

Pantheon Report

Generated at 2019-06-27 11:10:27 (UTC).

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

Repeated the test of 22 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:

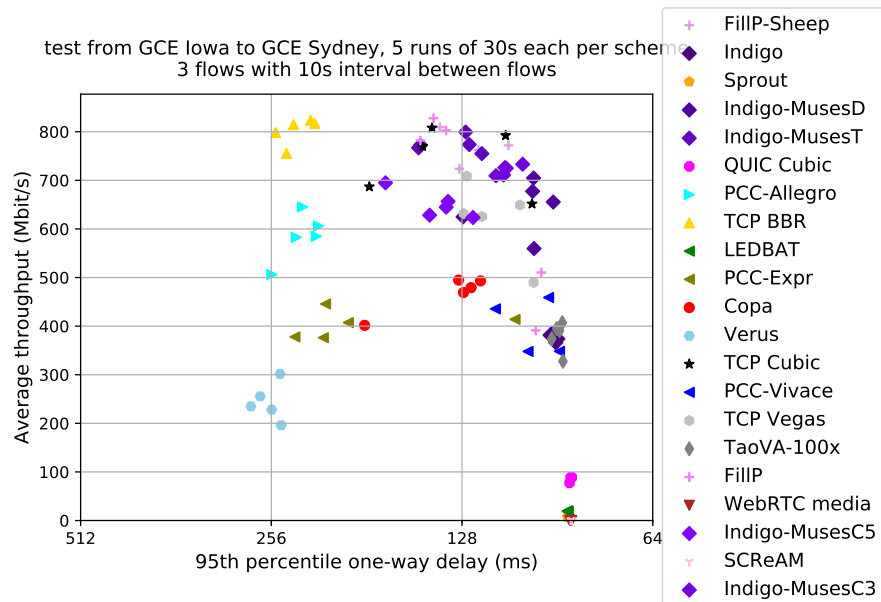
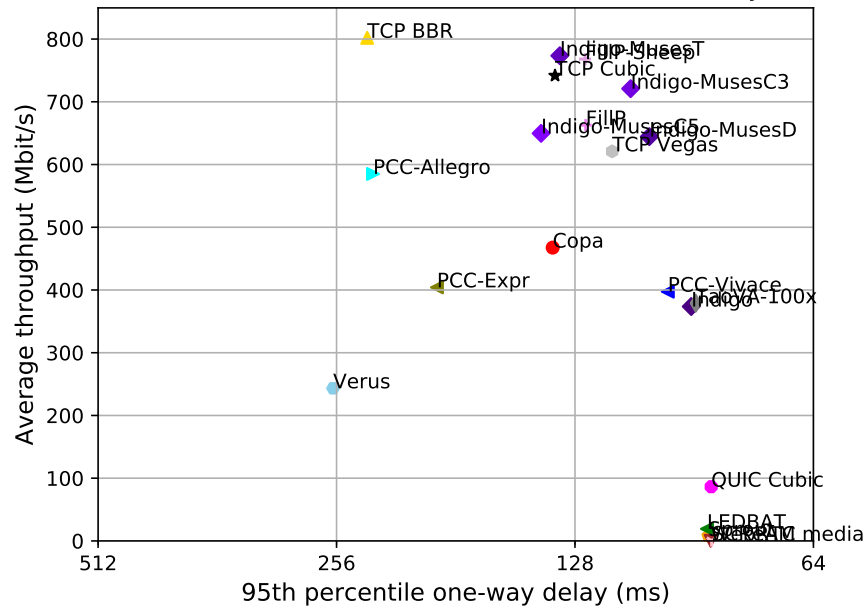
```
Linux 4.15.0-1032-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

```
branch: muses @ c3953d08f32ec7ebbdede2d2f0cbdeed262571ef
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf5e58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/muses_dtree @ 11c9498ecb1596b02ccd896791a02d03172af7ed
M helpers/__init__.pyc
M helpers/context.pyc
M helpers/utils.pyc
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-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
```

```
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

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



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	423.75	385.68	371.49	226.57	229.45	220.74	3.22	3.09	4.17
Copa	5	251.17	237.84	177.94	126.64	142.58	129.65	0.57	1.01	2.20
TCP Cubic	5	408.61	333.22	340.54	128.89	115.56	146.80	0.63	1.11	2.36
FillP	5	348.03	352.13	248.16	132.20	99.45	90.76	1.35	0.87	1.93
FillP-Sheep	5	475.10	317.21	252.74	133.40	92.49	90.65	1.10	0.86	1.93
Indigo	5	199.45	185.83	155.60	90.56	92.85	90.42	0.63	0.97	2.15
Indigo-MusesC3	5	430.84	346.37	256.54	114.43	97.74	90.46	0.50	0.90	3.15
Indigo-MusesC5	5	396.45	351.70	109.27	147.28	129.27	87.34	0.40	0.81	3.66
Indigo-MusesD	5	406.79	282.08	210.46	105.53	97.50	90.04	0.53	0.86	3.10
Indigo-MusesT	5	462.80	377.75	257.01	138.04	121.65	105.05	0.62	0.99	3.08
LEDBAT	5	12.48	8.25	4.03	87.31	87.10	86.55	1.15	1.75	3.52
Muses_DecisionTree	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCC-Allegro	5	334.50	263.72	232.59	227.40	198.88	202.72	5.11	4.81	4.12
PCC-Expr	5	205.89	217.84	165.15	198.34	152.18	164.39	3.72	2.02	2.72
QUIC Cubic	5	48.89	41.05	30.78	85.98	86.13	86.15	0.79	1.26	3.26
SCReAM	5	0.22	0.22	0.22	85.96	85.87	86.00	0.51	0.88	1.78
Sprout	5	4.30	3.96	3.02	86.90	86.91	86.93	0.70	1.03	2.82
TaoVA-100x	5	189.22	197.63	178.10	89.72	89.72	92.14	0.65	0.80	2.07
TCP Vegas	5	338.32	261.40	332.11	102.68	101.91	142.83	0.52	0.78	2.25
Verus	5	148.76	113.21	59.82	235.21	213.34	150.22	4.85	3.40	7.96
PCC-Vivace	5	231.24	178.76	147.00	102.25	104.72	126.98	0.67	1.19	2.75
WebRTC media	5	0.05	0.05	0.05	86.19	86.17	86.45	0.02	0.00	0.00

Run 1: Statistics of TCP BBR

Start at: 2019-06-27 05:21:53

End at: 2019-06-27 05:22:23

Local clock offset: 0.148 ms

Remote clock offset: 0.052 ms

Below is generated by plot.py at 2019-06-27 09:01:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 814.85 Mbit/s

95th percentile per-packet one-way delay: 236.174 ms

Loss rate: 3.30%

-- Flow 1:

Average throughput: 418.49 Mbit/s

95th percentile per-packet one-way delay: 247.840 ms

Loss rate: 4.61%

-- Flow 2:

Average throughput: 400.40 Mbit/s

95th percentile per-packet one-way delay: 203.121 ms

Loss rate: 1.16%

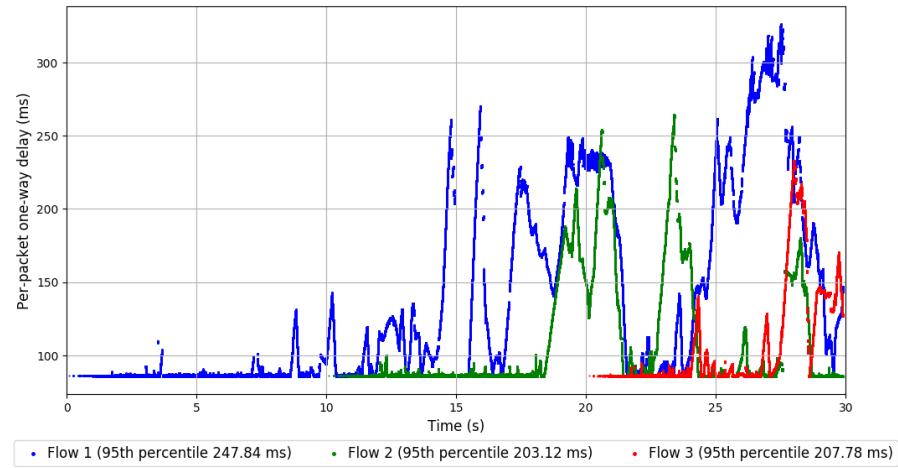
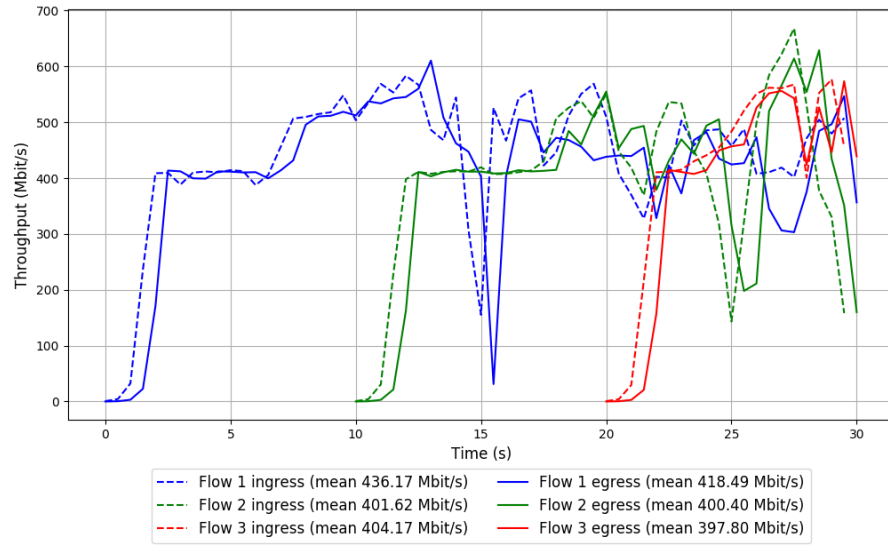
-- Flow 3:

Average throughput: 397.80 Mbit/s

95th percentile per-packet one-way delay: 207.779 ms

Loss rate: 3.28%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2019-06-27 05:59:28

End at: 2019-06-27 05:59:58

Local clock offset: -0.171 ms

Remote clock offset: 0.004 ms

Below is generated by plot.py at 2019-06-27 09:01:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 755.46 Mbit/s

95th percentile per-packet one-way delay: 242.203 ms

Loss rate: 3.41%

-- Flow 1:

Average throughput: 374.51 Mbit/s

95th percentile per-packet one-way delay: 225.925 ms

Loss rate: 2.51%

-- Flow 2:

Average throughput: 385.81 Mbit/s

95th percentile per-packet one-way delay: 253.611 ms

Loss rate: 4.61%

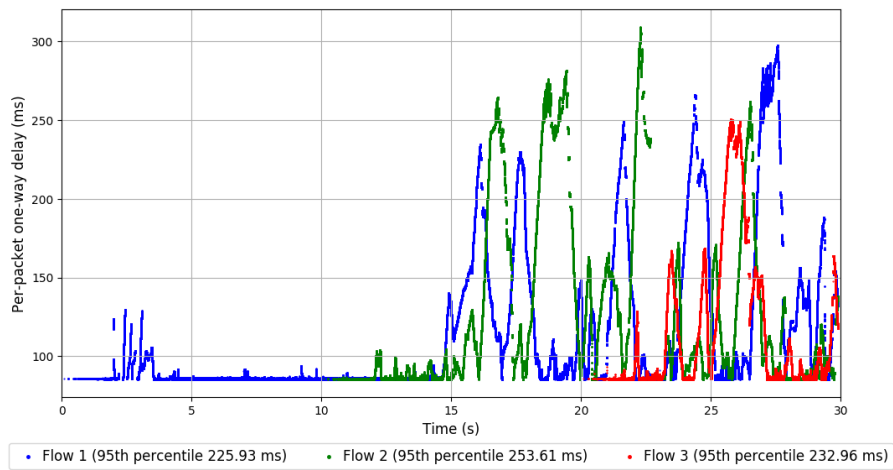
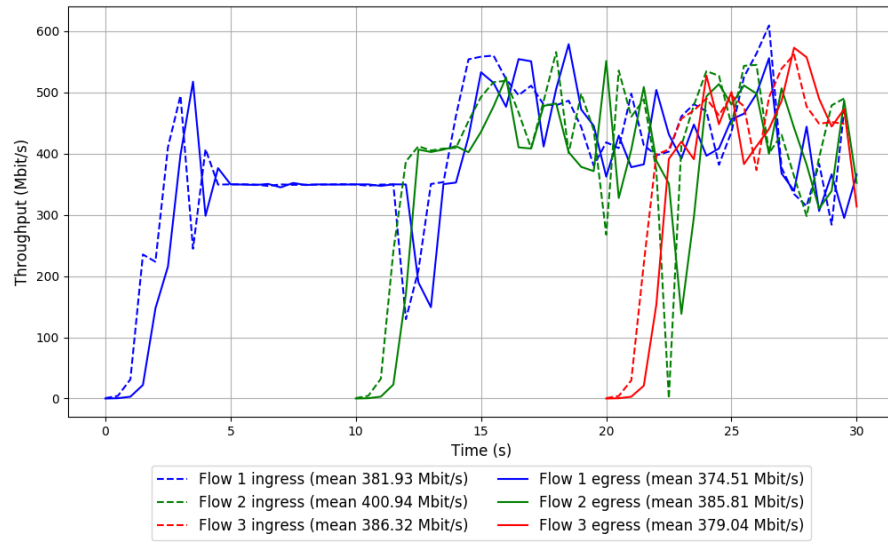
-- Flow 3:

Average throughput: 379.04 Mbit/s

95th percentile per-packet one-way delay: 232.957 ms

Loss rate: 3.59%

Run 2: Report of TCP BBR — Data Link

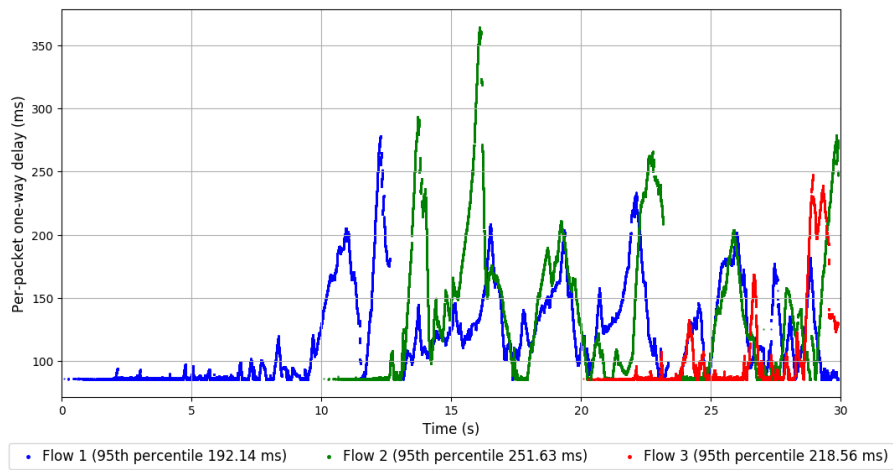
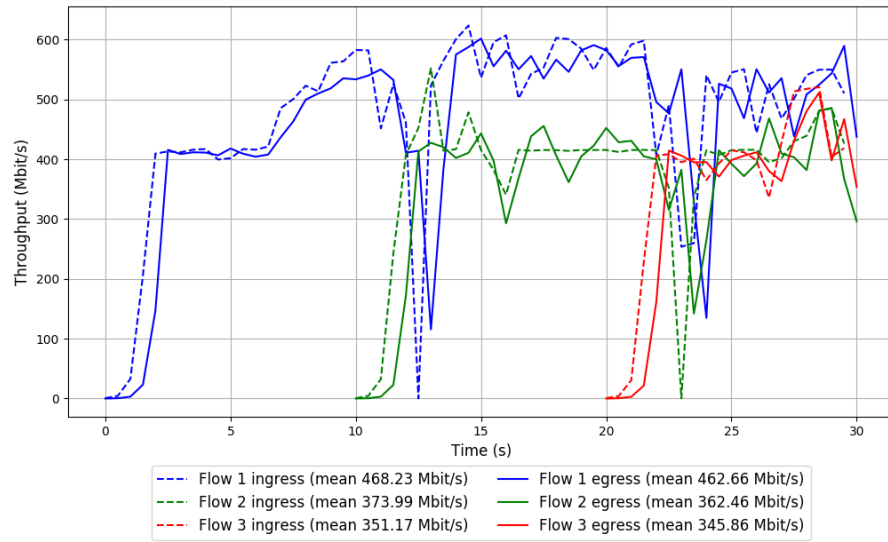


Run 3: Statistics of TCP BBR

Start at: 2019-06-27 06:36:58
End at: 2019-06-27 06:37:28
Local clock offset: -0.085 ms
Remote clock offset: -0.002 ms

Below is generated by plot.py at 2019-06-27 09:01:18
Datalink statistics
-- Total of 3 flows:
Average throughput: 817.04 Mbit/s
95th percentile per-packet one-way delay: 218.464 ms
Loss rate: 2.61%
-- Flow 1:
Average throughput: 462.66 Mbit/s
95th percentile per-packet one-way delay: 192.141 ms
Loss rate: 1.76%
-- Flow 2:
Average throughput: 362.46 Mbit/s
95th percentile per-packet one-way delay: 251.630 ms
Loss rate: 3.92%
-- Flow 3:
Average throughput: 345.86 Mbit/s
95th percentile per-packet one-way delay: 218.560 ms
Loss rate: 3.22%

Run 3: Report of TCP BBR — Data Link

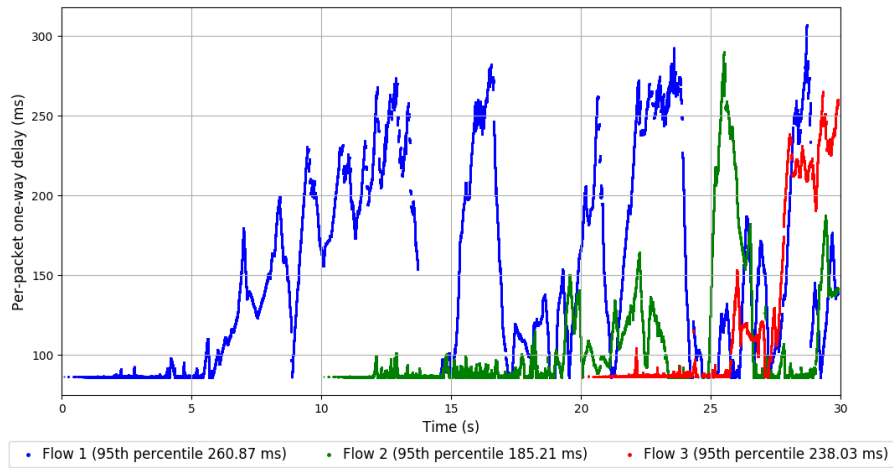
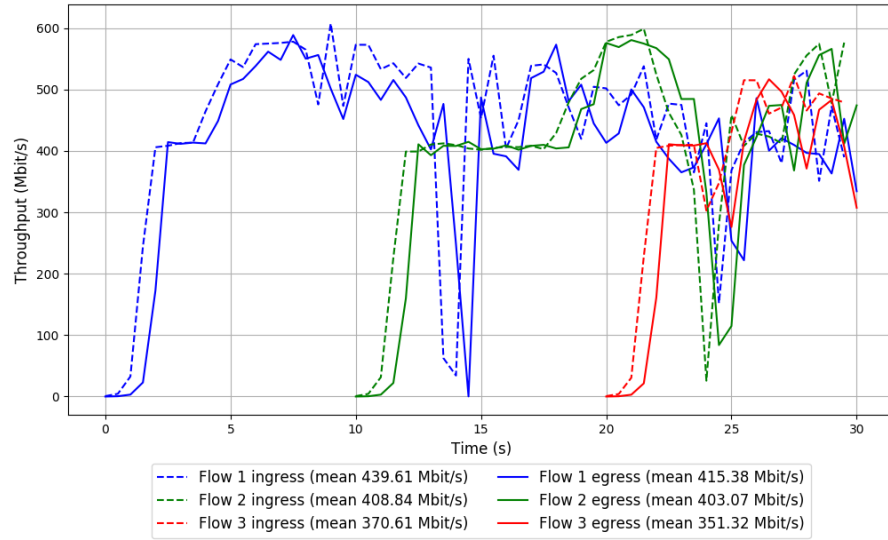


Run 4: Statistics of TCP BBR

Start at: 2019-06-27 07:14:33
End at: 2019-06-27 07:15:03
Local clock offset: 0.352 ms
Remote clock offset: -0.019 ms

Below is generated by plot.py at 2019-06-27 09:01:18
Datalink statistics
-- Total of 3 flows:
Average throughput: 798.54 Mbit/s
95th percentile per-packet one-way delay: 252.019 ms
Loss rate: 4.93%
-- Flow 1:
Average throughput: 415.38 Mbit/s
95th percentile per-packet one-way delay: 260.874 ms
Loss rate: 6.06%
-- Flow 2:
Average throughput: 403.07 Mbit/s
95th percentile per-packet one-way delay: 185.211 ms
Loss rate: 2.26%
-- Flow 3:
Average throughput: 351.32 Mbit/s
95th percentile per-packet one-way delay: 238.031 ms
Loss rate: 6.84%

Run 4: Report of TCP BBR — Data Link

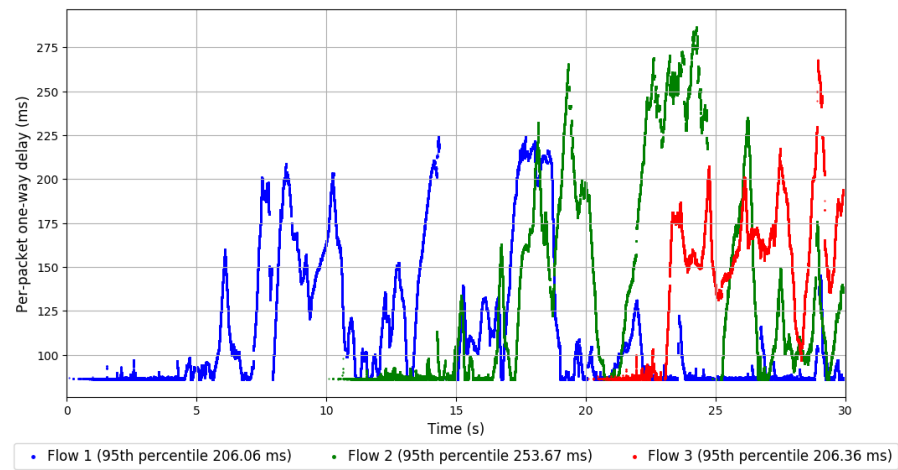
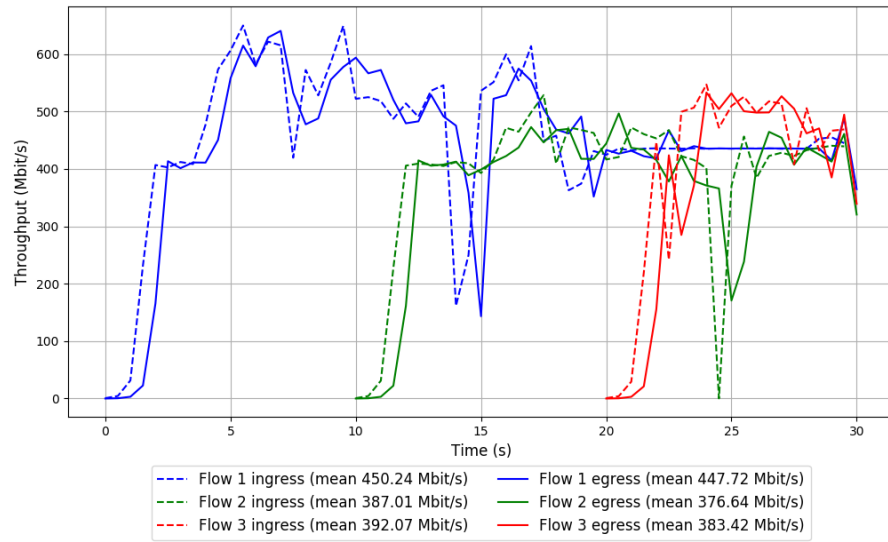


Run 5: Statistics of TCP BBR

Start at: 2019-06-27 07:52:37
End at: 2019-06-27 07:53:07
Local clock offset: 0.307 ms
Remote clock offset: -0.094 ms

Below is generated by plot.py at 2019-06-27 09:01:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 823.84 Mbit/s
95th percentile per-packet one-way delay: 222.009 ms
Loss rate: 2.30%
-- Flow 1:
Average throughput: 447.72 Mbit/s
95th percentile per-packet one-way delay: 206.064 ms
Loss rate: 1.14%
-- Flow 2:
Average throughput: 376.64 Mbit/s
95th percentile per-packet one-way delay: 253.669 ms
Loss rate: 3.52%
-- Flow 3:
Average throughput: 383.42 Mbit/s
95th percentile per-packet one-way delay: 206.361 ms
Loss rate: 3.90%

Run 5: Report of TCP BBR — Data Link

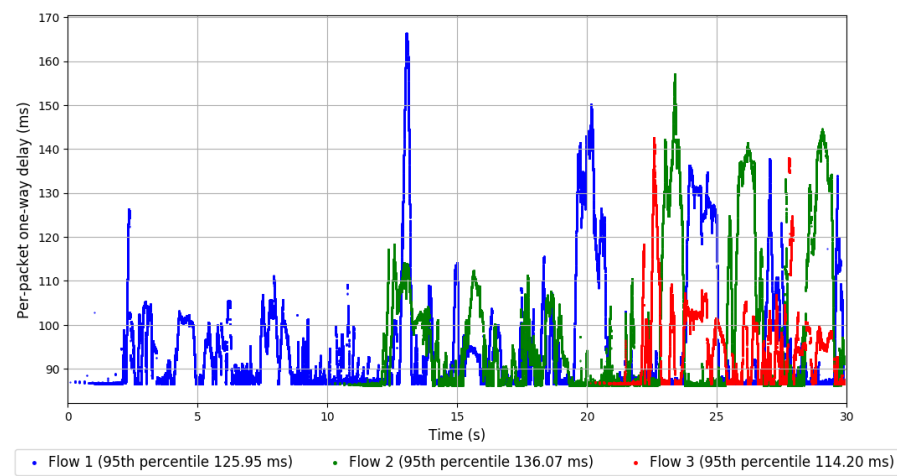
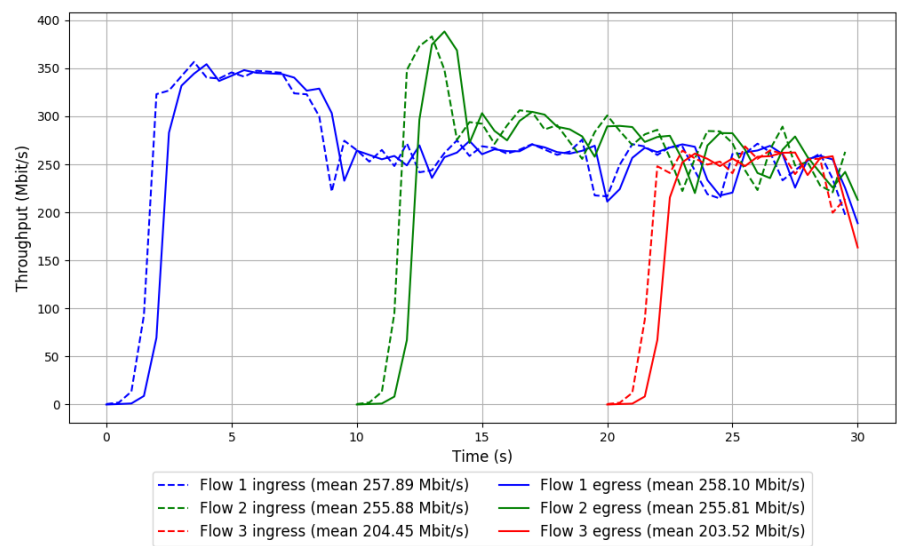


Run 1: Statistics of Copa

Start at: 2019-06-27 05:41:19
End at: 2019-06-27 05:41:49
Local clock offset: 0.606 ms
Remote clock offset: -0.027 ms

Below is generated by plot.py at 2019-06-27 09:03:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 494.77 Mbit/s
95th percentile per-packet one-way delay: 129.600 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 258.10 Mbit/s
95th percentile per-packet one-way delay: 125.951 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 255.81 Mbit/s
95th percentile per-packet one-way delay: 136.067 ms
Loss rate: 0.89%
-- Flow 3:
Average throughput: 203.52 Mbit/s
95th percentile per-packet one-way delay: 114.204 ms
Loss rate: 2.18%

Run 1: Report of Copa — Data Link

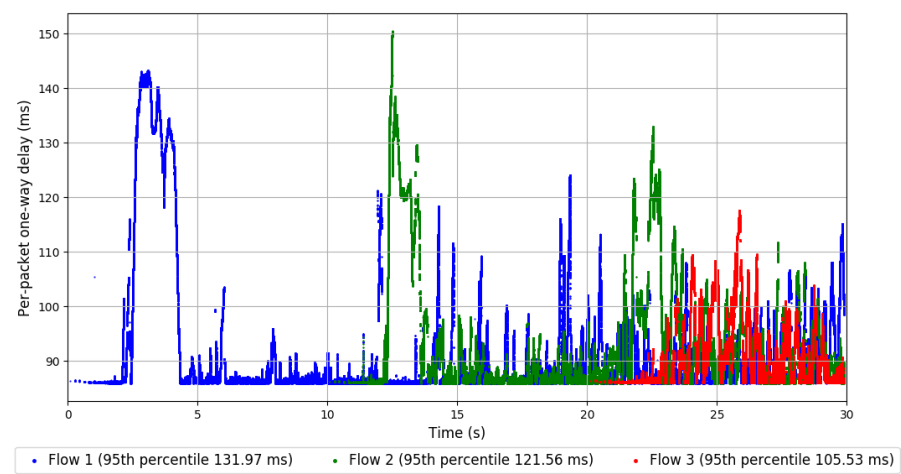
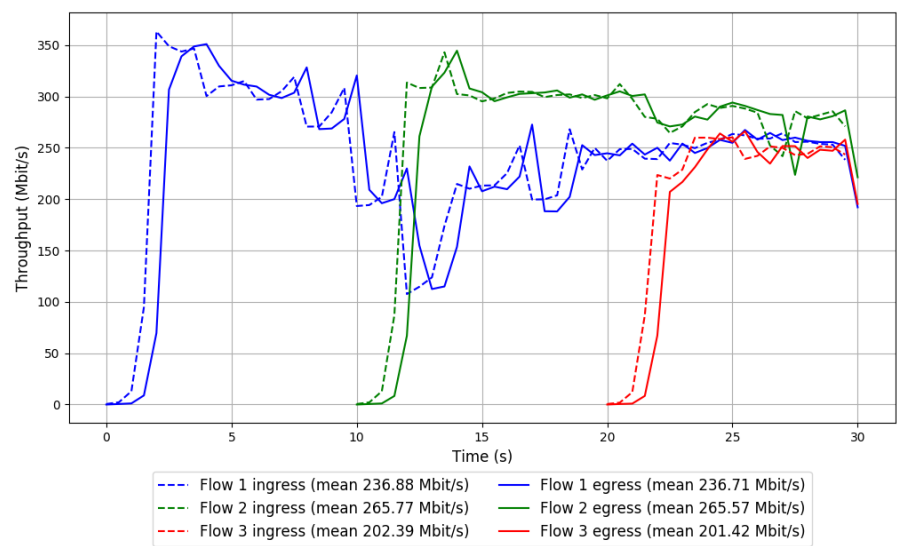


Run 2: Statistics of Copa

Start at: 2019-06-27 06:18:45
End at: 2019-06-27 06:19:15
Local clock offset: 0.093 ms
Remote clock offset: -0.036 ms

Below is generated by plot.py at 2019-06-27 09:03:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 479.16 Mbit/s
95th percentile per-packet one-way delay: 123.883 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 236.71 Mbit/s
95th percentile per-packet one-way delay: 131.971 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 265.57 Mbit/s
95th percentile per-packet one-way delay: 121.559 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 201.42 Mbit/s
95th percentile per-packet one-way delay: 105.526 ms
Loss rate: 2.20%

Run 2: Report of Copa — Data Link

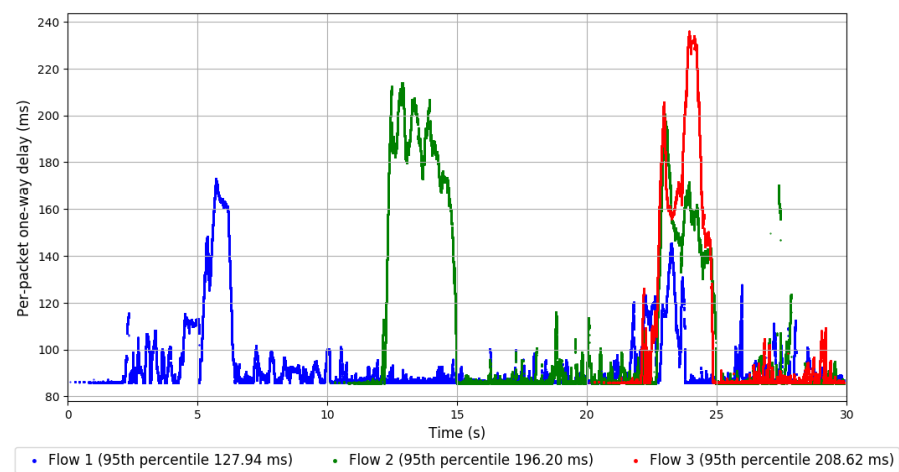
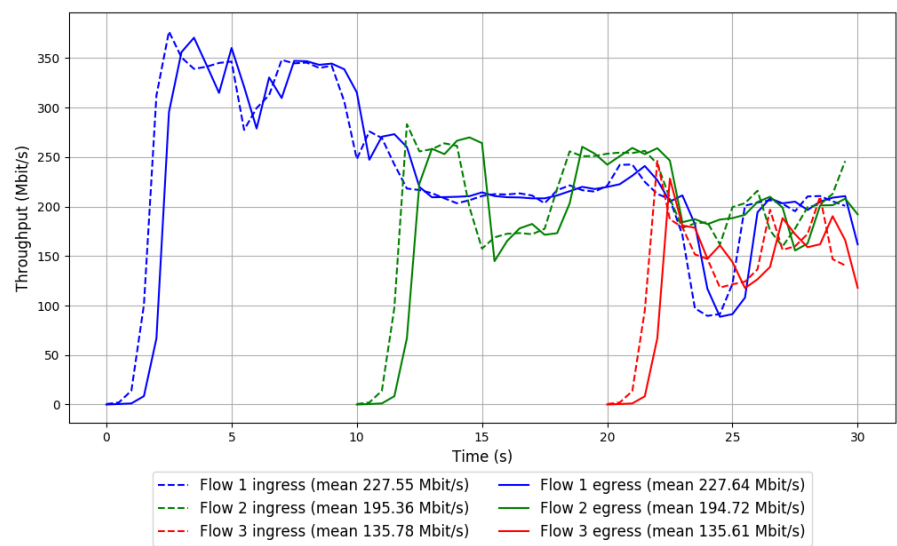


Run 3: Statistics of Copa

Start at: 2019-06-27 06:56:29
End at: 2019-06-27 06:56:59
Local clock offset: -0.337 ms
Remote clock offset: -0.015 ms

Below is generated by plot.py at 2019-06-27 09:03:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 401.58 Mbit/s
95th percentile per-packet one-way delay: 182.376 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 227.64 Mbit/s
95th percentile per-packet one-way delay: 127.937 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 194.72 Mbit/s
95th percentile per-packet one-way delay: 196.199 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 135.61 Mbit/s
95th percentile per-packet one-way delay: 208.621 ms
Loss rate: 1.85%

Run 3: Report of Copa — Data Link

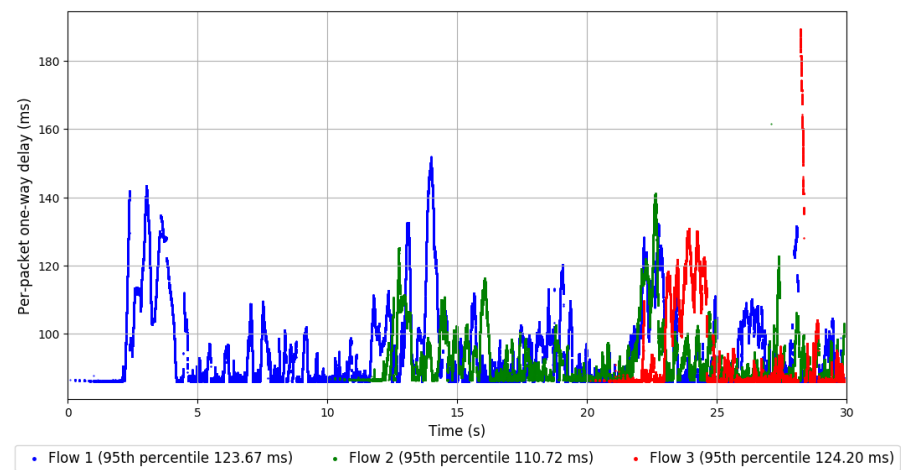
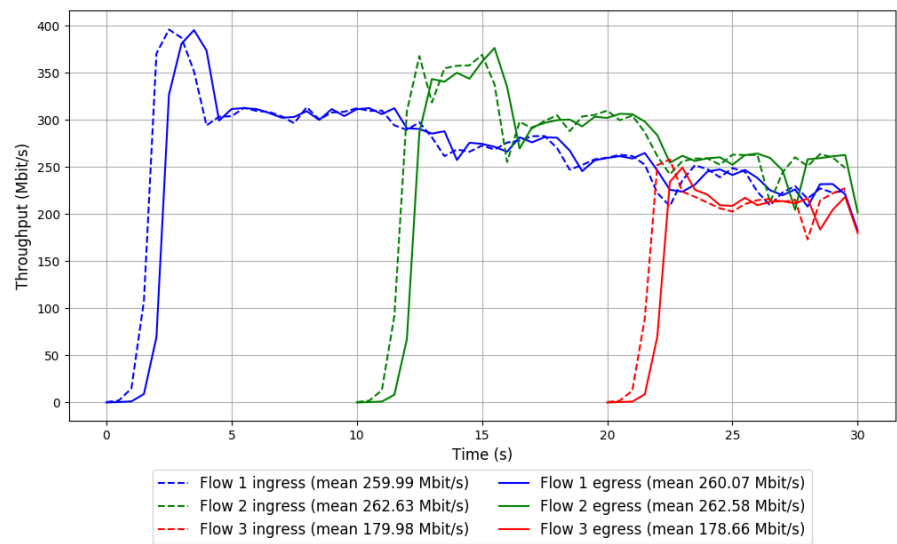


Run 4: Statistics of Copa

Start at: 2019-06-27 07:34:11
End at: 2019-06-27 07:34:41
Local clock offset: 0.301 ms
Remote clock offset: -0.043 ms

```
# Below is generated by plot.py at 2019-06-27 09:17:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 493.11 Mbit/s
95th percentile per-packet one-way delay: 119.674 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 260.07 Mbit/s
95th percentile per-packet one-way delay: 123.668 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 262.58 Mbit/s
95th percentile per-packet one-way delay: 110.720 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 178.66 Mbit/s
95th percentile per-packet one-way delay: 124.198 ms
Loss rate: 2.45%
```

Run 4: Report of Copa — Data Link

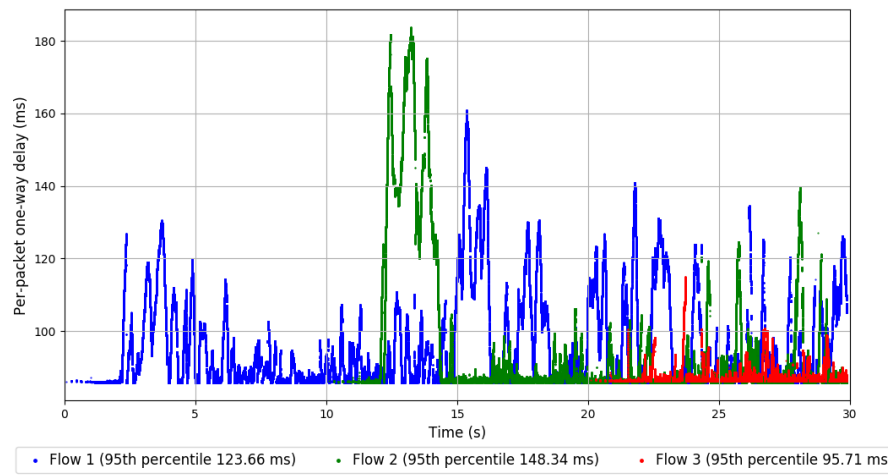
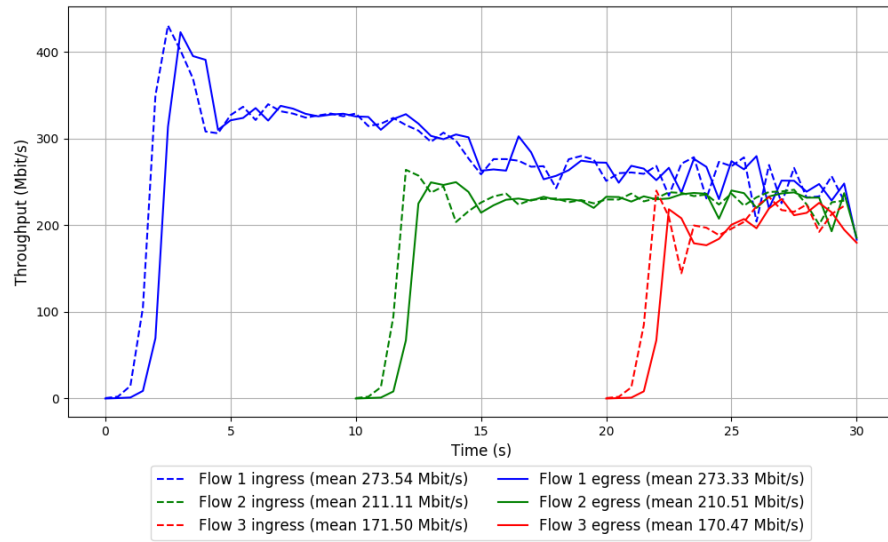


Run 5: Statistics of Copa

Start at: 2019-06-27 08:12:05
End at: 2019-06-27 08:12:35
Local clock offset: 0.143 ms
Remote clock offset: -0.116 ms

Below is generated by plot.py at 2019-06-27 09:17:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 469.13 Mbit/s
95th percentile per-packet one-way delay: 127.341 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 273.33 Mbit/s
95th percentile per-packet one-way delay: 123.660 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 210.51 Mbit/s
95th percentile per-packet one-way delay: 148.338 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 170.47 Mbit/s
95th percentile per-packet one-way delay: 95.708 ms
Loss rate: 2.34%

Run 5: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2019-06-27 05:55:48

End at: 2019-06-27 05:56:18

Local clock offset: -0.318 ms

Remote clock offset: 0.039 ms

Below is generated by plot.py at 2019-06-27 09:17:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 651.51 Mbit/s

95th percentile per-packet one-way delay: 99.253 ms

Loss rate: 1.00%

-- Flow 1:

Average throughput: 353.55 Mbit/s

95th percentile per-packet one-way delay: 101.965 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 288.77 Mbit/s

95th percentile per-packet one-way delay: 86.156 ms

Loss rate: 1.09%

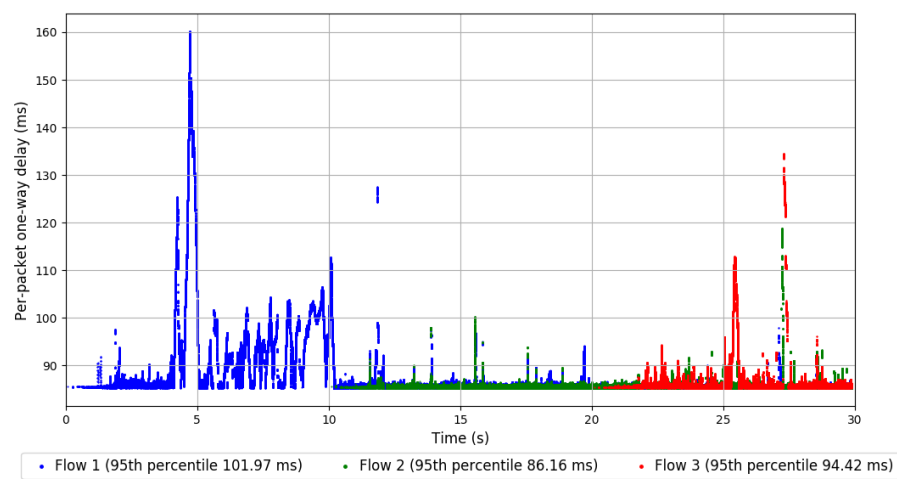
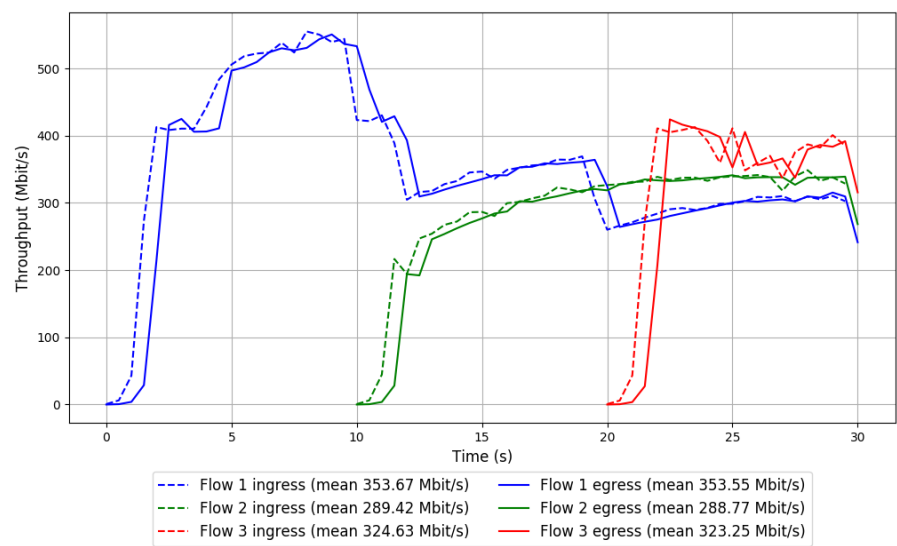
-- Flow 3:

Average throughput: 323.25 Mbit/s

95th percentile per-packet one-way delay: 94.418 ms

Loss rate: 2.14%

Run 1: Report of TCP Cubic — Data Link

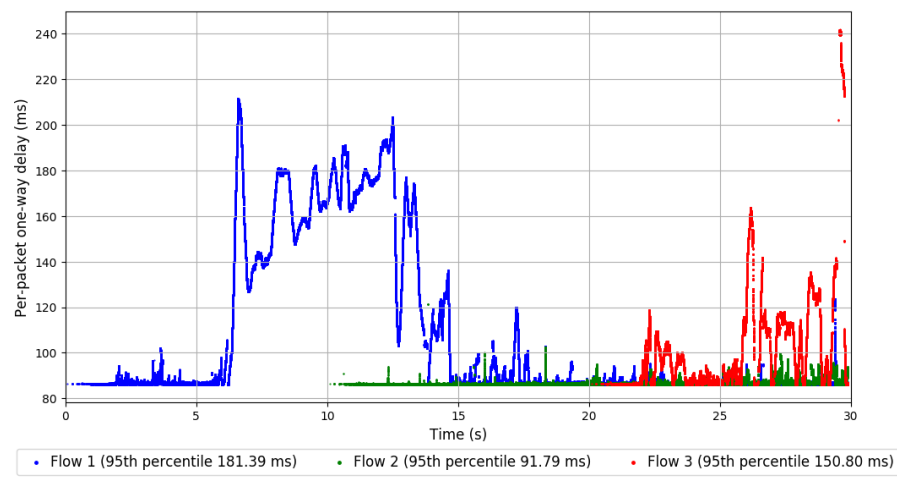
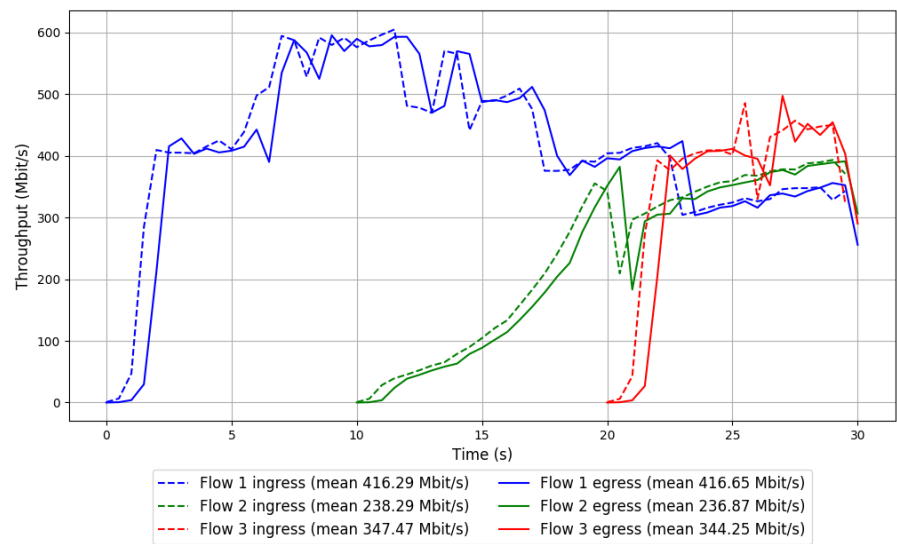


Run 2: Statistics of TCP Cubic

Start at: 2019-06-27 06:33:13
End at: 2019-06-27 06:33:43
Local clock offset: 0.317 ms
Remote clock offset: -0.037 ms

Below is generated by plot.py at 2019-06-27 09:17:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 686.86 Mbit/s
95th percentile per-packet one-way delay: 179.272 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 416.65 Mbit/s
95th percentile per-packet one-way delay: 181.390 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 236.87 Mbit/s
95th percentile per-packet one-way delay: 91.793 ms
Loss rate: 1.45%
-- Flow 3:
Average throughput: 344.25 Mbit/s
95th percentile per-packet one-way delay: 150.804 ms
Loss rate: 2.63%

Run 2: Report of TCP Cubic — Data Link

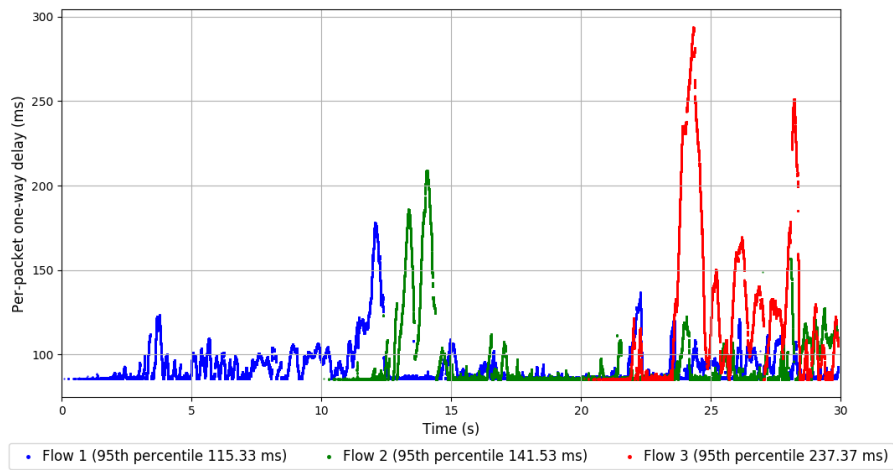
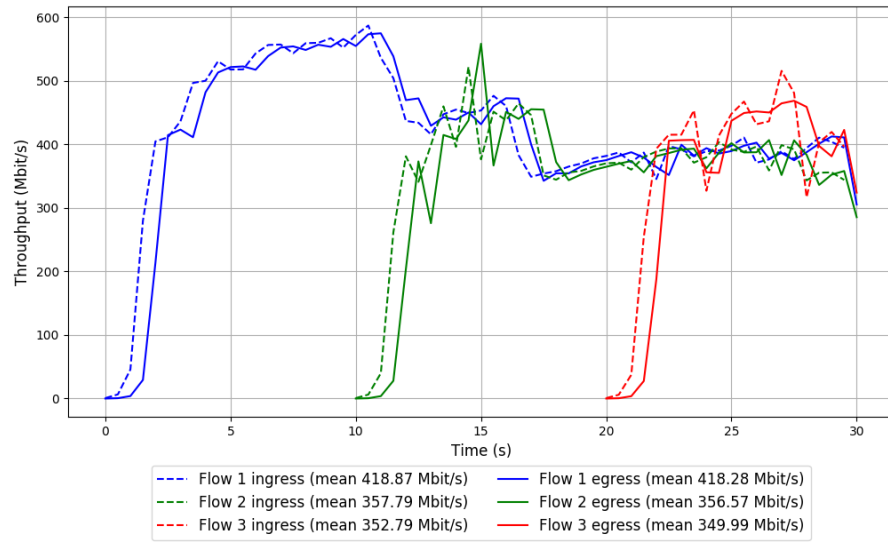


Run 3: Statistics of TCP Cubic

Start at: 2019-06-27 07:10:47
End at: 2019-06-27 07:11:17
Local clock offset: -0.508 ms
Remote clock offset: -0.038 ms

Below is generated by plot.py at 2019-06-27 09:17:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 770.11 Mbit/s
95th percentile per-packet one-way delay: 147.692 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 418.28 Mbit/s
95th percentile per-packet one-way delay: 115.330 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 356.57 Mbit/s
95th percentile per-packet one-way delay: 141.533 ms
Loss rate: 1.20%
-- Flow 3:
Average throughput: 349.99 Mbit/s
95th percentile per-packet one-way delay: 237.373 ms
Loss rate: 2.51%

Run 3: Report of TCP Cubic — Data Link

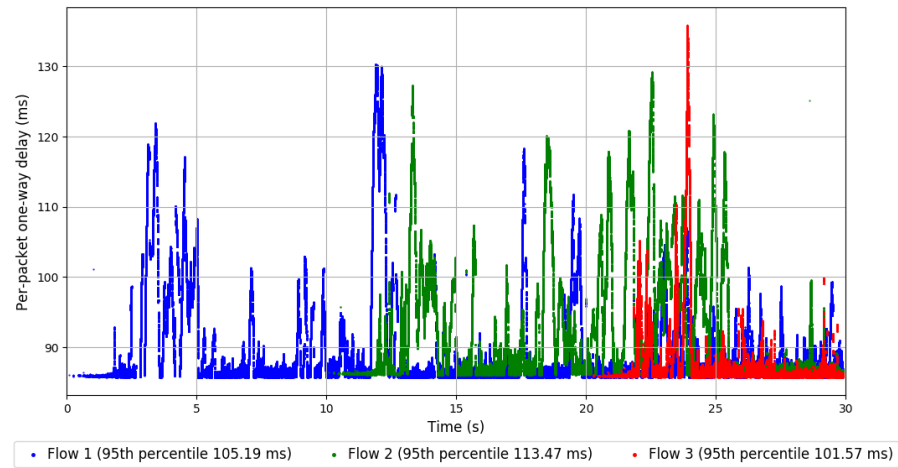
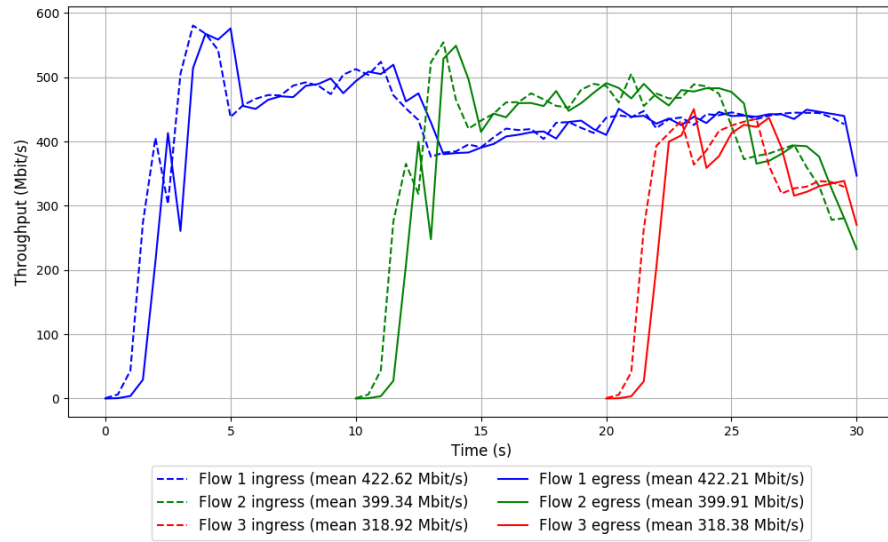


Run 4: Statistics of TCP Cubic

Start at: 2019-06-27 07:48:47
End at: 2019-06-27 07:49:17
Local clock offset: -0.092 ms
Remote clock offset: -0.102 ms

Below is generated by plot.py at 2019-06-27 09:17:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 792.33 Mbit/s
95th percentile per-packet one-way delay: 109.245 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 422.21 Mbit/s
95th percentile per-packet one-way delay: 105.187 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 399.91 Mbit/s
95th percentile per-packet one-way delay: 113.465 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 318.38 Mbit/s
95th percentile per-packet one-way delay: 101.569 ms
Loss rate: 1.90%

Run 4: Report of TCP Cubic — Data Link

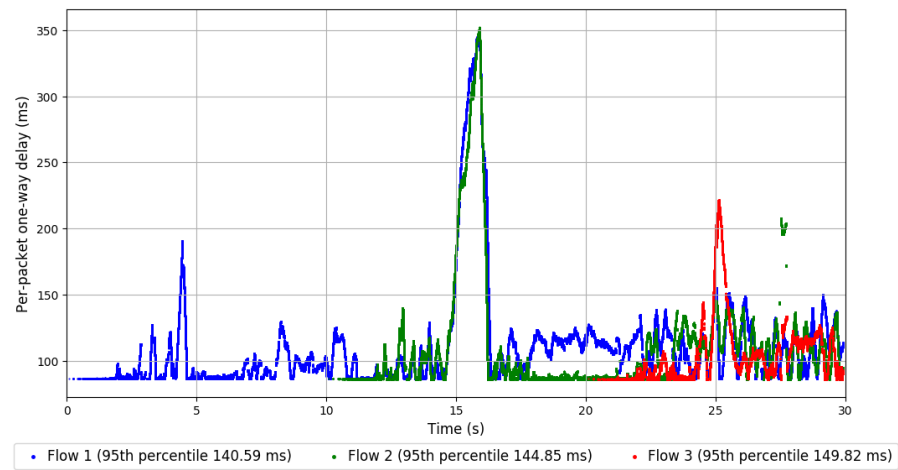
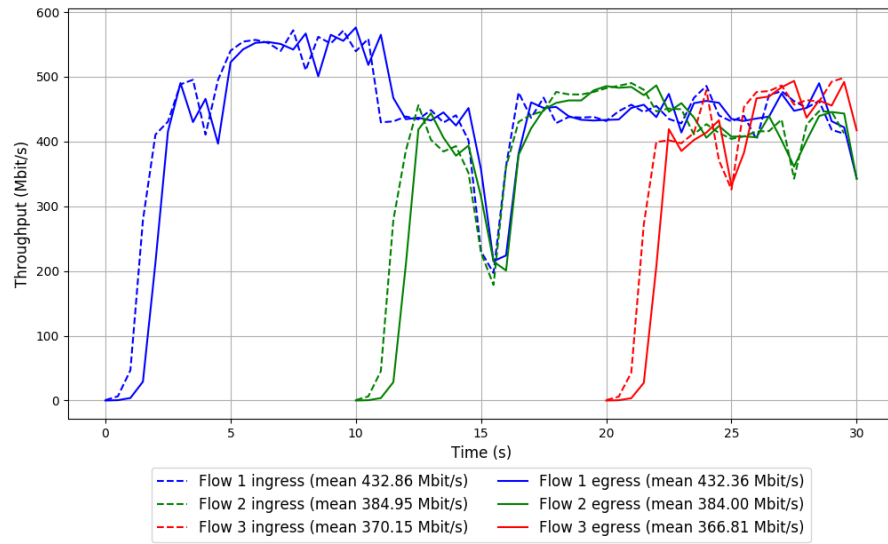


Run 5: Statistics of TCP Cubic

Start at: 2019-06-27 08:26:21
End at: 2019-06-27 08:26:52
Local clock offset: 0.353 ms
Remote clock offset: -0.045 ms

Below is generated by plot.py at 2019-06-27 09:18:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 807.89 Mbit/s
95th percentile per-packet one-way delay: 142.753 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 432.36 Mbit/s
95th percentile per-packet one-way delay: 140.587 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 384.00 Mbit/s
95th percentile per-packet one-way delay: 144.854 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 366.81 Mbit/s
95th percentile per-packet one-way delay: 149.822 ms
Loss rate: 2.61%

Run 5: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2019-06-27 05:52:08

End at: 2019-06-27 05:52:38

Local clock offset: 0.185 ms

Remote clock offset: 0.026 ms

Below is generated by plot.py at 2019-06-27 09:21:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 781.91 Mbit/s

95th percentile per-packet one-way delay: 148.916 ms

Loss rate: 2.84%

-- Flow 1:

Average throughput: 470.77 Mbit/s

95th percentile per-packet one-way delay: 159.561 ms

Loss rate: 4.02%

-- Flow 2:

Average throughput: 356.64 Mbit/s

95th percentile per-packet one-way delay: 98.640 ms

Loss rate: 0.82%

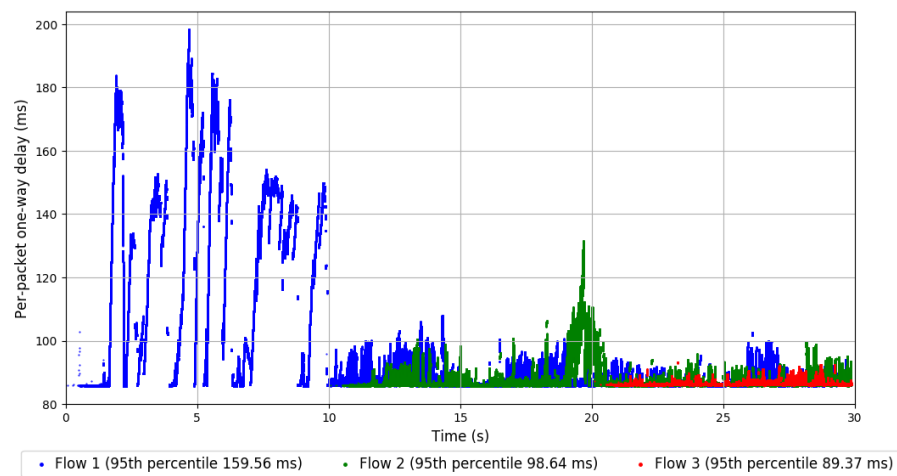
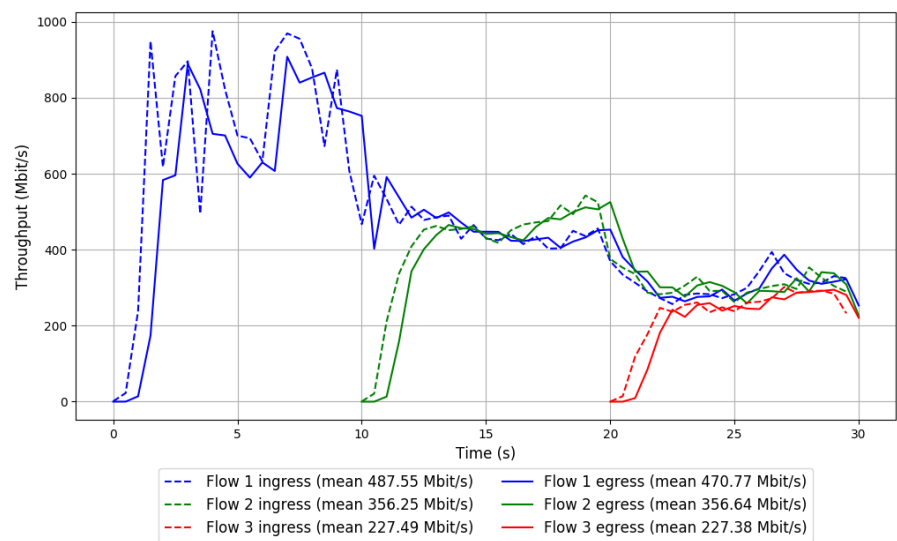
-- Flow 3:

Average throughput: 227.38 Mbit/s

95th percentile per-packet one-way delay: 89.369 ms

Loss rate: 1.62%

Run 1: Report of FillP — Data Link

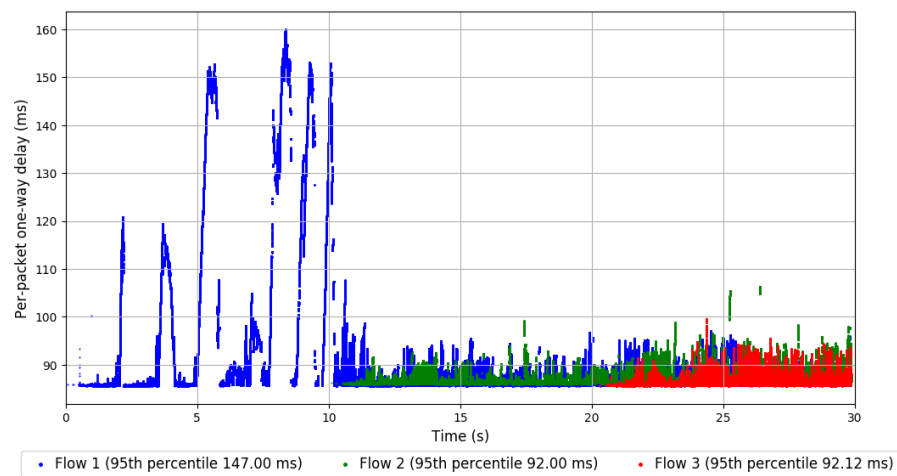
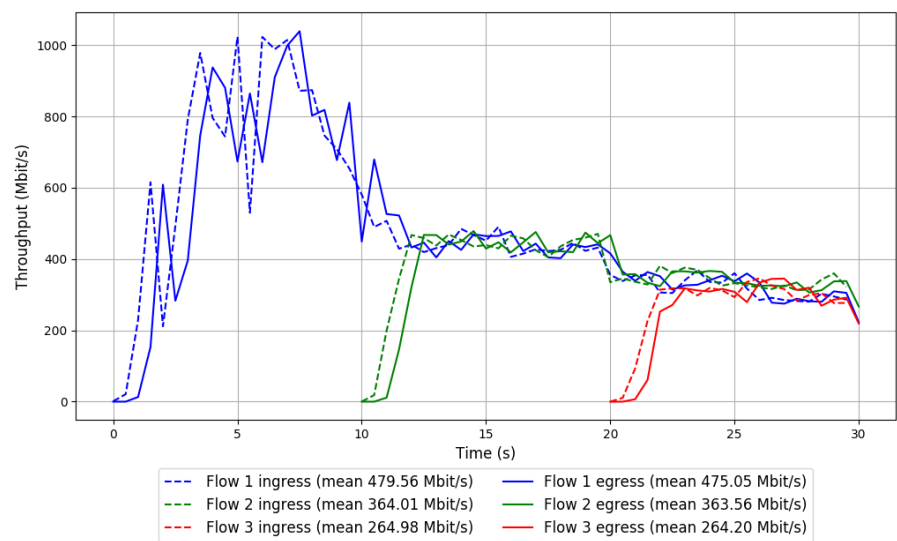


Run 2: Statistics of FillP

Start at: 2019-06-27 06:29:29
End at: 2019-06-27 06:29:59
Local clock offset: -0.261 ms
Remote clock offset: -0.071 ms

Below is generated by plot.py at 2019-06-27 09:31:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 802.66 Mbit/s
95th percentile per-packet one-way delay: 135.628 ms
Loss rate: 1.40%
-- Flow 1:
Average throughput: 475.05 Mbit/s
95th percentile per-packet one-way delay: 147.005 ms
Loss rate: 1.53%
-- Flow 2:
Average throughput: 363.56 Mbit/s
95th percentile per-packet one-way delay: 92.005 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 264.20 Mbit/s
95th percentile per-packet one-way delay: 92.124 ms
Loss rate: 2.09%

Run 2: Report of FillP — Data Link

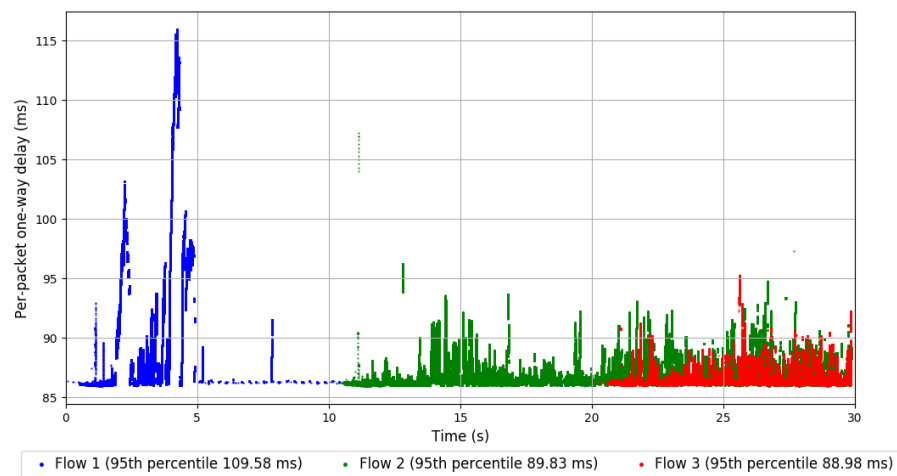
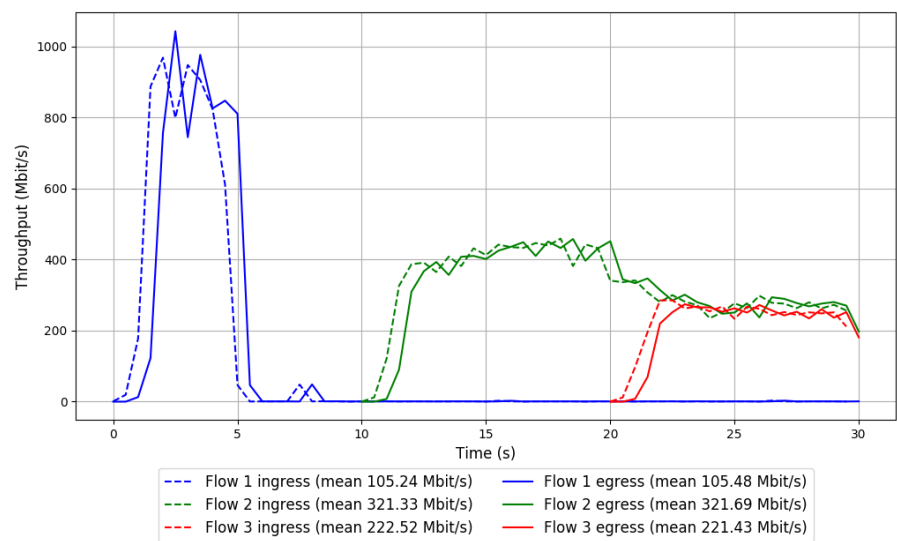


Run 3: Statistics of FillP

Start at: 2019-06-27 07:07:19
End at: 2019-06-27 07:07:49
Local clock offset: -0.109 ms
Remote clock offset: -0.008 ms

Below is generated by plot.py at 2019-06-27 09:31:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 391.19 Mbit/s
95th percentile per-packet one-way delay: 97.927 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 105.48 Mbit/s
95th percentile per-packet one-way delay: 109.579 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 321.69 Mbit/s
95th percentile per-packet one-way delay: 89.831 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 221.43 Mbit/s
95th percentile per-packet one-way delay: 88.977 ms
Loss rate: 1.88%

Run 3: Report of FillP — Data Link

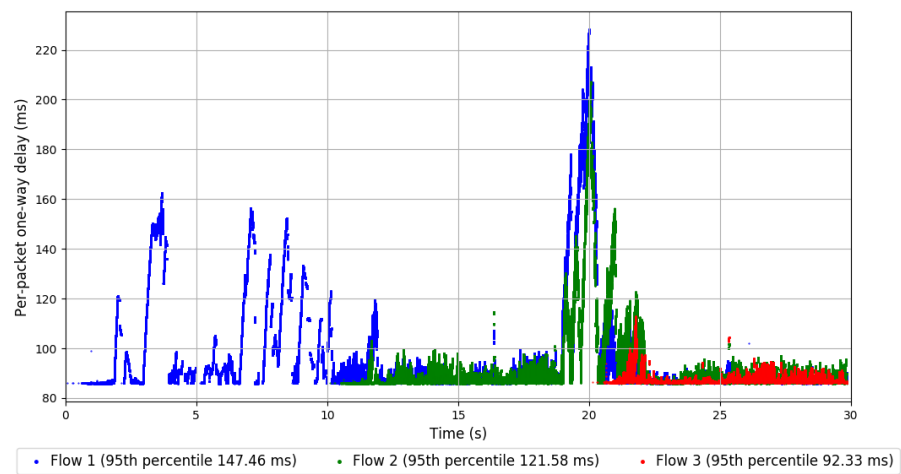
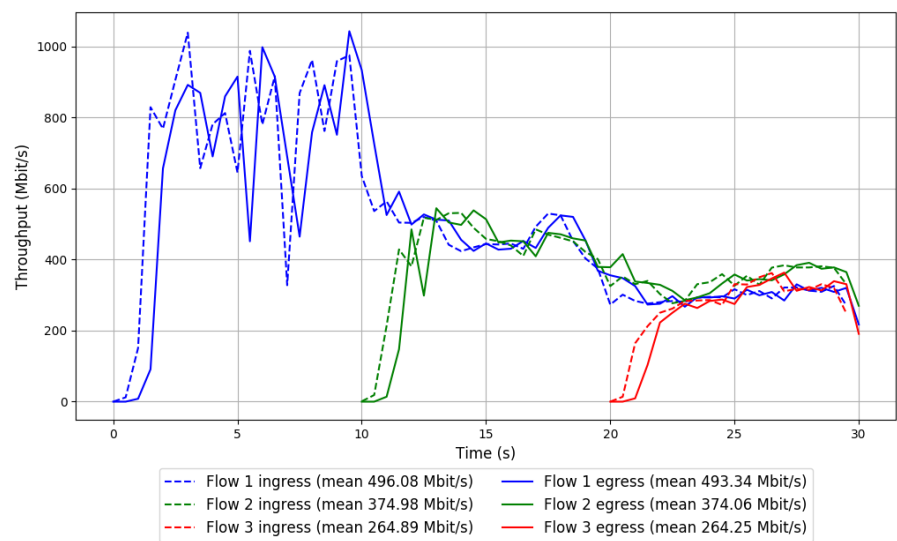


Run 4: Statistics of FillP

Start at: 2019-06-27 07:44:59
End at: 2019-06-27 07:45:29
Local clock offset: -0.065 ms
Remote clock offset: -0.068 ms

Below is generated by plot.py at 2019-06-27 09:35:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 827.81 Mbit/s
95th percentile per-packet one-way delay: 141.959 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 493.34 Mbit/s
95th percentile per-packet one-way delay: 147.462 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 374.06 Mbit/s
95th percentile per-packet one-way delay: 121.580 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 264.25 Mbit/s
95th percentile per-packet one-way delay: 92.335 ms
Loss rate: 2.00%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2019-06-27 08:22:45

End at: 2019-06-27 08:23:15

Local clock offset: -0.051 ms

Remote clock offset: 0.006 ms

Below is generated by plot.py at 2019-06-27 09:35:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 510.32 Mbit/s

95th percentile per-packet one-way delay: 95.951 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 195.50 Mbit/s

95th percentile per-packet one-way delay: 97.373 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 344.70 Mbit/s

95th percentile per-packet one-way delay: 95.192 ms

Loss rate: 0.89%

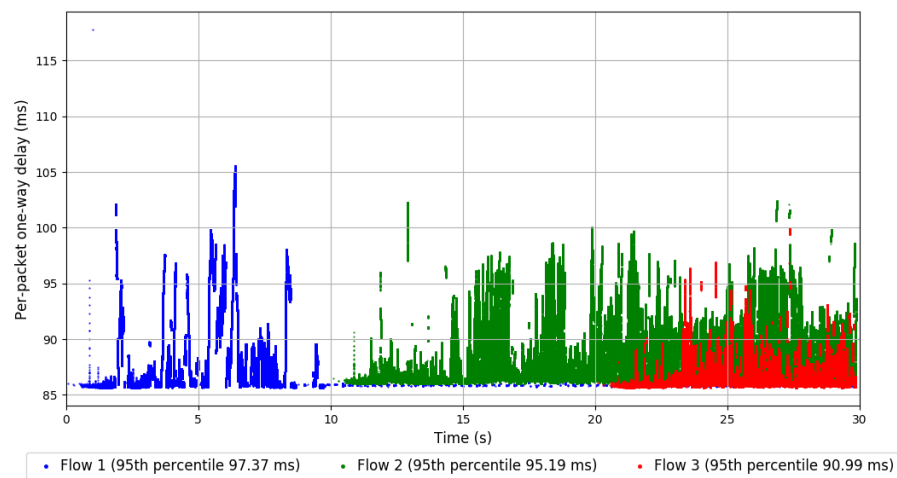
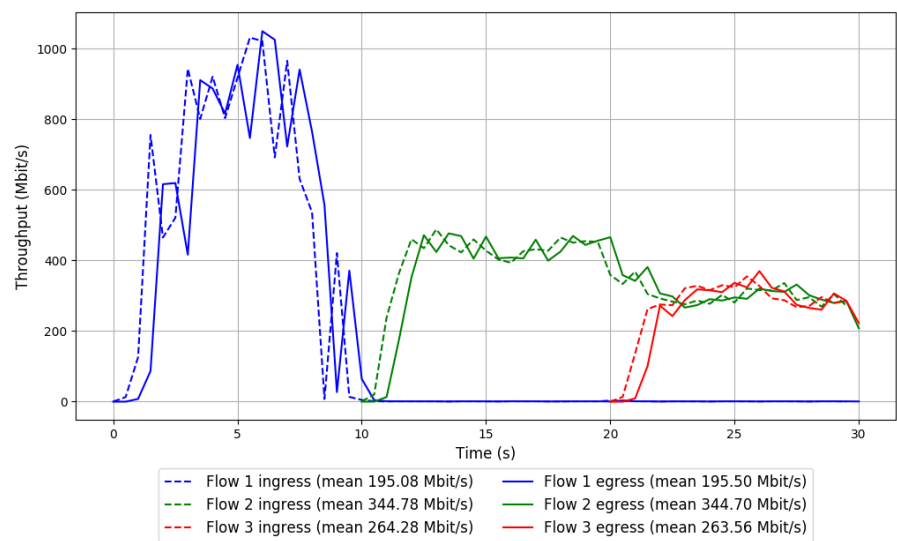
-- Flow 3:

Average throughput: 263.56 Mbit/s

95th percentile per-packet one-way delay: 90.991 ms

Loss rate: 2.06%

Run 5: Report of FillP — Data Link

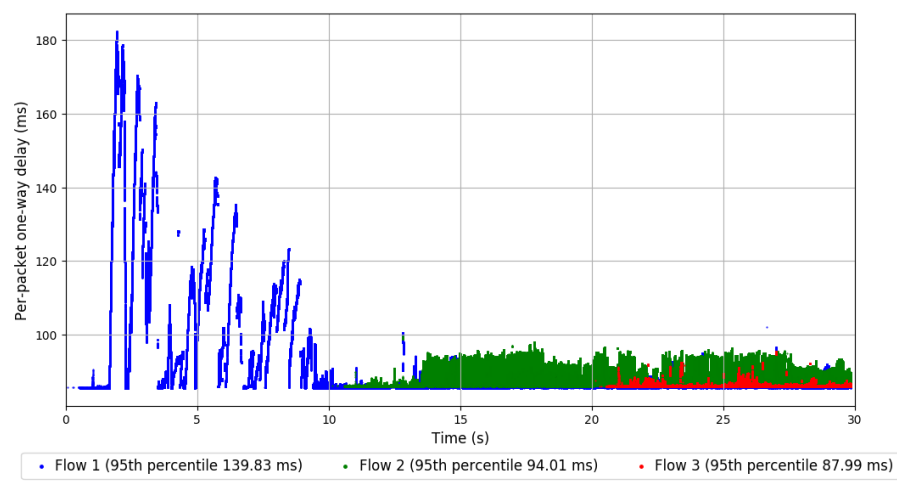
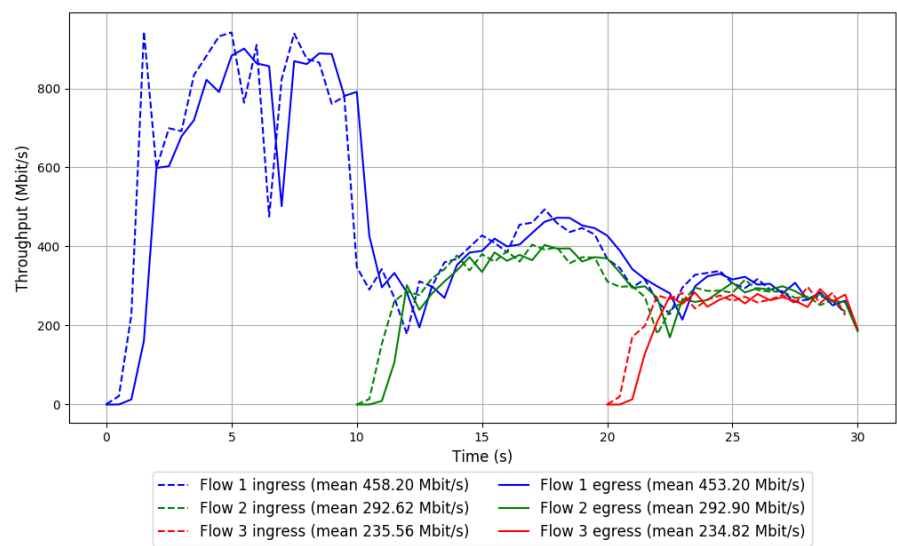


Run 1: Statistics of FillP-Sheep

Start at: 2019-06-27 05:37:55
End at: 2019-06-27 05:38:25
Local clock offset: -0.146 ms
Remote clock offset: -0.025 ms

Below is generated by plot.py at 2019-06-27 09:35:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 723.76 Mbit/s
95th percentile per-packet one-way delay: 129.232 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 453.20 Mbit/s
95th percentile per-packet one-way delay: 139.833 ms
Loss rate: 1.66%
-- Flow 2:
Average throughput: 292.90 Mbit/s
95th percentile per-packet one-way delay: 94.012 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 234.82 Mbit/s
95th percentile per-packet one-way delay: 87.989 ms
Loss rate: 2.11%

Run 1: Report of FillP-Sheep — Data Link

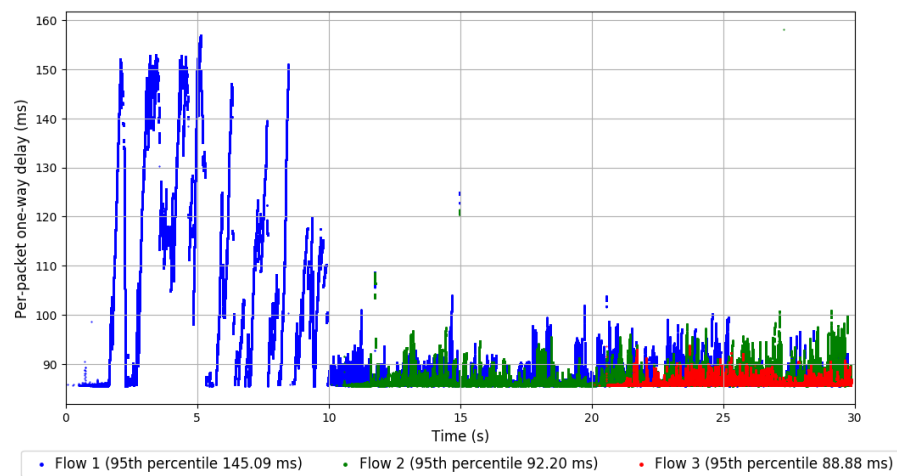
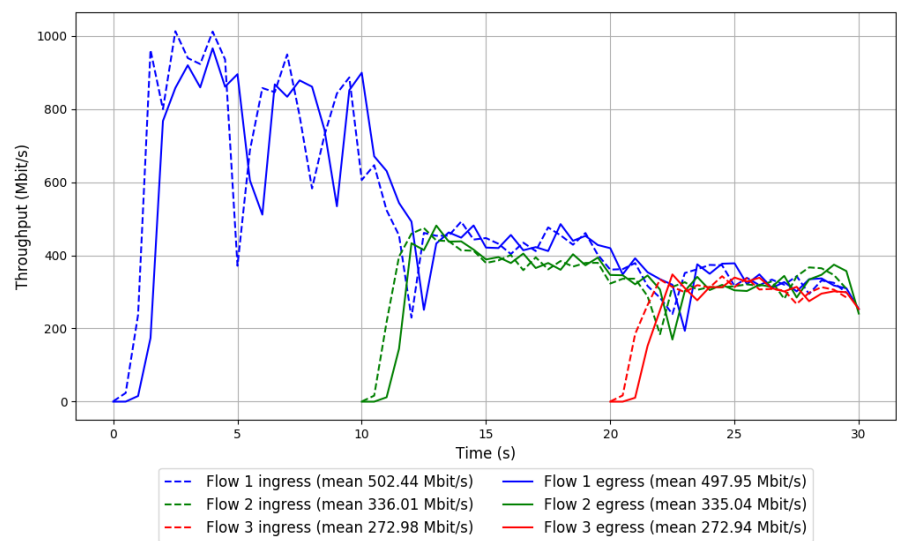


Run 2: Statistics of FillP-Sheep

Start at: 2019-06-27 06:15:15
End at: 2019-06-27 06:15:45
Local clock offset: -0.228 ms
Remote clock offset: -0.065 ms

Below is generated by plot.py at 2019-06-27 09:36:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 809.53 Mbit/s
95th percentile per-packet one-way delay: 138.748 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 497.95 Mbit/s
95th percentile per-packet one-way delay: 145.087 ms
Loss rate: 1.48%
-- Flow 2:
Average throughput: 335.04 Mbit/s
95th percentile per-packet one-way delay: 92.203 ms
Loss rate: 1.16%
-- Flow 3:
Average throughput: 272.94 Mbit/s
95th percentile per-packet one-way delay: 88.882 ms
Loss rate: 1.76%

Run 2: Report of FillP-Sheep — Data Link



Run 3: Statistics of FillP-Sheep

Start at: 2019-06-27 06:52:56

End at: 2019-06-27 06:53:26

Local clock offset: -0.508 ms

Remote clock offset: 0.026 ms

Below is generated by plot.py at 2019-06-27 09:36:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 771.80 Mbit/s

95th percentile per-packet one-way delay: 108.090 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 468.14 Mbit/s

95th percentile per-packet one-way delay: 116.499 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 336.93 Mbit/s

95th percentile per-packet one-way delay: 89.622 ms

Loss rate: 0.74%

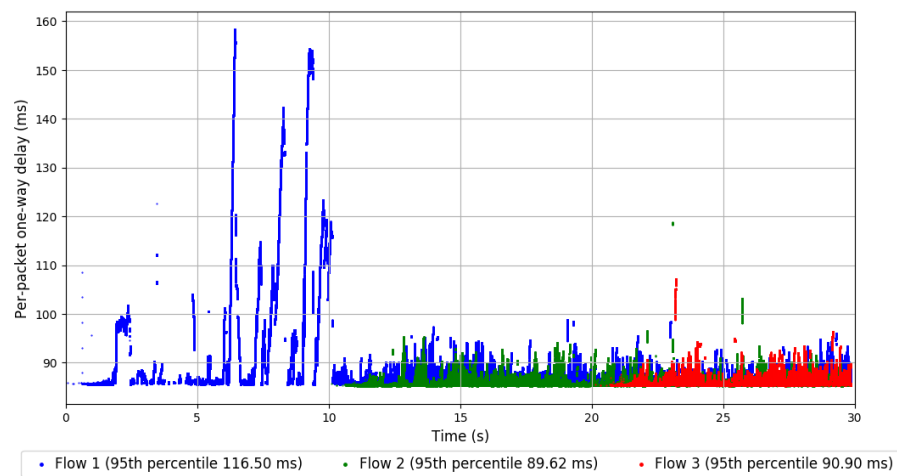
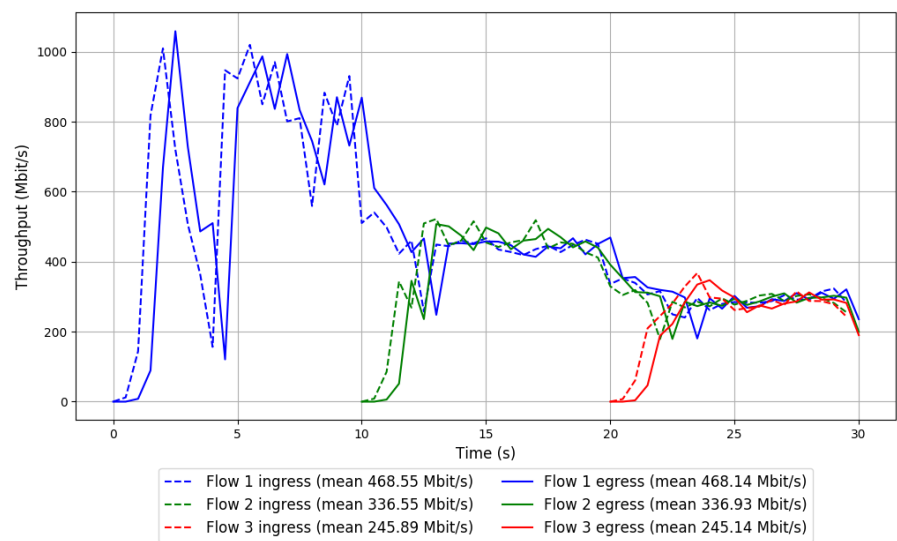
-- Flow 3:

Average throughput: 245.14 Mbit/s

95th percentile per-packet one-way delay: 90.903 ms

Loss rate: 2.00%

Run 3: Report of FillP-Sheep — Data Link

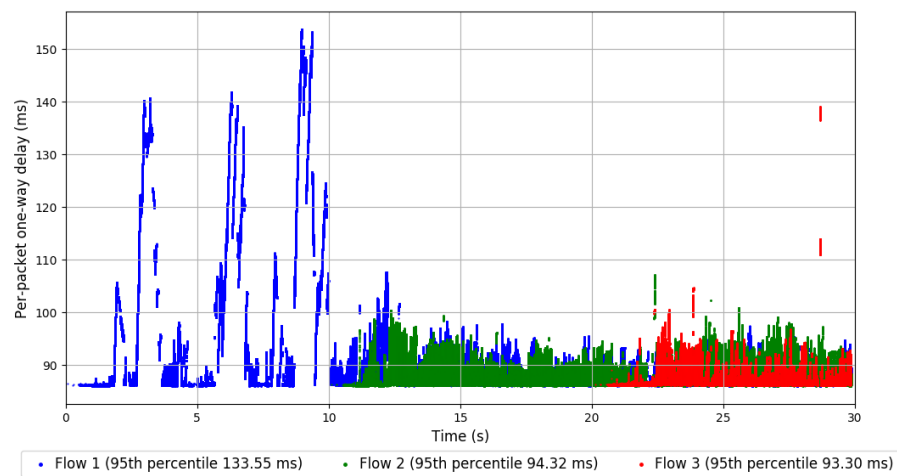
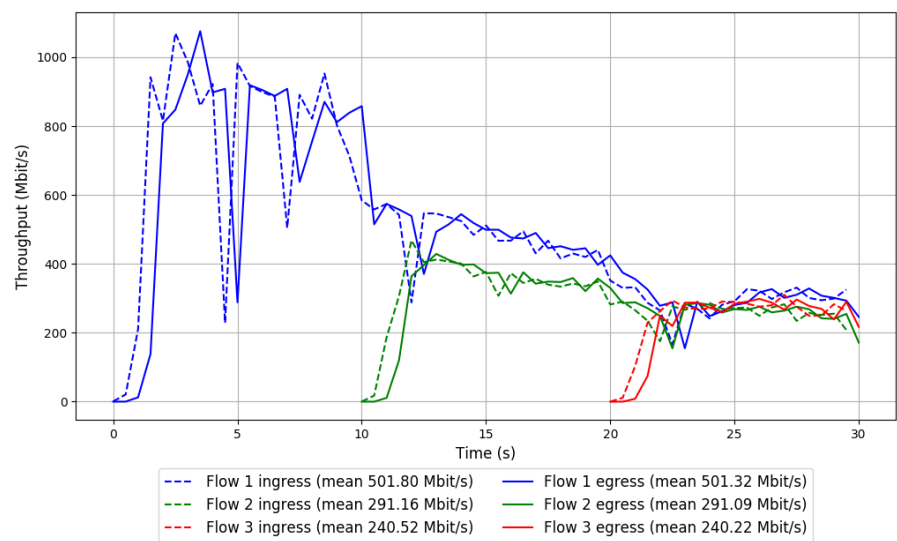


Run 4: Statistics of FillP-Sheep

Start at: 2019-06-27 07:30:33
End at: 2019-06-27 07:31:03
Local clock offset: 0.261 ms
Remote clock offset: -0.029 ms

Below is generated by plot.py at 2019-06-27 09:39:55
Datalink statistics
-- Total of 3 flows:
Average throughput: 773.03 Mbit/s
95th percentile per-packet one-way delay: 124.826 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 501.32 Mbit/s
95th percentile per-packet one-way delay: 133.551 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 291.09 Mbit/s
95th percentile per-packet one-way delay: 94.320 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 240.22 Mbit/s
95th percentile per-packet one-way delay: 93.299 ms
Loss rate: 1.87%

Run 4: Report of FillP-Sheep — Data Link

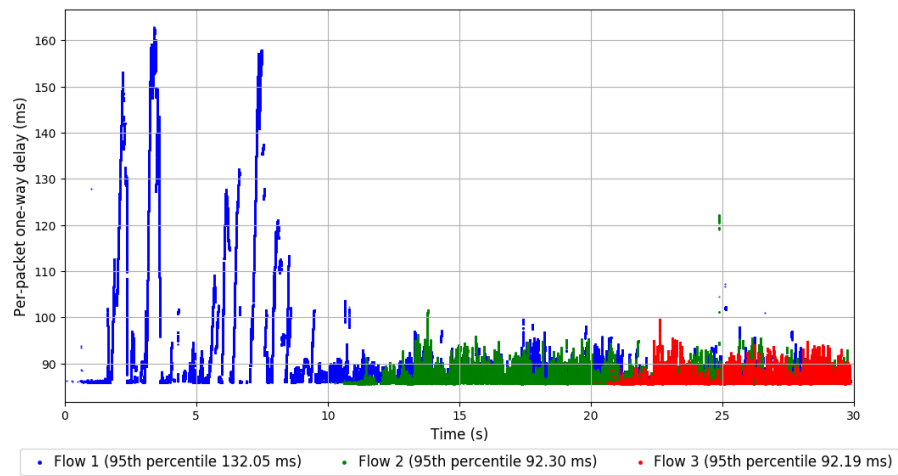
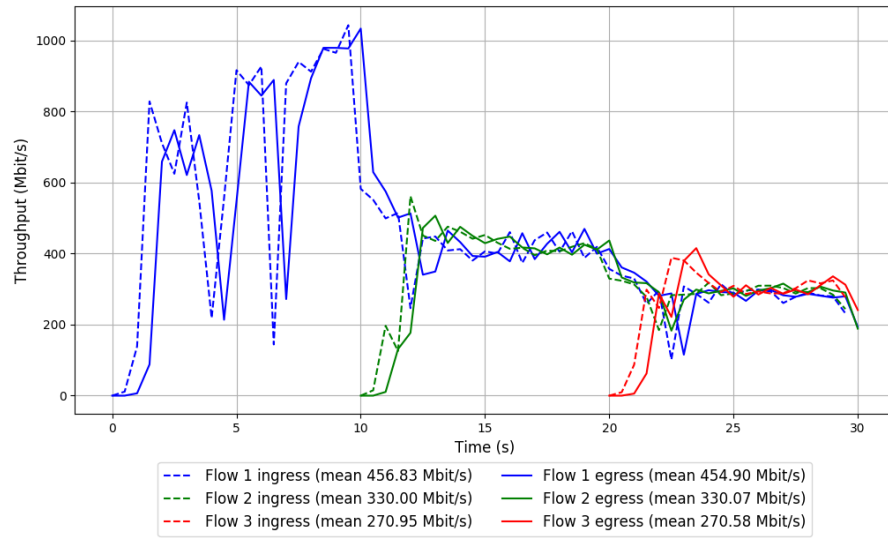


Run 5: Statistics of FillP-Sheep

Start at: 2019-06-27 08:08:35
End at: 2019-06-27 08:09:05
Local clock offset: -0.204 ms
Remote clock offset: -0.111 ms

Below is generated by plot.py at 2019-06-27 09:40:50
Datalink statistics
-- Total of 3 flows:
Average throughput: 762.27 Mbit/s
95th percentile per-packet one-way delay: 120.568 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 454.90 Mbit/s
95th percentile per-packet one-way delay: 132.047 ms
Loss rate: 1.00%
-- Flow 2:
Average throughput: 330.07 Mbit/s
95th percentile per-packet one-way delay: 92.302 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 270.58 Mbit/s
95th percentile per-packet one-way delay: 92.187 ms
Loss rate: 1.90%

Run 5: Report of FillP-Sheep — Data Link

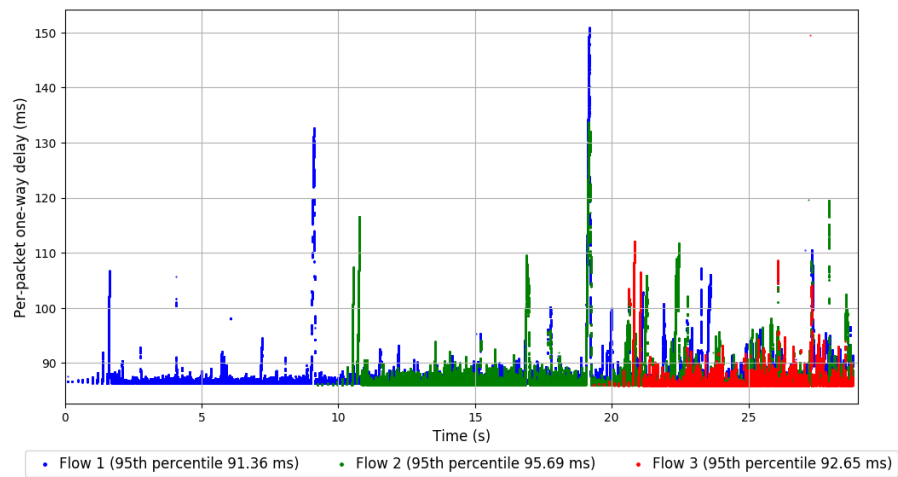
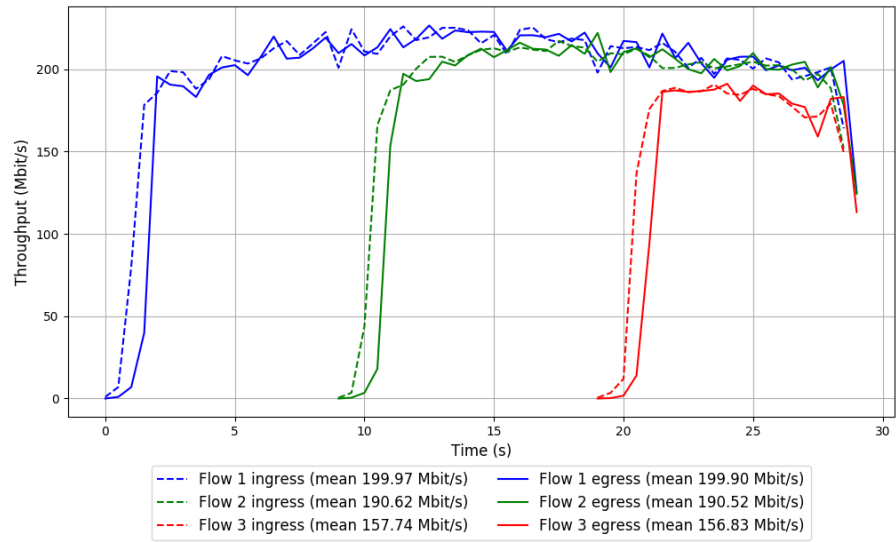


Run 1: Statistics of Indigo

Start at: 2019-06-27 05:36:03
End at: 2019-06-27 05:36:33
Local clock offset: 0.412 ms
Remote clock offset: -0.012 ms

Below is generated by plot.py at 2019-06-27 09:41:44
Datalink statistics
-- Total of 3 flows:
Average throughput: 381.53 Mbit/s
95th percentile per-packet one-way delay: 92.970 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 199.90 Mbit/s
95th percentile per-packet one-way delay: 91.360 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 190.52 Mbit/s
95th percentile per-packet one-way delay: 95.692 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 156.83 Mbit/s
95th percentile per-packet one-way delay: 92.653 ms
Loss rate: 2.36%

Run 1: Report of Indigo — Data Link

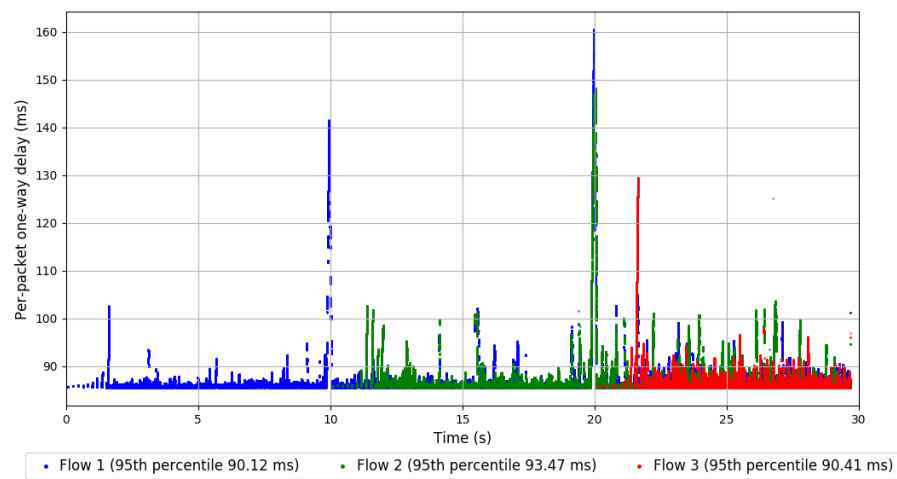
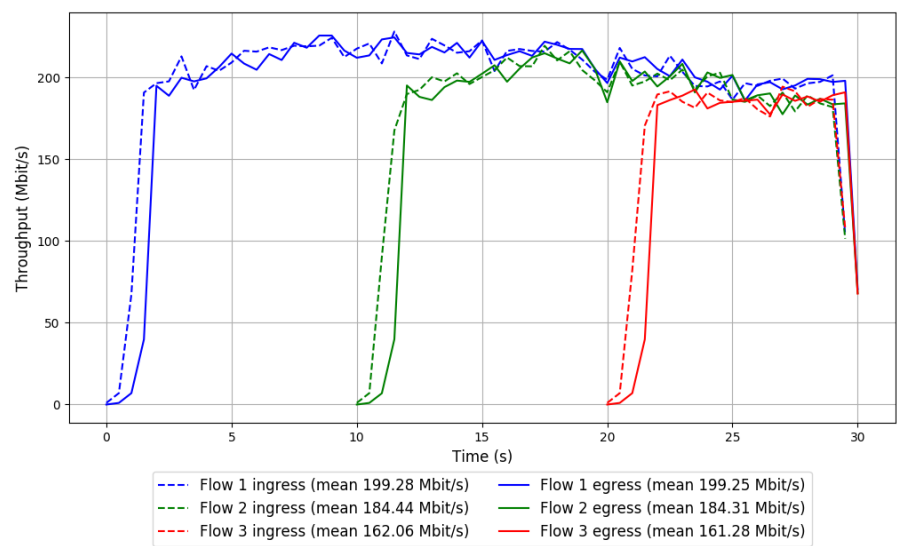


Run 2: Statistics of Indigo

Start at: 2019-06-27 06:13:22
End at: 2019-06-27 06:13:52
Local clock offset: -0.297 ms
Remote clock offset: -0.085 ms

Below is generated by plot.py at 2019-06-27 09:46:13
Datalink statistics
-- Total of 3 flows:
Average throughput: 373.56 Mbit/s
95th percentile per-packet one-way delay: 91.142 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 199.25 Mbit/s
95th percentile per-packet one-way delay: 90.119 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 184.31 Mbit/s
95th percentile per-packet one-way delay: 93.465 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 161.28 Mbit/s
95th percentile per-packet one-way delay: 90.410 ms
Loss rate: 2.14%

Run 2: Report of Indigo — Data Link

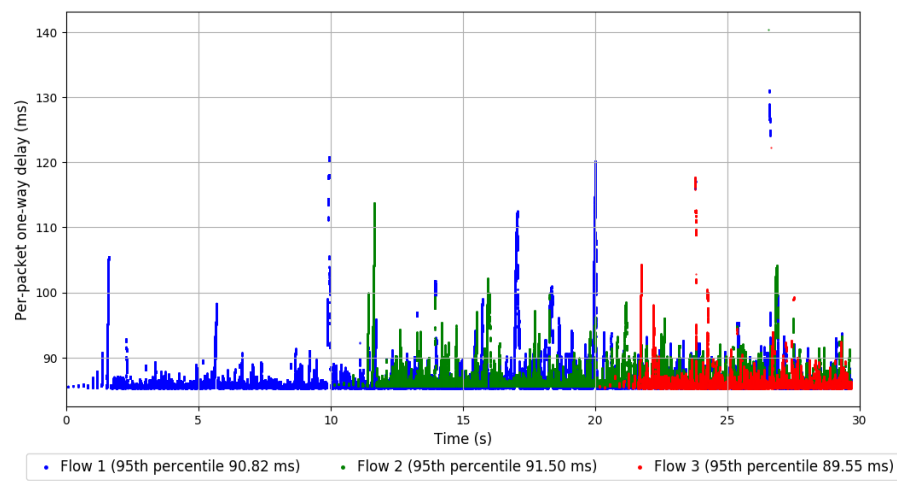
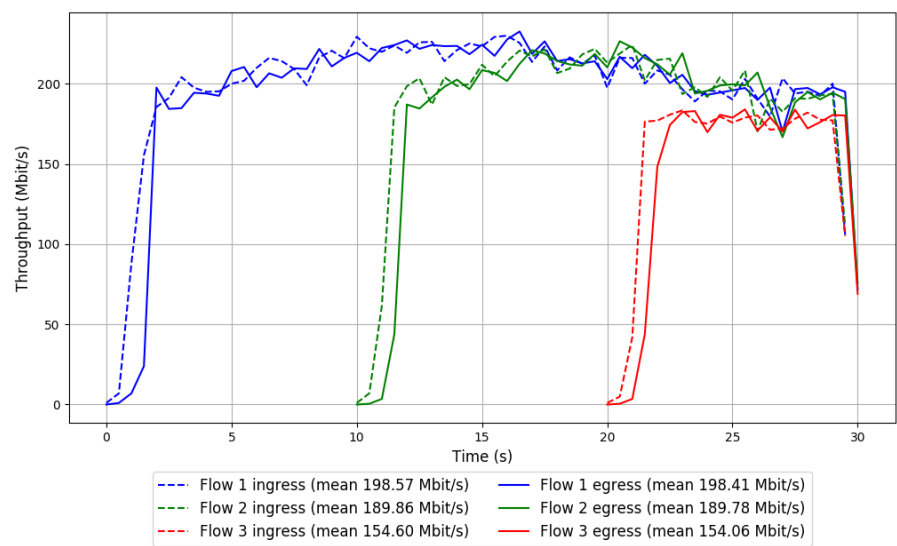


Run 3: Statistics of Indigo

Start at: 2019-06-27 06:51:03
End at: 2019-06-27 06:51:33
Local clock offset: -0.538 ms
Remote clock offset: -0.031 ms

Below is generated by plot.py at 2019-06-27 09:47:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 373.35 Mbit/s
95th percentile per-packet one-way delay: 91.023 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 198.41 Mbit/s
95th percentile per-packet one-way delay: 90.818 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 189.78 Mbit/s
95th percentile per-packet one-way delay: 91.502 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 154.06 Mbit/s
95th percentile per-packet one-way delay: 89.551 ms
Loss rate: 2.13%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2019-06-27 07:28:40

End at: 2019-06-27 07:29:10

Local clock offset: 0.182 ms

Remote clock offset: -0.02 ms

Below is generated by plot.py at 2019-06-27 09:48:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 373.66 Mbit/s

95th percentile per-packet one-way delay: 90.333 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 199.25 Mbit/s

95th percentile per-packet one-way delay: 90.188 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 188.97 Mbit/s

95th percentile per-packet one-way delay: 91.314 ms

Loss rate: 1.14%

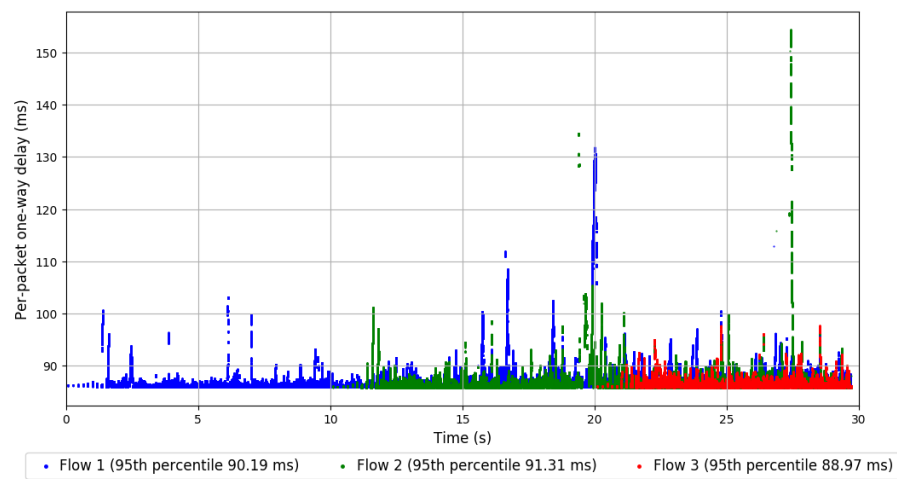
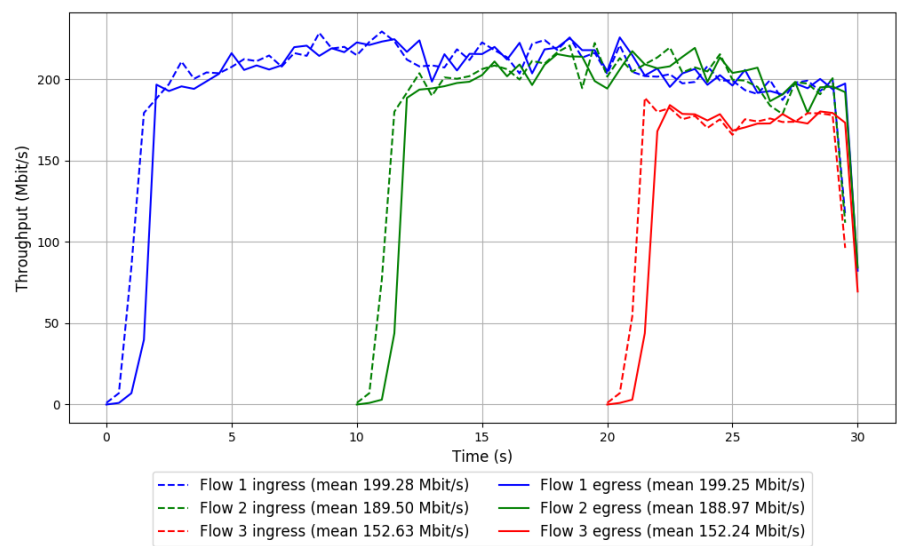
-- Flow 3:

Average throughput: 152.24 Mbit/s

95th percentile per-packet one-way delay: 88.968 ms

Loss rate: 2.01%

Run 4: Report of Indigo — Data Link

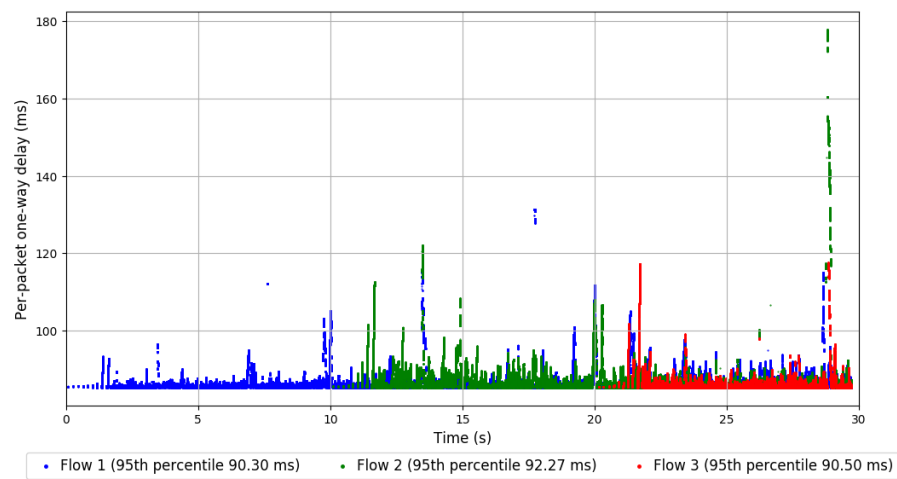
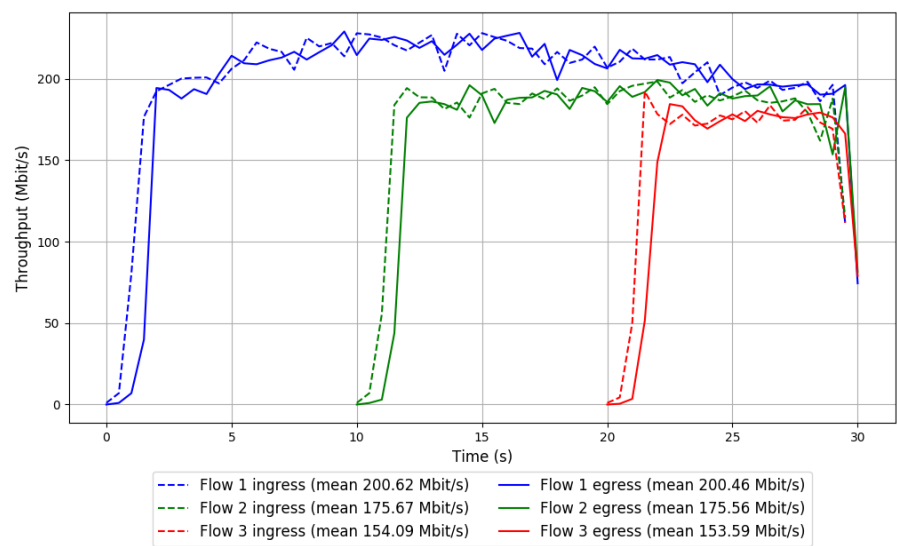


Run 5: Statistics of Indigo

Start at: 2019-06-27 08:06:42
End at: 2019-06-27 08:07:12
Local clock offset: -0.559 ms
Remote clock offset: -0.101 ms

Below is generated by plot.py at 2019-06-27 09:49:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 366.06 Mbit/s
95th percentile per-packet one-way delay: 91.024 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 200.46 Mbit/s
95th percentile per-packet one-way delay: 90.300 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 175.56 Mbit/s
95th percentile per-packet one-way delay: 92.270 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 153.59 Mbit/s
95th percentile per-packet one-way delay: 90.498 ms
Loss rate: 2.12%

Run 5: Report of Indigo — Data Link



Run 1: Statistics of Indigo-MusesC3

Start at: 2019-06-27 05:50:16

End at: 2019-06-27 05:50:46

Local clock offset: 0.137 ms

Remote clock offset: 0.003 ms

Below is generated by plot.py at 2019-06-27 09:49:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 710.95 Mbit/s

95th percentile per-packet one-way delay: 110.074 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 429.71 Mbit/s

95th percentile per-packet one-way delay: 119.095 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 331.44 Mbit/s

95th percentile per-packet one-way delay: 90.075 ms

Loss rate: 1.03%

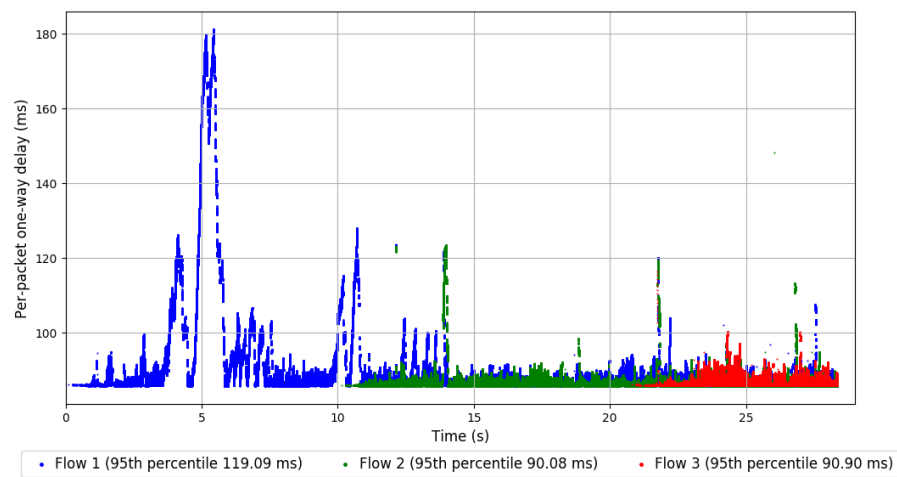
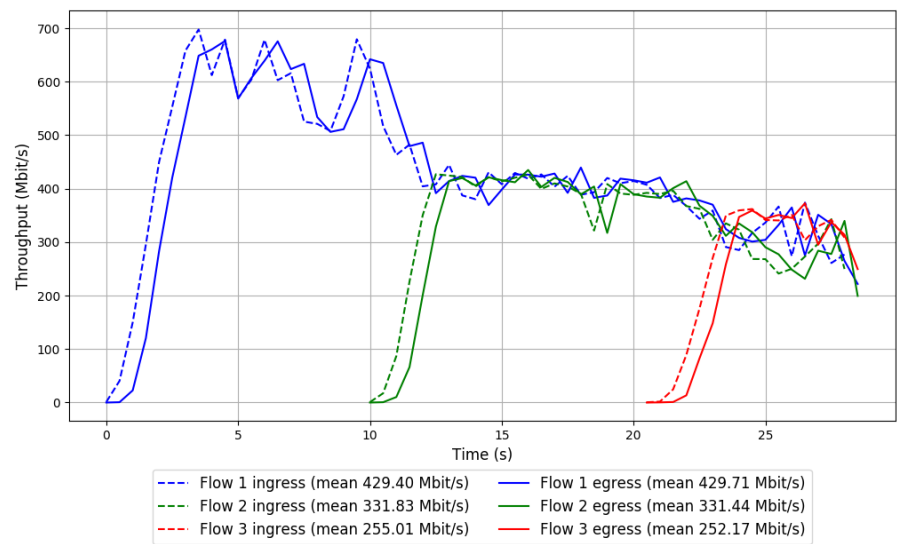
-- Flow 3:

Average throughput: 252.17 Mbit/s

95th percentile per-packet one-way delay: 90.904 ms

Loss rate: 3.31%

Run 1: Report of Indigo-MusesC3 — Data Link

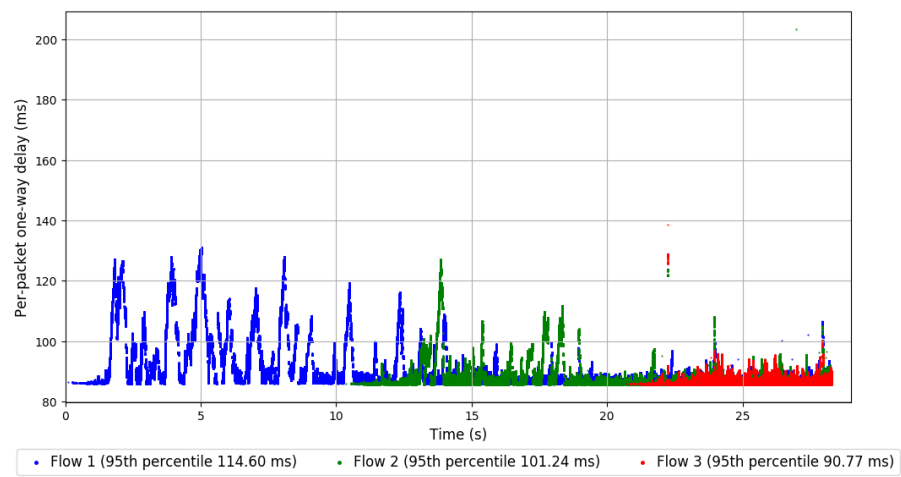
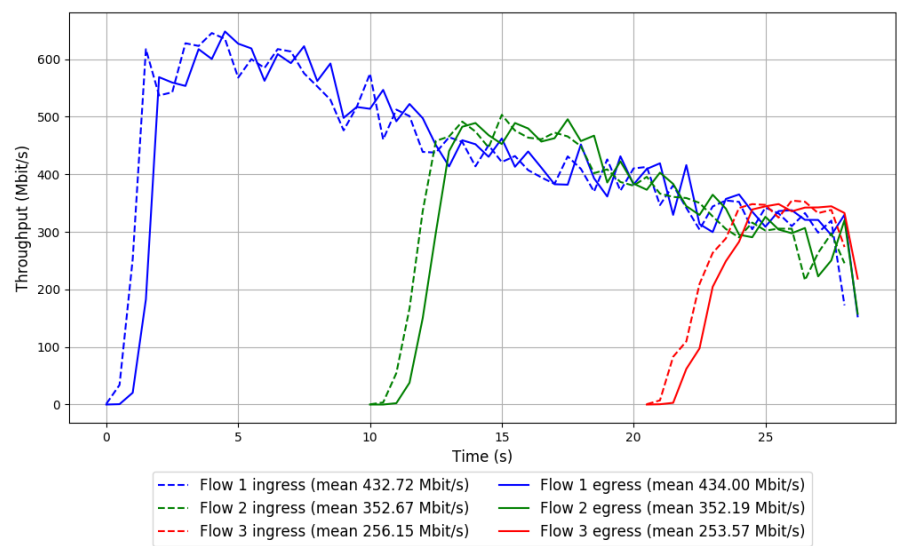


Run 2: Statistics of Indigo-MusesC3

Start at: 2019-06-27 06:27:36
End at: 2019-06-27 06:28:06
Local clock offset: -0.111 ms
Remote clock offset: -0.033 ms

Below is generated by plot.py at 2019-06-27 09:53:50
Datalink statistics
-- Total of 3 flows:
Average throughput: 726.04 Mbit/s
95th percentile per-packet one-way delay: 109.546 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 434.00 Mbit/s
95th percentile per-packet one-way delay: 114.601 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 352.19 Mbit/s
95th percentile per-packet one-way delay: 101.244 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 253.57 Mbit/s
95th percentile per-packet one-way delay: 90.767 ms
Loss rate: 3.21%

Run 2: Report of Indigo-MusesC3 — Data Link

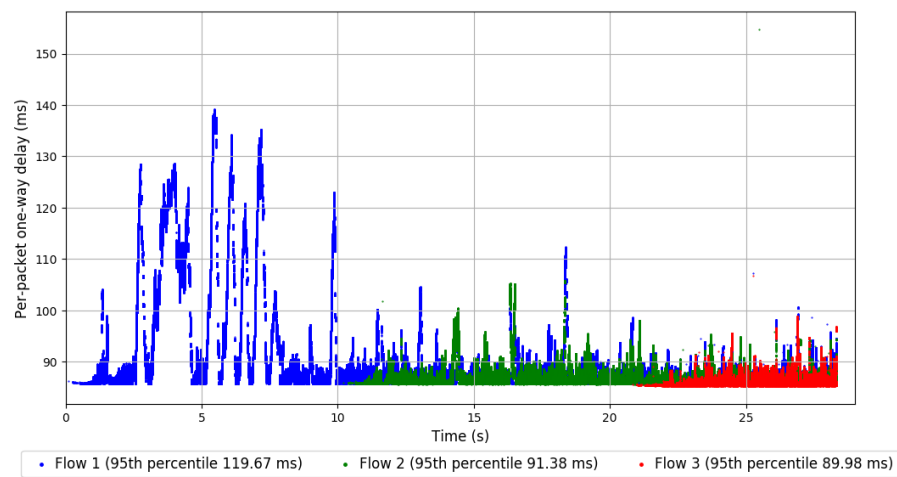
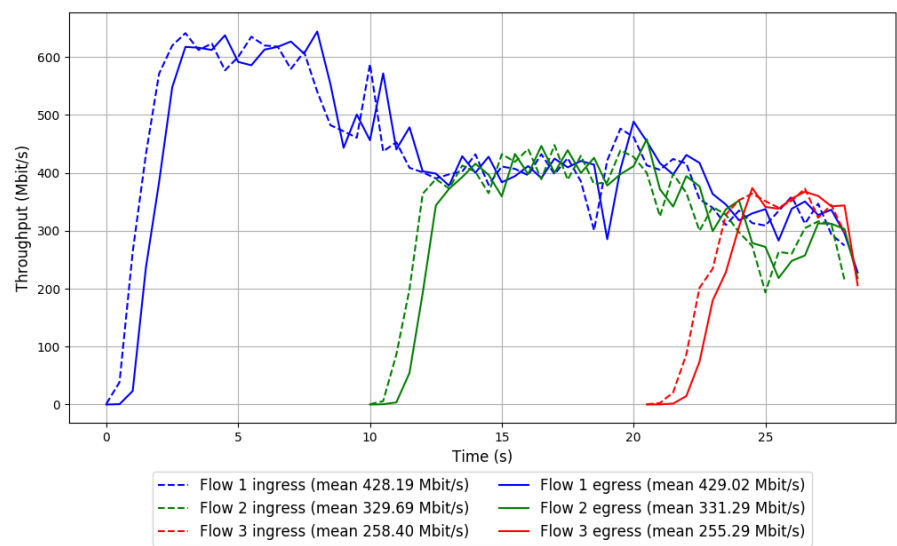


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-06-27 07:05:27
End at: 2019-06-27 07:05:57
Local clock offset: -0.491 ms
Remote clock offset: -0.048 ms

Below is generated by plot.py at 2019-06-27 09:54:38
Datalink statistics
-- Total of 3 flows:
Average throughput: 709.49 Mbit/s
95th percentile per-packet one-way delay: 113.147 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 429.02 Mbit/s
95th percentile per-packet one-way delay: 119.670 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 331.29 Mbit/s
95th percentile per-packet one-way delay: 91.380 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 255.29 Mbit/s
95th percentile per-packet one-way delay: 89.983 ms
Loss rate: 3.45%

Run 3: Report of Indigo-MusesC3 — Data Link

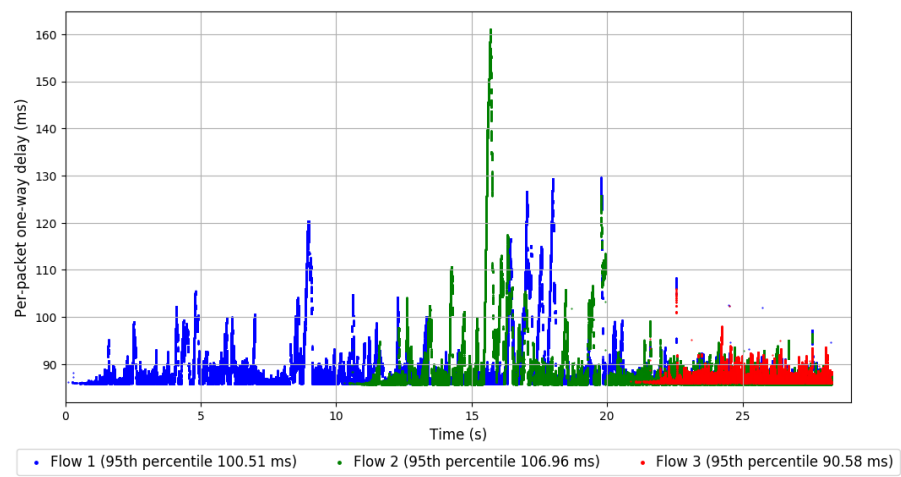
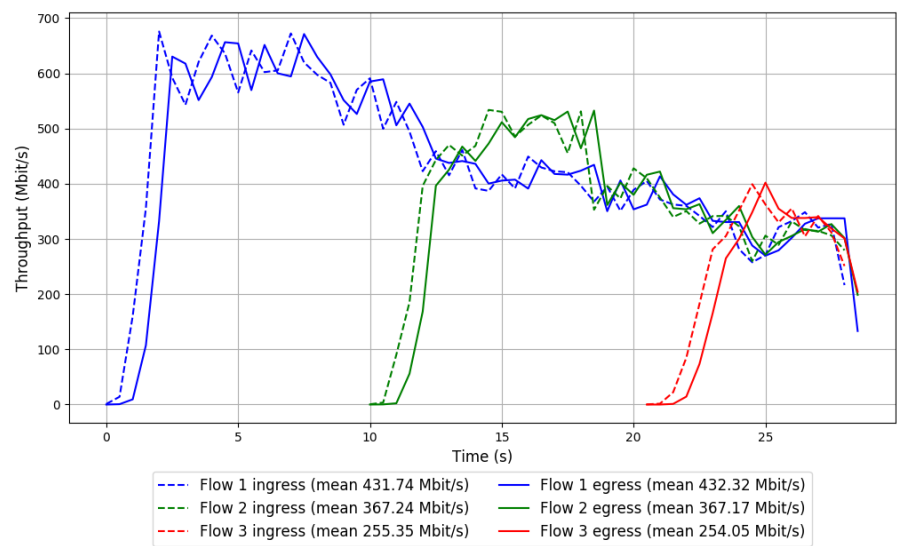


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-06-27 07:43:06
End at: 2019-06-27 07:43:36
Local clock offset: -0.067 ms
Remote clock offset: -0.106 ms

Below is generated by plot.py at 2019-06-27 09:56:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 733.10 Mbit/s
95th percentile per-packet one-way delay: 102.687 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 432.32 Mbit/s
95th percentile per-packet one-way delay: 100.510 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 367.17 Mbit/s
95th percentile per-packet one-way delay: 106.963 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 254.05 Mbit/s
95th percentile per-packet one-way delay: 90.576 ms
Loss rate: 3.12%

Run 4: Report of Indigo-MusesC3 — Data Link

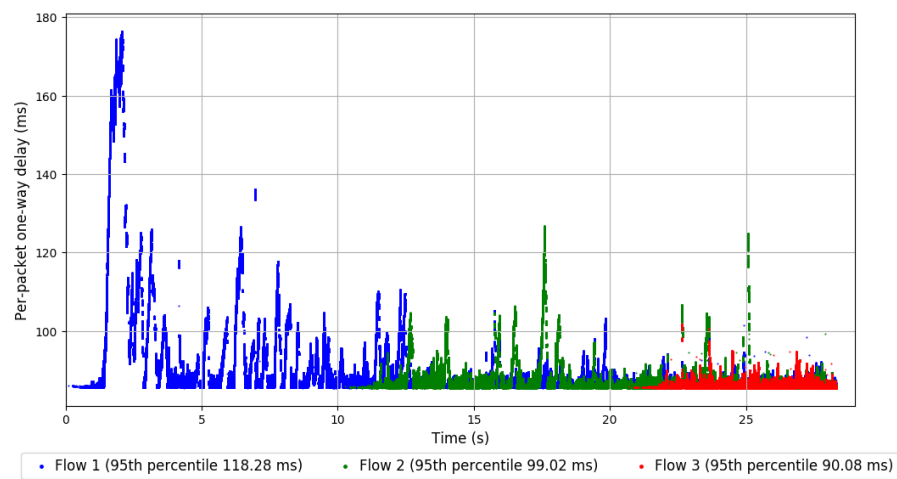
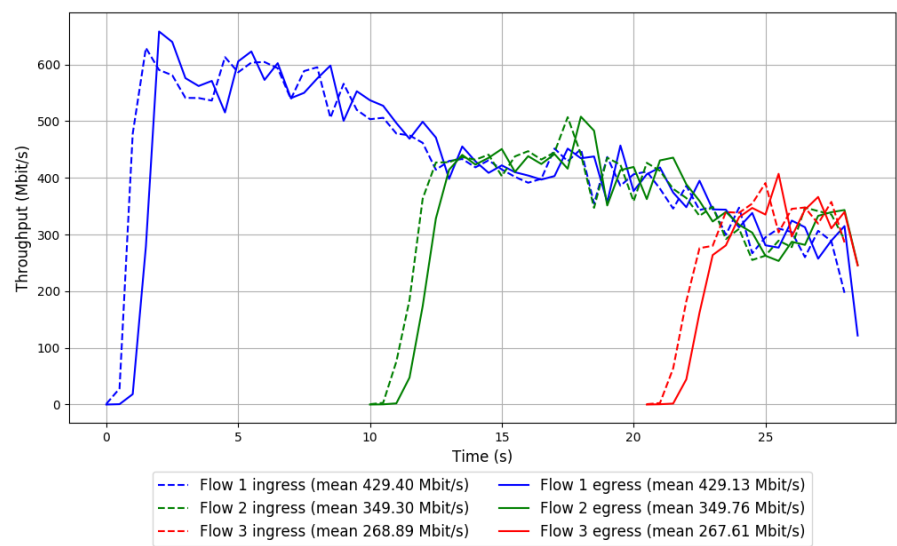


Run 5: Statistics of Indigo-MusesC3

Start at: 2019-06-27 08:20:51
End at: 2019-06-27 08:21:21
Local clock offset: -0.26 ms
Remote clock offset: -0.058 ms

Below is generated by plot.py at 2019-06-27 10:00:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 724.86 Mbit/s
95th percentile per-packet one-way delay: 108.965 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 429.13 Mbit/s
95th percentile per-packet one-way delay: 118.278 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 349.76 Mbit/s
95th percentile per-packet one-way delay: 99.024 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 267.61 Mbit/s
95th percentile per-packet one-way delay: 90.080 ms
Loss rate: 2.68%

Run 5: Report of Indigo-MusesC3 — Data Link



Run 1: Statistics of Indigo-MusesC5

Start at: 2019-06-27 05:57:39

End at: 2019-06-27 05:58:09

Local clock offset: 0.102 ms

Remote clock offset: -0.03 ms

Below is generated by plot.py at 2019-06-27 10:00:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 644.83 Mbit/s

95th percentile per-packet one-way delay: 135.600 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 373.46 Mbit/s

95th percentile per-packet one-way delay: 143.234 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 395.80 Mbit/s

95th percentile per-packet one-way delay: 116.012 ms

Loss rate: 1.10%

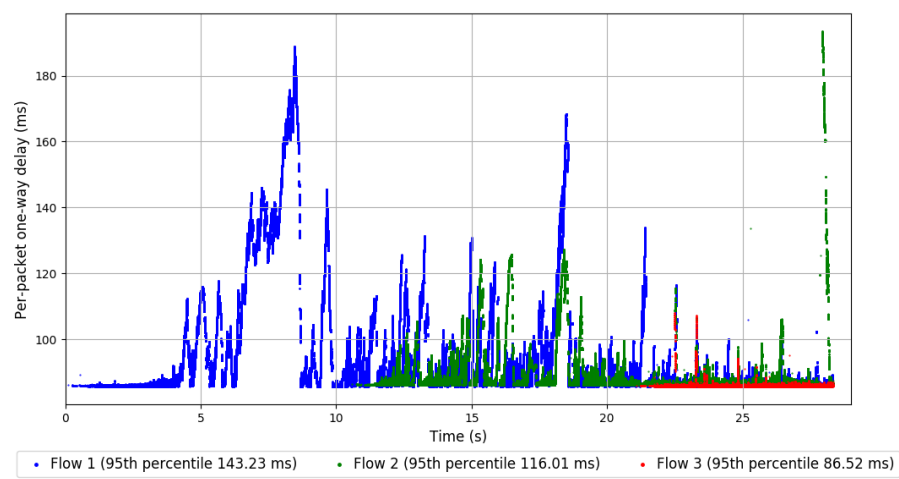
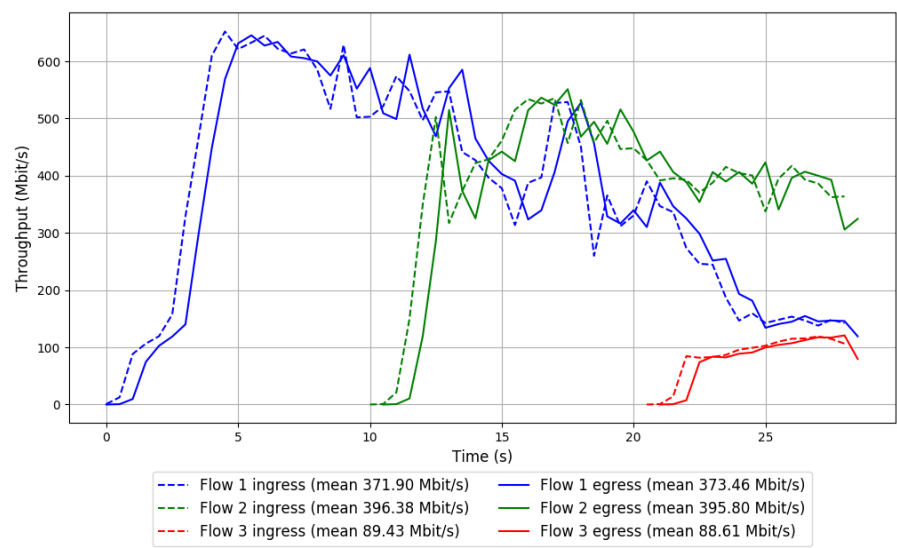
-- Flow 3:

Average throughput: 88.61 Mbit/s

95th percentile per-packet one-way delay: 86.521 ms

Loss rate: 3.21%

Run 1: Report of Indigo-MusesC5 — Data Link

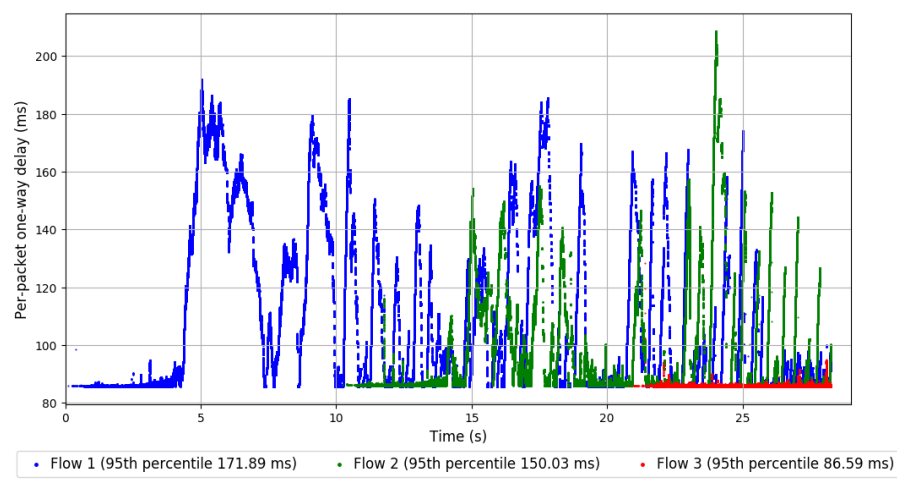
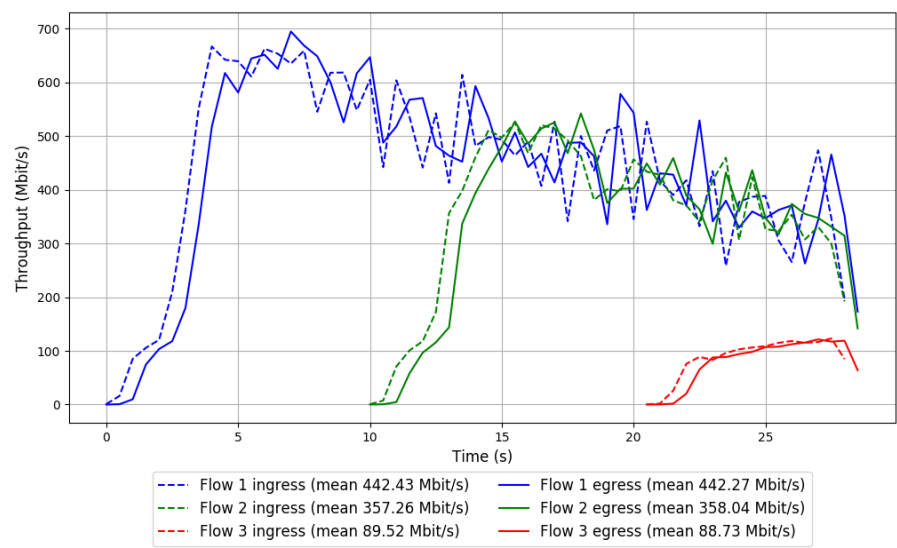


Run 2: Statistics of Indigo-MusesC5

Start at: 2019-06-27 06:35:07
End at: 2019-06-27 06:35:37
Local clock offset: -0.181 ms
Remote clock offset: -0.066 ms

Below is generated by plot.py at 2019-06-27 10:02:40
Datalink statistics
-- Total of 3 flows:
Average throughput: 694.92 Mbit/s
95th percentile per-packet one-way delay: 169.049 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 442.27 Mbit/s
95th percentile per-packet one-way delay: 171.890 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 358.04 Mbit/s
95th percentile per-packet one-way delay: 150.027 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 88.73 Mbit/s
95th percentile per-packet one-way delay: 86.587 ms
Loss rate: 3.13%

Run 2: Report of Indigo-MusesC5 — Data Link

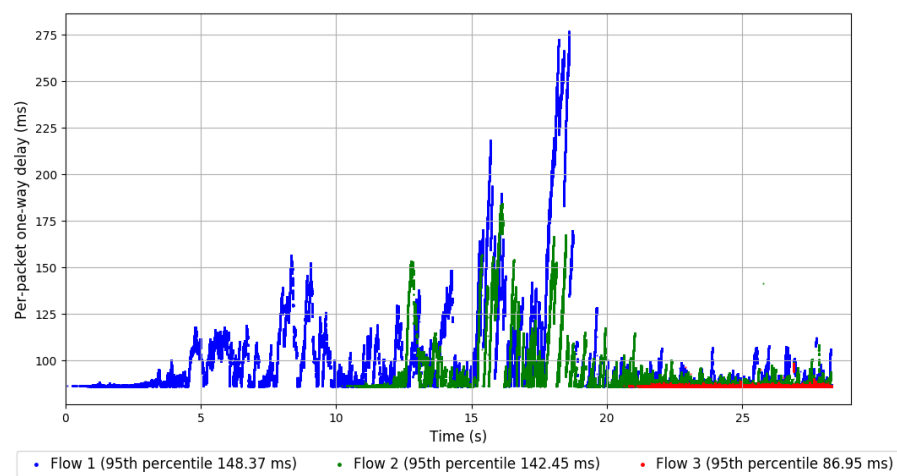
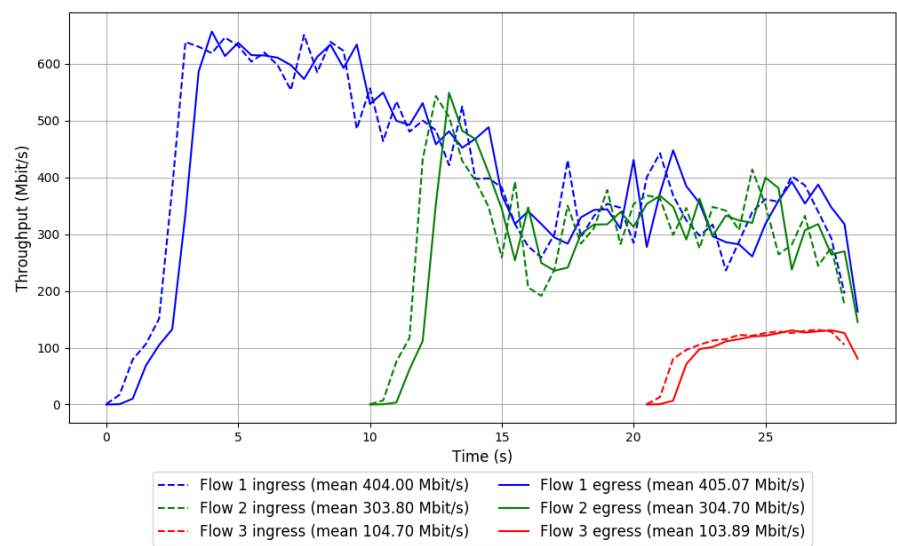


Run 3: Statistics of Indigo-MusesC5

Start at: 2019-06-27 07:12:45
End at: 2019-06-27 07:13:15
Local clock offset: 0.088 ms
Remote clock offset: -0.011 ms

Below is generated by plot.py at 2019-06-27 10:02:40
Datalink statistics
-- Total of 3 flows:
Average throughput: 628.37 Mbit/s
95th percentile per-packet one-way delay: 143.986 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 405.07 Mbit/s
95th percentile per-packet one-way delay: 148.367 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 304.70 Mbit/s
95th percentile per-packet one-way delay: 142.451 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 103.89 Mbit/s
95th percentile per-packet one-way delay: 86.947 ms
Loss rate: 2.93%

Run 3: Report of Indigo-MusesC5 — Data Link

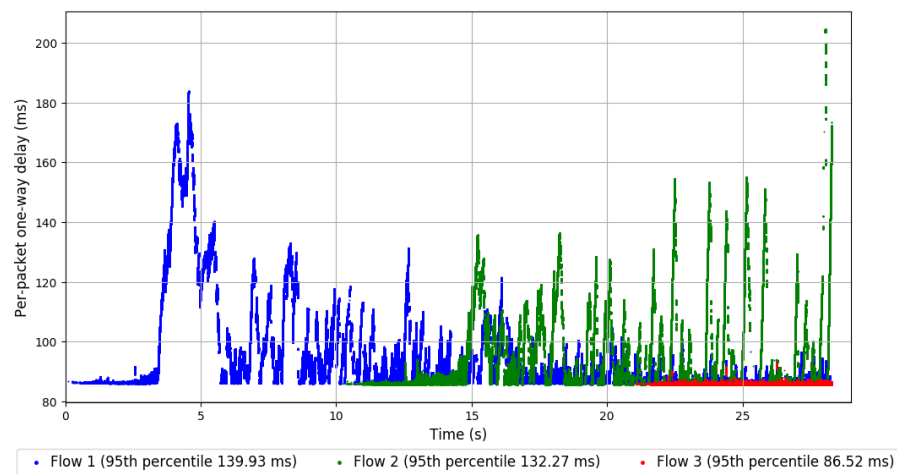
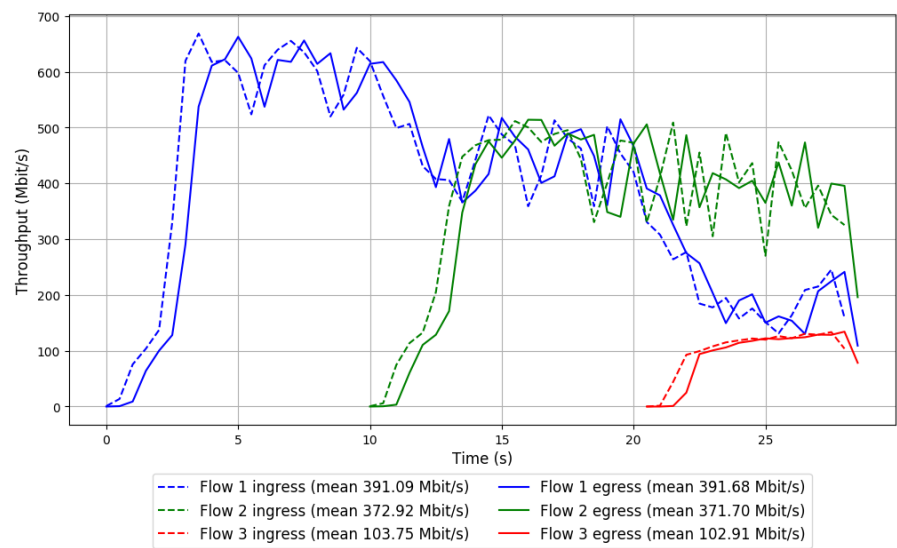


Run 4: Statistics of Indigo-MusesC5

Start at: 2019-06-27 07:50:48
End at: 2019-06-27 07:51:18
Local clock offset: -0.054 ms
Remote clock offset: -0.102 ms

Below is generated by plot.py at 2019-06-27 10:02:43
Datalink statistics
-- Total of 3 flows:
Average throughput: 656.72 Mbit/s
95th percentile per-packet one-way delay: 134.670 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 391.68 Mbit/s
95th percentile per-packet one-way delay: 139.933 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 371.70 Mbit/s
95th percentile per-packet one-way delay: 132.269 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 102.91 Mbit/s
95th percentile per-packet one-way delay: 86.520 ms
Loss rate: 3.07%

Run 4: Report of Indigo-MusesC5 — Data Link

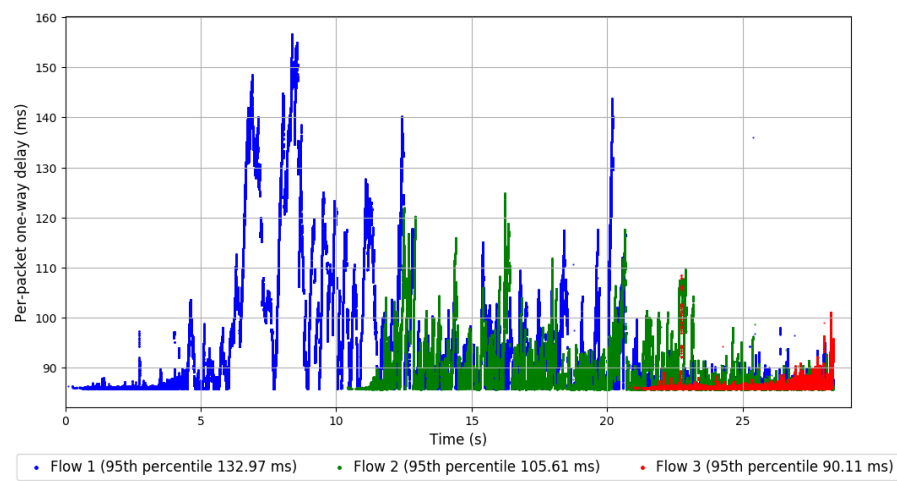
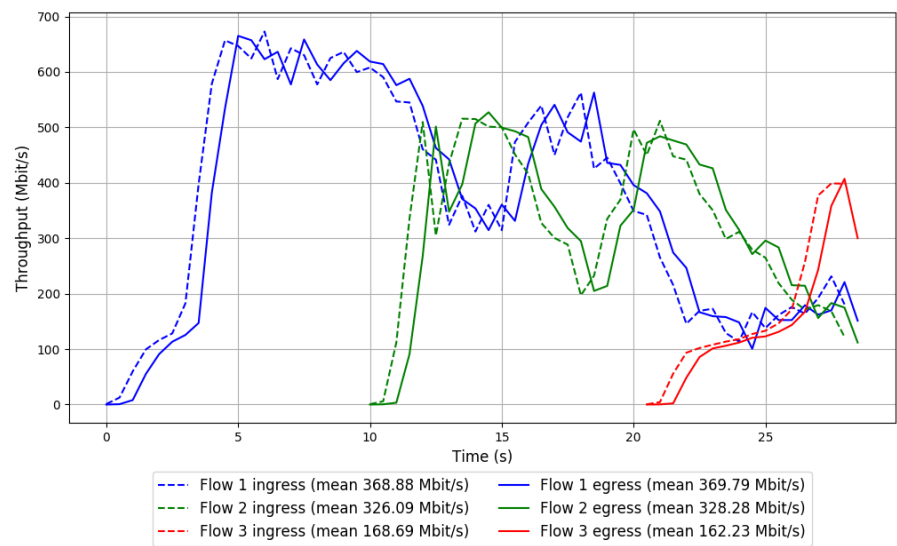


Run 5: Statistics of Indigo-MusesC5

Start at: 2019-06-27 08:28:21
End at: 2019-06-27 08:28:51
Local clock offset: 0.007 ms
Remote clock offset: -0.028 ms

Below is generated by plot.py at 2019-06-27 10:06:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 623.54 Mbit/s
95th percentile per-packet one-way delay: 122.987 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 369.79 Mbit/s
95th percentile per-packet one-way delay: 132.973 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 328.28 Mbit/s
95th percentile per-packet one-way delay: 105.609 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 162.23 Mbit/s
95th percentile per-packet one-way delay: 90.110 ms
Loss rate: 5.98%

Run 5: Report of Indigo-MusesC5 — Data Link



Run 1: Statistics of Indigo-MusesD

Start at: 2019-06-27 05:26:28

End at: 2019-06-27 05:26:58

Local clock offset: 0.156 ms

Remote clock offset: 0.009 ms

Below is generated by plot.py at 2019-06-27 10:08:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 704.80 Mbit/s

95th percentile per-packet one-way delay: 98.704 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 410.65 Mbit/s

95th percentile per-packet one-way delay: 101.022 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 362.74 Mbit/s

95th percentile per-packet one-way delay: 91.189 ms

Loss rate: 0.99%

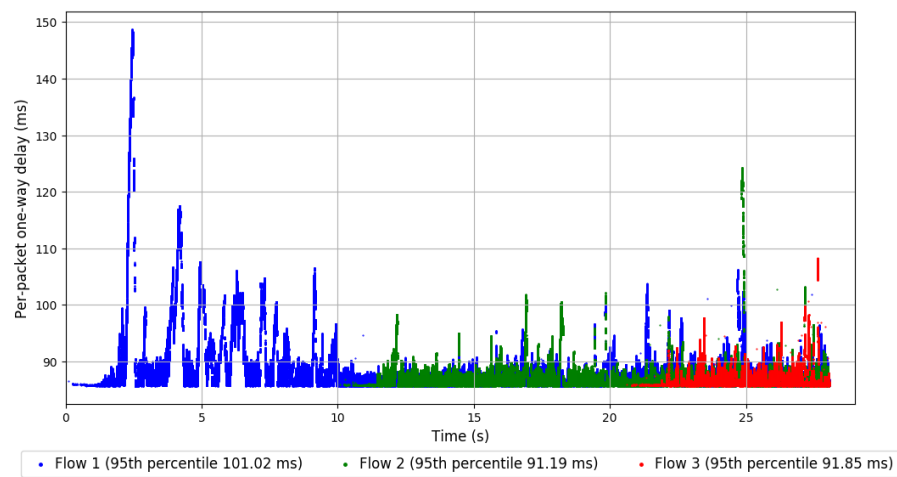
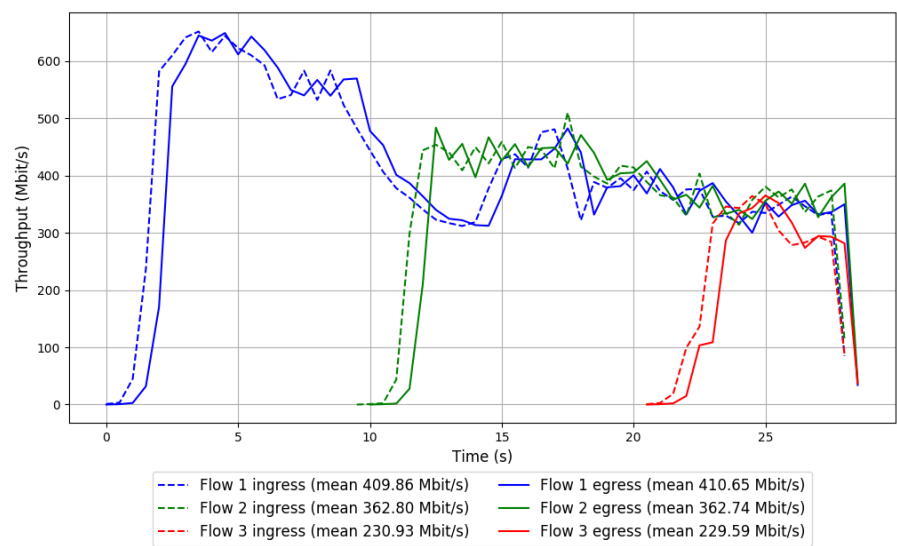
-- Flow 3:

Average throughput: 229.59 Mbit/s

95th percentile per-packet one-way delay: 91.850 ms

Loss rate: 2.85%

Run 1: Report of Indigo-MusesD — Data Link

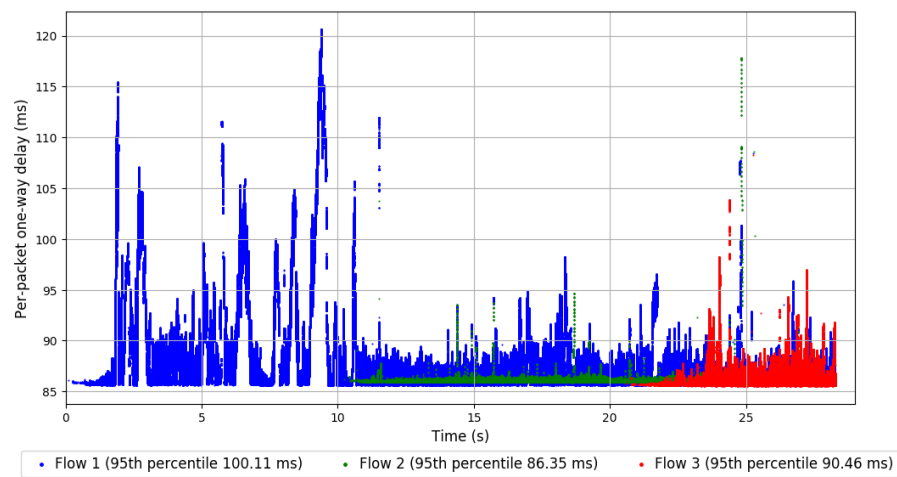
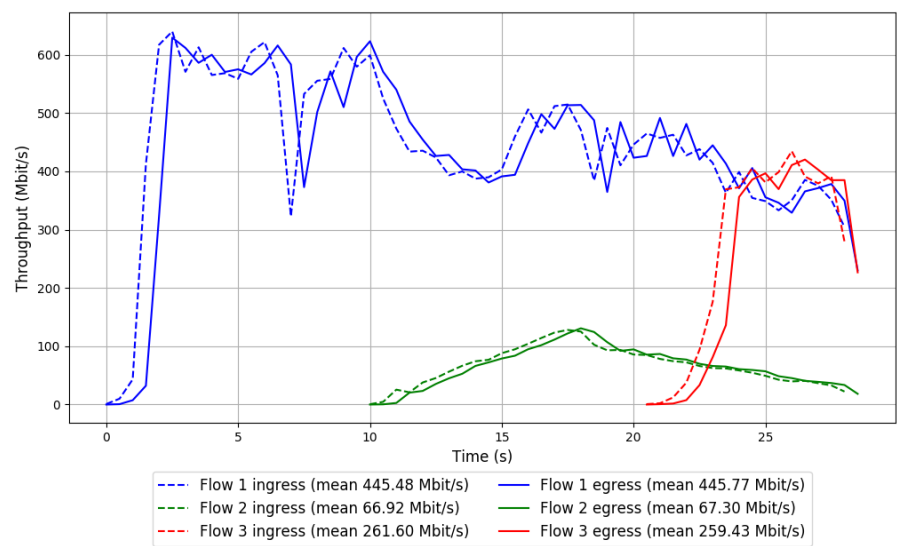


Run 2: Statistics of Indigo-MusesD

Start at: 2019-06-27 06:03:59
End at: 2019-06-27 06:04:29
Local clock offset: -0.152 ms
Remote clock offset: -0.026 ms

Below is generated by plot.py at 2019-06-27 10:08:03
Datalink statistics
-- Total of 3 flows:
Average throughput: 559.66 Mbit/s
95th percentile per-packet one-way delay: 98.532 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 445.77 Mbit/s
95th percentile per-packet one-way delay: 100.109 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 67.30 Mbit/s
95th percentile per-packet one-way delay: 86.354 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 259.43 Mbit/s
95th percentile per-packet one-way delay: 90.457 ms
Loss rate: 3.07%

Run 2: Report of Indigo-MusesD — Data Link

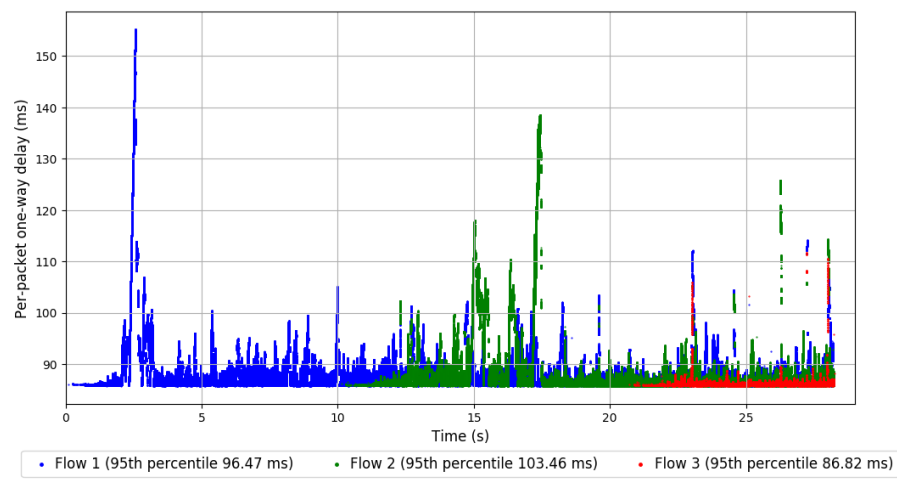
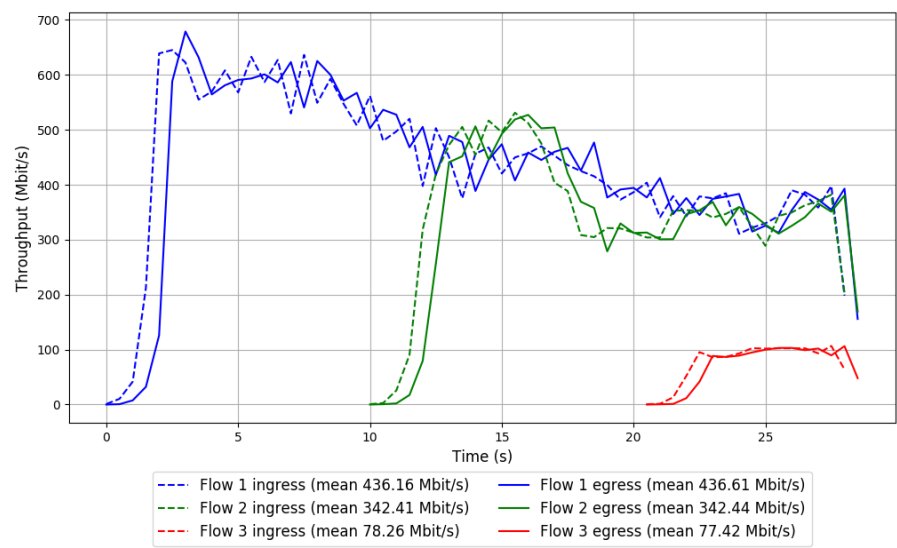


Run 3: Statistics of Indigo-MusesD

Start at: 2019-06-27 06:41:31
End at: 2019-06-27 06:42:01
Local clock offset: -0.078 ms
Remote clock offset: -0.057 ms

Below is generated by plot.py at 2019-06-27 10:12:40
Datalink statistics
-- Total of 3 flows:
Average throughput: 677.45 Mbit/s
95th percentile per-packet one-way delay: 99.040 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 436.61 Mbit/s
95th percentile per-packet one-way delay: 96.466 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 342.44 Mbit/s
95th percentile per-packet one-way delay: 103.461 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 77.42 Mbit/s
95th percentile per-packet one-way delay: 86.816 ms
Loss rate: 3.26%

Run 3: Report of Indigo-MusesD — Data Link

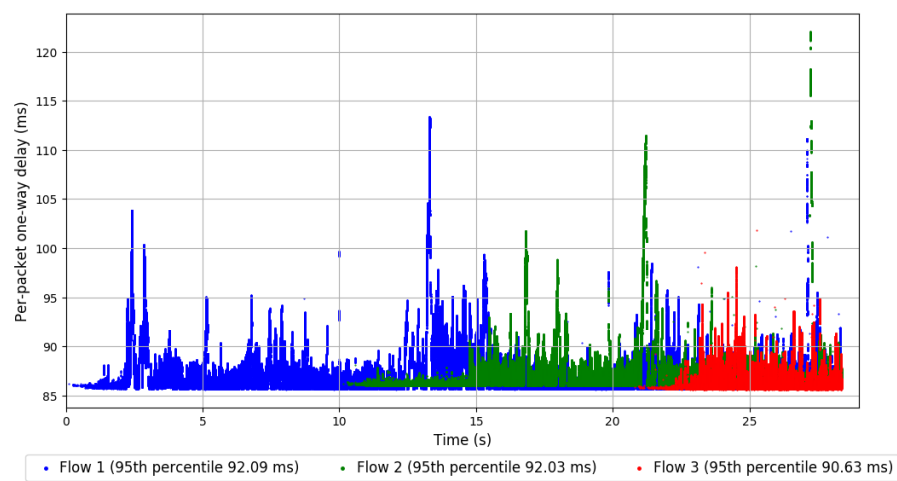
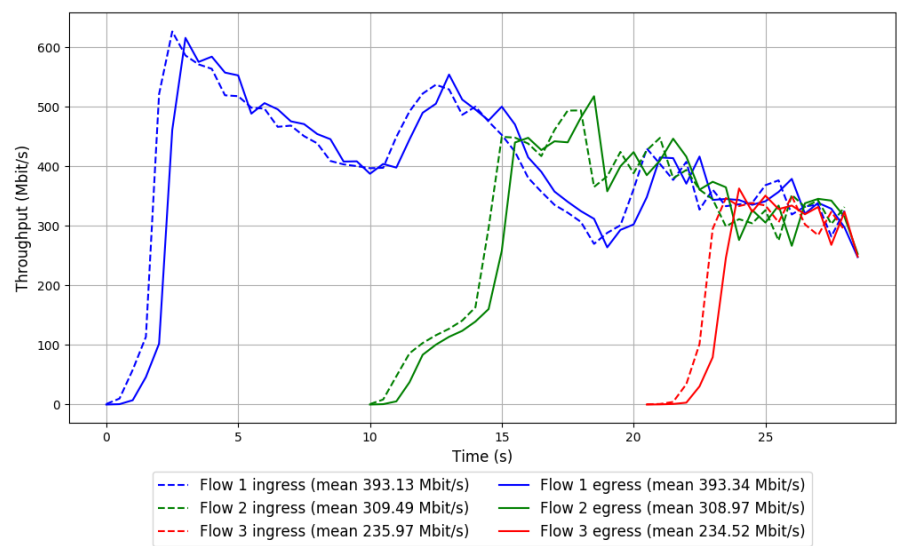


Run 4: Statistics of Indigo-MusesD

Start at: 2019-06-27 07:19:07
End at: 2019-06-27 07:19:37
Local clock offset: -0.076 ms
Remote clock offset: -0.038 ms

Below is generated by plot.py at 2019-06-27 10:12:40
Datalink statistics
-- Total of 3 flows:
Average throughput: 655.34 Mbit/s
95th percentile per-packet one-way delay: 91.877 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 393.34 Mbit/s
95th percentile per-packet one-way delay: 92.088 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 308.97 Mbit/s
95th percentile per-packet one-way delay: 92.032 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 234.52 Mbit/s
95th percentile per-packet one-way delay: 90.626 ms
Loss rate: 2.67%

Run 4: Report of Indigo-MusesD — Data Link

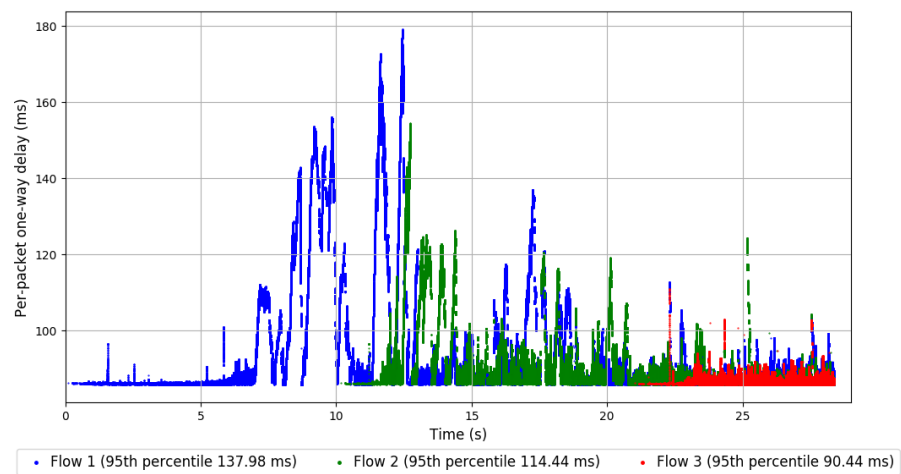
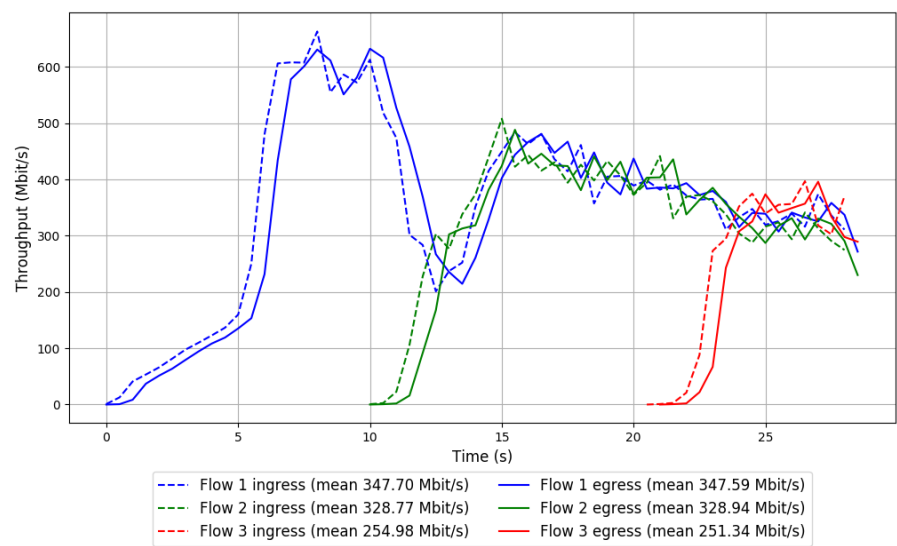


Run 5: Statistics of Indigo-MusesD

Start at: 2019-06-27 07:57:12
End at: 2019-06-27 07:57:42
Local clock offset: -0.075 ms
Remote clock offset: -0.112 ms

Below is generated by plot.py at 2019-06-27 10:13:33
Datalink statistics
-- Total of 3 flows:
Average throughput: 624.91 Mbit/s
95th percentile per-packet one-way delay: 127.510 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 347.59 Mbit/s
95th percentile per-packet one-way delay: 137.977 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 328.94 Mbit/s
95th percentile per-packet one-way delay: 114.440 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 251.34 Mbit/s
95th percentile per-packet one-way delay: 90.438 ms
Loss rate: 3.67%

Run 5: Report of Indigo-MusesD — Data Link

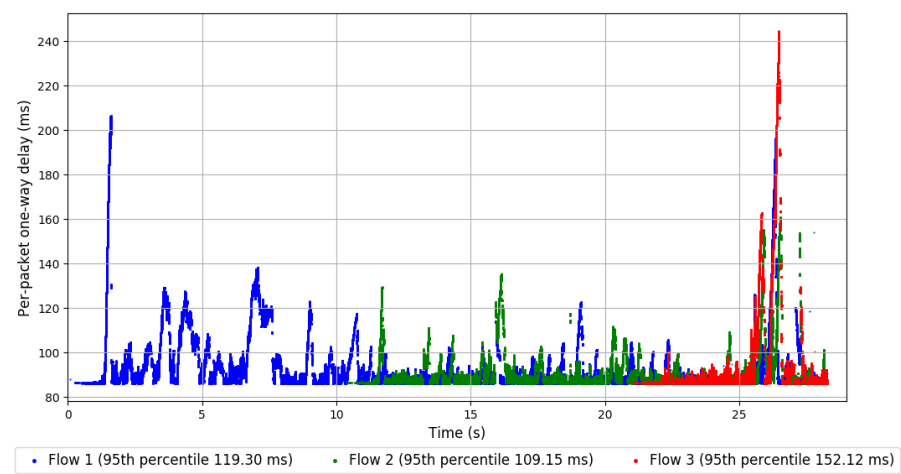
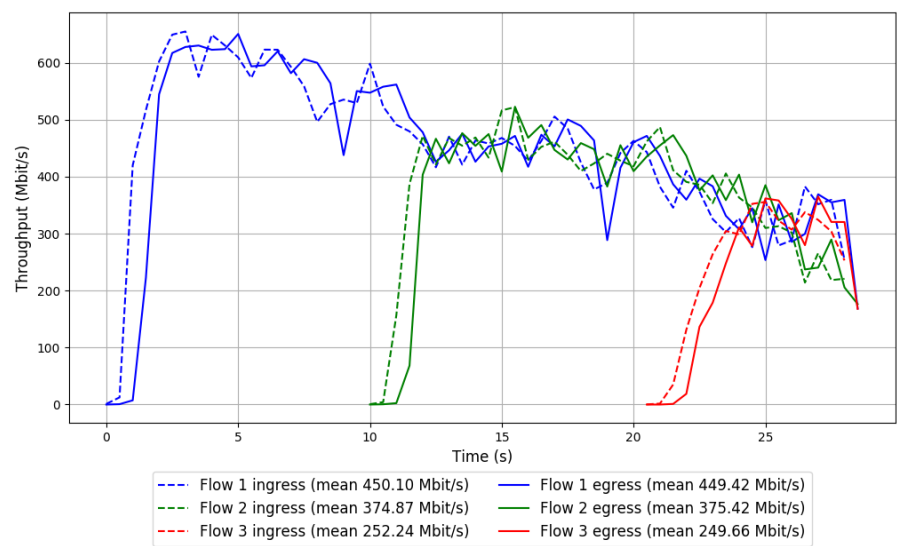


Run 1: Statistics of Indigo-MusesT

Start at: 2019-06-27 05:32:09
End at: 2019-06-27 05:32:39
Local clock offset: 0.546 ms
Remote clock offset: -0.008 ms

Below is generated by plot.py at 2019-06-27 10:17:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 754.99 Mbit/s
95th percentile per-packet one-way delay: 119.110 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 449.42 Mbit/s
95th percentile per-packet one-way delay: 119.296 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 375.42 Mbit/s
95th percentile per-packet one-way delay: 109.154 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 249.66 Mbit/s
95th percentile per-packet one-way delay: 152.125 ms
Loss rate: 3.29%

Run 1: Report of Indigo-MusesT — Data Link

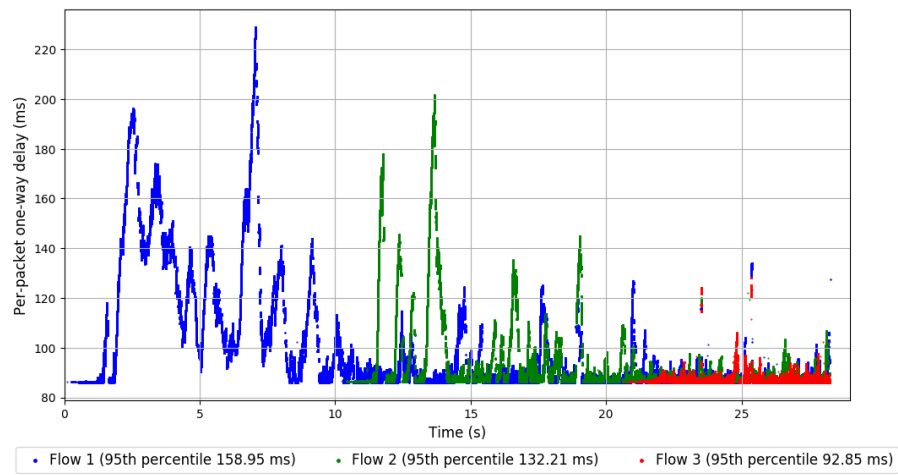
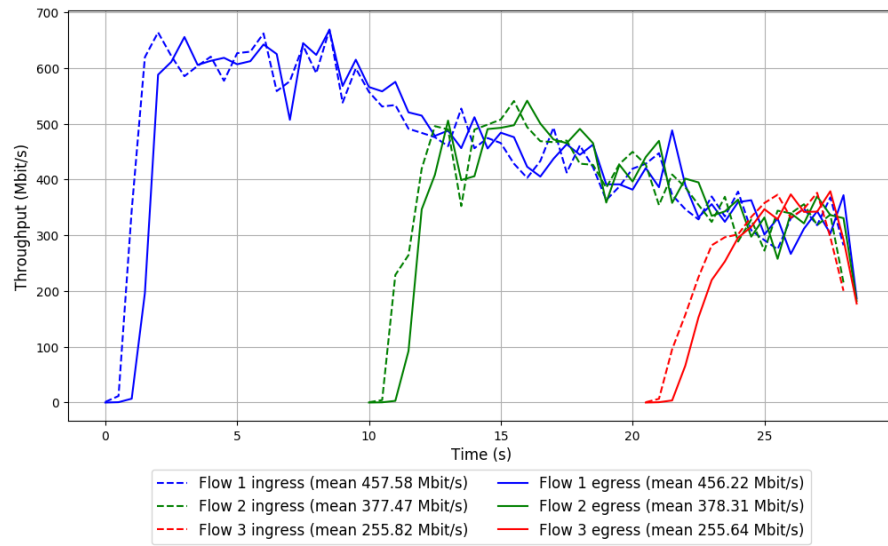


Run 2: Statistics of Indigo-MusesT

Start at: 2019-06-27 06:09:35
End at: 2019-06-27 06:10:05
Local clock offset: 0.208 ms
Remote clock offset: -0.071 ms

Below is generated by plot.py at 2019-06-27 10:17:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 766.92 Mbit/s
95th percentile per-packet one-way delay: 149.907 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 456.22 Mbit/s
95th percentile per-packet one-way delay: 158.947 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 378.31 Mbit/s
95th percentile per-packet one-way delay: 132.209 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 255.64 Mbit/s
95th percentile per-packet one-way delay: 92.854 ms
Loss rate: 2.31%

Run 2: Report of Indigo-MusesT — Data Link

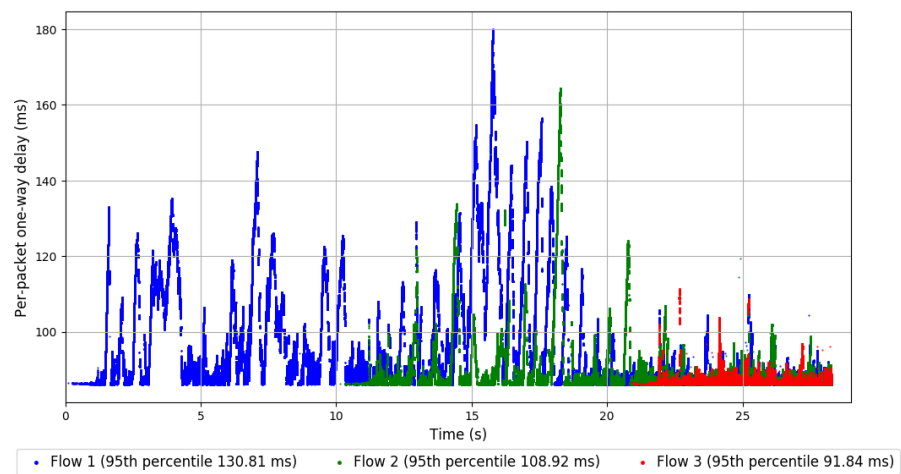
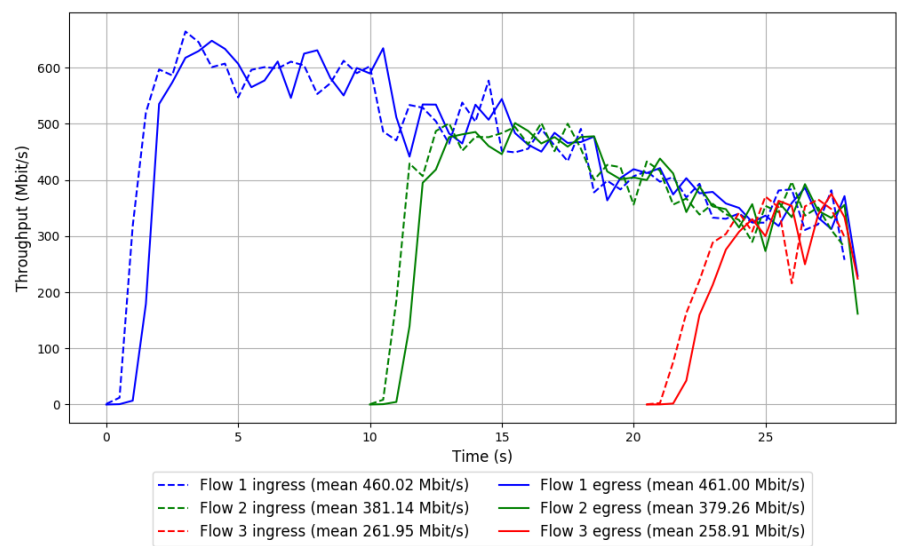


Run 3: Statistics of Indigo-MusesT

Start at: 2019-06-27 06:47:12
End at: 2019-06-27 06:47:42
Local clock offset: 0.309 ms
Remote clock offset: -0.014 ms

Below is generated by plot.py at 2019-06-27 10:20:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 773.59 Mbit/s
95th percentile per-packet one-way delay: 124.688 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 461.00 Mbit/s
95th percentile per-packet one-way delay: 130.807 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 379.26 Mbit/s
95th percentile per-packet one-way delay: 108.915 ms
Loss rate: 1.40%
-- Flow 3:
Average throughput: 258.91 Mbit/s
95th percentile per-packet one-way delay: 91.837 ms
Loss rate: 3.44%

Run 3: Report of Indigo-MusesT — Data Link

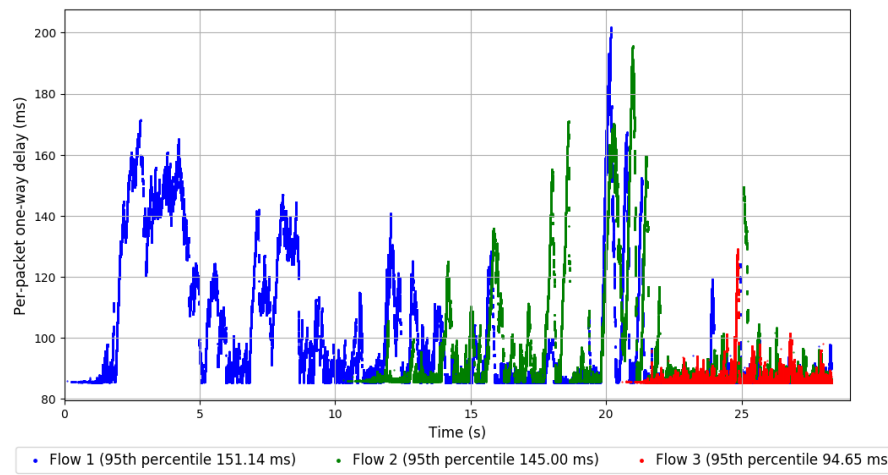
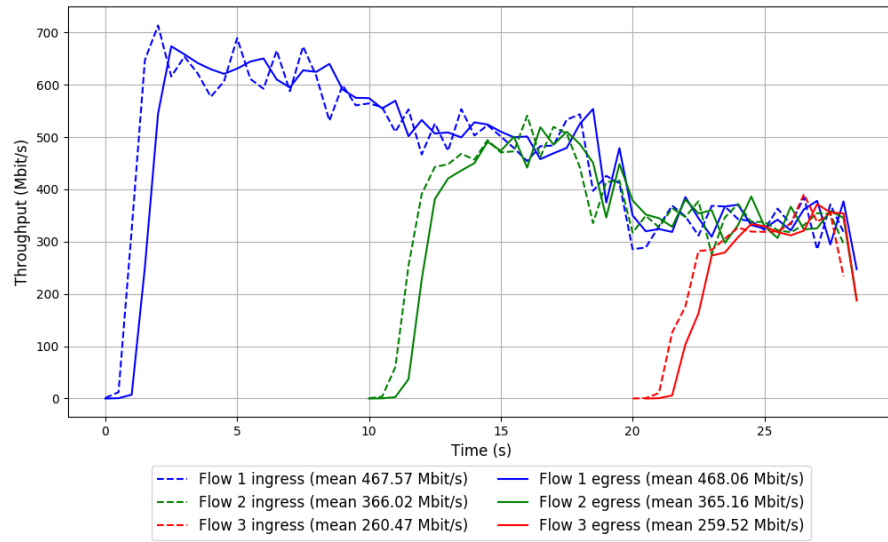


Run 4: Statistics of Indigo-MusesT

Start at: 2019-06-27 07:24:48
End at: 2019-06-27 07:25:18
Local clock offset: -0.312 ms
Remote clock offset: -0.034 ms

Below is generated by plot.py at 2019-06-27 10:21:33
Datalink statistics
-- Total of 3 flows:
Average throughput: 772.32 Mbit/s
95th percentile per-packet one-way delay: 148.845 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 468.06 Mbit/s
95th percentile per-packet one-way delay: 151.137 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 365.16 Mbit/s
95th percentile per-packet one-way delay: 145.005 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 259.52 Mbit/s
95th percentile per-packet one-way delay: 94.648 ms
Loss rate: 2.53%

Run 4: Report of Indigo-MusesT — Data Link

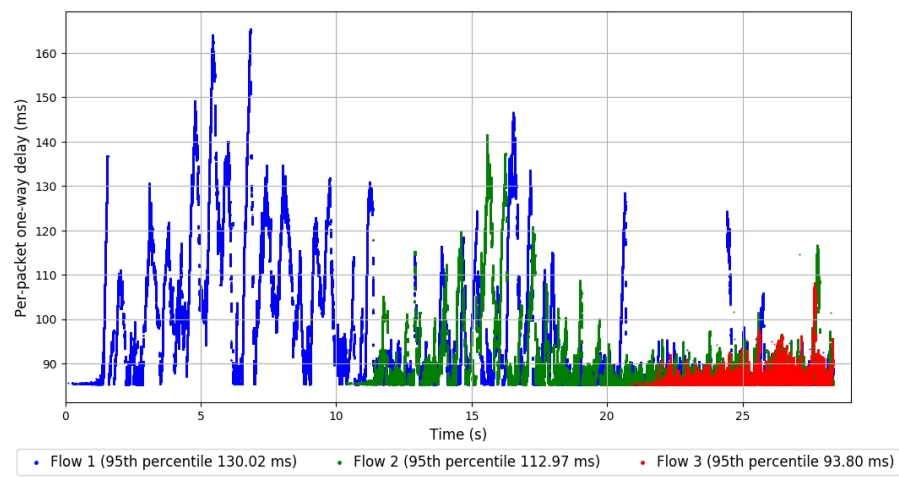
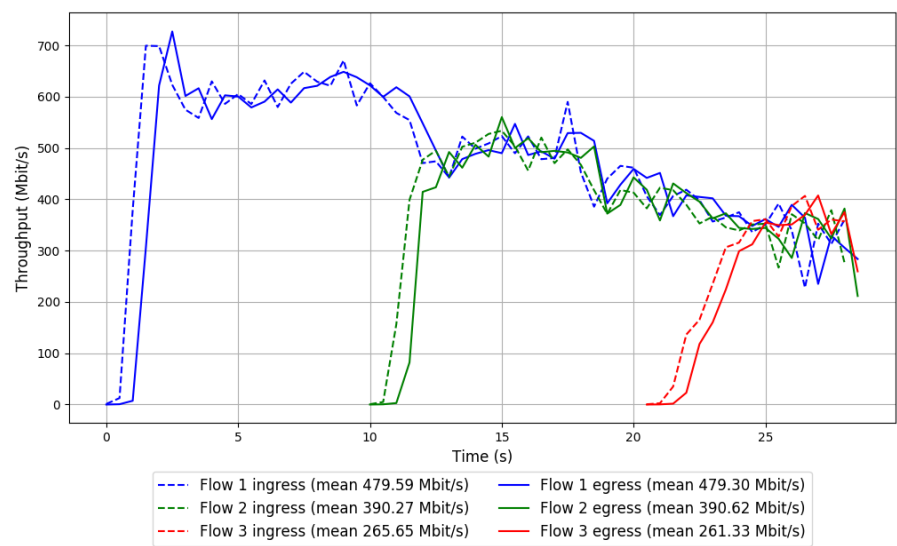


Run 5: Statistics of Indigo-MusesT

Start at: 2019-06-27 08:02:52
End at: 2019-06-27 08:03:22
Local clock offset: -0.497 ms
Remote clock offset: -0.106 ms

Below is generated by plot.py at 2019-06-27 10:23:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 799.43 Mbit/s
95th percentile per-packet one-way delay: 126.331 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 479.30 Mbit/s
95th percentile per-packet one-way delay: 130.018 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 390.62 Mbit/s
95th percentile per-packet one-way delay: 112.967 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 261.33 Mbit/s
95th percentile per-packet one-way delay: 93.801 ms
Loss rate: 3.84%

Run 5: Report of Indigo-MusesT — Data Link

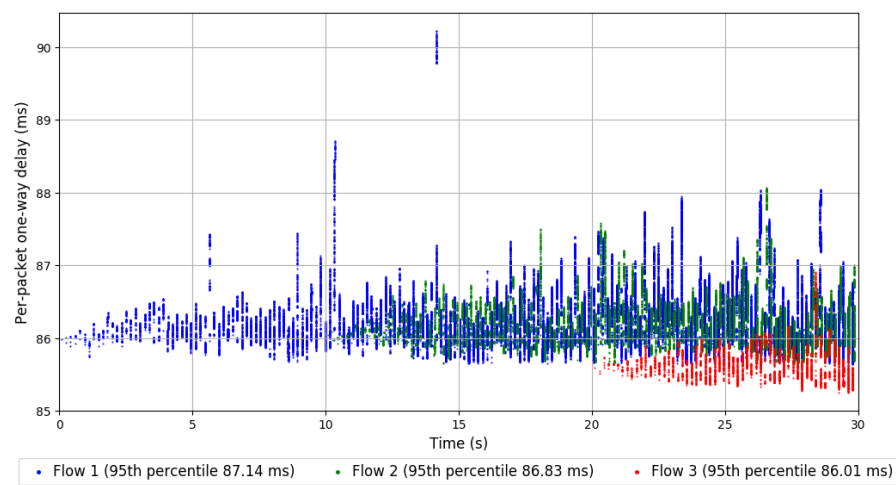
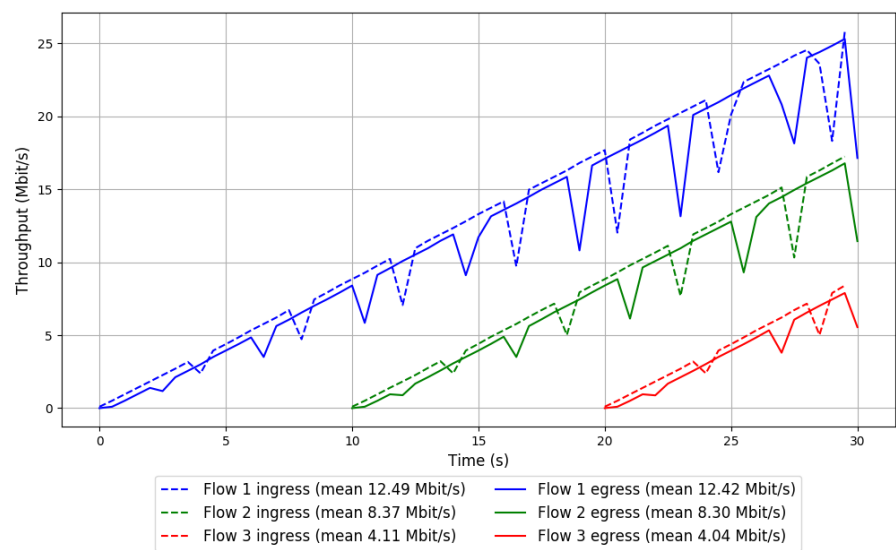


```
Run 1: Statistics of LEDBAT

Start at: 2019-06-27 05:48:59
End at: 2019-06-27 05:49:29
Local clock offset: -0.292 ms
Remote clock offset: -0.001 ms

# Below is generated by plot.py at 2019-06-27 10:23:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.21 Mbit/s
95th percentile per-packet one-way delay: 87.012 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 12.42 Mbit/s
95th percentile per-packet one-way delay: 87.141 ms
Loss rate: 1.16%
-- Flow 2:
Average throughput: 8.30 Mbit/s
95th percentile per-packet one-way delay: 86.827 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 4.04 Mbit/s
95th percentile per-packet one-way delay: 86.008 ms
Loss rate: 3.52%
```

Run 1: Report of LEDBAT — Data Link

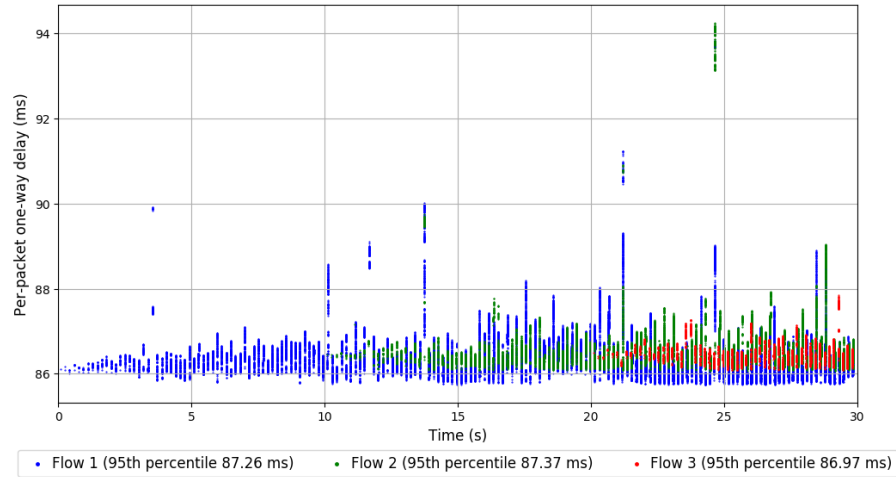
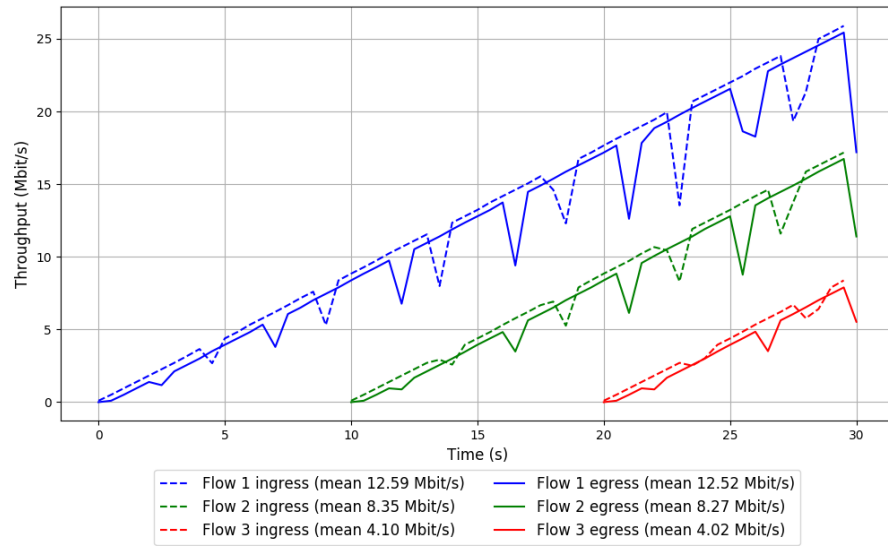


Run 2: Statistics of LEDBAT

Start at: 2019-06-27 06:26:19
End at: 2019-06-27 06:26:49
Local clock offset: -0.092 ms
Remote clock offset: -0.077 ms

Below is generated by plot.py at 2019-06-27 10:23:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 19.32 Mbit/s
95th percentile per-packet one-way delay: 87.287 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 12.52 Mbit/s
95th percentile per-packet one-way delay: 87.261 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 8.27 Mbit/s
95th percentile per-packet one-way delay: 87.368 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 4.02 Mbit/s
95th percentile per-packet one-way delay: 86.969 ms
Loss rate: 3.52%

Run 2: Report of LEDBAT — Data Link

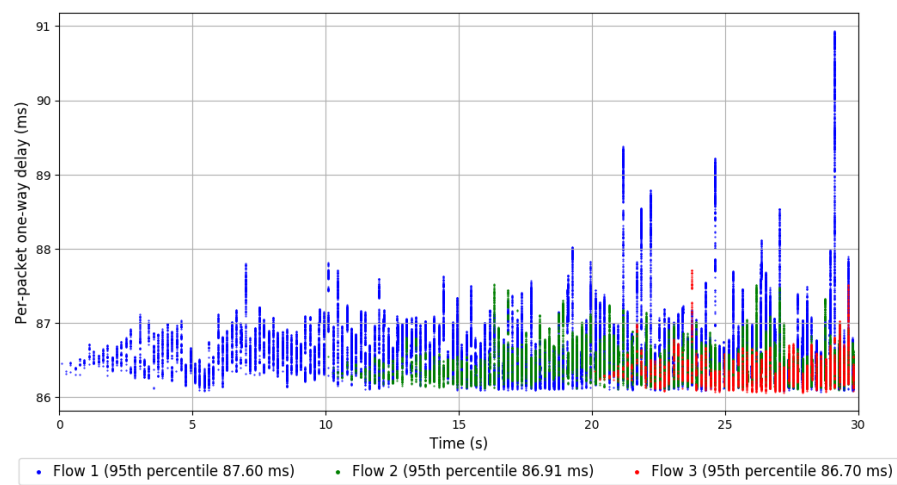
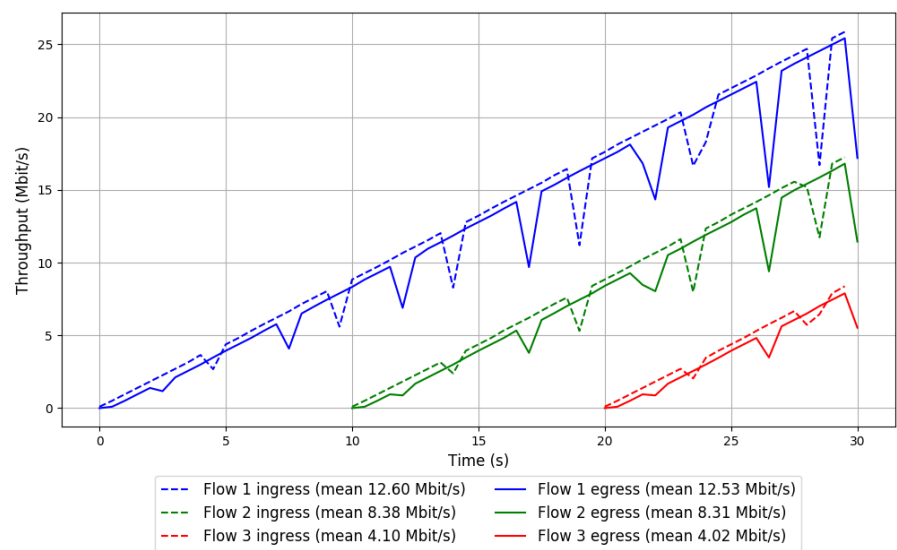


Run 3: Statistics of LEDBAT

Start at: 2019-06-27 07:04:10
End at: 2019-06-27 07:04:40
Local clock offset: 0.314 ms
Remote clock offset: -0.015 ms

Below is generated by plot.py at 2019-06-27 10:23:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 19.34 Mbit/s
95th percentile per-packet one-way delay: 87.341 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 12.53 Mbit/s
95th percentile per-packet one-way delay: 87.600 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 8.31 Mbit/s
95th percentile per-packet one-way delay: 86.908 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 4.02 Mbit/s
95th percentile per-packet one-way delay: 86.698 ms
Loss rate: 3.53%

Run 3: Report of LEDBAT — Data Link

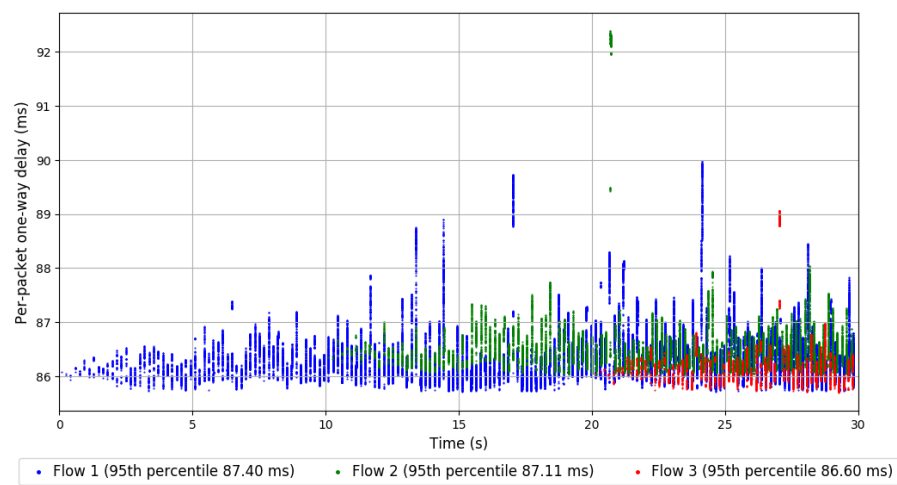
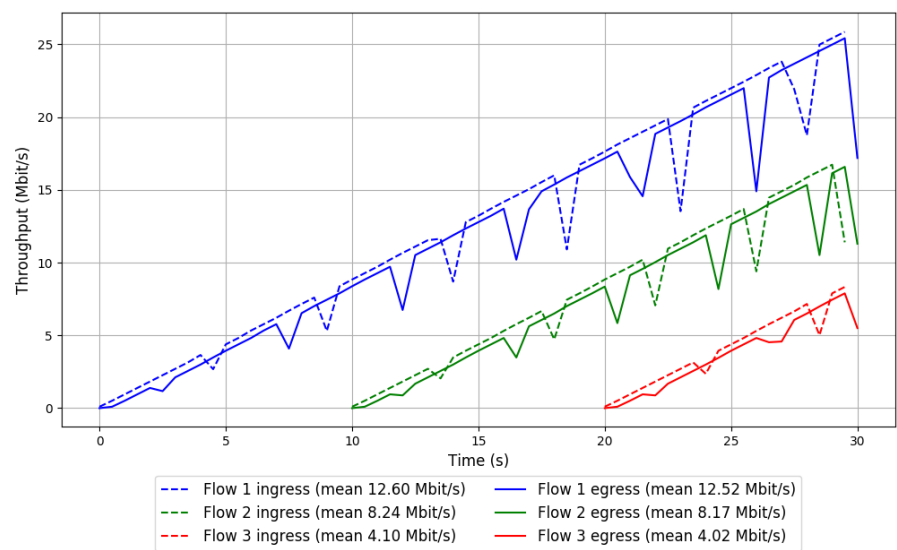


Run 4: Statistics of LEDBAT

Start at: 2019-06-27 07:41:48
End at: 2019-06-27 07:42:18
Local clock offset: -0.047 ms
Remote clock offset: -0.051 ms

Below is generated by plot.py at 2019-06-27 10:23:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 19.23 Mbit/s
95th percentile per-packet one-way delay: 87.312 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 12.52 Mbit/s
95th percentile per-packet one-way delay: 87.400 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 8.17 Mbit/s
95th percentile per-packet one-way delay: 87.110 ms
Loss rate: 1.75%
-- Flow 3:
Average throughput: 4.02 Mbit/s
95th percentile per-packet one-way delay: 86.603 ms
Loss rate: 3.50%

Run 4: Report of LEDBAT — Data Link

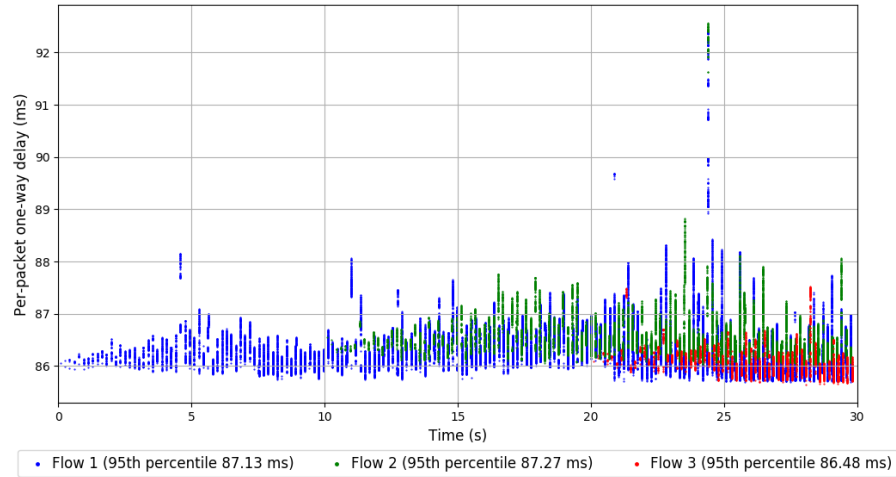
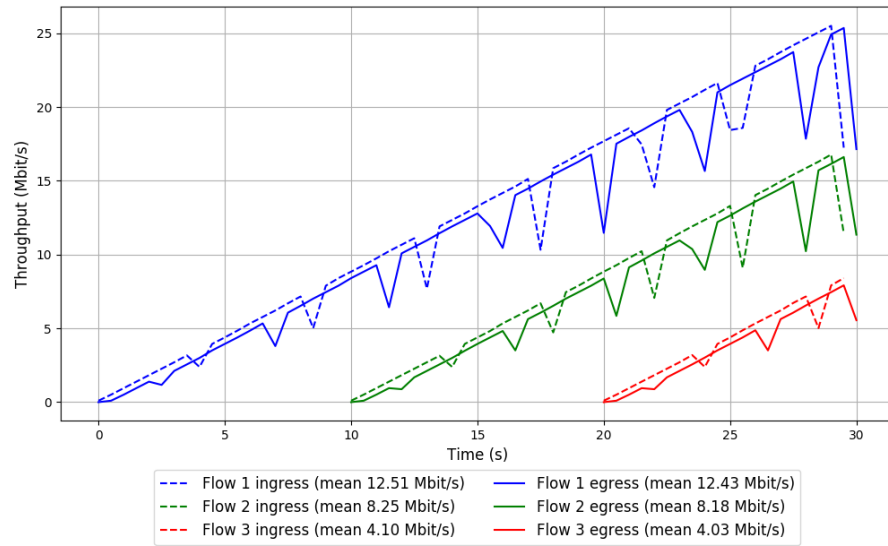


Run 5: Statistics of LEDBAT

Start at: 2019-06-27 08:19:34
End at: 2019-06-27 08:20:04
Local clock offset: -0.048 ms
Remote clock offset: -0.044 ms

Below is generated by plot.py at 2019-06-27 10:23:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 19.14 Mbit/s
95th percentile per-packet one-way delay: 87.172 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 12.43 Mbit/s
95th percentile per-packet one-way delay: 87.134 ms
Loss rate: 1.16%
-- Flow 2:
Average throughput: 8.18 Mbit/s
95th percentile per-packet one-way delay: 87.269 ms
Loss rate: 1.76%
-- Flow 3:
Average throughput: 4.03 Mbit/s
95th percentile per-packet one-way delay: 86.485 ms
Loss rate: 3.52%

Run 5: Report of LEDBAT — Data Link



Run 1: Statistics of Muses_DecisionTree

Start at: 2019-06-27 05:25:13

End at: 2019-06-27 05:25:43

Local clock offset: -0.007 ms

Remote clock offset: -0.013 ms

Run 1: Report of Muses_DecisionTree — Data Link

Figure is missing

Figure is missing

Run 2: Statistics of Muses_DecisionTree

Start at: 2019-06-27 06:02:45

End at: 2019-06-27 06:03:15

Local clock offset: -0.416 ms

Remote clock offset: -0.001 ms

Run 2: Report of Muses_DecisionTree — Data Link

Figure is missing

Figure is missing

Run 3: Statistics of Muses_DecisionTree

Start at: 2019-06-27 06:40:17

End at: 2019-06-27 06:40:47

Local clock offset: -0.072 ms

Remote clock offset: -0.038 ms

Run 3: Report of Muses_DecisionTree — Data Link

Figure is missing

Figure is missing

Run 4: Statistics of Muses_DecisionTree

Start at: 2019-06-27 07:17:53

End at: 2019-06-27 07:18:23

Local clock offset: 0.148 ms

Remote clock offset: -0.014 ms

Run 4: Report of Muses_DecisionTree — Data Link

Figure is missing

Figure is missing

Run 5: Statistics of Muses_DecisionTree

Start at: 2019-06-27 07:55:58

End at: 2019-06-27 07:56:28

Local clock offset: -0.239 ms

Remote clock offset: -0.15 ms

Run 5: Report of Muses_DecisionTree — Data Link

Figure is missing

Figure is missing

Run 1: Statistics of PCC-Allegro

Start at: 2019-06-27 05:43:23

End at: 2019-06-27 05:43:53

Local clock offset: 0.153 ms

Remote clock offset: 0.016 ms

Below is generated by plot.py at 2019-06-27 10:38:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 645.12 Mbit/s

95th percentile per-packet one-way delay: 228.608 ms

Loss rate: 7.82%

-- Flow 1:

Average throughput: 317.84 Mbit/s

95th percentile per-packet one-way delay: 198.963 ms

Loss rate: 2.07%

-- Flow 2:

Average throughput: 380.43 Mbit/s

95th percentile per-packet one-way delay: 239.164 ms

Loss rate: 14.39%

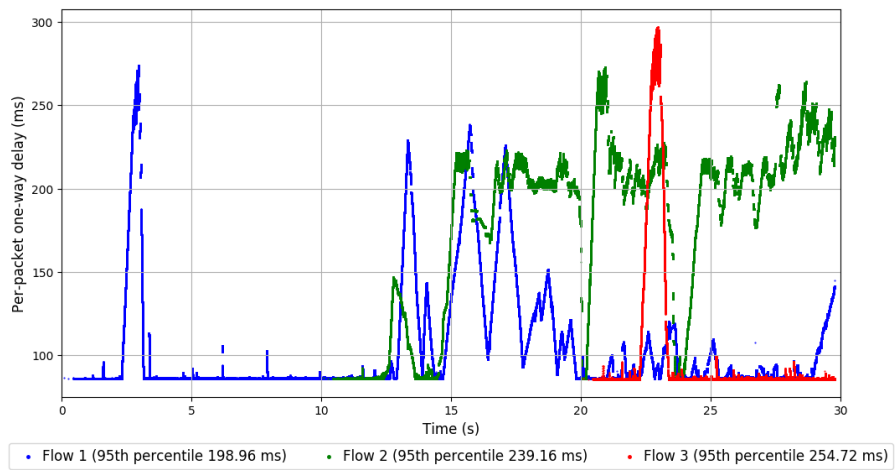
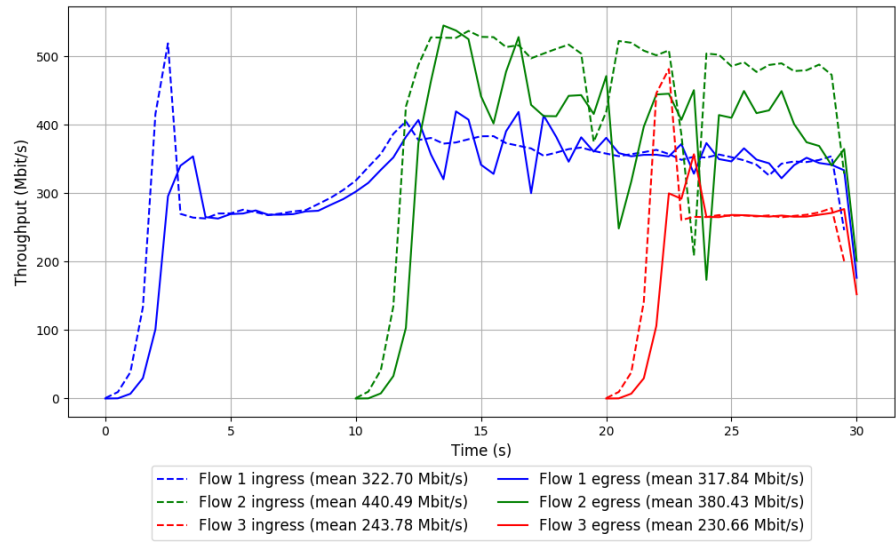
-- Flow 3:

Average throughput: 230.66 Mbit/s

95th percentile per-packet one-way delay: 254.718 ms

Loss rate: 7.04%

Run 1: Report of PCC-Allegro — Data Link

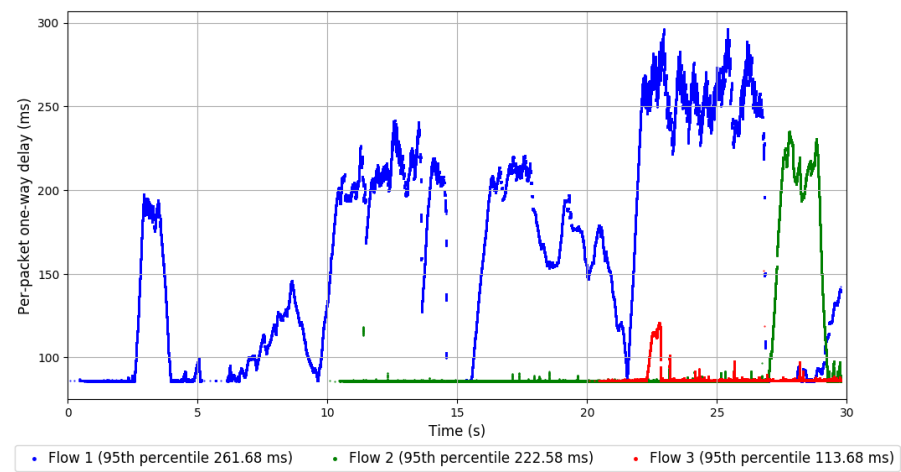
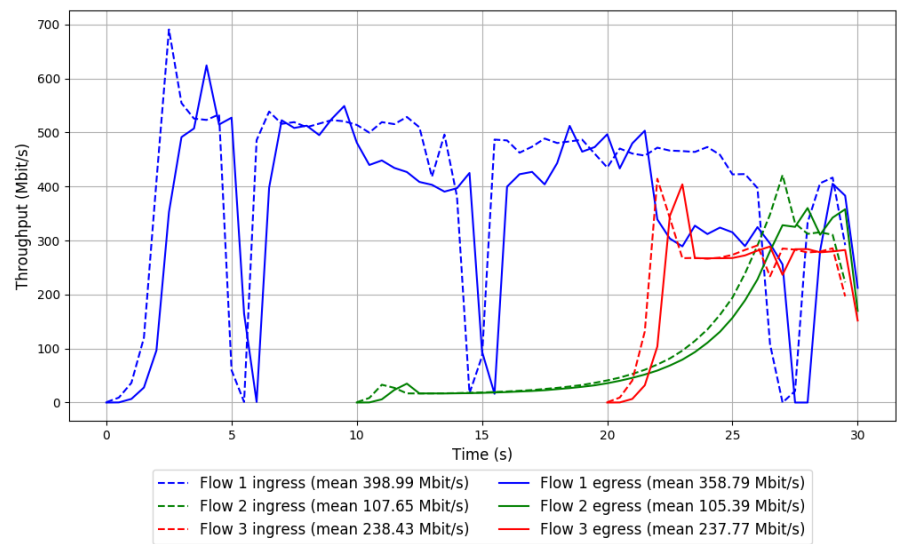


Run 2: Statistics of PCC-Allegro

Start at: 2019-06-27 06:20:48
End at: 2019-06-27 06:21:18
Local clock offset: -0.072 ms
Remote clock offset: -0.054 ms

Below is generated by plot.py at 2019-06-27 10:38:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 506.10 Mbit/s
95th percentile per-packet one-way delay: 255.545 ms
Loss rate: 8.37%
-- Flow 1:
Average throughput: 358.79 Mbit/s
95th percentile per-packet one-way delay: 261.681 ms
Loss rate: 10.59%
-- Flow 2:
Average throughput: 105.39 Mbit/s
95th percentile per-packet one-way delay: 222.576 ms
Loss rate: 2.95%
-- Flow 3:
Average throughput: 237.77 Mbit/s
95th percentile per-packet one-way delay: 113.677 ms
Loss rate: 2.04%

Run 2: Report of PCC-Allegro — Data Link

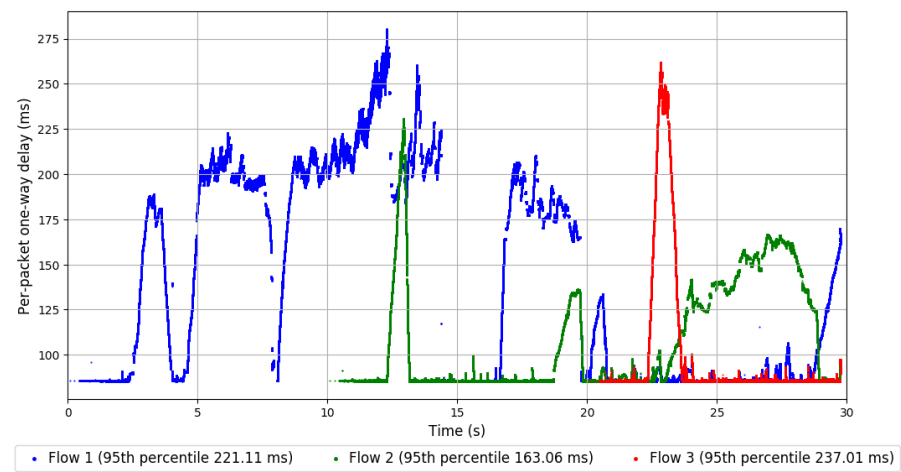
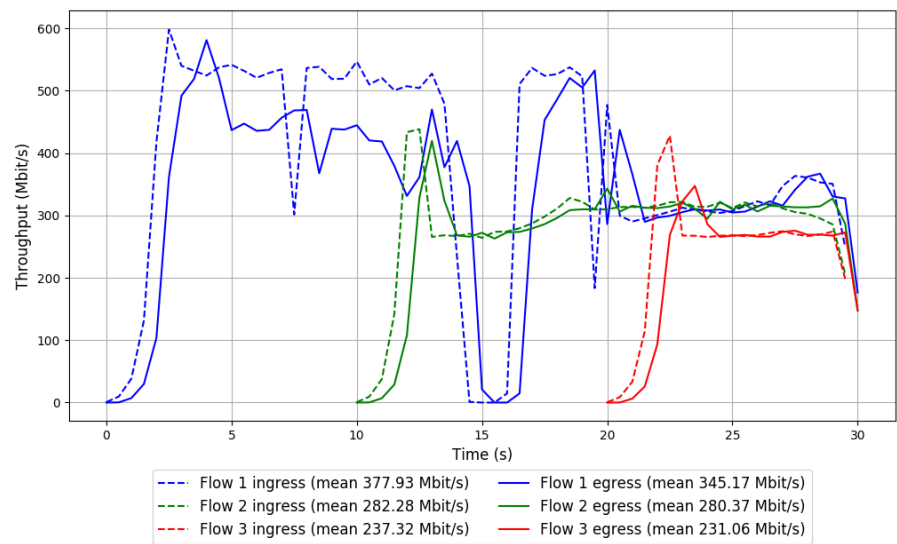


Run 3: Statistics of PCC-Allegro

Start at: 2019-06-27 06:58:26
End at: 2019-06-27 06:58:56
Local clock offset: -0.446 ms
Remote clock offset: -0.054 ms

Below is generated by plot.py at 2019-06-27 10:38:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 606.11 Mbit/s
95th percentile per-packet one-way delay: 215.701 ms
Loss rate: 6.38%
-- Flow 1:
Average throughput: 345.17 Mbit/s
95th percentile per-packet one-way delay: 221.107 ms
Loss rate: 9.20%
-- Flow 2:
Average throughput: 280.37 Mbit/s
95th percentile per-packet one-way delay: 163.058 ms
Loss rate: 1.54%
-- Flow 3:
Average throughput: 231.06 Mbit/s
95th percentile per-packet one-way delay: 237.010 ms
Loss rate: 4.35%

Run 3: Report of PCC-Allegro — Data Link

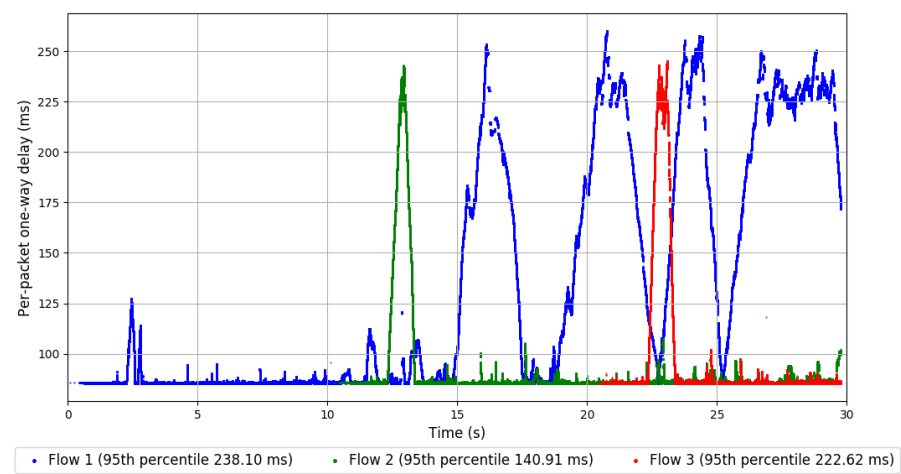
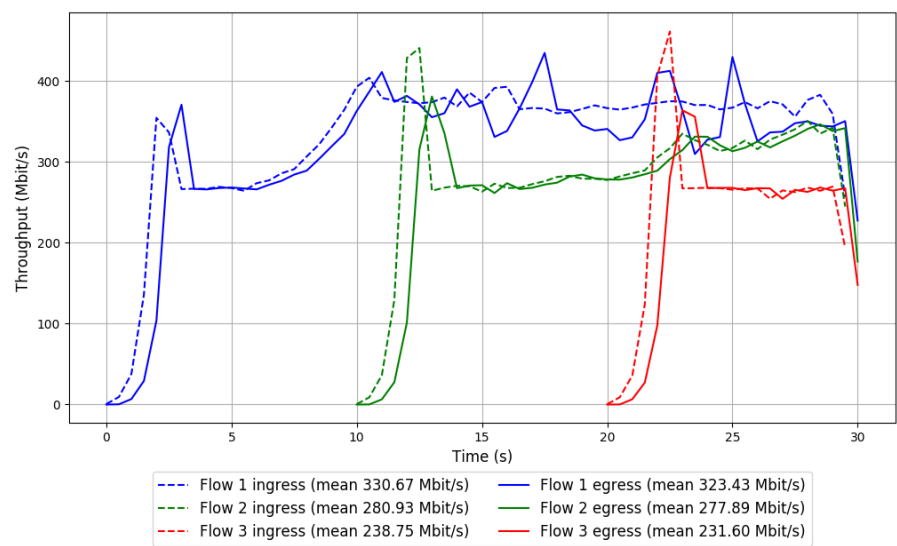


Run 4: Statistics of PCC-Allegro

Start at: 2019-06-27 07:36:17
End at: 2019-06-27 07:36:47
Local clock offset: -0.341 ms
Remote clock offset: -0.026 ms

Below is generated by plot.py at 2019-06-27 10:39:18
Datalink statistics
-- Total of 3 flows:
Average throughput: 582.72 Mbit/s
95th percentile per-packet one-way delay: 233.847 ms
Loss rate: 2.77%
-- Flow 1:
Average throughput: 323.43 Mbit/s
95th percentile per-packet one-way delay: 238.097 ms
Loss rate: 2.76%
-- Flow 2:
Average throughput: 277.89 Mbit/s
95th percentile per-packet one-way delay: 140.910 ms
Loss rate: 1.99%
-- Flow 3:
Average throughput: 231.60 Mbit/s
95th percentile per-packet one-way delay: 222.615 ms
Loss rate: 4.69%

Run 4: Report of PCC-Allegro — Data Link

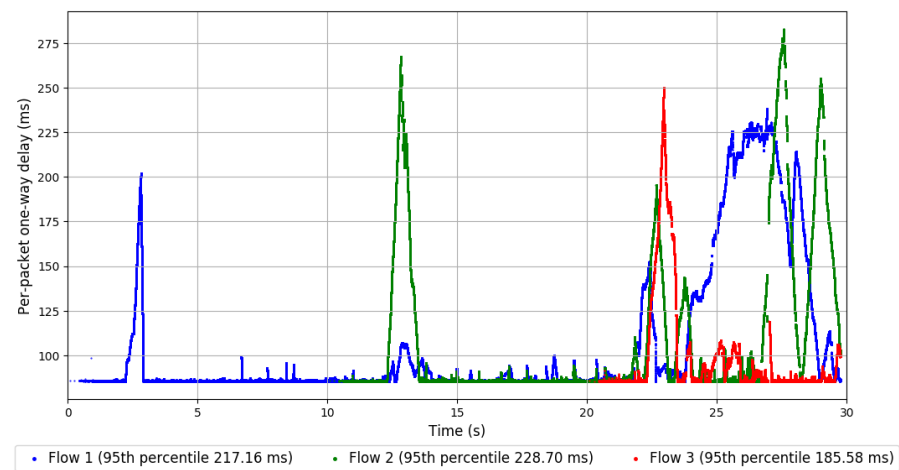
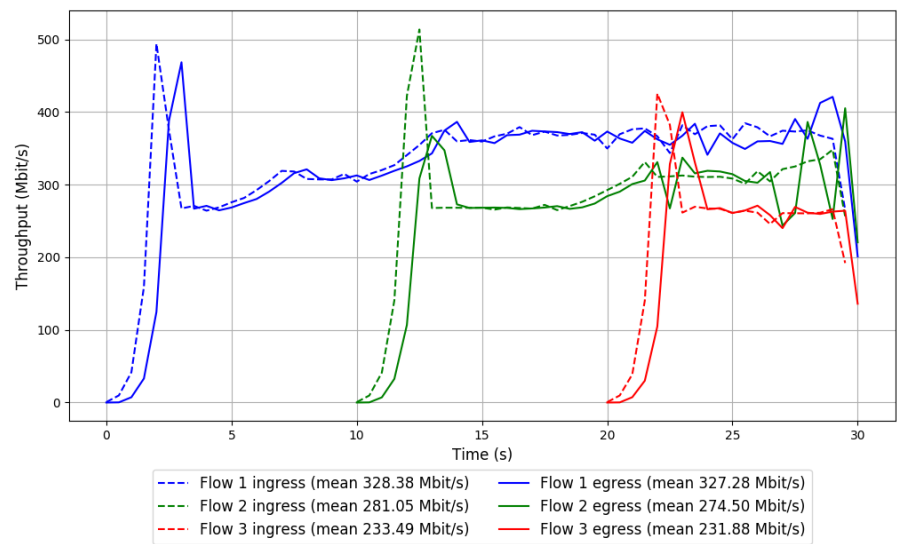


Run 5: Statistics of PCC-Allegro

Start at: 2019-06-27 08:14:09
End at: 2019-06-27 08:14:39
Local clock offset: -0.356 ms
Remote clock offset: -0.085 ms

Below is generated by plot.py at 2019-06-27 10:39:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 584.76 Mbit/s
95th percentile per-packet one-way delay: 217.345 ms
Loss rate: 1.84%
-- Flow 1:
Average throughput: 327.28 Mbit/s
95th percentile per-packet one-way delay: 217.160 ms
Loss rate: 0.92%
-- Flow 2:
Average throughput: 274.50 Mbit/s
95th percentile per-packet one-way delay: 228.703 ms
Loss rate: 3.19%
-- Flow 3:
Average throughput: 231.88 Mbit/s
95th percentile per-packet one-way delay: 185.582 ms
Loss rate: 2.46%

Run 5: Report of PCC-Allegro — Data Link

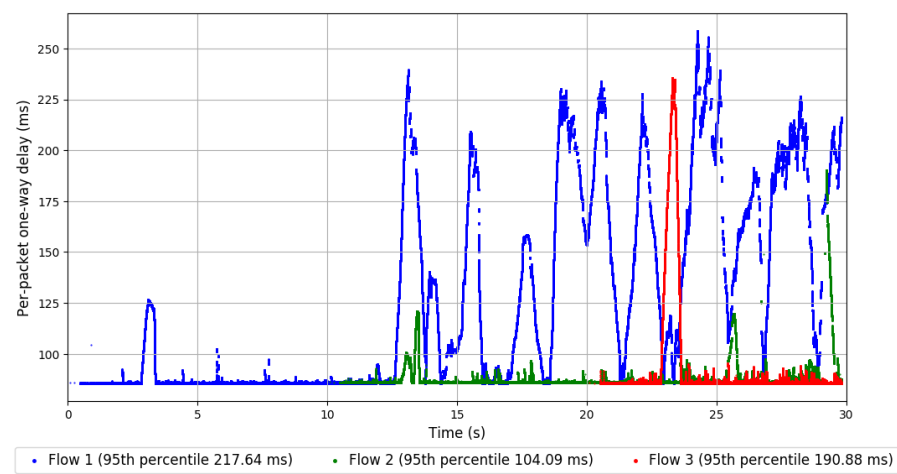
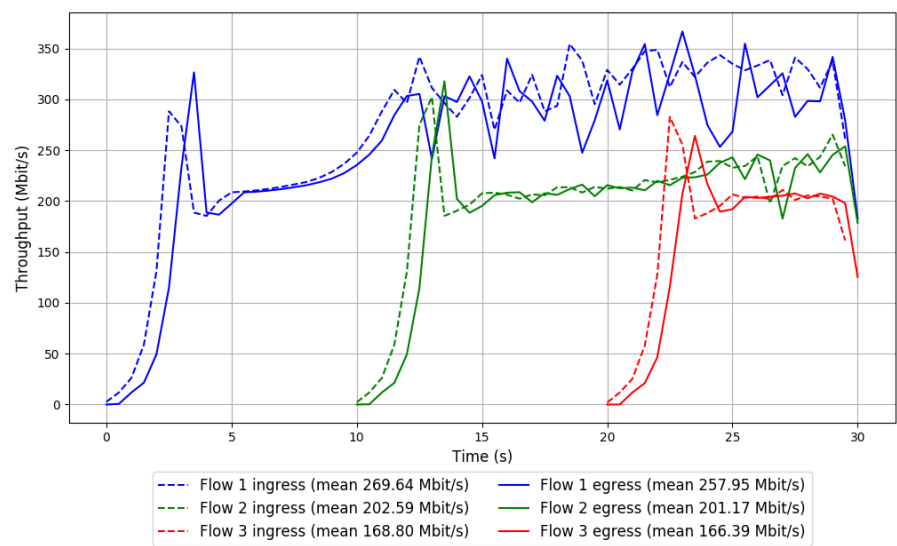


Run 1: Statistics of PCC-Expr

Start at: 2019-06-27 05:34:03
End at: 2019-06-27 05:34:33
Local clock offset: -0.044 ms
Remote clock offset: -0.029 ms

Below is generated by plot.py at 2019-06-27 10:39:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 445.63 Mbit/s
95th percentile per-packet one-way delay: 210.224 ms
Loss rate: 3.70%
-- Flow 1:
Average throughput: 257.95 Mbit/s
95th percentile per-packet one-way delay: 217.644 ms
Loss rate: 4.88%
-- Flow 2:
Average throughput: 201.17 Mbit/s
95th percentile per-packet one-way delay: 104.087 ms
Loss rate: 1.58%
-- Flow 3:
Average throughput: 166.39 Mbit/s
95th percentile per-packet one-way delay: 190.882 ms
Loss rate: 3.14%

Run 1: Report of PCC-Expr — Data Link

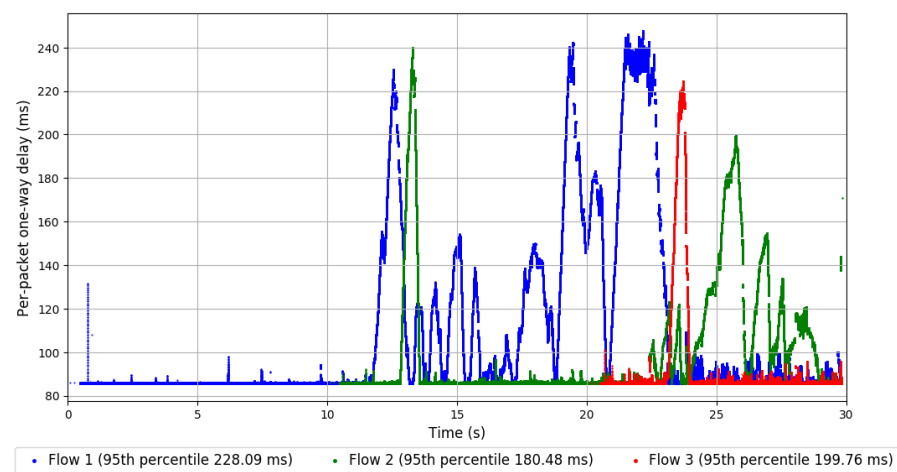
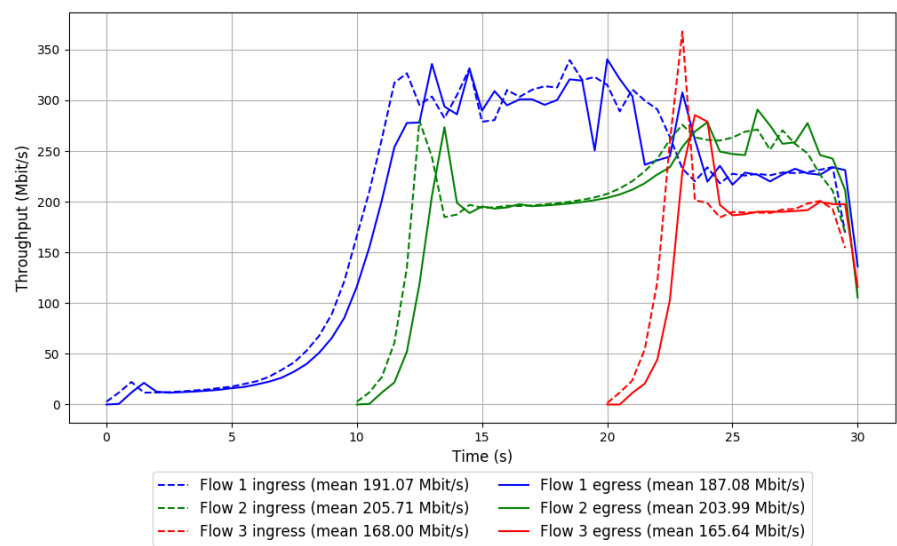


Run 2: Statistics of PCC-Expr

Start at: 2019-06-27 06:11:29
End at: 2019-06-27 06:11:59
Local clock offset: -0.053 ms
Remote clock offset: -0.037 ms

Below is generated by plot.py at 2019-06-27 10:39:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 376.23 Mbit/s
95th percentile per-packet one-way delay: 211.905 ms
Loss rate: 2.35%
-- Flow 1:
Average throughput: 187.08 Mbit/s
95th percentile per-packet one-way delay: 228.088 ms
Loss rate: 2.65%
-- Flow 2:
Average throughput: 203.99 Mbit/s
95th percentile per-packet one-way delay: 180.484 ms
Loss rate: 1.59%
-- Flow 3:
Average throughput: 165.64 Mbit/s
95th percentile per-packet one-way delay: 199.757 ms
Loss rate: 3.16%

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2019-06-27 06:49:07

End at: 2019-06-27 06:49:37

Local clock offset: -0.099 ms

Remote clock offset: 0.031 ms

Below is generated by plot.py at 2019-06-27 10:39:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 407.31 Mbit/s

95th percentile per-packet one-way delay: 193.478 ms

Loss rate: 2.46%

-- Flow 1:

Average throughput: 219.92 Mbit/s

95th percentile per-packet one-way delay: 198.373 ms

Loss rate: 3.27%

-- Flow 2:

Average throughput: 198.96 Mbit/s

95th percentile per-packet one-way delay: 160.301 ms

Loss rate: 1.20%

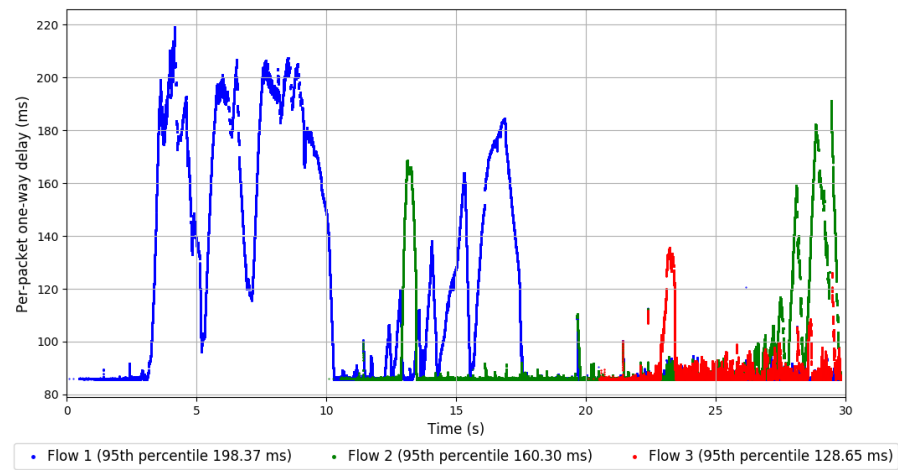
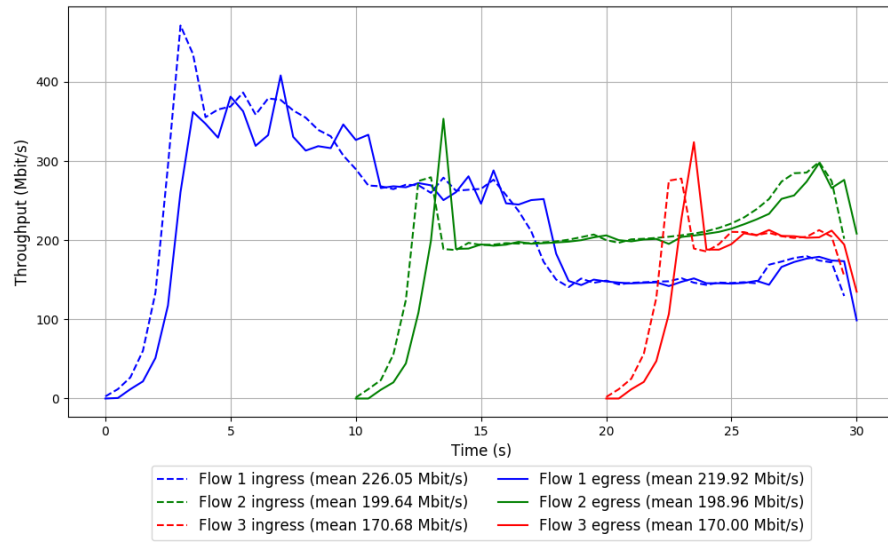
-- Flow 3:

Average throughput: 170.00 Mbit/s

95th percentile per-packet one-way delay: 128.650 ms

Loss rate: 2.14%

Run 3: Report of PCC-Expr — Data Link

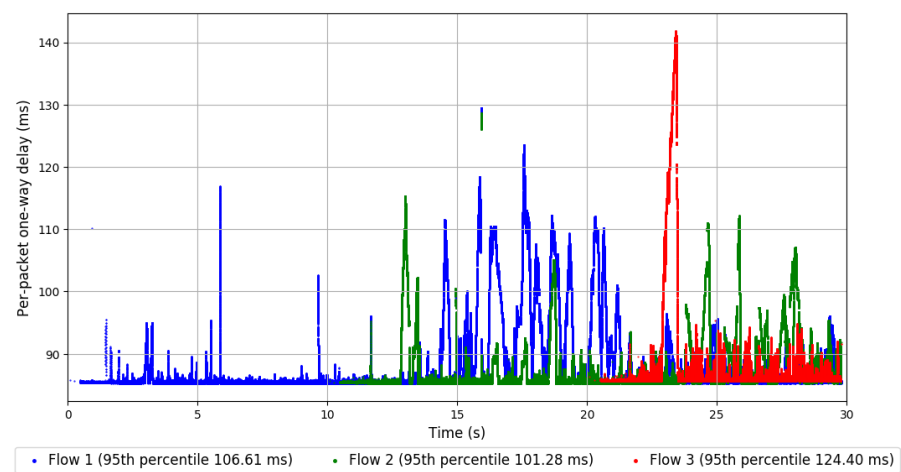
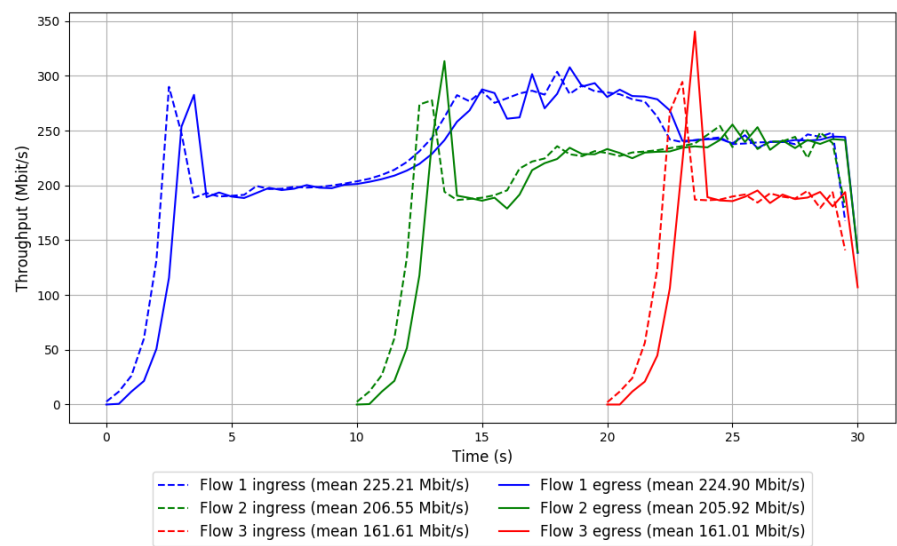


Run 4: Statistics of PCC-Expr

Start at: 2019-06-27 07:26:44
End at: 2019-06-27 07:27:14
Local clock offset: -0.456 ms
Remote clock offset: -0.051 ms

Below is generated by plot.py at 2019-06-27 10:48:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 413.94 Mbit/s
95th percentile per-packet one-way delay: 105.585 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 224.90 Mbit/s
95th percentile per-packet one-way delay: 106.607 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 205.92 Mbit/s
95th percentile per-packet one-way delay: 101.281 ms
Loss rate: 1.16%
-- Flow 3:
Average throughput: 161.01 Mbit/s
95th percentile per-packet one-way delay: 124.399 ms
Loss rate: 2.09%

Run 4: Report of PCC-Expr — Data Link

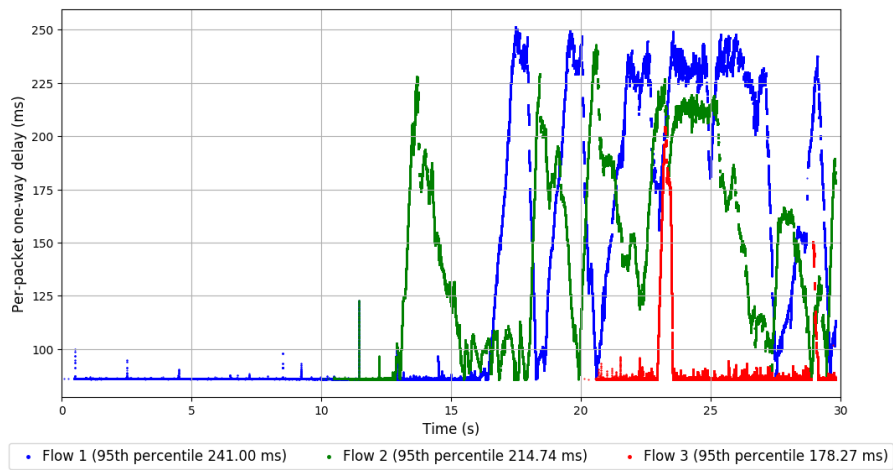
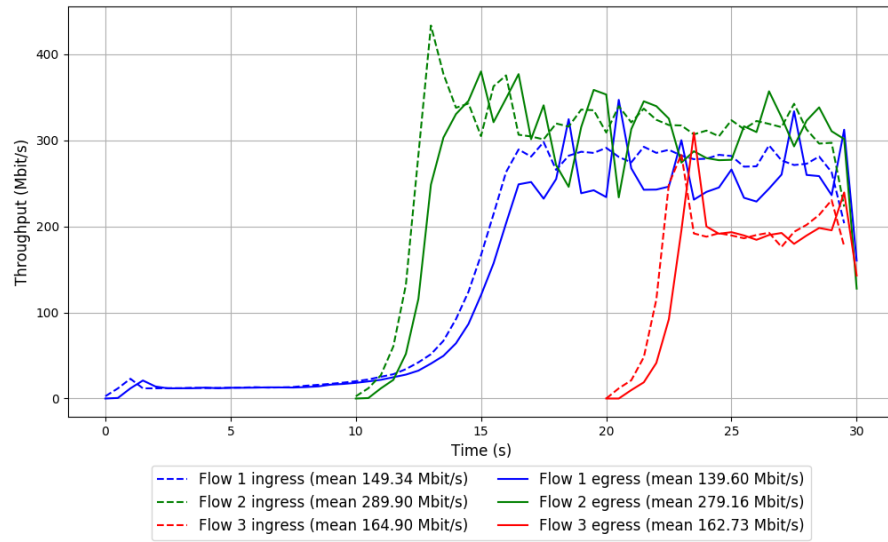


Run 5: Statistics of PCC-Expr

Start at: 2019-06-27 08:04:48
End at: 2019-06-27 08:05:18
Local clock offset: 0.059 ms
Remote clock offset: -0.104 ms

Below is generated by plot.py at 2019-06-27 10:48:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 377.78 Mbit/s
95th percentile per-packet one-way delay: 234.917 ms
Loss rate: 5.29%
-- Flow 1:
Average throughput: 139.60 Mbit/s
95th percentile per-packet one-way delay: 240.998 ms
Loss rate: 7.07%
-- Flow 2:
Average throughput: 279.16 Mbit/s
95th percentile per-packet one-way delay: 214.736 ms
Loss rate: 4.55%
-- Flow 3:
Average throughput: 162.73 Mbit/s
95th percentile per-packet one-way delay: 178.269 ms
Loss rate: 3.06%

Run 5: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2019-06-27 05:30:49

End at: 2019-06-27 05:31:19

Local clock offset: 0.545 ms

Remote clock offset: 0.024 ms

Below is generated by plot.py at 2019-06-27 10:48:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.36 Mbit/s

95th percentile per-packet one-way delay: 86.602 ms

Loss rate: 1.75%

-- Flow 1:

Average throughput: 44.27 Mbit/s

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

Loss rate: 1.19%

-- Flow 2:

Average throughput: 36.82 Mbit/s

95th percentile per-packet one-way delay: 86.632 ms

Loss rate: 1.62%

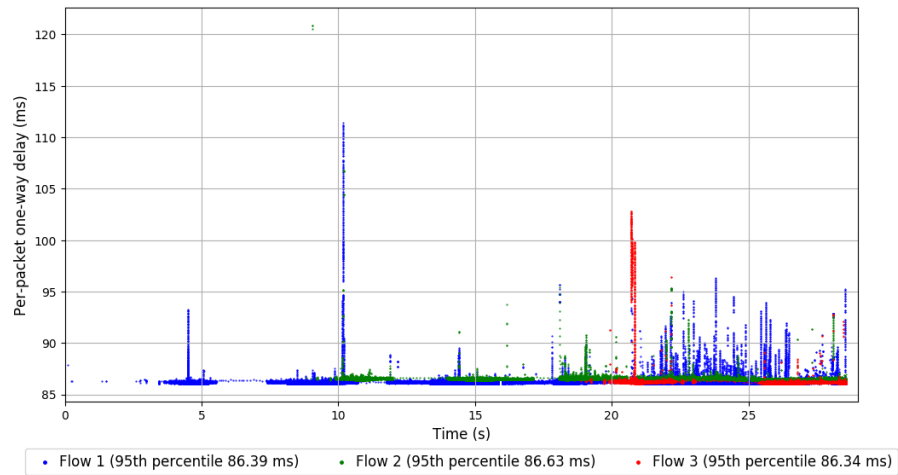
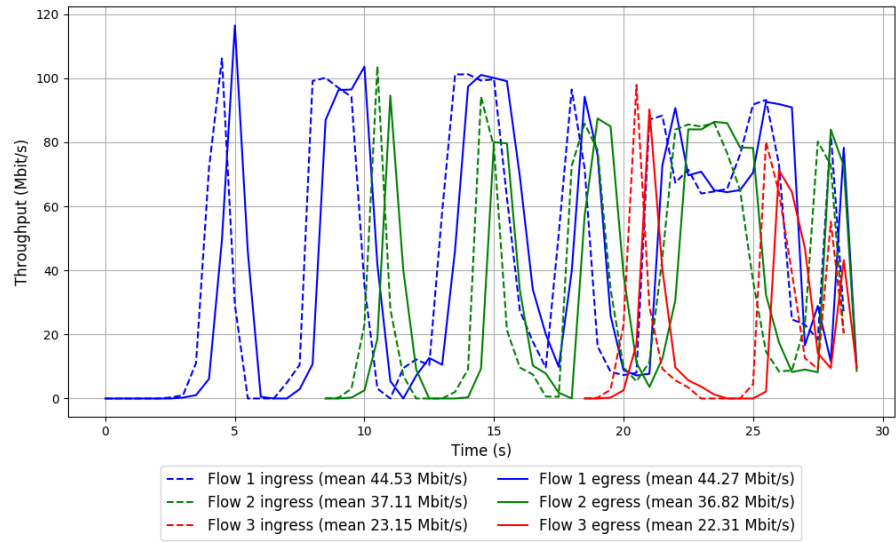
-- Flow 3:

Average throughput: 22.31 Mbit/s

95th percentile per-packet one-way delay: 86.342 ms

Loss rate: 5.30%

Run 1: Report of QUIC Cubic — Data Link

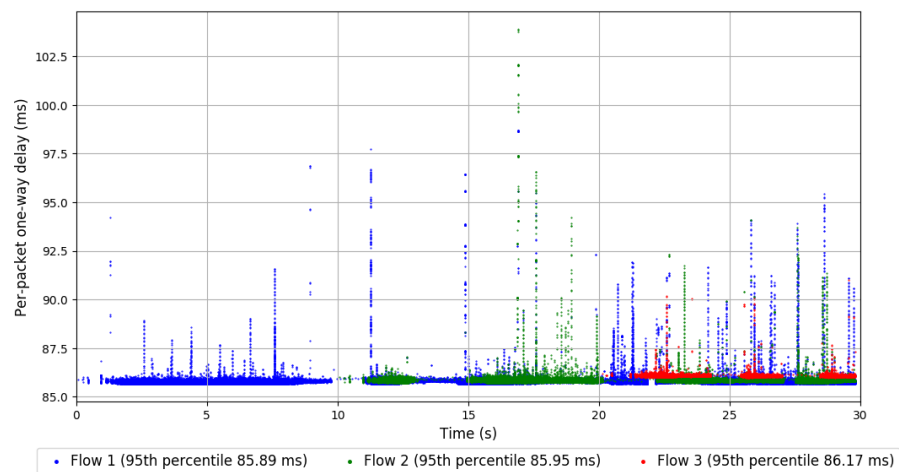
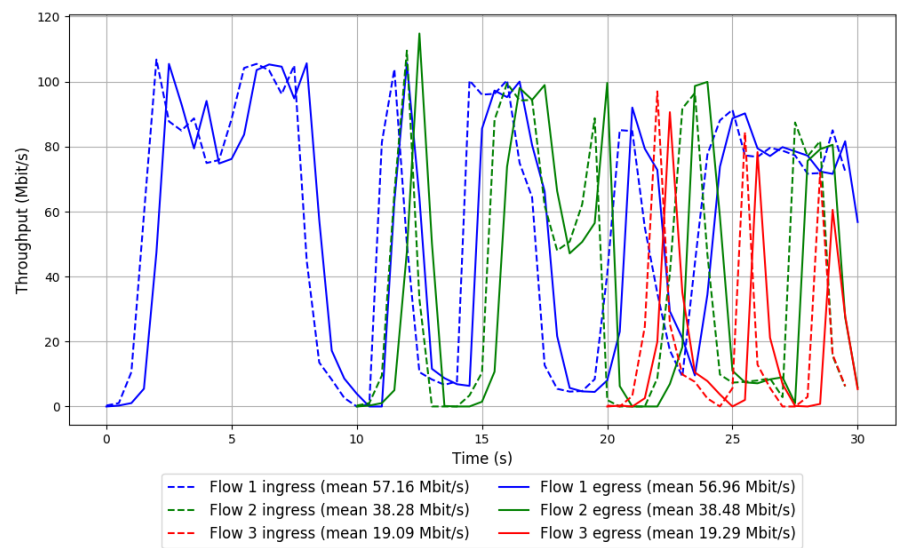


Run 2: Statistics of QUIC Cubic

Start at: 2019-06-27 06:08:14
End at: 2019-06-27 06:08:44
Local clock offset: -0.063 ms
Remote clock offset: -0.031 ms

Below is generated by plot.py at 2019-06-27 10:48:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 88.77 Mbit/s
95th percentile per-packet one-way delay: 86.069 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 56.96 Mbit/s
95th percentile per-packet one-way delay: 85.895 ms
Loss rate: 0.92%
-- Flow 2:
Average throughput: 38.48 Mbit/s
95th percentile per-packet one-way delay: 85.949 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 19.29 Mbit/s
95th percentile per-packet one-way delay: 86.171 ms
Loss rate: 0.70%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2019-06-27 06:45:51

End at: 2019-06-27 06:46:21

Local clock offset: -0.318 ms

Remote clock offset: -0.02 ms

Below is generated by plot.py at 2019-06-27 10:48:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.94 Mbit/s

95th percentile per-packet one-way delay: 85.912 ms

Loss rate: 1.22%

-- Flow 1:

Average throughput: 51.56 Mbit/s

95th percentile per-packet one-way delay: 85.758 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 43.44 Mbit/s

95th percentile per-packet one-way delay: 85.780 ms

Loss rate: 1.63%

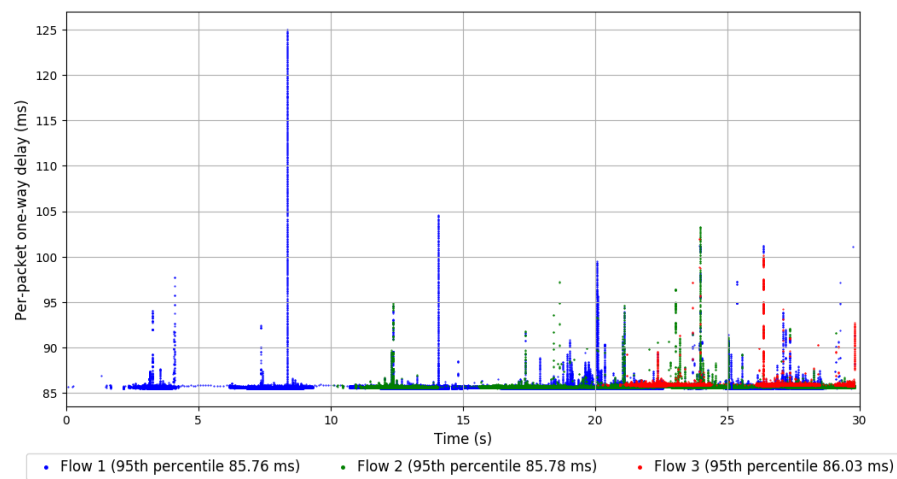
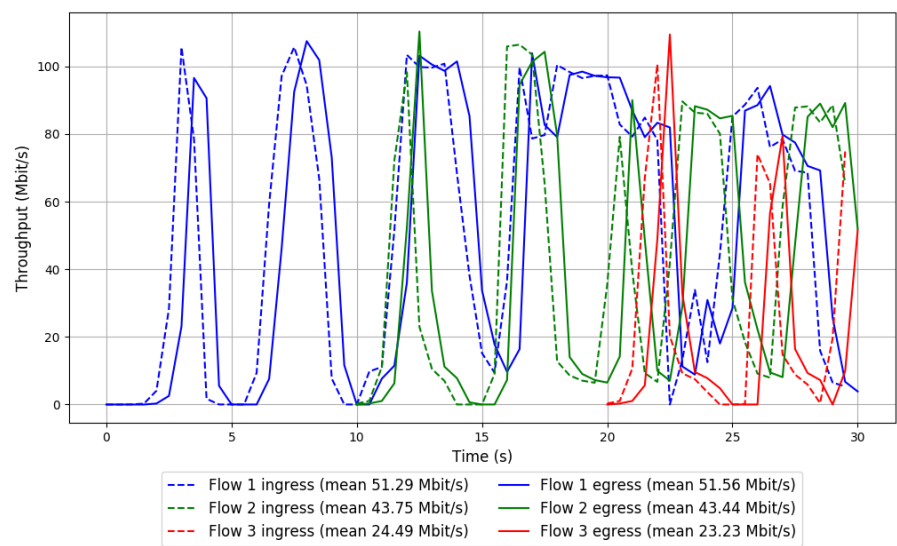
-- Flow 3:

Average throughput: 23.23 Mbit/s

95th percentile per-packet one-way delay: 86.032 ms

Loss rate: 6.91%

Run 3: Report of QUIC Cubic — Data Link

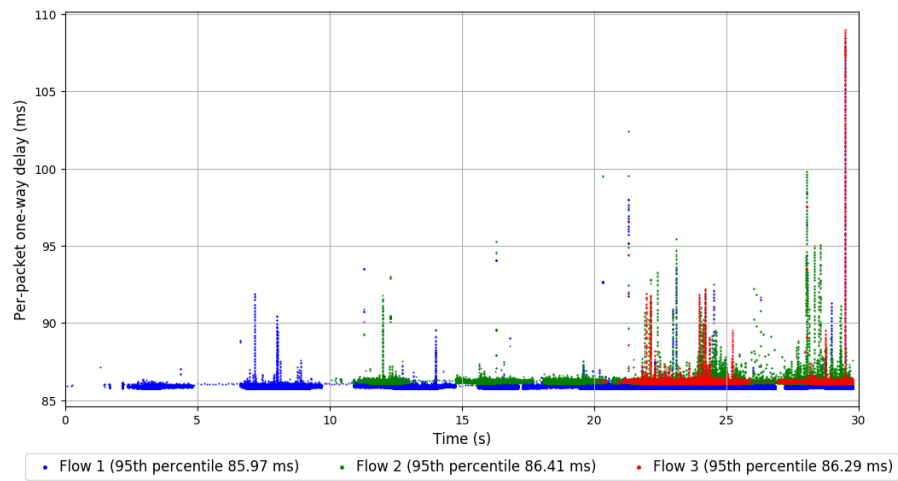
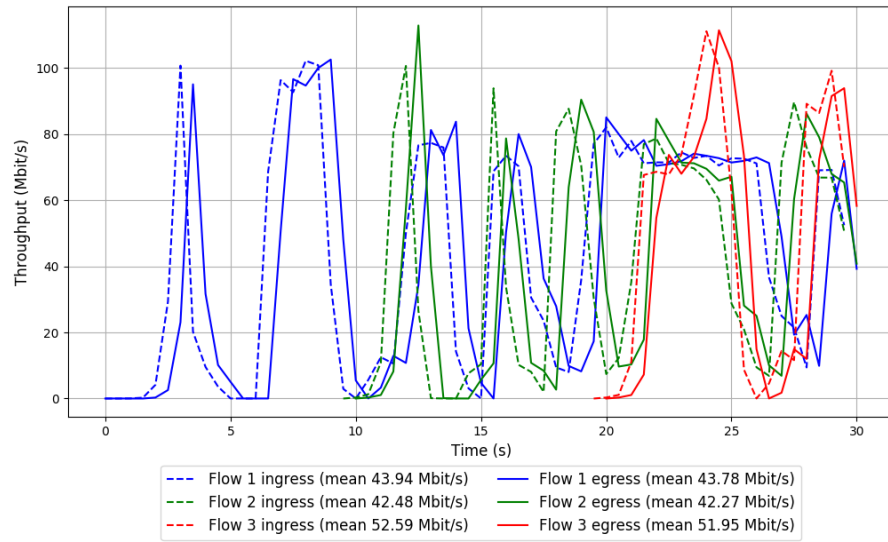


Run 4: Statistics of QUIC Cubic

Start at: 2019-06-27 07:23:27
End at: 2019-06-27 07:23:57
Local clock offset: -0.004 ms
Remote clock offset: -0.043 ms

Below is generated by plot.py at 2019-06-27 10:48:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 88.82 Mbit/s
95th percentile per-packet one-way delay: 86.274 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 43.78 Mbit/s
95th percentile per-packet one-way delay: 85.972 ms
Loss rate: 0.95%
-- Flow 2:
Average throughput: 42.27 Mbit/s
95th percentile per-packet one-way delay: 86.409 ms
Loss rate: 1.36%
-- Flow 3:
Average throughput: 51.95 Mbit/s
95th percentile per-packet one-way delay: 86.292 ms
Loss rate: 2.96%

Run 4: Report of QUIC Cubic — Data Link

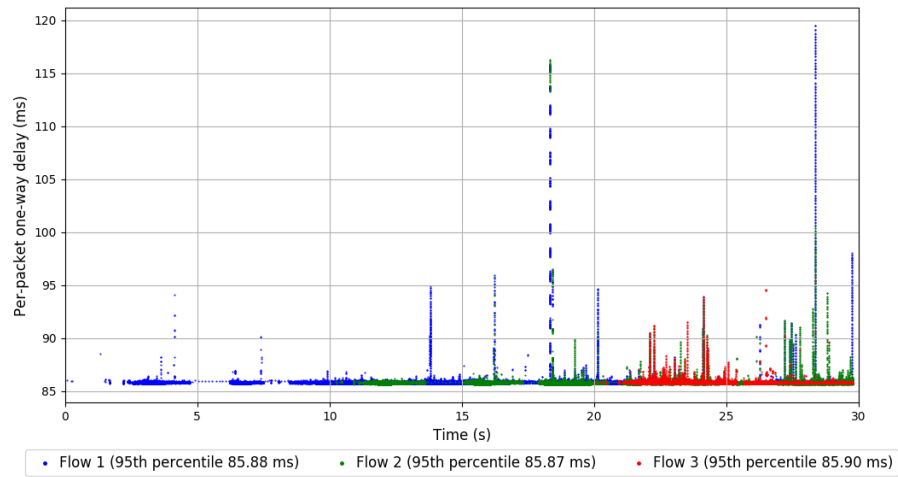
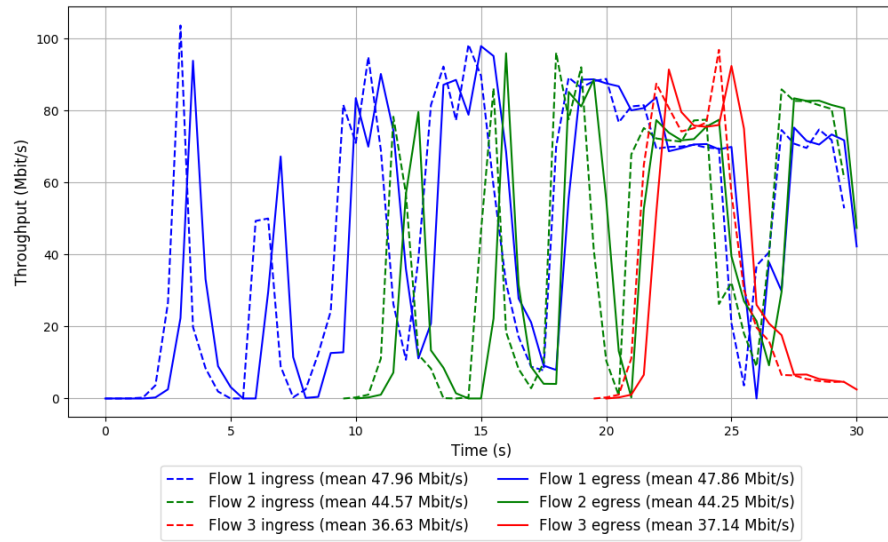


Run 5: Statistics of QUIC Cubic

Start at: 2019-06-27 08:01:31
End at: 2019-06-27 08:02:01
Local clock offset: -0.139 ms
Remote clock offset: -0.115 ms

Below is generated by plot.py at 2019-06-27 10:48:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 89.35 Mbit/s
95th percentile per-packet one-way delay: 85.883 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 47.86 Mbit/s
95th percentile per-packet one-way delay: 85.884 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 44.25 Mbit/s
95th percentile per-packet one-way delay: 85.874 ms
Loss rate: 1.56%
-- Flow 3:
Average throughput: 37.14 Mbit/s
95th percentile per-packet one-way delay: 85.898 ms
Loss rate: 0.42%

Run 5: Report of QUIC Cubic — Data Link

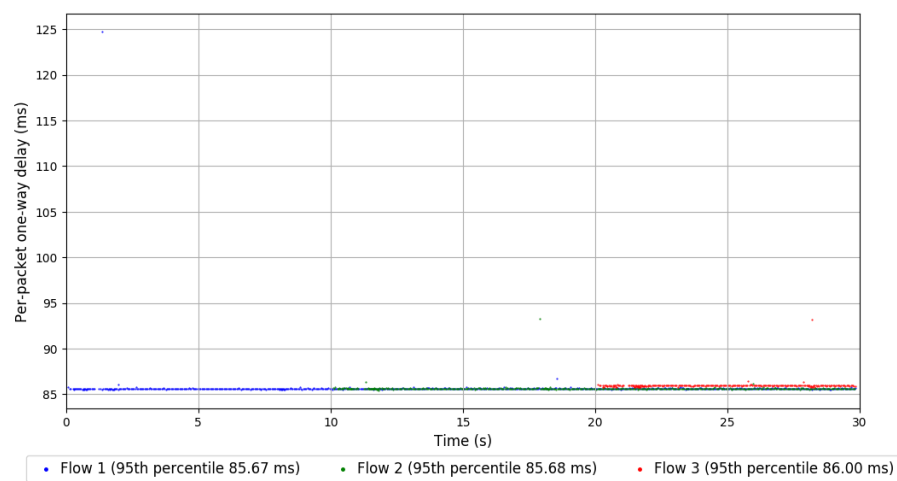
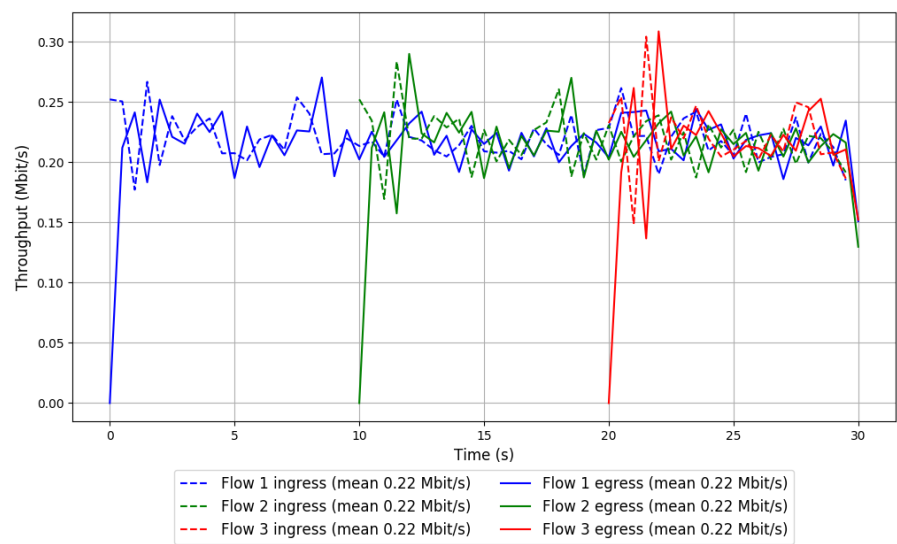


Run 1: Statistics of SReAM

Start at: 2019-06-27 05:23:59
End at: 2019-06-27 05:24:29
Local clock offset: -0.191 ms
Remote clock offset: -0.001 ms

Below is generated by plot.py at 2019-06-27 10:48:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 85.957 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.670 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.680 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.004 ms
Loss rate: 1.50%

Run 1: Report of SReAM — Data Link

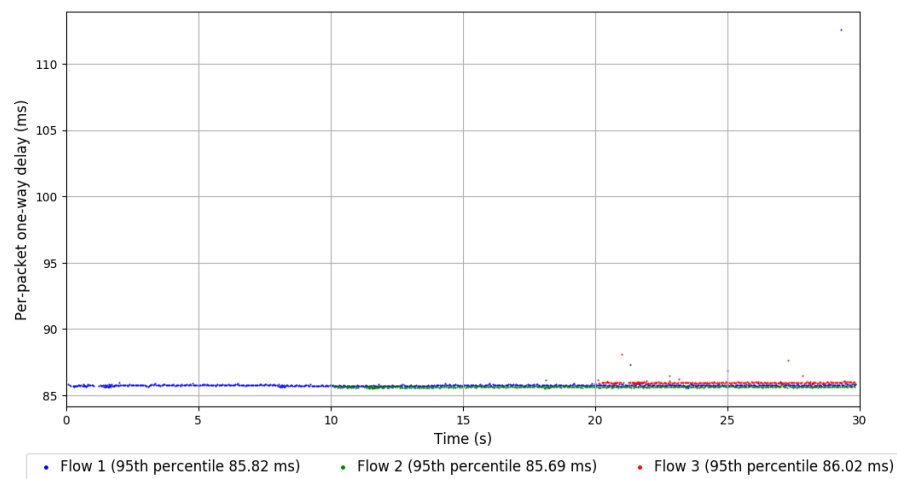
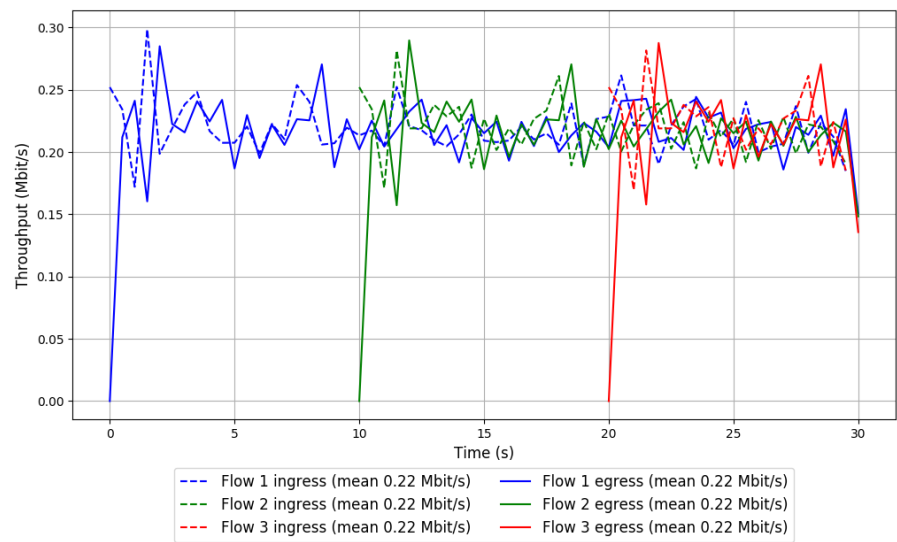


Run 2: Statistics of SReAM

Start at: 2019-06-27 06:01:30
End at: 2019-06-27 06:02:00
Local clock offset: -0.34 ms
Remote clock offset: -0.055 ms

Below is generated by plot.py at 2019-06-27 10:48:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 85.957 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.823 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.693 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.016 ms
Loss rate: 1.85%

Run 2: Report of SReAM — Data Link

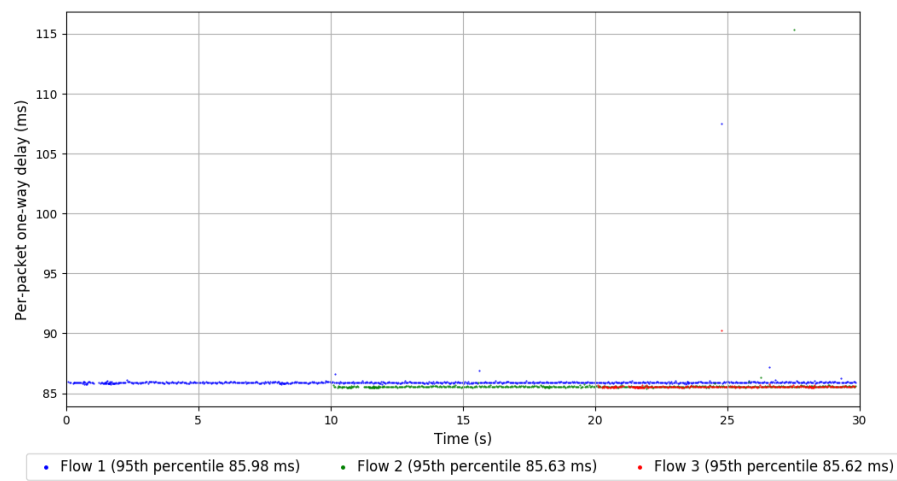
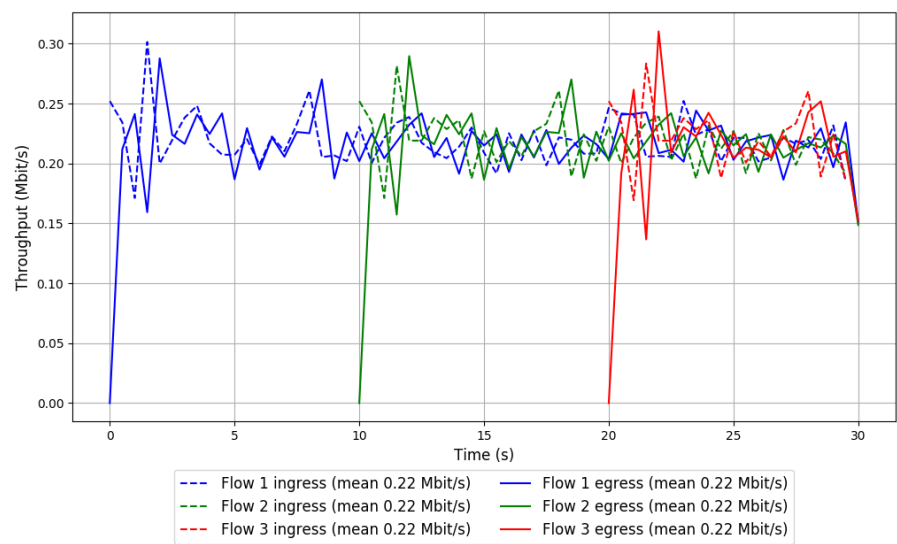


Run 3: Statistics of SReAM

Start at: 2019-06-27 06:39:02
End at: 2019-06-27 06:39:32
Local clock offset: -0.518 ms
Remote clock offset: -0.039 ms

Below is generated by plot.py at 2019-06-27 10:48:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 85.956 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.978 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.628 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.622 ms
Loss rate: 1.85%

Run 3: Report of SReAM — Data Link

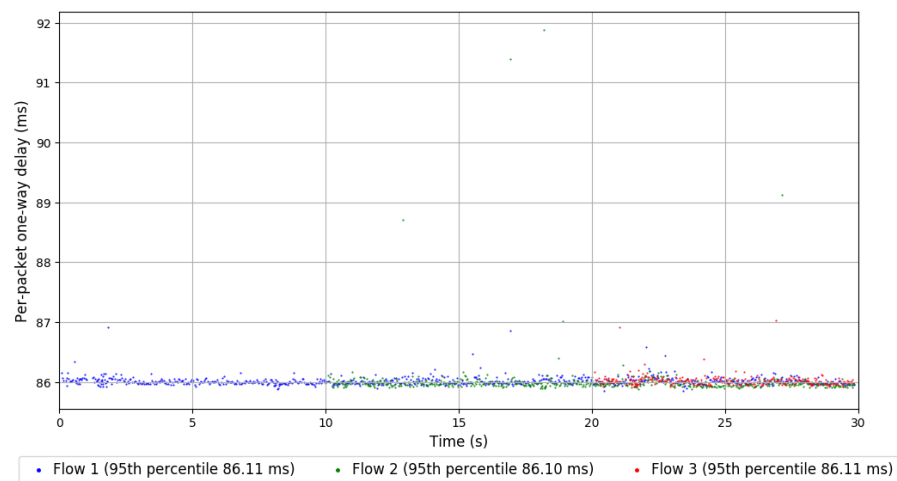
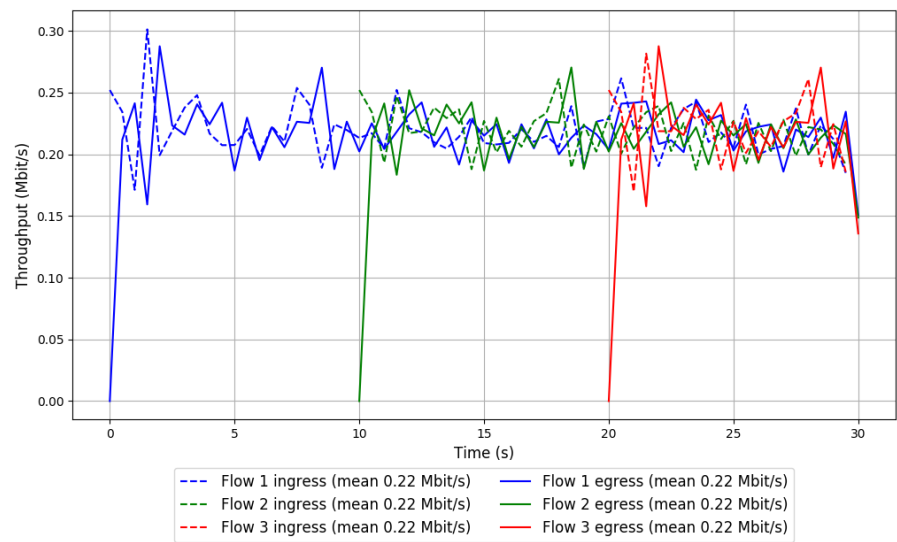


Run 4: Statistics of SReAM

Start at: 2019-06-27 07:16:39
End at: 2019-06-27 07:17:09
Local clock offset: -0.011 ms
Remote clock offset: -0.026 ms

Below is generated by plot.py at 2019-06-27 10:48:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.110 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.115 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.096 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.115 ms
Loss rate: 1.85%

Run 4: Report of SReAM — Data Link

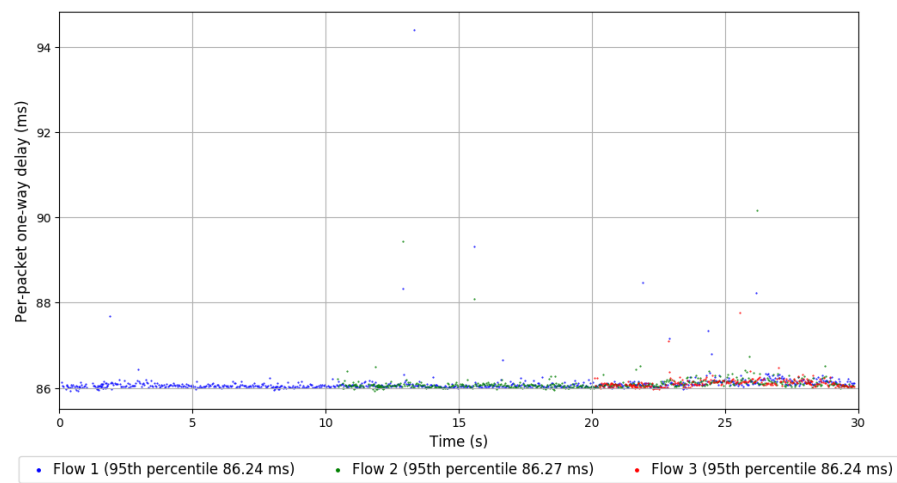
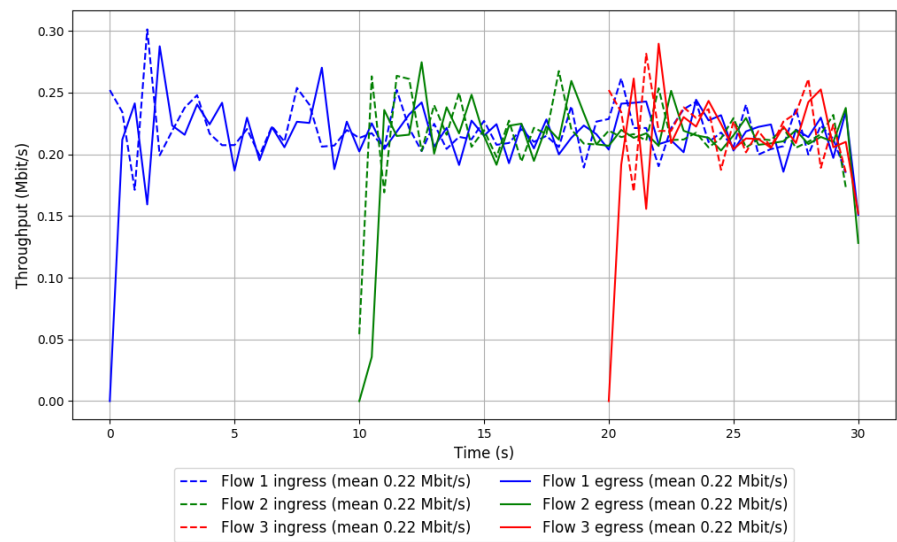


Run 5: Statistics of SReAM

Start at: 2019-06-27 07:54:44
End at: 2019-06-27 07:55:14
Local clock offset: -0.328 ms
Remote clock offset: -0.079 ms

Below is generated by plot.py at 2019-06-27 10:48:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.247 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.238 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.272 ms
Loss rate: 0.89%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.243 ms
Loss rate: 1.85%

Run 5: Report of SReAM — Data Link

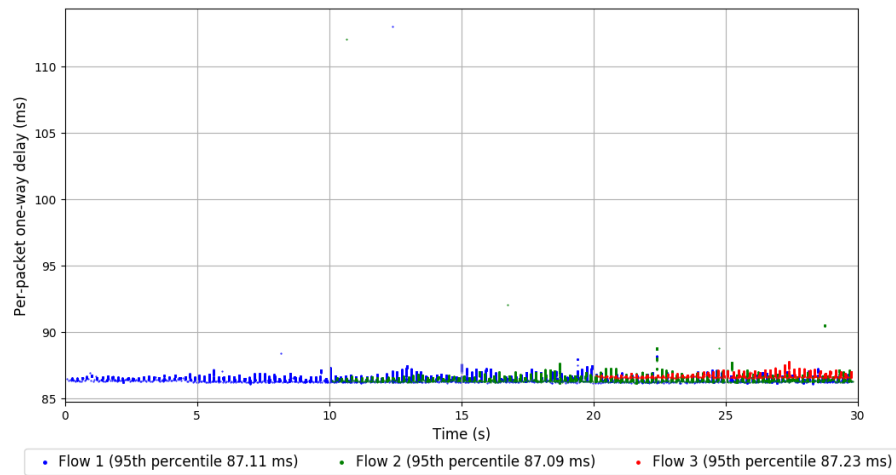
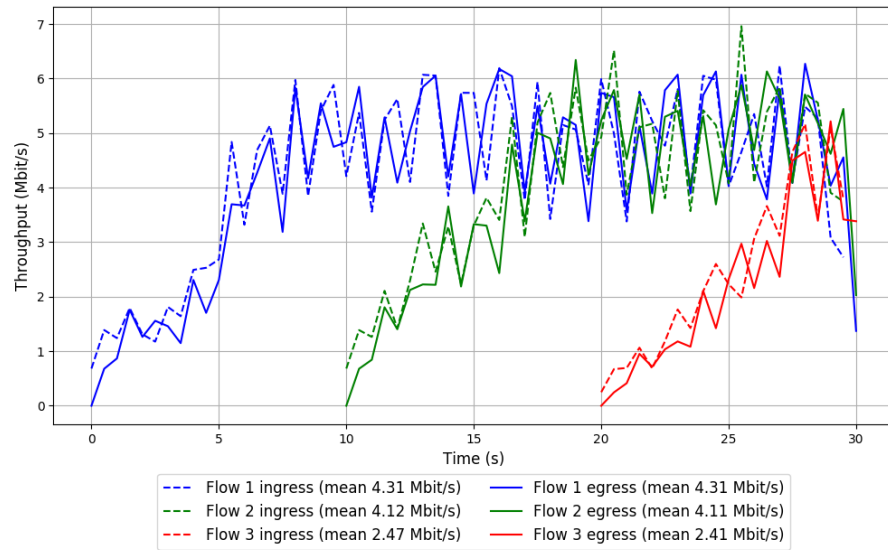


Run 1: Statistics of Sprout

Start at: 2019-06-27 05:28:19
End at: 2019-06-27 05:28:49
Local clock offset: 0.533 ms
Remote clock offset: -0.004 ms

Below is generated by plot.py at 2019-06-27 10:48:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 7.81 Mbit/s
95th percentile per-packet one-way delay: 87.120 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 4.31 Mbit/s
95th percentile per-packet one-way delay: 87.107 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 4.11 Mbit/s
95th percentile per-packet one-way delay: 87.092 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 87.226 ms
Loss rate: 4.31%

Run 1: Report of Sprout — Data Link

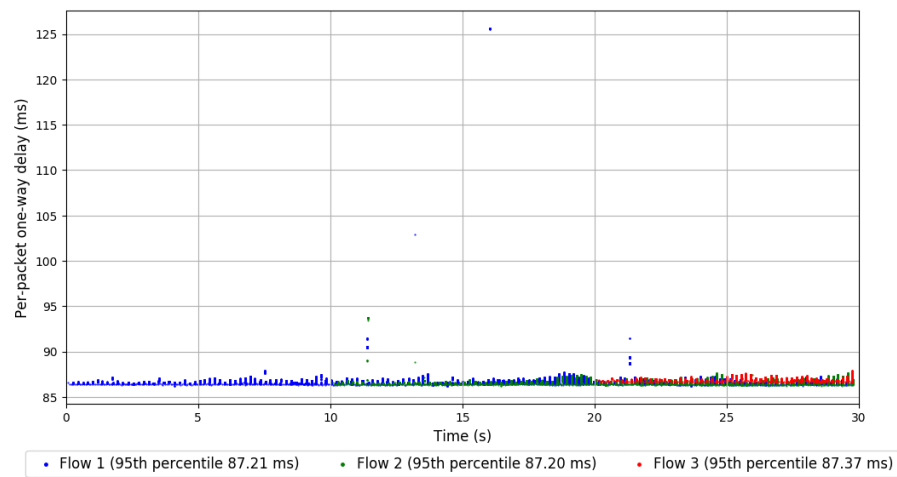
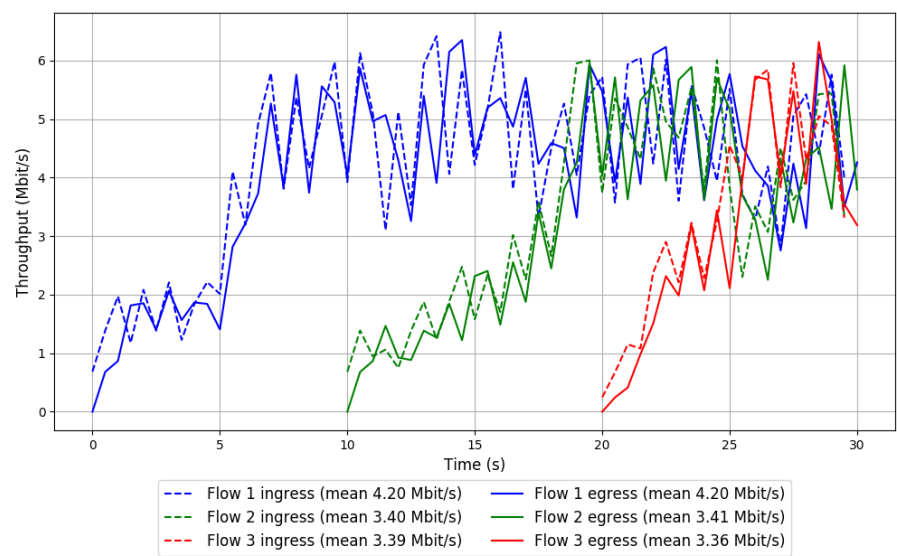


Run 2: Statistics of Sprout

Start at: 2019-06-27 06:05:44
End at: 2019-06-27 06:06:14
Local clock offset: 0.429 ms
Remote clock offset: -0.043 ms

Below is generated by plot.py at 2019-06-27 10:48:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 7.55 Mbit/s
95th percentile per-packet one-way delay: 87.254 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 4.20 Mbit/s
95th percentile per-packet one-way delay: 87.212 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 3.41 Mbit/s
95th percentile per-packet one-way delay: 87.202 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 3.36 Mbit/s
95th percentile per-packet one-way delay: 87.367 ms
Loss rate: 2.63%

Run 2: Report of Sprout — Data Link

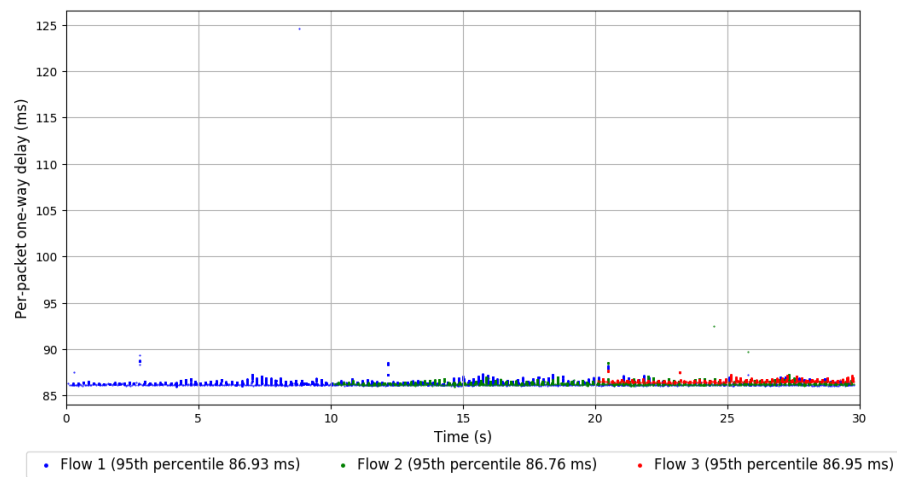
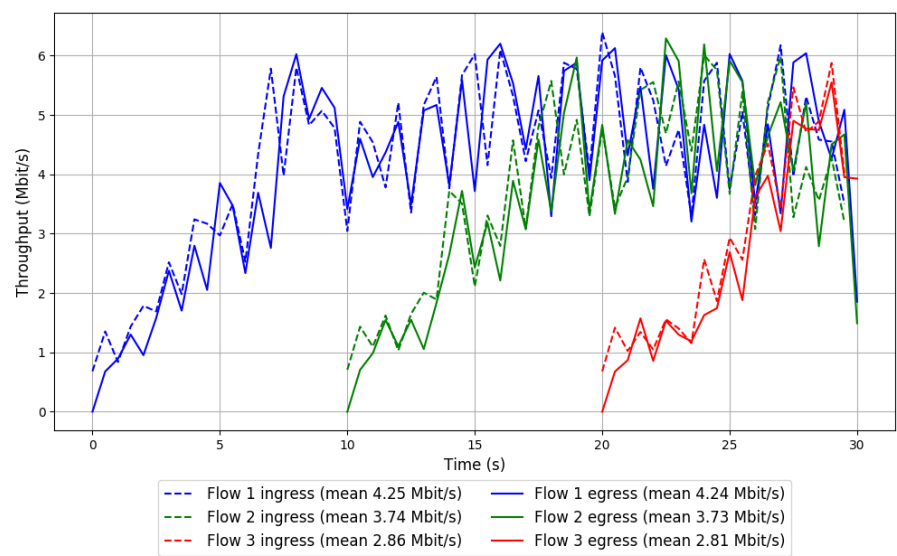


Run 3: Statistics of Sprout

Start at: 2019-06-27 06:43:21
End at: 2019-06-27 06:43:51
Local clock offset: 0.089 ms
Remote clock offset: -0.039 ms

```
# Below is generated by plot.py at 2019-06-27 10:48:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.63 Mbit/s
95th percentile per-packet one-way delay: 86.881 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 4.24 Mbit/s
95th percentile per-packet one-way delay: 86.928 ms
Loss rate: 0.73%
-- Flow 2:
Average throughput: 3.73 Mbit/s
95th percentile per-packet one-way delay: 86.764 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 2.81 Mbit/s
95th percentile per-packet one-way delay: 86.952 ms
Loss rate: 3.59%
```

Run 3: Report of Sprout — Data Link

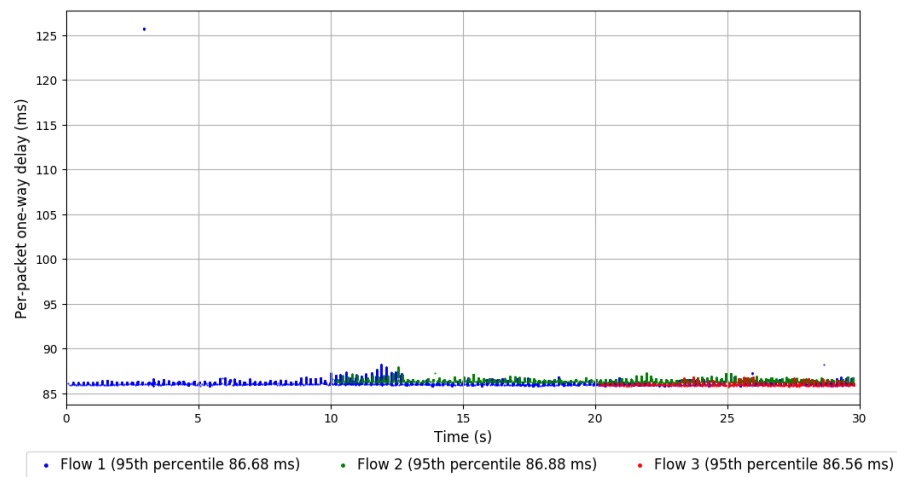
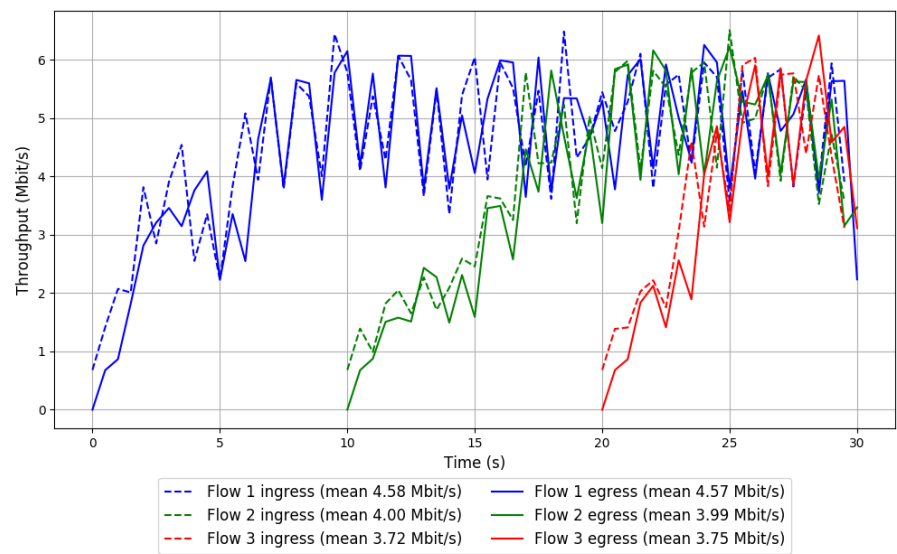


Run 4: Statistics of Sprout

Start at: 2019-06-27 07:20:57
End at: 2019-06-27 07:21:27
Local clock offset: -0.018 ms
Remote clock offset: -0.048 ms

```
# Below is generated by plot.py at 2019-06-27 10:48:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.44 Mbit/s
95th percentile per-packet one-way delay: 86.753 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 4.57 Mbit/s
95th percentile per-packet one-way delay: 86.683 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 3.99 Mbit/s
95th percentile per-packet one-way delay: 86.875 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 3.75 Mbit/s
95th percentile per-packet one-way delay: 86.565 ms
Loss rate: 0.89%
```

Run 4: Report of Sprout — Data Link

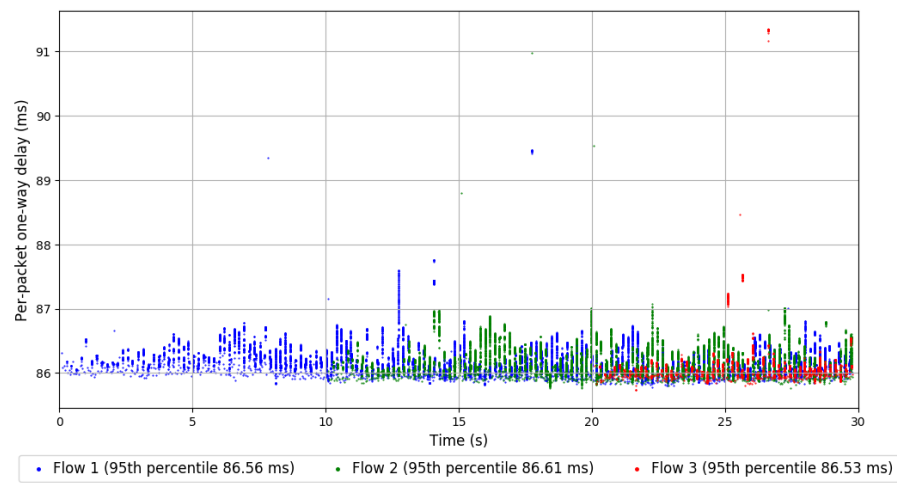
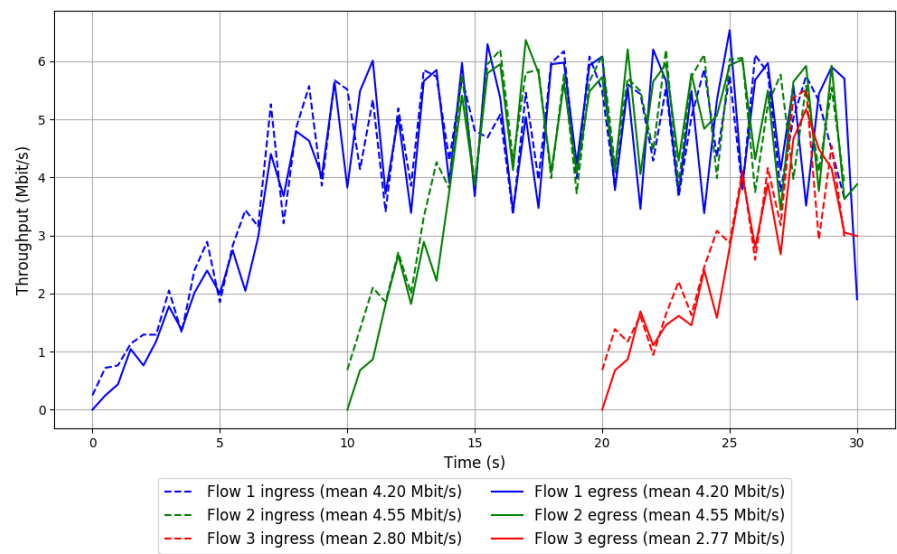


Run 5: Statistics of Sprout

Start at: 2019-06-27 07:59:01
End at: 2019-06-27 07:59:31
Local clock offset: -0.099 ms
Remote clock offset: -0.092 ms

Below is generated by plot.py at 2019-06-27 10:48:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.11 Mbit/s
95th percentile per-packet one-way delay: 86.581 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 4.20 Mbit/s
95th percentile per-packet one-way delay: 86.562 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 4.55 Mbit/s
95th percentile per-packet one-way delay: 86.612 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 2.77 Mbit/s
95th percentile per-packet one-way delay: 86.529 ms
Loss rate: 2.69%

Run 5: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2019-06-27 05:54:00

End at: 2019-06-27 05:54:30

Local clock offset: -0.047 ms

Remote clock offset: 0.029 ms

Below is generated by plot.py at 2019-06-27 10:51:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 327.70 Mbit/s

95th percentile per-packet one-way delay: 88.704 ms

Loss rate: 1.26%

-- Flow 1:

Average throughput: 135.02 Mbit/s

95th percentile per-packet one-way delay: 88.721 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 195.51 Mbit/s

95th percentile per-packet one-way delay: 88.647 ms

Loss rate: 1.12%

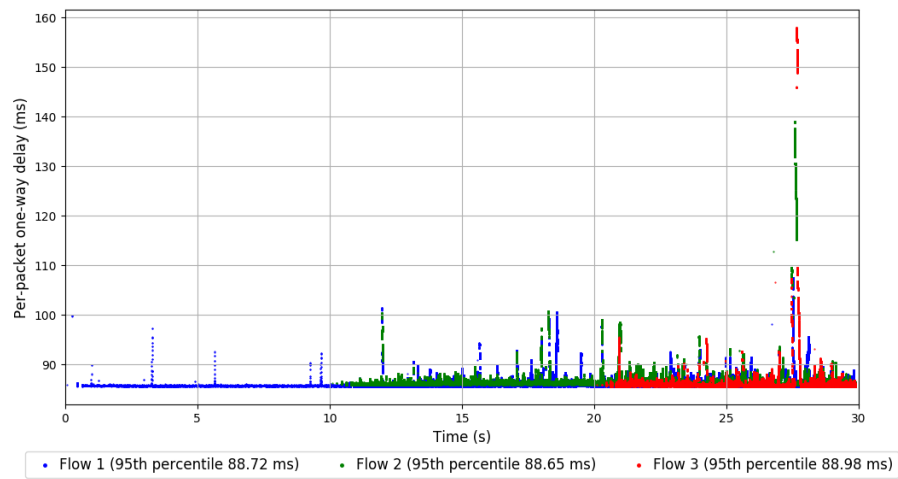
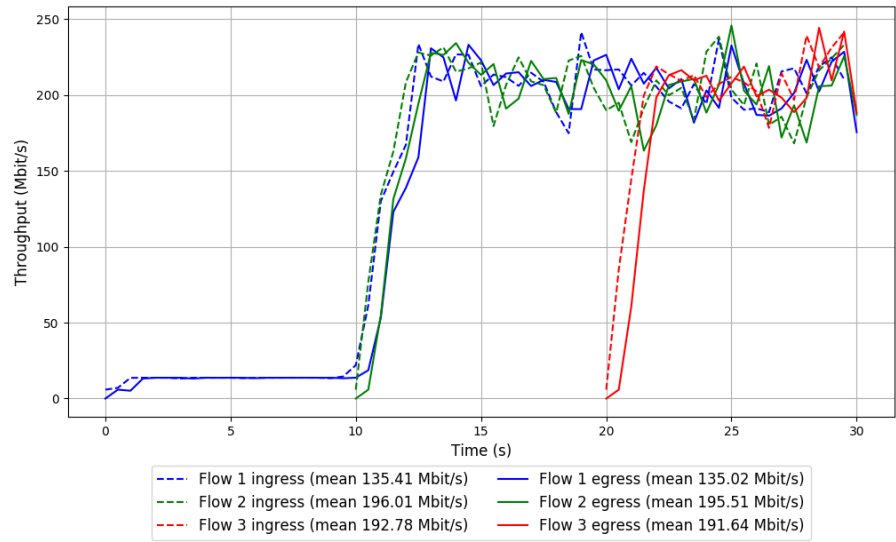
-- Flow 3:

Average throughput: 191.64 Mbit/s

95th percentile per-packet one-way delay: 88.980 ms

Loss rate: 2.32%

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

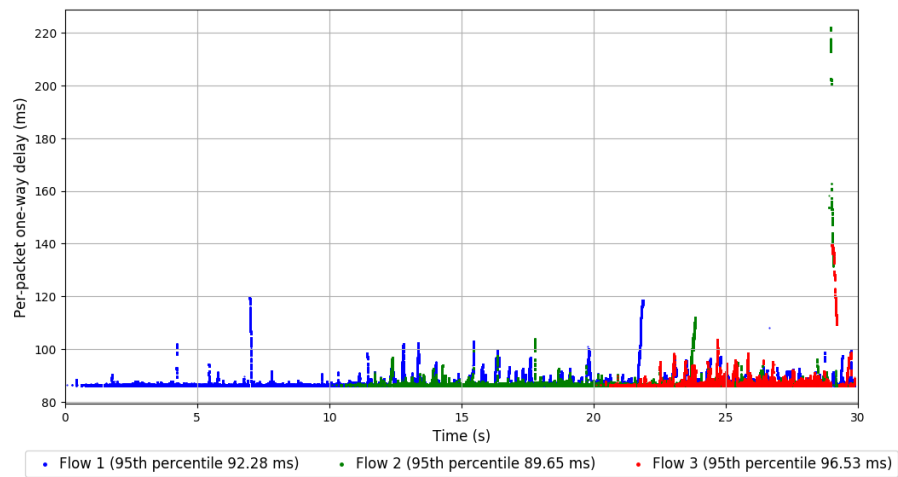
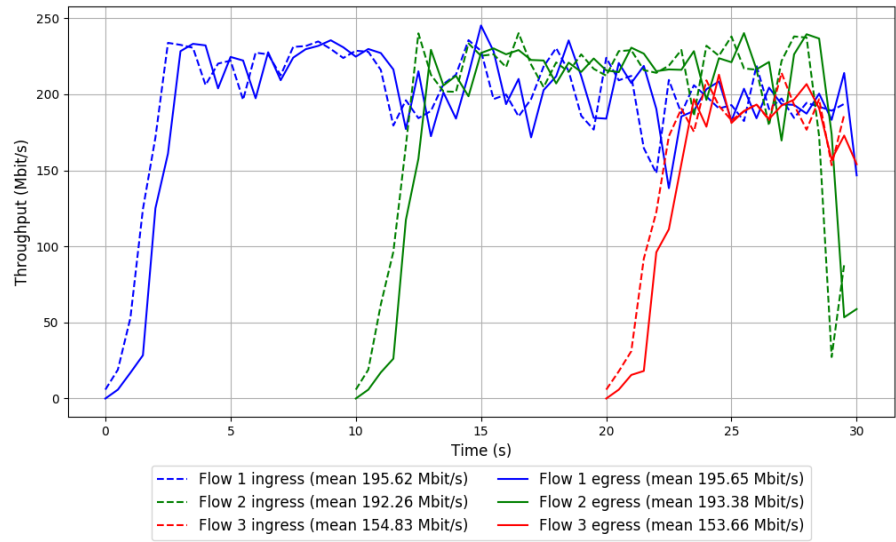


Run 2: Statistics of TaoVA-100x

Start at: 2019-06-27 06:31:20
End at: 2019-06-27 06:31:50
Local clock offset: 0.304 ms
Remote clock offset: -0.073 ms

Below is generated by plot.py at 2019-06-27 10:54:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 374.15 Mbit/s
95th percentile per-packet one-way delay: 92.386 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 195.65 Mbit/s
95th percentile per-packet one-way delay: 92.285 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 193.38 Mbit/s
95th percentile per-packet one-way delay: 89.649 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 153.66 Mbit/s
95th percentile per-packet one-way delay: 96.535 ms
Loss rate: 2.30%

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

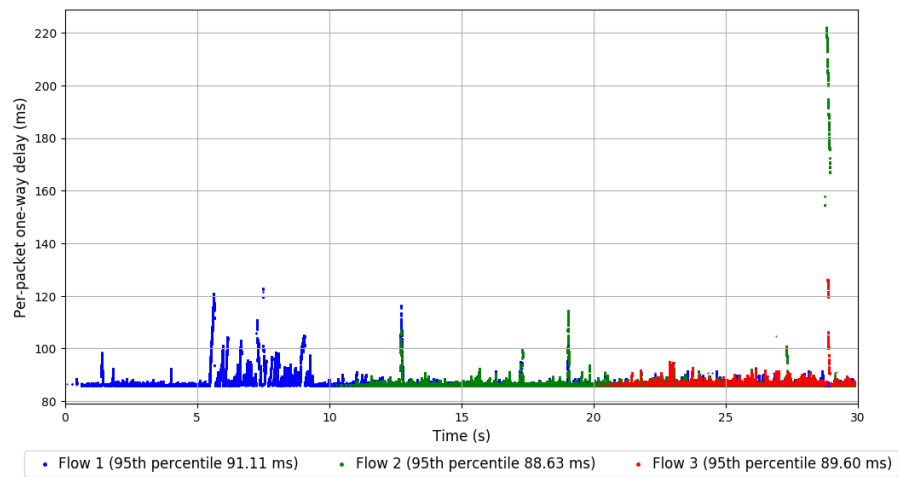
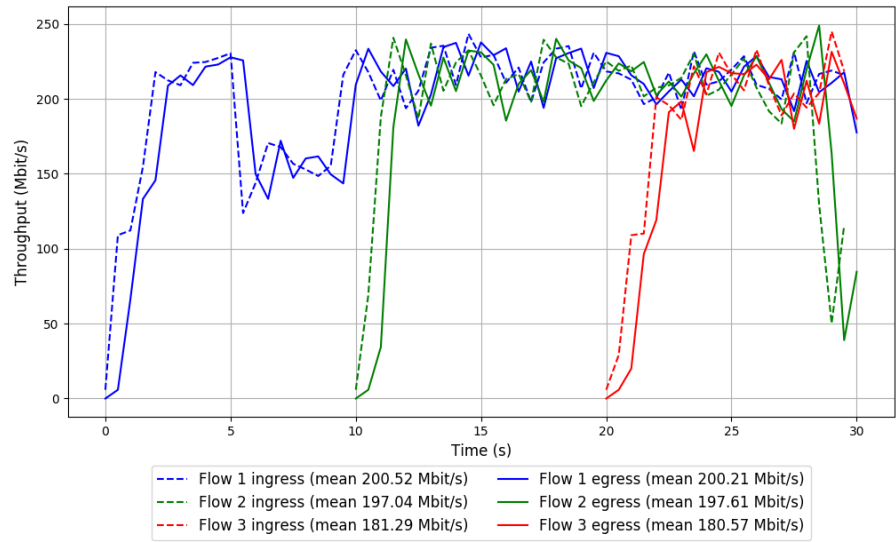


Run 3: Statistics of TaoVA-100x

Start at: 2019-06-27 07:08:52
End at: 2019-06-27 07:09:23
Local clock offset: 0.107 ms
Remote clock offset: -0.022 ms

Below is generated by plot.py at 2019-06-27 10:54:40
Datalink statistics
-- Total of 3 flows:
Average throughput: 390.79 Mbit/s
95th percentile per-packet one-way delay: 89.813 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 200.21 Mbit/s
95th percentile per-packet one-way delay: 91.107 ms
Loss rate: 0.73%
-- Flow 2:
Average throughput: 197.61 Mbit/s
95th percentile per-packet one-way delay: 88.627 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 180.57 Mbit/s
95th percentile per-packet one-way delay: 89.596 ms
Loss rate: 2.11%

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

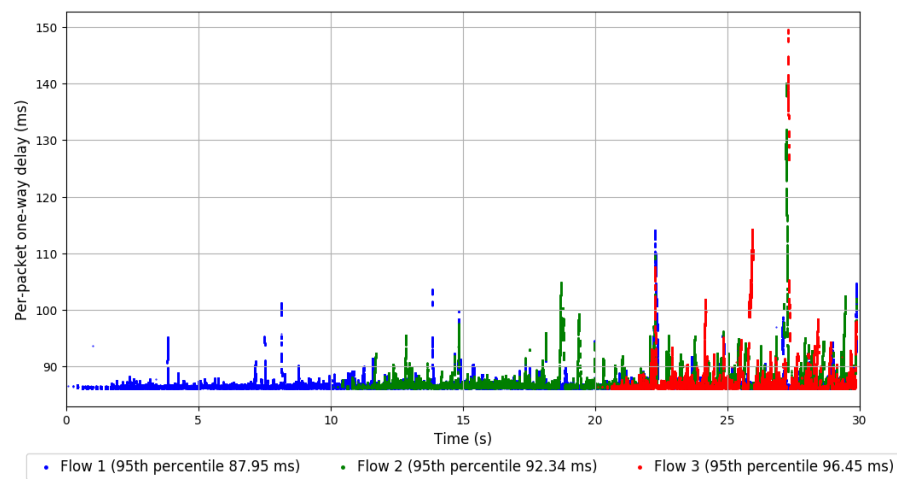
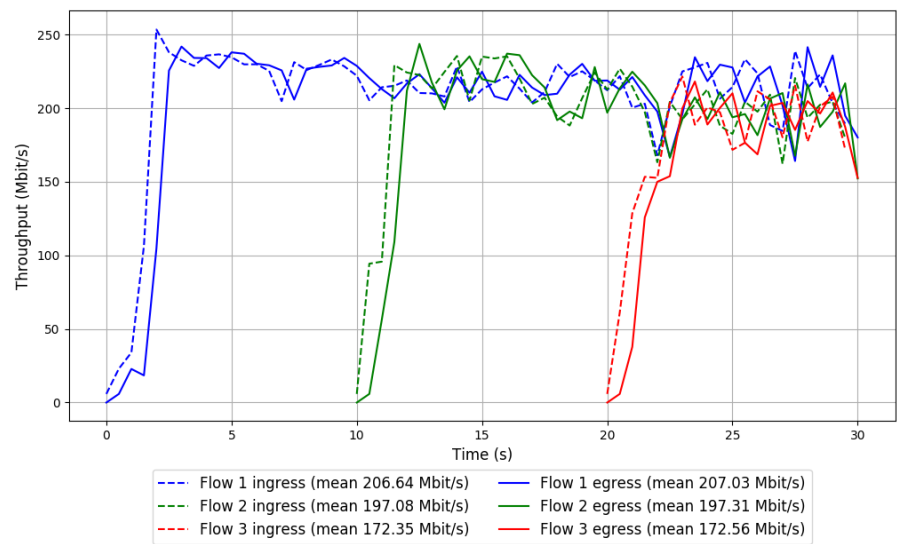


Run 4: Statistics of TaoVA-100x

Start at: 2019-06-27 07:46:52
End at: 2019-06-27 07:47:22
Local clock offset: 0.376 ms
Remote clock offset: -0.101 ms

Below is generated by plot.py at 2019-06-27 10:55:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 394.76 Mbit/s
95th percentile per-packet one-way delay: 90.765 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 207.03 Mbit/s
95th percentile per-packet one-way delay: 87.954 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 197.31 Mbit/s
95th percentile per-packet one-way delay: 92.338 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 172.56 Mbit/s
95th percentile per-packet one-way delay: 96.454 ms
Loss rate: 1.61%

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

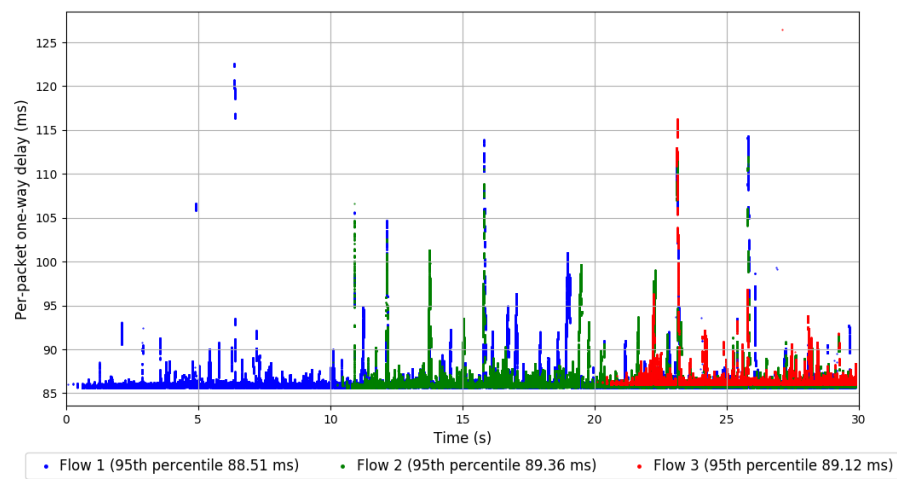
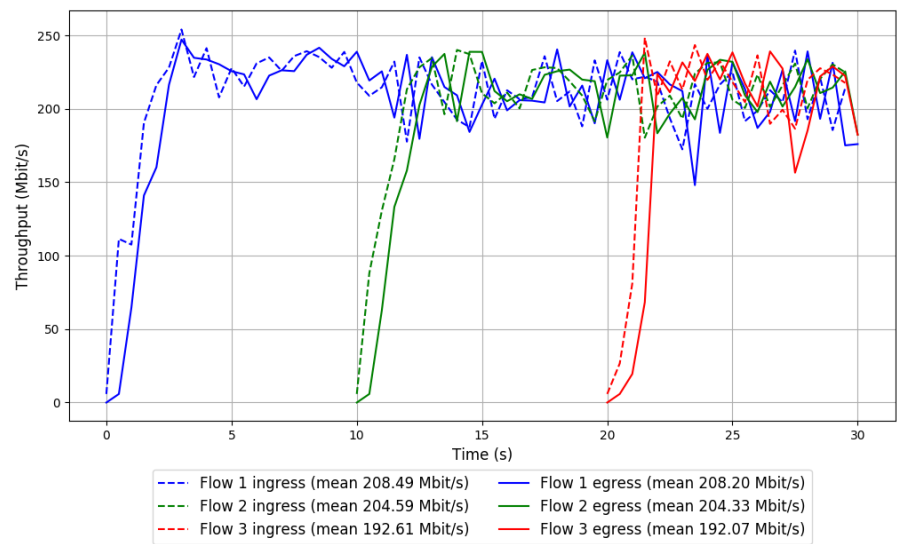


Run 5: Statistics of TaoVA-100x

Start at: 2019-06-27 08:24:23
End at: 2019-06-27 08:24:53
Local clock offset: -0.054 ms
Remote clock offset: -0.022 ms

Below is generated by plot.py at 2019-06-27 10:55:46
Datalink statistics
-- Total of 3 flows:
Average throughput: 406.94 Mbit/s
95th percentile per-packet one-way delay: 88.905 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 208.20 Mbit/s
95th percentile per-packet one-way delay: 88.514 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 204.33 Mbit/s
95th percentile per-packet one-way delay: 89.358 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 192.07 Mbit/s
95th percentile per-packet one-way delay: 89.118 ms
Loss rate: 2.00%

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

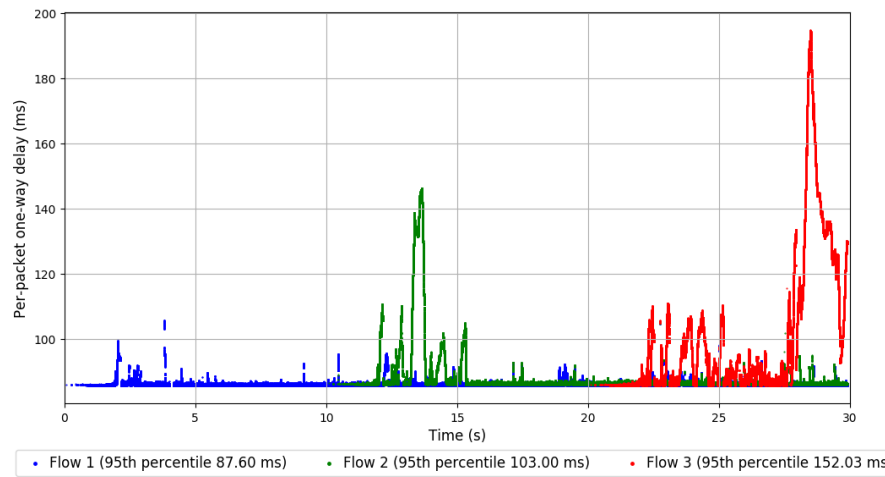
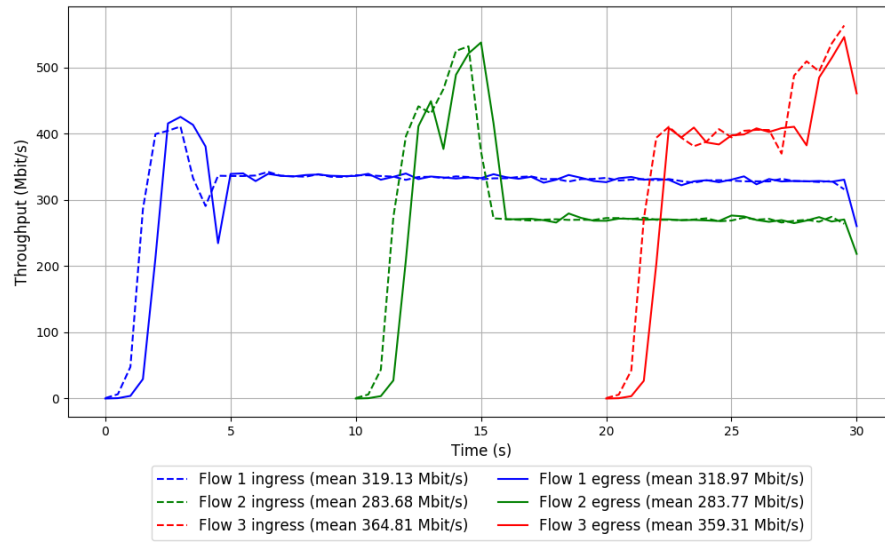


Run 1: Statistics of TCP Vegas

Start at: 2019-06-27 05:45:26
End at: 2019-06-27 05:45:56
Local clock offset: 0.097 ms
Remote clock offset: -0.003 ms

Below is generated by plot.py at 2019-06-27 10:55:46
Datalink statistics
-- Total of 3 flows:
Average throughput: 625.45 Mbit/s
95th percentile per-packet one-way delay: 119.061 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 318.97 Mbit/s
95th percentile per-packet one-way delay: 87.599 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 283.77 Mbit/s
95th percentile per-packet one-way delay: 102.997 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 359.31 Mbit/s
95th percentile per-packet one-way delay: 152.030 ms
Loss rate: 3.22%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2019-06-27 06:22:41

End at: 2019-06-27 06:23:11

Local clock offset: -0.33 ms

Remote clock offset: -0.05 ms

Below is generated by plot.py at 2019-06-27 11:01:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 631.64 Mbit/s

95th percentile per-packet one-way delay: 127.212 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 375.35 Mbit/s

95th percentile per-packet one-way delay: 132.684 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 226.57 Mbit/s

95th percentile per-packet one-way delay: 101.339 ms

Loss rate: 0.93%

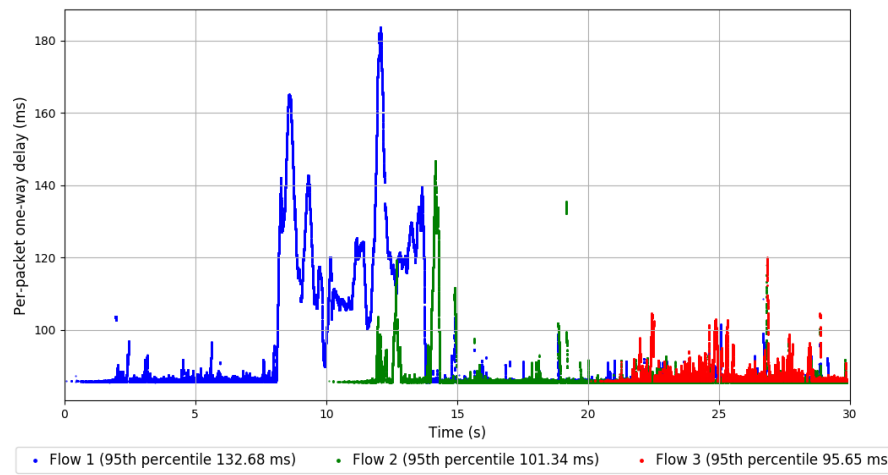
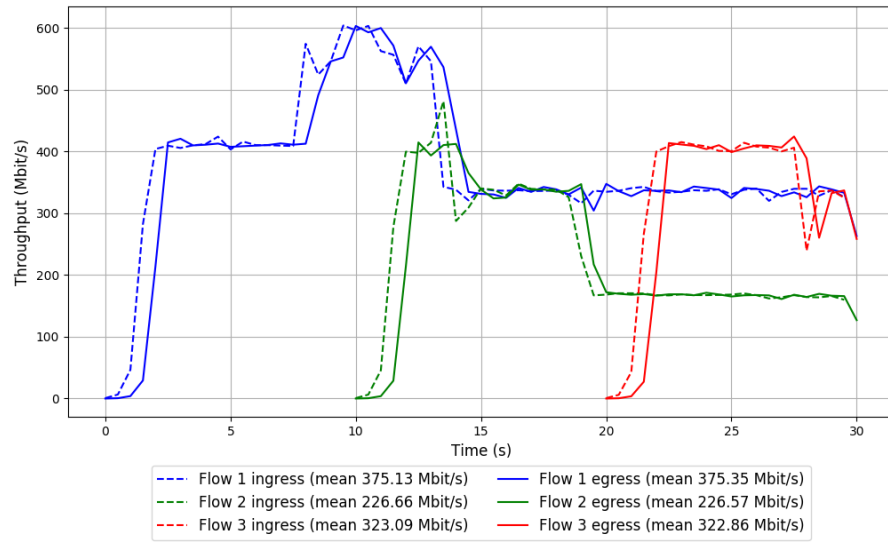
-- Flow 3:

Average throughput: 322.86 Mbit/s

95th percentile per-packet one-way delay: 95.648 ms

Loss rate: 1.82%

Run 2: Report of TCP Vegas — Data Link

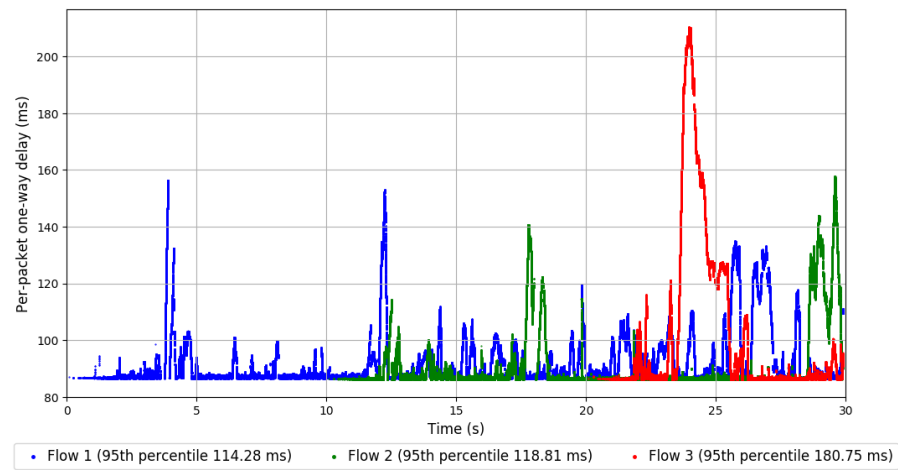
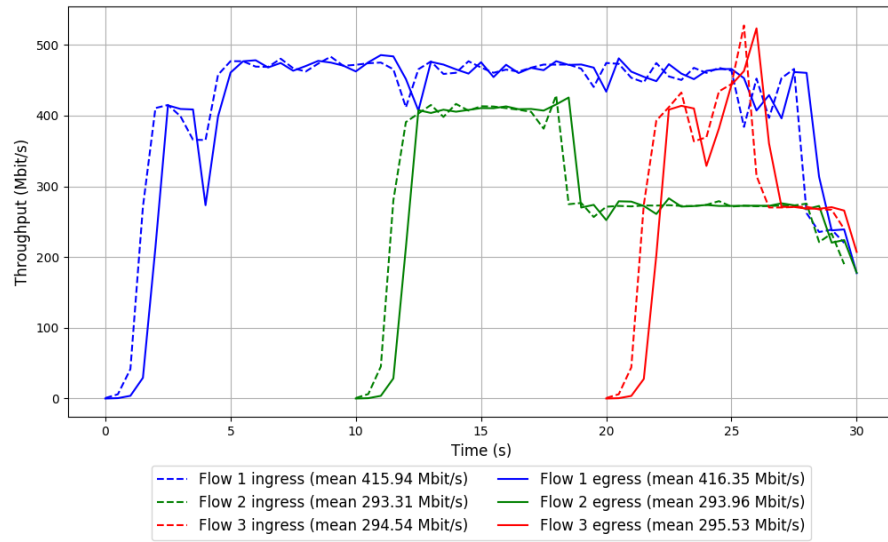


Run 3: Statistics of TCP Vegas

Start at: 2019-06-27 07:00:26
End at: 2019-06-27 07:00:56
Local clock offset: 0.364 ms
Remote clock offset: -0.017 ms

Below is generated by plot.py at 2019-06-27 11:03:53
Datalink statistics
-- Total of 3 flows:
Average throughput: 708.71 Mbit/s
95th percentile per-packet one-way delay: 125.797 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 416.35 Mbit/s
95th percentile per-packet one-way delay: 114.275 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 293.96 Mbit/s
95th percentile per-packet one-way delay: 118.810 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 295.53 Mbit/s
95th percentile per-packet one-way delay: 180.755 ms
Loss rate: 1.40%

Run 3: Report of TCP Vegas — Data Link

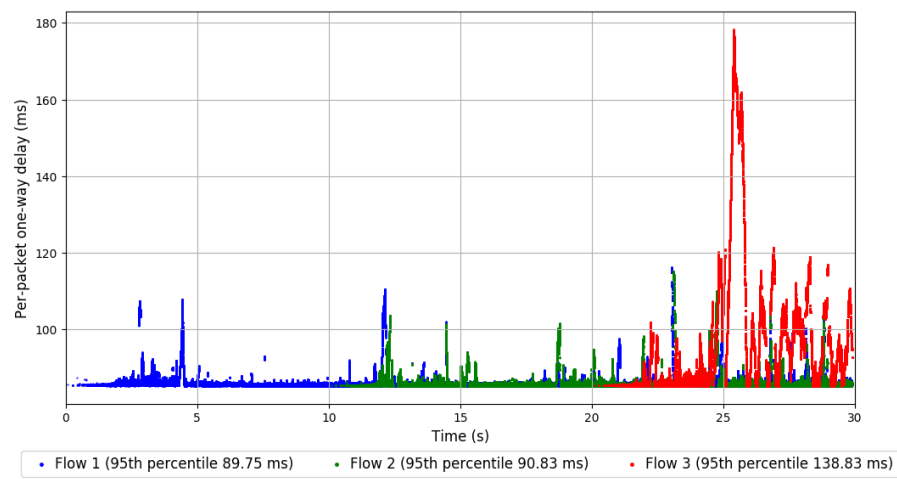
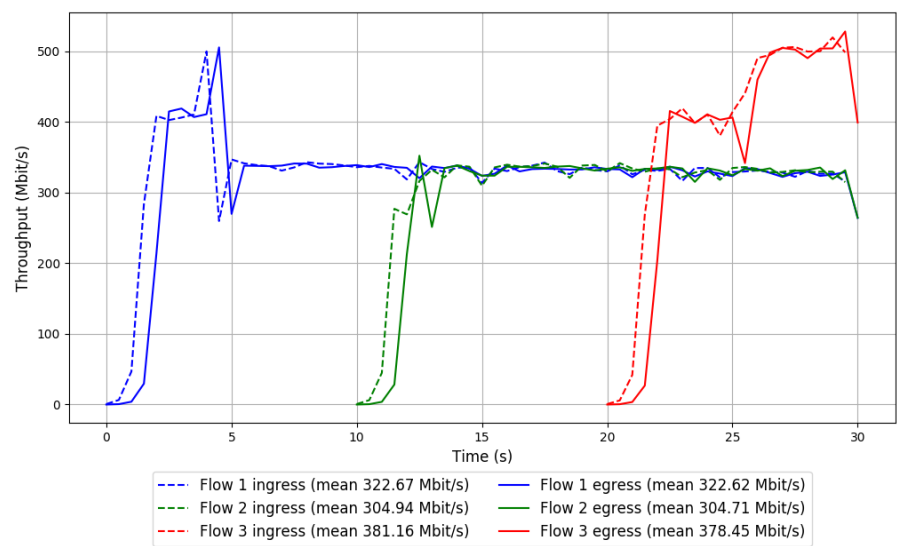


Run 4: Statistics of TCP Vegas

Start at: 2019-06-27 07:38:15
End at: 2019-06-27 07:38:45
Local clock offset: -0.448 ms
Remote clock offset: -0.001 ms

Below is generated by plot.py at 2019-06-27 11:05:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 649.29 Mbit/s
95th percentile per-packet one-way delay: 103.688 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 322.62 Mbit/s
95th percentile per-packet one-way delay: 89.754 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 304.71 Mbit/s
95th percentile per-packet one-way delay: 90.835 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 378.45 Mbit/s
95th percentile per-packet one-way delay: 138.832 ms
Loss rate: 2.44%

Run 4: Report of TCP Vegas — Data Link

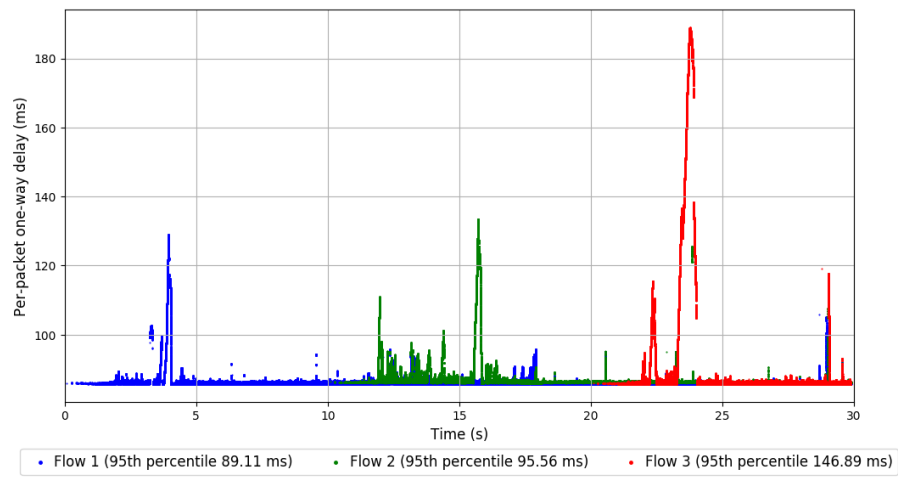
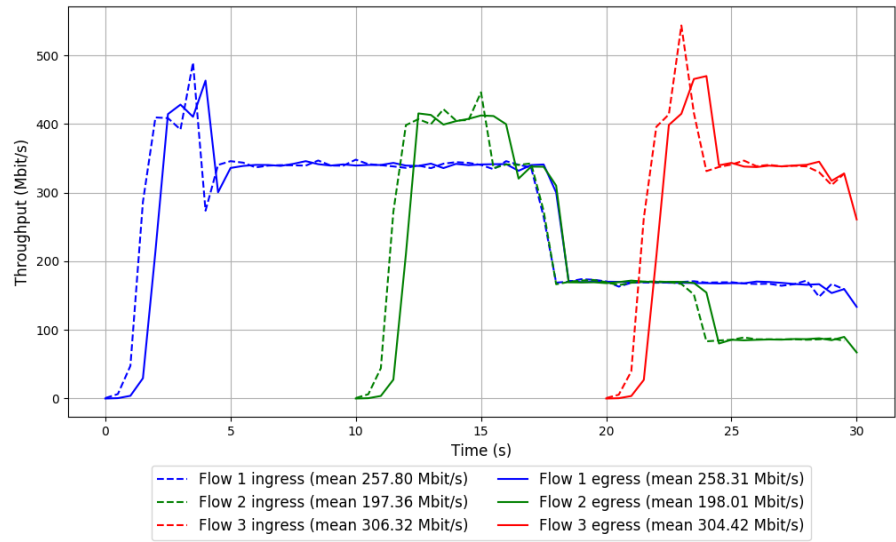


Run 5: Statistics of TCP Vegas

Start at: 2019-06-27 08:16:06
End at: 2019-06-27 08:16:36
Local clock offset: -0.087 ms
Remote clock offset: -0.076 ms

Below is generated by plot.py at 2019-06-27 11:05:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 489.70 Mbit/s
95th percentile per-packet one-way delay: 98.683 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 258.31 Mbit/s
95th percentile per-packet one-way delay: 89.105 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 198.01 Mbit/s
95th percentile per-packet one-way delay: 95.565 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 304.42 Mbit/s
95th percentile per-packet one-way delay: 146.890 ms
Loss rate: 2.35%

Run 5: Report of TCP Vegas — Data Link

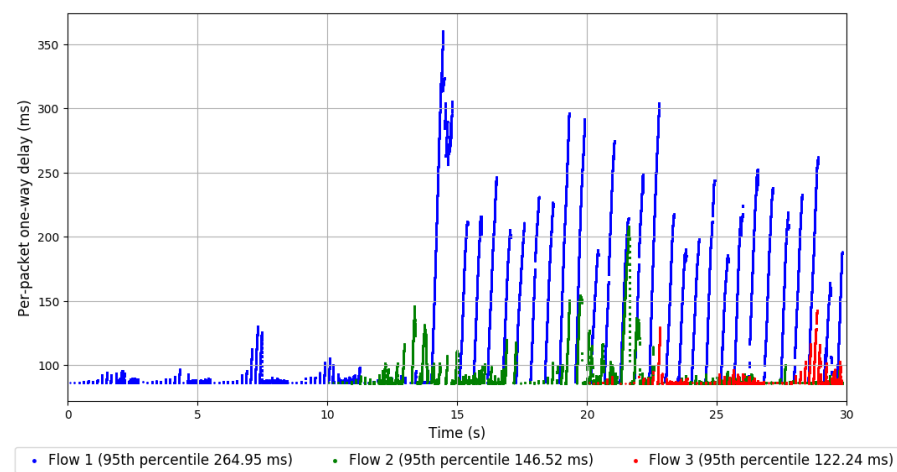
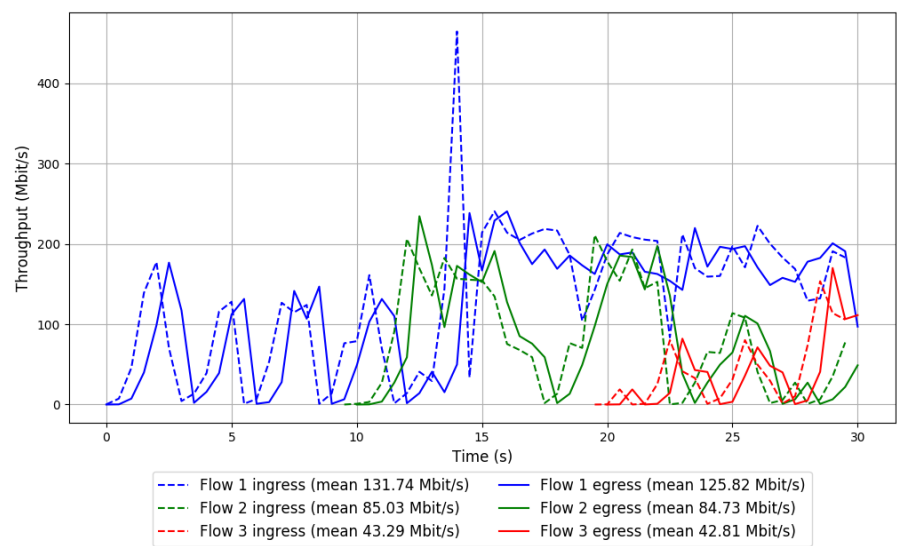


Run 1: Statistics of Verus

Start at: 2019-06-27 05:39:43
End at: 2019-06-27 05:40:13
Local clock offset: 0.385 ms
Remote clock offset: -0.046 ms

Below is generated by plot.py at 2019-06-27 11:05:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 196.17 Mbit/s
95th percentile per-packet one-way delay: 246.937 ms
Loss rate: 3.44%
-- Flow 1:
Average throughput: 125.82 Mbit/s
95th percentile per-packet one-way delay: 264.952 ms
Loss rate: 4.46%
-- Flow 2:
Average throughput: 84.73 Mbit/s
95th percentile per-packet one-way delay: 146.521 ms
Loss rate: 1.23%
-- Flow 3:
Average throughput: 42.81 Mbit/s
95th percentile per-packet one-way delay: 122.241 ms
Loss rate: 2.84%

Run 1: Report of Verus — Data Link

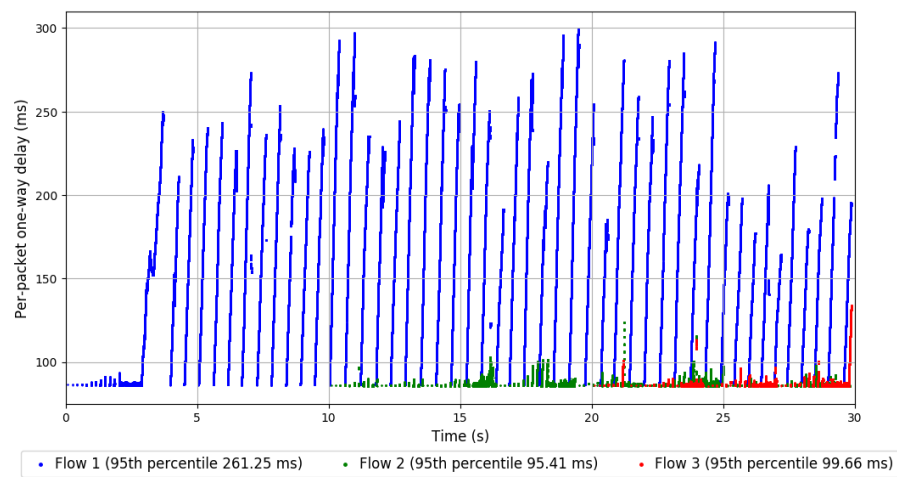
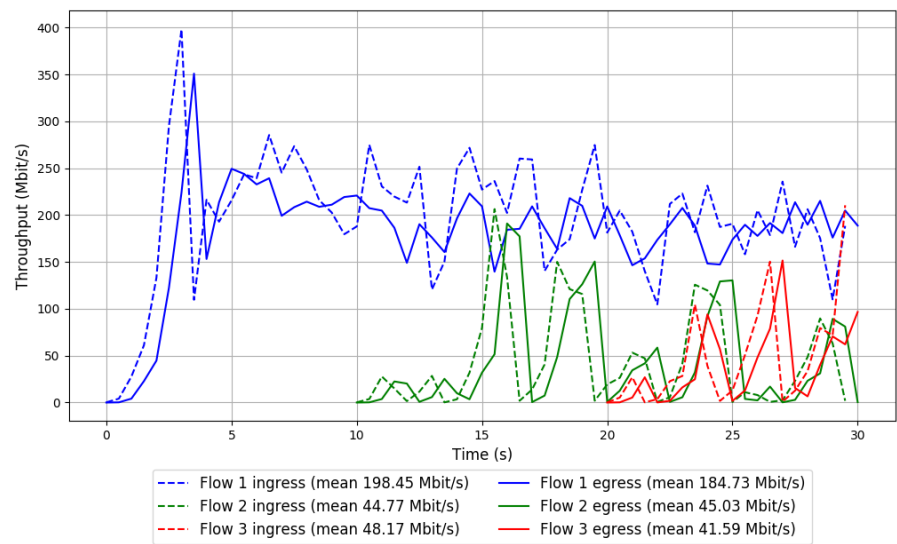


Run 2: Statistics of Verus

Start at: 2019-06-27 06:17:06
End at: 2019-06-27 06:17:36
Local clock offset: -0.146 ms
Remote clock offset: -0.047 ms

Below is generated by plot.py at 2019-06-27 11:05:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 228.17 Mbit/s
95th percentile per-packet one-way delay: 255.671 ms
Loss rate: 6.37%
-- Flow 1:
Average throughput: 184.73 Mbit/s
95th percentile per-packet one-way delay: 261.252 ms
Loss rate: 6.64%
-- Flow 2:
Average throughput: 45.03 Mbit/s
95th percentile per-packet one-way delay: 95.410 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 41.59 Mbit/s
95th percentile per-packet one-way delay: 99.657 ms
Loss rate: 14.47%

Run 2: Report of Verus — Data Link

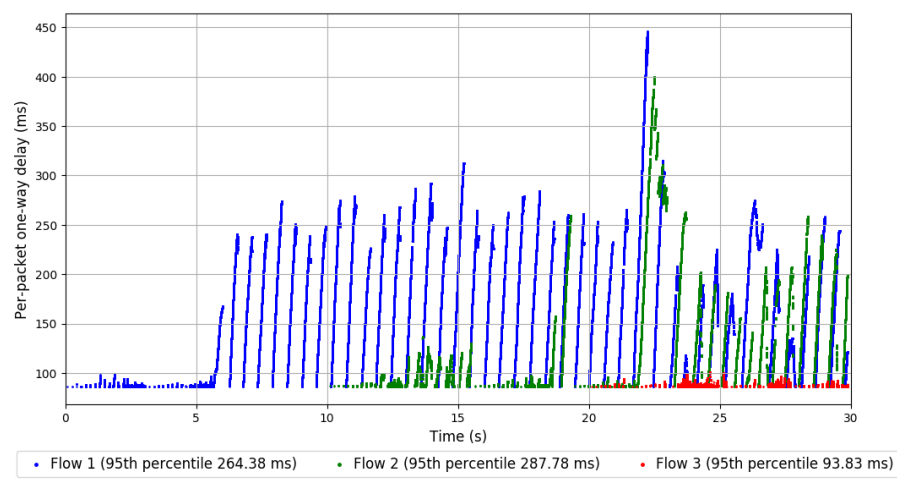
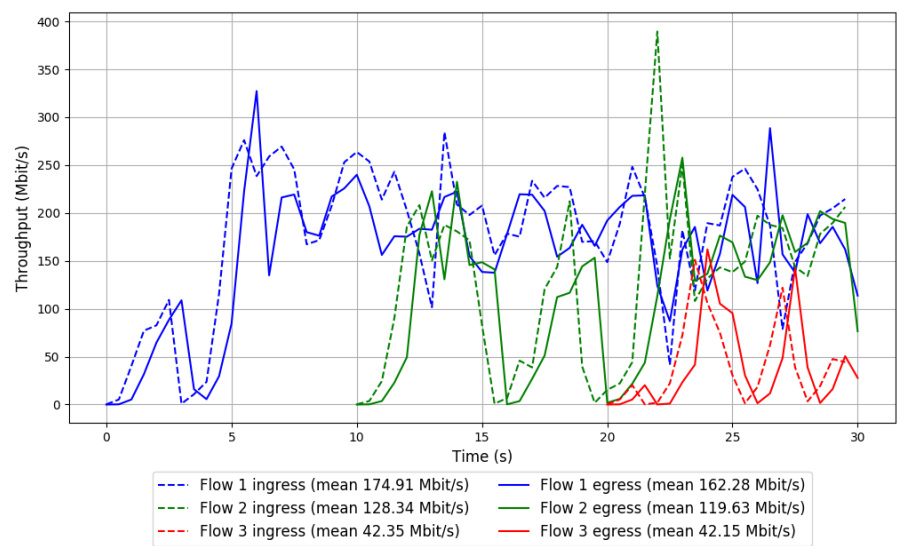


Run 3: Statistics of Verus

Start at: 2019-06-27 06:54:46
End at: 2019-06-27 06:55:16
Local clock offset: 0.322 ms
Remote clock offset: -0.079 ms

Below is generated by plot.py at 2019-06-27 11:05:12
Datalink statistics
-- Total of 3 flows:
Average throughput: 255.51 Mbit/s
95th percentile per-packet one-way delay: 266.582 ms
Loss rate: 7.11%
-- Flow 1:
Average throughput: 162.28 Mbit/s
95th percentile per-packet one-way delay: 264.378 ms
Loss rate: 7.61%
-- Flow 2:
Average throughput: 119.63 Mbit/s
95th percentile per-packet one-way delay: 287.782 ms
Loss rate: 6.88%
-- Flow 3:
Average throughput: 42.15 Mbit/s
95th percentile per-packet one-way delay: 93.826 ms
Loss rate: 2.20%

Run 3: Report of Verus — Data Link

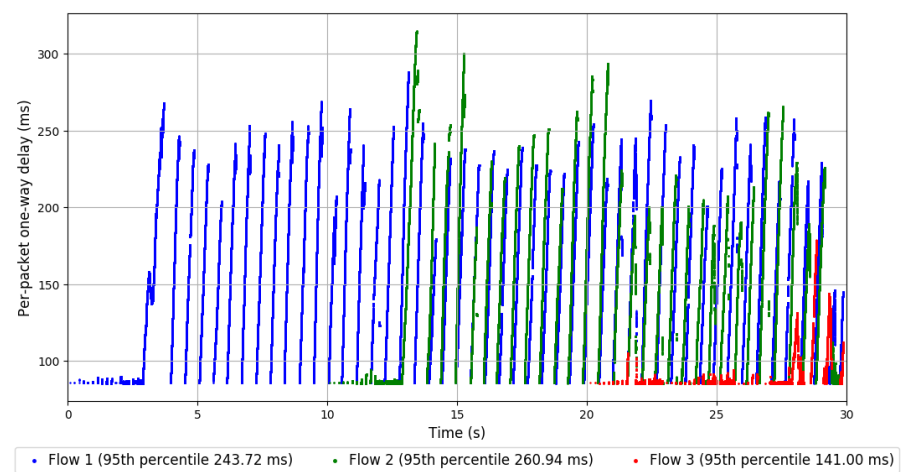
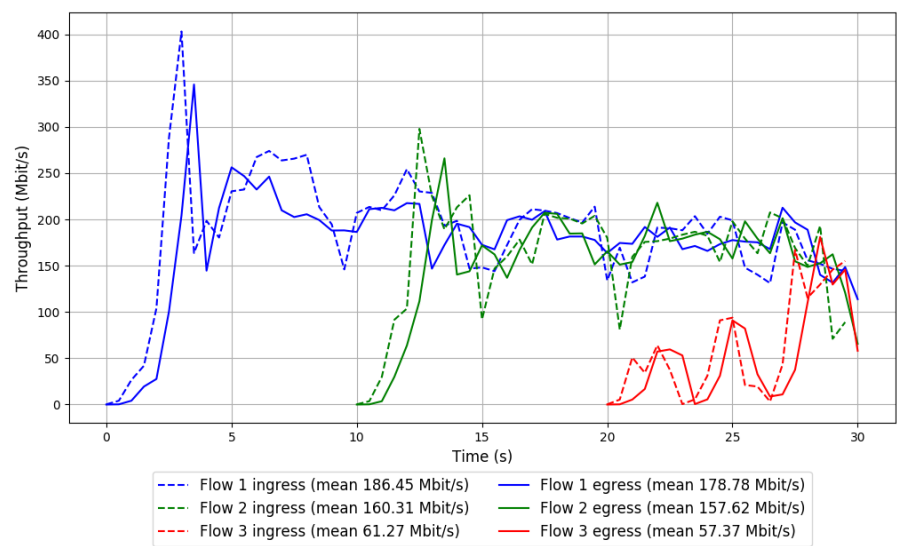


Run 4: Statistics of Verus

Start at: 2019-06-27 07:32:24
End at: 2019-06-27 07:32:54
Local clock offset: -0.178 ms
Remote clock offset: -0.019 ms

Below is generated by plot.py at 2019-06-27 11:07:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 301.66 Mbit/s
95th percentile per-packet one-way delay: 248.007 ms
Loss rate: 4.06%
-- Flow 1:
Average throughput: 178.78 Mbit/s
95th percentile per-packet one-way delay: 243.725 ms
Loss rate: 4.21%
-- Flow 2:
Average throughput: 157.62 Mbit/s
95th percentile per-packet one-way delay: 260.943 ms
Loss rate: 3.05%
-- Flow 3:
Average throughput: 57.37 Mbit/s
95th percentile per-packet one-way delay: 141.002 ms
Loss rate: 7.99%

Run 4: Report of Verus — Data Link

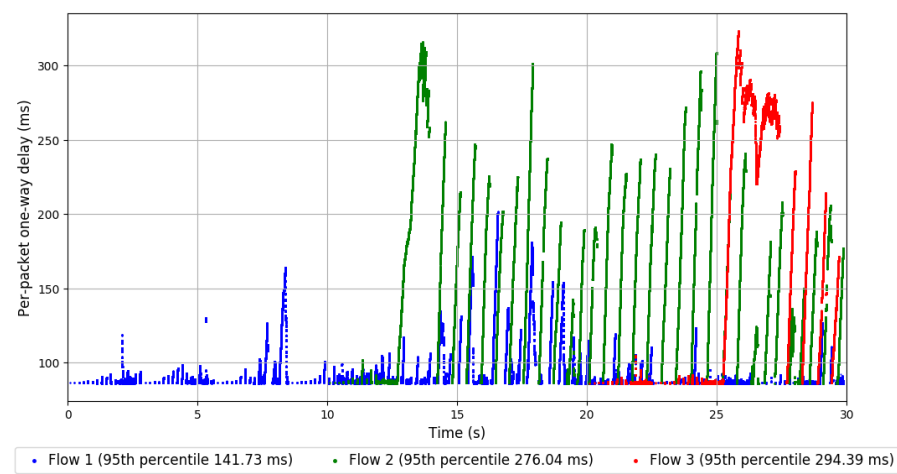
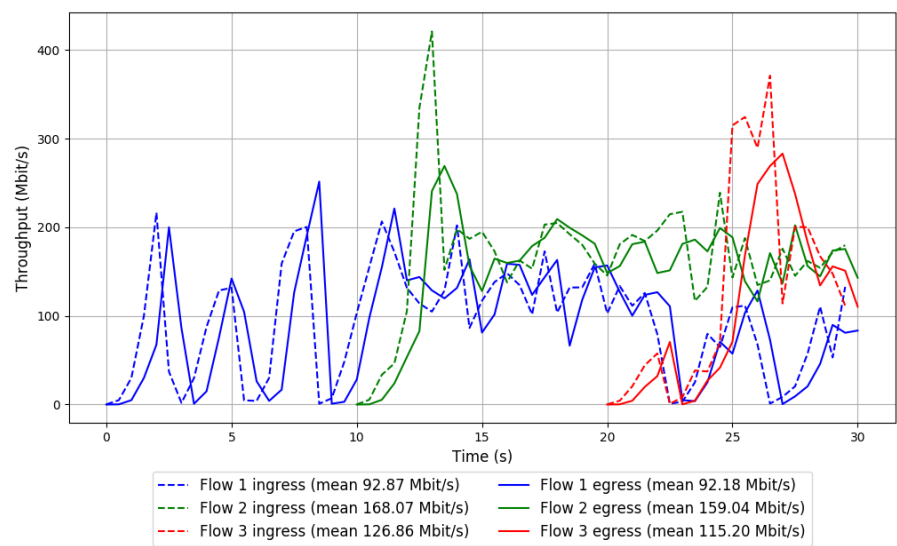


Run 5: Statistics of Verus

Start at: 2019-06-27 08:10:24
End at: 2019-06-27 08:10:54
Local clock offset: -0.067 ms
Remote clock offset: -0.108 ms

Below is generated by plot.py at 2019-06-27 11:09:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 234.94 Mbit/s
95th percentile per-packet one-way delay: 275.746 ms
Loss rate: 5.11%
-- Flow 1:
Average throughput: 92.18 Mbit/s
95th percentile per-packet one-way delay: 141.728 ms
Loss rate: 1.32%
-- Flow 2:
Average throughput: 159.04 Mbit/s
95th percentile per-packet one-way delay: 276.041 ms
Loss rate: 5.57%
-- Flow 3:
Average throughput: 115.20 Mbit/s
95th percentile per-packet one-way delay: 294.390 ms
Loss rate: 12.28%

Run 5: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2019-06-27 05:47:16

End at: 2019-06-27 05:47:46

Local clock offset: 0.527 ms

Remote clock offset: 0.007 ms

Below is generated by plot.py at 2019-06-27 11:09:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 347.93 Mbit/s

95th percentile per-packet one-way delay: 100.702 ms

Loss rate: 1.15%

-- Flow 1:

Average throughput: 167.50 Mbit/s

95th percentile per-packet one-way delay: 103.183 ms

Loss rate: 0.82%

-- Flow 2:

Average throughput: 204.14 Mbit/s

95th percentile per-packet one-way delay: 91.728 ms

Loss rate: 1.05%

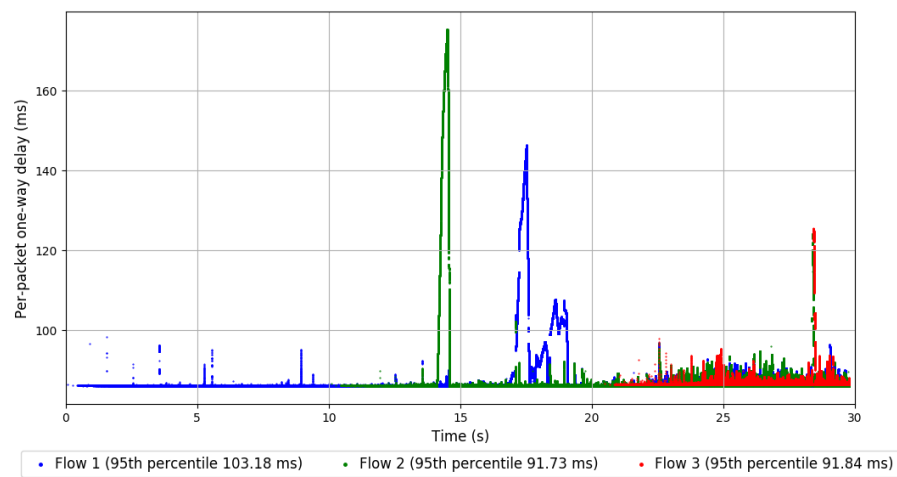
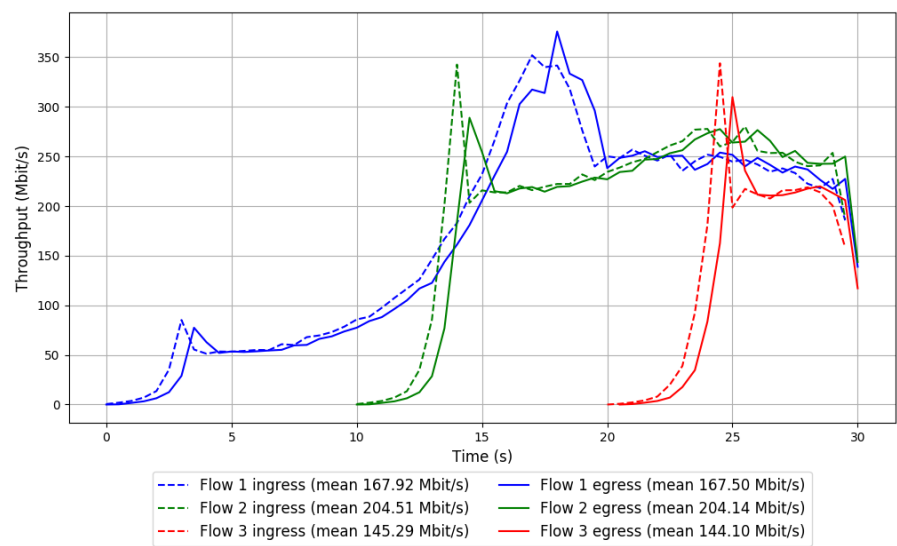
-- Flow 3:

Average throughput: 144.10 Mbit/s

95th percentile per-packet one-way delay: 91.840 ms

Loss rate: 2.63%

Run 1: Report of PCC-Vivace — Data Link

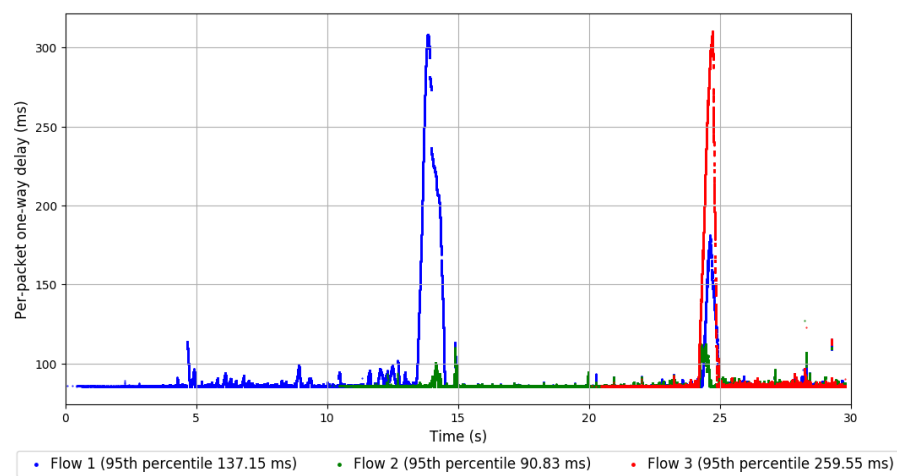
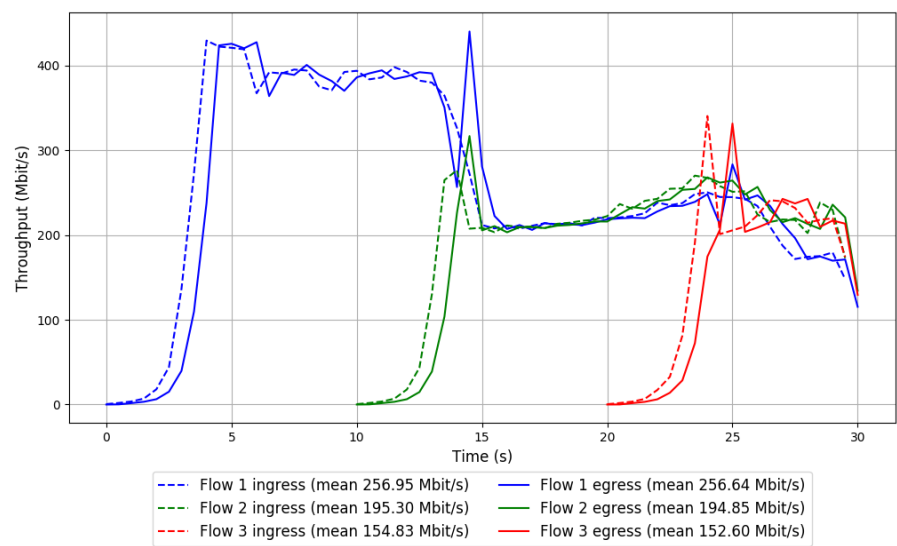


Run 2: Statistics of PCC-Vivace

Start at: 2019-06-27 06:24:30
End at: 2019-06-27 06:25:00
Local clock offset: -0.271 ms
Remote clock offset: -0.049 ms

Below is generated by plot.py at 2019-06-27 11:10:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 435.52 Mbit/s
95th percentile per-packet one-way delay: 113.378 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 256.64 Mbit/s
95th percentile per-packet one-way delay: 137.147 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 194.85 Mbit/s
95th percentile per-packet one-way delay: 90.835 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 152.60 Mbit/s
95th percentile per-packet one-way delay: 259.552 ms
Loss rate: 3.14%

Run 2: Report of PCC-Vivace — Data Link

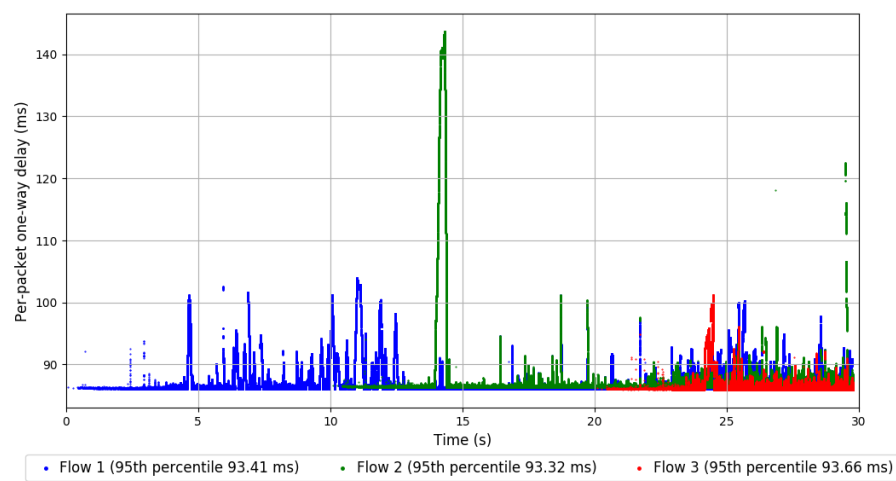
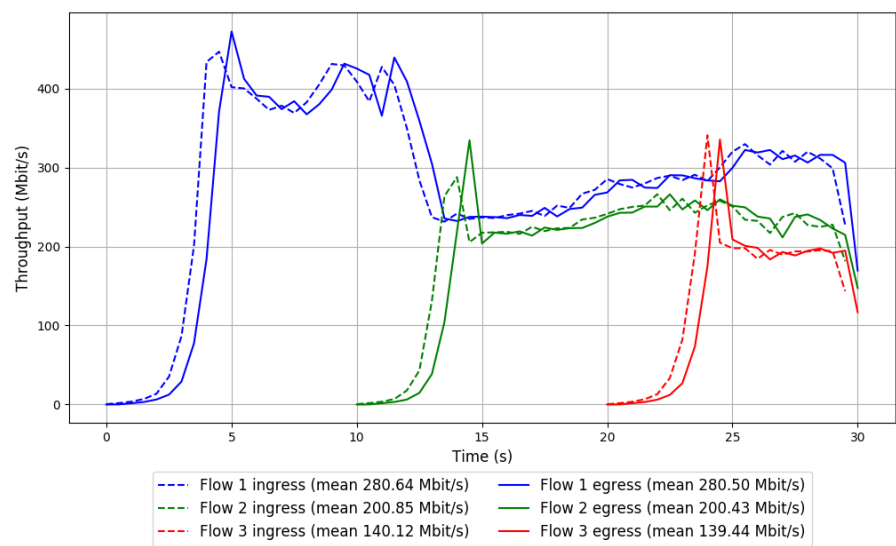


Run 3: Statistics of PCC-Vivace

Start at: 2019-06-27 07:02:20
End at: 2019-06-27 07:02:50
Local clock offset: 0.152 ms
Remote clock offset: -0.039 ms

Below is generated by plot.py at 2019-06-27 11:10:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 458.89 Mbit/s
95th percentile per-packet one-way delay: 93.466 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 280.50 Mbit/s
95th percentile per-packet one-way delay: 93.410 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 200.43 Mbit/s
95th percentile per-packet one-way delay: 93.318 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 139.44 Mbit/s
95th percentile per-packet one-way delay: 93.655 ms
Loss rate: 2.23%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2019-06-27 07:40:06

End at: 2019-06-27 07:40:36

Local clock offset: 0.4 ms

Remote clock offset: -0.07 ms

Below is generated by plot.py at 2019-06-27 11:10:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 348.14 Mbit/s

95th percentile per-packet one-way delay: 89.833 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 238.33 Mbit/s

95th percentile per-packet one-way delay: 89.508 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 96.73 Mbit/s

95th percentile per-packet one-way delay: 87.680 ms

Loss rate: 1.67%

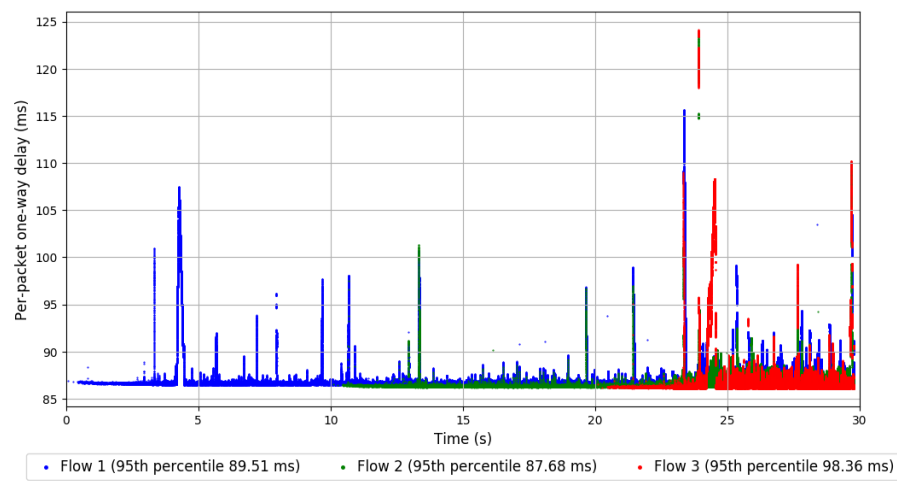
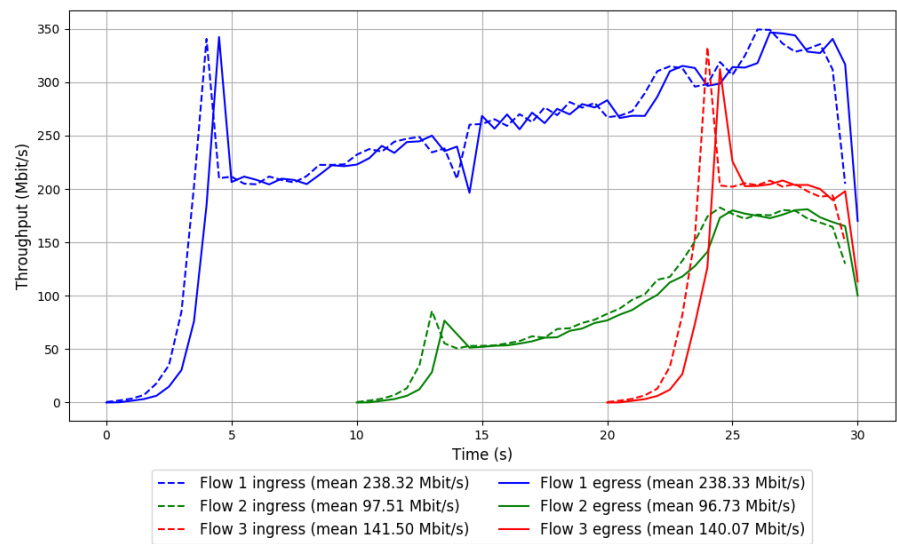
-- Flow 3:

Average throughput: 140.07 Mbit/s

95th percentile per-packet one-way delay: 98.360 ms

Loss rate: 2.77%

Run 4: Report of PCC-Vivace — Data Link

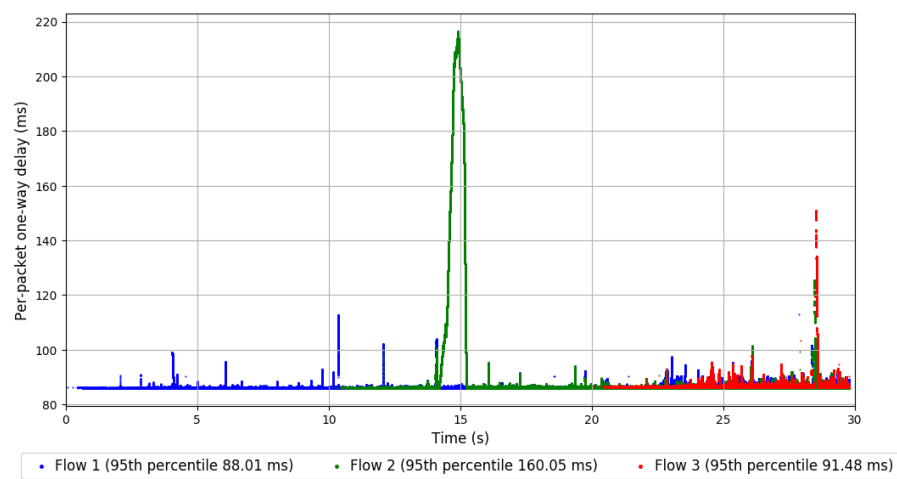
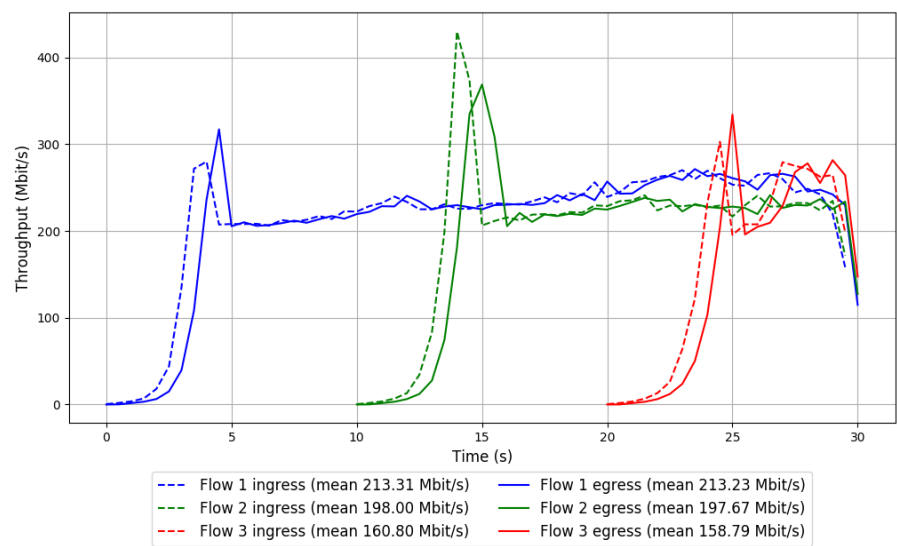


Run 5: Statistics of PCC-Vivace

Start at: 2019-06-27 08:17:49
End at: 2019-06-27 08:18:19
Local clock offset: 0.232 ms
Remote clock offset: -0.075 ms

Below is generated by plot.py at 2019-06-27 11:10:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 396.02 Mbit/s
95th percentile per-packet one-way delay: 91.314 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 213.23 Mbit/s
95th percentile per-packet one-way delay: 88.008 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 197.67 Mbit/s
95th percentile per-packet one-way delay: 160.050 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 158.79 Mbit/s
95th percentile per-packet one-way delay: 91.485 ms
Loss rate: 2.98%

Run 5: Report of PCC-Vivace — Data Link

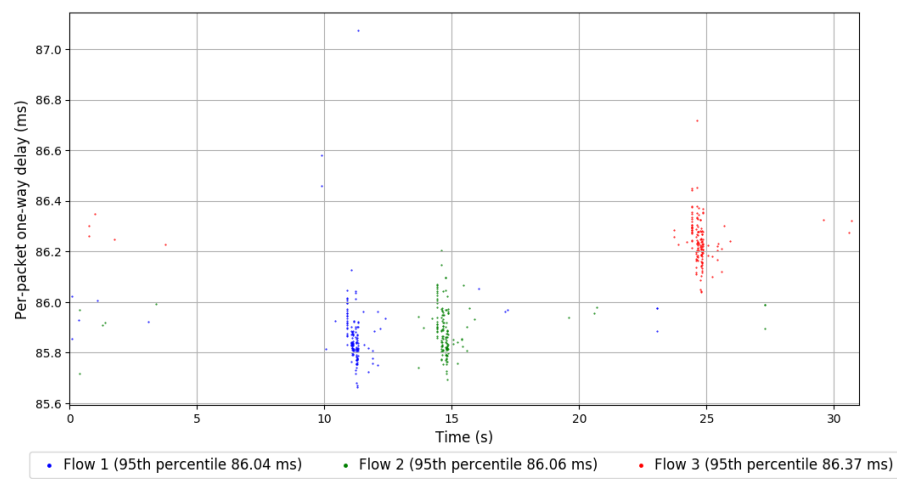
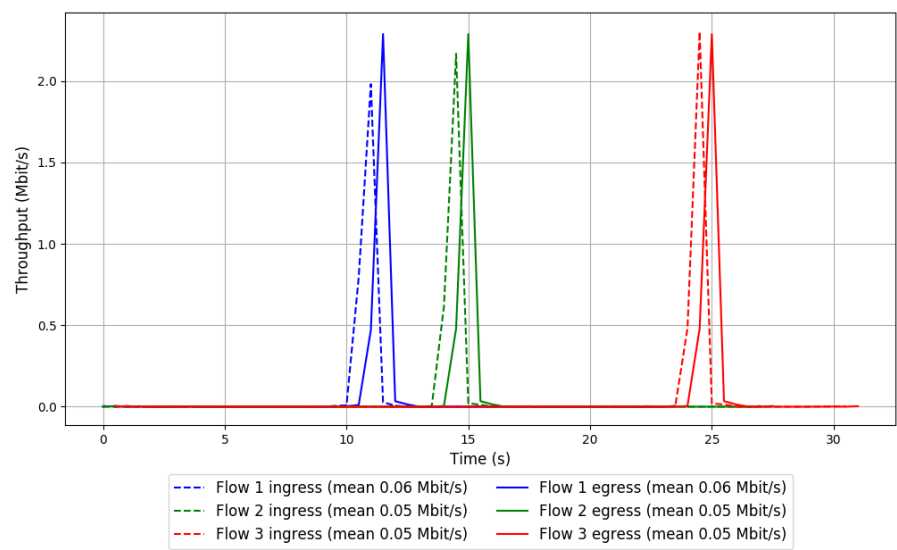


```
Run 1: Statistics of WebRTC media

Start at: 2019-06-27 05:29:35
End at: 2019-06-27 05:30:05
Local clock offset: 0.112 ms
Remote clock offset: -0.001 ms

# Below is generated by plot.py at 2019-06-27 11:10:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 86.327 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 86.036 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.060 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.373 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2019-06-27 06:07:00

End at: 2019-06-27 06:07:30

Local clock offset: -0.453 ms

Remote clock offset: -0.06 ms

Below is generated by plot.py at 2019-06-27 11:10:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 85.914 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 85.959 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 85.799 ms

Loss rate: 0.00%

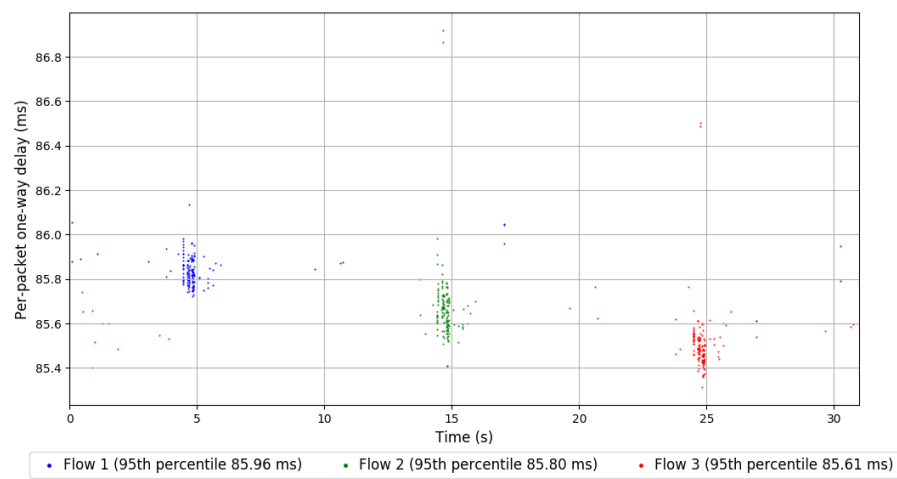
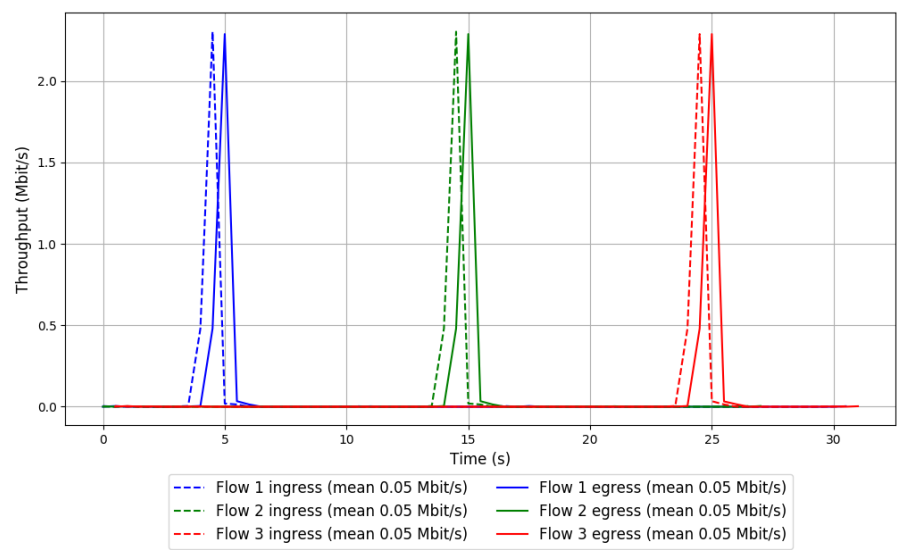
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 85.614 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

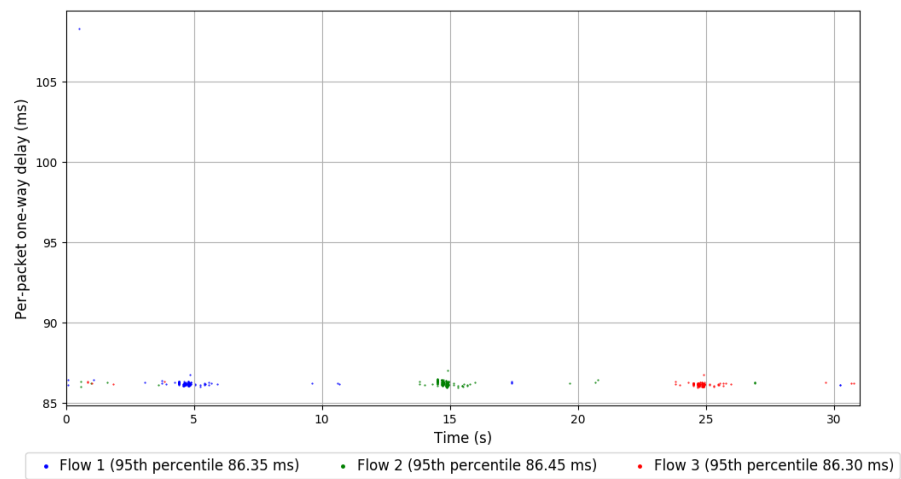
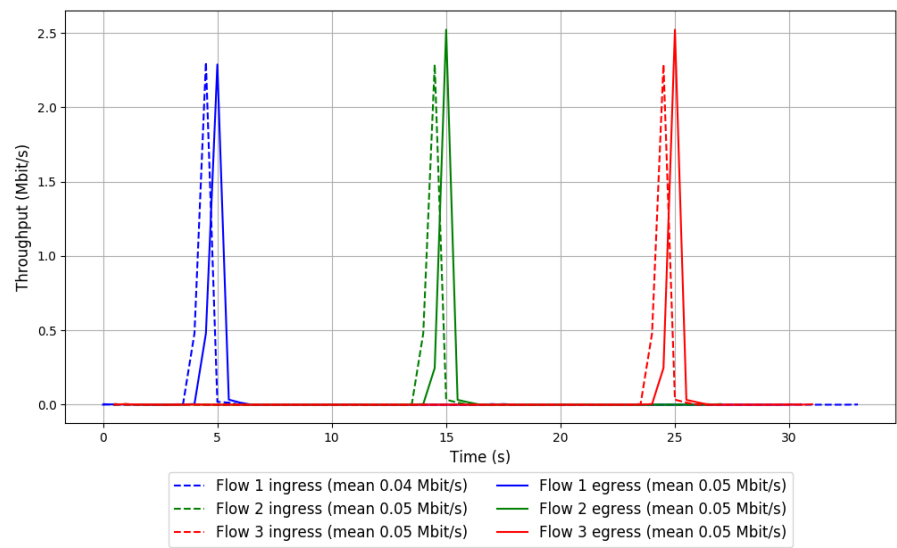


Run 3: Statistics of WebRTC media

Start at: 2019-06-27 06:44:37
End at: 2019-06-27 06:45:07
Local clock offset: 0.103 ms
Remote clock offset: -0.041 ms

Below is generated by plot.py at 2019-06-27 11:10:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 86.400 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.349 ms
Loss rate: 0.05%
-- 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: 86.303 ms
Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

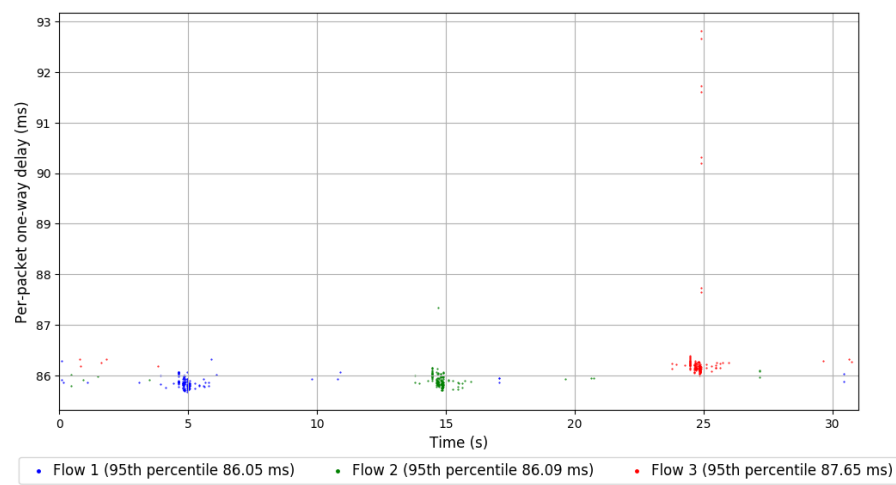
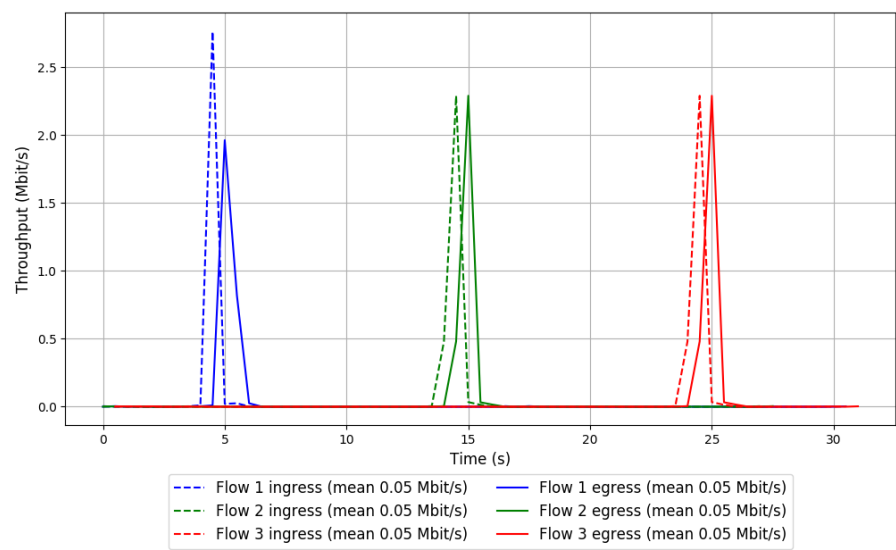


Run 4: Statistics of WebRTC media

Start at: 2019-06-27 07:22:13
End at: 2019-06-27 07:22:43
Local clock offset: -0.1 ms
Remote clock offset: -0.018 ms

Below is generated by plot.py at 2019-06-27 11:10:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 86.284 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.050 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.088 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 87.652 ms
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-06-27 08:00:17
End at: 2019-06-27 08:00:47
Local clock offset: 0.18 ms
Remote clock offset: -0.096 ms

Below is generated by plot.py at 2019-06-27 11:10:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 86.544 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.559 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.459 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.300 ms
Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

