet one-way delay: 139.468 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 359.37 Mbit/s
95th percentile per-packet one-way delay: 91.068 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 236.59 Mbit/s
95th percentile per-packet one-way delay: 91.203 ms
Loss rate: 0.00%

Run 4: Report of FillP — Data Link

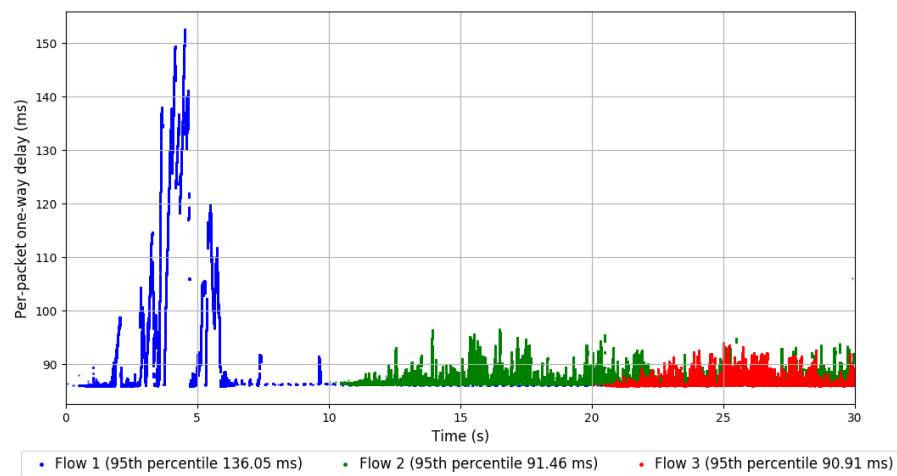
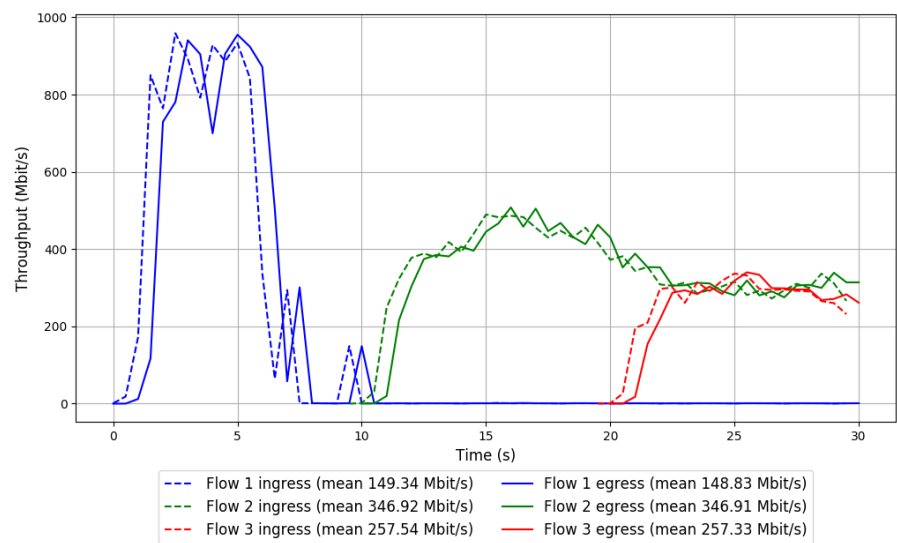


Run 5: Statistics of FillP

Start at: 2019-03-09 03:01:26
End at: 2019-03-09 03:01:56
Local clock offset: -0.138 ms
Remote clock offset: -0.069 ms

Below is generated by plot.py at 2019-03-09 04:27:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 465.24 Mbit/s
95th percentile per-packet one-way delay: 122.757 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 148.83 Mbit/s
95th percentile per-packet one-way delay: 136.054 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 346.91 Mbit/s
95th percentile per-packet one-way delay: 91.457 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 257.33 Mbit/s
95th percentile per-packet one-way delay: 90.910 ms
Loss rate: 0.08%

Run 5: Report of FillP — Data Link



Run 1: Statistics of FillP-Sheep

Start at: 2019-03-09 00:42:33

End at: 2019-03-09 00:43:03

Local clock offset: 0.088 ms

Remote clock offset: 0.06 ms

Below is generated by plot.py at 2019-03-09 04:27:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 757.90 Mbit/s

95th percentile per-packet one-way delay: 118.404 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 481.26 Mbit/s

95th percentile per-packet one-way delay: 123.506 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 300.76 Mbit/s

95th percentile per-packet one-way delay: 87.779 ms

Loss rate: 0.00%

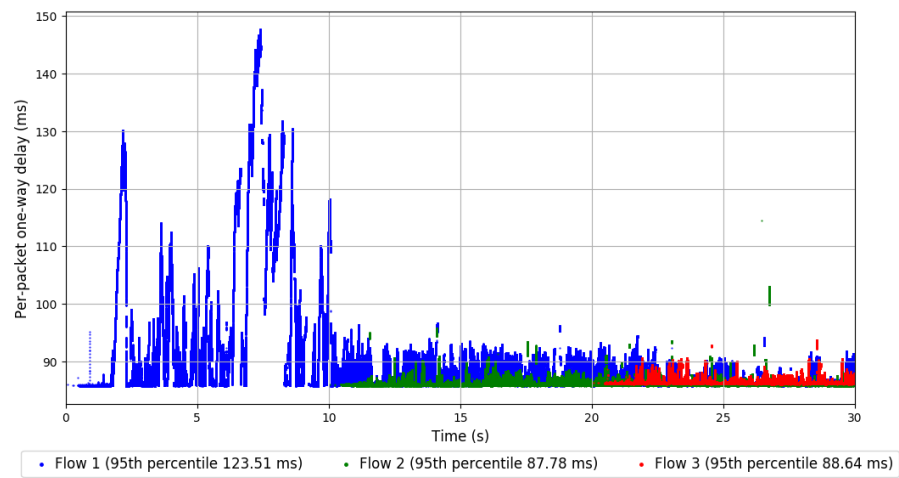
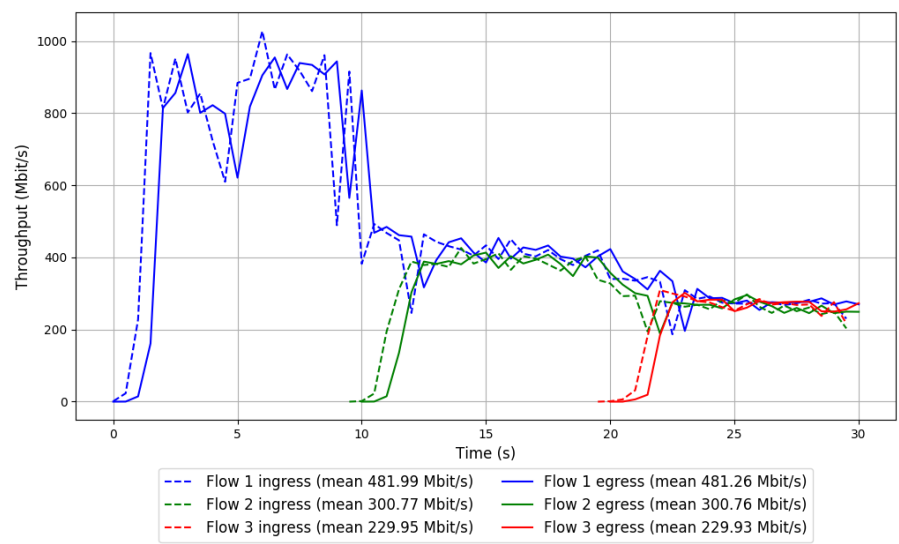
-- Flow 3:

Average throughput: 229.93 Mbit/s

95th percentile per-packet one-way delay: 88.641 ms

Loss rate: 0.00%

Run 1: Report of FillP-Sheep — Data Link

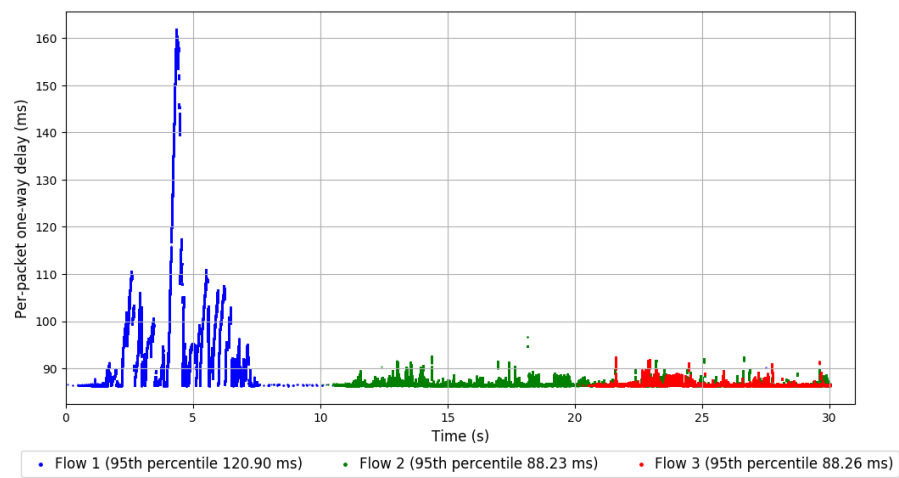
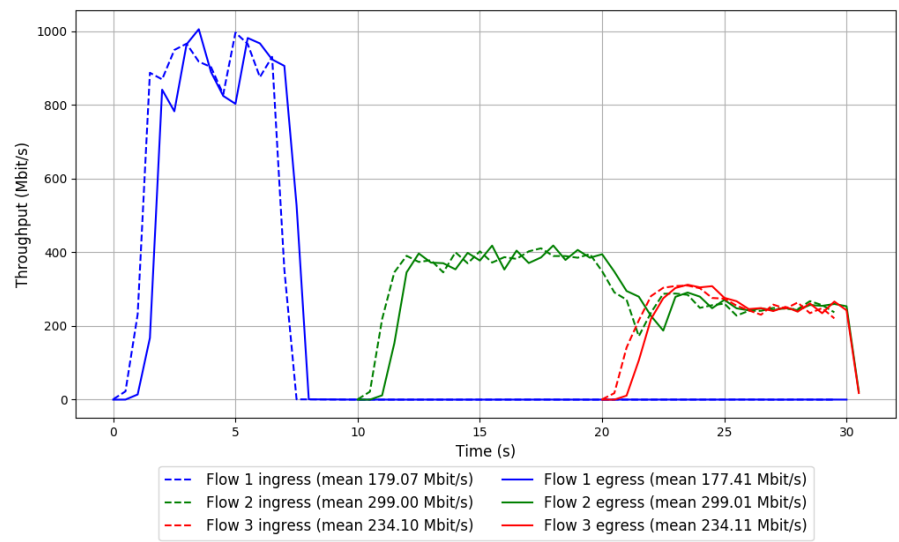


Run 2: Statistics of FillP-Sheep

Start at: 2019-03-09 01:19:35
End at: 2019-03-09 01:20:05
Local clock offset: -0.543 ms
Remote clock offset: -0.027 ms

Below is generated by plot.py at 2019-03-09 04:27:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 453.50 Mbit/s
95th percentile per-packet one-way delay: 105.284 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 177.41 Mbit/s
95th percentile per-packet one-way delay: 120.903 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 299.01 Mbit/s
95th percentile per-packet one-way delay: 88.232 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 234.11 Mbit/s
95th percentile per-packet one-way delay: 88.263 ms
Loss rate: 0.00%

Run 2: Report of FillP-Sheep — Data Link

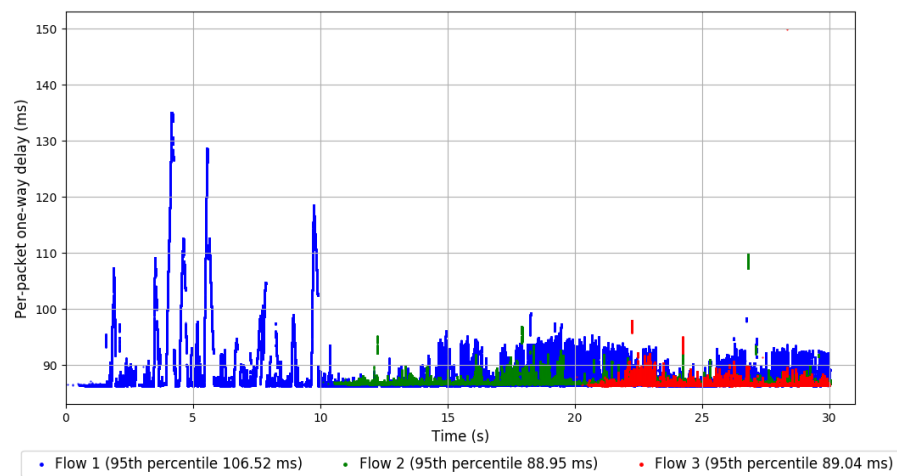
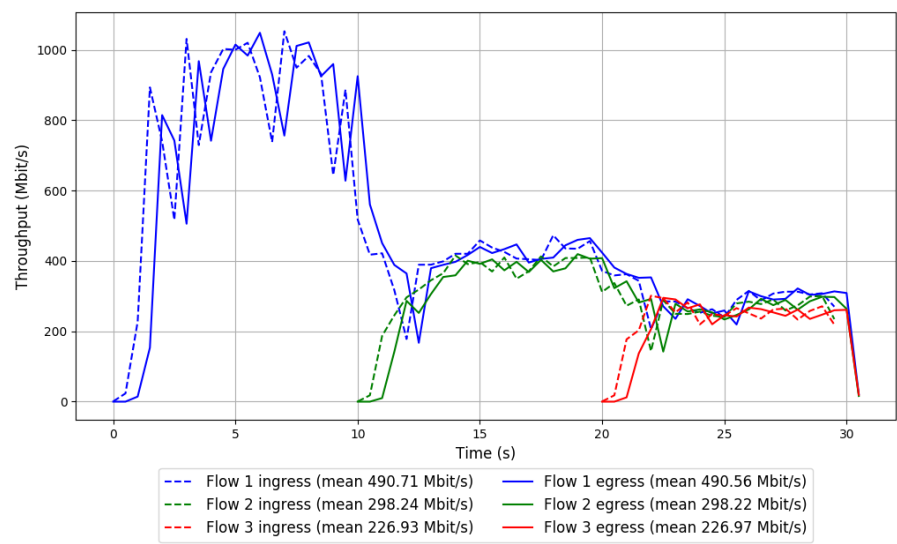


Run 3: Statistics of FillP-Sheep

Start at: 2019-03-09 01:57:08
End at: 2019-03-09 01:57:38
Local clock offset: -0.614 ms
Remote clock offset: -0.058 ms

Below is generated by plot.py at 2019-03-09 04:28:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 764.12 Mbit/s
95th percentile per-packet one-way delay: 100.214 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 490.56 Mbit/s
95th percentile per-packet one-way delay: 106.518 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 298.22 Mbit/s
95th percentile per-packet one-way delay: 88.952 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 226.97 Mbit/s
95th percentile per-packet one-way delay: 89.039 ms
Loss rate: 0.00%

Run 3: Report of FillP-Sheep — Data Link



Run 4: Statistics of FillP-Sheep

Start at: 2019-03-09 02:34:29

End at: 2019-03-09 02:34:59

Local clock offset: 0.02 ms

Remote clock offset: 0.029 ms

Below is generated by plot.py at 2019-03-09 04:32:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 811.56 Mbit/s

95th percentile per-packet one-way delay: 93.307 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 523.92 Mbit/s

95th percentile per-packet one-way delay: 95.602 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 309.38 Mbit/s

95th percentile per-packet one-way delay: 88.078 ms

Loss rate: 0.00%

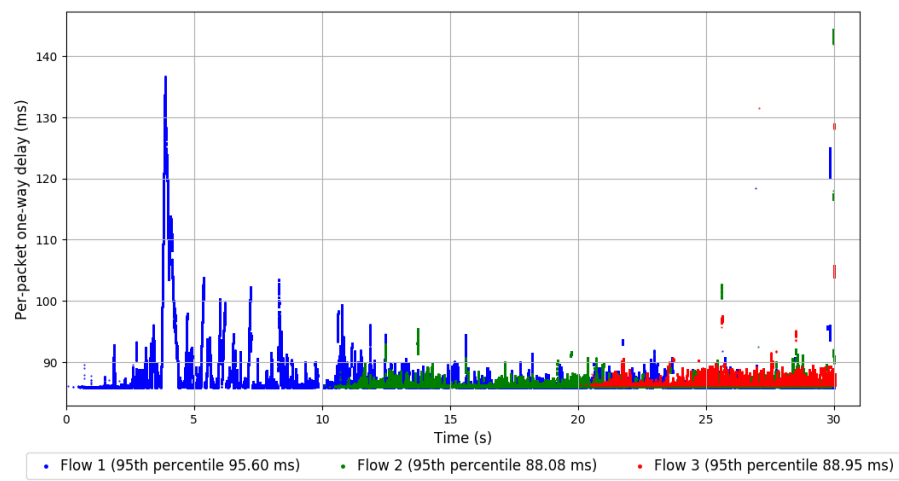
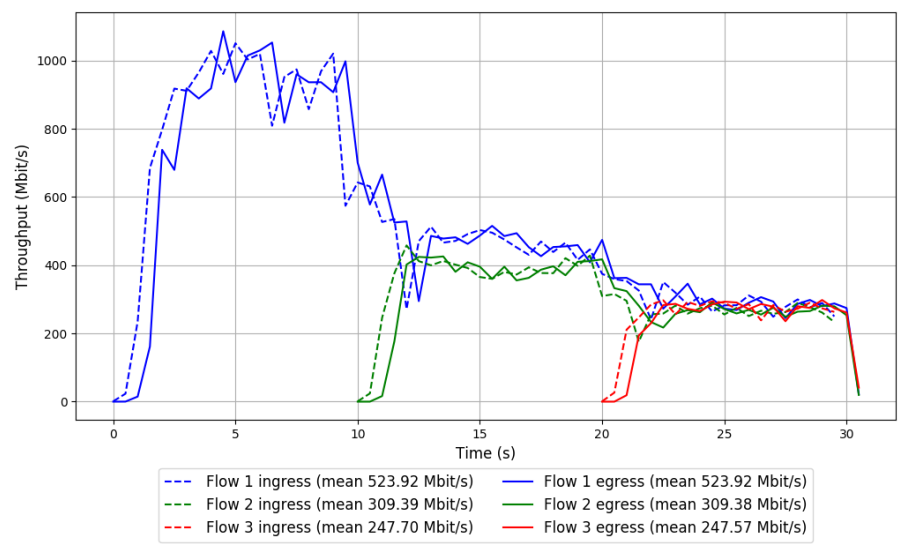
-- Flow 3:

Average throughput: 247.57 Mbit/s

95th percentile per-packet one-way delay: 88.952 ms

Loss rate: 0.05%

Run 4: Report of FillP-Sheep — Data Link

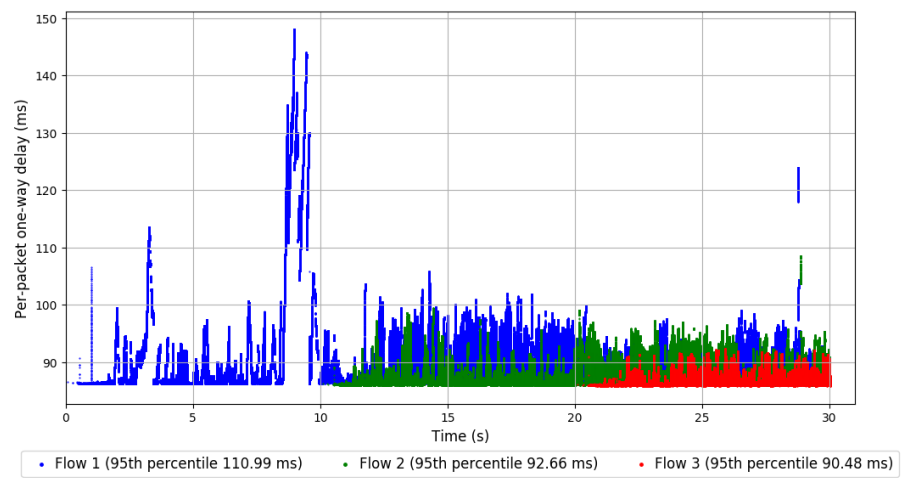
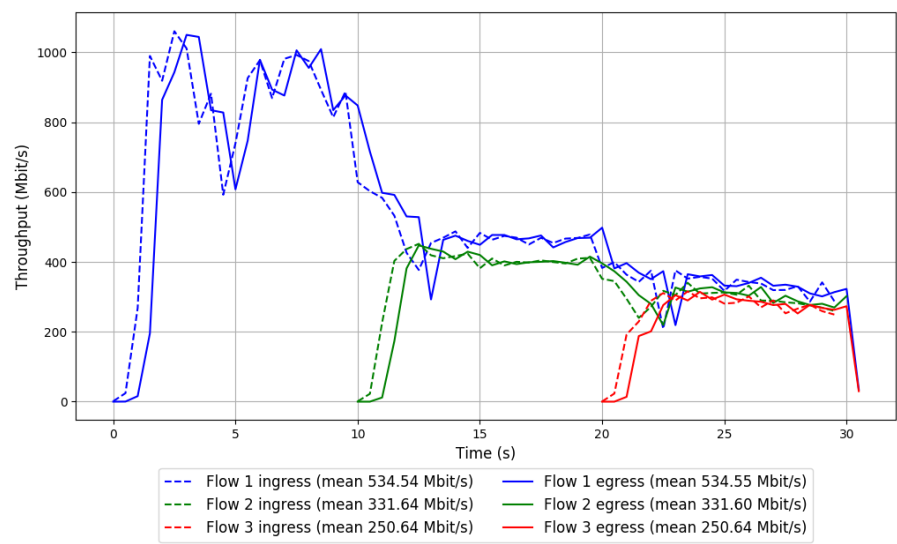


Run 5: Statistics of FillP-Sheep

Start at: 2019-03-09 03:11:44
End at: 2019-03-09 03:12:14
Local clock offset: -0.098 ms
Remote clock offset: -0.067 ms

Below is generated by plot.py at 2019-03-09 04:38:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 837.92 Mbit/s
95th percentile per-packet one-way delay: 100.147 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 534.55 Mbit/s
95th percentile per-packet one-way delay: 110.988 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 331.60 Mbit/s
95th percentile per-packet one-way delay: 92.658 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 250.64 Mbit/s
95th percentile per-packet one-way delay: 90.477 ms
Loss rate: 0.00%

Run 5: Report of FillP-Sheep — Data Link

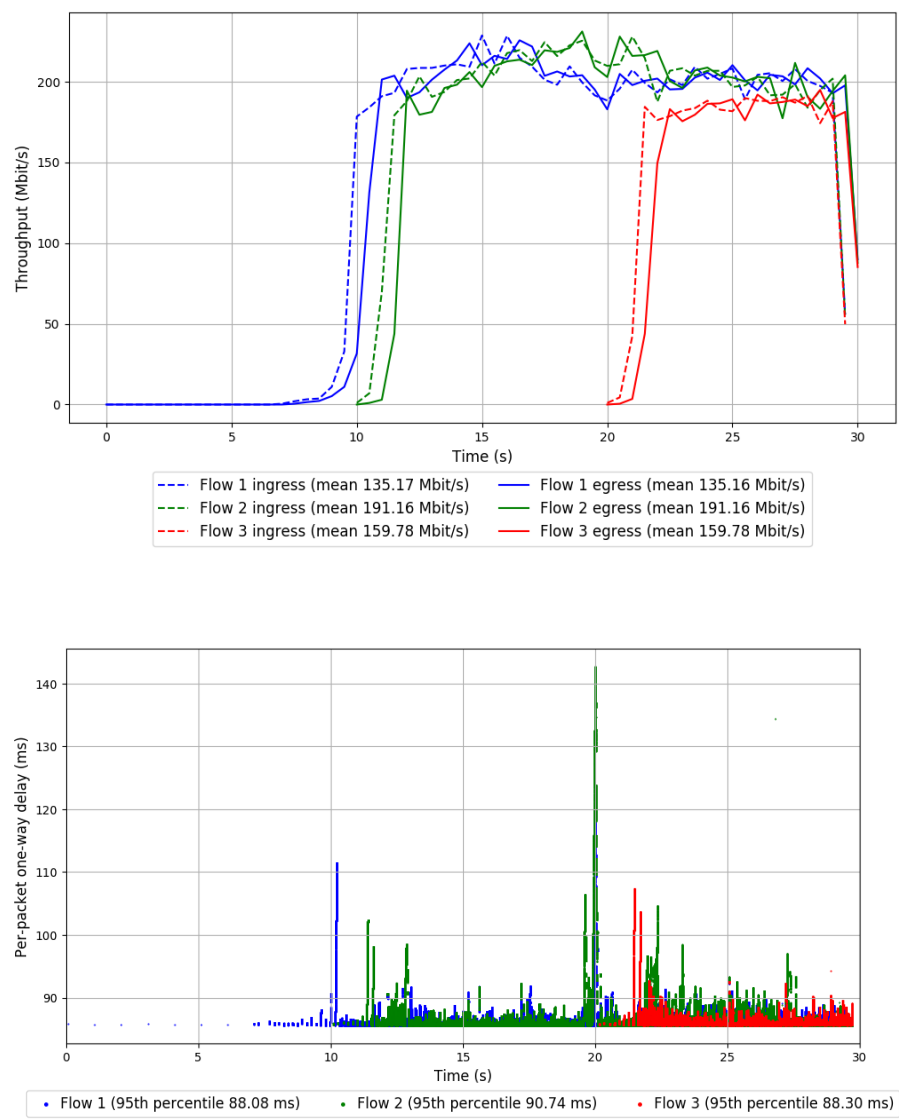


Run 1: Statistics of Indigo

Start at: 2019-03-09 00:14:19
End at: 2019-03-09 00:14:49
Local clock offset: 0.17 ms
Remote clock offset: -0.031 ms

Below is generated by plot.py at 2019-03-09 04:38:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 313.24 Mbit/s
95th percentile per-packet one-way delay: 89.004 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 135.16 Mbit/s
95th percentile per-packet one-way delay: 88.076 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 191.16 Mbit/s
95th percentile per-packet one-way delay: 90.744 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 159.78 Mbit/s
95th percentile per-packet one-way delay: 88.297 ms
Loss rate: 0.00%

Run 1: Report of Indigo — Data Link

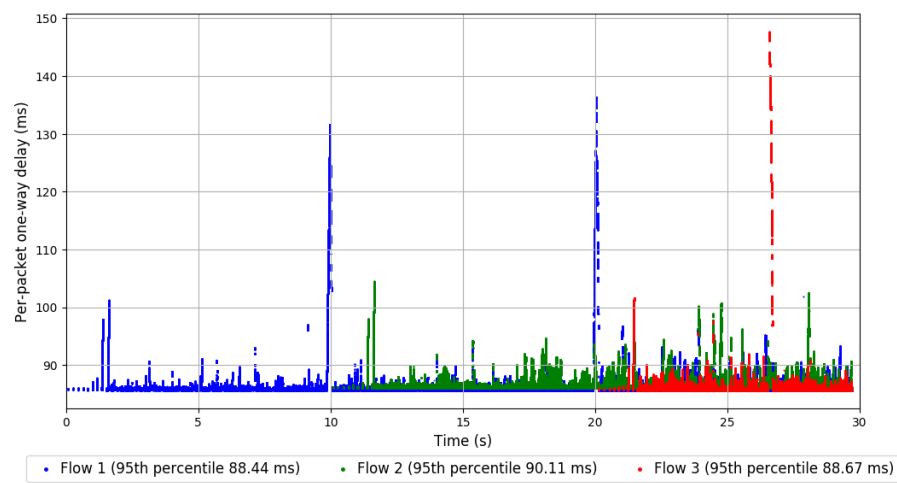
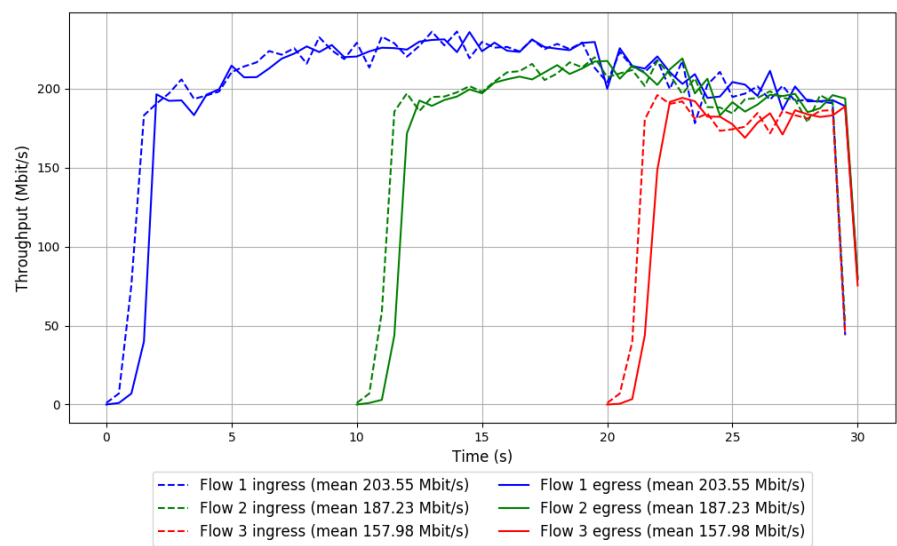


Run 2: Statistics of Indigo

Start at: 2019-03-09 00:51:13
End at: 2019-03-09 00:51:43
Local clock offset: 0.163 ms
Remote clock offset: 0.072 ms

Below is generated by plot.py at 2019-03-09 04:38:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 378.40 Mbit/s
95th percentile per-packet one-way delay: 89.233 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 203.55 Mbit/s
95th percentile per-packet one-way delay: 88.441 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 187.23 Mbit/s
95th percentile per-packet one-way delay: 90.105 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 157.98 Mbit/s
95th percentile per-packet one-way delay: 88.669 ms
Loss rate: 0.00%

Run 2: Report of Indigo — Data Link

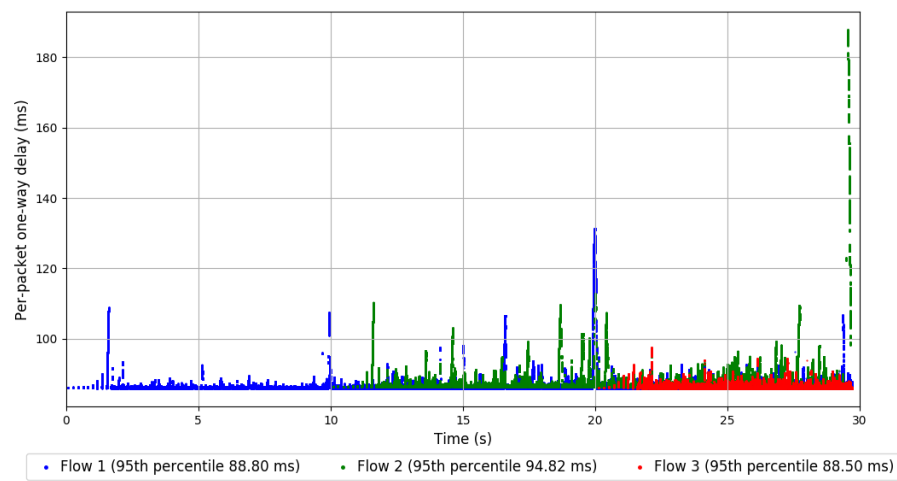
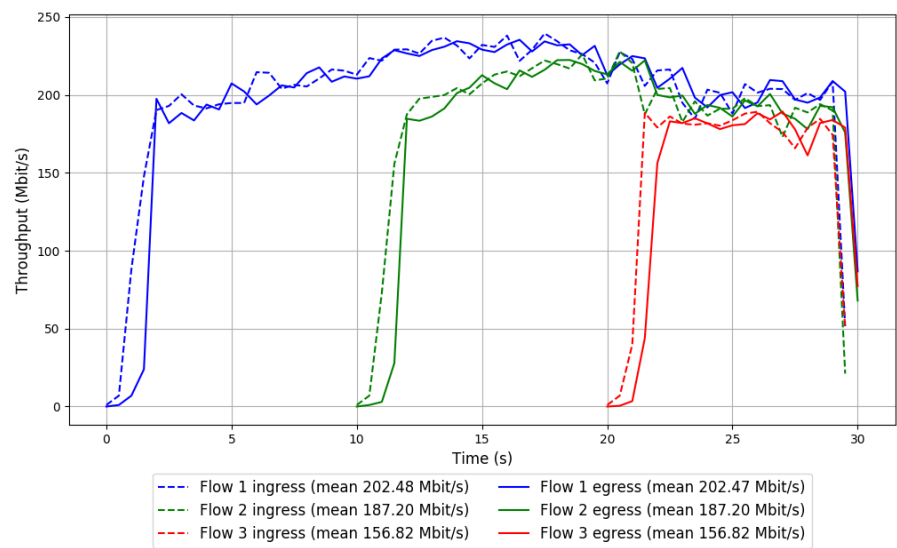


Run 3: Statistics of Indigo

Start at: 2019-03-09 01:28:29
End at: 2019-03-09 01:28:59
Local clock offset: -0.144 ms
Remote clock offset: -0.024 ms

Below is generated by plot.py at 2019-03-09 04:38:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 376.76 Mbit/s
95th percentile per-packet one-way delay: 90.441 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 202.47 Mbit/s
95th percentile per-packet one-way delay: 88.802 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 187.20 Mbit/s
95th percentile per-packet one-way delay: 94.817 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 156.82 Mbit/s
95th percentile per-packet one-way delay: 88.501 ms
Loss rate: 0.00%

Run 3: Report of Indigo — Data Link

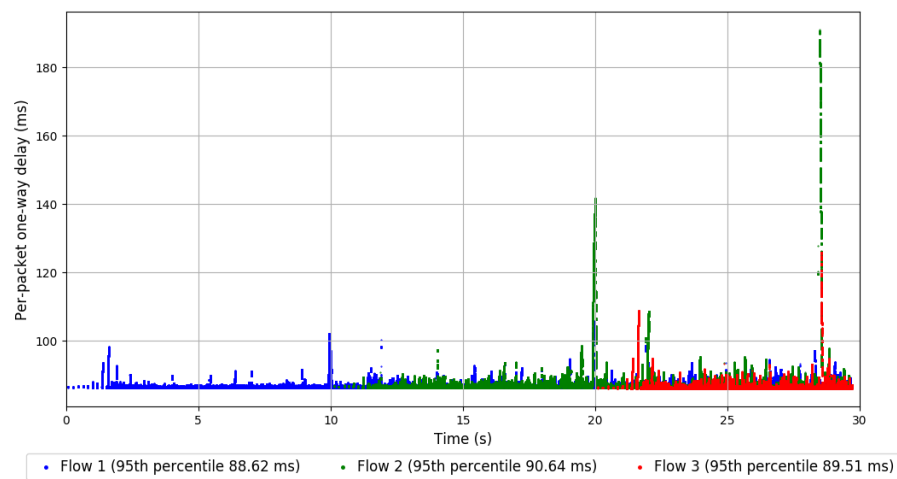
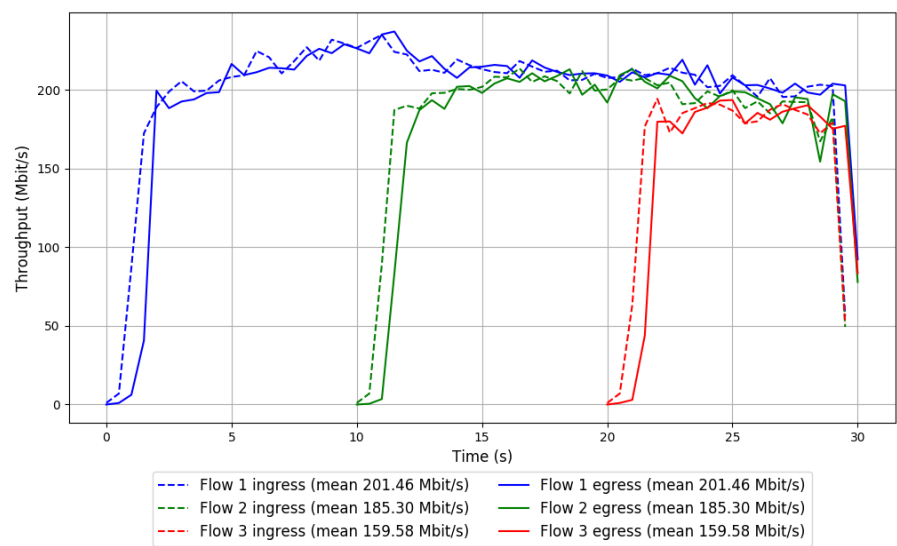


Run 4: Statistics of Indigo

Start at: 2019-03-09 02:05:52
End at: 2019-03-09 02:06:22
Local clock offset: -0.31 ms
Remote clock offset: -0.024 ms

Below is generated by plot.py at 2019-03-09 04:40:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 375.78 Mbit/s
95th percentile per-packet one-way delay: 89.366 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 201.46 Mbit/s
95th percentile per-packet one-way delay: 88.625 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 185.30 Mbit/s
95th percentile per-packet one-way delay: 90.637 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 159.58 Mbit/s
95th percentile per-packet one-way delay: 89.509 ms
Loss rate: 0.00%

Run 4: Report of Indigo — Data Link

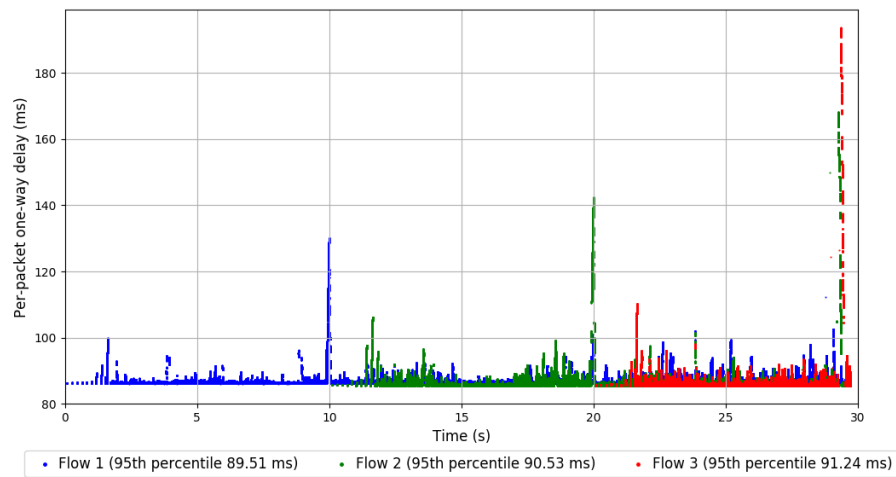
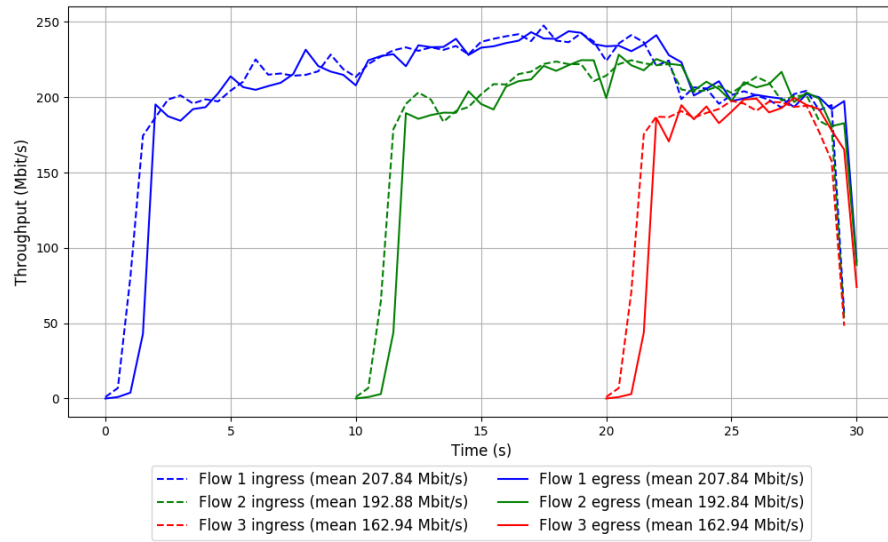


Run 5: Statistics of Indigo

Start at: 2019-03-09 02:43:25
End at: 2019-03-09 02:43:56
Local clock offset: 0.274 ms
Remote clock offset: -0.009 ms

Below is generated by plot.py at 2019-03-09 04:41:55
Datalink statistics
-- Total of 3 flows:
Average throughput: 388.33 Mbit/s
95th percentile per-packet one-way delay: 89.982 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 207.84 Mbit/s
95th percentile per-packet one-way delay: 89.513 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 192.84 Mbit/s
95th percentile per-packet one-way delay: 90.528 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 162.94 Mbit/s
95th percentile per-packet one-way delay: 91.239 ms
Loss rate: 0.00%

Run 5: Report of Indigo — Data Link



Run 1: Statistics of Indigo-MusesC3

Start at: 2019-03-09 00:33:41

End at: 2019-03-09 00:34:11

Local clock offset: 0.168 ms

Remote clock offset: 0.014 ms

Below is generated by plot.py at 2019-03-09 04:41:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 730.11 Mbit/s

95th percentile per-packet one-way delay: 108.258 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 428.04 Mbit/s

95th percentile per-packet one-way delay: 111.662 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 365.01 Mbit/s

95th percentile per-packet one-way delay: 97.139 ms

Loss rate: 0.00%

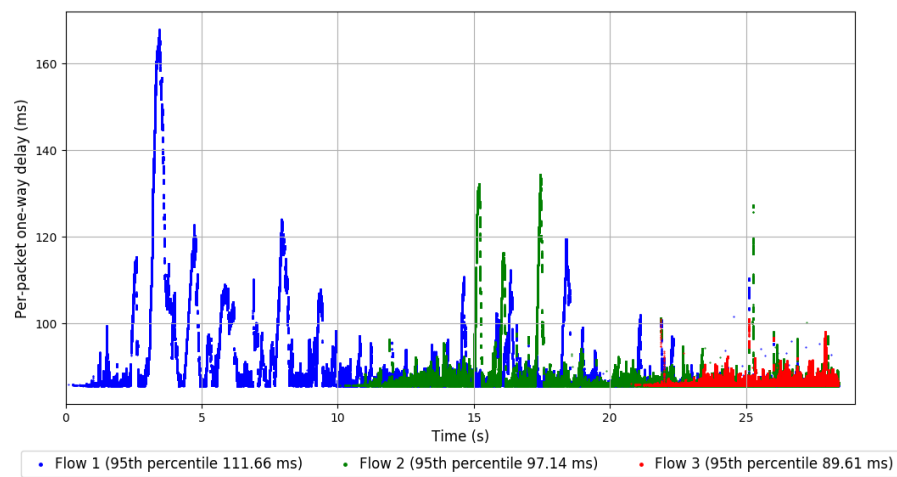
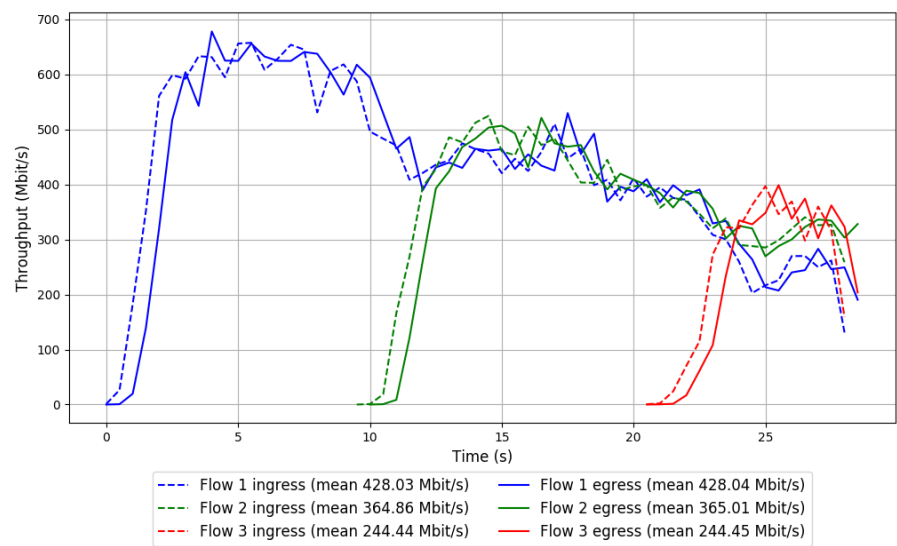
-- Flow 3:

Average throughput: 244.45 Mbit/s

95th percentile per-packet one-way delay: 89.612 ms

Loss rate: 0.00%

Run 1: Report of Indigo-MusesC3 — Data Link

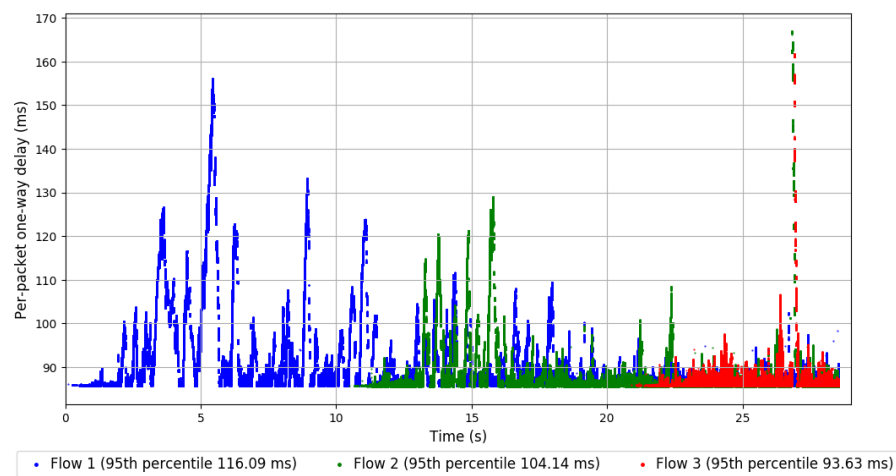
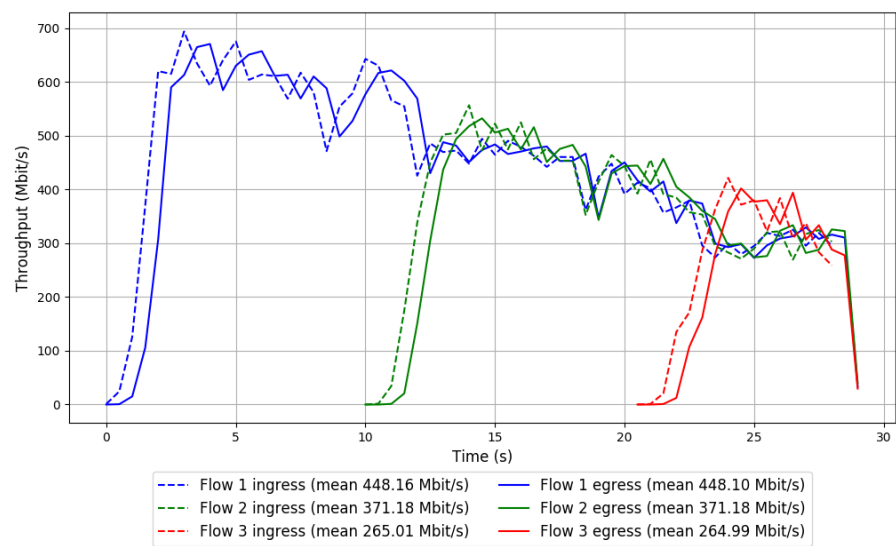


Run 2: Statistics of Indigo-MusesC3

Start at: 2019-03-09 01:10:53
End at: 2019-03-09 01:11:23
Local clock offset: 0.137 ms
Remote clock offset: -0.026 ms

Below is generated by plot.py at 2019-03-09 04:45:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 754.74 Mbit/s
95th percentile per-packet one-way delay: 111.413 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 448.10 Mbit/s
95th percentile per-packet one-way delay: 116.087 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 371.18 Mbit/s
95th percentile per-packet one-way delay: 104.135 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 264.99 Mbit/s
95th percentile per-packet one-way delay: 93.630 ms
Loss rate: 0.00%

Run 2: Report of Indigo-MusesC3 — Data Link

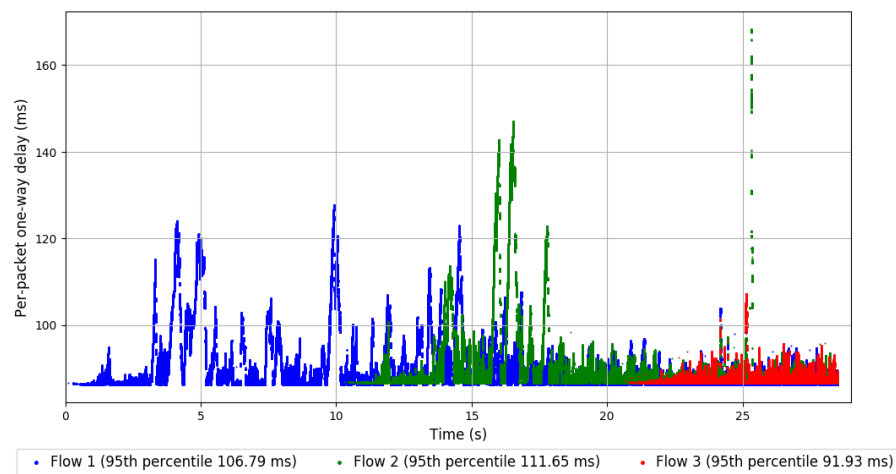
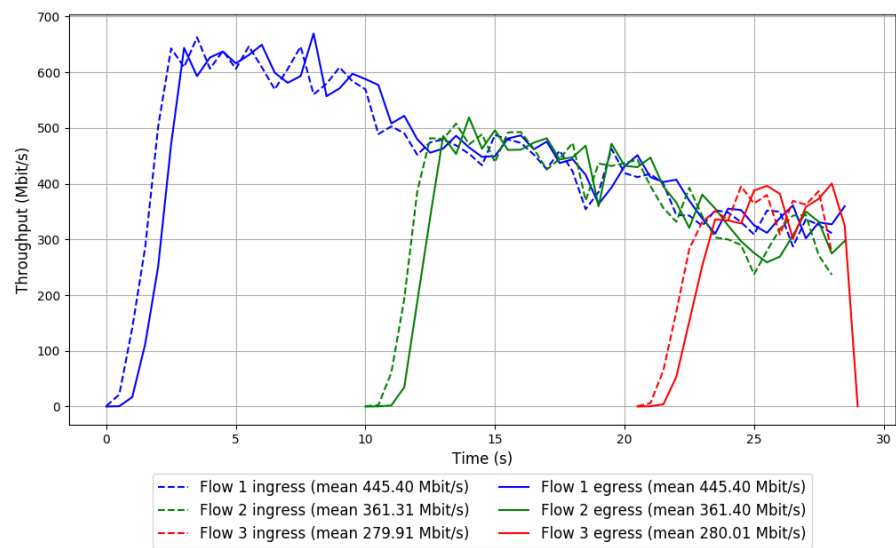


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-03-09 01:48:24
End at: 2019-03-09 01:48:54
Local clock offset: -0.619 ms
Remote clock offset: -0.073 ms

Below is generated by plot.py at 2019-03-09 04:47:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 754.07 Mbit/s
95th percentile per-packet one-way delay: 107.036 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 445.40 Mbit/s
95th percentile per-packet one-way delay: 106.787 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 361.40 Mbit/s
95th percentile per-packet one-way delay: 111.649 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 280.01 Mbit/s
95th percentile per-packet one-way delay: 91.933 ms
Loss rate: 0.00%

Run 3: Report of Indigo-MusesC3 — Data Link

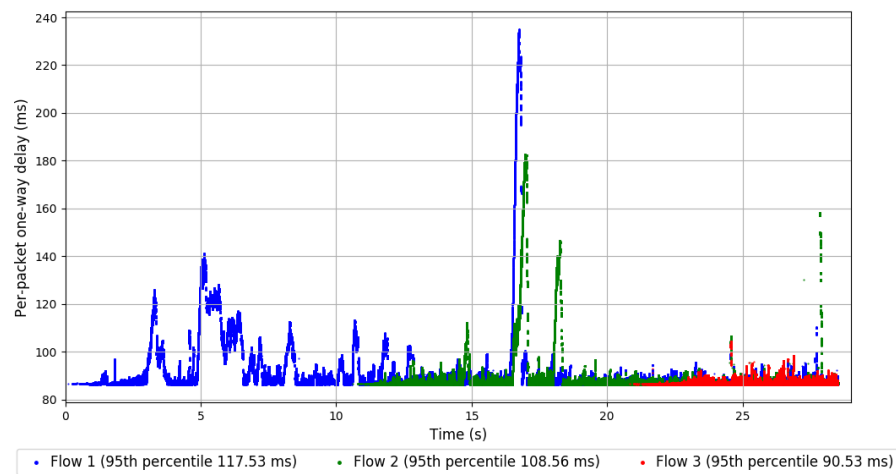
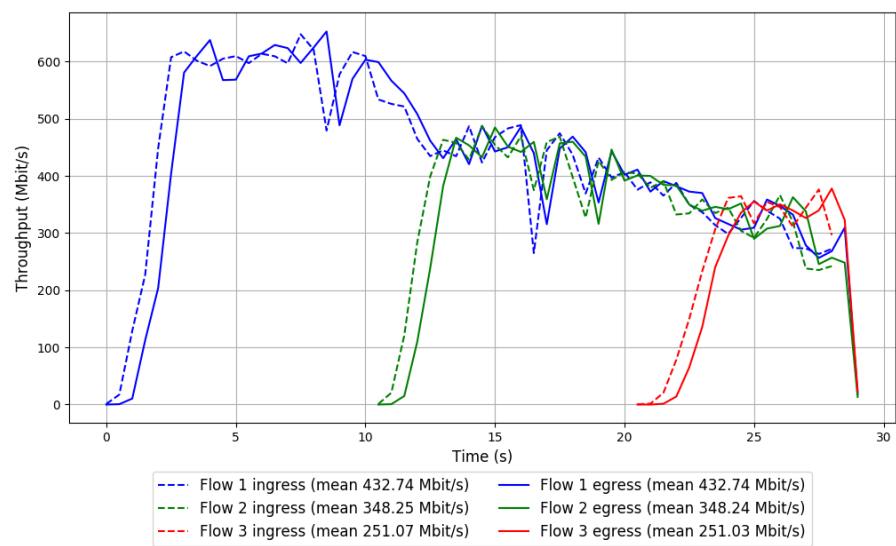


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-03-09 02:25:34
End at: 2019-03-09 02:26:04
Local clock offset: -0.415 ms
Remote clock offset: 0.026 ms

Below is generated by plot.py at 2019-03-09 04:47:54
Datalink statistics
-- Total of 3 flows:
Average throughput: 719.95 Mbit/s
95th percentile per-packet one-way delay: 112.594 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 432.74 Mbit/s
95th percentile per-packet one-way delay: 117.527 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 348.24 Mbit/s
95th percentile per-packet one-way delay: 108.565 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 251.03 Mbit/s
95th percentile per-packet one-way delay: 90.532 ms
Loss rate: 0.00%

Run 4: Report of Indigo-MusesC3 — Data Link

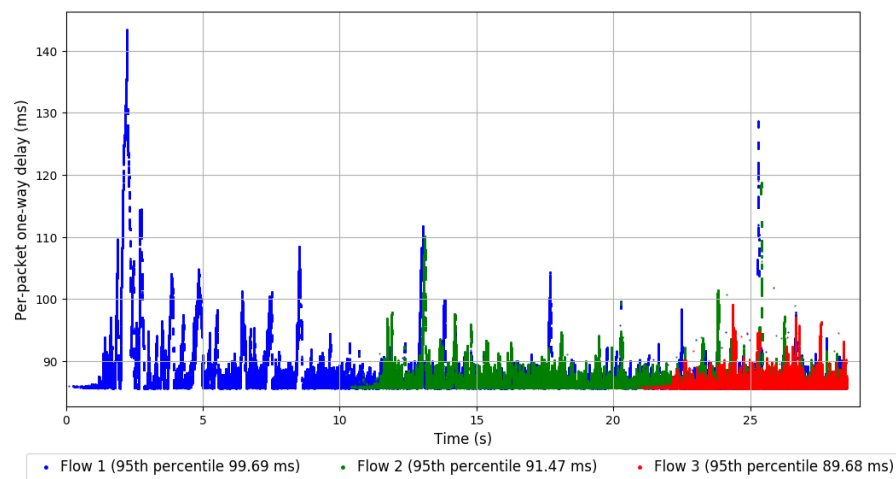
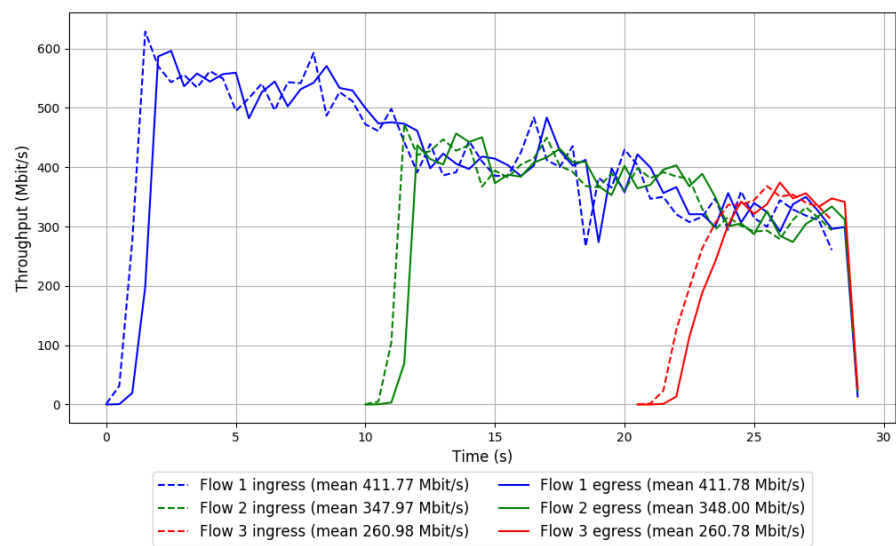


Run 5: Statistics of Indigo-MusesC3

Start at: 2019-03-09 03:03:03
End at: 2019-03-09 03:03:33
Local clock offset: 0.134 ms
Remote clock offset: -0.047 ms

Below is generated by plot.py at 2019-03-09 04:51:50
Datalink statistics
-- Total of 3 flows:
Average throughput: 705.54 Mbit/s
95th percentile per-packet one-way delay: 95.992 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 411.78 Mbit/s
95th percentile per-packet one-way delay: 99.689 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 348.00 Mbit/s
95th percentile per-packet one-way delay: 91.473 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 260.78 Mbit/s
95th percentile per-packet one-way delay: 89.679 ms
Loss rate: 0.09%

Run 5: Report of Indigo-MusesC3 — Data Link



Run 1: Statistics of Indigo-MusesC5

Start at: 2019-03-09 00:46:13

End at: 2019-03-09 00:46:43

Local clock offset: -0.079 ms

Remote clock offset: 0.055 ms

Below is generated by plot.py at 2019-03-09 04:51:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 649.49 Mbit/s

95th percentile per-packet one-way delay: 110.459 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 425.00 Mbit/s

95th percentile per-packet one-way delay: 113.513 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 306.26 Mbit/s

95th percentile per-packet one-way delay: 95.595 ms

Loss rate: 0.00%

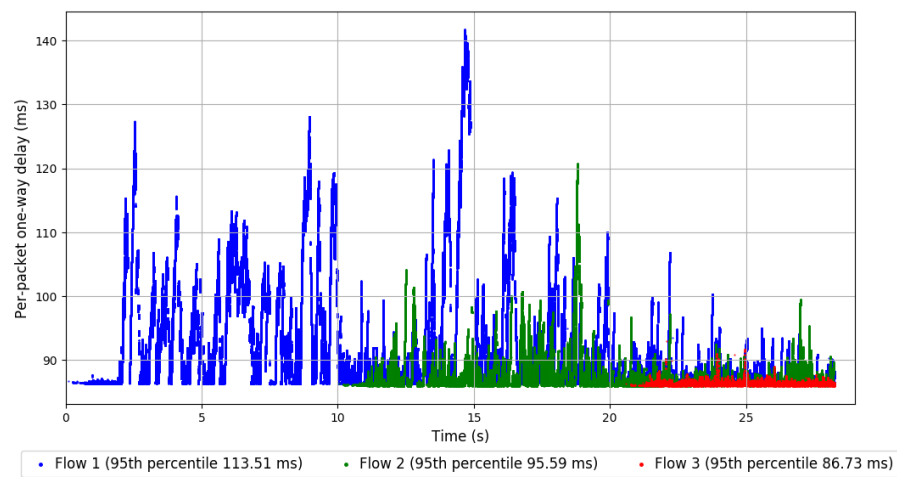
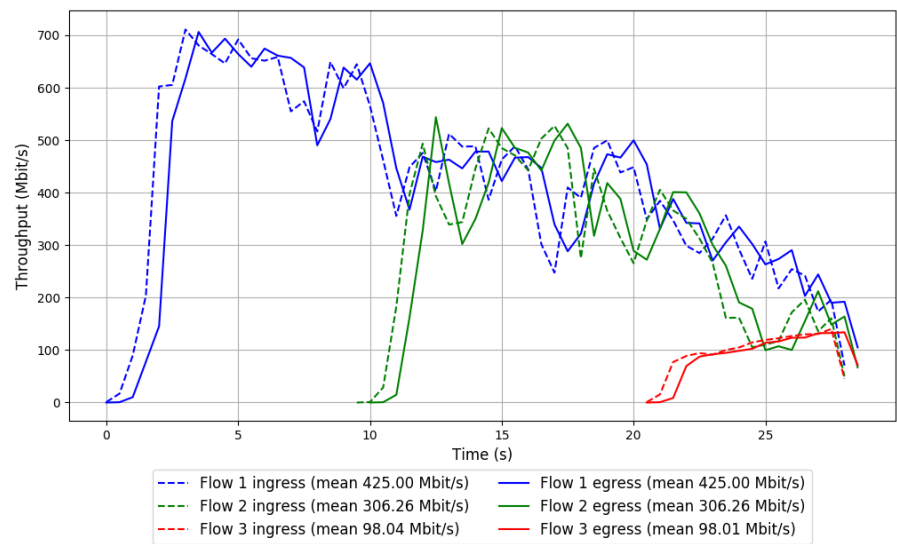
-- Flow 3:

Average throughput: 98.01 Mbit/s

95th percentile per-packet one-way delay: 86.730 ms

Loss rate: 0.03%

Run 1: Report of Indigo-MusesC5 — Data Link

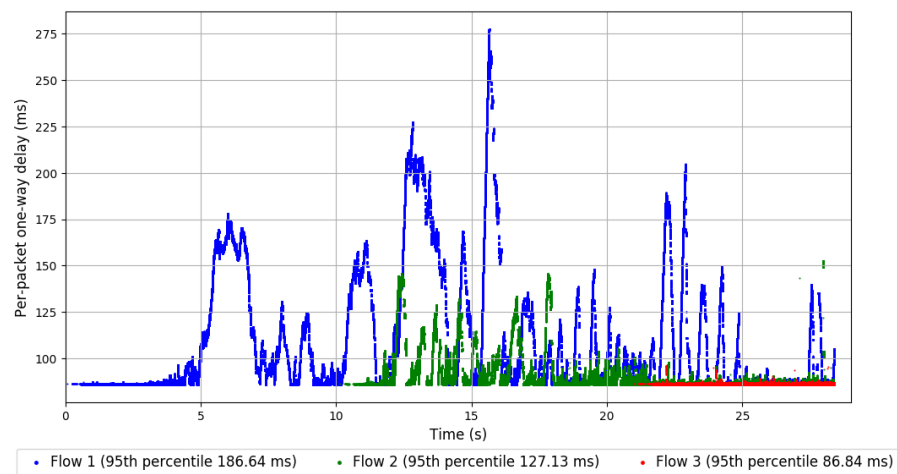
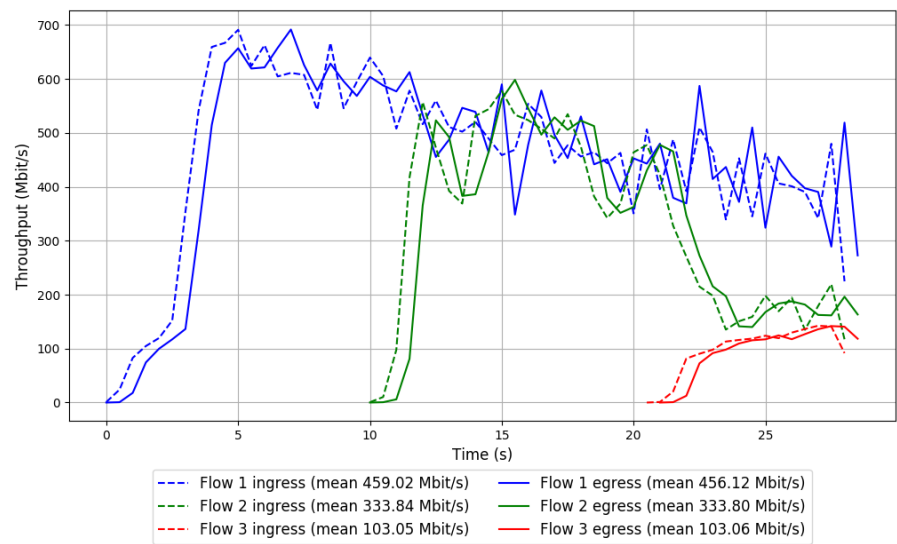


Run 2: Statistics of Indigo-MusesC5

Start at: 2019-03-09 01:23:14
End at: 2019-03-09 01:23:44
Local clock offset: -0.391 ms
Remote clock offset: -0.022 ms

Below is generated by plot.py at 2019-03-09 04:53:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 697.71 Mbit/s
95th percentile per-packet one-way delay: 172.143 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 456.12 Mbit/s
95th percentile per-packet one-way delay: 186.641 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 333.80 Mbit/s
95th percentile per-packet one-way delay: 127.133 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 103.06 Mbit/s
95th percentile per-packet one-way delay: 86.841 ms
Loss rate: 0.00%

Run 2: Report of Indigo-MusesC5 — Data Link

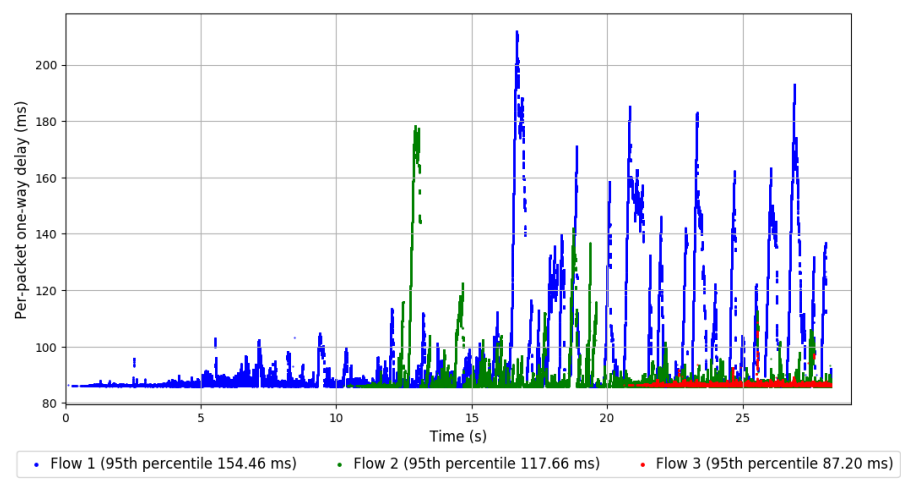
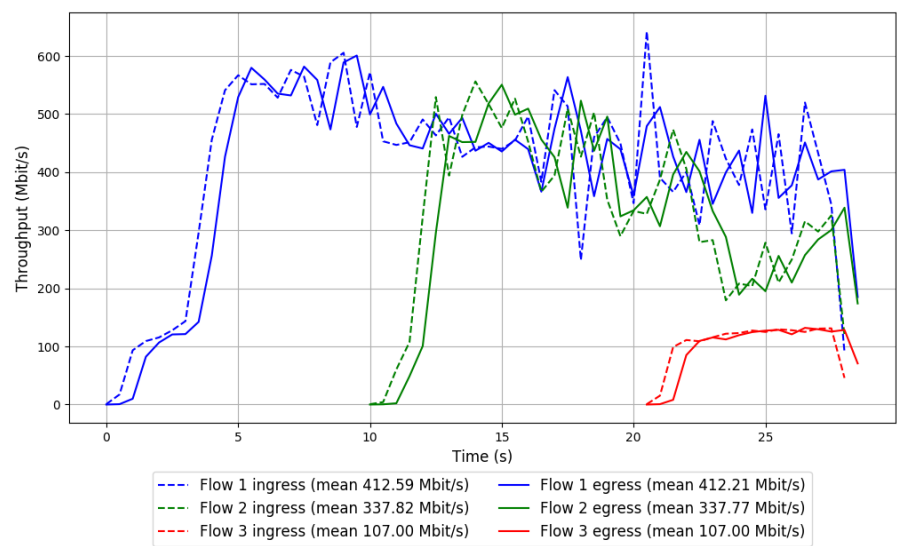


Run 3: Statistics of Indigo-MusesC5

Start at: 2019-03-09 02:00:47
End at: 2019-03-09 02:01:17
Local clock offset: -0.244 ms
Remote clock offset: -0.053 ms

Below is generated by plot.py at 2019-03-09 04:54:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 657.06 Mbit/s
95th percentile per-packet one-way delay: 149.232 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 412.21 Mbit/s
95th percentile per-packet one-way delay: 154.459 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 337.77 Mbit/s
95th percentile per-packet one-way delay: 117.664 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 107.00 Mbit/s
95th percentile per-packet one-way delay: 87.203 ms
Loss rate: 0.00%

Run 3: Report of Indigo-MusesC5 — Data Link



Run 4: Statistics of Indigo-MusesC5

Start at: 2019-03-09 02:38:23

End at: 2019-03-09 02:38:53

Local clock offset: 0.216 ms

Remote clock offset: 0.009 ms

Below is generated by plot.py at 2019-03-09 04:55:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 688.33 Mbit/s

95th percentile per-packet one-way delay: 136.035 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 420.53 Mbit/s

95th percentile per-packet one-way delay: 153.019 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 363.18 Mbit/s

95th percentile per-packet one-way delay: 102.726 ms

Loss rate: 0.00%

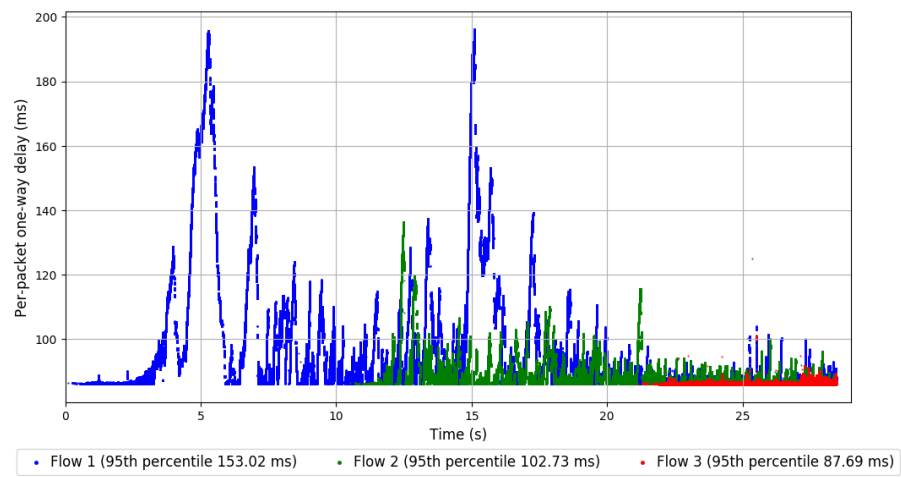
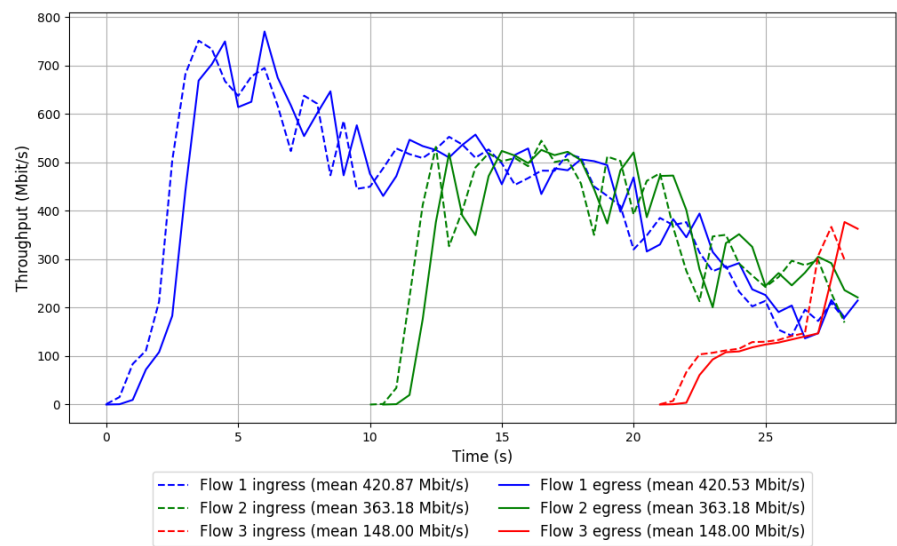
-- Flow 3:

Average throughput: 148.00 Mbit/s

95th percentile per-packet one-way delay: 87.693 ms

Loss rate: 0.00%

Run 4: Report of Indigo-MusesC5 — Data Link

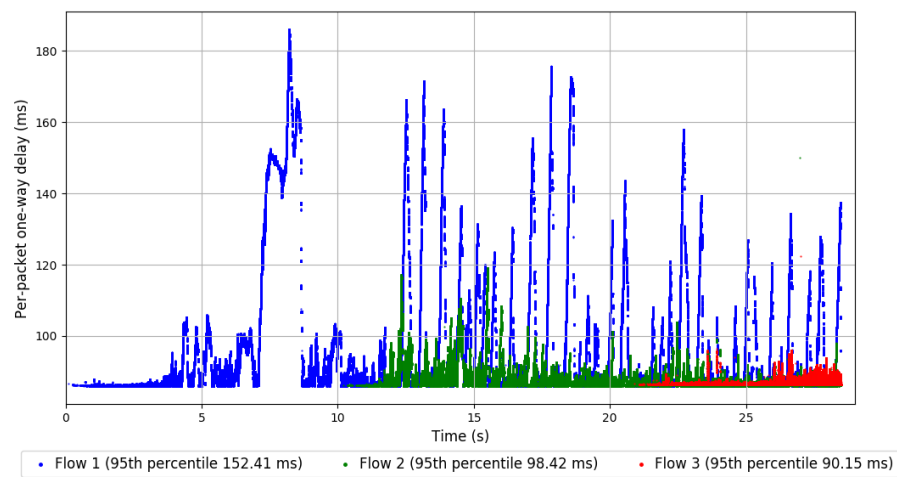
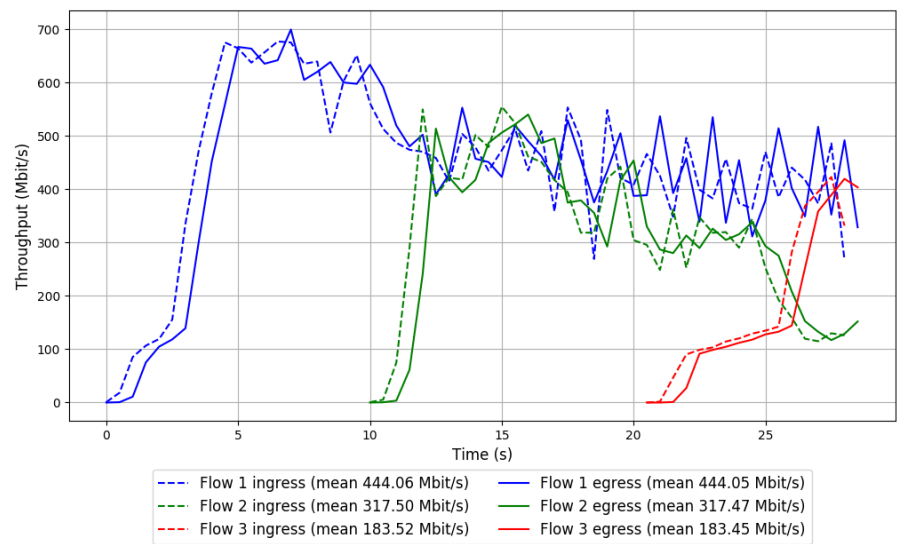


Run 5: Statistics of Indigo-MusesC5

Start at: 2019-03-09 03:15:24
End at: 2019-03-09 03:15:54
Local clock offset: -0.048 ms
Remote clock offset: -0.044 ms

Below is generated by plot.py at 2019-03-09 04:58:32
Datalink statistics
-- Total of 3 flows:
Average throughput: 697.31 Mbit/s
95th percentile per-packet one-way delay: 147.359 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 444.05 Mbit/s
95th percentile per-packet one-way delay: 152.406 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 317.47 Mbit/s
95th percentile per-packet one-way delay: 98.424 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 183.45 Mbit/s
95th percentile per-packet one-way delay: 90.154 ms
Loss rate: 0.05%

Run 5: Report of Indigo-MusesC5 — Data Link



Run 1: Statistics of Indigo-MusesD

Start at: 2019-03-09 00:30:00

End at: 2019-03-09 00:30:30

Local clock offset: -0.332 ms

Remote clock offset: -0.01 ms

Below is generated by plot.py at 2019-03-09 04:58:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 624.41 Mbit/s

95th percentile per-packet one-way delay: 90.790 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 376.27 Mbit/s

95th percentile per-packet one-way delay: 91.444 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 302.29 Mbit/s

95th percentile per-packet one-way delay: 89.402 ms

Loss rate: 0.00%

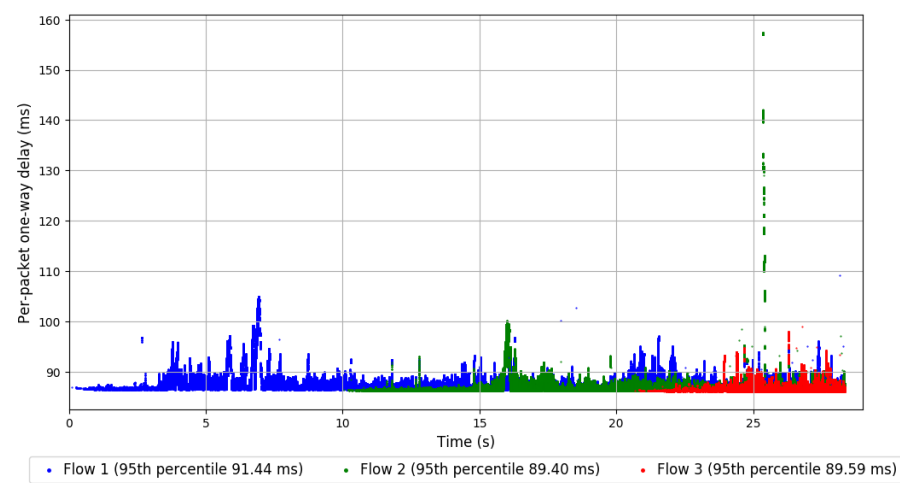
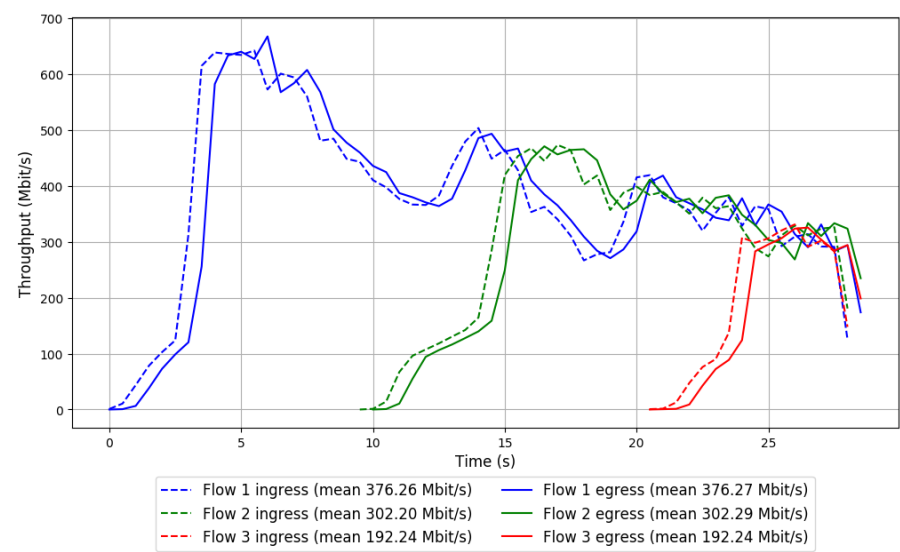
-- Flow 3:

Average throughput: 192.24 Mbit/s

95th percentile per-packet one-way delay: 89.595 ms

Loss rate: 0.00%

Run 1: Report of Indigo-MusesD — Data Link

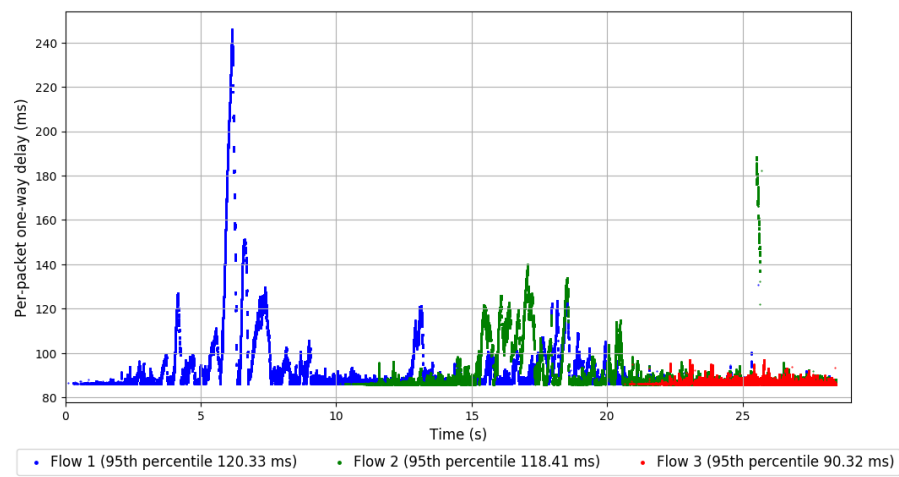
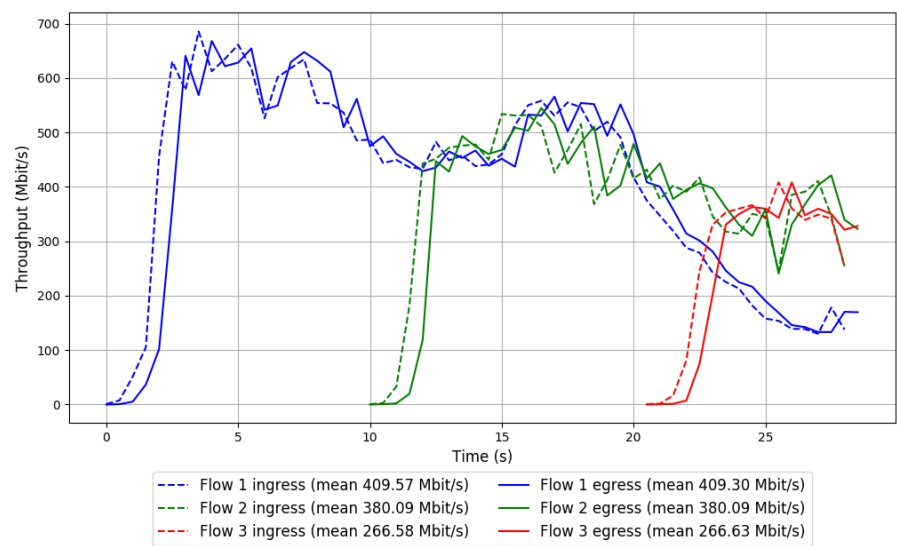


Run 2: Statistics of Indigo-MusesD

Start at: 2019-03-09 01:07:04
End at: 2019-03-09 01:07:34
Local clock offset: -0.087 ms
Remote clock offset: -0.012 ms

Below is generated by plot.py at 2019-03-09 05:01:32
Datalink statistics
-- Total of 3 flows:
Average throughput: 727.73 Mbit/s
95th percentile per-packet one-way delay: 118.090 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 409.30 Mbit/s
95th percentile per-packet one-way delay: 120.330 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 380.09 Mbit/s
95th percentile per-packet one-way delay: 118.409 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 266.63 Mbit/s
95th percentile per-packet one-way delay: 90.317 ms
Loss rate: 0.00%

Run 2: Report of Indigo-MusesD — Data Link



Run 3: Statistics of Indigo-MusesD

Start at: 2019-03-09 01:44:37

End at: 2019-03-09 01:45:07

Local clock offset: -0.42 ms

Remote clock offset: -0.06 ms

Below is generated by plot.py at 2019-03-09 05:02:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 650.70 Mbit/s

95th percentile per-packet one-way delay: 100.579 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 371.94 Mbit/s

95th percentile per-packet one-way delay: 105.773 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 380.95 Mbit/s

95th percentile per-packet one-way delay: 97.687 ms

Loss rate: 0.01%

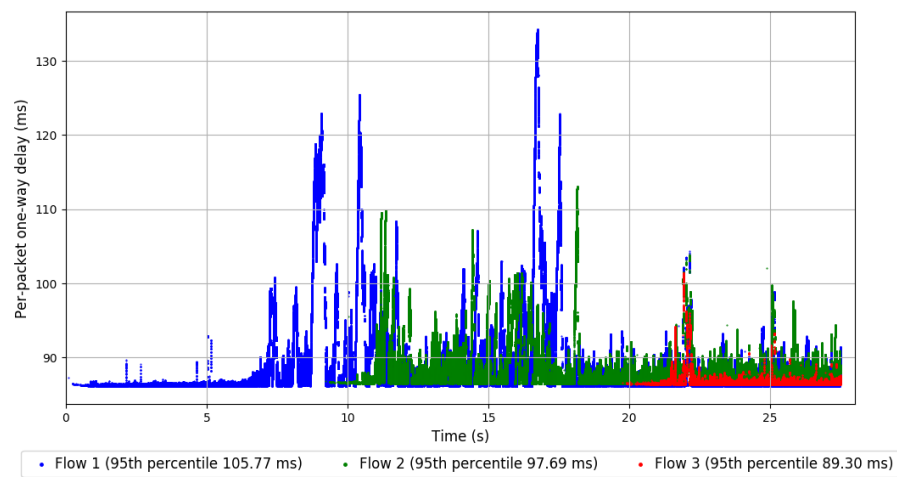
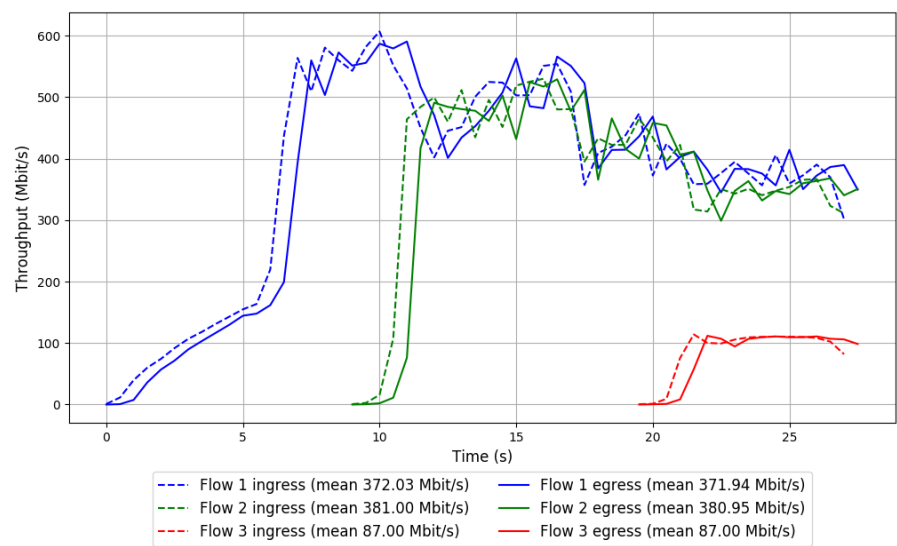
-- Flow 3:

Average throughput: 87.00 Mbit/s

95th percentile per-packet one-way delay: 89.303 ms

Loss rate: 0.00%

Run 3: Report of Indigo-MusesD — Data Link



Run 4: Statistics of Indigo-MusesD

Start at: 2019-03-09 02:21:48

End at: 2019-03-09 02:22:18

Local clock offset: 0.182 ms

Remote clock offset: 0.012 ms

Below is generated by plot.py at 2019-03-09 05:05:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 720.68 Mbit/s

95th percentile per-packet one-way delay: 125.035 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 398.17 Mbit/s

95th percentile per-packet one-way delay: 128.058 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 390.82 Mbit/s

95th percentile per-packet one-way delay: 120.840 ms

Loss rate: 0.00%

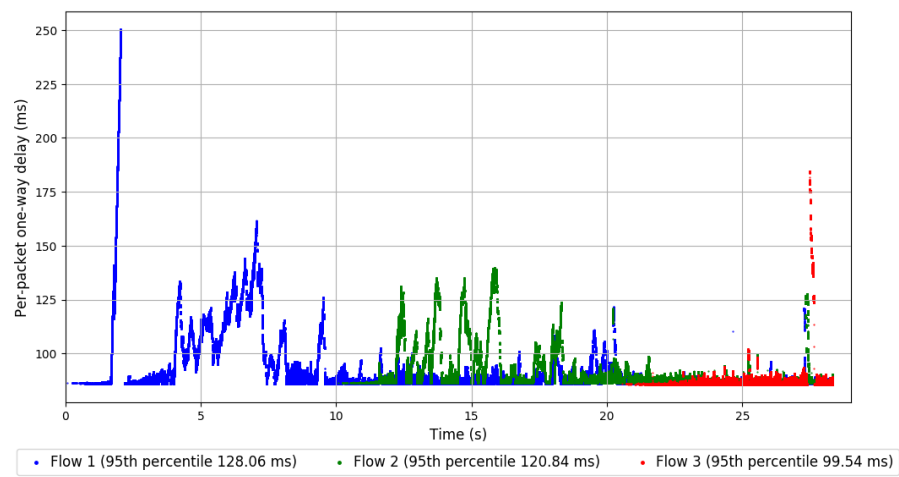
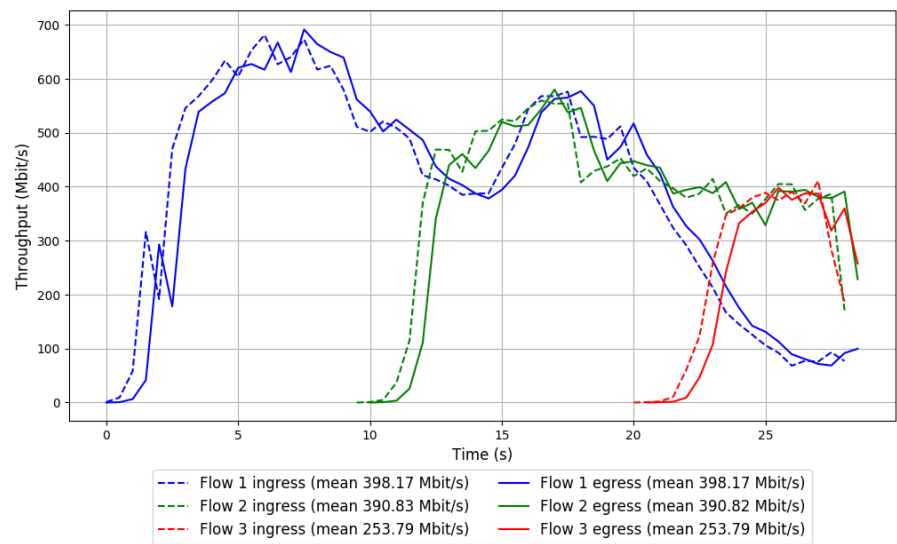
-- Flow 3:

Average throughput: 253.79 Mbit/s

95th percentile per-packet one-way delay: 99.541 ms

Loss rate: 0.00%

Run 4: Report of Indigo-MusesD — Data Link

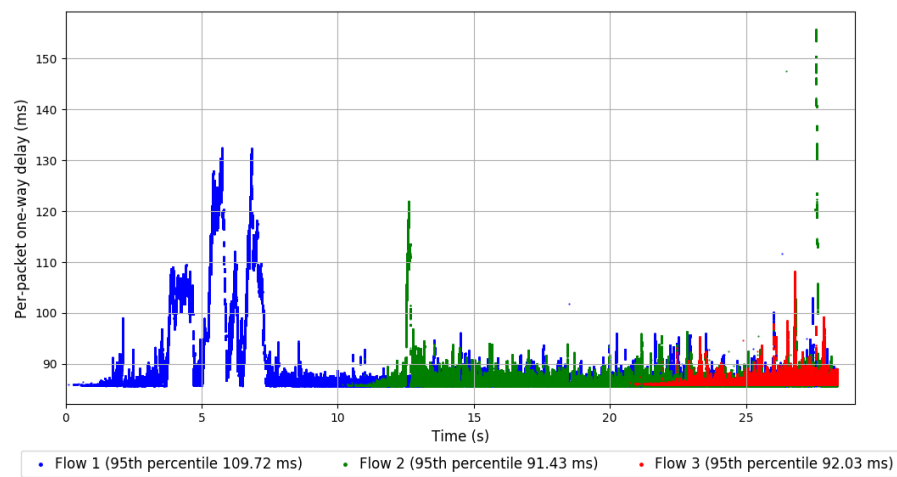
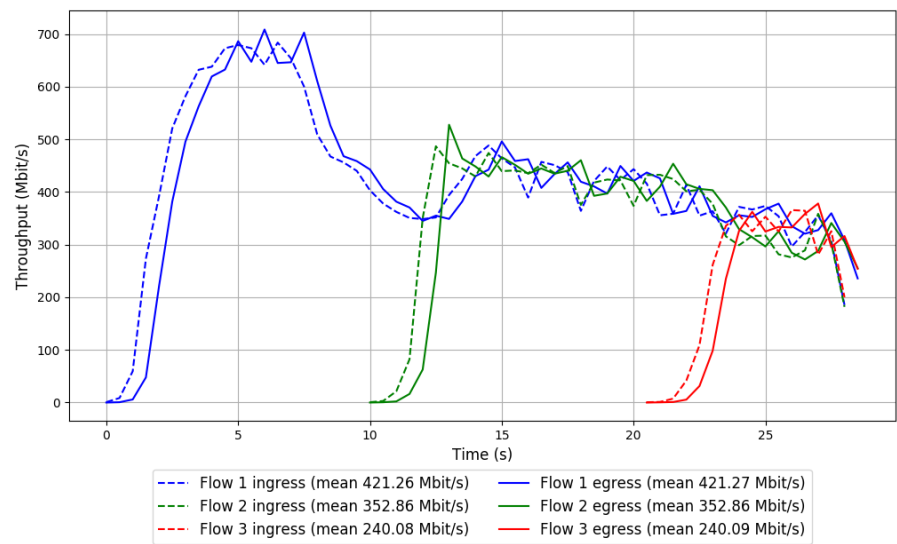


Run 5: Statistics of Indigo-MusesD

Start at: 2019-03-09 02:59:35
End at: 2019-03-09 03:00:05
Local clock offset: 0.177 ms
Remote clock offset: -0.032 ms

Below is generated by plot.py at 2019-03-09 05:07:21
Datalink statistics
-- Total of 3 flows:
Average throughput: 712.68 Mbit/s
95th percentile per-packet one-way delay: 105.568 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 421.27 Mbit/s
95th percentile per-packet one-way delay: 109.722 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 352.86 Mbit/s
95th percentile per-packet one-way delay: 91.430 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 240.09 Mbit/s
95th percentile per-packet one-way delay: 92.027 ms
Loss rate: 0.00%

Run 5: Report of Indigo-MusesD — Data Link

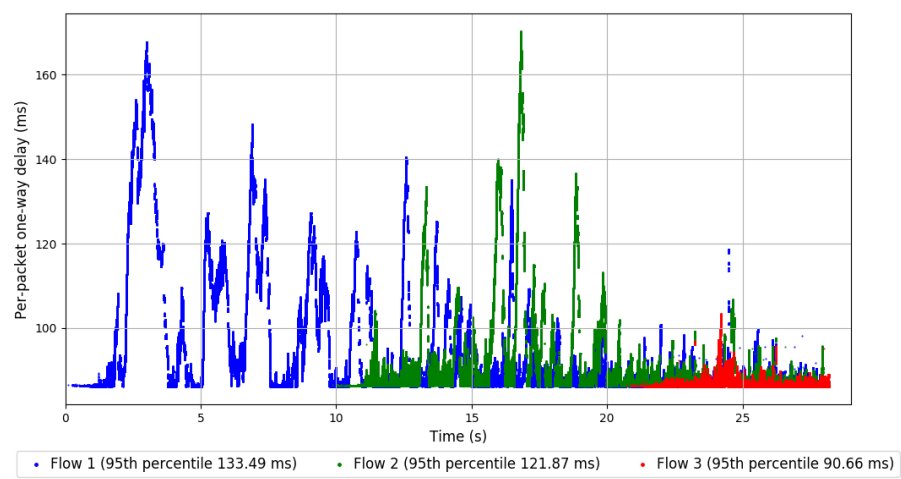
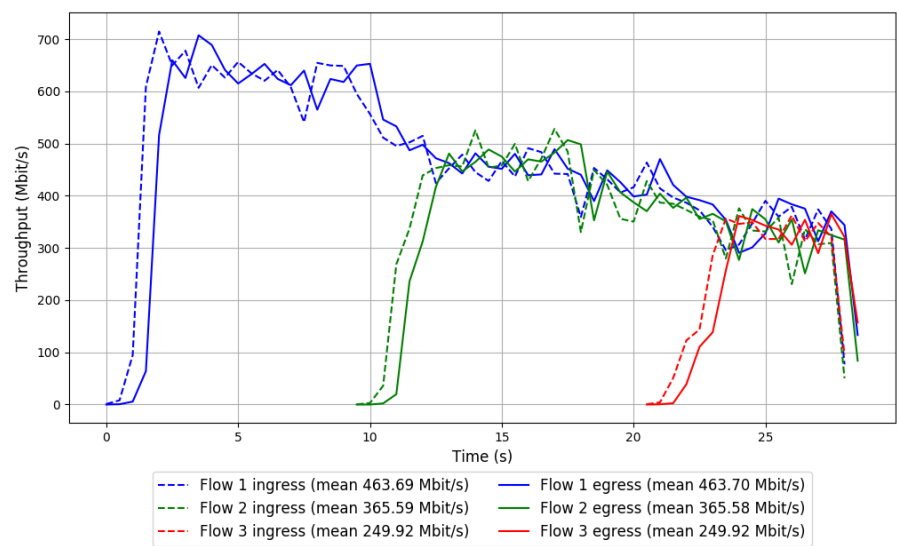


Run 1: Statistics of Indigo-MusesT

Start at: 2019-03-09 00:19:12
End at: 2019-03-09 00:19:42
Local clock offset: -0.325 ms
Remote clock offset: -0.018 ms

Below is generated by plot.py at 2019-03-09 05:08:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 768.39 Mbit/s
95th percentile per-packet one-way delay: 129.534 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 463.70 Mbit/s
95th percentile per-packet one-way delay: 133.492 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 365.58 Mbit/s
95th percentile per-packet one-way delay: 121.872 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 249.92 Mbit/s
95th percentile per-packet one-way delay: 90.660 ms
Loss rate: 0.00%

Run 1: Report of Indigo-MusesT — Data Link



Run 2: Statistics of Indigo-MusesT

Start at: 2019-03-09 00:56:11

End at: 2019-03-09 00:56:41

Local clock offset: -0.516 ms

Remote clock offset: 0.009 ms

Below is generated by plot.py at 2019-03-09 05:09:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 761.54 Mbit/s

95th percentile per-packet one-way delay: 159.025 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 458.13 Mbit/s

95th percentile per-packet one-way delay: 163.856 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 371.28 Mbit/s

95th percentile per-packet one-way delay: 117.270 ms

Loss rate: 0.00%

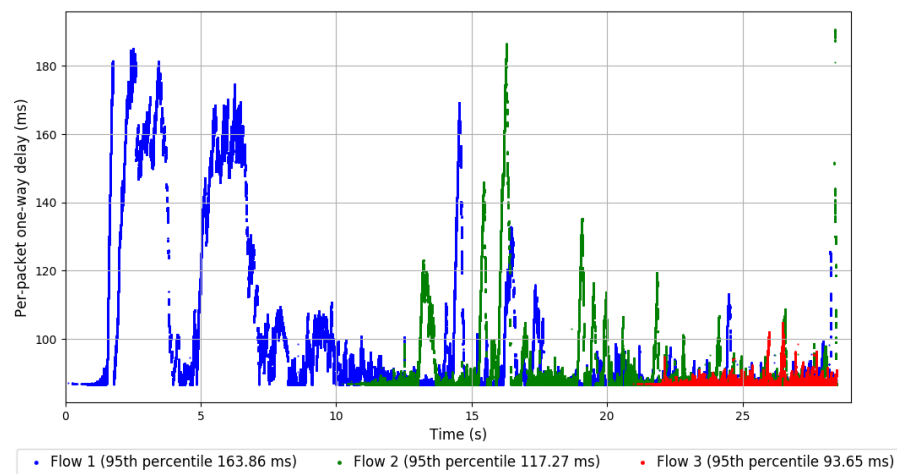
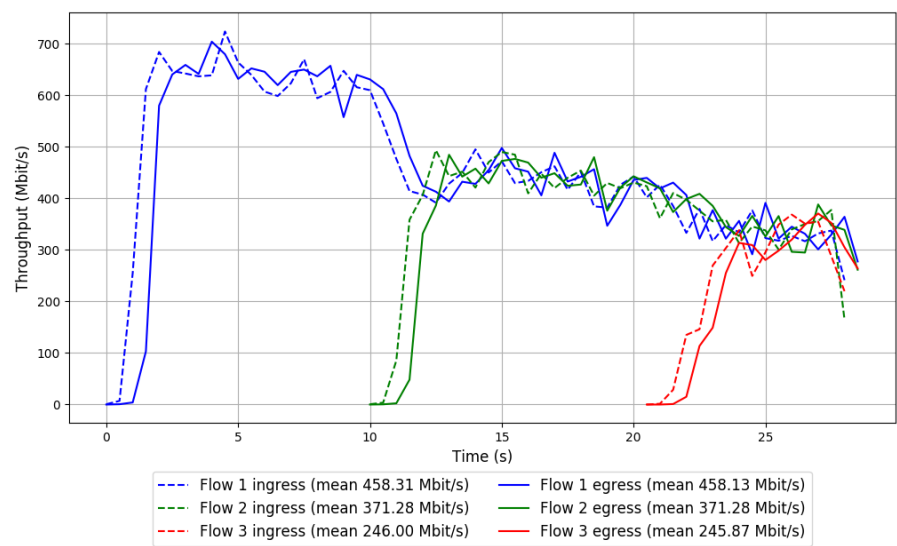
-- Flow 3:

Average throughput: 245.87 Mbit/s

95th percentile per-packet one-way delay: 93.649 ms

Loss rate: 0.05%

Run 2: Report of Indigo-MusesT — Data Link

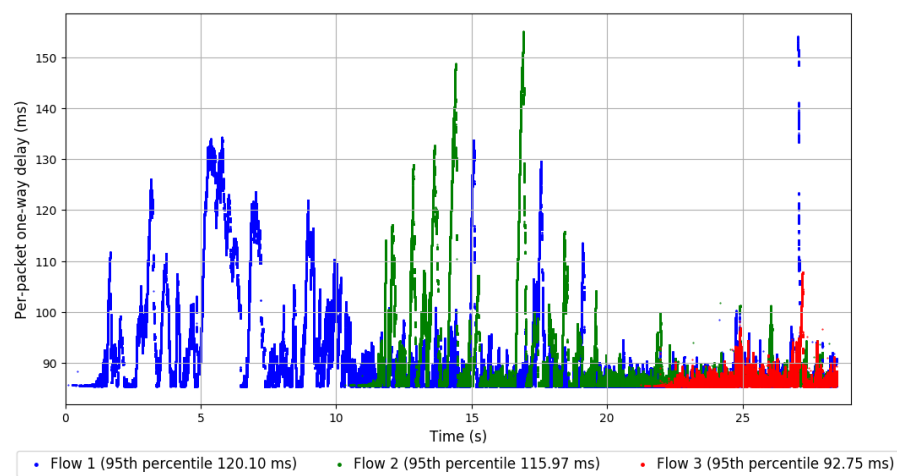
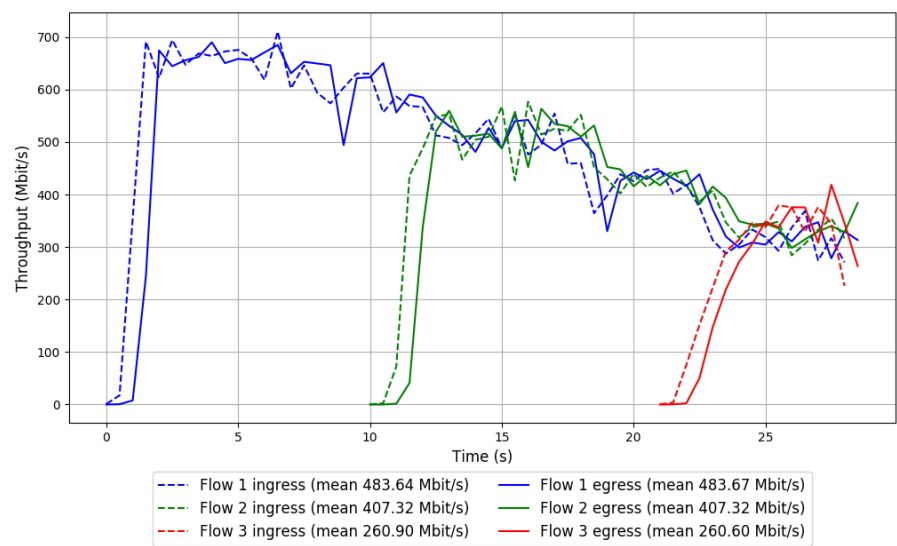


Run 3: Statistics of Indigo-MusesT

Start at: 2019-03-09 01:33:30
End at: 2019-03-09 01:34:00
Local clock offset: 0.236 ms
Remote clock offset: -0.063 ms

Below is generated by plot.py at 2019-03-09 05:13:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 810.37 Mbit/s
95th percentile per-packet one-way delay: 118.159 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 483.67 Mbit/s
95th percentile per-packet one-way delay: 120.104 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 407.32 Mbit/s
95th percentile per-packet one-way delay: 115.972 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 260.60 Mbit/s
95th percentile per-packet one-way delay: 92.753 ms
Loss rate: 0.10%

Run 3: Report of Indigo-MusesT — Data Link

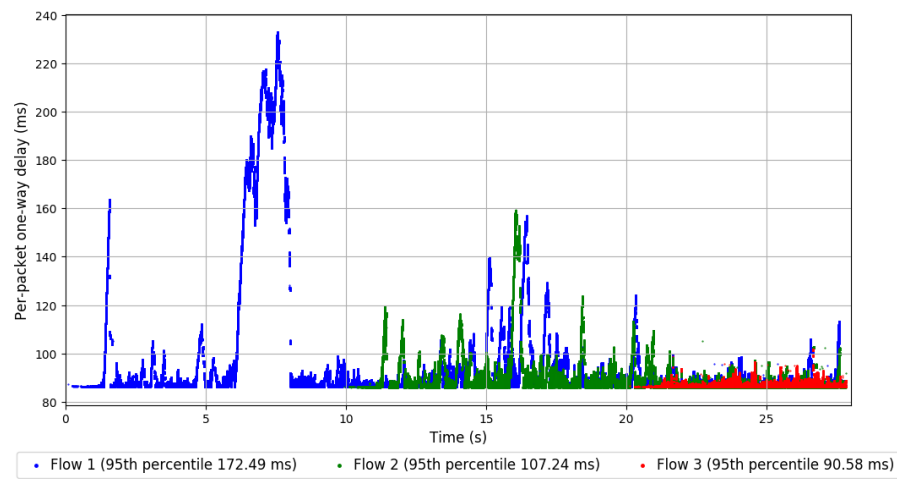
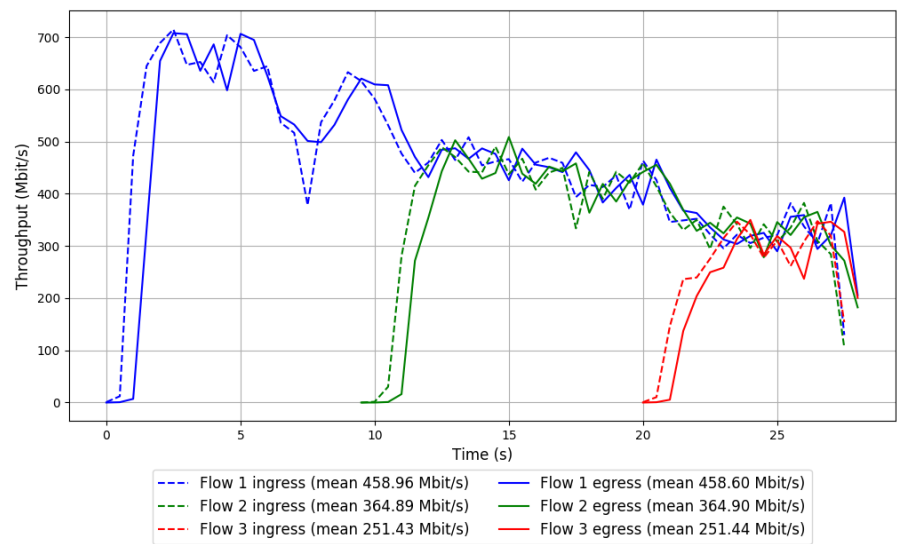


Run 4: Statistics of Indigo-MusesT

Start at: 2019-03-09 02:10:51
End at: 2019-03-09 02:11:21
Local clock offset: -0.072 ms
Remote clock offset: 0.004 ms

Below is generated by plot.py at 2019-03-09 05:13:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 763.39 Mbit/s
95th percentile per-packet one-way delay: 142.006 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 458.60 Mbit/s
95th percentile per-packet one-way delay: 172.493 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 364.90 Mbit/s
95th percentile per-packet one-way delay: 107.237 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 251.44 Mbit/s
95th percentile per-packet one-way delay: 90.580 ms
Loss rate: 0.00%

Run 4: Report of Indigo-MusesT — Data Link

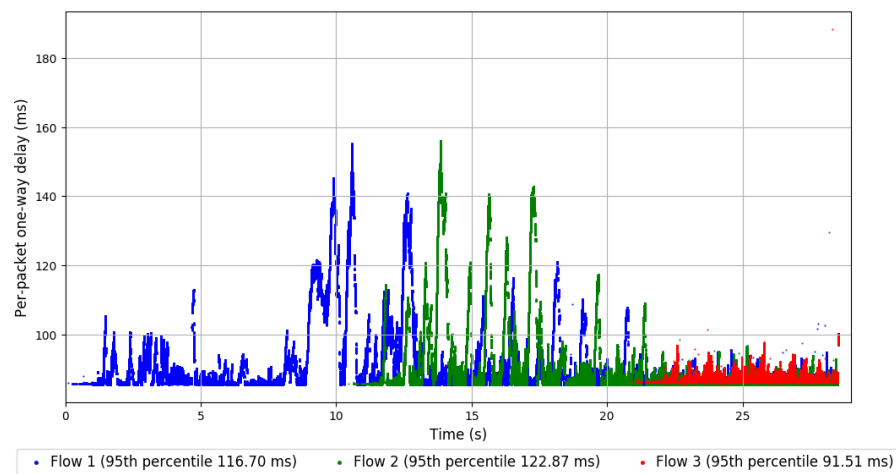
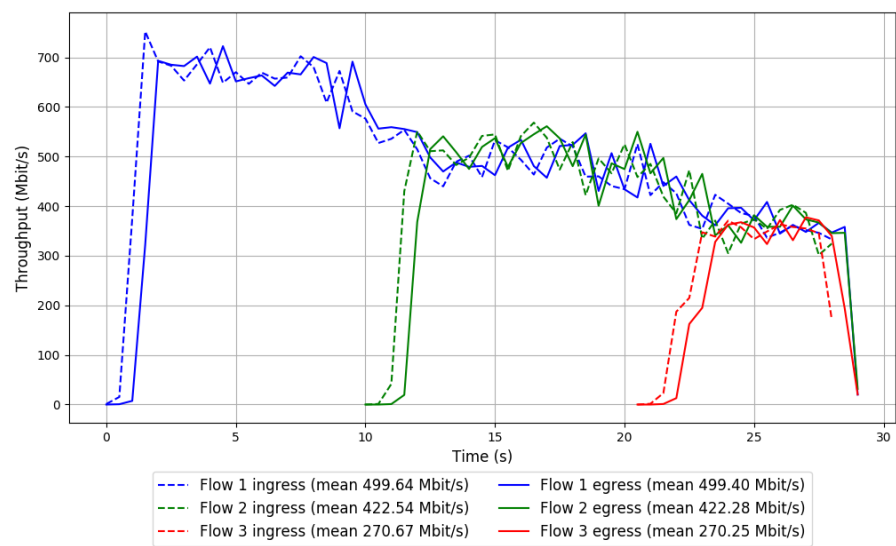


Run 5: Statistics of Indigo-MusesT

Start at: 2019-03-09 02:48:25
End at: 2019-03-09 02:48:55
Local clock offset: 0.318 ms
Remote clock offset: -0.008 ms

Below is generated by plot.py at 2019-03-09 05:16:33
Datalink statistics
-- Total of 3 flows:
Average throughput: 840.13 Mbit/s
95th percentile per-packet one-way delay: 116.505 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 499.40 Mbit/s
95th percentile per-packet one-way delay: 116.702 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 422.28 Mbit/s
95th percentile per-packet one-way delay: 122.871 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 270.25 Mbit/s
95th percentile per-packet one-way delay: 91.508 ms
Loss rate: 0.00%

Run 5: Report of Indigo-MusesT — Data Link

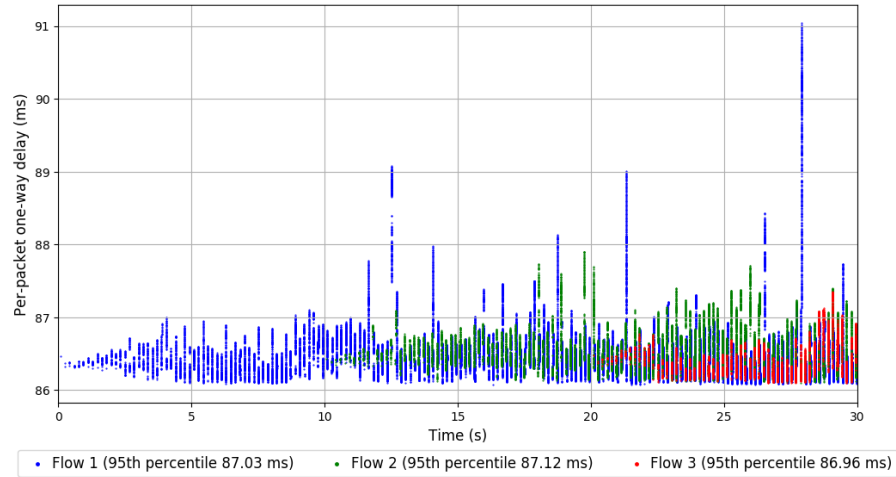
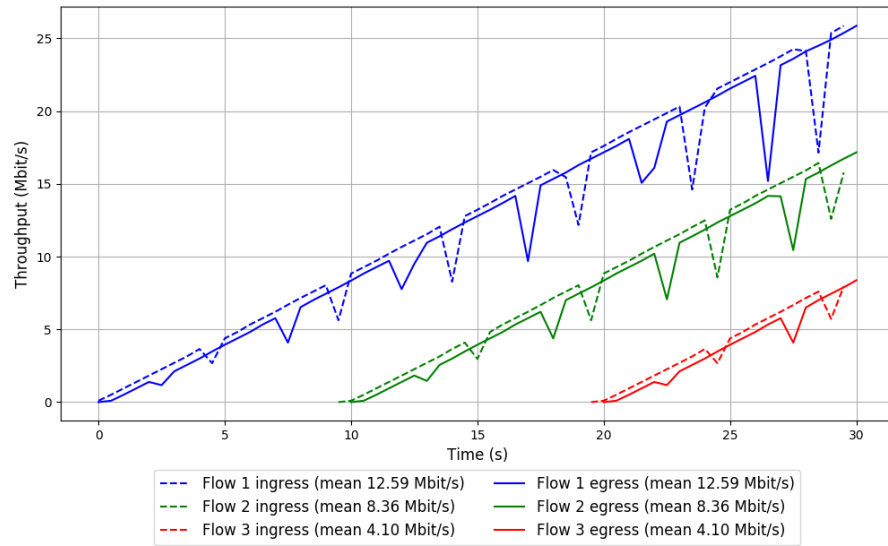


```
Run 1: Statistics of LEDBAT

Start at: 2019-03-09 00:27:24
End at: 2019-03-09 00:27:54
Local clock offset: -0.28 ms
Remote clock offset: 0.014 ms

# Below is generated by plot.py at 2019-03-09 05:16:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.51 Mbit/s
95th percentile per-packet one-way delay: 87.075 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.59 Mbit/s
95th percentile per-packet one-way delay: 87.030 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.36 Mbit/s
95th percentile per-packet one-way delay: 87.123 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 86.964 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

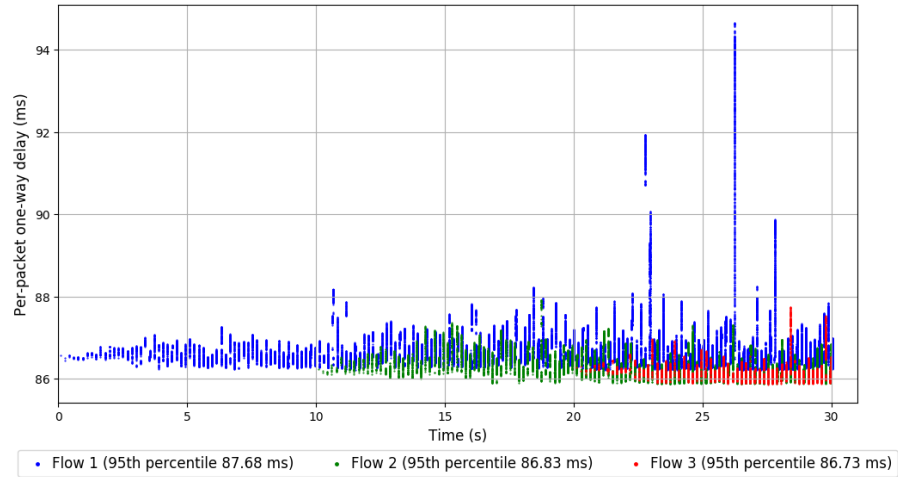
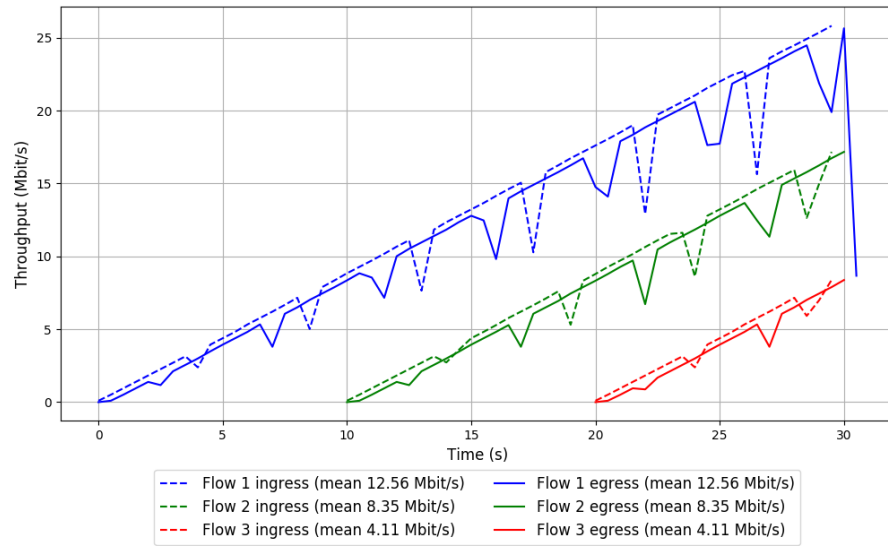


Run 2: Statistics of LEDBAT

Start at: 2019-03-09 01:04:24
End at: 2019-03-09 01:04:54
Local clock offset: -0.102 ms
Remote clock offset: -0.001 ms

Below is generated by plot.py at 2019-03-09 05:16:33
Datalink statistics
-- Total of 3 flows:
Average throughput: 19.44 Mbit/s
95th percentile per-packet one-way delay: 87.488 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.56 Mbit/s
95th percentile per-packet one-way delay: 87.682 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.35 Mbit/s
95th percentile per-packet one-way delay: 86.828 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.11 Mbit/s
95th percentile per-packet one-way delay: 86.730 ms
Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link

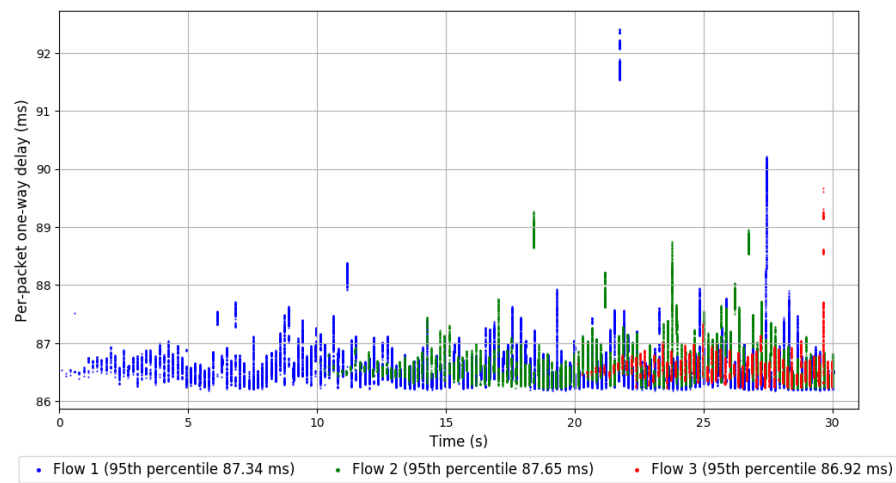
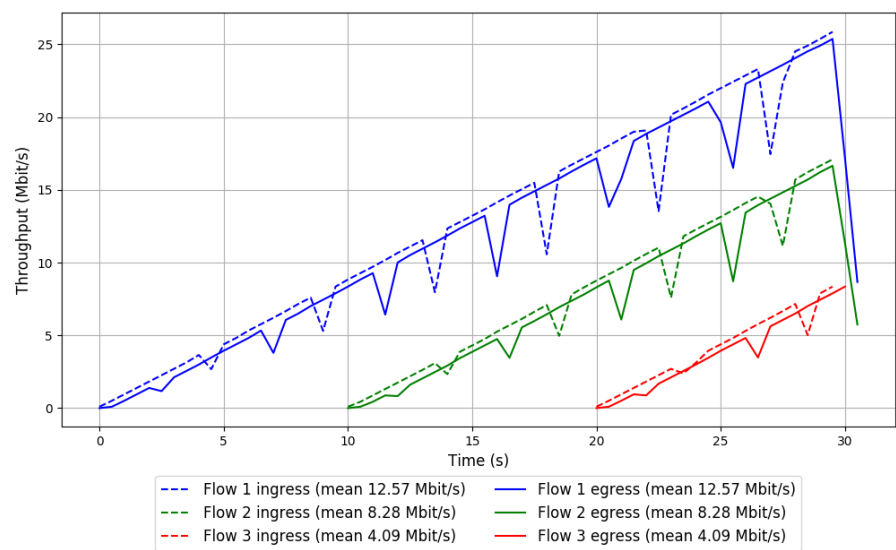


Run 3: Statistics of LEDBAT

Start at: 2019-03-09 01:41:58
End at: 2019-03-09 01:42:28
Local clock offset: -0.188 ms
Remote clock offset: -0.031 ms

Below is generated by plot.py at 2019-03-09 05:16:33
Datalink statistics
-- Total of 3 flows:
Average throughput: 19.43 Mbit/s
95th percentile per-packet one-way delay: 87.407 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.57 Mbit/s
95th percentile per-packet one-way delay: 87.336 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.28 Mbit/s
95th percentile per-packet one-way delay: 87.650 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.09 Mbit/s
95th percentile per-packet one-way delay: 86.924 ms
Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2019-03-09 02:19:09

End at: 2019-03-09 02:19:39

Local clock offset: -0.02 ms

Remote clock offset: 0.01 ms

Below is generated by plot.py at 2019-03-09 05:16:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 19.49 Mbit/s

95th percentile per-packet one-way delay: 87.054 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 12.58 Mbit/s

95th percentile per-packet one-way delay: 87.128 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 8.36 Mbit/s

95th percentile per-packet one-way delay: 86.893 ms

Loss rate: 0.00%

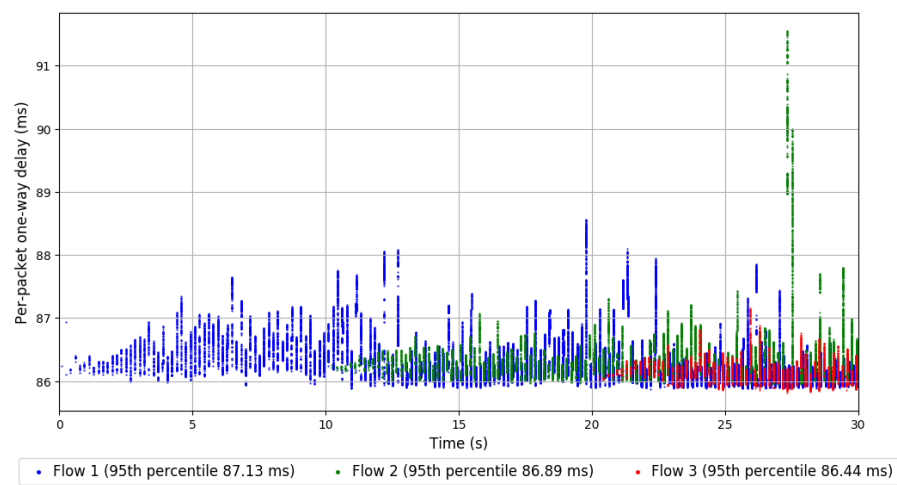
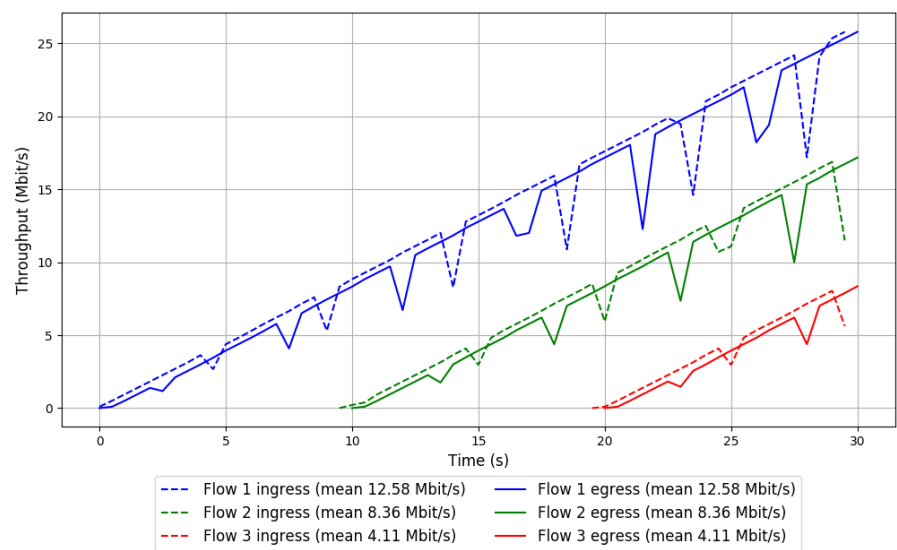
-- Flow 3:

Average throughput: 4.11 Mbit/s

95th percentile per-packet one-way delay: 86.441 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link

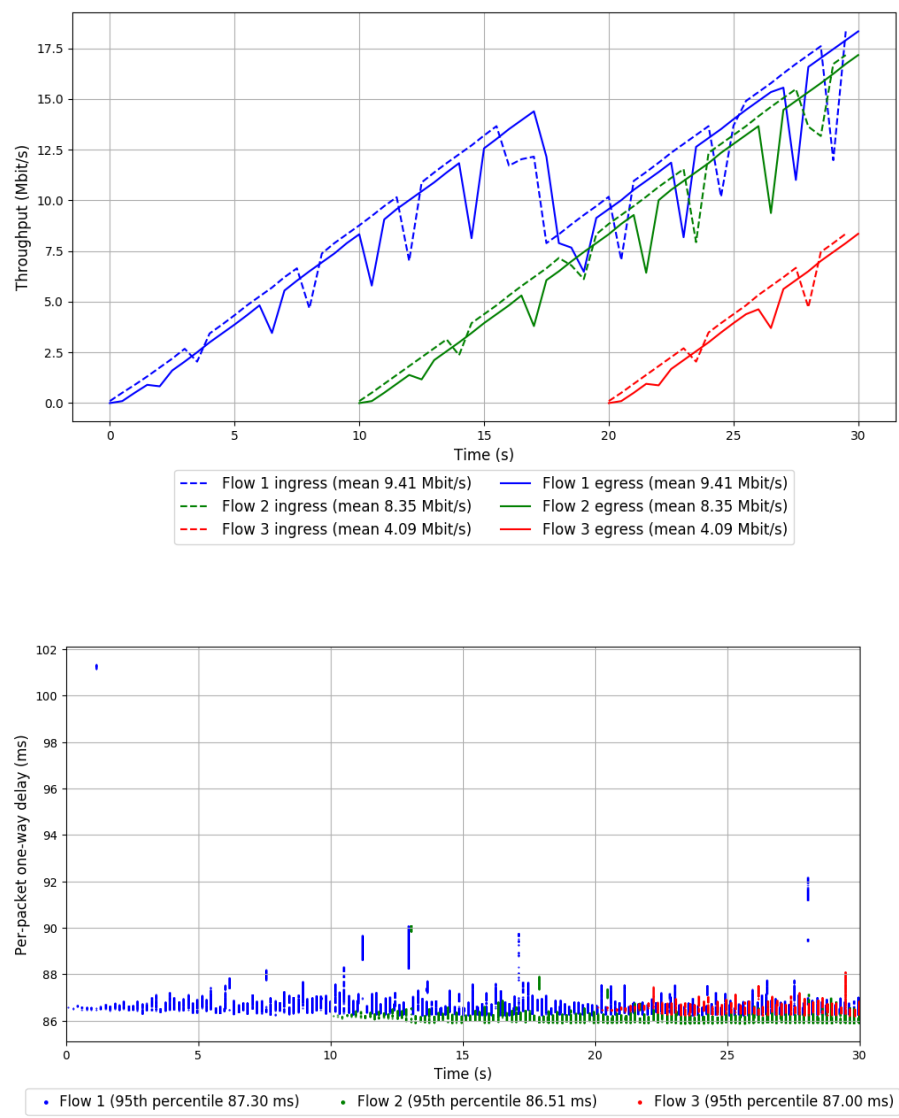


Run 5: Statistics of LEDBAT

Start at: 2019-03-09 02:56:57
End at: 2019-03-09 02:57:27
Local clock offset: -0.115 ms
Remote clock offset: -0.036 ms

Below is generated by plot.py at 2019-03-09 05:16:33
Datalink statistics
-- Total of 3 flows:
Average throughput: 16.31 Mbit/s
95th percentile per-packet one-way delay: 87.089 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.41 Mbit/s
95th percentile per-packet one-way delay: 87.301 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.35 Mbit/s
95th percentile per-packet one-way delay: 86.509 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.09 Mbit/s
95th percentile per-packet one-way delay: 87.002 ms
Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2019-03-09 00:37:18

End at: 2019-03-09 00:37:48

Local clock offset: 0.343 ms

Remote clock offset: 0.042 ms

Below is generated by plot.py at 2019-03-09 05:26:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 576.07 Mbit/s

95th percentile per-packet one-way delay: 239.111 ms

Loss rate: 1.82%

-- Flow 1:

Average throughput: 299.37 Mbit/s

95th percentile per-packet one-way delay: 238.596 ms

Loss rate: 1.70%

-- Flow 2:

Average throughput: 300.21 Mbit/s

95th percentile per-packet one-way delay: 252.926 ms

Loss rate: 2.67%

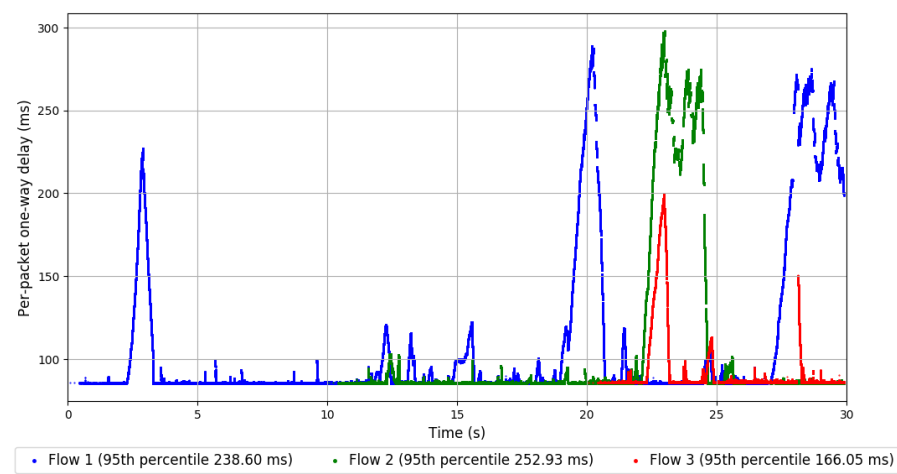
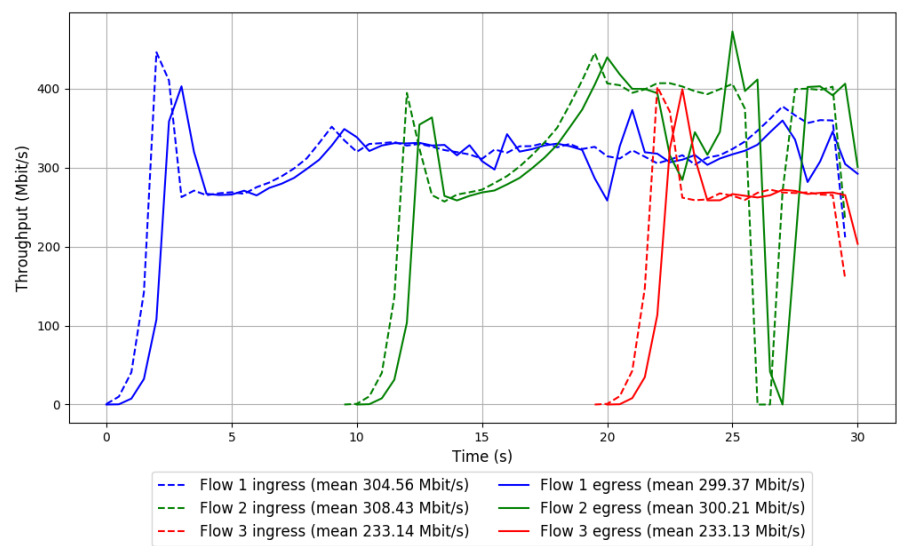
-- Flow 3:

Average throughput: 233.13 Mbit/s

95th percentile per-packet one-way delay: 166.054 ms

Loss rate: 0.01%

Run 1: Report of PCC-Allegro — Data Link

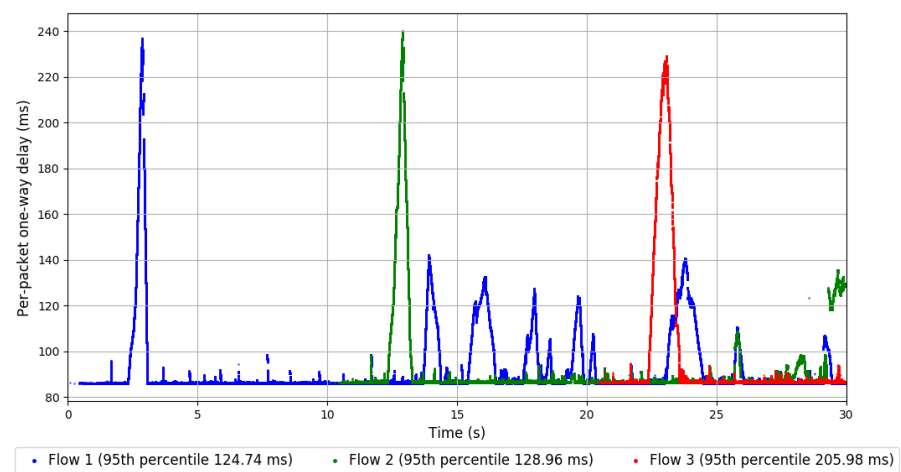
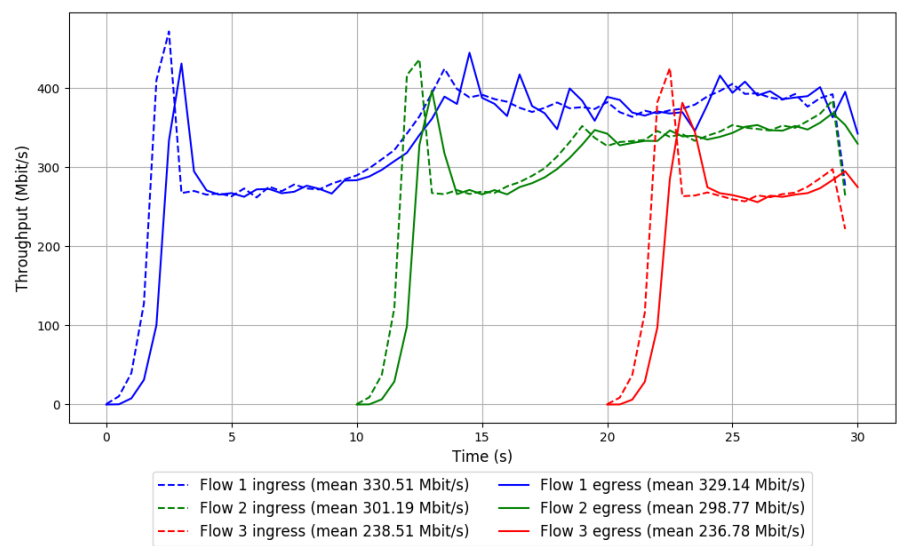


Run 2: Statistics of PCC-Allegro

Start at: 2019-03-09 01:14:22
End at: 2019-03-09 01:14:52
Local clock offset: -0.119 ms
Remote clock offset: -0.018 ms

Below is generated by plot.py at 2019-03-09 05:27:47
Datalink statistics
-- Total of 3 flows:
Average throughput: 605.62 Mbit/s
95th percentile per-packet one-way delay: 130.463 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 329.14 Mbit/s
95th percentile per-packet one-way delay: 124.739 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 298.77 Mbit/s
95th percentile per-packet one-way delay: 128.957 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 236.78 Mbit/s
95th percentile per-packet one-way delay: 205.981 ms
Loss rate: 0.73%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2019-03-09 01:51:52

End at: 2019-03-09 01:52:22

Local clock offset: 0.191 ms

Remote clock offset: -0.04 ms

Below is generated by plot.py at 2019-03-09 05:29:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 592.50 Mbit/s

95th percentile per-packet one-way delay: 199.784 ms

Loss rate: 1.88%

-- Flow 1:

Average throughput: 314.59 Mbit/s

95th percentile per-packet one-way delay: 202.393 ms

Loss rate: 2.51%

-- Flow 2:

Average throughput: 304.68 Mbit/s

95th percentile per-packet one-way delay: 145.906 ms

Loss rate: 1.20%

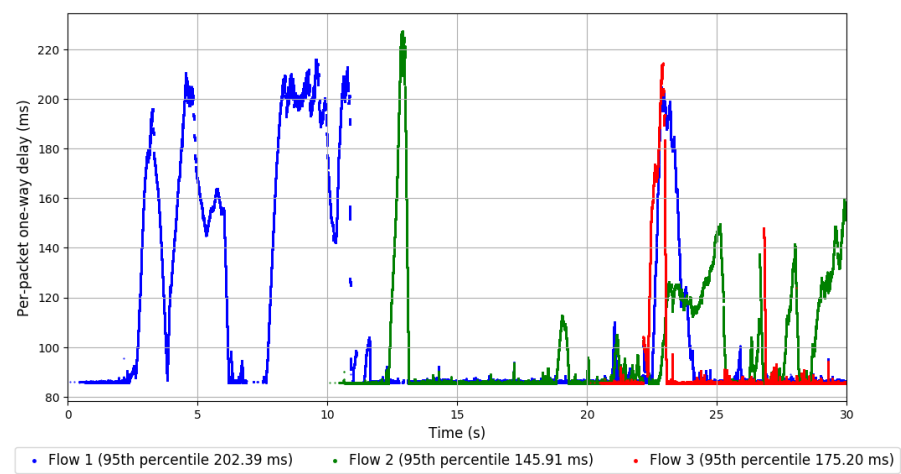
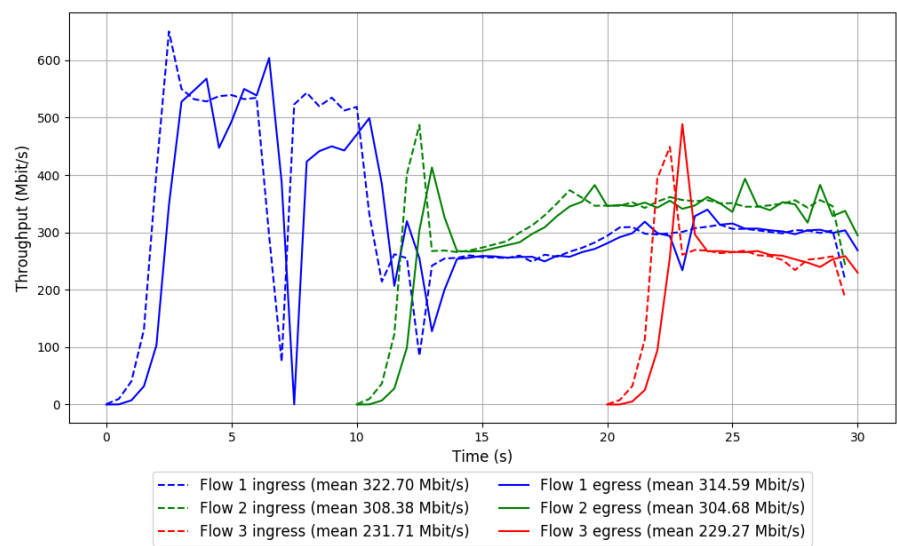
-- Flow 3:

Average throughput: 229.27 Mbit/s

95th percentile per-packet one-way delay: 175.200 ms

Loss rate: 1.05%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2019-03-09 02:29:11

End at: 2019-03-09 02:29:41

Local clock offset: 0.398 ms

Remote clock offset: 0.041 ms

Below is generated by plot.py at 2019-03-09 05:32:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 628.53 Mbit/s

95th percentile per-packet one-way delay: 223.670 ms

Loss rate: 2.20%

-- Flow 1:

Average throughput: 356.44 Mbit/s

95th percentile per-packet one-way delay: 234.651 ms

Loss rate: 3.30%

-- Flow 2:

Average throughput: 292.74 Mbit/s

95th percentile per-packet one-way delay: 131.268 ms

Loss rate: 0.50%

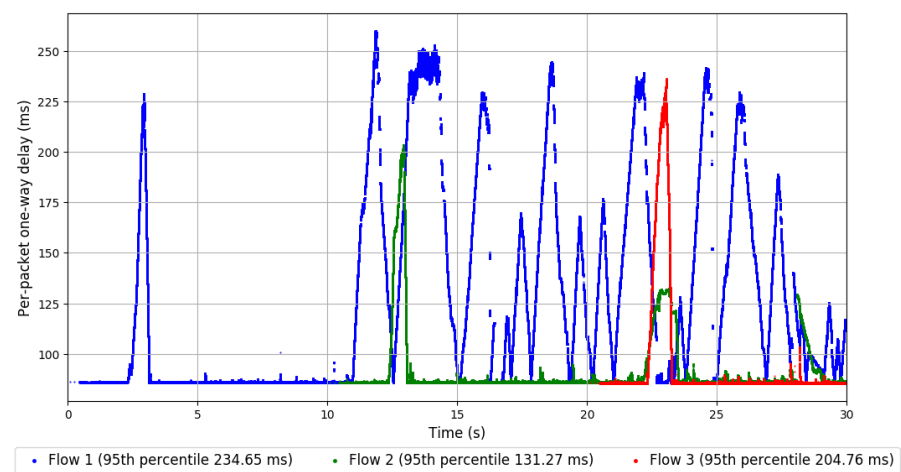
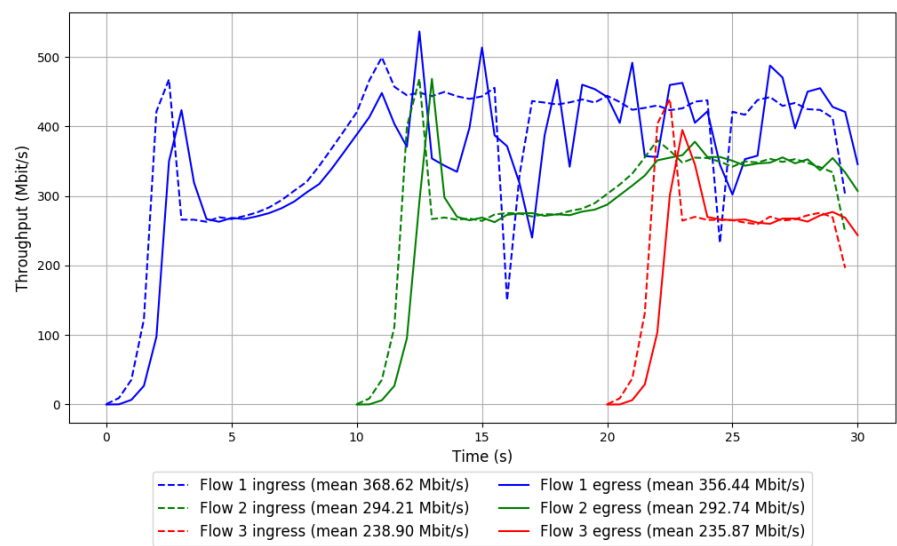
-- Flow 3:

Average throughput: 235.87 Mbit/s

95th percentile per-packet one-way delay: 204.756 ms

Loss rate: 1.27%

Run 4: Report of PCC-Allegro — Data Link

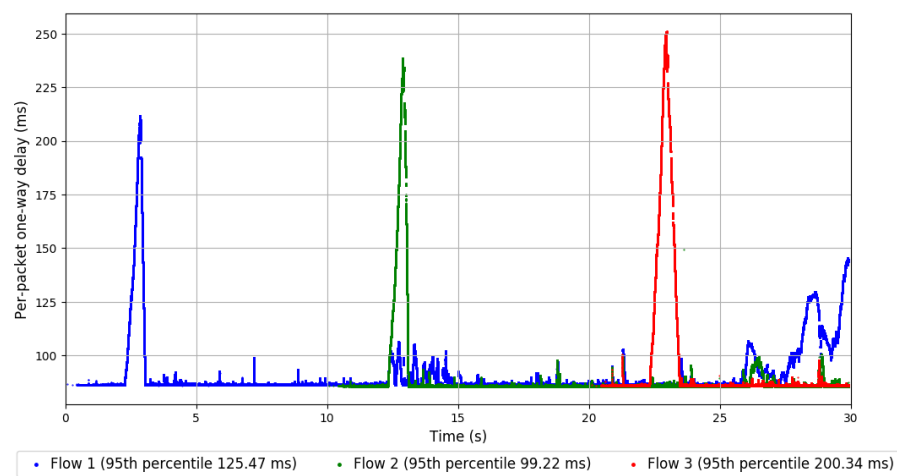
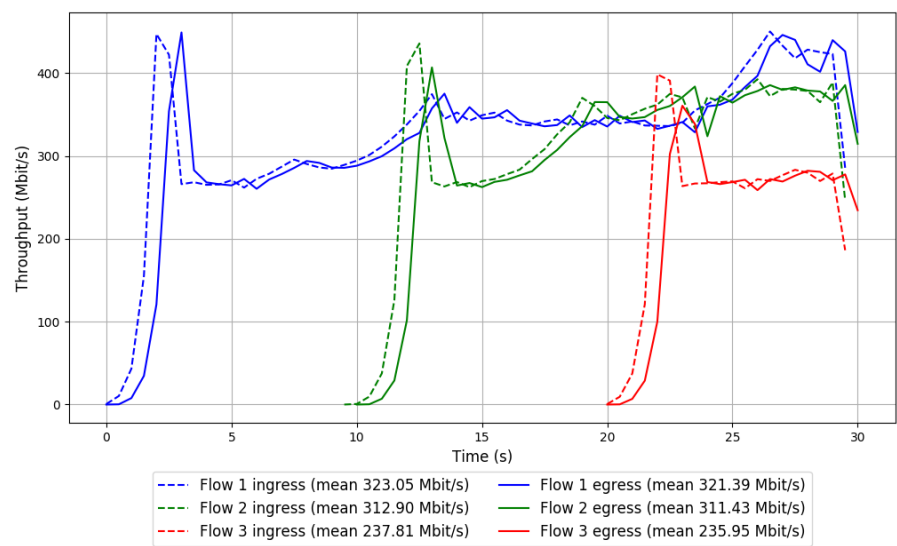


Run 5: Statistics of PCC-Allegro

Start at: 2019-03-09 03:06:31
End at: 2019-03-09 03:07:01
Local clock offset: 0.136 ms
Remote clock offset: -0.037 ms

Below is generated by plot.py at 2019-03-09 05:32:28
Datalink statistics
-- Total of 3 flows:
Average throughput: 606.23 Mbit/s
95th percentile per-packet one-way delay: 127.099 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 321.39 Mbit/s
95th percentile per-packet one-way delay: 125.465 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 311.43 Mbit/s
95th percentile per-packet one-way delay: 99.224 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 235.95 Mbit/s
95th percentile per-packet one-way delay: 200.342 ms
Loss rate: 0.78%

Run 5: Report of PCC-Allegro — Data Link

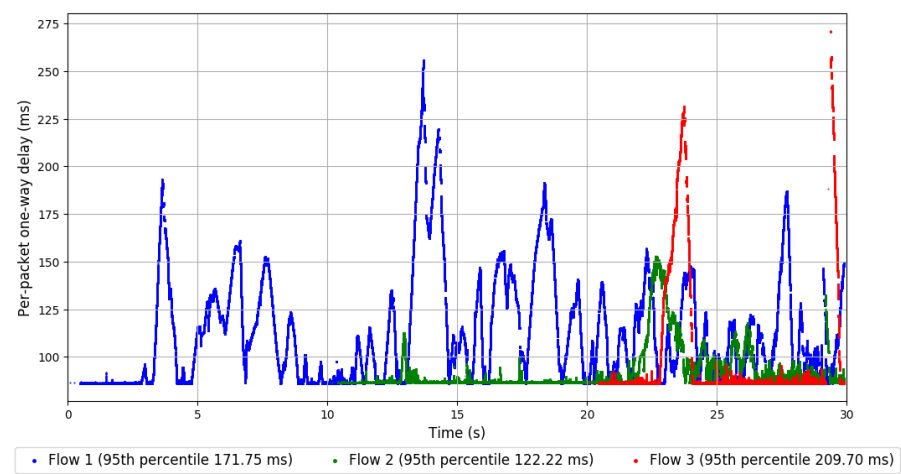
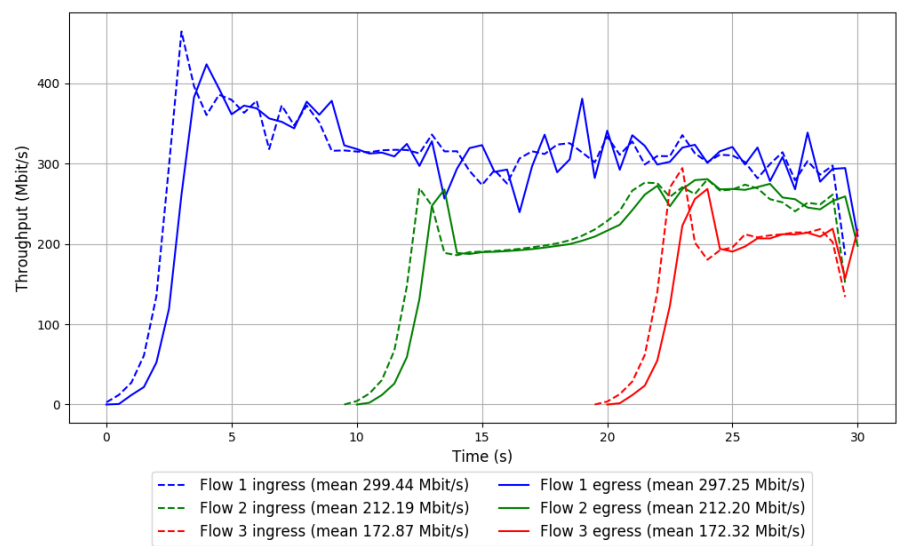


```
Run 1: Statistics of PCC-Expr

Start at: 2019-03-09 00:40:29
End at: 2019-03-09 00:40:59
Local clock offset: -0.324 ms
Remote clock offset: 0.038 ms

# Below is generated by plot.py at 2019-03-09 05:32:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 495.68 Mbit/s
95th percentile per-packet one-way delay: 167.837 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 297.25 Mbit/s
95th percentile per-packet one-way delay: 171.750 ms
Loss rate: 0.73%
-- Flow 2:
Average throughput: 212.20 Mbit/s
95th percentile per-packet one-way delay: 122.215 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 172.32 Mbit/s
95th percentile per-packet one-way delay: 209.701 ms
Loss rate: 0.32%
```

Run 1: Report of PCC-Expr — Data Link

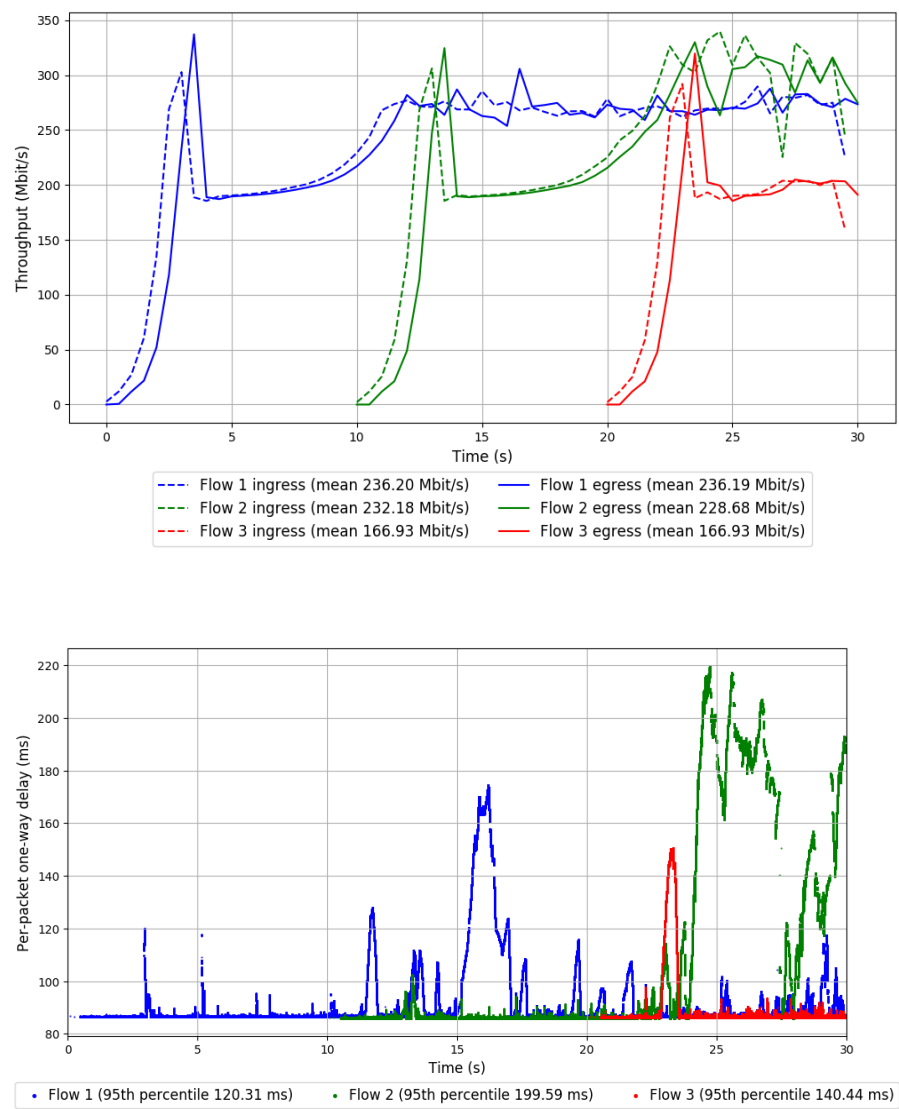


Run 2: Statistics of PCC-Expr

Start at: 2019-03-09 01:17:34
End at: 2019-03-09 01:18:04
Local clock offset: -0.133 ms
Remote clock offset: -0.026 ms

Below is generated by plot.py at 2019-03-09 05:32:28
Datalink statistics
-- Total of 3 flows:
Average throughput: 443.35 Mbit/s
95th percentile per-packet one-way delay: 183.452 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 236.19 Mbit/s
95th percentile per-packet one-way delay: 120.306 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 228.68 Mbit/s
95th percentile per-packet one-way delay: 199.594 ms
Loss rate: 1.51%
-- Flow 3:
Average throughput: 166.93 Mbit/s
95th percentile per-packet one-way delay: 140.437 ms
Loss rate: 0.03%

Run 2: Report of PCC-Expr — Data Link

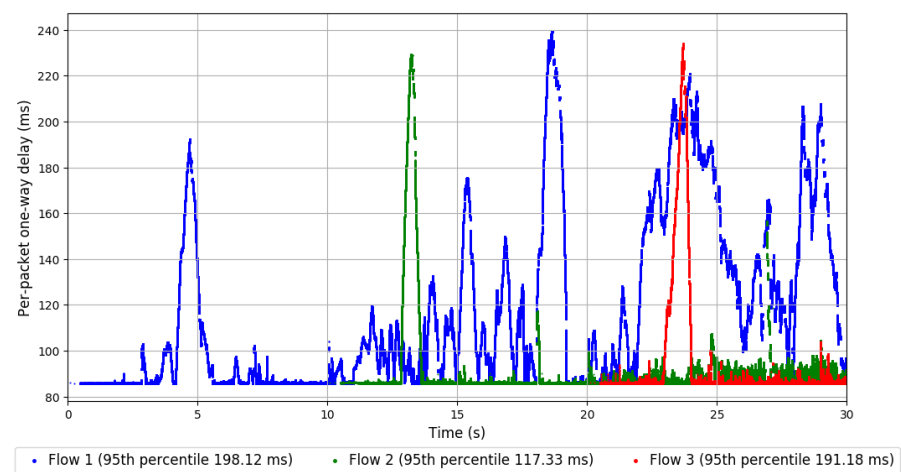
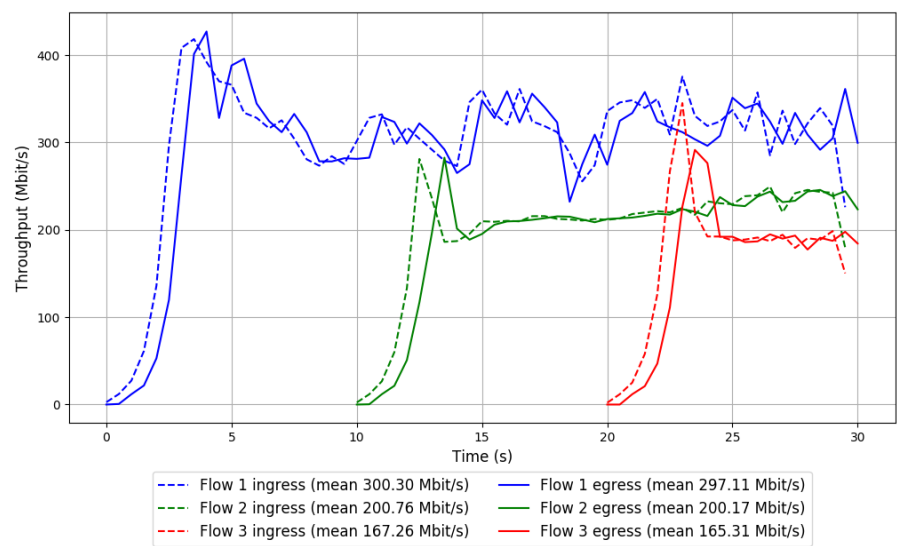


Run 3: Statistics of PCC-Expr

Start at: 2019-03-09 01:55:05
End at: 2019-03-09 01:55:35
Local clock offset: -0.194 ms
Remote clock offset: -0.097 ms

Below is generated by plot.py at 2019-03-09 05:35:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 484.75 Mbit/s
95th percentile per-packet one-way delay: 192.987 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 297.11 Mbit/s
95th percentile per-packet one-way delay: 198.120 ms
Loss rate: 1.06%
-- Flow 2:
Average throughput: 200.17 Mbit/s
95th percentile per-packet one-way delay: 117.330 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 165.31 Mbit/s
95th percentile per-packet one-way delay: 191.183 ms
Loss rate: 1.16%

Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2019-03-09 02:32:27

End at: 2019-03-09 02:32:57

Local clock offset: -0.157 ms

Remote clock offset: 0.028 ms

Below is generated by plot.py at 2019-03-09 05:43:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 484.64 Mbit/s

95th percentile per-packet one-way delay: 164.023 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 286.17 Mbit/s

95th percentile per-packet one-way delay: 170.479 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 220.67 Mbit/s

95th percentile per-packet one-way delay: 112.926 ms

Loss rate: 0.00%

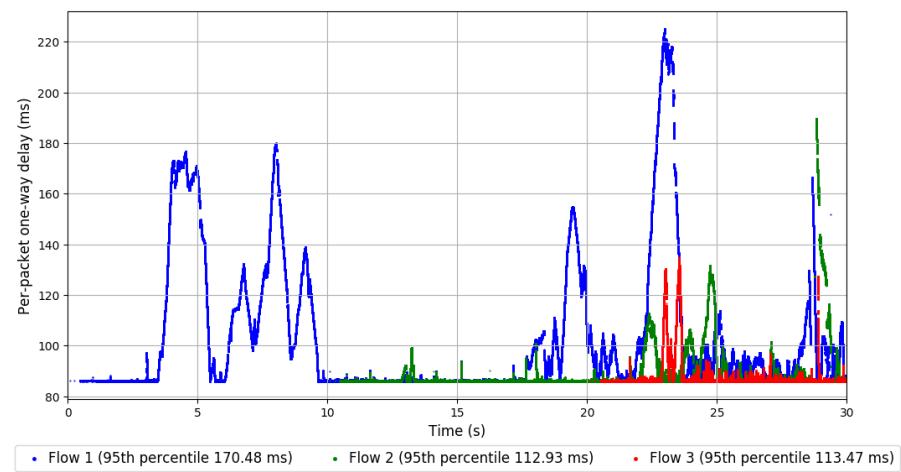
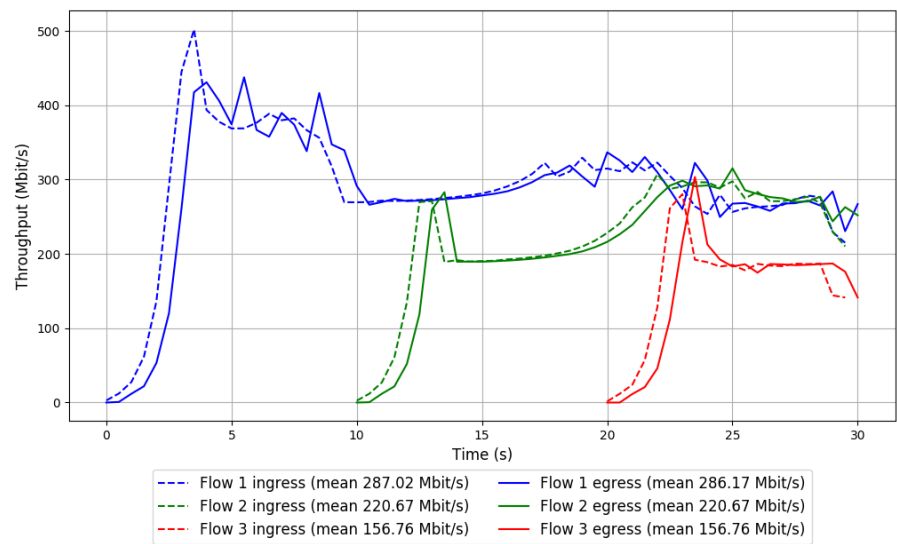
-- Flow 3:

Average throughput: 156.76 Mbit/s

95th percentile per-packet one-way delay: 113.473 ms

Loss rate: 0.00%

Run 4: Report of PCC-Expr — Data Link

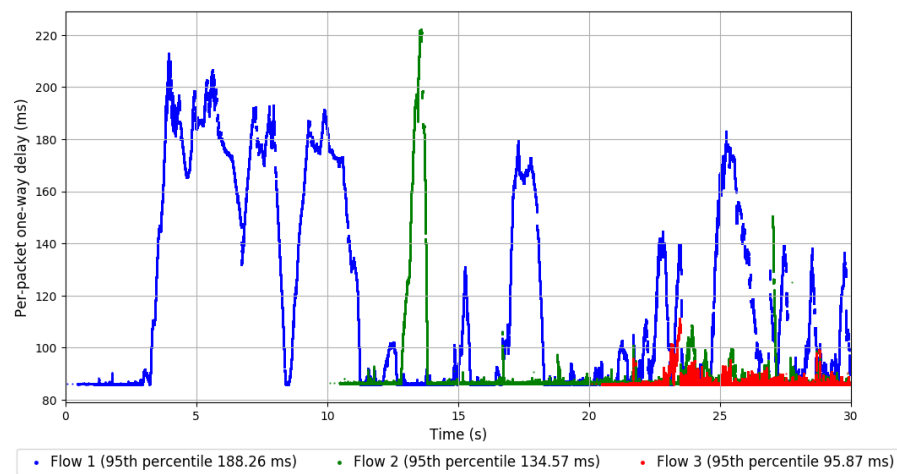
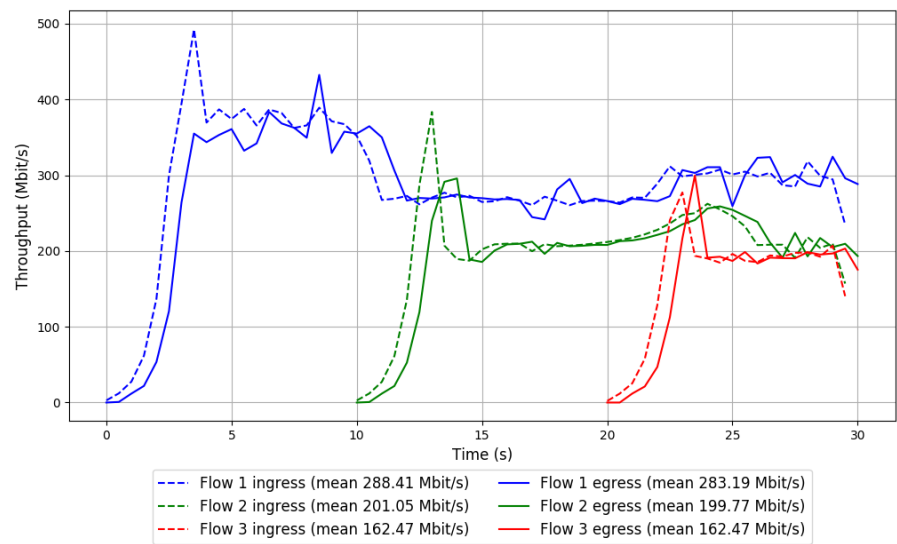


Run 5: Statistics of PCC-Expr

Start at: 2019-03-09 03:09:43
End at: 2019-03-09 03:10:13
Local clock offset: -0.066 ms
Remote clock offset: -0.018 ms

Below is generated by plot.py at 2019-03-09 05:44:47
Datalink statistics
-- Total of 3 flows:
Average throughput: 469.66 Mbit/s
95th percentile per-packet one-way delay: 186.155 ms
Loss rate: 1.27%
-- Flow 1:
Average throughput: 283.19 Mbit/s
95th percentile per-packet one-way delay: 188.259 ms
Loss rate: 1.81%
-- Flow 2:
Average throughput: 199.77 Mbit/s
95th percentile per-packet one-way delay: 134.572 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 162.47 Mbit/s
95th percentile per-packet one-way delay: 95.868 ms
Loss rate: 0.00%

Run 5: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2019-03-09 00:28:41

End at: 2019-03-09 00:29:11

Local clock offset: -0.339 ms

Remote clock offset: 0.031 ms

Below is generated by plot.py at 2019-03-09 05:44:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 61.82 Mbit/s

95th percentile per-packet one-way delay: 86.617 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 86.349 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.63 Mbit/s

95th percentile per-packet one-way delay: 86.643 ms

Loss rate: 0.00%

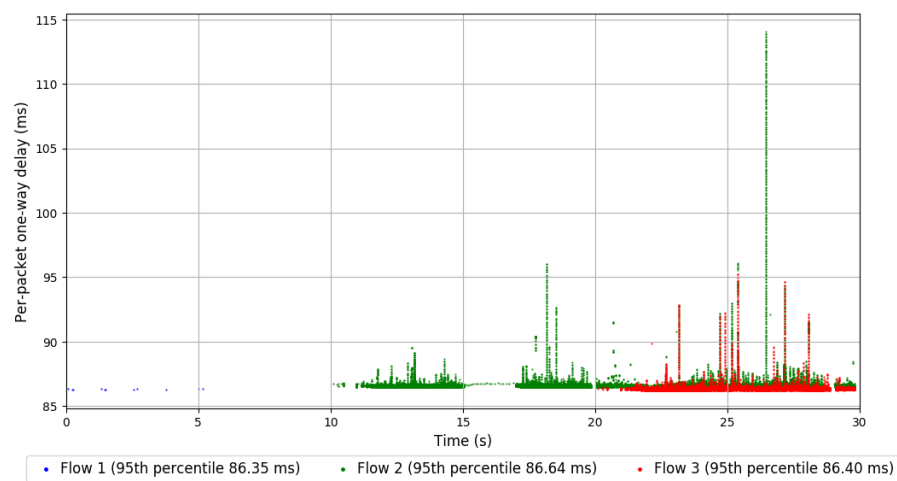
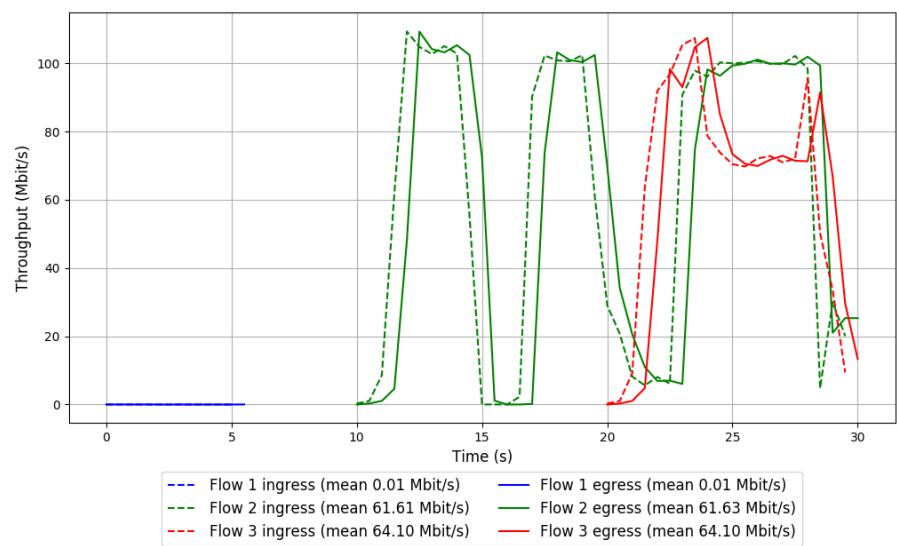
-- Flow 3:

Average throughput: 64.10 Mbit/s

95th percentile per-packet one-way delay: 86.403 ms

Loss rate: 0.00%

Run 1: Report of QUIC Cubic — Data Link

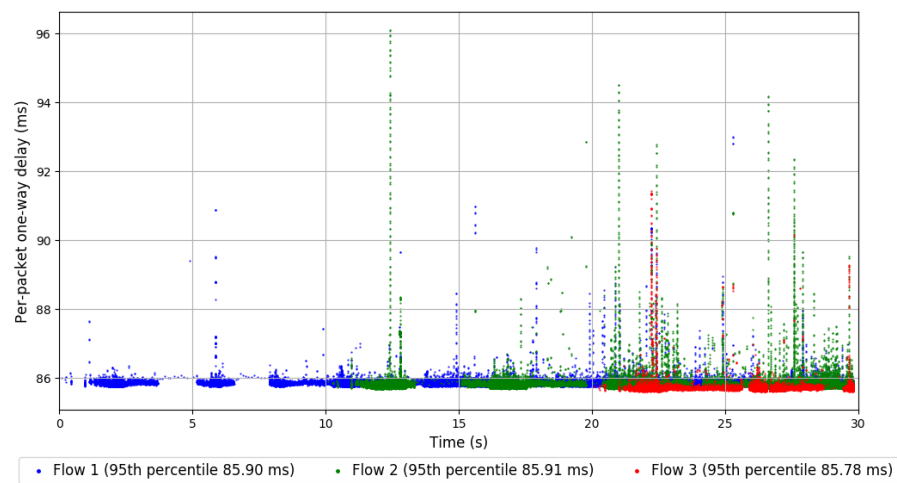
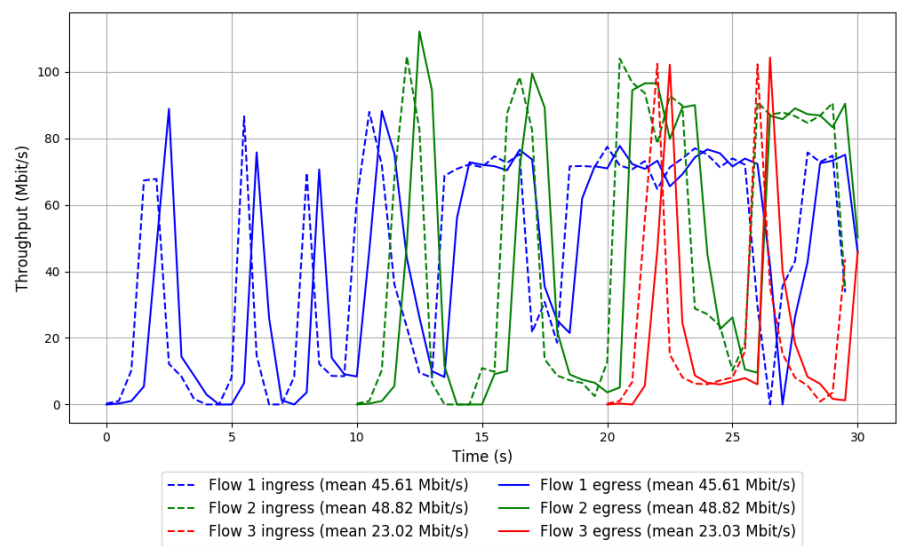


Run 2: Statistics of QUIC Cubic

Start at: 2019-03-09 01:05:42
End at: 2019-03-09 01:06:12
Local clock offset: 0.093 ms
Remote clock offset: -0.013 ms

Below is generated by plot.py at 2019-03-09 05:44:47
Datalink statistics
-- Total of 3 flows:
Average throughput: 85.52 Mbit/s
95th percentile per-packet one-way delay: 85.900 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 45.61 Mbit/s
95th percentile per-packet one-way delay: 85.902 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 48.82 Mbit/s
95th percentile per-packet one-way delay: 85.907 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 23.03 Mbit/s
95th percentile per-packet one-way delay: 85.775 ms
Loss rate: 0.01%

Run 2: Report of QUIC Cubic — Data Link

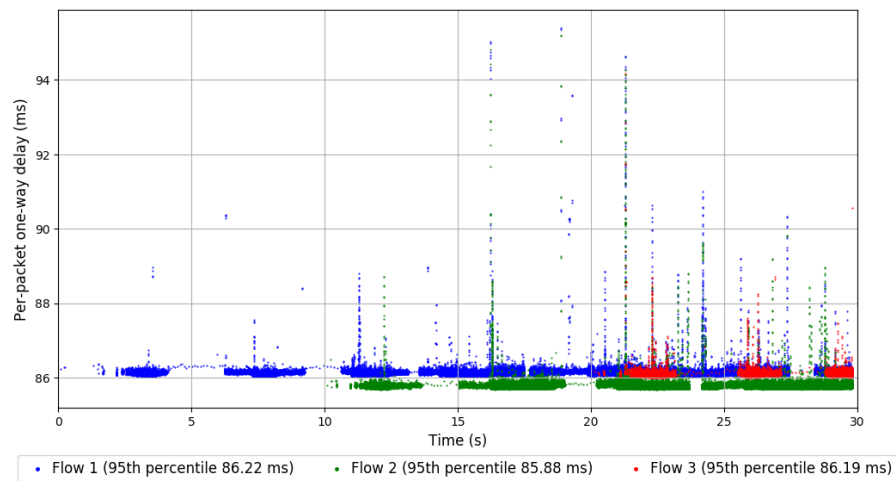
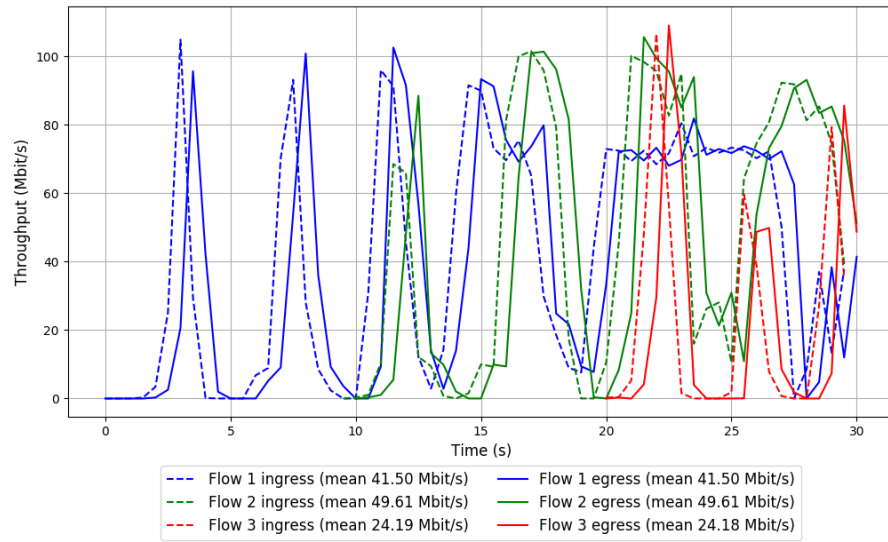


Run 3: Statistics of QUIC Cubic

Start at: 2019-03-09 01:43:15
End at: 2019-03-09 01:43:45
Local clock offset: -0.019 ms
Remote clock offset: -0.073 ms

Below is generated by plot.py at 2019-03-09 05:44:47
Datalink statistics
-- Total of 3 flows:
Average throughput: 82.30 Mbit/s
95th percentile per-packet one-way delay: 86.196 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.50 Mbit/s
95th percentile per-packet one-way delay: 86.219 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 49.61 Mbit/s
95th percentile per-packet one-way delay: 85.880 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.18 Mbit/s
95th percentile per-packet one-way delay: 86.188 ms
Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2019-03-09 02:20:27

End at: 2019-03-09 02:20:57

Local clock offset: -0.211 ms

Remote clock offset: 0.03 ms

Below is generated by plot.py at 2019-03-09 05:44:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.88 Mbit/s

95th percentile per-packet one-way delay: 86.243 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 49.63 Mbit/s

95th percentile per-packet one-way delay: 86.237 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 59.04 Mbit/s

95th percentile per-packet one-way delay: 86.251 ms

Loss rate: 0.00%

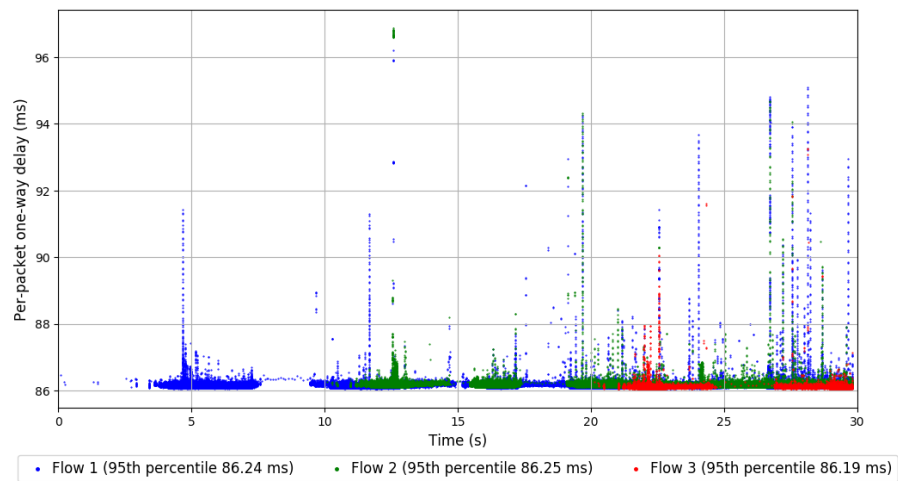
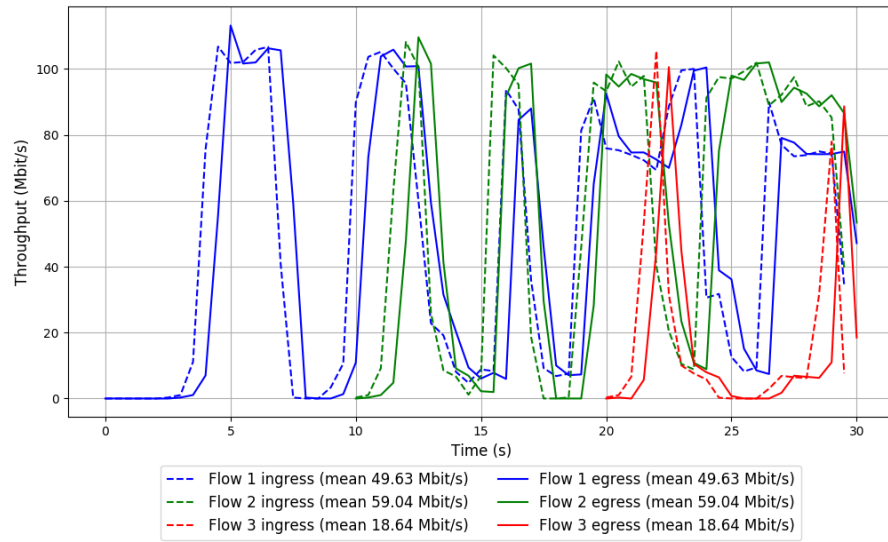
-- Flow 3:

Average throughput: 18.64 Mbit/s

95th percentile per-packet one-way delay: 86.190 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link

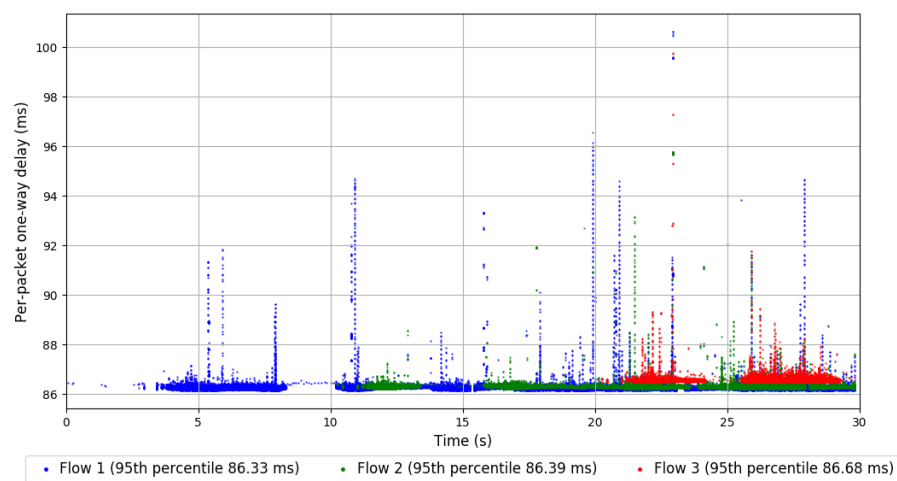
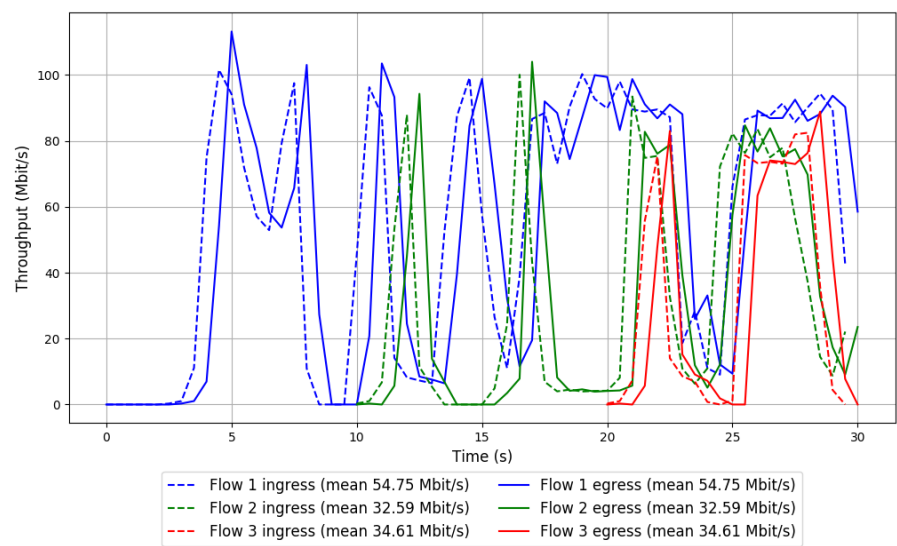


Run 5: Statistics of QUIC Cubic

Start at: 2019-03-09 02:58:14
End at: 2019-03-09 02:58:44
Local clock offset: -0.089 ms
Remote clock offset: -0.055 ms

Below is generated by plot.py at 2019-03-09 05:44:47
Datalink statistics
-- Total of 3 flows:
Average throughput: 87.67 Mbit/s
95th percentile per-packet one-way delay: 86.566 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.75 Mbit/s
95th percentile per-packet one-way delay: 86.332 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.59 Mbit/s
95th percentile per-packet one-way delay: 86.385 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 34.61 Mbit/s
95th percentile per-packet one-way delay: 86.681 ms
Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link

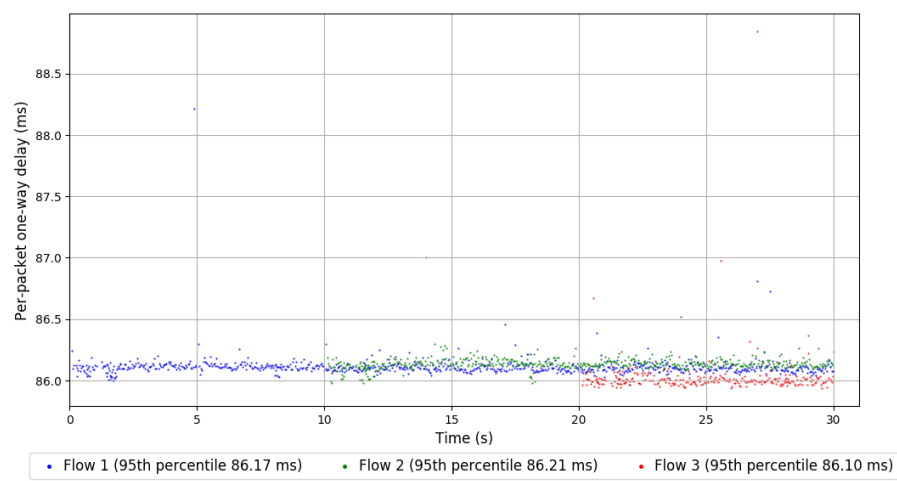
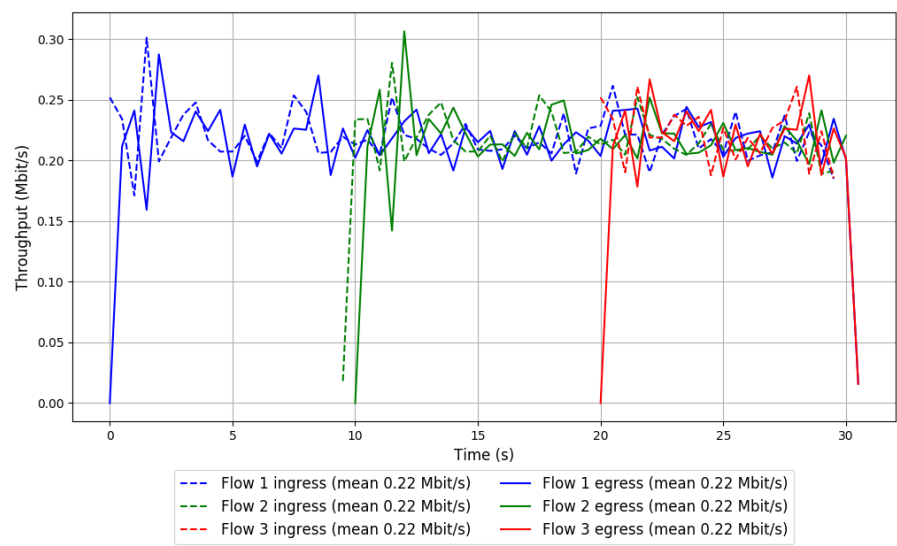


```
Run 1: Statistics of SCReAM

Start at: 2019-03-09 00:39:15
End at: 2019-03-09 00:39:45
Local clock offset: -0.045 ms
Remote clock offset: 0.029 ms

# Below is generated by plot.py at 2019-03-09 05:44:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.188 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.169 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.206 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.096 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link



Run 2: Statistics of SReAM

Start at: 2019-03-09 01:16:20

End at: 2019-03-09 01:16:50

Local clock offset: -0.55 ms

Remote clock offset: -0.04 ms

Below is generated by plot.py at 2019-03-09 05:44:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 87.162 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.953 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.562 ms

Loss rate: 0.00%

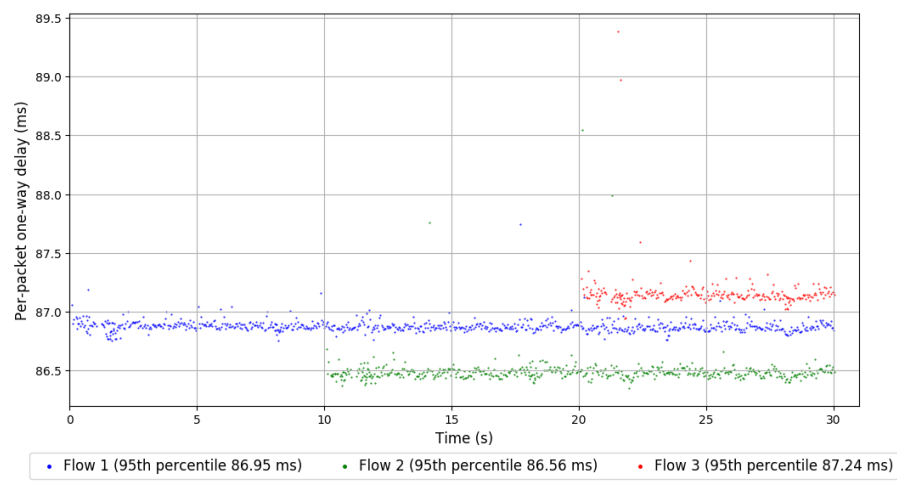
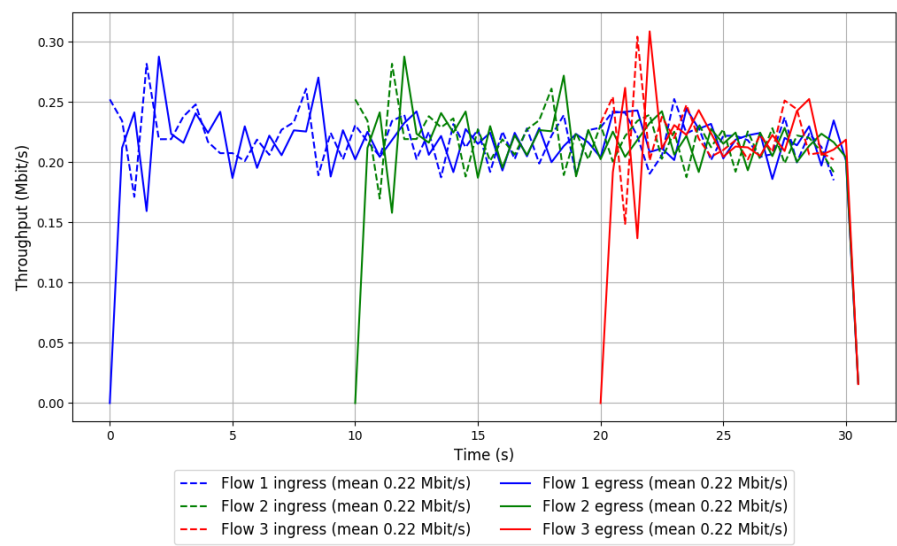
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.243 ms

Loss rate: 0.00%

Run 2: Report of SReAM — Data Link

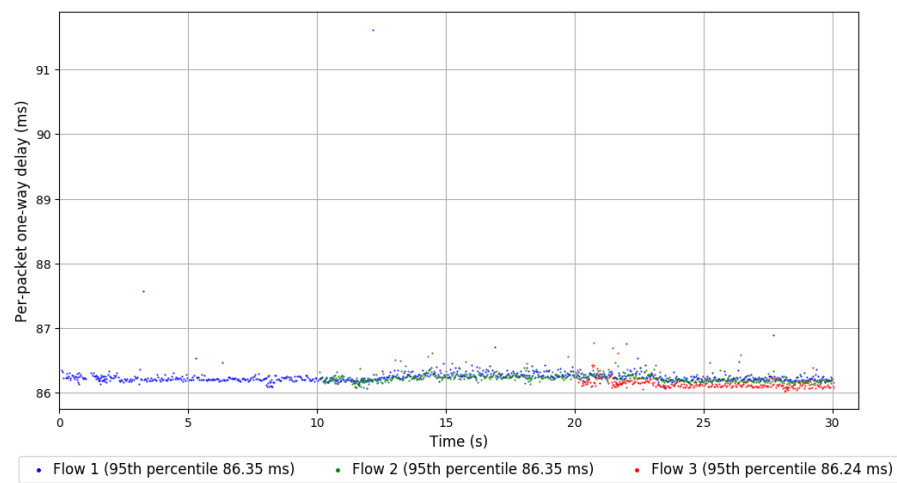
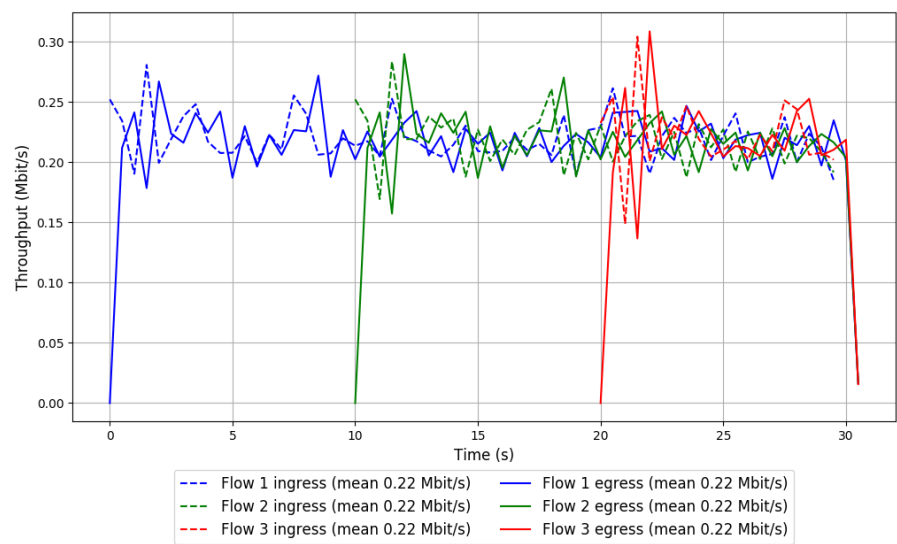


Run 3: Statistics of SReAM

Start at: 2019-03-09 01:53:50
End at: 2019-03-09 01:54:20
Local clock offset: -0.207 ms
Remote clock offset: -0.057 ms

Below is generated by plot.py at 2019-03-09 05:44:47
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.346 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.348 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.352 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.242 ms
Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SReAM

Start at: 2019-03-09 02:31:12

End at: 2019-03-09 02:31:42

Local clock offset: 0.232 ms

Remote clock offset: 0.029 ms

Below is generated by plot.py at 2019-03-09 05:44:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 86.274 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.290 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.018 ms

Loss rate: 0.00%

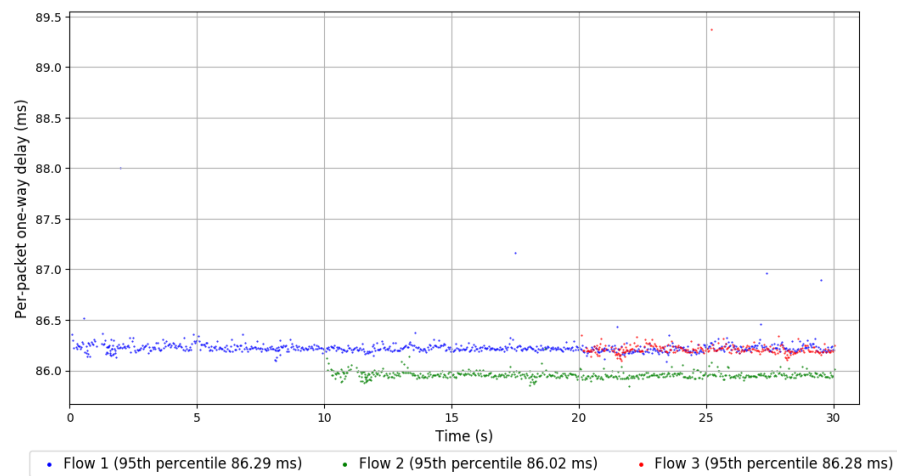
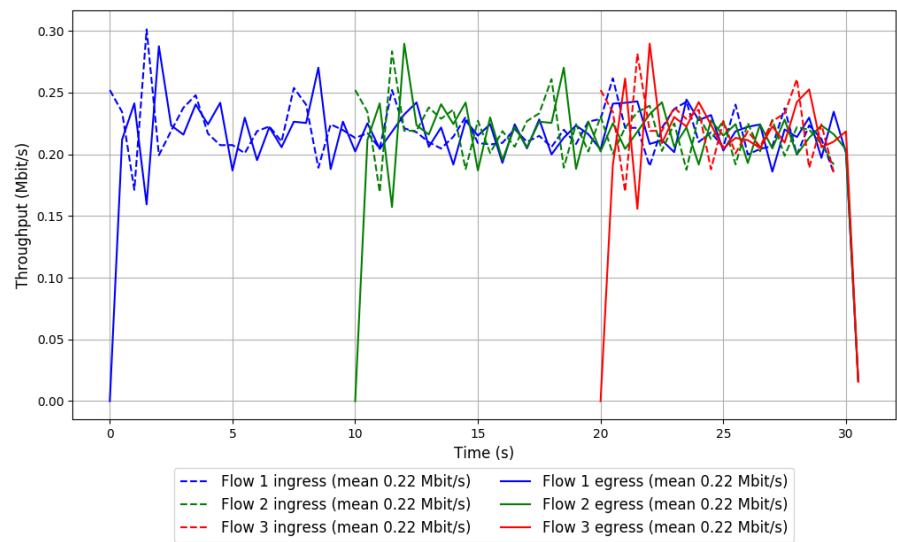
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.276 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link

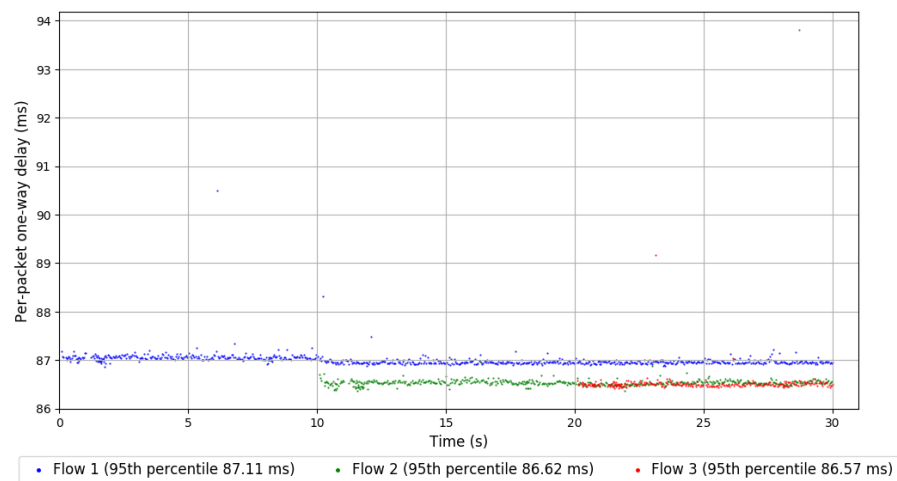
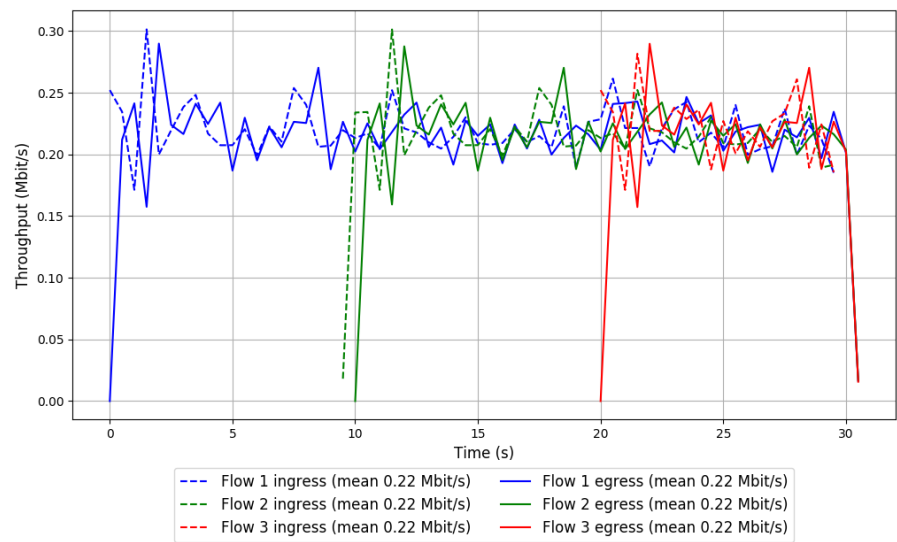


Run 5: Statistics of SReAM

Start at: 2019-03-09 03:08:29
End at: 2019-03-09 03:08:59
Local clock offset: -0.401 ms
Remote clock offset: -0.007 ms

Below is generated by plot.py at 2019-03-09 05:44:47
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 87.083 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.112 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.616 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.574 ms
Loss rate: 0.00%

Run 5: Report of SReAM — Data Link

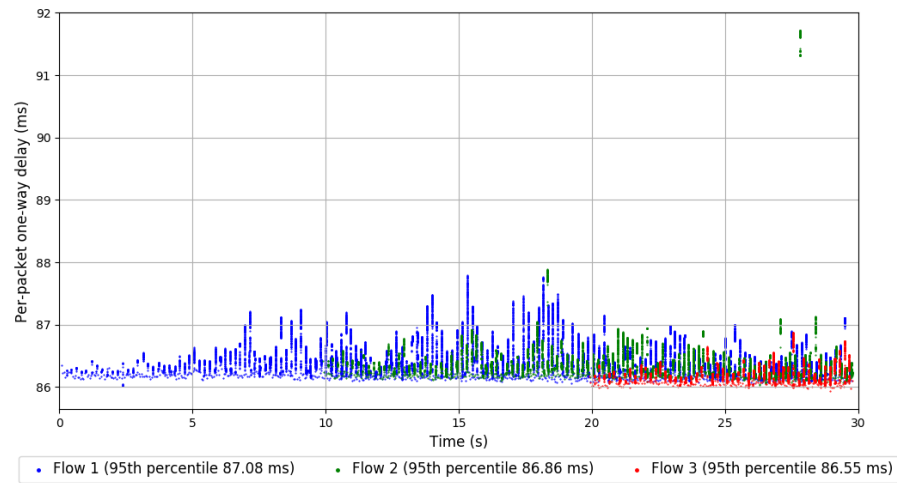
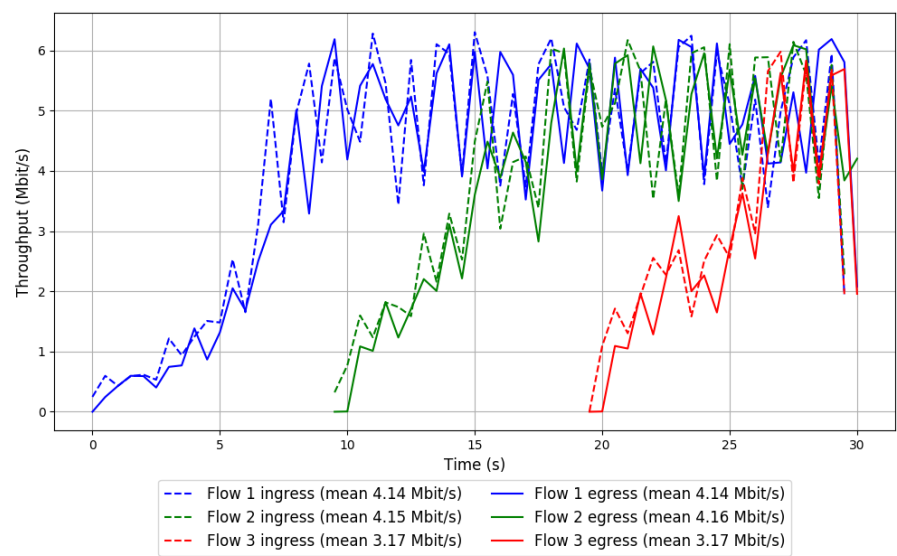


Run 1: Statistics of Sprout

Start at: 2019-03-09 00:16:07
End at: 2019-03-09 00:16:37
Local clock offset: -0.161 ms
Remote clock offset: -0.016 ms

Below is generated by plot.py at 2019-03-09 05:44:47
Datalink statistics
-- Total of 3 flows:
Average throughput: 7.97 Mbit/s
95th percentile per-packet one-way delay: 86.984 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.14 Mbit/s
95th percentile per-packet one-way delay: 87.080 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.16 Mbit/s
95th percentile per-packet one-way delay: 86.862 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.17 Mbit/s
95th percentile per-packet one-way delay: 86.552 ms
Loss rate: 0.00%

Run 1: Report of Sprout — Data Link

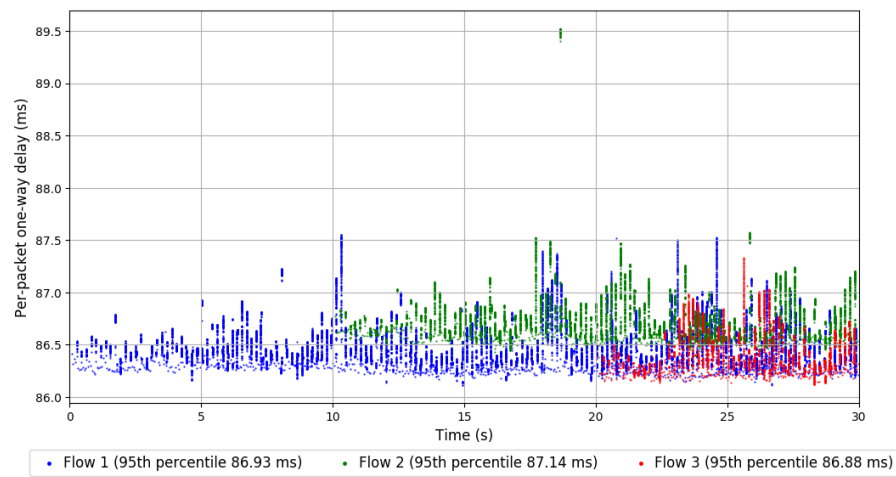
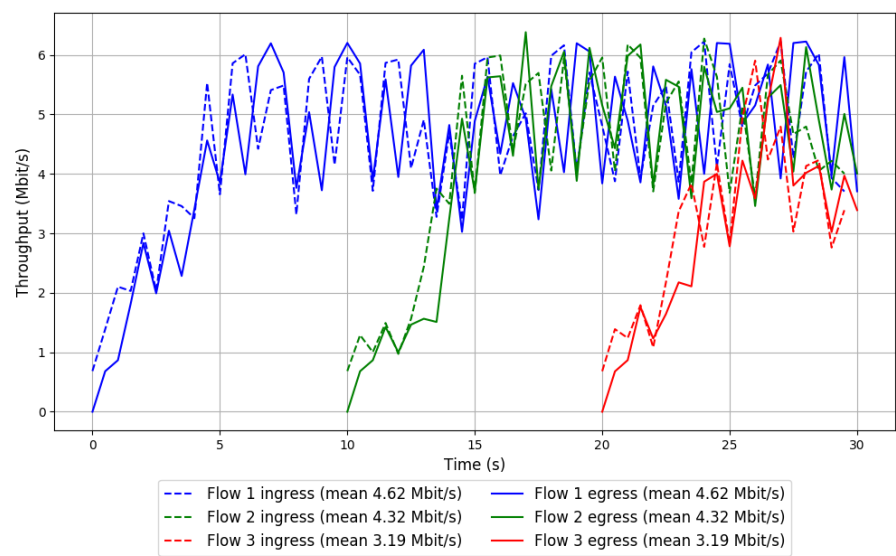


Run 2: Statistics of Sprout

Start at: 2019-03-09 00:53:11
End at: 2019-03-09 00:53:41
Local clock offset: -0.233 ms
Remote clock offset: 0.06 ms

Below is generated by plot.py at 2019-03-09 05:44:47
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.54 Mbit/s
95th percentile per-packet one-way delay: 87.039 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.62 Mbit/s
95th percentile per-packet one-way delay: 86.933 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.32 Mbit/s
95th percentile per-packet one-way delay: 87.141 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.19 Mbit/s
95th percentile per-packet one-way delay: 86.882 ms
Loss rate: 0.00%

Run 2: Report of Sprout — Data Link

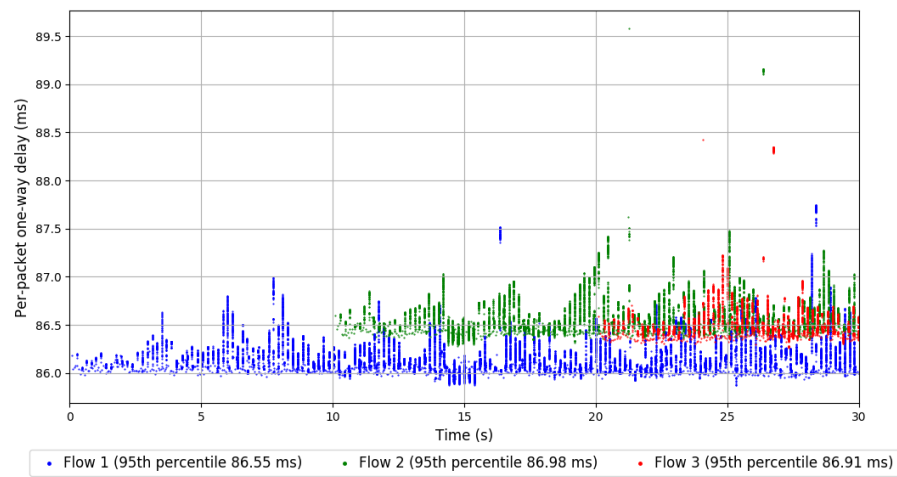
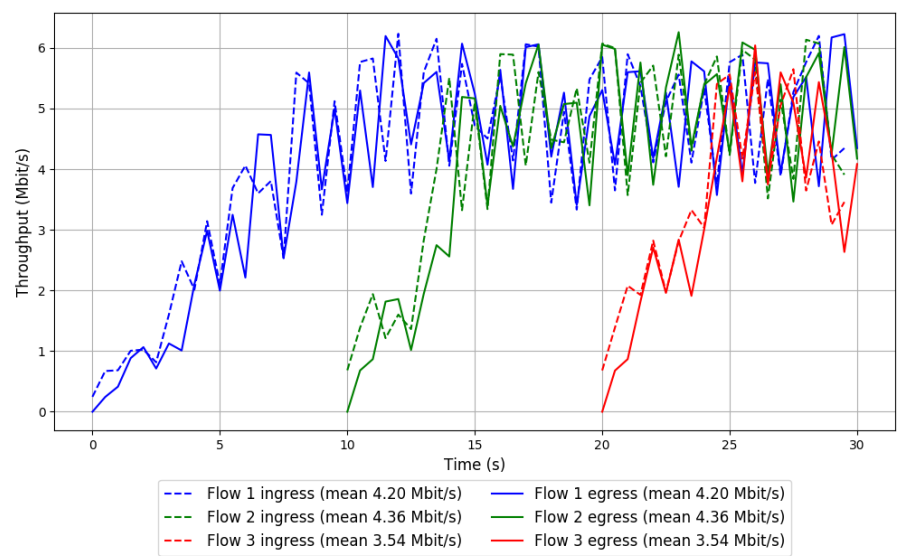


Run 3: Statistics of Sprout

Start at: 2019-03-09 01:30:23
End at: 2019-03-09 01:30:53
Local clock offset: -0.19 ms
Remote clock offset: -0.04 ms

```
# Below is generated by plot.py at 2019-03-09 05:44:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.27 Mbit/s
95th percentile per-packet one-way delay: 86.875 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.20 Mbit/s
95th percentile per-packet one-way delay: 86.550 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.36 Mbit/s
95th percentile per-packet one-way delay: 86.985 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.54 Mbit/s
95th percentile per-packet one-way delay: 86.909 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

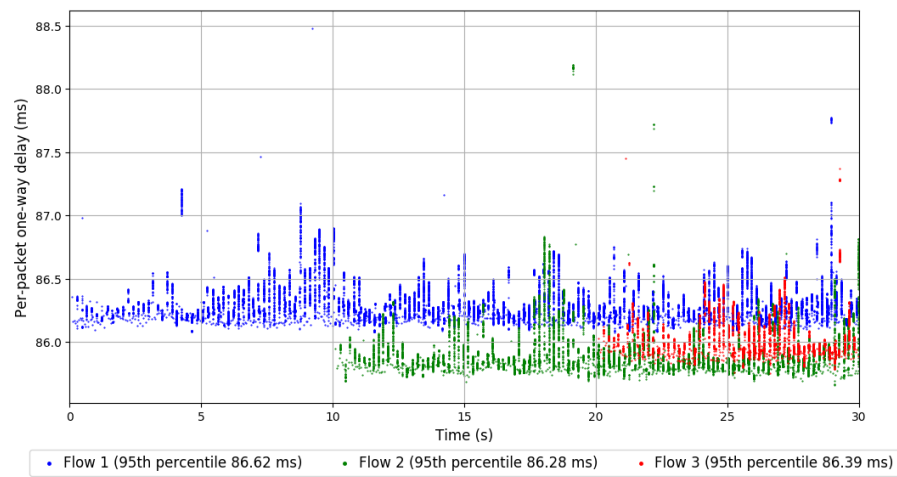
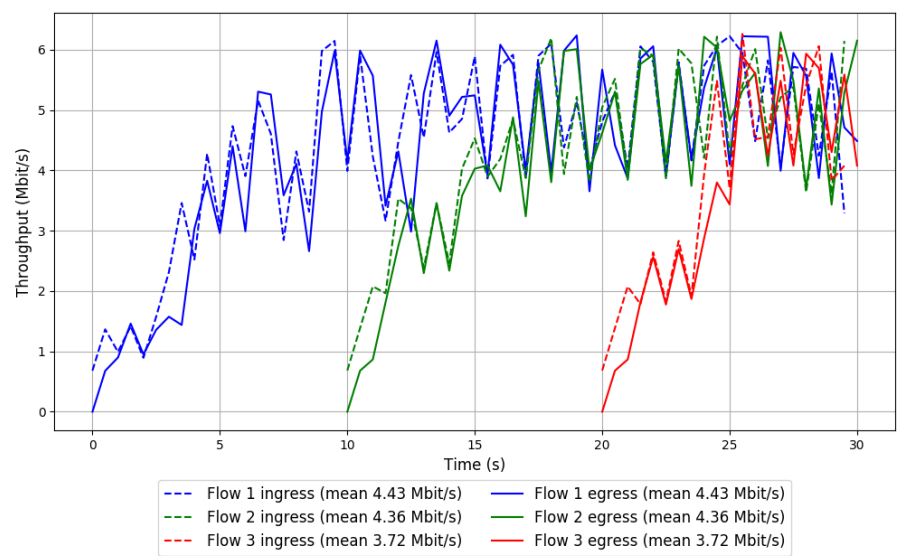


Run 4: Statistics of Sprout

Start at: 2019-03-09 02:07:45
End at: 2019-03-09 02:08:15
Local clock offset: 0.144 ms
Remote clock offset: 0.02 ms

```
# Below is generated by plot.py at 2019-03-09 05:44:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.55 Mbit/s
95th percentile per-packet one-way delay: 86.553 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.43 Mbit/s
95th percentile per-packet one-way delay: 86.624 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.36 Mbit/s
95th percentile per-packet one-way delay: 86.285 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.72 Mbit/s
95th percentile per-packet one-way delay: 86.386 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

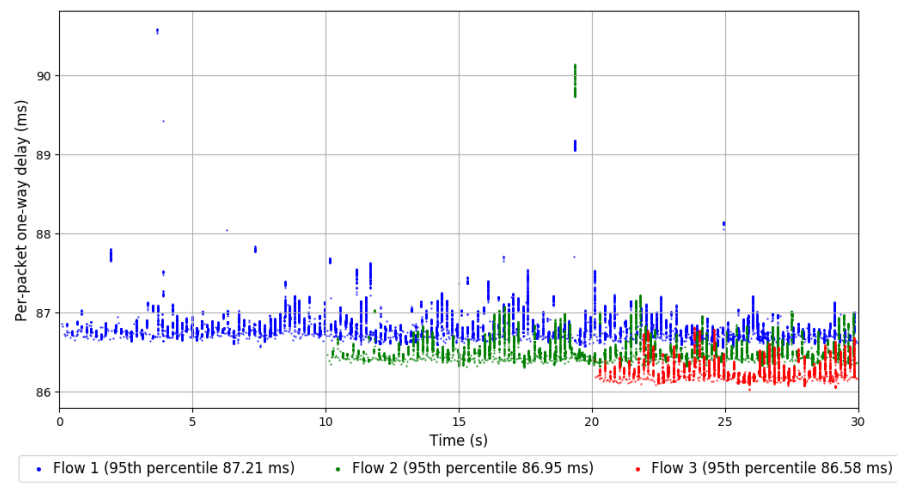
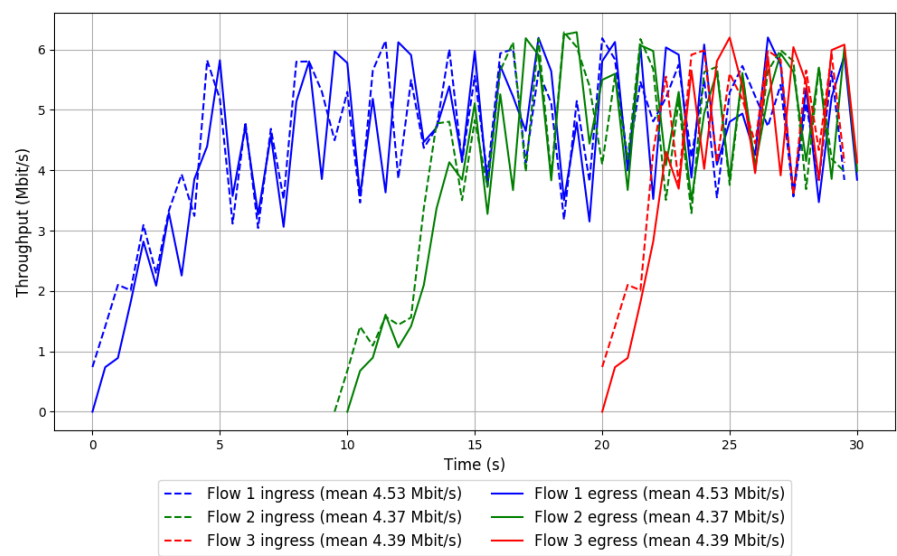


Run 5: Statistics of Sprout

Start at: 2019-03-09 02:45:19
End at: 2019-03-09 02:45:49
Local clock offset: -0.083 ms
Remote clock offset: -0.003 ms

Below is generated by plot.py at 2019-03-09 05:44:47
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.88 Mbit/s
95th percentile per-packet one-way delay: 87.117 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.53 Mbit/s
95th percentile per-packet one-way delay: 87.207 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.37 Mbit/s
95th percentile per-packet one-way delay: 86.949 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.39 Mbit/s
95th percentile per-packet one-way delay: 86.584 ms
Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2019-03-09 00:48:02

End at: 2019-03-09 00:48:32

Local clock offset: -0.47 ms

Remote clock offset: 0.066 ms

Below is generated by plot.py at 2019-03-09 05:47:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 401.46 Mbit/s

95th percentile per-packet one-way delay: 88.257 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 209.39 Mbit/s

95th percentile per-packet one-way delay: 87.696 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 197.42 Mbit/s

95th percentile per-packet one-way delay: 88.212 ms

Loss rate: 0.00%

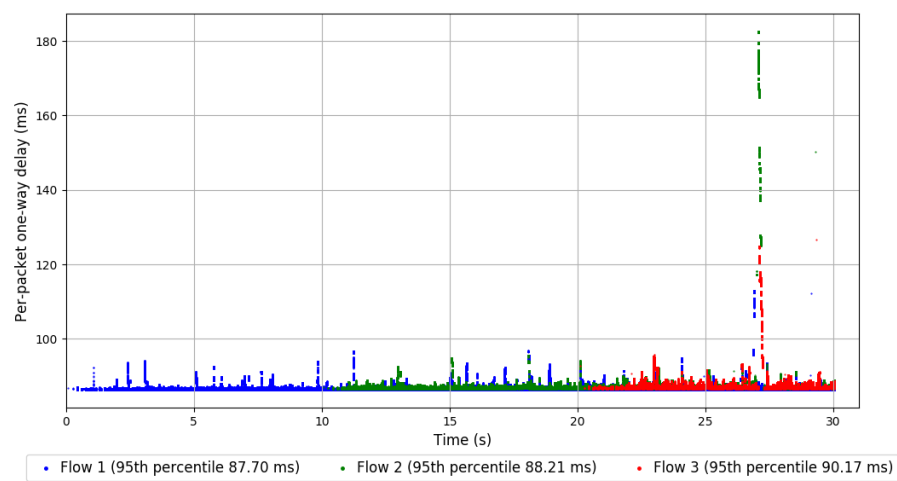
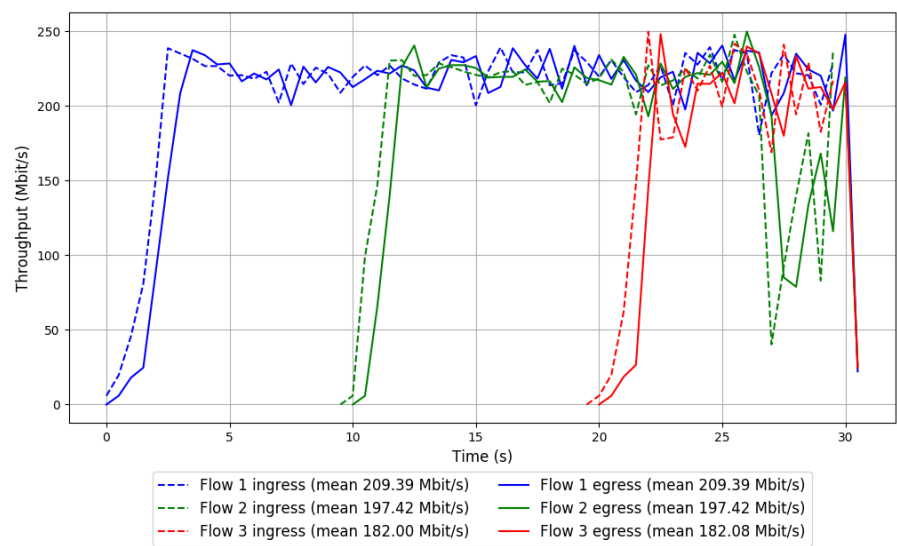
-- Flow 3:

Average throughput: 182.08 Mbit/s

95th percentile per-packet one-way delay: 90.165 ms

Loss rate: 0.00%

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

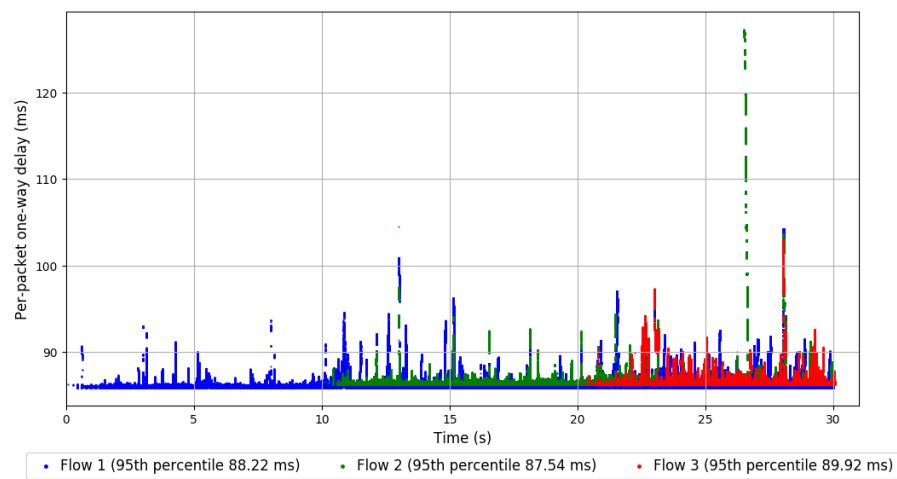
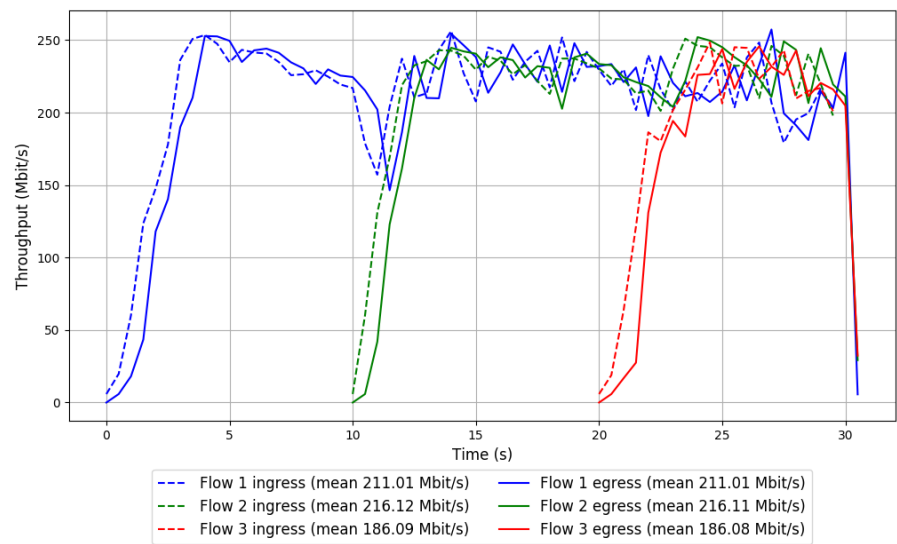


Run 2: Statistics of TaoVA-100x

Start at: 2019-03-09 01:25:12
End at: 2019-03-09 01:25:42
Local clock offset: -0.154 ms
Remote clock offset: -0.004 ms

Below is generated by plot.py at 2019-03-09 05:48:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 416.52 Mbit/s
95th percentile per-packet one-way delay: 88.351 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 211.01 Mbit/s
95th percentile per-packet one-way delay: 88.215 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 216.11 Mbit/s
95th percentile per-packet one-way delay: 87.536 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 186.08 Mbit/s
95th percentile per-packet one-way delay: 89.919 ms
Loss rate: 0.00%

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

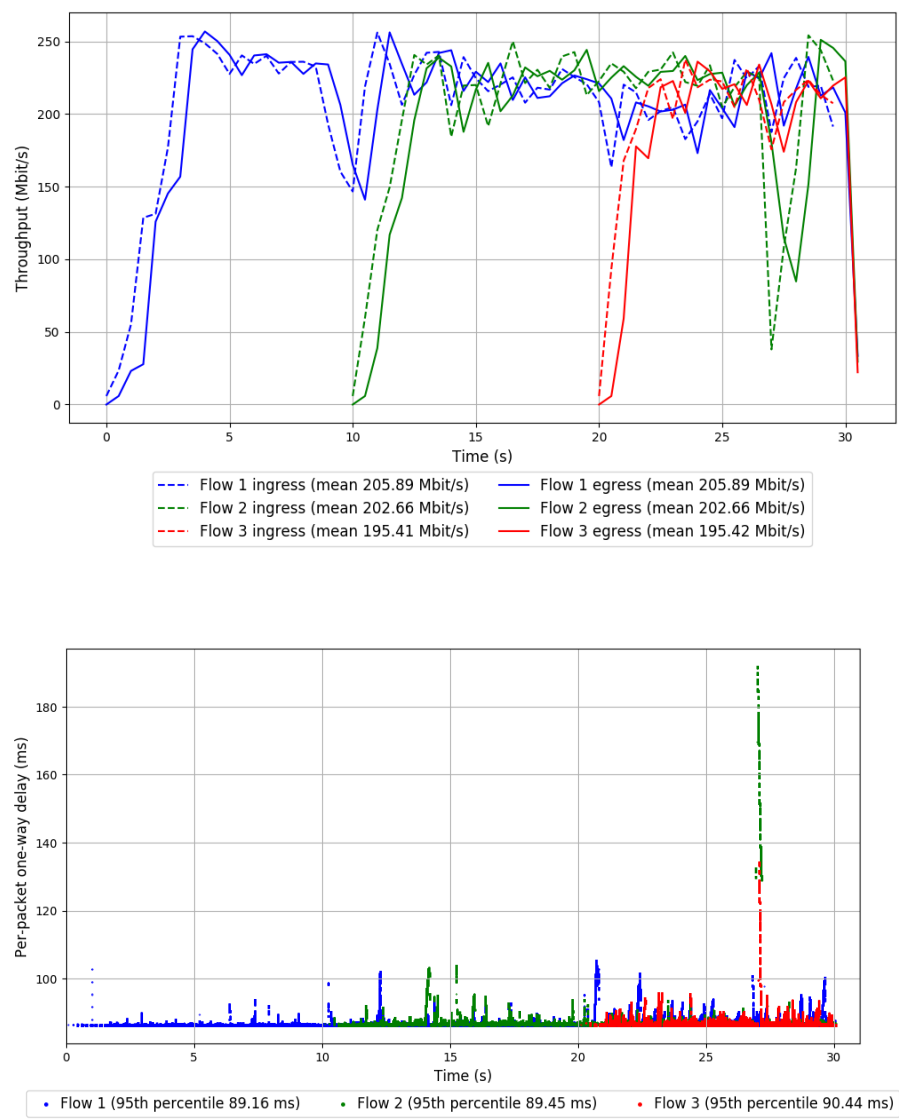


Run 3: Statistics of TaoVA-100x

Start at: 2019-03-09 02:02:39
End at: 2019-03-09 02:03:09
Local clock offset: -0.577 ms
Remote clock offset: -0.031 ms

Below is generated by plot.py at 2019-03-09 05:48:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 405.61 Mbit/s
95th percentile per-packet one-way delay: 89.568 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 205.89 Mbit/s
95th percentile per-packet one-way delay: 89.164 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 202.66 Mbit/s
95th percentile per-packet one-way delay: 89.450 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 195.42 Mbit/s
95th percentile per-packet one-way delay: 90.441 ms
Loss rate: 0.00%

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



Run 4: Statistics of TaoVA-100x

Start at: 2019-03-09 02:40:15

End at: 2019-03-09 02:40:45

Local clock offset: 0.178 ms

Remote clock offset: 0.004 ms

Below is generated by plot.py at 2019-03-09 05:48:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 408.76 Mbit/s

95th percentile per-packet one-way delay: 87.698 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 216.30 Mbit/s

95th percentile per-packet one-way delay: 87.754 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 198.61 Mbit/s

95th percentile per-packet one-way delay: 87.169 ms

Loss rate: 0.00%

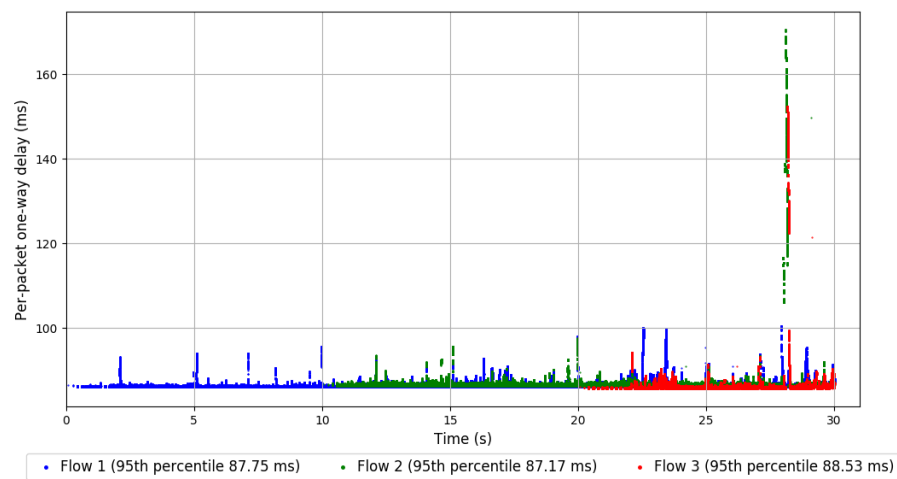
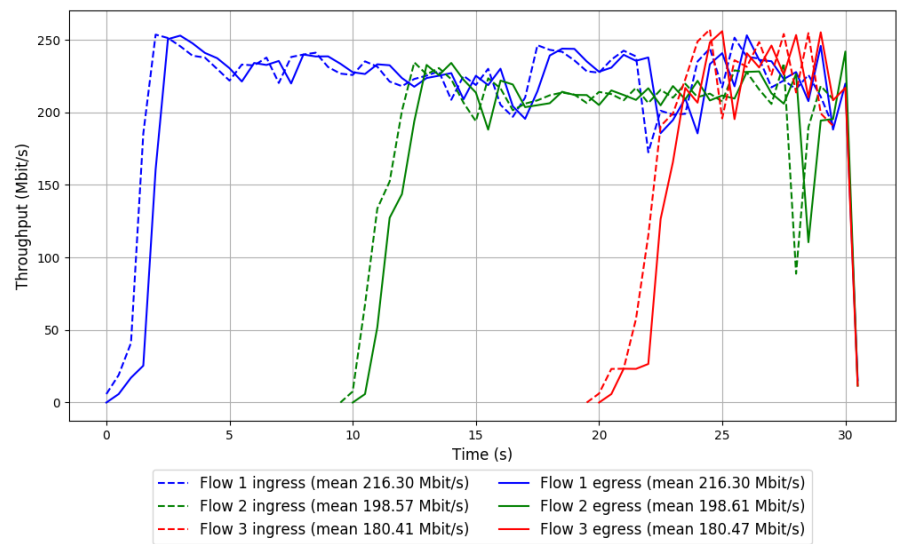
-- Flow 3:

Average throughput: 180.47 Mbit/s

95th percentile per-packet one-way delay: 88.533 ms

Loss rate: 0.00%

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

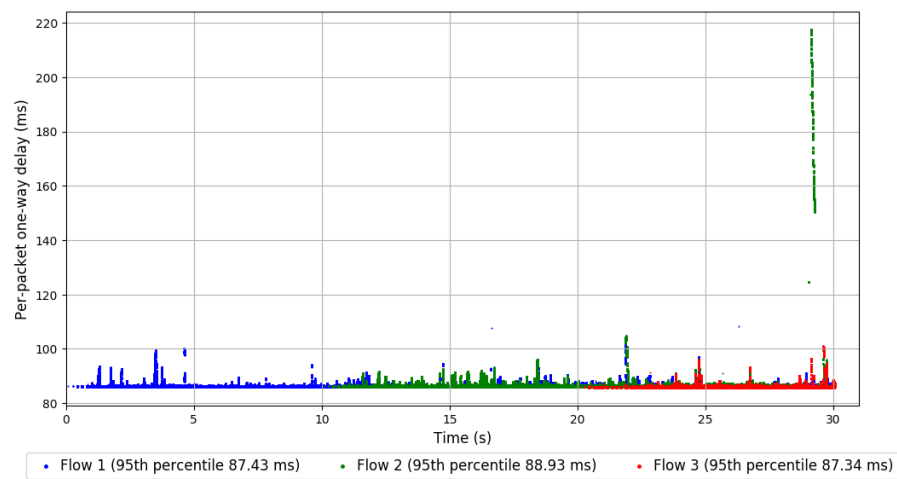
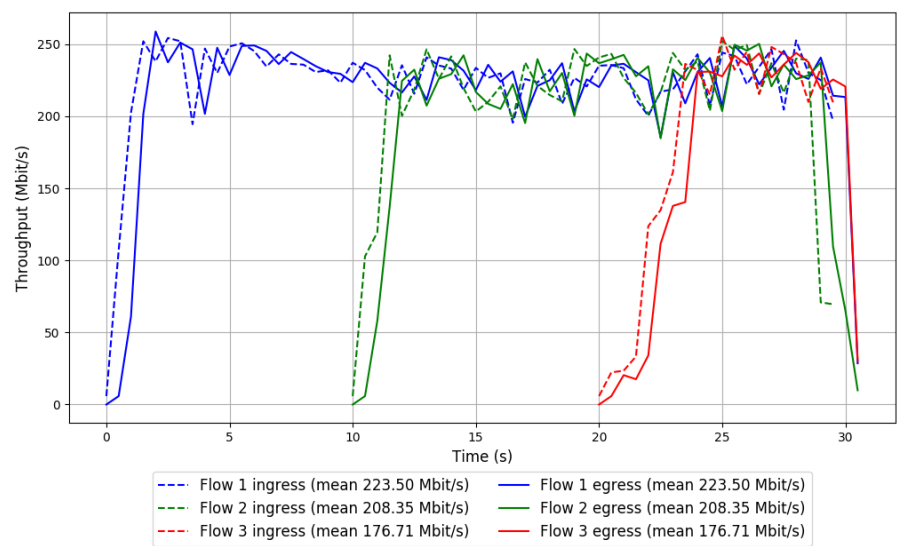


Run 5: Statistics of TaoVA-100x

Start at: 2019-03-09 03:17:15
End at: 2019-03-09 03:17:45
Local clock offset: 0.124 ms
Remote clock offset: -0.053 ms

Below is generated by plot.py at 2019-03-09 05:49:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 420.96 Mbit/s
95th percentile per-packet one-way delay: 87.753 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 223.50 Mbit/s
95th percentile per-packet one-way delay: 87.432 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 208.35 Mbit/s
95th percentile per-packet one-way delay: 88.932 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 176.71 Mbit/s
95th percentile per-packet one-way delay: 87.342 ms
Loss rate: 0.00%

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



Run 1: Statistics of TCP Vegas

Start at: 2019-03-09 00:44:22

End at: 2019-03-09 00:44:52

Local clock offset: -0.06 ms

Remote clock offset: 0.033 ms

Below is generated by plot.py at 2019-03-09 05:49:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 651.76 Mbit/s

95th percentile per-packet one-way delay: 100.049 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 304.10 Mbit/s

95th percentile per-packet one-way delay: 92.788 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 327.37 Mbit/s

95th percentile per-packet one-way delay: 89.988 ms

Loss rate: 0.00%

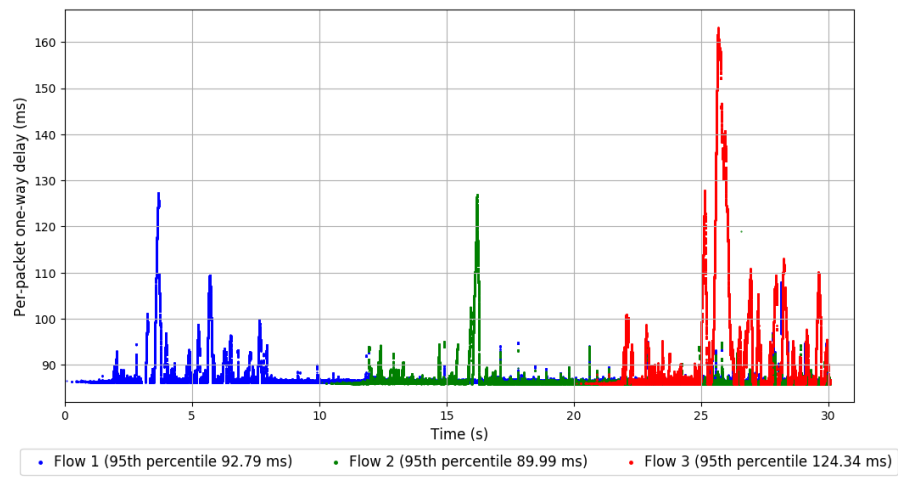
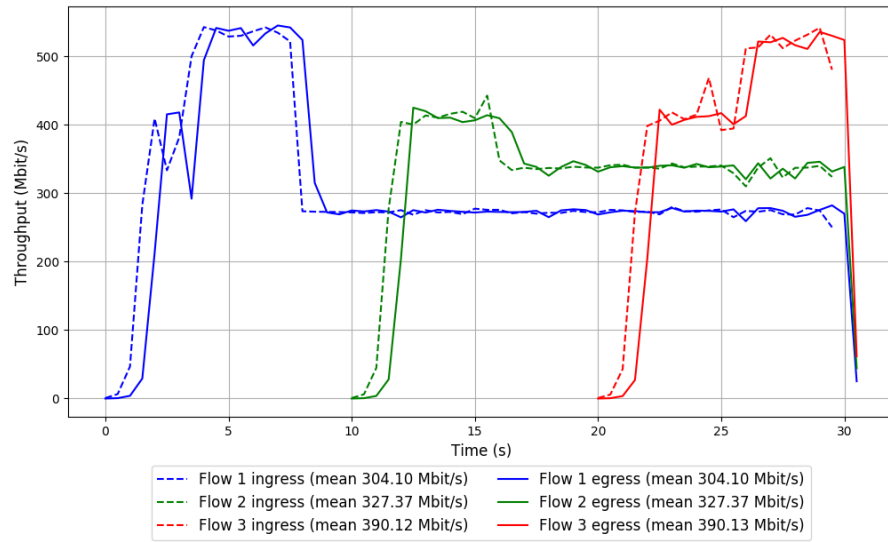
-- Flow 3:

Average throughput: 390.13 Mbit/s

95th percentile per-packet one-way delay: 124.337 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link

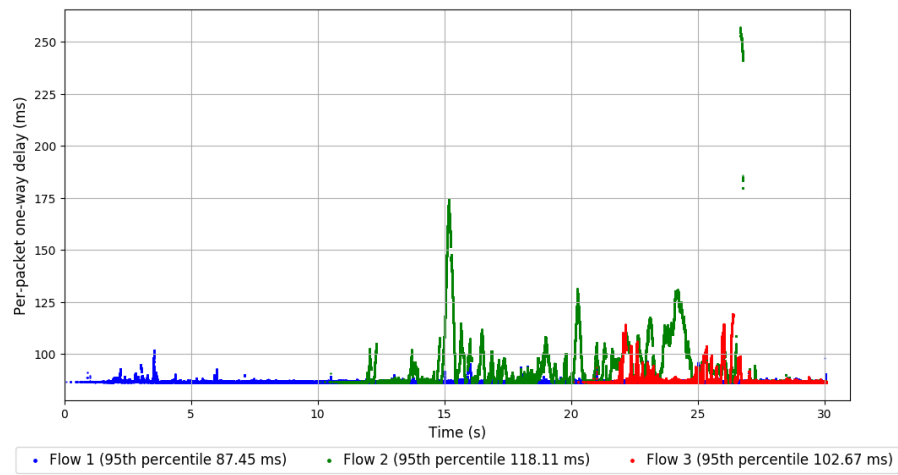
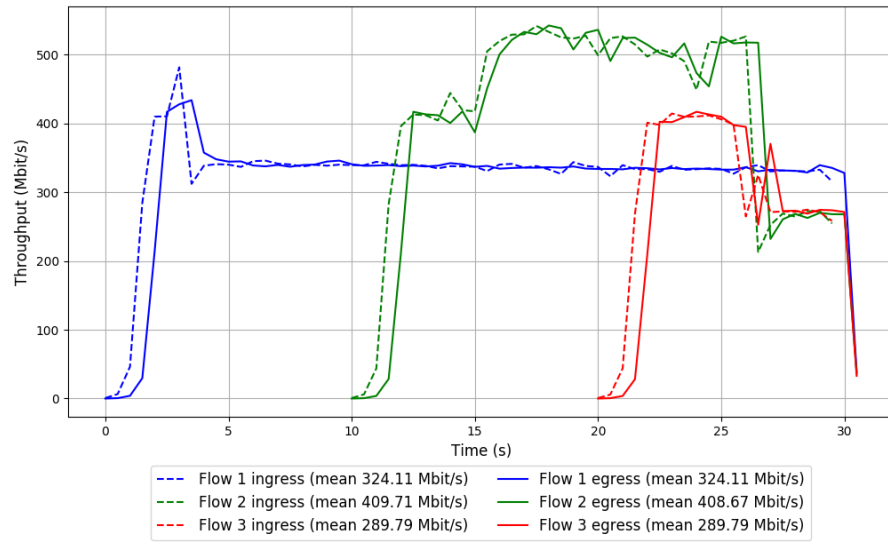


Run 2: Statistics of TCP Vegas

Start at: 2019-03-09 01:21:14
End at: 2019-03-09 01:21:44
Local clock offset: -0.587 ms
Remote clock offset: 0.015 ms

Below is generated by plot.py at 2019-03-09 05:57:43
Datalink statistics
-- Total of 3 flows:
Average throughput: 692.65 Mbit/s
95th percentile per-packet one-way delay: 106.644 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 324.11 Mbit/s
95th percentile per-packet one-way delay: 87.446 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 408.67 Mbit/s
95th percentile per-packet one-way delay: 118.106 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 289.79 Mbit/s
95th percentile per-packet one-way delay: 102.667 ms
Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link

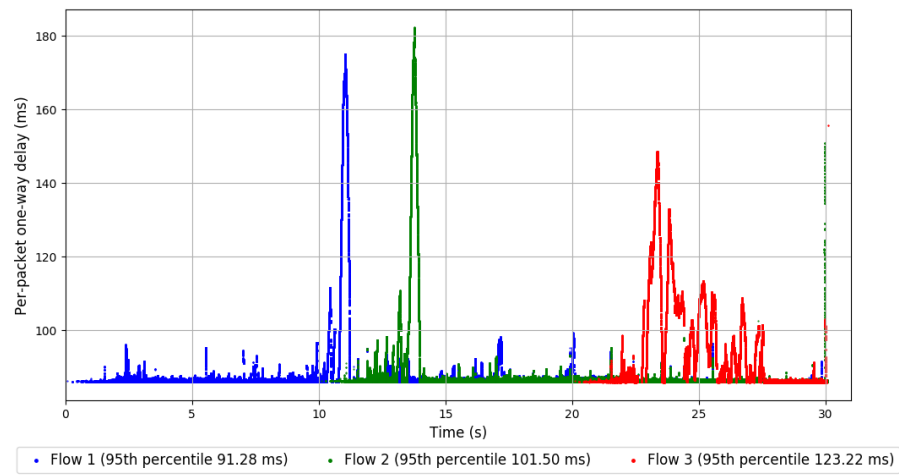
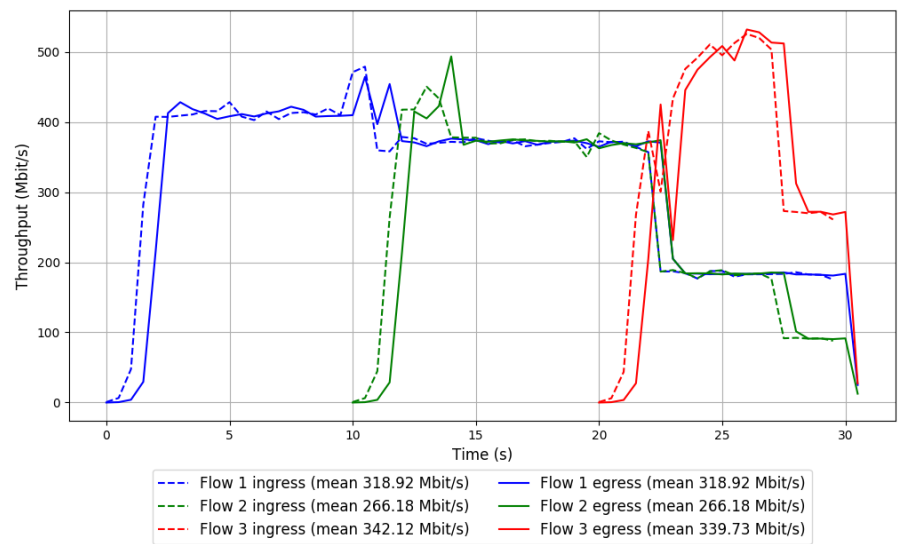


Run 3: Statistics of TCP Vegas

Start at: 2019-03-09 01:58:57
End at: 2019-03-09 01:59:27
Local clock offset: -0.212 ms
Remote clock offset: -0.041 ms

Below is generated by plot.py at 2019-03-09 05:57:43
Datalink statistics
-- Total of 3 flows:
Average throughput: 608.75 Mbit/s
95th percentile per-packet one-way delay: 108.634 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 318.92 Mbit/s
95th percentile per-packet one-way delay: 91.283 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 266.18 Mbit/s
95th percentile per-packet one-way delay: 101.498 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 339.73 Mbit/s
95th percentile per-packet one-way delay: 123.225 ms
Loss rate: 0.17%

Run 3: Report of TCP Vegas — Data Link

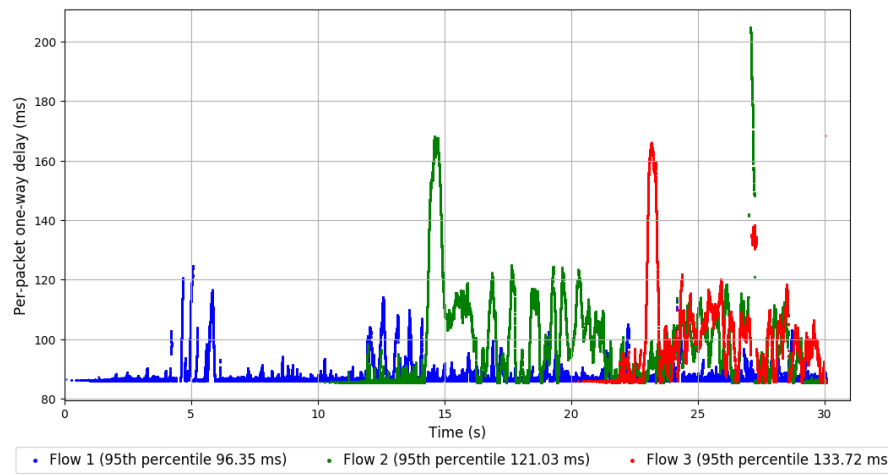
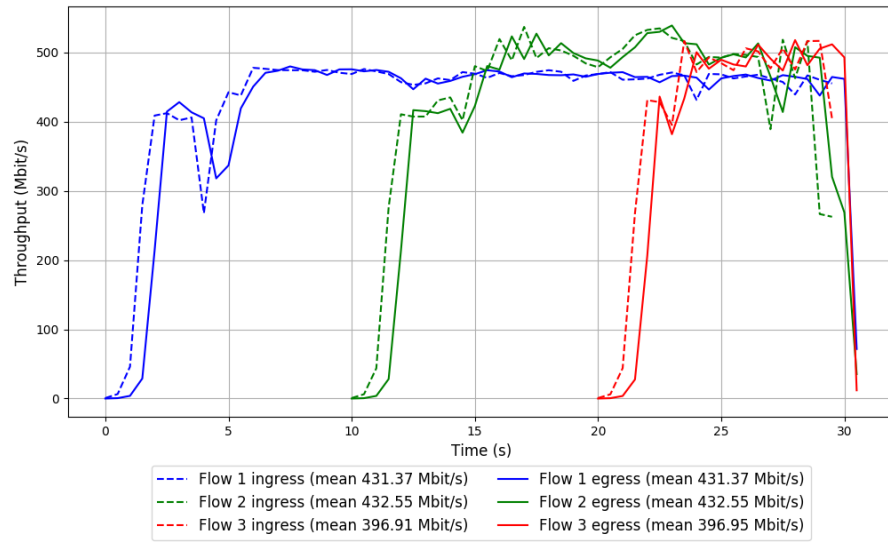


Run 4: Statistics of TCP Vegas

Start at: 2019-03-09 02:36:21
End at: 2019-03-09 02:36:51
Local clock offset: 0.407 ms
Remote clock offset: -0.002 ms

Below is generated by plot.py at 2019-03-09 06:02:44
Datalink statistics
-- Total of 3 flows:
Average throughput: 851.48 Mbit/s
95th percentile per-packet one-way delay: 114.789 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 431.37 Mbit/s
95th percentile per-packet one-way delay: 96.347 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 432.55 Mbit/s
95th percentile per-packet one-way delay: 121.034 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 396.95 Mbit/s
95th percentile per-packet one-way delay: 133.719 ms
Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link

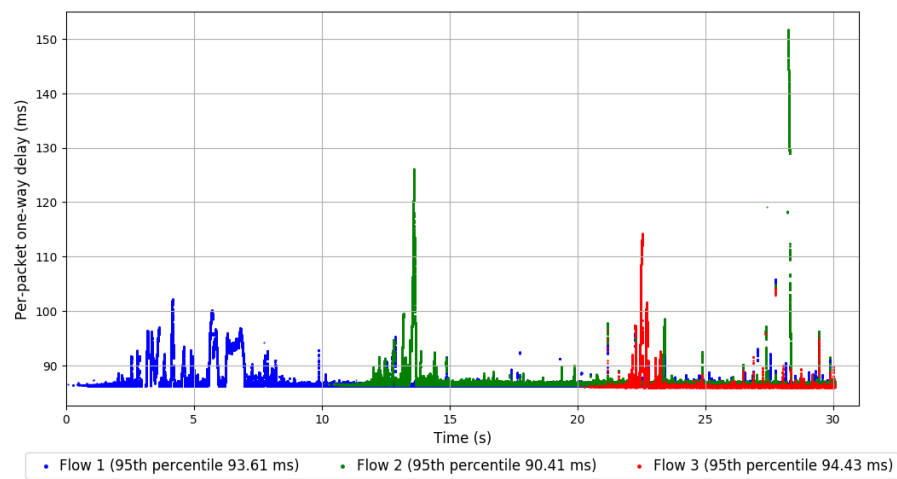
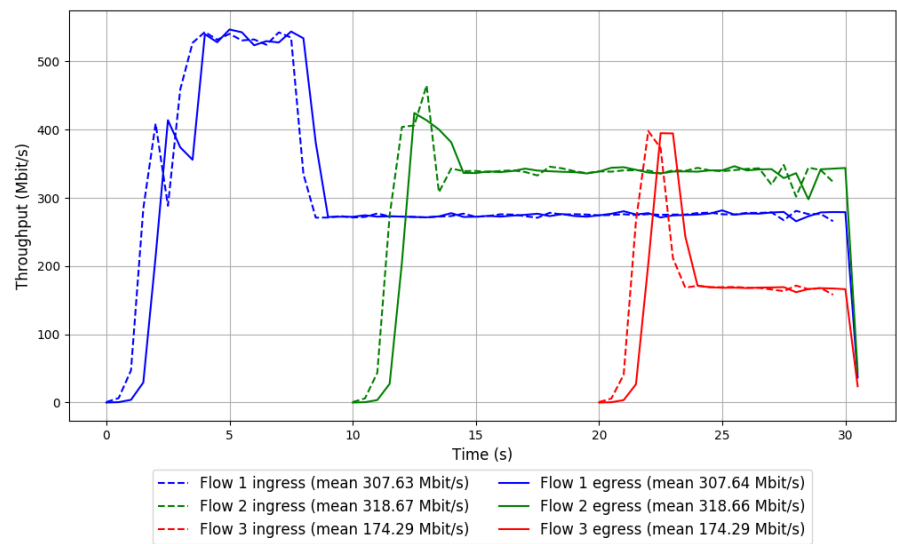


Run 5: Statistics of TCP Vegas

Start at: 2019-03-09 03:13:37
End at: 2019-03-09 03:14:07
Local clock offset: -0.096 ms
Remote clock offset: -0.002 ms

Below is generated by plot.py at 2019-03-09 06:02:44
Datalink statistics
-- Total of 3 flows:
Average throughput: 577.78 Mbit/s
95th percentile per-packet one-way delay: 93.236 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 307.64 Mbit/s
95th percentile per-packet one-way delay: 93.605 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 318.66 Mbit/s
95th percentile per-packet one-way delay: 90.406 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 174.29 Mbit/s
95th percentile per-packet one-way delay: 94.429 ms
Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2019-03-09 00:35:34

End at: 2019-03-09 00:36:04

Local clock offset: 0.327 ms

Remote clock offset: 0.026 ms

Below is generated by plot.py at 2019-03-09 06:02:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 271.56 Mbit/s

95th percentile per-packet one-way delay: 240.658 ms

Loss rate: 4.27%

-- Flow 1:

Average throughput: 176.72 Mbit/s

95th percentile per-packet one-way delay: 249.705 ms

Loss rate: 6.40%

-- Flow 2:

Average throughput: 132.81 Mbit/s

95th percentile per-packet one-way delay: 214.972 ms

Loss rate: 0.01%

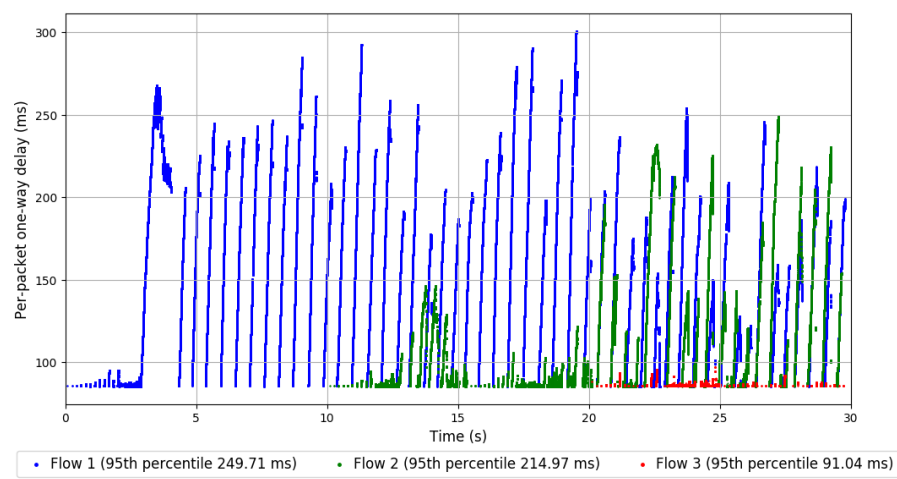
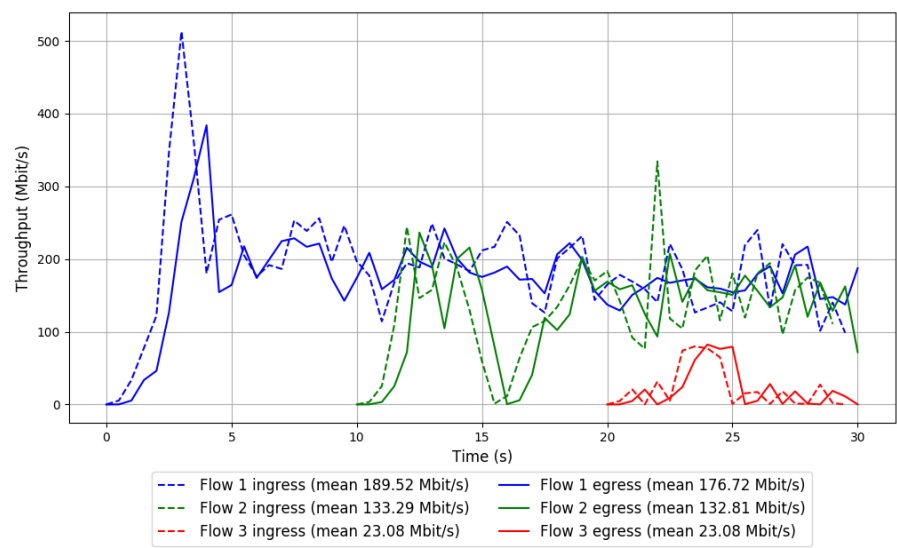
-- Flow 3:

Average throughput: 23.08 Mbit/s

95th percentile per-packet one-way delay: 91.040 ms

Loss rate: 0.00%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2019-03-09 01:12:47

End at: 2019-03-09 01:13:17

Local clock offset: -0.131 ms

Remote clock offset: 0.007 ms

Below is generated by plot.py at 2019-03-09 06:02:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.26 Mbit/s

95th percentile per-packet one-way delay: 130.640 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 135.12 Mbit/s

95th percentile per-packet one-way delay: 136.353 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 42.46 Mbit/s

95th percentile per-packet one-way delay: 93.602 ms

Loss rate: 0.01%

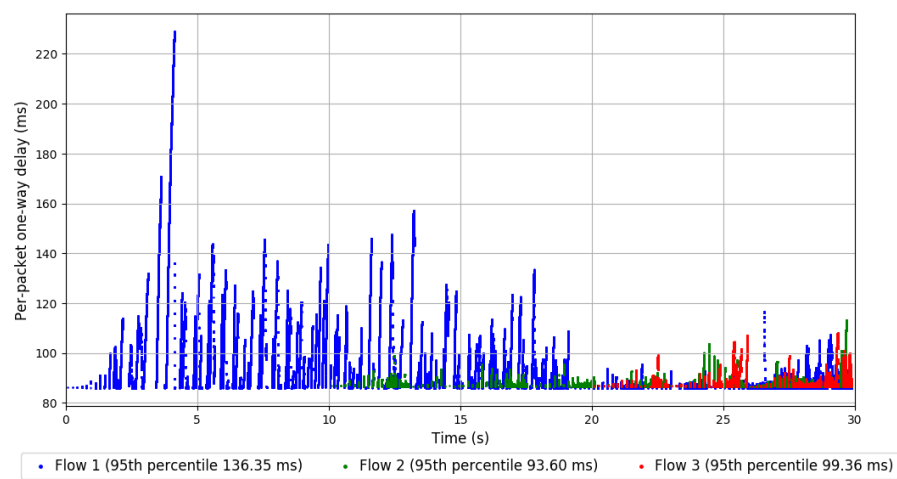
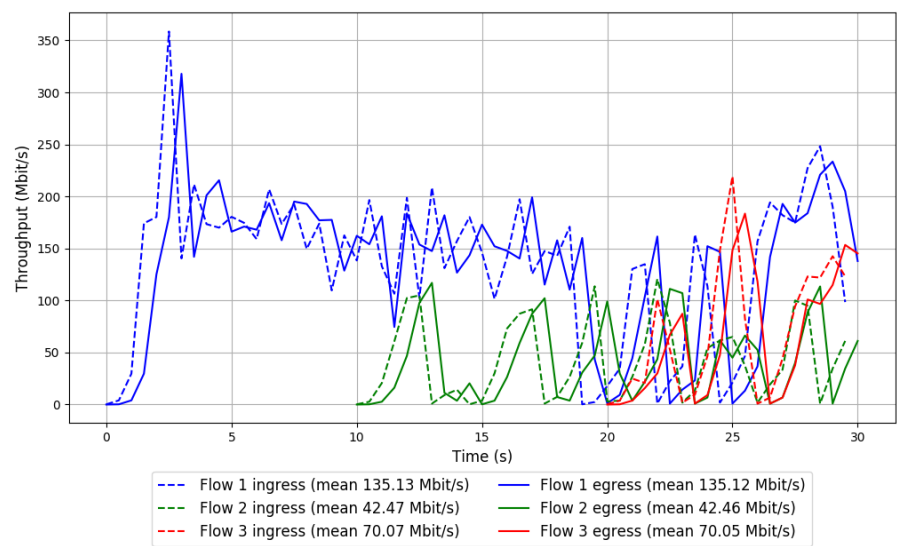
-- Flow 3:

Average throughput: 70.05 Mbit/s

95th percentile per-packet one-way delay: 99.363 ms

Loss rate: 0.05%

Run 2: Report of Verus — Data Link

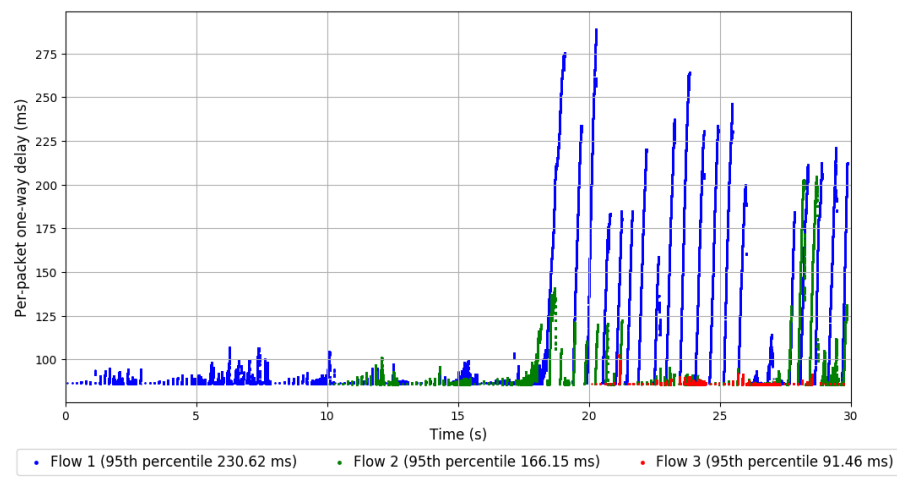
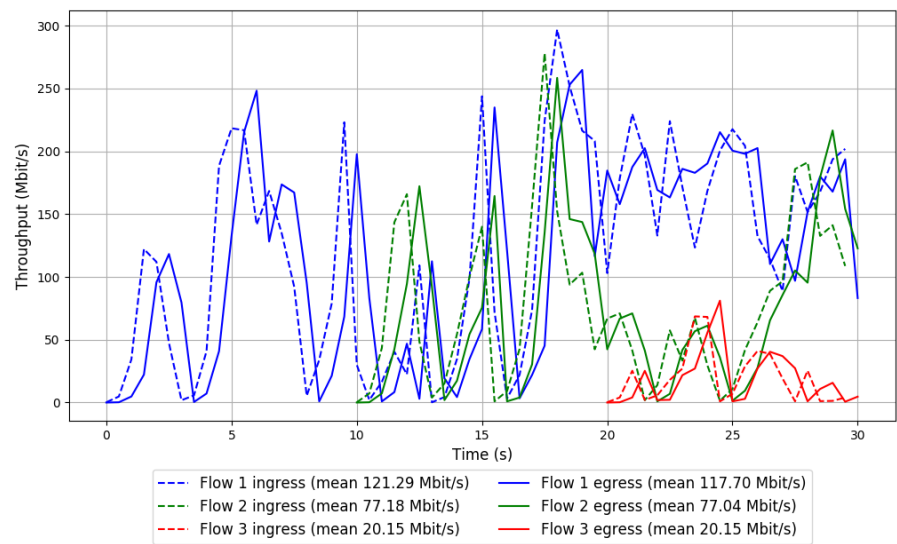


Run 3: Statistics of Verus

Start at: 2019-03-09 01:50:18
End at: 2019-03-09 01:50:48
Local clock offset: -0.183 ms
Remote clock offset: -0.056 ms

Below is generated by plot.py at 2019-03-09 06:02:44
Datalink statistics
-- Total of 3 flows:
Average throughput: 175.36 Mbit/s
95th percentile per-packet one-way delay: 220.555 ms
Loss rate: 1.99%
-- Flow 1:
Average throughput: 117.70 Mbit/s
95th percentile per-packet one-way delay: 230.625 ms
Loss rate: 2.93%
-- Flow 2:
Average throughput: 77.04 Mbit/s
95th percentile per-packet one-way delay: 166.150 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 20.15 Mbit/s
95th percentile per-packet one-way delay: 91.456 ms
Loss rate: 0.00%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2019-03-09 02:27:26

End at: 2019-03-09 02:27:56

Local clock offset: 0.008 ms

Remote clock offset: 0.003 ms

Below is generated by plot.py at 2019-03-09 06:02:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 278.47 Mbit/s

95th percentile per-packet one-way delay: 262.704 ms

Loss rate: 6.26%

-- Flow 1:

Average throughput: 185.31 Mbit/s

95th percentile per-packet one-way delay: 257.458 ms

Loss rate: 7.47%

-- Flow 2:

Average throughput: 127.62 Mbit/s

95th percentile per-packet one-way delay: 275.350 ms

Loss rate: 4.12%

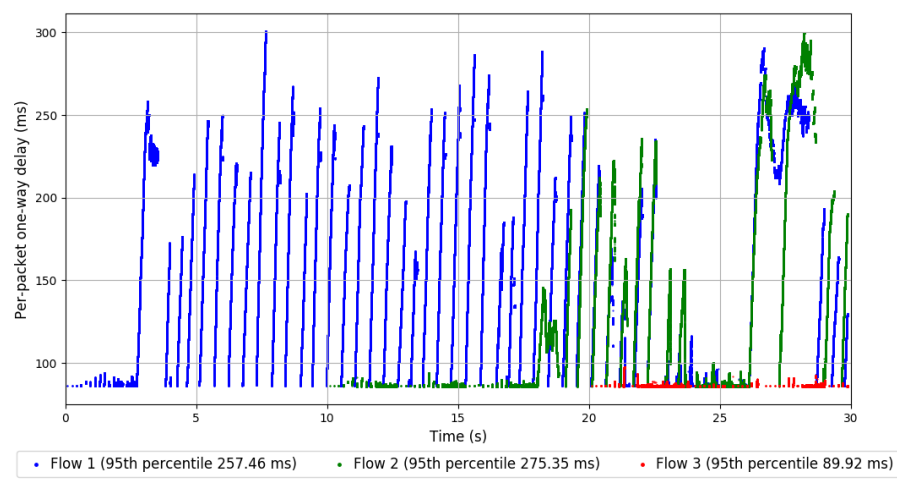
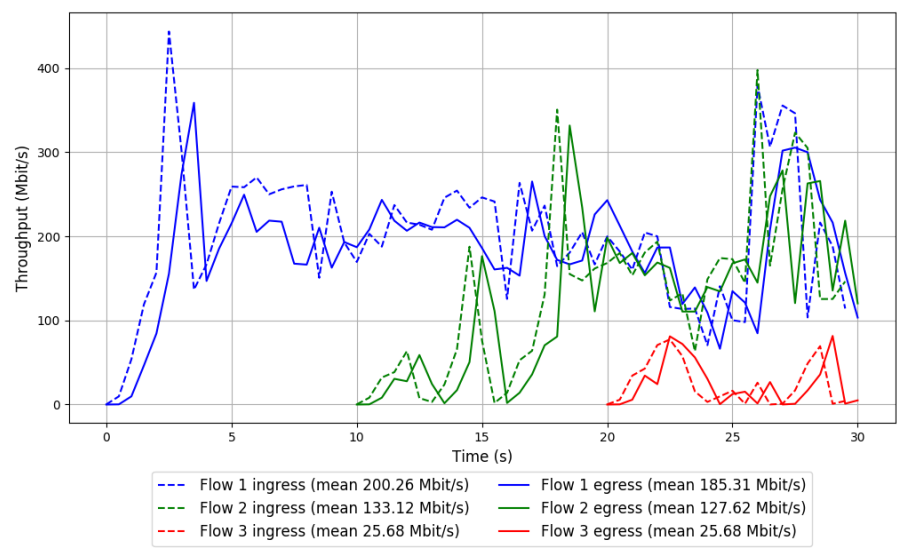
-- Flow 3:

Average throughput: 25.68 Mbit/s

95th percentile per-packet one-way delay: 89.925 ms

Loss rate: 0.00%

Run 4: Report of Verus — Data Link

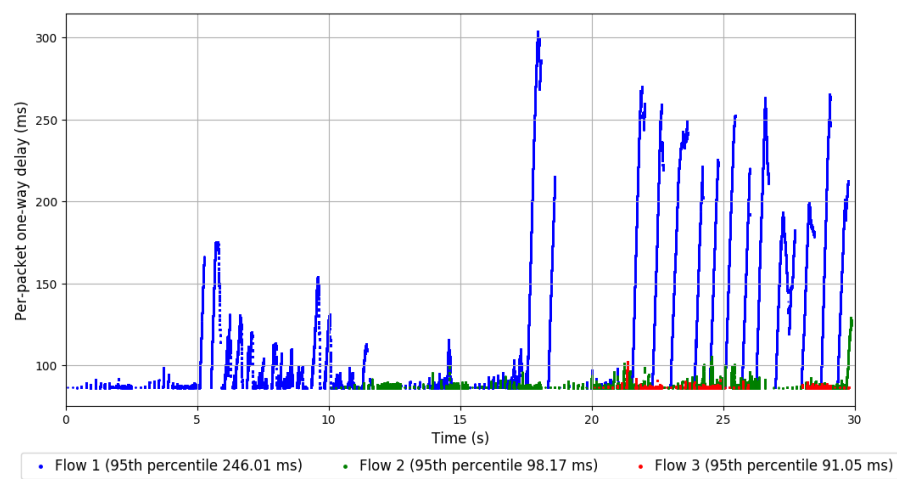
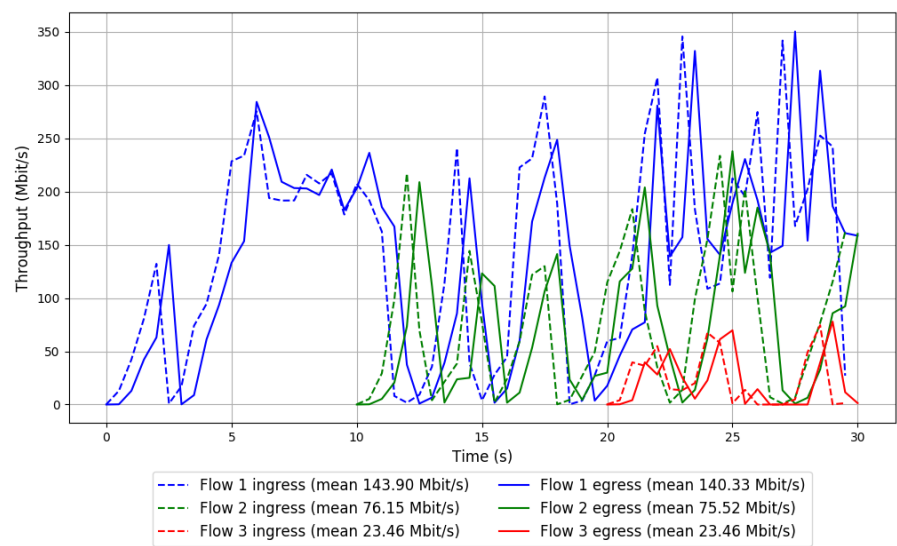


Run 5: Statistics of Verus

Start at: 2019-03-09 03:04:55
End at: 2019-03-09 03:05:25
Local clock offset: -0.534 ms
Remote clock offset: -0.016 ms

Below is generated by plot.py at 2019-03-09 06:02:44
Datalink statistics
-- Total of 3 flows:
Average throughput: 197.47 Mbit/s
95th percentile per-packet one-way delay: 238.138 ms
Loss rate: 1.68%
-- Flow 1:
Average throughput: 140.33 Mbit/s
95th percentile per-packet one-way delay: 246.014 ms
Loss rate: 2.07%
-- Flow 2:
Average throughput: 75.52 Mbit/s
95th percentile per-packet one-way delay: 98.167 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 23.46 Mbit/s
95th percentile per-packet one-way delay: 91.046 ms
Loss rate: 0.00%

Run 5: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2019-03-09 00:17:22

End at: 2019-03-09 00:17:52

Local clock offset: 0.163 ms

Remote clock offset: -0.02 ms

Below is generated by plot.py at 2019-03-09 06:02:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 453.30 Mbit/s

95th percentile per-packet one-way delay: 91.724 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 275.81 Mbit/s

95th percentile per-packet one-way delay: 96.875 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 192.91 Mbit/s

95th percentile per-packet one-way delay: 86.935 ms

Loss rate: 0.00%

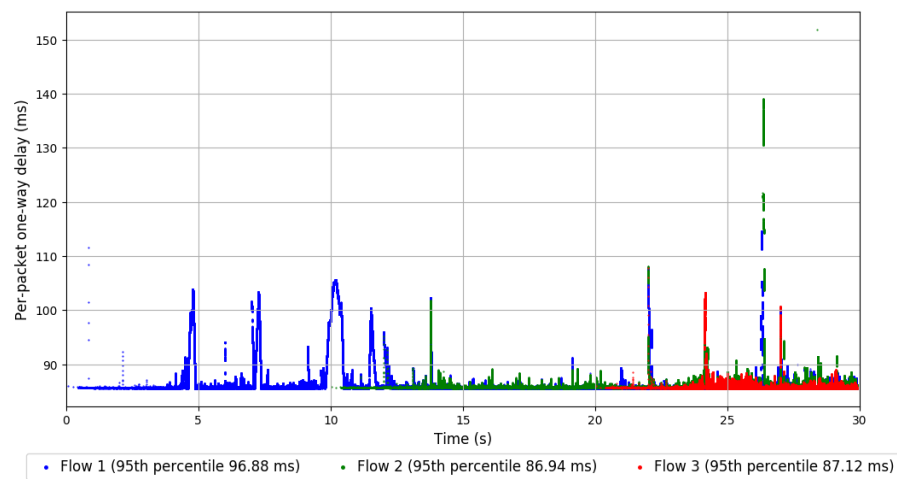
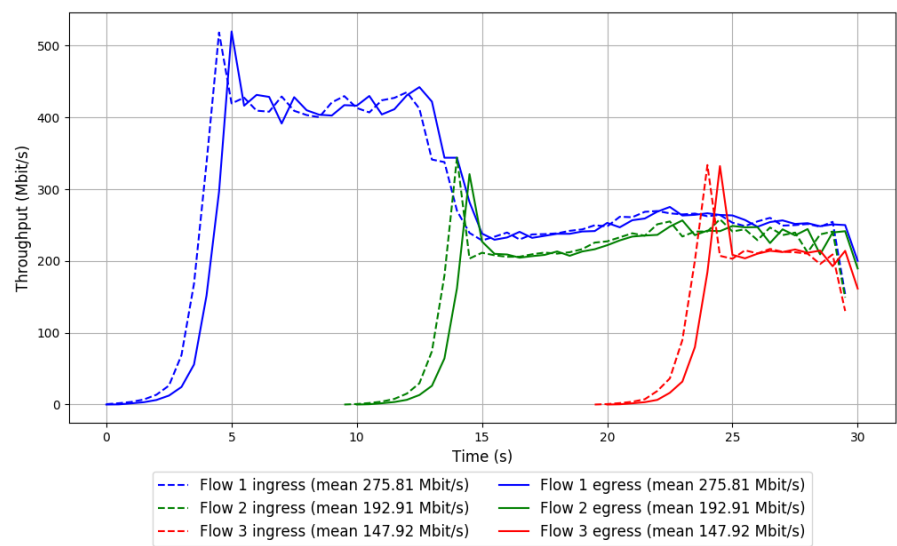
-- Flow 3:

Average throughput: 147.92 Mbit/s

95th percentile per-packet one-way delay: 87.125 ms

Loss rate: 0.00%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2019-03-09 00:54:27

End at: 2019-03-09 00:54:57

Local clock offset: -0.508 ms

Remote clock offset: 0.043 ms

Below is generated by plot.py at 2019-03-09 06:02:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 343.58 Mbit/s

95th percentile per-packet one-way delay: 87.717 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 213.68 Mbit/s

95th percentile per-packet one-way delay: 87.596 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 184.54 Mbit/s

95th percentile per-packet one-way delay: 88.117 ms

Loss rate: 0.00%

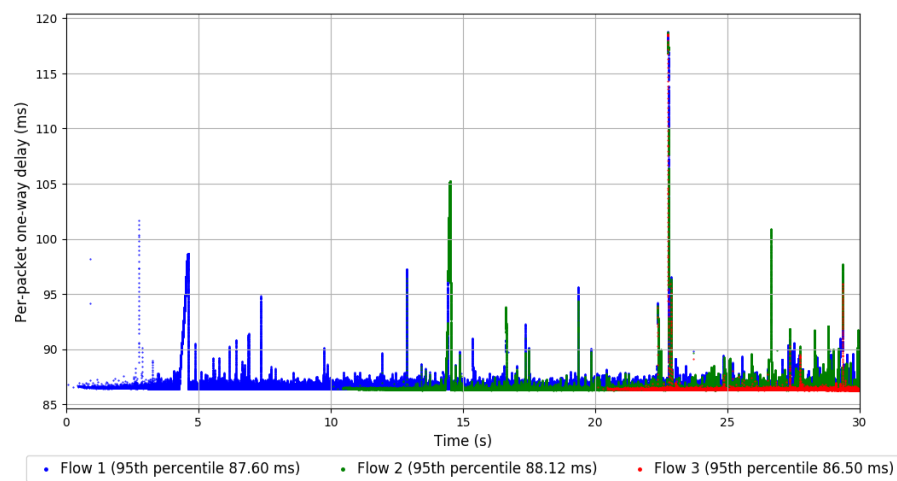
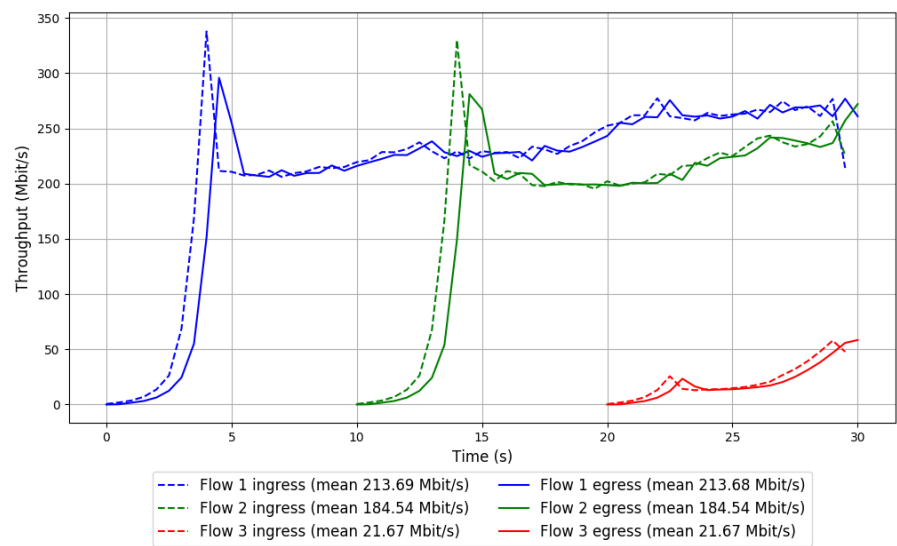
-- Flow 3:

Average throughput: 21.67 Mbit/s

95th percentile per-packet one-way delay: 86.496 ms

Loss rate: 0.00%

Run 2: Report of PCC-Vivace — Data Link

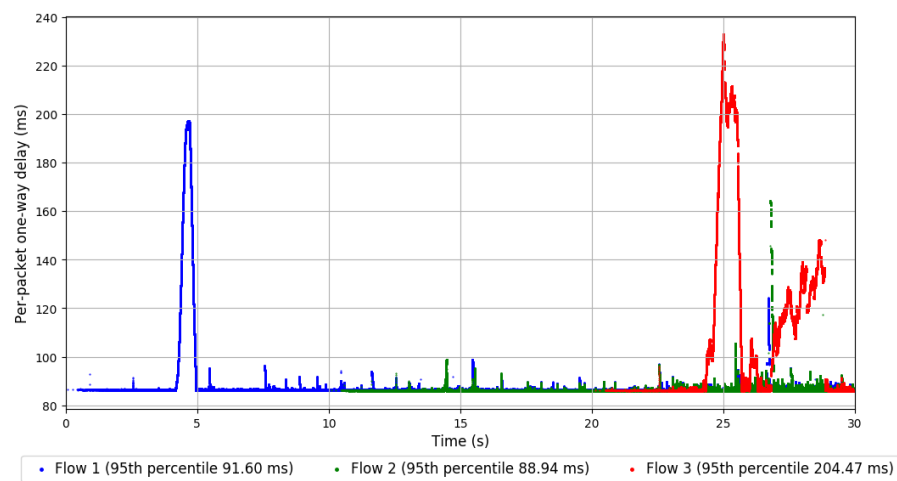
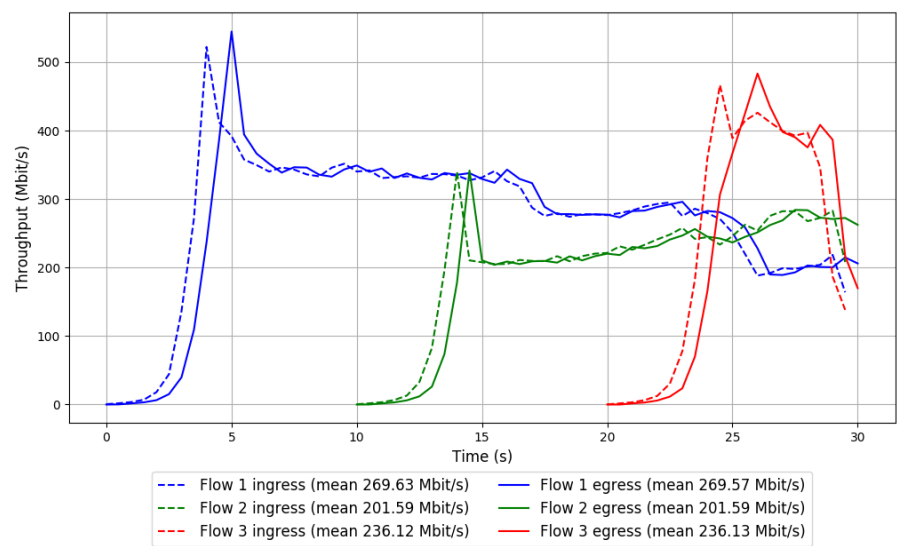


Run 3: Statistics of PCC-Vivace

Start at: 2019-03-09 01:31:39
End at: 2019-03-09 01:32:09
Local clock offset: -0.2 ms
Remote clock offset: -0.049 ms

Below is generated by plot.py at 2019-03-09 06:04:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 481.32 Mbit/s
95th percentile per-packet one-way delay: 136.075 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 269.57 Mbit/s
95th percentile per-packet one-way delay: 91.599 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 201.59 Mbit/s
95th percentile per-packet one-way delay: 88.935 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 236.13 Mbit/s
95th percentile per-packet one-way delay: 204.471 ms
Loss rate: 0.00%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2019-03-09 02:09:01

End at: 2019-03-09 02:09:31

Local clock offset: -0.11 ms

Remote clock offset: 0.008 ms

Below is generated by plot.py at 2019-03-09 06:04:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 454.06 Mbit/s

95th percentile per-packet one-way delay: 101.134 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 279.36 Mbit/s

95th percentile per-packet one-way delay: 116.011 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 186.72 Mbit/s

95th percentile per-packet one-way delay: 87.629 ms

Loss rate: 0.00%

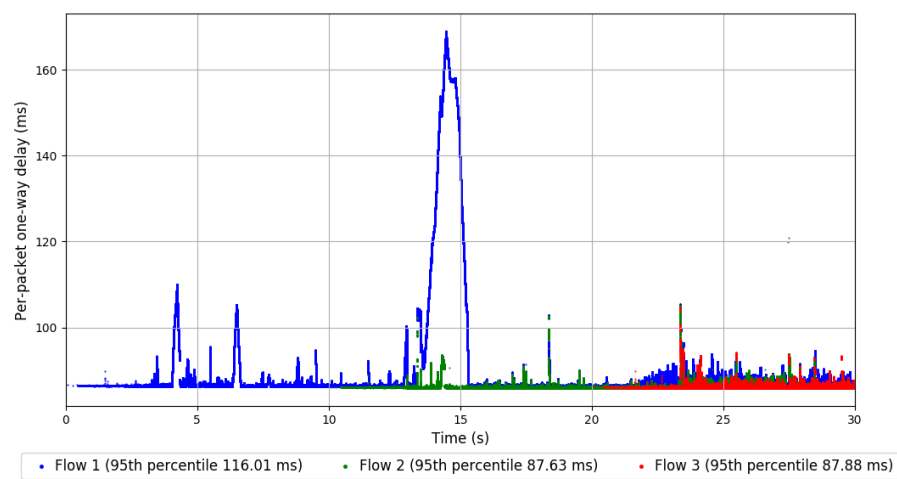
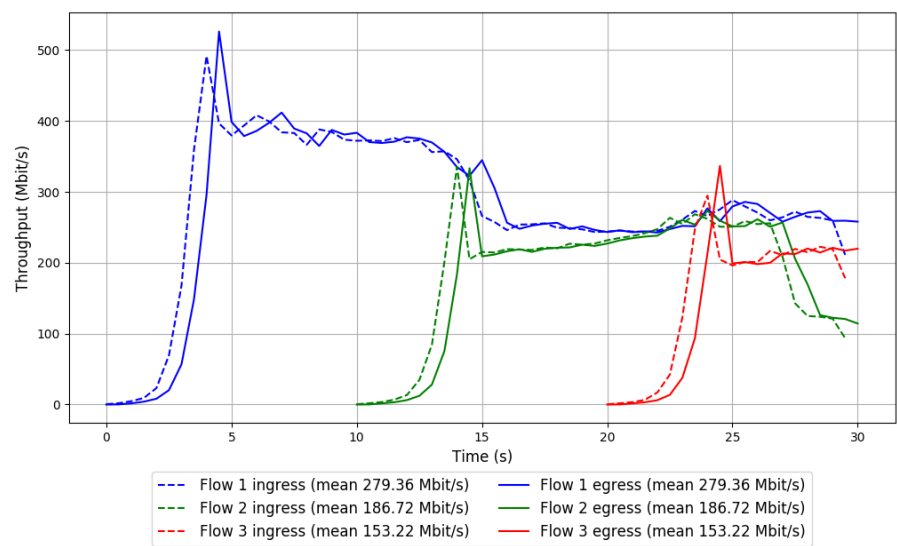
-- Flow 3:

Average throughput: 153.22 Mbit/s

95th percentile per-packet one-way delay: 87.882 ms

Loss rate: 0.00%

Run 4: Report of PCC-Vivace — Data Link

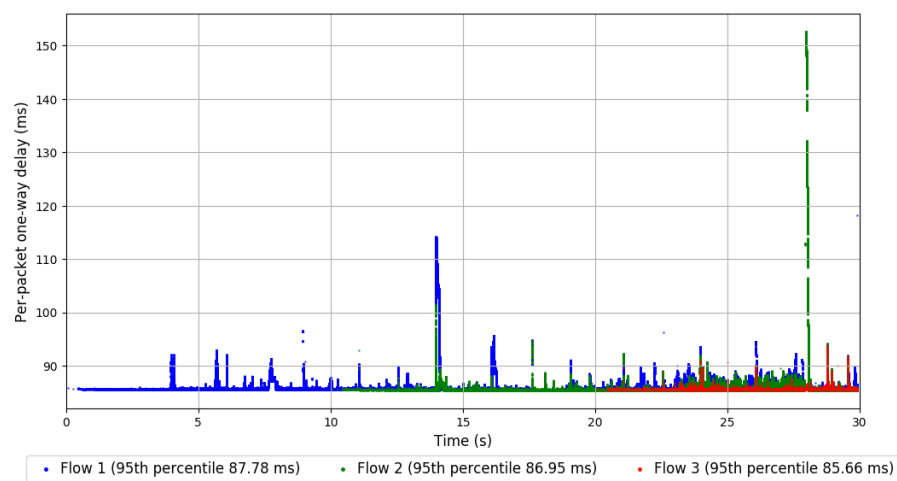
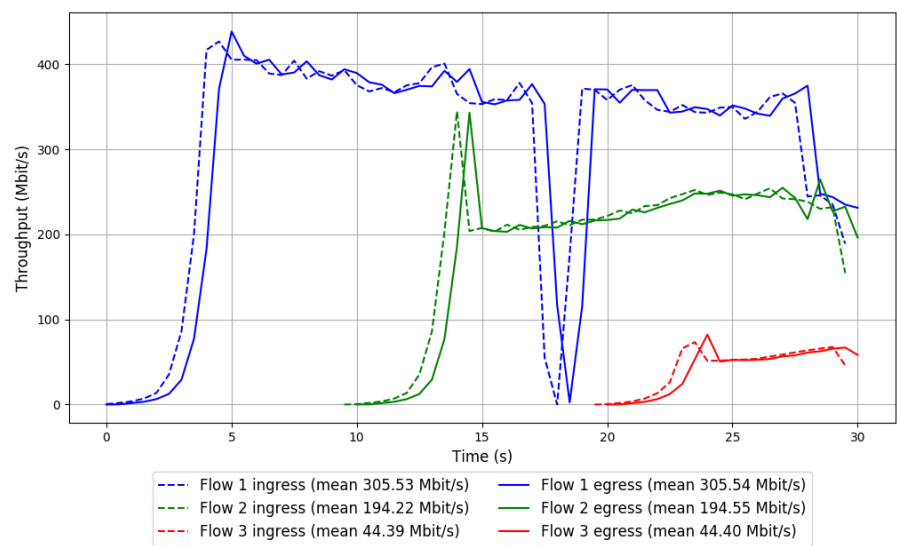


Run 5: Statistics of PCC-Vivace

Start at: 2019-03-09 02:46:36
End at: 2019-03-09 02:47:06
Local clock offset: 0.343 ms
Remote clock offset: -0.035 ms

Below is generated by plot.py at 2019-03-09 06:04:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 449.43 Mbit/s
95th percentile per-packet one-way delay: 87.490 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 305.54 Mbit/s
95th percentile per-packet one-way delay: 87.780 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 194.55 Mbit/s
95th percentile per-packet one-way delay: 86.954 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 44.40 Mbit/s
95th percentile per-packet one-way delay: 85.655 ms
Loss rate: 0.00%

Run 5: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2019-03-09 00:49:58

End at: 2019-03-09 00:50:28

Local clock offset: -0.203 ms

Remote clock offset: 0.072 ms

Below is generated by plot.py at 2019-03-09 06:04:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.38 Mbit/s

95th percentile per-packet one-way delay: 86.549 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.91 Mbit/s

95th percentile per-packet one-way delay: 86.395 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.06 Mbit/s

95th percentile per-packet one-way delay: 86.377 ms

Loss rate: 0.00%

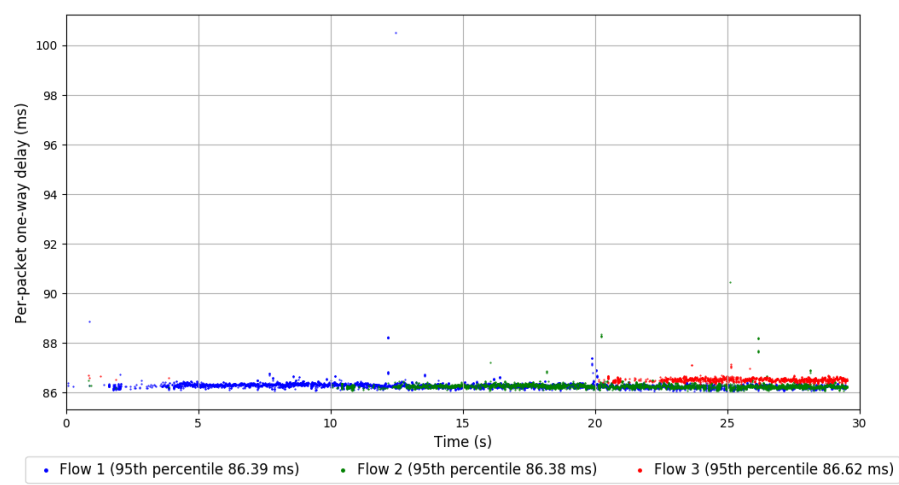
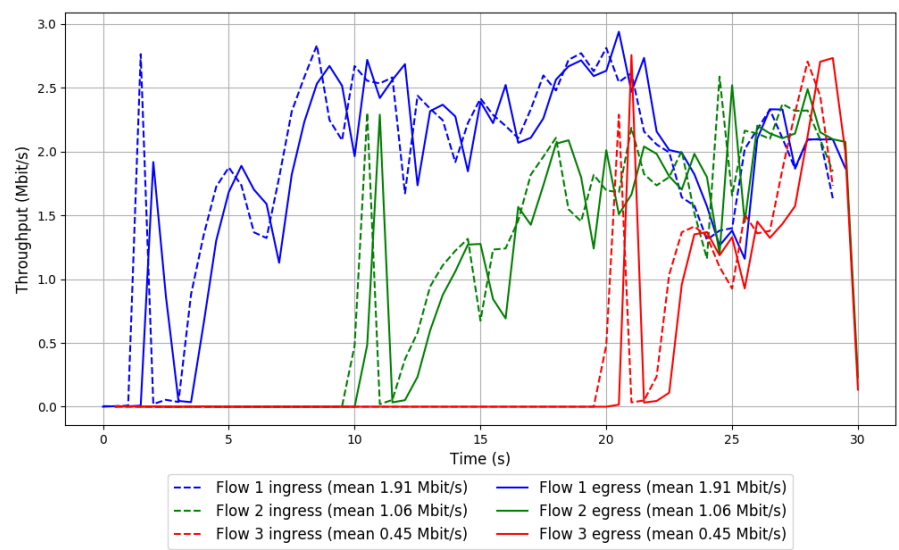
-- Flow 3:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 86.622 ms

Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link

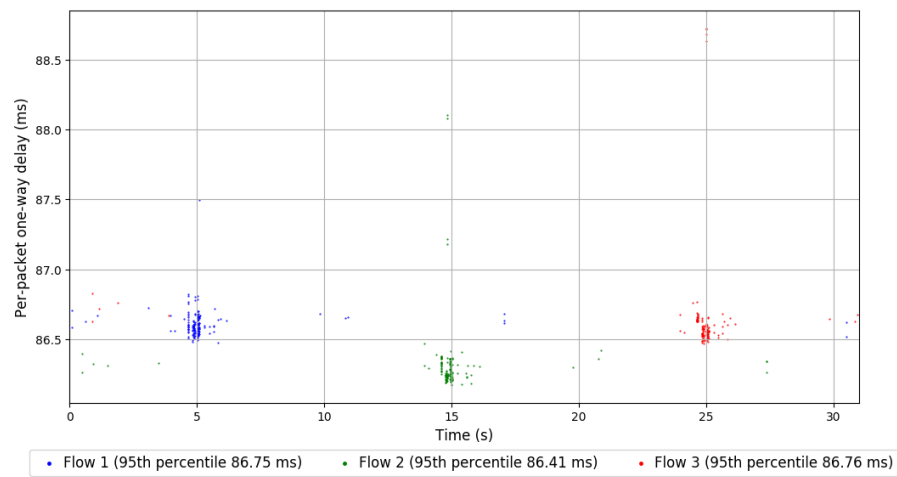
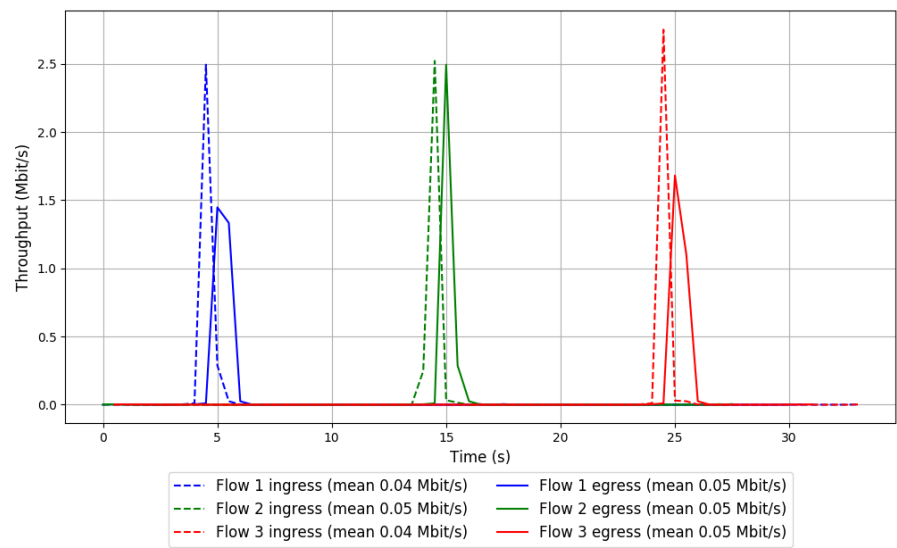


Run 2: Statistics of WebRTC media

Start at: 2019-03-09 01:27:15
End at: 2019-03-09 01:27:45
Local clock offset: -0.338 ms
Remote clock offset: -0.014 ms

Below is generated by plot.py at 2019-03-09 06:04:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 86.721 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.755 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.408 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.759 ms
Loss rate: 0.05%

Run 2: Report of WebRTC media — Data Link

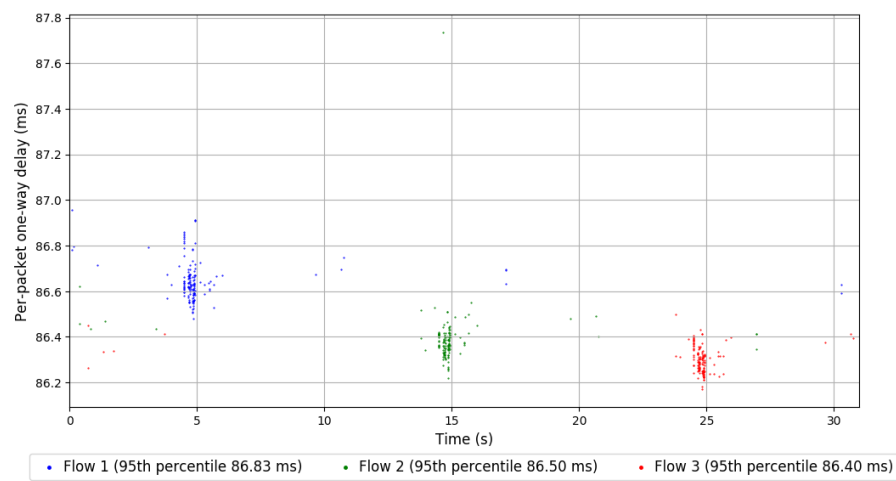
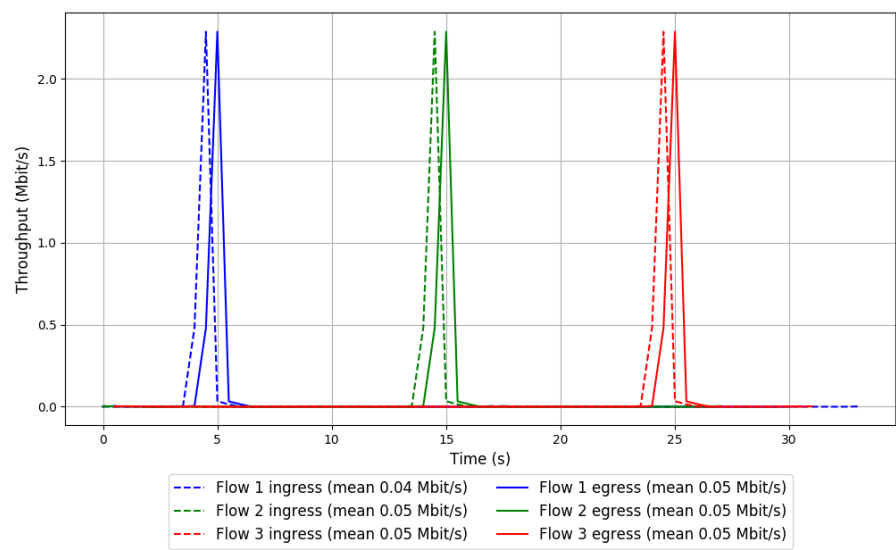


Run 3: Statistics of WebRTC media

Start at: 2019-03-09 02:04:38
End at: 2019-03-09 02:05:08
Local clock offset: -0.361 ms
Remote clock offset: -0.029 ms

Below is generated by plot.py at 2019-03-09 06:04:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 86.725 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.831 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.500 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.404 ms
Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

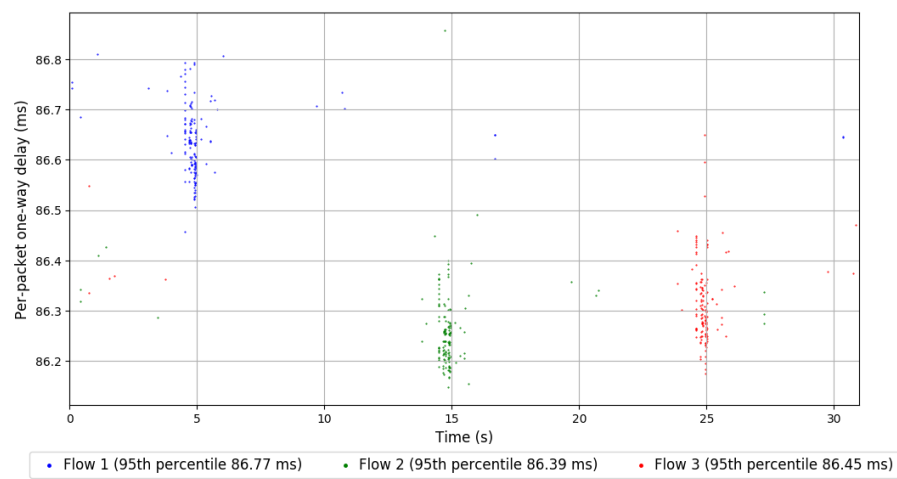
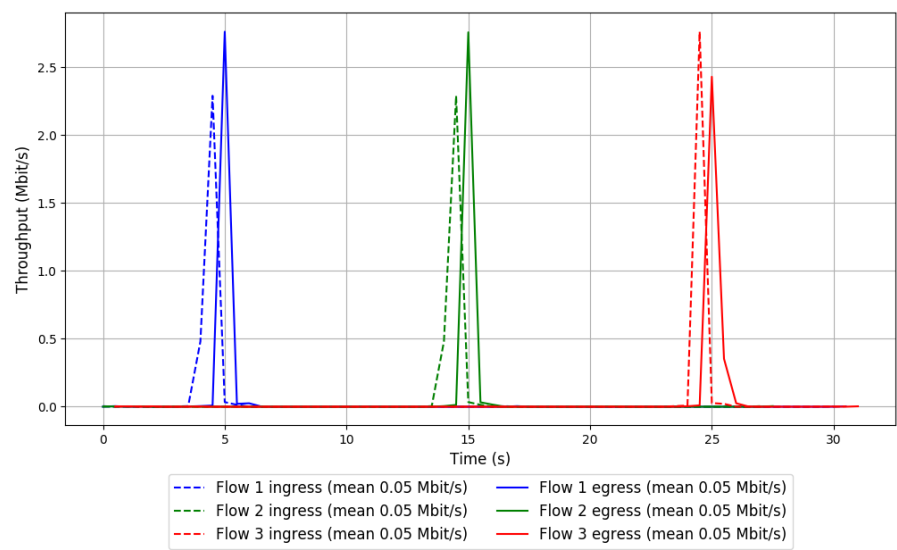


Run 4: Statistics of WebRTC media

Start at: 2019-03-09 02:42:11
End at: 2019-03-09 02:42:41
Local clock offset: -0.303 ms
Remote clock offset: -0.024 ms

Below is generated by plot.py at 2019-03-09 06:04:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 86.715 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.767 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.393 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.449 ms
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-03-09 03:19:13
End at: 2019-03-09 03:19:43
Local clock offset: 0.347 ms
Remote clock offset: -0.046 ms

Below is generated by plot.py at 2019-03-09 06:04:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 86.089 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 85.862 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.126 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 85.687 ms
Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

