Pantheon Report

Generated at 2018-02-05 01:47:31 (UTC).

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

Repeated the test of 17 congestion control schemes 10 times.

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

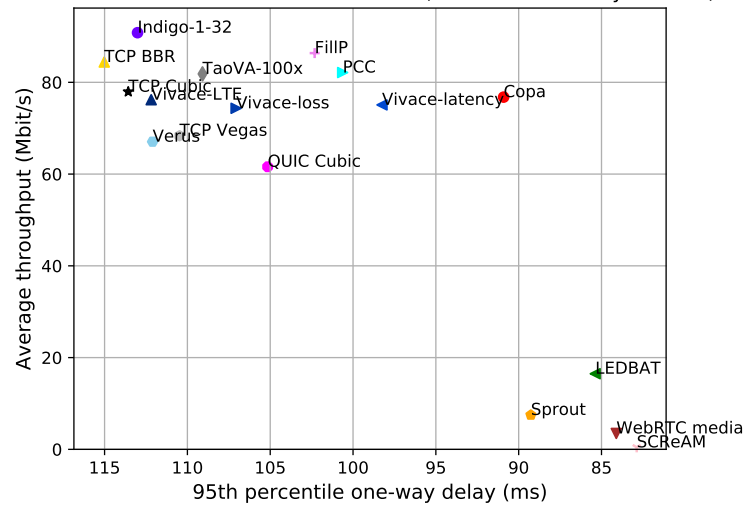Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

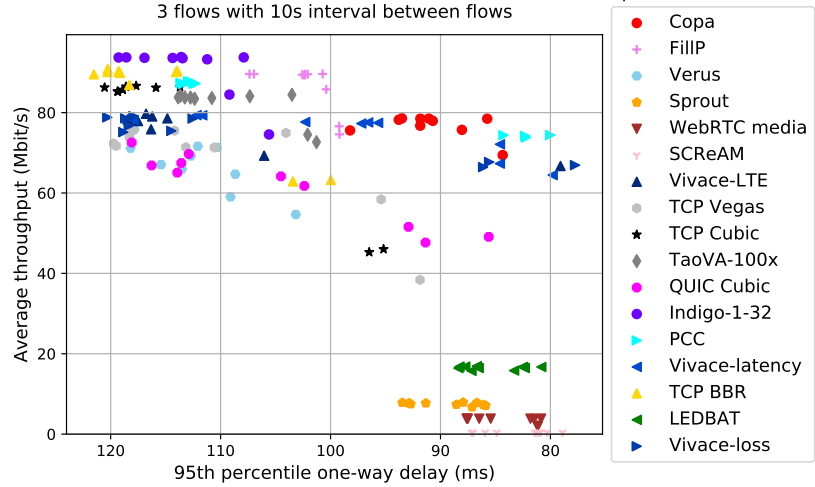NTP offsets were measured against `gps.ntp.br` and have been applied to correct the timestamps in logs.

```
Git summary:
branch: master @ 70217998b3c9a7166a95460a70c0854d1326e100
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/fillp @ fb9c9ab842e5614ad52911a76fb9bd1c1b0dca86
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
 M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
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/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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

test from Colombia Ethernet to AWS Brazil 2 Ethernet, 10 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	10	51.14	37.20	26.37	113.70	115.52	115.01	2.40	3.36	5.14
TCP Cubic	10	45.19	34.99	29.18	112.97	113.65	113.93	0.70	1.46	3.64
LEDBAT	10	10.79	6.99	3.28	84.99	85.47	84.95	1.21	1.83	3.74
PCC	10	62.49	20.35	18.95	99.63	100.93	100.96	2.28	3.92	3.61
QUIC Cubic	10	36.79	25.75	23.79	104.98	103.43	103.85	1.01	1.56	2.89
SCReAM	10	0.22	0.22	0.22	81.88	82.29	82.46	0.64	0.84	1.60
WebRTC media	10	1.69	1.33	0.48	83.78	83.43	83.29	0.67	0.79	3.14
Sprout	10	3.91	3.67	3.55	89.01	89.22	89.66	0.70	1.14	2.28
TaoVA-100x	10	49.35	37.57	23.02	107.53	109.62	110.46	2.50	4.06	4.33
TCP Vegas	10	34.46	37.03	28.44	110.43	109.52	110.49	0.73	0.96	2.43
Verus	10	35.54	37.12	21.82	110.50	111.92	115.21	2.80	3.82	5.95
Copa	10	50.64	33.03	12.82	89.62	92.00	93.28	1.50	2.60	4.58
FillP	10	53.52	36.53	26.35	101.02	102.36	103.90	3.01	5.67	8.50
Indigo-1-32	10	60.34	34.37	23.92	112.11	113.22	114.37	1.38	1.86	3.96
Vivace-latency	10	59.42	18.40	10.63	97.75	99.04	97.35	1.25	2.13	4.64
Vivace-loss	10	52.77	23.73	17.97	106.32	106.69	107.32	1.81	3.43	9.06
Vivace-LTE	10	51.85	27.29	19.28	110.66	112.08	113.31	1.64	3.88	5.42

```
Run 1: Statistics of TCP BBR

Start at: 2018-02-04 17:29:58
End at: 2018-02-04 17:30:28
Local clock offset: -0.105 ms
Remote clock offset: -4.84 ms


# Below is generated by plot.py at 2018-02-05 01:24:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.89 Mbit/s
95th percentile per-packet one-way delay: 118.310 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 52.18 Mbit/s
95th percentile per-packet one-way delay: 117.621 ms
Loss rate: 1.59%
-- Flow 2:
Average throughput: 38.05 Mbit/s
95th percentile per-packet one-way delay: 119.120 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 28.98 Mbit/s
95th percentile per-packet one-way delay: 118.387 ms
Loss rate: 2.33%
```
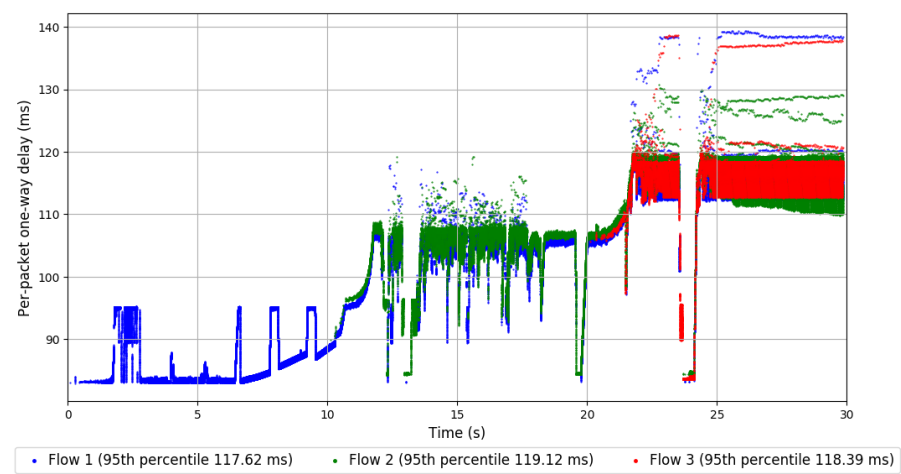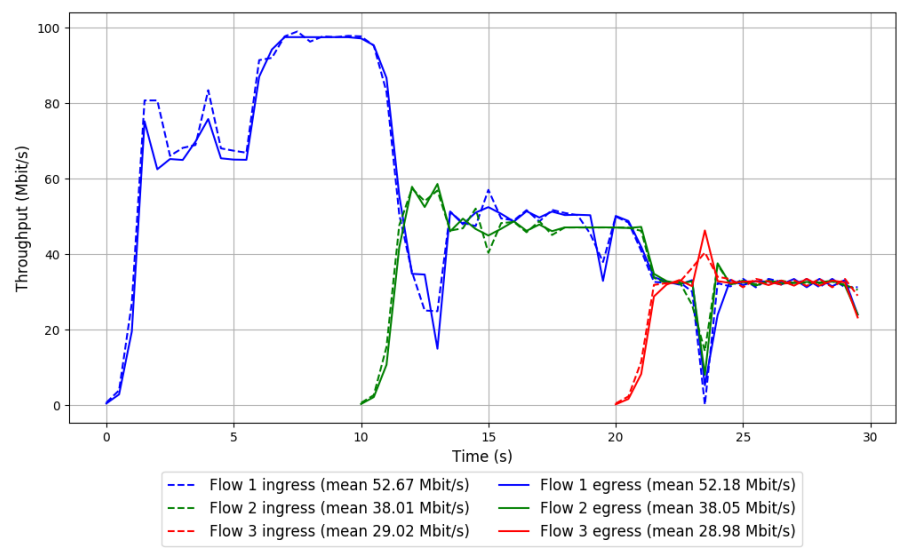
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2018-02-04 17:53:52
End at: 2018-02-04 17:54:22
Local clock offset: -0.021 ms
Remote clock offset: 0.729 ms


# Below is generated by plot.py at 2018-02-05 01:25:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.40 Mbit/s
95th percentile per-packet one-way delay: 113.948 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 54.20 Mbit/s
95th percentile per-packet one-way delay: 112.089 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 40.14 Mbit/s
95th percentile per-packet one-way delay: 113.984 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 29.30 Mbit/s
95th percentile per-packet one-way delay: 115.303 ms
Loss rate: 2.43%
```
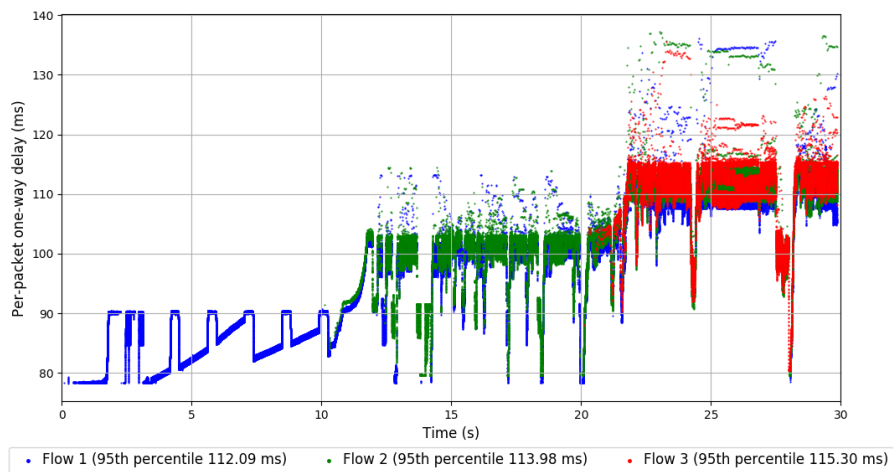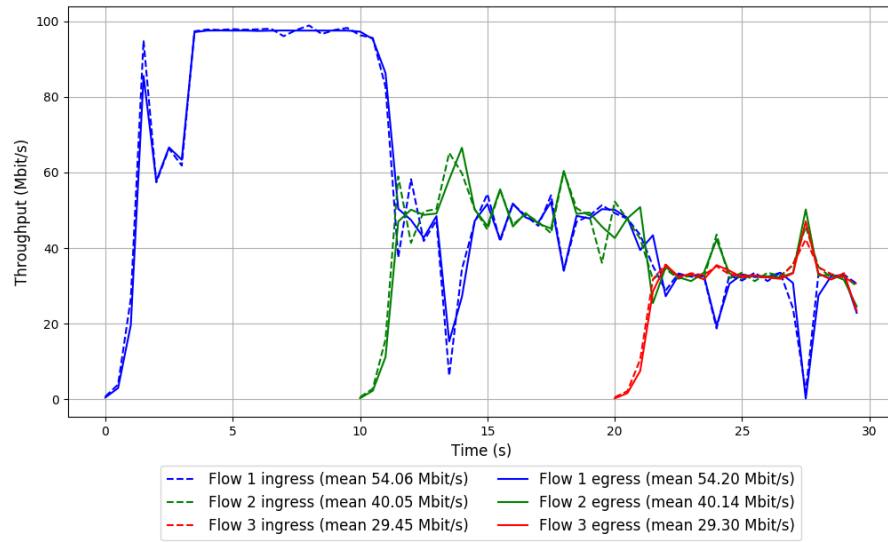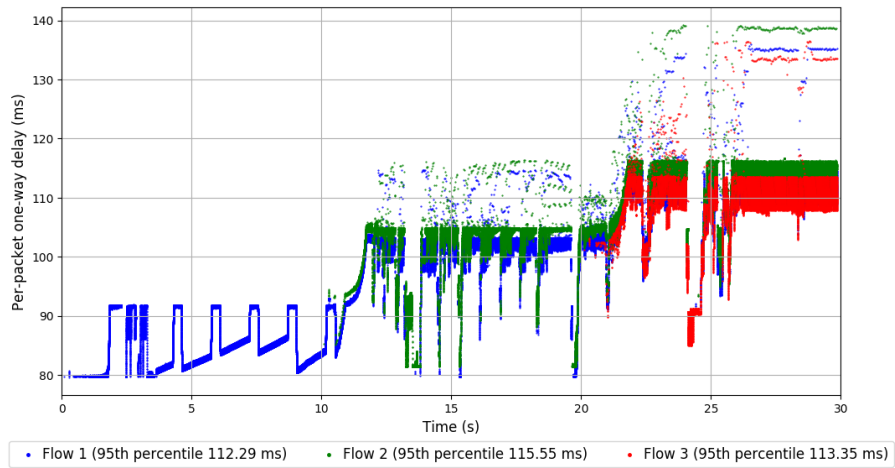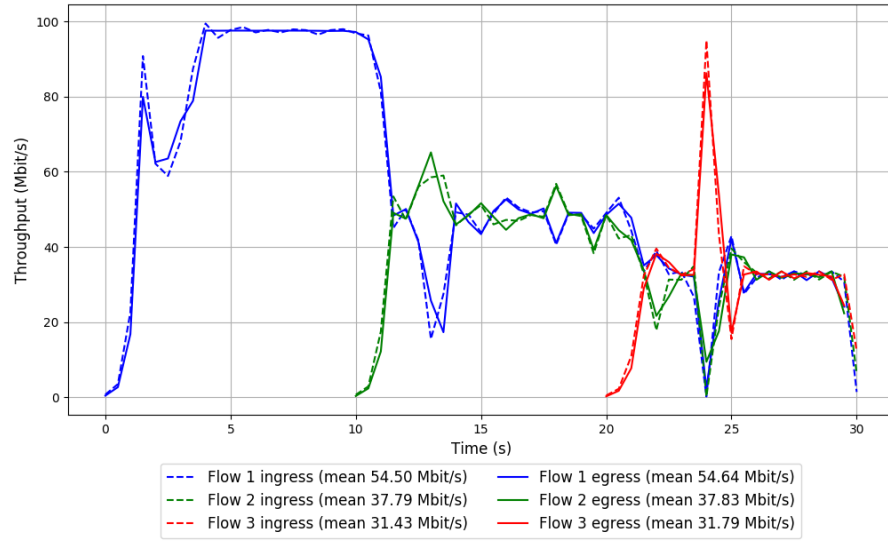
Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2018-02-04 18:17:57
End at: 2018-02-04 18:18:28
Local clock offset: -0.038 ms
Remote clock offset: -1.371 ms


# Below is generated by plot.py at 2018-02-05 01:25:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.12 Mbit/s
95th percentile per-packet one-way delay: 114.046 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 54.64 Mbit/s
95th percentile per-packet one-way delay: 112.292 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 37.83 Mbit/s
95th percentile per-packet one-way delay: 115.545 ms
Loss rate: 1.51%
-- Flow 3:
Average throughput: 31.79 Mbit/s
95th percentile per-packet one-way delay: 113.351 ms
Loss rate: 4.23%
```

Run 3: Report of TCP BBR — Data Link

- - - Flow 1 ingress (mean 54.50 Mbit/s)   —— Flow 1 egress (mean 54.64 Mbit/s)
- - - Flow 2 ingress (mean 37.79 Mbit/s)   —— Flow 2 egress (mean 37.83 Mbit/s)
- - - Flow 3 ingress (mean 31.43 Mbit/s)   —— Flow 3 egress (mean 31.79 Mbit/s)

• Flow 1 (95th percentile 112.29 ms)   • Flow 2 (95th percentile 115.55 ms)   • Flow 3 (95th percentile 113.35 ms)
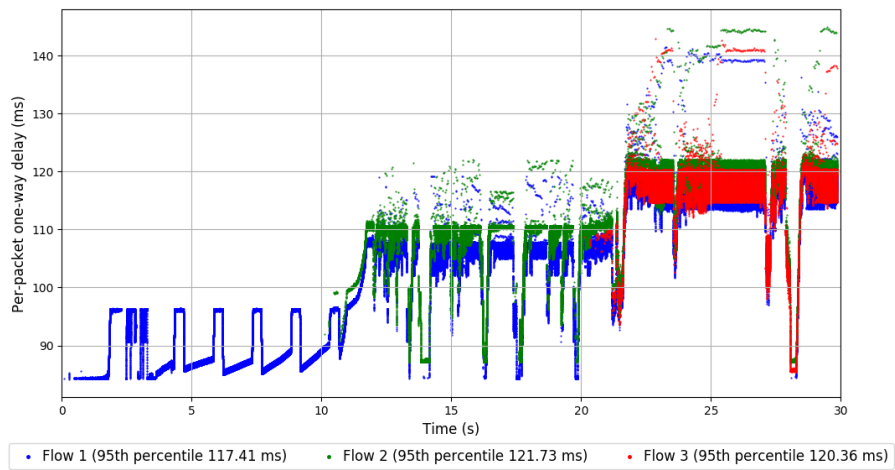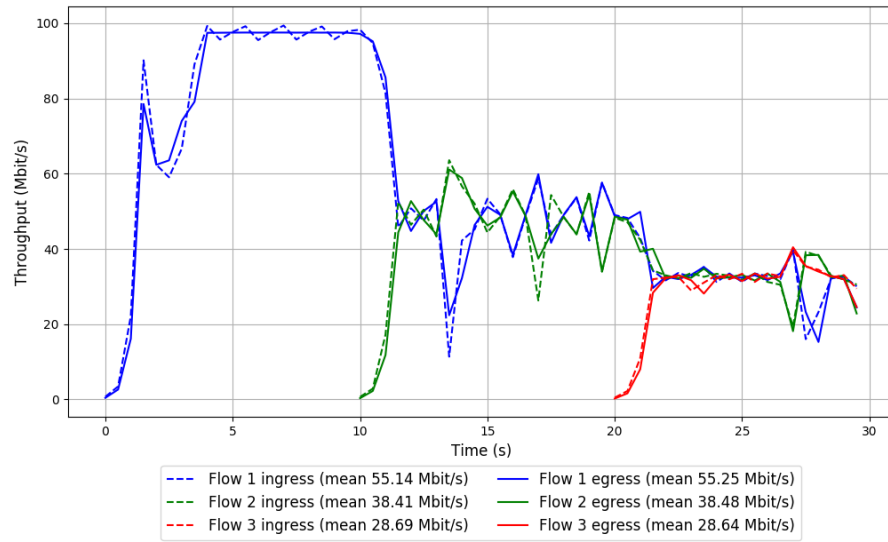
```
Run 4: Statistics of TCP BBR

Start at: 2018-02-04 18:42:08
End at: 2018-02-04 18:42:38
Local clock offset: -0.028 ms
Remote clock offset: -5.603 ms

# Below is generated by plot.py at 2018-02-05 01:25:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.13 Mbit/s
95th percentile per-packet one-way delay: 120.283 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 55.25 Mbit/s
95th percentile per-packet one-way delay: 117.413 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 38.48 Mbit/s
95th percentile per-packet one-way delay: 121.729 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 28.64 Mbit/s
95th percentile per-packet one-way delay: 120.365 ms
Loss rate: 2.35%
```

Run 4: Report of TCP BBR — Data Link

```
Run 5: Statistics of TCP BBR

Start at: 2018-02-04 19:06:00
End at: 2018-02-04 19:06:30
Local clock offset: -0.124 ms
Remote clock offset: 2.657 ms


# Below is generated by plot.py at 2018-02-05 01:25:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.89 Mbit/s
95th percentile per-packet one-way delay: 103.423 ms
Loss rate: 11.00%
-- Flow 1:
Average throughput: 37.49 Mbit/s
95th percentile per-packet one-way delay: 103.313 ms
Loss rate: 9.94%
-- Flow 2:
Average throughput: 32.23 Mbit/s
95th percentile per-packet one-way delay: 103.498 ms
Loss rate: 12.45%
-- Flow 3:
Average throughput: 12.30 Mbit/s
95th percentile per-packet one-way delay: 101.858 ms
Loss rate: 12.81%
```
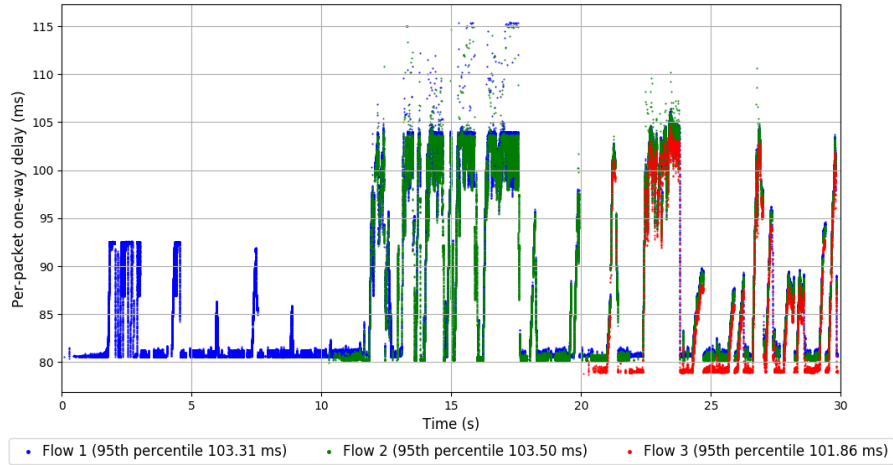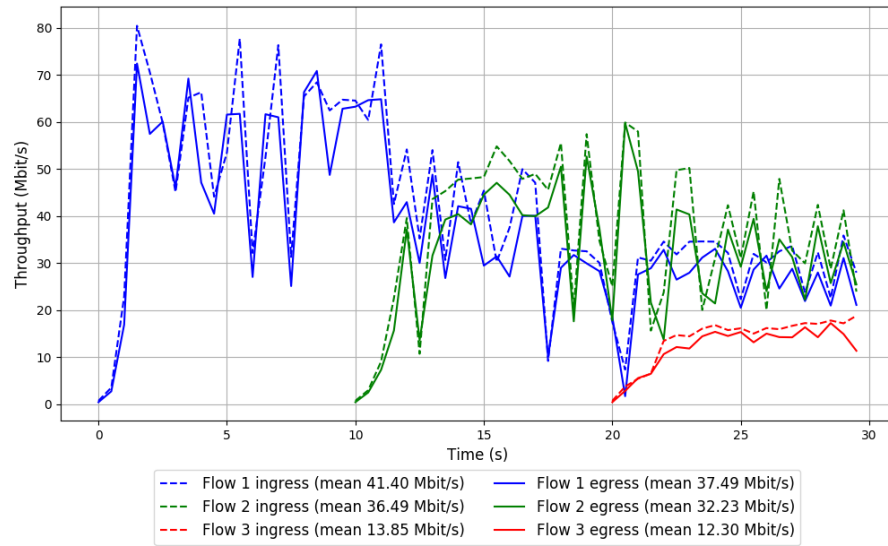
Run 5: Report of TCP BBR — Data Link

```
Run 6: Statistics of TCP BBR

Start at: 2018-02-04 19:30:02
End at: 2018-02-04 19:30:32
Local clock offset: -0.087 ms
Remote clock offset: 3.744 ms


# Below is generated by plot.py at 2018-02-05 01:25:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.25 Mbit/s
95th percentile per-packet one-way delay: 99.974 ms
Loss rate: 10.43%
-- Flow 1:
Average throughput: 38.09 Mbit/s
95th percentile per-packet one-way delay: 98.570 ms
Loss rate: 9.28%
-- Flow 2:
Average throughput: 30.69 Mbit/s
95th percentile per-packet one-way delay: 101.139 ms
Loss rate: 11.71%
-- Flow 3:
Average throughput: 14.61 Mbit/s
95th percentile per-packet one-way delay: 99.317 ms
Loss rate: 13.80%
```
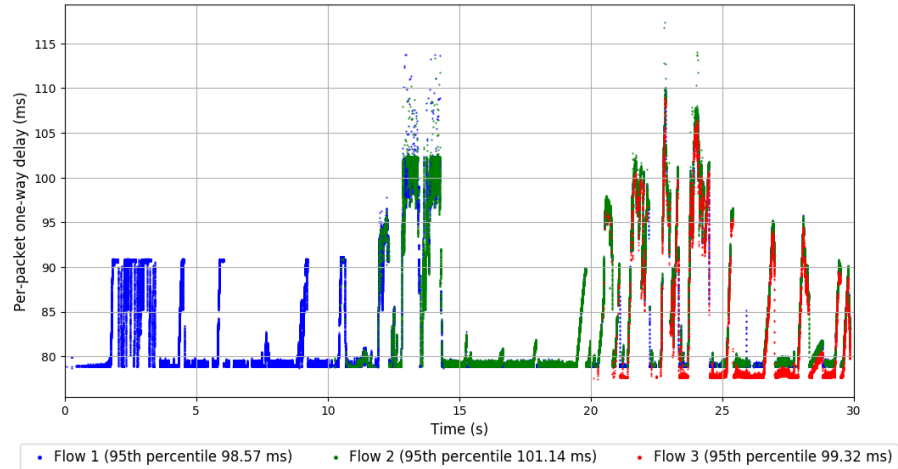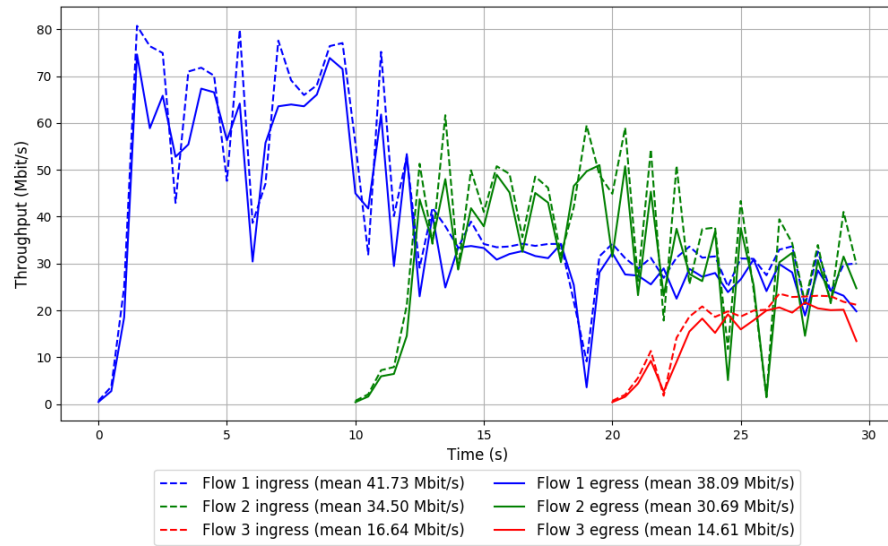
Run 6: Report of TCP BBR — Data Link

Legend:
- Flow 1 ingress (mean 41.73 Mbit/s)
- Flow 1 egress (mean 38.09 Mbit/s)
- Flow 2 ingress (mean 34.50 Mbit/s)
- Flow 2 egress (mean 30.69 Mbit/s)
- Flow 3 ingress (mean 16.64 Mbit/s)
- Flow 3 egress (mean 14.61 Mbit/s)

Legend:
- Flow 1 (95th percentile 98.57 ms)
- Flow 2 (95th percentile 101.14 ms)
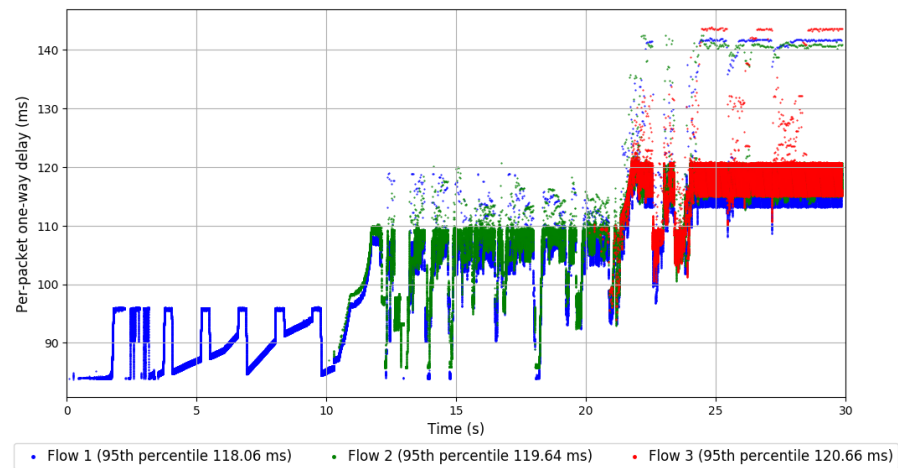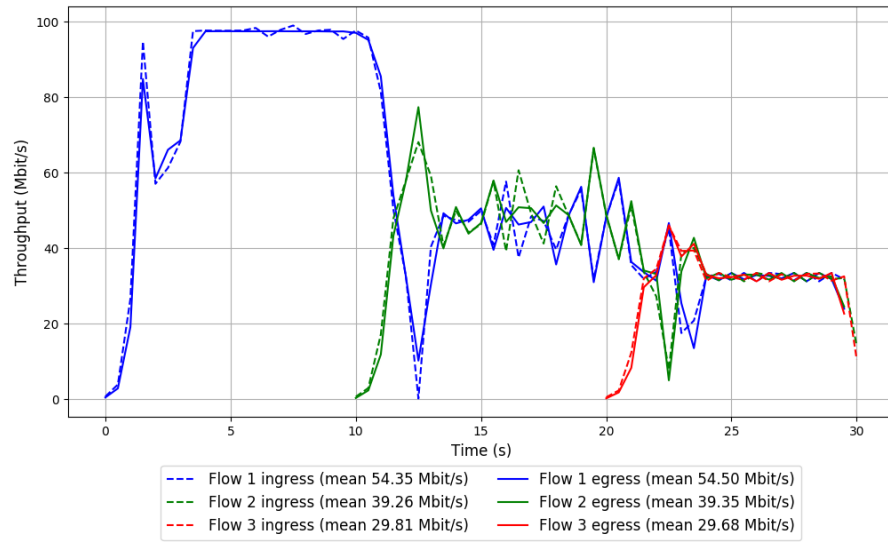- Flow 3 (95th percentile 99.32 ms)

```
Run 7: Statistics of TCP BBR

Start at: 2018-02-04 19:53:50
End at: 2018-02-04 19:54:20
Local clock offset: -0.124 ms
Remote clock offset: -2.086 ms


# Below is generated by plot.py at 2018-02-05 01:25:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.30 Mbit/s
95th percentile per-packet one-way delay: 119.277 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 54.50 Mbit/s
95th percentile per-packet one-way delay: 118.059 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 39.35 Mbit/s
95th percentile per-packet one-way delay: 119.640 ms
Loss rate: 1.83%
-- Flow 3:
Average throughput: 29.68 Mbit/s
95th percentile per-packet one-way delay: 120.660 ms
Loss rate: 4.49%
```
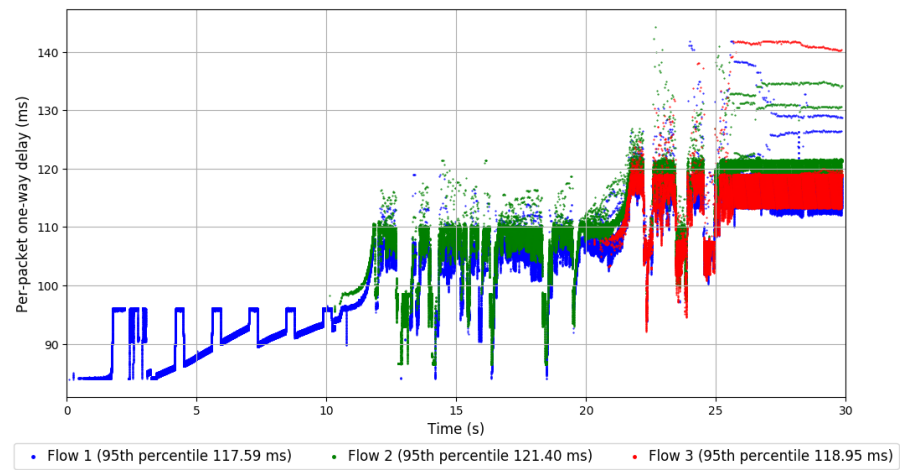
Run 7: Report of TCP BBR — Data Link

- Flow 1 ingress (mean 54.35 Mbit/s) — Flow 1 egress (mean 54.50 Mbit/s)
- Flow 2 ingress (mean 39.26 Mbit/s) — Flow 2 egress (mean 39.35 Mbit/s)
- Flow 3 ingress (mean 29.81 Mbit/s) — Flow 3 egress (mean 29.68 Mbit/s)

- Flow 1 (95th percentile 118.06 ms) • Flow 2 (95th percentile 119.64 ms) • Flow 3 (95th percentile 120.66 ms)

```
Run 8: Statistics of TCP BBR

Start at: 2018-02-04 20:17:43
End at: 2018-02-04 20:18:13
Local clock offset: -0.064 ms
Remote clock offset: -1.612 ms


# Below is generated by plot.py at 2018-02-05 01:25:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.88 Mbit/s
95th percentile per-packet one-way delay: 120.269 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 55.31 Mbit/s
95th percentile per-packet one-way delay: 117.591 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 38.52 Mbit/s
95th percentile per-packet one-way delay: 121.397 ms
Loss rate: 1.70%
-- Flow 3:
Average throughput: 30.71 Mbit/s
95th percentile per-packet one-way delay: 118.951 ms
Loss rate: 4.25%
```
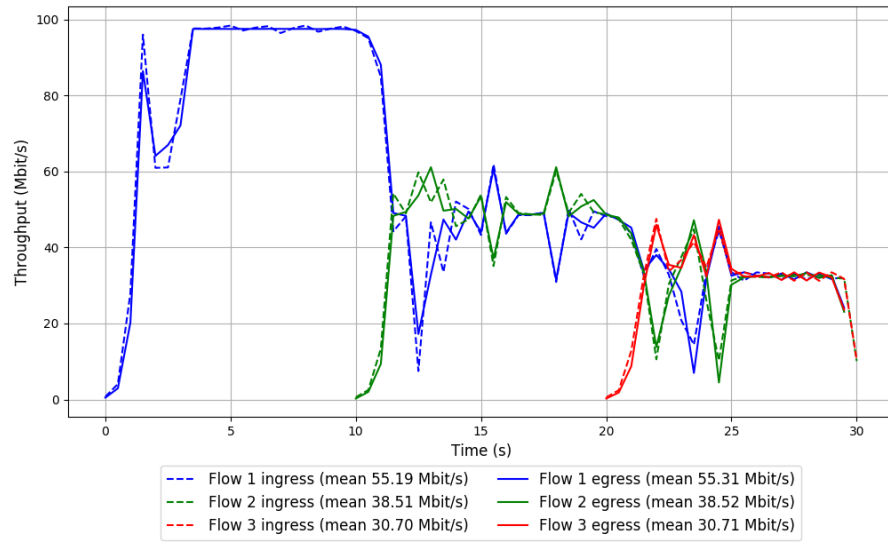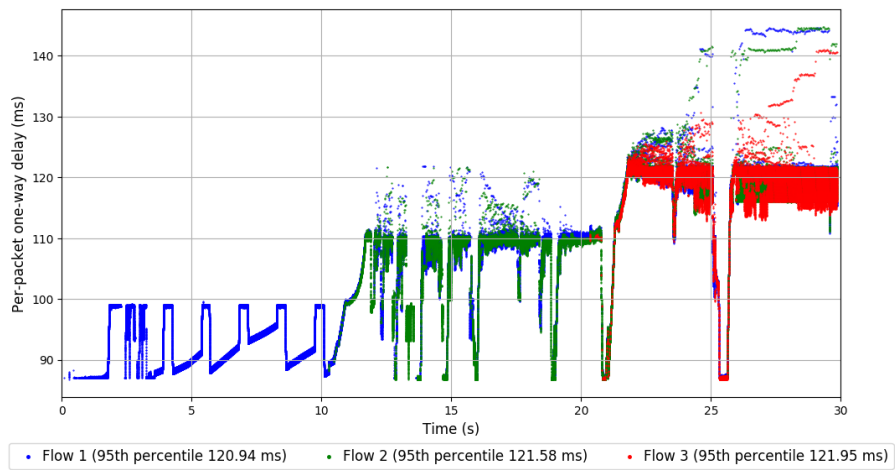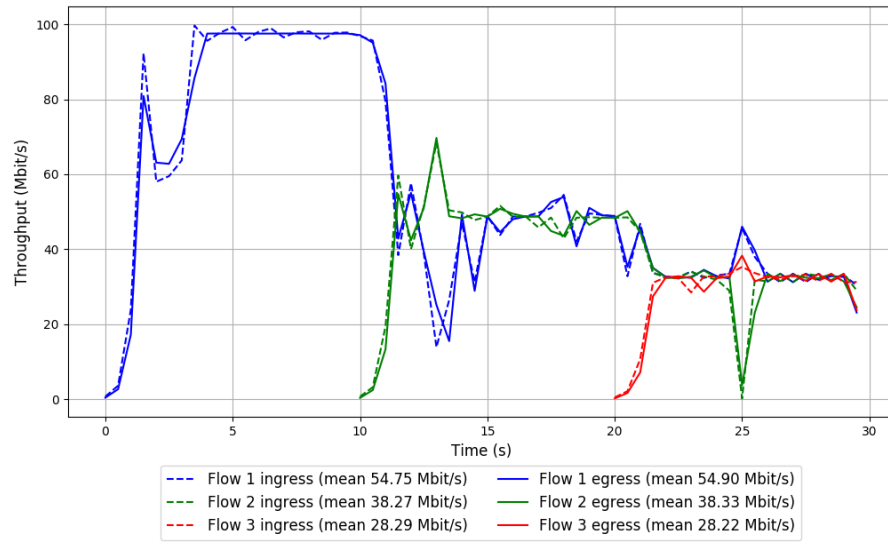
Run 8: Report of TCP BBR — Data Link

Flow 1 ingress (mean 55.19 Mbit/s) --- Flow 1 egress (mean 55.31 Mbit/s)
Flow 2 ingress (mean 38.51 Mbit/s) --- Flow 2 egress (mean 38.52 Mbit/s)
Flow 3 ingress (mean 30.70 Mbit/s) --- Flow 3 egress (mean 30.71 Mbit/s)

Flow 1 (95th percentile 117.59 ms) • Flow 2 (95th percentile 121.40 ms) • Flow 3 (95th percentile 118.95 ms)

```
Run 9: Statistics of TCP BBR

Start at: 2018-02-04 20:41:40
End at: 2018-02-04 20:42:11
Local clock offset: -0.086 ms
Remote clock offset: -1.587 ms


# Below is generated by plot.py at 2018-02-05 01:25:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.54 Mbit/s
95th percentile per-packet one-way delay: 121.521 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 54.90 Mbit/s
95th percentile per-packet one-way delay: 120.941 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 38.33 Mbit/s
95th percentile per-packet one-way delay: 121.582 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 28.22 Mbit/s
95th percentile per-packet one-way delay: 121.947 ms
Loss rate: 2.52%
```
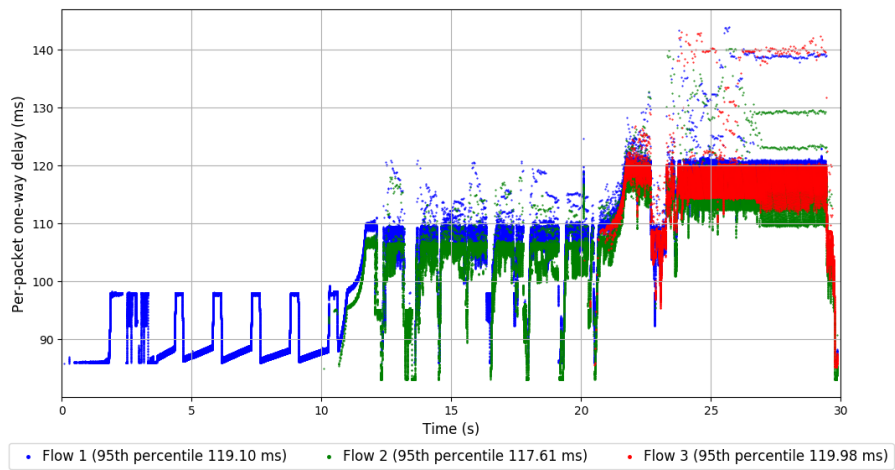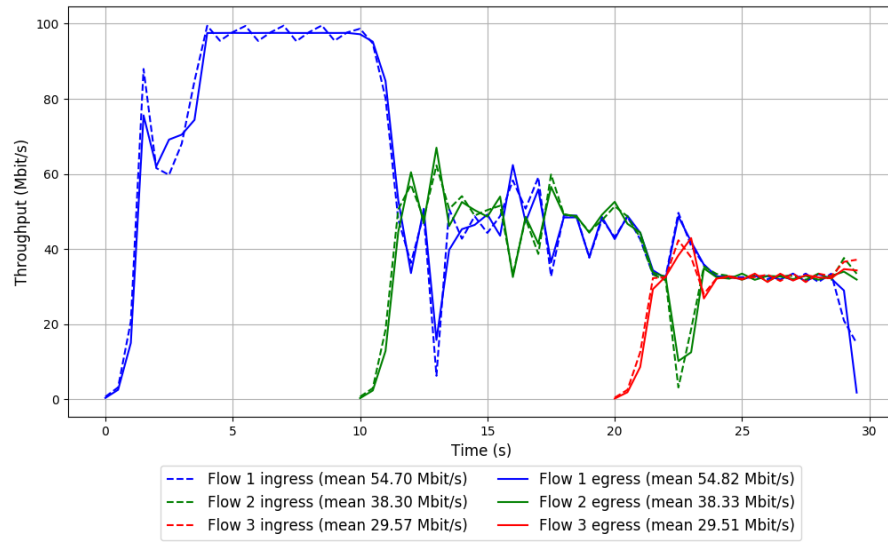
Run 9: Report of TCP BBR — Data Link

Flow 1 ingress (mean 54.75 Mbit/s)   Flow 1 egress (mean 54.90 Mbit/s)
Flow 2 ingress (mean 38.27 Mbit/s)   Flow 2 egress (mean 38.33 Mbit/s)
Flow 3 ingress (mean 28.29 Mbit/s)   Flow 3 egress (mean 28.22 Mbit/s)

Flow 1 (95th percentile 120.94 ms)   Flow 2 (95th percentile 121.58 ms)   Flow 3 (95th percentile 121.95 ms)

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```
Run 10: Statistics of TCP BBR

Start at: 2018-02-04 21:05:31
End at: 2018-02-04 21:06:01
Local clock offset: -0.062 ms
Remote clock offset: -0.703 ms


# Below is generated by plot.py at 2018-02-05 01:25:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.90 Mbit/s
95th percentile per-packet one-way delay: 119.148 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 54.82 Mbit/s
95th percentile per-packet one-way delay: 119.101 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 38.33 Mbit/s
95th percentile per-packet one-way delay: 117.614 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 29.51 Mbit/s
95th percentile per-packet one-way delay: 119.985 ms
Loss rate: 2.22%
```

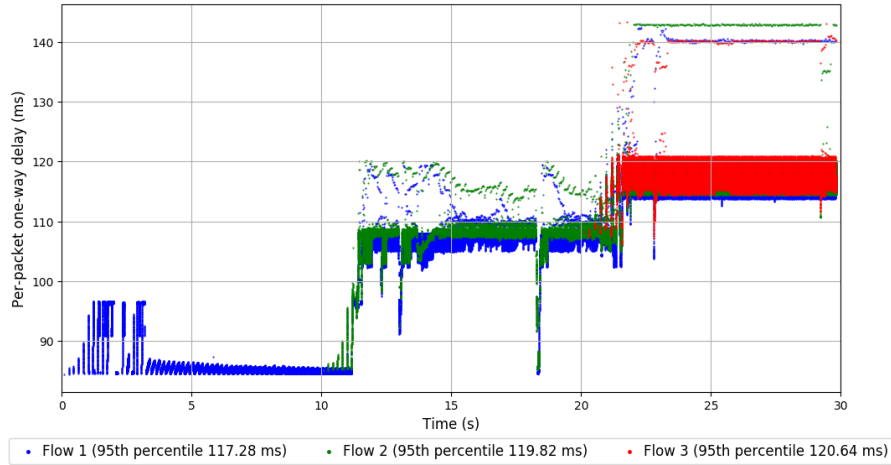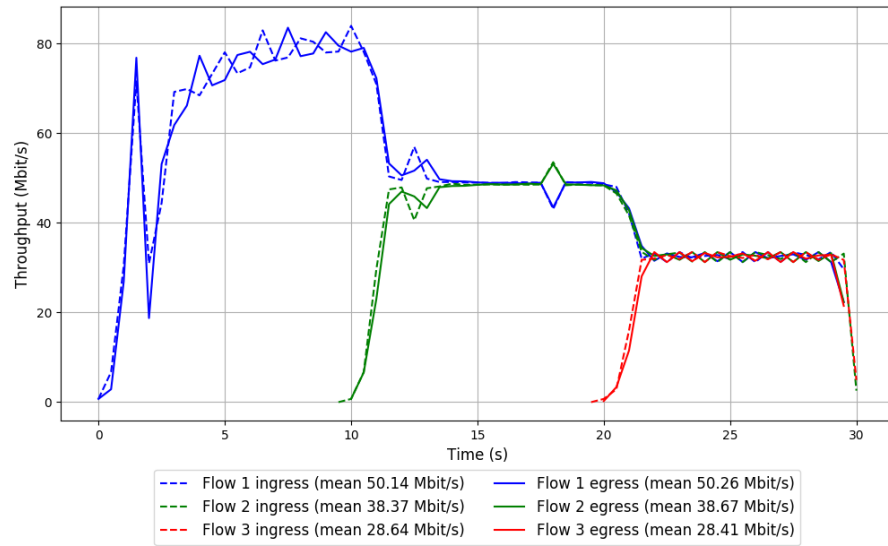Run 10: Report of TCP BBR — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2018-02-04 17:44:34
End at: 2018-02-04 17:45:04
Local clock offset: -0.026 ms
Remote clock offset: -4.613 ms

# Below is generated by plot.py at 2018-02-05 01:26:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.21 Mbit/s
95th percentile per-packet one-way delay: 119.347 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 50.26 Mbit/s
95th percentile per-packet one-way delay: 117.284 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 38.67 Mbit/s
95th percentile per-packet one-way delay: 119.821 ms
Loss rate: 1.30%
-- Flow 3:
Average throughput: 28.41 Mbit/s
95th percentile per-packet one-way delay: 120.637 ms
Loss rate: 3.92%
```

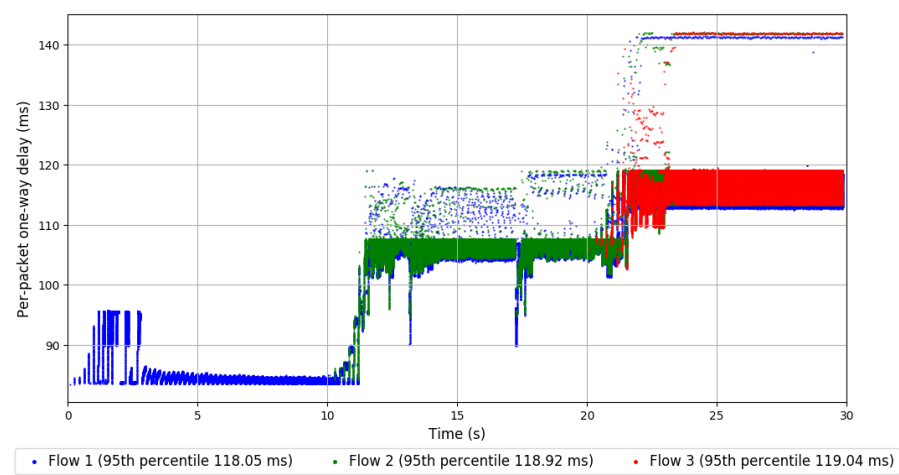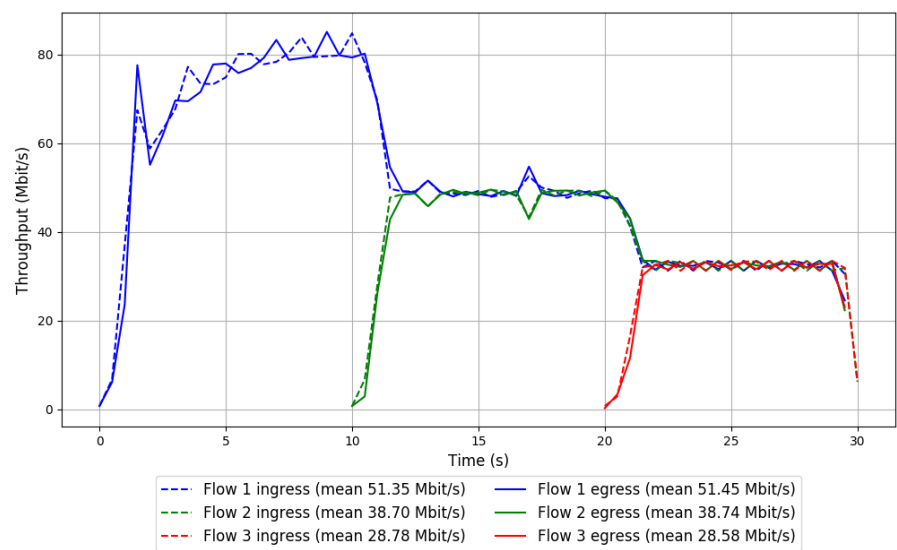Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2018-02-04 18:08:29
End at: 2018-02-04 18:08:59
Local clock offset: -0.025 ms
Remote clock offset: -5.039 ms


# Below is generated by plot.py at 2018-02-05 01:26:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.46 Mbit/s
95th percentile per-packet one-way delay: 118.611 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 51.45 Mbit/s
95th percentile per-packet one-way delay: 118.053 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 38.74 Mbit/s
95th percentile per-packet one-way delay: 118.922 ms
Loss rate: 1.45%
-- Flow 3:
Average throughput: 28.58 Mbit/s
95th percentile per-packet one-way delay: 119.039 ms
Loss rate: 3.89%
```

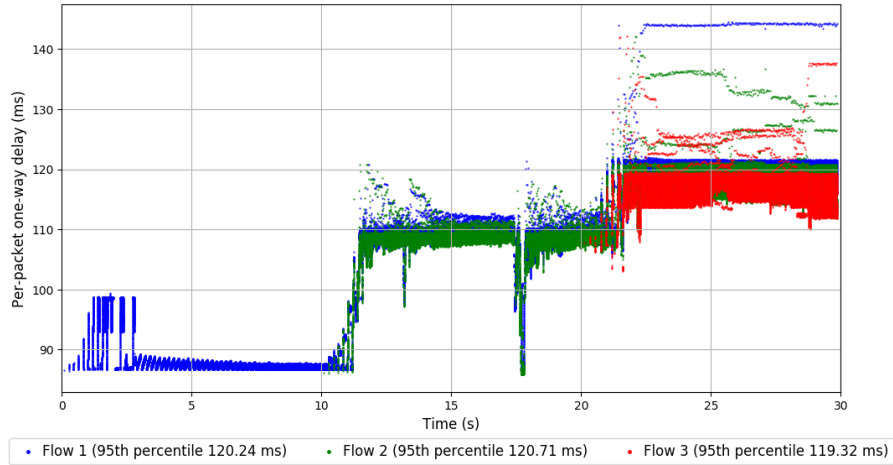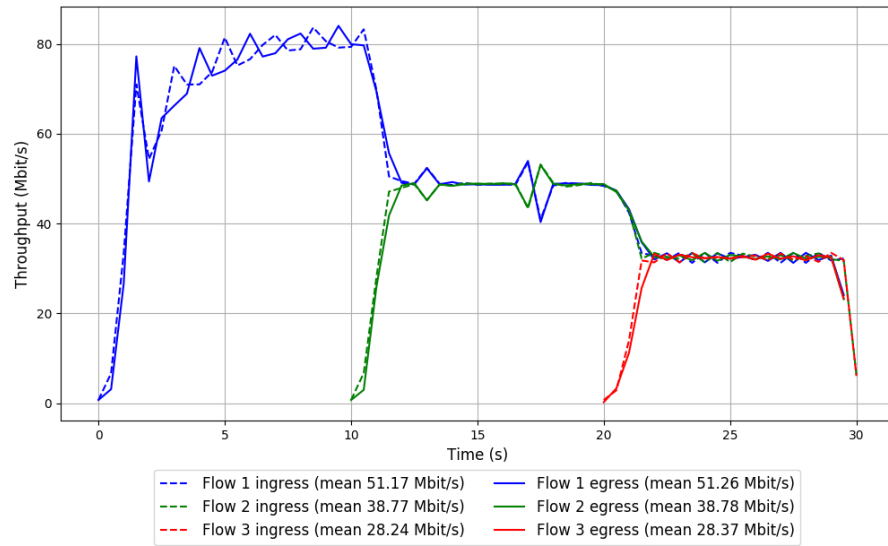Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2018-02-04 18:32:49
End at: 2018-02-04 18:33:19
Local clock offset: -0.037 ms
Remote clock offset: -6.221 ms


# Below is generated by plot.py at 2018-02-05 01:26:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.26 Mbit/s
95th percentile per-packet one-way delay: 120.554 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 51.26 Mbit/s
95th percentile per-packet one-way delay: 120.238 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 38.78 Mbit/s
95th percentile per-packet one-way delay: 120.707 ms
Loss rate: 1.44%
-- Flow 3:
Average throughput: 28.37 Mbit/s
95th percentile per-packet one-way delay: 119.316 ms
Loss rate: 3.89%
```
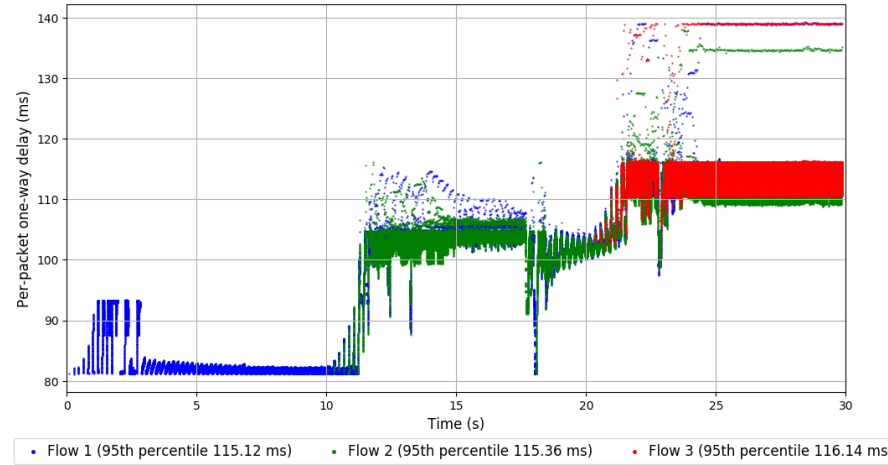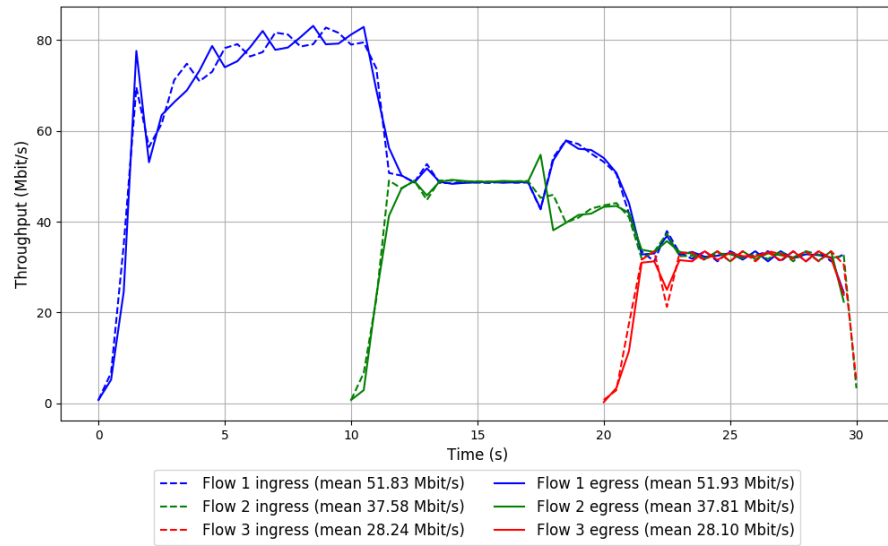
Run 3: Report of TCP Cubic — Data Link

- - - - Flow 1 ingress (mean 51.17 Mbit/s)   —— Flow 1 egress (mean 51.26 Mbit/s)
- - - - Flow 2 ingress (mean 38.77 Mbit/s)   —— Flow 2 egress (mean 38.78 Mbit/s)
- - - - Flow 3 ingress (mean 28.24 Mbit/s)   —— Flow 3 egress (mean 28.37 Mbit/s)

• Flow 1 (95th percentile 120.24 ms)   • Flow 2 (95th percentile 120.71 ms)   • Flow 3 (95th percentile 119.32 ms)

```
Run 4: Statistics of TCP Cubic

Start at: 2018-02-04 18:56:44
End at: 2018-02-04 18:57:14
Local clock offset: -0.037 ms
Remote clock offset: 0.354 ms


# Below is generated by plot.py at 2018-02-05 01:26:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.21 Mbit/s
95th percentile per-packet one-way delay: 115.881 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 51.93 Mbit/s
95th percentile per-packet one-way delay: 115.117 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 37.81 Mbit/s
95th percentile per-packet one-way delay: 115.360 ms
Loss rate: 1.34%
-- Flow 3:
Average throughput: 28.10 Mbit/s
95th percentile per-packet one-way delay: 116.144 ms
Loss rate: 3.48%
```
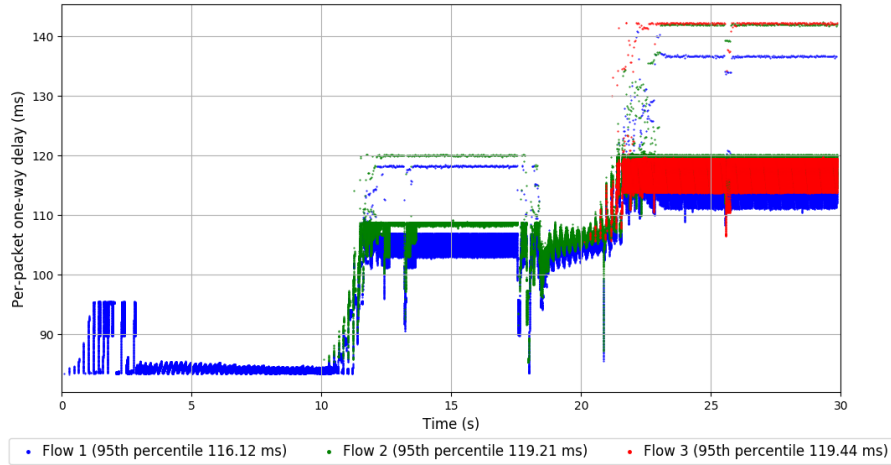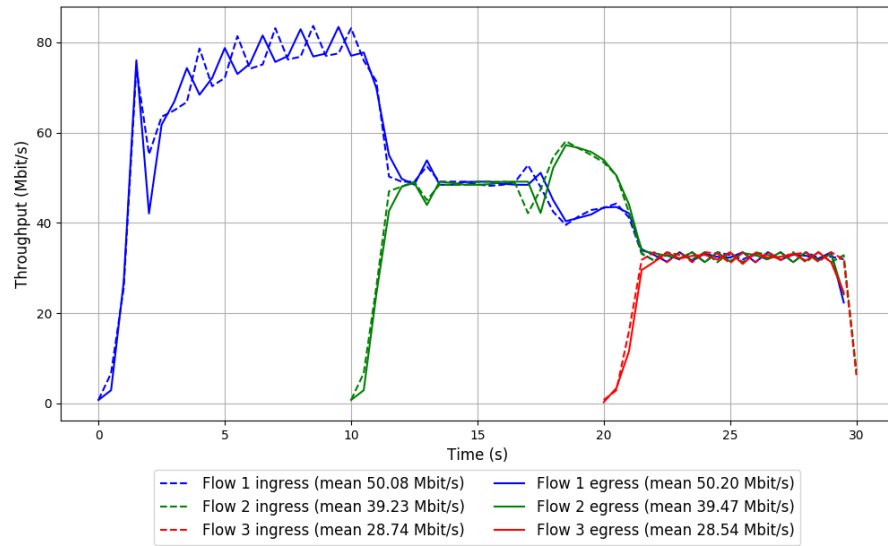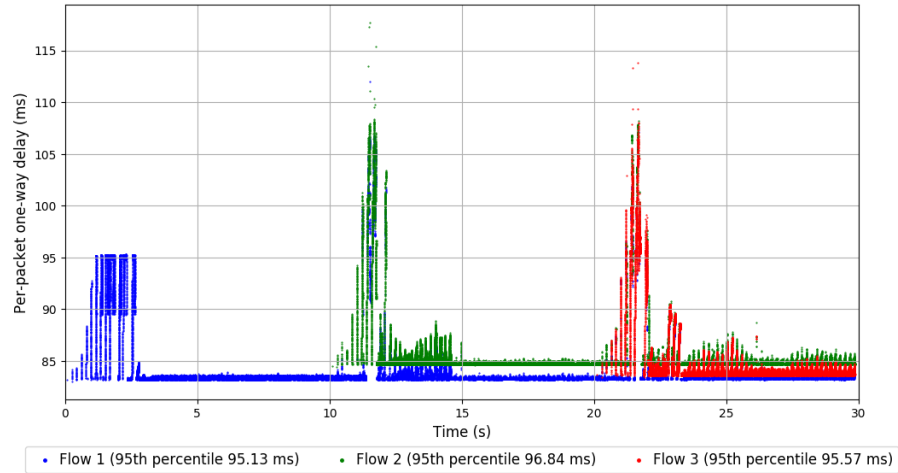
Run 4: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 51.83 Mbit/s) — Flow 1 egress (mean 51.93 Mbit/s)
Flow 2 ingress (mean 37.58 Mbit/s) — Flow 2 egress (mean 37.81 Mbit/s)
Flow 3 ingress (mean 28.24 Mbit/s) — Flow 3 egress (mean 28.10 Mbit/s)

Flow 1 (95th percentile 115.12 ms) — Flow 2 (95th percentile 115.36 ms) — Flow 3 (95th percentile 116.14 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2018-02-04 19:20:39
End at: 2018-02-04 19:21:09
Local clock offset: -0.067 ms
Remote clock offset: -2.086 ms


# Below is generated by plot.py at 2018-02-05 01:26:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.68 Mbit/s
95th percentile per-packet one-way delay: 118.900 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 50.20 Mbit/s
95th percentile per-packet one-way delay: 116.124 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 39.47 Mbit/s
95th percentile per-packet one-way delay: 119.207 ms
Loss rate: 1.43%
-- Flow 3:
Average throughput: 28.54 Mbit/s
95th percentile per-packet one-way delay: 119.439 ms
Loss rate: 3.89%
```

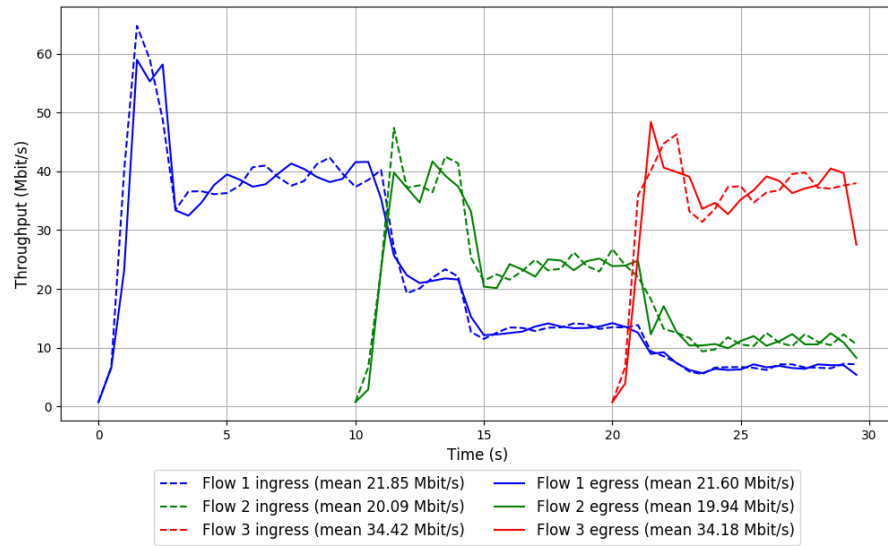Run 5: Report of TCP Cubic — Data Link

```
Run 6: Statistics of TCP Cubic

Start at: 2018-02-04 19:44:37
End at: 2018-02-04 19:45:07
Local clock offset: -0.084 ms
Remote clock offset: -1.578 ms


# Below is generated by plot.py at 2018-02-05 01:26:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.03 Mbit/s
95th percentile per-packet one-way delay: 95.177 ms
Loss rate: 1.89%
-- Flow 1:
Average throughput: 21.60 Mbit/s
95th percentile per-packet one-way delay: 95.134 ms
Loss rate: 1.72%
-- Flow 2:
Average throughput: 19.94 Mbit/s
95th percentile per-packet one-way delay: 96.841 ms
Loss rate: 1.65%
-- Flow 3:
Average throughput: 34.18 Mbit/s
95th percentile per-packet one-way delay: 95.573 ms
Loss rate: 2.48%
```
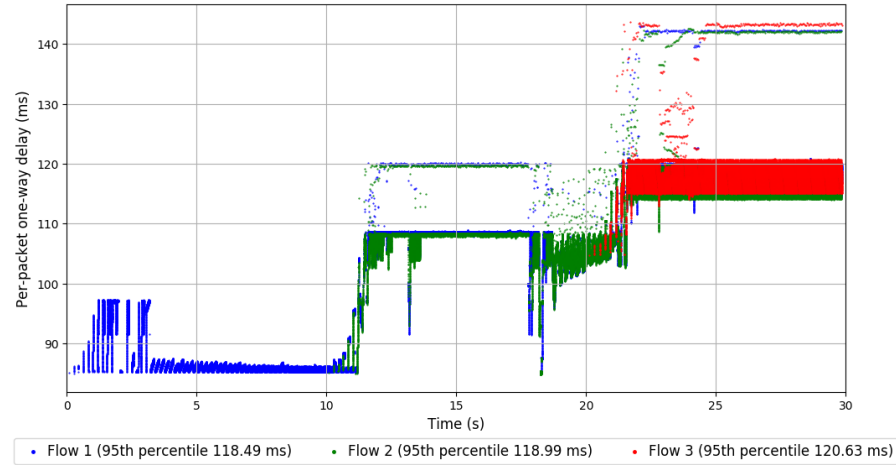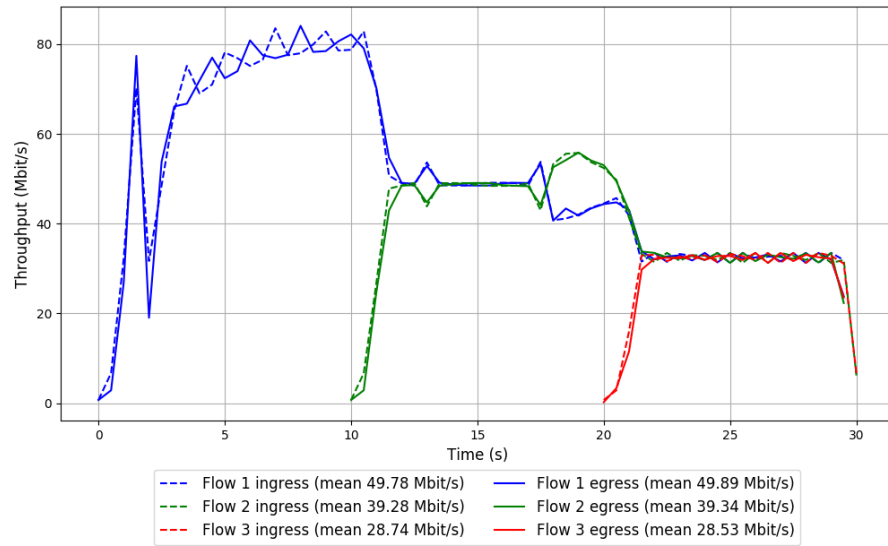
Run 6: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 21.85 Mbit/s) Flow 1 egress (mean 21.60 Mbit/s)
Flow 2 ingress (mean 20.09 Mbit/s) Flow 2 egress (mean 19.94 Mbit/s)
Flow 3 ingress (mean 34.42 Mbit/s) Flow 3 egress (mean 34.18 Mbit/s)

Flow 1 (95th percentile 95.13 ms)   Flow 2 (95th percentile 96.84 ms)   Flow 3 (95th percentile 95.57 ms)
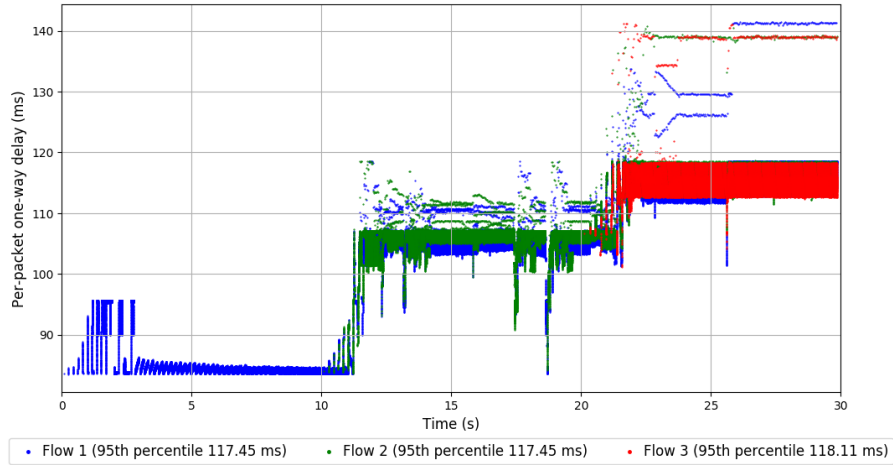
```
Run 7: Statistics of TCP Cubic

Start at: 2018-02-04 20:08:25
End at: 2018-02-04 20:08:55
Local clock offset: -0.038 ms
Remote clock offset: -0.994 ms


# Below is generated by plot.py at 2018-02-05 01:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.29 Mbit/s
95th percentile per-packet one-way delay: 119.371 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 49.89 Mbit/s
95th percentile per-packet one-way delay: 118.494 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 39.34 Mbit/s
95th percentile per-packet one-way delay: 118.989 ms
Loss rate: 1.43%
-- Flow 3:
Average throughput: 28.53 Mbit/s
95th percentile per-packet one-way delay: 120.633 ms
Loss rate: 3.90%
```
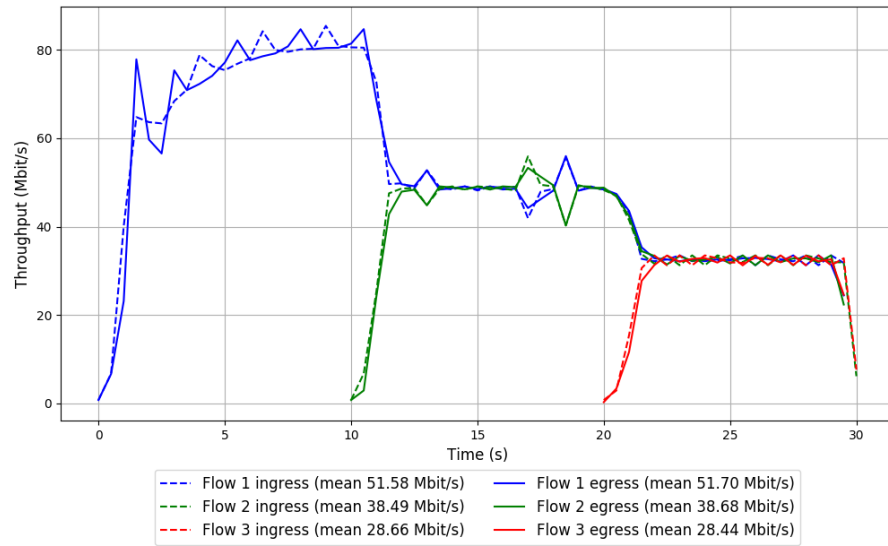
Run 7: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 49.78 Mbit/s)   Flow 1 egress (mean 49.89 Mbit/s)
Flow 2 ingress (mean 39.28 Mbit/s)   Flow 2 egress (mean 39.34 Mbit/s)
Flow 3 ingress (mean 28.74 Mbit/s)   Flow 3 egress (mean 28.53 Mbit/s)

Flow 1 (95th percentile 118.49 ms)   Flow 2 (95th percentile 118.99 ms)   Flow 3 (95th percentile 120.63 ms)
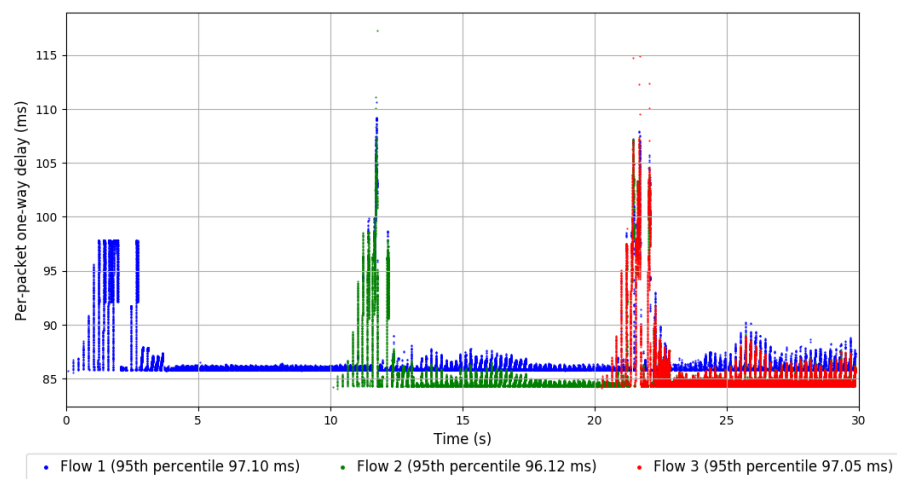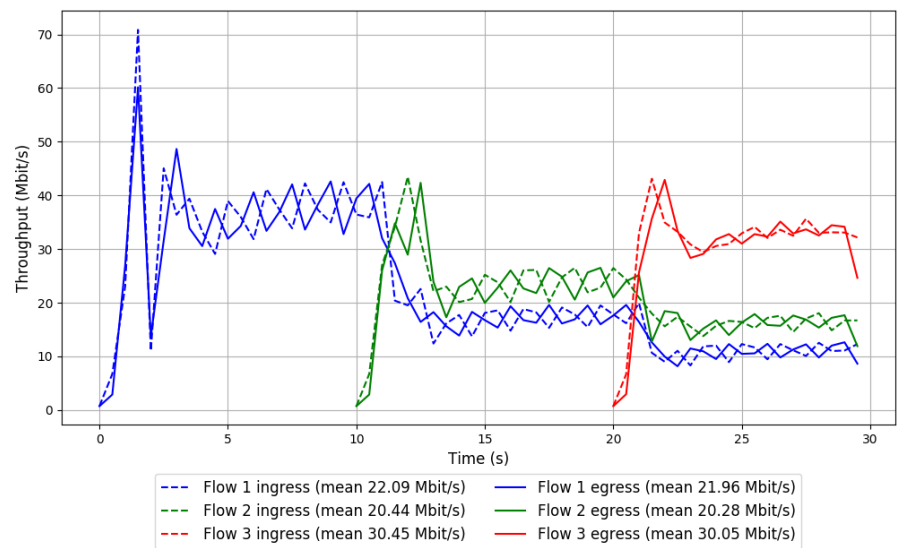
```
Run 8: Statistics of TCP Cubic

Start at: 2018-02-04 20:32:21
End at: 2018-02-04 20:32:51
Local clock offset: -0.02 ms
Remote clock offset: -0.856 ms


# Below is generated by plot.py at 2018-02-05 01:27:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.66 Mbit/s
95th percentile per-packet one-way delay: 117.684 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 51.70 Mbit/s
95th percentile per-packet one-way delay: 117.446 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 38.68 Mbit/s
95th percentile per-packet one-way delay: 117.454 ms
Loss rate: 1.44%
-- Flow 3:
Average throughput: 28.44 Mbit/s
95th percentile per-packet one-way delay: 118.108 ms
Loss rate: 3.92%
```

Run 8: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 51.58 Mbit/s) --- Flow 1 egress (mean 51.70 Mbit/s)
Flow 2 ingress (mean 38.49 Mbit/s) --- Flow 2 egress (mean 38.68 Mbit/s)
Flow 3 ingress (mean 28.66 Mbit/s) --- Flow 3 egress (mean 28.44 Mbit/s)

Flow 1 (95th percentile 117.45 ms)   Flow 2 (95th percentile 117.45 ms)   Flow 3 (95th percentile 118.11 ms)

```
Run 9: Statistics of TCP Cubic

Start at: 2018-02-04 20:56:17
End at: 2018-02-04 20:56:47
Local clock offset: -0.04 ms
Remote clock offset: -1.671 ms


# Below is generated by plot.py at 2018-02-05 01:27:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 45.28 Mbit/s
95th percentile per-packet one-way delay: 96.483 ms
Loss rate: 1.77%
-- Flow 1:
Average throughput: 21.96 Mbit/s
95th percentile per-packet one-way delay: 97.097 ms
Loss rate: 1.22%
-- Flow 2:
Average throughput: 20.28 Mbit/s
95th percentile per-packet one-way delay: 96.119 ms
Loss rate: 1.65%
-- Flow 3:
Average throughput: 30.05 Mbit/s
95th percentile per-packet one-way delay: 97.045 ms
Loss rate: 3.11%
```
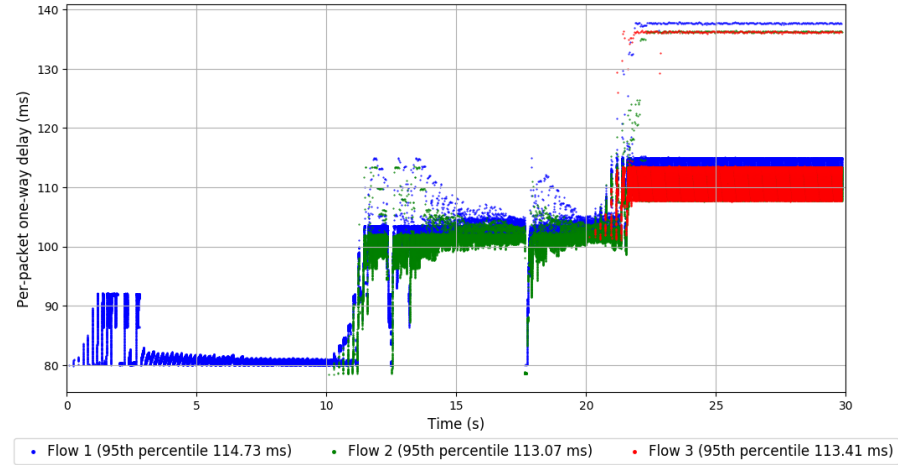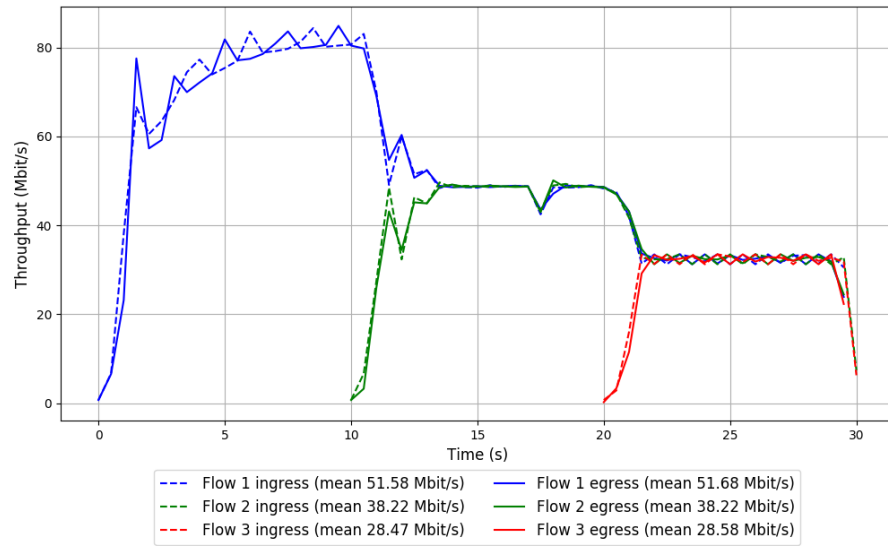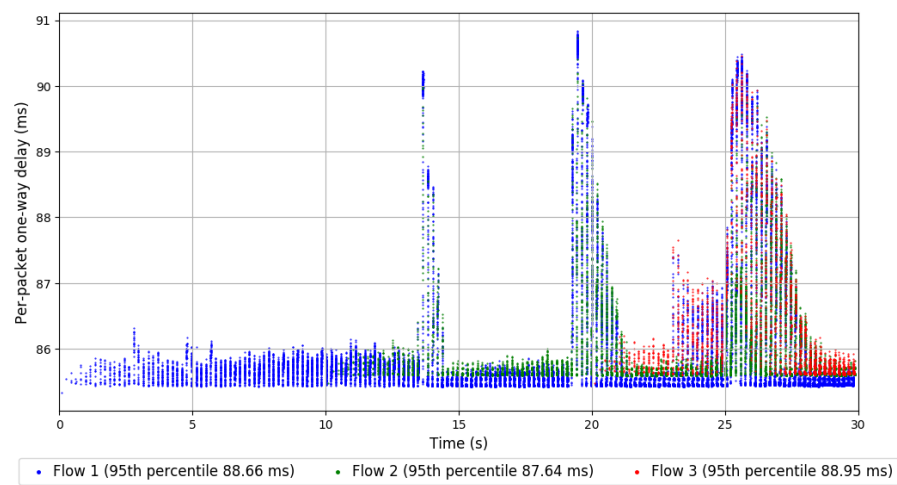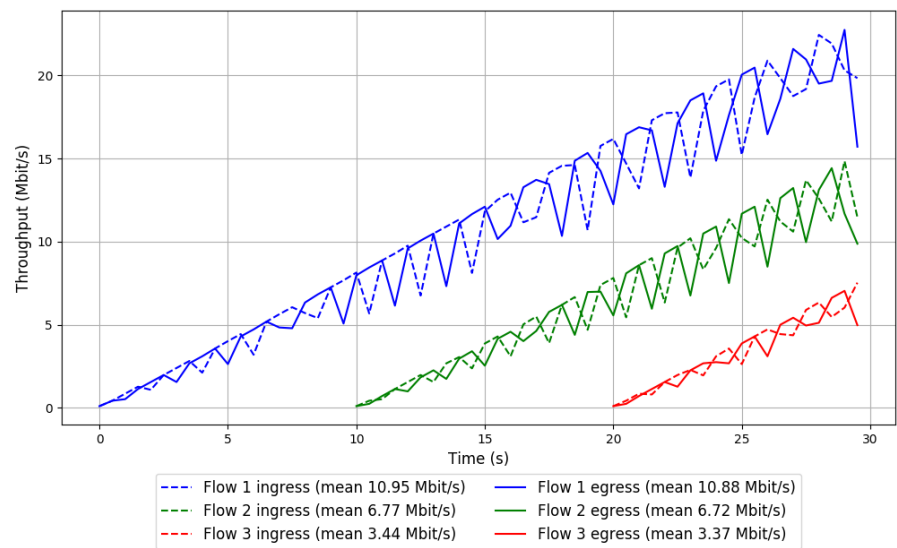
Run 9: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 22.09 Mbit/s) --- Flow 1 egress (mean 21.96 Mbit/s)
Flow 2 ingress (mean 20.44 Mbit/s) --- Flow 2 egress (mean 20.28 Mbit/s)
Flow 3 ingress (mean 30.45 Mbit/s) --- Flow 3 egress (mean 30.05 Mbit/s)

Flow 1 (95th percentile 97.10 ms) • Flow 2 (95th percentile 96.12 ms) • Flow 3 (95th percentile 97.05 ms)

```
Run 10: Statistics of TCP Cubic

Start at: 2018-02-04 21:20:05
End at: 2018-02-04 21:20:35
Local clock offset: -0.096 ms
Remote clock offset: 4.129 ms


# Below is generated by plot.py at 2018-02-05 01:27:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.36 Mbit/s
95th percentile per-packet one-way delay: 113.696 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 51.68 Mbit/s
95th percentile per-packet one-way delay: 114.730 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 38.22 Mbit/s
95th percentile per-packet one-way delay: 113.071 ms
Loss rate: 1.46%
-- Flow 3:
Average throughput: 28.58 Mbit/s
95th percentile per-packet one-way delay: 113.411 ms
Loss rate: 3.90%
```
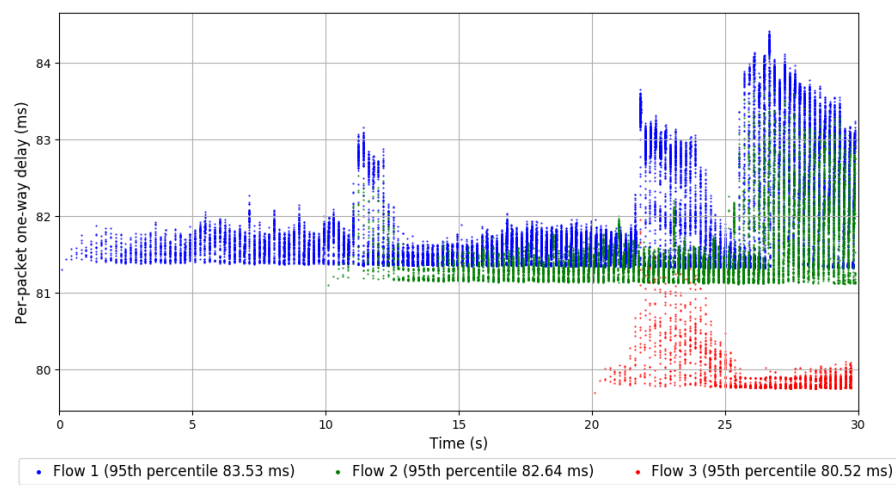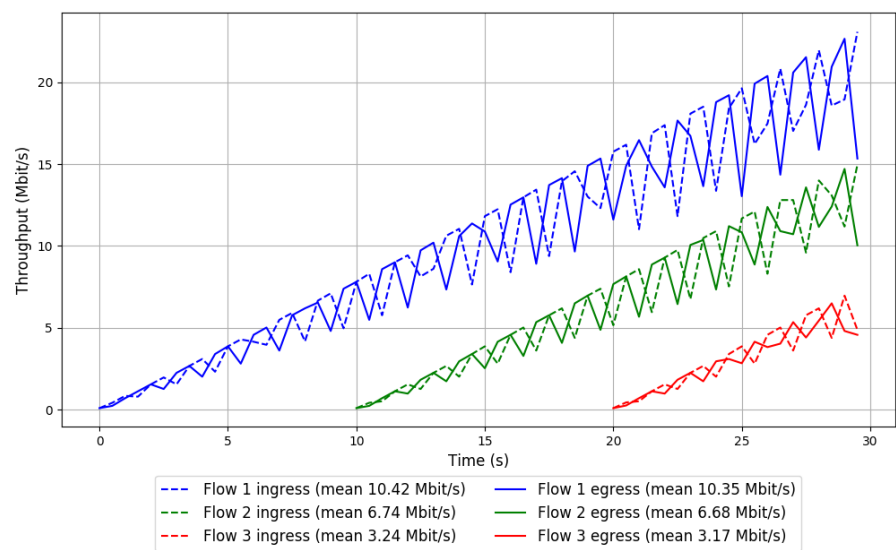
Run 10: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 51.58 Mbit/s) --- Flow 1 egress (mean 51.68 Mbit/s)
Flow 2 ingress (mean 38.22 Mbit/s) --- Flow 2 egress (mean 38.22 Mbit/s)
Flow 3 ingress (mean 28.47 Mbit/s) --- Flow 3 egress (mean 28.58 Mbit/s)

Flow 1 (95th percentile 114.73 ms)   Flow 2 (95th percentile 113.07 ms)   Flow 3 (95th percentile 113.41 ms)
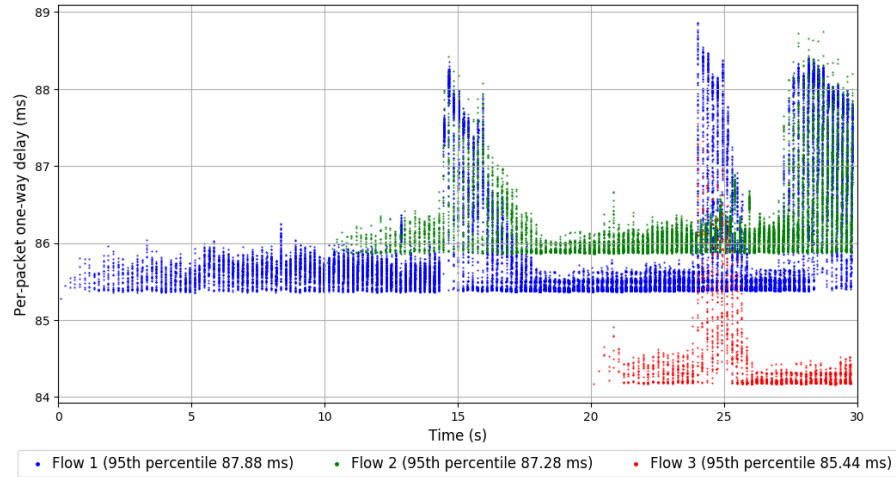
43

```
Run 1: Statistics of LEDBAT

Start at: 2018-02-04 17:39:20
End at: 2018-02-04 17:39:50
Local clock offset: -0.106 ms
Remote clock offset: -5.554 ms


# Below is generated by plot.py at 2018-02-05 01:27:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.42 Mbit/s
95th percentile per-packet one-way delay: 88.372 ms
Loss rate: 1.53%
-- Flow 1:
Average throughput: 10.88 Mbit/s
95th percentile per-packet one-way delay: 88.659 ms
Loss rate: 1.21%
-- Flow 2:
Average throughput: 6.72 Mbit/s
95th percentile per-packet one-way delay: 87.637 ms
Loss rate: 1.76%
-- Flow 3:
Average throughput: 3.37 Mbit/s
95th percentile per-packet one-way delay: 88.954 ms
Loss rate: 3.75%
```
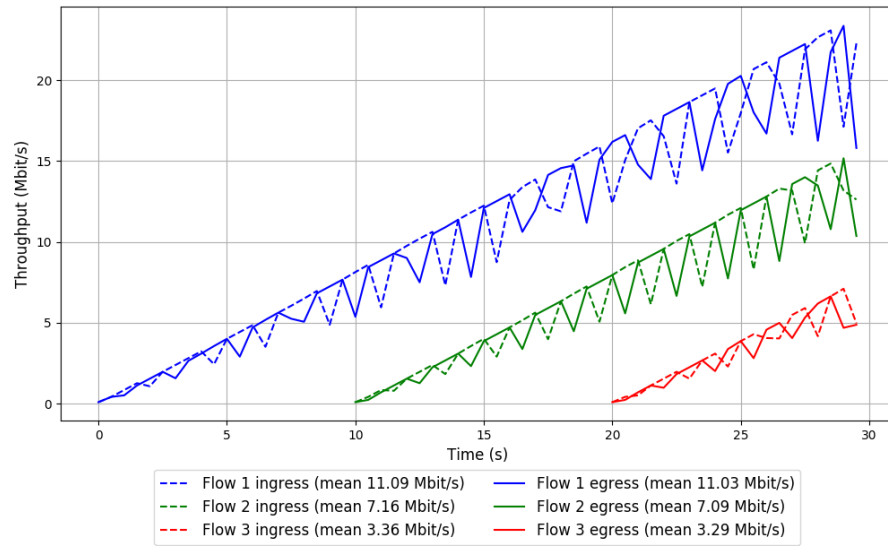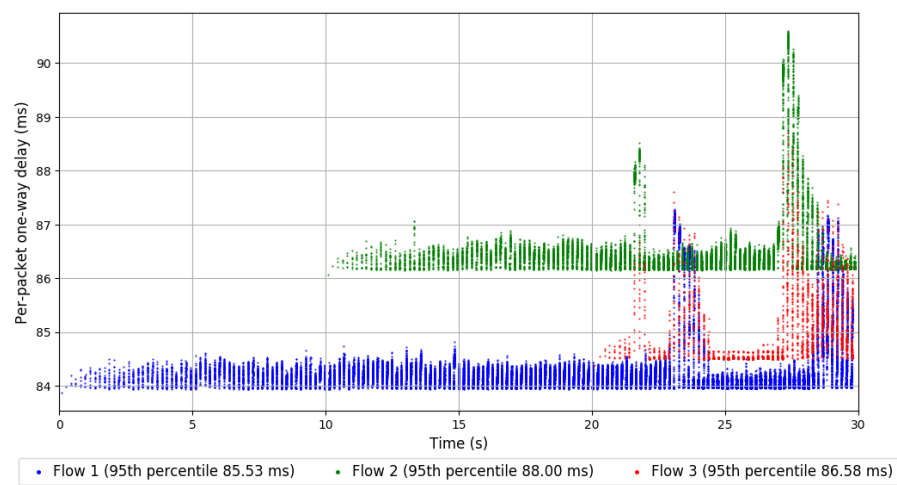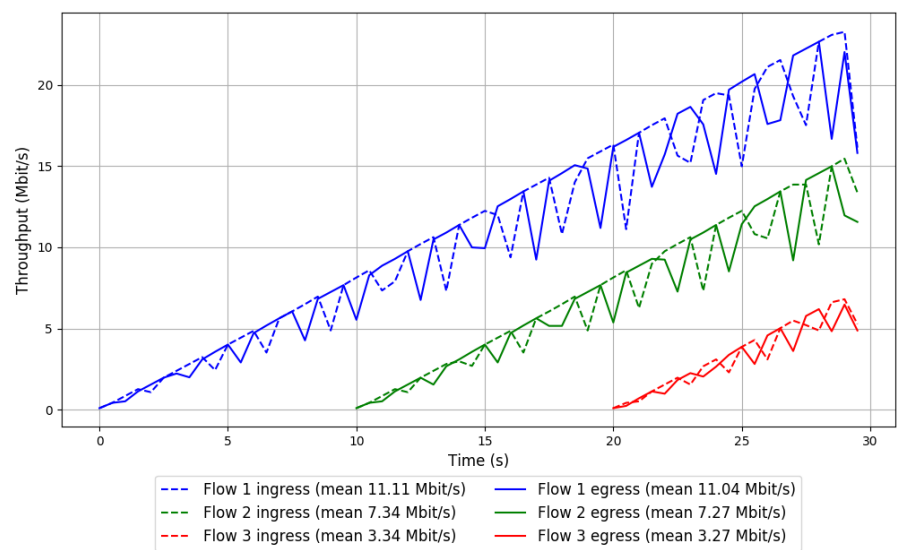
Run 1: Report of LEDBAT — Data Link

Flow 1 ingress (mean 10.95 Mbit/s)   Flow 1 egress (mean 10.88 Mbit/s)
Flow 2 ingress (mean 6.77 Mbit/s)   Flow 2 egress (mean 6.72 Mbit/s)
Flow 3 ingress (mean 3.44 Mbit/s)   Flow 3 egress (mean 3.37 Mbit/s)

Flow 1 (95th percentile 88.66 ms)   Flow 2 (95th percentile 87.64 ms)   Flow 3 (95th percentile 88.95 ms)

```
Run 2: Statistics of LEDBAT

Start at: 2018-02-04 18:03:15
End at: 2018-02-04 18:03:45
Local clock offset: -0.026 ms
Remote clock offset: 0.633 ms

# Below is generated by plot.py at 2018-02-05 01:27:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.81 Mbit/s
95th percentile per-packet one-way delay: 83.303 ms
Loss rate: 1.58%
-- Flow 1:
Average throughput: 10.35 Mbit/s
95th percentile per-packet one-way delay: 83.527 ms
Loss rate: 1.24%
-- Flow 2:
Average throughput: 6.68 Mbit/s
95th percentile per-packet one-way delay: 82.638 ms
Loss rate: 1.83%
-- Flow 3:
Average throughput: 3.17 Mbit/s
95th percentile per-packet one-way delay: 80.524 ms
Loss rate: 3.88%
```

Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2018-02-04 18:27:21
End at: 2018-02-04 18:27:51
Local clock offset: -0.08 ms
Remote clock offset: -6.567 ms


# Below is generated by plot.py at 2018-02-05 01:27:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.79 Mbit/s
95th percentile per-packet one-way delay: 87.744 ms
Loss rate: 1.55%
-- Flow 1:
Average throughput: 11.03 Mbit/s
95th percentile per-packet one-way delay: 87.883 ms
Loss rate: 1.20%
-- Flow 2:
Average throughput: 7.09 Mbit/s
95th percentile per-packet one-way delay: 87.280 ms
Loss rate: 1.85%
-- Flow 3:
Average throughput: 3.29 Mbit/s
95th percentile per-packet one-way delay: 85.439 ms
Loss rate: 3.81%
```
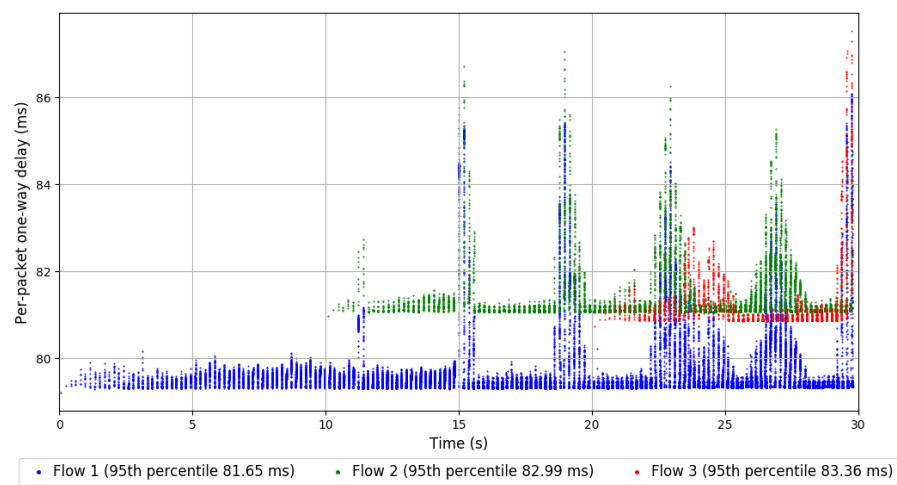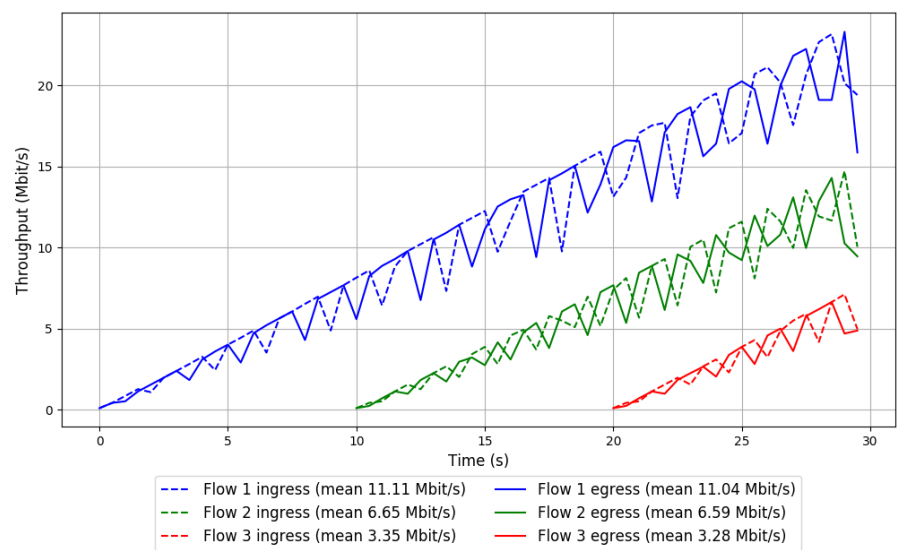
Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2018-02-04 18:51:28
End at: 2018-02-04 18:51:58
Local clock offset: -0.025 ms
Remote clock offset: -4.918 ms


# Below is generated by plot.py at 2018-02-05 01:27:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.90 Mbit/s
95th percentile per-packet one-way delay: 86.693 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 11.04 Mbit/s
95th percentile per-packet one-way delay: 85.533 ms
Loss rate: 1.20%
-- Flow 2:
Average throughput: 7.27 Mbit/s
95th percentile per-packet one-way delay: 88.000 ms
Loss rate: 1.81%
-- Flow 3:
Average throughput: 3.27 Mbit/s
95th percentile per-packet one-way delay: 86.577 ms
Loss rate: 3.81%
```
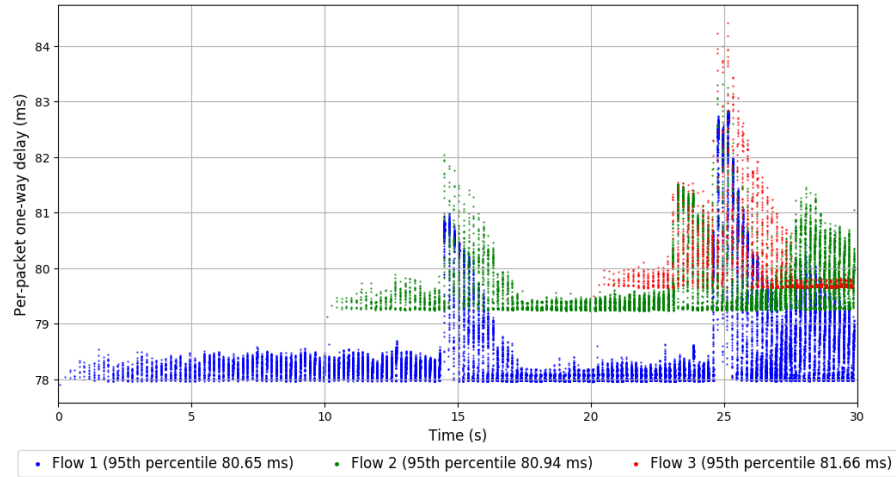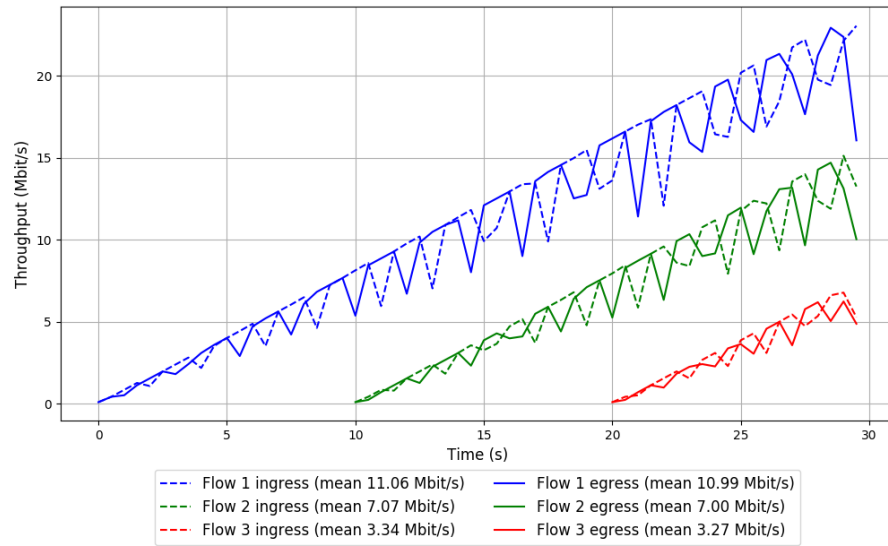
Run 4: Report of LEDBAT — Data Link

```
Run 5: Statistics of LEDBAT

Start at: 2018-02-04 19:15:23
End at: 2018-02-04 19:15:53
Local clock offset: -0.115 ms
Remote clock offset: 1.591 ms


# Below is generated by plot.py at 2018-02-05 01:27:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.46 Mbit/s
95th percentile per-packet one-way delay: 82.337 ms
Loss rate: 1.56%
-- Flow 1:
Average throughput: 11.04 Mbit/s
95th percentile per-packet one-way delay: 81.652 ms
Loss rate: 1.20%
-- Flow 2:
Average throughput: 6.59 Mbit/s
95th percentile per-packet one-way delay: 82.990 ms
Loss rate: 1.91%
-- Flow 3:
Average throughput: 3.28 Mbit/s
95th percentile per-packet one-way delay: 83.358 ms
Loss rate: 3.81%
```
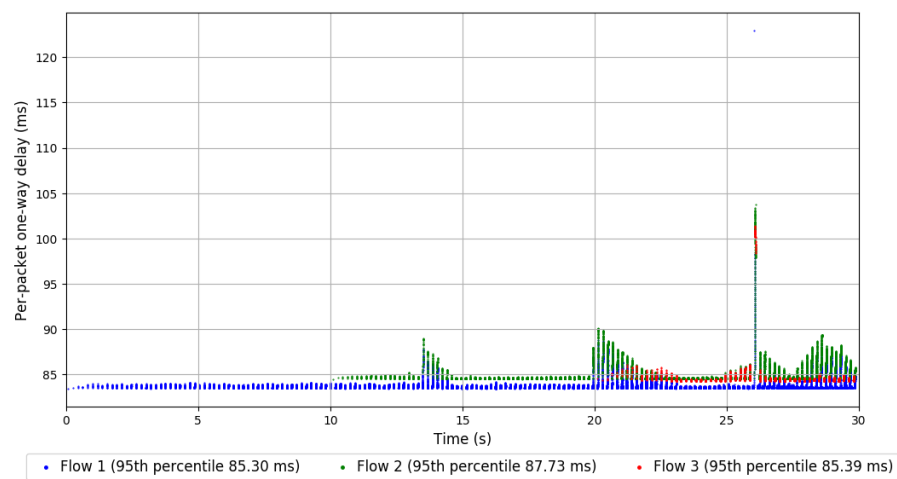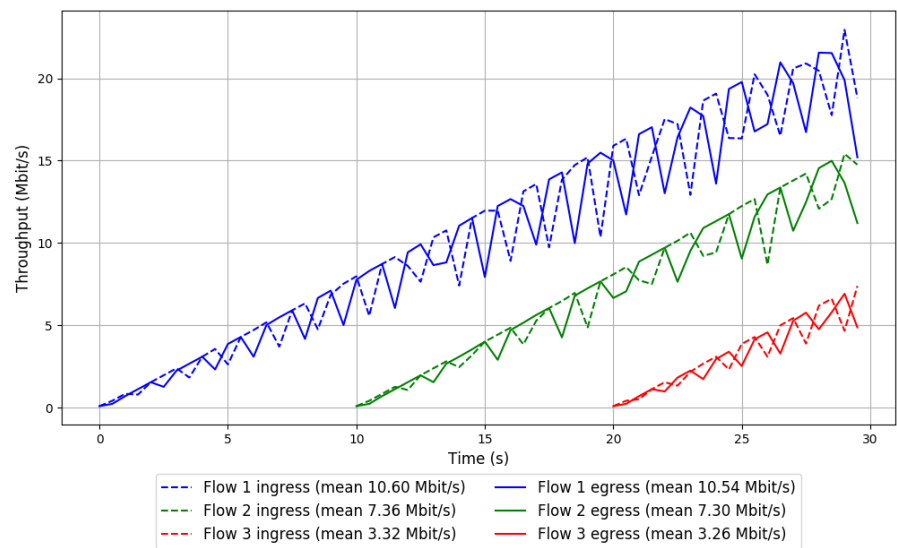
Run 5: Report of LEDBAT — Data Link

```
Run 6: Statistics of LEDBAT

Start at: 2018-02-04 19:39:22
End at: 2018-02-04 19:39:52
Local clock offset: -0.077 ms
Remote clock offset: 3.93 ms


# Below is generated by plot.py at 2018-02-05 01:27:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.70 Mbit/s
95th percentile per-packet one-way delay: 80.831 ms
Loss rate: 1.55%
-- Flow 1:
Average throughput: 10.99 Mbit/s
95th percentile per-packet one-way delay: 80.647 ms
Loss rate: 1.20%
-- Flow 2:
Average throughput: 7.00 Mbit/s
95th percentile per-packet one-way delay: 80.940 ms
Loss rate: 1.84%
-- Flow 3:
Average throughput: 3.27 Mbit/s
95th percentile per-packet one-way delay: 81.656 ms
Loss rate: 3.82%
```
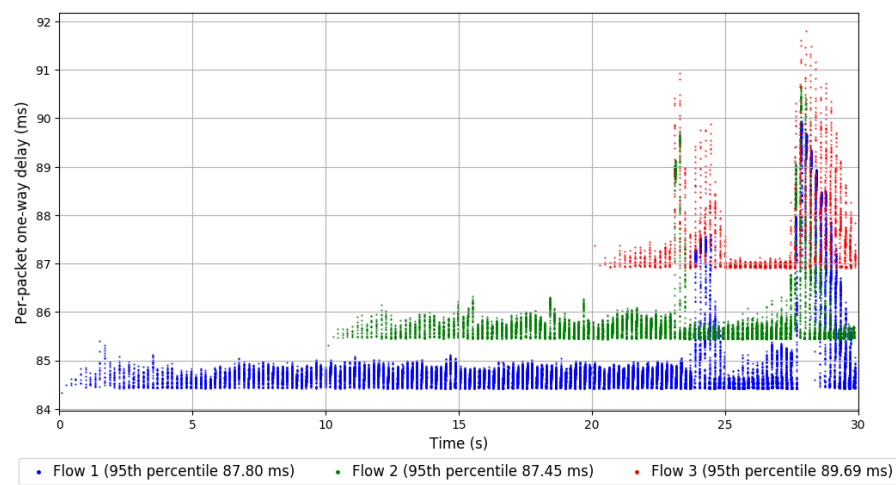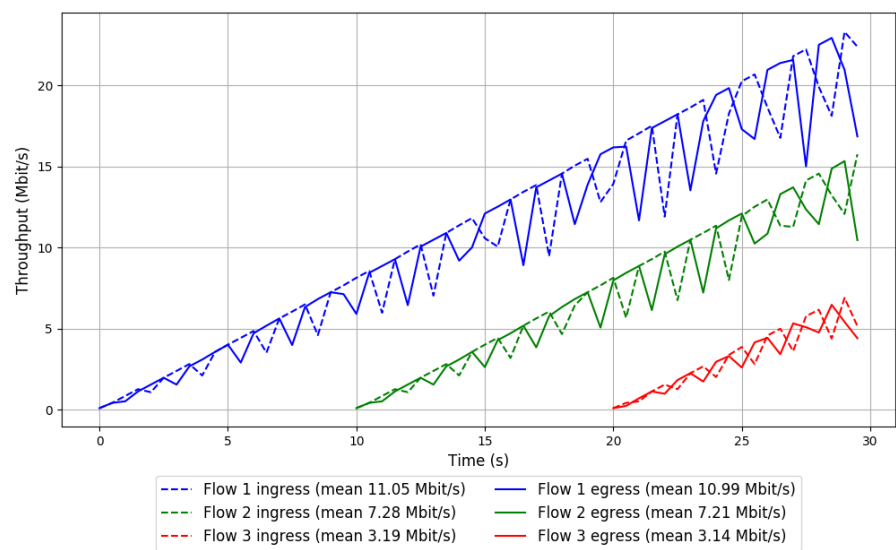
Run 6: Report of LEDBAT — Data Link

```
Run 7: Statistics of LEDBAT

Start at: 2018-02-04 20:03:09
End at: 2018-02-04 20:03:39
Local clock offset: -0.08 ms
Remote clock offset: -0.993 ms

# Below is generated by plot.py at 2018-02-05 01:27:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.44 Mbit/s
95th percentile per-packet one-way delay: 86.528 ms
Loss rate: 1.55%
-- Flow 1:
Average throughput: 10.54 Mbit/s
95th percentile per-packet one-way delay: 85.296 ms
Loss rate: 1.20%
-- Flow 2:
Average throughput: 7.30 Mbit/s
95th percentile per-packet one-way delay: 87.727 ms
Loss rate: 1.81%
-- Flow 3:
Average throughput: 3.26 Mbit/s
95th percentile per-packet one-way delay: 85.392 ms
Loss rate: 3.82%
```
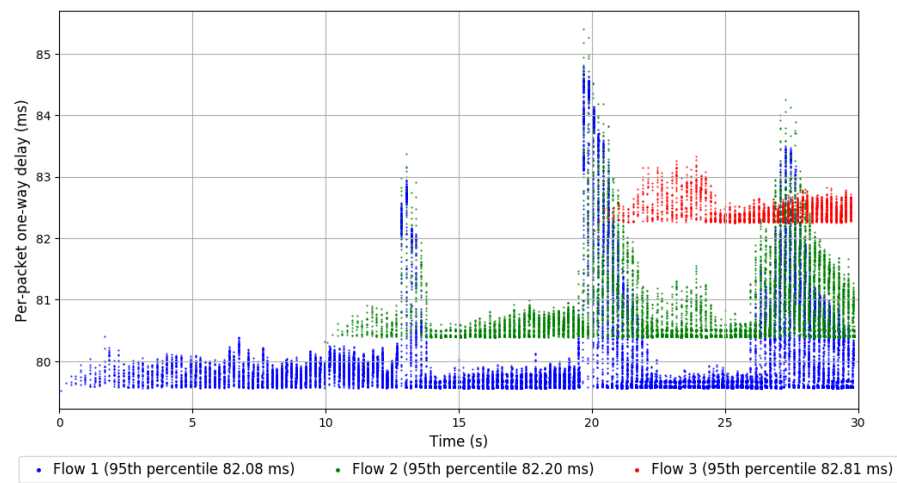
Run 7: Report of LEDBAT — Data Link

Flow 1 ingress (mean 10.60 Mbit/s)   Flow 1 egress (mean 10.54 Mbit/s)
Flow 2 ingress (mean 7.36 Mbit/s)   Flow 2 egress (mean 7.30 Mbit/s)
Flow 3 ingress (mean 3.32 Mbit/s)   Flow 3 egress (mean 3.26 Mbit/s)

Flow 1 (95th percentile 85.30 ms)   Flow 2 (95th percentile 87.73 ms)   Flow 3 (95th percentile 85.39 ms)

```
Run 8: Statistics of LEDBAT

Start at: 2018-02-04 20:27:04
End at: 2018-02-04 20:27:34
Local clock offset: -0.018 ms
Remote clock offset: -1.664 ms

# Below is generated by plot.py at 2018-02-05 01:27:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.80 Mbit/s
95th percentile per-packet one-way delay: 88.270 ms
Loss rate: 1.52%
-- Flow 1:
Average throughput: 10.99 Mbit/s
95th percentile per-packet one-way delay: 87.797 ms
Loss rate: 1.20%
-- Flow 2:
Average throughput: 7.21 Mbit/s
95th percentile per-packet one-way delay: 87.450 ms
Loss rate: 1.83%
-- Flow 3:
Average throughput: 3.14 Mbit/s
95th percentile per-packet one-way delay: 89.693 ms
Loss rate: 3.51%
```
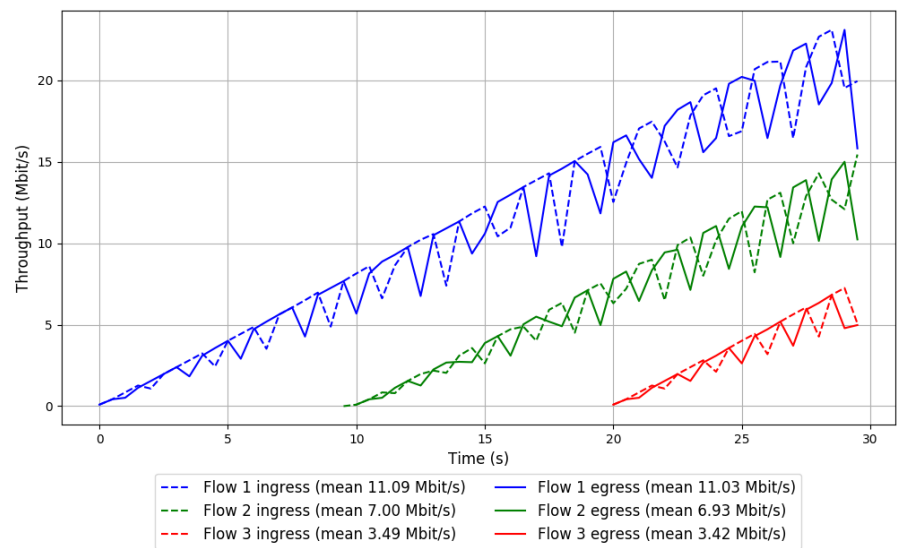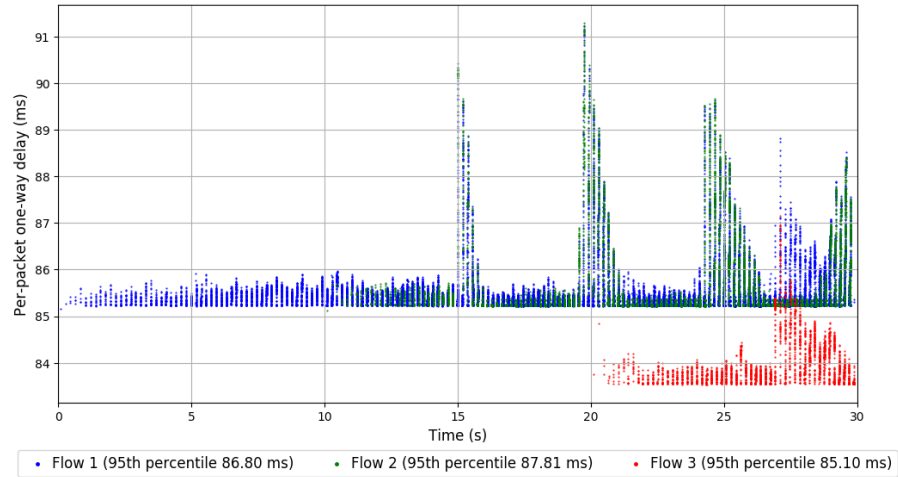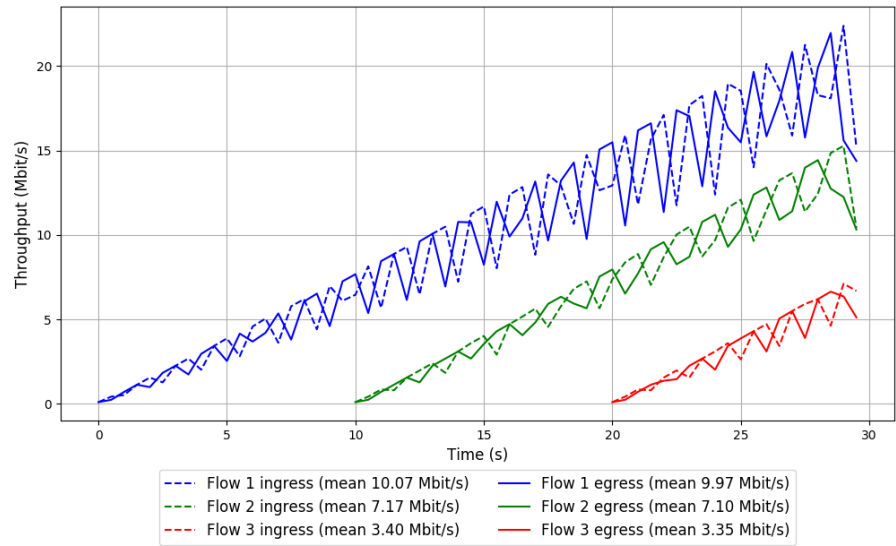
Run 8: Report of LEDBAT — Data Link

Flow 1 ingress (mean 11.05 Mbit/s) --- Flow 1 egress (mean 10.99 Mbit/s)
Flow 2 ingress (mean 7.28 Mbit/s) --- Flow 2 egress (mean 7.21 Mbit/s)
Flow 3 ingress (mean 3.19 Mbit/s) --- Flow 3 egress (mean 3.14 Mbit/s)

Flow 1 (95th percentile 87.80 ms)   Flow 2 (95th percentile 87.45 ms)   Flow 3 (95th percentile 89.69 ms)

```
Run 9: Statistics of LEDBAT

Start at: 2018-02-04 20:51:02
End at: 2018-02-04 20:51:32
Local clock offset: -0.016 ms
Remote clock offset: 3.252 ms

# Below is generated by plot.py at 2018-02-05 01:27:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.73 Mbit/s
95th percentile per-packet one-way delay: 82.520 ms
Loss rate: 1.56%
-- Flow 1:
Average throughput: 11.03 Mbit/s
95th percentile per-packet one-way delay: 82.084 ms
Loss rate: 1.20%
-- Flow 2:
Average throughput: 6.93 Mbit/s
95th percentile per-packet one-way delay: 82.204 ms
Loss rate: 1.86%
-- Flow 3:
Average throughput: 3.42 Mbit/s
95th percentile per-packet one-way delay: 82.808 ms
Loss rate: 3.73%
```
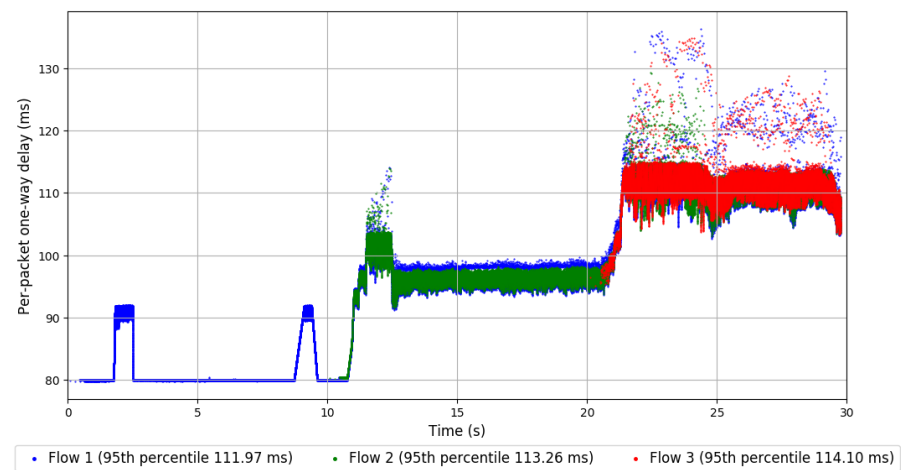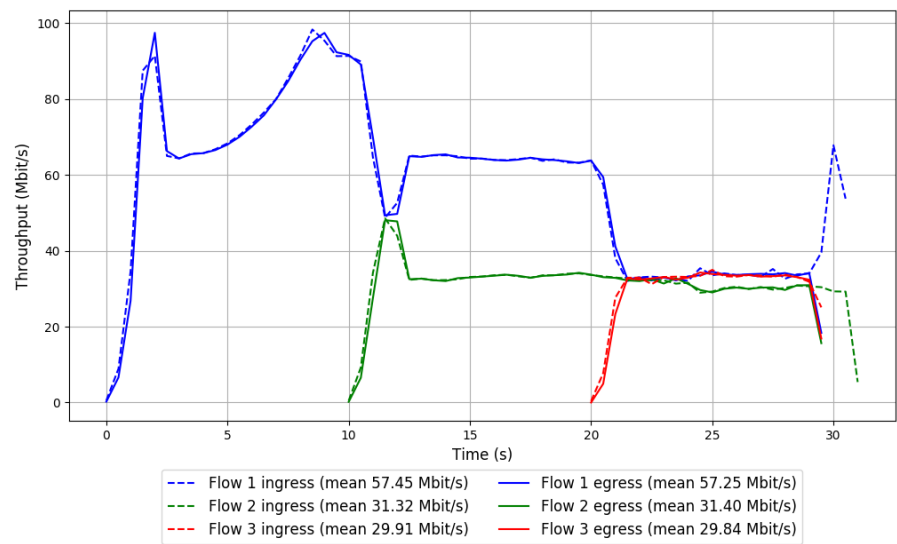
Run 9: Report of LEDBAT — Data Link

```
Run 10: Statistics of LEDBAT

Start at: 2018-02-04 21:14:49
End at: 2018-02-04 21:15:19
Local clock offset: -0.093 ms
Remote clock offset: -0.676 ms


# Below is generated by plot.py at 2018-02-05 01:27:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.75 Mbit/s
95th percentile per-packet one-way delay: 87.180 ms
Loss rate: 1.59%
-- Flow 1:
Average throughput: 9.97 Mbit/s
95th percentile per-packet one-way delay: 86.799 ms
Loss rate: 1.26%
-- Flow 2:
Average throughput: 7.10 Mbit/s
95th percentile per-packet one-way delay: 87.811 ms
Loss rate: 1.84%
-- Flow 3:
Average throughput: 3.35 Mbit/s
95th percentile per-packet one-way delay: 85.098 ms
Loss rate: 3.43%
```
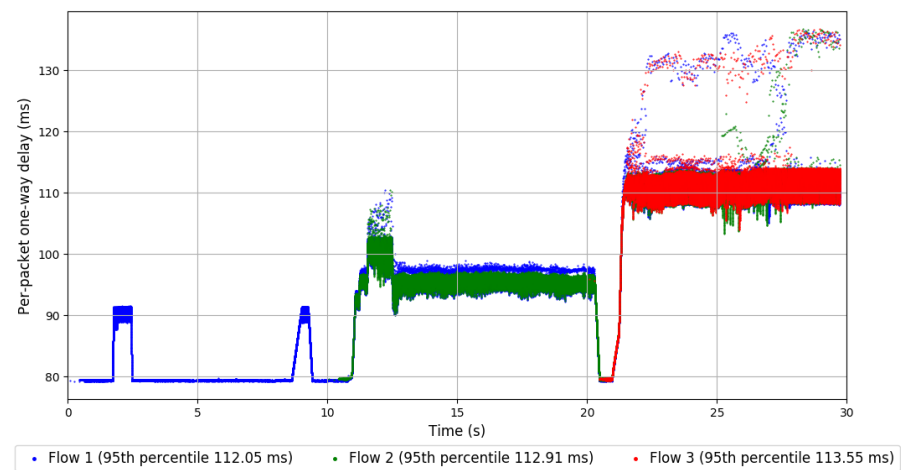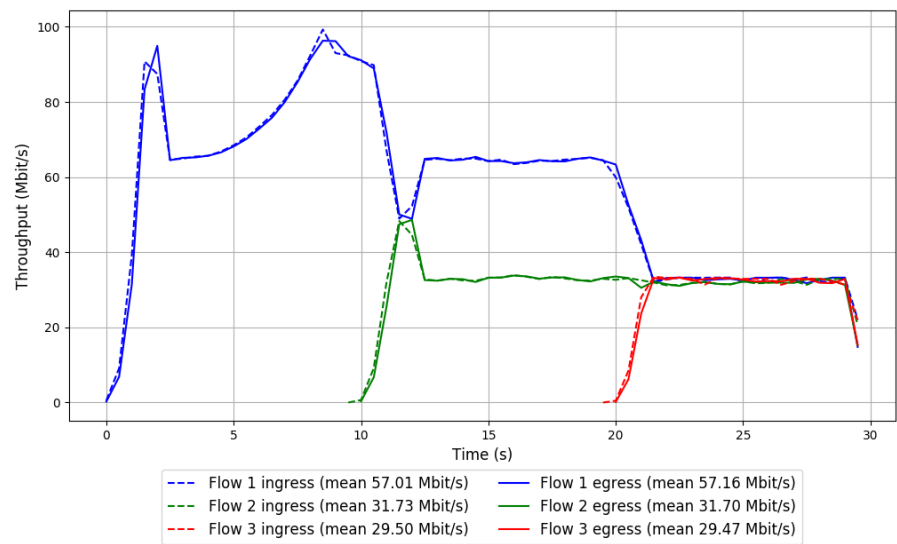
Run 10: Report of LEDBAT — Data Link

- - - Flow 1 ingress (mean 10.07 Mbit/s) — Flow 1 egress (mean 9.97 Mbit/s)
- - - Flow 2 ingress (mean 7.17 Mbit/s) — Flow 2 egress (mean 7.10 Mbit/s)
- - - Flow 3 ingress (mean 3.40 Mbit/s) — Flow 3 egress (mean 3.35 Mbit/s)

• Flow 1 (95th percentile 86.80 ms)   • Flow 2 (95th percentile 87.81 ms)   • Flow 3 (95th percentile 85.10 ms)
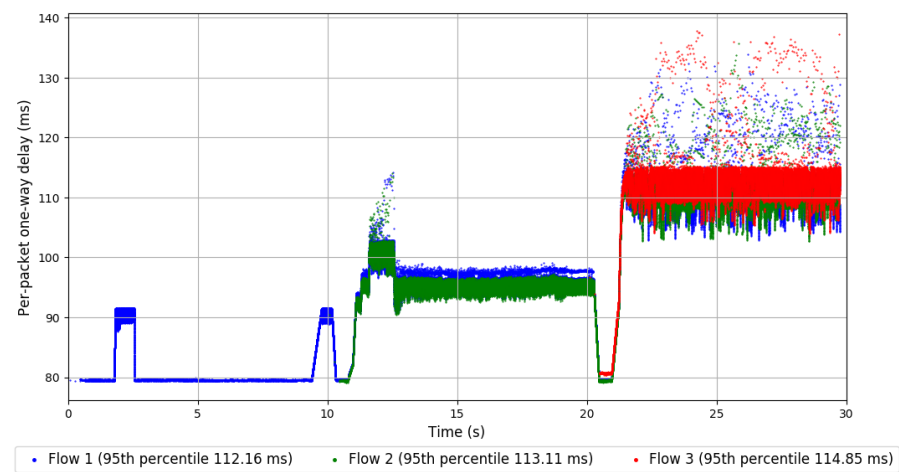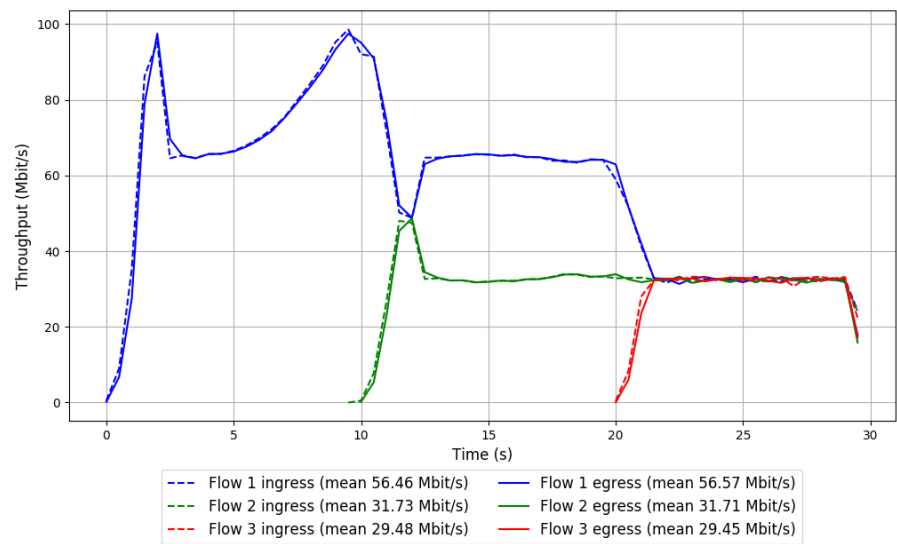
63

```
Run 1: Statistics of PCC

Start at: 2018-02-04 17:38:01
End at: 2018-02-04 17:38:31
Local clock offset: -0.06 ms
Remote clock offset: 0.129 ms


# Below is generated by plot.py at 2018-02-05 01:28:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.77 Mbit/s
95th percentile per-packet one-way delay: 112.943 ms
Loss rate: 4.58%
-- Flow 1:
Average throughput: 57.25 Mbit/s
95th percentile per-packet one-way delay: 111.965 ms
Loss rate: 4.22%
-- Flow 2:
Average throughput: 31.40 Mbit/s
95th percentile per-packet one-way delay: 113.262 ms
Loss rate: 6.45%
-- Flow 3:
Average throughput: 29.84 Mbit/s
95th percentile per-packet one-way delay: 114.101 ms
Loss rate: 2.58%
```

Run 1: Report of PCC — Data Link

```
Run 2: Statistics of PCC

Start at: 2018-02-04 18:01:56
End at: 2018-02-04 18:02:26
Local clock offset: -0.013 ms
Remote clock offset: 0.038 ms


# Below is generated by plot.py at 2018-02-05 01:28:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.75 Mbit/s
95th percentile per-packet one-way delay: 112.725 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 57.16 Mbit/s
95th percentile per-packet one-way delay: 112.045 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 31.70 Mbit/s
95th percentile per-packet one-way delay: 112.914 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 29.47 Mbit/s
95th percentile per-packet one-way delay: 113.548 ms
Loss rate: 2.27%
```
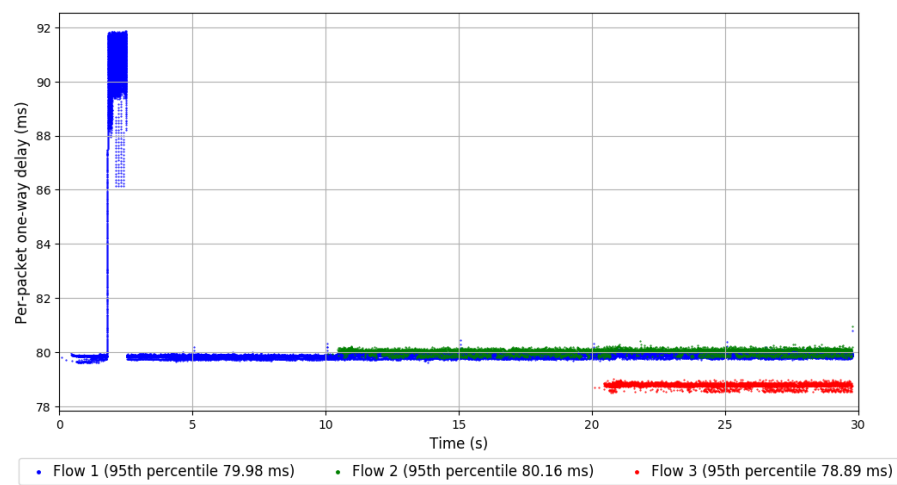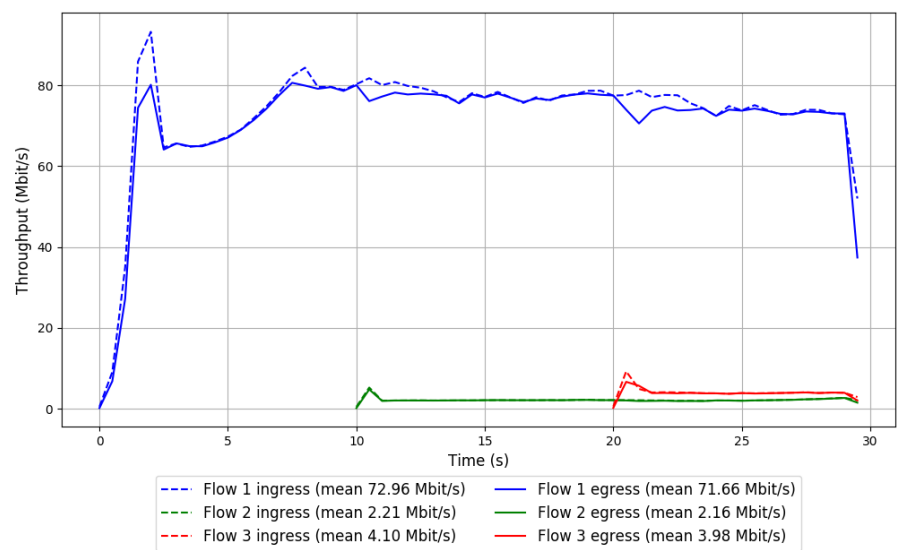
Run 2: Report of PCC — Data Link

- - - Flow 1 ingress (mean 57.01 Mbit/s) —— Flow 1 egress (mean 57.16 Mbit/s)
- - - Flow 2 ingress (mean 31.73 Mbit/s) —— Flow 2 egress (mean 31.70 Mbit/s)
- - - Flow 3 ingress (mean 29.50 Mbit/s) —— Flow 3 egress (mean 29.47 Mbit/s)

• Flow 1 (95th percentile 112.05 ms)   • Flow 2 (95th percentile 112.91 ms)   • Flow 3 (95th percentile 113.55 ms)

67

```
Run 3: Statistics of PCC

Start at: 2018-02-04 18:26:02
End at: 2018-02-04 18:26:32
Local clock offset: -0.025 ms
Remote clock offset: -0.114 ms


# Below is generated by plot.py at 2018-02-05 01:28:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.15 Mbit/s
95th percentile per-packet one-way delay: 113.403 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 56.57 Mbit/s
95th percentile per-packet one-way delay: 112.161 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 31.71 Mbit/s
95th percentile per-packet one-way delay: 113.112 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 29.45 Mbit/s
95th percentile per-packet one-way delay: 114.846 ms
Loss rate: 2.27%
```
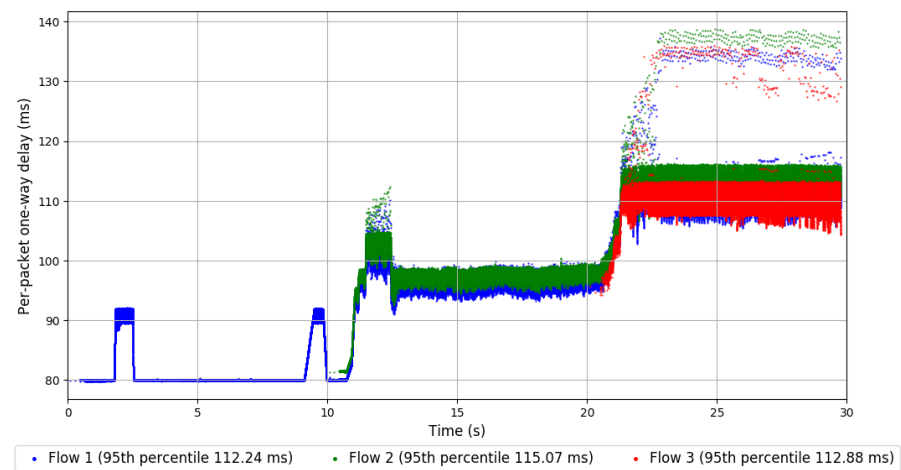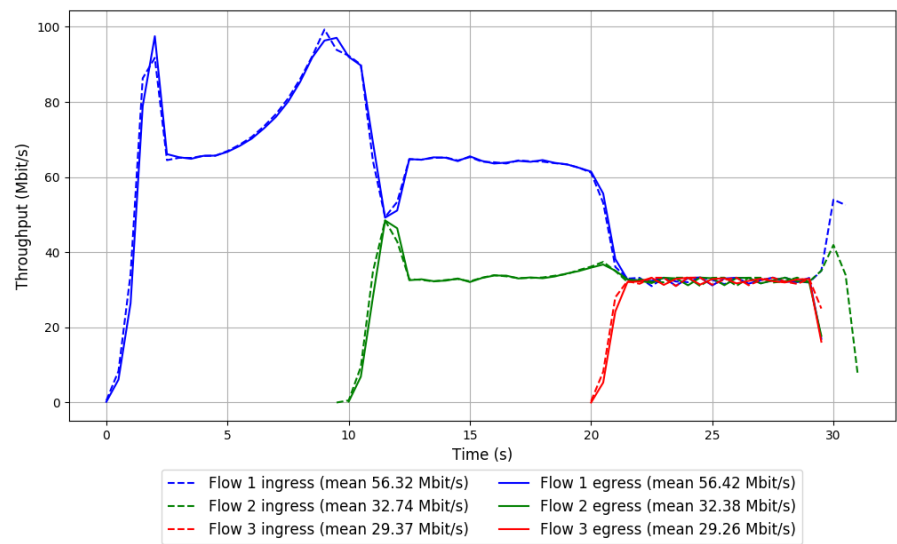
Run 3: Report of PCC — Data Link

Flow 1 ingress (mean 56.46 Mbit/s) — Flow 1 egress (mean 56.57 Mbit/s)
Flow 2 ingress (mean 31.73 Mbit/s) — Flow 2 egress (mean 31.71 Mbit/s)
Flow 3 ingress (mean 29.48 Mbit/s) — Flow 3 egress (mean 29.45 Mbit/s)

Flow 1 (95th percentile 112.16 ms)   Flow 2 (95th percentile 113.11 ms)   Flow 3 (95th percentile 114.85 ms)

```
Run 4: Statistics of PCC

Start at: 2018-02-04 18:50:10
End at: 2018-02-04 18:50:40
Local clock offset: -0.034 ms
Remote clock offset: 0.747 ms


# Below is generated by plot.py at 2018-02-05 01:28:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.39 Mbit/s
95th percentile per-packet one-way delay: 80.013 ms
Loss rate: 2.43%
-- Flow 1:
Average throughput: 71.66 Mbit/s
95th percentile per-packet one-way delay: 79.977 ms
Loss rate: 2.38%
-- Flow 2:
Average throughput: 2.16 Mbit/s
95th percentile per-packet one-way delay: 80.155 ms
Loss rate: 2.80%
-- Flow 3:
Average throughput: 3.98 Mbit/s
95th percentile per-packet one-way delay: 78.891 ms
Loss rate: 4.68%
```
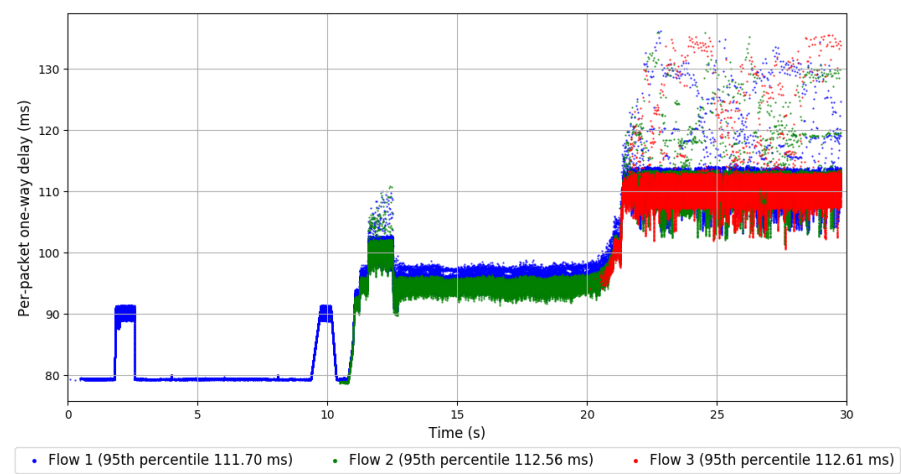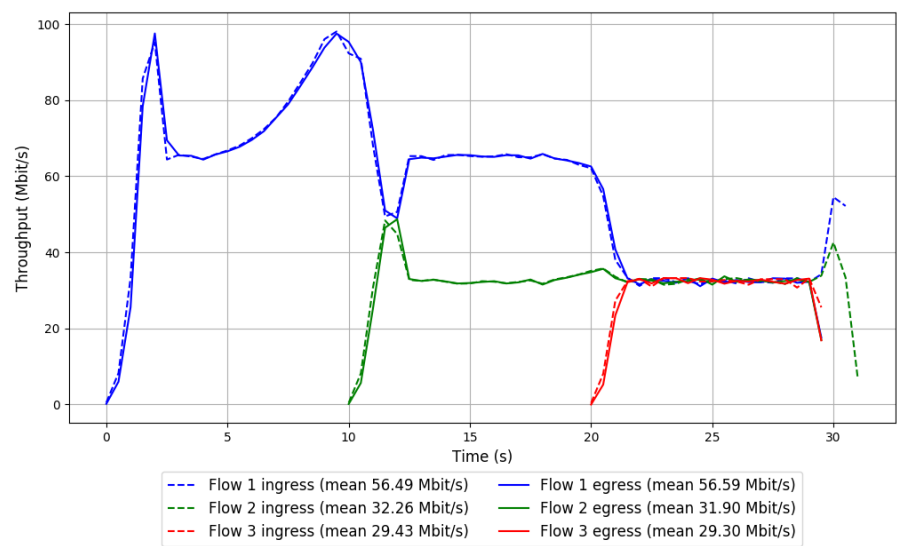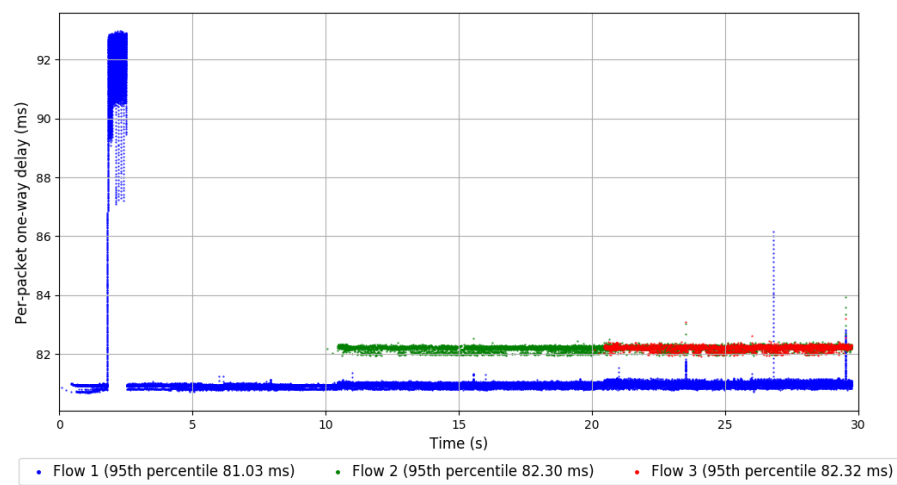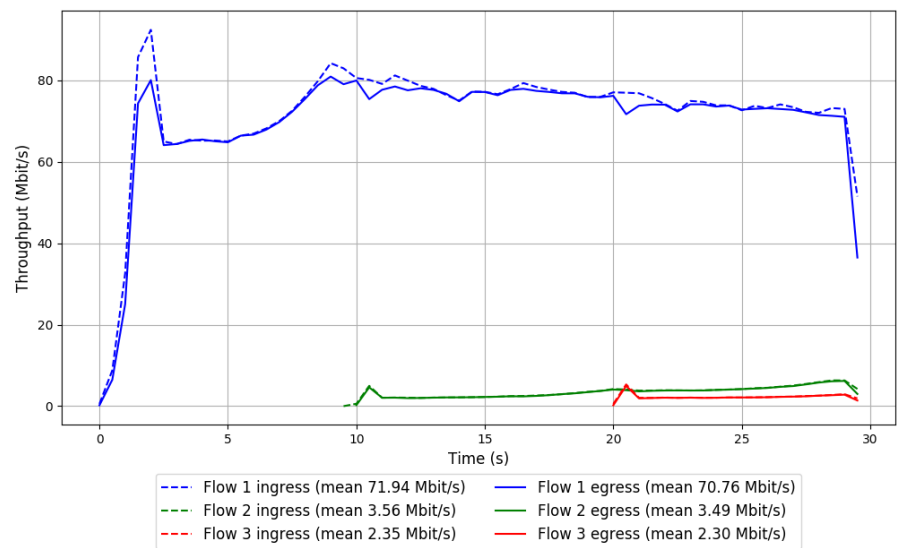
Run 4: Report of PCC — Data Link

```
Run 5: Statistics of PCC

Start at: 2018-02-04 19:14:03
End at: 2018-02-04 19:14:33
Local clock offset: -0.124 ms
Remote clock offset: 2.324 ms


# Below is generated by plot.py at 2018-02-05 01:28:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.40 Mbit/s
95th percentile per-packet one-way delay: 113.643 ms
Loss rate: 4.69%
-- Flow 1:
Average throughput: 56.42 Mbit/s
95th percentile per-packet one-way delay: 112.238 ms
Loss rate: 3.77%
-- Flow 2:
Average throughput: 32.38 Mbit/s
95th percentile per-packet one-way delay: 115.066 ms
Loss rate: 7.86%
-- Flow 3:
Average throughput: 29.26 Mbit/s
95th percentile per-packet one-way delay: 112.878 ms
Loss rate: 2.67%
```
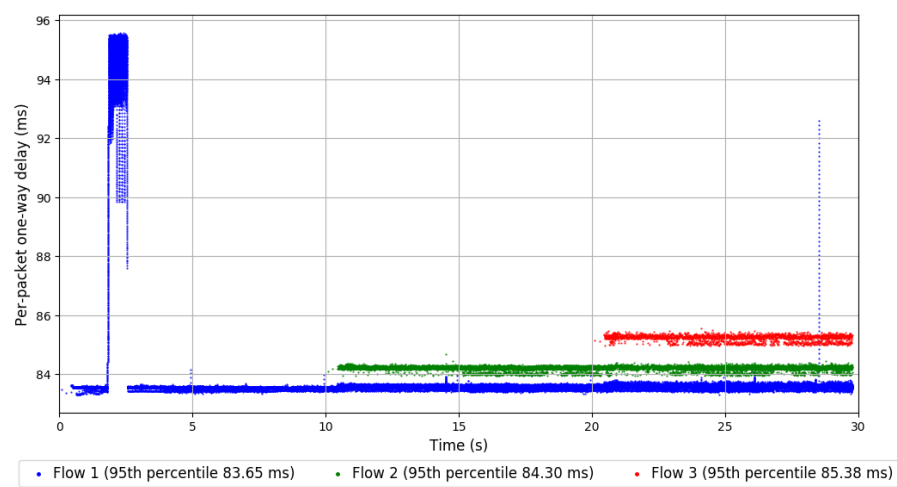
Run 5: Report of PCC — Data Link

```
Run 6: Statistics of PCC

Start at: 2018-02-04 19:38:03
End at: 2018-02-04 19:38:33
Local clock offset: -0.062 ms
Remote clock offset: 3.196 ms

# Below is generated by plot.py at 2018-02-05 01:28:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.24 Mbit/s
95th percentile per-packet one-way delay: 112.290 ms
Loss rate: 4.67%
-- Flow 1:
Average throughput: 56.59 Mbit/s
95th percentile per-packet one-way delay: 111.702 ms
Loss rate: 3.76%
-- Flow 2:
Average throughput: 31.90 Mbit/s
95th percentile per-packet one-way delay: 112.561 ms
Loss rate: 7.86%
-- Flow 3:
Average throughput: 29.30 Mbit/s
95th percentile per-packet one-way delay: 112.613 ms
Loss rate: 2.64%
```
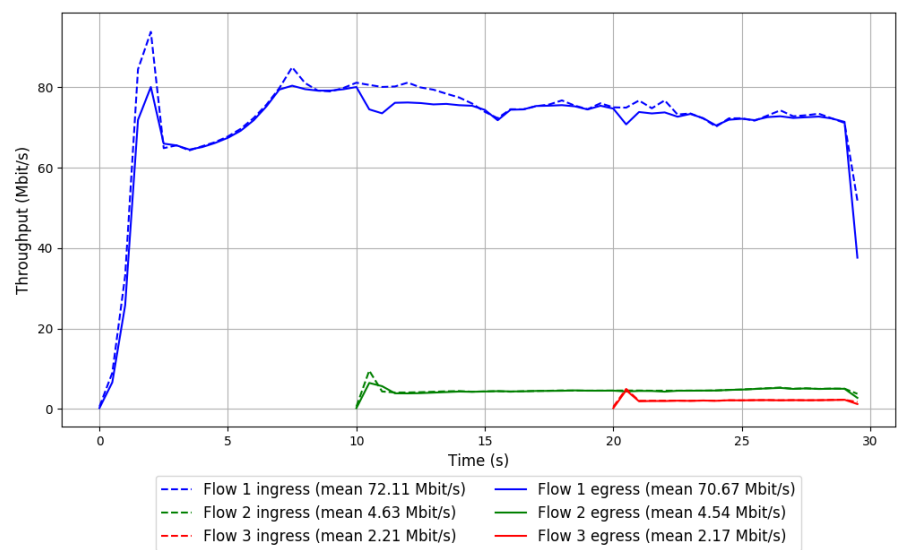
Run 6: Report of PCC — Data Link

- - - Flow 1 ingress (mean 56.49 Mbit/s) —— Flow 1 egress (mean 56.59 Mbit/s)
- - - Flow 2 ingress (mean 32.26 Mbit/s) —— Flow 2 egress (mean 31.90 Mbit/s)
- - - Flow 3 ingress (mean 29.43 Mbit/s) —— Flow 3 egress (mean 29.30 Mbit/s)

• Flow 1 (95th percentile 111.70 ms)   • Flow 2 (95th percentile 112.56 ms)   • Flow 3 (95th percentile 112.61 ms)

```
Run 7: Statistics of PCC

Start at: 2018-02-04 20:01:51
End at: 2018-02-04 20:02:21
Local clock offset: -0.055 ms
Remote clock offset: 2.861 ms


# Below is generated by plot.py at 2018-02-05 01:28:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.82 Mbit/s
95th percentile per-packet one-way delay: 82.211 ms
Loss rate: 2.28%
-- Flow 1:
Average throughput: 70.76 Mbit/s
95th percentile per-packet one-way delay: 81.028 ms
Loss rate: 2.24%
-- Flow 2:
Average throughput: 3.49 Mbit/s
95th percentile per-packet one-way delay: 82.302 ms
Loss rate: 2.85%
-- Flow 3:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 82.318 ms
Loss rate: 3.83%
```
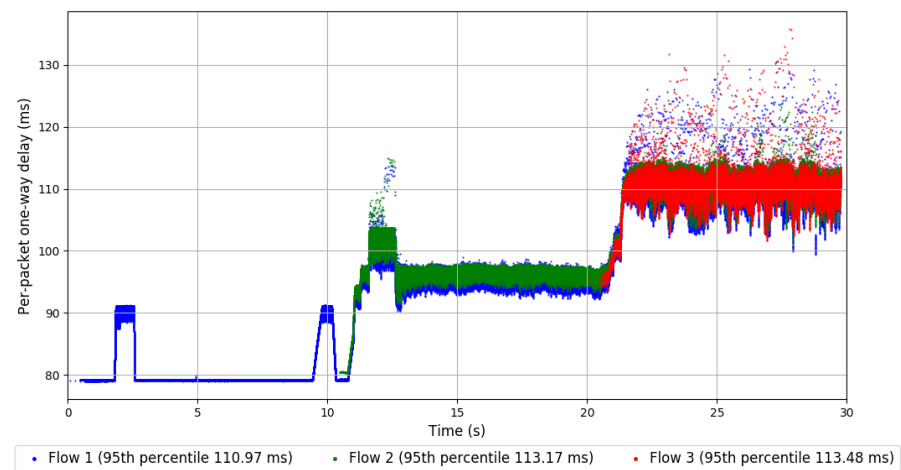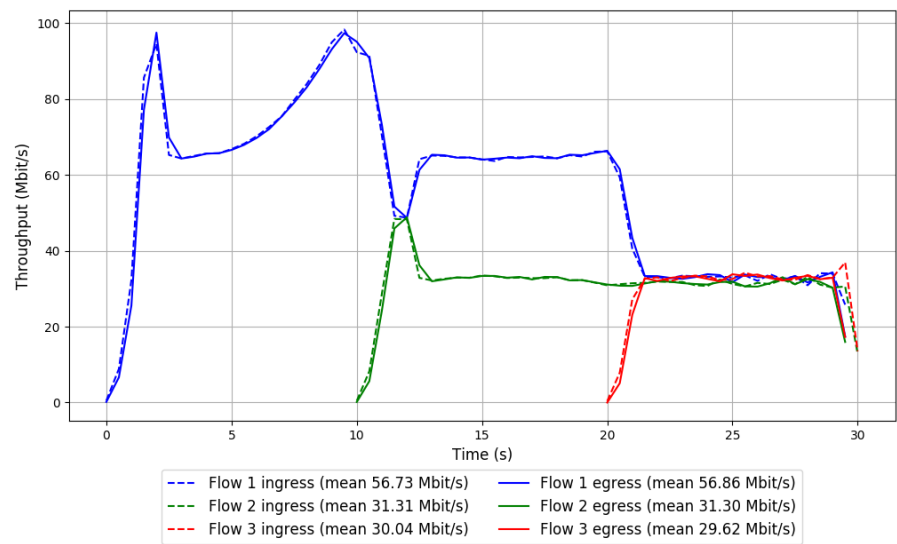
Run 7: Report of PCC — Data Link

```
Run 8: Statistics of PCC

Start at: 2018-02-04 20:25:46
End at: 2018-02-04 20:26:16
Local clock offset: -0.102 ms
Remote clock offset: -0.862 ms


# Below is generated by plot.py at 2018-02-05 01:28:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.38 Mbit/s
95th percentile per-packet one-way delay: 84.267 ms
Loss rate: 2.61%
-- Flow 1:
Average throughput: 70.67 Mbit/s
95th percentile per-packet one-way delay: 83.650 ms
Loss rate: 2.59%
-- Flow 2:
Average throughput: 4.54 Mbit/s
95th percentile per-packet one-way delay: 84.302 ms
Loss rate: 3.01%
-- Flow 3:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 85.375 ms
Loss rate: 3.61%
```
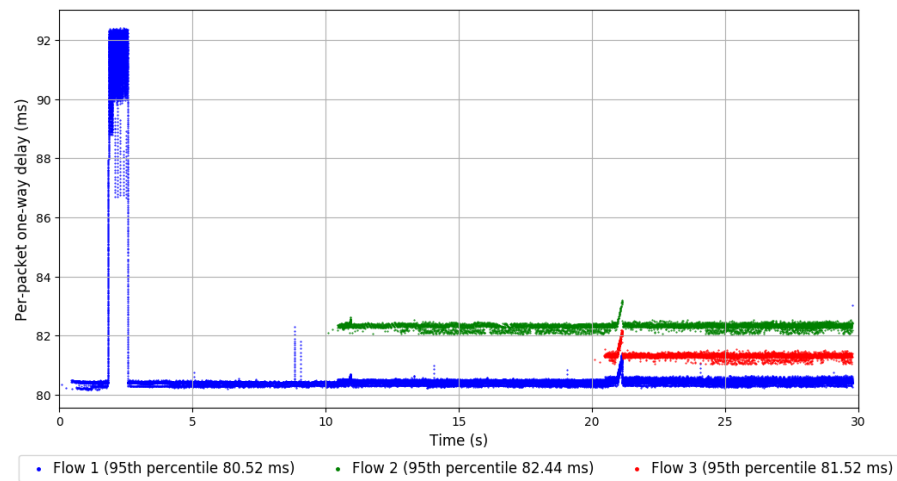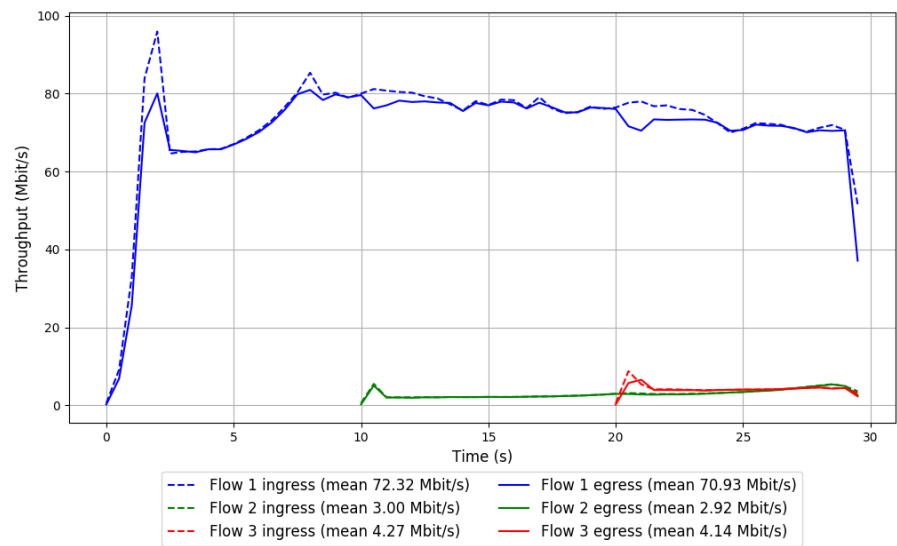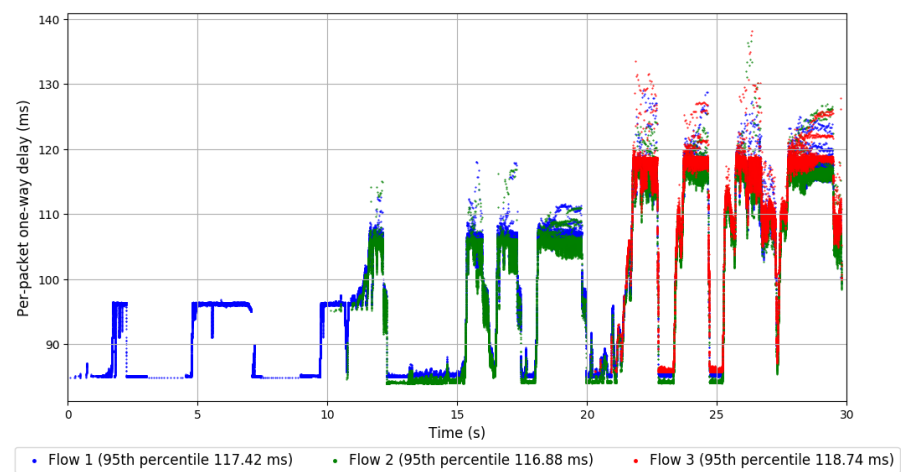
Run 8: Report of PCC — Data Link

```
Run 9: Statistics of PCC

Start at: 2018-02-04 20:49:44
End at: 2018-02-04 20:50:14
Local clock offset: -0.049 ms
Remote clock offset: 4.893 ms


# Below is generated by plot.py at 2018-02-05 01:29:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.22 Mbit/s
95th percentile per-packet one-way delay: 112.471 ms
Loss rate: 1.72%
-- Flow 1:
Average throughput: 56.86 Mbit/s
95th percentile per-packet one-way delay: 110.974 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 31.30 Mbit/s
95th percentile per-packet one-way delay: 113.167 ms
Loss rate: 2.69%
-- Flow 3:
Average throughput: 29.62 Mbit/s
95th percentile per-packet one-way delay: 113.476 ms
Loss rate: 6.66%
```
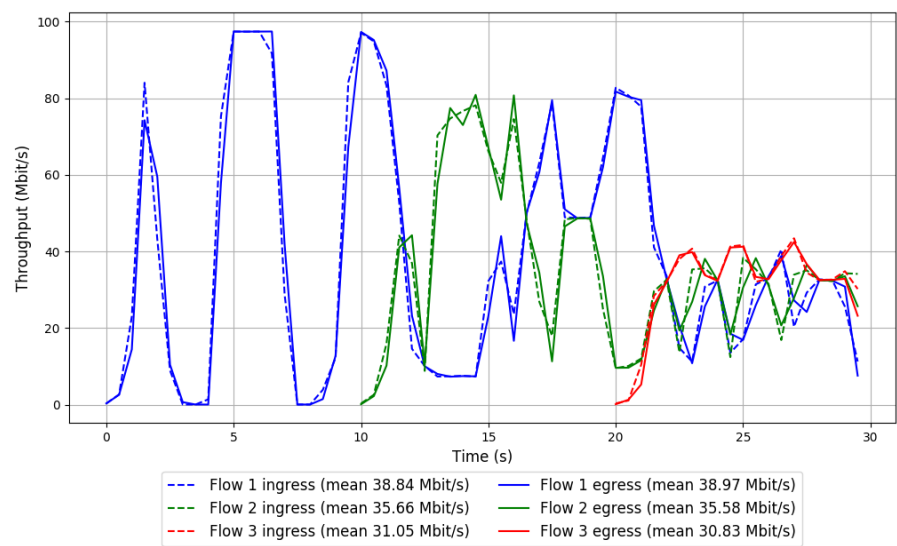
Run 9: Report of PCC — Data Link

```
Run 10: Statistics of PCC

Start at: 2018-02-04 21:13:31
End at: 2018-02-04 21:14:01
Local clock offset: -0.075 ms
Remote clock offset: 3.309 ms


# Below is generated by plot.py at 2018-02-05 01:29:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.21 Mbit/s
95th percentile per-packet one-way delay: 82.289 ms
Loss rate: 2.59%
-- Flow 1:
Average throughput: 70.93 Mbit/s
95th percentile per-packet one-way delay: 80.517 ms
Loss rate: 2.52%
-- Flow 2:
Average throughput: 2.92 Mbit/s
95th percentile per-packet one-way delay: 82.439 ms
Loss rate: 3.38%
-- Flow 3:
Average throughput: 4.14 Mbit/s
95th percentile per-packet one-way delay: 81.516 ms
Loss rate: 4.88%
```
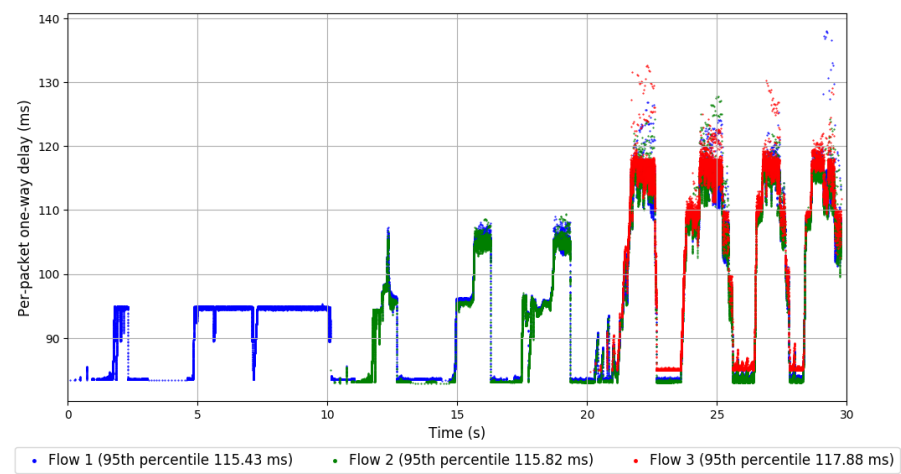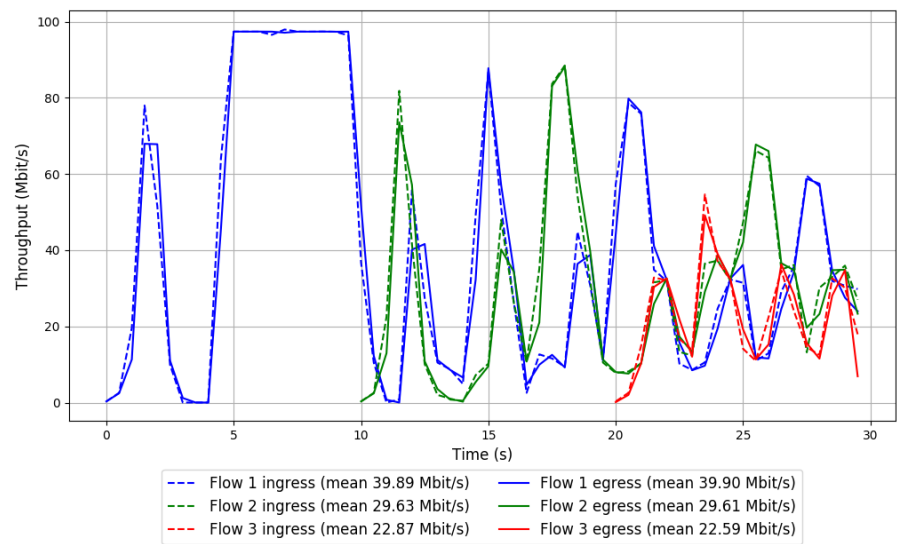
Run 10: Report of PCC — Data Link

Flow 1 ingress (mean 72.32 Mbit/s)   Flow 1 egress (mean 70.93 Mbit/s)
Flow 2 ingress (mean 3.00 Mbit/s)   Flow 2 egress (mean 2.92 Mbit/s)
Flow 3 ingress (mean 4.27 Mbit/s)   Flow 3 egress (mean 4.14 Mbit/s)

Flow 1 (95th percentile 80.52 ms)   Flow 2 (95th percentile 82.44 ms)   Flow 3 (95th percentile 81.52 ms)

```
Run 1: Statistics of QUIC Cubic

Start at: 2018-02-04 17:43:14
End at: 2018-02-04 17:43:44
Local clock offset: -0.103 ms
Remote clock offset: -5.479 ms


# Below is generated by plot.py at 2018-02-05 01:29:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.57 Mbit/s
95th percentile per-packet one-way delay: 118.086 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 38.97 Mbit/s
95th percentile per-packet one-way delay: 117.421 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 35.58 Mbit/s
95th percentile per-packet one-way delay: 116.877 ms
Loss rate: 1.20%
-- Flow 3:
Average throughput: 30.83 Mbit/s
95th percentile per-packet one-way delay: 118.738 ms
Loss rate: 2.68%
```
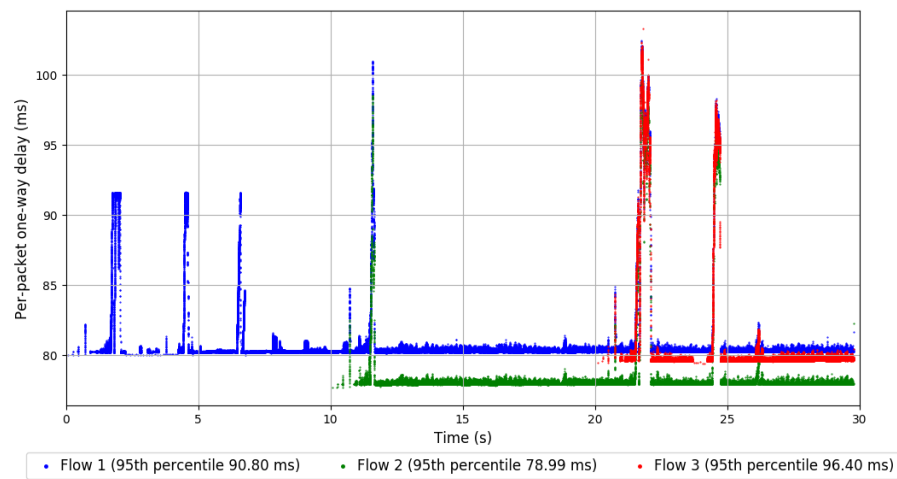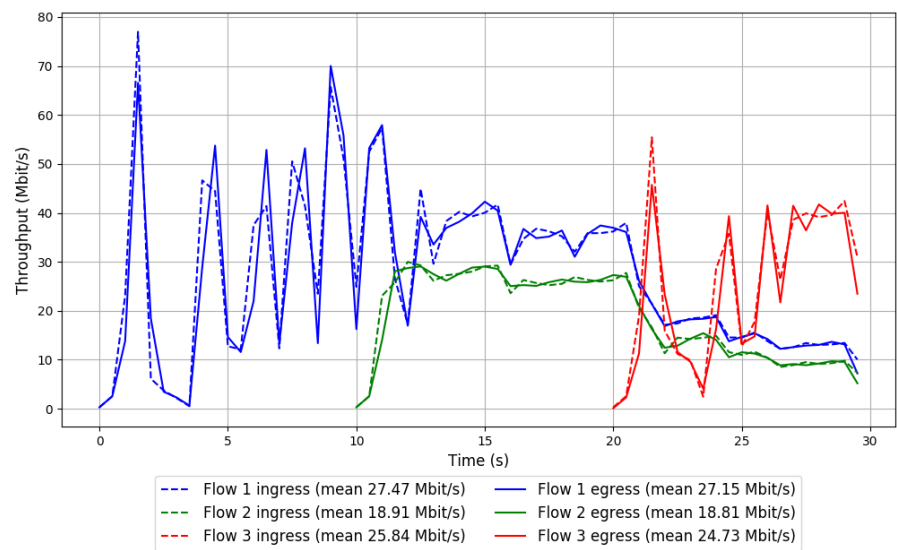
Run 1: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 38.84 Mbit/s) --- Flow 1 egress (mean 38.97 Mbit/s)
Flow 2 ingress (mean 35.66 Mbit/s) --- Flow 2 egress (mean 35.58 Mbit/s)
Flow 3 ingress (mean 31.05 Mbit/s) --- Flow 3 egress (mean 30.83 Mbit/s)

Flow 1 (95th percentile 117.42 ms)   Flow 2 (95th percentile 116.88 ms)   Flow 3 (95th percentile 118.74 ms)

```
Run 2: Statistics of QUIC Cubic

Start at: 2018-02-04 18:07:10
End at: 2018-02-04 18:07:40
Local clock offset: -0.008 ms
Remote clock offset: -4.778 ms


# Below is generated by plot.py at 2018-02-05 01:29:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.86 Mbit/s
95th percentile per-packet one-way delay: 116.277 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 39.90 Mbit/s
95th percentile per-packet one-way delay: 115.434 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 29.61 Mbit/s
95th percentile per-packet one-way delay: 115.816 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 22.59 Mbit/s
95th percentile per-packet one-way delay: 117.880 ms
Loss rate: 3.11%
```
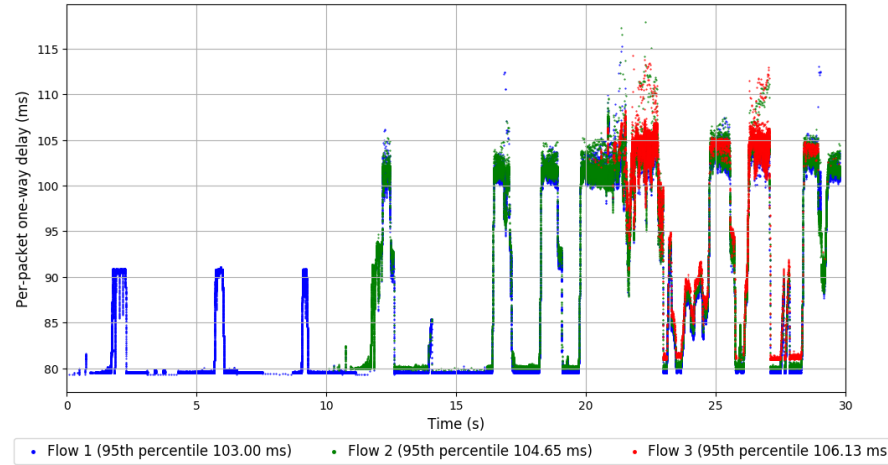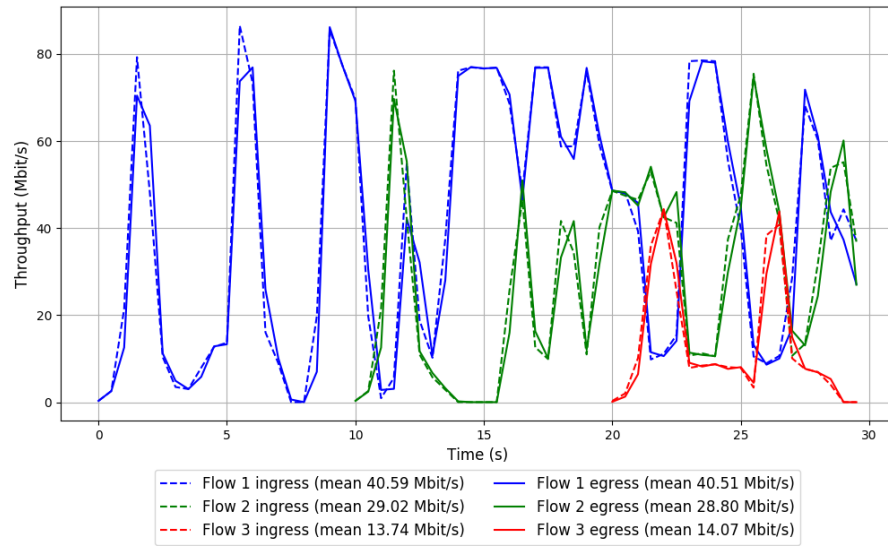
Run 2: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 39.89 Mbit/s)   Flow 1 egress (mean 39.90 Mbit/s)
Flow 2 ingress (mean 29.63 Mbit/s)   Flow 2 egress (mean 29.61 Mbit/s)
Flow 3 ingress (mean 22.87 Mbit/s)   Flow 3 egress (mean 22.59 Mbit/s)

Flow 1 (95th percentile 115.43 ms)   Flow 2 (95th percentile 115.82 ms)   Flow 3 (95th percentile 117.88 ms)

```
Run 3: Statistics of QUIC Cubic

Start at: 2018-02-04 18:31:31
End at: 2018-02-04 18:32:01
Local clock offset: -0.023 ms
Remote clock offset: 0.201 ms

# Below is generated by plot.py at 2018-02-05 01:29:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 47.67 Mbit/s
95th percentile per-packet one-way delay: 91.359 ms
Loss rate: 2.41%
-- Flow 1:
Average throughput: 27.15 Mbit/s
95th percentile per-packet one-way delay: 90.796 ms
Loss rate: 1.76%
-- Flow 2:
Average throughput: 18.81 Mbit/s
95th percentile per-packet one-way delay: 78.991 ms
Loss rate: 1.40%
-- Flow 3:
Average throughput: 24.73 Mbit/s
95th percentile per-packet one-way delay: 96.399 ms
Loss rate: 6.03%
```
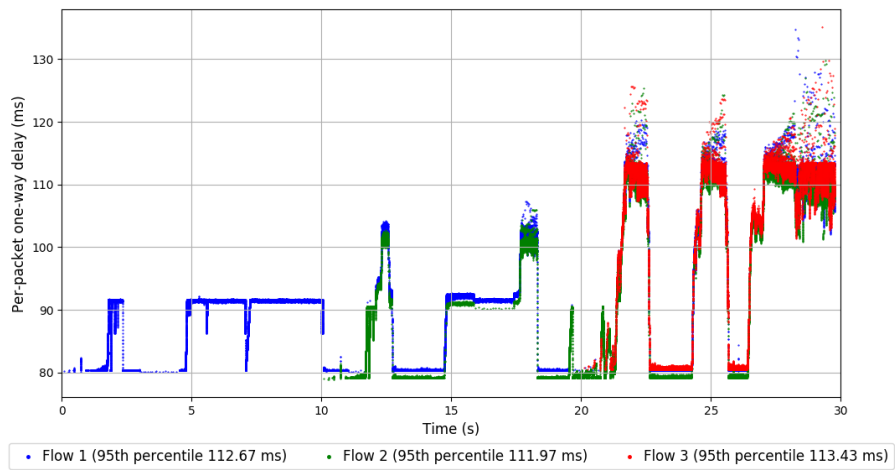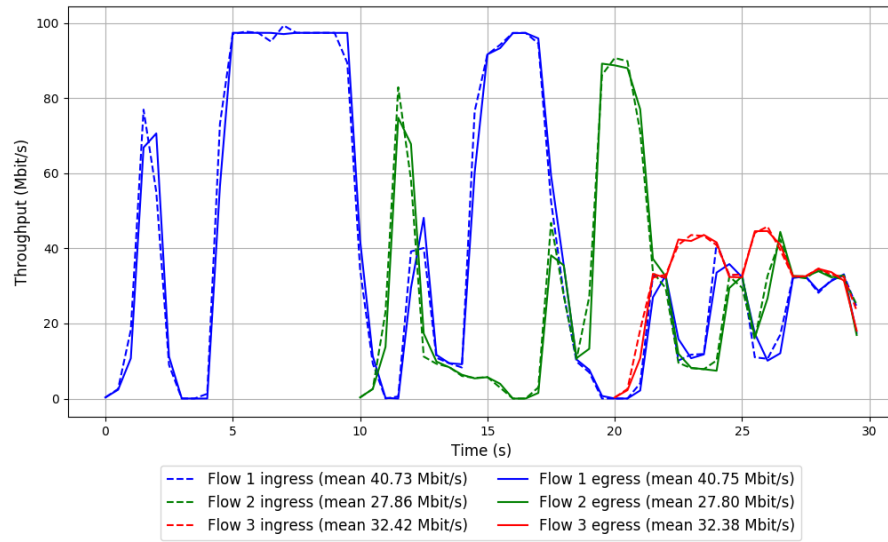
Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 27.47 Mbit/s)   Flow 1 egress (mean 27.15 Mbit/s)
Flow 2 ingress (mean 18.91 Mbit/s)   Flow 2 egress (mean 18.81 Mbit/s)
Flow 3 ingress (mean 25.84 Mbit/s)   Flow 3 egress (mean 24.73 Mbit/s)

Flow 1 (95th percentile 90.80 ms)   Flow 2 (95th percentile 78.99 ms)   Flow 3 (95th percentile 96.40 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2018-02-04 18:55:25
End at: 2018-02-04 18:55:55
Local clock offset: -0.037 ms
Remote clock offset: 1.14 ms


# Below is generated by plot.py at 2018-02-05 01:29:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.15 Mbit/s
95th percentile per-packet one-way delay: 104.512 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 40.51 Mbit/s
95th percentile per-packet one-way delay: 102.996 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 28.80 Mbit/s
95th percentile per-packet one-way delay: 104.649 ms
Loss rate: 1.71%
-- Flow 3:
Average throughput: 14.07 Mbit/s
95th percentile per-packet one-way delay: 106.130 ms
Loss rate: 0.00%
```
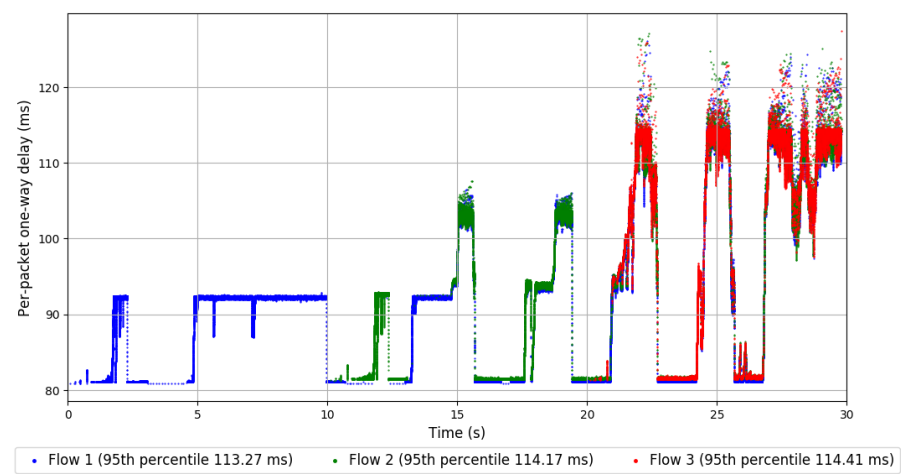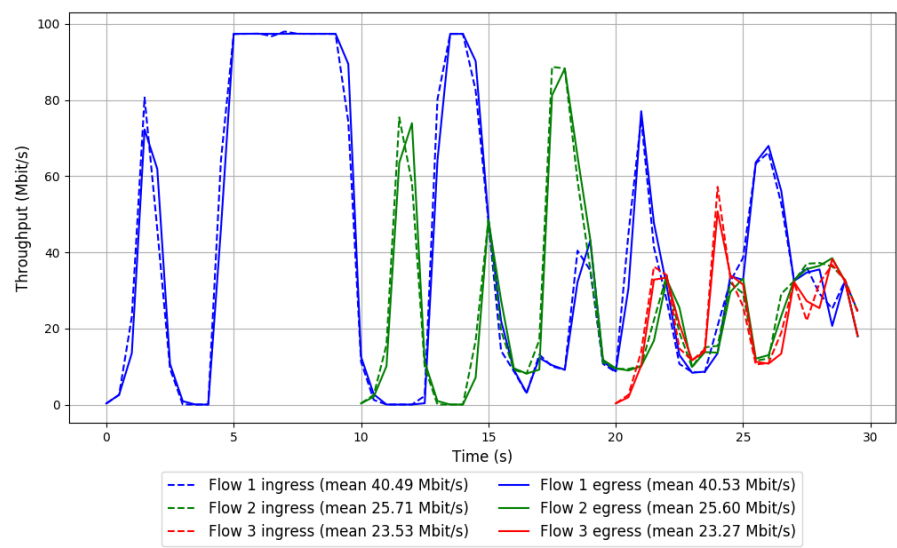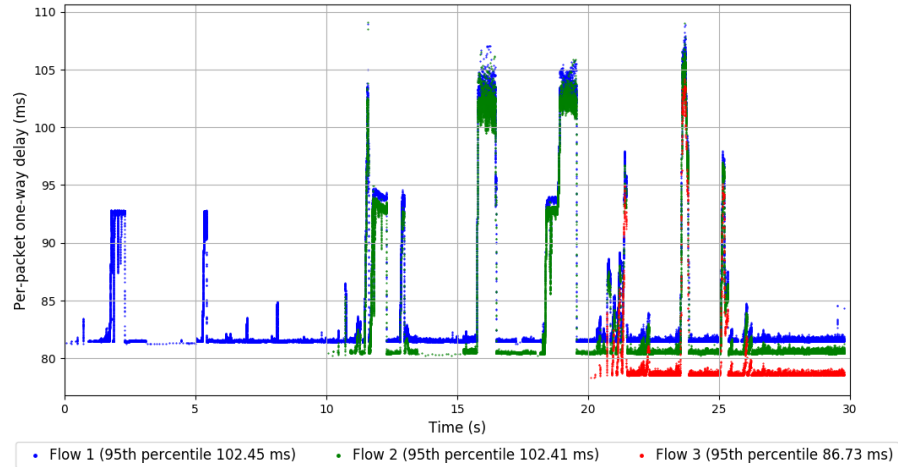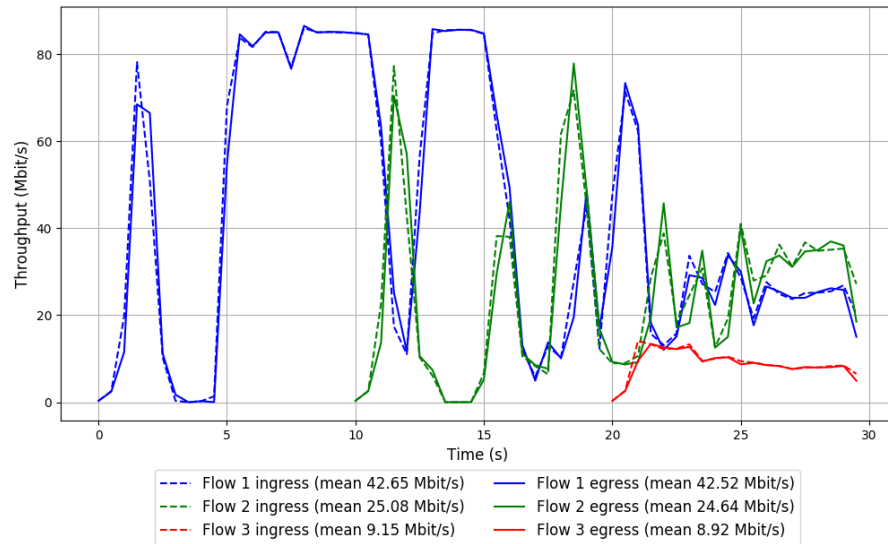
Run 4: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 40.59 Mbit/s) --- Flow 1 egress (mean 40.51 Mbit/s)
Flow 2 ingress (mean 29.02 Mbit/s) --- Flow 2 egress (mean 28.80 Mbit/s)
Flow 3 ingress (mean 13.74 Mbit/s) --- Flow 3 egress (mean 14.07 Mbit/s)

Flow 1 (95th percentile 103.00 ms)   Flow 2 (95th percentile 104.65 ms)   Flow 3 (95th percentile 106.13 ms)

91

```
Run 5: Statistics of QUIC Cubic

Start at: 2018-02-04 19:19:20
End at: 2018-02-04 19:19:50
Local clock offset: -0.054 ms
Remote clock offset: 3.589 ms


# Below is generated by plot.py at 2018-02-05 01:29:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.71 Mbit/s
95th percentile per-packet one-way delay: 112.891 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 40.75 Mbit/s
95th percentile per-packet one-way delay: 112.667 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 27.80 Mbit/s
95th percentile per-packet one-way delay: 111.975 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 32.38 Mbit/s
95th percentile per-packet one-way delay: 113.428 ms
Loss rate: 2.06%
```
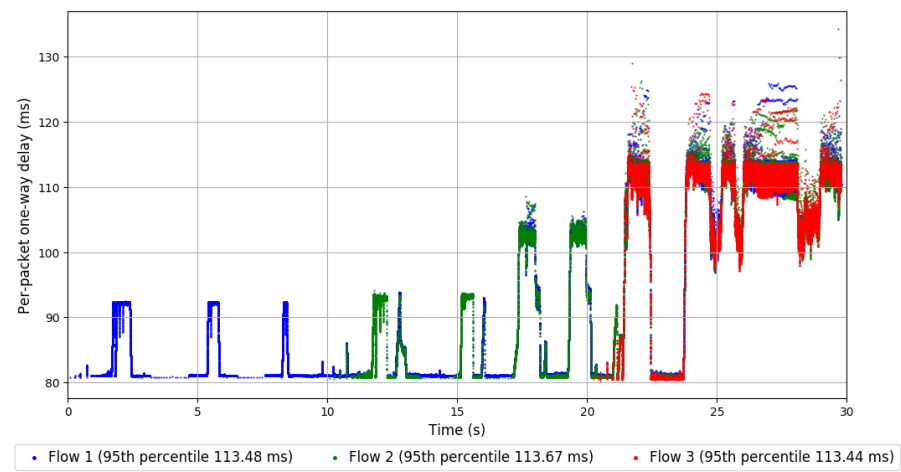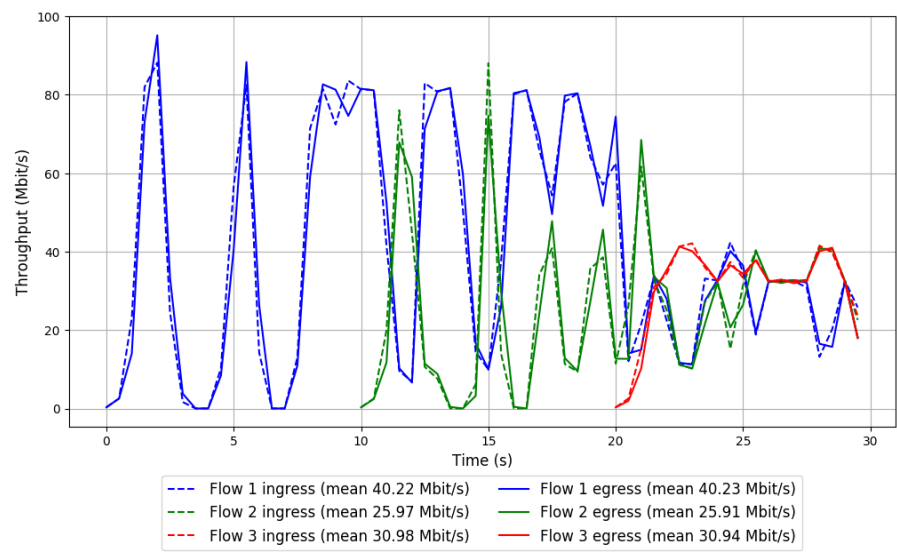
Run 5: Report of QUIC Cubic — Data Link

- - - - Flow 1 ingress (mean 40.73 Mbit/s)   —— Flow 1 egress (mean 40.75 Mbit/s)
- - - - Flow 2 ingress (mean 27.86 Mbit/s)   —— Flow 2 egress (mean 27.80 Mbit/s)
- - - - Flow 3 ingress (mean 32.42 Mbit/s)   —— Flow 3 egress (mean 32.38 Mbit/s)

· Flow 1 (95th percentile 112.67 ms)   · Flow 2 (95th percentile 111.97 ms)   · Flow 3 (95th percentile 113.43 ms)

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```
Run 6: Statistics of QUIC Cubic

Start at: 2018-02-04 19:43:18
End at: 2018-02-04 19:43:48
Local clock offset: -0.083 ms
Remote clock offset: 3.228 ms


# Below is generated by plot.py at 2018-02-05 01:29:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.07 Mbit/s
95th percentile per-packet one-way delay: 113.943 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 40.53 Mbit/s
95th percentile per-packet one-way delay: 113.270 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 25.60 Mbit/s
95th percentile per-packet one-way delay: 114.168 ms
Loss rate: 1.36%
-- Flow 3:
Average throughput: 23.27 Mbit/s
95th percentile per-packet one-way delay: 114.408 ms
Loss rate: 2.97%
```

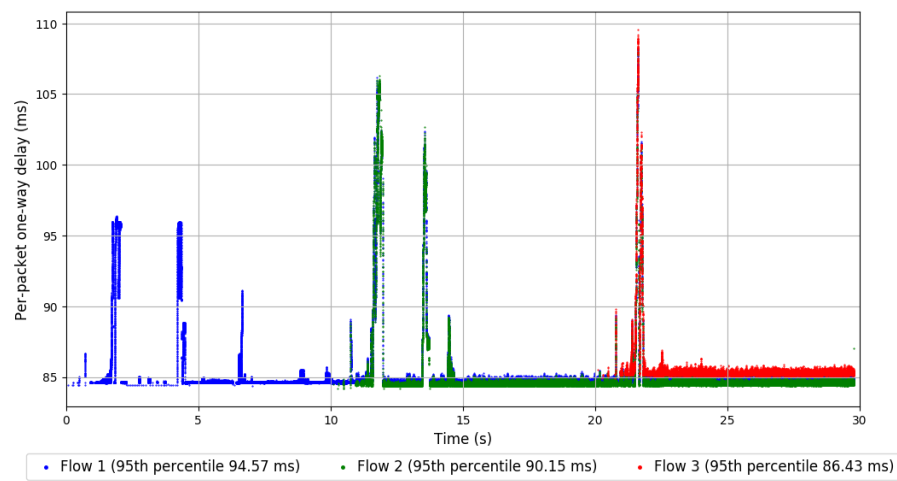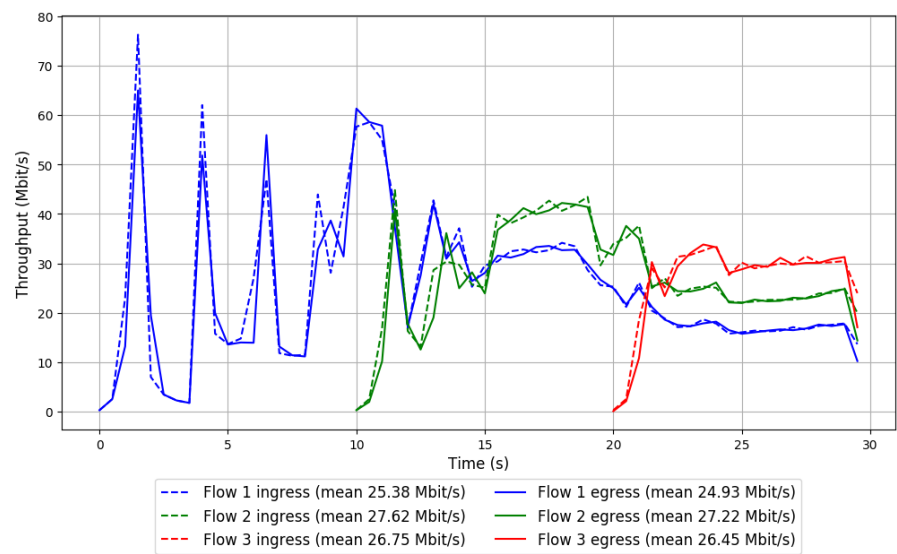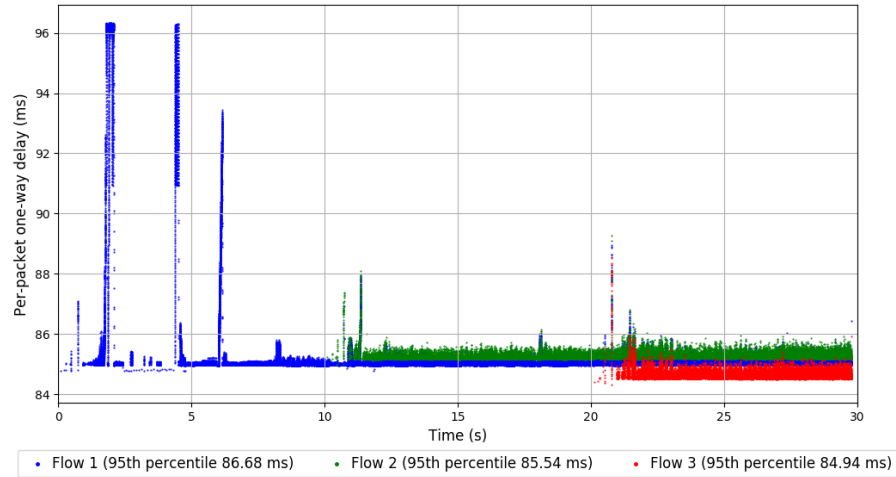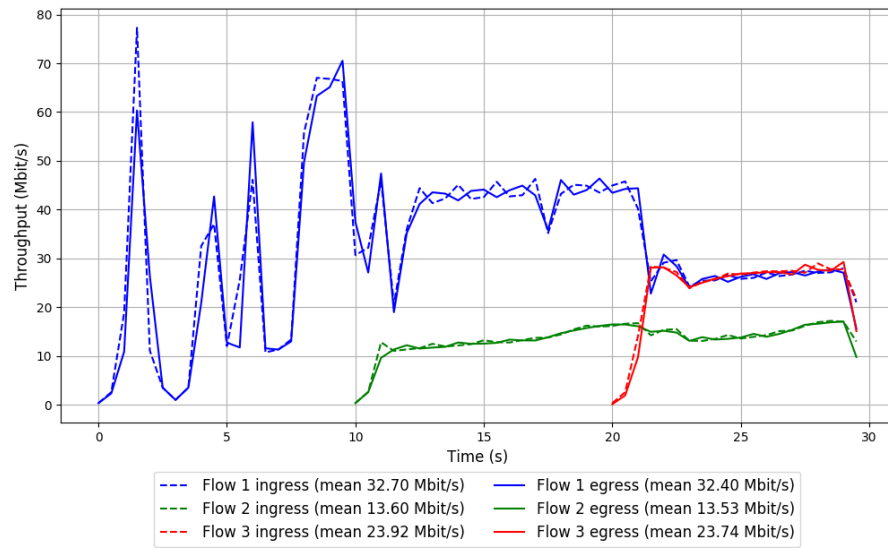Run 6: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 40.49 Mbit/s) --- Flow 1 egress (mean 40.53 Mbit/s)
Flow 2 ingress (mean 25.71 Mbit/s) --- Flow 2 egress (mean 25.60 Mbit/s)
Flow 3 ingress (mean 23.53 Mbit/s) --- Flow 3 egress (mean 23.27 Mbit/s)

Flow 1 (95th percentile 113.27 ms) • Flow 2 (95th percentile 114.17 ms) • Flow 3 (95th percentile 114.41 ms)

95

```
Run 7: Statistics of QUIC Cubic

Start at: 2018-02-04 20:07:06
End at: 2018-02-04 20:07:36
Local clock offset: -0.044 ms
Remote clock offset: 3.812 ms


# Below is generated by plot.py at 2018-02-05 01:30:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.76 Mbit/s
95th percentile per-packet one-way delay: 102.385 ms
Loss rate: 1.53%
-- Flow 1:
Average throughput: 42.52 Mbit/s
95th percentile per-packet one-way delay: 102.446 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 24.64 Mbit/s
95th percentile per-packet one-way delay: 102.413 ms
Loss rate: 2.66%
-- Flow 3:
Average throughput: 8.92 Mbit/s
95th percentile per-packet one-way delay: 86.730 ms
Loss rate: 4.27%
```
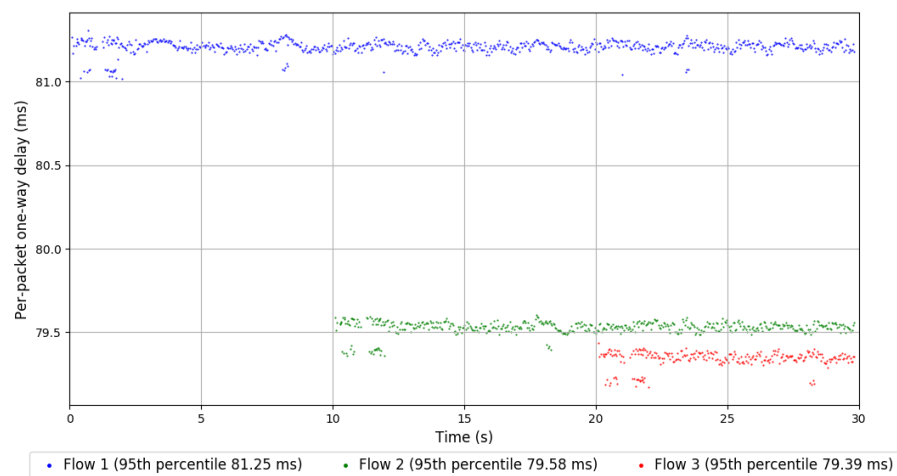
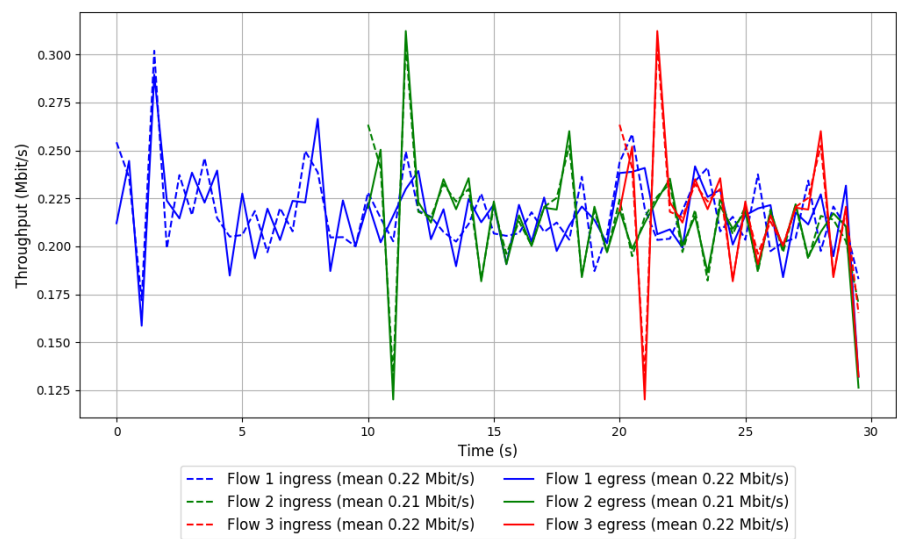Run 7: Report of QUIC Cubic — Data Link

```
Run 8: Statistics of QUIC Cubic

Start at: 2018-02-04 20:31:02
End at: 2018-02-04 20:31:32
Local clock offset: -0.088 ms
Remote clock offset: 3.196 ms


# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.47 Mbit/s
95th percentile per-packet one-way delay: 113.579 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 40.23 Mbit/s
95th percentile per-packet one-way delay: 113.484 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 25.91 Mbit/s
95th percentile per-packet one-way delay: 113.672 ms
Loss rate: 1.16%
-- Flow 3:
Average throughput: 30.94 Mbit/s
95th percentile per-packet one-way delay: 113.436 ms
Loss rate: 2.14%
```

Run 8: Report of QUIC Cubic — Data Link
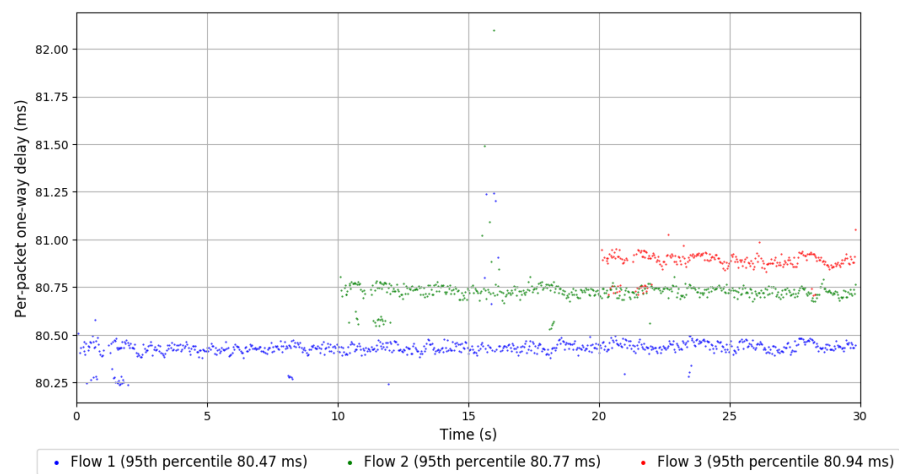
```
Run 9: Statistics of QUIC Cubic

Start at: 2018-02-04 20:54:59
End at: 2018-02-04 20:55:29
Local clock offset: -0.026 ms
Remote clock offset: -0.769 ms


# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 51.58 Mbit/s
95th percentile per-packet one-way delay: 92.908 ms
Loss rate: 2.46%
-- Flow 1:
Average throughput: 24.93 Mbit/s
95th percentile per-packet one-way delay: 94.572 ms
Loss rate: 2.37%
-- Flow 2:
Average throughput: 27.22 Mbit/s
95th percentile per-packet one-way delay: 90.151 ms
Loss rate: 2.35%
-- Flow 3:
Average throughput: 26.45 Mbit/s
95th percentile per-packet one-way delay: 86.433 ms
Loss rate: 2.96%
```

Run 9: Report of QUIC Cubic — Data Link

```
Run 10: Statistics of QUIC Cubic

Start at: 2018-02-04 21:18:47
End at: 2018-02-04 21:19:17
Local clock offset: -0.092 ms
Remote clock offset: -0.665 ms


# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.09 Mbit/s
95th percentile per-packet one-way delay: 85.610 ms
Loss rate: 1.70%
-- Flow 1:
Average throughput: 32.40 Mbit/s
95th percentile per-packet one-way delay: 86.678 ms
Loss rate: 1.54%
-- Flow 2:
Average throughput: 13.53 Mbit/s
95th percentile per-packet one-way delay: 85.541 ms
Loss rate: 1.44%
-- Flow 3:
Average throughput: 23.74 Mbit/s
95th percentile per-packet one-way delay: 84.941 ms
Loss rate: 2.65%
```

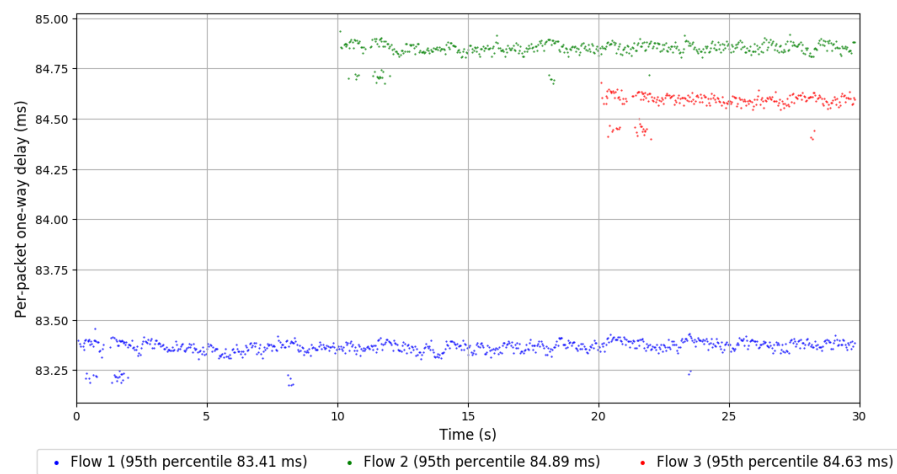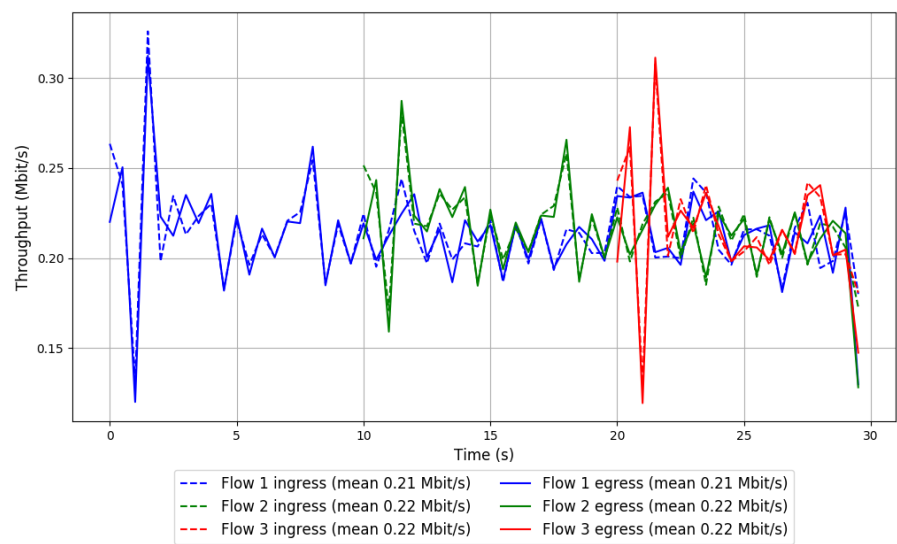Run 10: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of SCReAM

Start at: 2018-02-04 17:35:25
End at: 2018-02-04 17:35:55
Local clock offset: -0.131 ms
Remote clock offset: -0.837 ms

# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 81.245 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.252 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 79.575 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 79.394 ms
Loss rate: 1.49%
```
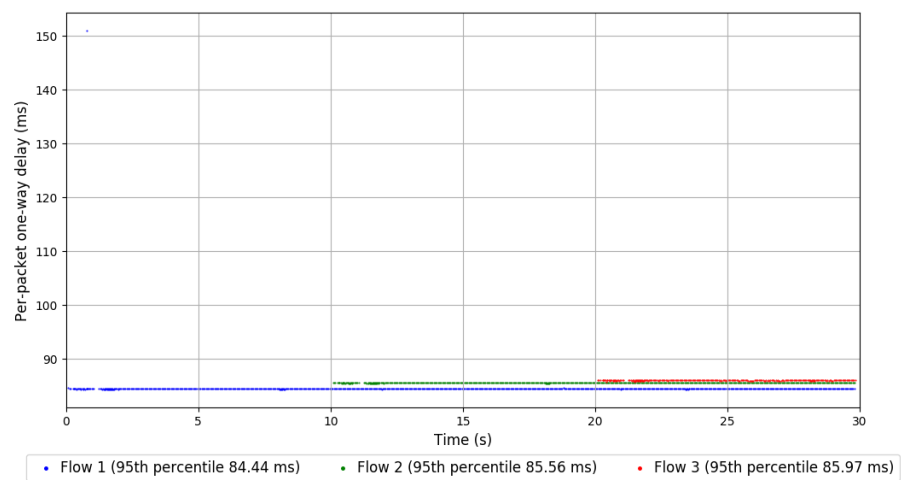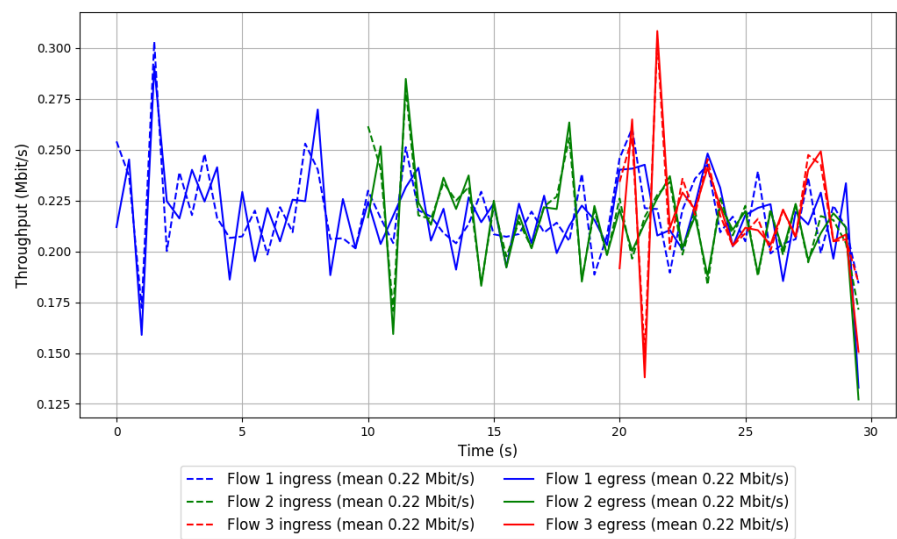
Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2018-02-04 17:59:20
End at: 2018-02-04 17:59:50
Local clock offset: -0.024 ms
Remote clock offset: 0.124 ms


# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 80.912 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.473 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.770 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.936 ms
Loss rate: 1.49%
```

Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2018-02-04 18:23:26
End at: 2018-02-04 18:23:56
Local clock offset: 0.008 ms
Remote clock offset: -5.939 ms

# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 84.879 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 83.405 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.889 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.632 ms
Loss rate: 1.49%
```
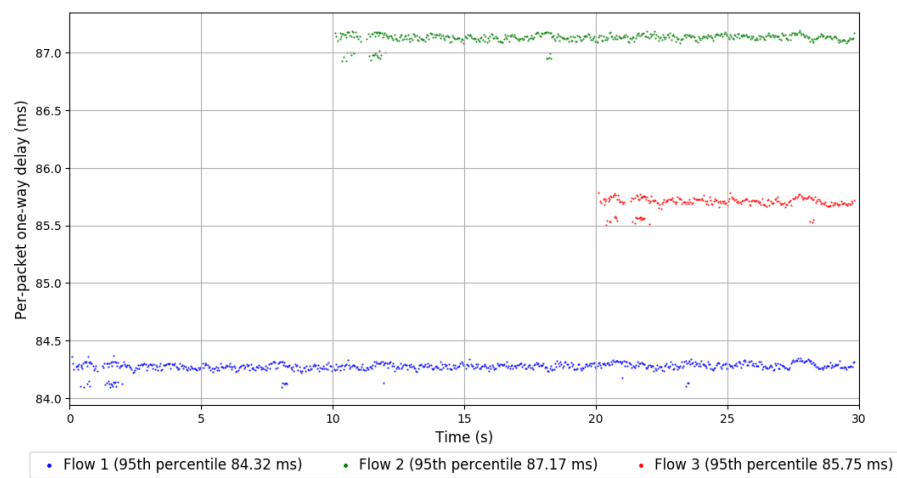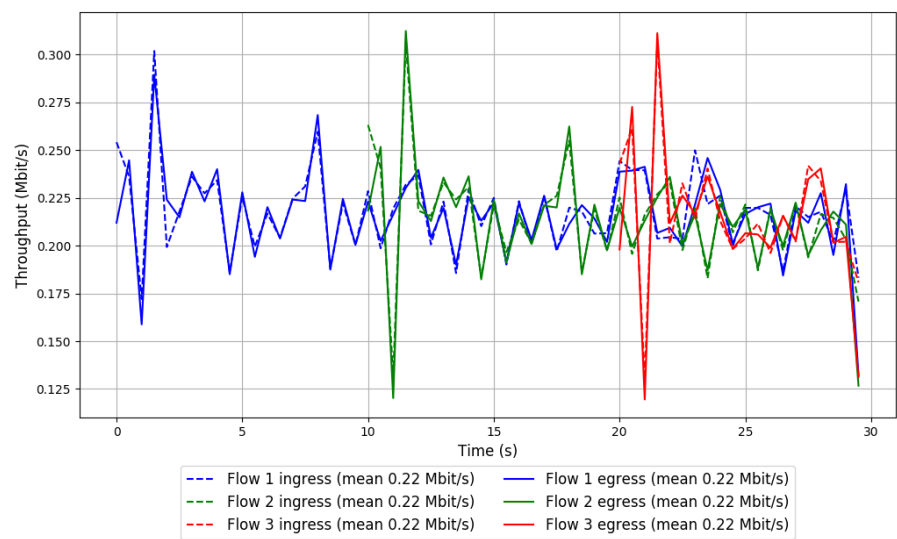
Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2018-02-04 18:47:35
End at: 2018-02-04 18:48:05
Local clock offset: -0.026 ms
Remote clock offset: -5.106 ms


# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 85.943 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.443 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.556 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.966 ms
Loss rate: 1.50%
```
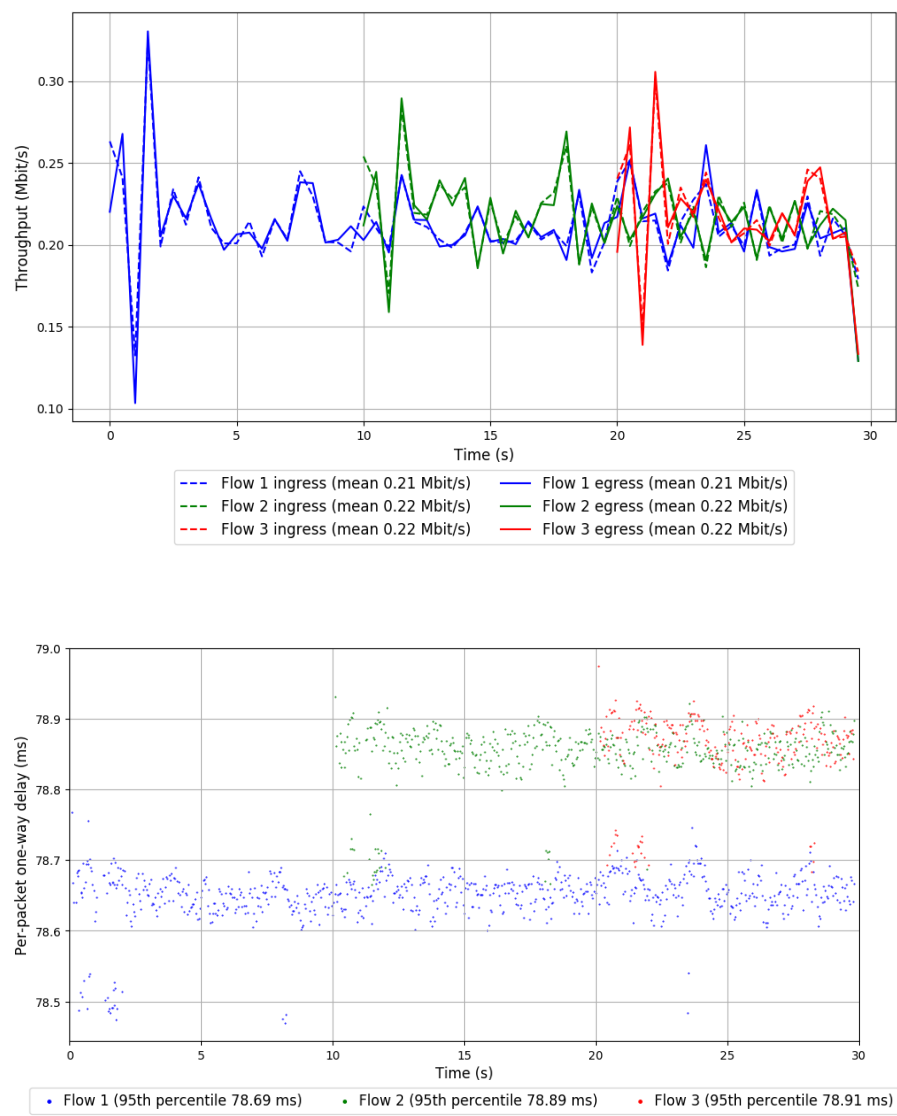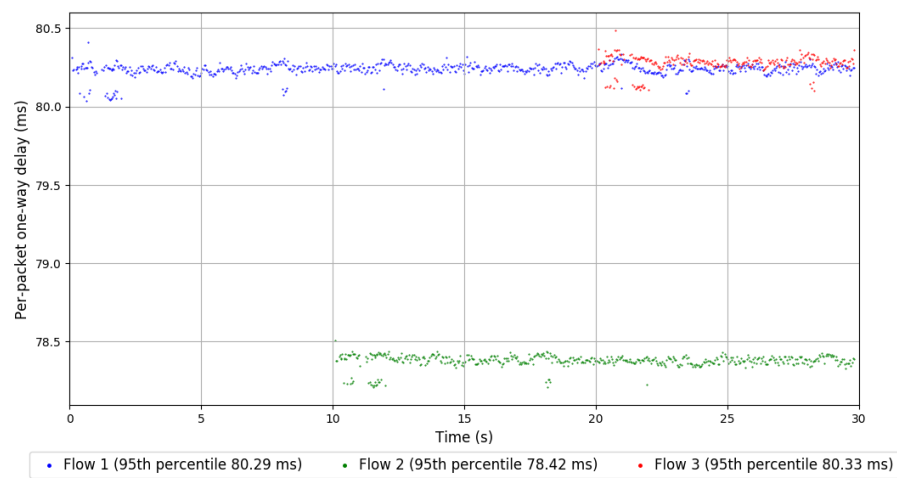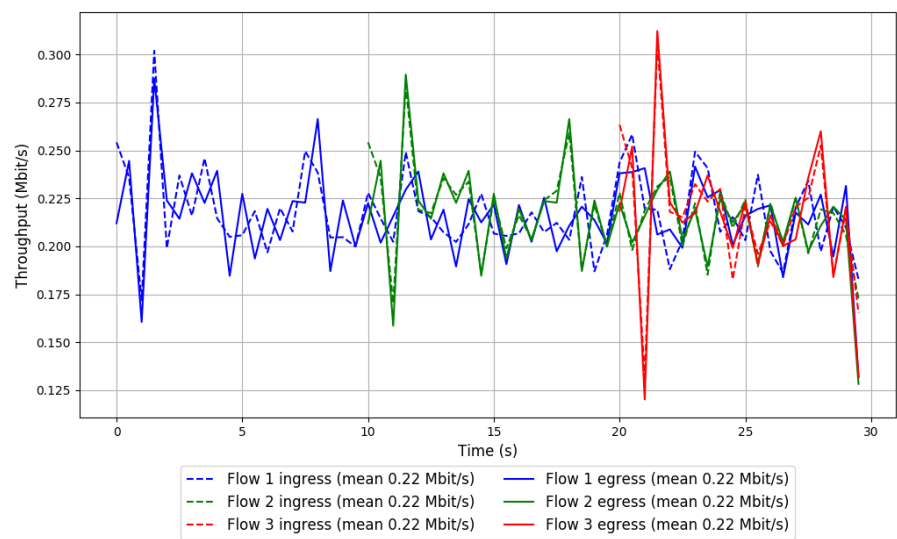
Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2018-02-04 19:11:27
End at: 2018-02-04 19:11:57
Local clock offset: -0.054 ms
Remote clock offset: -3.48 ms


# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 87.159 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.320 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.171 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.755 ms
Loss rate: 1.86%
```
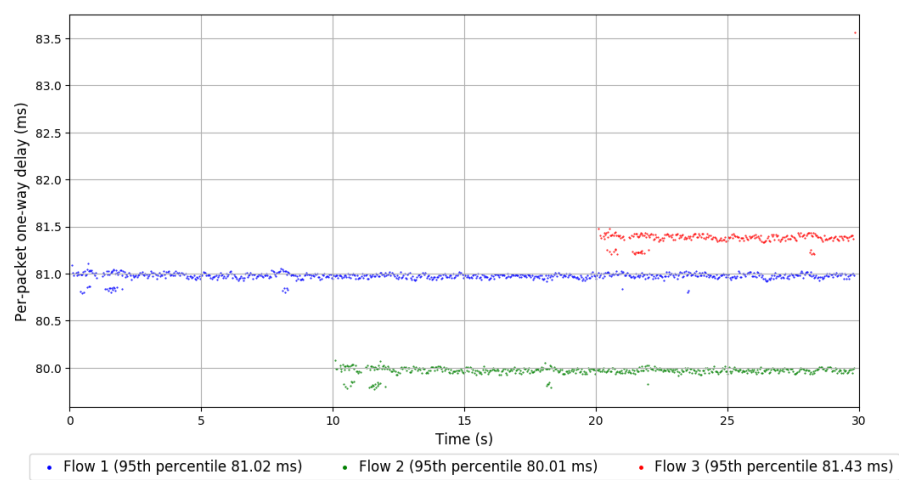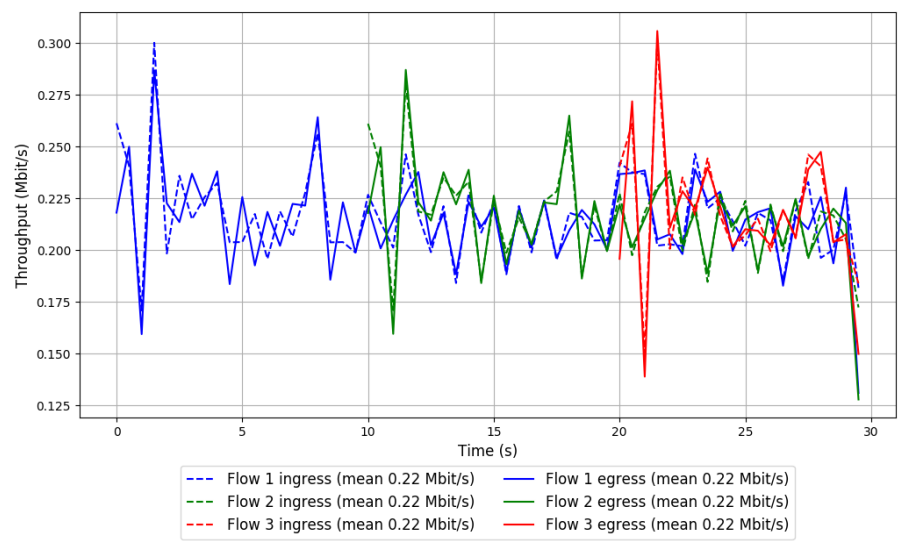
Run 5: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.22 Mbit/s)   Flow 1 egress (mean 0.22 Mbit/s)
Flow 2 ingress (mean 0.22 Mbit/s)   Flow 2 egress (mean 0.22 Mbit/s)
Flow 3 ingress (mean 0.22 Mbit/s)   Flow 3 egress (mean 0.22 Mbit/s)

Flow 1 (95th percentile 84.32 ms)   Flow 2 (95th percentile 87.17 ms)   Flow 3 (95th percentile 85.75 ms)

```
Run 6: Statistics of SCReAM

Start at: 2018-02-04 19:35:27
End at: 2018-02-04 19:35:57
Local clock offset: -0.142 ms
Remote clock offset: 3.898 ms


# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 78.895 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 78.692 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 78.895 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 78.912 ms
Loss rate: 1.87%
```
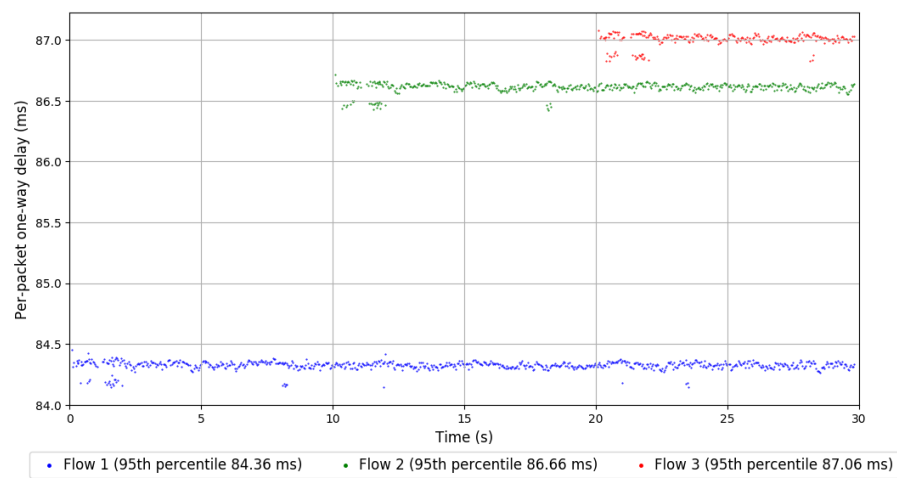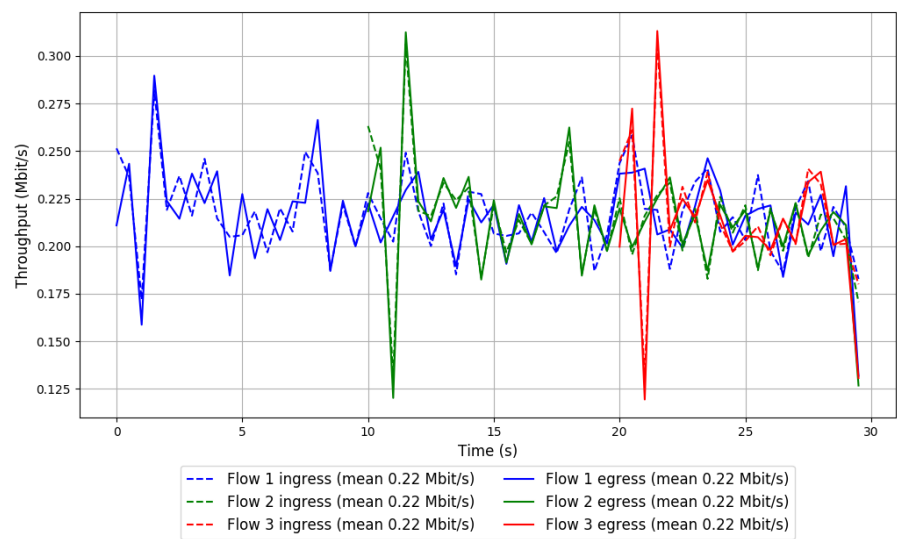
Run 6: Report of SCReAM — Data Link

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```
Run 7: Statistics of SCReAM

Start at: 2018-02-04 19:59:16
End at: 2018-02-04 19:59:46
Local clock offset: -0.06 ms
Remote clock offset: 3.686 ms

# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 80.302 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.286 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 78.419 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.335 ms
Loss rate: 1.49%
```

Run 7: Report of SCReAM — Data Link

```
Run 8: Statistics of SCReAM

Start at: 2018-02-04 20:23:10
End at: 2018-02-04 20:23:40
Local clock offset: -0.088 ms
Remote clock offset: 4.01 ms


# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 81.404 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.021 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.013 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.430 ms
Loss rate: 1.49%
```
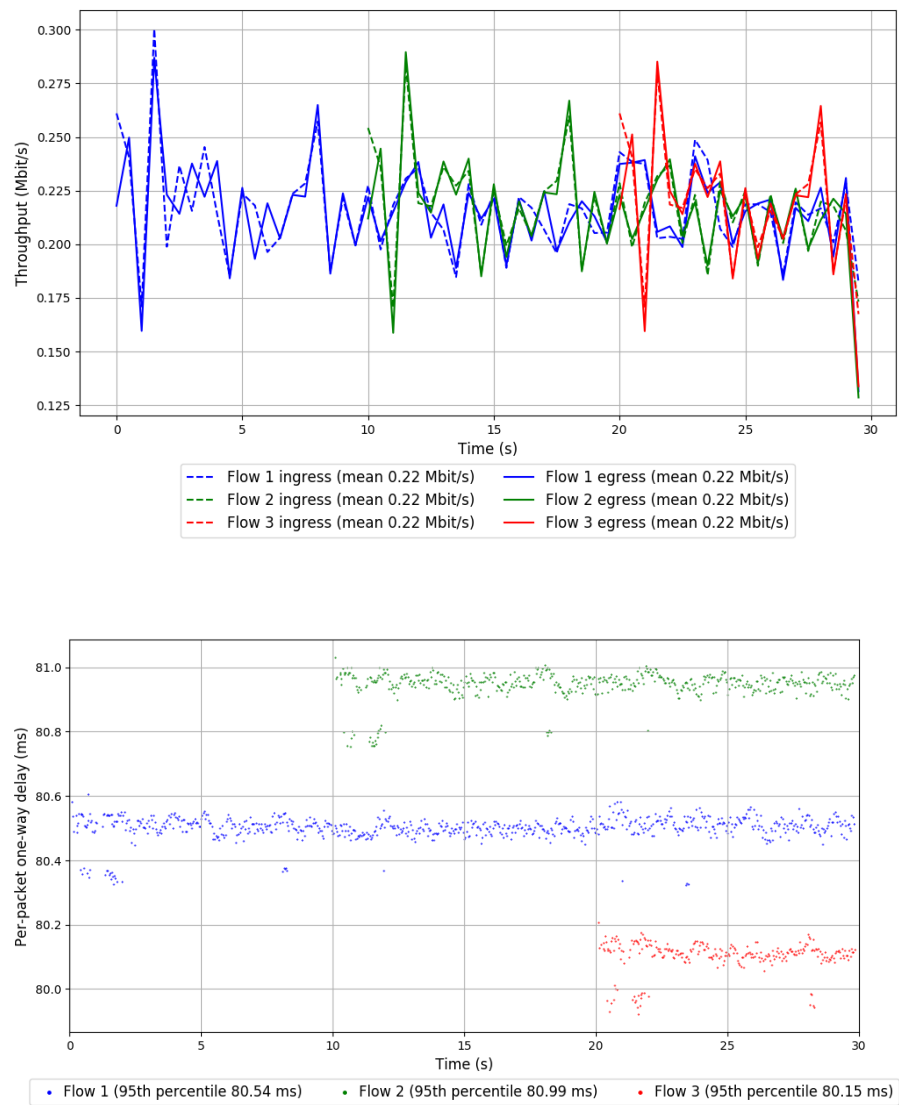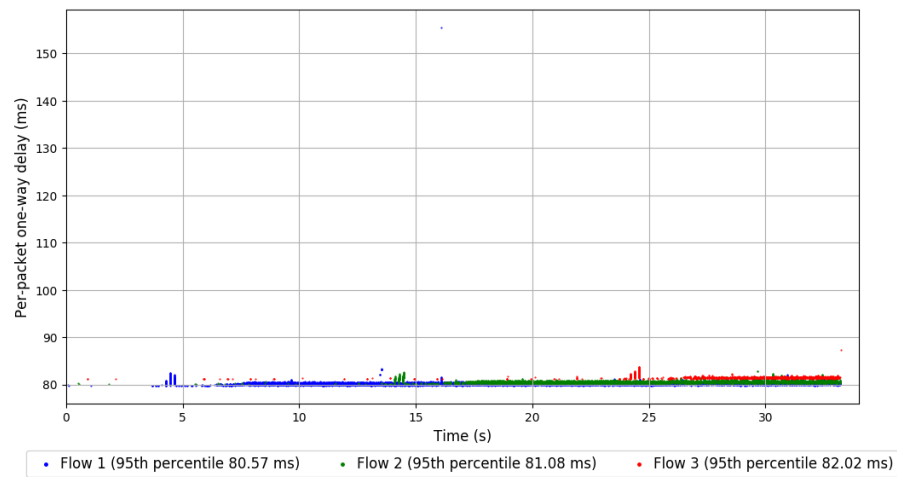
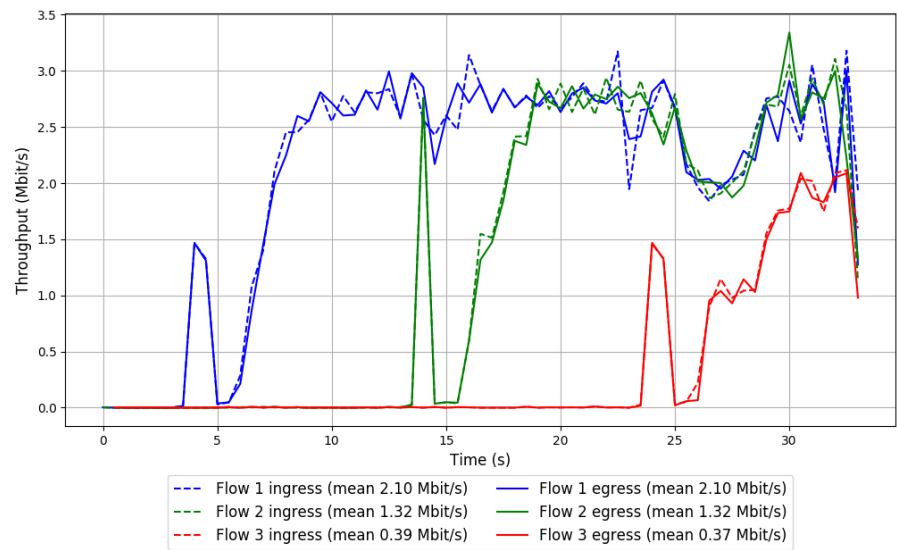## Run 8: Report of SCReAM — Data Link

```
Run 9: Statistics of SCReAM

Start at: 2018-02-04 20:47:07
End at: 2018-02-04 20:47:37
Local clock offset: -0.029 ms
Remote clock offset: -1.517 ms

# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 87.028 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.363 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.656 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.055 ms
Loss rate: 1.86%
```

Run 9: Report of SCReAM — Data Link

```
Run 10: Statistics of SCReAM

Start at: 2018-02-04 21:10:56
End at: 2018-02-04 21:11:26
Local clock offset: -0.074 ms
Remote clock offset: 3.407 ms


# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 80.976 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.544 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.988 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.153 ms
Loss rate: 1.49%
```
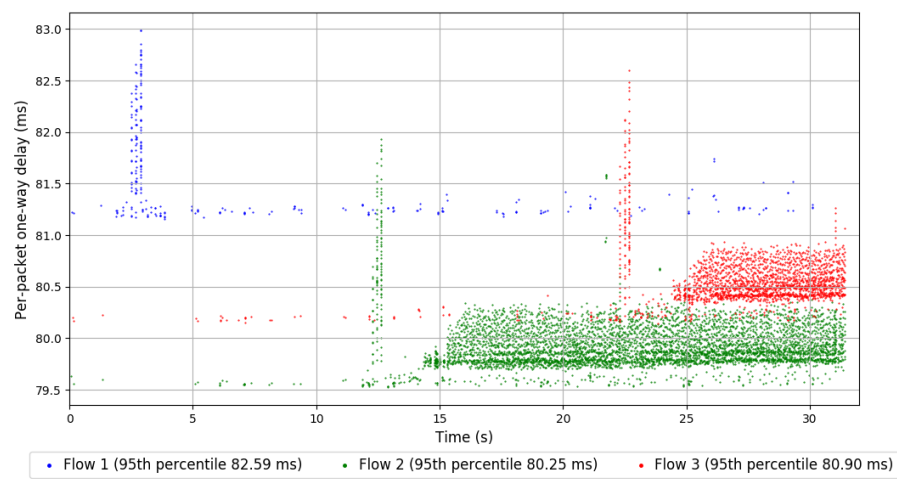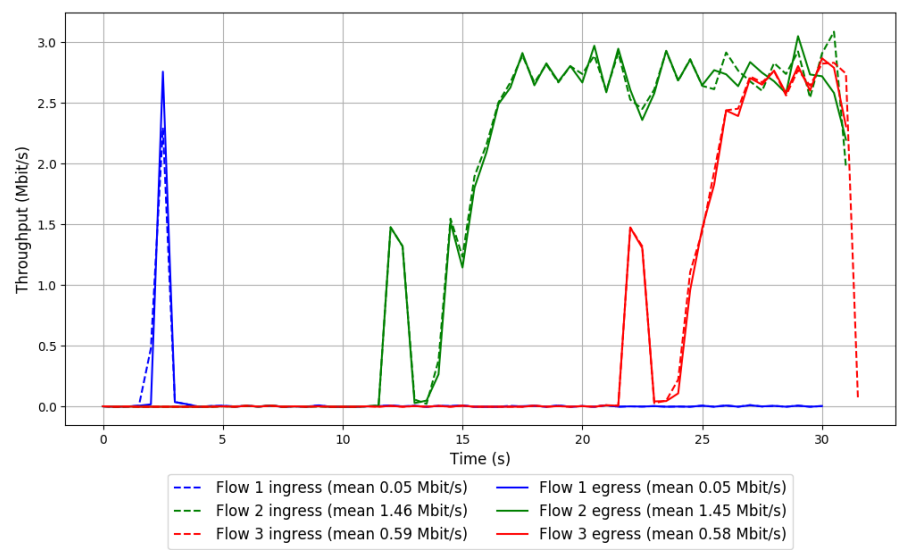
Run 10: Report of SCReAM — Data Link

Run 1: Statistics of WebRTC media

Start at: 2018-02-04 17:27:23
End at: 2018-02-04 17:27:53
Local clock offset: -0.105 ms
Remote clock offset: -0.035 ms

Below is generated by plot.py at 2018-02-05 01:30:43
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.76 Mbit/s
95th percentile per-packet one-way delay: 81.487 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 80.568 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 81.076 ms
Loss rate: 0.86%
-- Flow 3:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 82.016 ms
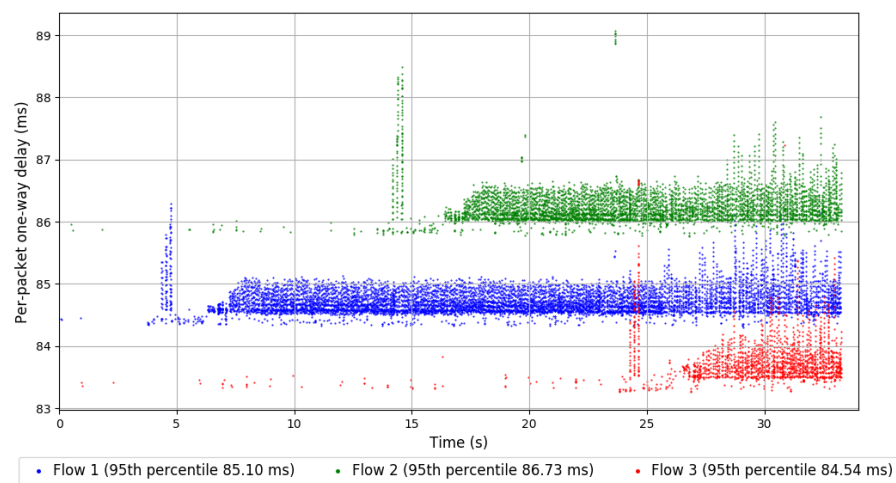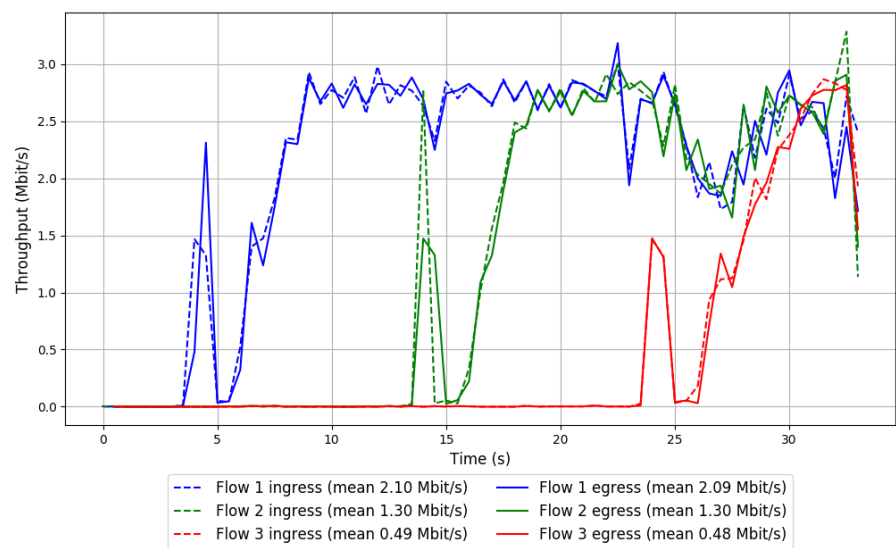Loss rate: 3.90%

Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2018-02-04 17:51:15
End at: 2018-02-04 17:51:45
Local clock offset: -0.023 ms
Remote clock offset: 0.586 ms


# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 81.180 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 82.588 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 80.255 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 80.903 ms
Loss rate: 2.47%
```
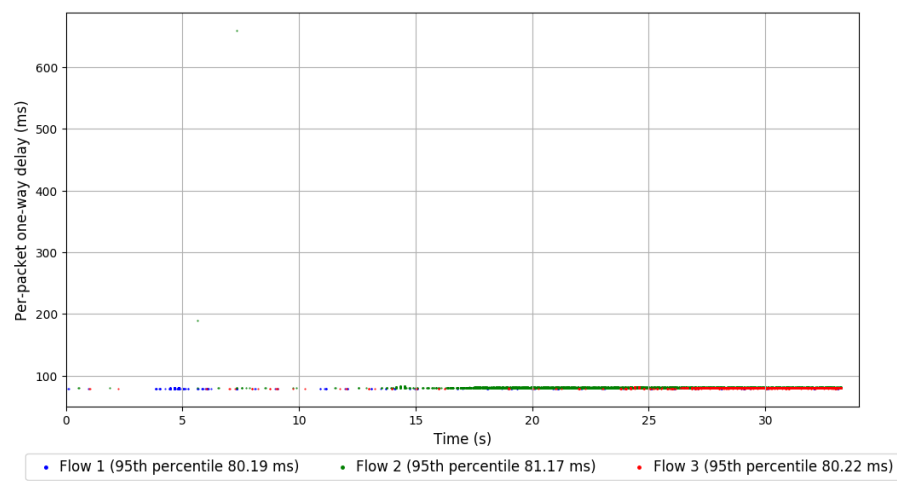
Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2018-02-04 18:15:21
End at: 2018-02-04 18:15:51
Local clock offset: -0.078 ms
Remote clock offset: -5.935 ms


# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.84 Mbit/s
95th percentile per-packet one-way delay: 86.477 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 2.09 Mbit/s
95th percentile per-packet one-way delay: 85.096 ms
Loss rate: 0.96%
-- Flow 2:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 86.726 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 84.544 ms
Loss rate: 2.45%
```
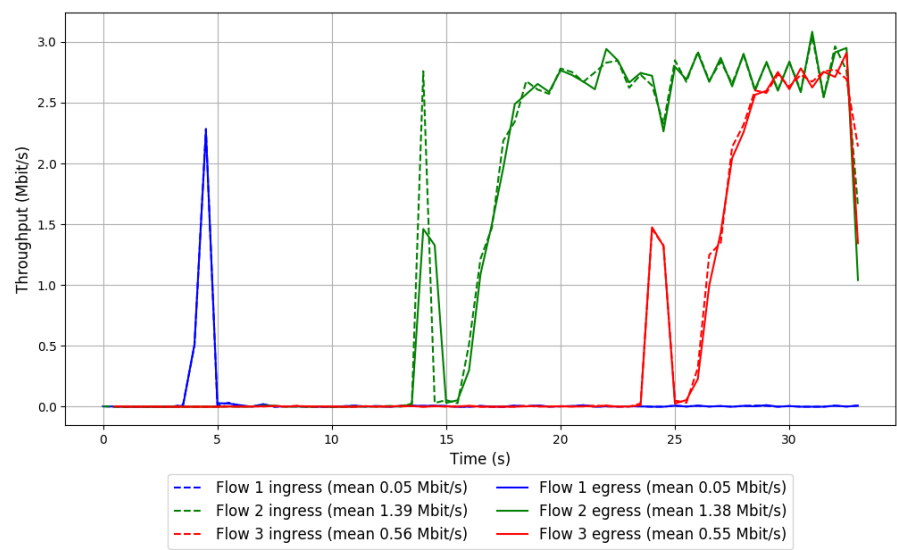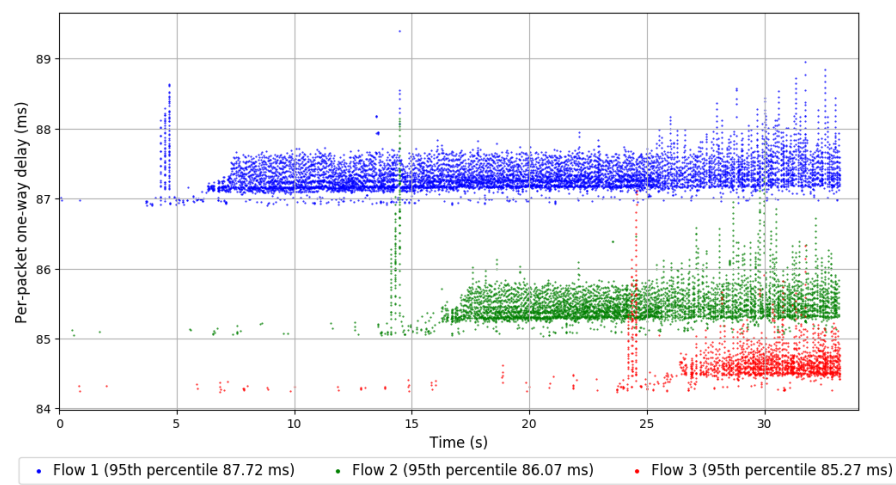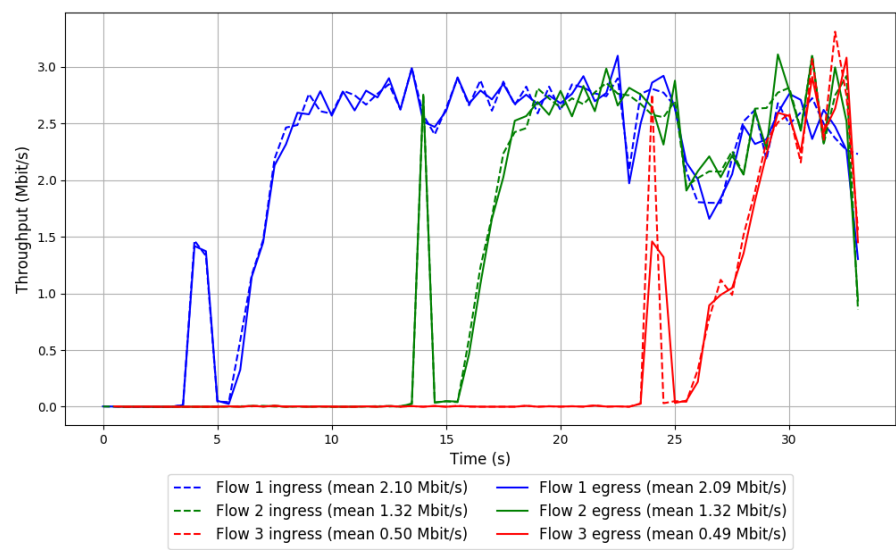
Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2018-02-04 18:39:31
End at: 2018-02-04 18:40:01
Local clock offset: -0.021 ms
Remote clock offset: 0.678 ms


# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 81.147 ms
Loss rate: 1.52%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 80.191 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.38 Mbit/s
95th percentile per-packet one-way delay: 81.172 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 80.220 ms
Loss rate: 2.94%
```
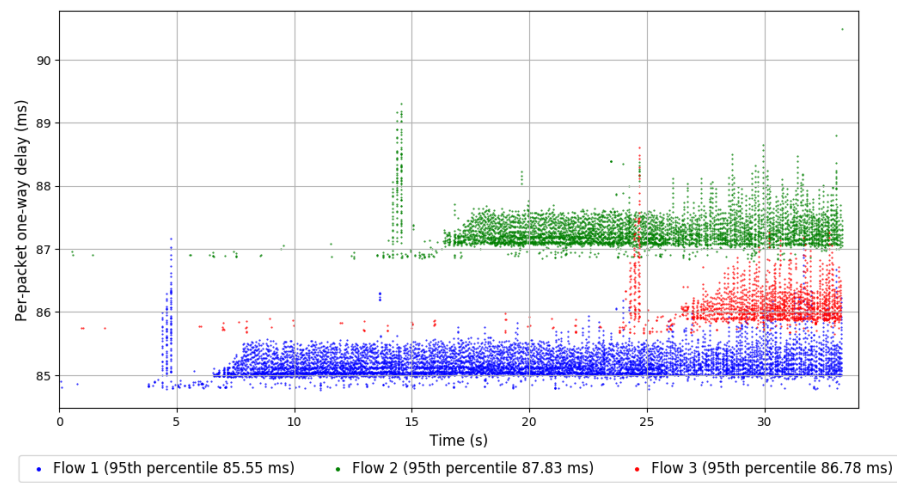
Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2018-02-04 19:03:25
End at: 2018-02-04 19:03:55
Local clock offset: -0.134 ms
Remote clock offset: -4.146 ms


# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.86 Mbit/s
95th percentile per-packet one-way delay: 87.623 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 2.09 Mbit/s
95th percentile per-packet one-way delay: 87.723 ms
Loss rate: 0.97%
-- Flow 2:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 86.074 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 85.265 ms
Loss rate: 2.54%
```

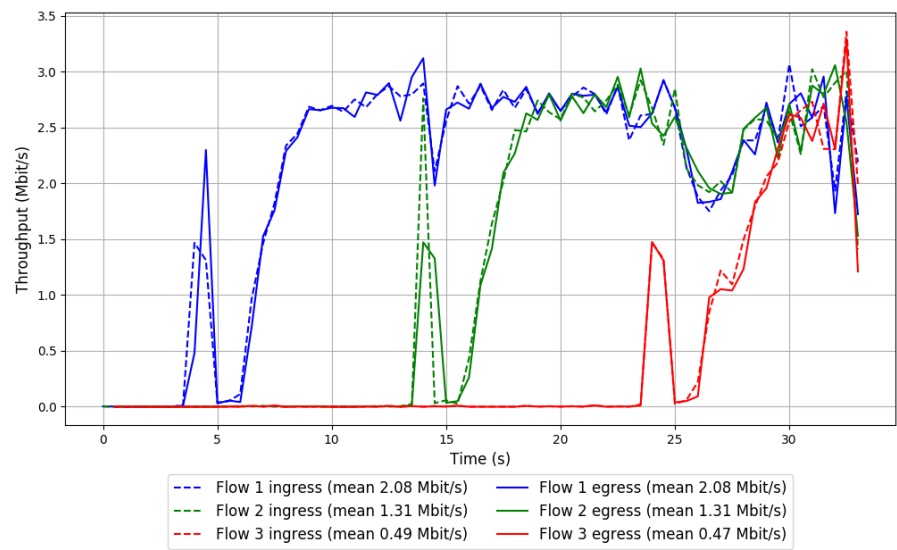Run 5: Report of WebRTC media — Data Link

```
Run 6: Statistics of WebRTC media

Start at: 2018-02-04 19:27:26
End at: 2018-02-04 19:27:56
Local clock offset: -0.073 ms
Remote clock offset: -2.512 ms


# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.83 Mbit/s
95th percentile per-packet one-way delay: 87.525 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 85.553 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 87.827 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 86.778 ms
Loss rate: 3.84%
```

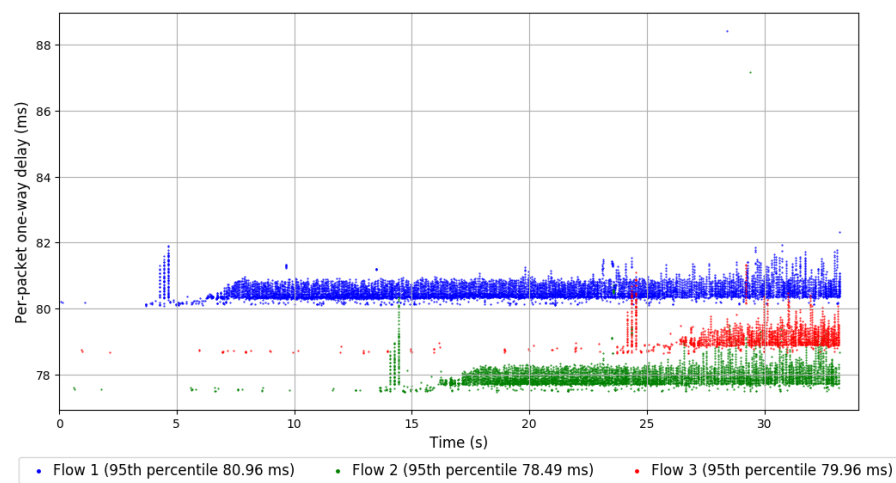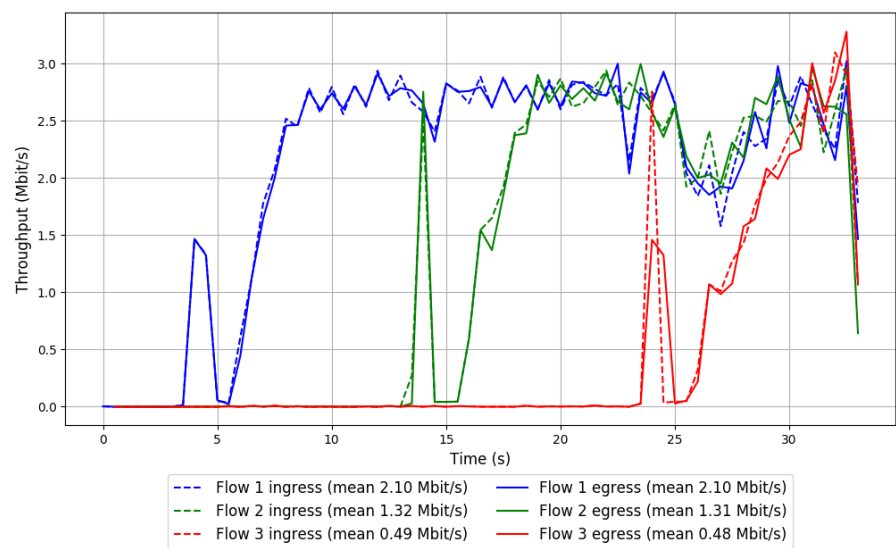Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2018-02-04 19:51:14
End at: 2018-02-04 19:51:44
Local clock offset: -0.155 ms
Remote clock offset: 4.296 ms


# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.86 Mbit/s
95th percentile per-packet one-way delay: 80.844 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 80.957 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 78.491 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 79.963 ms
Loss rate: 3.54%
```
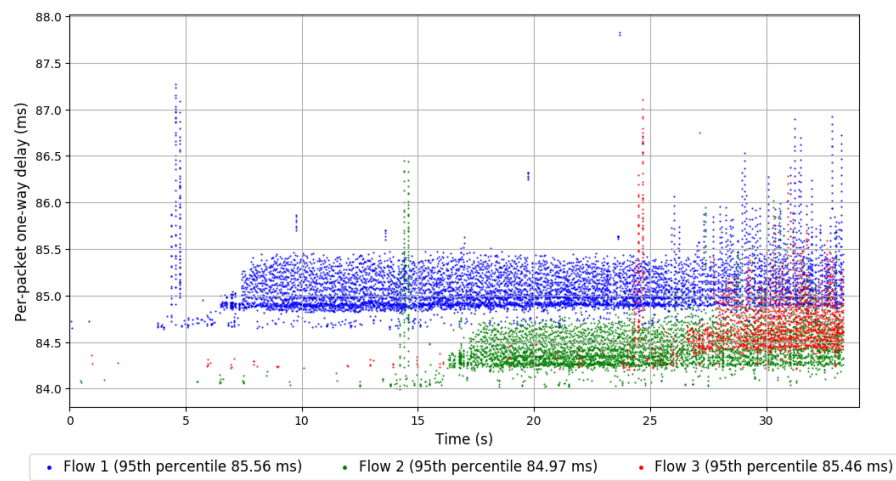
Run 7: Report of WebRTC media — Data Link

```
Run 8: Statistics of WebRTC media

Start at: 2018-02-04 20:15:05
End at: 2018-02-04 20:15:35
Local clock offset: -0.058 ms
Remote clock offset: -0.99 ms

# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.85 Mbit/s
95th percentile per-packet one-way delay: 85.433 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 2.09 Mbit/s
95th percentile per-packet one-way delay: 85.557 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 84.966 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 85.456 ms
Loss rate: 2.63%
```
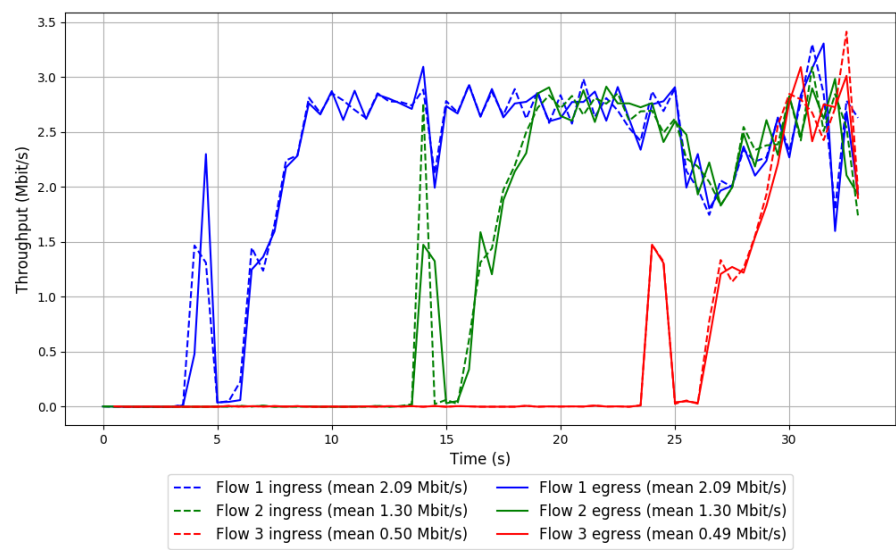
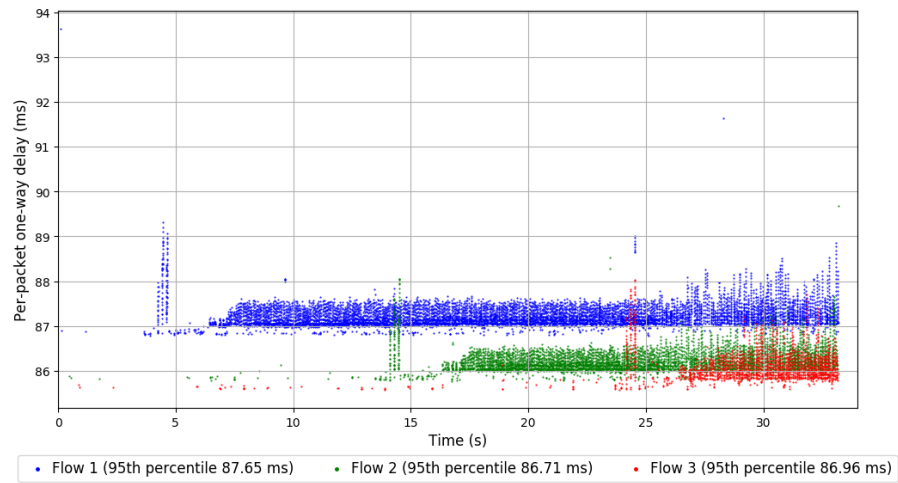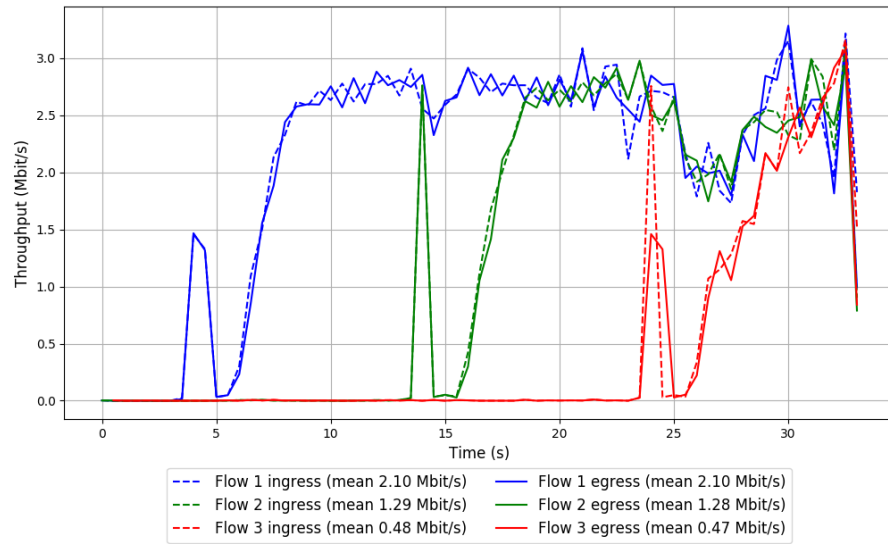Run 8: Report of WebRTC media — Data Link

```
Run 9: Statistics of WebRTC media

Start at: 2018-02-04 20:39:04
End at: 2018-02-04 20:39:34
Local clock offset: -0.054 ms
Remote clock offset: -1.599 ms


# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.82 Mbit/s
95th percentile per-packet one-way delay: 87.537 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 87.648 ms
Loss rate: 0.96%
-- Flow 2:
Average throughput: 1.28 Mbit/s
95th percentile per-packet one-way delay: 86.714 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 86.964 ms
Loss rate: 3.50%
```

Run 9: Report of WebRTC media — Data Link

```
Run 10: Statistics of WebRTC media

Start at: 2018-02-04 21:02:54
End at: 2018-02-04 21:03:24
Local clock offset: -0.068 ms
Remote clock offset: 4.176 ms

# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.85 Mbit/s
95th percentile per-packet one-way delay: 81.817 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 81.906 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 81.018 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 80.803 ms
Loss rate: 3.55%
```
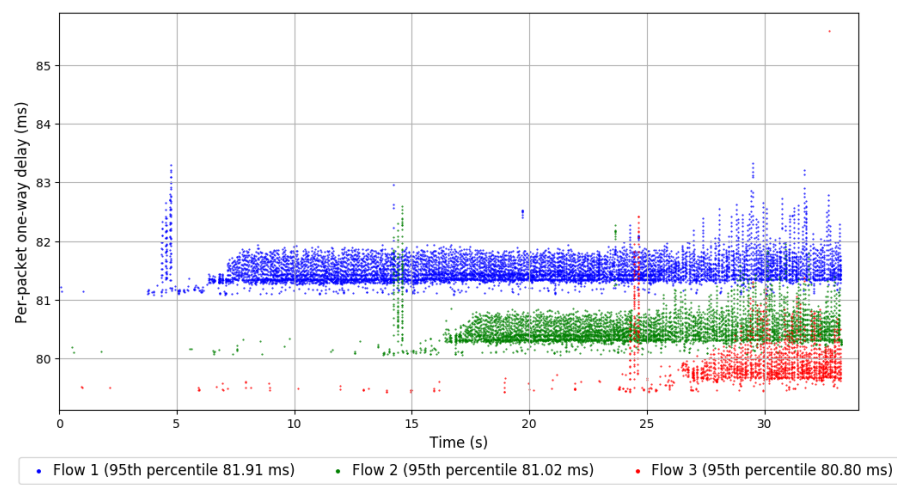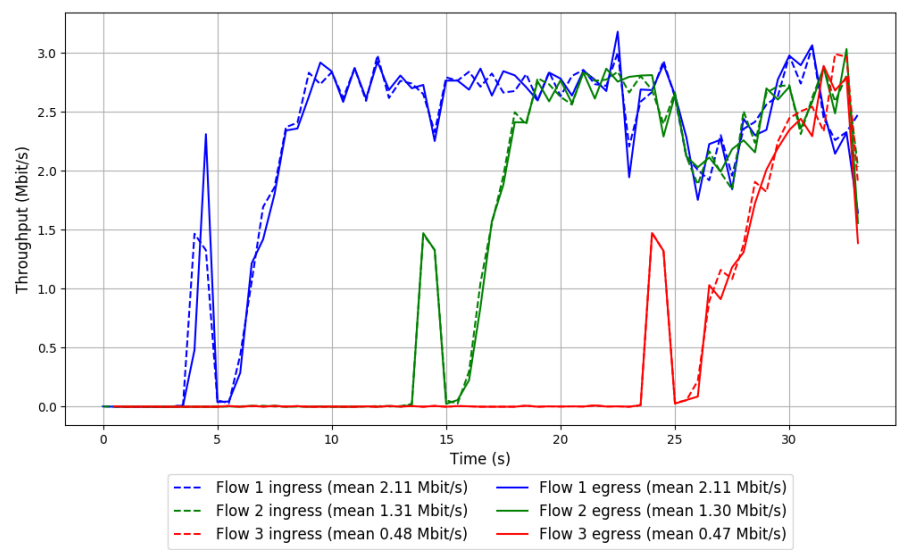
Run 10: Report of WebRTC media — Data Link

```
Run 1: Statistics of Sprout

Start at: 2018-02-04 17:45:53
End at: 2018-02-04 17:46:23
Local clock offset: -0.088 ms
Remote clock offset: 0.202 ms


# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.37 Mbit/s
95th percentile per-packet one-way delay: 88.553 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 4.11 Mbit/s
95th percentile per-packet one-way delay: 88.708 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 3.09 Mbit/s
95th percentile per-packet one-way delay: 87.797 ms
Loss rate: 1.60%
-- Flow 3:
Average throughput: 3.72 Mbit/s
95th percentile per-packet one-way delay: 88.816 ms
Loss rate: 2.67%
```
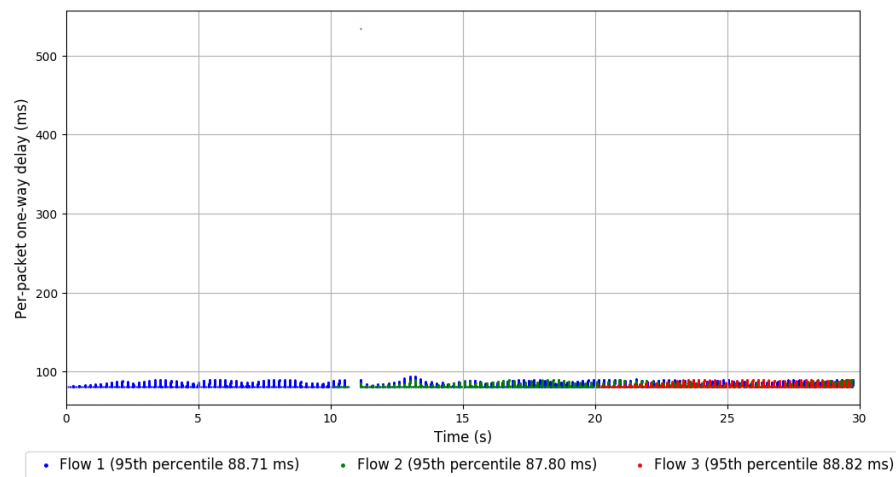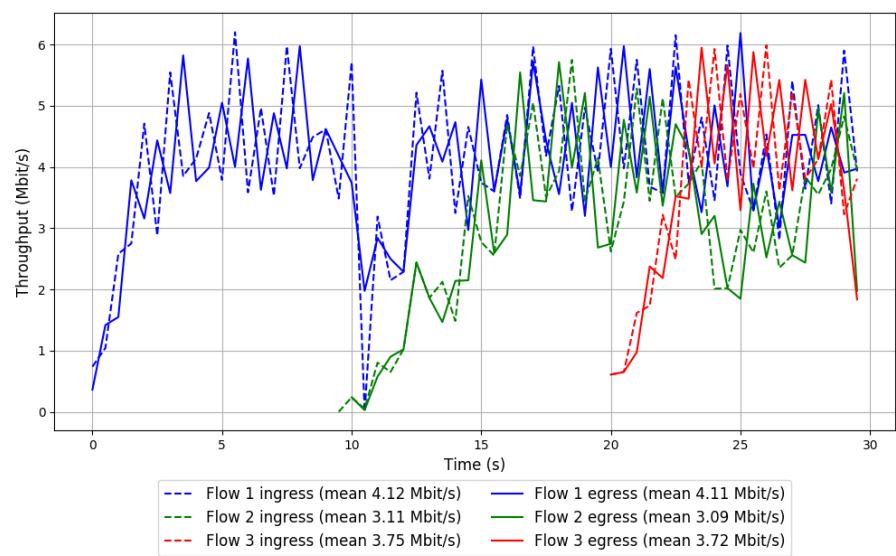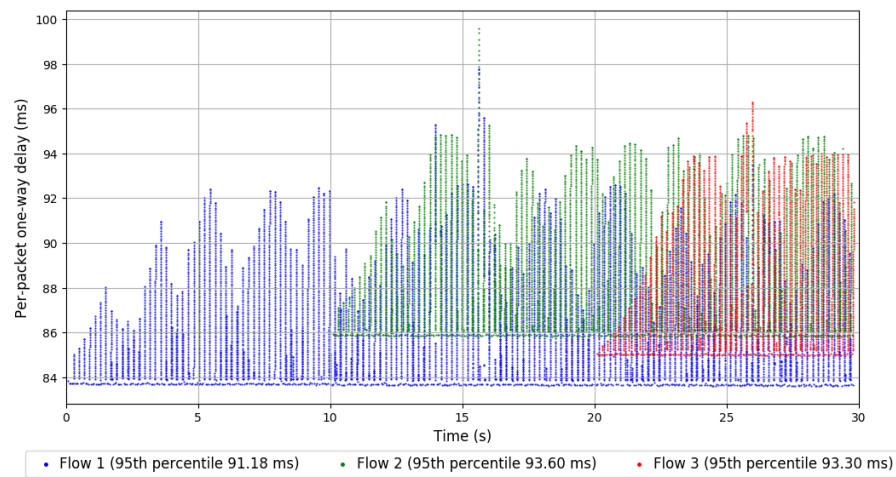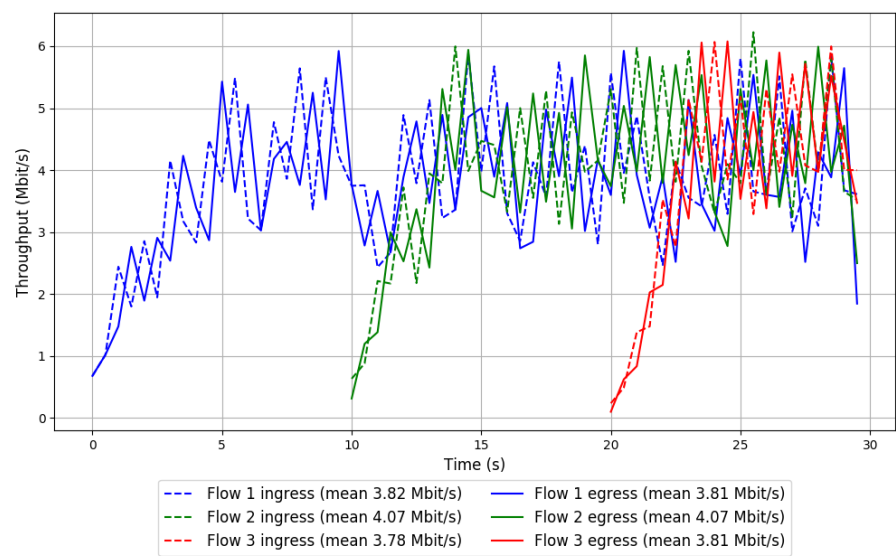
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2018-02-04 18:09:48
End at: 2018-02-04 18:10:18
Local clock offset: -0.0 ms
Remote clock offset: -6.019 ms


# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.74 Mbit/s
95th percentile per-packet one-way delay: 92.860 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 3.81 Mbit/s
95th percentile per-packet one-way delay: 91.182 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 4.07 Mbit/s
95th percentile per-packet one-way delay: 93.604 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 3.81 Mbit/s
95th percentile per-packet one-way delay: 93.296 ms
Loss rate: 0.74%
```
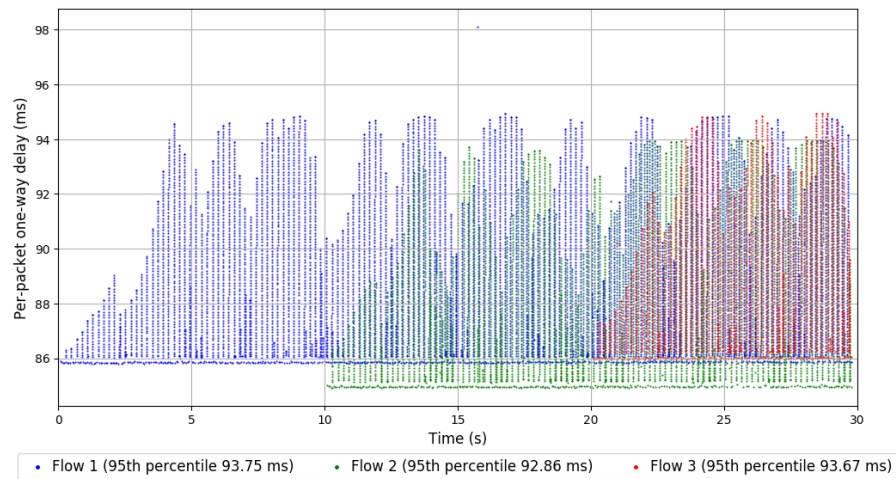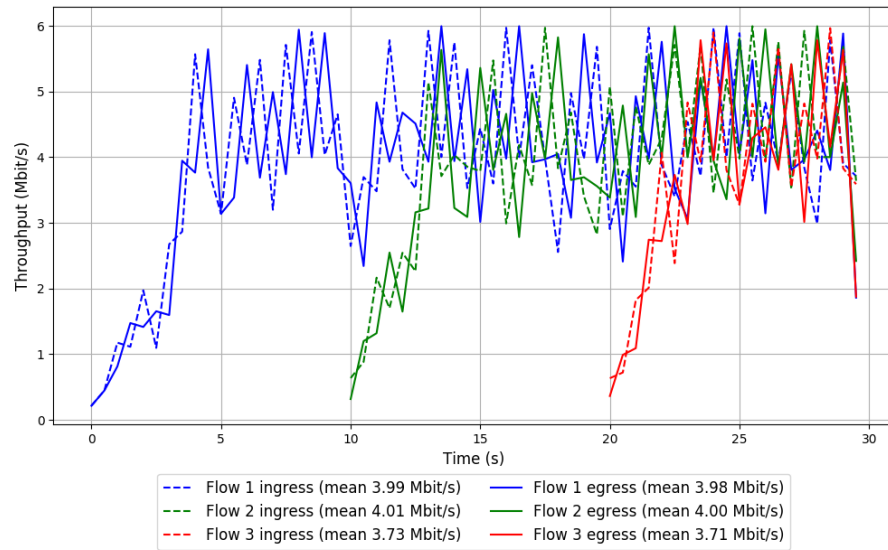
Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2018-02-04 18:34:10
End at: 2018-02-04 18:34:40
Local clock offset: -0.029 ms
Remote clock offset: -6.258 ms


# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.84 Mbit/s
95th percentile per-packet one-way delay: 93.465 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 3.98 Mbit/s
95th percentile per-packet one-way delay: 93.753 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 4.00 Mbit/s
95th percentile per-packet one-way delay: 92.855 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 3.71 Mbit/s
95th percentile per-packet one-way delay: 93.673 ms
Loss rate: 2.34%
```

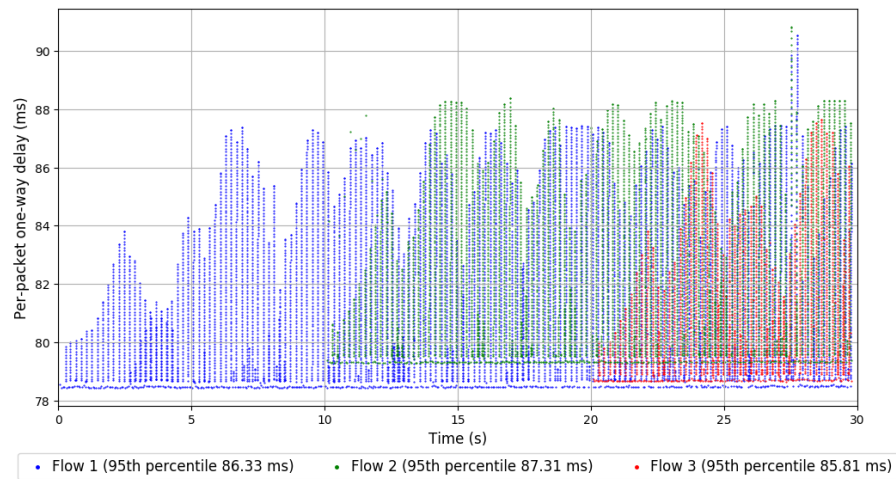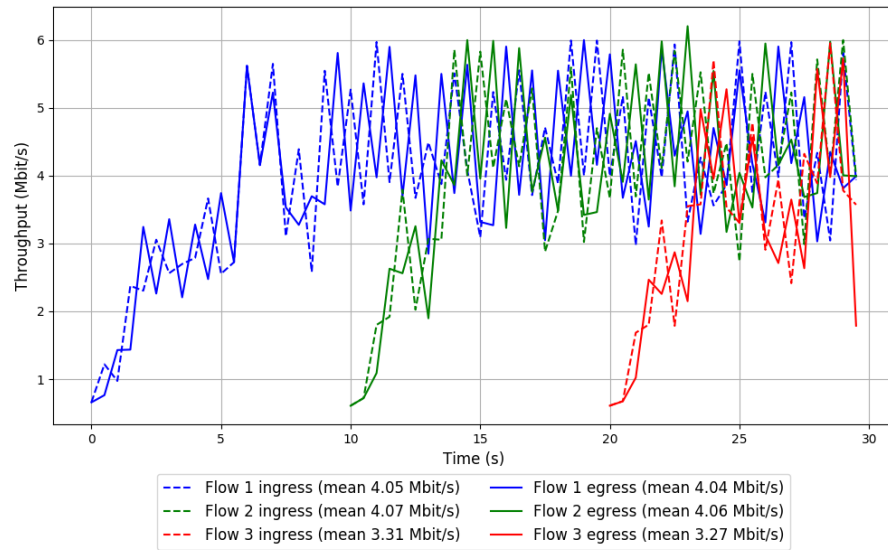# Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2018-02-04 18:58:04
End at: 2018-02-04 18:58:34
Local clock offset: -0.011 ms
Remote clock offset: 1.191 ms


# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.80 Mbit/s
95th percentile per-packet one-way delay: 86.691 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 4.04 Mbit/s
95th percentile per-packet one-way delay: 86.326 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 4.06 Mbit/s
95th percentile per-packet one-way delay: 87.309 ms
Loss rate: 1.24%
-- Flow 3:
Average throughput: 3.27 Mbit/s
95th percentile per-packet one-way delay: 85.814 ms
Loss rate: 2.78%
```
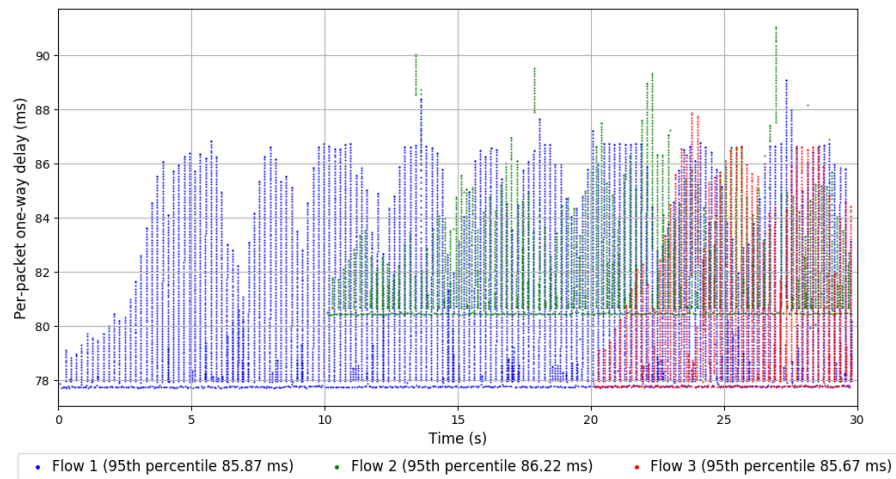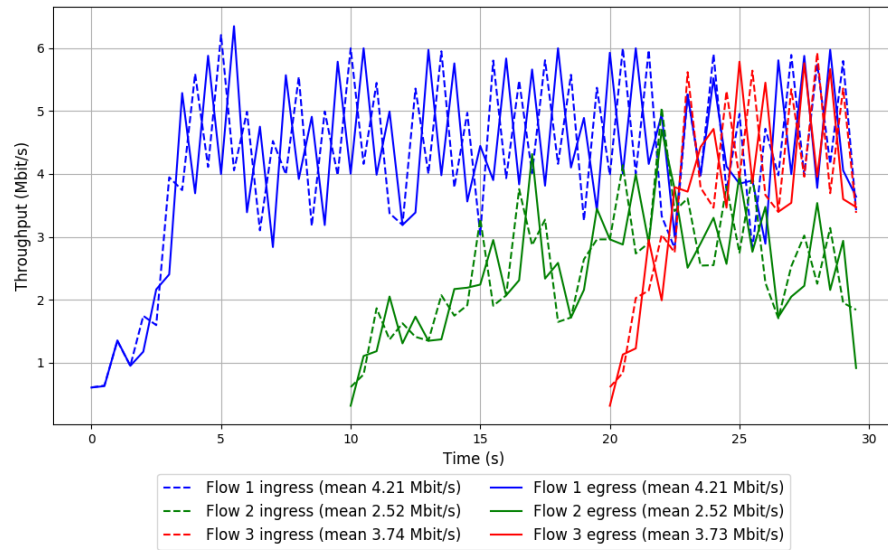
Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2018-02-04 19:21:59
End at: 2018-02-04 19:22:29
Local clock offset: -0.133 ms
Remote clock offset: 3.543 ms


# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.10 Mbit/s
95th percentile per-packet one-way delay: 85.883 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 4.21 Mbit/s
95th percentile per-packet one-way delay: 85.871 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 2.52 Mbit/s
95th percentile per-packet one-way delay: 86.216 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 3.73 Mbit/s
95th percentile per-packet one-way delay: 85.668 ms
Loss rate: 2.26%
```

Run 5: Report of Sprout — Data Link

```
Run 6: Statistics of Sprout

Start at: 2018-02-04 19:45:54
End at: 2018-02-04 19:46:24
Local clock offset: -0.087 ms
Remote clock offset: 3.274 ms


# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.90 Mbit/s
95th percentile per-packet one-way delay: 87.937 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 4.14 Mbit/s
95th percentile per-packet one-way delay: 87.451 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 3.79 Mbit/s
95th percentile per-packet one-way delay: 88.007 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 3.85 Mbit/s
95th percentile per-packet one-way delay: 89.131 ms
Loss rate: 2.52%
```
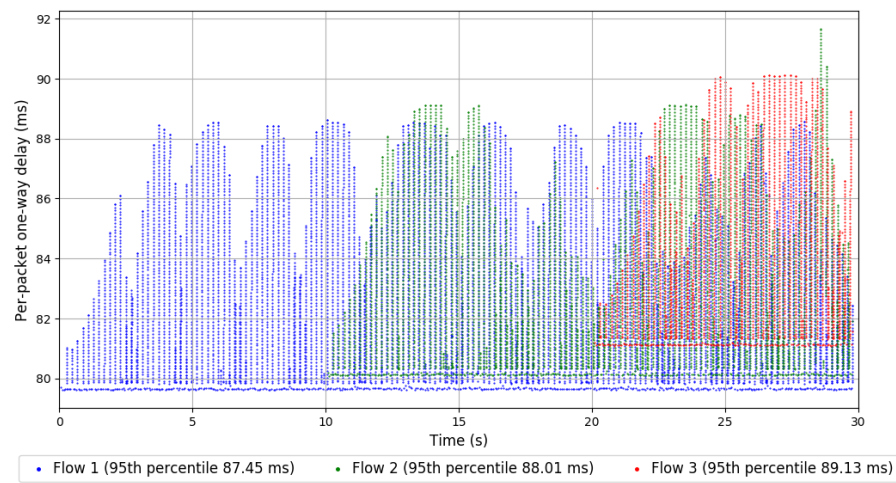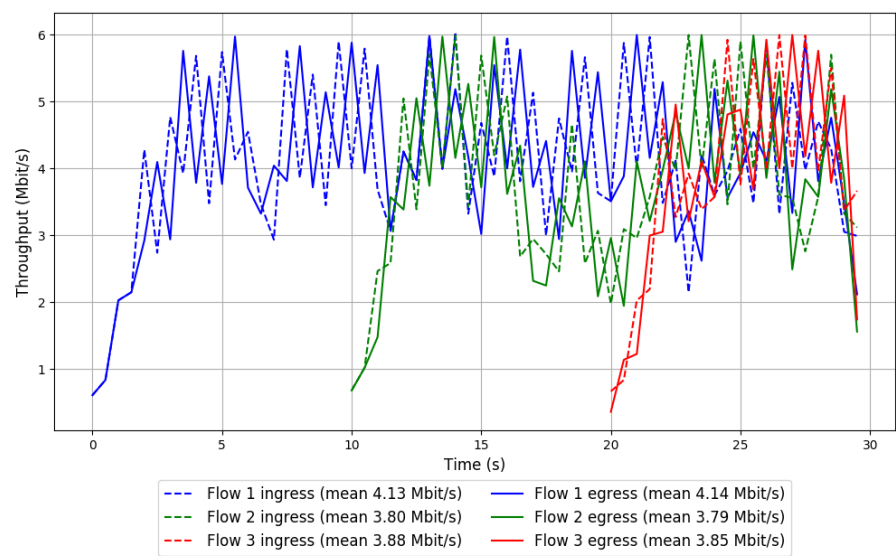
Run 6: Report of Sprout — Data Link

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```
Run 7: Statistics of Sprout

Start at: 2018-02-04 20:09:44
End at: 2018-02-04 20:10:14
Local clock offset: -0.027 ms
Remote clock offset: 2.97 ms


# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.72 Mbit/s
95th percentile per-packet one-way delay: 87.124 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 3.20 Mbit/s
95th percentile per-packet one-way delay: 87.553 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 3.47 Mbit/s
95th percentile per-packet one-way delay: 86.367 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 3.75 Mbit/s
95th percentile per-packet one-way delay: 87.116 ms
Loss rate: 2.03%
```
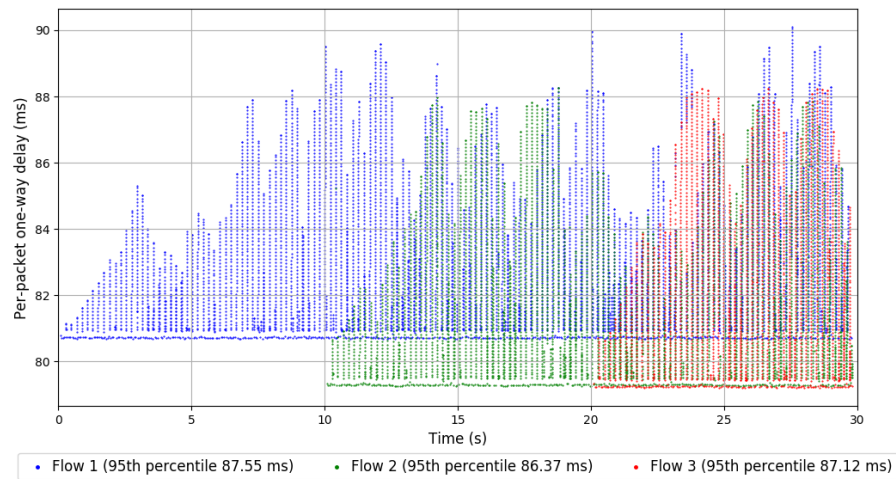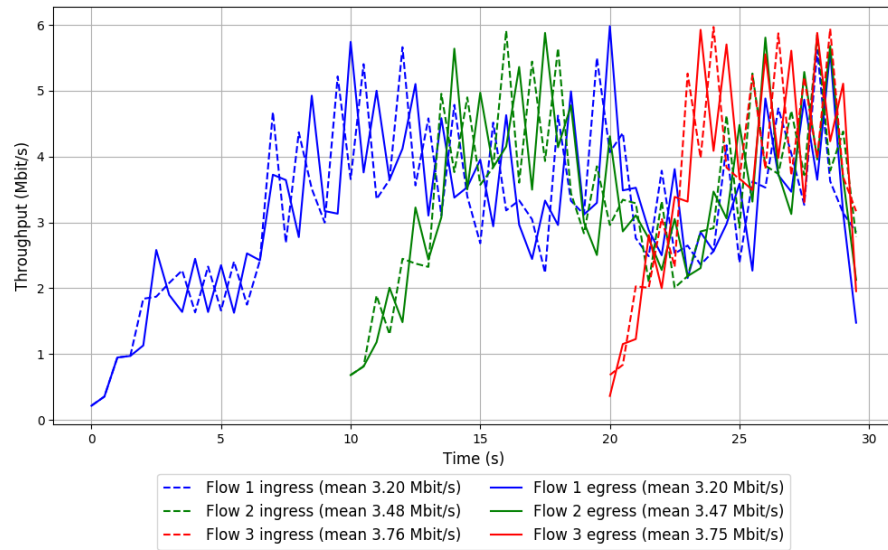
Run 7: Report of Sprout — Data Link

```
Run 8: Statistics of Sprout

Start at: 2018-02-04 20:33:41
End at: 2018-02-04 20:34:11
Local clock offset: -0.005 ms
Remote clock offset: -0.826 ms


# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.71 Mbit/s
95th percentile per-packet one-way delay: 91.332 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 4.04 Mbit/s
95th percentile per-packet one-way delay: 91.188 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 3.75 Mbit/s
95th percentile per-packet one-way delay: 91.225 ms
Loss rate: 1.20%
-- Flow 3:
Average throughput: 3.66 Mbit/s
95th percentile per-packet one-way delay: 92.202 ms
Loss rate: 2.04%
```
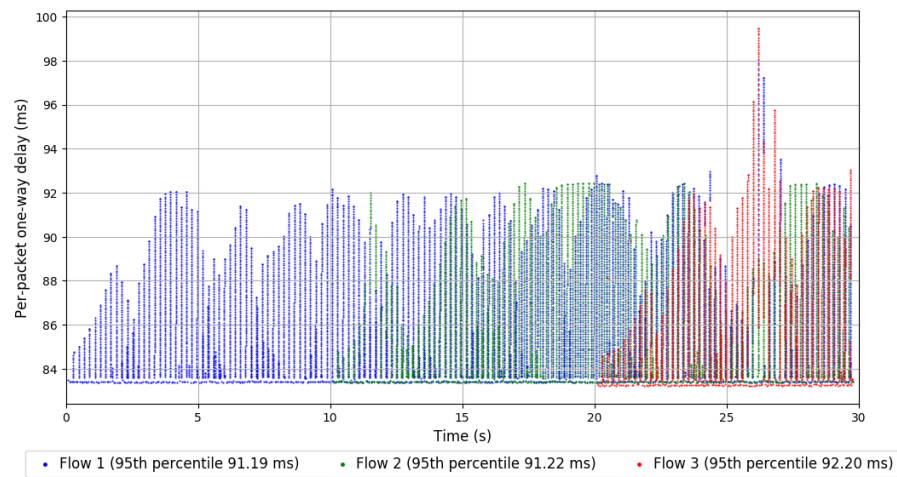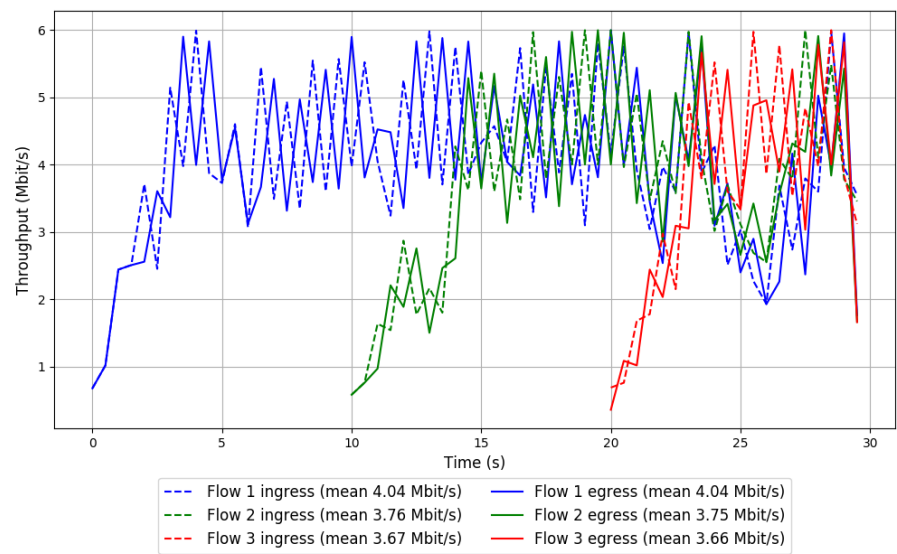
Run 8: Report of Sprout — Data Link

Flow 1 ingress (mean 4.04 Mbit/s) --- Flow 1 egress (mean 4.04 Mbit/s) ---
Flow 2 ingress (mean 3.76 Mbit/s) --- Flow 2 egress (mean 3.75 Mbit/s) ---
Flow 3 ingress (mean 3.67 Mbit/s) --- Flow 3 egress (mean 3.66 Mbit/s) ---

Flow 1 (95th percentile 91.19 ms) · Flow 2 (95th percentile 91.22 ms) · Flow 3 (95th percentile 92.20 ms)
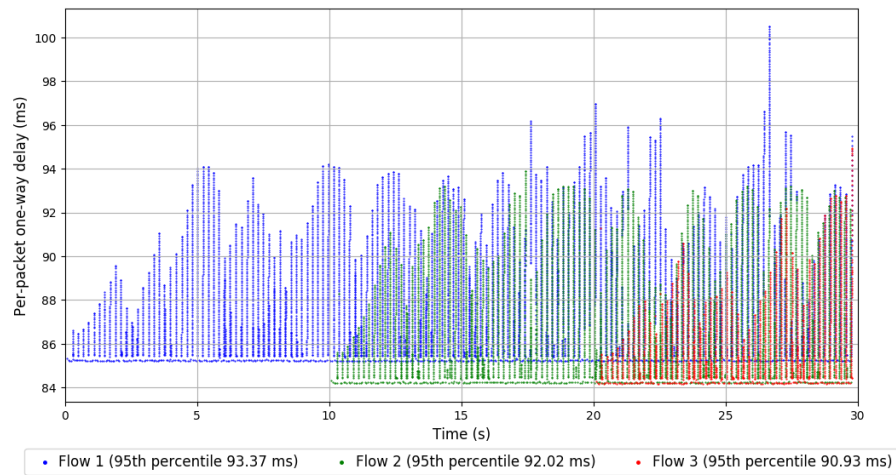
159

```
Run 9: Statistics of Sprout

Start at: 2018-02-04 20:57:34
End at: 2018-02-04 20:58:04
Local clock offset: -0.024 ms
Remote clock offset: -1.572 ms


# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.49 Mbit/s
95th percentile per-packet one-way delay: 92.706 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 3.87 Mbit/s
95th percentile per-packet one-way delay: 93.369 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 4.09 Mbit/s
95th percentile per-packet one-way delay: 92.018 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 2.81 Mbit/s
95th percentile per-packet one-way delay: 90.930 ms
Loss rate: 2.63%
```
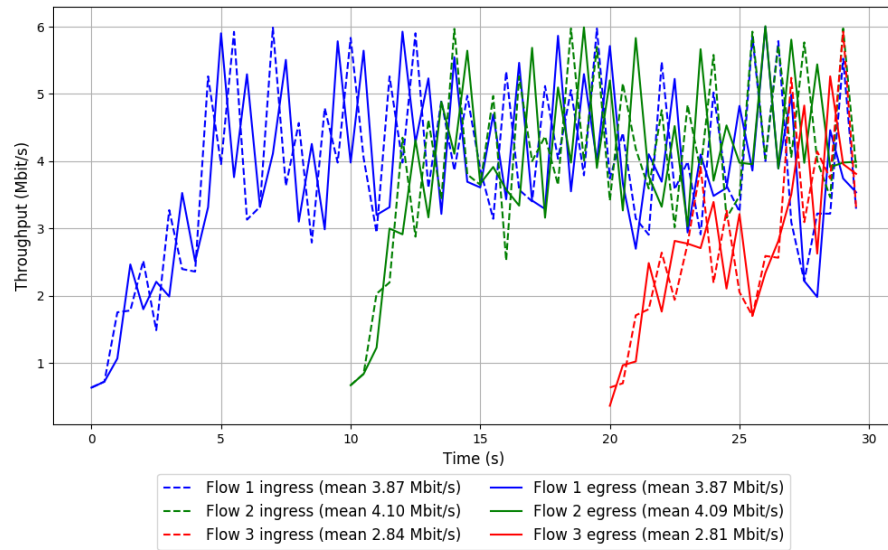
Run 9: Report of Sprout — Data Link

```
Run 10: Statistics of Sprout

Start at: 2018-02-04 21:21:25
End at: 2018-02-04 21:21:55
Local clock offset: -0.096 ms
Remote clock offset: 4.906 ms


# Below is generated by plot.py at 2018-02-05 01:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.31 Mbit/s
95th percentile per-packet one-way delay: 86.099 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 3.72 Mbit/s
95th percentile per-packet one-way delay: 84.698 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 3.84 Mbit/s
95th percentile per-packet one-way delay: 86.753 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 3.23 Mbit/s
95th percentile per-packet one-way delay: 89.920 ms
Loss rate: 2.82%
```
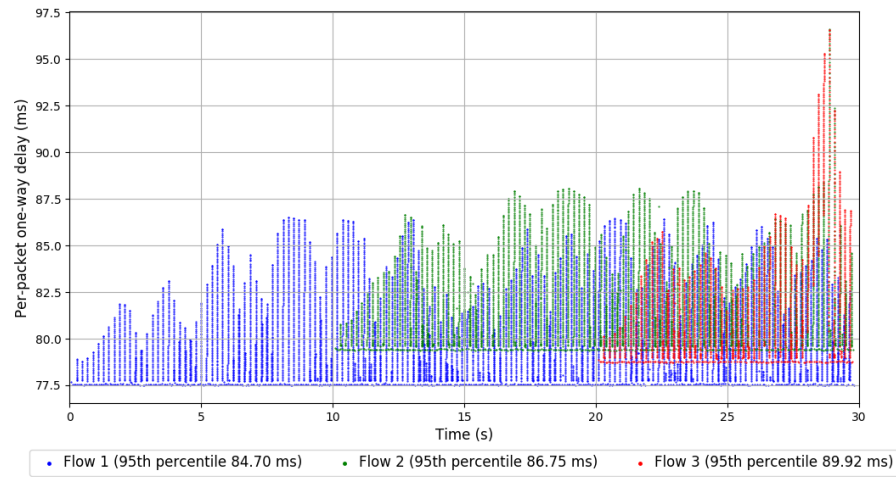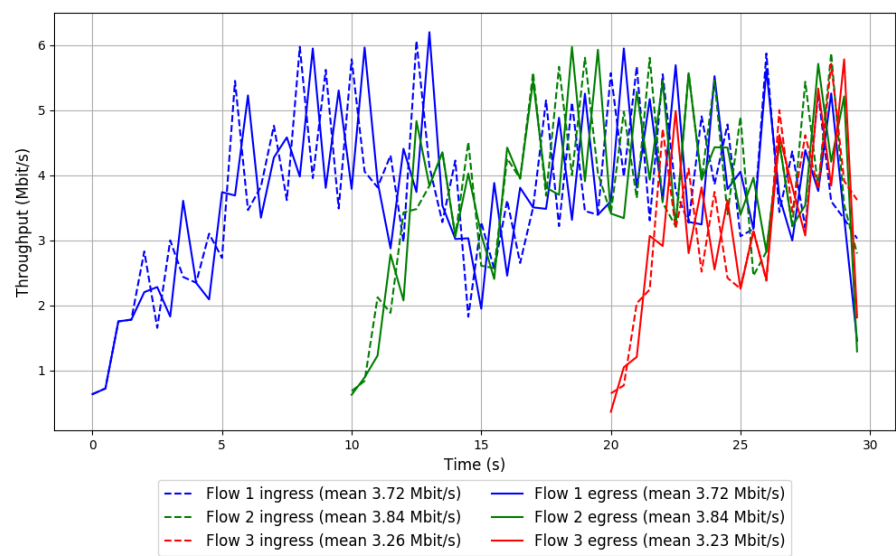
Run 10: Report of Sprout — Data Link

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

Start at: 2018-02-04 17:26:00
End at: 2018-02-04 17:26:30
Local clock offset: -0.168 ms
Remote clock offset: -5.793 ms

# Below is generated by plot.py at 2018-02-05 01:32:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.64 Mbit/s
95th percentile per-packet one-way delay: 110.799 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 51.25 Mbit/s
95th percentile per-packet one-way delay: 109.882 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 40.34 Mbit/s
95th percentile per-packet one-way delay: 110.647 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 17.12 Mbit/s
95th percentile per-packet one-way delay: 112.650 ms
Loss rate: 2.14%
```

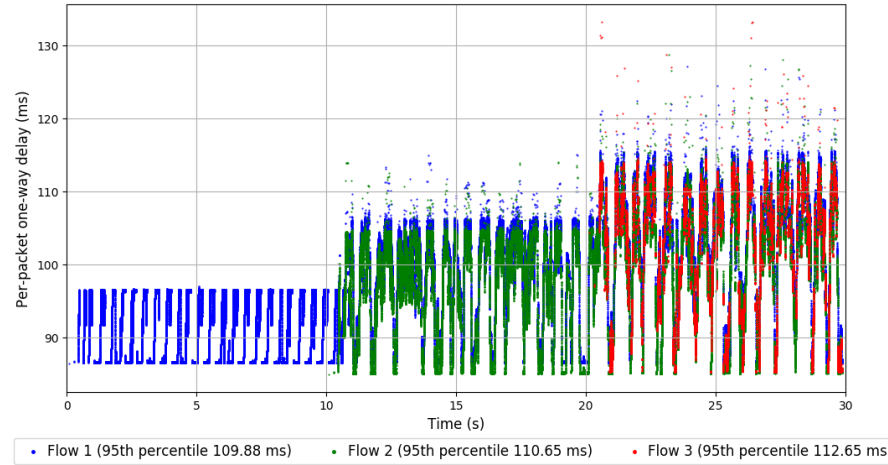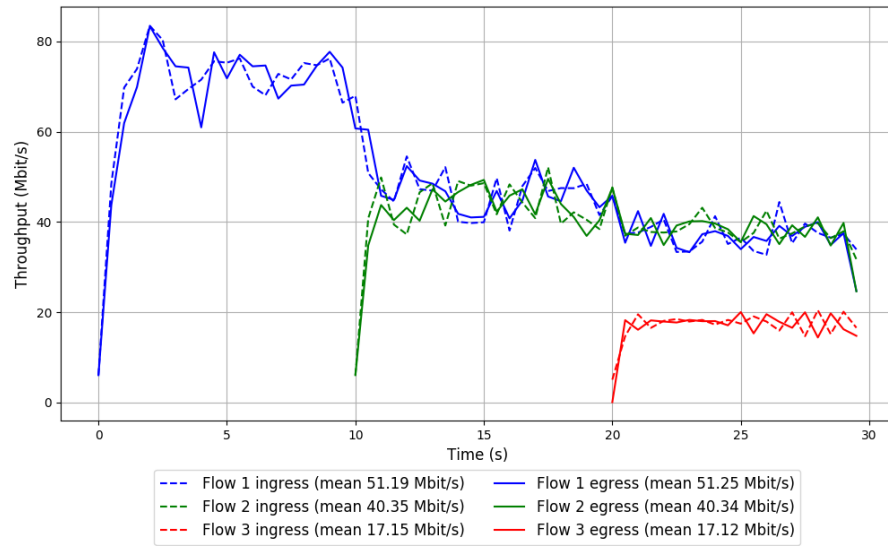Run 1: Report of TaoVA-100x — Data Link

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

Start at: 2018-02-04 17:49:50
End at: 2018-02-04 17:50:20
Local clock offset: -0.023 ms
Remote clock offset: -4.401 ms

# Below is generated by plot.py at 2018-02-05 01:32:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.79 Mbit/s
95th percentile per-packet one-way delay: 113.258 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 48.86 Mbit/s
95th percentile per-packet one-way delay: 110.745 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 38.45 Mbit/s
95th percentile per-packet one-way delay: 113.749 ms
Loss rate: 0.96%
-- Flow 3:
Average throughput: 28.65 Mbit/s
95th percentile per-packet one-way delay: 114.903 ms
Loss rate: 2.21%
```

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

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

Start at: 2018-02-04 18:13:47
End at: 2018-02-04 18:14:17
Local clock offset: -0.018 ms
Remote clock offset: 0.022 ms

# Below is generated by plot.py at 2018-02-05 01:32:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.52 Mbit/s
95th percentile per-packet one-way delay: 102.084 ms
Loss rate: 11.69%
-- Flow 1:
Average throughput: 47.48 Mbit/s
95th percentile per-packet one-way delay: 99.559 ms
Loss rate: 9.13%
-- Flow 2:
Average throughput: 33.19 Mbit/s
95th percentile per-packet one-way delay: 102.360 ms
Loss rate: 16.80%
-- Flow 3:
Average throughput: 15.24 Mbit/s
95th percentile per-packet one-way delay: 106.302 ms
Loss rate: 11.39%
```
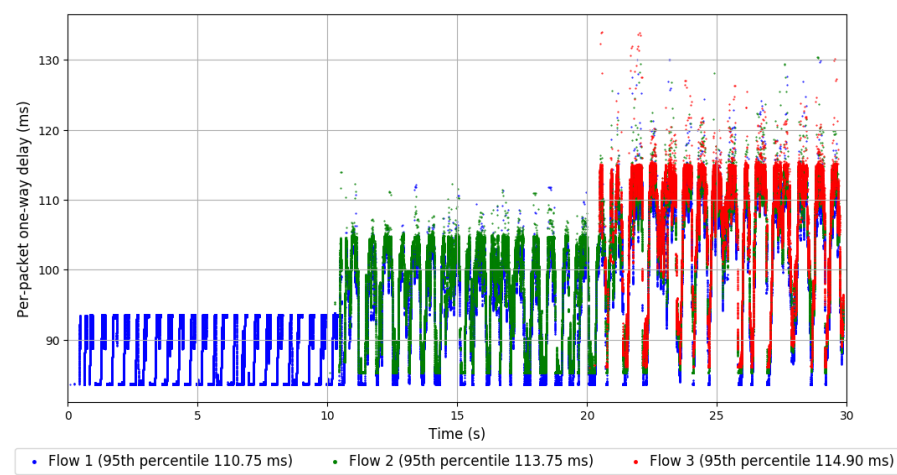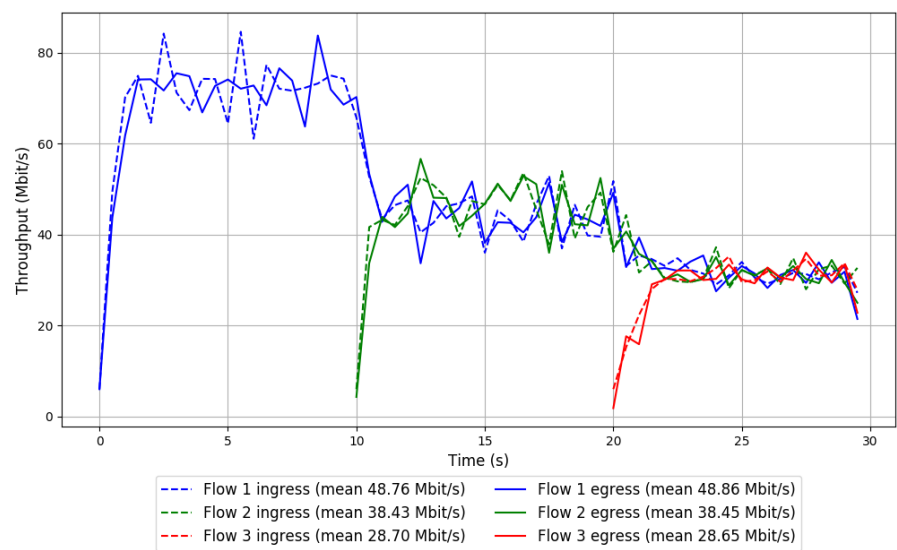
Run 3: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 51.92 Mbit/s) --- Flow 1 egress (mean 47.48 Mbit/s)
Flow 2 ingress (mean 39.52 Mbit/s) --- Flow 2 egress (mean 33.19 Mbit/s)
Flow 3 ingress (mean 16.86 Mbit/s) --- Flow 3 egress (mean 15.24 Mbit/s)

Flow 1 (95th percentile 99.56 ms)   Flow 2 (95th percentile 102.36 ms)   Flow 3 (95th percentile 106.30 ms)

```
Run 4: Statistics of TaoVA-100x

Start at: 2018-02-04 18:38:07
End at: 2018-02-04 18:38:37
Local clock offset: -0.041 ms
Remote clock offset: -5.156 ms

# Below is generated by plot.py at 2018-02-05 01:32:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.46 Mbit/s
95th percentile per-packet one-way delay: 112.362 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 48.79 Mbit/s
95th percentile per-packet one-way delay: 111.905 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 37.71 Mbit/s
95th percentile per-packet one-way delay: 112.835 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 29.44 Mbit/s
95th percentile per-packet one-way delay: 112.269 ms
Loss rate: 2.49%
```
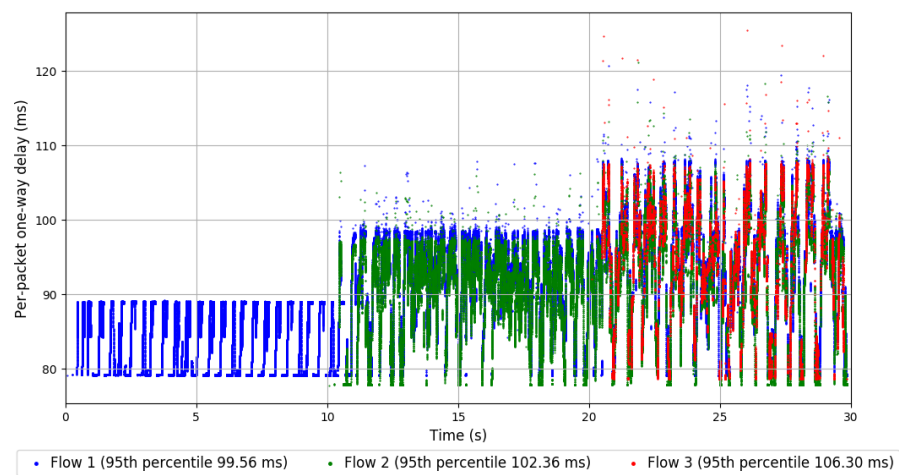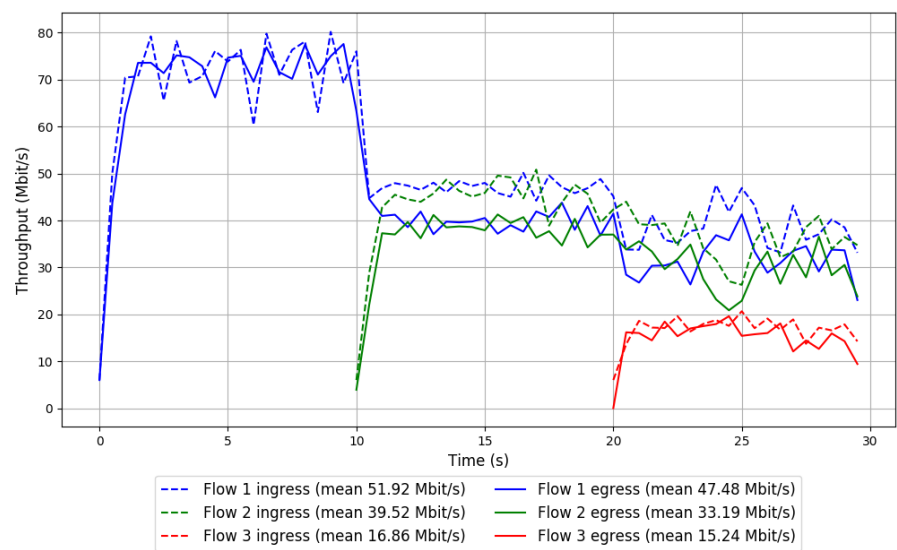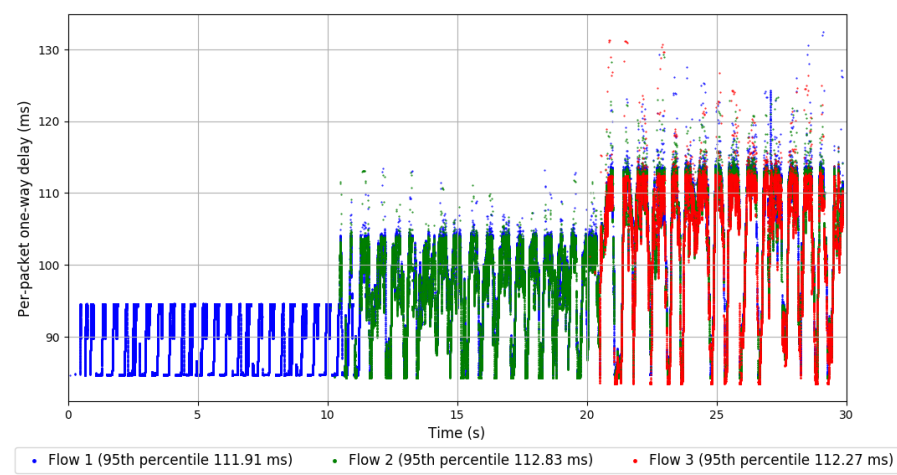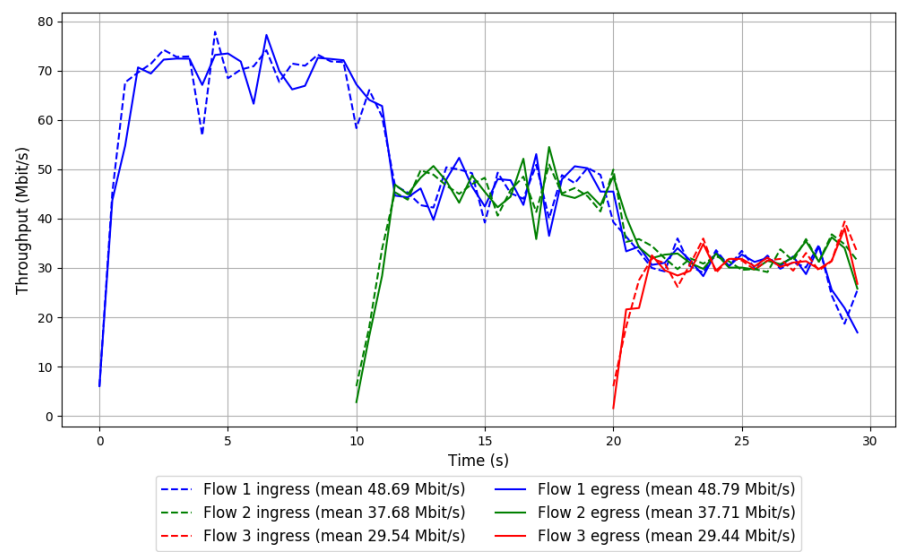
Run 4: Report of TaoVA-100x — Data Link

```
Run 5: Statistics of TaoVA-100x

Start at: 2018-02-04 19:02:01
End at: 2018-02-04 19:02:31
Local clock offset: -0.037 ms
Remote clock offset: 1.505 ms


# Below is generated by plot.py at 2018-02-05 01:32:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.09 Mbit/s
95th percentile per-packet one-way delay: 107.341 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 49.82 Mbit/s
95th percentile per-packet one-way delay: 106.619 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 38.02 Mbit/s
95th percentile per-packet one-way delay: 108.315 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 27.58 Mbit/s
95th percentile per-packet one-way delay: 107.215 ms
Loss rate: 2.56%
```

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

Flow 1 ingress (mean 49.74 Mbit/s) Flow 1 egress (mean 49.82 Mbit/s)
Flow 2 ingress (mean 37.94 Mbit/s) Flow 2 egress (mean 38.02 Mbit/s)
Flow 3 ingress (mean 27.72 Mbit/s) Flow 3 egress (mean 27.58 Mbit/s)

Flow 1 (95th percentile 106.62 ms) Flow 2 (95th percentile 108.31 ms) Flow 3 (95th percentile 107.22 ms)

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```
Run 6: Statistics of TaoVA-100x

Start at: 2018-02-04 19:25:54
End at: 2018-02-04 19:26:24
Local clock offset: -0.063 ms
Remote clock offset: 3.852 ms

# Below is generated by plot.py at 2018-02-05 01:32:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.66 Mbit/s
95th percentile per-packet one-way delay: 101.279 ms
Loss rate: 13.71%
-- Flow 1:
Average throughput: 45.83 Mbit/s
95th percentile per-packet one-way delay: 97.699 ms
Loss rate: 12.21%
-- Flow 2:
Average throughput: 32.97 Mbit/s
95th percentile per-packet one-way delay: 103.305 ms
Loss rate: 16.80%
-- Flow 3:
Average throughput: 15.12 Mbit/s
95th percentile per-packet one-way delay: 105.067 ms
Loss rate: 13.28%
```
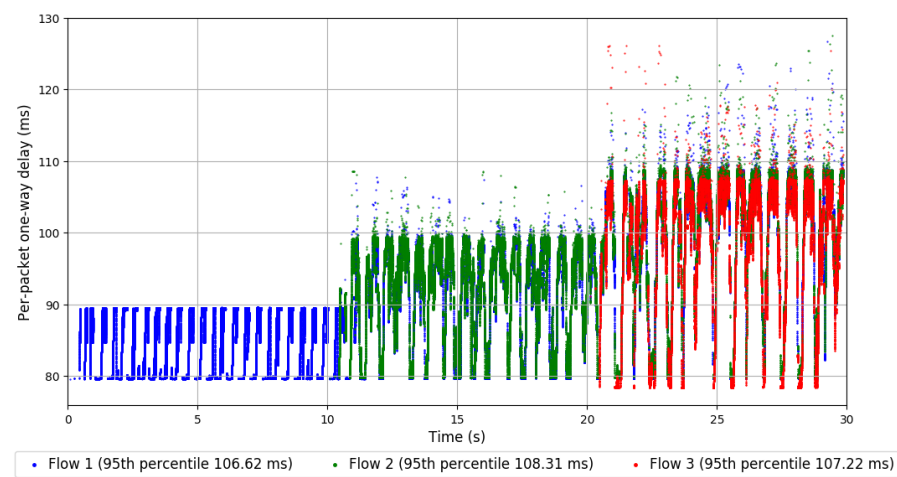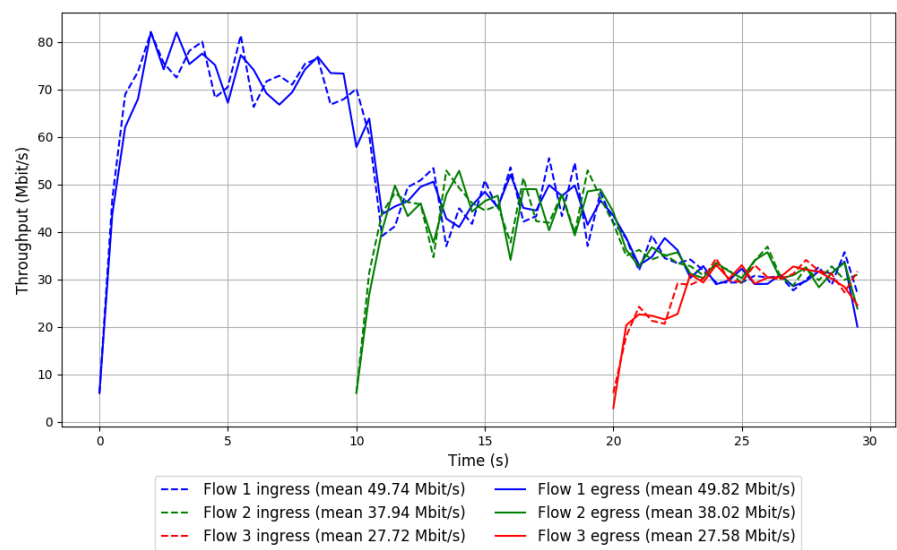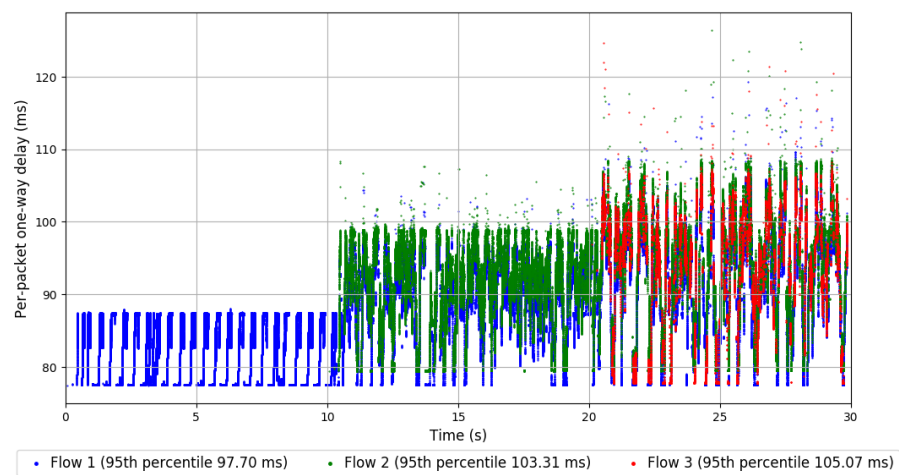
Run 6: Report of TaoVA-100x — Data Link

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```
Run 7: Statistics of TaoVA-100x

Start at: 2018-02-04 19:49:51
End at: 2018-02-04 19:50:21
Local clock offset: -0.12 ms
Remote clock offset: -2.308 ms

# Below is generated by plot.py at 2018-02-05 01:32:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.81 Mbit/s
95th percentile per-packet one-way delay: 113.859 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 50.45 Mbit/s
95th percentile per-packet one-way delay: 112.039 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 37.72 Mbit/s
95th percentile per-packet one-way delay: 113.885 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 25.41 Mbit/s
95th percentile per-packet one-way delay: 114.570 ms
Loss rate: 2.05%
```

Run 7: Report of TaoVA-100x — Data Link

```
Run 8: Statistics of TaoVA-100x

Start at: 2018-02-04 20:13:41
End at: 2018-02-04 20:14:11
Local clock offset: -0.035 ms
Remote clock offset: 3.879 ms


# Below is generated by plot.py at 2018-02-05 01:32:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.45 Mbit/s
95th percentile per-packet one-way delay: 103.512 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 51.43 Mbit/s
95th percentile per-packet one-way delay: 103.038 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 40.92 Mbit/s
95th percentile per-packet one-way delay: 103.506 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 17.86 Mbit/s
95th percentile per-packet one-way delay: 104.976 ms
Loss rate: 2.37%
```
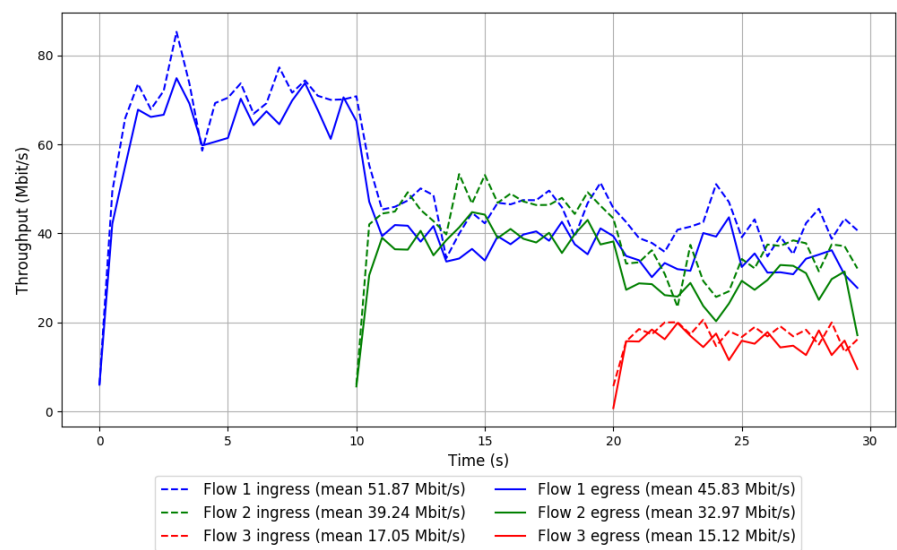
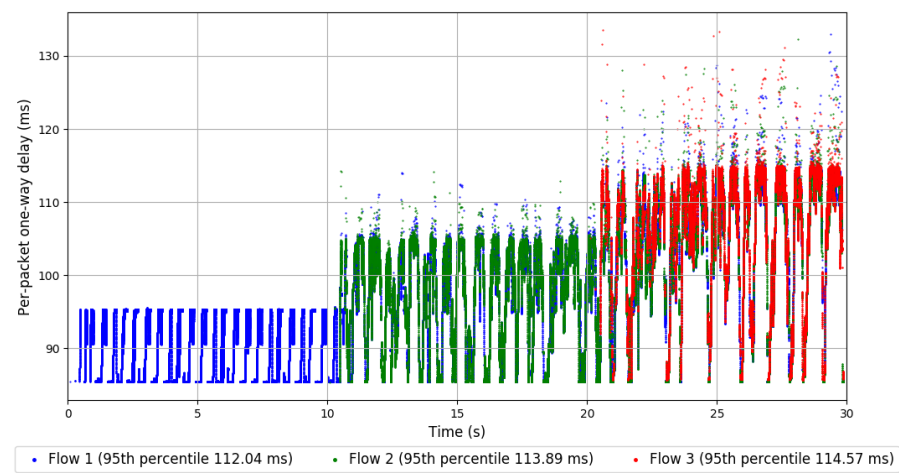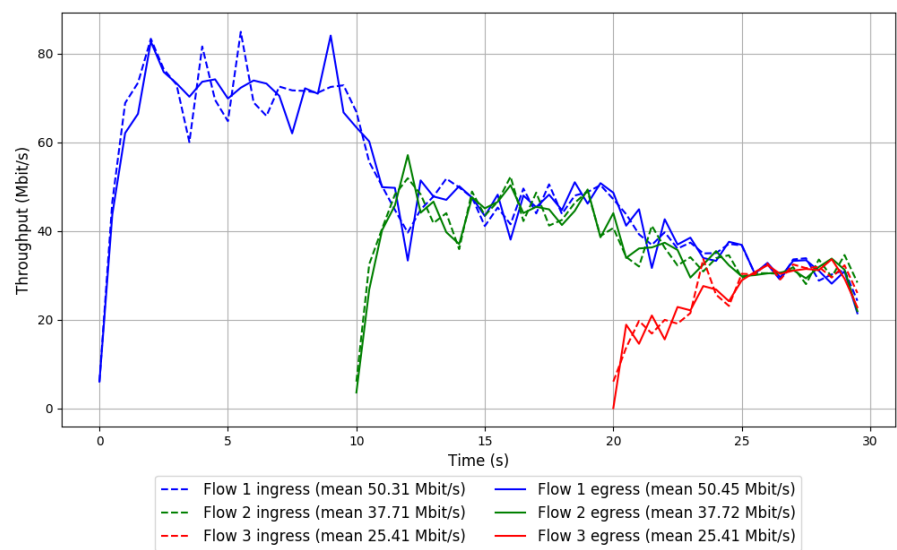Run 8: Report of TaoVA-100x — Data Link

- - - Flow 1 ingress (mean 51.36 Mbit/s)   —— Flow 1 egress (mean 51.43 Mbit/s)
- - - Flow 2 ingress (mean 40.90 Mbit/s)   —— Flow 2 egress (mean 40.92 Mbit/s)
- - - Flow 3 ingress (mean 17.92 Mbit/s)   —— Flow 3 egress (mean 17.86 Mbit/s)

• Flow 1 (95th percentile 103.04 ms)   • Flow 2 (95th percentile 103.51 ms)   • Flow 3 (95th percentile 104.98 ms)

```
Run 9: Statistics of TaoVA-100x

Start at: 2018-02-04 20:37:40
End at: 2018-02-04 20:38:10
Local clock offset: -0.005 ms
Remote clock offset: -0.754 ms

# Below is generated by plot.py at 2018-02-05 01:34:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.76 Mbit/s
95th percentile per-packet one-way delay: 112.742 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 49.81 Mbit/s
95th percentile per-packet one-way delay: 111.719 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 37.73 Mbit/s
95th percentile per-packet one-way delay: 114.233 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 27.17 Mbit/s
95th percentile per-packet one-way delay: 111.919 ms
Loss rate: 2.38%
```
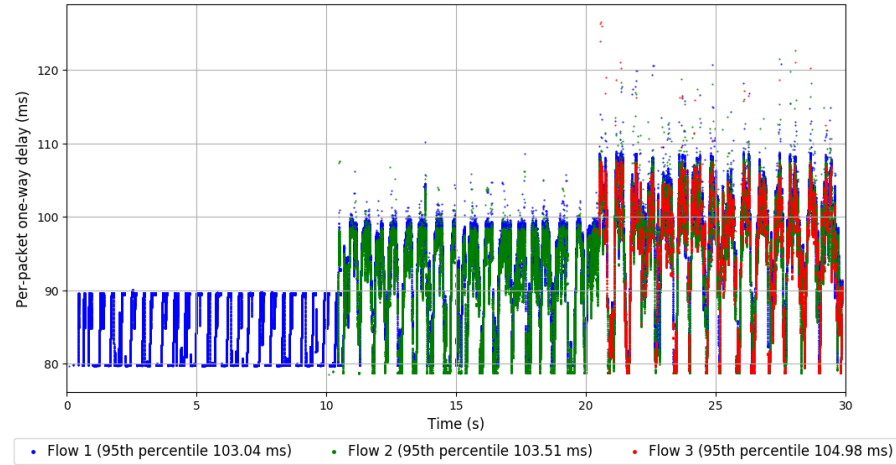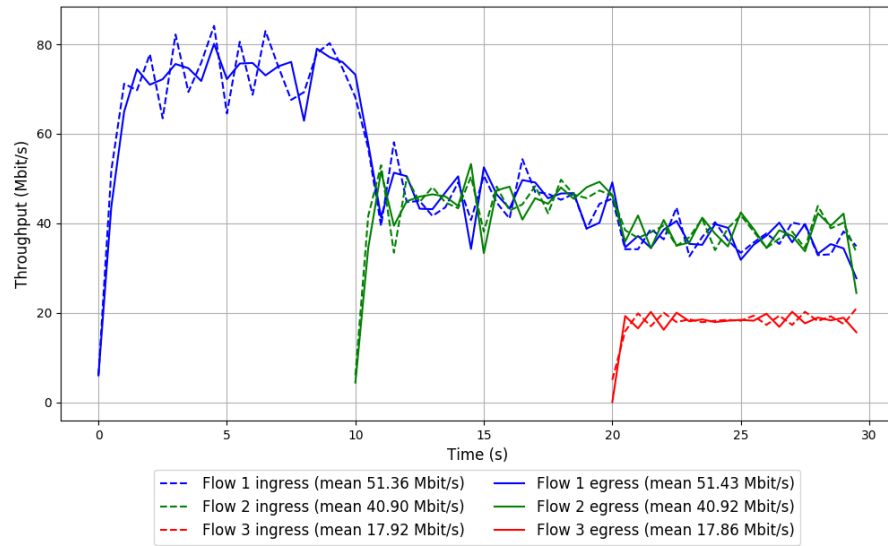
Run 9: Report of TaoVA-100x — Data Link

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```
Run 10: Statistics of TaoVA-100x

Start at: 2018-02-04 21:01:30
End at: 2018-02-04 21:02:00
Local clock offset: -0.142 ms
Remote clock offset: -1.583 ms


# Below is generated by plot.py at 2018-02-05 01:34:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.19 Mbit/s
95th percentile per-packet one-way delay: 113.653 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 49.80 Mbit/s
95th percentile per-packet one-way delay: 112.133 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 38.67 Mbit/s
95th percentile per-packet one-way delay: 113.335 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 26.62 Mbit/s
95th percentile per-packet one-way delay: 114.765 ms
Loss rate: 2.43%
```

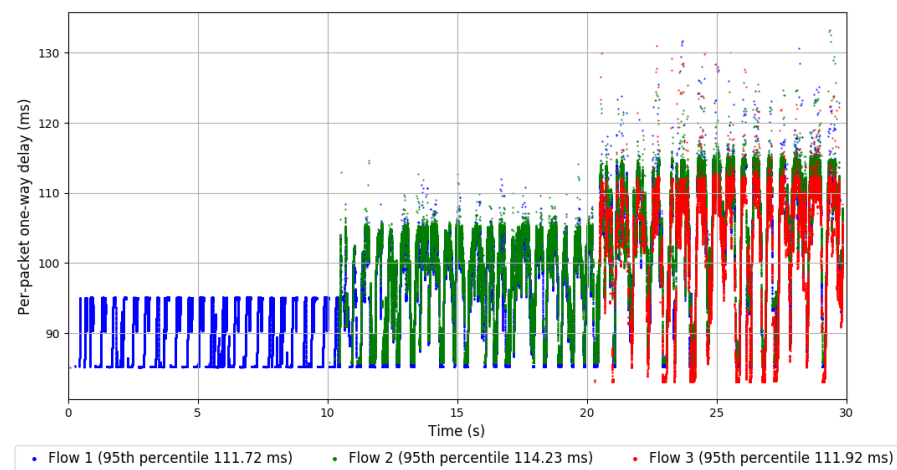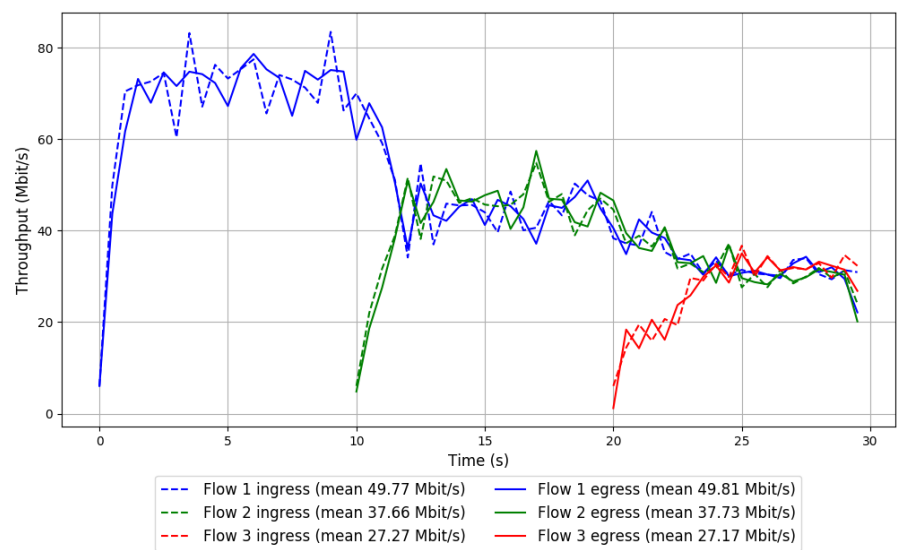Run 10: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 49.72 Mbit/s)   Flow 1 egress (mean 49.80 Mbit/s)
Flow 2 ingress (mean 38.64 Mbit/s)   Flow 2 egress (mean 38.67 Mbit/s)
Flow 3 ingress (mean 26.73 Mbit/s)   Flow 3 egress (mean 26.62 Mbit/s)

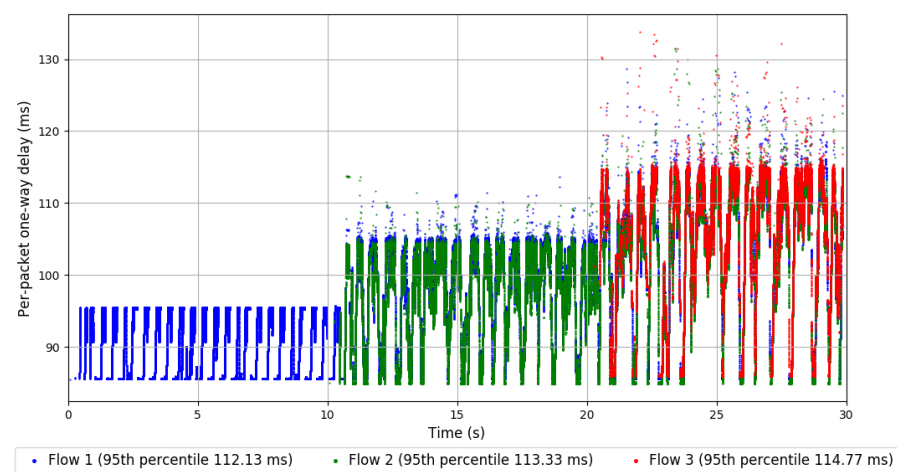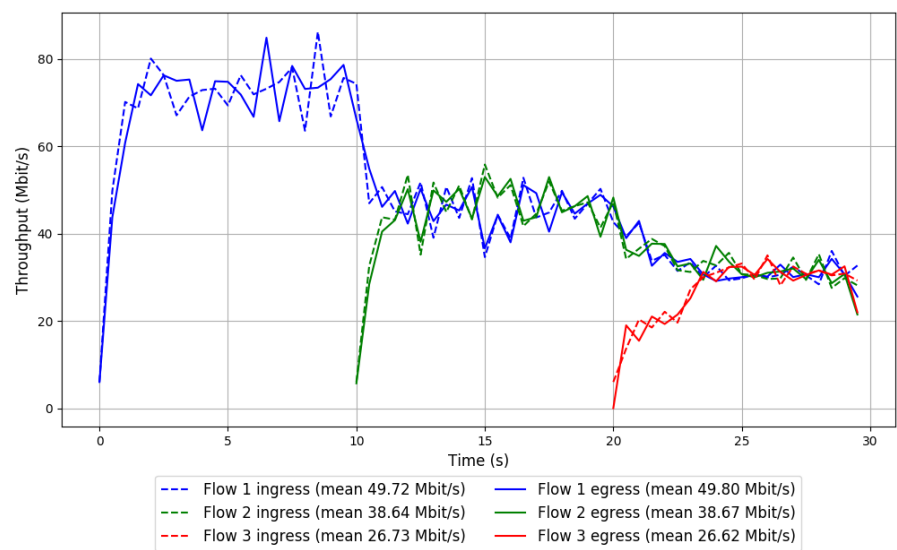Flow 1 (95th percentile 112.13 ms)   Flow 2 (95th percentile 113.33 ms)   Flow 3 (95th percentile 114.77 ms)

```
Run 1: Statistics of TCP Vegas

Start at: 2018-02-04 17:40:36
End at: 2018-02-04 17:41:06
Local clock offset: -0.057 ms
Remote clock offset: -4.804 ms


# Below is generated by plot.py at 2018-02-05 01:34:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 58.40 Mbit/s
95th percentile per-packet one-way delay: 95.400 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 22.99 Mbit/s
95th percentile per-packet one-way delay: 98.221 ms
Loss rate: 1.13%
-- Flow 2:
Average throughput: 34.22 Mbit/s
95th percentile per-packet one-way delay: 87.448 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 38.70 Mbit/s
95th percentile per-packet one-way delay: 89.252 ms
Loss rate: 2.12%
```

Run 1: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 23.11 Mbit/s) --- Flow 1 egress (mean 22.99 Mbit/s)
Flow 2 ingress (mean 34.32 Mbit/s) --- Flow 2 egress (mean 34.22 Mbit/s)
Flow 3 ingress (mean 38.83 Mbit/s) --- Flow 3 egress (mean 38.70 Mbit/s)

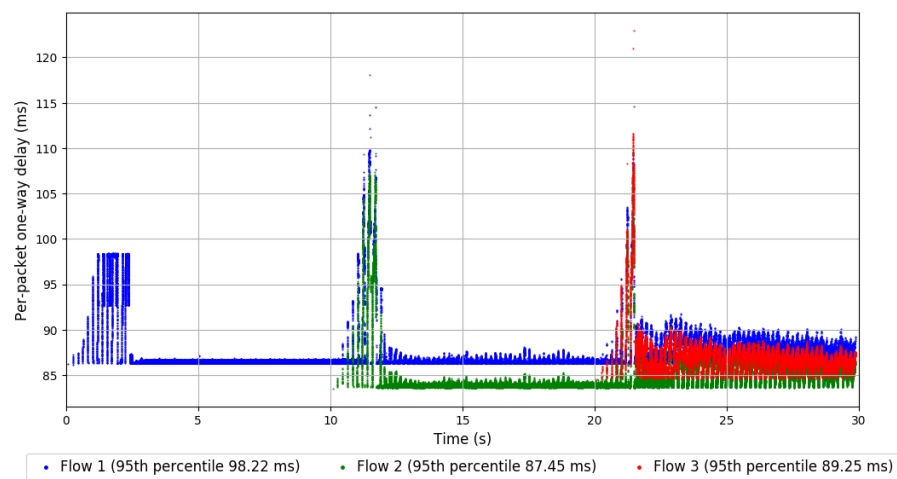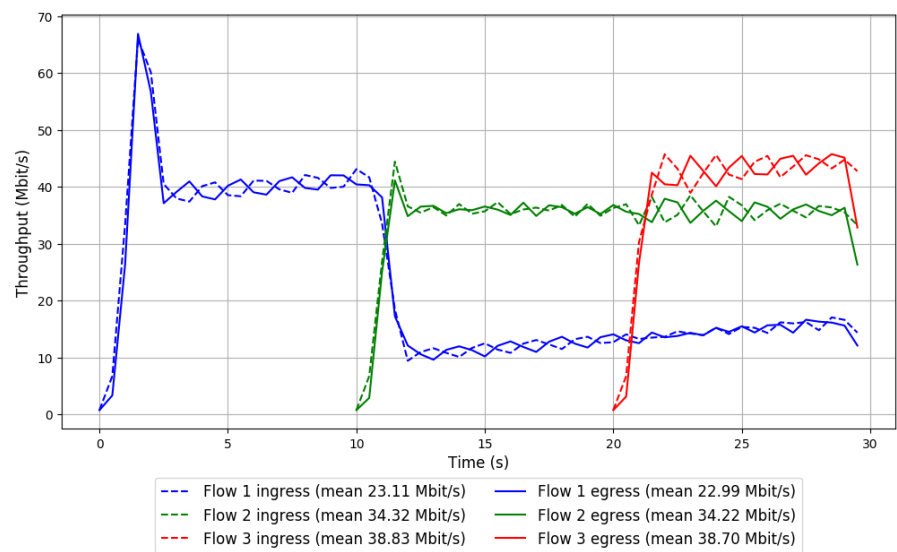Flow 1 (95th percentile 98.22 ms) • Flow 2 (95th percentile 87.45 ms) • Flow 3 (95th percentile 89.25 ms)

```
Run 2: Statistics of TCP Vegas

Start at: 2018-02-04 18:04:31
End at: 2018-02-04 18:05:01
Local clock offset: -0.03 ms
Remote clock offset: 1.38 ms


# Below is generated by plot.py at 2018-02-05 01:34:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.39 Mbit/s
95th percentile per-packet one-way delay: 91.856 ms
Loss rate: 2.06%
-- Flow 1:
Average throughput: 16.93 Mbit/s
95th percentile per-packet one-way delay: 91.342 ms
Loss rate: 1.32%
-- Flow 2:
Average throughput: 16.59 Mbit/s
95th percentile per-packet one-way delay: 92.152 ms
Loss rate: 1.54%
-- Flow 3:
Average throughput: 31.88 Mbit/s
95th percentile per-packet one-way delay: 93.668 ms
Loss rate: 3.76%
```
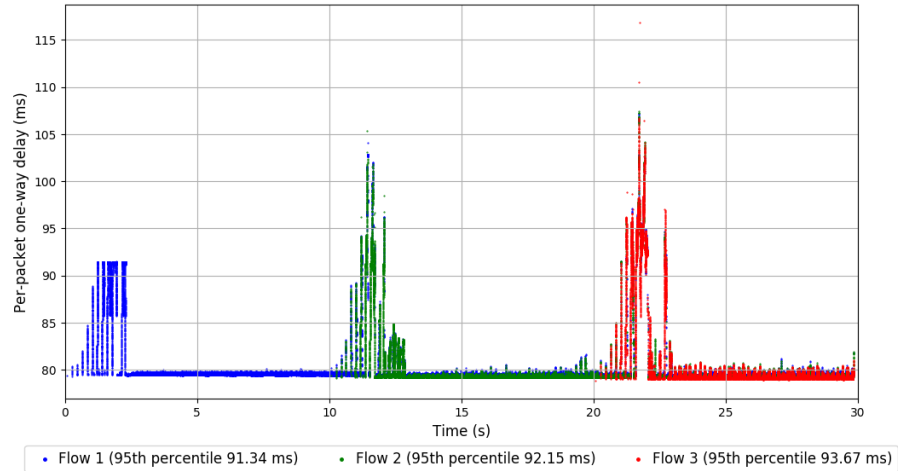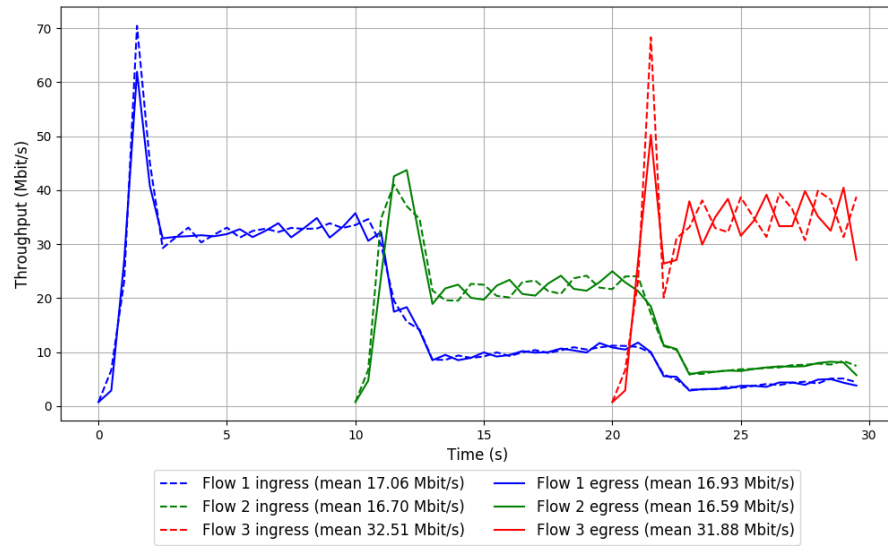
Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2018-02-04 18:28:37
End at: 2018-02-04 18:29:07
Local clock offset: -0.066 ms
Remote clock offset: -6.401 ms


# Below is generated by plot.py at 2018-02-05 01:34:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.96 Mbit/s
95th percentile per-packet one-way delay: 104.048 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 41.58 Mbit/s
95th percentile per-packet one-way delay: 104.208 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 46.34 Mbit/s
95th percentile per-packet one-way delay: 103.646 ms
Loss rate: 0.96%
-- Flow 3:
Average throughput: 7.99 Mbit/s
95th percentile per-packet one-way delay: 105.713 ms
Loss rate: 1.95%
```

Run 3: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 41.59 Mbit/s) — — —   Flow 1 egress (mean 41.58 Mbit/s) ———
Flow 2 ingress (mean 46.37 Mbit/s) — — —   Flow 2 egress (mean 46.34 Mbit/s) ———
Flow 3 ingress (mean 7.98 Mbit/s) — — —   Flow 3 egress (mean 7.99 Mbit/s) ———

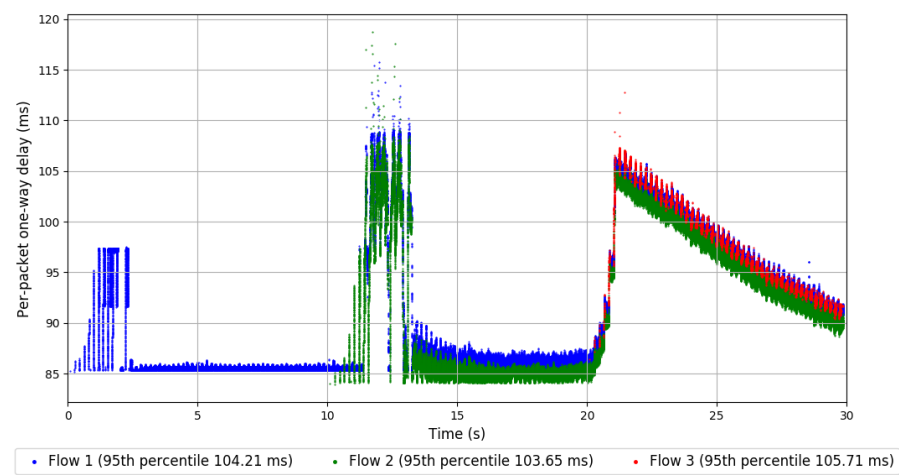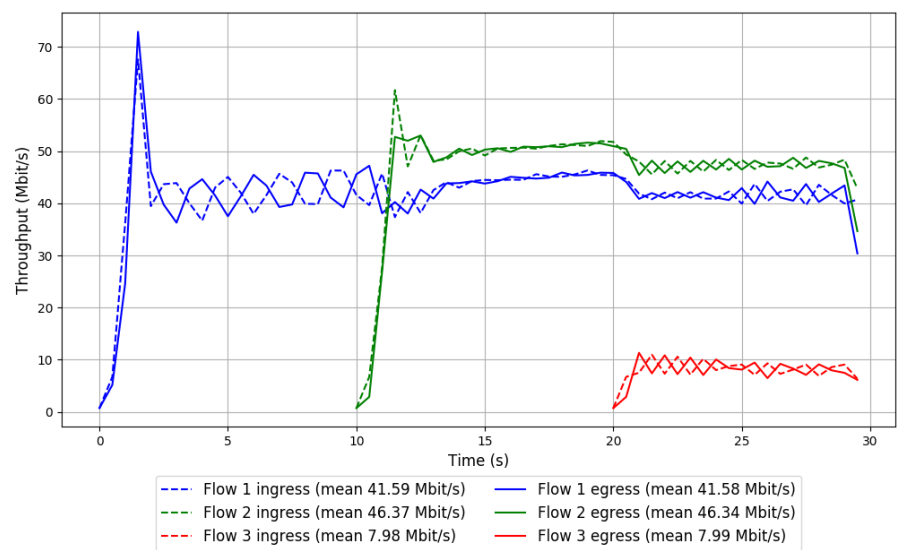Flow 1 (95th percentile 104.21 ms)   Flow 2 (95th percentile 103.65 ms)   Flow 3 (95th percentile 105.71 ms)

```
Run 4: Statistics of TCP Vegas

Start at: 2018-02-04 18:52:44
End at: 2018-02-04 18:53:14
Local clock offset: -0.021 ms
Remote clock offset: 0.866 ms


# Below is generated by plot.py at 2018-02-05 01:34:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.51 Mbit/s
95th percentile per-packet one-way delay: 114.193 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 36.02 Mbit/s
95th percentile per-packet one-way delay: 113.466 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 45.20 Mbit/s
95th percentile per-packet one-way delay: 113.908 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 29.03 Mbit/s
95th percentile per-packet one-way delay: 114.493 ms
Loss rate: 2.49%
```

Run 4: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 36.02 Mbit/s)   Flow 1 egress (mean 36.02 Mbit/s)
Flow 2 ingress (mean 44.70 Mbit/s)   Flow 2 egress (mean 45.20 Mbit/s)
Flow 3 ingress (mean 28.57 Mbit/s)   Flow 3 egress (mean 29.03 Mbit/s)

Flow 1 (95th percentile 113.47 ms)   Flow 2 (95th percentile 113.91 ms)   Flow 3 (95th percentile 114.49 ms)

```
Run 5: Statistics of TCP Vegas

Start at: 2018-02-04 19:16:39
End at: 2018-02-04 19:17:09
Local clock offset: -0.116 ms
Remote clock offset: -2.349 ms


# Below is generated by plot.py at 2018-02-05 01:34:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.34 Mbit/s
95th percentile per-packet one-way delay: 119.748 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 38.01 Mbit/s
95th percentile per-packet one-way delay: 119.088 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 37.48 Mbit/s
95th percentile per-packet one-way delay: 120.052 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 28.94 Mbit/s
95th percentile per-packet one-way delay: 118.427 ms
Loss rate: 2.43%
```
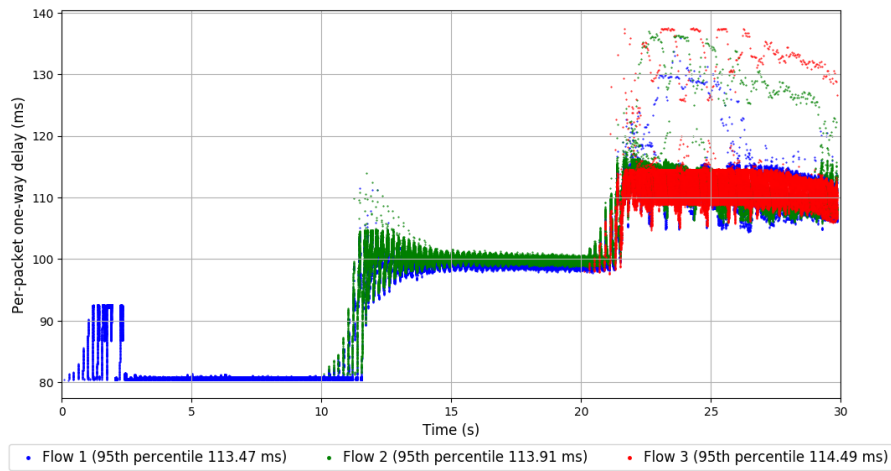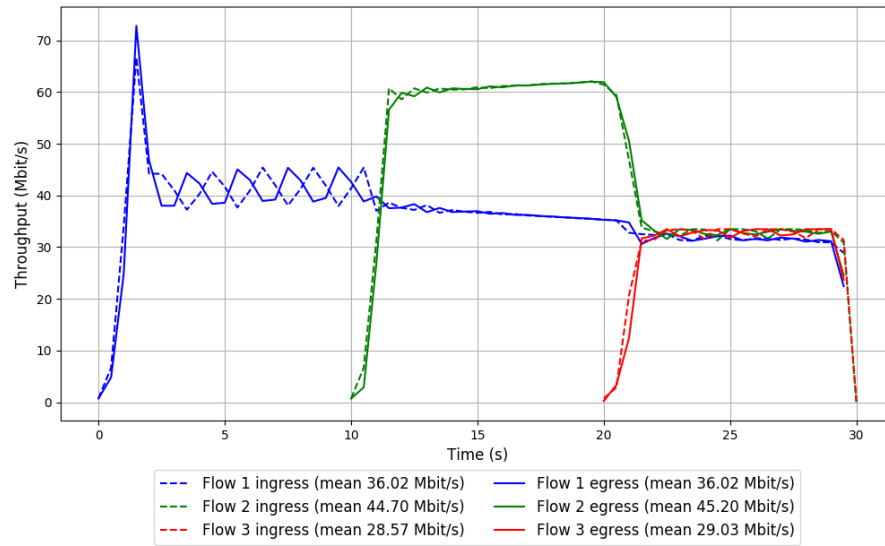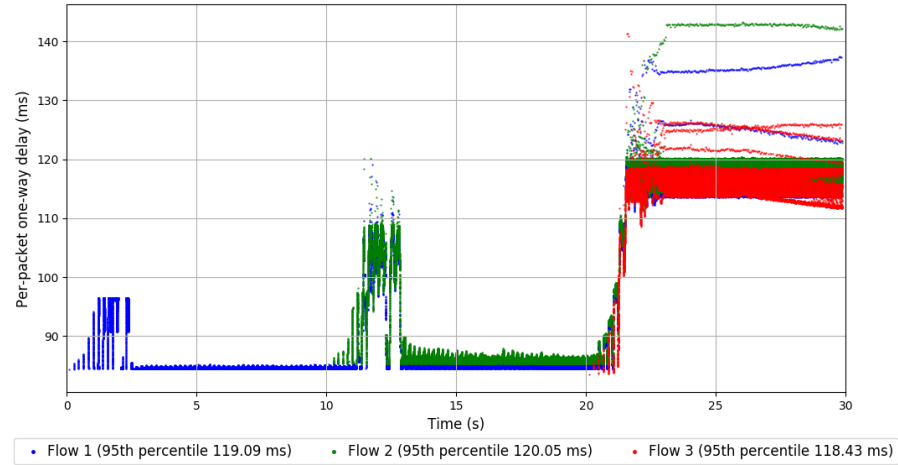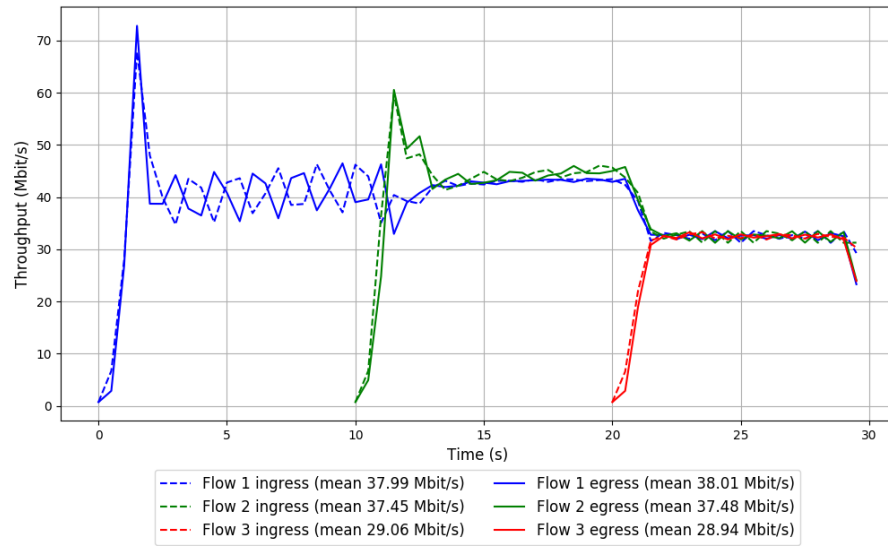
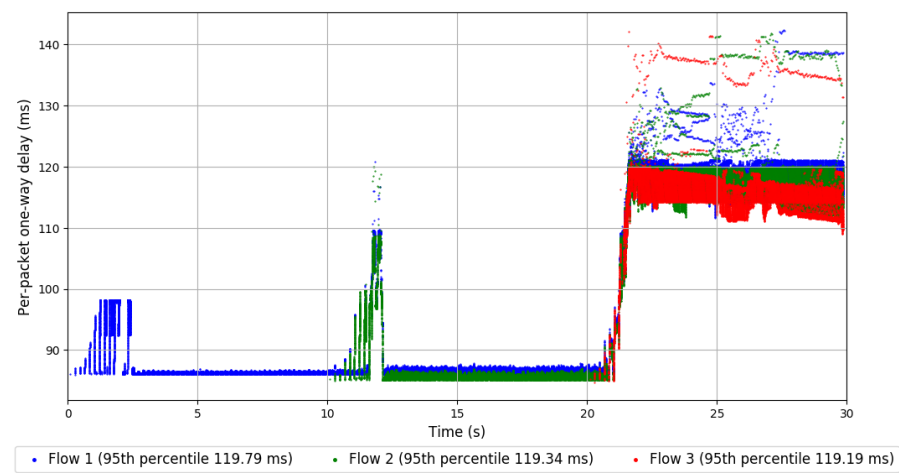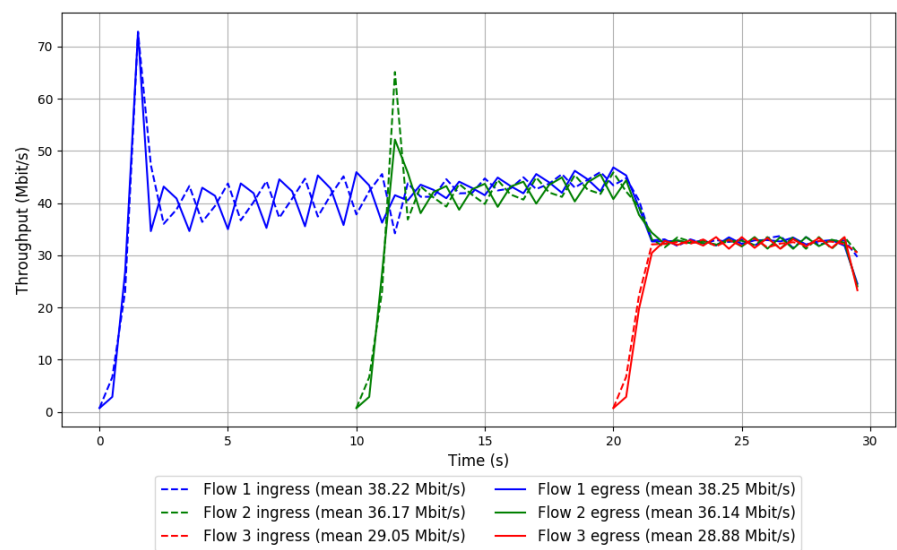Run 5: Report of TCP Vegas — Data Link

```
Run 6: Statistics of TCP Vegas

Start at: 2018-02-04 19:40:38
End at: 2018-02-04 19:41:08
Local clock offset: -0.143 ms
Remote clock offset: -1.553 ms


# Below is generated by plot.py at 2018-02-05 01:34:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.70 Mbit/s
95th percentile per-packet one-way delay: 119.501 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 38.25 Mbit/s
95th percentile per-packet one-way delay: 119.786 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 36.14 Mbit/s
95th percentile per-packet one-way delay: 119.336 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 28.88 Mbit/s
95th percentile per-packet one-way delay: 119.188 ms
Loss rate: 2.41%
```

Run 6: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 38.22 Mbit/s) ——— Flow 1 egress (mean 38.25 Mbit/s)
Flow 2 ingress (mean 36.17 Mbit/s) ——— Flow 2 egress (mean 36.14 Mbit/s)
Flow 3 ingress (mean 29.05 Mbit/s) ——— Flow 3 egress (mean 28.88 Mbit/s)

Flow 1 (95th percentile 119.79 ms)   Flow 2 (95th percentile 119.34 ms)   Flow 3 (95th percentile 119.19 ms)
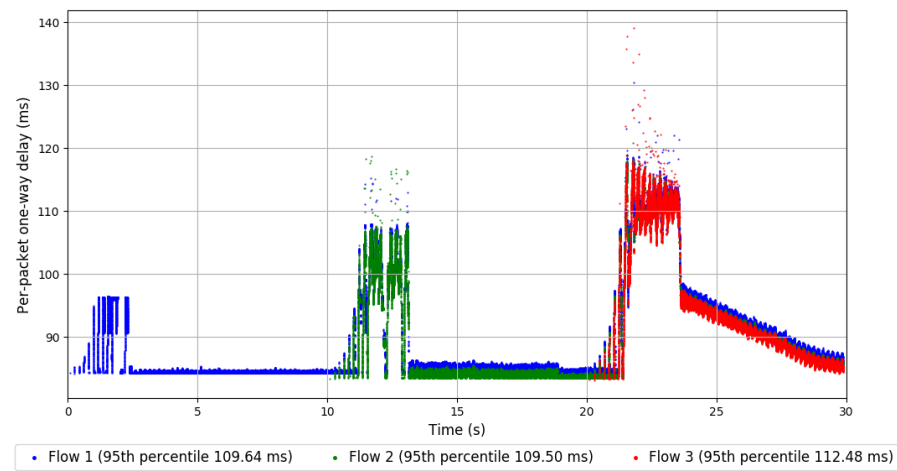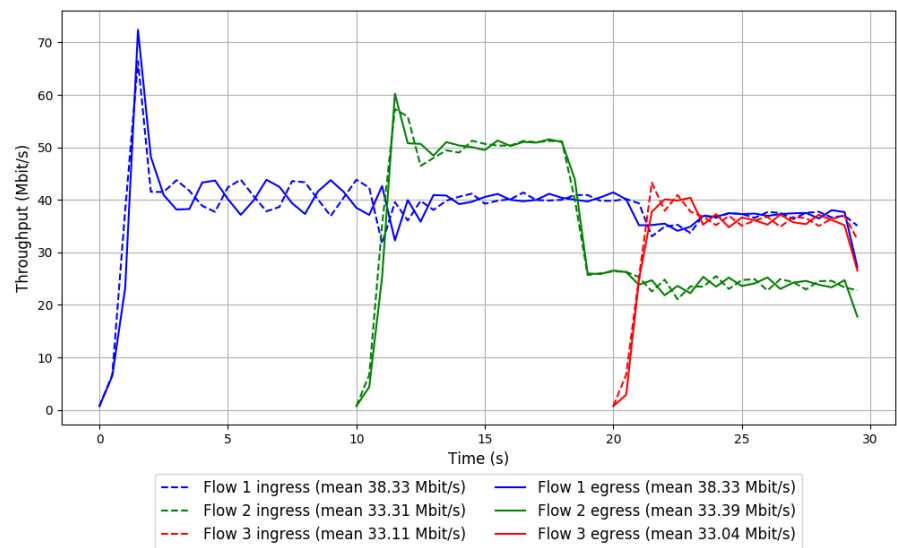
```
Run 7: Statistics of TCP Vegas

Start at: 2018-02-04 20:04:25
End at: 2018-02-04 20:04:55
Local clock offset: -0.128 ms
Remote clock offset: -0.965 ms


# Below is generated by plot.py at 2018-02-05 01:34:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.33 Mbit/s
95th percentile per-packet one-way delay: 110.572 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 38.33 Mbit/s
95th percentile per-packet one-way delay: 109.644 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 33.39 Mbit/s
95th percentile per-packet one-way delay: 109.503 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 33.04 Mbit/s
95th percentile per-packet one-way delay: 112.478 ms
Loss rate: 2.02%
```

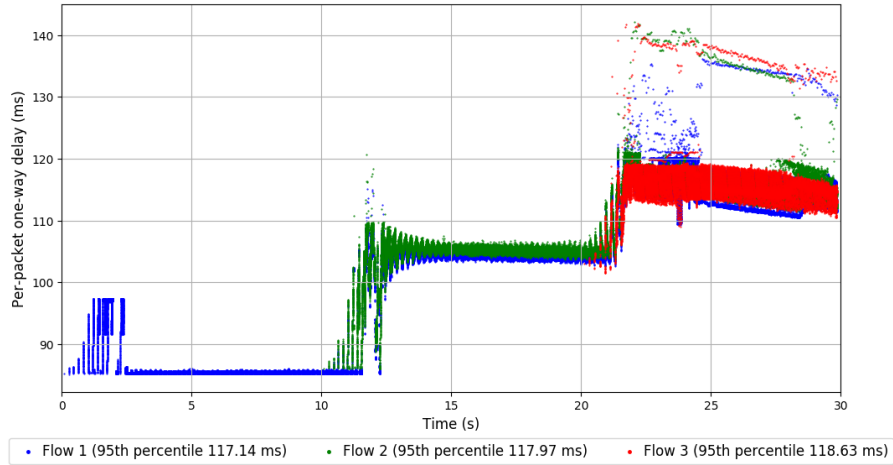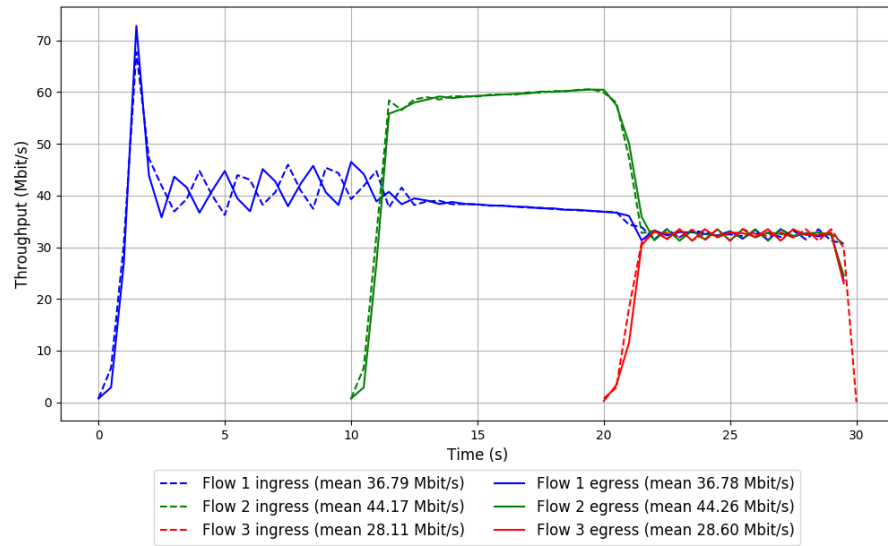Run 7: Report of TCP Vegas — Data Link

197

```
Run 8: Statistics of TCP Vegas

Start at: 2018-02-04 20:28:20
End at: 2018-02-04 20:28:50
Local clock offset: -0.012 ms
Remote clock offset: -1.672 ms


# Below is generated by plot.py at 2018-02-05 01:34:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.51 Mbit/s
95th percentile per-packet one-way delay: 117.984 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 36.78 Mbit/s
95th percentile per-packet one-way delay: 117.142 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 44.26 Mbit/s
95th percentile per-packet one-way delay: 117.971 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 28.60 Mbit/s
95th percentile per-packet one-way delay: 118.630 ms
Loss rate: 2.51%
```

Run 8: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 36.79 Mbit/s) — Flow 1 egress (mean 36.78 Mbit/s)
Flow 2 ingress (mean 44.17 Mbit/s) — Flow 2 egress (mean 44.26 Mbit/s)
Flow 3 ingress (mean 28.11 Mbit/s) — Flow 3 egress (mean 28.60 Mbit/s)

Flow 1 (95th percentile 117.14 ms) — Flow 2 (95th percentile 117.97 ms) — Flow 3 (95th percentile 118.63 ms)
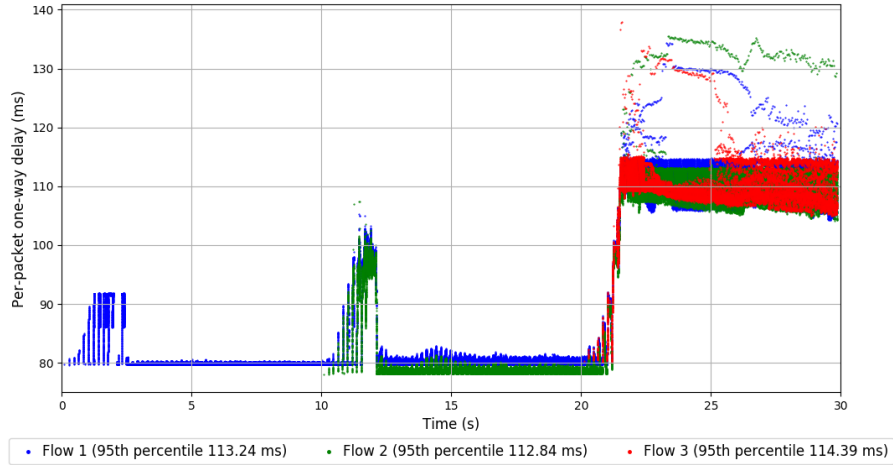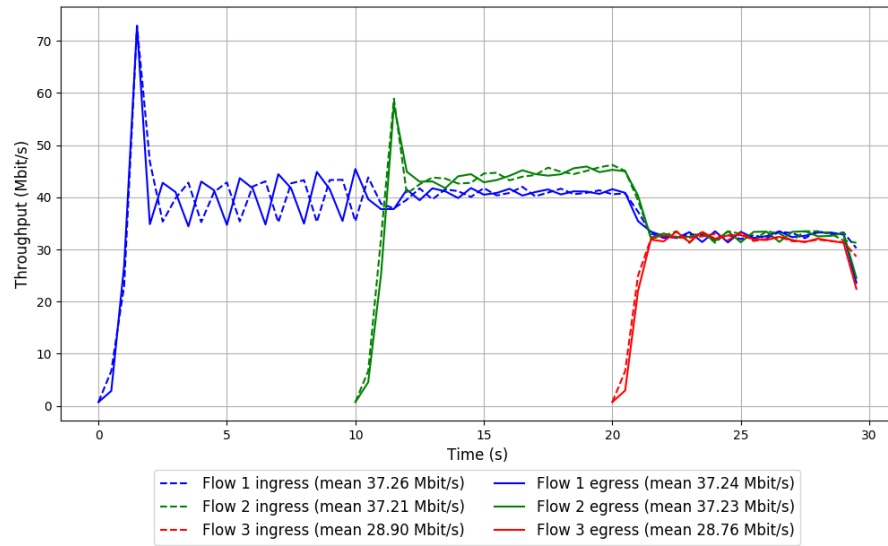
```
Run 9: Statistics of TCP Vegas

Start at: 2018-02-04 20:52:18
End at: 2018-02-04 20:52:48
Local clock offset: -0.043 ms
Remote clock offset: 4.14 ms


# Below is generated by plot.py at 2018-02-05 01:34:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.38 Mbit/s
95th percentile per-packet one-way delay: 113.160 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 37.24 Mbit/s
95th percentile per-packet one-way delay: 113.244 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 37.23 Mbit/s
95th percentile per-packet one-way delay: 112.837 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 28.76 Mbit/s
95th percentile per-packet one-way delay: 114.390 ms
Loss rate: 2.27%
```

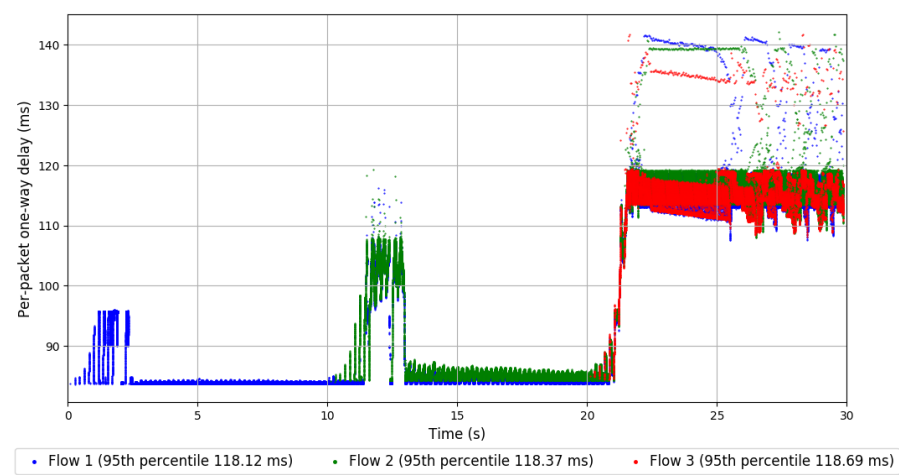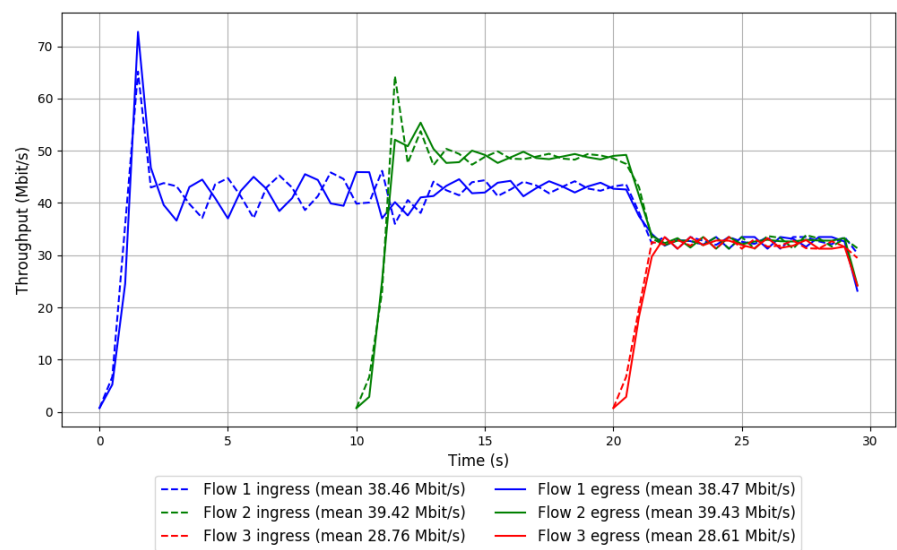# Run 9: Report of TCP Vegas — Data Link

```
Run 10: Statistics of TCP Vegas

Start at: 2018-02-04 21:16:05
End at: 2018-02-04 21:16:35
Local clock offset: -0.104 ms
Remote clock offset: -1.433 ms


# Below is generated by plot.py at 2018-02-05 01:34:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.97 Mbit/s
95th percentile per-packet one-way delay: 118.307 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 38.47 Mbit/s
95th percentile per-packet one-way delay: 118.121 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 39.43 Mbit/s
95th percentile per-packet one-way delay: 118.367 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 28.61 Mbit/s
95th percentile per-packet one-way delay: 118.692 ms
Loss rate: 2.35%
```

Run 10: Report of TCP Vegas — Data Link

- - - Flow 1 ingress (mean 38.46 Mbit/s)   —— Flow 1 egress (mean 38.47 Mbit/s)
- - - Flow 2 ingress (mean 39.42 Mbit/s)   —— Flow 2 egress (mean 39.43 Mbit/s)
- - - Flow 3 ingress (mean 28.76 Mbit/s)   —— Flow 3 egress (mean 28.61 Mbit/s)

• Flow 1 (95th percentile 118.12 ms)   • Flow 2 (95th percentile 118.37 ms)   • Flow 3 (95th percentile 118.69 ms)

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```
Run 1: Statistics of Verus

Start at: 2018-02-04 17:23:19
End at: 2018-02-04 17:23:49
Local clock offset: -0.094 ms
Remote clock offset: 0.629 ms


# Below is generated by plot.py at 2018-02-05 01:34:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.64 Mbit/s
95th percentile per-packet one-way delay: 112.075 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 34.35 Mbit/s
95th percentile per-packet one-way delay: 110.781 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.92 Mbit/s
95th percentile per-packet one-way delay: 111.842 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 23.24 Mbit/s
95th percentile per-packet one-way delay: 113.613 ms
Loss rate: 0.01%
```
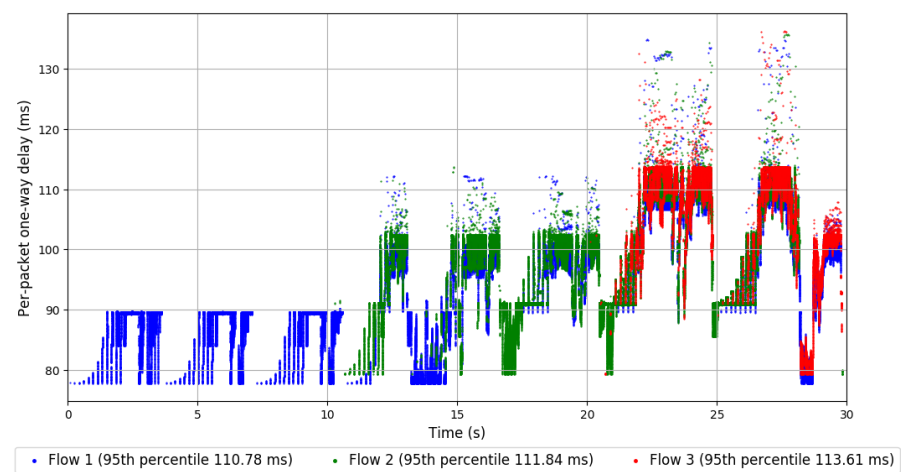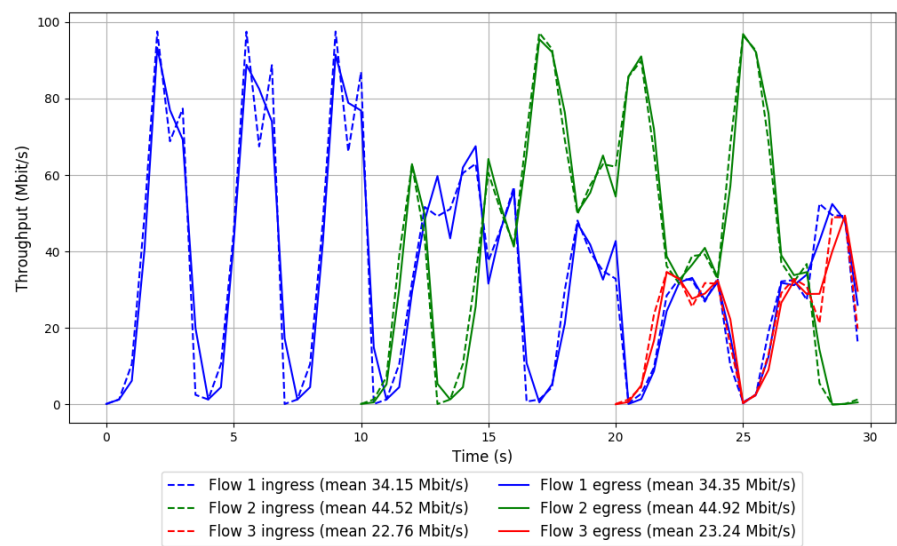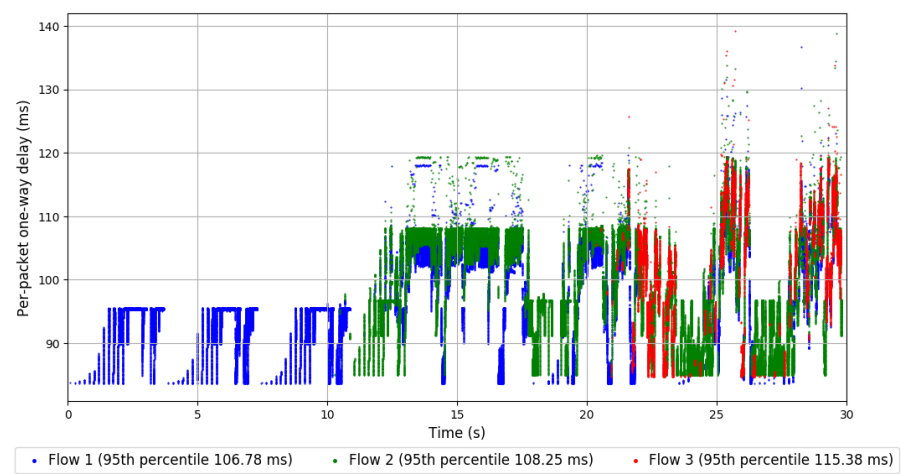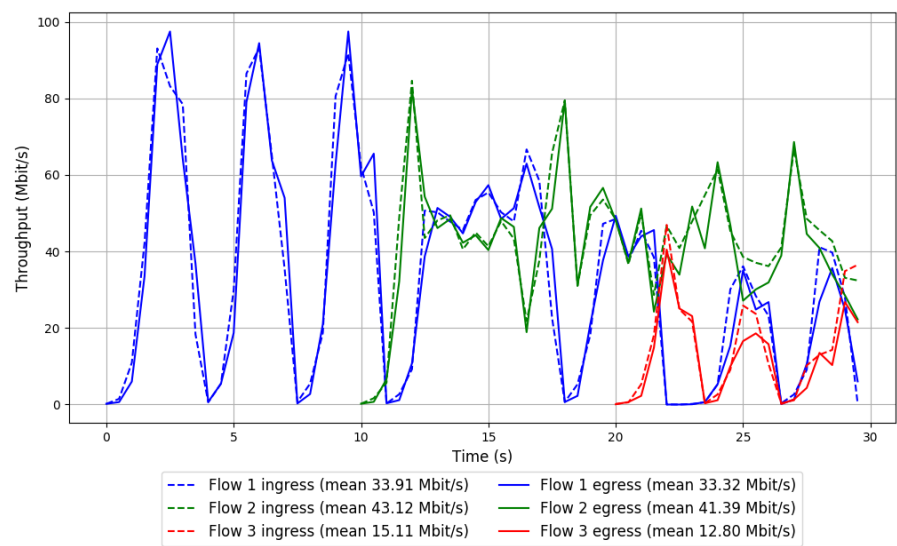
Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2018-02-04 17:47:09
End at: 2018-02-04 17:47:39
Local clock offset: -0.019 ms
Remote clock offset: -4.595 ms


# Below is generated by plot.py at 2018-02-05 01:34:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.69 Mbit/s
95th percentile per-packet one-way delay: 108.663 ms
Loss rate: 4.39%
-- Flow 1:
Average throughput: 33.32 Mbit/s
95th percentile per-packet one-way delay: 106.778 ms
Loss rate: 1.68%
-- Flow 2:
Average throughput: 41.39 Mbit/s
95th percentile per-packet one-way delay: 108.255 ms
Loss rate: 5.21%
-- Flow 3:
Average throughput: 12.80 Mbit/s
95th percentile per-packet one-way delay: 115.376 ms
Loss rate: 17.79%
```
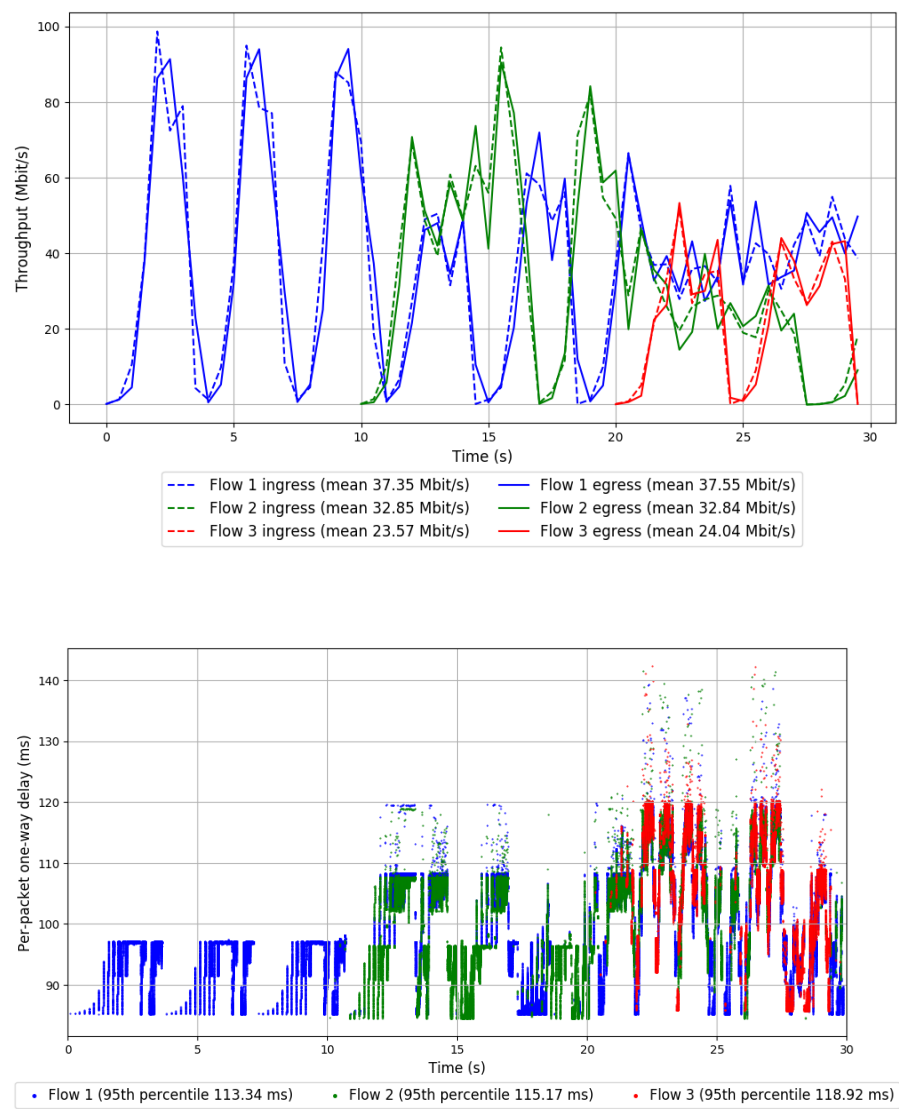
Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2018-02-04 18:11:04
End at: 2018-02-04 18:11:34
Local clock offset: -0.019 ms
Remote clock offset: -5.317 ms


# Below is generated by plot.py at 2018-02-05 01:35:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.06 Mbit/s
95th percentile per-packet one-way delay: 115.415 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 37.55 Mbit/s
95th percentile per-packet one-way delay: 113.336 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 32.84 Mbit/s
95th percentile per-packet one-way delay: 115.172 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 24.04 Mbit/s
95th percentile per-packet one-way delay: 118.925 ms
Loss rate: 0.04%
```
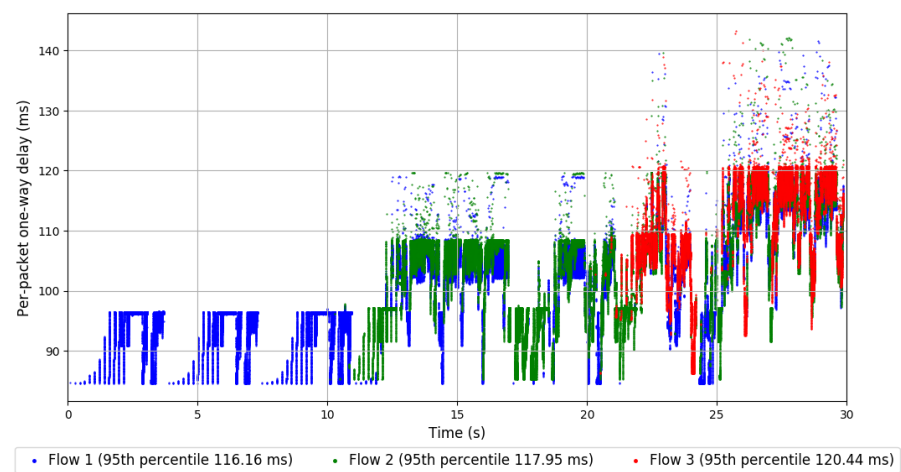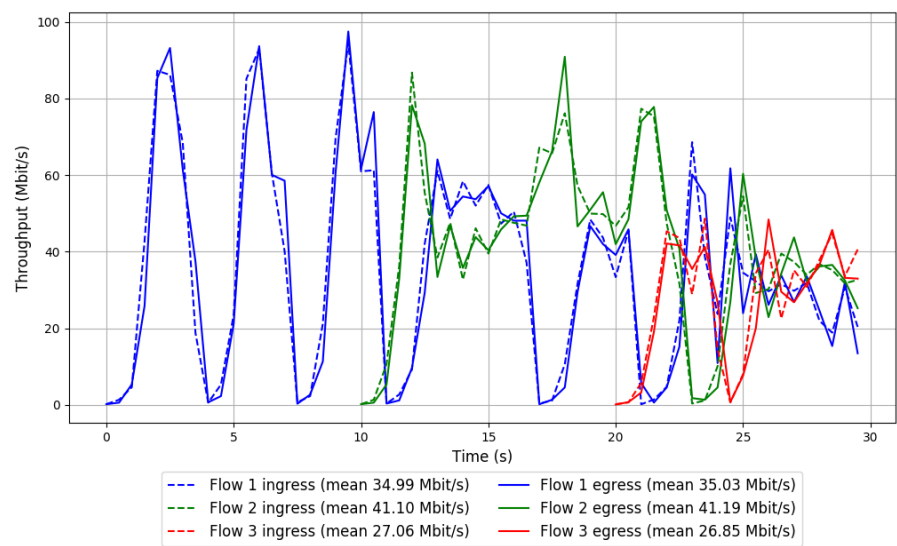
Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2018-02-04 18:35:25
End at: 2018-02-04 18:35:55
Local clock offset: -0.024 ms
Remote clock offset: -5.258 ms


# Below is generated by plot.py at 2018-02-05 01:35:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.15 Mbit/s
95th percentile per-packet one-way delay: 118.195 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 35.03 Mbit/s
95th percentile per-packet one-way delay: 116.158 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 41.19 Mbit/s
95th percentile per-packet one-way delay: 117.947 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 26.85 Mbit/s
95th percentile per-packet one-way delay: 120.436 ms
Loss rate: 2.92%
```

Run 4: Report of Verus — Data Link

Flow 1 ingress (mean 34.99 Mbit/s) --- Flow 1 egress (mean 35.03 Mbit/s)
Flow 2 ingress (mean 41.10 Mbit/s) --- Flow 2 egress (mean 41.19 Mbit/s)
Flow 3 ingress (mean 27.06 Mbit/s) --- Flow 3 egress (mean 26.85 Mbit/s)

Flow 1 (95th percentile 116.16 ms) Flow 2 (95th percentile 117.95 ms) Flow 3 (95th percentile 120.44 ms)
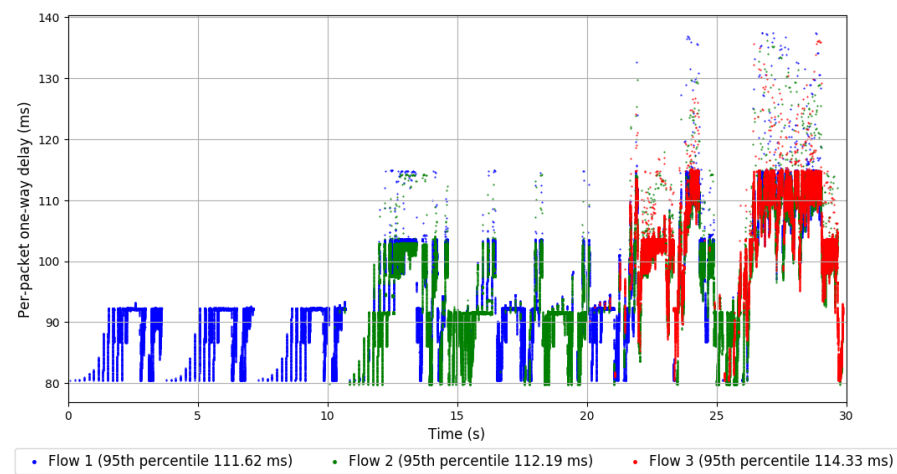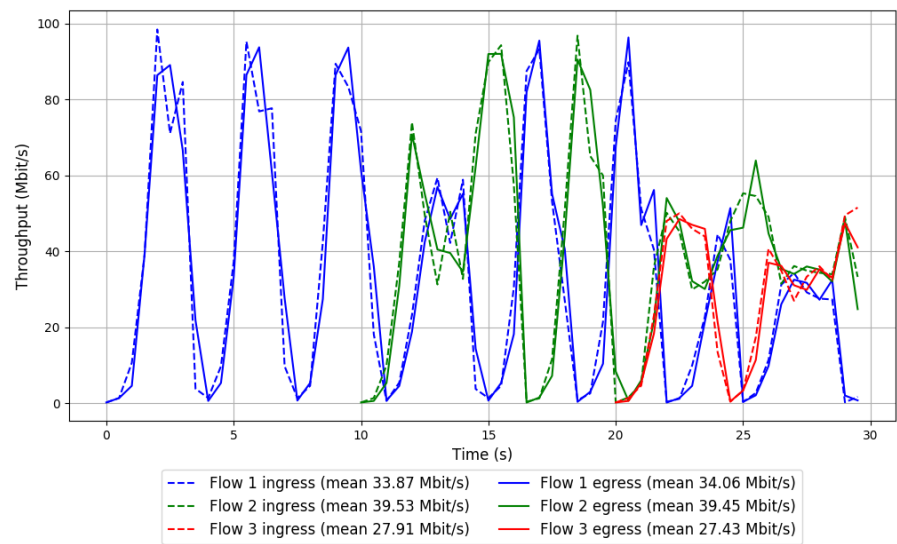
211

```
Run 5: Statistics of Verus

Start at: 2018-02-04 18:59:19
End at: 2018-02-04 18:59:49
Local clock offset: -0.048 ms
Remote clock offset: 1.319 ms


# Below is generated by plot.py at 2018-02-05 01:35:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.21 Mbit/s
95th percentile per-packet one-way delay: 112.705 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 34.06 Mbit/s
95th percentile per-packet one-way delay: 111.624 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 39.45 Mbit/s
95th percentile per-packet one-way delay: 112.193 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 27.43 Mbit/s
95th percentile per-packet one-way delay: 114.327 ms
Loss rate: 3.67%
```

Run 5: Report of Verus — Data Link

```
Run 6: Statistics of Verus

Start at: 2018-02-04 19:23:14
End at: 2018-02-04 19:23:44
Local clock offset: -0.06 ms
Remote clock offset: 3.694 ms


# Below is generated by plot.py at 2018-02-05 01:35:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.65 Mbit/s
95th percentile per-packet one-way delay: 103.159 ms
Loss rate: 12.89%
-- Flow 1:
Average throughput: 29.54 Mbit/s
95th percentile per-packet one-way delay: 101.869 ms
Loss rate: 12.41%
-- Flow 2:
Average throughput: 33.82 Mbit/s
95th percentile per-packet one-way delay: 103.272 ms
Loss rate: 12.83%
-- Flow 3:
Average throughput: 8.88 Mbit/s
95th percentile per-packet one-way delay: 108.239 ms
Loss rate: 17.87%
```
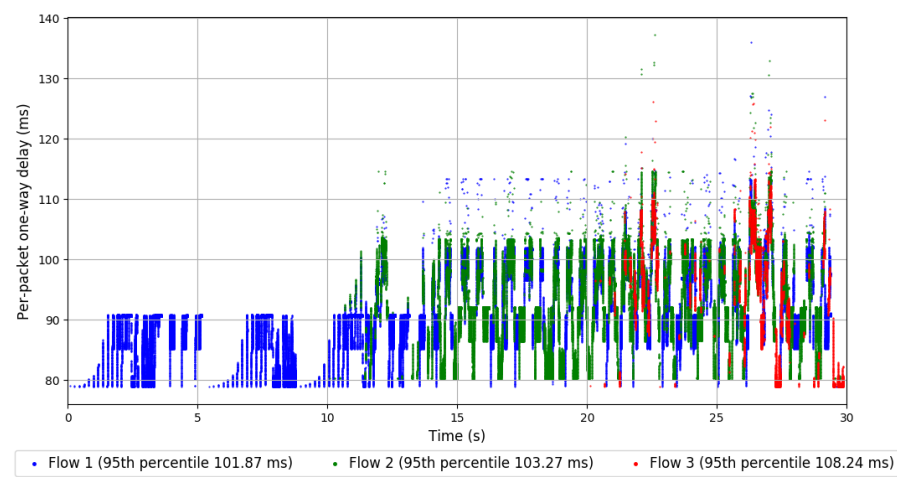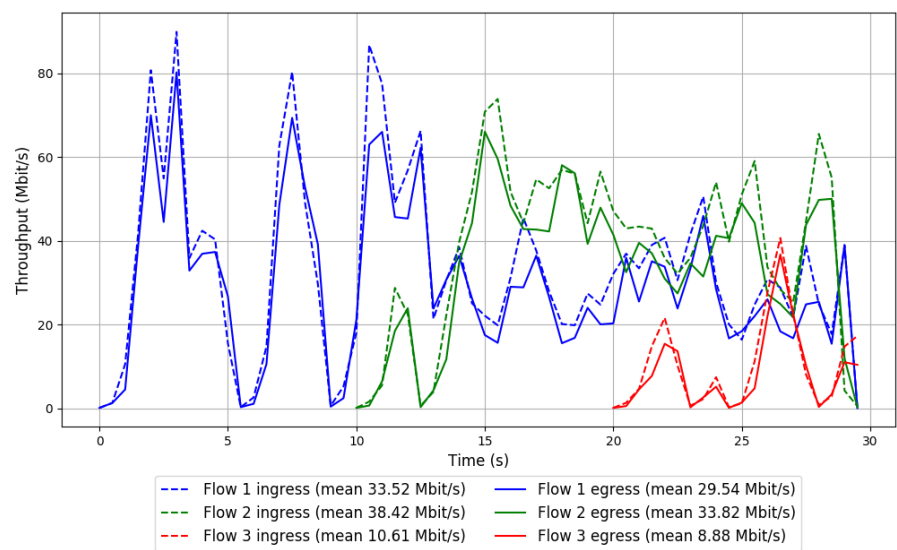
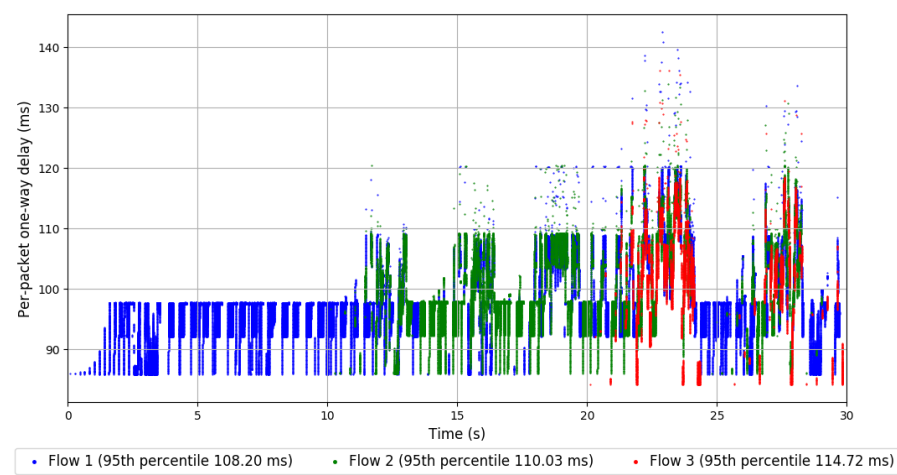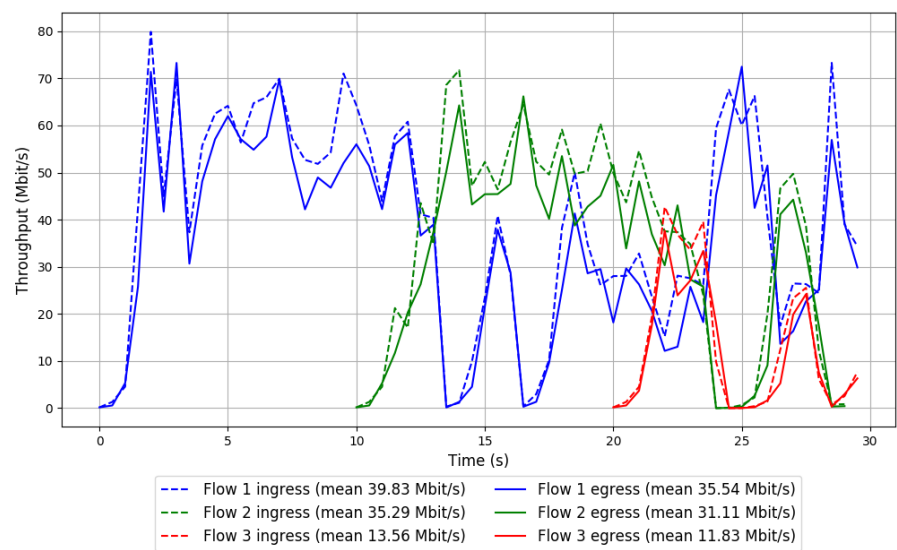## Run 6: Report of Verus — Data Link

215

```
Run 7: Statistics of Verus

Start at: 2018-02-04 19:47:10
End at: 2018-02-04 19:47:40
Local clock offset: -0.149 ms
Remote clock offset: -1.431 ms


# Below is generated by plot.py at 2018-02-05 01:35:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.04 Mbit/s
95th percentile per-packet one-way delay: 109.100 ms
Loss rate: 12.17%
-- Flow 1:
Average throughput: 35.54 Mbit/s
95th percentile per-packet one-way delay: 108.199 ms
Loss rate: 11.61%
-- Flow 2:
Average throughput: 31.11 Mbit/s
95th percentile per-packet one-way delay: 110.032 ms
Loss rate: 12.77%
-- Flow 3:
Average throughput: 11.83 Mbit/s
95th percentile per-packet one-way delay: 114.724 ms
Loss rate: 14.08%
```
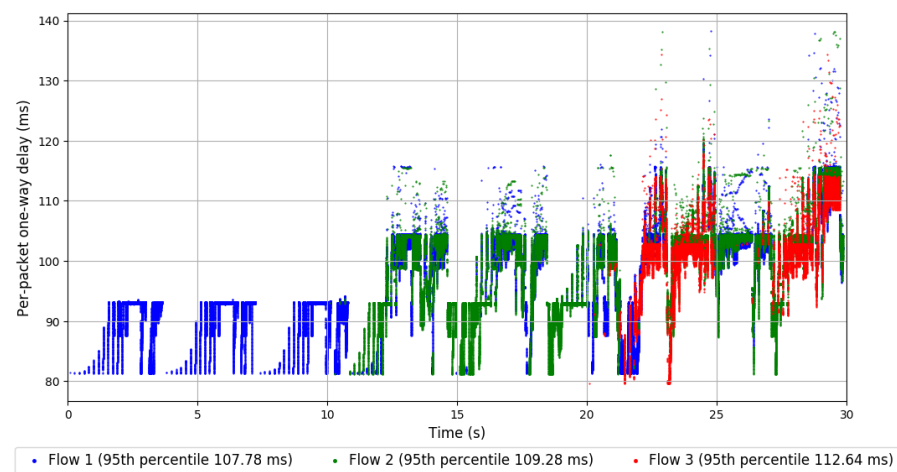
Run 7: Report of Verus — Data Link

```
Run 8: Statistics of Verus

Start at: 2018-02-04 20:11:00
End at: 2018-02-04 20:11:30
Local clock offset: -0.034 ms
Remote clock offset: 3.964 ms


# Below is generated by plot.py at 2018-02-05 01:36:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.33 Mbit/s
95th percentile per-packet one-way delay: 110.350 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 32.73 Mbit/s
95th percentile per-packet one-way delay: 107.775 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 46.56 Mbit/s
95th percentile per-packet one-way delay: 109.282 ms
Loss rate: 1.13%
-- Flow 3:
Average throughput: 23.84 Mbit/s
95th percentile per-packet one-way delay: 112.641 ms
Loss rate: 0.00%
```
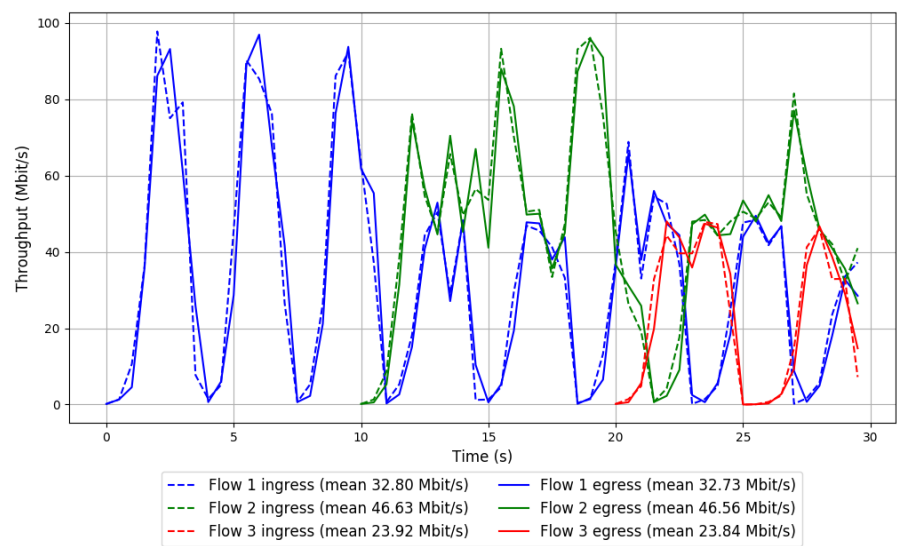
Run 8: Report of Verus — Data Link

Flow 1 ingress (mean 32.80 Mbit/s)   Flow 1 egress (mean 32.73 Mbit/s)
Flow 2 ingress (mean 46.63 Mbit/s)   Flow 2 egress (mean 46.56 Mbit/s)
Flow 3 ingress (mean 23.92 Mbit/s)   Flow 3 egress (mean 23.84 Mbit/s)

Flow 1 (95th percentile 107.78 ms)   Flow 2 (95th percentile 109.28 ms)   Flow 3 (95th percentile 112.64 ms)

219

```
Run 9: Statistics of Verus

Start at: 2018-02-04 20:34:57
End at: 2018-02-04 20:35:27
Local clock offset: -0.068 ms
Remote clock offset: -1.58 ms


# Below is generated by plot.py at 2018-02-05 01:36:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.85 Mbit/s
95th percentile per-packet one-way delay: 117.851 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 46.29 Mbit/s
95th percentile per-packet one-way delay: 116.505 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 36.02 Mbit/s
95th percentile per-packet one-way delay: 117.833 ms
Loss rate: 1.32%
-- Flow 3:
Average throughput: 17.40 Mbit/s
95th percentile per-packet one-way delay: 118.661 ms
Loss rate: 0.56%
```
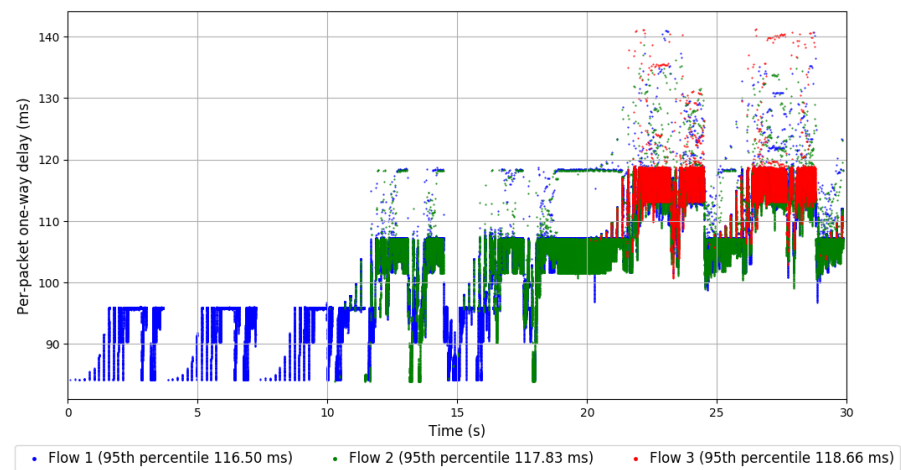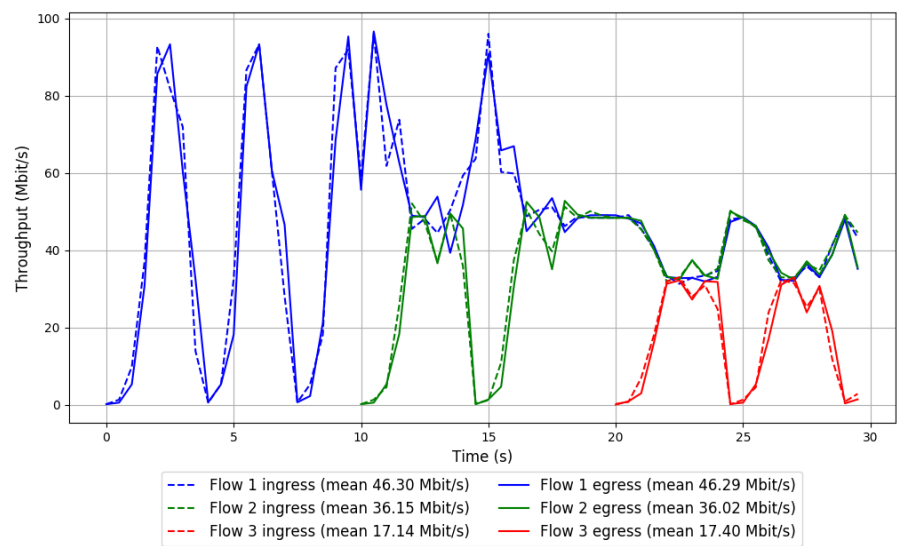
Run 9: Report of Verus — Data Link

Flow 1 ingress (mean 46.30 Mbit/s) --- Flow 1 egress (mean 46.29 Mbit/s)
Flow 2 ingress (mean 36.15 Mbit/s) --- Flow 2 egress (mean 36.02 Mbit/s)
Flow 3 ingress (mean 17.14 Mbit/s) --- Flow 3 egress (mean 17.40 Mbit/s)

Flow 1 (95th percentile 116.50 ms) Flow 2 (95th percentile 117.83 ms) Flow 3 (95th percentile 118.66 ms)

```
Run 10: Statistics of Verus

Start at: 2018-02-04 20:58:50
End at: 2018-02-04 20:59:20
Local clock offset: -0.061 ms
Remote clock offset: 3.999 ms


# Below is generated by plot.py at 2018-02-05 01:36:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.96 Mbit/s
95th percentile per-packet one-way delay: 113.510 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 36.94 Mbit/s
95th percentile per-packet one-way delay: 111.945 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 23.88 Mbit/s
95th percentile per-packet one-way delay: 113.370 ms
Loss rate: 1.95%
-- Flow 3:
Average throughput: 41.91 Mbit/s
95th percentile per-packet one-way delay: 115.207 ms
Loss rate: 2.55%
```
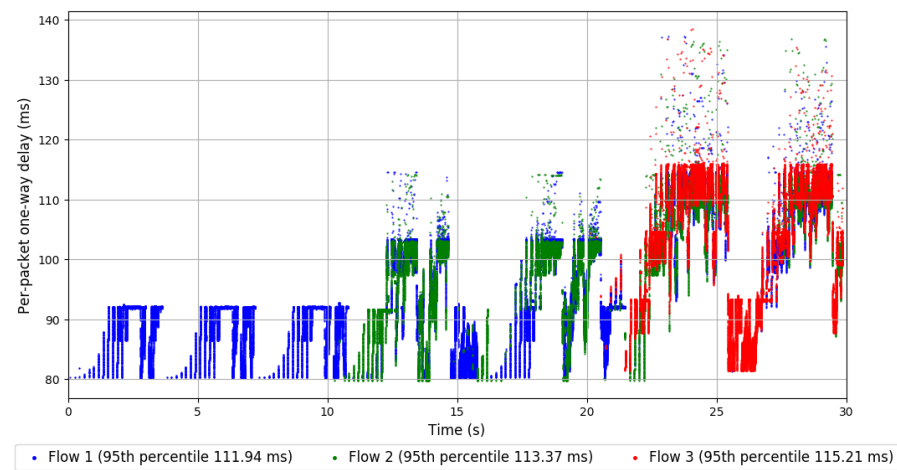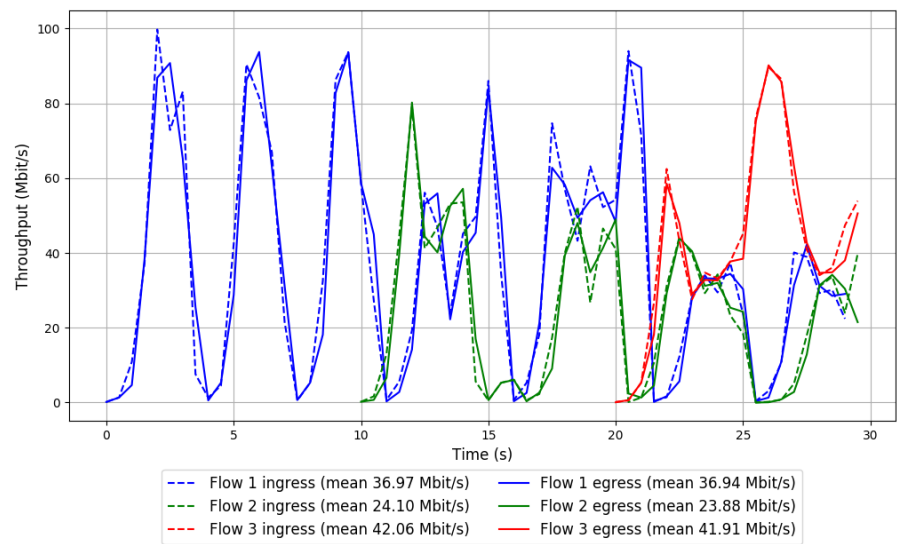
Run 10: Report of Verus — Data Link

- - - - Flow 1 ingress (mean 36.97 Mbit/s)   —— Flow 1 egress (mean 36.94 Mbit/s)
- - - - Flow 2 ingress (mean 24.10 Mbit/s)   —— Flow 2 egress (mean 23.88 Mbit/s)
- - - - Flow 3 ingress (mean 42.06 Mbit/s)   —— Flow 3 egress (mean 41.91 Mbit/s)

- Flow 1 (95th percentile 111.94 ms)   - Flow 2 (95th percentile 113.37 ms)   - Flow 3 (95th percentile 115.21 ms)
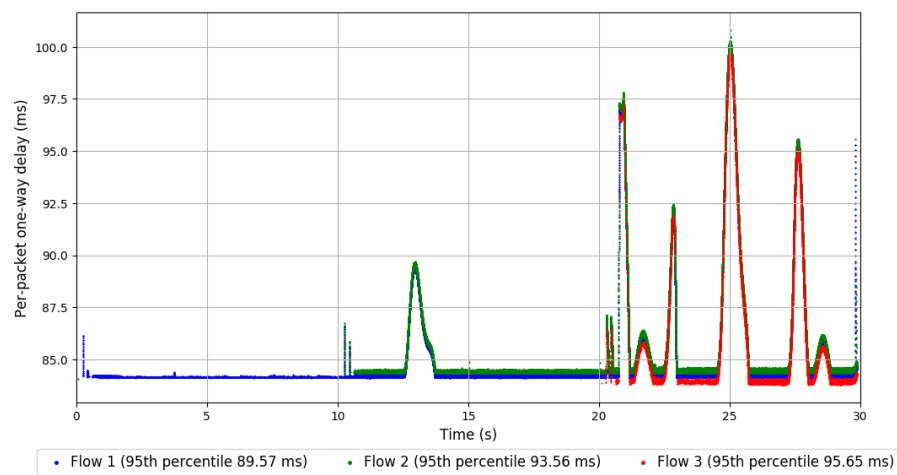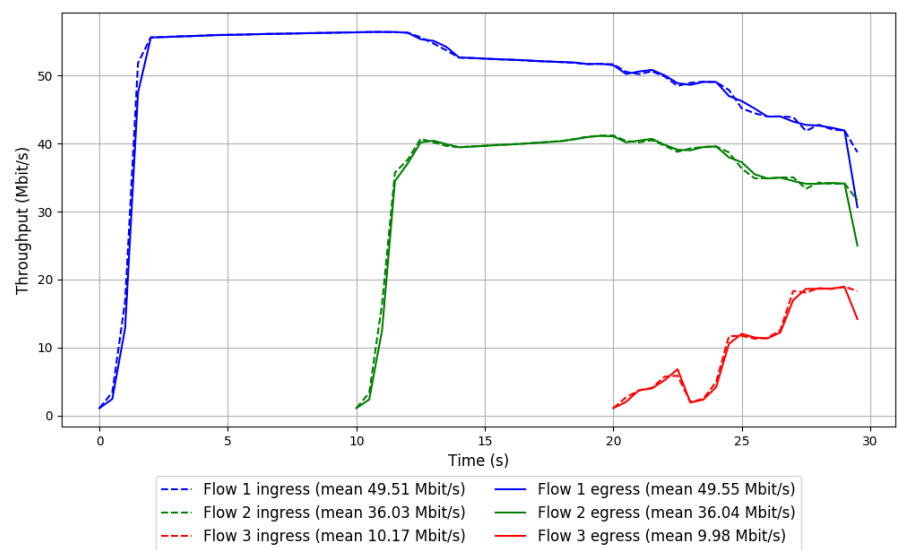
223

```
Run 1: Statistics of Copa

Start at: 2018-02-04 17:32:40
End at: 2018-02-04 17:33:10
Local clock offset: -0.132 ms
Remote clock offset: -5.673 ms

# Below is generated by plot.py at 2018-02-05 01:37:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.76 Mbit/s
95th percentile per-packet one-way delay: 91.841 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 49.55 Mbit/s
95th percentile per-packet one-way delay: 89.568 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 36.04 Mbit/s
95th percentile per-packet one-way delay: 93.560 ms
Loss rate: 0.86%
-- Flow 3:
Average throughput: 9.98 Mbit/s
95th percentile per-packet one-way delay: 95.649 ms
Loss rate: 3.61%
```

Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2018-02-04 17:56:33
End at: 2018-02-04 17:57:03
Local clock offset: -0.09 ms
Remote clock offset: 0.778 ms


# Below is generated by plot.py at 2018-02-05 01:37:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.44 Mbit/s
95th percentile per-packet one-way delay: 84.340 ms
Loss rate: 12.95%
-- Flow 1:
Average throughput: 48.06 Mbit/s
95th percentile per-packet one-way delay: 82.778 ms
Loss rate: 10.68%
-- Flow 2:
Average throughput: 27.49 Mbit/s
95th percentile per-packet one-way delay: 86.227 ms
Loss rate: 17.36%
-- Flow 3:
Average throughput: 9.54 Mbit/s
95th percentile per-packet one-way delay: 86.142 ms
Loss rate: 19.19%
```
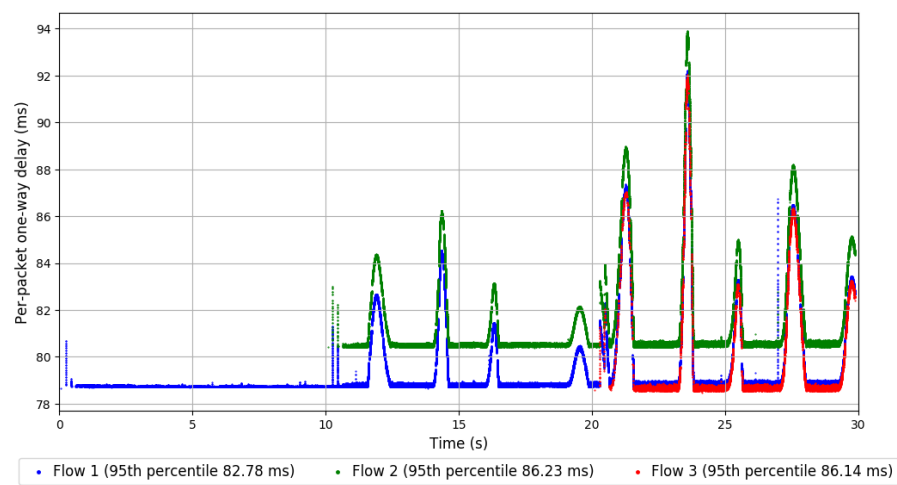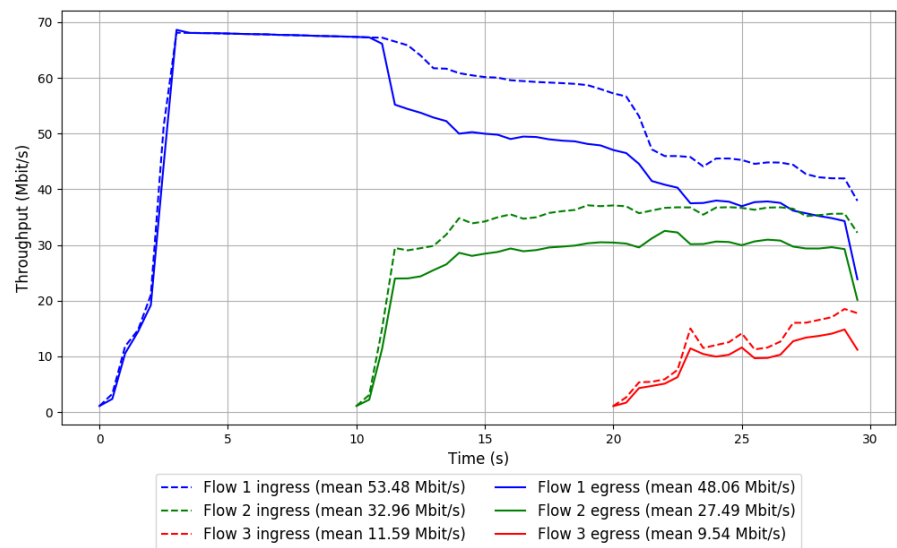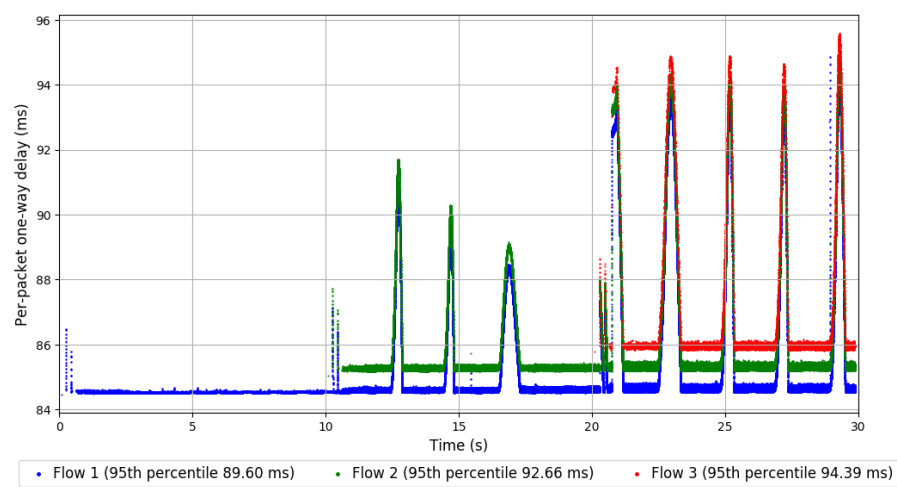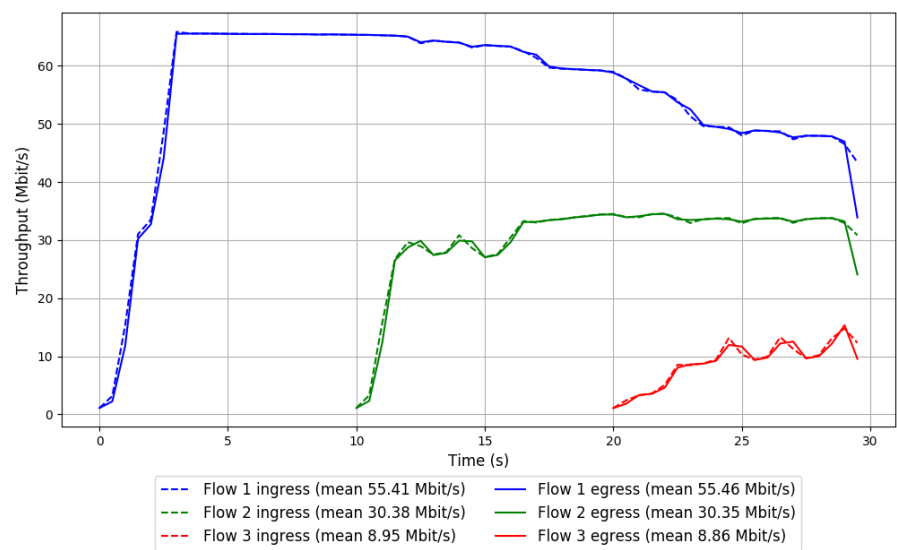
Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2018-02-04 18:20:40
End at: 2018-02-04 18:21:10
Local clock offset: -0.079 ms
Remote clock offset: -6.165 ms


# Below is generated by plot.py at 2018-02-05 01:37:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.53 Mbit/s
95th percentile per-packet one-way delay: 91.060 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 55.46 Mbit/s
95th percentile per-packet one-way delay: 89.597 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 30.35 Mbit/s
95th percentile per-packet one-way delay: 92.656 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 8.86 Mbit/s
95th percentile per-packet one-way delay: 94.389 ms
Loss rate: 2.78%
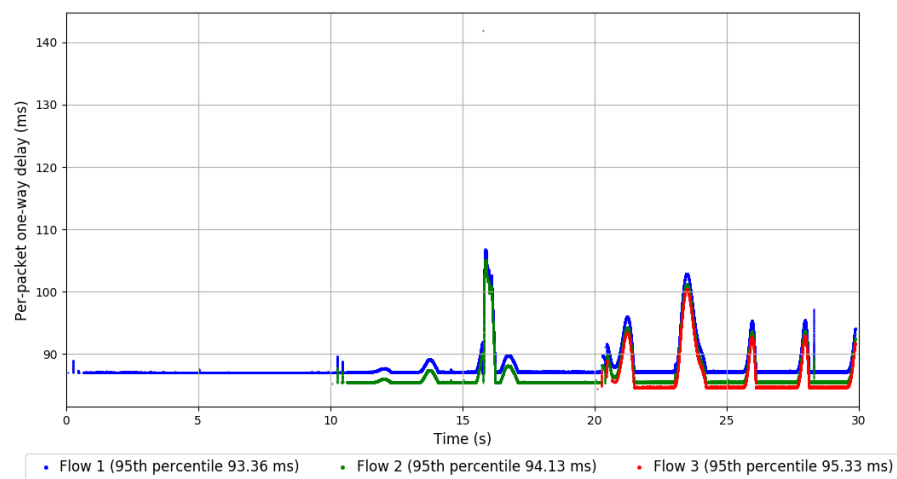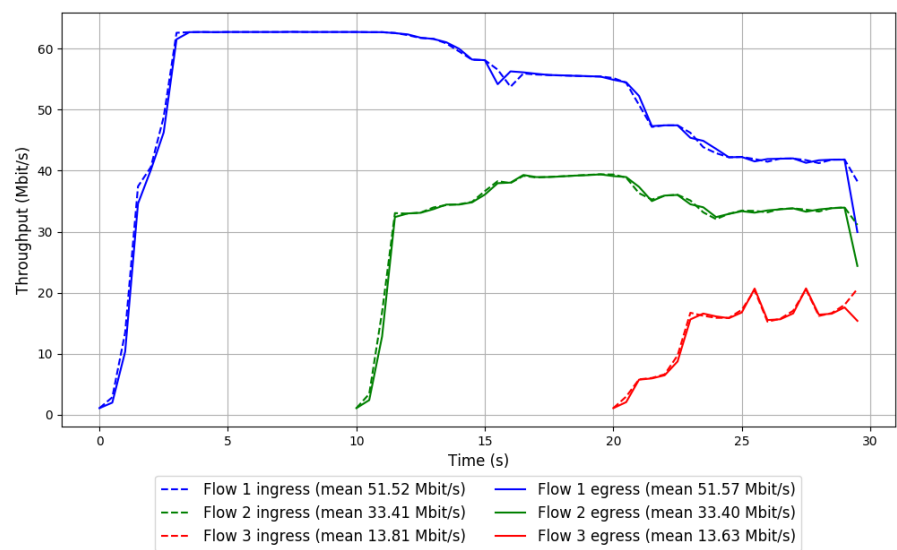```

Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2018-02-04 18:44:50
End at: 2018-02-04 18:45:20
Local clock offset: -0.043 ms
Remote clock offset: -5.446 ms

Below is generated by plot.py at 2018-02-05 01:37:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 78.22 Mbit/s
95th percentile per-packet one-way delay: 93.792 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 51.57 Mbit/s
95th percentile per-packet one-way delay: 93.359 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 33.40 Mbit/s
95th percentile per-packet one-way delay: 94.129 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 13.63 Mbit/s
95th percentile per-packet one-way delay: 95.330 ms
Loss rate: 3.10%
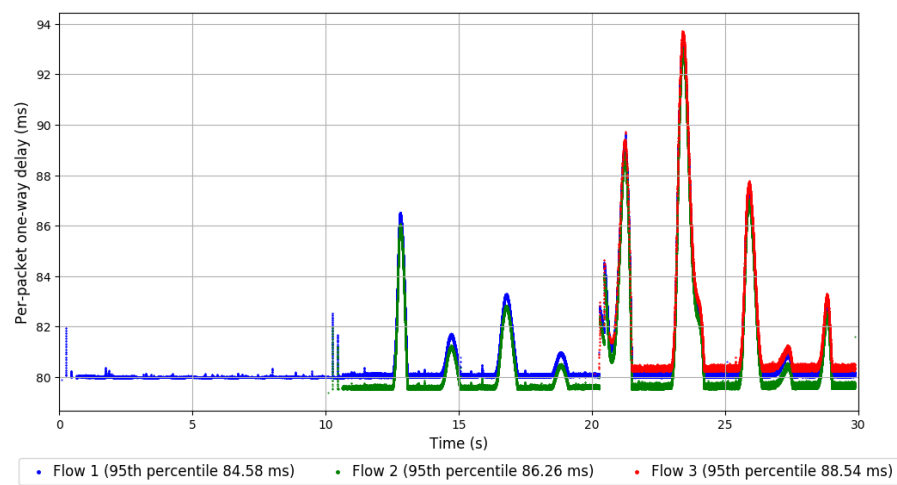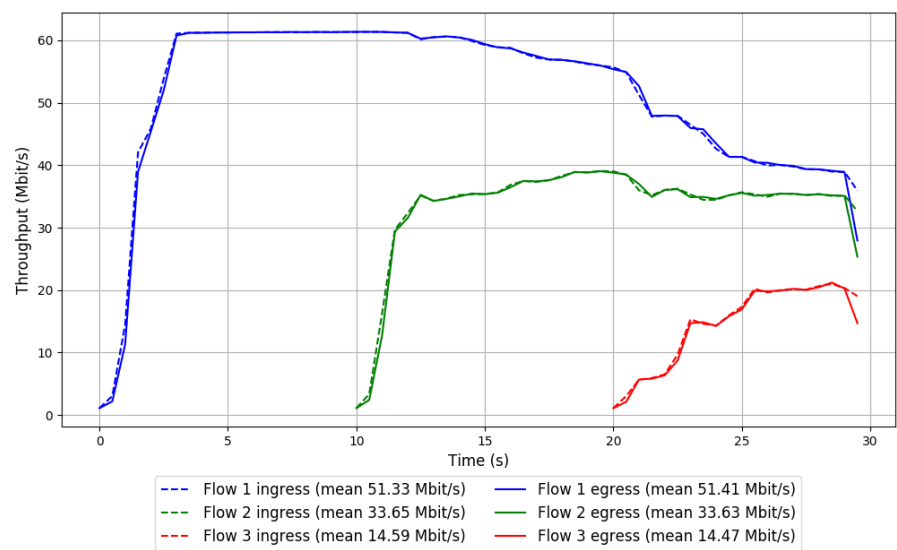```

Run 4: Report of Copa — Data Link

```
Run 5: Statistics of Copa

Start at: 2018-02-04 19:08:41
End at: 2018-02-04 19:09:11
Local clock offset: -0.018 ms
Remote clock offset: 2.086 ms


# Below is generated by plot.py at 2018-02-05 01:37:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.49 Mbit/s
95th percentile per-packet one-way delay: 85.748 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 51.41 Mbit/s
95th percentile per-packet one-way delay: 84.578 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 33.63 Mbit/s
95th percentile per-packet one-way delay: 86.256 ms
Loss rate: 0.96%
-- Flow 3:
Average throughput: 14.47 Mbit/s
95th percentile per-packet one-way delay: 88.539 ms
Loss rate: 2.63%
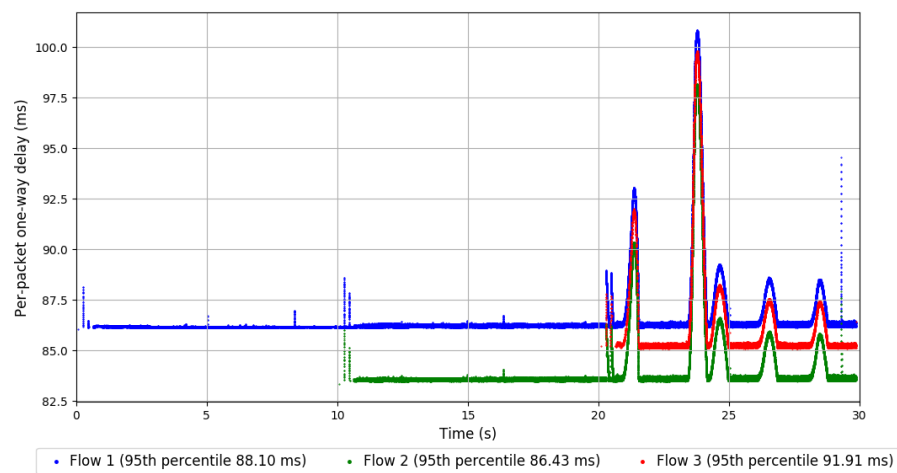```

Run 5: Report of Copa — Data Link

```
Run 6: Statistics of Copa

Start at: 2018-02-04 19:32:43
End at: 2018-02-04 19:33:13
Local clock offset: -0.054 ms
Remote clock offset: -1.924 ms

Below is generated by plot.py at 2018-02-05 01:37:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 75.72 Mbit/s
95th percentile per-packet one-way delay: 88.048 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 45.58 Mbit/s
95th percentile per-packet one-way delay: 88.100 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 36.67 Mbit/s
95th percentile per-packet one-way delay: 86.434 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 17.64 Mbit/s
95th percentile per-packet one-way delay: 91.907 ms
Loss rate: 2.61%
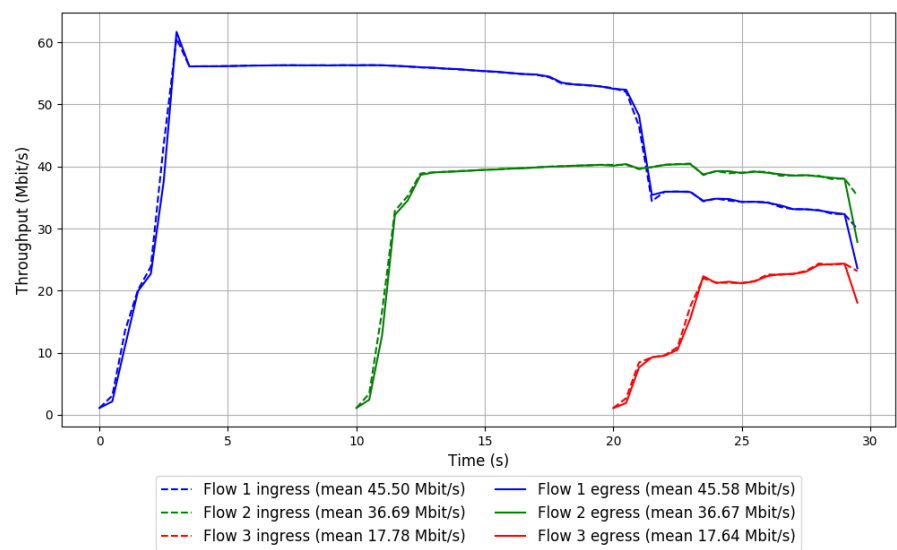```

Run 6: Report of Copa — Data Link

```
Run 7: Statistics of Copa

Start at: 2018-02-04 19:56:32
End at: 2018-02-04 19:57:02
Local clock offset: -0.086 ms
Remote clock offset: -1.299 ms


# Below is generated by plot.py at 2018-02-05 01:38:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.58 Mbit/s
95th percentile per-packet one-way delay: 98.225 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 49.29 Mbit/s
95th percentile per-packet one-way delay: 95.737 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 30.99 Mbit/s
95th percentile per-packet one-way delay: 99.974 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 17.41 Mbit/s
95th percentile per-packet one-way delay: 101.074 ms
Loss rate: 2.99%
```
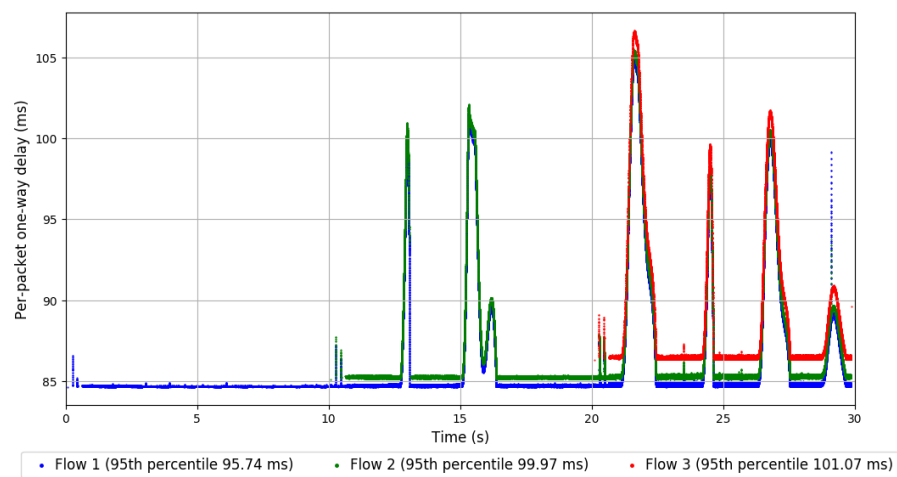
Run 7: Report of Copa — Data Link

```
Run 8: Statistics of Copa

Start at: 2018-02-04 20:20:25
End at: 2018-02-04 20:20:55
Local clock offset: -0.046 ms
Remote clock offset: -1.699 ms


# Below is generated by plot.py at 2018-02-05 01:38:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.50 Mbit/s
95th percentile per-packet one-way delay: 91.830 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 52.80 Mbit/s
95th percentile per-packet one-way delay: 90.695 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 31.97 Mbit/s
95th percentile per-packet one-way delay: 93.140 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 13.63 Mbit/s
95th percentile per-packet one-way delay: 94.942 ms
Loss rate: 2.85%
```
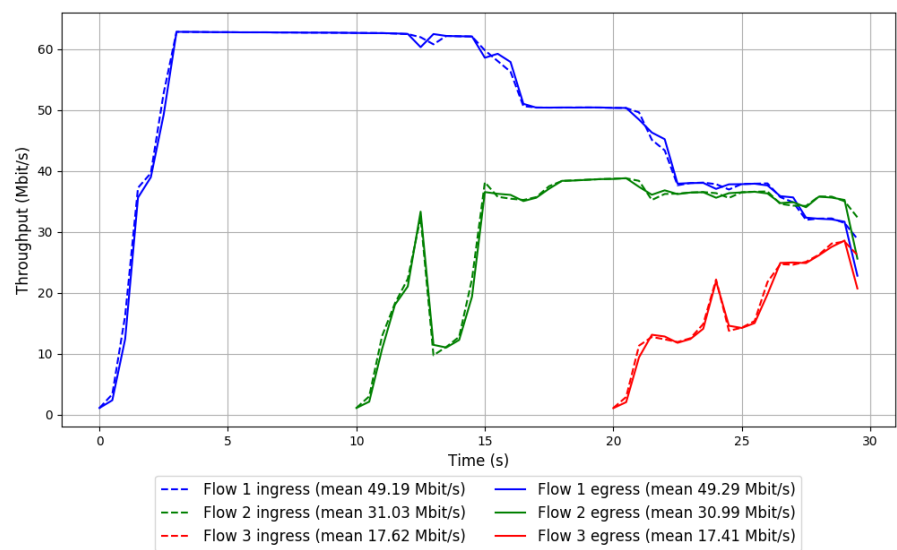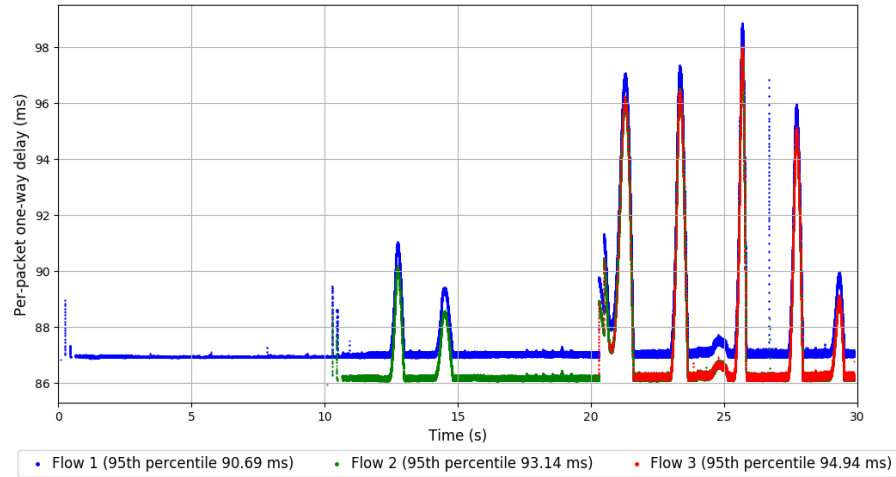
Run 8: Report of Copa — Data Link

```
Run 9: Statistics of Copa

Start at: 2018-02-04 20:44:22
End at: 2018-02-04 20:44:52
Local clock offset: -0.006 ms
Remote clock offset: -1.578 ms


# Below is generated by plot.py at 2018-02-05 01:39:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.95 Mbit/s
95th percentile per-packet one-way delay: 90.704 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 50.74 Mbit/s
95th percentile per-packet one-way delay: 89.425 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 35.26 Mbit/s
95th percentile per-packet one-way delay: 92.018 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 11.56 Mbit/s
95th percentile per-packet one-way delay: 93.414 ms
Loss rate: 2.72%
```
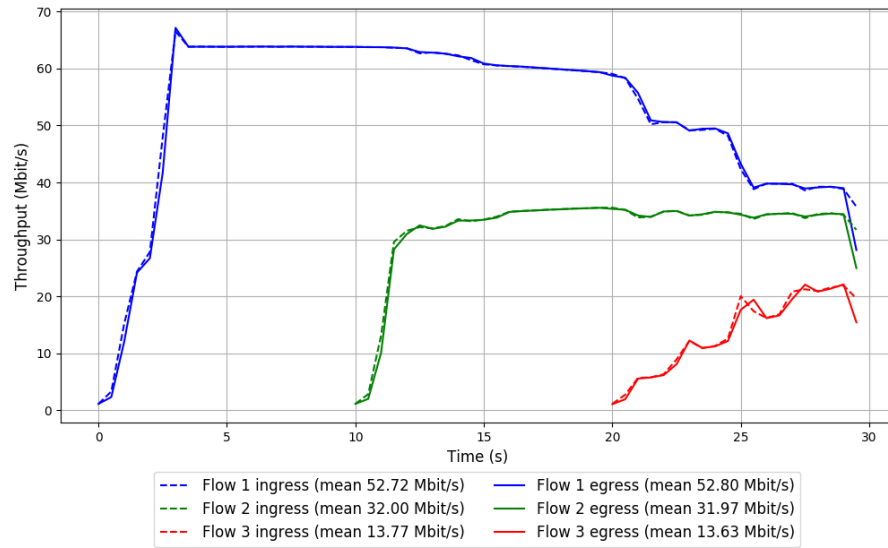
Run 9: Report of Copa — Data Link

```
Run 10: Statistics of Copa

Start at: 2018-02-04 21:08:12
End at: 2018-02-04 21:08:42
Local clock offset: -0.087 ms
Remote clock offset: -1.516 ms


# Below is generated by plot.py at 2018-02-05 01:39:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.58 Mbit/s
95th percentile per-packet one-way delay: 93.508 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 51.95 Mbit/s
95th percentile per-packet one-way delay: 92.367 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 34.47 Mbit/s
95th percentile per-packet one-way delay: 95.618 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 11.43 Mbit/s
95th percentile per-packet one-way delay: 91.376 ms
Loss rate: 3.27%
```
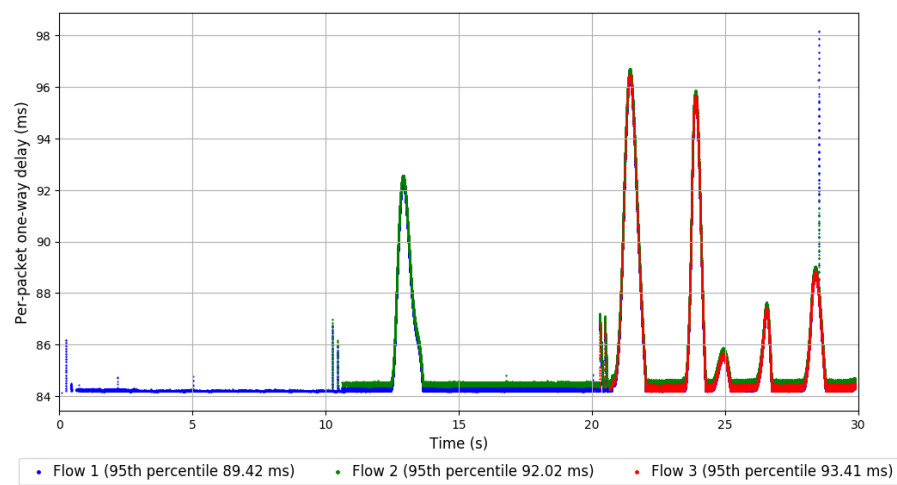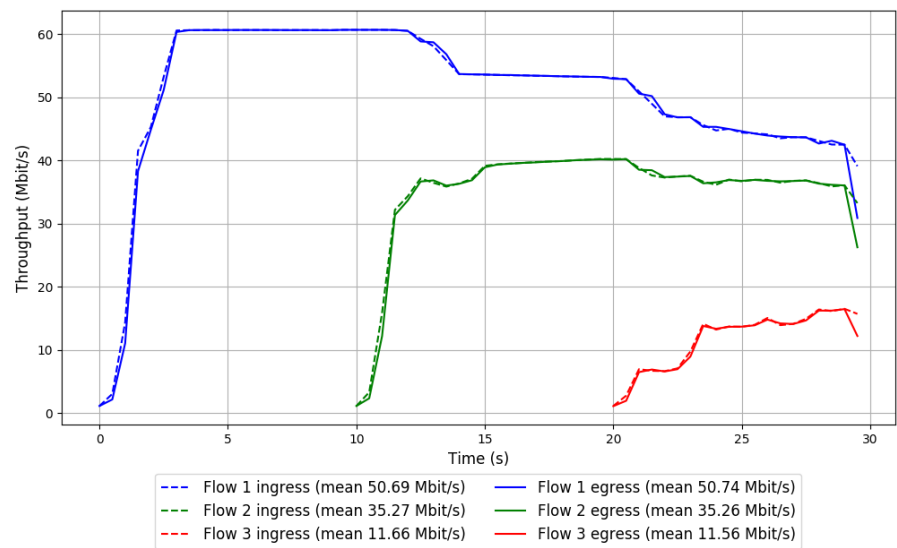
Run 10: Report of Copa — Data Link

```
Run 1: Statistics of FillP

Start at: 2018-02-04 17:34:02
End at: 2018-02-04 17:34:32
Local clock offset: -0.079 ms
Remote clock offset: -5.613 ms


# Below is generated by plot.py at 2018-02-05 01:40:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.60 Mbit/s
95th percentile per-packet one-way delay: 107.373 ms
Loss rate: 3.46%
-- Flow 1:
Average throughput: 54.96 Mbit/s
95th percentile per-packet one-way delay: 105.896 ms
Loss rate: 2.88%
-- Flow 2:
Average throughput: 38.49 Mbit/s
95th percentile per-packet one-way delay: 106.184 ms
Loss rate: 5.00%
-- Flow 3:
Average throughput: 27.91 Mbit/s
95th percentile per-packet one-way delay: 109.880 ms
Loss rate: 2.55%
```

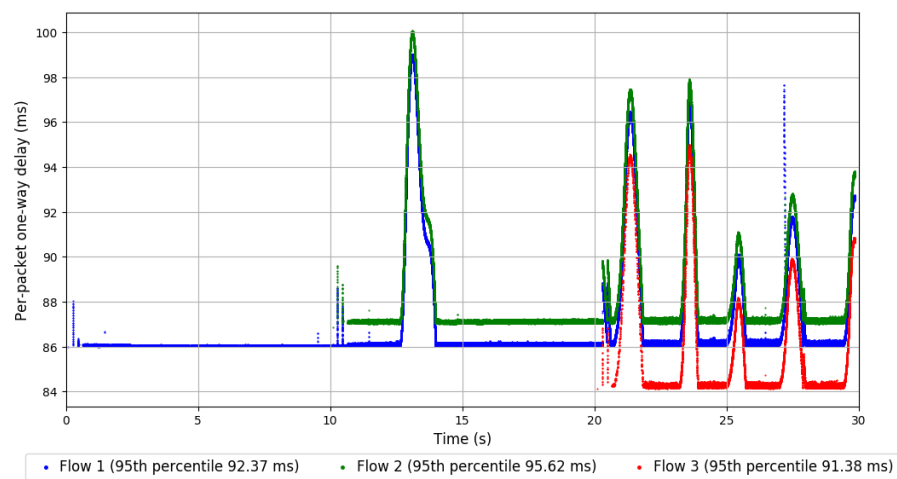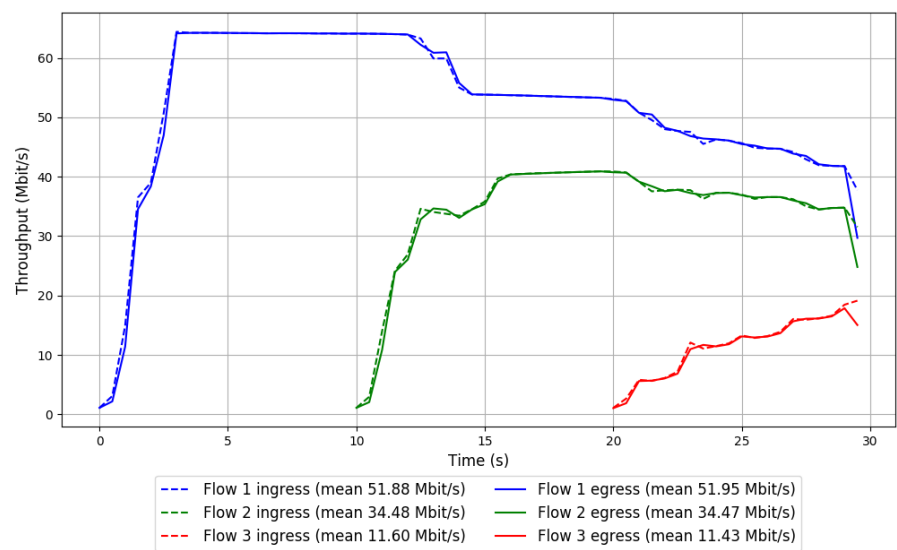Run 1: Report of FillP — Data Link

```
Run 2: Statistics of FillP

Start at: 2018-02-04 17:57:56
End at: 2018-02-04 17:58:26
Local clock offset: -0.013 ms
Remote clock offset: 1.707 ms


# Below is generated by plot.py at 2018-02-05 01:40:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.60 Mbit/s
95th percentile per-packet one-way delay: 99.186 ms
Loss rate: 15.03%
-- Flow 1:
Average throughput: 46.35 Mbit/s
95th percentile per-packet one-way delay: 97.194 ms
Loss rate: 13.47%
-- Flow 2:
Average throughput: 31.47 Mbit/s
95th percentile per-packet one-way delay: 99.473 ms
Loss rate: 16.93%
-- Flow 3:
Average throughput: 22.85 Mbit/s
95th percentile per-packet one-way delay: 101.383 ms
Loss rate: 18.98%
```
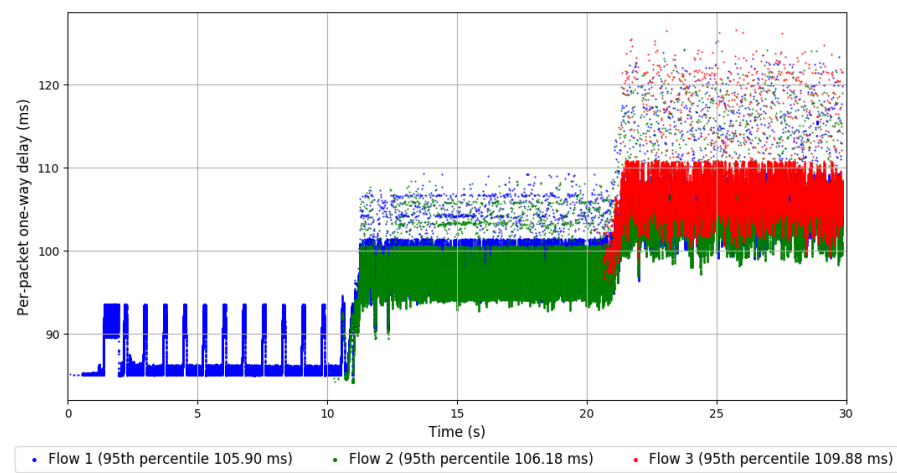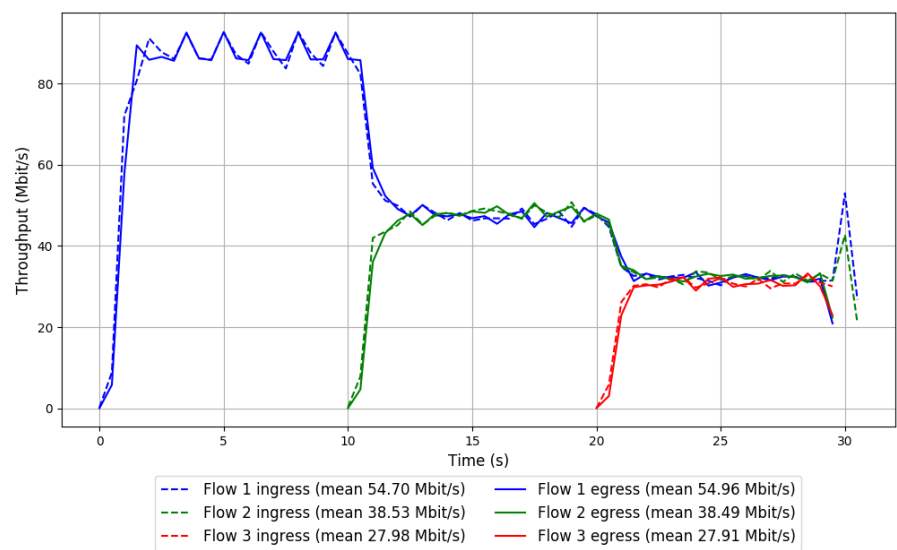
Run 2: Report of FillP — Data Link

```
Run 3: Statistics of FillP

Start at: 2018-02-04 18:22:04
End at: 2018-02-04 18:22:34
Local clock offset: -0.025 ms
Remote clock offset: -1.25 ms


# Below is generated by plot.py at 2018-02-05 01:40:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.32 Mbit/s
95th percentile per-packet one-way delay: 102.382 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 54.61 Mbit/s
95th percentile per-packet one-way delay: 102.268 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 38.55 Mbit/s
95th percentile per-packet one-way delay: 102.872 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 27.95 Mbit/s
95th percentile per-packet one-way delay: 101.573 ms
Loss rate: 2.21%
```

Run 3: Report of FillP — Data Link

```
Run 4: Statistics of FillP

Start at: 2018-02-04 18:46:13
End at: 2018-02-04 18:46:43
Local clock offset: -0.043 ms
Remote clock offset: 1.287 ms


# Below is generated by plot.py at 2018-02-05 01:40:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.79 Mbit/s
95th percentile per-packet one-way delay: 100.392 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 54.05 Mbit/s
95th percentile per-packet one-way delay: 98.168 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 35.94 Mbit/s
95th percentile per-packet one-way delay: 101.193 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 24.17 Mbit/s
95th percentile per-packet one-way delay: 102.196 ms
Loss rate: 2.93%
```
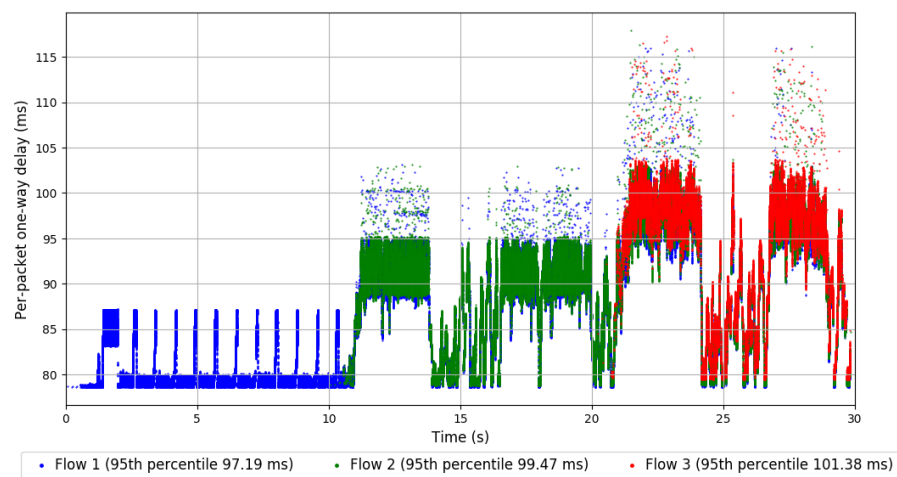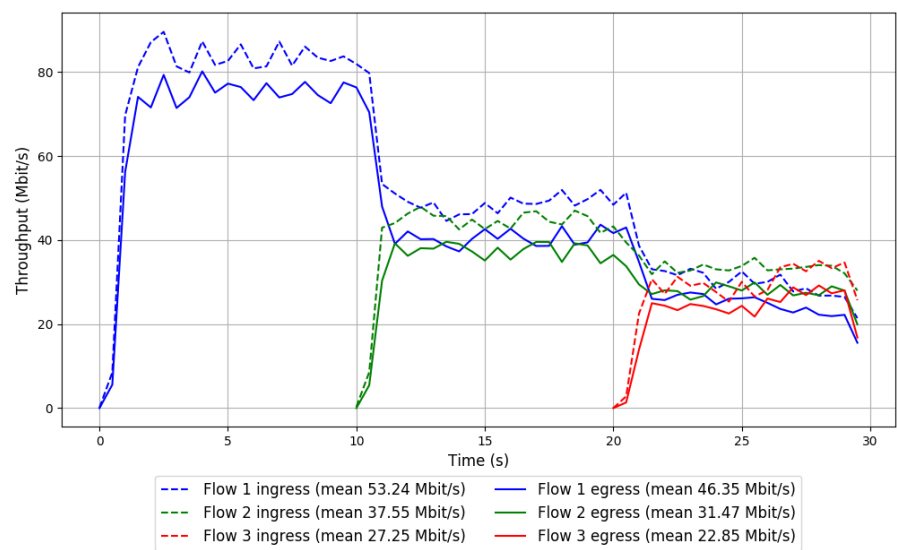
Run 4: Report of FillP — Data Link

```
Run 5: Statistics of FillP

Start at: 2018-02-04 19:10:04
End at: 2018-02-04 19:10:34
Local clock offset: -0.064 ms
Remote clock offset: 1.242 ms


# Below is generated by plot.py at 2018-02-05 01:40:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.56 Mbit/s
95th percentile per-packet one-way delay: 102.076 ms
Loss rate: 2.42%
-- Flow 1:
Average throughput: 55.00 Mbit/s
95th percentile per-packet one-way delay: 100.037 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 38.31 Mbit/s
95th percentile per-packet one-way delay: 102.472 ms
Loss rate: 3.87%
-- Flow 3:
Average throughput: 27.95 Mbit/s
95th percentile per-packet one-way delay: 104.137 ms
Loss rate: 9.23%
```
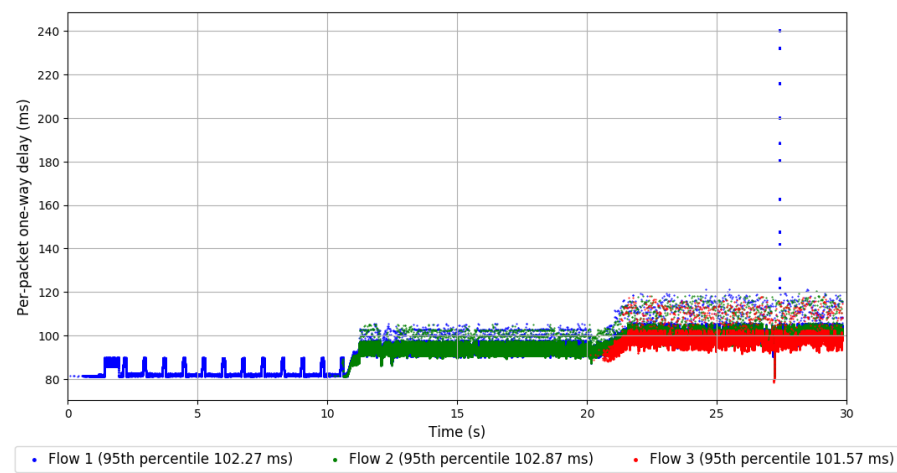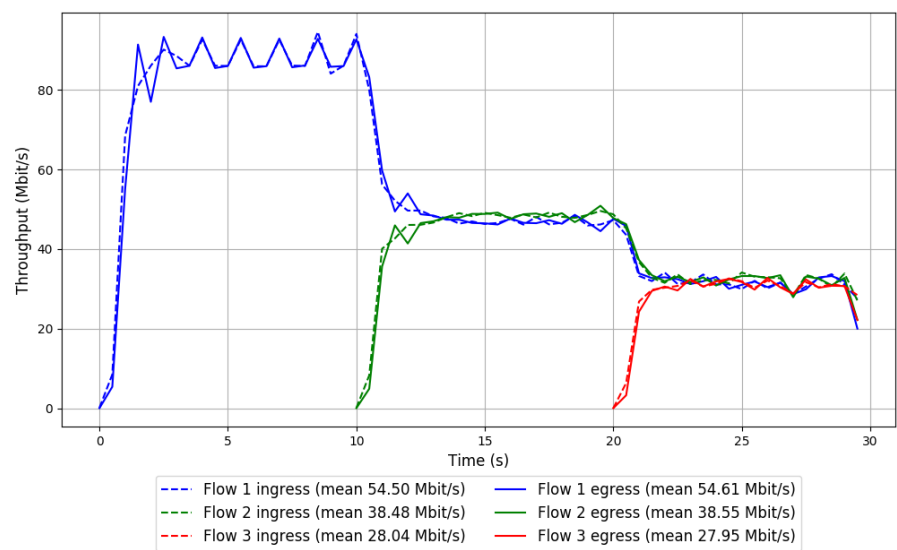
Run 5: Report of FillP — Data Link

Flow 1 ingress (mean 54.87 Mbit/s)   Flow 1 egress (mean 55.00 Mbit/s)
Flow 2 ingress (mean 38.43 Mbit/s)   Flow 2 egress (mean 38.31 Mbit/s)
Flow 3 ingress (mean 28.62 Mbit/s)   Flow 3 egress (mean 27.95 Mbit/s)

Flow 1 (95th percentile 100.04 ms)   Flow 2 (95th percentile 102.47 ms)   Flow 3 (95th percentile 104.14 ms)

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```
Run 6: Statistics of FillP

Start at: 2018-02-04 19:34:05
End at: 2018-02-04 19:34:35
Local clock offset: -0.088 ms
Remote clock offset: 2.225 ms


# Below is generated by plot.py at 2018-02-05 01:40:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.45 Mbit/s
95th percentile per-packet one-way delay: 102.568 ms
Loss rate: 2.38%
-- Flow 1:
Average throughput: 54.91 Mbit/s
95th percentile per-packet one-way delay: 101.328 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 38.44 Mbit/s
95th percentile per-packet one-way delay: 102.761 ms
Loss rate: 3.69%
-- Flow 3:
Average throughput: 27.64 Mbit/s
95th percentile per-packet one-way delay: 104.357 ms
Loss rate: 9.37%
```
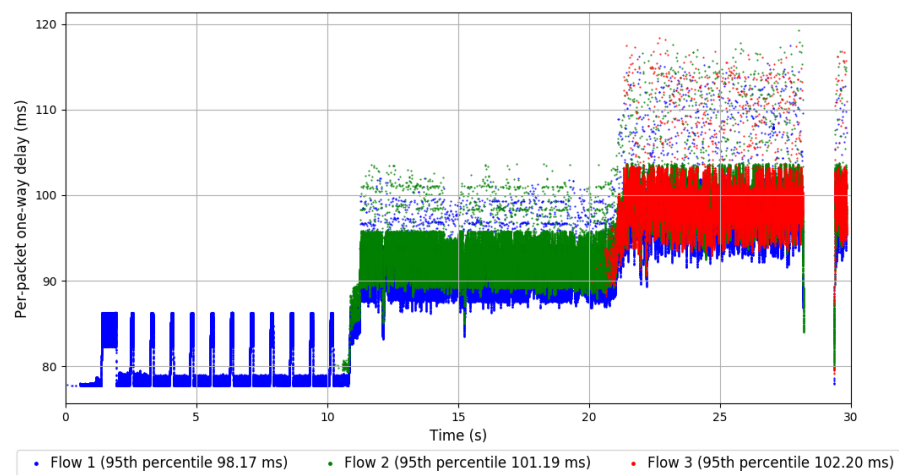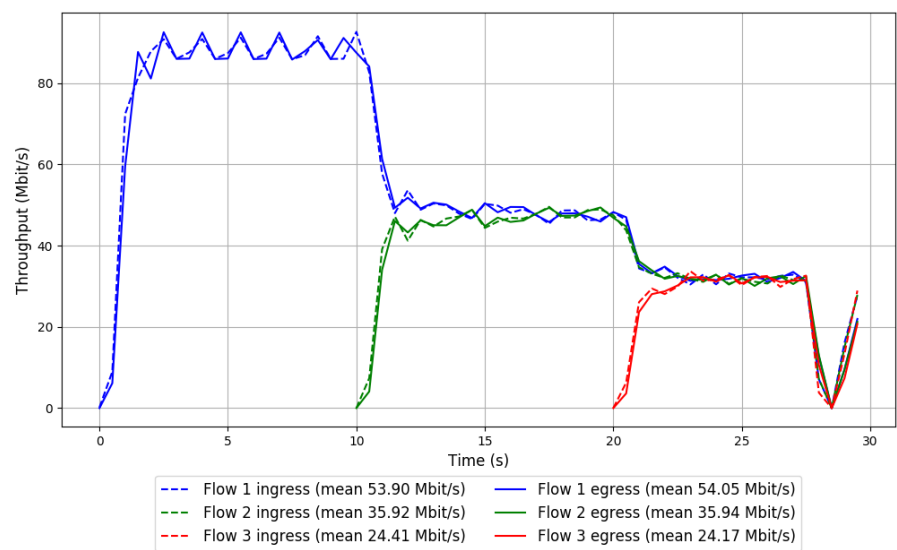
Run 6: Report of FillP — Data Link

Flow 1 ingress (mean 54.76 Mbit/s) --- Flow 1 egress (mean 54.91 Mbit/s)
Flow 2 ingress (mean 38.50 Mbit/s) --- Flow 2 egress (mean 38.44 Mbit/s)
Flow 3 ingress (mean 28.37 Mbit/s) --- Flow 3 egress (mean 27.64 Mbit/s)

Flow 1 (95th percentile 101.33 ms)   Flow 2 (95th percentile 102.76 ms)   Flow 3 (95th percentile 104.36 ms)

```
Run 7: Statistics of FillP

Start at: 2018-02-04 19:57:54
End at: 2018-02-04 19:58:24
Local clock offset: -0.077 ms
Remote clock offset: 3.726 ms

# Below is generated by plot.py at 2018-02-05 01:41:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.54 Mbit/s
95th percentile per-packet one-way delay: 102.308 ms
Loss rate: 2.65%
-- Flow 1:
Average throughput: 55.04 Mbit/s
95th percentile per-packet one-way delay: 101.911 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 38.30 Mbit/s
95th percentile per-packet one-way delay: 100.634 ms
Loss rate: 4.25%
-- Flow 3:
Average throughput: 27.83 Mbit/s
95th percentile per-packet one-way delay: 104.249 ms
Loss rate: 10.37%
```
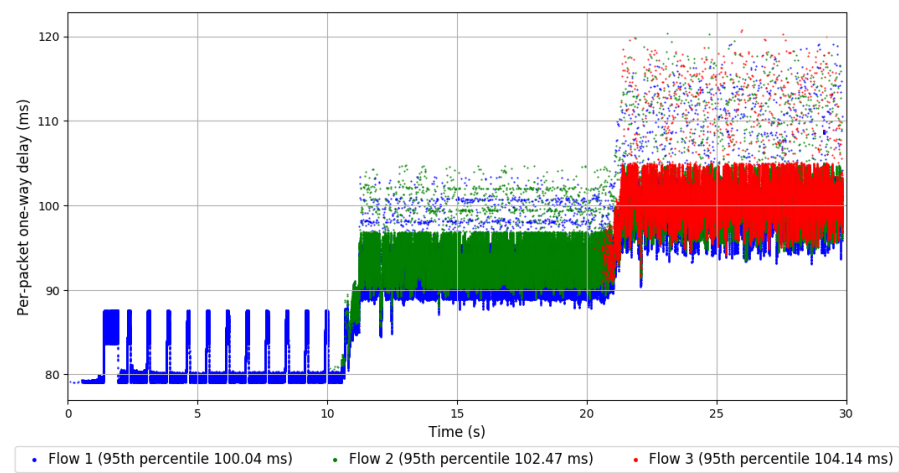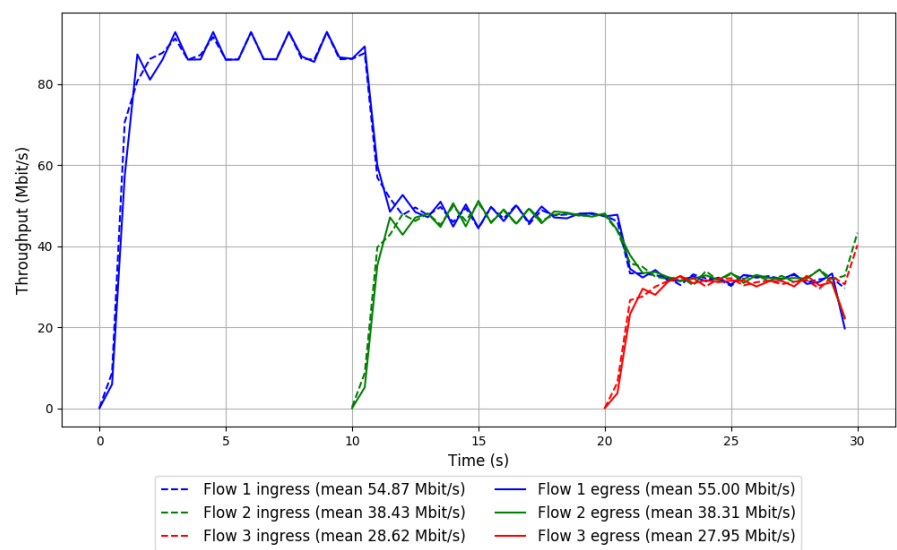
Run 7: Report of FillP — Data Link

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```
Run 8: Statistics of FillP

Start at: 2018-02-04 20:21:48
End at: 2018-02-04 20:22:18
Local clock offset: -0.103 ms
Remote clock offset: 3.216 ms


# Below is generated by plot.py at 2018-02-05 01:41:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.60 Mbit/s
95th percentile per-packet one-way delay: 99.212 ms
Loss rate: 13.02%
-- Flow 1:
Average throughput: 50.20 Mbit/s
95th percentile per-packet one-way delay: 97.713 ms
Loss rate: 10.71%
-- Flow 2:
Average throughput: 29.45 Mbit/s
95th percentile per-packet one-way delay: 99.401 ms
Loss rate: 16.87%
-- Flow 3:
Average throughput: 21.00 Mbit/s
95th percentile per-packet one-way delay: 101.182 ms
Loss rate: 17.75%
```
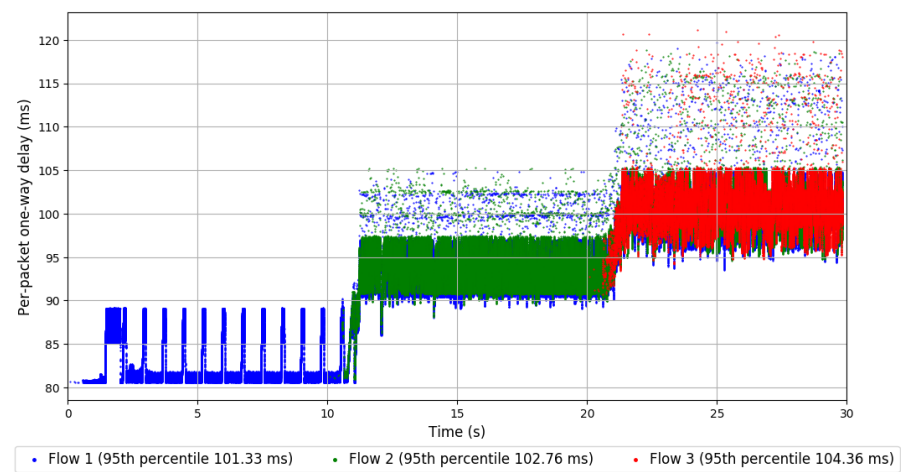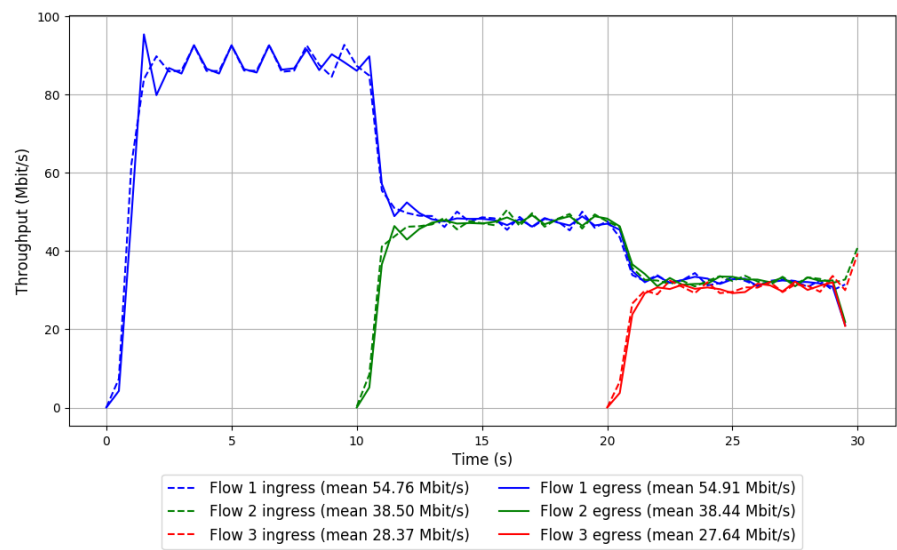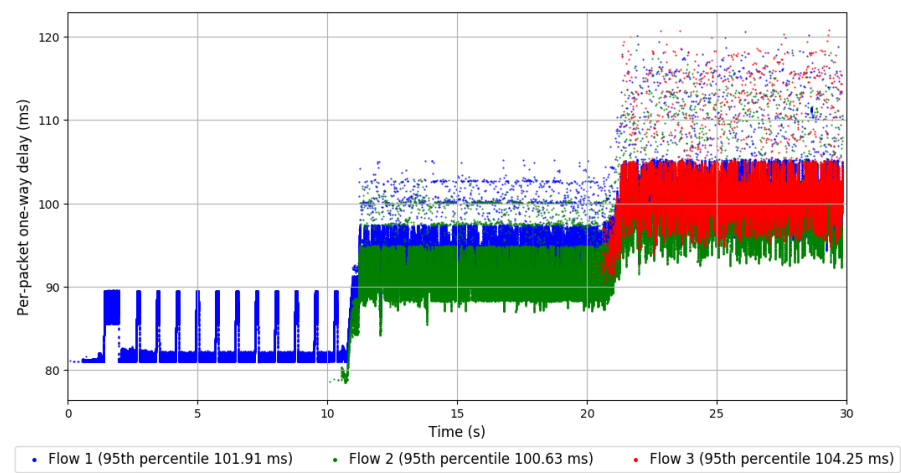
Run 8: Report of FillP — Data Link

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```
Run 9: Statistics of FillP

Start at: 2018-02-04 20:45:45
End at: 2018-02-04 20:46:15
Local clock offset: -0.021 ms
Remote clock offset: -1.641 ms


# Below is generated by plot.py at 2018-02-05 01:42:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.60 Mbit/s
95th percentile per-packet one-way delay: 106.961 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 54.91 Mbit/s
95th percentile per-packet one-way delay: 106.386 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 38.19 Mbit/s
95th percentile per-packet one-way delay: 107.634 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 28.12 Mbit/s
95th percentile per-packet one-way delay: 107.371 ms
Loss rate: 2.40%
```
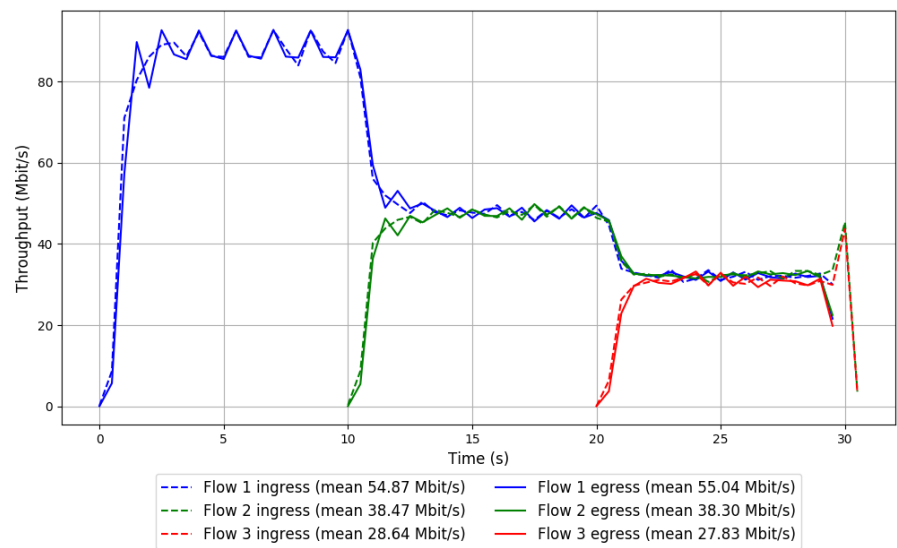
Run 9: Report of FillP — Data Link

```
Run 10: Statistics of FillP

Start at: 2018-02-04 21:09:35
End at: 2018-02-04 21:10:05
Local clock offset: -0.059 ms
Remote clock offset: 5.052 ms


# Below is generated by plot.py at 2018-02-05 01:42:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.62 Mbit/s
95th percentile per-packet one-way delay: 100.715 ms
Loss rate: 2.32%
-- Flow 1:
Average throughput: 55.12 Mbit/s
95th percentile per-packet one-way delay: 99.294 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 38.20 Mbit/s
95th percentile per-packet one-way delay: 101.014 ms
Loss rate: 3.63%
-- Flow 3:
Average throughput: 28.09 Mbit/s
95th percentile per-packet one-way delay: 102.660 ms
Loss rate: 9.23%
```
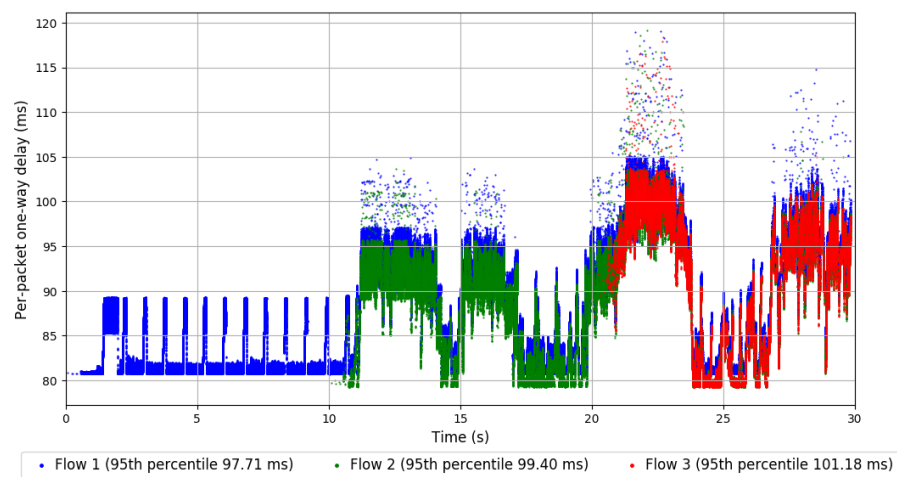
Run 10: Report of FillP — Data Link

```
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-04 17:41:54
End at: 2018-02-04 17:42:24
Local clock offset: -0.025 ms
Remote clock offset: -0.659 ms


# Below is generated by plot.py at 2018-02-05 01:42:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.57 Mbit/s
95th percentile per-packet one-way delay: 105.598 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 34.21 Mbit/s
95th percentile per-packet one-way delay: 104.179 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 49.88 Mbit/s
95th percentile per-packet one-way delay: 105.534 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 22.56 Mbit/s
95th percentile per-packet one-way delay: 107.989 ms
Loss rate: 2.45%
```
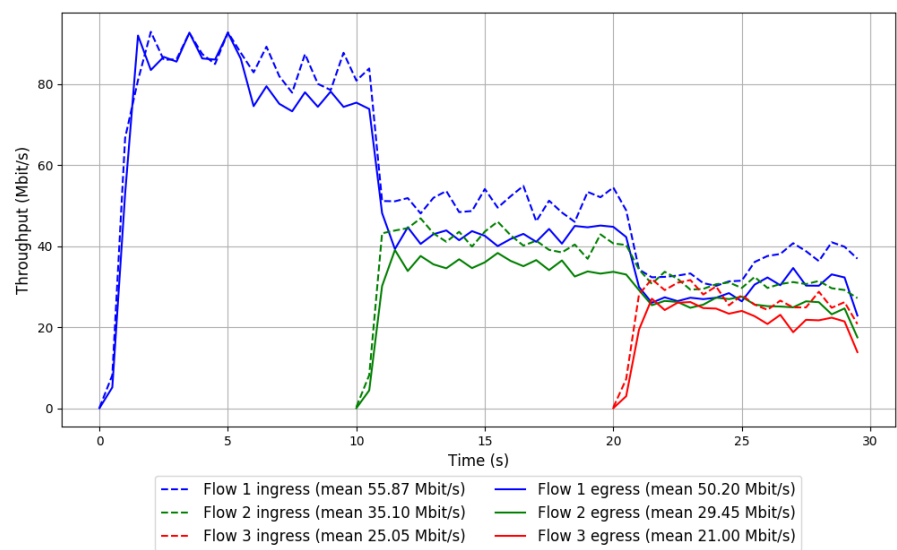
Run 1: Report of Indigo-1-32 — Data Link
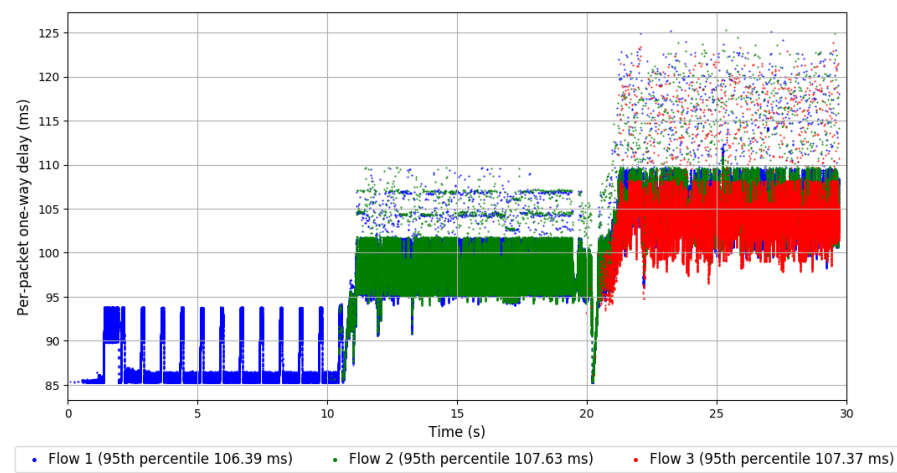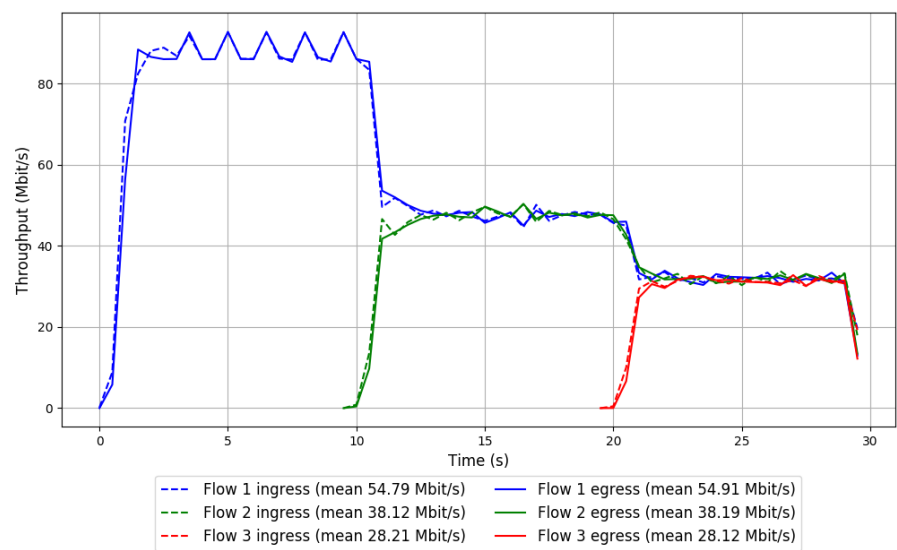

Flow 1 ingress (mean 34.17 Mbit/s)   Flow 1 egress (mean 34.21 Mbit/s)
Flow 2 ingress (mean 49.83 Mbit/s)   Flow 2 egress (mean 49.88 Mbit/s)
Flow 3 ingress (mean 22.68 Mbit/s)   Flow 3 egress (mean 22.56 Mbit/s)

Flow 1 (95th percentile 104.18 ms)   Flow 2 (95th percentile 105.53 ms)   Flow 3 (95th percentile 107.99 ms)

```
Run 2: Statistics of Indigo-1-32

Start at: 2018-02-04 18:05:48
End at: 2018-02-04 18:06:18
Local clock offset: -0.025 ms
Remote clock offset: -5.407 ms


# Below is generated by plot.py at 2018-02-05 01:42:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.75 Mbit/s
95th percentile per-packet one-way delay: 118.578 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 62.30 Mbit/s
95th percentile per-packet one-way delay: 118.590 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 33.29 Mbit/s
95th percentile per-packet one-way delay: 117.287 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 29.15 Mbit/s
95th percentile per-packet one-way delay: 118.908 ms
Loss rate: 2.35%
```
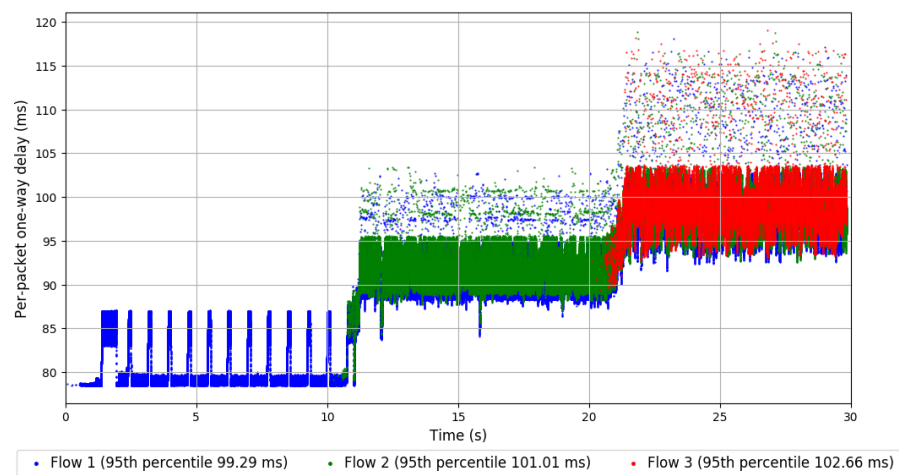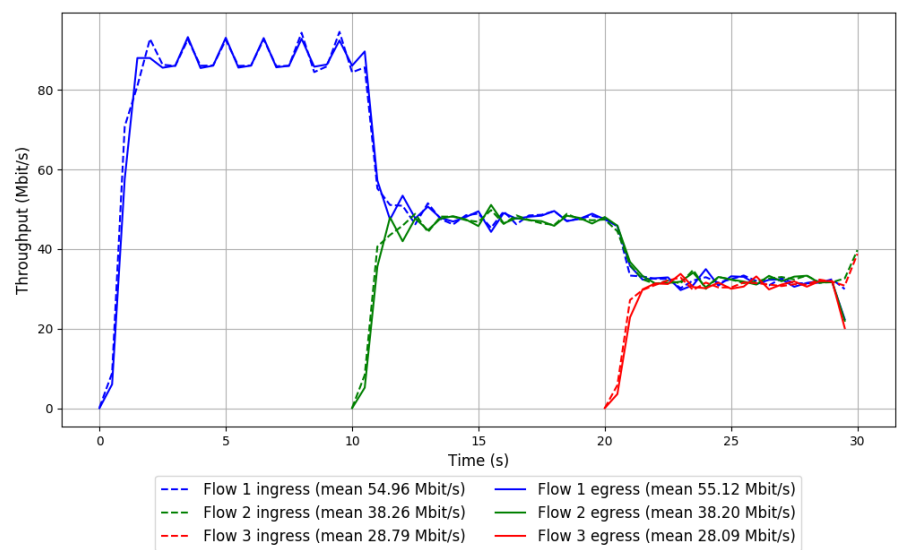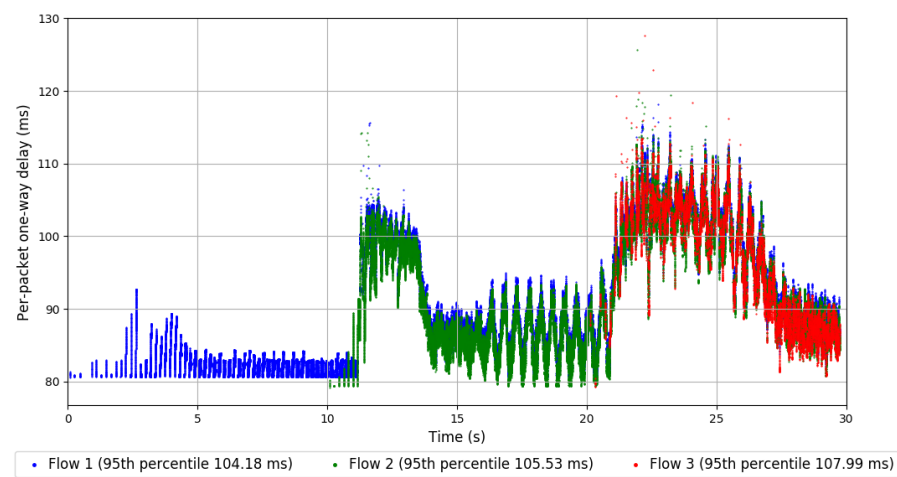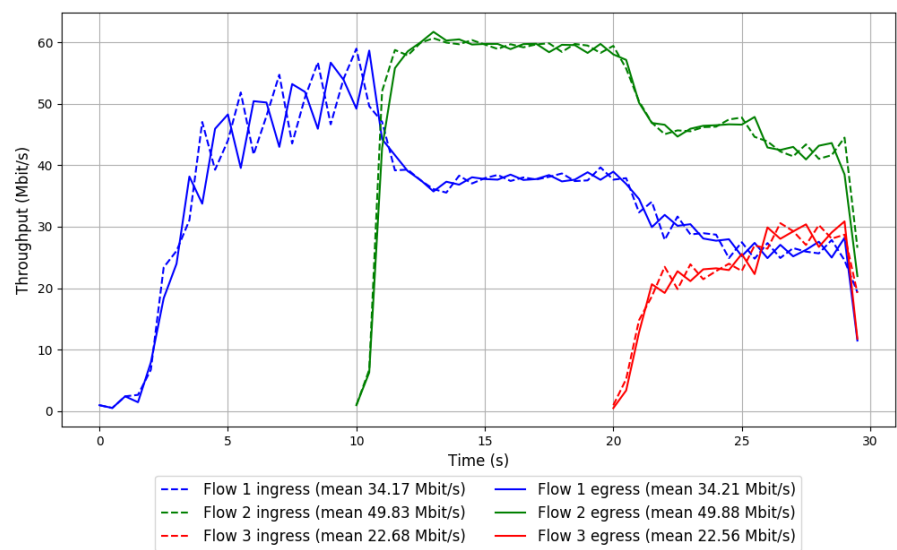
Run 2: Report of Indigo-1-32 — Data Link

```
Run 3: Statistics of Indigo-1-32

Start at: 2018-02-04 18:29:56
End at: 2018-02-04 18:30:26
Local clock offset: -0.008 ms
Remote clock offset: -6.481 ms


# Below is generated by plot.py at 2018-02-05 01:42:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.49 Mbit/s
95th percentile per-packet one-way delay: 109.198 ms
Loss rate: 10.18%
-- Flow 1:
Average throughput: 61.82 Mbit/s
95th percentile per-packet one-way delay: 108.532 ms
Loss rate: 9.64%
-- Flow 2:
Average throughput: 31.44 Mbit/s
95th percentile per-packet one-way delay: 110.143 ms
Loss rate: 10.84%
-- Flow 3:
Average throughput: 5.76 Mbit/s
95th percentile per-packet one-way delay: 108.901 ms
Loss rate: 19.62%
```

Run 3: Report of Indigo-1-32 — Data Link

- - - Flow 1 ingress (mean 67.97 Mbit/s)   —— Flow 1 egress (mean 61.82 Mbit/s)
- - - Flow 2 ingress (mean 34.92 Mbit/s)   —— Flow 2 egress (mean 31.44 Mbit/s)
- - - Flow 3 ingress (mean 7.01 Mbit/s)   —— Flow 3 egress (mean 5.76 Mbit/s)

- Flow 1 (95th percentile 108.53 ms)   • Flow 2 (95th percentile 110.14 ms)   • Flow 3 (95th percentile 108.90 ms)
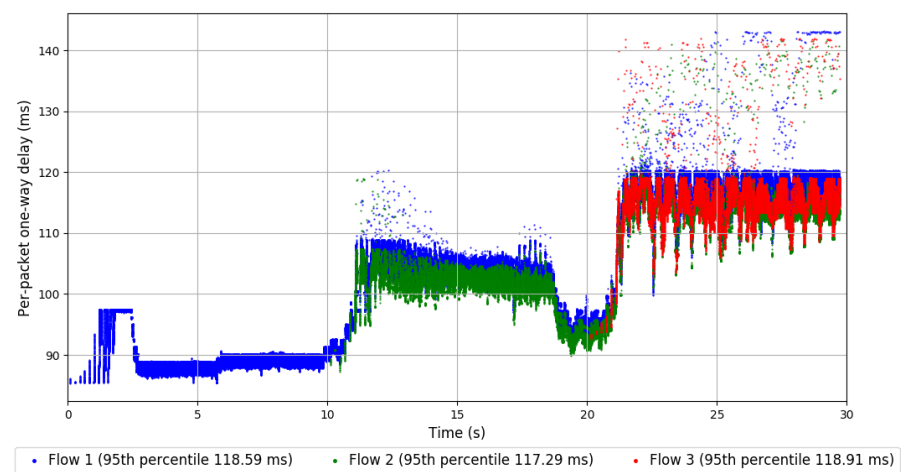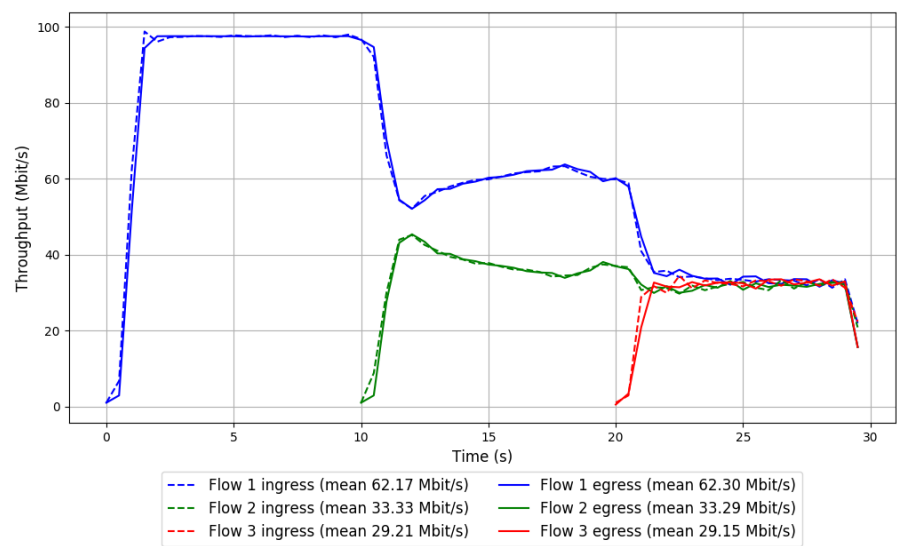
269

```
Run 4: Statistics of Indigo-1-32

Start at: 2018-02-04 18:54:03
End at: 2018-02-04 18:54:33
Local clock offset: -0.021 ms
Remote clock offset: 0.963 ms


# Below is generated by plot.py at 2018-02-05 01:42:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.84 Mbit/s
95th percentile per-packet one-way delay: 113.582 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 60.42 Mbit/s
95th percentile per-packet one-way delay: 113.336 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 36.46 Mbit/s
95th percentile per-packet one-way delay: 113.213 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 28.72 Mbit/s
95th percentile per-packet one-way delay: 115.277 ms
Loss rate: 2.38%
```

Run 4: Report of Indigo-1-32 — Data Link

- - - Flow 1 ingress (mean 60.25 Mbit/s) —— Flow 1 egress (mean 60.42 Mbit/s)
- - - Flow 2 ingress (mean 36.42 Mbit/s) —— Flow 2 egress (mean 36.46 Mbit/s)
- - - Flow 3 ingress (mean 28.77 Mbit/s) —— Flow 3 egress (mean 28.72 Mbit/s)

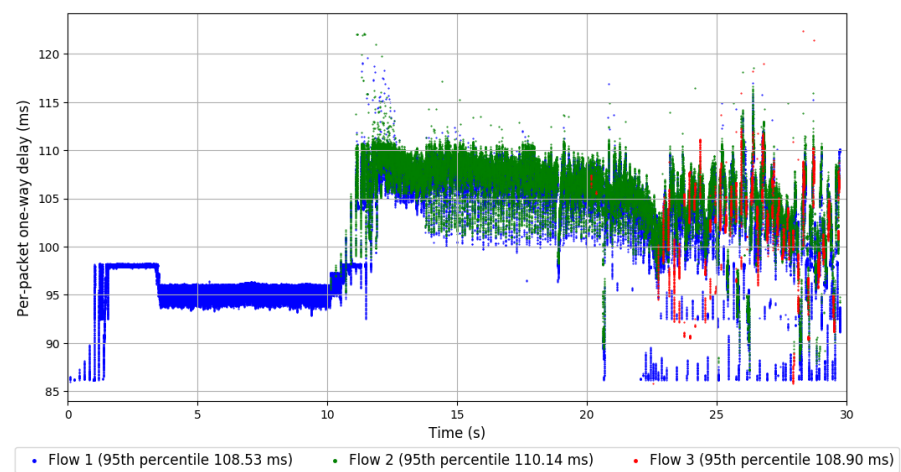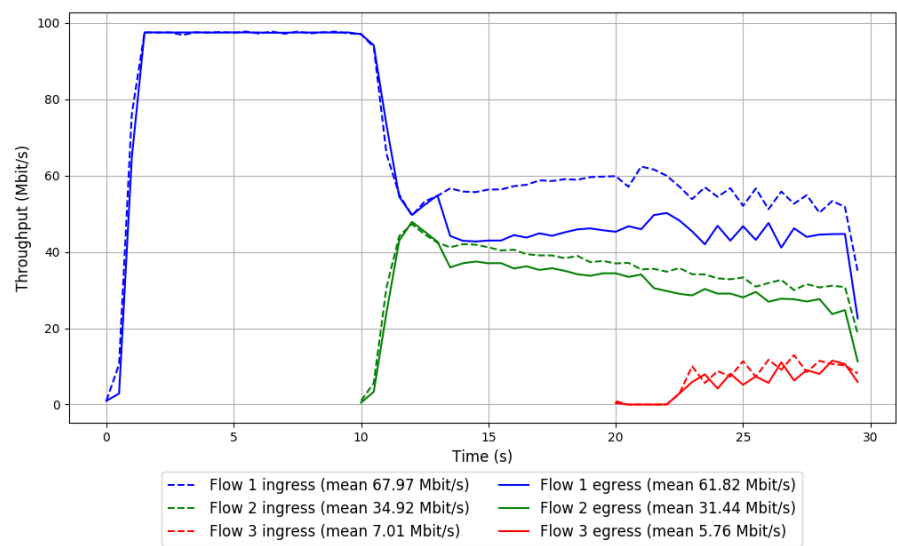- Flow 1 (95th percentile 113.34 ms)   - Flow 2 (95th percentile 113.21 ms)   - Flow 3 (95th percentile 115.28 ms)

```
Run 5: Statistics of Indigo-1-32

Start at: 2018-02-04 19:17:58
End at: 2018-02-04 19:18:28
Local clock offset: -0.048 ms
Remote clock offset: -2.295 ms


# Below is generated by plot.py at 2018-02-05 01:42:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.27 Mbit/s
95th percentile per-packet one-way delay: 111.221 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 68.68 Mbit/s
95th percentile per-packet one-way delay: 109.078 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 22.70 Mbit/s
95th percentile per-packet one-way delay: 113.372 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 29.52 Mbit/s
95th percentile per-packet one-way delay: 113.999 ms
Loss rate: 1.99%
```

Run 5: Report of Indigo-1-32 — Data Link

```
Run 6: Statistics of Indigo-1-32

Start at: 2018-02-04 19:41:57
End at: 2018-02-04 19:42:27
Local clock offset: -0.086 ms
Remote clock offset: -1.641 ms


# Below is generated by plot.py at 2018-02-05 01:43:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.64 Mbit/s
95th percentile per-packet one-way delay: 116.926 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 62.44 Mbit/s
95th percentile per-packet one-way delay: 114.234 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 34.80 Mbit/s
95th percentile per-packet one-way delay: 118.358 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 25.30 Mbit/s
95th percentile per-packet one-way delay: 118.613 ms
Loss rate: 2.11%
```
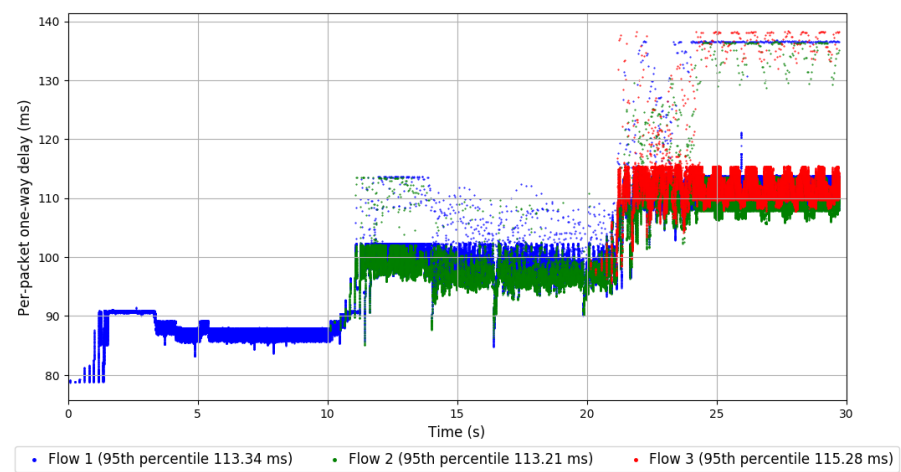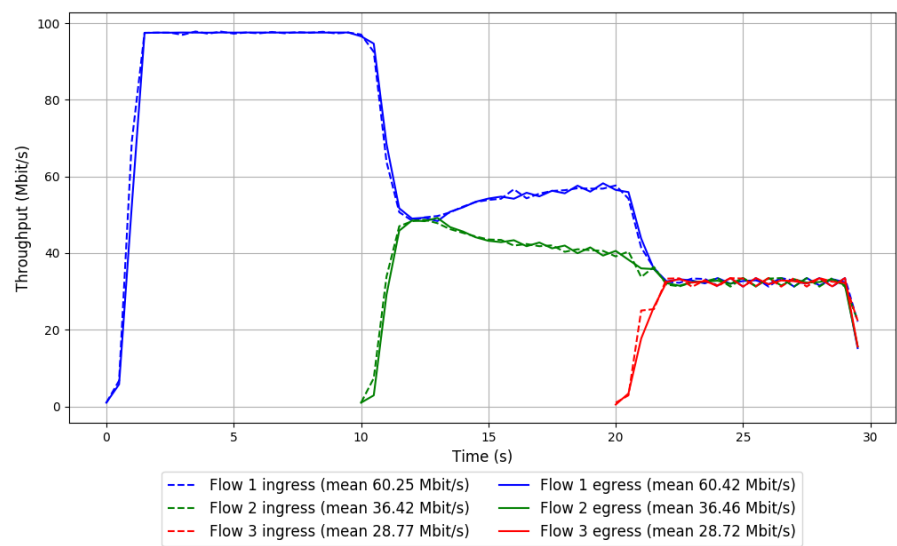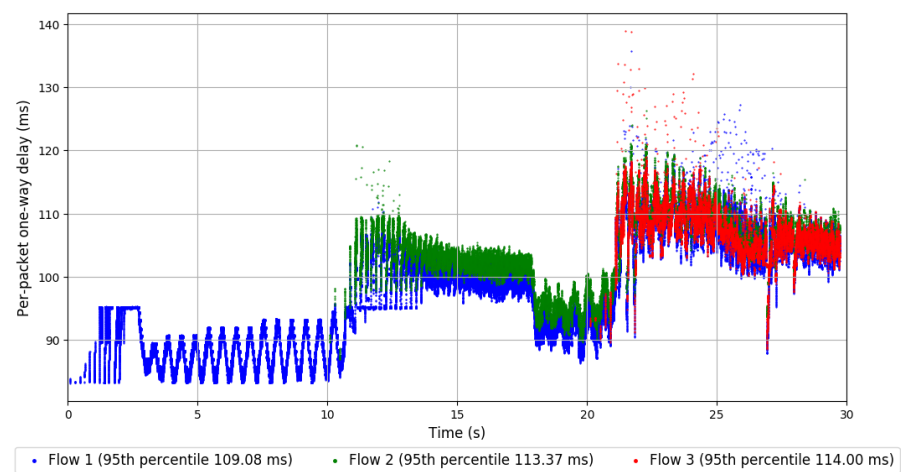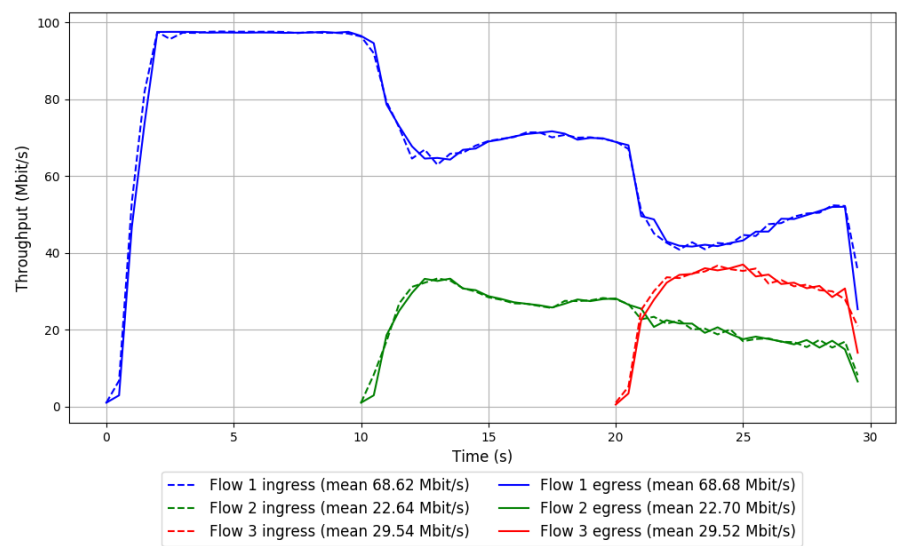
Run 6: Report of Indigo-1-32 — Data Link

- - - Flow 1 ingress (mean 62.36 Mbit/s) —— Flow 1 egress (mean 62.44 Mbit/s)
- - - Flow 2 ingress (mean 34.75 Mbit/s) —— Flow 2 egress (mean 34.80 Mbit/s)
- - - Flow 3 ingress (mean 25.31 Mbit/s) —— Flow 3 egress (mean 25.30 Mbit/s)

• Flow 1 (95th percentile 114.23 ms)   • Flow 2 (95th percentile 118.36 ms)   • Flow 3 (95th percentile 118.61 ms)
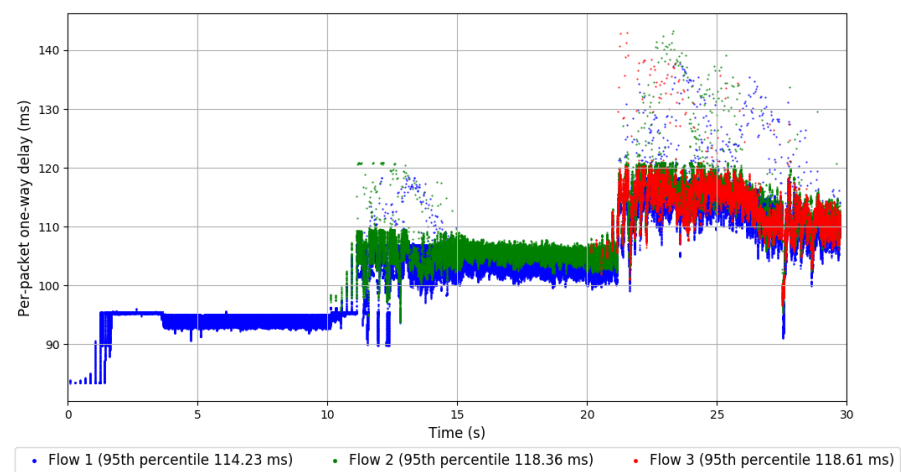
275

```
Run 7: Statistics of Indigo-1-32

Start at: 2018-02-04 20:05:44
End at: 2018-02-04 20:06:14
Local clock offset: -0.037 ms
Remote clock offset: -1.869 ms


# Below is generated by plot.py at 2018-02-05 01:43:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.72 Mbit/s
95th percentile per-packet one-way delay: 119.277 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 60.27 Mbit/s
95th percentile per-packet one-way delay: 119.756 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 37.09 Mbit/s
95th percentile per-packet one-way delay: 118.115 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 27.78 Mbit/s
95th percentile per-packet one-way delay: 119.840 ms
Loss rate: 2.15%
```
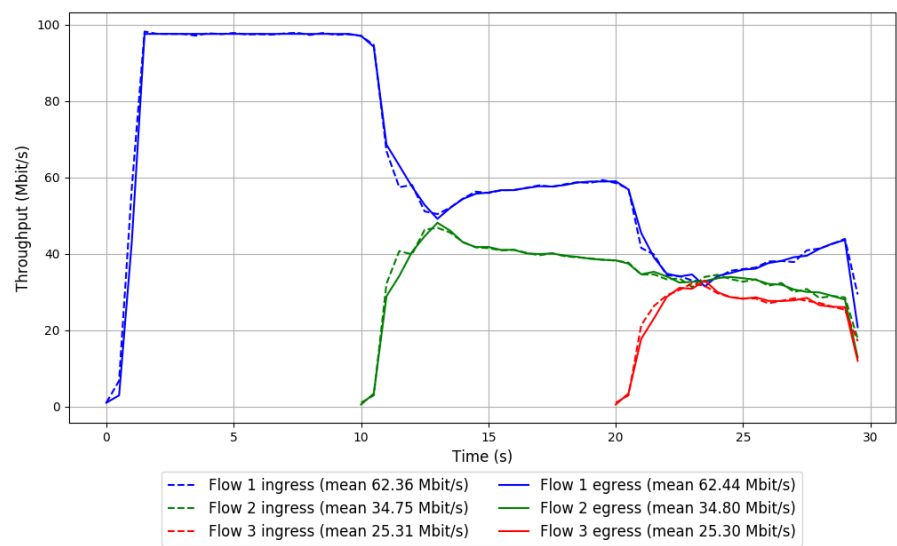
Run 7: Report of Indigo-1-32 — Data Link

Flow 1 ingress (mean 60.12 Mbit/s) --- Flow 1 egress (mean 60.27 Mbit/s)
Flow 2 ingress (mean 37.06 Mbit/s) --- Flow 2 egress (mean 37.09 Mbit/s)
Flow 3 ingress (mean 27.81 Mbit/s) --- Flow 3 egress (mean 27.78 Mbit/s)

Flow 1 (95th percentile 119.76 ms)   Flow 2 (95th percentile 118.11 ms)   Flow 3 (95th percentile 119.84 ms)

277

```
Run 8: Statistics of Indigo-1-32

Start at: 2018-02-04 20:29:39
End at: 2018-02-04 20:30:09
Local clock offset: -0.031 ms
Remote clock offset: -0.794 ms


# Below is generated by plot.py at 2018-02-05 01:43:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.61 Mbit/s
95th percentile per-packet one-way delay: 114.365 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 65.00 Mbit/s
95th percentile per-packet one-way delay: 113.872 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 29.48 Mbit/s
95th percentile per-packet one-way delay: 114.179 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 28.24 Mbit/s
95th percentile per-packet one-way delay: 115.557 ms
Loss rate: 2.09%
```

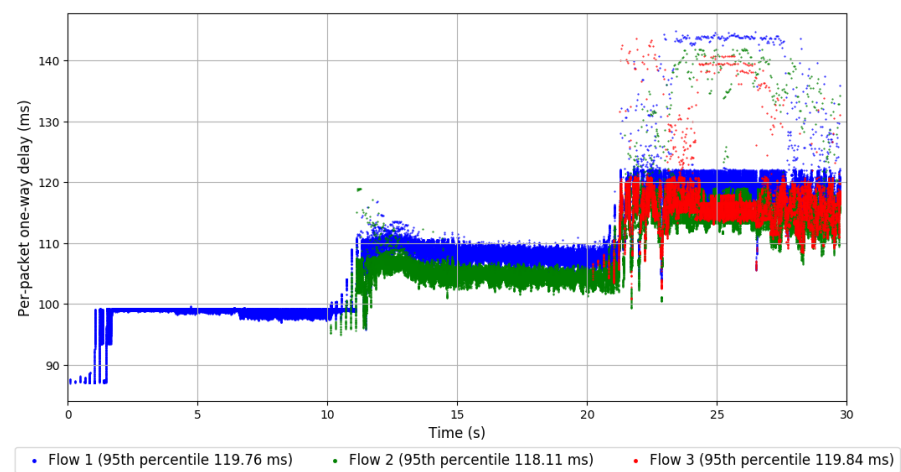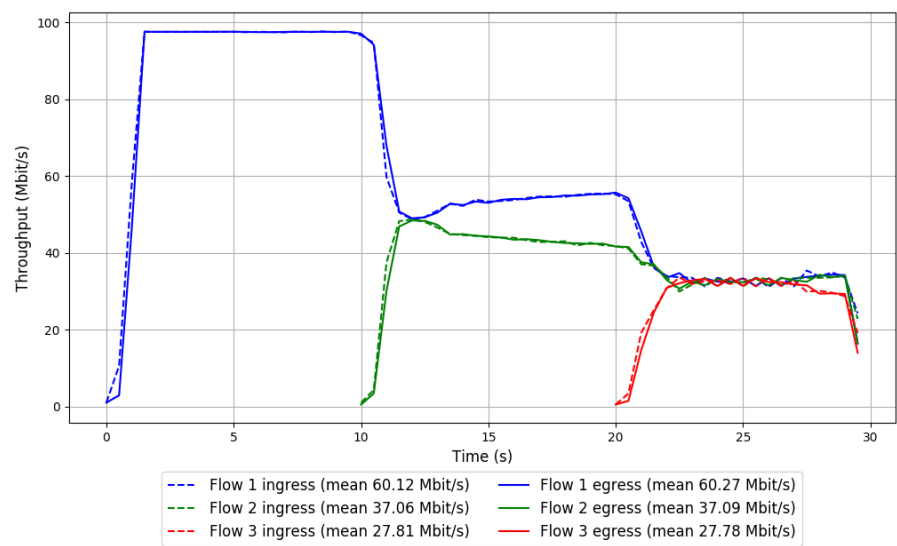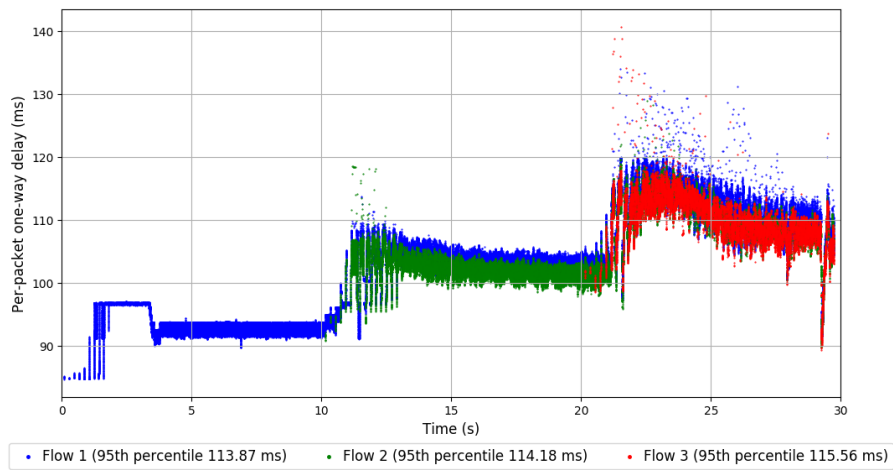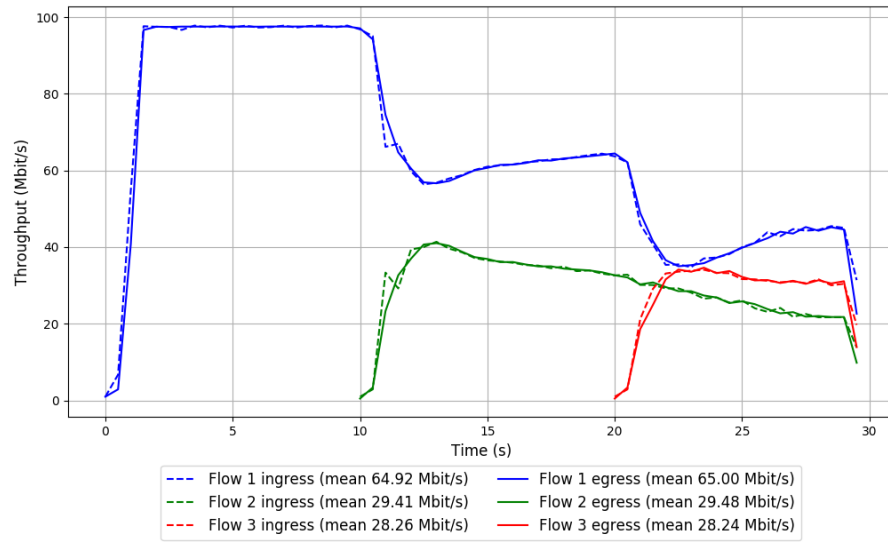## Run 8: Report of Indigo-1-32 — Data Link

```
Run 9: Statistics of Indigo-1-32

Start at: 2018-02-04 20:53:37
End at: 2018-02-04 20:54:07
Local clock offset: -0.042 ms
Remote clock offset: -1.576 ms


# Below is generated by plot.py at 2018-02-05 01:43:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.75 Mbit/s
95th percentile per-packet one-way delay: 107.897 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 69.55 Mbit/s
95th percentile per-packet one-way delay: 107.549 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 28.81 Mbit/s
95th percentile per-packet one-way delay: 107.624 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 15.96 Mbit/s
95th percentile per-packet one-way delay: 110.186 ms
Loss rate: 2.21%
```

Run 9: Report of Indigo-1-32 — Data Link

Flow 1 ingress (mean 69.46 Mbit/s) --- Flow 1 egress (mean 69.55 Mbit/s)
Flow 2 ingress (mean 28.80 Mbit/s) --- Flow 2 egress (mean 28.81 Mbit/s)
Flow 3 ingress (mean 16.02 Mbit/s) --- Flow 3 egress (mean 15.96 Mbit/s)

Flow 1 (95th percentile 107.55 ms)   Flow 2 (95th percentile 107.62 ms)   Flow 3 (95th percentile 110.19 ms)

```
Run 10: Statistics of Indigo-1-32

Start at: 2018-02-04 21:17:25
End at: 2018-02-04 21:17:55
Local clock offset: -0.085 ms
Remote clock offset: 3.275 ms


# Below is generated by plot.py at 2018-02-05 01:43:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.54 Mbit/s
95th percentile per-packet one-way delay: 113.462 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 58.72 Mbit/s
95th percentile per-packet one-way delay: 112.010 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 39.79 Mbit/s
95th percentile per-packet one-way delay: 114.364 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 26.22 Mbit/s
95th percentile per-packet one-way delay: 114.467 ms
Loss rate: 2.21%
```

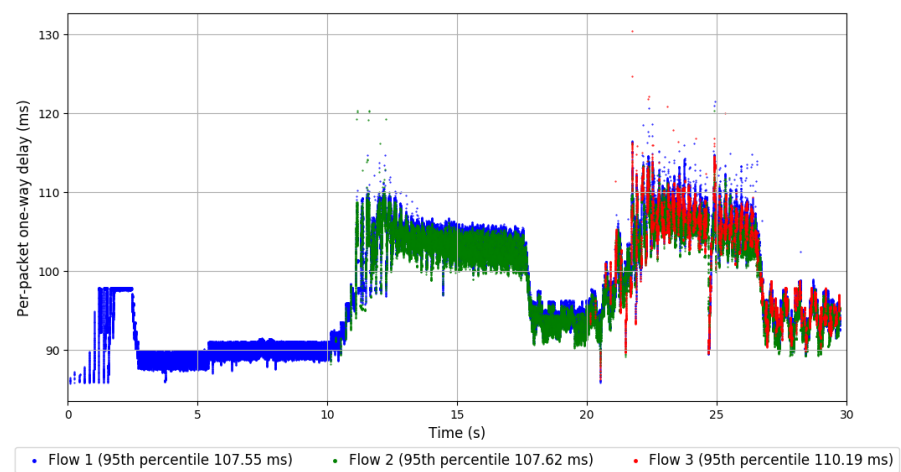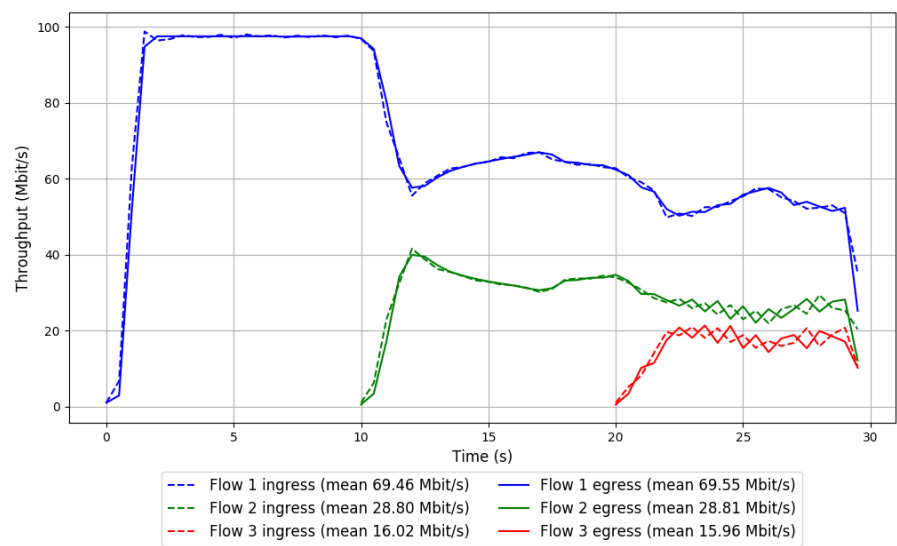## Run 10: Report of Indigo-1-32 — Data Link

- - - Flow 1 ingress (mean 58.62 Mbit/s) —— Flow 1 egress (mean 58.72 Mbit/s)
- - - Flow 2 ingress (mean 39.74 Mbit/s) —— Flow 2 egress (mean 39.79 Mbit/s)
- - - Flow 3 ingress (mean 26.26 Mbit/s) —— Flow 3 egress (mean 26.22 Mbit/s)

- Flow 1 (95th percentile 112.01 ms)   - Flow 2 (95th percentile 114.36 ms)   - Flow 3 (95th percentile 114.47 ms)

```
Run 1: Statistics of Vivace-latency

Start at: 2018-02-04 17:31:19
End at: 2018-02-04 17:31:49
Local clock offset: -0.084 ms
Remote clock offset: -4.929 ms


# Below is generated by plot.py at 2018-02-05 01:43:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.66 Mbit/s
95th percentile per-packet one-way delay: 102.304 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 68.41 Mbit/s
95th percentile per-packet one-way delay: 102.363 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 10.80 Mbit/s
95th percentile per-packet one-way delay: 101.091 ms
Loss rate: 1.84%
-- Flow 3:
Average throughput: 6.45 Mbit/s
95th percentile per-packet one-way delay: 101.195 ms
Loss rate: 3.64%
```
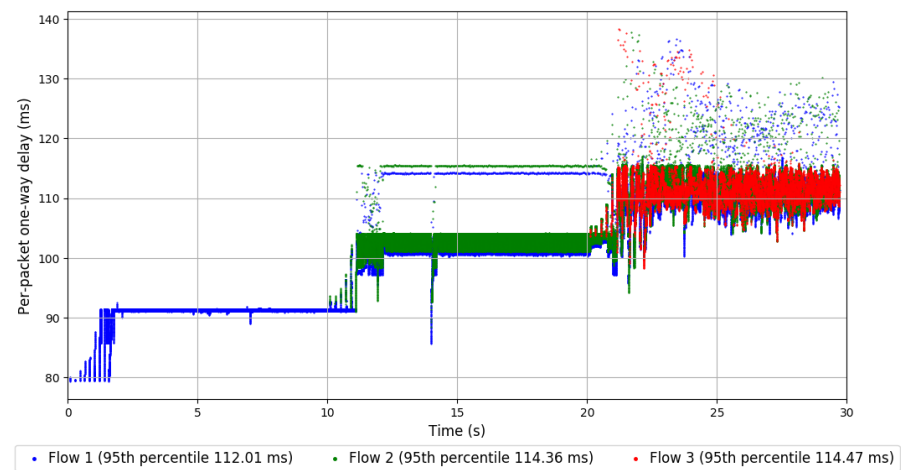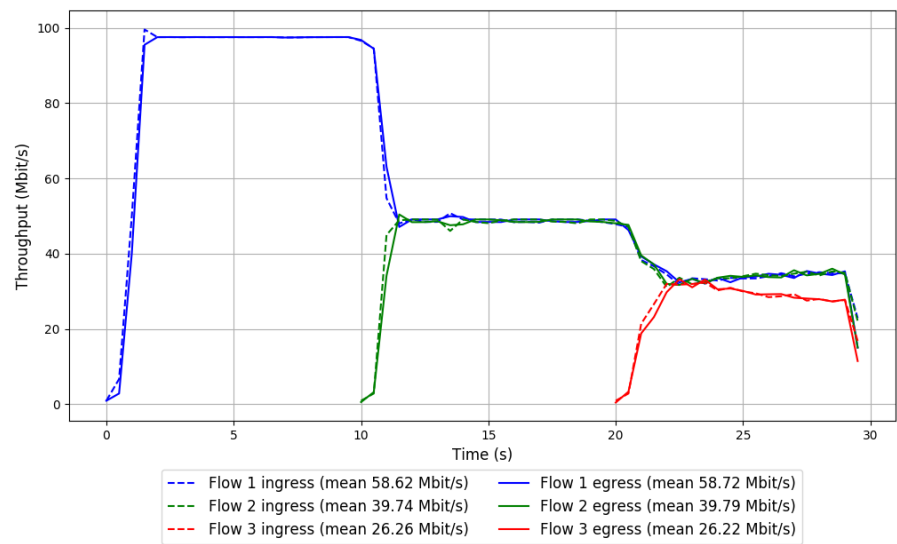
Run 1: Report of Vivace-latency — Data Link

Legend:
- Flow 1 ingress (mean 68.41 Mbit/s)
- Flow 1 egress (mean 68.41 Mbit/s)
- Flow 2 ingress (mean 10.90 Mbit/s)
- Flow 2 egress (mean 10.80 Mbit/s)
- Flow 3 ingress (mean 6.58 Mbit/s)
- Flow 3 egress (mean 6.45 Mbit/s)

Legend:
- Flow 1 (95th percentile 102.36 ms)
- Flow 2 (95th percentile 101.09 ms)
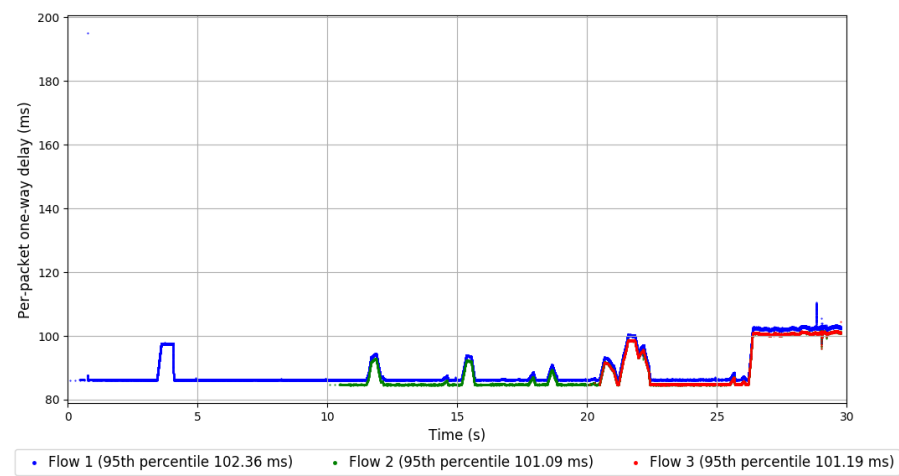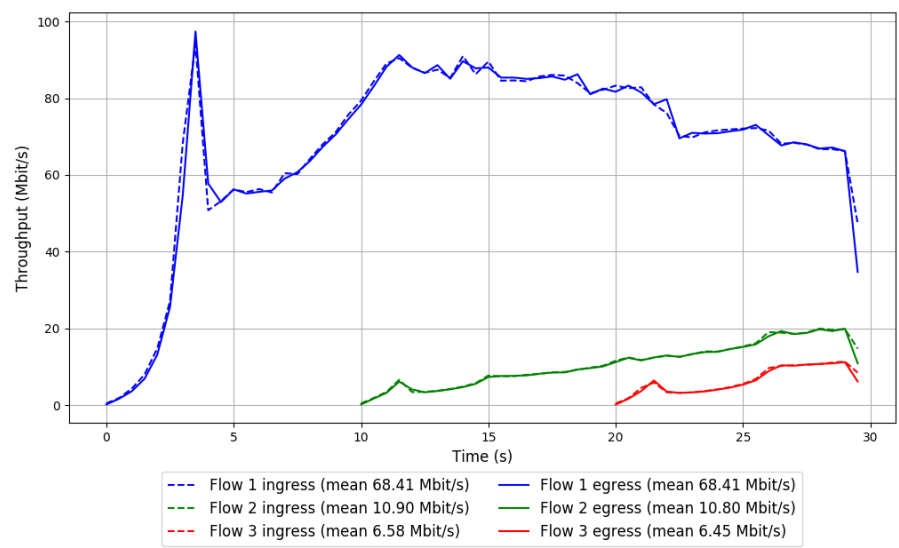- Flow 3 (95th percentile 101.19 ms)

```
Run 2: Statistics of Vivace-latency

Start at: 2018-02-04 17:55:12
End at: 2018-02-04 17:55:42
Local clock offset: -0.022 ms
Remote clock offset: -4.945 ms


# Below is generated by plot.py at 2018-02-05 01:43:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.31 Mbit/s
95th percentile per-packet one-way delay: 84.599 ms
Loss rate: 2.27%
-- Flow 1:
Average throughput: 59.37 Mbit/s
95th percentile per-packet one-way delay: 84.603 ms
Loss rate: 2.15%
-- Flow 2:
Average throughput: 10.31 Mbit/s
95th percentile per-packet one-way delay: 84.593 ms
Loss rate: 2.94%
-- Flow 3:
Average throughput: 3.40 Mbit/s
95th percentile per-packet one-way delay: 84.471 ms
Loss rate: 4.32%
```

Run 2: Report of Vivace-latency — Data Link

Flow 1 ingress (mean 60.31 Mbit/s) Flow 1 egress (mean 59.37 Mbit/s)
Flow 2 ingress (mean 10.53 Mbit/s) Flow 2 egress (mean 10.31 Mbit/s)
Flow 3 ingress (mean 3.49 Mbit/s) Flow 3 egress (mean 3.40 Mbit/s)

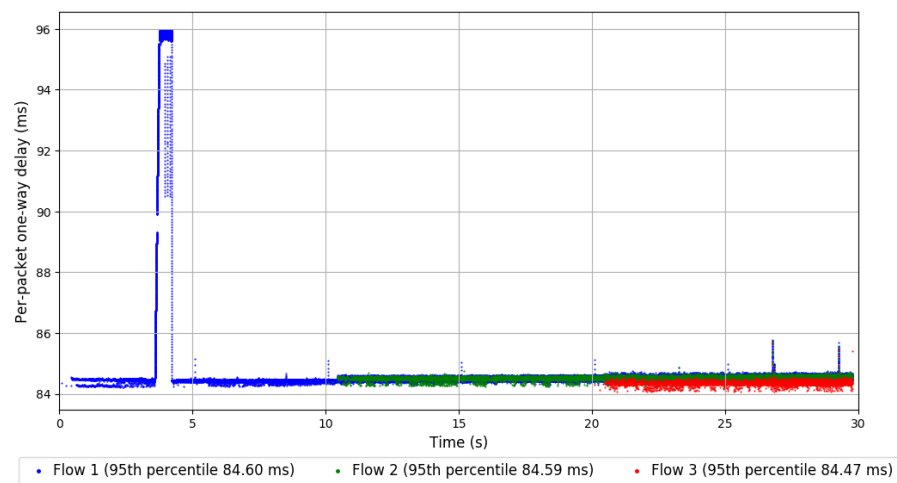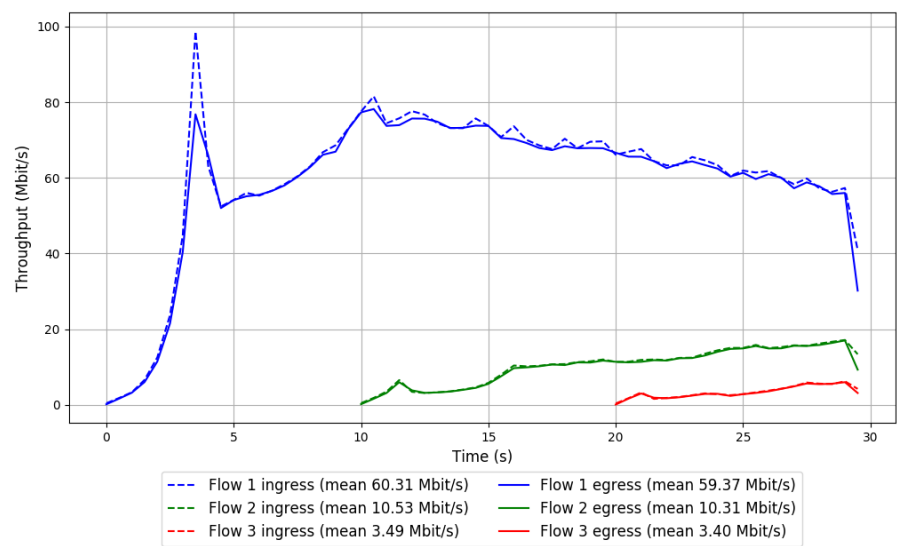Flow 1 (95th percentile 84.60 ms) Flow 2 (95th percentile 84.59 ms) Flow 3 (95th percentile 84.47 ms)
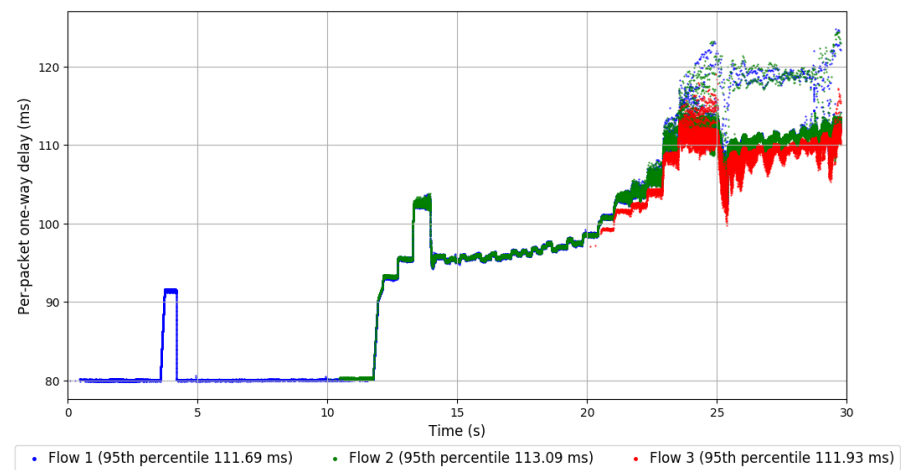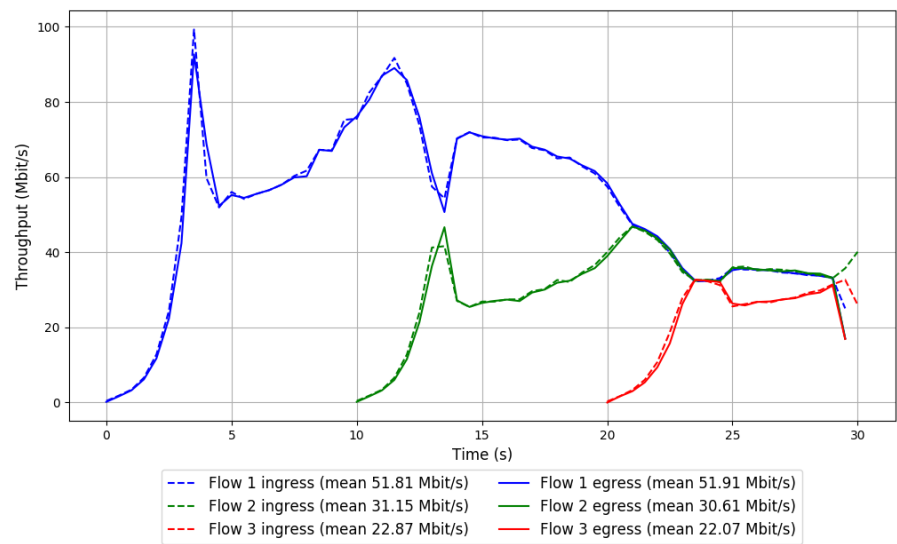
```
Run 3: Statistics of Vivace-latency

Start at: 2018-02-04 18:19:18
End at: 2018-02-04 18:19:48
Local clock offset: -0.028 ms
Remote clock offset: -1.476 ms


# Below is generated by plot.py at 2018-02-05 01:43:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.37 Mbit/s
95th percentile per-packet one-way delay: 112.194 ms
Loss rate: 2.69%
-- Flow 1:
Average throughput: 51.91 Mbit/s
95th percentile per-packet one-way delay: 111.690 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 30.61 Mbit/s
95th percentile per-packet one-way delay: 113.088 ms
Loss rate: 5.22%
-- Flow 3:
Average throughput: 22.07 Mbit/s
95th percentile per-packet one-way delay: 111.934 ms
Loss rate: 10.32%
```

Run 3: Report of Vivace-latency — Data Link

Flow 1 ingress (mean 51.81 Mbit/s) Flow 1 egress (mean 51.91 Mbit/s)
Flow 2 ingress (mean 31.15 Mbit/s) Flow 2 egress (mean 30.61 Mbit/s)
Flow 3 ingress (mean 22.87 Mbit/s) Flow 3 egress (mean 22.07 Mbit/s)

Flow 1 (95th percentile 111.69 ms) Flow 2 (95th percentile 113.09 ms) Flow 3 (95th percentile 111.93 ms)
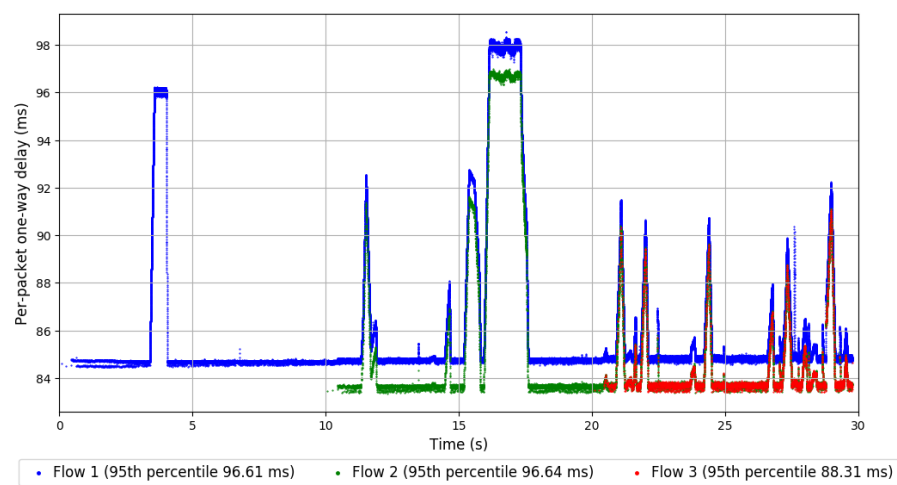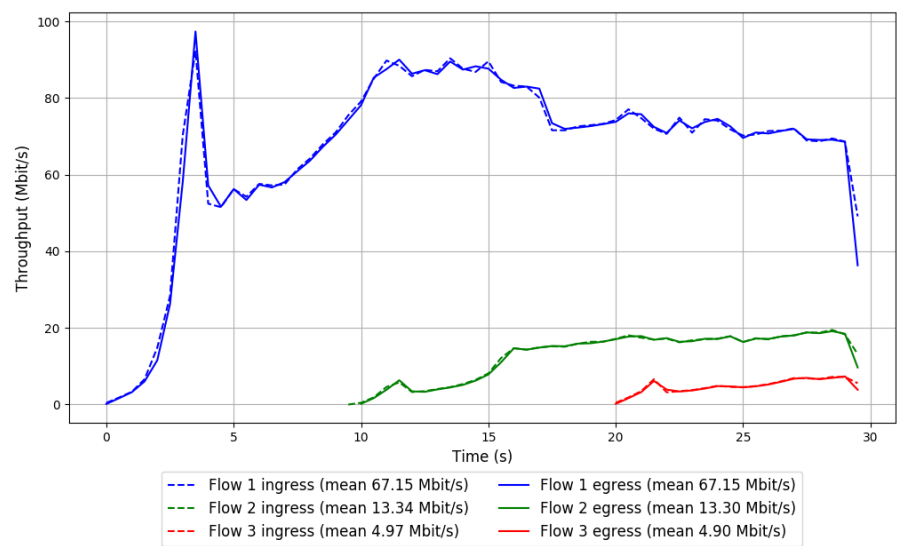
```
Run 4: Statistics of Vivace-latency

Start at: 2018-02-04 18:43:29
End at: 2018-02-04 18:43:59
Local clock offset: -0.041 ms
Remote clock offset: -4.645 ms


# Below is generated by plot.py at 2018-02-05 01:44:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.56 Mbit/s
95th percentile per-packet one-way delay: 96.575 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 67.15 Mbit/s
95th percentile per-packet one-way delay: 96.614 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 13.30 Mbit/s
95th percentile per-packet one-way delay: 96.645 ms
Loss rate: 1.28%
-- Flow 3:
Average throughput: 4.90 Mbit/s
95th percentile per-packet one-way delay: 88.315 ms
Loss rate: 3.02%
```

Run 4: Report of Vivace-latency — Data Link

```
Run 5: Statistics of Vivace-latency

Start at: 2018-02-04 19:07:20
End at: 2018-02-04 19:07:50
Local clock offset: -0.121 ms
Remote clock offset: 1.982 ms


# Below is generated by plot.py at 2018-02-05 01:44:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.46 Mbit/s
95th percentile per-packet one-way delay: 79.794 ms
Loss rate: 2.53%
-- Flow 1:
Average throughput: 53.59 Mbit/s
95th percentile per-packet one-way delay: 79.818 ms
Loss rate: 2.40%
-- Flow 2:
Average throughput: 14.56 Mbit/s
95th percentile per-packet one-way delay: 78.431 ms
Loss rate: 3.05%
-- Flow 3:
Average throughput: 3.73 Mbit/s
95th percentile per-packet one-way delay: 79.838 ms
Loss rate: 4.23%
```
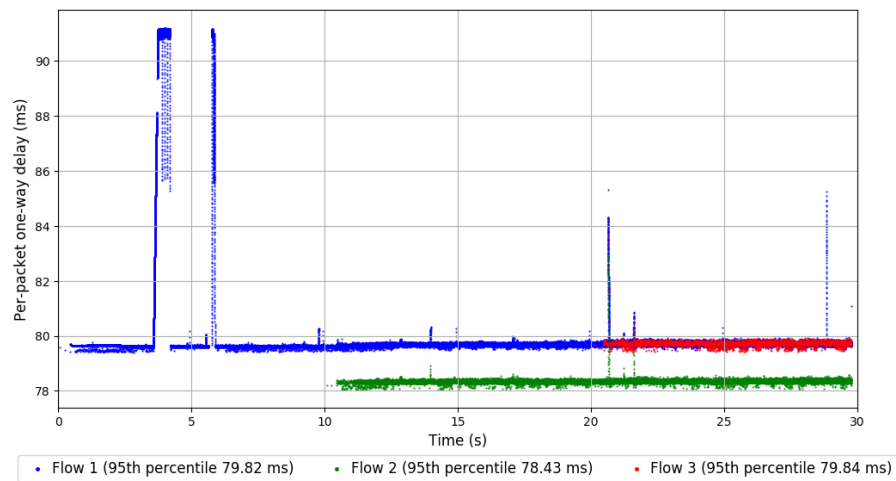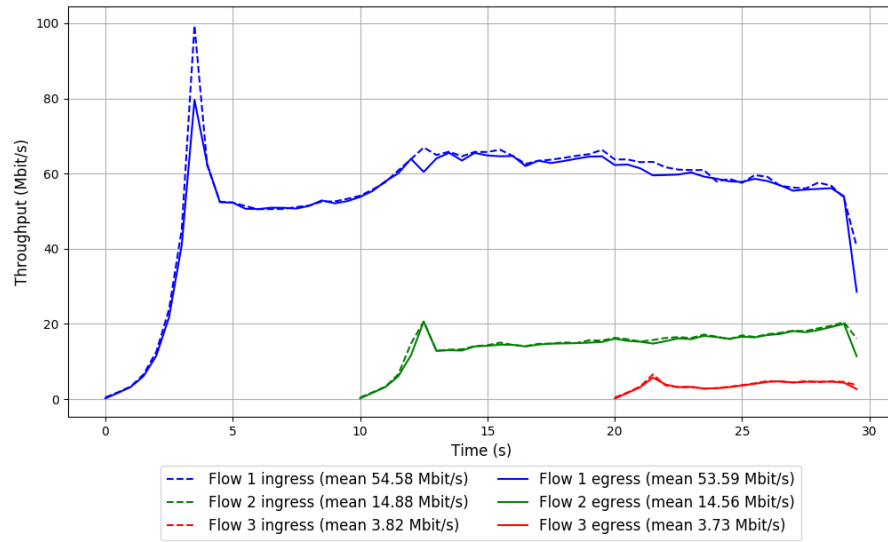
Run 5: Report of Vivace-latency — Data Link

```
Run 6: Statistics of Vivace-latency

Start at: 2018-02-04 19:31:22
End at: 2018-02-04 19:31:52
Local clock offset: -0.07 ms
Remote clock offset: -2.73 ms


# Below is generated by plot.py at 2018-02-05 01:44:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.29 Mbit/s
95th percentile per-packet one-way delay: 97.206 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 67.49 Mbit/s
95th percentile per-packet one-way delay: 96.960 ms
Loss rate: 1.07%
-- Flow 2:
Average throughput: 11.34 Mbit/s
95th percentile per-packet one-way delay: 99.446 ms
Loss rate: 1.55%
-- Flow 3:
Average throughput: 7.02 Mbit/s
95th percentile per-packet one-way delay: 100.772 ms
Loss rate: 2.63%
```
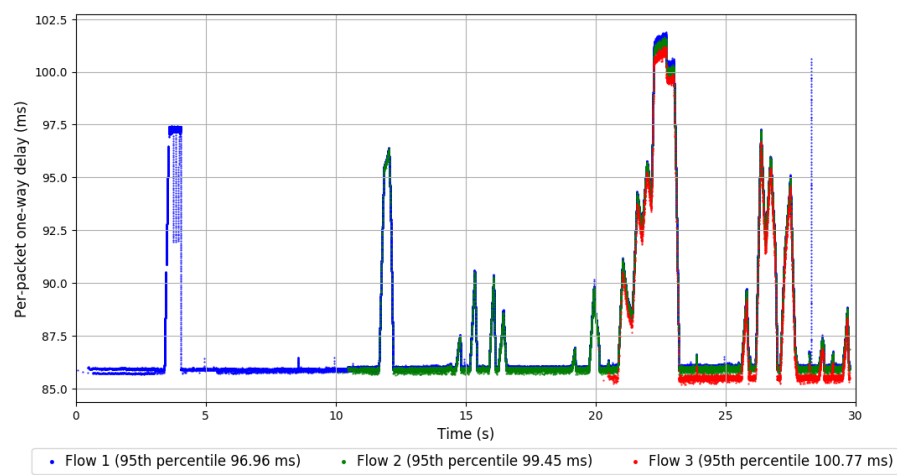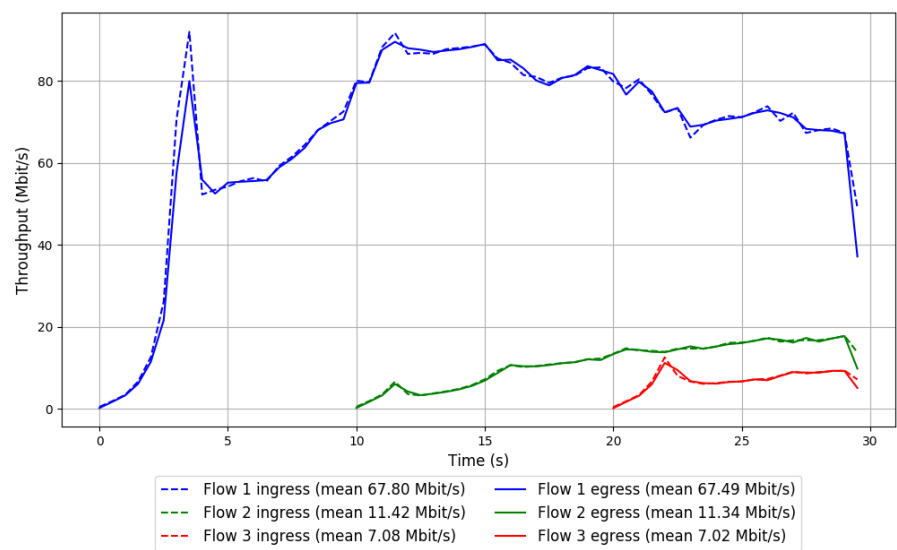
Run 6: Report of Vivace-latency — Data Link

```
Run 7: Statistics of Vivace-latency

Start at: 2018-02-04 19:55:10
End at: 2018-02-04 19:55:40
Local clock offset: -0.095 ms
Remote clock offset: 3.571 ms


# Below is generated by plot.py at 2018-02-05 01:44:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.33 Mbit/s
95th percentile per-packet one-way delay: 111.668 ms
Loss rate: 2.90%
-- Flow 1:
Average throughput: 52.12 Mbit/s
95th percentile per-packet one-way delay: 111.112 ms
Loss rate: 2.37%
-- Flow 2:
Average throughput: 30.20 Mbit/s
95th percentile per-packet one-way delay: 112.053 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 22.05 Mbit/s
95th percentile per-packet one-way delay: 111.720 ms
Loss rate: 10.54%
```

Run 7: Report of Vivace-latency — Data Link

Flow 1 ingress (mean 52.05 Mbit/s)   Flow 1 egress (mean 52.12 Mbit/s)
Flow 2 ingress (mean 30.29 Mbit/s)   Flow 2 egress (mean 30.20 Mbit/s)
Flow 3 ingress (mean 22.82 Mbit/s)   Flow 3 egress (mean 22.05 Mbit/s)

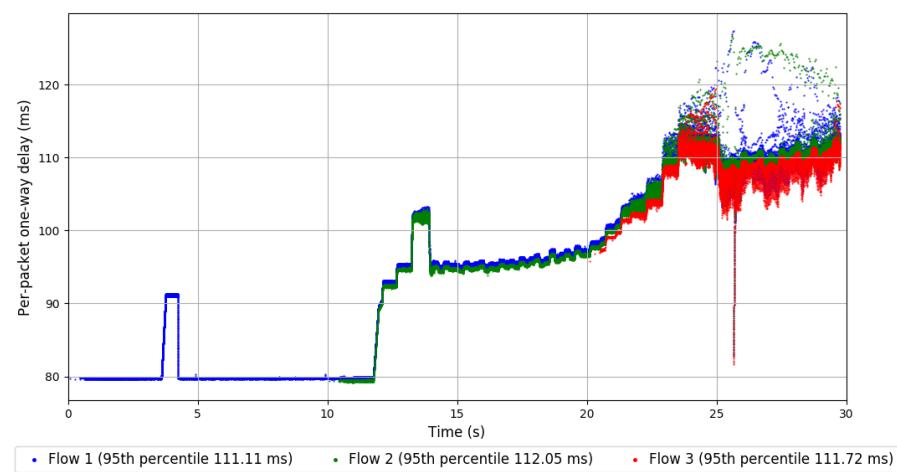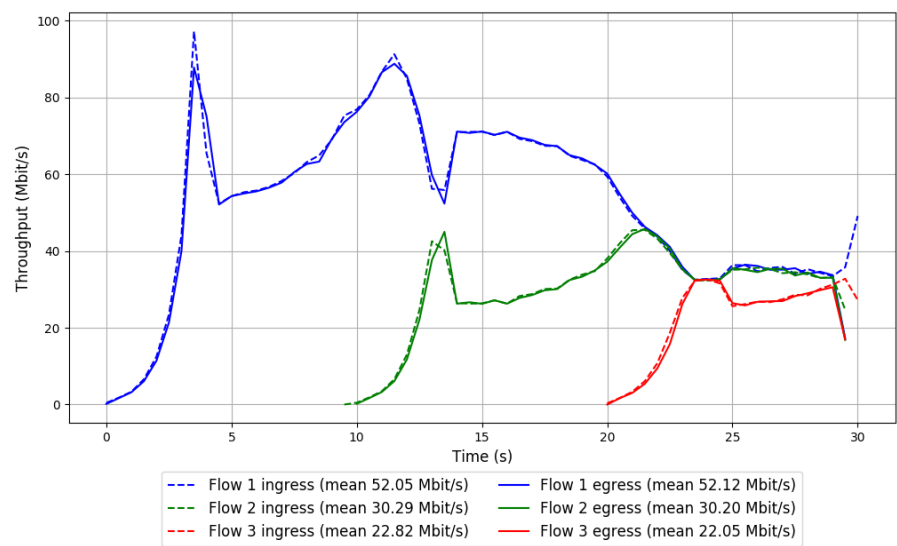Flow 1 (95th percentile 111.11 ms)   Flow 2 (95th percentile 112.05 ms)   Flow 3 (95th percentile 111.72 ms)

```
Run 8: Statistics of Vivace-latency

Start at: 2018-02-04 20:19:04
End at: 2018-02-04 20:19:34
Local clock offset: -0.089 ms
Remote clock offset: 4.881 ms


# Below is generated by plot.py at 2018-02-05 01:44:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.45 Mbit/s
95th percentile per-packet one-way delay: 95.674 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 55.28 Mbit/s
95th percentile per-packet one-way delay: 95.512 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 29.49 Mbit/s
95th percentile per-packet one-way delay: 100.508 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 8.05 Mbit/s
95th percentile per-packet one-way delay: 85.980 ms
Loss rate: 2.54%
```
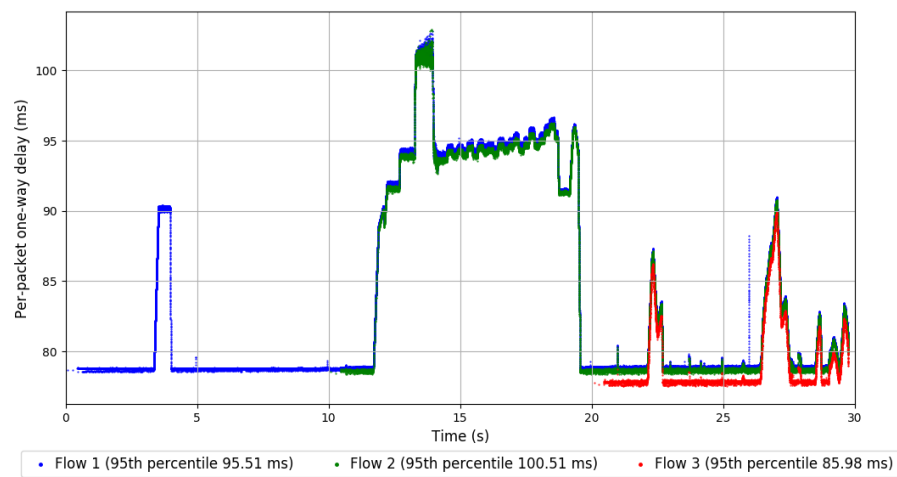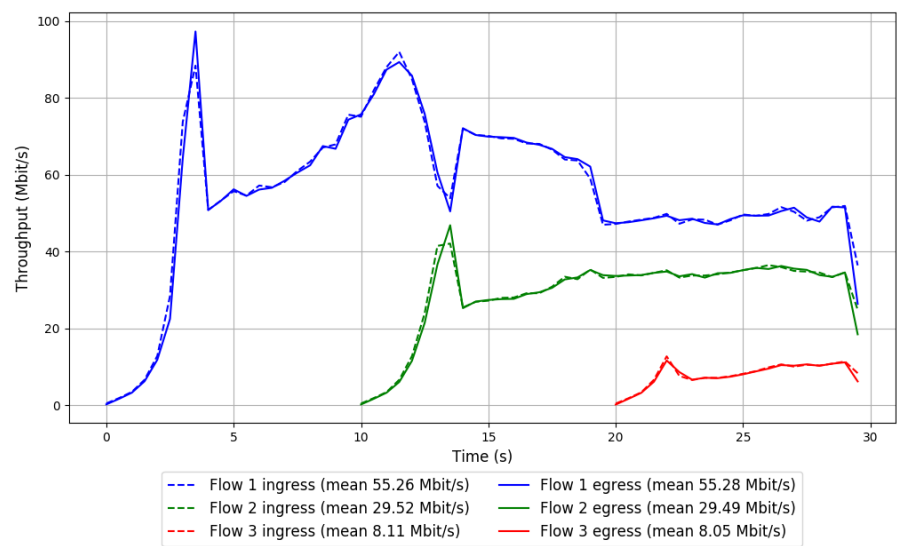
Run 8: Report of Vivace-latency — Data Link

```
Run 9: Statistics of Vivace-latency

Start at: 2018-02-04 20:43:01
End at: 2018-02-04 20:43:31
Local clock offset: 0.006 ms
Remote clock offset: 4.944 ms


# Below is generated by plot.py at 2018-02-05 01:44:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.12 Mbit/s
95th percentile per-packet one-way delay: 84.592 ms
Loss rate: 1.84%
-- Flow 1:
Average throughput: 62.99 Mbit/s
95th percentile per-packet one-way delay: 83.455 ms
Loss rate: 1.79%
-- Flow 2:
Average throughput: 9.62 Mbit/s
95th percentile per-packet one-way delay: 86.046 ms
Loss rate: 1.85%
-- Flow 3:
Average throughput: 8.44 Mbit/s
95th percentile per-packet one-way delay: 90.194 ms
Loss rate: 2.93%
```
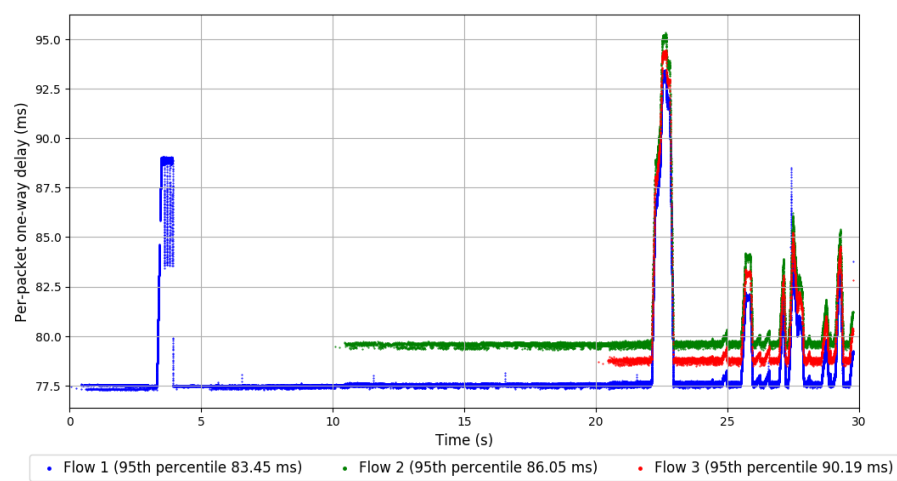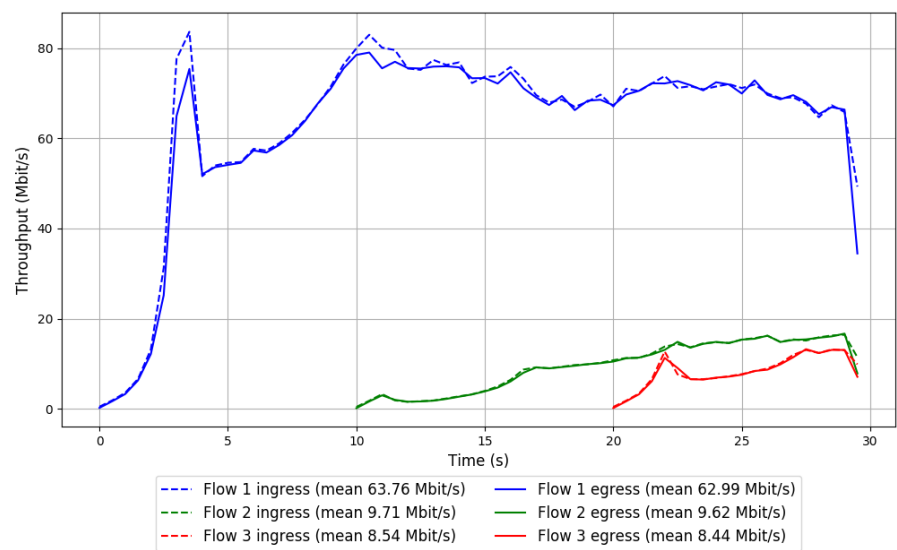
Run 9: Report of Vivace-latency — Data Link

```
Run 10: Statistics of Vivace-latency

Start at: 2018-02-04 21:06:51
End at: 2018-02-04 21:07:21
Local clock offset: -0.145 ms
Remote clock offset: -1.612 ms


# Below is generated by plot.py at 2018-02-05 01:45:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.22 Mbit/s
95th percentile per-packet one-way delay: 117.926 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 55.91 Mbit/s
95th percentile per-packet one-way delay: 115.340 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 23.73 Mbit/s
95th percentile per-packet one-way delay: 118.460 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 20.20 Mbit/s
95th percentile per-packet one-way delay: 119.123 ms
Loss rate: 2.23%
```
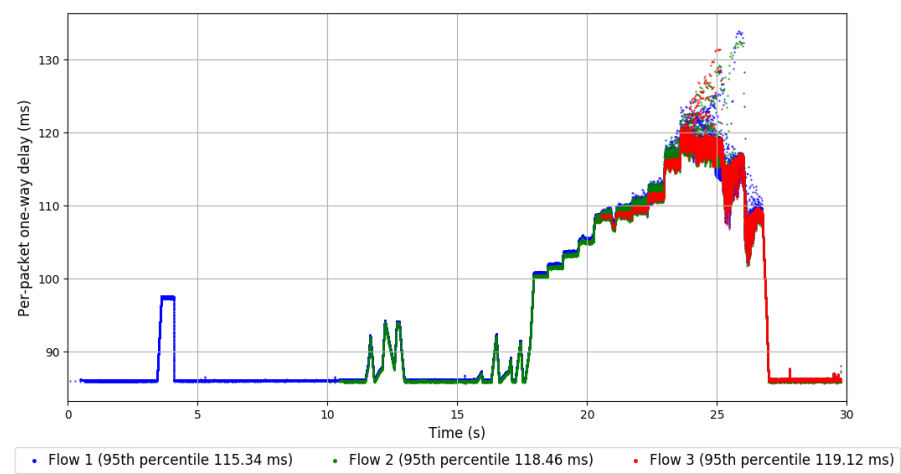
Run 10: Report of Vivace-latency — Data Link

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```
Run 1: Statistics of Vivace-loss

Start at: 2018-02-04 17:28:38
End at: 2018-02-04 17:29:08
Local clock offset: -0.097 ms
Remote clock offset: 0.779 ms


# Below is generated by plot.py at 2018-02-05 01:45:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.93 Mbit/s
95th percentile per-packet one-way delay: 77.762 ms
Loss rate: 2.16%
-- Flow 1:
Average throughput: 61.56 Mbit/s
95th percentile per-packet one-way delay: 77.761 ms
Loss rate: 2.06%
-- Flow 2:
Average throughput: 6.59 Mbit/s
95th percentile per-packet one-way delay: 77.602 ms
Loss rate: 2.83%
-- Flow 3:
Average throughput: 3.06 Mbit/s
95th percentile per-packet one-way delay: 77.824 ms
Loss rate: 5.19%
```
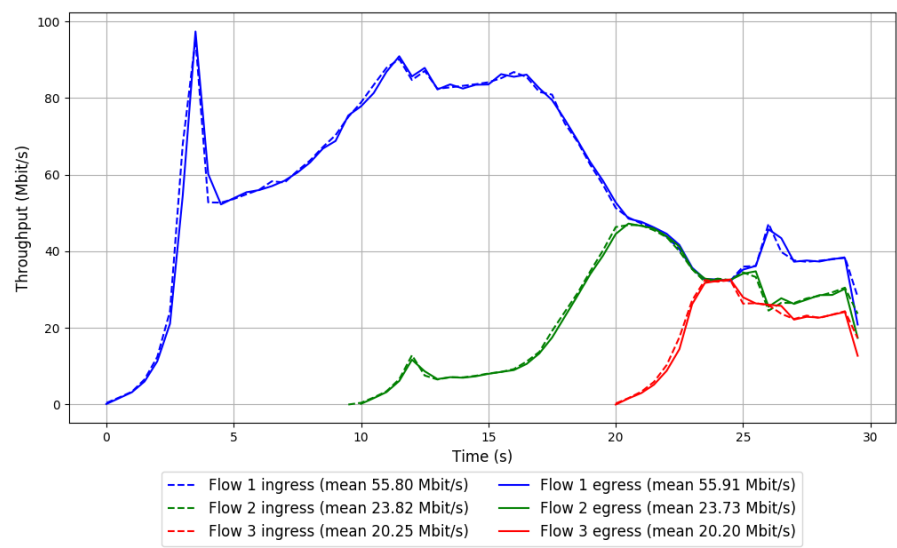
Run 1: Report of Vivace-loss — Data Link

Flow 1 ingress (mean 62.47 Mbit/s)   Flow 1 egress (mean 61.56 Mbit/s)
Flow 2 ingress (mean 6.72 Mbit/s)   Flow 2 egress (mean 6.59 Mbit/s)
Flow 3 ingress (mean 3.16 Mbit/s)   Flow 3 egress (mean 3.06 Mbit/s)

Flow 1 (95th percentile 77.76 ms)   Flow 2 (95th percentile 77.60 ms)   Flow 3 (95th percentile 77.82 ms)

```
Run 2: Statistics of Vivace-loss

Start at: 2018-02-04 17:52:29
End at: 2018-02-04 17:52:59
Local clock offset: -0.018 ms
Remote clock offset: 1.48 ms


# Below is generated by plot.py at 2018-02-05 01:45:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.52 Mbit/s
95th percentile per-packet one-way delay: 112.545 ms
Loss rate: 4.45%
-- Flow 1:
Average throughput: 50.98 Mbit/s
95th percentile per-packet one-way delay: 112.238 ms
Loss rate: 2.75%
-- Flow 2:
Average throughput: 29.73 Mbit/s
95th percentile per-packet one-way delay: 112.677 ms
Loss rate: 1.41%
-- Flow 3:
Average throughput: 24.12 Mbit/s
95th percentile per-packet one-way delay: 112.072 ms
Loss rate: 19.78%
```
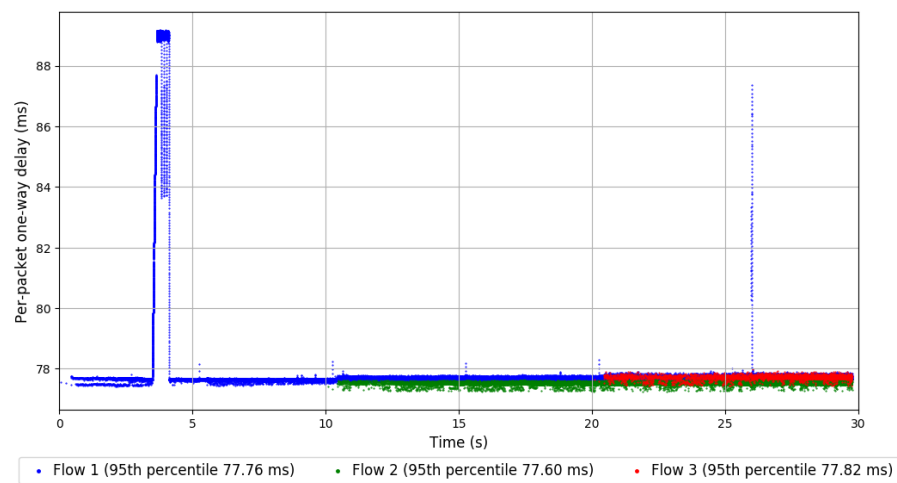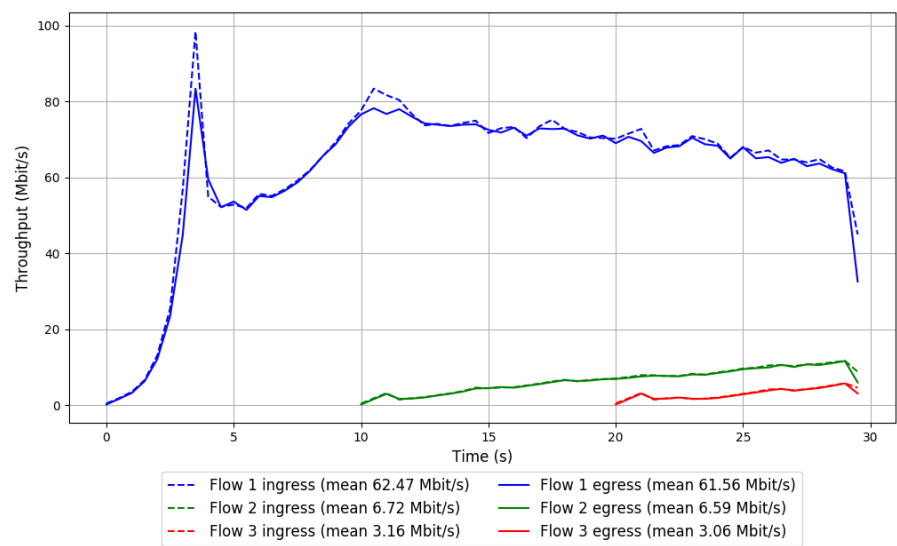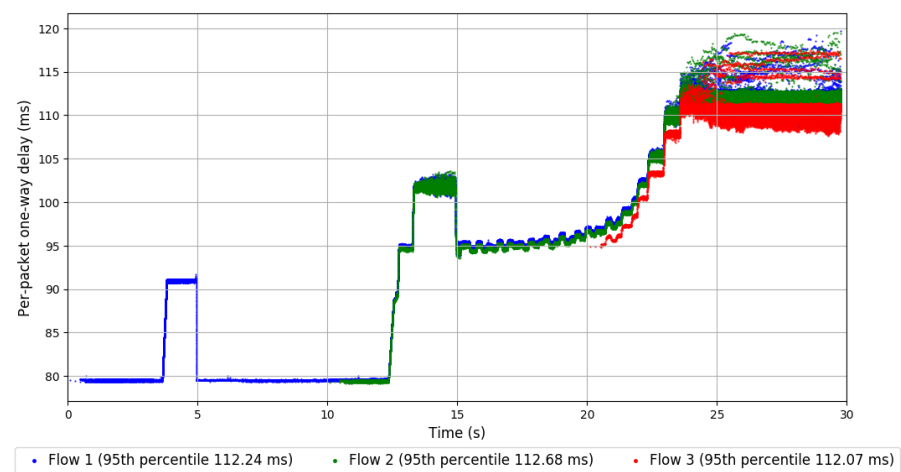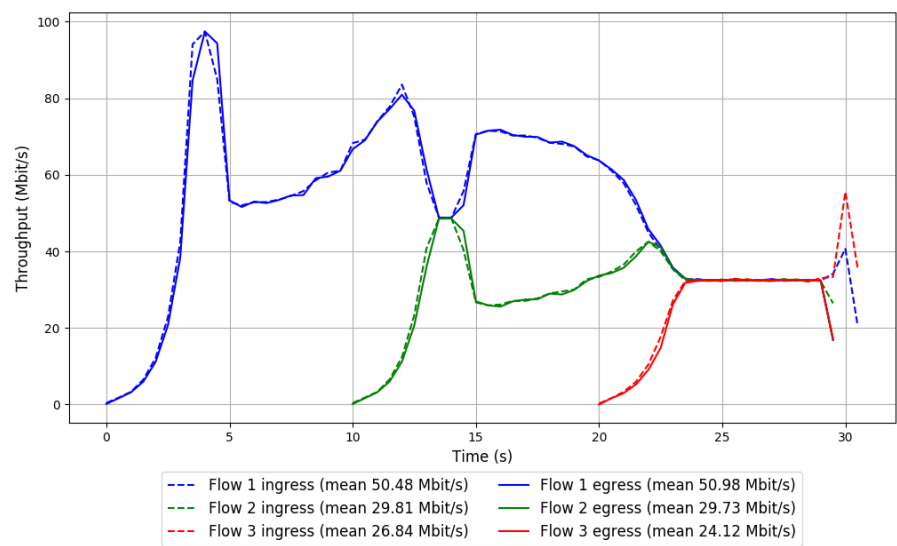
Run 2: Report of Vivace-loss — Data Link

```
Run 3: Statistics of Vivace-loss

Start at: 2018-02-04 18:16:36
End at: 2018-02-04 18:17:06
Local clock offset: -0.071 ms
Remote clock offset: -1.238 ms


# Below is generated by plot.py at 2018-02-05 01:45:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.46 Mbit/s
95th percentile per-packet one-way delay: 114.480 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 47.57 Mbit/s
95th percentile per-packet one-way delay: 113.883 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 30.09 Mbit/s
95th percentile per-packet one-way delay: 113.327 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 24.46 Mbit/s
95th percentile per-packet one-way delay: 115.068 ms
Loss rate: 2.87%
```

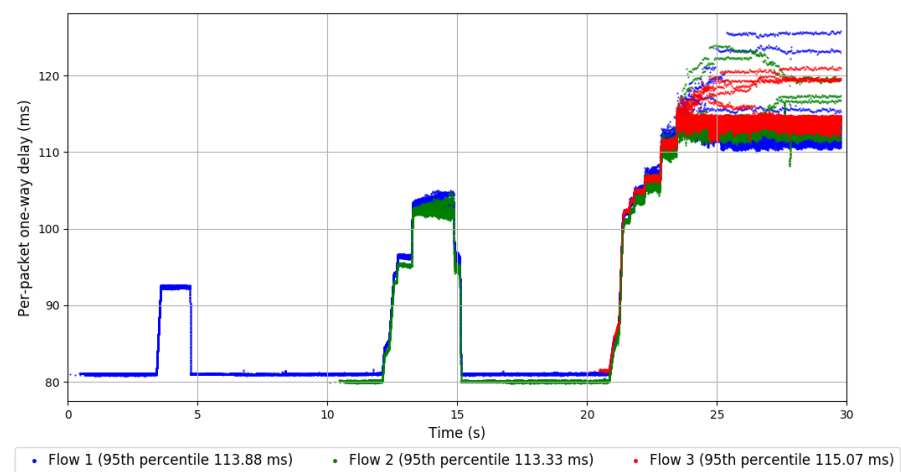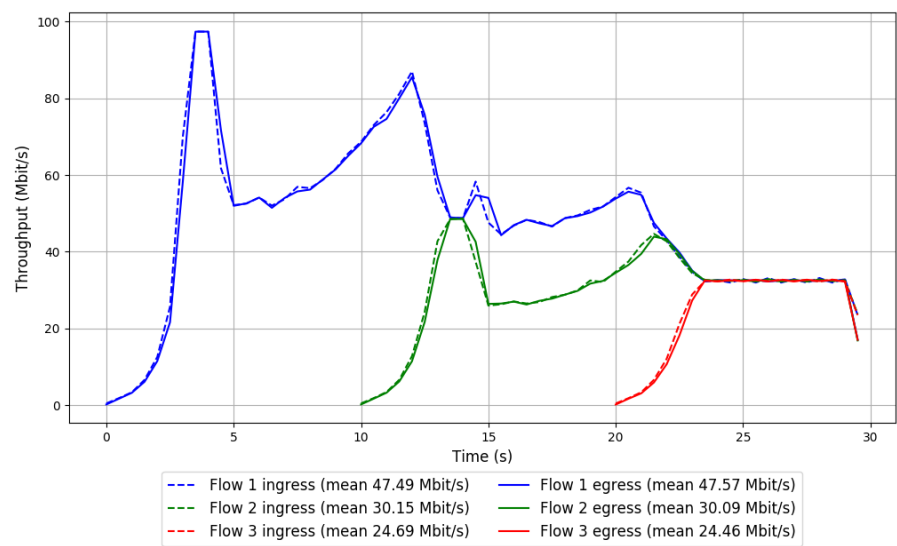Run 3: Report of Vivace-loss — Data Link

```
Run 4: Statistics of Vivace-loss

Start at: 2018-02-04 18:40:46
End at: 2018-02-04 18:41:16
Local clock offset: -0.032 ms
Remote clock offset: -5.737 ms


# Below is generated by plot.py at 2018-02-05 01:45:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.82 Mbit/s
95th percentile per-packet one-way delay: 120.306 ms
Loss rate: 3.79%
-- Flow 1:
Average throughput: 51.11 Mbit/s
95th percentile per-packet one-way delay: 117.968 ms
Loss rate: 2.43%
-- Flow 2:
Average throughput: 29.93 Mbit/s
95th percentile per-packet one-way delay: 117.279 ms
Loss rate: 7.17%
-- Flow 3:
Average throughput: 24.23 Mbit/s
95th percentile per-packet one-way delay: 120.765 ms
Loss rate: 3.66%
```
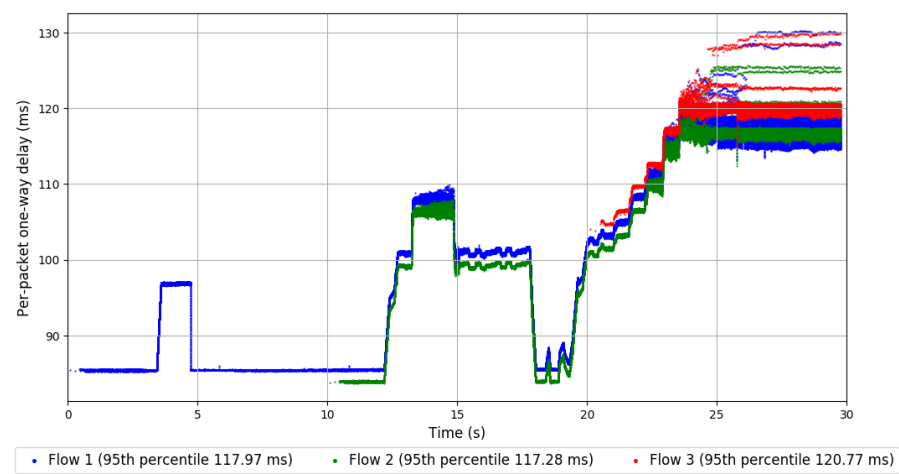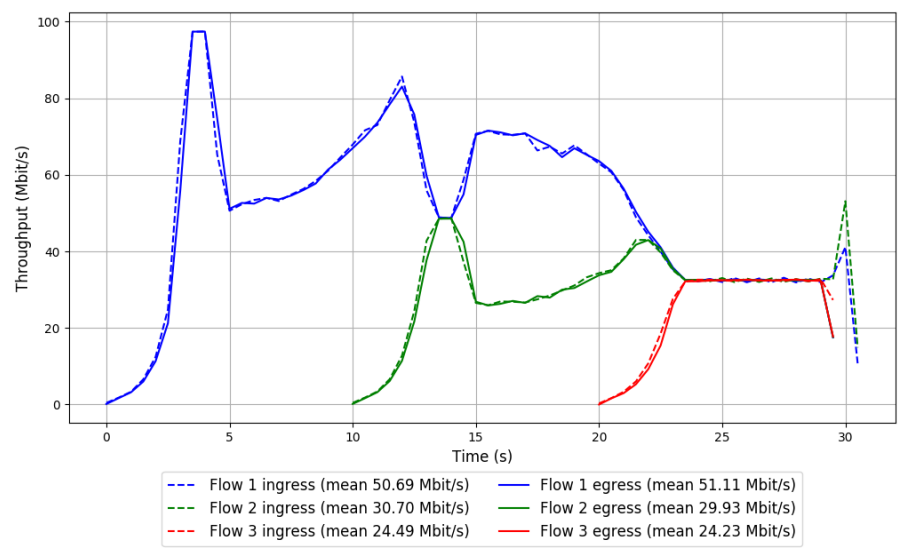
Run 4: Report of Vivace-loss — Data Link

```
Run 5: Statistics of Vivace-loss

Start at: 2018-02-04 19:04:40
End at: 2018-02-04 19:05:10
Local clock offset: -0.046 ms
Remote clock offset: -3.909 ms


# Below is generated by plot.py at 2018-02-05 01:45:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.69 Mbit/s
95th percentile per-packet one-way delay: 85.573 ms
Loss rate: 3.05%
-- Flow 1:
Average throughput: 61.30 Mbit/s
95th percentile per-packet one-way delay: 85.544 ms
Loss rate: 2.87%
-- Flow 2:
Average throughput: 8.06 Mbit/s
95th percentile per-packet one-way delay: 85.537 ms
Loss rate: 4.72%
-- Flow 3:
Average throughput: 3.22 Mbit/s
95th percentile per-packet one-way delay: 86.092 ms
Loss rate: 4.68%
```

Run 5: Report of Vivace-loss — Data Link

Flow 1 ingress (mean 62.73 Mbit/s) --- Flow 1 egress (mean 61.30 Mbit/s)
Flow 2 ingress (mean 8.39 Mbit/s) --- Flow 2 egress (mean 8.06 Mbit/s)
Flow 3 ingress (mean 3.32 Mbit/s) --- Flow 3 egress (mean 3.22 Mbit/s)

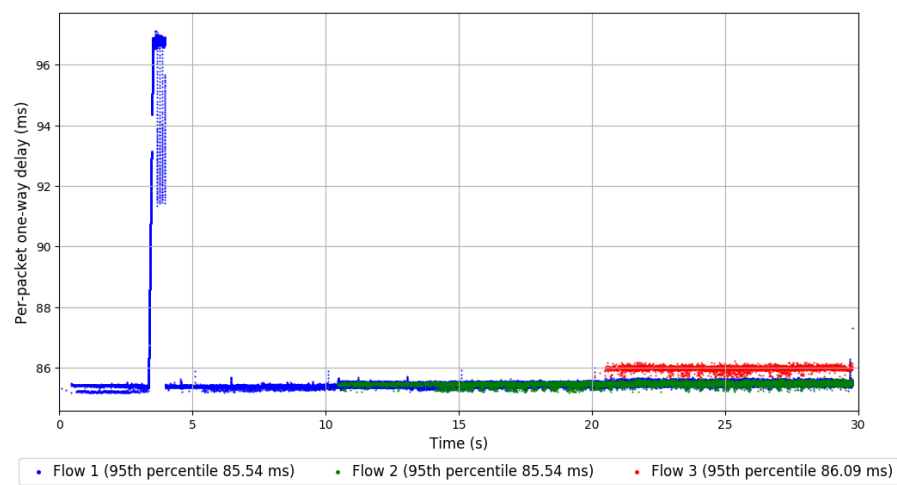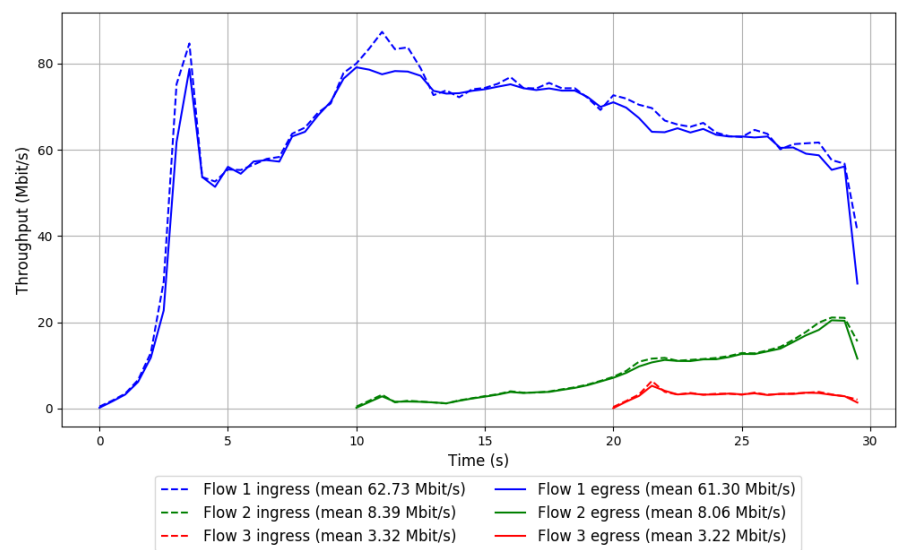Flow 1 (95th percentile 85.54 ms)   Flow 2 (95th percentile 85.54 ms)   Flow 3 (95th percentile 86.09 ms)

```
Run 6: Statistics of Vivace-loss

Start at: 2018-02-04 19:28:41
End at: 2018-02-04 19:29:11
Local clock offset: -0.063 ms
Remote clock offset: -1.846 ms


# Below is generated by plot.py at 2018-02-05 01:45:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.44 Mbit/s
95th percentile per-packet one-way delay: 86.121 ms
Loss rate: 2.60%
-- Flow 1:
Average throughput: 56.33 Mbit/s
95th percentile per-packet one-way delay: 84.661 ms
Loss rate: 2.43%
-- Flow 2:
Average throughput: 13.77 Mbit/s
95th percentile per-packet one-way delay: 86.144 ms
Loss rate: 3.40%
-- Flow 3:
Average throughput: 2.98 Mbit/s
95th percentile per-packet one-way delay: 86.195 ms
Loss rate: 4.90%
```

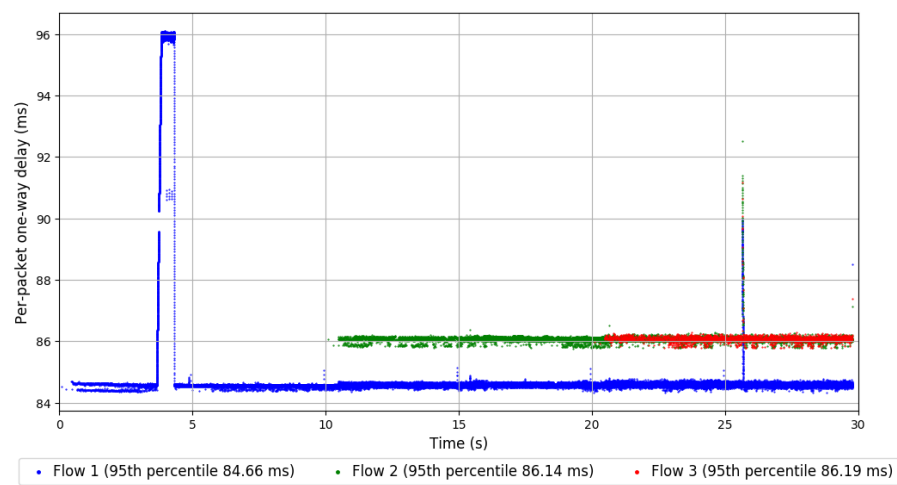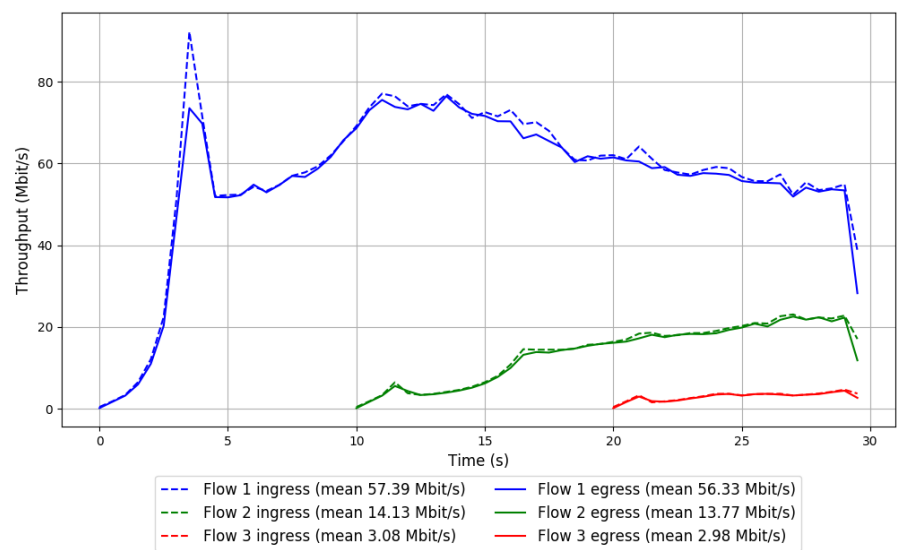Run 6: Report of Vivace-loss — Data Link

```
Run 7: Statistics of Vivace-loss

Start at: 2018-02-04 19:52:29
End at: 2018-02-04 19:52:59
Local clock offset: -0.108 ms
Remote clock offset: -2.175 ms


# Below is generated by plot.py at 2018-02-05 01:46:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.15 Mbit/s
95th percentile per-packet one-way delay: 118.847 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 47.43 Mbit/s
95th percentile per-packet one-way delay: 118.272 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 29.75 Mbit/s
95th percentile per-packet one-way delay: 118.798 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 24.59 Mbit/s
95th percentile per-packet one-way delay: 120.158 ms
Loss rate: 2.80%
```

Run 7: Report of Vivace-loss — Data Link

- Flow 1 ingress (mean 47.34 Mbit/s)
- Flow 1 egress (mean 47.43 Mbit/s)
- Flow 2 ingress (mean 29.81 Mbit/s)
- Flow 2 egress (mean 29.75 Mbit/s)
- Flow 3 ingress (mean 24.79 Mbit/s)
- Flow 3 egress (mean 24.59 Mbit/s)

- Flow 1 (95th percentile 118.27 ms)
- Flow 2 (95th percentile 118.80 ms)
- Flow 3 (95th percentile 120.16 ms)

```
Run 8: Statistics of Vivace-loss

Start at: 2018-02-04 20:16:20
End at: 2018-02-04 20:16:50
Local clock offset: -0.05 ms
Remote clock offset: -1.793 ms


# Below is generated by plot.py at 2018-02-05 01:46:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.57 Mbit/s
95th percentile per-packet one-way delay: 118.675 ms
Loss rate: 5.69%
-- Flow 1:
Average throughput: 51.00 Mbit/s
95th percentile per-packet one-way delay: 117.949 ms
Loss rate: 3.63%
-- Flow 2:
Average throughput: 29.65 Mbit/s
95th percentile per-packet one-way delay: 119.124 ms
Loss rate: 1.30%
-- Flow 3:
Average throughput: 24.37 Mbit/s
95th percentile per-packet one-way delay: 118.195 ms
Loss rate: 24.42%
```
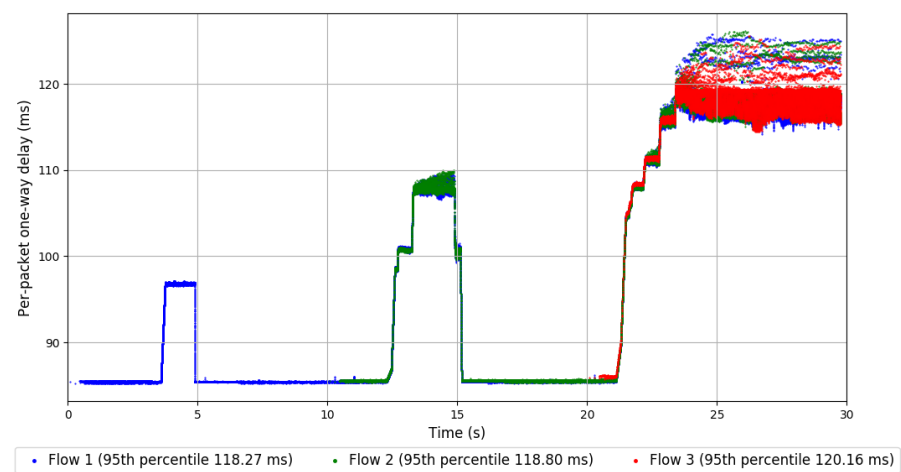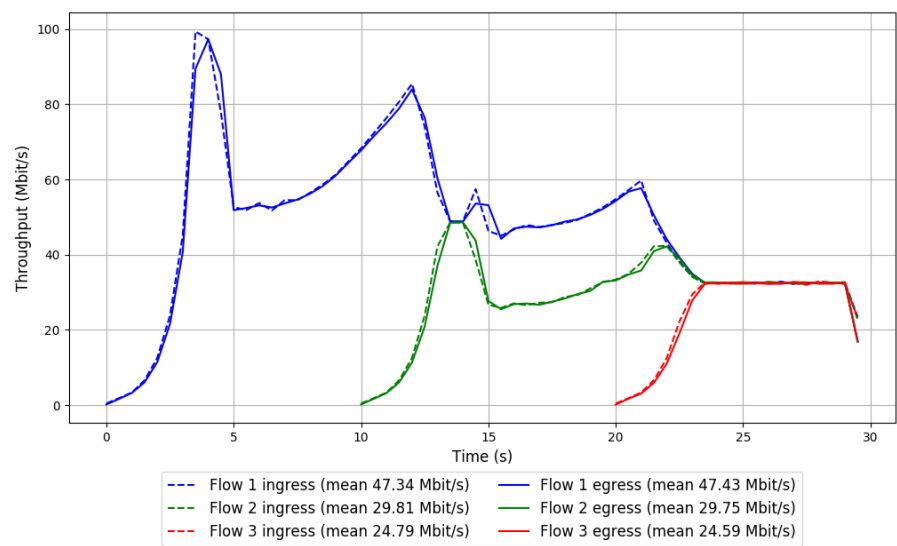
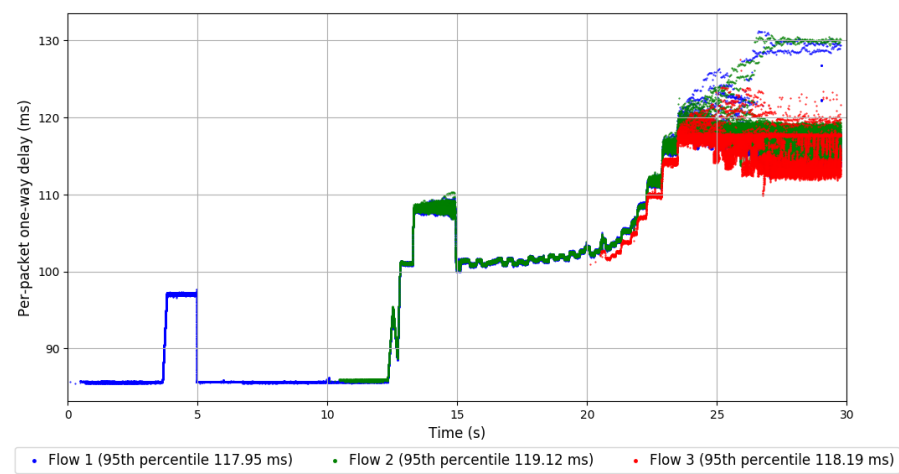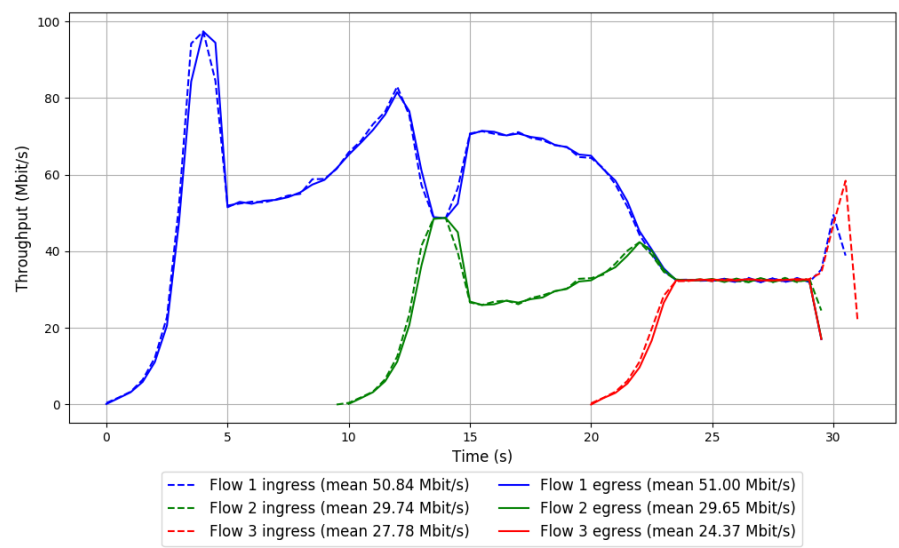Run 8: Report of Vivace-loss — Data Link

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```
Run 9: Statistics of Vivace-loss

Start at: 2018-02-04 20:40:19
End at: 2018-02-04 20:40:49
Local clock offset: 0.008 ms
Remote clock offset: -1.647 ms


# Below is generated by plot.py at 2018-02-05 01:46:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.70 Mbit/s
95th percentile per-packet one-way delay: 118.353 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 48.80 Mbit/s
95th percentile per-packet one-way delay: 117.811 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 30.10 Mbit/s
95th percentile per-packet one-way delay: 118.719 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 24.46 Mbit/s
95th percentile per-packet one-way delay: 117.803 ms
Loss rate: 2.99%
```

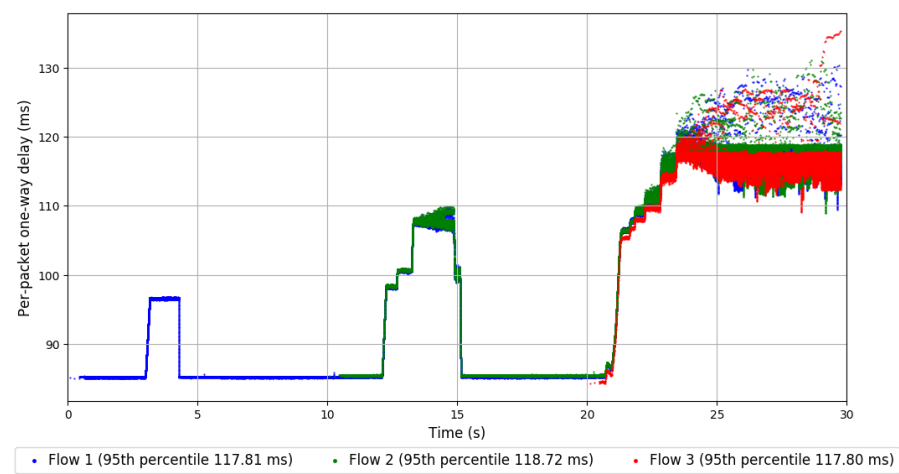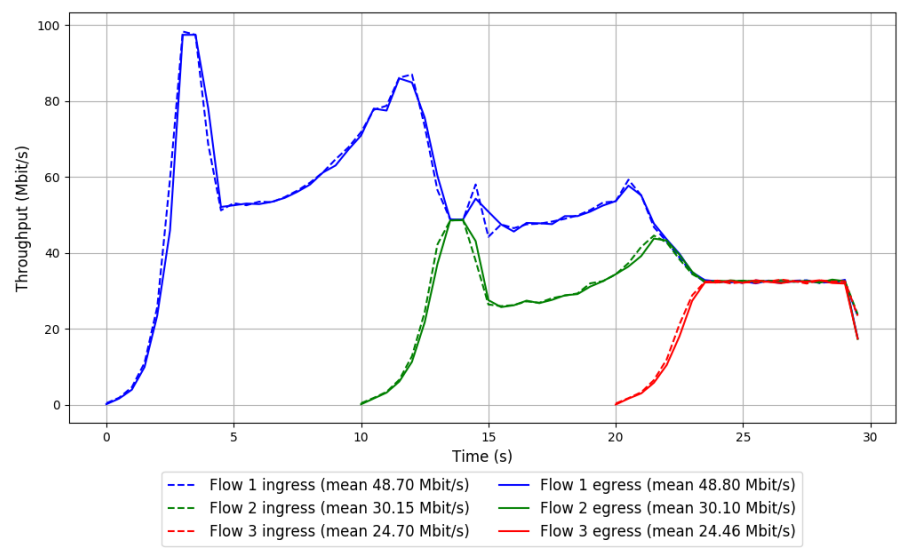# Run 9: Report of Vivace-loss — Data Link

```
Run 10: Statistics of Vivace-loss

Start at: 2018-02-04 21:04:09
End at: 2018-02-04 21:04:39
Local clock offset: -0.06 ms
Remote clock offset: -1.62 ms


# Below is generated by plot.py at 2018-02-05 01:46:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.11 Mbit/s
95th percentile per-packet one-way delay: 117.923 ms
Loss rate: 5.19%
-- Flow 1:
Average throughput: 51.63 Mbit/s
95th percentile per-packet one-way delay: 117.115 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 29.60 Mbit/s
95th percentile per-packet one-way delay: 117.675 ms
Loss rate: 10.02%
-- Flow 3:
Average throughput: 24.21 Mbit/s
95th percentile per-packet one-way delay: 119.077 ms
Loss rate: 19.35%
```

Run 10: Report of Vivace-loss — Data Link

Flow 1 ingress (mean 51.51 Mbit/s) Flow 1 egress (mean 51.63 Mbit/s)
Flow 2 ingress (mean 30.69 Mbit/s) Flow 2 egress (mean 29.60 Mbit/s)
Flow 3 ingress (mean 26.65 Mbit/s) Flow 3 egress (mean 24.21 Mbit/s)

Flow 1 (95th percentile 117.11 ms) Flow 2 (95th percentile 117.67 ms) Flow 3 (95th percentile 119.08 ms)

```
Run 1: Statistics of Vivace-LTE

Start at: 2018-02-04 17:24:38
End at: 2018-02-04 17:25:08
Local clock offset: -0.108 ms
Remote clock offset: -5.707 ms


# Below is generated by plot.py at 2018-02-05 01:46:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.94 Mbit/s
95th percentile per-packet one-way delay: 118.331 ms
Loss rate: 3.49%
-- Flow 1:
Average throughput: 50.43 Mbit/s
95th percentile per-packet one-way delay: 117.007 ms
Loss rate: 2.60%
-- Flow 2:
Average throughput: 30.76 Mbit/s
95th percentile per-packet one-way delay: 117.948 ms
Loss rate: 5.57%
-- Flow 3:
Average throughput: 21.93 Mbit/s
95th percentile per-packet one-way delay: 120.202 ms
Loss rate: 3.64%
```
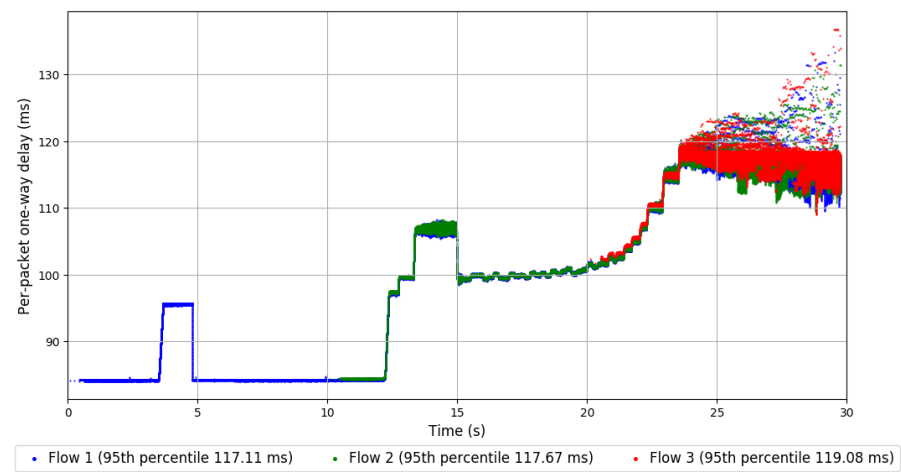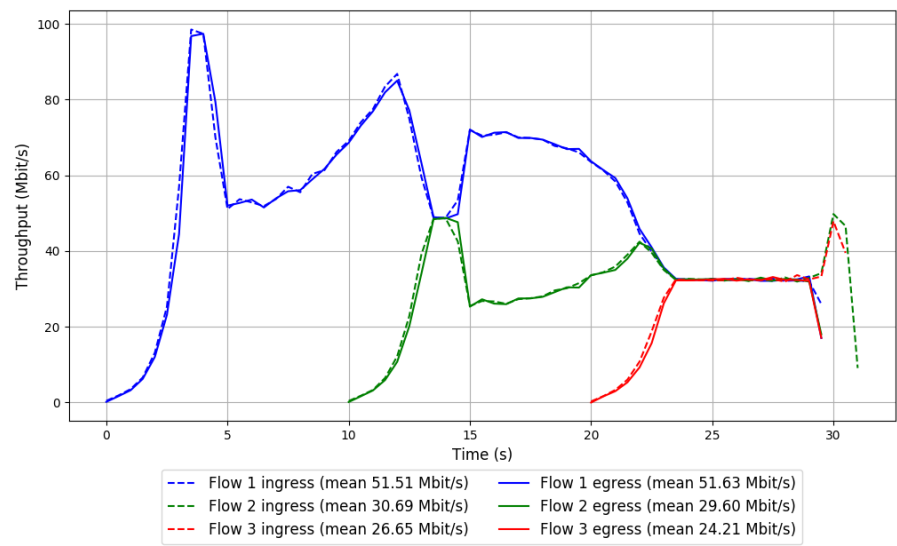
Run 1: Report of Vivace-LTE — Data Link

- - - Flow 1 ingress (mean 50.25 Mbit/s)   —— Flow 1 egress (mean 50.43 Mbit/s)
- - - Flow 2 ingress (mean 31.14 Mbit/s)   —— Flow 2 egress (mean 30.76 Mbit/s)
- - - Flow 3 ingress (mean 22.21 Mbit/s)   —— Flow 3 egress (mean 21.93 Mbit/s)

- Flow 1 (95th percentile 117.01 ms)   • Flow 2 (95th percentile 117.95 ms)   • Flow 3 (95th percentile 120.20 ms)
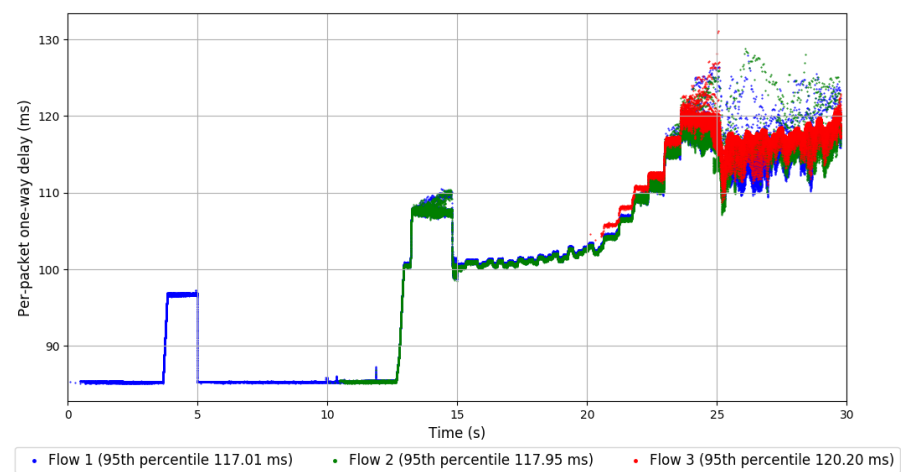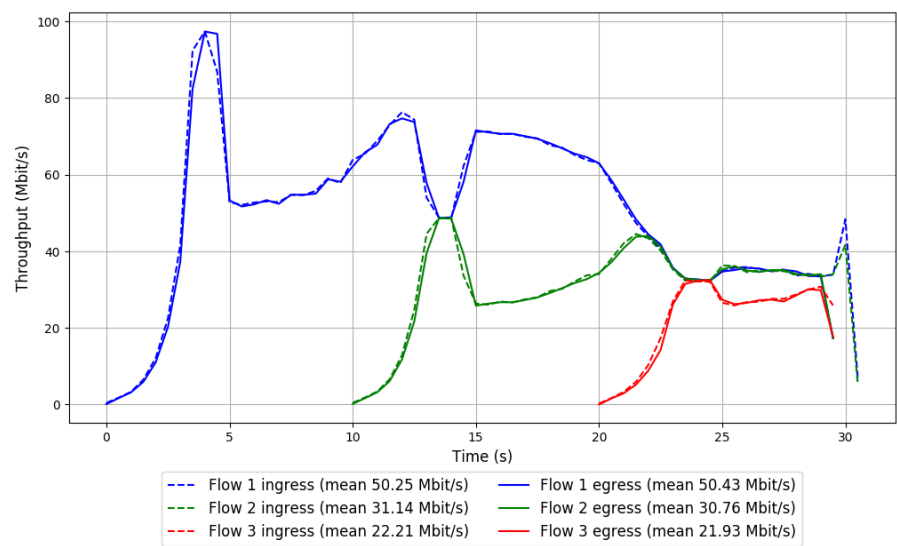
```
Run 2: Statistics of Vivace-LTE

Start at: 2018-02-04 17:48:29
End at: 2018-02-04 17:48:59
Local clock offset: -0.014 ms
Remote clock offset: -0.49 ms


# Below is generated by plot.py at 2018-02-05 01:46:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.58 Mbit/s
95th percentile per-packet one-way delay: 114.843 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 51.35 Mbit/s
95th percentile per-packet one-way delay: 111.623 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 29.76 Mbit/s
95th percentile per-packet one-way delay: 115.182 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 23.01 Mbit/s
95th percentile per-packet one-way delay: 115.497 ms
Loss rate: 3.05%
```
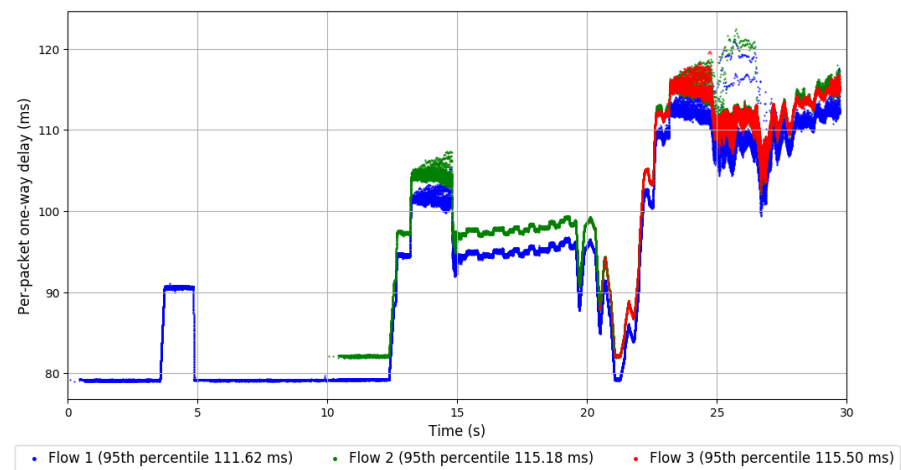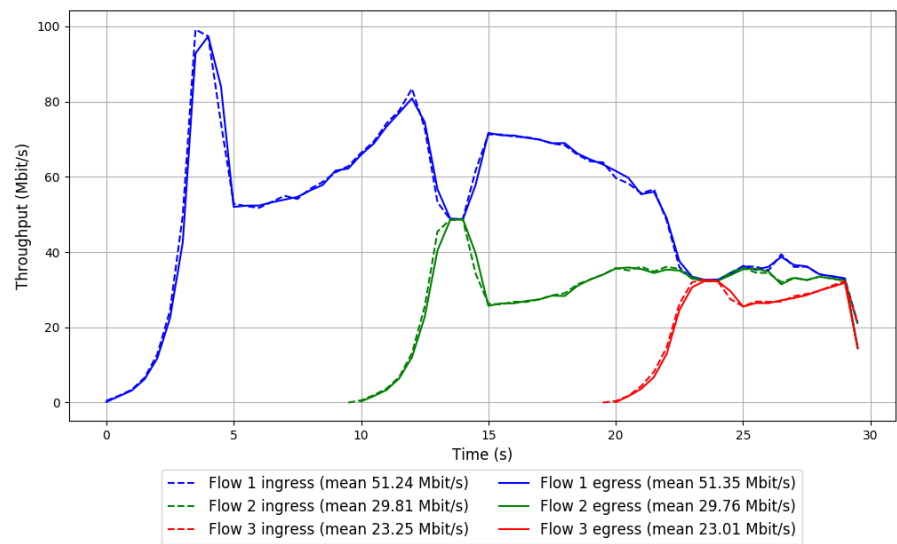
Run 2: Report of Vivace-LTE — Data Link

```
Run 3: Statistics of Vivace-LTE

Start at: 2018-02-04 18:12:24
End at: 2018-02-04 18:12:54
Local clock offset: -0.018 ms
Remote clock offset: -5.582 ms

# Below is generated by plot.py at 2018-02-05 01:46:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.72 Mbit/s
95th percentile per-packet one-way delay: 116.781 ms
Loss rate: 5.39%
-- Flow 1:
Average throughput: 52.53 Mbit/s
95th percentile per-packet one-way delay: 115.494 ms
Loss rate: 4.62%
-- Flow 2:
Average throughput: 30.72 Mbit/s
95th percentile per-packet one-way delay: 117.151 ms
Loss rate: 7.93%
-- Flow 3:
Average throughput: 21.01 Mbit/s
95th percentile per-packet one-way delay: 117.540 ms
Loss rate: 3.44%
```

Run 3: Report of Vivace-LTE — Data Link

- - - Flow 1 ingress (mean 52.48 Mbit/s) —— Flow 1 egress (mean 52.53 Mbit/s)
- - - Flow 2 ingress (mean 31.41 Mbit/s) —— Flow 2 egress (mean 30.72 Mbit/s)
- - - Flow 3 ingress (mean 21.24 Mbit/s) —— Flow 3 egress (mean 21.01 Mbit/s)

• Flow 1 (95th percentile 115.49 ms)   • Flow 2 (95th percentile 117.15 ms)   • Flow 3 (95th percentile 117.54 ms)
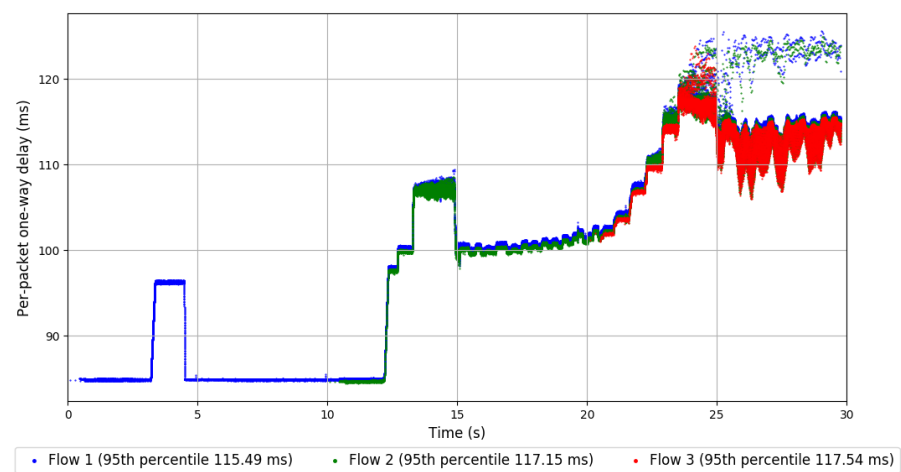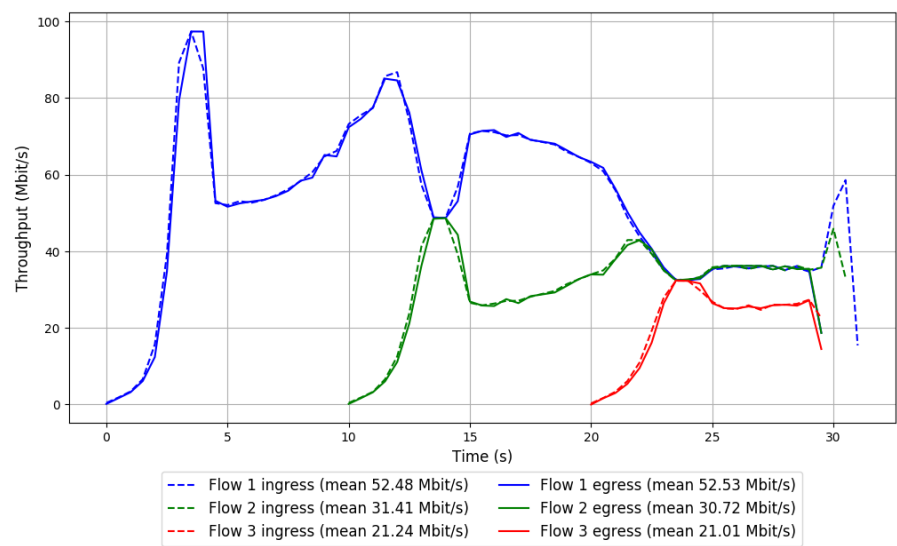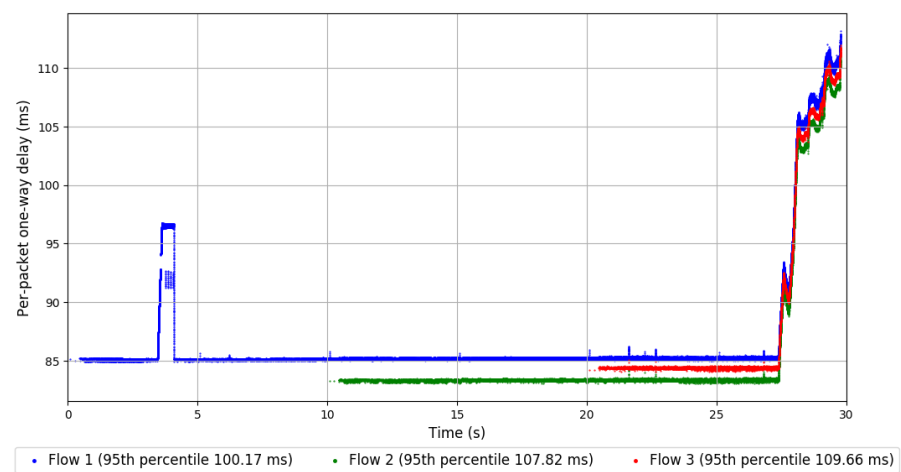
```
Run 4: Statistics of Vivace-LTE

Start at: 2018-02-04 18:36:46
End at: 2018-02-04 18:37:16
Local clock offset: -0.004 ms
Remote clock offset: -5.262 ms


# Below is generated by plot.py at 2018-02-05 01:46:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.29 Mbit/s
95th percentile per-packet one-way delay: 106.039 ms
Loss rate: 2.72%
-- Flow 1:
Average throughput: 56.80 Mbit/s
95th percentile per-packet one-way delay: 100.175 ms
Loss rate: 2.33%
-- Flow 2:
Average throughput: 13.34 Mbit/s
95th percentile per-packet one-way delay: 107.816 ms
Loss rate: 3.29%
-- Flow 3:
Average throughput: 11.16 Mbit/s
95th percentile per-packet one-way delay: 109.656 ms
Loss rate: 7.27%
```

Run 4: Report of Vivace-LTE — Data Link

- Flow 1 ingress (mean 57.80 Mbit/s)
- Flow 1 egress (mean 56.80 Mbit/s)
- Flow 2 ingress (mean 13.67 Mbit/s)
- Flow 2 egress (mean 13.34 Mbit/s)
- Flow 3 ingress (mean 11.80 Mbit/s)
- Flow 3 egress (mean 11.16 Mbit/s)

- Flow 1 (95th percentile 100.17 ms)
- Flow 2 (95th percentile 107.82 ms)
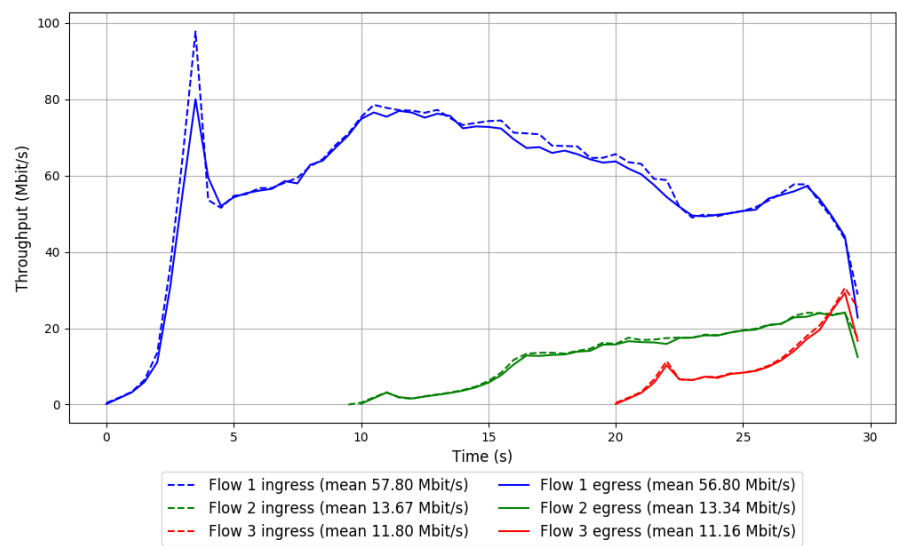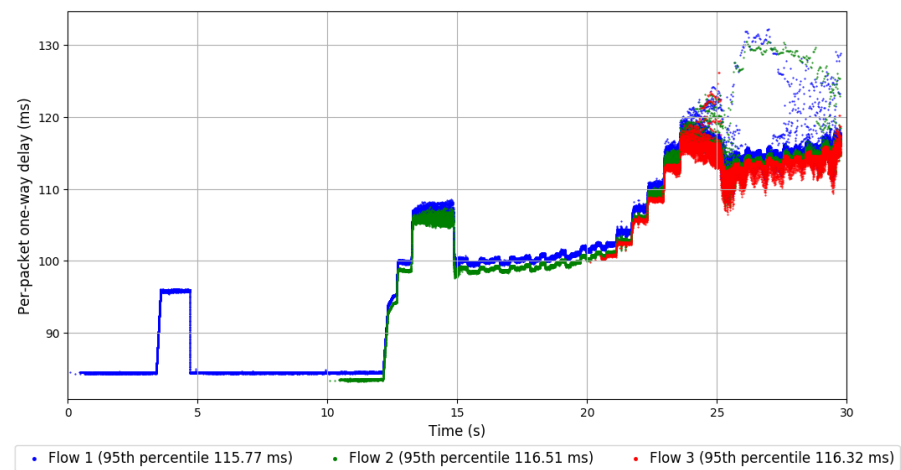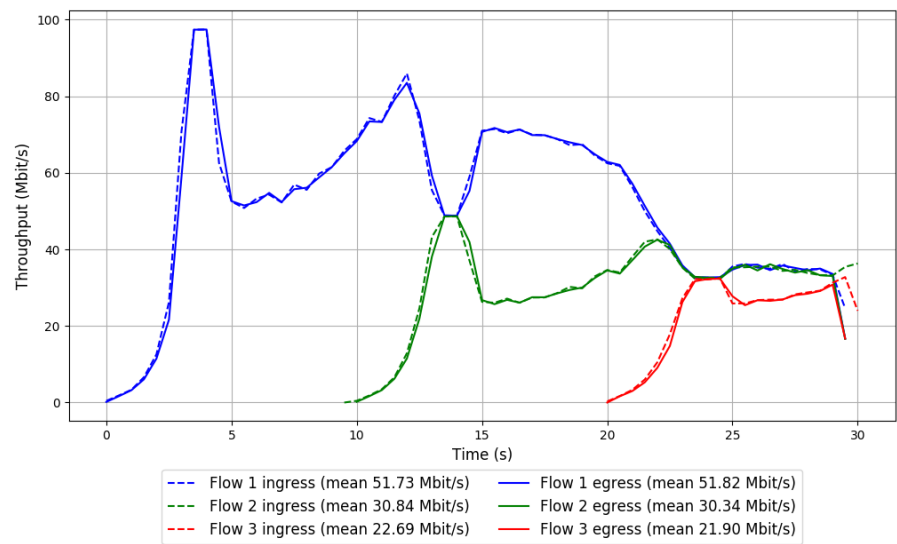- Flow 3 (95th percentile 109.66 ms)

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```
Run 5: Statistics of Vivace-LTE

Start at: 2018-02-04 19:00:39
End at: 2018-02-04 19:01:09
Local clock offset: -0.053 ms
Remote clock offset: -3.324 ms


# Below is generated by plot.py at 2018-02-05 01:47:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.05 Mbit/s
95th percentile per-packet one-way delay: 116.221 ms
Loss rate: 2.61%
-- Flow 1:
Average throughput: 51.82 Mbit/s
95th percentile per-packet one-way delay: 115.769 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 30.34 Mbit/s
95th percentile per-packet one-way delay: 116.508 ms
Loss rate: 5.00%
-- Flow 3:
Average throughput: 21.90 Mbit/s
95th percentile per-packet one-way delay: 116.319 ms
Loss rate: 10.11%
```

Run 5: Report of Vivace-LTE — Data Link

Flow 1 ingress (mean 51.73 Mbit/s) ---- Flow 1 egress (mean 51.82 Mbit/s)
Flow 2 ingress (mean 30.84 Mbit/s) ---- Flow 2 egress (mean 30.34 Mbit/s)
Flow 3 ingress (mean 22.69 Mbit/s) ---- Flow 3 egress (mean 21.90 Mbit/s)

Flow 1 (95th percentile 115.77 ms)   Flow 2 (95th percentile 116.51 ms)   Flow 3 (95th percentile 116.32 ms)

```
Run 6: Statistics of Vivace-LTE

Start at: 2018-02-04 19:24:34
End at: 2018-02-04 19:25:04
Local clock offset: -0.139 ms
Remote clock offset: 3.858 ms


# Below is generated by plot.py at 2018-02-05 01:47:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.72 Mbit/s
95th percentile per-packet one-way delay: 79.081 ms
Loss rate: 3.30%
-- Flow 1:
Average throughput: 53.80 Mbit/s
95th percentile per-packet one-way delay: 78.520 ms
Loss rate: 2.87%
-- Flow 2:
Average throughput: 16.14 Mbit/s
95th percentile per-packet one-way delay: 77.506 ms
Loss rate: 4.50%
-- Flow 3:
Average throughput: 6.83 Mbit/s
95th percentile per-packet one-way delay: 79.225 ms
Loss rate: 7.56%
```
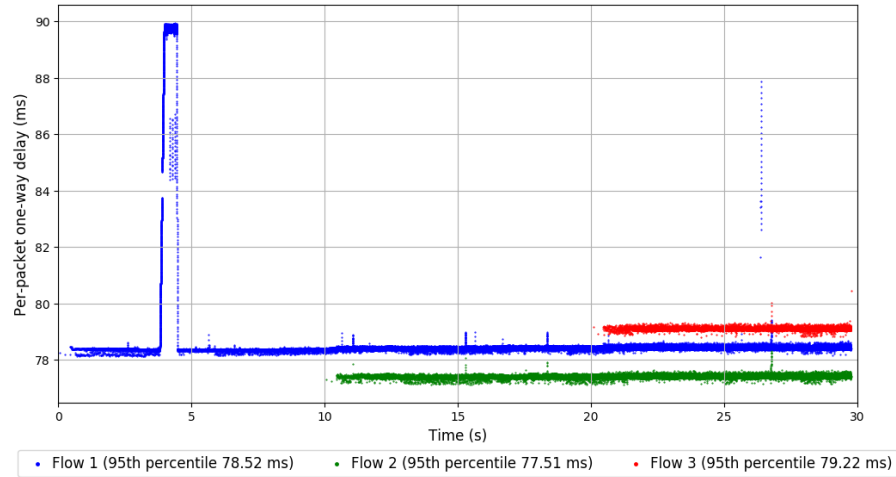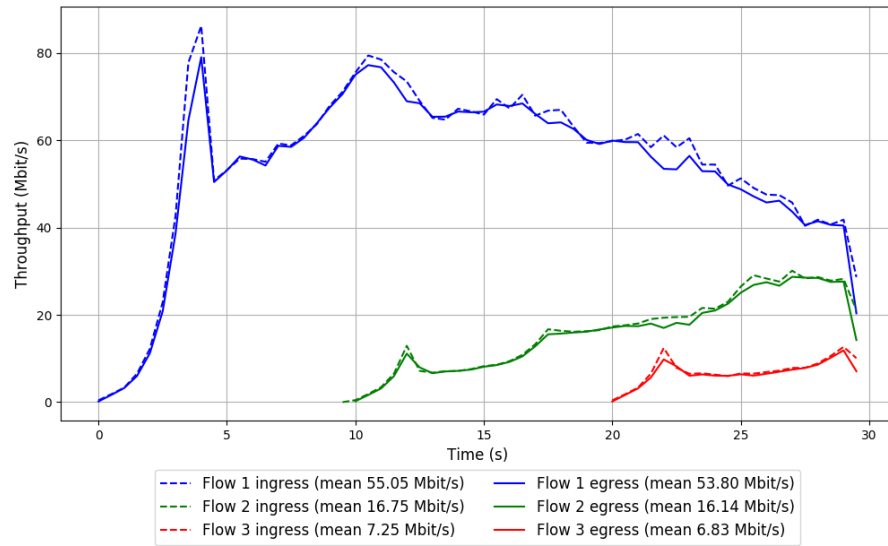
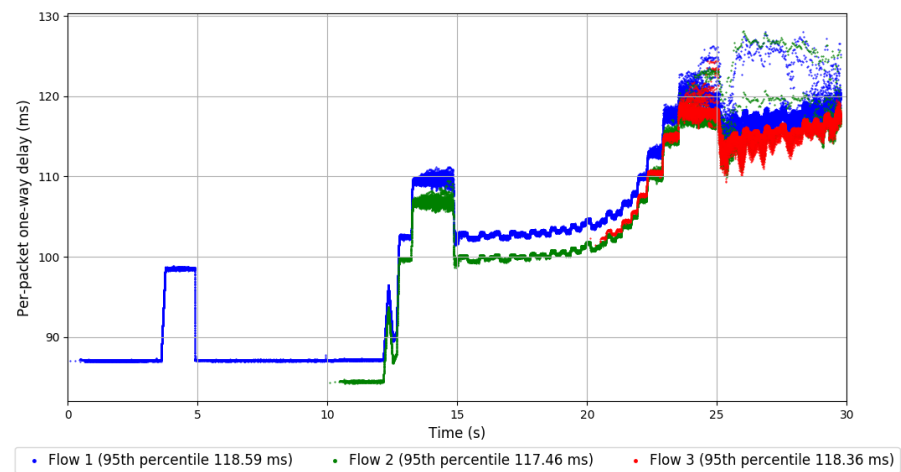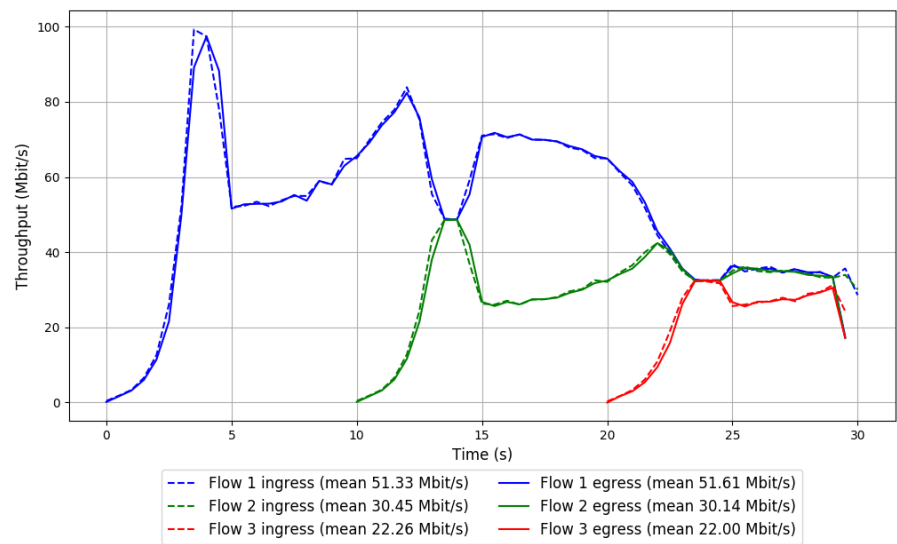Run 6: Report of Vivace-LTE — Data Link

```
Run 7: Statistics of Vivace-LTE

Start at: 2018-02-04 19:48:29
End at: 2018-02-04 19:48:59
Local clock offset: -0.1 ms
Remote clock offset: -2.346 ms

# Below is generated by plot.py at 2018-02-05 01:47:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.76 Mbit/s
95th percentile per-packet one-way delay: 118.251 ms
Loss rate: 2.58%
-- Flow 1:
Average throughput: 51.61 Mbit/s
95th percentile per-packet one-way delay: 118.592 ms
Loss rate: 1.75%
-- Flow 2:
Average throughput: 30.14 Mbit/s
95th percentile per-packet one-way delay: 117.456 ms
Loss rate: 4.39%
-- Flow 3:
Average throughput: 22.00 Mbit/s
95th percentile per-packet one-way delay: 118.358 ms
Loss rate: 3.33%
```

Run 7: Report of Vivace-LTE — Data Link

Flow 1 ingress (mean 51.33 Mbit/s) --- Flow 1 egress (mean 51.61 Mbit/s)
Flow 2 ingress (mean 30.45 Mbit/s) --- Flow 2 egress (mean 30.14 Mbit/s)
Flow 3 ingress (mean 22.26 Mbit/s) --- Flow 3 egress (mean 22.00 Mbit/s)

Flow 1 (95th percentile 118.59 ms)   Flow 2 (95th percentile 117.46 ms)   Flow 3 (95th percentile 118.36 ms)
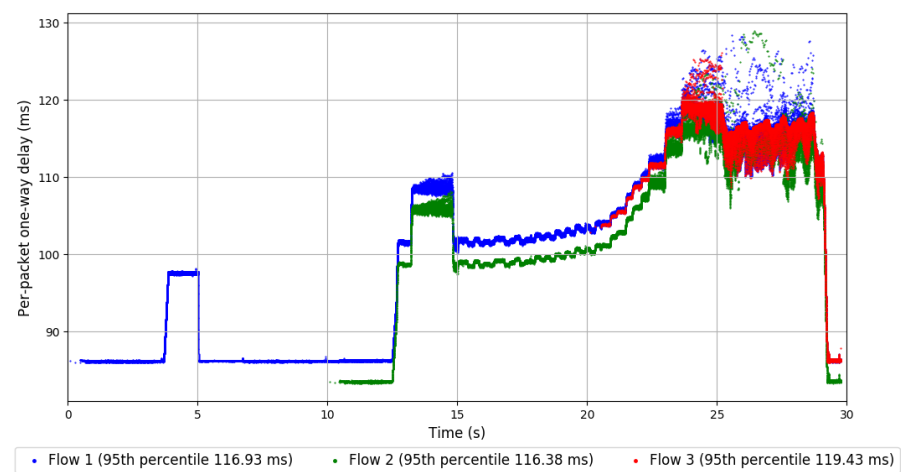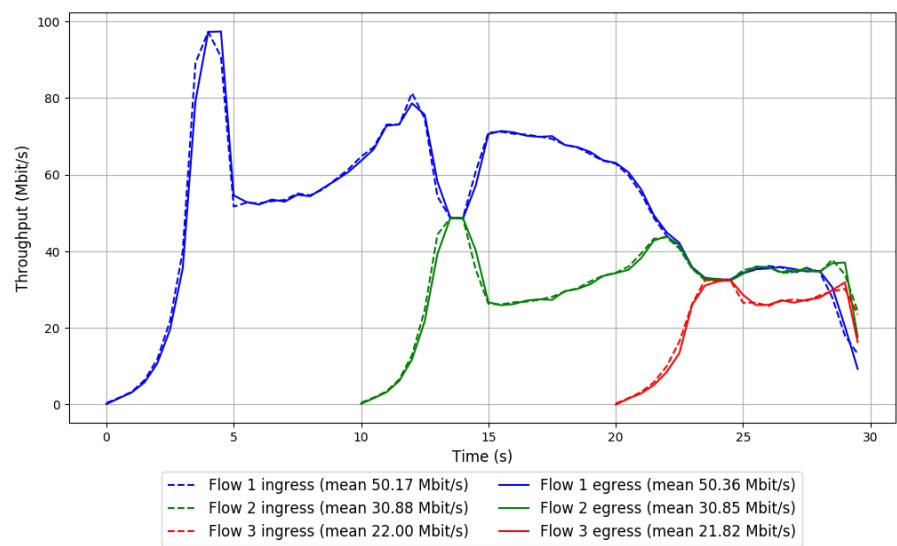
```
Run 8: Statistics of Vivace-LTE

Start at: 2018-02-04 20:12:20
End at: 2018-02-04 20:12:50
Local clock offset: -0.047 ms
Remote clock offset: -0.927 ms


# Below is generated by plot.py at 2018-02-05 01:47:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.91 Mbit/s
95th percentile per-packet one-way delay: 117.517 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 50.36 Mbit/s
95th percentile per-packet one-way delay: 116.934 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 30.85 Mbit/s
95th percentile per-packet one-way delay: 116.376 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 21.82 Mbit/s
95th percentile per-packet one-way delay: 119.426 ms
Loss rate: 2.84%
```

Run 8: Report of Vivace-LTE — Data Link

Flow 1 ingress (mean 50.17 Mbit/s)　　Flow 1 egress (mean 50.36 Mbit/s)
Flow 2 ingress (mean 30.88 Mbit/s)　　Flow 2 egress (mean 30.85 Mbit/s)
Flow 3 ingress (mean 22.00 Mbit/s)　　Flow 3 egress (mean 21.82 Mbit/s)

Flow 1 (95th percentile 116.93 ms)　　Flow 2 (95th percentile 116.38 ms)　　Flow 3 (95th percentile 119.43 ms)
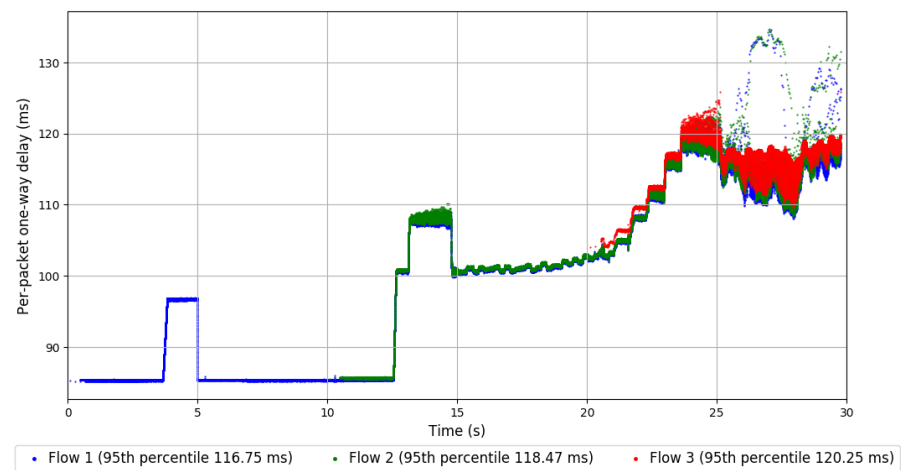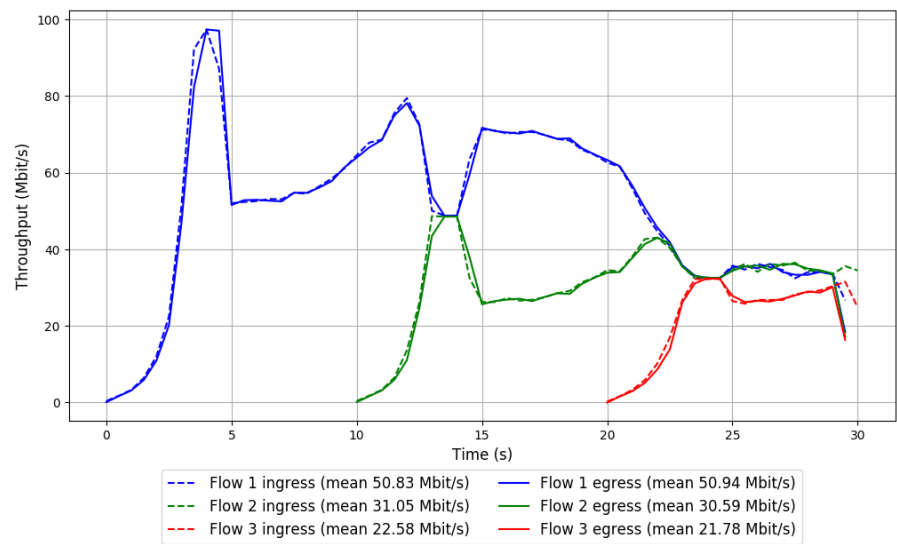
```
Run 9: Statistics of Vivace-LTE

Start at: 2018-02-04 20:36:18
End at: 2018-02-04 20:36:48
Local clock offset: -0.051 ms
Remote clock offset: -1.642 ms


# Below is generated by plot.py at 2018-02-05 01:47:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.30 Mbit/s
95th percentile per-packet one-way delay: 118.468 ms
Loss rate: 2.60%
-- Flow 1:
Average throughput: 50.94 Mbit/s
95th percentile per-packet one-way delay: 116.752 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 30.59 Mbit/s
95th percentile per-packet one-way delay: 118.471 ms
Loss rate: 4.78%
-- Flow 3:
Average throughput: 21.78 Mbit/s
95th percentile per-packet one-way delay: 120.254 ms
Loss rate: 10.09%
```

Run 9: Report of Vivace-LTE — Data Link

```
Run 10: Statistics of Vivace-LTE

Start at: 2018-02-04 21:00:09
End at: 2018-02-04 21:00:39
Local clock offset: -0.113 ms
Remote clock offset: -0.833 ms


# Below is generated by plot.py at 2018-02-05 01:47:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.86 Mbit/s
95th percentile per-packet one-way delay: 116.328 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 48.84 Mbit/s
95th percentile per-packet one-way delay: 115.729 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 30.29 Mbit/s
95th percentile per-packet one-way delay: 116.392 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 21.32 Mbit/s
95th percentile per-packet one-way delay: 116.633 ms
Loss rate: 2.86%
```

Run 10: Report of Vivace-LTE — Data Link