

Pantheon Report

Generated at 2019-01-18 04:15:45 (UTC).

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

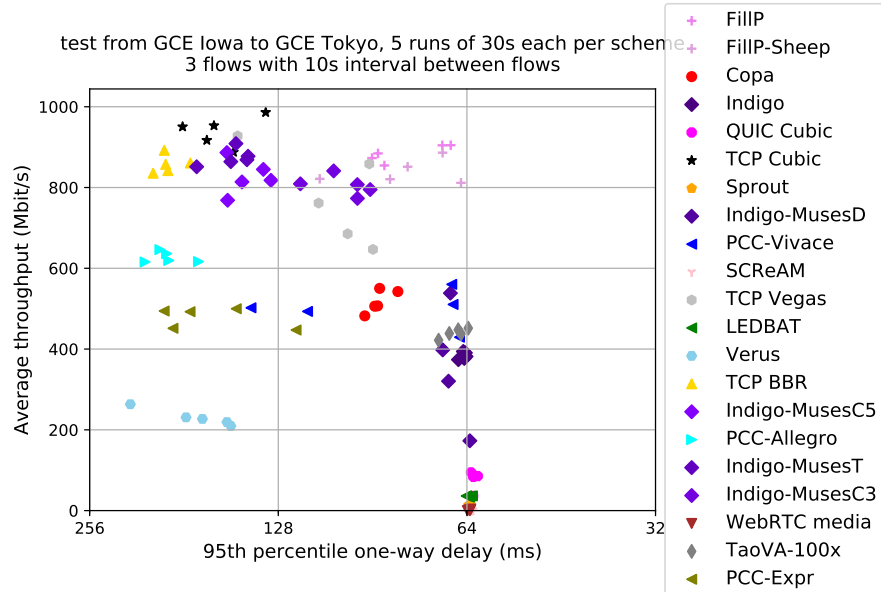
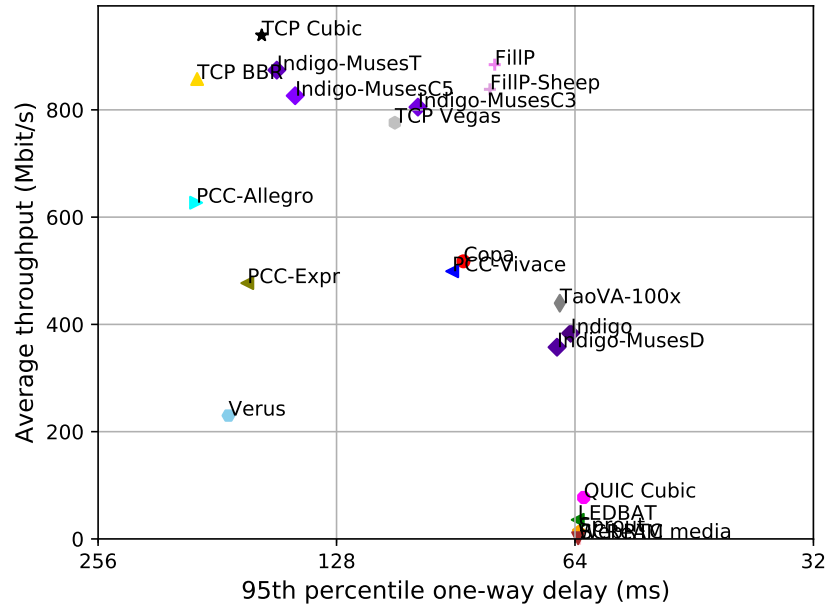
```
Linux 4.15.0-1026-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

```
branch: muses @ c80a283586bf7b0cc1fe08c69c8f60d56498f81c
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ c3eee875824760ec5b2fd207fefe166e1afe2170
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 Iowa to GCE Tokyo, 5 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	445.34	425.58	388.00	187.66	183.94	203.67	1.25	1.04	1.87
Copa	5	268.86	258.02	231.21	83.86	89.64	90.57	0.00	0.03	0.04
TCP Cubic	5	490.39	463.58	420.42	148.60	142.73	162.35	0.13	0.24	0.57
FillP	5	564.62	348.69	262.84	86.44	66.99	66.48	0.18	0.01	0.03
FillP-Sheep	5	536.34	331.47	245.65	86.50	66.67	64.96	0.25	0.02	0.00
Indigo	5	205.92	190.17	159.32	64.59	64.80	65.25	0.00	0.00	0.00
Indigo-MusesC3	5	488.12	398.35	224.66	99.14	106.79	67.55	0.00	0.12	0.25
Indigo-MusesC5	5	503.54	427.12	174.40	147.39	135.82	84.54	0.09	0.07	0.45
Indigo-MusesD	4	244.22	165.64	25.75	67.09	67.15	63.10	0.00	0.00	0.00
Indigo-MusesT	5	530.34	441.24	216.84	154.92	129.75	71.29	0.37	0.26	0.00
LEDBAT	5	22.75	15.61	7.72	63.62	63.20	63.07	0.00	0.00	0.00
PCC-Allegro	5	348.02	283.87	273.07	197.07	150.22	179.75	3.50	0.78	2.90
PCC-Expr	5	269.40	224.75	174.85	176.37	118.31	97.36	2.53	0.20	0.23
QUIC Cubic	5	37.84	41.59	36.14	62.25	62.30	62.38	0.00	0.00	0.00
SCReAM	5	0.22	0.22	0.22	63.01	63.01	63.05	0.00	0.00	0.00
Sprout	5	6.79	6.64	6.28	63.36	63.23	63.28	0.00	0.00	0.00
TaoVA-100x	5	227.03	214.92	207.90	65.48	67.36	69.50	0.00	0.04	0.26
TCP Vegas	5	386.23	416.37	337.72	96.69	108.67	101.20	0.02	0.09	0.03
Verus	5	123.37	118.39	86.08	156.63	148.42	142.62	0.27	1.15	0.13
PCC-Vivace	5	294.54	256.28	102.75	89.86	83.65	63.89	0.04	0.00	0.00
WebRTC media	5	0.45	0.62	0.26	63.30	63.37	63.40	0.01	0.00	0.00

Run 1: Statistics of TCP BBR

Start at: 2019-01-17 21:54:49

End at: 2019-01-17 21:55:19

Local clock offset: -0.126 ms

Remote clock offset: 0.288 ms

Below is generated by plot.py at 2019-01-18 01:22:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 892.09 Mbit/s

95th percentile per-packet one-way delay: 194.605 ms

Loss rate: 1.38%

-- Flow 1:

Average throughput: 458.39 Mbit/s

95th percentile per-packet one-way delay: 193.276 ms

Loss rate: 1.14%

-- Flow 2:

Average throughput: 457.62 Mbit/s

95th percentile per-packet one-way delay: 167.511 ms

Loss rate: 0.62%

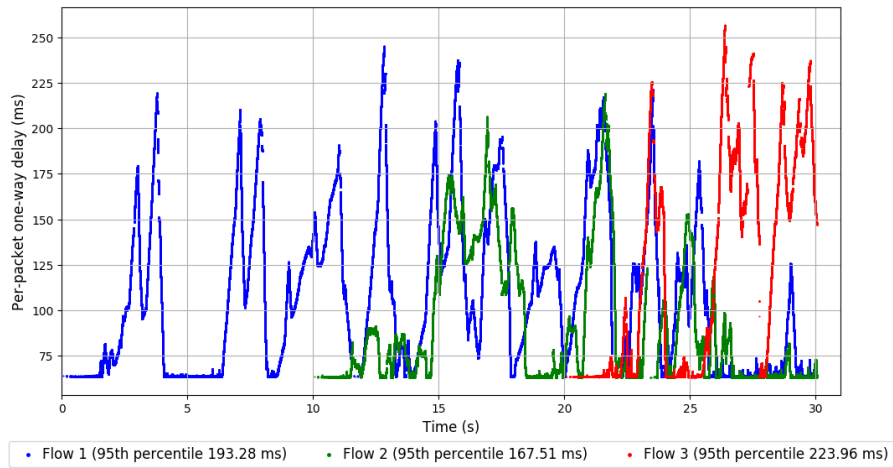
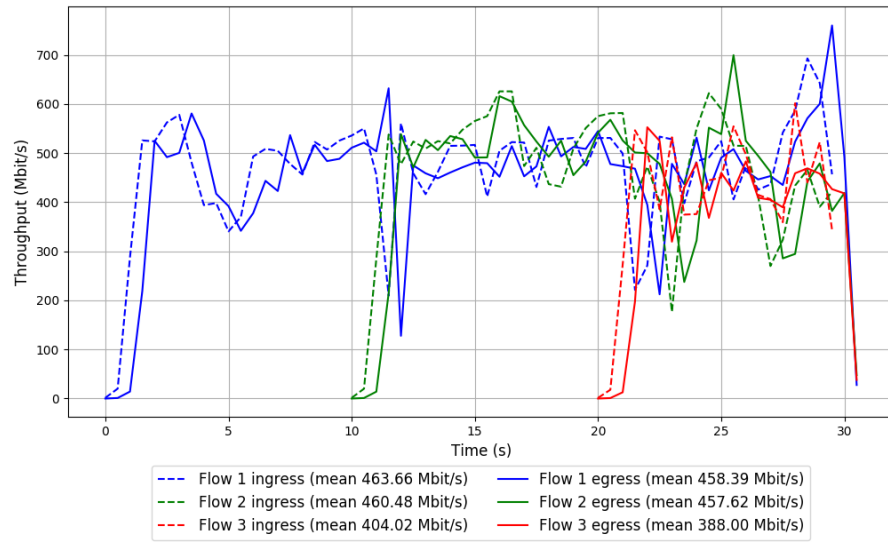
-- Flow 3:

Average throughput: 388.00 Mbit/s

95th percentile per-packet one-way delay: 223.964 ms

Loss rate: 3.96%

Run 1: Report of TCP BBR — Data Link

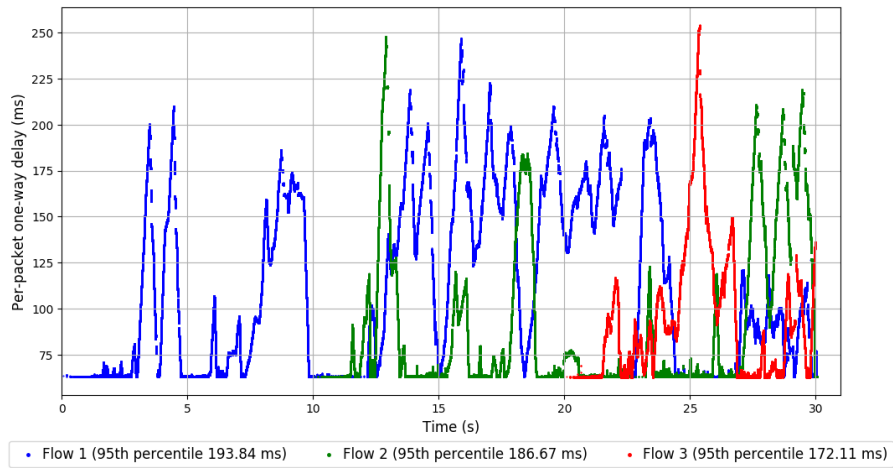
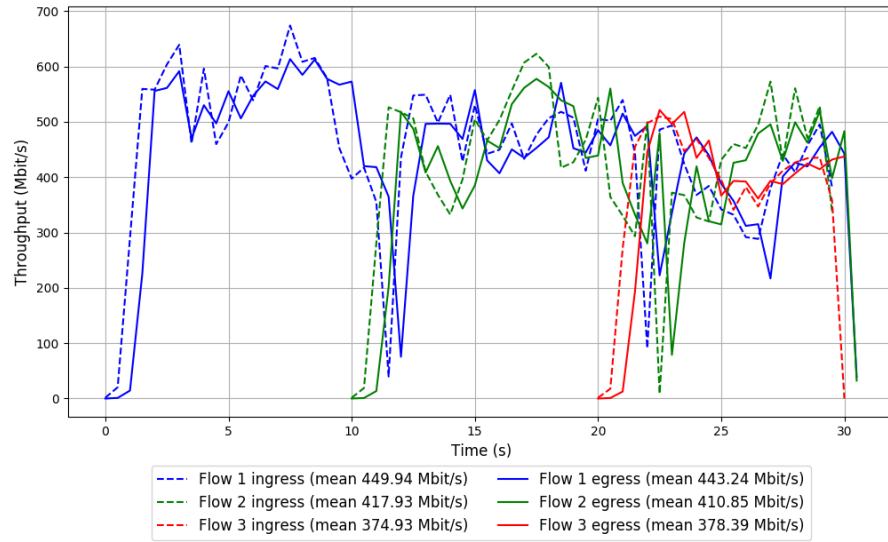


Run 2: Statistics of TCP BBR

Start at: 2019-01-17 22:31:17
End at: 2019-01-17 22:31:47
Local clock offset: -0.048 ms
Remote clock offset: -0.247 ms

Below is generated by plot.py at 2019-01-18 01:22:50
Datalink statistics
-- Total of 3 flows:
Average throughput: 841.94 Mbit/s
95th percentile per-packet one-way delay: 192.036 ms
Loss rate: 1.40%
-- Flow 1:
Average throughput: 443.24 Mbit/s
95th percentile per-packet one-way delay: 193.835 ms
Loss rate: 1.49%
-- Flow 2:
Average throughput: 410.85 Mbit/s
95th percentile per-packet one-way delay: 186.671 ms
Loss rate: 1.69%
-- Flow 3:
Average throughput: 378.39 Mbit/s
95th percentile per-packet one-way delay: 172.111 ms
Loss rate: 0.39%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2019-01-17 23:07:40

End at: 2019-01-17 23:08:10

Local clock offset: 0.022 ms

Remote clock offset: -0.07 ms

Below is generated by plot.py at 2019-01-18 01:22:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 860.72 Mbit/s

95th percentile per-packet one-way delay: 176.800 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 435.35 Mbit/s

95th percentile per-packet one-way delay: 166.784 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 432.61 Mbit/s

95th percentile per-packet one-way delay: 183.721 ms

Loss rate: 1.52%

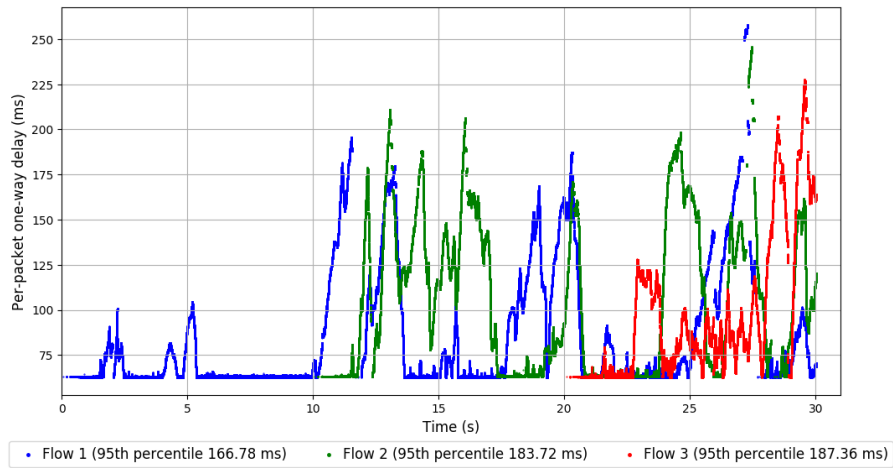
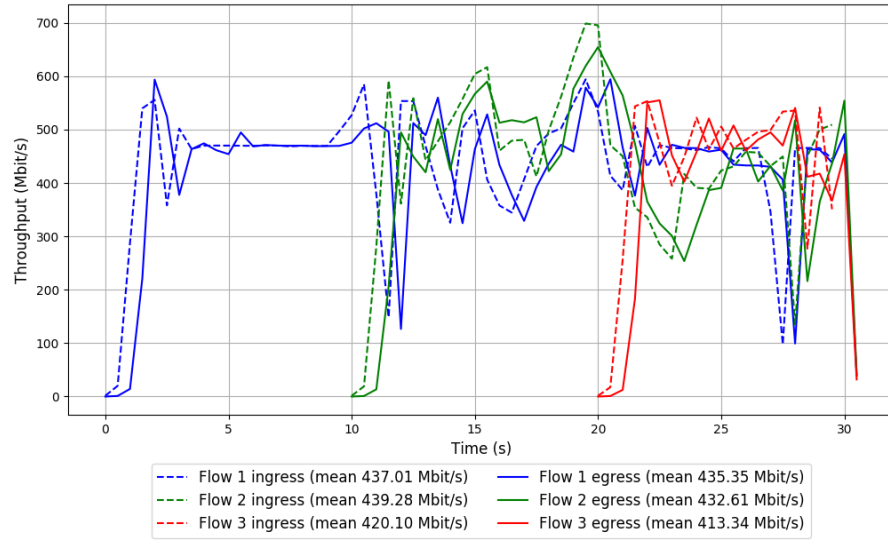
-- Flow 3:

Average throughput: 413.34 Mbit/s

95th percentile per-packet one-way delay: 187.357 ms

Loss rate: 1.52%

Run 3: Report of TCP BBR — Data Link

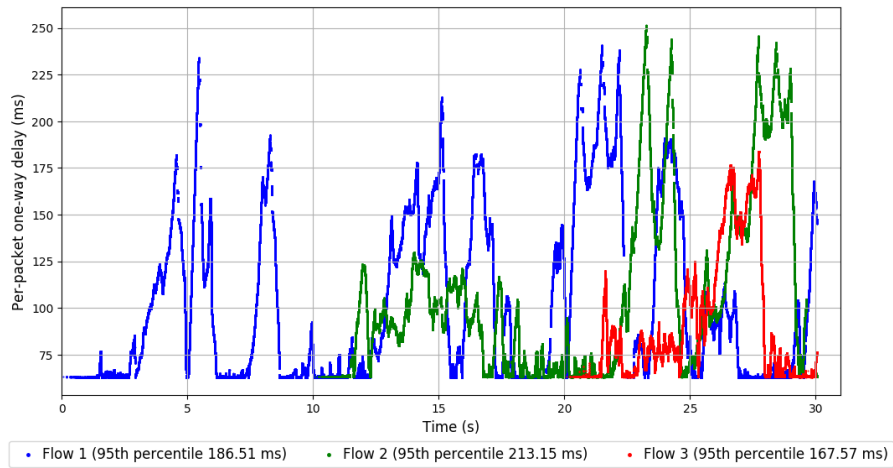
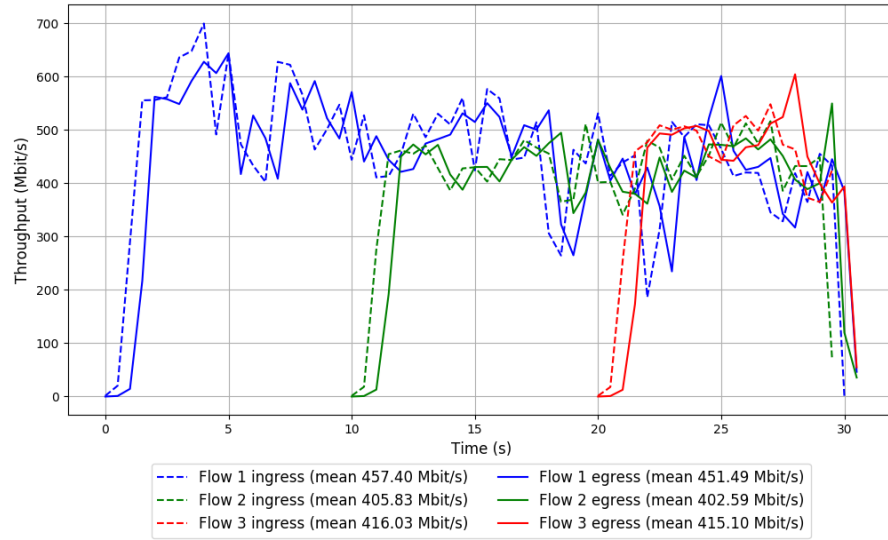


Run 4: Statistics of TCP BBR

Start at: 2019-01-17 23:44:22
End at: 2019-01-17 23:44:52
Local clock offset: -0.072 ms
Remote clock offset: -0.143 ms

Below is generated by plot.py at 2019-01-18 01:22:50
Datalink statistics
-- Total of 3 flows:
Average throughput: 857.45 Mbit/s
95th percentile per-packet one-way delay: 193.608 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 451.49 Mbit/s
95th percentile per-packet one-way delay: 186.512 ms
Loss rate: 1.38%
-- Flow 2:
Average throughput: 402.59 Mbit/s
95th percentile per-packet one-way delay: 213.148 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 415.10 Mbit/s
95th percentile per-packet one-way delay: 167.575 ms
Loss rate: 0.23%

Run 4: Report of TCP BBR — Data Link

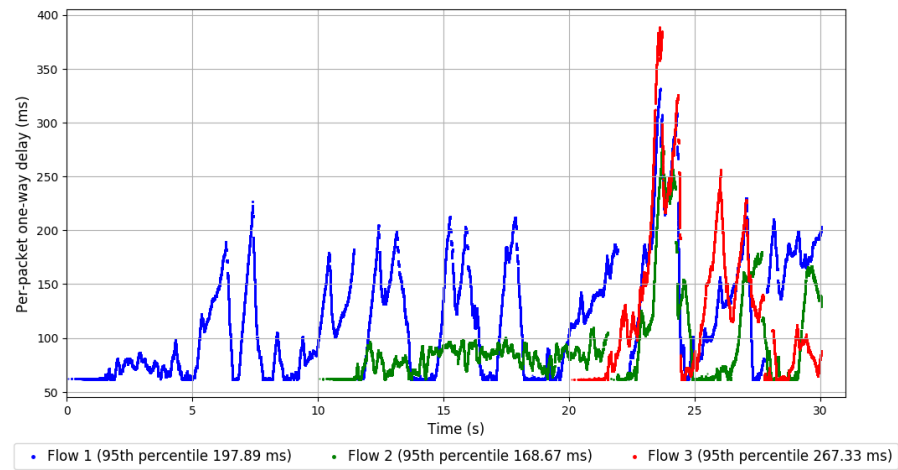
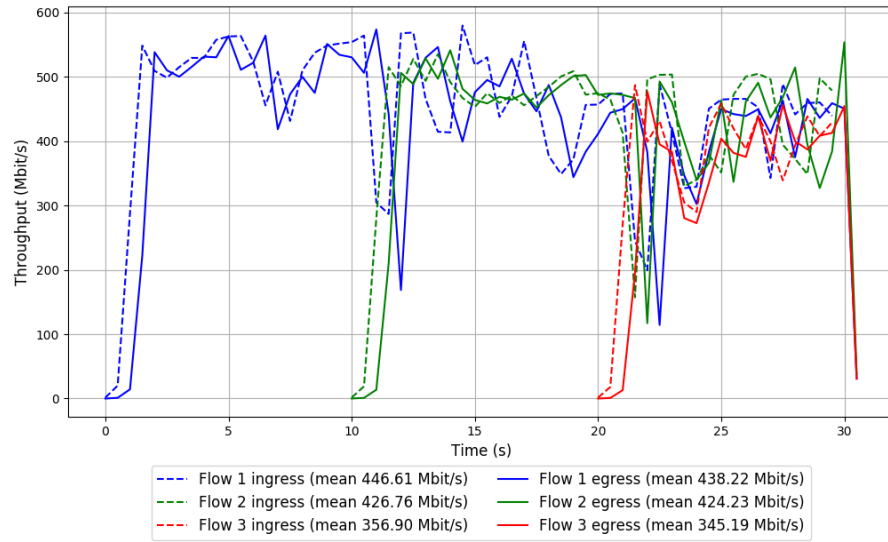


Run 5: Statistics of TCP BBR

Start at: 2019-01-18 00:20:21
End at: 2019-01-18 00:20:51
Local clock offset: -0.045 ms
Remote clock offset: -1.375 ms

Below is generated by plot.py at 2019-01-18 01:22:50
Datalink statistics
-- Total of 3 flows:
Average throughput: 835.37 Mbit/s
95th percentile per-packet one-way delay: 202.744 ms
Loss rate: 1.64%
-- Flow 1:
Average throughput: 438.22 Mbit/s
95th percentile per-packet one-way delay: 197.886 ms
Loss rate: 1.88%
-- Flow 2:
Average throughput: 424.23 Mbit/s
95th percentile per-packet one-way delay: 168.667 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 345.19 Mbit/s
95th percentile per-packet one-way delay: 267.326 ms
Loss rate: 3.27%

Run 5: Report of TCP BBR — Data Link

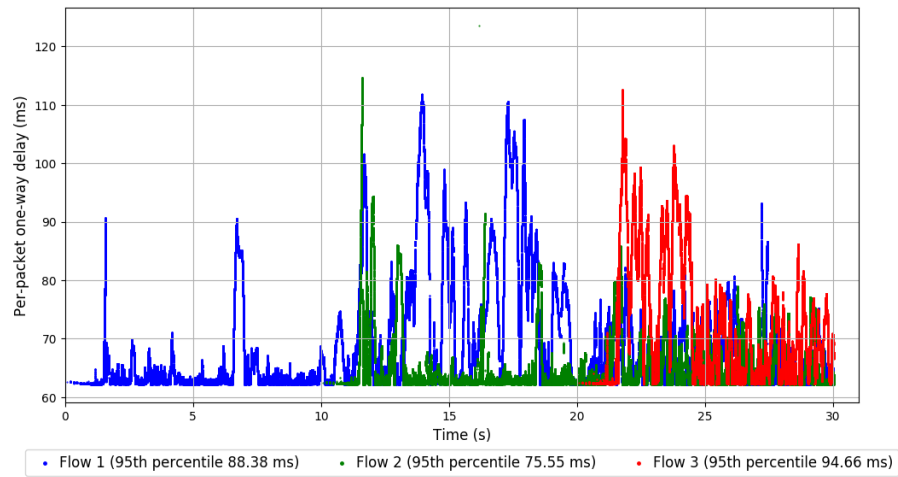
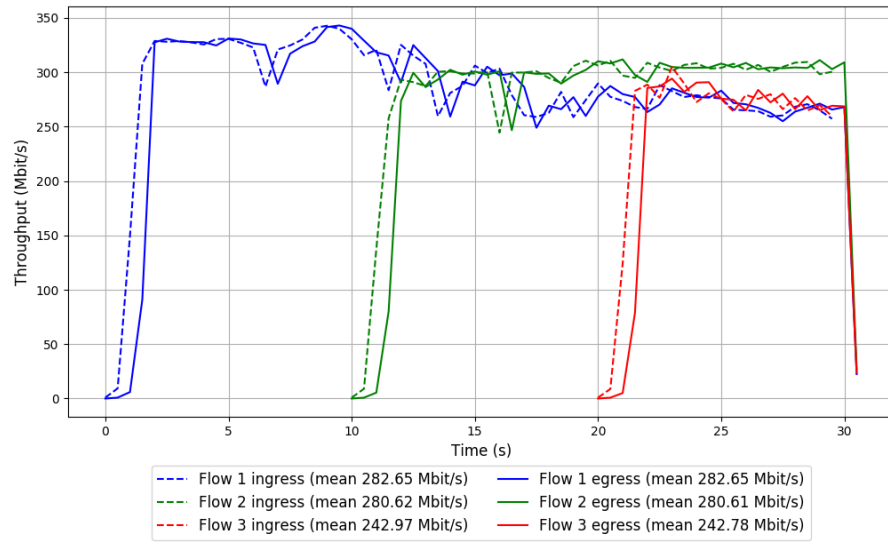


Run 1: Statistics of Copa

Start at: 2019-01-17 22:15:40
End at: 2019-01-17 22:16:10
Local clock offset: -0.065 ms
Remote clock offset: -0.621 ms

Below is generated by plot.py at 2019-01-18 01:25:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 550.24 Mbit/s
95th percentile per-packet one-way delay: 88.198 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 282.65 Mbit/s
95th percentile per-packet one-way delay: 88.384 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 280.61 Mbit/s
95th percentile per-packet one-way delay: 75.553 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 242.78 Mbit/s
95th percentile per-packet one-way delay: 94.655 ms
Loss rate: 0.06%

Run 1: Report of Copa — Data Link

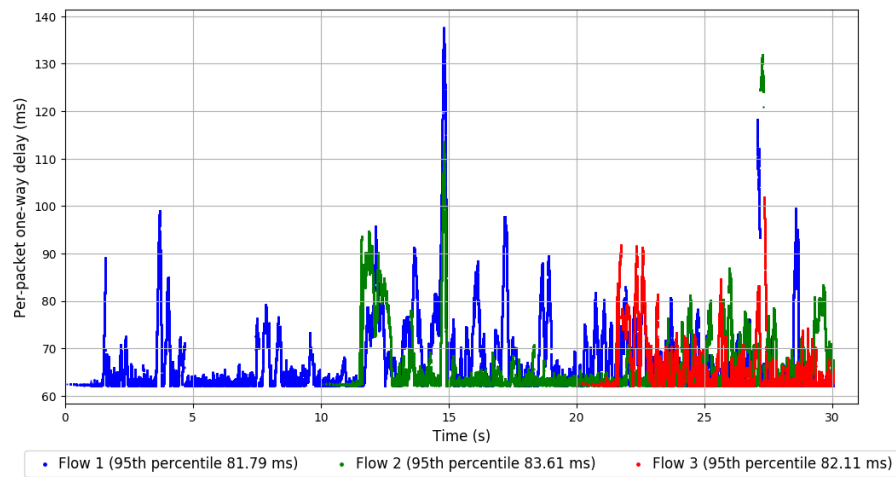
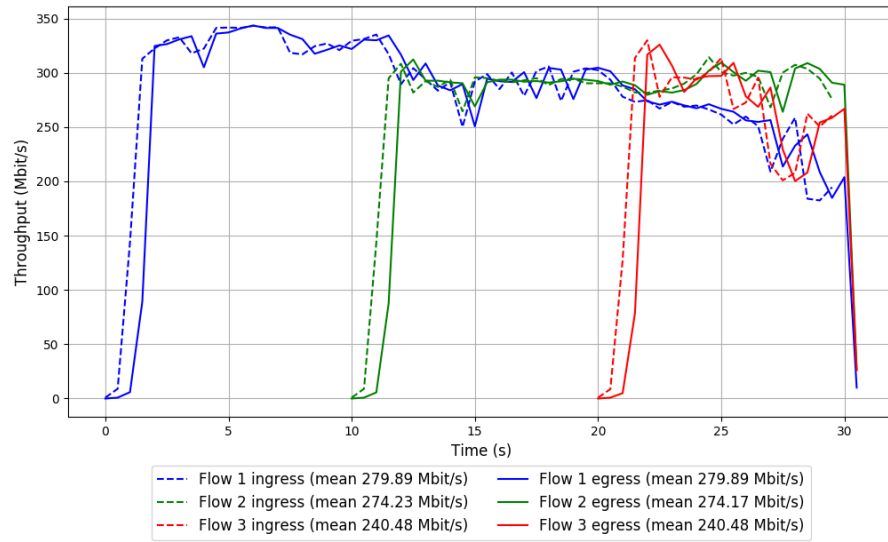


Run 2: Statistics of Copa

Start at: 2019-01-17 22:52:25
End at: 2019-01-17 22:52:55
Local clock offset: 0.005 ms
Remote clock offset: -0.669 ms

Below is generated by plot.py at 2019-01-18 01:25:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 542.39 Mbit/s
95th percentile per-packet one-way delay: 82.496 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 279.89 Mbit/s
95th percentile per-packet one-way delay: 81.793 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 274.17 Mbit/s
95th percentile per-packet one-way delay: 83.607 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 240.48 Mbit/s
95th percentile per-packet one-way delay: 82.108 ms
Loss rate: 0.00%

Run 2: Report of Copa — Data Link

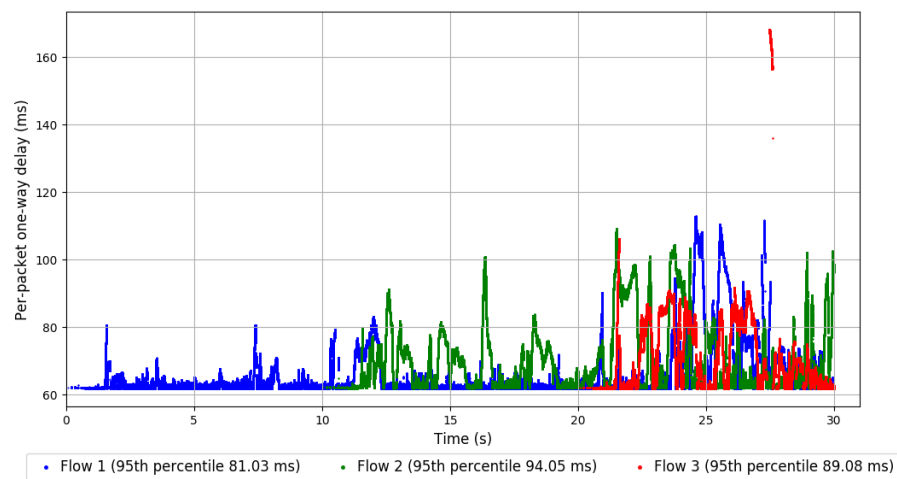
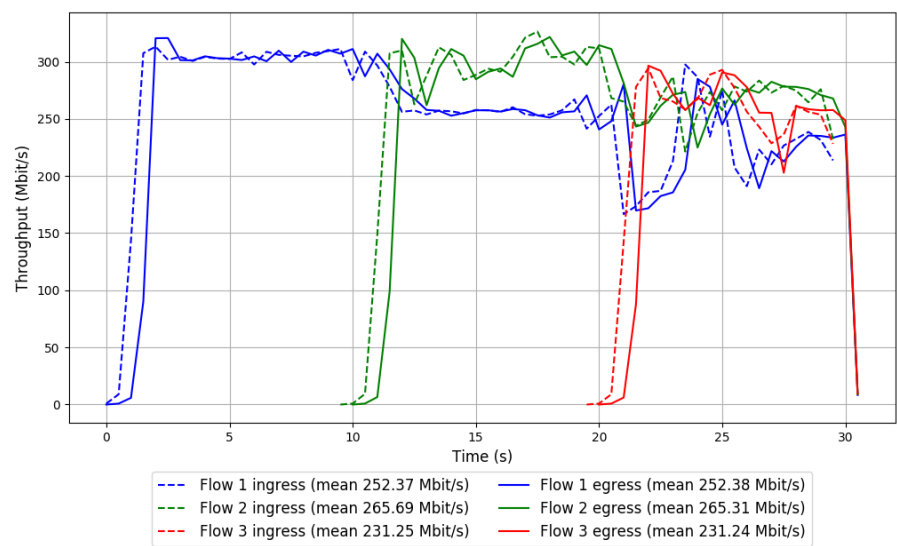


Run 3: Statistics of Copa

Start at: 2019-01-17 23:28:47
End at: 2019-01-17 23:29:17
Local clock offset: -0.04 ms
Remote clock offset: -0.849 ms

Below is generated by plot.py at 2019-01-18 01:25:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 506.10 Mbit/s
95th percentile per-packet one-way delay: 89.802 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 252.38 Mbit/s
95th percentile per-packet one-way delay: 81.025 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 265.31 Mbit/s
95th percentile per-packet one-way delay: 94.046 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 231.24 Mbit/s
95th percentile per-packet one-way delay: 89.082 ms
Loss rate: 0.00%

Run 3: Report of Copa — Data Link

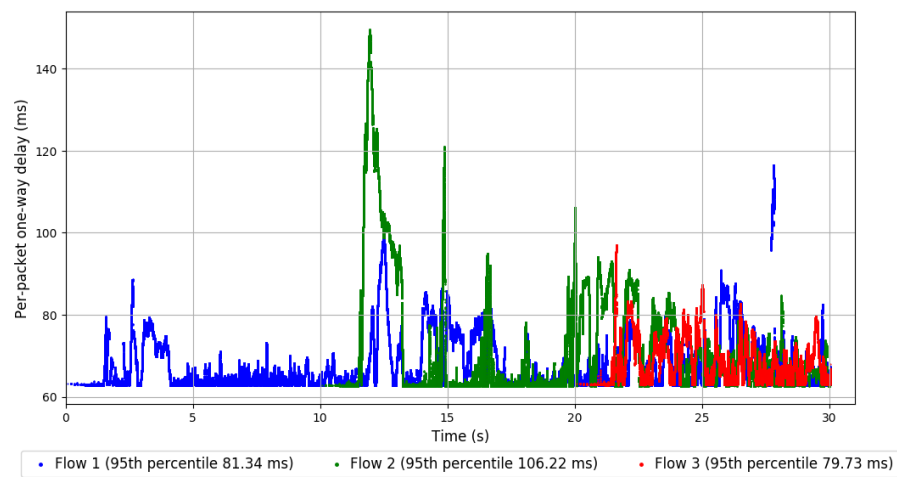
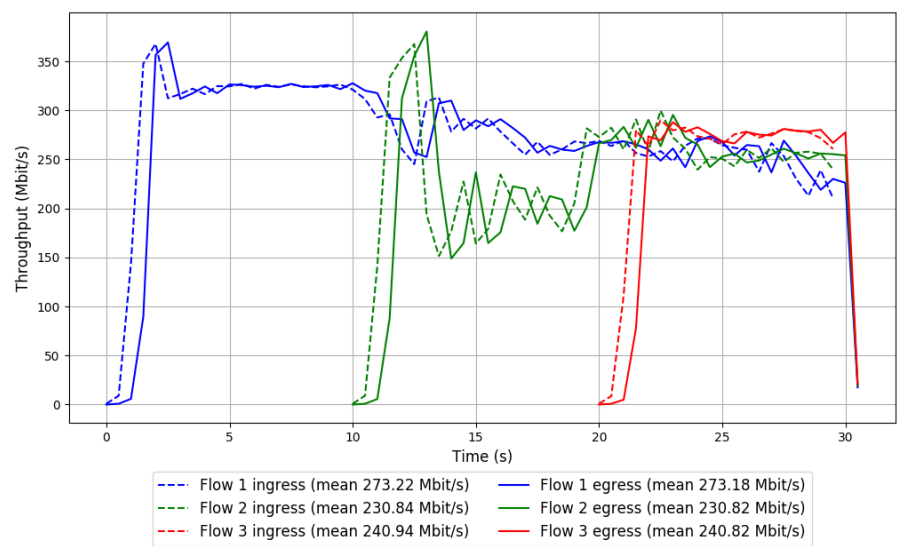


Run 4: Statistics of Copa

Start at: 2019-01-18 00:05:06
End at: 2019-01-18 00:05:36
Local clock offset: -0.03 ms
Remote clock offset: -0.108 ms

Below is generated by plot.py at 2019-01-18 01:43:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 506.96 Mbit/s
95th percentile per-packet one-way delay: 88.867 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 273.18 Mbit/s
95th percentile per-packet one-way delay: 81.345 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 230.82 Mbit/s
95th percentile per-packet one-way delay: 106.224 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 240.82 Mbit/s
95th percentile per-packet one-way delay: 79.730 ms
Loss rate: 0.02%

Run 4: Report of Copa — Data Link

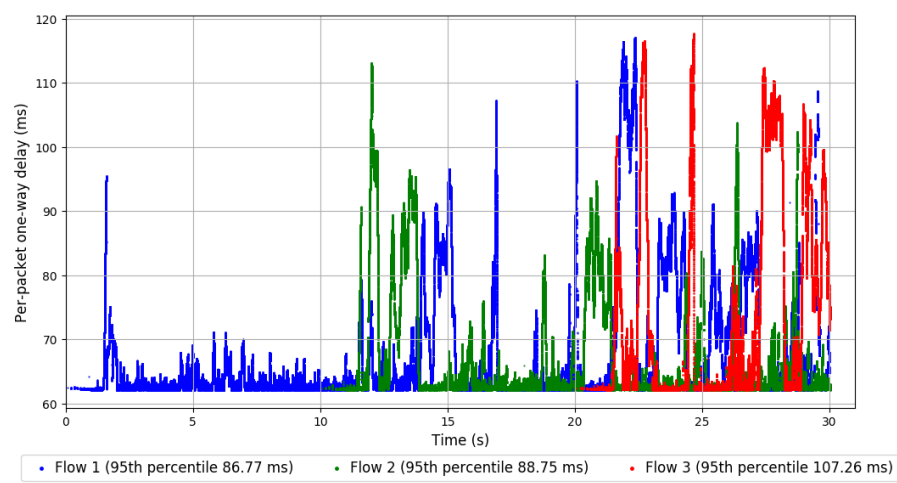
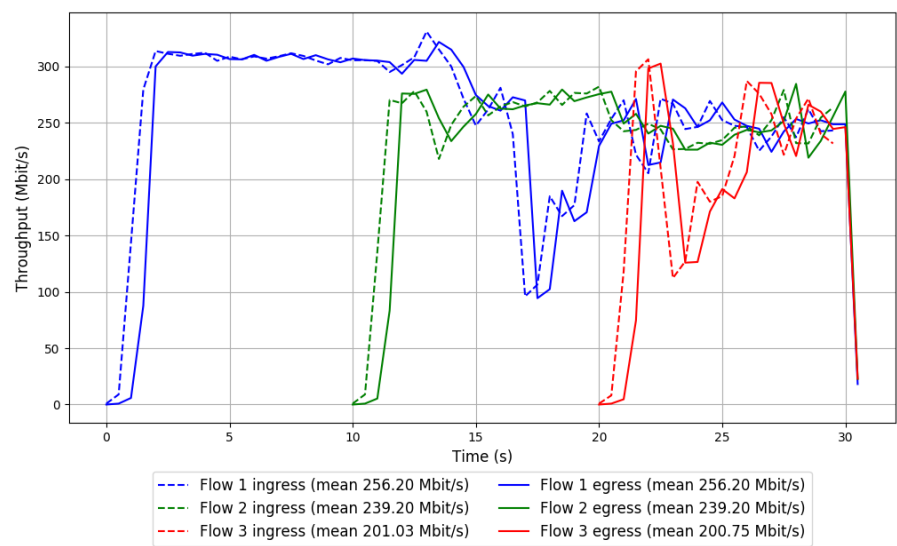


Run 5: Statistics of Copa

Start at: 2019-01-18 00:41:17
End at: 2019-01-18 00:41:47
Local clock offset: -0.09 ms
Remote clock offset: -0.907 ms

Below is generated by plot.py at 2019-01-18 01:43:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 482.18 Mbit/s
95th percentile per-packet one-way delay: 93.153 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 256.20 Mbit/s
95th percentile per-packet one-way delay: 86.765 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 239.20 Mbit/s
95th percentile per-packet one-way delay: 88.745 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 200.75 Mbit/s
95th percentile per-packet one-way delay: 107.260 ms
Loss rate: 0.10%

Run 5: Report of Copa — Data Link

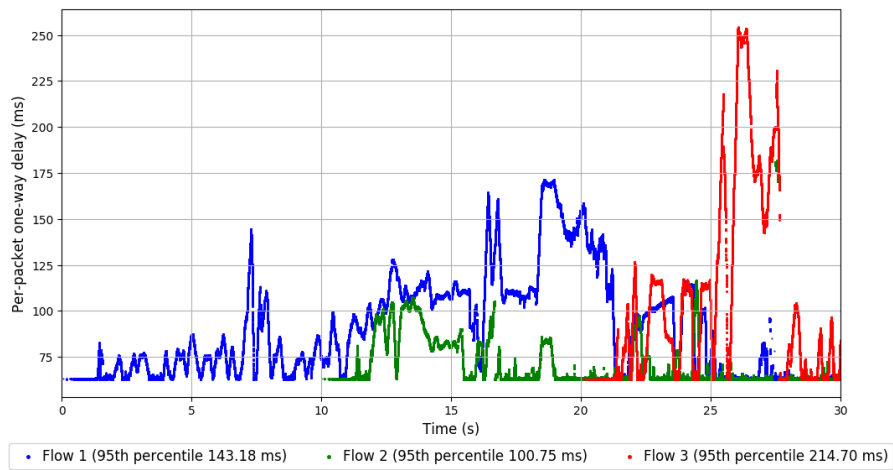
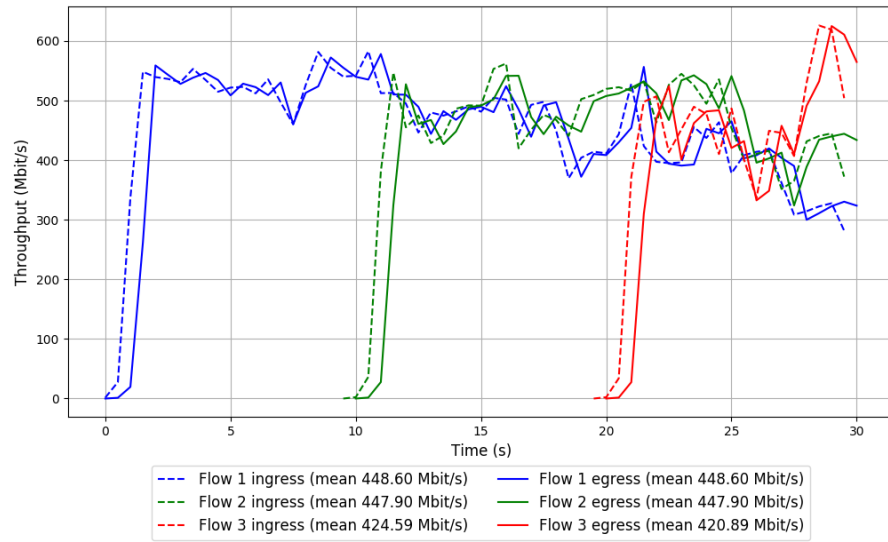


Run 1: Statistics of TCP Cubic

Start at: 2019-01-17 21:52:49
End at: 2019-01-17 21:53:19
Local clock offset: -0.098 ms
Remote clock offset: -0.114 ms

Below is generated by plot.py at 2019-01-18 01:43:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 887.70 Mbit/s
95th percentile per-packet one-way delay: 150.903 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 448.60 Mbit/s
95th percentile per-packet one-way delay: 143.184 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 447.90 Mbit/s
95th percentile per-packet one-way delay: 100.755 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 420.89 Mbit/s
95th percentile per-packet one-way delay: 214.696 ms
Loss rate: 0.87%

Run 1: Report of TCP Cubic — Data Link

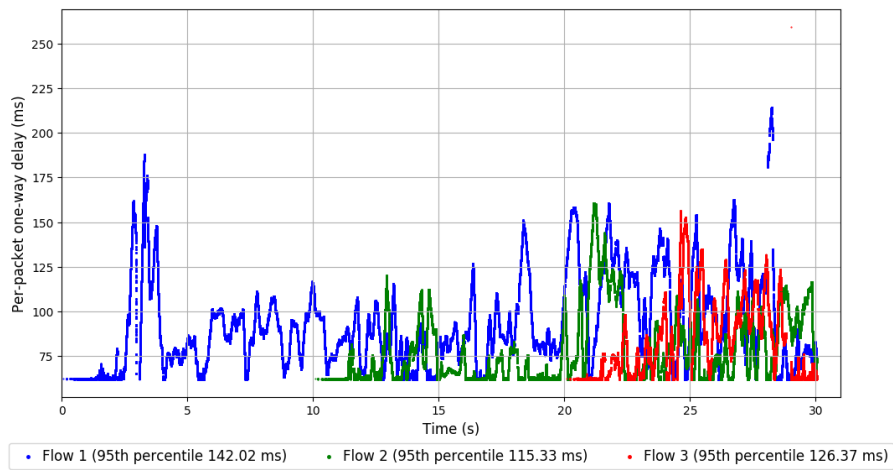
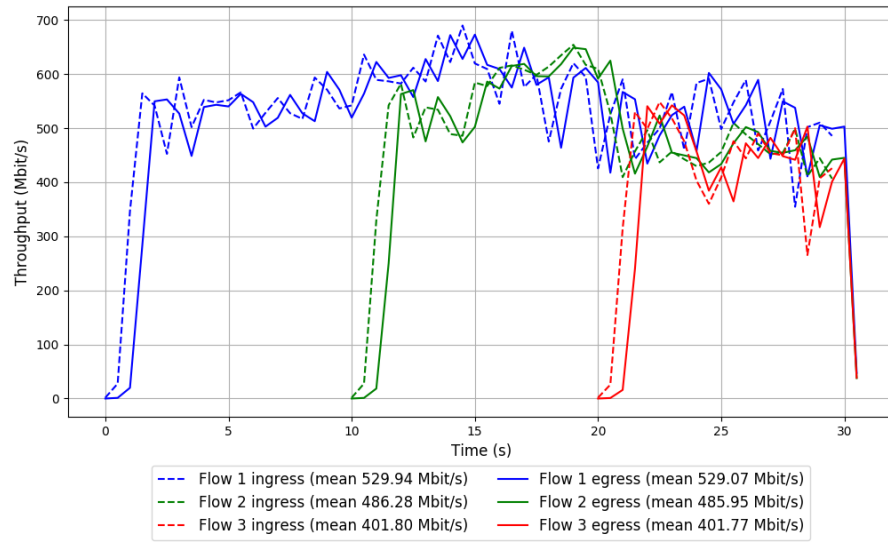


Run 2: Statistics of TCP Cubic

Start at: 2019-01-17 22:29:13
End at: 2019-01-17 22:29:43
Local clock offset: -0.032 ms
Remote clock offset: -0.827 ms

Below is generated by plot.py at 2019-01-18 01:45:13
Datalink statistics
-- Total of 3 flows:
Average throughput: 986.13 Mbit/s
95th percentile per-packet one-way delay: 134.070 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 529.07 Mbit/s
95th percentile per-packet one-way delay: 142.017 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 485.95 Mbit/s
95th percentile per-packet one-way delay: 115.331 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 401.77 Mbit/s
95th percentile per-packet one-way delay: 126.374 ms
Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link

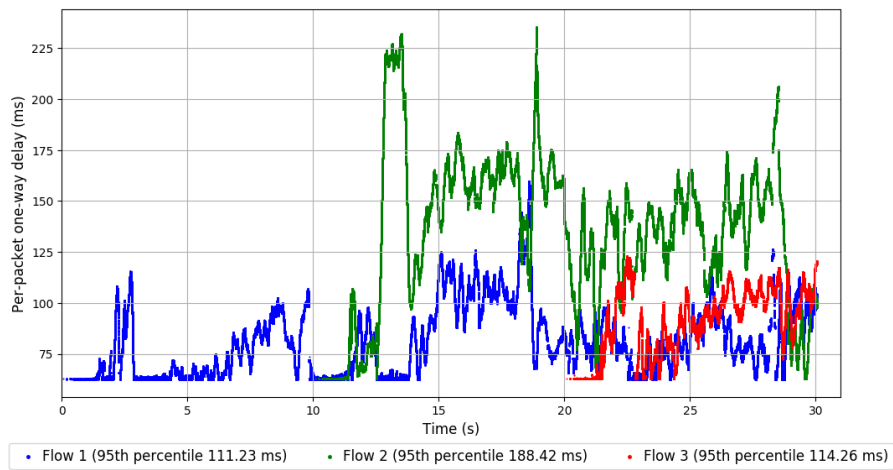
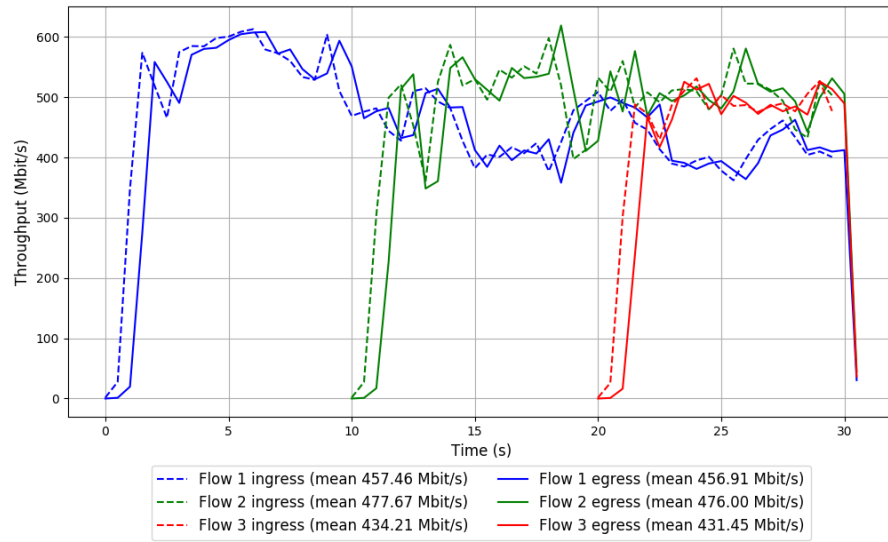


Run 3: Statistics of TCP Cubic

Start at: 2019-01-17 23:05:38
End at: 2019-01-17 23:06:08
Local clock offset: -0.032 ms
Remote clock offset: -0.392 ms

Below is generated by plot.py at 2019-01-18 01:45:13
Datalink statistics
-- Total of 3 flows:
Average throughput: 917.05 Mbit/s
95th percentile per-packet one-way delay: 166.449 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 456.91 Mbit/s
95th percentile per-packet one-way delay: 111.235 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 476.00 Mbit/s
95th percentile per-packet one-way delay: 188.424 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 431.45 Mbit/s
95th percentile per-packet one-way delay: 114.256 ms
Loss rate: 0.63%

Run 3: Report of TCP Cubic — Data Link

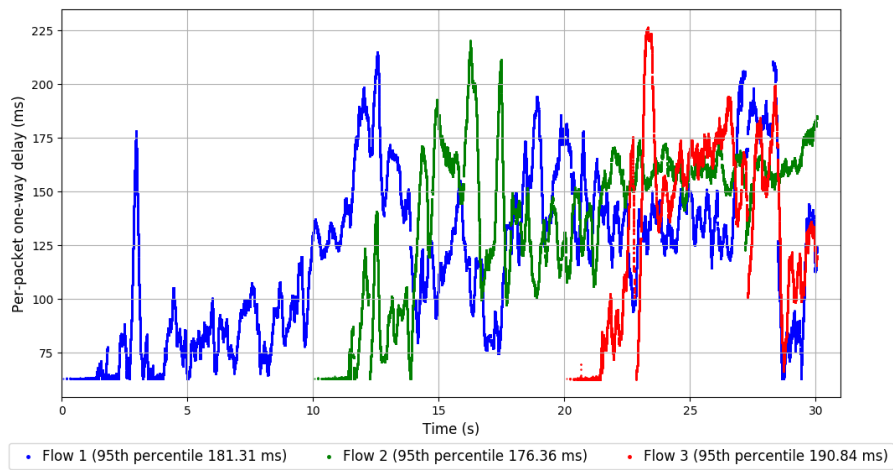
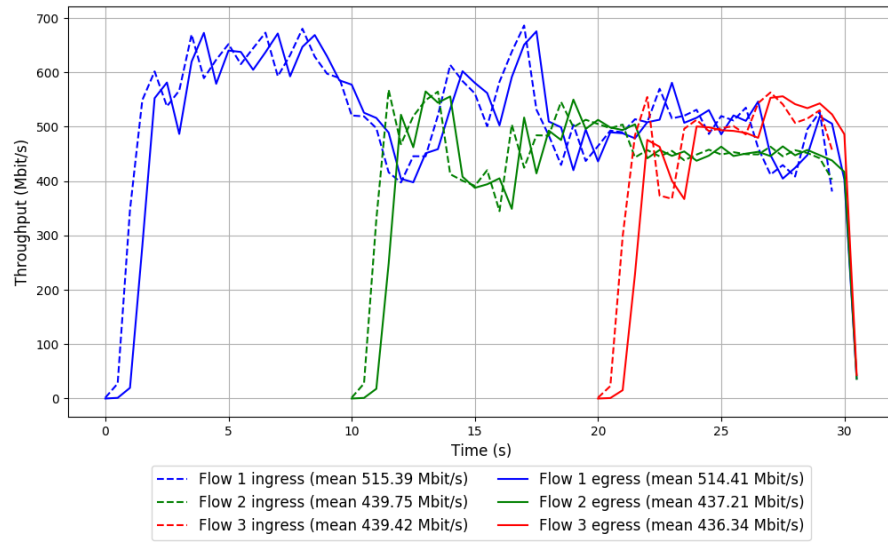


Run 4: Statistics of TCP Cubic

Start at: 2019-01-17 23:42:15
End at: 2019-01-17 23:42:45
Local clock offset: -0.069 ms
Remote clock offset: -0.249 ms

Below is generated by plot.py at 2019-01-18 01:45:51
Datalink statistics
-- Total of 3 flows:
Average throughput: 950.46 Mbit/s
95th percentile per-packet one-way delay: 181.957 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 514.41 Mbit/s
95th percentile per-packet one-way delay: 181.306 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 437.21 Mbit/s
95th percentile per-packet one-way delay: 176.358 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 436.34 Mbit/s
95th percentile per-packet one-way delay: 190.838 ms
Loss rate: 0.69%

Run 4: Report of TCP Cubic — Data Link

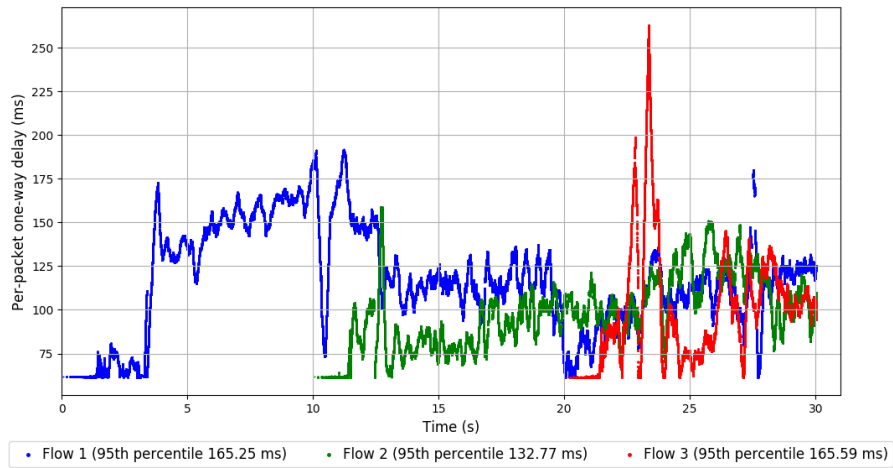
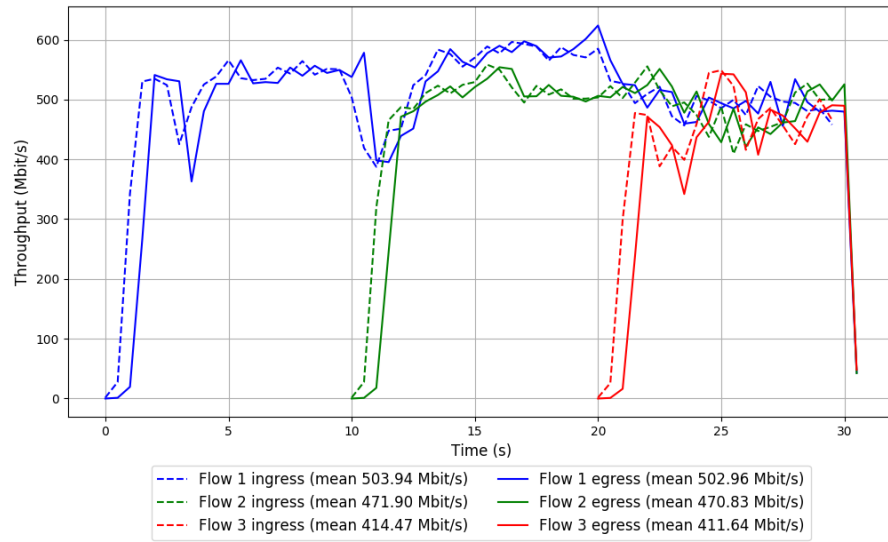


Run 5: Statistics of TCP Cubic

Start at: 2019-01-18 00:18:18
End at: 2019-01-18 00:18:48
Local clock offset: -0.004 ms
Remote clock offset: -1.329 ms

Below is generated by plot.py at 2019-01-18 01:47:17
Datalink statistics
-- Total of 3 flows:
Average throughput: 953.19 Mbit/s
95th percentile per-packet one-way delay: 162.137 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 502.96 Mbit/s
95th percentile per-packet one-way delay: 165.248 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 470.83 Mbit/s
95th percentile per-packet one-way delay: 132.770 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 411.64 Mbit/s
95th percentile per-packet one-way delay: 165.589 ms
Loss rate: 0.68%

Run 5: Report of TCP Cubic — Data Link

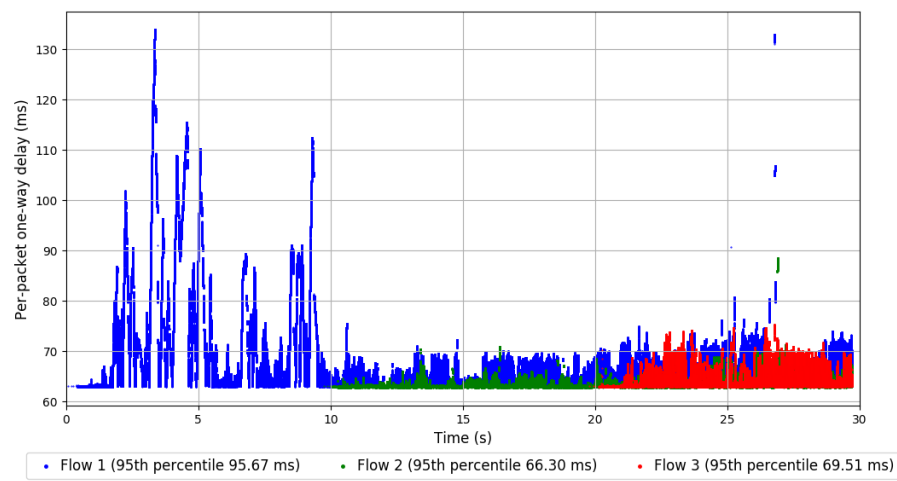
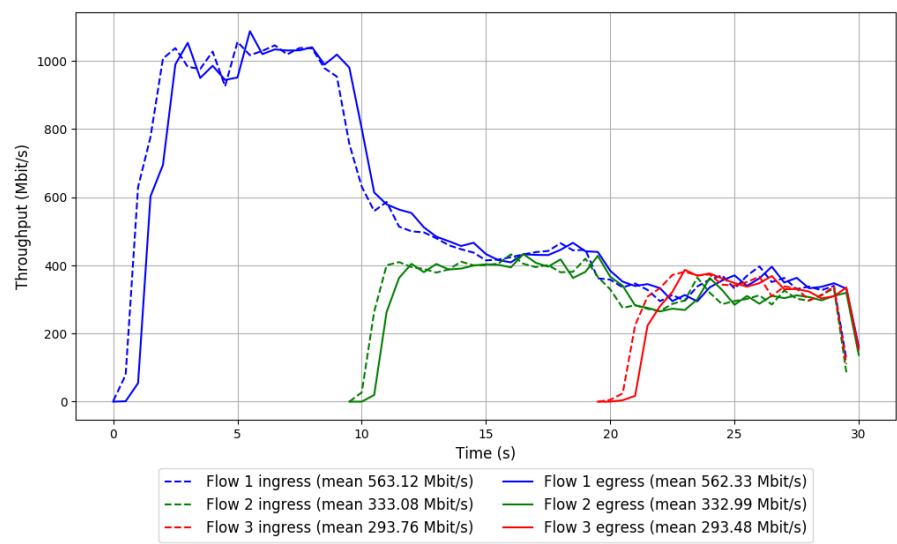


Run 1: Statistics of FillP

Start at: 2019-01-17 22:11:52
End at: 2019-01-17 22:12:23
Local clock offset: -0.094 ms
Remote clock offset: -0.164 ms

Below is generated by plot.py at 2019-01-18 01:49:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 884.43 Mbit/s
95th percentile per-packet one-way delay: 88.736 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 562.33 Mbit/s
95th percentile per-packet one-way delay: 95.669 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 332.99 Mbit/s
95th percentile per-packet one-way delay: 66.298 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 293.48 Mbit/s
95th percentile per-packet one-way delay: 69.512 ms
Loss rate: 0.08%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2019-01-17 22:48:38

End at: 2019-01-17 22:49:08

Local clock offset: 0.001 ms

Remote clock offset: -0.71 ms

Below is generated by plot.py at 2019-01-18 02:07:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 904.50 Mbit/s

95th percentile per-packet one-way delay: 70.058 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 575.13 Mbit/s

95th percentile per-packet one-way delay: 74.235 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 376.90 Mbit/s

95th percentile per-packet one-way delay: 66.875 ms

Loss rate: 0.00%

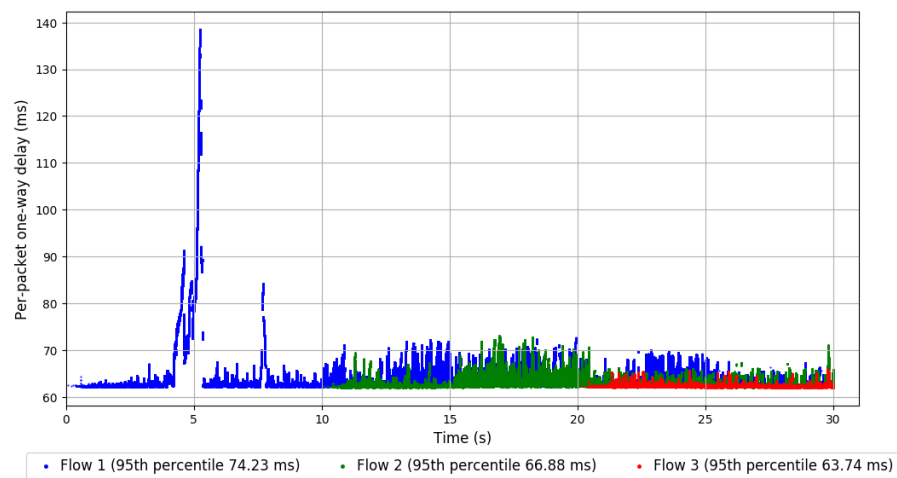
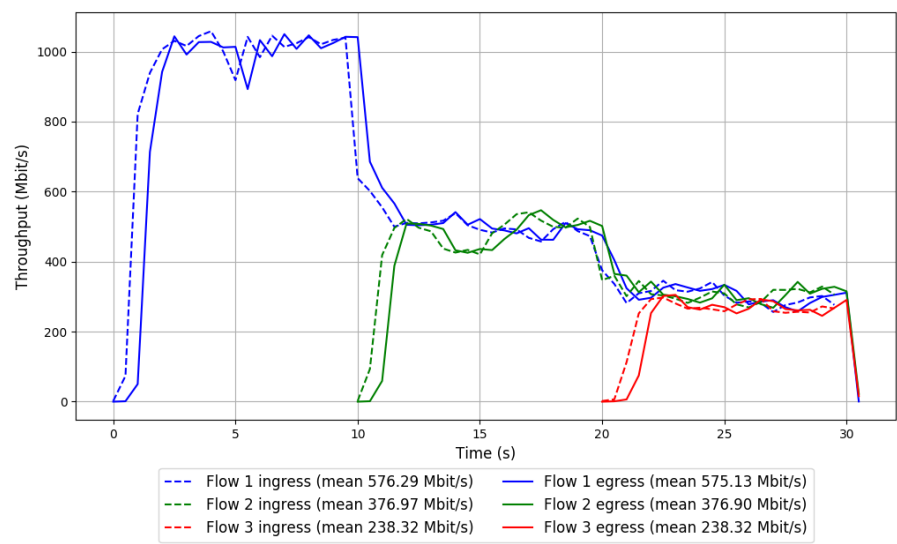
-- Flow 3:

Average throughput: 238.32 Mbit/s

95th percentile per-packet one-way delay: 63.745 ms

Loss rate: 0.00%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2019-01-17 23:24:58

End at: 2019-01-17 23:25:28

Local clock offset: -0.031 ms

Remote clock offset: 0.286 ms

Below is generated by plot.py at 2019-01-18 02:07:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 872.95 Mbit/s

95th percentile per-packet one-way delay: 90.704 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 560.16 Mbit/s

95th percentile per-packet one-way delay: 96.518 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 343.45 Mbit/s

95th percentile per-packet one-way delay: 66.194 ms

Loss rate: 0.00%

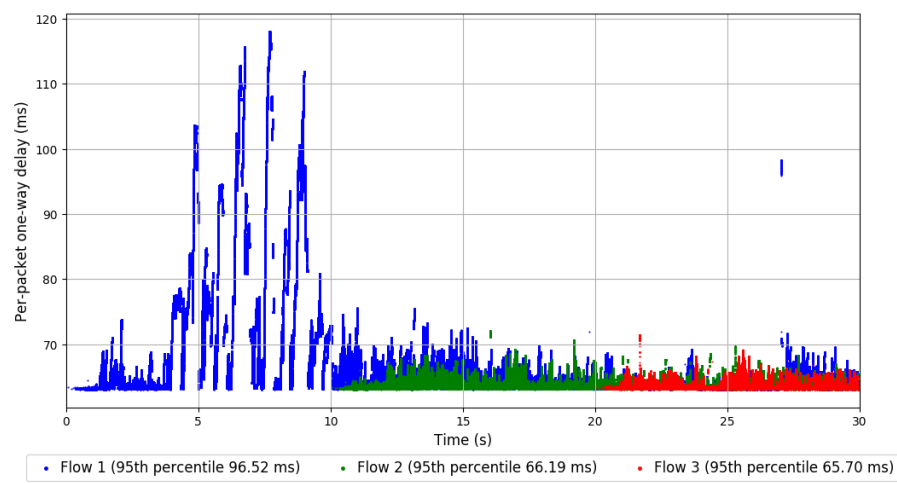
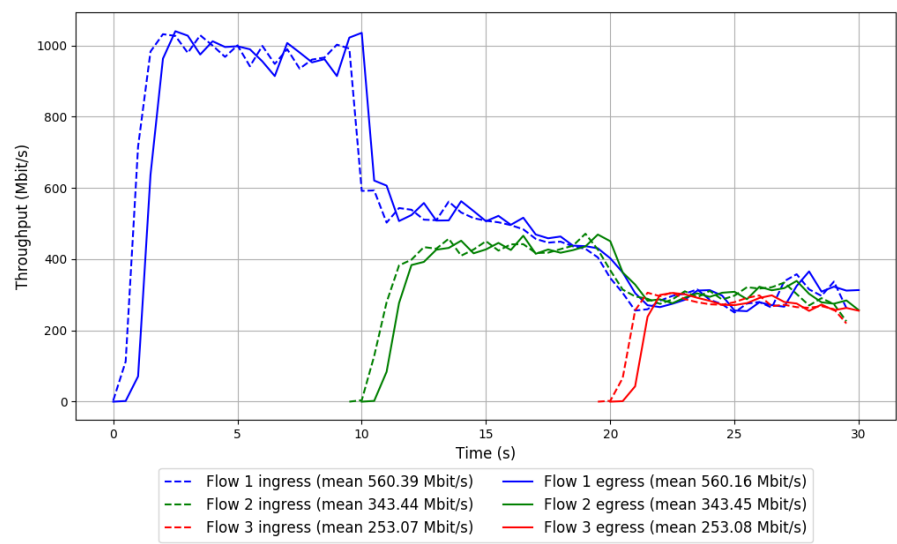
-- Flow 3:

Average throughput: 253.08 Mbit/s

95th percentile per-packet one-way delay: 65.696 ms

Loss rate: 0.00%

Run 3: Report of FillP — Data Link

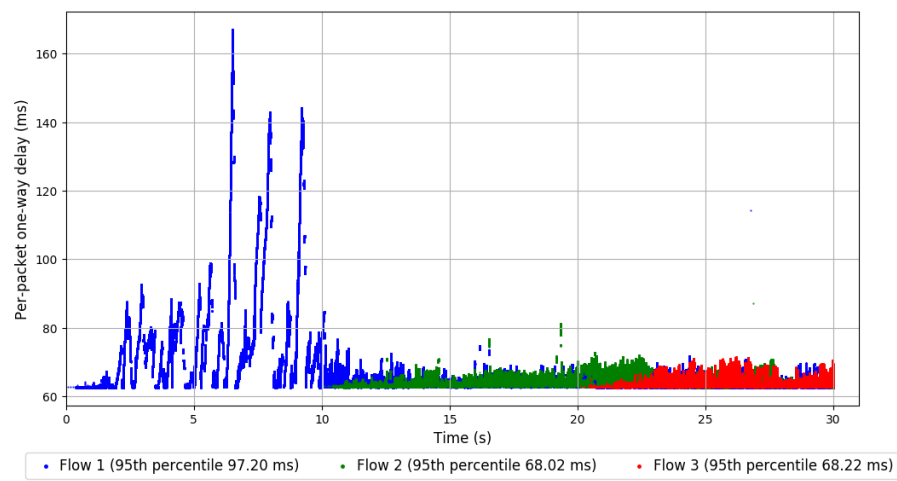
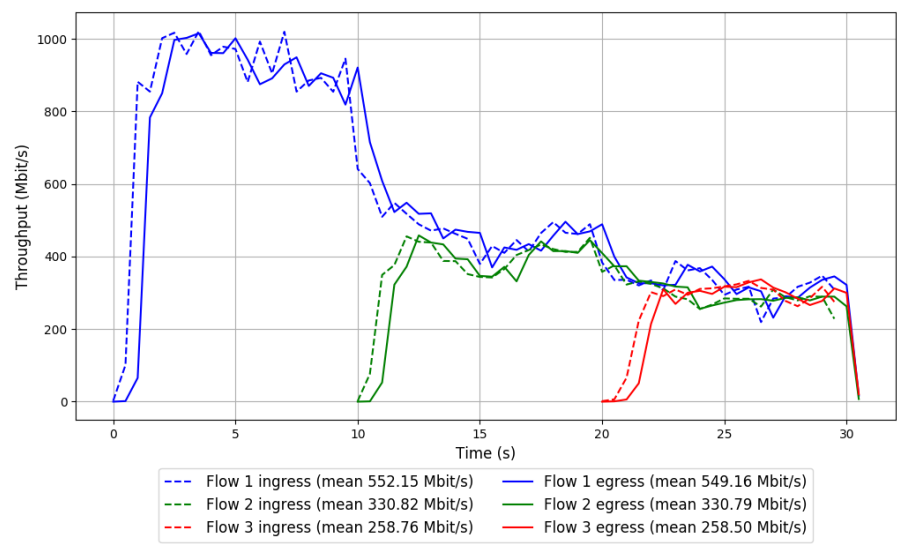


Run 4: Statistics of FillP

Start at: 2019-01-18 00:01:20
End at: 2019-01-18 00:01:50
Local clock offset: -0.06 ms
Remote clock offset: -0.172 ms

Below is generated by plot.py at 2019-01-18 02:08:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 854.60 Mbit/s
95th percentile per-packet one-way delay: 86.671 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 549.16 Mbit/s
95th percentile per-packet one-way delay: 97.201 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 330.79 Mbit/s
95th percentile per-packet one-way delay: 68.024 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 258.50 Mbit/s
95th percentile per-packet one-way delay: 68.217 ms
Loss rate: 0.06%

Run 4: Report of FillP — Data Link

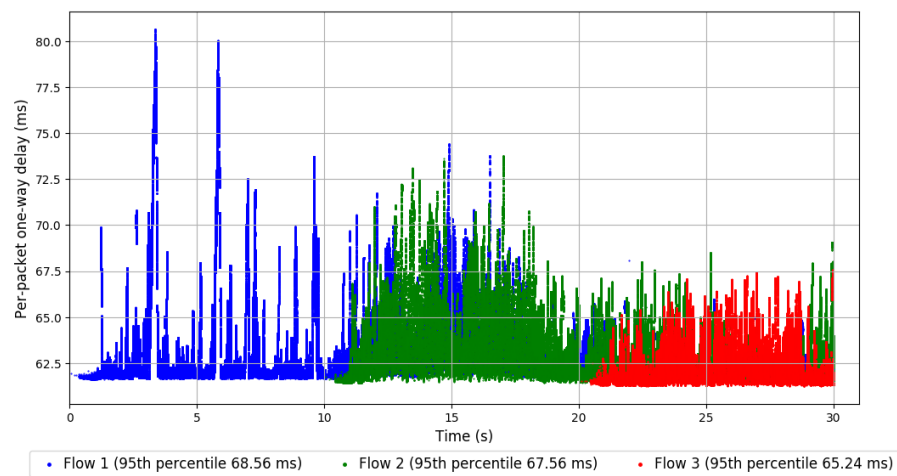
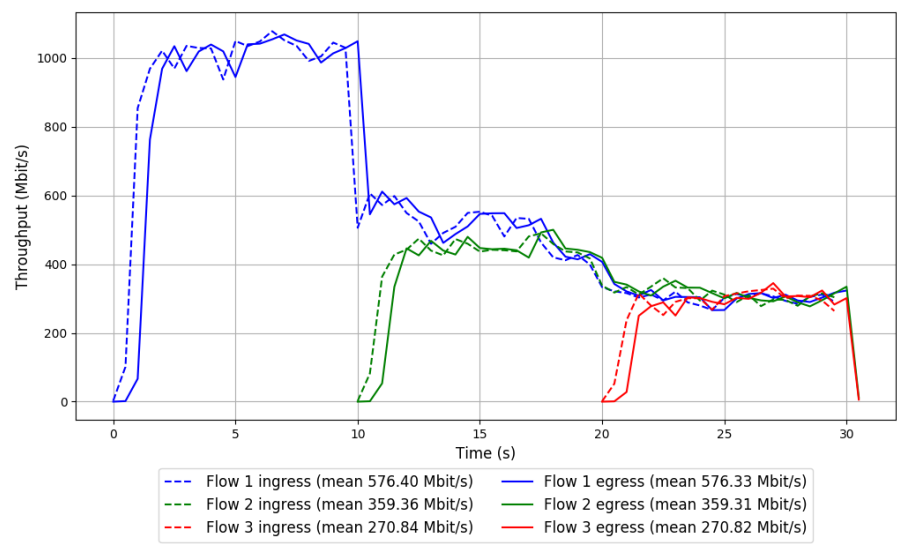


Run 5: Statistics of FillP

Start at: 2019-01-18 00:37:31
End at: 2019-01-18 00:38:01
Local clock offset: -0.074 ms
Remote clock offset: -1.377 ms

Below is generated by plot.py at 2019-01-18 02:09:40
Datalink statistics
-- Total of 3 flows:
Average throughput: 904.79 Mbit/s
95th percentile per-packet one-way delay: 67.923 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 576.33 Mbit/s
95th percentile per-packet one-way delay: 68.563 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 359.31 Mbit/s
95th percentile per-packet one-way delay: 67.563 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 270.82 Mbit/s
95th percentile per-packet one-way delay: 65.242 ms
Loss rate: 0.00%

Run 5: Report of FillP — Data Link

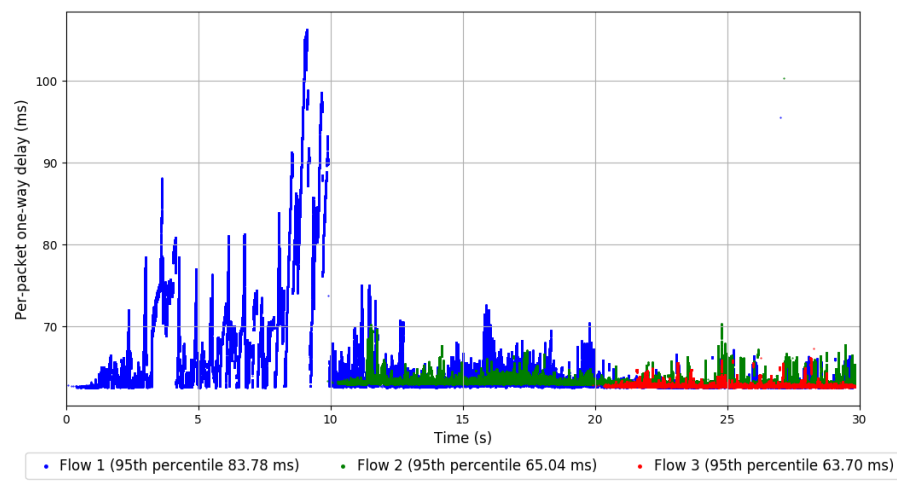
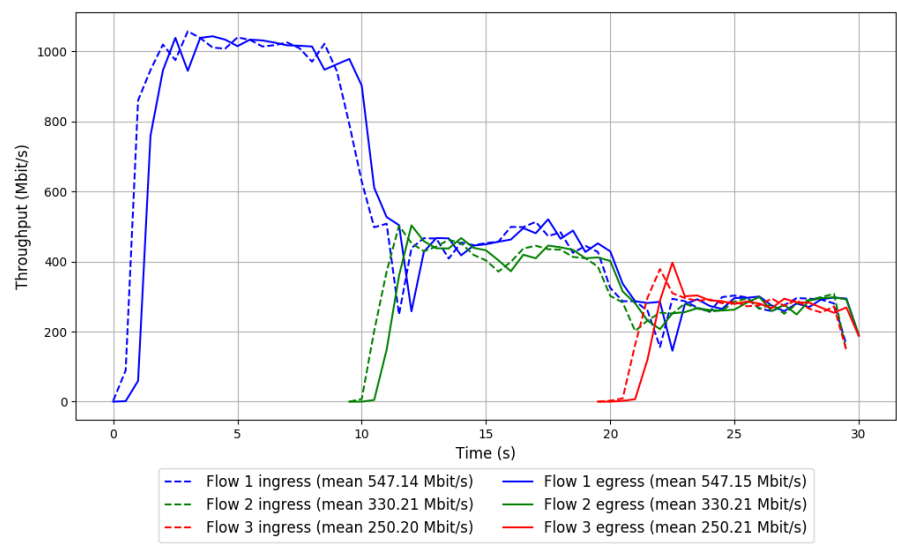


Run 1: Statistics of FillP-Sheep

Start at: 2019-01-17 21:56:54
End at: 2019-01-17 21:57:24
Local clock offset: 0.056 ms
Remote clock offset: -0.189 ms

Below is generated by plot.py at 2019-01-18 02:09:40
Datalink statistics
-- Total of 3 flows:
Average throughput: 851.40 Mbit/s
95th percentile per-packet one-way delay: 79.574 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 547.15 Mbit/s
95th percentile per-packet one-way delay: 83.778 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 330.21 Mbit/s
95th percentile per-packet one-way delay: 65.042 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 250.21 Mbit/s
95th percentile per-packet one-way delay: 63.699 ms
Loss rate: 0.00%

Run 1: Report of FillP-Sheep — Data Link

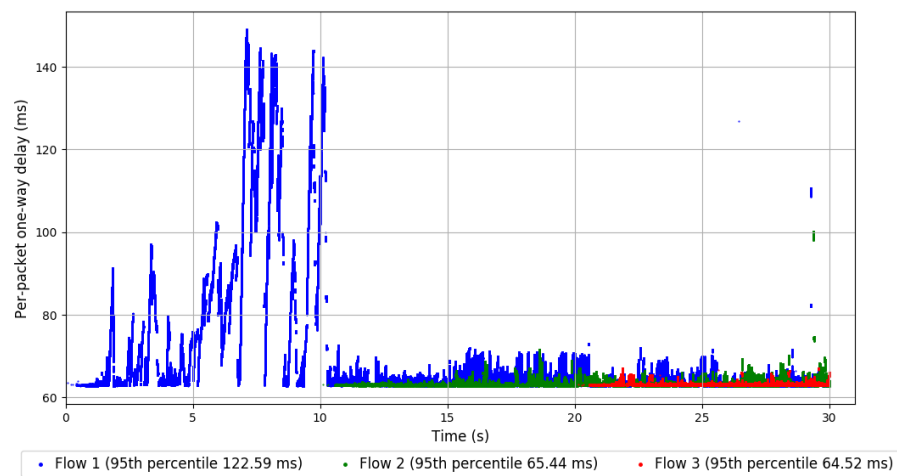
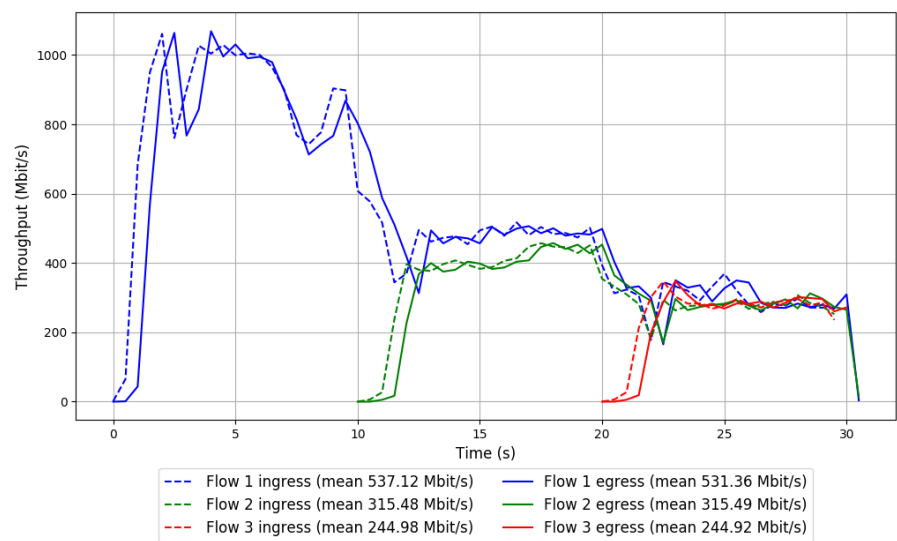


Run 2: Statistics of FillP-Sheep

Start at: 2019-01-17 22:33:20
End at: 2019-01-17 22:33:50
Local clock offset: -0.033 ms
Remote clock offset: -0.121 ms

Below is generated by plot.py at 2019-01-18 02:09:41
Datalink statistics
-- Total of 3 flows:
Average throughput: 821.50 Mbit/s
95th percentile per-packet one-way delay: 109.916 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 531.36 Mbit/s
95th percentile per-packet one-way delay: 122.591 ms
Loss rate: 1.07%
-- Flow 2:
Average throughput: 315.49 Mbit/s
95th percentile per-packet one-way delay: 65.439 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 244.92 Mbit/s
95th percentile per-packet one-way delay: 64.518 ms
Loss rate: 0.00%

Run 2: Report of FillP-Sheep — Data Link



Run 3: Statistics of FillP-Sheep

Start at: 2019-01-17 23:09:43

End at: 2019-01-17 23:10:13

Local clock offset: -0.014 ms

Remote clock offset: -0.32 ms

Below is generated by plot.py at 2019-01-18 02:12:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 886.28 Mbit/s

95th percentile per-packet one-way delay: 69.985 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 559.52 Mbit/s

95th percentile per-packet one-way delay: 70.158 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 359.36 Mbit/s

95th percentile per-packet one-way delay: 70.333 ms

Loss rate: 0.07%

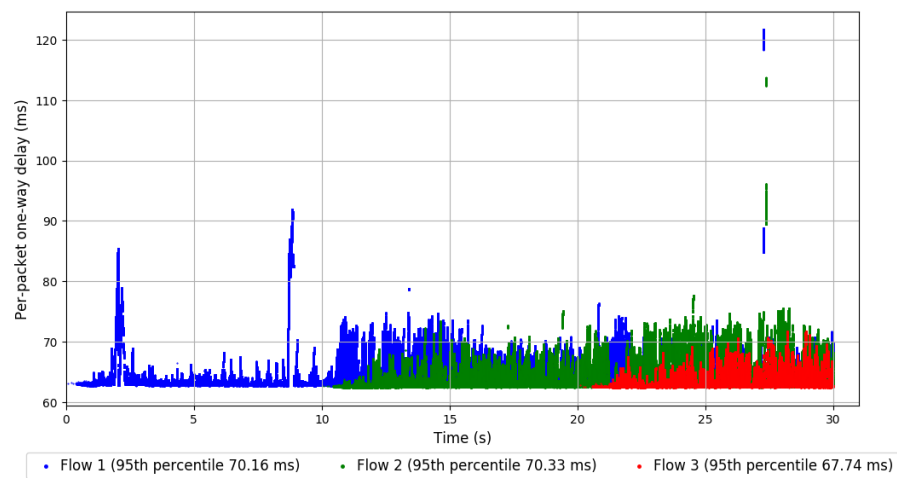
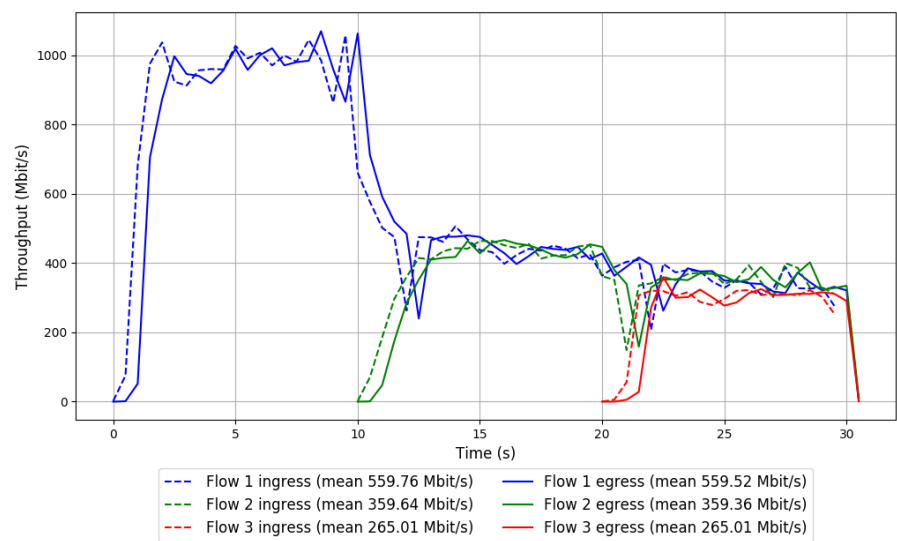
-- Flow 3:

Average throughput: 265.01 Mbit/s

95th percentile per-packet one-way delay: 67.741 ms

Loss rate: 0.00%

Run 3: Report of FillP-Sheep — Data Link

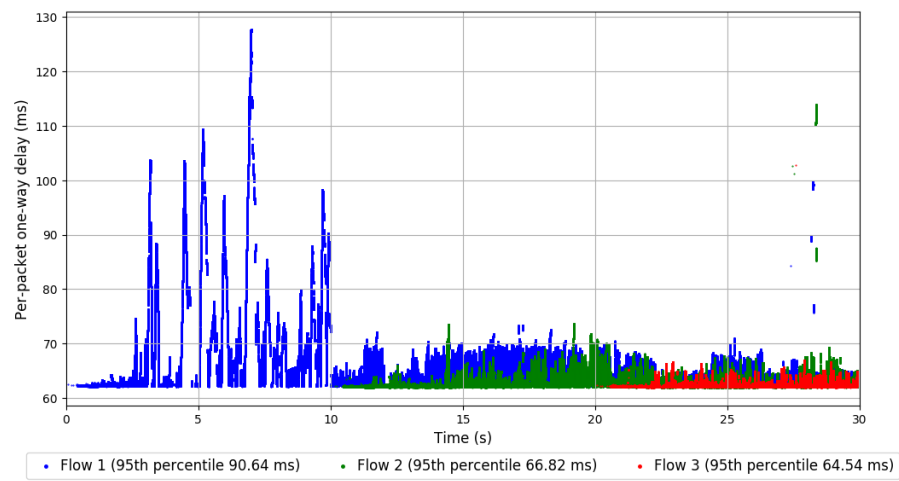
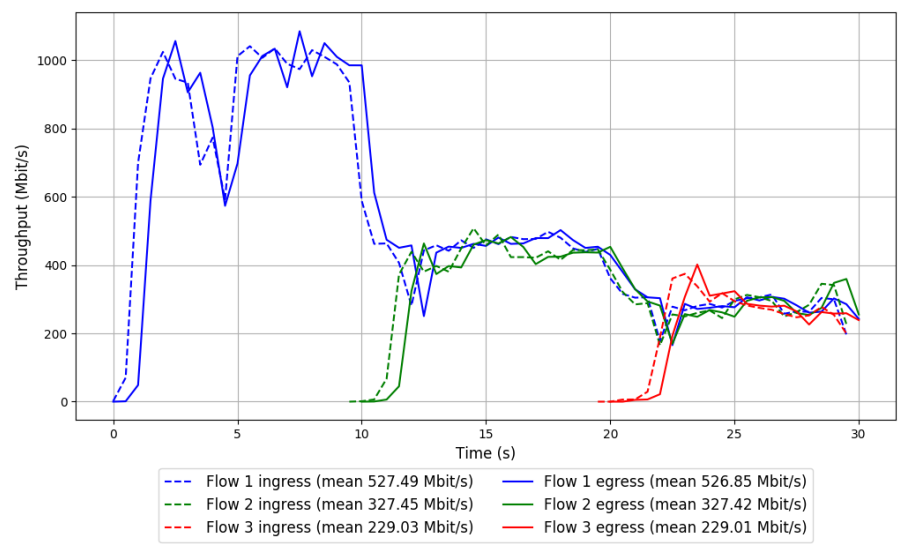


Run 4: Statistics of FillP-Sheep

Start at: 2019-01-17 23:46:25
End at: 2019-01-17 23:46:55
Local clock offset: -0.052 ms
Remote clock offset: -0.835 ms

Below is generated by plot.py at 2019-01-18 02:13:02
Datalink statistics
-- Total of 3 flows:
Average throughput: 820.60 Mbit/s
95th percentile per-packet one-way delay: 84.890 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 526.85 Mbit/s
95th percentile per-packet one-way delay: 90.642 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 327.42 Mbit/s
95th percentile per-packet one-way delay: 66.824 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 229.01 Mbit/s
95th percentile per-packet one-way delay: 64.539 ms
Loss rate: 0.00%

Run 4: Report of FillP-Sheep — Data Link



Run 5: Statistics of FillP-Sheep

Start at: 2019-01-18 00:22:23

End at: 2019-01-18 00:22:53

Local clock offset: -0.031 ms

Remote clock offset: -1.44 ms

Below is generated by plot.py at 2019-01-18 02:30:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 811.59 Mbit/s

95th percentile per-packet one-way delay: 65.410 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 516.81 Mbit/s

95th percentile per-packet one-way delay: 65.347 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 324.87 Mbit/s

95th percentile per-packet one-way delay: 65.708 ms

Loss rate: 0.00%

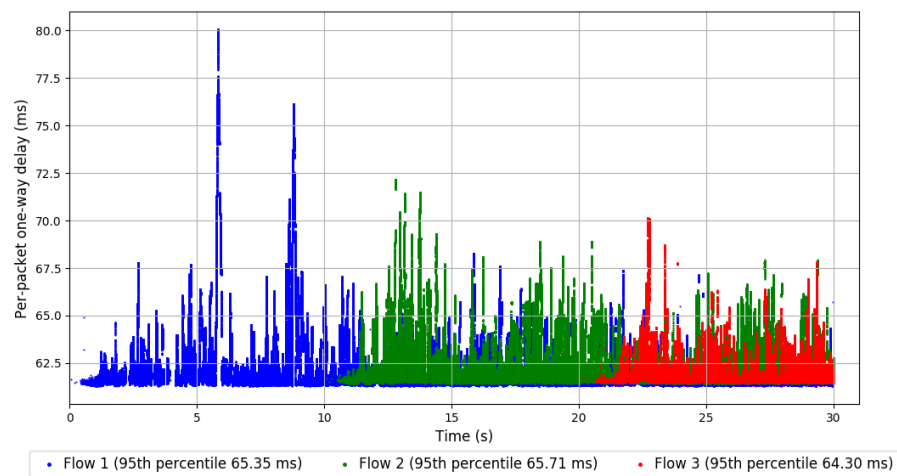
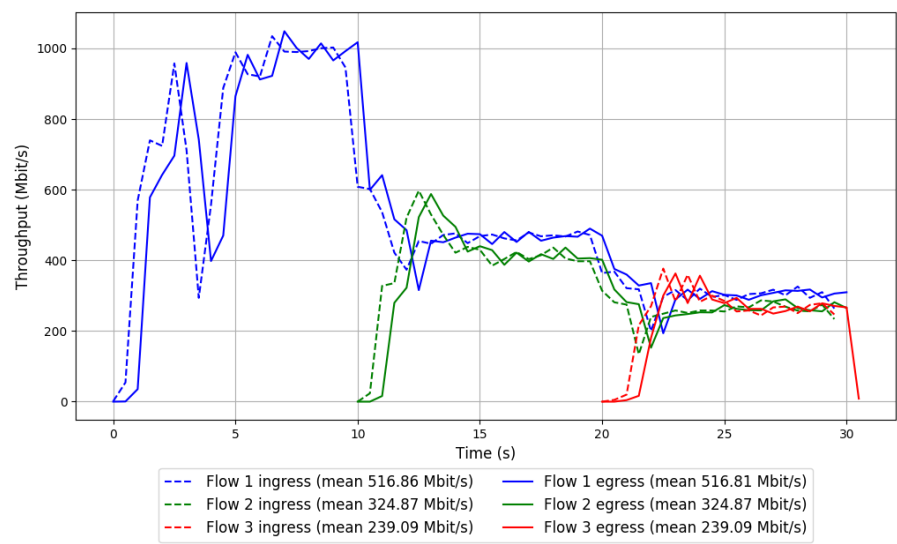
-- Flow 3:

Average throughput: 239.09 Mbit/s

95th percentile per-packet one-way delay: 64.297 ms

Loss rate: 0.00%

Run 5: Report of FillP-Sheep — Data Link

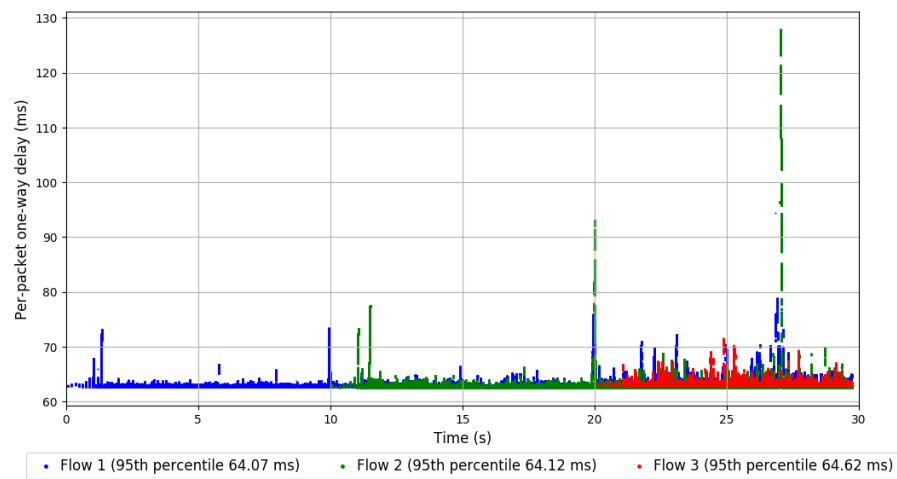
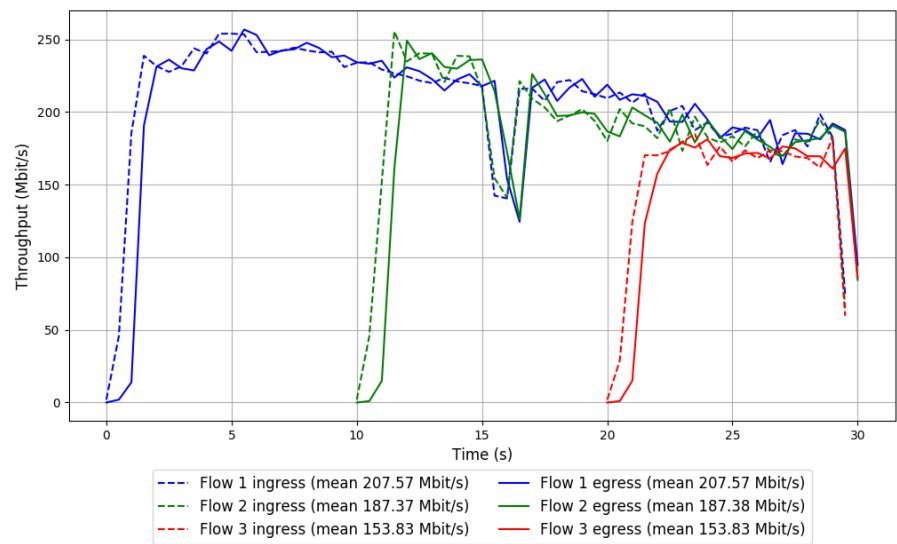


Run 1: Statistics of Indigo

Start at: 2019-01-17 21:58:43
End at: 2019-01-17 21:59:13
Local clock offset: -0.097 ms
Remote clock offset: -0.324 ms

Below is generated by plot.py at 2019-01-18 02:30:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 381.67 Mbit/s
95th percentile per-packet one-way delay: 64.196 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 207.57 Mbit/s
95th percentile per-packet one-way delay: 64.074 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 187.38 Mbit/s
95th percentile per-packet one-way delay: 64.119 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 153.83 Mbit/s
95th percentile per-packet one-way delay: 64.621 ms
Loss rate: 0.00%

Run 1: Report of Indigo — Data Link

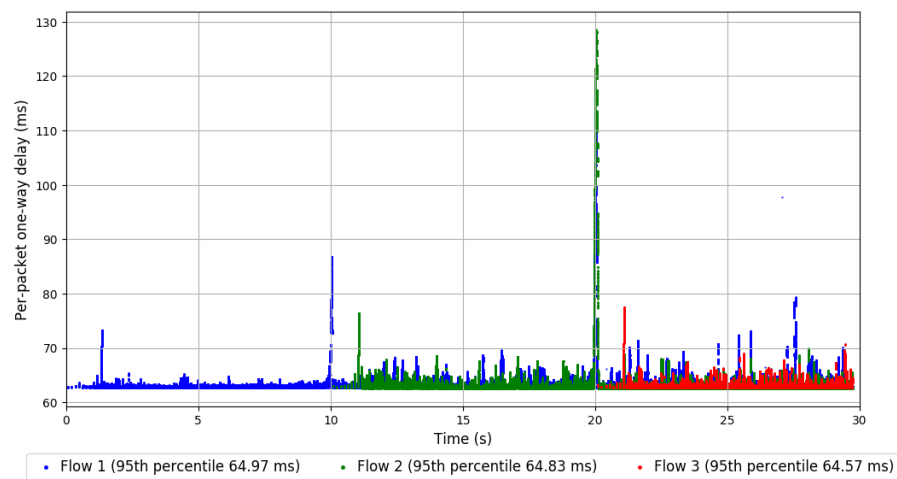
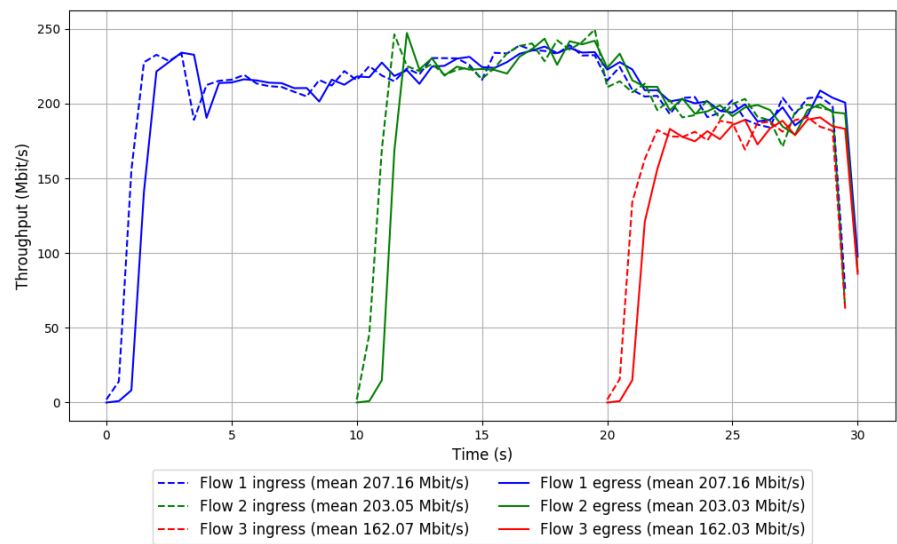


Run 2: Statistics of Indigo

Start at: 2019-01-17 22:35:08
End at: 2019-01-17 22:35:38
Local clock offset: -0.013 ms
Remote clock offset: -0.118 ms

Below is generated by plot.py at 2019-01-18 02:30:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 394.09 Mbit/s
95th percentile per-packet one-way delay: 64.854 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 207.16 Mbit/s
95th percentile per-packet one-way delay: 64.967 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 203.03 Mbit/s
95th percentile per-packet one-way delay: 64.827 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 162.03 Mbit/s
95th percentile per-packet one-way delay: 64.572 ms
Loss rate: 0.02%

Run 2: Report of Indigo — Data Link

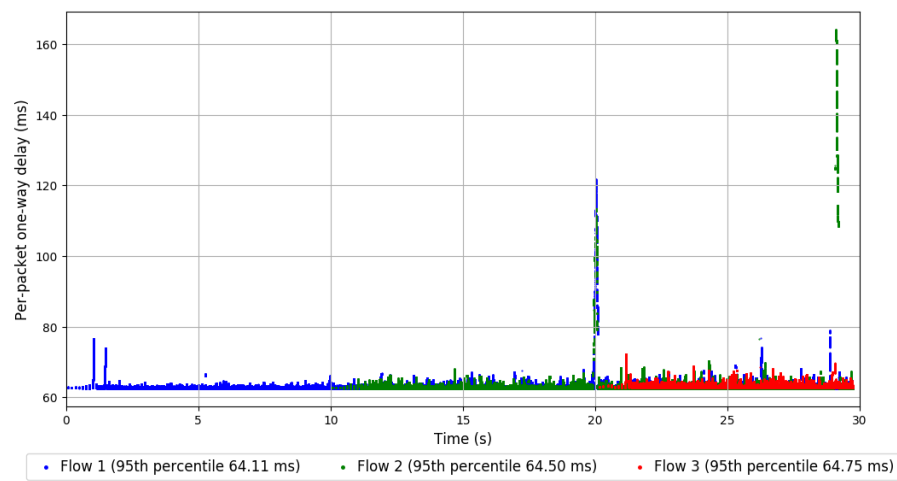
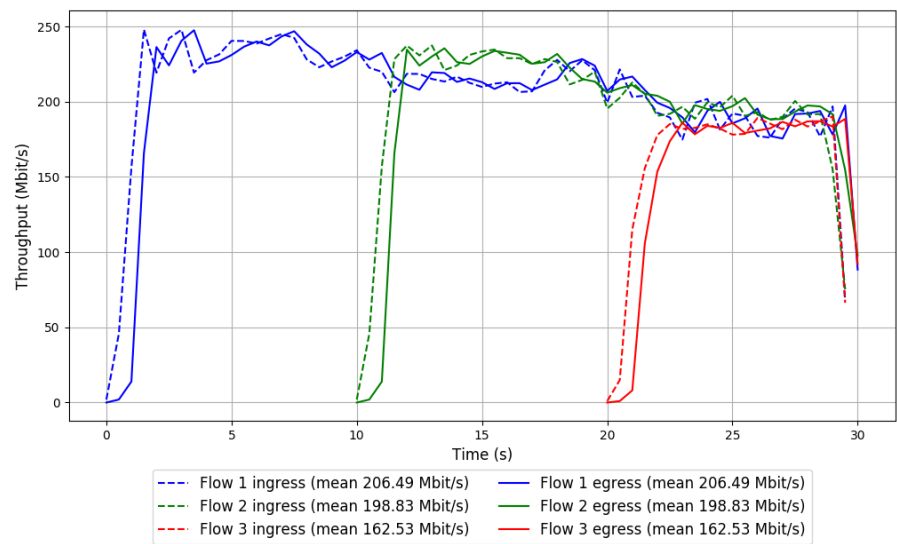


Run 3: Statistics of Indigo

Start at: 2019-01-17 23:11:34
End at: 2019-01-17 23:12:04
Local clock offset: -0.017 ms
Remote clock offset: -0.238 ms

Below is generated by plot.py at 2019-01-18 02:30:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 390.65 Mbit/s
95th percentile per-packet one-way delay: 64.358 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 206.49 Mbit/s
95th percentile per-packet one-way delay: 64.105 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 198.83 Mbit/s
95th percentile per-packet one-way delay: 64.495 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 162.53 Mbit/s
95th percentile per-packet one-way delay: 64.750 ms
Loss rate: 0.00%

Run 3: Report of Indigo — Data Link

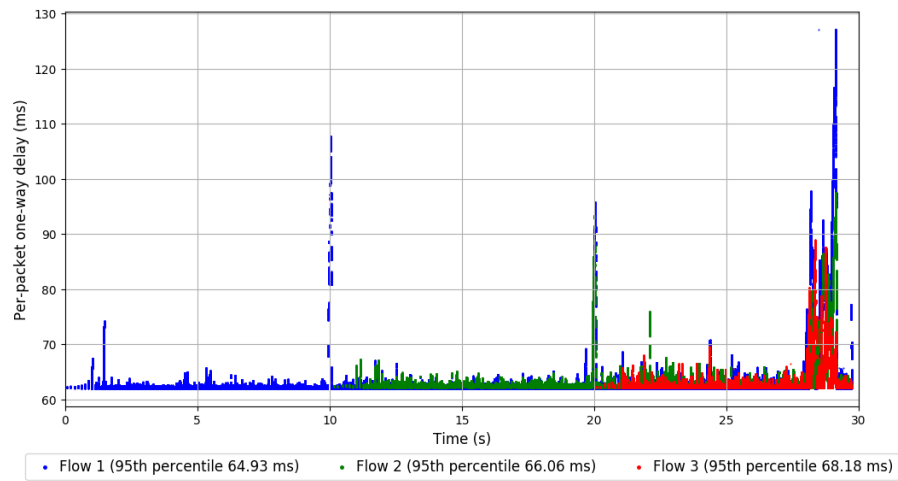
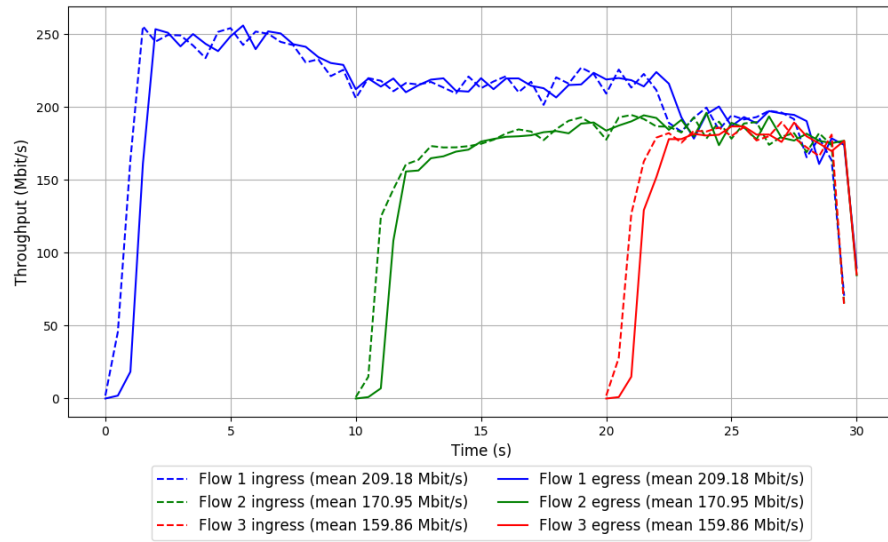


Run 4: Statistics of Indigo

Start at: 2019-01-17 23:48:13
End at: 2019-01-17 23:48:43
Local clock offset: -0.056 ms
Remote clock offset: -0.835 ms

Below is generated by plot.py at 2019-01-18 02:30:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 373.78 Mbit/s
95th percentile per-packet one-way delay: 66.031 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 209.18 Mbit/s
95th percentile per-packet one-way delay: 64.929 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 170.95 Mbit/s
95th percentile per-packet one-way delay: 66.062 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 159.86 Mbit/s
95th percentile per-packet one-way delay: 68.182 ms
Loss rate: 0.00%

Run 4: Report of Indigo — Data Link

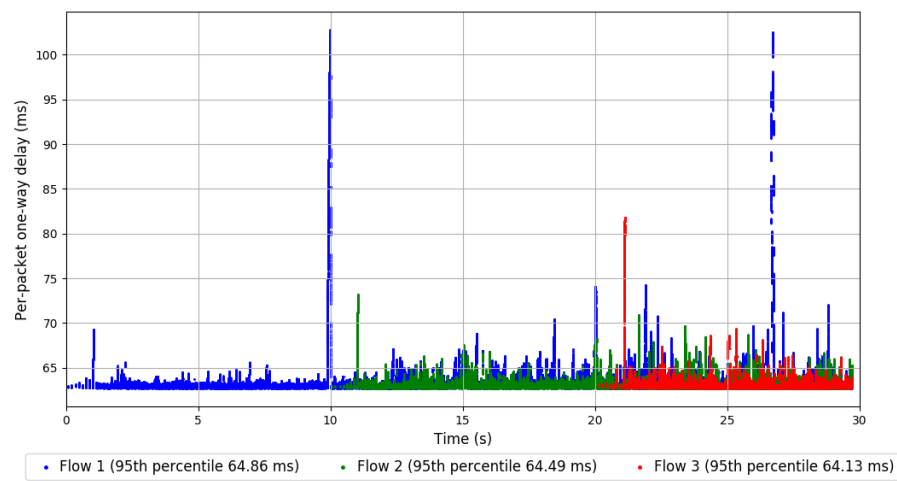
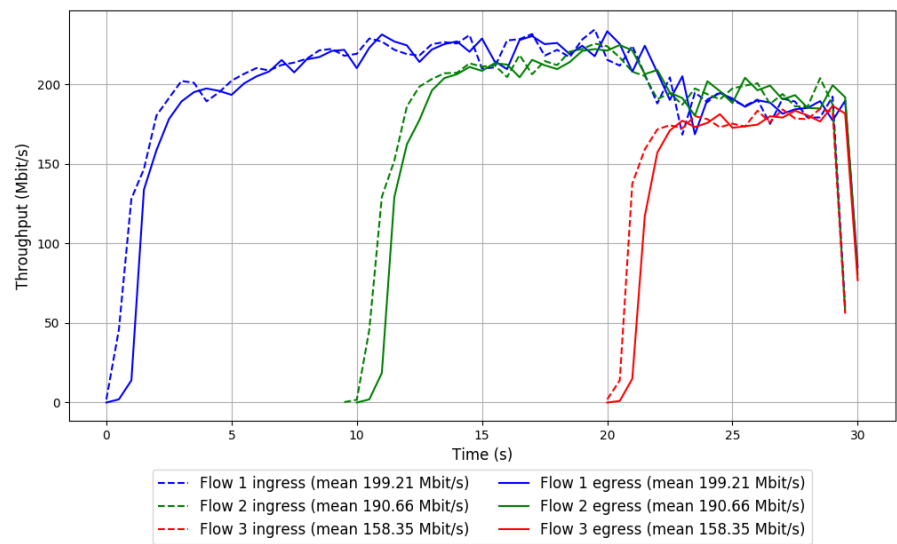


Run 5: Statistics of Indigo

Start at: 2019-01-18 00:24:12
End at: 2019-01-18 00:24:42
Local clock offset: -0.031 ms
Remote clock offset: -0.026 ms

Below is generated by plot.py at 2019-01-18 02:30:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 376.86 Mbit/s
95th percentile per-packet one-way delay: 64.631 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 199.21 Mbit/s
95th percentile per-packet one-way delay: 64.858 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 190.66 Mbit/s
95th percentile per-packet one-way delay: 64.488 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 158.35 Mbit/s
95th percentile per-packet one-way delay: 64.131 ms
Loss rate: 0.00%

Run 5: Report of Indigo — Data Link

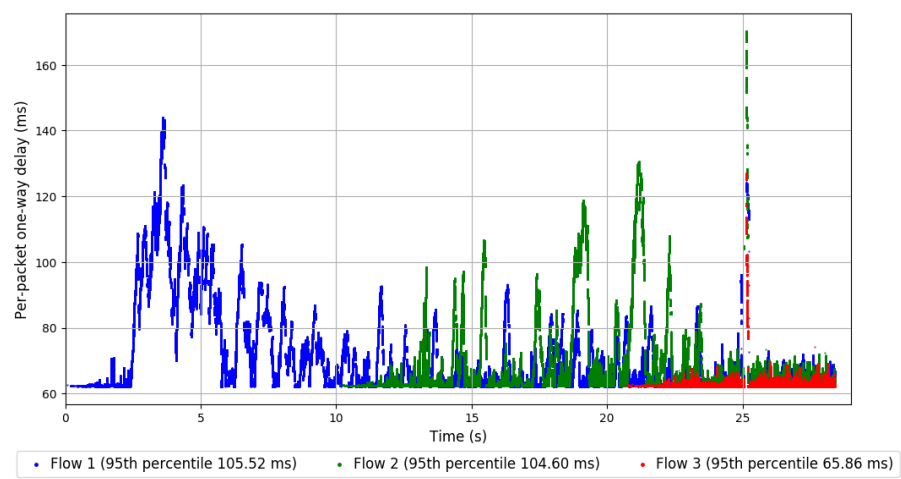
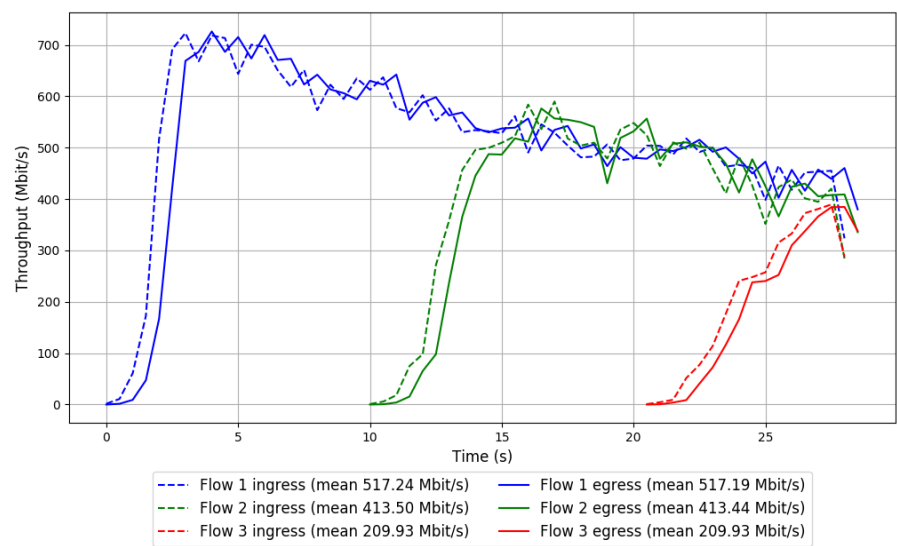


Run 1: Statistics of Indigo-MusesC3

Start at: 2019-01-17 22:06:14
End at: 2019-01-17 22:06:44
Local clock offset: -0.121 ms
Remote clock offset: -0.867 ms

Below is generated by plot.py at 2019-01-18 02:31:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 841.15 Mbit/s
95th percentile per-packet one-way delay: 104.436 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 517.19 Mbit/s
95th percentile per-packet one-way delay: 105.521 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 413.44 Mbit/s
95th percentile per-packet one-way delay: 104.599 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 209.93 Mbit/s
95th percentile per-packet one-way delay: 65.861 ms
Loss rate: 0.00%

Run 1: Report of Indigo-MusesC3 — Data Link

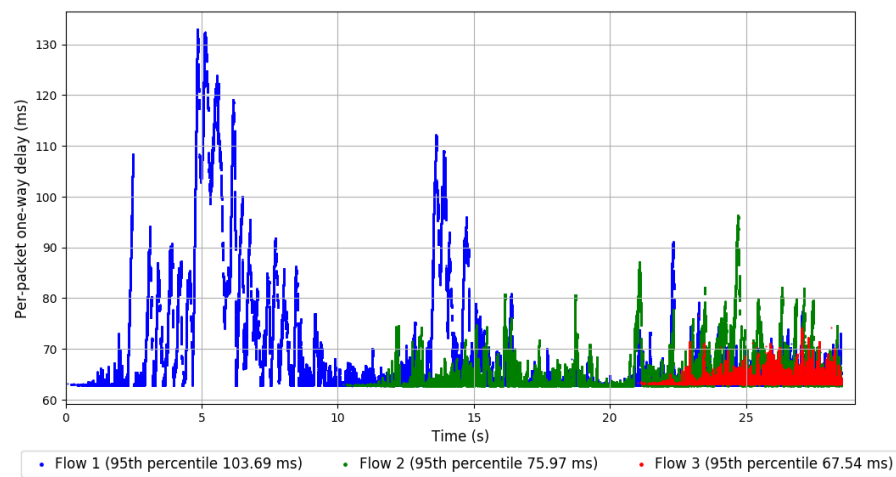
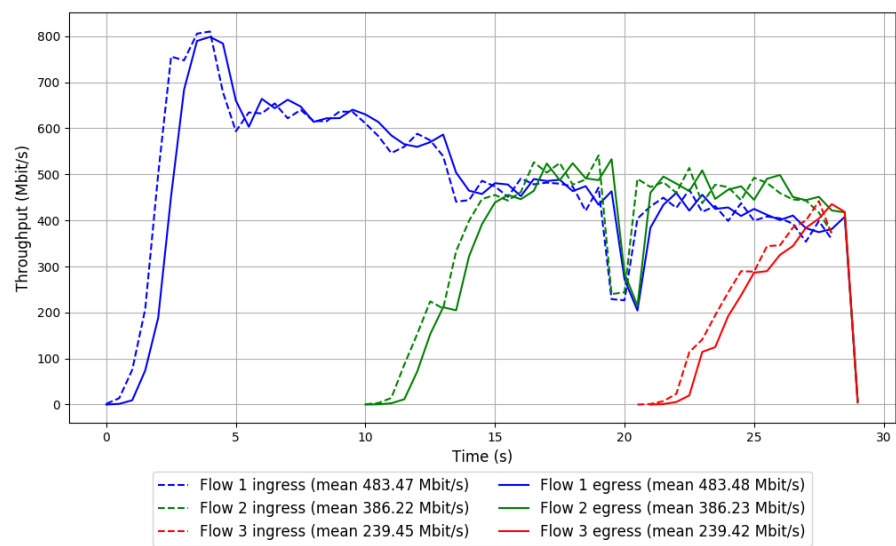


Run 2: Statistics of Indigo-MusesC3

Start at: 2019-01-17 22:42:49
End at: 2019-01-17 22:43:19
Local clock offset: 0.043 ms
Remote clock offset: -0.103 ms

Below is generated by plot.py at 2019-01-18 02:31:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 794.98 Mbit/s
95th percentile per-packet one-way delay: 91.323 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 483.48 Mbit/s
95th percentile per-packet one-way delay: 103.694 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 386.23 Mbit/s
95th percentile per-packet one-way delay: 75.970 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 239.42 Mbit/s
95th percentile per-packet one-way delay: 67.543 ms
Loss rate: 0.00%

Run 2: Report of Indigo-MusesC3 — Data Link

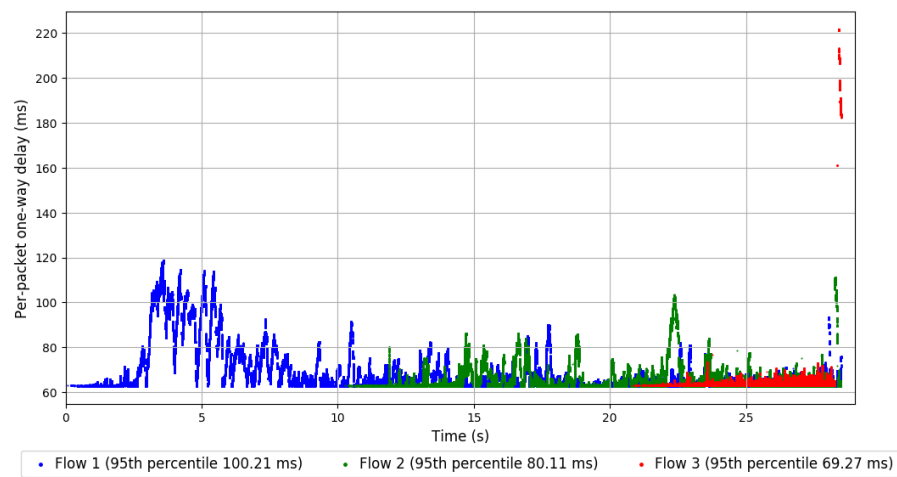
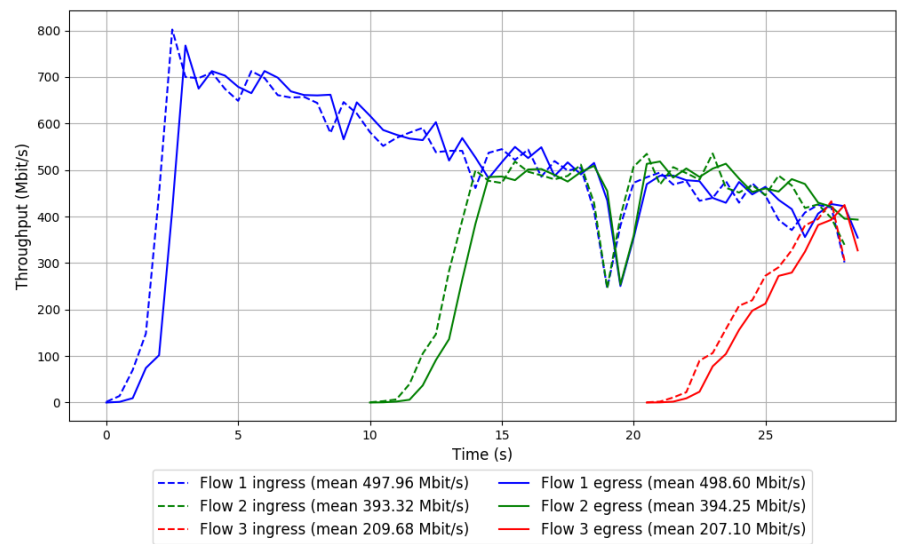


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-01-17 23:19:10
End at: 2019-01-17 23:19:40
Local clock offset: 0.009 ms
Remote clock offset: -0.048 ms

Below is generated by plot.py at 2019-01-18 02:42:12
Datalink statistics
-- Total of 3 flows:
Average throughput: 807.27 Mbit/s
95th percentile per-packet one-way delay: 95.734 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 498.60 Mbit/s
95th percentile per-packet one-way delay: 100.208 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 394.25 Mbit/s
95th percentile per-packet one-way delay: 80.113 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 207.10 Mbit/s
95th percentile per-packet one-way delay: 69.267 ms
Loss rate: 1.13%

Run 3: Report of Indigo-MusesC3 — Data Link

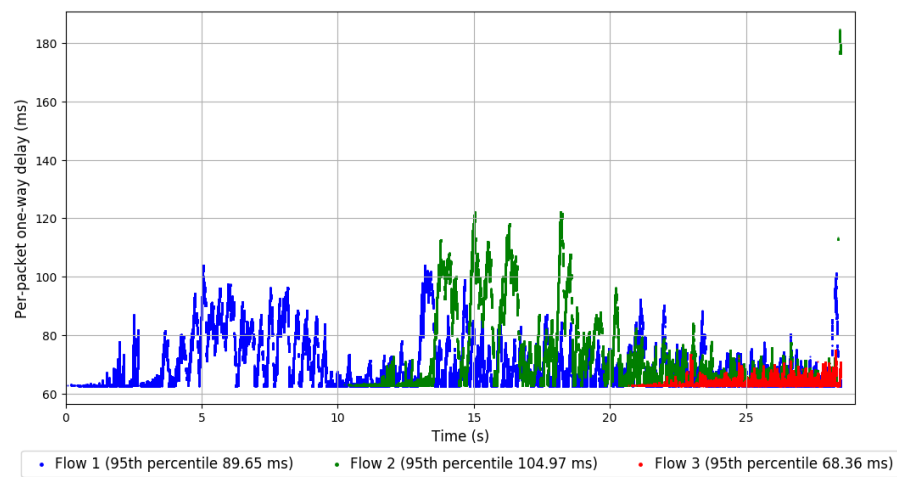
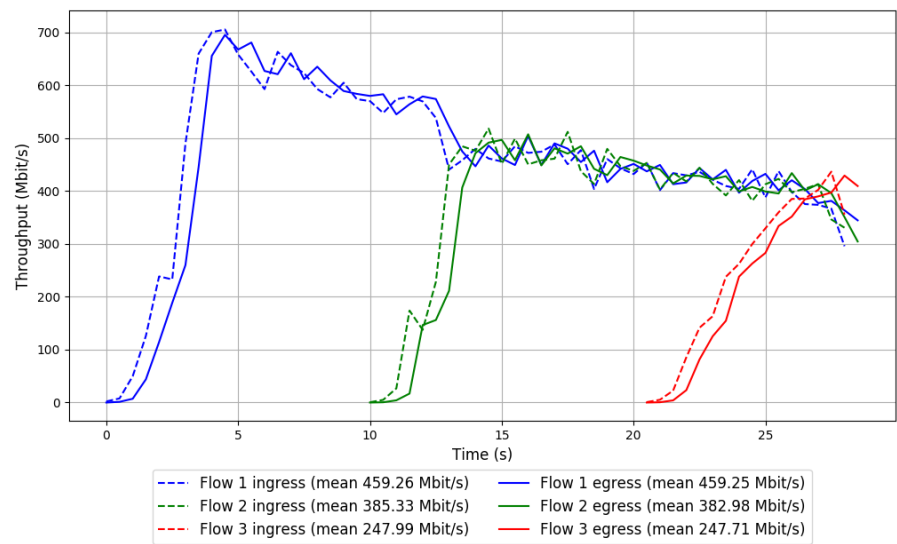


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-01-17 23:55:42
End at: 2019-01-17 23:56:12
Local clock offset: -0.072 ms
Remote clock offset: -0.319 ms

Below is generated by plot.py at 2019-01-18 02:42:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 773.02 Mbit/s
95th percentile per-packet one-way delay: 95.699 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 459.25 Mbit/s
95th percentile per-packet one-way delay: 89.649 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 382.98 Mbit/s
95th percentile per-packet one-way delay: 104.969 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 247.71 Mbit/s
95th percentile per-packet one-way delay: 68.359 ms
Loss rate: 0.10%

Run 4: Report of Indigo-MusesC3 — Data Link

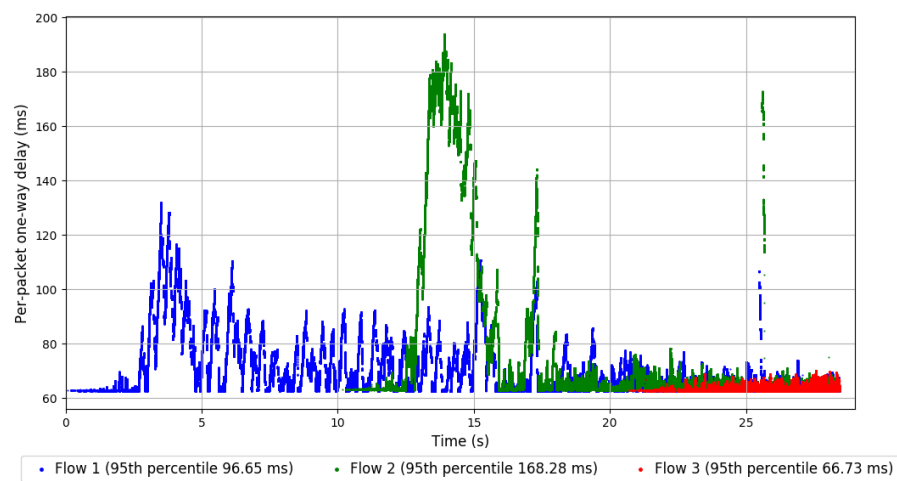
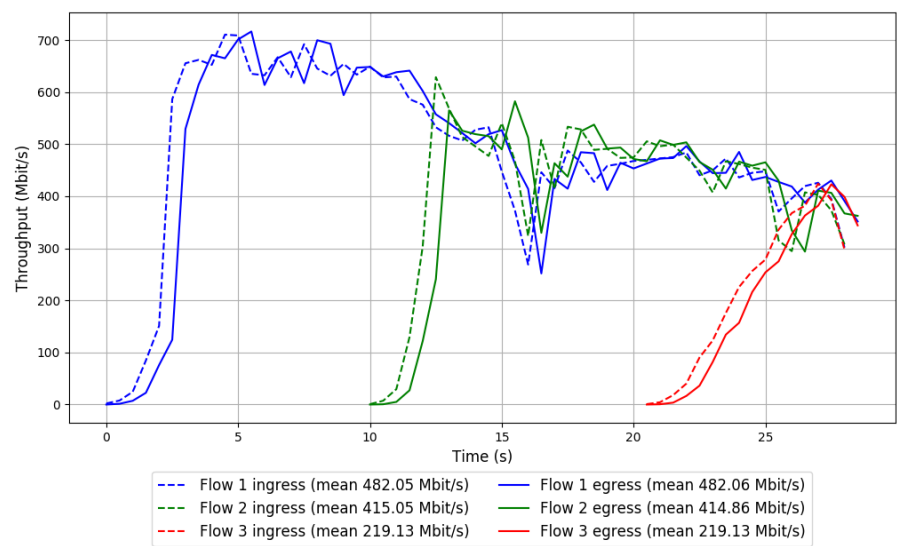


Run 5: Statistics of Indigo-MusesC3

Start at: 2019-01-18 00:31:45
End at: 2019-01-18 00:32:15
Local clock offset: -0.011 ms
Remote clock offset: -0.063 ms

Below is generated by plot.py at 2019-01-18 02:43:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 809.14 Mbit/s
95th percentile per-packet one-way delay: 118.016 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 482.06 Mbit/s
95th percentile per-packet one-way delay: 96.649 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 414.86 Mbit/s
95th percentile per-packet one-way delay: 168.284 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 219.13 Mbit/s
95th percentile per-packet one-way delay: 66.730 ms
Loss rate: 0.00%

Run 5: Report of Indigo-MusesC3 — Data Link

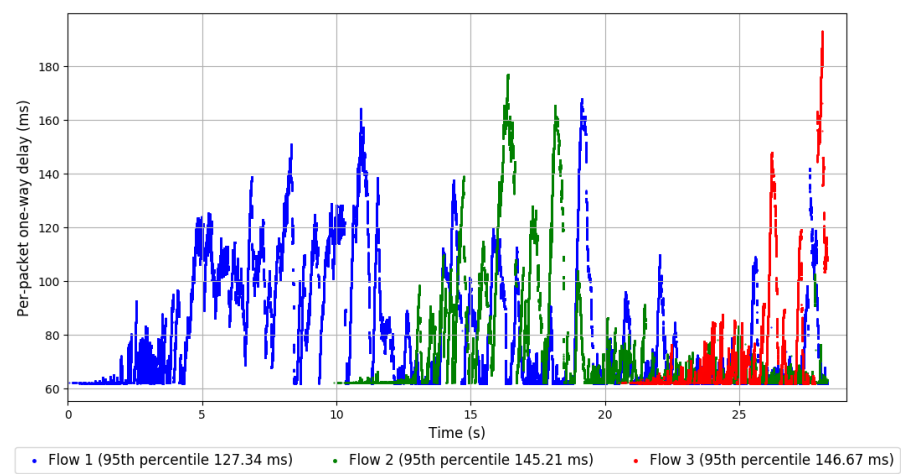
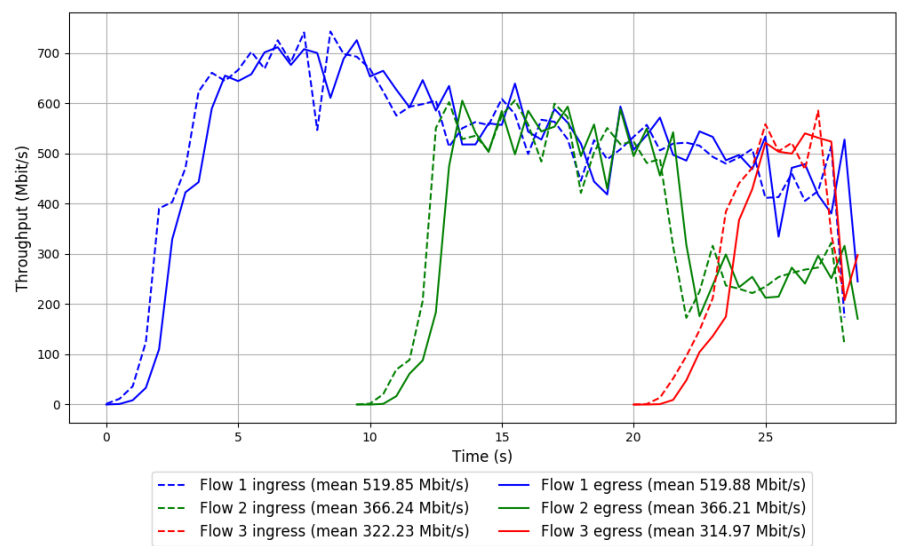


Run 1: Statistics of Indigo-MusesC5

Start at: 2019-01-17 21:49:01
End at: 2019-01-17 21:49:31
Local clock offset: -0.099 ms
Remote clock offset: -0.851 ms

Below is generated by plot.py at 2019-01-18 02:44:32
Datalink statistics
-- Total of 3 flows:
Average throughput: 844.94 Mbit/s
95th percentile per-packet one-way delay: 135.228 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 519.88 Mbit/s
95th percentile per-packet one-way delay: 127.341 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 366.21 Mbit/s
95th percentile per-packet one-way delay: 145.207 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 314.97 Mbit/s
95th percentile per-packet one-way delay: 146.673 ms
Loss rate: 2.25%

Run 1: Report of Indigo-MusesC5 — Data Link

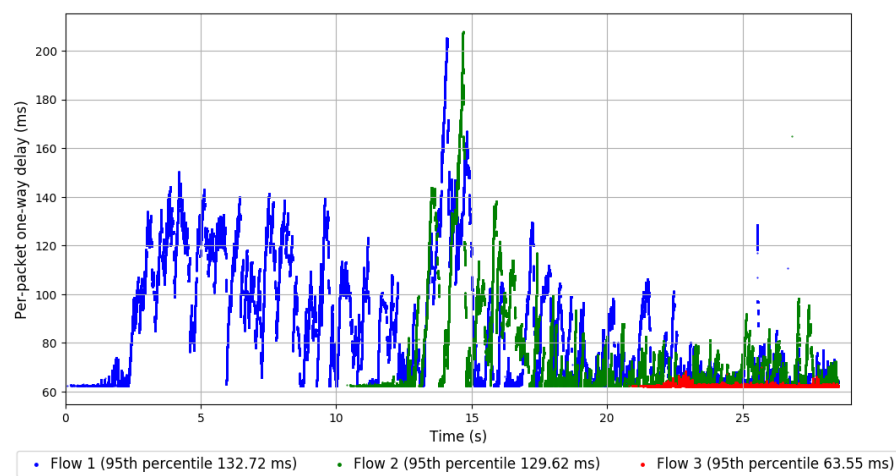
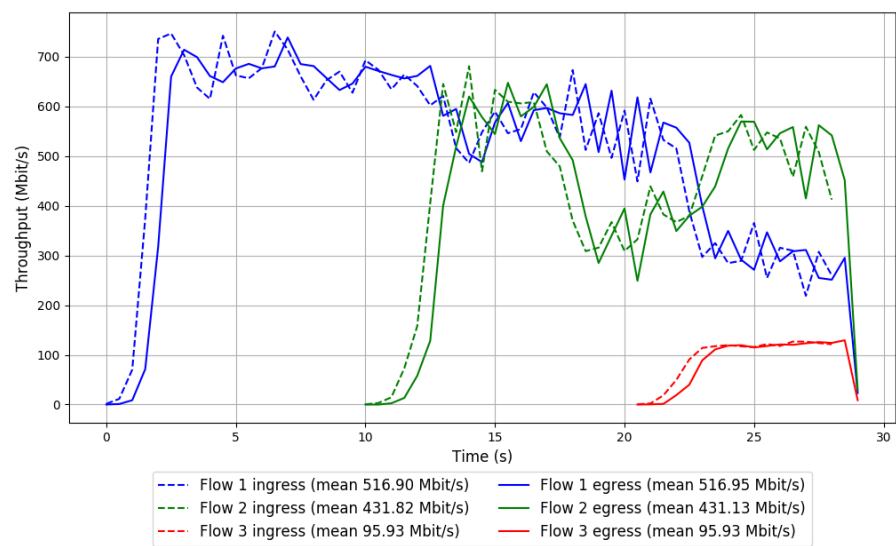


Run 2: Statistics of Indigo-MusesC5

Start at: 2019-01-17 22:25:24
End at: 2019-01-17 22:25:54
Local clock offset: 0.055 ms
Remote clock offset: -0.647 ms

Below is generated by plot.py at 2019-01-18 02:44:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 817.89 Mbit/s
95th percentile per-packet one-way delay: 131.494 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 516.95 Mbit/s
95th percentile per-packet one-way delay: 132.722 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 431.13 Mbit/s
95th percentile per-packet one-way delay: 129.622 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 95.93 Mbit/s
95th percentile per-packet one-way delay: 63.546 ms
Loss rate: 0.00%

Run 2: Report of Indigo-MusesC5 — Data Link

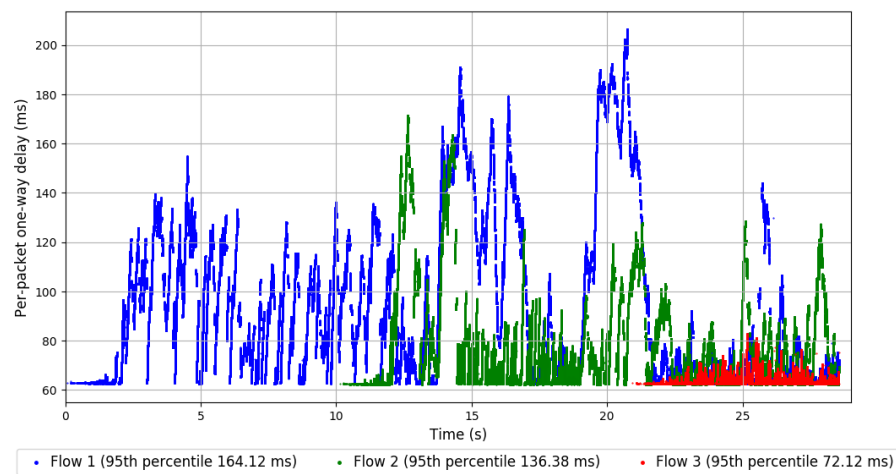
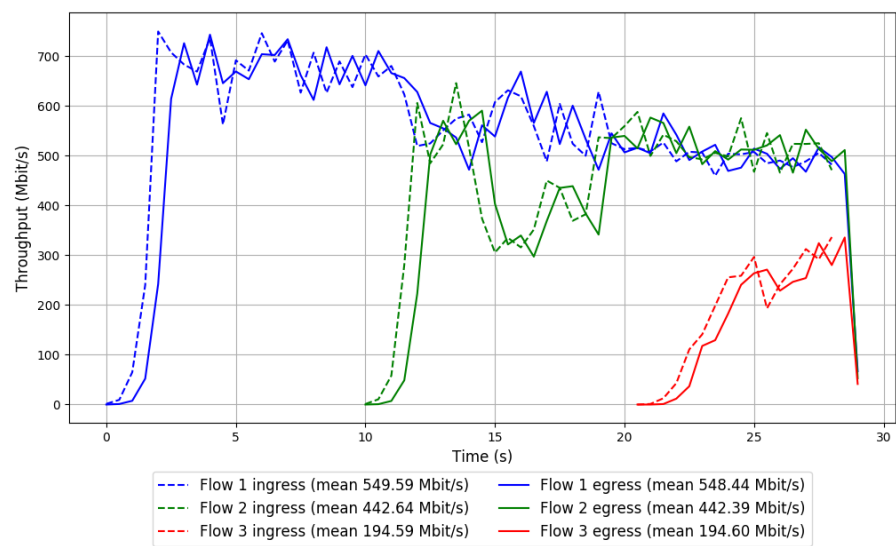


Run 3: Statistics of Indigo-MusesC5

Start at: 2019-01-17 23:01:45
End at: 2019-01-17 23:02:15
Local clock offset: -0.025 ms
Remote clock offset: -0.578 ms

Below is generated by plot.py at 2019-01-18 02:51:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 886.55 Mbit/s
95th percentile per-packet one-way delay: 154.614 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 548.44 Mbit/s
95th percentile per-packet one-way delay: 164.121 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 442.39 Mbit/s
95th percentile per-packet one-way delay: 136.381 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 194.60 Mbit/s
95th percentile per-packet one-way delay: 72.122 ms
Loss rate: 0.00%

Run 3: Report of Indigo-MusesC5 — Data Link

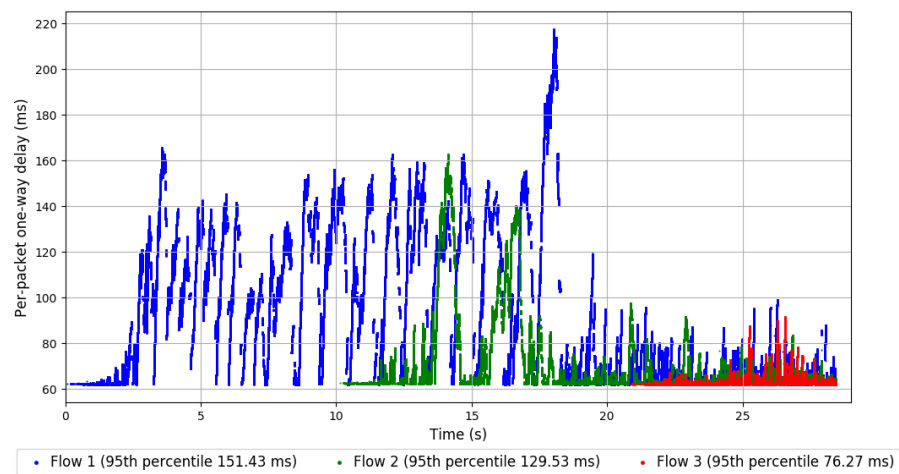
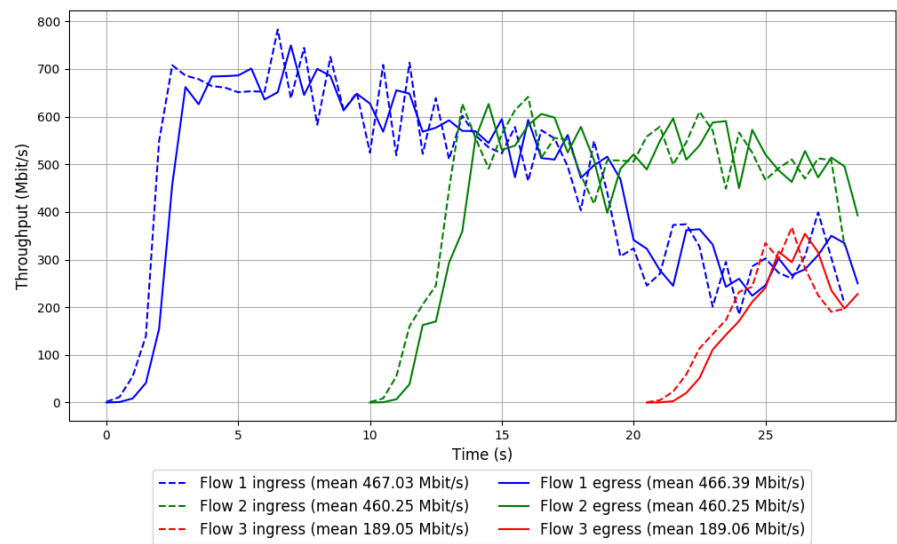


Run 4: Statistics of Indigo-MusesC5

Start at: 2019-01-17 23:38:19
End at: 2019-01-17 23:38:49
Local clock offset: -0.099 ms
Remote clock offset: -0.813 ms

Below is generated by plot.py at 2019-01-18 02:51:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 813.92 Mbit/s
95th percentile per-packet one-way delay: 146.273 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 466.39 Mbit/s
95th percentile per-packet one-way delay: 151.430 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 460.25 Mbit/s
95th percentile per-packet one-way delay: 129.530 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 189.06 Mbit/s
95th percentile per-packet one-way delay: 76.266 ms
Loss rate: 0.00%

Run 4: Report of Indigo-MusesC5 — Data Link



Run 5: Statistics of Indigo-MusesC5

Start at: 2019-01-18 00:14:29

End at: 2019-01-18 00:14:59

Local clock offset: -0.076 ms

Remote clock offset: 0.241 ms

Below is generated by plot.py at 2019-01-18 02:51:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 768.44 Mbit/s

95th percentile per-packet one-way delay: 154.208 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 466.02 Mbit/s

95th percentile per-packet one-way delay: 161.334 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 435.62 Mbit/s

95th percentile per-packet one-way delay: 138.339 ms

Loss rate: 0.11%

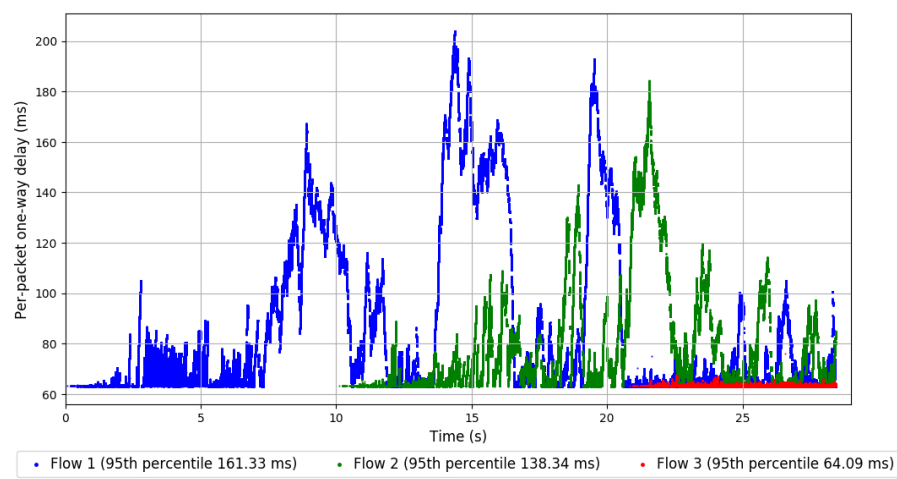
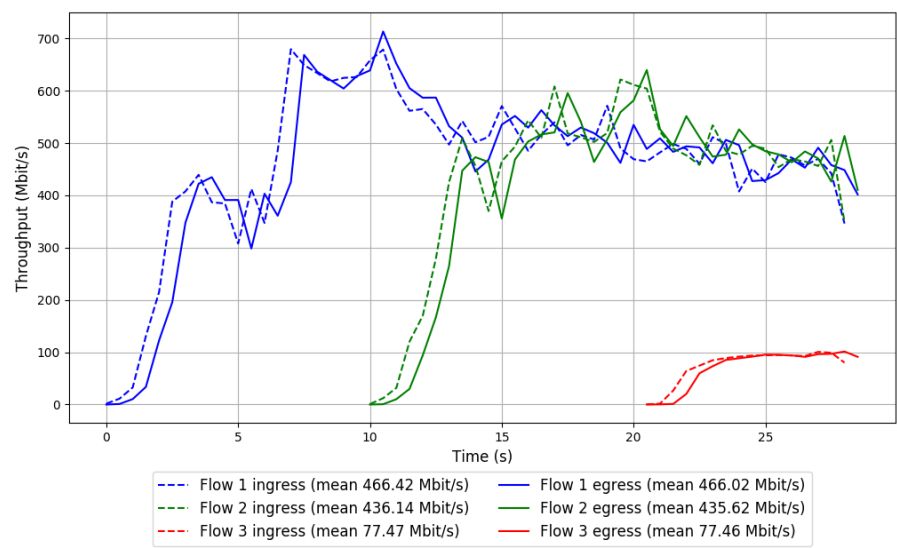
-- Flow 3:

Average throughput: 77.46 Mbit/s

95th percentile per-packet one-way delay: 64.093 ms

Loss rate: 0.00%

Run 5: Report of Indigo-MusesC5 — Data Link



Run 1: Statistics of Indigo-MusesD

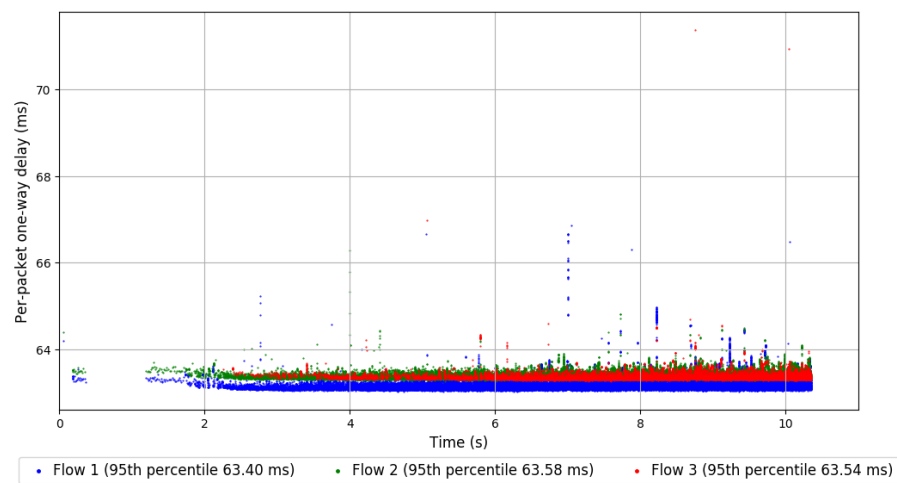
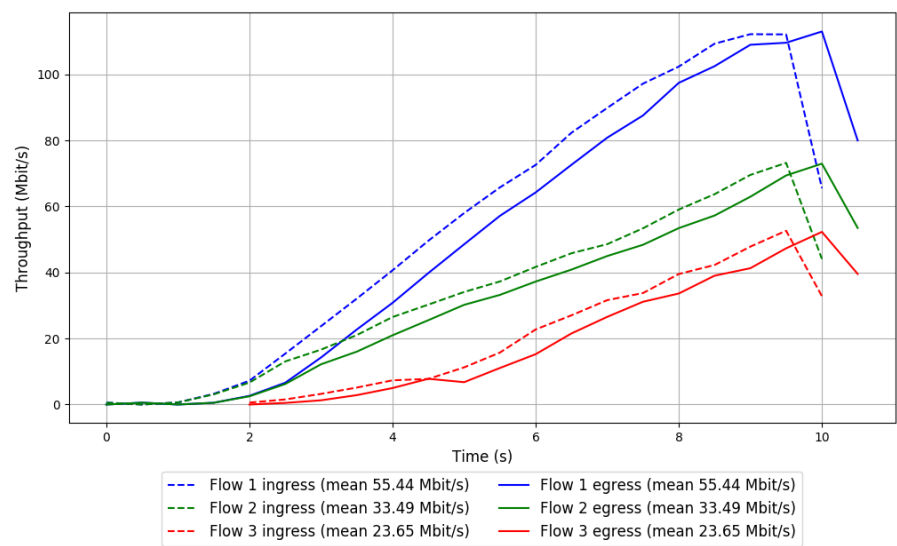
Start at: 2019-01-17 21:46:33

End at: 2019-01-17 21:47:03

Local clock offset: -0.12 ms

Remote clock offset: 0.073 ms

Run 1: Report of Indigo-MusesD — Data Link

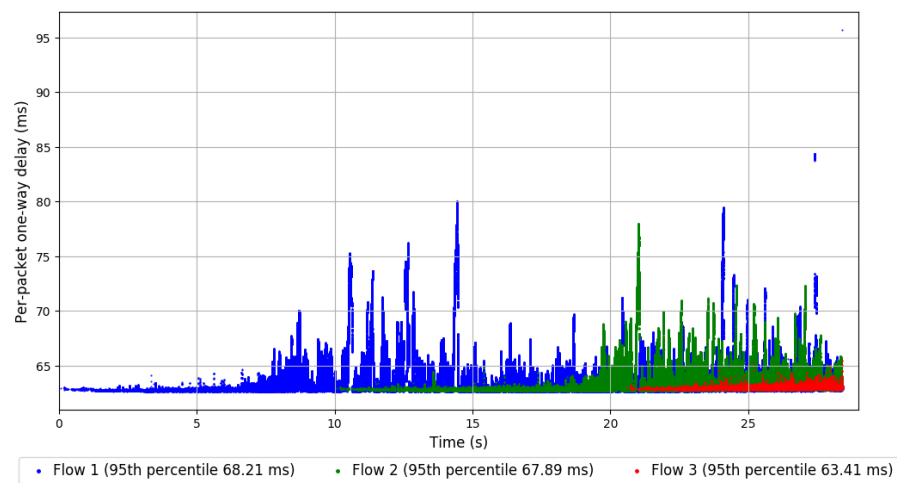
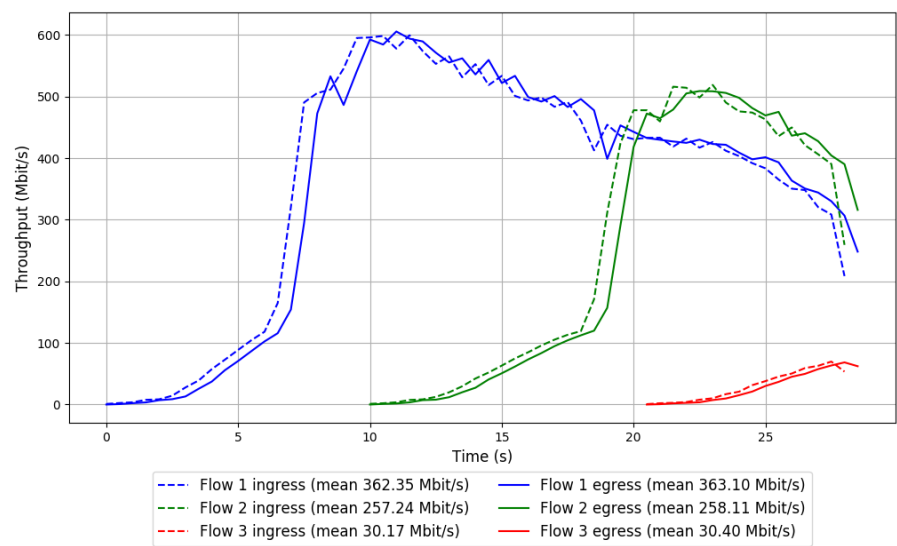


Run 2: Statistics of Indigo-MusesD

Start at: 2019-01-17 22:22:32
End at: 2019-01-17 22:23:02
Local clock offset: -0.027 ms
Remote clock offset: -0.355 ms

Below is generated by plot.py at 2019-01-18 02:55:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 538.46 Mbit/s
95th percentile per-packet one-way delay: 68.003 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 363.10 Mbit/s
95th percentile per-packet one-way delay: 68.206 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 258.11 Mbit/s
95th percentile per-packet one-way delay: 67.891 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.40 Mbit/s
95th percentile per-packet one-way delay: 63.406 ms
Loss rate: 0.01%

Run 2: Report of Indigo-MusesD — Data Link

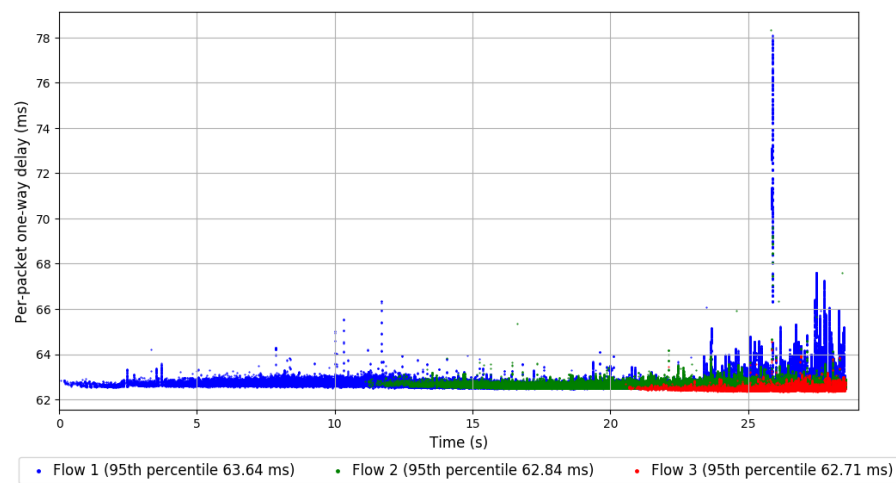
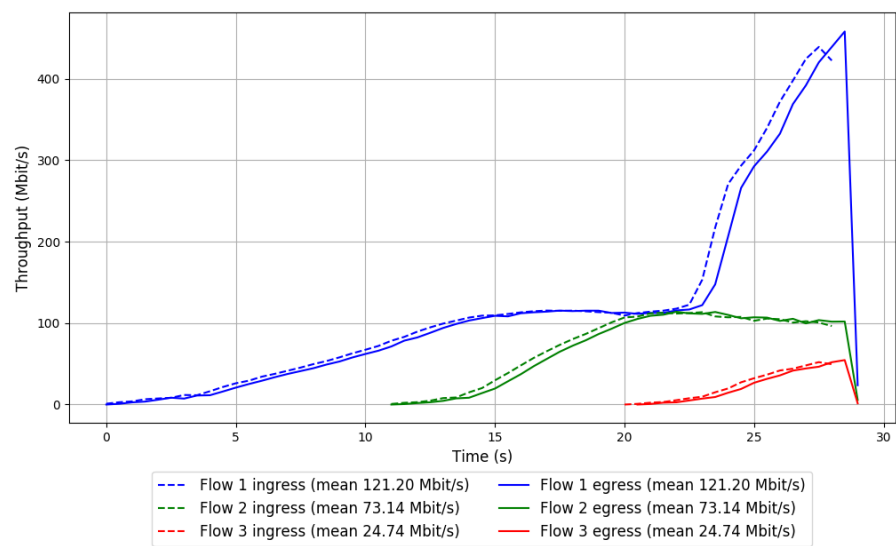


Run 3: Statistics of Indigo-MusesD

Start at: 2019-01-17 22:59:11
End at: 2019-01-17 22:59:41
Local clock offset: -0.021 ms
Remote clock offset: -0.328 ms

Below is generated by plot.py at 2019-01-18 02:55:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 172.92 Mbit/s
95th percentile per-packet one-way delay: 63.313 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 121.20 Mbit/s
95th percentile per-packet one-way delay: 63.643 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 73.14 Mbit/s
95th percentile per-packet one-way delay: 62.836 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.74 Mbit/s
95th percentile per-packet one-way delay: 62.714 ms
Loss rate: 0.00%

Run 3: Report of Indigo-MusesD — Data Link

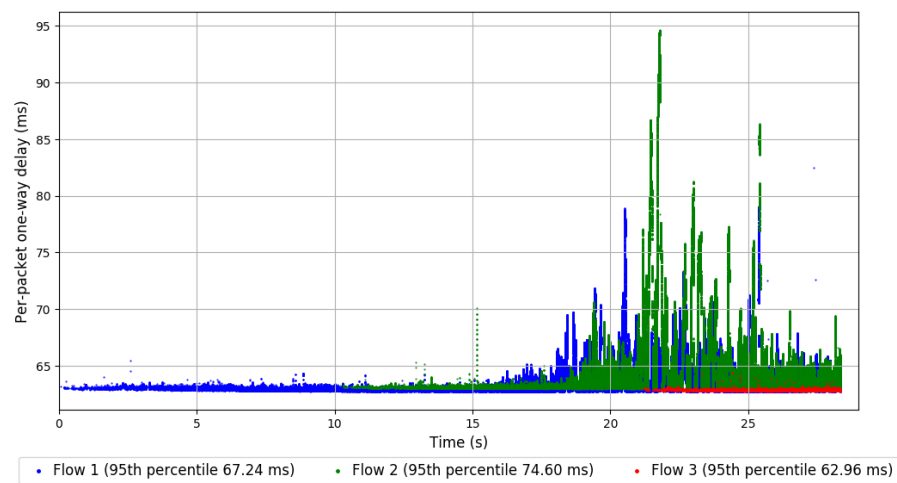
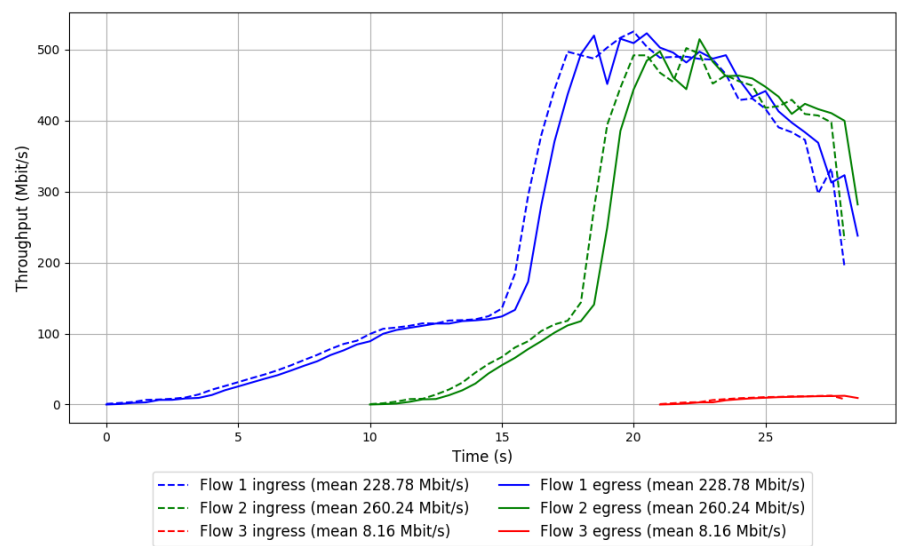


Run 4: Statistics of Indigo-MusesD

Start at: 2019-01-17 23:35:33
End at: 2019-01-17 23:36:03
Local clock offset: -0.034 ms
Remote clock offset: -0.067 ms

Below is generated by plot.py at 2019-01-18 02:55:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 397.92 Mbit/s
95th percentile per-packet one-way delay: 69.951 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 228.78 Mbit/s
95th percentile per-packet one-way delay: 67.243 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 260.24 Mbit/s
95th percentile per-packet one-way delay: 74.600 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.16 Mbit/s
95th percentile per-packet one-way delay: 62.963 ms
Loss rate: 0.00%

Run 4: Report of Indigo-MusesD — Data Link



Run 5: Statistics of Indigo-MusesD

Start at: 2019-01-18 00:11:47

End at: 2019-01-18 00:12:17

Local clock offset: -0.04 ms

Remote clock offset: -0.08 ms

Below is generated by plot.py at 2019-01-18 02:55:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 320.46 Mbit/s

95th percentile per-packet one-way delay: 68.477 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 263.79 Mbit/s

95th percentile per-packet one-way delay: 69.277 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 71.08 Mbit/s

95th percentile per-packet one-way delay: 63.282 ms

Loss rate: 0.00%

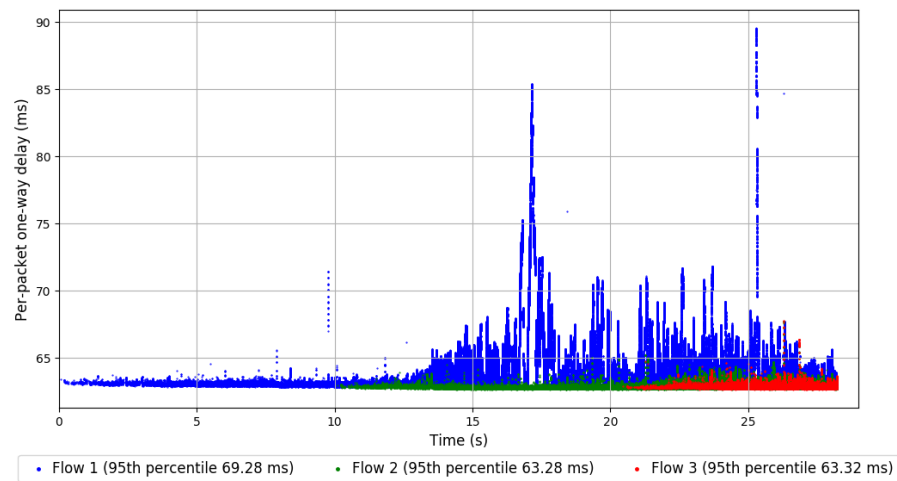
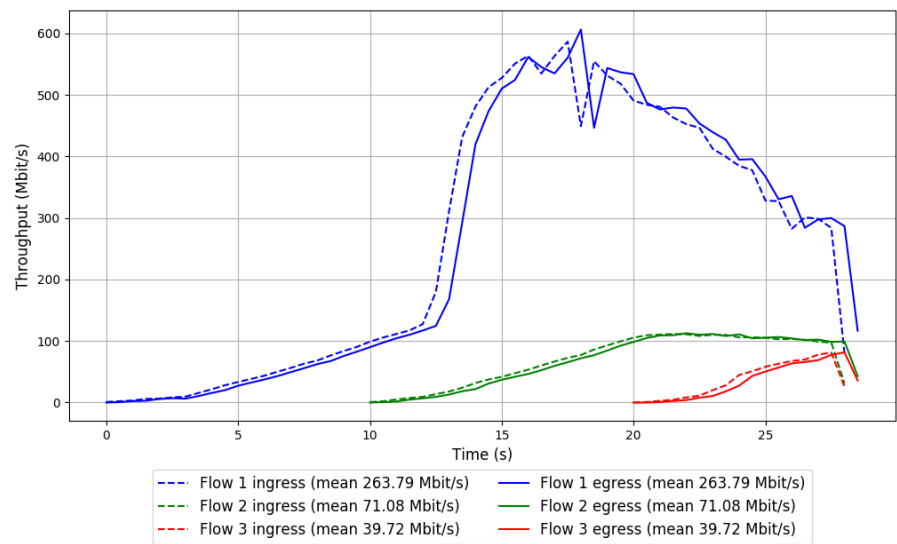
-- Flow 3:

Average throughput: 39.72 Mbit/s

95th percentile per-packet one-way delay: 63.317 ms

Loss rate: 0.00%

Run 5: Report of Indigo-MusesD — Data Link

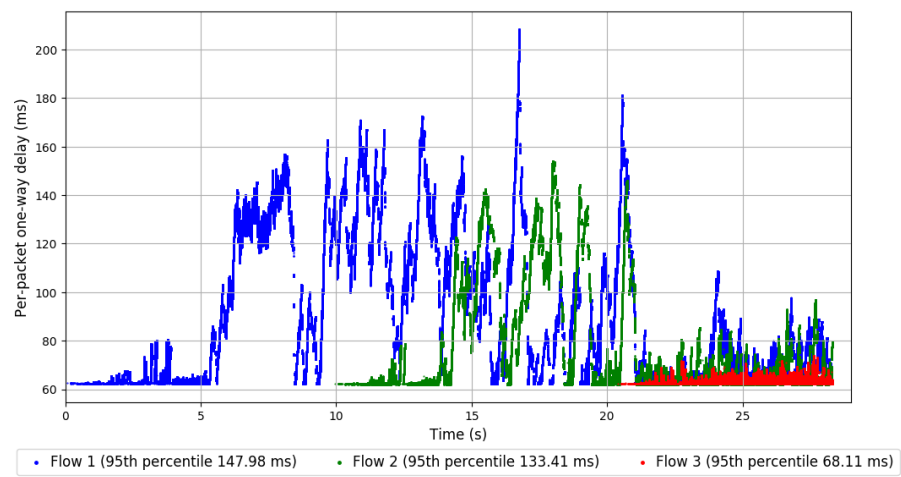
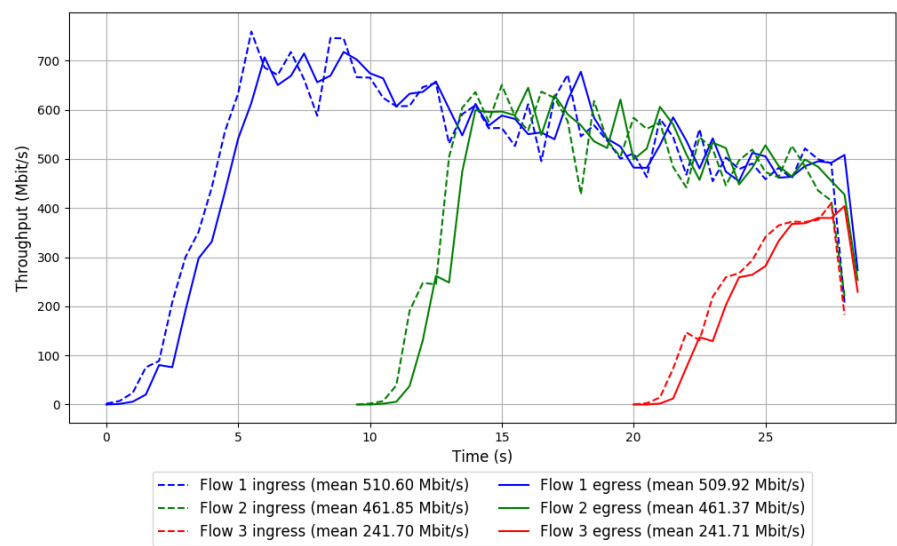


Run 1: Statistics of Indigo-MusesT

Start at: 2019-01-17 22:08:09
End at: 2019-01-17 22:08:39
Local clock offset: -0.076 ms
Remote clock offset: -0.828 ms

Below is generated by plot.py at 2019-01-18 03:04:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 877.41 Mbit/s
95th percentile per-packet one-way delay: 143.037 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 509.92 Mbit/s
95th percentile per-packet one-way delay: 147.980 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 461.37 Mbit/s
95th percentile per-packet one-way delay: 133.412 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 241.71 Mbit/s
95th percentile per-packet one-way delay: 68.114 ms
Loss rate: 0.00%

Run 1: Report of Indigo-MusesT — Data Link



Run 2: Statistics of Indigo-MusesT

Start at: 2019-01-17 22:44:41

End at: 2019-01-17 22:45:11

Local clock offset: -0.02 ms

Remote clock offset: 0.415 ms

Below is generated by plot.py at 2019-01-18 03:06:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 864.05 Mbit/s

95th percentile per-packet one-way delay: 152.401 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 533.32 Mbit/s

95th percentile per-packet one-way delay: 159.862 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 423.04 Mbit/s

95th percentile per-packet one-way delay: 88.152 ms

Loss rate: 0.04%

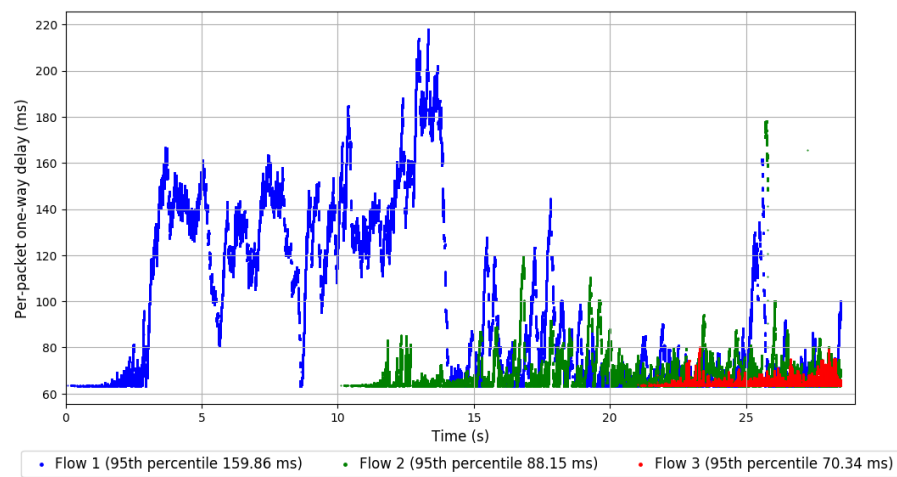
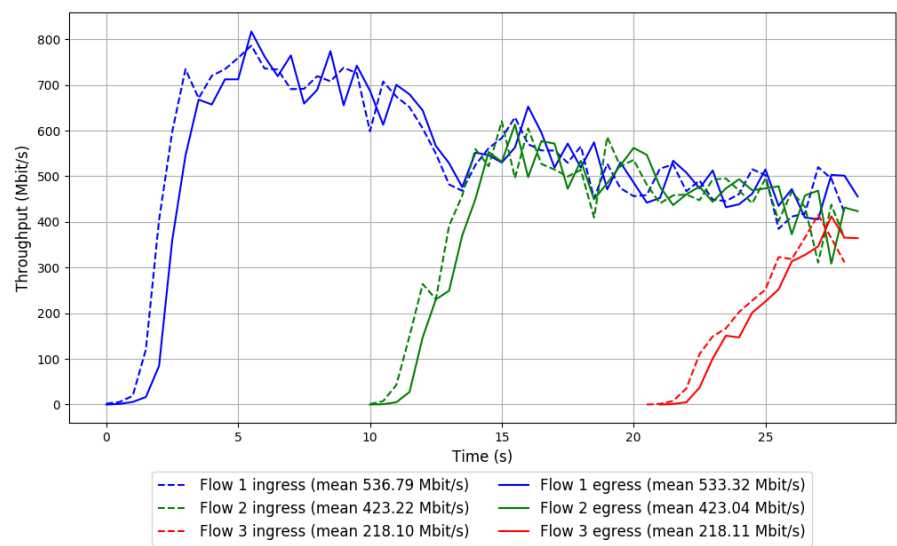
-- Flow 3:

Average throughput: 218.11 Mbit/s

95th percentile per-packet one-way delay: 70.336 ms

Loss rate: 0.00%

Run 2: Report of Indigo-MusesT — Data Link

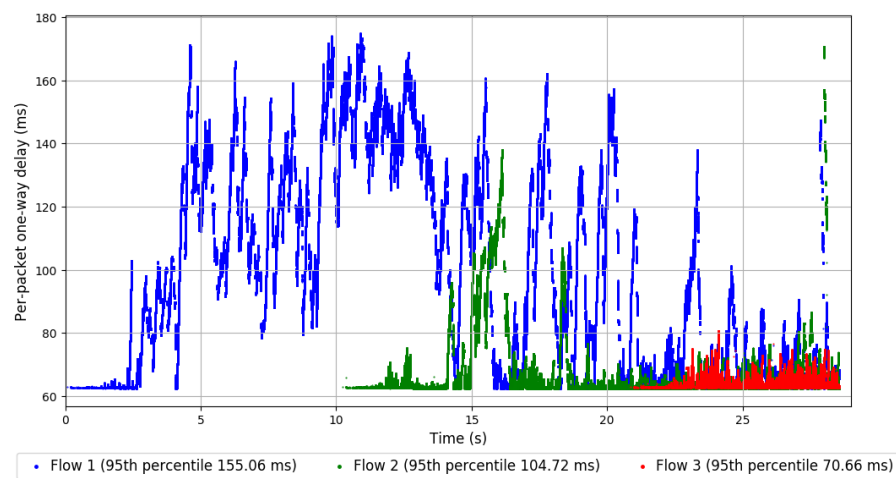
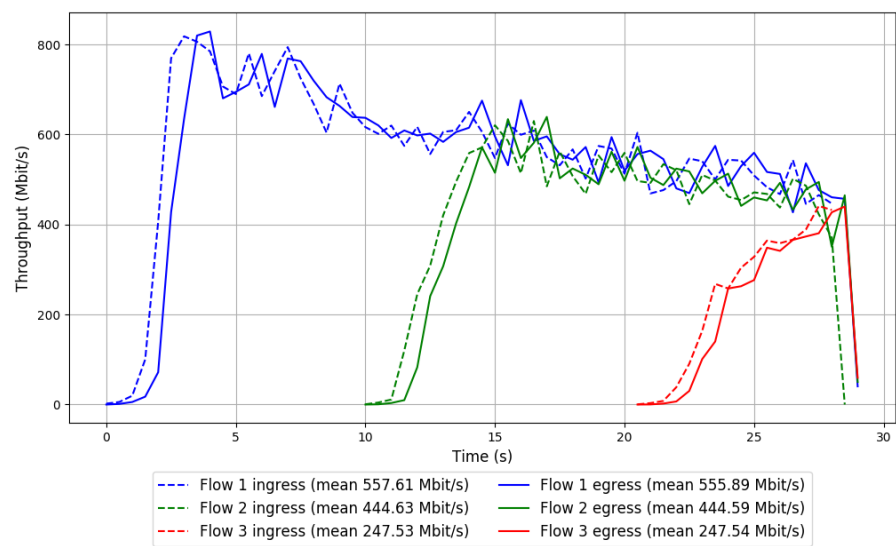


Run 3: Statistics of Indigo-MuseST

Start at: 2019-01-17 23:21:03
End at: 2019-01-17 23:21:33
Local clock offset: -0.002 ms
Remote clock offset: -0.296 ms

Below is generated by plot.py at 2019-01-18 03:09:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 908.77 Mbit/s
95th percentile per-packet one-way delay: 149.567 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 555.89 Mbit/s
95th percentile per-packet one-way delay: 155.064 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 444.59 Mbit/s
95th percentile per-packet one-way delay: 104.721 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 247.54 Mbit/s
95th percentile per-packet one-way delay: 70.656 ms
Loss rate: 0.00%

Run 3: Report of Indigo-MusesT — Data Link

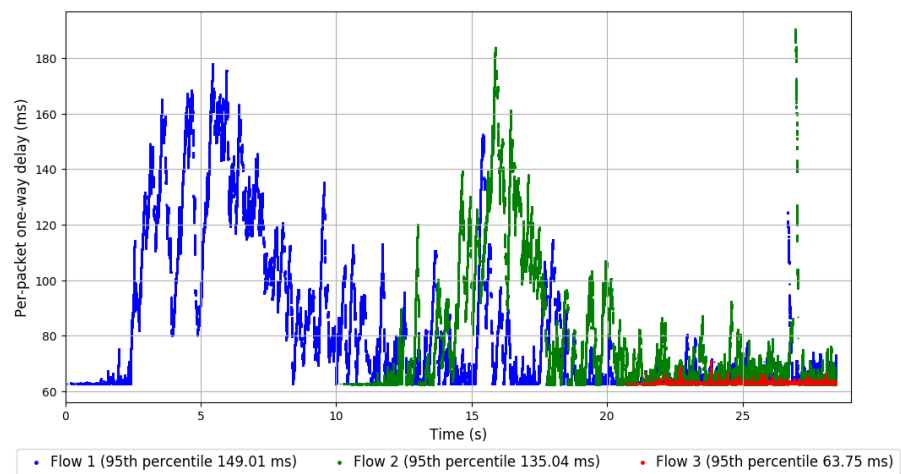
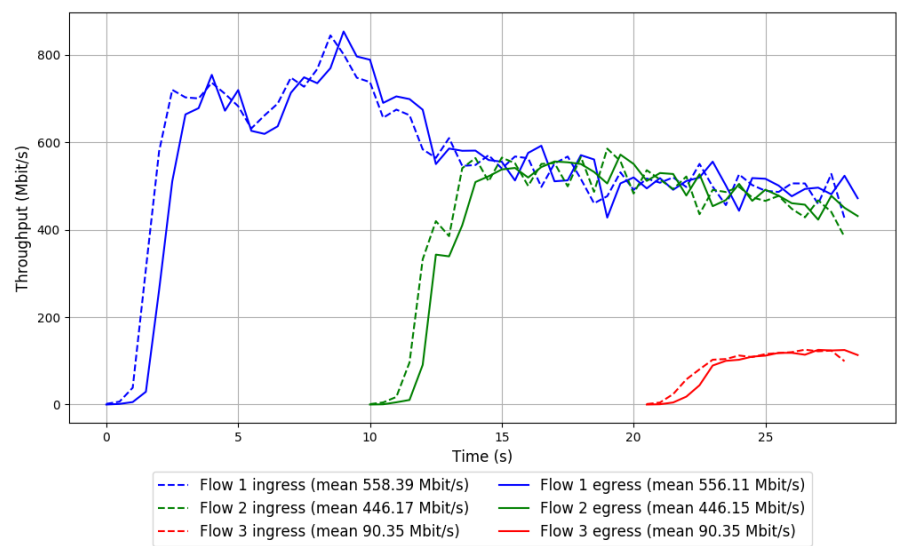


Run 4: Statistics of Indigo-MusesT

Start at: 2019-01-17 23:57:35
End at: 2019-01-17 23:58:05
Local clock offset: -0.1 ms
Remote clock offset: -0.457 ms

Below is generated by plot.py at 2019-01-18 03:09:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 868.73 Mbit/s
95th percentile per-packet one-way delay: 143.634 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 556.11 Mbit/s
95th percentile per-packet one-way delay: 149.012 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 446.15 Mbit/s
95th percentile per-packet one-way delay: 135.039 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 90.35 Mbit/s
95th percentile per-packet one-way delay: 63.746 ms
Loss rate: 0.00%

Run 4: Report of Indigo-MusesT — Data Link

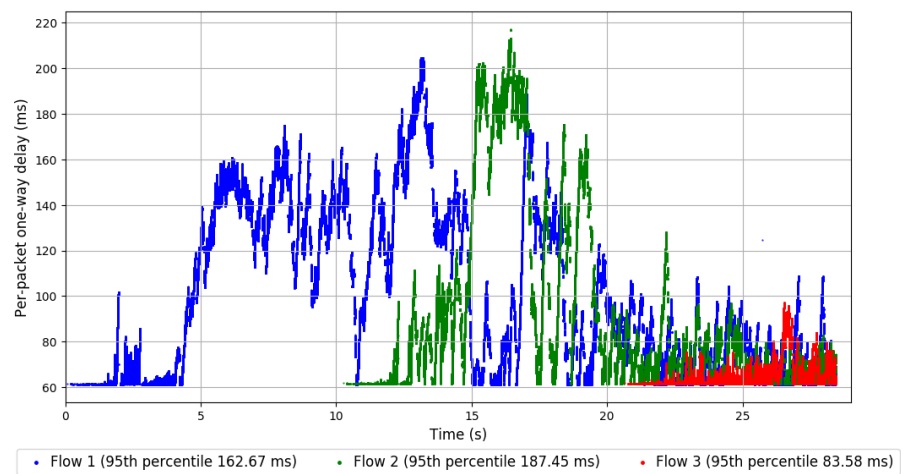
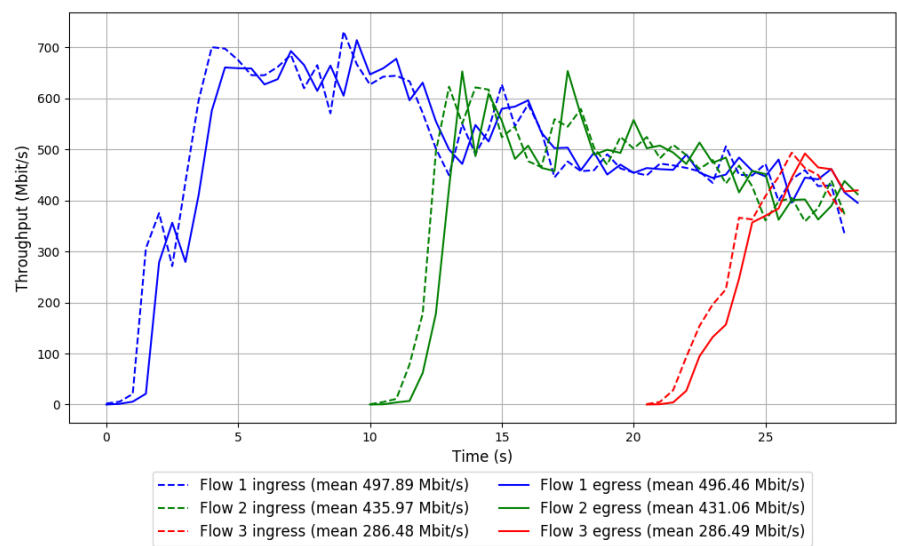


Run 5: Statistics of Indigo-MusesT

Start at: 2019-01-18 00:33:40
End at: 2019-01-18 00:34:10
Local clock offset: 0.008 ms
Remote clock offset: -1.373 ms

Below is generated by plot.py at 2019-01-18 03:09:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 851.38 Mbit/s
95th percentile per-packet one-way delay: 172.771 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 496.46 Mbit/s
95th percentile per-packet one-way delay: 162.668 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 431.06 Mbit/s
95th percentile per-packet one-way delay: 187.447 ms
Loss rate: 1.13%
-- Flow 3:
Average throughput: 286.49 Mbit/s
95th percentile per-packet one-way delay: 83.583 ms
Loss rate: 0.00%

Run 5: Report of Indigo-MusesT — Data Link

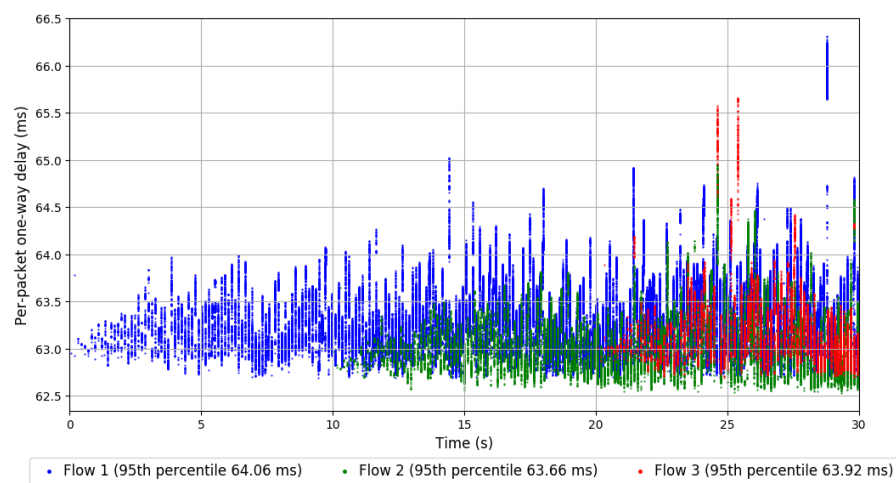
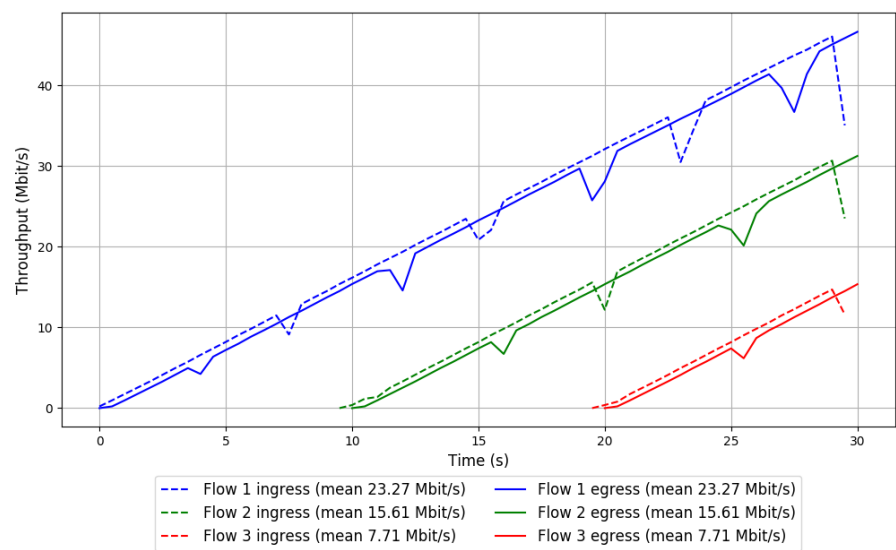


Run 1: Statistics of LEDBAT

Start at: 2019-01-17 21:45:16
End at: 2019-01-17 21:45:46
Local clock offset: -0.115 ms
Remote clock offset: -0.299 ms

Below is generated by plot.py at 2019-01-18 03:09:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 36.21 Mbit/s
95th percentile per-packet one-way delay: 64.004 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 23.27 Mbit/s
95th percentile per-packet one-way delay: 64.063 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 15.61 Mbit/s
95th percentile per-packet one-way delay: 63.665 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.71 Mbit/s
95th percentile per-packet one-way delay: 63.917 ms
Loss rate: 0.00%

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2019-01-17 22:21:15

End at: 2019-01-17 22:21:45

Local clock offset: -0.033 ms

Remote clock offset: -0.25 ms

Below is generated by plot.py at 2019-01-18 03:09:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 36.22 Mbit/s

95th percentile per-packet one-way delay: 64.165 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 23.32 Mbit/s

95th percentile per-packet one-way delay: 64.248 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 15.63 Mbit/s

95th percentile per-packet one-way delay: 63.918 ms

Loss rate: 0.00%

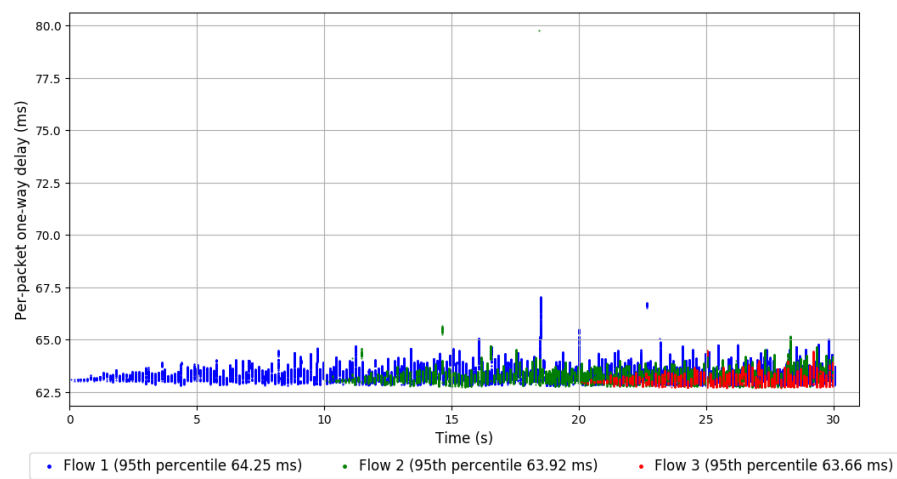
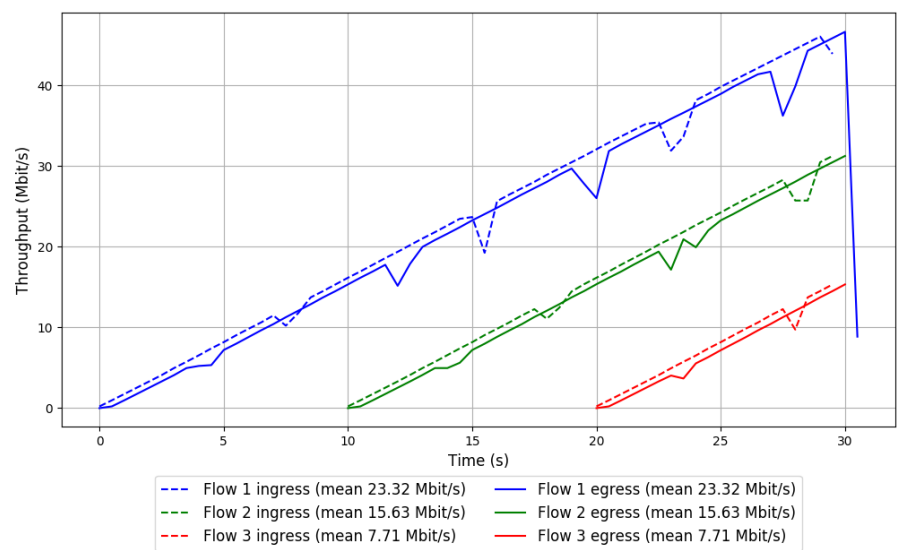
-- Flow 3:

Average throughput: 7.71 Mbit/s

95th percentile per-packet one-way delay: 63.658 ms

Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link

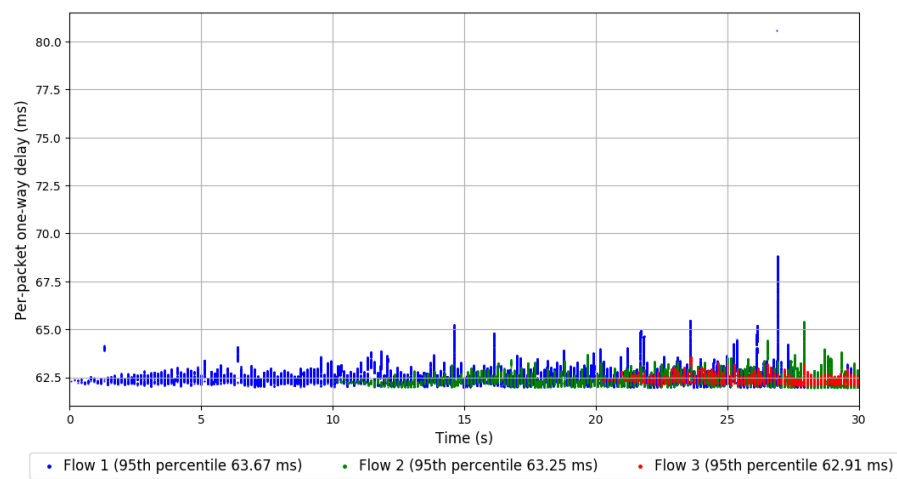
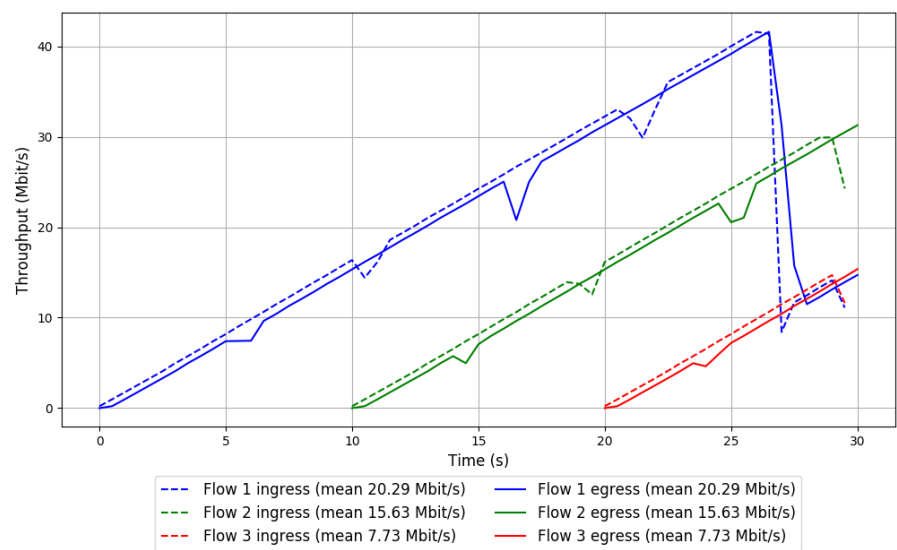


Run 3: Statistics of LEDBAT

Start at: 2019-01-17 22:57:54
End at: 2019-01-17 22:58:24
Local clock offset: -0.012 ms
Remote clock offset: -0.714 ms

Below is generated by plot.py at 2019-01-18 03:09:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 33.23 Mbit/s
95th percentile per-packet one-way delay: 63.440 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 20.29 Mbit/s
95th percentile per-packet one-way delay: 63.675 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 15.63 Mbit/s
95th percentile per-packet one-way delay: 63.246 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.73 Mbit/s
95th percentile per-packet one-way delay: 62.906 ms
Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link

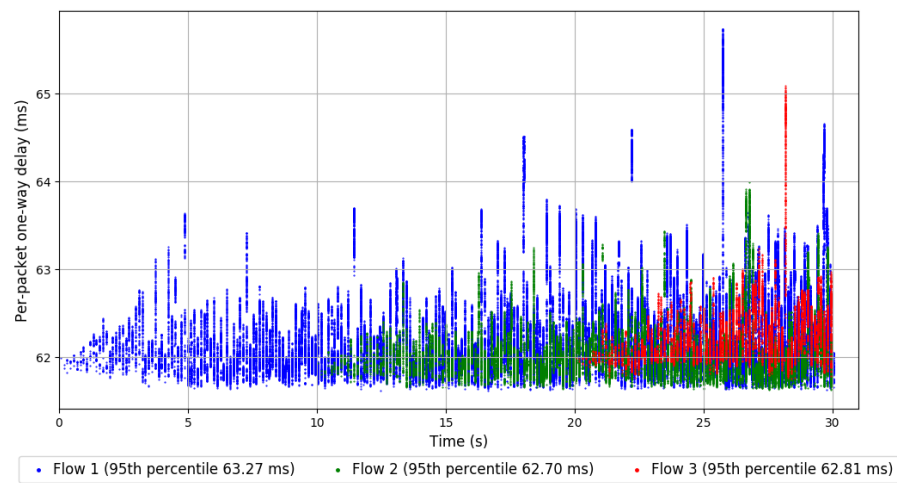
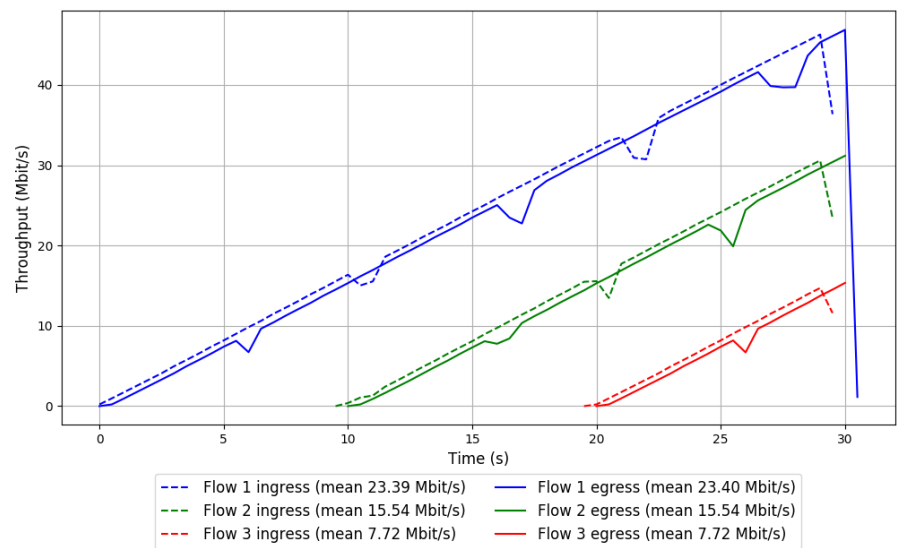


Run 4: Statistics of LEDBAT

Start at: 2019-01-17 23:34:16
End at: 2019-01-17 23:34:46
Local clock offset: 0.082 ms
Remote clock offset: -0.925 ms

Below is generated by plot.py at 2019-01-18 03:09:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 36.25 Mbit/s
95th percentile per-packet one-way delay: 63.134 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 23.40 Mbit/s
95th percentile per-packet one-way delay: 63.273 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 15.54 Mbit/s
95th percentile per-packet one-way delay: 62.704 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.72 Mbit/s
95th percentile per-packet one-way delay: 62.810 ms
Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link

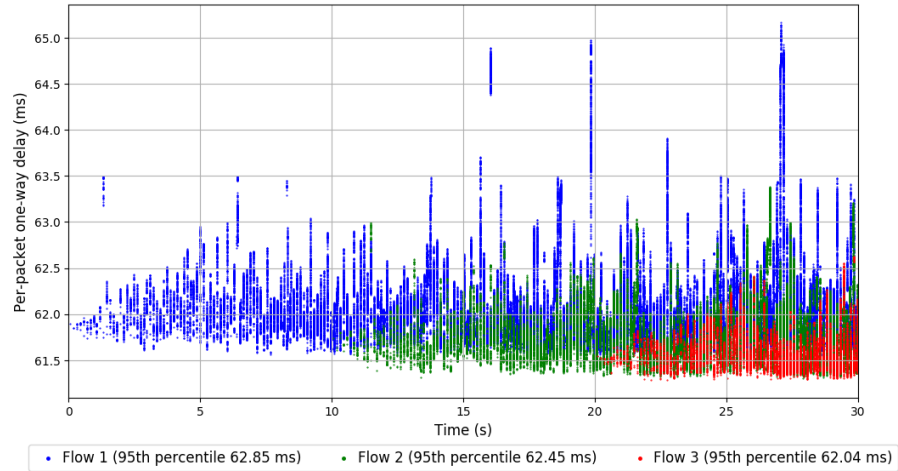
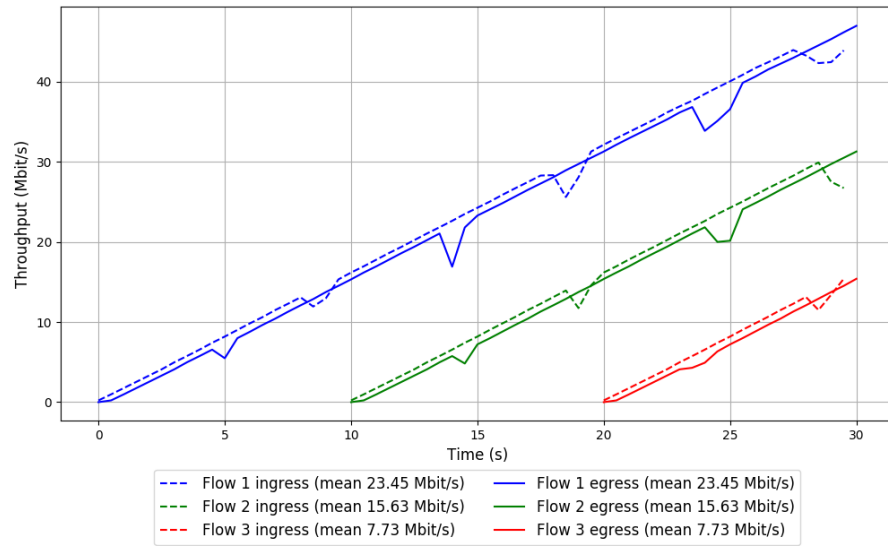


Run 5: Statistics of LEDBAT

Start at: 2019-01-18 00:10:31
End at: 2019-01-18 00:11:01
Local clock offset: 0.0 ms
Remote clock offset: -1.421 ms

Below is generated by plot.py at 2019-01-18 03:09:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 36.38 Mbit/s
95th percentile per-packet one-way delay: 62.734 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 23.45 Mbit/s
95th percentile per-packet one-way delay: 62.855 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 15.63 Mbit/s
95th percentile per-packet one-way delay: 62.453 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.73 Mbit/s
95th percentile per-packet one-way delay: 62.038 ms
Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link

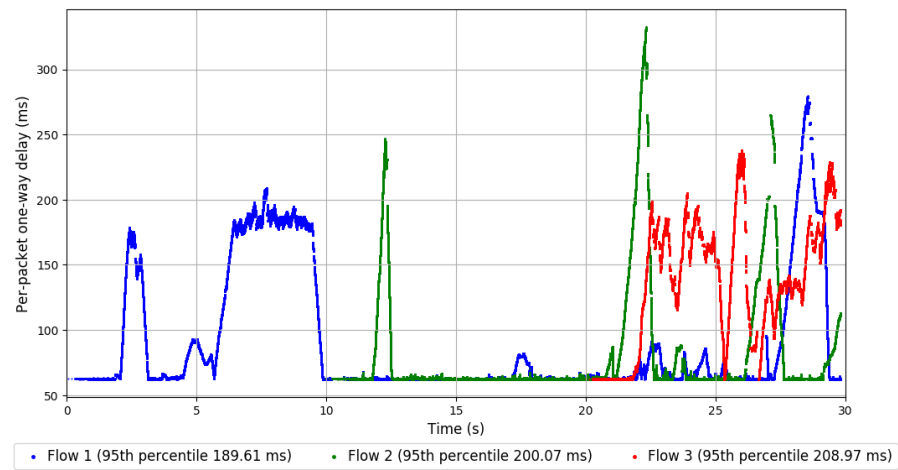
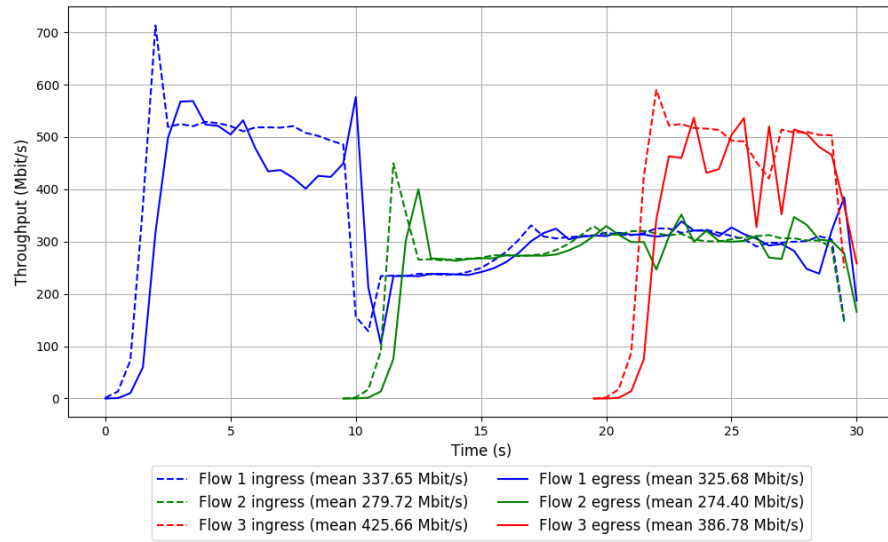


```
Run 1: Statistics of PCC-Allegro

Start at: 2019-01-17 22:13:43
End at: 2019-01-17 22:14:13
Local clock offset: -0.082 ms
Remote clock offset: -0.703 ms

# Below is generated by plot.py at 2019-01-18 03:22:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 636.42 Mbit/s
95th percentile per-packet one-way delay: 192.942 ms
Loss rate: 4.26%
-- Flow 1:
Average throughput: 325.68 Mbit/s
95th percentile per-packet one-way delay: 189.610 ms
Loss rate: 3.55%
-- Flow 2:
Average throughput: 274.40 Mbit/s
95th percentile per-packet one-way delay: 200.072 ms
Loss rate: 1.90%
-- Flow 3:
Average throughput: 386.78 Mbit/s
95th percentile per-packet one-way delay: 208.968 ms
Loss rate: 9.13%
```

Run 1: Report of PCC-Allegro — Data Link

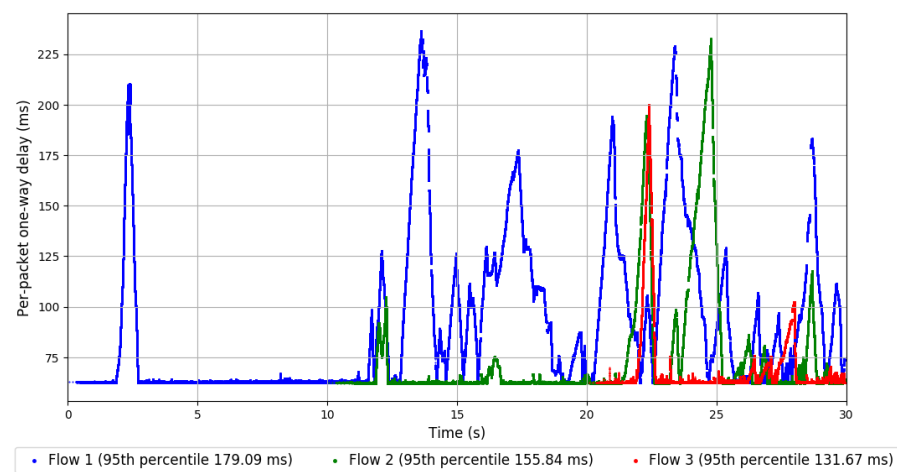
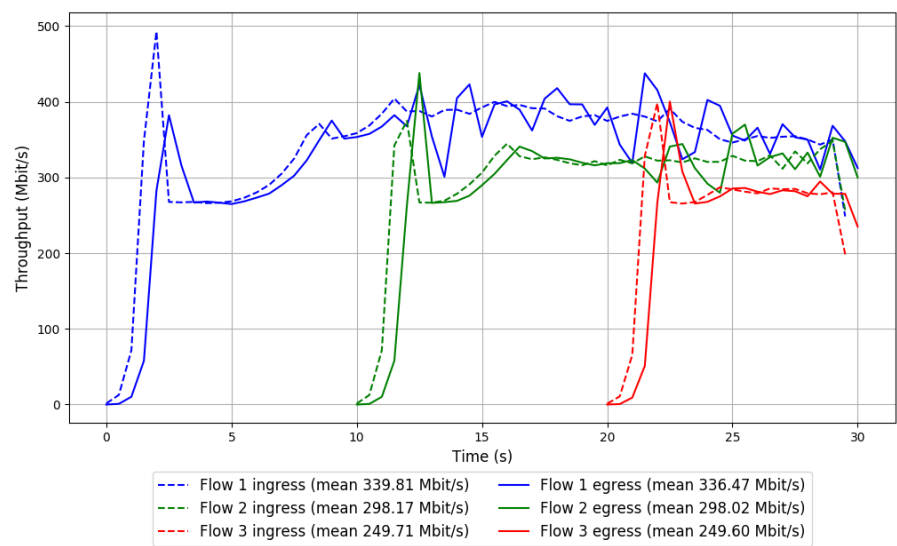


Run 2: Statistics of PCC-Allegro

Start at: 2019-01-17 22:50:29
End at: 2019-01-17 22:50:59
Local clock offset: -0.043 ms
Remote clock offset: -0.718 ms

Below is generated by plot.py at 2019-01-18 03:22:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 616.64 Mbit/s
95th percentile per-packet one-way delay: 171.599 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 336.47 Mbit/s
95th percentile per-packet one-way delay: 179.094 ms
Loss rate: 0.98%
-- Flow 2:
Average throughput: 298.02 Mbit/s
95th percentile per-packet one-way delay: 155.835 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 249.60 Mbit/s
95th percentile per-packet one-way delay: 131.668 ms
Loss rate: 0.04%

Run 2: Report of PCC-Allegro — Data Link

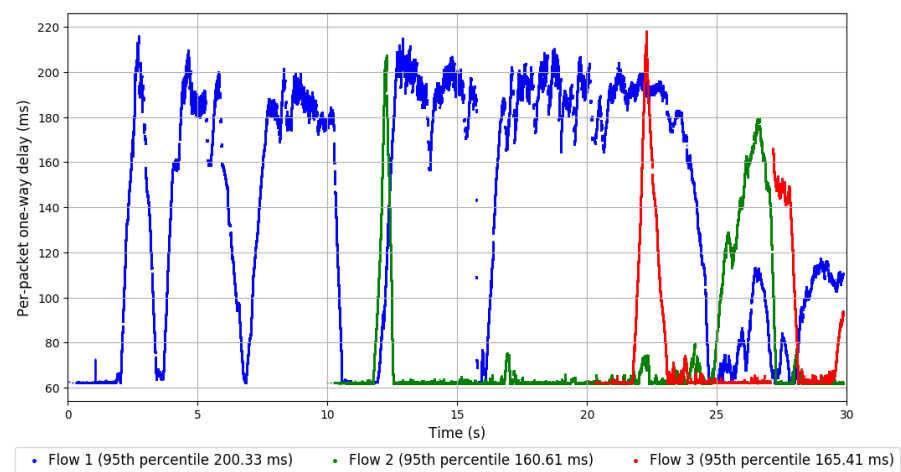
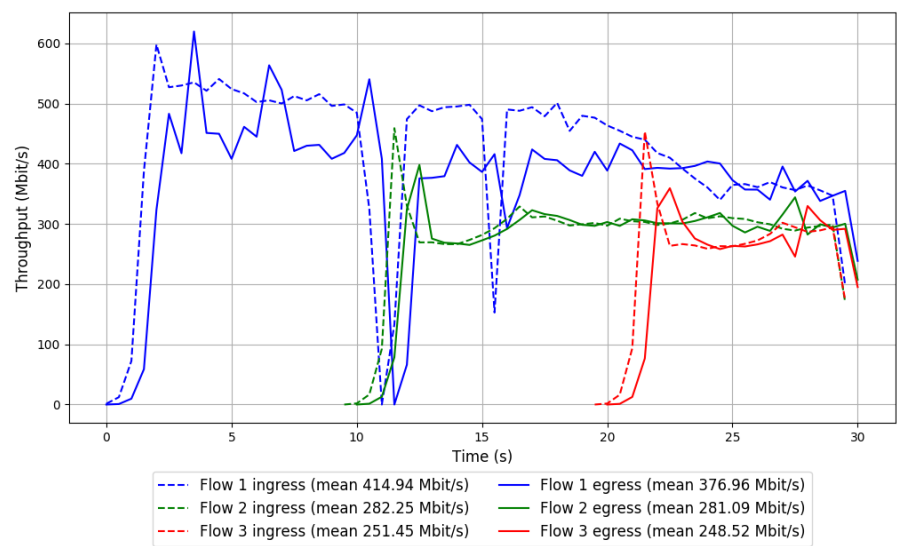


Run 3: Statistics of PCC-Allegro

Start at: 2019-01-17 23:26:49
End at: 2019-01-17 23:27:19
Local clock offset: -0.021 ms
Remote clock offset: -0.778 ms

Below is generated by plot.py at 2019-01-18 03:26:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 646.21 Mbit/s
95th percentile per-packet one-way delay: 197.768 ms
Loss rate: 5.79%
-- Flow 1:
Average throughput: 376.96 Mbit/s
95th percentile per-packet one-way delay: 200.331 ms
Loss rate: 9.15%
-- Flow 2:
Average throughput: 281.09 Mbit/s
95th percentile per-packet one-way delay: 160.614 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 248.52 Mbit/s
95th percentile per-packet one-way delay: 165.407 ms
Loss rate: 1.16%

Run 3: Report of PCC-Allegro — Data Link

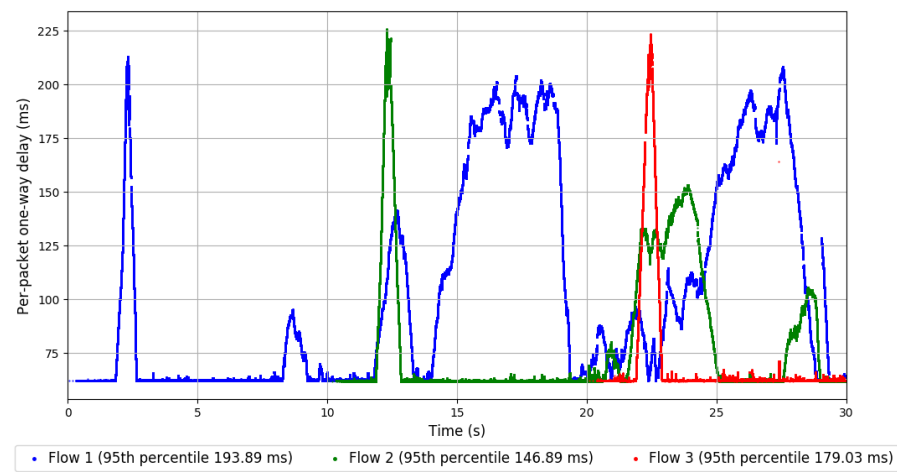
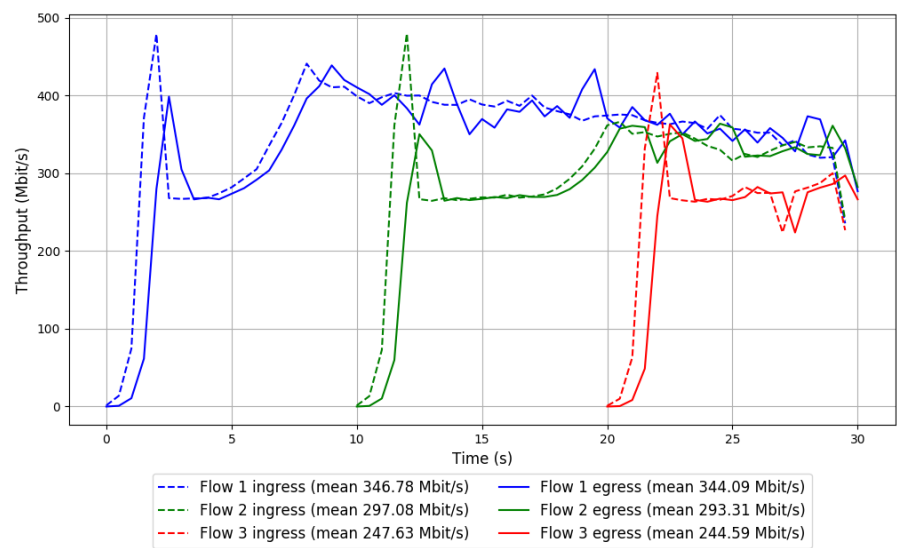


Run 4: Statistics of PCC-Allegro

Start at: 2019-01-18 00:03:09
End at: 2019-01-18 00:03:39
Local clock offset: -0.07 ms
Remote clock offset: -0.822 ms

Below is generated by plot.py at 2019-01-18 03:33:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 619.45 Mbit/s
95th percentile per-packet one-way delay: 191.446 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 344.09 Mbit/s
95th percentile per-packet one-way delay: 193.887 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 293.31 Mbit/s
95th percentile per-packet one-way delay: 146.891 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 244.59 Mbit/s
95th percentile per-packet one-way delay: 179.029 ms
Loss rate: 1.23%

Run 4: Report of PCC-Allegro — Data Link

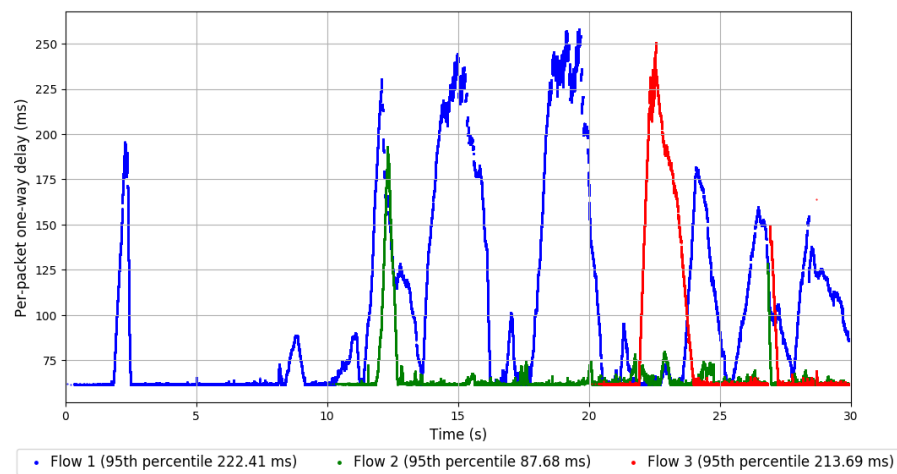
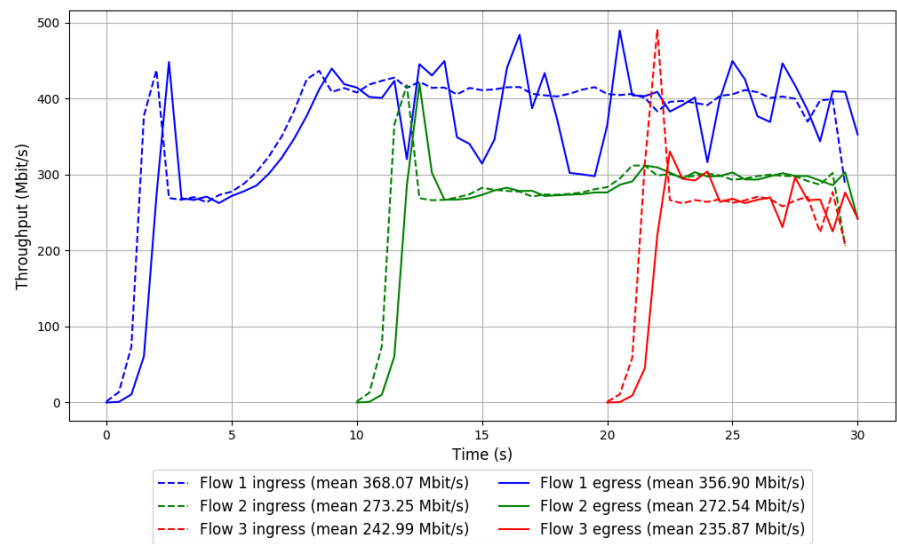


Run 5: Statistics of PCC-Allegro

Start at: 2019-01-18 00:39:22
End at: 2019-01-18 00:39:52
Local clock offset: -0.072 ms
Remote clock offset: -1.448 ms

Below is generated by plot.py at 2019-01-18 03:35:28
Datalink statistics
-- Total of 3 flows:
Average throughput: 615.67 Mbit/s
95th percentile per-packet one-way delay: 208.841 ms
Loss rate: 2.22%
-- Flow 1:
Average throughput: 356.90 Mbit/s
95th percentile per-packet one-way delay: 222.413 ms
Loss rate: 3.03%
-- Flow 2:
Average throughput: 272.54 Mbit/s
95th percentile per-packet one-way delay: 87.680 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 235.87 Mbit/s
95th percentile per-packet one-way delay: 213.693 ms
Loss rate: 2.94%

Run 5: Report of PCC-Allegro — Data Link

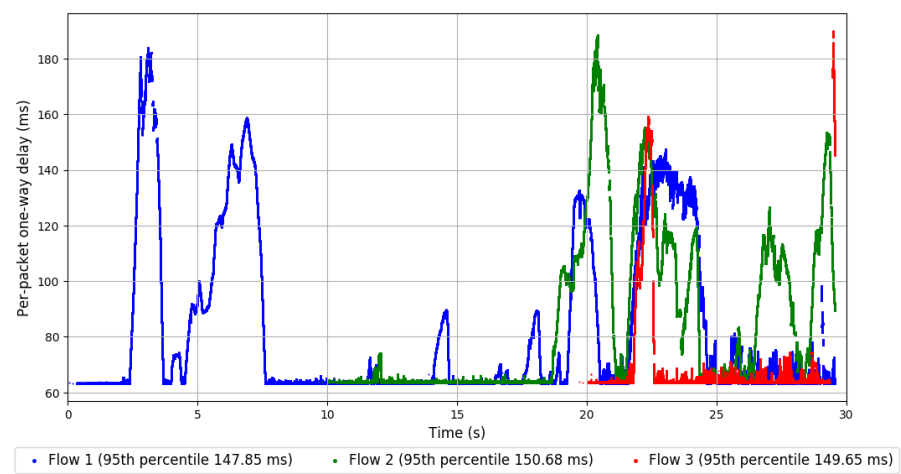
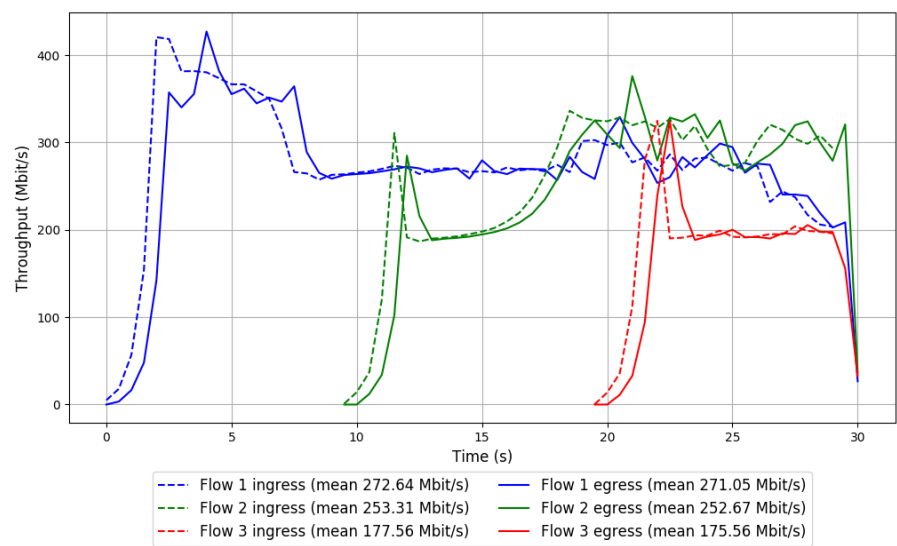



```
Run 1: Statistics of PCC-Expr

Start at: 2019-01-17 22:01:45
End at: 2019-01-17 22:02:15
Local clock offset: -0.092 ms
Remote clock offset: 0.391 ms

# Below is generated by plot.py at 2019-01-18 03:35:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 499.83 Mbit/s
95th percentile per-packet one-way delay: 149.399 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 271.05 Mbit/s
95th percentile per-packet one-way delay: 147.850 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 252.67 Mbit/s
95th percentile per-packet one-way delay: 150.678 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 175.56 Mbit/s
95th percentile per-packet one-way delay: 149.646 ms
Loss rate: 1.11%
```

Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

Start at: 2019-01-17 22:38:13

End at: 2019-01-17 22:38:43

Local clock offset: 0.007 ms

Remote clock offset: -0.65 ms

Below is generated by plot.py at 2019-01-18 03:35:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 494.18 Mbit/s

95th percentile per-packet one-way delay: 194.737 ms

Loss rate: 3.75%

-- Flow 1:

Average throughput: 298.14 Mbit/s

95th percentile per-packet one-way delay: 197.932 ms

Loss rate: 6.06%

-- Flow 2:

Average throughput: 205.56 Mbit/s

95th percentile per-packet one-way delay: 88.303 ms

Loss rate: 0.00%

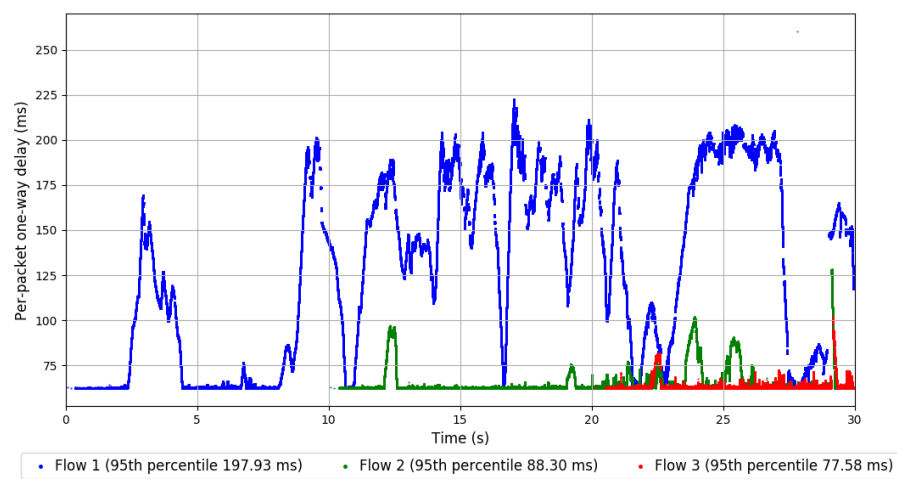
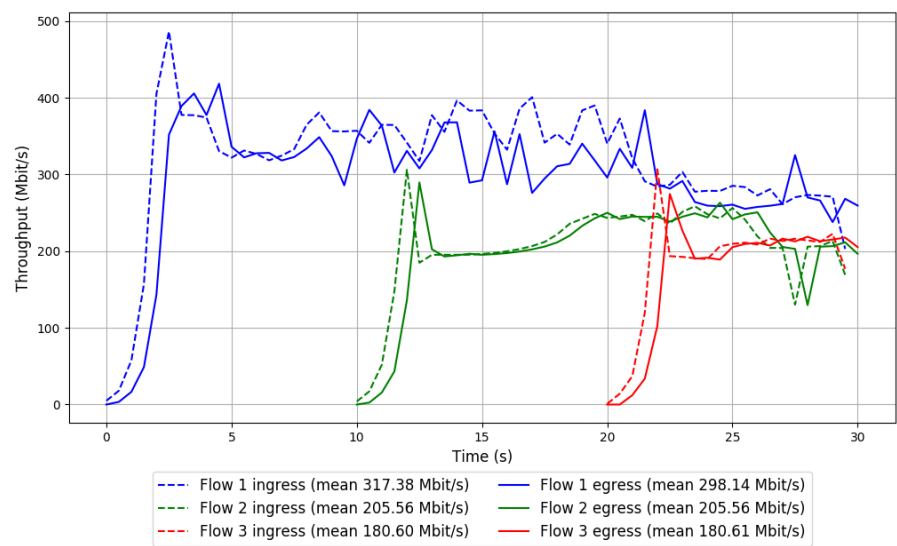
-- Flow 3:

Average throughput: 180.61 Mbit/s

95th percentile per-packet one-way delay: 77.583 ms

Loss rate: 0.00%

Run 2: Report of PCC-Expr — Data Link

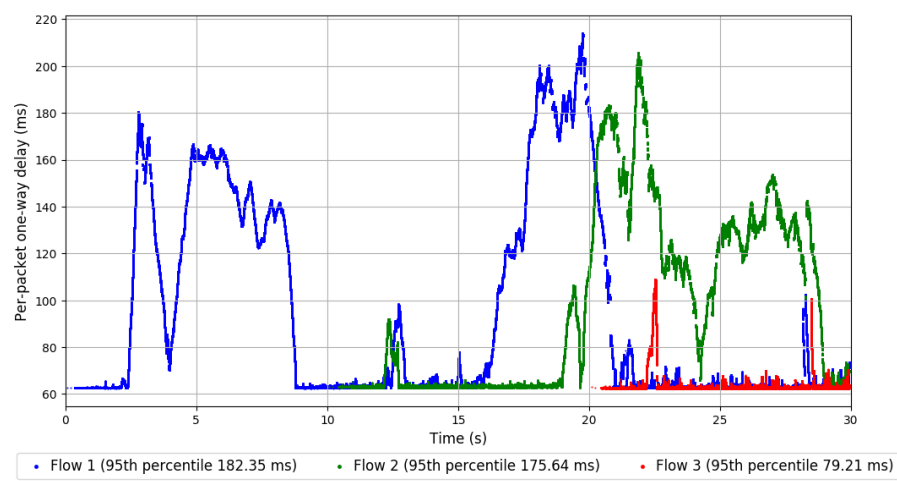
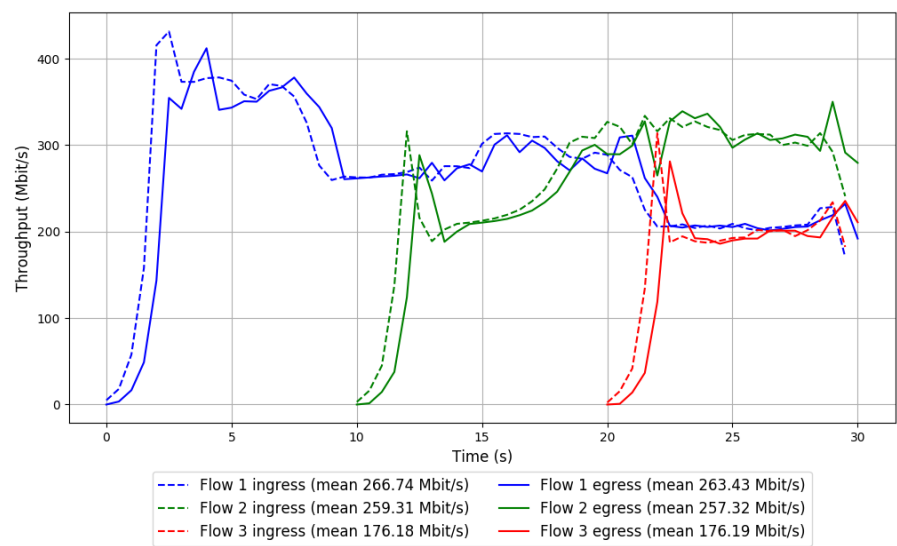


Run 3: Statistics of PCC-Expr

Start at: 2019-01-17 23:14:36
End at: 2019-01-17 23:15:06
Local clock offset: -0.0 ms
Remote clock offset: -0.224 ms

Below is generated by plot.py at 2019-01-18 03:35:28
Datalink statistics
-- Total of 3 flows:
Average throughput: 492.50 Mbit/s
95th percentile per-packet one-way delay: 177.047 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 263.43 Mbit/s
95th percentile per-packet one-way delay: 182.354 ms
Loss rate: 1.25%
-- Flow 2:
Average throughput: 257.32 Mbit/s
95th percentile per-packet one-way delay: 175.638 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 176.19 Mbit/s
95th percentile per-packet one-way delay: 79.208 ms
Loss rate: 0.02%

Run 3: Report of PCC-Expr — Data Link

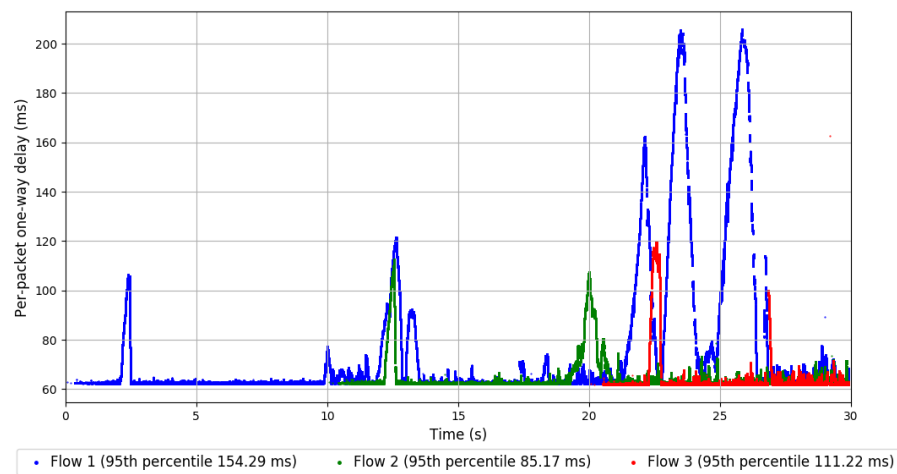
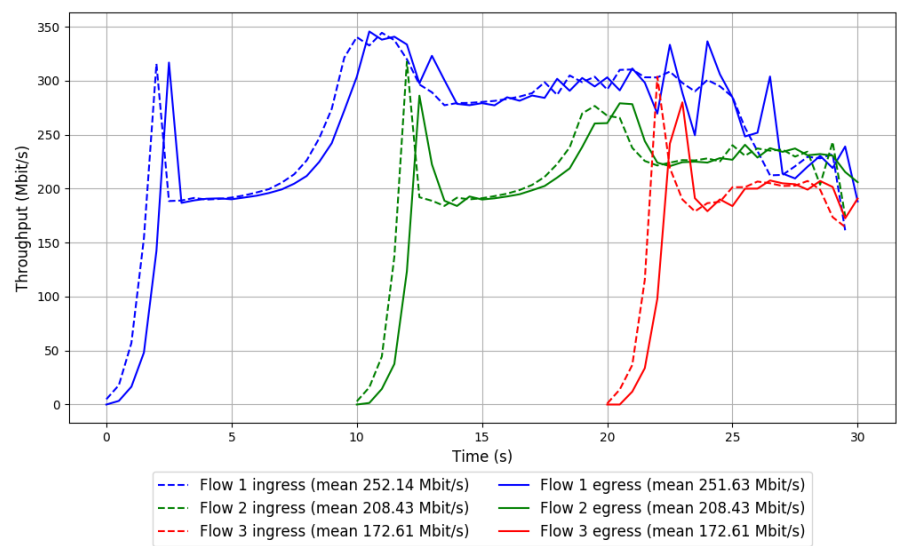


Run 4: Statistics of PCC-Expr

Start at: 2019-01-17 23:51:14
End at: 2019-01-17 23:51:44
Local clock offset: -0.067 ms
Remote clock offset: -0.808 ms

Below is generated by plot.py at 2019-01-18 03:42:49
Datalink statistics
-- Total of 3 flows:
Average throughput: 447.11 Mbit/s
95th percentile per-packet one-way delay: 119.922 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 251.63 Mbit/s
95th percentile per-packet one-way delay: 154.289 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 208.43 Mbit/s
95th percentile per-packet one-way delay: 85.172 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 172.61 Mbit/s
95th percentile per-packet one-way delay: 111.220 ms
Loss rate: 0.00%

Run 4: Report of PCC-Expr — Data Link

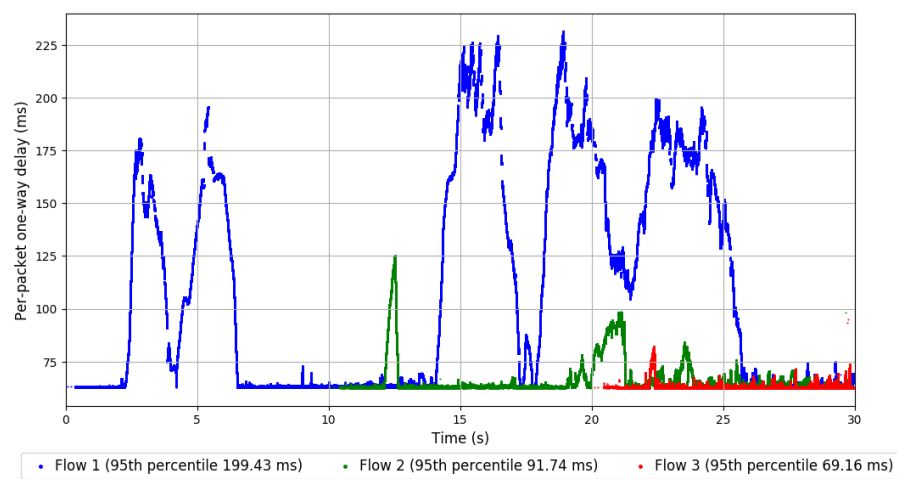
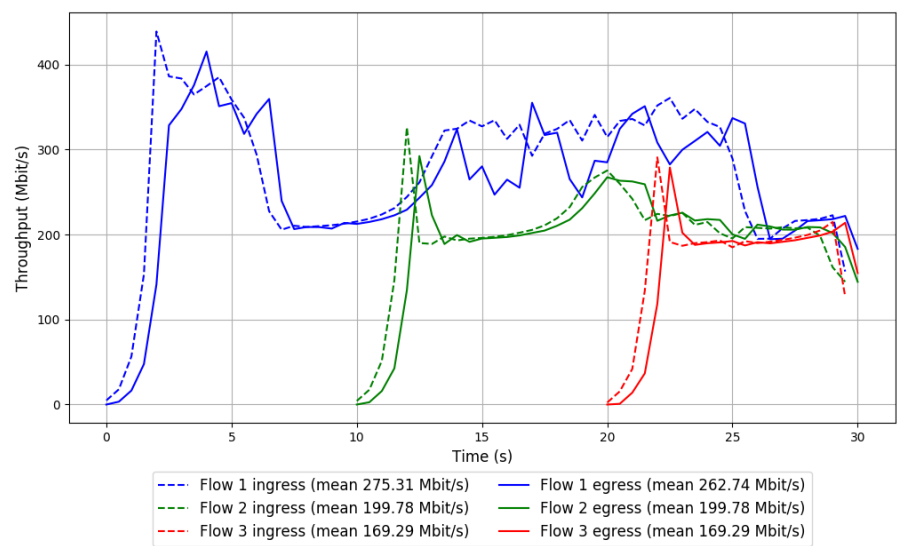


Run 5: Statistics of PCC-Expr

Start at: 2019-01-18 00:27:14
End at: 2019-01-18 00:27:44
Local clock offset: -0.018 ms
Remote clock offset: -0.182 ms

Below is generated by plot.py at 2019-01-18 03:43:13
Datalink statistics
-- Total of 3 flows:
Average throughput: 451.36 Mbit/s
95th percentile per-packet one-way delay: 188.509 ms
Loss rate: 2.71%
-- Flow 1:
Average throughput: 262.74 Mbit/s
95th percentile per-packet one-way delay: 199.426 ms
Loss rate: 4.57%
-- Flow 2:
Average throughput: 199.78 Mbit/s
95th percentile per-packet one-way delay: 91.743 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 169.29 Mbit/s
95th percentile per-packet one-way delay: 69.162 ms
Loss rate: 0.00%

Run 5: Report of PCC-Expr — Data Link

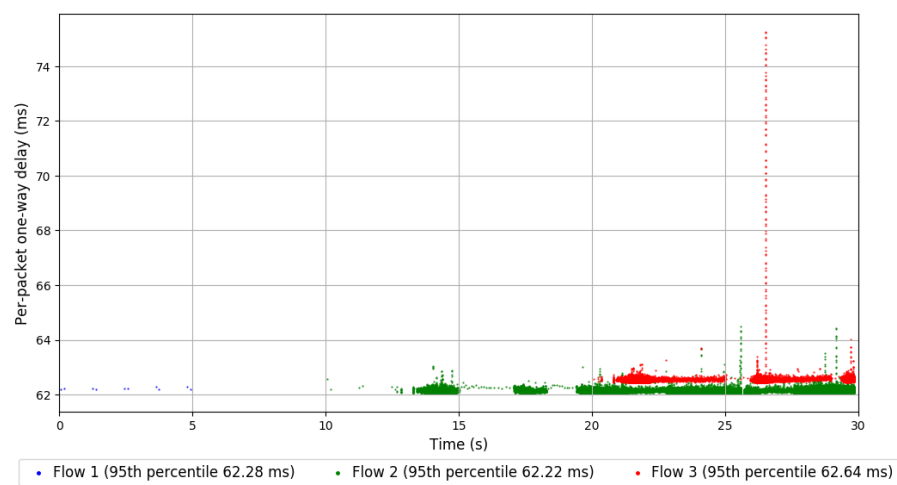
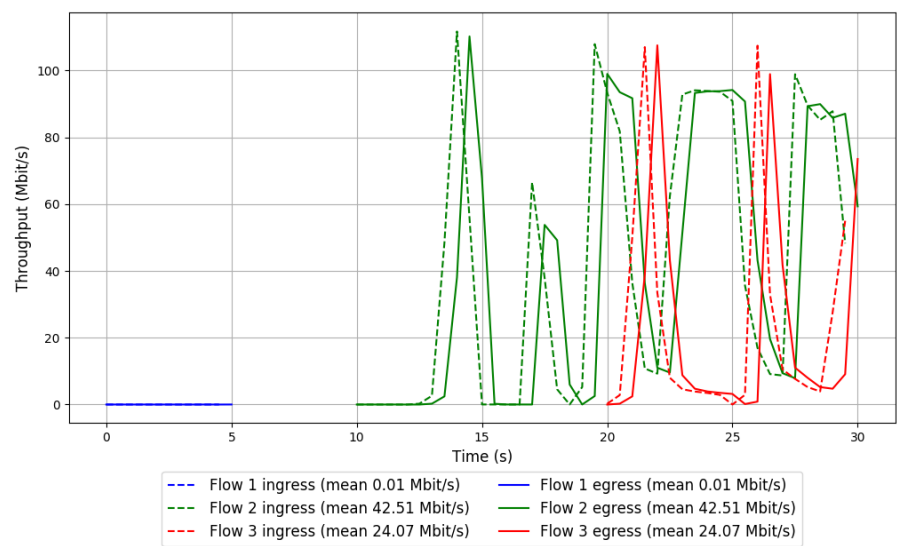


Run 1: Statistics of QUIC Cubic

Start at: 2019-01-17 22:03:45
End at: 2019-01-17 22:04:15
Local clock offset: -0.093 ms
Remote clock offset: -0.781 ms

Below is generated by plot.py at 2019-01-18 03:43:13
Datalink statistics
-- Total of 3 flows:
Average throughput: 36.11 Mbit/s
95th percentile per-packet one-way delay: 62.566 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 62.278 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.51 Mbit/s
95th percentile per-packet one-way delay: 62.220 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.07 Mbit/s
95th percentile per-packet one-way delay: 62.636 ms
Loss rate: 0.00%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2019-01-17 22:40:17

End at: 2019-01-17 22:40:47

Local clock offset: -0.023 ms

Remote clock offset: -0.73 ms

Below is generated by plot.py at 2019-01-18 03:43:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.55 Mbit/s

95th percentile per-packet one-way delay: 62.501 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 40.42 Mbit/s

95th percentile per-packet one-way delay: 62.303 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 50.42 Mbit/s

95th percentile per-packet one-way delay: 62.526 ms

Loss rate: 0.00%

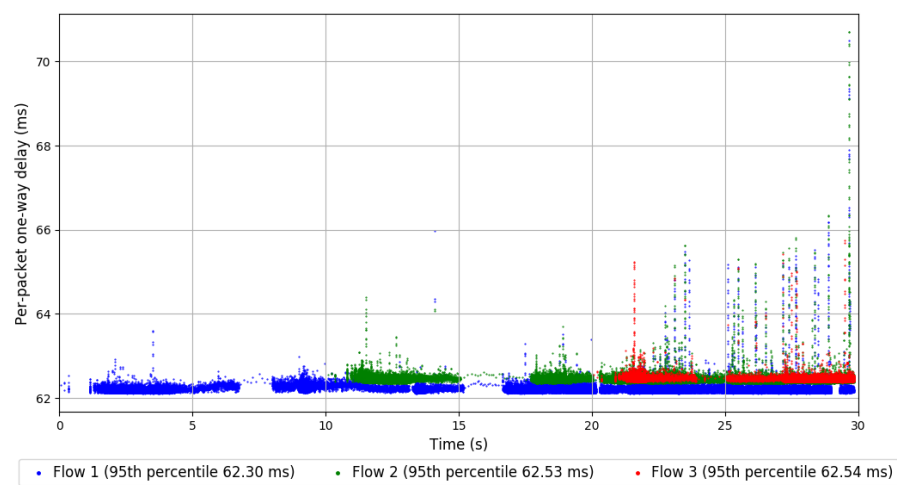
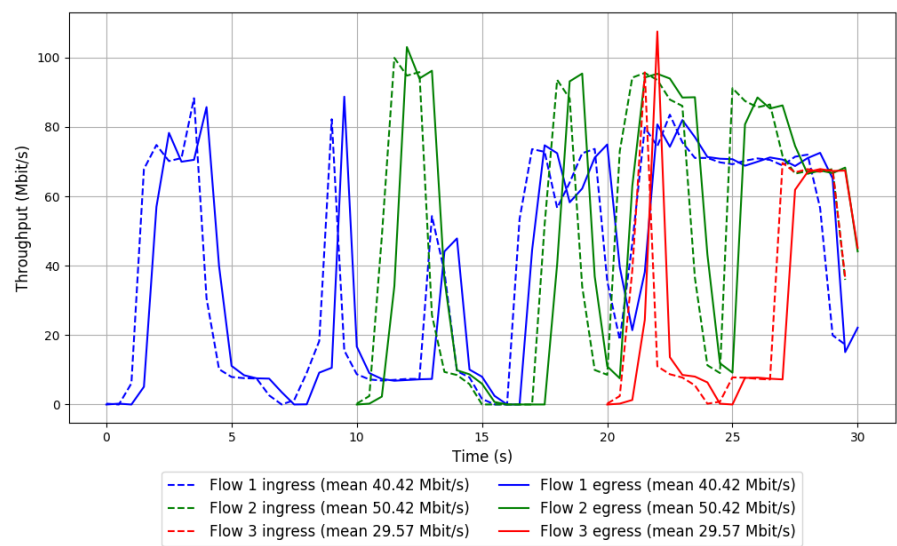
-- Flow 3:

Average throughput: 29.57 Mbit/s

95th percentile per-packet one-way delay: 62.538 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2019-01-17 23:16:37

End at: 2019-01-17 23:17:07

Local clock offset: -0.064 ms

Remote clock offset: -0.16 ms

Below is generated by plot.py at 2019-01-18 03:43:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.59 Mbit/s

95th percentile per-packet one-way delay: 63.041 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 44.87 Mbit/s

95th percentile per-packet one-way delay: 62.742 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.25 Mbit/s

95th percentile per-packet one-way delay: 63.081 ms

Loss rate: 0.00%

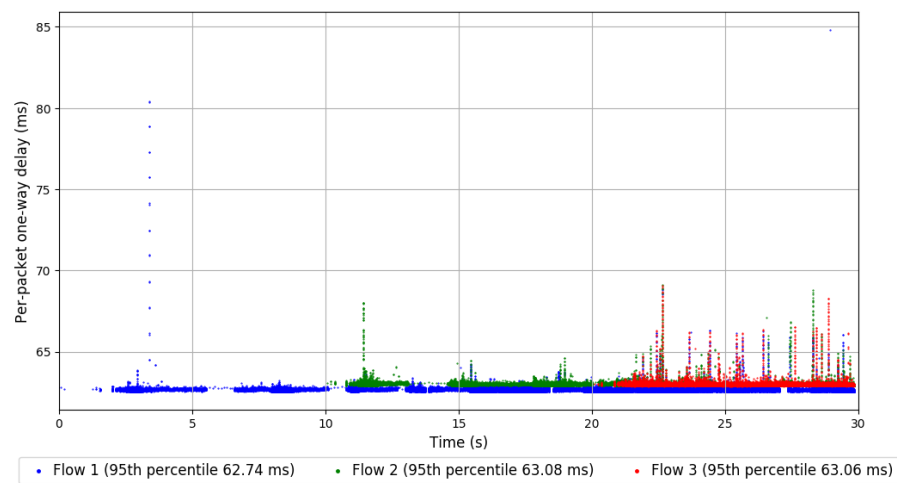
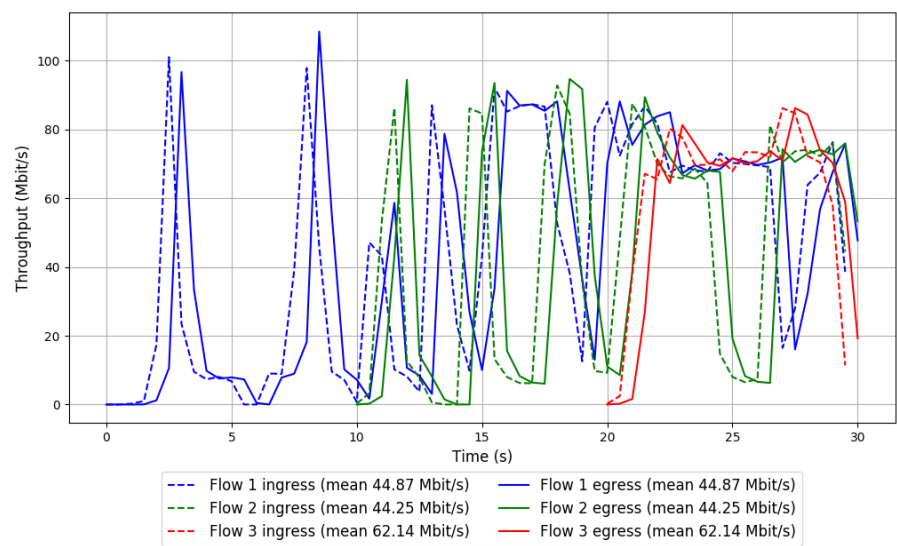
-- Flow 3:

Average throughput: 62.14 Mbit/s

95th percentile per-packet one-way delay: 63.058 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link

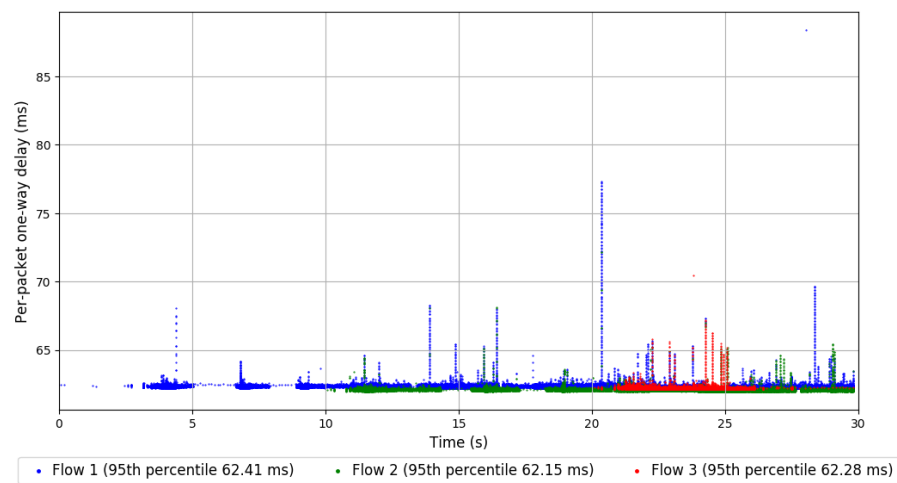
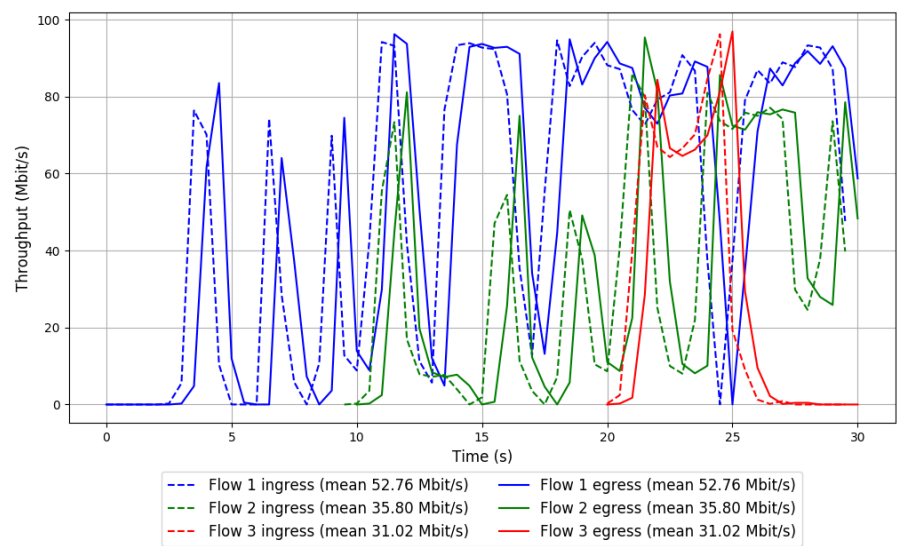


Run 4: Statistics of QUIC Cubic

Start at: 2019-01-17 23:53:09
End at: 2019-01-17 23:53:39
Local clock offset: -0.043 ms
Remote clock offset: -0.794 ms

Below is generated by plot.py at 2019-01-18 03:43:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 86.66 Mbit/s
95th percentile per-packet one-way delay: 62.388 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.76 Mbit/s
95th percentile per-packet one-way delay: 62.412 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 35.80 Mbit/s
95th percentile per-packet one-way delay: 62.151 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 31.02 Mbit/s
95th percentile per-packet one-way delay: 62.284 ms
Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link

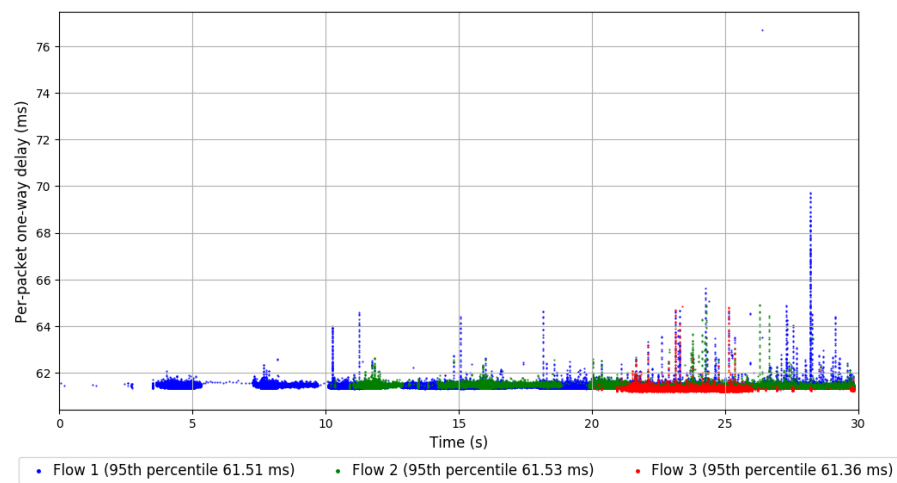
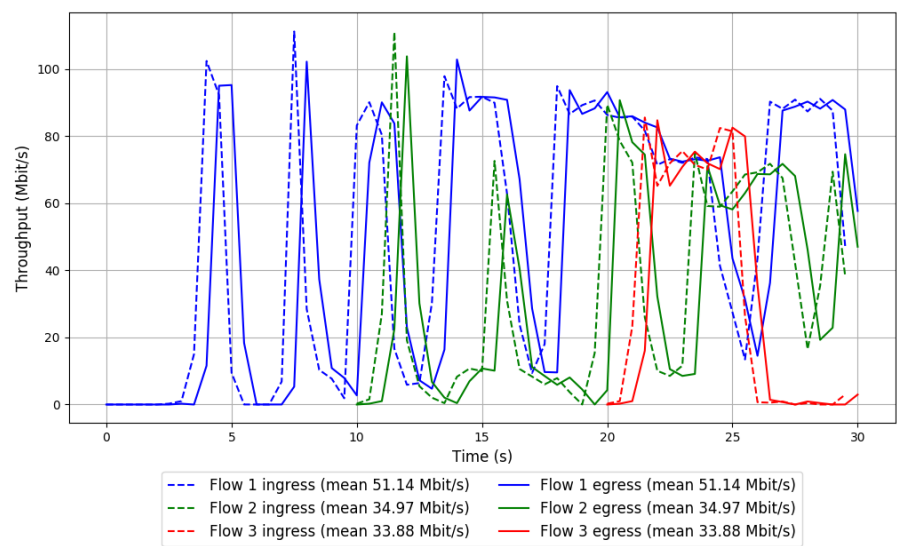


Run 5: Statistics of QUIC Cubic

Start at: 2019-01-18 00:29:12
End at: 2019-01-18 00:29:42
Local clock offset: -0.017 ms
Remote clock offset: -1.368 ms

Below is generated by plot.py at 2019-01-18 03:43:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 85.44 Mbit/s
95th percentile per-packet one-way delay: 61.511 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 51.14 Mbit/s
95th percentile per-packet one-way delay: 61.510 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 34.97 Mbit/s
95th percentile per-packet one-way delay: 61.529 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 33.88 Mbit/s
95th percentile per-packet one-way delay: 61.363 ms
Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link

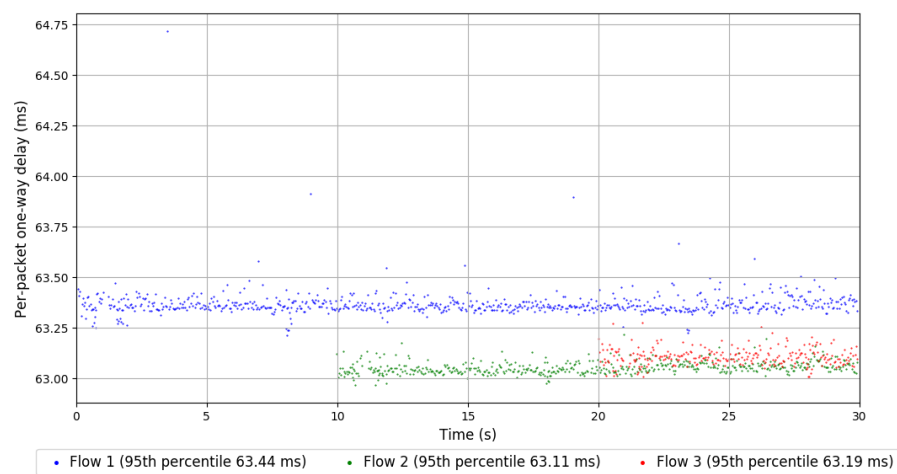
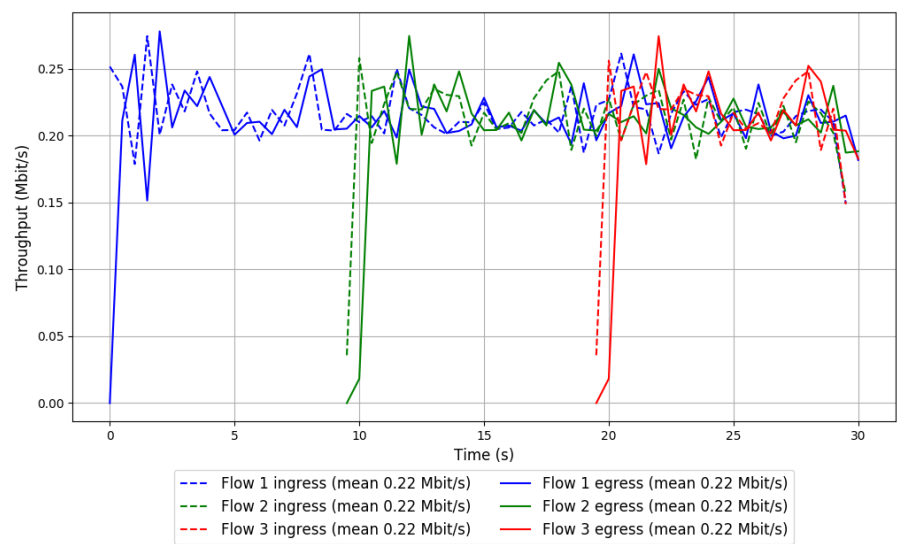


```
Run 1: Statistics of SReAM

Start at: 2019-01-17 22:00:33
End at: 2019-01-17 22:01:03
Local clock offset: -0.119 ms
Remote clock offset: 0.021 ms

# Below is generated by plot.py at 2019-01-18 03:43:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.414 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.436 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.114 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.188 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SReAM

Start at: 2019-01-17 22:37:01

End at: 2019-01-17 22:37:31

Local clock offset: -0.036 ms

Remote clock offset: 0.28 ms

Below is generated by plot.py at 2019-01-18 03:43:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 63.766 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.470 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.301 ms

Loss rate: 0.00%

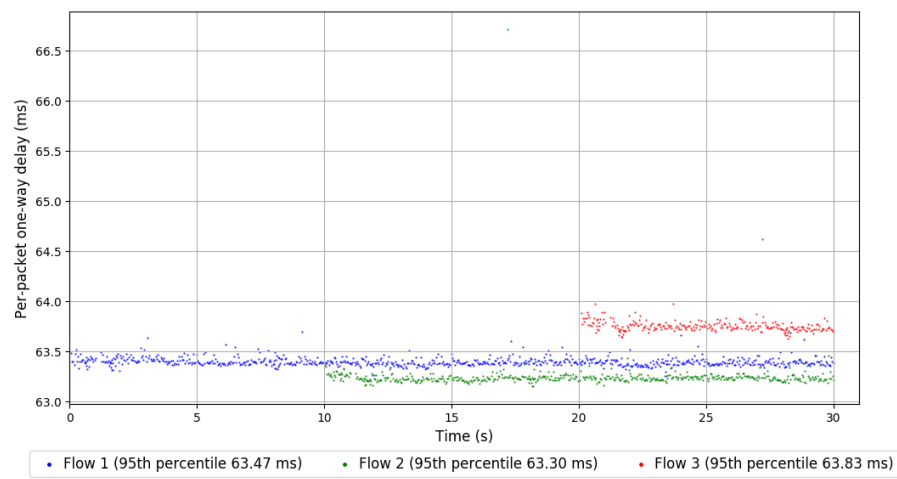
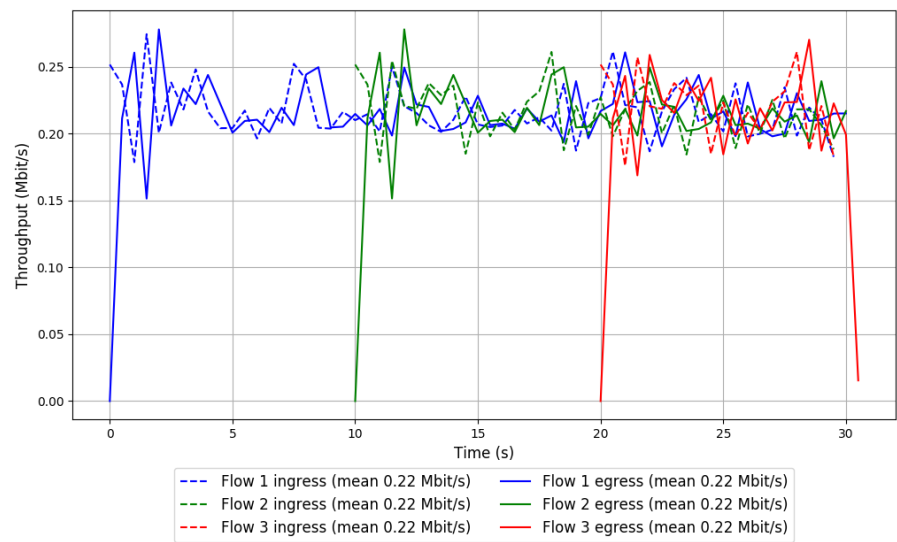
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.832 ms

Loss rate: 0.00%

Run 2: Report of SReAM — Data Link

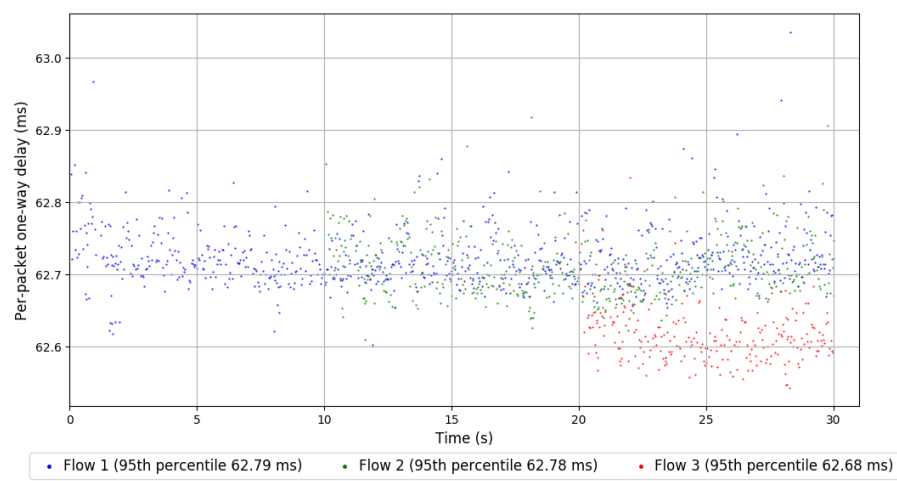
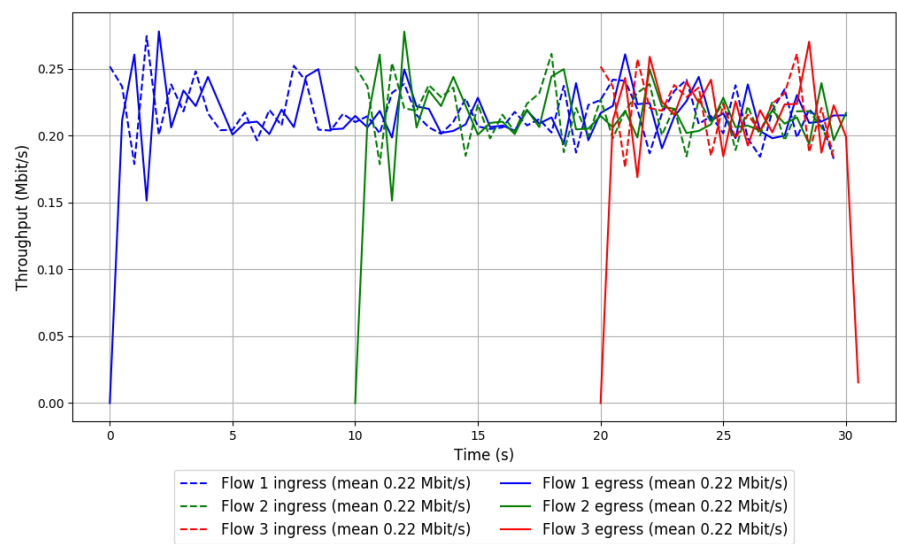


Run 3: Statistics of SReAM

Start at: 2019-01-17 23:13:24
End at: 2019-01-17 23:13:54
Local clock offset: -0.012 ms
Remote clock offset: -0.259 ms

Below is generated by plot.py at 2019-01-18 03:43:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 62.783 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.794 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.781 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.684 ms
Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

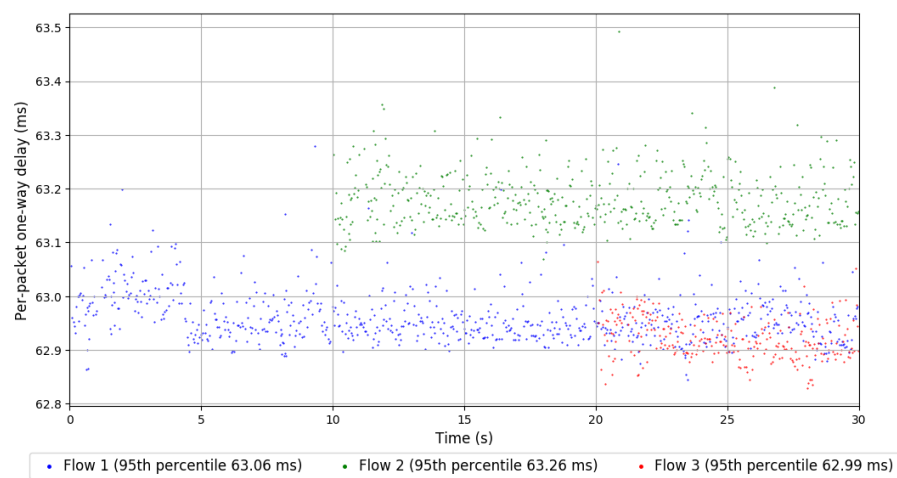
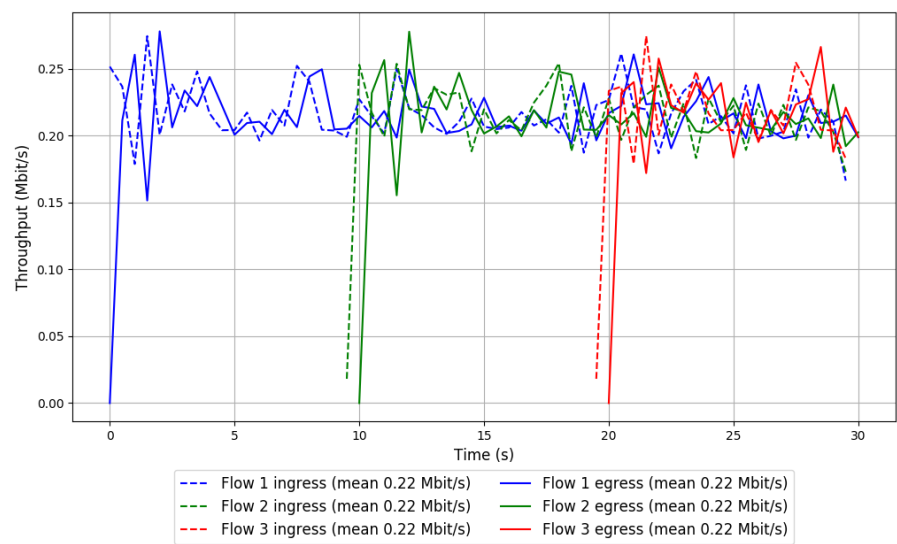


Run 4: Statistics of SReAM

Start at: 2019-01-17 23:50:02
End at: 2019-01-17 23:50:32
Local clock offset: -0.064 ms
Remote clock offset: -0.109 ms

Below is generated by plot.py at 2019-01-18 03:43:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.233 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.057 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.264 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.988 ms
Loss rate: 0.00%

Run 4: Report of SCReAM — Data Link

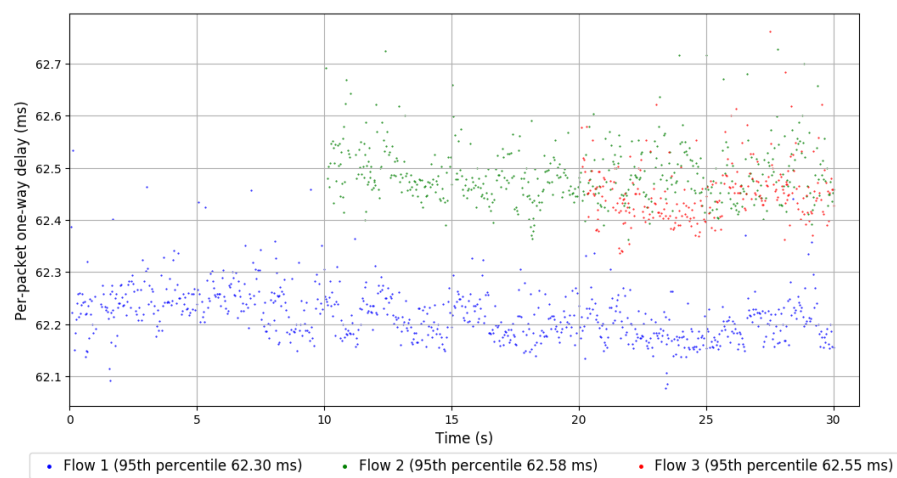
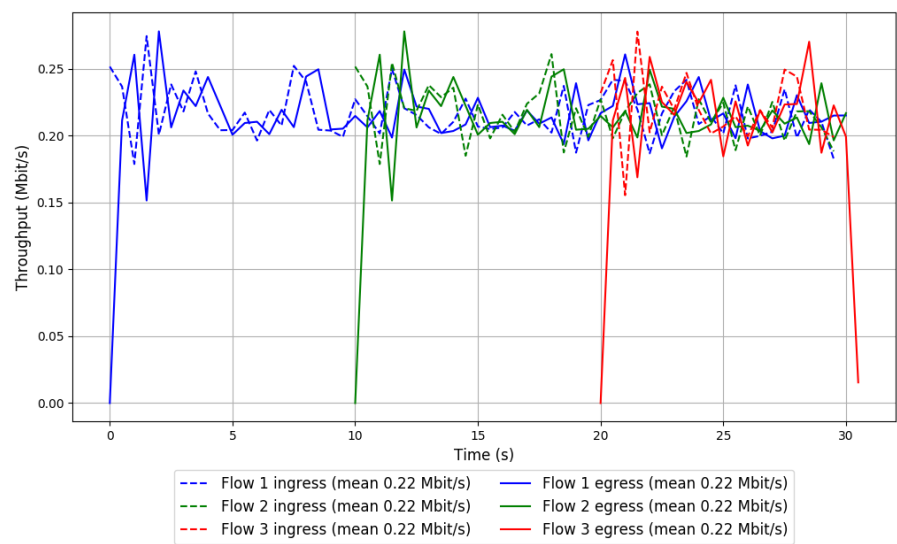


Run 5: Statistics of SReAM

Start at: 2019-01-18 00:26:02
End at: 2019-01-18 00:26:32
Local clock offset: -0.088 ms
Remote clock offset: -0.798 ms

Below is generated by plot.py at 2019-01-18 03:43:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 62.549 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.304 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.580 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.553 ms
Loss rate: 0.00%

Run 5: Report of SReAM — Data Link

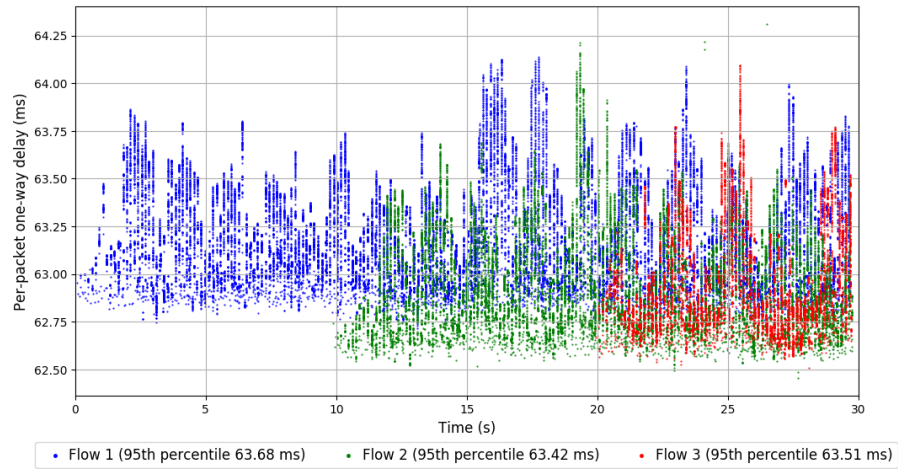
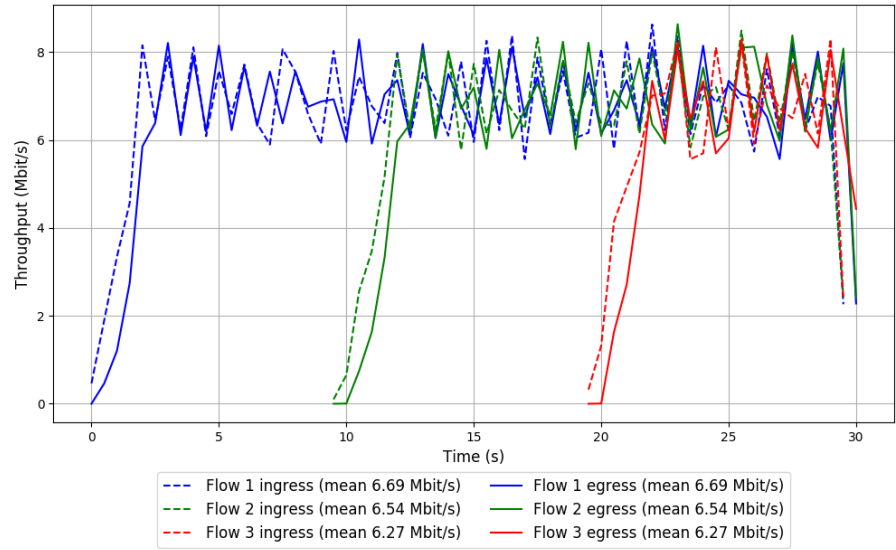


Run 1: Statistics of Sprout

Start at: 2019-01-17 22:05:00
End at: 2019-01-17 22:05:30
Local clock offset: -0.073 ms
Remote clock offset: -0.394 ms

Below is generated by plot.py at 2019-01-18 03:43:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 13.13 Mbit/s
95th percentile per-packet one-way delay: 63.607 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.69 Mbit/s
95th percentile per-packet one-way delay: 63.684 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.54 Mbit/s
95th percentile per-packet one-way delay: 63.423 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.27 Mbit/s
95th percentile per-packet one-way delay: 63.514 ms
Loss rate: 0.00%

Run 1: Report of Sprout — Data Link

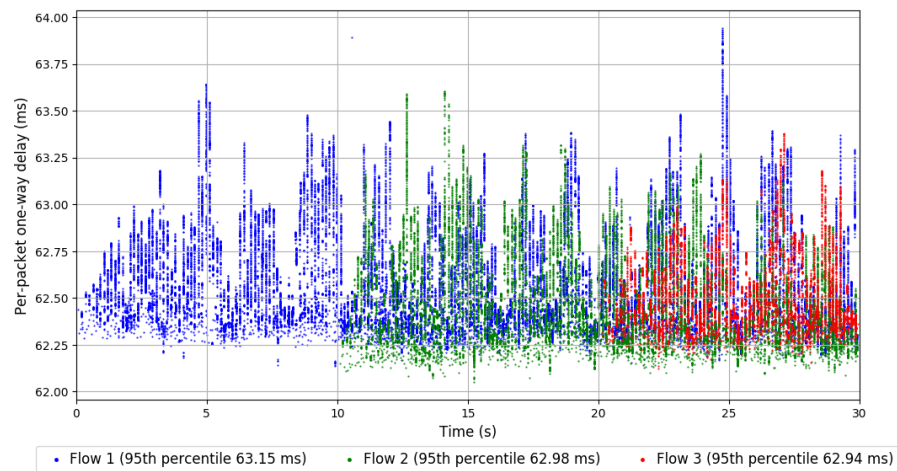
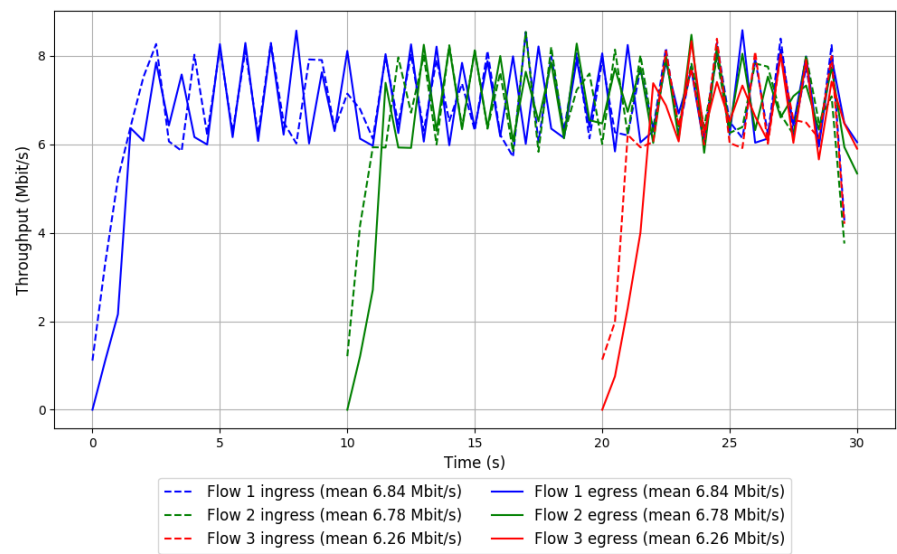


Run 2: Statistics of Sprout

Start at: 2019-01-17 22:41:35
End at: 2019-01-17 22:42:05
Local clock offset: -0.042 ms
Remote clock offset: -0.771 ms

Below is generated by plot.py at 2019-01-18 03:43:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 13.41 Mbit/s
95th percentile per-packet one-way delay: 63.084 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.84 Mbit/s
95th percentile per-packet one-way delay: 63.147 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.78 Mbit/s
95th percentile per-packet one-way delay: 62.984 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.26 Mbit/s
95th percentile per-packet one-way delay: 62.943 ms
Loss rate: 0.00%

Run 2: Report of Sprout — Data Link

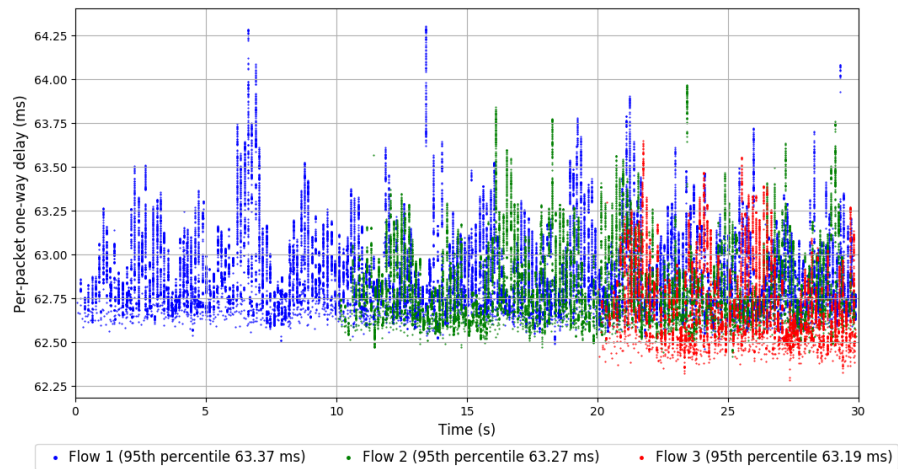
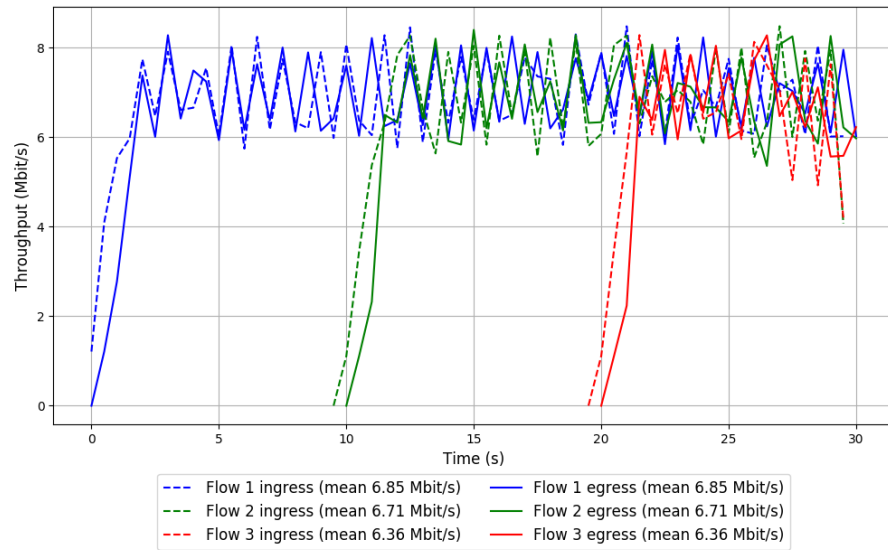


Run 3: Statistics of Sprout

Start at: 2019-01-17 23:17:55
End at: 2019-01-17 23:18:25
Local clock offset: -0.029 ms
Remote clock offset: -0.405 ms

Below is generated by plot.py at 2019-01-18 03:43:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 13.41 Mbit/s
95th percentile per-packet one-way delay: 63.309 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.85 Mbit/s
95th percentile per-packet one-way delay: 63.367 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.71 Mbit/s
95th percentile per-packet one-way delay: 63.265 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.36 Mbit/s
95th percentile per-packet one-way delay: 63.186 ms
Loss rate: 0.00%

Run 3: Report of Sprout — Data Link

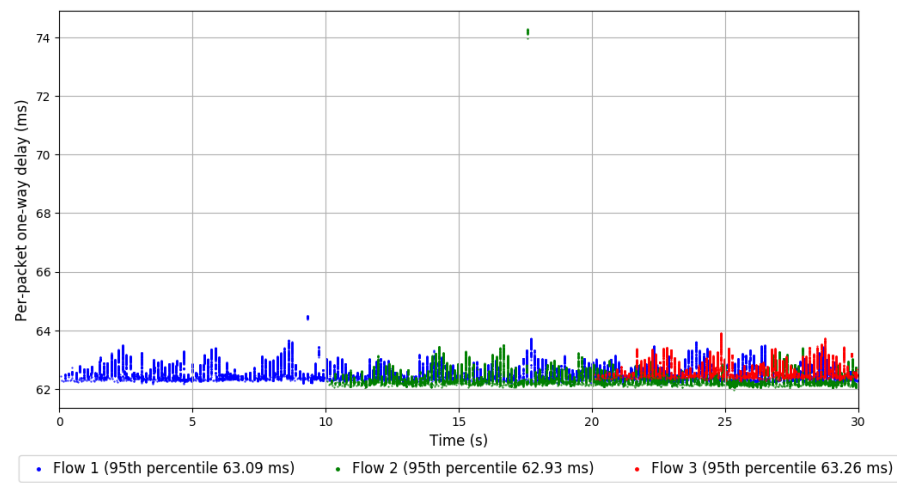
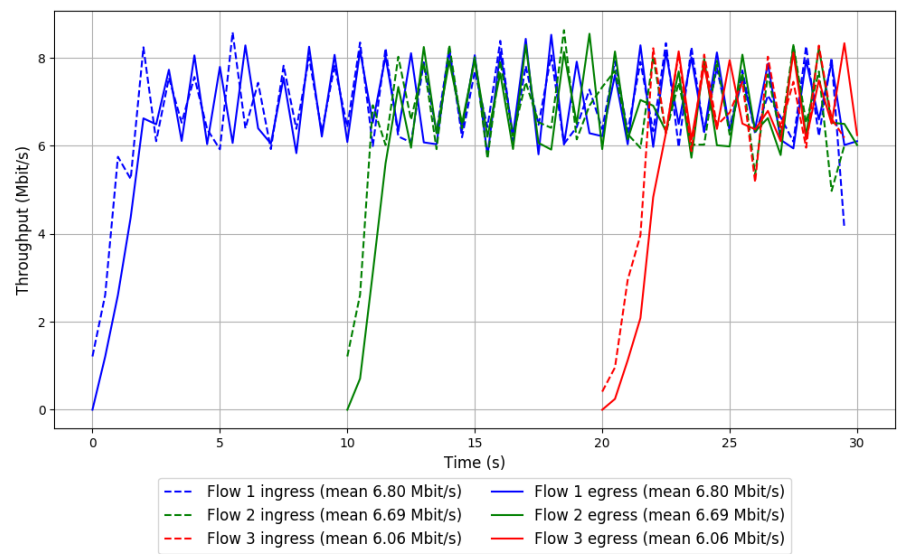


Run 4: Statistics of Sprout

Start at: 2019-01-17 23:54:28
End at: 2019-01-17 23:54:58
Local clock offset: -0.076 ms
Remote clock offset: -0.856 ms

```
# Below is generated by plot.py at 2019-01-18 03:43:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.24 Mbit/s
95th percentile per-packet one-way delay: 63.099 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.80 Mbit/s
95th percentile per-packet one-way delay: 63.091 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.69 Mbit/s
95th percentile per-packet one-way delay: 62.931 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.06 Mbit/s
95th percentile per-packet one-way delay: 63.259 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

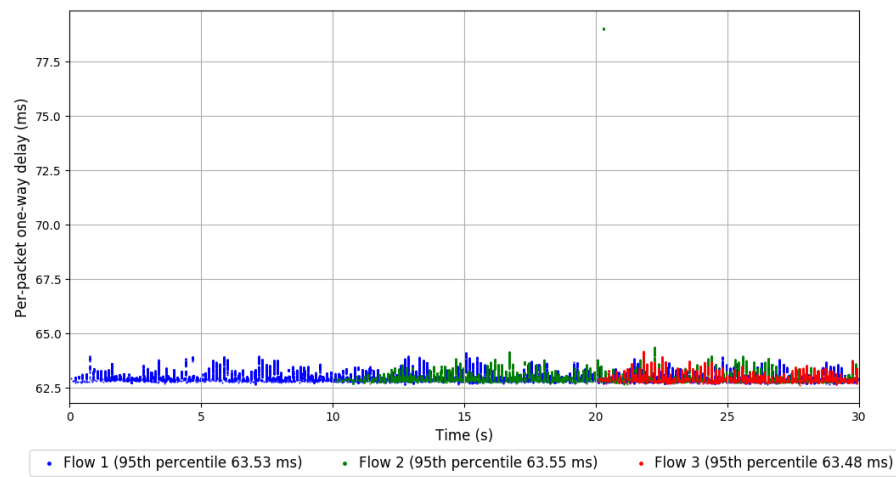
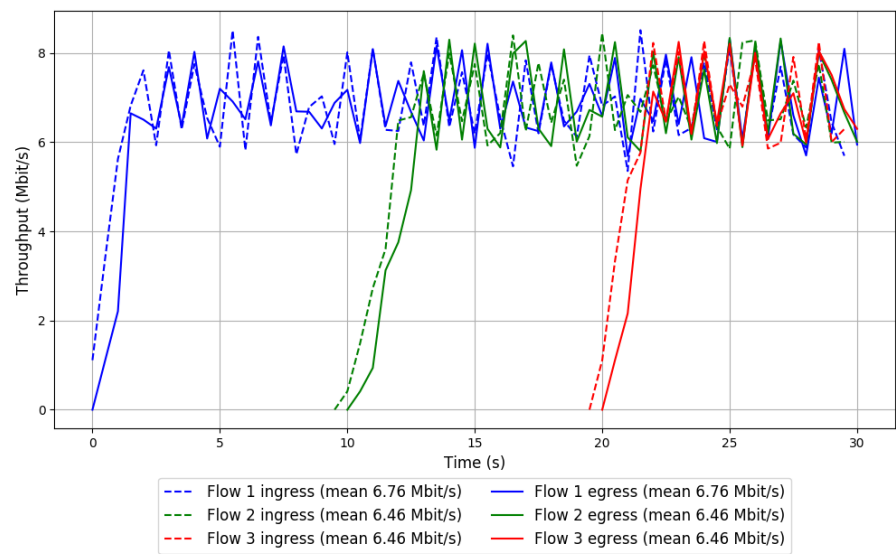


Run 5: Statistics of Sprout

Start at: 2019-01-18 00:30:30
End at: 2019-01-18 00:31:00
Local clock offset: -0.029 ms
Remote clock offset: -0.108 ms

```
# Below is generated by plot.py at 2019-01-18 03:43:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.18 Mbit/s
95th percentile per-packet one-way delay: 63.533 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.76 Mbit/s
95th percentile per-packet one-way delay: 63.533 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.46 Mbit/s
95th percentile per-packet one-way delay: 63.551 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.46 Mbit/s
95th percentile per-packet one-way delay: 63.484 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

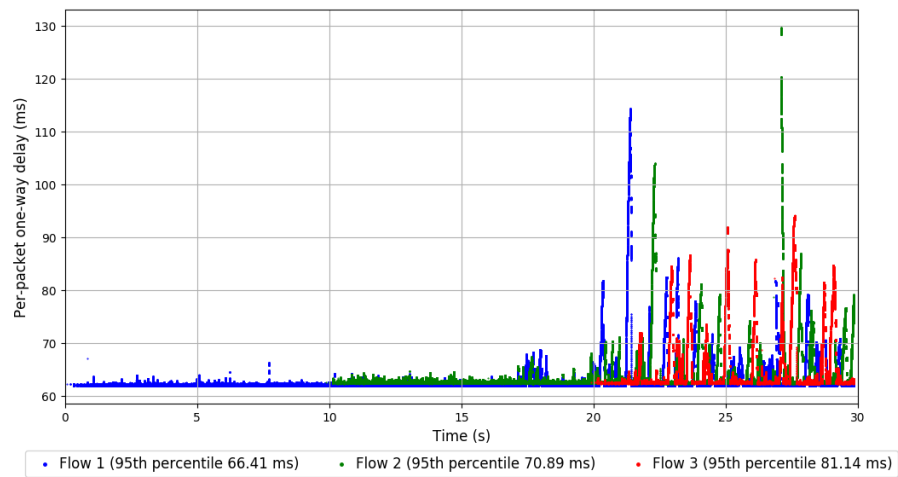
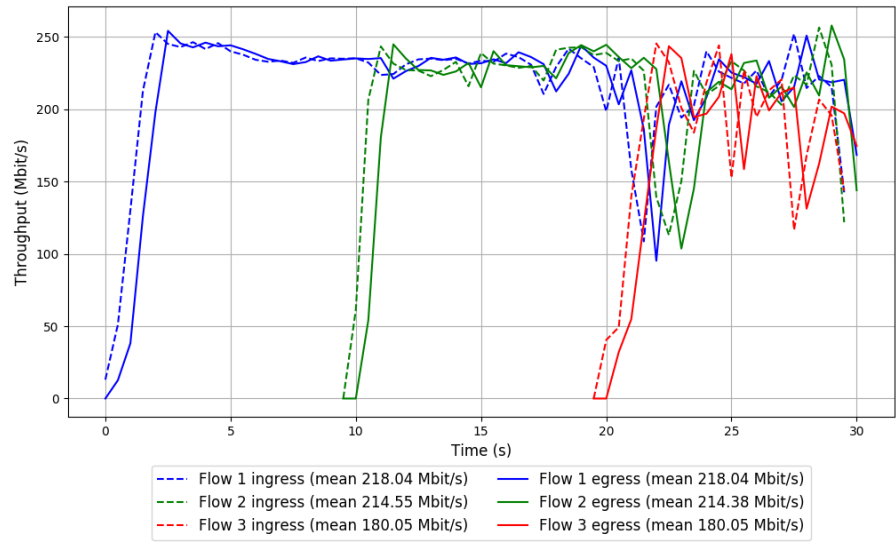



```
Run 1: Statistics of TaoVA-100x

Start at: 2019-01-17 21:50:55
End at: 2019-01-17 21:51:25
Local clock offset: -0.129 ms
Remote clock offset: -0.829 ms

# Below is generated by plot.py at 2019-01-18 03:52:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 421.90 Mbit/s
95th percentile per-packet one-way delay: 71.011 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 218.04 Mbit/s
95th percentile per-packet one-way delay: 66.407 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 214.38 Mbit/s
95th percentile per-packet one-way delay: 70.894 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 180.05 Mbit/s
95th percentile per-packet one-way delay: 81.136 ms
Loss rate: 0.00%
```

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



Run 2: Statistics of TaoVA-100x

Start at: 2019-01-17 22:27:17

End at: 2019-01-17 22:27:47

Local clock offset: -0.032 ms

Remote clock offset: 0.381 ms

Below is generated by plot.py at 2019-01-18 03:53:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 438.59 Mbit/s

95th percentile per-packet one-way delay: 68.280 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 224.52 Mbit/s

95th percentile per-packet one-way delay: 68.025 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 211.74 Mbit/s

95th percentile per-packet one-way delay: 69.776 ms

Loss rate: 0.08%

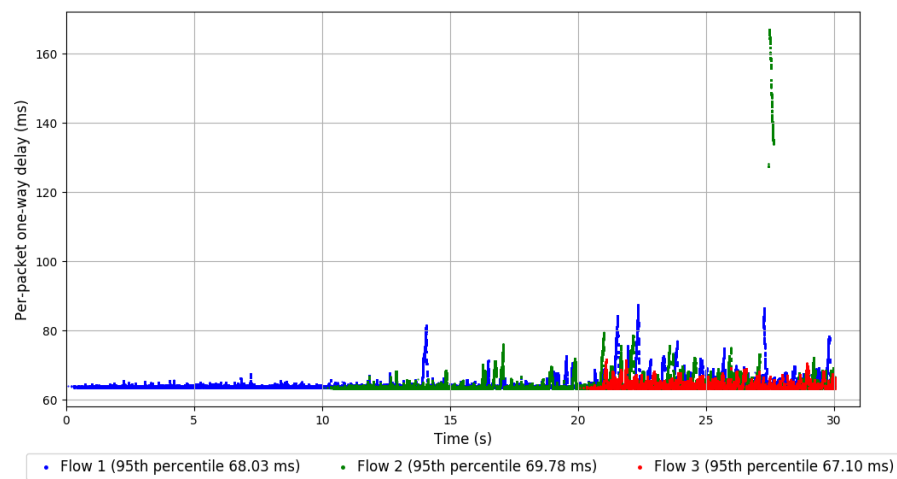
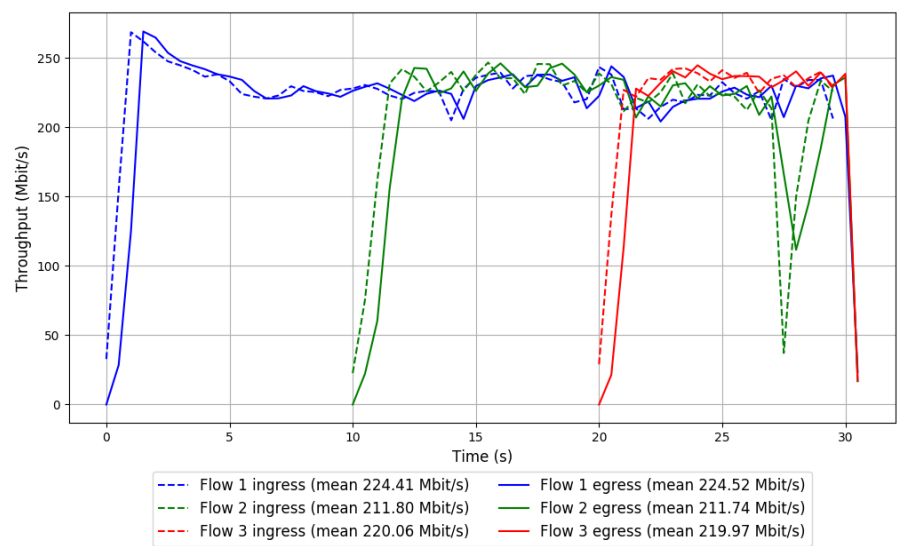
-- Flow 3:

Average throughput: 219.97 Mbit/s

95th percentile per-packet one-way delay: 67.100 ms

Loss rate: 0.16%

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

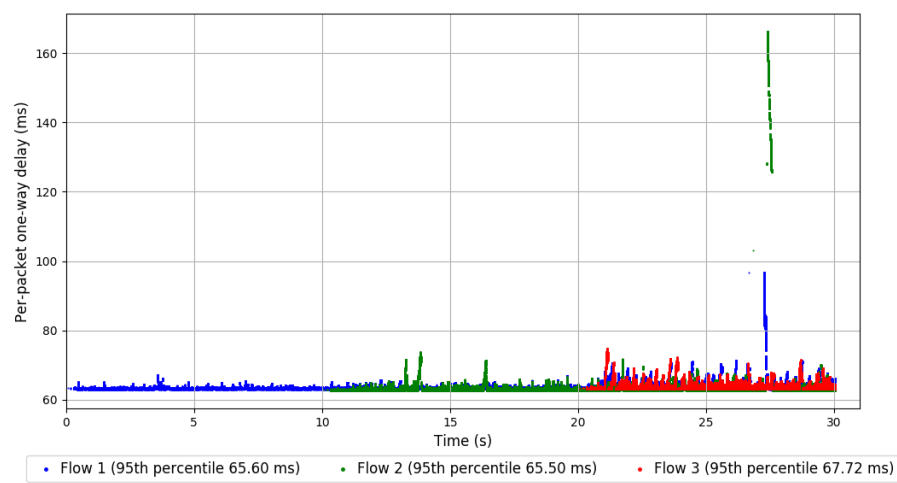
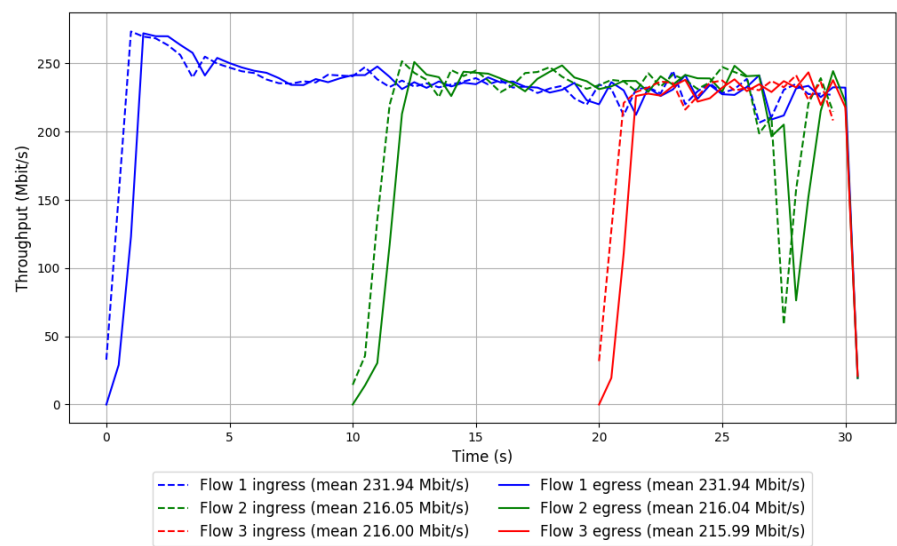


Run 3: Statistics of TaoVA-100x

Start at: 2019-01-17 23:03:41
End at: 2019-01-17 23:04:11
Local clock offset: -0.009 ms
Remote clock offset: -0.062 ms

Below is generated by plot.py at 2019-01-18 03:54:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 447.59 Mbit/s
95th percentile per-packet one-way delay: 66.072 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 231.94 Mbit/s
95th percentile per-packet one-way delay: 65.603 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 216.04 Mbit/s
95th percentile per-packet one-way delay: 65.499 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 215.99 Mbit/s
95th percentile per-packet one-way delay: 67.716 ms
Loss rate: 0.00%

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

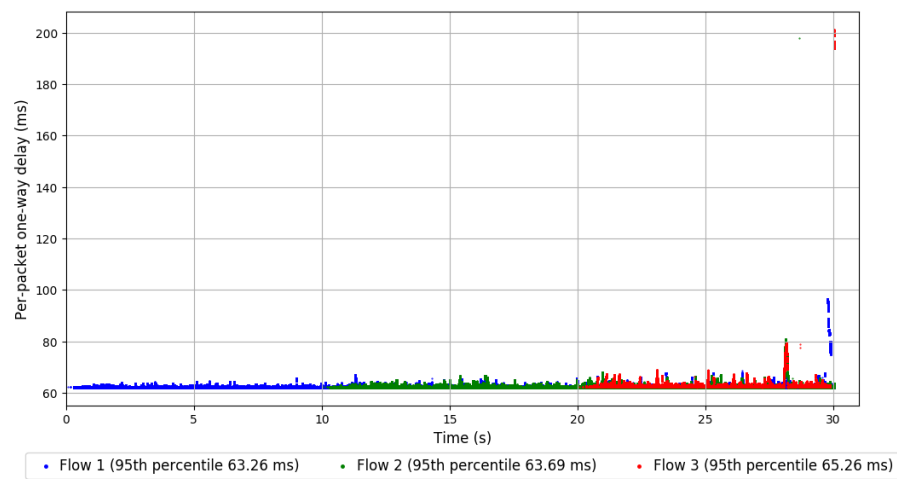
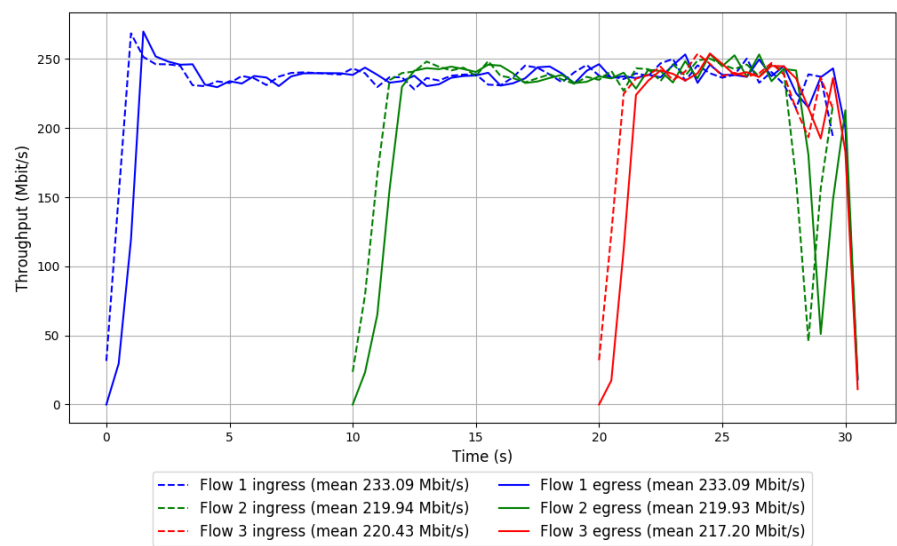


Run 4: Statistics of TaoVA-100x

Start at: 2019-01-17 23:40:13
End at: 2019-01-17 23:40:43
Local clock offset: -0.075 ms
Remote clock offset: -0.789 ms

Below is generated by plot.py at 2019-01-18 03:54:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 451.69 Mbit/s
95th percentile per-packet one-way delay: 63.682 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 233.09 Mbit/s
95th percentile per-packet one-way delay: 63.255 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 219.93 Mbit/s
95th percentile per-packet one-way delay: 63.689 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 217.20 Mbit/s
95th percentile per-packet one-way delay: 65.262 ms
Loss rate: 1.16%

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

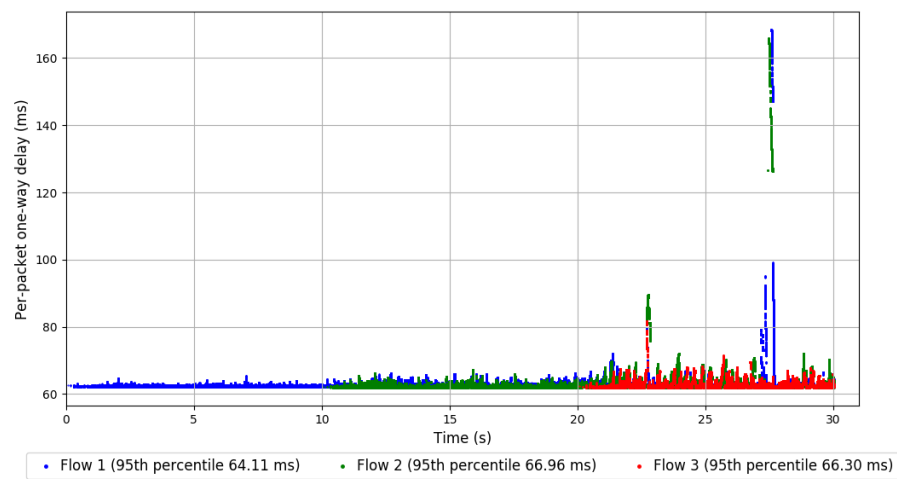
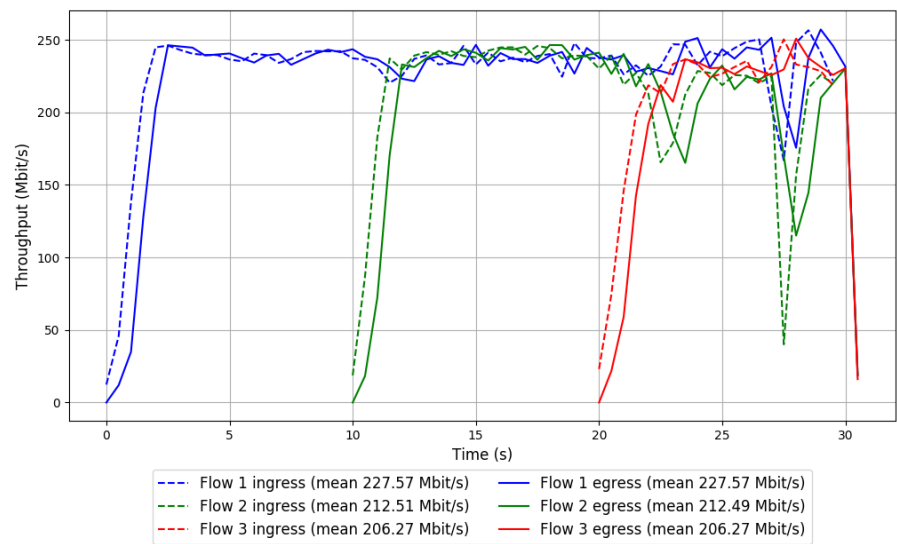


Run 5: Statistics of TaoVA-100x

Start at: 2019-01-18 00:16:19
End at: 2019-01-18 00:16:49
Local clock offset: -0.037 ms
Remote clock offset: -0.816 ms

Below is generated by plot.py at 2019-01-18 03:54:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 437.62 Mbit/s
95th percentile per-packet one-way delay: 65.407 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 227.57 Mbit/s
95th percentile per-packet one-way delay: 64.114 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 212.49 Mbit/s
95th percentile per-packet one-way delay: 66.962 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 206.27 Mbit/s
95th percentile per-packet one-way delay: 66.297 ms
Loss rate: 0.00%

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

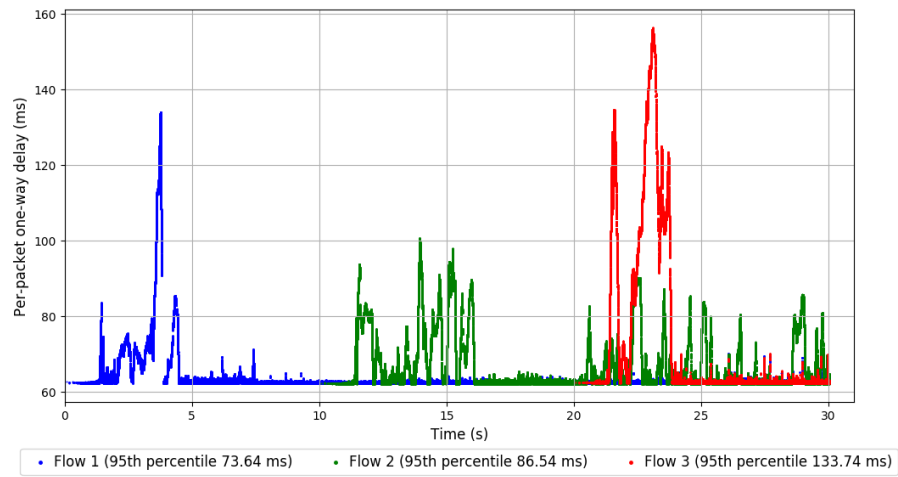
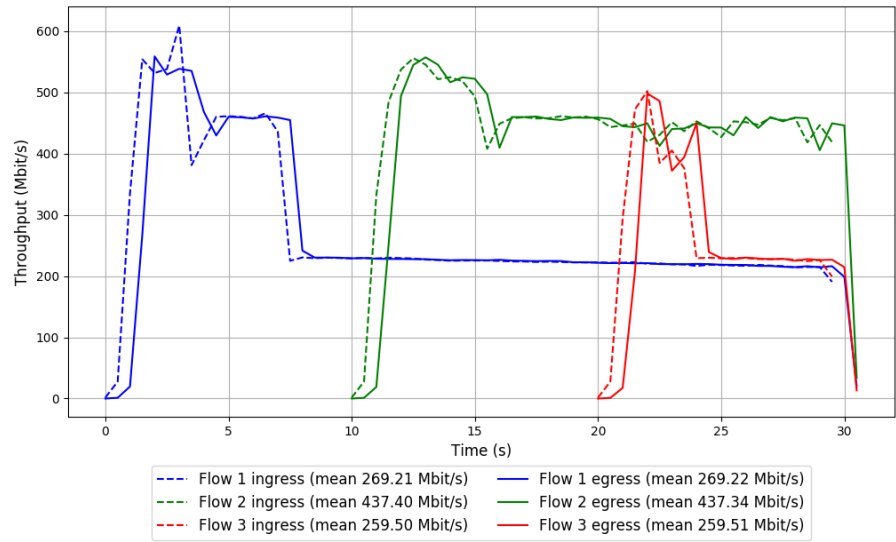


Run 1: Statistics of TCP Vegas

Start at: 2019-01-17 22:10:04
End at: 2019-01-17 22:10:34
Local clock offset: -0.112 ms
Remote clock offset: -0.822 ms

Below is generated by plot.py at 2019-01-18 03:54:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 646.79 Mbit/s
95th percentile per-packet one-way delay: 90.390 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 269.22 Mbit/s
95th percentile per-packet one-way delay: 73.640 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 437.34 Mbit/s
95th percentile per-packet one-way delay: 86.538 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 259.51 Mbit/s
95th percentile per-packet one-way delay: 133.738 ms
Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2019-01-17 22:46:36

End at: 2019-01-17 22:47:06

Local clock offset: 0.009 ms

Remote clock offset: 0.271 ms

Below is generated by plot.py at 2019-01-18 04:07:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 927.71 Mbit/s

95th percentile per-packet one-way delay: 148.636 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 486.36 Mbit/s

95th percentile per-packet one-way delay: 155.131 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 475.73 Mbit/s

95th percentile per-packet one-way delay: 141.198 ms

Loss rate: 0.38%

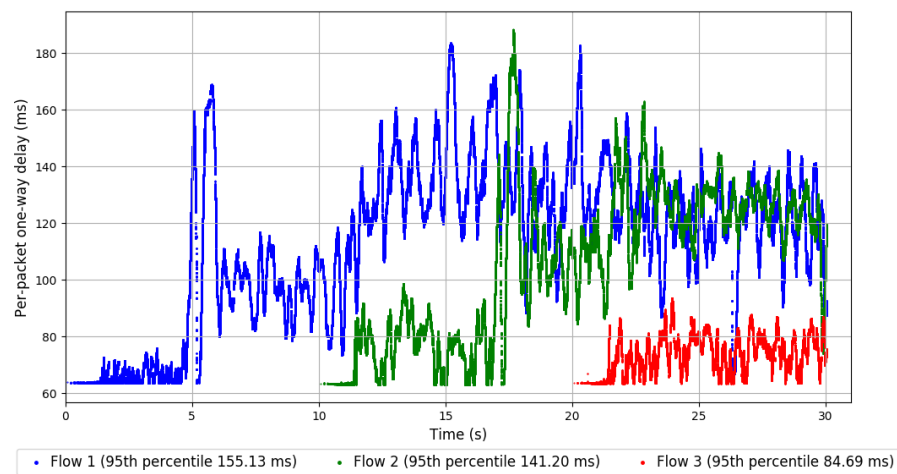
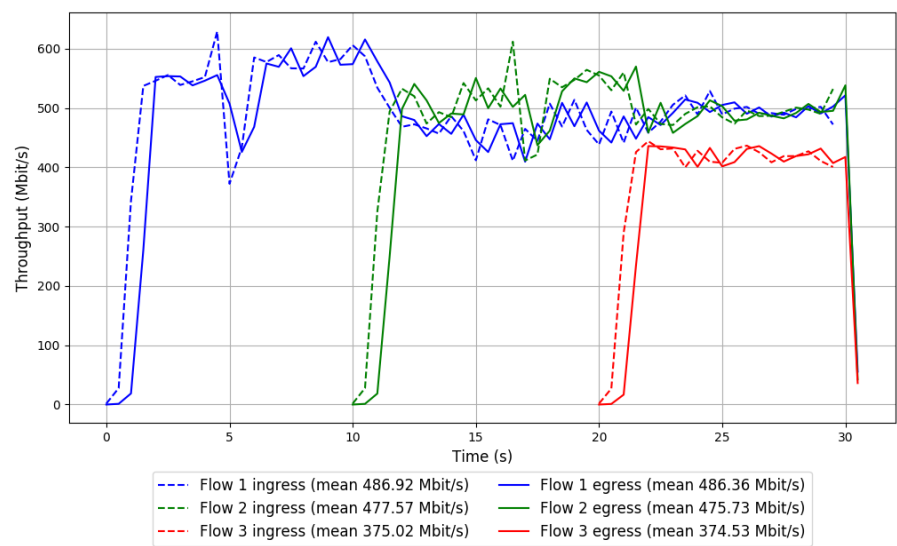
-- Flow 3:

Average throughput: 374.53 Mbit/s

95th percentile per-packet one-way delay: 84.687 ms

Loss rate: 0.13%

Run 2: Report of TCP Vegas — Data Link

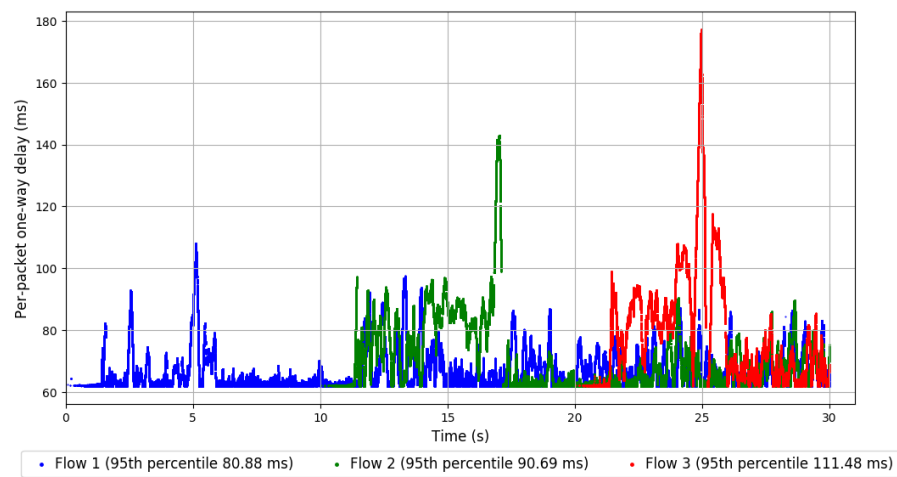
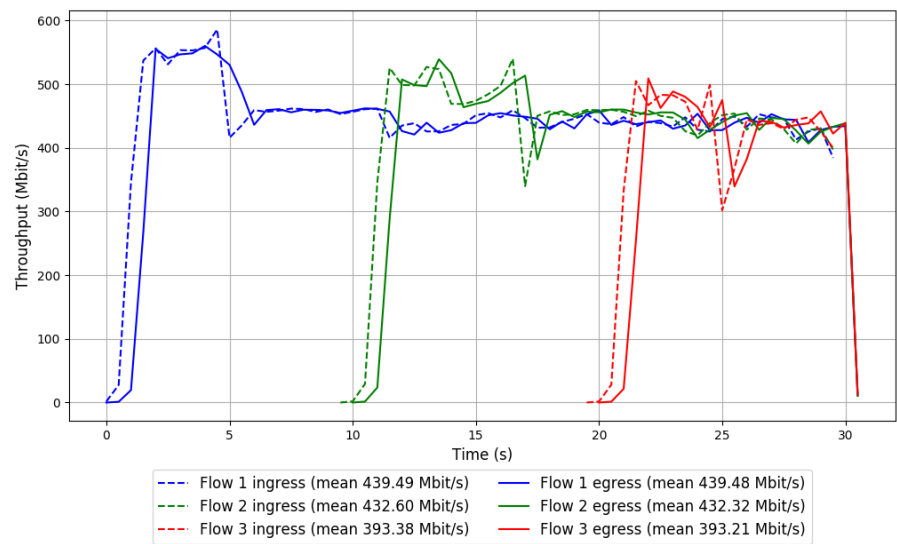


Run 3: Statistics of TCP Vegas

Start at: 2019-01-17 23:23:01
End at: 2019-01-17 23:23:31
Local clock offset: -0.023 ms
Remote clock offset: -0.836 ms

Below is generated by plot.py at 2019-01-18 04:07:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 858.53 Mbit/s
95th percentile per-packet one-way delay: 91.623 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 439.48 Mbit/s
95th percentile per-packet one-way delay: 80.880 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 432.32 Mbit/s
95th percentile per-packet one-way delay: 90.689 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 393.21 Mbit/s
95th percentile per-packet one-way delay: 111.479 ms
Loss rate: 0.04%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2019-01-17 23:59:31

End at: 2019-01-18 00:00:01

Local clock offset: -0.067 ms

Remote clock offset: 0.234 ms

Below is generated by plot.py at 2019-01-18 04:07:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 685.41 Mbit/s

95th percentile per-packet one-way delay: 99.196 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 334.00 Mbit/s

95th percentile per-packet one-way delay: 87.178 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 328.25 Mbit/s

95th percentile per-packet one-way delay: 106.873 ms

Loss rate: 0.00%

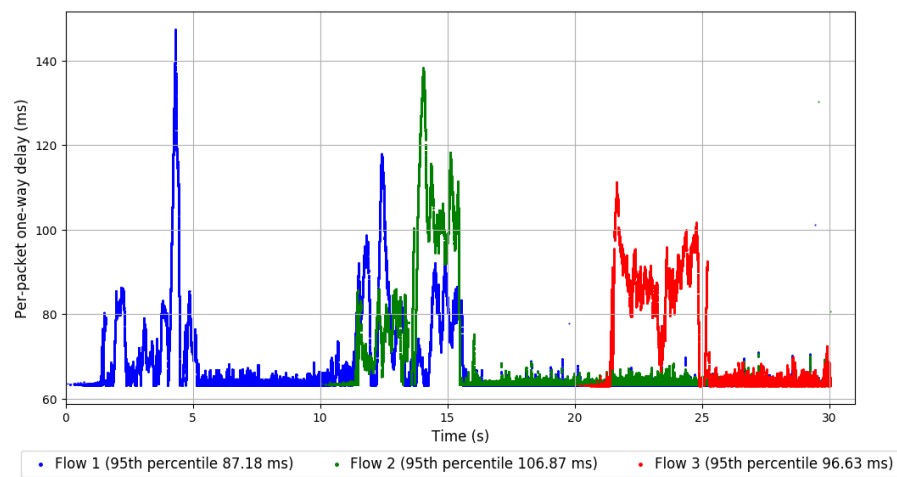
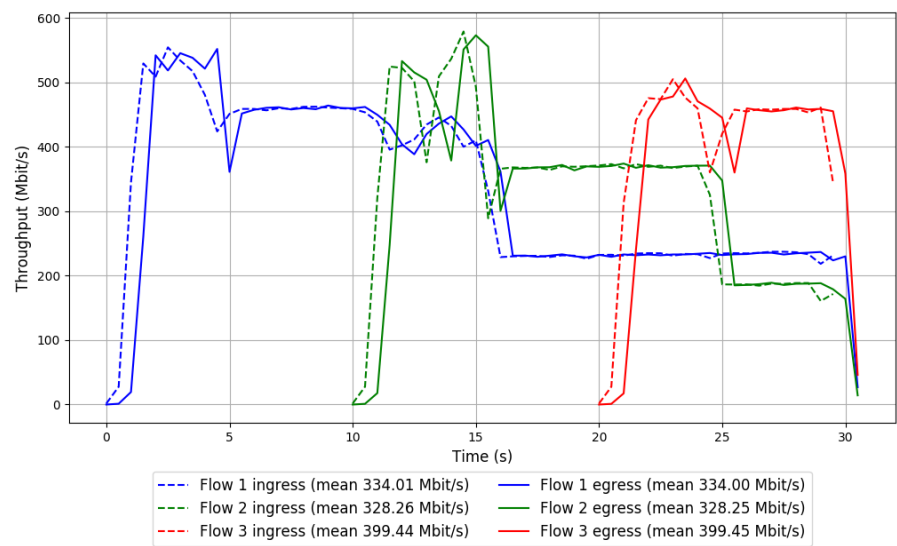
-- Flow 3:

Average throughput: 399.45 Mbit/s

95th percentile per-packet one-way delay: 96.633 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2019-01-18 00:35:37

End at: 2019-01-18 00:36:07

Local clock offset: -0.078 ms

Remote clock offset: 0.371 ms

Below is generated by plot.py at 2019-01-18 04:10:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 761.45 Mbit/s

95th percentile per-packet one-way delay: 110.375 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 402.10 Mbit/s

95th percentile per-packet one-way delay: 86.598 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 408.20 Mbit/s

95th percentile per-packet one-way delay: 118.072 ms

Loss rate: 0.00%

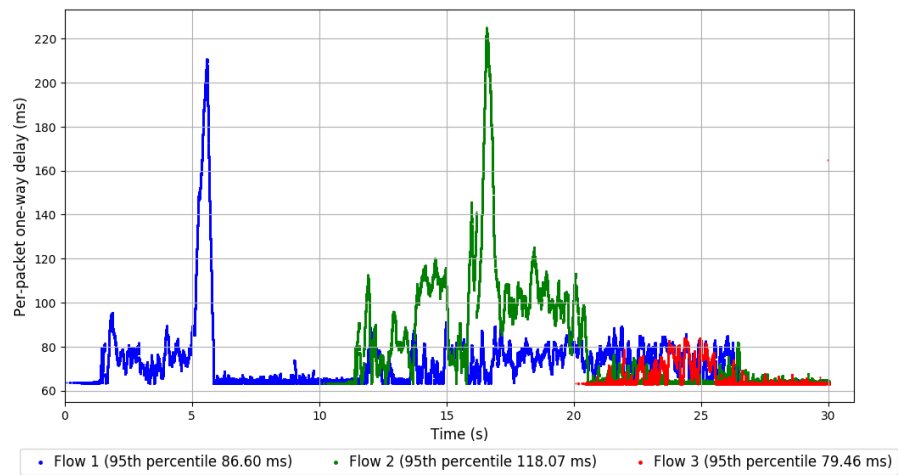
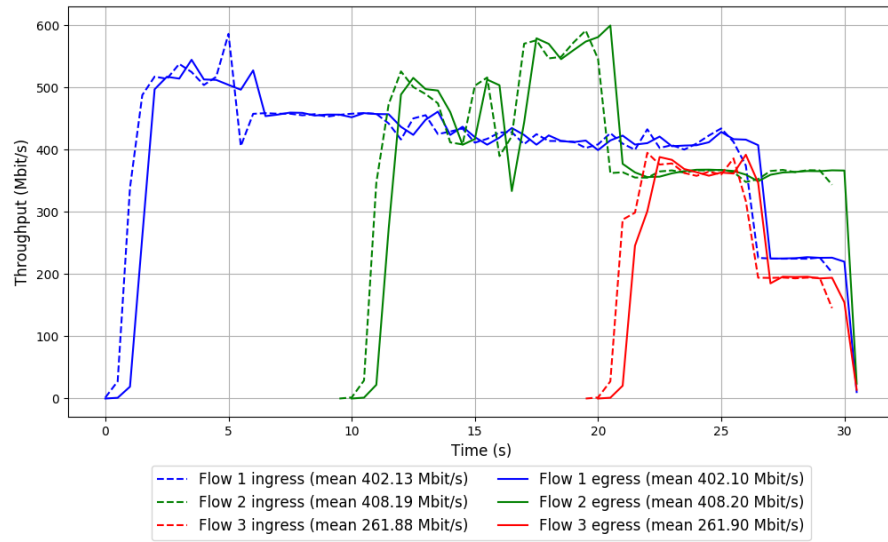
-- Flow 3:

Average throughput: 261.90 Mbit/s

95th percentile per-packet one-way delay: 79.460 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2019-01-17 21:41:48

End at: 2019-01-17 21:42:18

Local clock offset: -0.207 ms

Remote clock offset: 0.066 ms

Below is generated by plot.py at 2019-01-18 04:10:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 230.86 Mbit/s

95th percentile per-packet one-way delay: 179.655 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 131.01 Mbit/s

95th percentile per-packet one-way delay: 198.830 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 121.23 Mbit/s

95th percentile per-packet one-way delay: 114.713 ms

Loss rate: 0.00%

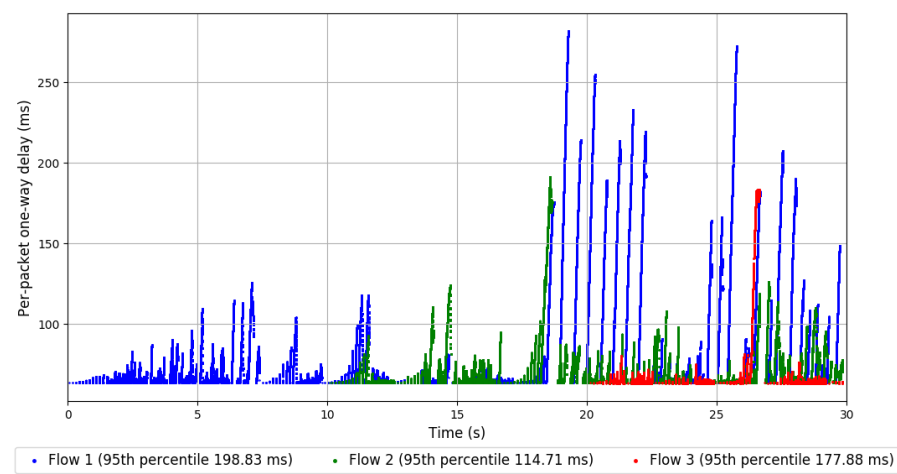
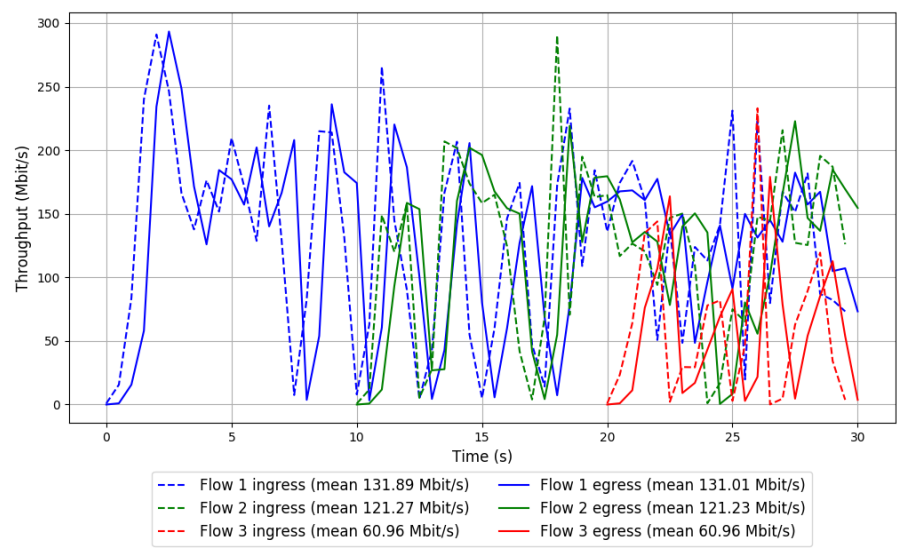
-- Flow 3:

Average throughput: 60.96 Mbit/s

95th percentile per-packet one-way delay: 177.885 ms

Loss rate: 0.00%

Run 1: Report of Verus — Data Link

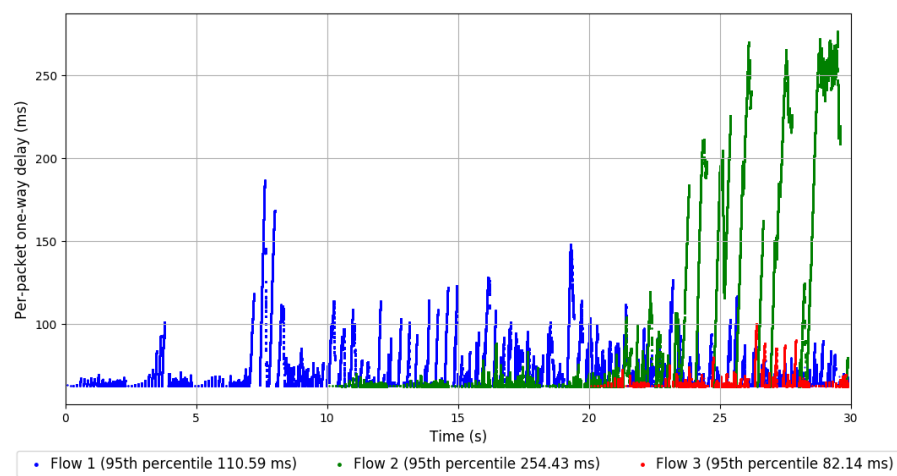
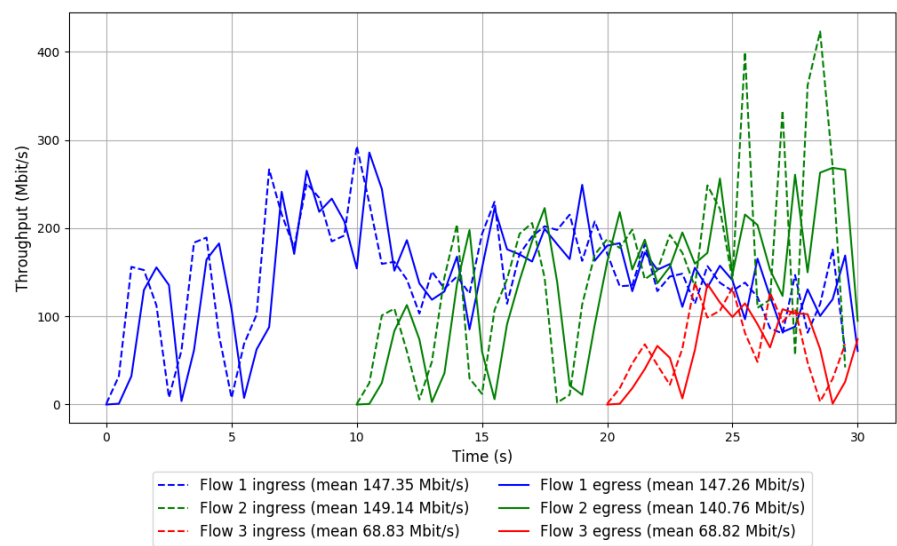


Run 2: Statistics of Verus

Start at: 2019-01-17 22:17:47
End at: 2019-01-17 22:18:17
Local clock offset: -0.07 ms
Remote clock offset: -0.548 ms

Below is generated by plot.py at 2019-01-18 04:10:47
Datalink statistics
-- Total of 3 flows:
Average throughput: 263.41 Mbit/s
95th percentile per-packet one-way delay: 220.459 ms
Loss rate: 2.10%
-- Flow 1:
Average throughput: 147.26 Mbit/s
95th percentile per-packet one-way delay: 110.590 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 140.76 Mbit/s
95th percentile per-packet one-way delay: 254.430 ms
Loss rate: 5.61%
-- Flow 3:
Average throughput: 68.82 Mbit/s
95th percentile per-packet one-way delay: 82.142 ms
Loss rate: 0.00%

Run 2: Report of Verus — Data Link

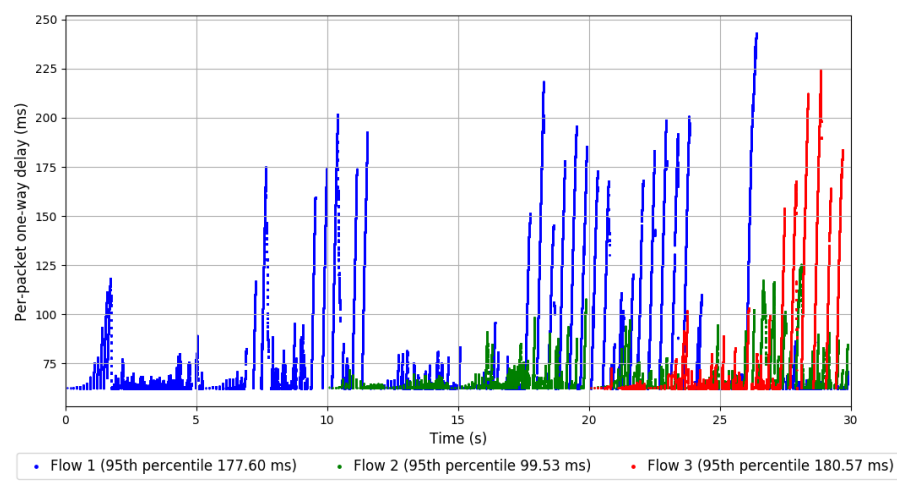
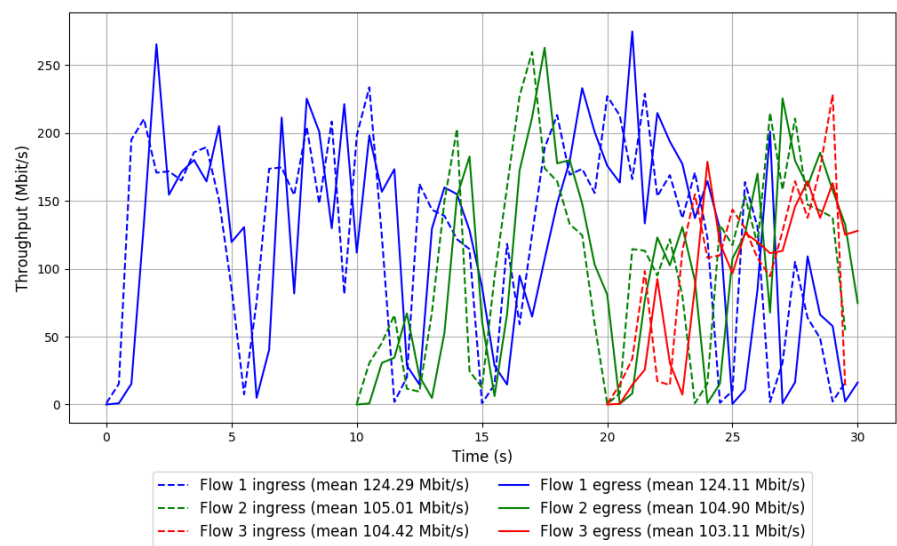


Run 3: Statistics of Verus

Start at: 2019-01-17 22:54:30
End at: 2019-01-17 22:55:00
Local clock offset: 0.048 ms
Remote clock offset: -0.669 ms

Below is generated by plot.py at 2019-01-18 04:10:47
Datalink statistics
-- Total of 3 flows:
Average throughput: 227.08 Mbit/s
95th percentile per-packet one-way delay: 169.174 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 124.11 Mbit/s
95th percentile per-packet one-way delay: 177.598 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 104.90 Mbit/s
95th percentile per-packet one-way delay: 99.534 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 103.11 Mbit/s
95th percentile per-packet one-way delay: 180.573 ms
Loss rate: 0.00%

Run 3: Report of Verus — Data Link

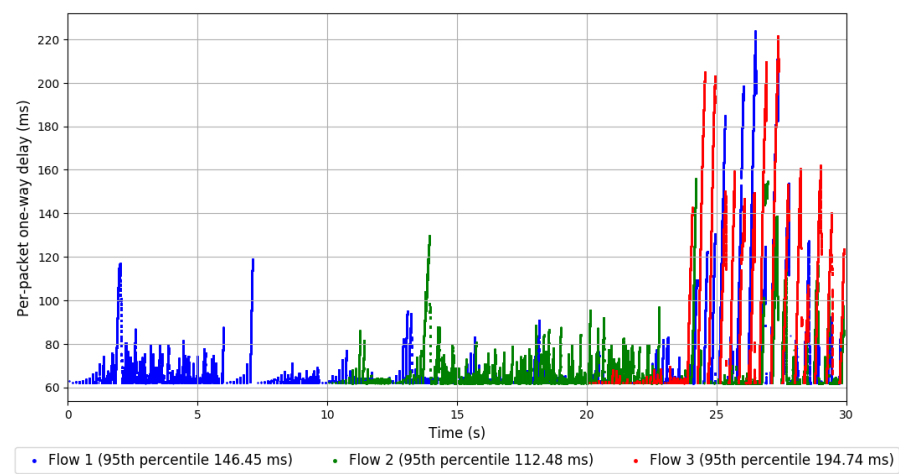
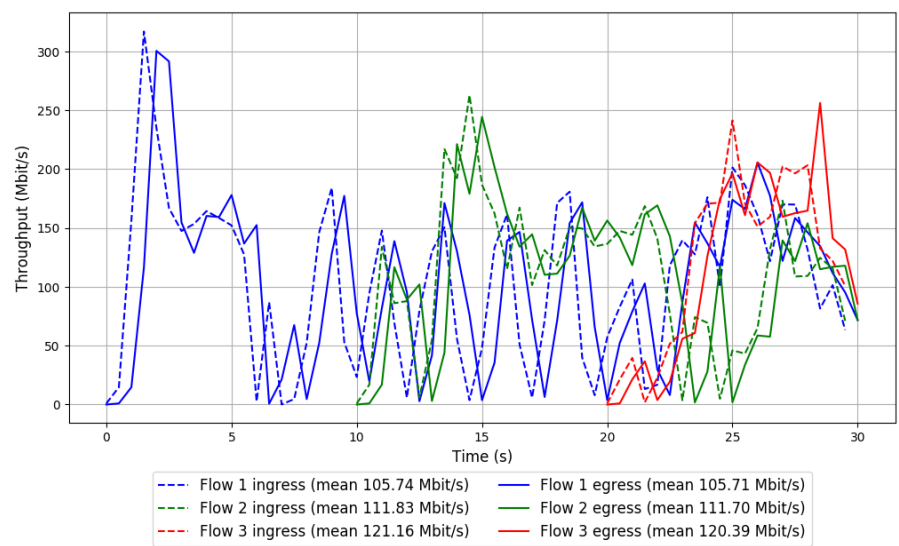


Run 4: Statistics of Verus

Start at: 2019-01-17 23:30:51
End at: 2019-01-17 23:31:21
Local clock offset: -0.065 ms
Remote clock offset: -0.851 ms

Below is generated by plot.py at 2019-01-18 04:10:47
Datalink statistics
-- Total of 3 flows:
Average throughput: 219.17 Mbit/s
95th percentile per-packet one-way delay: 154.597 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 105.71 Mbit/s
95th percentile per-packet one-way delay: 146.451 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 111.70 Mbit/s
95th percentile per-packet one-way delay: 112.485 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 120.39 Mbit/s
95th percentile per-packet one-way delay: 194.740 ms
Loss rate: 0.64%

Run 4: Report of Verus — Data Link

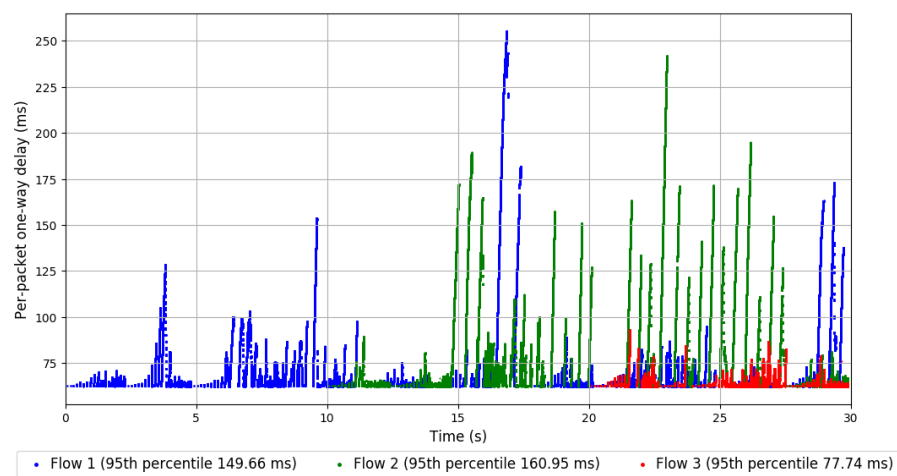
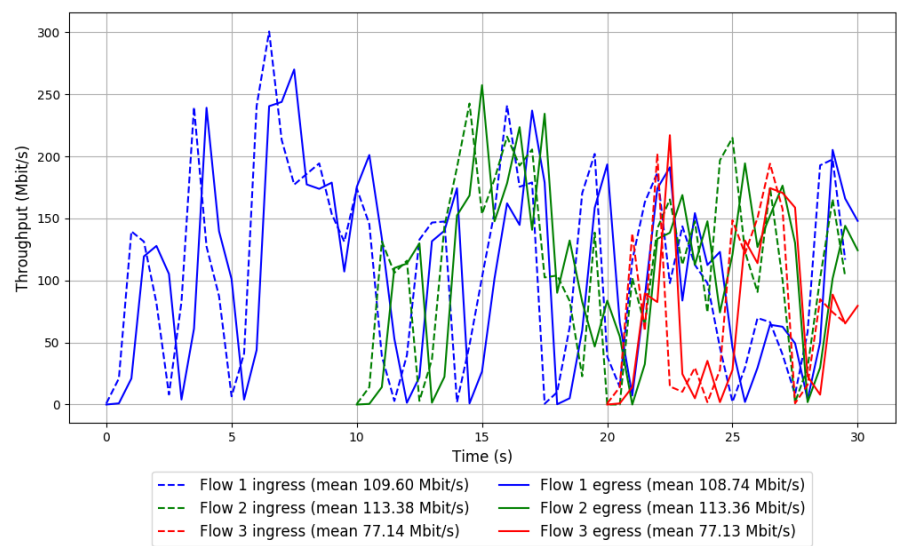


Run 5: Statistics of Verus

Start at: 2019-01-18 00:07:07
End at: 2019-01-18 00:07:37
Local clock offset: -0.032 ms
Remote clock offset: -0.414 ms

Below is generated by plot.py at 2019-01-18 04:12:28
Datalink statistics
-- Total of 3 flows:
Average throughput: 209.45 Mbit/s
95th percentile per-packet one-way delay: 152.385 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 108.74 Mbit/s
95th percentile per-packet one-way delay: 149.661 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 113.36 Mbit/s
95th percentile per-packet one-way delay: 160.948 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 77.13 Mbit/s
95th percentile per-packet one-way delay: 77.739 ms
Loss rate: 0.00%

Run 5: Report of Verus — Data Link

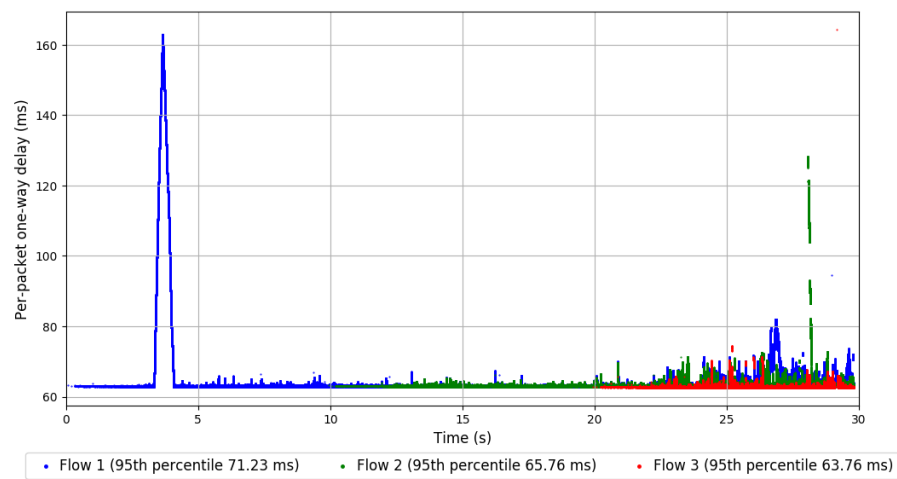
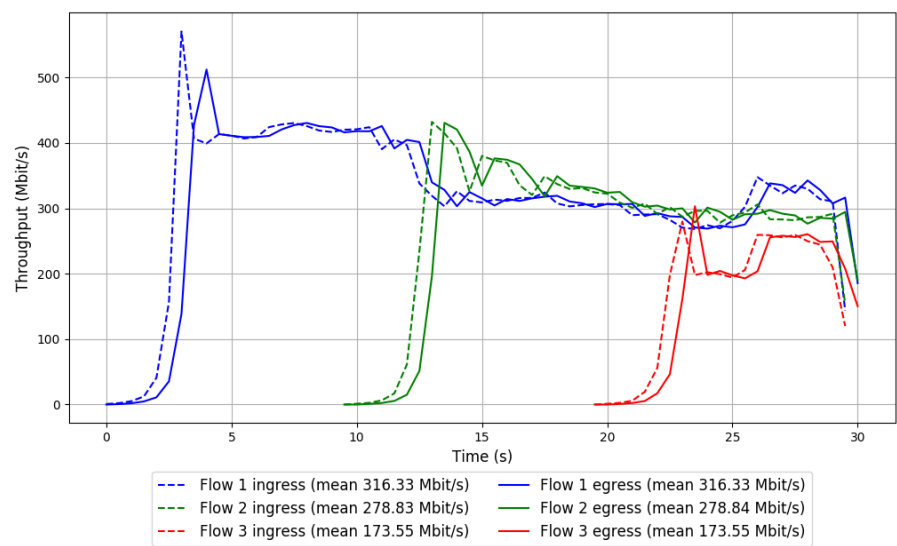


Run 1: Statistics of PCC-Vivace

Start at: 2019-01-17 21:43:24
End at: 2019-01-17 21:43:54
Local clock offset: -0.157 ms
Remote clock offset: -0.351 ms

Below is generated by plot.py at 2019-01-18 04:15:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 560.16 Mbit/s
95th percentile per-packet one-way delay: 67.673 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 316.33 Mbit/s
95th percentile per-packet one-way delay: 71.228 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 278.84 Mbit/s
95th percentile per-packet one-way delay: 65.760 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 173.55 Mbit/s
95th percentile per-packet one-way delay: 63.763 ms
Loss rate: 0.00%

Run 1: Report of PCC-Vivace — Data Link

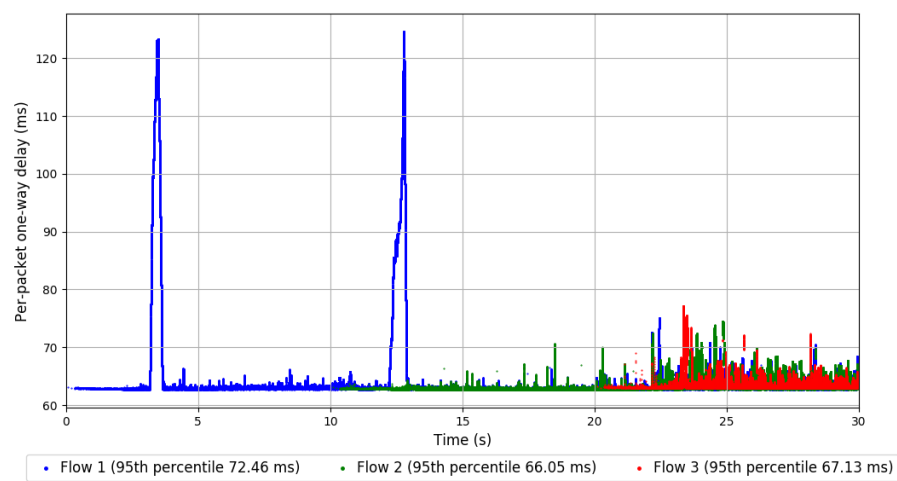
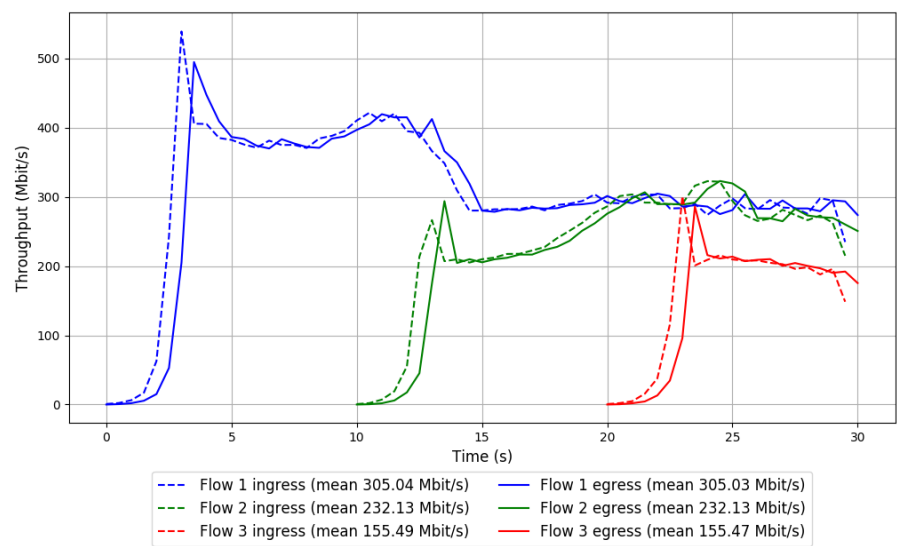


Run 2: Statistics of PCC-Vivace

Start at: 2019-01-17 22:19:26
End at: 2019-01-17 22:19:56
Local clock offset: -0.089 ms
Remote clock offset: -0.122 ms

Below is generated by plot.py at 2019-01-18 04:15:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 510.47 Mbit/s
95th percentile per-packet one-way delay: 67.345 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 305.03 Mbit/s
95th percentile per-packet one-way delay: 72.464 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 232.13 Mbit/s
95th percentile per-packet one-way delay: 66.049 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 155.47 Mbit/s
95th percentile per-packet one-way delay: 67.129 ms
Loss rate: 0.00%

Run 2: Report of PCC-Vivace — Data Link

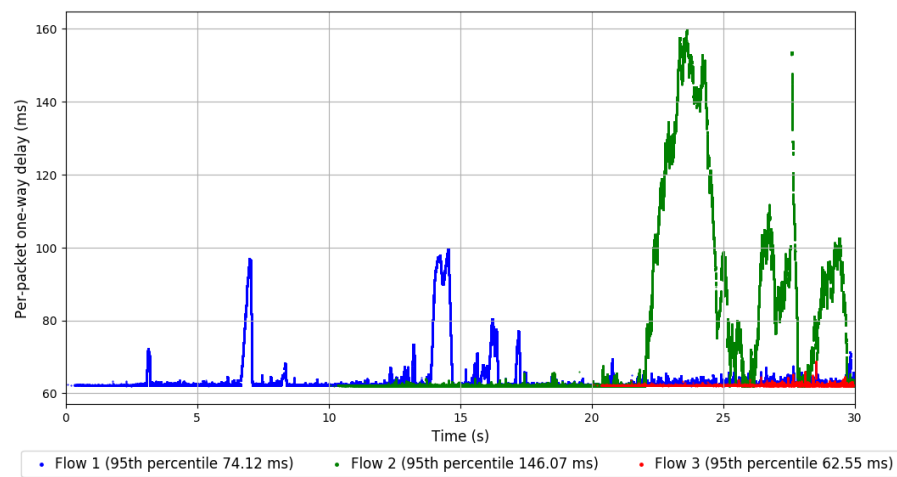
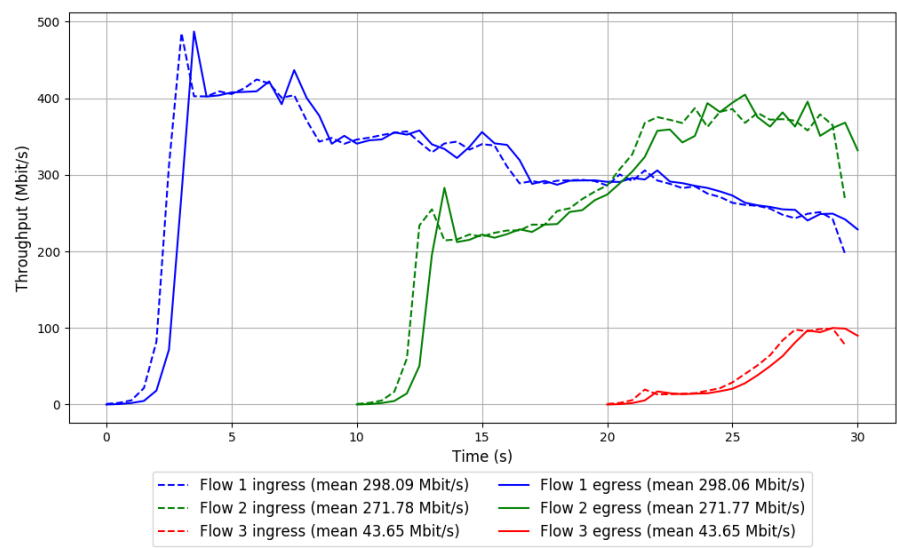


Run 3: Statistics of PCC-Vivace

Start at: 2019-01-17 22:56:06
End at: 2019-01-17 22:56:36
Local clock offset: -0.003 ms
Remote clock offset: -0.724 ms

Below is generated by plot.py at 2019-01-18 04:15:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 493.18 Mbit/s
95th percentile per-packet one-way delay: 114.965 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 298.06 Mbit/s
95th percentile per-packet one-way delay: 74.125 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 271.77 Mbit/s
95th percentile per-packet one-way delay: 146.075 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 43.65 Mbit/s
95th percentile per-packet one-way delay: 62.548 ms
Loss rate: 0.00%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2019-01-17 23:32:29

End at: 2019-01-17 23:32:59

Local clock offset: -0.075 ms

Remote clock offset: 0.292 ms

Below is generated by plot.py at 2019-01-18 04:15:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 429.33 Mbit/s

95th percentile per-packet one-way delay: 65.768 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 250.69 Mbit/s

95th percentile per-packet one-way delay: 64.500 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 247.73 Mbit/s

95th percentile per-packet one-way delay: 67.492 ms

Loss rate: 0.00%

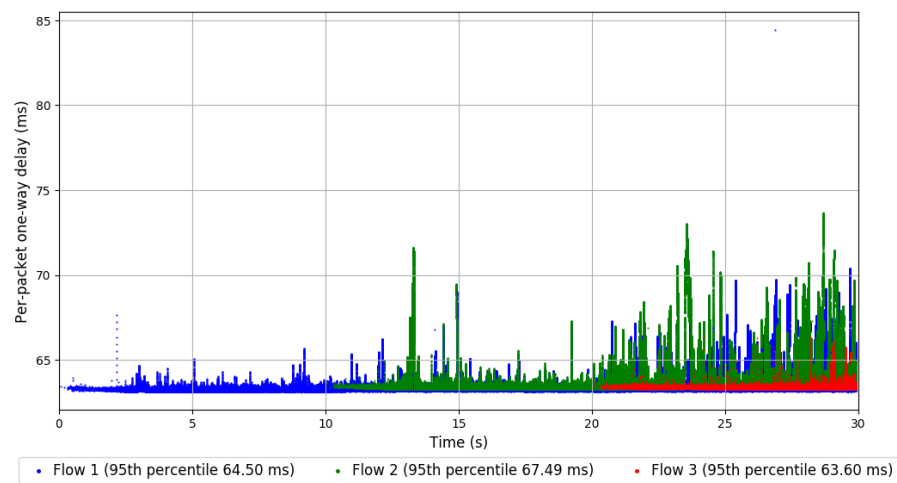
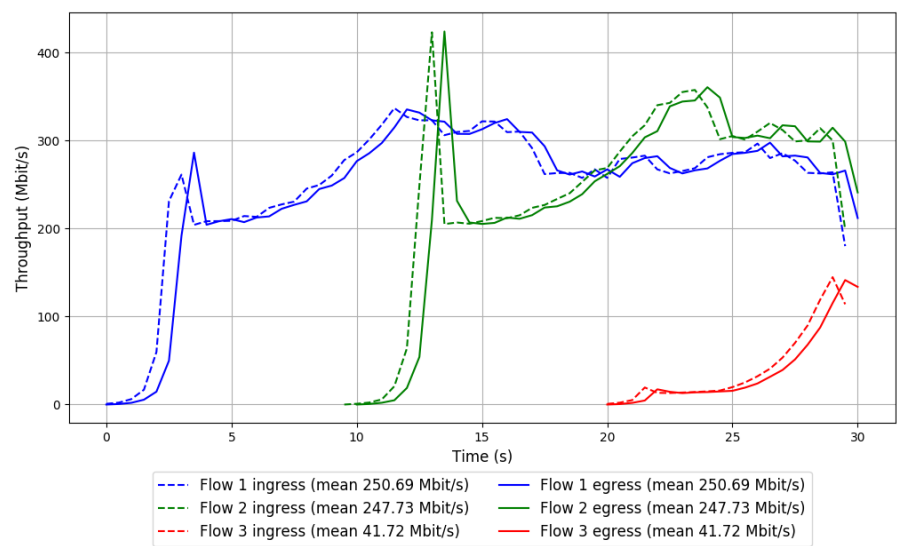
-- Flow 3:

Average throughput: 41.72 Mbit/s

95th percentile per-packet one-way delay: 63.602 ms

Loss rate: 0.00%

Run 4: Report of PCC-Vivace — Data Link

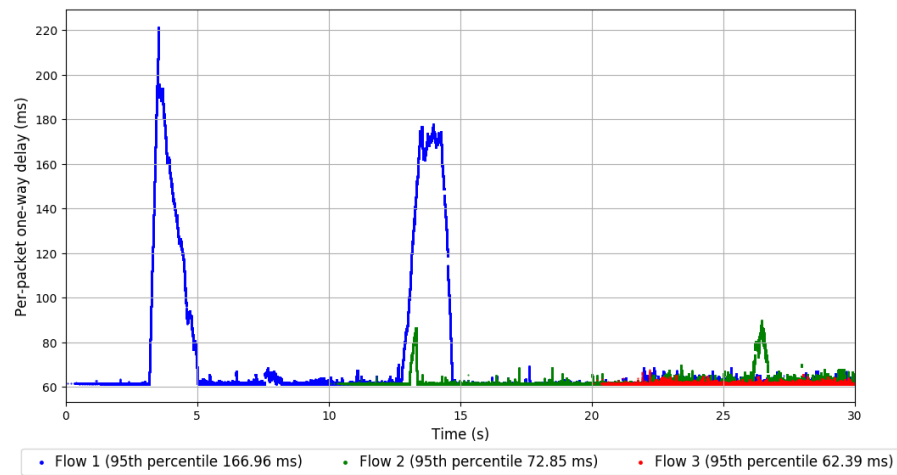
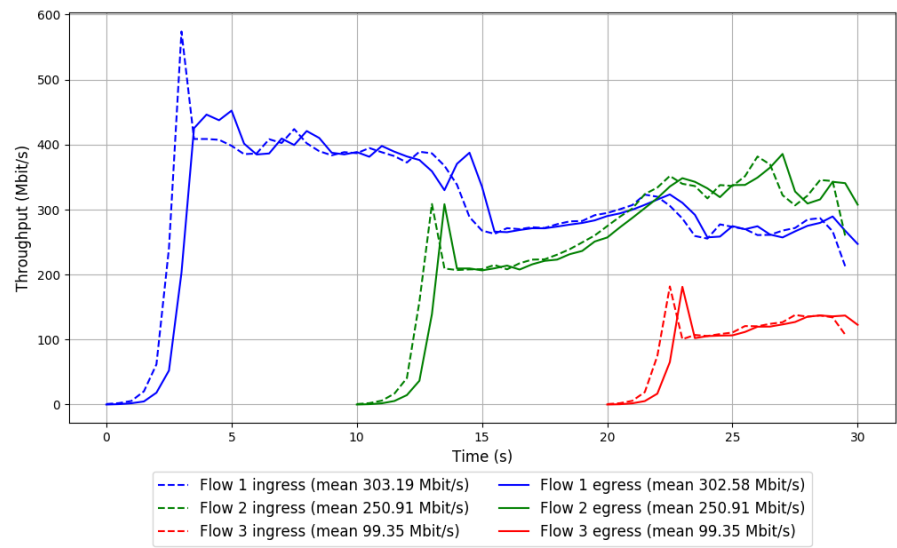


Run 5: Statistics of PCC-Vivace

Start at: 2019-01-18 00:08:42
End at: 2019-01-18 00:09:12
Local clock offset: -0.051 ms
Remote clock offset: -1.406 ms

Below is generated by plot.py at 2019-01-18 04:15:39
Datalink statistics
-- Total of 3 flows:
Average throughput: 502.18 Mbit/s
95th percentile per-packet one-way delay: 141.523 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 302.58 Mbit/s
95th percentile per-packet one-way delay: 166.959 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 250.91 Mbit/s
95th percentile per-packet one-way delay: 72.849 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 99.35 Mbit/s
95th percentile per-packet one-way delay: 62.388 ms
Loss rate: 0.00%

Run 5: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2019-01-17 21:47:48

End at: 2019-01-17 21:48:18

Local clock offset: -0.132 ms

Remote clock offset: 0.124 ms

Below is generated by plot.py at 2019-01-18 04:15:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 63.525 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 63.819 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 63.534 ms

Loss rate: 0.00%

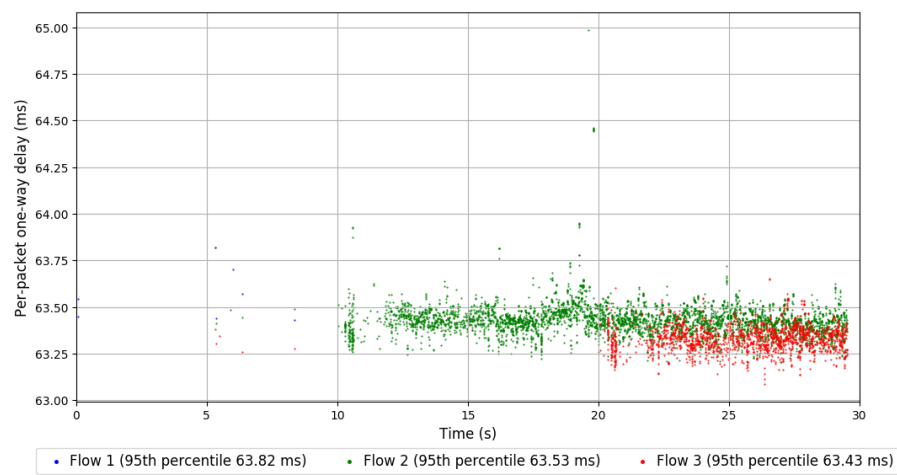
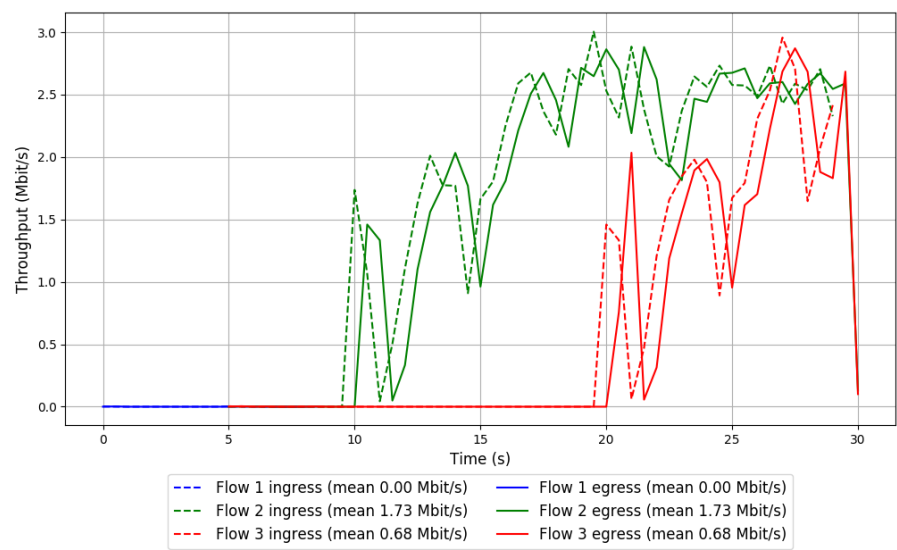
-- Flow 3:

Average throughput: 0.68 Mbit/s

95th percentile per-packet one-way delay: 63.433 ms

Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link

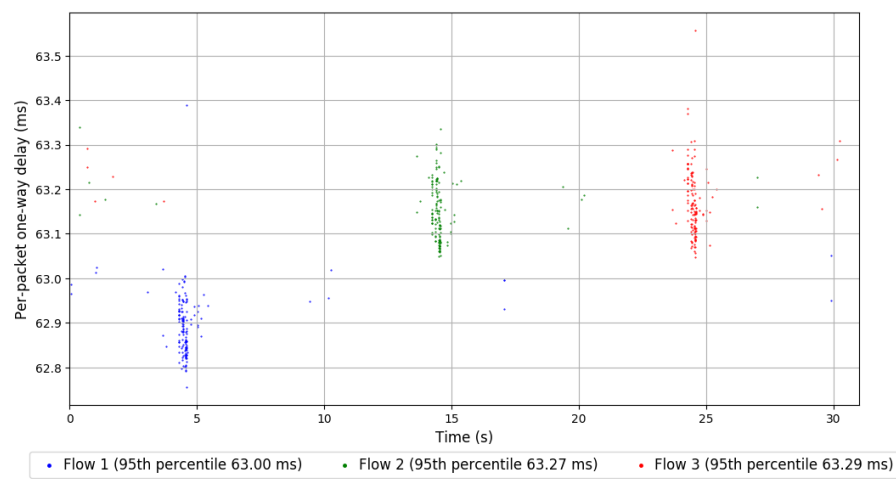
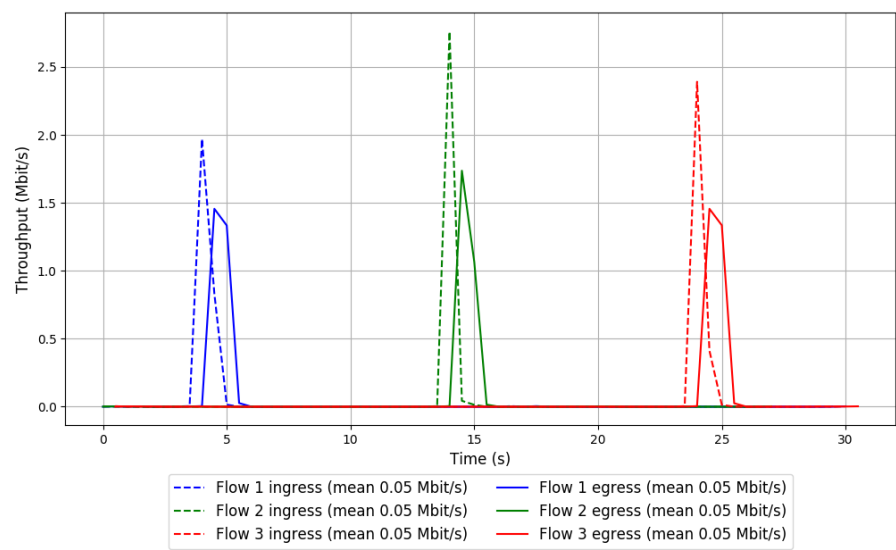


Run 2: Statistics of WebRTC media

Start at: 2019-01-17 22:24:12
End at: 2019-01-17 22:24:42
Local clock offset: -0.05 ms
Remote clock offset: -0.123 ms

Below is generated by plot.py at 2019-01-18 04:15:39
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 63.266 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 62.997 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.274 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.290 ms
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

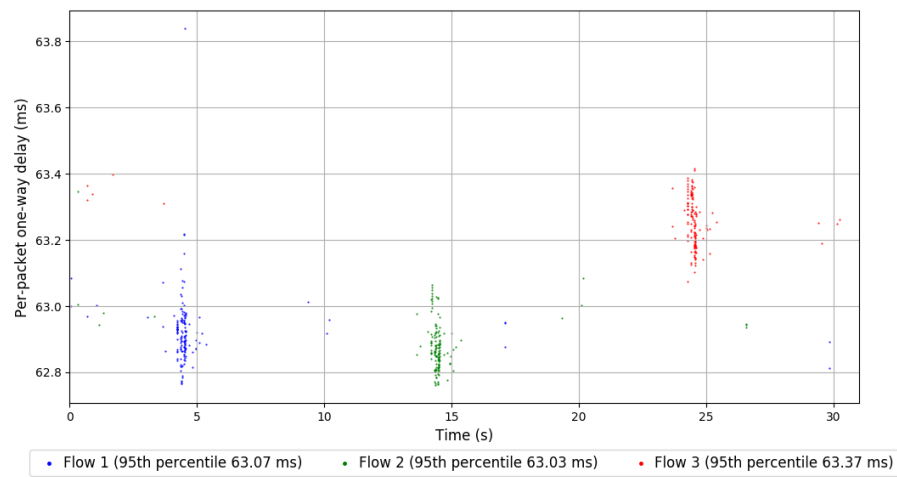
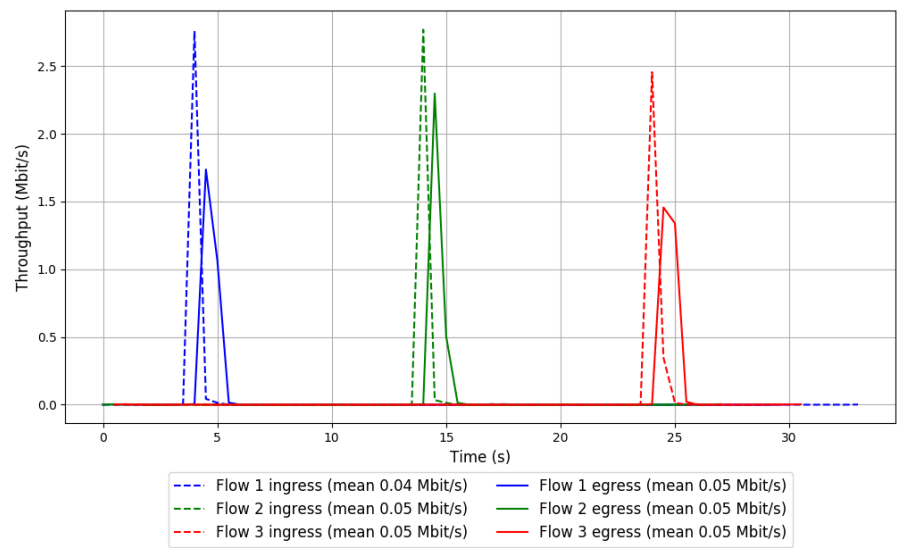


Run 3: Statistics of WebRTC media

Start at: 2019-01-17 23:00:33
End at: 2019-01-17 23:01:03
Local clock offset: 0.006 ms
Remote clock offset: -0.077 ms

Below is generated by plot.py at 2019-01-18 04:15:39
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 63.342 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.070 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.027 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.374 ms
Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

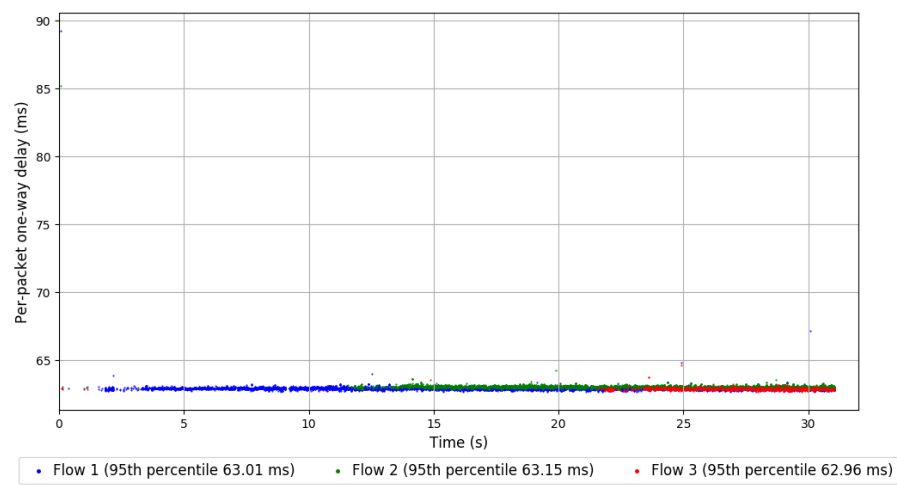
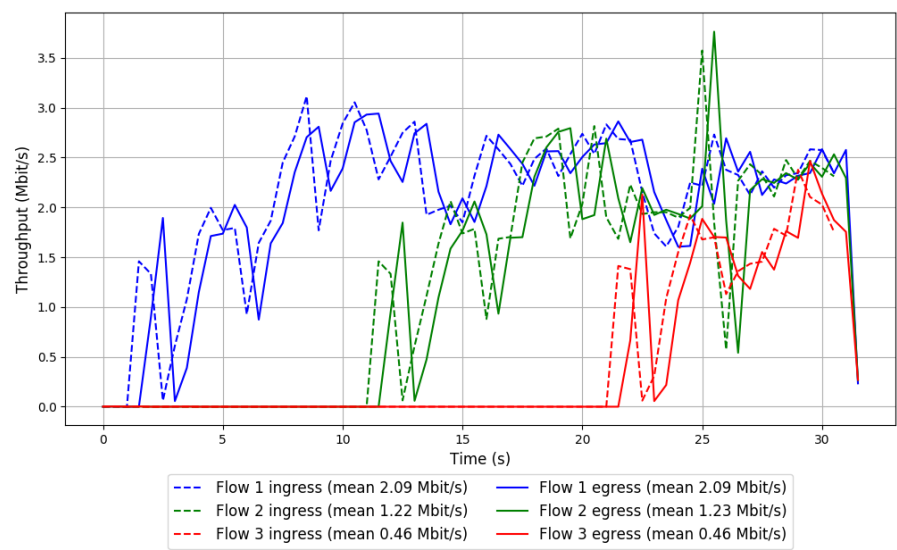


Run 4: Statistics of WebRTC media

Start at: 2019-01-17 23:37:06
End at: 2019-01-17 23:37:36
Local clock offset: -0.026 ms
Remote clock offset: -0.127 ms

Below is generated by plot.py at 2019-01-18 04:15:39
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.77 Mbit/s
95th percentile per-packet one-way delay: 63.093 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.09 Mbit/s
95th percentile per-packet one-way delay: 63.008 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.23 Mbit/s
95th percentile per-packet one-way delay: 63.151 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 62.962 ms
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-01-18 00:13:16

End at: 2019-01-18 00:13:46

Local clock offset: -0.02 ms

Remote clock offset: 0.487 ms

Below is generated by plot.py at 2019-01-18 04:15:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 63.883 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 63.594 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 63.850 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 63.946 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

