

## Pantheon Report

Generated at 2018-10-26 11:44:50 (UTC).

Data path: China on **eno1** (*remote*) → AWS Korea on **ens5** (*local*).

Repeated the test of 18 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 **ntp.nict.jp** and have been applied to correct the timestamps in logs.

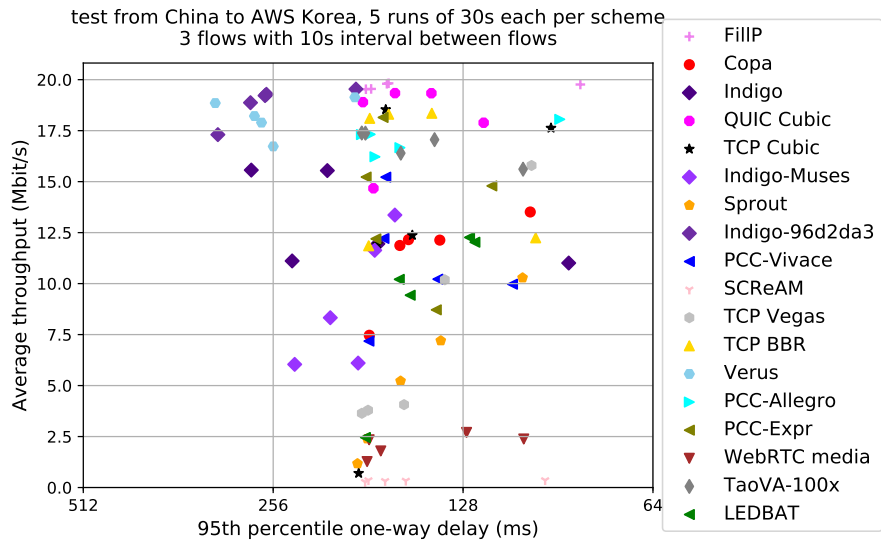
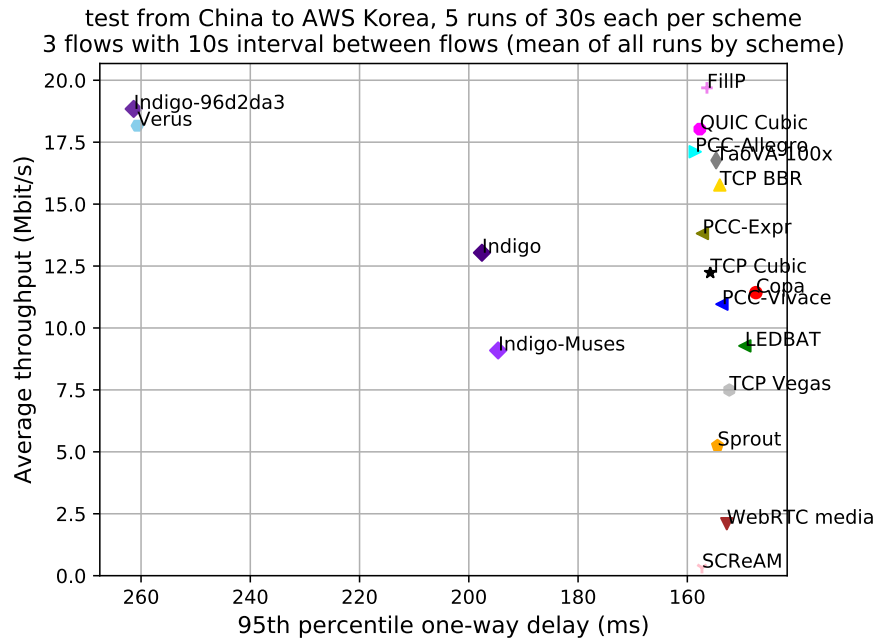
### System info:

```
Linux 4.15.0-1023-aws
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 @ 2e19c0464530faa92c63f8217c9971438a26a3be
third_party/fillp @ 5332fc9127c63565e13f4933b336c02d1aabdac6
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-96d2da3 @ 8413272d46f8aa0bcb967ed7048b6a8f994abb95
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 65ac1b19bbefed0c6349ae986009b4fa8643c40a
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
```

third\_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4  
third\_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851



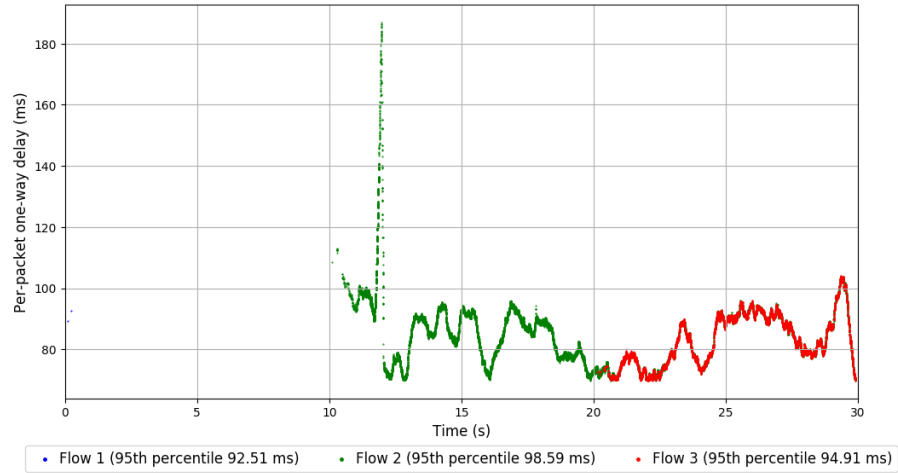
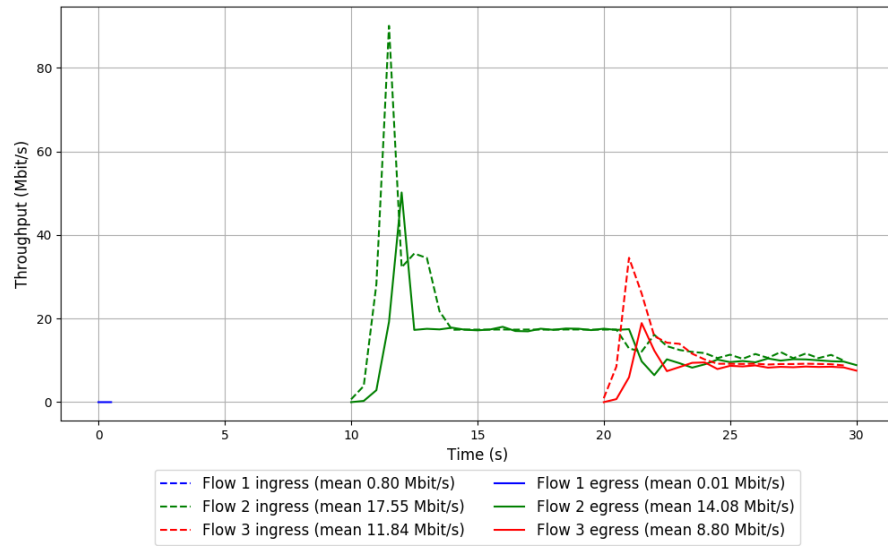
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	8.21	9.53	3.79	149.86	150.65	148.17	52.24	26.45	28.45
Copa	5	5.97	5.84	4.89	147.81	146.37	147.68	3.47	1.31	5.66
TCP Cubic	5	6.94	6.40	6.87	156.58	154.54	150.74	8.95	9.48	7.62
FillP	5	12.41	7.84	6.37	176.94	151.48	151.15	41.24	29.23	33.19
Indigo	5	60.29	9.02	7.09	157.46	182.11	202.68	52.87	61.09	79.12
Indigo-96d2da3	5	12.63	6.26	6.72	257.39	268.71	264.97	64.91	68.02	72.49
LEDBAT	5	5.48	4.35	2.89	147.29	148.52	143.38	0.92	1.60	3.48
Indigo-Muses	5	4.10	4.51	6.17	191.70	196.65	168.15	9.11	9.32	3.24
PCC-Allegro	5	14.52	3.20	1.45	158.25	156.11	155.56	51.69	58.81	50.41
PCC-Expr	5	6.08	7.70	8.08	155.50	156.83	154.91	39.52	16.60	29.32
QUIC Cubic	5	9.68	7.89	9.55	154.36	157.61	159.84	5.53	12.17	15.18
SCReAM	5	0.14	0.18	0.21	161.04	151.78	149.81	0.48	0.81	1.56
Sprout	5	2.68	2.79	2.56	152.05	153.05	148.31	2.16	1.06	2.31
TaoVA-100x	5	8.20	7.09	11.83	154.82	154.10	152.01	8.40	16.12	20.42
TCP Vegas	5	4.66	2.54	4.23	150.27	152.38	150.23	0.47	1.02	1.57
Verus	5	13.66	5.51	3.58	240.42	243.38	238.86	60.84	61.84	60.59
PCC-Vivace	5	3.87	8.35	4.74	153.68	153.09	152.53	3.41	5.88	6.43
WebRTC media	5	0.99	0.84	0.28	153.08	152.33	146.81	18.65	1.13	19.97

Run 1: Statistics of TCP BBR

Start at: 2018-10-26 09:51:18  
End at: 2018-10-26 09:51:48  
Local clock offset: -1.818 ms  
Remote clock offset: 16.505 ms

# Below is generated by plot.py at 2018-10-26 11:41:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.24 Mbit/s  
95th percentile per-packet one-way delay: 98.205 ms  
Loss rate: 22.04%  
-- Flow 1:  
Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 92.510 ms  
Loss rate: 98.79%  
-- Flow 2:  
Average throughput: 14.08 Mbit/s  
95th percentile per-packet one-way delay: 98.586 ms  
Loss rate: 20.45%  
-- Flow 3:  
Average throughput: 8.80 Mbit/s  
95th percentile per-packet one-way delay: 94.911 ms  
Loss rate: 26.70%

## Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-10-26 10:15:34

End at: 2018-10-26 10:16:04

Local clock offset: -1.423 ms

Remote clock offset: 15.84 ms

# Below is generated by plot.py at 2018-10-26 11:42:00

# Datalink statistics

-- Total of 3 flows:

Average throughput: 18.35 Mbit/s

95th percentile per-packet one-way delay: 143.476 ms

Loss rate: 22.79%

-- Flow 1:

Average throughput: 11.47 Mbit/s

95th percentile per-packet one-way delay: 146.550 ms

Loss rate: 22.72%

-- Flow 2:

Average throughput: 10.25 Mbit/s

95th percentile per-packet one-way delay: 133.124 ms

Loss rate: 22.92%

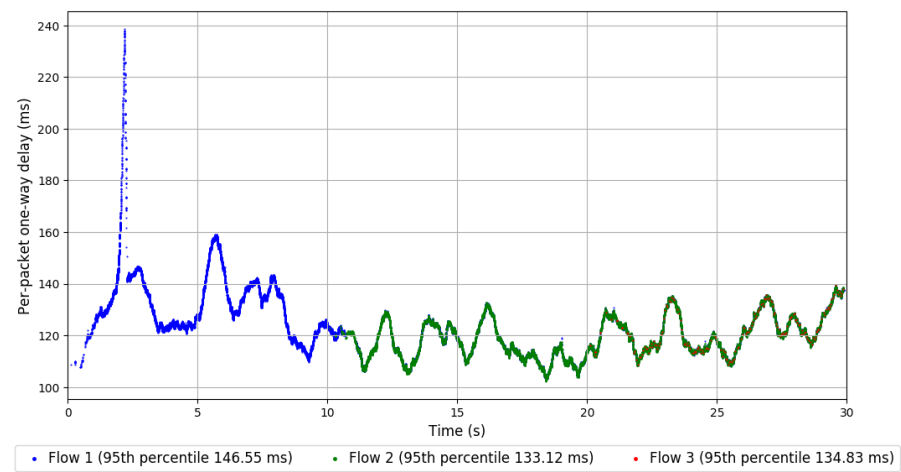
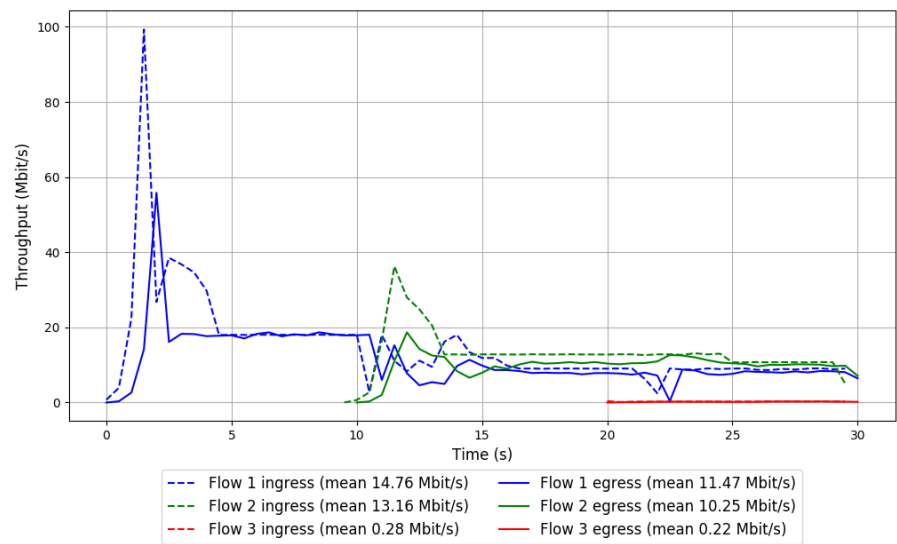
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 134.832 ms

Loss rate: 21.63%

Run 2: Report of TCP BBR — Data Link

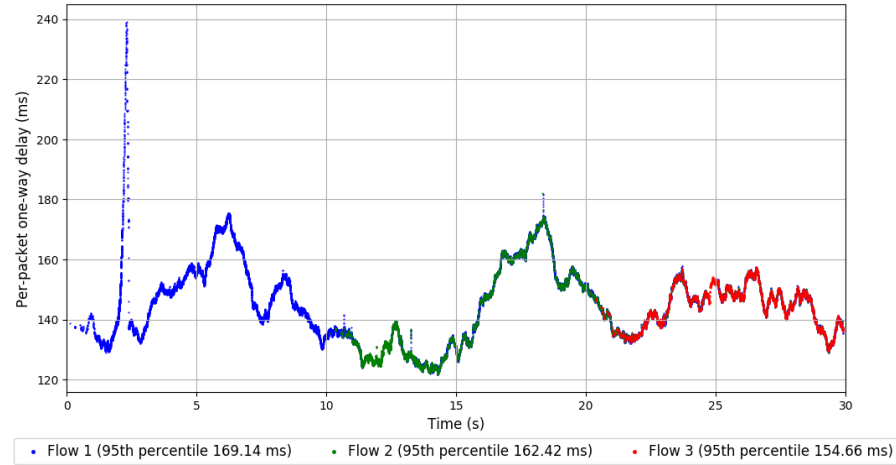
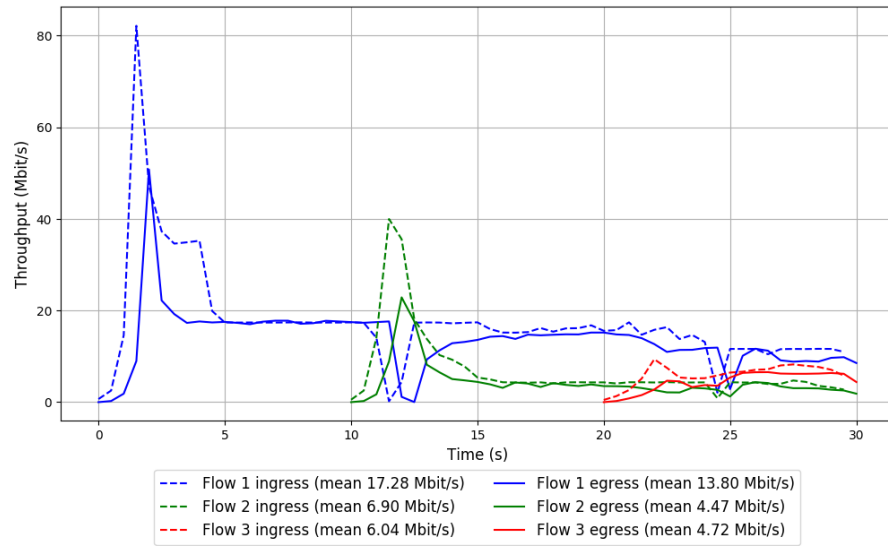


Run 3: Statistics of TCP BBR

Start at: 2018-10-26 10:40:47  
End at: 2018-10-26 10:41:17  
Local clock offset: -1.215 ms  
Remote clock offset: 25.906 ms

# Below is generated by plot.py at 2018-10-26 11:42:00  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 18.31 Mbit/s  
95th percentile per-packet one-way delay: 167.947 ms  
Loss rate: 23.89%  
-- Flow 1:  
Average throughput: 13.80 Mbit/s  
95th percentile per-packet one-way delay: 169.138 ms  
Loss rate: 20.73%  
-- Flow 2:  
Average throughput: 4.47 Mbit/s  
95th percentile per-packet one-way delay: 162.418 ms  
Loss rate: 35.92%  
-- Flow 3:  
Average throughput: 4.72 Mbit/s  
95th percentile per-packet one-way delay: 154.663 ms  
Loss rate: 23.58%

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

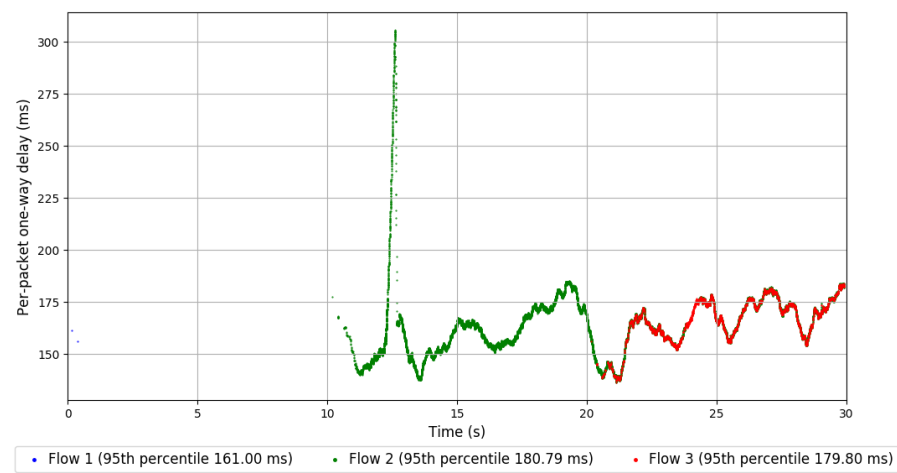
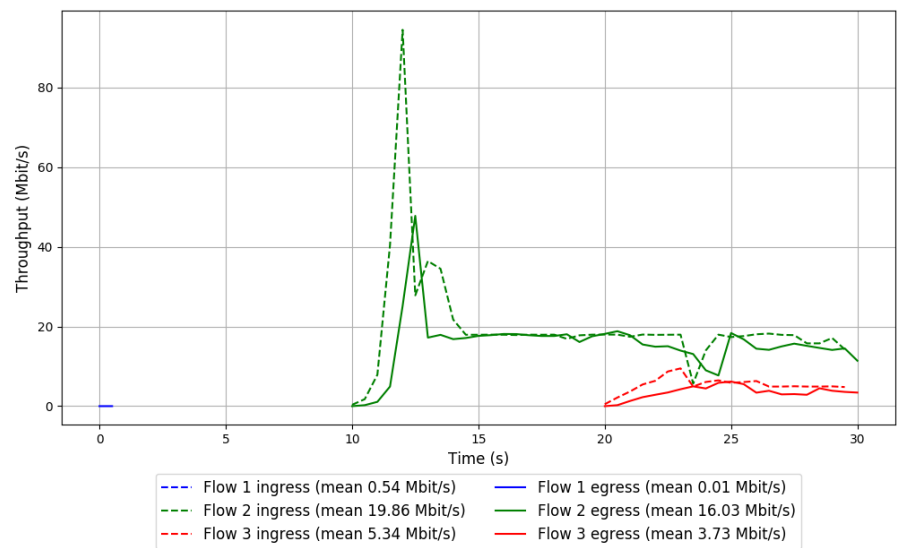


Run 4: Statistics of TCP BBR

Start at: 2018-10-26 11:05:56  
End at: 2018-10-26 11:06:26  
Local clock offset: 0.186 ms  
Remote clock offset: 36.445 ms

# Below is generated by plot.py at 2018-10-26 11:42:00  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 11.85 Mbit/s  
95th percentile per-packet one-way delay: 180.681 ms  
Loss rate: 21.67%  
-- Flow 1:  
Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 160.999 ms  
Loss rate: 98.79%  
-- Flow 2:  
Average throughput: 16.03 Mbit/s  
95th percentile per-packet one-way delay: 180.790 ms  
Loss rate: 20.30%  
-- Flow 3:  
Average throughput: 3.73 Mbit/s  
95th percentile per-packet one-way delay: 179.800 ms  
Loss rate: 31.70%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-10-26 11:31:42

End at: 2018-10-26 11:32:12

Local clock offset: 2.386 ms

Remote clock offset: -20.7 ms

# Below is generated by plot.py at 2018-10-26 11:42:00

# Datalink statistics

-- Total of 3 flows:

Average throughput: 18.10 Mbit/s

95th percentile per-packet one-way delay: 179.963 ms

Loss rate: 22.26%

-- Flow 1:

Average throughput: 15.77 Mbit/s

95th percentile per-packet one-way delay: 180.080 ms

Loss rate: 20.16%

-- Flow 2:

Average throughput: 2.81 Mbit/s

95th percentile per-packet one-way delay: 178.351 ms

Loss rate: 32.68%

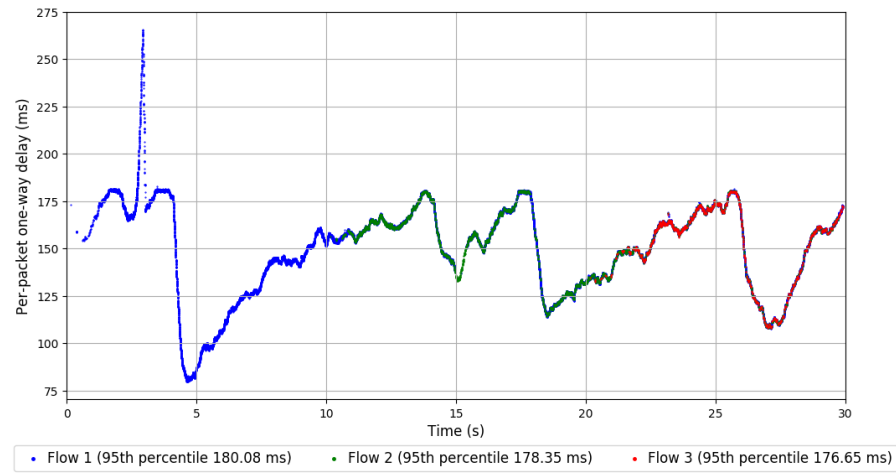
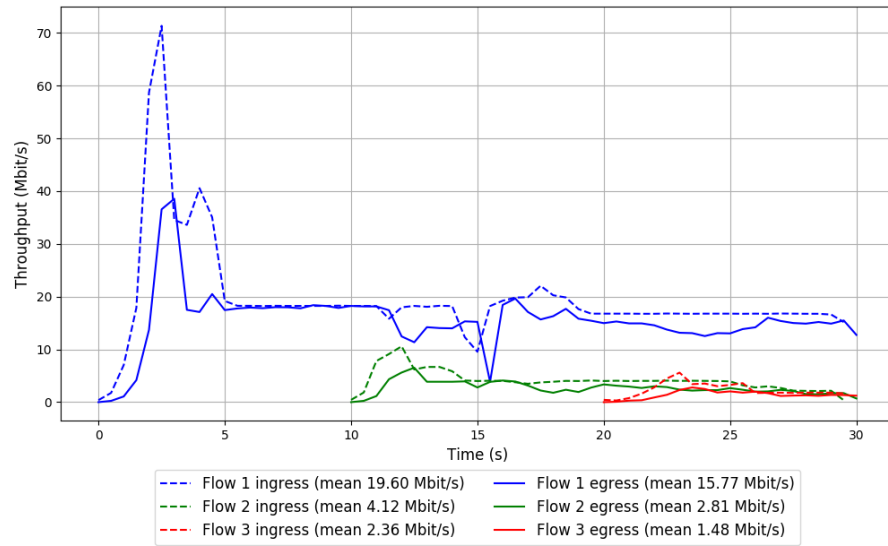
-- Flow 3:

Average throughput: 1.48 Mbit/s

95th percentile per-packet one-way delay: 176.649 ms

Loss rate: 38.65%

# Run 5: Report of TCP BBR — Data Link

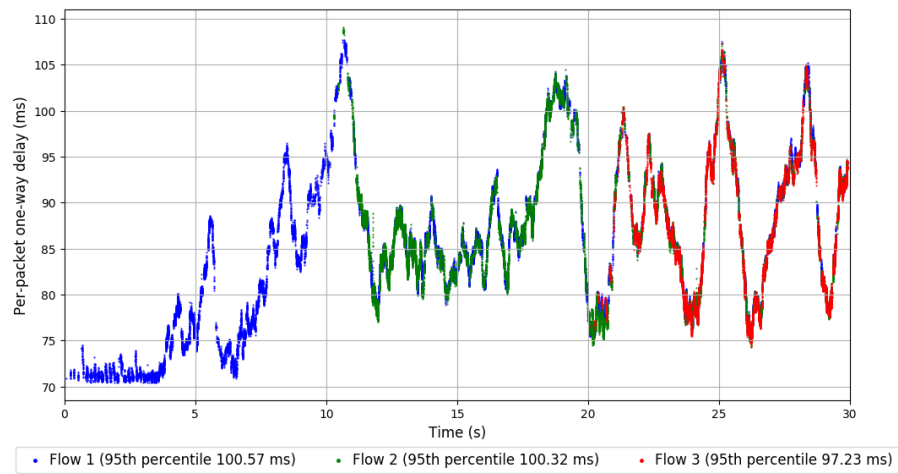
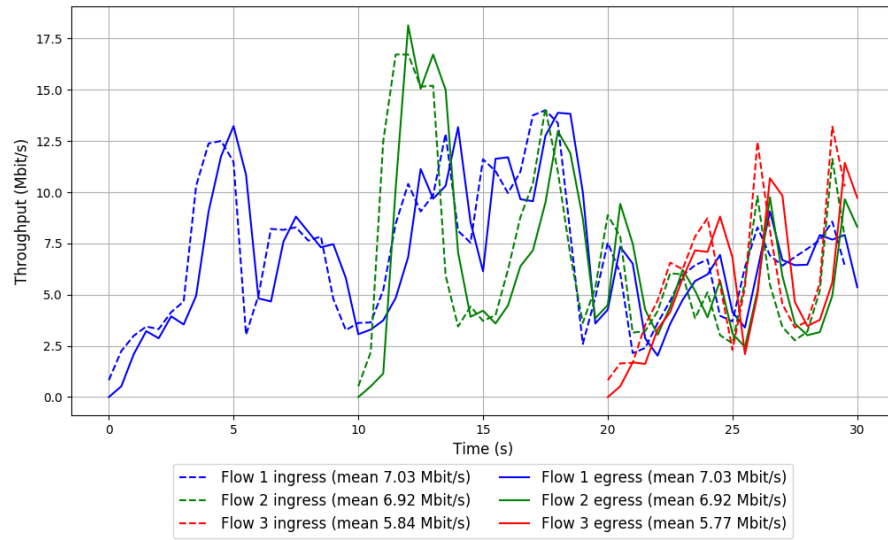


Run 1: Statistics of Copa

Start at: 2018-10-26 09:40:54  
End at: 2018-10-26 09:41:24  
Local clock offset: -1.636 ms  
Remote clock offset: 19.139 ms

# Below is generated by plot.py at 2018-10-26 11:42:06  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 13.51 Mbit/s  
95th percentile per-packet one-way delay: 100.162 ms  
Loss rate: 0.89%  
-- Flow 1:  
Average throughput: 7.03 Mbit/s  
95th percentile per-packet one-way delay: 100.574 ms  
Loss rate: 0.52%  
-- Flow 2:  
Average throughput: 6.92 Mbit/s  
95th percentile per-packet one-way delay: 100.322 ms  
Loss rate: 0.75%  
-- Flow 3:  
Average throughput: 5.77 Mbit/s  
95th percentile per-packet one-way delay: 97.231 ms  
Loss rate: 2.56%

## Run 1: Report of Copa — Data Link

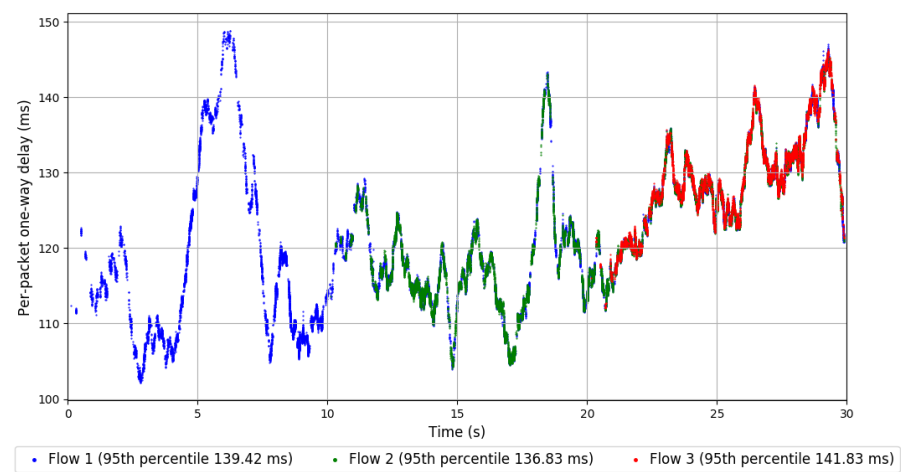
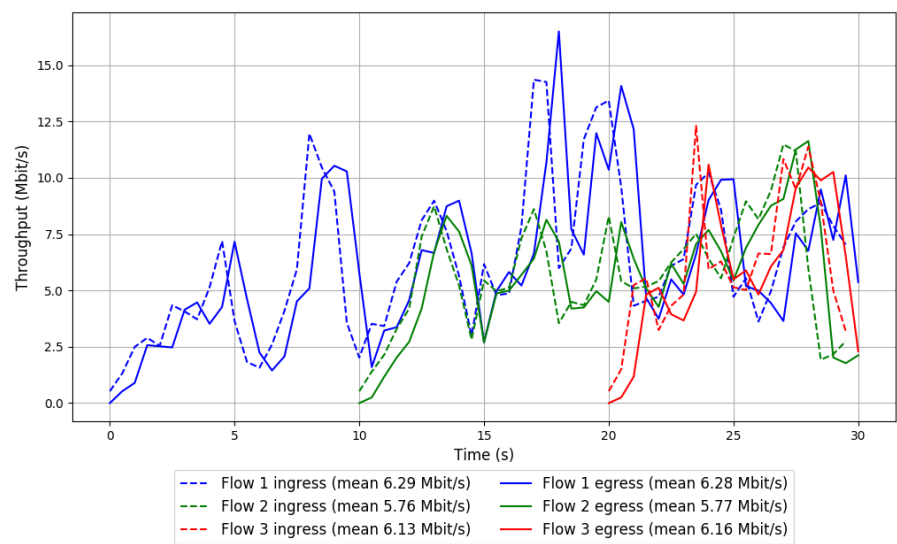


Run 2: Statistics of Copa

Start at: 2018-10-26 10:04:40  
End at: 2018-10-26 10:05:10  
Local clock offset: -1.974 ms  
Remote clock offset: 13.739 ms

# Below is generated by plot.py at 2018-10-26 11:42:06  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.13 Mbit/s  
95th percentile per-packet one-way delay: 139.351 ms  
Loss rate: 0.82%  
-- Flow 1:  
Average throughput: 6.28 Mbit/s  
95th percentile per-packet one-way delay: 139.421 ms  
Loss rate: 0.77%  
-- Flow 2:  
Average throughput: 5.77 Mbit/s  
95th percentile per-packet one-way delay: 136.827 ms  
Loss rate: 0.66%  
-- Flow 3:  
Average throughput: 6.16 Mbit/s  
95th percentile per-packet one-way delay: 141.831 ms  
Loss rate: 1.25%

Run 2: Report of Copa — Data Link

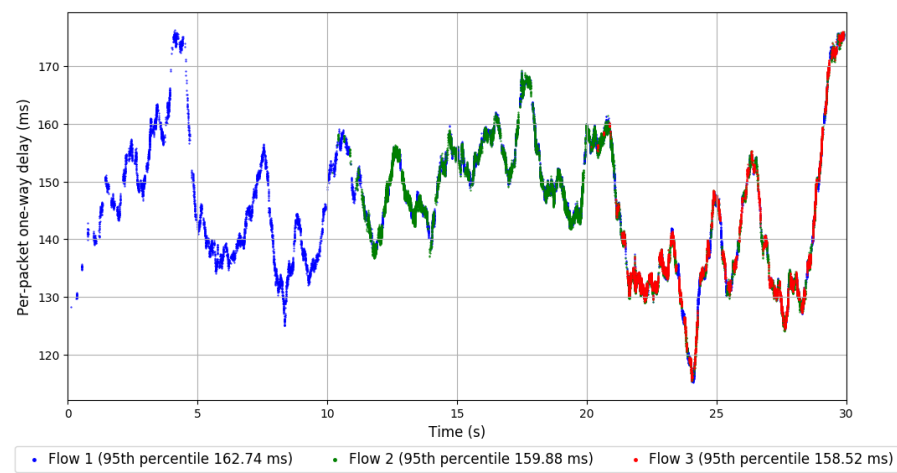
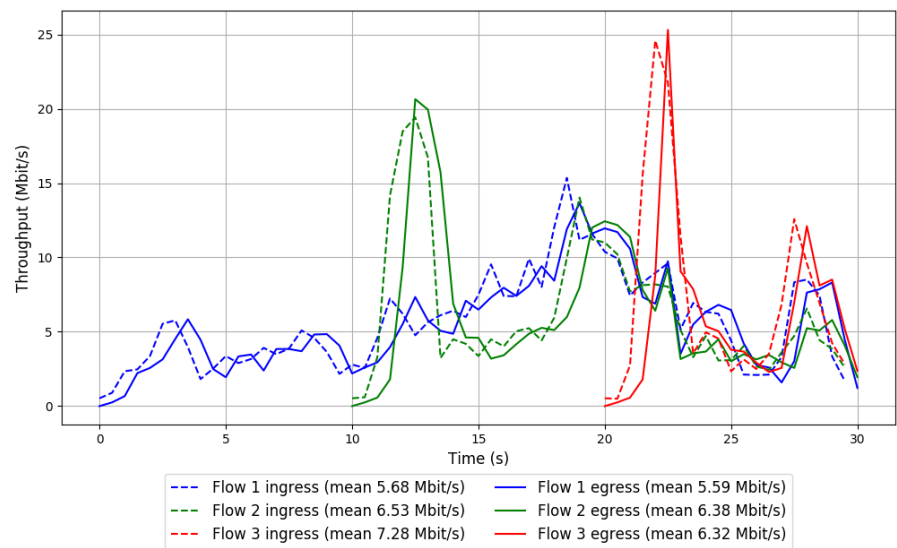


Run 3: Statistics of Copa

Start at: 2018-10-26 10:29:34  
End at: 2018-10-26 10:30:04  
Local clock offset: -1.415 ms  
Remote clock offset: 16.217 ms

# Below is generated by plot.py at 2018-10-26 11:42:06  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 11.87 Mbit/s  
95th percentile per-packet one-way delay: 161.226 ms  
Loss rate: 5.19%  
-- Flow 1:  
Average throughput: 5.59 Mbit/s  
95th percentile per-packet one-way delay: 162.741 ms  
Loss rate: 2.27%  
-- Flow 2:  
Average throughput: 6.38 Mbit/s  
95th percentile per-packet one-way delay: 159.877 ms  
Loss rate: 3.41%  
-- Flow 3:  
Average throughput: 6.32 Mbit/s  
95th percentile per-packet one-way delay: 158.522 ms  
Loss rate: 15.28%

Run 3: Report of Copa — Data Link

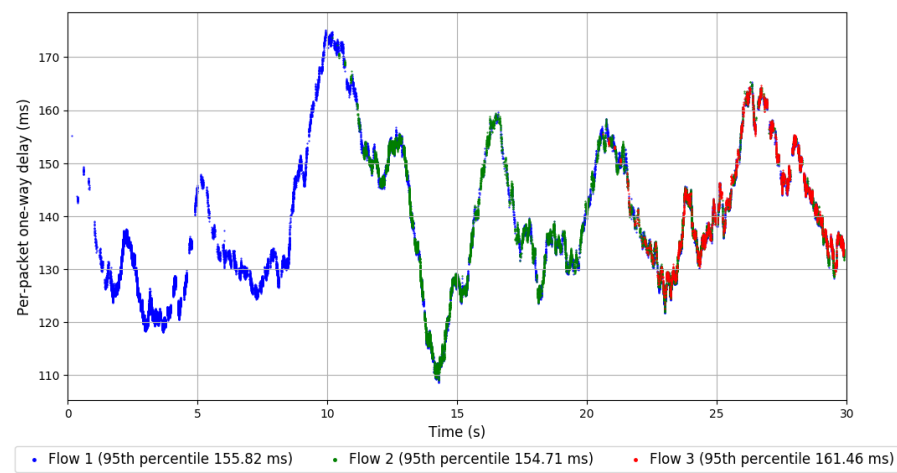
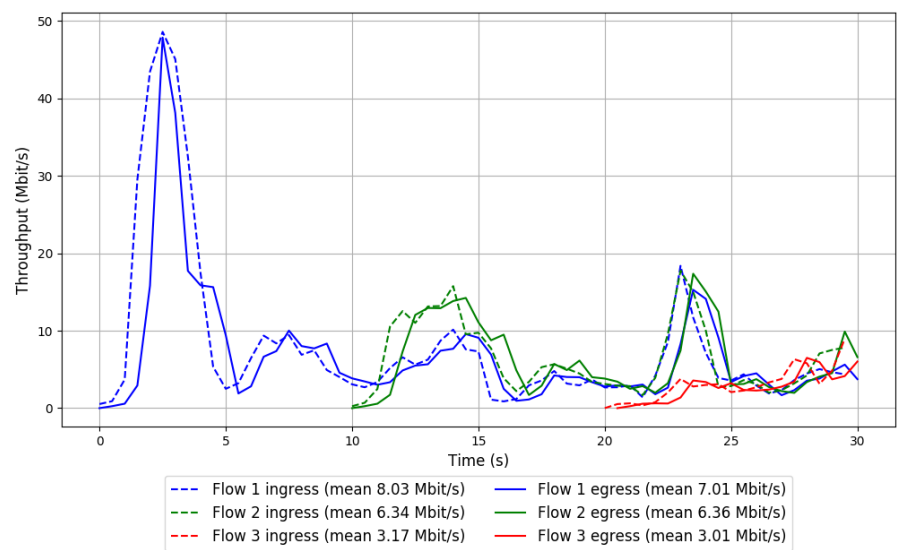


Run 4: Statistics of Copa

Start at: 2018-10-26 10:54:54  
End at: 2018-10-26 10:55:24  
Local clock offset: -1.212 ms  
Remote clock offset: 36.147 ms

# Below is generated by plot.py at 2018-10-26 11:42:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.16 Mbit/s  
95th percentile per-packet one-way delay: 156.227 ms  
Loss rate: 8.93%  
-- Flow 1:  
Average throughput: 7.01 Mbit/s  
95th percentile per-packet one-way delay: 155.822 ms  
Loss rate: 13.32%  
-- Flow 2:  
Average throughput: 6.36 Mbit/s  
95th percentile per-packet one-way delay: 154.706 ms  
Loss rate: 0.96%  
-- Flow 3:  
Average throughput: 3.01 Mbit/s  
95th percentile per-packet one-way delay: 161.456 ms  
Loss rate: 7.39%

Run 4: Report of Copa — Data Link

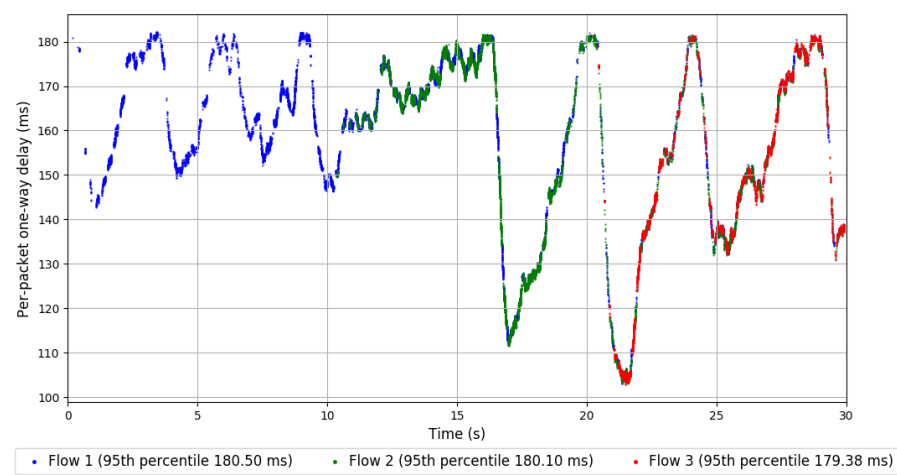
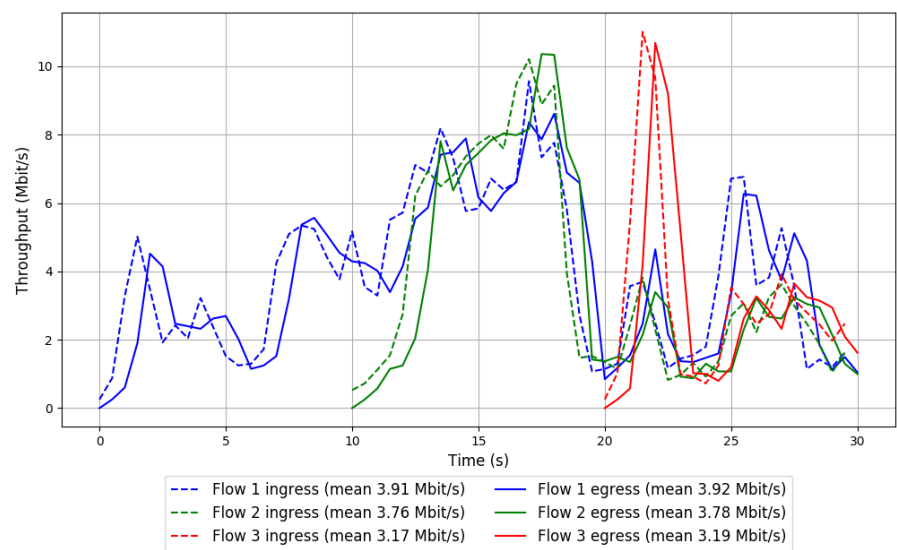


Run 5: Statistics of Copa

Start at: 2018-10-26 11:20:24  
End at: 2018-10-26 11:20:54  
Local clock offset: 2.109 ms  
Remote clock offset: -7.652 ms

```
# Below is generated by plot.py at 2018-10-26 11:42:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.47 Mbit/s
95th percentile per-packet one-way delay: 180.242 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 3.92 Mbit/s
95th percentile per-packet one-way delay: 180.495 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 3.78 Mbit/s
95th percentile per-packet one-way delay: 180.104 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 3.19 Mbit/s
95th percentile per-packet one-way delay: 179.377 ms
Loss rate: 1.82%
```

Run 5: Report of Copa — Data Link

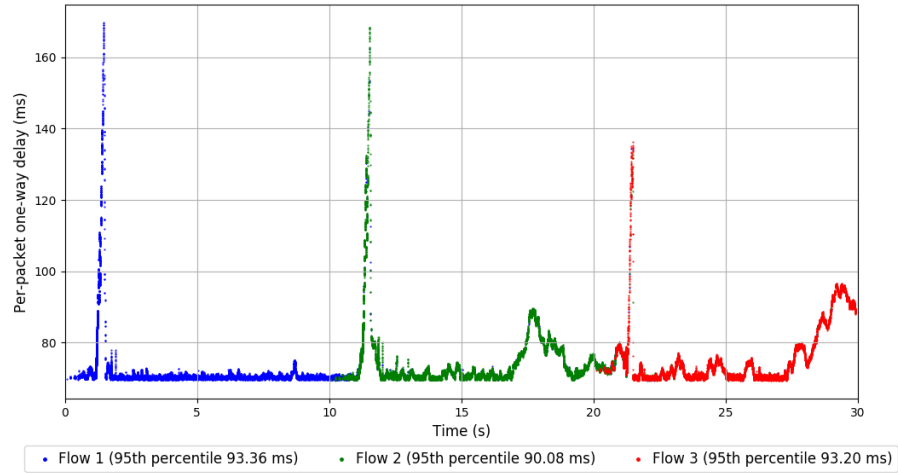
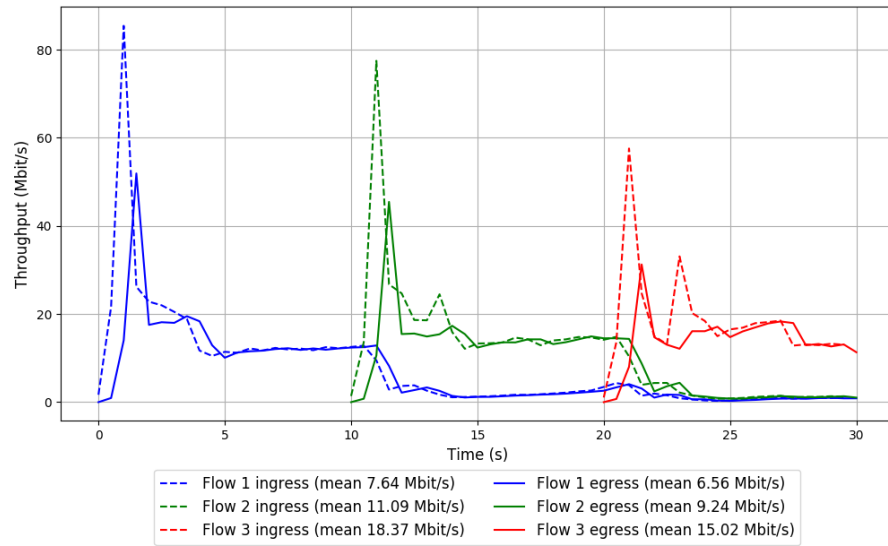


Run 1: Statistics of TCP Cubic

Start at: 2018-10-26 09:39:35  
End at: 2018-10-26 09:40:05  
Local clock offset: -1.717 ms  
Remote clock offset: 20.797 ms

# Below is generated by plot.py at 2018-10-26 11:42:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 17.63 Mbit/s  
95th percentile per-packet one-way delay: 92.859 ms  
Loss rate: 16.85%  
-- Flow 1:  
Average throughput: 6.56 Mbit/s  
95th percentile per-packet one-way delay: 93.361 ms  
Loss rate: 14.48%  
-- Flow 2:  
Average throughput: 9.24 Mbit/s  
95th percentile per-packet one-way delay: 90.080 ms  
Loss rate: 17.21%  
-- Flow 3:  
Average throughput: 15.02 Mbit/s  
95th percentile per-packet one-way delay: 93.196 ms  
Loss rate: 19.38%

# Run 1: Report of TCP Cubic — Data Link

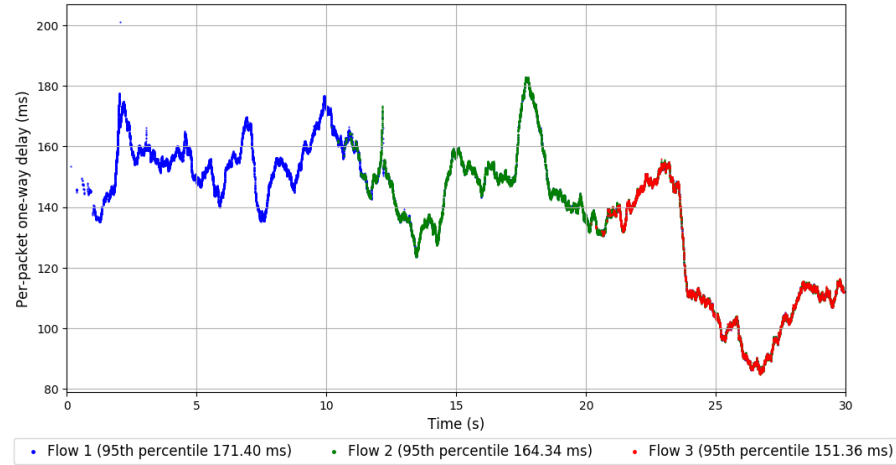
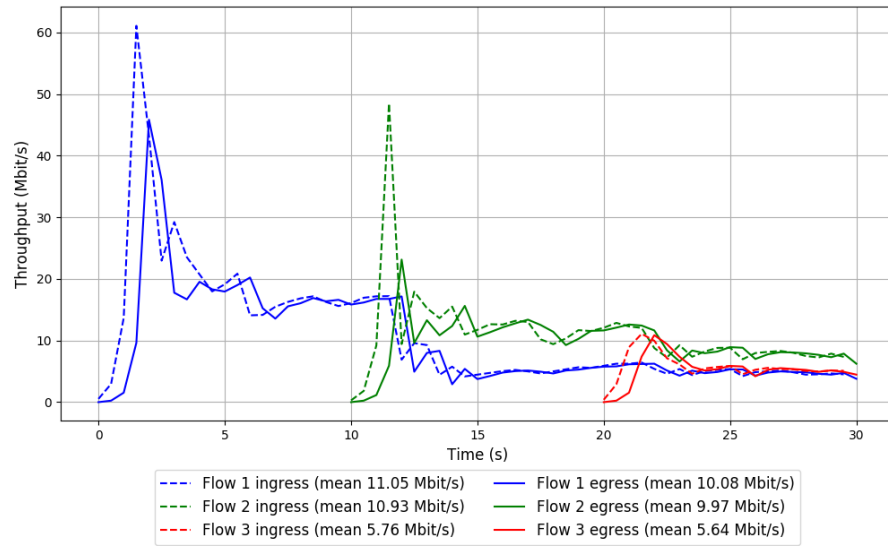


Run 2: Statistics of TCP Cubic

Start at: 2018-10-26 10:03:19  
End at: 2018-10-26 10:03:49  
Local clock offset: -1.946 ms  
Remote clock offset: 14.315 ms

# Below is generated by plot.py at 2018-10-26 11:42:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 18.53 Mbit/s  
95th percentile per-packet one-way delay: 169.768 ms  
Loss rate: 9.05%  
-- Flow 1:  
Average throughput: 10.08 Mbit/s  
95th percentile per-packet one-way delay: 171.401 ms  
Loss rate: 9.39%  
-- Flow 2:  
Average throughput: 9.97 Mbit/s  
95th percentile per-packet one-way delay: 164.343 ms  
Loss rate: 9.82%  
-- Flow 3:  
Average throughput: 5.64 Mbit/s  
95th percentile per-packet one-way delay: 151.364 ms  
Loss rate: 4.13%

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



Run 3: Statistics of TCP Cubic

Start at: 2018-10-26 10:28:06

End at: 2018-10-26 10:28:36

Local clock offset: -1.525 ms

Remote clock offset: 7.255 ms

# Below is generated by plot.py at 2018-10-26 11:42:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.70 Mbit/s

95th percentile per-packet one-way delay: 187.397 ms

Loss rate: 4.46%

-- Flow 1:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 187.259 ms

Loss rate: 3.44%

-- Flow 2:

Average throughput: 0.27 Mbit/s

95th percentile per-packet one-way delay: 187.445 ms

Loss rate: 4.25%

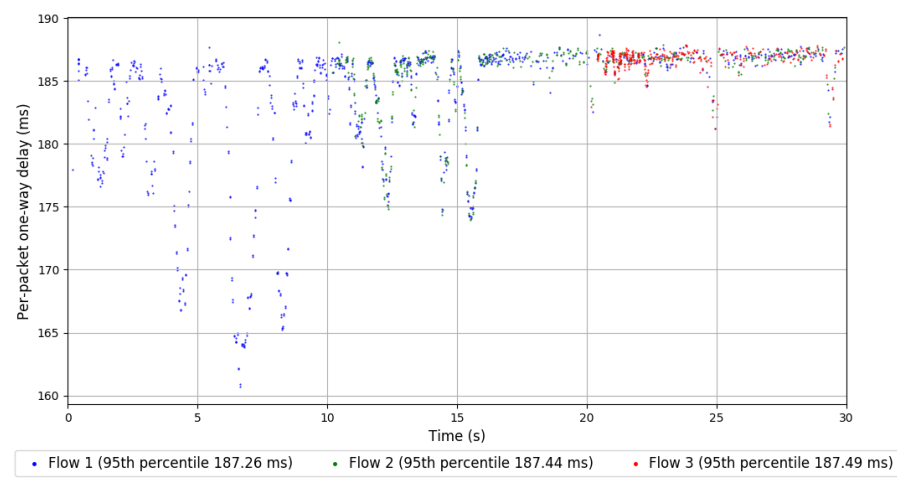
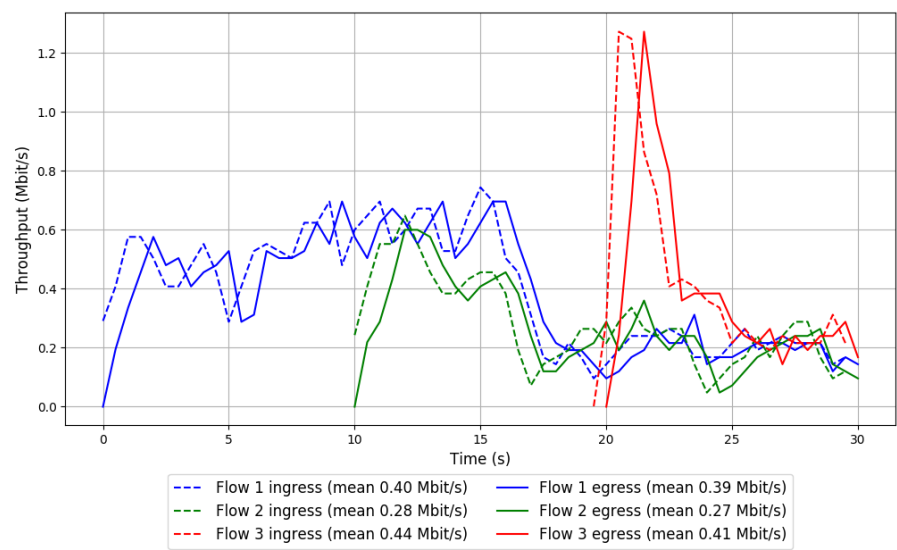
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 187.485 ms

Loss rate: 7.50%

Run 3: Report of TCP Cubic — Data Link

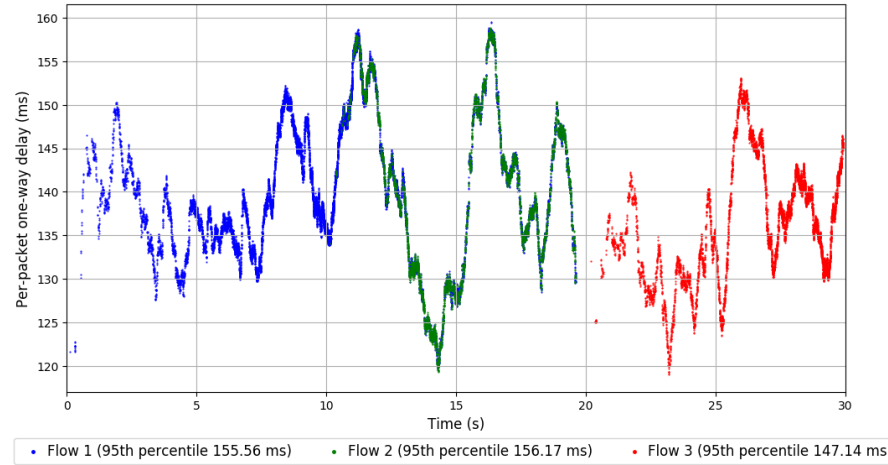
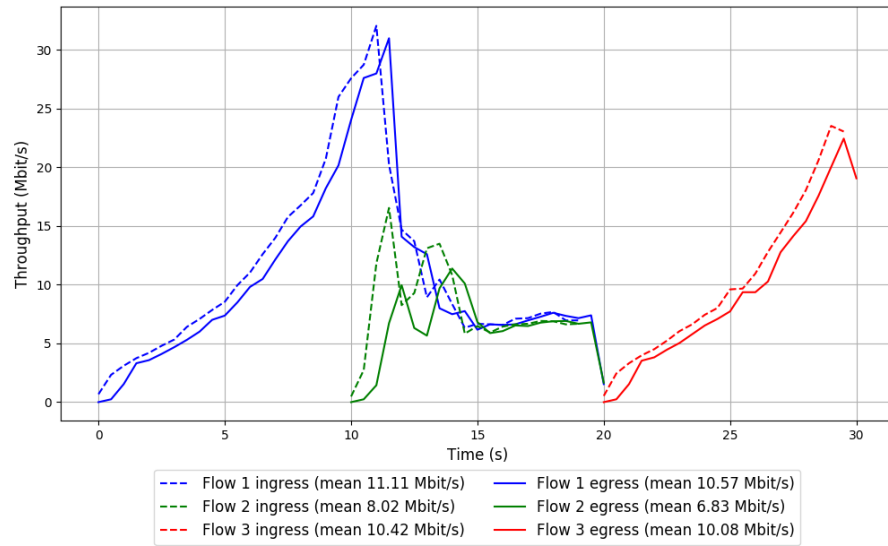


Run 4: Statistics of TCP Cubic

Start at: 2018-10-26 10:53:32  
End at: 2018-10-26 10:54:02  
Local clock offset: -1.279 ms  
Remote clock offset: 38.614 ms

# Below is generated by plot.py at 2018-10-26 11:42:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.37 Mbit/s  
95th percentile per-packet one-way delay: 154.032 ms  
Loss rate: 6.89%  
-- Flow 1:  
Average throughput: 10.57 Mbit/s  
95th percentile per-packet one-way delay: 155.562 ms  
Loss rate: 4.87%  
-- Flow 2:  
Average throughput: 6.83 Mbit/s  
95th percentile per-packet one-way delay: 156.172 ms  
Loss rate: 14.93%  
-- Flow 3:  
Average throughput: 10.08 Mbit/s  
95th percentile per-packet one-way delay: 147.144 ms  
Loss rate: 5.22%

# Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-10-26 11:18:58

End at: 2018-10-26 11:19:28

Local clock offset: 1.928 ms

Remote clock offset: 1.386 ms

# Below is generated by plot.py at 2018-10-26 11:42:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 11.93 Mbit/s

95th percentile per-packet one-way delay: 174.961 ms

Loss rate: 8.36%

-- Flow 1:

Average throughput: 7.10 Mbit/s

95th percentile per-packet one-way delay: 175.332 ms

Loss rate: 12.58%

-- Flow 2:

Average throughput: 5.71 Mbit/s

95th percentile per-packet one-way delay: 174.637 ms

Loss rate: 1.20%

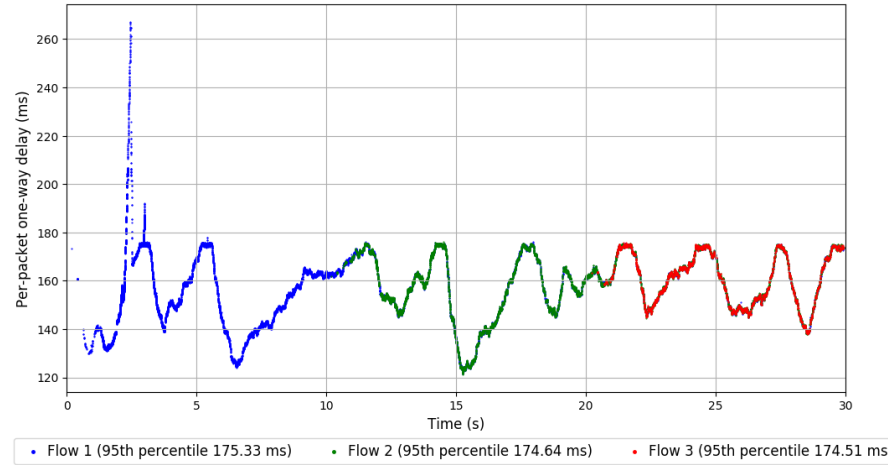
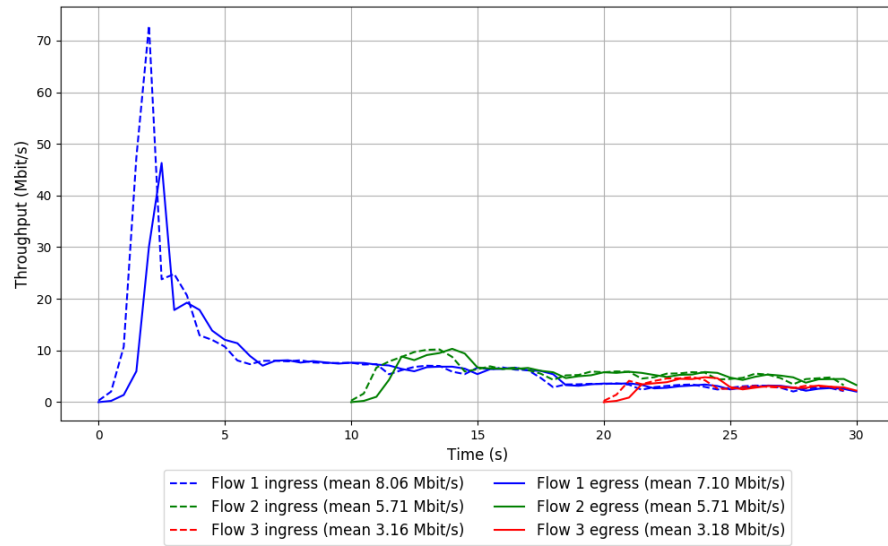
-- Flow 3:

Average throughput: 3.18 Mbit/s

95th percentile per-packet one-way delay: 174.515 ms

Loss rate: 1.87%

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

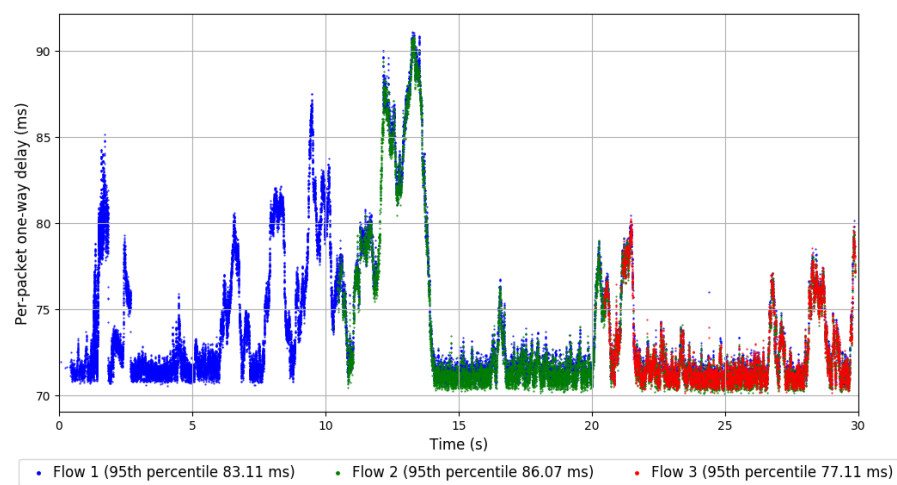
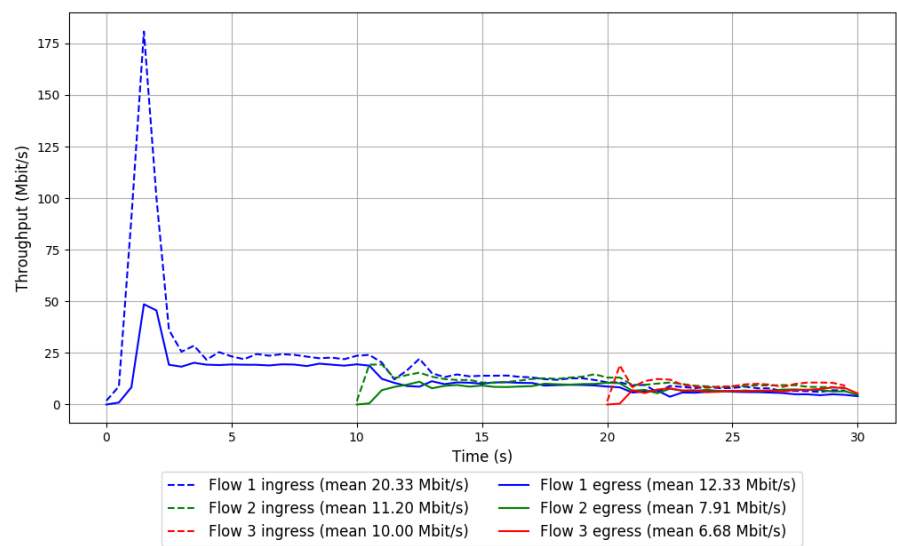


Run 1: Statistics of FillP

Start at: 2018-10-26 09:36:54  
End at: 2018-10-26 09:37:24  
Local clock offset: -1.54 ms  
Remote clock offset: 21.377 ms

# Below is generated by plot.py at 2018-10-26 11:42:26  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 19.76 Mbit/s  
95th percentile per-packet one-way delay: 83.425 ms  
Loss rate: 36.72%  
-- Flow 1:  
Average throughput: 12.33 Mbit/s  
95th percentile per-packet one-way delay: 83.108 ms  
Loss rate: 39.64%  
-- Flow 2:  
Average throughput: 7.91 Mbit/s  
95th percentile per-packet one-way delay: 86.071 ms  
Loss rate: 29.91%  
-- Flow 3:  
Average throughput: 6.68 Mbit/s  
95th percentile per-packet one-way delay: 77.114 ms  
Loss rate: 34.14%

Run 1: Report of FillP — Data Link

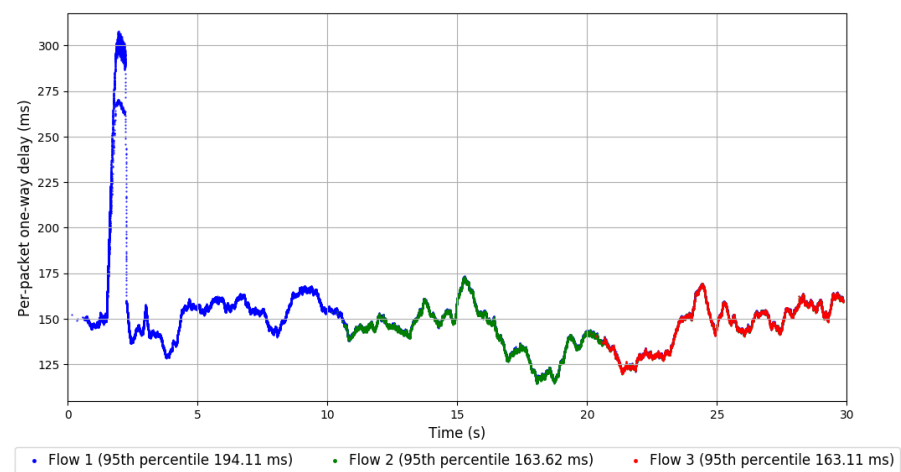
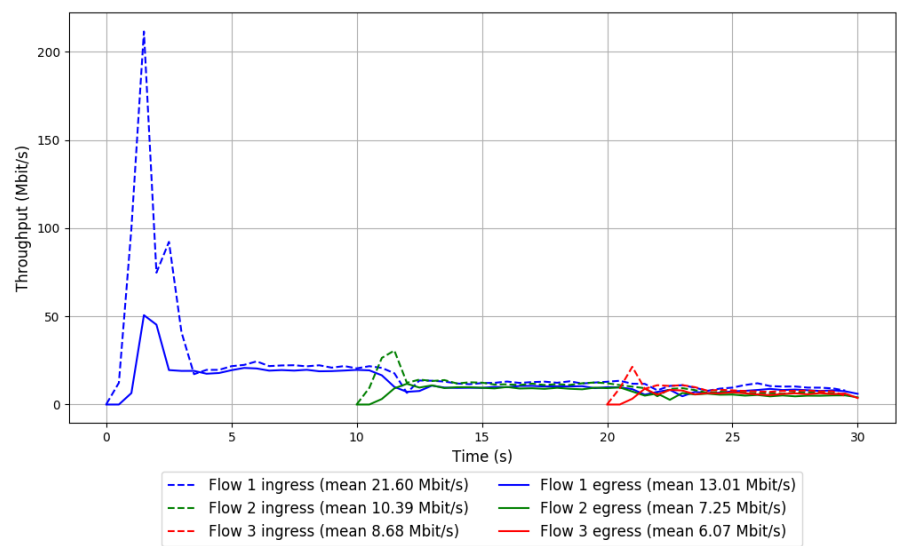


Run 2: Statistics of FillP

Start at: 2018-10-26 10:00:23  
End at: 2018-10-26 10:00:53  
Local clock offset: -2.108 ms  
Remote clock offset: 11.597 ms

# Below is generated by plot.py at 2018-10-26 11:42:28  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 19.80 Mbit/s  
95th percentile per-packet one-way delay: 169.072 ms  
Loss rate: 37.37%  
-- Flow 1:  
Average throughput: 13.01 Mbit/s  
95th percentile per-packet one-way delay: 194.111 ms  
Loss rate: 40.19%  
-- Flow 2:  
Average throughput: 7.25 Mbit/s  
95th percentile per-packet one-way delay: 163.615 ms  
Loss rate: 30.95%  
-- Flow 3:  
Average throughput: 6.07 Mbit/s  
95th percentile per-packet one-way delay: 163.114 ms  
Loss rate: 31.58%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-10-26 10:25:05

End at: 2018-10-26 10:25:35

Local clock offset: -1.372 ms

Remote clock offset: 8.243 ms

# Below is generated by plot.py at 2018-10-26 11:42:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 19.82 Mbit/s

95th percentile per-packet one-way delay: 167.982 ms

Loss rate: 36.58%

-- Flow 1:

Average throughput: 12.43 Mbit/s

95th percentile per-packet one-way delay: 212.099 ms

Loss rate: 40.54%

-- Flow 2:

Average throughput: 7.98 Mbit/s

95th percentile per-packet one-way delay: 159.227 ms

Loss rate: 27.56%

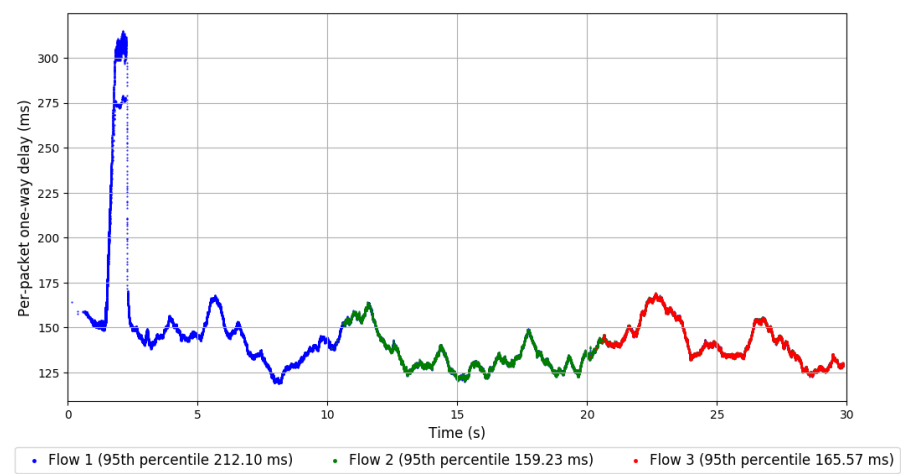
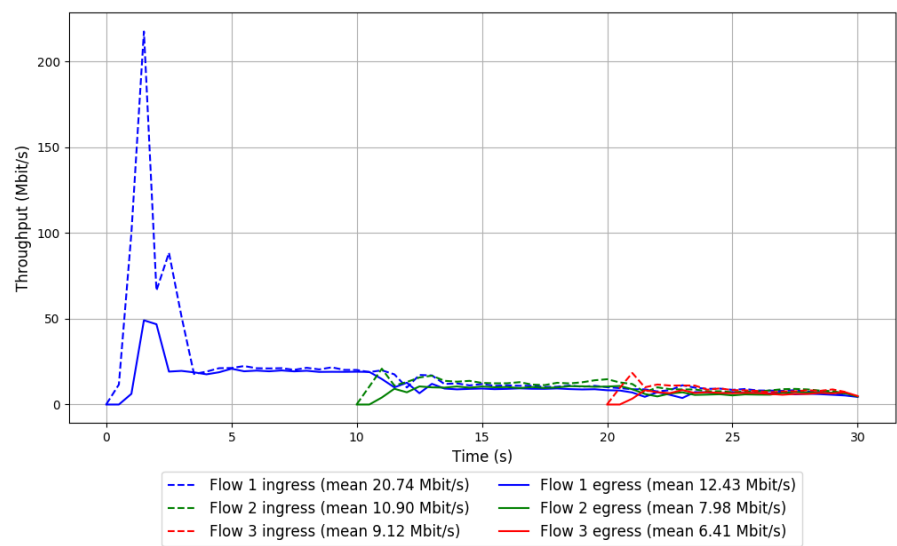
-- Flow 3:

Average throughput: 6.41 Mbit/s

95th percentile per-packet one-way delay: 165.567 ms

Loss rate: 31.12%

Run 3: Report of FillP — Data Link

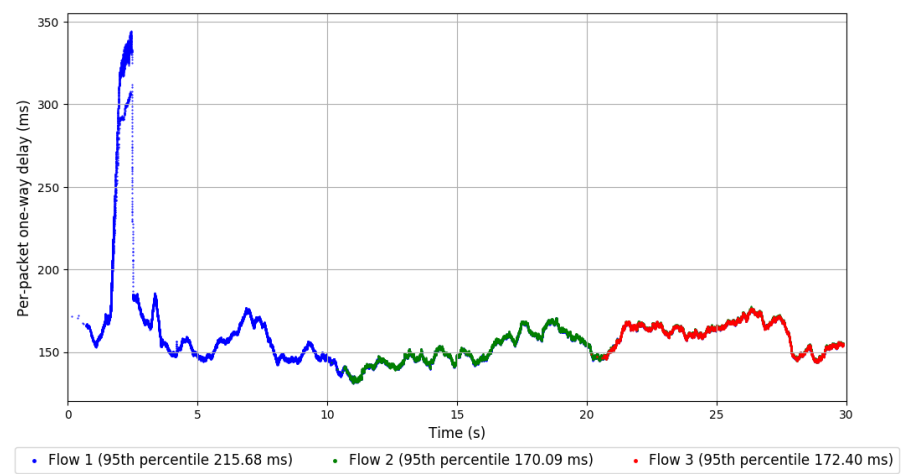
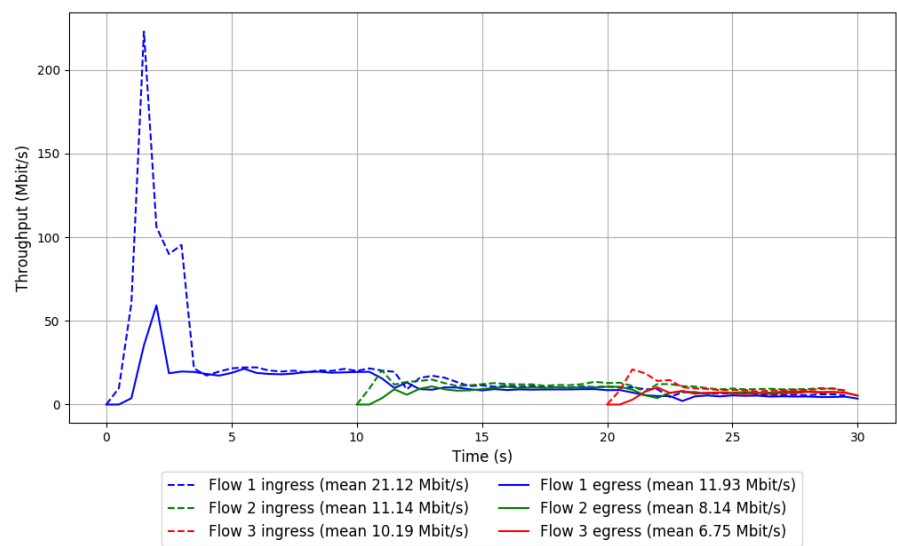


Run 4: Statistics of FillP

Start at: 2018-10-26 10:50:25  
End at: 2018-10-26 10:50:55  
Local clock offset: -1.186 ms  
Remote clock offset: 31.095 ms

# Below is generated by plot.py at 2018-10-26 11:42:35  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 19.53 Mbit/s  
95th percentile per-packet one-way delay: 182.507 ms  
Loss rate: 39.25%  
-- Flow 1:  
Average throughput: 11.93 Mbit/s  
95th percentile per-packet one-way delay: 215.683 ms  
Loss rate: 43.97%  
-- Flow 2:  
Average throughput: 8.14 Mbit/s  
95th percentile per-packet one-way delay: 170.085 ms  
Loss rate: 27.70%  
-- Flow 3:  
Average throughput: 6.75 Mbit/s  
95th percentile per-packet one-way delay: 172.402 ms  
Loss rate: 35.12%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-10-26 11:15:44

End at: 2018-10-26 11:16:14

Local clock offset: 1.512 ms

Remote clock offset: 4.053 ms

# Below is generated by plot.py at 2018-10-26 11:42:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 19.55 Mbit/s

95th percentile per-packet one-way delay: 179.042 ms

Loss rate: 38.33%

-- Flow 1:

Average throughput: 12.35 Mbit/s

95th percentile per-packet one-way delay: 179.698 ms

Loss rate: 41.87%

-- Flow 2:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 178.415 ms

Loss rate: 30.04%

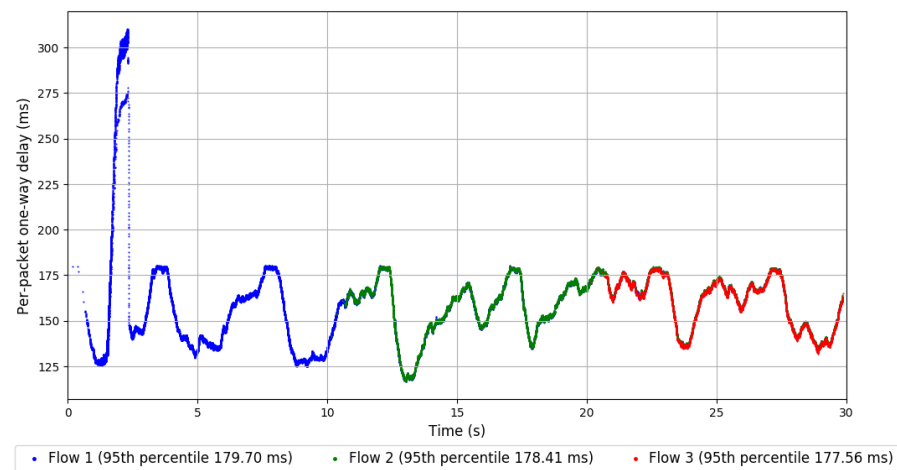
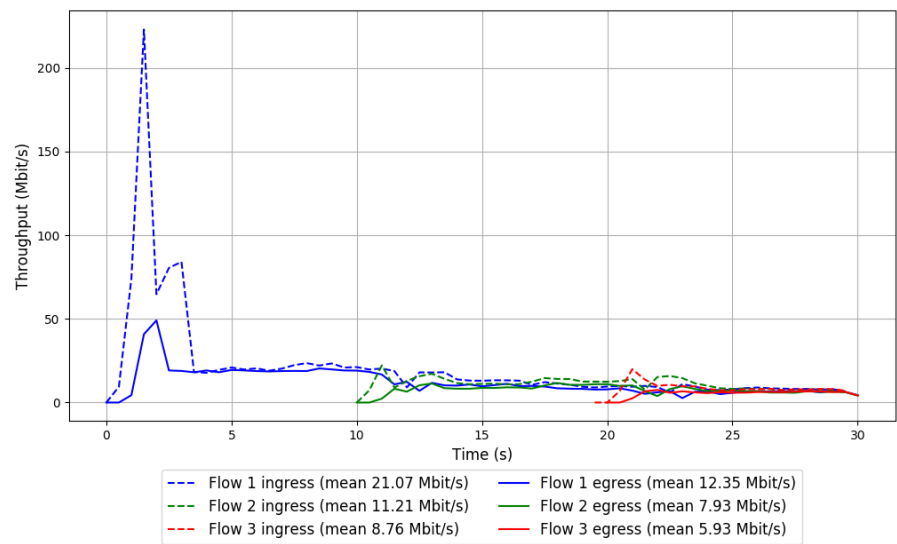
-- Flow 3:

Average throughput: 5.93 Mbit/s

95th percentile per-packet one-way delay: 177.558 ms

Loss rate: 33.99%

Run 5: Report of FillP — Data Link

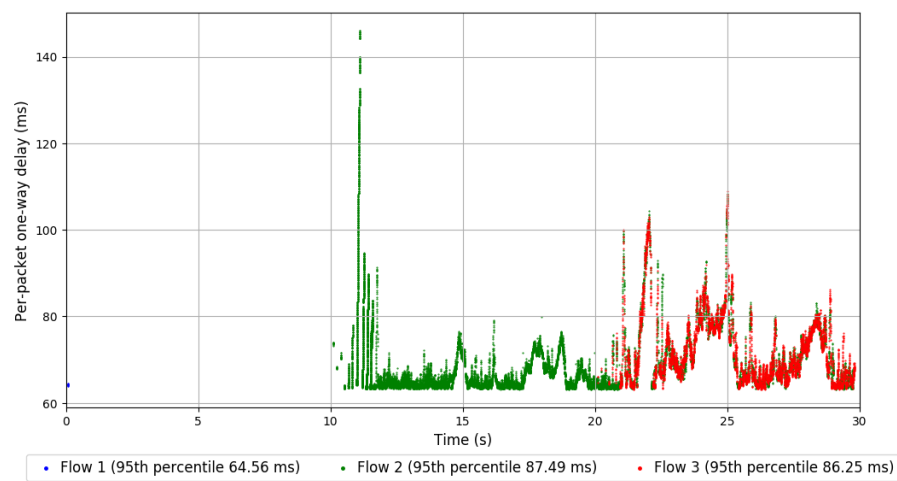
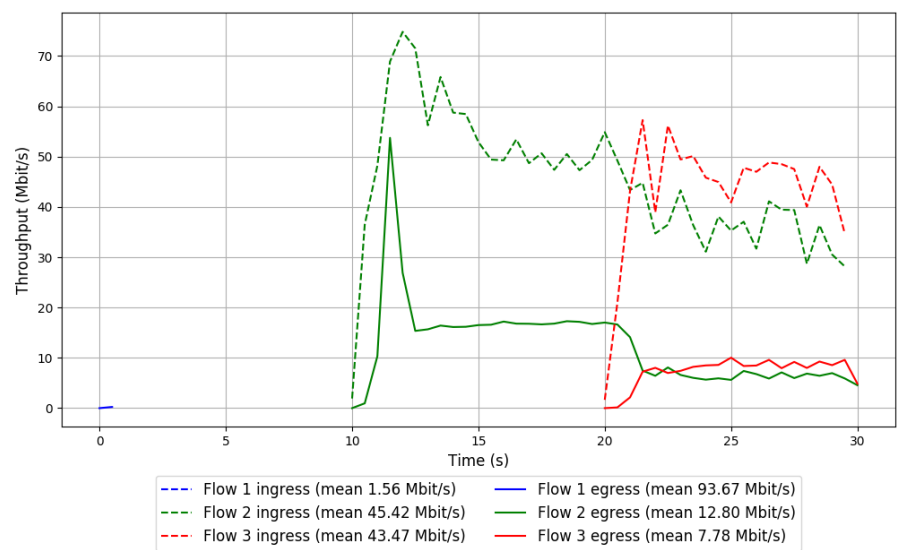


```
Run 1: Statistics of Indigo

Start at: 2018-10-26 09:38:15
End at: 2018-10-26 09:38:45
Local clock offset: -1.736 ms
Remote clock offset: 27.786 ms

# Below is generated by plot.py at 2018-10-26 11:42:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.01 Mbit/s
95th percentile per-packet one-way delay: 87.051 ms
Loss rate: 75.35%
-- Flow 1:
Average throughput: 93.67 Mbit/s
95th percentile per-packet one-way delay: 64.565 ms
Loss rate: 41.37%
-- Flow 2:
Average throughput: 12.80 Mbit/s
95th percentile per-packet one-way delay: 87.491 ms
Loss rate: 72.03%
-- Flow 3:
Average throughput: 7.78 Mbit/s
95th percentile per-packet one-way delay: 86.247 ms
Loss rate: 82.35%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-10-26 10:01:50

End at: 2018-10-26 10:02:20

Local clock offset: -2.331 ms

Remote clock offset: 9.972 ms

# Below is generated by plot.py at 2018-10-26 11:42:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 11.95 Mbit/s

95th percentile per-packet one-way delay: 174.693 ms

Loss rate: 53.29%

-- Flow 1:

Average throughput: 93.23 Mbit/s

95th percentile per-packet one-way delay: 139.537 ms

Loss rate: 37.69%

-- Flow 2:

Average throughput: 14.81 Mbit/s

95th percentile per-packet one-way delay: 174.160 ms

Loss rate: 47.32%

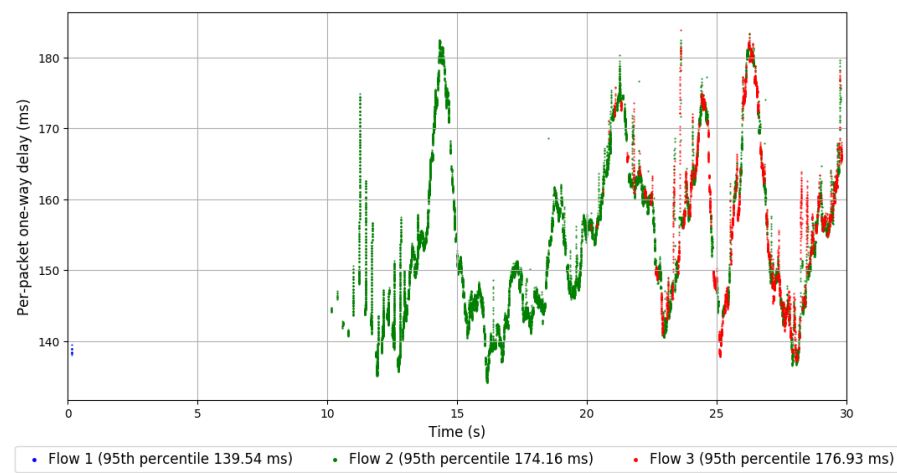
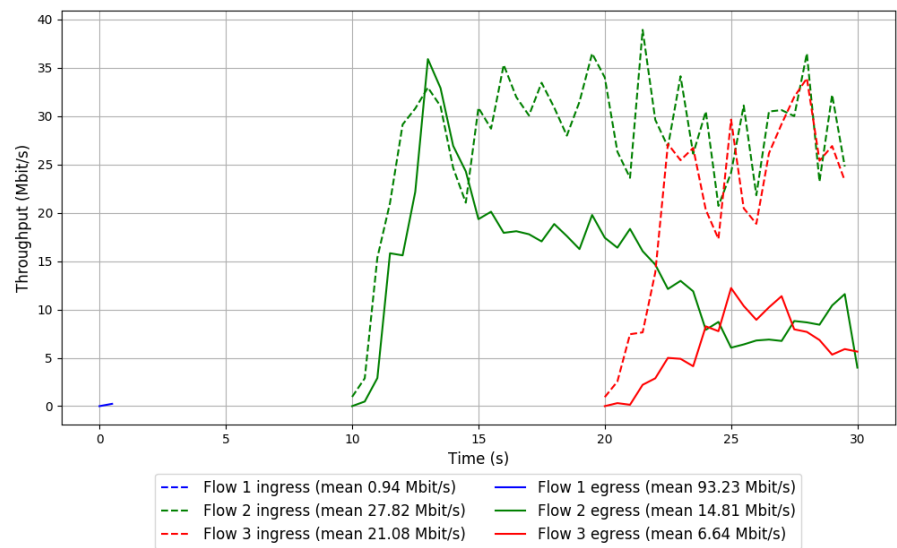
-- Flow 3:

Average throughput: 6.64 Mbit/s

95th percentile per-packet one-way delay: 176.927 ms

Loss rate: 69.16%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-10-26 10:26:29

End at: 2018-10-26 10:26:59

Local clock offset: -1.624 ms

Remote clock offset: 5.501 ms

# Below is generated by plot.py at 2018-10-26 11:42:42

# Datalink statistics

-- Total of 3 flows:

Average throughput: 15.54 Mbit/s

95th percentile per-packet one-way delay: 210.082 ms

Loss rate: 79.03%

-- Flow 1:

Average throughput: 13.41 Mbit/s

95th percentile per-packet one-way delay: 212.967 ms

Loss rate: 79.87%

-- Flow 2:

Average throughput: 1.89 Mbit/s

95th percentile per-packet one-way delay: 188.877 ms

Loss rate: 72.55%

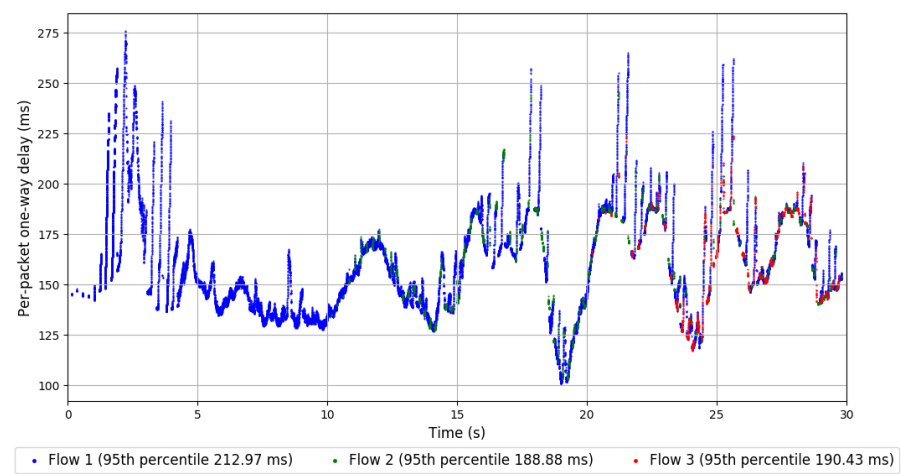
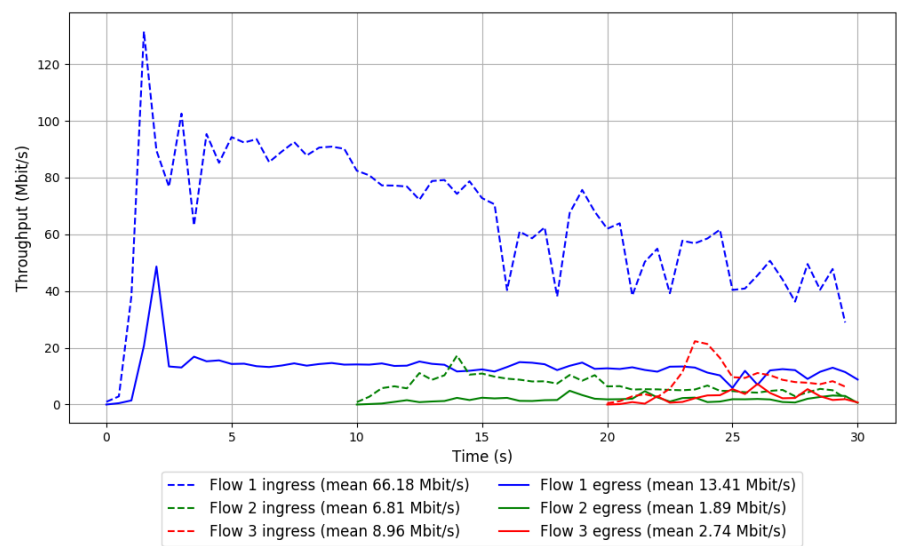
-- Flow 3:

Average throughput: 2.74 Mbit/s

95th percentile per-packet one-way delay: 190.432 ms

Loss rate: 70.11%

Run 3: Report of Indigo — Data Link

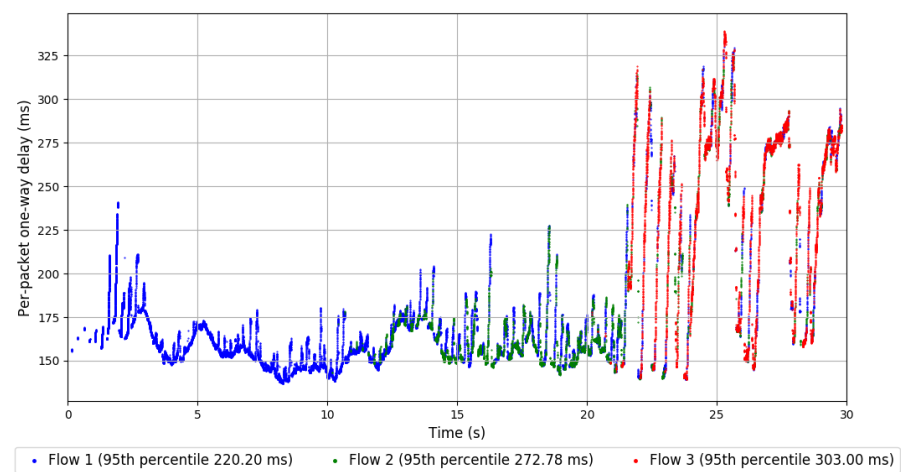
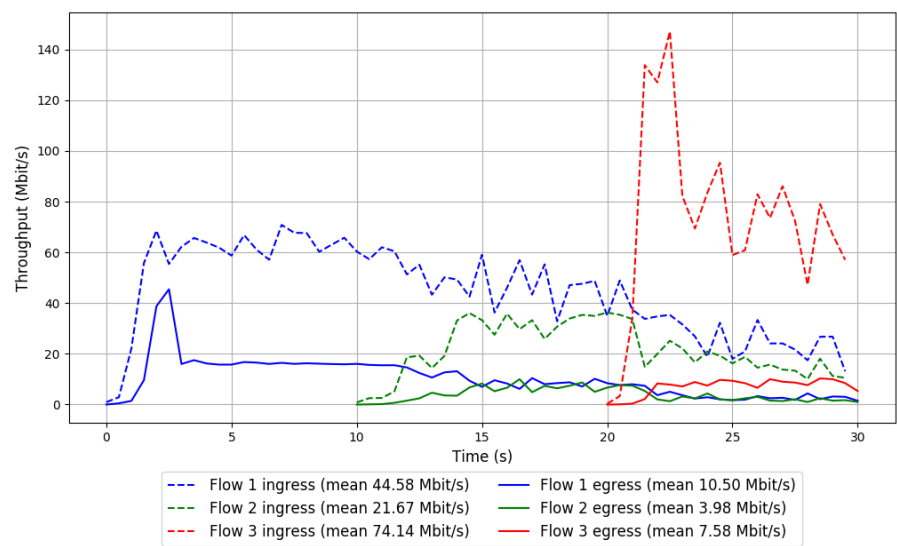


Run 4: Statistics of Indigo

Start at: 2018-10-26 10:51:53  
End at: 2018-10-26 10:52:23  
Local clock offset: -1.326 ms  
Remote clock offset: 31.442 ms

# Below is generated by plot.py at 2018-10-26 11:42:55  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 15.57 Mbit/s  
95th percentile per-packet one-way delay: 277.297 ms  
Loss rate: 81.48%  
-- Flow 1:  
Average throughput: 10.50 Mbit/s  
95th percentile per-packet one-way delay: 220.199 ms  
Loss rate: 76.67%  
-- Flow 2:  
Average throughput: 3.98 Mbit/s  
95th percentile per-packet one-way delay: 272.778 ms  
Loss rate: 81.88%  
-- Flow 3:  
Average throughput: 7.58 Mbit/s  
95th percentile per-packet one-way delay: 303.001 ms  
Loss rate: 90.03%

Run 4: Report of Indigo — Data Link

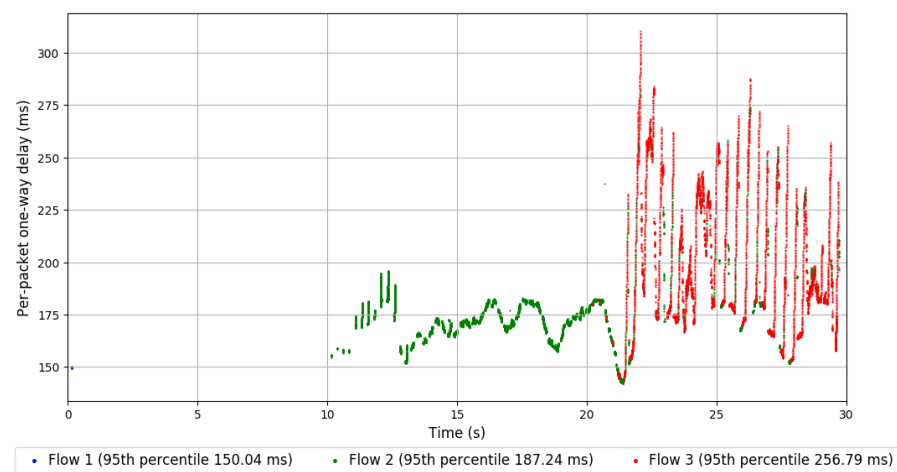
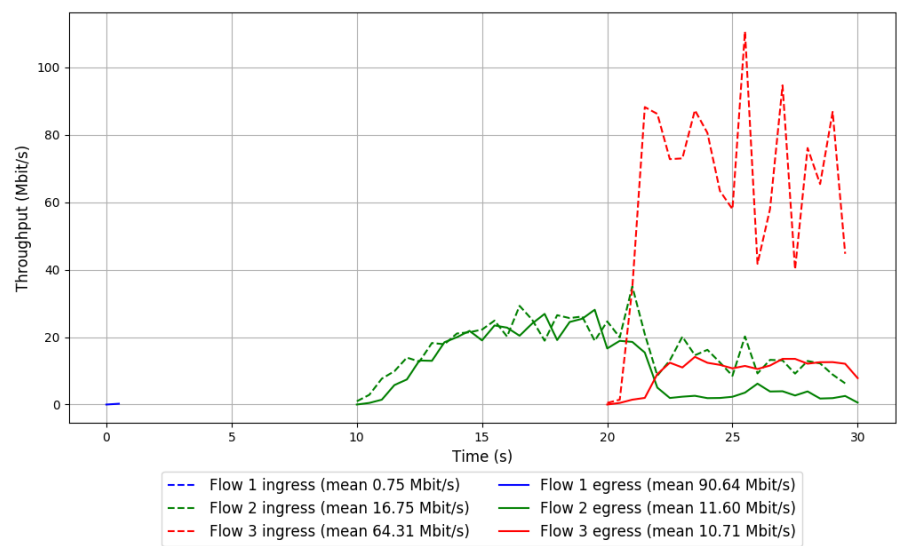


Run 5: Statistics of Indigo

Start at: 2018-10-26 11:17:16  
End at: 2018-10-26 11:17:46  
Local clock offset: 1.64 ms  
Remote clock offset: -2.544 ms

# Below is generated by plot.py at 2018-10-26 11:42:55  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 11.11 Mbit/s  
95th percentile per-packet one-way delay: 238.876 ms  
Loss rate: 65.92%  
-- Flow 1:  
Average throughput: 90.64 Mbit/s  
95th percentile per-packet one-way delay: 150.043 ms  
Loss rate: 28.74%  
-- Flow 2:  
Average throughput: 11.60 Mbit/s  
95th percentile per-packet one-way delay: 187.235 ms  
Loss rate: 31.66%  
-- Flow 3:  
Average throughput: 10.71 Mbit/s  
95th percentile per-packet one-way delay: 256.791 ms  
Loss rate: 83.93%

Run 5: Report of Indigo — Data Link

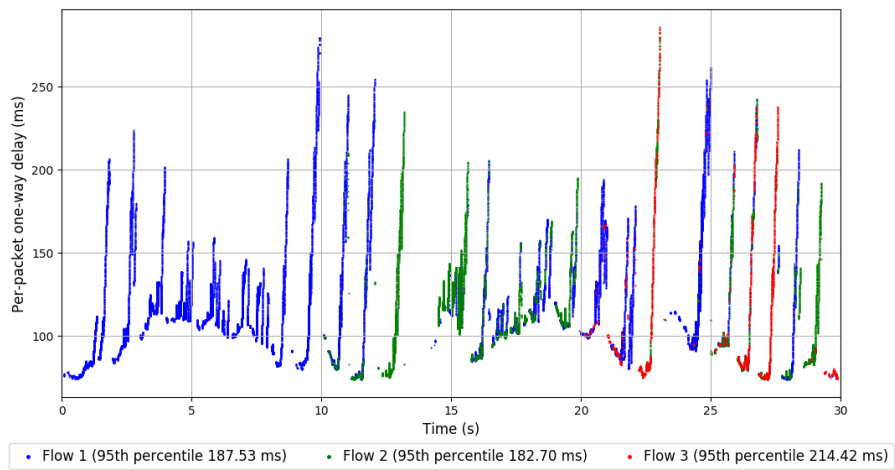
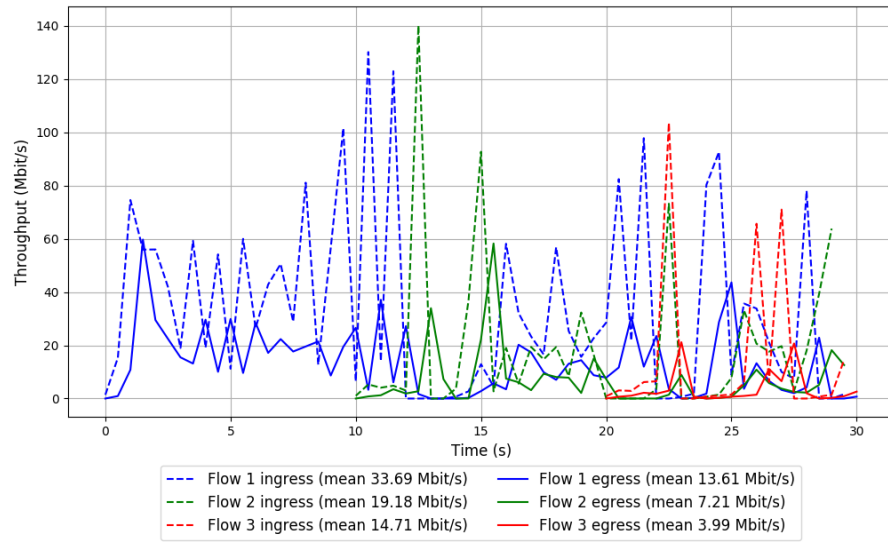


Run 1: Statistics of Indigo-96d2da3

Start at: 2018-10-26 09:42:13  
End at: 2018-10-26 09:42:43  
Local clock offset: -1.473 ms  
Remote clock offset: 15.531 ms

# Below is generated by plot.py at 2018-10-26 11:42:55  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 19.54 Mbit/s  
95th percentile per-packet one-way delay: 189.254 ms  
Loss rate: 61.68%  
-- Flow 1:  
Average throughput: 13.61 Mbit/s  
95th percentile per-packet one-way delay: 187.534 ms  
Loss rate: 59.80%  
-- Flow 2:  
Average throughput: 7.21 Mbit/s  
95th percentile per-packet one-way delay: 182.700 ms  
Loss rate: 62.24%  
-- Flow 3:  
Average throughput: 3.99 Mbit/s  
95th percentile per-packet one-way delay: 214.417 ms  
Loss rate: 73.31%

# Run 1: Report of Indigo-96d2da3 — Data Link



Run 2: Statistics of Indigo-96d2da3

Start at: 2018-10-26 10:06:01

End at: 2018-10-26 10:06:31

Local clock offset: -1.938 ms

Remote clock offset: 9.955 ms

# Below is generated by plot.py at 2018-10-26 11:42:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 19.28 Mbit/s

95th percentile per-packet one-way delay: 262.408 ms

Loss rate: 70.27%

-- Flow 1:

Average throughput: 12.61 Mbit/s

95th percentile per-packet one-way delay: 261.497 ms

Loss rate: 69.34%

-- Flow 2:

Average throughput: 4.85 Mbit/s

95th percentile per-packet one-way delay: 255.781 ms

Loss rate: 71.13%

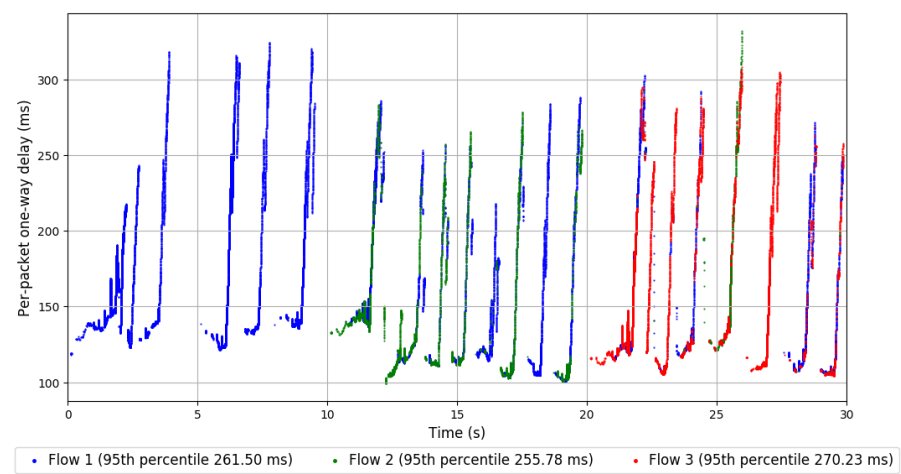
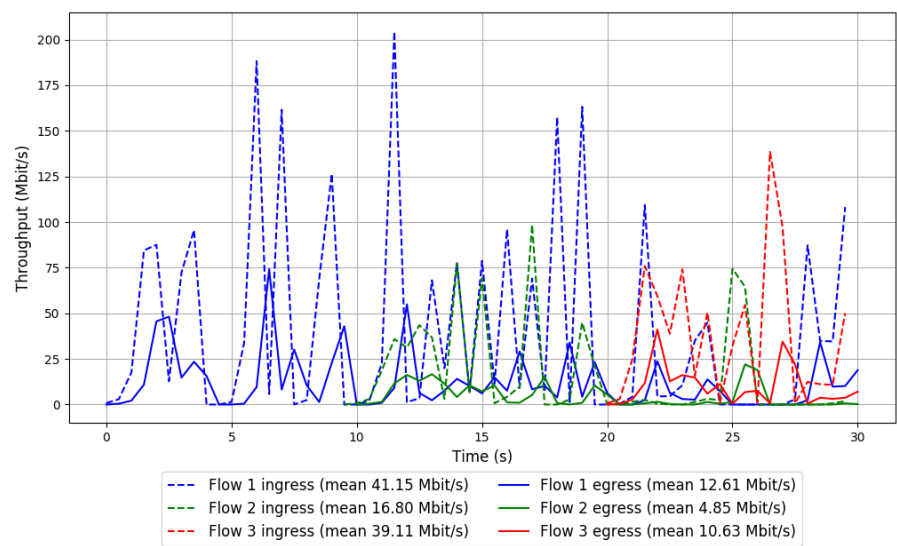
-- Flow 3:

Average throughput: 10.63 Mbit/s

95th percentile per-packet one-way delay: 270.225 ms

Loss rate: 72.50%

Run 2: Report of Indigo-96d2da3 — Data Link



Run 3: Statistics of Indigo-96d2da3

Start at: 2018-10-26 10:31:03

End at: 2018-10-26 10:31:33

Local clock offset: -1.423 ms

Remote clock offset: 8.23 ms

# Below is generated by plot.py at 2018-10-26 11:42:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 19.22 Mbit/s

95th percentile per-packet one-way delay: 263.714 ms

Loss rate: 64.24%

-- Flow 1:

Average throughput: 13.97 Mbit/s

95th percentile per-packet one-way delay: 259.307 ms

Loss rate: 62.22%

-- Flow 2:

Average throughput: 3.83 Mbit/s

95th percentile per-packet one-way delay: 293.181 ms

Loss rate: 72.76%

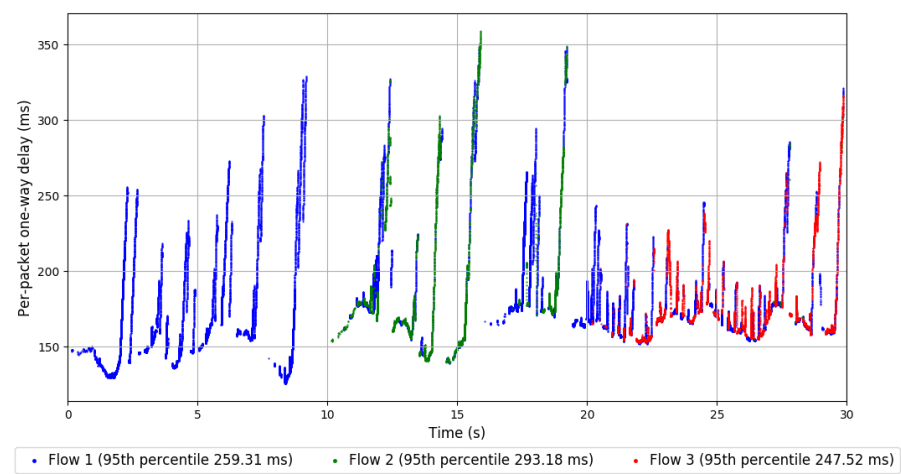
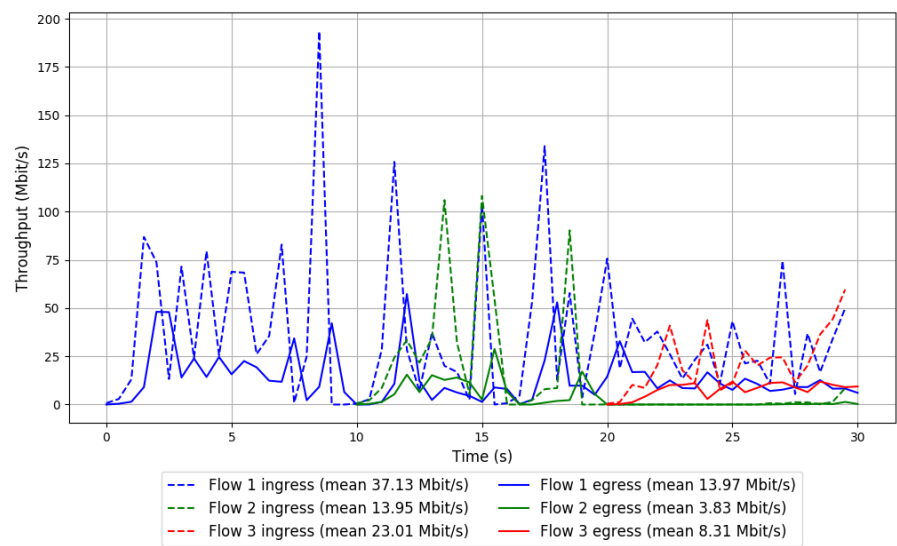
-- Flow 3:

Average throughput: 8.31 Mbit/s

95th percentile per-packet one-way delay: 247.521 ms

Loss rate: 63.61%

Run 3: Report of Indigo-96d2da3 — Data Link

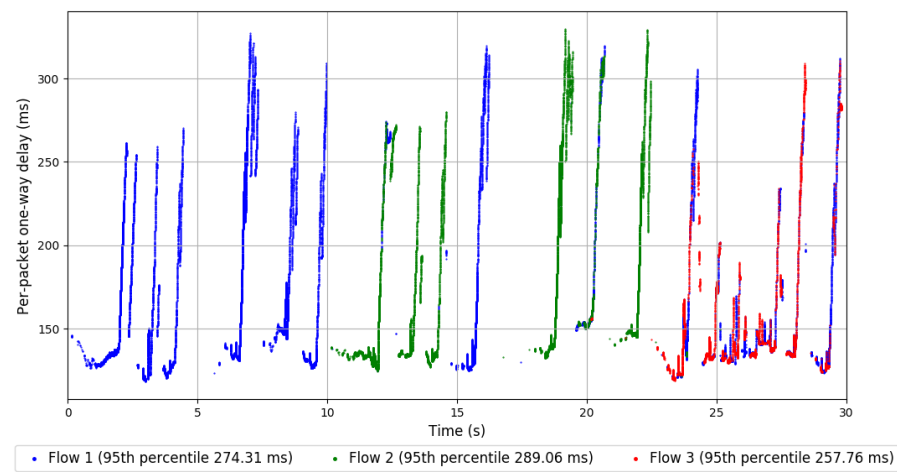
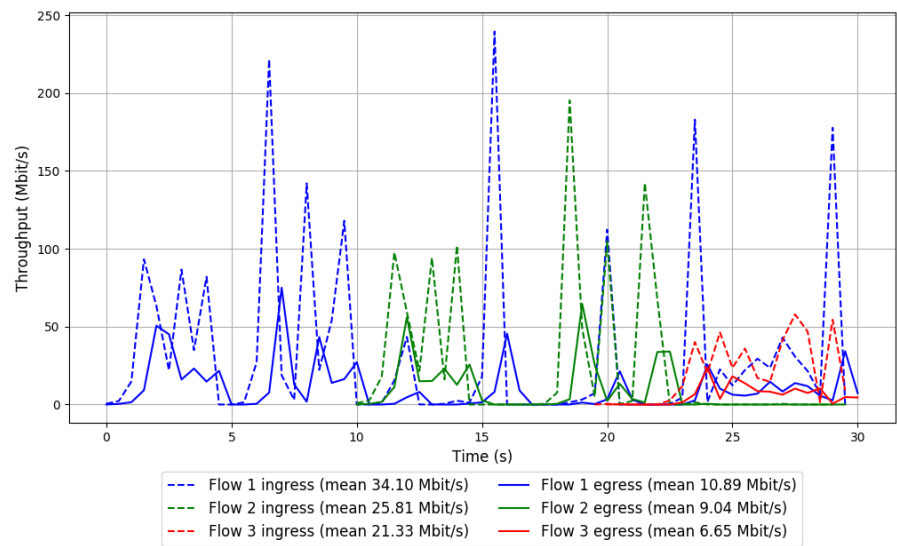


Run 4: Statistics of Indigo-96d2da3

Start at: 2018-10-26 10:56:17  
End at: 2018-10-26 10:56:47  
Local clock offset: -1.367 ms  
Remote clock offset: 35.626 ms

# Below is generated by plot.py at 2018-10-26 11:43:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 18.87 Mbit/s  
95th percentile per-packet one-way delay: 278.102 ms  
Loss rate: 67.52%  
-- Flow 1:  
Average throughput: 10.89 Mbit/s  
95th percentile per-packet one-way delay: 274.314 ms  
Loss rate: 68.29%  
-- Flow 2:  
Average throughput: 9.04 Mbit/s  
95th percentile per-packet one-way delay: 289.059 ms  
Loss rate: 64.98%  
-- Flow 3:  
Average throughput: 6.65 Mbit/s  
95th percentile per-packet one-way delay: 257.762 ms  
Loss rate: 69.73%

Run 4: Report of Indigo-96d2da3 — Data Link

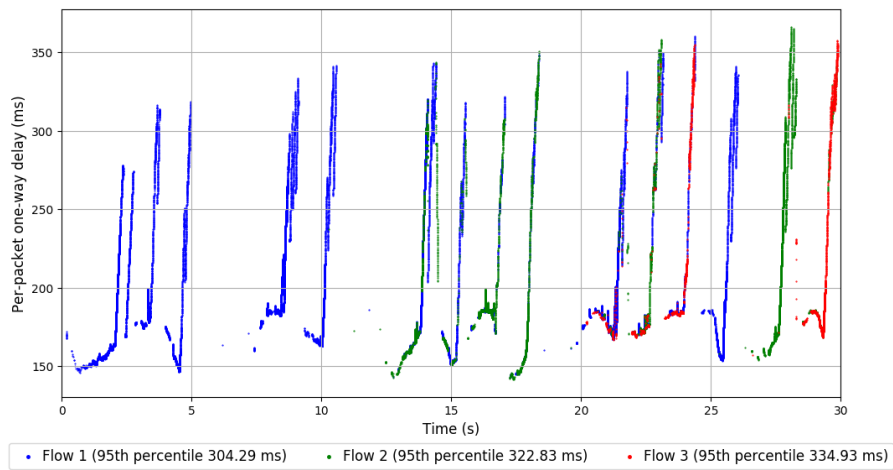
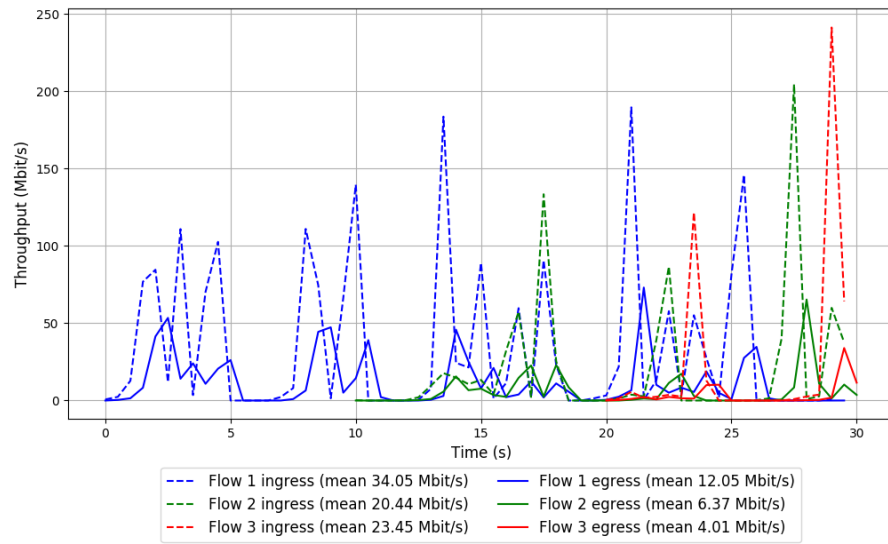


Run 5: Statistics of Indigo-96d2da3

Start at: 2018-10-26 11:21:48  
End at: 2018-10-26 11:22:18  
Local clock offset: 1.912 ms  
Remote clock offset: -14.163 ms

# Below is generated by plot.py at 2018-10-26 11:43:03  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 17.30 Mbit/s  
95th percentile per-packet one-way delay: 313.288 ms  
Loss rate: 68.52%  
-- Flow 1:  
Average throughput: 12.05 Mbit/s  
95th percentile per-packet one-way delay: 304.290 ms  
Loss rate: 64.89%  
-- Flow 2:  
Average throughput: 6.37 Mbit/s  
95th percentile per-packet one-way delay: 322.830 ms  
Loss rate: 69.01%  
-- Flow 3:  
Average throughput: 4.01 Mbit/s  
95th percentile per-packet one-way delay: 334.929 ms  
Loss rate: 83.29%

## Run 5: Report of Indigo-96d2da3 — Data Link

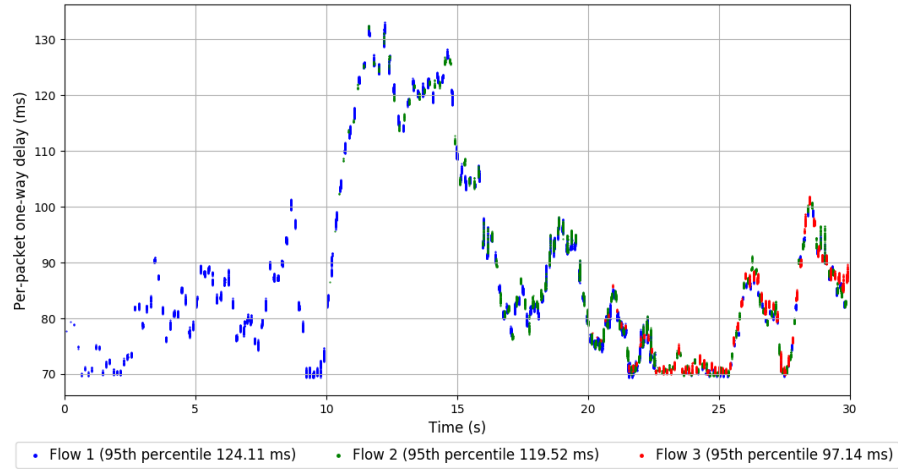
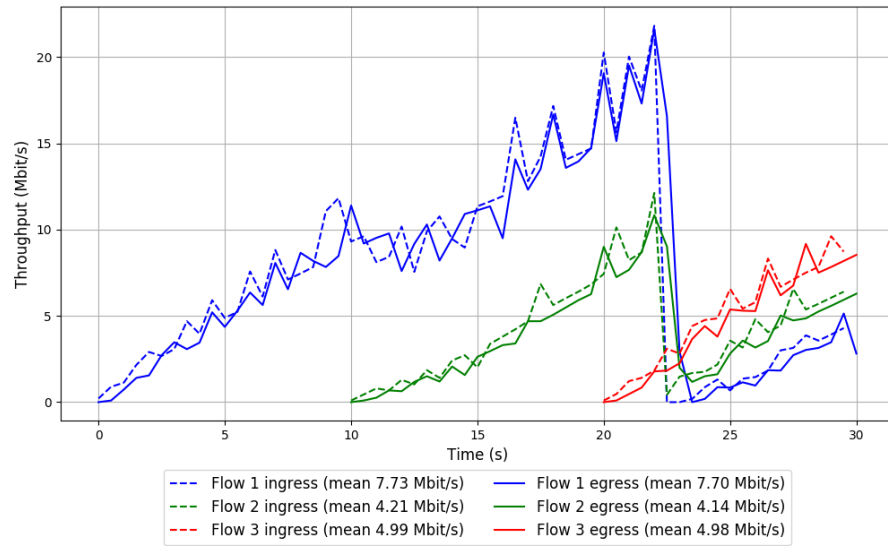


Run 1: Statistics of LEDBAT

Start at: 2018-10-26 09:43:33  
End at: 2018-10-26 09:44:03  
Local clock offset: -1.725 ms  
Remote clock offset: 18.827 ms

# Below is generated by plot.py at 2018-10-26 11:43:03  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.03 Mbit/s  
95th percentile per-packet one-way delay: 122.604 ms  
Loss rate: 1.31%  
-- Flow 1:  
Average throughput: 7.70 Mbit/s  
95th percentile per-packet one-way delay: 124.113 ms  
Loss rate: 0.91%  
-- Flow 2:  
Average throughput: 4.14 Mbit/s  
95th percentile per-packet one-way delay: 119.515 ms  
Loss rate: 2.24%  
-- Flow 3:  
Average throughput: 4.98 Mbit/s  
95th percentile per-packet one-way delay: 97.137 ms  
Loss rate: 1.64%

# Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-10-26 10:07:26

End at: 2018-10-26 10:07:56

Local clock offset: -1.846 ms

Remote clock offset: 12.56 ms

# Below is generated by plot.py at 2018-10-26 11:43:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 12.26 Mbit/s

95th percentile per-packet one-way delay: 125.038 ms

Loss rate: 1.26%

-- Flow 1:

Average throughput: 7.72 Mbit/s

95th percentile per-packet one-way delay: 125.350 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 5.29 Mbit/s

95th percentile per-packet one-way delay: 125.066 ms

Loss rate: 1.39%

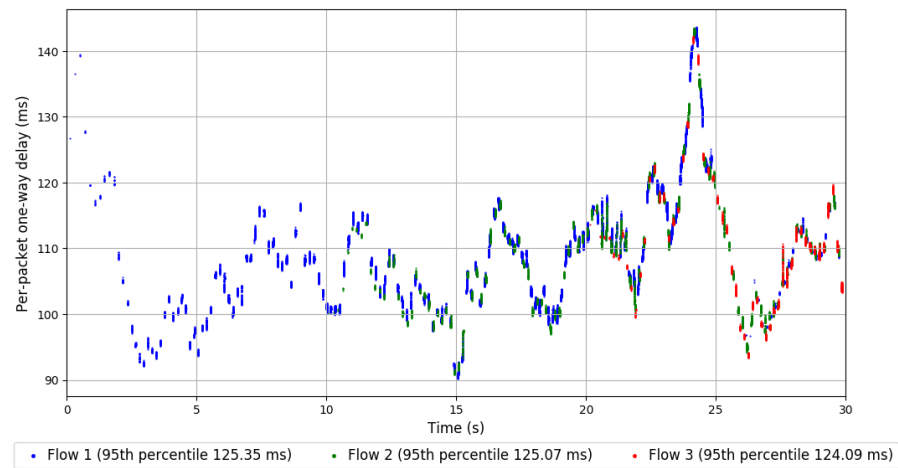
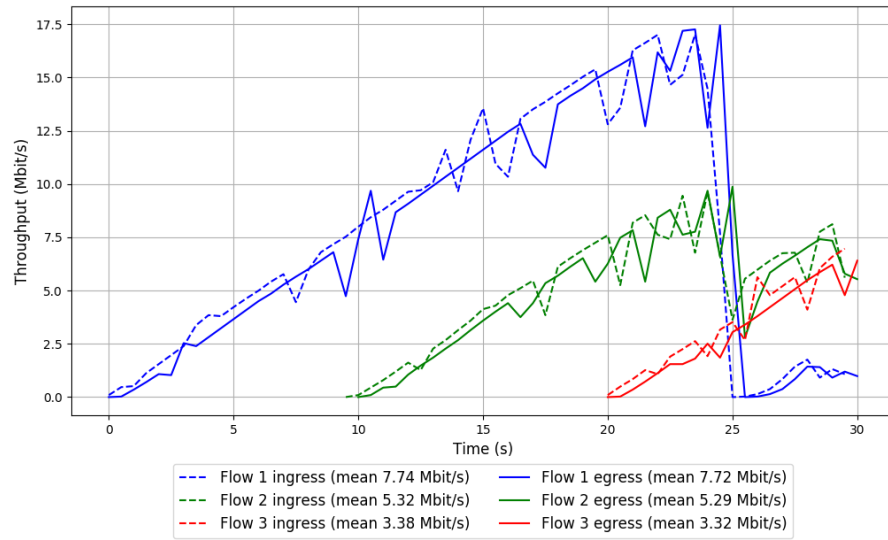
-- Flow 3:

Average throughput: 3.32 Mbit/s

95th percentile per-packet one-way delay: 124.086 ms

Loss rate: 3.55%

## Run 2: Report of LEDBAT — Data Link

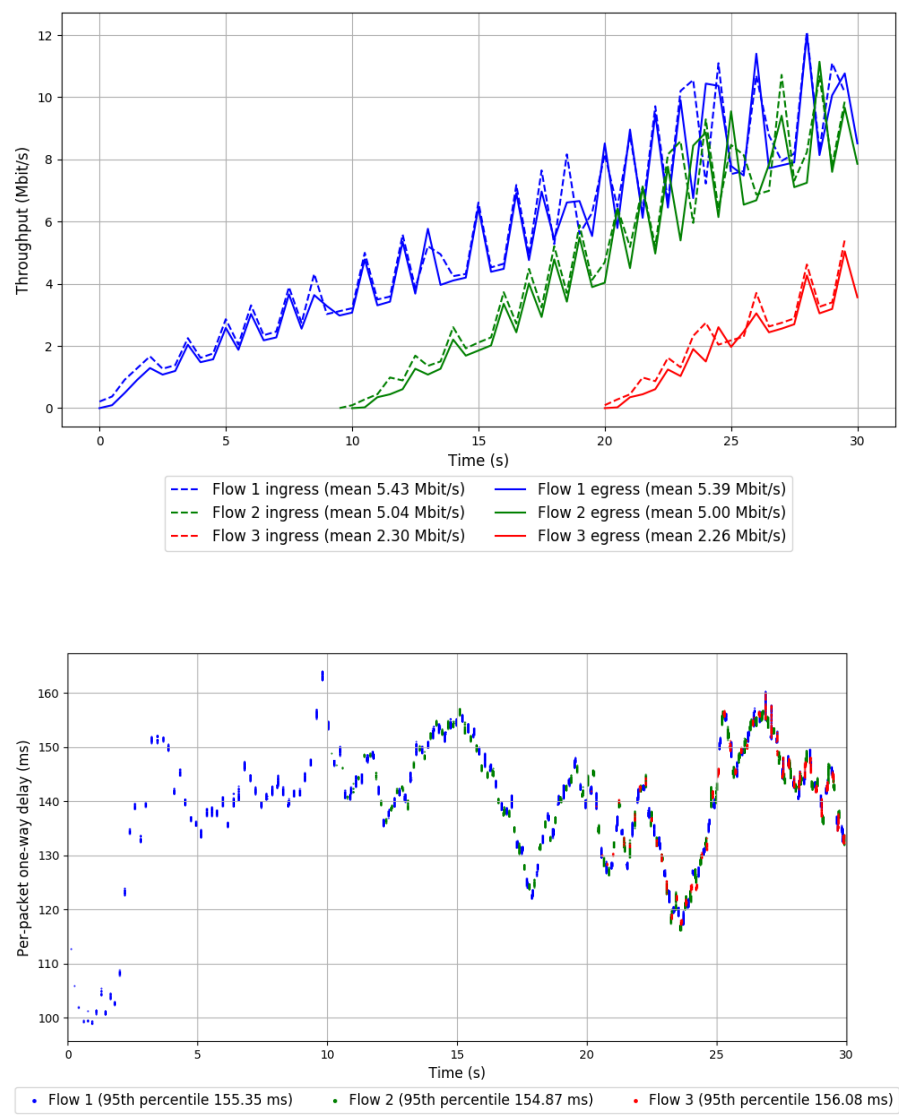


Run 3: Statistics of LEDBAT

Start at: 2018-10-26 10:32:31  
End at: 2018-10-26 10:33:01  
Local clock offset: -1.5 ms  
Remote clock offset: 17.705 ms

# Below is generated by plot.py at 2018-10-26 11:43:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 9.43 Mbit/s  
95th percentile per-packet one-way delay: 155.274 ms  
Loss rate: 1.78%  
-- Flow 1:  
Average throughput: 5.39 Mbit/s  
95th percentile per-packet one-way delay: 155.352 ms  
Loss rate: 1.33%  
-- Flow 2:  
Average throughput: 5.00 Mbit/s  
95th percentile per-packet one-way delay: 154.872 ms  
Loss rate: 1.99%  
-- Flow 3:  
Average throughput: 2.26 Mbit/s  
95th percentile per-packet one-way delay: 156.081 ms  
Loss rate: 4.04%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-10-26 10:57:44

End at: 2018-10-26 10:58:14

Local clock offset: -1.107 ms

Remote clock offset: 42.92 ms

# Below is generated by plot.py at 2018-10-26 11:43:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 10.21 Mbit/s

95th percentile per-packet one-way delay: 161.587 ms

Loss rate: 1.66%

-- Flow 1:

Average throughput: 6.57 Mbit/s

95th percentile per-packet one-way delay: 162.544 ms

Loss rate: 1.48%

-- Flow 2:

Average throughput: 4.36 Mbit/s

95th percentile per-packet one-way delay: 160.429 ms

Loss rate: 1.32%

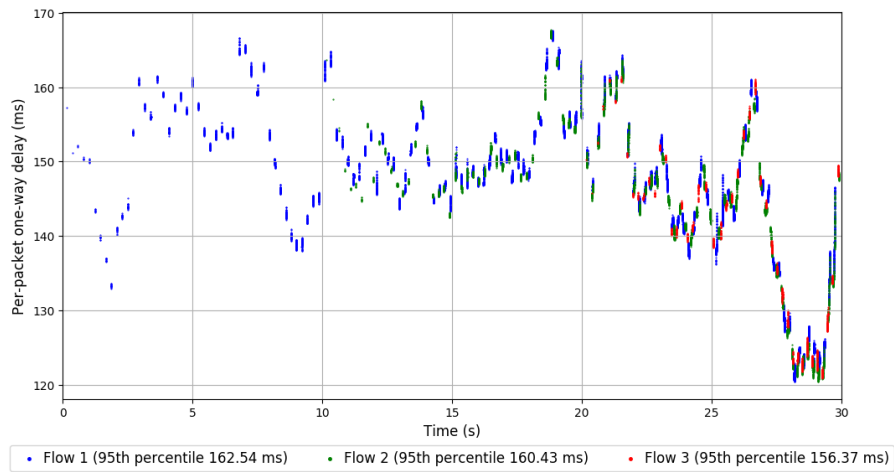
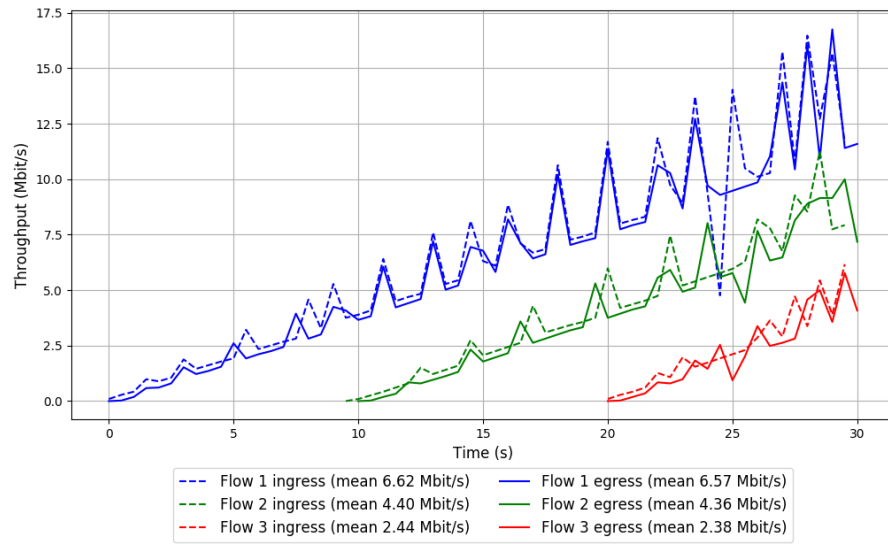
-- Flow 3:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 156.372 ms

Loss rate: 4.32%

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

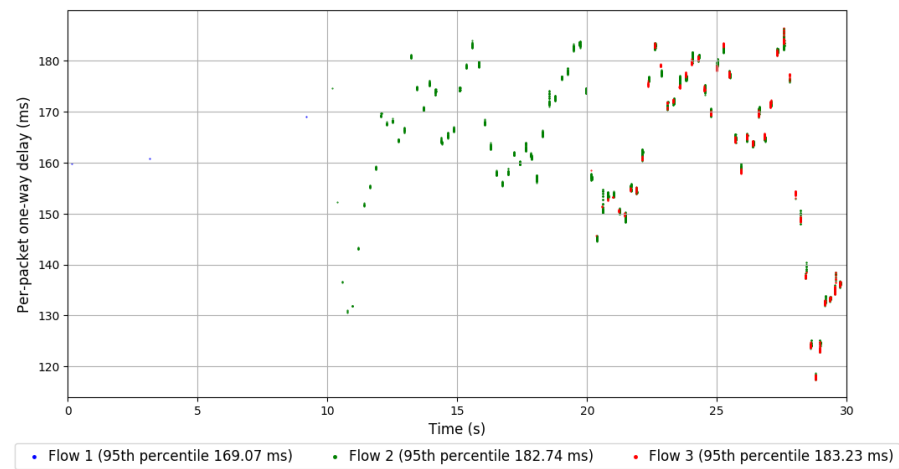
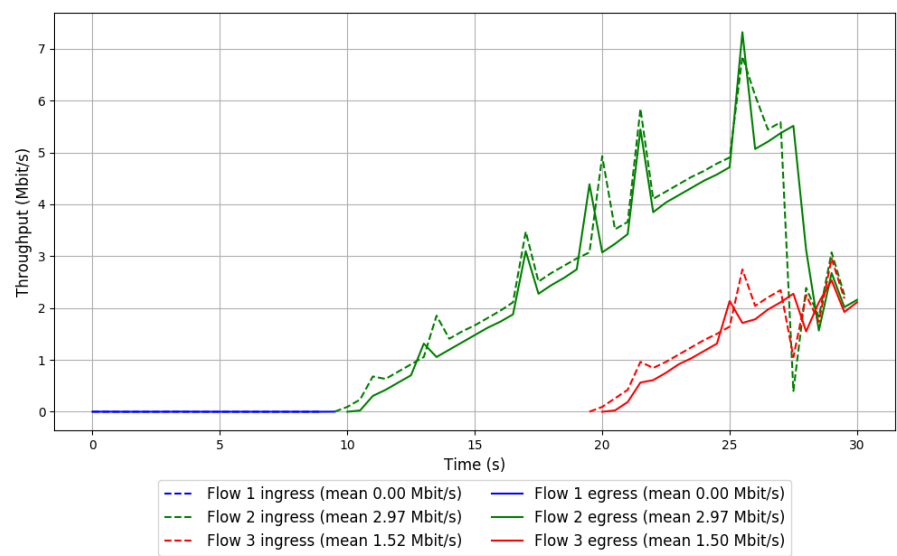


Run 5: Statistics of LEDBAT

Start at: 2018-10-26 11:23:23  
End at: 2018-10-26 11:23:53  
Local clock offset: 2.228 ms  
Remote clock offset: -14.43 ms

# Below is generated by plot.py at 2018-10-26 11:43:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.45 Mbit/s  
95th percentile per-packet one-way delay: 182.853 ms  
Loss rate: 1.60%  
-- Flow 1:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 169.068 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 2.97 Mbit/s  
95th percentile per-packet one-way delay: 182.740 ms  
Loss rate: 1.04%  
-- Flow 3:  
Average throughput: 1.50 Mbit/s  
95th percentile per-packet one-way delay: 183.231 ms  
Loss rate: 3.84%

Run 5: Report of LEDBAT — Data Link

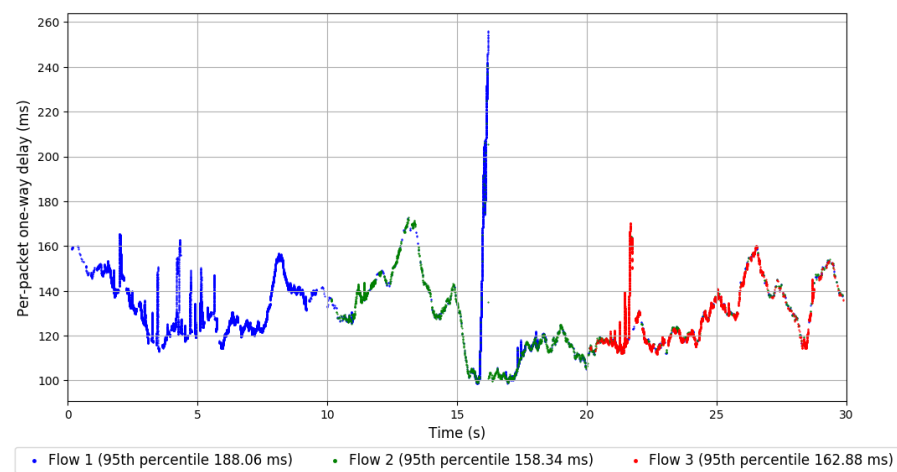
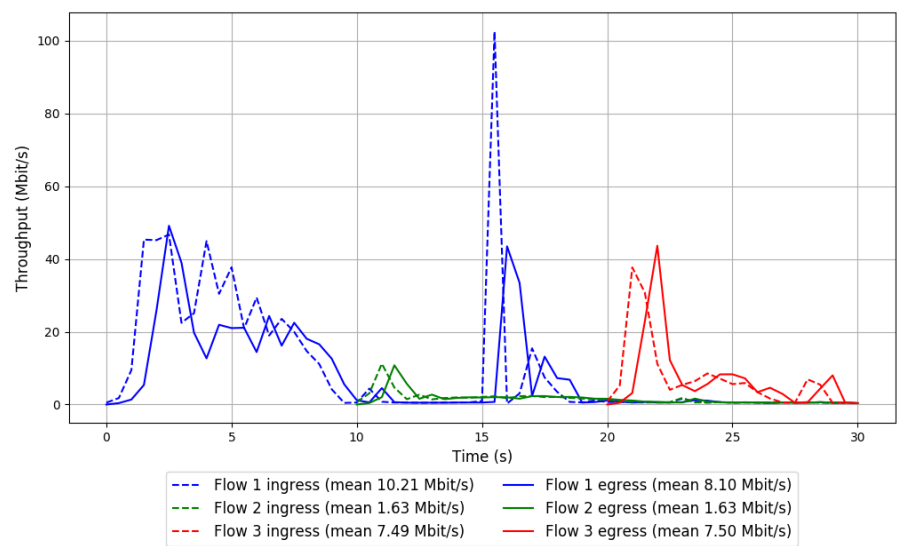


Run 1: Statistics of Indigo-Muses

Start at: 2018-10-26 09:59:02  
End at: 2018-10-26 09:59:32  
Local clock offset: -1.923 ms  
Remote clock offset: 12.857 ms

# Below is generated by plot.py at 2018-10-26 11:43:10  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 11.63 Mbit/s  
95th percentile per-packet one-way delay: 176.726 ms  
Loss rate: 16.16%  
-- Flow 1:  
Average throughput: 8.10 Mbit/s  
95th percentile per-packet one-way delay: 188.061 ms  
Loss rate: 21.31%  
-- Flow 2:  
Average throughput: 1.63 Mbit/s  
95th percentile per-packet one-way delay: 158.338 ms  
Loss rate: 0.97%  
-- Flow 3:  
Average throughput: 7.50 Mbit/s  
95th percentile per-packet one-way delay: 162.885 ms  
Loss rate: 1.59%

Run 1: Report of Indigo-Muses — Data Link



Run 2: Statistics of Indigo-Muses

Start at: 2018-10-26 10:23:43

End at: 2018-10-26 10:24:13

Local clock offset: -1.473 ms

Remote clock offset: 11.0 ms

# Below is generated by plot.py at 2018-10-26 11:43:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 13.36 Mbit/s

95th percentile per-packet one-way delay: 164.190 ms

Loss rate: 15.15%

-- Flow 1:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 145.142 ms

Loss rate: 1.46%

-- Flow 2:

Average throughput: 13.32 Mbit/s

95th percentile per-packet one-way delay: 177.350 ms

Loss rate: 19.53%

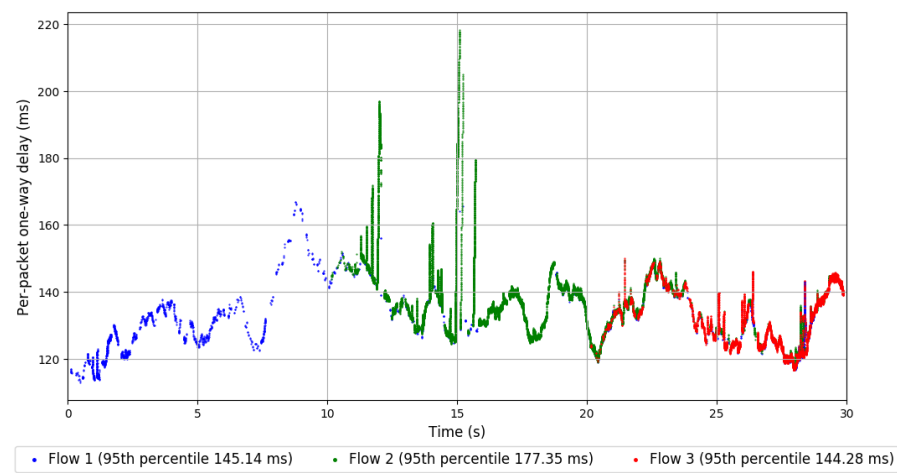
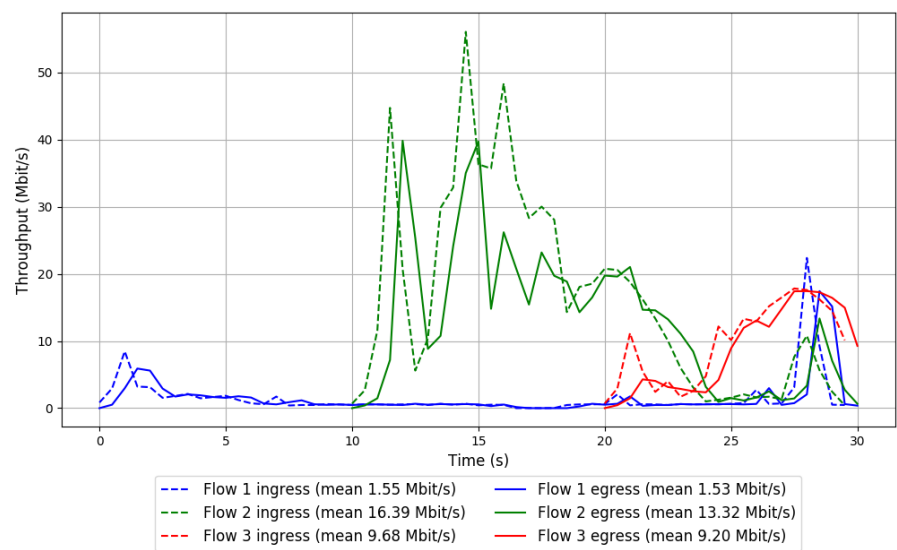
-- Flow 3:

Average throughput: 9.20 Mbit/s

95th percentile per-packet one-way delay: 144.276 ms

Loss rate: 6.87%

Run 2: Report of Indigo-Muses — Data Link

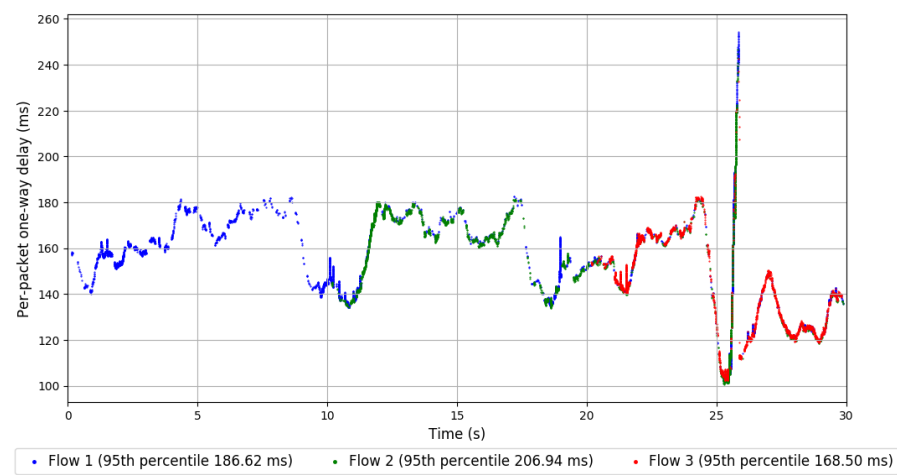
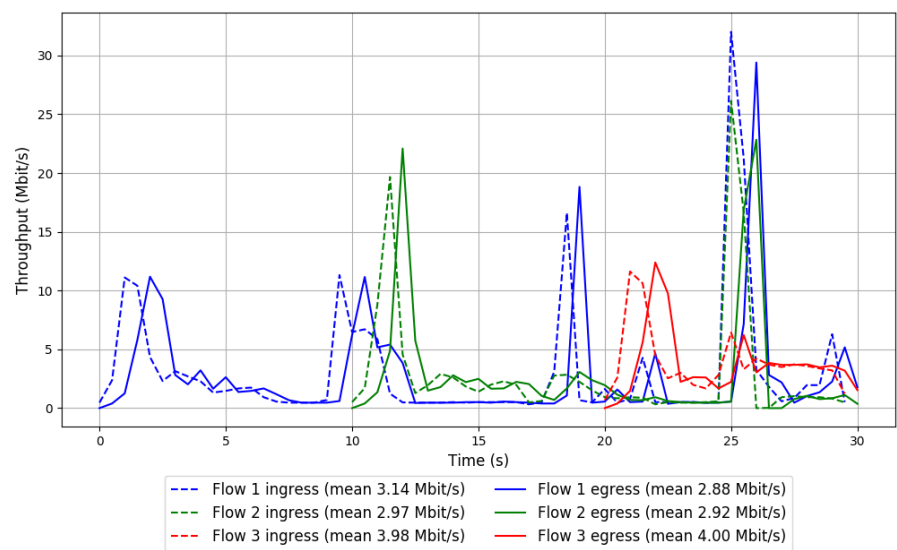


Run 3: Statistics of Indigo-Muses

Start at: 2018-10-26 10:49:05  
End at: 2018-10-26 10:49:35  
Local clock offset: -1.183 ms  
Remote clock offset: 35.658 ms

# Below is generated by plot.py at 2018-10-26 11:43:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 6.10 Mbit/s  
95th percentile per-packet one-way delay: 187.750 ms  
Loss rate: 5.71%  
-- Flow 1:  
Average throughput: 2.88 Mbit/s  
95th percentile per-packet one-way delay: 186.625 ms  
Loss rate: 9.08%  
-- Flow 2:  
Average throughput: 2.92 Mbit/s  
95th percentile per-packet one-way delay: 206.937 ms  
Loss rate: 3.01%  
-- Flow 3:  
Average throughput: 4.00 Mbit/s  
95th percentile per-packet one-way delay: 168.495 ms  
Loss rate: 1.69%

Run 3: Report of Indigo-Muses — Data Link



#### Run 4: Statistics of Indigo-Muses

Start at: 2018-10-26 11:14:20

End at: 2018-10-26 11:14:50

Local clock offset: 1.405 ms

Remote clock offset: 2.817 ms

# Below is generated by plot.py at 2018-10-26 11:43:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 8.33 Mbit/s

95th percentile per-packet one-way delay: 207.825 ms

Loss rate: 9.07%

-- Flow 1:

Average throughput: 5.68 Mbit/s

95th percentile per-packet one-way delay: 218.426 ms

Loss rate: 12.24%

-- Flow 2:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 182.994 ms

Loss rate: 0.45%

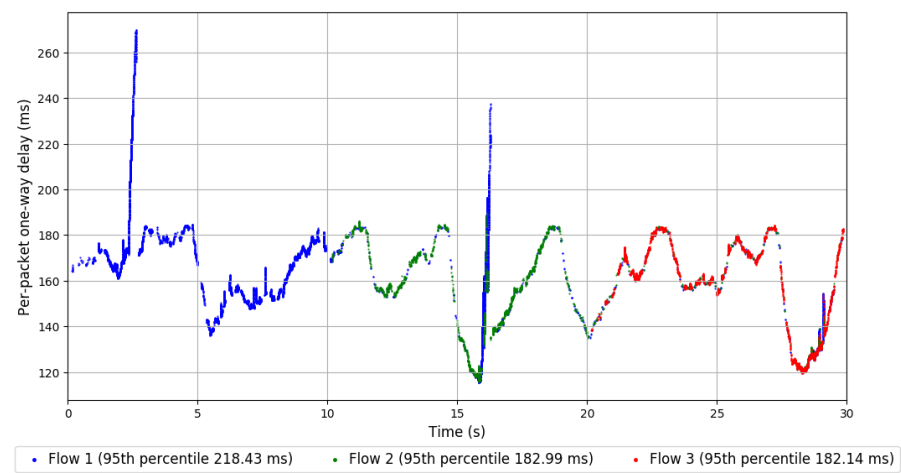
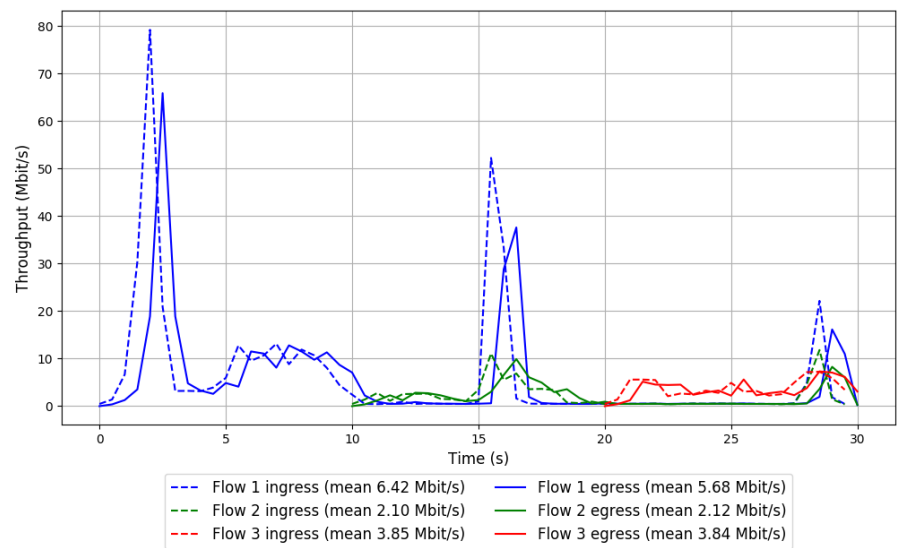
-- Flow 3:

Average throughput: 3.84 Mbit/s

95th percentile per-packet one-way delay: 182.136 ms

Loss rate: 2.53%

Run 4: Report of Indigo-Muses — Data Link

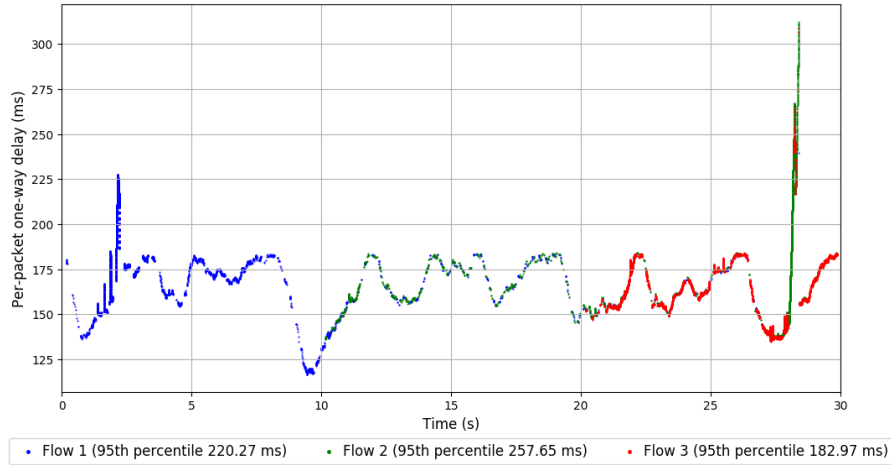
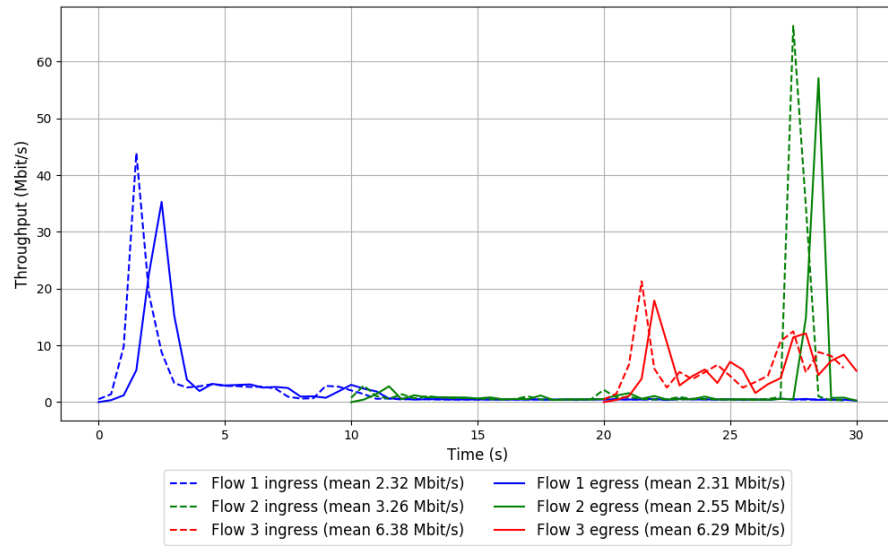


Run 5: Statistics of Indigo-Muses

Start at: 2018-10-26 11:40:33  
End at: 2018-10-26 11:41:03  
Local clock offset: -0.047 ms  
Remote clock offset: -28.45 ms

# Below is generated by plot.py at 2018-10-26 11:43:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 6.04 Mbit/s  
95th percentile per-packet one-way delay: 236.675 ms  
Loss rate: 9.08%  
-- Flow 1:  
Average throughput: 2.31 Mbit/s  
95th percentile per-packet one-way delay: 220.268 ms  
Loss rate: 1.45%  
-- Flow 2:  
Average throughput: 2.55 Mbit/s  
95th percentile per-packet one-way delay: 257.650 ms  
Loss rate: 22.65%  
-- Flow 3:  
Average throughput: 6.29 Mbit/s  
95th percentile per-packet one-way delay: 182.968 ms  
Loss rate: 3.50%

## Run 5: Report of Indigo-Muses — Data Link

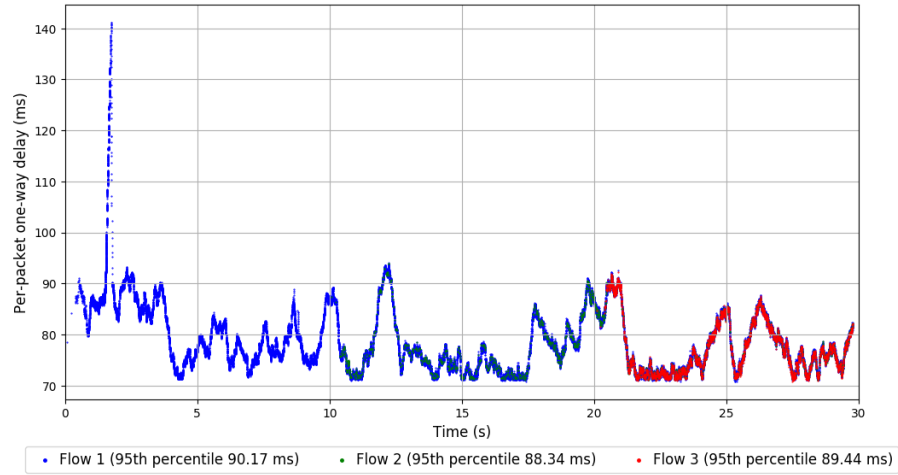
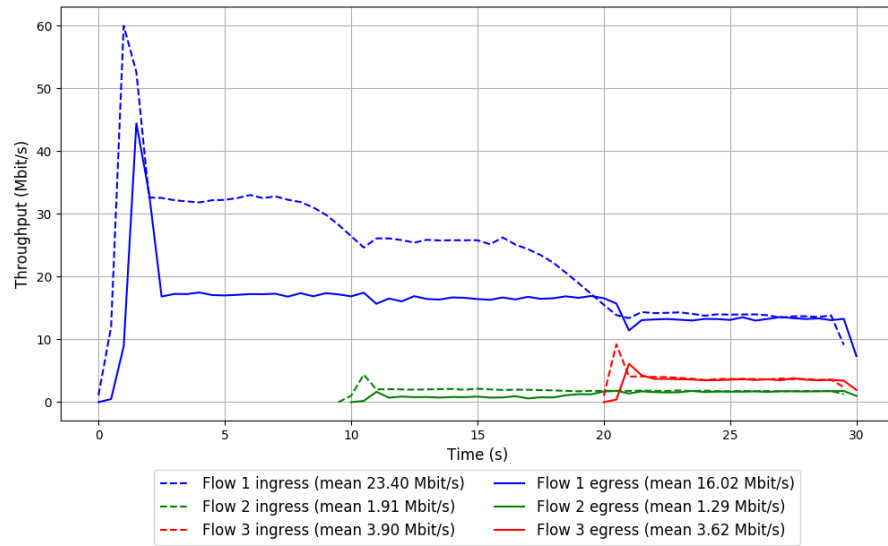


```
Run 1: Statistics of PCC-Allegro

Start at: 2018-10-26 09:55:11
End at: 2018-10-26 09:55:41
Local clock offset: -1.951 ms
Remote clock offset: 14.34 ms

# Below is generated by plot.py at 2018-10-26 11:43:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.06 Mbit/s
95th percentile per-packet one-way delay: 89.931 ms
Loss rate: 30.76%
-- Flow 1:
Average throughput: 16.02 Mbit/s
95th percentile per-packet one-way delay: 90.169 ms
Loss rate: 31.86%
-- Flow 2:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 88.338 ms
Loss rate: 32.98%
-- Flow 3:
Average throughput: 3.62 Mbit/s
95th percentile per-packet one-way delay: 89.435 ms
Loss rate: 8.44%
```

# Run 1: Report of PCC-Allegro — Data Link

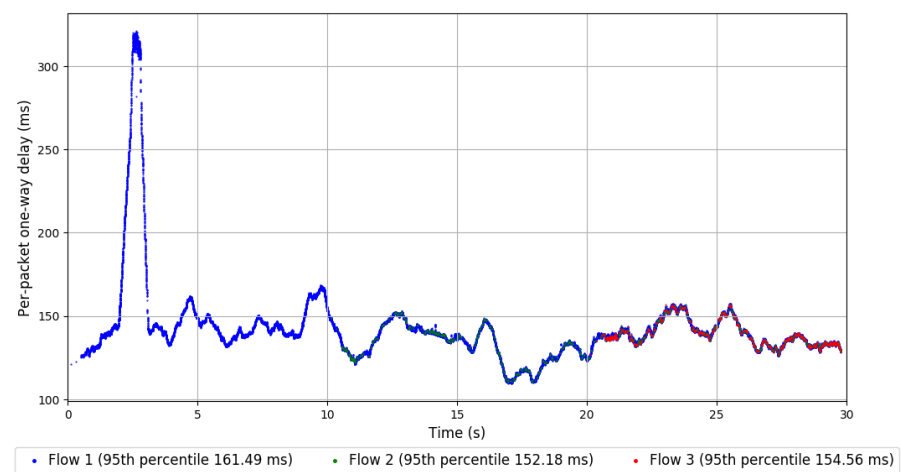
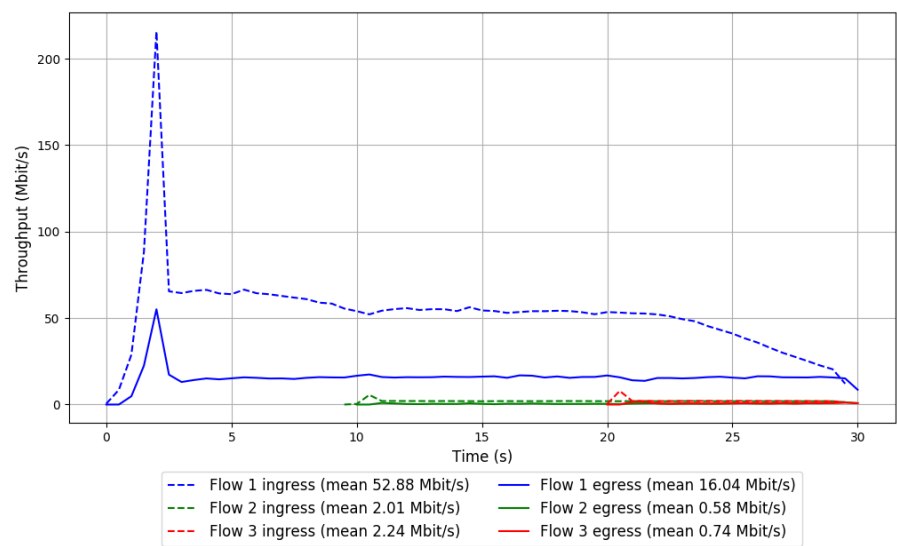


Run 2: Statistics of PCC-Allegro

Start at: 2018-10-26 10:19:40  
End at: 2018-10-26 10:20:10  
Local clock offset: -1.537 ms  
Remote clock offset: 10.395 ms

# Below is generated by plot.py at 2018-10-26 11:43:28  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 16.67 Mbit/s  
95th percentile per-packet one-way delay: 161.179 ms  
Loss rate: 69.86%  
-- Flow 1:  
Average throughput: 16.04 Mbit/s  
95th percentile per-packet one-way delay: 161.489 ms  
Loss rate: 69.85%  
-- Flow 2:  
Average throughput: 0.58 Mbit/s  
95th percentile per-packet one-way delay: 152.177 ms  
Loss rate: 71.62%  
-- Flow 3:  
Average throughput: 0.74 Mbit/s  
95th percentile per-packet one-way delay: 154.561 ms  
Loss rate: 67.47%

Run 2: Report of PCC-Allegro — Data Link

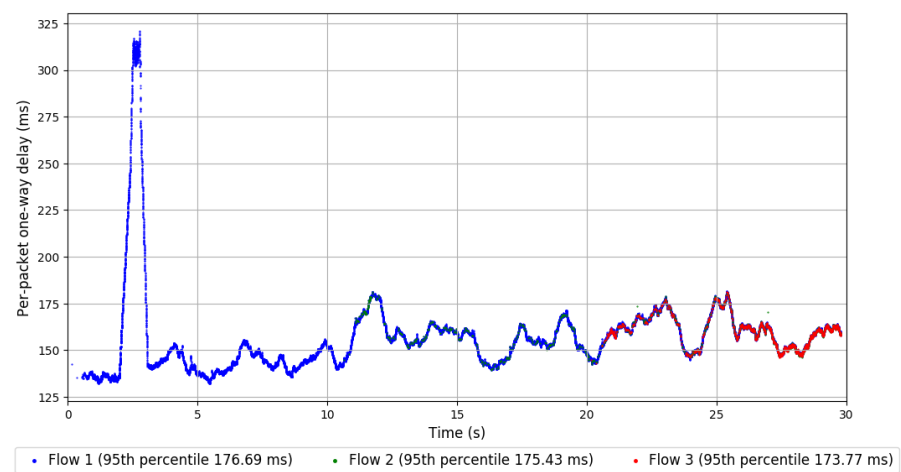
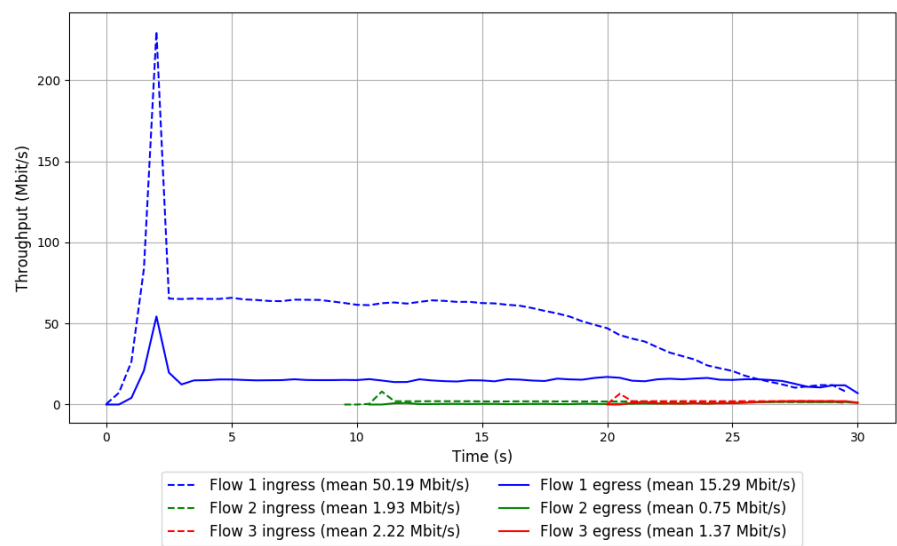


Run 3: Statistics of PCC-Allegro

Start at: 2018-10-26 10:44:53  
End at: 2018-10-26 10:45:23  
Local clock offset: -1.176 ms  
Remote clock offset: 28.065 ms

# Below is generated by plot.py at 2018-10-26 11:43:28  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 16.22 Mbit/s  
95th percentile per-packet one-way delay: 176.549 ms  
Loss rate: 69.14%  
-- Flow 1:  
Average throughput: 15.29 Mbit/s  
95th percentile per-packet one-way delay: 176.689 ms  
Loss rate: 69.73%  
-- Flow 2:  
Average throughput: 0.75 Mbit/s  
95th percentile per-packet one-way delay: 175.433 ms  
Loss rate: 62.68%  
-- Flow 3:  
Average throughput: 1.37 Mbit/s  
95th percentile per-packet one-way delay: 173.766 ms  
Loss rate: 39.80%

Run 3: Report of PCC-Allegro — Data Link

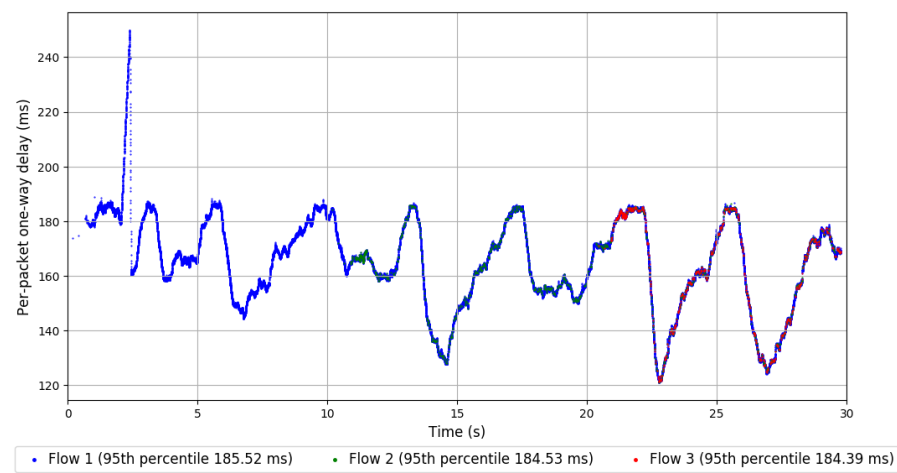
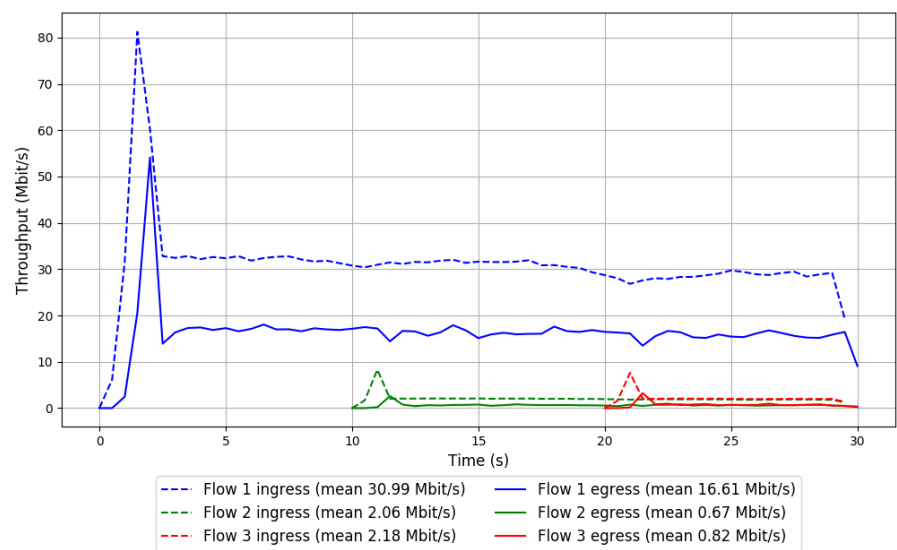


Run 4: Statistics of PCC-Allegro

Start at: 2018-10-26 11:10:09  
End at: 2018-10-26 11:10:39  
Local clock offset: 0.776 ms  
Remote clock offset: 14.327 ms

# Below is generated by plot.py at 2018-10-26 11:43:28  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 17.31 Mbit/s  
95th percentile per-packet one-way delay: 185.488 ms  
Loss rate: 48.08%  
-- Flow 1:  
Average throughput: 16.61 Mbit/s  
95th percentile per-packet one-way delay: 185.518 ms  
Loss rate: 46.83%  
-- Flow 2:  
Average throughput: 0.67 Mbit/s  
95th percentile per-packet one-way delay: 184.533 ms  
Loss rate: 68.00%  
-- Flow 3:  
Average throughput: 0.82 Mbit/s  
95th percentile per-packet one-way delay: 184.386 ms  
Loss rate: 64.19%

Run 4: Report of PCC-Allegro — Data Link

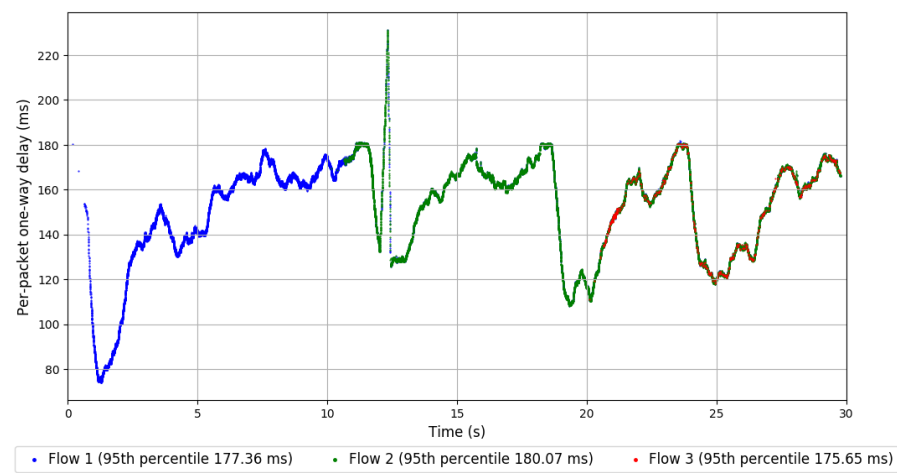
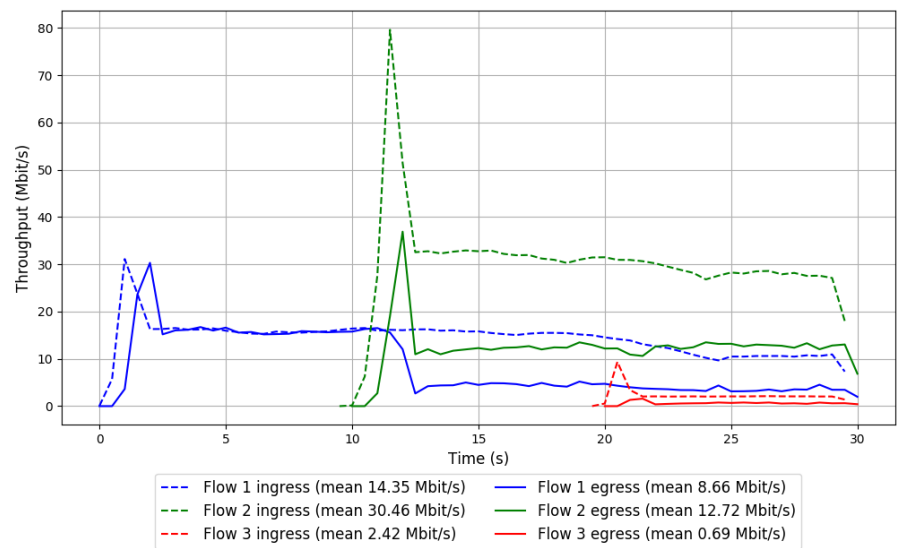


Run 5: Statistics of PCC-Allegro

Start at: 2018-10-26 11:36:20  
End at: 2018-10-26 11:36:50  
Local clock offset: 1.123 ms  
Remote clock offset: -25.552 ms

# Below is generated by plot.py at 2018-10-26 11:43:28  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 17.32 Mbit/s  
95th percentile per-packet one-way delay: 179.657 ms  
Loss rate: 51.53%  
-- Flow 1:  
Average throughput: 8.66 Mbit/s  
95th percentile per-packet one-way delay: 177.364 ms  
Loss rate: 40.17%  
-- Flow 2:  
Average throughput: 12.72 Mbit/s  
95th percentile per-packet one-way delay: 180.074 ms  
Loss rate: 58.76%  
-- Flow 3:  
Average throughput: 0.69 Mbit/s  
95th percentile per-packet one-way delay: 175.646 ms  
Loss rate: 72.17%

Run 5: Report of PCC-Allegro — Data Link

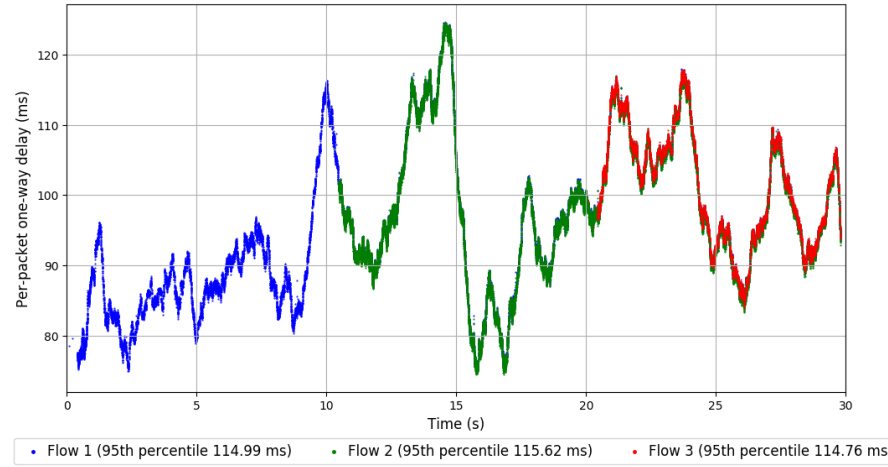
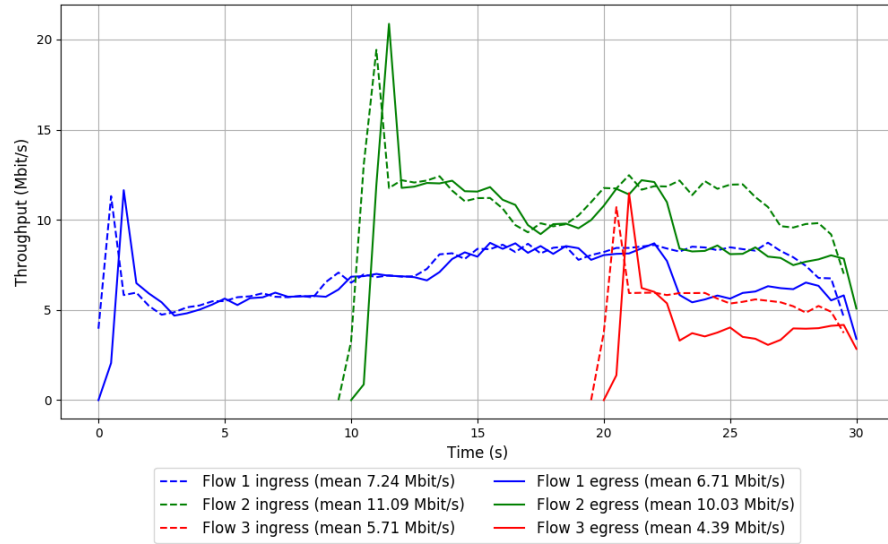


```
Run 1: Statistics of PCC-Expr

Start at: 2018-10-26 09:57:41
End at: 2018-10-26 09:58:11
Local clock offset: -1.994 ms
Remote clock offset: 9.91 ms

# Below is generated by plot.py at 2018-10-26 11:43:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.79 Mbit/s
95th percentile per-packet one-way delay: 115.248 ms
Loss rate: 10.85%
-- Flow 1:
Average throughput: 6.71 Mbit/s
95th percentile per-packet one-way delay: 114.991 ms
Loss rate: 7.80%
-- Flow 2:
Average throughput: 10.03 Mbit/s
95th percentile per-packet one-way delay: 115.618 ms
Loss rate: 10.34%
-- Flow 3:
Average throughput: 4.39 Mbit/s
95th percentile per-packet one-way delay: 114.758 ms
Loss rate: 24.50%
```

# Run 1: Report of PCC-Expr — Data Link

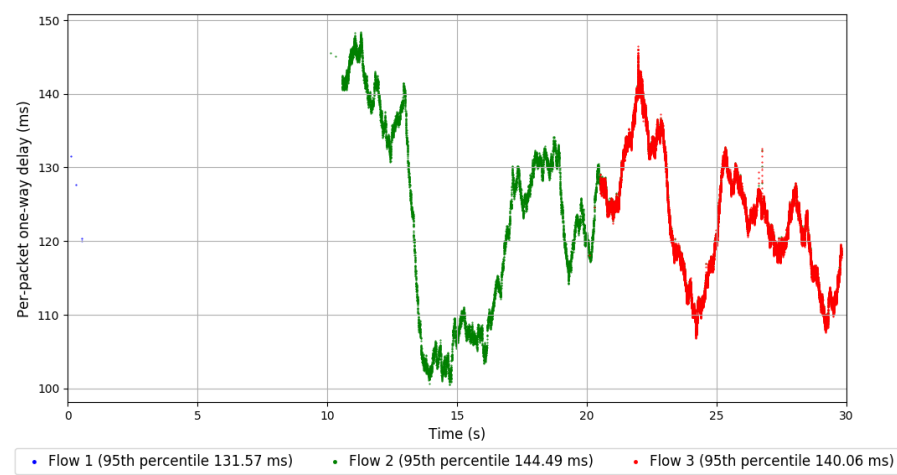
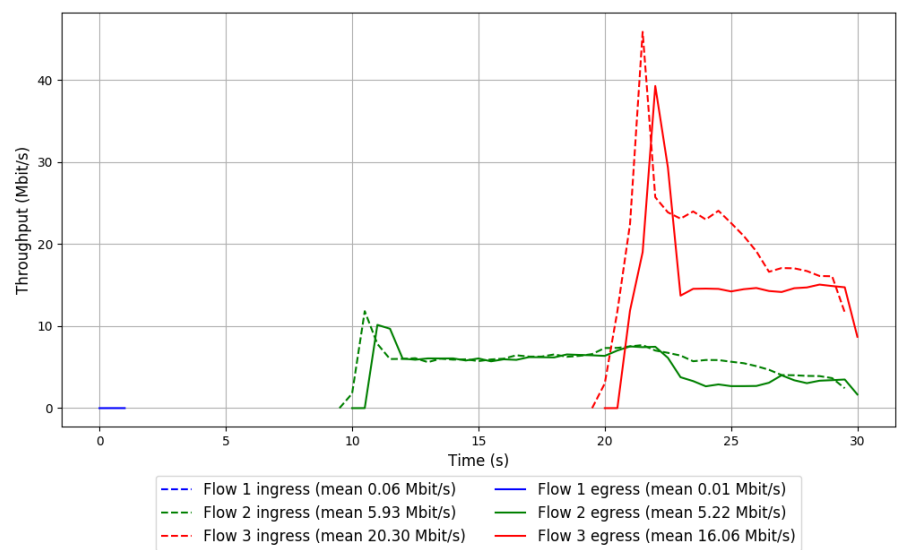


```
Run 2: Statistics of PCC-Expr

Start at: 2018-10-26 10:22:22
End at: 2018-10-26 10:22:52
Local clock offset: -1.534 ms
Remote clock offset: 9.784 ms

# Below is generated by plot.py at 2018-10-26 11:43:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.71 Mbit/s
95th percentile per-packet one-way delay: 141.162 ms
Loss rate: 18.82%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 131.567 ms
Loss rate: 86.98%
-- Flow 2:
Average throughput: 5.22 Mbit/s
95th percentile per-packet one-way delay: 144.493 ms
Loss rate: 12.87%
-- Flow 3:
Average throughput: 16.06 Mbit/s
95th percentile per-packet one-way delay: 140.058 ms
Loss rate: 22.31%
```

Run 2: Report of PCC-Expr — Data Link

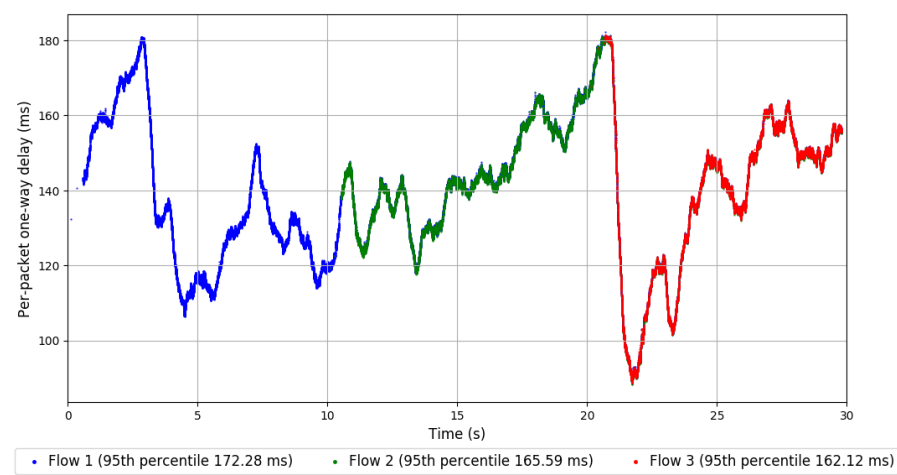
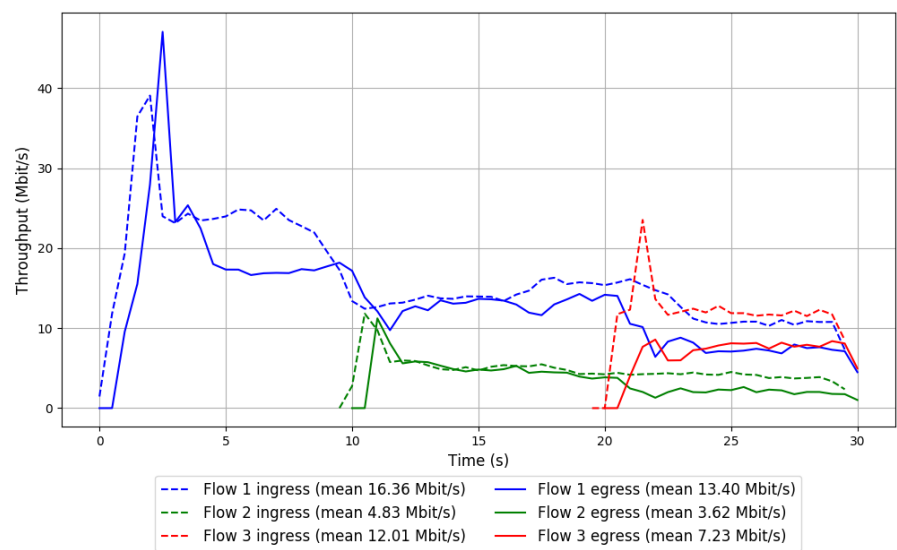


Run 3: Statistics of PCC-Expr

Start at: 2018-10-26 10:47:37  
End at: 2018-10-26 10:48:07  
Local clock offset: -1.059 ms  
Remote clock offset: 35.462 ms

# Below is generated by plot.py at 2018-10-26 11:43:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 18.15 Mbit/s  
95th percentile per-packet one-way delay: 171.422 ms  
Loss rate: 23.41%  
-- Flow 1:  
Average throughput: 13.40 Mbit/s  
95th percentile per-packet one-way delay: 172.280 ms  
Loss rate: 18.63%  
-- Flow 2:  
Average throughput: 3.62 Mbit/s  
95th percentile per-packet one-way delay: 165.587 ms  
Loss rate: 25.84%  
-- Flow 3:  
Average throughput: 7.23 Mbit/s  
95th percentile per-packet one-way delay: 162.120 ms  
Loss rate: 41.18%

Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2018-10-26 11:12:53

End at: 2018-10-26 11:13:23

Local clock offset: 1.317 ms

Remote clock offset: 7.224 ms

# Below is generated by plot.py at 2018-10-26 11:43:53

# Datalink statistics

-- Total of 3 flows:

Average throughput: 15.22 Mbit/s

95th percentile per-packet one-way delay: 182.369 ms

Loss rate: 12.15%

-- Flow 1:

Average throughput: 10.27 Mbit/s

95th percentile per-packet one-way delay: 182.434 ms

Loss rate: 8.48%

-- Flow 2:

Average throughput: 5.26 Mbit/s

95th percentile per-packet one-way delay: 182.311 ms

Loss rate: 14.69%

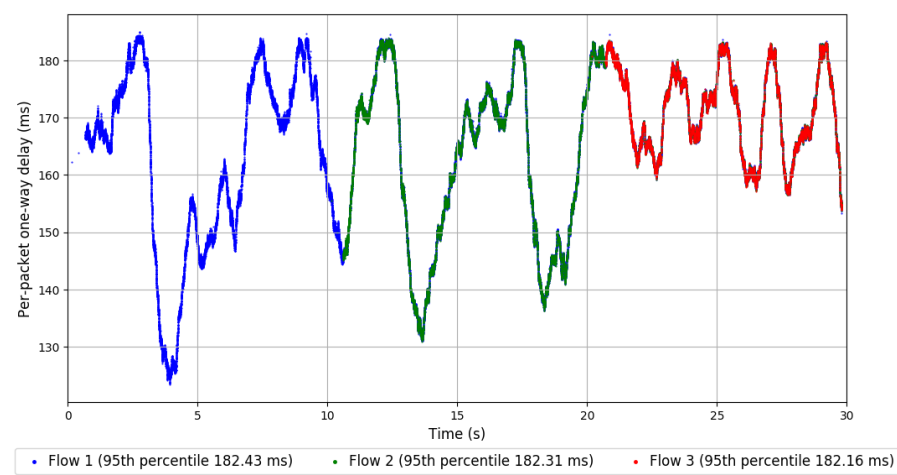
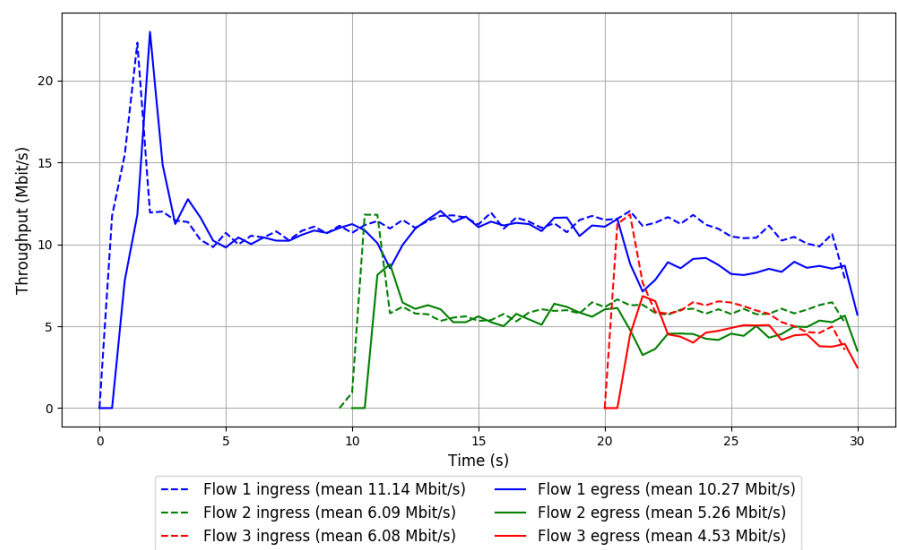
-- Flow 3:

Average throughput: 4.53 Mbit/s

95th percentile per-packet one-way delay: 182.163 ms

Loss rate: 27.37%

Run 4: Report of PCC-Expr — Data Link

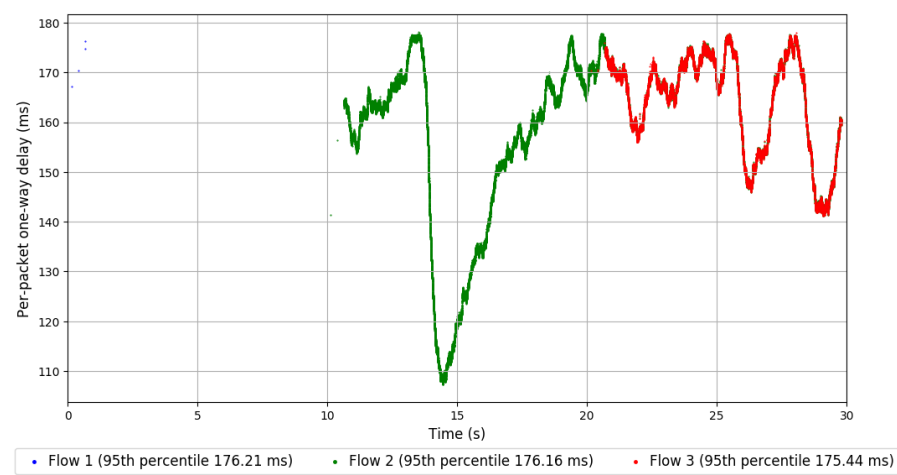
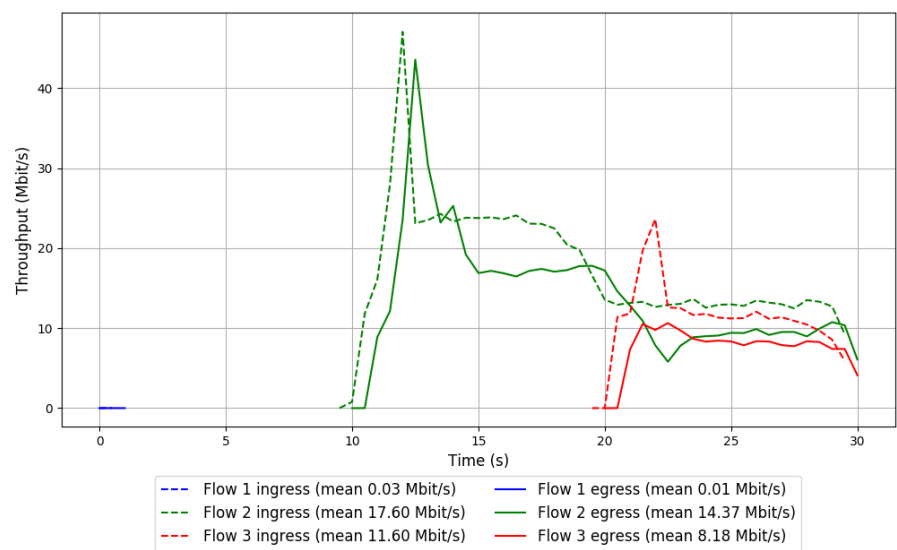


Run 5: Statistics of PCC-Expr

Start at: 2018-10-26 11:39:07  
End at: 2018-10-26 11:39:37  
Local clock offset: 0.447 ms  
Remote clock offset: -25.132 ms

# Below is generated by plot.py at 2018-10-26 11:43:53  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.20 Mbit/s  
95th percentile per-packet one-way delay: 175.980 ms  
Loss rate: 22.21%  
-- Flow 1:  
Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 176.213 ms  
Loss rate: 75.71%  
-- Flow 2:  
Average throughput: 14.37 Mbit/s  
95th percentile per-packet one-way delay: 176.156 ms  
Loss rate: 19.26%  
-- Flow 3:  
Average throughput: 8.18 Mbit/s  
95th percentile per-packet one-way delay: 175.438 ms  
Loss rate: 31.22%

Run 5: Report of PCC-Expr — Data Link

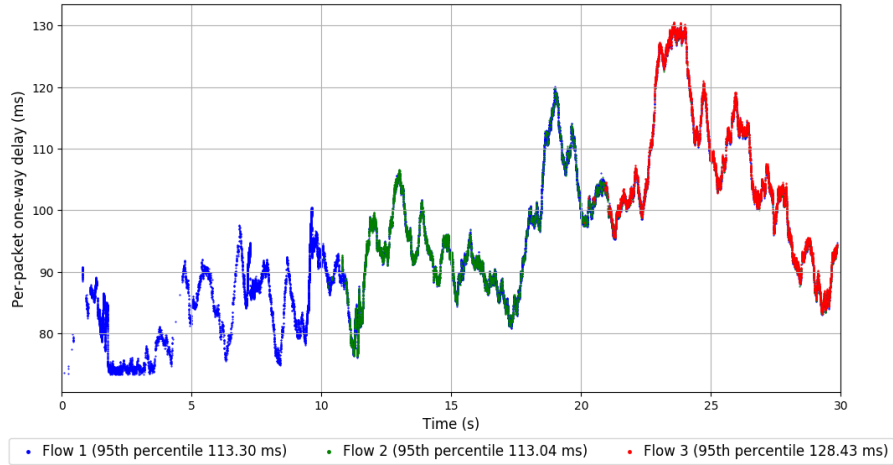
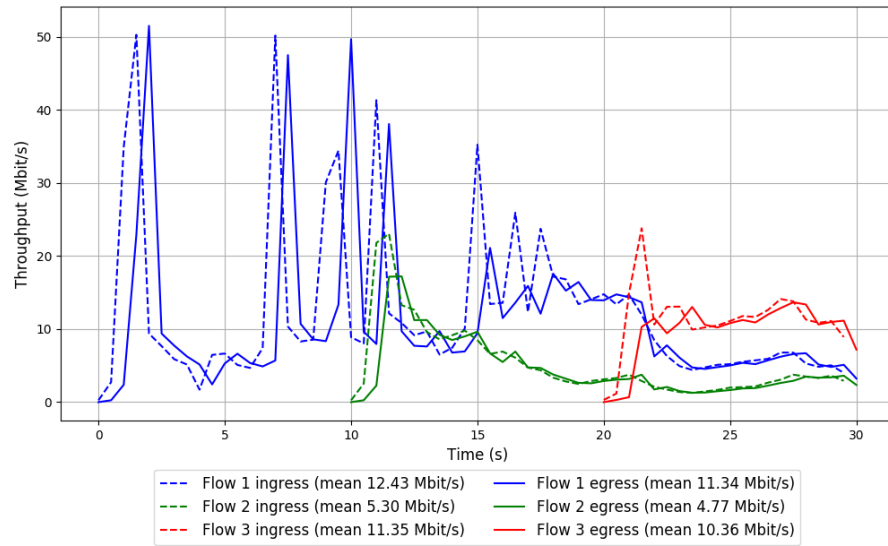


Run 1: Statistics of QUIC Cubic

Start at: 2018-10-26 09:48:42  
End at: 2018-10-26 09:49:12  
Local clock offset: -1.948 ms  
Remote clock offset: 13.105 ms

# Below is generated by plot.py at 2018-10-26 11:43:53  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 17.89 Mbit/s  
95th percentile per-packet one-way delay: 118.734 ms  
Loss rate: 9.73%  
-- Flow 1:  
Average throughput: 11.34 Mbit/s  
95th percentile per-packet one-way delay: 113.296 ms  
Loss rate: 9.24%  
-- Flow 2:  
Average throughput: 4.77 Mbit/s  
95th percentile per-packet one-way delay: 113.040 ms  
Loss rate: 10.85%  
-- Flow 3:  
Average throughput: 10.36 Mbit/s  
95th percentile per-packet one-way delay: 128.429 ms  
Loss rate: 10.30%

# Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-10-26 10:12:53

End at: 2018-10-26 10:13:23

Local clock offset: -1.594 ms

Remote clock offset: 10.46 ms

# Below is generated by plot.py at 2018-10-26 11:43:53

# Datalink statistics

-- Total of 3 flows:

Average throughput: 19.34 Mbit/s

95th percentile per-packet one-way delay: 143.689 ms

Loss rate: 6.50%

-- Flow 1:

Average throughput: 12.22 Mbit/s

95th percentile per-packet one-way delay: 143.094 ms

Loss rate: 4.93%

-- Flow 2:

Average throughput: 5.79 Mbit/s

95th percentile per-packet one-way delay: 144.011 ms

Loss rate: 6.72%

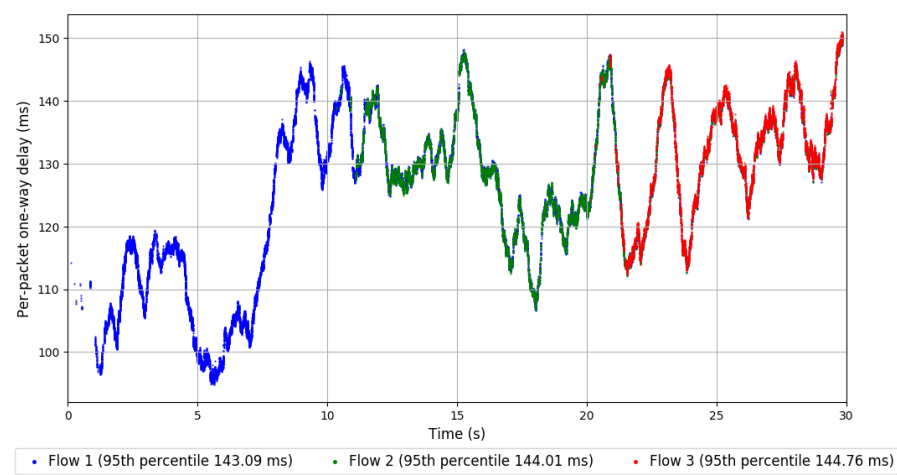
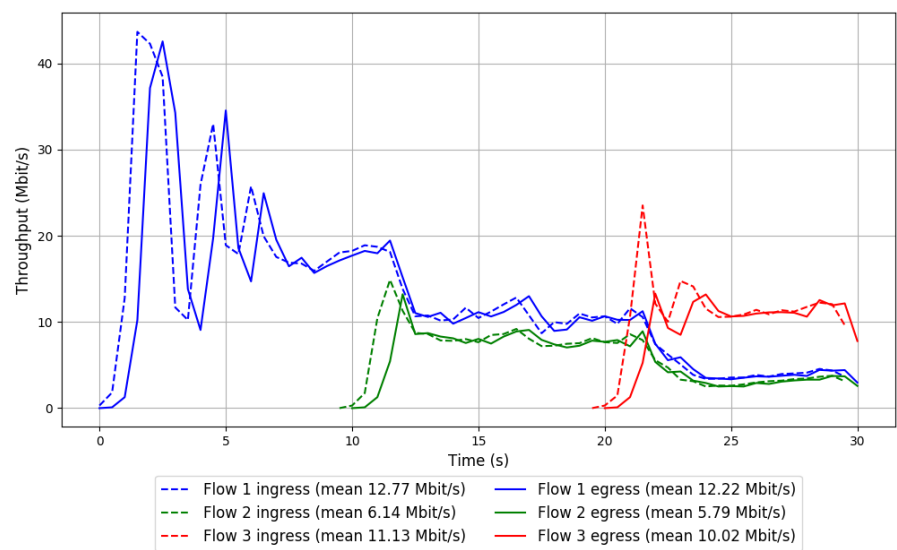
-- Flow 3:

Average throughput: 10.02 Mbit/s

95th percentile per-packet one-way delay: 144.759 ms

Loss rate: 11.71%

Run 2: Report of QUIC Cubic — Data Link

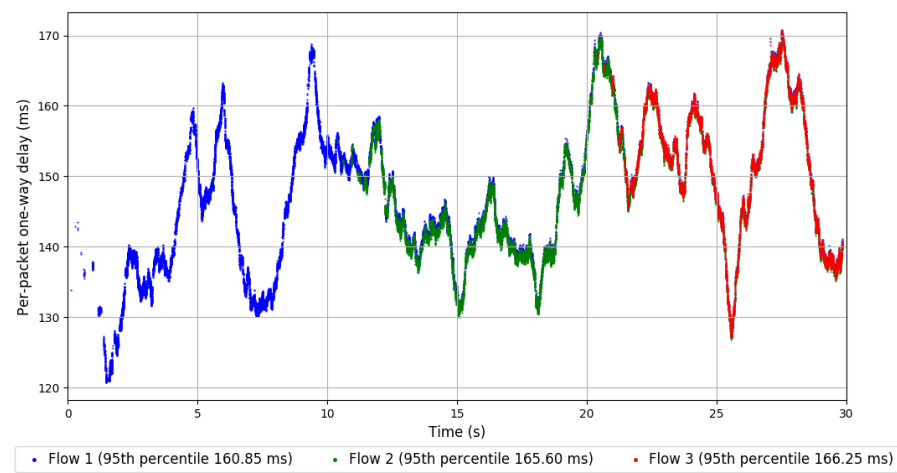
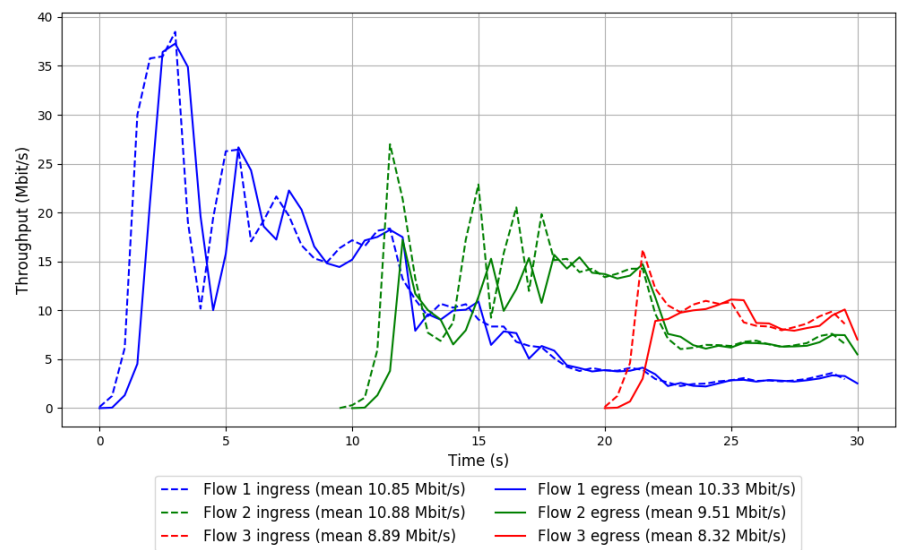


Run 3: Statistics of QUIC Cubic

Start at: 2018-10-26 10:38:00  
End at: 2018-10-26 10:38:30  
Local clock offset: -1.324 ms  
Remote clock offset: 29.865 ms

# Below is generated by plot.py at 2018-10-26 11:43:53  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 19.34 Mbit/s  
95th percentile per-packet one-way delay: 164.109 ms  
Loss rate: 8.72%  
-- Flow 1:  
Average throughput: 10.33 Mbit/s  
95th percentile per-packet one-way delay: 160.848 ms  
Loss rate: 5.47%  
-- Flow 2:  
Average throughput: 9.51 Mbit/s  
95th percentile per-packet one-way delay: 165.600 ms  
Loss rate: 13.62%  
-- Flow 3:  
Average throughput: 8.32 Mbit/s  
95th percentile per-packet one-way delay: 166.253 ms  
Loss rate: 8.62%

Run 3: Report of QUIC Cubic — Data Link

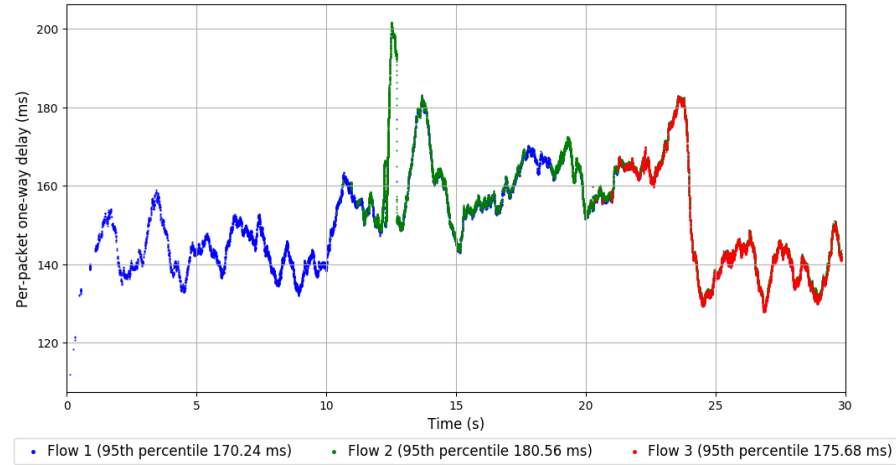
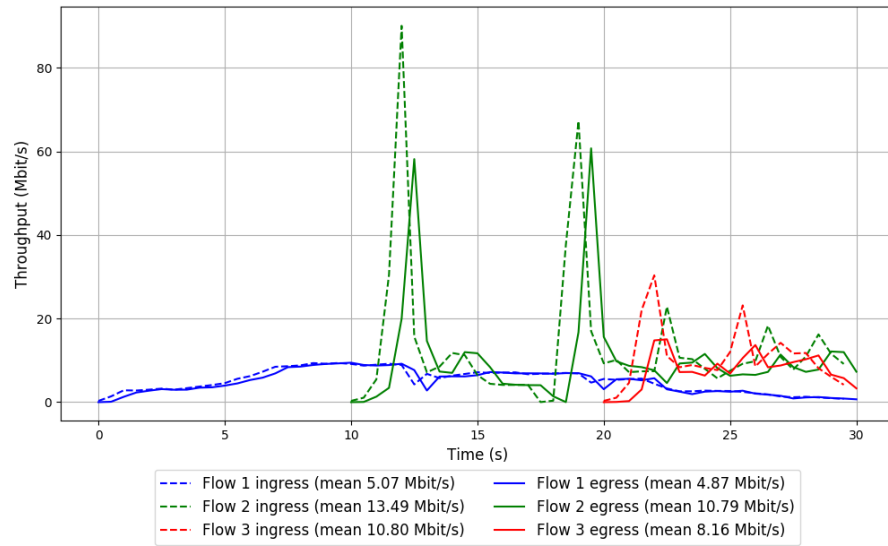


Run 4: Statistics of QUIC Cubic

Start at: 2018-10-26 11:03:11  
End at: 2018-10-26 11:03:41  
Local clock offset: -0.572 ms  
Remote clock offset: 40.585 ms

# Below is generated by plot.py at 2018-10-26 11:43:53  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 14.67 Mbit/s  
95th percentile per-packet one-way delay: 177.555 ms  
Loss rate: 17.18%  
-- Flow 1:  
Average throughput: 4.87 Mbit/s  
95th percentile per-packet one-way delay: 170.237 ms  
Loss rate: 4.50%  
-- Flow 2:  
Average throughput: 10.79 Mbit/s  
95th percentile per-packet one-way delay: 180.565 ms  
Loss rate: 20.80%  
-- Flow 3:  
Average throughput: 8.16 Mbit/s  
95th percentile per-packet one-way delay: 175.680 ms  
Loss rate: 26.07%

#### Run 4: Report of QUIC Cubic — Data Link

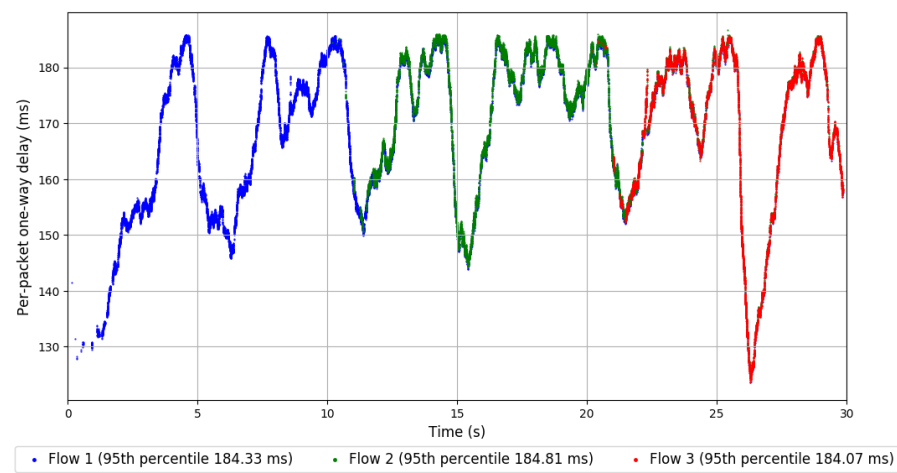
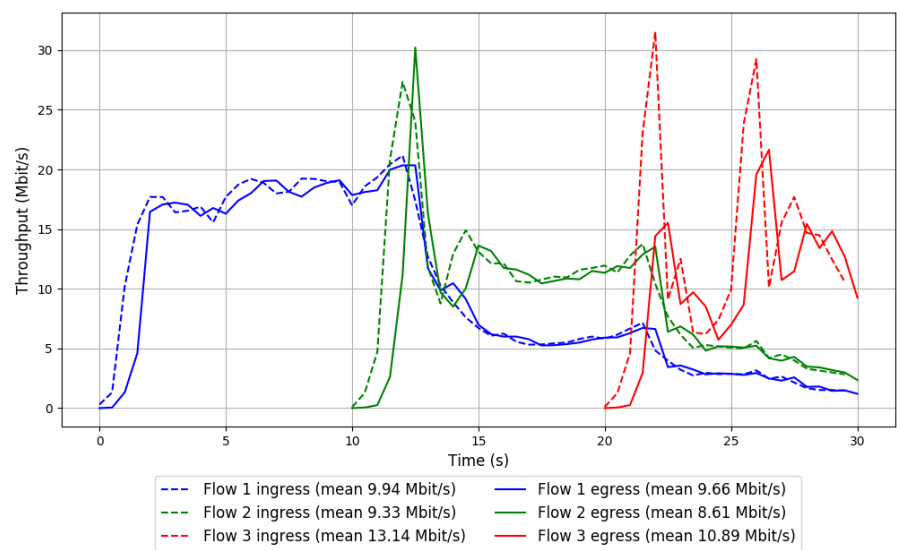


Run 5: Statistics of QUIC Cubic

Start at: 2018-10-26 11:28:56  
End at: 2018-10-26 11:29:26  
Local clock offset: 2.641 ms  
Remote clock offset: -23.046 ms

# Below is generated by plot.py at 2018-10-26 11:43:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 18.90 Mbit/s  
95th percentile per-packet one-way delay: 184.494 ms  
Loss rate: 8.48%  
-- Flow 1:  
Average throughput: 9.66 Mbit/s  
95th percentile per-packet one-way delay: 184.328 ms  
Loss rate: 3.52%  
-- Flow 2:  
Average throughput: 8.61 Mbit/s  
95th percentile per-packet one-way delay: 184.814 ms  
Loss rate: 8.88%  
-- Flow 3:  
Average throughput: 10.89 Mbit/s  
95th percentile per-packet one-way delay: 184.066 ms  
Loss rate: 19.22%

Run 5: Report of QUIC Cubic — Data Link

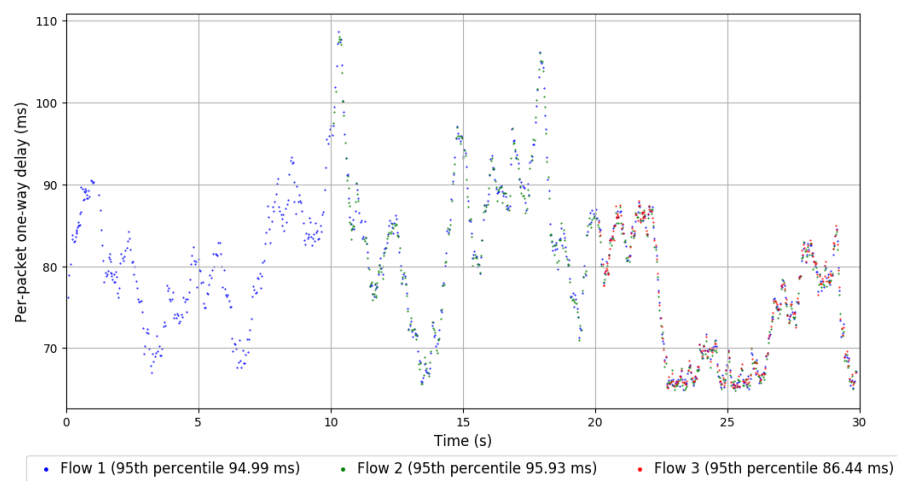
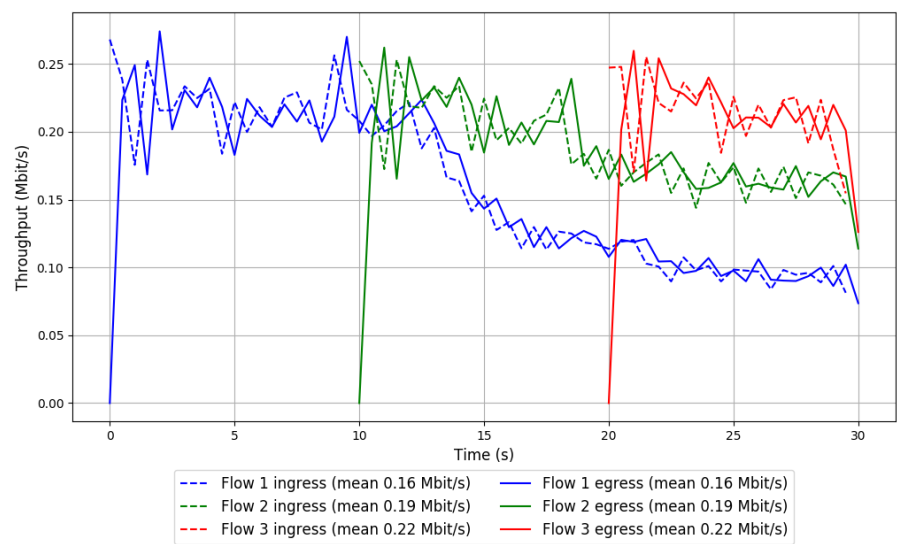


```
Run 1: Statistics of SCReAM

Start at: 2018-10-26 09:56:28
End at: 2018-10-26 09:56:58
Local clock offset: -1.968 ms
Remote clock offset: 20.47 ms

# Below is generated by plot.py at 2018-10-26 11:43:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 94.870 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 94.988 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 95.926 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.435 ms
Loss rate: 1.29%
```

Run 1: Report of SReAM — Data Link

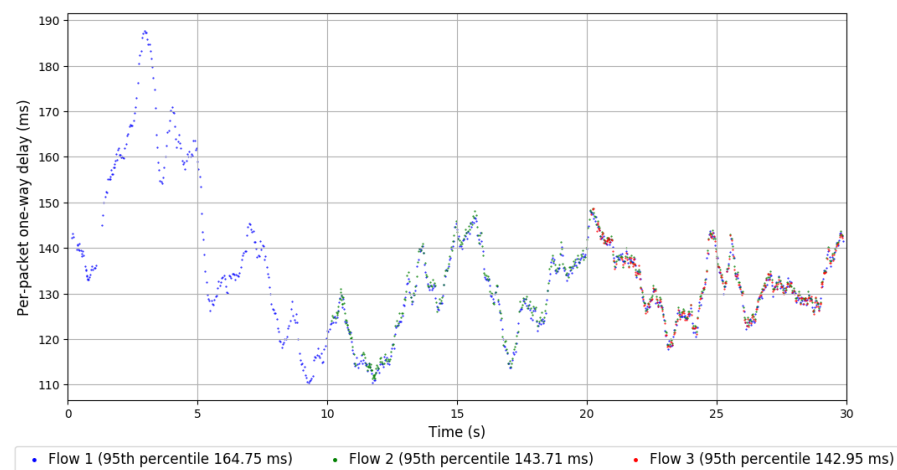
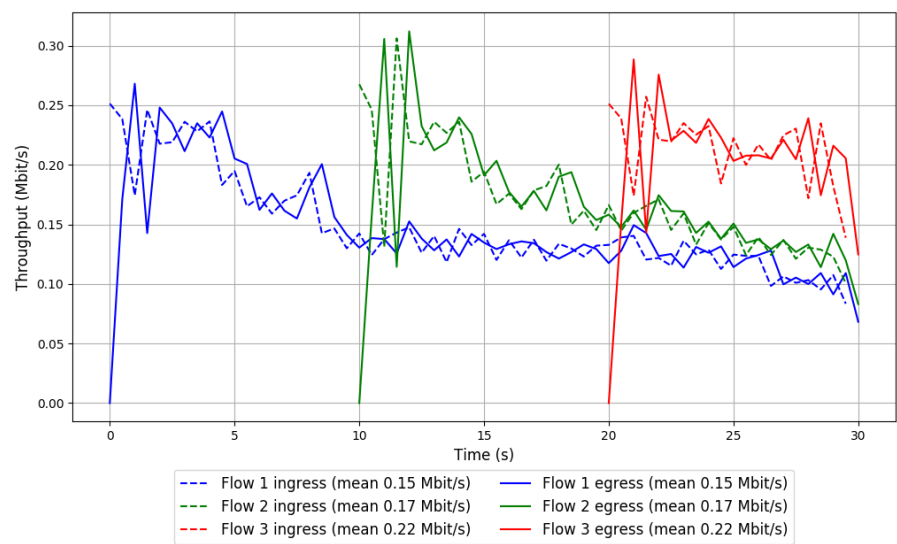


Run 2: Statistics of SReAM

Start at: 2018-10-26 10:21:04  
End at: 2018-10-26 10:21:34  
Local clock offset: -1.425 ms  
Remote clock offset: 6.128 ms

# Below is generated by plot.py at 2018-10-26 11:43:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.33 Mbit/s  
95th percentile per-packet one-way delay: 157.749 ms  
Loss rate: 0.80%  
-- Flow 1:  
Average throughput: 0.15 Mbit/s  
95th percentile per-packet one-way delay: 164.755 ms  
Loss rate: 0.43%  
-- Flow 2:  
Average throughput: 0.17 Mbit/s  
95th percentile per-packet one-way delay: 143.706 ms  
Loss rate: 0.77%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 142.947 ms  
Loss rate: 1.60%

Run 2: Report of SReAM — Data Link

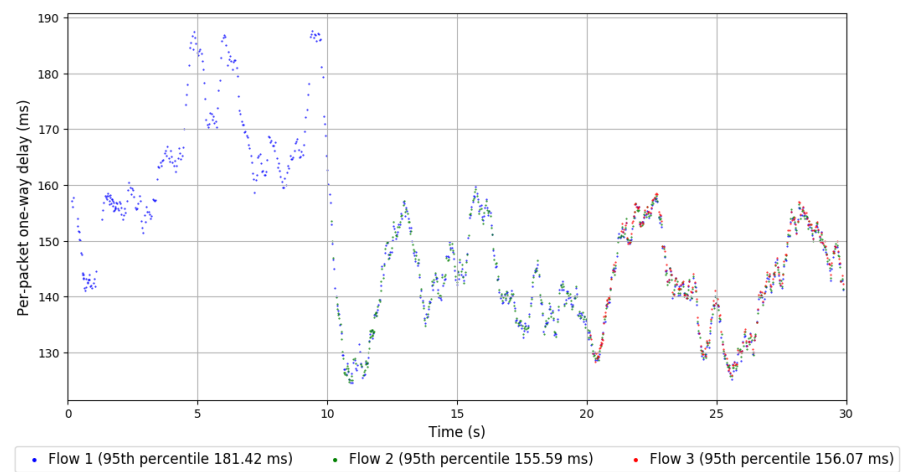
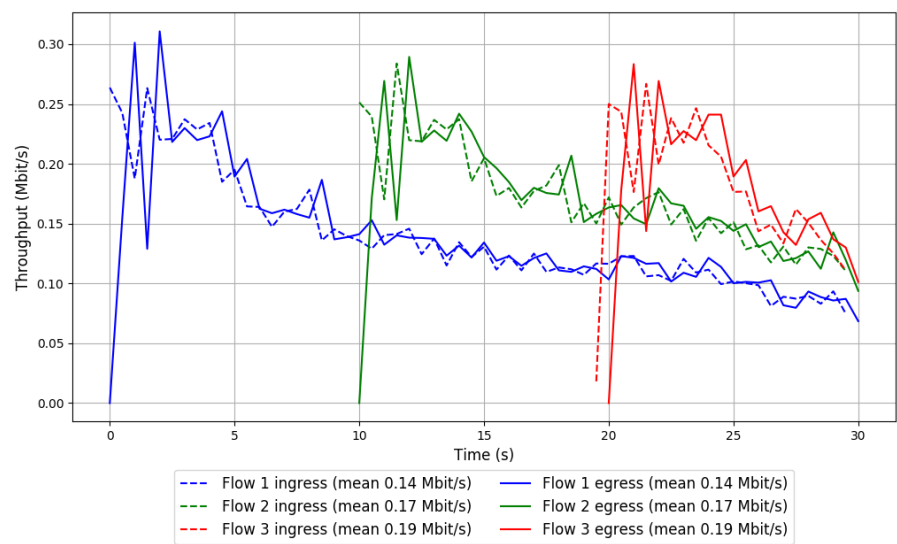


Run 3: Statistics of SCReAM

Start at: 2018-10-26 10:46:21  
End at: 2018-10-26 10:46:51  
Local clock offset: -1.114 ms  
Remote clock offset: 28.124 ms

# Below is generated by plot.py at 2018-10-26 11:43:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.32 Mbit/s  
95th percentile per-packet one-way delay: 170.136 ms  
Loss rate: 0.71%  
-- Flow 1:  
Average throughput: 0.14 Mbit/s  
95th percentile per-packet one-way delay: 181.417 ms  
Loss rate: 0.40%  
-- Flow 2:  
Average throughput: 0.17 Mbit/s  
95th percentile per-packet one-way delay: 155.592 ms  
Loss rate: 0.76%  
-- Flow 3:  
Average throughput: 0.19 Mbit/s  
95th percentile per-packet one-way delay: 156.067 ms  
Loss rate: 1.32%

Run 3: Report of SReAM — Data Link

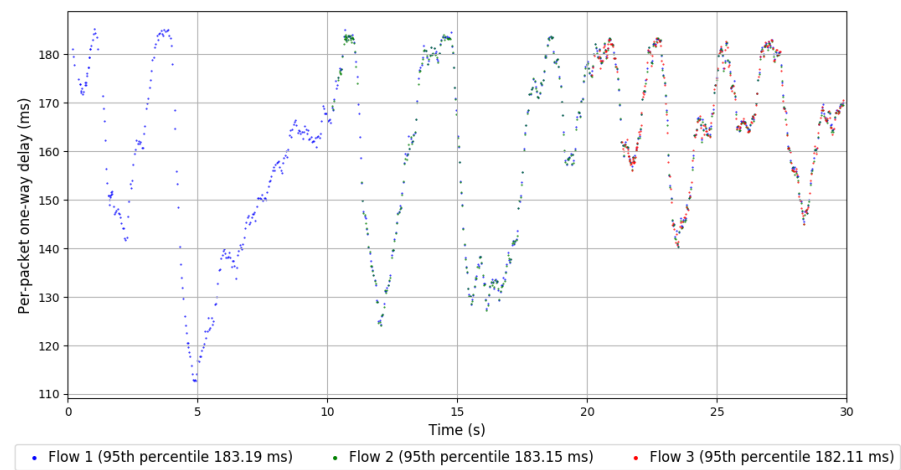
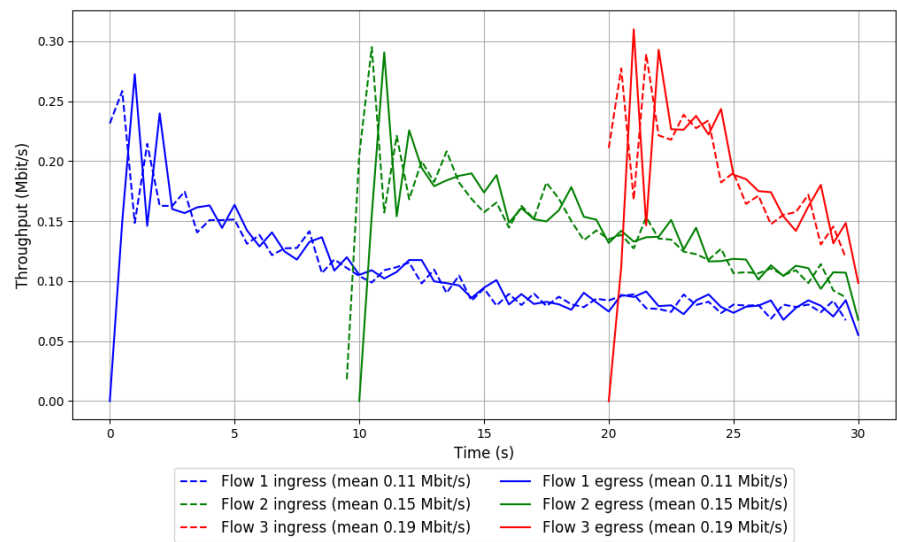


Run 4: Statistics of SCReAM

Start at: 2018-10-26 11:11:35  
End at: 2018-10-26 11:12:05  
Local clock offset: 1.204 ms  
Remote clock offset: 11.151 ms

# Below is generated by plot.py at 2018-10-26 11:43:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.27 Mbit/s  
95th percentile per-packet one-way delay: 183.025 ms  
Loss rate: 1.08%  
-- Flow 1:  
Average throughput: 0.11 Mbit/s  
95th percentile per-packet one-way delay: 183.189 ms  
Loss rate: 0.91%  
-- Flow 2:  
Average throughput: 0.15 Mbit/s  
95th percentile per-packet one-way delay: 183.152 ms  
Loss rate: 0.88%  
-- Flow 3:  
Average throughput: 0.19 Mbit/s  
95th percentile per-packet one-way delay: 182.114 ms  
Loss rate: 1.68%

Run 4: Report of SReAM — Data Link

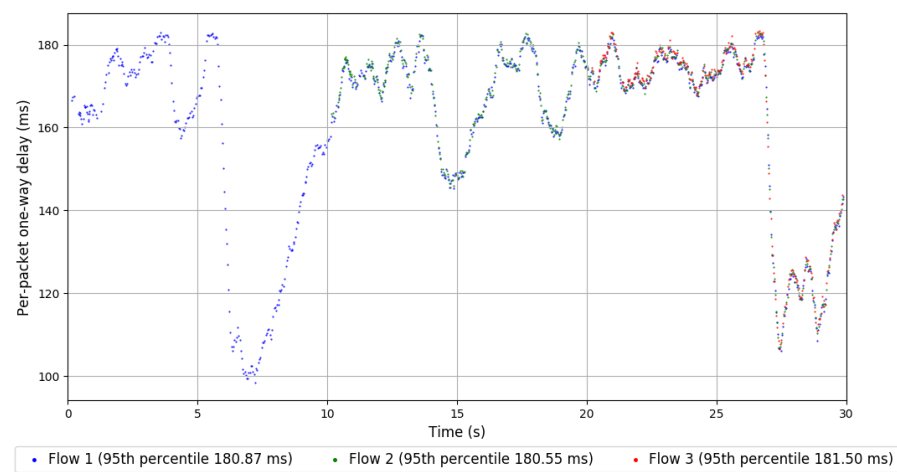
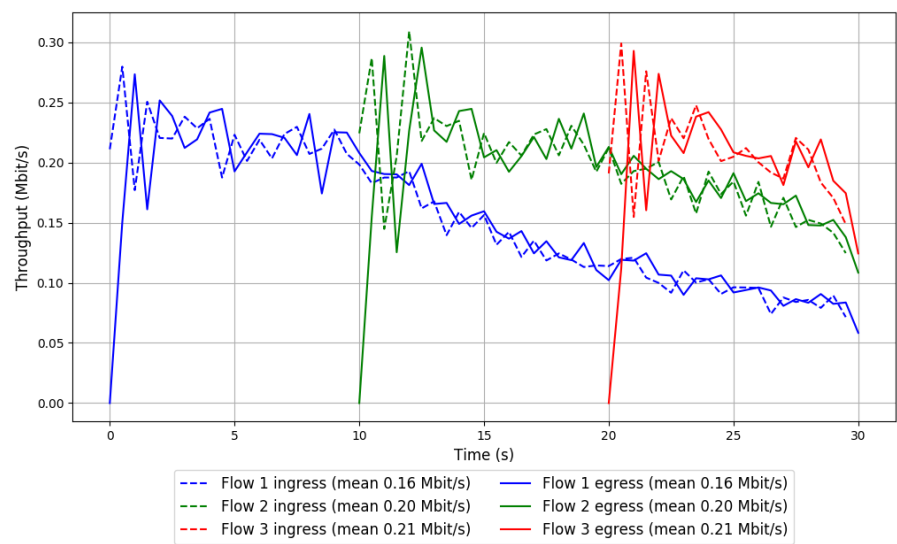


Run 5: Statistics of SCReAM

Start at: 2018-10-26 11:37:48  
End at: 2018-10-26 11:38:19  
Local clock offset: 0.675 ms  
Remote clock offset: -29.28 ms

# Below is generated by plot.py at 2018-10-26 11:43:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.36 Mbit/s  
95th percentile per-packet one-way delay: 180.823 ms  
Loss rate: 0.89%  
-- Flow 1:  
Average throughput: 0.16 Mbit/s  
95th percentile per-packet one-way delay: 180.867 ms  
Loss rate: 0.43%  
-- Flow 2:  
Average throughput: 0.20 Mbit/s  
95th percentile per-packet one-way delay: 180.546 ms  
Loss rate: 0.90%  
-- Flow 3:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 181.500 ms  
Loss rate: 1.91%

Run 5: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2018-10-26 09:44:49

End at: 2018-10-26 09:45:19

Local clock offset: -1.649 ms

Remote clock offset: 15.6 ms

# Below is generated by plot.py at 2018-10-26 11:44:00

# Datalink statistics

-- Total of 3 flows:

Average throughput: 10.29 Mbit/s

95th percentile per-packet one-way delay: 103.010 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 5.06 Mbit/s

95th percentile per-packet one-way delay: 102.880 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 5.42 Mbit/s

95th percentile per-packet one-way delay: 106.181 ms

Loss rate: 0.93%

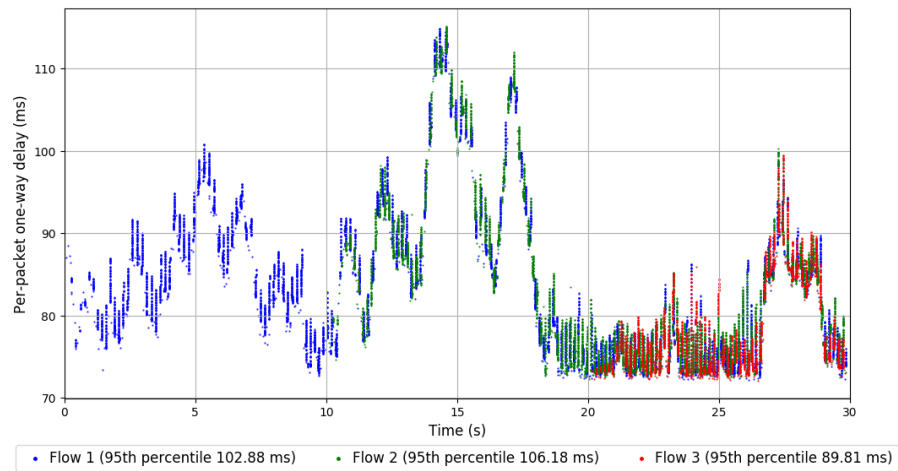
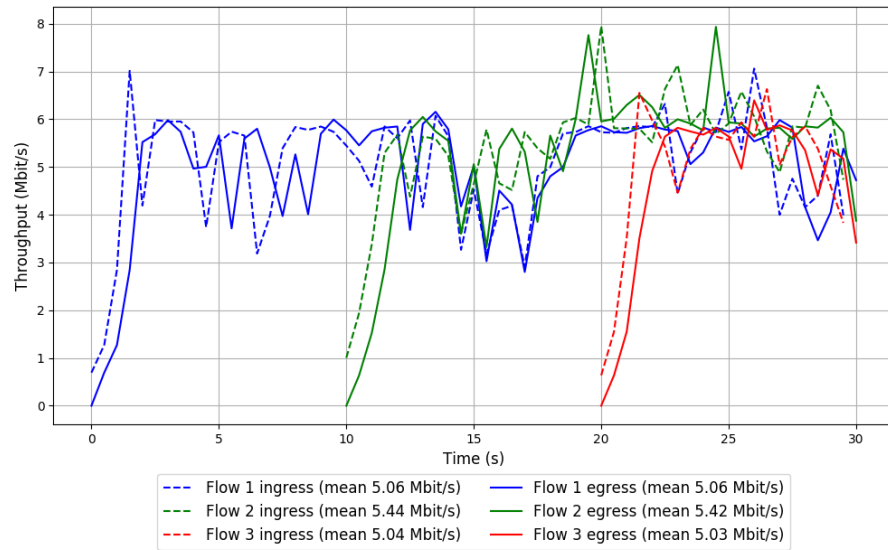
-- Flow 3:

Average throughput: 5.03 Mbit/s

95th percentile per-packet one-way delay: 89.807 ms

Loss rate: 1.64%

## Run 1: Report of Sprout — Data Link

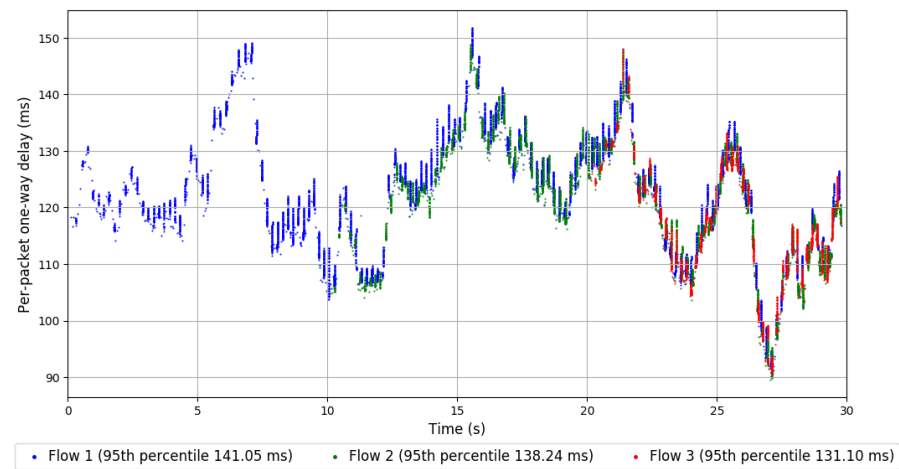
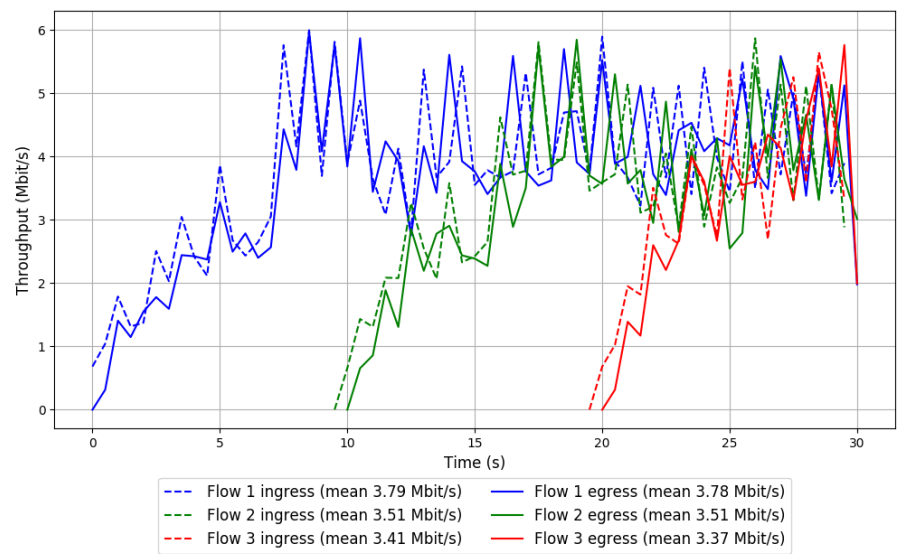


Run 2: Statistics of Sprout

Start at: 2018-10-26 10:08:45  
End at: 2018-10-26 10:09:15  
Local clock offset: -1.532 ms  
Remote clock offset: 8.481 ms

# Below is generated by plot.py at 2018-10-26 11:44:00  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 7.20 Mbit/s  
95th percentile per-packet one-way delay: 138.853 ms  
Loss rate: 1.26%  
-- Flow 1:  
Average throughput: 3.78 Mbit/s  
95th percentile per-packet one-way delay: 141.048 ms  
Loss rate: 0.86%  
-- Flow 2:  
Average throughput: 3.51 Mbit/s  
95th percentile per-packet one-way delay: 138.241 ms  
Loss rate: 0.99%  
-- Flow 3:  
Average throughput: 3.37 Mbit/s  
95th percentile per-packet one-way delay: 131.100 ms  
Loss rate: 3.17%

Run 2: Report of Sprout — Data Link

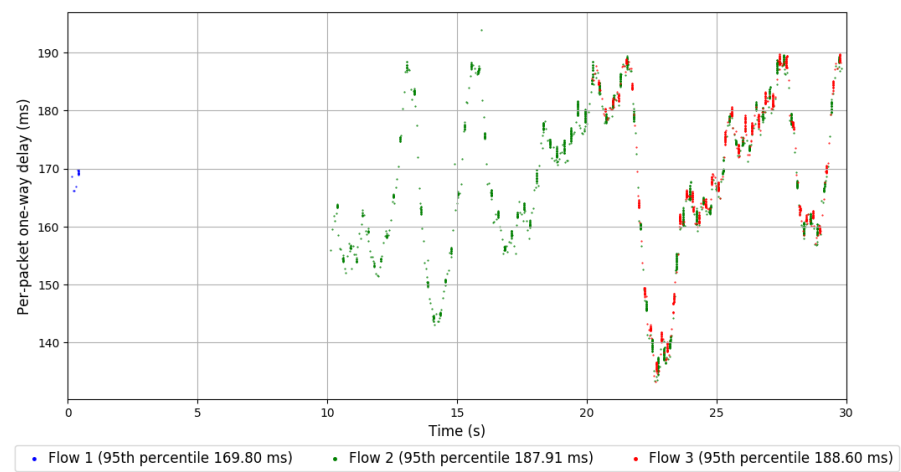
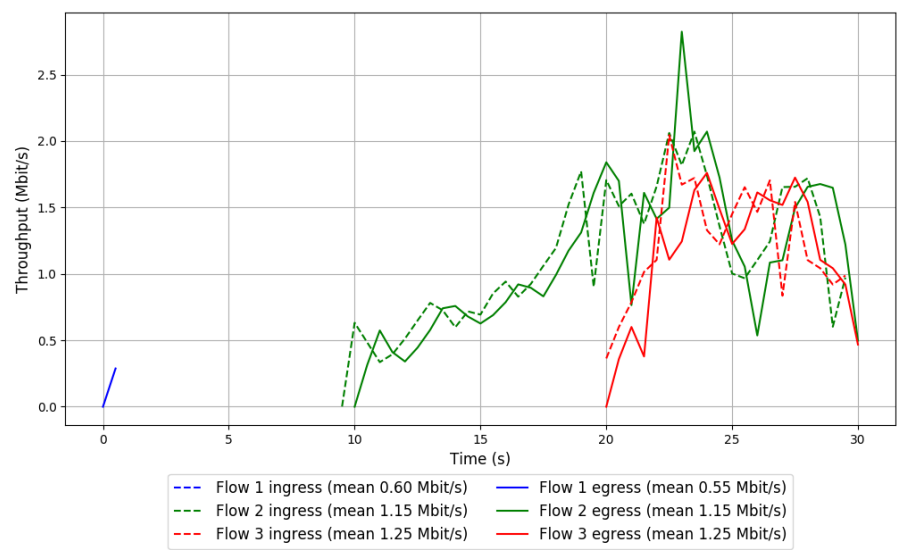


Run 3: Statistics of Sprout

Start at: 2018-10-26 10:33:51  
End at: 2018-10-26 10:34:21  
Local clock offset: -1.483 ms  
Remote clock offset: 10.896 ms

# Below is generated by plot.py at 2018-10-26 11:44:00  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1.17 Mbit/s  
95th percentile per-packet one-way delay: 188.199 ms  
Loss rate: 1.49%  
-- Flow 1:  
Average throughput: 0.55 Mbit/s  
95th percentile per-packet one-way delay: 169.803 ms  
Loss rate: 7.69%  
-- Flow 2:  
Average throughput: 1.15 Mbit/s  
95th percentile per-packet one-way delay: 187.908 ms  
Loss rate: 1.10%  
-- Flow 3:  
Average throughput: 1.25 Mbit/s  
95th percentile per-packet one-way delay: 188.597 ms  
Loss rate: 2.13%

Run 3: Report of Sprout — Data Link

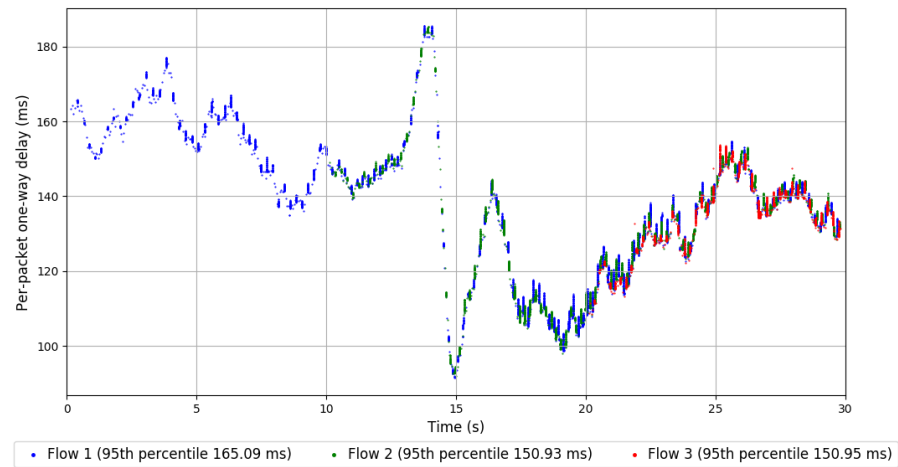
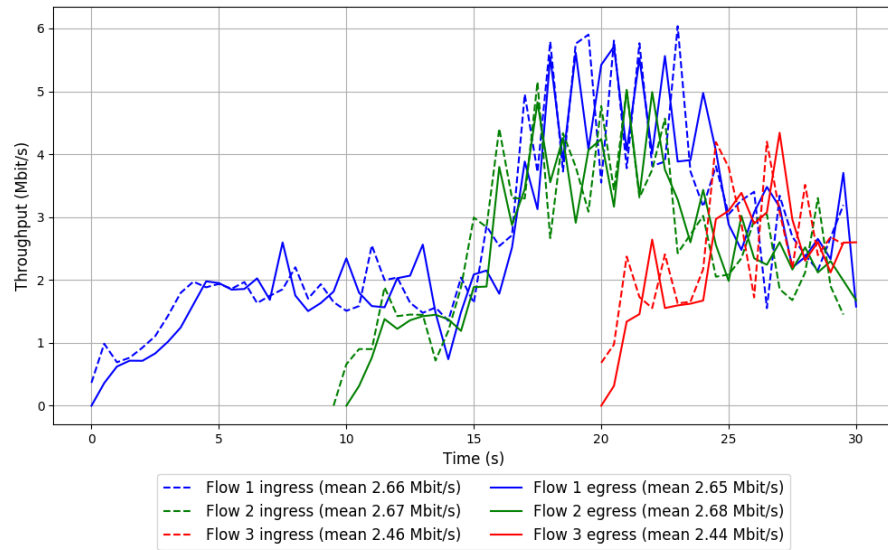


#### Run 4: Statistics of Sprout

Start at: 2018-10-26 10:59:06  
End at: 2018-10-26 10:59:36  
Local clock offset: -1.336 ms  
Remote clock offset: 38.411 ms

```
# Below is generated by plot.py at 2018-10-26 11:44:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.22 Mbit/s
95th percentile per-packet one-way delay: 160.801 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 2.65 Mbit/s
95th percentile per-packet one-way delay: 165.091 ms
Loss rate: 1.05%
-- Flow 2:
Average throughput: 2.68 Mbit/s
95th percentile per-packet one-way delay: 150.926 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 2.44 Mbit/s
95th percentile per-packet one-way delay: 150.947 ms
Loss rate: 2.56%
```

# Run 4: Report of Sprout — Data Link

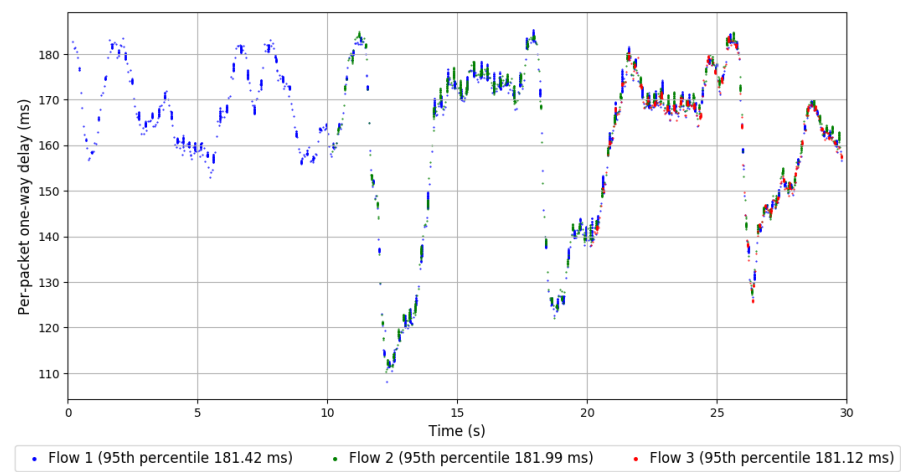
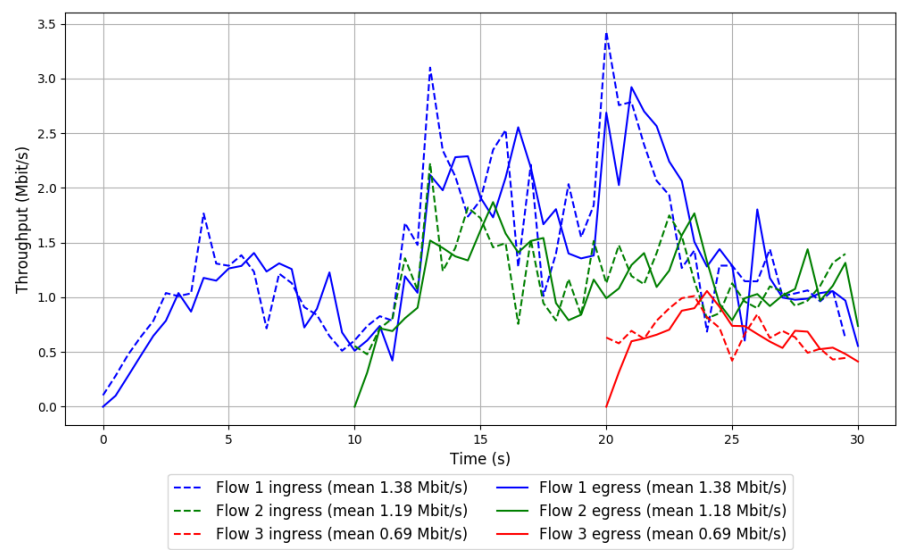


Run 5: Statistics of Sprout

Start at: 2018-10-26 11:24:42  
End at: 2018-10-26 11:25:12  
Local clock offset: 2.199 ms  
Remote clock offset: -15.843 ms

```
# Below is generated by plot.py at 2018-10-26 11:44:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 181.558 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 1.38 Mbit/s
95th percentile per-packet one-way delay: 181.423 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 1.18 Mbit/s
95th percentile per-packet one-way delay: 181.992 ms
Loss rate: 1.56%
-- Flow 3:
Average throughput: 0.69 Mbit/s
95th percentile per-packet one-way delay: 181.123 ms
Loss rate: 2.06%
```

Run 5: Report of Sprout — Data Link

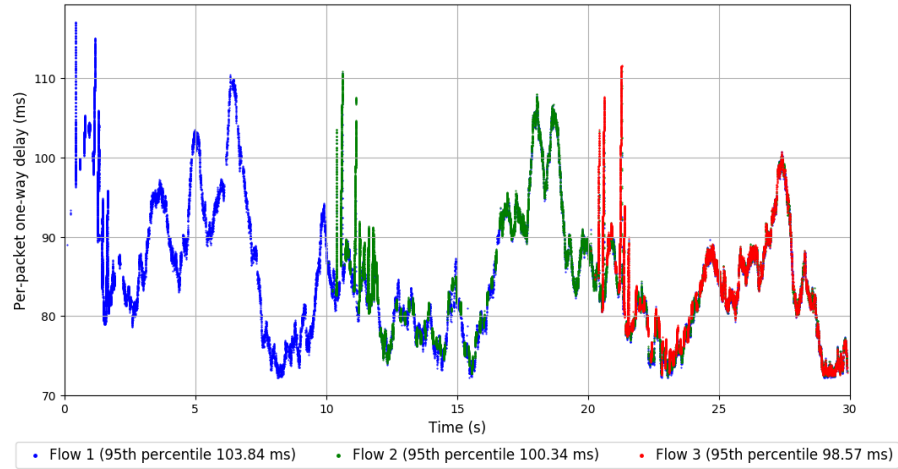
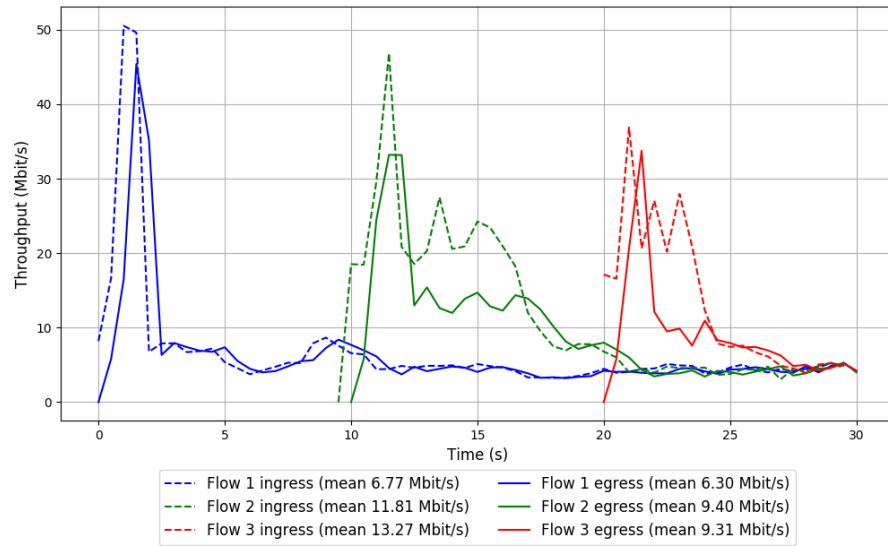


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-10-26 09:52:34
End at: 2018-10-26 09:53:04
Local clock offset: -2.053 ms
Remote clock offset: 13.162 ms

# Below is generated by plot.py at 2018-10-26 11:44:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.61 Mbit/s
95th percentile per-packet one-way delay: 102.822 ms
Loss rate: 18.45%
-- Flow 1:
Average throughput: 6.30 Mbit/s
95th percentile per-packet one-way delay: 103.837 ms
Loss rate: 7.42%
-- Flow 2:
Average throughput: 9.40 Mbit/s
95th percentile per-packet one-way delay: 100.337 ms
Loss rate: 21.01%
-- Flow 3:
Average throughput: 9.31 Mbit/s
95th percentile per-packet one-way delay: 98.572 ms
Loss rate: 30.84%
```

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-10-26 10:16:56

End at: 2018-10-26 10:17:26

Local clock offset: -1.636 ms

Remote clock offset: 6.574 ms

# Below is generated by plot.py at 2018-10-26 11:44:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 17.06 Mbit/s

95th percentile per-packet one-way delay: 142.043 ms

Loss rate: 18.21%

-- Flow 1:

Average throughput: 6.78 Mbit/s

95th percentile per-packet one-way delay: 144.478 ms

Loss rate: 8.05%

-- Flow 2:

Average throughput: 10.22 Mbit/s

95th percentile per-packet one-way delay: 141.002 ms

Loss rate: 16.52%

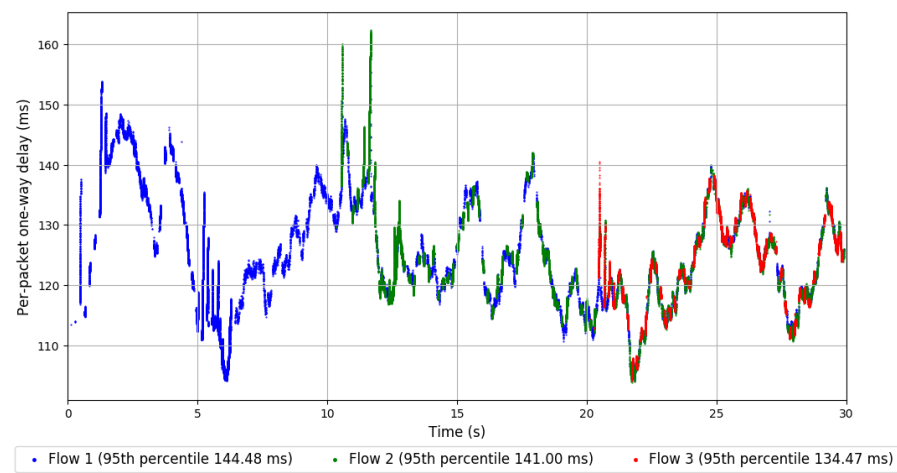
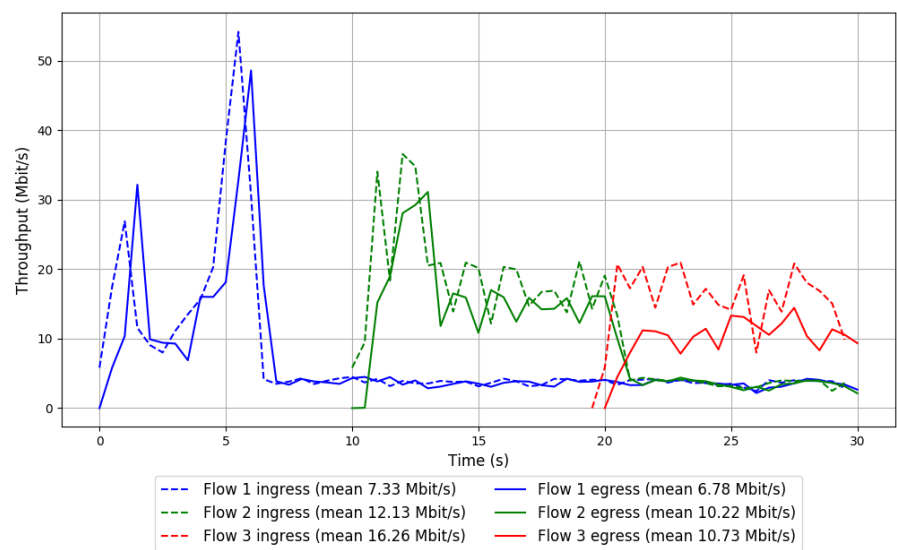
-- Flow 3:

Average throughput: 10.73 Mbit/s

95th percentile per-packet one-way delay: 134.474 ms

Loss rate: 34.71%

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

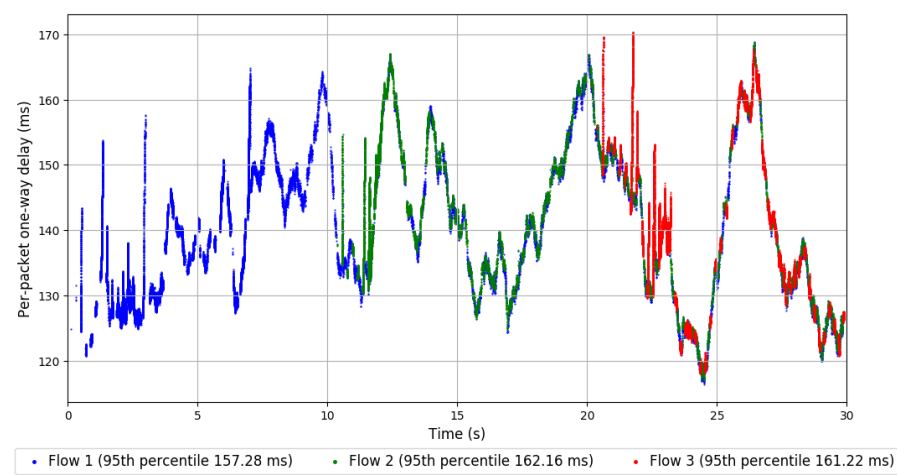
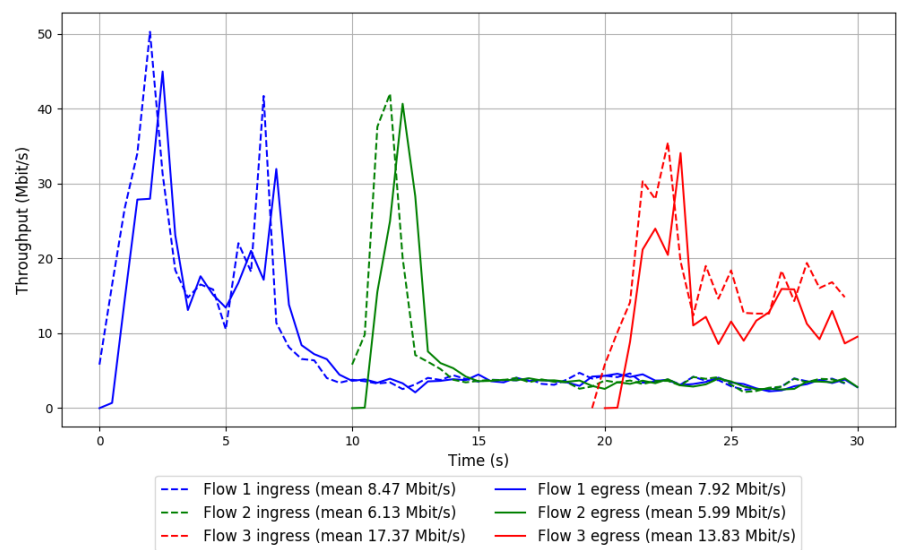


Run 3: Statistics of TaoVA-100x

Start at: 2018-10-26 10:42:10  
End at: 2018-10-26 10:42:40  
Local clock offset: -1.328 ms  
Remote clock offset: 26.367 ms

# Below is generated by plot.py at 2018-10-26 11:44:24  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 16.40 Mbit/s  
95th percentile per-packet one-way delay: 160.667 ms  
Loss rate: 11.00%  
-- Flow 1:  
Average throughput: 7.92 Mbit/s  
95th percentile per-packet one-way delay: 157.277 ms  
Loss rate: 7.09%  
-- Flow 2:  
Average throughput: 5.99 Mbit/s  
95th percentile per-packet one-way delay: 162.161 ms  
Loss rate: 3.29%  
-- Flow 3:  
Average throughput: 13.83 Mbit/s  
95th percentile per-packet one-way delay: 161.219 ms  
Loss rate: 22.17%

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

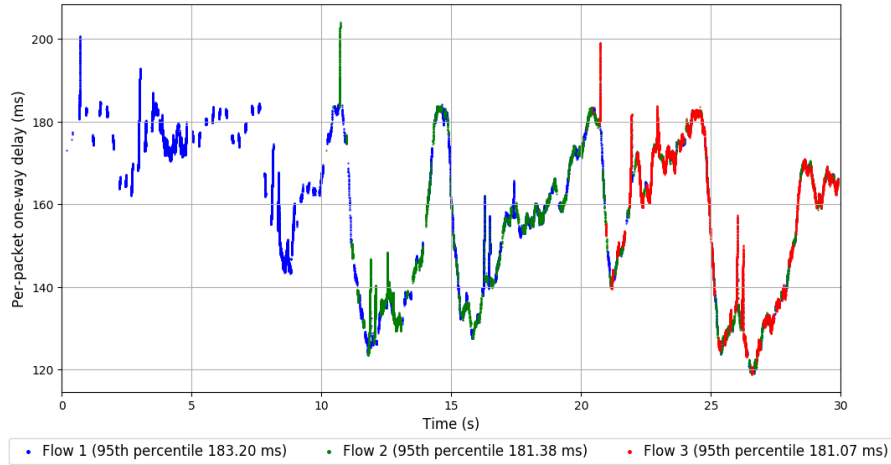
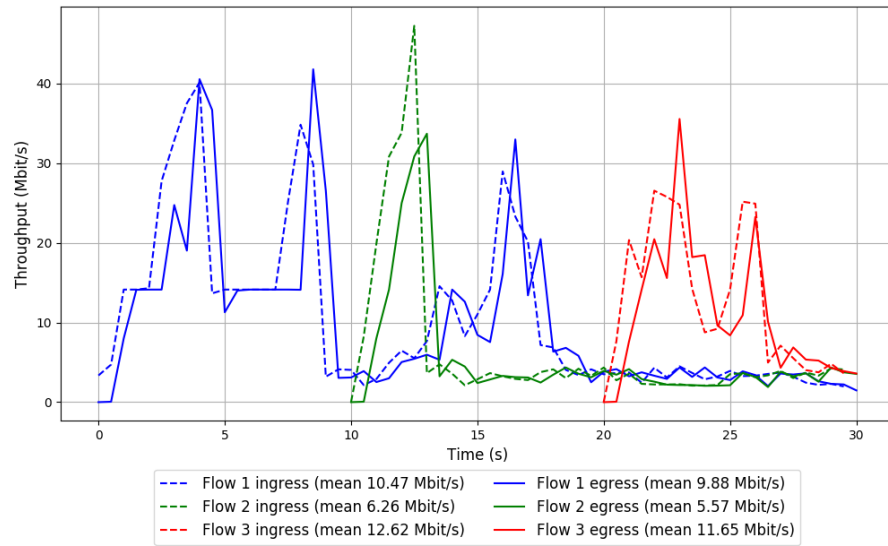


Run 4: Statistics of TaoVA-100x

Start at: 2018-10-26 11:07:20  
End at: 2018-10-26 11:07:50  
Local clock offset: 0.285 ms  
Remote clock offset: 30.128 ms

# Below is generated by plot.py at 2018-10-26 11:44:24  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 17.38 Mbit/s  
95th percentile per-packet one-way delay: 182.816 ms  
Loss rate: 8.44%  
-- Flow 1:  
Average throughput: 9.88 Mbit/s  
95th percentile per-packet one-way delay: 183.197 ms  
Loss rate: 6.37%  
-- Flow 2:  
Average throughput: 5.57 Mbit/s  
95th percentile per-packet one-way delay: 181.379 ms  
Loss rate: 12.04%  
-- Flow 3:  
Average throughput: 11.65 Mbit/s  
95th percentile per-packet one-way delay: 181.074 ms  
Loss rate: 10.02%

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

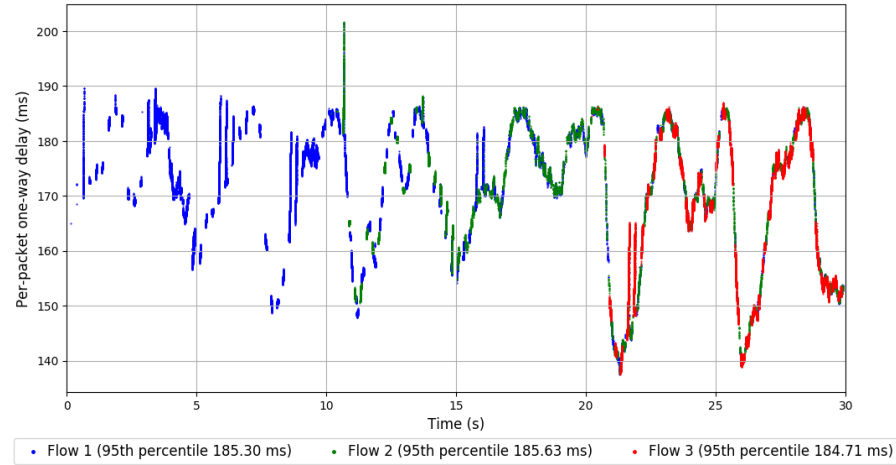
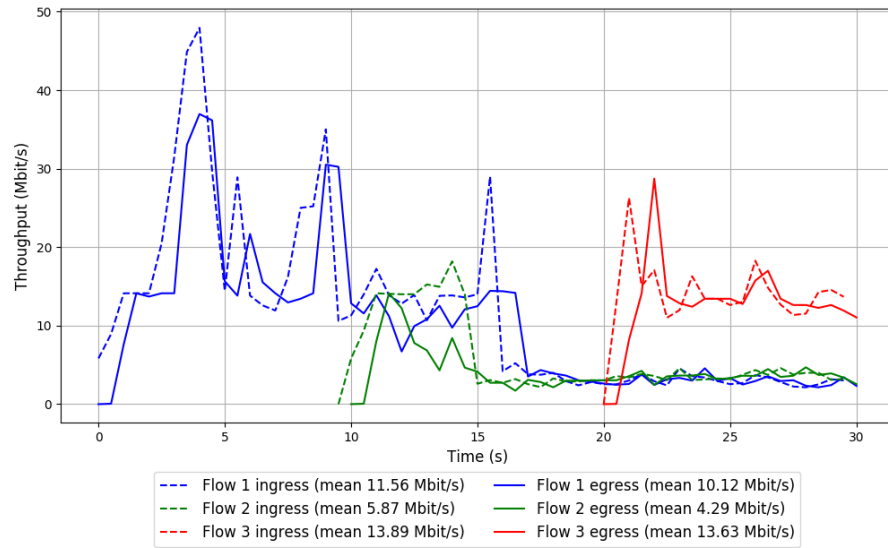


Run 5: Statistics of TaoVA-100x

Start at: 2018-10-26 11:33:07  
End at: 2018-10-26 11:33:37  
Local clock offset: 2.127 ms  
Remote clock offset: -27.685 ms

# Below is generated by plot.py at 2018-10-26 11:44:26  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 17.38 Mbit/s  
95th percentile per-packet one-way delay: 185.284 ms  
Loss rate: 13.93%  
-- Flow 1:  
Average throughput: 10.12 Mbit/s  
95th percentile per-packet one-way delay: 185.303 ms  
Loss rate: 13.07%  
-- Flow 2:  
Average throughput: 4.29 Mbit/s  
95th percentile per-packet one-way delay: 185.634 ms  
Loss rate: 27.72%  
-- Flow 3:  
Average throughput: 13.63 Mbit/s  
95th percentile per-packet one-way delay: 184.708 ms  
Loss rate: 4.34%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-10-26 09:53:54

End at: 2018-10-26 09:54:24

Local clock offset: -1.846 ms

Remote clock offset: 8.883 ms

# Below is generated by plot.py at 2018-10-26 11:44:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 15.79 Mbit/s

95th percentile per-packet one-way delay: 99.695 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 10.79 Mbit/s

95th percentile per-packet one-way delay: 99.857 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 4.90 Mbit/s

95th percentile per-packet one-way delay: 99.556 ms

Loss rate: 1.27%

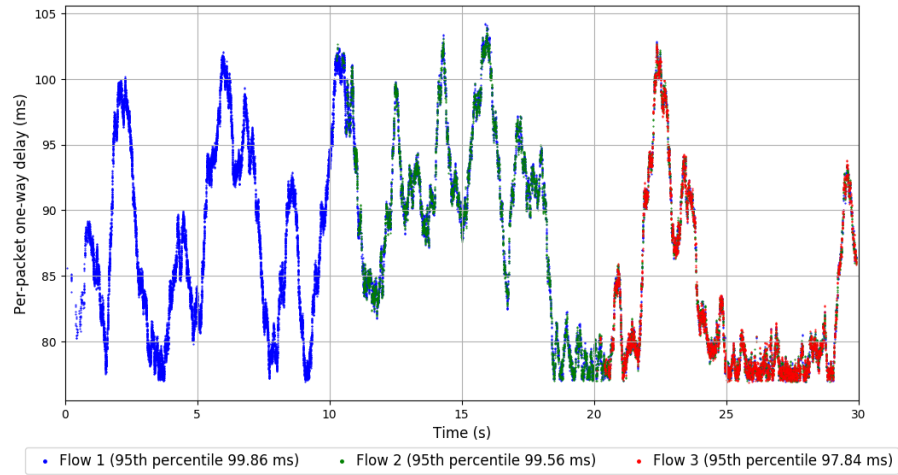
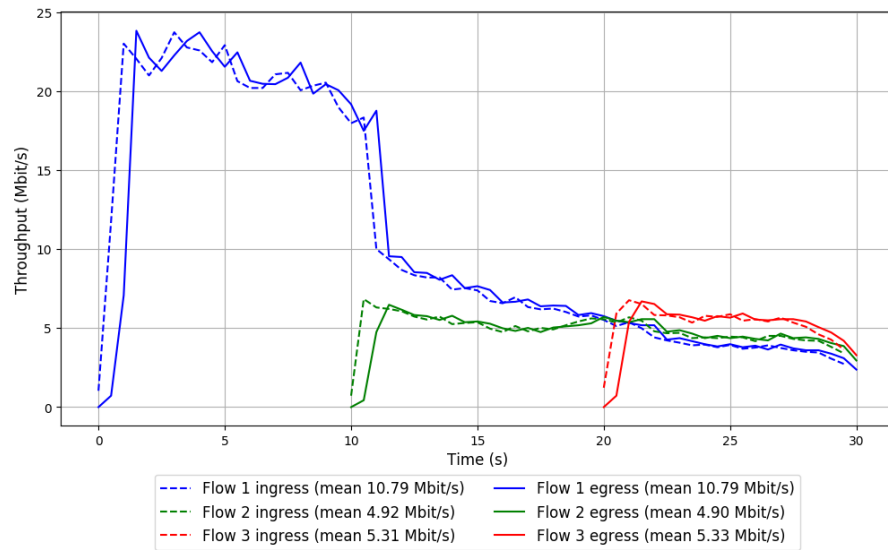
-- Flow 3:

Average throughput: 5.33 Mbit/s

95th percentile per-packet one-way delay: 97.836 ms

Loss rate: 1.07%

# Run 1: Report of TCP Vegas — Data Link

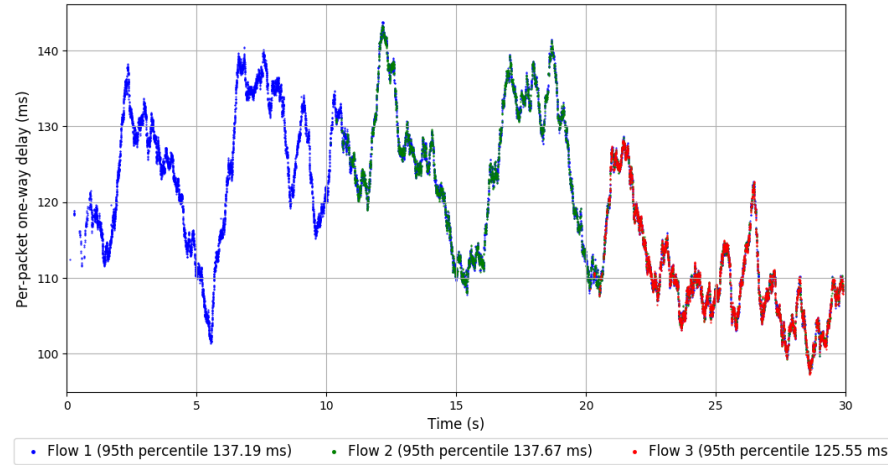
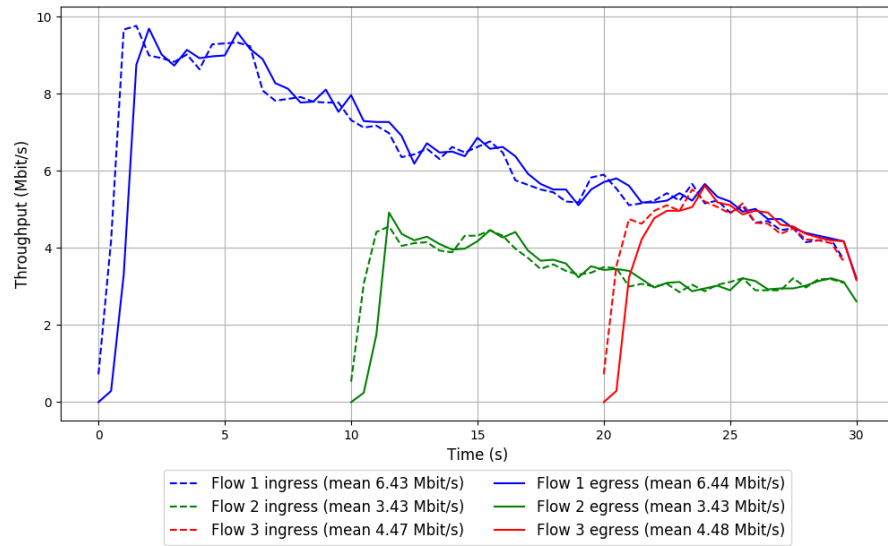


Run 2: Statistics of TCP Vegas

Start at: 2018-10-26 10:18:22  
End at: 2018-10-26 10:18:52  
Local clock offset: -1.546 ms  
Remote clock offset: 15.168 ms

# Below is generated by plot.py at 2018-10-26 11:44:26  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 10.19 Mbit/s  
95th percentile per-packet one-way delay: 136.831 ms  
Loss rate: 0.62%  
-- Flow 1:  
Average throughput: 6.44 Mbit/s  
95th percentile per-packet one-way delay: 137.188 ms  
Loss rate: 0.35%  
-- Flow 2:  
Average throughput: 3.43 Mbit/s  
95th percentile per-packet one-way delay: 137.668 ms  
Loss rate: 0.81%  
-- Flow 3:  
Average throughput: 4.48 Mbit/s  
95th percentile per-packet one-way delay: 125.549 ms  
Loss rate: 1.51%

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

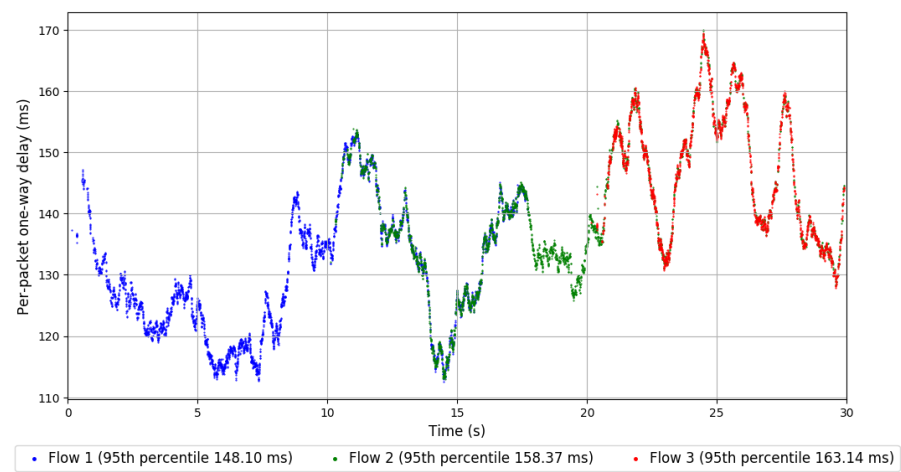
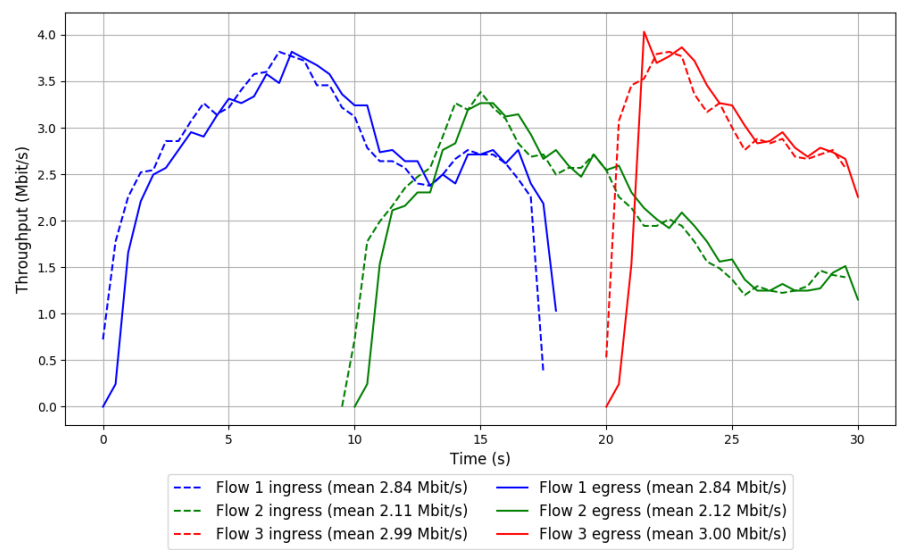


Run 3: Statistics of TCP Vegas

Start at: 2018-10-26 10:43:34  
End at: 2018-10-26 10:44:04  
Local clock offset: -1.265 ms  
Remote clock offset: 30.555 ms

# Below is generated by plot.py at 2018-10-26 11:44:26  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 4.07 Mbit/s  
95th percentile per-packet one-way delay: 158.774 ms  
Loss rate: 0.70%  
-- Flow 1:  
Average throughput: 2.84 Mbit/s  
95th percentile per-packet one-way delay: 148.104 ms  
Loss rate: 0.05%  
-- Flow 2:  
Average throughput: 2.12 Mbit/s  
95th percentile per-packet one-way delay: 158.366 ms  
Loss rate: 0.65%  
-- Flow 3:  
Average throughput: 3.00 Mbit/s  
95th percentile per-packet one-way delay: 163.139 ms  
Loss rate: 1.86%

Run 3: Report of TCP Vegas — Data Link

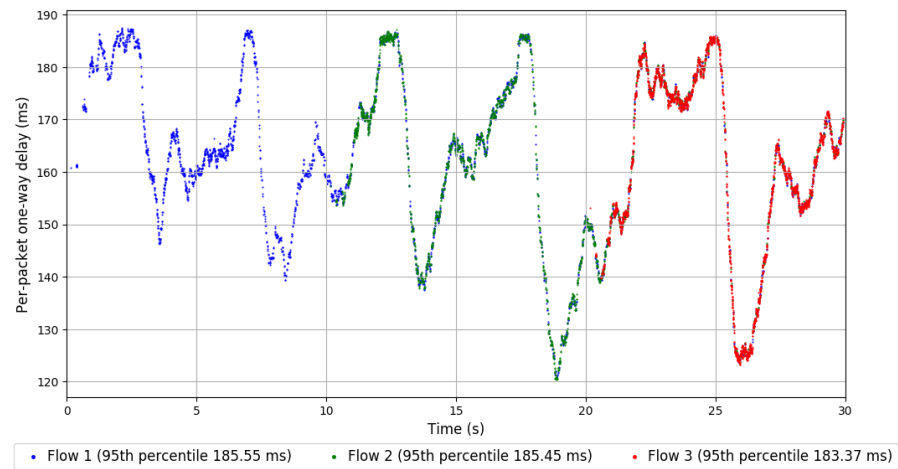
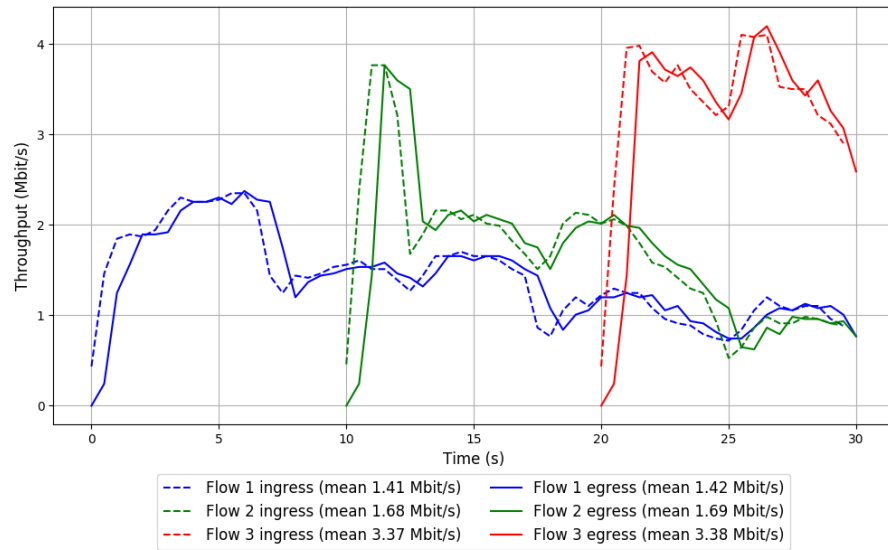


Run 4: Statistics of TCP Vegas

Start at: 2018-10-26 11:08:49  
End at: 2018-10-26 11:09:19  
Local clock offset: 0.709 ms  
Remote clock offset: 20.684 ms

```
# Below is generated by plot.py at 2018-10-26 11:44:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.64 Mbit/s
95th percentile per-packet one-way delay: 185.217 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 185.551 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 1.69 Mbit/s
95th percentile per-packet one-way delay: 185.452 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 3.38 Mbit/s
95th percentile per-packet one-way delay: 183.374 ms
Loss rate: 2.10%
```

#### Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-10-26 11:34:57

End at: 2018-10-26 11:35:27

Local clock offset: 1.439 ms

Remote clock offset: -25.0 ms

# Below is generated by plot.py at 2018-10-26 11:44:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.79 Mbit/s

95th percentile per-packet one-way delay: 181.076 ms

Loss rate: 1.10%

-- Flow 1:

Average throughput: 1.82 Mbit/s

95th percentile per-packet one-way delay: 180.672 ms

Loss rate: 0.81%

-- Flow 2:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 180.837 ms

Loss rate: 1.64%

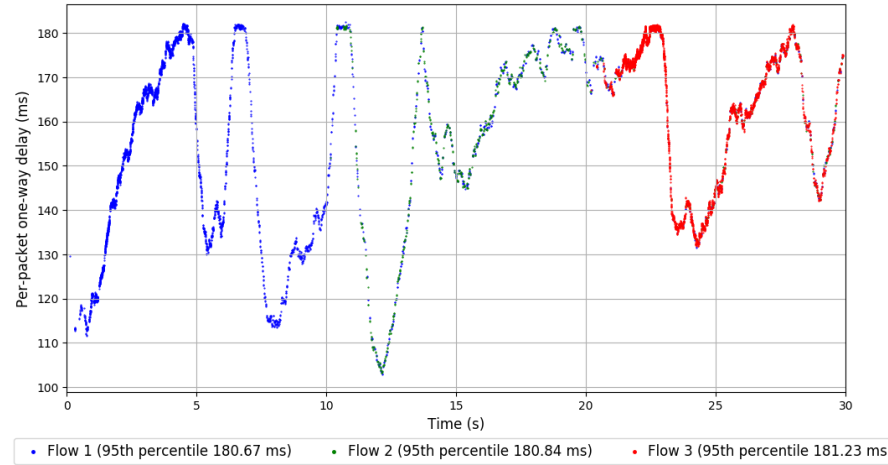
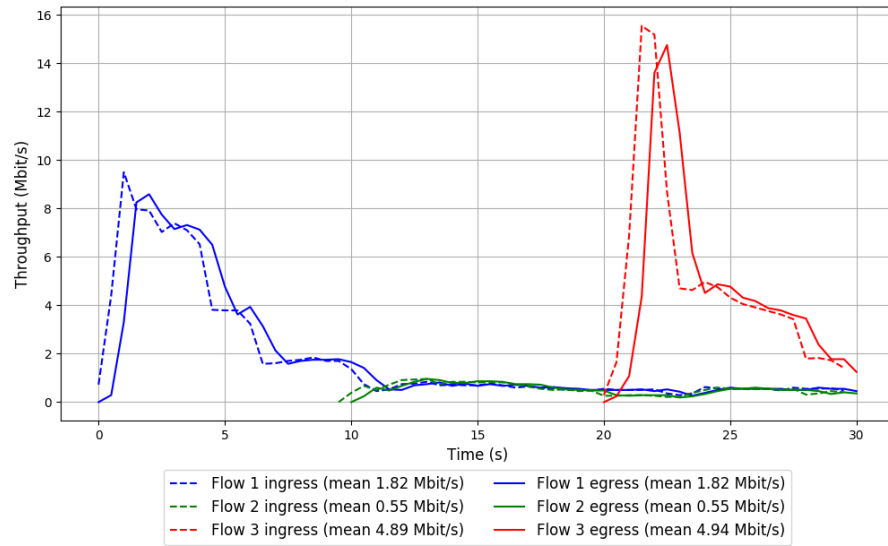
-- Flow 3:

Average throughput: 4.94 Mbit/s

95th percentile per-packet one-way delay: 181.231 ms

Loss rate: 1.31%

### Run 5: Report of TCP Vegas — Data Link

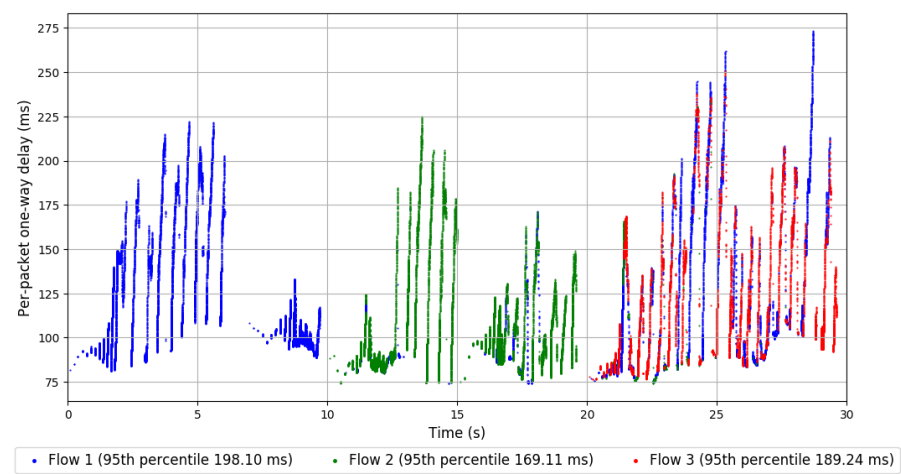
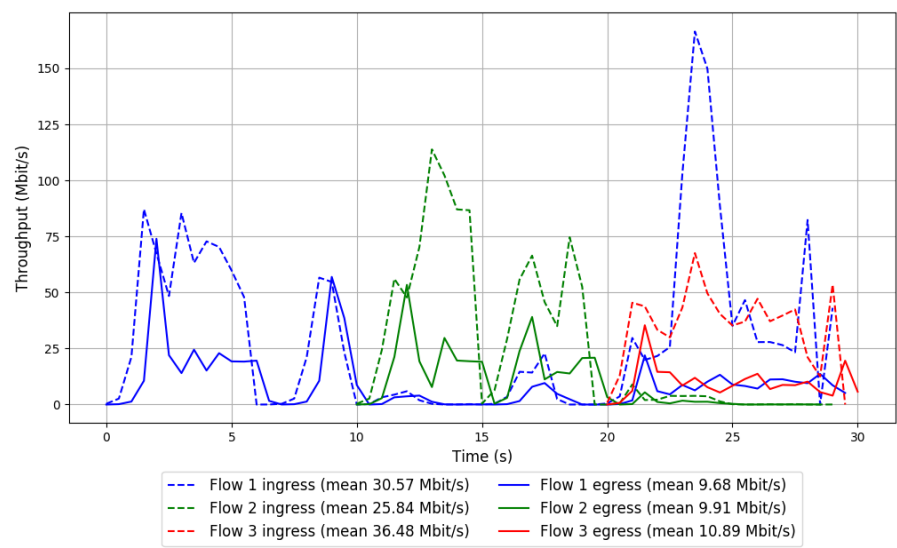


Run 1: Statistics of Verus

Start at: 2018-10-26 09:46:04  
End at: 2018-10-26 09:46:34  
Local clock offset: -1.811 ms  
Remote clock offset: 13.447 ms

# Below is generated by plot.py at 2018-10-26 11:44:33  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 19.14 Mbit/s  
95th percentile per-packet one-way delay: 190.010 ms  
Loss rate: 67.36%  
-- Flow 1:  
Average throughput: 9.68 Mbit/s  
95th percentile per-packet one-way delay: 198.099 ms  
Loss rate: 68.20%  
-- Flow 2:  
Average throughput: 9.91 Mbit/s  
95th percentile per-packet one-way delay: 169.106 ms  
Loss rate: 63.98%  
-- Flow 3:  
Average throughput: 10.89 Mbit/s  
95th percentile per-packet one-way delay: 189.240 ms  
Loss rate: 70.05%

Run 1: Report of Verus — Data Link

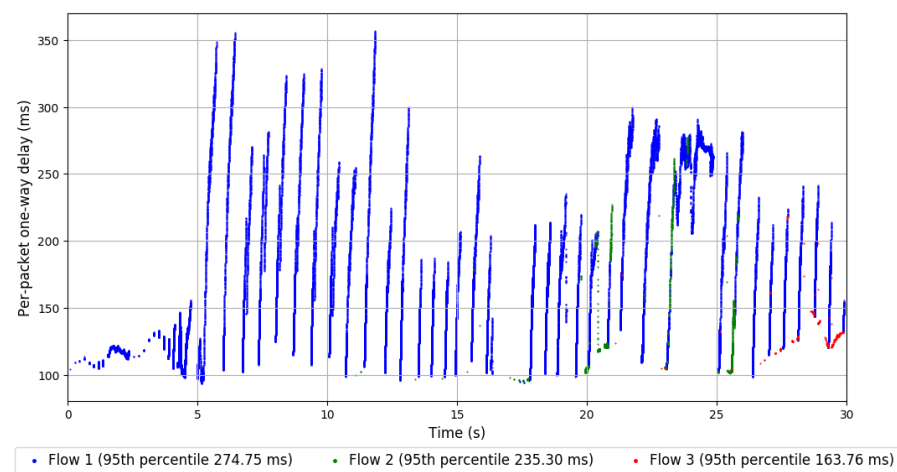
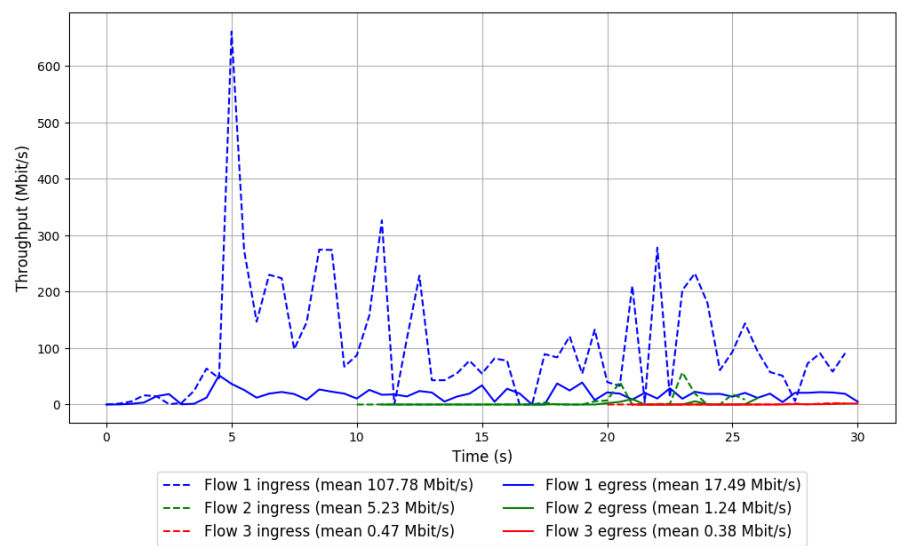


Run 2: Statistics of Verus

Start at: 2018-10-26 10:10:03  
End at: 2018-10-26 10:10:33  
Local clock offset: -1.377 ms  
Remote clock offset: 12.949 ms

# Below is generated by plot.py at 2018-10-26 11:44:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 18.22 Mbit/s  
95th percentile per-packet one-way delay: 274.125 ms  
Loss rate: 83.54%  
-- Flow 1:  
Average throughput: 17.49 Mbit/s  
95th percentile per-packet one-way delay: 274.752 ms  
Loss rate: 83.77%  
-- Flow 2:  
Average throughput: 1.24 Mbit/s  
95th percentile per-packet one-way delay: 235.298 ms  
Loss rate: 77.64%  
-- Flow 3:  
Average throughput: 0.38 Mbit/s  
95th percentile per-packet one-way delay: 163.760 ms  
Loss rate: 29.97%

Run 2: Report of Verus — Data Link

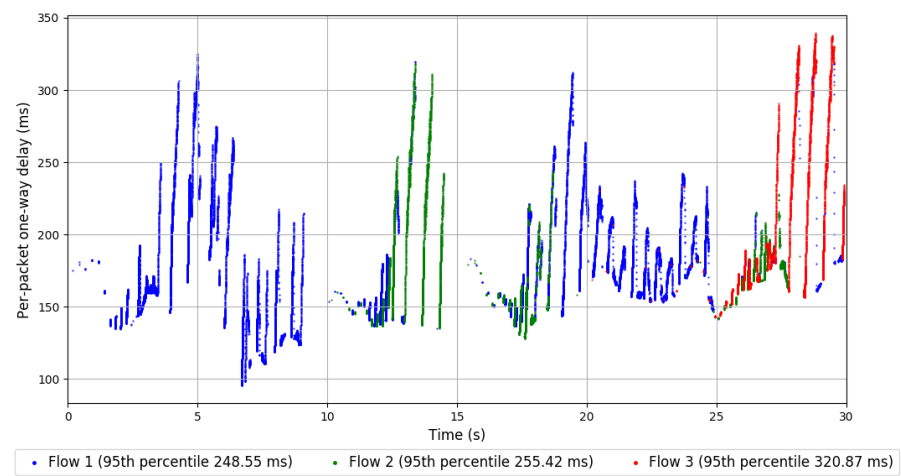
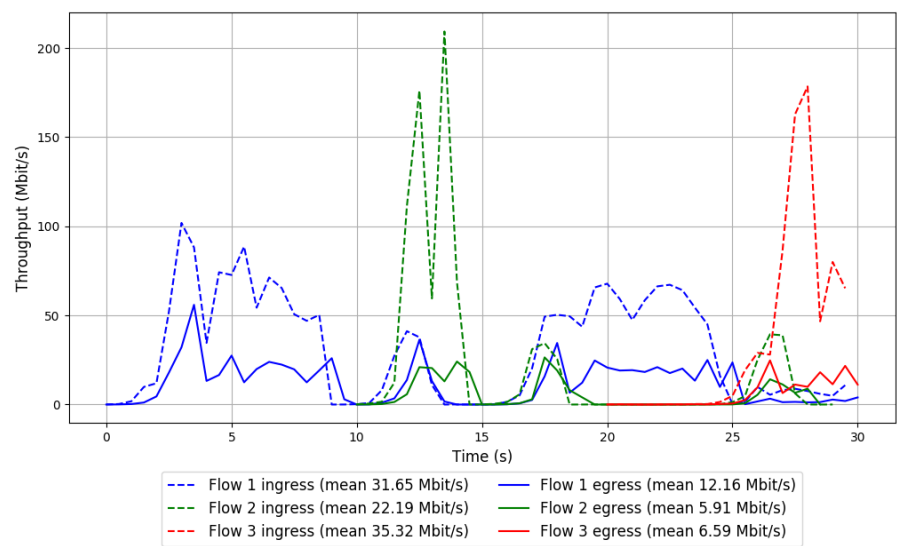


Run 3: Statistics of Verus

Start at: 2018-10-26 10:35:10  
End at: 2018-10-26 10:35:40  
Local clock offset: -1.438 ms  
Remote clock offset: 19.196 ms

# Below is generated by plot.py at 2018-10-26 11:44:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 17.89 Mbit/s  
95th percentile per-packet one-way delay: 267.113 ms  
Loss rate: 69.20%  
-- Flow 1:  
Average throughput: 12.16 Mbit/s  
95th percentile per-packet one-way delay: 248.550 ms  
Loss rate: 61.91%  
-- Flow 2:  
Average throughput: 5.91 Mbit/s  
95th percentile per-packet one-way delay: 255.417 ms  
Loss rate: 75.05%  
-- Flow 3:  
Average throughput: 6.59 Mbit/s  
95th percentile per-packet one-way delay: 320.873 ms  
Loss rate: 81.78%

Run 3: Report of Verus — Data Link

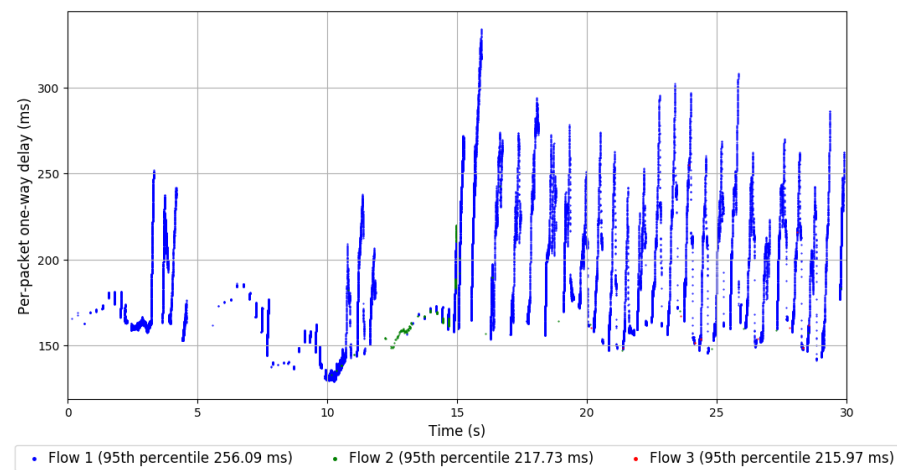
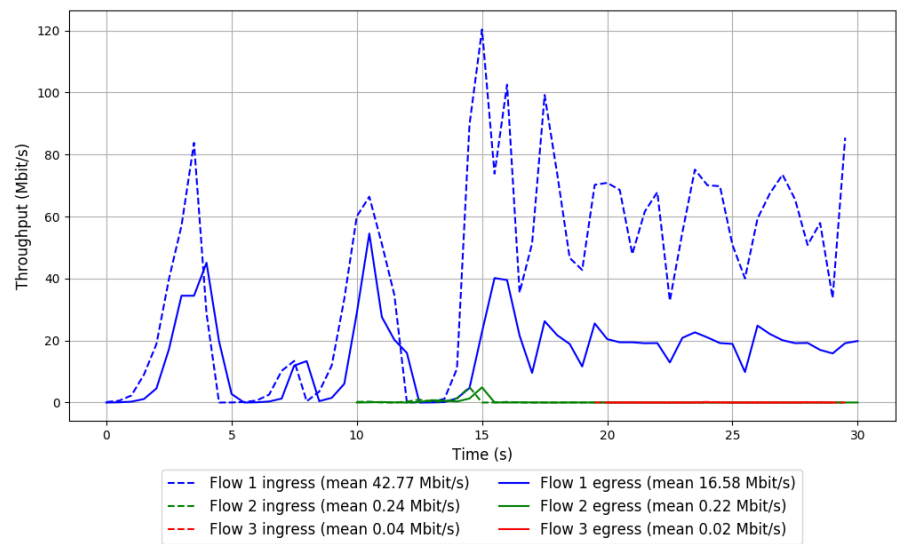


Run 4: Statistics of Verus

Start at: 2018-10-26 11:00:25  
End at: 2018-10-26 11:00:55  
Local clock offset: -1.19 ms  
Remote clock offset: 37.165 ms

# Below is generated by plot.py at 2018-10-26 11:44:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 16.73 Mbit/s  
95th percentile per-packet one-way delay: 255.921 ms  
Loss rate: 61.16%  
-- Flow 1:  
Average throughput: 16.58 Mbit/s  
95th percentile per-packet one-way delay: 256.094 ms  
Loss rate: 61.36%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 217.734 ms  
Loss rate: 8.68%  
-- Flow 3:  
Average throughput: 0.02 Mbit/s  
95th percentile per-packet one-way delay: 215.975 ms  
Loss rate: 58.82%

Run 4: Report of Verus — Data Link

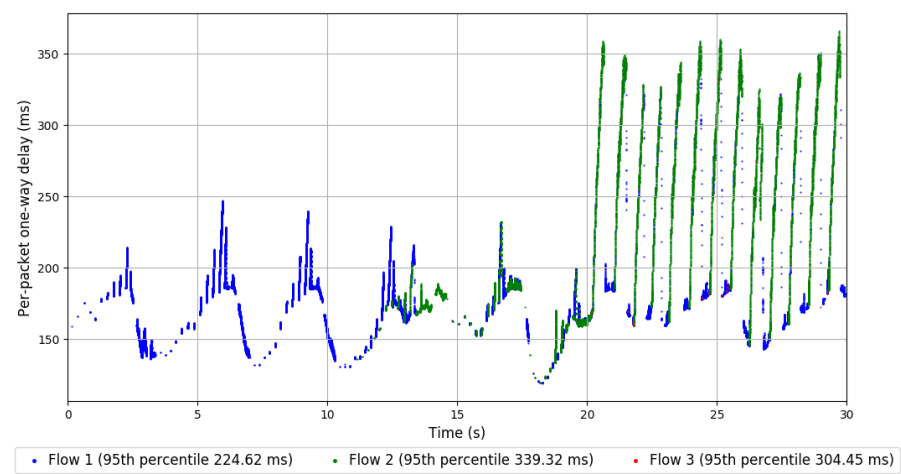
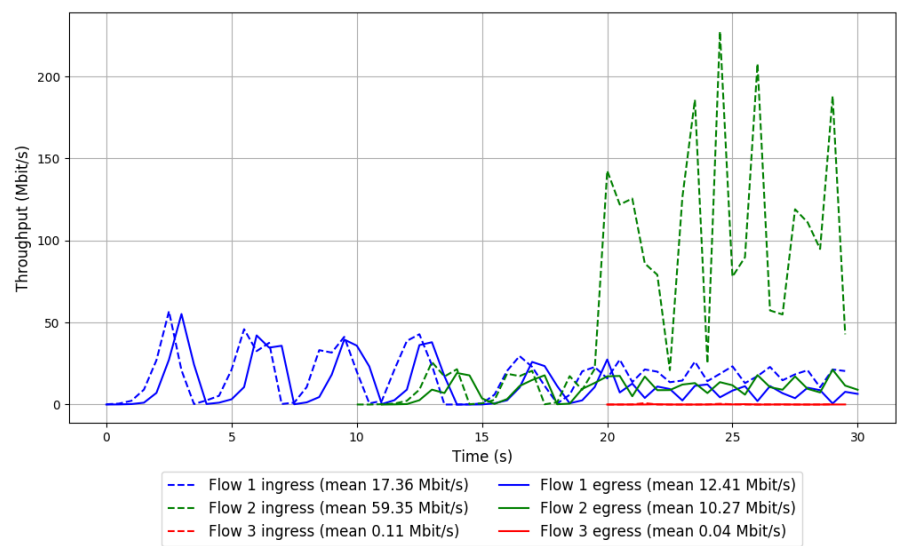


Run 5: Statistics of Verus

Start at: 2018-10-26 11:26:03  
End at: 2018-10-26 11:26:33  
Local clock offset: 2.485 ms  
Remote clock offset: -20.095 ms

# Below is generated by plot.py at 2018-10-26 11:44:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 18.85 Mbit/s  
95th percentile per-packet one-way delay: 316.269 ms  
Loss rate: 67.13%  
-- Flow 1:  
Average throughput: 12.41 Mbit/s  
95th percentile per-packet one-way delay: 224.616 ms  
Loss rate: 28.98%  
-- Flow 2:  
Average throughput: 10.27 Mbit/s  
95th percentile per-packet one-way delay: 339.320 ms  
Loss rate: 83.87%  
-- Flow 3:  
Average throughput: 0.04 Mbit/s  
95th percentile per-packet one-way delay: 304.451 ms  
Loss rate: 62.35%

Run 5: Report of Verus — Data Link

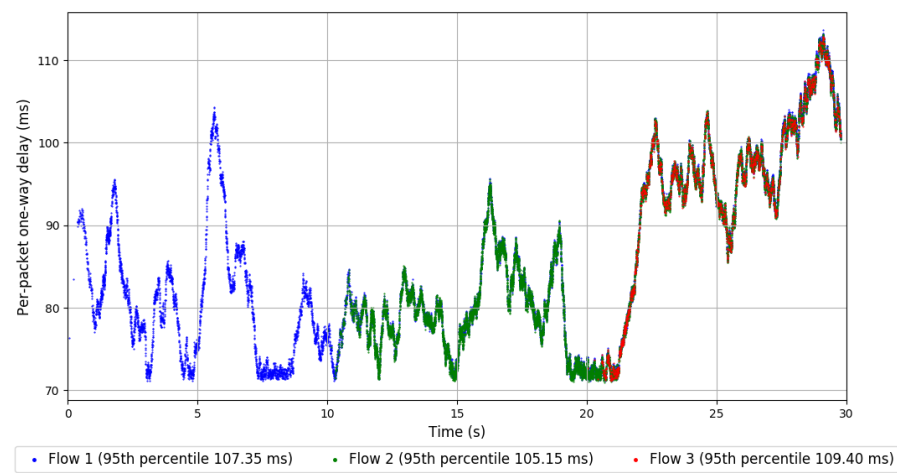
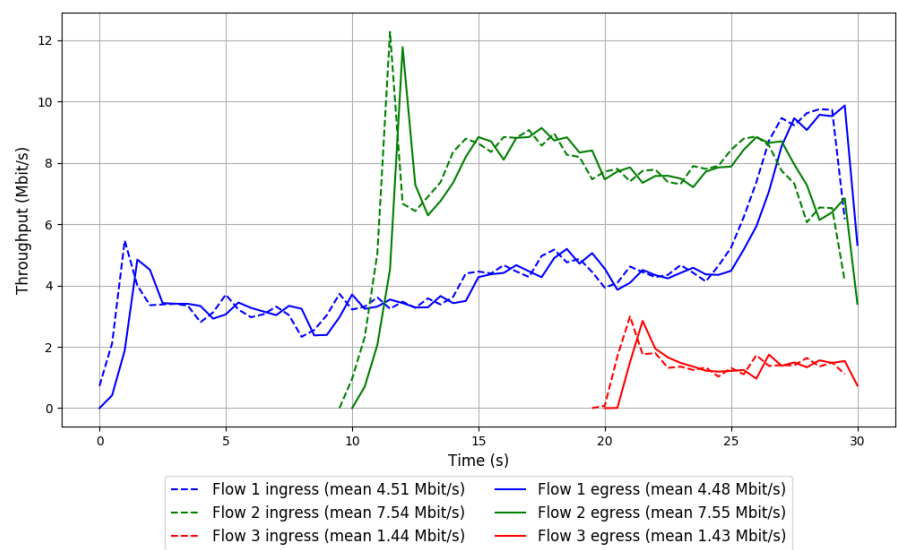


Run 1: Statistics of PCC-Vivace

Start at: 2018-10-26 09:50:00  
End at: 2018-10-26 09:50:30  
Local clock offset: -1.842 ms  
Remote clock offset: 15.035 ms

# Below is generated by plot.py at 2018-10-26 11:44:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 9.97 Mbit/s  
95th percentile per-packet one-way delay: 106.886 ms  
Loss rate: 0.92%  
-- Flow 1:  
Average throughput: 4.48 Mbit/s  
95th percentile per-packet one-way delay: 107.352 ms  
Loss rate: 1.07%  
-- Flow 2:  
Average throughput: 7.55 Mbit/s  
95th percentile per-packet one-way delay: 105.151 ms  
Loss rate: 0.67%  
-- Flow 3:  
Average throughput: 1.43 Mbit/s  
95th percentile per-packet one-way delay: 109.403 ms  
Loss rate: 2.14%

Run 1: Report of PCC-Vivace — Data Link

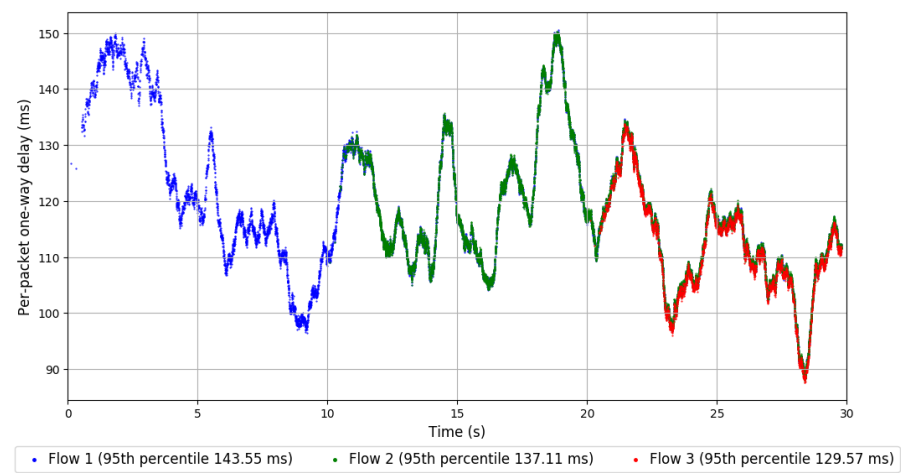
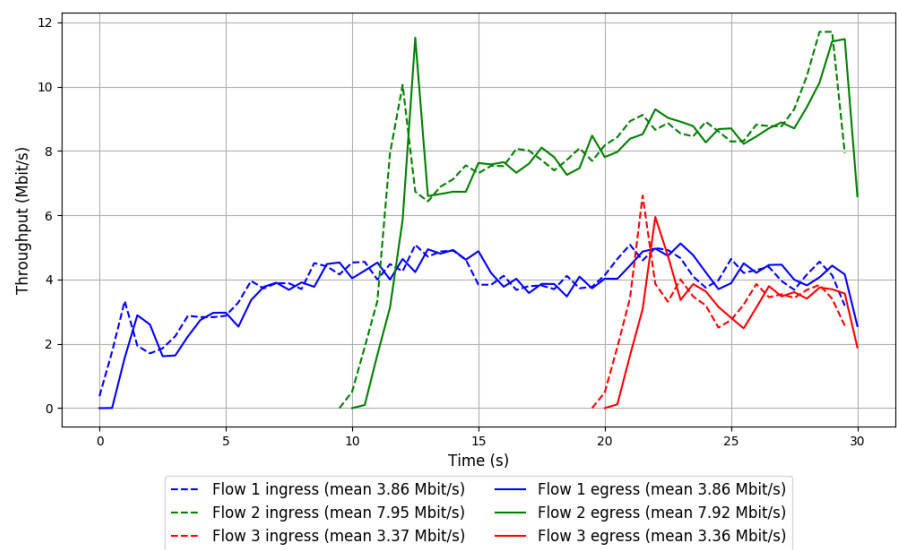


Run 2: Statistics of PCC-Vivace

Start at: 2018-10-26 10:14:14  
End at: 2018-10-26 10:14:44  
Local clock offset: -1.39 ms  
Remote clock offset: 13.092 ms

# Below is generated by plot.py at 2018-10-26 11:44:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 10.22 Mbit/s  
95th percentile per-packet one-way delay: 140.349 ms  
Loss rate: 1.12%  
-- Flow 1:  
Average throughput: 3.86 Mbit/s  
95th percentile per-packet one-way delay: 143.551 ms  
Loss rate: 0.66%  
-- Flow 2:  
Average throughput: 7.92 Mbit/s  
95th percentile per-packet one-way delay: 137.113 ms  
Loss rate: 1.26%  
-- Flow 3:  
Average throughput: 3.36 Mbit/s  
95th percentile per-packet one-way delay: 129.570 ms  
Loss rate: 2.06%

Run 2: Report of PCC-Vivace — Data Link

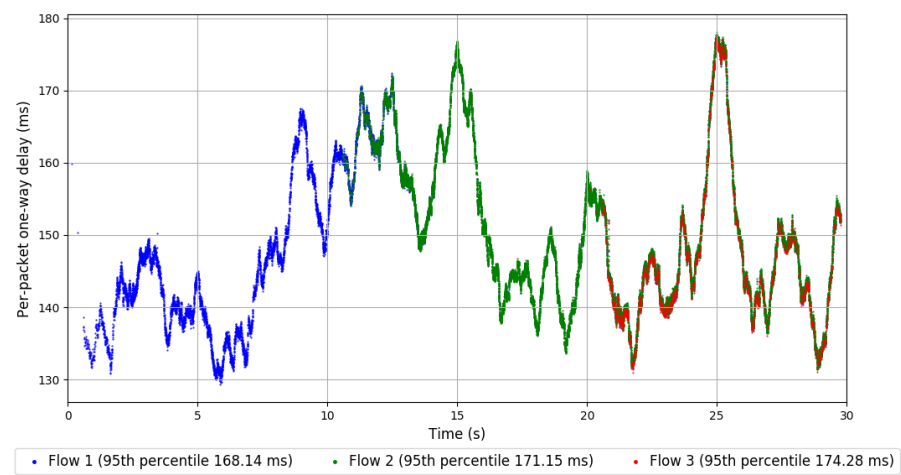
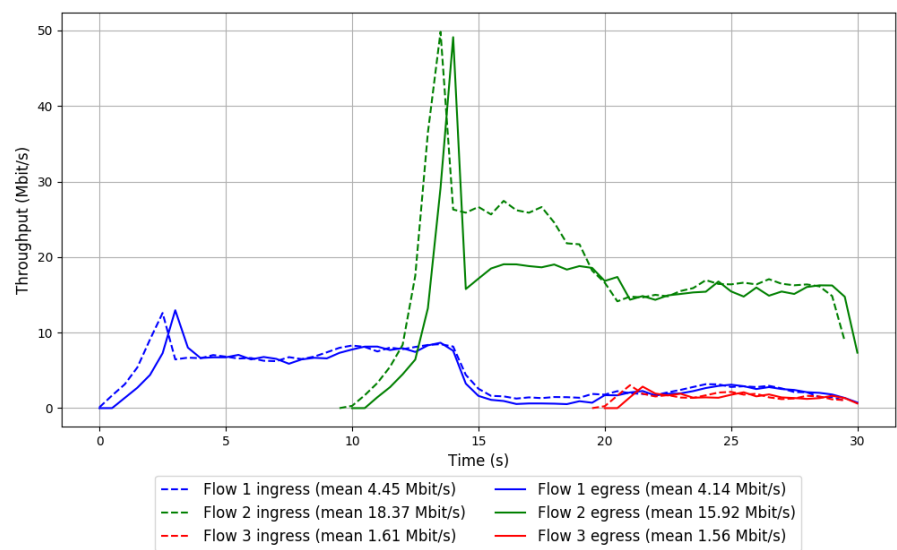


Run 3: Statistics of PCC-Vivace

Start at: 2018-10-26 10:39:23  
End at: 2018-10-26 10:39:53  
Local clock offset: -1.086 ms  
Remote clock offset: 31.927 ms

# Below is generated by plot.py at 2018-10-26 11:44:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 15.22 Mbit/s  
95th percentile per-packet one-way delay: 169.727 ms  
Loss rate: 12.28%  
-- Flow 1:  
Average throughput: 4.14 Mbit/s  
95th percentile per-packet one-way delay: 168.138 ms  
Loss rate: 7.64%  
-- Flow 2:  
Average throughput: 15.92 Mbit/s  
95th percentile per-packet one-way delay: 171.153 ms  
Loss rate: 14.27%  
-- Flow 3:  
Average throughput: 1.56 Mbit/s  
95th percentile per-packet one-way delay: 174.275 ms  
Loss rate: 5.26%

Run 3: Report of PCC-Vivace — Data Link

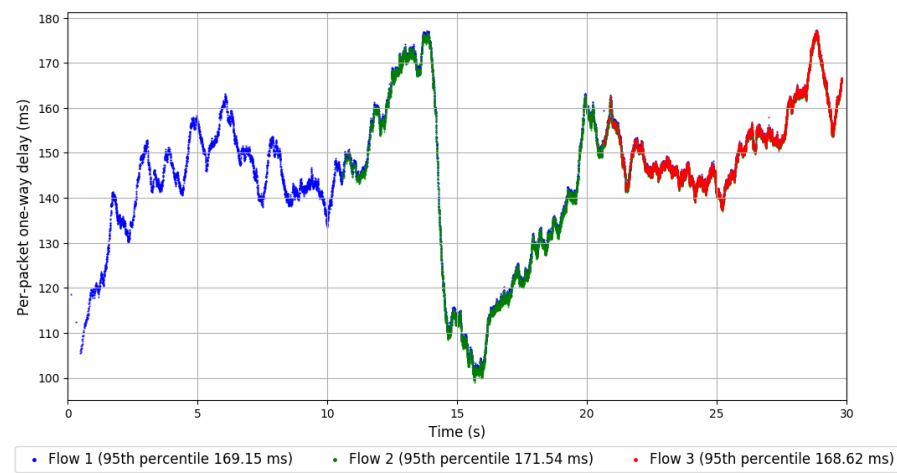
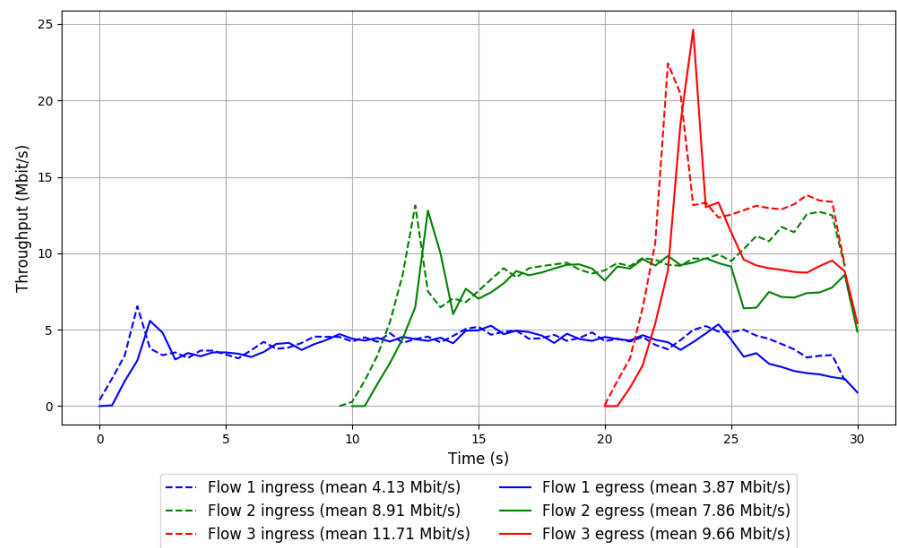


Run 4: Statistics of PCC-Vivace

Start at: 2018-10-26 11:04:33  
End at: 2018-10-26 11:05:03  
Local clock offset: -0.346 ms  
Remote clock offset: 46.683 ms

# Below is generated by plot.py at 2018-10-26 11:44:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.22 Mbit/s  
95th percentile per-packet one-way delay: 170.874 ms  
Loss rate: 12.80%  
-- Flow 1:  
Average throughput: 3.87 Mbit/s  
95th percentile per-packet one-way delay: 169.154 ms  
Loss rate: 6.86%  
-- Flow 2:  
Average throughput: 7.86 Mbit/s  
95th percentile per-packet one-way delay: 171.536 ms  
Loss rate: 12.66%  
-- Flow 3:  
Average throughput: 9.66 Mbit/s  
95th percentile per-packet one-way delay: 168.624 ms  
Loss rate: 19.37%

Run 4: Report of PCC-Vivace — Data Link

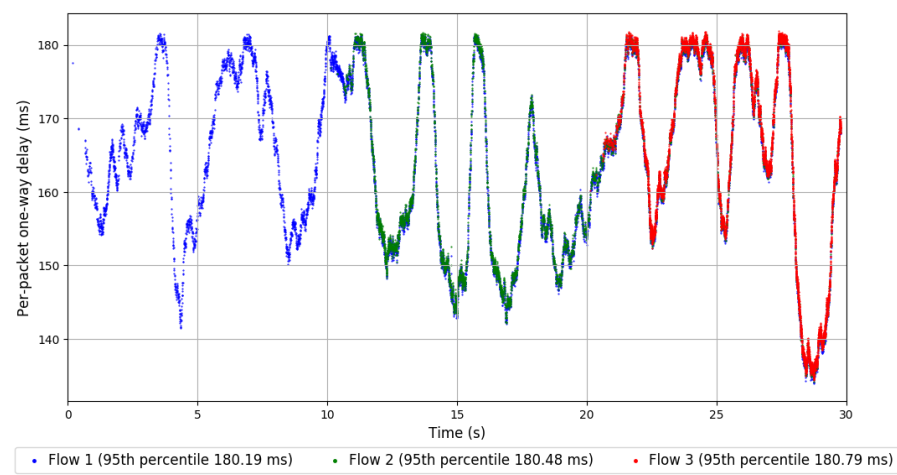
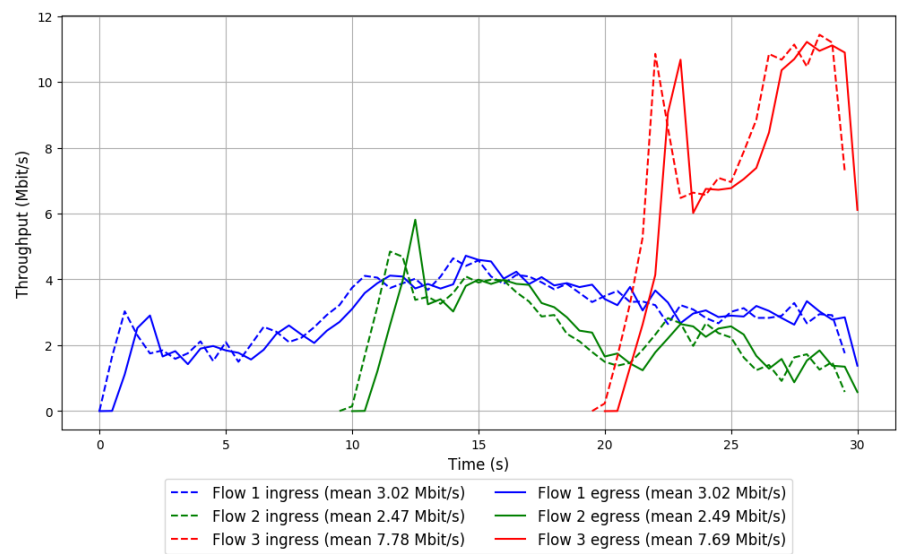


Run 5: Statistics of PCC-Vivace

Start at: 2018-10-26 11:30:20  
End at: 2018-10-26 11:30:50  
Local clock offset: 2.522 ms  
Remote clock offset: -20.705 ms

# Below is generated by plot.py at 2018-10-26 11:44:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 7.18 Mbit/s  
95th percentile per-packet one-way delay: 180.504 ms  
Loss rate: 1.63%  
-- Flow 1:  
Average throughput: 3.02 Mbit/s  
95th percentile per-packet one-way delay: 180.194 ms  
Loss rate: 0.80%  
-- Flow 2:  
Average throughput: 2.49 Mbit/s  
95th percentile per-packet one-way delay: 180.481 ms  
Loss rate: 0.54%  
-- Flow 3:  
Average throughput: 7.69 Mbit/s  
95th percentile per-packet one-way delay: 180.793 ms  
Loss rate: 3.30%

Run 5: Report of PCC-Vivace — Data Link

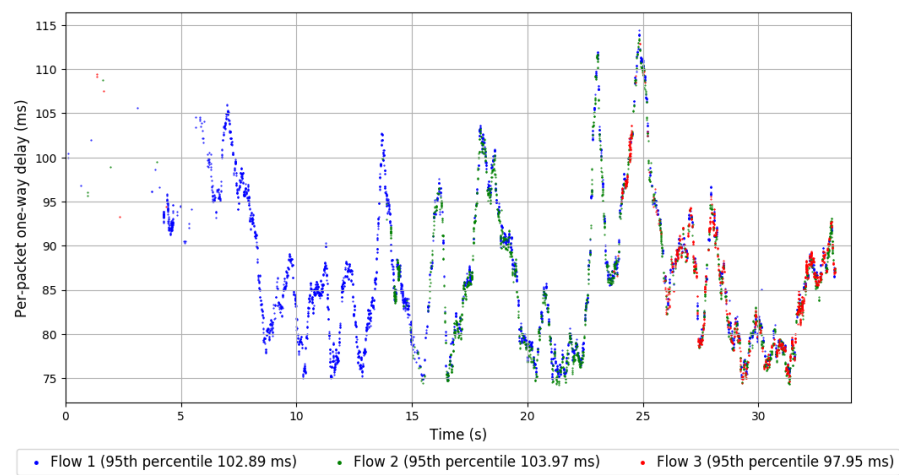
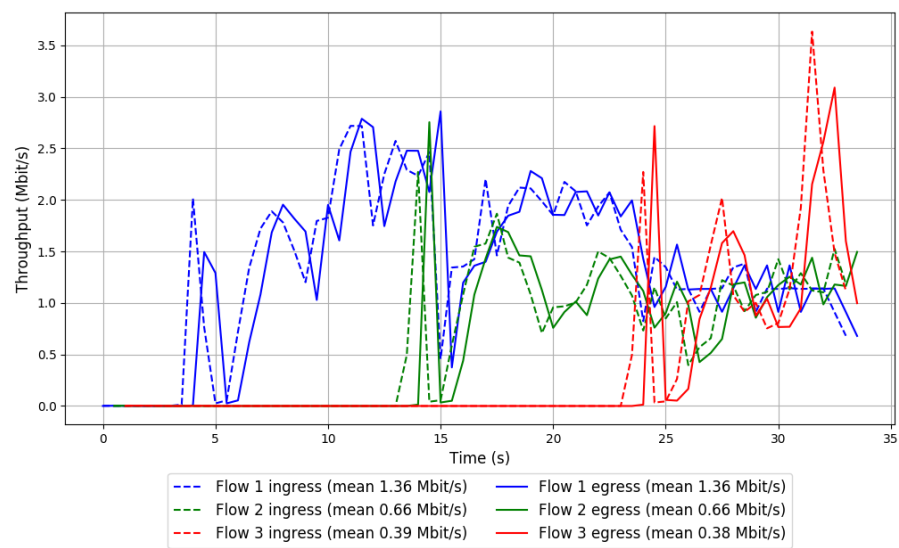


Run 1: Statistics of WebRTC media

Start at: 2018-10-26 09:47:27  
End at: 2018-10-26 09:47:57  
Local clock offset: -1.898 ms  
Remote clock offset: 12.602 ms

# Below is generated by plot.py at 2018-10-26 11:44:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.38 Mbit/s  
95th percentile per-packet one-way delay: 102.575 ms  
Loss rate: 0.52%  
-- Flow 1:  
Average throughput: 1.36 Mbit/s  
95th percentile per-packet one-way delay: 102.894 ms  
Loss rate: 0.25%  
-- Flow 2:  
Average throughput: 0.66 Mbit/s  
95th percentile per-packet one-way delay: 103.971 ms  
Loss rate: 0.52%  
-- Flow 3:  
Average throughput: 0.38 Mbit/s  
95th percentile per-packet one-way delay: 97.954 ms  
Loss rate: 1.49%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-10-26 10:11:36

End at: 2018-10-26 10:12:06

Local clock offset: -1.48 ms

Remote clock offset: 7.566 ms

# Below is generated by plot.py at 2018-10-26 11:44:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 2.70 Mbit/s

95th percentile per-packet one-way delay: 126.388 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 1.66 Mbit/s

95th percentile per-packet one-way delay: 128.862 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 1.07 Mbit/s

95th percentile per-packet one-way delay: 123.802 ms

Loss rate: 1.08%

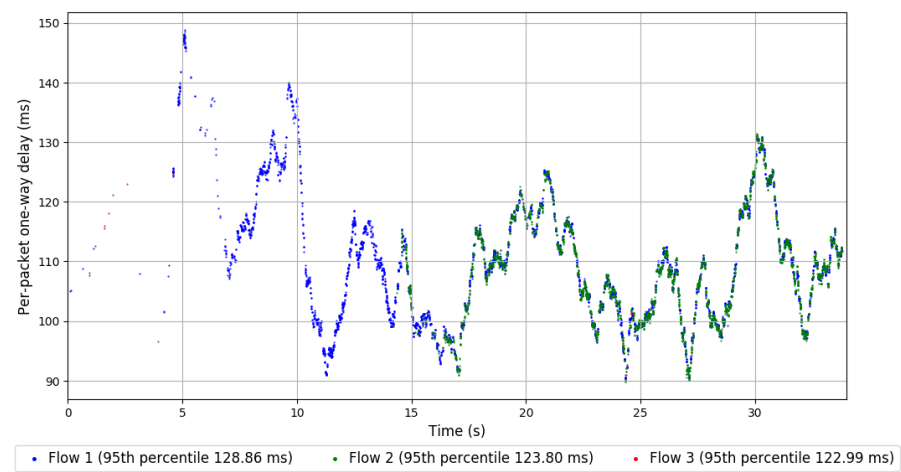
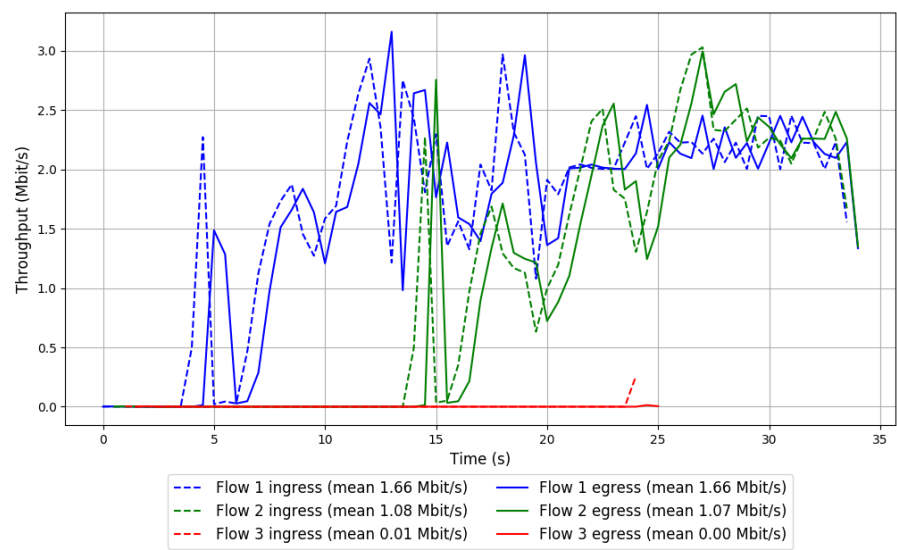
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 122.986 ms

Loss rate: 90.59%

Run 2: Report of WebRTC media — Data Link

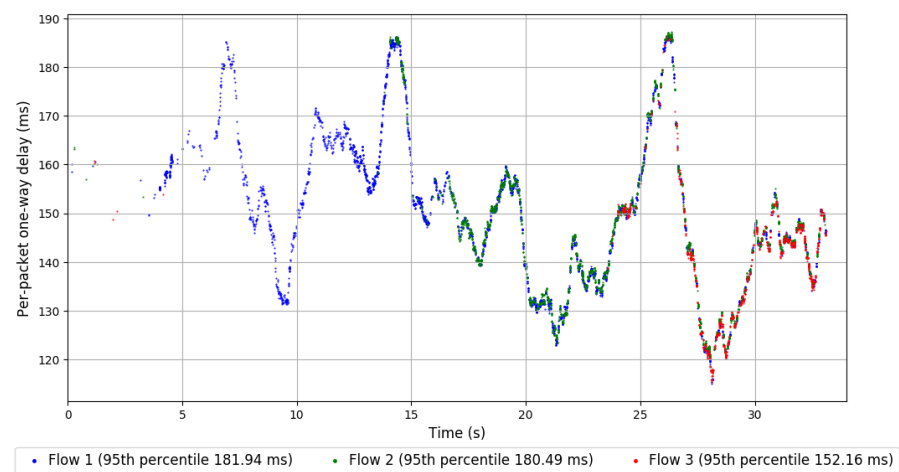
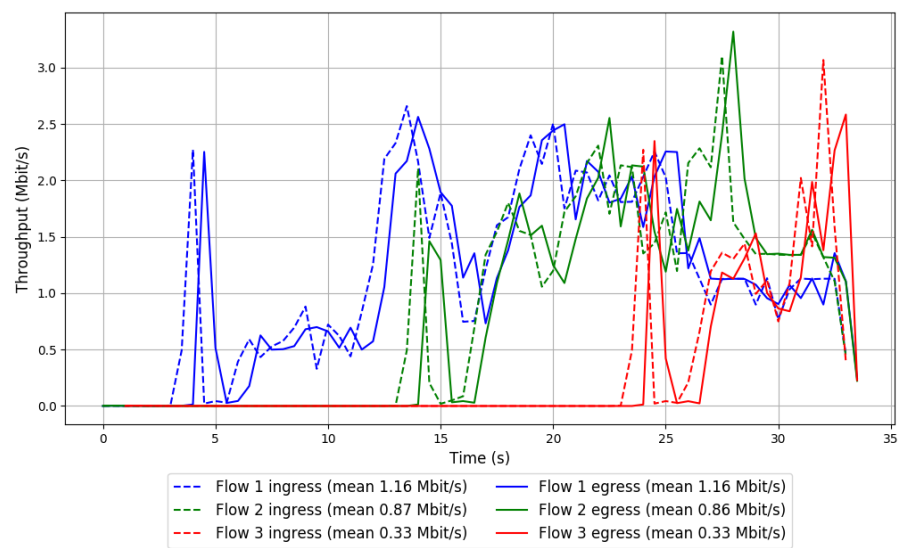


Run 3: Statistics of WebRTC media

Start at: 2018-10-26 10:36:40  
End at: 2018-10-26 10:37:10  
Local clock offset: -1.497 ms  
Remote clock offset: 18.366 ms

# Below is generated by plot.py at 2018-10-26 11:44:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.34 Mbit/s  
95th percentile per-packet one-way delay: 180.361 ms  
Loss rate: 1.03%  
-- Flow 1:  
Average throughput: 1.16 Mbit/s  
95th percentile per-packet one-way delay: 181.935 ms  
Loss rate: 0.64%  
-- Flow 2:  
Average throughput: 0.86 Mbit/s  
95th percentile per-packet one-way delay: 180.485 ms  
Loss rate: 1.20%  
-- Flow 3:  
Average throughput: 0.33 Mbit/s  
95th percentile per-packet one-way delay: 152.158 ms  
Loss rate: 2.00%

Run 3: Report of WebRTC media — Data Link

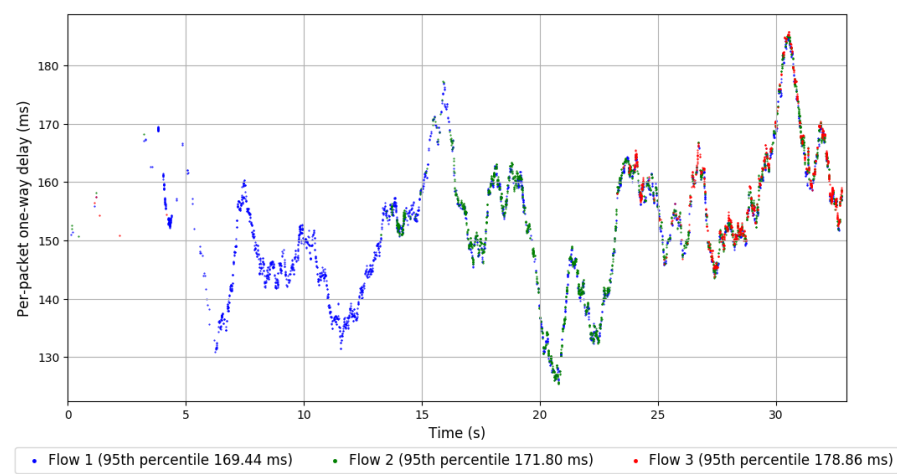
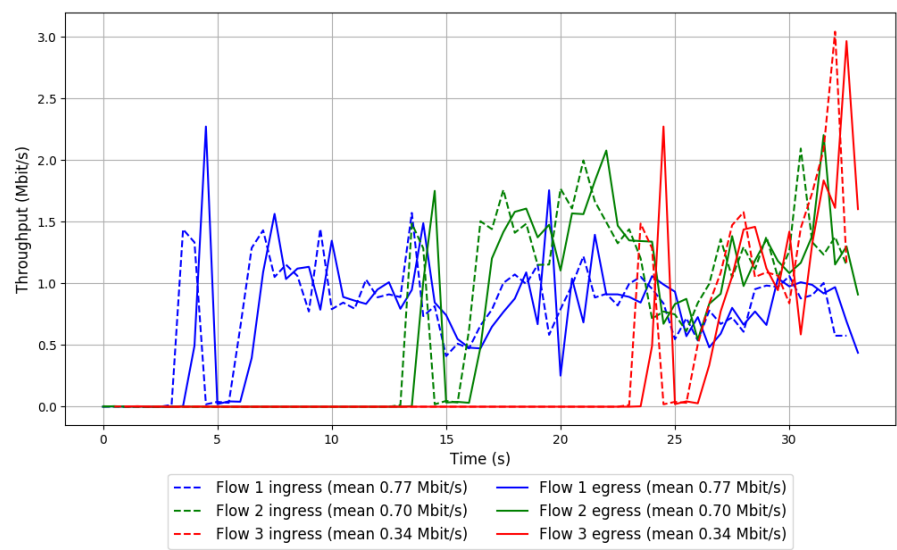


Run 4: Statistics of WebRTC media

Start at: 2018-10-26 11:01:52  
End at: 2018-10-26 11:02:22  
Local clock offset: -1.208 ms  
Remote clock offset: 35.932 ms

# Below is generated by plot.py at 2018-10-26 11:44:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1.79 Mbit/s  
95th percentile per-packet one-way delay: 172.856 ms  
Loss rate: 1.32%  
-- Flow 1:  
Average throughput: 0.77 Mbit/s  
95th percentile per-packet one-way delay: 169.436 ms  
Loss rate: 0.69%  
-- Flow 2:  
Average throughput: 0.70 Mbit/s  
95th percentile per-packet one-way delay: 171.803 ms  
Loss rate: 1.47%  
-- Flow 3:  
Average throughput: 0.34 Mbit/s  
95th percentile per-packet one-way delay: 178.863 ms  
Loss rate: 2.45%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-10-26 11:27:37  
End at: 2018-10-26 11:28:07  
Local clock offset: 2.429 ms  
Remote clock offset: -18.823 ms

# Below is generated by plot.py at 2018-10-26 11:44:49  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1.27 Mbit/s  
95th percentile per-packet one-way delay: 181.698 ms  
Loss rate: 2.22%  
-- Flow 1:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 182.284 ms  
Loss rate: 91.07%  
-- Flow 2:  
Average throughput: 0.92 Mbit/s  
95th percentile per-packet one-way delay: 181.585 ms  
Loss rate: 1.39%  
-- Flow 3:  
Average throughput: 0.37 Mbit/s  
95th percentile per-packet one-way delay: 182.068 ms  
Loss rate: 3.32%

Run 5: Report of WebRTC media — Data Link

