

## Pantheon Report

Generated at 2018-08-22 18:27:14 (UTC).

Data path: India ppp0 ppp0 (*remote*) → AWS India 1 Ethernet (*local*).

Repeated the test of 17 congestion control schemes 3 times.

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

NTP offsets were measured against `nets.org.sg` and have been applied to correct the timestamps in logs.

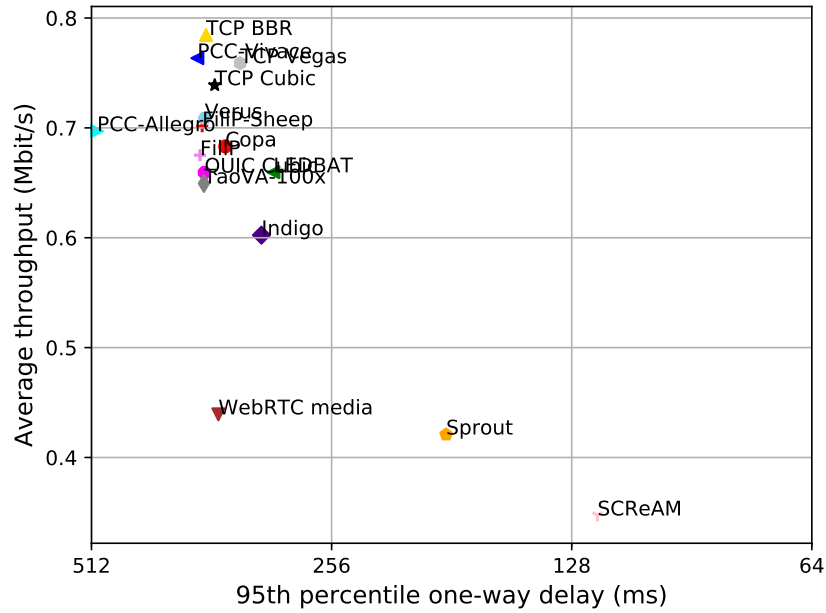
### System info:

```
Linux 4.15.0-1017-aws
net.core.default_qdisc = fq_codel
net.core.rmem_default = 16777216
net.core.rmem_max = 33554432
net.core.wmem_default = 212992
net.core.wmem_max = 212992
net.ipv4.tcp_rmem = 4096 87380 6291456
net.ipv4.tcp_wmem = 4096 16384 4194304
```

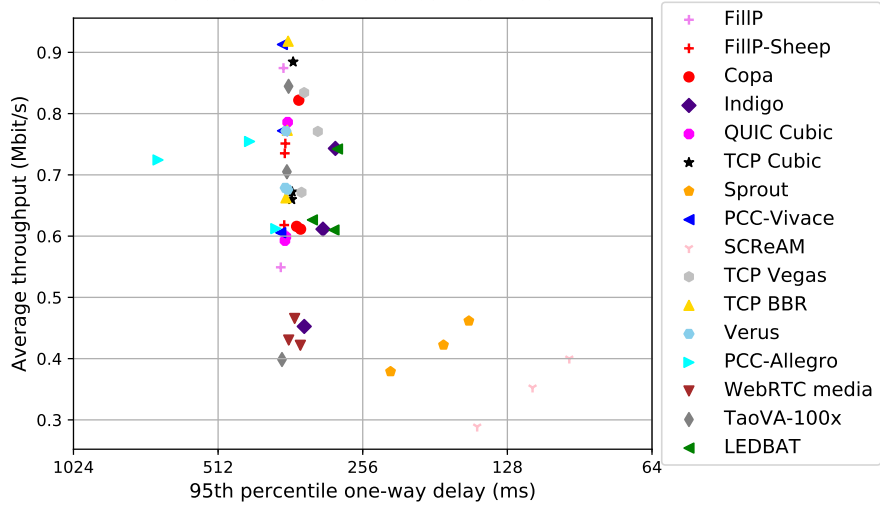
### Git summary:

```
branch: master @ 7719b900495aa706f8452ab7d4a94dd562e9296e
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/fillp-sheep @ daed0c84f98531712514b2231f43ec6901114ffe
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
  M src/ScreamClient
  M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

test from India ppp0 to AWS India 1, 3 runs of 30s each per scheme  
 3 flows with 10s interval between flows (mean of all runs by scheme)



test from India ppp0 to AWS India 1, 3 runs of 30s each per scheme  
 3 flows with 10s interval between flows



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	3	0.52	0.28	0.27	364.72	370.39	372.39	14.91	28.77	34.81
Copa	3	0.44	0.25	0.27	342.88	351.70	355.79	3.78	8.29	14.33
TCP Cubic	3	0.49	0.28	0.21	357.18	357.67	362.13	3.80	8.18	12.31
FillP	3	0.44	0.25	0.24	377.37	371.01	374.59	63.78	51.55	60.54
FillP-Sheep	3	0.49	0.22	0.20	371.63	373.78	373.86	54.71	77.30	81.99
Indigo	3	0.31	0.31	0.25	288.60	325.20	327.13	2.98	6.61	15.18
LEDBAT	3	0.31	0.31	0.48	271.38	311.15	298.44	0.13	1.33	2.82
PCC-Allegro	3	0.52	0.28	0.00	449.25	600.44	350.59	81.61	90.33	92.31
PCC-Expr	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
QUIC Cubic	3	0.39	0.30	0.24	366.19	369.44	371.75	18.62	26.45	40.22
SCReAM	3	0.17	0.17	0.20	113.89	118.49	136.29	0.19	0.48	1.02
Sprout	3	0.21	0.21	0.20	172.42	190.38	199.85	1.78	2.21	2.90
TaoVA-100x	3	0.46	0.22	0.21	370.19	386.21	372.42	49.84	71.22	67.53
TCP Vegas	3	0.41	0.35	0.38	320.03	334.92	342.97	2.09	3.25	5.31
Verus	3	0.59	0.16	0.06	368.44	369.51	367.47	32.39	56.06	70.55
PCC-Vivace	3	0.52	0.25	0.28	377.81	370.25	373.61	61.74	72.60	76.19
WebRTC media	3	0.17	0.16	0.11	353.10	357.52	355.06	10.35	14.72	15.03

Run 1: Statistics of TCP BBR

Start at: 2018-08-22 17:39:05  
End at: 2018-08-22 17:39:35  
Local clock offset: 0.699 ms  
Remote clock offset: -64.849 ms

# Below is generated by plot.py at 2018-08-22 18:26:40

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.77 Mbit/s  
95th percentile per-packet one-way delay: 367.606 ms  
Loss rate: 22.38%

-- Flow 1:

Average throughput: 0.57 Mbit/s  
95th percentile per-packet one-way delay: 364.913 ms  
Loss rate: 15.38%

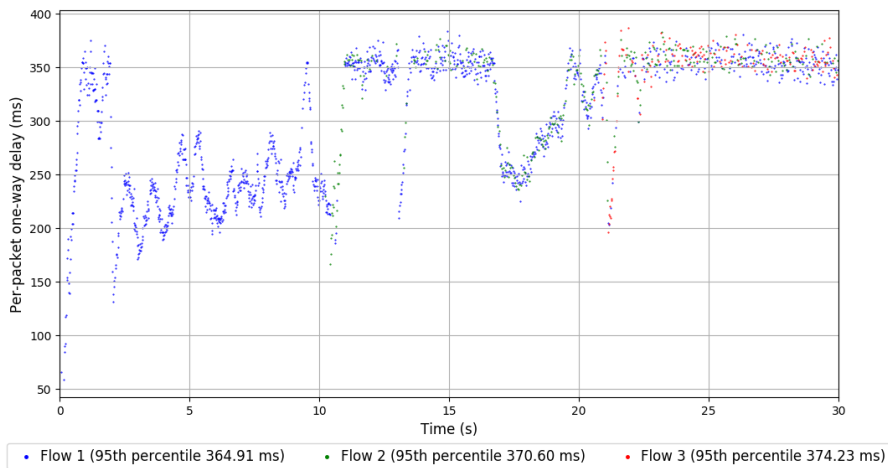
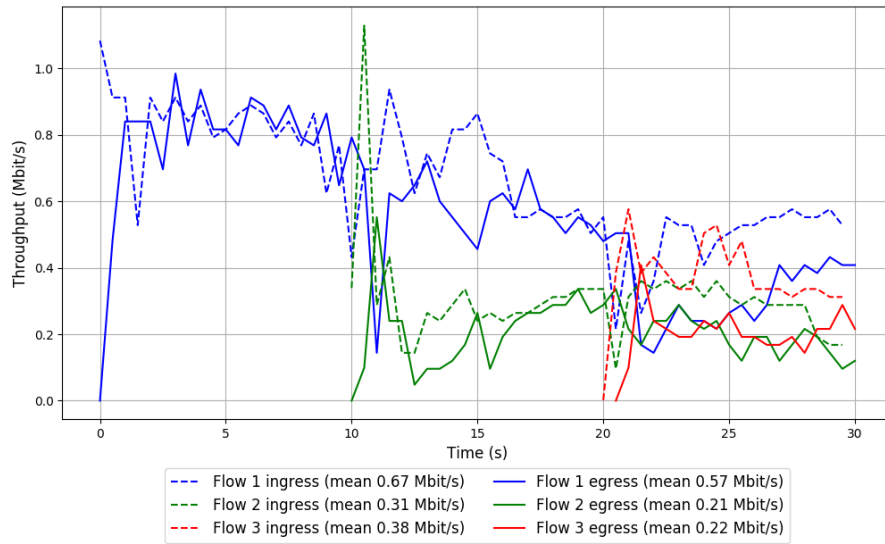
-- Flow 2:

Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 370.601 ms  
Loss rate: 31.62%

-- Flow 3:

Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 374.231 ms  
Loss rate: 44.93%

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

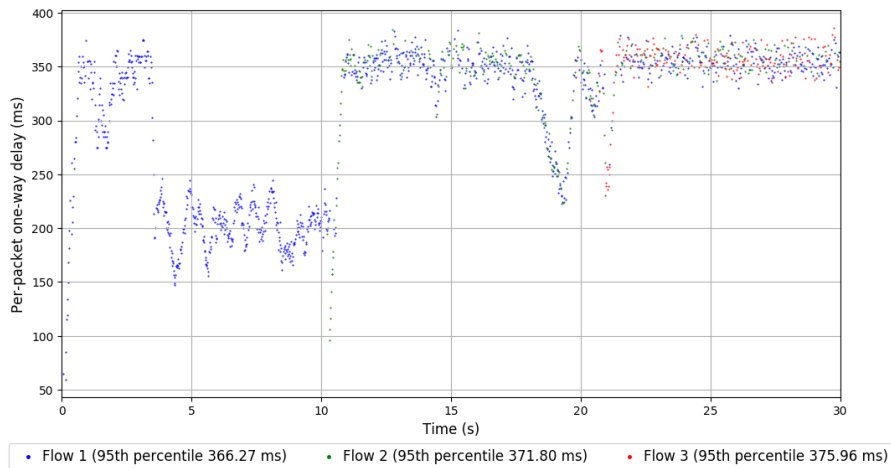
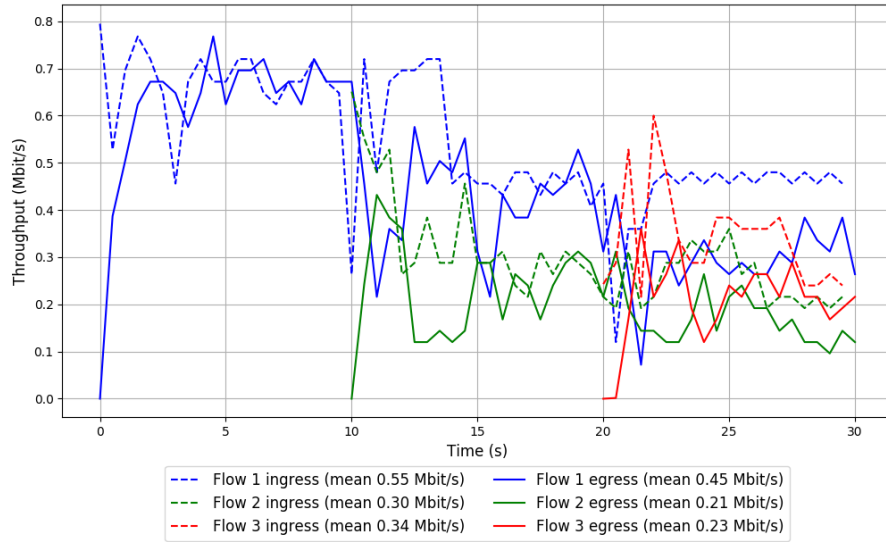


Run 2: Statistics of TCP BBR

Start at: 2018-08-22 17:57:35  
End at: 2018-08-22 17:58:05  
Local clock offset: 2.388 ms  
Remote clock offset: -66.14 ms

# Below is generated by plot.py at 2018-08-22 18:26:40  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.66 Mbit/s  
95th percentile per-packet one-way delay: 369.876 ms  
Loss rate: 22.99%  
-- Flow 1:  
Average throughput: 0.45 Mbit/s  
95th percentile per-packet one-way delay: 366.269 ms  
Loss rate: 17.03%  
-- Flow 2:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 371.798 ms  
Loss rate: 31.66%  
-- Flow 3:  
Average throughput: 0.23 Mbit/s  
95th percentile per-packet one-way delay: 375.964 ms  
Loss rate: 36.38%

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



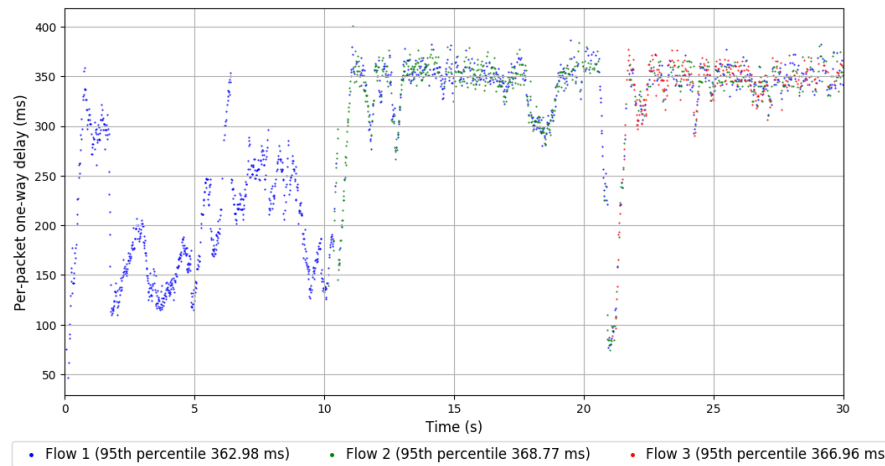
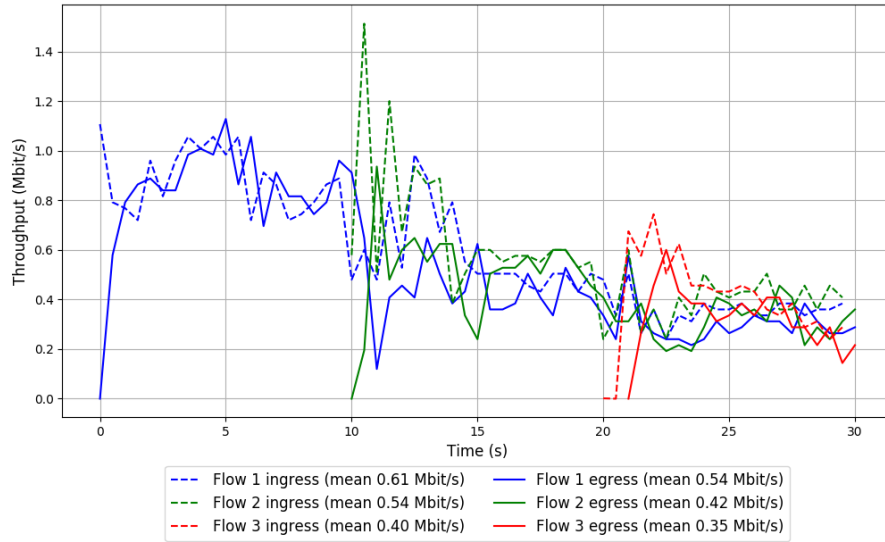
Run 3: Statistics of TCP BBR

Start at: 2018-08-22 18:16:11  
End at: 2018-08-22 18:16:41  
Local clock offset: 2.585 ms  
Remote clock offset: -64.234 ms

```
# Below is generated by plot.py at 2018-08-22 18:26:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.92 Mbit/s
95th percentile per-packet one-way delay: 366.001 ms
Loss rate: 17.13%
-- Flow 1:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 362.976 ms
Loss rate: 12.33%
-- Flow 2:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 368.772 ms
Loss rate: 23.03%
-- Flow 3:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 366.964 ms
Loss rate: 23.13%
```



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



Run 1: Statistics of Copa

Start at: 2018-08-22 17:36:55  
End at: 2018-08-22 17:37:25  
Local clock offset: 2.11 ms  
Remote clock offset: -64.105 ms

# Below is generated by plot.py at 2018-08-22 18:26:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.62 Mbit/s  
95th percentile per-packet one-way delay: 351.452 ms  
Loss rate: 6.89%

-- Flow 1:

Average throughput: 0.41 Mbit/s  
95th percentile per-packet one-way delay: 346.636 ms  
Loss rate: 5.25%

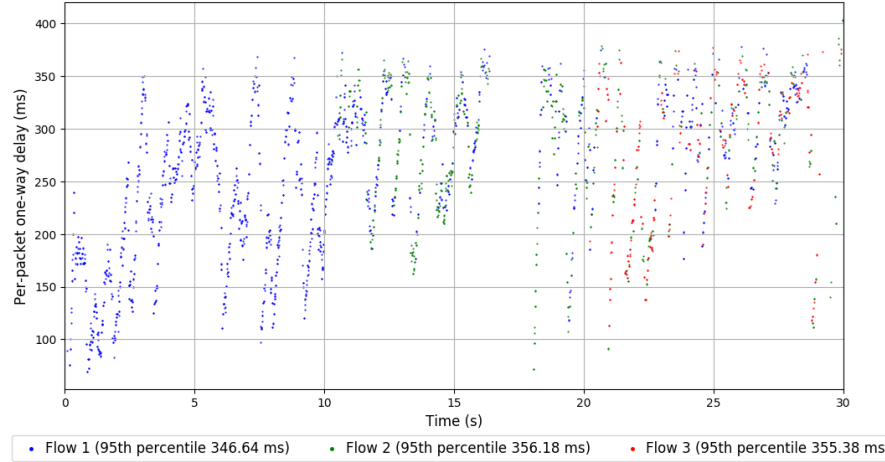
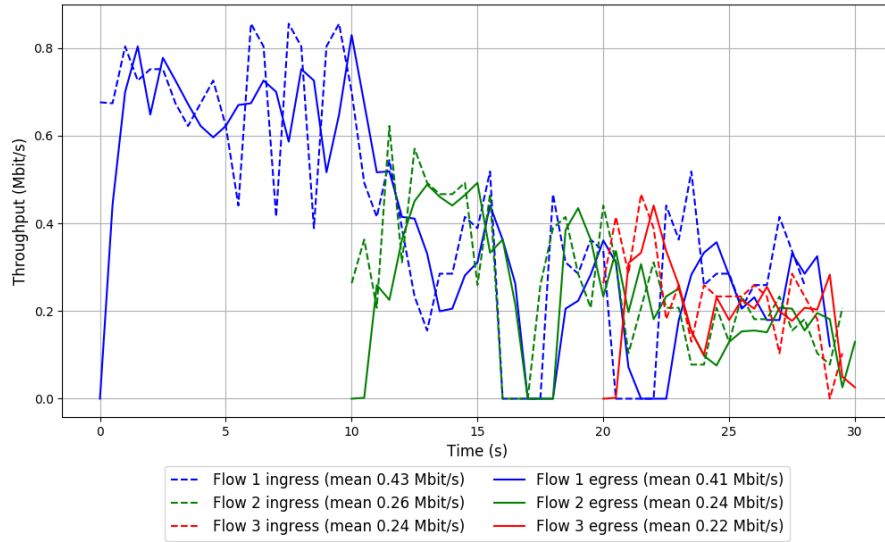
-- Flow 2:

Average throughput: 0.24 Mbit/s  
95th percentile per-packet one-way delay: 356.178 ms  
Loss rate: 8.41%

-- Flow 3:

Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 355.379 ms  
Loss rate: 12.01%

# Run 1: Report of Copa — Data Link

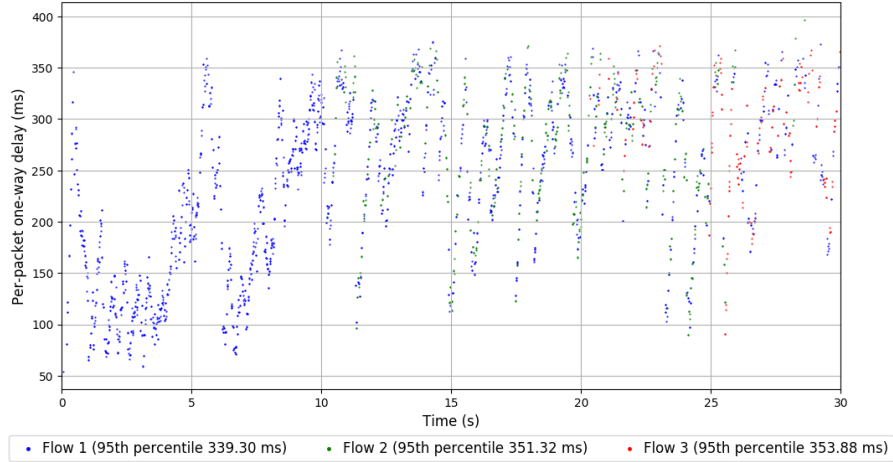
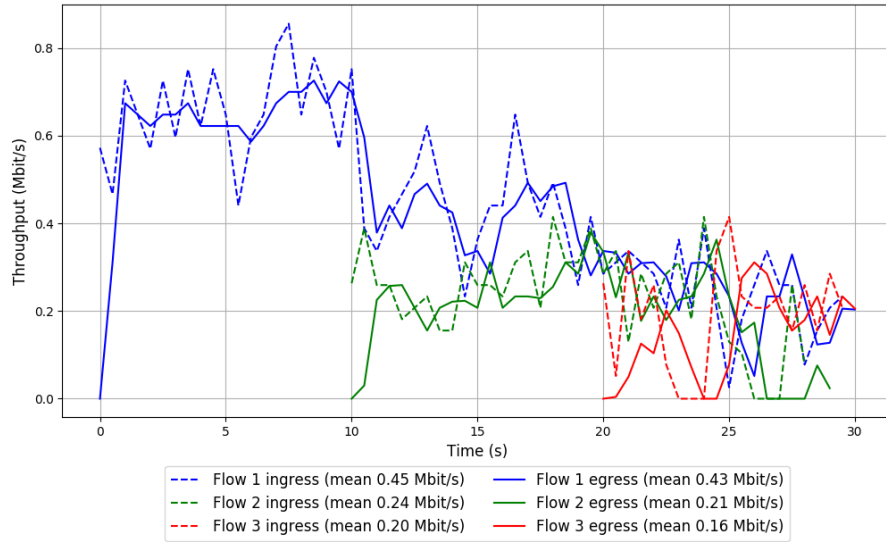


Run 2: Statistics of Copa

Start at: 2018-08-22 17:55:25  
End at: 2018-08-22 17:55:55  
Local clock offset: -2.54 ms  
Remote clock offset: -65.101 ms

```
# Below is generated by plot.py at 2018-08-22 18:26:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 344.836 ms
Loss rate: 7.49%
-- Flow 1:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 339.301 ms
Loss rate: 4.13%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 351.323 ms
Loss rate: 11.45%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 353.883 ms
Loss rate: 22.01%
```

## Run 2: Report of Copa — Data Link

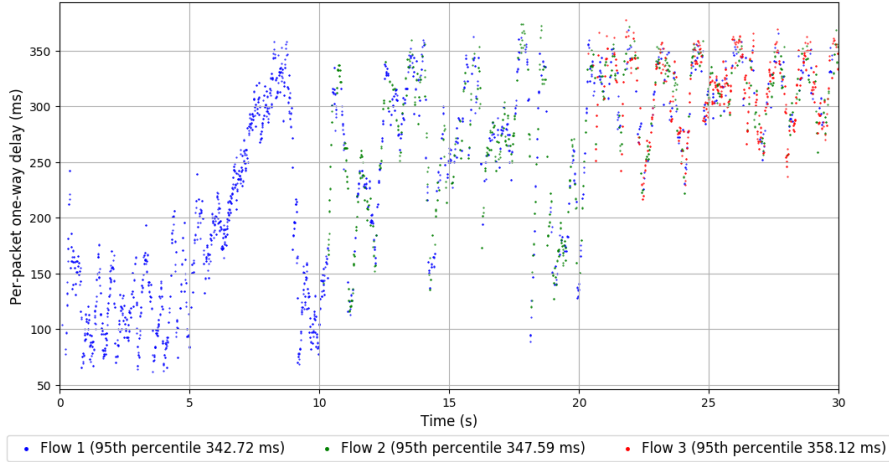
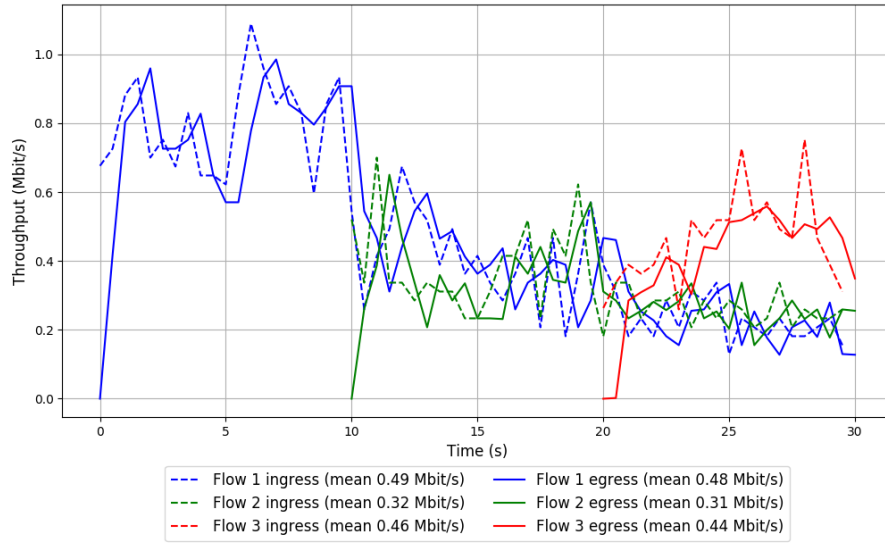


Run 3: Statistics of Copa

Start at: 2018-08-22 18:14:01  
End at: 2018-08-22 18:14:31  
Local clock offset: 3.148 ms  
Remote clock offset: -63.699 ms

```
# Below is generated by plot.py at 2018-08-22 18:26:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.82 Mbit/s
95th percentile per-packet one-way delay: 347.792 ms
Loss rate: 3.98%
-- Flow 1:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 342.717 ms
Loss rate: 1.95%
-- Flow 2:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 347.588 ms
Loss rate: 5.00%
-- Flow 3:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 358.117 ms
Loss rate: 8.97%
```

### Run 3: Report of Copa — Data Link



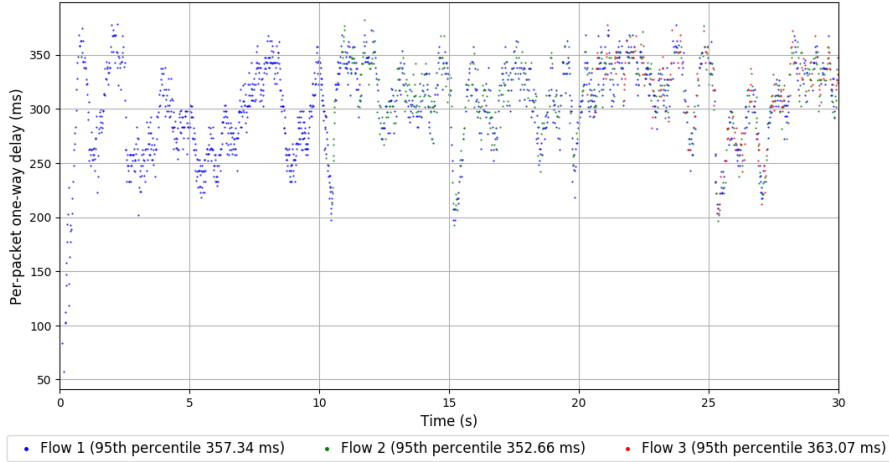
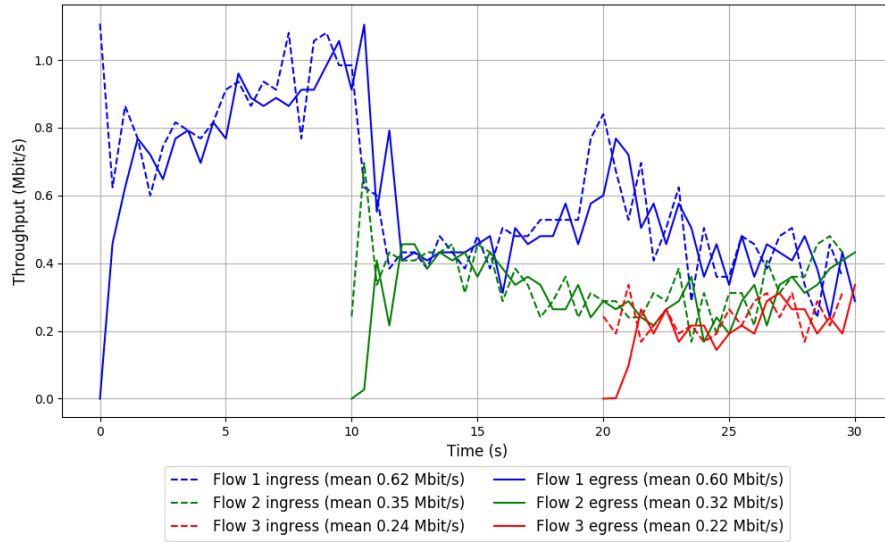
Run 1: Statistics of TCP Cubic

Start at: 2018-08-22 17:42:21  
End at: 2018-08-22 17:42:51  
Local clock offset: 3.686 ms  
Remote clock offset: -65.531 ms

# Below is generated by plot.py at 2018-08-22 18:26:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.88 Mbit/s  
95th percentile per-packet one-way delay: 357.326 ms  
Loss rate: 5.41%  
-- Flow 1:  
Average throughput: 0.60 Mbit/s  
95th percentile per-packet one-way delay: 357.340 ms  
Loss rate: 3.67%  
-- Flow 2:  
Average throughput: 0.32 Mbit/s  
95th percentile per-packet one-way delay: 352.657 ms  
Loss rate: 7.97%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 363.074 ms  
Loss rate: 11.49%



Run 1: Report of TCP Cubic — Data Link

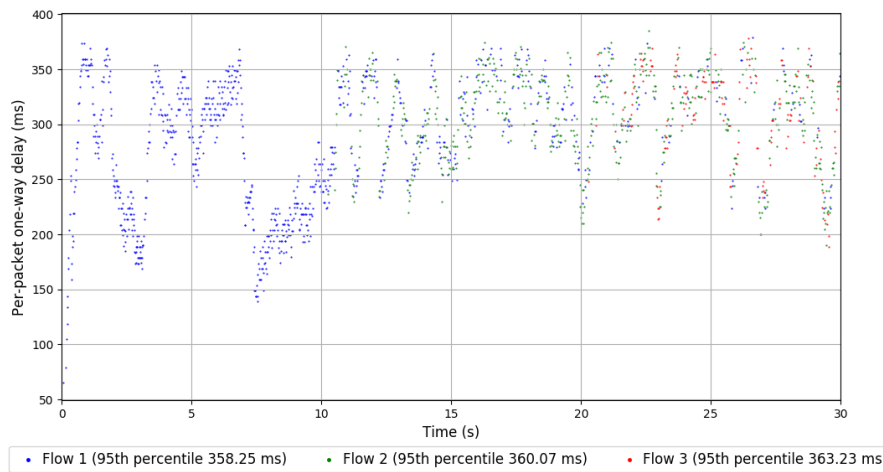
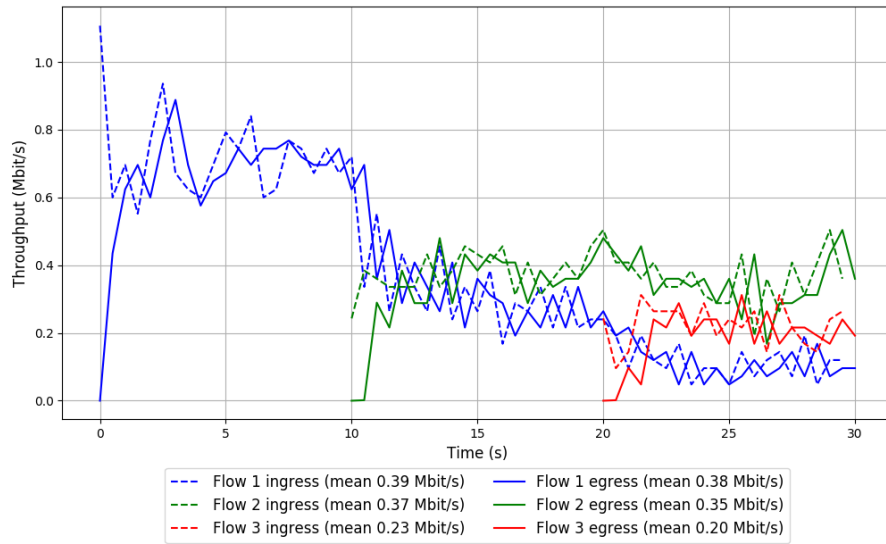


Run 2: Statistics of TCP Cubic

Start at: 2018-08-22 18:00:51  
End at: 2018-08-22 18:01:21  
Local clock offset: 1.913 ms  
Remote clock offset: -66.751 ms

```
# Below is generated by plot.py at 2018-08-22 18:26:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 359.060 ms
Loss rate: 6.00%
-- Flow 1:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 358.248 ms
Loss rate: 4.59%
-- Flow 2:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 360.069 ms
Loss rate: 6.01%
-- Flow 3:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 363.227 ms
Loss rate: 13.43%
```

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

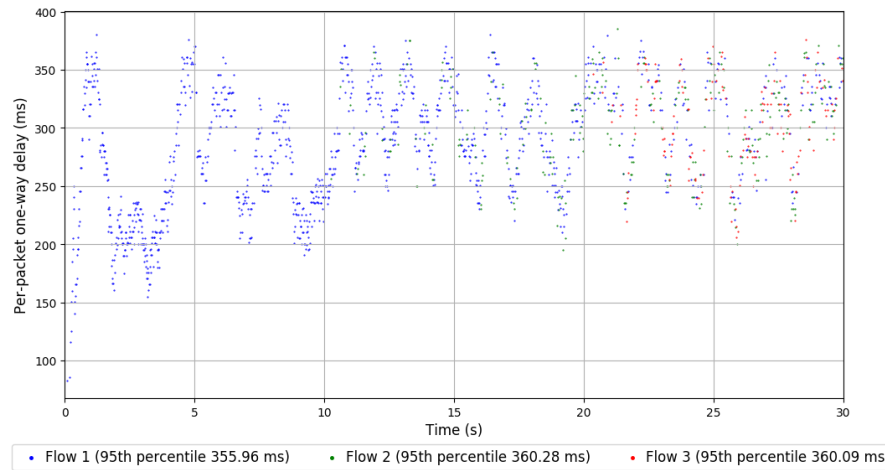
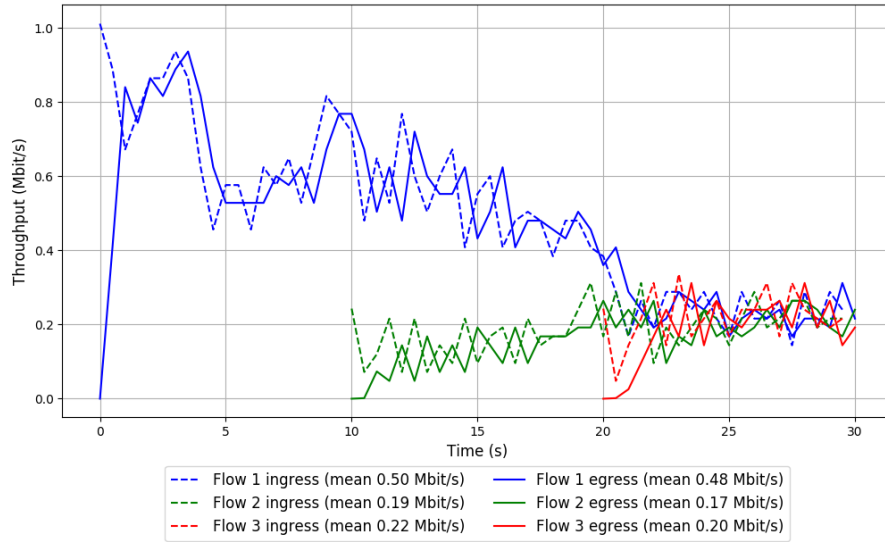


Run 3: Statistics of TCP Cubic

Start at: 2018-08-22 18:19:28  
End at: 2018-08-22 18:19:58  
Local clock offset: 1.544 ms  
Remote clock offset: -64.424 ms

```
# Below is generated by plot.py at 2018-08-22 18:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 359.803 ms
Loss rate: 5.41%
-- Flow 1:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 355.962 ms
Loss rate: 3.14%
-- Flow 2:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 360.283 ms
Loss rate: 10.57%
-- Flow 3:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 360.094 ms
Loss rate: 12.01%
```

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

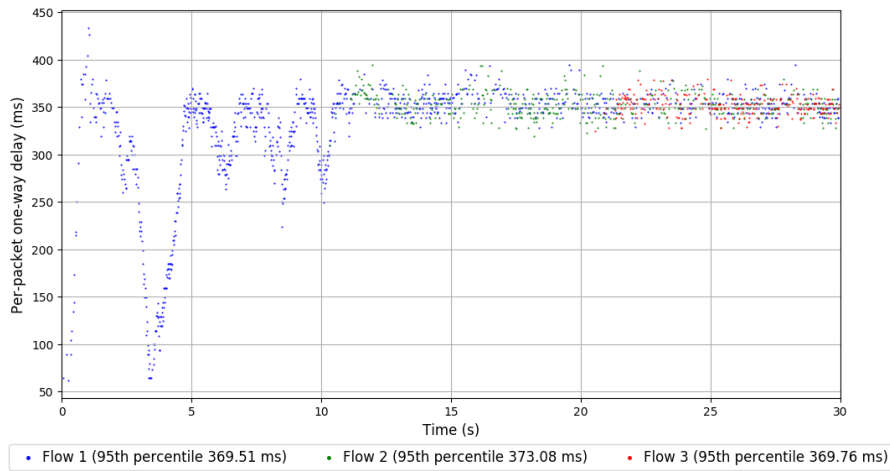
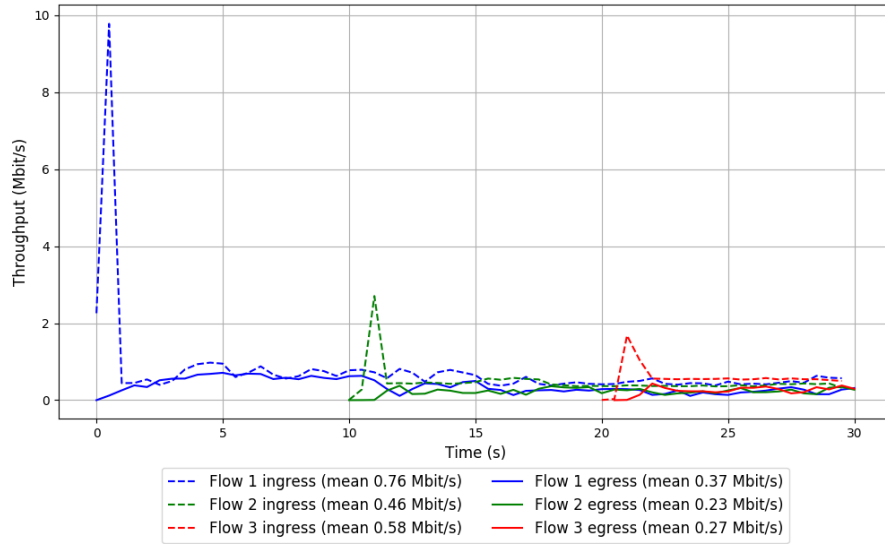


Run 1: Statistics of FillP

Start at: 2018-08-22 17:45:37  
End at: 2018-08-22 17:46:07  
Local clock offset: 1.475 ms  
Remote clock offset: -65.644 ms

```
# Below is generated by plot.py at 2018-08-22 18:26:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 369.575 ms
Loss rate: 52.21%
-- Flow 1:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 369.506 ms
Loss rate: 51.91%
-- Flow 2:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 373.085 ms
Loss rate: 50.21%
-- Flow 3:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 369.760 ms
Loss rate: 56.61%
```

### Run 1: Report of FillP — Data Link



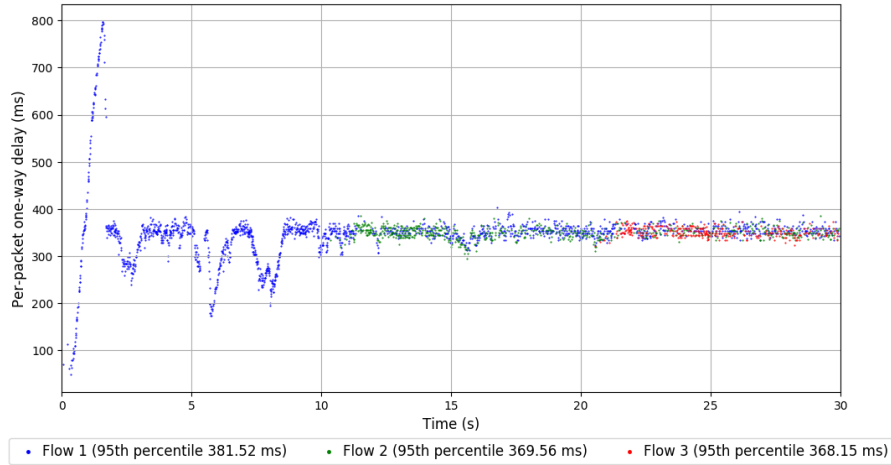
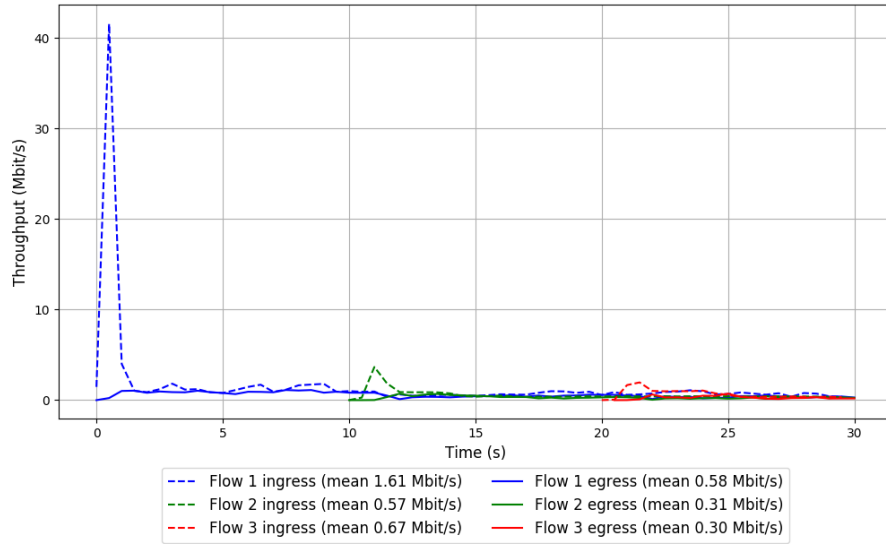
Run 2: Statistics of FillP

Start at: 2018-08-22 18:04:07  
End at: 2018-08-22 18:04:37  
Local clock offset: 3.298 ms  
Remote clock offset: -66.524 ms

```
# Below is generated by plot.py at 2018-08-22 18:26:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.87 Mbit/s
95th percentile per-packet one-way delay: 374.294 ms
Loss rate: 60.67%
-- Flow 1:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 381.518 ms
Loss rate: 64.22%
-- Flow 2:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 369.561 ms
Loss rate: 46.93%
-- Flow 3:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 368.155 ms
Loss rate: 58.40%
```



## Run 2: Report of FillP — Data Link

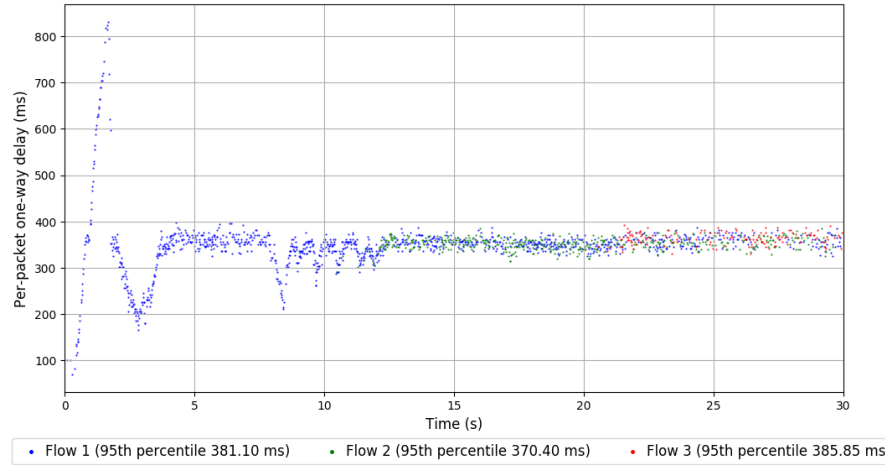
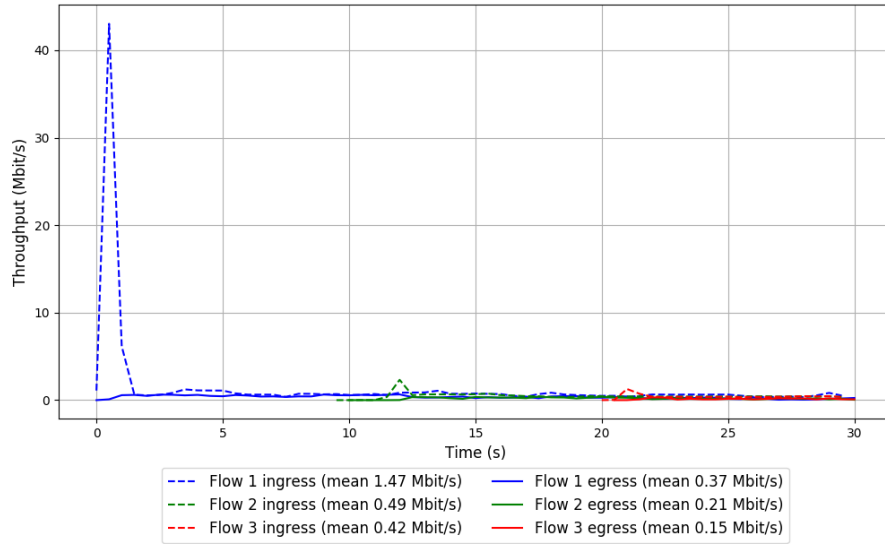


Run 3: Statistics of FillP

Start at: 2018-08-22 18:22:44  
End at: 2018-08-22 18:23:14  
Local clock offset: -1.061 ms  
Remote clock offset: -63.732 ms

```
# Below is generated by plot.py at 2018-08-22 18:26:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 379.131 ms
Loss rate: 71.62%
-- Flow 1:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 381.098 ms
Loss rate: 75.20%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 370.398 ms
Loss rate: 57.51%
-- Flow 3:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 385.849 ms
Loss rate: 66.61%
```

### Run 3: Report of FillP — Data Link



Run 1: Statistics of FillP-Sheep

Start at: 2018-08-22 17:43:26  
End at: 2018-08-22 17:43:56  
Local clock offset: 0.976 ms  
Remote clock offset: -65.634 ms

# Below is generated by plot.py at 2018-08-22 18:26:48

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.74 Mbit/s  
95th percentile per-packet one-way delay: 371.934 ms  
Loss rate: 65.27%

-- Flow 1:

Average throughput: 0.52 Mbit/s  
95th percentile per-packet one-way delay: 371.731 ms  
Loss rate: 56.16%

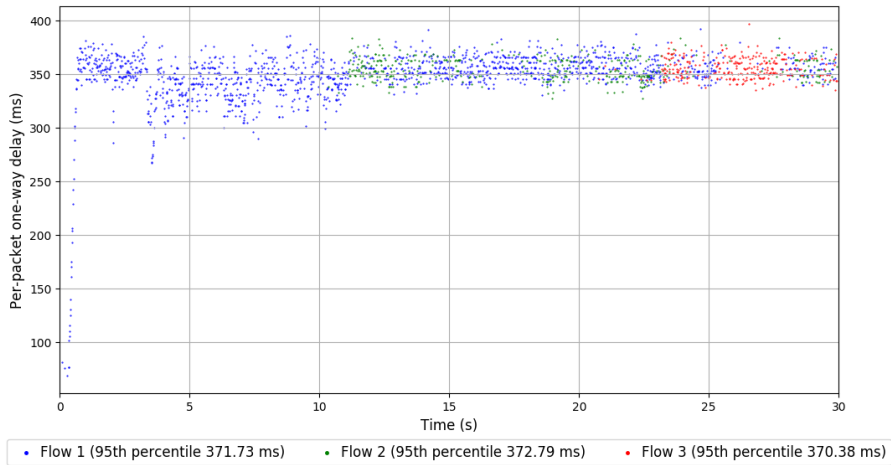
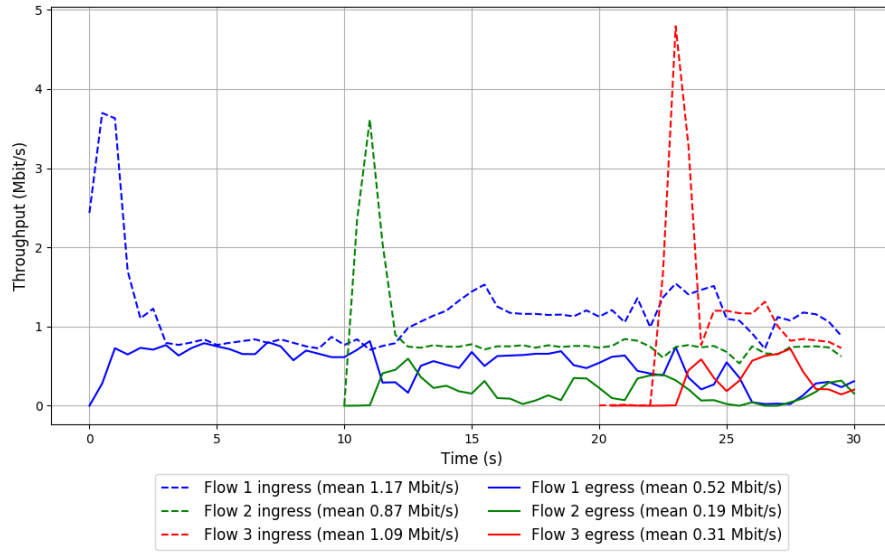
-- Flow 2:

Average throughput: 0.19 Mbit/s  
95th percentile per-packet one-way delay: 372.788 ms  
Loss rate: 78.44%

-- Flow 3:

Average throughput: 0.31 Mbit/s  
95th percentile per-packet one-way delay: 370.382 ms  
Loss rate: 73.81%

# Run 1: Report of FillP-Sheep — Data Link

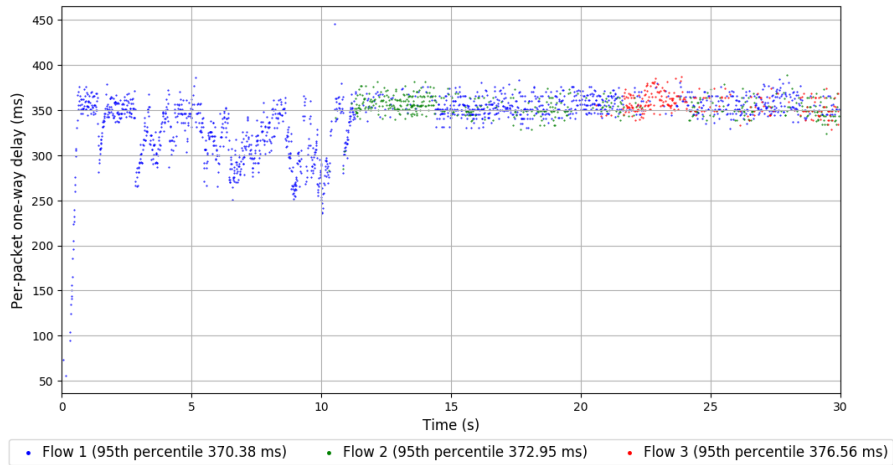
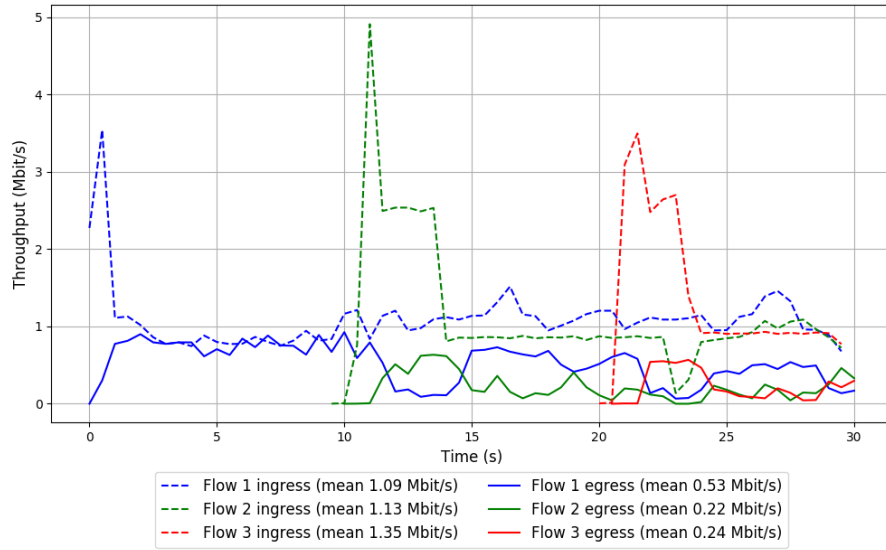


Run 2: Statistics of FillP-Sheep

Start at: 2018-08-22 18:01:56  
End at: 2018-08-22 18:02:26  
Local clock offset: 2.914 ms  
Remote clock offset: -66.66 ms

```
# Below is generated by plot.py at 2018-08-22 18:26:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.75 Mbit/s
95th percentile per-packet one-way delay: 370.988 ms
Loss rate: 67.33%
-- Flow 1:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 370.375 ms
Loss rate: 51.72%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 372.947 ms
Loss rate: 80.66%
-- Flow 3:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 376.557 ms
Loss rate: 83.14%
```

## Run 2: Report of FillP-Sheep — Data Link



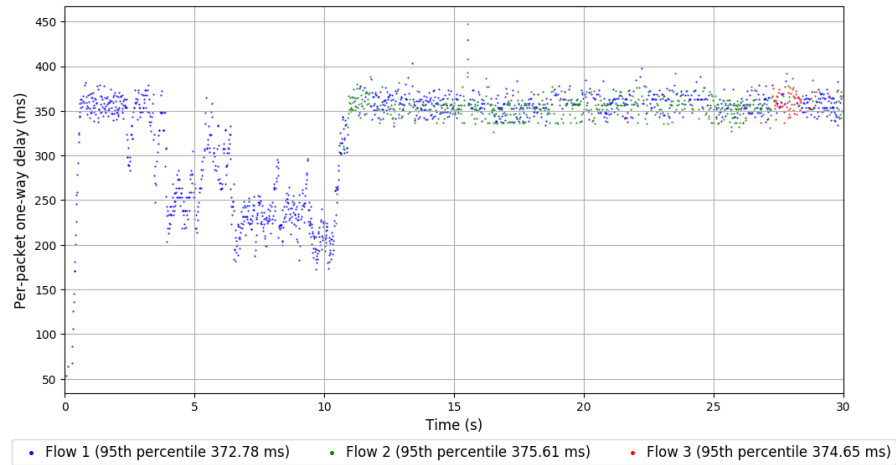
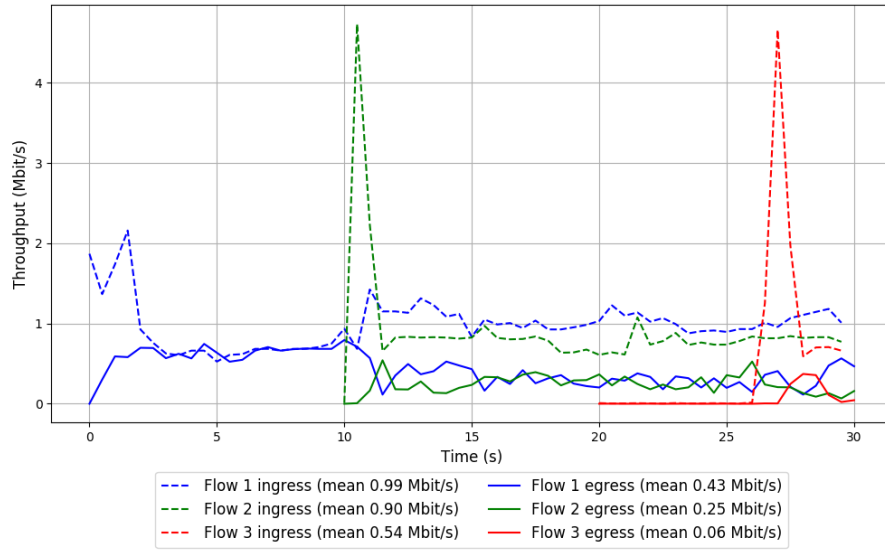
Run 3: Statistics of FillP-Sheep

Start at: 2018-08-22 18:20:33  
End at: 2018-08-22 18:21:03  
Local clock offset: -0.188 ms  
Remote clock offset: -64.412 ms

```
# Below is generated by plot.py at 2018-08-22 18:26:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 372.924 ms
Loss rate: 65.17%
-- Flow 1:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 372.778 ms
Loss rate: 56.26%
-- Flow 2:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 375.607 ms
Loss rate: 72.80%
-- Flow 3:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 374.654 ms
Loss rate: 89.03%
```



### Run 3: Report of FillP-Sheep — Data Link



Run 1: Statistics of Indigo

Start at: 2018-08-22 17:48:53  
End at: 2018-08-22 17:49:23  
Local clock offset: 2.53 ms  
Remote clock offset: -65.555 ms

# Below is generated by plot.py at 2018-08-22 18:26:48

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.45 Mbit/s  
95th percentile per-packet one-way delay: 338.816 ms  
Loss rate: 8.25%

-- Flow 1:

Average throughput: 0.27 Mbit/s  
95th percentile per-packet one-way delay: 327.651 ms  
Loss rate: 3.93%

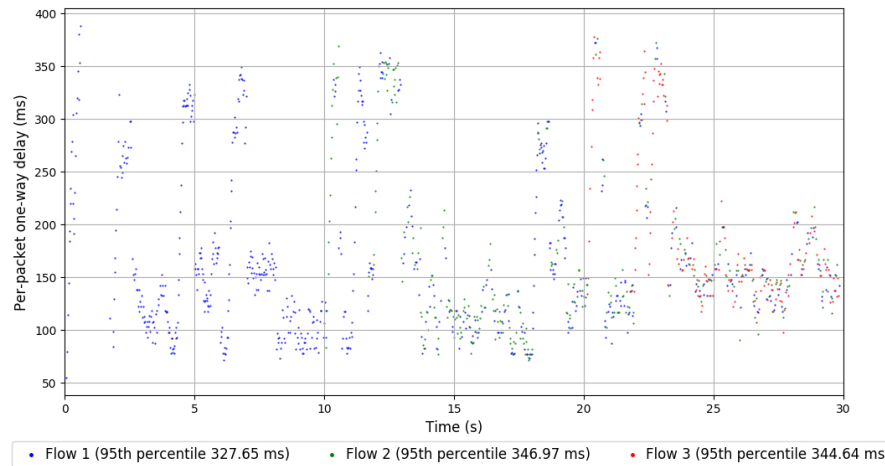
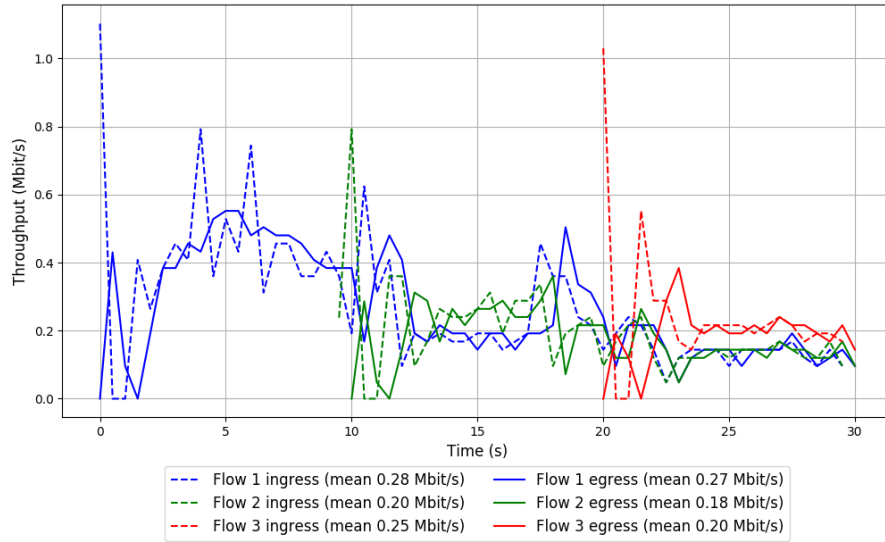
-- Flow 2:

Average throughput: 0.18 Mbit/s  
95th percentile per-packet one-way delay: 346.969 ms  
Loss rate: 9.94%

-- Flow 3:

Average throughput: 0.20 Mbit/s  
95th percentile per-packet one-way delay: 344.637 ms  
Loss rate: 20.00%

# Run 1: Report of Indigo — Data Link

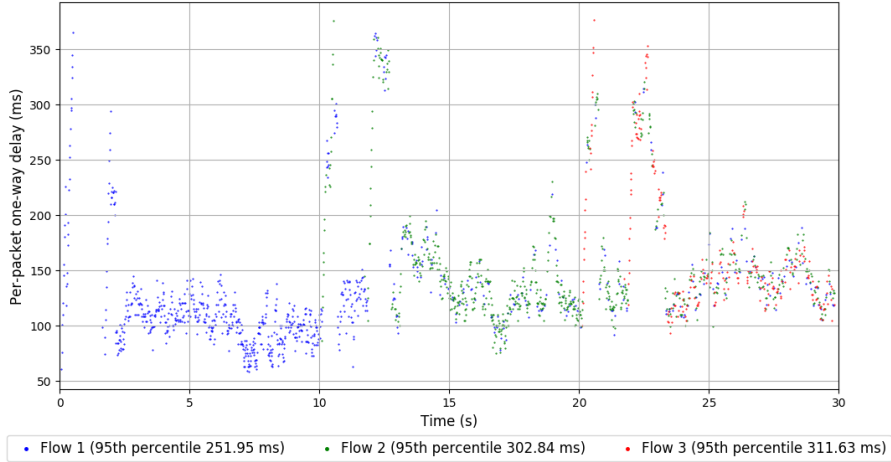
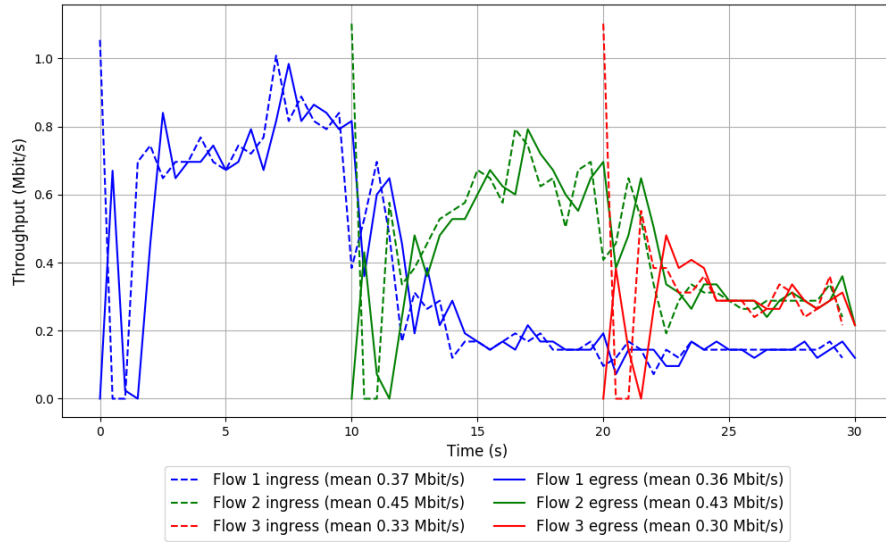


Run 2: Statistics of Indigo

Start at: 2018-08-22 18:07:24  
End at: 2018-08-22 18:07:54  
Local clock offset: 2.317 ms  
Remote clock offset: -64.854 ms

```
# Below is generated by plot.py at 2018-08-22 18:26:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.74 Mbit/s
95th percentile per-packet one-way delay: 291.879 ms
Loss rate: 4.01%
-- Flow 1:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 251.951 ms
Loss rate: 2.09%
-- Flow 2:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 302.837 ms
Loss rate: 4.06%
-- Flow 3:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 311.629 ms
Loss rate: 10.34%
```

## Run 2: Report of Indigo — Data Link

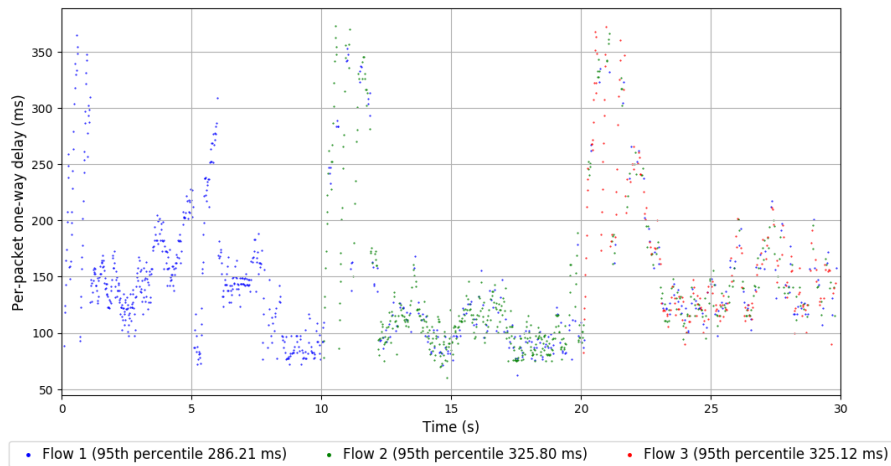
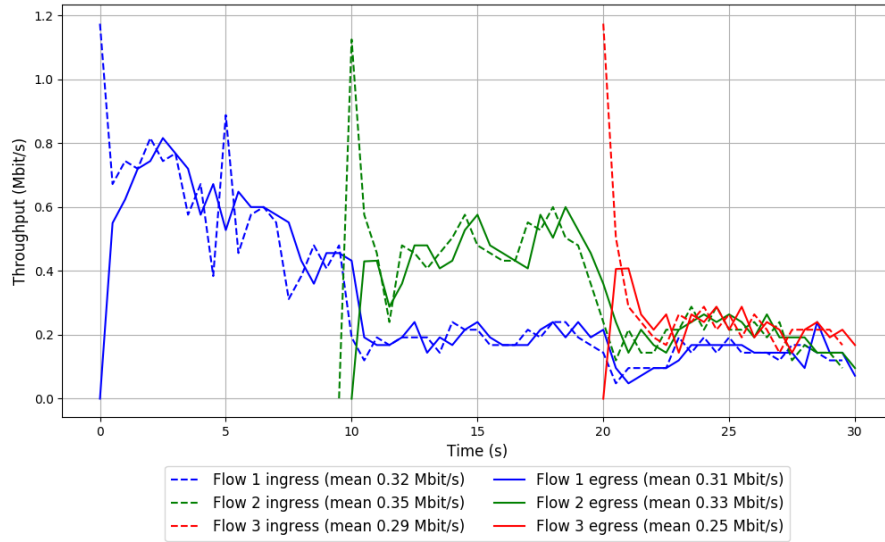


Run 3: Statistics of Indigo

Start at: 2018-08-22 18:26:01  
End at: 2018-08-22 18:26:31  
Local clock offset: 2.28 ms  
Remote clock offset: -64.104 ms

```
# Below is generated by plot.py at 2018-08-22 18:26:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 309.744 ms
Loss rate: 5.78%
-- Flow 1:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 286.211 ms
Loss rate: 2.92%
-- Flow 2:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 325.802 ms
Loss rate: 5.84%
-- Flow 3:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 325.121 ms
Loss rate: 15.19%
```

### Run 3: Report of Indigo — Data Link



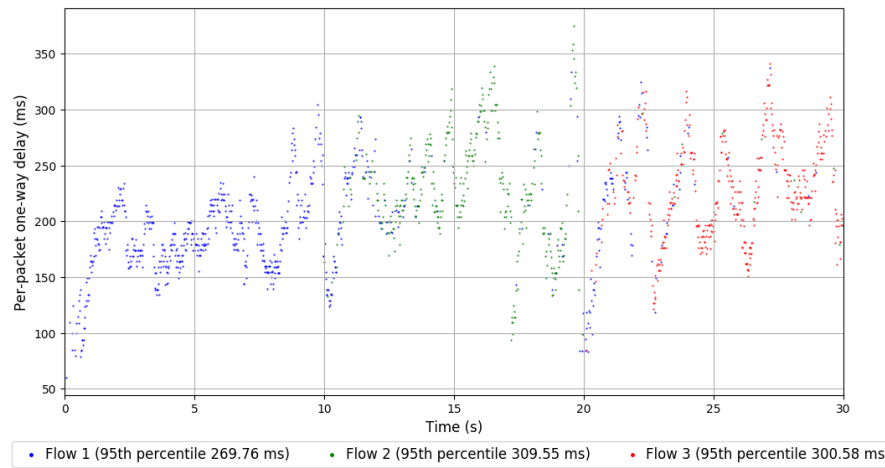
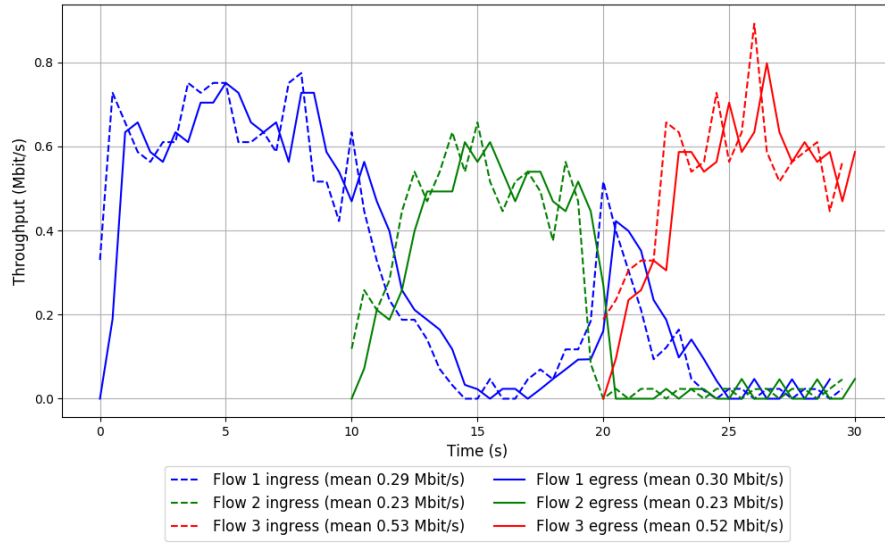
Run 1: Statistics of LEDBAT

Start at: 2018-08-22 17:38:00  
End at: 2018-08-22 17:38:30  
Local clock offset: 0.327 ms  
Remote clock offset: -64.825 ms

# Below is generated by plot.py at 2018-08-22 18:26:50  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.61 Mbit/s  
95th percentile per-packet one-way delay: 293.848 ms  
Loss rate: 1.08%  
-- Flow 1:  
Average throughput: 0.30 Mbit/s  
95th percentile per-packet one-way delay: 269.758 ms  
Loss rate: 0.13%  
-- Flow 2:  
Average throughput: 0.23 Mbit/s  
95th percentile per-packet one-way delay: 309.545 ms  
Loss rate: 1.55%  
-- Flow 3:  
Average throughput: 0.52 Mbit/s  
95th percentile per-packet one-way delay: 300.576 ms  
Loss rate: 2.24%



# Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-08-22 17:56:30  
End at: 2018-08-22 17:57:00  
Local clock offset: 1.86 ms  
Remote clock offset: -66.244 ms

# Below is generated by plot.py at 2018-08-22 18:26:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 325.867 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 309.826 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 319.058 ms

Loss rate: 1.12%

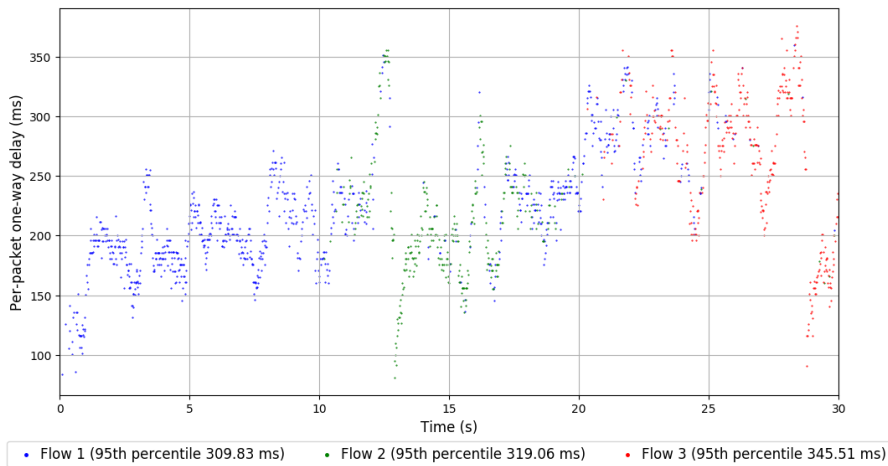
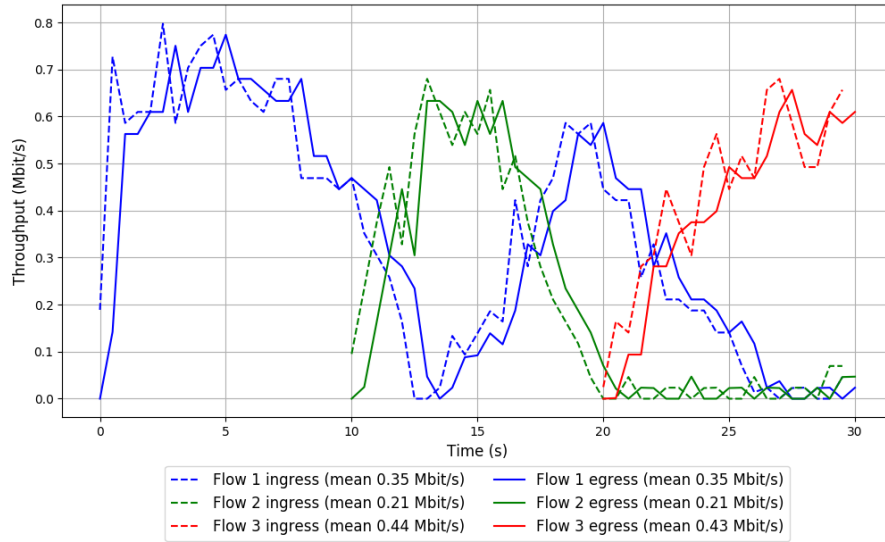
-- Flow 3:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 345.511 ms

Loss rate: 3.77%

Run 2: Report of LEDBAT — Data Link

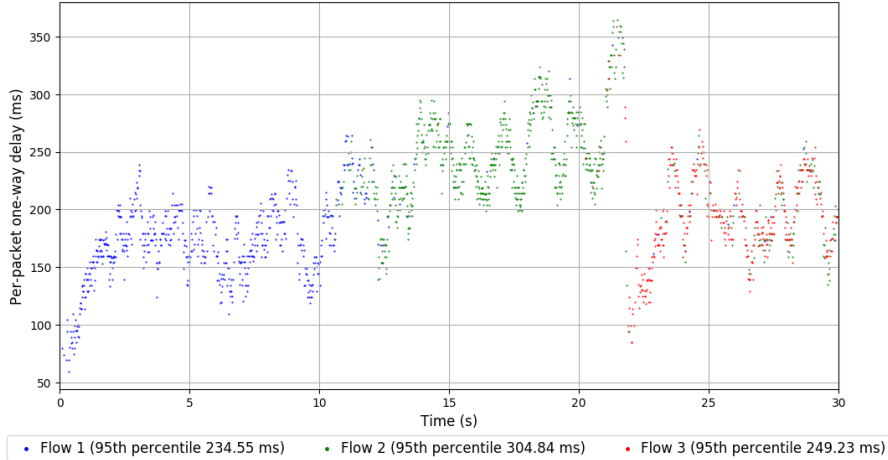
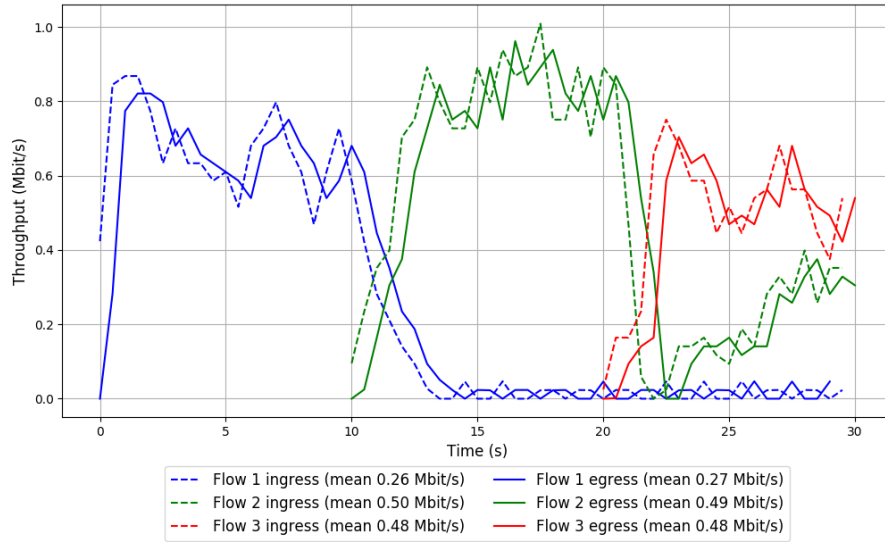


Run 3: Statistics of LEDBAT

Start at: 2018-08-22 18:15:06  
End at: 2018-08-22 18:15:36  
Local clock offset: 0.607 ms  
Remote clock offset: -63.571 ms

```
# Below is generated by plot.py at 2018-08-22 18:26:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.74 Mbit/s
95th percentile per-packet one-way delay: 288.935 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 234.546 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 304.841 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 249.231 ms
Loss rate: 2.46%
```

### Run 3: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2018-08-22 17:44:32  
End at: 2018-08-22 17:45:02  
Local clock offset: 0.719 ms  
Remote clock offset: -65.688 ms

# Below is generated by plot.py at 2018-08-22 18:26:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.75 Mbit/s  
95th percentile per-packet one-way delay: 440.327 ms  
Loss rate: 84.00%

-- Flow 1:

Average throughput: 0.49 Mbit/s  
95th percentile per-packet one-way delay: 380.030 ms  
Loss rate: 78.25%

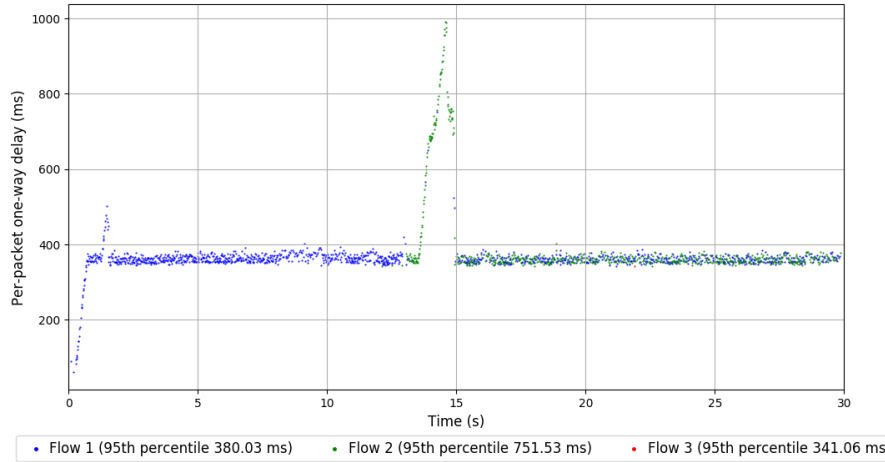
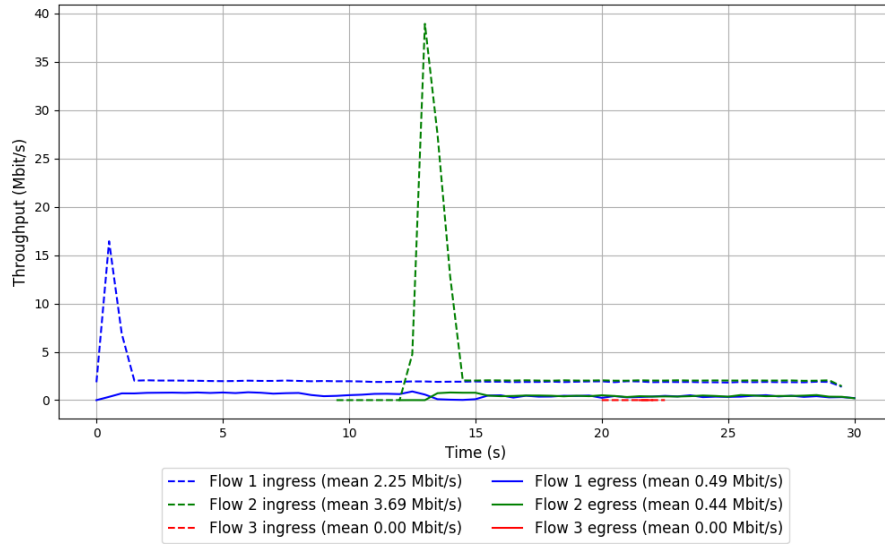
-- Flow 2:

Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 751.534 ms  
Loss rate: 89.28%

-- Flow 3:

Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 341.056 ms  
Loss rate: 92.31%

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



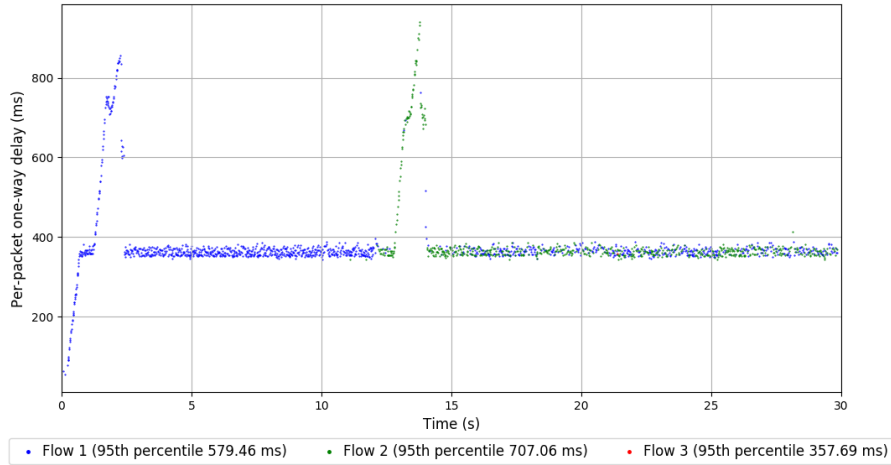
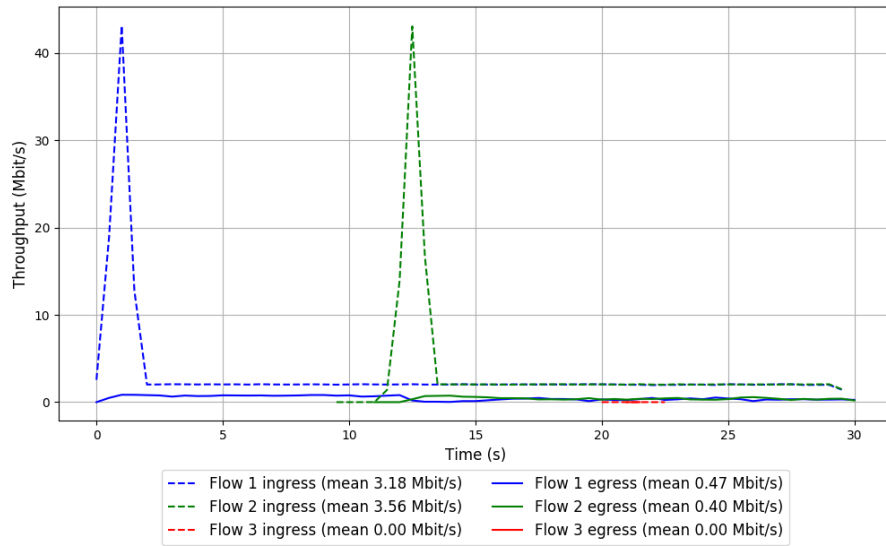
Run 2: Statistics of PCC-Allegro

Start at: 2018-08-22 18:03:01  
End at: 2018-08-22 18:03:31  
Local clock offset: 3.32 ms  
Remote clock offset: -65.926 ms

```
# Below is generated by plot.py at 2018-08-22 18:26:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.72 Mbit/s
95th percentile per-packet one-way delay: 682.754 ms
Loss rate: 86.98%
-- Flow 1:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 579.455 ms
Loss rate: 85.18%
-- Flow 2:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 707.062 ms
Loss rate: 89.39%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 357.687 ms
Loss rate: 92.31%
```



## Run 2: Report of PCC-Allegro — Data Link

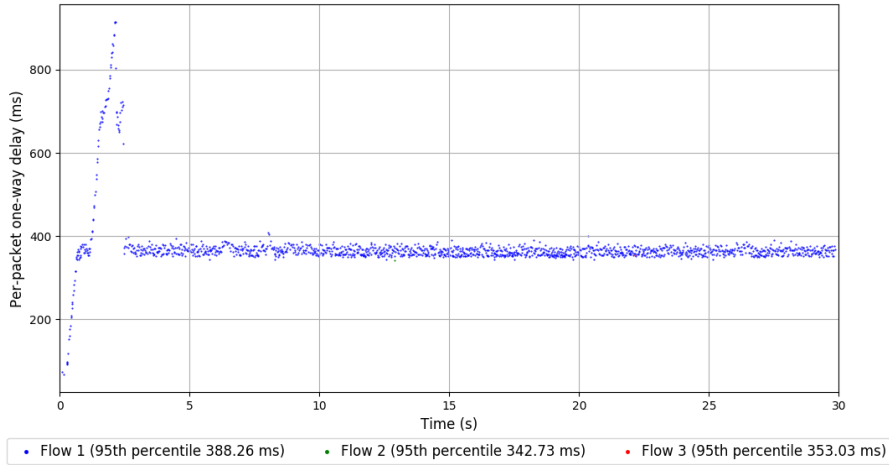
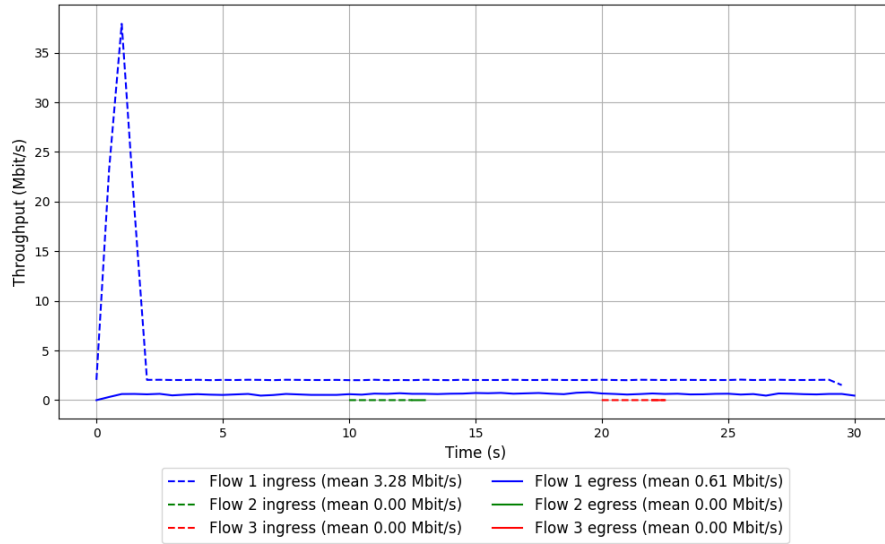


Run 3: Statistics of PCC-Allegro

Start at: 2018-08-22 18:21:39  
End at: 2018-08-22 18:22:09  
Local clock offset: -0.3 ms  
Remote clock offset: -64.608 ms

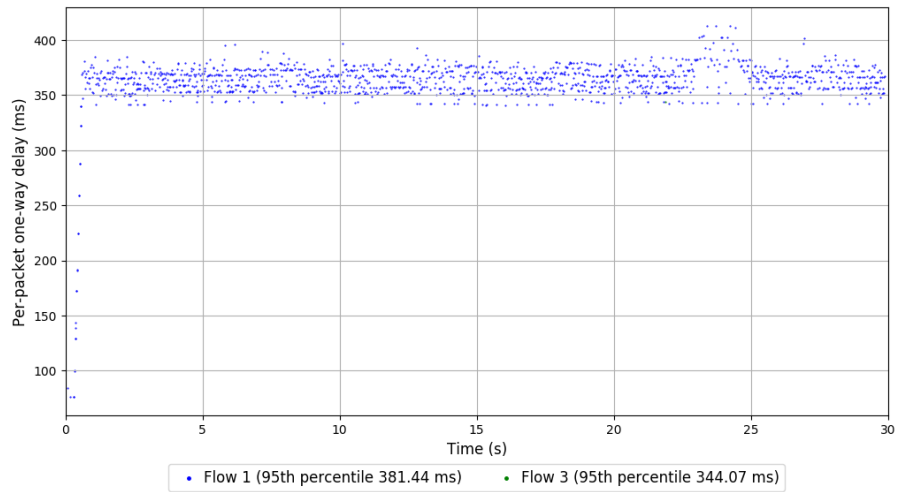
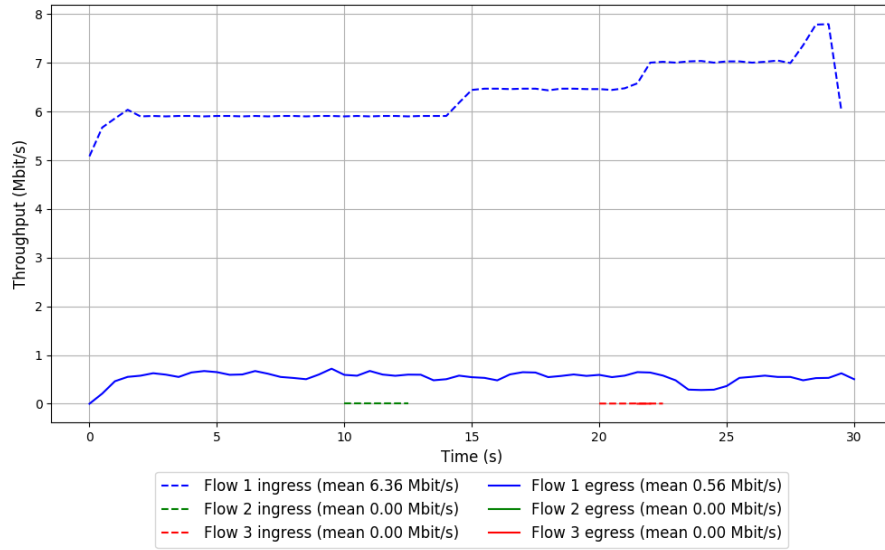
```
# Below is generated by plot.py at 2018-08-22 18:26:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 388.260 ms
Loss rate: 81.40%
-- Flow 1:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 388.260 ms
Loss rate: 81.39%
-- Flow 2:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 342.725 ms
Loss rate: 92.31%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 353.030 ms
Loss rate: 92.31%
```

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



Run 1: Statistics of PCC-Expr  
Start at: 2018-08-22 17:33:38  
End at: 2018-08-22 17:34:08  
Local clock offset: -0.735 ms  
Remote clock offset: -64.653 ms

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



Run 2: Statistics of PCC-Expr

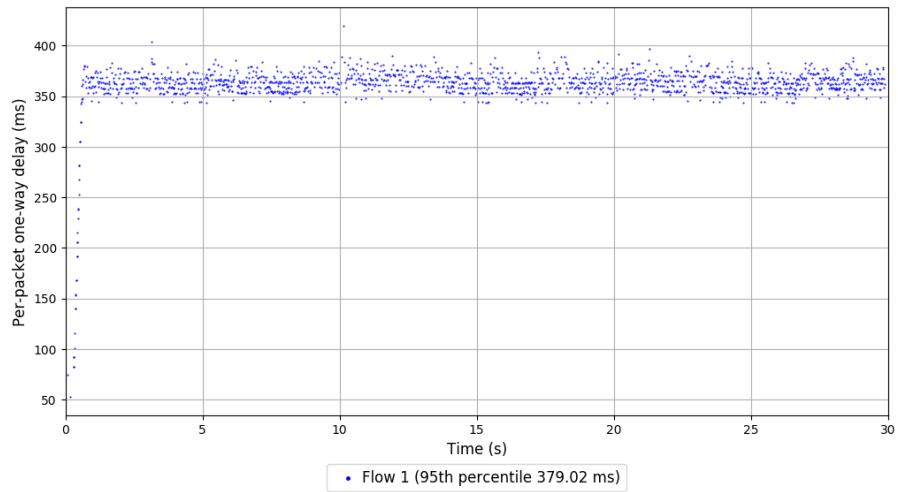
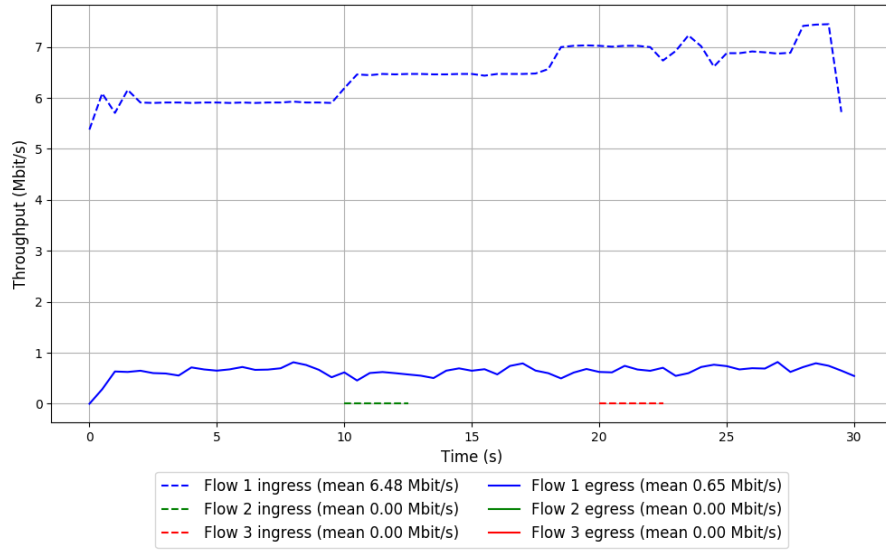
Start at: 2018-08-22 17:52:08

End at: 2018-08-22 17:52:38

Local clock offset: 3.444 ms

Remote clock offset: -65.258 ms

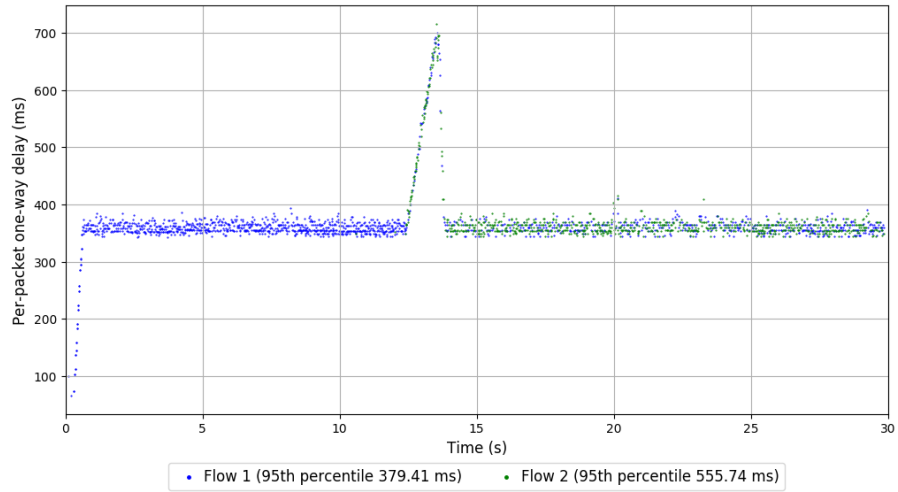
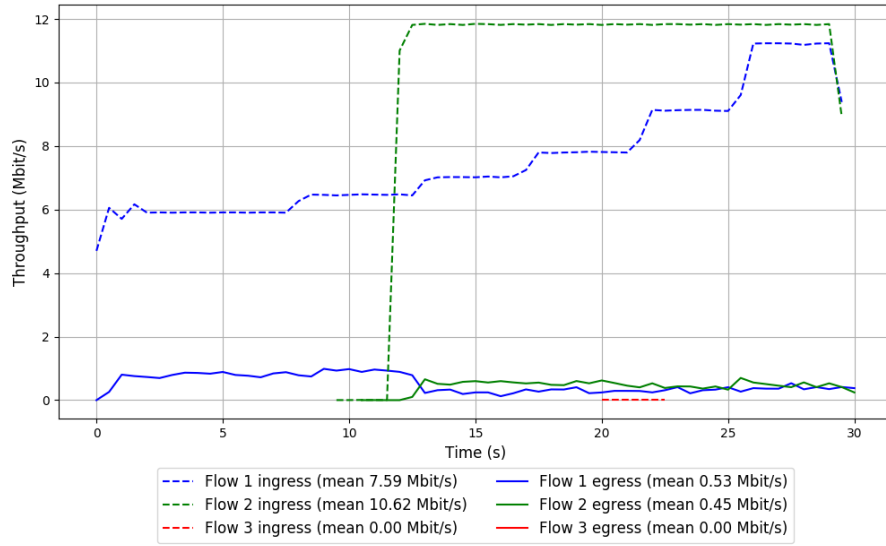
## Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr  
Start at: 2018-08-22 18:10:40  
End at: 2018-08-22 18:11:10  
Local clock offset: 1.0 ms  
Remote clock offset: -64.128 ms



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



Run 1: Statistics of QUIC Cubic

Start at: 2018-08-22 17:32:32  
End at: 2018-08-22 17:33:03  
Local clock offset: 0.864 ms  
Remote clock offset: -63.576 ms

# Below is generated by plot.py at 2018-08-22 18:27:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.60 Mbit/s  
95th percentile per-packet one-way delay: 369.983 ms  
Loss rate: 26.57%

-- Flow 1:

Average throughput: 0.36 Mbit/s  
95th percentile per-packet one-way delay: 369.527 ms  
Loss rate: 22.15%

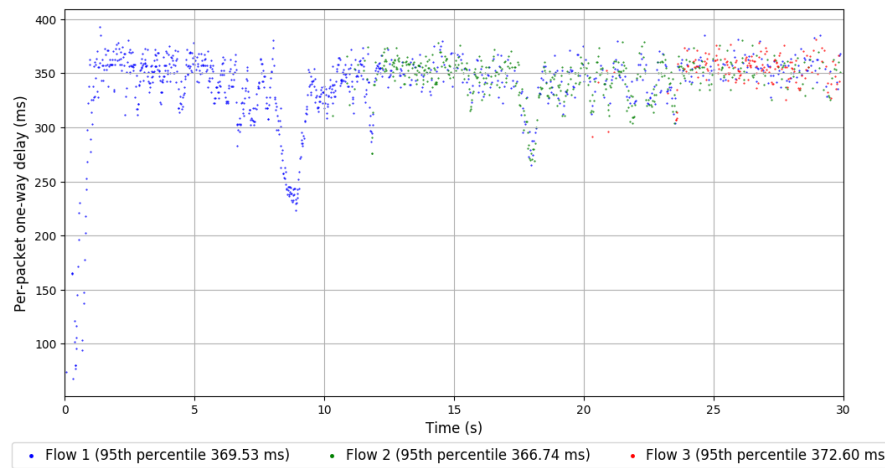
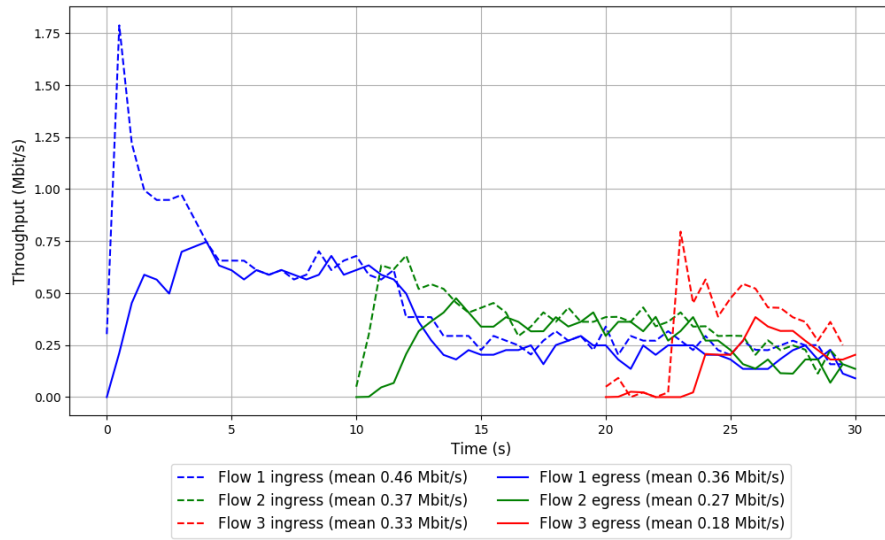
-- Flow 2:

Average throughput: 0.27 Mbit/s  
95th percentile per-packet one-way delay: 366.744 ms  
Loss rate: 25.85%

-- Flow 3:

Average throughput: 0.18 Mbit/s  
95th percentile per-packet one-way delay: 372.597 ms  
Loss rate: 47.33%

# Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-08-22 17:51:03  
End at: 2018-08-22 17:51:33  
Local clock offset: 2.168 ms  
Remote clock offset: -65.394 ms

# Below is generated by plot.py at 2018-08-22 18:27:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.59 Mbit/s  
95th percentile per-packet one-way delay: 371.650 ms  
Loss rate: 28.22%

-- Flow 1:

Average throughput: 0.35 Mbit/s  
95th percentile per-packet one-way delay: 369.067 ms  
Loss rate: 22.21%

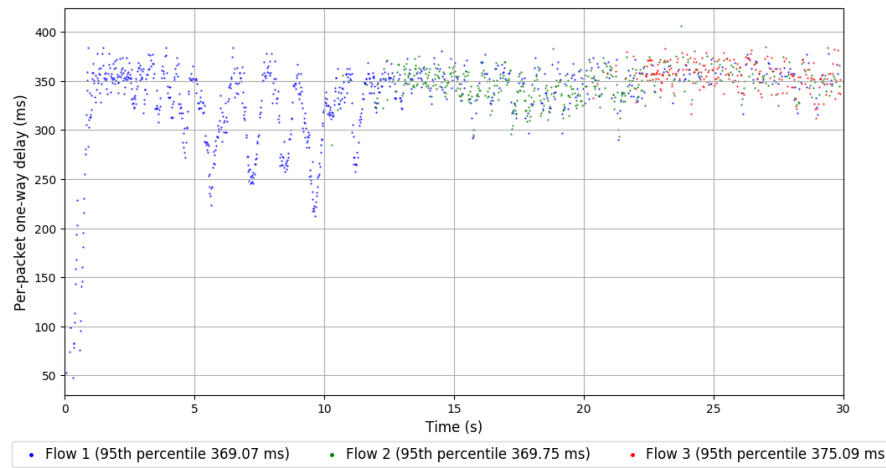
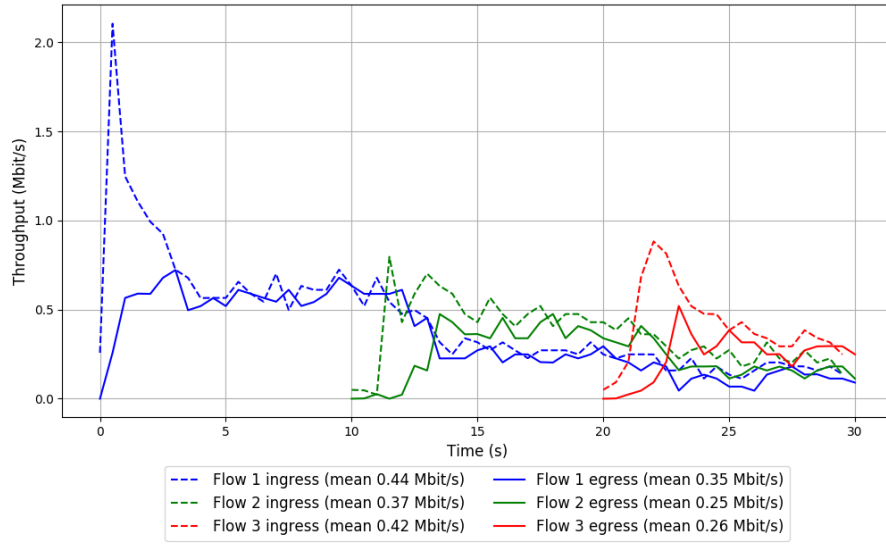
-- Flow 2:

Average throughput: 0.25 Mbit/s  
95th percentile per-packet one-way delay: 369.749 ms  
Loss rate: 32.23%

-- Flow 3:

Average throughput: 0.26 Mbit/s  
95th percentile per-packet one-way delay: 375.088 ms  
Loss rate: 40.51%

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



Run 3: Statistics of QUIC Cubic

Start at: 2018-08-22 18:09:35  
End at: 2018-08-22 18:10:05  
Local clock offset: 1.742 ms  
Remote clock offset: -65.306 ms

# Below is generated by plot.py at 2018-08-22 18:27:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.79 Mbit/s

95th percentile per-packet one-way delay: 366.908 ms

Loss rate: 17.64%

-- Flow 1:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 359.962 ms

Loss rate: 11.50%

-- Flow 2:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 371.824 ms

Loss rate: 21.27%

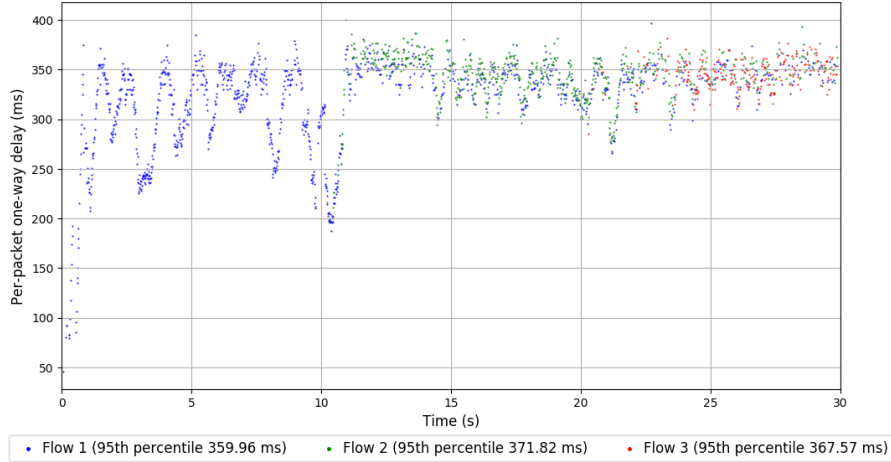
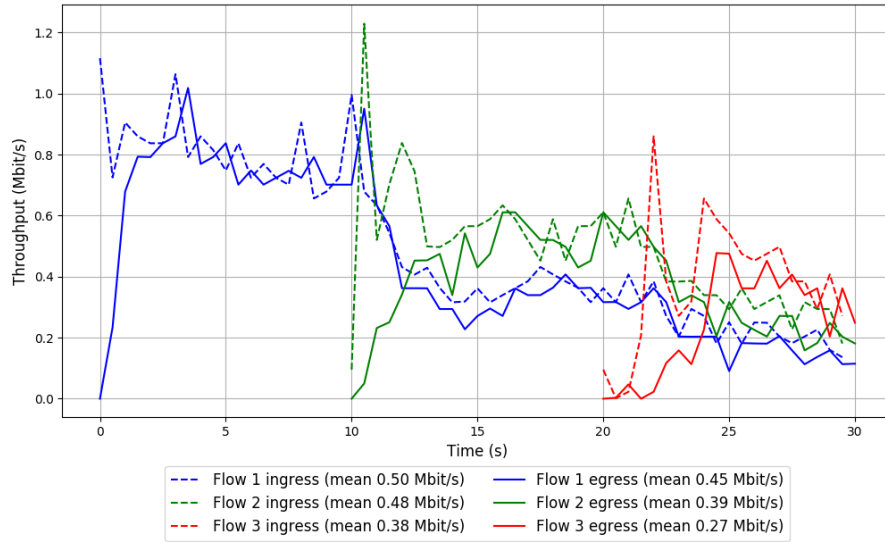
-- Flow 3:

Average throughput: 0.27 Mbit/s

95th percentile per-packet one-way delay: 367.567 ms

Loss rate: 32.81%

### Run 3: Report of QUIC Cubic — Data Link



Run 1: Statistics of SCReAM

Start at: 2018-08-22 17:34:44  
End at: 2018-08-22 17:35:14  
Local clock offset: 1.984 ms  
Remote clock offset: -63.976 ms

# Below is generated by plot.py at 2018-08-22 18:27:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 147.930 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 137.845 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 144.424 ms

Loss rate: 0.70%

-- Flow 3:

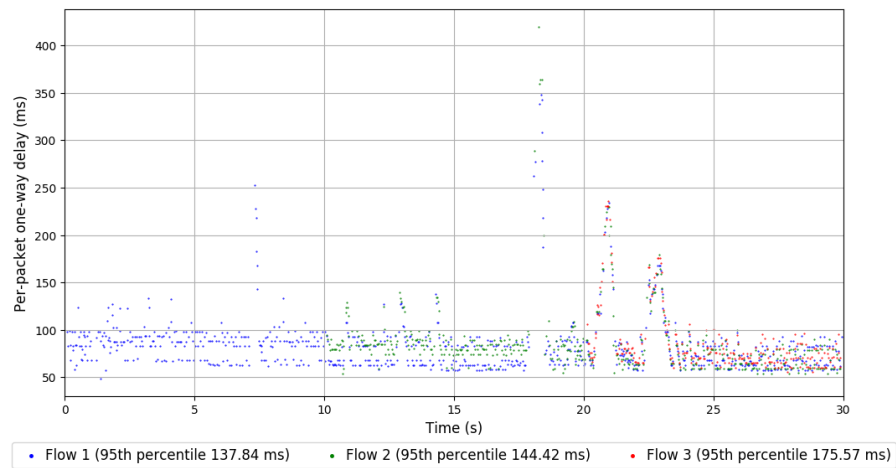
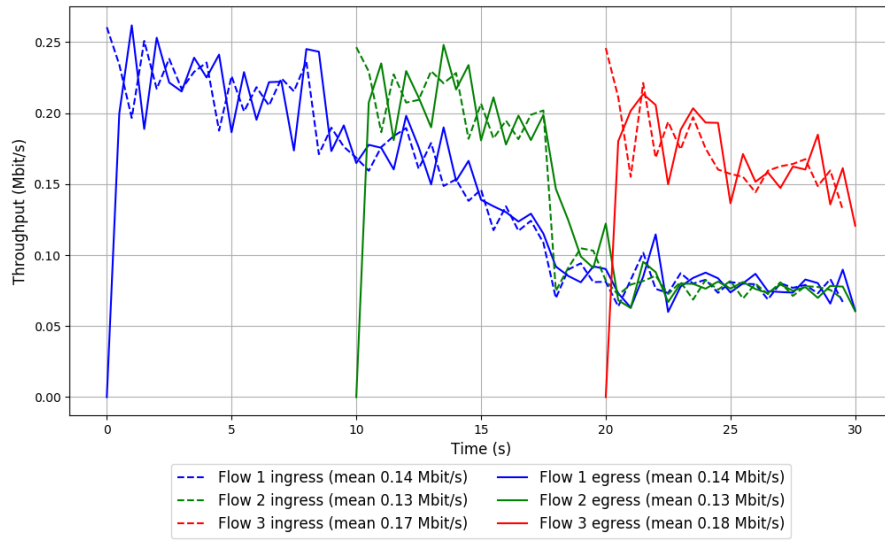
Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 175.567 ms

Loss rate: 1.00%



### Run 1: Report of SCReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2018-08-22 17:53:14

End at: 2018-08-22 17:53:44

Local clock offset: 3.221 ms

Remote clock offset: -65.3 ms

# Below is generated by plot.py at 2018-08-22 18:27:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 113.449 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 108.566 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 121.520 ms

Loss rate: 0.42%

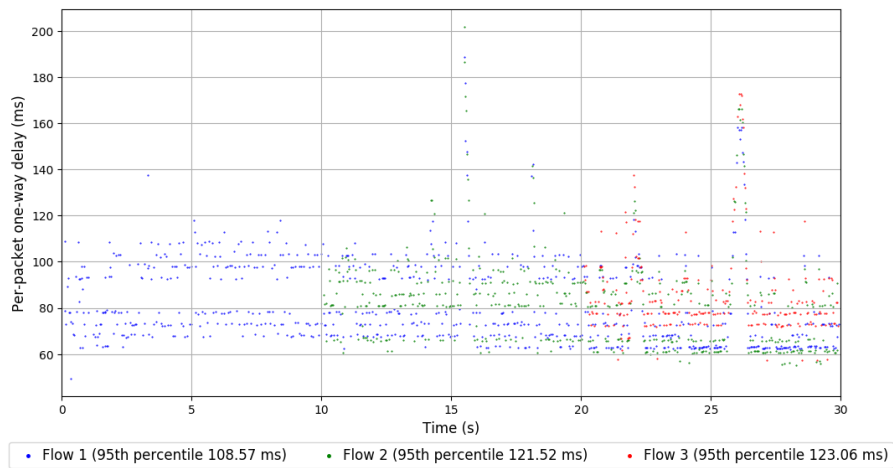
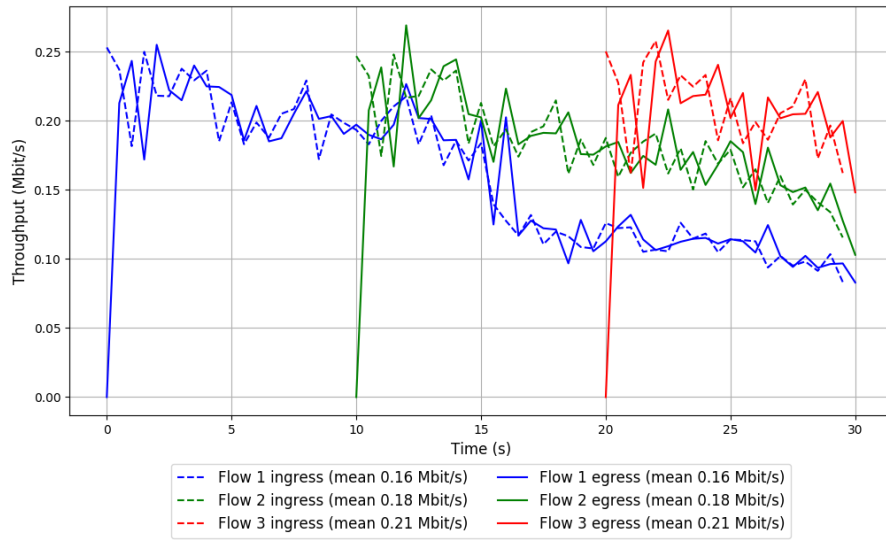
-- Flow 3:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 123.057 ms

Loss rate: 1.01%

## Run 2: Report of SCReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-08-22 18:11:46  
End at: 2018-08-22 18:12:16  
Local clock offset: 0.004 ms  
Remote clock offset: -64.222 ms

# Below is generated by plot.py at 2018-08-22 18:27:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.40 Mbit/s  
95th percentile per-packet one-way delay: 95.133 ms  
Loss rate: 0.36%

-- Flow 1:

Average throughput: 0.20 Mbit/s  
95th percentile per-packet one-way delay: 95.259 ms  
Loss rate: 0.16%

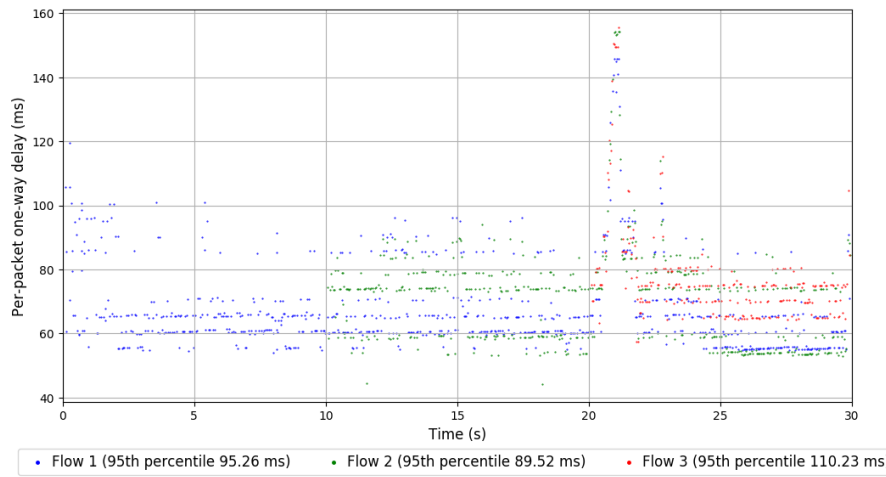
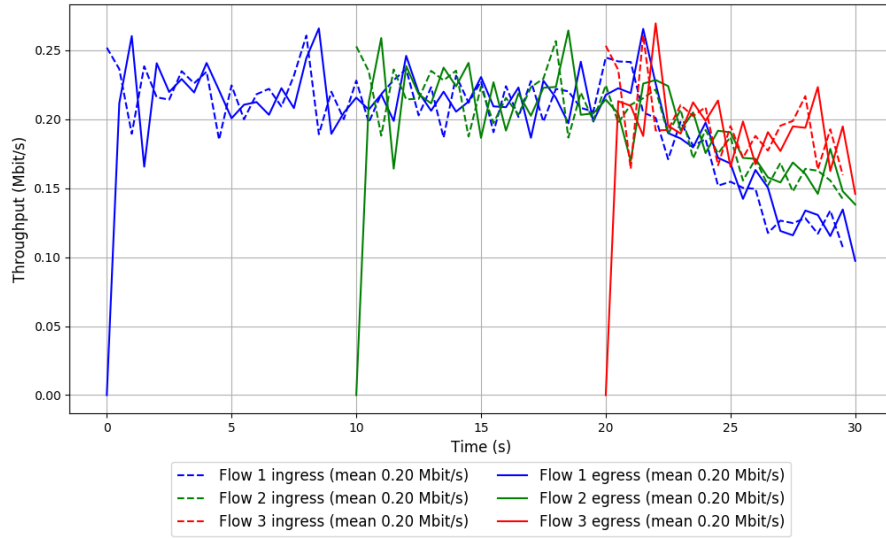
-- Flow 2:

Average throughput: 0.20 Mbit/s  
95th percentile per-packet one-way delay: 89.518 ms  
Loss rate: 0.32%

-- Flow 3:

Average throughput: 0.20 Mbit/s  
95th percentile per-packet one-way delay: 110.233 ms  
Loss rate: 1.05%

### Run 3: Report of SCReAM — Data Link

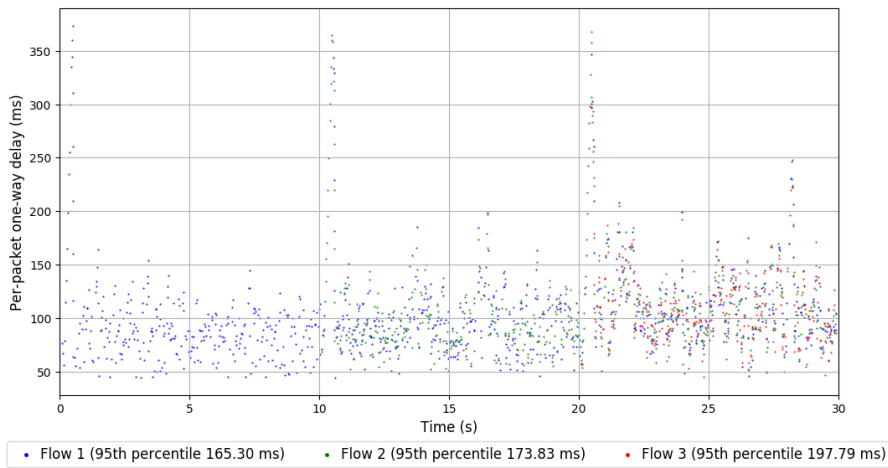
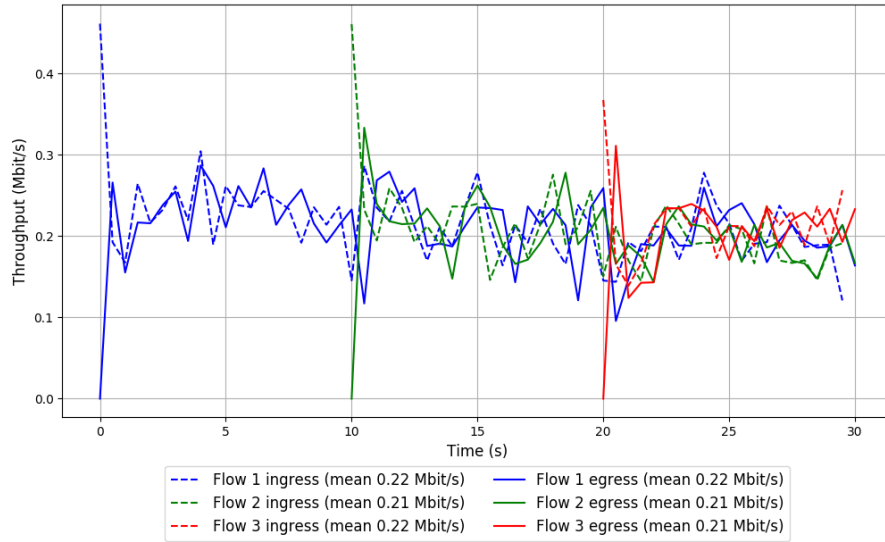


Run 1: Statistics of Sprout

Start at: 2018-08-22 17:31:27  
End at: 2018-08-22 17:31:57  
Local clock offset: 2.655 ms  
Remote clock offset: -64.06 ms

```
# Below is generated by plot.py at 2018-08-22 18:27:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 173.827 ms
Loss rate: 1.75%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 165.304 ms
Loss rate: 1.29%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 173.827 ms
Loss rate: 1.96%
-- Flow 3:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 197.793 ms
Loss rate: 2.71%
```

# Run 1: Report of Sprout — Data Link



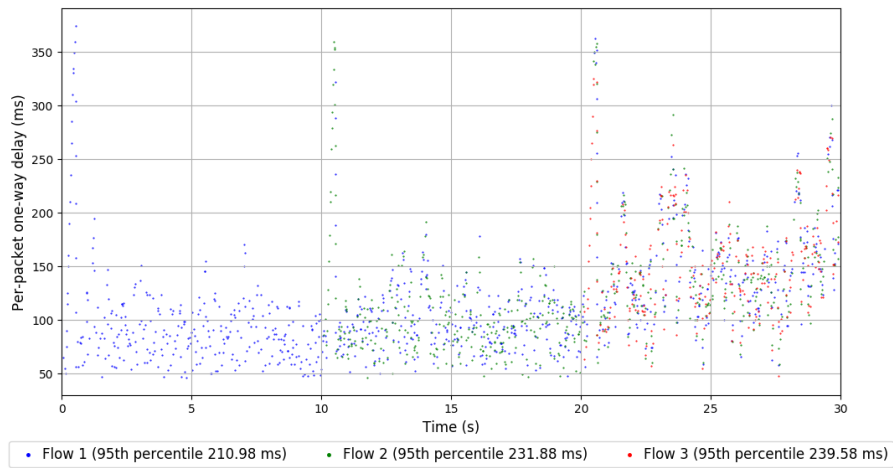
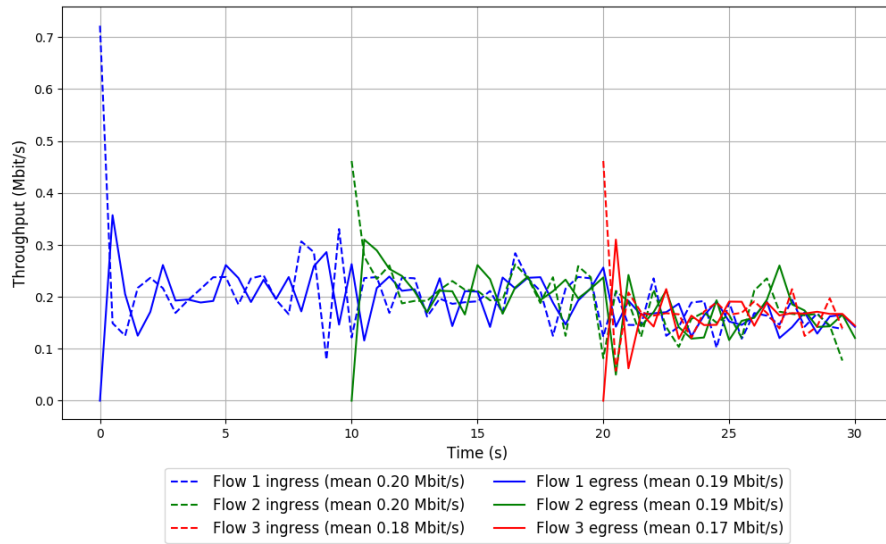
Run 2: Statistics of Sprout

Start at: 2018-08-22 17:49:58  
End at: 2018-08-22 17:50:28  
Local clock offset: 3.544 ms  
Remote clock offset: -65.574 ms

```
# Below is generated by plot.py at 2018-08-22 18:27:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 224.051 ms
Loss rate: 3.06%
-- Flow 1:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 210.981 ms
Loss rate: 3.51%
-- Flow 2:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 231.882 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 239.579 ms
Loss rate: 5.44%
```



## Run 2: Report of Sprout — Data Link

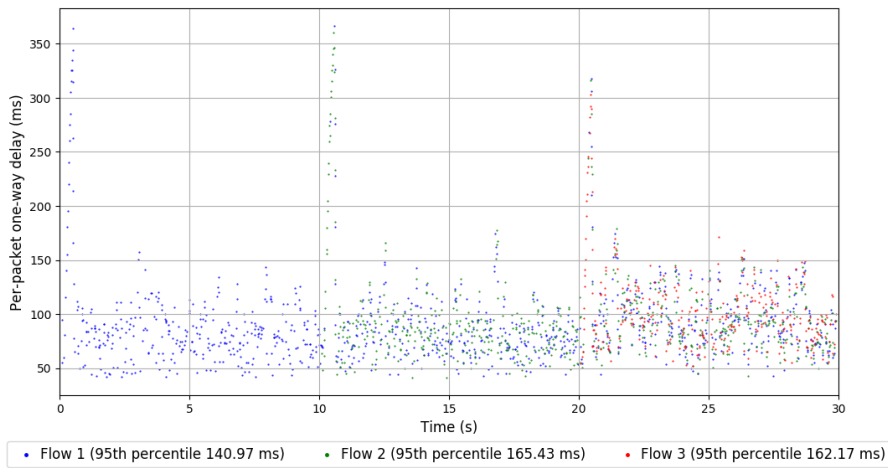
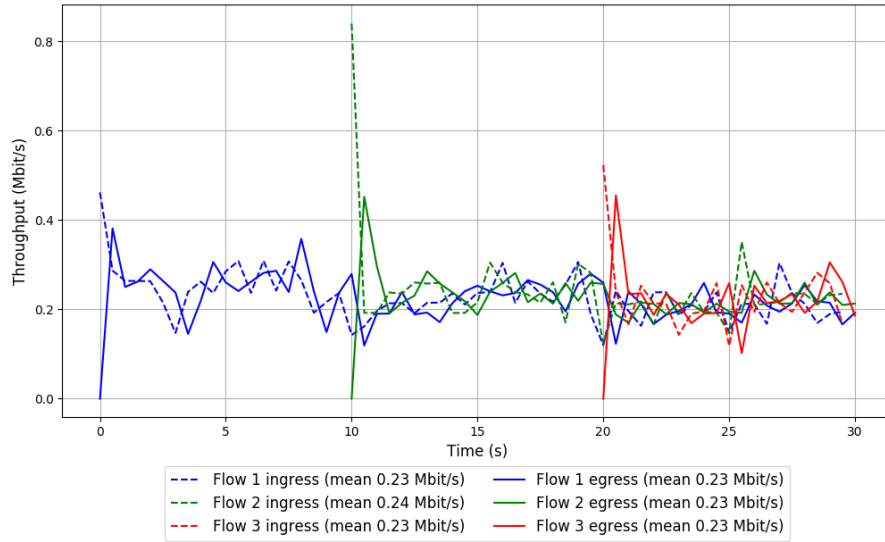


Run 3: Statistics of Sprout

Start at: 2018-08-22 18:08:29  
End at: 2018-08-22 18:08:59  
Local clock offset: 1.653 ms  
Remote clock offset: -65.378 ms

```
# Below is generated by plot.py at 2018-08-22 18:27:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 153.941 ms
Loss rate: 1.53%
-- Flow 1:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 140.974 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 165.426 ms
Loss rate: 3.41%
-- Flow 3:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 162.170 ms
Loss rate: 0.55%
```

### Run 3: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2018-08-22 17:35:49  
End at: 2018-08-22 17:36:19  
Local clock offset: 2.424 ms  
Remote clock offset: -64.085 ms

# Below is generated by plot.py at 2018-08-22 18:27:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.40 Mbit/s  
95th percentile per-packet one-way delay: 376.958 ms  
Loss rate: 70.31%

-- Flow 1:

Average throughput: 0.27 Mbit/s  
95th percentile per-packet one-way delay: 379.995 ms  
Loss rate: 66.40%

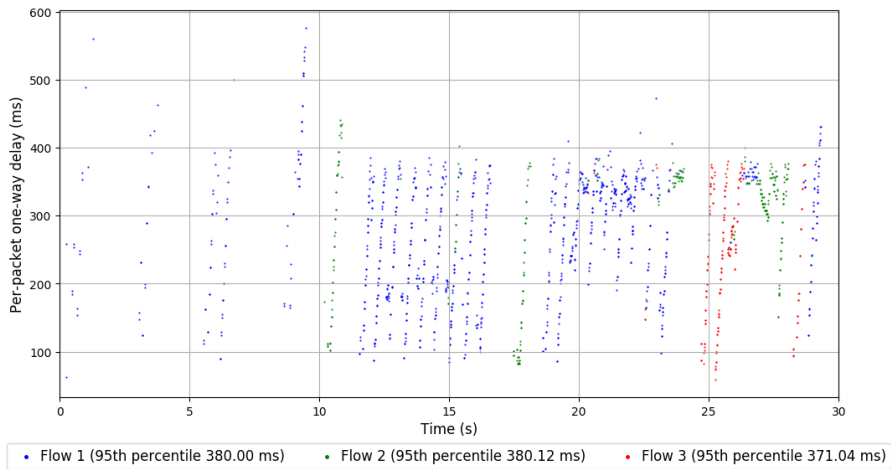
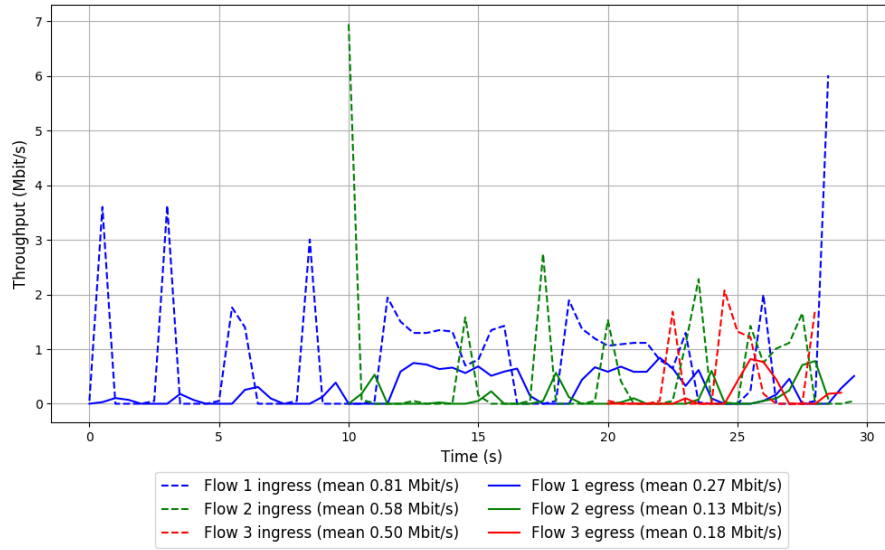
-- Flow 2:

Average throughput: 0.13 Mbit/s  
95th percentile per-packet one-way delay: 380.120 ms  
Loss rate: 80.17%

-- Flow 3:

Average throughput: 0.18 Mbit/s  
95th percentile per-packet one-way delay: 371.043 ms  
Loss rate: 64.83%

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

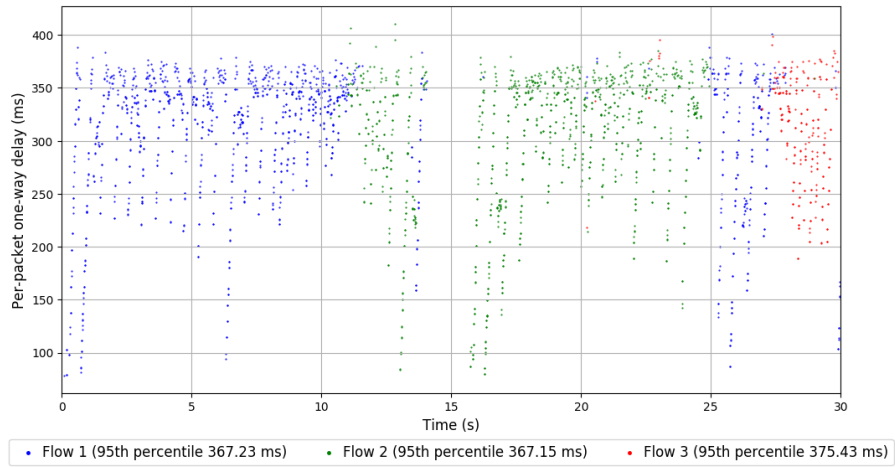
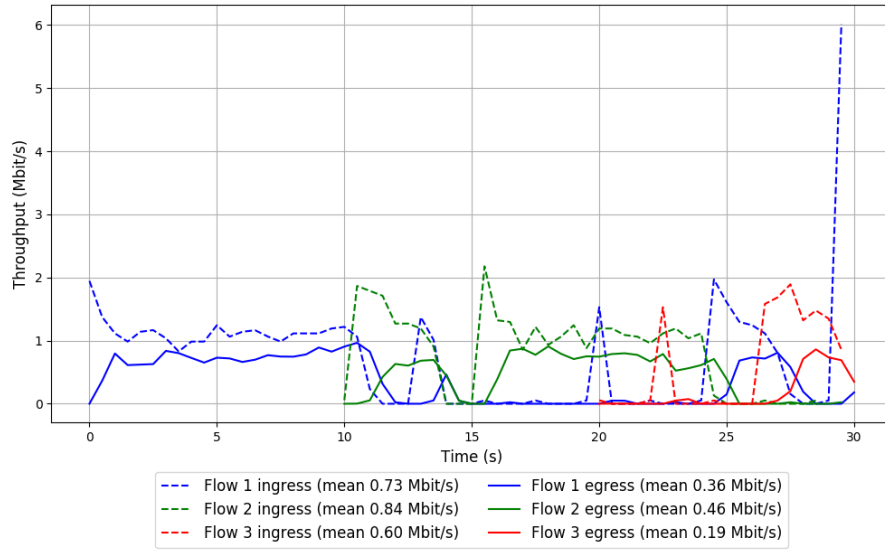


Run 2: Statistics of TaoVA-100x

Start at: 2018-08-22 17:54:20  
End at: 2018-08-22 17:54:50  
Local clock offset: 2.347 ms  
Remote clock offset: -69.01 ms

```
# Below is generated by plot.py at 2018-08-22 18:27:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 368.180 ms
Loss rate: 51.43%
-- Flow 1:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 367.229 ms
Loss rate: 51.04%
-- Flow 2:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 367.154 ms
Loss rate: 45.45%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 375.427 ms
Loss rate: 68.58%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-08-22 18:12:51  
End at: 2018-08-22 18:13:21  
Local clock offset: 2.134 ms  
Remote clock offset: -65.022 ms

# Below is generated by plot.py at 2018-08-22 18:27:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.84 Mbit/s  
95th percentile per-packet one-way delay: 365.267 ms  
Loss rate: 50.69%

-- Flow 1:

Average throughput: 0.74 Mbit/s  
95th percentile per-packet one-way delay: 363.357 ms  
Loss rate: 32.07%

-- Flow 2:

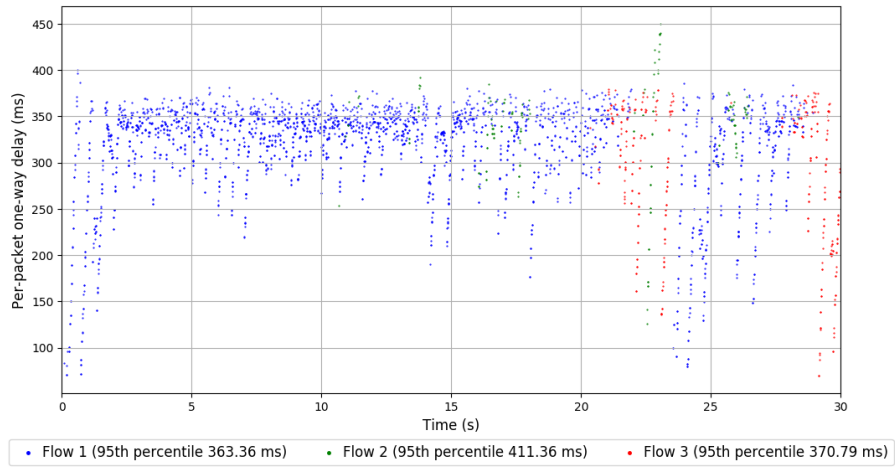
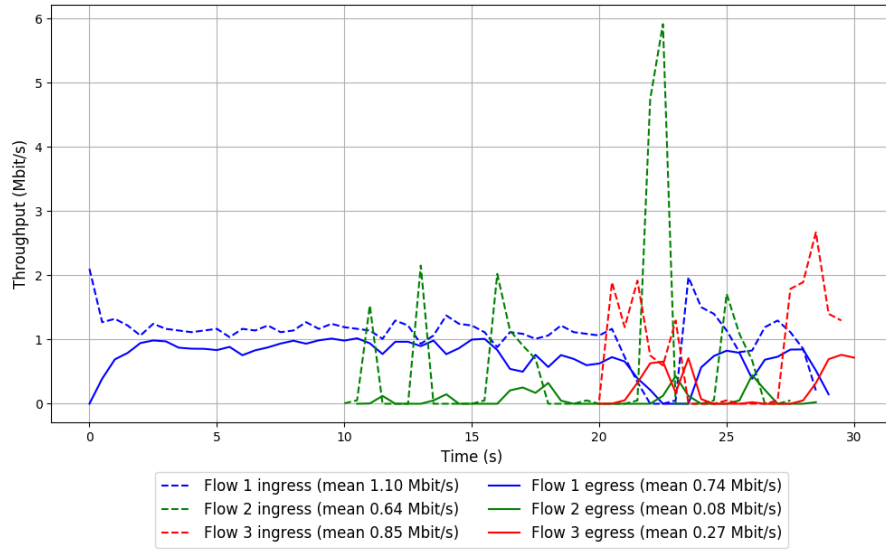
Average throughput: 0.08 Mbit/s  
95th percentile per-packet one-way delay: 411.360 ms  
Loss rate: 88.04%

-- Flow 3:

Average throughput: 0.27 Mbit/s  
95th percentile per-packet one-way delay: 370.792 ms  
Loss rate: 69.19%



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



Run 1: Statistics of TCP Vegas

Start at: 2018-08-22 17:40:10  
End at: 2018-08-22 17:40:40  
Local clock offset: 0.276 ms  
Remote clock offset: -65.006 ms

# Below is generated by plot.py at 2018-08-22 18:27:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.83 Mbit/s  
95th percentile per-packet one-way delay: 339.018 ms  
Loss rate: 3.48%

-- Flow 1:

Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 319.818 ms  
Loss rate: 2.06%

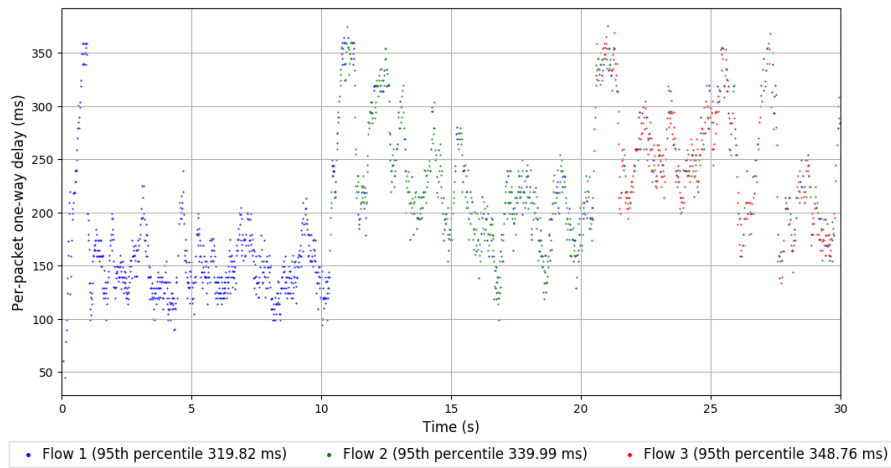
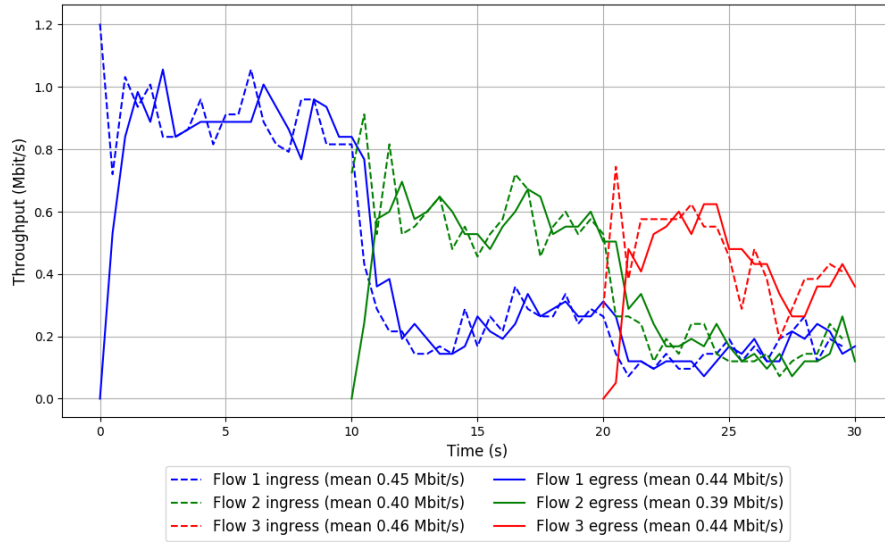
-- Flow 2:

Average throughput: 0.39 Mbit/s  
95th percentile per-packet one-way delay: 339.993 ms  
Loss rate: 4.41%

-- Flow 3:

Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 348.762 ms  
Loss rate: 6.03%

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



Run 2: Statistics of TCP Vegas

Start at: 2018-08-22 17:58:40  
End at: 2018-08-22 17:59:10  
Local clock offset: 1.024 ms  
Remote clock offset: -66.005 ms

# Below is generated by plot.py at 2018-08-22 18:27:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.67 Mbit/s  
95th percentile per-packet one-way delay: 343.326 ms  
Loss rate: 3.91%

-- Flow 1:

Average throughput: 0.36 Mbit/s  
95th percentile per-packet one-way delay: 337.993 ms  
Loss rate: 3.35%

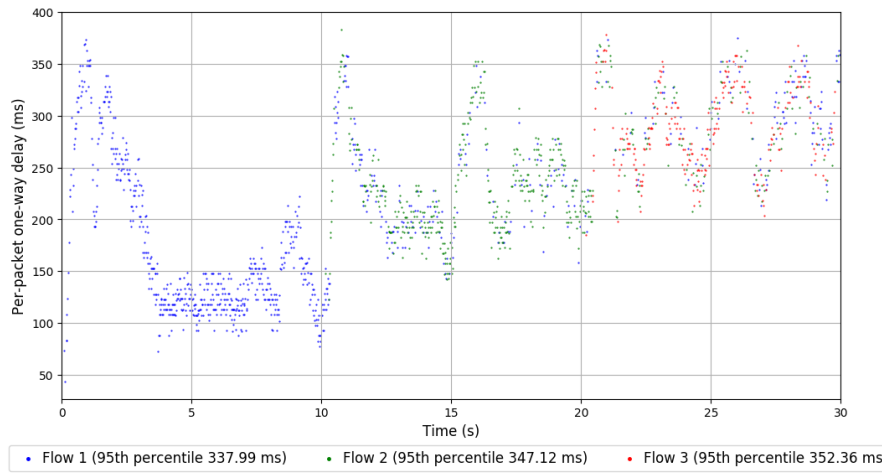
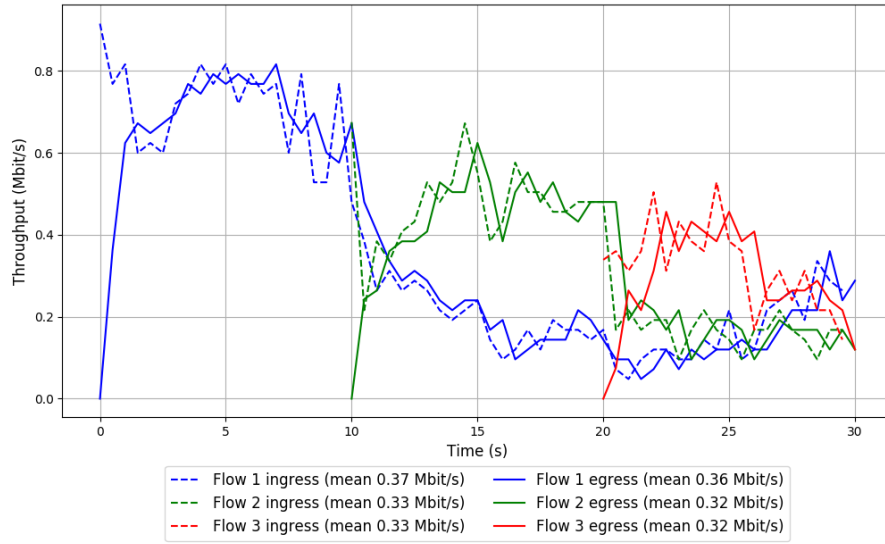
-- Flow 2:

Average throughput: 0.32 Mbit/s  
95th percentile per-packet one-way delay: 347.117 ms  
Loss rate: 3.12%

-- Flow 3:

Average throughput: 0.32 Mbit/s  
95th percentile per-packet one-way delay: 352.358 ms  
Loss rate: 7.38%

Run 2: Report of TCP Vegas — Data Link

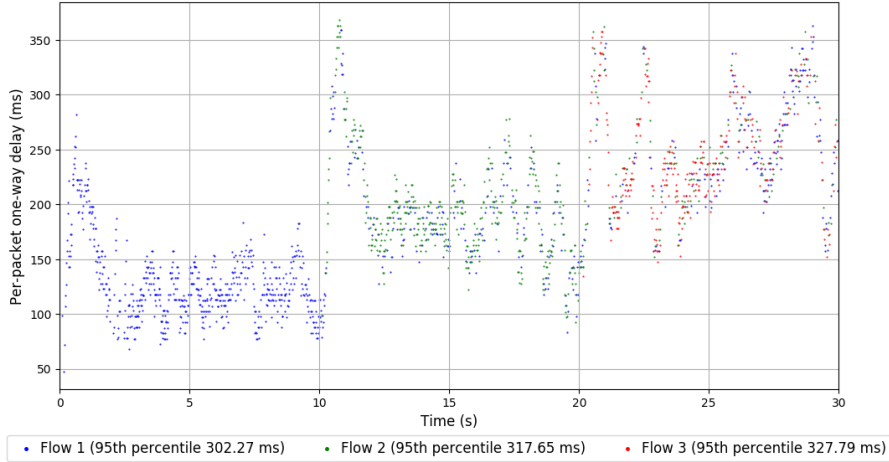
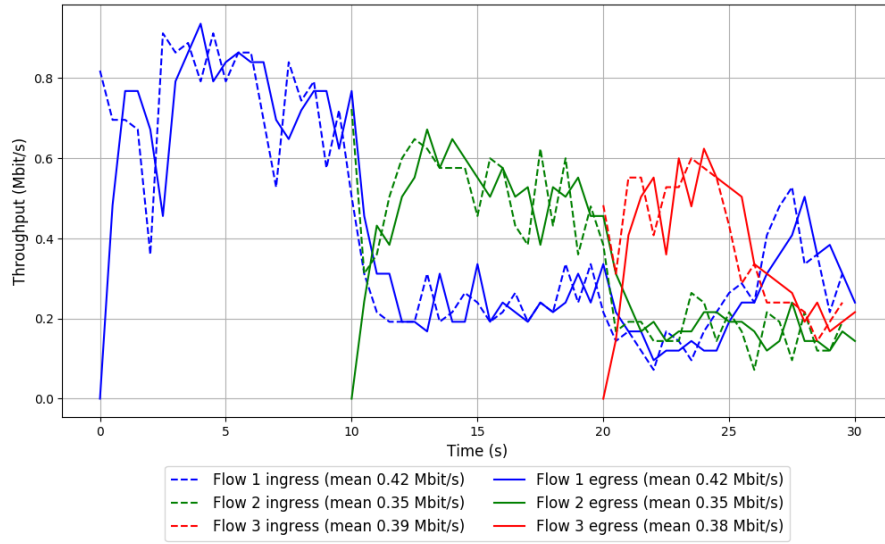


Run 3: Statistics of TCP Vegas

Start at: 2018-08-22 18:17:17  
End at: 2018-08-22 18:17:47  
Local clock offset: 0.843 ms  
Remote clock offset: -63.671 ms

```
# Below is generated by plot.py at 2018-08-22 18:27:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.77 Mbit/s
95th percentile per-packet one-way delay: 317.466 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 302.271 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 317.654 ms
Loss rate: 2.22%
-- Flow 3:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 327.787 ms
Loss rate: 2.51%
```

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



Run 1: Statistics of Verus

Start at: 2018-08-22 17:46:42  
End at: 2018-08-22 17:47:12  
Local clock offset: 0.095 ms  
Remote clock offset: -64.458 ms

# Below is generated by plot.py at 2018-08-22 18:27:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.68 Mbit/s  
95th percentile per-packet one-way delay: 366.732 ms  
Loss rate: 35.79%

-- Flow 1:

Average throughput: 0.61 Mbit/s  
95th percentile per-packet one-way delay: 365.927 ms  
Loss rate: 29.02%

-- Flow 2:

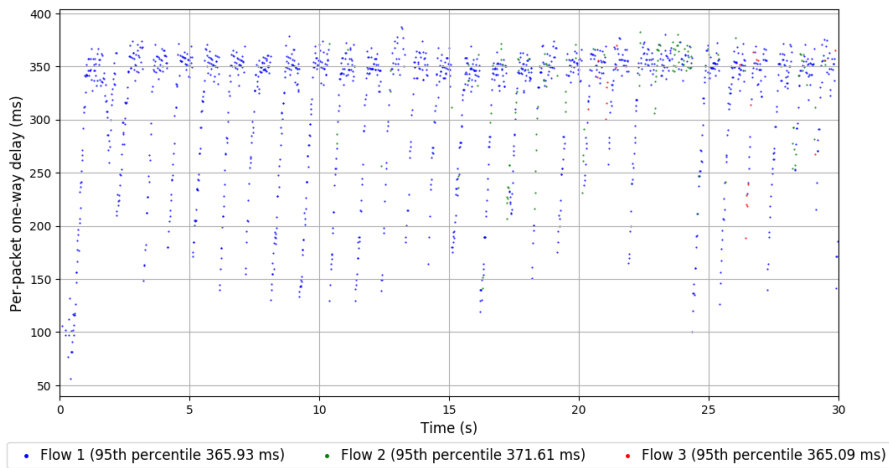
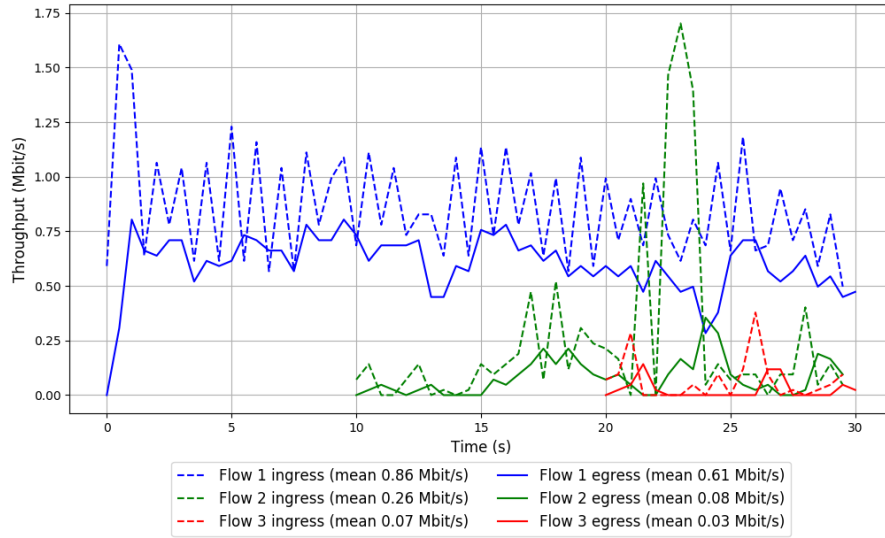
Average throughput: 0.08 Mbit/s  
95th percentile per-packet one-way delay: 371.606 ms  
Loss rate: 67.46%

-- Flow 3:

Average throughput: 0.03 Mbit/s  
95th percentile per-packet one-way delay: 365.088 ms  
Loss rate: 60.34%



### Run 1: Report of Verus — Data Link

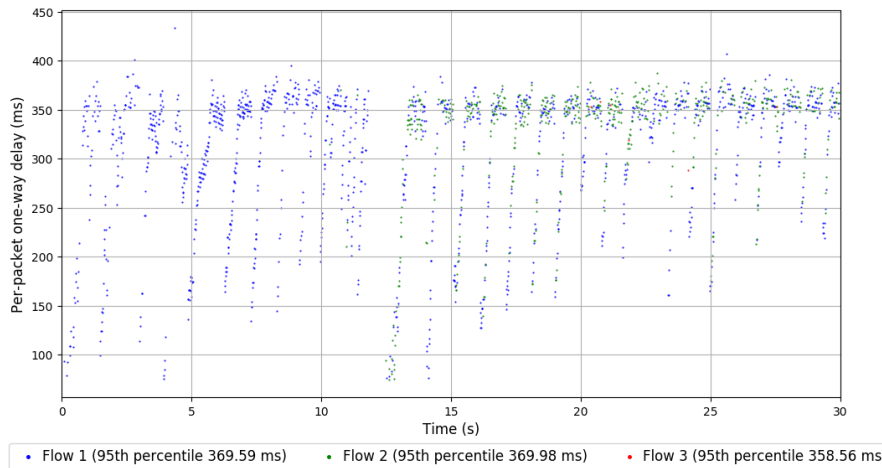
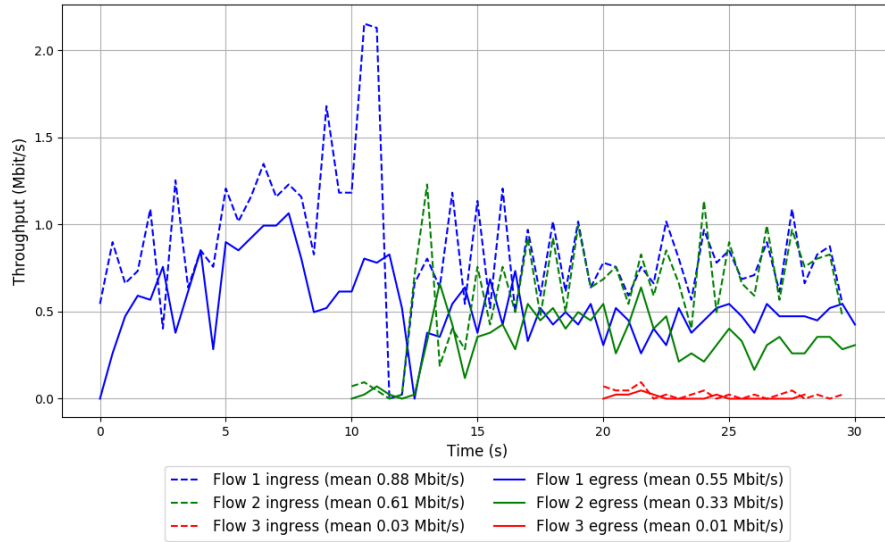


Run 2: Statistics of Verus

Start at: 2018-08-22 18:05:13  
End at: 2018-08-22 18:05:43  
Local clock offset: 4.231 ms  
Remote clock offset: -65.326 ms

```
# Below is generated by plot.py at 2018-08-22 18:27:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.77 Mbit/s
95th percentile per-packet one-way delay: 369.865 ms
Loss rate: 40.75%
-- Flow 1:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 369.592 ms
Loss rate: 37.88%
-- Flow 2:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 369.982 ms
Loss rate: 46.37%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 358.560 ms
Loss rate: 68.18%
```

Run 2: Report of Verus — Data Link

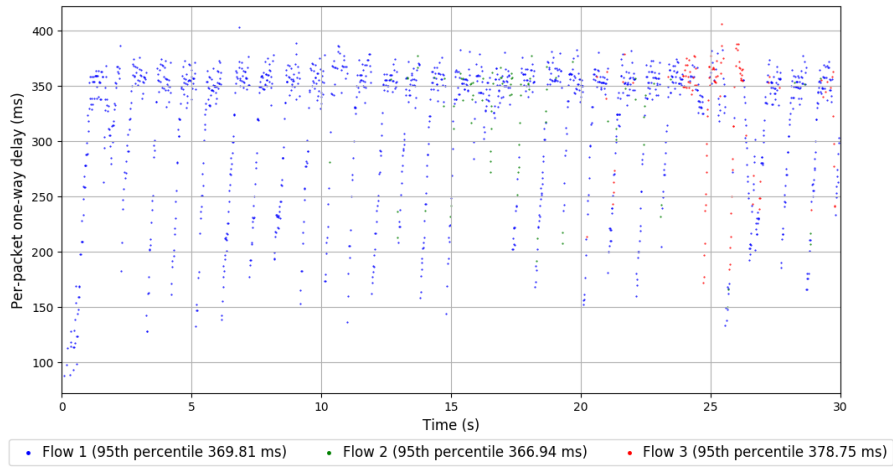
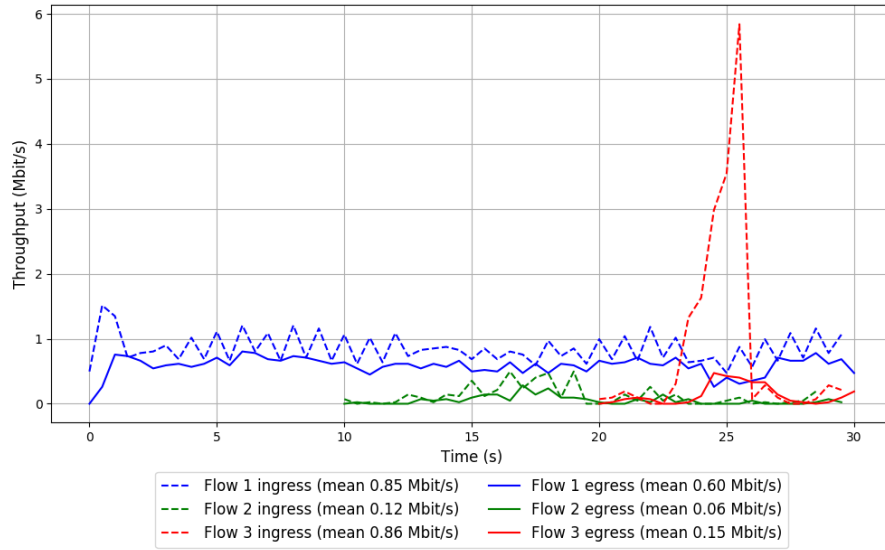


Run 3: Statistics of Verus

Start at: 2018-08-22 18:23:50  
End at: 2018-08-22 18:24:20  
Local clock offset: 0.447 ms  
Remote clock offset: -64.164 ms

```
# Below is generated by plot.py at 2018-08-22 18:27:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.68 Mbit/s
95th percentile per-packet one-way delay: 371.112 ms
Loss rate: 44.22%
-- Flow 1:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 369.805 ms
Loss rate: 30.26%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 366.945 ms
Loss rate: 54.36%
-- Flow 3:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 378.755 ms
Loss rate: 83.13%
```

### Run 3: Report of Verus — Data Link

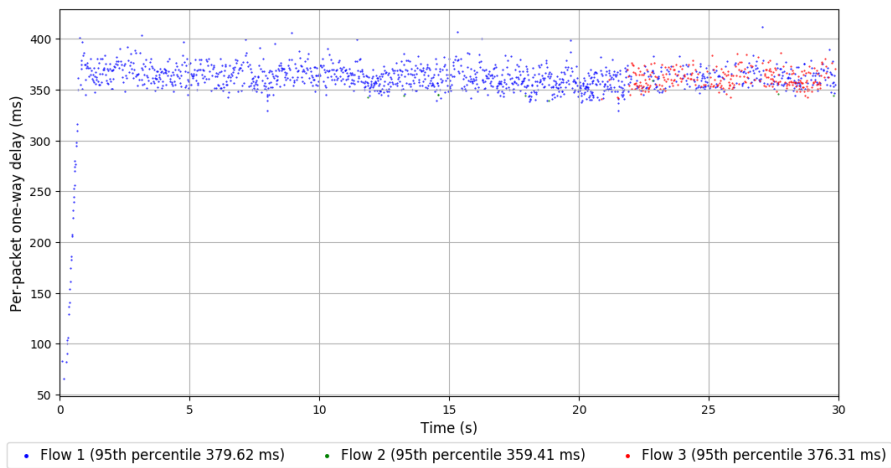
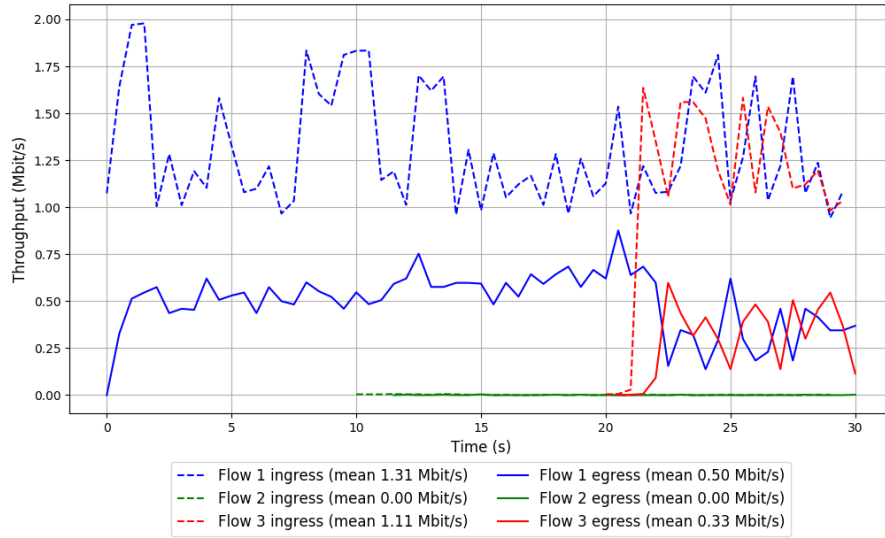


Run 1: Statistics of PCC-Vivace

Start at: 2018-08-22 17:47:48  
End at: 2018-08-22 17:48:18  
Local clock offset: 3.278 ms  
Remote clock offset: -65.615 ms

```
# Below is generated by plot.py at 2018-08-22 18:27:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 379.253 ms
Loss rate: 64.08%
-- Flow 1:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 379.619 ms
Loss rate: 61.68%
-- Flow 2:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 359.406 ms
Loss rate: 74.38%
-- Flow 3:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 376.308 ms
Loss rate: 72.66%
```

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



Run 2: Statistics of PCC-Vivace

Start at: 2018-08-22 18:06:19

End at: 2018-08-22 18:06:49

Local clock offset: 3.775 ms

Remote clock offset: -65.4 ms

# Below is generated by plot.py at 2018-08-22 18:27:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.91 Mbit/s

95th percentile per-packet one-way delay: 376.248 ms

Loss rate: 64.90%

-- Flow 1:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 376.248 ms

Loss rate: 58.47%

-- Flow 2:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 377.515 ms

Loss rate: 69.84%

-- Flow 3:

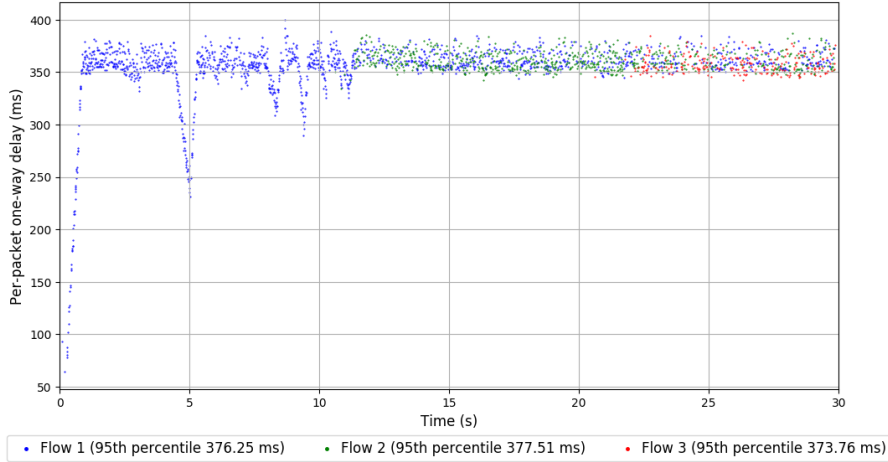
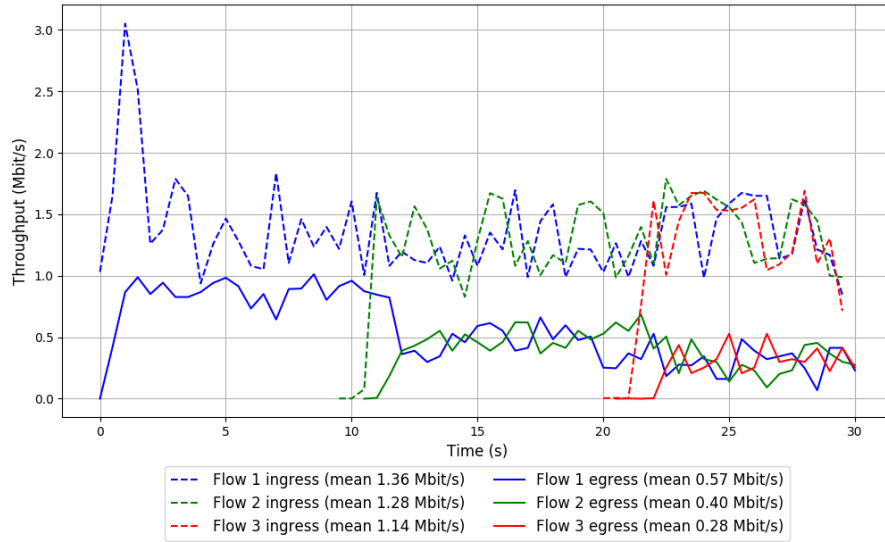
Average throughput: 0.28 Mbit/s

95th percentile per-packet one-way delay: 373.758 ms

Loss rate: 76.89%



Run 2: Report of PCC-Vivace — Data Link

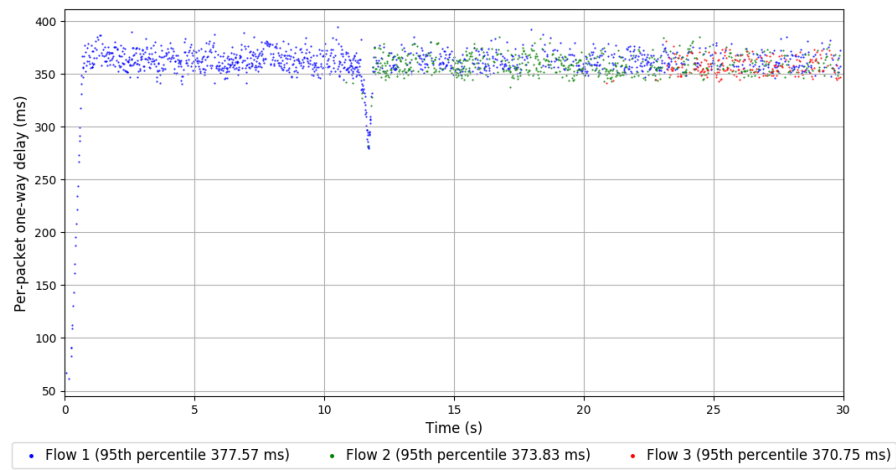
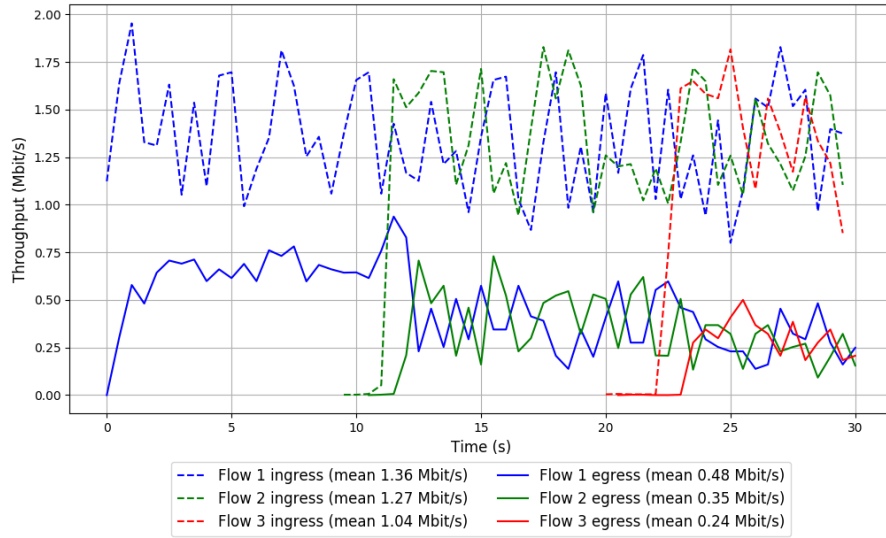


Run 3: Statistics of PCC-Vivace

Start at: 2018-08-22 18:24:56  
End at: 2018-08-22 18:25:26  
Local clock offset: -1.101 ms  
Remote clock offset: -64.114 ms

```
# Below is generated by plot.py at 2018-08-22 18:27:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.77 Mbit/s
95th percentile per-packet one-way delay: 376.104 ms
Loss rate: 69.79%
-- Flow 1:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 377.574 ms
Loss rate: 65.08%
-- Flow 2:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 373.834 ms
Loss rate: 73.59%
-- Flow 3:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 370.750 ms
Loss rate: 79.03%
```

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



Run 1: Statistics of WebRTC media

Start at: 2018-08-22 17:41:16  
End at: 2018-08-22 17:41:46  
Local clock offset: 3.183 ms  
Remote clock offset: -64.845 ms

# Below is generated by plot.py at 2018-08-22 18:27:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.42 Mbit/s  
95th percentile per-packet one-way delay: 345.142 ms  
Loss rate: 8.84%

-- Flow 1:

Average throughput: 0.14 Mbit/s  
95th percentile per-packet one-way delay: 343.046 ms  
Loss rate: 6.85%

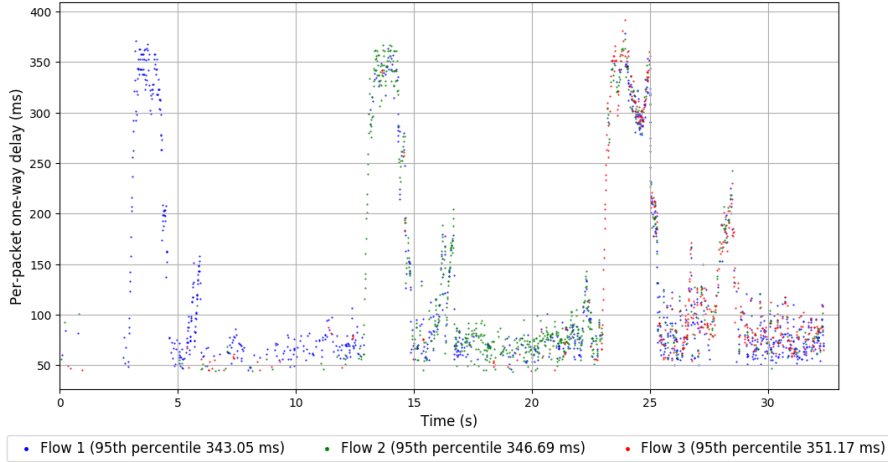
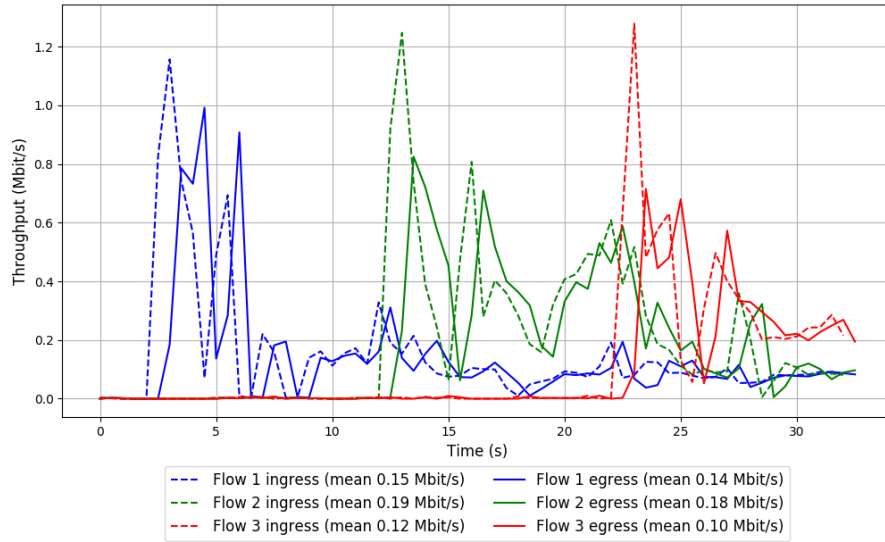
-- Flow 2:

Average throughput: 0.18 Mbit/s  
95th percentile per-packet one-way delay: 346.690 ms  
Loss rate: 7.68%

-- Flow 3:

Average throughput: 0.10 Mbit/s  
95th percentile per-packet one-way delay: 351.168 ms  
Loss rate: 13.35%

# Run 1: Report of WebRTC media — Data Link

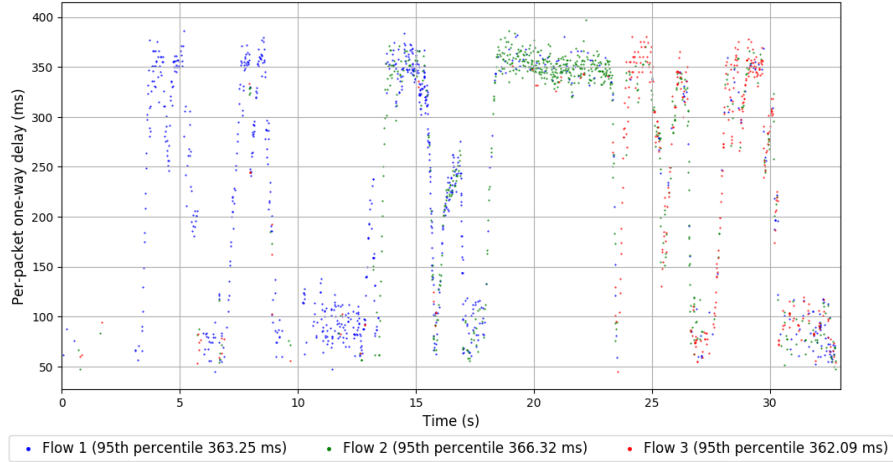
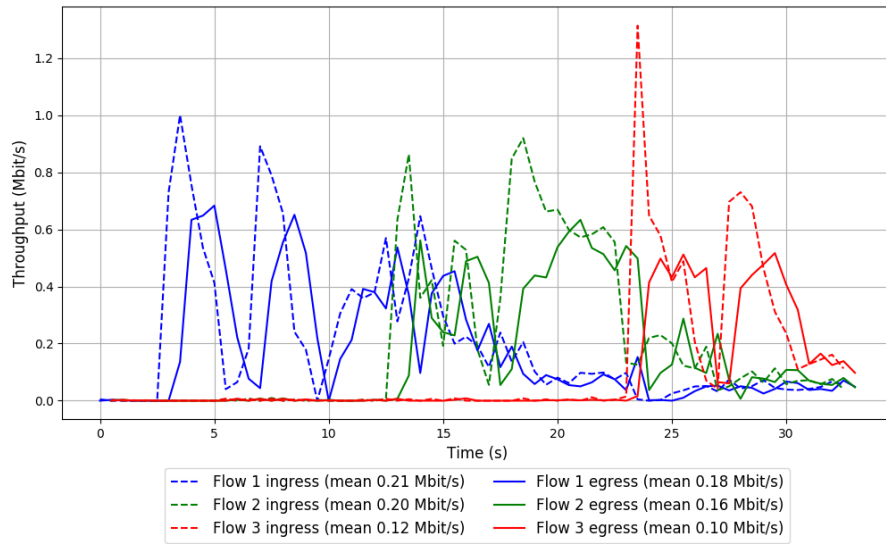


Run 2: Statistics of WebRTC media

Start at: 2018-08-22 17:59:45  
End at: 2018-08-22 18:00:15  
Local clock offset: 3.723 ms  
Remote clock offset: -65.996 ms

```
# Below is generated by plot.py at 2018-08-22 18:27:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 365.035 ms
Loss rate: 18.05%
-- Flow 1:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 363.252 ms
Loss rate: 14.82%
-- Flow 2:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 366.319 ms
Loss rate: 20.68%
-- Flow 3:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 362.089 ms
Loss rate: 19.30%
```

## Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-08-22 18:18:22  
End at: 2018-08-22 18:18:52  
Local clock offset: 0.633 ms  
Remote clock offset: -64.151 ms

```
# Below is generated by plot.py at 2018-08-22 18:27:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 354.752 ms
Loss rate: 12.35%
-- Flow 1:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 353.013 ms
Loss rate: 9.39%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 359.545 ms
Loss rate: 15.79%
-- Flow 3:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 351.935 ms
Loss rate: 12.44%
```



### Run 3: Report of WebRTC media — Data Link

