

## Pantheon Report

Generated at 2019-01-03 04:33:13 (UTC).

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

Repeated the test of 19 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:

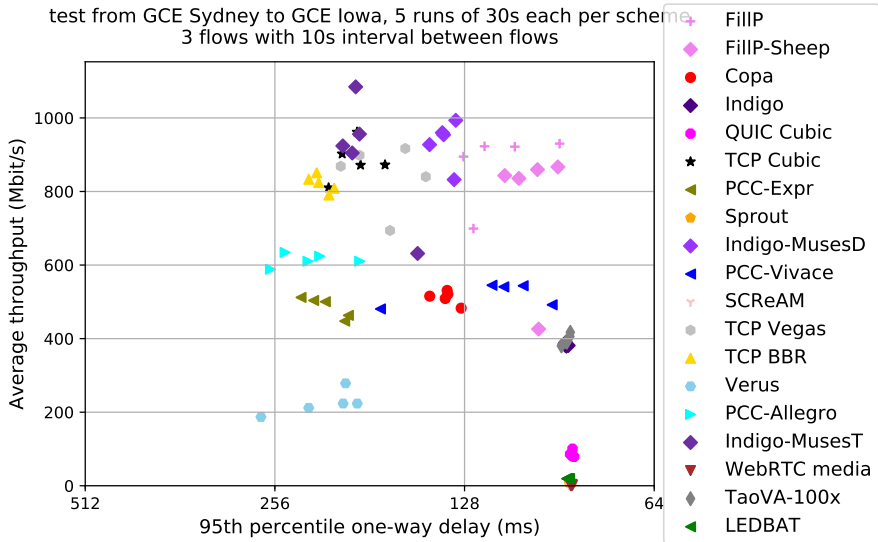
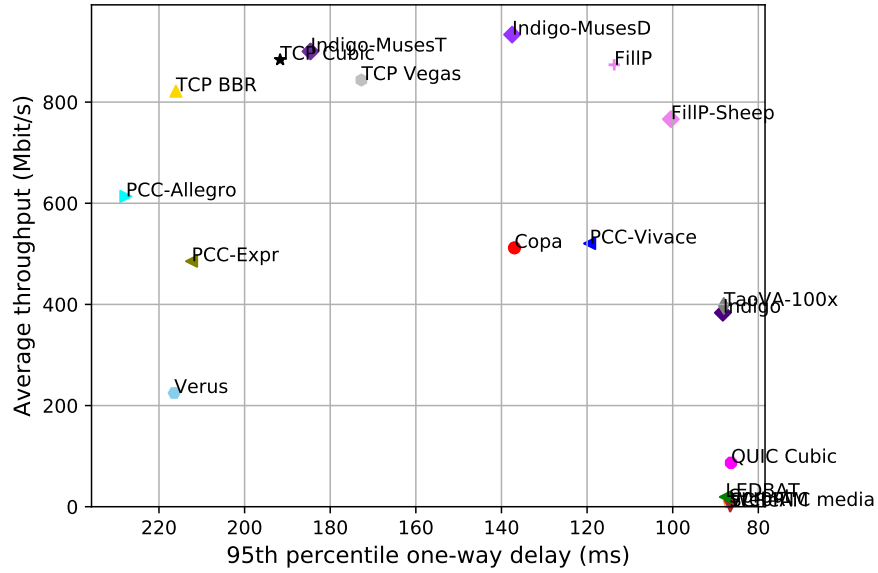
```
Linux 4.15.0-1025-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

### Git summary:

```
branch: muses @ c654af0b7d59d4ef4b914cfac404e1fc2e96dc68
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfc58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 65ac1b19bbefed0c6349ae986009b4fa8643c40a
third_party/muses-refactored @ 31f8f0ba8ef8b1da76c2bc0cd0a7850c33ff64fb
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
```

```
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

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



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	435.46	400.88	358.14	202.93	228.34	228.06	1.58	2.76	2.21
Copa	5	270.84	253.35	217.47	130.52	142.42	144.37	0.01	0.03	0.04
TCP Cubic	5	476.09	433.64	357.26	191.92	182.56	186.62	0.22	0.24	0.58
FillP	5	534.58	375.86	268.03	121.00	91.32	91.06	0.41	0.00	0.01
FillP-Sheep	5	466.34	333.93	234.91	109.94	90.04	89.22	0.20	0.00	0.00
Indigo	5	204.70	191.32	161.17	87.71	88.81	89.16	0.00	0.00	0.00
Indigo-MusesD	5	497.71	485.30	350.40	137.74	140.89	124.75	0.12	0.10	0.03
Indigo-MusesT	5	556.80	407.48	279.39	186.13	165.38	133.85	1.58	0.32	0.49
LEDBAT	5	12.52	8.33	4.11	87.82	87.38	86.96	0.00	0.00	0.00
PCC-Allegro	5	344.38	288.12	236.30	234.16	194.45	213.28	6.78	0.98	1.55
PCC-Expr	5	282.51	214.19	182.90	212.09	163.28	165.44	4.27	1.71	3.30
QUIC Cubic	5	51.40	43.39	20.43	86.26	86.32	86.23	0.00	0.00	0.00
SCReAM	5	0.22	0.22	0.22	86.45	86.69	86.51	0.00	0.00	0.00
Sprout	5	4.34	4.29	3.18	86.72	86.88	86.77	0.00	0.00	0.00
TaoVA-100x	5	205.31	199.07	177.84	87.54	87.59	90.23	0.00	0.00	0.00
TCP Vegas	5	451.61	400.11	377.61	158.96	158.40	157.81	0.06	0.15	0.49
Verus	5	140.31	120.19	73.20	214.20	182.97	158.75	5.26	0.42	0.61
PCC-Vivace	5	316.26	247.36	120.23	126.47	106.36	89.23	0.13	0.00	0.00
WebRTC media	5	0.84	0.54	0.22	86.56	86.46	86.44	0.02	0.01	0.00



Run 1: Statistics of TCP BBR

Start at: 2019-01-02 22:44:39

End at: 2019-01-02 22:45:09

Local clock offset: -0.272 ms

Remote clock offset: 0.068 ms

# Below is generated by plot.py at 2019-01-03 01:57:00

# Datalink statistics

-- Total of 3 flows:

Average throughput: 850.83 Mbit/s

95th percentile per-packet one-way delay: 219.732 ms

Loss rate: 2.69%

-- Flow 1:

Average throughput: 462.08 Mbit/s

95th percentile per-packet one-way delay: 200.638 ms

Loss rate: 1.39%

-- Flow 2:

Average throughput: 406.68 Mbit/s

95th percentile per-packet one-way delay: 249.413 ms

Loss rate: 4.73%

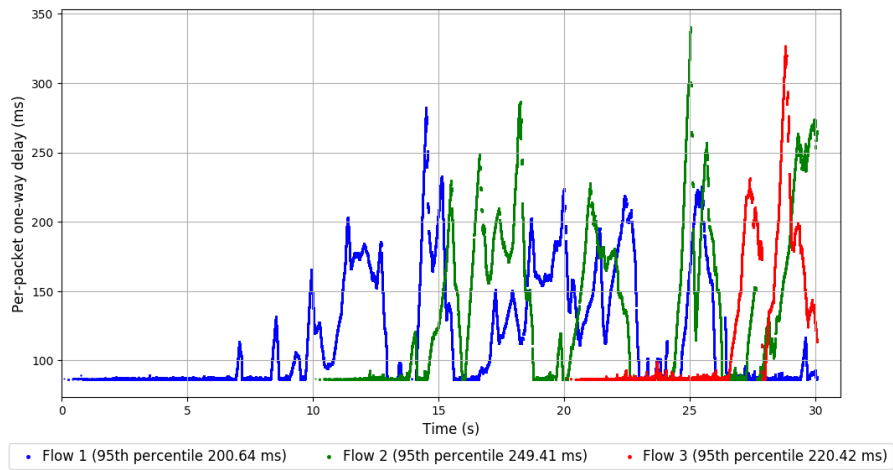
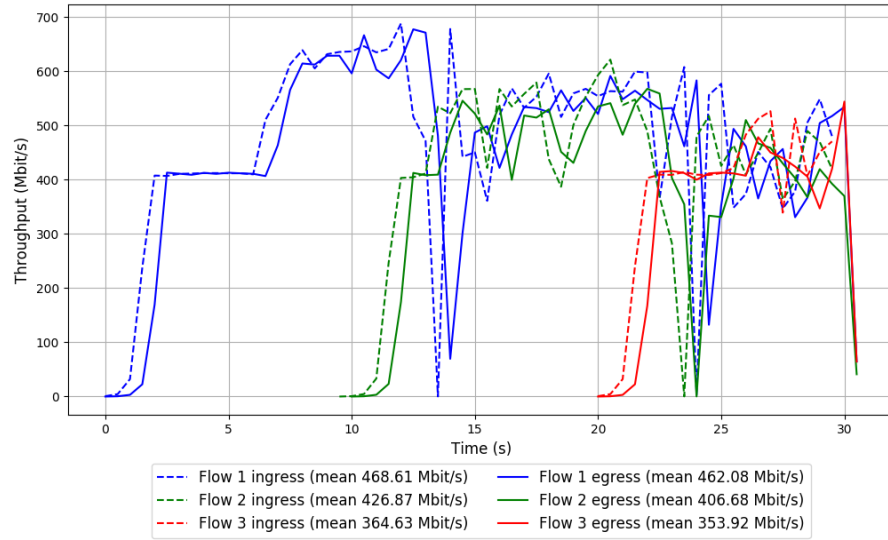
-- Flow 3:

Average throughput: 353.92 Mbit/s

95th percentile per-packet one-way delay: 220.419 ms

Loss rate: 2.93%

# Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2019-01-02 23:18:51

End at: 2019-01-02 23:19:21

Local clock offset: 0.093 ms

Remote clock offset: 0.014 ms

# Below is generated by plot.py at 2019-01-03 01:57:01

# Datalink statistics

-- Total of 3 flows:

Average throughput: 790.35 Mbit/s

95th percentile per-packet one-way delay: 210.121 ms

Loss rate: 1.84%

-- Flow 1:

Average throughput: 377.27 Mbit/s

95th percentile per-packet one-way delay: 195.971 ms

Loss rate: 1.25%

-- Flow 2:

Average throughput: 425.22 Mbit/s

95th percentile per-packet one-way delay: 207.538 ms

Loss rate: 2.47%

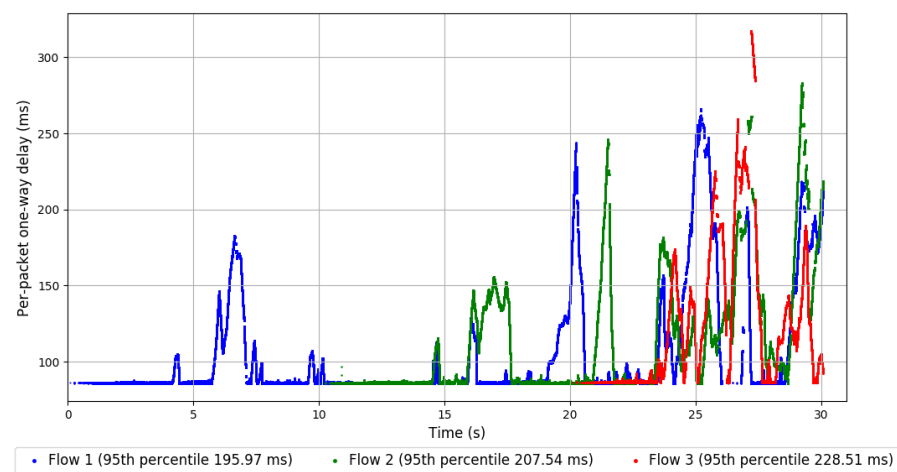
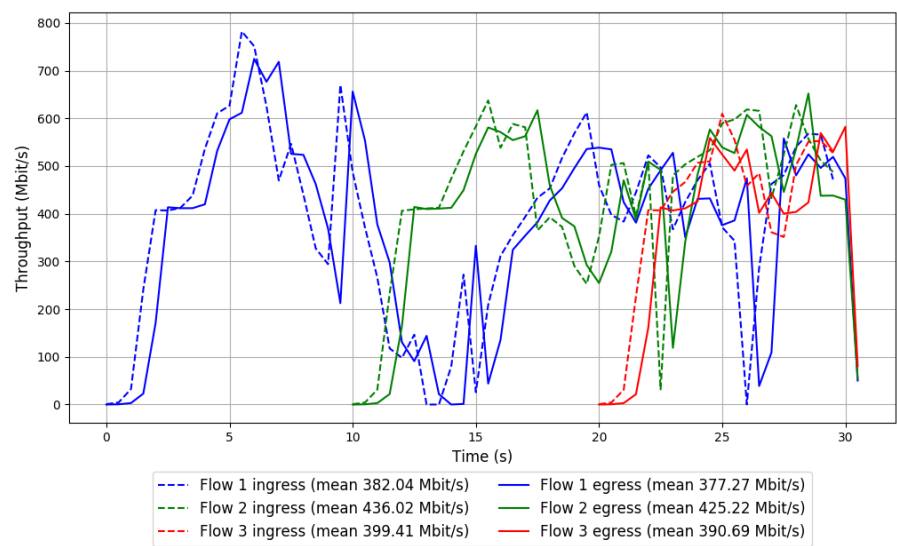
-- Flow 3:

Average throughput: 390.69 Mbit/s

95th percentile per-packet one-way delay: 228.510 ms

Loss rate: 2.18%

Run 2: Report of TCP BBR — Data Link

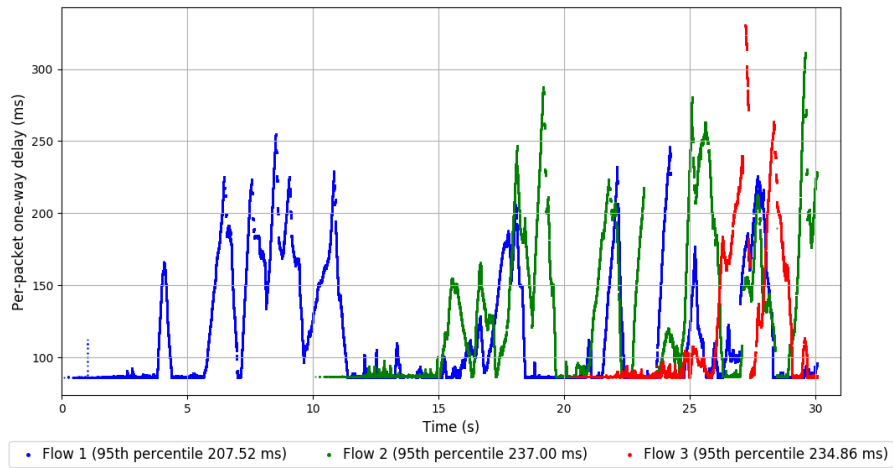
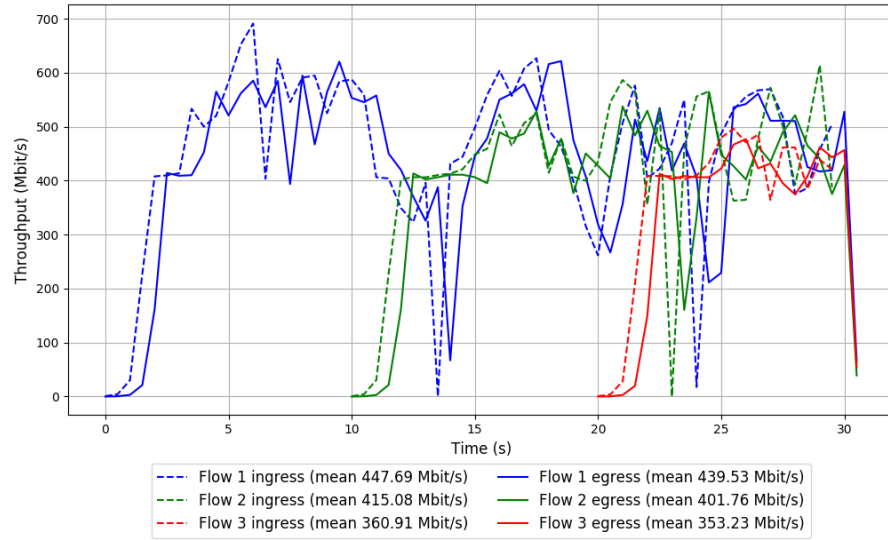


Run 3: Statistics of TCP BBR

Start at: 2019-01-02 23:52:30  
End at: 2019-01-02 23:53:00  
Local clock offset: -0.126 ms  
Remote clock offset: -0.051 ms

# Below is generated by plot.py at 2019-01-03 01:57:01  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 824.27 Mbit/s  
95th percentile per-packet one-way delay: 218.110 ms  
Loss rate: 2.32%  
-- Flow 1:  
Average throughput: 439.53 Mbit/s  
95th percentile per-packet one-way delay: 207.518 ms  
Loss rate: 1.82%  
-- Flow 2:  
Average throughput: 401.76 Mbit/s  
95th percentile per-packet one-way delay: 237.001 ms  
Loss rate: 3.21%  
-- Flow 3:  
Average throughput: 353.23 Mbit/s  
95th percentile per-packet one-way delay: 234.858 ms  
Loss rate: 2.13%

### Run 3: Report of TCP BBR — Data Link

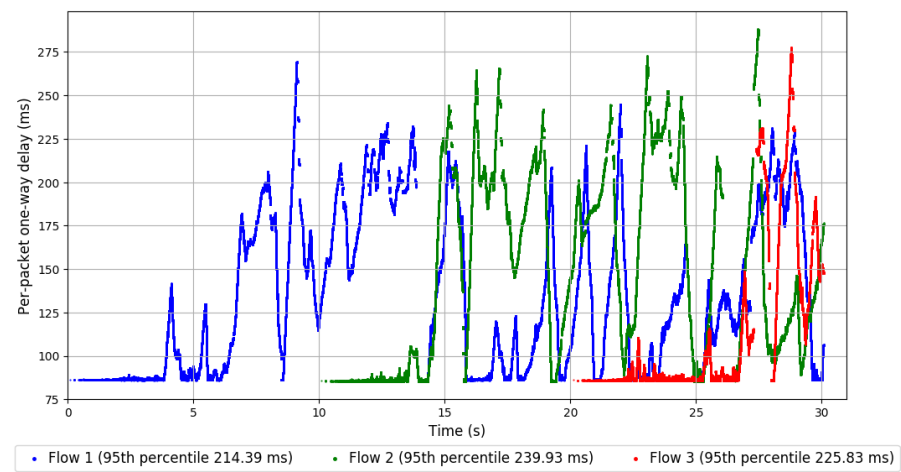
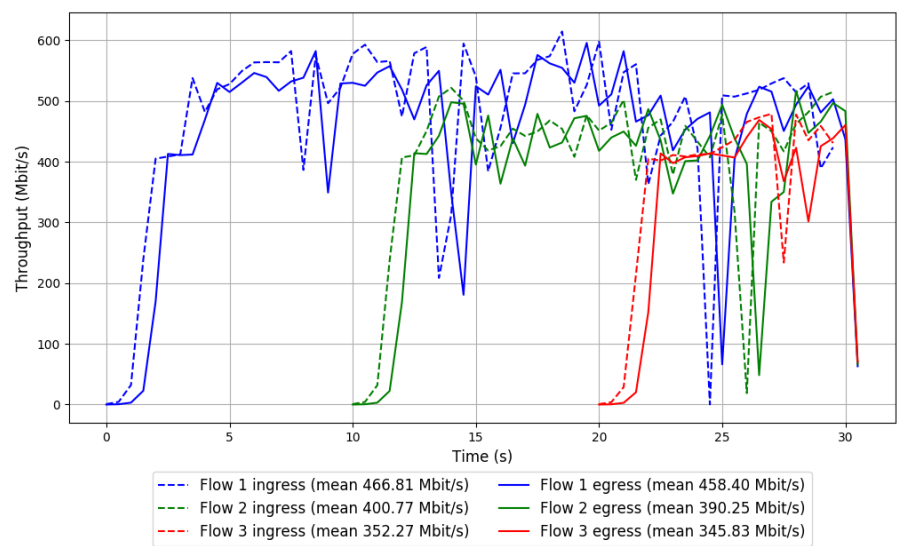


Run 4: Statistics of TCP BBR

Start at: 2019-01-03 00:26:38  
End at: 2019-01-03 00:27:08  
Local clock offset: 0.295 ms  
Remote clock offset: -0.012 ms

# Below is generated by plot.py at 2019-01-03 01:57:01  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 833.15 Mbit/s  
95th percentile per-packet one-way delay: 226.172 ms  
Loss rate: 2.06%  
-- Flow 1:  
Average throughput: 458.40 Mbit/s  
95th percentile per-packet one-way delay: 214.386 ms  
Loss rate: 1.80%  
-- Flow 2:  
Average throughput: 390.25 Mbit/s  
95th percentile per-packet one-way delay: 239.934 ms  
Loss rate: 2.62%  
-- Flow 3:  
Average throughput: 345.83 Mbit/s  
95th percentile per-packet one-way delay: 225.826 ms  
Loss rate: 1.82%

Run 4: Report of TCP BBR — Data Link





Run 5: Statistics of TCP BBR

Start at: 2019-01-03 01:00:22

End at: 2019-01-03 01:00:52

Local clock offset: 0.057 ms

Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2019-01-03 01:57:01

# Datalink statistics

-- Total of 3 flows:

Average throughput: 808.77 Mbit/s

95th percentile per-packet one-way delay: 206.071 ms

Loss rate: 1.42%

-- Flow 1:

Average throughput: 440.04 Mbit/s

95th percentile per-packet one-way delay: 196.130 ms

Loss rate: 1.63%

-- Flow 2:

Average throughput: 380.47 Mbit/s

95th percentile per-packet one-way delay: 207.821 ms

Loss rate: 0.78%

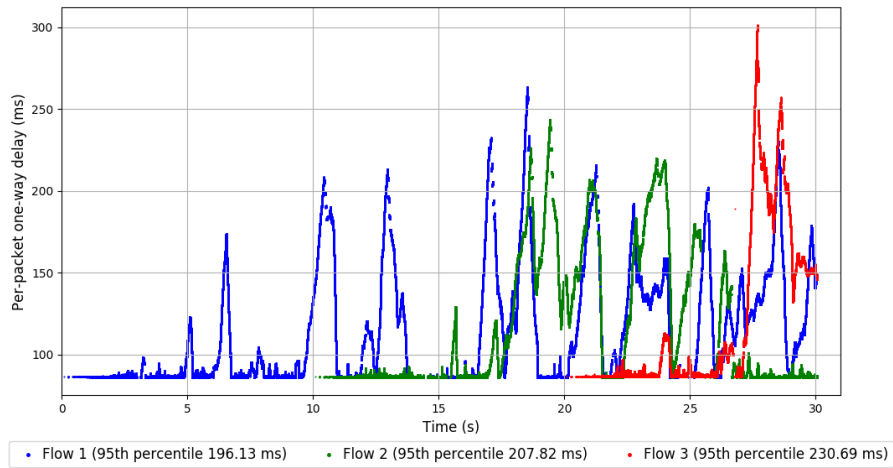
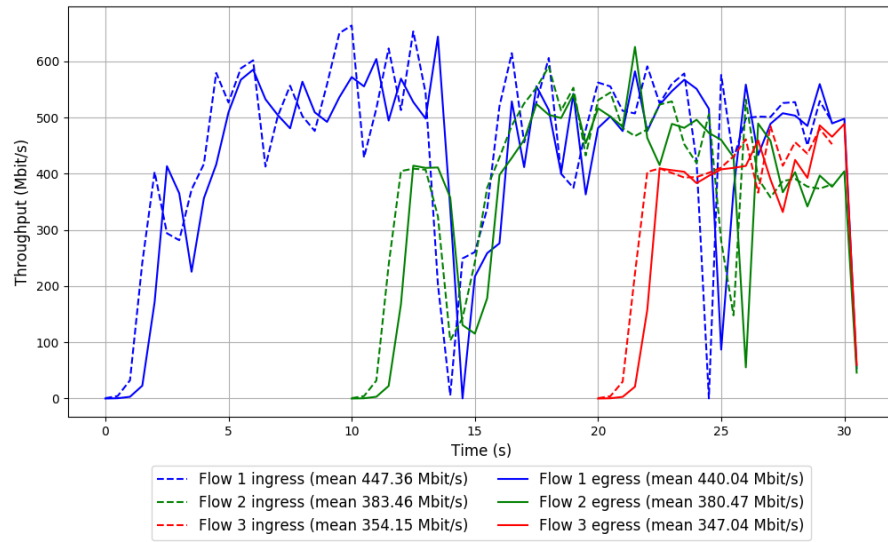
-- Flow 3:

Average throughput: 347.04 Mbit/s

95th percentile per-packet one-way delay: 230.687 ms

Loss rate: 2.00%

# Run 5: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2019-01-02 22:39:24

End at: 2019-01-02 22:39:54

Local clock offset: -0.03 ms

Remote clock offset: 0.049 ms

# Below is generated by plot.py at 2019-01-03 01:59:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 515.42 Mbit/s

95th percentile per-packet one-way delay: 145.372 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 270.16 Mbit/s

95th percentile per-packet one-way delay: 134.875 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 263.08 Mbit/s

95th percentile per-packet one-way delay: 154.918 ms

Loss rate: 0.00%

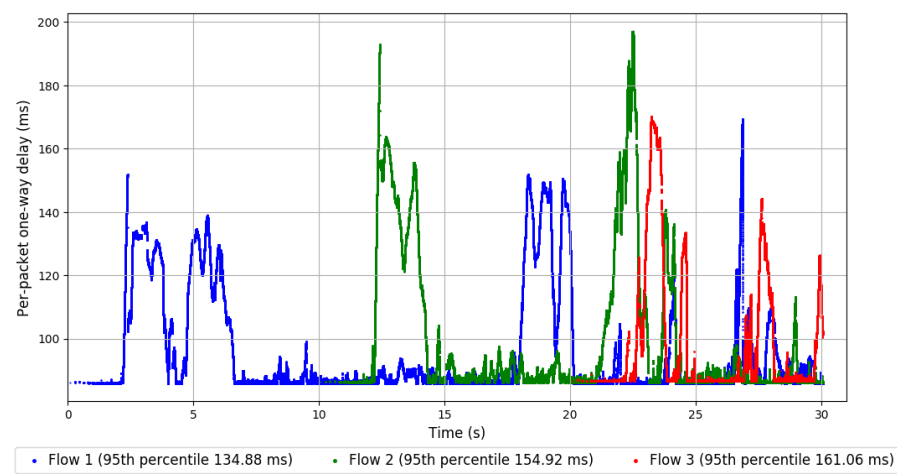
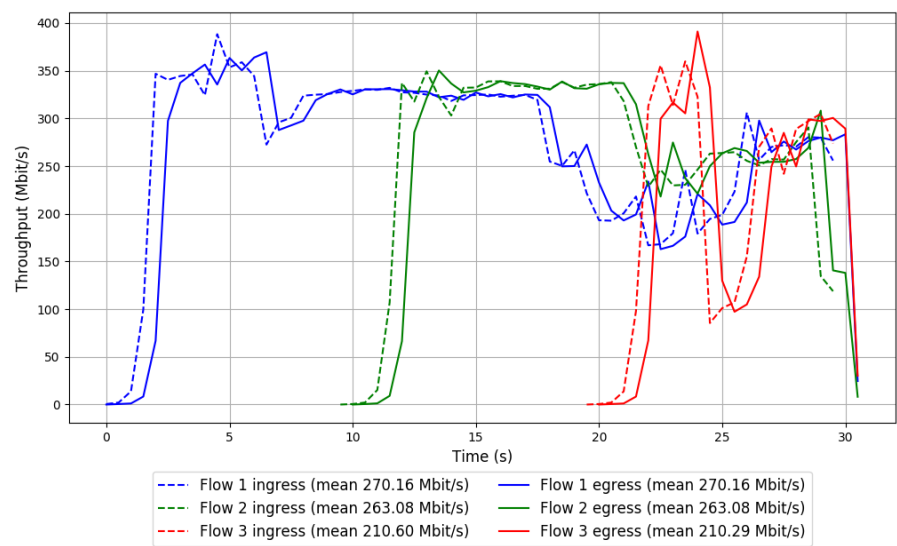
-- Flow 3:

Average throughput: 210.29 Mbit/s

95th percentile per-packet one-way delay: 161.059 ms

Loss rate: 0.14%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2019-01-02 23:13:40

End at: 2019-01-02 23:14:10

Local clock offset: -0.051 ms

Remote clock offset: 0.007 ms

# Below is generated by plot.py at 2019-01-03 01:59:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 482.88 Mbit/s

95th percentile per-packet one-way delay: 129.592 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 264.38 Mbit/s

95th percentile per-packet one-way delay: 127.223 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 224.89 Mbit/s

95th percentile per-packet one-way delay: 161.014 ms

Loss rate: 0.09%

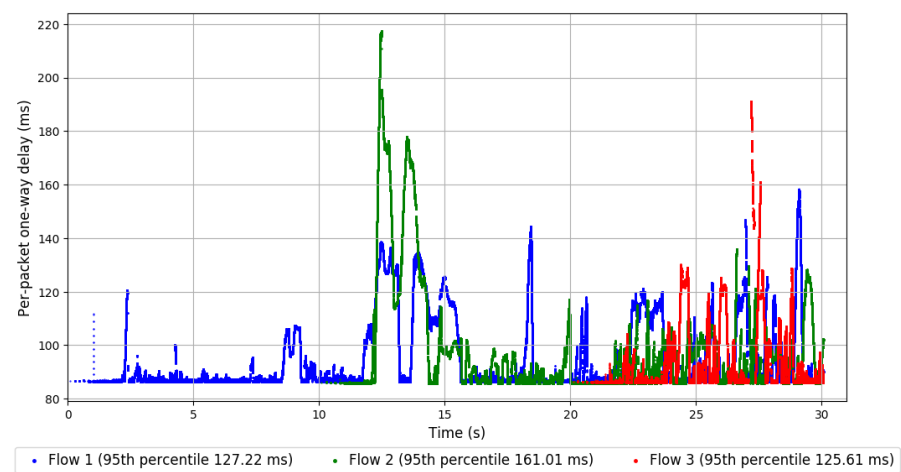
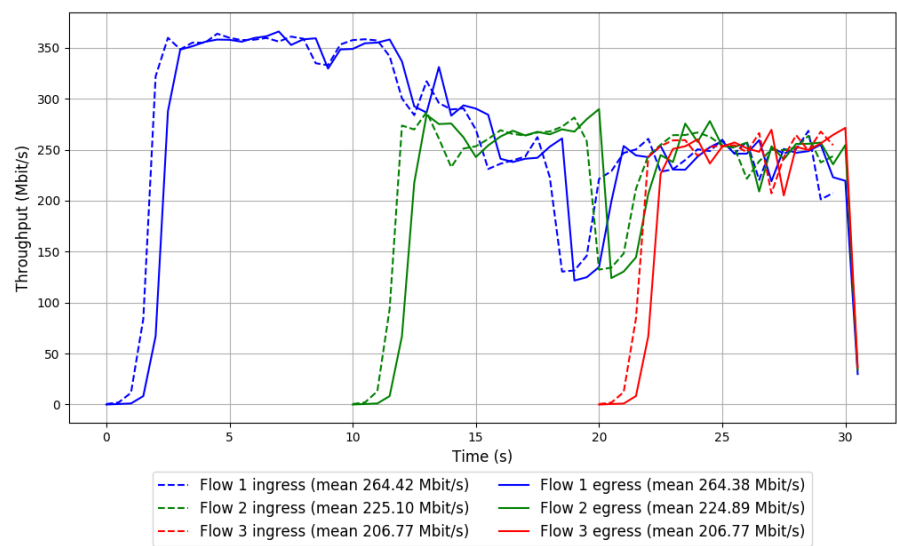
-- Flow 3:

Average throughput: 206.77 Mbit/s

95th percentile per-packet one-way delay: 125.606 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link

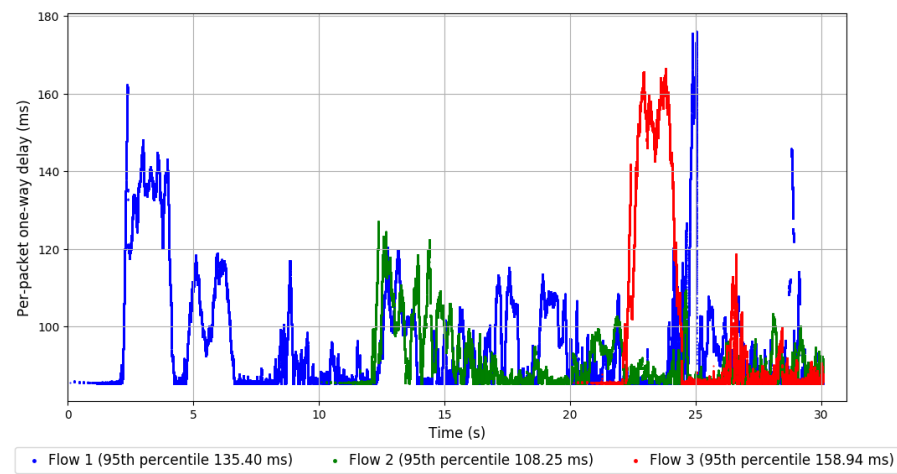
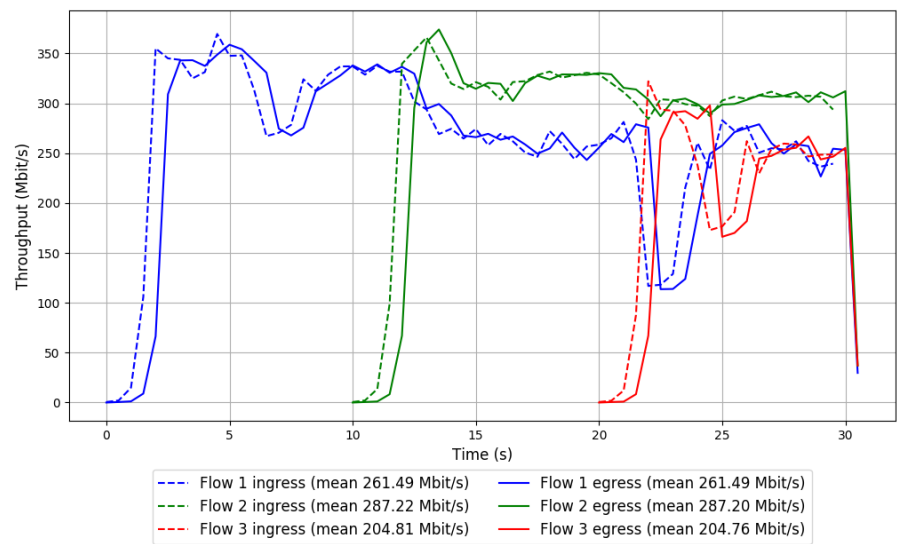


Run 3: Statistics of Copa

Start at: 2019-01-02 23:47:29  
End at: 2019-01-02 23:47:59  
Local clock offset: 0.315 ms  
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2019-01-03 01:59:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 520.74 Mbit/s  
95th percentile per-packet one-way delay: 136.070 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 261.49 Mbit/s  
95th percentile per-packet one-way delay: 135.397 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 287.20 Mbit/s  
95th percentile per-packet one-way delay: 108.253 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 204.76 Mbit/s  
95th percentile per-packet one-way delay: 158.937 ms  
Loss rate: 0.01%

Run 3: Report of Copa — Data Link





Run 4: Statistics of Copa

Start at: 2019-01-03 00:21:24

End at: 2019-01-03 00:21:54

Local clock offset: -0.126 ms

Remote clock offset: 0.033 ms

# Below is generated by plot.py at 2019-01-03 02:16:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 509.04 Mbit/s

95th percentile per-packet one-way delay: 137.368 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 274.91 Mbit/s

95th percentile per-packet one-way delay: 138.805 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 236.38 Mbit/s

95th percentile per-packet one-way delay: 139.236 ms

Loss rate: 0.01%

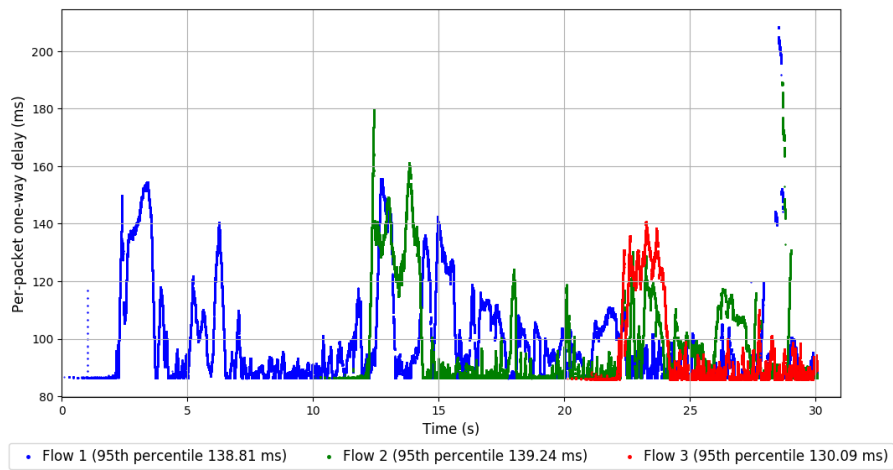
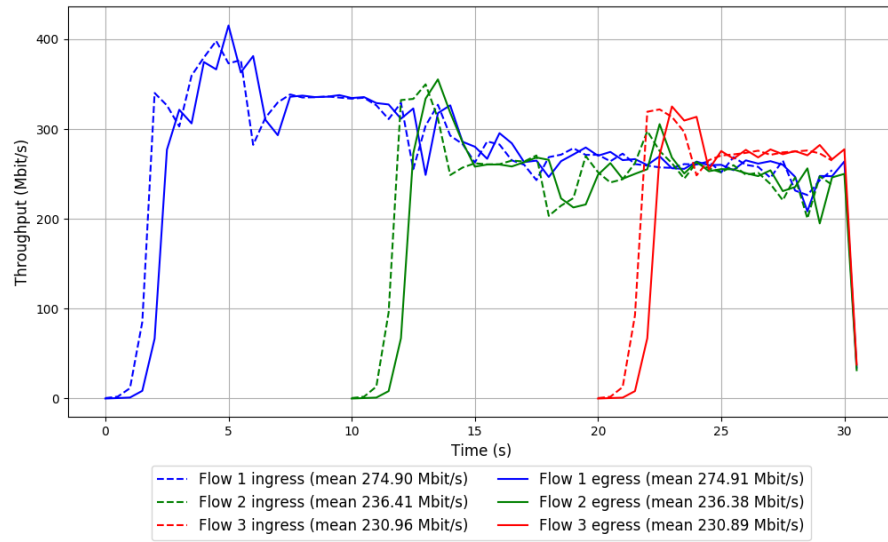
-- Flow 3:

Average throughput: 230.89 Mbit/s

95th percentile per-packet one-way delay: 130.093 ms

Loss rate: 0.02%

#### Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2019-01-03 00:55:05

End at: 2019-01-03 00:55:35

Local clock offset: 0.349 ms

Remote clock offset: 0.014 ms

# Below is generated by plot.py at 2019-01-03 02:18:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 531.02 Mbit/s

95th percentile per-packet one-way delay: 136.397 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 283.25 Mbit/s

95th percentile per-packet one-way delay: 116.288 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 255.22 Mbit/s

95th percentile per-packet one-way delay: 148.693 ms

Loss rate: 0.03%

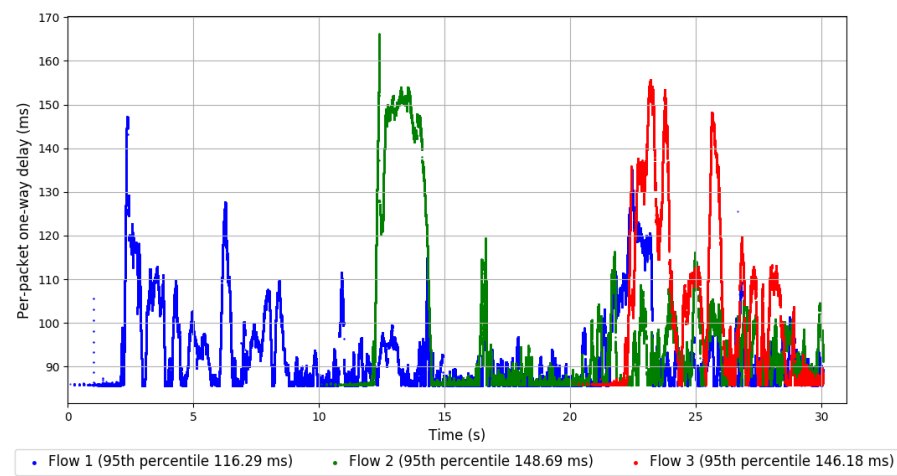
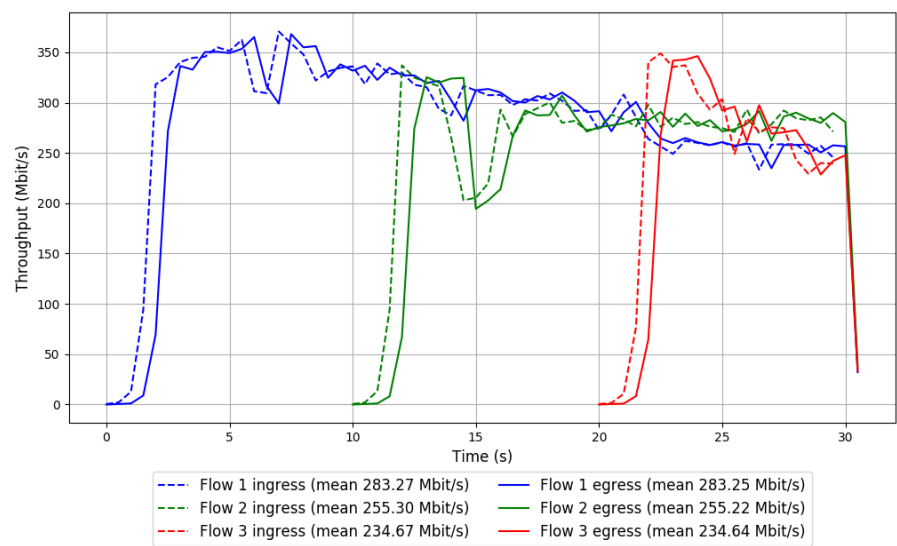
-- Flow 3:

Average throughput: 234.64 Mbit/s

95th percentile per-packet one-way delay: 146.175 ms

Loss rate: 0.02%

Run 5: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2019-01-02 23:00:14

End at: 2019-01-02 23:00:44

Local clock offset: 0.17 ms

Remote clock offset: 0.073 ms

# Below is generated by plot.py at 2019-01-03 02:18:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 872.53 Mbit/s

95th percentile per-packet one-way delay: 171.168 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 474.72 Mbit/s

95th percentile per-packet one-way delay: 167.212 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 429.26 Mbit/s

95th percentile per-packet one-way delay: 176.167 ms

Loss rate: 0.12%

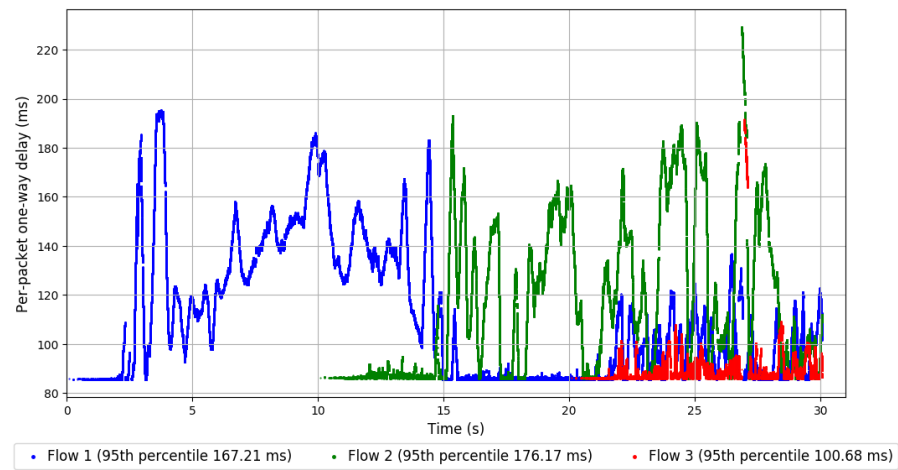
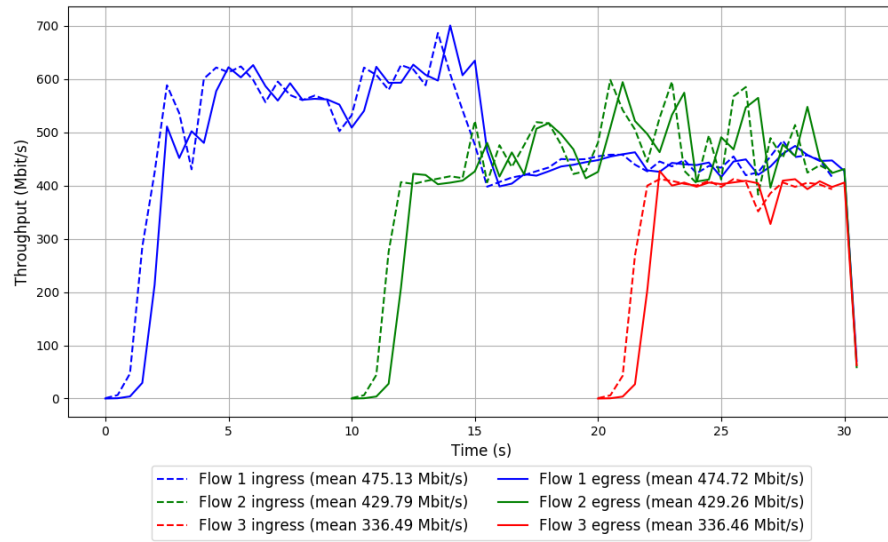
-- Flow 3:

Average throughput: 336.46 Mbit/s

95th percentile per-packet one-way delay: 100.679 ms

Loss rate: 0.00%

# Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2019-01-02 23:34:12

End at: 2019-01-02 23:34:42

Local clock offset: 0.227 ms

Remote clock offset: 0.008 ms

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

# Datalink statistics

-- Total of 3 flows:

Average throughput: 961.51 Mbit/s

95th percentile per-packet one-way delay: 189.554 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 548.78 Mbit/s

95th percentile per-packet one-way delay: 192.549 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 439.66 Mbit/s

95th percentile per-packet one-way delay: 170.409 ms

Loss rate: 0.13%

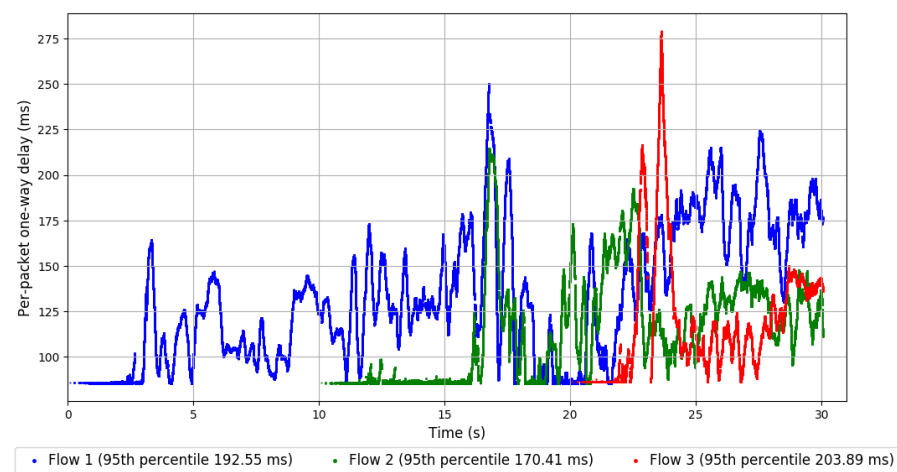
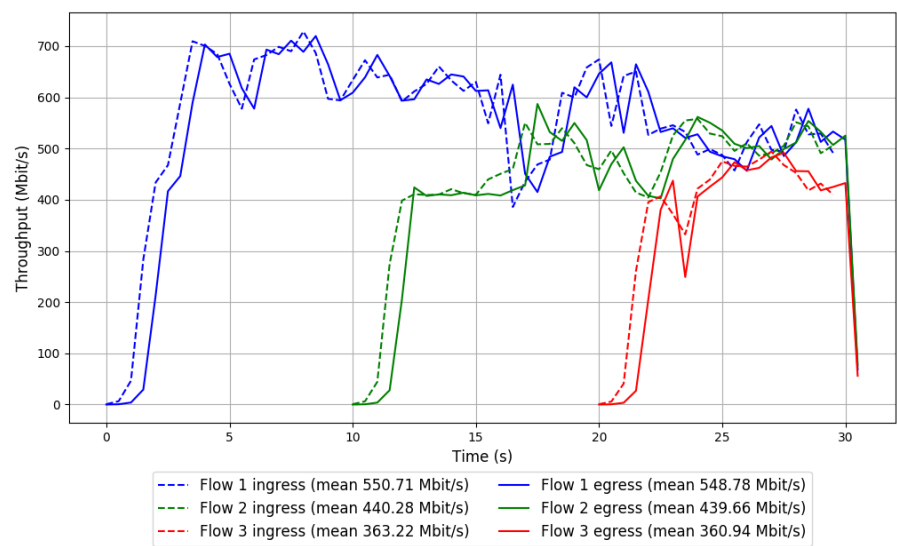
-- Flow 3:

Average throughput: 360.94 Mbit/s

95th percentile per-packet one-way delay: 203.892 ms

Loss rate: 0.62%

Run 2: Report of TCP Cubic — Data Link



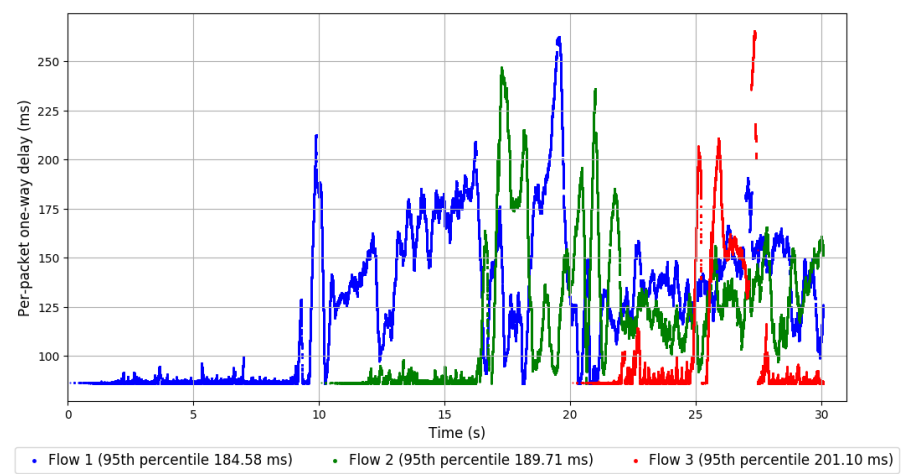
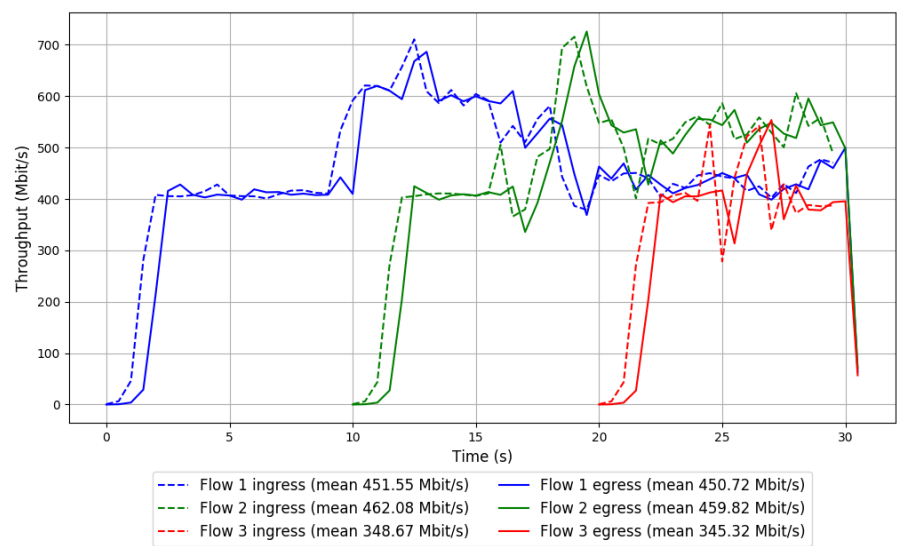


Run 3: Statistics of TCP Cubic

Start at: 2019-01-03 00:08:03  
End at: 2019-01-03 00:08:33  
Local clock offset: -0.089 ms  
Remote clock offset: -0.032 ms

# Below is generated by plot.py at 2019-01-03 02:19:03  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 871.86 Mbit/s  
95th percentile per-packet one-way delay: 187.180 ms  
Loss rate: 0.39%  
-- Flow 1:  
Average throughput: 450.72 Mbit/s  
95th percentile per-packet one-way delay: 184.577 ms  
Loss rate: 0.18%  
-- Flow 2:  
Average throughput: 459.82 Mbit/s  
95th percentile per-packet one-way delay: 189.711 ms  
Loss rate: 0.48%  
-- Flow 3:  
Average throughput: 345.32 Mbit/s  
95th percentile per-packet one-way delay: 201.102 ms  
Loss rate: 0.96%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2019-01-03 00:42:00

End at: 2019-01-03 00:42:30

Local clock offset: 0.019 ms

Remote clock offset: 0.02 ms

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

# Datalink statistics

-- Total of 3 flows:

Average throughput: 810.14 Mbit/s

95th percentile per-packet one-way delay: 210.376 ms

Loss rate: 0.27%

-- Flow 1:

Average throughput: 410.67 Mbit/s

95th percentile per-packet one-way delay: 210.778 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 425.05 Mbit/s

95th percentile per-packet one-way delay: 197.653 ms

Loss rate: 0.23%

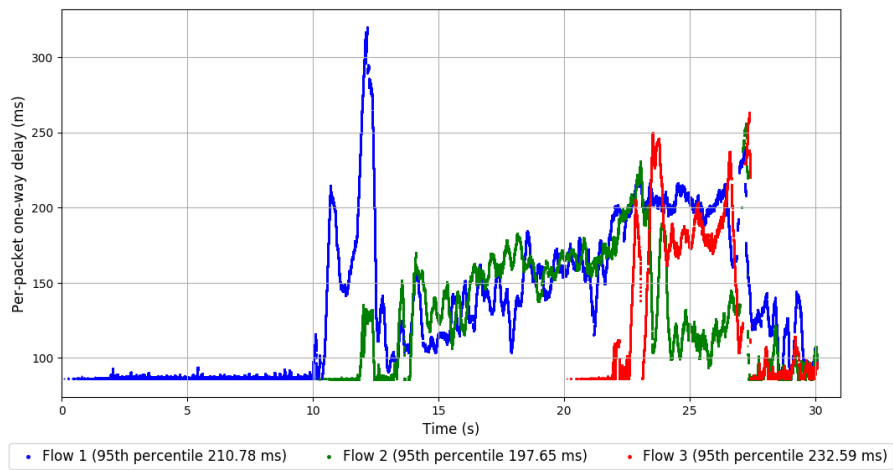
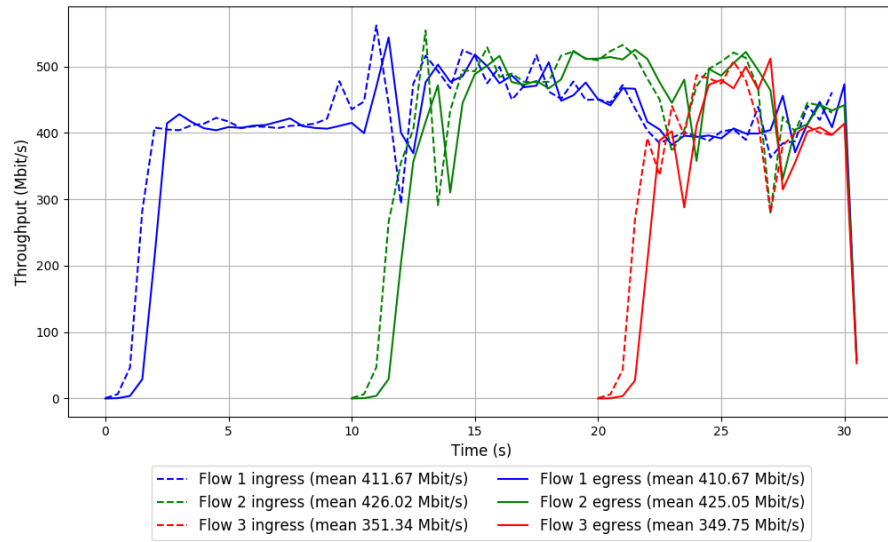
-- Flow 3:

Average throughput: 349.75 Mbit/s

95th percentile per-packet one-way delay: 232.586 ms

Loss rate: 0.45%

# Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2019-01-03 01:15:47

End at: 2019-01-03 01:16:17

Local clock offset: -0.077 ms

Remote clock offset: 0.03 ms

# Below is generated by plot.py at 2019-01-03 02:20:10

# Datalink statistics

-- Total of 3 flows:

Average throughput: 902.44 Mbit/s

95th percentile per-packet one-way delay: 200.211 ms

Loss rate: 0.33%

-- Flow 1:

Average throughput: 495.56 Mbit/s

95th percentile per-packet one-way delay: 204.464 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 414.41 Mbit/s

95th percentile per-packet one-way delay: 178.867 ms

Loss rate: 0.24%

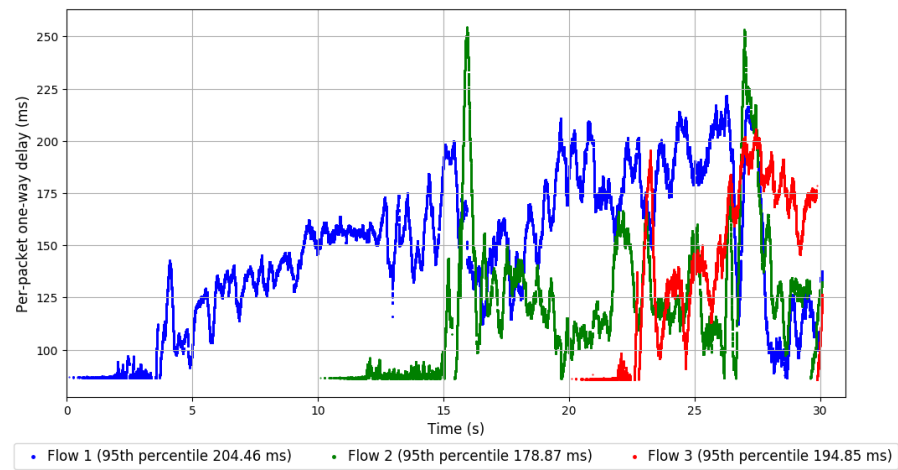
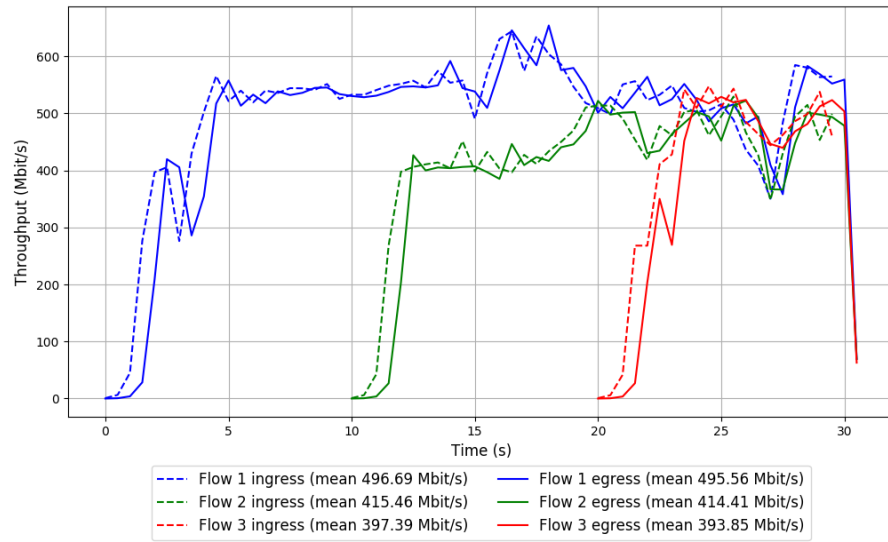
-- Flow 3:

Average throughput: 393.85 Mbit/s

95th percentile per-packet one-way delay: 194.851 ms

Loss rate: 0.88%

# Run 5: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2019-01-02 22:34:01

End at: 2019-01-02 22:34:31

Local clock offset: -0.48 ms

Remote clock offset: 0.017 ms

# Below is generated by plot.py at 2019-01-03 02:23:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 921.74 Mbit/s

95th percentile per-packet one-way delay: 106.516 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 582.66 Mbit/s

95th percentile per-packet one-way delay: 115.917 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 368.06 Mbit/s

95th percentile per-packet one-way delay: 94.142 ms

Loss rate: 0.00%

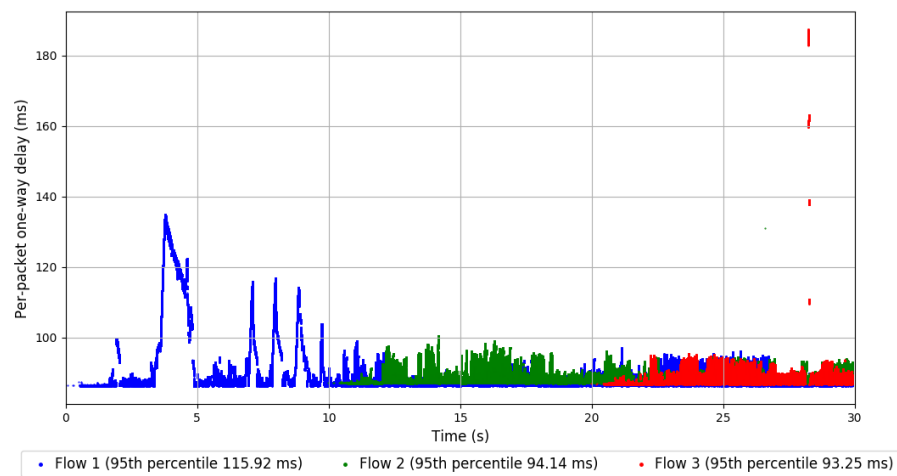
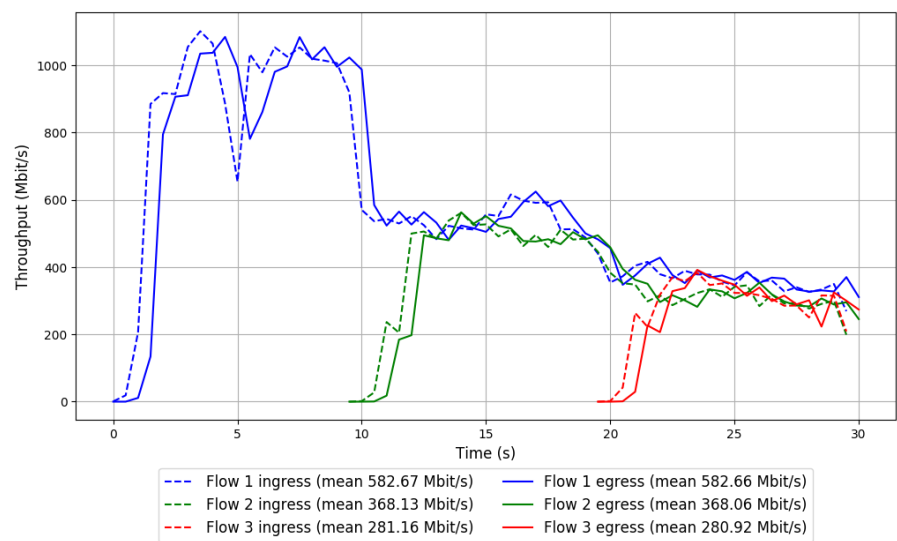
-- Flow 3:

Average throughput: 280.92 Mbit/s

95th percentile per-packet one-way delay: 93.253 ms

Loss rate: 0.07%

Run 1: Report of FillP — Data Link





Run 2: Statistics of FillP

Start at: 2019-01-02 23:08:23

End at: 2019-01-02 23:08:53

Local clock offset: 0.278 ms

Remote clock offset: 0.015 ms

# Below is generated by plot.py at 2019-01-03 02:42:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 922.85 Mbit/s

95th percentile per-packet one-way delay: 118.972 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 588.92 Mbit/s

95th percentile per-packet one-way delay: 125.365 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 375.53 Mbit/s

95th percentile per-packet one-way delay: 90.388 ms

Loss rate: 0.00%

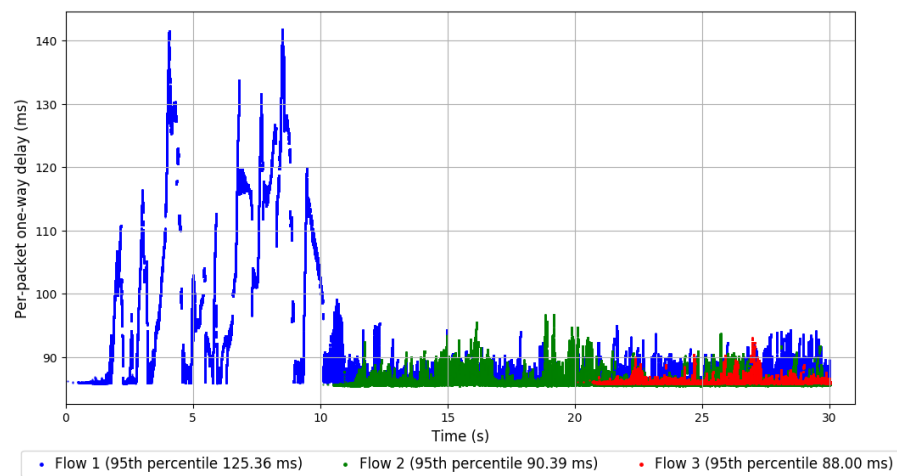
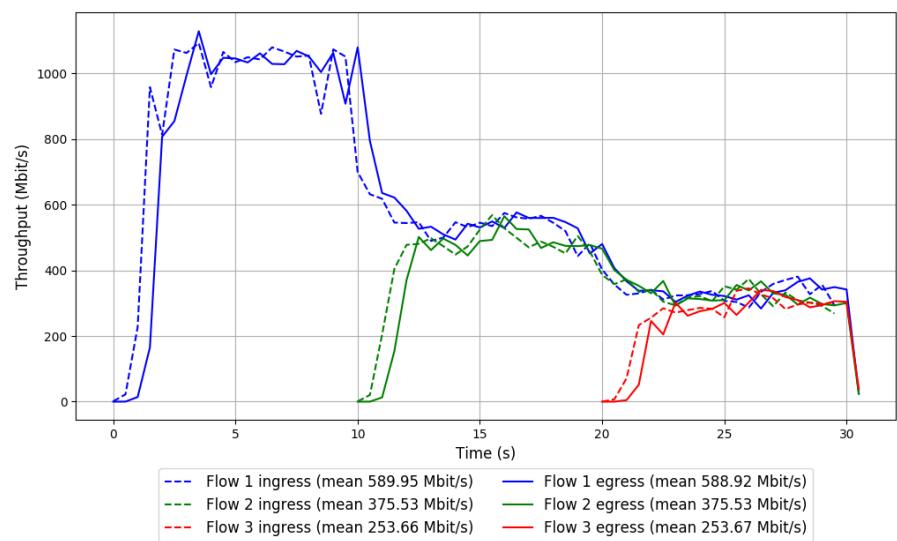
-- Flow 3:

Average throughput: 253.67 Mbit/s

95th percentile per-packet one-way delay: 87.997 ms

Loss rate: 0.00%

Run 2: Report of FillP — Data Link

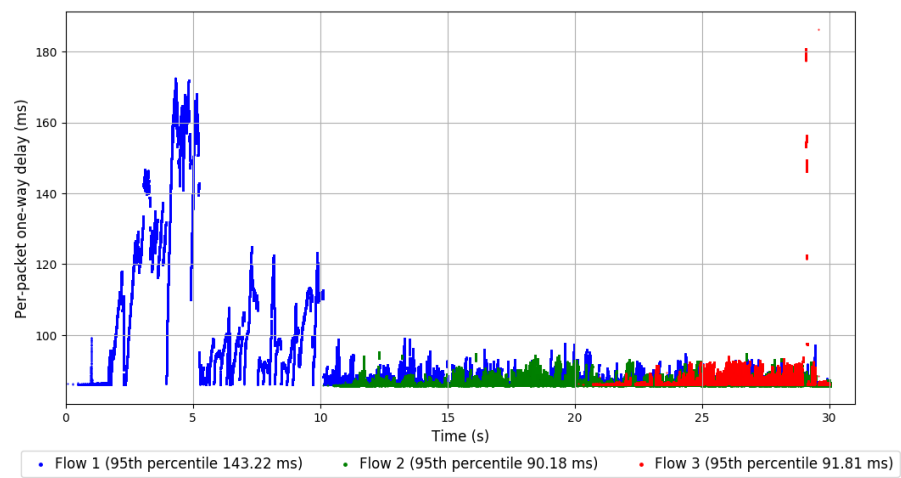
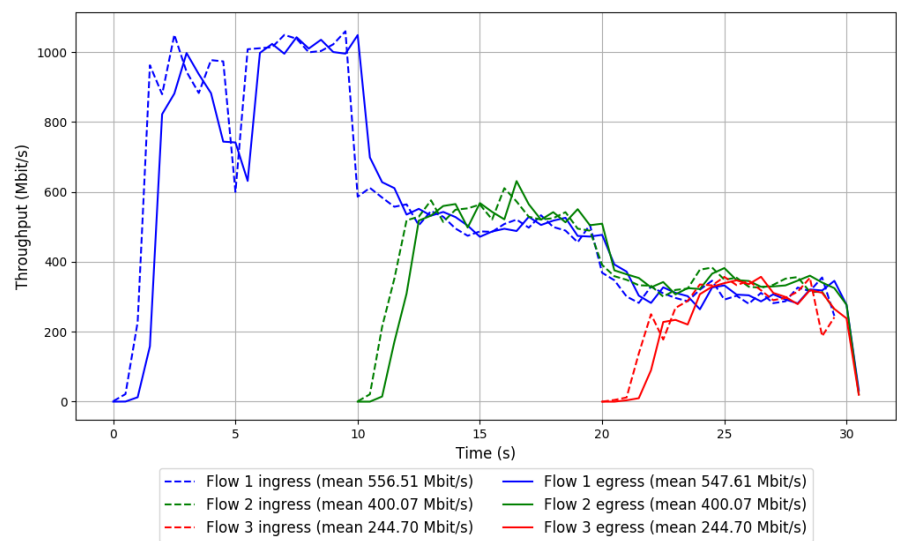


Run 3: Statistics of FillP

Start at: 2019-01-02 23:42:28  
End at: 2019-01-02 23:42:58  
Local clock offset: 0.126 ms  
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2019-01-03 02:42:22  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 894.74 Mbit/s  
95th percentile per-packet one-way delay: 128.487 ms  
Loss rate: 0.99%  
-- Flow 1:  
Average throughput: 547.61 Mbit/s  
95th percentile per-packet one-way delay: 143.219 ms  
Loss rate: 1.60%  
-- Flow 2:  
Average throughput: 400.07 Mbit/s  
95th percentile per-packet one-way delay: 90.184 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 244.70 Mbit/s  
95th percentile per-packet one-way delay: 91.809 ms  
Loss rate: 0.00%

Run 3: Report of FillP — Data Link

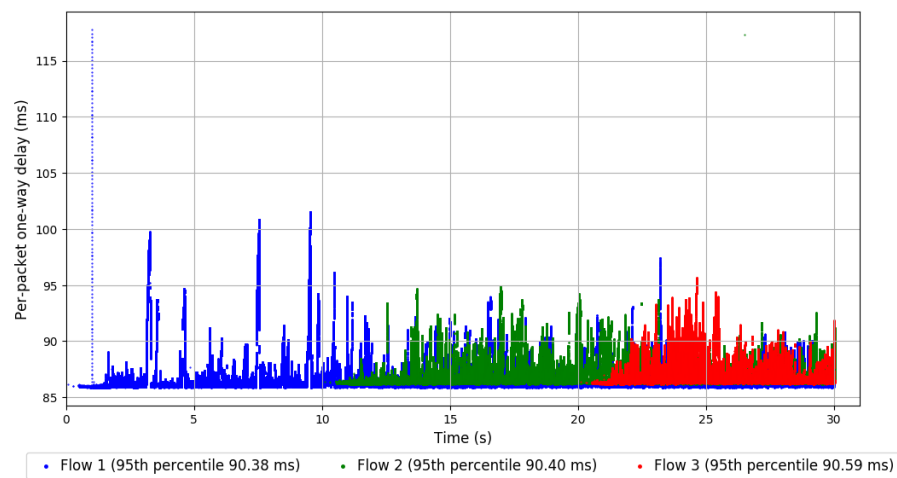
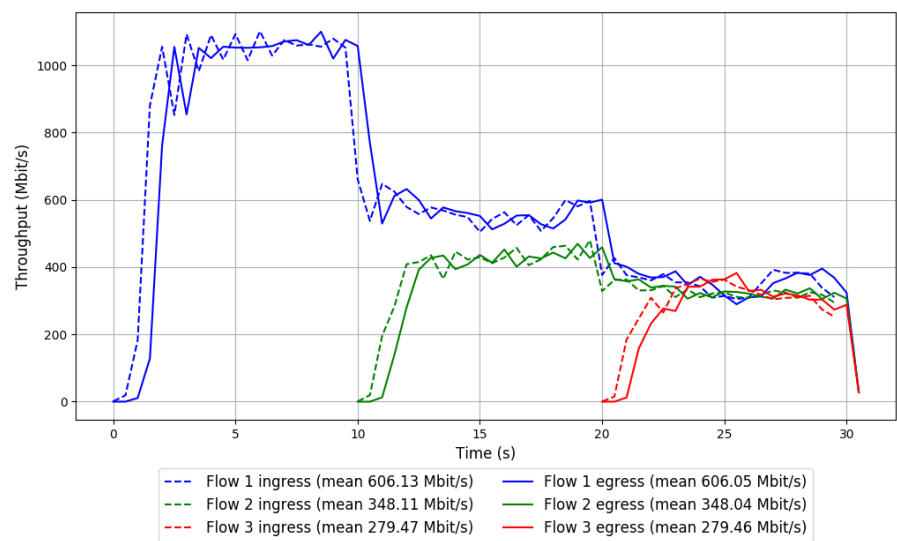


Run 4: Statistics of FillP

Start at: 2019-01-03 00:16:09  
End at: 2019-01-03 00:16:39  
Local clock offset: -0.114 ms  
Remote clock offset: -0.028 ms

# Below is generated by plot.py at 2019-01-03 02:43:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 930.06 Mbit/s  
95th percentile per-packet one-way delay: 90.429 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 606.05 Mbit/s  
95th percentile per-packet one-way delay: 90.379 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 348.04 Mbit/s  
95th percentile per-packet one-way delay: 90.402 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 279.46 Mbit/s  
95th percentile per-packet one-way delay: 90.591 ms  
Loss rate: 0.00%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2019-01-03 00:50:00

End at: 2019-01-03 00:50:30

Local clock offset: 0.314 ms

Remote clock offset: 0.025 ms

# Below is generated by plot.py at 2019-01-03 02:43:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 699.17 Mbit/s

95th percentile per-packet one-way delay: 123.908 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 347.68 Mbit/s

95th percentile per-packet one-way delay: 130.124 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 387.59 Mbit/s

95th percentile per-packet one-way delay: 91.506 ms

Loss rate: 0.00%

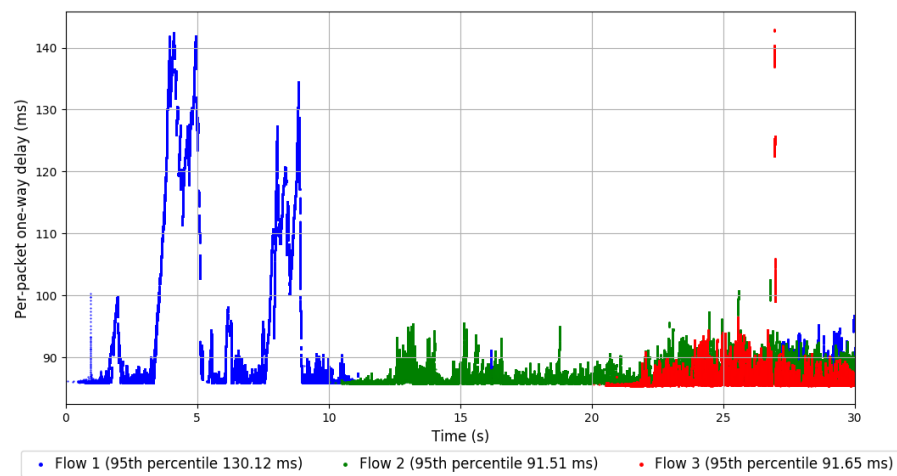
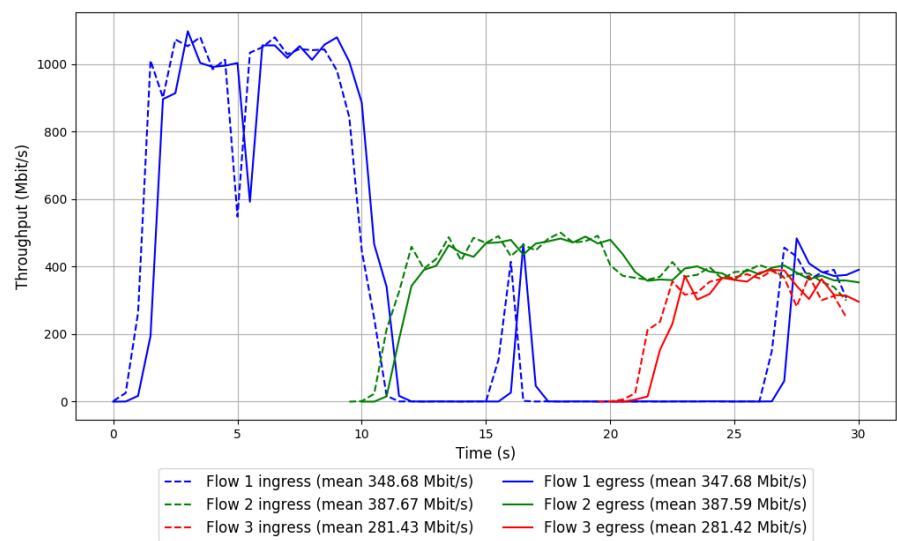
-- Flow 3:

Average throughput: 281.42 Mbit/s

95th percentile per-packet one-way delay: 91.652 ms

Loss rate: 0.00%

Run 5: Report of FillP — Data Link





Run 1: Statistics of FillP-Sheep

Start at: 2019-01-02 22:42:46

End at: 2019-01-02 22:43:16

Local clock offset: 0.082 ms

Remote clock offset: 0.058 ms

# Below is generated by plot.py at 2019-01-03 02:43:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 859.50 Mbit/s

95th percentile per-packet one-way delay: 98.050 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 538.02 Mbit/s

95th percentile per-packet one-way delay: 101.128 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 357.07 Mbit/s

95th percentile per-packet one-way delay: 91.814 ms

Loss rate: 0.00%

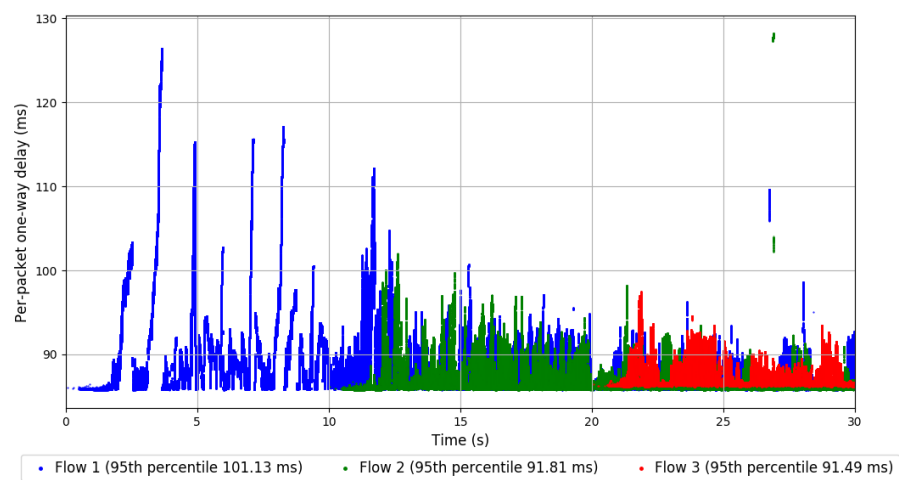
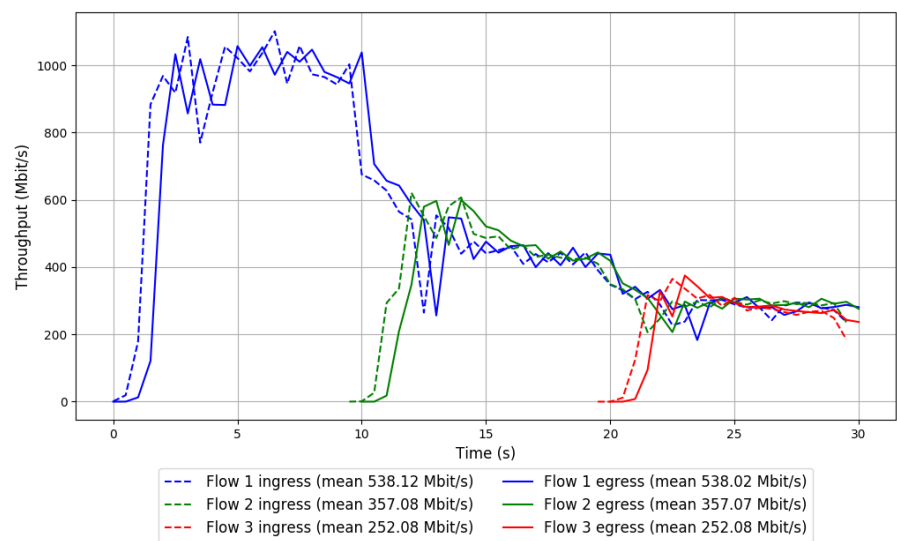
-- Flow 3:

Average throughput: 252.08 Mbit/s

95th percentile per-packet one-way delay: 91.488 ms

Loss rate: 0.00%

Run 1: Report of FillP-Sheep — Data Link



Run 2: Statistics of FillP-Sheep

Start at: 2019-01-02 23:16:58

End at: 2019-01-02 23:17:28

Local clock offset: -0.169 ms

Remote clock offset: 0.011 ms

# Below is generated by plot.py at 2019-01-03 02:43:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 843.40 Mbit/s

95th percentile per-packet one-way delay: 110.514 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 546.87 Mbit/s

95th percentile per-packet one-way delay: 114.955 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 337.75 Mbit/s

95th percentile per-packet one-way delay: 89.174 ms

Loss rate: 0.00%

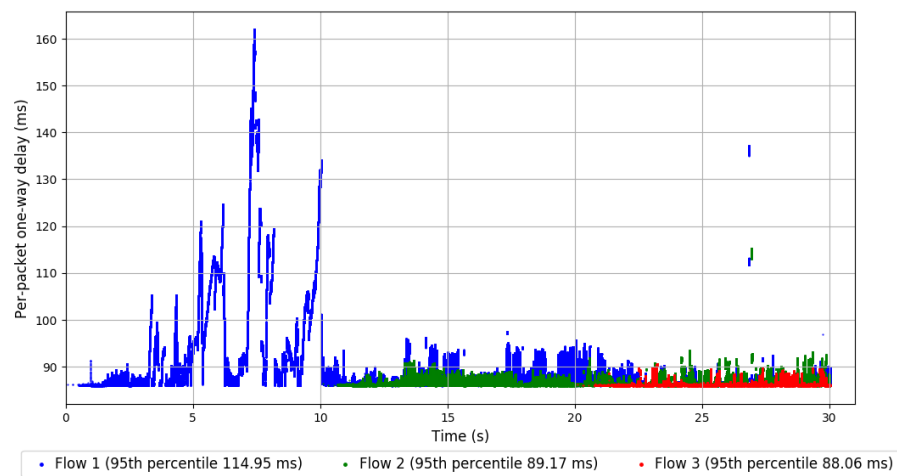
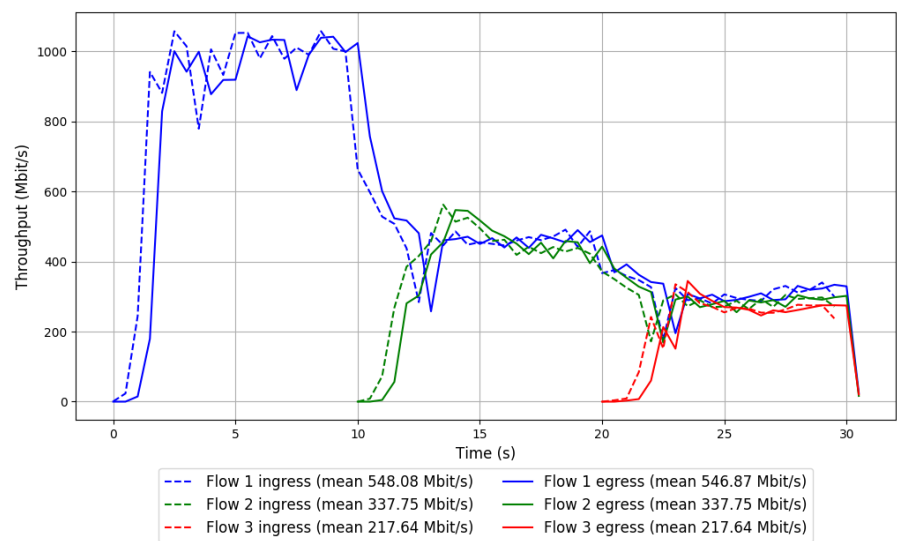
-- Flow 3:

Average throughput: 217.64 Mbit/s

95th percentile per-packet one-way delay: 88.058 ms

Loss rate: 0.00%

Run 2: Report of FillP-Sheep — Data Link



Run 3: Statistics of FillP-Sheep

Start at: 2019-01-02 23:50:55

End at: 2019-01-02 23:51:25

Local clock offset: -0.101 ms

Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2019-01-03 02:43:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 426.09 Mbit/s

95th percentile per-packet one-way delay: 97.651 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 158.63 Mbit/s

95th percentile per-packet one-way delay: 111.938 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 291.73 Mbit/s

95th percentile per-packet one-way delay: 88.682 ms

Loss rate: 0.00%

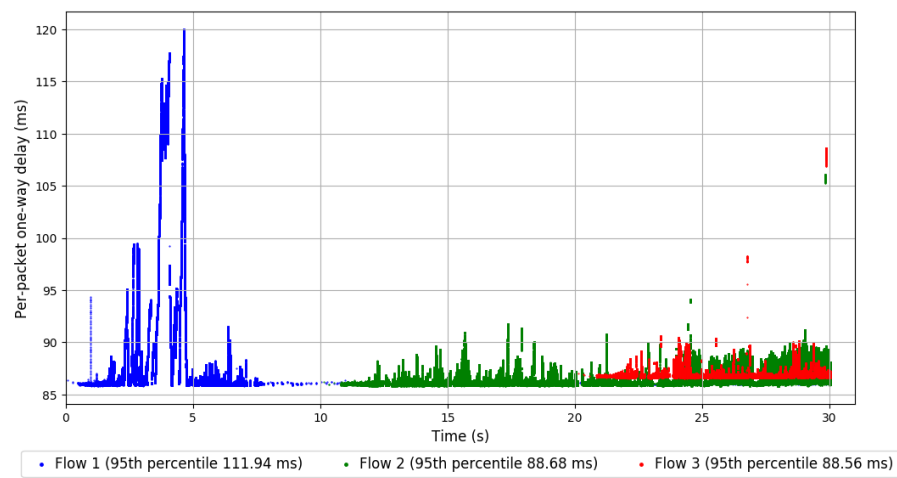
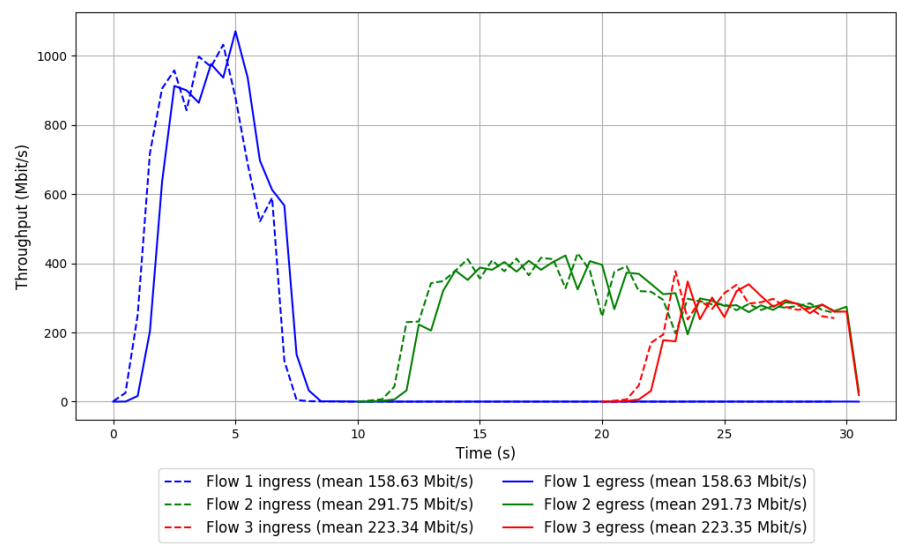
-- Flow 3:

Average throughput: 223.35 Mbit/s

95th percentile per-packet one-way delay: 88.561 ms

Loss rate: 0.00%

Run 3: Report of FillP-Sheep — Data Link



Run 4: Statistics of FillP-Sheep

Start at: 2019-01-03 00:24:45

End at: 2019-01-03 00:25:15

Local clock offset: 0.212 ms

Remote clock offset: 0.013 ms

# Below is generated by plot.py at 2019-01-03 02:47:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 835.53 Mbit/s

95th percentile per-packet one-way delay: 104.928 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 526.17 Mbit/s

95th percentile per-packet one-way delay: 129.193 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 343.65 Mbit/s

95th percentile per-packet one-way delay: 90.235 ms

Loss rate: 0.00%

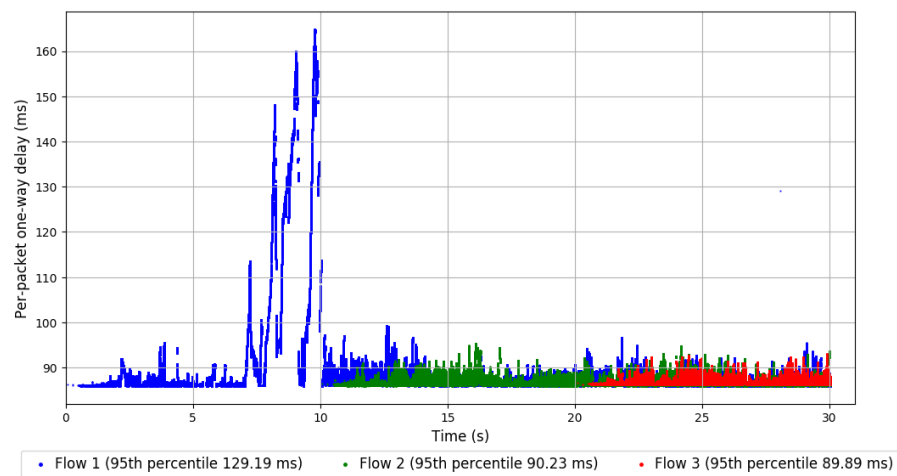
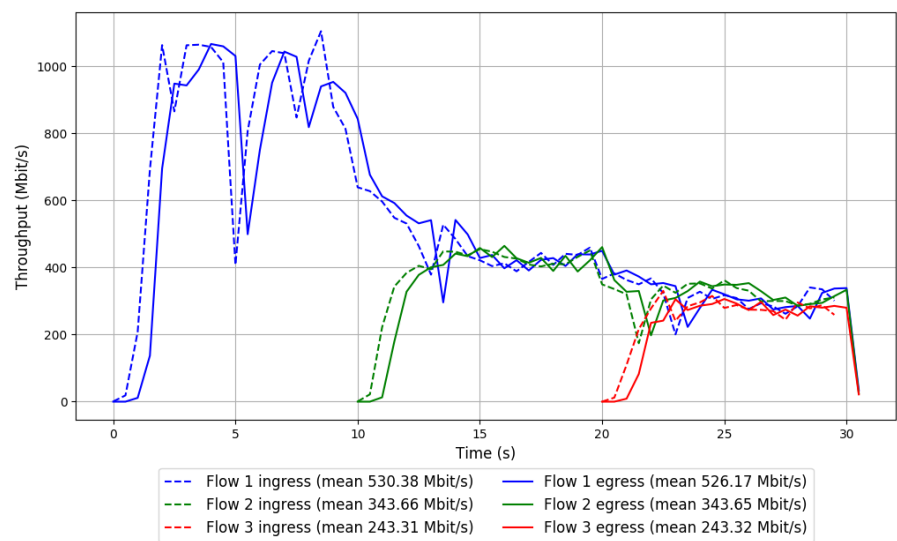
-- Flow 3:

Average throughput: 243.32 Mbit/s

95th percentile per-packet one-way delay: 89.886 ms

Loss rate: 0.00%

Run 4: Report of FillP-Sheep — Data Link





Run 5: Statistics of FillP-Sheep

Start at: 2019-01-03 00:58:28

End at: 2019-01-03 00:58:58

Local clock offset: 0.315 ms

Remote clock offset: 0.014 ms

# Below is generated by plot.py at 2019-01-03 02:55:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 866.78 Mbit/s

95th percentile per-packet one-way delay: 91.001 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 562.03 Mbit/s

95th percentile per-packet one-way delay: 92.480 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 339.47 Mbit/s

95th percentile per-packet one-way delay: 90.278 ms

Loss rate: 0.00%

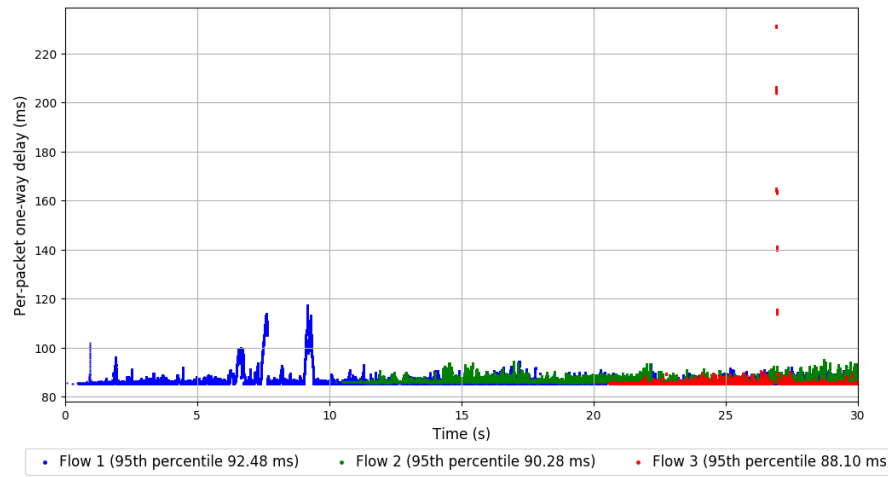
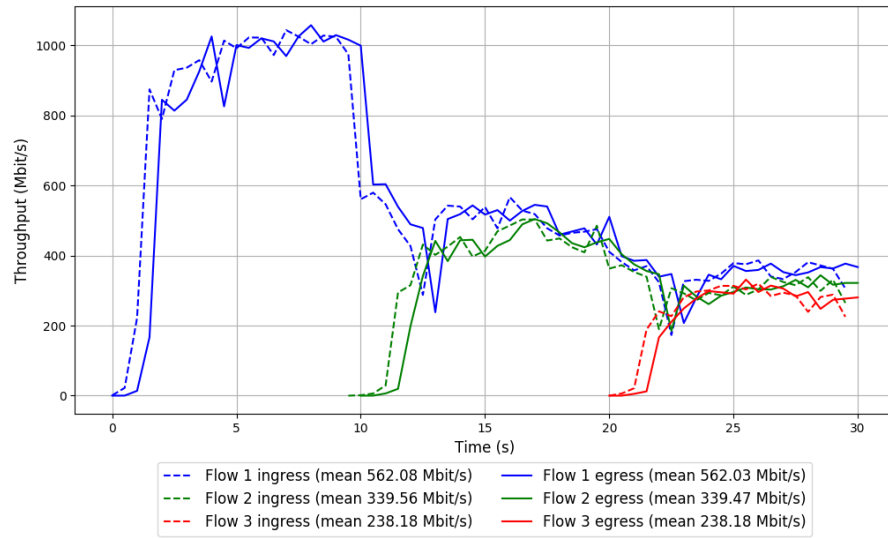
-- Flow 3:

Average throughput: 238.18 Mbit/s

95th percentile per-packet one-way delay: 88.102 ms

Loss rate: 0.00%

# Run 5: Report of FillP-Sheep — Data Link

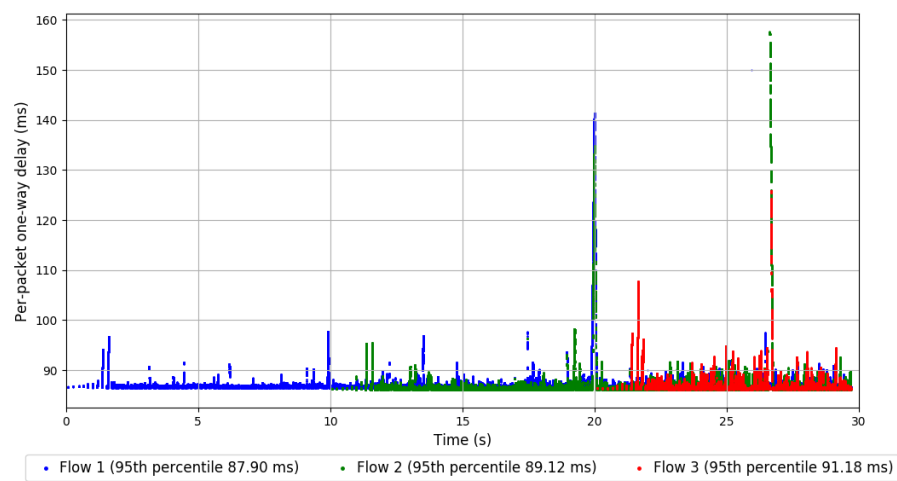
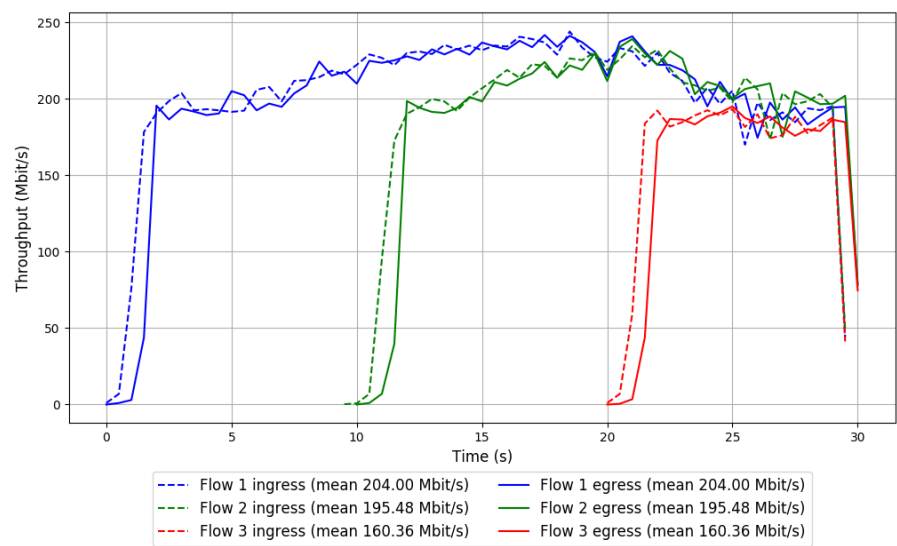


```
Run 1: Statistics of Indigo

Start at: 2019-01-02 23:02:16
End at: 2019-01-02 23:02:46
Local clock offset: -0.242 ms
Remote clock offset: 0.128 ms

# Below is generated by plot.py at 2019-01-03 02:55:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 385.49 Mbit/s
95th percentile per-packet one-way delay: 88.673 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 204.00 Mbit/s
95th percentile per-packet one-way delay: 87.898 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 195.48 Mbit/s
95th percentile per-packet one-way delay: 89.116 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 160.36 Mbit/s
95th percentile per-packet one-way delay: 91.178 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link

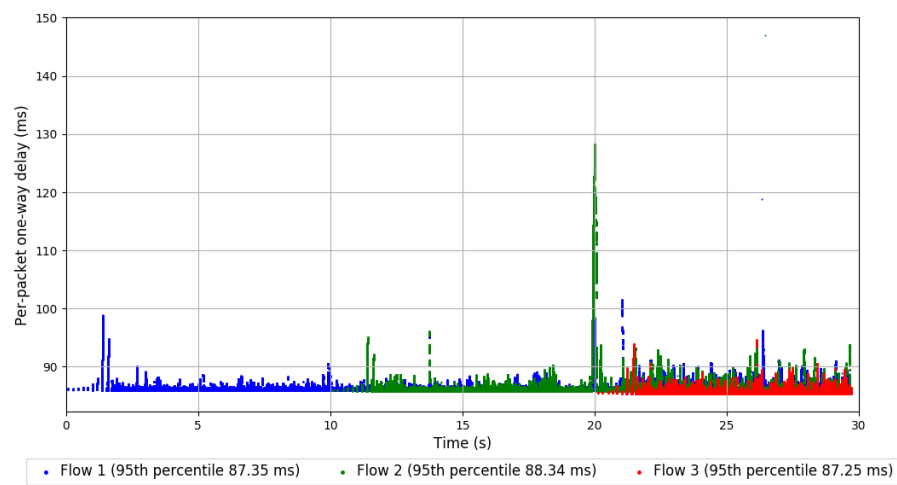
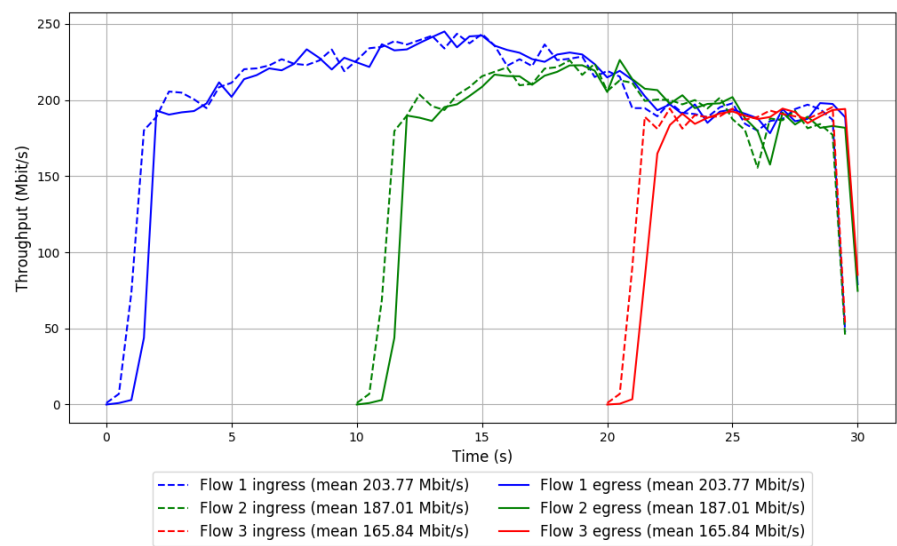


Run 2: Statistics of Indigo

Start at: 2019-01-02 23:36:21  
End at: 2019-01-02 23:36:51  
Local clock offset: 0.226 ms  
Remote clock offset: -0.001 ms

# Below is generated by plot.py at 2019-01-03 02:58:51  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 381.28 Mbit/s  
95th percentile per-packet one-way delay: 87.633 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 203.77 Mbit/s  
95th percentile per-packet one-way delay: 87.352 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 187.01 Mbit/s  
95th percentile per-packet one-way delay: 88.337 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 165.84 Mbit/s  
95th percentile per-packet one-way delay: 87.249 ms  
Loss rate: 0.00%

Run 2: Report of Indigo — Data Link

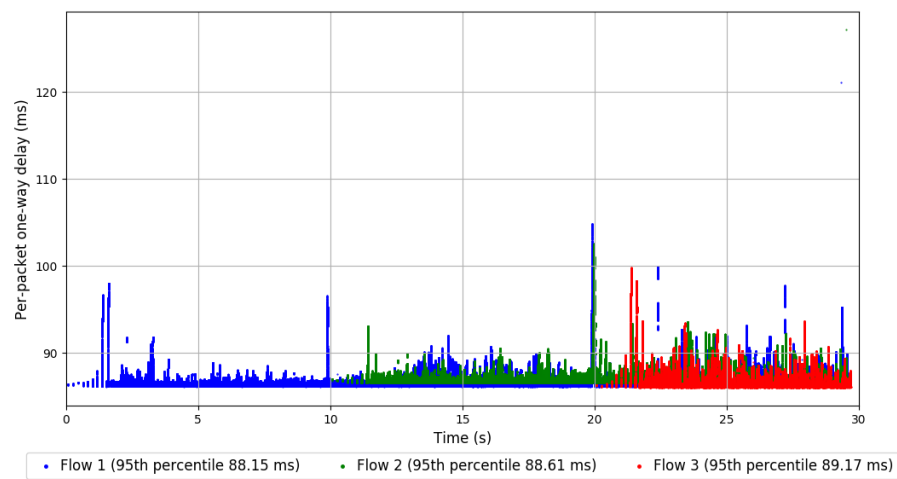
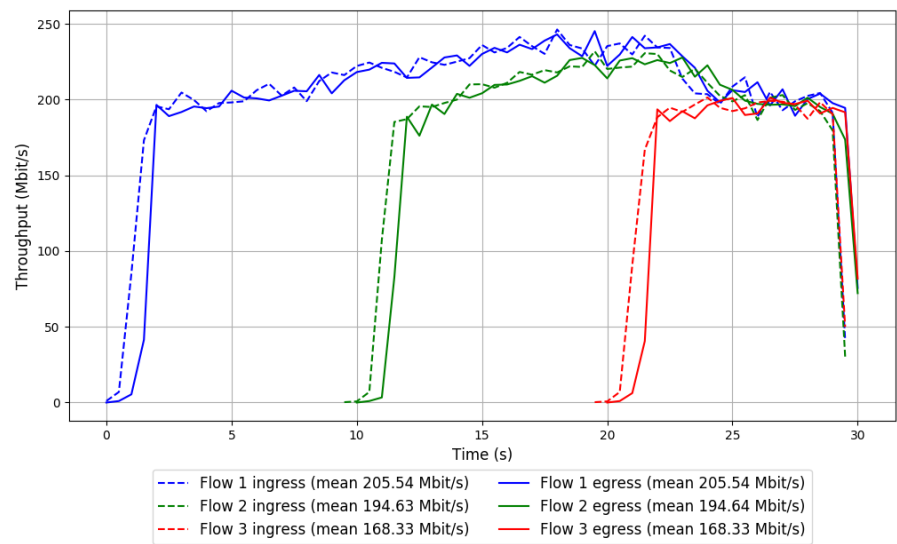


Run 3: Statistics of Indigo

Start at: 2019-01-03 00:10:05  
End at: 2019-01-03 00:10:35  
Local clock offset: -0.289 ms  
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2019-01-03 02:59:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 389.19 Mbit/s  
95th percentile per-packet one-way delay: 88.451 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 205.54 Mbit/s  
95th percentile per-packet one-way delay: 88.149 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 194.64 Mbit/s  
95th percentile per-packet one-way delay: 88.608 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 168.33 Mbit/s  
95th percentile per-packet one-way delay: 89.169 ms  
Loss rate: 0.00%

Run 3: Report of Indigo — Data Link





Run 4: Statistics of Indigo

Start at: 2019-01-03 00:44:01

End at: 2019-01-03 00:44:31

Local clock offset: 0.015 ms

Remote clock offset: 0.009 ms

# Below is generated by plot.py at 2019-01-03 02:59:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 379.70 Mbit/s

95th percentile per-packet one-way delay: 88.222 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 209.30 Mbit/s

95th percentile per-packet one-way delay: 87.275 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 179.33 Mbit/s

95th percentile per-packet one-way delay: 88.706 ms

Loss rate: 0.00%

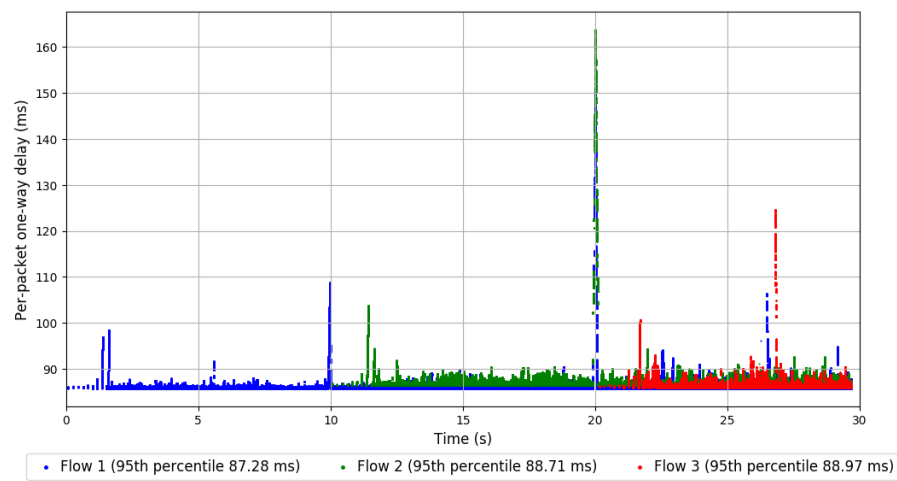
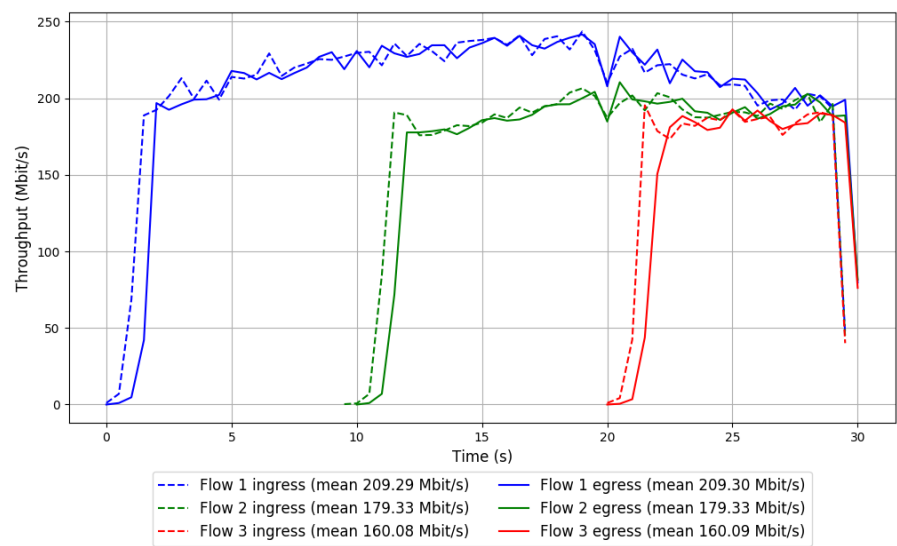
-- Flow 3:

Average throughput: 160.09 Mbit/s

95th percentile per-packet one-way delay: 88.973 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2019-01-03 01:17:50

End at: 2019-01-03 01:18:20

Local clock offset: -0.086 ms

Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2019-01-03 02:59:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 381.79 Mbit/s

95th percentile per-packet one-way delay: 88.471 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 200.91 Mbit/s

95th percentile per-packet one-way delay: 87.868 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 200.13 Mbit/s

95th percentile per-packet one-way delay: 89.258 ms

Loss rate: 0.00%

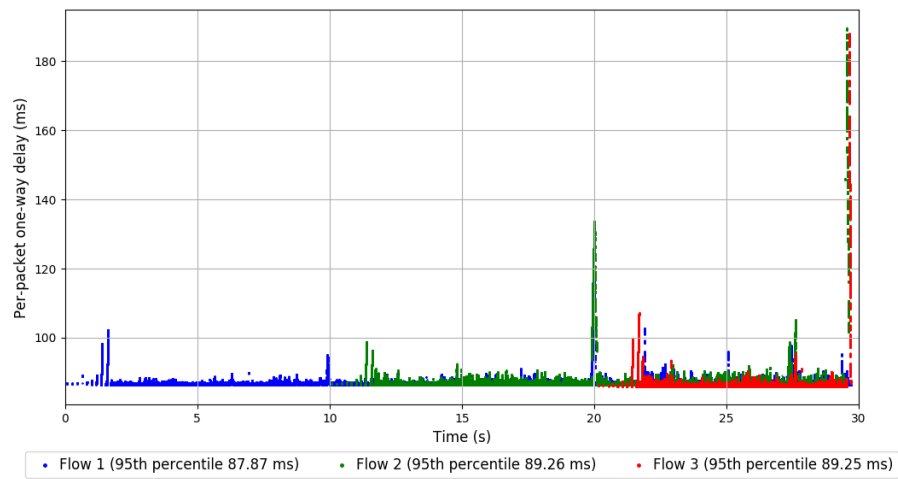
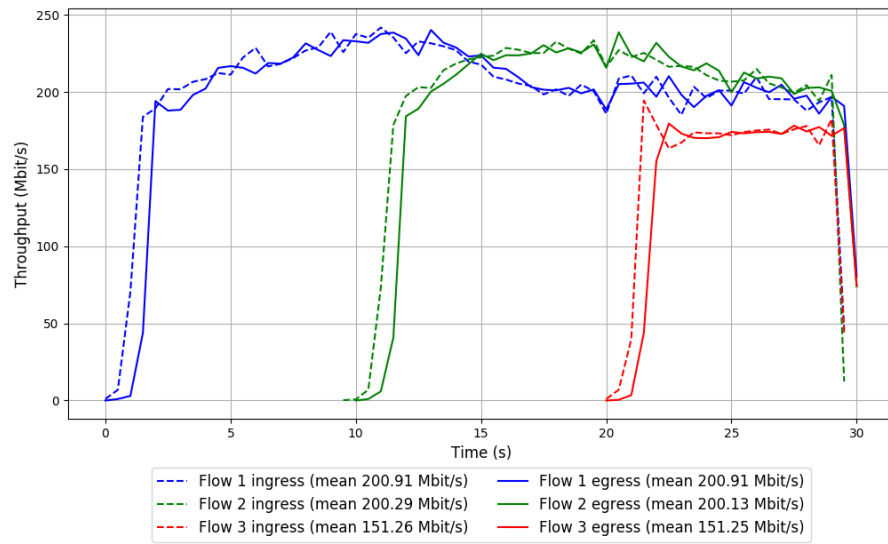
-- Flow 3:

Average throughput: 151.25 Mbit/s

95th percentile per-packet one-way delay: 89.249 ms

Loss rate: 0.00%

## Run 5: Report of Indigo — Data Link



Run 1: Statistics of Indigo-MusesD

Start at: 2019-01-02 22:32:02

End at: 2019-01-02 22:32:32

Local clock offset: 0.017 ms

Remote clock offset: 0.091 ms

# Below is generated by plot.py at 2019-01-03 03:02:28

# Datalink statistics

-- Total of 3 flows:

Average throughput: 832.18 Mbit/s

95th percentile per-packet one-way delay: 132.968 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 405.81 Mbit/s

95th percentile per-packet one-way delay: 131.399 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 471.04 Mbit/s

95th percentile per-packet one-way delay: 137.162 ms

Loss rate: 0.07%

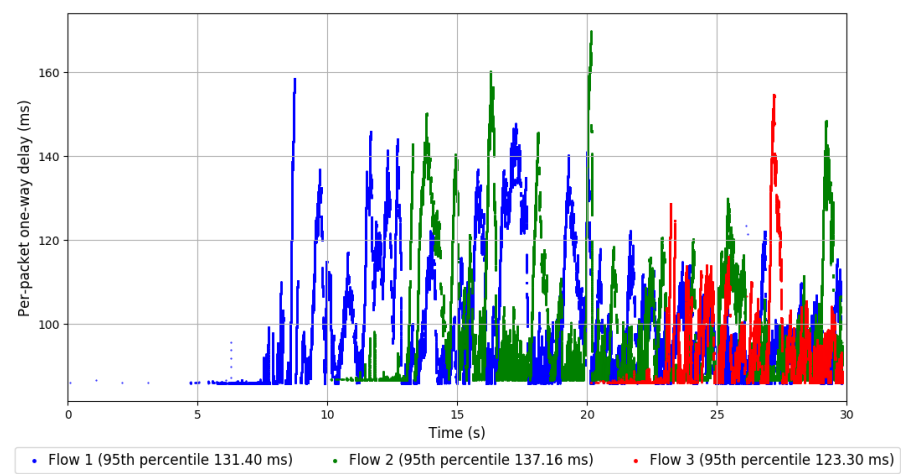
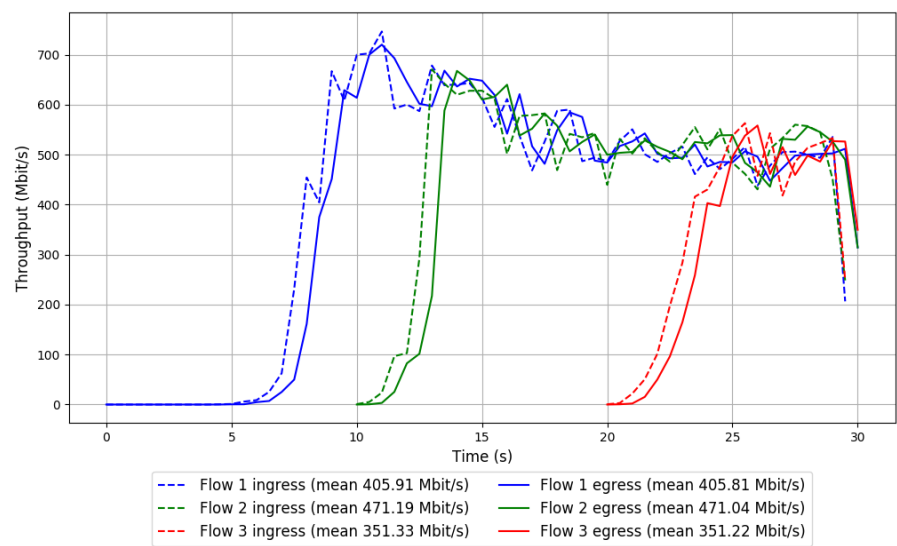
-- Flow 3:

Average throughput: 351.22 Mbit/s

95th percentile per-packet one-way delay: 123.300 ms

Loss rate: 0.02%

Run 1: Report of Indigo-MusesD — Data Link



Run 2: Statistics of Indigo-MusesD

Start at: 2019-01-02 23:06:17

End at: 2019-01-02 23:06:47

Local clock offset: -0.382 ms

Remote clock offset: 0.03 ms

# Below is generated by plot.py at 2019-01-03 03:09:52

# Datalink statistics

-- Total of 3 flows:

Average throughput: 959.87 Mbit/s

95th percentile per-packet one-way delay: 138.813 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 550.23 Mbit/s

95th percentile per-packet one-way delay: 138.042 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 454.62 Mbit/s

95th percentile per-packet one-way delay: 143.710 ms

Loss rate: 0.25%

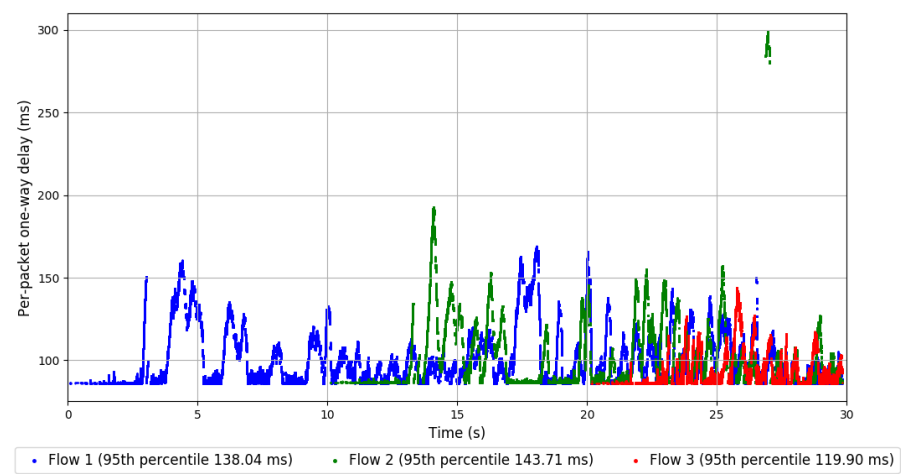
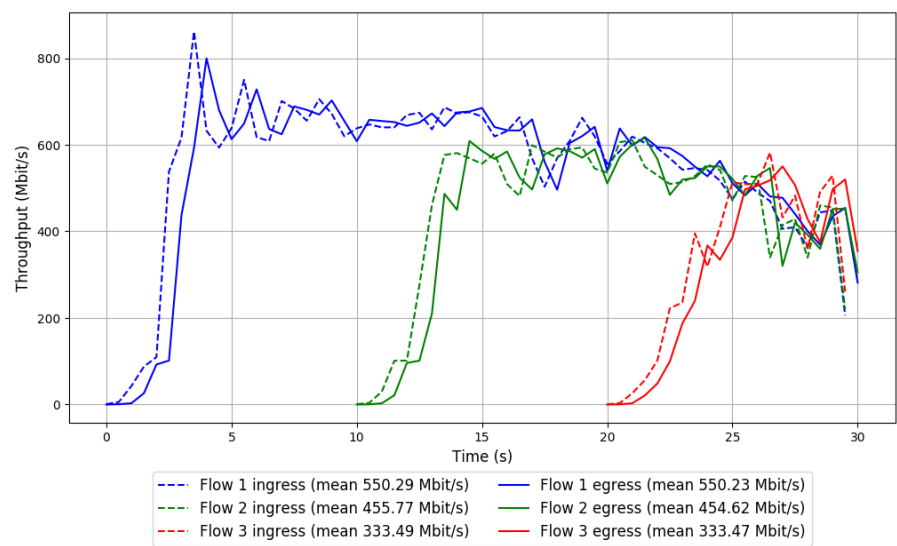
-- Flow 3:

Average throughput: 333.47 Mbit/s

95th percentile per-packet one-way delay: 119.901 ms

Loss rate: 0.00%

Run 2: Report of Indigo-MusesD — Data Link



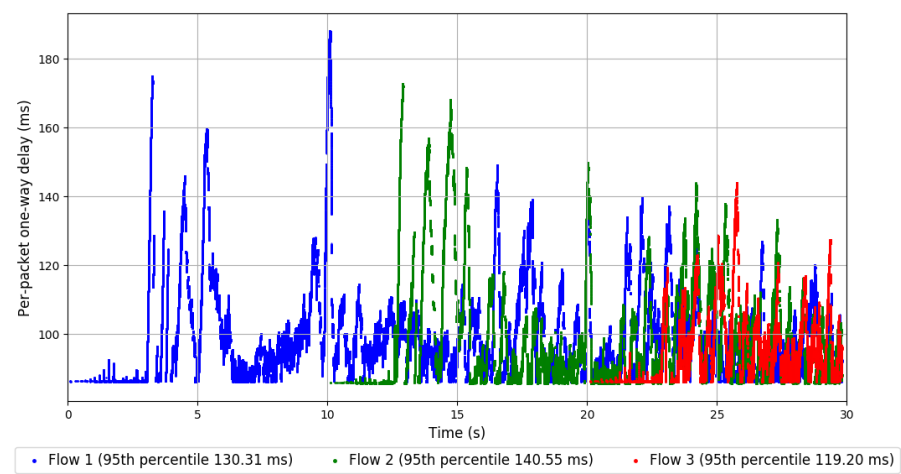
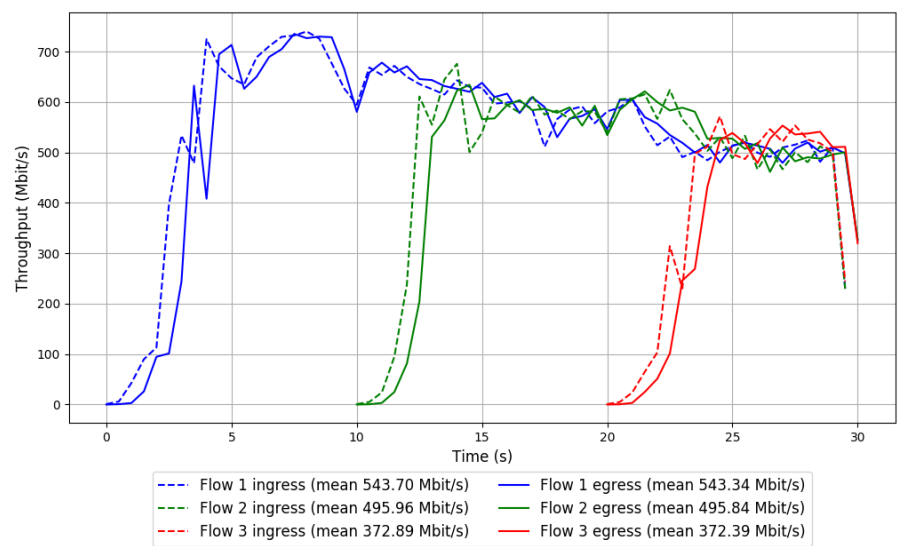


Run 3: Statistics of Indigo-MusesD

Start at: 2019-01-02 23:40:21  
End at: 2019-01-02 23:40:51  
Local clock offset: -0.112 ms  
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2019-01-03 03:17:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 993.49 Mbit/s  
95th percentile per-packet one-way delay: 132.177 ms  
Loss rate: 0.05%  
-- Flow 1:  
Average throughput: 543.34 Mbit/s  
95th percentile per-packet one-way delay: 130.312 ms  
Loss rate: 0.06%  
-- Flow 2:  
Average throughput: 495.84 Mbit/s  
95th percentile per-packet one-way delay: 140.548 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 372.39 Mbit/s  
95th percentile per-packet one-way delay: 119.199 ms  
Loss rate: 0.12%

Run 3: Report of Indigo-MusesD — Data Link

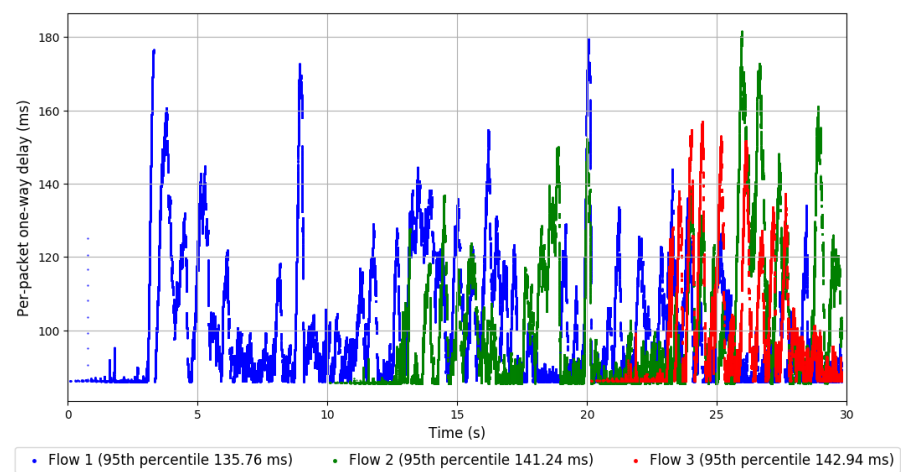
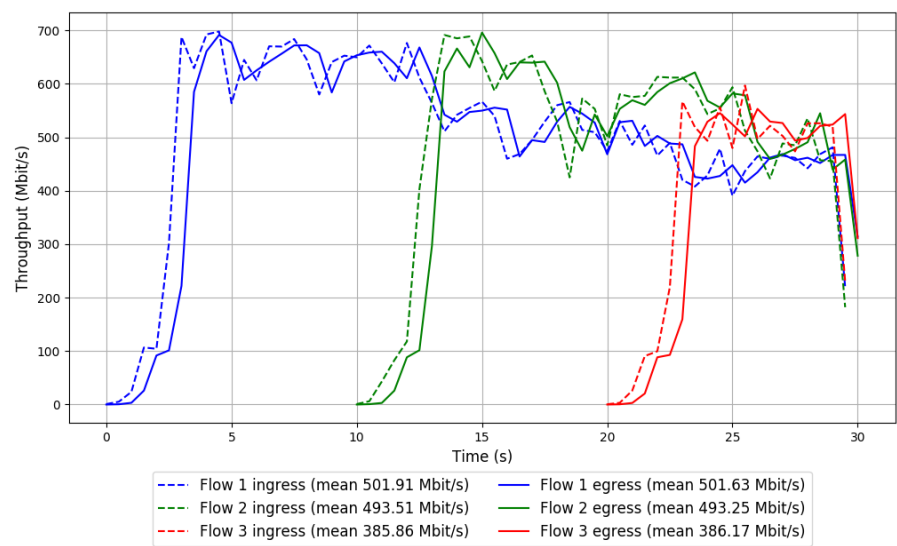


Run 4: Statistics of Indigo-MusesD

Start at: 2019-01-03 00:14:00  
End at: 2019-01-03 00:14:30  
Local clock offset: 0.151 ms  
Remote clock offset: -0.023 ms

# Below is generated by plot.py at 2019-01-03 03:19:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 954.23 Mbit/s  
95th percentile per-packet one-way delay: 138.160 ms  
Loss rate: 0.05%  
-- Flow 1:  
Average throughput: 501.63 Mbit/s  
95th percentile per-packet one-way delay: 135.758 ms  
Loss rate: 0.06%  
-- Flow 2:  
Average throughput: 493.25 Mbit/s  
95th percentile per-packet one-way delay: 141.236 ms  
Loss rate: 0.05%  
-- Flow 3:  
Average throughput: 386.17 Mbit/s  
95th percentile per-packet one-way delay: 142.943 ms  
Loss rate: 0.00%

Run 4: Report of Indigo-MusesD — Data Link



Run 5: Statistics of Indigo-MusesD

Start at: 2019-01-03 00:47:56

End at: 2019-01-03 00:48:26

Local clock offset: 0.154 ms

Remote clock offset: 0.023 ms

# Below is generated by plot.py at 2019-01-03 03:20:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 927.36 Mbit/s

95th percentile per-packet one-way delay: 145.445 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 487.52 Mbit/s

95th percentile per-packet one-way delay: 153.210 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 511.73 Mbit/s

95th percentile per-packet one-way delay: 141.800 ms

Loss rate: 0.12%

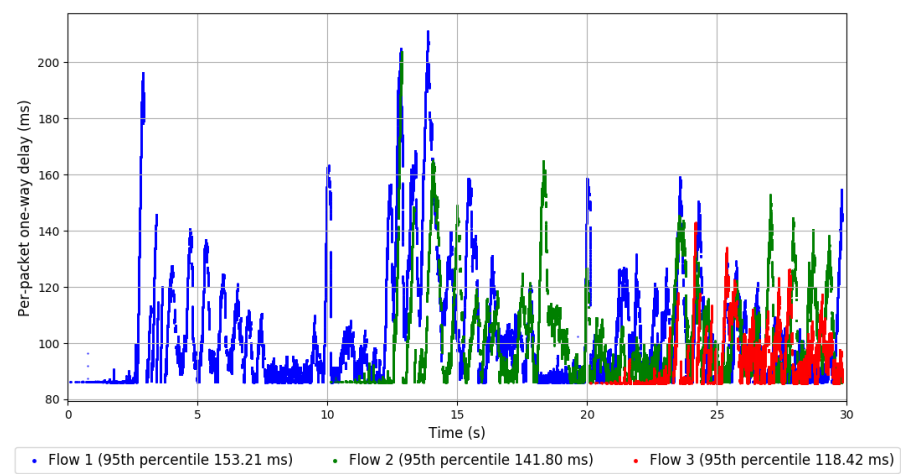
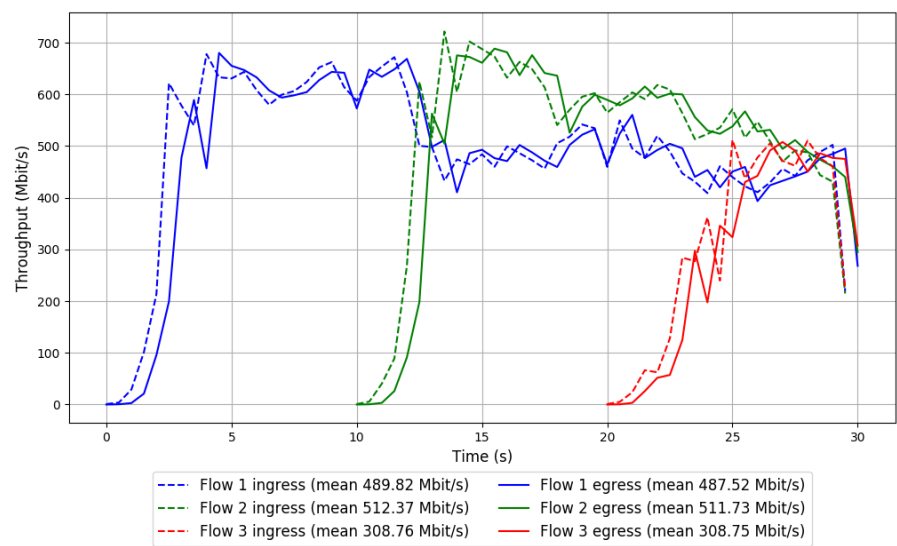
-- Flow 3:

Average throughput: 308.75 Mbit/s

95th percentile per-packet one-way delay: 118.420 ms

Loss rate: 0.00%

Run 5: Report of Indigo-MusesD — Data Link



Run 1: Statistics of Indigo-MusesT

Start at: 2019-01-02 22:37:13

End at: 2019-01-02 22:37:43

Local clock offset: -0.235 ms

Remote clock offset: 0.091 ms

# Below is generated by plot.py at 2019-01-03 03:23:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1084.41 Mbit/s

95th percentile per-packet one-way delay: 190.540 ms

Loss rate: 1.00%

-- Flow 1:

Average throughput: 623.81 Mbit/s

95th percentile per-packet one-way delay: 192.198 ms

Loss rate: 1.32%

-- Flow 2:

Average throughput: 591.95 Mbit/s

95th percentile per-packet one-way delay: 186.478 ms

Loss rate: 0.67%

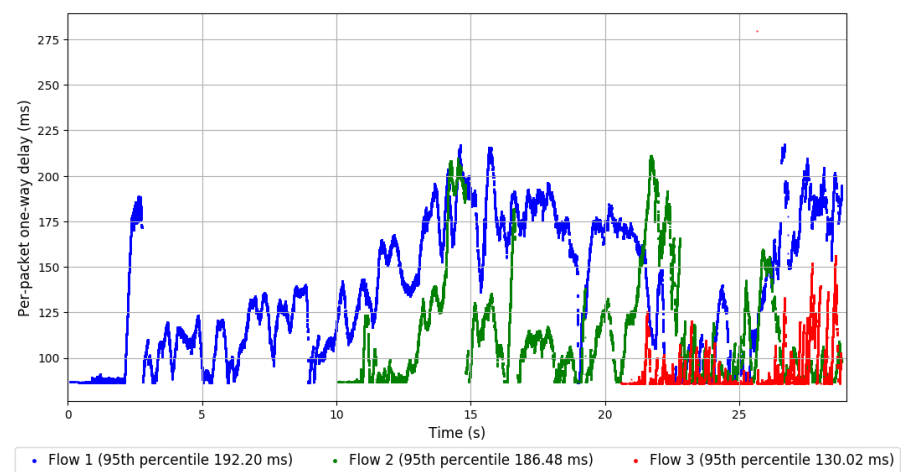
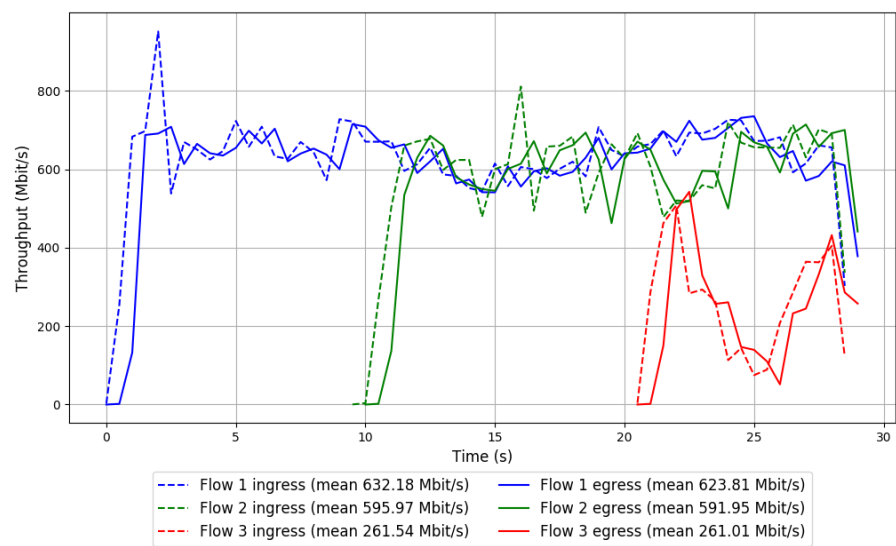
-- Flow 3:

Average throughput: 261.01 Mbit/s

95th percentile per-packet one-way delay: 130.022 ms

Loss rate: 0.00%

Run 1: Report of Indigo-MusesT — Data Link



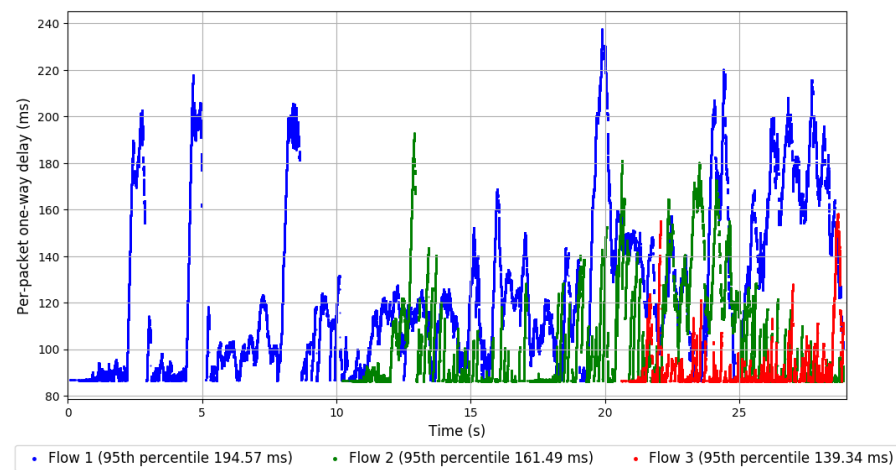
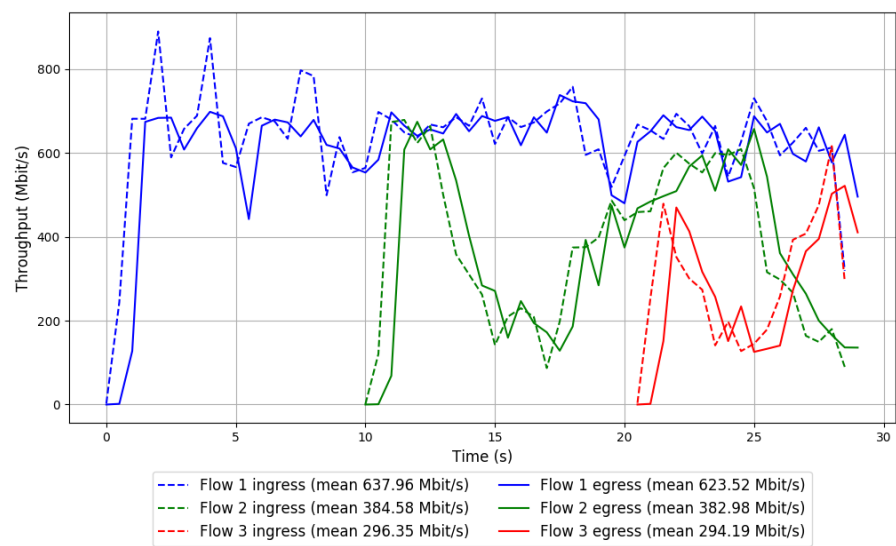


Run 2: Statistics of Indigo-MusesT

Start at: 2019-01-02 23:11:35  
End at: 2019-01-02 23:12:05  
Local clock offset: -0.114 ms  
Remote clock offset: -0.008 ms

# Below is generated by plot.py at 2019-01-03 03:23:58  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 956.06 Mbit/s  
95th percentile per-packet one-way delay: 187.927 ms  
Loss rate: 1.65%  
-- Flow 1:  
Average throughput: 623.52 Mbit/s  
95th percentile per-packet one-way delay: 194.570 ms  
Loss rate: 2.26%  
-- Flow 2:  
Average throughput: 382.98 Mbit/s  
95th percentile per-packet one-way delay: 161.491 ms  
Loss rate: 0.39%  
-- Flow 3:  
Average throughput: 294.19 Mbit/s  
95th percentile per-packet one-way delay: 139.341 ms  
Loss rate: 0.71%

Run 2: Report of Indigo-MusesT — Data Link

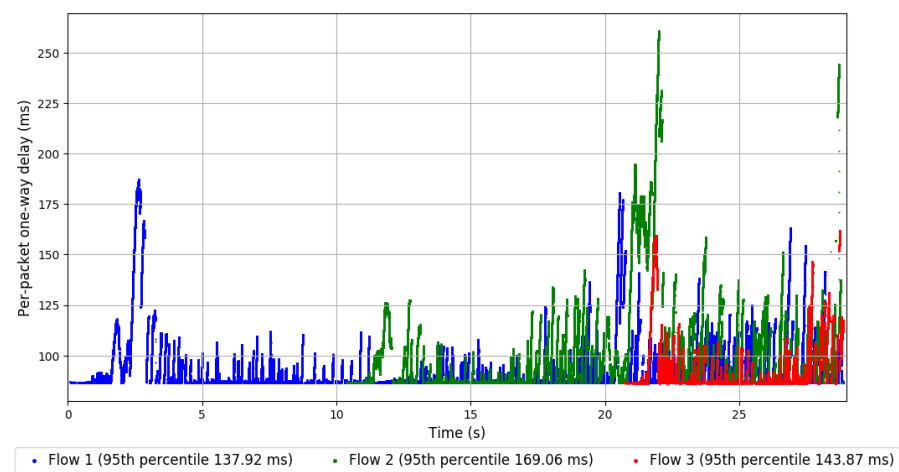
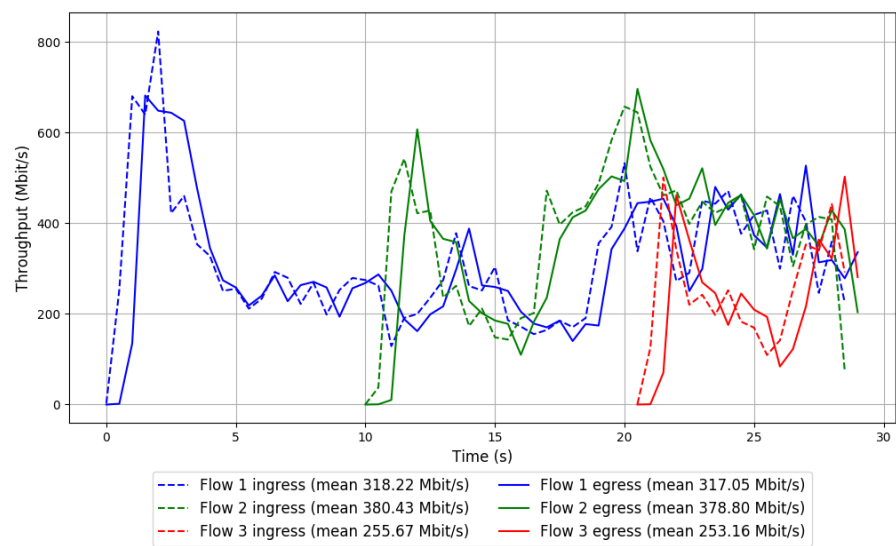


Run 3: Statistics of Indigo-MusesT

Start at: 2019-01-02 23:45:40  
End at: 2019-01-02 23:46:10  
Local clock offset: -0.381 ms  
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2019-01-03 03:23:58  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 631.46 Mbit/s  
95th percentile per-packet one-way delay: 151.950 ms  
Loss rate: 0.46%  
-- Flow 1:  
Average throughput: 317.05 Mbit/s  
95th percentile per-packet one-way delay: 137.923 ms  
Loss rate: 0.37%  
-- Flow 2:  
Average throughput: 378.80 Mbit/s  
95th percentile per-packet one-way delay: 169.057 ms  
Loss rate: 0.43%  
-- Flow 3:  
Average throughput: 253.16 Mbit/s  
95th percentile per-packet one-way delay: 143.872 ms  
Loss rate: 0.94%

Run 3: Report of Indigo-MusesT — Data Link



Run 4: Statistics of Indigo-MusesT

Start at: 2019-01-03 00:19:21

End at: 2019-01-03 00:19:51

Local clock offset: -0.344 ms

Remote clock offset: 0.008 ms

# Below is generated by plot.py at 2019-01-03 03:23:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 904.70 Mbit/s

95th percentile per-packet one-way delay: 192.940 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 613.10 Mbit/s

95th percentile per-packet one-way delay: 198.350 ms

Loss rate: 1.67%

-- Flow 2:

Average throughput: 331.92 Mbit/s

95th percentile per-packet one-way delay: 141.673 ms

Loss rate: 0.00%

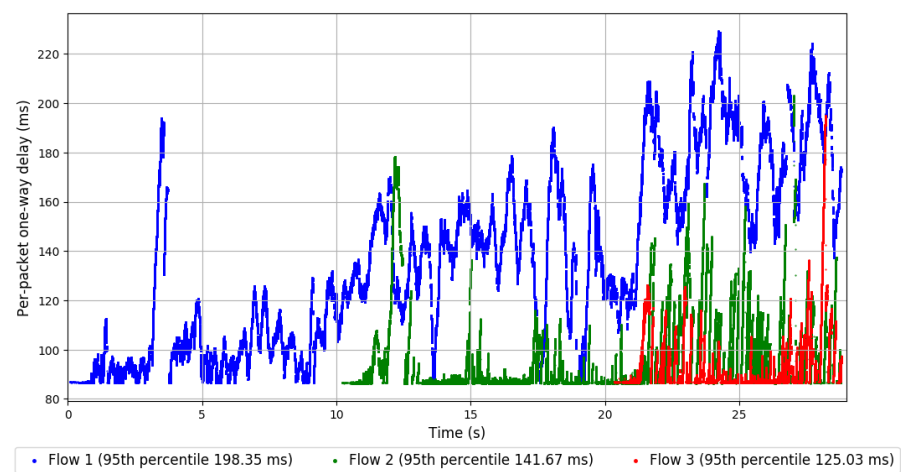
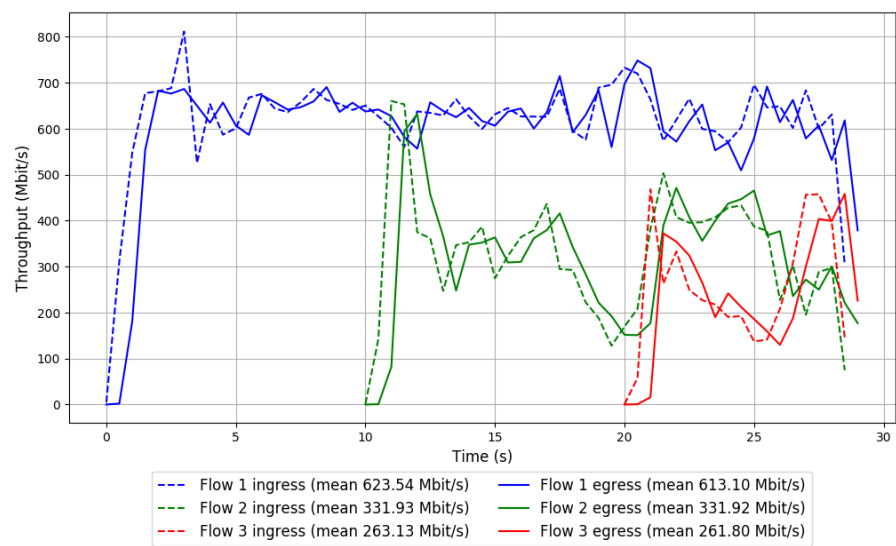
-- Flow 3:

Average throughput: 261.80 Mbit/s

95th percentile per-packet one-way delay: 125.029 ms

Loss rate: 0.48%

Run 4: Report of Indigo-MusesT — Data Link



Run 5: Statistics of Indigo-MusesT

Start at: 2019-01-03 00:53:02

End at: 2019-01-03 00:53:32

Local clock offset: 0.036 ms

Remote clock offset: 0.025 ms

# Below is generated by plot.py at 2019-01-03 03:30:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 923.93 Mbit/s

95th percentile per-packet one-way delay: 199.719 ms

Loss rate: 1.57%

-- Flow 1:

Average throughput: 606.53 Mbit/s

95th percentile per-packet one-way delay: 207.603 ms

Loss rate: 2.29%

-- Flow 2:

Average throughput: 351.76 Mbit/s

95th percentile per-packet one-way delay: 168.190 ms

Loss rate: 0.09%

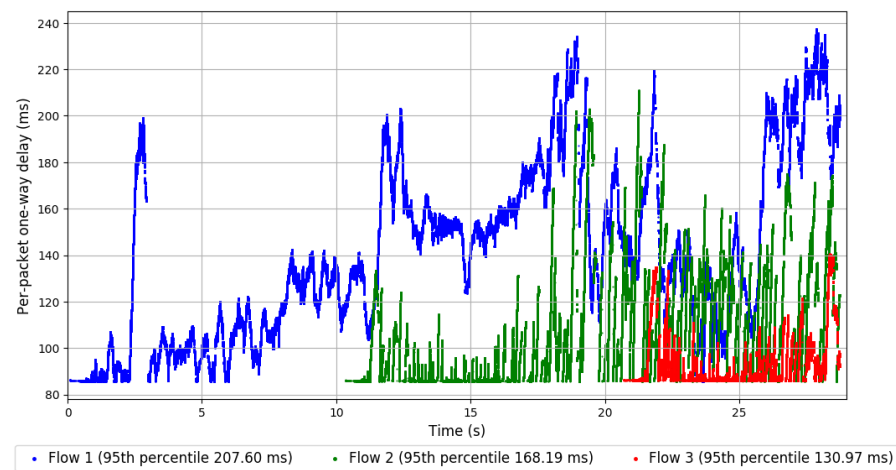
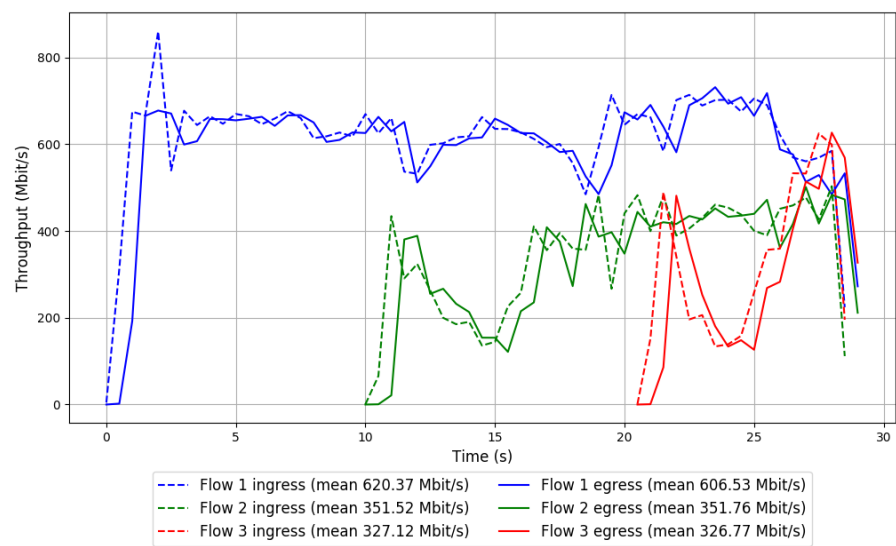
-- Flow 3:

Average throughput: 326.77 Mbit/s

95th percentile per-packet one-way delay: 130.965 ms

Loss rate: 0.32%

Run 5: Report of Indigo-MusesT — Data Link



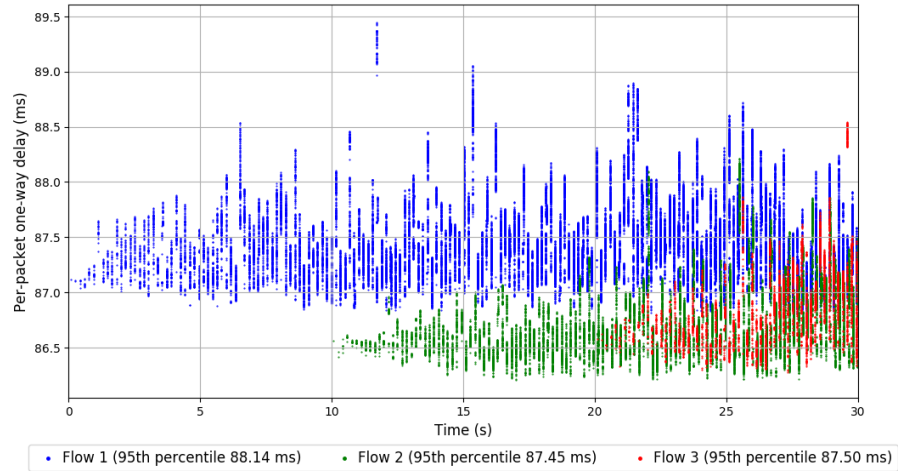
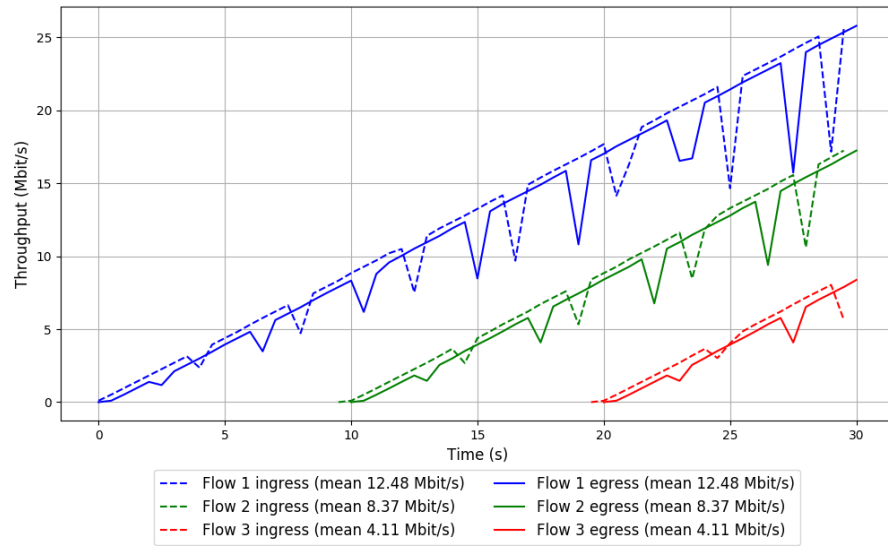


```
Run 1: Statistics of LEDBAT

Start at: 2019-01-02 22:48:01
End at: 2019-01-02 22:48:31
Local clock offset: -0.449 ms
Remote clock offset: 0.073 ms

# Below is generated by plot.py at 2019-01-03 03:30:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.39 Mbit/s
95th percentile per-packet one-way delay: 88.031 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.48 Mbit/s
95th percentile per-packet one-way delay: 88.136 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.37 Mbit/s
95th percentile per-packet one-way delay: 87.453 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.11 Mbit/s
95th percentile per-packet one-way delay: 87.504 ms
Loss rate: 0.00%
```

## Run 1: Report of LEDBAT — Data Link

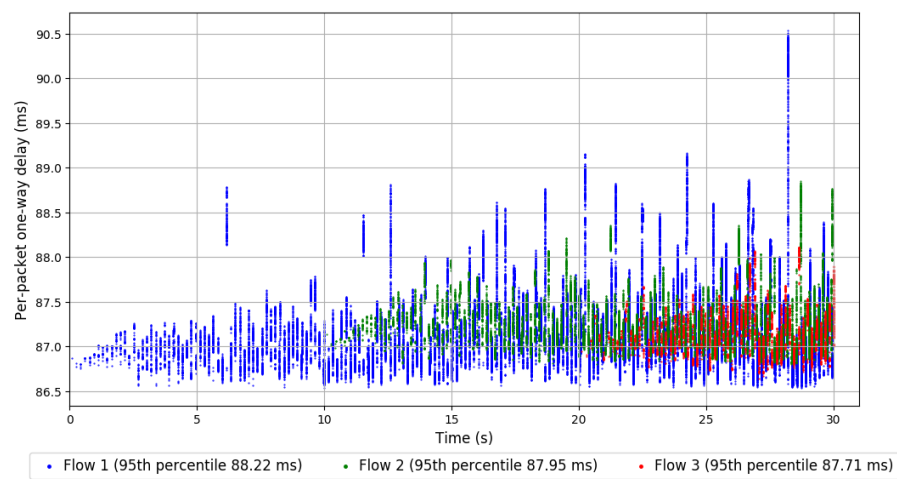
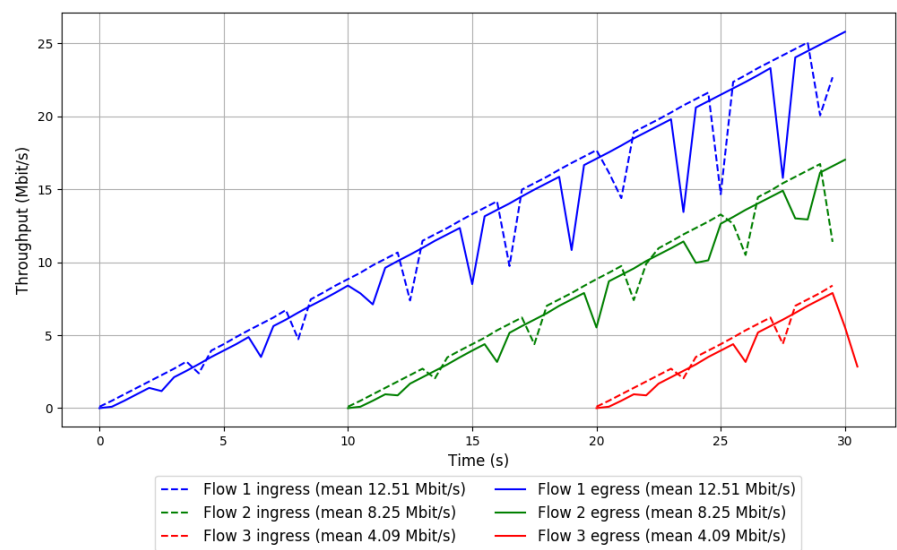


Run 2: Statistics of LEDBAT

Start at: 2019-01-02 23:22:09  
End at: 2019-01-02 23:22:39  
Local clock offset: -0.406 ms  
Remote clock offset: -0.005 ms

# Below is generated by plot.py at 2019-01-03 03:30:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 19.30 Mbit/s  
95th percentile per-packet one-way delay: 88.117 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 12.51 Mbit/s  
95th percentile per-packet one-way delay: 88.224 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 8.25 Mbit/s  
95th percentile per-packet one-way delay: 87.949 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 4.09 Mbit/s  
95th percentile per-packet one-way delay: 87.712 ms  
Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link

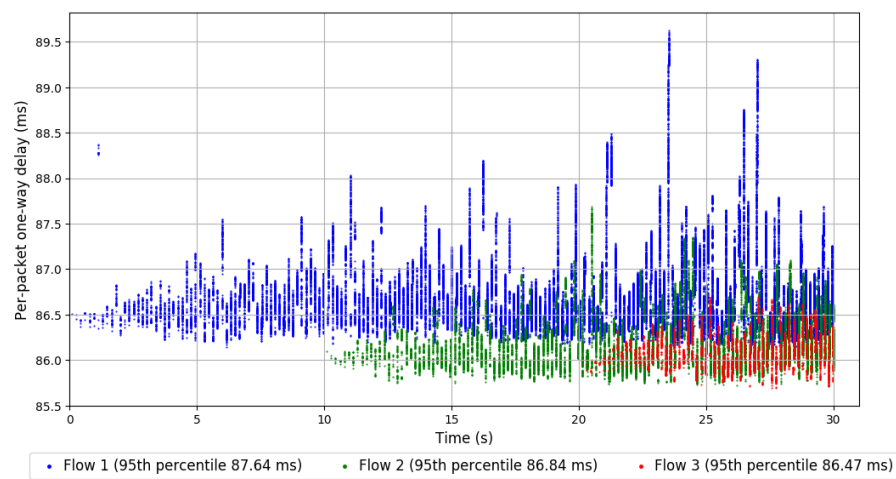
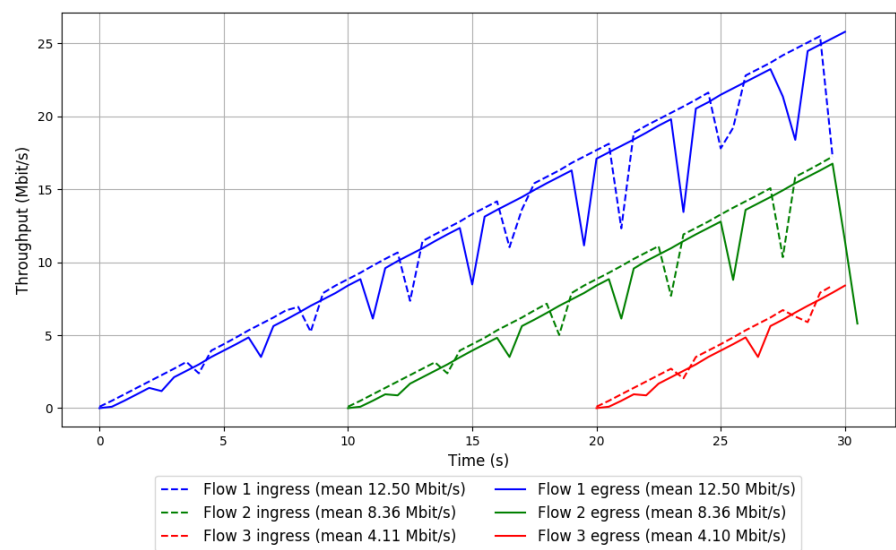


Run 3: Statistics of LEDBAT

Start at: 2019-01-02 23:55:53  
End at: 2019-01-02 23:56:23  
Local clock offset: 0.052 ms  
Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2019-01-03 03:30:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 19.38 Mbit/s  
95th percentile per-packet one-way delay: 87.444 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 12.50 Mbit/s  
95th percentile per-packet one-way delay: 87.636 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 8.36 Mbit/s  
95th percentile per-packet one-way delay: 86.843 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 4.10 Mbit/s  
95th percentile per-packet one-way delay: 86.469 ms  
Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link

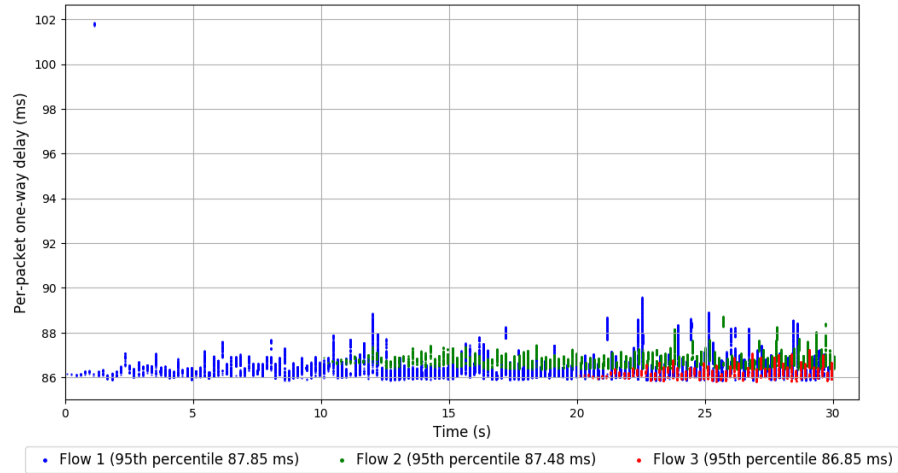
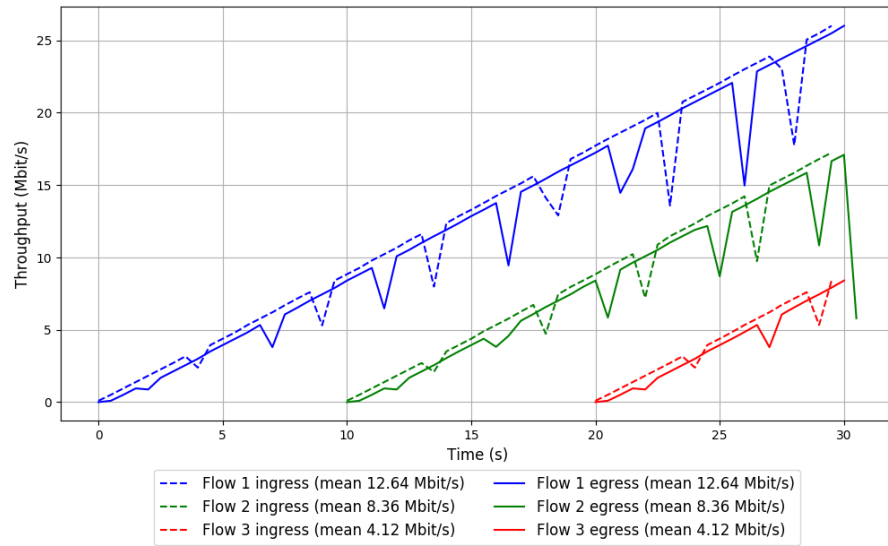


Run 4: Statistics of LEDBAT

Start at: 2019-01-03 00:29:59  
End at: 2019-01-03 00:30:29  
Local clock offset: -0.145 ms  
Remote clock offset: 0.006 ms

# Below is generated by plot.py at 2019-01-03 03:30:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 19.53 Mbit/s  
95th percentile per-packet one-way delay: 87.695 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 12.64 Mbit/s  
95th percentile per-packet one-way delay: 87.852 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 8.36 Mbit/s  
95th percentile per-packet one-way delay: 87.479 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 4.12 Mbit/s  
95th percentile per-packet one-way delay: 86.849 ms  
Loss rate: 0.00%

# Run 4: Report of LEDBAT — Data Link





Run 5: Statistics of LEDBAT

Start at: 2019-01-03 01:03:41

End at: 2019-01-03 01:04:11

Local clock offset: 0.327 ms

Remote clock offset: 0.041 ms

# Below is generated by plot.py at 2019-01-03 03:30:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 19.34 Mbit/s

95th percentile per-packet one-way delay: 87.189 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 12.49 Mbit/s

95th percentile per-packet one-way delay: 87.234 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 8.33 Mbit/s

95th percentile per-packet one-way delay: 87.175 ms

Loss rate: 0.00%

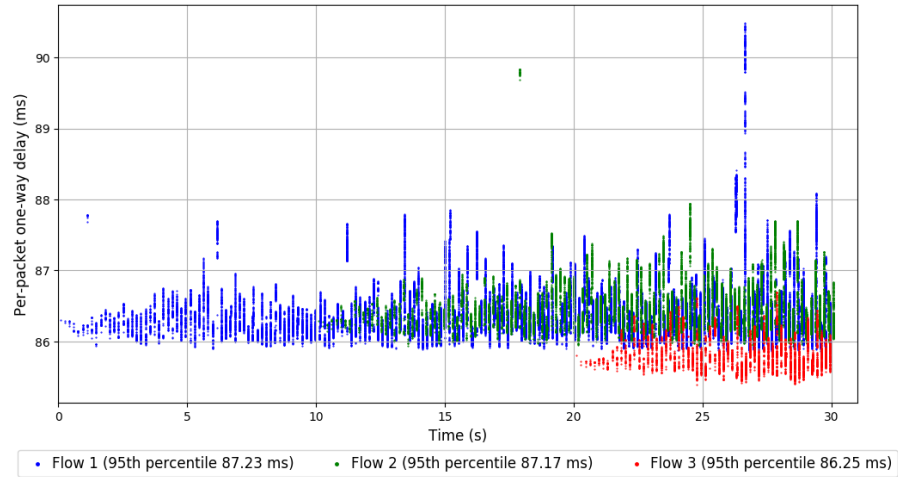
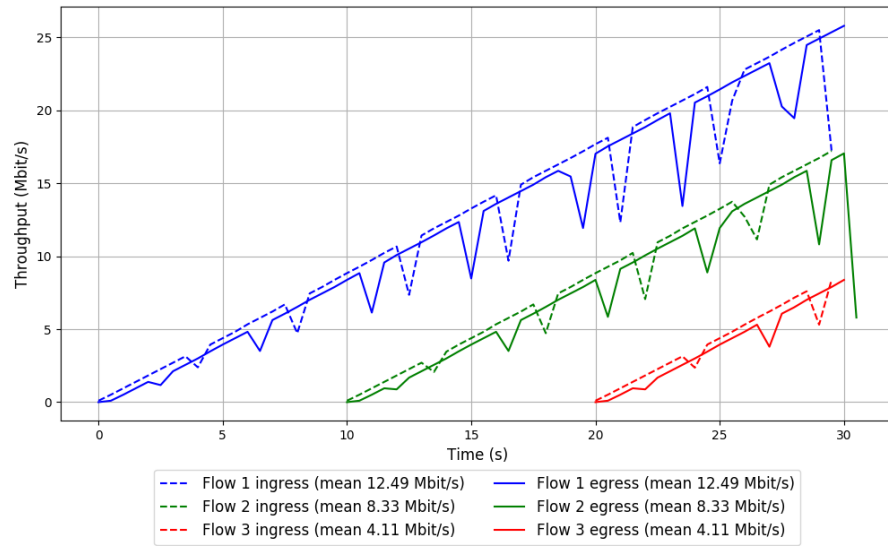
-- Flow 3:

Average throughput: 4.11 Mbit/s

95th percentile per-packet one-way delay: 86.252 ms

Loss rate: 0.00%

## Run 5: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2019-01-02 22:51:23

End at: 2019-01-02 22:51:53

Local clock offset: -0.079 ms

Remote clock offset: 0.036 ms

# Below is generated by plot.py at 2019-01-03 03:46:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 634.39 Mbit/s

95th percentile per-packet one-way delay: 246.610 ms

Loss rate: 4.67%

-- Flow 1:

Average throughput: 342.88 Mbit/s

95th percentile per-packet one-way delay: 254.563 ms

Loss rate: 7.43%

-- Flow 2:

Average throughput: 315.13 Mbit/s

95th percentile per-packet one-way delay: 225.023 ms

Loss rate: 1.15%

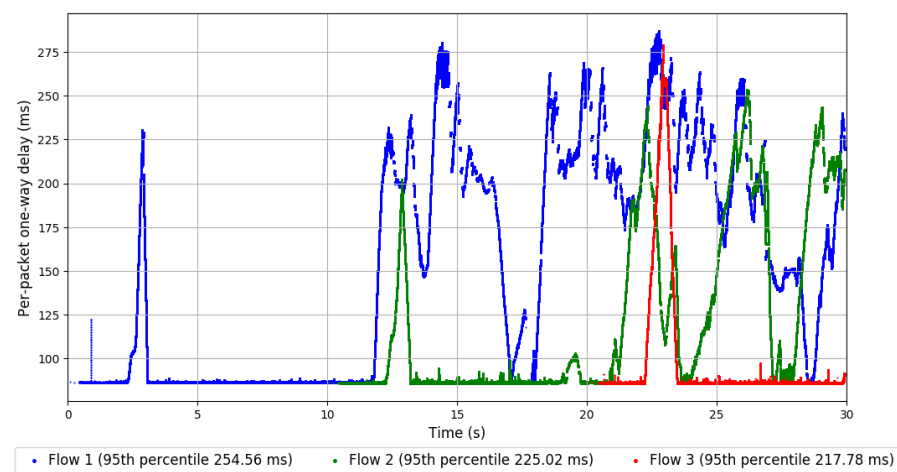
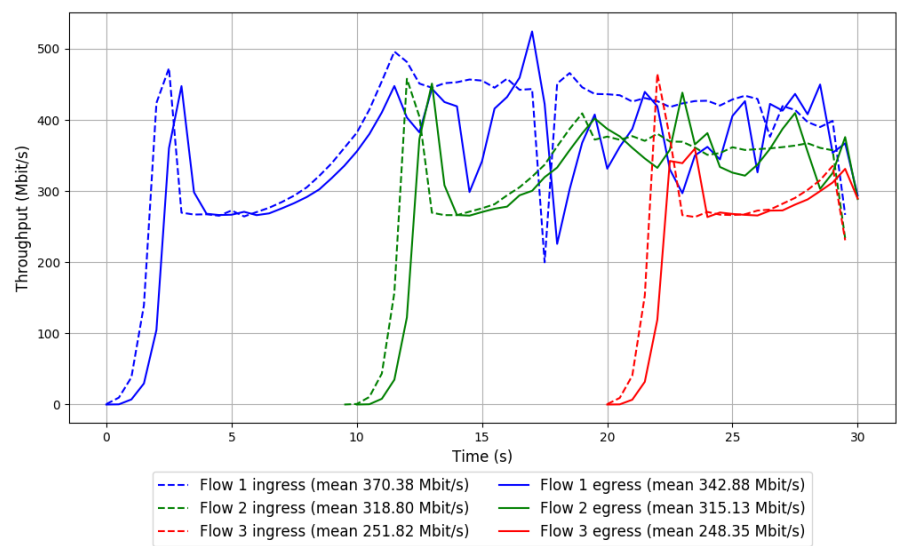
-- Flow 3:

Average throughput: 248.35 Mbit/s

95th percentile per-packet one-way delay: 217.783 ms

Loss rate: 1.36%

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2019-01-02 23:25:19

End at: 2019-01-02 23:25:49

Local clock offset: -0.167 ms

Remote clock offset: 0.038 ms

# Below is generated by plot.py at 2019-01-03 03:46:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 588.50 Mbit/s

95th percentile per-packet one-way delay: 260.142 ms

Loss rate: 11.91%

-- Flow 1:

Average throughput: 338.17 Mbit/s

95th percentile per-packet one-way delay: 261.513 ms

Loss rate: 18.58%

-- Flow 2:

Average throughput: 262.99 Mbit/s

95th percentile per-packet one-way delay: 255.729 ms

Loss rate: 0.96%

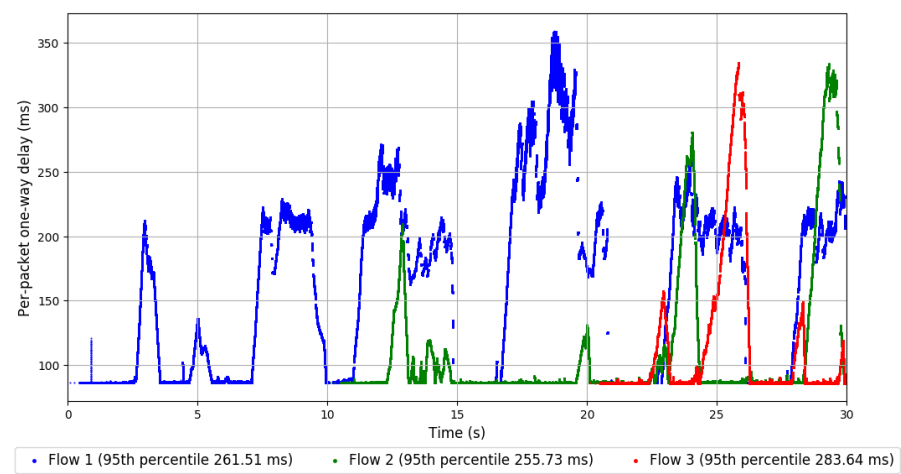
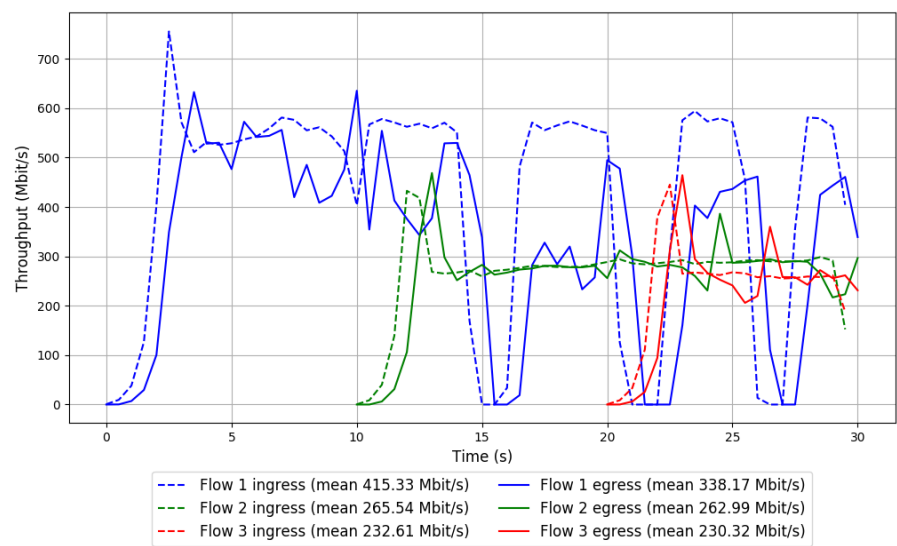
-- Flow 3:

Average throughput: 230.32 Mbit/s

95th percentile per-packet one-way delay: 283.639 ms

Loss rate: 0.97%

Run 2: Report of PCC-Allegro — Data Link

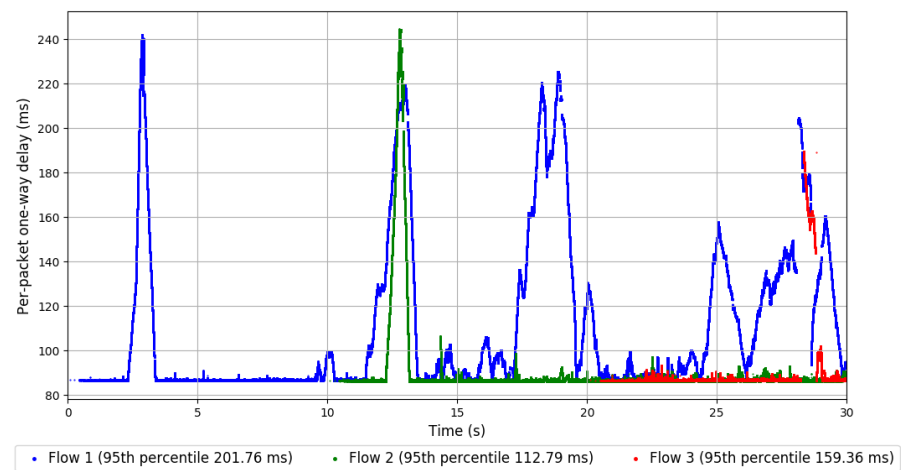
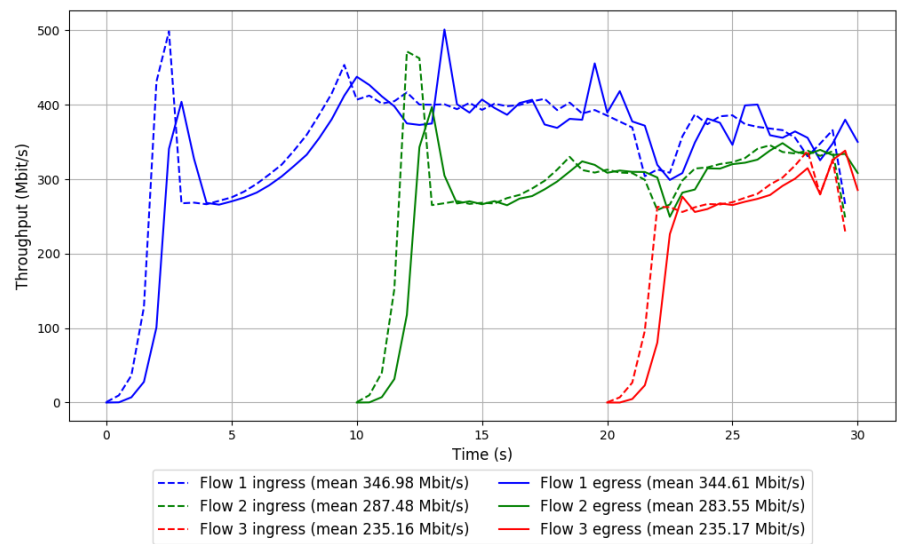


Run 3: Statistics of PCC-Allegro

Start at: 2019-01-02 23:59:12  
End at: 2019-01-02 23:59:42  
Local clock offset: -0.333 ms  
Remote clock offset: -0.036 ms

# Below is generated by plot.py at 2019-01-03 03:46:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 610.42 Mbit/s  
95th percentile per-packet one-way delay: 187.770 ms  
Loss rate: 0.81%  
-- Flow 1:  
Average throughput: 344.61 Mbit/s  
95th percentile per-packet one-way delay: 201.760 ms  
Loss rate: 0.68%  
-- Flow 2:  
Average throughput: 283.55 Mbit/s  
95th percentile per-packet one-way delay: 112.789 ms  
Loss rate: 1.36%  
-- Flow 3:  
Average throughput: 235.17 Mbit/s  
95th percentile per-packet one-way delay: 159.361 ms  
Loss rate: 0.00%

Run 3: Report of PCC-Allegro — Data Link





Run 4: Statistics of PCC-Allegro

Start at: 2019-01-03 00:33:16

End at: 2019-01-03 00:33:46

Local clock offset: -0.098 ms

Remote clock offset: 0.019 ms

# Below is generated by plot.py at 2019-01-03 03:49:55

# Datalink statistics

-- Total of 3 flows:

Average throughput: 623.97 Mbit/s

95th percentile per-packet one-way delay: 217.309 ms

Loss rate: 2.56%

-- Flow 1:

Average throughput: 349.10 Mbit/s

95th percentile per-packet one-way delay: 221.592 ms

Loss rate: 3.13%

-- Flow 2:

Average throughput: 301.06 Mbit/s

95th percentile per-packet one-way delay: 167.161 ms

Loss rate: 0.69%

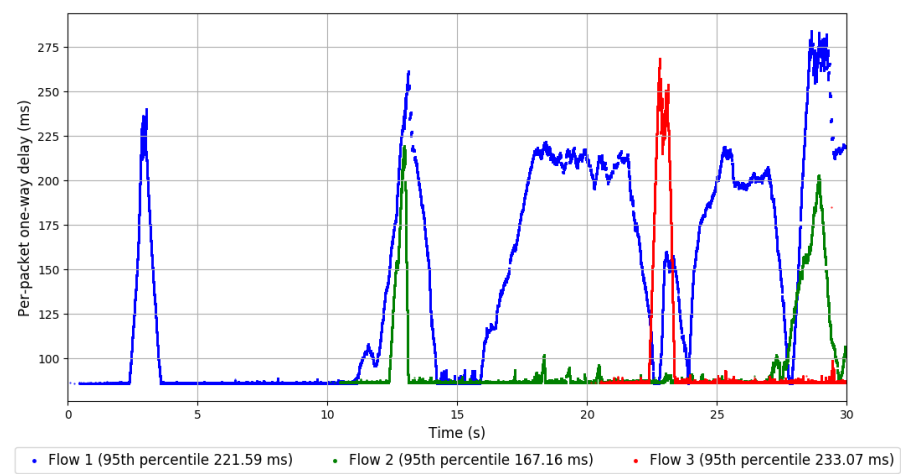
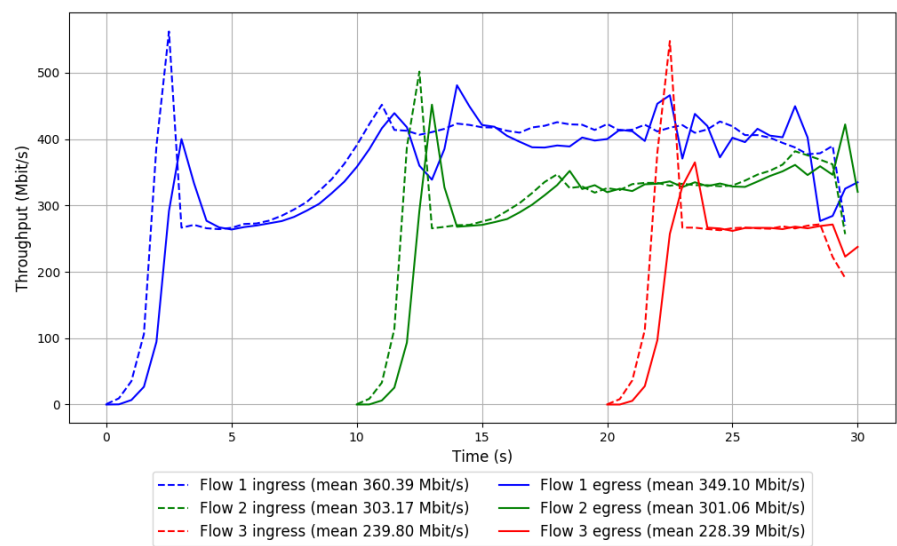
-- Flow 3:

Average throughput: 228.39 Mbit/s

95th percentile per-packet one-way delay: 233.072 ms

Loss rate: 4.76%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2019-01-03 01:07:03

End at: 2019-01-03 01:07:33

Local clock offset: -0.099 ms

Remote clock offset: 0.011 ms

# Below is generated by plot.py at 2019-01-03 03:49:56

# Datalink statistics

-- Total of 3 flows:

Average throughput: 610.34 Mbit/s

95th percentile per-packet one-way delay: 226.825 ms

Loss rate: 2.65%

-- Flow 1:

Average throughput: 347.15 Mbit/s

95th percentile per-packet one-way delay: 231.371 ms

Loss rate: 4.07%

-- Flow 2:

Average throughput: 277.85 Mbit/s

95th percentile per-packet one-way delay: 211.539 ms

Loss rate: 0.73%

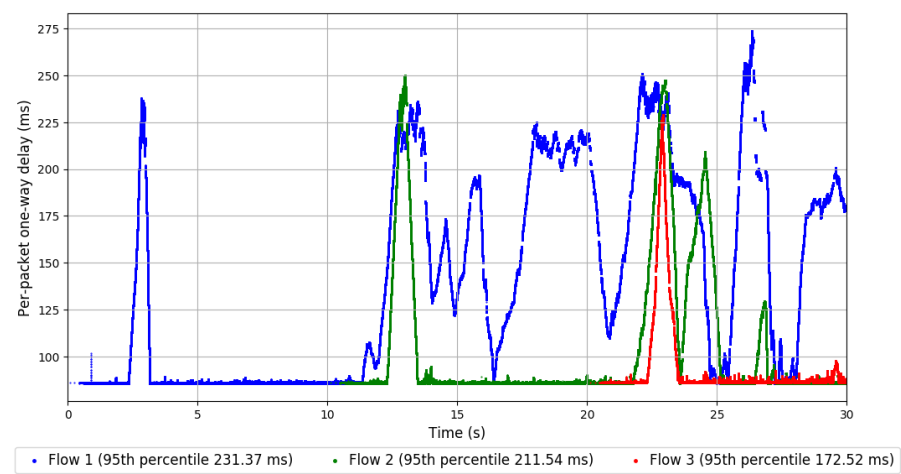
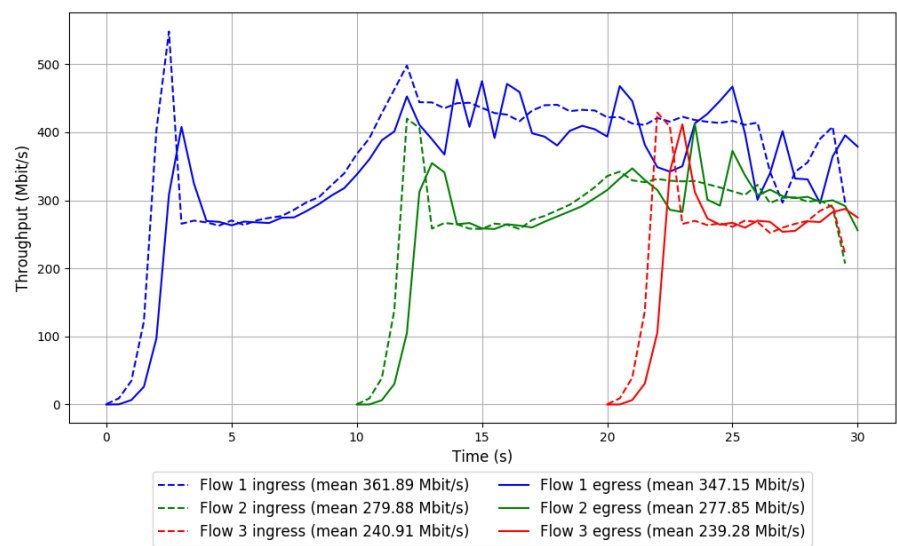
-- Flow 3:

Average throughput: 239.28 Mbit/s

95th percentile per-packet one-way delay: 172.523 ms

Loss rate: 0.66%

Run 5: Report of PCC-Allegro — Data Link

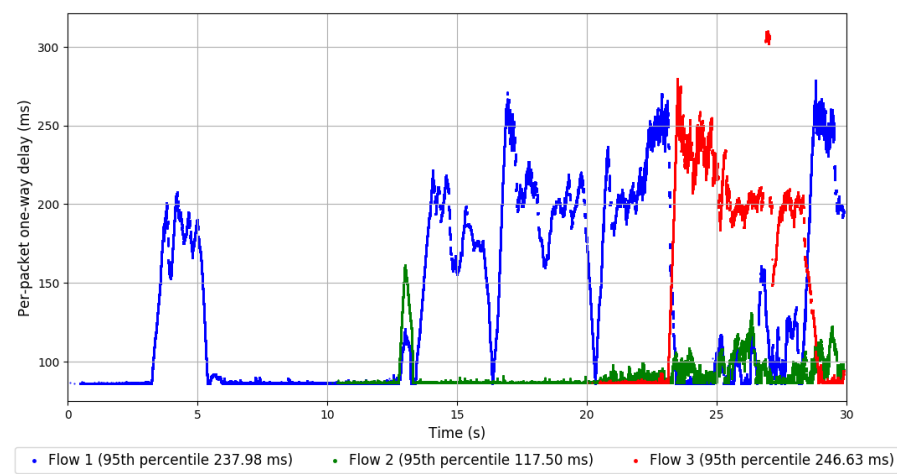
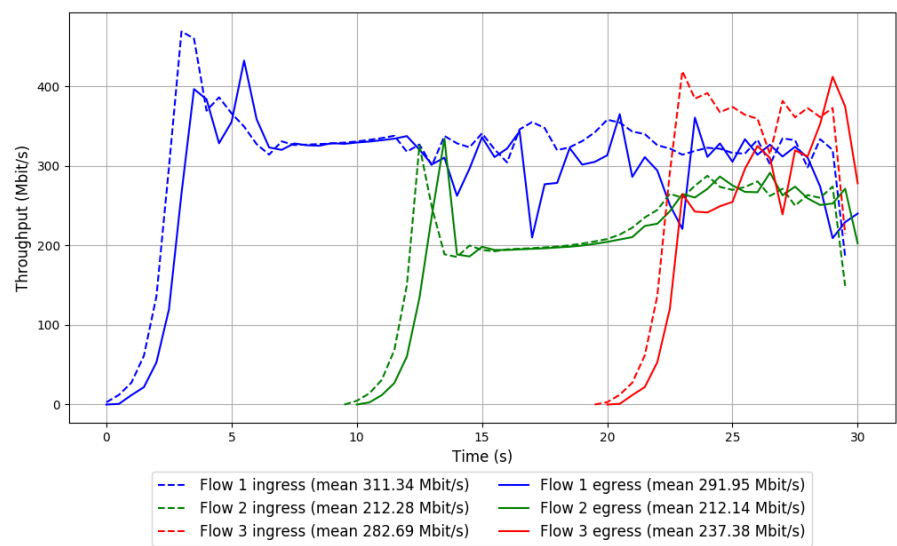


```
Run 1: Statistics of PCC-Expr

Start at: 2019-01-02 23:04:10
End at: 2019-01-02 23:04:40
Local clock offset: -0.228 ms
Remote clock offset: 0.046 ms

# Below is generated by plot.py at 2019-01-03 03:49:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 512.03 Mbit/s
95th percentile per-packet one-way delay: 232.690 ms
Loss rate: 6.30%
-- Flow 1:
Average throughput: 291.95 Mbit/s
95th percentile per-packet one-way delay: 237.982 ms
Loss rate: 6.22%
-- Flow 2:
Average throughput: 212.14 Mbit/s
95th percentile per-packet one-way delay: 117.495 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 237.38 Mbit/s
95th percentile per-packet one-way delay: 246.630 ms
Loss rate: 16.01%
```

Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

Start at: 2019-01-02 23:38:14

End at: 2019-01-02 23:38:44

Local clock offset: -0.501 ms

Remote clock offset: -0.0 ms

# Below is generated by plot.py at 2019-01-03 03:49:56

# Datalink statistics

-- Total of 3 flows:

Average throughput: 500.38 Mbit/s

95th percentile per-packet one-way delay: 212.925 ms

Loss rate: 4.22%

-- Flow 1:

Average throughput: 301.23 Mbit/s

95th percentile per-packet one-way delay: 207.315 ms

Loss rate: 5.64%

-- Flow 2:

Average throughput: 216.06 Mbit/s

95th percentile per-packet one-way delay: 216.071 ms

Loss rate: 2.56%

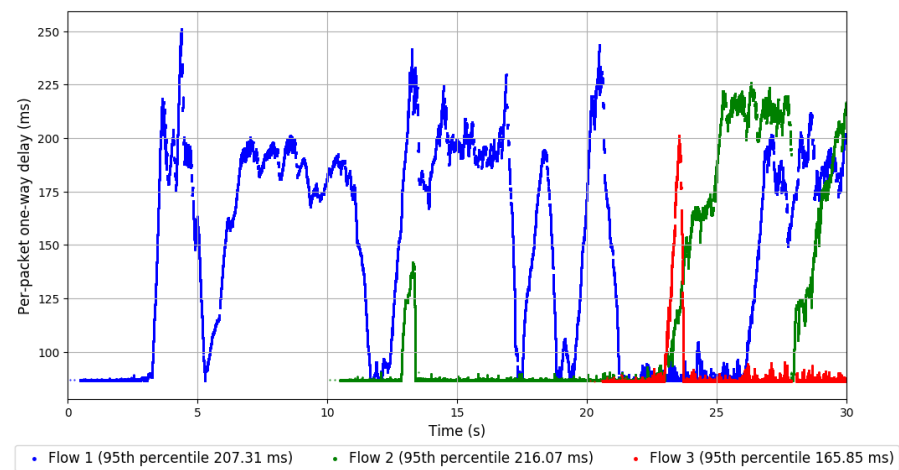
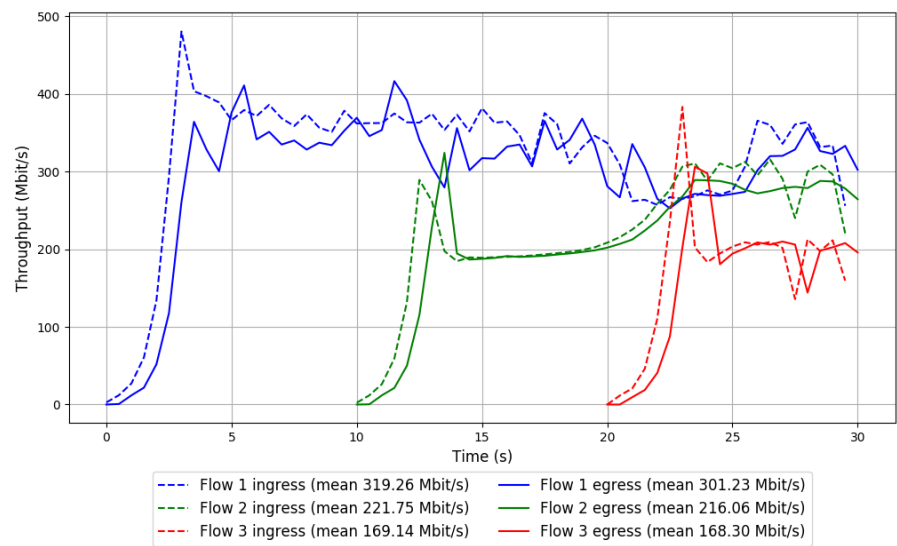
-- Flow 3:

Average throughput: 168.30 Mbit/s

95th percentile per-packet one-way delay: 165.852 ms

Loss rate: 0.50%

Run 2: Report of PCC-Expr — Data Link



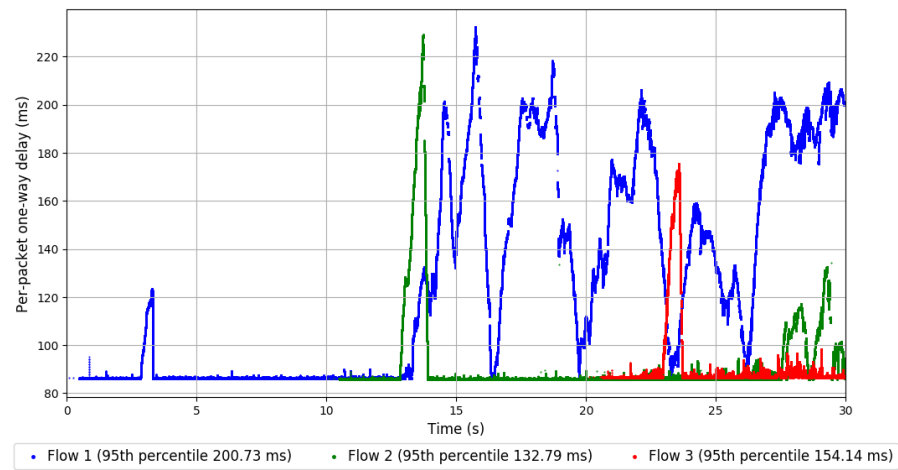
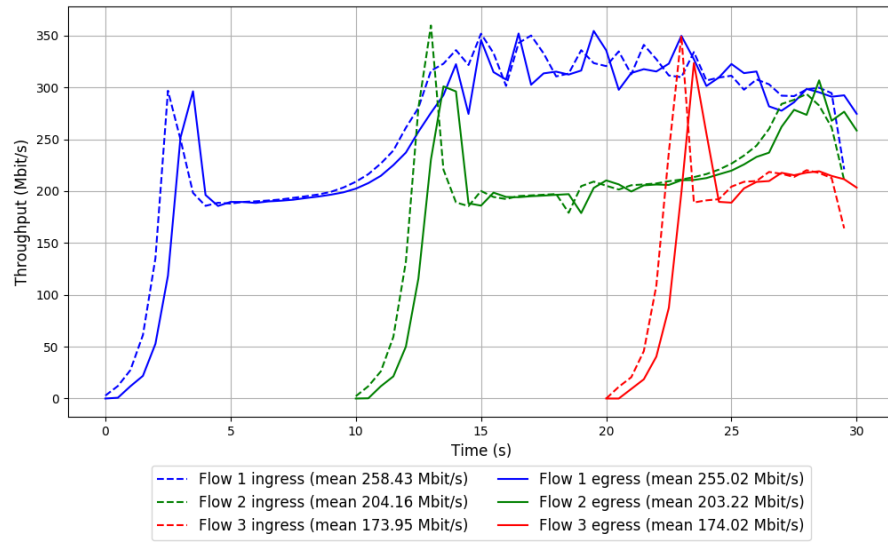


Run 3: Statistics of PCC-Expr

Start at: 2019-01-03 00:12:00  
End at: 2019-01-03 00:12:30  
Local clock offset: -0.095 ms  
Remote clock offset: -0.026 ms

# Below is generated by plot.py at 2019-01-03 03:53:22  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 447.58 Mbit/s  
95th percentile per-packet one-way delay: 198.399 ms  
Loss rate: 0.89%  
-- Flow 1:  
Average throughput: 255.02 Mbit/s  
95th percentile per-packet one-way delay: 200.733 ms  
Loss rate: 1.32%  
-- Flow 2:  
Average throughput: 203.22 Mbit/s  
95th percentile per-packet one-way delay: 132.791 ms  
Loss rate: 0.45%  
-- Flow 3:  
Average throughput: 174.02 Mbit/s  
95th percentile per-packet one-way delay: 154.141 ms  
Loss rate: 0.00%

### Run 3: Report of PCC-Expr — Data Link

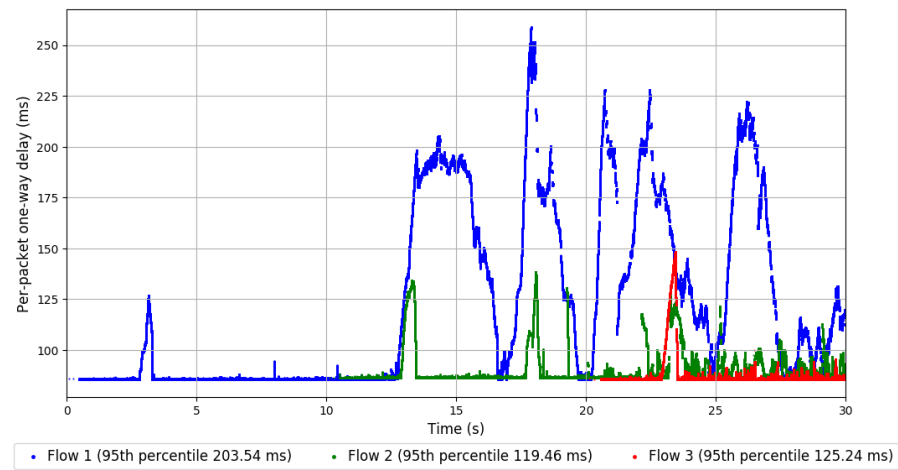
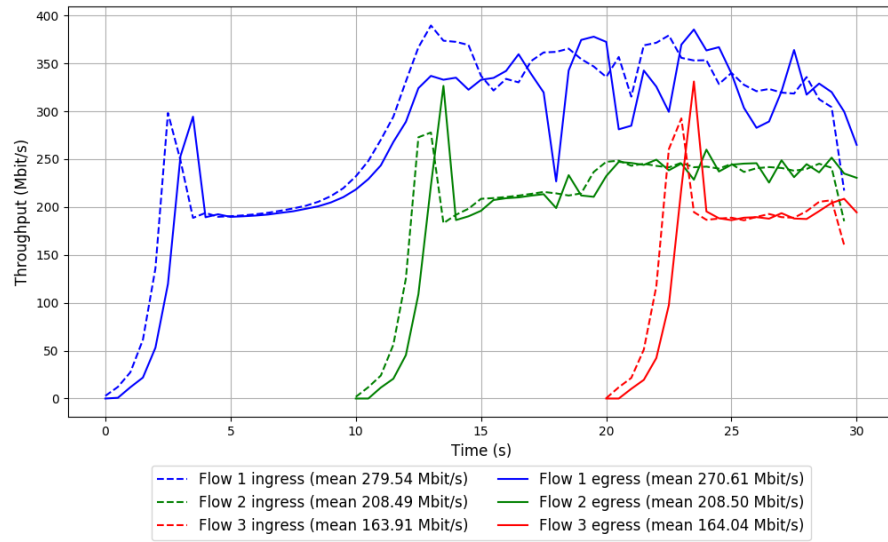


Run 4: Statistics of PCC-Expr

Start at: 2019-01-03 00:45:55  
End at: 2019-01-03 00:46:25  
Local clock offset: 0.09 ms  
Remote clock offset: -0.014 ms

# Below is generated by plot.py at 2019-01-03 04:06:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 463.19 Mbit/s  
95th percentile per-packet one-way delay: 195.737 ms  
Loss rate: 1.90%  
-- Flow 1:  
Average throughput: 270.61 Mbit/s  
95th percentile per-packet one-way delay: 203.544 ms  
Loss rate: 3.20%  
-- Flow 2:  
Average throughput: 208.50 Mbit/s  
95th percentile per-packet one-way delay: 119.462 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 164.04 Mbit/s  
95th percentile per-packet one-way delay: 125.244 ms  
Loss rate: 0.00%

# Run 4: Report of PCC-Expr — Data Link

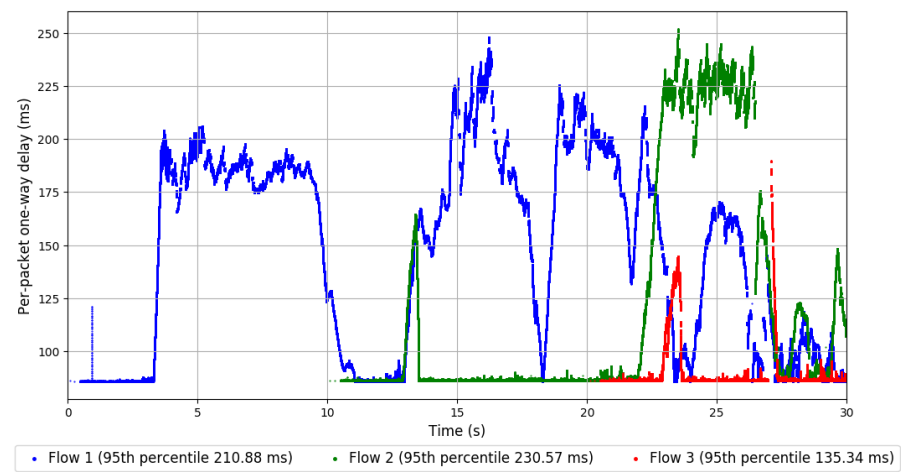
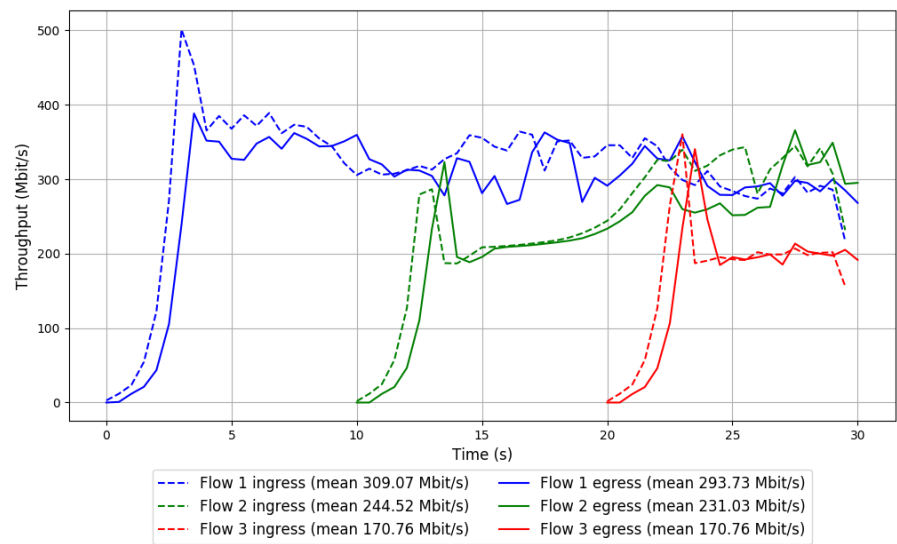


Run 5: Statistics of PCC-Expr

Start at: 2019-01-03 01:19:44  
End at: 2019-01-03 01:20:14  
Local clock offset: -0.096 ms  
Remote clock offset: -0.029 ms

# Below is generated by plot.py at 2019-01-03 04:08:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 503.65 Mbit/s  
95th percentile per-packet one-way delay: 222.198 ms  
Loss rate: 4.60%  
-- Flow 1:  
Average throughput: 293.73 Mbit/s  
95th percentile per-packet one-way delay: 210.883 ms  
Loss rate: 4.96%  
-- Flow 2:  
Average throughput: 231.03 Mbit/s  
95th percentile per-packet one-way delay: 230.572 ms  
Loss rate: 5.51%  
-- Flow 3:  
Average throughput: 170.76 Mbit/s  
95th percentile per-packet one-way delay: 135.342 ms  
Loss rate: 0.00%

Run 5: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2019-01-02 22:53:24

End at: 2019-01-02 22:53:54

Local clock offset: 0.176 ms

Remote clock offset: 0.054 ms

# Below is generated by plot.py at 2019-01-03 04:08:45

# Datalink statistics

-- Total of 3 flows:

Average throughput: 78.74 Mbit/s

95th percentile per-packet one-way delay: 85.748 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 42.97 Mbit/s

95th percentile per-packet one-way delay: 85.754 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 43.09 Mbit/s

95th percentile per-packet one-way delay: 85.693 ms

Loss rate: 0.00%

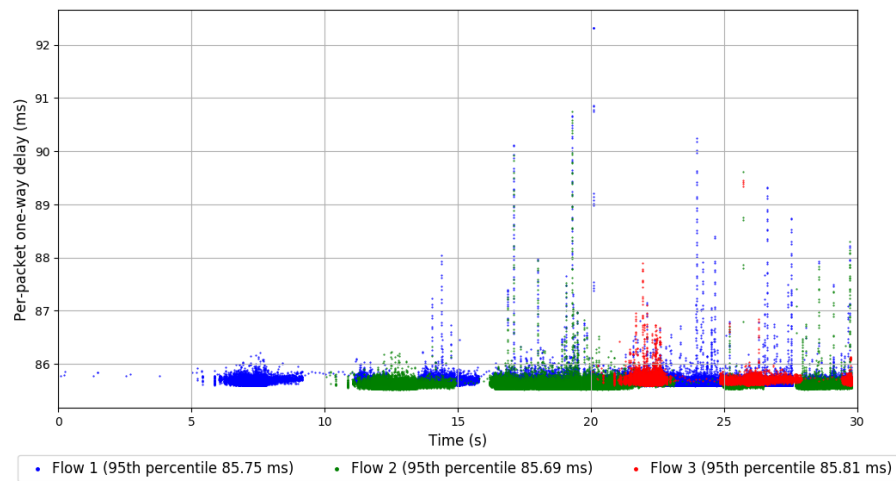
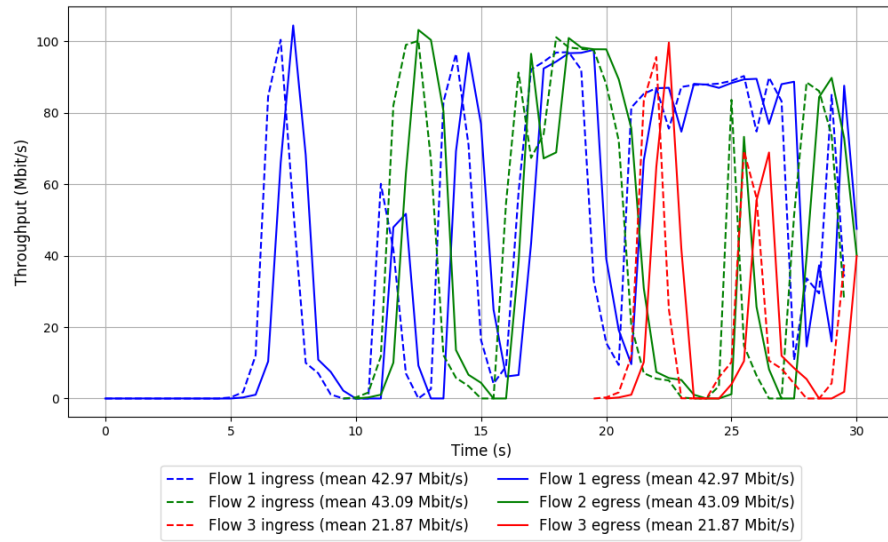
-- Flow 3:

Average throughput: 21.87 Mbit/s

95th percentile per-packet one-way delay: 85.805 ms

Loss rate: 0.00%

## Run 1: Report of QUIC Cubic — Data Link





Run 2: Statistics of QUIC Cubic

Start at: 2019-01-02 23:27:18

End at: 2019-01-02 23:27:48

Local clock offset: -0.107 ms

Remote clock offset: 0.009 ms

# Below is generated by plot.py at 2019-01-03 04:08:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 80.42 Mbit/s

95th percentile per-packet one-way delay: 86.373 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 41.46 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 48.64 Mbit/s

95th percentile per-packet one-way delay: 85.981 ms

Loss rate: 0.00%

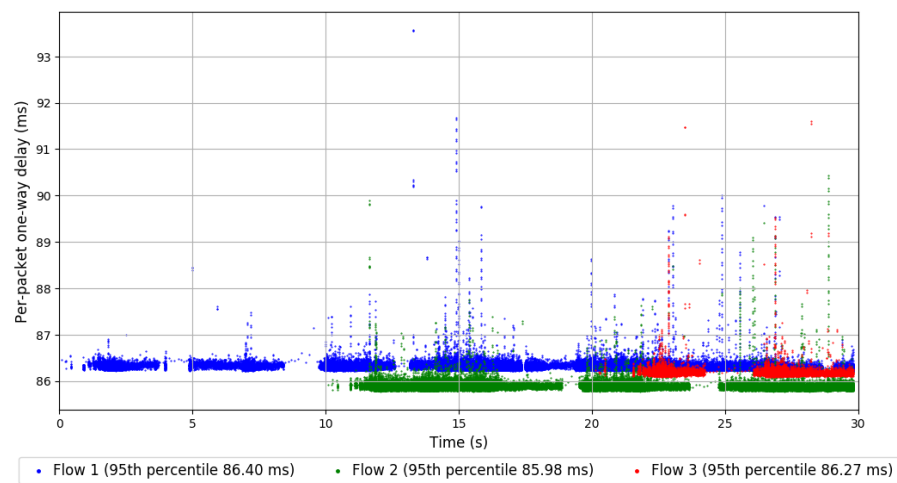
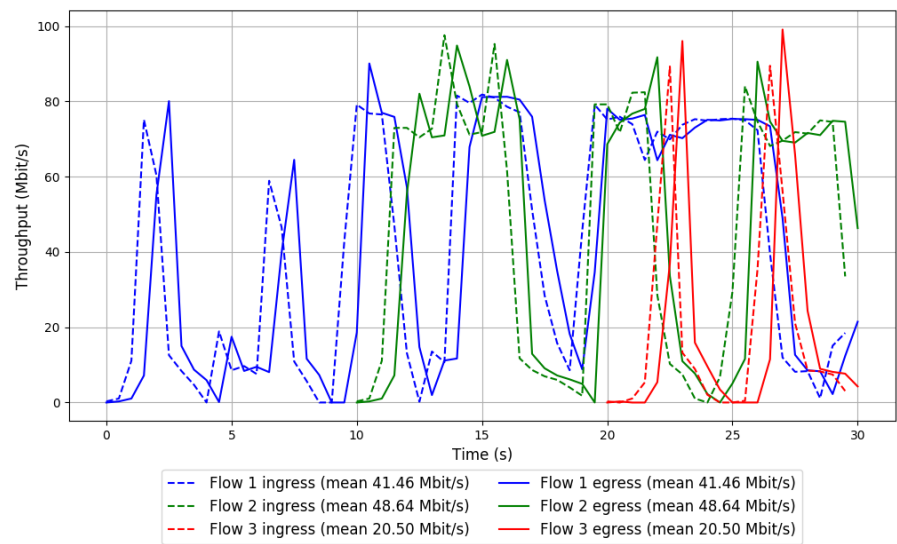
-- Flow 3:

Average throughput: 20.50 Mbit/s

95th percentile per-packet one-way delay: 86.273 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link

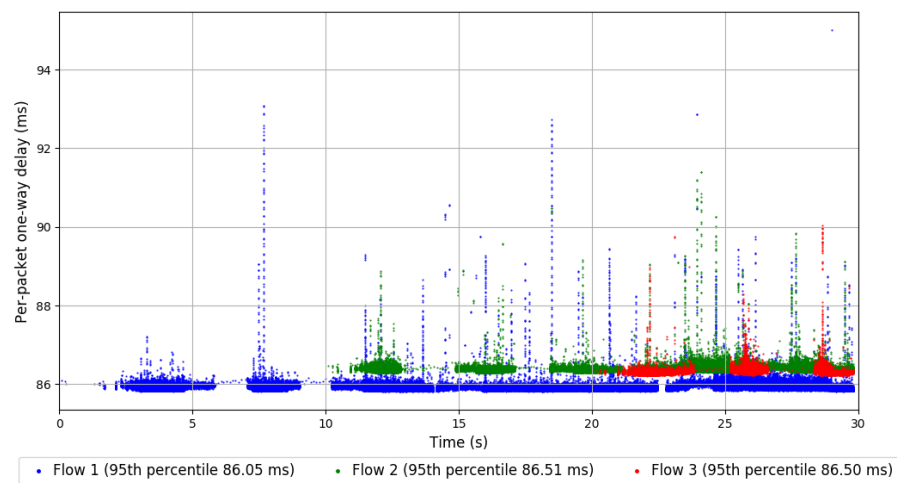
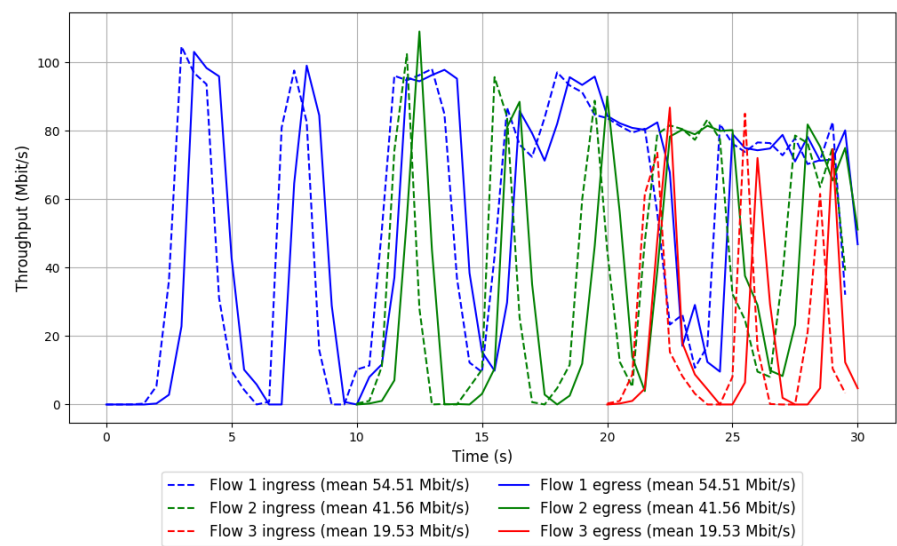


Run 3: Statistics of QUIC Cubic

Start at: 2019-01-03 00:01:11  
End at: 2019-01-03 00:01:41  
Local clock offset: -0.094 ms  
Remote clock offset: -0.051 ms

# Below is generated by plot.py at 2019-01-03 04:08:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 88.45 Mbit/s  
95th percentile per-packet one-way delay: 86.444 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 54.51 Mbit/s  
95th percentile per-packet one-way delay: 86.049 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 41.56 Mbit/s  
95th percentile per-packet one-way delay: 86.506 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 19.53 Mbit/s  
95th percentile per-packet one-way delay: 86.504 ms  
Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2019-01-03 00:35:15

End at: 2019-01-03 00:35:45

Local clock offset: 0.09 ms

Remote clock offset: 0.014 ms

# Below is generated by plot.py at 2019-01-03 04:08:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 100.68 Mbit/s

95th percentile per-packet one-way delay: 86.263 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 67.02 Mbit/s

95th percentile per-packet one-way delay: 86.197 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.42 Mbit/s

95th percentile per-packet one-way delay: 86.297 ms

Loss rate: 0.00%

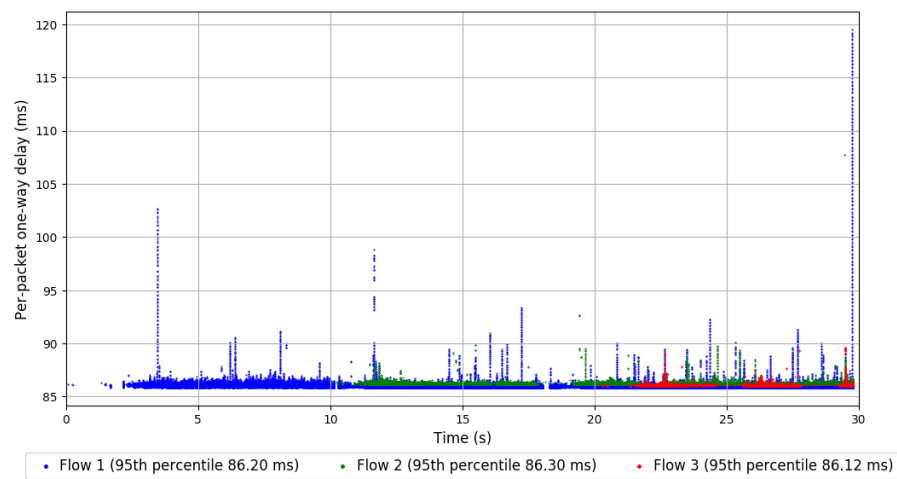
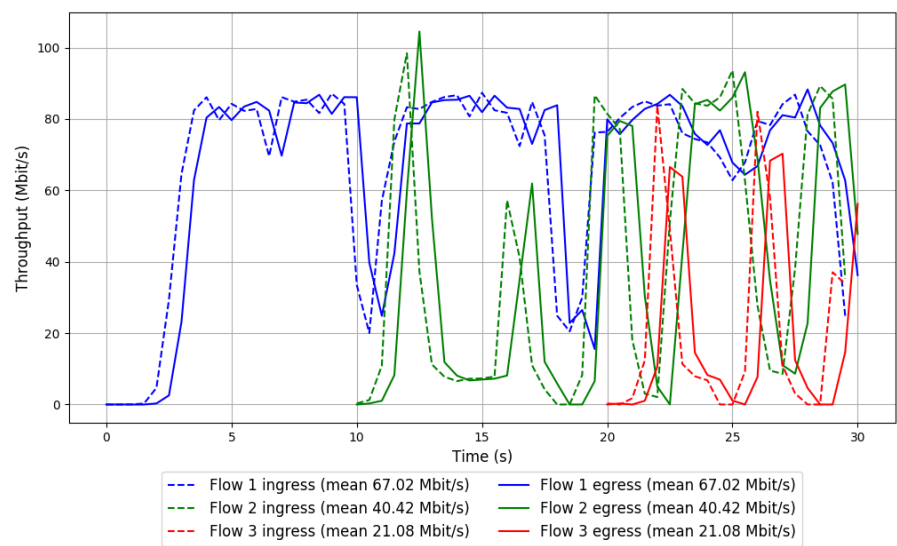
-- Flow 3:

Average throughput: 21.08 Mbit/s

95th percentile per-packet one-way delay: 86.124 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

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

End at: 2019-01-03 01:09:31

Local clock offset: -0.515 ms

Remote clock offset: 0.021 ms

# Below is generated by plot.py at 2019-01-03 04:08:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 86.00 Mbit/s

95th percentile per-packet one-way delay: 87.034 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 51.04 Mbit/s

95th percentile per-packet one-way delay: 86.879 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 43.26 Mbit/s

95th percentile per-packet one-way delay: 87.106 ms

Loss rate: 0.00%

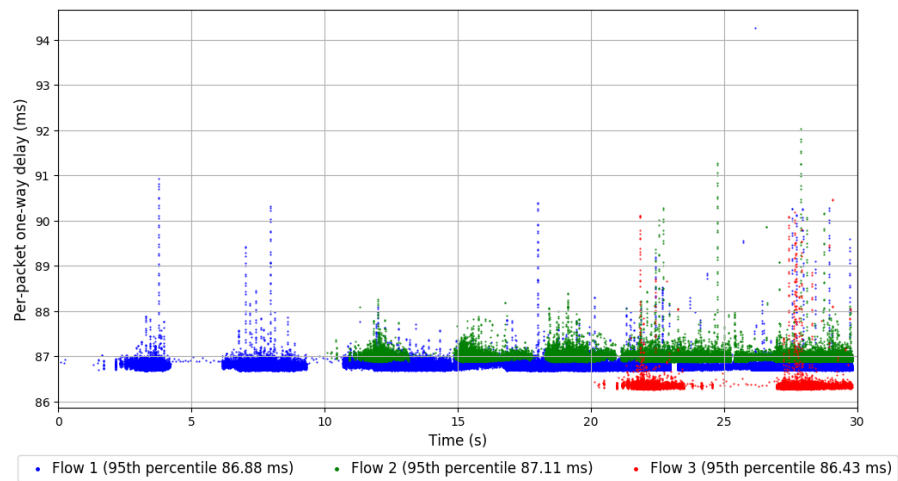
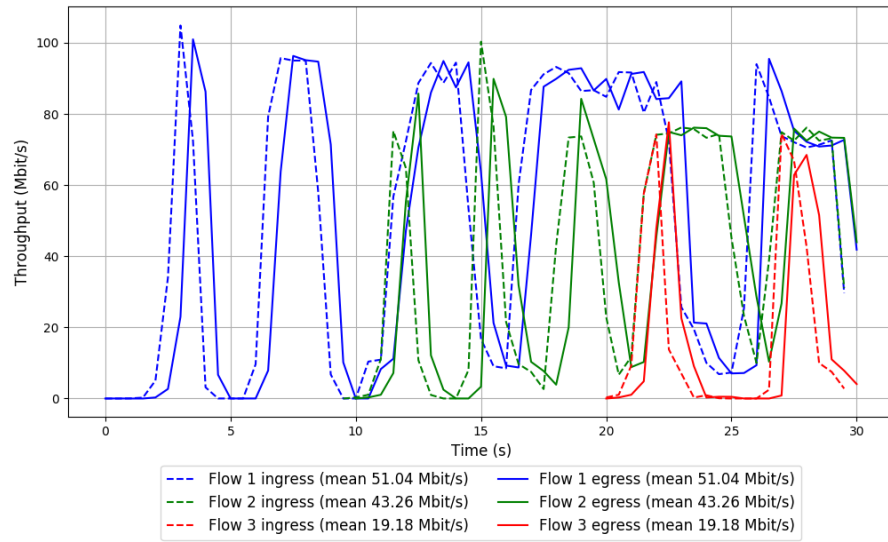
-- Flow 3:

Average throughput: 19.18 Mbit/s

95th percentile per-packet one-way delay: 86.431 ms

Loss rate: 0.00%

## Run 5: Report of QUIC Cubic — Data Link



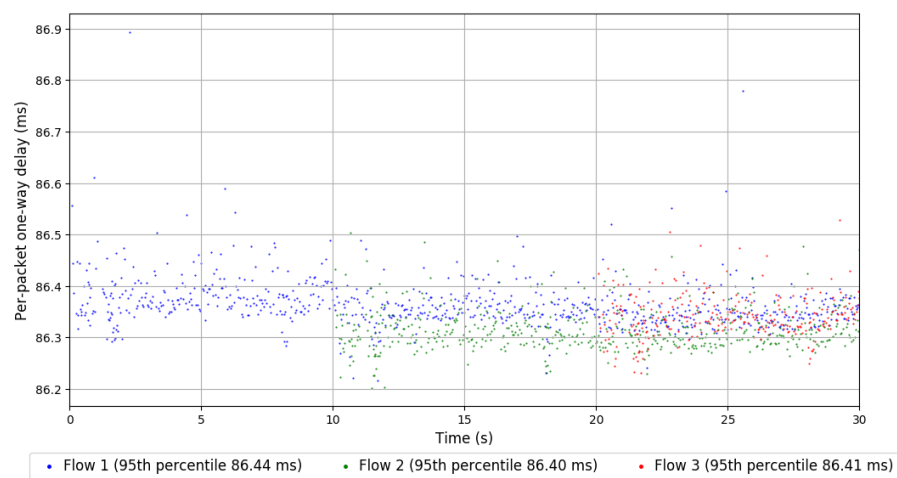
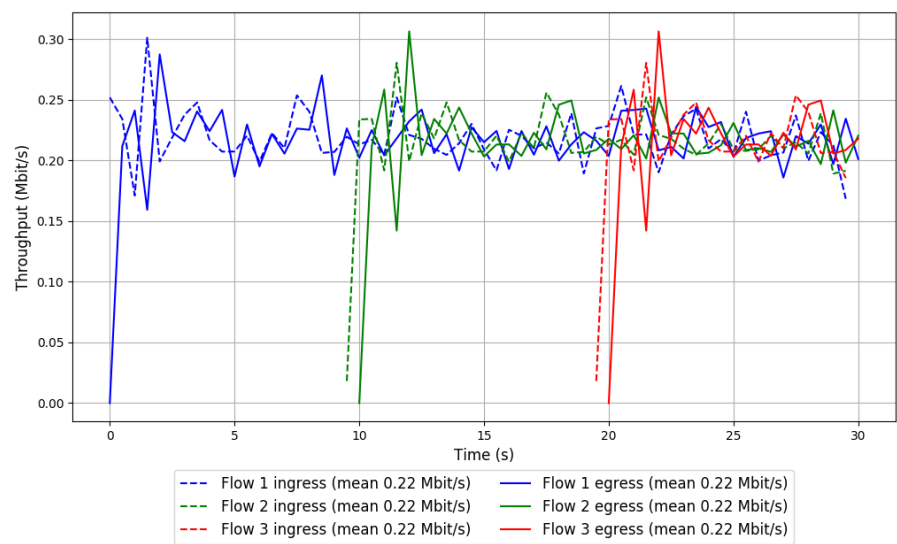


```
Run 1: Statistics of SReAM

Start at: 2019-01-02 22:41:31
End at: 2019-01-02 22:42:01
Local clock offset: -0.338 ms
Remote clock offset: 0.051 ms

# Below is generated by plot.py at 2019-01-03 04:08:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.423 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.444 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.396 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.414 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

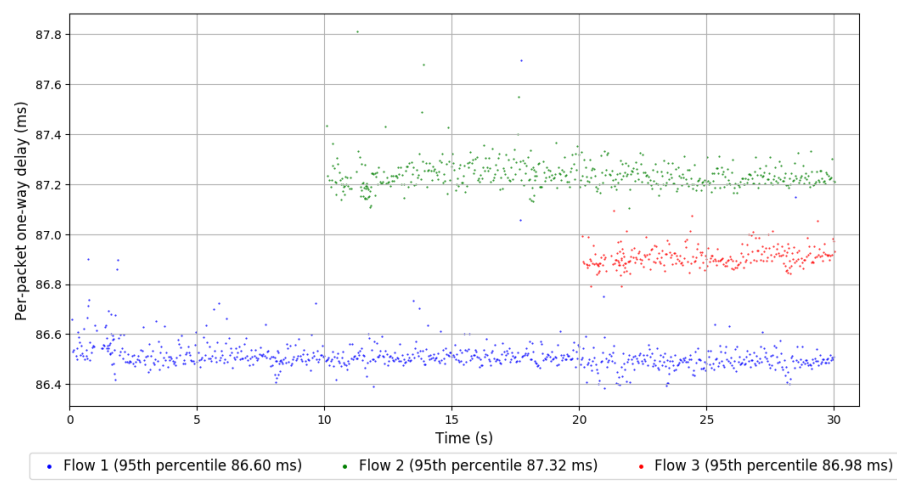
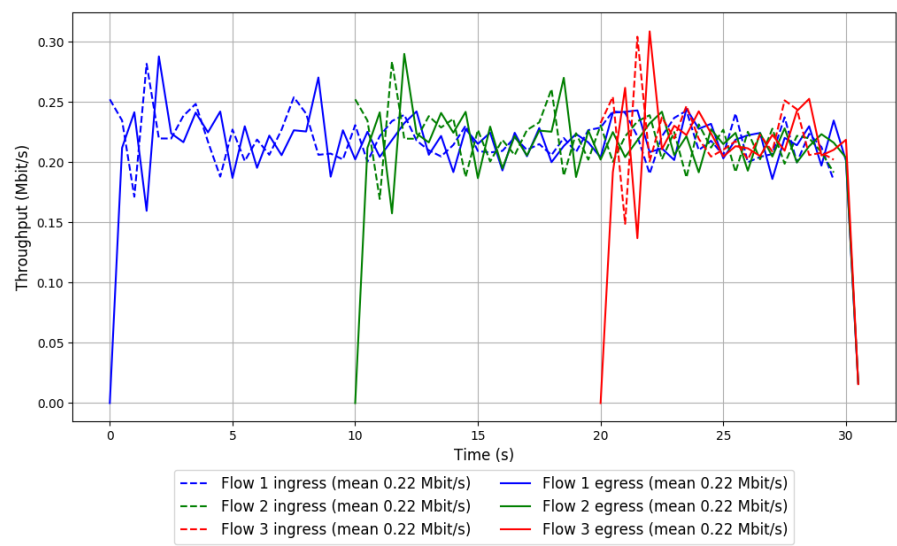


```
Run 2: Statistics of SReAM

Start at: 2019-01-02 23:15:44
End at: 2019-01-02 23:16:14
Local clock offset: -0.559 ms
Remote clock offset: 0.032 ms

# Below is generated by plot.py at 2019-01-03 04:08:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 87.283 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.601 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.322 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.985 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link

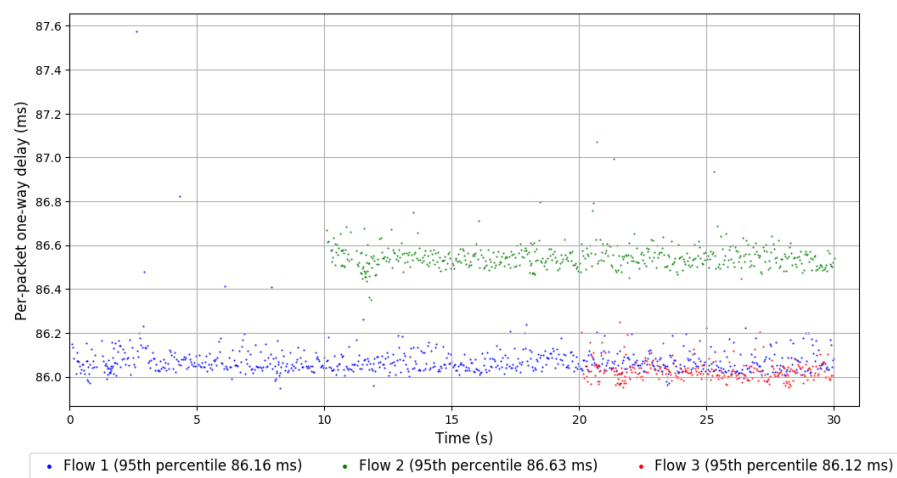
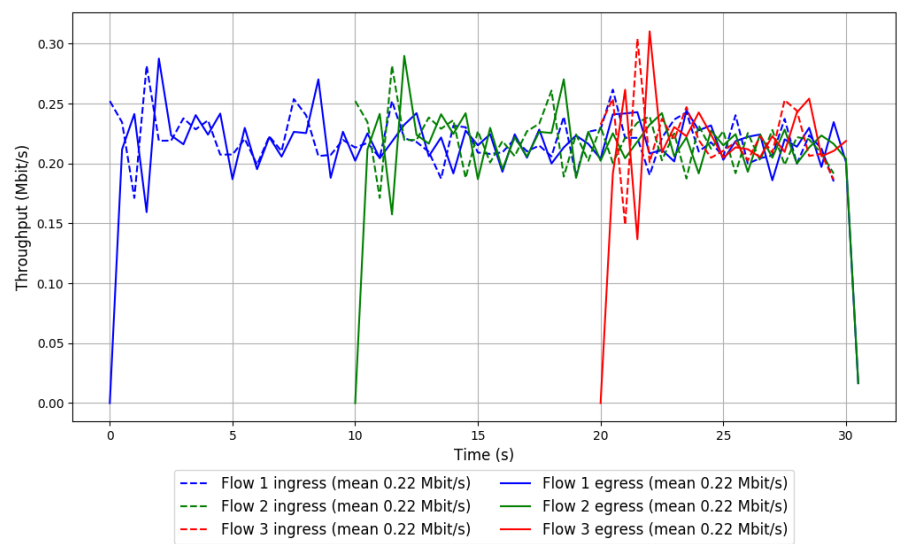


Run 3: Statistics of SReAM

Start at: 2019-01-02 23:49:40  
End at: 2019-01-02 23:50:10  
Local clock offset: -0.088 ms  
Remote clock offset: -0.008 ms

# Below is generated by plot.py at 2019-01-03 04:08:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 86.585 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 86.163 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 86.626 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 86.119 ms  
Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

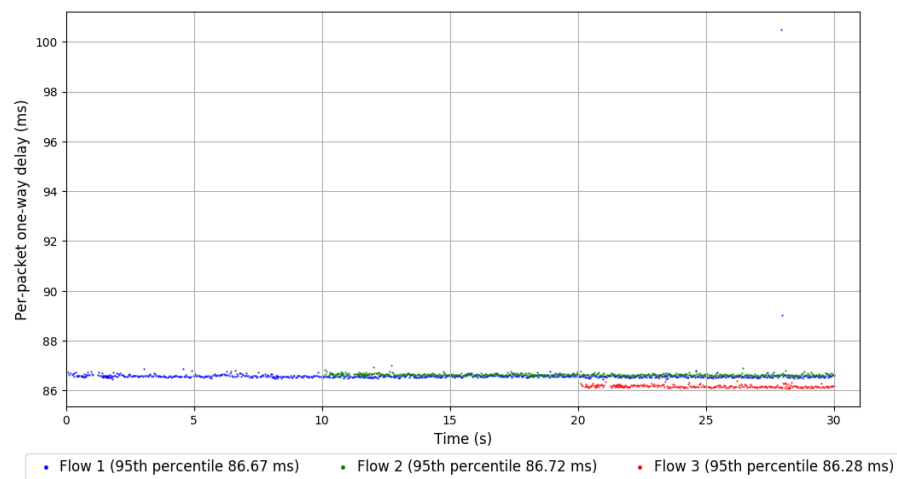
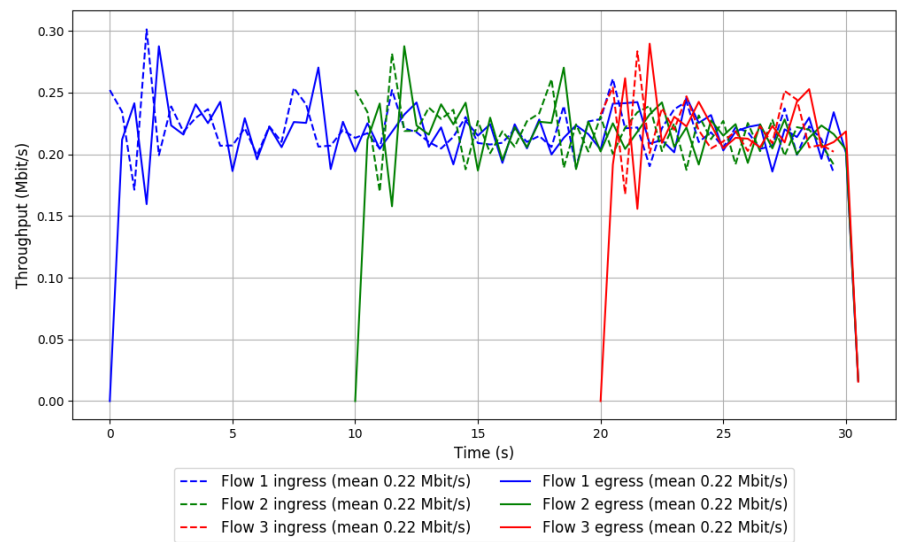


Run 4: Statistics of SReAM

Start at: 2019-01-03 00:23:31  
End at: 2019-01-03 00:24:01  
Local clock offset: -0.227 ms  
Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2019-01-03 04:08:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 86.693 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 86.673 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 86.717 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 86.277 ms  
Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



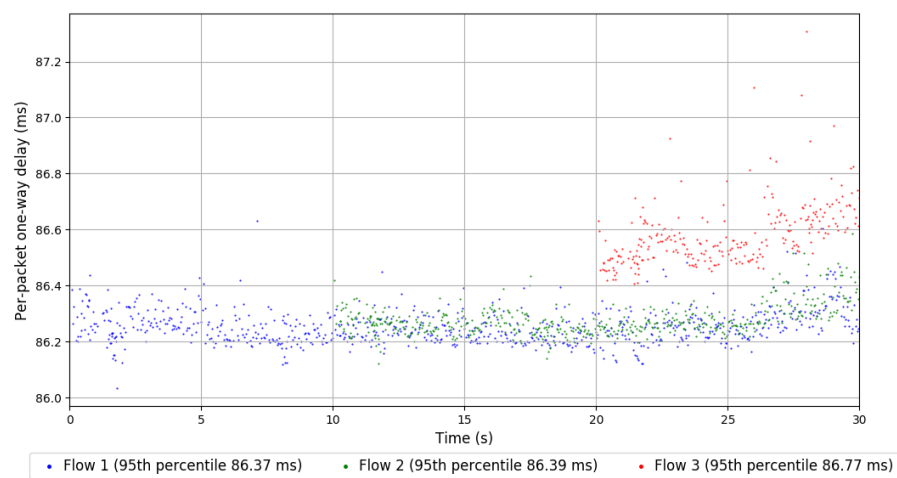
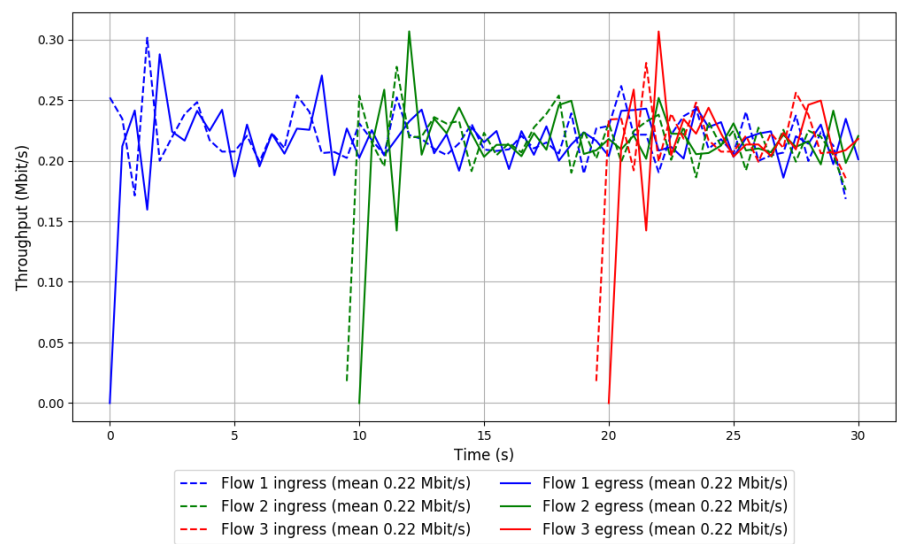


Run 5: Statistics of SReAM

Start at: 2019-01-03 00:57:14  
End at: 2019-01-03 00:57:44  
Local clock offset: 0.15 ms  
Remote clock offset: -0.018 ms

# Below is generated by plot.py at 2019-01-03 04:08:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 86.623 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 86.368 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 86.395 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 86.774 ms  
Loss rate: 0.00%

Run 5: Report of SReAM — Data Link

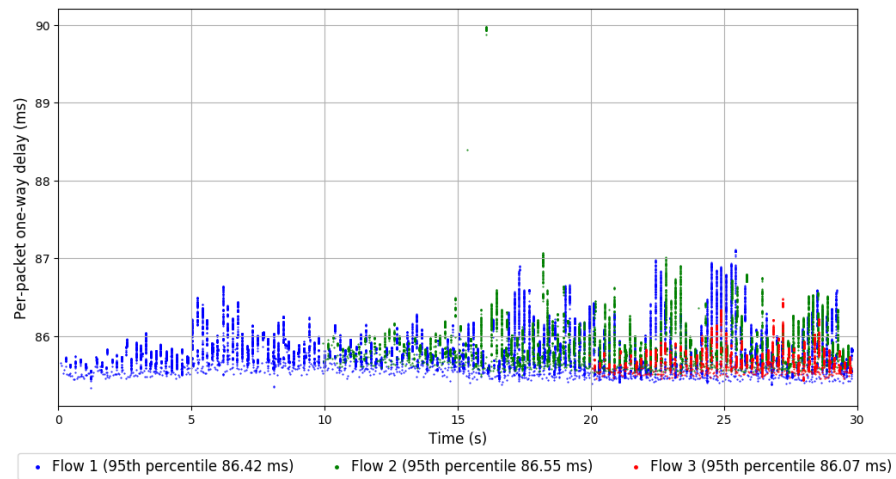
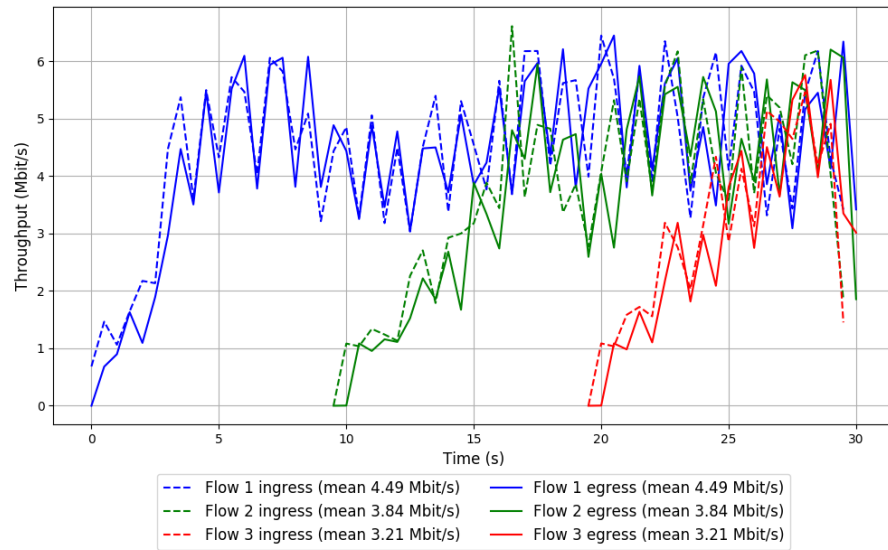


```
Run 1: Statistics of Sprout

Start at: 2019-01-02 22:35:57
End at: 2019-01-02 22:36:27
Local clock offset: 0.373 ms
Remote clock offset: 0.059 ms

# Below is generated by plot.py at 2019-01-03 04:08:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.13 Mbit/s
95th percentile per-packet one-way delay: 86.435 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.49 Mbit/s
95th percentile per-packet one-way delay: 86.419 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.84 Mbit/s
95th percentile per-packet one-way delay: 86.554 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.21 Mbit/s
95th percentile per-packet one-way delay: 86.067 ms
Loss rate: 0.00%
```

## Run 1: Report of Sprout — Data Link

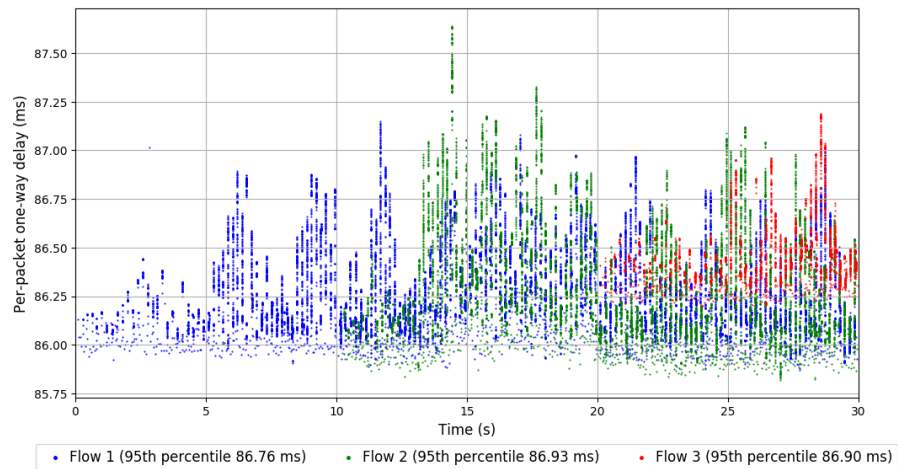
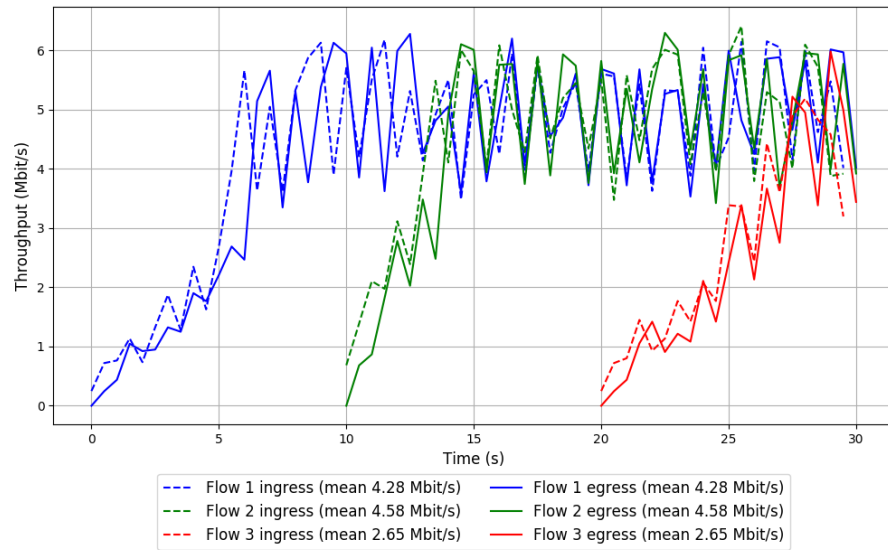


## Run 2: Statistics of Sprout

Start at: 2019-01-02 23:10:19  
End at: 2019-01-02 23:10:50  
Local clock offset: -0.103 ms  
Remote clock offset: -0.001 ms

# Below is generated by plot.py at 2019-01-03 04:08:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.20 Mbit/s  
95th percentile per-packet one-way delay: 86.825 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 4.28 Mbit/s  
95th percentile per-packet one-way delay: 86.758 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 4.58 Mbit/s  
95th percentile per-packet one-way delay: 86.926 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 2.65 Mbit/s  
95th percentile per-packet one-way delay: 86.898 ms  
Loss rate: 0.00%

## Run 2: Report of Sprout — Data Link

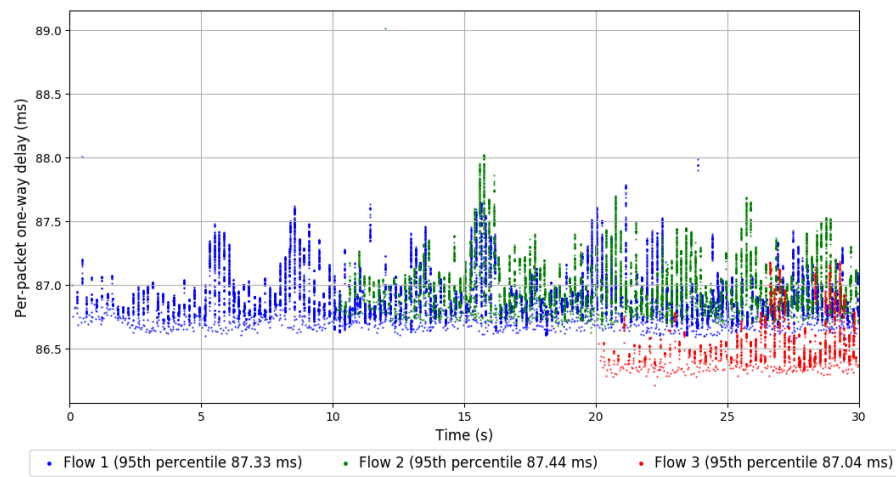
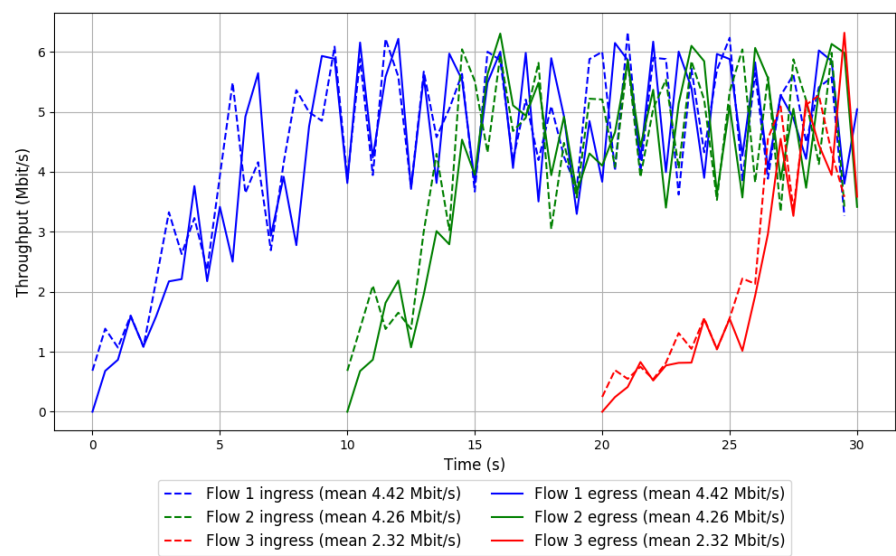


### Run 3: Statistics of Sprout

Start at: 2019-01-02 23:44:24  
End at: 2019-01-02 23:44:54  
Local clock offset: -0.407 ms  
Remote clock offset: -0.011 ms

```
# Below is generated by plot.py at 2019-01-03 04:08:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.02 Mbit/s
95th percentile per-packet one-way delay: 87.355 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.42 Mbit/s
95th percentile per-packet one-way delay: 87.331 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.26 Mbit/s
95th percentile per-packet one-way delay: 87.437 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 87.039 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link



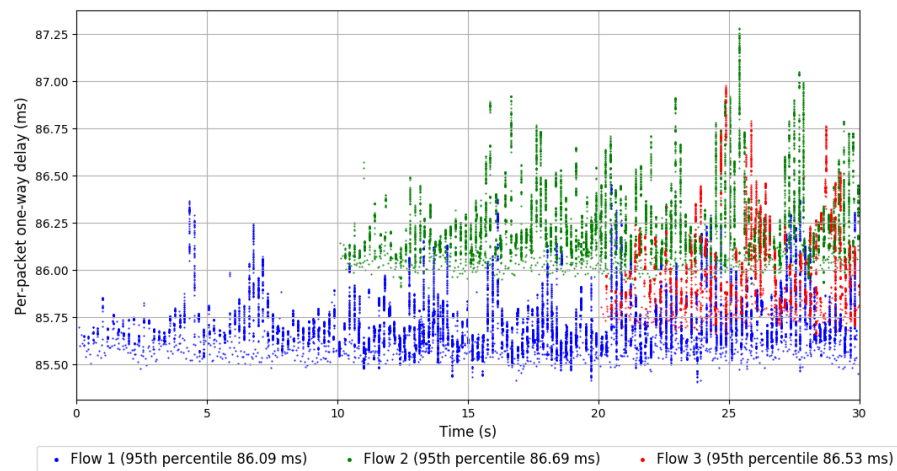
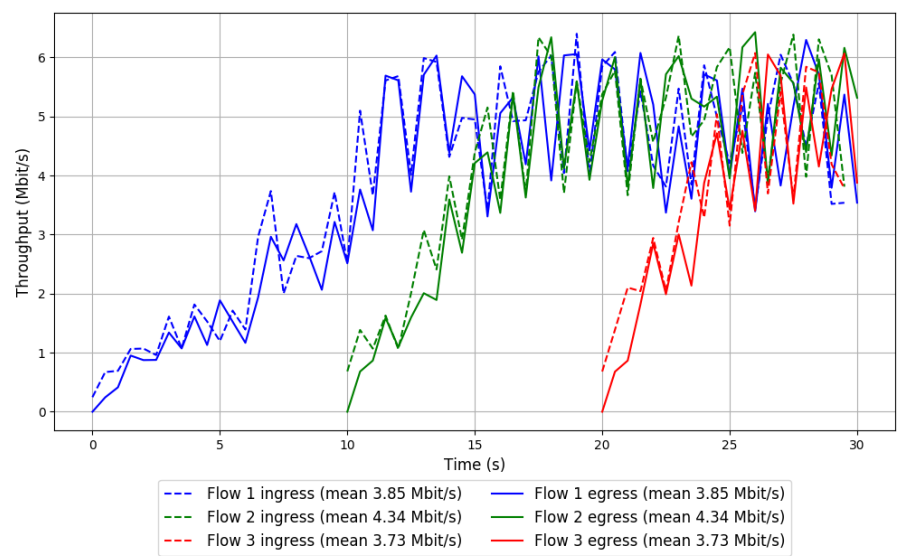


#### Run 4: Statistics of Sprout

Start at: 2019-01-03 00:18:05  
End at: 2019-01-03 00:18:35  
Local clock offset: 0.33 ms  
Remote clock offset: -0.02 ms

```
# Below is generated by plot.py at 2019-01-03 04:08:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.96 Mbit/s
95th percentile per-packet one-way delay: 86.526 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.85 Mbit/s
95th percentile per-packet one-way delay: 86.089 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.34 Mbit/s
95th percentile per-packet one-way delay: 86.693 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.73 Mbit/s
95th percentile per-packet one-way delay: 86.528 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

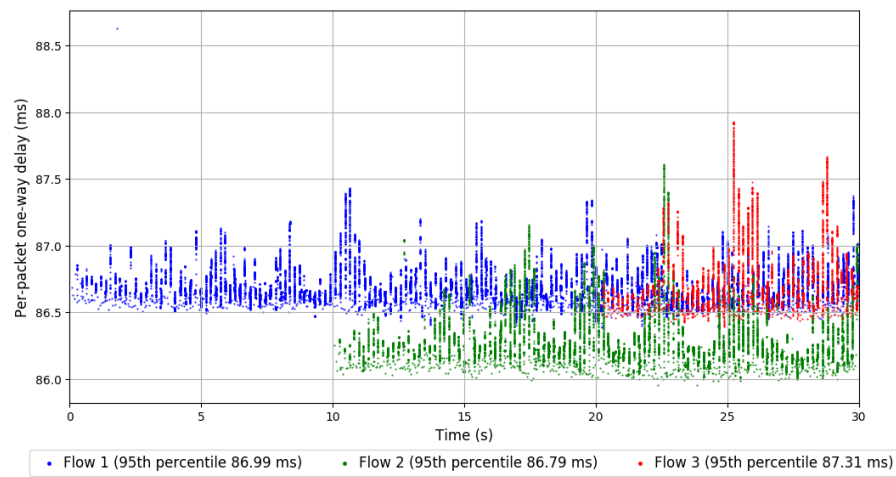
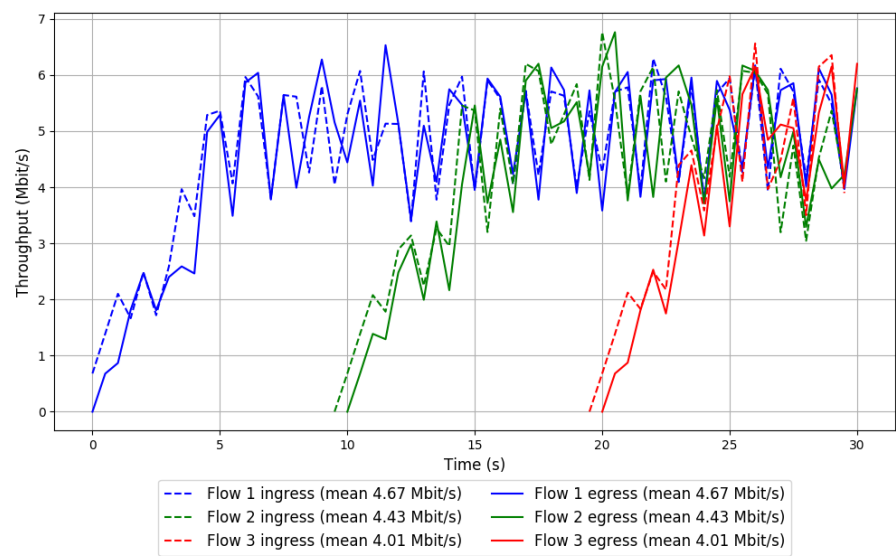


Run 5: Statistics of Sprout

Start at: 2019-01-03 00:51:47  
End at: 2019-01-03 00:52:17  
Local clock offset: -0.13 ms  
Remote clock offset: 0.03 ms

# Below is generated by plot.py at 2019-01-03 04:08:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.94 Mbit/s  
95th percentile per-packet one-way delay: 87.011 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 4.67 Mbit/s  
95th percentile per-packet one-way delay: 86.991 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 4.43 Mbit/s  
95th percentile per-packet one-way delay: 86.792 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 4.01 Mbit/s  
95th percentile per-packet one-way delay: 87.308 ms  
Loss rate: 0.00%

Run 5: Report of Sprout — Data Link

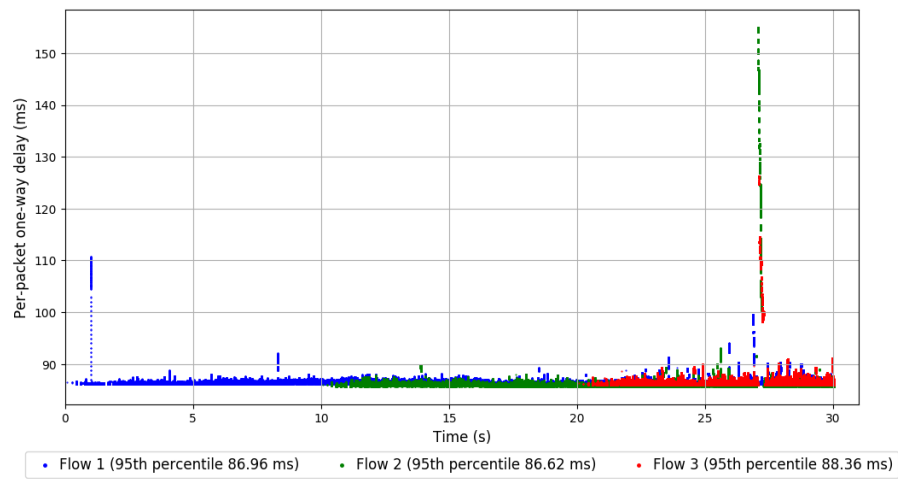
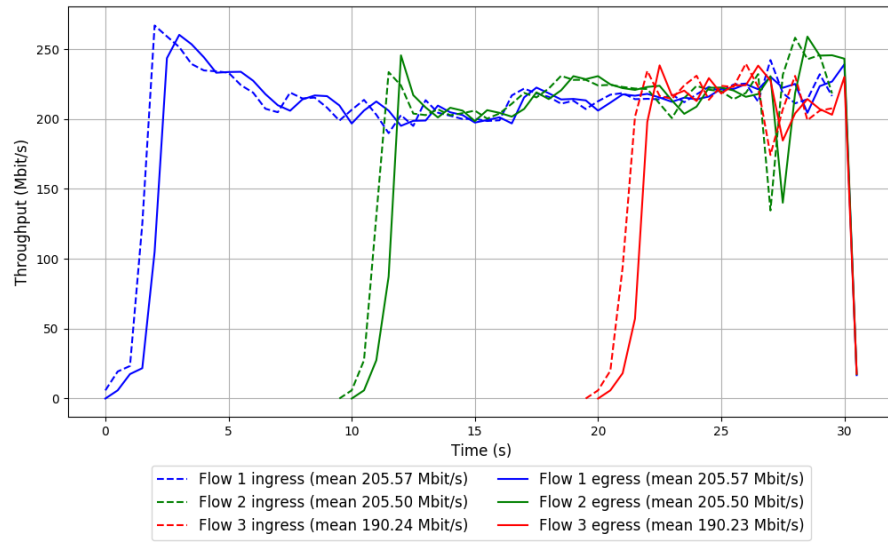


```
Run 1: Statistics of TaoVA-100x

Start at: 2019-01-02 22:56:40
End at: 2019-01-02 22:57:10
Local clock offset: 0.002 ms
Remote clock offset: 0.03 ms

# Below is generated by plot.py at 2019-01-03 04:08:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 405.83 Mbit/s
95th percentile per-packet one-way delay: 87.107 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 205.57 Mbit/s
95th percentile per-packet one-way delay: 86.956 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 205.50 Mbit/s
95th percentile per-packet one-way delay: 86.623 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 190.23 Mbit/s
95th percentile per-packet one-way delay: 88.356 ms
Loss rate: 0.00%
```

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

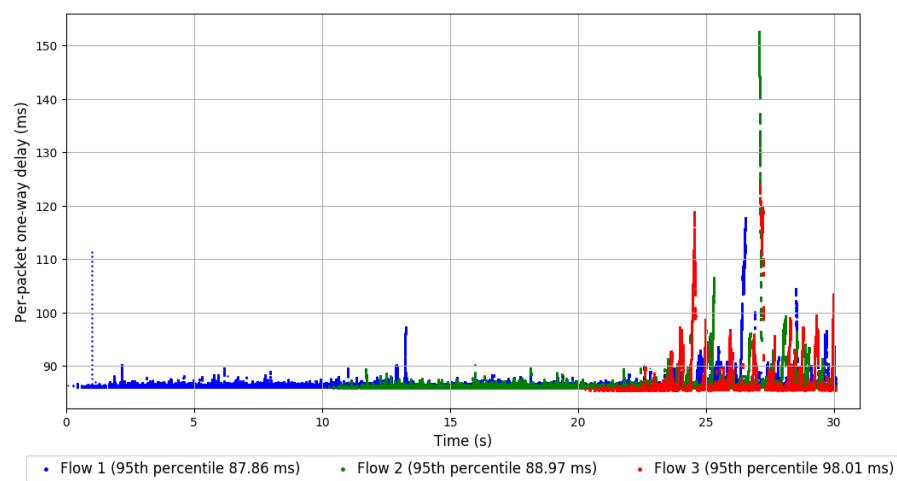
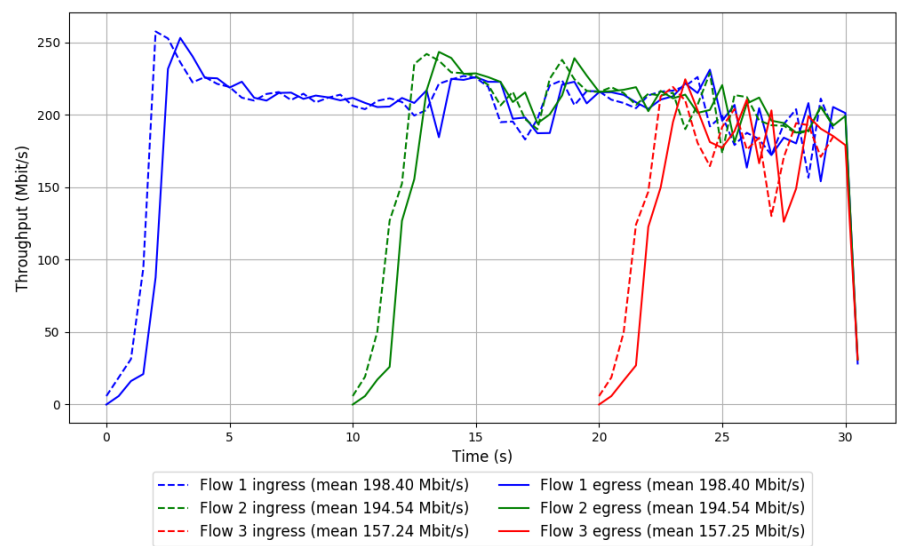


```
Run 2: Statistics of TaoVA-100x

Start at: 2019-01-02 23:30:34
End at: 2019-01-02 23:31:04
Local clock offset: 0.246 ms
Remote clock offset: 0.029 ms

# Below is generated by plot.py at 2019-01-03 04:08:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 380.23 Mbit/s
95th percentile per-packet one-way delay: 89.845 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 198.40 Mbit/s
95th percentile per-packet one-way delay: 87.859 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 194.54 Mbit/s
95th percentile per-packet one-way delay: 88.973 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 157.25 Mbit/s
95th percentile per-packet one-way delay: 98.013 ms
Loss rate: 0.00%
```

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



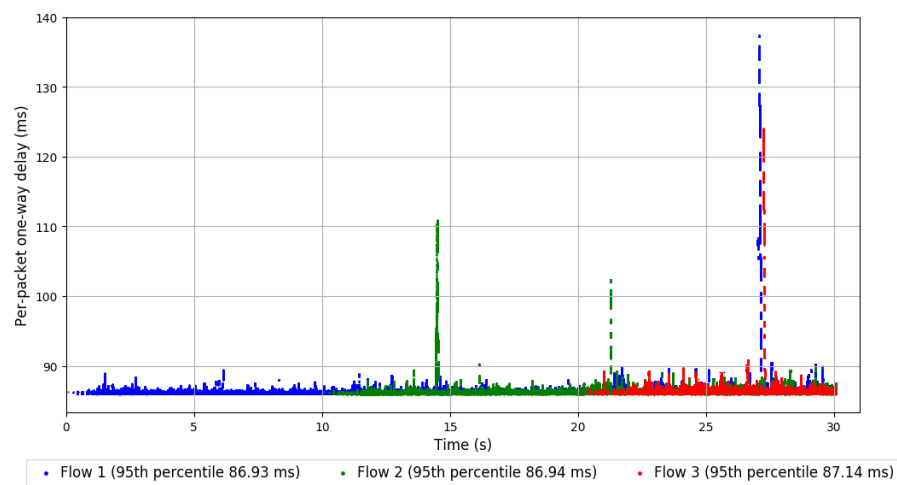
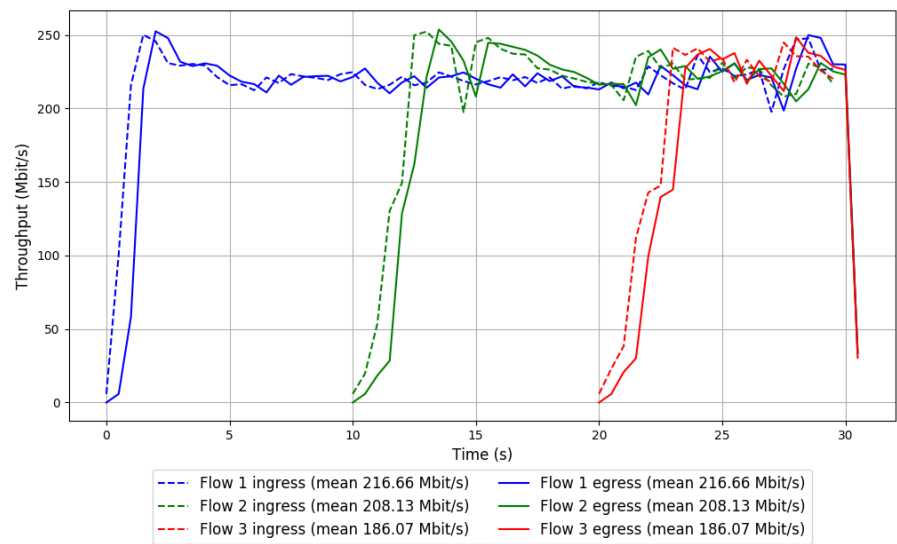


Run 3: Statistics of TaoVA-100x

Start at: 2019-01-03 00:04:27  
End at: 2019-01-03 00:04:57  
Local clock offset: -0.27 ms  
Remote clock offset: -0.062 ms

# Below is generated by plot.py at 2019-01-03 04:08:58  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 417.11 Mbit/s  
95th percentile per-packet one-way delay: 86.964 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 216.66 Mbit/s  
95th percentile per-packet one-way delay: 86.929 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 208.13 Mbit/s  
95th percentile per-packet one-way delay: 86.939 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 186.07 Mbit/s  
95th percentile per-packet one-way delay: 87.145 ms  
Loss rate: 0.00%

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



Run 4: Statistics of TaoVA-100x

Start at: 2019-01-03 00:38:29

End at: 2019-01-03 00:38:59

Local clock offset: -0.135 ms

Remote clock offset: 0.027 ms

# Below is generated by plot.py at 2019-01-03 04:08:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 390.49 Mbit/s

95th percentile per-packet one-way delay: 88.049 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 198.40 Mbit/s

95th percentile per-packet one-way delay: 87.762 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 189.68 Mbit/s

95th percentile per-packet one-way delay: 88.449 ms

Loss rate: 0.00%

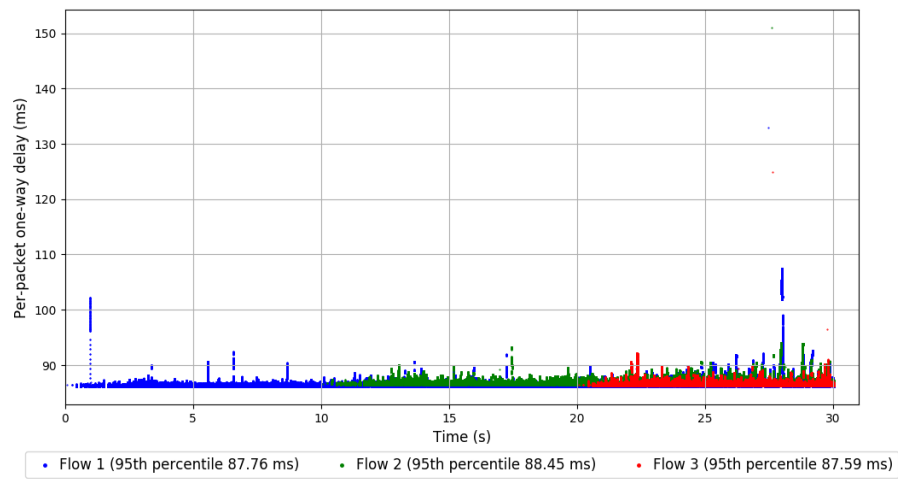
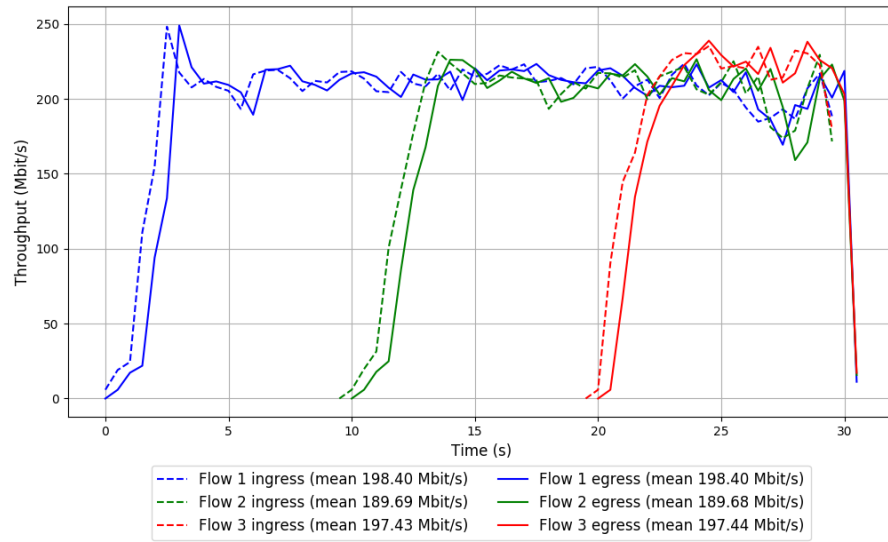
-- Flow 3:

Average throughput: 197.44 Mbit/s

95th percentile per-packet one-way delay: 87.588 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2019-01-03 01:12:13

End at: 2019-01-03 01:12:43

Local clock offset: -0.1 ms

Remote clock offset: 0.008 ms

# Below is generated by plot.py at 2019-01-03 04:08:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 391.58 Mbit/s

95th percentile per-packet one-way delay: 88.328 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 207.51 Mbit/s

95th percentile per-packet one-way delay: 88.192 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 197.48 Mbit/s

95th percentile per-packet one-way delay: 86.988 ms

Loss rate: 0.00%

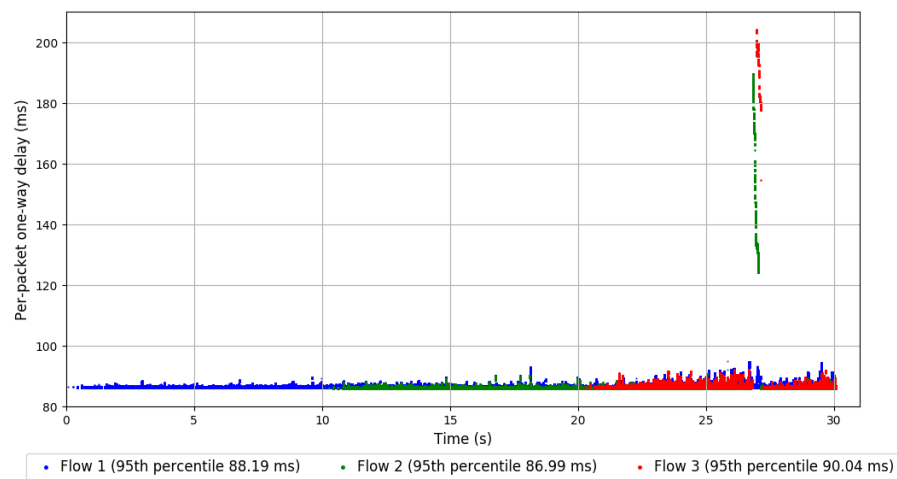
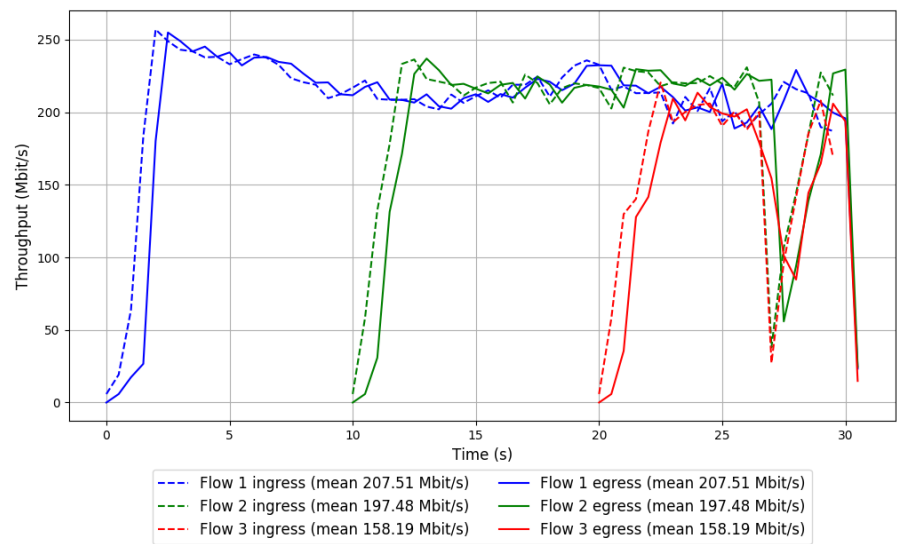
-- Flow 3:

Average throughput: 158.19 Mbit/s

95th percentile per-packet one-way delay: 90.037 ms

Loss rate: 0.00%

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



Run 1: Statistics of TCP Vegas

Start at: 2019-01-02 22:49:18

End at: 2019-01-02 22:49:48

Local clock offset: 0.369 ms

Remote clock offset: 0.061 ms

# Below is generated by plot.py at 2019-01-03 04:14:29

# Datalink statistics

-- Total of 3 flows:

Average throughput: 916.90 Mbit/s

95th percentile per-packet one-way delay: 158.965 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 490.19 Mbit/s

95th percentile per-packet one-way delay: 157.821 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 435.44 Mbit/s

95th percentile per-packet one-way delay: 136.624 ms

Loss rate: 0.01%

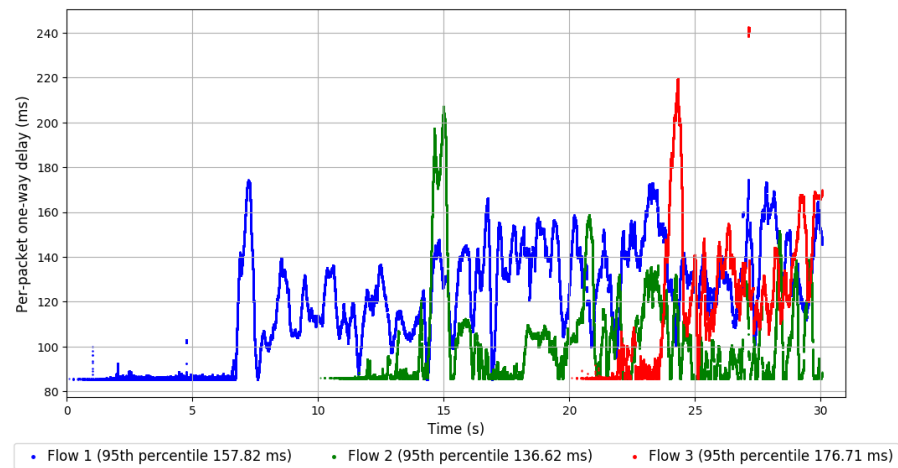
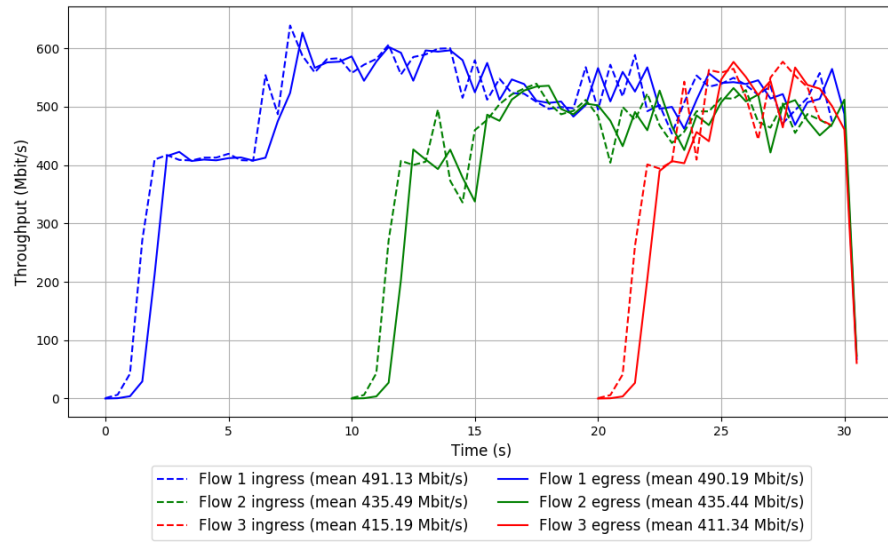
-- Flow 3:

Average throughput: 411.34 Mbit/s

95th percentile per-packet one-way delay: 176.714 ms

Loss rate: 0.91%

# Run 1: Report of TCP Vegas — Data Link





Run 2: Statistics of TCP Vegas

Start at: 2019-01-02 23:23:27

End at: 2019-01-02 23:23:57

Local clock offset: 0.068 ms

Remote clock offset: 0.037 ms

# Below is generated by plot.py at 2019-01-03 04:22:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 693.96 Mbit/s

95th percentile per-packet one-way delay: 168.050 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 360.08 Mbit/s

95th percentile per-packet one-way delay: 88.379 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 343.74 Mbit/s

95th percentile per-packet one-way delay: 205.081 ms

Loss rate: 0.00%

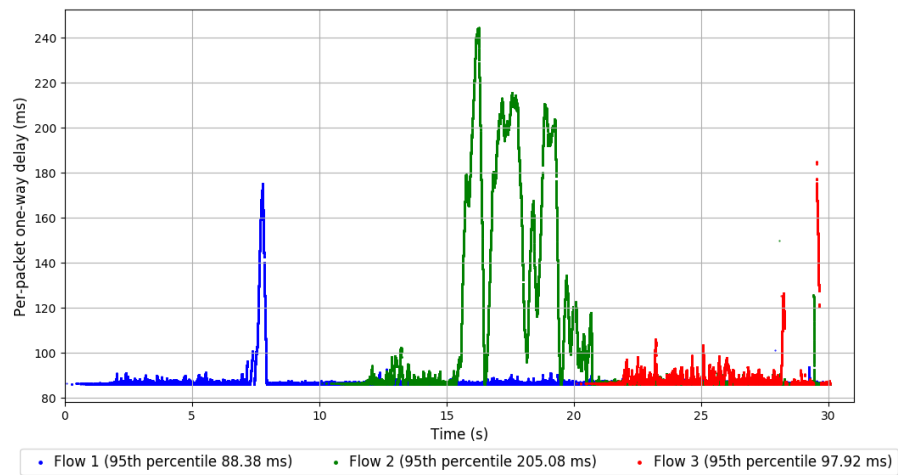
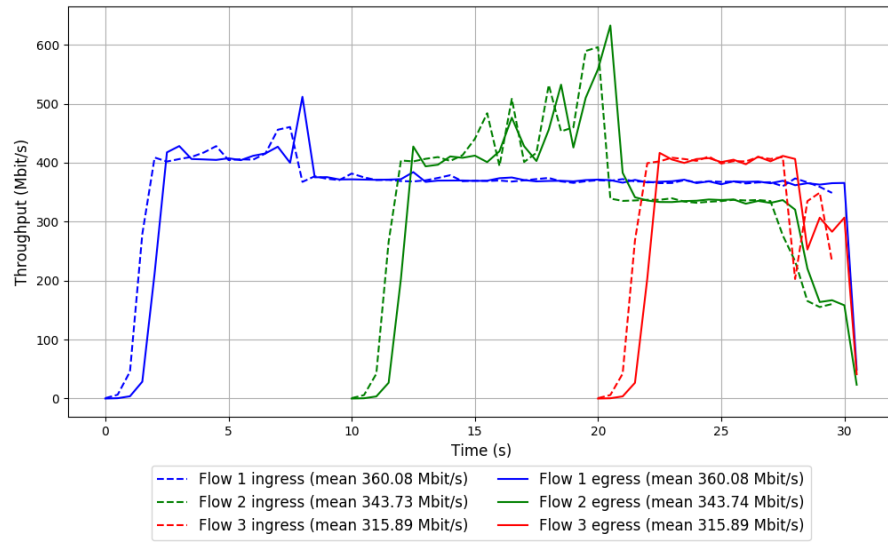
-- Flow 3:

Average throughput: 315.89 Mbit/s

95th percentile per-packet one-way delay: 97.921 ms

Loss rate: 0.00%

## Run 2: Report of TCP Vegas — Data Link

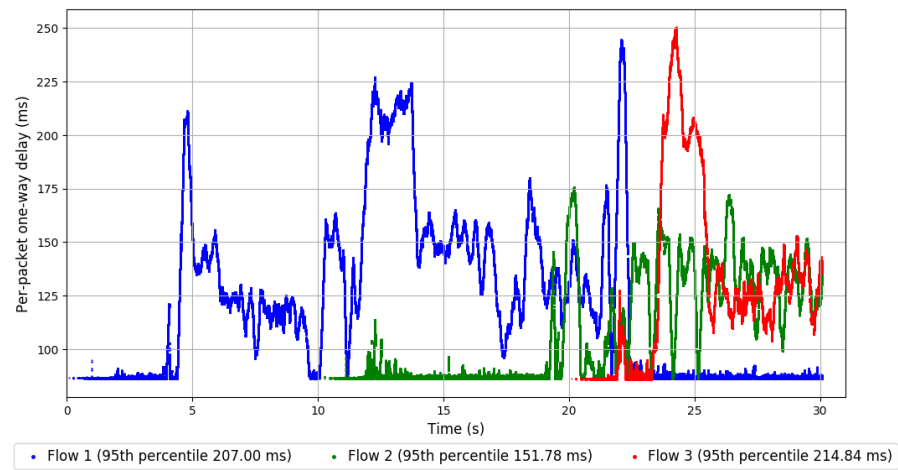
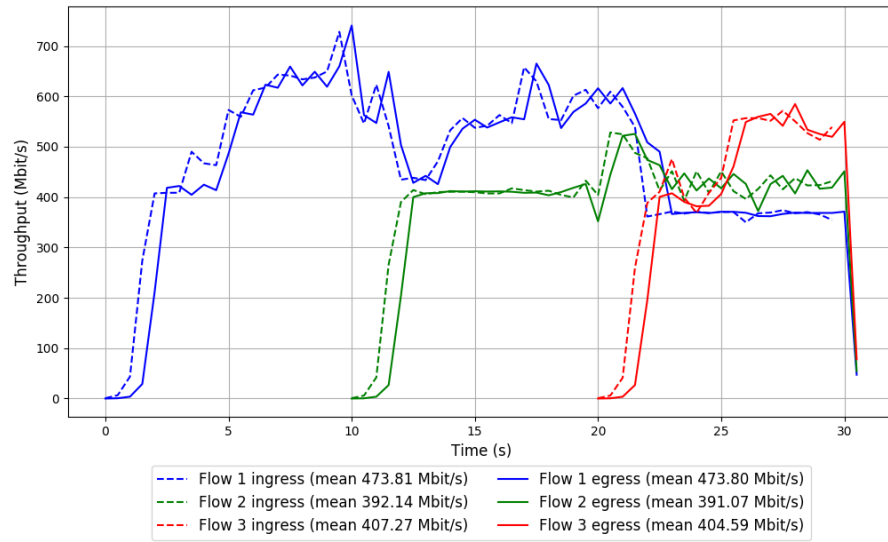


Run 3: Statistics of TCP Vegas

Start at: 2019-01-02 23:57:10  
End at: 2019-01-02 23:57:40  
Local clock offset: -0.086 ms  
Remote clock offset: -0.056 ms

# Below is generated by plot.py at 2019-01-03 04:27:30  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 868.67 Mbit/s  
95th percentile per-packet one-way delay: 201.244 ms  
Loss rate: 0.18%  
-- Flow 1:  
Average throughput: 473.80 Mbit/s  
95th percentile per-packet one-way delay: 206.998 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 391.07 Mbit/s  
95th percentile per-packet one-way delay: 151.780 ms  
Loss rate: 0.27%  
-- Flow 3:  
Average throughput: 404.59 Mbit/s  
95th percentile per-packet one-way delay: 214.835 ms  
Loss rate: 0.65%

### Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2019-01-03 00:31:16

End at: 2019-01-03 00:31:46

Local clock offset: -0.388 ms

Remote clock offset: 0.055 ms

# Below is generated by plot.py at 2019-01-03 04:27:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 840.12 Mbit/s

95th percentile per-packet one-way delay: 147.465 ms

Loss rate: 0.25%

-- Flow 1:

Average throughput: 432.90 Mbit/s

95th percentile per-packet one-way delay: 149.338 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 417.02 Mbit/s

95th percentile per-packet one-way delay: 143.583 ms

Loss rate: 0.27%

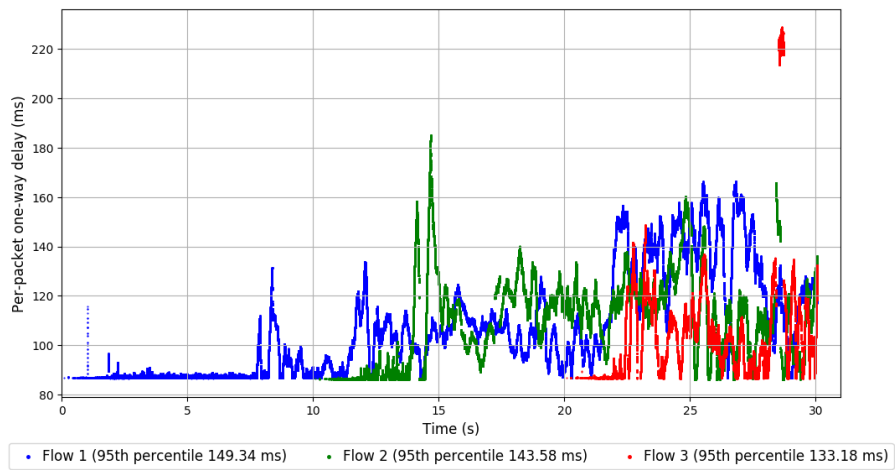
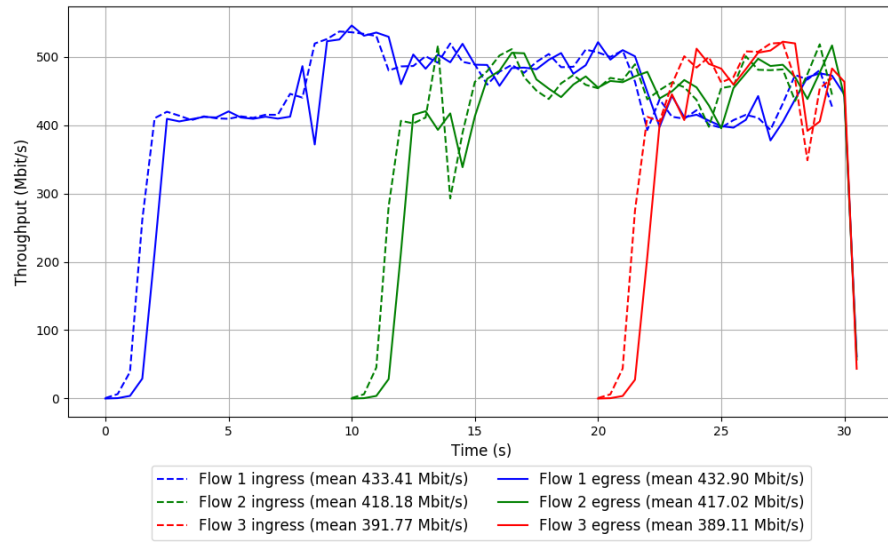
-- Flow 3:

Average throughput: 389.11 Mbit/s

95th percentile per-packet one-way delay: 133.184 ms

Loss rate: 0.67%

# Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2019-01-03 01:04:58

End at: 2019-01-03 01:05:28

Local clock offset: -0.496 ms

Remote clock offset: 0.024 ms

# Below is generated by plot.py at 2019-01-03 04:29:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 898.37 Mbit/s

95th percentile per-packet one-way delay: 187.910 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 501.09 Mbit/s

95th percentile per-packet one-way delay: 192.256 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 413.30 Mbit/s

95th percentile per-packet one-way delay: 154.918 ms

Loss rate: 0.22%

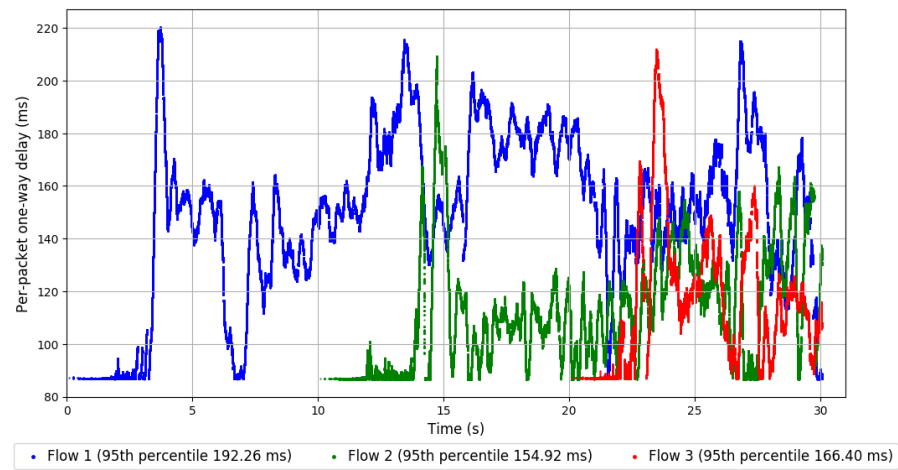
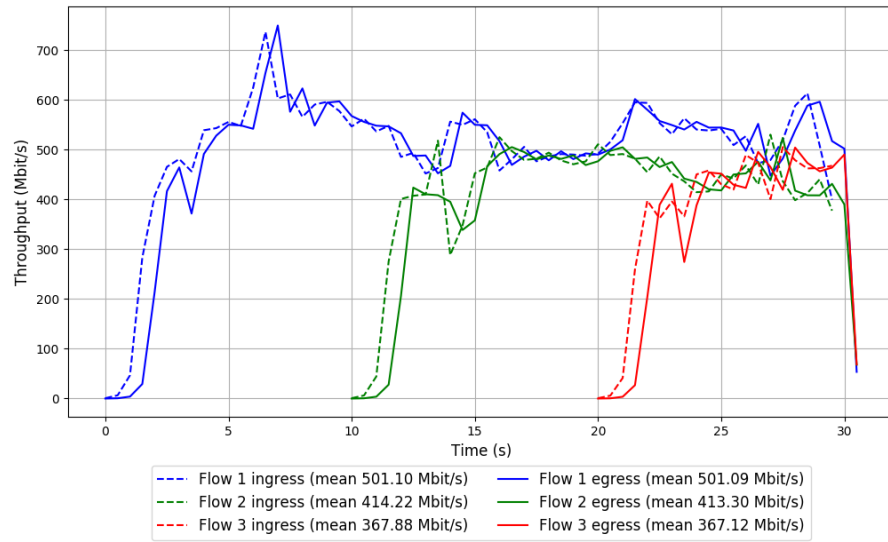
-- Flow 3:

Average throughput: 367.12 Mbit/s

95th percentile per-packet one-way delay: 166.401 ms

Loss rate: 0.20%

# Run 5: Report of TCP Vegas — Data Link





Run 1: Statistics of Verus

Start at: 2019-01-02 22:58:36

End at: 2019-01-02 22:59:06

Local clock offset: 0.176 ms

Remote clock offset: 0.056 ms

# Below is generated by plot.py at 2019-01-03 04:29:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 211.73 Mbit/s

95th percentile per-packet one-way delay: 226.212 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 101.02 Mbit/s

95th percentile per-packet one-way delay: 227.745 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 99.91 Mbit/s

95th percentile per-packet one-way delay: 140.078 ms

Loss rate: 0.00%

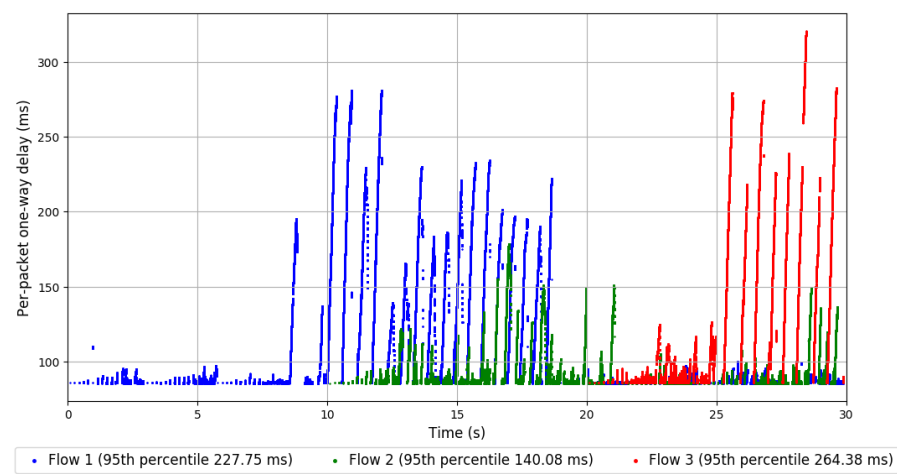
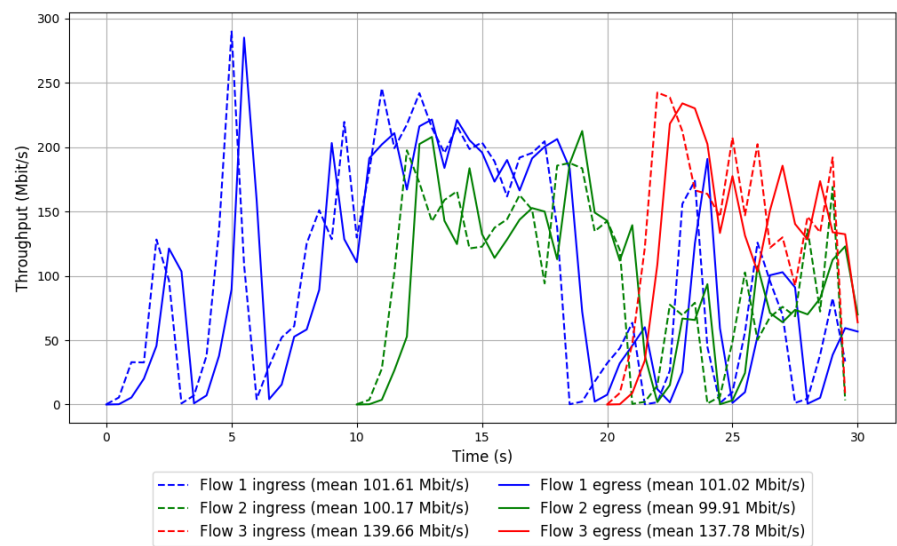
-- Flow 3:

Average throughput: 137.78 Mbit/s

95th percentile per-packet one-way delay: 264.382 ms

Loss rate: 1.34%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2019-01-02 23:32:28

End at: 2019-01-02 23:32:58

Local clock offset: 0.265 ms

Remote clock offset: 0.034 ms

# Below is generated by plot.py at 2019-01-03 04:29:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 278.50 Mbit/s

95th percentile per-packet one-way delay: 197.711 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 180.58 Mbit/s

95th percentile per-packet one-way delay: 206.397 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 99.49 Mbit/s

95th percentile per-packet one-way delay: 127.140 ms

Loss rate: 0.00%

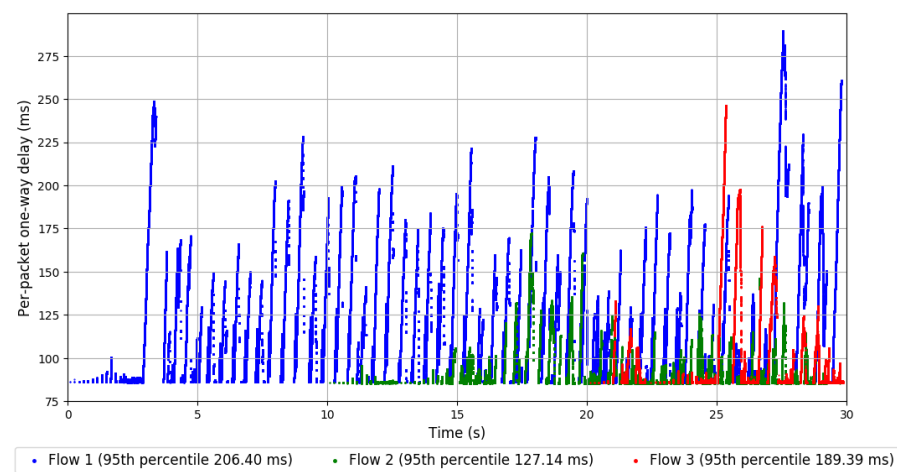
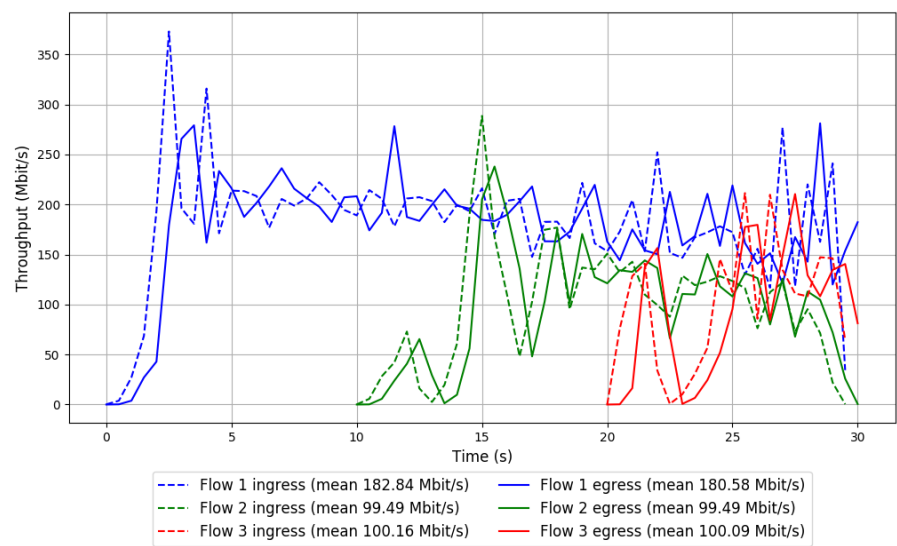
-- Flow 3:

Average throughput: 100.09 Mbit/s

95th percentile per-packet one-way delay: 189.389 ms

Loss rate: 0.07%

Run 2: Report of Verus — Data Link

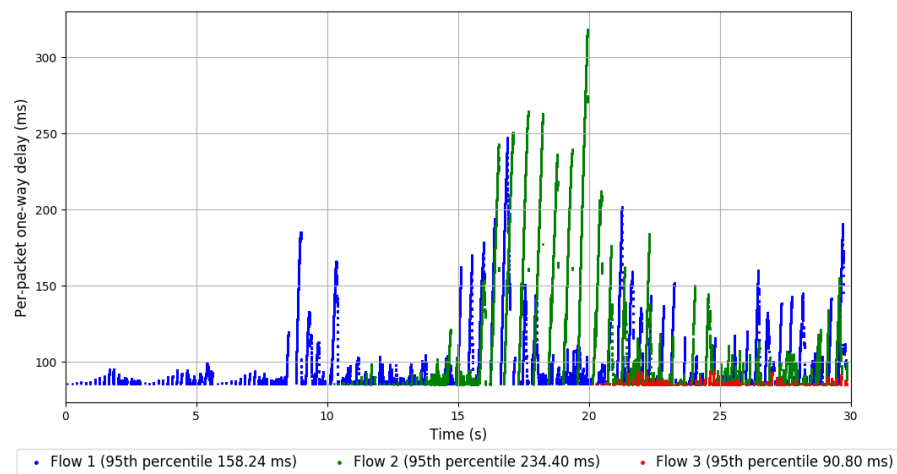
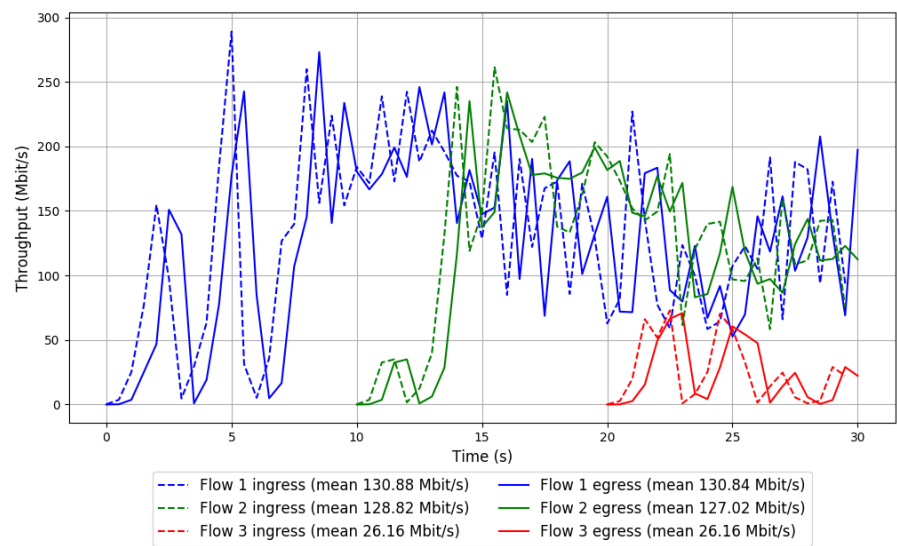


Run 3: Statistics of Verus

Start at: 2019-01-03 00:06:24  
End at: 2019-01-03 00:06:54  
Local clock offset: 0.3 ms  
Remote clock offset: -0.046 ms

# Below is generated by plot.py at 2019-01-03 04:29:24  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 223.67 Mbit/s  
95th percentile per-packet one-way delay: 199.481 ms  
Loss rate: 0.53%  
-- Flow 1:  
Average throughput: 130.84 Mbit/s  
95th percentile per-packet one-way delay: 158.241 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 127.02 Mbit/s  
95th percentile per-packet one-way delay: 234.400 ms  
Loss rate: 1.40%  
-- Flow 3:  
Average throughput: 26.16 Mbit/s  
95th percentile per-packet one-way delay: 90.799 ms  
Loss rate: 0.00%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2019-01-03 00:40:23

End at: 2019-01-03 00:40:53

Local clock offset: 0.104 ms

Remote clock offset: 0.053 ms

# Below is generated by plot.py at 2019-01-03 04:29:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 187.08 Mbit/s

95th percentile per-packet one-way delay: 269.358 ms

Loss rate: 11.94%

-- Flow 1:

Average throughput: 169.15 Mbit/s

95th percentile per-packet one-way delay: 289.520 ms

Loss rate: 24.92%

-- Flow 2:

Average throughput: 142.02 Mbit/s

95th percentile per-packet one-way delay: 218.117 ms

Loss rate: 0.48%

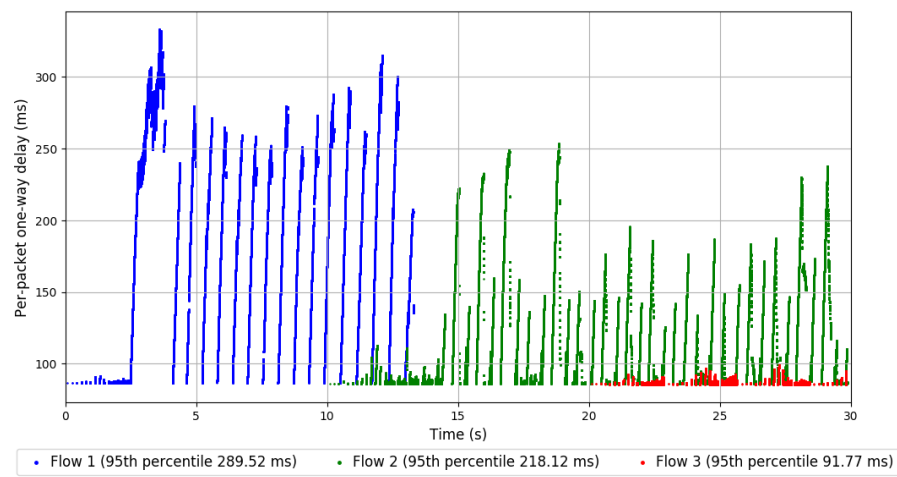
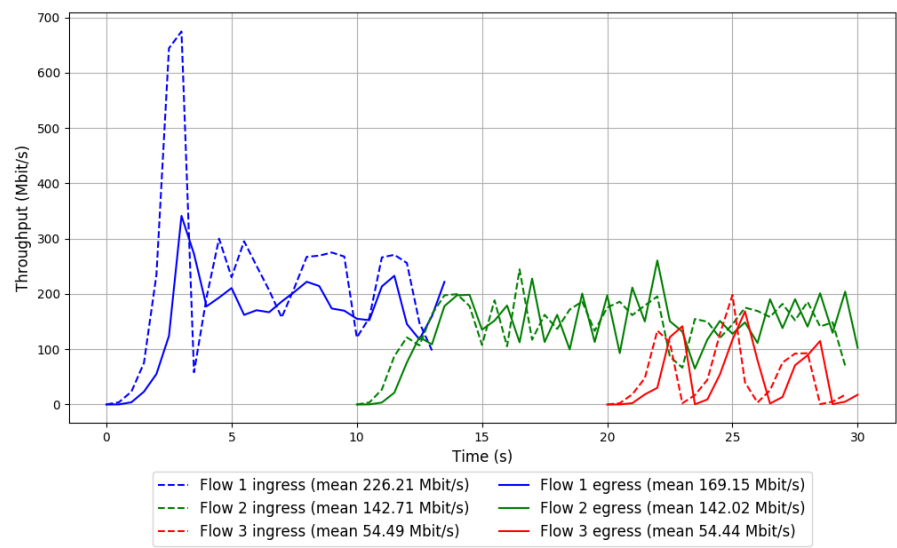
-- Flow 3:

Average throughput: 54.44 Mbit/s

95th percentile per-packet one-way delay: 91.770 ms

Loss rate: 0.00%

Run 4: Report of Verus — Data Link



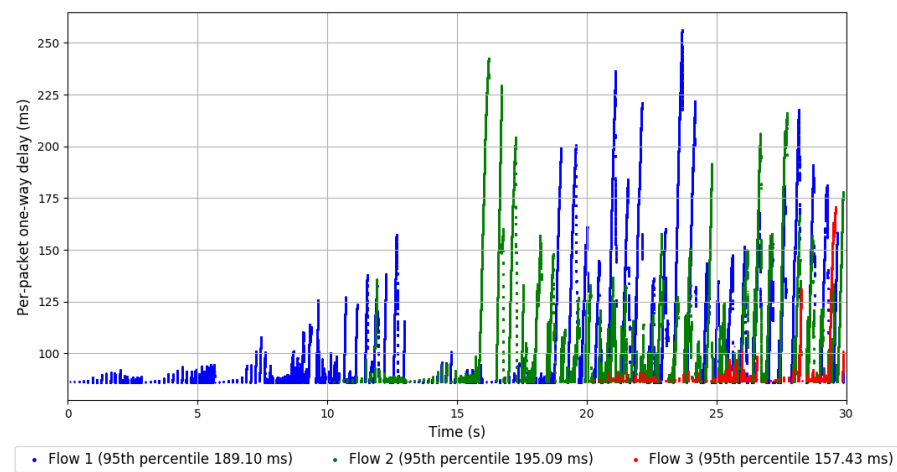
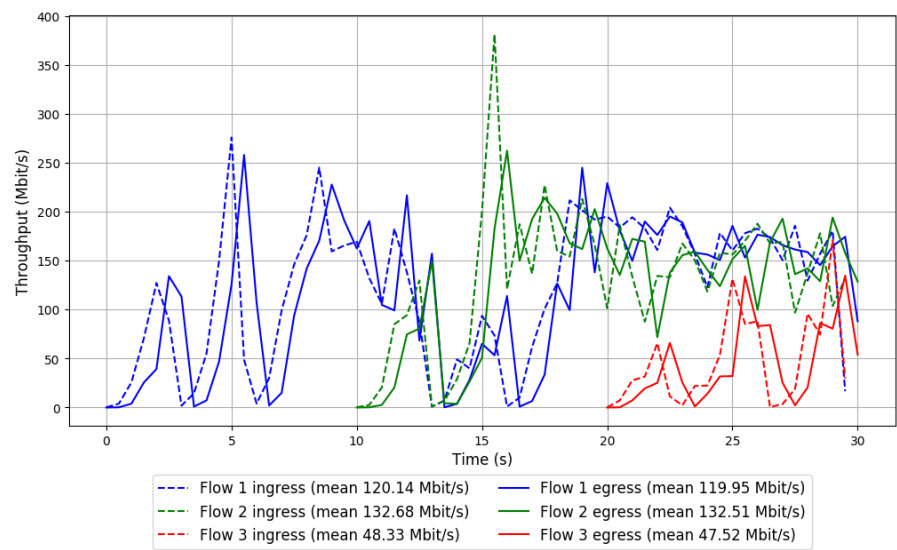


Run 5: Statistics of Verus

Start at: 2019-01-03 01:14:08  
End at: 2019-01-03 01:14:38  
Local clock offset: -0.131 ms  
Remote clock offset: 0.007 ms

# Below is generated by plot.py at 2019-01-03 04:29:24  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 223.53 Mbit/s  
95th percentile per-packet one-way delay: 189.441 ms  
Loss rate: 0.28%  
-- Flow 1:  
Average throughput: 119.95 Mbit/s  
95th percentile per-packet one-way delay: 189.101 ms  
Loss rate: 0.15%  
-- Flow 2:  
Average throughput: 132.51 Mbit/s  
95th percentile per-packet one-way delay: 195.094 ms  
Loss rate: 0.22%  
-- Flow 3:  
Average throughput: 47.52 Mbit/s  
95th percentile per-packet one-way delay: 157.430 ms  
Loss rate: 1.65%

Run 5: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2019-01-02 22:54:44

End at: 2019-01-02 22:55:14

Local clock offset: -0.239 ms

Remote clock offset: 0.065 ms

# Below is generated by plot.py at 2019-01-03 04:30:52

# Datalink statistics

-- Total of 3 flows:

Average throughput: 543.74 Mbit/s

95th percentile per-packet one-way delay: 103.326 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 301.40 Mbit/s

95th percentile per-packet one-way delay: 93.486 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 294.36 Mbit/s

95th percentile per-packet one-way delay: 142.094 ms

Loss rate: 0.00%

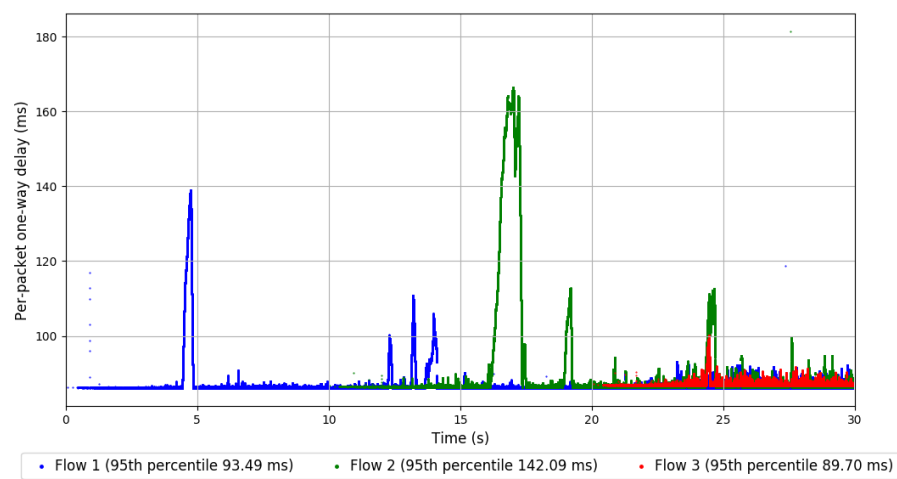
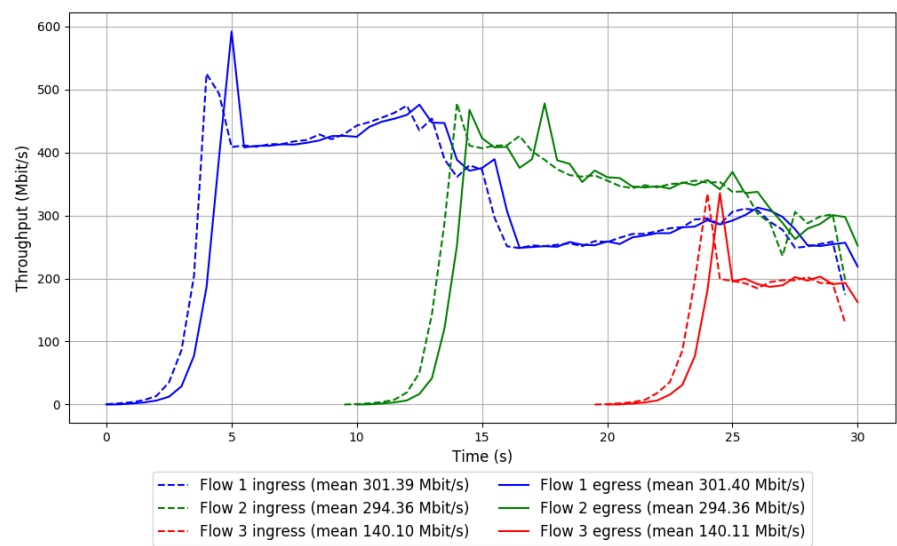
-- Flow 3:

Average throughput: 140.11 Mbit/s

95th percentile per-packet one-way delay: 89.697 ms

Loss rate: 0.00%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2019-01-02 23:28:38

End at: 2019-01-02 23:29:08

Local clock offset: -0.376 ms

Remote clock offset: 0.019 ms

# Below is generated by plot.py at 2019-01-03 04:32:13

# Datalink statistics

-- Total of 3 flows:

Average throughput: 540.82 Mbit/s

95th percentile per-packet one-way delay: 110.886 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 327.38 Mbit/s

95th percentile per-packet one-way delay: 112.079 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 280.20 Mbit/s

95th percentile per-packet one-way delay: 111.803 ms

Loss rate: 0.00%

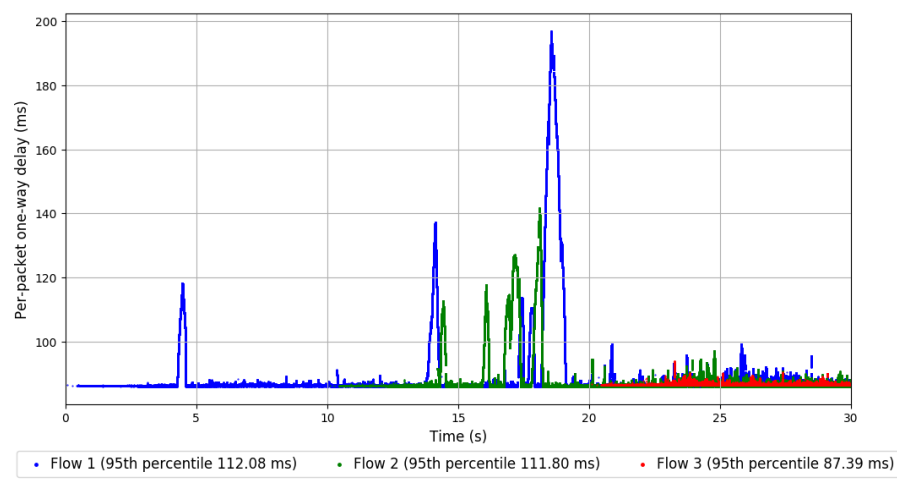
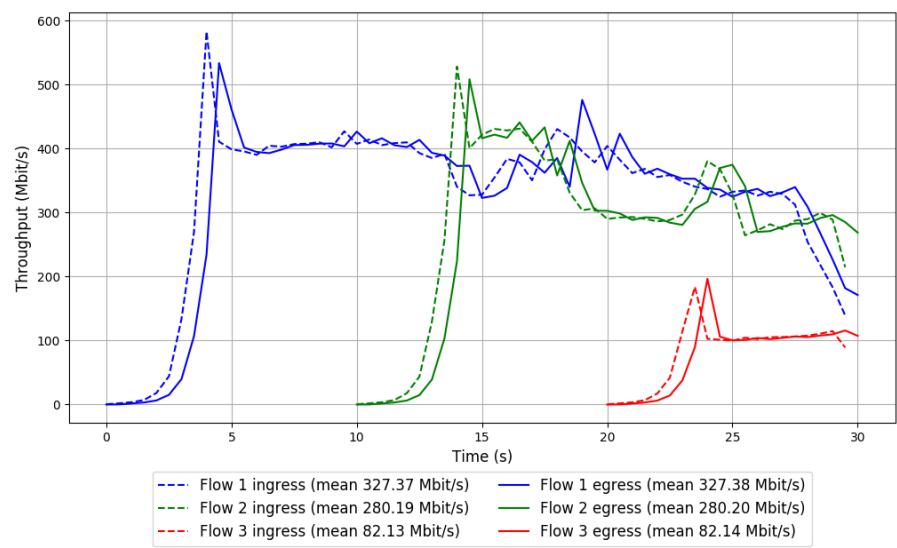
-- Flow 3:

Average throughput: 82.14 Mbit/s

95th percentile per-packet one-way delay: 87.390 ms

Loss rate: 0.00%

Run 2: Report of PCC-Vivace — Data Link

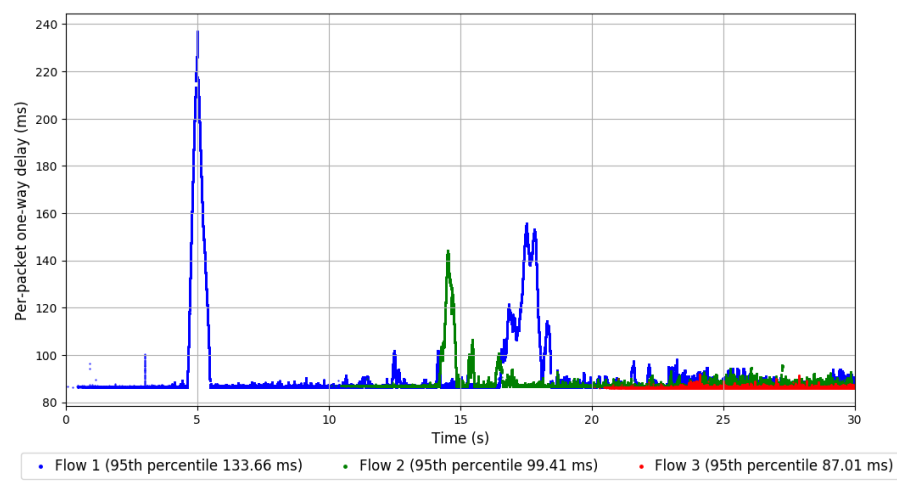
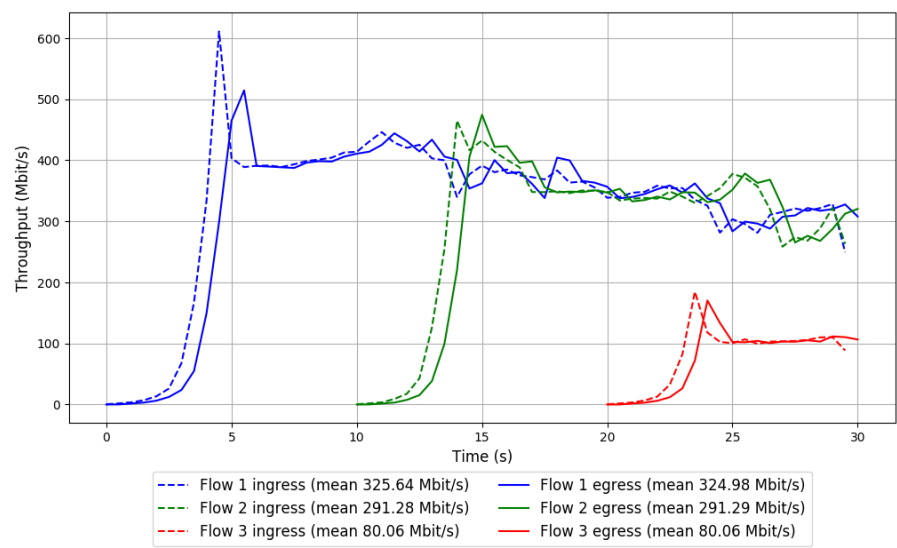


Run 3: Statistics of PCC-Vivace

Start at: 2019-01-03 00:02:32  
End at: 2019-01-03 00:03:02  
Local clock offset: -0.274 ms  
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2019-01-03 04:32:57  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 545.08 Mbit/s  
95th percentile per-packet one-way delay: 115.799 ms  
Loss rate: 0.12%  
-- Flow 1:  
Average throughput: 324.98 Mbit/s  
95th percentile per-packet one-way delay: 133.662 ms  
Loss rate: 0.20%  
-- Flow 2:  
Average throughput: 291.29 Mbit/s  
95th percentile per-packet one-way delay: 99.411 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 80.06 Mbit/s  
95th percentile per-packet one-way delay: 87.014 ms  
Loss rate: 0.00%

Run 3: Report of PCC-Vivace — Data Link





Run 4: Statistics of PCC-Vivace

Start at: 2019-01-03 00:36:37

End at: 2019-01-03 00:37:07

Local clock offset: -0.152 ms

Remote clock offset: 0.016 ms

# Below is generated by plot.py at 2019-01-03 04:32:57

# Datalink statistics

-- Total of 3 flows:

Average throughput: 491.97 Mbit/s

95th percentile per-packet one-way delay: 92.939 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 319.01 Mbit/s

95th percentile per-packet one-way delay: 95.717 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 186.03 Mbit/s

95th percentile per-packet one-way delay: 88.835 ms

Loss rate: 0.00%

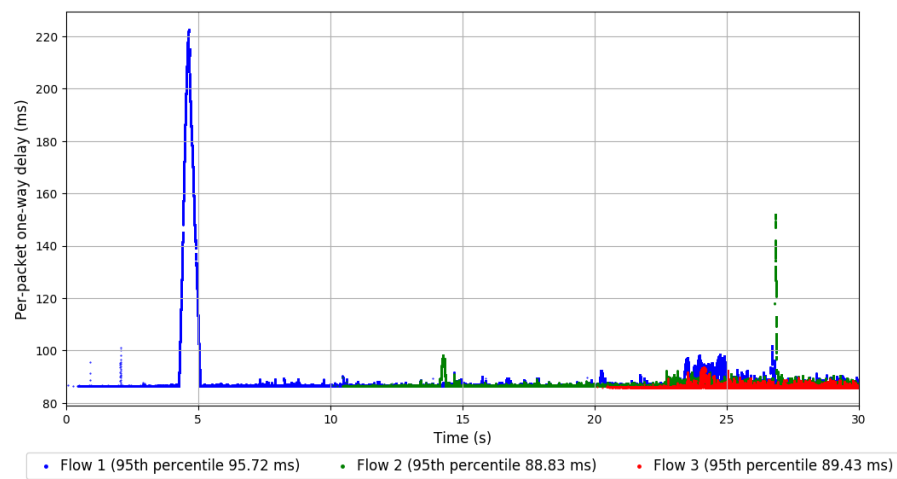
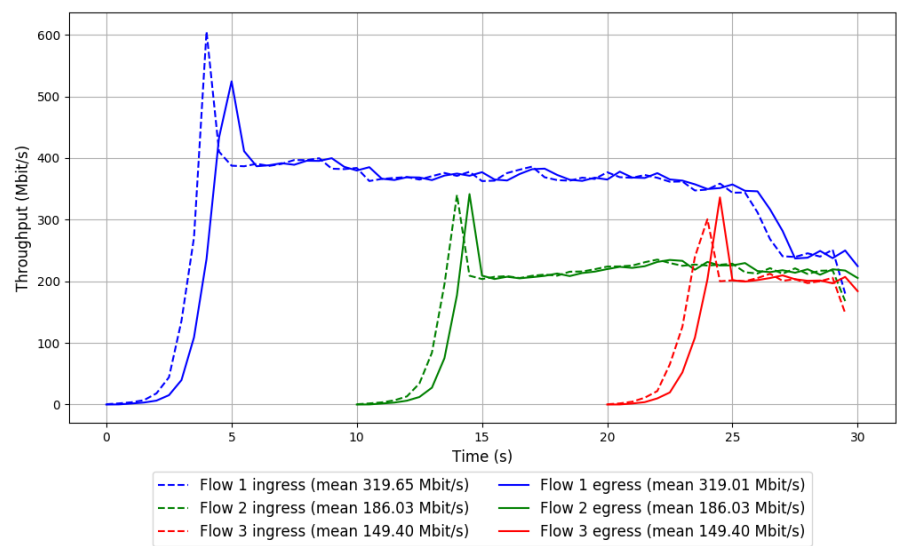
-- Flow 3:

Average throughput: 149.40 Mbit/s

95th percentile per-packet one-way delay: 89.432 ms

Loss rate: 0.00%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2019-01-03 01:10:22

End at: 2019-01-03 01:10:52

Local clock offset: 0.235 ms

Remote clock offset: 0.002 ms

# Below is generated by plot.py at 2019-01-03 04:33:09

# Datalink statistics

-- Total of 3 flows:

Average throughput: 480.76 Mbit/s

95th percentile per-packet one-way delay: 174.089 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 308.53 Mbit/s

95th percentile per-packet one-way delay: 197.424 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 184.91 Mbit/s

95th percentile per-packet one-way delay: 89.637 ms

Loss rate: 0.00%

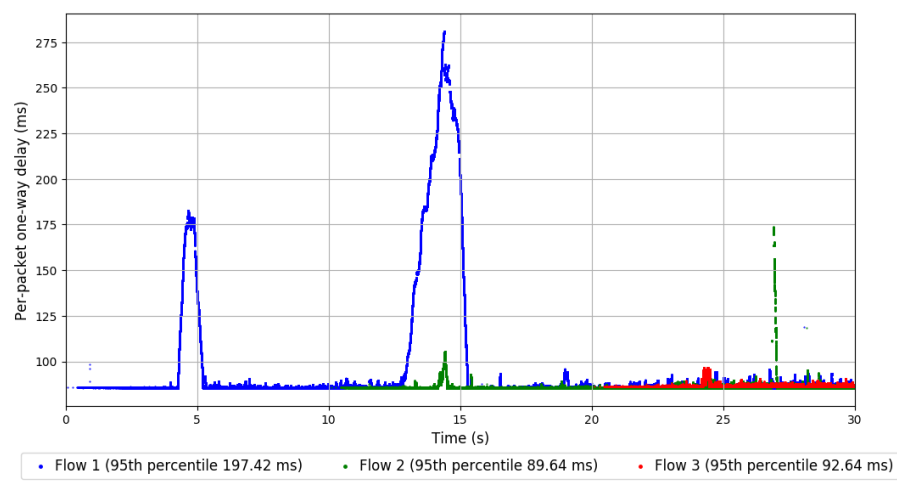
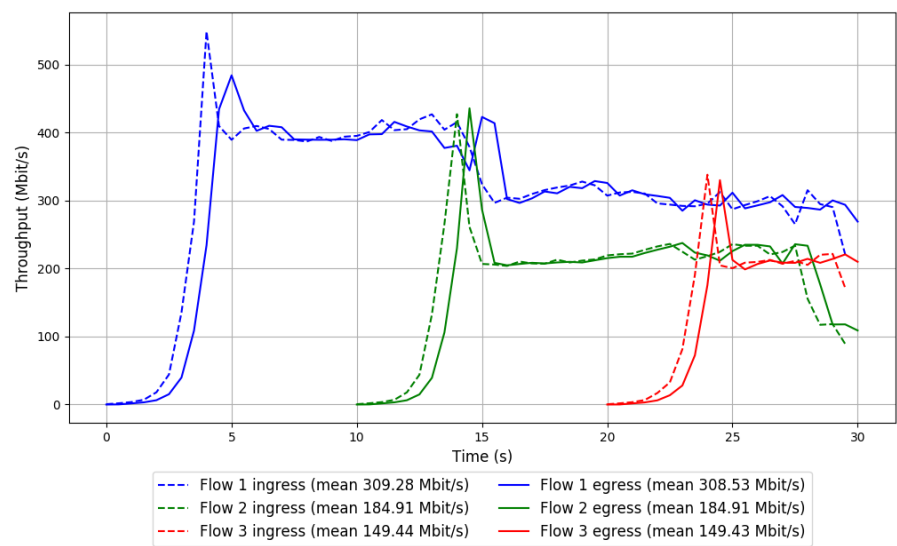
-- Flow 3:

Average throughput: 149.43 Mbit/s

95th percentile per-packet one-way delay: 92.638 ms

Loss rate: 0.00%

Run 5: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2019-01-02 22:46:45

End at: 2019-01-02 22:47:15

Local clock offset: 0.088 ms

Remote clock offset: 0.052 ms

# Below is generated by plot.py at 2019-01-03 04:33:09

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.75 Mbit/s

95th percentile per-packet one-way delay: 86.437 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 86.401 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 86.387 ms

Loss rate: 0.00%

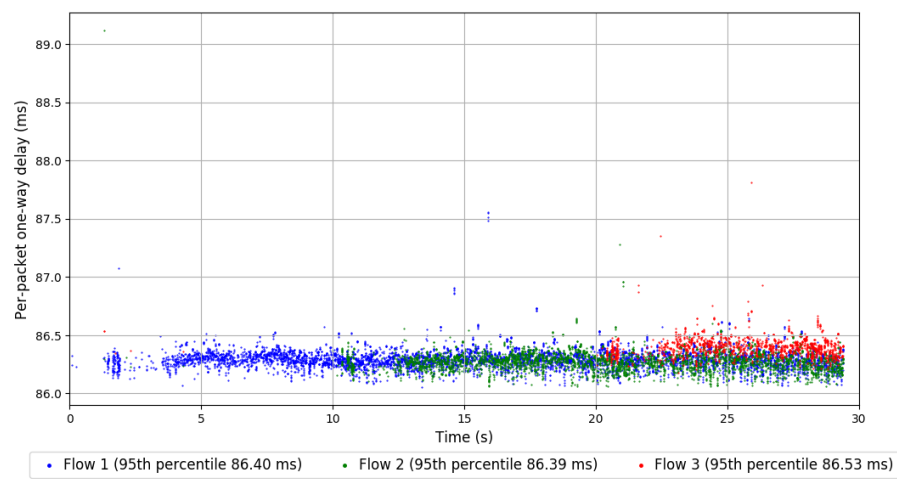
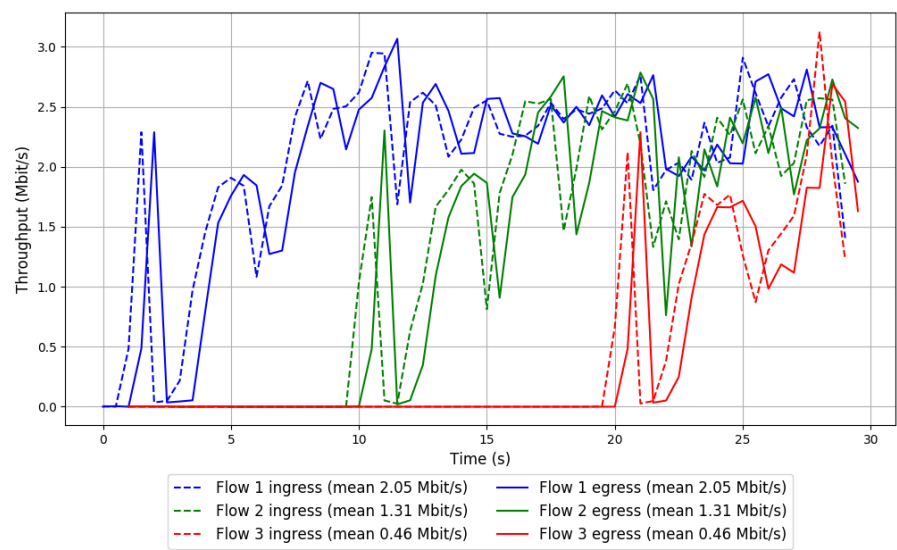
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 86.525 ms

Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2019-01-02 23:20:55

End at: 2019-01-02 23:21:25

Local clock offset: -0.307 ms

Remote clock offset: 0.027 ms

# Below is generated by plot.py at 2019-01-03 04:33:09

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 86.792 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.753 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.862 ms

Loss rate: 0.05%

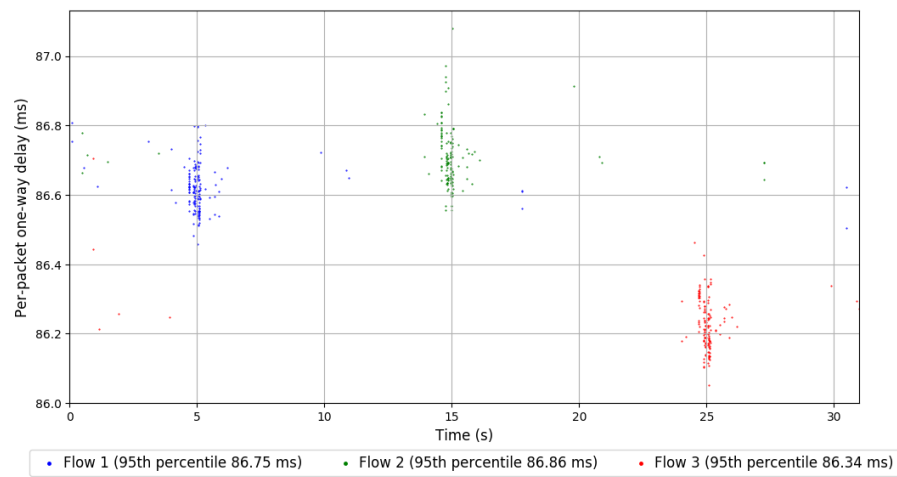
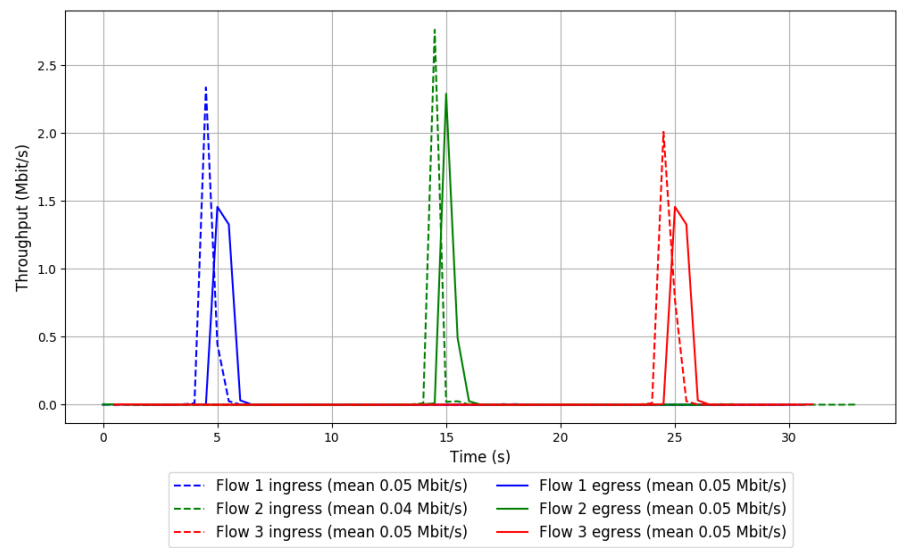
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.343 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link





Run 3: Statistics of WebRTC media

Start at: 2019-01-02 23:54:37

End at: 2019-01-02 23:55:07

Local clock offset: -0.126 ms

Remote clock offset: -0.05 ms

# Below is generated by plot.py at 2019-01-03 04:33:09

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.72 Mbit/s

95th percentile per-packet one-way delay: 86.301 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.579 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 86.282 ms

Loss rate: 0.00%

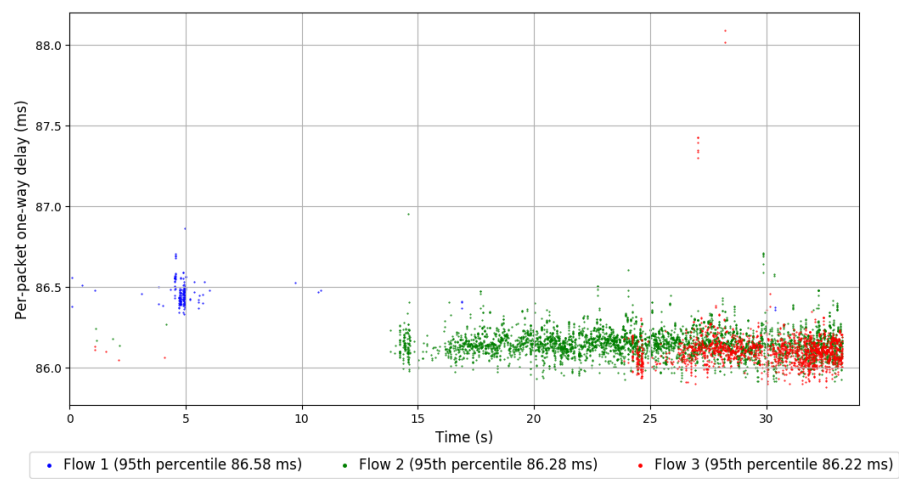
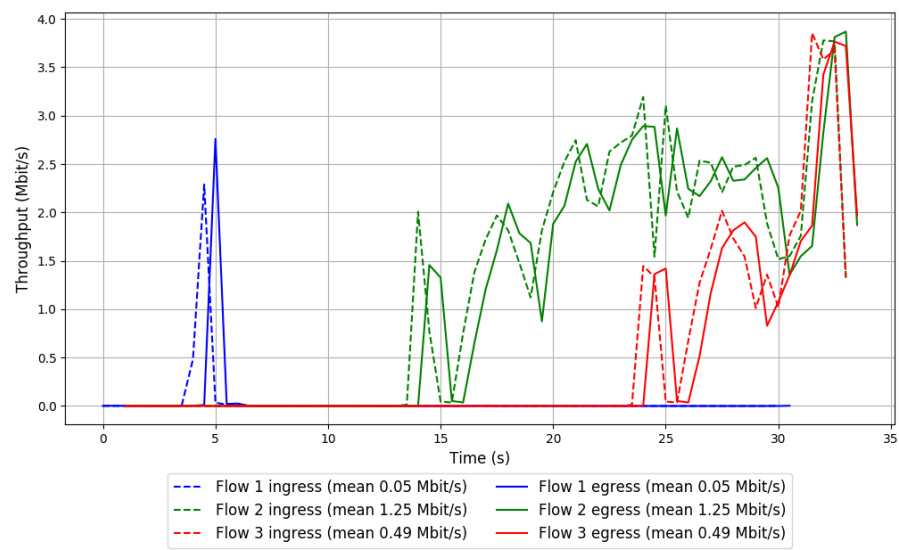
-- Flow 3:

Average throughput: 0.49 Mbit/s

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

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2019-01-03 00:28:44

End at: 2019-01-03 00:29:14

Local clock offset: -0.096 ms

Remote clock offset: 0.013 ms

# Below is generated by plot.py at 2019-01-03 04:33:09

# Datalink statistics

-- Total of 3 flows:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 86.551 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 86.505 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.134 ms

Loss rate: 0.00%

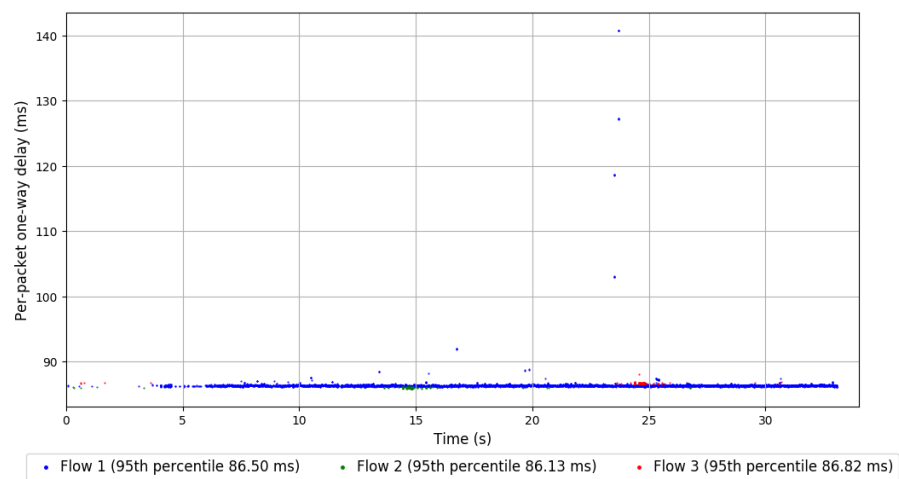
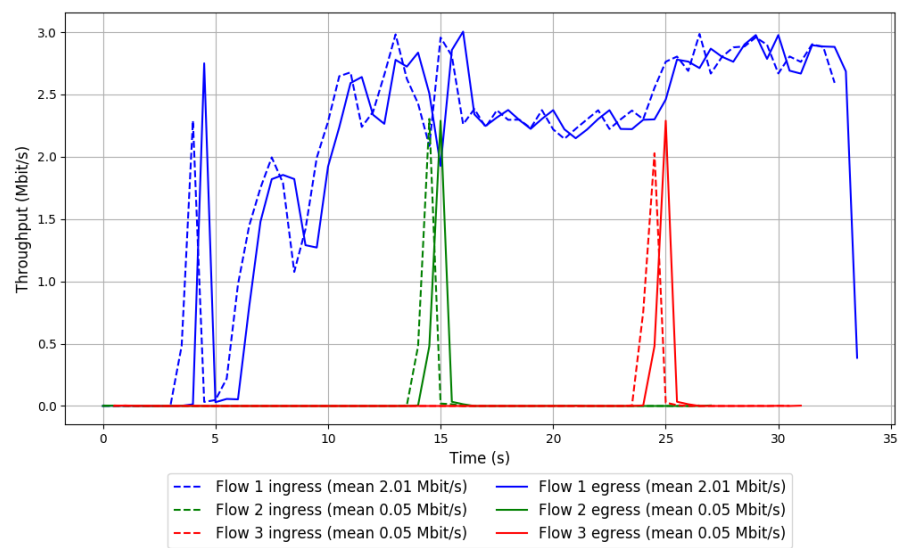
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.824 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-01-03 01:02:27

End at: 2019-01-03 01:02:57

Local clock offset: -0.083 ms

Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2019-01-03 04:33:10

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 86.592 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.574 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.623 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.282 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

