Pantheon Report

Generated at 2017-12-11 10:48:29 (UTC).

Data path: AWS Brazil 2 Ethernet (*local*) →Colombia ppp0 (*remote*).

Repeated the test of 14 congestion control schemes 3 times.

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

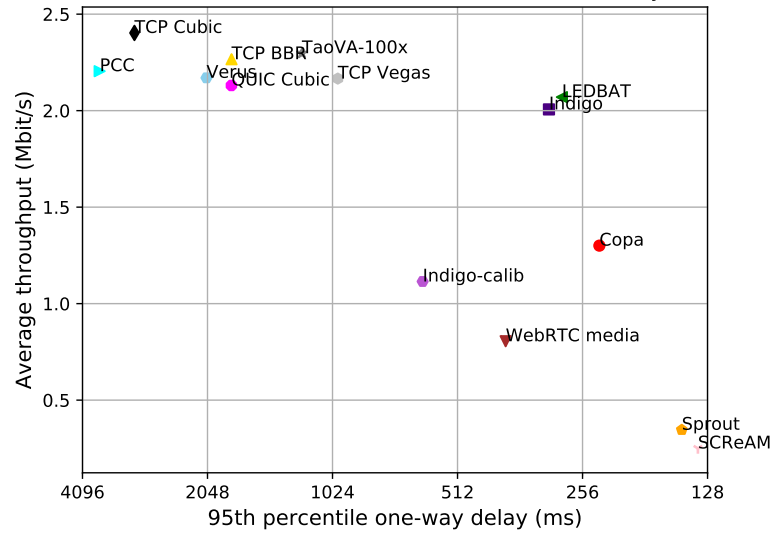Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

Tested BBR with qdisc of Fair Queuing (`fq`), and other schemes with the default Linux qdisc (`pfifo_fast`).

NTP offsets were measured against `gps.ntp.br` and have been applied to correct the timestamps in logs.

```
Git summary:
branch: indigos @ e3a57ad5ac5cfcaca0e3f983c8dd4cc3509e0262
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fabb936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
 M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
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/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
 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/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```
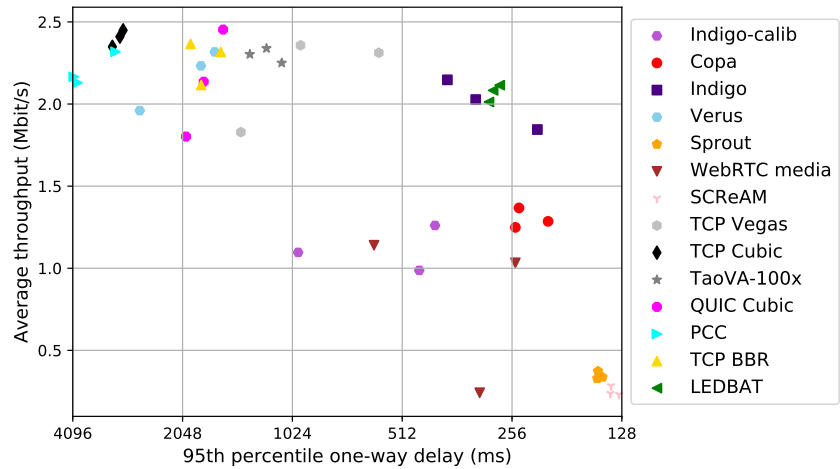
test from AWS Brazil 2 Ethernet to Colombia ppp0, 3 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)

test from AWS Brazil 2 Ethernet to Colombia ppp0, 3 runs of 30s each per scheme
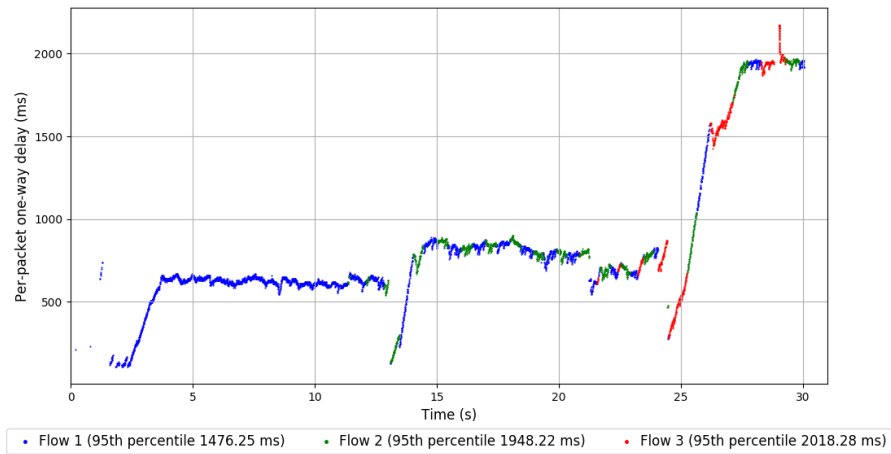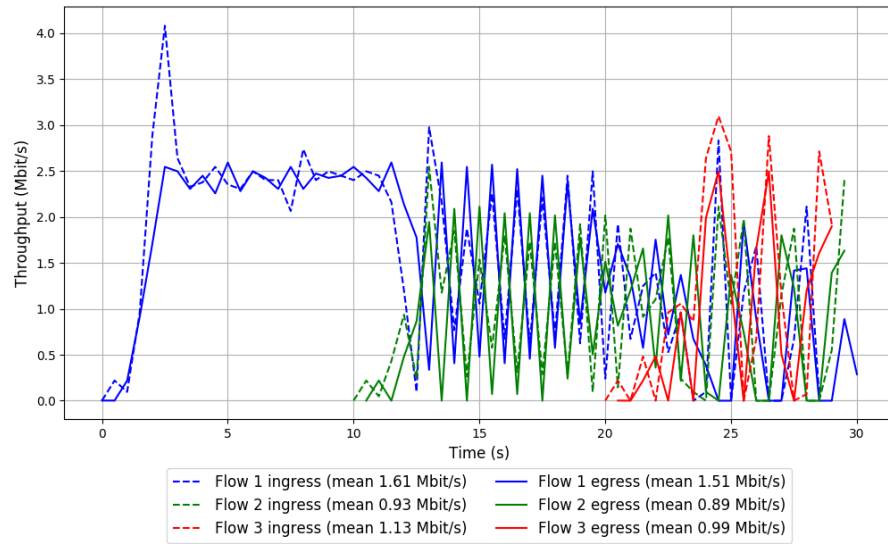3 flows with 10s interval between flows

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	1.50	0.79	0.95	1606.40	1803.74	1836.31	2.41	6.37	20.46
TCP Cubic	3	2.34	0.09	0.06	3067.74	3064.04	3000.82	13.14	24.29	55.27
LEDBAT	3	1.66	0.39	0.46	286.56	294.46	300.26	0.60	0.41	2.11
PCC	3	1.91	0.00	0.96	3725.69	3081.57	2700.33	46.95	2.84	52.84
QUIC Cubic	3	1.63	0.65	0.20	1774.82	1831.53	1858.12	4.71	10.02	24.23
SCReAM	3	0.08	0.17	0.15	124.04	135.08	136.82	0.13	0.12	0.32
WebRTC media	3	0.53	0.19	0.09	386.62	409.83	287.48	2.05	0.53	3.03
Sprout	3	0.17	0.18	0.17	157.28	142.75	152.64	0.01	0.00	0.00
TaoVA-100x	3	1.27	1.10	0.86	1173.30	1170.13	1392.33	1.72	1.64	4.71
TCP Vegas	3	1.56	0.67	0.56	963.24	1001.67	1031.97	1.65	3.99	10.58
Verus	3	2.16	0.01	0.01	2059.36	2143.06	1539.95	4.99	6.20	9.70
Copa	3	0.05	1.52	0.82	2758.96	220.80	266.15	0.00	0.22	0.80
Indigo	3	0.80	1.28	1.10	264.28	329.73	290.88	0.02	0.39	0.15
Indigo-calib	3	0.41	0.64	0.88	392.08	707.69	414.38	0.03	0.37	0.06

```
Run 1: Statistics of TCP BBR

Start at: 2017-12-11 10:02:25
End at: 2017-12-11 10:02:55
Local clock offset: -4.161 ms
Remote clock offset: -4.661 ms


# Below is generated by plot.py at 2017-12-11 10:47:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: 1947.072 ms
Loss rate: 6.19%
-- Flow 1:
Average throughput: 1.51 Mbit/s
95th percentile per-packet one-way delay: 1476.248 ms
Loss rate: 1.80%
-- Flow 2:
Average throughput: 0.89 Mbit/s
95th percentile per-packet one-way delay: 1948.221 ms
Loss rate: 7.92%
-- Flow 3:
Average throughput: 0.99 Mbit/s
95th percentile per-packet one-way delay: 2018.283 ms
Loss rate: 21.94%
```
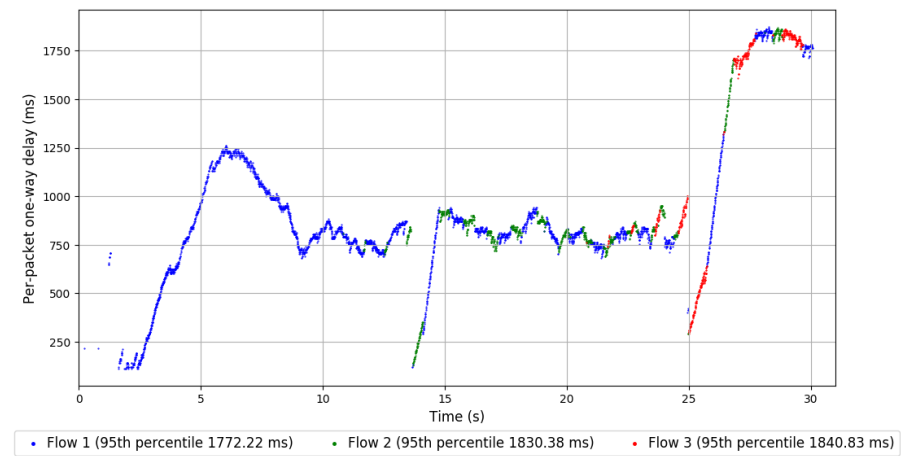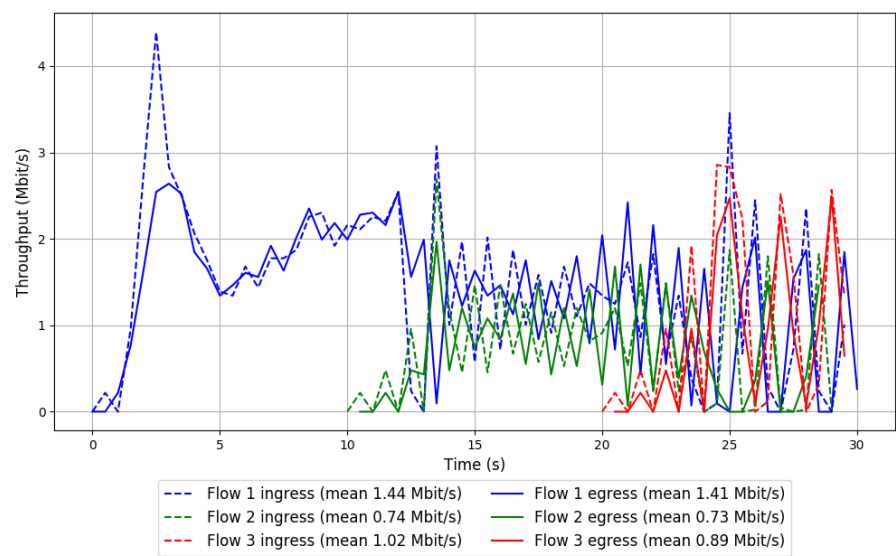
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2017-12-11 10:19:55
End at: 2017-12-11 10:20:25
Local clock offset: -2.939 ms
Remote clock offset: -4.298 ms


# Below is generated by plot.py at 2017-12-11 10:47:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 1820.914 ms
Loss rate: 6.17%
-- Flow 1:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 1772.219 ms
Loss rate: 2.56%
-- Flow 2:
Average throughput: 0.73 Mbit/s
95th percentile per-packet one-way delay: 1830.381 ms
Loss rate: 6.63%
-- Flow 3:
Average throughput: 0.89 Mbit/s
95th percentile per-packet one-way delay: 1840.829 ms
Loss rate: 21.17%
```
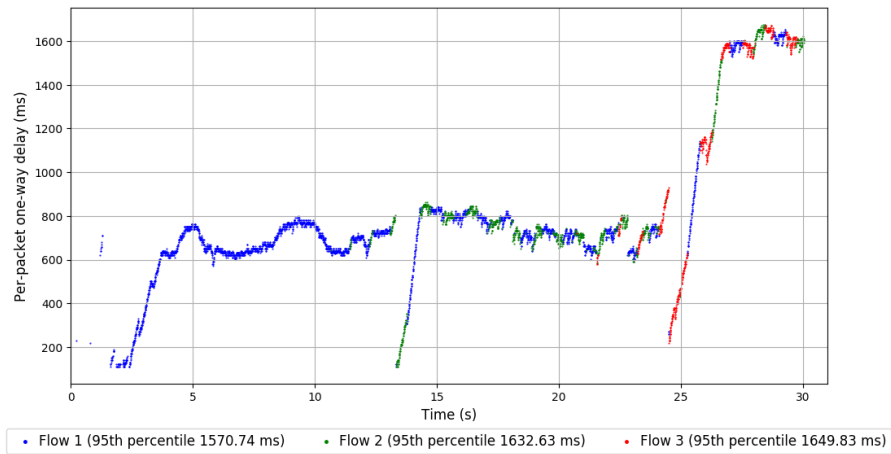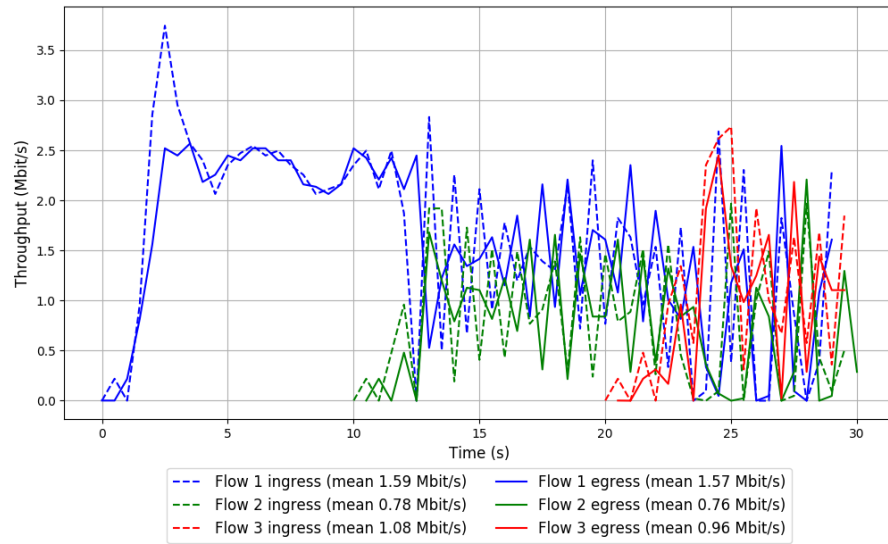
Run 2: Report of TCP BBR — Data Link

Flow 1 ingress (mean 1.44 Mbit/s)   Flow 1 egress (mean 1.41 Mbit/s)
Flow 2 ingress (mean 0.74 Mbit/s)   Flow 2 egress (mean 0.73 Mbit/s)
Flow 3 ingress (mean 1.02 Mbit/s)   Flow 3 egress (mean 0.89 Mbit/s)

Flow 1 (95th percentile 1772.22 ms)   Flow 2 (95th percentile 1830.38 ms)   Flow 3 (95th percentile 1840.83 ms)

```
Run 3: Statistics of TCP BBR

Start at: 2017-12-11 10:37:26
End at: 2017-12-11 10:37:56
Local clock offset: -2.605 ms
Remote clock offset: -5.653 ms

# Below is generated by plot.py at 2017-12-11 10:47:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 1609.511 ms
Loss rate: 5.47%
-- Flow 1:
Average throughput: 1.57 Mbit/s
95th percentile per-packet one-way delay: 1570.744 ms
Loss rate: 2.87%
-- Flow 2:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 1632.627 ms
Loss rate: 4.56%
-- Flow 3:
Average throughput: 0.96 Mbit/s
95th percentile per-packet one-way delay: 1649.833 ms
Loss rate: 18.26%
```
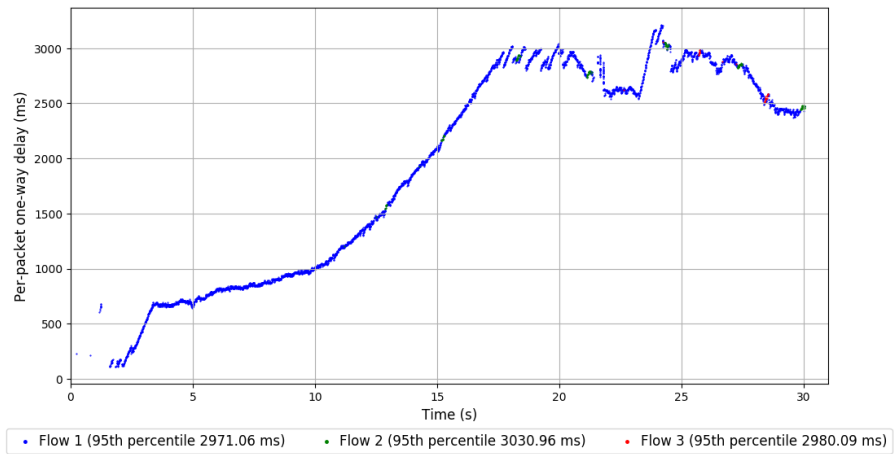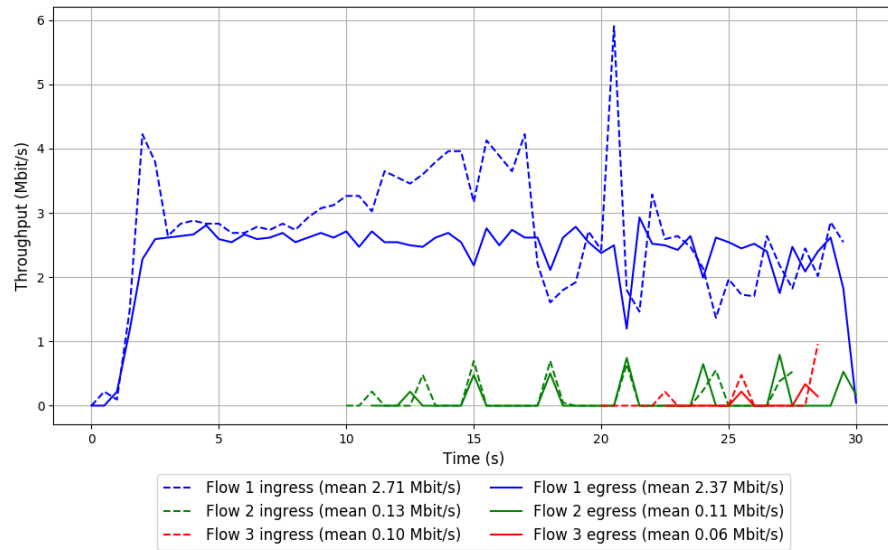
Run 3: Report of TCP BBR — Data Link

Flow 1 ingress (mean 1.59 Mbit/s)   Flow 1 egress (mean 1.57 Mbit/s)
Flow 2 ingress (mean 0.78 Mbit/s)   Flow 2 egress (mean 0.76 Mbit/s)
Flow 3 ingress (mean 1.08 Mbit/s)   Flow 3 egress (mean 0.96 Mbit/s)

Flow 1 (95th percentile 1570.74 ms)   Flow 2 (95th percentile 1632.63 ms)   Flow 3 (95th percentile 1649.83 ms)
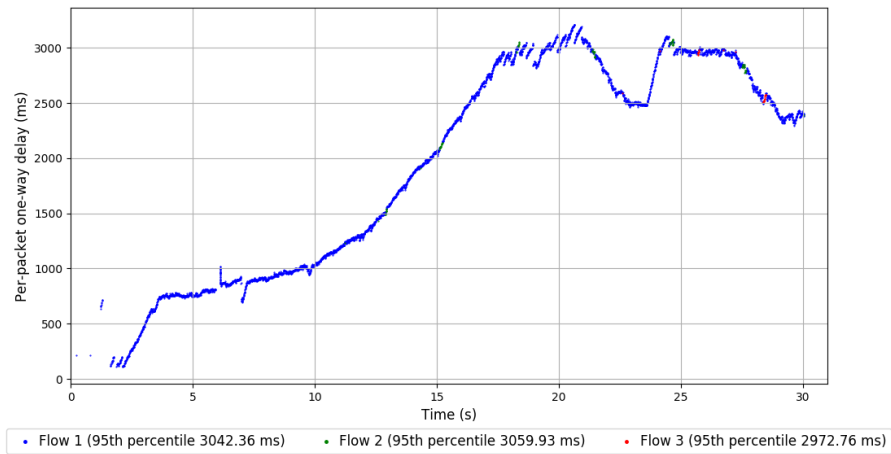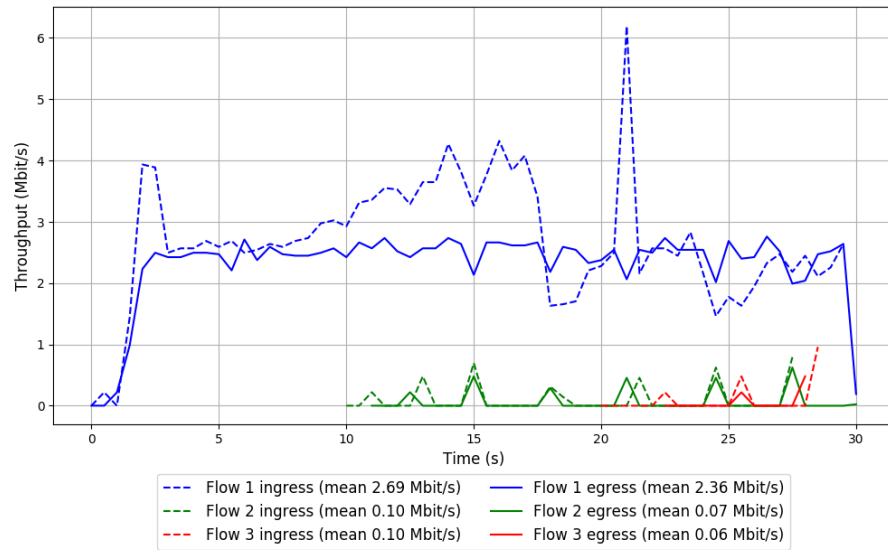
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```
Run 1: Statistics of TCP Cubic

Start at: 2017-12-11 10:03:40
End at: 2017-12-11 10:04:10
Local clock offset: -4.216 ms
Remote clock offset: -4.691 ms


# Below is generated by plot.py at 2017-12-11 10:47:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.45 Mbit/s
95th percentile per-packet one-way delay: 2980.690 ms
Loss rate: 13.30%
-- Flow 1:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: 2971.062 ms
Loss rate: 12.96%
-- Flow 2:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 3030.957 ms
Loss rate: 9.07%
-- Flow 3:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 2980.093 ms
Loss rate: 57.65%
```
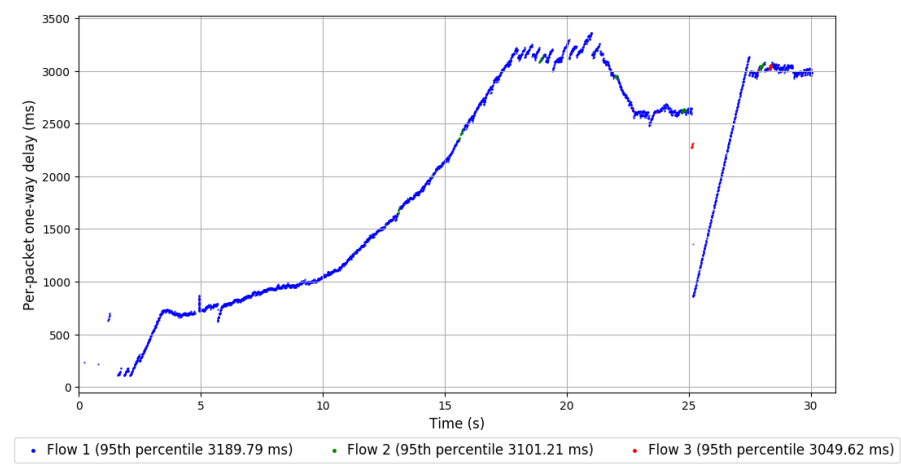
Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2017-12-11 10:21:10
End at: 2017-12-11 10:21:40
Local clock offset: -2.811 ms
Remote clock offset: -5.154 ms


# Below is generated by plot.py at 2017-12-11 10:47:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 3042.392 ms
Loss rate: 13.60%
-- Flow 1:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 3042.358 ms
Loss rate: 12.73%
-- Flow 2:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 3059.935 ms
Loss rate: 31.55%
-- Flow 3:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 2972.755 ms
Loss rate: 57.65%
```

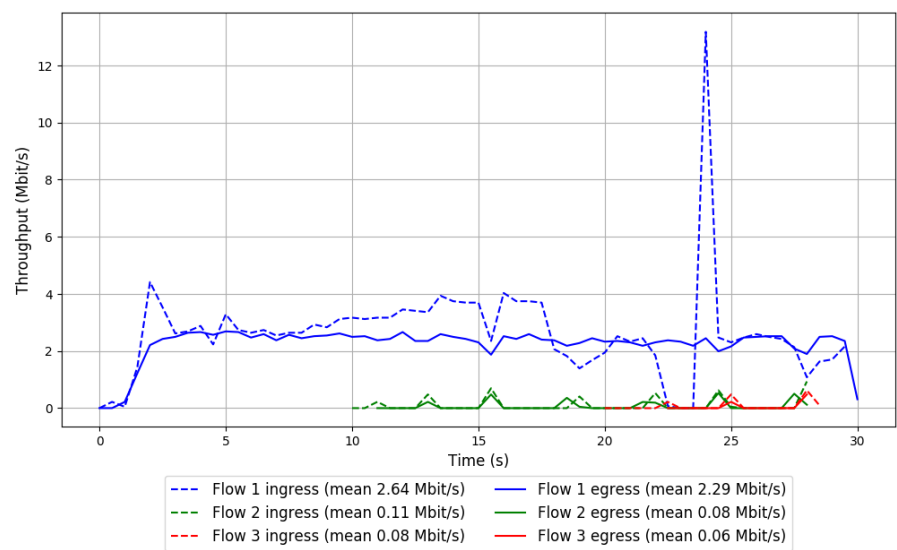Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2017-12-11 10:38:41
End at: 2017-12-11 10:39:11
Local clock offset: -2.61 ms
Remote clock offset: -5.681 ms


# Below is generated by plot.py at 2017-12-11 10:47:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 3189.749 ms
Loss rate: 14.51%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 3189.791 ms
Loss rate: 13.74%
-- Flow 2:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 3101.214 ms
Loss rate: 32.25%
-- Flow 3:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 3049.624 ms
Loss rate: 50.52%
```

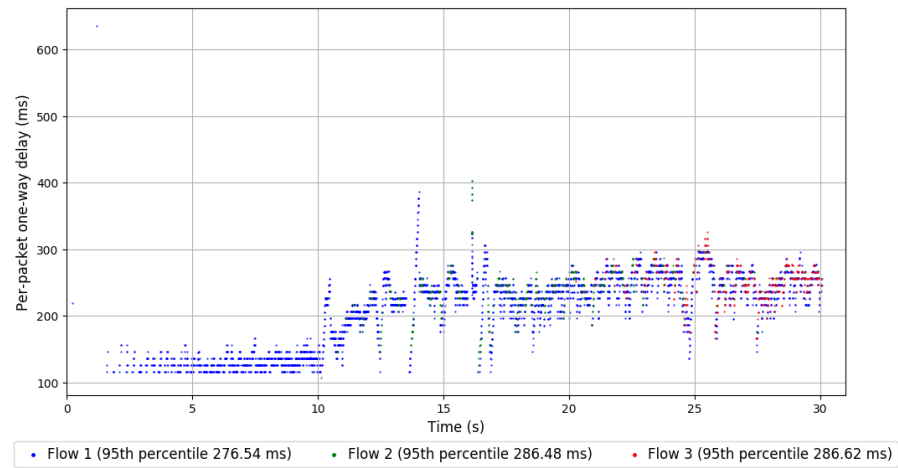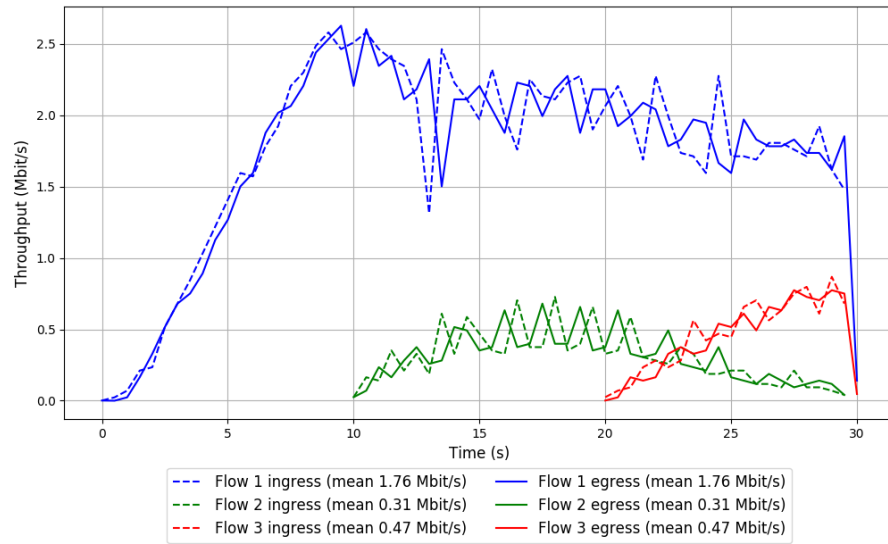Run 3: Report of TCP Cubic — Data Link

```
Run 1: Statistics of LEDBAT

Start at: 2017-12-11 09:58:40
End at: 2017-12-11 09:59:10
Local clock offset: -3.939 ms
Remote clock offset: 1.118 ms


# Below is generated by plot.py at 2017-12-11 10:47:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 276.674 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 1.76 Mbit/s
95th percentile per-packet one-way delay: 276.542 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 286.478 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 286.620 ms
Loss rate: 3.00%
```
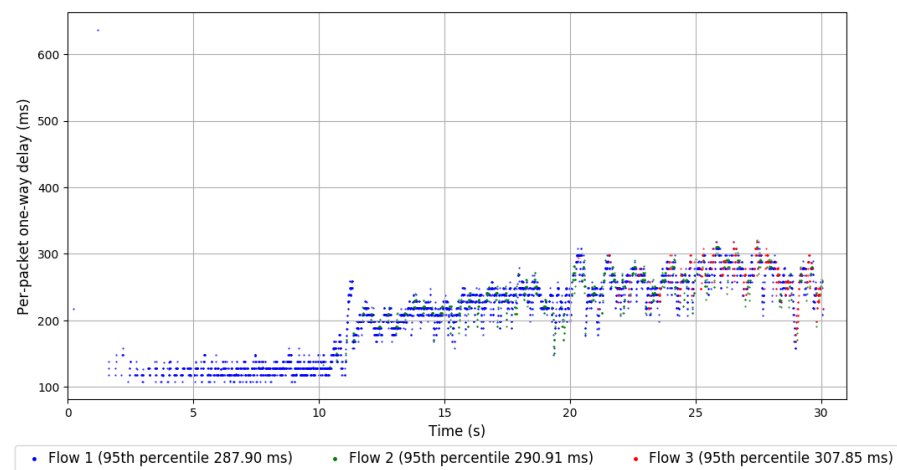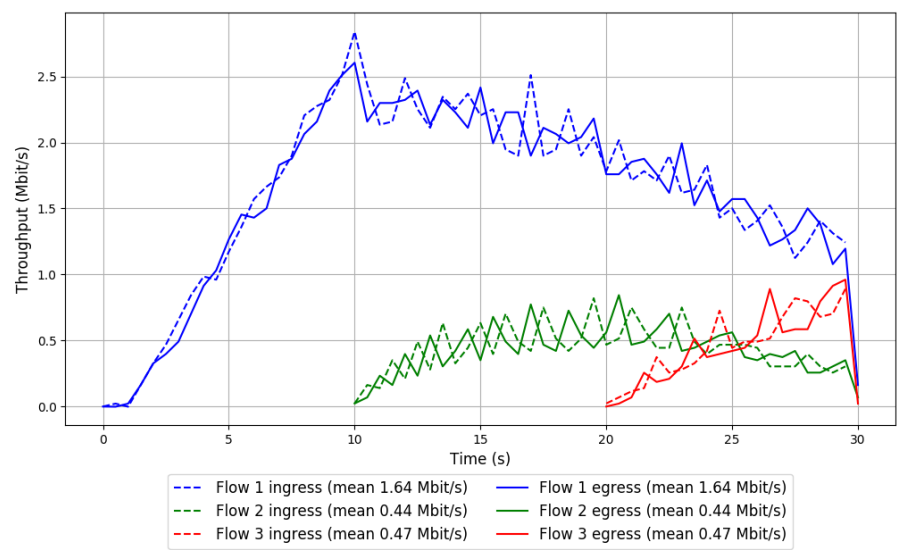
Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2017-12-11 10:16:11
End at: 2017-12-11 10:16:41
Local clock offset: -3.088 ms
Remote clock offset: -4.134 ms


# Below is generated by plot.py at 2017-12-11 10:47:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 288.478 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 1.64 Mbit/s
95th percentile per-packet one-way delay: 287.904 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 290.907 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 307.848 ms
Loss rate: 2.03%
```

Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2017-12-11 10:33:41
End at: 2017-12-11 10:34:11
Local clock offset: -2.654 ms
Remote clock offset: -4.423 ms


# Below is generated by plot.py at 2017-12-11 10:47:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 296.146 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: 295.240 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 305.990 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 306.313 ms
Loss rate: 1.31%
```
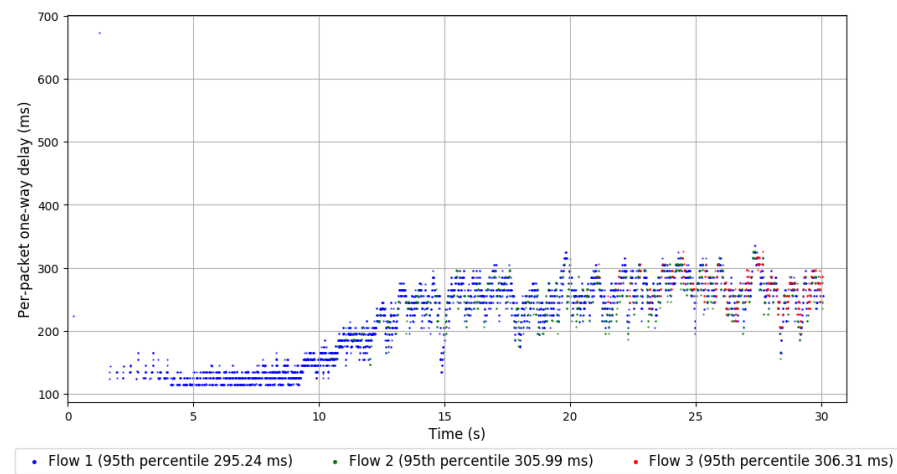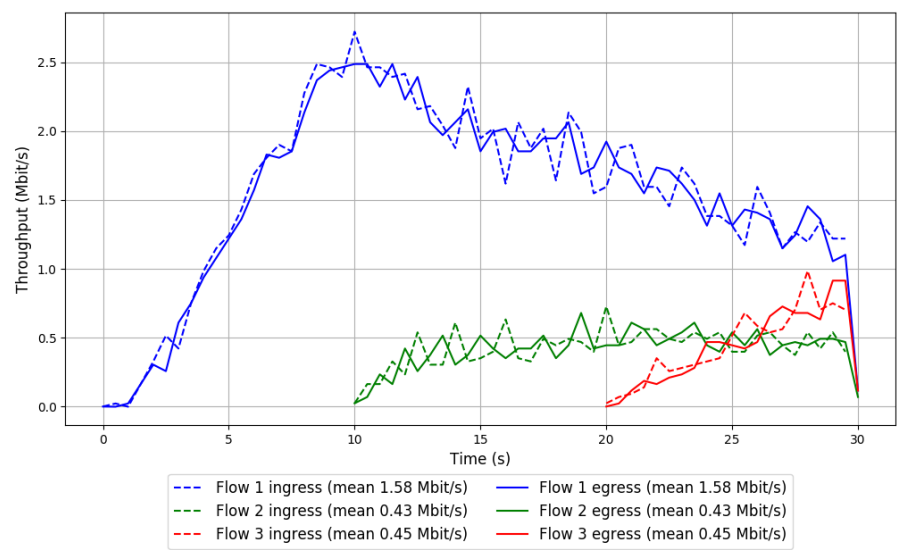
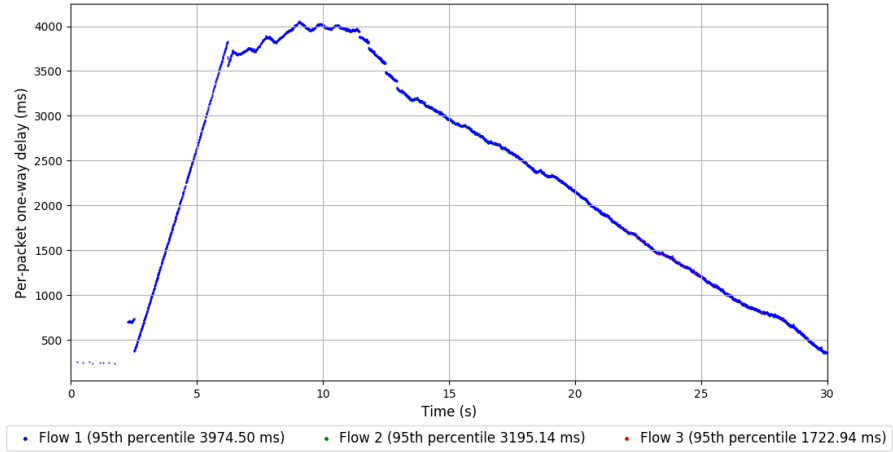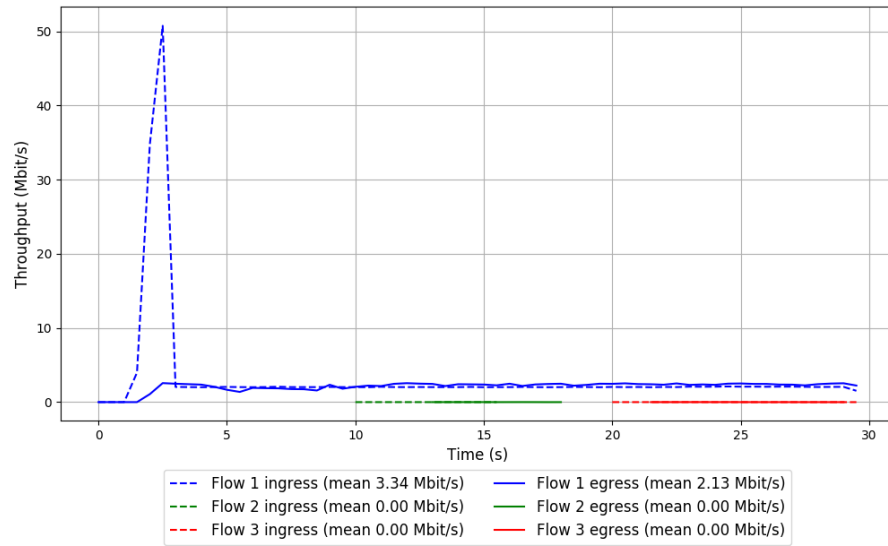## Run 3: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC

Start at: 2017-12-11 10:04:55
End at: 2017-12-11 10:05:25
Local clock offset: -4.24 ms
Remote clock offset: 0.954 ms


# Below is generated by plot.py at 2017-12-11 10:48:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.13 Mbit/s
95th percentile per-packet one-way delay: 3974.187 ms
Loss rate: 36.59%
-- Flow 1:
Average throughput: 2.13 Mbit/s
95th percentile per-packet one-way delay: 3974.496 ms
Loss rate: 36.60%
-- Flow 2:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 3195.144 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 1722.940 ms
Loss rate: 3.87%
```
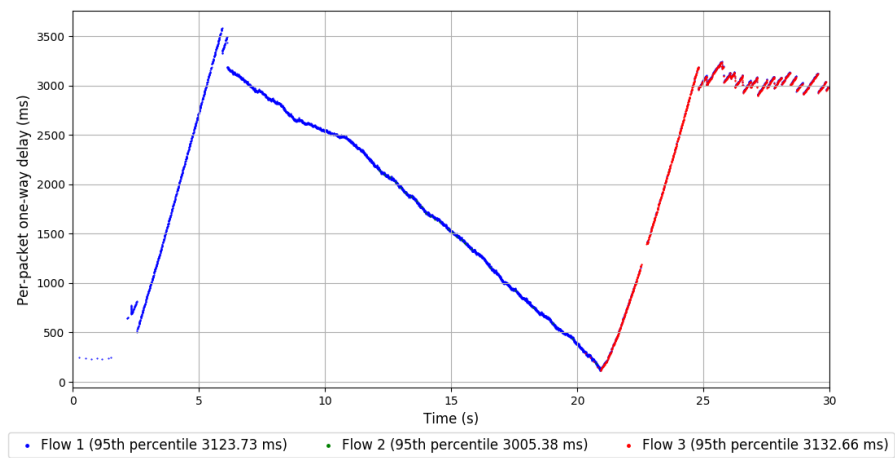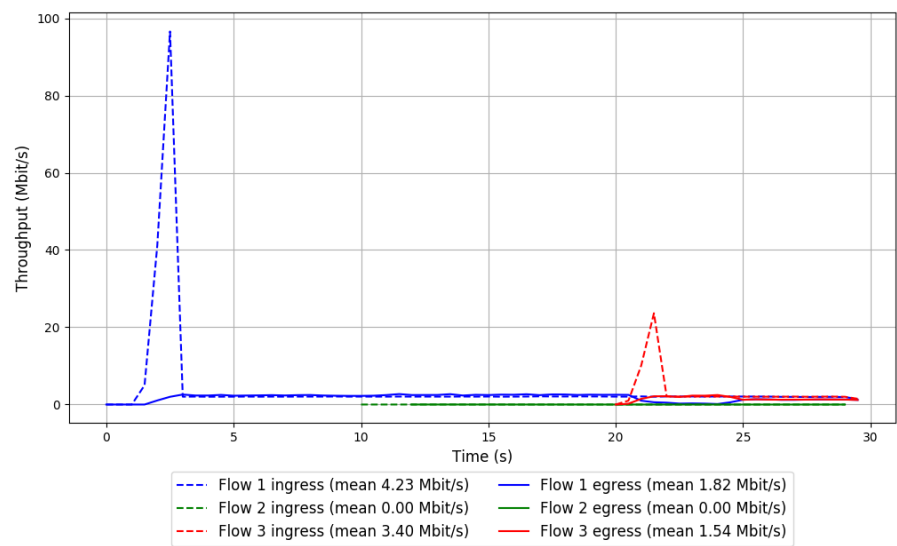
Run 1: Report of PCC — Data Link

Flow 1 ingress (mean 3.34 Mbit/s) Flow 1 egress (mean 2.13 Mbit/s)
Flow 2 ingress (mean 0.00 Mbit/s) Flow 2 egress (mean 0.00 Mbit/s)
Flow 3 ingress (mean 0.00 Mbit/s) Flow 3 egress (mean 0.00 Mbit/s)

Flow 1 (95th percentile 3974.50 ms)   Flow 2 (95th percentile 3195.14 ms)   Flow 3 (95th percentile 1722.94 ms)

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```
Run 2: Statistics of PCC

Start at: 2017-12-11 10:22:25
End at: 2017-12-11 10:22:55
Local clock offset: -2.767 ms
Remote clock offset: -4.556 ms


# Below is generated by plot.py at 2017-12-11 10:48:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 3126.261 ms
Loss rate: 56.94%
-- Flow 1:
Average throughput: 1.82 Mbit/s
95th percentile per-packet one-way delay: 3123.728 ms
Loss rate: 57.32%
-- Flow 2:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 3005.383 ms
Loss rate: 8.52%
-- Flow 3:
Average throughput: 1.54 Mbit/s
95th percentile per-packet one-way delay: 3132.657 ms
Loss rate: 55.59%
```

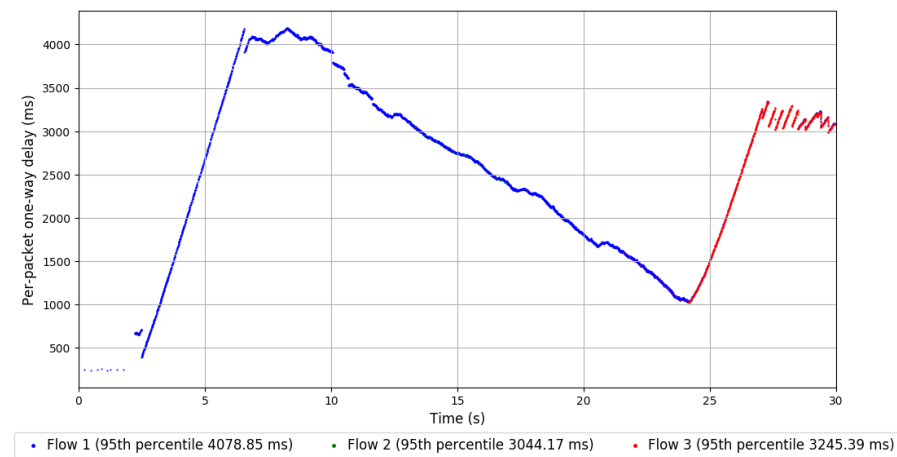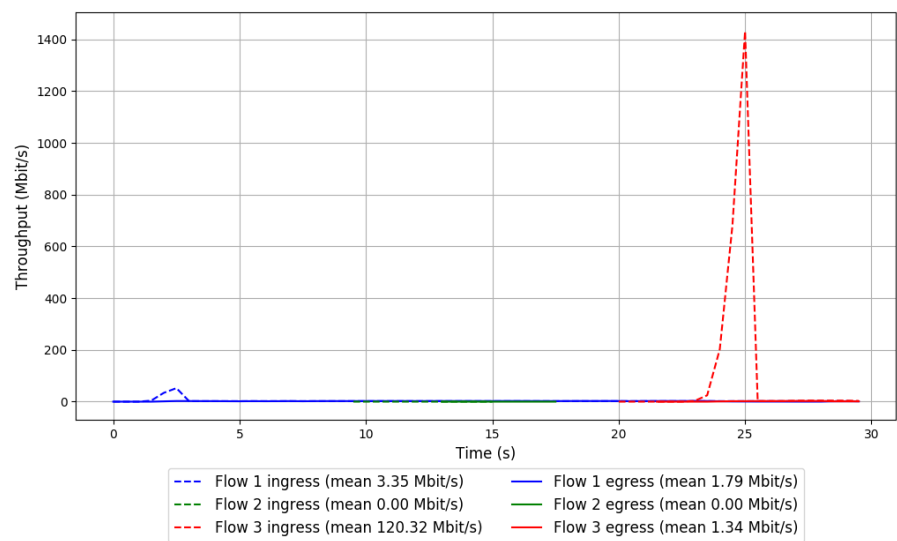# Run 2: Report of PCC — Data Link

```
Run 3: Statistics of PCC

Start at: 2017-12-11 10:39:56
End at: 2017-12-11 10:40:26
Local clock offset: -2.638 ms
Remote clock offset: -0.046 ms


# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 4070.246 ms
Loss rate: 95.00%
-- Flow 1:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 4078.850 ms
Loss rate: 46.92%
-- Flow 2:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 3044.173 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.34 Mbit/s
95th percentile per-packet one-way delay: 3245.386 ms
Loss rate: 99.05%
```

Run 3: Report of PCC — Data Link

Flow 1 ingress (mean 3.35 Mbit/s)   Flow 1 egress (mean 1.79 Mbit/s)
Flow 2 ingress (mean 0.00 Mbit/s)   Flow 2 egress (mean 0.00 Mbit/s)
Flow 3 ingress (mean 120.32 Mbit/s)   Flow 3 egress (mean 1.34 Mbit/s)

Flow 1 (95th percentile 4078.85 ms)   Flow 2 (95th percentile 3044.17 ms)   Flow 3 (95th percentile 3245.39 ms)

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```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-11 10:09:55
End at: 2017-12-11 10:10:25
Local clock offset: -3.775 ms
Remote clock offset: 1.245 ms


# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.14 Mbit/s
95th percentile per-packet one-way delay: 1792.327 ms
Loss rate: 6.78%
-- Flow 1:
Average throughput: 1.54 Mbit/s
95th percentile per-packet one-way delay: 1784.080 ms
Loss rate: 4.68%
-- Flow 2:
Average throughput: 0.79 Mbit/s
95th percentile per-packet one-way delay: 1796.835 ms
Loss rate: 10.05%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 1815.781 ms
Loss rate: 25.98%
```
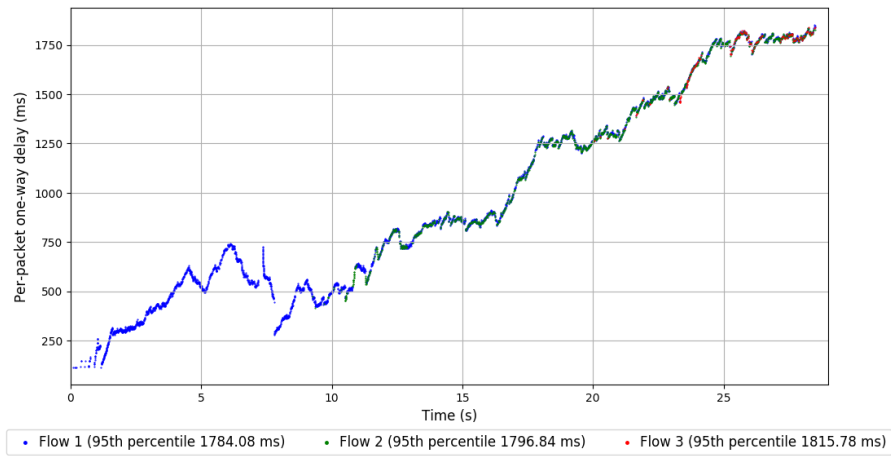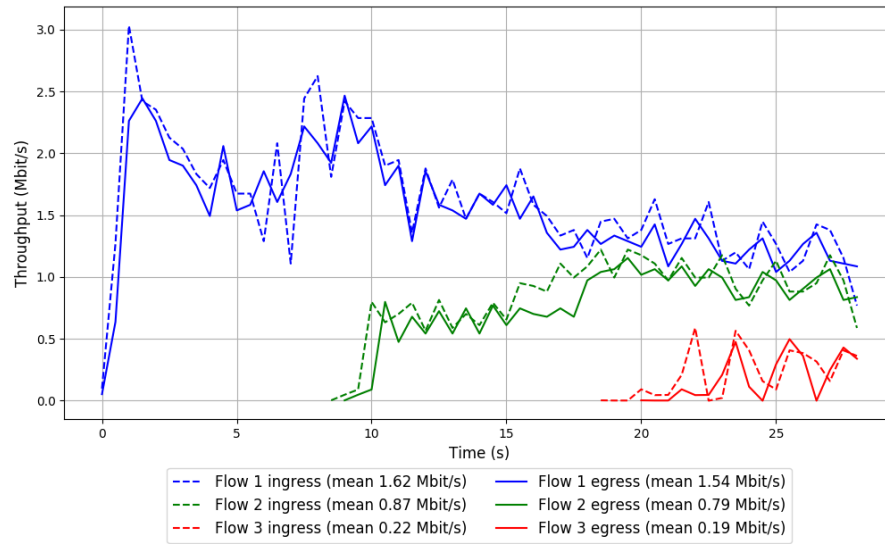
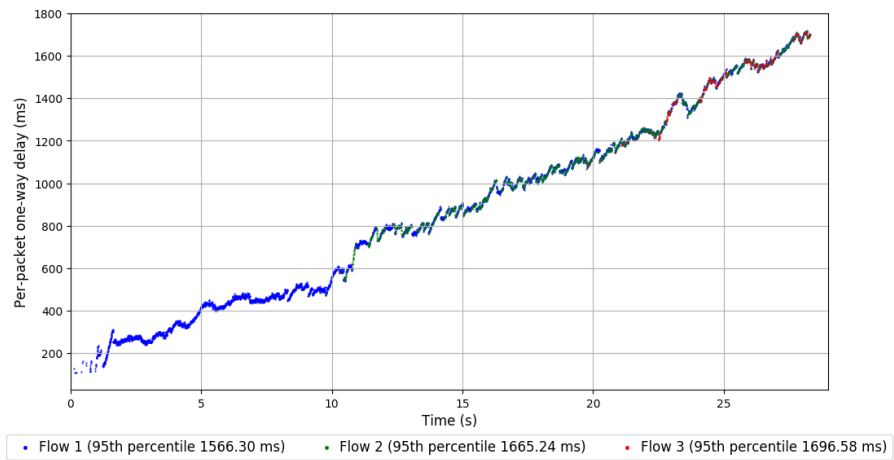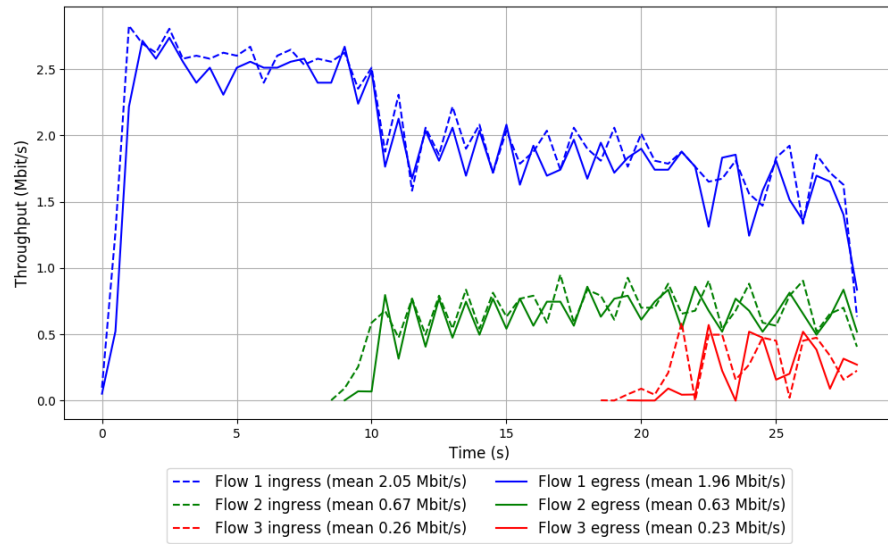Run 1: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 1.62 Mbit/s)   Flow 1 egress (mean 1.54 Mbit/s)
Flow 2 ingress (mean 0.87 Mbit/s)   Flow 2 egress (mean 0.79 Mbit/s)
Flow 3 ingress (mean 0.22 Mbit/s)   Flow 3 egress (mean 0.19 Mbit/s)

Flow 1 (95th percentile 1784.08 ms)   Flow 2 (95th percentile 1796.84 ms)   Flow 3 (95th percentile 1815.78 ms)

```
Run 2: Statistics of QUIC Cubic

Start at: 2017-12-11 10:27:25
End at: 2017-12-11 10:27:55
Local clock offset: -2.636 ms
Remote clock offset: -5.158 ms


# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.45 Mbit/s
95th percentile per-packet one-way delay: 1585.442 ms
Loss rate: 5.91%
-- Flow 1:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 1566.297 ms
Loss rate: 4.77%
-- Flow 2:
Average throughput: 0.63 Mbit/s
95th percentile per-packet one-way delay: 1665.241 ms
Loss rate: 7.96%
-- Flow 3:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 1696.578 ms
Loss rate: 21.66%
```

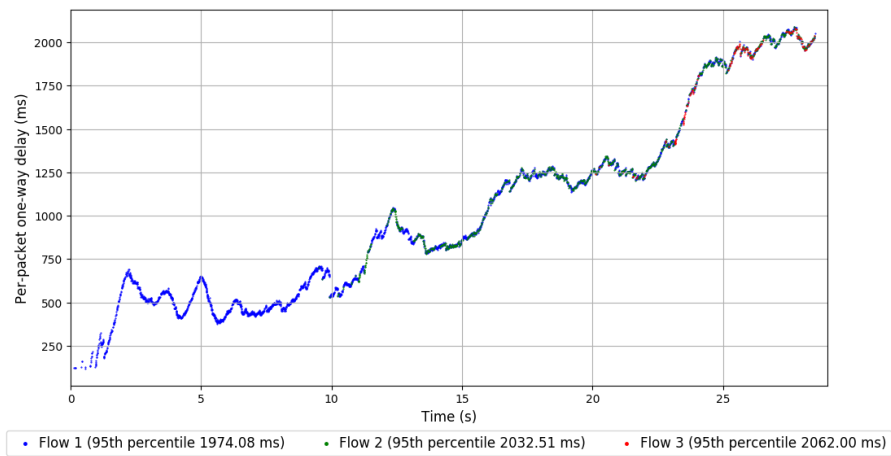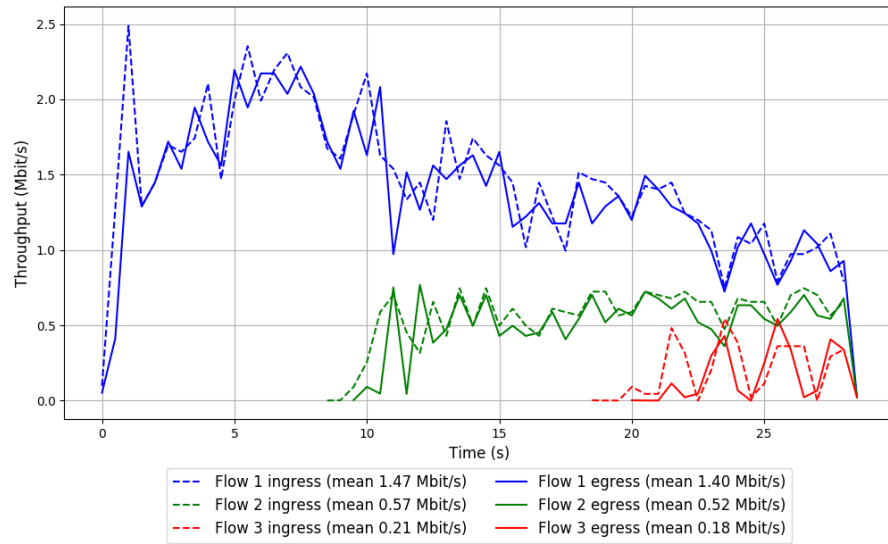## Run 2: Report of QUIC Cubic — Data Link

- Flow 1 ingress (mean 2.05 Mbit/s)
- Flow 1 egress (mean 1.96 Mbit/s)
- Flow 2 ingress (mean 0.67 Mbit/s)
- Flow 2 egress (mean 0.63 Mbit/s)
- Flow 3 ingress (mean 0.26 Mbit/s)
- Flow 3 egress (mean 0.23 Mbit/s)

- Flow 1 (95th percentile 1566.30 ms)
- Flow 2 (95th percentile 1665.24 ms)
- Flow 3 (95th percentile 1696.58 ms)

```
Run 3: Statistics of QUIC Cubic

Start at: 2017-12-11 10:44:57
End at: 2017-12-11 10:45:27
Local clock offset: -2.08 ms
Remote clock offset: -0.988 ms


# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.80 Mbit/s
95th percentile per-packet one-way delay: 2003.871 ms
Loss rate: 6.91%
-- Flow 1:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 1974.076 ms
Loss rate: 4.68%
-- Flow 2:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 2032.509 ms
Loss rate: 12.04%
-- Flow 3:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 2061.997 ms
Loss rate: 25.05%
```

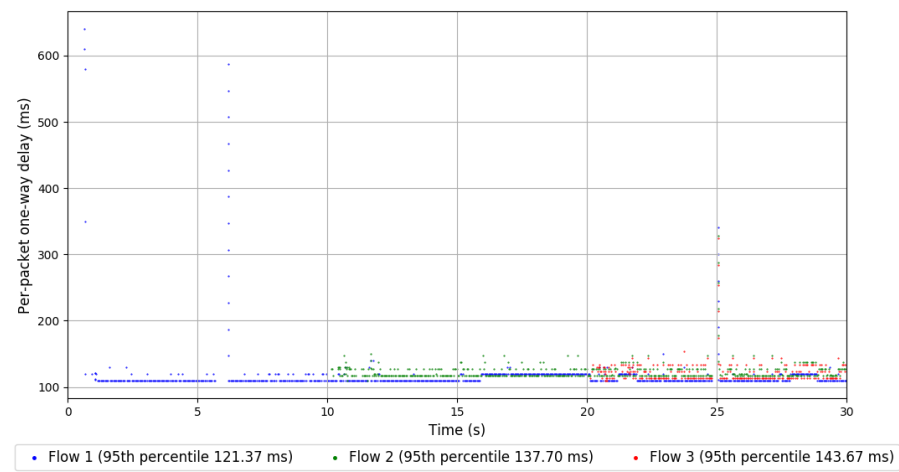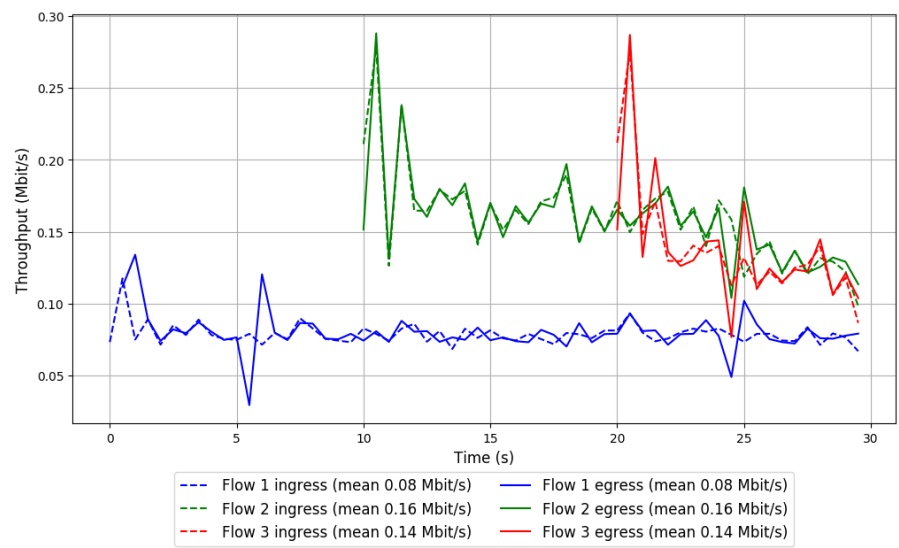## Run 3: Report of QUIC Cubic — Data Link

- Flow 1 ingress (mean 1.47 Mbit/s)
- Flow 1 egress (mean 1.40 Mbit/s)
- Flow 2 ingress (mean 0.57 Mbit/s)
- Flow 2 egress (mean 0.52 Mbit/s)
- Flow 3 ingress (mean 0.21 Mbit/s)
- Flow 3 egress (mean 0.18 Mbit/s)

- Flow 1 (95th percentile 1974.08 ms)
- Flow 2 (95th percentile 2032.51 ms)
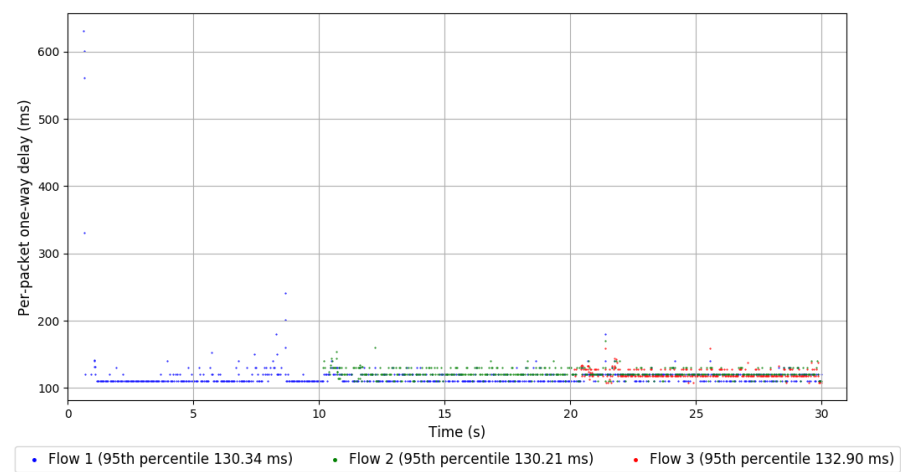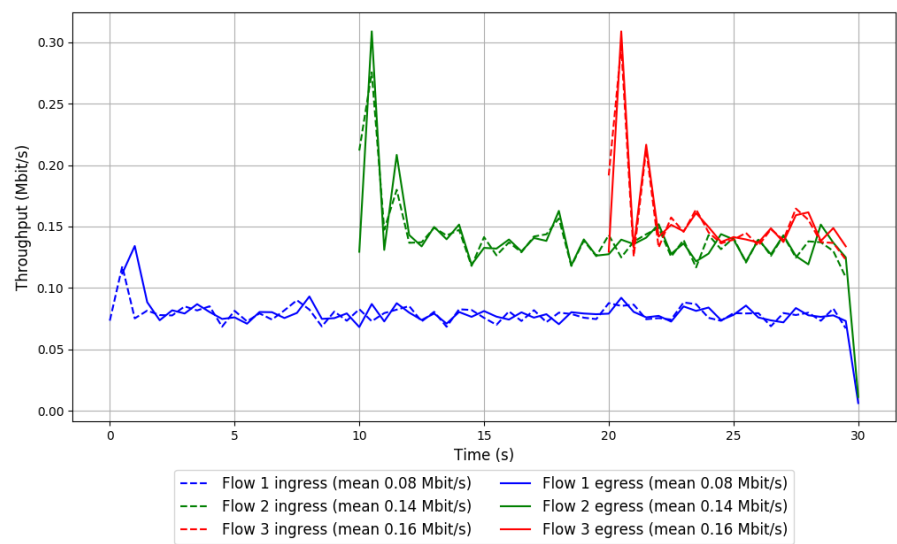- Flow 3 (95th percentile 2062.00 ms)

```
Run 1: Statistics of SCReAM

Start at: 2017-12-11 10:07:25
End at: 2017-12-11 10:07:55
Local clock offset: -4.014 ms
Remote clock offset: 1.391 ms


# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 137.631 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 121.367 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 137.702 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 143.667 ms
Loss rate: 0.29%
```
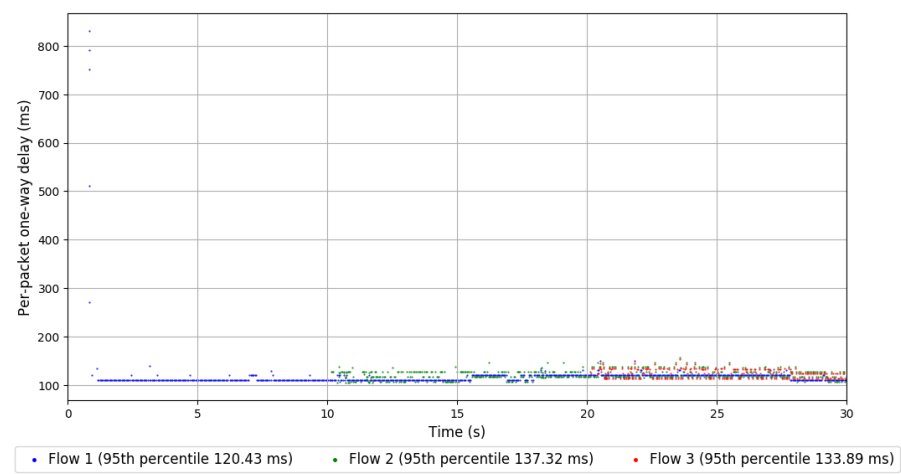
Run 1: Report of SCReAM — Data Link

35

```
Run 2: Statistics of SCReAM

Start at: 2017-12-11 10:24:55
End at: 2017-12-11 10:25:25
Local clock offset: -2.698 ms
Remote clock offset: 1.273 ms


# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 130.341 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 130.336 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 130.208 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 132.903 ms
Loss rate: 0.33%
```

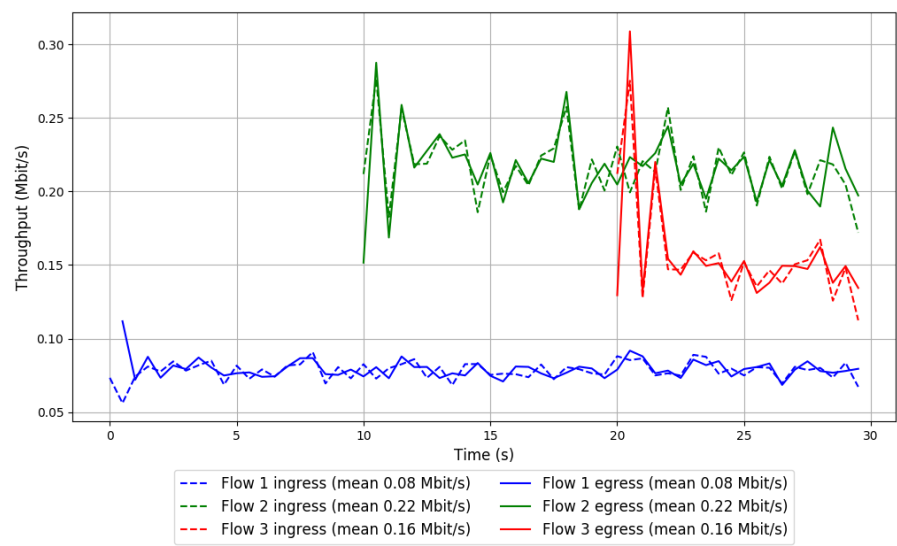# Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2017-12-11 10:42:26
End at: 2017-12-11 10:42:56
Local clock offset: -2.41 ms
Remote clock offset: -0.118 ms


# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 137.129 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 120.431 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.323 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 133.890 ms
Loss rate: 0.33%
```
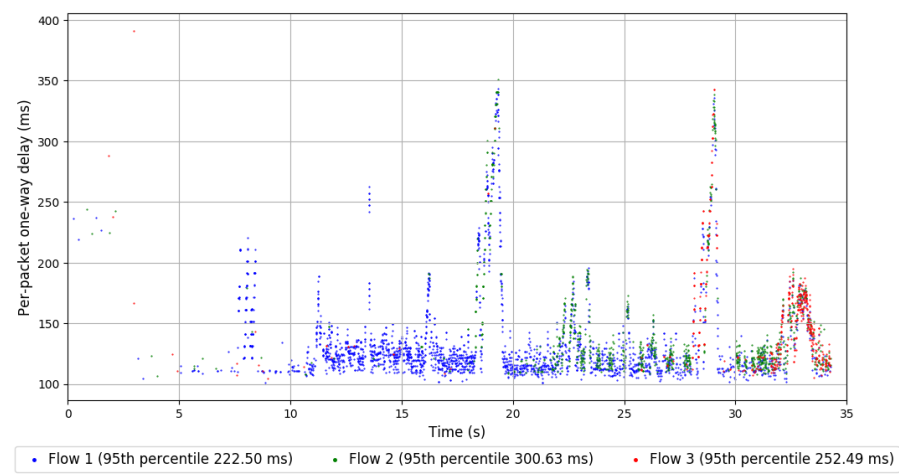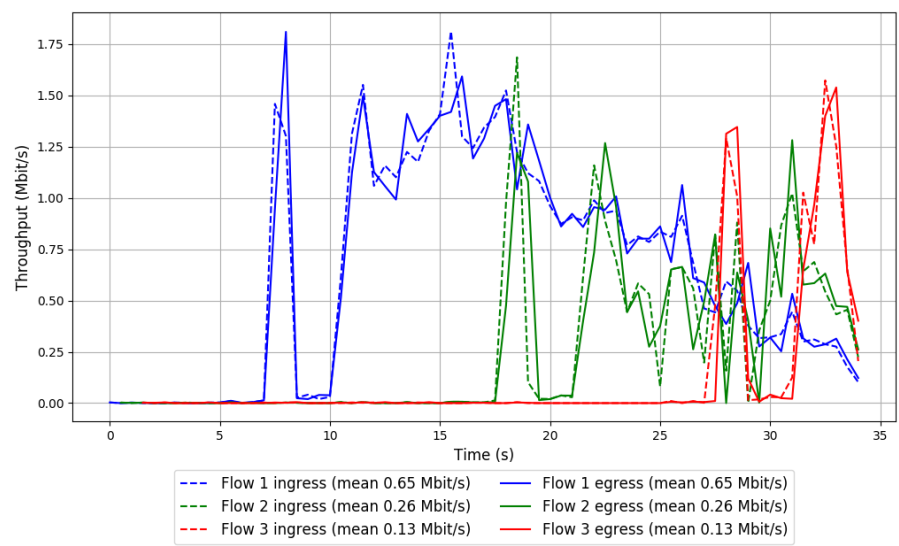
Run 3: Report of SCReAM — Data Link

```
Run 1: Statistics of WebRTC media

Start at: 2017-12-11 10:08:40
End at: 2017-12-11 10:09:10
Local clock offset: -3.932 ms
Remote clock offset: -3.988 ms


# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.03 Mbit/s
95th percentile per-packet one-way delay: 250.660 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 222.499 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 300.627 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 252.491 ms
Loss rate: 0.00%
```

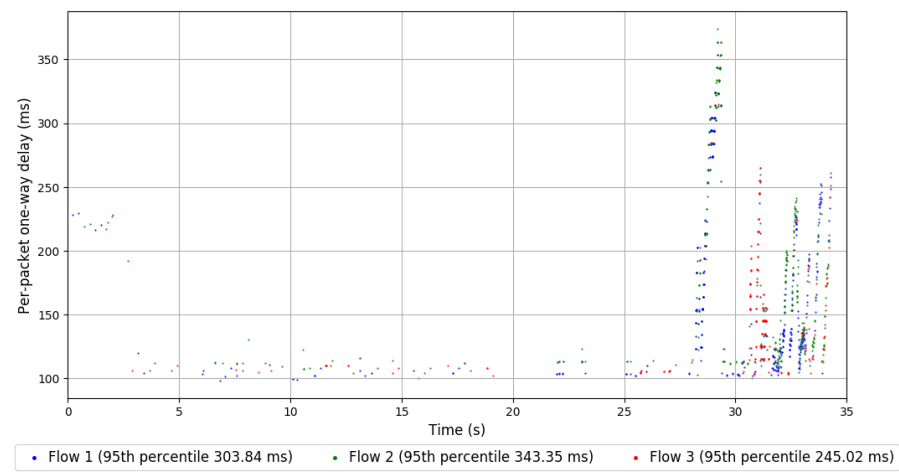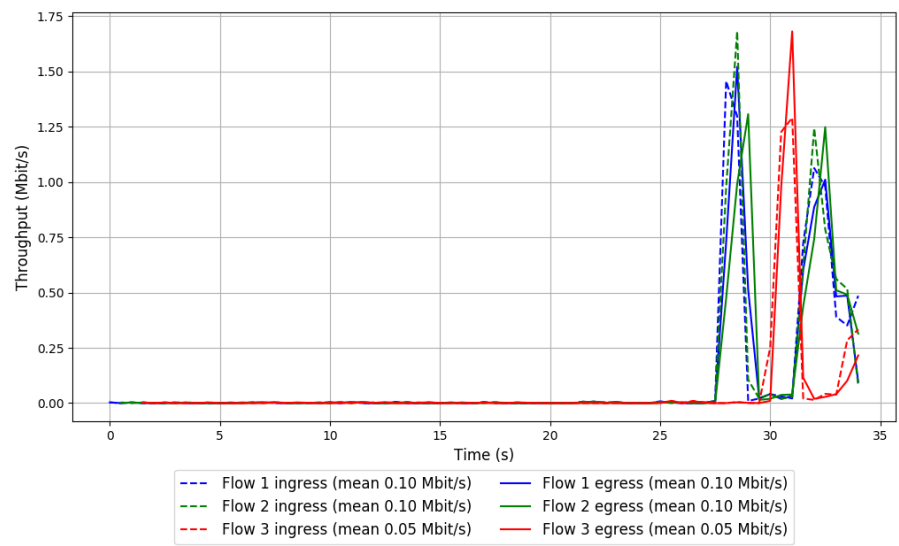Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2017-12-11 10:26:10
End at: 2017-12-11 10:26:40
Local clock offset: -2.632 ms
Remote clock offset: -5.225 ms

# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 314.006 ms
Loss rate: 4.63%
-- Flow 1:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 303.843 ms
Loss rate: 6.16%
-- Flow 2:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 343.348 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 245.023 ms
Loss rate: 8.79%
```

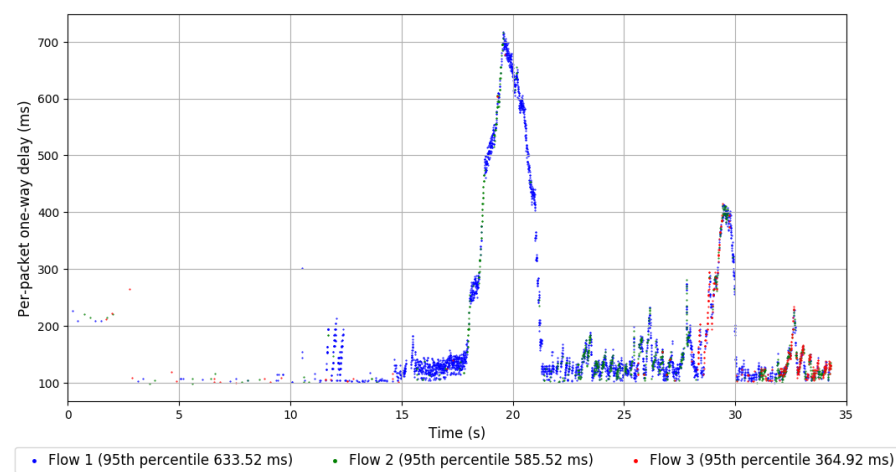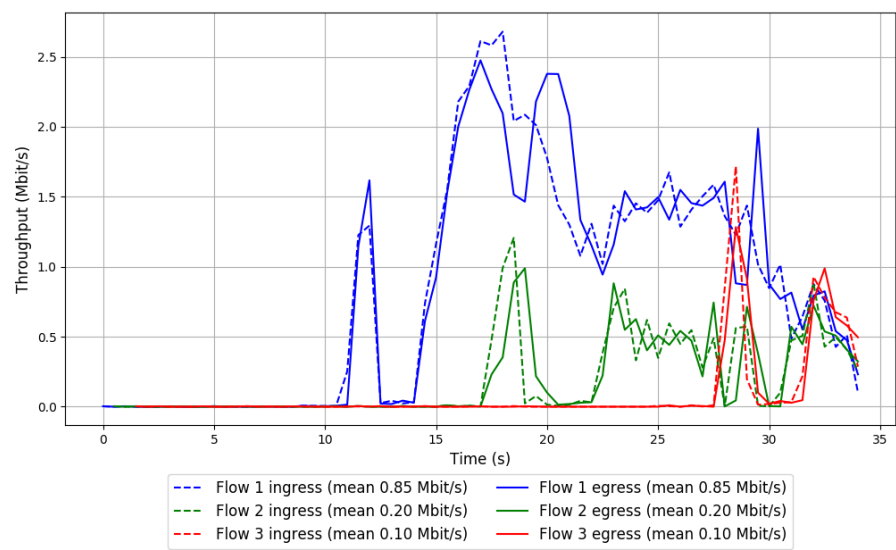Run 2: Report of WebRTC media — Data Link

Flow 1 ingress (mean 0.10 Mbit/s)   Flow 1 egress (mean 0.10 Mbit/s)
Flow 2 ingress (mean 0.10 Mbit/s)   Flow 2 egress (mean 0.10 Mbit/s)
Flow 3 ingress (mean 0.05 Mbit/s)   Flow 3 egress (mean 0.05 Mbit/s)

Flow 1 (95th percentile 303.84 ms)   Flow 2 (95th percentile 343.35 ms)   Flow 3 (95th percentile 245.02 ms)

```
Run 3: Statistics of WebRTC media

Start at: 2017-12-11 10:43:41
End at: 2017-12-11 10:44:11
Local clock offset: -2.229 ms
Remote clock offset: -5.895 ms

# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.14 Mbit/s
95th percentile per-packet one-way delay: 611.723 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 0.85 Mbit/s
95th percentile per-packet one-way delay: 633.522 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 585.518 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 364.916 ms
Loss rate: 0.29%
```

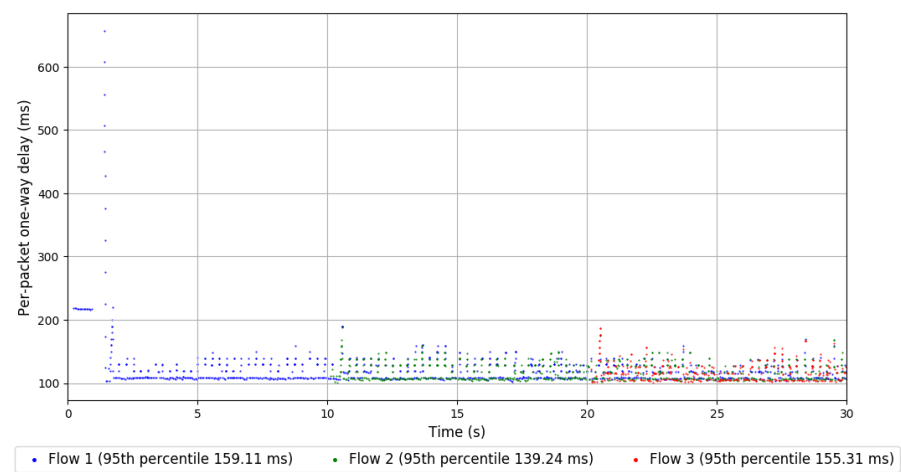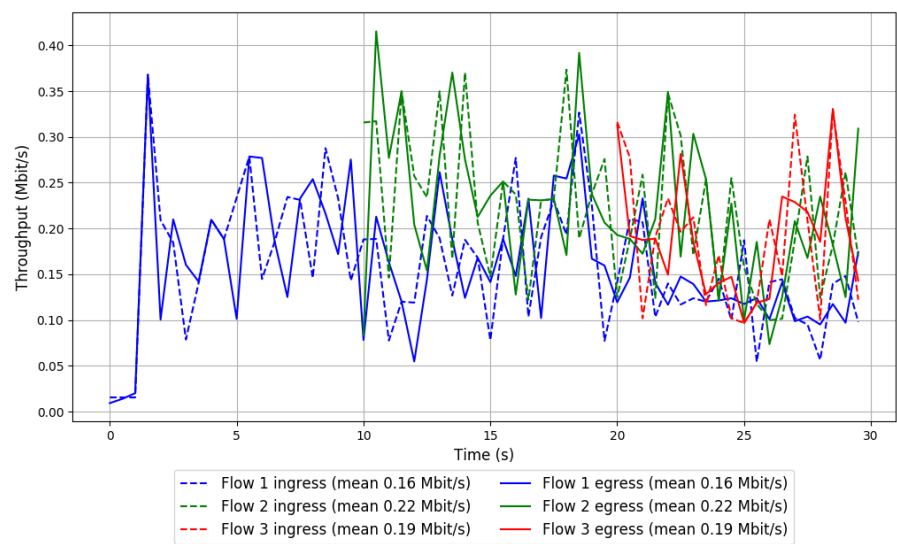Run 3: Report of WebRTC media — Data Link

```
Run 1: Statistics of Sprout

Start at: 2017-12-11 09:56:10
End at: 2017-12-11 09:56:40
Local clock offset: -3.798 ms
Remote clock offset: -4.438 ms


# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 148.785 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 159.106 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 139.241 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 155.306 ms
Loss rate: 0.00%
```

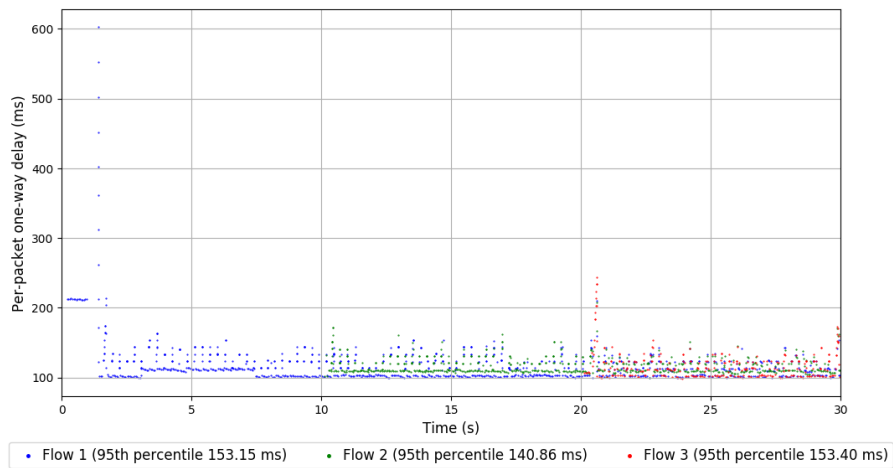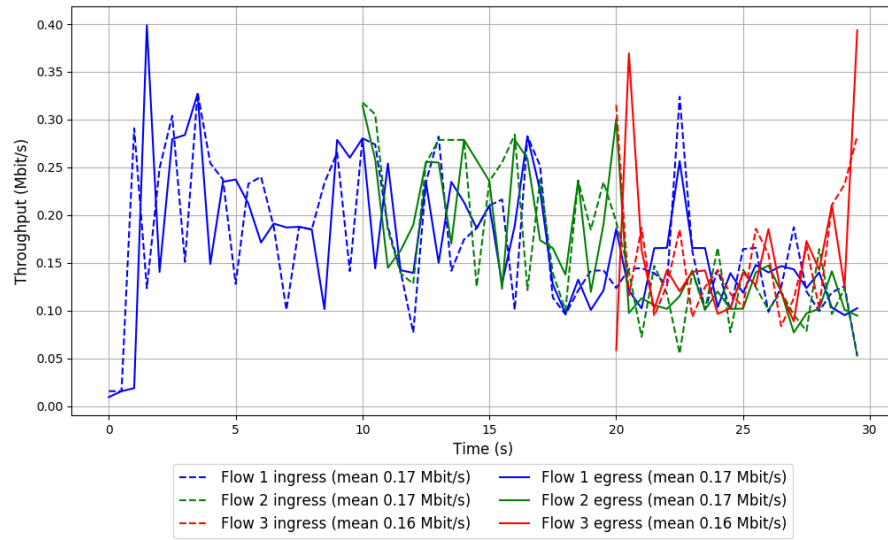Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2017-12-11 10:13:41
End at: 2017-12-11 10:14:11
Local clock offset: -3.3 ms
Remote clock offset: -4.135 ms


# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 144.651 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 153.150 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 140.860 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 153.402 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2017-12-11 10:31:10
End at: 2017-12-11 10:31:40
Local clock offset: -2.597 ms
Remote clock offset: -4.43 ms

# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 149.548 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 159.581 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 148.134 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 149.199 ms
Loss rate: 0.00%
```
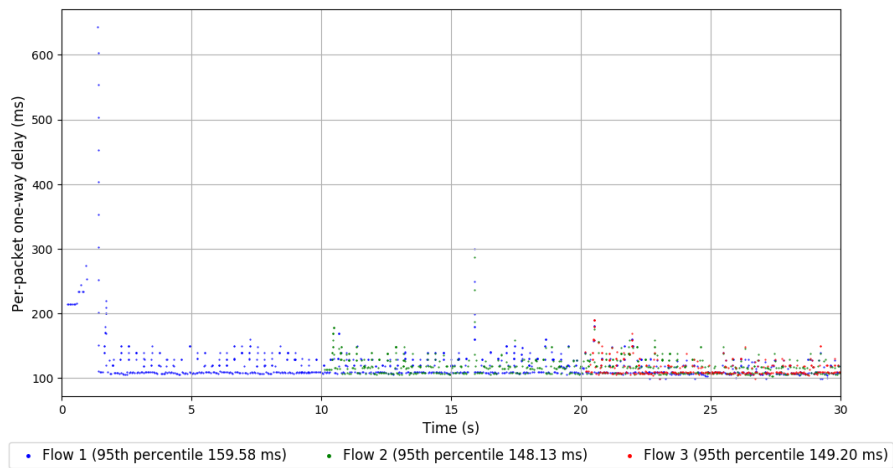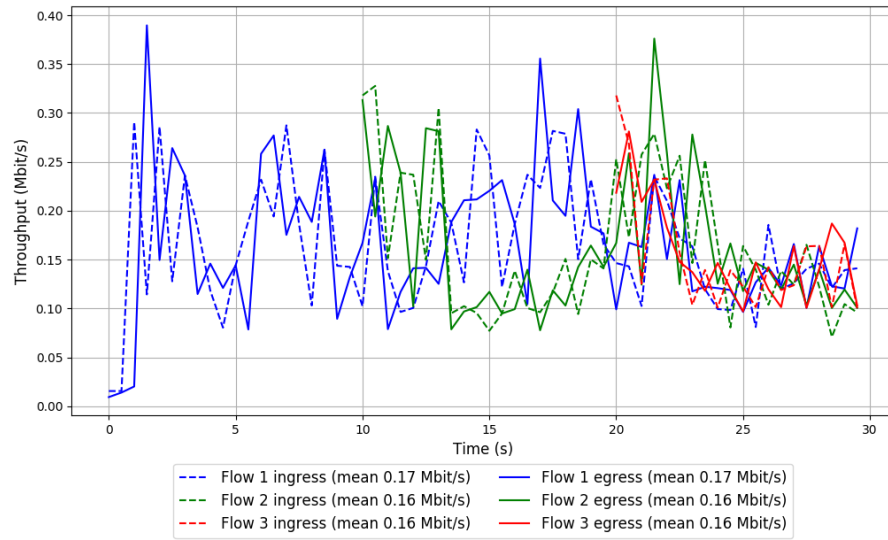
Run 3: Report of Sprout — Data Link

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

Start at: 2017-12-11 10:06:10
End at: 2017-12-11 10:06:40
Local clock offset: -4.238 ms
Remote clock offset: 0.89 ms


# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 1339.386 ms
Loss rate: 2.31%
-- Flow 1:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 1283.514 ms
Loss rate: 2.24%
-- Flow 2:
Average throughput: 1.14 Mbit/s
95th percentile per-packet one-way delay: 1355.299 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 0.79 Mbit/s
95th percentile per-packet one-way delay: 1611.526 ms
Loss rate: 5.90%
```
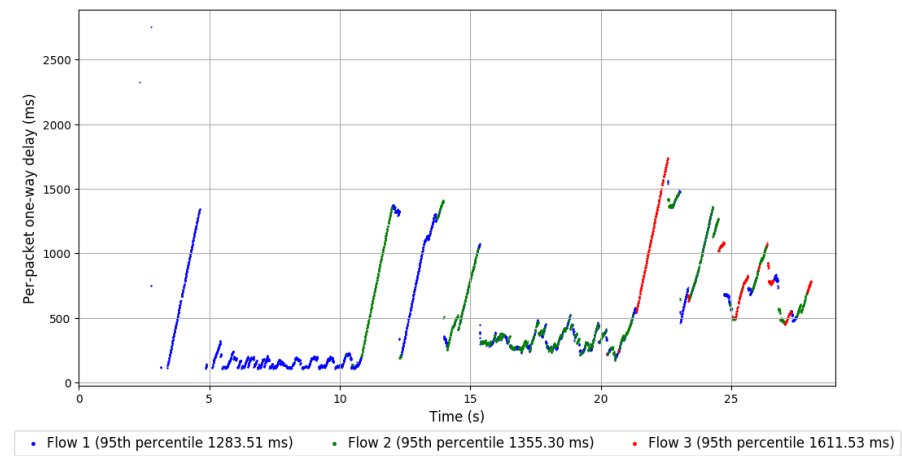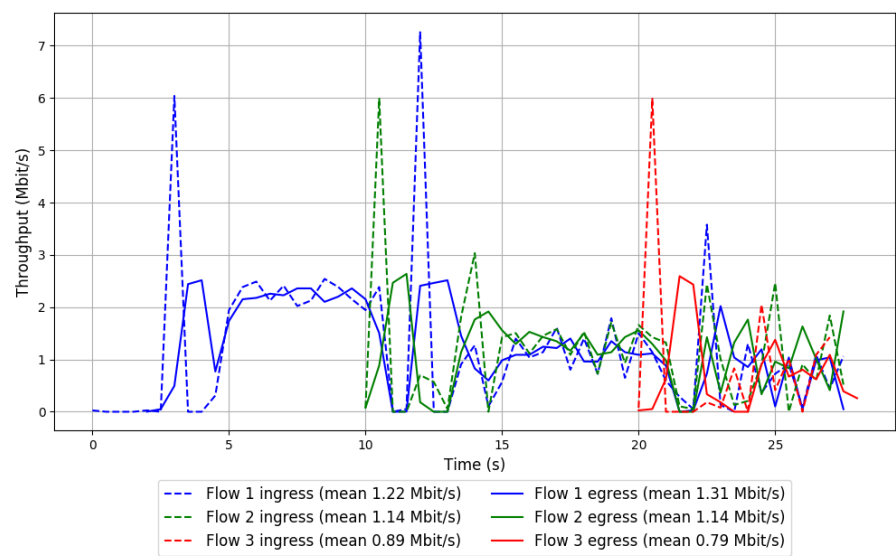
Run 1: Report of TaoVA-100x — Data Link

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

Start at: 2017-12-11 10:23:40
End at: 2017-12-11 10:24:10
Local clock offset: -2.771 ms
Remote clock offset: 1.368 ms


# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 1095.269 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 1.23 Mbit/s
95th percentile per-packet one-way delay: 1077.924 ms
Loss rate: 1.06%
-- Flow 2:
Average throughput: 1.10 Mbit/s
95th percentile per-packet one-way delay: 939.392 ms
Loss rate: 1.50%
-- Flow 3:
Average throughput: 0.88 Mbit/s
95th percentile per-packet one-way delay: 1328.536 ms
Loss rate: 3.52%
```
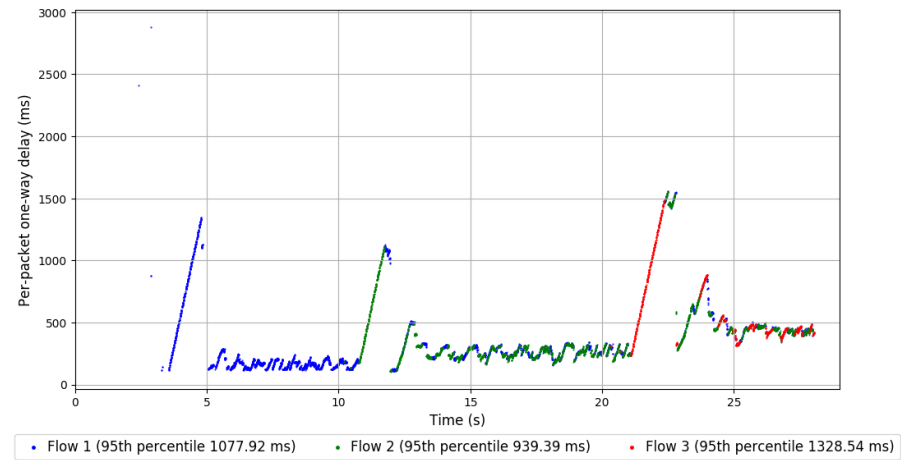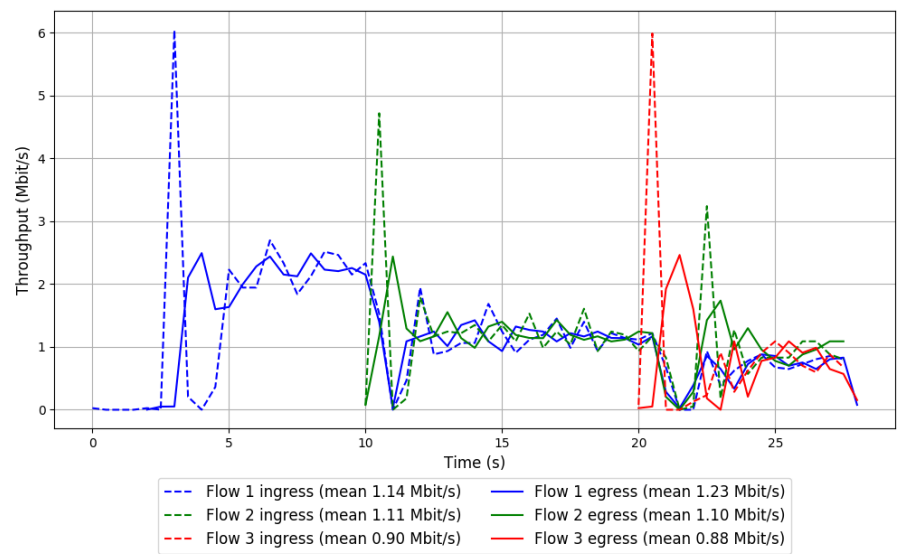
Run 2: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 1.14 Mbit/s) --- Flow 1 egress (mean 1.23 Mbit/s)
Flow 2 ingress (mean 1.11 Mbit/s) --- Flow 2 egress (mean 1.10 Mbit/s)
Flow 3 ingress (mean 0.90 Mbit/s) --- Flow 3 egress (mean 0.88 Mbit/s)

Flow 1 (95th percentile 1077.92 ms) Flow 2 (95th percentile 939.39 ms) Flow 3 (95th percentile 1328.54 ms)
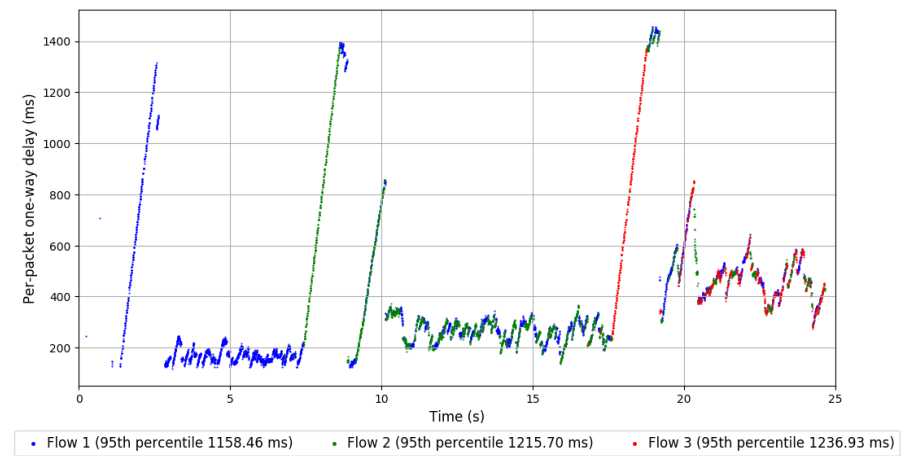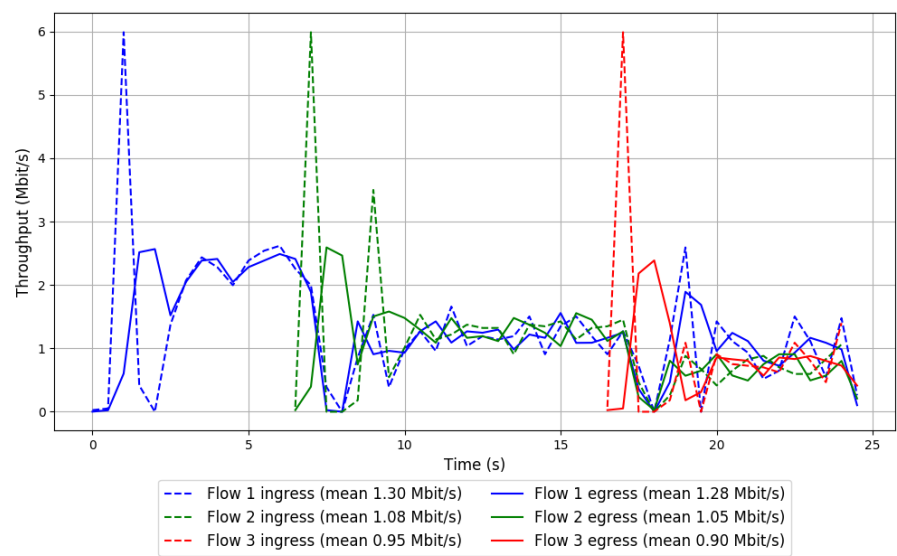
```
Run 3: Statistics of TaoVA-100x

Start at: 2017-12-11 10:41:11
End at: 2017-12-11 10:41:41
Local clock offset: -2.683 ms
Remote clock offset: -0.018 ms


# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.34 Mbit/s
95th percentile per-packet one-way delay: 1205.825 ms
Loss rate: 2.32%
-- Flow 1:
Average throughput: 1.28 Mbit/s
95th percentile per-packet one-way delay: 1158.457 ms
Loss rate: 1.87%
-- Flow 2:
Average throughput: 1.05 Mbit/s
95th percentile per-packet one-way delay: 1215.696 ms
Loss rate: 2.15%
-- Flow 3:
Average throughput: 0.90 Mbit/s
95th percentile per-packet one-way delay: 1236.931 ms
Loss rate: 4.72%
```

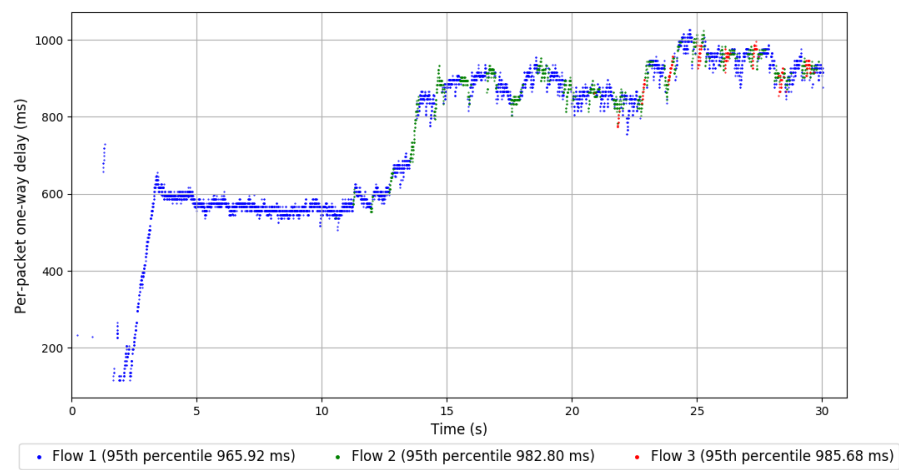# Run 3: Report of TaoVA-100x — Data Link

Legend:
- Flow 1 ingress (mean 1.30 Mbit/s)
- Flow 1 egress (mean 1.28 Mbit/s)
- Flow 2 ingress (mean 1.08 Mbit/s)
- Flow 2 egress (mean 1.05 Mbit/s)
- Flow 3 ingress (mean 0.95 Mbit/s)
- Flow 3 egress (mean 0.90 Mbit/s)

Legend:
- Flow 1 (95th percentile 1158.46 ms)
- Flow 2 (95th percentile 1215.70 ms)
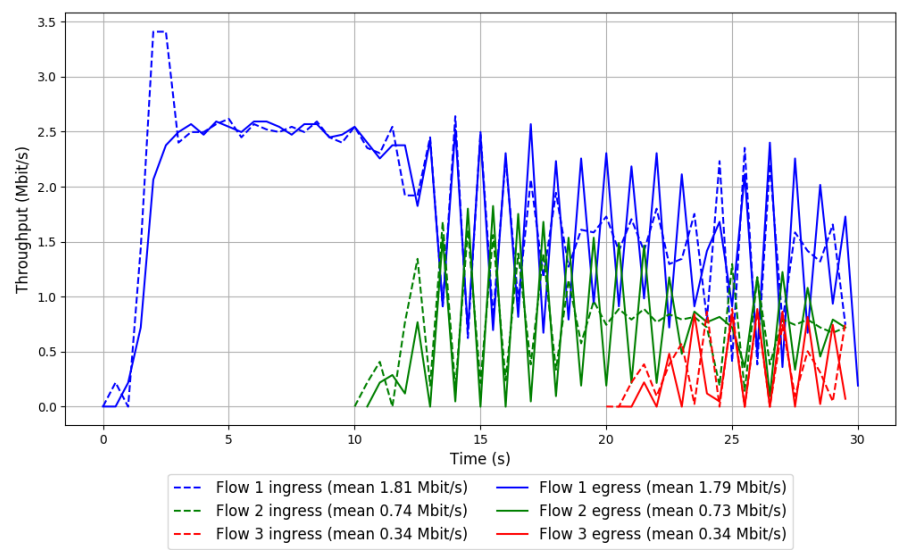- Flow 3 (95th percentile 1236.93 ms)

```
Run 1: Statistics of TCP Vegas

Start at: 2017-12-11 09:57:25
End at: 2017-12-11 09:57:55
Local clock offset: -3.809 ms
Remote clock offset: -4.482 ms


# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 972.985 ms
Loss rate: 2.77%
-- Flow 1:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 965.921 ms
Loss rate: 1.66%
-- Flow 2:
Average throughput: 0.73 Mbit/s
95th percentile per-packet one-way delay: 982.796 ms
Loss rate: 4.72%
-- Flow 3:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 985.683 ms
Loss rate: 12.04%
```

Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2017-12-11 10:14:56
End at: 2017-12-11 10:15:26
Local clock offset: -3.185 ms
Remote clock offset: 1.134 ms


# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.83 Mbit/s
95th percentile per-packet one-way delay: 1417.333 ms
Loss rate: 3.71%
-- Flow 1:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 1377.219 ms
Loss rate: 2.72%
-- Flow 2:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 1428.915 ms
Loss rate: 5.54%
-- Flow 3:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 1497.061 ms
Loss rate: 17.09%
```
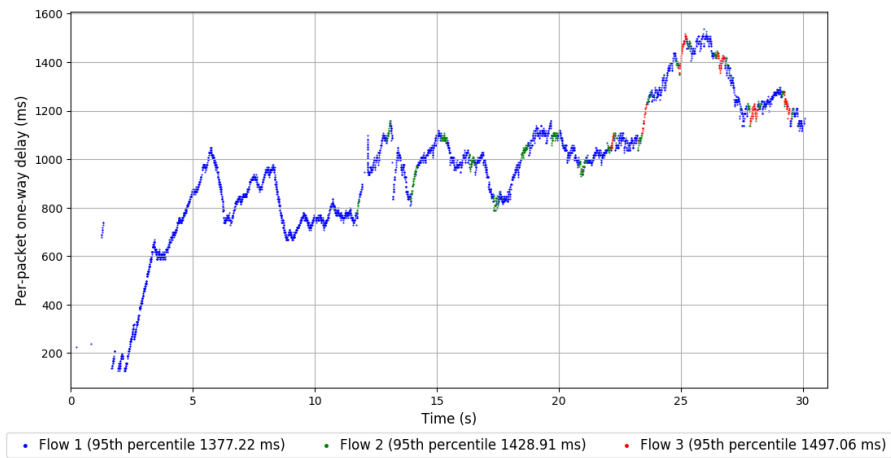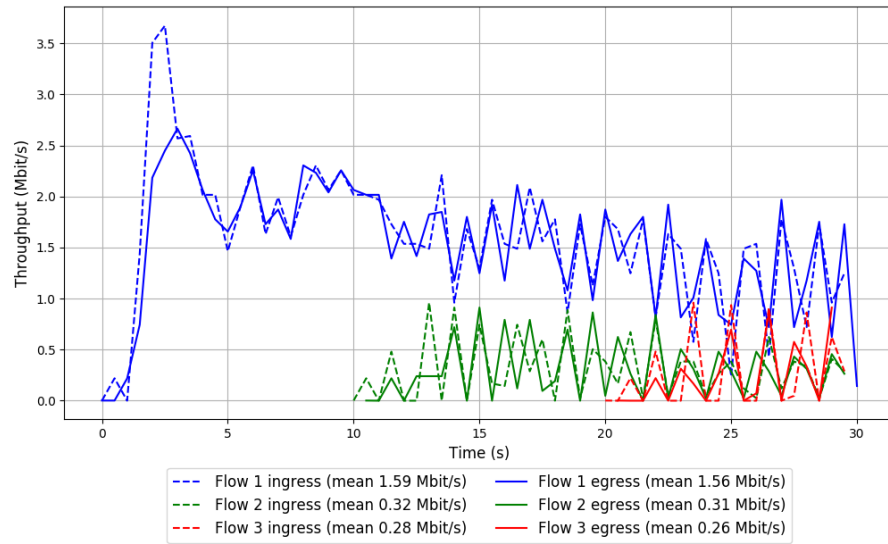
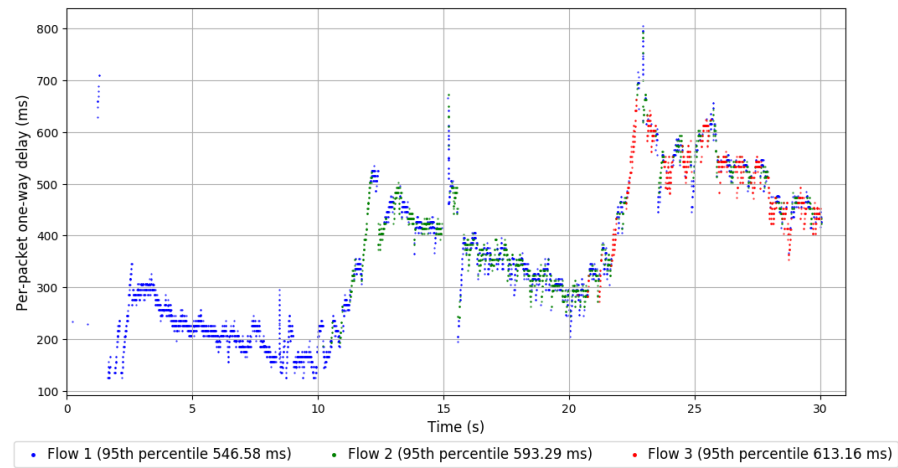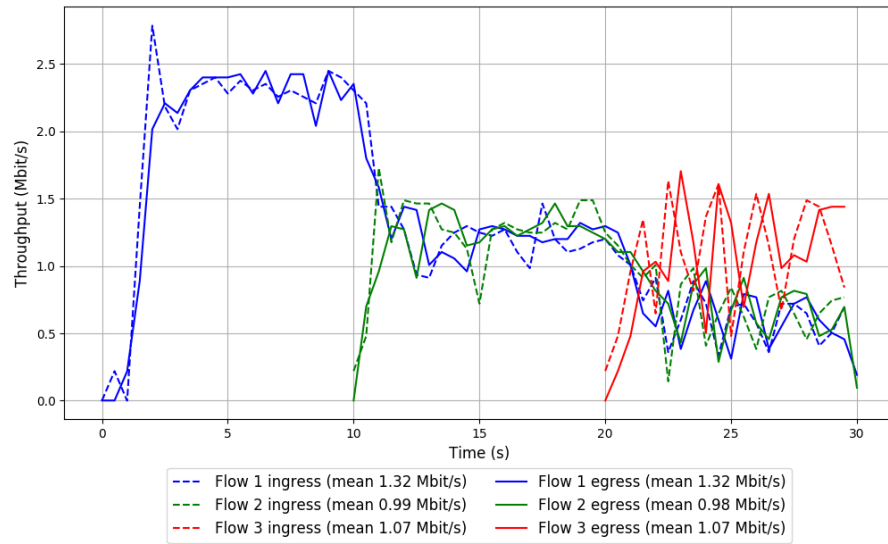Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2017-12-11 10:32:25
End at: 2017-12-11 10:32:55
Local clock offset: -2.586 ms
Remote clock offset: -0.724 ms


# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 593.334 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 546.583 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 0.98 Mbit/s
95th percentile per-packet one-way delay: 593.286 ms
Loss rate: 1.71%
-- Flow 3:
Average throughput: 1.07 Mbit/s
95th percentile per-packet one-way delay: 613.160 ms
Loss rate: 2.60%
```

Run 3: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 1.32 Mbit/s) — — — Flow 1 egress (mean 1.32 Mbit/s)
Flow 2 ingress (mean 0.99 Mbit/s) — — — Flow 2 egress (mean 0.98 Mbit/s)
Flow 3 ingress (mean 1.07 Mbit/s) — — — Flow 3 egress (mean 1.07 Mbit/s)

Flow 1 (95th percentile 546.58 ms)   Flow 2 (95th percentile 593.29 ms)   Flow 3 (95th percentile 613.16 ms)

63

```
Run 1: Statistics of Verus

Start at: 2017-12-11 09:54:55
End at: 2017-12-11 09:55:25
Local clock offset: -3.679 ms
Remote clock offset: 0.413 ms


# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 1824.055 ms
Loss rate: 4.00%
-- Flow 1:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 1823.995 ms
Loss rate: 4.00%
-- Flow 2:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 1834.274 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 1613.684 ms
Loss rate: 9.09%
```
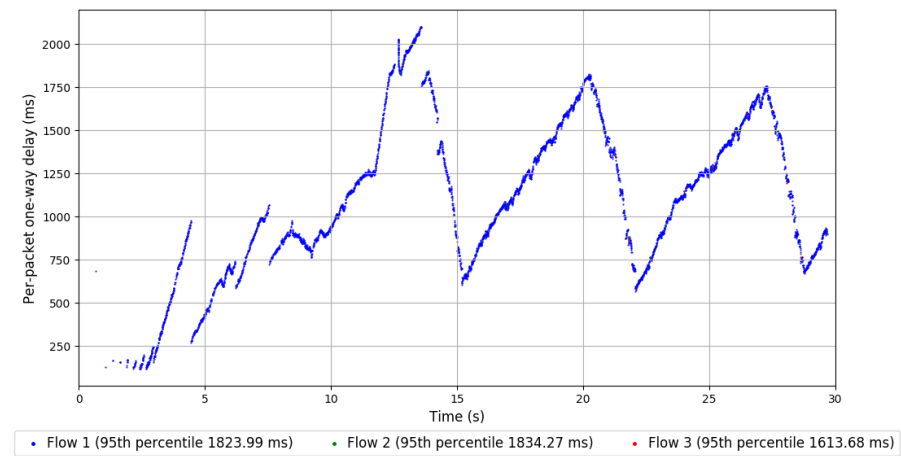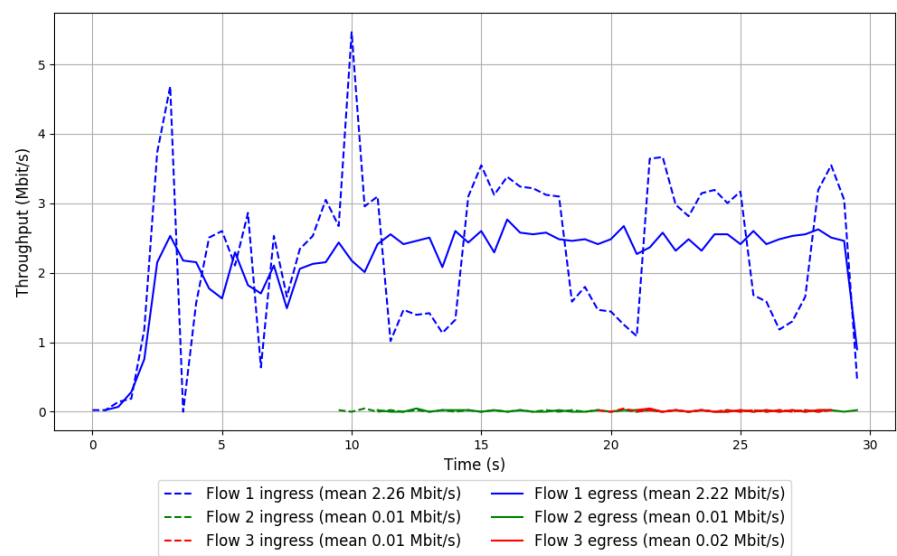
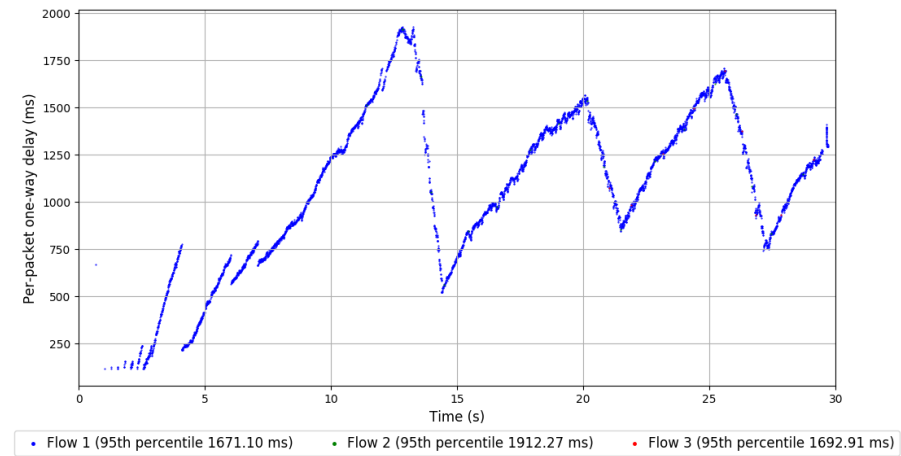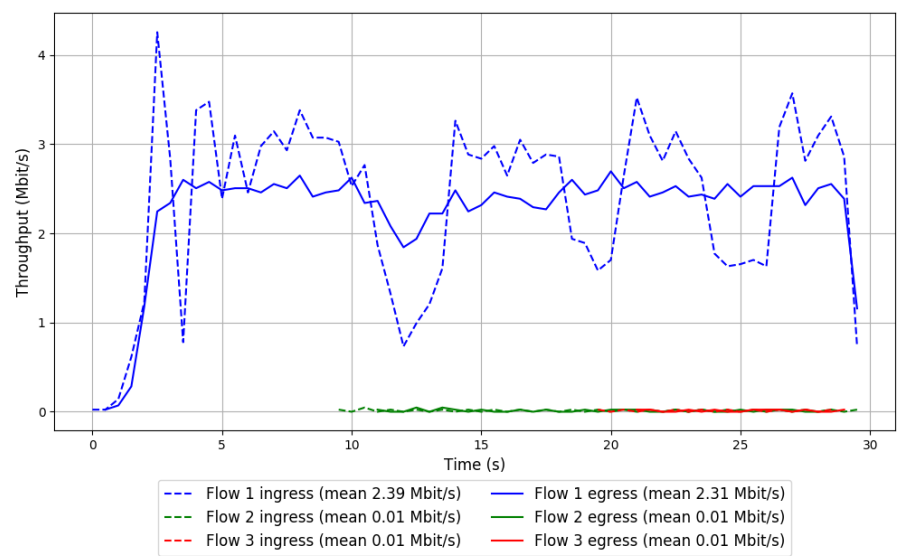Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2017-12-11 10:12:26
End at: 2017-12-11 10:12:56
Local clock offset: -3.388 ms
Remote clock offset: -0.407 ms


# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 1672.373 ms
Loss rate: 5.31%
-- Flow 1:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 1671.097 ms
Loss rate: 5.29%
-- Flow 2:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 1912.273 ms
Loss rate: 9.09%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 1692.907 ms
Loss rate: 10.00%
```

Run 2: Report of Verus — Data Link

Flow 1 ingress (mean 2.39 Mbit/s) --- Flow 1 egress (mean 2.31 Mbit/s)
Flow 2 ingress (mean 0.01 Mbit/s) --- Flow 2 egress (mean 0.01 Mbit/s)
Flow 3 ingress (mean 0.01 Mbit/s) --- Flow 3 egress (mean 0.01 Mbit/s)

Flow 1 (95th percentile 1671.10 ms)   Flow 2 (95th percentile 1912.27 ms)   Flow 3 (95th percentile 1692.91 ms)

```
Run 3: Statistics of Verus

Start at: 2017-12-11 10:29:55
End at: 2017-12-11 10:30:25
Local clock offset: -2.585 ms
Remote clock offset: 0.918 ms


# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 2682.953 ms
Loss rate: 5.72%
-- Flow 1:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 2682.987 ms
Loss rate: 5.69%
-- Flow 2:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 2682.634 ms
Loss rate: 9.52%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 1313.262 ms
Loss rate: 10.00%
```
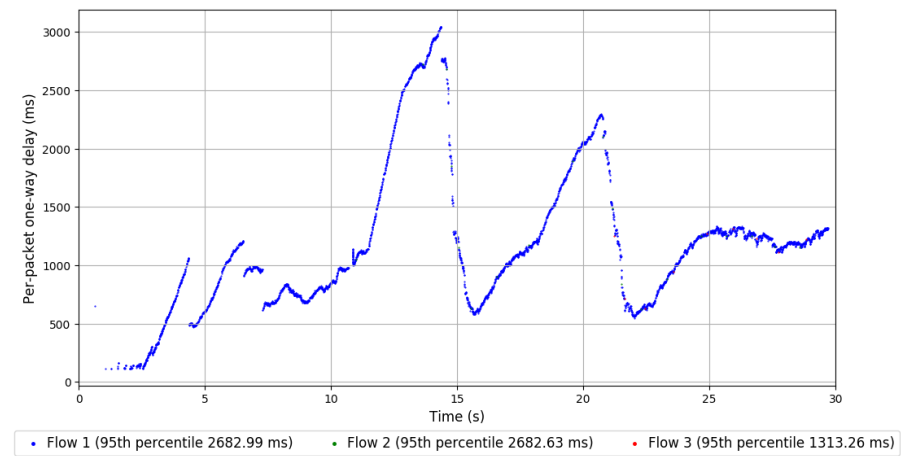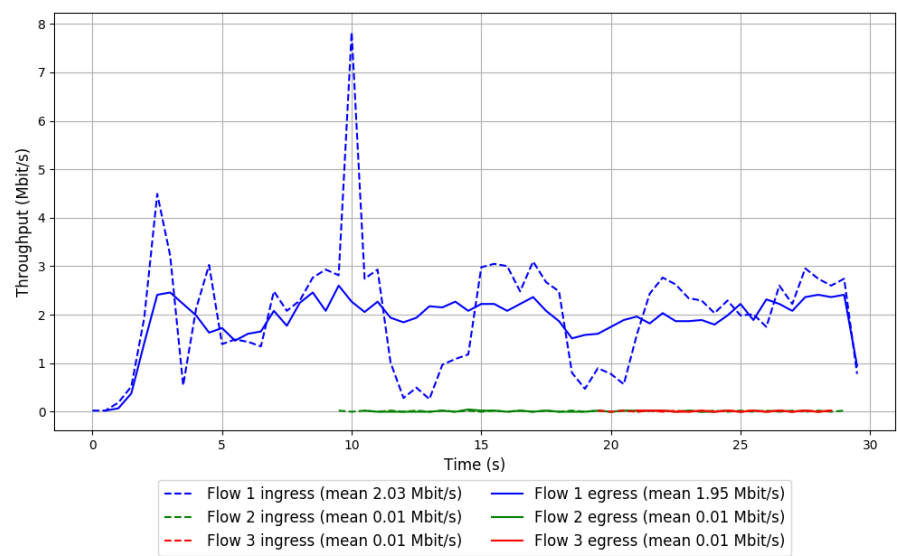
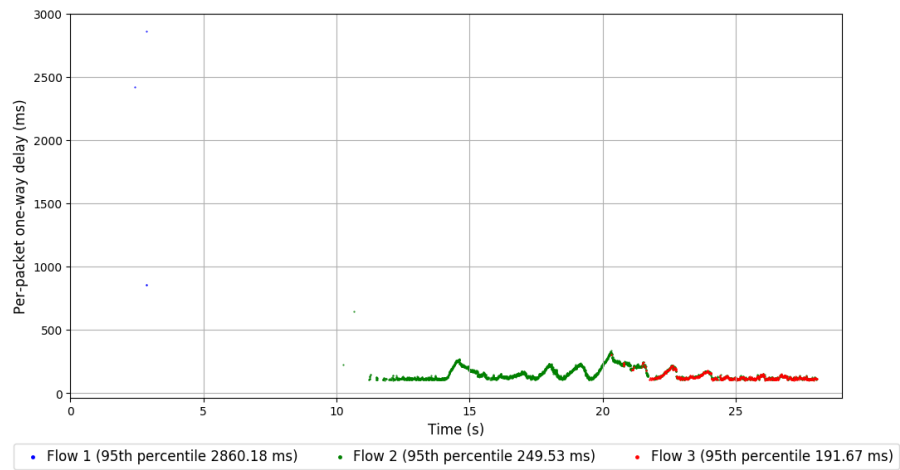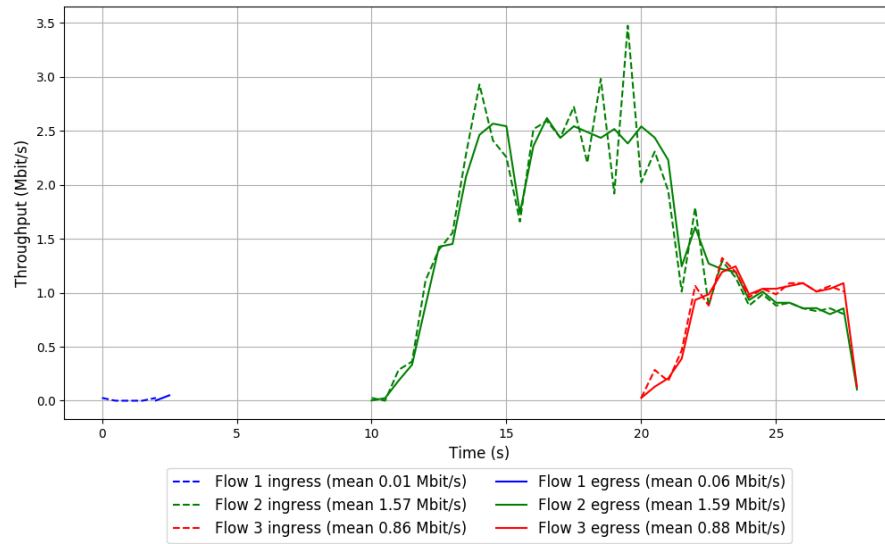Run 3: Report of Verus — Data Link

```
Run 1: Statistics of Copa

Start at: 2017-12-11 10:11:10
End at: 2017-12-11 10:11:40
Local clock offset: -3.547 ms
Remote clock offset: -4.137 ms


# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.37 Mbit/s
95th percentile per-packet one-way delay: 244.991 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 2860.184 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 249.535 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 0.88 Mbit/s
95th percentile per-packet one-way delay: 191.667 ms
Loss rate: 0.57%
```

Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2017-12-11 10:28:40
End at: 2017-12-11 10:29:10
Local clock offset: -2.614 ms
Remote clock offset: -5.21 ms

# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 203.905 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 2727.867 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 206.042 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 0.82 Mbit/s
95th percentile per-packet one-way delay: 194.130 ms
Loss rate: 0.98%
```
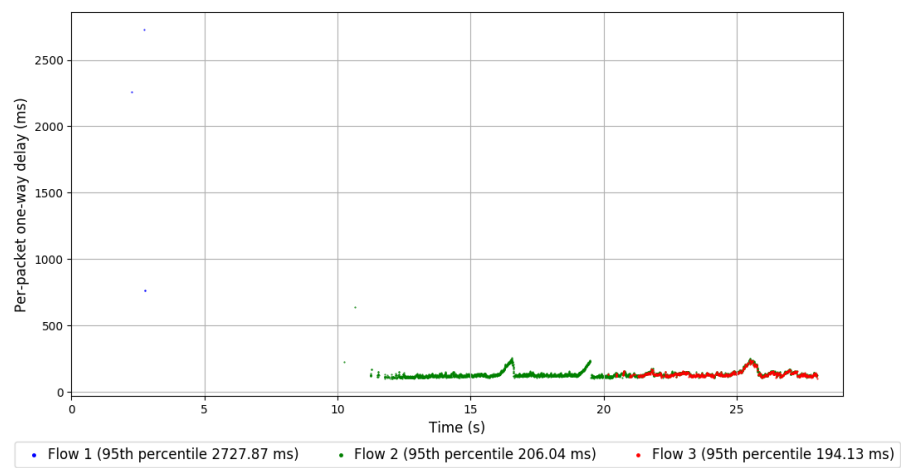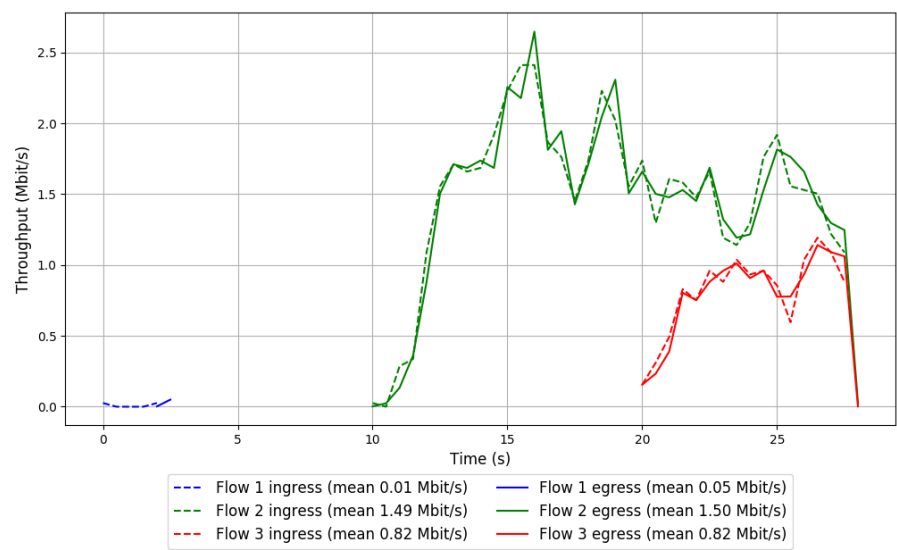
Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2017-12-11 10:46:18
End at: 2017-12-11 10:46:48
Local clock offset: -1.969 ms
Remote clock offset: -0.09 ms

# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.25 Mbit/s
95th percentile per-packet one-way delay: 250.685 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 2688.827 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 206.811 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 0.75 Mbit/s
95th percentile per-packet one-way delay: 412.656 ms
Loss rate: 0.86%
```
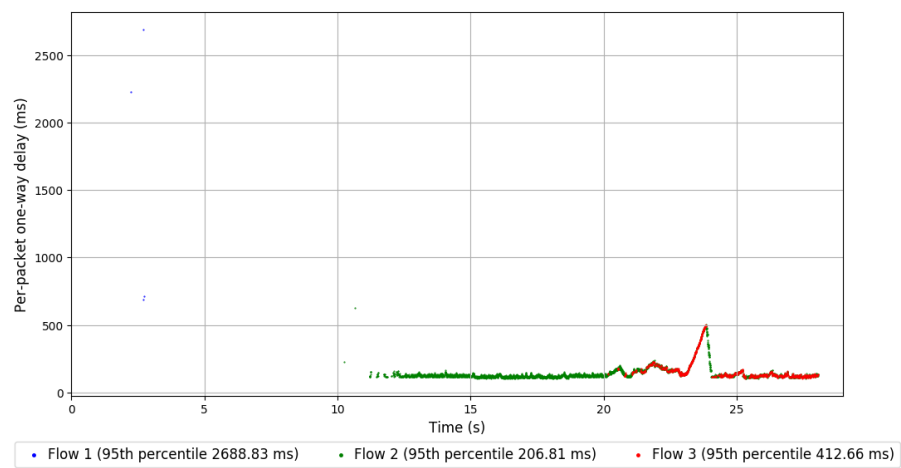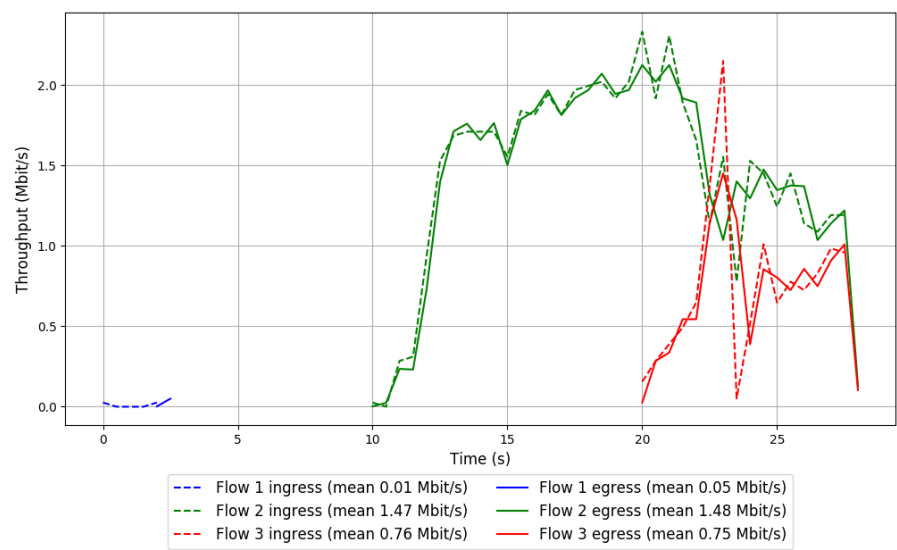
Run 3: Report of Copa — Data Link

- - - Flow 1 ingress (mean 0.01 Mbit/s)   —— Flow 1 egress (mean 0.05 Mbit/s)
- - - Flow 2 ingress (mean 1.47 Mbit/s)   —— Flow 2 egress (mean 1.48 Mbit/s)
- - - Flow 3 ingress (mean 0.76 Mbit/s)   —— Flow 3 egress (mean 0.75 Mbit/s)

- Flow 1 (95th percentile 2688.83 ms)   • Flow 2 (95th percentile 206.81 ms)   • Flow 3 (95th percentile 412.66 ms)
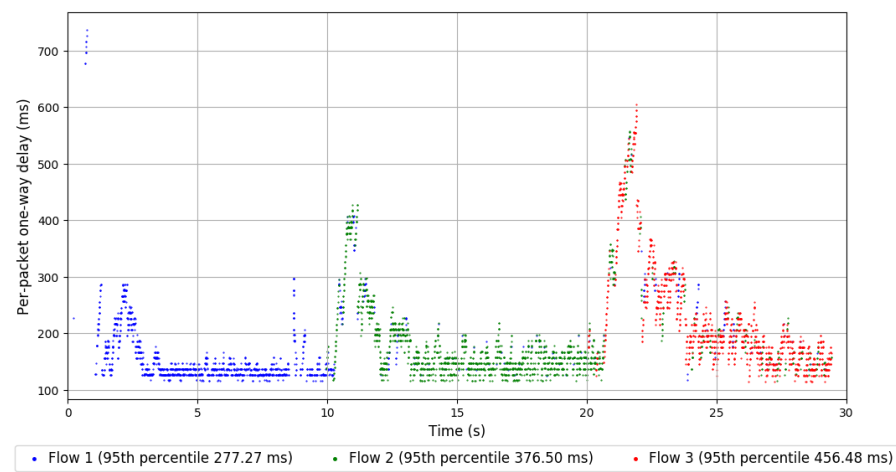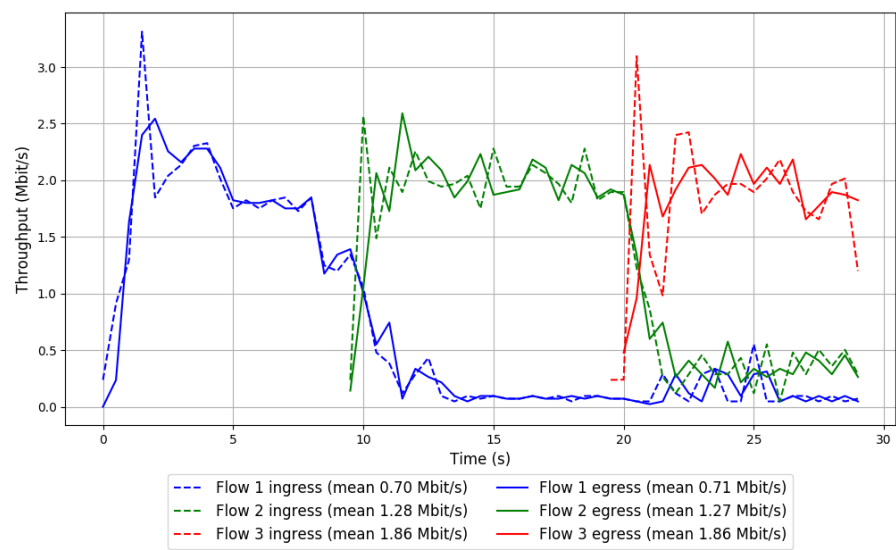
```
Run 1: Statistics of Indigo

Start at: 2017-12-11 10:01:10
End at: 2017-12-11 10:01:40
Local clock offset: -3.997 ms
Remote clock offset: 1.483 ms


# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 385.007 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 277.272 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 1.27 Mbit/s
95th percentile per-packet one-way delay: 376.499 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 1.86 Mbit/s
95th percentile per-packet one-way delay: 456.479 ms
Loss rate: 0.00%
```
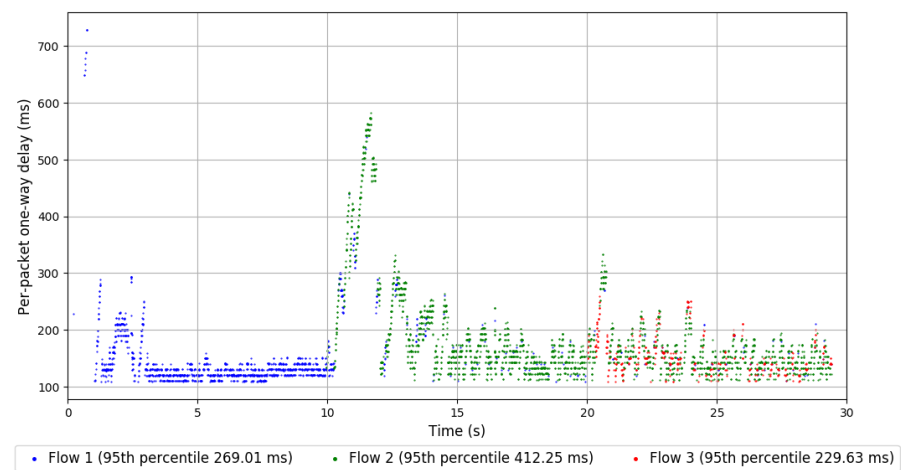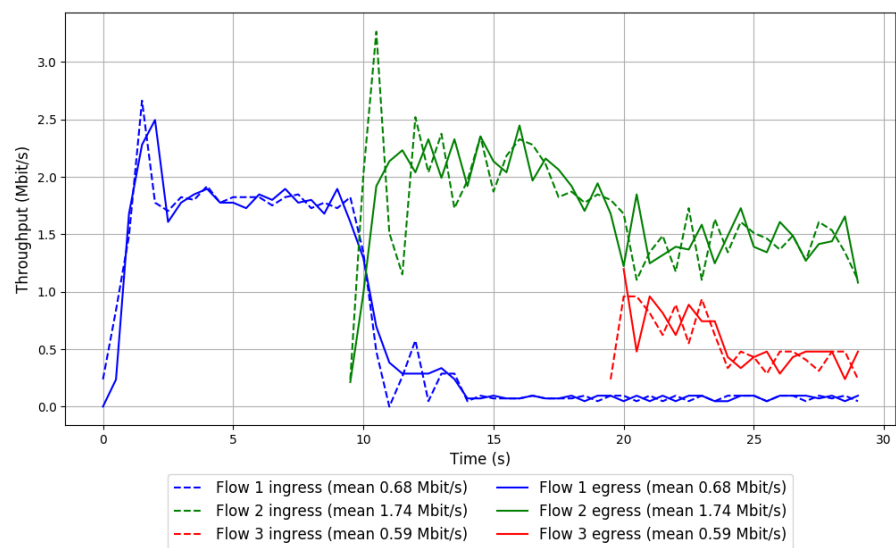
Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2017-12-11 10:18:40
End at: 2017-12-11 10:19:10
Local clock offset: -2.923 ms
Remote clock offset: -4.269 ms


# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 322.003 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.68 Mbit/s
95th percentile per-packet one-way delay: 269.006 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.74 Mbit/s
95th percentile per-packet one-way delay: 412.249 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 229.629 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2017-12-11 10:36:10
End at: 2017-12-11 10:36:40
Local clock offset: -2.601 ms
Remote clock offset: 0.388 ms


# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.84 Mbit/s
95th percentile per-packet one-way delay: 218.148 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 1.02 Mbit/s
95th percentile per-packet one-way delay: 246.573 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.84 Mbit/s
95th percentile per-packet one-way delay: 200.439 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 0.86 Mbit/s
95th percentile per-packet one-way delay: 186.521 ms
Loss rate: 0.45%
```
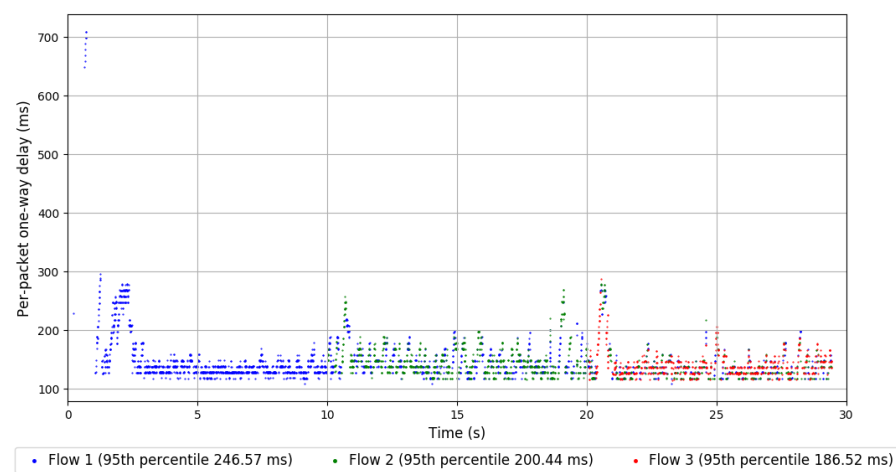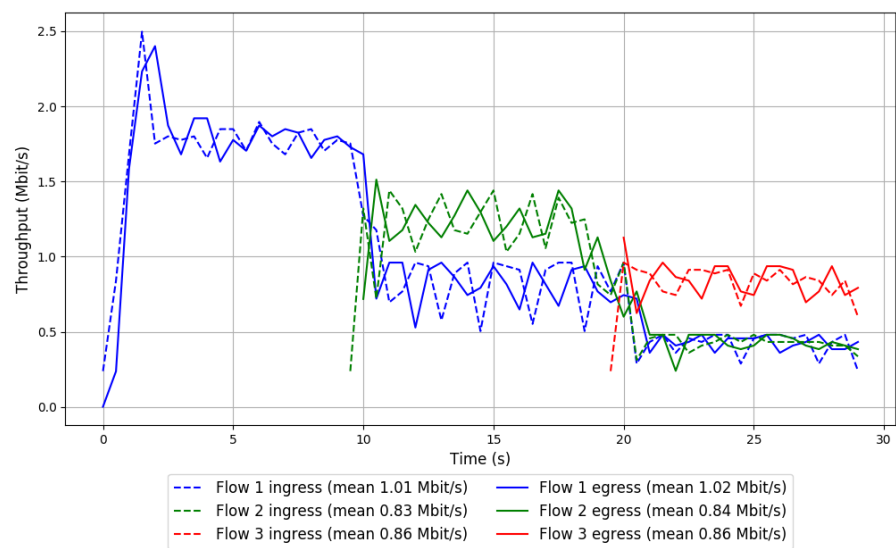
Run 3: Report of Indigo — Data Link

- - - Flow 1 ingress (mean 1.01 Mbit/s)   —— Flow 1 egress (mean 1.02 Mbit/s)
- - - Flow 2 ingress (mean 0.83 Mbit/s)   —— Flow 2 egress (mean 0.84 Mbit/s)
- - - Flow 3 ingress (mean 0.86 Mbit/s)   —— Flow 3 egress (mean 0.86 Mbit/s)

• Flow 1 (95th percentile 246.57 ms)   • Flow 2 (95th percentile 200.44 ms)   • Flow 3 (95th percentile 186.52 ms)
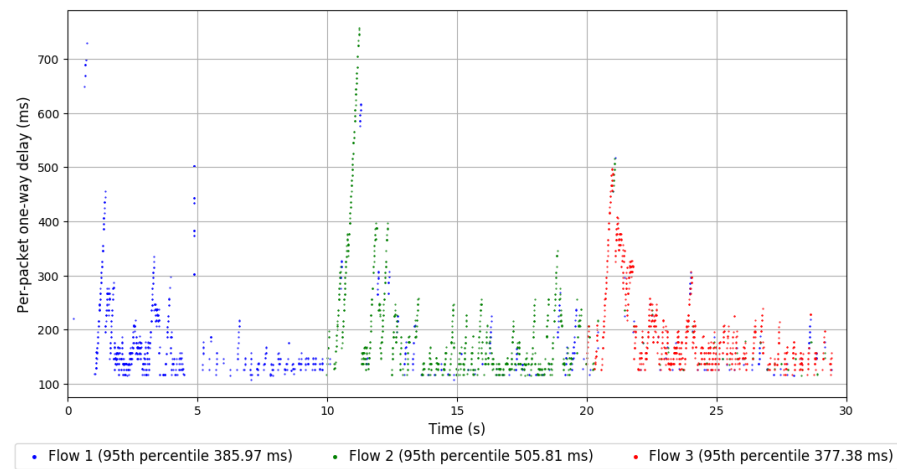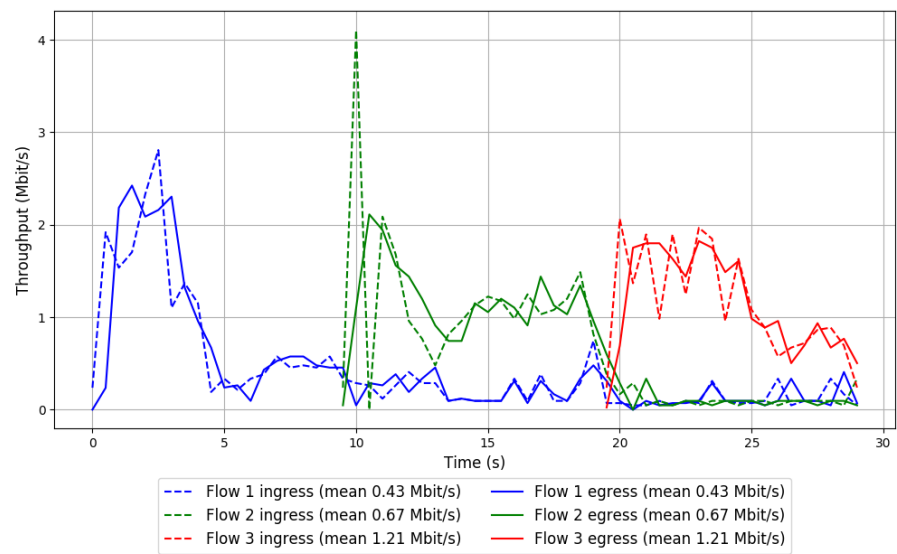
81

```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-11 09:59:55
End at: 2017-12-11 10:00:25
Local clock offset: -4.012 ms
Remote clock offset: 0.282 ms

# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.26 Mbit/s
95th percentile per-packet one-way delay: 416.241 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 385.969 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 505.808 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 1.21 Mbit/s
95th percentile per-packet one-way delay: 377.375 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-calib — Data Link

```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-11 10:17:26
End at: 2017-12-11 10:17:56
Local clock offset: -3.006 ms
Remote clock offset: 1.88 ms


# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.10 Mbit/s
95th percentile per-packet one-way delay: 987.583 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 361.370 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.63 Mbit/s
95th percentile per-packet one-way delay: 1295.575 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 247.026 ms
Loss rate: 0.00%
```
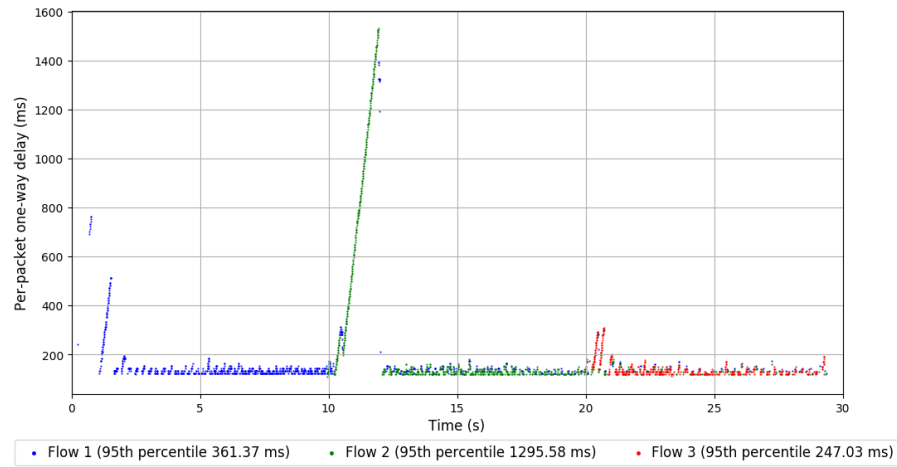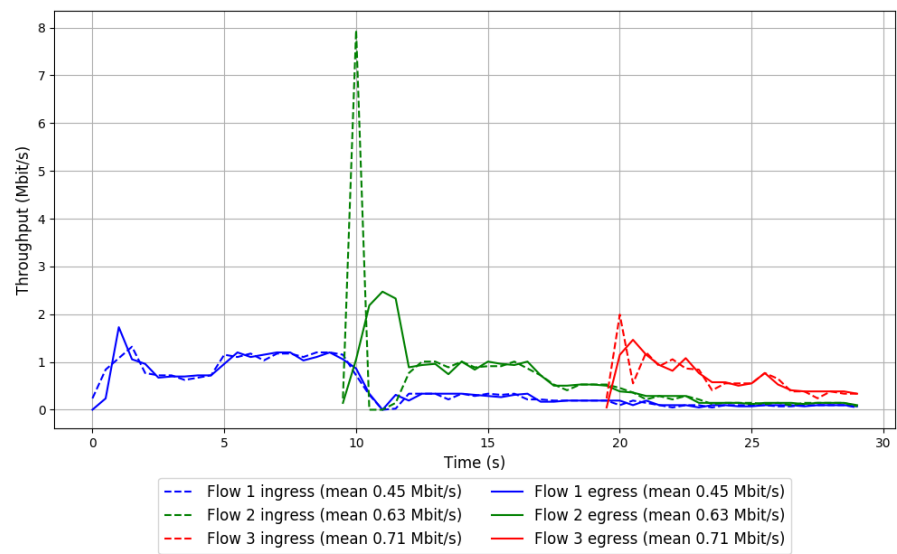
Run 2: Report of Indigo-calib — Data Link

```
Run 3: Statistics of Indigo-calib

Start at: 2017-12-11 10:34:56
End at: 2017-12-11 10:35:26
Local clock offset: -2.568 ms
Remote clock offset: -0.034 ms


# Below is generated by plot.py at 2017-12-11 10:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.99 Mbit/s
95th percentile per-packet one-way delay: 459.809 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 428.906 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 321.697 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.73 Mbit/s
95th percentile per-packet one-way delay: 618.750 ms
Loss rate: 0.17%
```

Run 3: Report of Indigo-calib — Data Link