Pantheon Report

Generated at 2017-12-05 09:45:37 (UTC).

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

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.

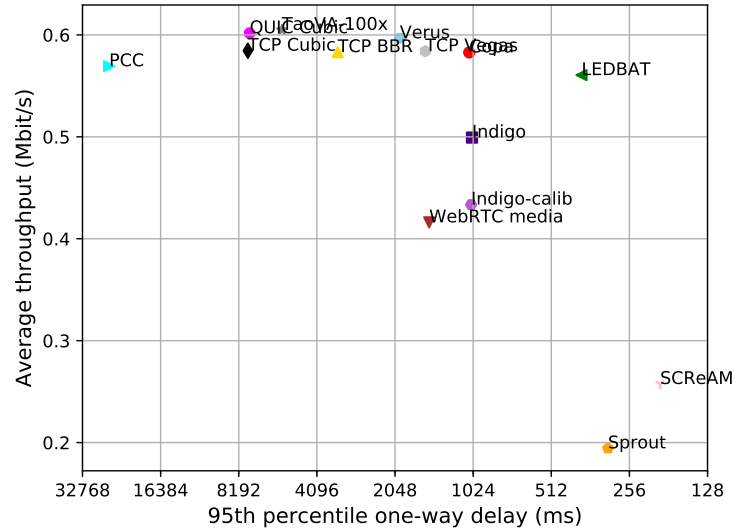Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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
```
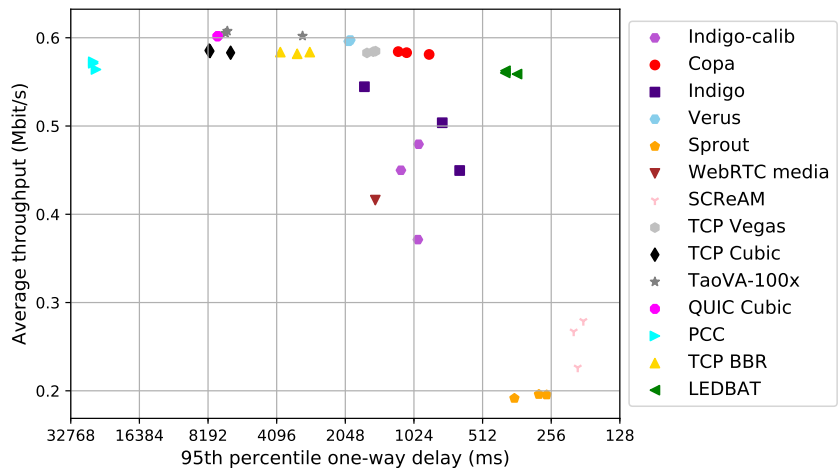
test from Colombia ppp0 to AWS Brazil 2 Ethernet, 3 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)

test from Colombia ppp0 to AWS Brazil 2 Ethernet, 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	0.37	0.31	0.04	3378.97	3424.60	2605.41	2.61	6.36	40.08
TCP Cubic	3	0.55	0.06	0.00	7566.62	6390.22	7650.35	29.27	48.07	73.98
LEDBAT	3	0.26	0.34	0.26	341.60	394.61	415.04	0.16	0.96	7.60
PCC	3	0.57	0.00	N/A	25872.68	N/A	N/A	98.60	N/A	N/A
QUIC Cubic	2	0.57	0.06	0.00	7400.76	7740.20	7516.67	29.01	33.13	33.33
SCReAM	3	0.08	0.17	0.17	180.77	190.83	239.48	0.84	1.04	2.05
WebRTC media	1	0.24	0.13	0.05	1354.02	1588.58	1452.76	0.98	0.00	13.48
Sprout	3	0.10	0.10	0.10	559.34	229.47	277.22	1.29	2.59	5.31
TaoVA-100x	3	0.38	0.33	0.10	5559.05	5239.72	5426.12	16.79	22.42	49.60
TCP Vegas	3	0.42	0.15	0.22	1523.59	1630.57	1613.39	2.24	6.25	16.32
Verus	2	0.58	0.01	0.01	1962.43	2024.74	1957.23	6.34	5.00	10.00
Copa	3	0.41	0.23	0.09	993.80	1084.88	1138.22	2.98	5.75	15.88
Indigo	3	0.26	0.23	0.27	913.21	777.86	1279.90	7.01	2.07	11.07
Indigo-calib	3	0.20	0.23	0.23	1029.75	990.22	1103.75	5.80	7.14	12.49

```
Run 1: Statistics of TCP BBR

Start at: 2017-12-05 08:14:44
End at: 2017-12-05 08:15:14
Local clock offset: 1.914 ms
Remote clock offset: 2.525 ms


# Below is generated by plot.py at 2017-12-05 09:45:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 2932.216 ms
Loss rate: 4.26%
-- Flow 1:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 2892.140 ms
Loss rate: 2.18%
-- Flow 2:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 2972.226 ms
Loss rate: 5.74%
-- Flow 3:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 1561.179 ms
Loss rate: 30.96%
```
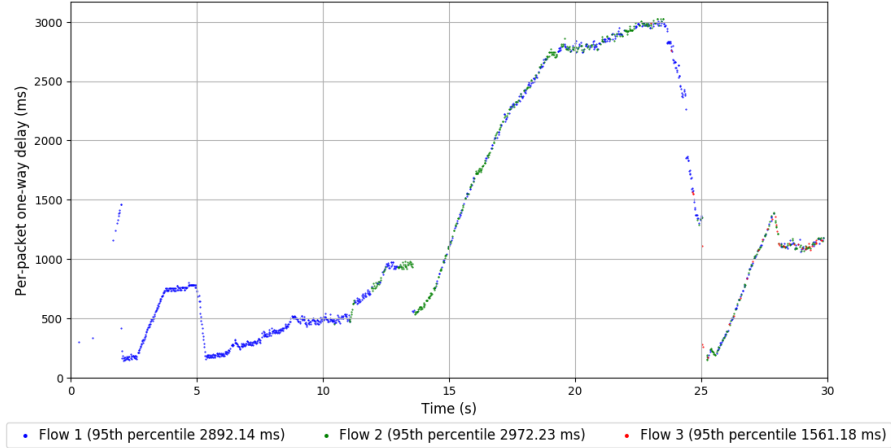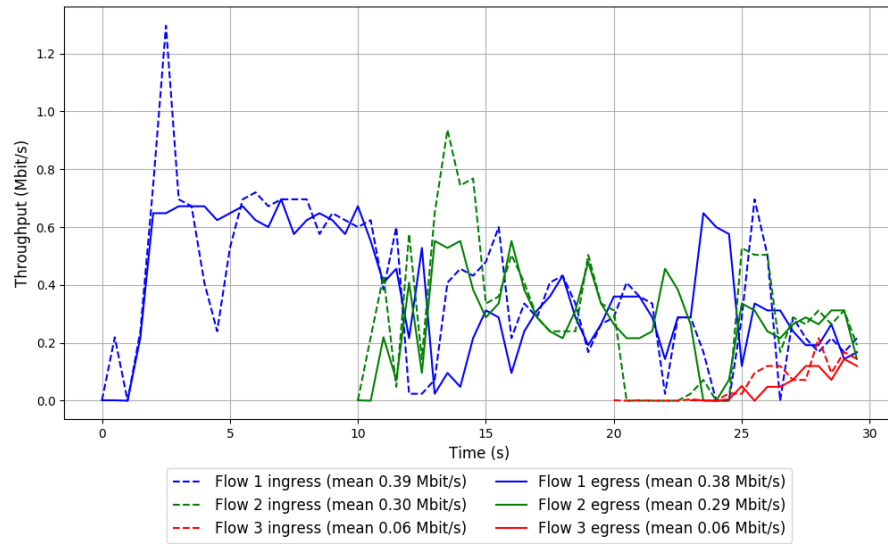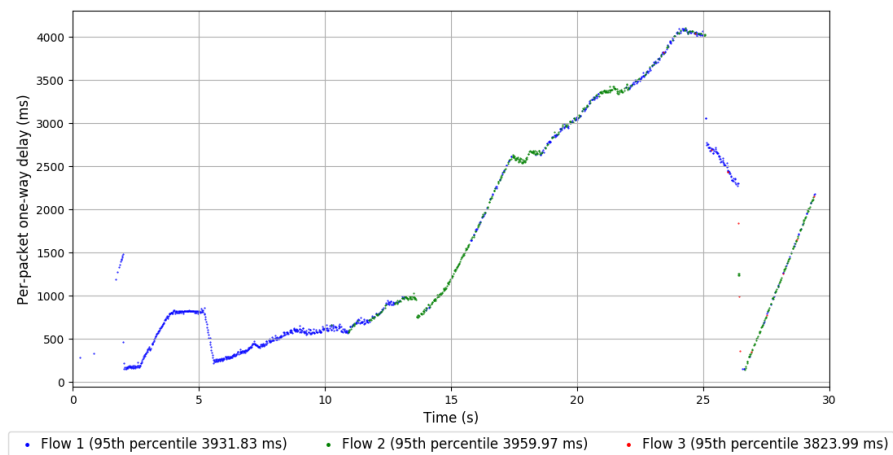
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2017-12-05 08:32:08
End at: 2017-12-05 08:32:38
Local clock offset: 1.613 ms
Remote clock offset: 2.271 ms


# Below is generated by plot.py at 2017-12-05 09:45:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 3948.035 ms
Loss rate: 5.41%
-- Flow 1:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 3931.827 ms
Loss rate: 3.08%
-- Flow 2:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 3959.969 ms
Loss rate: 7.66%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 3823.991 ms
Loss rate: 58.25%
```
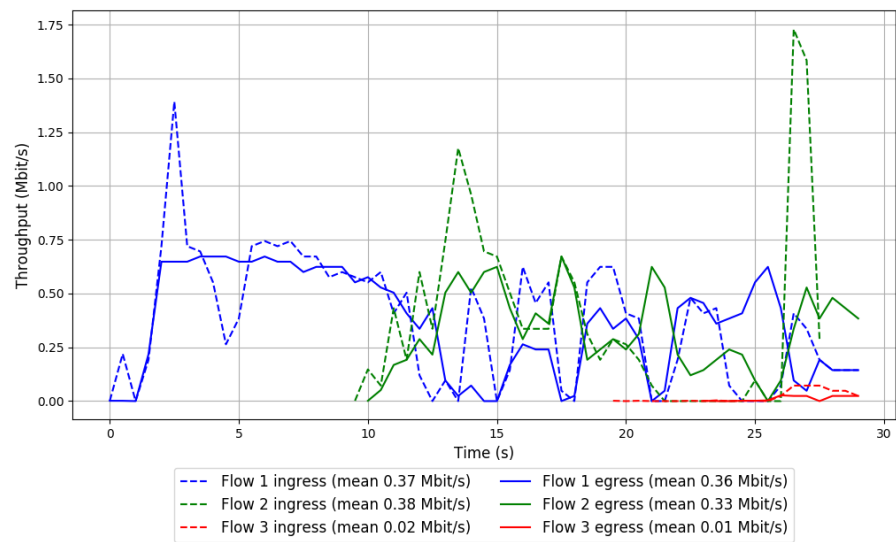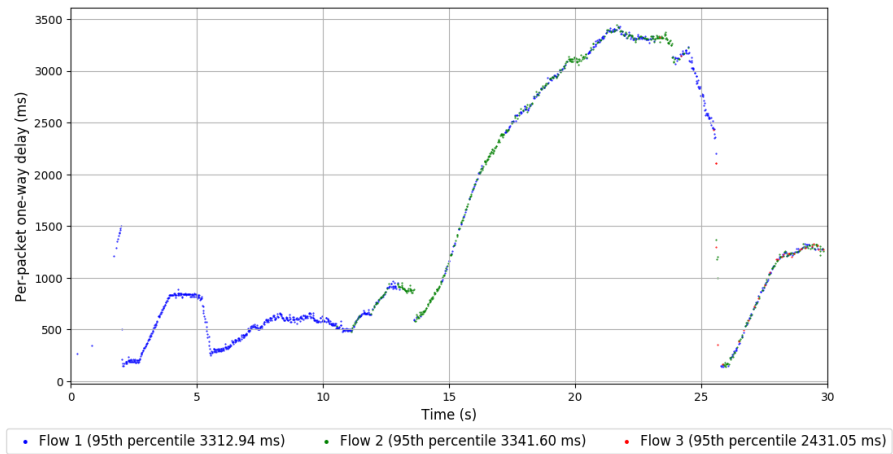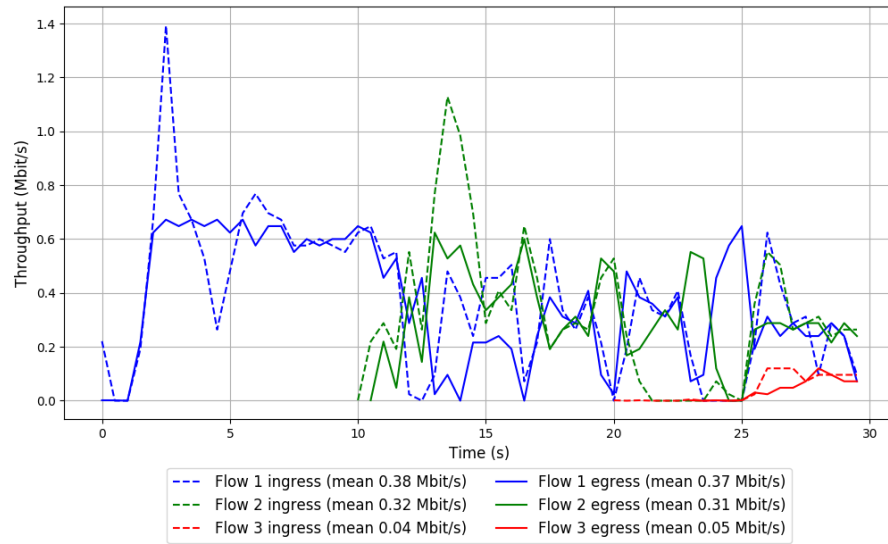
Run 2: Report of TCP BBR — Data Link

Flow 1 ingress (mean 0.37 Mbit/s)   Flow 1 egress (mean 0.36 Mbit/s)
Flow 2 ingress (mean 0.38 Mbit/s)   Flow 2 egress (mean 0.33 Mbit/s)
Flow 3 ingress (mean 0.02 Mbit/s)   Flow 3 egress (mean 0.01 Mbit/s)

Flow 1 (95th percentile 3931.83 ms)   Flow 2 (95th percentile 3959.97 ms)   Flow 3 (95th percentile 3823.99 ms)

```
Run 3: Statistics of TCP BBR

Start at: 2017-12-05 08:49:32
End at: 2017-12-05 08:50:02
Local clock offset: 1.537 ms
Remote clock offset: 1.897 ms


# Below is generated by plot.py at 2017-12-05 09:45:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 3329.935 ms
Loss rate: 4.34%
-- Flow 1:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 3312.936 ms
Loss rate: 2.57%
-- Flow 2:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 3341.599 ms
Loss rate: 5.68%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 2431.048 ms
Loss rate: 31.03%
```
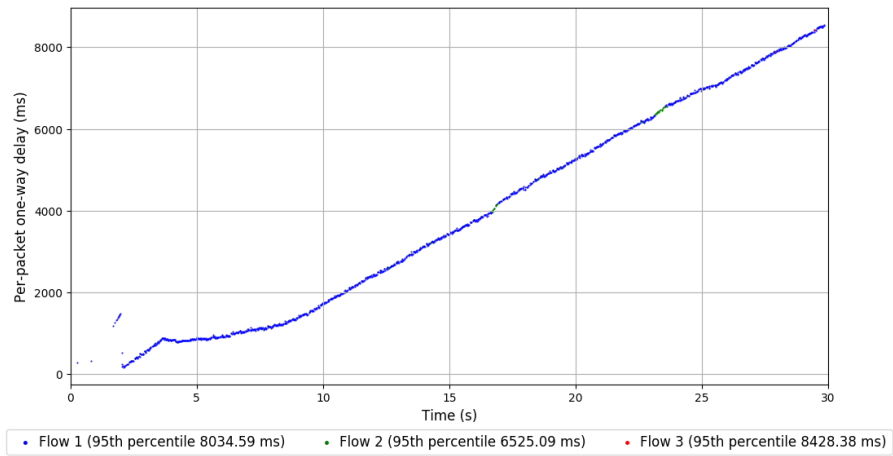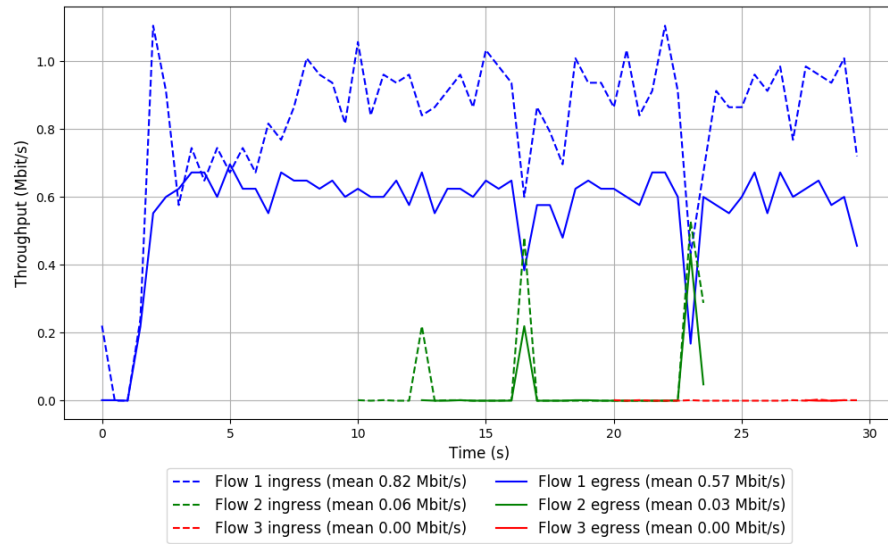
Run 3: Report of TCP BBR — Data Link

Flow 1 ingress (mean 0.38 Mbit/s) --- Flow 1 egress (mean 0.37 Mbit/s)
Flow 2 ingress (mean 0.32 Mbit/s) --- Flow 2 egress (mean 0.31 Mbit/s)
Flow 3 ingress (mean 0.04 Mbit/s) --- Flow 3 egress (mean 0.05 Mbit/s)

Flow 1 (95th percentile 3312.94 ms)   Flow 2 (95th percentile 3341.60 ms)   Flow 3 (95th percentile 2431.05 ms)

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```
Run 1: Statistics of TCP Cubic

Start at: 2017-12-05 08:15:58
End at: 2017-12-05 08:16:28
Local clock offset: 1.93 ms
Remote clock offset: -3.15 ms


# Below is generated by plot.py at 2017-12-05 09:45:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 8034.514 ms
Loss rate: 31.66%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 8034.592 ms
Loss rate: 30.97%
-- Flow 2:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 6525.087 ms
Loss rate: 53.59%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 8428.375 ms
Loss rate: 75.13%
```
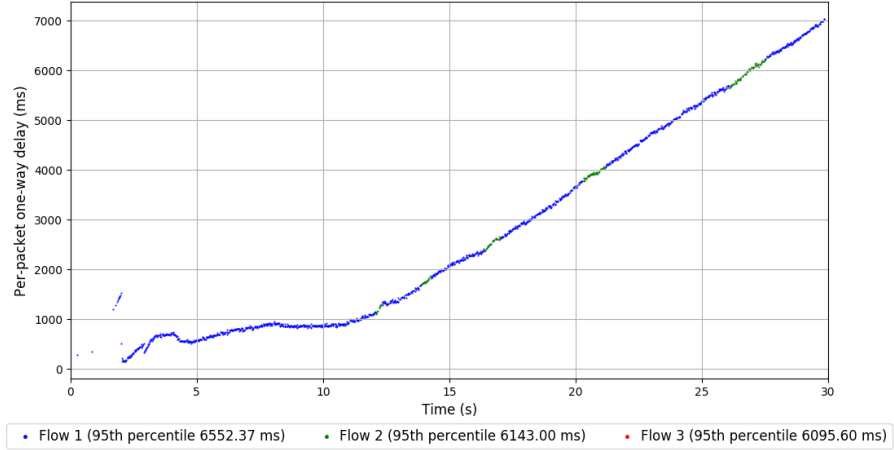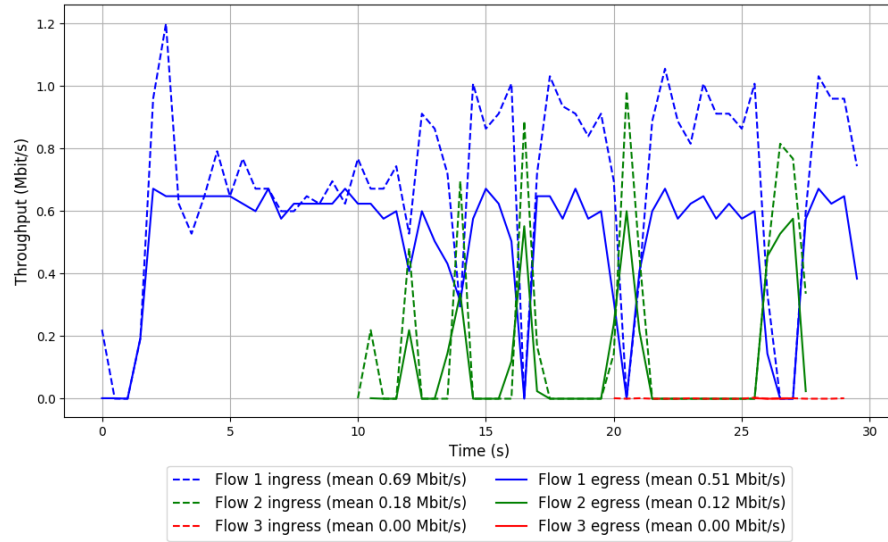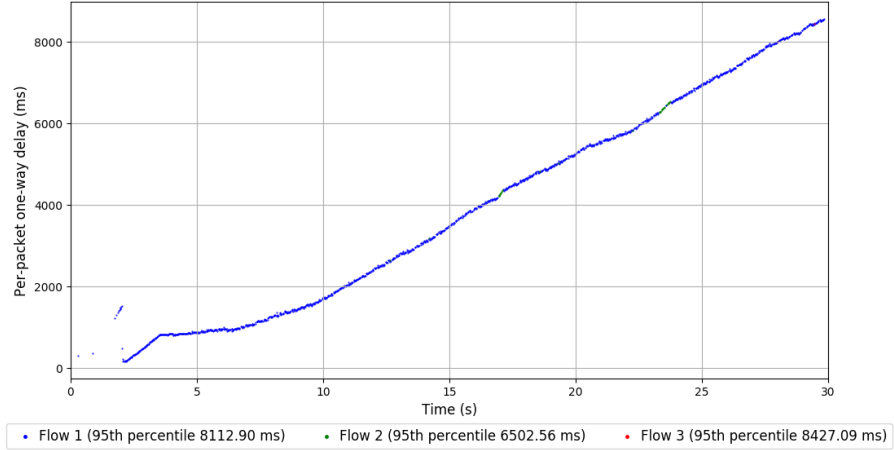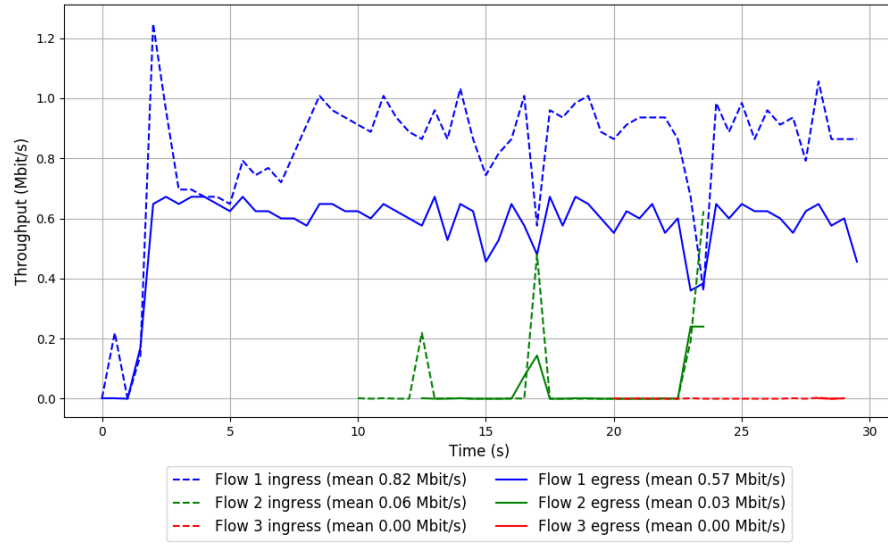
Run 1: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 0.82 Mbit/s) --- Flow 1 egress (mean 0.57 Mbit/s)
Flow 2 ingress (mean 0.06 Mbit/s) --- Flow 2 egress (mean 0.03 Mbit/s)
Flow 3 ingress (mean 0.00 Mbit/s) --- Flow 3 egress (mean 0.00 Mbit/s)

Flow 1 (95th percentile 8034.59 ms)   Flow 2 (95th percentile 6525.09 ms)   Flow 3 (95th percentile 8428.38 ms)

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```
Run 2: Statistics of TCP Cubic

Start at: 2017-12-05 08:33:22
End at: 2017-12-05 08:33:52
Local clock offset: 1.6 ms
Remote clock offset: 3.206 ms


# Below is generated by plot.py at 2017-12-05 09:45:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 6522.334 ms
Loss rate: 27.44%
-- Flow 1:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 6552.366 ms
Loss rate: 25.93%
-- Flow 2:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 6143.000 ms
Loss rate: 37.04%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 6095.595 ms
Loss rate: 74.87%
```
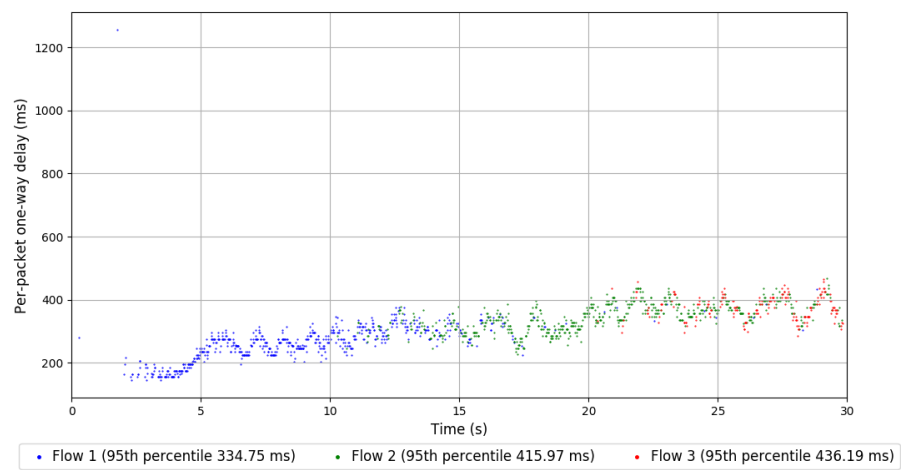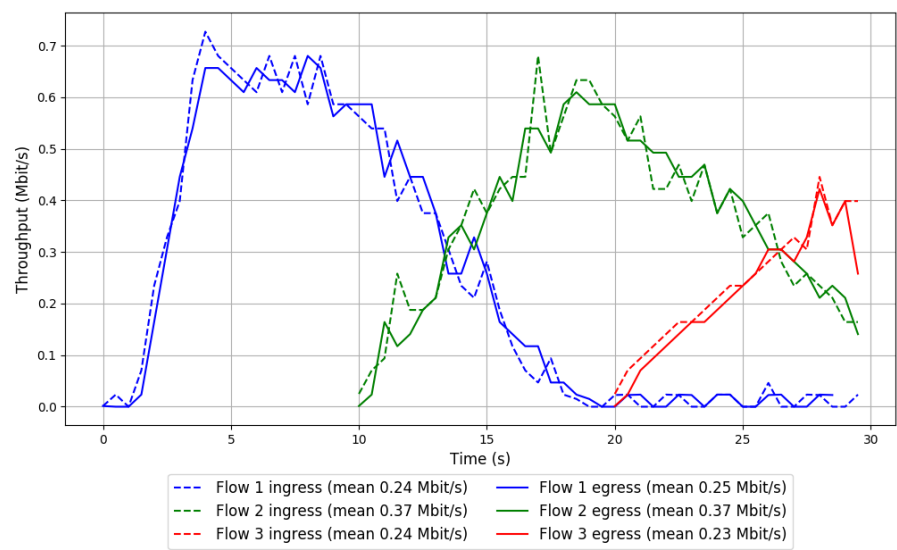
Run 2: Report of TCP Cubic — Data Link

- - - Flow 1 ingress (mean 0.69 Mbit/s)   —— Flow 1 egress (mean 0.51 Mbit/s)
- - - Flow 2 ingress (mean 0.18 Mbit/s)   —— Flow 2 egress (mean 0.12 Mbit/s)
- - - Flow 3 ingress (mean 0.00 Mbit/s)   —— Flow 3 egress (mean 0.00 Mbit/s)

• Flow 1 (95th percentile 6552.37 ms)   • Flow 2 (95th percentile 6143.00 ms)   • Flow 3 (95th percentile 6095.60 ms)

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```
Run 3: Statistics of TCP Cubic

Start at: 2017-12-05 08:50:47
End at: 2017-12-05 08:51:17
Local clock offset: 1.602 ms
Remote clock offset: -1.635 ms


# Below is generated by plot.py at 2017-12-05 09:45:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 8112.622 ms
Loss rate: 31.61%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 8112.904 ms
Loss rate: 30.92%
-- Flow 2:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 6502.562 ms
Loss rate: 53.59%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 8427.094 ms
Loss rate: 71.93%
```

Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 0.82 Mbit/s) --- Flow 1 egress (mean 0.57 Mbit/s)
Flow 2 ingress (mean 0.06 Mbit/s) --- Flow 2 egress (mean 0.03 Mbit/s)
Flow 3 ingress (mean 0.00 Mbit/s) --- Flow 3 egress (mean 0.00 Mbit/s)

Flow 1 (95th percentile 8112.90 ms)   Flow 2 (95th percentile 6502.56 ms)   Flow 3 (95th percentile 8427.09 ms)

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```
Run 1: Statistics of LEDBAT

Start at: 2017-12-05 08:17:13
End at: 2017-12-05 08:17:43
Local clock offset: 1.949 ms
Remote clock offset: -3.005 ms

# Below is generated by plot.py at 2017-12-05 09:45:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 406.437 ms
Loss rate: 1.73%
-- Flow 1:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 334.749 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 415.966 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 436.195 ms
Loss rate: 8.46%
```
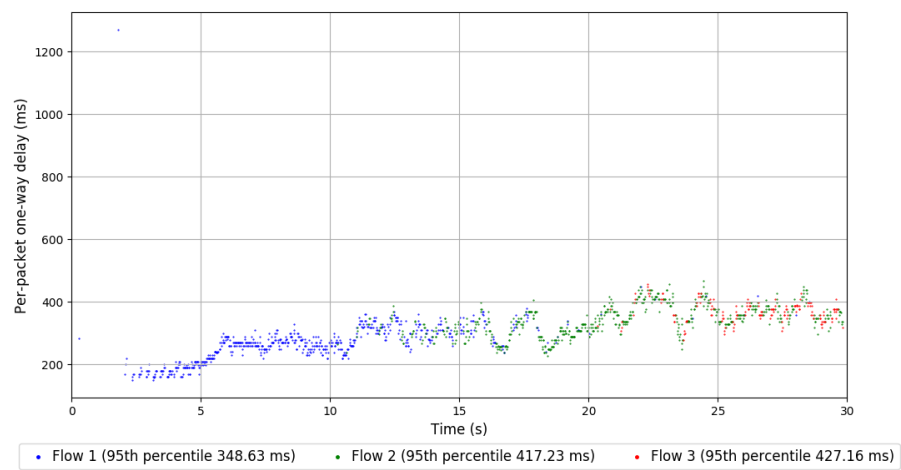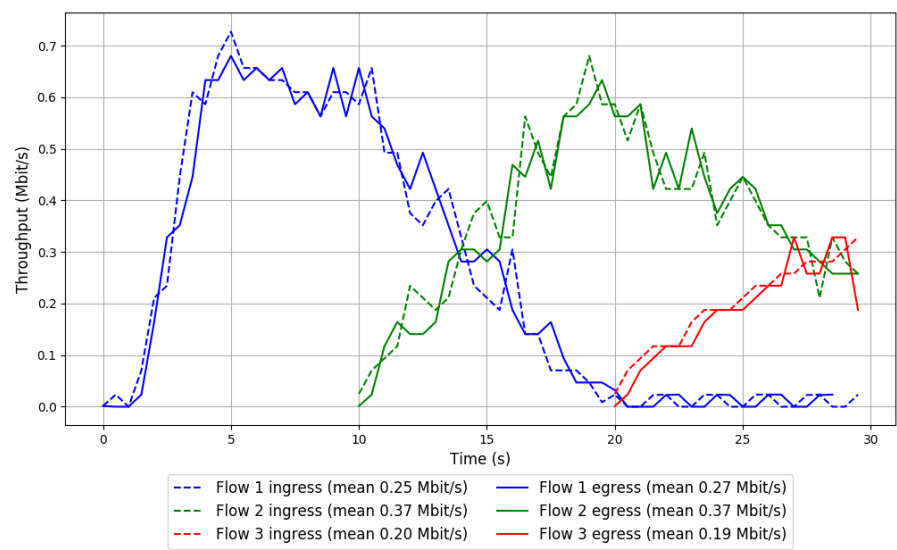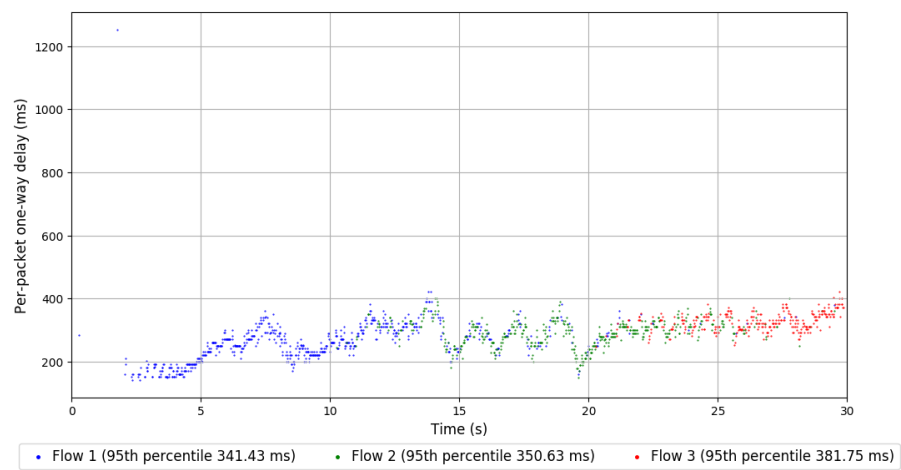
Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2017-12-05 08:34:37
End at: 2017-12-05 08:35:07
Local clock offset: 1.559 ms
Remote clock offset: 2.242 ms


# Below is generated by plot.py at 2017-12-05 09:45:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 407.281 ms
Loss rate: 1.74%
-- Flow 1:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 348.631 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 417.226 ms
Loss rate: 1.75%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 427.156 ms
Loss rate: 7.74%
```
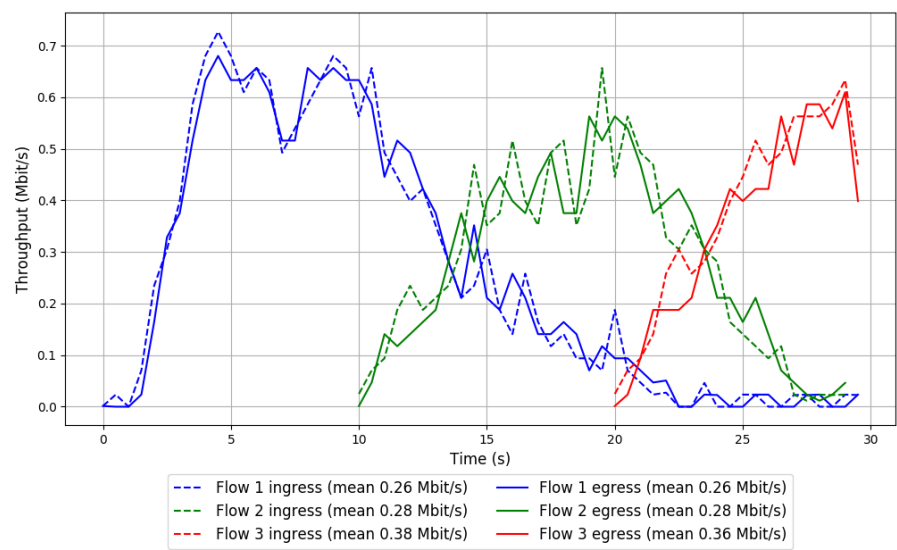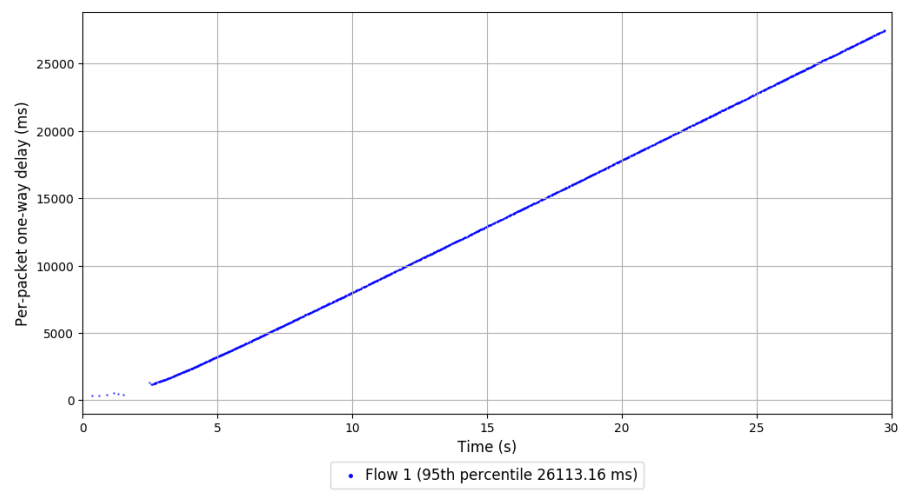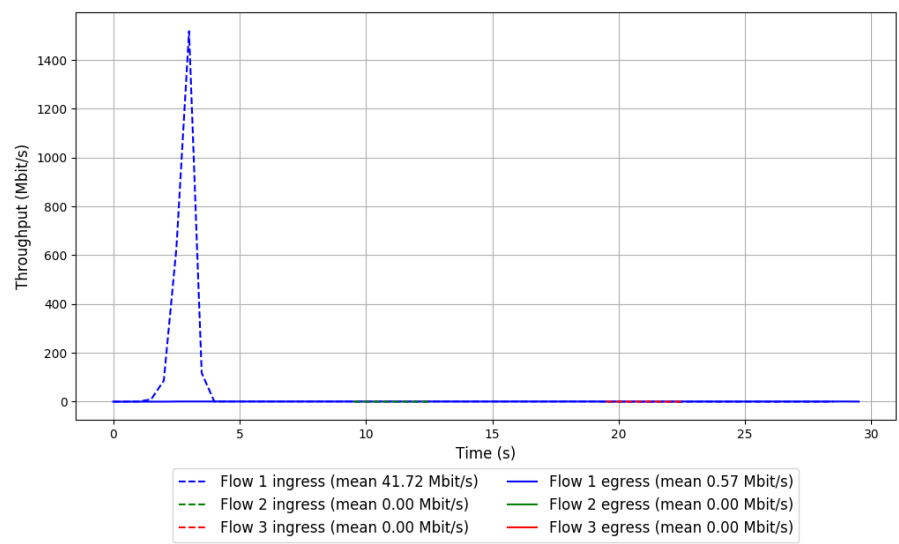
Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2017-12-05 08:52:01
End at: 2017-12-05 08:52:31
Local clock offset: 1.6 ms
Remote clock offset: 2.808 ms

# Below is generated by plot.py at 2017-12-05 09:45:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 361.445 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 341.431 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 350.633 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 381.754 ms
Loss rate: 6.60%
```
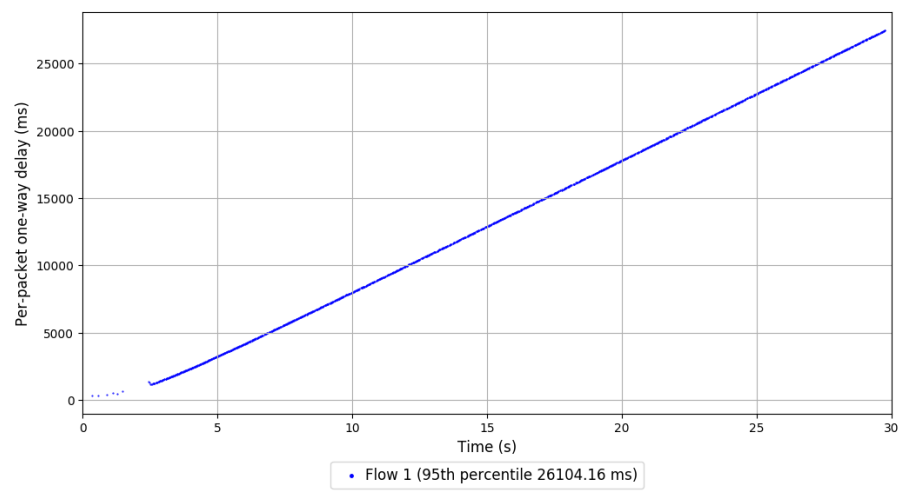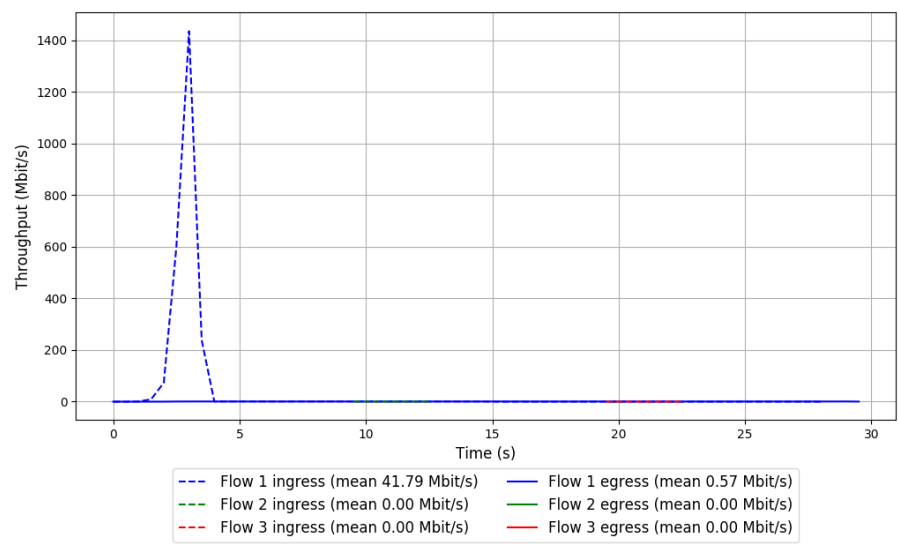
Run 3: Report of LEDBAT — Data Link

Flow 1 ingress (mean 0.26 Mbit/s) --- Flow 1 egress (mean 0.26 Mbit/s) ---
Flow 2 ingress (mean 0.28 Mbit/s) --- Flow 2 egress (mean 0.28 Mbit/s) ---
Flow 3 ingress (mean 0.38 Mbit/s) --- Flow 3 egress (mean 0.36 Mbit/s) ---

• Flow 1 (95th percentile 341.43 ms)   • Flow 2 (95th percentile 350.63 ms)   • Flow 3 (95th percentile 381.75 ms)

```
Run 1: Statistics of PCC

Start at: 2017-12-05 08:03:32
End at: 2017-12-05 08:04:02
Local clock offset: 1.913 ms
Remote clock offset: -4.434 ms


# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 26113.163 ms
Loss rate: 98.59%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 26113.163 ms
Loss rate: 98.59%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

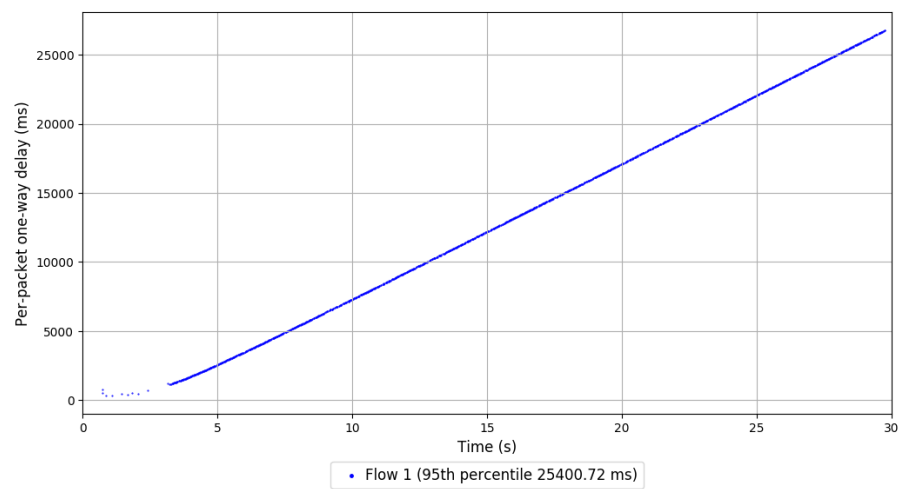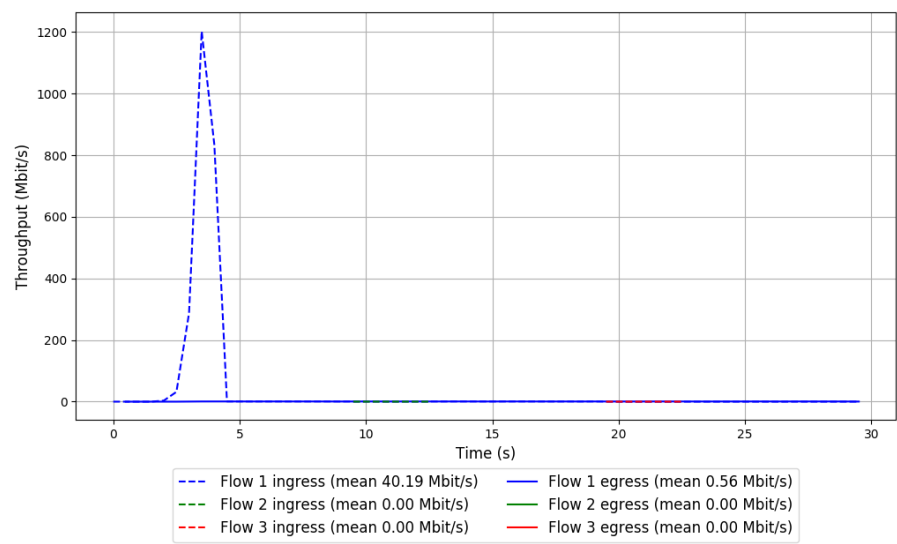# Run 1: Report of PCC — Data Link

Flow 1 ingress (mean 41.72 Mbit/s) — — Flow 1 egress (mean 0.57 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 26113.16 ms)

```
Run 2: Statistics of PCC

Start at: 2017-12-05 08:20:56
End at: 2017-12-05 08:21:26
Local clock offset: 1.988 ms
Remote clock offset: 1.92 ms


# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 26104.162 ms
Loss rate: 98.58%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 26104.162 ms
Loss rate: 98.58%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```
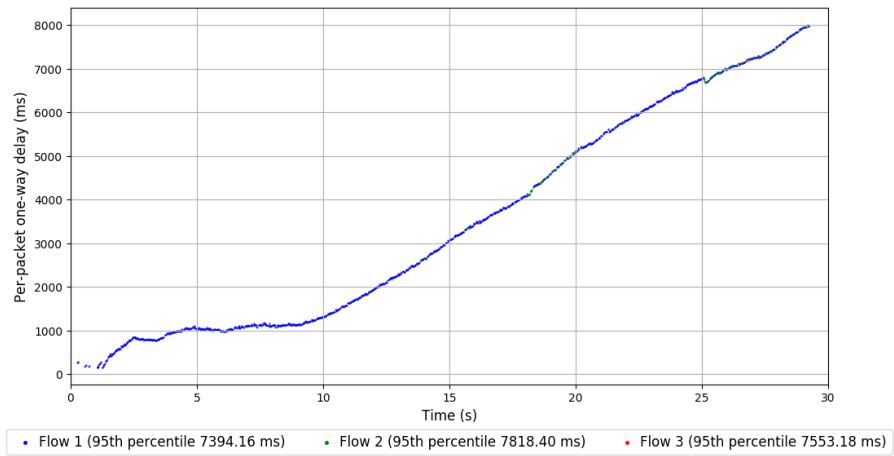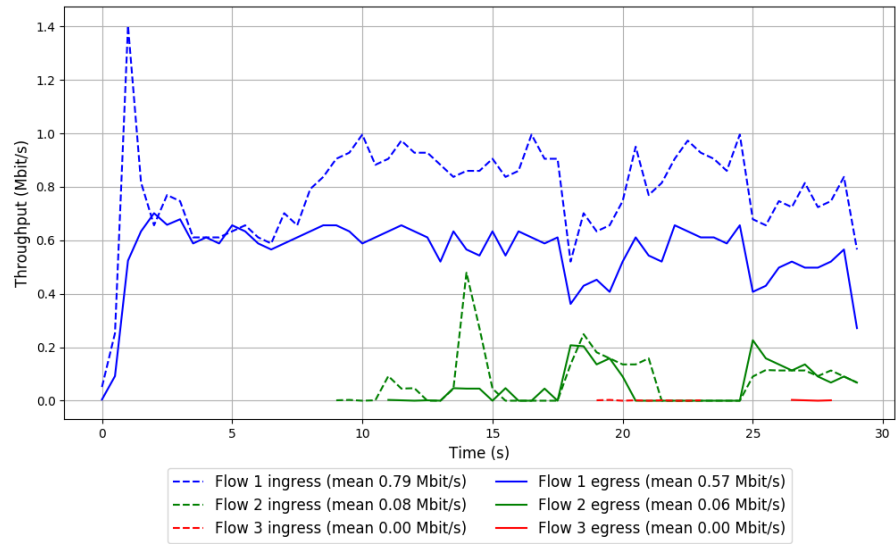
Run 2: Report of PCC — Data Link

Flow 1 ingress (mean 41.79 Mbit/s) — Flow 1 egress (mean 0.57 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 26104.16 ms)

```
Run 3: Statistics of PCC

Start at: 2017-12-05 08:38:21
End at: 2017-12-05 08:38:51
Local clock offset: 1.438 ms
Remote clock offset: -2.419 ms


# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 25400.725 ms
Loss rate: 98.63%
-- Flow 1:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 25400.725 ms
Loss rate: 98.63%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```
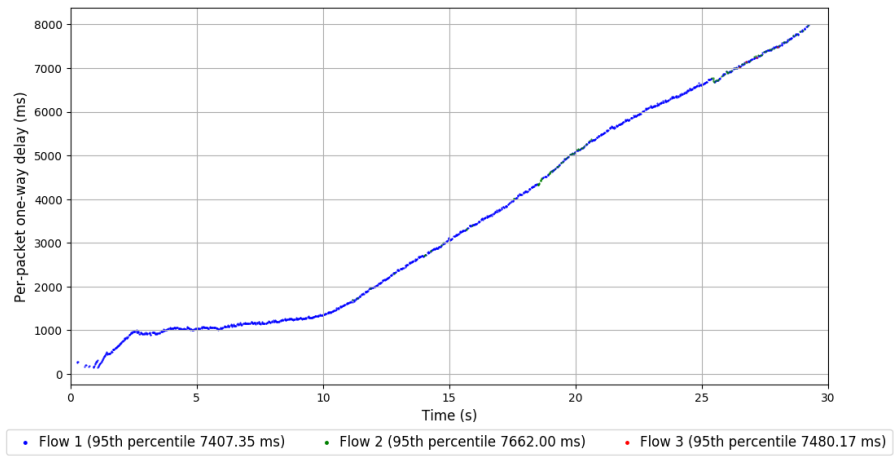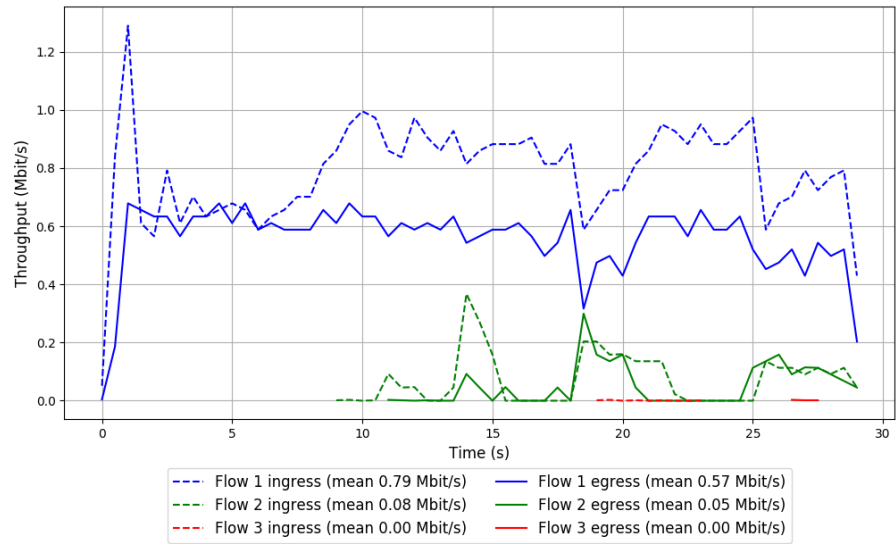
Run 3: Report of PCC — Data Link

```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-05 08:02:17
End at: 2017-12-05 08:02:47
Local clock offset: 1.866 ms
Remote clock offset: 1.499 ms


# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 7449.779 ms
Loss rate: 29.23%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 7394.160 ms
Loss rate: 29.08%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 7818.402 ms
Loss rate: 31.56%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 7553.181 ms
Loss rate: 33.33%
```
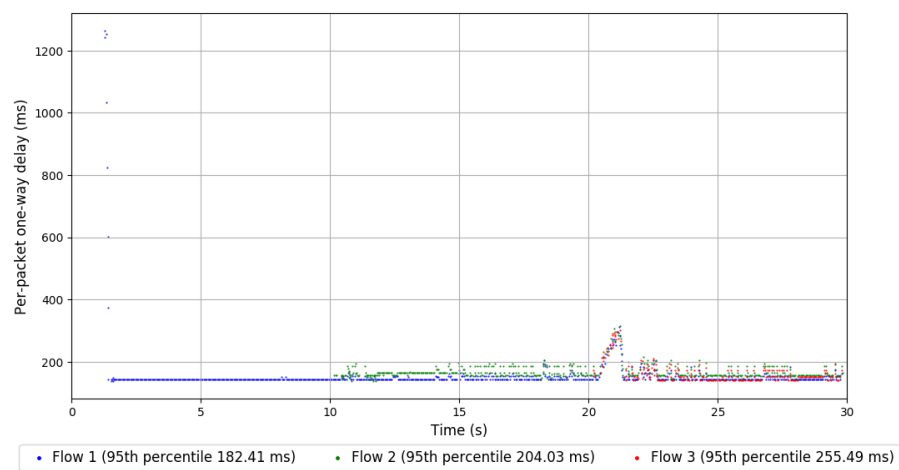
Run 1: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 0.79 Mbit/s) — — — Flow 1 egress (mean 0.57 Mbit/s)
Flow 2 ingress (mean 0.08 Mbit/s) — — — Flow 2 egress (mean 0.06 Mbit/s)
Flow 3 ingress (mean 0.00 Mbit/s) — — — Flow 3 egress (mean 0.00 Mbit/s)

Flow 1 (95th percentile 7394.16 ms)   Flow 2 (95th percentile 7818.40 ms)   Flow 3 (95th percentile 7553.18 ms)

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```
Run 2: Statistics of QUIC Cubic

Start at: 2017-12-05 08:19:42
End at: 2017-12-05 08:20:12
Local clock offset: 2.029 ms
Remote clock offset: 1.301 ms
```

Run 2: Report of QUIC Cubic — Data Link

- Flow 1 ingress (mean 0.41 Mbit/s)
- Flow 2 ingress (mean 0.33 Mbit/s)
- Flow 3 ingress (mean 0.10 Mbit/s)
- Flow 1 egress (mean 0.32 Mbit/s)
- Flow 2 egress (mean 0.26 Mbit/s)
- Flow 3 egress (mean 0.07 Mbit/s)

- Flow 1 (95th percentile 3364.00 ms)
- Flow 2 (95th percentile 3558.56 ms)
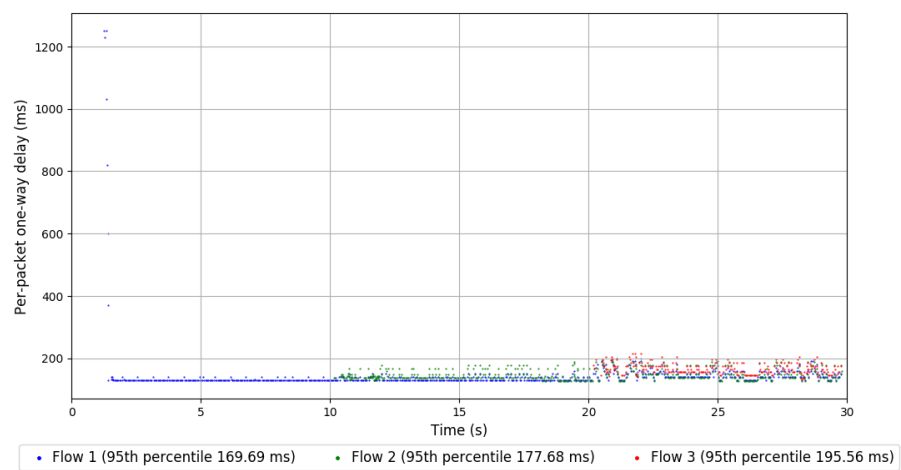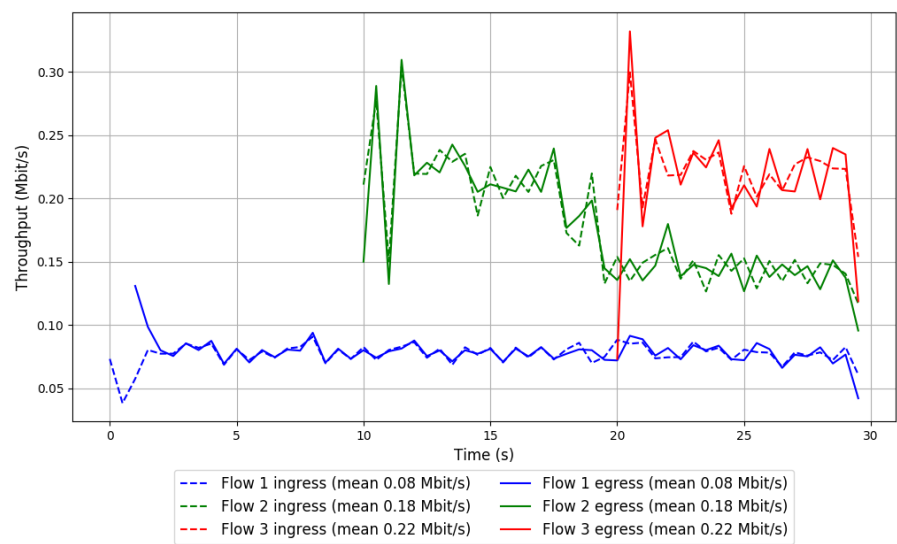- Flow 3 (95th percentile 3990.70 ms)

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```
Run 3: Statistics of QUIC Cubic

Start at: 2017-12-05 08:37:06
End at: 2017-12-05 08:37:36
Local clock offset: 1.438 ms
Remote clock offset: -3.293 ms


# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 7427.262 ms
Loss rate: 29.29%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 7407.351 ms
Loss rate: 28.94%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 7661.996 ms
Loss rate: 34.70%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 7480.167 ms
Loss rate: 33.33%
```

Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 0.79 Mbit/s) --- Flow 1 egress (mean 0.57 Mbit/s)
Flow 2 ingress (mean 0.08 Mbit/s) --- Flow 2 egress (mean 0.05 Mbit/s)
Flow 3 ingress (mean 0.00 Mbit/s) --- Flow 3 egress (mean 0.00 Mbit/s)

Flow 1 (95th percentile 7407.35 ms)   Flow 2 (95th percentile 7662.00 ms)   Flow 3 (95th percentile 7480.17 ms)

```
Run 1: Statistics of SCReAM

Start at: 2017-12-05 08:12:15
End at: 2017-12-05 08:12:45
Local clock offset: 1.876 ms
Remote clock offset: -3.286 ms

# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 204.034 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 182.409 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 204.034 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 255.490 ms
Loss rate: 1.80%
```
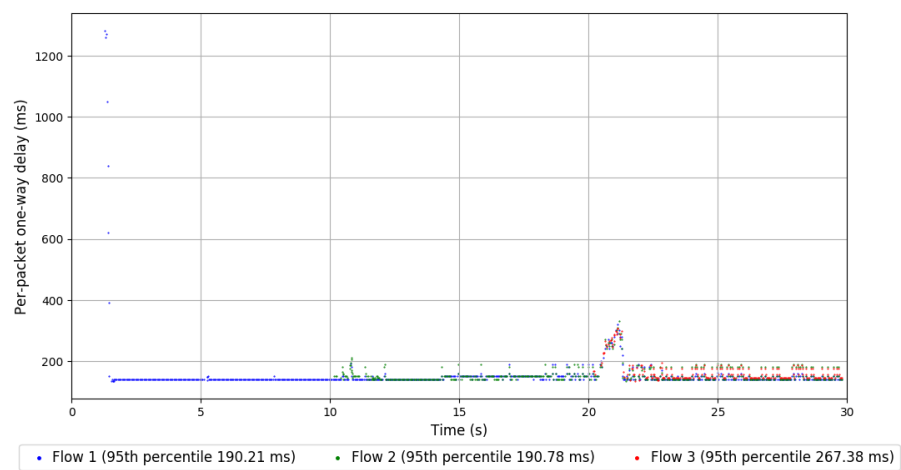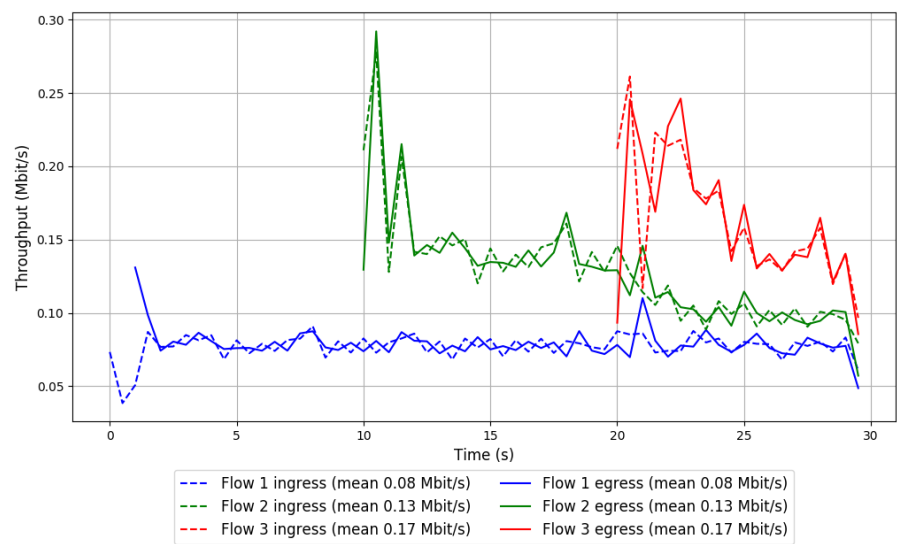
Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2017-12-05 08:29:39
End at: 2017-12-05 08:30:09
Local clock offset: 1.604 ms
Remote clock offset: 1.379 ms


# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 185.106 ms
Loss rate: 1.46%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 169.694 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 177.680 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 195.564 ms
Loss rate: 2.72%
```
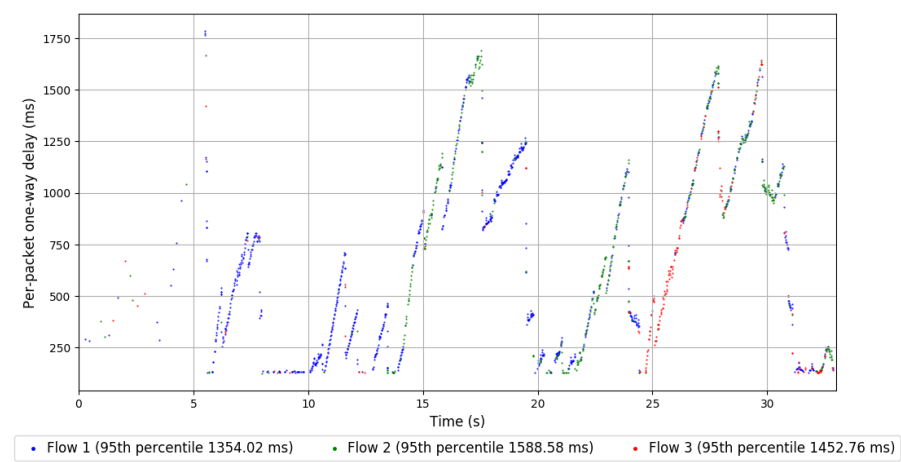
Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2017-12-05 08:47:03
End at: 2017-12-05 08:47:33
Local clock offset: 1.54 ms
Remote clock offset: -2.107 ms

# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 195.844 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 190.213 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 190.783 ms
Loss rate: 0.96%
-- Flow 3:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 267.377 ms
Loss rate: 1.62%
```
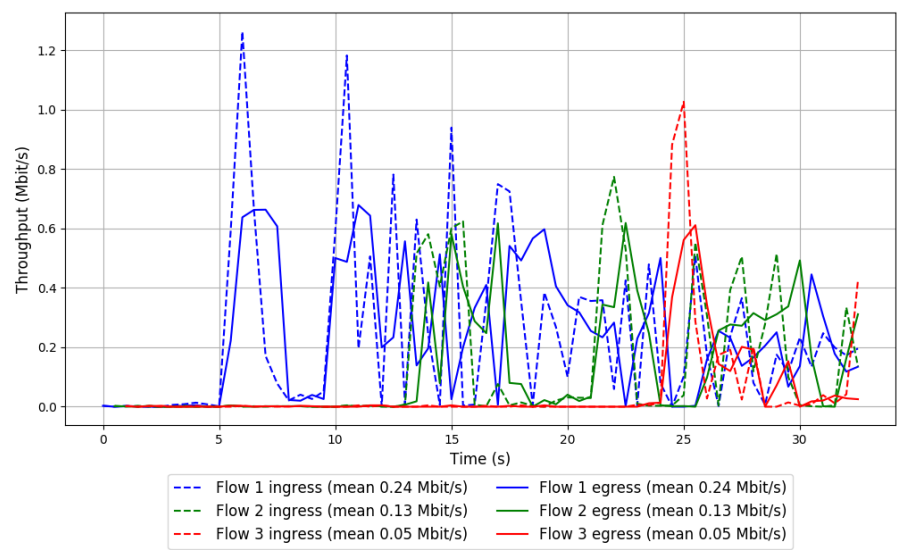
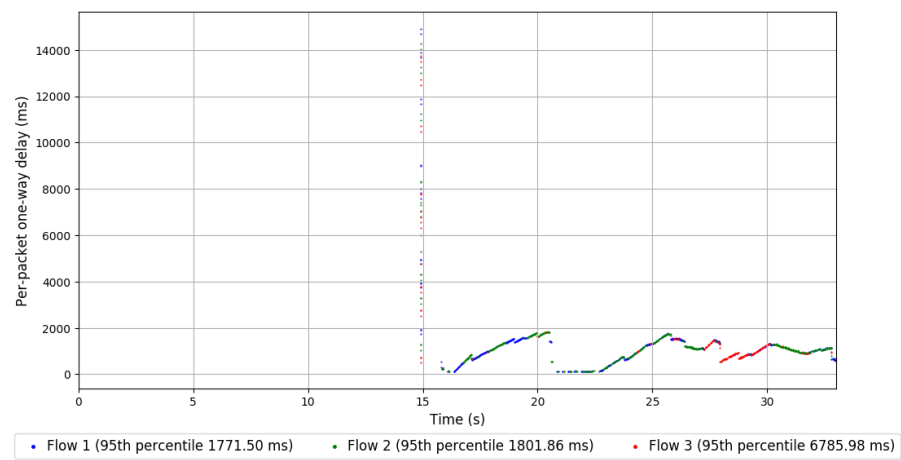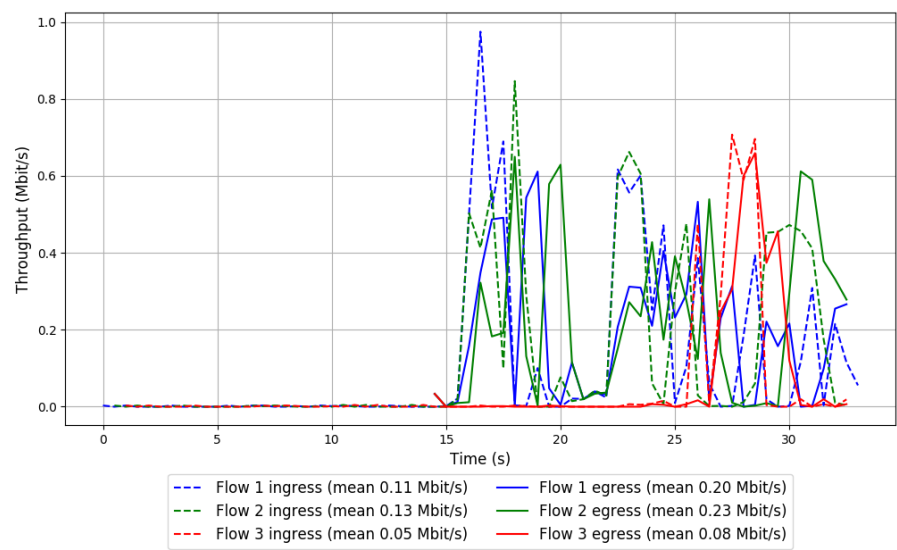# Run 3: Report of SCReAM — Data Link

```
Run 1: Statistics of WebRTC media

Start at: 2017-12-05 08:04:48
End at: 2017-12-05 08:05:18
Local clock offset: 1.914 ms
Remote clock offset: 1.315 ms


# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 1512.708 ms
Loss rate: 2.23%
-- Flow 1:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 1354.024 ms
Loss rate: 0.98%
-- Flow 2:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 1588.584 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 1452.763 ms
Loss rate: 13.48%
```
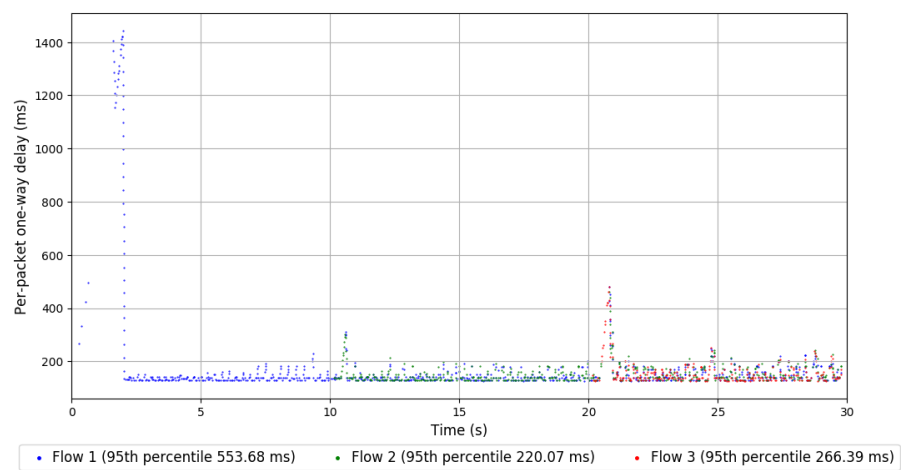
Run 1: Report of WebRTC media — Data Link

Flow 1 ingress (mean 0.24 Mbit/s)   Flow 1 egress (mean 0.24 Mbit/s)
Flow 2 ingress (mean 0.13 Mbit/s)   Flow 2 egress (mean 0.13 Mbit/s)
Flow 3 ingress (mean 0.05 Mbit/s)   Flow 3 egress (mean 0.05 Mbit/s)

Flow 1 (95th percentile 1354.02 ms)   Flow 2 (95th percentile 1588.58 ms)   Flow 3 (95th percentile 1452.76 ms)

Run 2: Statistics of WebRTC media

Start at: 2017-12-05 08:22:12
End at: 2017-12-05 08:22:42
Local clock offset: 2.09 ms
Remote clock offset: 1.08 ms

Run 2: Report of WebRTC media — Data Link

Flow 1 ingress (mean 0.11 Mbit/s)   Flow 1 egress (mean 0.20 Mbit/s)
Flow 2 ingress (mean 0.13 Mbit/s)   Flow 2 egress (mean 0.23 Mbit/s)
Flow 3 ingress (mean 0.05 Mbit/s)   Flow 3 egress (mean 0.08 Mbit/s)

Flow 1 (95th percentile 1771.50 ms)   Flow 2 (95th percentile 1801.86 ms)   Flow 3 (95th percentile 6785.98 ms)

```
Run 3: Statistics of WebRTC media

Start at: 2017-12-05 08:39:37
End at: 2017-12-05 08:40:07
Local clock offset: 1.489 ms
Remote clock offset: 3.292 ms
```

Run 3: Report of WebRTC media — Data Link

Flow 1 ingress (mean 0.12 Mbit/s) — Flow 1 egress (mean 0.20 Mbit/s)
Flow 2 ingress (mean 0.13 Mbit/s) — Flow 2 egress (mean 0.23 Mbit/s)
Flow 3 ingress (mean 0.05 Mbit/s) — Flow 3 egress (mean 0.08 Mbit/s)

Flow 1 (95th percentile 1712.43 ms) • Flow 2 (95th percentile 1744.17 ms) • Flow 3 (95th percentile 7859.43 ms)

```
Run 1: Statistics of Sprout

Start at: 2017-12-05 08:07:16
End at: 2017-12-05 08:07:46
Local clock offset: 1.862 ms
Remote clock offset: 0.559 ms


# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 289.870 ms
Loss rate: 2.81%
-- Flow 1:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 553.678 ms
Loss rate: 2.17%
-- Flow 2:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 220.073 ms
Loss rate: 2.48%
-- Flow 3:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 266.390 ms
Loss rate: 5.16%
```
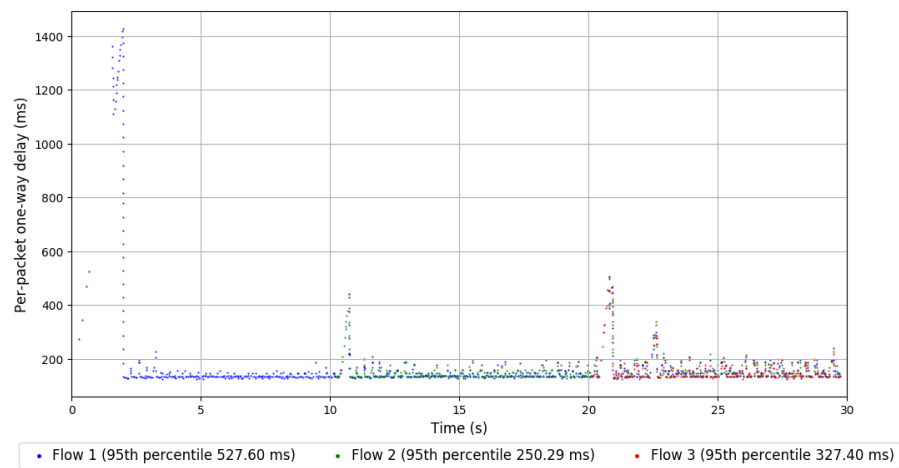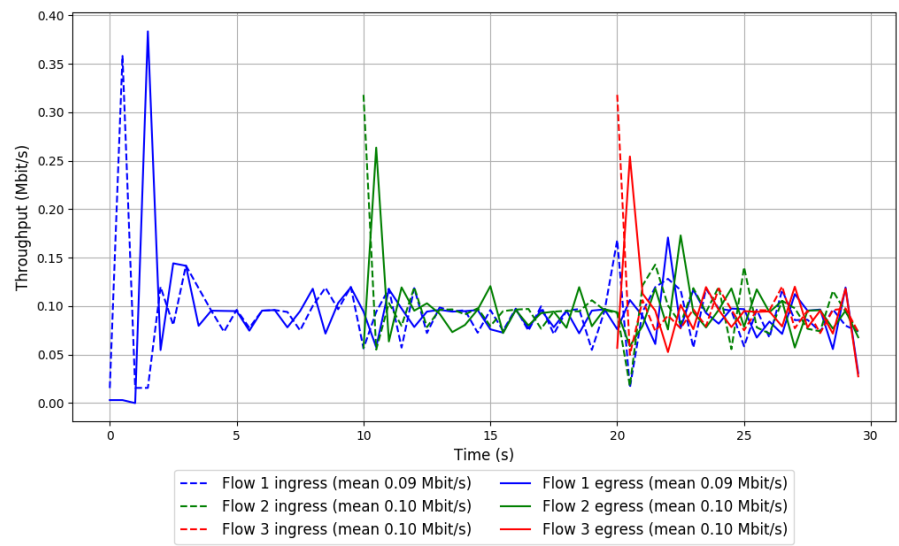
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2017-12-05 08:24:41
End at: 2017-12-05 08:25:11
Local clock offset: 1.944 ms
Remote clock offset: -2.751 ms


# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 268.035 ms
Loss rate: 2.39%
-- Flow 1:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 596.732 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 218.033 ms
Loss rate: 2.86%
-- Flow 3:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 237.871 ms
Loss rate: 6.41%
```

Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2017-12-05 08:42:05
End at: 2017-12-05 08:42:35
Local clock offset: 1.503 ms
Remote clock offset: 2.533 ms


# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 371.226 ms
Loss rate: 2.11%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 527.600 ms
Loss rate: 1.07%
-- Flow 2:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 250.290 ms
Loss rate: 2.42%
-- Flow 3:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 327.404 ms
Loss rate: 4.37%
```
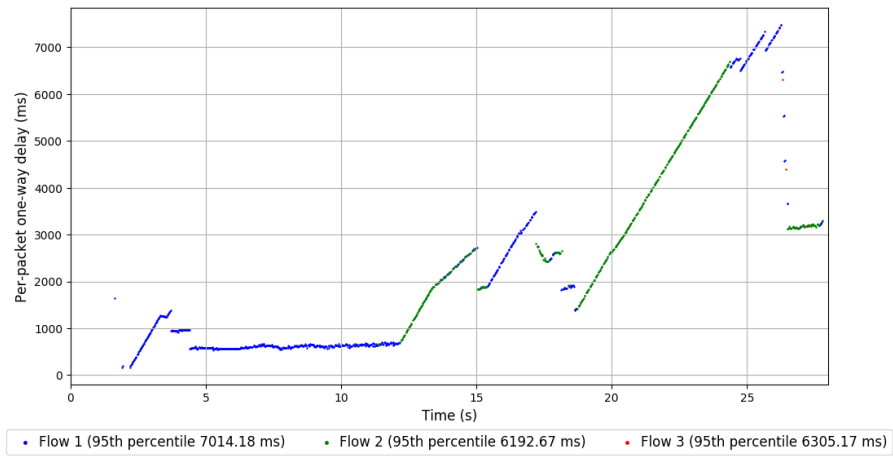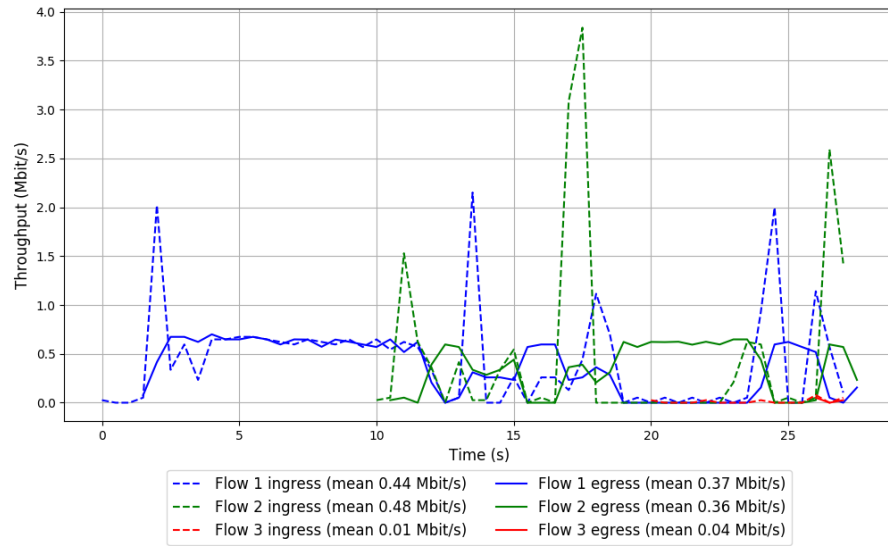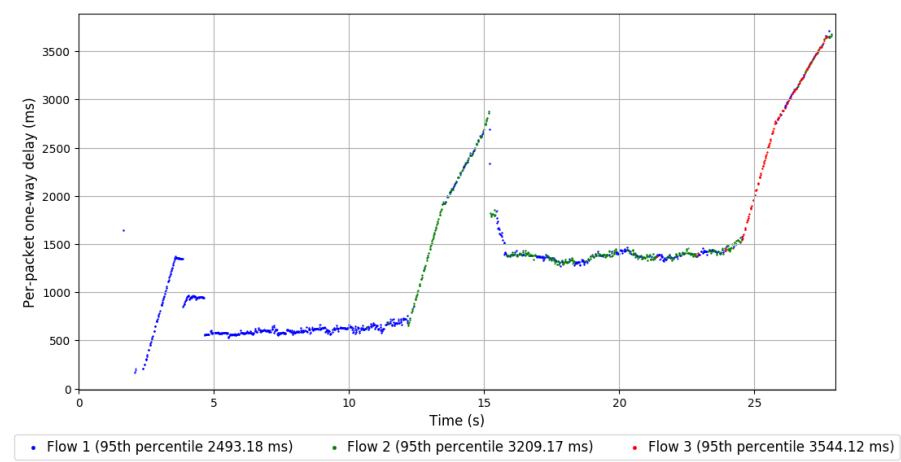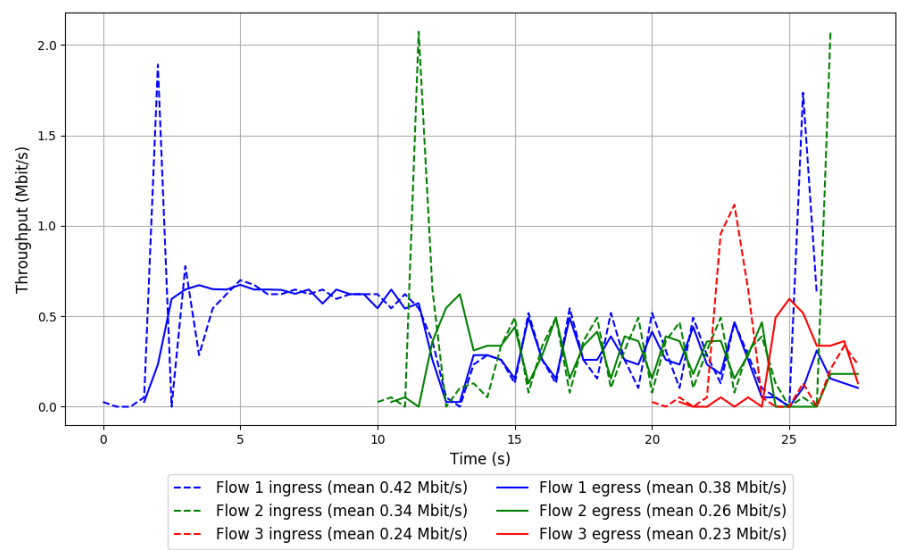
Run 3: Report of Sprout — Data Link

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

Start at: 2017-12-05 08:09:46
End at: 2017-12-05 08:10:16
Local clock offset: 1.862 ms
Remote clock offset: 0.714 ms

# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 6739.831 ms
Loss rate: 21.76%
-- Flow 1:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 7014.175 ms
Loss rate: 19.16%
-- Flow 2:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 6192.669 ms
Loss rate: 25.04%
-- Flow 3:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 6305.168 ms
Loss rate: 62.50%
```
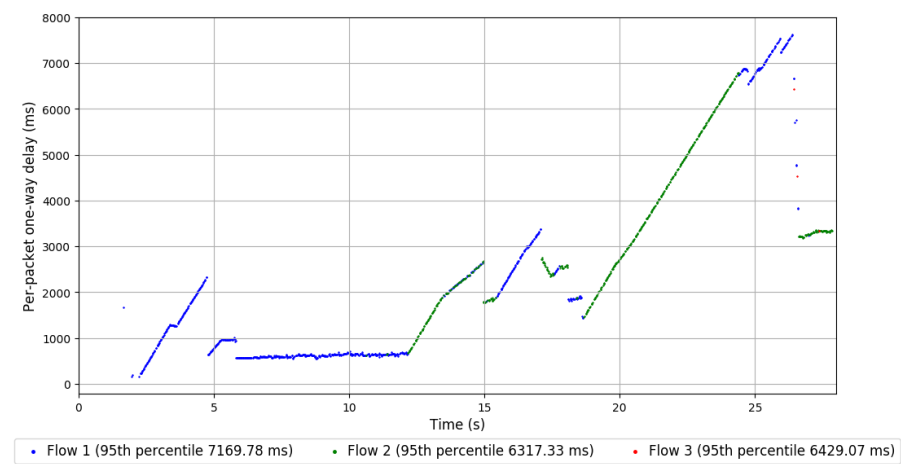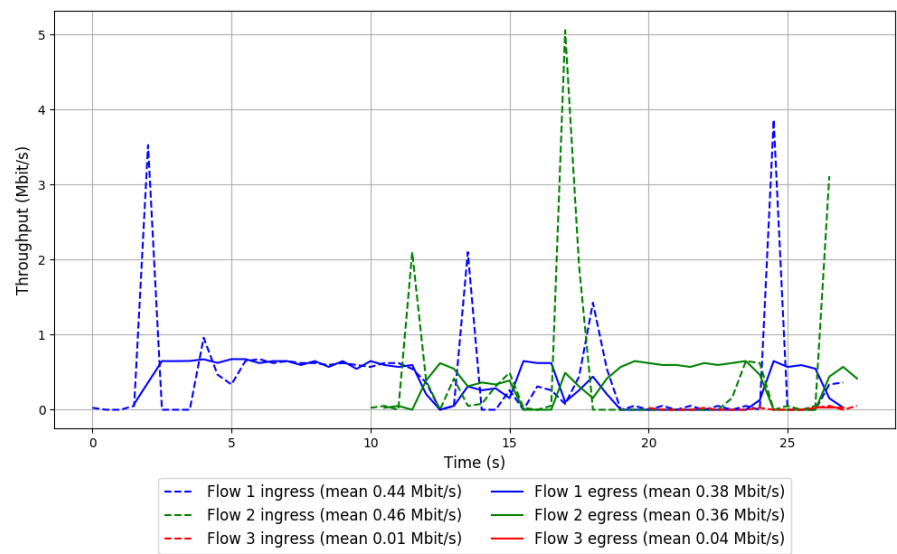
Run 1: Report of TaoVA-100x — Data Link

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

Start at: 2017-12-05 08:27:10
End at: 2017-12-05 08:27:40
Local clock offset: 1.802 ms
Remote clock offset: -3.451 ms


# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 3154.088 ms
Loss rate: 15.66%
-- Flow 1:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 2493.185 ms
Loss rate: 11.15%
-- Flow 2:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 3209.171 ms
Loss rate: 21.62%
-- Flow 3:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 3544.125 ms
Loss rate: 23.81%
```
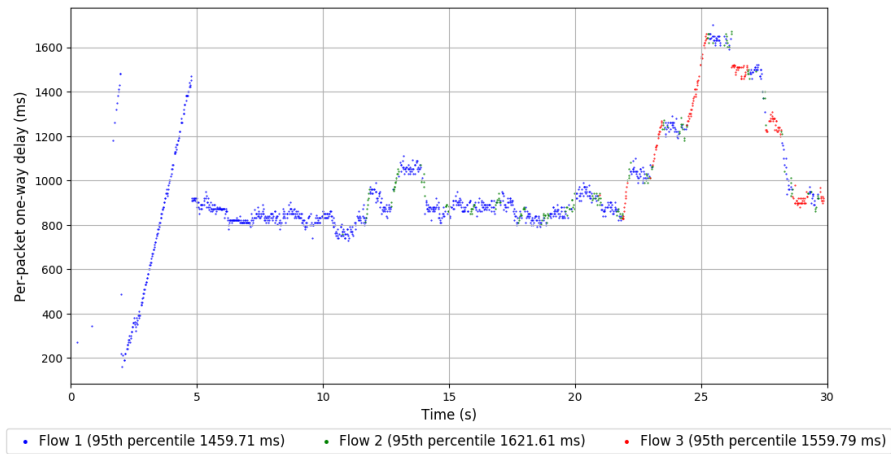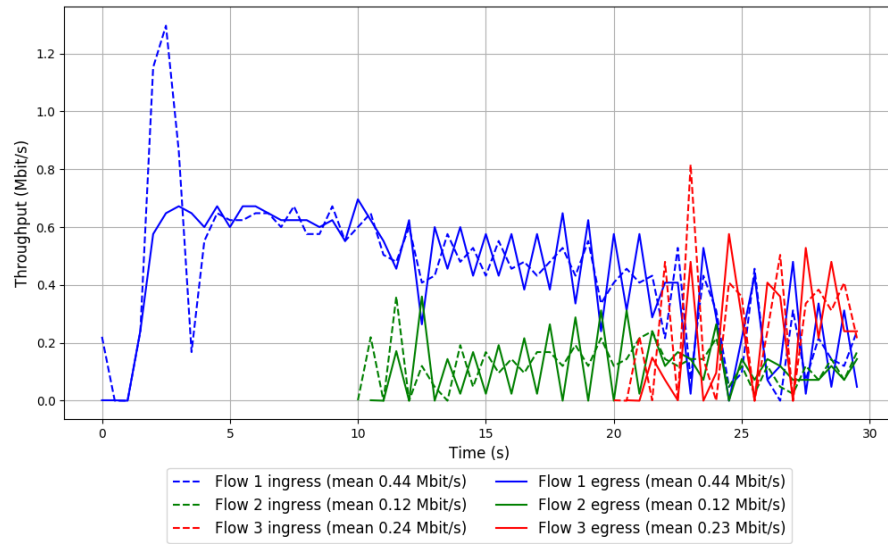
Run 2: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 0.42 Mbit/s)   Flow 1 egress (mean 0.38 Mbit/s)
Flow 2 ingress (mean 0.34 Mbit/s)   Flow 2 egress (mean 0.26 Mbit/s)
Flow 3 ingress (mean 0.24 Mbit/s)   Flow 3 egress (mean 0.23 Mbit/s)

Flow 1 (95th percentile 2493.18 ms)   Flow 2 (95th percentile 3209.17 ms)   Flow 3 (95th percentile 3544.12 ms)

```
Run 3: Statistics of TaoVA-100x

Start at: 2017-12-05 08:44:34
End at: 2017-12-05 08:45:04
Local clock offset: 1.502 ms
Remote clock offset: 2.625 ms

# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 6868.759 ms
Loss rate: 20.49%
-- Flow 1:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 7169.778 ms
Loss rate: 20.06%
-- Flow 2:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 6317.329 ms
Loss rate: 20.60%
-- Flow 3:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 6429.067 ms
Loss rate: 62.50%
```

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

Flow 1 ingress (mean 0.44 Mbit/s) --- Flow 1 egress (mean 0.38 Mbit/s)
Flow 2 ingress (mean 0.46 Mbit/s) --- Flow 2 egress (mean 0.36 Mbit/s)
Flow 3 ingress (mean 0.01 Mbit/s) --- Flow 3 egress (mean 0.04 Mbit/s)

Flow 1 (95th percentile 7169.78 ms) · Flow 2 (95th percentile 6317.33 ms) · Flow 3 (95th percentile 6429.07 ms)

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```
Run 1: Statistics of TCP Vegas

Start at: 2017-12-05 08:11:00
End at: 2017-12-05 08:11:30
Local clock offset: 1.879 ms
Remote clock offset: -4.098 ms


# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 1509.200 ms
Loss rate: 4.06%
-- Flow 1:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 1459.713 ms
Loss rate: 1.64%
-- Flow 2:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 1621.613 ms
Loss rate: 6.82%
-- Flow 3:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 1559.789 ms
Loss rate: 14.40%
```
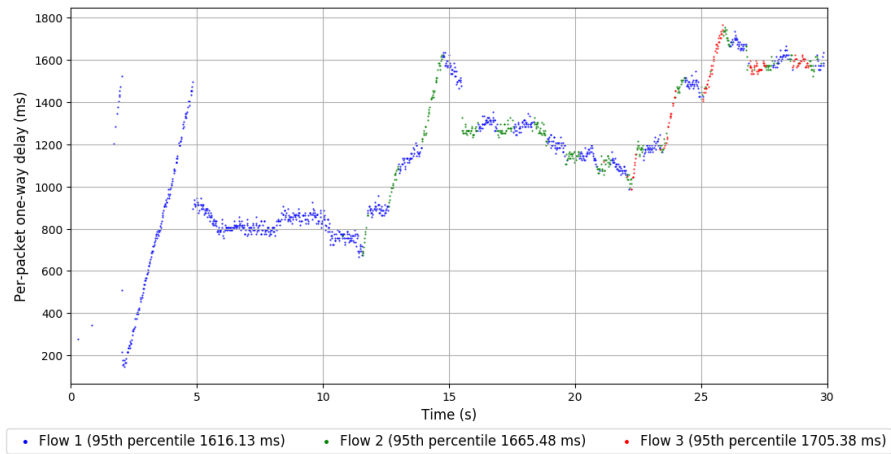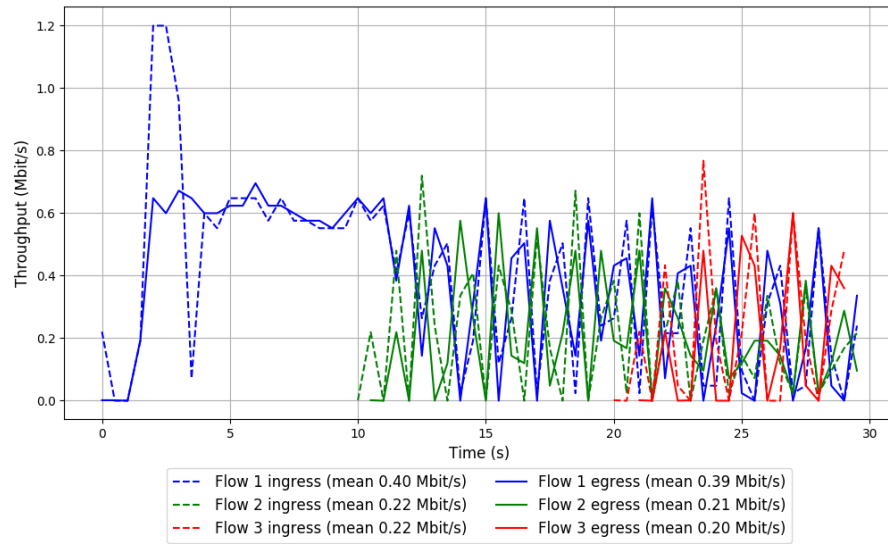
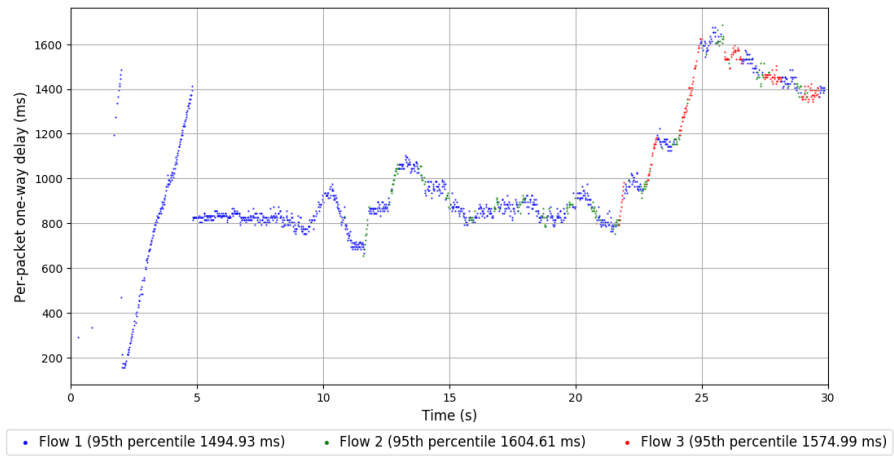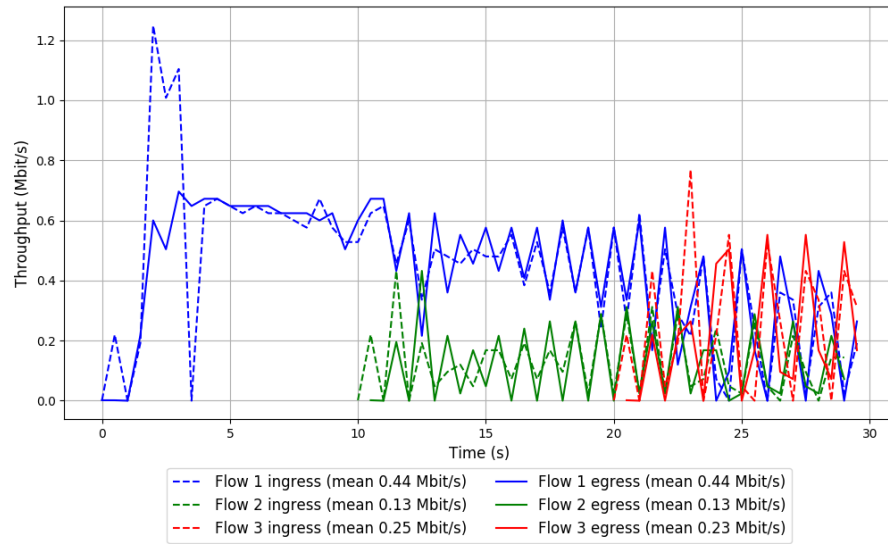Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2017-12-05 08:28:25
End at: 2017-12-05 08:28:55
Local clock offset: 1.669 ms
Remote clock offset: 2.993 ms


# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 1645.602 ms
Loss rate: 5.22%
-- Flow 1:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 1616.129 ms
Loss rate: 2.72%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 1665.477 ms
Loss rate: 5.65%
-- Flow 3:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 1705.384 ms
Loss rate: 19.01%
```

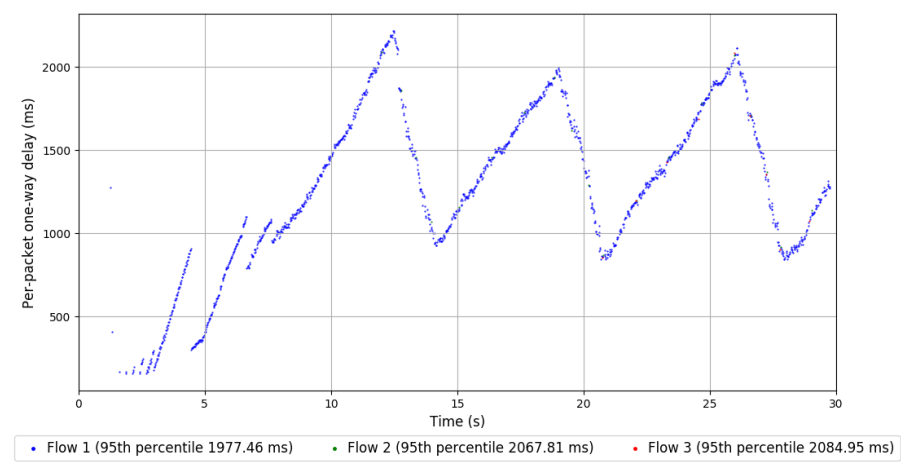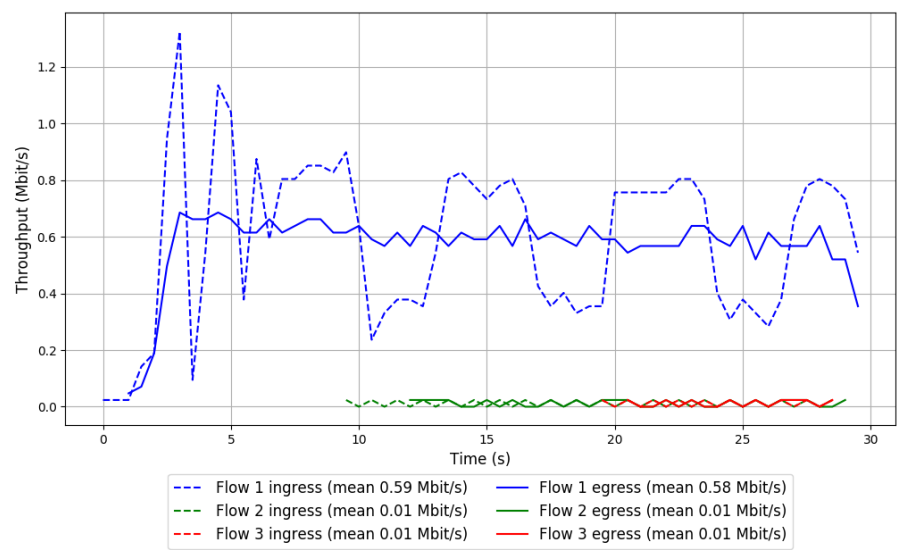# Run 2: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 0.40 Mbit/s)
Flow 1 egress (mean 0.39 Mbit/s)
Flow 2 ingress (mean 0.22 Mbit/s)
Flow 2 egress (mean 0.21 Mbit/s)
Flow 3 ingress (mean 0.22 Mbit/s)
Flow 3 egress (mean 0.20 Mbit/s)

Flow 1 (95th percentile 1616.13 ms)
Flow 2 (95th percentile 1665.48 ms)
Flow 3 (95th percentile 1705.38 ms)

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```
Run 3: Statistics of TCP Vegas

Start at: 2017-12-05 08:45:49
End at: 2017-12-05 08:46:19
Local clock offset: 1.481 ms
Remote clock offset: -2.153 ms


# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 1544.730 ms
Loss rate: 4.64%
-- Flow 1:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 1494.926 ms
Loss rate: 2.36%
-- Flow 2:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 1604.609 ms
Loss rate: 6.27%
-- Flow 3:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 1574.986 ms
Loss rate: 15.56%
```

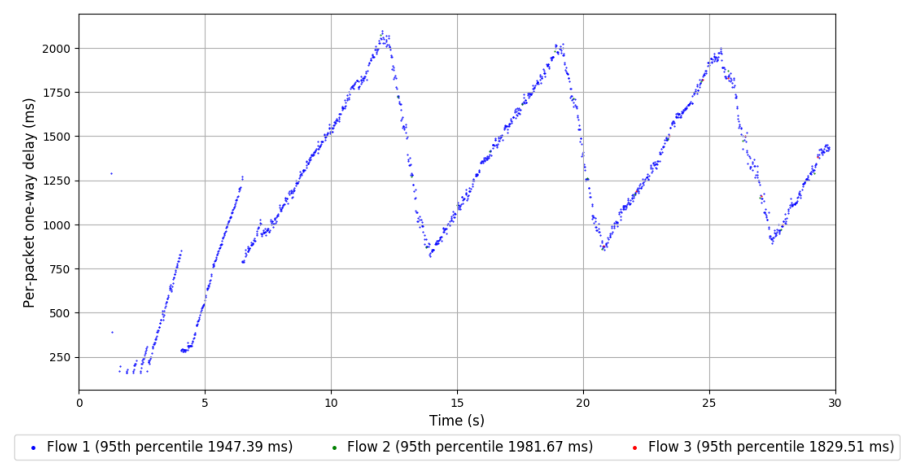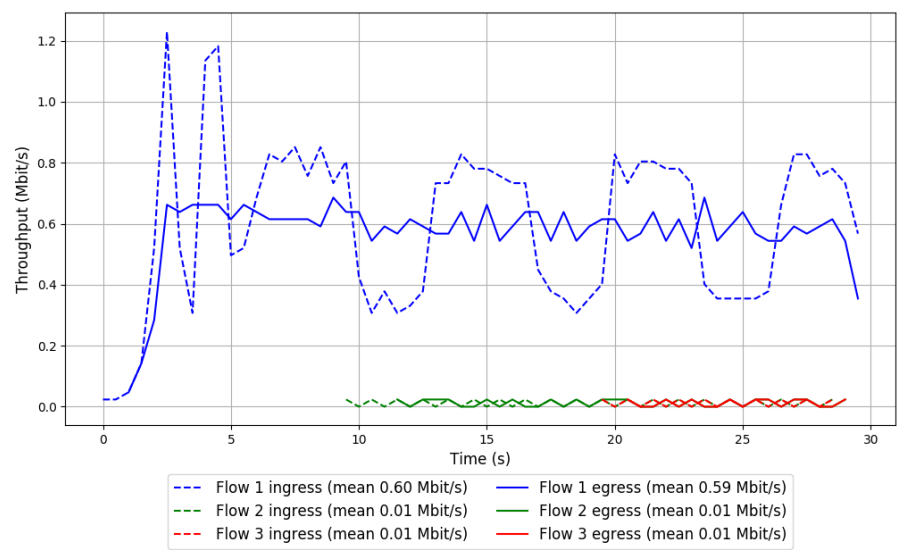Run 3: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: 2017-12-05 08:01:03
End at: 2017-12-05 08:01:33
Local clock offset: 1.976 ms
Remote clock offset: -3.815 ms

# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 1979.344 ms
Loss rate: 6.02%
-- Flow 1:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 1977.459 ms
Loss rate: 6.01%
-- Flow 2:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 2067.811 ms
Loss rate: 5.00%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 2084.952 ms
Loss rate: 10.00%
```

Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2017-12-05 08:18:28
End at: 2017-12-05 08:18:58
Local clock offset: 1.927 ms
Remote clock offset: -3.458 ms


# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 1947.394 ms
Loss rate: 6.68%
-- Flow 1:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 1947.394 ms
Loss rate: 6.68%
-- Flow 2:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 1981.675 ms
Loss rate: 5.00%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 1829.513 ms
Loss rate: 10.00%
```

Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2017-12-05 08:35:52
End at: 2017-12-05 08:36:22
Local clock offset: 1.531 ms
Remote clock offset: 1.483 ms
```
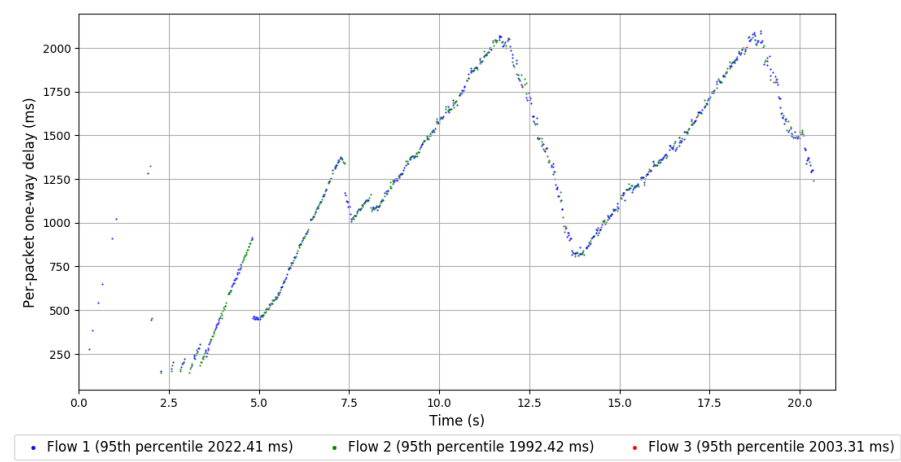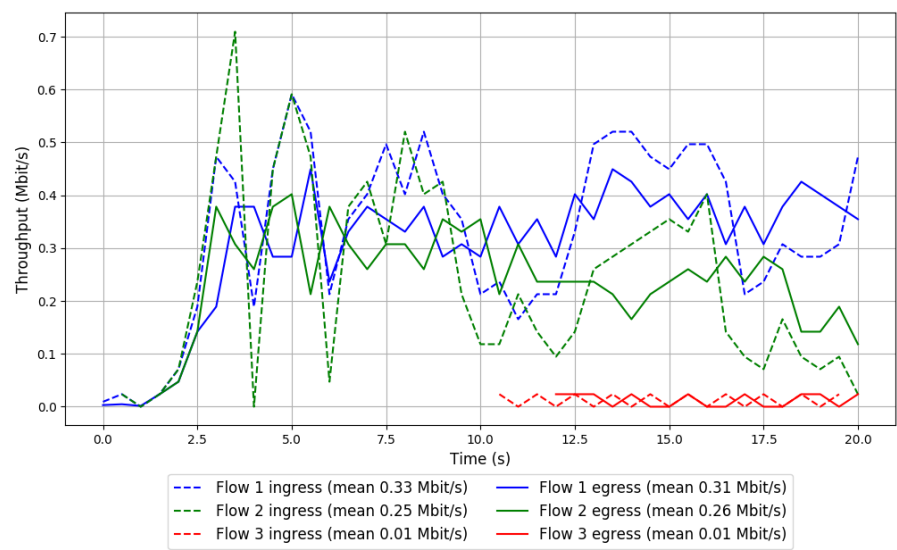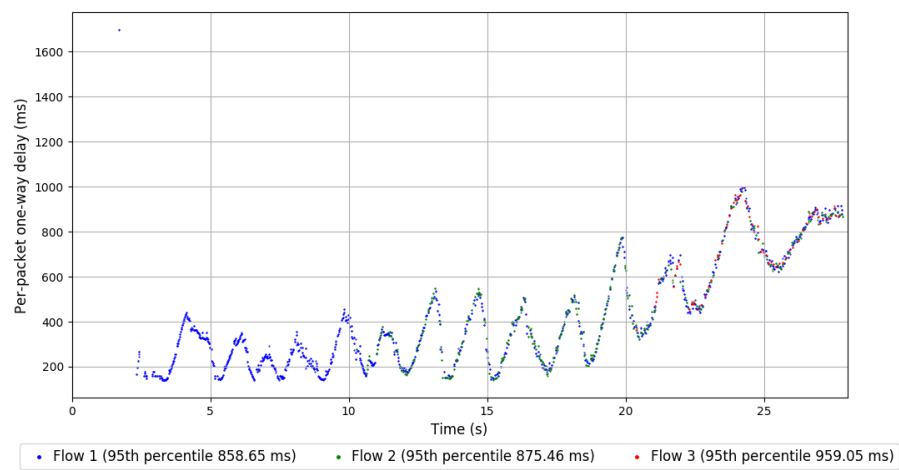
Run 3: Report of Verus — Data Link

```
Run 1: Statistics of Copa

Start at: 2017-12-05 08:13:29
End at: 2017-12-05 08:13:59
Local clock offset: 1.899 ms
Remote clock offset: 1.649 ms

# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 878.389 ms
Loss rate: 3.93%
-- Flow 1:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 858.646 ms
Loss rate: 3.02%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 875.464 ms
Loss rate: 4.15%
-- Flow 3:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 959.046 ms
Loss rate: 12.50%
```
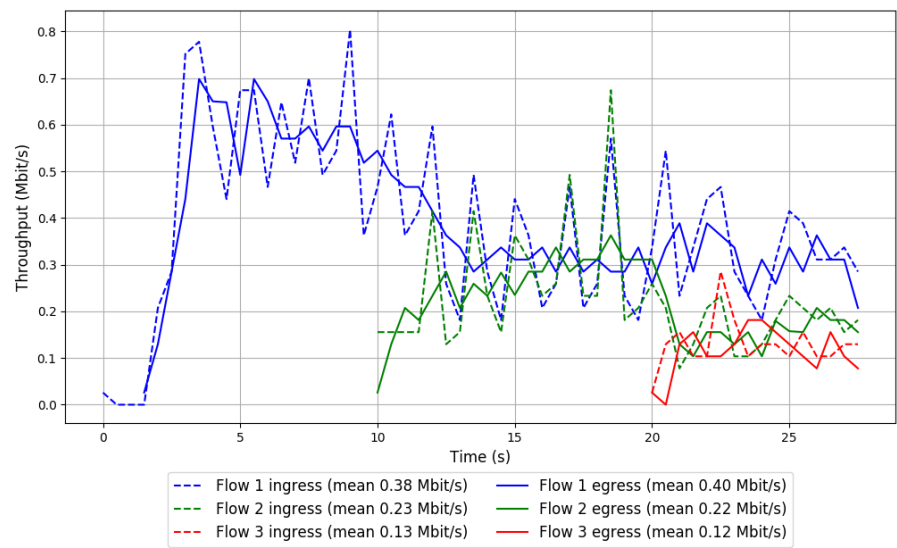
Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2017-12-05 08:30:53
End at: 2017-12-05 08:31:23
Local clock offset: 1.662 ms
Remote clock offset: 2.134 ms

# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 1102.615 ms
Loss rate: 4.48%
-- Flow 1:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 981.148 ms
Loss rate: 2.74%
-- Flow 2:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 1115.525 ms
Loss rate: 6.42%
-- Flow 3:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 1147.031 ms
Loss rate: 18.87%
```
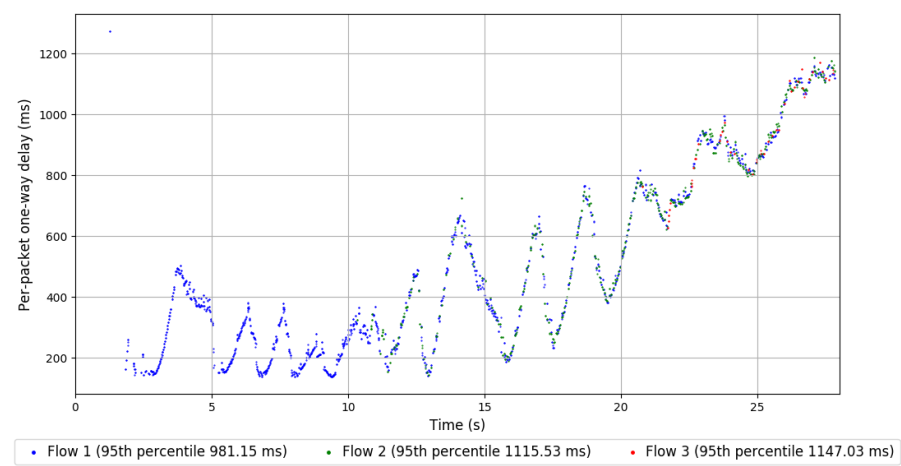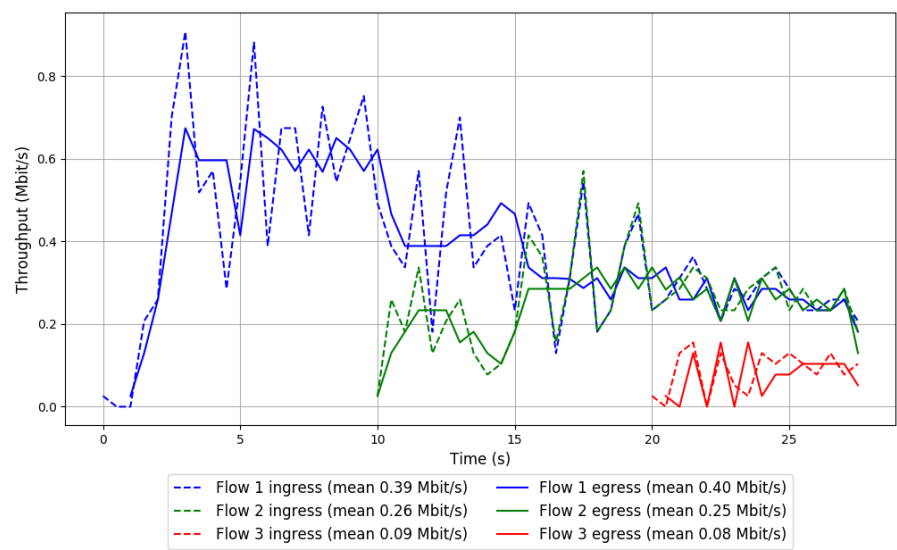
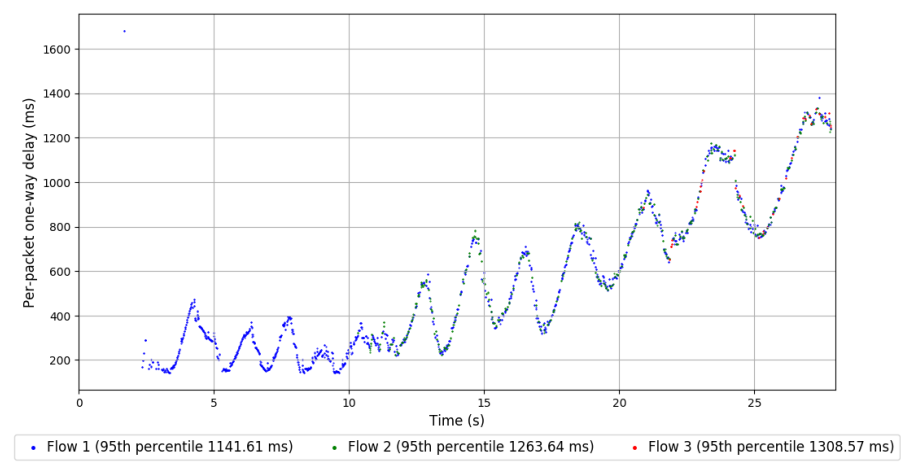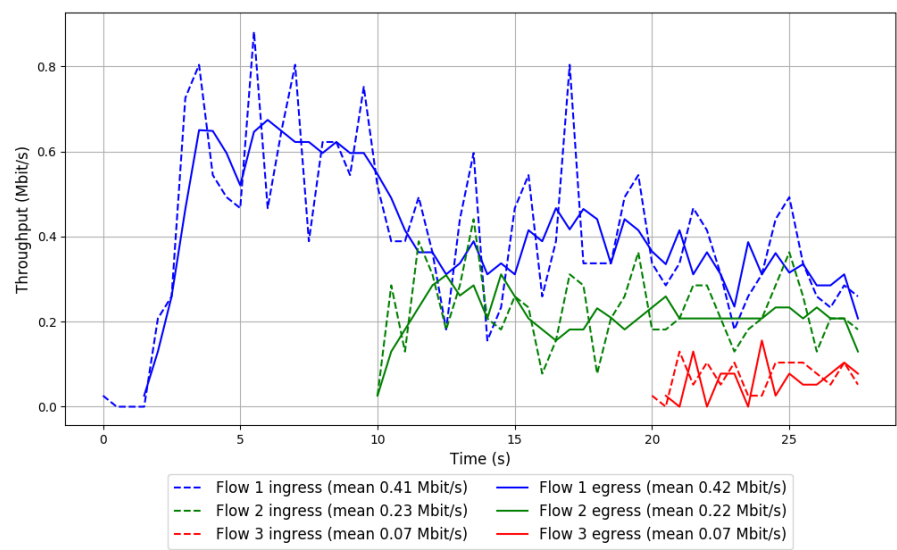## Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2017-12-05 08:48:17
End at: 2017-12-05 08:48:48
Local clock offset: 1.579 ms
Remote clock offset: -2.085 ms


# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 1200.091 ms
Loss rate: 4.53%
-- Flow 1:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 1141.607 ms
Loss rate: 3.19%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1263.639 ms
Loss rate: 6.67%
-- Flow 3:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 1308.572 ms
Loss rate: 16.28%
```
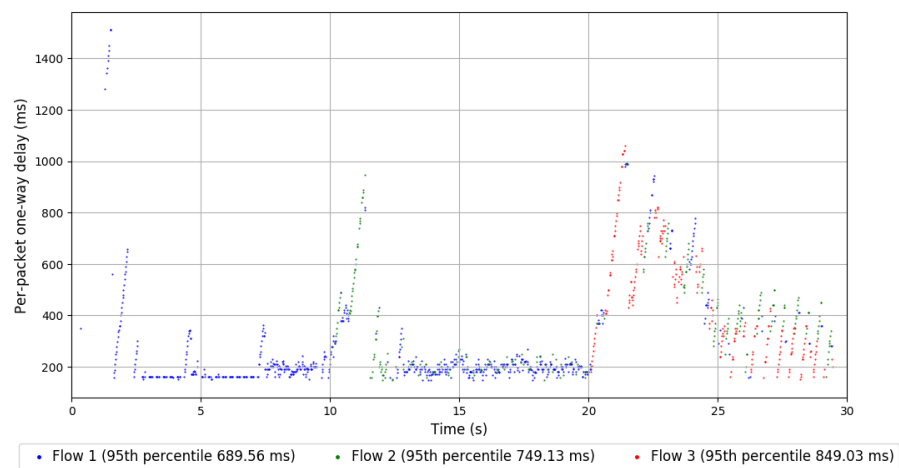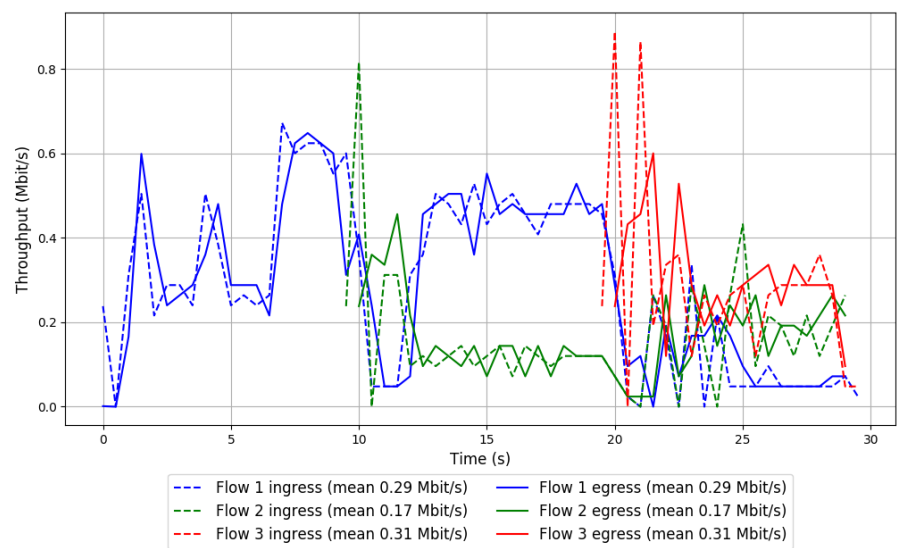
Run 3: Report of Copa — Data Link

```
Run 1: Statistics of Indigo

Start at: 2017-12-05 08:06:02
End at: 2017-12-05 08:06:32
Local clock offset: 1.82 ms
Remote clock offset: -3.505 ms


# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 769.400 ms
Loss rate: 2.09%
-- Flow 1:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 689.557 ms
Loss rate: 1.52%
-- Flow 2:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 749.126 ms
Loss rate: 2.54%
-- Flow 3:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 849.027 ms
Loss rate: 3.21%
```
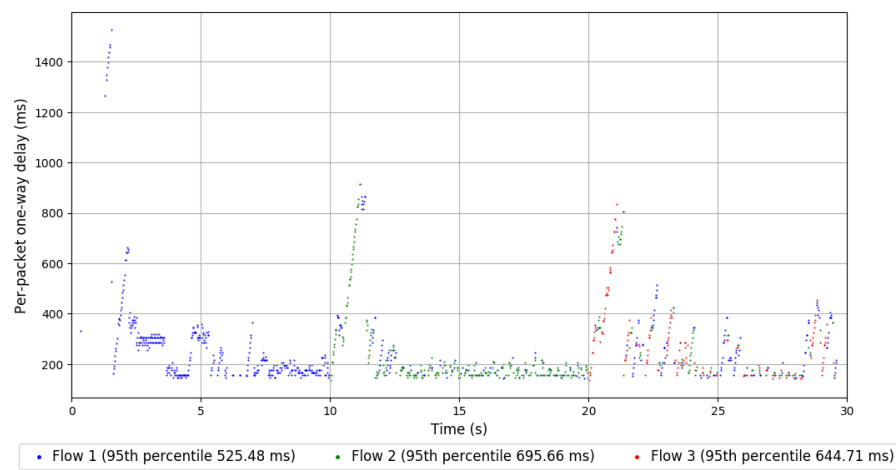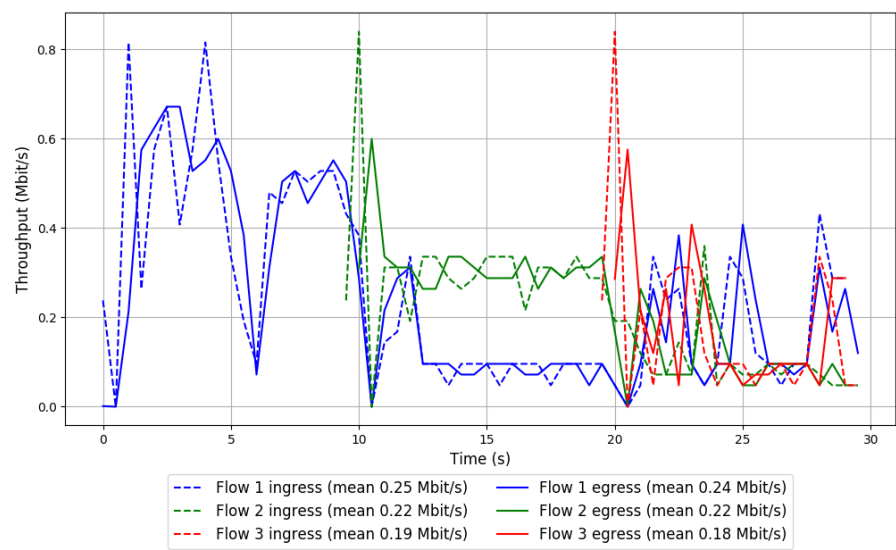
Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2017-12-05 08:23:27
End at: 2017-12-05 08:23:57
Local clock offset: 2.023 ms
Remote clock offset: -2.928 ms

# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 645.295 ms
Loss rate: 1.88%
-- Flow 1:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 525.481 ms
Loss rate: 1.81%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 695.665 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 644.711 ms
Loss rate: 5.23%
```
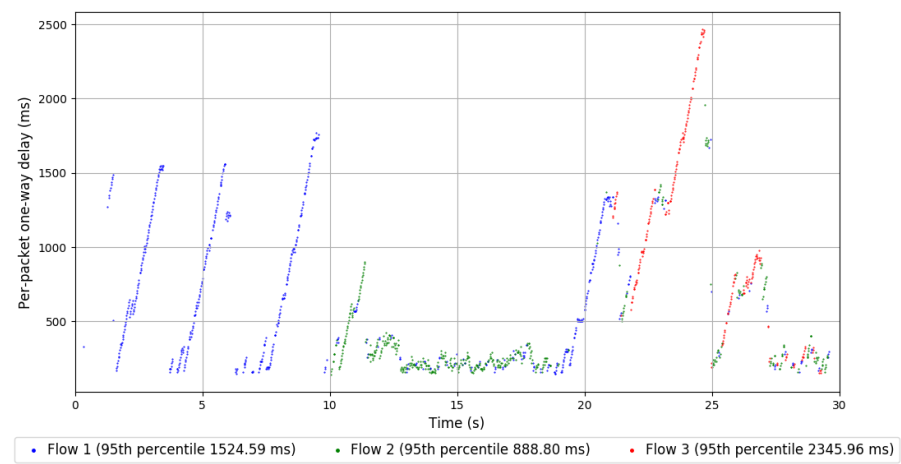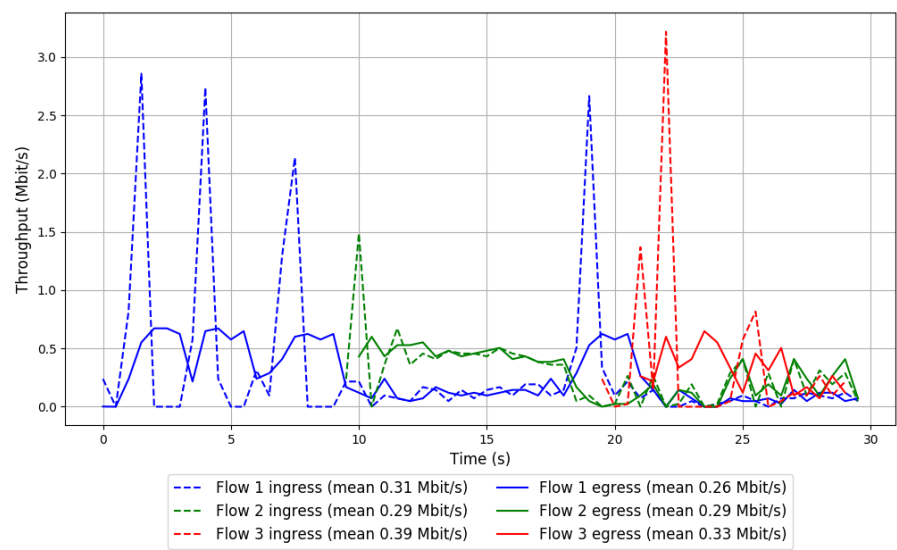
Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2017-12-05 08:40:51
End at: 2017-12-05 08:41:21
Local clock offset: 1.425 ms
Remote clock offset: -3.126 ms

# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 1688.640 ms
Loss rate: 14.55%
-- Flow 1:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 1524.588 ms
Loss rate: 17.69%
-- Flow 2:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 888.801 ms
Loss rate: 3.11%
-- Flow 3:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 2345.958 ms
Loss rate: 24.76%
```

Run 3: Report of Indigo — Data Link

Flow 1 ingress (mean 0.31 Mbit/s)   Flow 1 egress (mean 0.26 Mbit/s)
Flow 2 ingress (mean 0.29 Mbit/s)   Flow 2 egress (mean 0.29 Mbit/s)
Flow 3 ingress (mean 0.39 Mbit/s)   Flow 3 egress (mean 0.33 Mbit/s)

Flow 1 (95th percentile 1524.59 ms)   Flow 2 (95th percentile 888.80 ms)   Flow 3 (95th percentile 2345.96 ms)
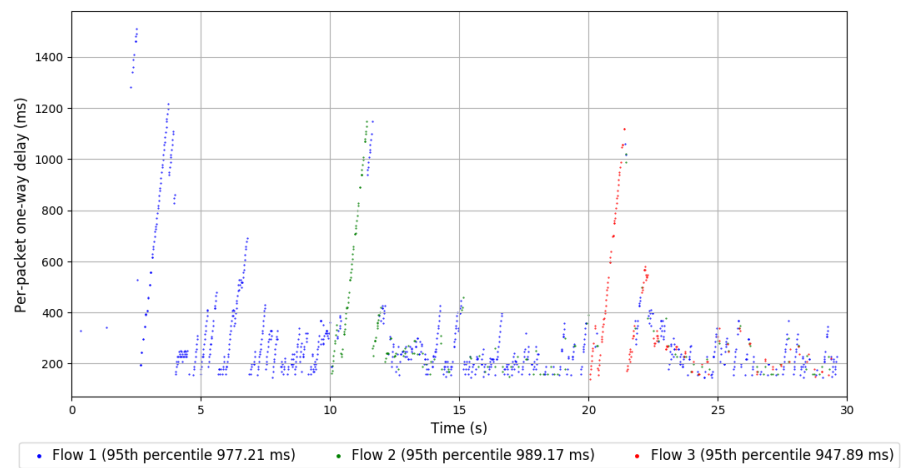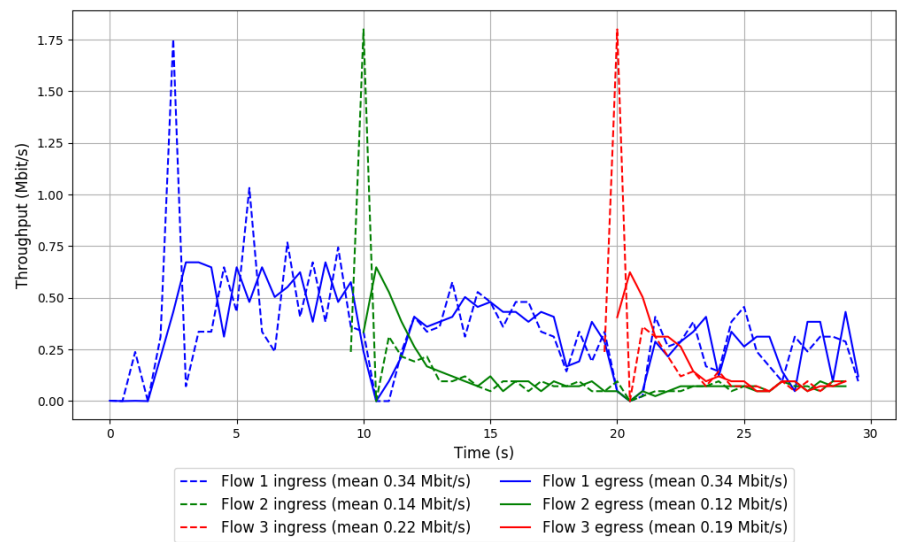
```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-05 08:08:31
End at: 2017-12-05 08:09:01
Local clock offset: 1.797 ms
Remote clock offset: -3.282 ms

# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 977.206 ms
Loss rate: 5.57%
-- Flow 1:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 977.206 ms
Loss rate: 2.37%
-- Flow 2:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 989.174 ms
Loss rate: 10.86%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 947.889 ms
Loss rate: 14.46%
```

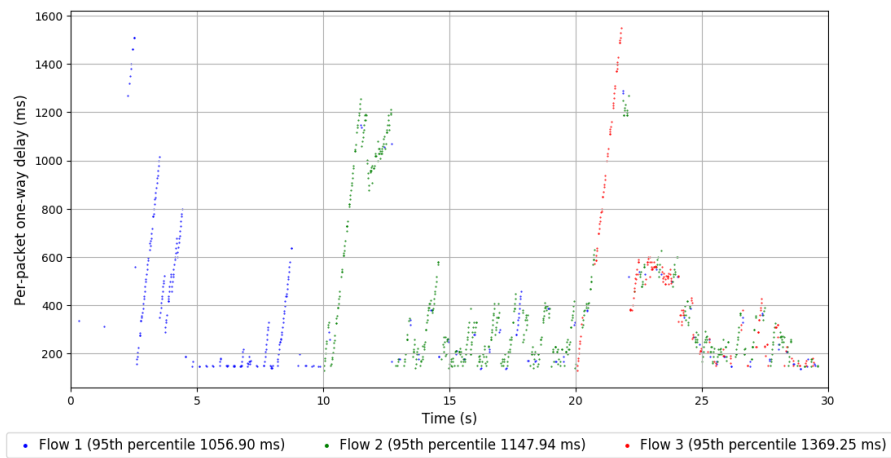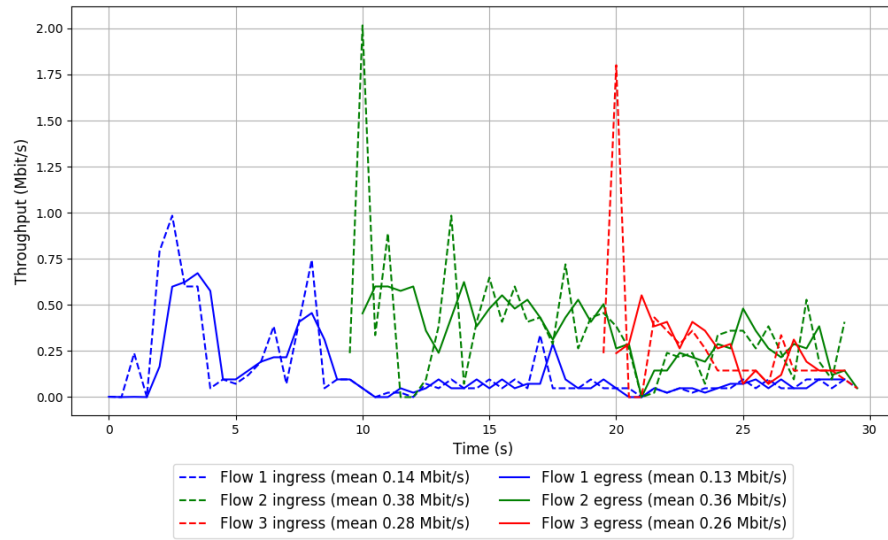# Run 1: Report of Indigo-calib — Data Link

```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-05 08:25:56
End at: 2017-12-05 08:26:26
Local clock offset: 1.773 ms
Remote clock offset: 2.064 ms

# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 1167.932 ms
Loss rate: 6.80%
-- Flow 1:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 1056.899 ms
Loss rate: 7.78%
-- Flow 2:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 1147.945 ms
Loss rate: 4.38%
-- Flow 3:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 1369.251 ms
Loss rate: 11.90%
```

Run 2: Report of Indigo-calib — Data Link

```
Run 3: Statistics of Indigo-calib

Start at: 2017-12-05 08:43:20
End at: 2017-12-05 08:43:50
Local clock offset: 1.486 ms
Remote clock offset: -2.181 ms


# Below is generated by plot.py at 2017-12-05 09:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 984.134 ms
Loss rate: 7.77%
-- Flow 1:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 1055.130 ms
Loss rate: 7.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 833.531 ms
Loss rate: 6.17%
-- Flow 3:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 994.118 ms
Loss rate: 11.12%
```

Run 3: Report of Indigo-calib — Data Link

Flow 1 ingress (mean 0.13 Mbit/s)   Flow 1 egress (mean 0.13 Mbit/s)
Flow 2 ingress (mean 0.23 Mbit/s)   Flow 2 egress (mean 0.22 Mbit/s)
Flow 3 ingress (mean 0.28 Mbit/s)   Flow 3 egress (mean 0.25 Mbit/s)

Flow 1 (95th percentile 1055.13 ms)   Flow 2 (95th percentile 833.53 ms)   Flow 3 (95th percentile 994.12 ms)