

Pantheon Report

Generated at 2019-01-19 04:56:25 (UTC).

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

Repeated the test of 21 congestion control schemes 5 times.

Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.

NTP offsets were measured against `time.google.com` and have been applied to correct the timestamps in logs.

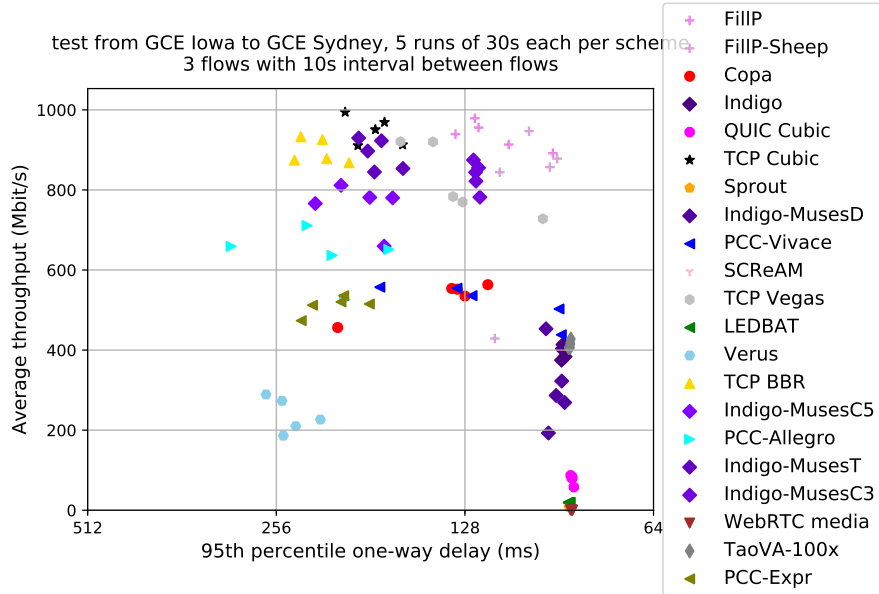
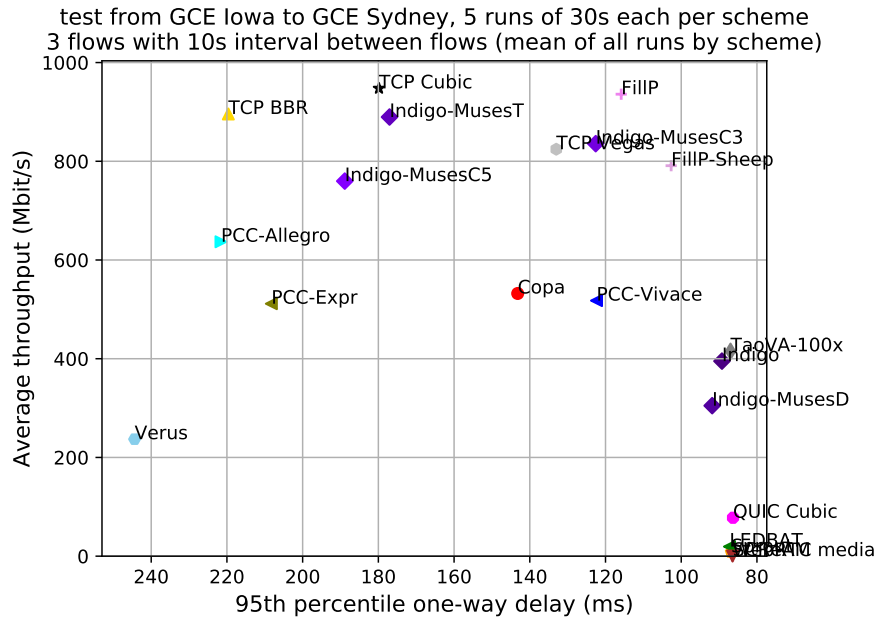
System info:

```
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 @ d0153f8e594aa89e93b032143cedbdf5e58e562f4
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



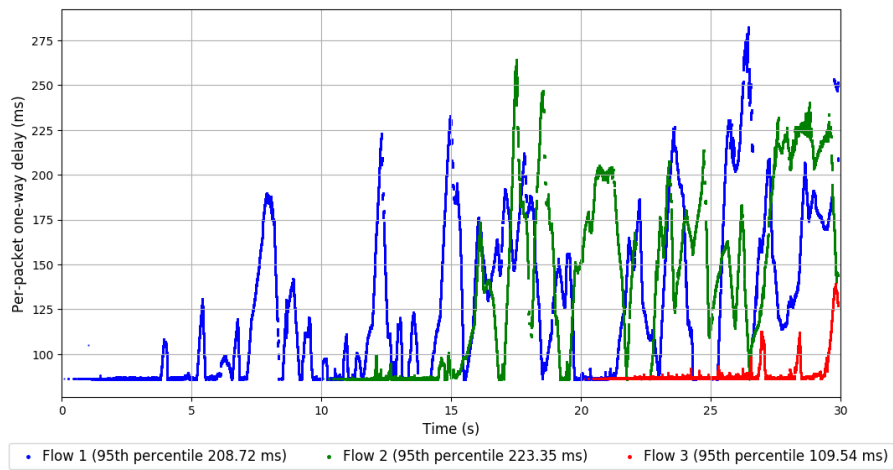
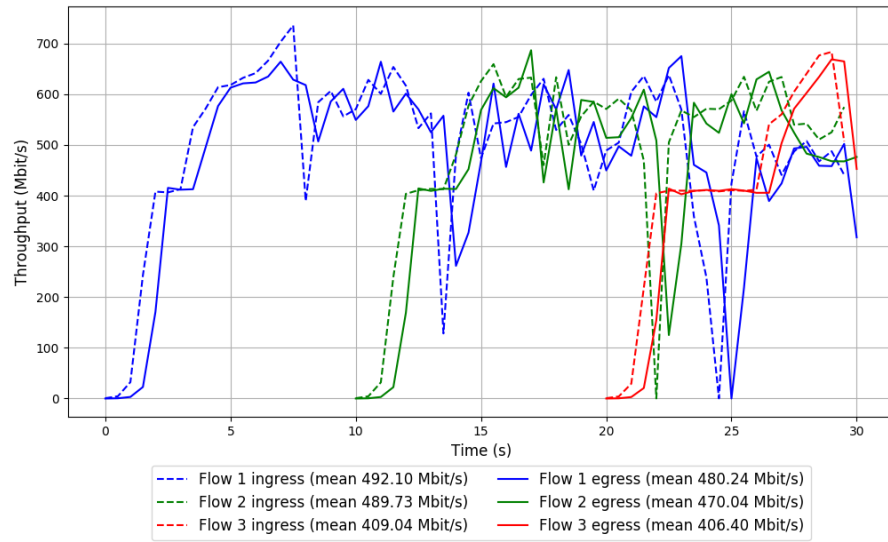
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	481.03	434.44	384.84	195.67	229.95	176.15	2.41	5.09	3.96
Copa	5	289.72	262.93	206.55	140.04	134.89	147.51	0.52	0.85	2.03
TCP Cubic	5	502.56	473.12	398.05	171.76	165.94	202.99	0.66	1.14	2.90
FillP	5	580.14	402.38	271.48	120.99	94.00	91.61	0.85	0.77	2.10
FillP-Sheep	5	460.91	371.24	256.14	109.95	90.79	89.67	0.37	0.71	2.07
Indigo	5	207.05	198.67	171.83	88.71	89.96	89.63	0.60	0.87	1.97
Indigo-MusesC3	5	512.47	434.33	160.46	125.69	115.55	90.30	0.57	1.04	5.24
Indigo-MusesC5	5	463.32	412.22	116.27	188.10	192.33	93.27	1.99	3.10	3.77
Indigo-MusesD	5	241.13	91.72	16.54	93.48	87.05	86.41	1.36	1.71	5.57
Indigo-MusesT	5	556.24	450.34	159.11	178.37	151.70	89.92	2.55	1.79	4.47
LEDBAT	5	12.57	8.31	4.03	87.34	87.11	86.82	1.15	1.74	3.52
PCC-Allegro	5	332.77	340.18	243.23	211.55	219.93	217.80	7.80	6.36	5.61
PCC-Expr	5	297.44	231.69	185.16	194.75	199.70	169.79	3.26	2.64	3.50
QUIC Cubic	5	42.59	38.98	27.77	86.20	86.20	86.14	0.91	1.17	3.94
SCReAM	5	0.22	0.22	0.22	86.30	86.29	86.17	0.51	0.86	1.85
Sprout	5	4.35	4.01	2.67	86.66	86.90	86.65	0.57	1.18	2.75
TaoVA-100x	5	212.96	204.61	201.46	86.82	87.03	87.62	0.57	0.82	1.76
TCP Vegas	5	462.45	371.95	349.66	128.46	119.02	116.32	0.54	0.79	2.17
Verus	5	124.51	119.34	102.79	198.23	184.57	233.59	4.12	2.99	6.70
PCC-Vivace	5	306.01	239.46	162.54	112.23	140.50	96.39	0.68	1.07	2.34
WebRTC media	5	0.05	0.05	0.05	86.38	86.35	86.42	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

Start at: 2019-01-18 22:31:43
End at: 2019-01-18 22:32:13
Local clock offset: 0.229 ms
Remote clock offset: -0.142 ms

Below is generated by plot.py at 2019-01-19 02:21:03
Datalink statistics
-- Total of 3 flows:
Average throughput: 925.90 Mbit/s
95th percentile per-packet one-way delay: 216.078 ms
Loss rate: 3.53%
-- Flow 1:
Average throughput: 480.24 Mbit/s
95th percentile per-packet one-way delay: 208.721 ms
Loss rate: 2.97%
-- Flow 2:
Average throughput: 470.04 Mbit/s
95th percentile per-packet one-way delay: 223.355 ms
Loss rate: 4.85%
-- Flow 3:
Average throughput: 406.40 Mbit/s
95th percentile per-packet one-way delay: 109.539 ms
Loss rate: 2.37%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2019-01-18 23:10:56

End at: 2019-01-18 23:11:26

Local clock offset: -0.442 ms

Remote clock offset: 0.076 ms

Below is generated by plot.py at 2019-01-19 02:21:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 874.40 Mbit/s

95th percentile per-packet one-way delay: 239.447 ms

Loss rate: 5.23%

-- Flow 1:

Average throughput: 492.91 Mbit/s

95th percentile per-packet one-way delay: 219.186 ms

Loss rate: 4.49%

-- Flow 2:

Average throughput: 413.38 Mbit/s

95th percentile per-packet one-way delay: 250.928 ms

Loss rate: 6.95%

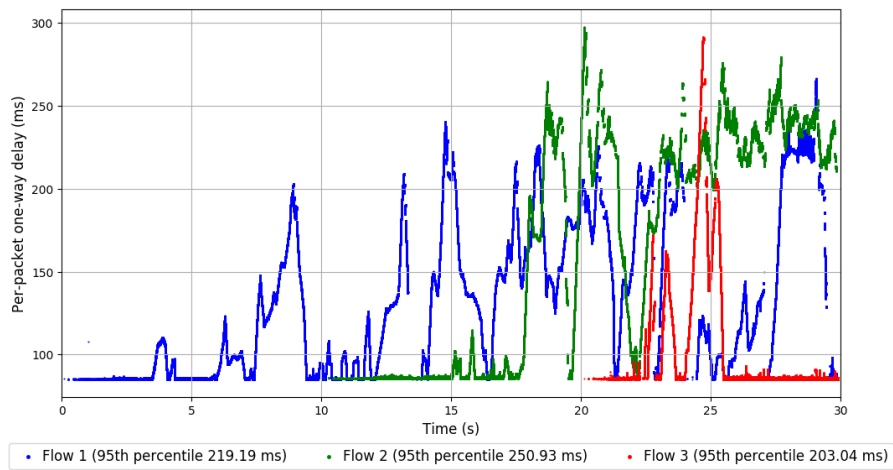
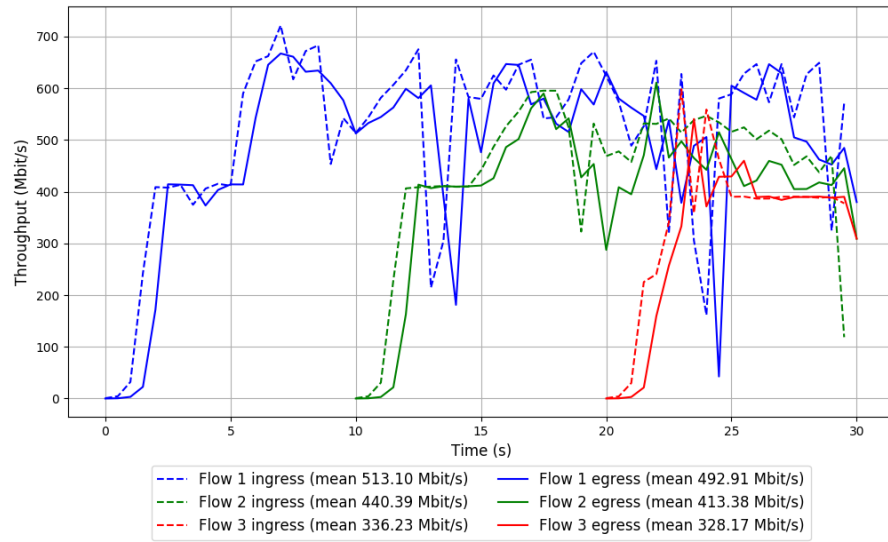
-- Flow 3:

Average throughput: 328.17 Mbit/s

95th percentile per-packet one-way delay: 203.043 ms

Loss rate: 4.09%

Run 2: Report of TCP BBR — Data Link

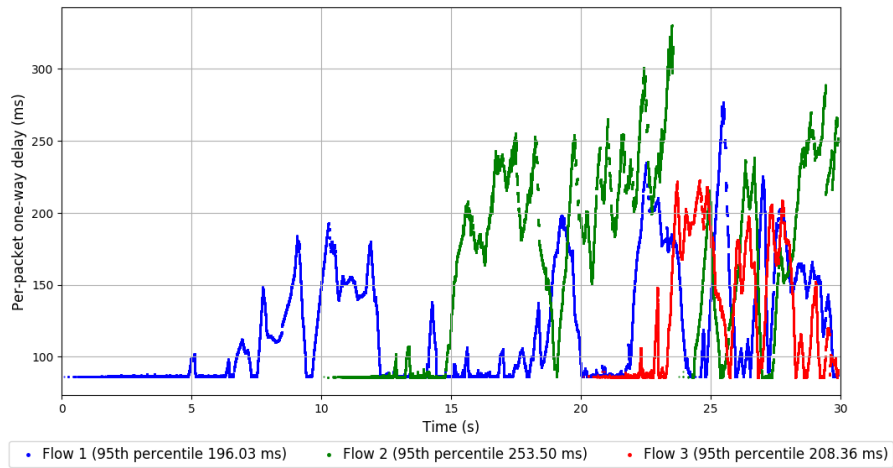
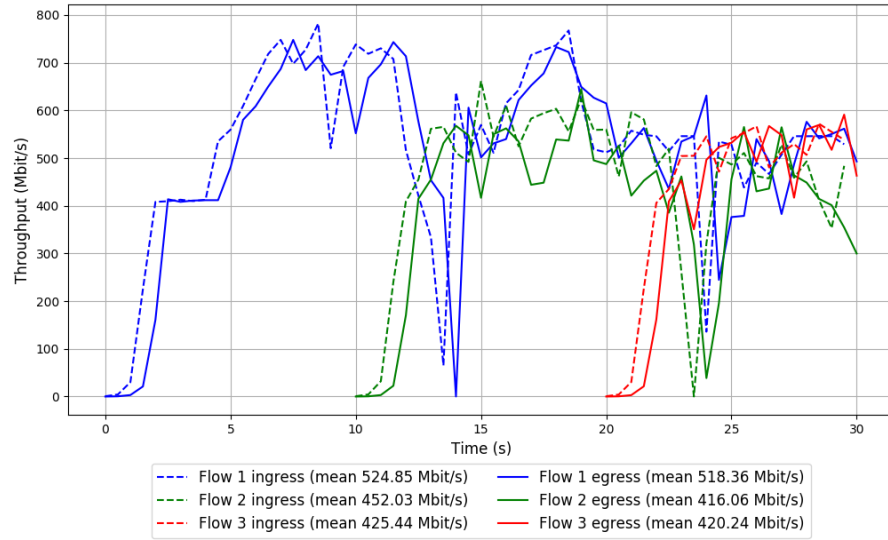


Run 3: Statistics of TCP BBR

Start at: 2019-01-18 23:50:34
End at: 2019-01-18 23:51:04
Local clock offset: -0.033 ms
Remote clock offset: -0.042 ms

Below is generated by plot.py at 2019-01-19 02:21:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 932.81 Mbit/s
95th percentile per-packet one-way delay: 233.942 ms
Loss rate: 4.14%
-- Flow 1:
Average throughput: 518.36 Mbit/s
95th percentile per-packet one-way delay: 196.027 ms
Loss rate: 1.81%
-- Flow 2:
Average throughput: 416.06 Mbit/s
95th percentile per-packet one-way delay: 253.498 ms
Loss rate: 8.75%
-- Flow 3:
Average throughput: 420.24 Mbit/s
95th percentile per-packet one-way delay: 208.358 ms
Loss rate: 2.95%

Run 3: Report of TCP BBR — Data Link

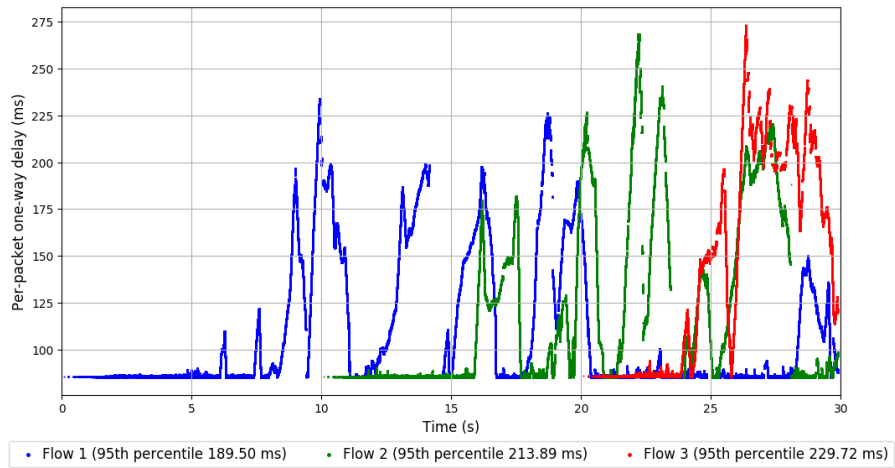
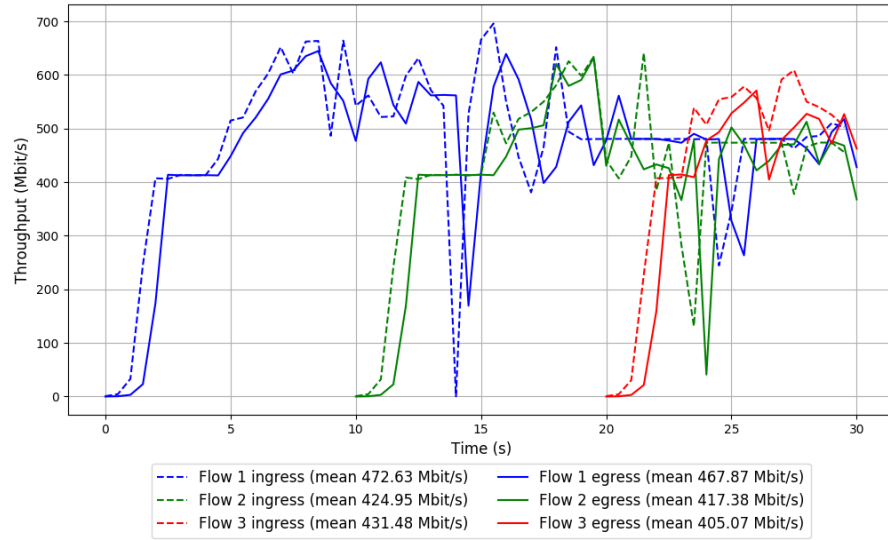


Run 4: Statistics of TCP BBR

Start at: 2019-01-19 00:29:24
End at: 2019-01-19 00:29:54
Local clock offset: -0.277 ms
Remote clock offset: -0.062 ms

Below is generated by plot.py at 2019-01-19 02:21:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 878.19 Mbit/s
95th percentile per-packet one-way delay: 212.699 ms
Loss rate: 2.89%
-- Flow 1:
Average throughput: 467.87 Mbit/s
95th percentile per-packet one-way delay: 189.497 ms
Loss rate: 1.58%
-- Flow 2:
Average throughput: 417.38 Mbit/s
95th percentile per-packet one-way delay: 213.892 ms
Loss rate: 2.63%
-- Flow 3:
Average throughput: 405.07 Mbit/s
95th percentile per-packet one-way delay: 229.724 ms
Loss rate: 7.75%

Run 4: Report of TCP BBR — Data Link

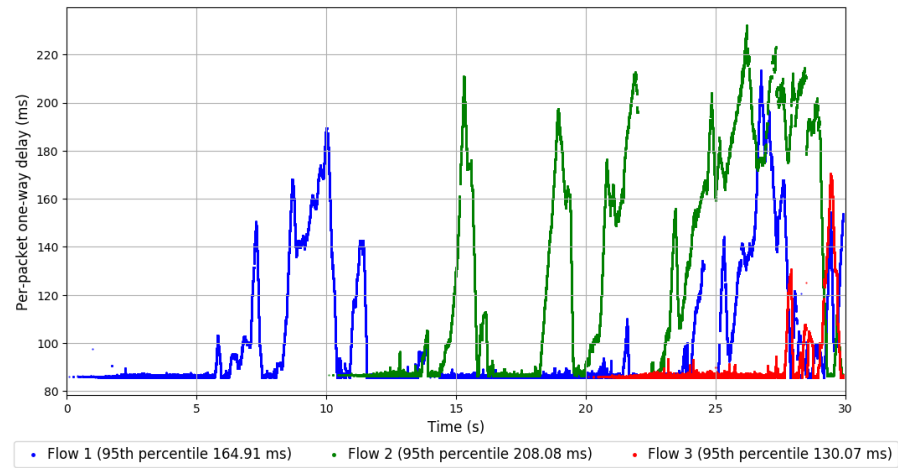
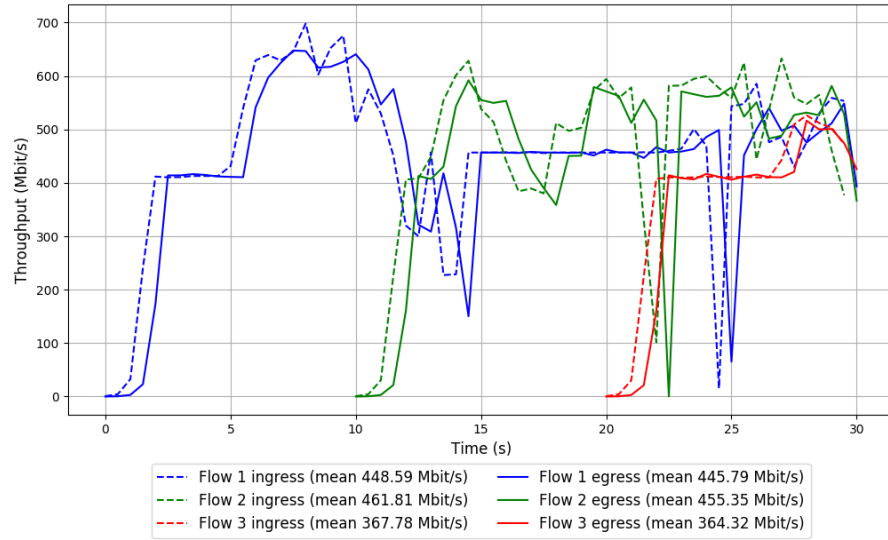


Run 5: Statistics of TCP BBR

Start at: 2019-01-19 01:09:54
End at: 2019-01-19 01:10:24
Local clock offset: -0.115 ms
Remote clock offset: -0.146 ms

Below is generated by plot.py at 2019-01-19 02:21:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 867.92 Mbit/s
95th percentile per-packet one-way delay: 195.944 ms
Loss rate: 1.77%
-- Flow 1:
Average throughput: 445.79 Mbit/s
95th percentile per-packet one-way delay: 164.909 ms
Loss rate: 1.20%
-- Flow 2:
Average throughput: 455.35 Mbit/s
95th percentile per-packet one-way delay: 208.084 ms
Loss rate: 2.25%
-- Flow 3:
Average throughput: 364.32 Mbit/s
95th percentile per-packet one-way delay: 130.069 ms
Loss rate: 2.66%

Run 5: Report of TCP BBR — Data Link

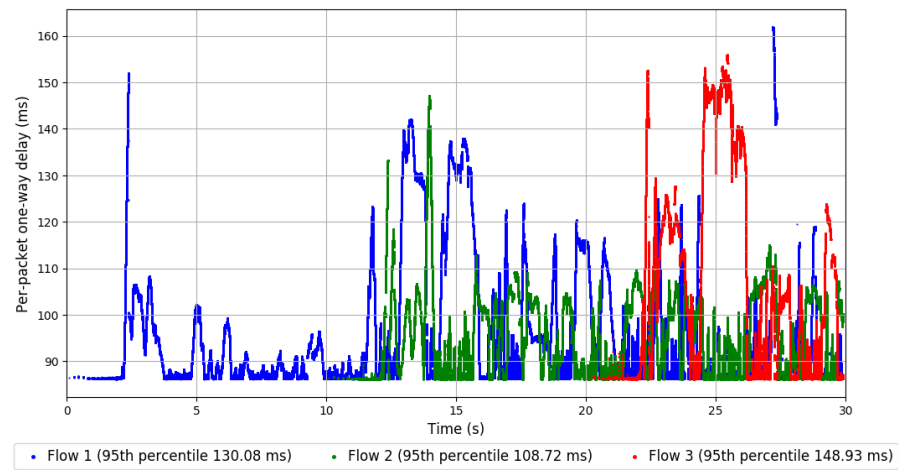
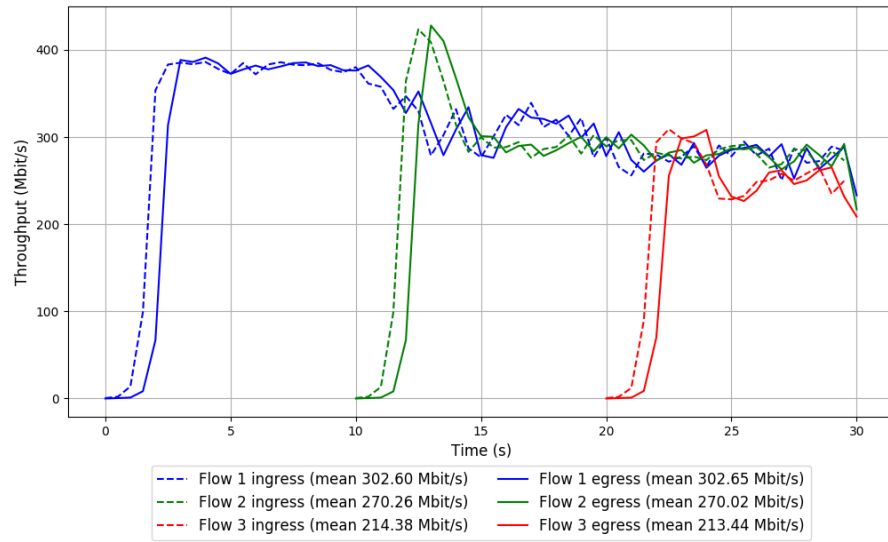


Run 1: Statistics of Copa

Start at: 2019-01-18 22:27:36
End at: 2019-01-18 22:28:06
Local clock offset: 0.46 ms
Remote clock offset: -0.106 ms

Below is generated by plot.py at 2019-01-19 02:22:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 552.07 Mbit/s
95th percentile per-packet one-way delay: 131.669 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 302.65 Mbit/s
95th percentile per-packet one-way delay: 130.079 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 270.02 Mbit/s
95th percentile per-packet one-way delay: 108.722 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 213.44 Mbit/s
95th percentile per-packet one-way delay: 148.927 ms
Loss rate: 2.16%

Run 1: Report of Copa — Data Link

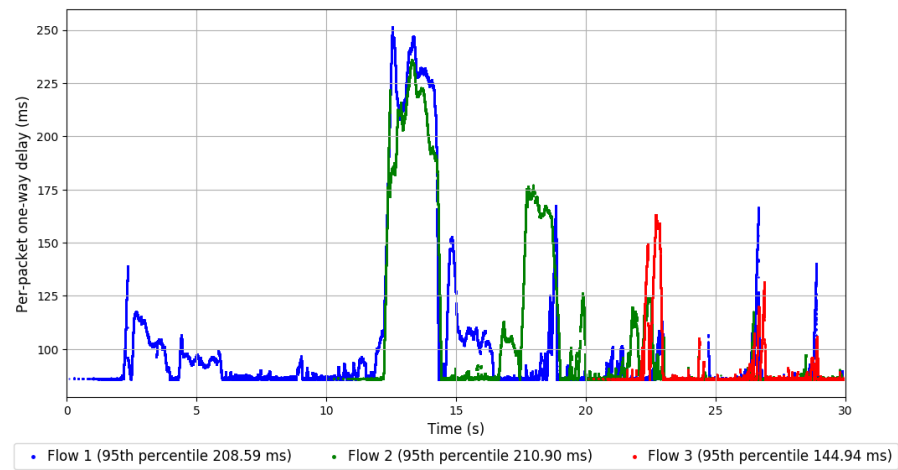
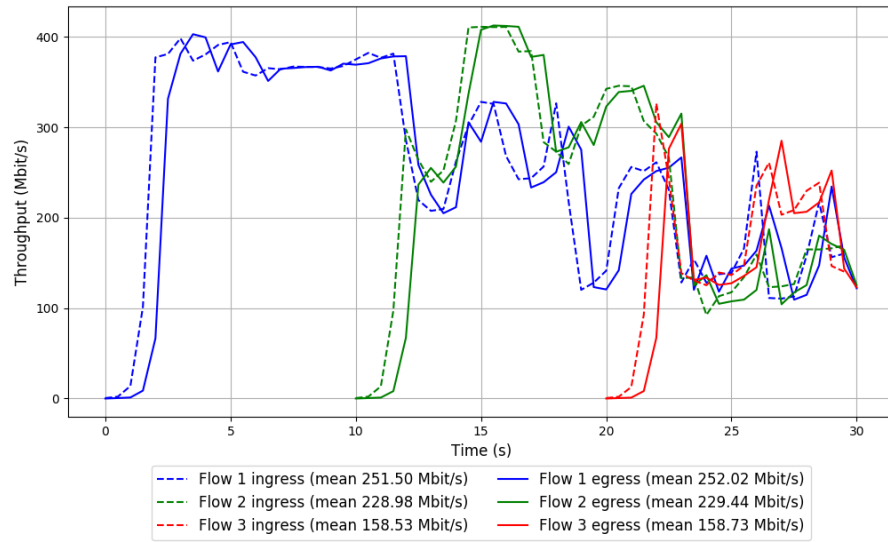


Run 2: Statistics of Copa

Start at: 2019-01-18 23:06:45
End at: 2019-01-18 23:07:15
Local clock offset: 0.144 ms
Remote clock offset: -0.092 ms

Below is generated by plot.py at 2019-01-19 02:22:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 456.36 Mbit/s
95th percentile per-packet one-way delay: 204.299 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 252.02 Mbit/s
95th percentile per-packet one-way delay: 208.585 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 229.44 Mbit/s
95th percentile per-packet one-way delay: 210.904 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 158.73 Mbit/s
95th percentile per-packet one-way delay: 144.935 ms
Loss rate: 1.60%

Run 2: Report of Copa — Data Link

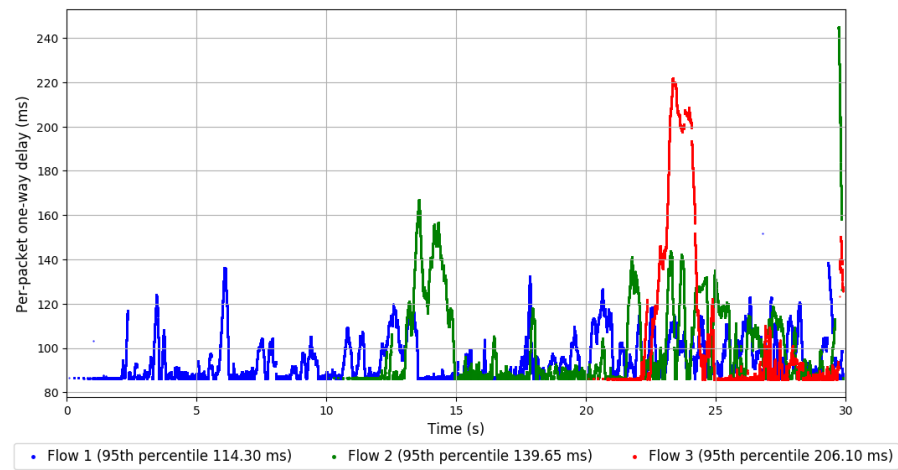
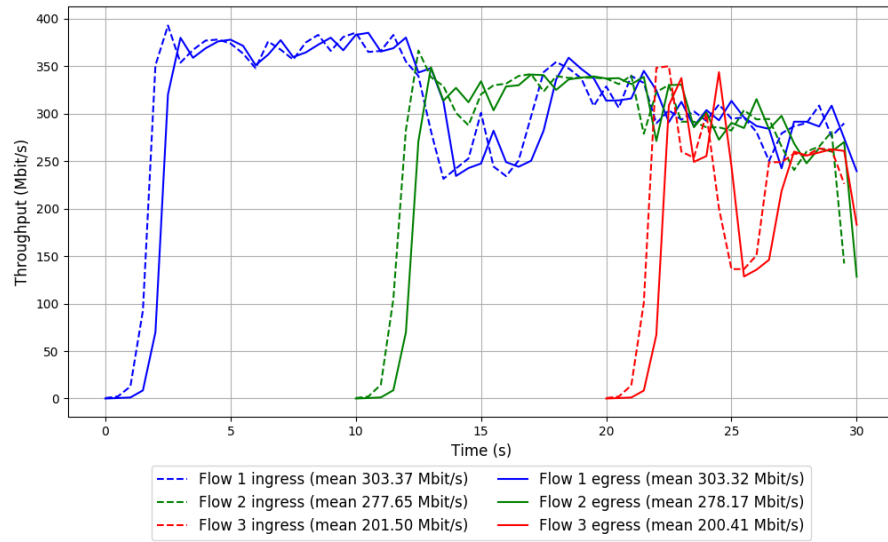


Run 3: Statistics of Copa

Start at: 2019-01-18 23:46:15
End at: 2019-01-18 23:46:45
Local clock offset: 0.109 ms
Remote clock offset: -0.071 ms

Below is generated by plot.py at 2019-01-19 02:22:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 553.97 Mbit/s
95th percentile per-packet one-way delay: 134.386 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 303.32 Mbit/s
95th percentile per-packet one-way delay: 114.300 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 278.17 Mbit/s
95th percentile per-packet one-way delay: 139.650 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 200.41 Mbit/s
95th percentile per-packet one-way delay: 206.105 ms
Loss rate: 2.26%

Run 3: Report of Copa — Data Link

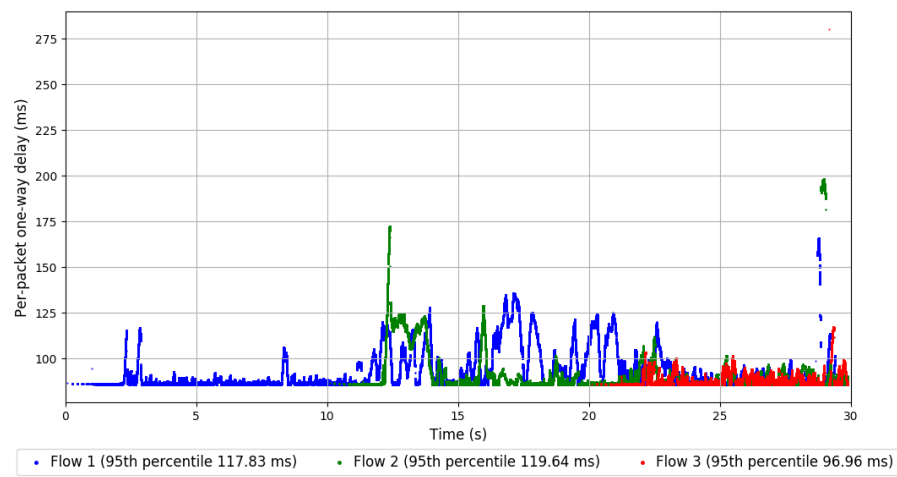
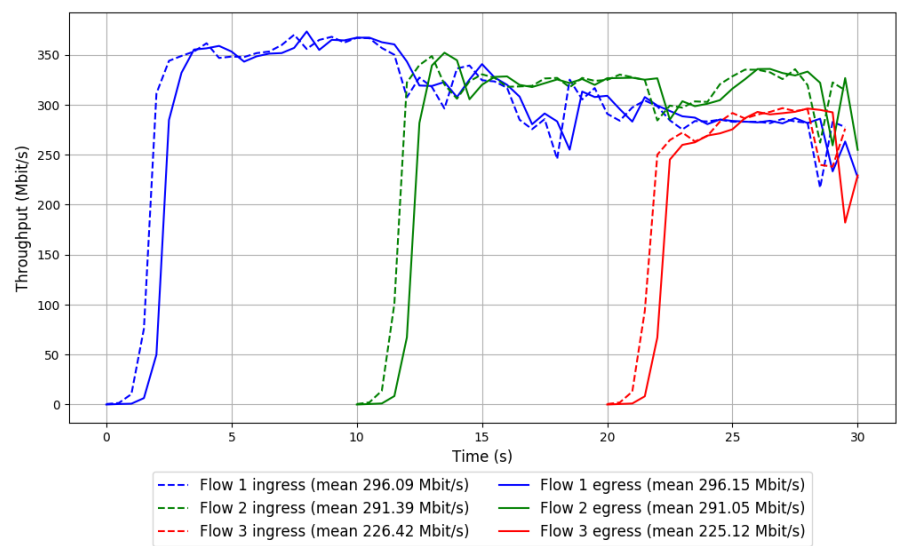


Run 4: Statistics of Copa

Start at: 2019-01-19 00:25:16
End at: 2019-01-19 00:25:46
Local clock offset: 0.037 ms
Remote clock offset: -0.085 ms

Below is generated by plot.py at 2019-01-19 02:40:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 563.45 Mbit/s
95th percentile per-packet one-way delay: 117.663 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 296.15 Mbit/s
95th percentile per-packet one-way delay: 117.827 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 291.05 Mbit/s
95th percentile per-packet one-way delay: 119.645 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 225.12 Mbit/s
95th percentile per-packet one-way delay: 96.963 ms
Loss rate: 2.28%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2019-01-19 01:05:32

End at: 2019-01-19 01:06:02

Local clock offset: 0.317 ms

Remote clock offset: -0.11 ms

Below is generated by plot.py at 2019-01-19 02:40:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 534.98 Mbit/s

95th percentile per-packet one-way delay: 127.972 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 294.44 Mbit/s

95th percentile per-packet one-way delay: 129.419 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 245.99 Mbit/s

95th percentile per-packet one-way delay: 95.509 ms

Loss rate: 0.95%

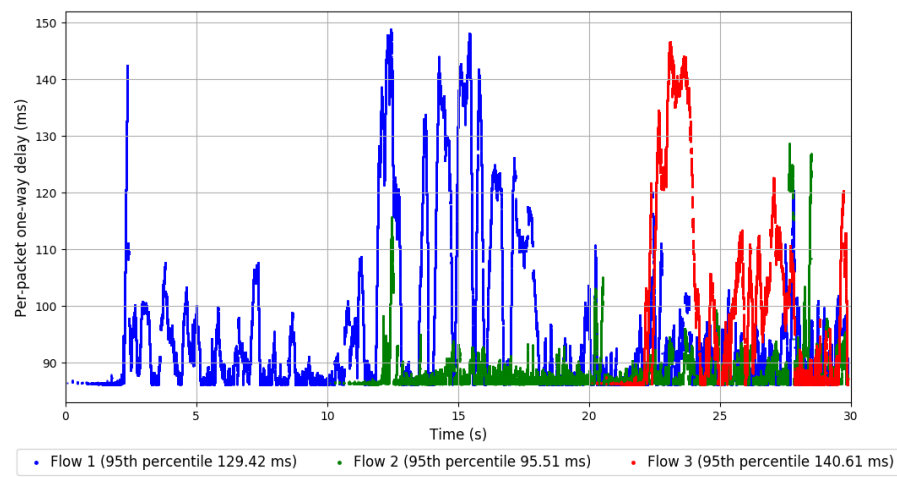
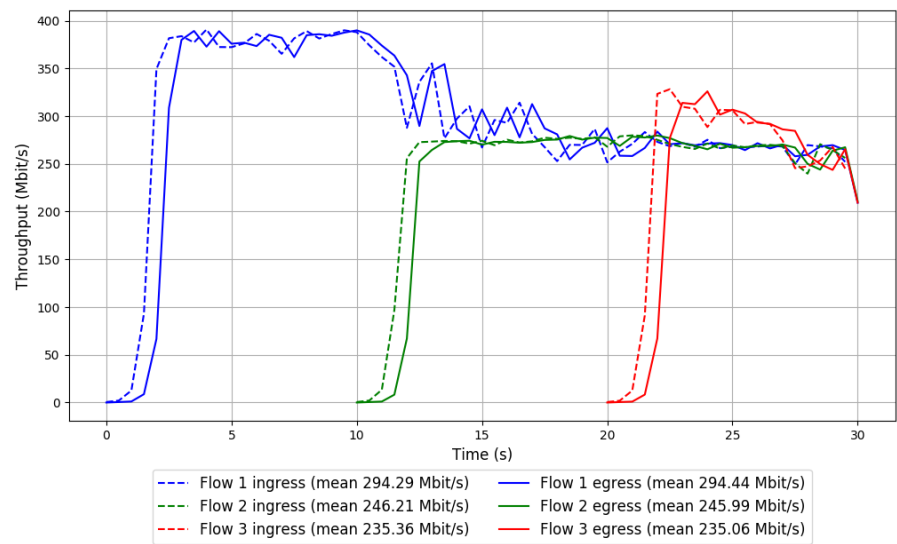
-- Flow 3:

Average throughput: 235.06 Mbit/s

95th percentile per-packet one-way delay: 140.611 ms

Loss rate: 1.85%

Run 5: Report of Copa — Data Link

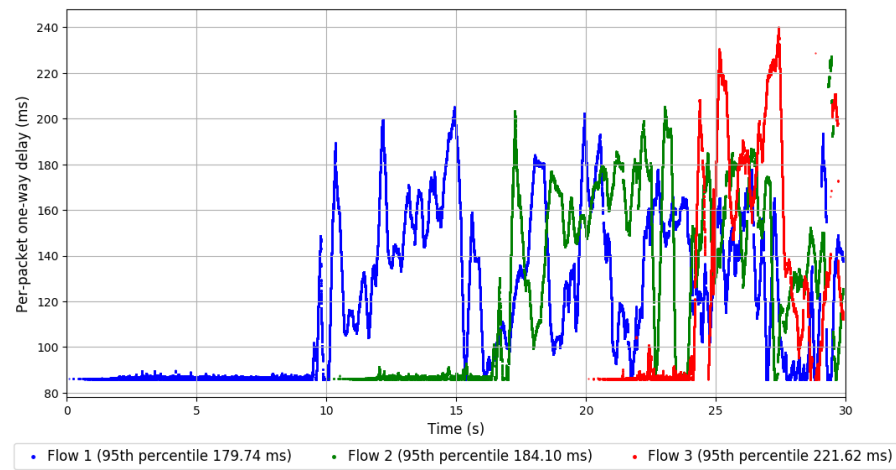
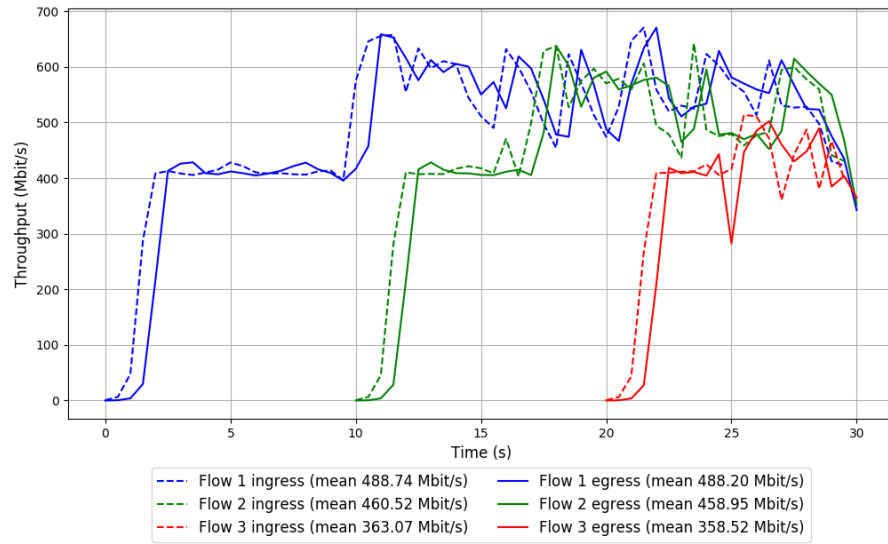


Run 1: Statistics of TCP Cubic

Start at: 2019-01-18 22:53:21
End at: 2019-01-18 22:53:51
Local clock offset: 0.154 ms
Remote clock offset: -0.115 ms

Below is generated by plot.py at 2019-01-19 02:40:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 910.86 Mbit/s
95th percentile per-packet one-way delay: 189.642 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 488.20 Mbit/s
95th percentile per-packet one-way delay: 179.743 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 458.95 Mbit/s
95th percentile per-packet one-way delay: 184.099 ms
Loss rate: 1.20%
-- Flow 3:
Average throughput: 358.52 Mbit/s
95th percentile per-packet one-way delay: 221.621 ms
Loss rate: 2.96%

Run 1: Report of TCP Cubic — Data Link

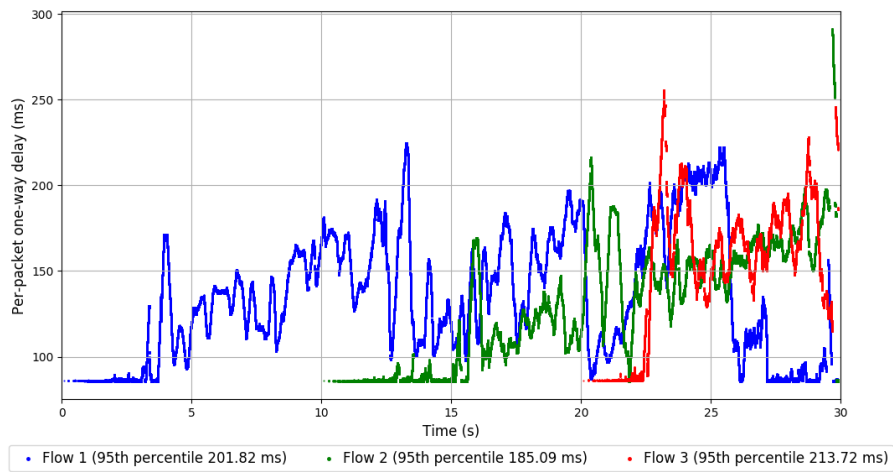
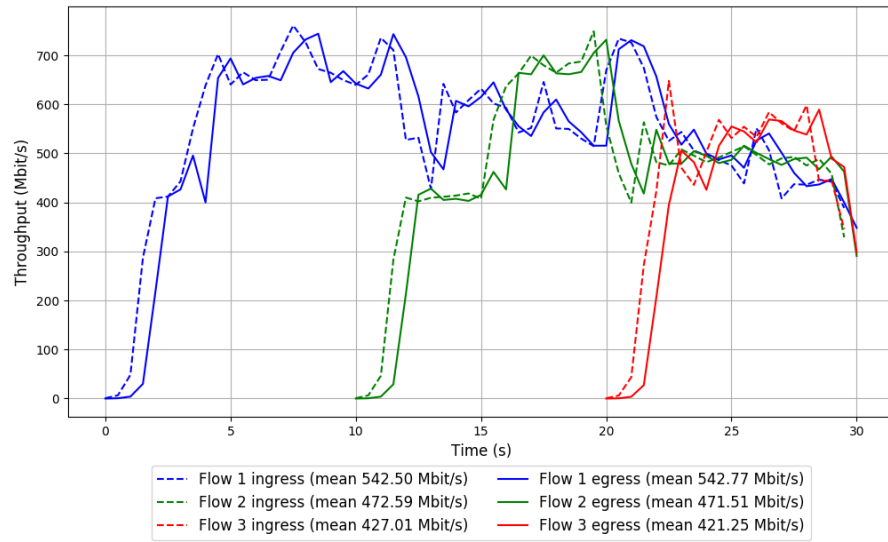


Run 2: Statistics of TCP Cubic

Start at: 2019-01-18 23:32:57
End at: 2019-01-18 23:33:27
Local clock offset: -0.062 ms
Remote clock offset: -0.052 ms

Below is generated by plot.py at 2019-01-19 02:40:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 994.40 Mbit/s
95th percentile per-packet one-way delay: 198.746 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 542.77 Mbit/s
95th percentile per-packet one-way delay: 201.822 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 471.51 Mbit/s
95th percentile per-packet one-way delay: 185.088 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 421.25 Mbit/s
95th percentile per-packet one-way delay: 213.719 ms
Loss rate: 3.07%

Run 2: Report of TCP Cubic — Data Link

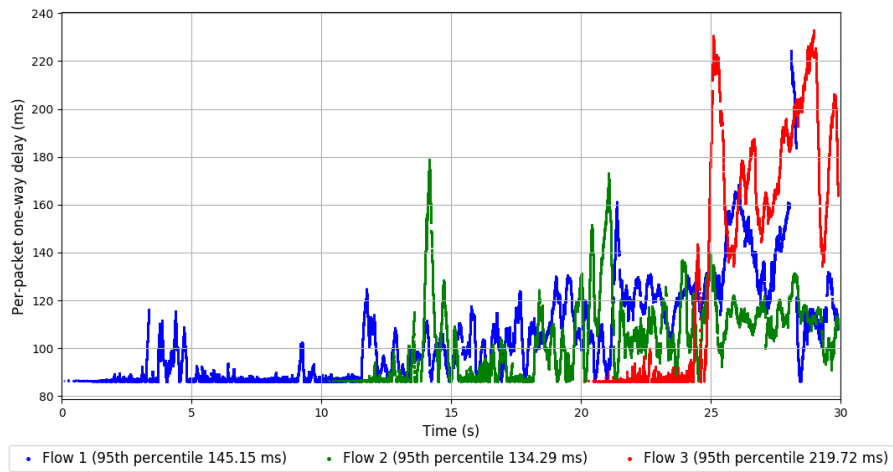
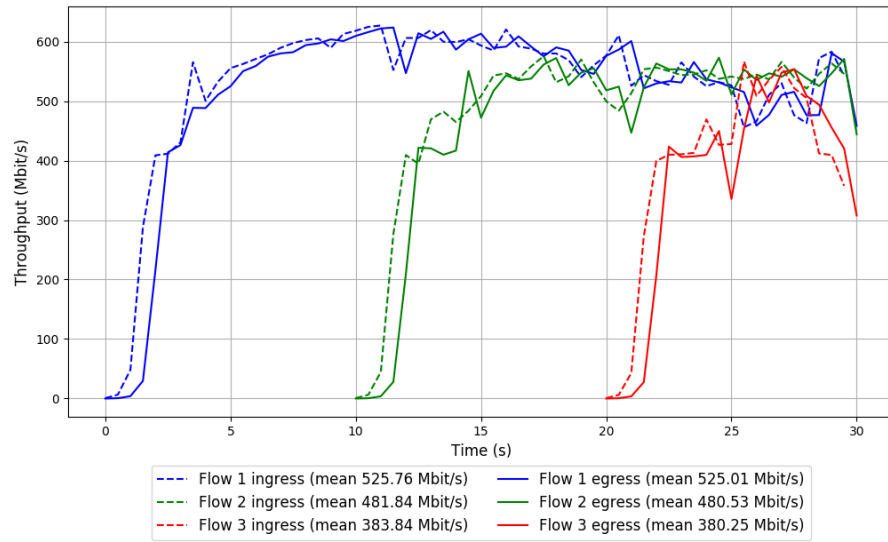


Run 3: Statistics of TCP Cubic

Start at: 2019-01-19 00:12:04
End at: 2019-01-19 00:12:34
Local clock offset: 0.282 ms
Remote clock offset: -0.088 ms

Below is generated by plot.py at 2019-01-19 02:41:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 969.18 Mbit/s
95th percentile per-packet one-way delay: 172.012 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 525.01 Mbit/s
95th percentile per-packet one-way delay: 145.153 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 480.53 Mbit/s
95th percentile per-packet one-way delay: 134.287 ms
Loss rate: 1.13%
-- Flow 3:
Average throughput: 380.25 Mbit/s
95th percentile per-packet one-way delay: 219.719 ms
Loss rate: 2.65%

Run 3: Report of TCP Cubic — Data Link

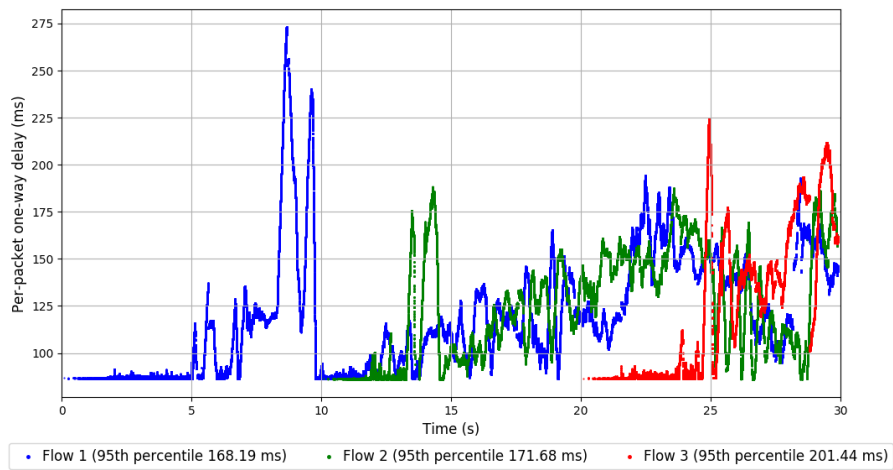
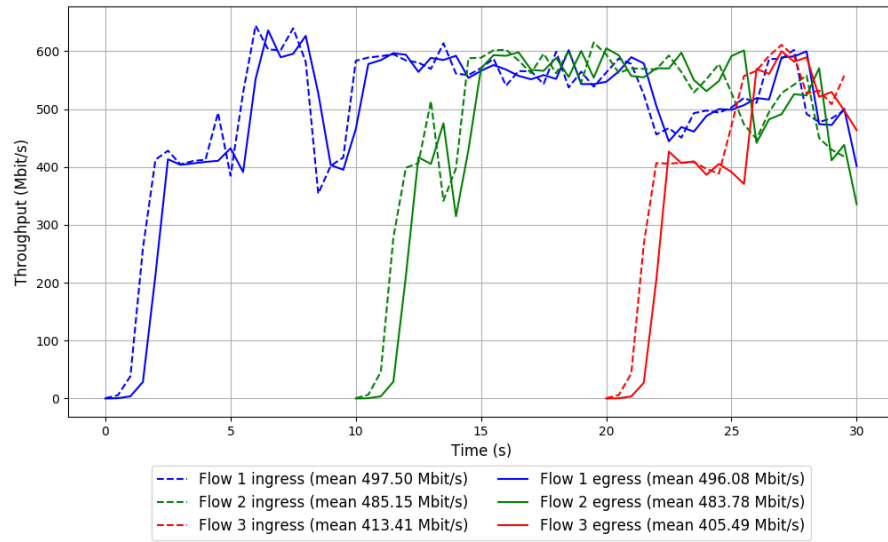


Run 4: Statistics of TCP Cubic

Start at: 2019-01-19 00:51:38
End at: 2019-01-19 00:52:08
Local clock offset: 0.559 ms
Remote clock offset: -0.083 ms

Below is generated by plot.py at 2019-01-19 02:41:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 950.81 Mbit/s
95th percentile per-packet one-way delay: 177.880 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 496.08 Mbit/s
95th percentile per-packet one-way delay: 168.186 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 483.78 Mbit/s
95th percentile per-packet one-way delay: 171.677 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 405.49 Mbit/s
95th percentile per-packet one-way delay: 201.439 ms
Loss rate: 3.62%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2019-01-19 01:31:29

End at: 2019-01-19 01:31:59

Local clock offset: -0.093 ms

Remote clock offset: 0.04 ms

Below is generated by plot.py at 2019-01-19 02:41:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 913.03 Mbit/s

95th percentile per-packet one-way delay: 160.898 ms

Loss rate: 1.01%

-- Flow 1:

Average throughput: 460.73 Mbit/s

95th percentile per-packet one-way delay: 163.873 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 470.82 Mbit/s

95th percentile per-packet one-way delay: 154.556 ms

Loss rate: 1.16%

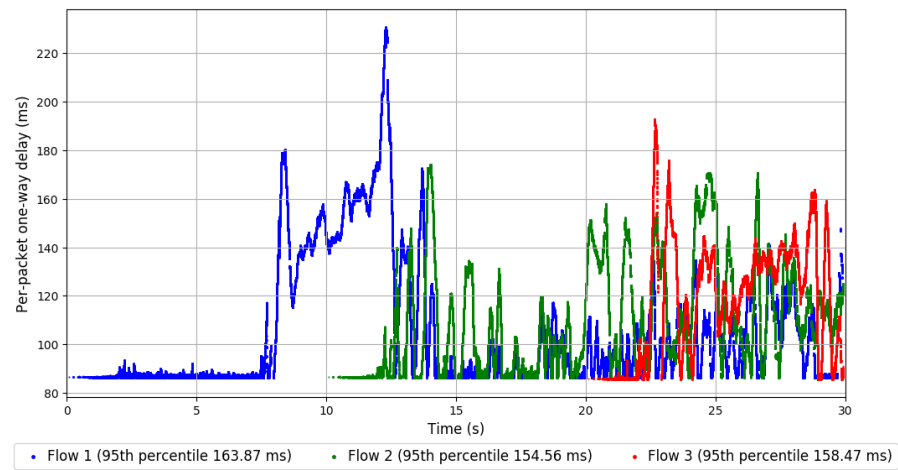
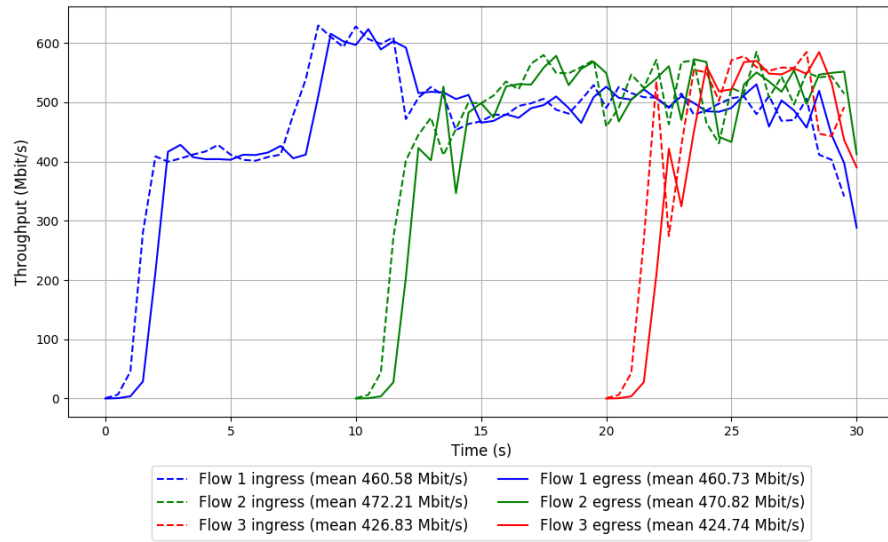
-- Flow 3:

Average throughput: 424.74 Mbit/s

95th percentile per-packet one-way delay: 158.472 ms

Loss rate: 2.20%

Run 5: Report of TCP Cubic — Data Link

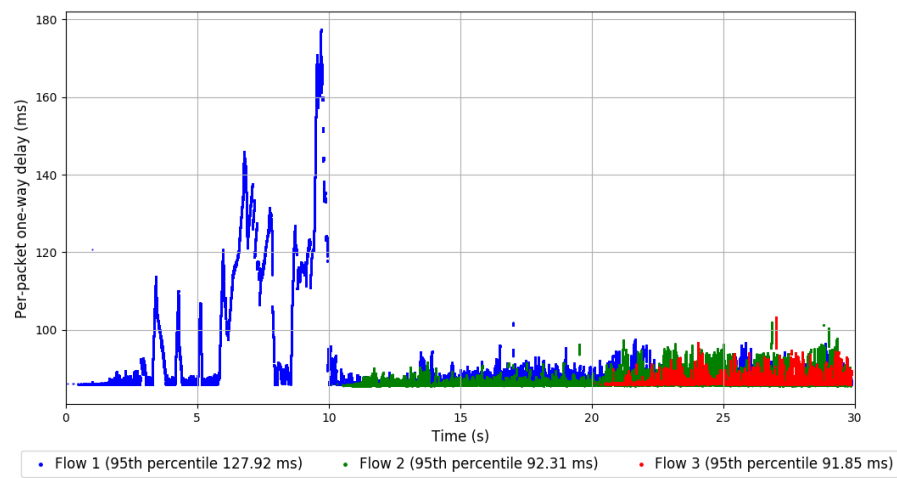
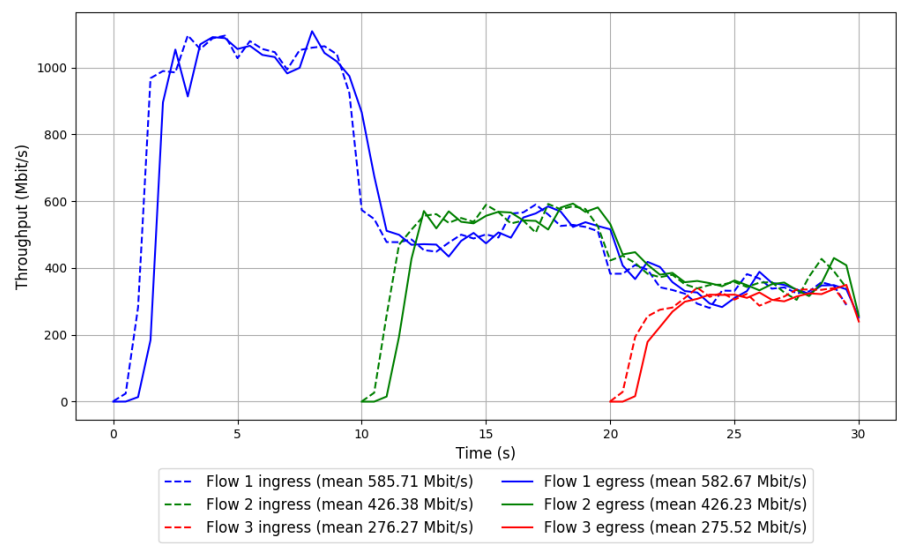


Run 1: Statistics of FillP

Start at: 2019-01-18 22:55:28
End at: 2019-01-18 22:55:58
Local clock offset: -0.209 ms
Remote clock offset: -0.075 ms

Below is generated by plot.py at 2019-01-19 02:46:12
Datalink statistics
-- Total of 3 flows:
Average throughput: 955.65 Mbit/s
95th percentile per-packet one-way delay: 121.716 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 582.67 Mbit/s
95th percentile per-packet one-way delay: 127.915 ms
Loss rate: 1.09%
-- Flow 2:
Average throughput: 426.23 Mbit/s
95th percentile per-packet one-way delay: 92.309 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 275.52 Mbit/s
95th percentile per-packet one-way delay: 91.853 ms
Loss rate: 2.04%

Run 1: Report of FillP — Data Link

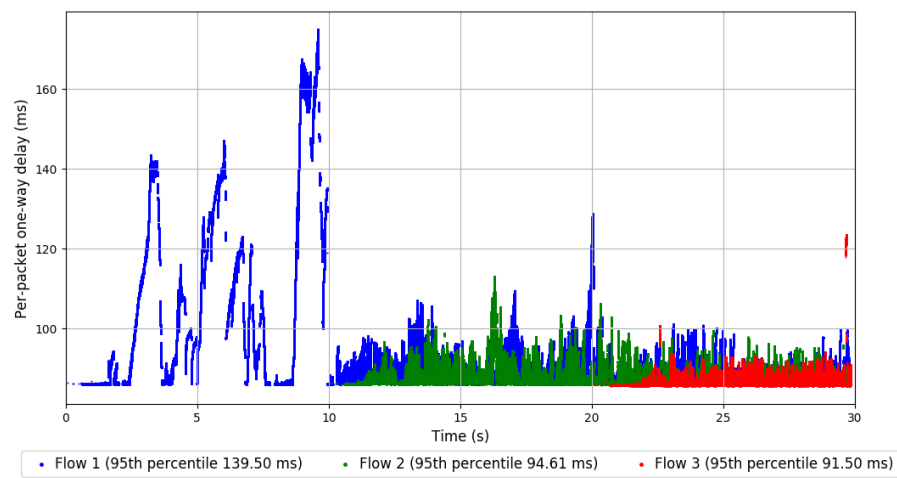
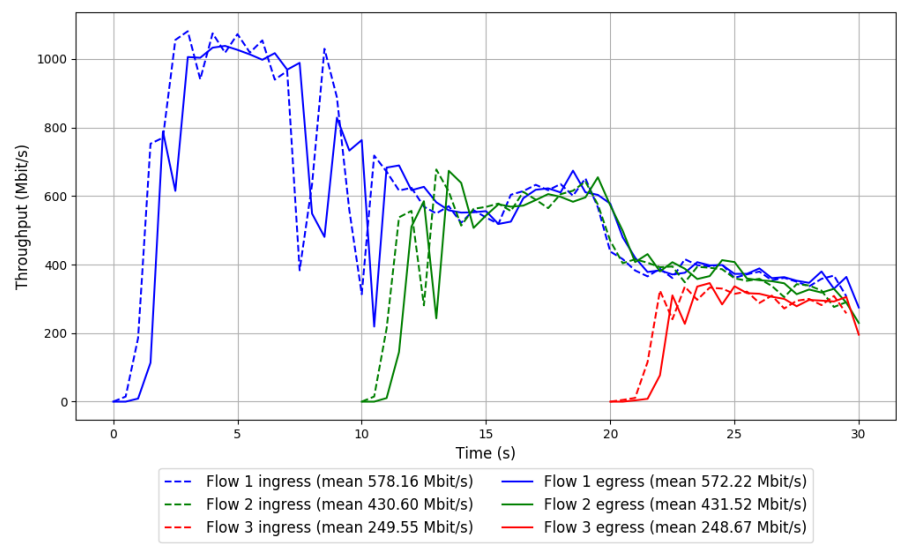


Run 2: Statistics of FillP

Start at: 2019-01-18 23:35:23
End at: 2019-01-18 23:35:53
Local clock offset: -0.156 ms
Remote clock offset: -0.035 ms

Below is generated by plot.py at 2019-01-19 03:01:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 939.49 Mbit/s
95th percentile per-packet one-way delay: 132.530 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 572.22 Mbit/s
95th percentile per-packet one-way delay: 139.502 ms
Loss rate: 1.60%
-- Flow 2:
Average throughput: 431.52 Mbit/s
95th percentile per-packet one-way delay: 94.607 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 248.67 Mbit/s
95th percentile per-packet one-way delay: 91.496 ms
Loss rate: 2.20%

Run 2: Report of FillP — Data Link

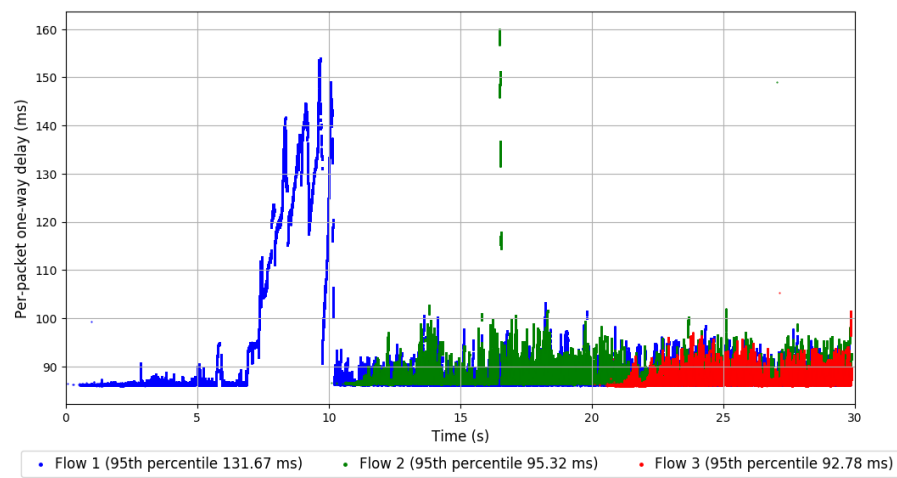
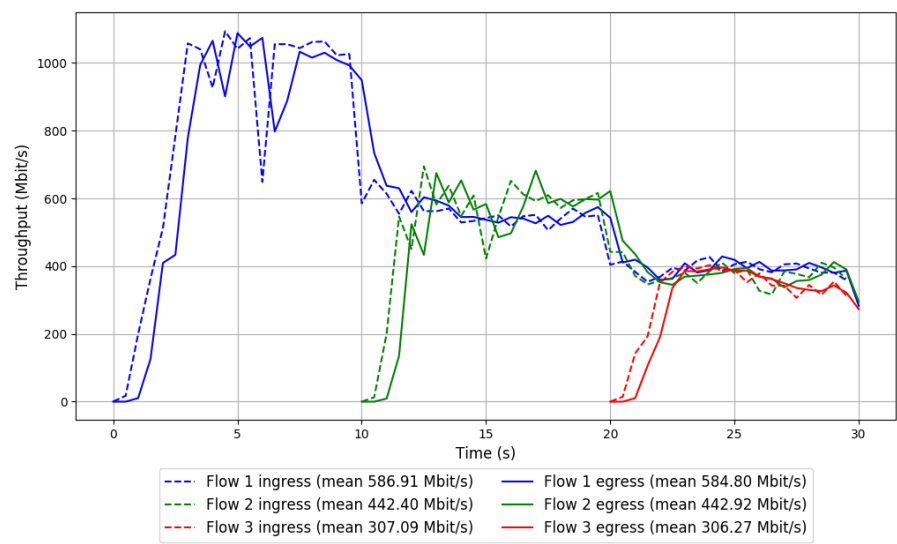


Run 3: Statistics of FillP

Start at: 2019-01-19 00:14:15
End at: 2019-01-19 00:14:45
Local clock offset: 0.116 ms
Remote clock offset: -0.079 ms

Below is generated by plot.py at 2019-01-19 03:04:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 978.93 Mbit/s
95th percentile per-packet one-way delay: 123.392 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 584.80 Mbit/s
95th percentile per-packet one-way delay: 131.671 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 442.92 Mbit/s
95th percentile per-packet one-way delay: 95.317 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 306.27 Mbit/s
95th percentile per-packet one-way delay: 92.778 ms
Loss rate: 1.92%

Run 3: Report of FillP — Data Link

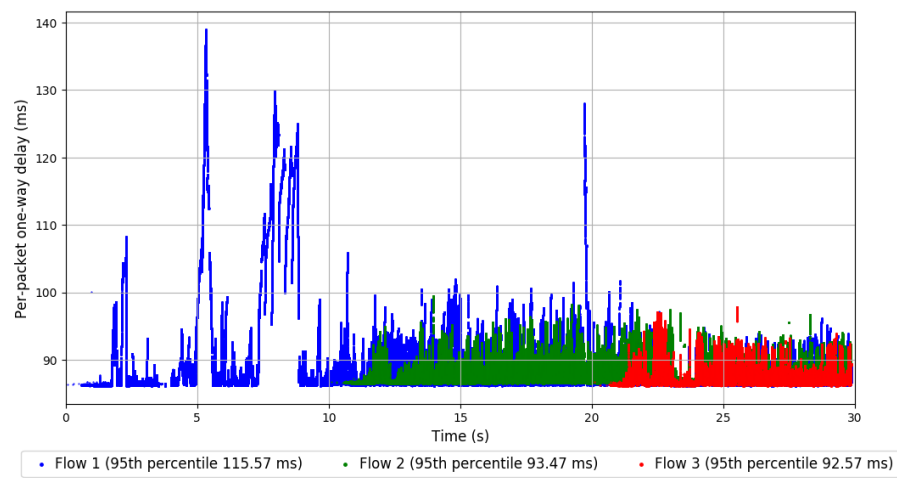
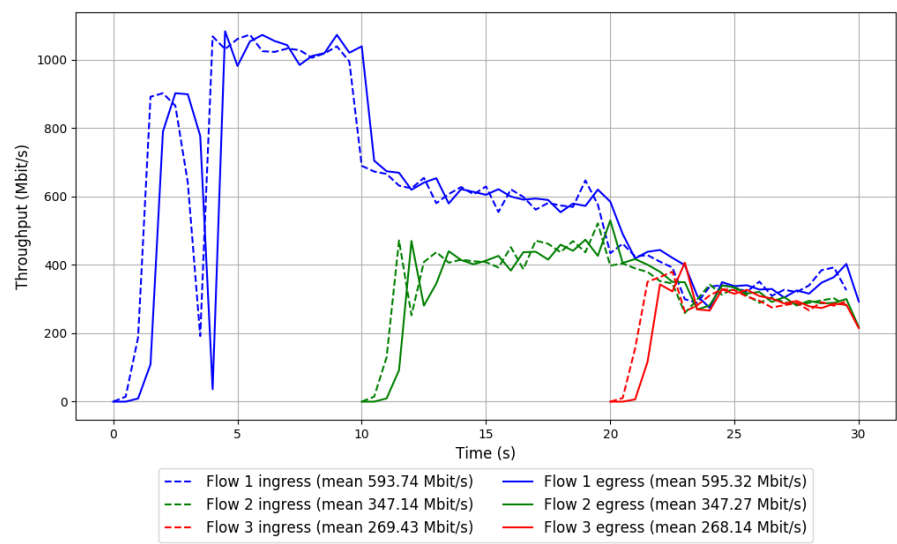


Run 4: Statistics of FillP

Start at: 2019-01-19 00:54:02
End at: 2019-01-19 00:54:32
Local clock offset: 0.574 ms
Remote clock offset: -0.083 ms

Below is generated by plot.py at 2019-01-19 03:04:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 913.46 Mbit/s
95th percentile per-packet one-way delay: 108.971 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 595.32 Mbit/s
95th percentile per-packet one-way delay: 115.571 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 347.27 Mbit/s
95th percentile per-packet one-way delay: 93.468 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 268.14 Mbit/s
95th percentile per-packet one-way delay: 92.568 ms
Loss rate: 2.26%

Run 4: Report of FillP — Data Link

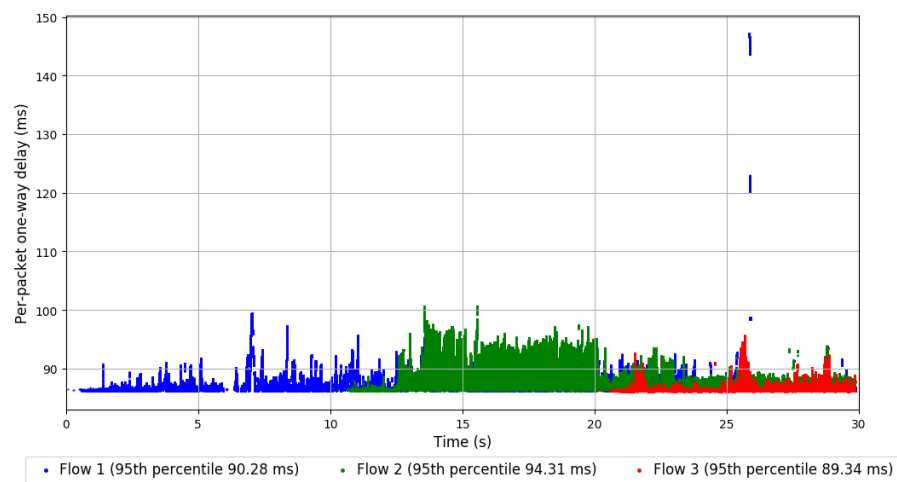
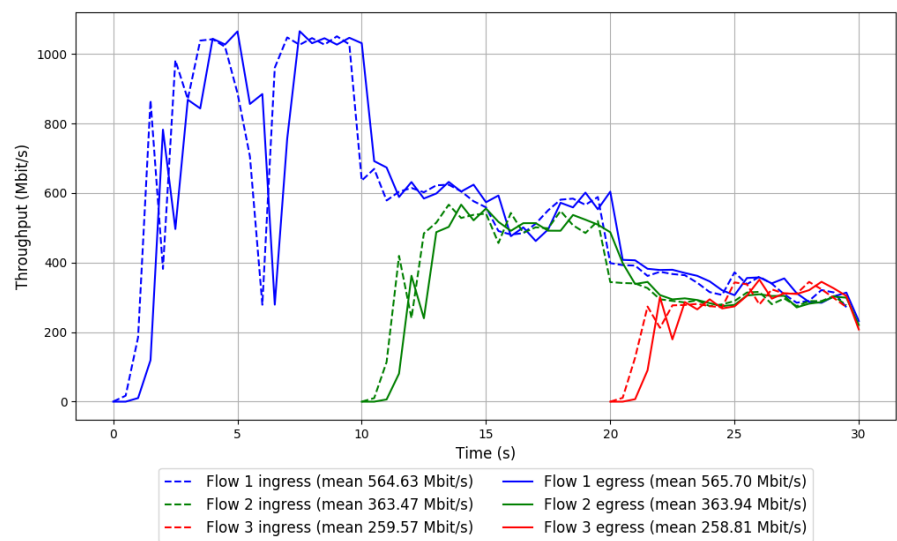


Run 5: Statistics of FillP

Start at: 2019-01-19 01:33:49
End at: 2019-01-19 01:34:19
Local clock offset: 0.356 ms
Remote clock offset: -0.056 ms

Below is generated by plot.py at 2019-01-19 03:04:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 891.91 Mbit/s
95th percentile per-packet one-way delay: 92.655 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 565.70 Mbit/s
95th percentile per-packet one-way delay: 90.282 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 363.94 Mbit/s
95th percentile per-packet one-way delay: 94.314 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 258.81 Mbit/s
95th percentile per-packet one-way delay: 89.336 ms
Loss rate: 2.08%

Run 5: Report of FillP — Data Link

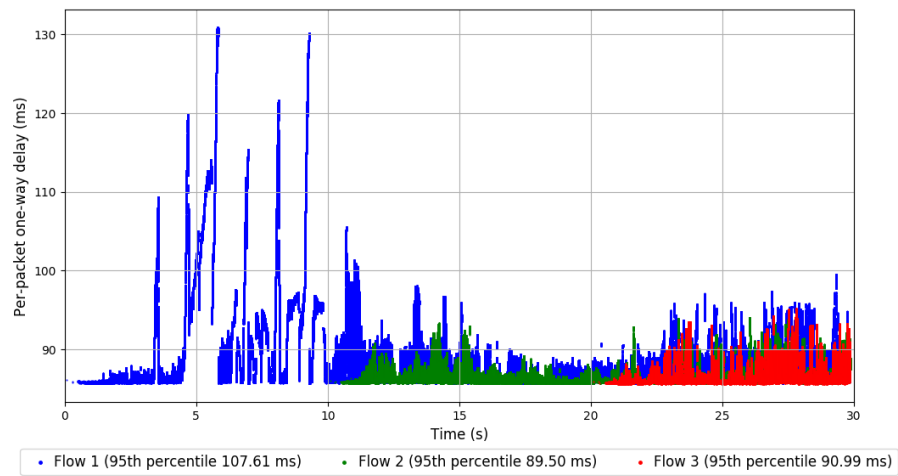
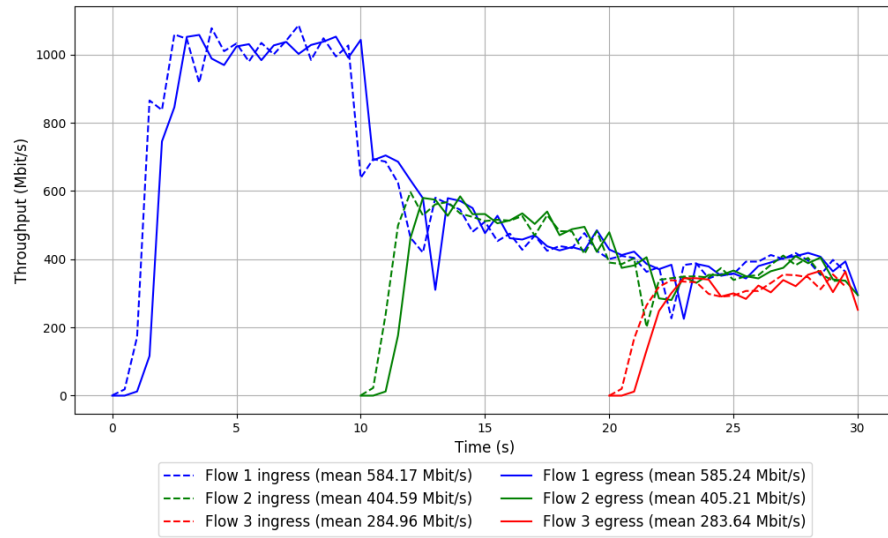


Run 1: Statistics of FillP-Sheep

Start at: 2019-01-18 23:01:12
End at: 2019-01-18 23:01:42
Local clock offset: -0.105 ms
Remote clock offset: -0.104 ms

Below is generated by plot.py at 2019-01-19 03:04:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 946.81 Mbit/s
95th percentile per-packet one-way delay: 101.136 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 585.24 Mbit/s
95th percentile per-packet one-way delay: 107.612 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 405.21 Mbit/s
95th percentile per-packet one-way delay: 89.502 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 283.64 Mbit/s
95th percentile per-packet one-way delay: 90.993 ms
Loss rate: 2.20%

Run 1: Report of FillP-Sheep — Data Link

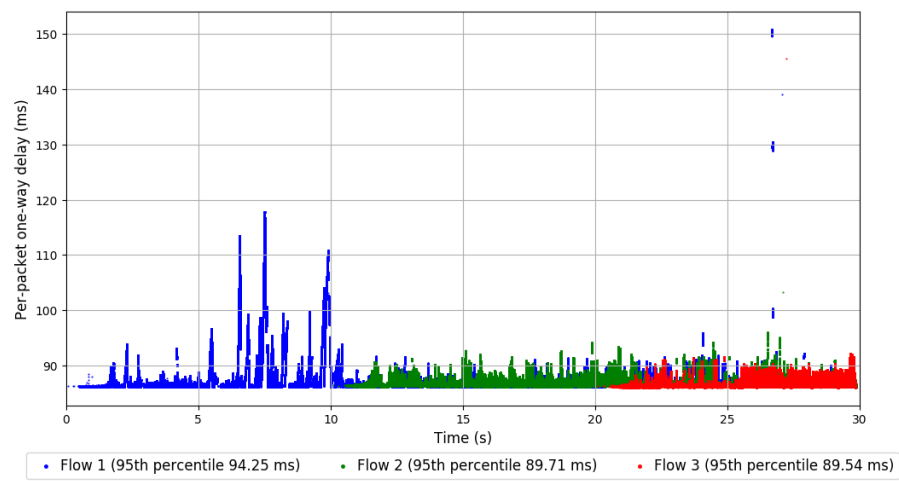
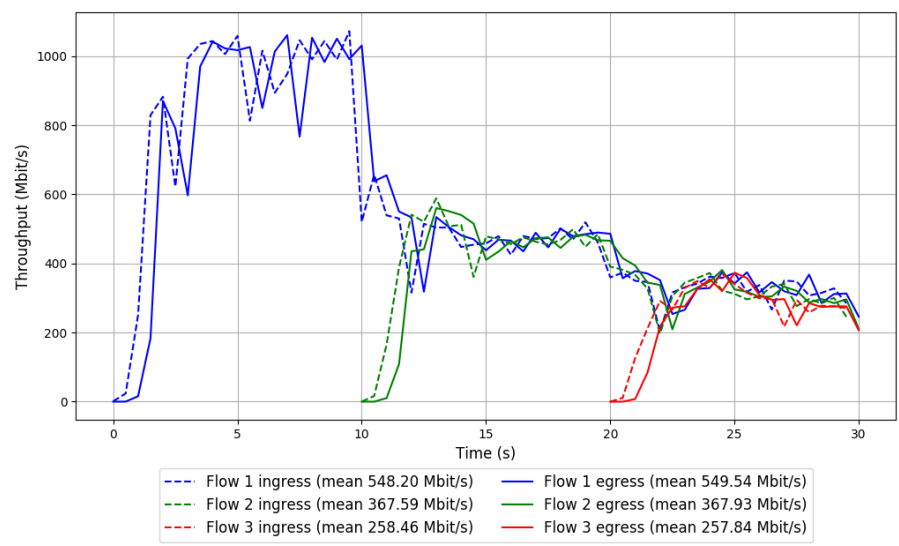


Run 2: Statistics of FillP-Sheep

Start at: 2019-01-18 23:40:57
End at: 2019-01-18 23:41:27
Local clock offset: 0.387 ms
Remote clock offset: -0.013 ms

Below is generated by plot.py at 2019-01-19 03:04:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 878.19 Mbit/s
95th percentile per-packet one-way delay: 91.212 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 549.54 Mbit/s
95th percentile per-packet one-way delay: 94.255 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 367.93 Mbit/s
95th percentile per-packet one-way delay: 89.708 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 257.84 Mbit/s
95th percentile per-packet one-way delay: 89.543 ms
Loss rate: 2.05%

Run 2: Report of FillP-Sheep — Data Link

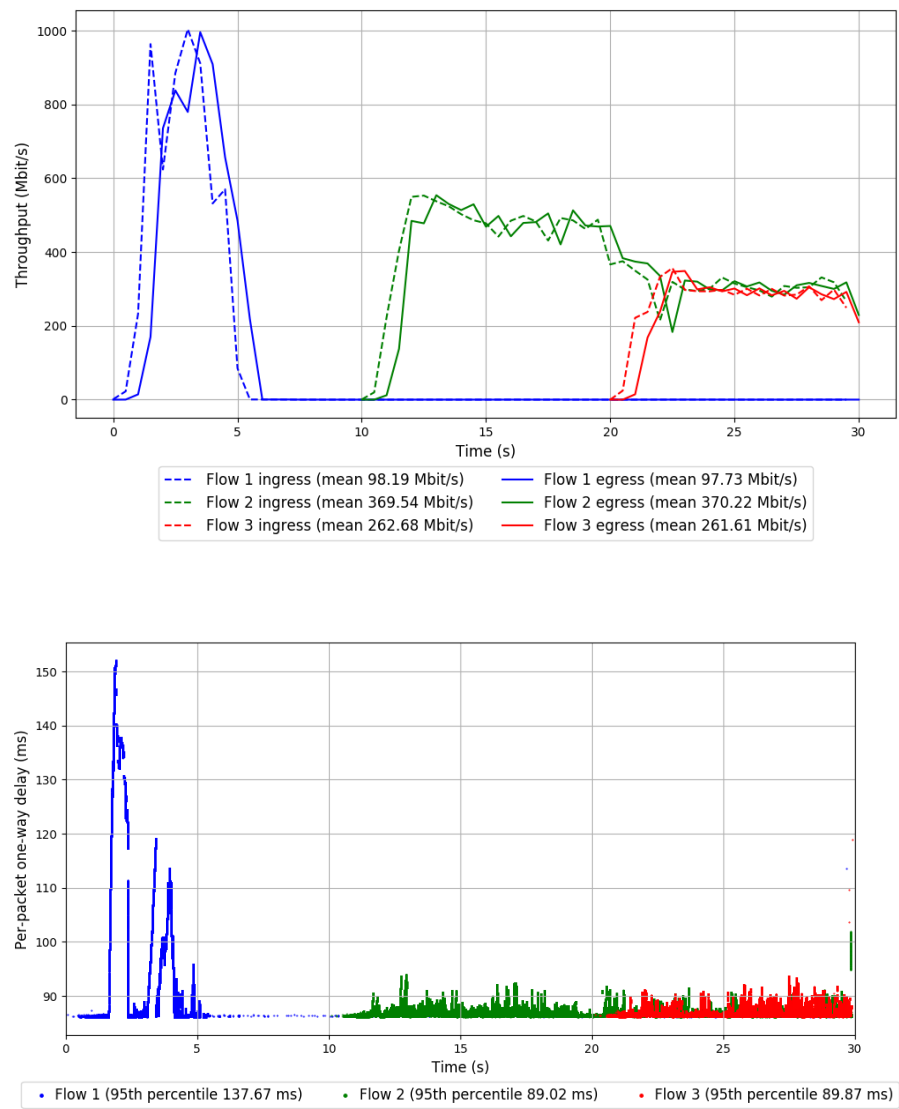


Run 3: Statistics of FillP-Sheep

Start at: 2019-01-19 00:20:15
End at: 2019-01-19 00:20:45
Local clock offset: 0.3 ms
Remote clock offset: -0.087 ms

Below is generated by plot.py at 2019-01-19 03:04:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 428.90 Mbit/s
95th percentile per-packet one-way delay: 114.653 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 97.73 Mbit/s
95th percentile per-packet one-way delay: 137.670 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 370.22 Mbit/s
95th percentile per-packet one-way delay: 89.020 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 261.61 Mbit/s
95th percentile per-packet one-way delay: 89.872 ms
Loss rate: 1.91%

Run 3: Report of FillP-Sheep — Data Link

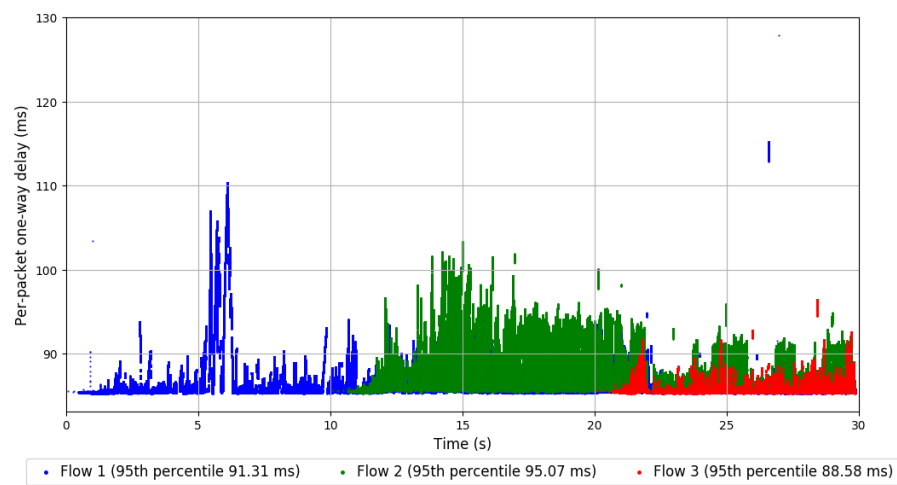
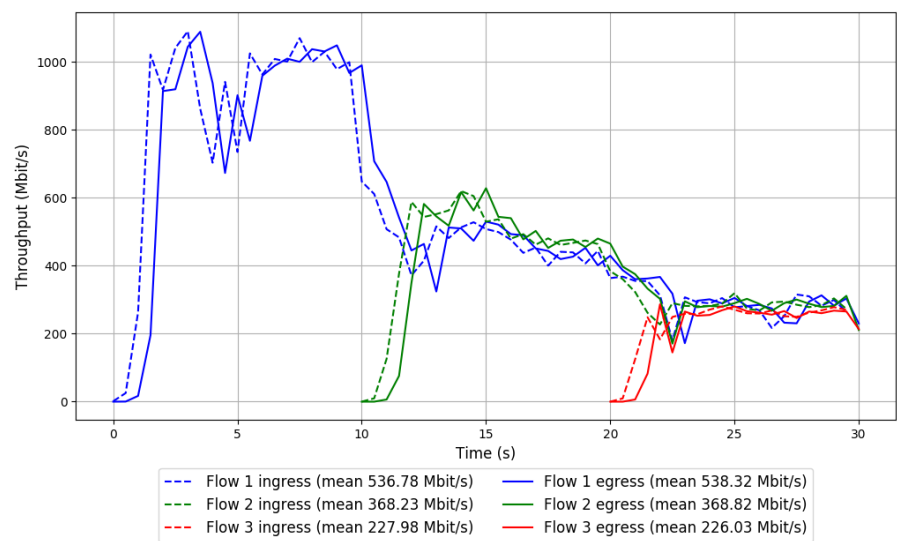


Run 4: Statistics of FillP-Sheep

Start at: 2019-01-19 00:59:57
End at: 2019-01-19 01:00:27
Local clock offset: -0.376 ms
Remote clock offset: -0.111 ms

Below is generated by plot.py at 2019-01-19 03:08:12
Datalink statistics
-- Total of 3 flows:
Average throughput: 857.09 Mbit/s
95th percentile per-packet one-way delay: 93.684 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 538.32 Mbit/s
95th percentile per-packet one-way delay: 91.315 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 368.82 Mbit/s
95th percentile per-packet one-way delay: 95.072 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 226.03 Mbit/s
95th percentile per-packet one-way delay: 88.585 ms
Loss rate: 2.40%

Run 4: Report of FillP-Sheep — Data Link

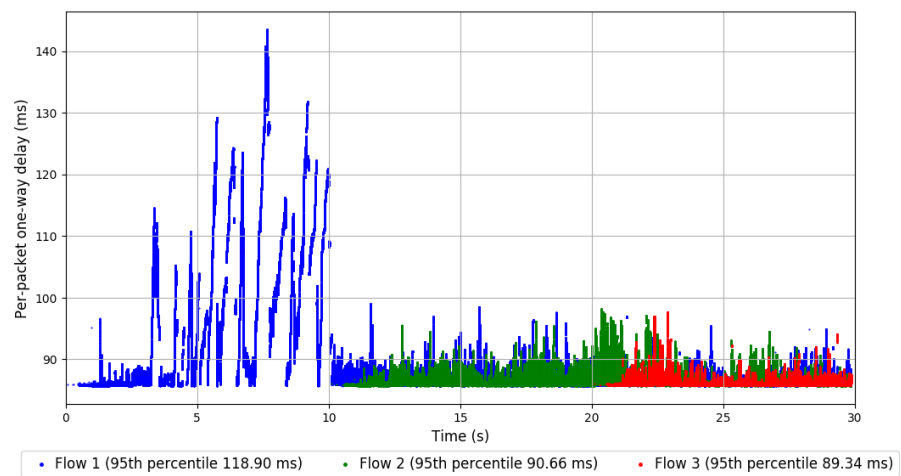
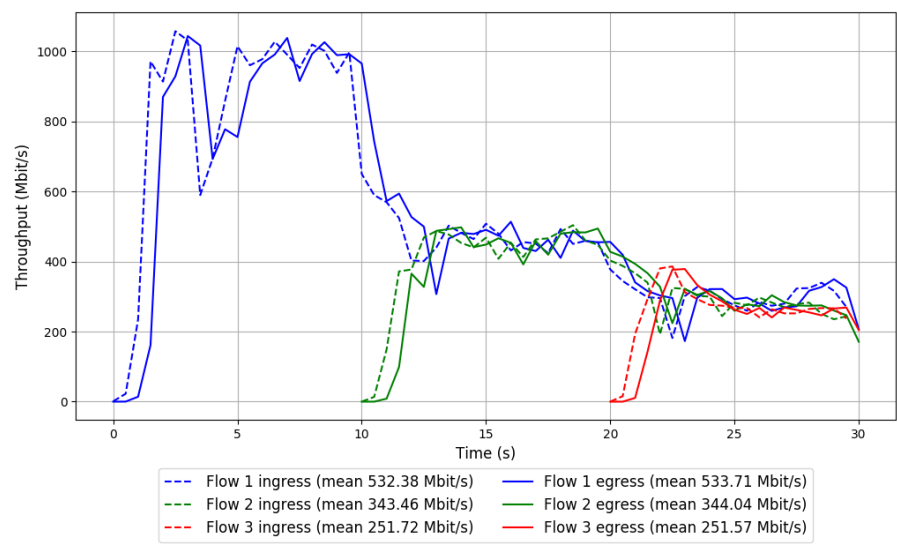


Run 5: Statistics of FillP-Sheep

Start at: 2019-01-19 01:39:06
End at: 2019-01-19 01:39:36
Local clock offset: -0.057 ms
Remote clock offset: -0.077 ms

Below is generated by plot.py at 2019-01-19 03:12:54
Datalink statistics
-- Total of 3 flows:
Average throughput: 844.25 Mbit/s
95th percentile per-packet one-way delay: 112.615 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 533.71 Mbit/s
95th percentile per-packet one-way delay: 118.901 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 344.04 Mbit/s
95th percentile per-packet one-way delay: 90.663 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 251.57 Mbit/s
95th percentile per-packet one-way delay: 89.341 ms
Loss rate: 1.79%

Run 5: Report of FillP-Sheep — Data Link

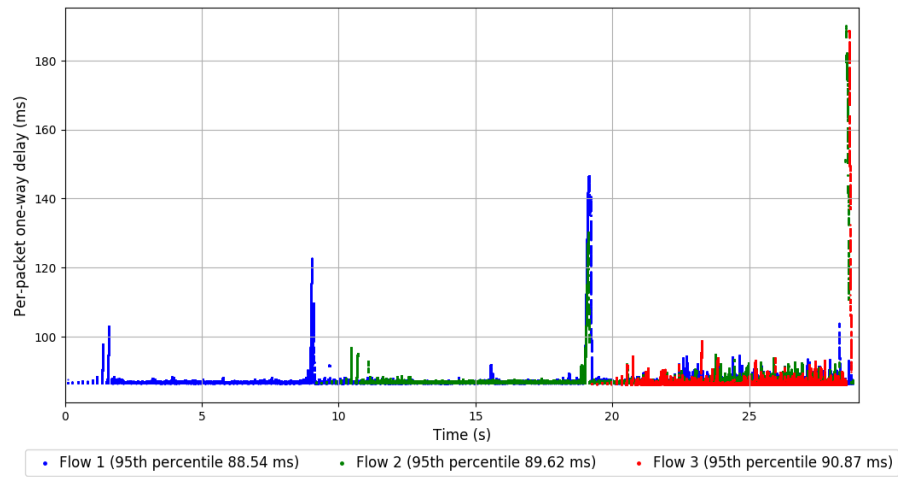
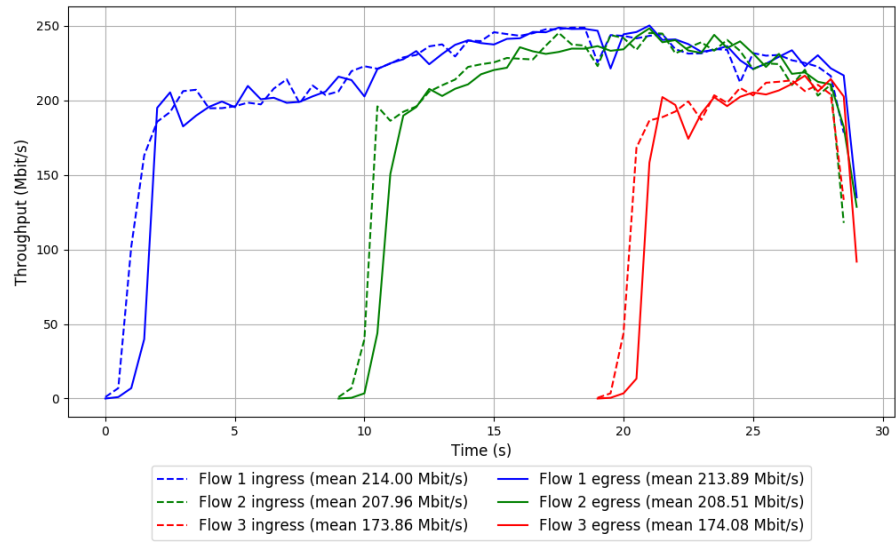


```
Run 1: Statistics of Indigo

Start at: 2019-01-18 22:57:26
End at: 2019-01-18 22:57:56
Local clock offset: 0.408 ms
Remote clock offset: -0.078 ms

# Below is generated by plot.py at 2019-01-19 03:17:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 413.84 Mbit/s
95th percentile per-packet one-way delay: 89.276 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 213.89 Mbit/s
95th percentile per-packet one-way delay: 88.542 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 208.51 Mbit/s
95th percentile per-packet one-way delay: 89.616 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 174.08 Mbit/s
95th percentile per-packet one-way delay: 90.869 ms
Loss rate: 2.26%
```

Run 1: Report of Indigo — Data Link

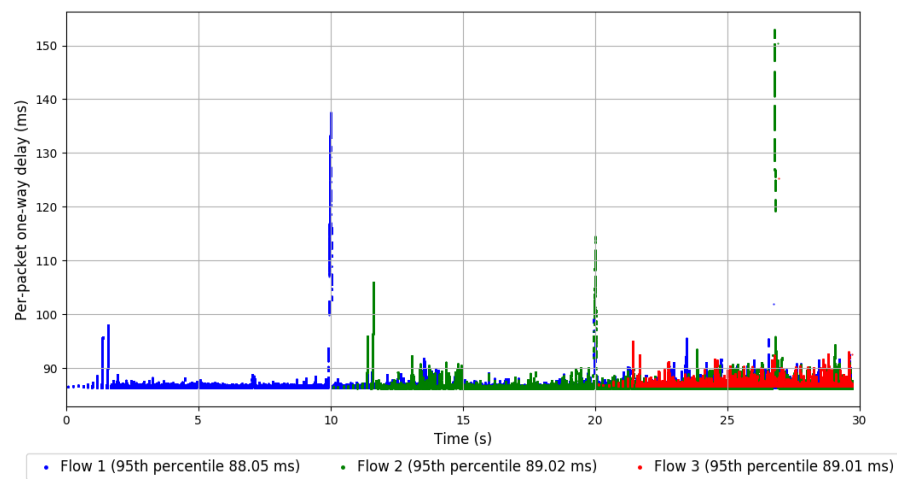
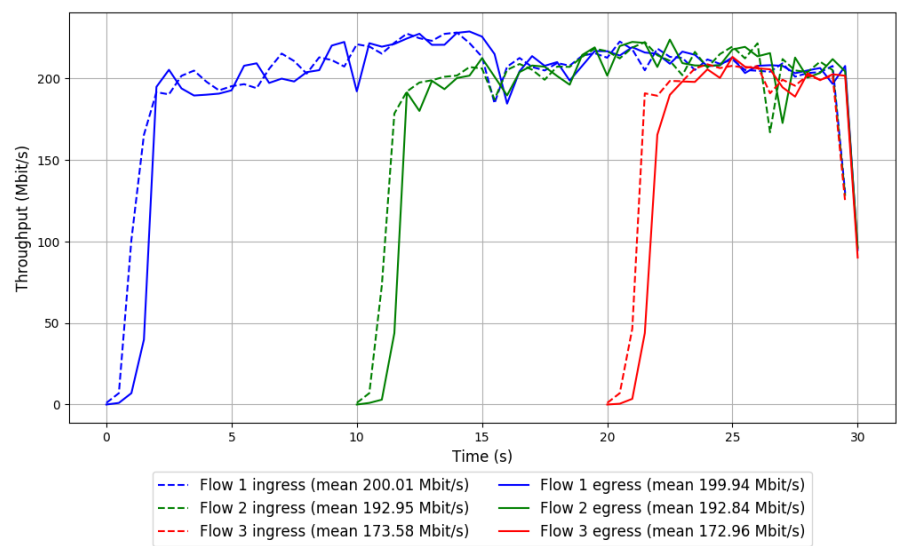


Run 2: Statistics of Indigo

Start at: 2019-01-18 23:37:25
End at: 2019-01-18 23:37:55
Local clock offset: 0.573 ms
Remote clock offset: -0.032 ms

Below is generated by plot.py at 2019-01-19 03:17:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 383.50 Mbit/s
95th percentile per-packet one-way delay: 88.607 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 199.94 Mbit/s
95th percentile per-packet one-way delay: 88.050 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 192.84 Mbit/s
95th percentile per-packet one-way delay: 89.020 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 172.96 Mbit/s
95th percentile per-packet one-way delay: 89.008 ms
Loss rate: 2.07%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2019-01-19 00:16:28

End at: 2019-01-19 00:16:58

Local clock offset: -0.161 ms

Remote clock offset: 0.01 ms

Below is generated by plot.py at 2019-01-19 03:18:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 399.84 Mbit/s

95th percentile per-packet one-way delay: 89.143 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 212.09 Mbit/s

95th percentile per-packet one-way delay: 88.375 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 199.41 Mbit/s

95th percentile per-packet one-way delay: 90.056 ms

Loss rate: 0.95%

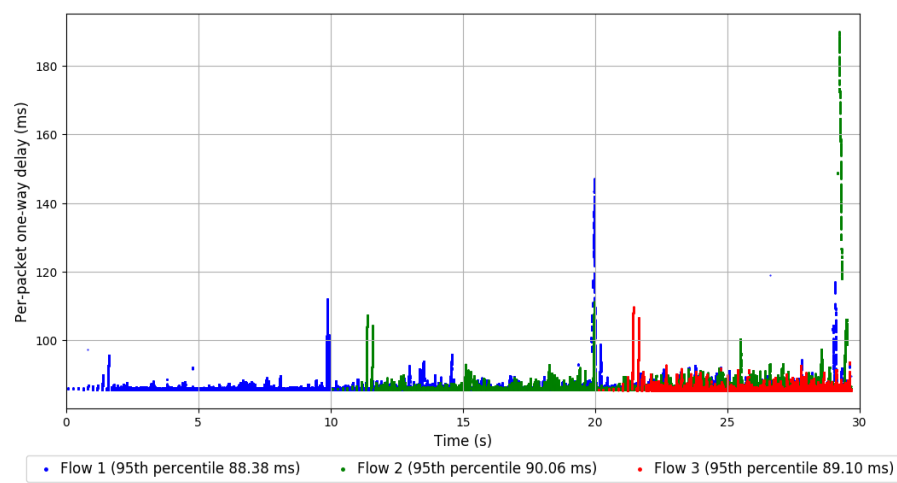
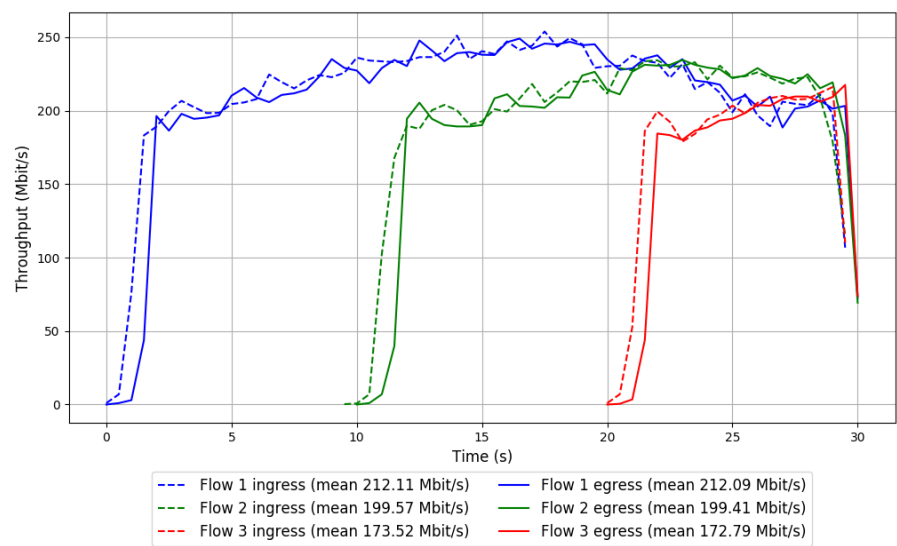
-- Flow 3:

Average throughput: 172.79 Mbit/s

95th percentile per-packet one-way delay: 89.102 ms

Loss rate: 2.19%

Run 3: Report of Indigo — Data Link

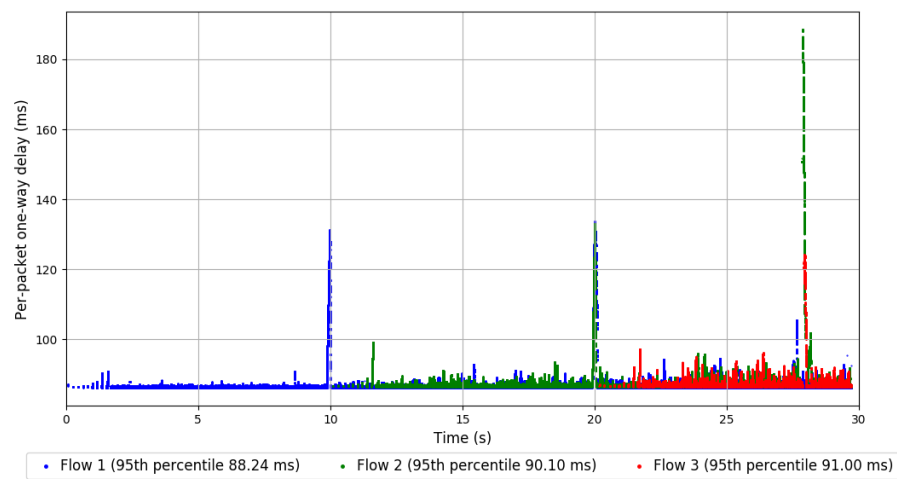
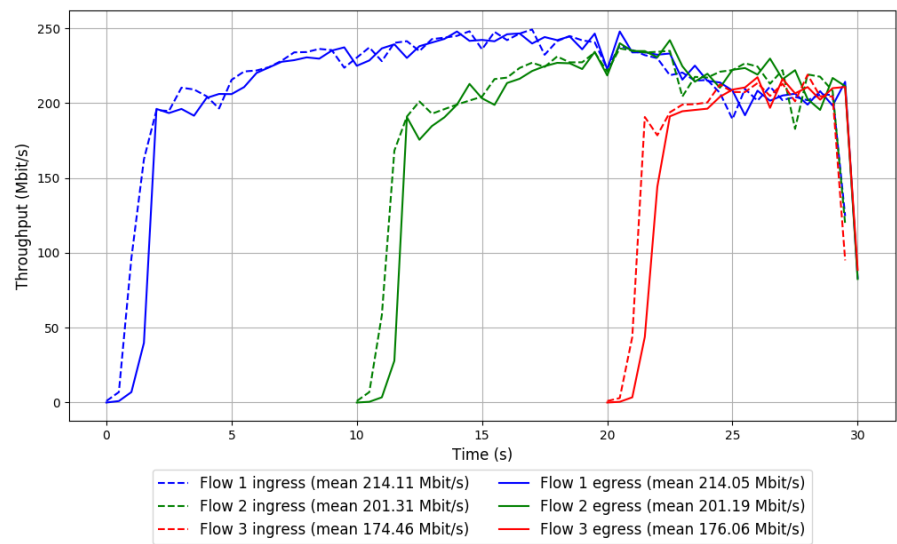


Run 4: Statistics of Indigo

Start at: 2019-01-19 00:56:09
End at: 2019-01-19 00:56:39
Local clock offset: 0.53 ms
Remote clock offset: -0.104 ms

```
# Below is generated by plot.py at 2019-01-19 03:18:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 403.72 Mbit/s
95th percentile per-packet one-way delay: 89.455 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 214.05 Mbit/s
95th percentile per-packet one-way delay: 88.239 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 201.19 Mbit/s
95th percentile per-packet one-way delay: 90.096 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 176.06 Mbit/s
95th percentile per-packet one-way delay: 90.995 ms
Loss rate: 1.17%
```

Run 4: Report of Indigo — Data Link

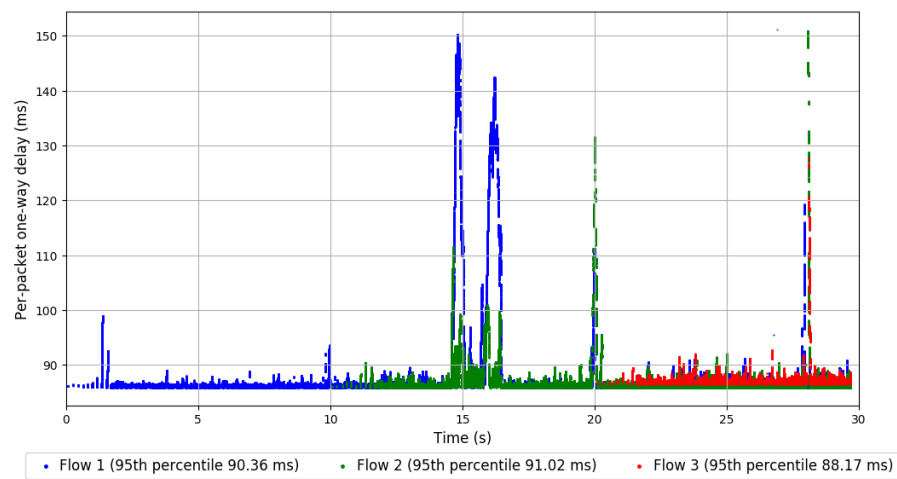
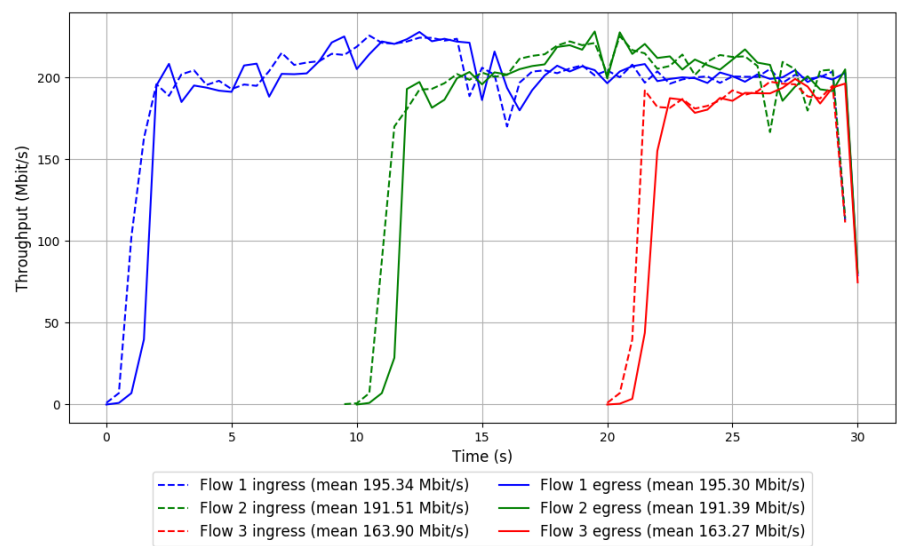


Run 5: Statistics of Indigo

Start at: 2019-01-19 01:35:46
End at: 2019-01-19 01:36:16
Local clock offset: 0.11 ms
Remote clock offset: -0.069 ms

Below is generated by plot.py at 2019-01-19 03:18:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 374.82 Mbit/s
95th percentile per-packet one-way delay: 89.738 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 195.30 Mbit/s
95th percentile per-packet one-way delay: 90.357 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 191.39 Mbit/s
95th percentile per-packet one-way delay: 91.018 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 163.27 Mbit/s
95th percentile per-packet one-way delay: 88.174 ms
Loss rate: 2.14%

Run 5: Report of Indigo — Data Link



Run 1: Statistics of Indigo-MusesC3

Start at: 2019-01-18 22:37:23

End at: 2019-01-18 22:37:53

Local clock offset: 0.051 ms

Remote clock offset: -0.17 ms

Below is generated by plot.py at 2019-01-19 03:20:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 822.06 Mbit/s

95th percentile per-packet one-way delay: 122.895 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 517.19 Mbit/s

95th percentile per-packet one-way delay: 127.654 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 415.31 Mbit/s

95th percentile per-packet one-way delay: 96.811 ms

Loss rate: 1.17%

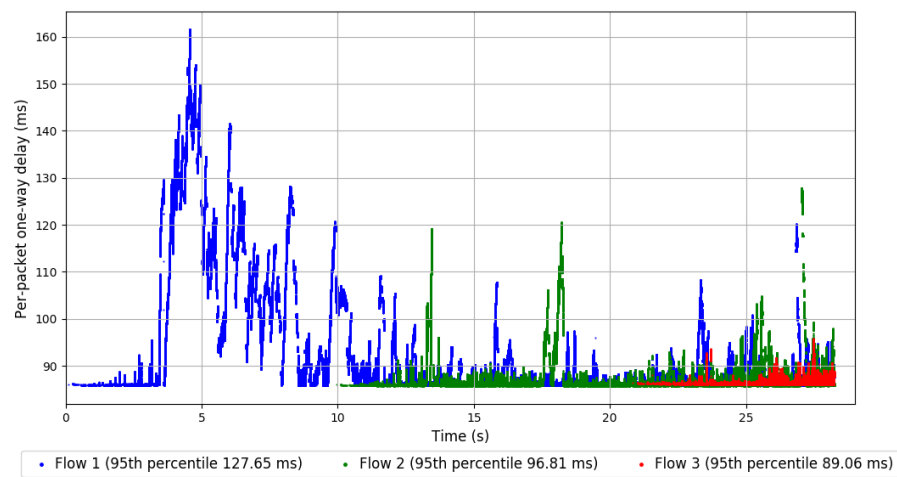
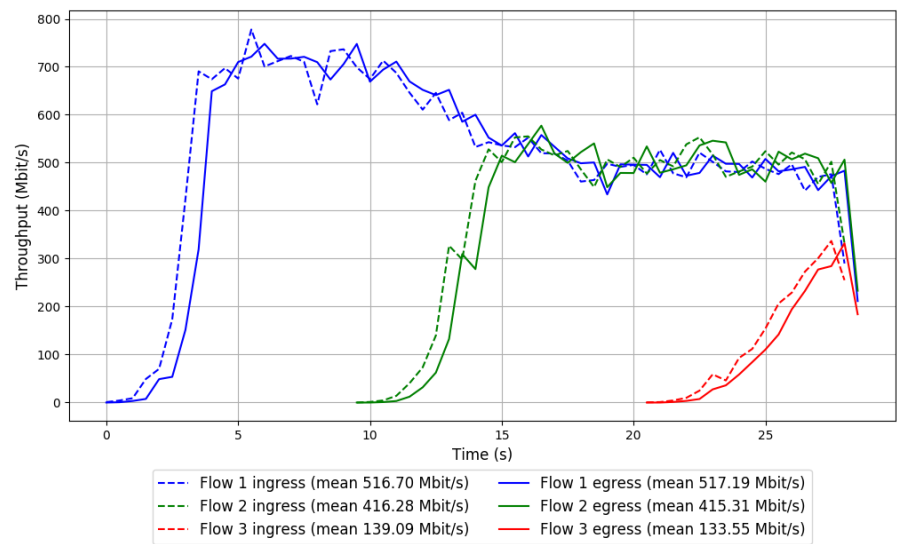
-- Flow 3:

Average throughput: 133.55 Mbit/s

95th percentile per-packet one-way delay: 89.059 ms

Loss rate: 6.19%

Run 1: Report of Indigo-MusesC3 — Data Link

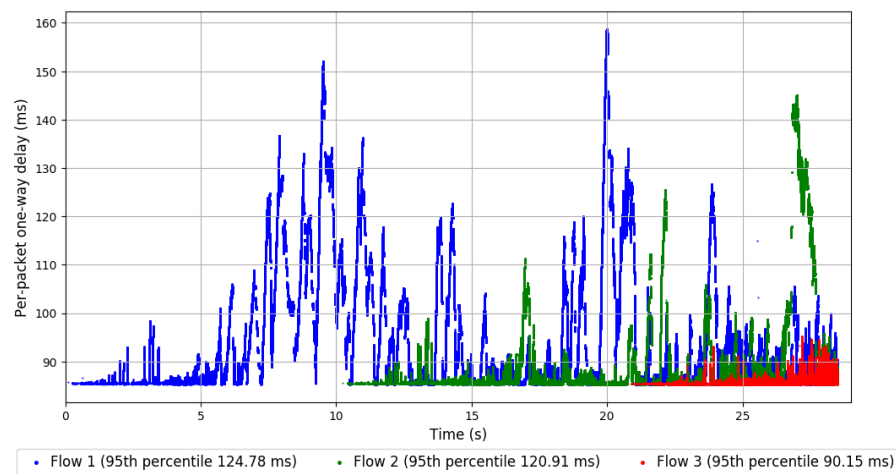
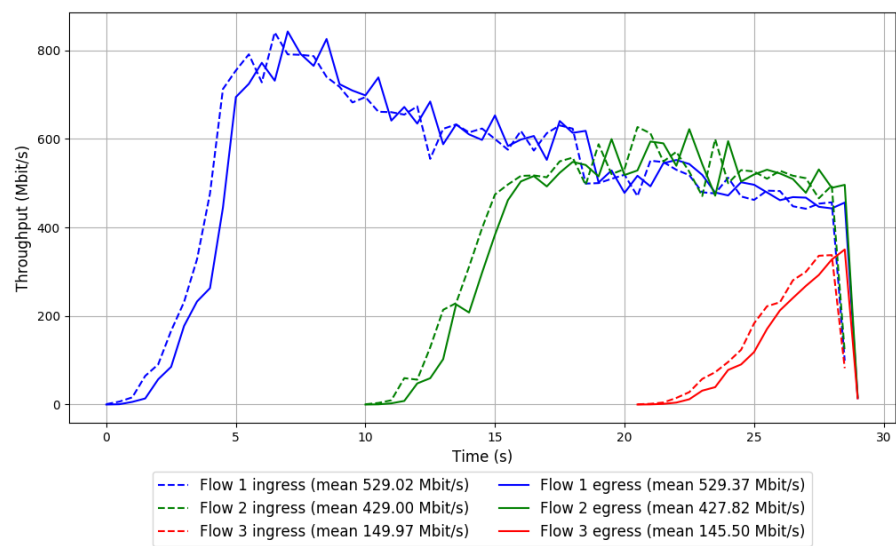


Run 2: Statistics of Indigo-MusesC3

Start at: 2019-01-18 23:16:50
End at: 2019-01-18 23:17:20
Local clock offset: -0.418 ms
Remote clock offset: -0.035 ms

Below is generated by plot.py at 2019-01-19 03:25:23
Datalink statistics
-- Total of 3 flows:
Average throughput: 844.01 Mbit/s
95th percentile per-packet one-way delay: 123.121 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 529.37 Mbit/s
95th percentile per-packet one-way delay: 124.775 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 427.82 Mbit/s
95th percentile per-packet one-way delay: 120.909 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 145.50 Mbit/s
95th percentile per-packet one-way delay: 90.148 ms
Loss rate: 5.07%

Run 2: Report of Indigo-MusesC3 — Data Link

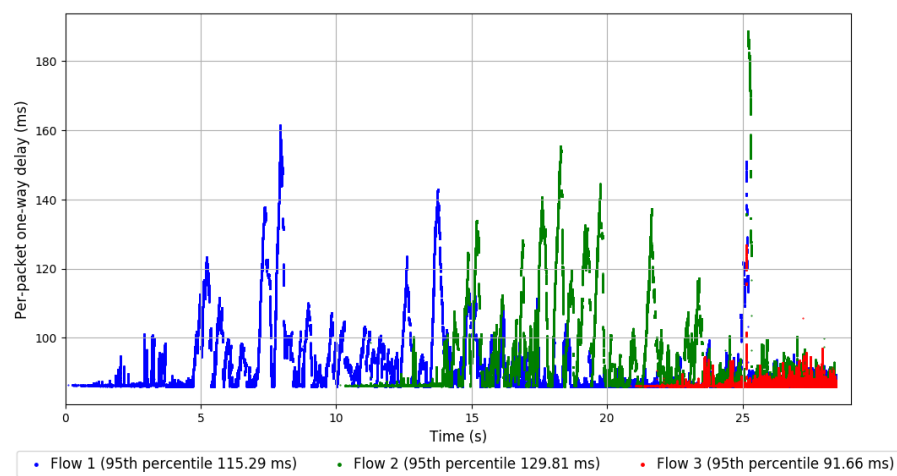
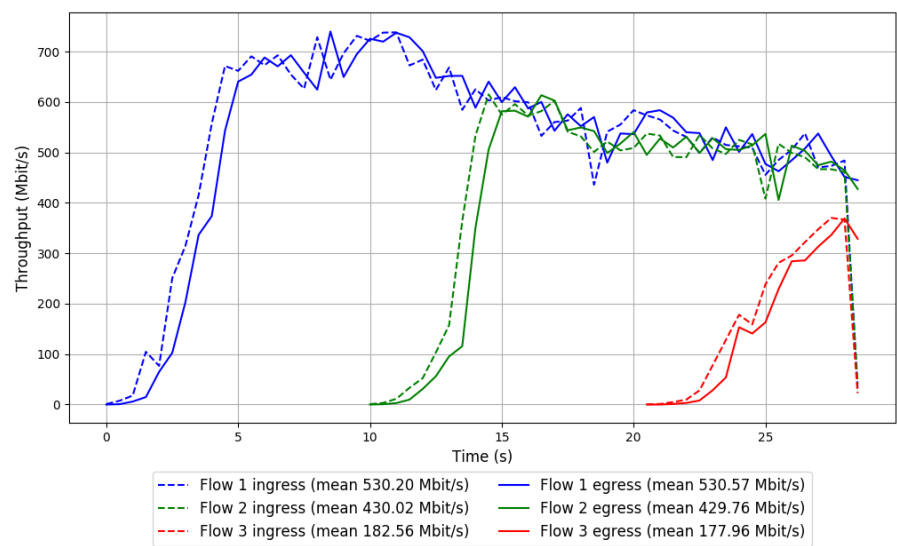


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-01-18 23:56:00
End at: 2019-01-18 23:56:30
Local clock offset: 0.22 ms
Remote clock offset: -0.074 ms

Below is generated by plot.py at 2019-01-19 03:31:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 855.45 Mbit/s
95th percentile per-packet one-way delay: 121.760 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 530.57 Mbit/s
95th percentile per-packet one-way delay: 115.294 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 429.76 Mbit/s
95th percentile per-packet one-way delay: 129.809 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 177.96 Mbit/s
95th percentile per-packet one-way delay: 91.659 ms
Loss rate: 4.72%

Run 3: Report of Indigo-MusesC3 — Data Link

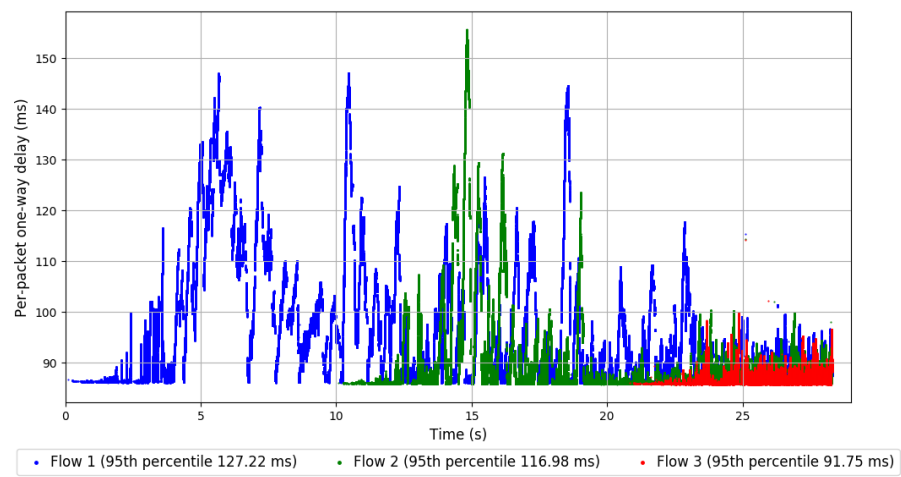
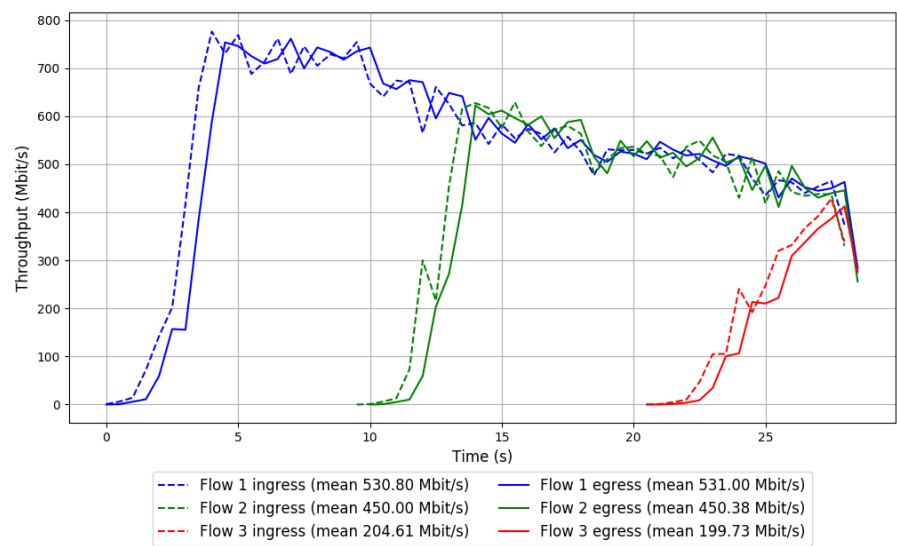


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-01-19 00:35:00
End at: 2019-01-19 00:35:30
Local clock offset: 0.103 ms
Remote clock offset: -0.097 ms

Below is generated by plot.py at 2019-01-19 03:34:35
Datalink statistics
-- Total of 3 flows:
Average throughput: 874.74 Mbit/s
95th percentile per-packet one-way delay: 124.055 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 531.00 Mbit/s
95th percentile per-packet one-way delay: 127.224 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 450.38 Mbit/s
95th percentile per-packet one-way delay: 116.980 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 199.73 Mbit/s
95th percentile per-packet one-way delay: 91.749 ms
Loss rate: 4.58%

Run 4: Report of Indigo-MusesC3 — Data Link

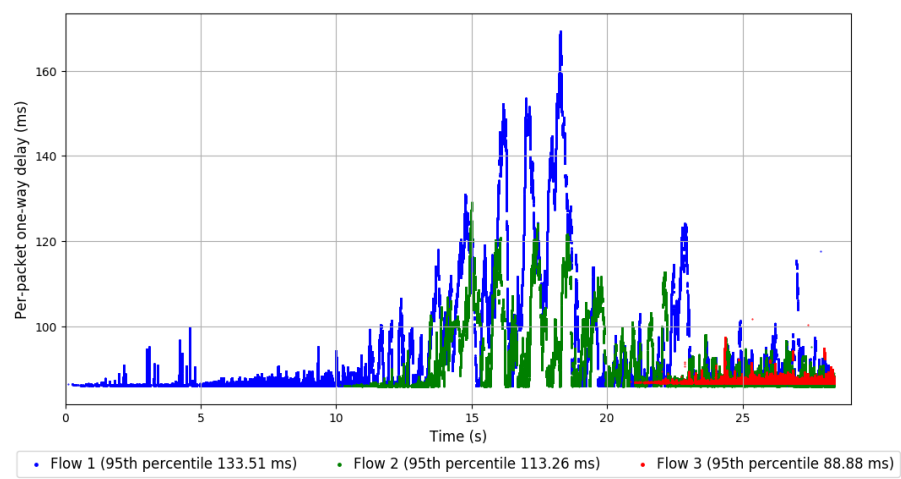
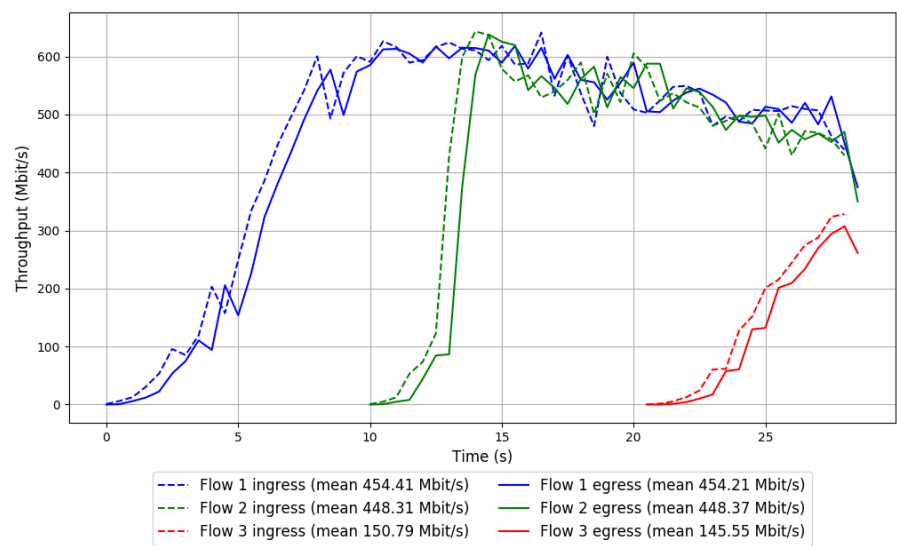


Run 5: Statistics of Indigo-MusesC3

Start at: 2019-01-19 01:15:24
End at: 2019-01-19 01:15:54
Local clock offset: 0.018 ms
Remote clock offset: -0.101 ms

Below is generated by plot.py at 2019-01-19 03:34:35
Datalink statistics
-- Total of 3 flows:
Average throughput: 782.10 Mbit/s
95th percentile per-packet one-way delay: 121.139 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 454.21 Mbit/s
95th percentile per-packet one-way delay: 133.506 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 448.37 Mbit/s
95th percentile per-packet one-way delay: 113.256 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 145.55 Mbit/s
95th percentile per-packet one-way delay: 88.876 ms
Loss rate: 5.64%

Run 5: Report of Indigo-MusesC3 — Data Link

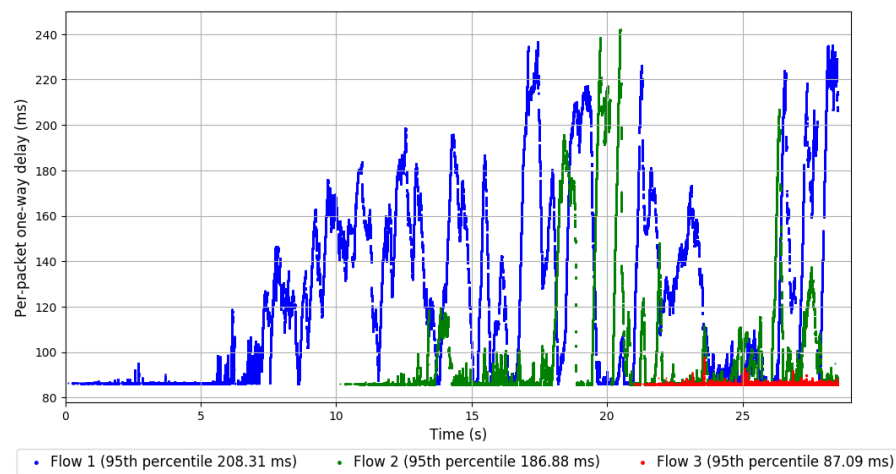
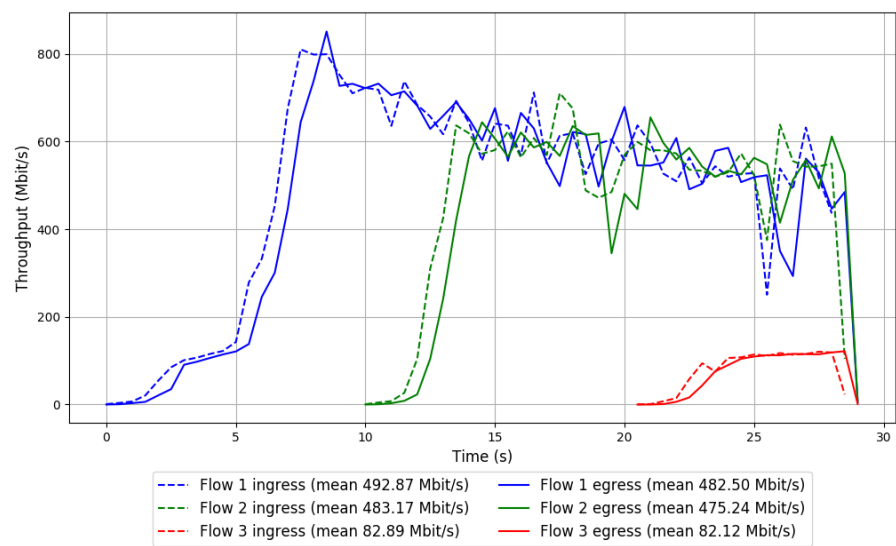


Run 1: Statistics of Indigo-MusesC5

Start at: 2019-01-18 23:04:33
End at: 2019-01-18 23:05:03
Local clock offset: -0.015 ms
Remote clock offset: -0.092 ms

Below is generated by plot.py at 2019-01-19 03:34:54
Datalink statistics
-- Total of 3 flows:
Average throughput: 811.56 Mbit/s
95th percentile per-packet one-way delay: 201.820 ms
Loss rate: 2.21%
-- Flow 1:
Average throughput: 482.50 Mbit/s
95th percentile per-packet one-way delay: 208.311 ms
Loss rate: 1.95%
-- Flow 2:
Average throughput: 475.24 Mbit/s
95th percentile per-packet one-way delay: 186.877 ms
Loss rate: 2.56%
-- Flow 3:
Average throughput: 82.12 Mbit/s
95th percentile per-packet one-way delay: 87.089 ms
Loss rate: 3.09%

Run 1: Report of Indigo-MusesC5 — Data Link

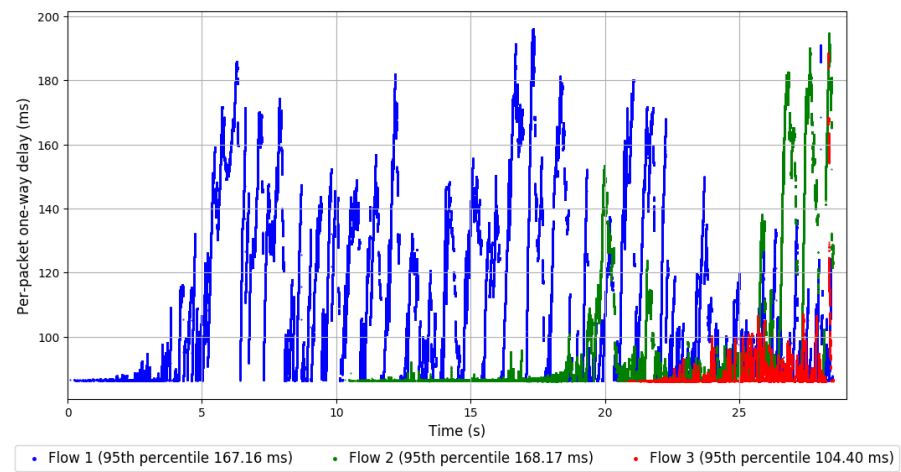
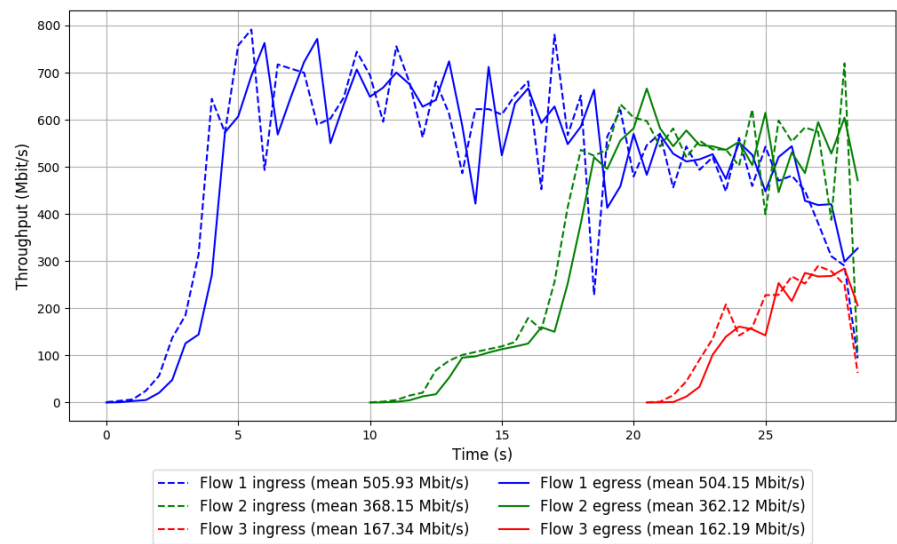


Run 2: Statistics of Indigo-MusesC5

Start at: 2019-01-18 23:44:15
End at: 2019-01-18 23:44:45
Local clock offset: 0.494 ms
Remote clock offset: -0.014 ms

Below is generated by plot.py at 2019-01-19 03:34:54
Datalink statistics
-- Total of 3 flows:
Average throughput: 780.30 Mbit/s
95th percentile per-packet one-way delay: 166.927 ms
Loss rate: 1.69%
-- Flow 1:
Average throughput: 504.15 Mbit/s
95th percentile per-packet one-way delay: 167.159 ms
Loss rate: 0.96%
-- Flow 2:
Average throughput: 362.12 Mbit/s
95th percentile per-packet one-way delay: 168.174 ms
Loss rate: 2.57%
-- Flow 3:
Average throughput: 162.19 Mbit/s
95th percentile per-packet one-way delay: 104.396 ms
Loss rate: 5.19%

Run 2: Report of Indigo-MusesC5 — Data Link

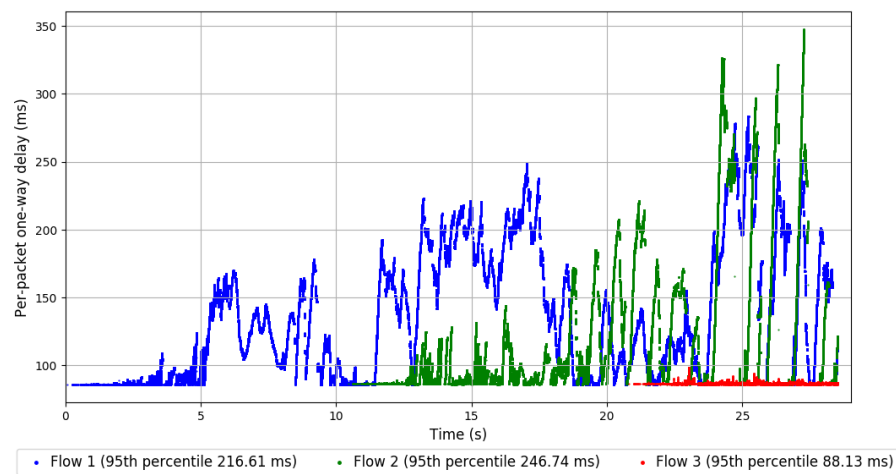
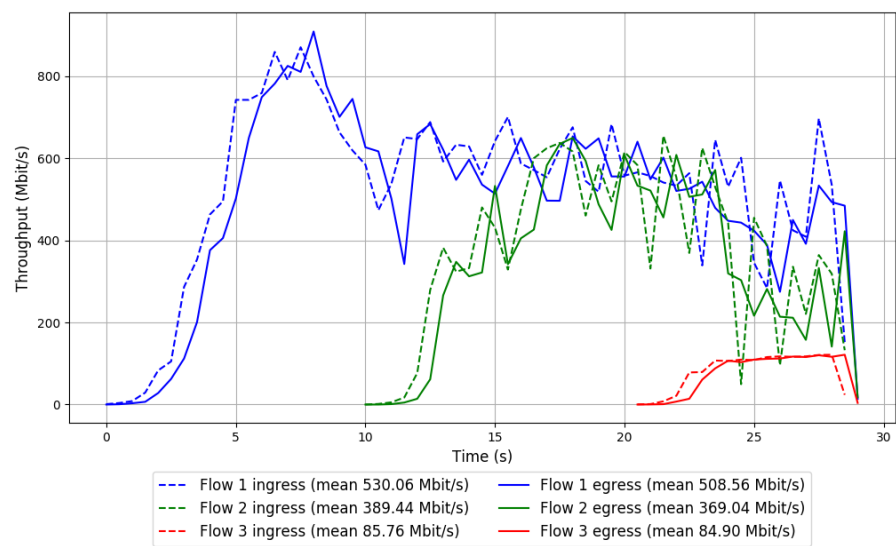


Run 3: Statistics of Indigo-MusesC5

Start at: 2019-01-19 00:23:09
End at: 2019-01-19 00:23:39
Local clock offset: 0.03 ms
Remote clock offset: -0.071 ms

Below is generated by plot.py at 2019-01-19 03:34:54
Datalink statistics
-- Total of 3 flows:
Average throughput: 766.07 Mbit/s
95th percentile per-packet one-way delay: 221.832 ms
Loss rate: 5.06%
-- Flow 1:
Average throughput: 508.56 Mbit/s
95th percentile per-packet one-way delay: 216.606 ms
Loss rate: 4.64%
-- Flow 2:
Average throughput: 369.04 Mbit/s
95th percentile per-packet one-way delay: 246.736 ms
Loss rate: 6.14%
-- Flow 3:
Average throughput: 84.90 Mbit/s
95th percentile per-packet one-way delay: 88.129 ms
Loss rate: 3.15%

Run 3: Report of Indigo-MusesC5 — Data Link



Run 4: Statistics of Indigo-MusesC5

Start at: 2019-01-19 01:03:15

End at: 2019-01-19 01:03:45

Local clock offset: 0.219 ms

Remote clock offset: -0.1 ms

Below is generated by plot.py at 2019-01-19 03:37:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 781.45 Mbit/s

95th percentile per-packet one-way delay: 181.584 ms

Loss rate: 1.95%

-- Flow 1:

Average throughput: 455.44 Mbit/s

95th percentile per-packet one-way delay: 172.441 ms

Loss rate: 1.30%

-- Flow 2:

Average throughput: 472.77 Mbit/s

95th percentile per-packet one-way delay: 197.918 ms

Loss rate: 2.82%

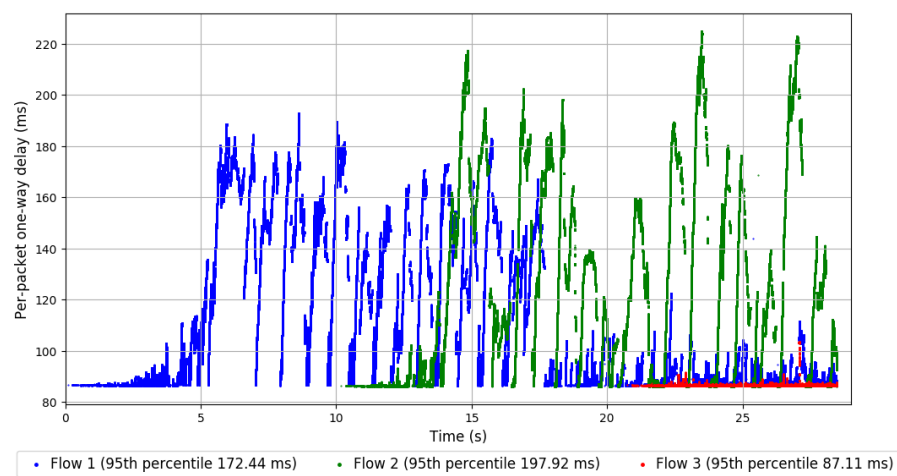
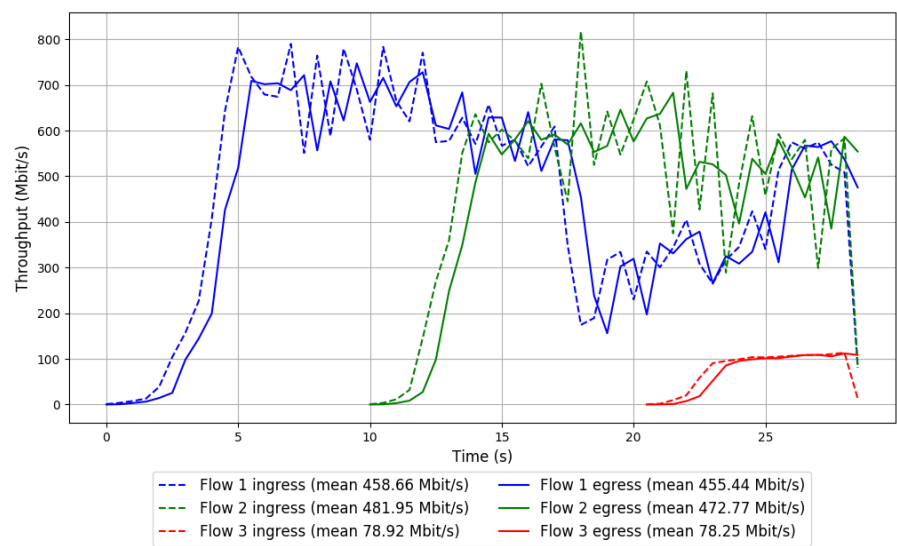
-- Flow 3:

Average throughput: 78.25 Mbit/s

95th percentile per-packet one-way delay: 87.112 ms

Loss rate: 3.05%

Run 4: Report of Indigo-MusesC5 — Data Link

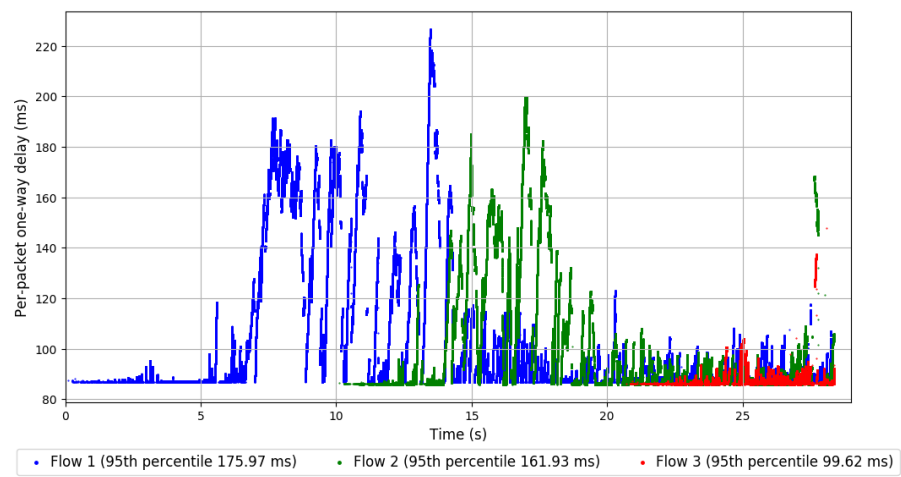
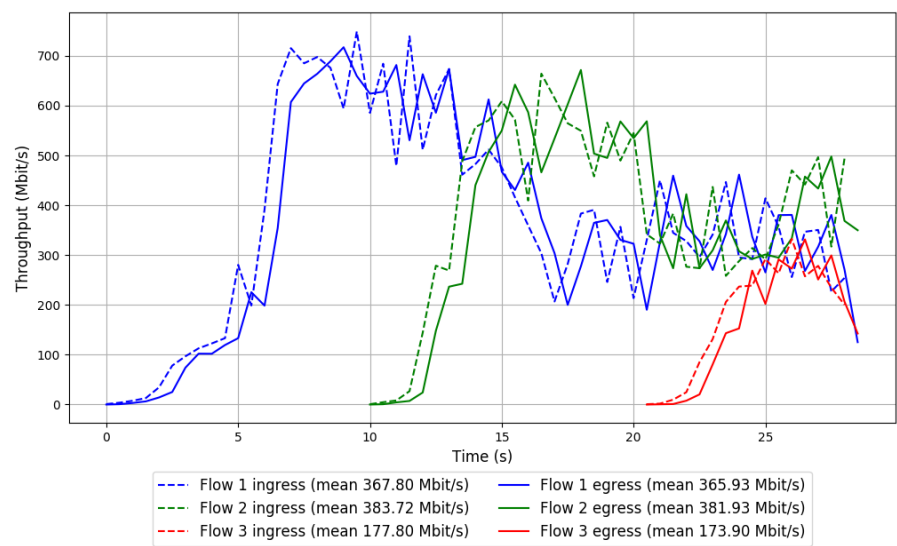


Run 5: Statistics of Indigo-MusesC5

Start at: 2019-01-19 01:42:13
End at: 2019-01-19 01:42:43
Local clock offset: 0.252 ms
Remote clock offset: -0.065 ms

Below is generated by plot.py at 2019-01-19 03:40:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 659.69 Mbit/s
95th percentile per-packet one-way delay: 172.228 ms
Loss rate: 1.46%
-- Flow 1:
Average throughput: 365.93 Mbit/s
95th percentile per-packet one-way delay: 175.970 ms
Loss rate: 1.11%
-- Flow 2:
Average throughput: 381.93 Mbit/s
95th percentile per-packet one-way delay: 161.926 ms
Loss rate: 1.40%
-- Flow 3:
Average throughput: 173.90 Mbit/s
95th percentile per-packet one-way delay: 99.621 ms
Loss rate: 4.35%

Run 5: Report of Indigo-MusesC5 — Data Link

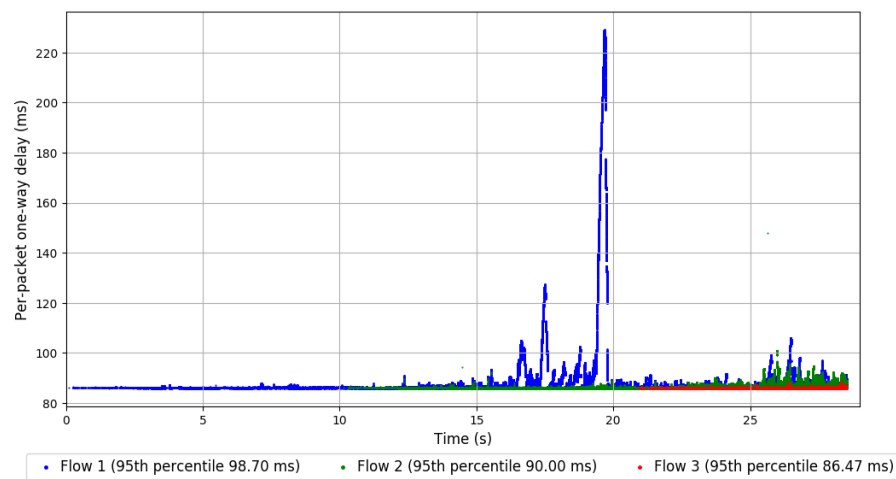
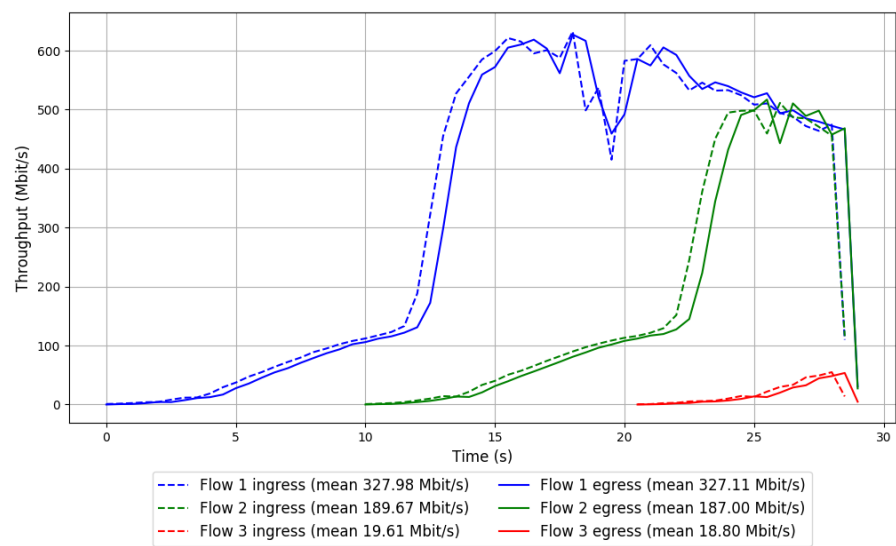


Run 1: Statistics of Indigo-MusesD

Start at: 2019-01-18 22:59:22
End at: 2019-01-18 22:59:52
Local clock offset: 0.161 ms
Remote clock offset: -0.064 ms

Below is generated by plot.py at 2019-01-19 03:40:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 453.14 Mbit/s
95th percentile per-packet one-way delay: 95.009 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 327.11 Mbit/s
95th percentile per-packet one-way delay: 98.697 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 187.00 Mbit/s
95th percentile per-packet one-way delay: 89.995 ms
Loss rate: 2.32%
-- Flow 3:
Average throughput: 18.80 Mbit/s
95th percentile per-packet one-way delay: 86.465 ms
Loss rate: 6.21%

Run 1: Report of Indigo-MusesD — Data Link

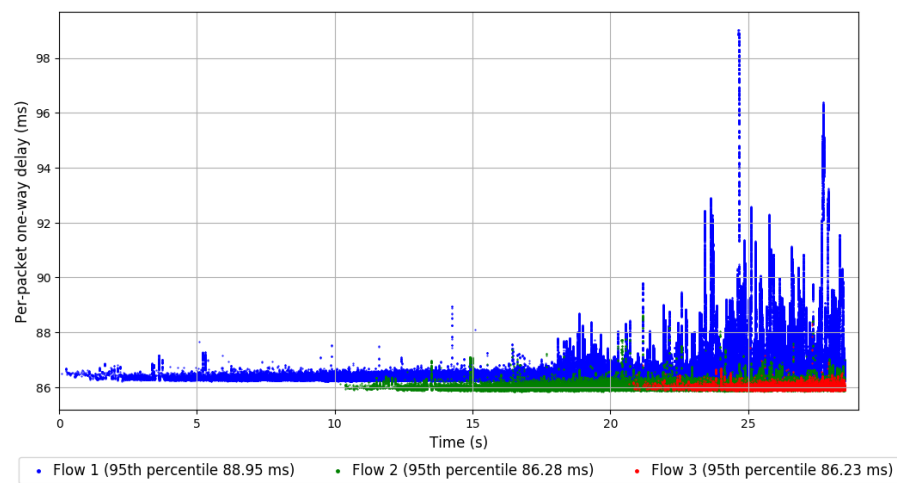
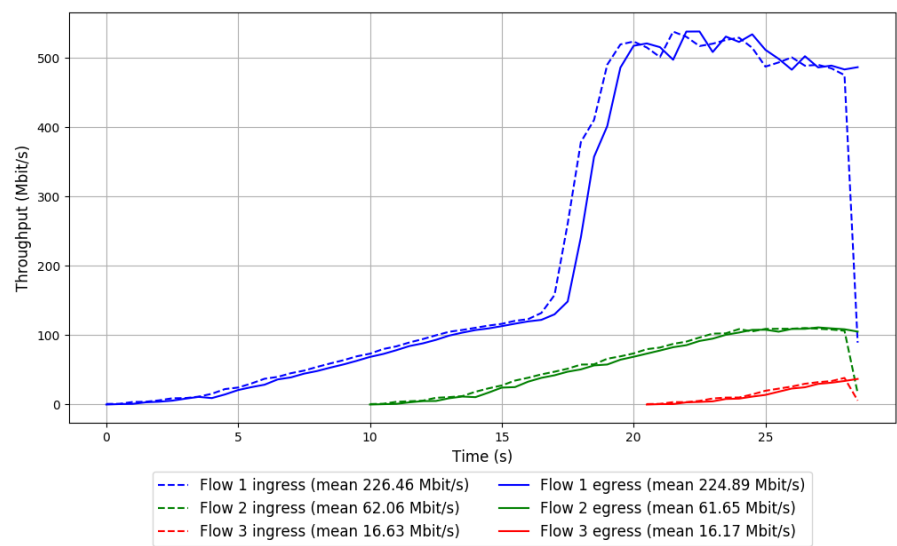


Run 2: Statistics of Indigo-MusesD

Start at: 2019-01-18 23:39:25
End at: 2019-01-18 23:39:55
Local clock offset: 0.108 ms
Remote clock offset: -0.032 ms

Below is generated by plot.py at 2019-01-19 03:40:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 269.05 Mbit/s
95th percentile per-packet one-way delay: 88.724 ms
Loss rate: 1.40%
-- Flow 1:
Average throughput: 224.89 Mbit/s
95th percentile per-packet one-way delay: 88.953 ms
Loss rate: 1.29%
-- Flow 2:
Average throughput: 61.65 Mbit/s
95th percentile per-packet one-way delay: 86.282 ms
Loss rate: 1.58%
-- Flow 3:
Average throughput: 16.17 Mbit/s
95th percentile per-packet one-way delay: 86.226 ms
Loss rate: 4.86%

Run 2: Report of Indigo-MusesD — Data Link

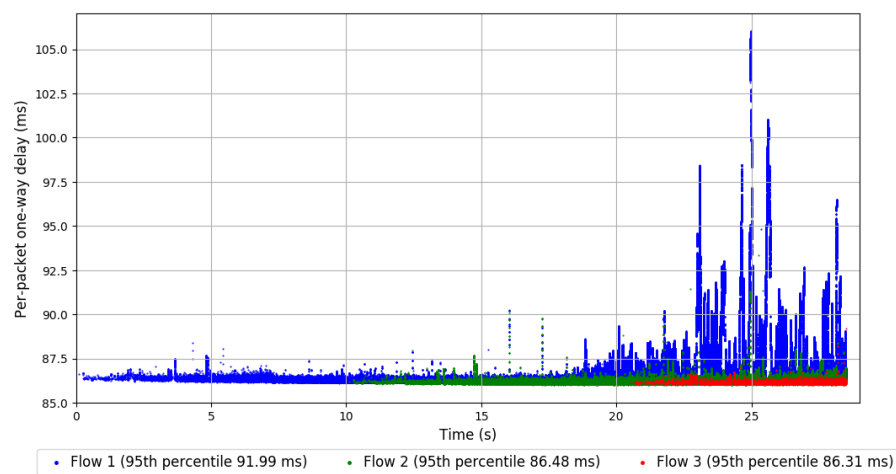
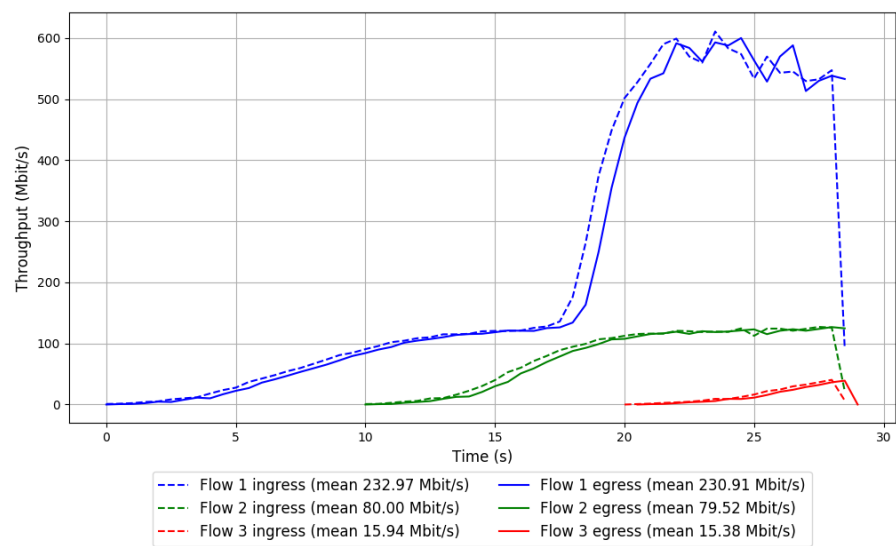


Run 3: Statistics of Indigo-MusesD

Start at: 2019-01-19 00:18:40
End at: 2019-01-19 00:19:10
Local clock offset: 0.277 ms
Remote clock offset: -0.085 ms

Below is generated by plot.py at 2019-01-19 03:40:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 286.65 Mbit/s
95th percentile per-packet one-way delay: 91.544 ms
Loss rate: 1.56%
-- Flow 1:
Average throughput: 230.91 Mbit/s
95th percentile per-packet one-way delay: 91.987 ms
Loss rate: 1.49%
-- Flow 2:
Average throughput: 79.52 Mbit/s
95th percentile per-packet one-way delay: 86.482 ms
Loss rate: 1.55%
-- Flow 3:
Average throughput: 15.38 Mbit/s
95th percentile per-packet one-way delay: 86.305 ms
Loss rate: 5.49%

Run 3: Report of Indigo-MusesD — Data Link

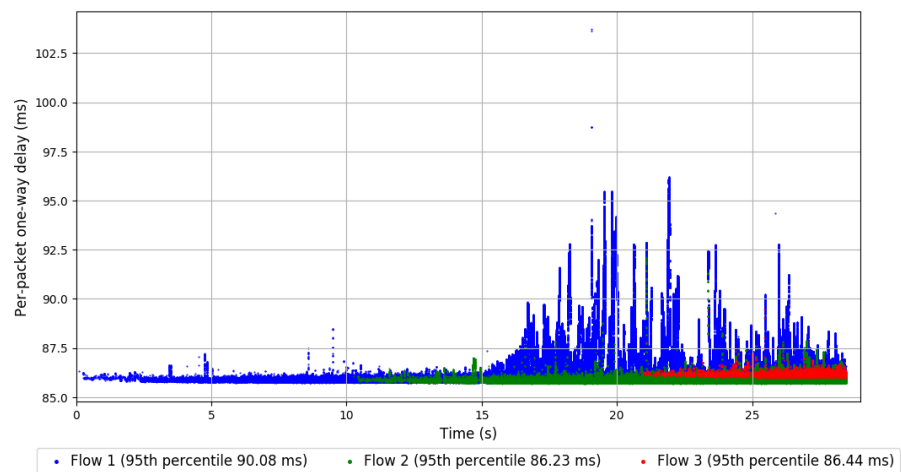
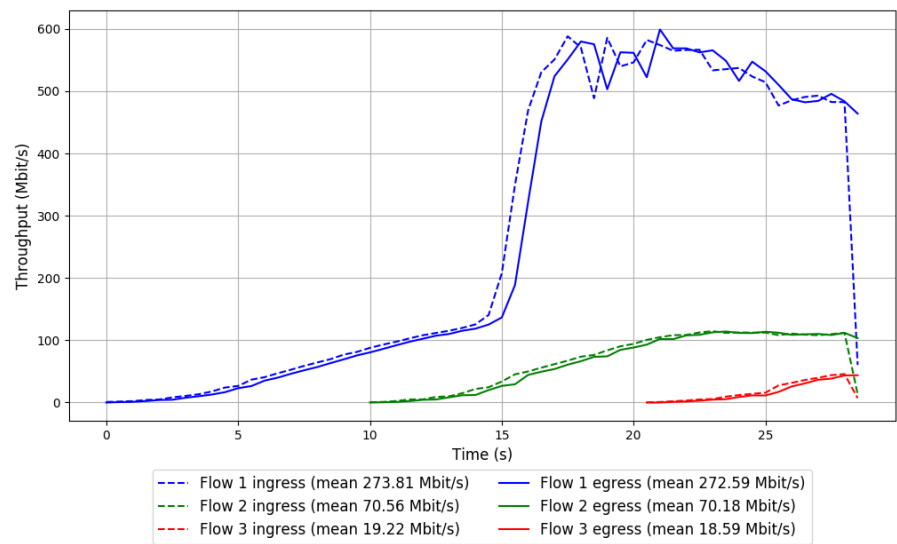


Run 4: Statistics of Indigo-MusesD

Start at: 2019-01-19 00:58:20
End at: 2019-01-19 00:58:50
Local clock offset: -0.032 ms
Remote clock offset: -0.104 ms

Below is generated by plot.py at 2019-01-19 03:41:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 322.64 Mbit/s
95th percentile per-packet one-way delay: 89.673 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 272.59 Mbit/s
95th percentile per-packet one-way delay: 90.076 ms
Loss rate: 1.04%
-- Flow 2:
Average throughput: 70.18 Mbit/s
95th percentile per-packet one-way delay: 86.234 ms
Loss rate: 1.47%
-- Flow 3:
Average throughput: 18.59 Mbit/s
95th percentile per-packet one-way delay: 86.440 ms
Loss rate: 5.49%

Run 4: Report of Indigo-MusesD — Data Link

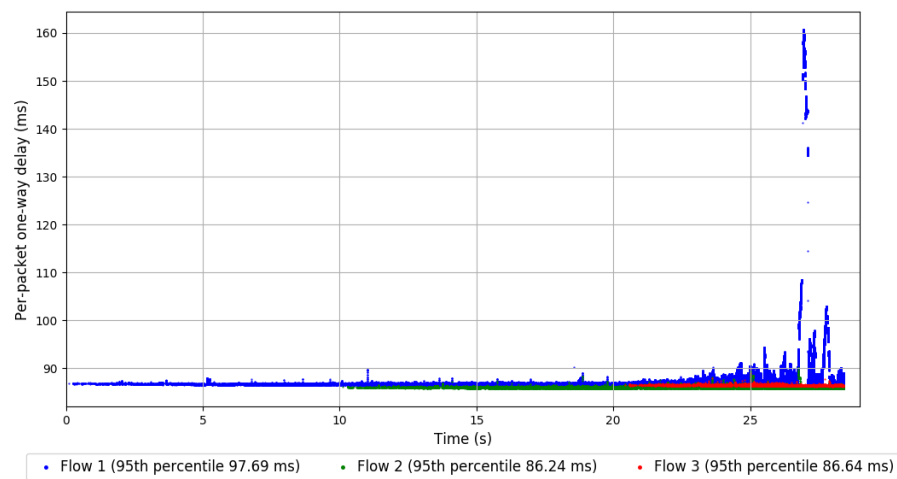
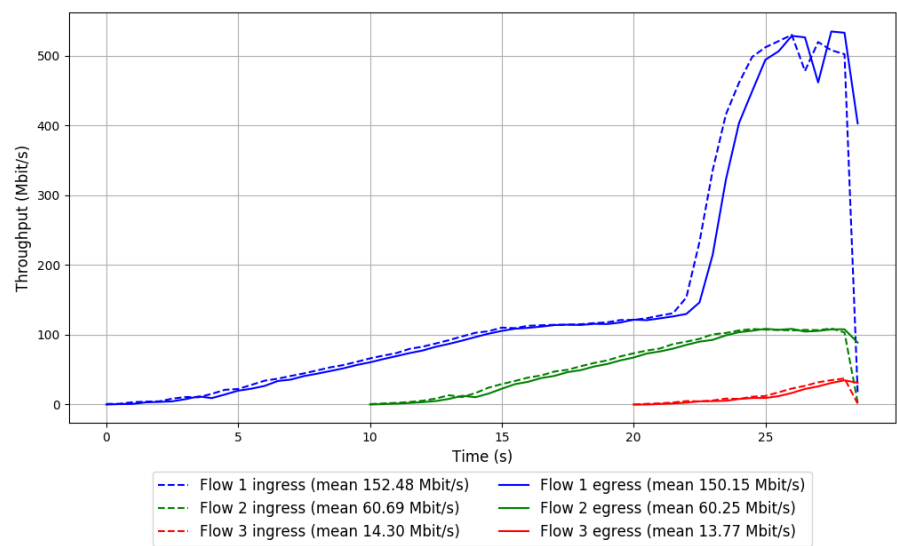


Run 5: Statistics of Indigo-MusesD

Start at: 2019-01-19 01:37:40
End at: 2019-01-19 01:38:10
Local clock offset: 0.039 ms
Remote clock offset: -0.086 ms

Below is generated by plot.py at 2019-01-19 03:41:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 192.95 Mbit/s
95th percentile per-packet one-way delay: 94.174 ms
Loss rate: 2.11%
-- Flow 1:
Average throughput: 150.15 Mbit/s
95th percentile per-packet one-way delay: 97.691 ms
Loss rate: 2.13%
-- Flow 2:
Average throughput: 60.25 Mbit/s
95th percentile per-packet one-way delay: 86.237 ms
Loss rate: 1.65%
-- Flow 3:
Average throughput: 13.77 Mbit/s
95th percentile per-packet one-way delay: 86.638 ms
Loss rate: 5.81%

Run 5: Report of Indigo-MusesD — Data Link

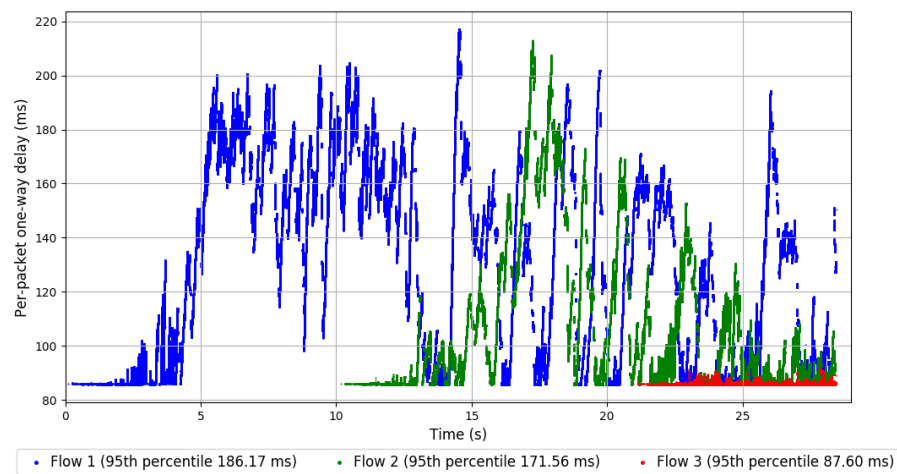
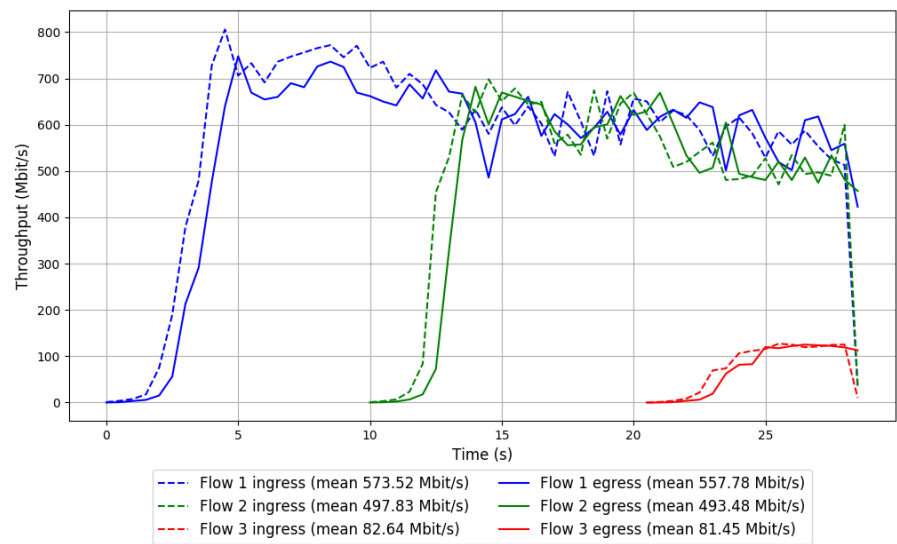


Run 1: Statistics of Indigo-MusesT

Start at: 2019-01-18 22:44:00
End at: 2019-01-18 22:44:31
Local clock offset: 0.108 ms
Remote clock offset: -0.089 ms

Below is generated by plot.py at 2019-01-19 03:52:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 897.17 Mbit/s
95th percentile per-packet one-way delay: 182.951 ms
Loss rate: 2.77%
-- Flow 1:
Average throughput: 557.78 Mbit/s
95th percentile per-packet one-way delay: 186.166 ms
Loss rate: 3.33%
-- Flow 2:
Average throughput: 493.48 Mbit/s
95th percentile per-packet one-way delay: 171.560 ms
Loss rate: 1.72%
-- Flow 3:
Average throughput: 81.45 Mbit/s
95th percentile per-packet one-way delay: 87.598 ms
Loss rate: 3.61%

Run 1: Report of Indigo-MusesT — Data Link

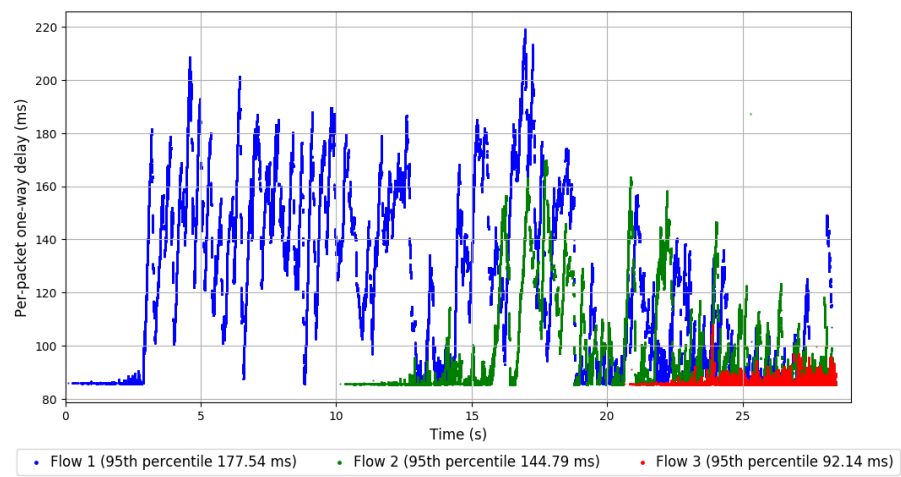
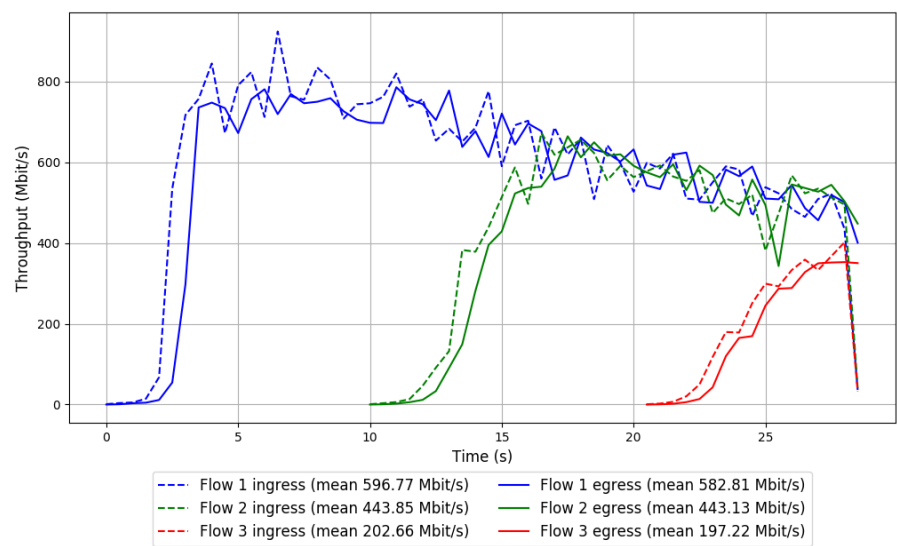


Run 2: Statistics of Indigo-MusesT

Start at: 2019-01-18 23:23:27
End at: 2019-01-18 23:23:57
Local clock offset: -0.312 ms
Remote clock offset: -0.051 ms

Below is generated by plot.py at 2019-01-19 03:55:21
Datalink statistics
-- Total of 3 flows:
Average throughput: 922.93 Mbit/s
95th percentile per-packet one-way delay: 173.957 ms
Loss rate: 2.50%
-- Flow 1:
Average throughput: 582.81 Mbit/s
95th percentile per-packet one-way delay: 177.540 ms
Loss rate: 2.93%
-- Flow 2:
Average throughput: 443.13 Mbit/s
95th percentile per-packet one-way delay: 144.790 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 197.22 Mbit/s
95th percentile per-packet one-way delay: 92.140 ms
Loss rate: 4.79%

Run 2: Report of Indigo-MusesT — Data Link

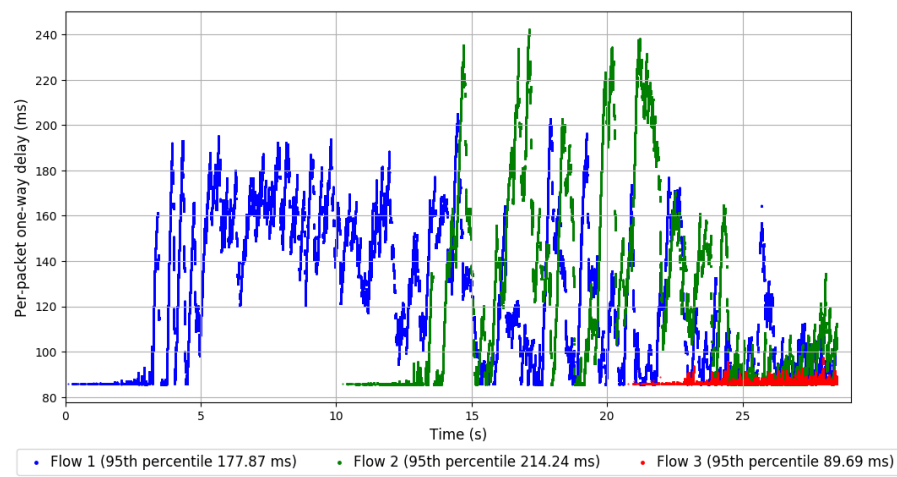
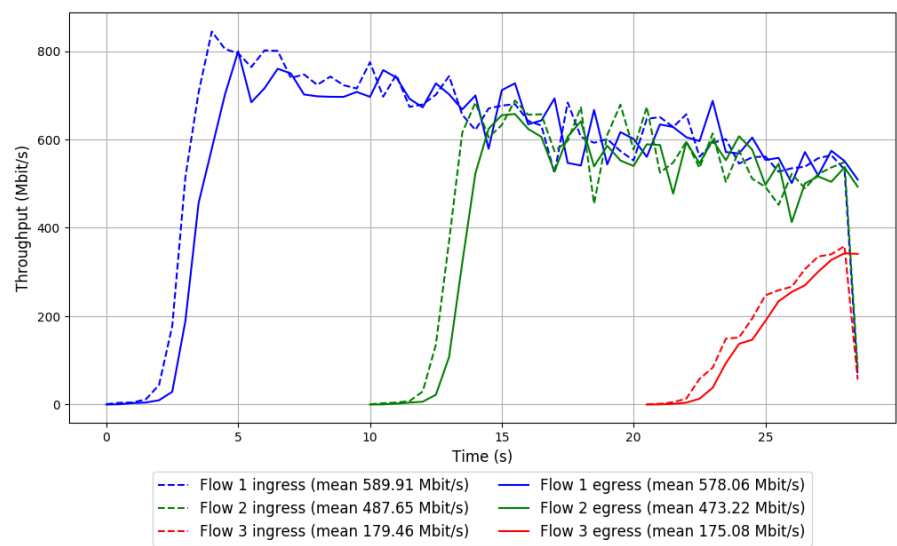


Run 3: Statistics of Indigo-MusesT

Start at: 2019-01-19 00:02:37
End at: 2019-01-19 00:03:07
Local clock offset: -0.222 ms
Remote clock offset: -0.087 ms

Below is generated by plot.py at 2019-01-19 03:56:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 929.70 Mbit/s
95th percentile per-packet one-way delay: 189.150 ms
Loss rate: 3.13%
-- Flow 1:
Average throughput: 578.06 Mbit/s
95th percentile per-packet one-way delay: 177.873 ms
Loss rate: 2.61%
-- Flow 2:
Average throughput: 473.22 Mbit/s
95th percentile per-packet one-way delay: 214.244 ms
Loss rate: 3.87%
-- Flow 3:
Average throughput: 175.08 Mbit/s
95th percentile per-packet one-way delay: 89.693 ms
Loss rate: 4.72%

Run 3: Report of Indigo-MusesT — Data Link

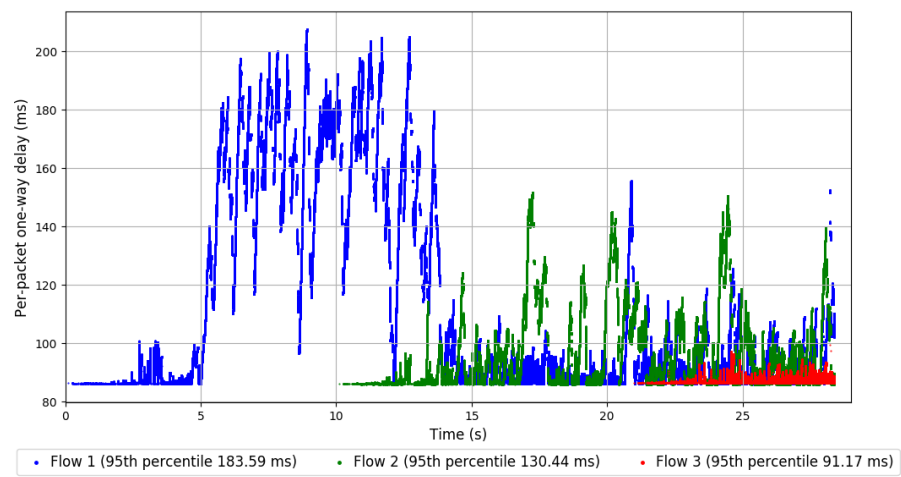
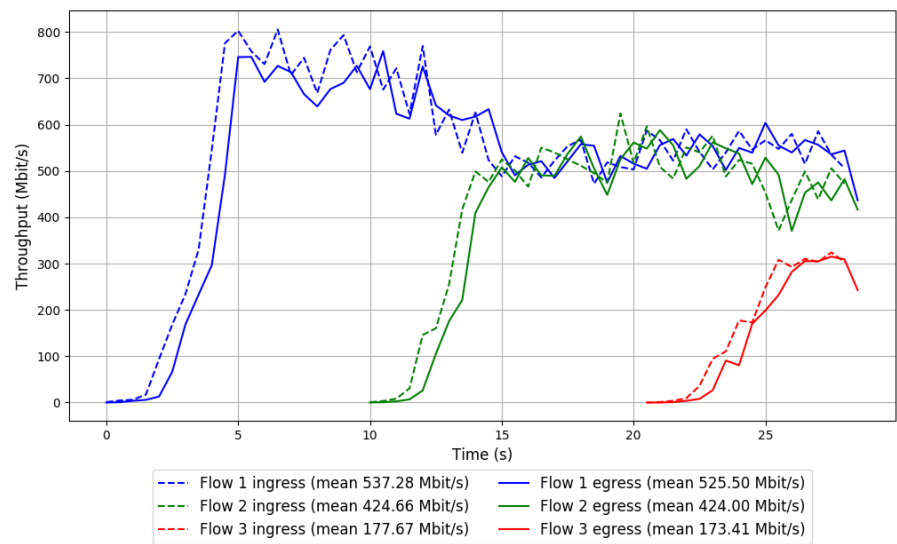


Run 4: Statistics of Indigo-MusesT

Start at: 2019-01-19 00:41:40
End at: 2019-01-19 00:42:10
Local clock offset: 0.437 ms
Remote clock offset: -0.084 ms

Below is generated by plot.py at 2019-01-19 03:56:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 844.93 Mbit/s
95th percentile per-packet one-way delay: 178.482 ms
Loss rate: 2.34%
-- Flow 1:
Average throughput: 525.50 Mbit/s
95th percentile per-packet one-way delay: 183.585 ms
Loss rate: 2.79%
-- Flow 2:
Average throughput: 424.00 Mbit/s
95th percentile per-packet one-way delay: 130.441 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 173.41 Mbit/s
95th percentile per-packet one-way delay: 91.170 ms
Loss rate: 4.63%

Run 4: Report of Indigo-MusesT — Data Link

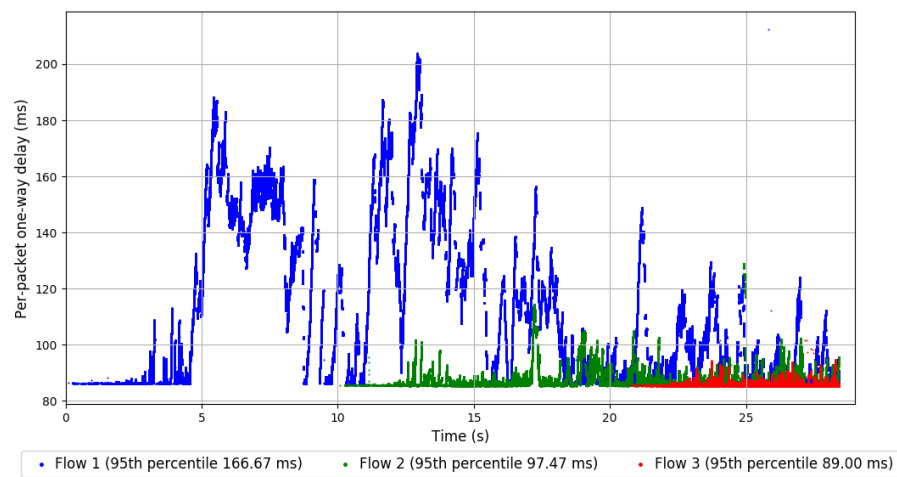
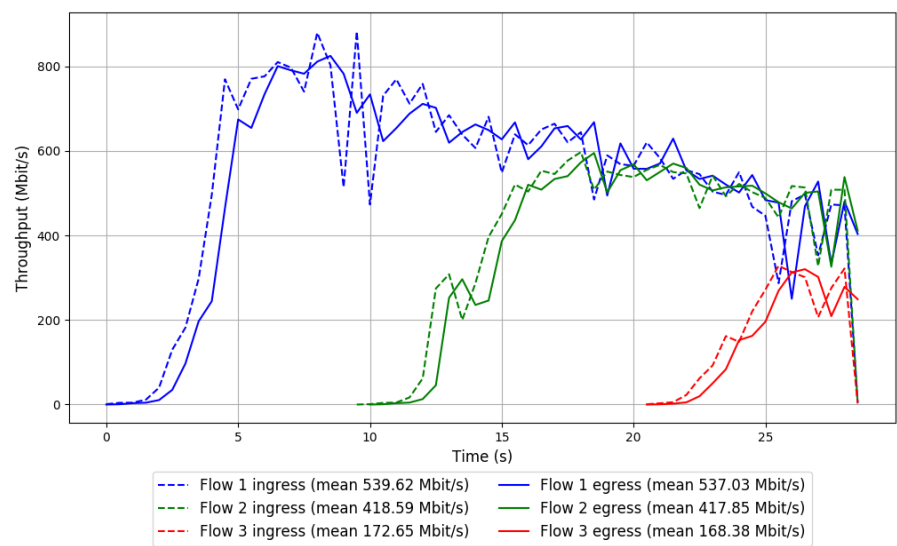


Run 5: Statistics of Indigo-MusesT

Start at: 2019-01-19 01:21:59
End at: 2019-01-19 01:22:29
Local clock offset: -0.607 ms
Remote clock offset: -0.109 ms

Below is generated by plot.py at 2019-01-19 03:56:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 853.55 Mbit/s
95th percentile per-packet one-way delay: 160.730 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 537.03 Mbit/s
95th percentile per-packet one-way delay: 166.669 ms
Loss rate: 1.08%
-- Flow 2:
Average throughput: 417.85 Mbit/s
95th percentile per-packet one-way delay: 97.467 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 168.38 Mbit/s
95th percentile per-packet one-way delay: 88.999 ms
Loss rate: 4.60%

Run 5: Report of Indigo-MusesT — Data Link

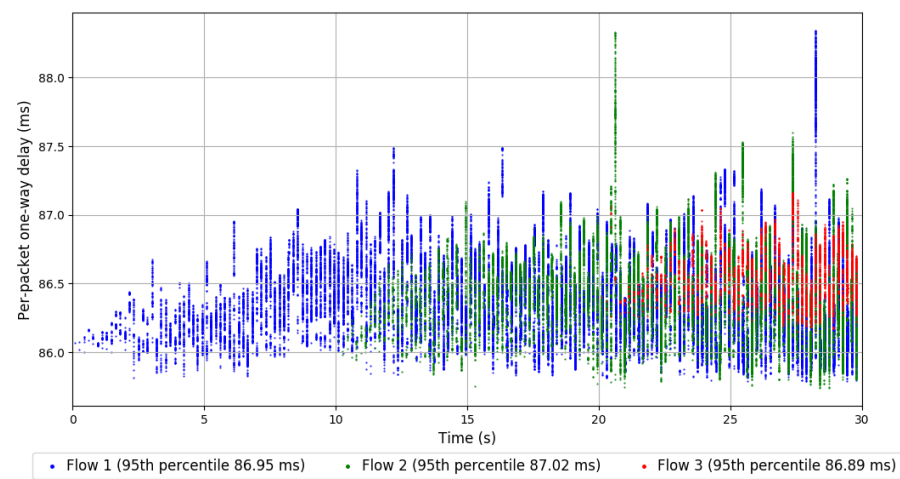
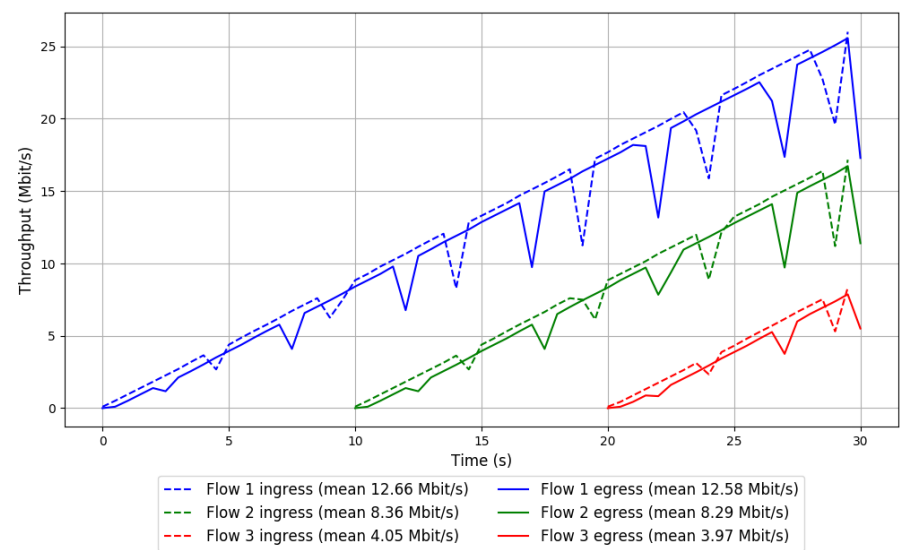


```
Run 1: Statistics of LEDBAT

Start at: 2019-01-18 22:42:43
End at: 2019-01-18 22:43:13
Local clock offset: 0.062 ms
Remote clock offset: -0.12 ms

# Below is generated by plot.py at 2019-01-19 03:56:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.37 Mbit/s
95th percentile per-packet one-way delay: 86.964 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 12.58 Mbit/s
95th percentile per-packet one-way delay: 86.950 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 8.29 Mbit/s
95th percentile per-packet one-way delay: 87.019 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 3.97 Mbit/s
95th percentile per-packet one-way delay: 86.885 ms
Loss rate: 3.54%
```

Run 1: Report of LEDBAT — Data Link

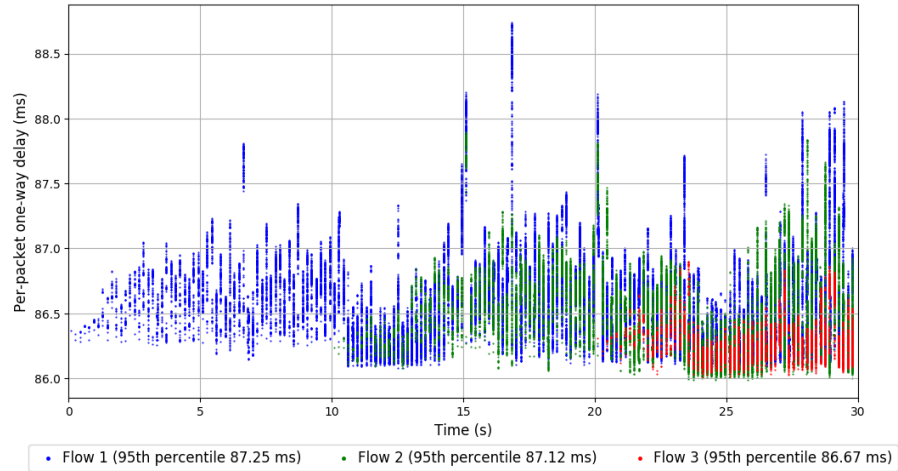
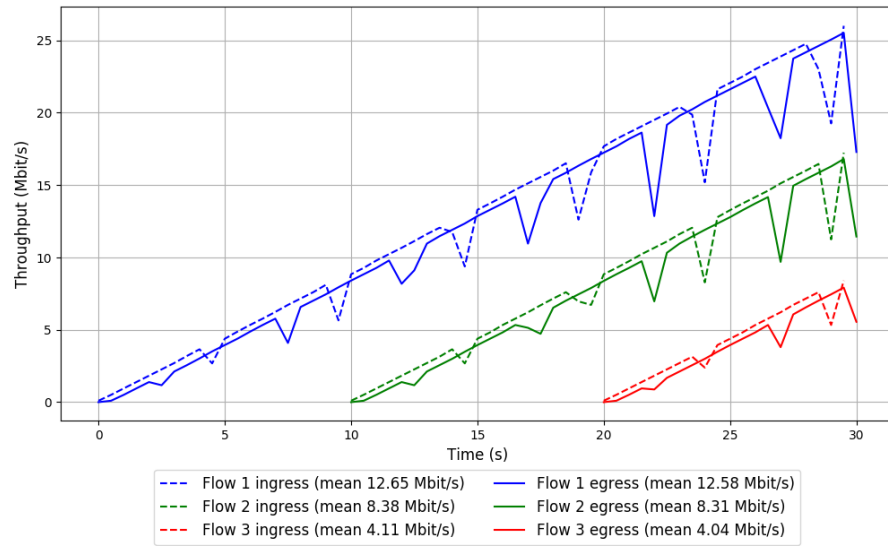


Run 2: Statistics of LEDBAT

Start at: 2019-01-18 23:22:10
End at: 2019-01-18 23:22:40
Local clock offset: 0.346 ms
Remote clock offset: -0.031 ms

Below is generated by plot.py at 2019-01-19 03:56:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 19.40 Mbit/s
95th percentile per-packet one-way delay: 87.181 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 12.58 Mbit/s
95th percentile per-packet one-way delay: 87.254 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 8.31 Mbit/s
95th percentile per-packet one-way delay: 87.123 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 4.04 Mbit/s
95th percentile per-packet one-way delay: 86.668 ms
Loss rate: 3.52%

Run 2: Report of LEDBAT — Data Link

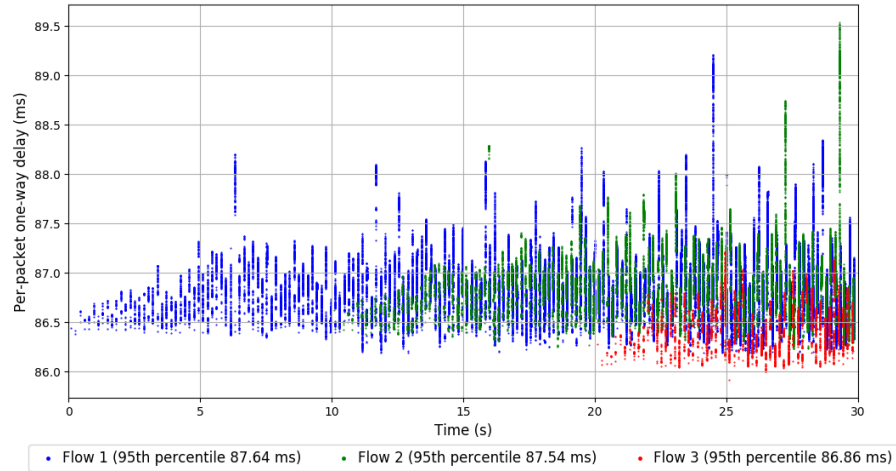
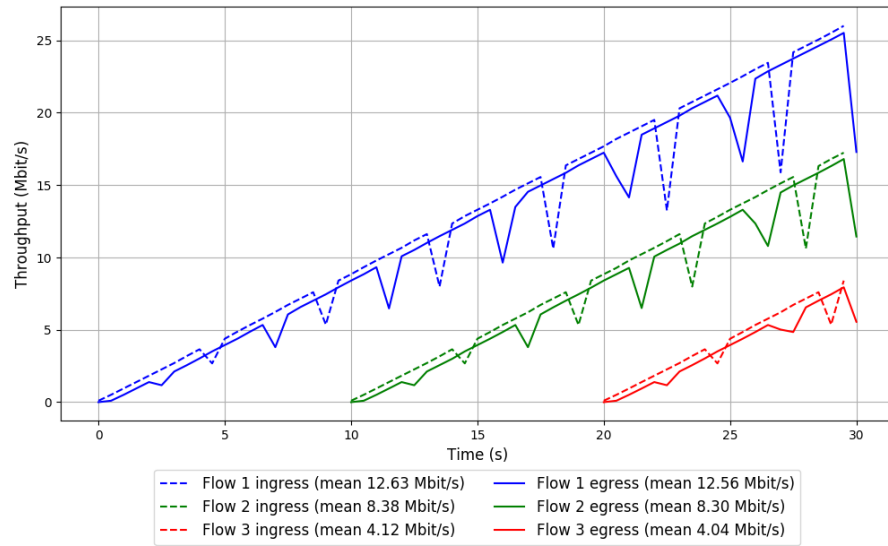


Run 3: Statistics of LEDBAT

Start at: 2019-01-19 00:01:20
End at: 2019-01-19 00:01:50
Local clock offset: 0.071 ms
Remote clock offset: -0.054 ms

Below is generated by plot.py at 2019-01-19 03:56:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 19.37 Mbit/s
95th percentile per-packet one-way delay: 87.571 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 12.56 Mbit/s
95th percentile per-packet one-way delay: 87.645 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 8.30 Mbit/s
95th percentile per-packet one-way delay: 87.539 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 4.04 Mbit/s
95th percentile per-packet one-way delay: 86.863 ms
Loss rate: 3.52%

Run 3: Report of LEDBAT — Data Link

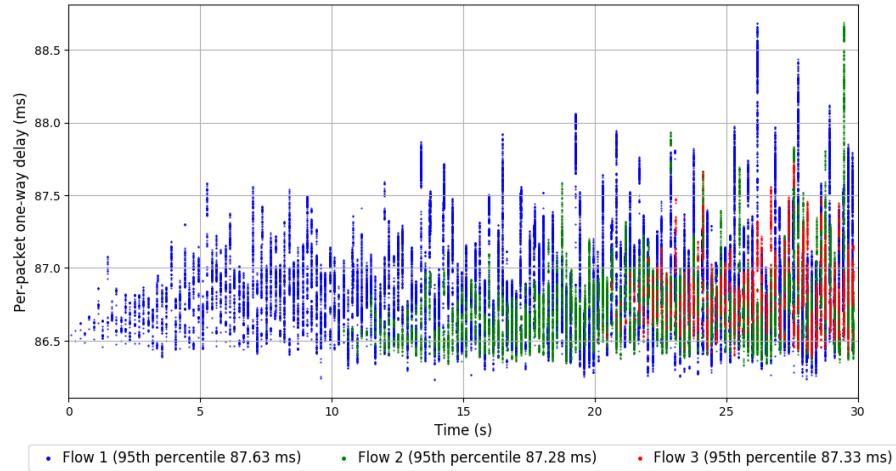
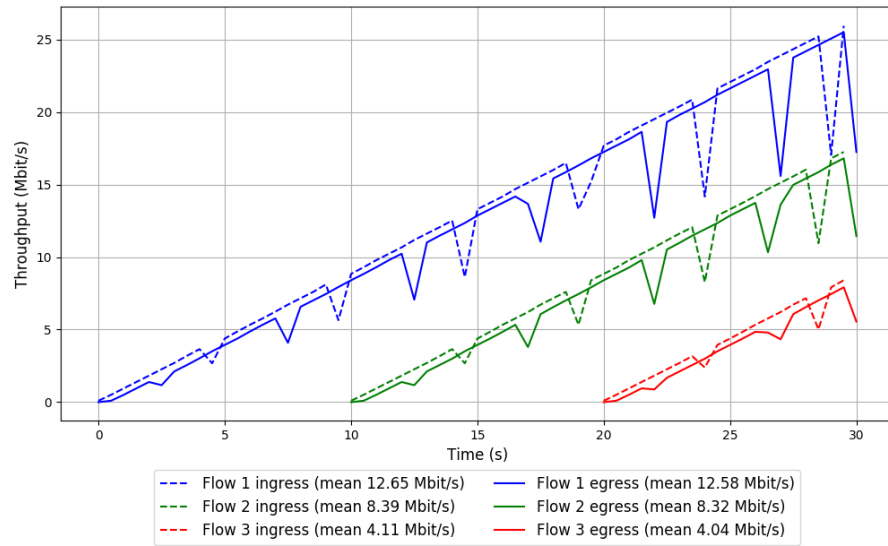


Run 4: Statistics of LEDBAT

Start at: 2019-01-19 00:40:23
End at: 2019-01-19 00:40:53
Local clock offset: 0.774 ms
Remote clock offset: -0.039 ms

Below is generated by plot.py at 2019-01-19 03:56:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 19.40 Mbit/s
95th percentile per-packet one-way delay: 87.537 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 12.58 Mbit/s
95th percentile per-packet one-way delay: 87.631 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 8.32 Mbit/s
95th percentile per-packet one-way delay: 87.277 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 4.04 Mbit/s
95th percentile per-packet one-way delay: 87.330 ms
Loss rate: 3.52%

Run 4: Report of LEDBAT — Data Link

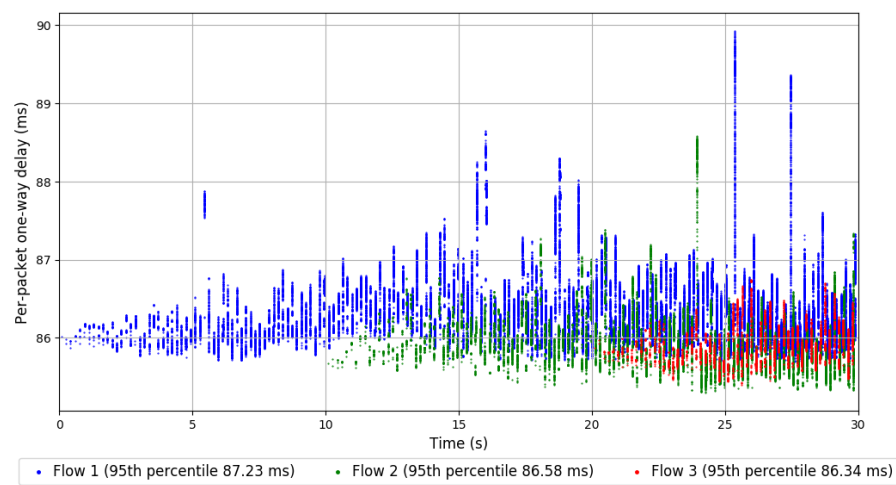
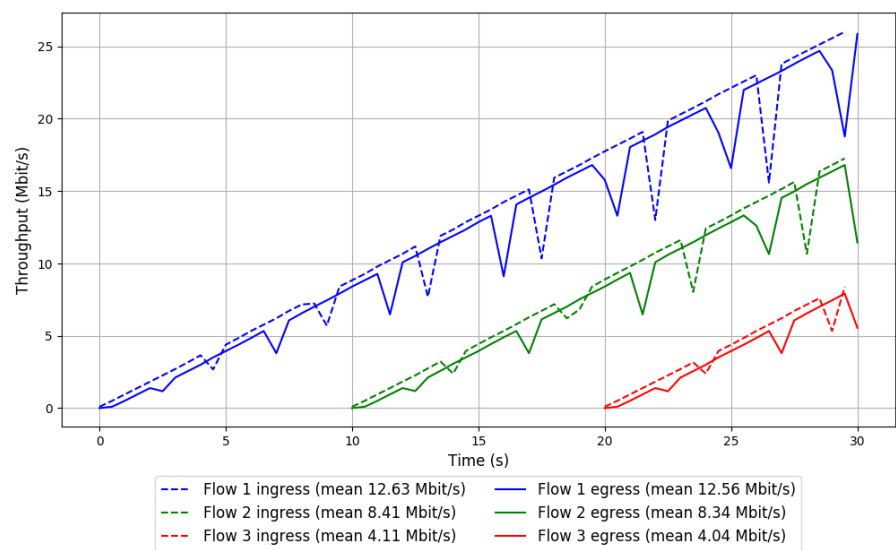


Run 5: Statistics of LEDBAT

Start at: 2019-01-19 01:20:42
End at: 2019-01-19 01:21:12
Local clock offset: -0.594 ms
Remote clock offset: -0.114 ms

Below is generated by plot.py at 2019-01-19 03:56:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 19.39 Mbit/s
95th percentile per-packet one-way delay: 87.070 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 12.56 Mbit/s
95th percentile per-packet one-way delay: 87.233 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 8.34 Mbit/s
95th percentile per-packet one-way delay: 86.585 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 4.04 Mbit/s
95th percentile per-packet one-way delay: 86.344 ms
Loss rate: 3.52%

Run 5: Report of LEDBAT — Data Link

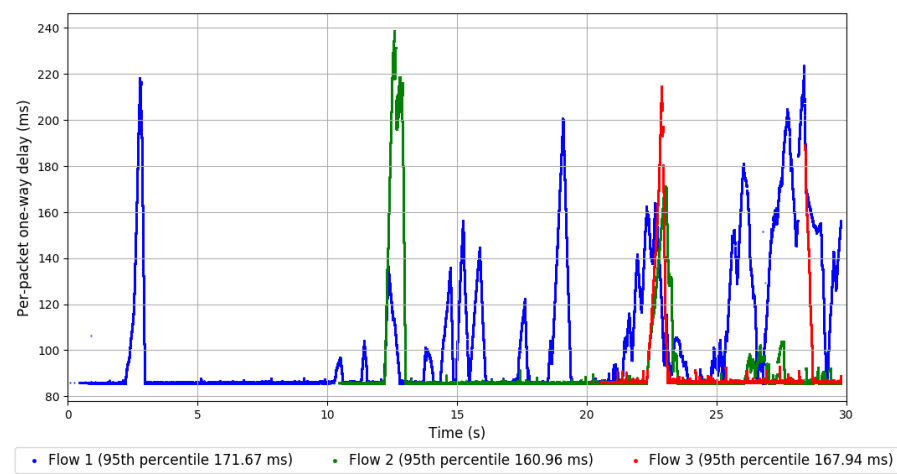
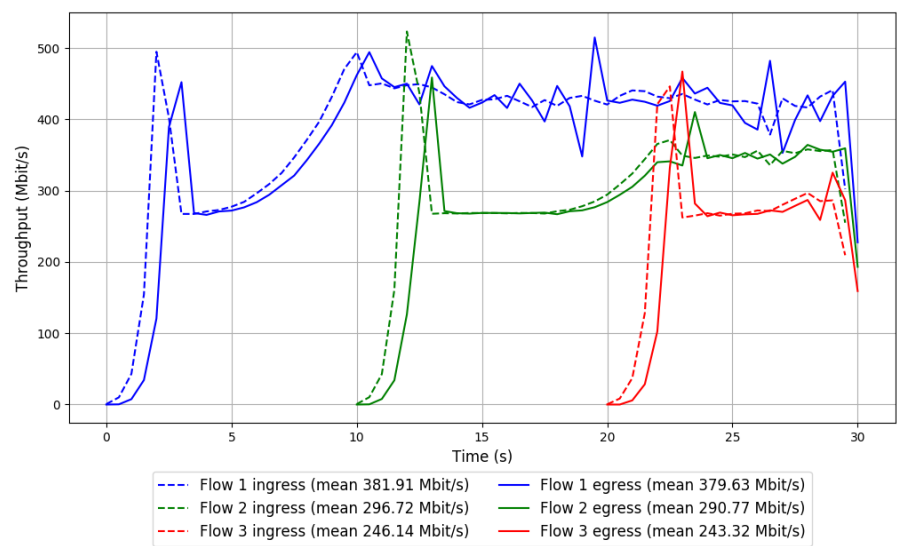


Run 1: Statistics of PCC-Allegro

Start at: 2019-01-18 22:35:18
End at: 2019-01-18 22:35:48
Local clock offset: 0.07 ms
Remote clock offset: -0.168 ms

Below is generated by plot.py at 2019-01-19 04:06:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 651.40 Mbit/s
95th percentile per-packet one-way delay: 169.300 ms
Loss rate: 1.88%
-- Flow 1:
Average throughput: 379.63 Mbit/s
95th percentile per-packet one-way delay: 171.671 ms
Loss rate: 1.17%
-- Flow 2:
Average throughput: 290.77 Mbit/s
95th percentile per-packet one-way delay: 160.958 ms
Loss rate: 2.85%
-- Flow 3:
Average throughput: 243.32 Mbit/s
95th percentile per-packet one-way delay: 167.938 ms
Loss rate: 2.88%

Run 1: Report of PCC-Allegro — Data Link

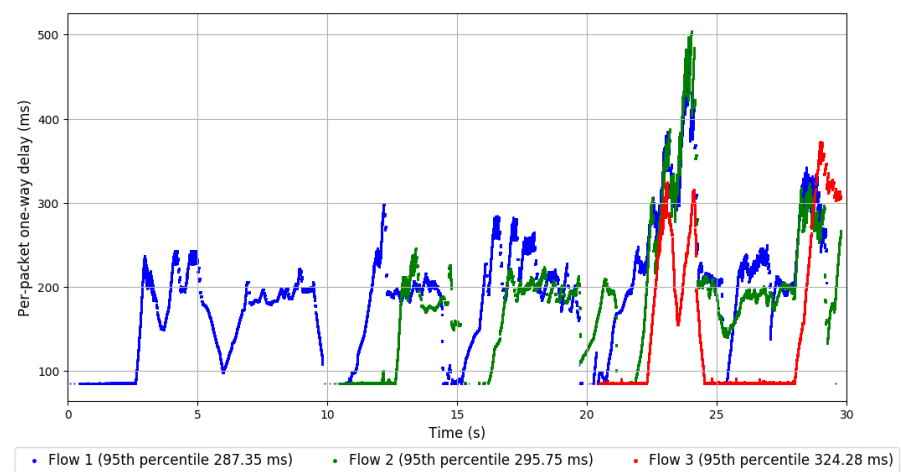
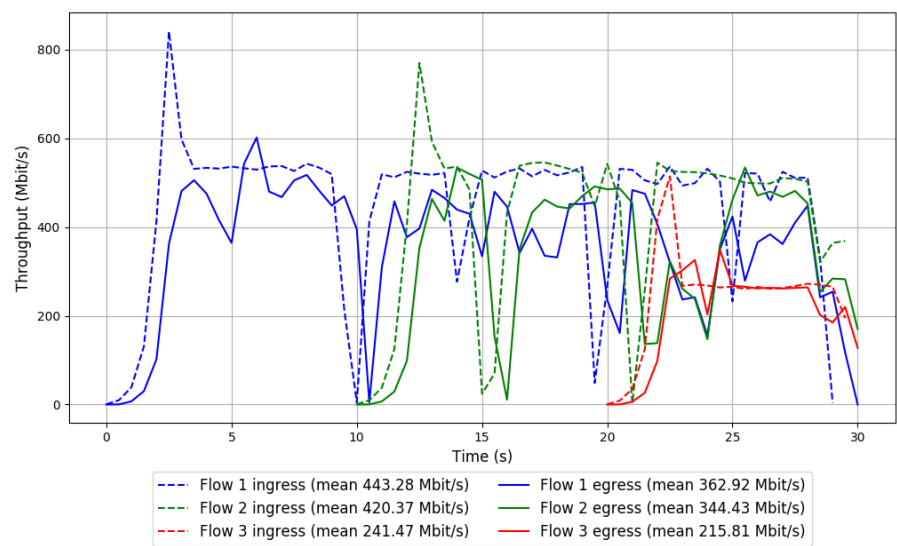


Run 2: Statistics of PCC-Allegro

Start at: 2019-01-18 23:14:32
End at: 2019-01-18 23:15:02
Local clock offset: -0.247 ms
Remote clock offset: -0.091 ms

Below is generated by plot.py at 2019-01-19 04:08:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 659.09 Mbit/s
95th percentile per-packet one-way delay: 302.220 ms
Loss rate: 17.76%
-- Flow 1:
Average throughput: 362.92 Mbit/s
95th percentile per-packet one-way delay: 287.345 ms
Loss rate: 18.13%
-- Flow 2:
Average throughput: 344.43 Mbit/s
95th percentile per-packet one-way delay: 295.752 ms
Loss rate: 18.78%
-- Flow 3:
Average throughput: 215.81 Mbit/s
95th percentile per-packet one-way delay: 324.284 ms
Loss rate: 12.17%

Run 2: Report of PCC-Allegro — Data Link

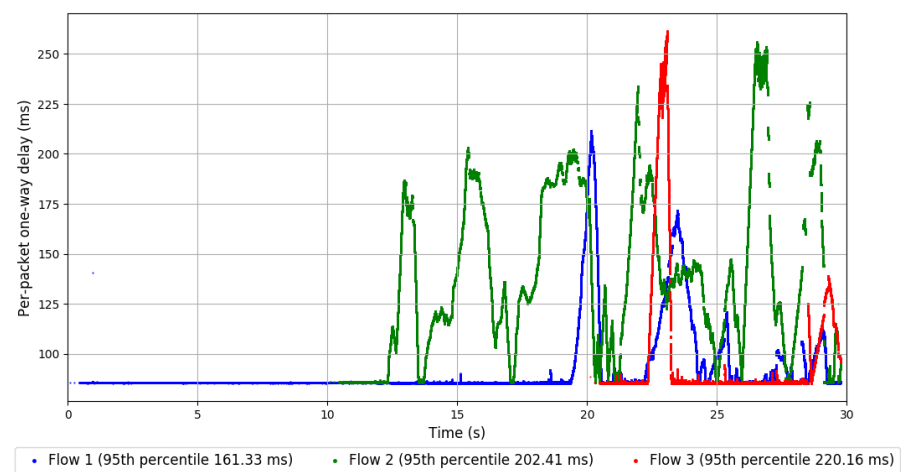
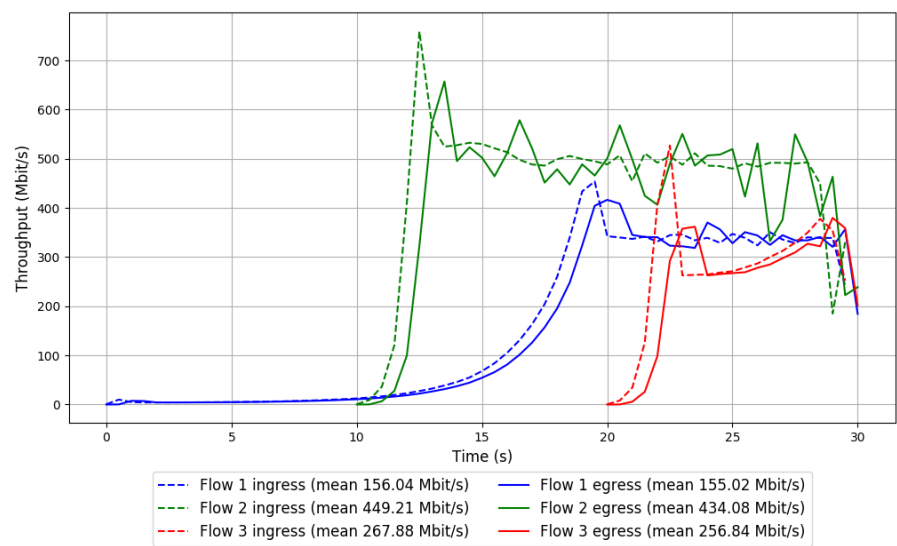


Run 3: Statistics of PCC-Allegro

Start at: 2019-01-18 23:54:04
End at: 2019-01-18 23:54:34
Local clock offset: -0.505 ms
Remote clock offset: -0.062 ms

Below is generated by plot.py at 2019-01-19 04:08:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 526.52 Mbit/s
95th percentile per-packet one-way delay: 199.084 ms
Loss rate: 3.62%
-- Flow 1:
Average throughput: 155.02 Mbit/s
95th percentile per-packet one-way delay: 161.334 ms
Loss rate: 1.23%
-- Flow 2:
Average throughput: 434.08 Mbit/s
95th percentile per-packet one-way delay: 202.406 ms
Loss rate: 4.21%
-- Flow 3:
Average throughput: 256.84 Mbit/s
95th percentile per-packet one-way delay: 220.157 ms
Loss rate: 5.83%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2019-01-19 00:32:56

End at: 2019-01-19 00:33:26

Local clock offset: 0.028 ms

Remote clock offset: -0.12 ms

Below is generated by plot.py at 2019-01-19 04:19:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 636.45 Mbit/s

95th percentile per-packet one-way delay: 208.535 ms

Loss rate: 5.93%

-- Flow 1:

Average throughput: 343.76 Mbit/s

95th percentile per-packet one-way delay: 208.397 ms

Loss rate: 8.82%

-- Flow 2:

Average throughput: 312.78 Mbit/s

95th percentile per-packet one-way delay: 210.999 ms

Loss rate: 1.81%

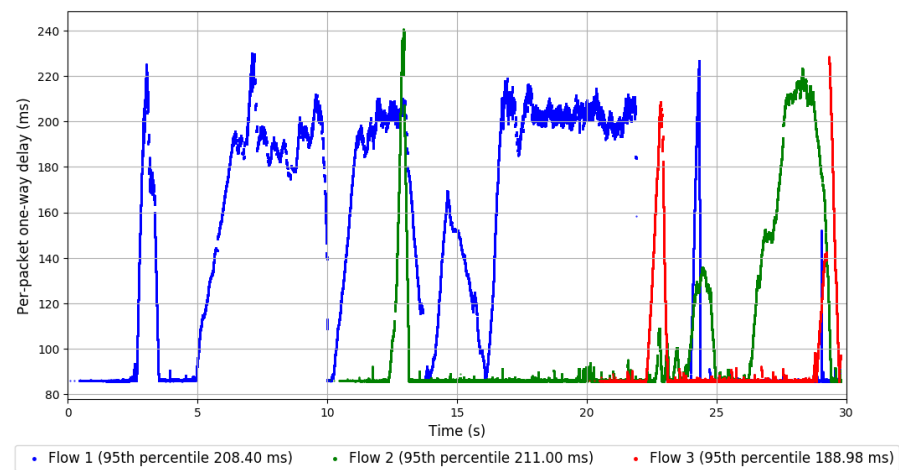
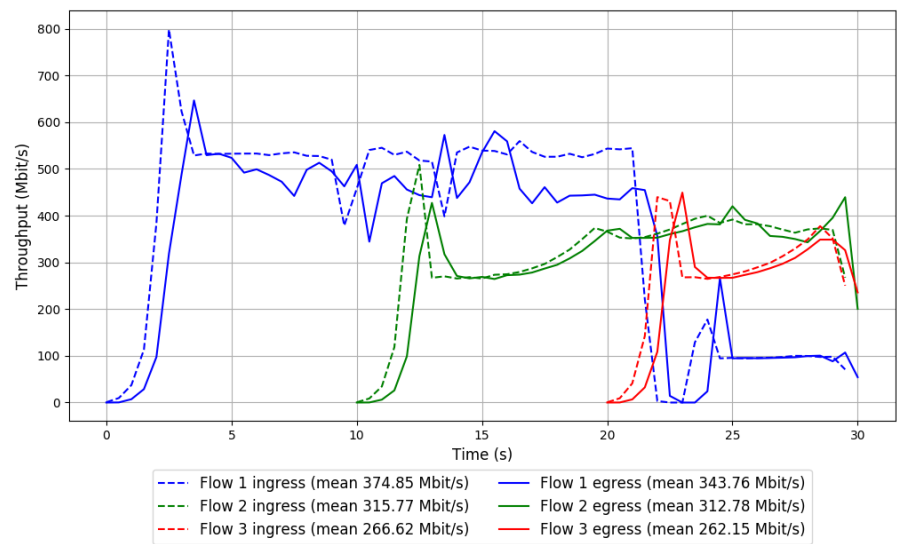
-- Flow 3:

Average throughput: 262.15 Mbit/s

95th percentile per-packet one-way delay: 188.983 ms

Loss rate: 3.40%

Run 4: Report of PCC-Allegro — Data Link

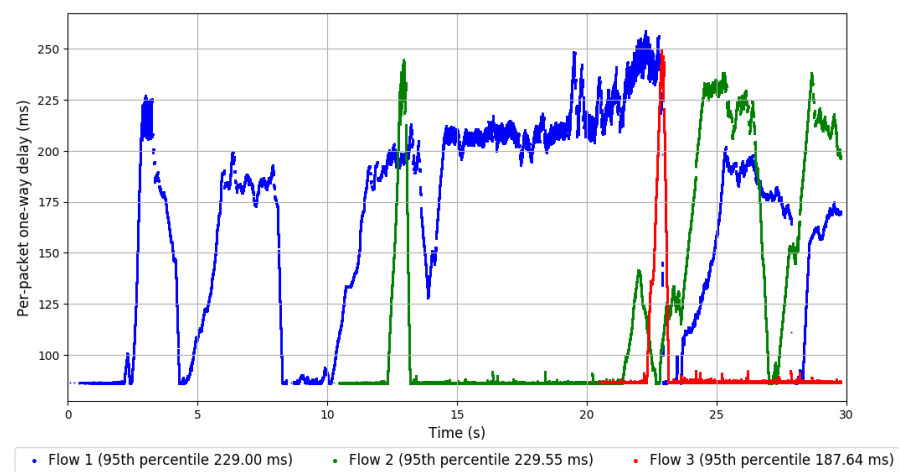
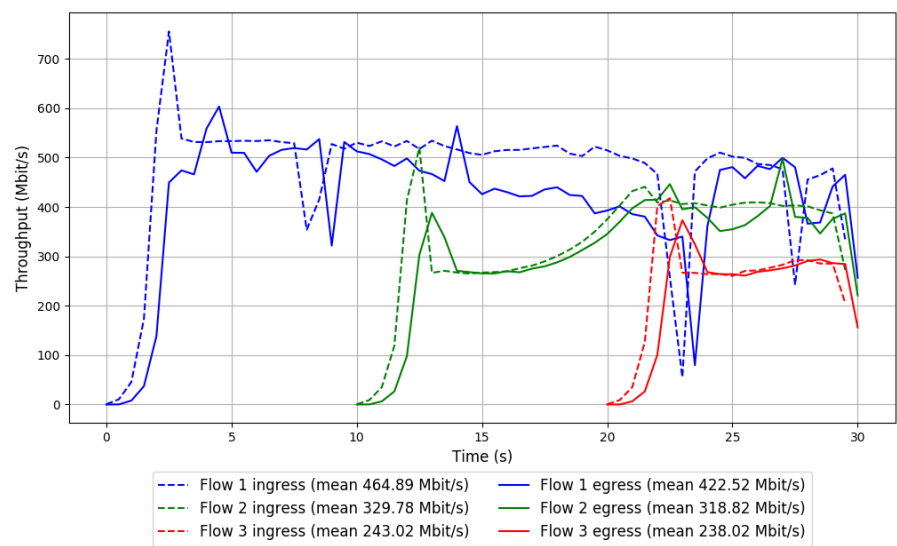


Run 5: Statistics of PCC-Allegro

Start at: 2019-01-19 01:13:17
End at: 2019-01-19 01:13:47
Local clock offset: 0.04 ms
Remote clock offset: -0.119 ms

Below is generated by plot.py at 2019-01-19 04:24:55
Datalink statistics
-- Total of 3 flows:
Average throughput: 711.20 Mbit/s
95th percentile per-packet one-way delay: 228.688 ms
Loss rate: 7.45%
-- Flow 1:
Average throughput: 422.52 Mbit/s
95th percentile per-packet one-way delay: 229.002 ms
Loss rate: 9.64%
-- Flow 2:
Average throughput: 318.82 Mbit/s
95th percentile per-packet one-way delay: 229.554 ms
Loss rate: 4.16%
-- Flow 3:
Average throughput: 238.02 Mbit/s
95th percentile per-packet one-way delay: 187.642 ms
Loss rate: 3.78%

Run 5: Report of PCC-Allegro — Data Link

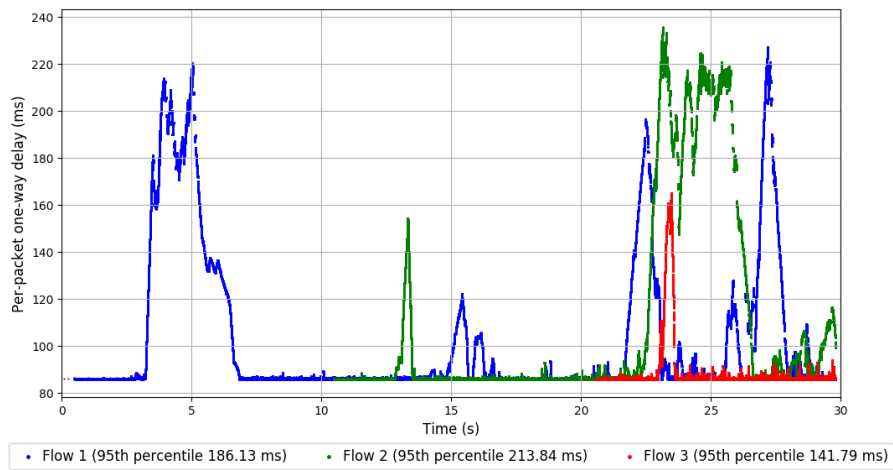
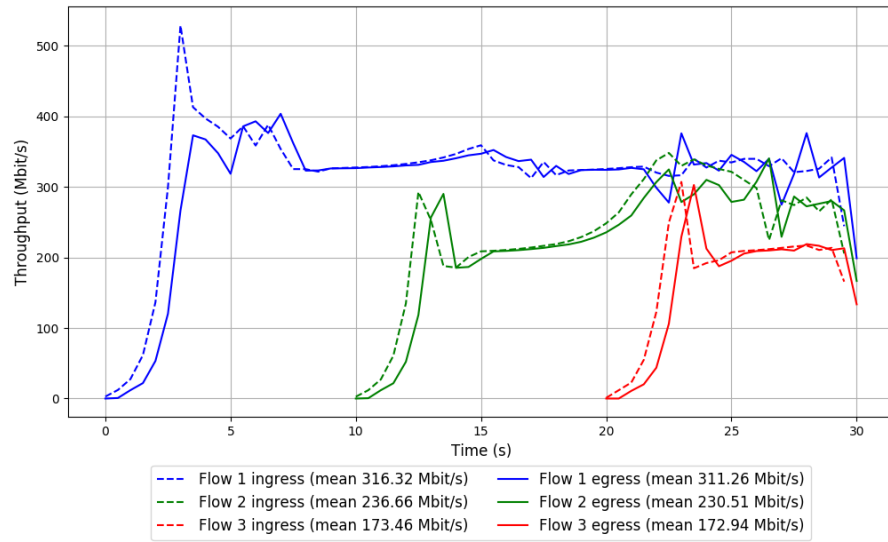


Run 1: Statistics of PCC-Expr

Start at: 2019-01-18 22:40:36
End at: 2019-01-18 22:41:06
Local clock offset: 0.074 ms
Remote clock offset: -0.134 ms

Below is generated by plot.py at 2019-01-19 04:24:55
Datalink statistics
-- Total of 3 flows:
Average throughput: 520.44 Mbit/s
95th percentile per-packet one-way delay: 201.844 ms
Loss rate: 2.54%
-- Flow 1:
Average throughput: 311.26 Mbit/s
95th percentile per-packet one-way delay: 186.126 ms
Loss rate: 2.17%
-- Flow 2:
Average throughput: 230.51 Mbit/s
95th percentile per-packet one-way delay: 213.843 ms
Loss rate: 3.45%
-- Flow 3:
Average throughput: 172.94 Mbit/s
95th percentile per-packet one-way delay: 141.789 ms
Loss rate: 2.06%

Run 1: Report of PCC-Expr — Data Link

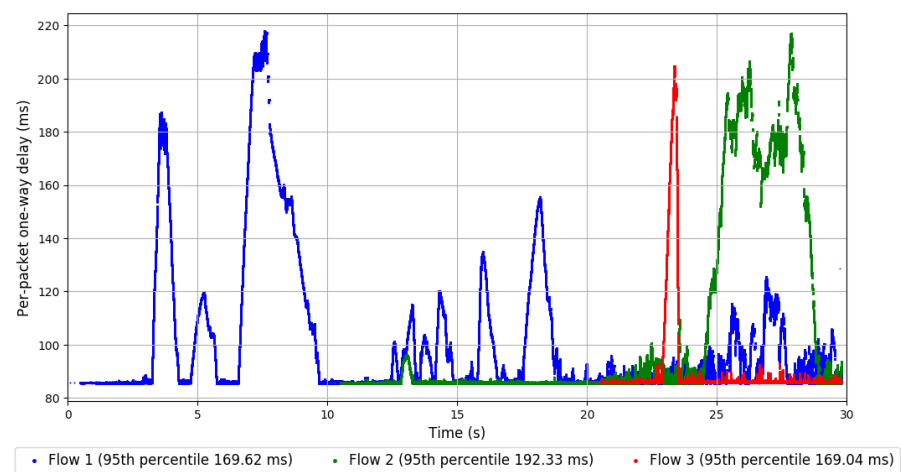
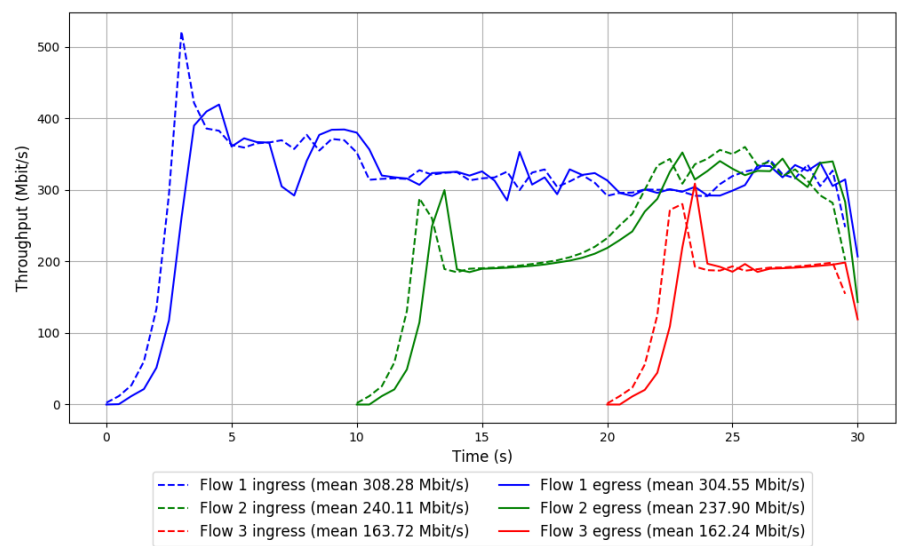


Run 2: Statistics of PCC-Expr

Start at: 2019-01-18 23:20:03
End at: 2019-01-18 23:20:33
Local clock offset: -0.25 ms
Remote clock offset: -0.051 ms

Below is generated by plot.py at 2019-01-19 04:24:55
Datalink statistics
-- Total of 3 flows:
Average throughput: 515.10 Mbit/s
95th percentile per-packet one-way delay: 181.876 ms
Loss rate: 1.86%
-- Flow 1:
Average throughput: 304.55 Mbit/s
95th percentile per-packet one-way delay: 169.625 ms
Loss rate: 1.78%
-- Flow 2:
Average throughput: 237.90 Mbit/s
95th percentile per-packet one-way delay: 192.330 ms
Loss rate: 1.78%
-- Flow 3:
Average throughput: 162.24 Mbit/s
95th percentile per-packet one-way delay: 169.036 ms
Loss rate: 2.63%

Run 2: Report of PCC-Expr — Data Link

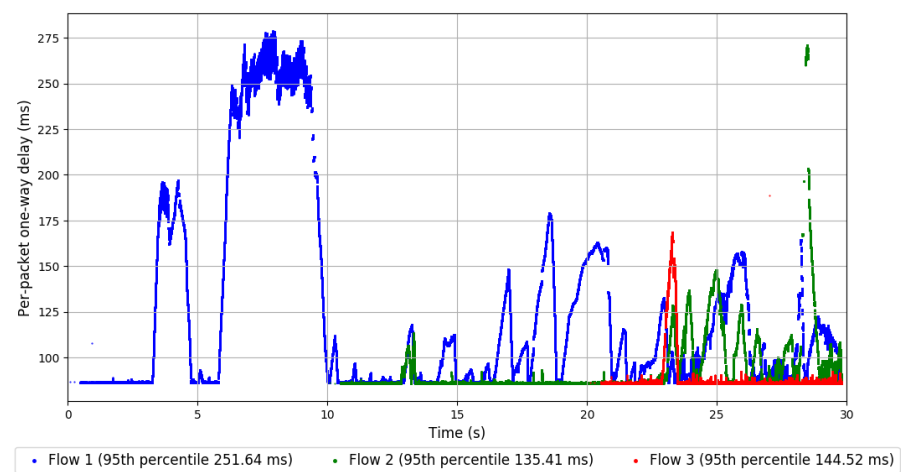
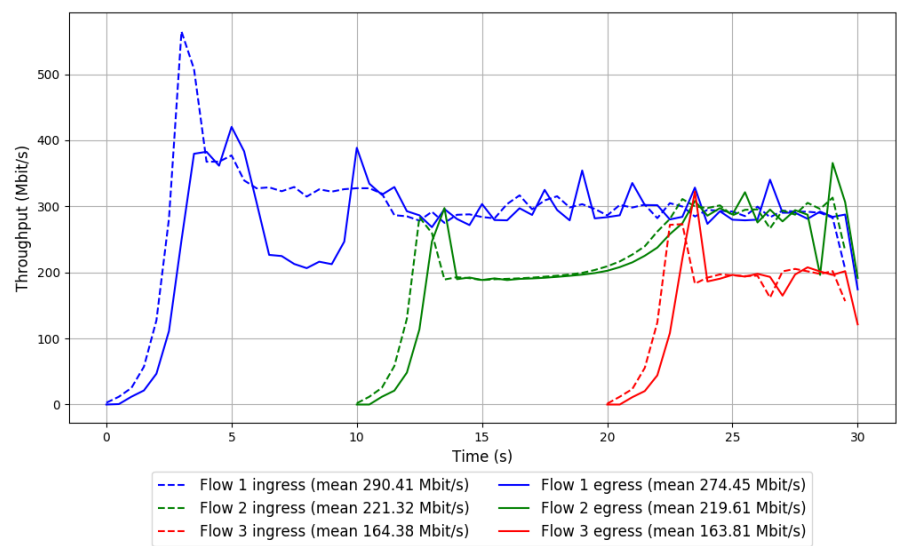


Run 3: Statistics of PCC-Expr

Start at: 2019-01-18 23:59:14
End at: 2019-01-18 23:59:44
Local clock offset: 0.095 ms
Remote clock offset: -0.072 ms

Below is generated by plot.py at 2019-01-19 04:24:55
Datalink statistics
-- Total of 3 flows:
Average throughput: 473.52 Mbit/s
95th percentile per-packet one-way delay: 233.606 ms
Loss rate: 4.30%
-- Flow 1:
Average throughput: 274.45 Mbit/s
95th percentile per-packet one-way delay: 251.639 ms
Loss rate: 6.04%
-- Flow 2:
Average throughput: 219.61 Mbit/s
95th percentile per-packet one-way delay: 135.406 ms
Loss rate: 1.64%
-- Flow 3:
Average throughput: 163.81 Mbit/s
95th percentile per-packet one-way delay: 144.520 ms
Loss rate: 2.16%

Run 3: Report of PCC-Expr — Data Link

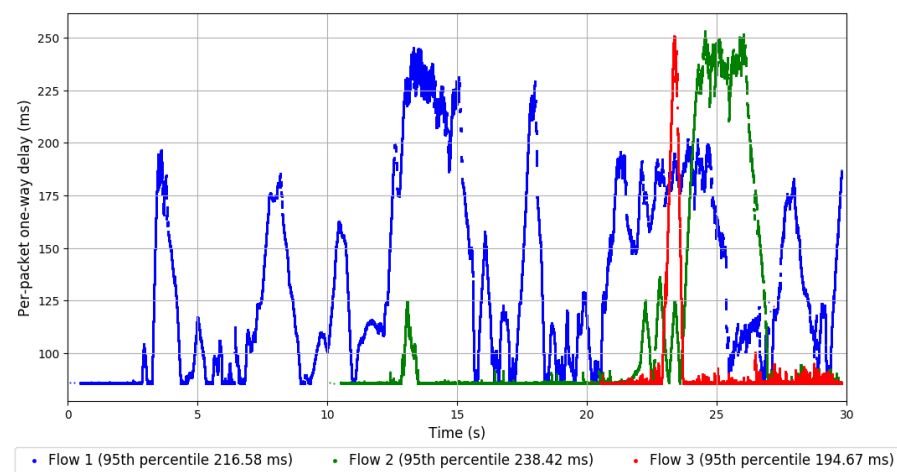
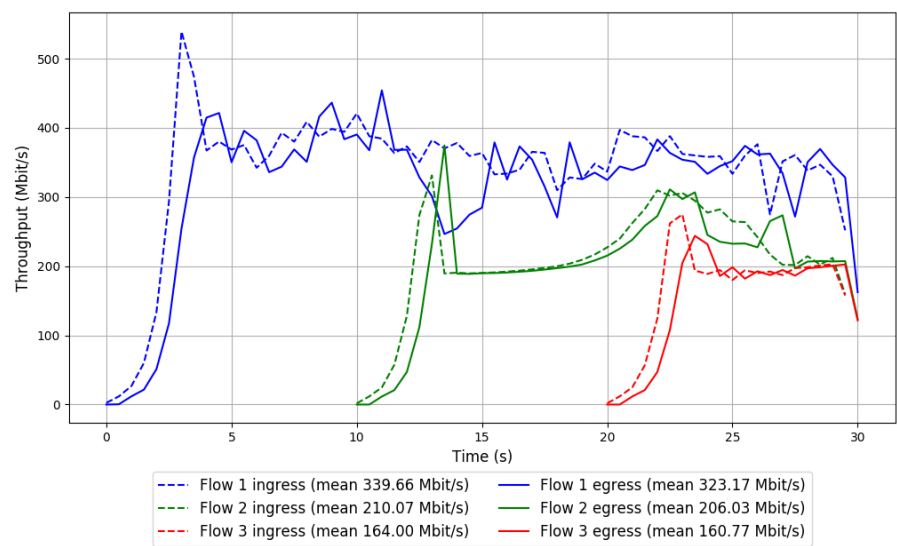


Run 4: Statistics of PCC-Expr

Start at: 2019-01-19 00:38:15
End at: 2019-01-19 00:38:45
Local clock offset: 0.129 ms
Remote clock offset: -0.058 ms

Below is generated by plot.py at 2019-01-19 04:24:55
Datalink statistics
-- Total of 3 flows:
Average throughput: 512.21 Mbit/s
95th percentile per-packet one-way delay: 224.147 ms
Loss rate: 4.54%
-- Flow 1:
Average throughput: 323.17 Mbit/s
95th percentile per-packet one-way delay: 216.583 ms
Loss rate: 5.40%
-- Flow 2:
Average throughput: 206.03 Mbit/s
95th percentile per-packet one-way delay: 238.424 ms
Loss rate: 2.77%
-- Flow 3:
Average throughput: 160.77 Mbit/s
95th percentile per-packet one-way delay: 194.671 ms
Loss rate: 3.69%

Run 4: Report of PCC-Expr — Data Link

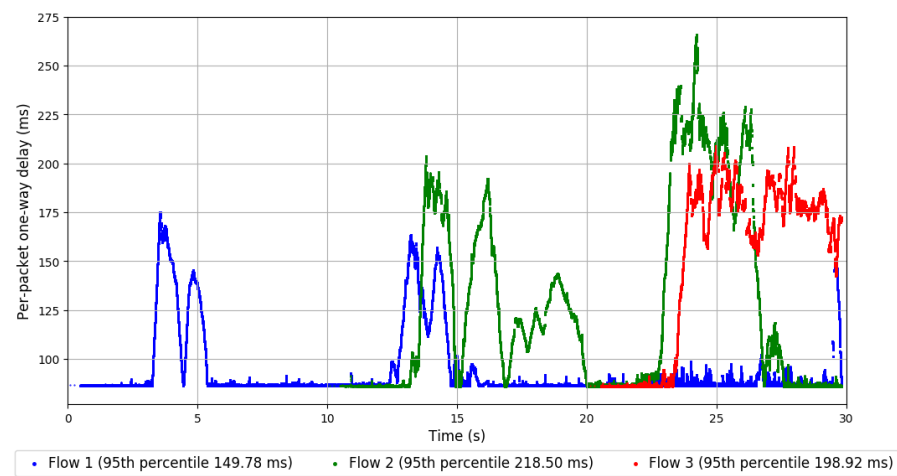
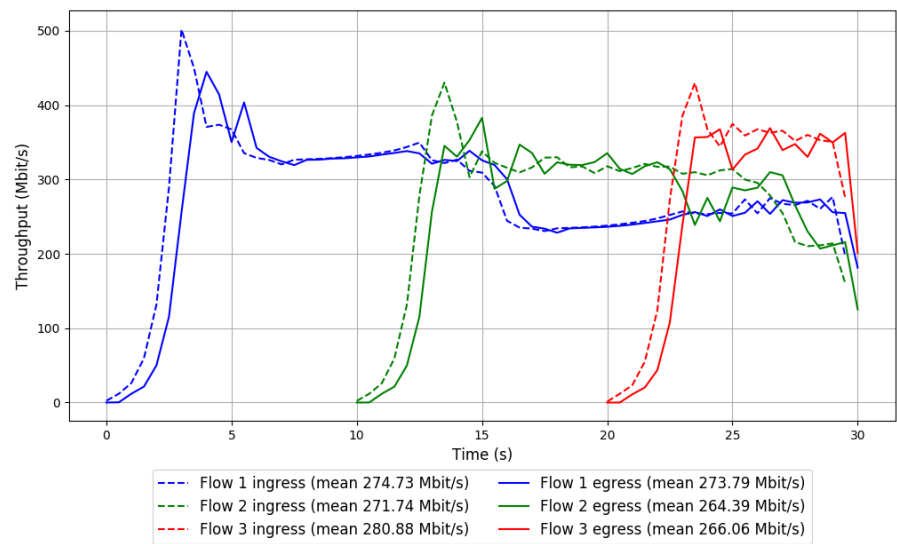


Run 5: Statistics of PCC-Expr

Start at: 2019-01-19 01:18:34
End at: 2019-01-19 01:19:04
Local clock offset: 0.06 ms
Remote clock offset: -0.126 ms

Below is generated by plot.py at 2019-01-19 04:28:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 535.80 Mbit/s
95th percentile per-packet one-way delay: 199.888 ms
Loss rate: 2.80%
-- Flow 1:
Average throughput: 273.79 Mbit/s
95th percentile per-packet one-way delay: 149.784 ms
Loss rate: 0.92%
-- Flow 2:
Average throughput: 264.39 Mbit/s
95th percentile per-packet one-way delay: 218.498 ms
Loss rate: 3.55%
-- Flow 3:
Average throughput: 266.06 Mbit/s
95th percentile per-packet one-way delay: 198.918 ms
Loss rate: 6.94%

Run 5: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2019-01-18 22:47:43

End at: 2019-01-18 22:48:13

Local clock offset: -0.056 ms

Remote clock offset: -0.13 ms

Below is generated by plot.py at 2019-01-19 04:28:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.68 Mbit/s

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

Loss rate: 1.35%

-- Flow 1:

Average throughput: 47.49 Mbit/s

95th percentile per-packet one-way delay: 86.259 ms

Loss rate: 1.12%

-- Flow 2:

Average throughput: 32.04 Mbit/s

95th percentile per-packet one-way delay: 86.223 ms

Loss rate: 0.21%

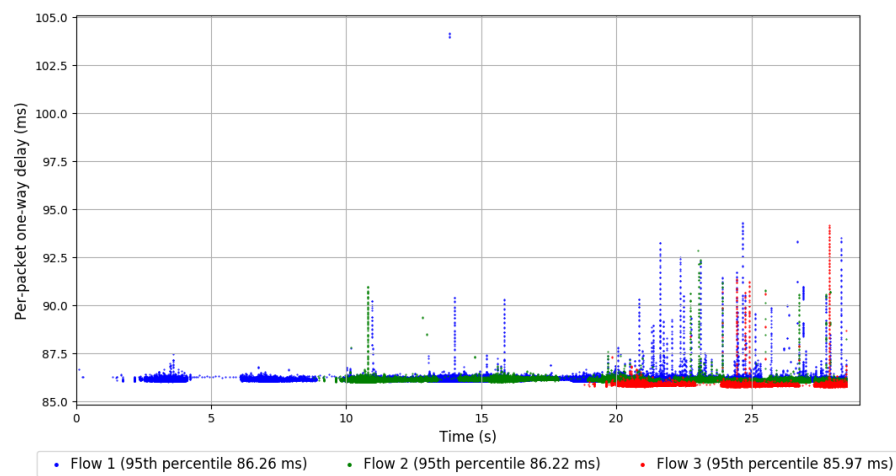
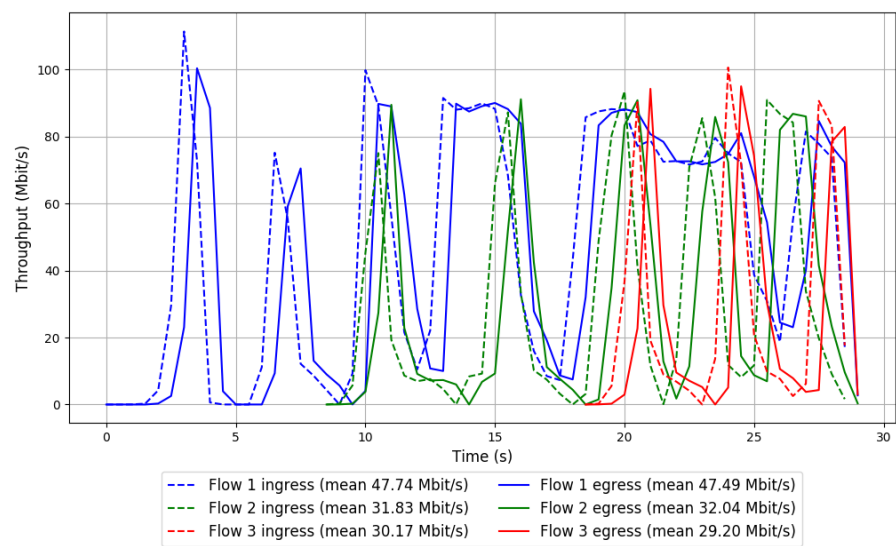
-- Flow 3:

Average throughput: 29.20 Mbit/s

95th percentile per-packet one-way delay: 85.972 ms

Loss rate: 4.87%

Run 1: Report of QUIC Cubic — Data Link

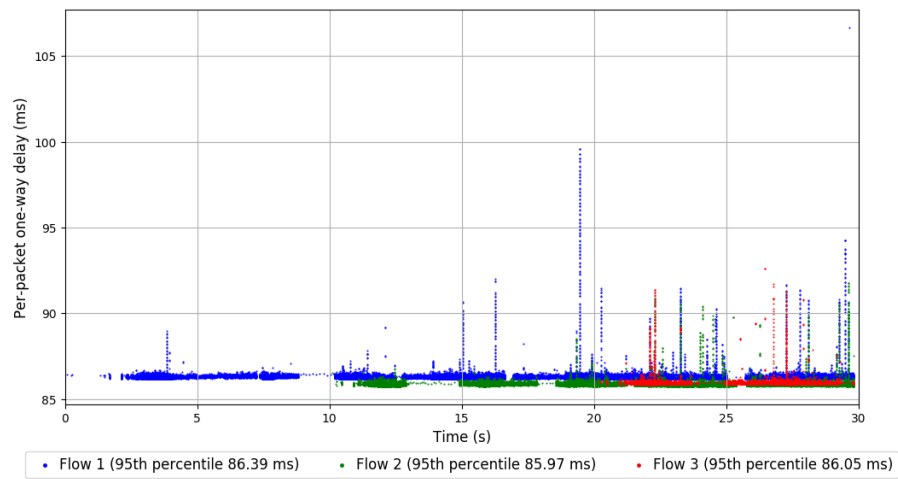
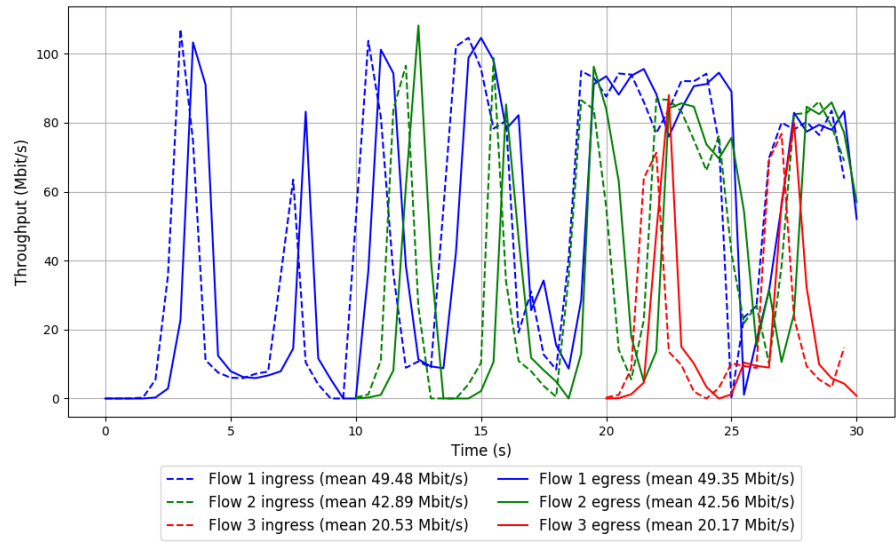


Run 2: Statistics of QUIC Cubic

Start at: 2019-01-18 23:27:15
End at: 2019-01-18 23:27:45
Local clock offset: 0.107 ms
Remote clock offset: -0.022 ms

Below is generated by plot.py at 2019-01-19 04:28:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 84.14 Mbit/s
95th percentile per-packet one-way delay: 86.356 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 49.35 Mbit/s
95th percentile per-packet one-way delay: 86.385 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 42.56 Mbit/s
95th percentile per-packet one-way delay: 85.971 ms
Loss rate: 1.63%
-- Flow 3:
Average throughput: 20.17 Mbit/s
95th percentile per-packet one-way delay: 86.048 ms
Loss rate: 3.47%

Run 2: Report of QUIC Cubic — Data Link

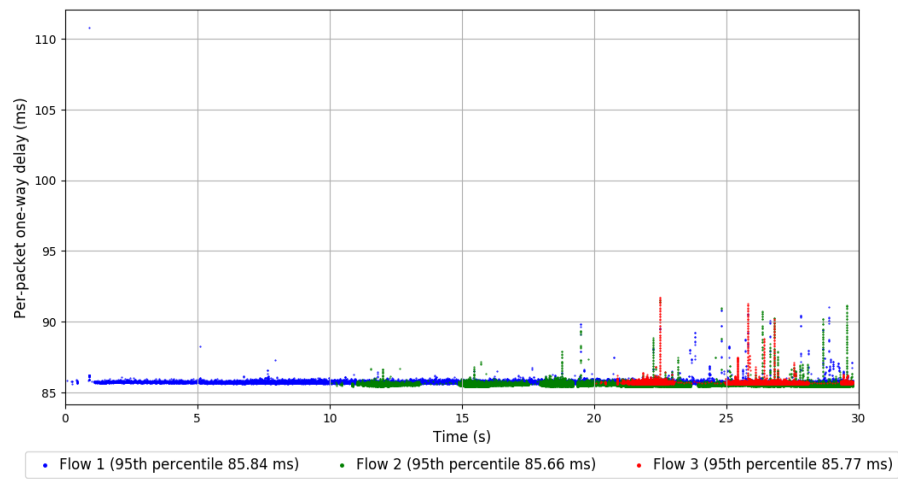
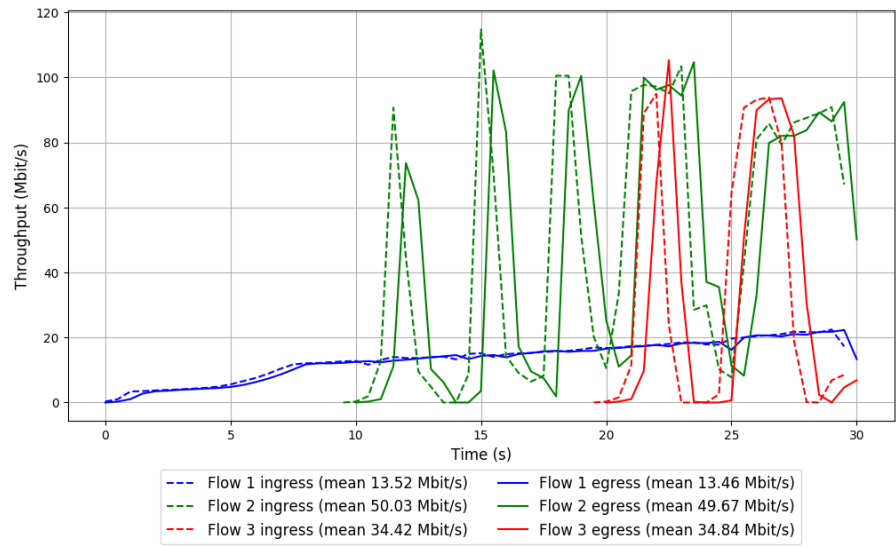


Run 3: Statistics of QUIC Cubic

Start at: 2019-01-19 00:06:42
End at: 2019-01-19 00:07:12
Local clock offset: -0.298 ms
Remote clock offset: -0.076 ms

Below is generated by plot.py at 2019-01-19 04:28:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 57.80 Mbit/s
95th percentile per-packet one-way delay: 85.773 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 13.46 Mbit/s
95th percentile per-packet one-way delay: 85.837 ms
Loss rate: 0.99%
-- Flow 2:
Average throughput: 49.67 Mbit/s
95th percentile per-packet one-way delay: 85.659 ms
Loss rate: 1.58%
-- Flow 3:
Average throughput: 34.84 Mbit/s
95th percentile per-packet one-way delay: 85.772 ms
Loss rate: 0.57%

Run 3: Report of QUIC Cubic — Data Link

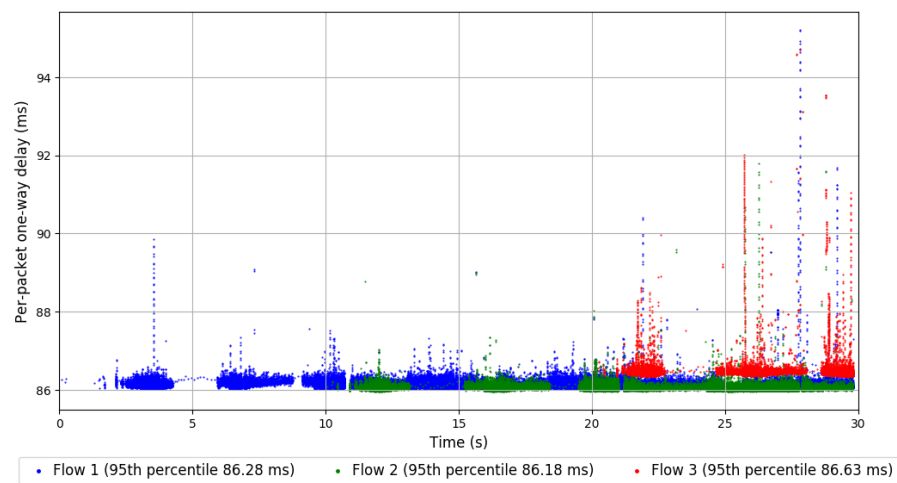
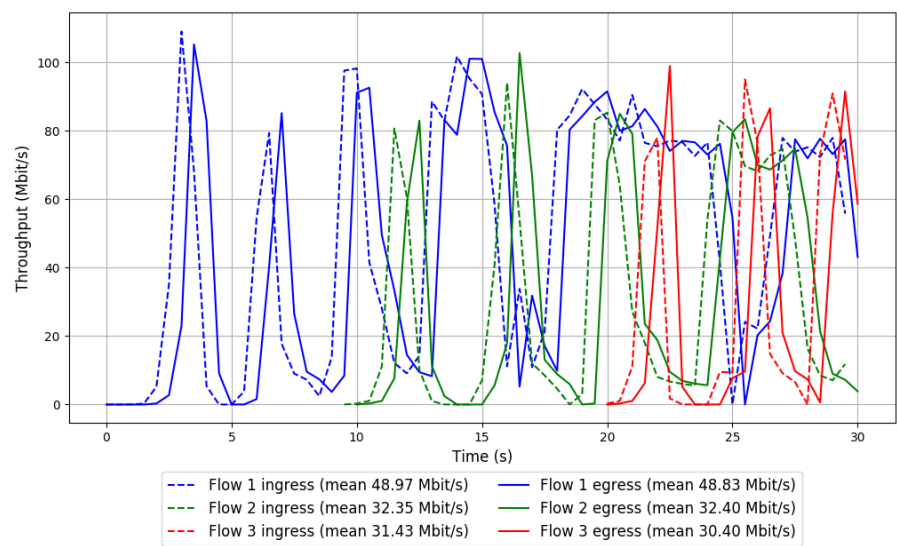


Run 4: Statistics of QUIC Cubic

Start at: 2019-01-19 00:45:27
End at: 2019-01-19 00:45:57
Local clock offset: 0.498 ms
Remote clock offset: -0.084 ms

Below is generated by plot.py at 2019-01-19 04:28:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 80.26 Mbit/s
95th percentile per-packet one-way delay: 86.443 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 48.83 Mbit/s
95th percentile per-packet one-way delay: 86.276 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 32.40 Mbit/s
95th percentile per-packet one-way delay: 86.182 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 30.40 Mbit/s
95th percentile per-packet one-way delay: 86.633 ms
Loss rate: 4.79%

Run 4: Report of QUIC Cubic — Data Link

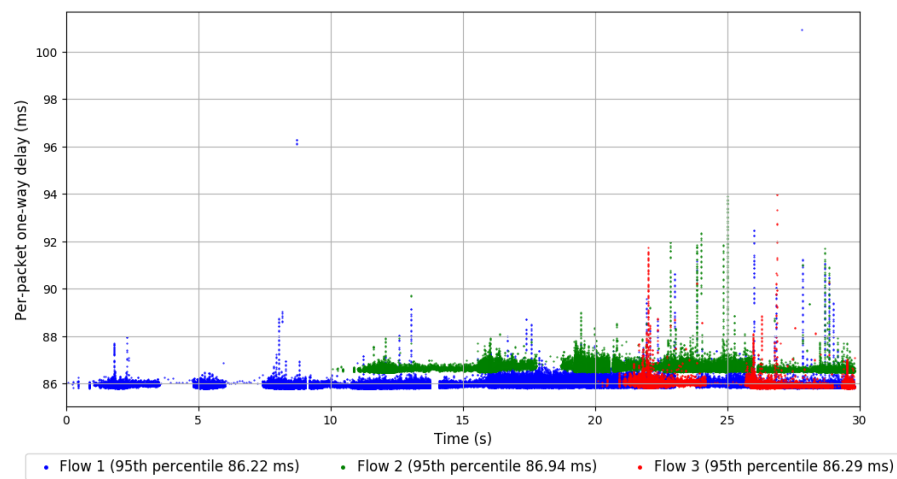
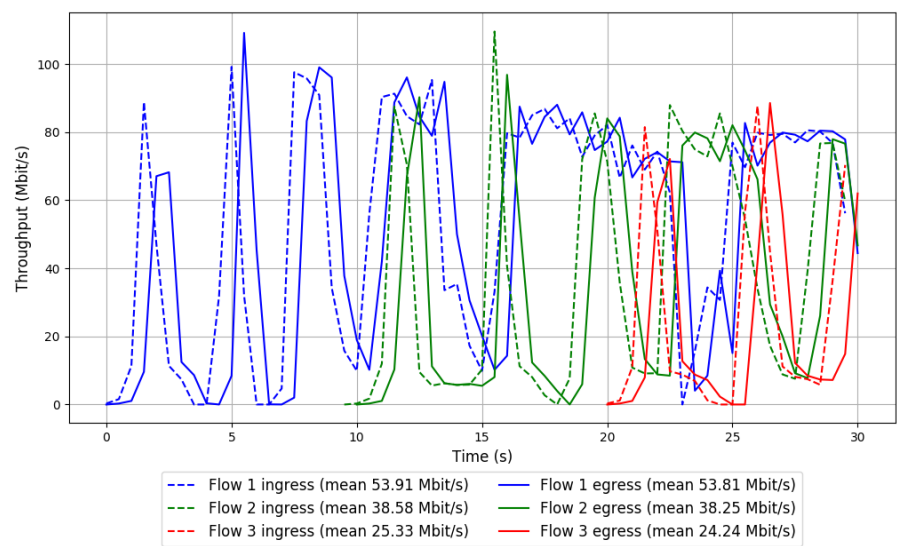


Run 5: Statistics of QUIC Cubic

Start at: 2019-01-19 01:25:48
End at: 2019-01-19 01:26:18
Local clock offset: -0.156 ms
Remote clock offset: -0.122 ms

Below is generated by plot.py at 2019-01-19 04:28:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 87.10 Mbit/s
95th percentile per-packet one-way delay: 86.787 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 53.81 Mbit/s
95th percentile per-packet one-way delay: 86.223 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 38.25 Mbit/s
95th percentile per-packet one-way delay: 86.941 ms
Loss rate: 1.72%
-- Flow 3:
Average throughput: 24.24 Mbit/s
95th percentile per-packet one-way delay: 86.288 ms
Loss rate: 5.99%

Run 5: Report of QUIC Cubic — Data Link

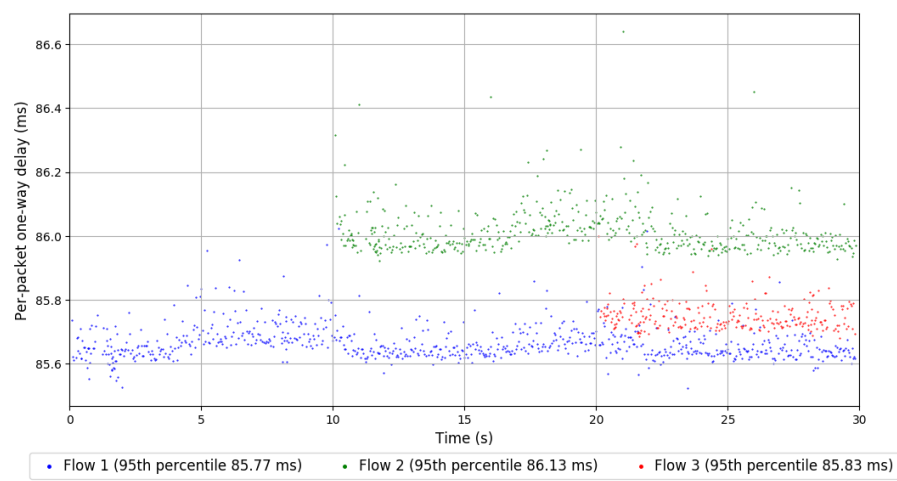
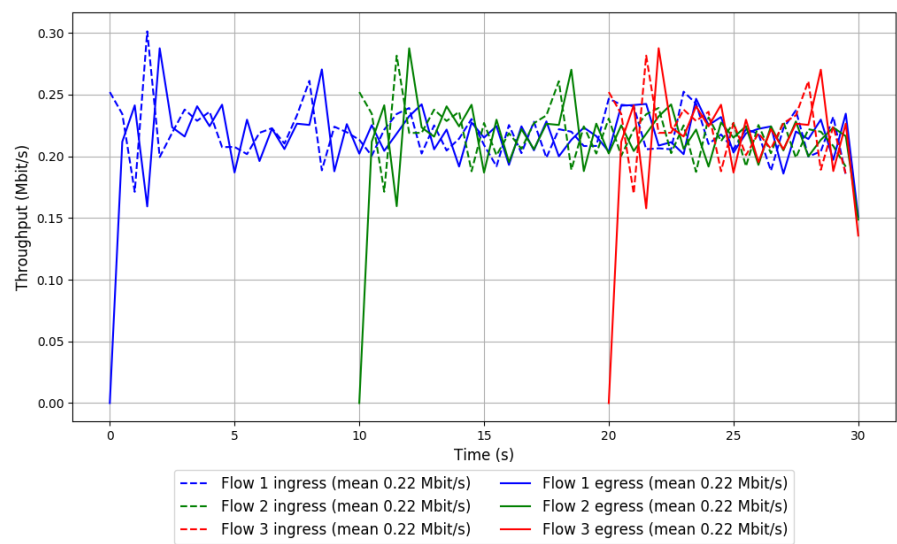


```
Run 1: Statistics of SReAM

Start at: 2019-01-18 22:39:22
End at: 2019-01-18 22:39:52
Local clock offset: -0.193 ms
Remote clock offset: -0.124 ms

# Below is generated by plot.py at 2019-01-19 04:28:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.069 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.766 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.126 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.829 ms
Loss rate: 1.85%
```

Run 1: Report of SReAM — Data Link

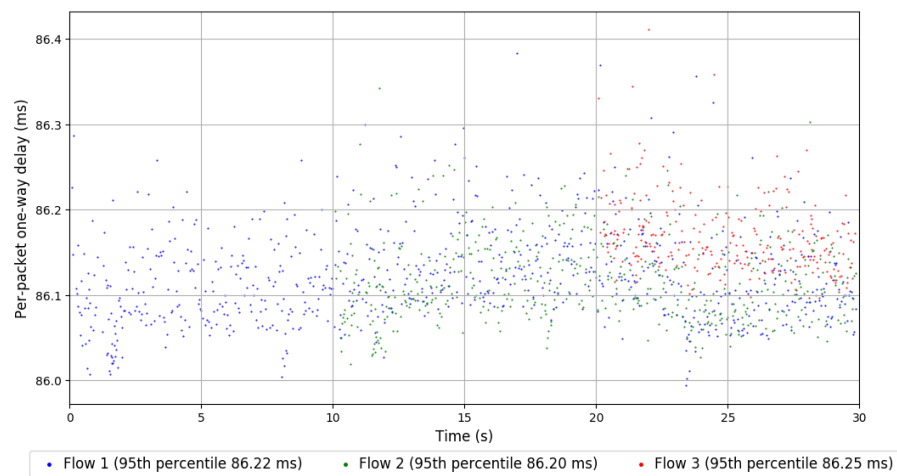
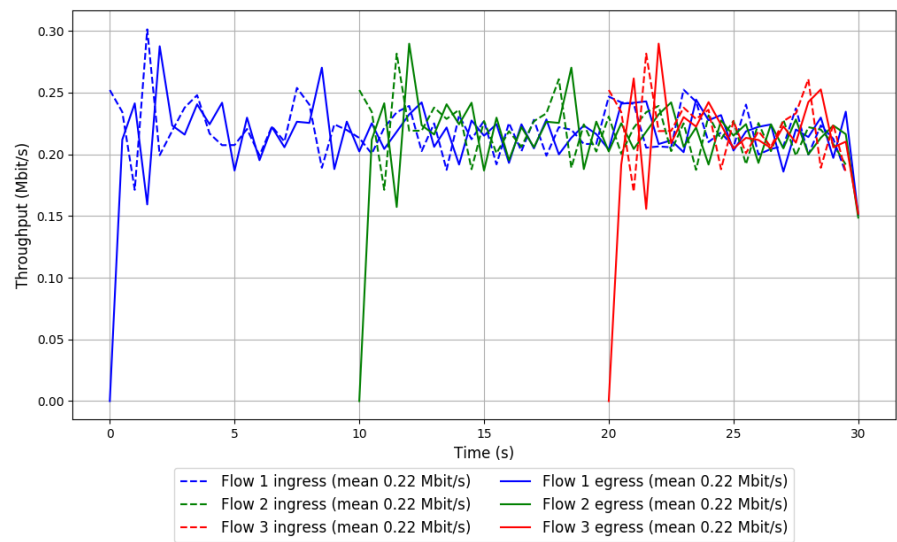


Run 2: Statistics of SReAM

Start at: 2019-01-18 23:18:49
End at: 2019-01-18 23:19:19
Local clock offset: 0.151 ms
Remote clock offset: -0.039 ms

Below is generated by plot.py at 2019-01-19 04:28:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.222 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.221 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.203 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.250 ms
Loss rate: 1.85%

Run 2: Report of SReAM — Data Link

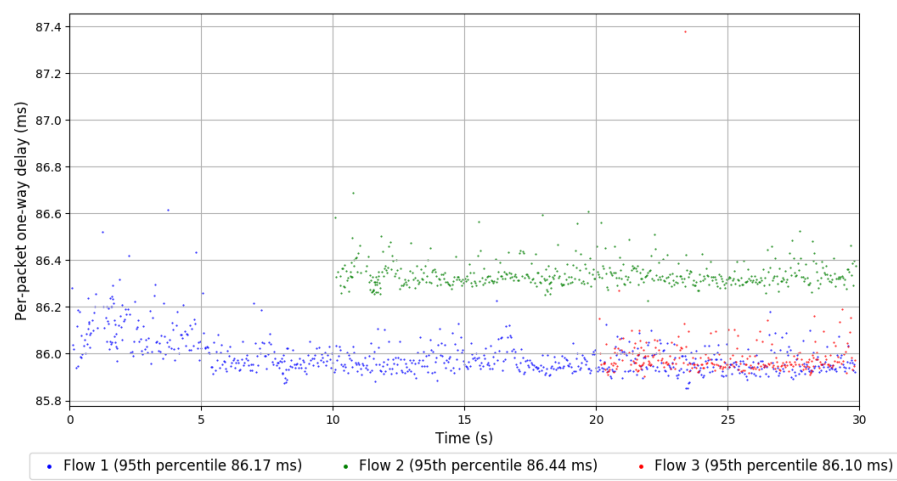
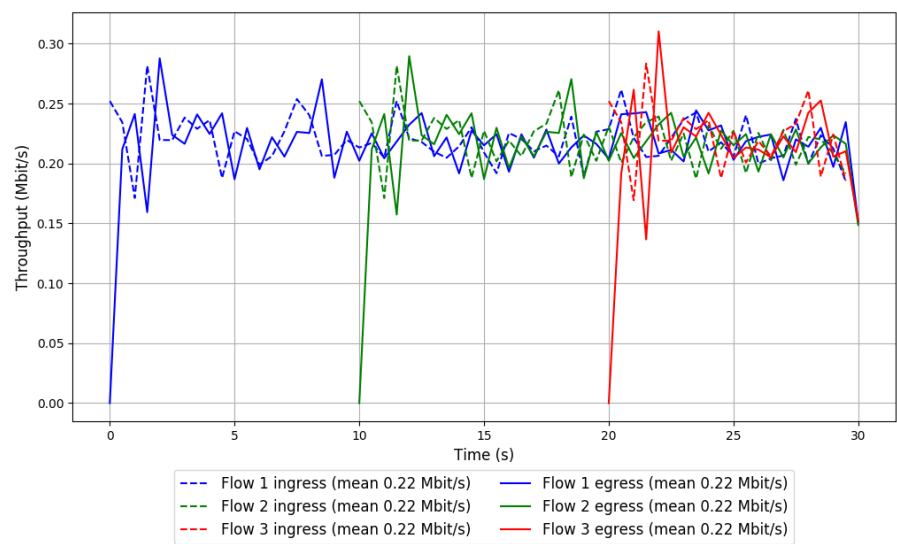


Run 3: Statistics of SReAM

Start at: 2019-01-18 23:58:00
End at: 2019-01-18 23:58:30
Local clock offset: -0.028 ms
Remote clock offset: -0.066 ms

Below is generated by plot.py at 2019-01-19 04:28:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.388 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.169 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.445 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.096 ms
Loss rate: 1.85%

Run 3: Report of SReAM — Data Link

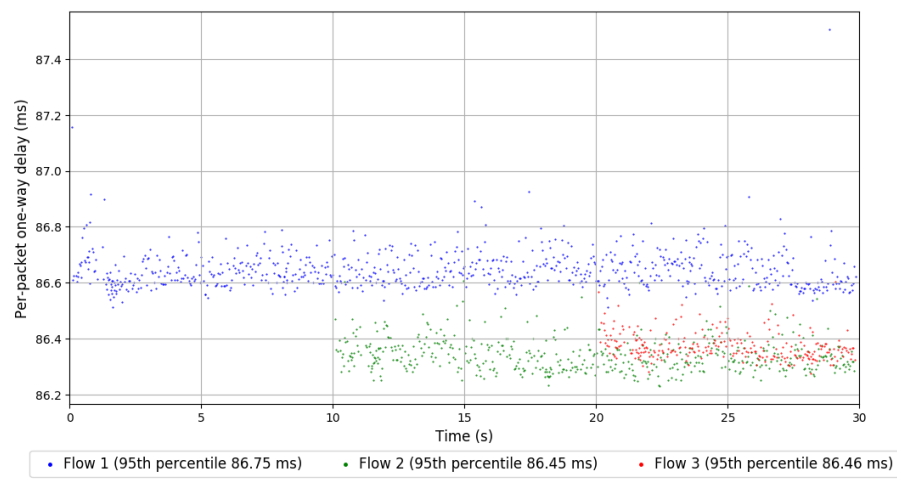
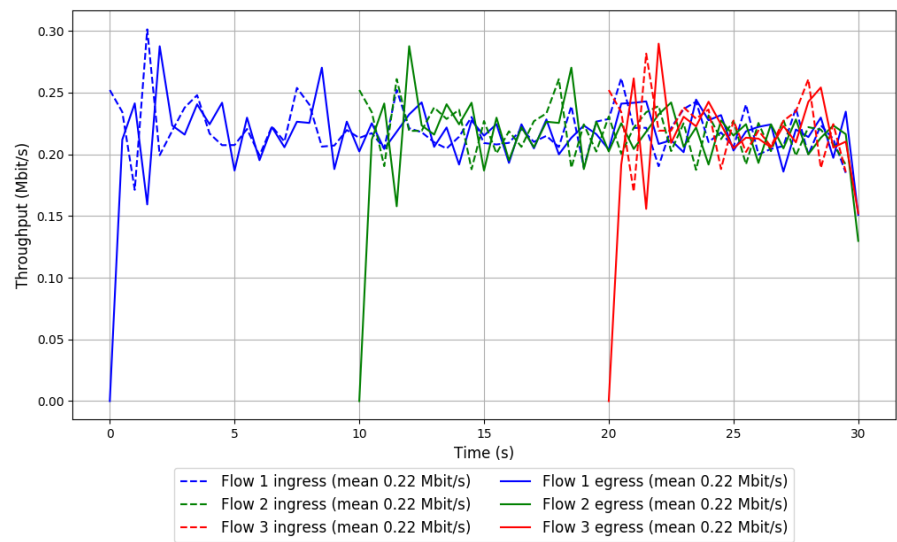


Run 4: Statistics of SReAM

Start at: 2019-01-19 00:37:01
End at: 2019-01-19 00:37:31
Local clock offset: 0.473 ms
Remote clock offset: -0.089 ms

Below is generated by plot.py at 2019-01-19 04:28:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.724 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.752 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.451 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.463 ms
Loss rate: 1.85%

Run 4: Report of SReAM — Data Link

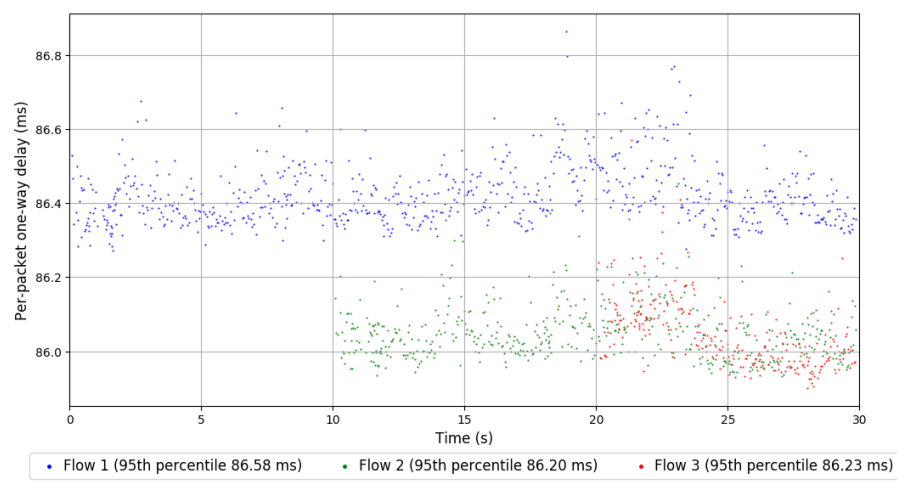
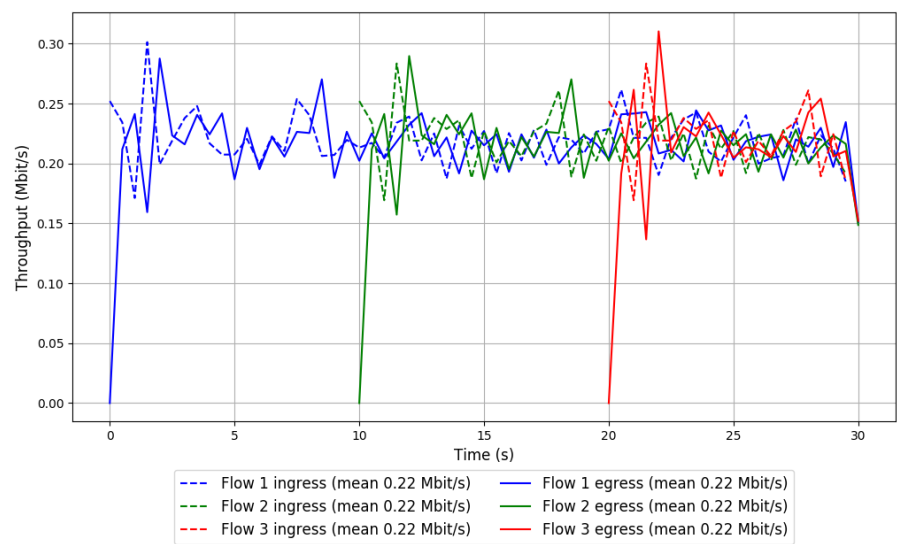


Run 5: Statistics of SReAM

Start at: 2019-01-19 01:17:19
End at: 2019-01-19 01:17:49
Local clock offset: -0.116 ms
Remote clock offset: -0.082 ms

Below is generated by plot.py at 2019-01-19 04:28:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.526 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.583 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.204 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.228 ms
Loss rate: 1.85%

Run 5: Report of SReAM — Data Link

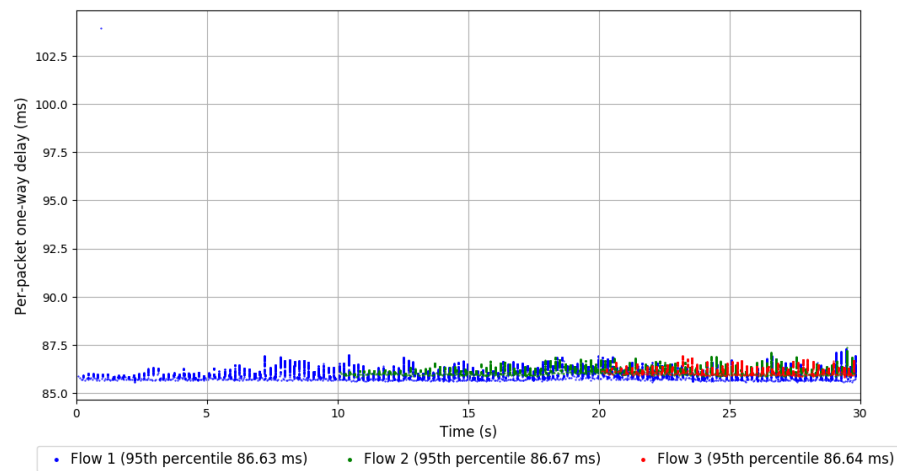
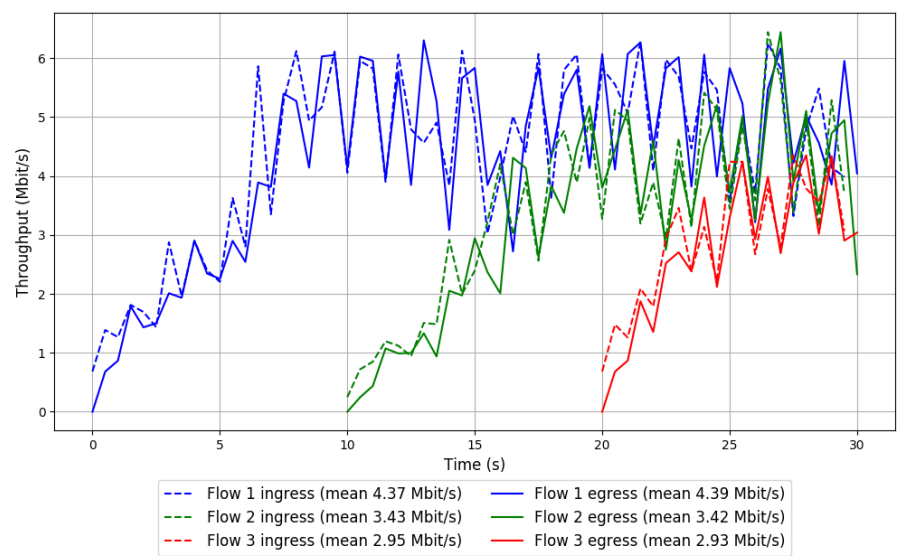


Run 1: Statistics of Sprout

Start at: 2019-01-18 22:34:02
End at: 2019-01-18 22:34:32
Local clock offset: -0.174 ms
Remote clock offset: -0.137 ms

Below is generated by plot.py at 2019-01-19 04:28:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 7.62 Mbit/s
95th percentile per-packet one-way delay: 86.646 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 4.39 Mbit/s
95th percentile per-packet one-way delay: 86.632 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.42 Mbit/s
95th percentile per-packet one-way delay: 86.666 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 2.93 Mbit/s
95th percentile per-packet one-way delay: 86.635 ms
Loss rate: 2.50%

Run 1: Report of Sprout — Data Link

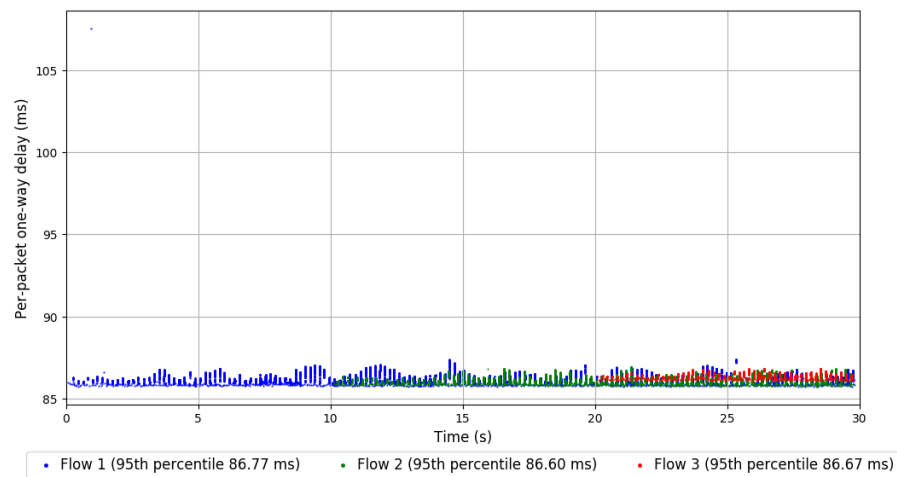
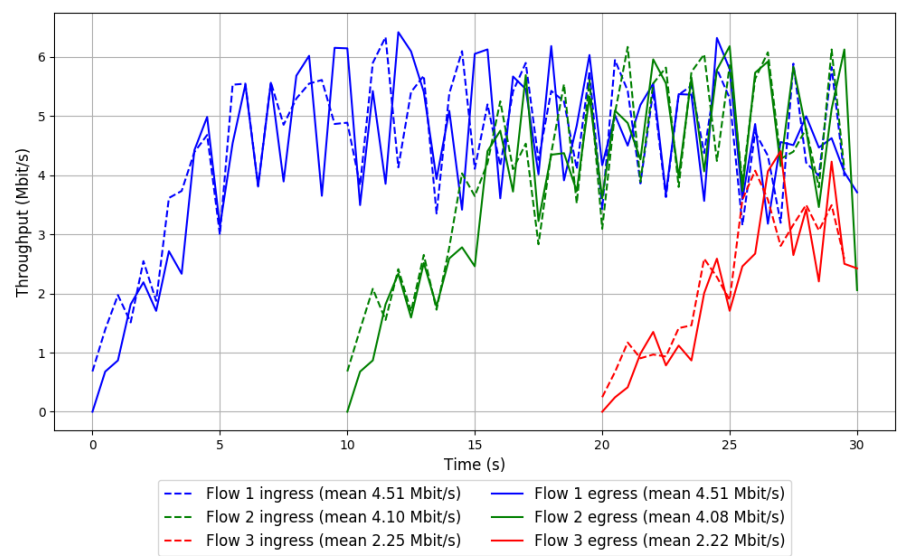


Run 2: Statistics of Sprout

Start at: 2019-01-18 23:13:17
End at: 2019-01-18 23:13:47
Local clock offset: -0.076 ms
Remote clock offset: -0.089 ms

Below is generated by plot.py at 2019-01-19 04:28:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 7.93 Mbit/s
95th percentile per-packet one-way delay: 86.708 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 4.51 Mbit/s
95th percentile per-packet one-way delay: 86.771 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 4.08 Mbit/s
95th percentile per-packet one-way delay: 86.600 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 86.665 ms
Loss rate: 2.90%

Run 2: Report of Sprout — Data Link

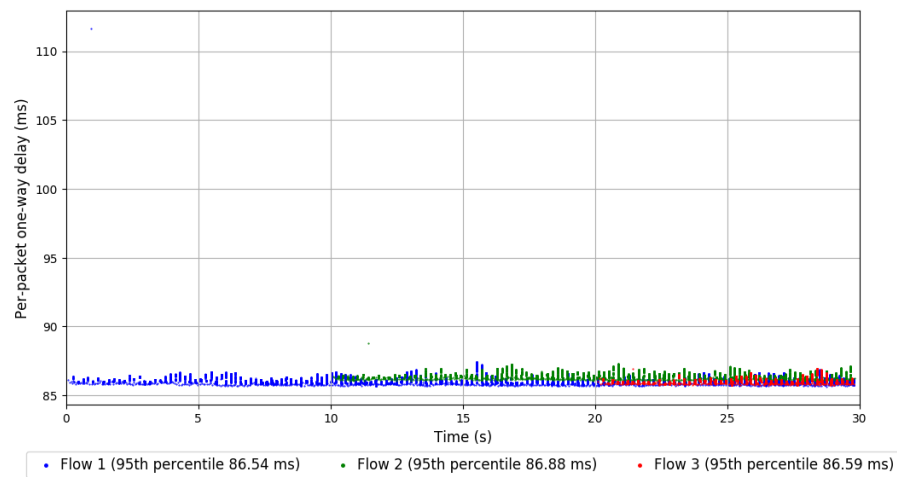
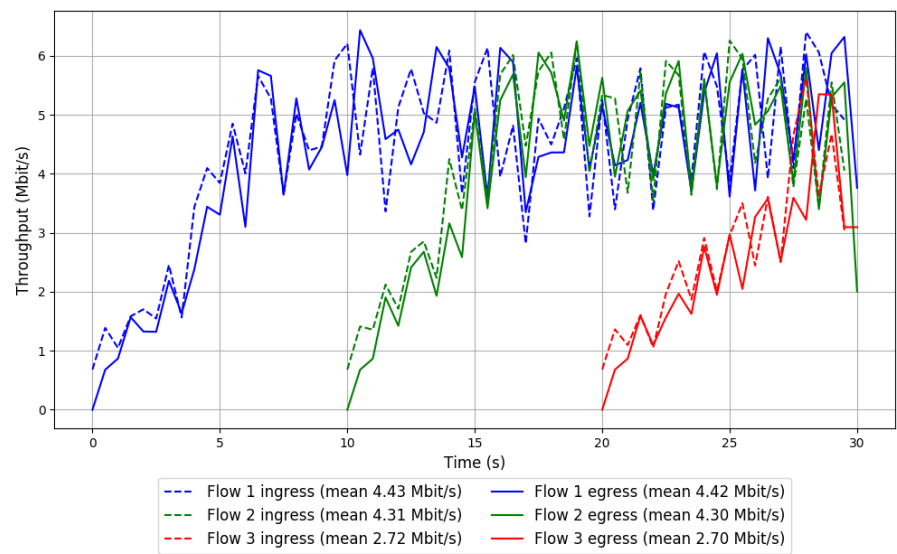


Run 3: Statistics of Sprout

Start at: 2019-01-18 23:52:48
End at: 2019-01-18 23:53:18
Local clock offset: -0.128 ms
Remote clock offset: -0.067 ms

```
# Below is generated by plot.py at 2019-01-19 04:28:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.15 Mbit/s
95th percentile per-packet one-way delay: 86.739 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 4.42 Mbit/s
95th percentile per-packet one-way delay: 86.539 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 4.30 Mbit/s
95th percentile per-packet one-way delay: 86.880 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 2.70 Mbit/s
95th percentile per-packet one-way delay: 86.594 ms
Loss rate: 2.84%
```

Run 3: Report of Sprout — Data Link

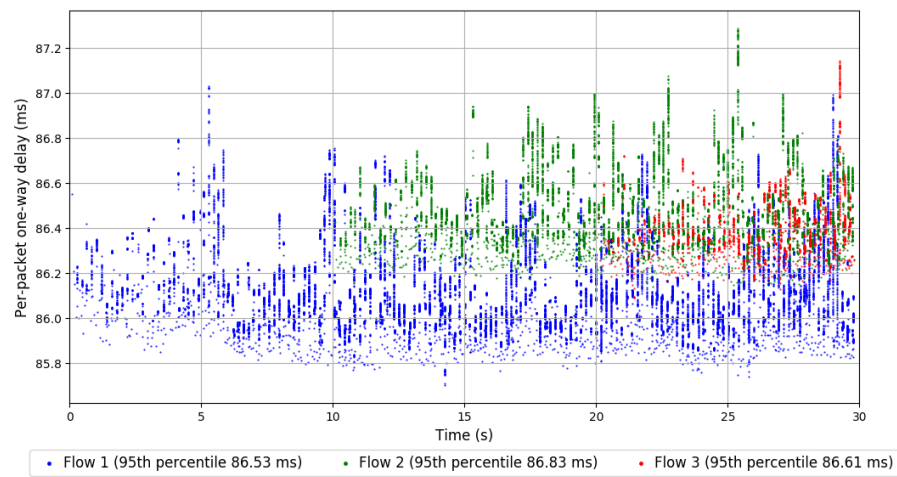
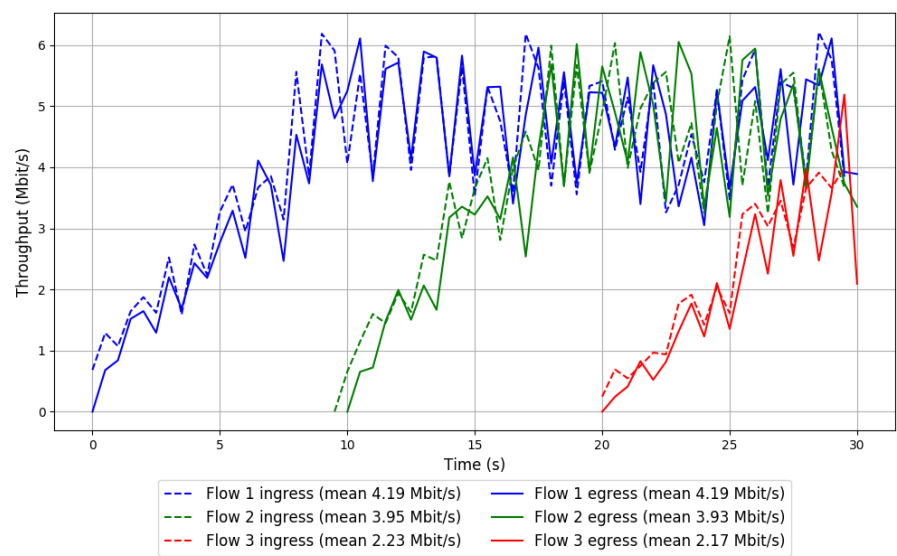


Run 4: Statistics of Sprout

Start at: 2019-01-19 00:31:41
End at: 2019-01-19 00:32:11
Local clock offset: 0.028 ms
Remote clock offset: -0.121 ms

```
# Below is generated by plot.py at 2019-01-19 04:28:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.50 Mbit/s
95th percentile per-packet one-way delay: 86.721 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 4.19 Mbit/s
95th percentile per-packet one-way delay: 86.530 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 3.93 Mbit/s
95th percentile per-packet one-way delay: 86.826 ms
Loss rate: 1.16%
-- Flow 3:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 86.610 ms
Loss rate: 4.33%
```

Run 4: Report of Sprout — Data Link

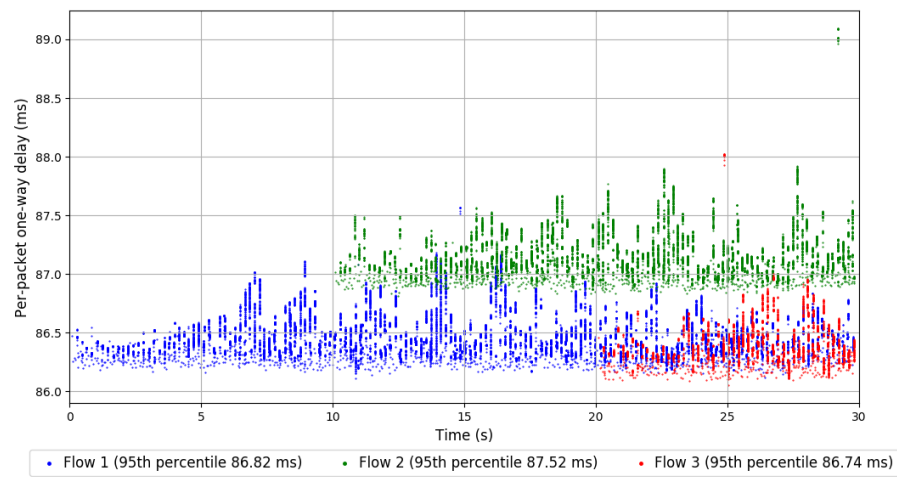
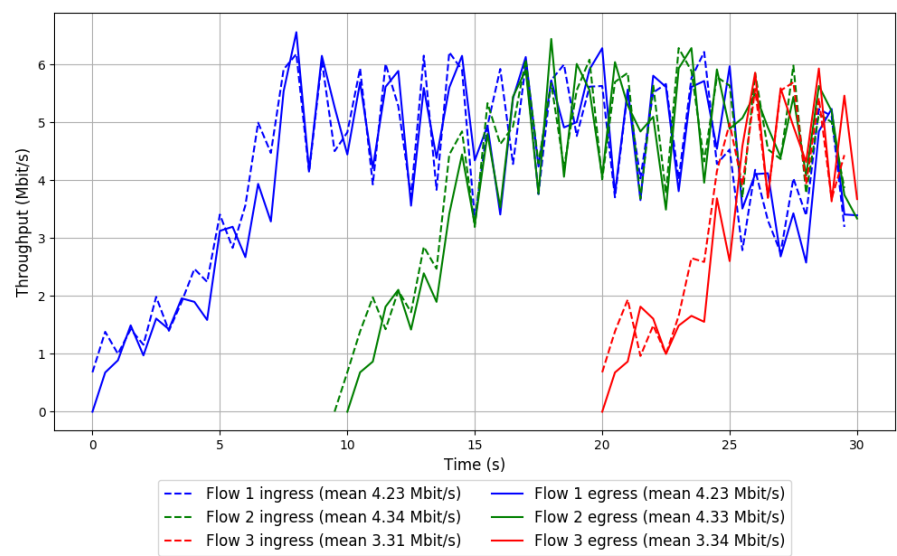


Run 5: Statistics of Sprout

Start at: 2019-01-19 01:12:01
End at: 2019-01-19 01:12:31
Local clock offset: 0.125 ms
Remote clock offset: -0.097 ms

Below is generated by plot.py at 2019-01-19 04:28:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.19 Mbit/s
95th percentile per-packet one-way delay: 87.355 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 4.23 Mbit/s
95th percentile per-packet one-way delay: 86.822 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 4.33 Mbit/s
95th percentile per-packet one-way delay: 87.521 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 3.34 Mbit/s
95th percentile per-packet one-way delay: 86.742 ms
Loss rate: 1.17%

Run 5: Report of Sprout — Data Link

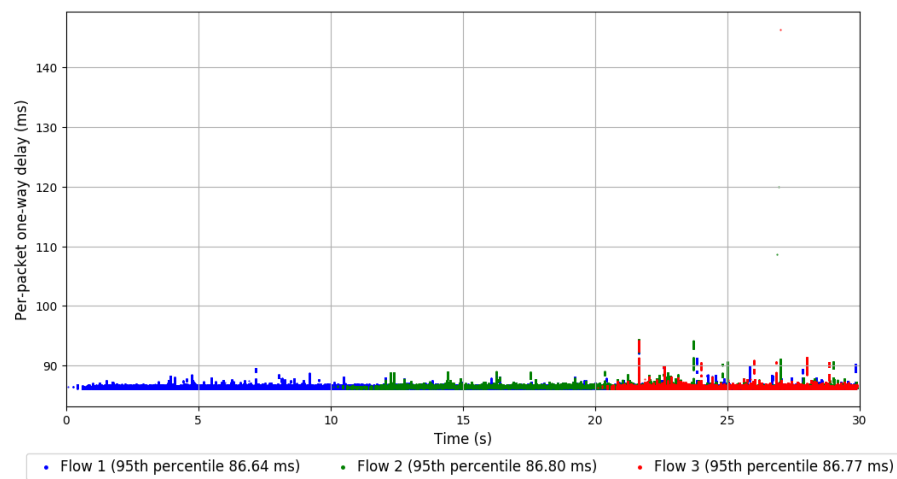
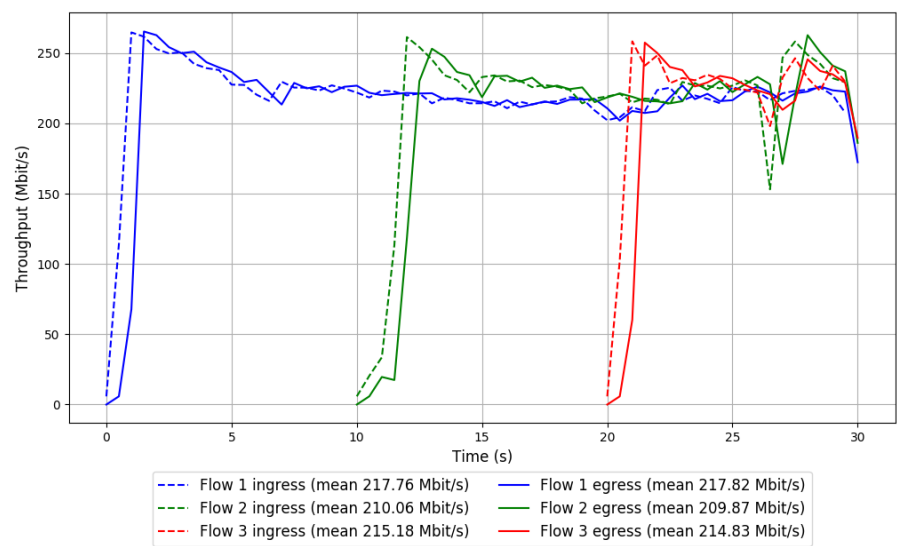



```
Run 1: Statistics of TaoVA-100x

Start at: 2019-01-18 22:51:14
End at: 2019-01-18 22:51:44
Local clock offset: 0.532 ms
Remote clock offset: -0.071 ms

# Below is generated by plot.py at 2019-01-19 04:34:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 427.77 Mbit/s
95th percentile per-packet one-way delay: 86.706 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 217.82 Mbit/s
95th percentile per-packet one-way delay: 86.641 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 209.87 Mbit/s
95th percentile per-packet one-way delay: 86.802 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 214.83 Mbit/s
95th percentile per-packet one-way delay: 86.766 ms
Loss rate: 1.89%
```

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

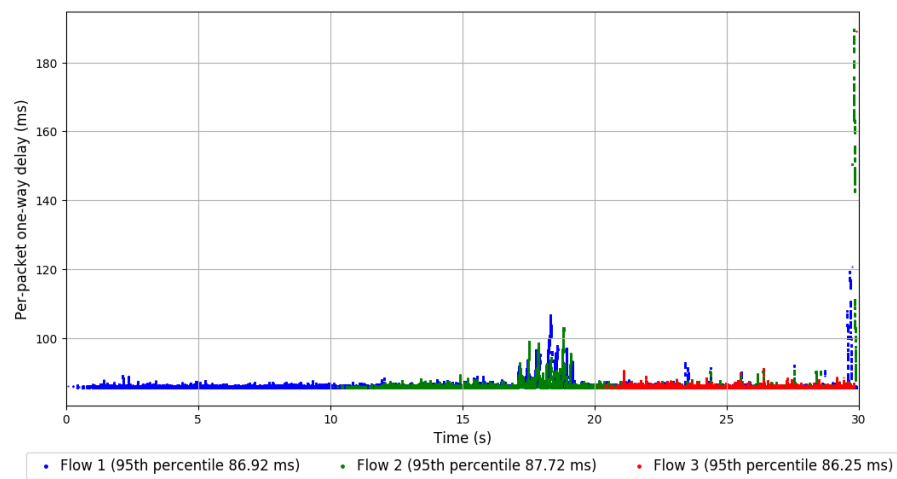
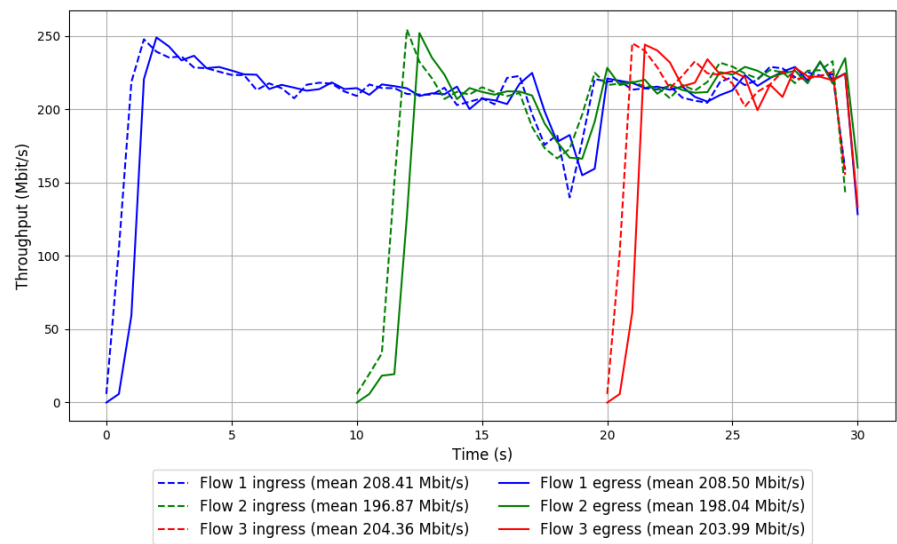


Run 2: Statistics of TaoVA-100x

Start at: 2019-01-18 23:30:47
End at: 2019-01-18 23:31:17
Local clock offset: -0.246 ms
Remote clock offset: -0.087 ms

Below is generated by plot.py at 2019-01-19 04:34:51
Datalink statistics
-- Total of 3 flows:
Average throughput: 406.94 Mbit/s
95th percentile per-packet one-way delay: 86.938 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 208.50 Mbit/s
95th percentile per-packet one-way delay: 86.923 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 198.04 Mbit/s
95th percentile per-packet one-way delay: 87.720 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 203.99 Mbit/s
95th percentile per-packet one-way delay: 86.248 ms
Loss rate: 1.53%

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

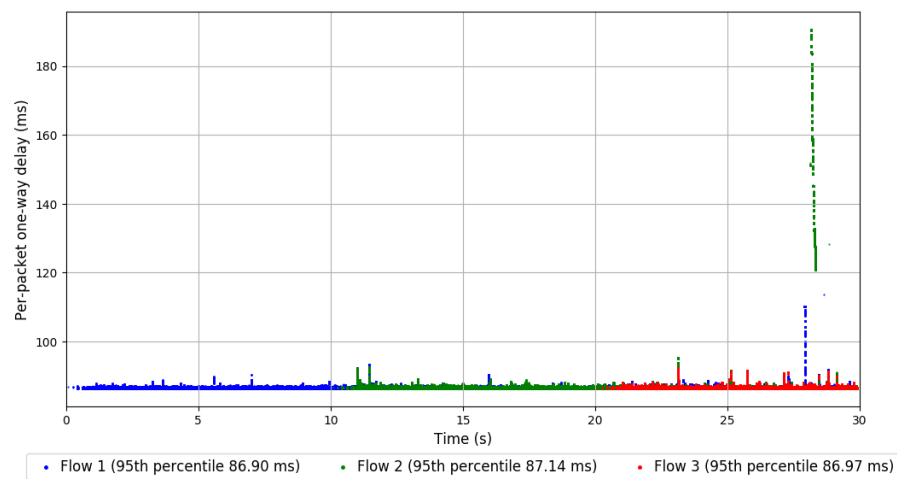
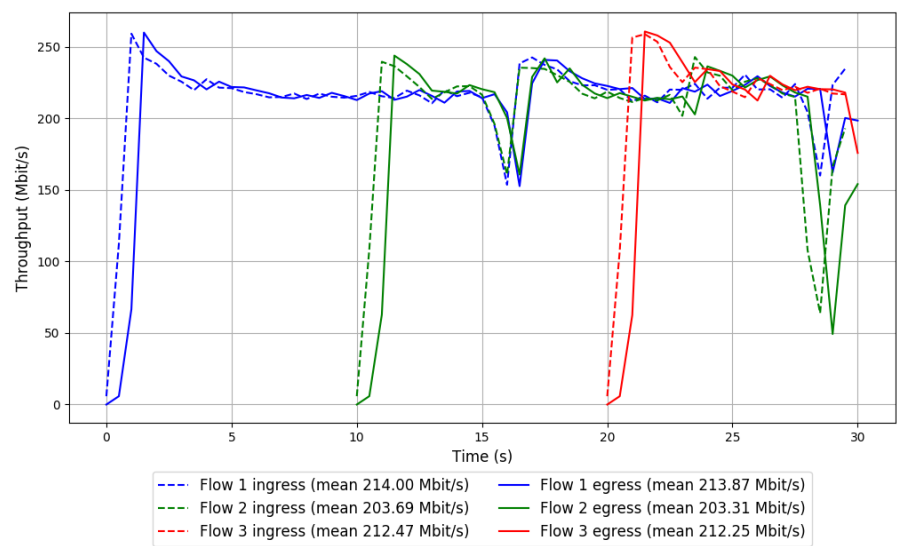


Run 3: Statistics of TaoVA-100x

Start at: 2019-01-19 00:10:00
End at: 2019-01-19 00:10:30
Local clock offset: 0.599 ms
Remote clock offset: -0.069 ms

Below is generated by plot.py at 2019-01-19 04:34:51
Datalink statistics
-- Total of 3 flows:
Average throughput: 418.72 Mbit/s
95th percentile per-packet one-way delay: 86.979 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 213.87 Mbit/s
95th percentile per-packet one-way delay: 86.897 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 203.31 Mbit/s
95th percentile per-packet one-way delay: 87.144 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 212.25 Mbit/s
95th percentile per-packet one-way delay: 86.971 ms
Loss rate: 1.84%

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

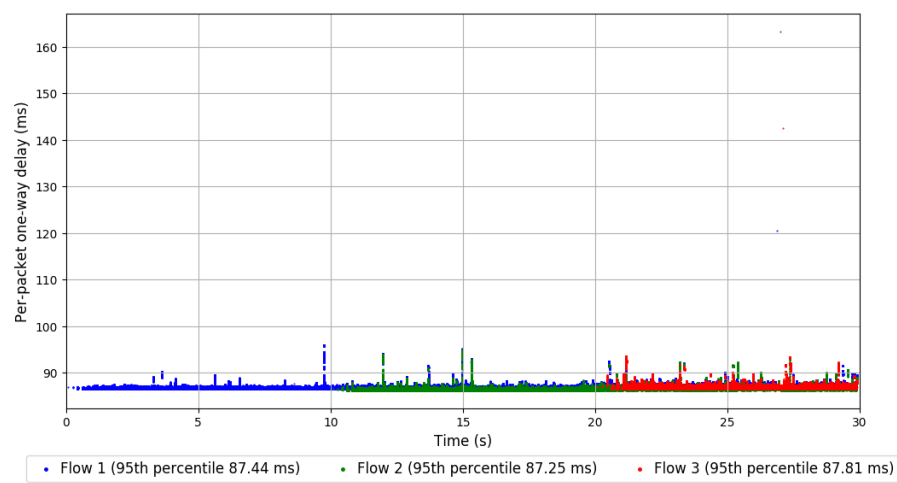
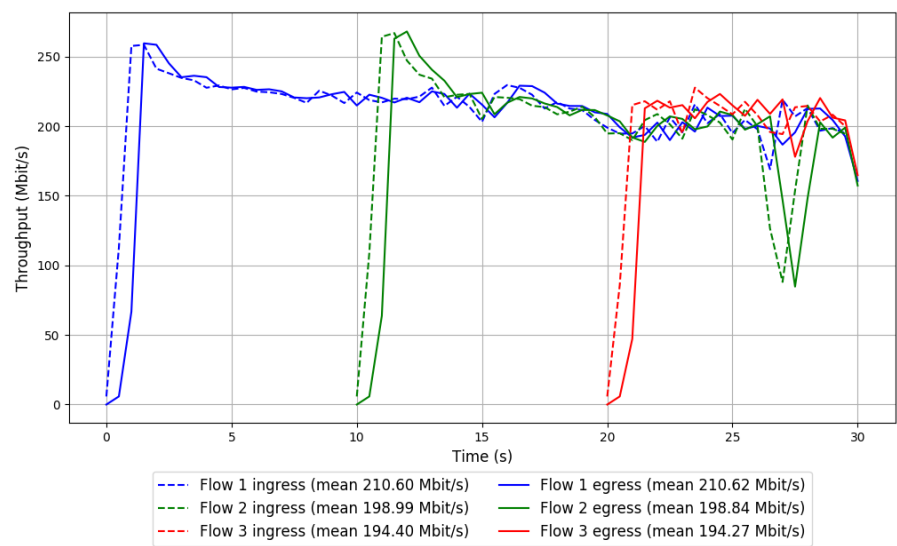


Run 4: Statistics of TaoVA-100x

Start at: 2019-01-19 00:49:26
End at: 2019-01-19 00:49:56
Local clock offset: 0.647 ms
Remote clock offset: -0.098 ms

Below is generated by plot.py at 2019-01-19 04:34:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 406.50 Mbit/s
95th percentile per-packet one-way delay: 87.458 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 210.62 Mbit/s
95th percentile per-packet one-way delay: 87.443 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 198.84 Mbit/s
95th percentile per-packet one-way delay: 87.249 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 194.27 Mbit/s
95th percentile per-packet one-way delay: 87.813 ms
Loss rate: 1.81%

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

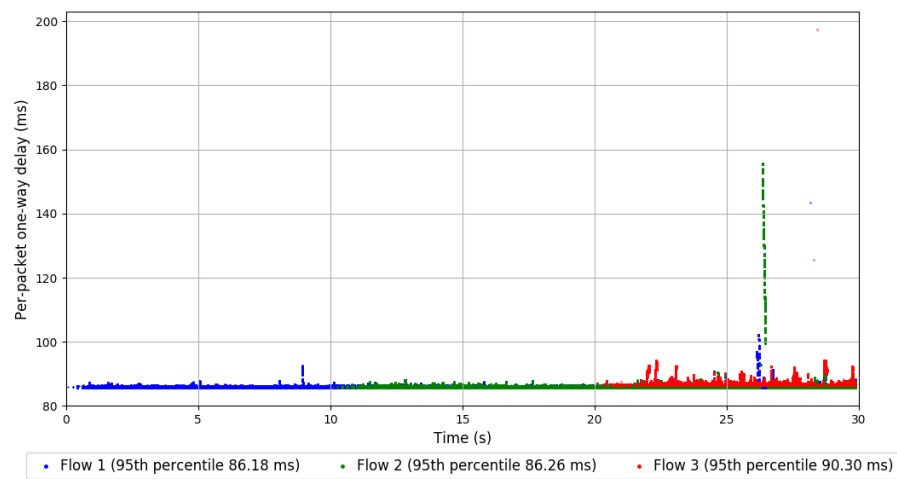
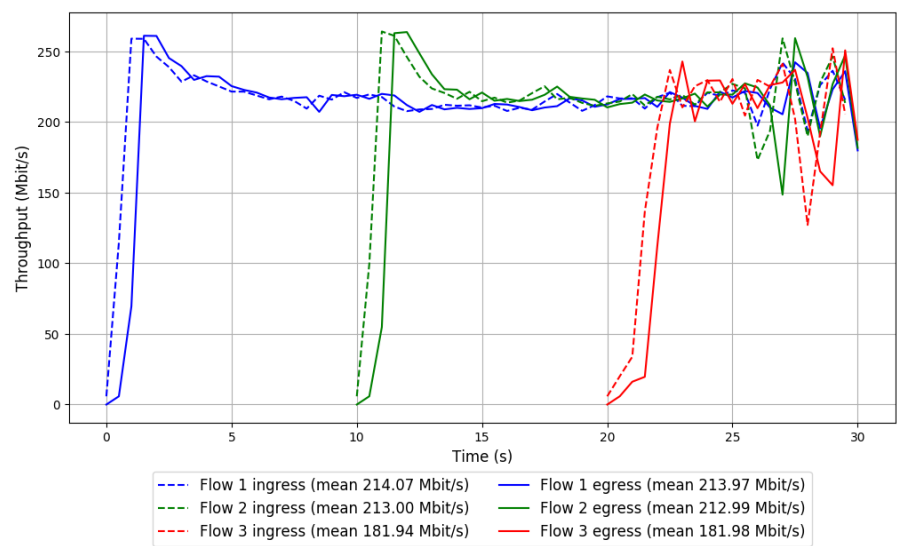


Run 5: Statistics of TaoVA-100x

Start at: 2019-01-19 01:29:23
End at: 2019-01-19 01:29:53
Local clock offset: -0.37 ms
Remote clock offset: -0.132 ms

Below is generated by plot.py at 2019-01-19 04:35:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 415.14 Mbit/s
95th percentile per-packet one-way delay: 86.841 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 213.97 Mbit/s
95th percentile per-packet one-way delay: 86.178 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 212.99 Mbit/s
95th percentile per-packet one-way delay: 86.257 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 181.98 Mbit/s
95th percentile per-packet one-way delay: 90.301 ms
Loss rate: 1.72%

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

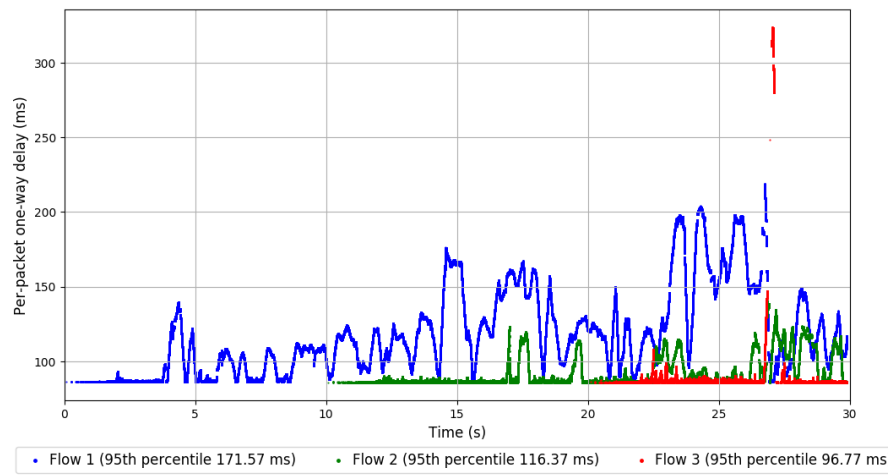
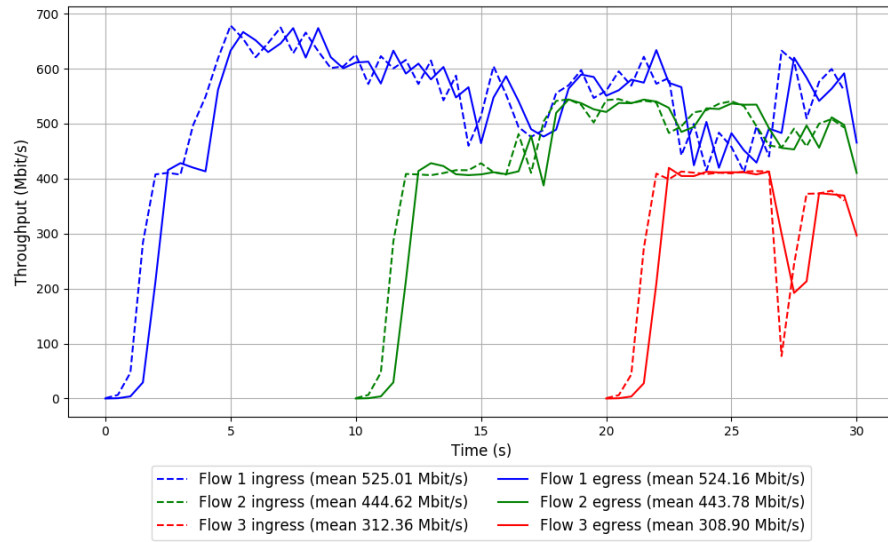


Run 1: Statistics of TCP Vegas

Start at: 2019-01-18 22:49:03
End at: 2019-01-18 22:49:33
Local clock offset: -0.01 ms
Remote clock offset: -0.059 ms

Below is generated by plot.py at 2019-01-19 04:43:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 920.54 Mbit/s
95th percentile per-packet one-way delay: 162.170 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 524.16 Mbit/s
95th percentile per-packet one-way delay: 171.569 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 443.78 Mbit/s
95th percentile per-packet one-way delay: 116.373 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 308.90 Mbit/s
95th percentile per-packet one-way delay: 96.769 ms
Loss rate: 2.82%

Run 1: Report of TCP Vegas — Data Link

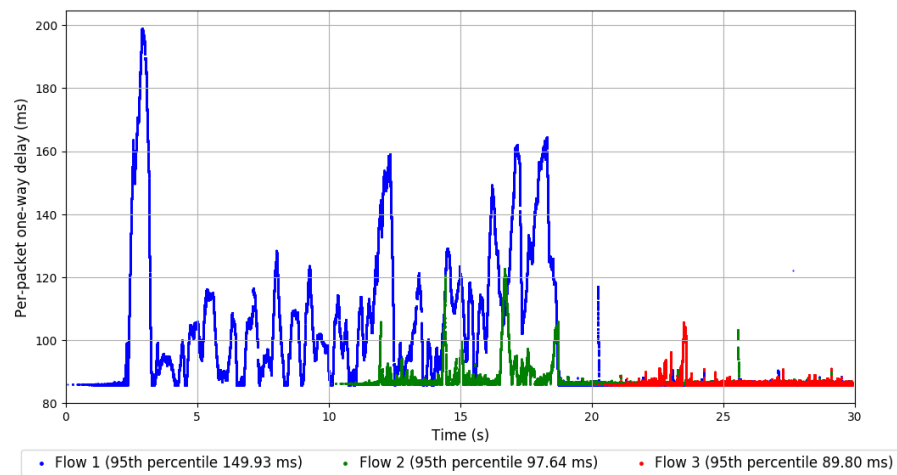
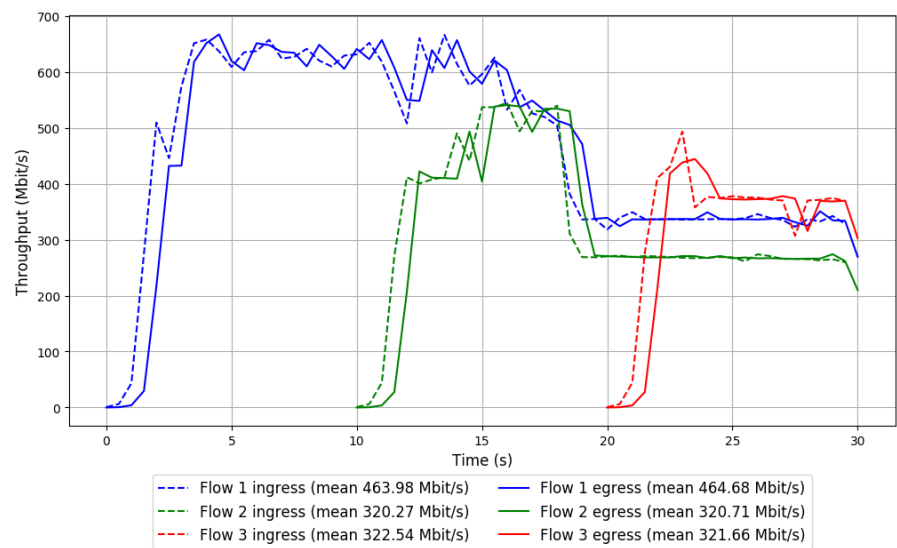


Run 2: Statistics of TCP Vegas

Start at: 2019-01-18 23:28:36
End at: 2019-01-18 23:29:06
Local clock offset: -0.079 ms
Remote clock offset: -0.034 ms

Below is generated by plot.py at 2019-01-19 04:43:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 783.43 Mbit/s
95th percentile per-packet one-way delay: 133.687 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 464.68 Mbit/s
95th percentile per-packet one-way delay: 149.929 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 320.71 Mbit/s
95th percentile per-packet one-way delay: 97.636 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 321.66 Mbit/s
95th percentile per-packet one-way delay: 89.795 ms
Loss rate: 2.00%

Run 2: Report of TCP Vegas — Data Link

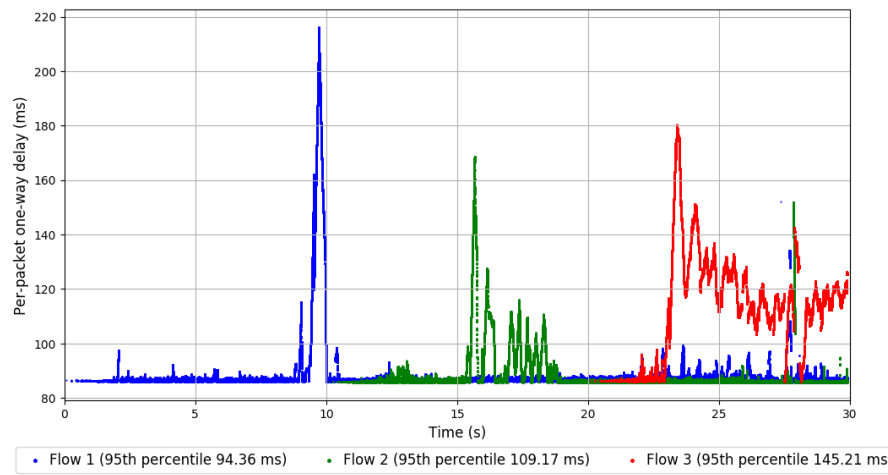
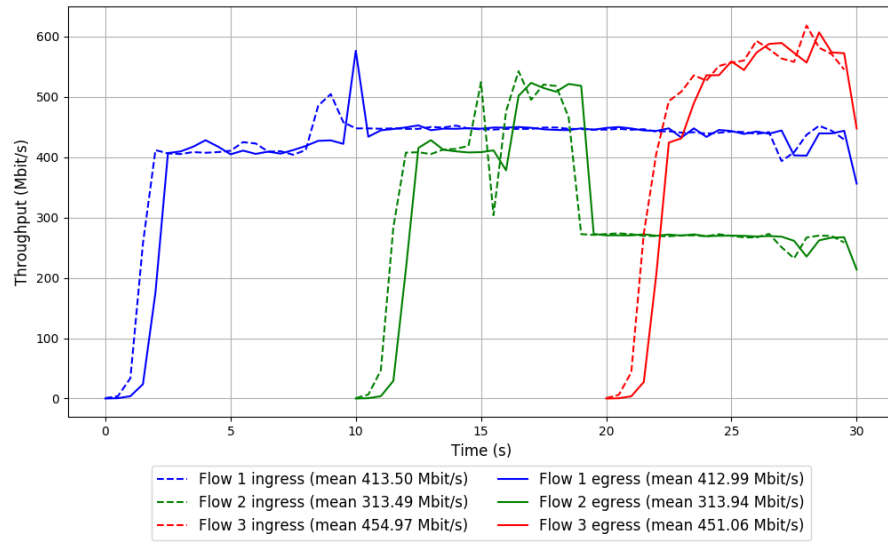


Run 3: Statistics of TCP Vegas

Start at: 2019-01-19 00:08:01
End at: 2019-01-19 00:08:31
Local clock offset: -0.091 ms
Remote clock offset: -0.047 ms

Below is generated by plot.py at 2019-01-19 04:46:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 769.81 Mbit/s
95th percentile per-packet one-way delay: 129.139 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 412.99 Mbit/s
95th percentile per-packet one-way delay: 94.364 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 313.94 Mbit/s
95th percentile per-packet one-way delay: 109.174 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 451.06 Mbit/s
95th percentile per-packet one-way delay: 145.213 ms
Loss rate: 2.57%

Run 3: Report of TCP Vegas — Data Link

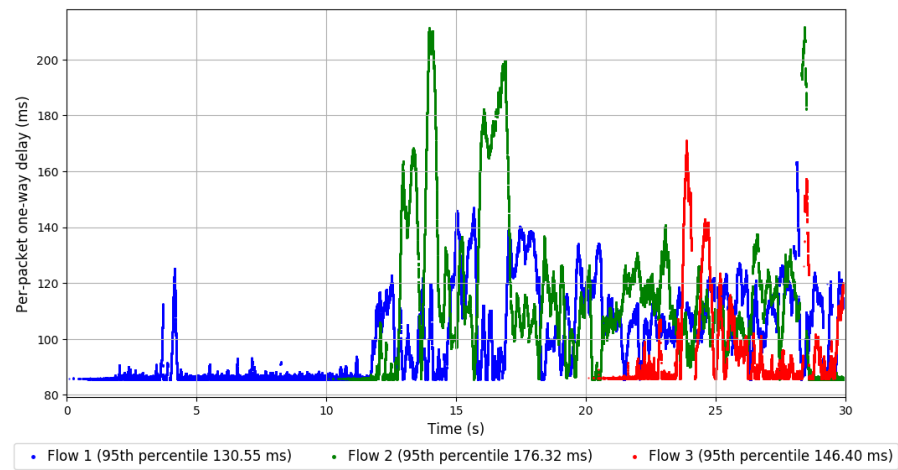
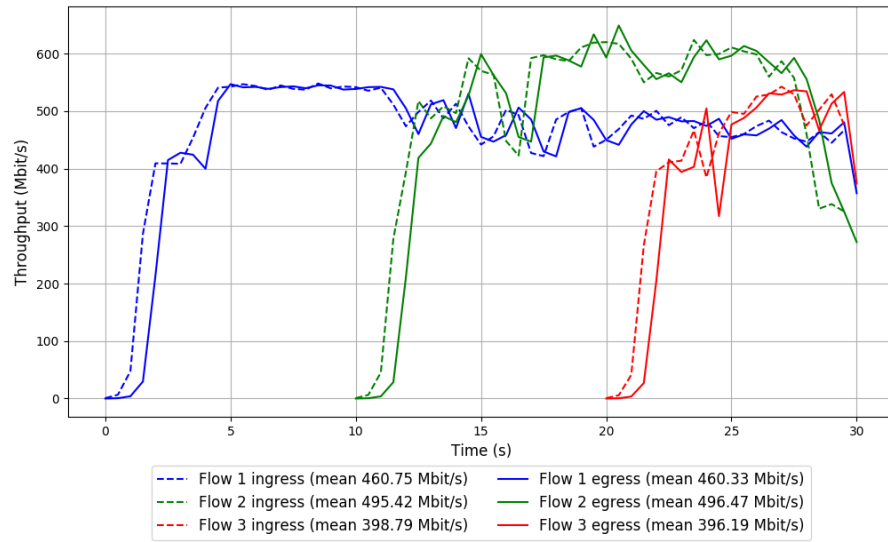


Run 4: Statistics of TCP Vegas

Start at: 2019-01-19 00:46:48
End at: 2019-01-19 00:47:18
Local clock offset: -0.024 ms
Remote clock offset: -0.095 ms

Below is generated by plot.py at 2019-01-19 04:54:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 920.23 Mbit/s
95th percentile per-packet one-way delay: 143.929 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 460.33 Mbit/s
95th percentile per-packet one-way delay: 130.547 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 496.47 Mbit/s
95th percentile per-packet one-way delay: 176.316 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 396.19 Mbit/s
95th percentile per-packet one-way delay: 146.395 ms
Loss rate: 2.37%

Run 4: Report of TCP Vegas — Data Link

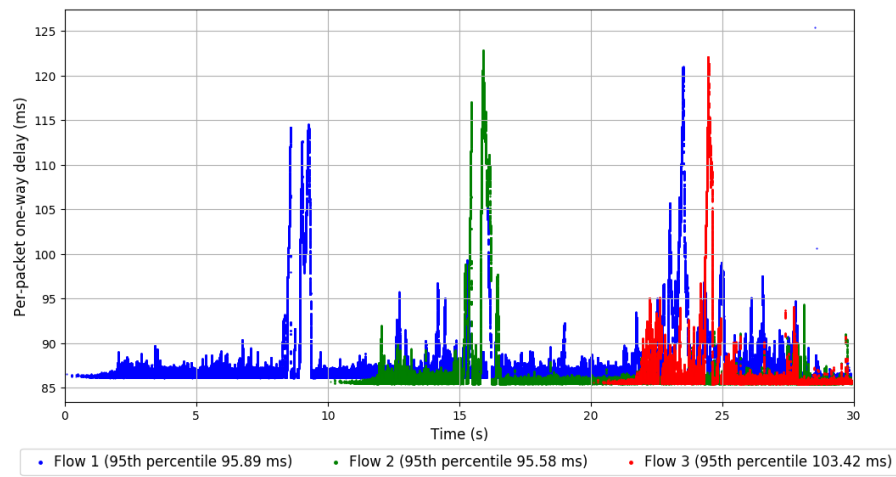
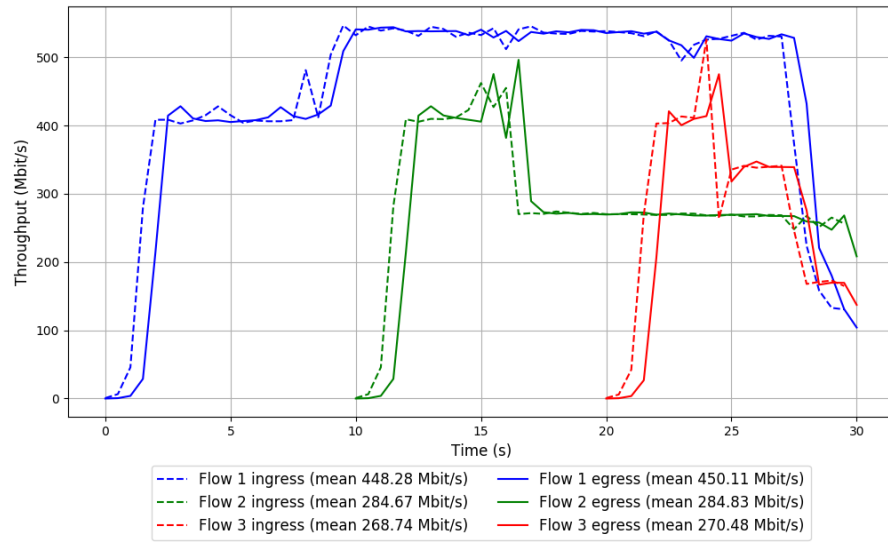


Run 5: Statistics of TCP Vegas

Start at: 2019-01-19 01:27:09
End at: 2019-01-19 01:27:39
Local clock offset: -0.518 ms
Remote clock offset: -0.118 ms

Below is generated by plot.py at 2019-01-19 04:54:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 728.02 Mbit/s
95th percentile per-packet one-way delay: 96.105 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 450.11 Mbit/s
95th percentile per-packet one-way delay: 95.888 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 284.83 Mbit/s
95th percentile per-packet one-way delay: 95.578 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 270.48 Mbit/s
95th percentile per-packet one-way delay: 103.418 ms
Loss rate: 1.10%

Run 5: Report of TCP Vegas — Data Link

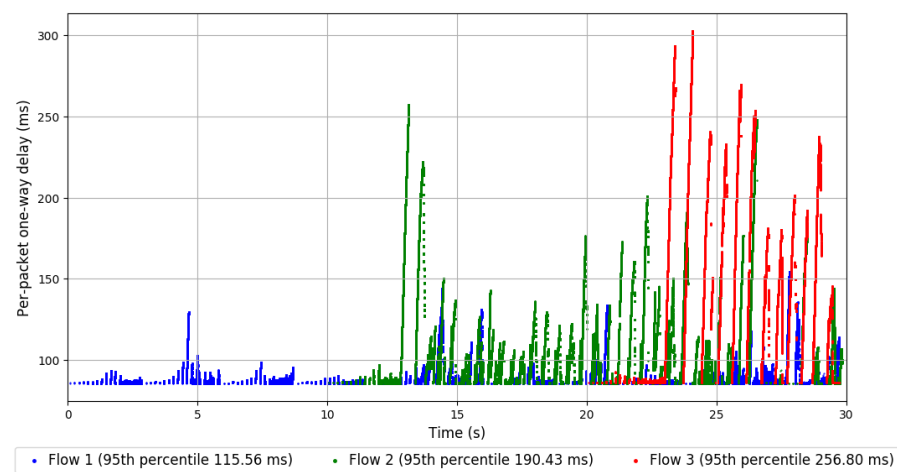
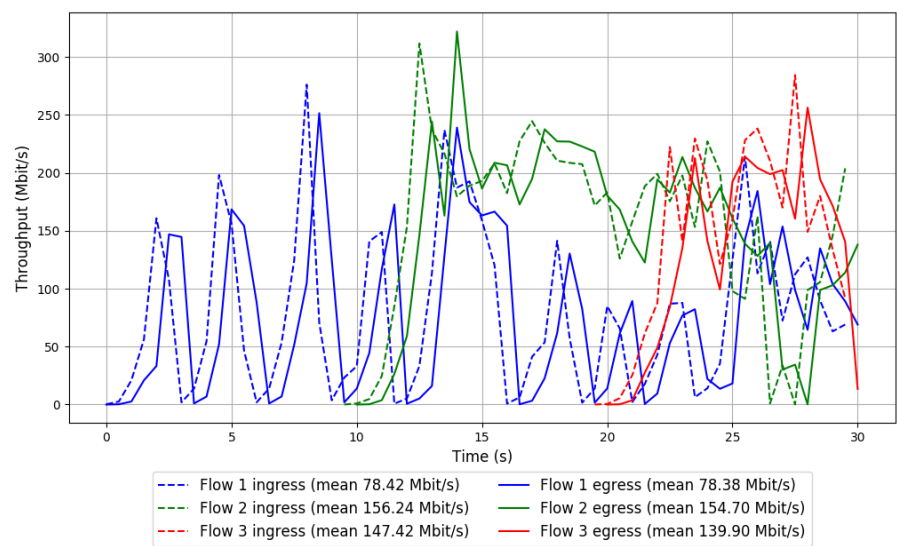


Run 1: Statistics of Verus

Start at: 2019-01-18 22:46:04
End at: 2019-01-18 22:46:34
Local clock offset: -0.093 ms
Remote clock offset: -0.05 ms

Below is generated by plot.py at 2019-01-19 04:54:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 226.44 Mbit/s
95th percentile per-packet one-way delay: 217.717 ms
Loss rate: 2.52%
-- Flow 1:
Average throughput: 78.38 Mbit/s
95th percentile per-packet one-way delay: 115.561 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 154.70 Mbit/s
95th percentile per-packet one-way delay: 190.427 ms
Loss rate: 1.85%
-- Flow 3:
Average throughput: 139.90 Mbit/s
95th percentile per-packet one-way delay: 256.796 ms
Loss rate: 7.92%

Run 1: Report of Verus — Data Link

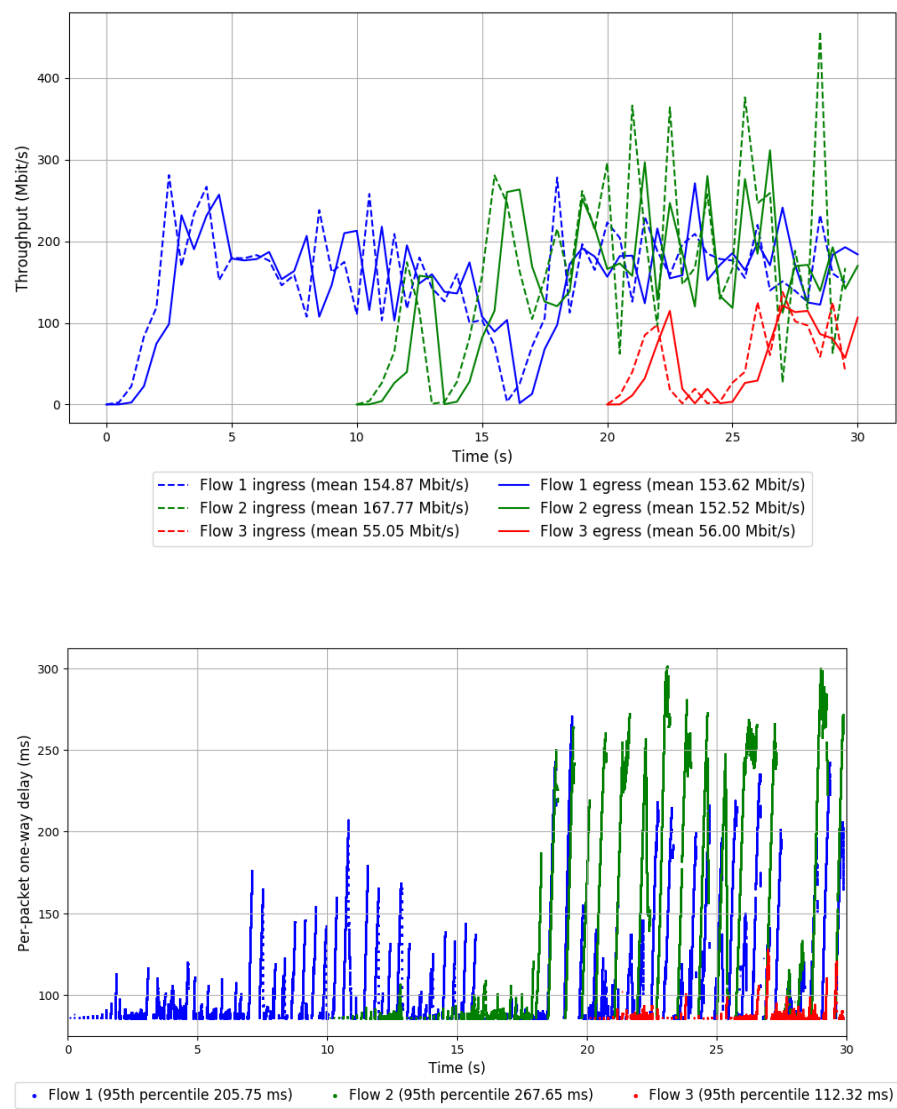


Run 2: Statistics of Verus

Start at: 2019-01-18 23:25:30
End at: 2019-01-18 23:26:00
Local clock offset: 0.019 ms
Remote clock offset: -0.047 ms

Below is generated by plot.py at 2019-01-19 04:54:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 273.19 Mbit/s
95th percentile per-packet one-way delay: 250.671 ms
Loss rate: 3.86%
-- Flow 1:
Average throughput: 153.62 Mbit/s
95th percentile per-packet one-way delay: 205.755 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 152.52 Mbit/s
95th percentile per-packet one-way delay: 267.649 ms
Loss rate: 8.72%
-- Flow 3:
Average throughput: 56.00 Mbit/s
95th percentile per-packet one-way delay: 112.324 ms
Loss rate: 0.27%

Run 2: Report of Verus — Data Link

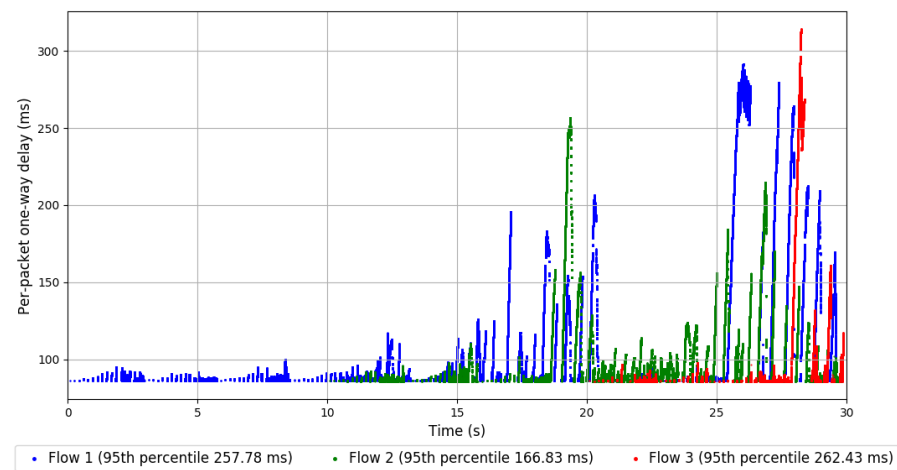
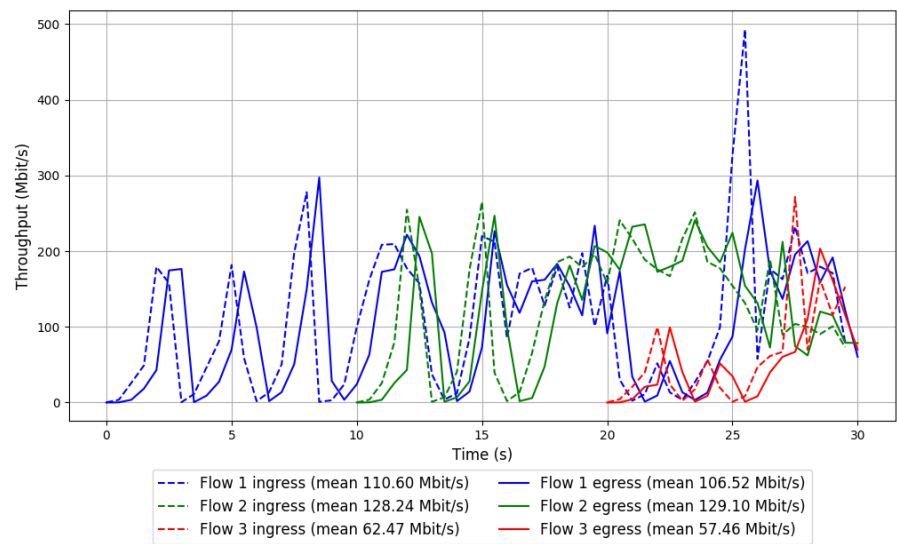


Run 3: Statistics of Verus

Start at: 2019-01-19 00:05:01
End at: 2019-01-19 00:05:31
Local clock offset: -0.072 ms
Remote clock offset: -0.074 ms

Below is generated by plot.py at 2019-01-19 04:54:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 210.06 Mbit/s
95th percentile per-packet one-way delay: 238.303 ms
Loss rate: 3.65%
-- Flow 1:
Average throughput: 106.52 Mbit/s
95th percentile per-packet one-way delay: 257.783 ms
Loss rate: 4.93%
-- Flow 2:
Average throughput: 129.10 Mbit/s
95th percentile per-packet one-way delay: 166.829 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 57.46 Mbit/s
95th percentile per-packet one-way delay: 262.434 ms
Loss rate: 9.62%

Run 3: Report of Verus — Data Link

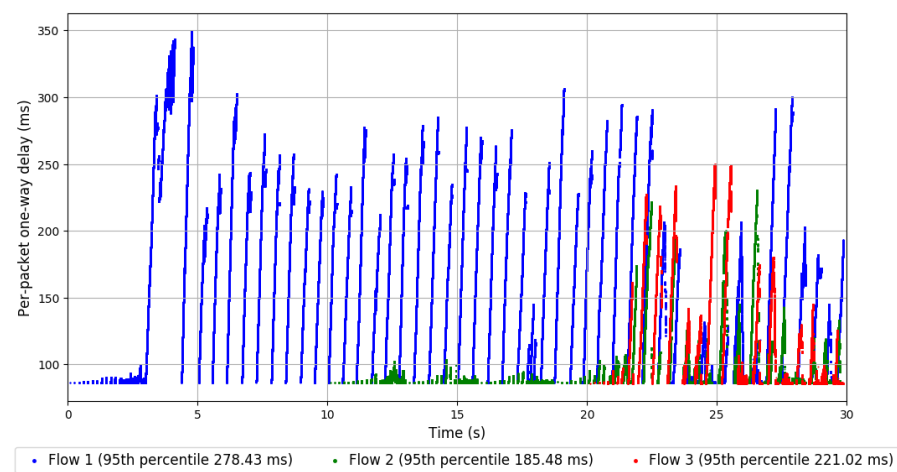
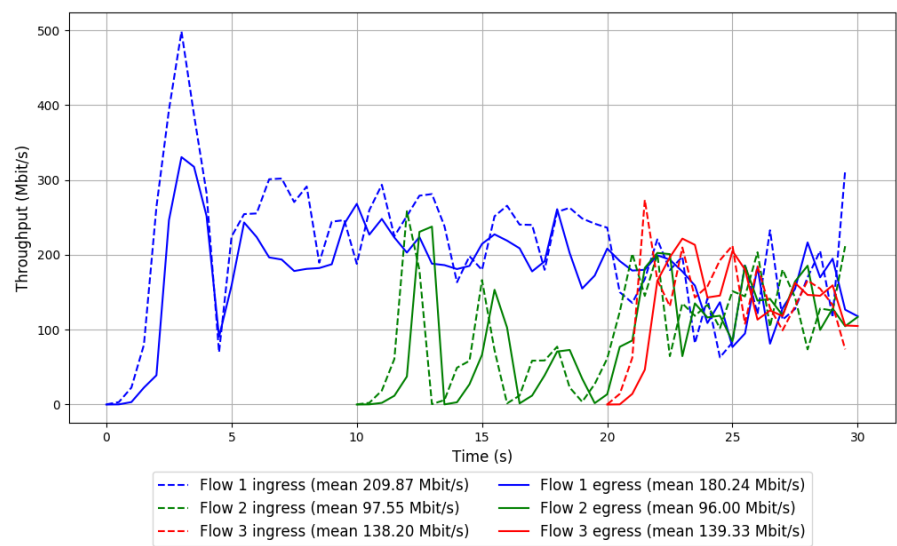


Run 4: Statistics of Verus

Start at: 2019-01-19 00:43:40
End at: 2019-01-19 00:44:10
Local clock offset: 0.323 ms
Remote clock offset: -0.072 ms

Below is generated by plot.py at 2019-01-19 04:54:40
Datalink statistics
-- Total of 3 flows:
Average throughput: 289.14 Mbit/s
95th percentile per-packet one-way delay: 265.846 ms
Loss rate: 10.33%
-- Flow 1:
Average throughput: 180.24 Mbit/s
95th percentile per-packet one-way delay: 278.429 ms
Loss rate: 14.62%
-- Flow 2:
Average throughput: 96.00 Mbit/s
95th percentile per-packet one-way delay: 185.477 ms
Loss rate: 2.97%
-- Flow 3:
Average throughput: 139.33 Mbit/s
95th percentile per-packet one-way delay: 221.022 ms
Loss rate: 1.09%

Run 4: Report of Verus — Data Link

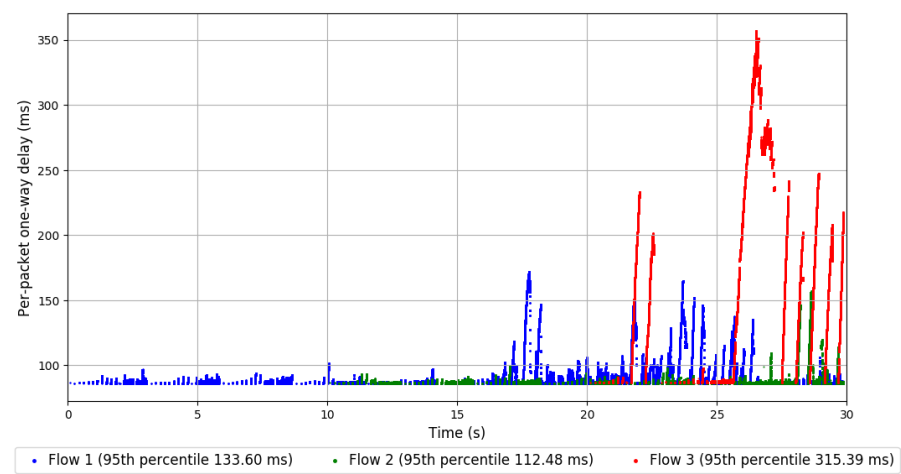
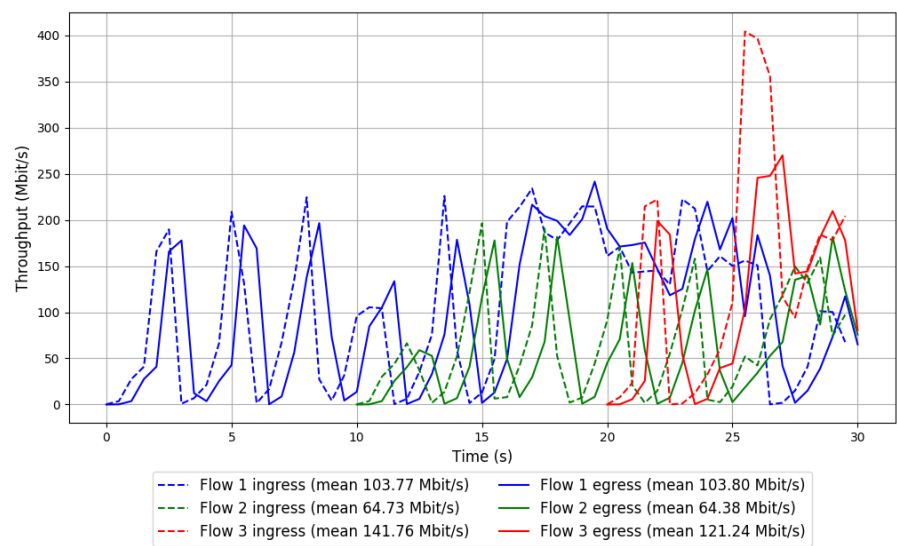


Run 5: Statistics of Verus

Start at: 2019-01-19 01:24:06
End at: 2019-01-19 01:24:36
Local clock offset: 0.02 ms
Remote clock offset: -0.113 ms

Below is generated by plot.py at 2019-01-19 04:54:40
Datalink statistics
-- Total of 3 flows:
Average throughput: 186.17 Mbit/s
95th percentile per-packet one-way delay: 249.424 ms
Loss rate: 3.83%
-- Flow 1:
Average throughput: 103.80 Mbit/s
95th percentile per-packet one-way delay: 133.599 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 64.38 Mbit/s
95th percentile per-packet one-way delay: 112.476 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 121.24 Mbit/s
95th percentile per-packet one-way delay: 315.391 ms
Loss rate: 14.62%

Run 5: Report of Verus — Data Link

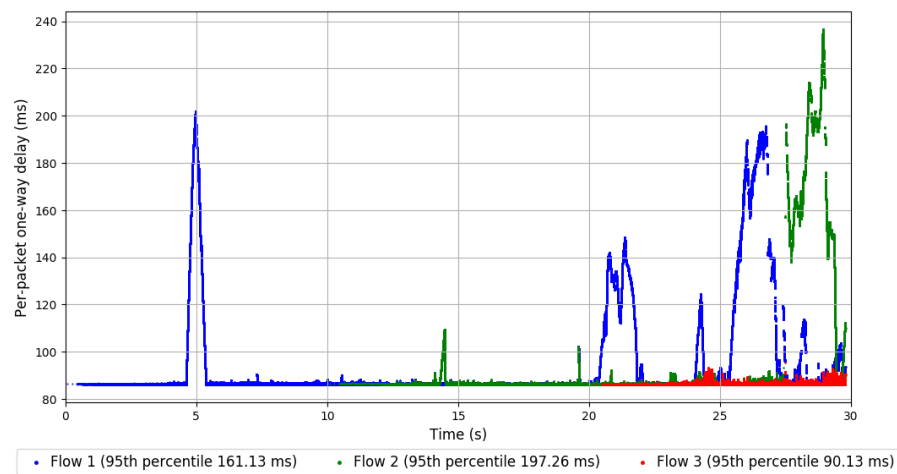
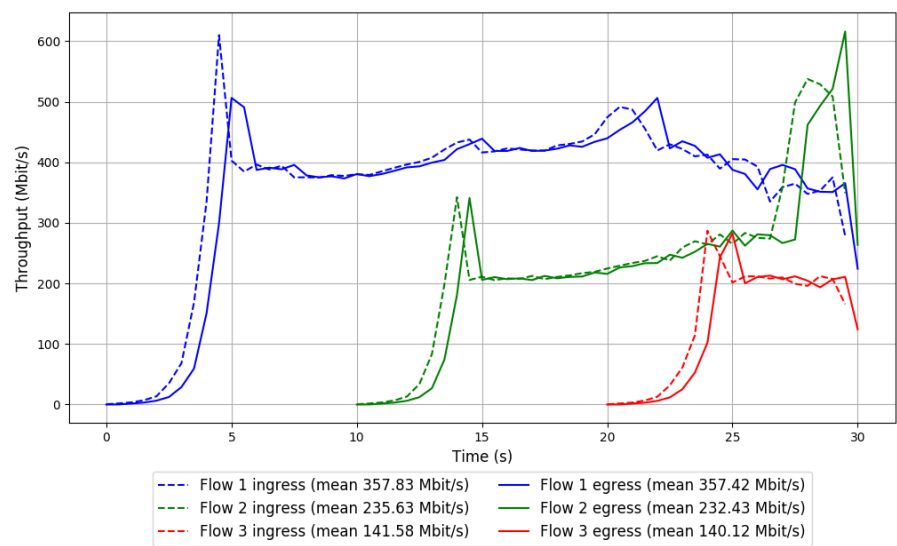


Run 1: Statistics of PCC-Vivace

Start at: 2019-01-18 22:29:46
End at: 2019-01-18 22:30:16
Local clock offset: 0.484 ms
Remote clock offset: -0.128 ms

Below is generated by plot.py at 2019-01-19 04:55:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 557.10 Mbit/s
95th percentile per-packet one-way delay: 174.989 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 357.42 Mbit/s
95th percentile per-packet one-way delay: 161.132 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 232.43 Mbit/s
95th percentile per-packet one-way delay: 197.257 ms
Loss rate: 2.21%
-- Flow 3:
Average throughput: 140.12 Mbit/s
95th percentile per-packet one-way delay: 90.128 ms
Loss rate: 2.76%

Run 1: Report of PCC-Vivace — Data Link

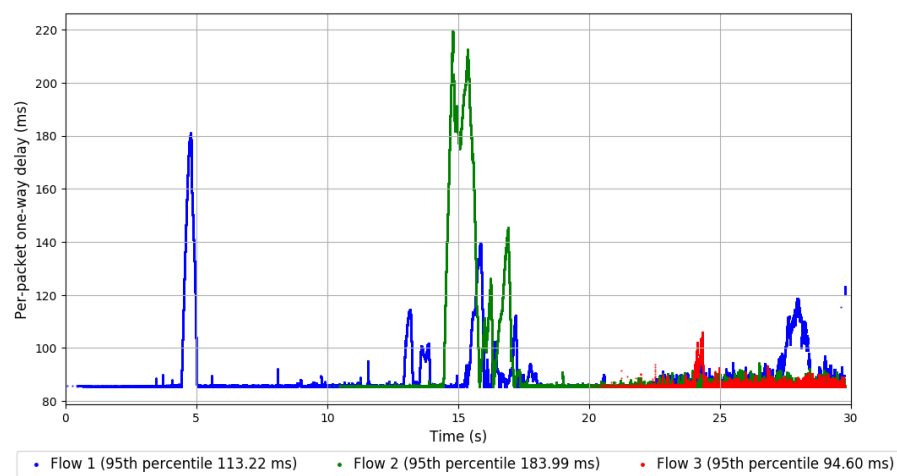
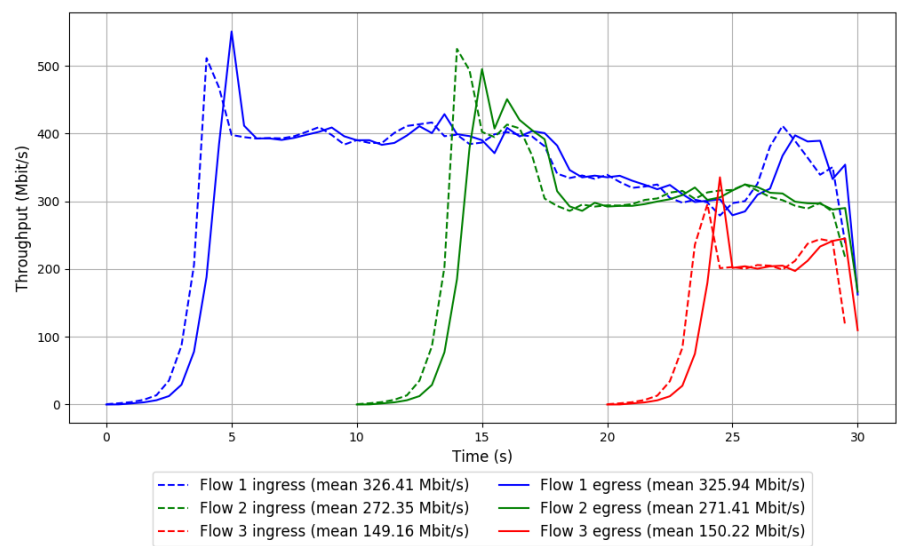


Run 2: Statistics of PCC-Vivace

Start at: 2019-01-18 23:08:50
End at: 2019-01-18 23:09:20
Local clock offset: -0.239 ms
Remote clock offset: -0.088 ms

Below is generated by plot.py at 2019-01-19 04:55:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 554.68 Mbit/s
95th percentile per-packet one-way delay: 131.803 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 325.94 Mbit/s
95th percentile per-packet one-way delay: 113.221 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 271.41 Mbit/s
95th percentile per-packet one-way delay: 183.989 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 150.22 Mbit/s
95th percentile per-packet one-way delay: 94.601 ms
Loss rate: 1.54%

Run 2: Report of PCC-Vivace — Data Link

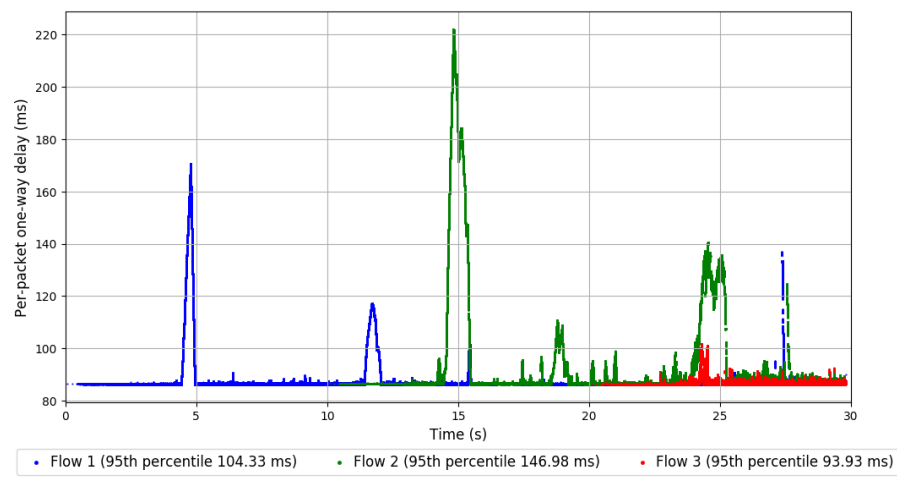
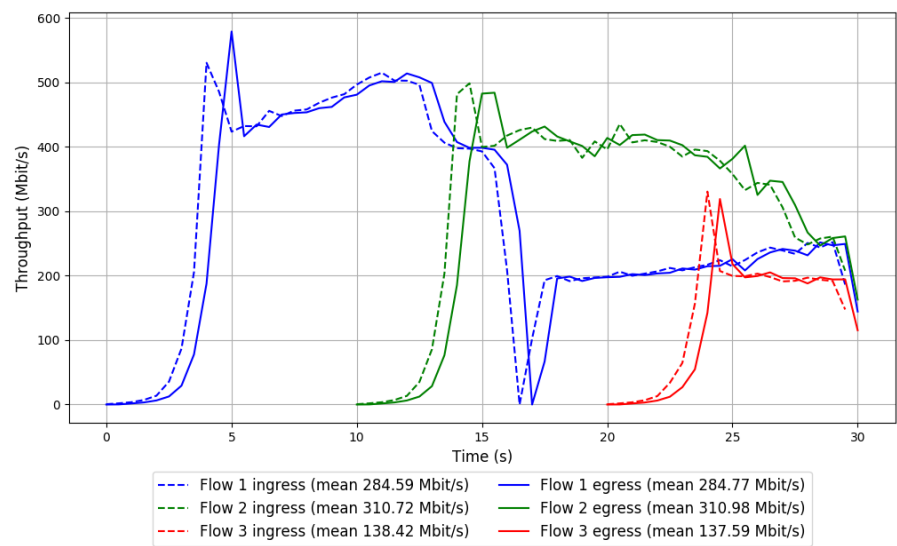


Run 3: Statistics of PCC-Vivace

Start at: 2019-01-18 23:48:33
End at: 2019-01-18 23:49:03
Local clock offset: 0.505 ms
Remote clock offset: -0.037 ms

Below is generated by plot.py at 2019-01-19 04:56:02
Datalink statistics
-- Total of 3 flows:
Average throughput: 535.86 Mbit/s
95th percentile per-packet one-way delay: 124.697 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 284.77 Mbit/s
95th percentile per-packet one-way delay: 104.334 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 310.98 Mbit/s
95th percentile per-packet one-way delay: 146.983 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 137.59 Mbit/s
95th percentile per-packet one-way delay: 93.932 ms
Loss rate: 2.33%

Run 3: Report of PCC-Vivace — Data Link

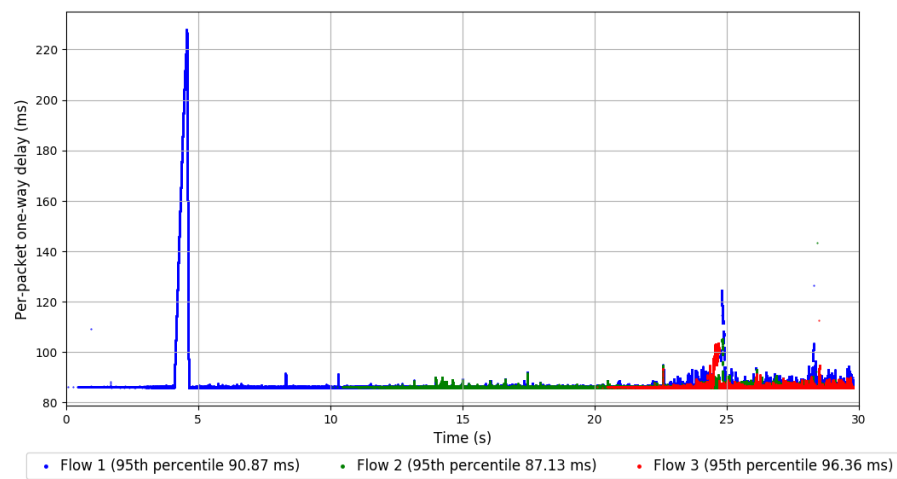
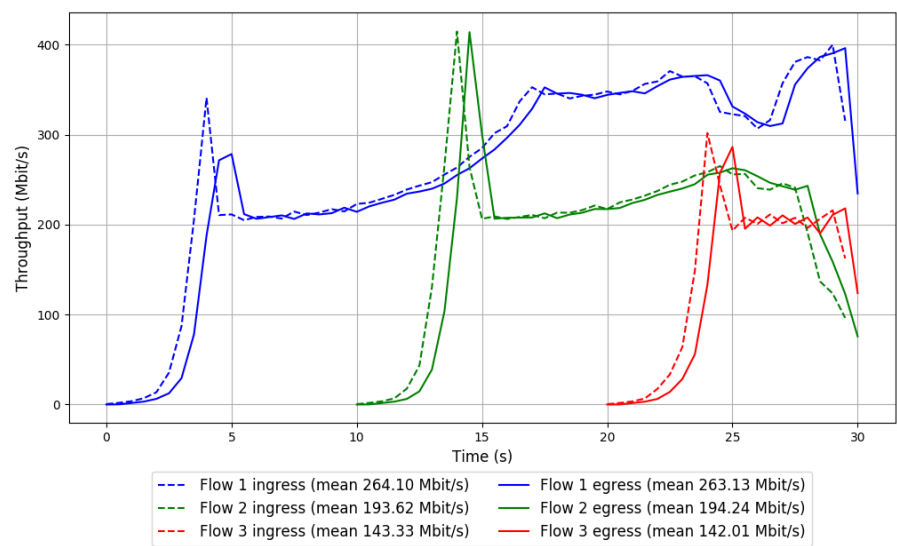


Run 4: Statistics of PCC-Vivace

Start at: 2019-01-19 00:27:35
End at: 2019-01-19 00:28:05
Local clock offset: 0.159 ms
Remote clock offset: -0.086 ms

Below is generated by plot.py at 2019-01-19 04:56:02
Datalink statistics
-- Total of 3 flows:
Average throughput: 438.23 Mbit/s
95th percentile per-packet one-way delay: 89.840 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 263.13 Mbit/s
95th percentile per-packet one-way delay: 90.874 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 194.24 Mbit/s
95th percentile per-packet one-way delay: 87.129 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 142.01 Mbit/s
95th percentile per-packet one-way delay: 96.358 ms
Loss rate: 2.66%

Run 4: Report of PCC-Vivace — Data Link

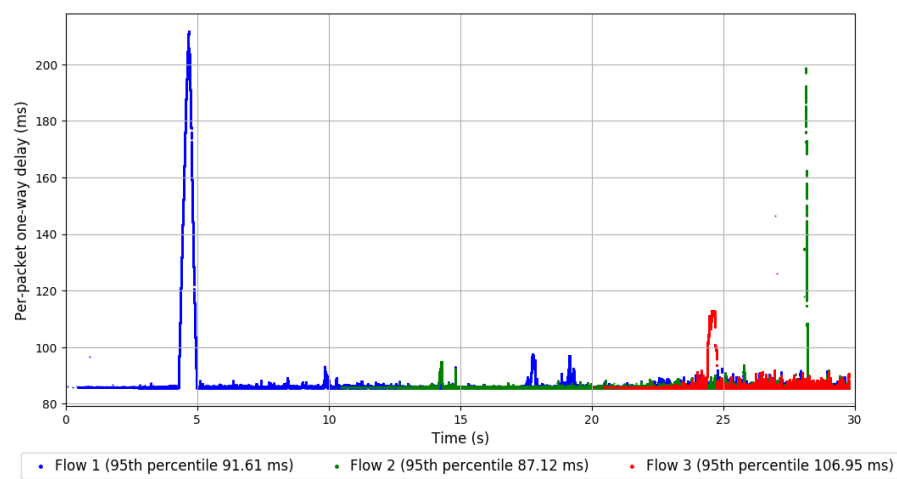
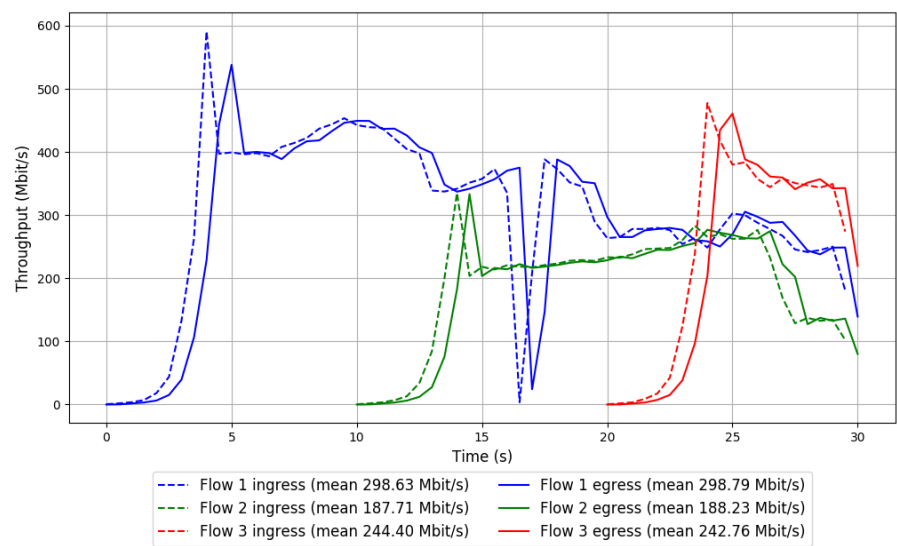


Run 5: Statistics of PCC-Vivace

Start at: 2019-01-19 01:07:52
End at: 2019-01-19 01:08:22
Local clock offset: -0.27 ms
Remote clock offset: -0.123 ms

Below is generated by plot.py at 2019-01-19 04:56:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 502.78 Mbit/s
95th percentile per-packet one-way delay: 90.589 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 298.79 Mbit/s
95th percentile per-packet one-way delay: 91.611 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 188.23 Mbit/s
95th percentile per-packet one-way delay: 87.125 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 242.76 Mbit/s
95th percentile per-packet one-way delay: 106.946 ms
Loss rate: 2.43%

Run 5: Report of PCC-Vivace — Data Link

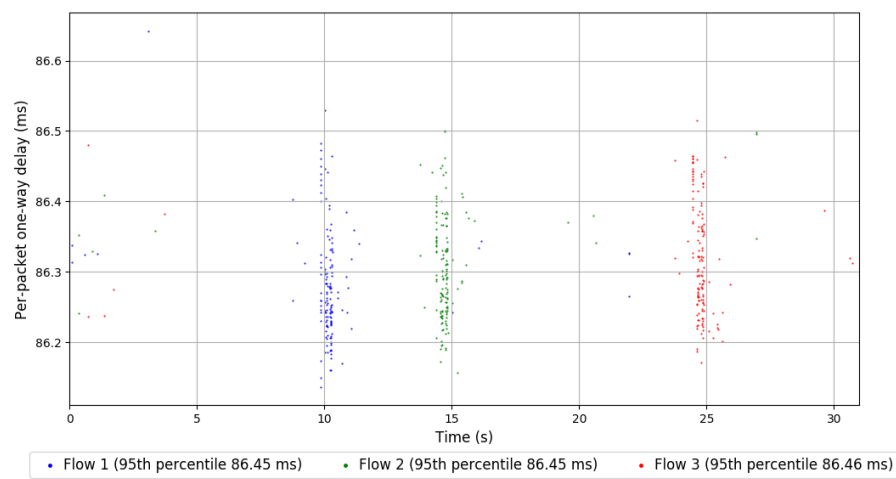
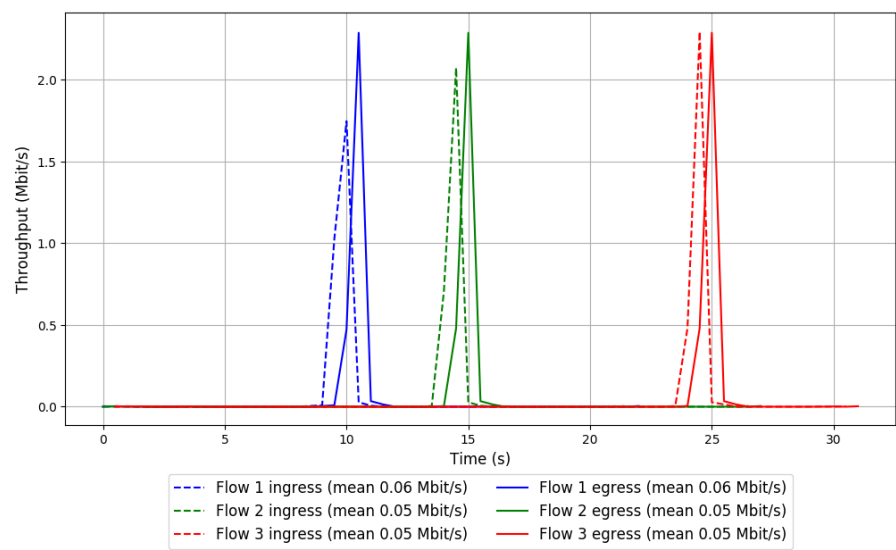


Run 1: Statistics of WebRTC media

Start at: 2019-01-18 23:03:19
End at: 2019-01-18 23:03:49
Local clock offset: -0.002 ms
Remote clock offset: -0.114 ms

Below is generated by plot.py at 2019-01-19 04:56:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 86.455 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 86.446 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.447 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.460 ms
Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link

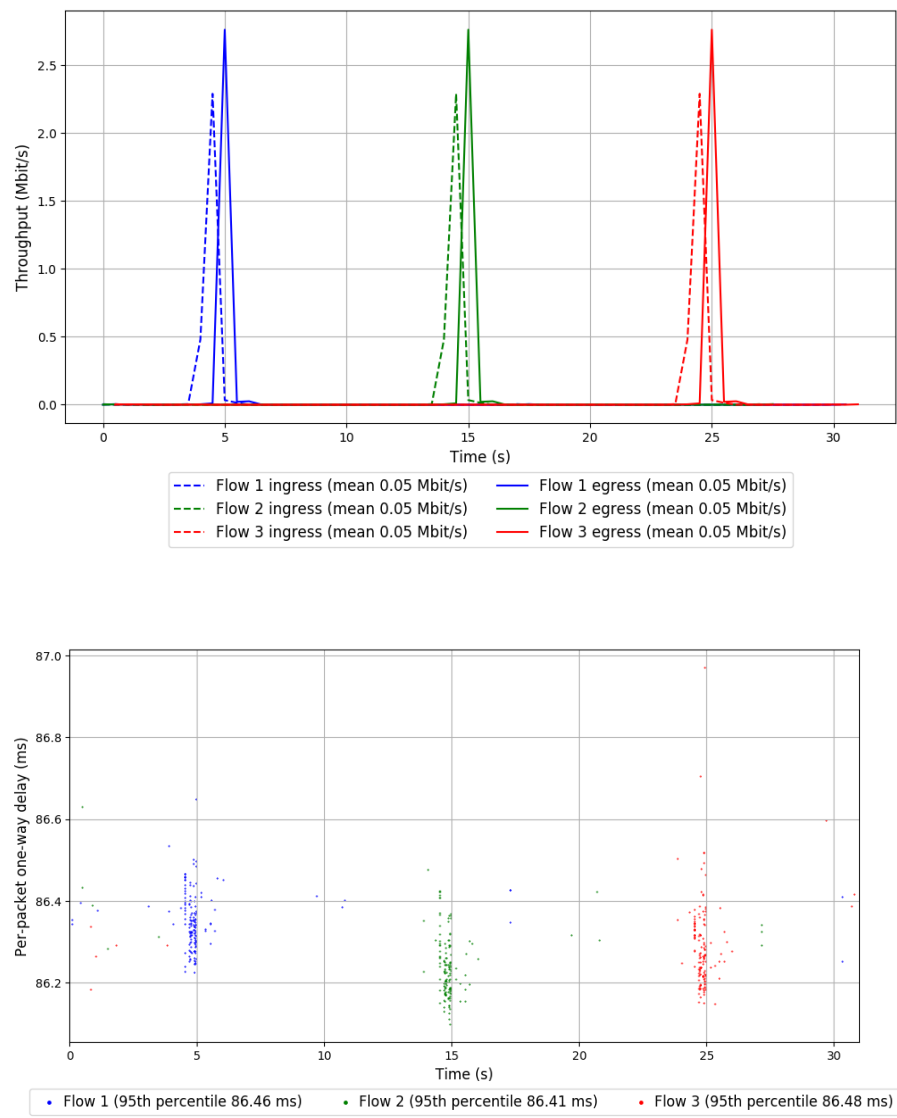


Run 2: Statistics of WebRTC media

Start at: 2019-01-18 23:43:01
End at: 2019-01-18 23:43:31
Local clock offset: 0.399 ms
Remote clock offset: -0.017 ms

Below is generated by plot.py at 2019-01-19 04:56:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 86.456 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.460 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.414 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.479 ms
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

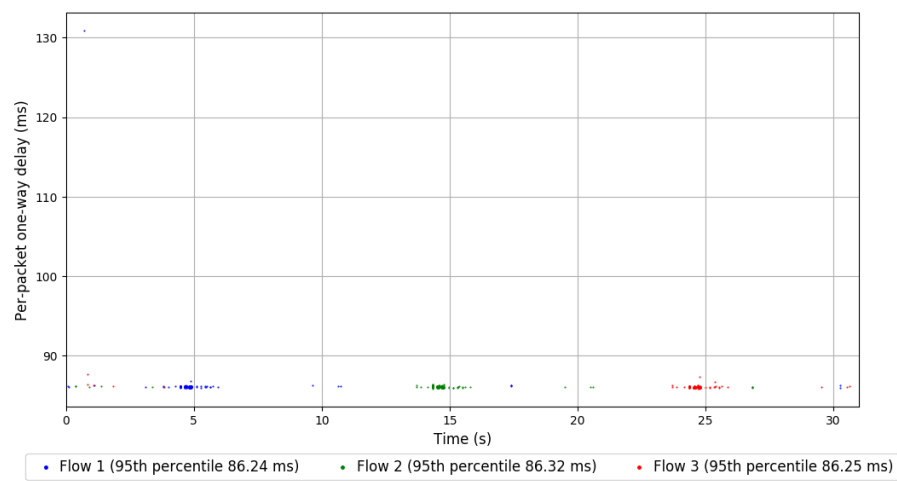
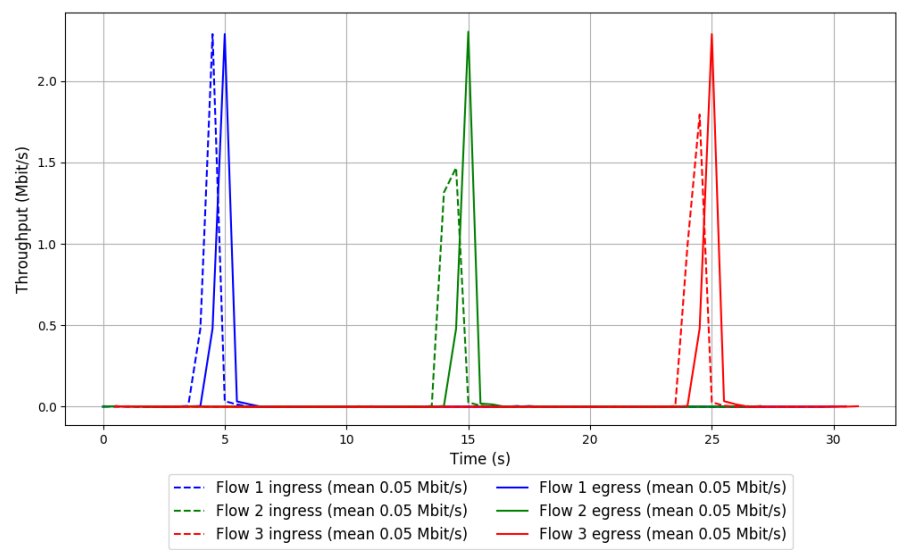


Run 3: Statistics of WebRTC media

Start at: 2019-01-19 00:21:55
End at: 2019-01-19 00:22:25
Local clock offset: 0.08 ms
Remote clock offset: -0.094 ms

```
# Below is generated by plot.py at 2019-01-19 04:56:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 86.259 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.244 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.322 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.252 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

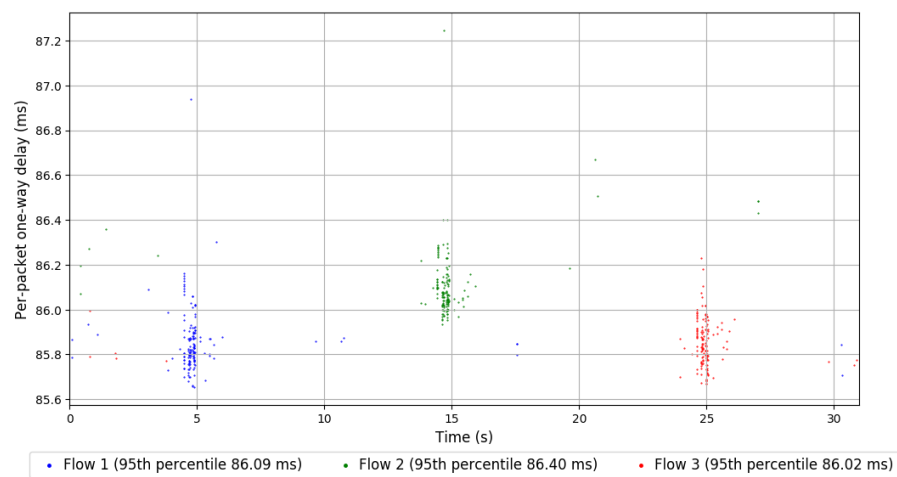
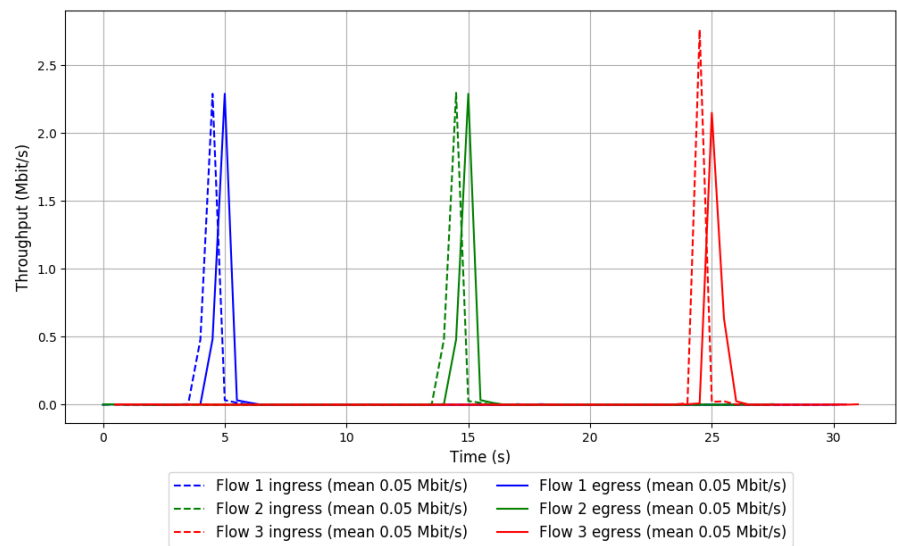


Run 4: Statistics of WebRTC media

Start at: 2019-01-19 01:02:01
End at: 2019-01-19 01:02:31
Local clock offset: -0.237 ms
Remote clock offset: -0.095 ms

Below is generated by plot.py at 2019-01-19 04:56:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 86.250 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.092 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.399 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.017 ms
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-01-19 01:40:59
End at: 2019-01-19 01:41:29
Local clock offset: 0.047 ms
Remote clock offset: -0.054 ms

```
# Below is generated by plot.py at 2019-01-19 04:56:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 86.814 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.682 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.146 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.891 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

