Pantheon Report

Generated at 2018-01-17 08:35:51 (UTC).

Data path: AWS California 2 Ethernet (*local*) →Mexico Ethernet (*remote*).

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.

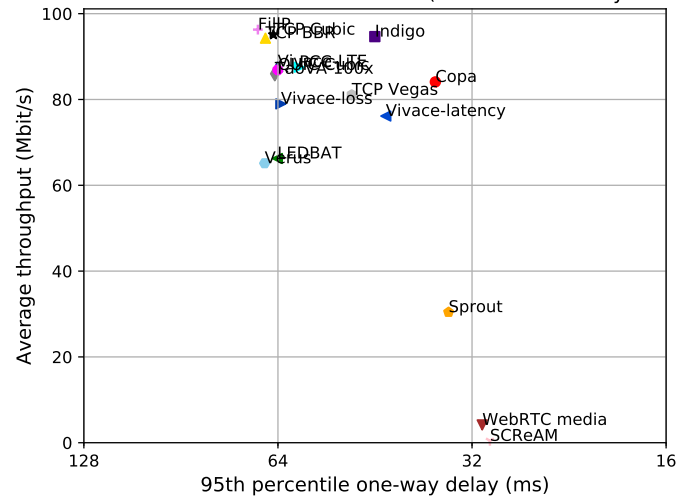Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

NTP offsets were measured against `time.stanford.edu` and have been applied to correct the timestamps in logs.
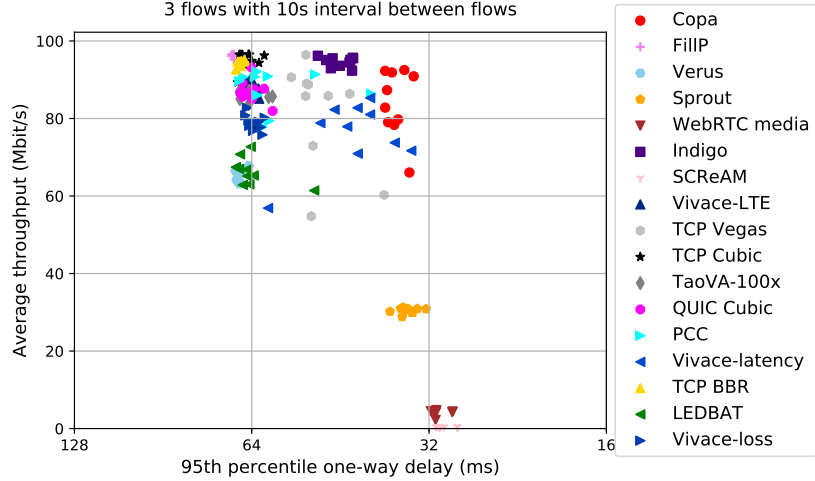
```
Git summary:
branch: master @ 386976fcf771de1359acd909bfbb98a156d79009
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/fillp @ ec9585325218d5048c4d4152fa42240af54c6e67
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
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 @ 423cbca3e8ea1d599e7b5cf725835e8a2b6bfac6
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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

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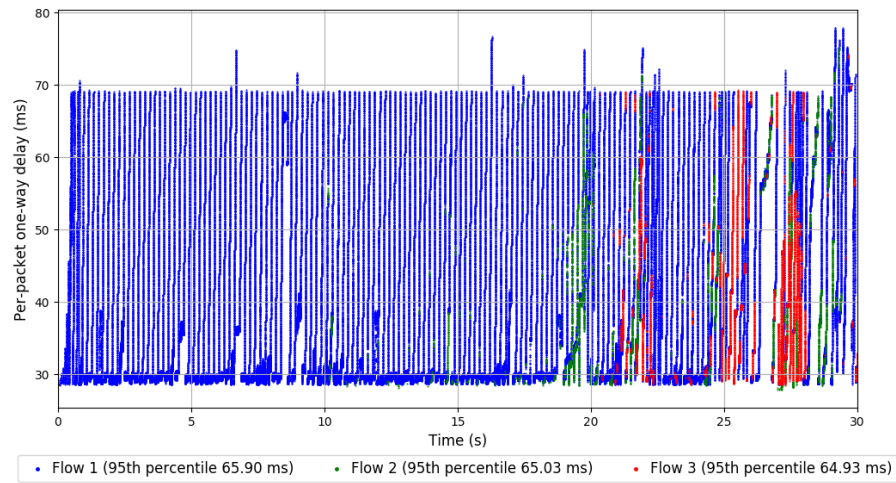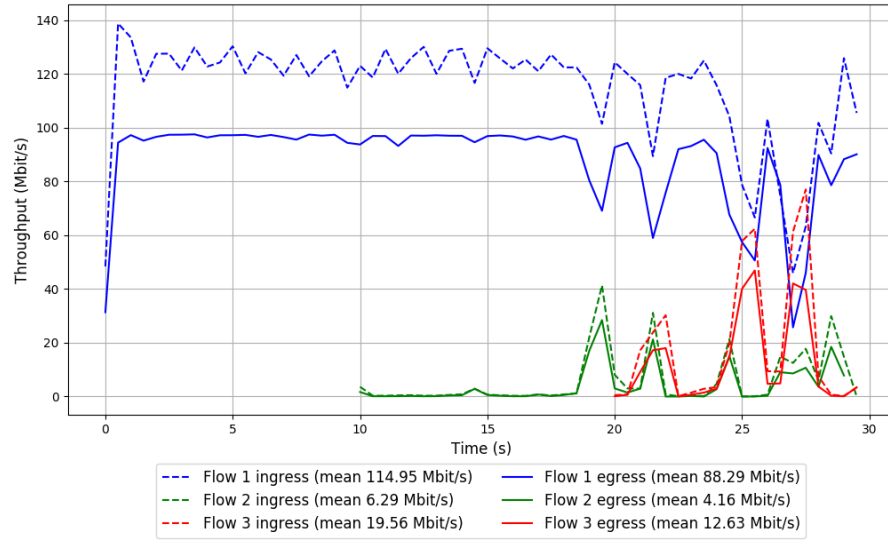3 flows with 10s interval between flows

2

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	78.22	16.68	16.33	66.71	65.67	64.56	24.23	31.16	33.48
TCP Cubic	10	65.48	30.70	27.75	64.68	64.36	64.07	0.72	0.54	0.71
LEDBAT	10	41.29	26.67	22.26	62.80	65.38	63.29	0.20	0.47	0.24
PCC	10	77.92	9.86	9.21	58.88	61.12	63.12	1.71	1.84	3.53
QUIC Cubic	10	59.58	28.41	25.53	63.36	64.52	63.19	1.37	1.19	1.07
SCReAM	9	0.22	0.22	0.22	29.76	29.69	29.89	0.02	0.00	0.00
WebRTC media	10	2.15	1.42	0.60	30.53	30.73	30.93	0.02	0.03	0.05
Sprout	10	15.48	15.23	14.61	33.95	34.85	36.36	0.06	0.06	0.03
TaoVA-100x	10	53.48	38.50	29.84	62.45	65.37	65.50	14.55	26.51	18.06
TCP Vegas	10	51.20	26.79	36.26	49.12	41.63	37.54	0.41	0.24	0.57
Verus	8	41.47	27.96	18.64	66.79	67.55	65.51	33.68	45.78	31.62
Copa	10	56.18	32.75	24.26	36.50	36.09	36.97	0.03	0.05	0.06
FillP	10	57.42	34.66	42.84	68.54	68.97	69.24	29.57	36.21	41.10
Indigo	10	65.08	30.90	27.66	41.68	47.86	52.81	0.19	0.19	0.31
Vivace-latency	10	56.98	22.04	13.70	41.45	44.45	47.17	0.25	0.31	0.30
Vivace-loss	10	52.79	28.65	21.69	62.94	63.74	63.74	5.88	6.09	6.18
Vivace-LTE	10	65.26	24.88	17.86	63.58	64.92	65.79	2.49	2.56	3.28

```
Run 1: Statistics of TCP BBR

Start at: 2018-01-17 03:25:09
End at: 2018-01-17 03:25:39
Local clock offset: -0.667 ms
Remote clock offset: -4.097 ms


# Below is generated by plot.py at 2018-01-17 08:07:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.17 Mbit/s
95th percentile per-packet one-way delay: 65.850 ms
Loss rate: 24.23%
-- Flow 1:
Average throughput: 88.29 Mbit/s
95th percentile per-packet one-way delay: 65.901 ms
Loss rate: 23.21%
-- Flow 2:
Average throughput: 4.16 Mbit/s
95th percentile per-packet one-way delay: 65.029 ms
Loss rate: 35.02%
-- Flow 3:
Average throughput: 12.63 Mbit/s
95th percentile per-packet one-way delay: 64.934 ms
Loss rate: 35.56%
```
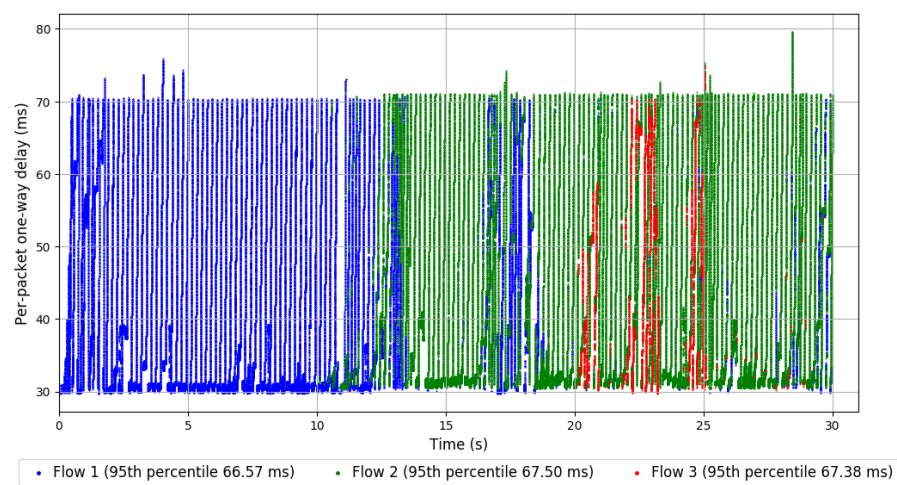
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2018-01-17 03:51:18
End at: 2018-01-17 03:51:48
Local clock offset: -0.69 ms
Remote clock offset: -2.14 ms


# Below is generated by plot.py at 2018-01-17 08:07:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.41 Mbit/s
95th percentile per-packet one-way delay: 67.118 ms
Loss rate: 26.76%
-- Flow 1:
Average throughput: 44.09 Mbit/s
95th percentile per-packet one-way delay: 66.571 ms
Loss rate: 26.58%
-- Flow 2:
Average throughput: 71.51 Mbit/s
95th percentile per-packet one-way delay: 67.500 ms
Loss rate: 26.44%
-- Flow 3:
Average throughput: 8.42 Mbit/s
95th percentile per-packet one-way delay: 67.376 ms
Loss rate: 34.30%
```
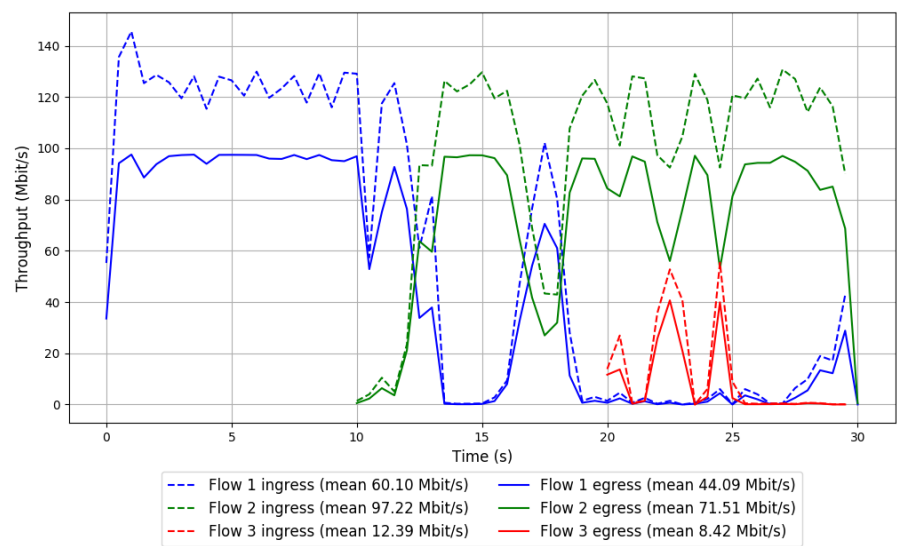
Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2018-01-17 04:17:07
End at: 2018-01-17 04:17:37
Local clock offset: -0.785 ms
Remote clock offset: -2.14 ms


# Below is generated by plot.py at 2018-01-17 08:07:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.64 Mbit/s
95th percentile per-packet one-way delay: 68.042 ms
Loss rate: 24.92%
-- Flow 1:
Average throughput: 88.40 Mbit/s
95th percentile per-packet one-way delay: 67.900 ms
Loss rate: 24.69%
-- Flow 2:
Average throughput: 6.21 Mbit/s
95th percentile per-packet one-way delay: 68.474 ms
Loss rate: 28.89%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 57.619 ms
Loss rate: 41.04%
```
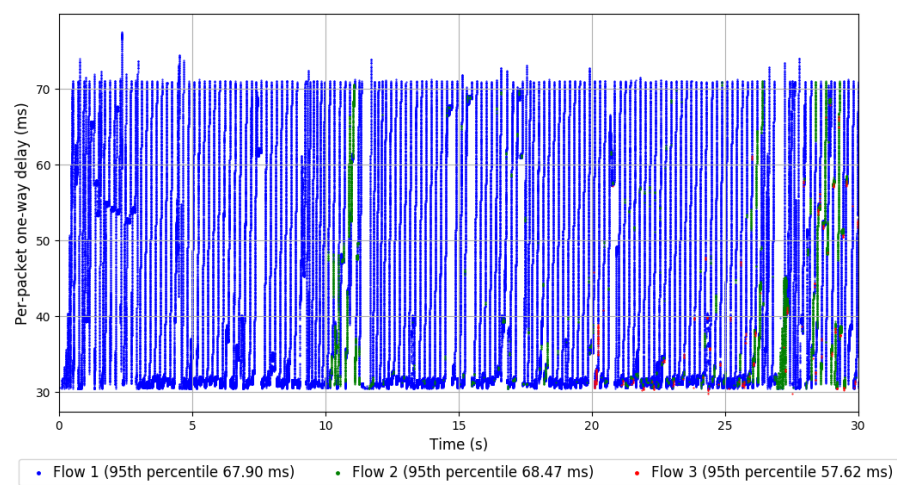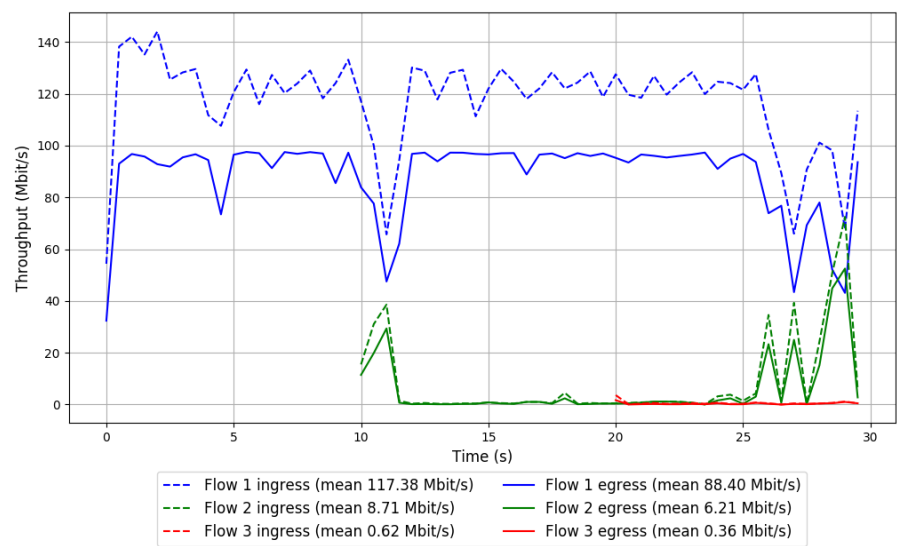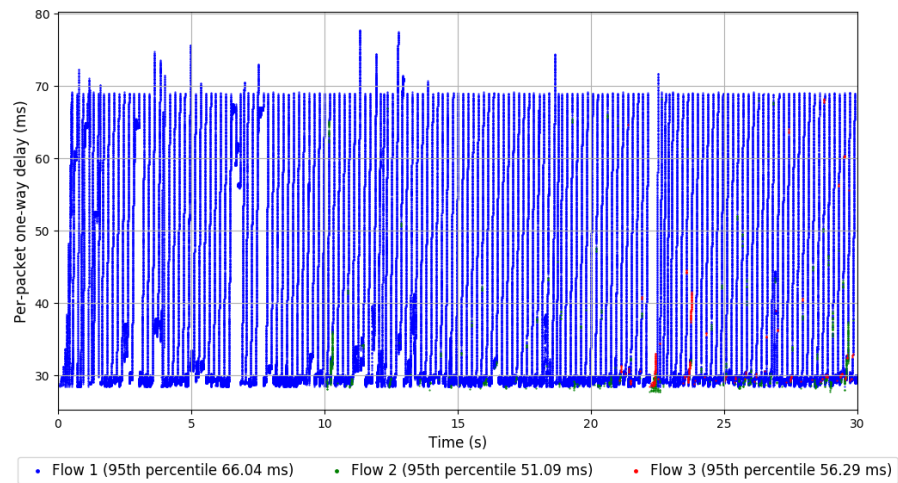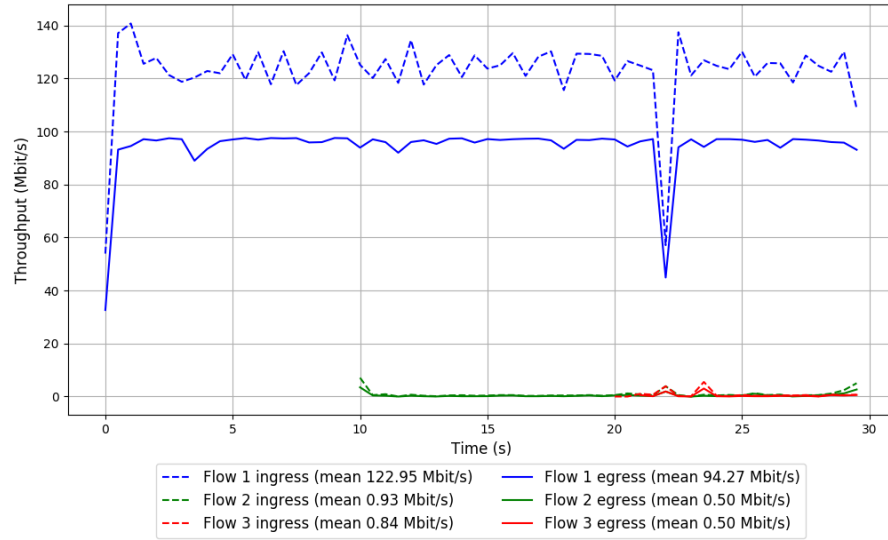
Run 3: Report of TCP BBR — Data Link

- - - Flow 1 ingress (mean 117.38 Mbit/s) —— Flow 1 egress (mean 88.40 Mbit/s)
- - - Flow 2 ingress (mean 8.71 Mbit/s) —— Flow 2 egress (mean 6.21 Mbit/s)
- - - Flow 3 ingress (mean 0.62 Mbit/s) —— Flow 3 egress (mean 0.36 Mbit/s)

• Flow 1 (95th percentile 67.90 ms)   • Flow 2 (95th percentile 68.47 ms)   • Flow 3 (95th percentile 57.62 ms)

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```
Run 4: Statistics of TCP BBR

Start at: 2018-01-17 04:43:05
End at: 2018-01-17 04:43:35
Local clock offset: -0.698 ms
Remote clock offset: -4.133 ms


# Below is generated by plot.py at 2018-01-17 08:07:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.75 Mbit/s
95th percentile per-packet one-way delay: 66.036 ms
Loss rate: 23.49%
-- Flow 1:
Average throughput: 94.27 Mbit/s
95th percentile per-packet one-way delay: 66.043 ms
Loss rate: 23.32%
-- Flow 2:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 51.087 ms
Loss rate: 46.15%
-- Flow 3:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 56.289 ms
Loss rate: 47.53%
```
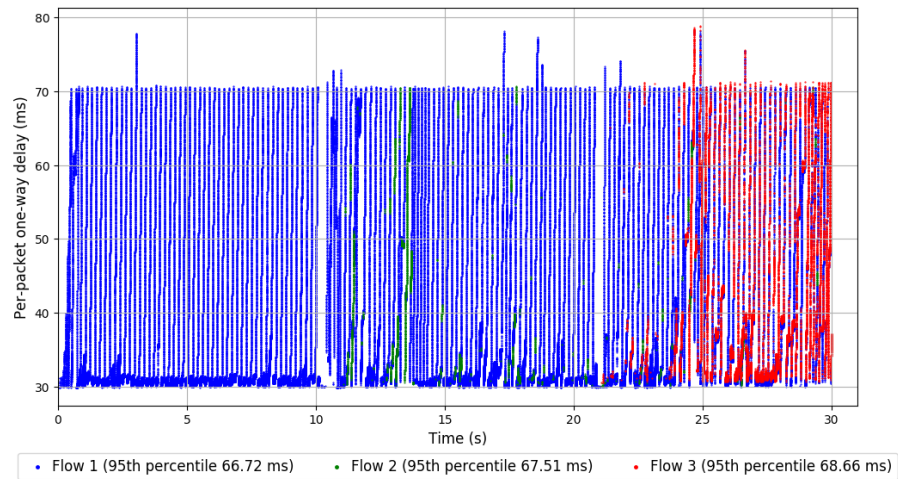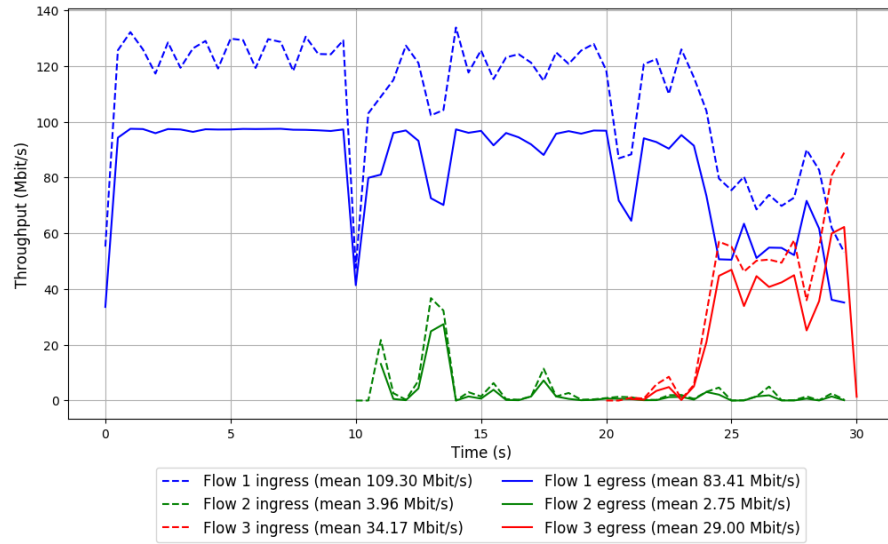
Run 4: Report of TCP BBR — Data Link

- - - Flow 1 ingress (mean 122.95 Mbit/s) ——— Flow 1 egress (mean 94.27 Mbit/s)
- - - Flow 2 ingress (mean 0.93 Mbit/s) ——— Flow 2 egress (mean 0.50 Mbit/s)
- - - Flow 3 ingress (mean 0.84 Mbit/s) ——— Flow 3 egress (mean 0.50 Mbit/s)

- Flow 1 (95th percentile 66.04 ms)   • Flow 2 (95th percentile 51.09 ms)   • Flow 3 (95th percentile 56.29 ms)

```
Run 5: Statistics of TCP BBR

Start at: 2018-01-17 05:10:02
End at: 2018-01-17 05:10:32
Local clock offset: -0.506 ms
Remote clock offset: -1.841 ms


# Below is generated by plot.py at 2018-01-17 08:07:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.72 Mbit/s
95th percentile per-packet one-way delay: 67.058 ms
Loss rate: 23.92%
-- Flow 1:
Average throughput: 83.41 Mbit/s
95th percentile per-packet one-way delay: 66.715 ms
Loss rate: 23.68%
-- Flow 2:
Average throughput: 2.75 Mbit/s
95th percentile per-packet one-way delay: 67.507 ms
Loss rate: 34.26%
-- Flow 3:
Average throughput: 29.00 Mbit/s
95th percentile per-packet one-way delay: 68.656 ms
Loss rate: 23.83%
```
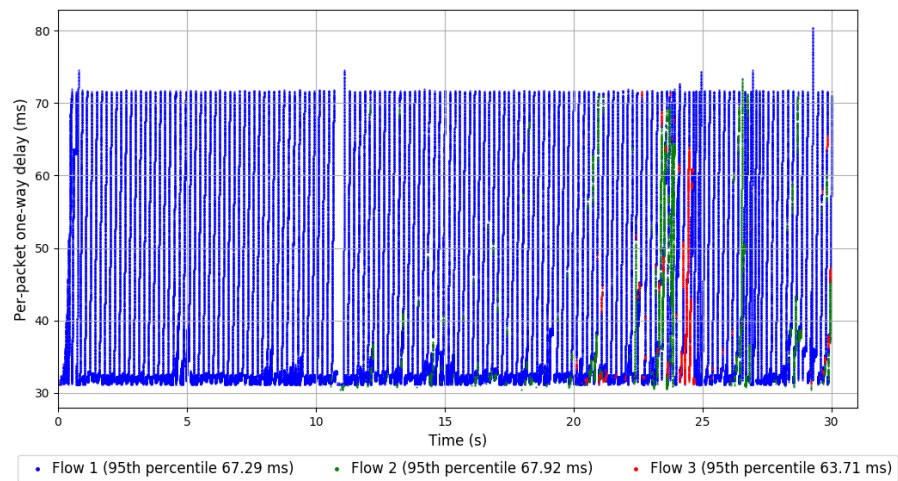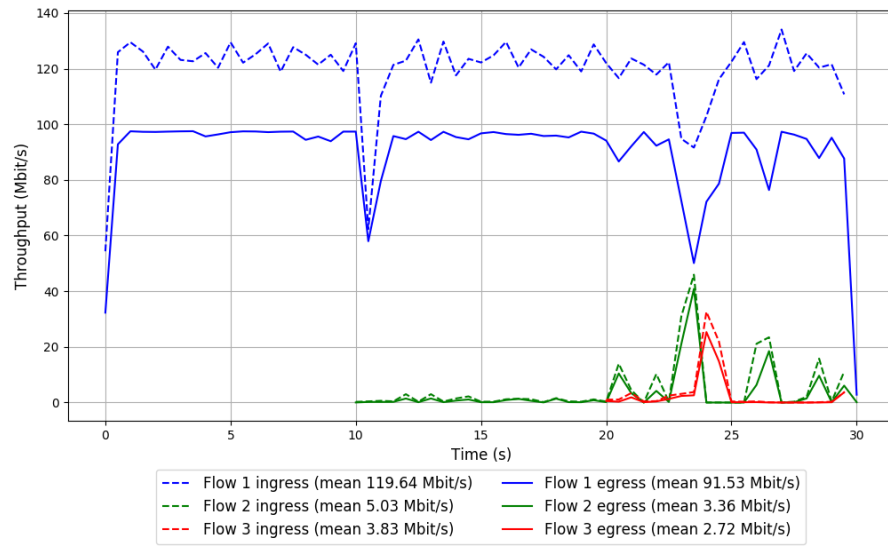
Run 5: Report of TCP BBR — Data Link

```
Run 6: Statistics of TCP BBR

Start at: 2018-01-17 05:37:19
End at: 2018-01-17 05:37:49
Local clock offset: -0.349 ms
Remote clock offset: -1.517 ms


# Below is generated by plot.py at 2018-01-17 08:07:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.66 Mbit/s
95th percentile per-packet one-way delay: 67.283 ms
Loss rate: 23.77%
-- Flow 1:
Average throughput: 91.53 Mbit/s
95th percentile per-packet one-way delay: 67.293 ms
Loss rate: 23.46%
-- Flow 2:
Average throughput: 3.36 Mbit/s
95th percentile per-packet one-way delay: 67.920 ms
Loss rate: 33.21%
-- Flow 3:
Average throughput: 2.72 Mbit/s
95th percentile per-packet one-way delay: 63.709 ms
Loss rate: 28.82%
```
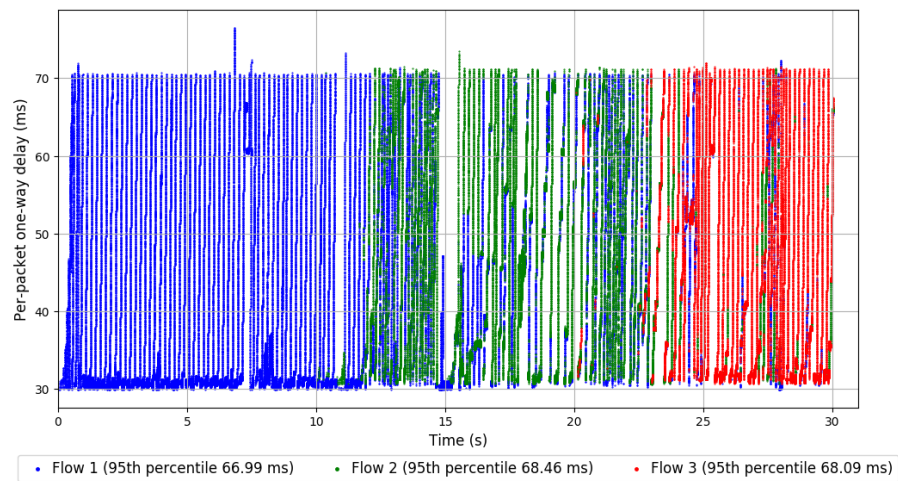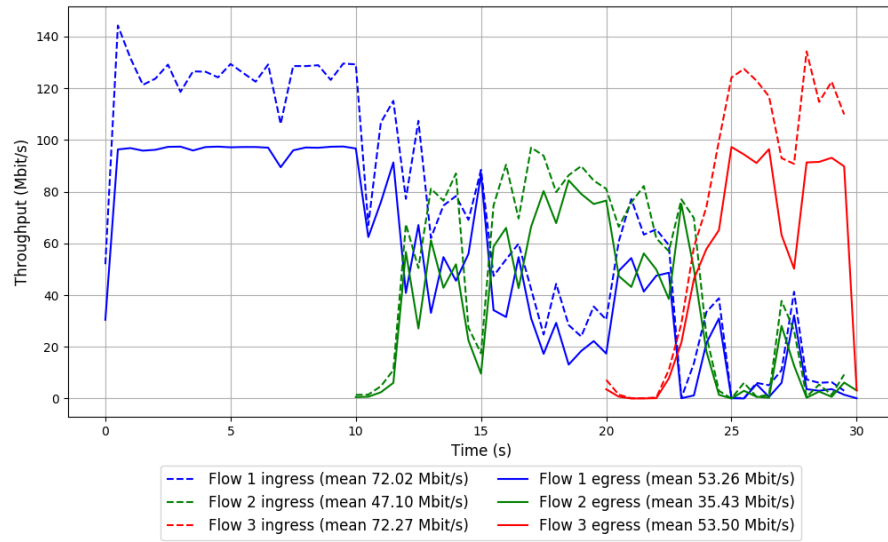
Run 6: Report of TCP BBR — Data Link

Flow 1 ingress (mean 119.64 Mbit/s) --- Flow 1 egress (mean 91.53 Mbit/s)
Flow 2 ingress (mean 5.03 Mbit/s) --- Flow 2 egress (mean 3.36 Mbit/s)
Flow 3 ingress (mean 3.83 Mbit/s) --- Flow 3 egress (mean 2.72 Mbit/s)

Flow 1 (95th percentile 67.29 ms) • Flow 2 (95th percentile 67.92 ms) • Flow 3 (95th percentile 63.71 ms)

```
Run 7: Statistics of TCP BBR

Start at: 2018-01-17 06:03:42
End at: 2018-01-17 06:04:12
Local clock offset: -0.134 ms
Remote clock offset: -2.043 ms


# Below is generated by plot.py at 2018-01-17 08:07:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.61 Mbit/s
95th percentile per-packet one-way delay: 67.653 ms
Loss rate: 25.64%
-- Flow 1:
Average throughput: 53.26 Mbit/s
95th percentile per-packet one-way delay: 66.987 ms
Loss rate: 25.96%
-- Flow 2:
Average throughput: 35.43 Mbit/s
95th percentile per-packet one-way delay: 68.460 ms
Loss rate: 24.65%
-- Flow 3:
Average throughput: 53.50 Mbit/s
95th percentile per-packet one-way delay: 68.088 ms
Loss rate: 25.98%
```
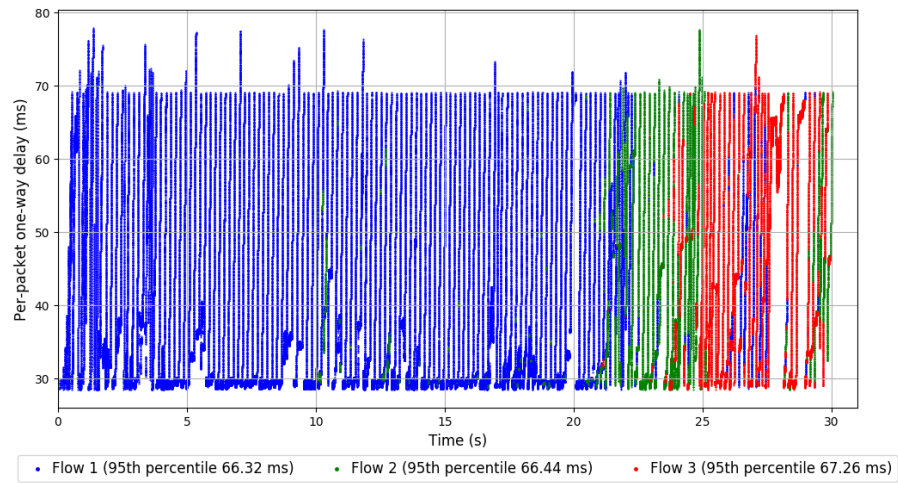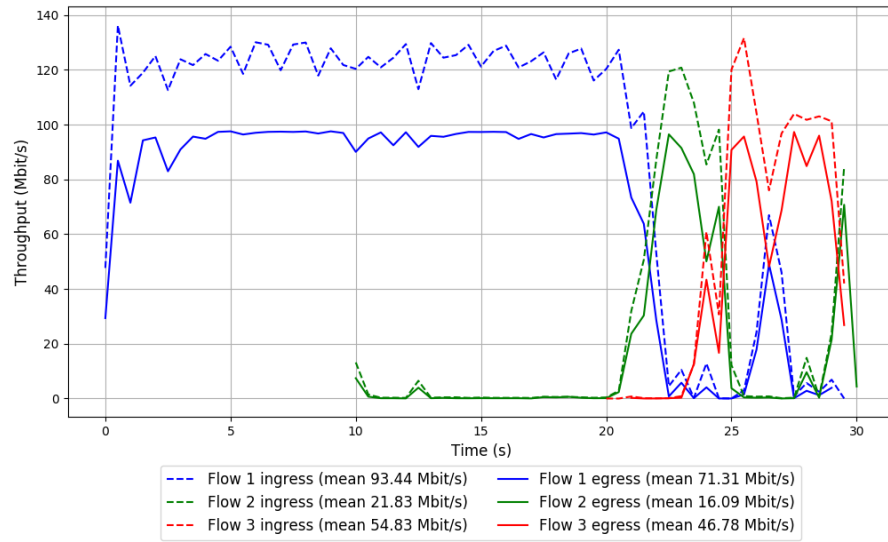
Run 7: Report of TCP BBR — Data Link

Flow 1 ingress (mean 72.02 Mbit/s) --- Flow 1 egress (mean 53.26 Mbit/s)
Flow 2 ingress (mean 47.10 Mbit/s) --- Flow 2 egress (mean 35.43 Mbit/s)
Flow 3 ingress (mean 72.27 Mbit/s) --- Flow 3 egress (mean 53.50 Mbit/s)

• Flow 1 (95th percentile 66.99 ms)   • Flow 2 (95th percentile 68.46 ms)   • Flow 3 (95th percentile 68.09 ms)
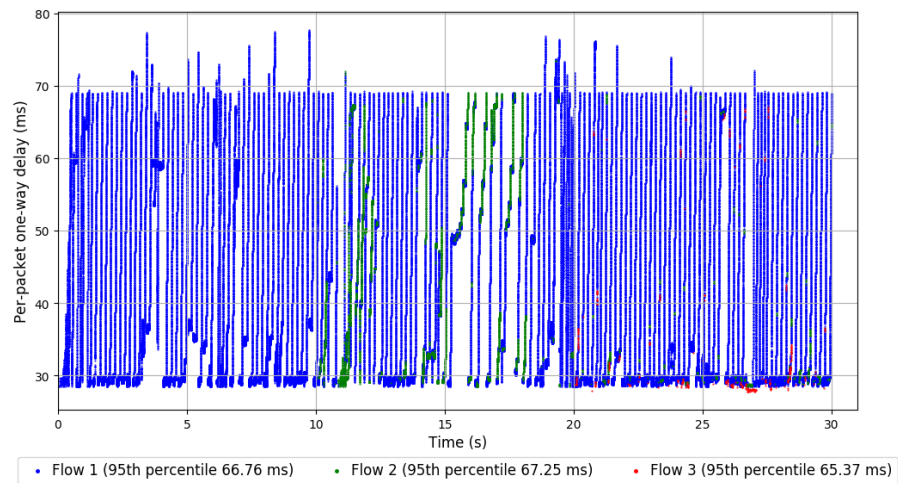
```
Run 8: Statistics of TCP BBR

Start at: 2018-01-17 06:30:07
End at: 2018-01-17 06:30:37
Local clock offset: -0.101 ms
Remote clock offset: -4.412 ms


# Below is generated by plot.py at 2018-01-17 08:07:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.58 Mbit/s
95th percentile per-packet one-way delay: 66.697 ms
Loss rate: 24.58%
-- Flow 1:
Average throughput: 71.31 Mbit/s
95th percentile per-packet one-way delay: 66.318 ms
Loss rate: 24.56%
-- Flow 2:
Average throughput: 16.09 Mbit/s
95th percentile per-packet one-way delay: 66.442 ms
Loss rate: 26.30%
-- Flow 3:
Average throughput: 46.78 Mbit/s
95th percentile per-packet one-way delay: 67.261 ms
Loss rate: 23.34%
```
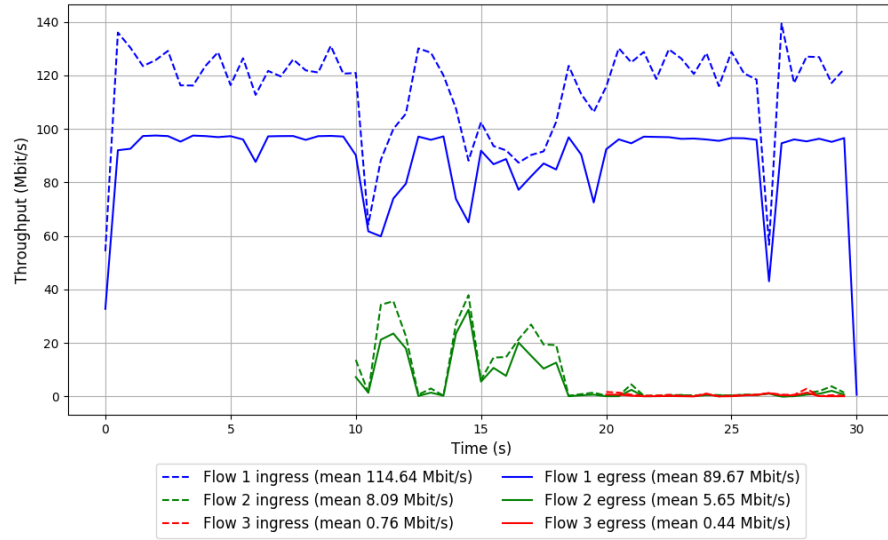
Run 8: Report of TCP BBR — Data Link

Flow 1 ingress (mean 93.44 Mbit/s) ---- Flow 1 egress (mean 71.31 Mbit/s) ——
Flow 2 ingress (mean 21.83 Mbit/s) ---- Flow 2 egress (mean 16.09 Mbit/s) ——
Flow 3 ingress (mean 54.83 Mbit/s) ---- Flow 3 egress (mean 46.78 Mbit/s) ——

Flow 1 (95th percentile 66.32 ms) • Flow 2 (95th percentile 66.44 ms) • Flow 3 (95th percentile 67.26 ms)
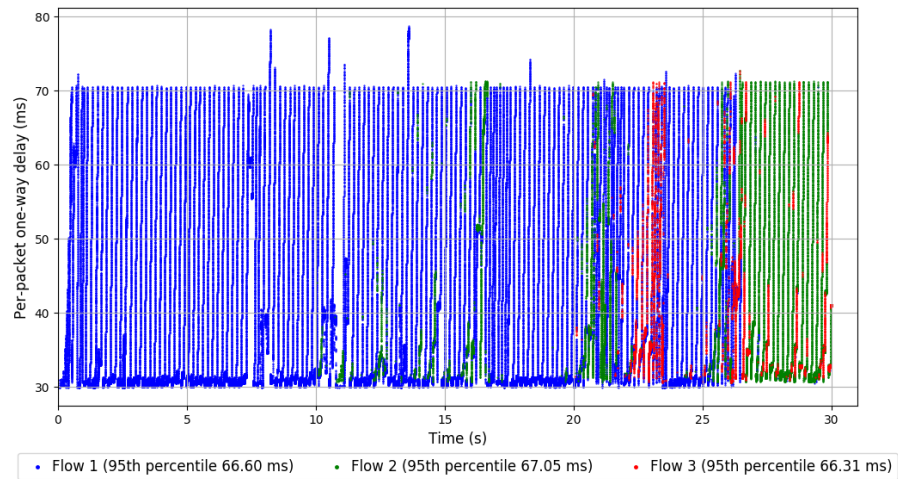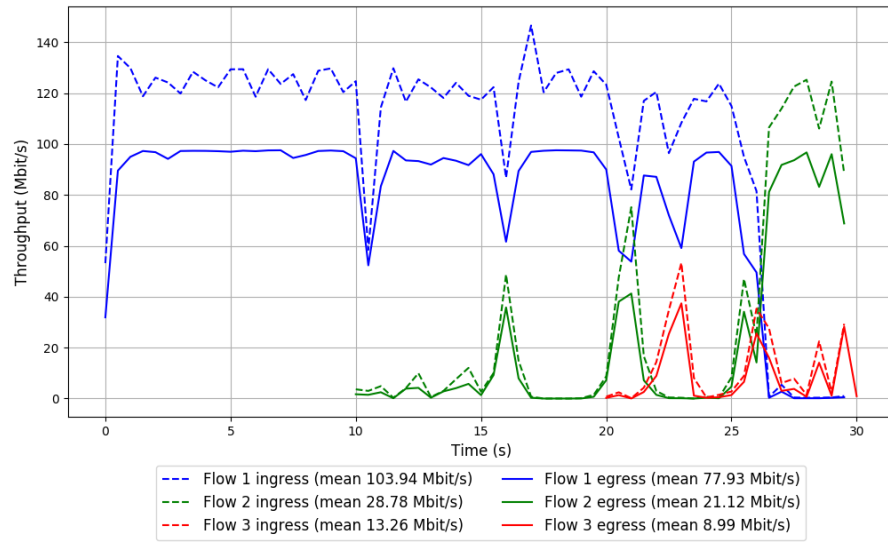
```
Run 9: Statistics of TCP BBR

Start at: 2018-01-17 06:55:42
End at: 2018-01-17 06:56:12
Local clock offset: 0.035 ms
Remote clock offset: -4.288 ms


# Below is generated by plot.py at 2018-01-17 08:08:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.57 Mbit/s
95th percentile per-packet one-way delay: 66.797 ms
Loss rate: 22.18%
-- Flow 1:
Average throughput: 89.67 Mbit/s
95th percentile per-packet one-way delay: 66.757 ms
Loss rate: 21.77%
-- Flow 2:
Average throughput: 5.65 Mbit/s
95th percentile per-packet one-way delay: 67.249 ms
Loss rate: 30.05%
-- Flow 3:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 65.369 ms
Loss rate: 42.26%
```
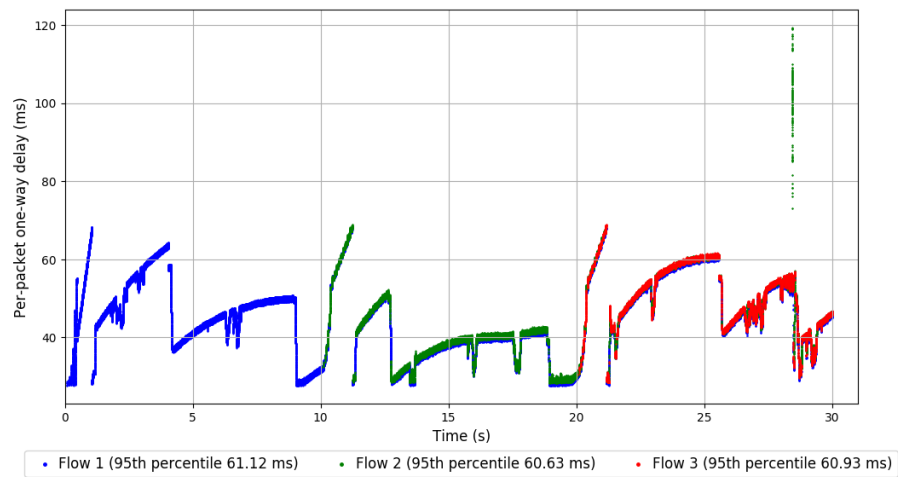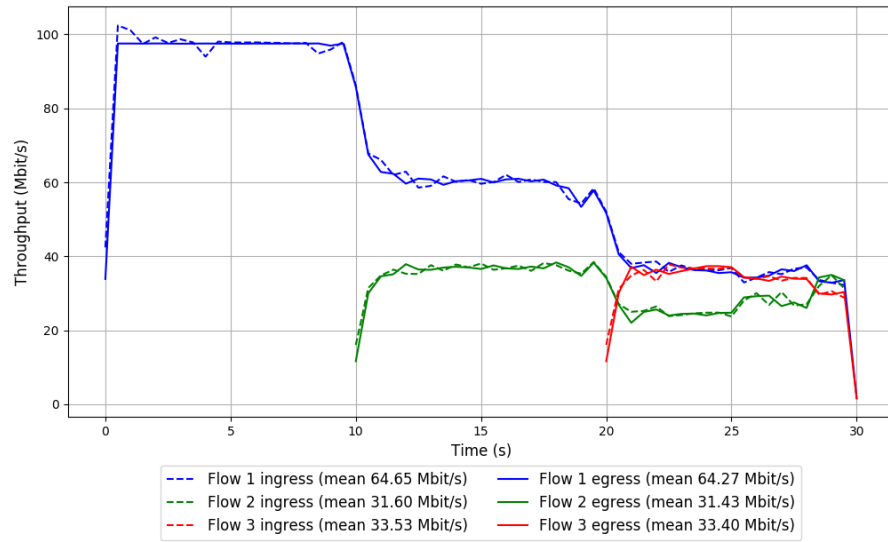
Run 9: Report of TCP BBR — Data Link

Flow 1 ingress (mean 114.64 Mbit/s) --- Flow 1 egress (mean 89.67 Mbit/s)
Flow 2 ingress (mean 8.09 Mbit/s) --- Flow 2 egress (mean 5.65 Mbit/s)
Flow 3 ingress (mean 0.76 Mbit/s) --- Flow 3 egress (mean 0.44 Mbit/s)

Flow 1 (95th percentile 66.76 ms)   Flow 2 (95th percentile 67.25 ms)   Flow 3 (95th percentile 65.37 ms)

```
Run 10: Statistics of TCP BBR

Start at: 2018-01-17 07:20:42
End at: 2018-01-17 07:21:12
Local clock offset: 0.1 ms
Remote clock offset: -2.038 ms

# Below is generated by plot.py at 2018-01-17 08:08:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.81 Mbit/s
95th percentile per-packet one-way delay: 66.683 ms
Loss rate: 25.51%
-- Flow 1:
Average throughput: 77.93 Mbit/s
95th percentile per-packet one-way delay: 66.598 ms
Loss rate: 25.02%
-- Flow 2:
Average throughput: 21.12 Mbit/s
95th percentile per-packet one-way delay: 67.053 ms
Loss rate: 26.62%
-- Flow 3:
Average throughput: 8.99 Mbit/s
95th percentile per-packet one-way delay: 66.315 ms
Loss rate: 32.16%
```
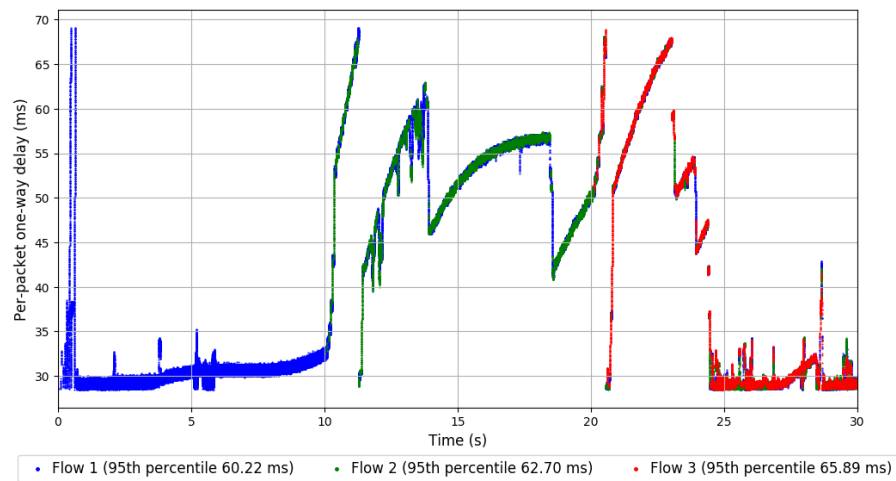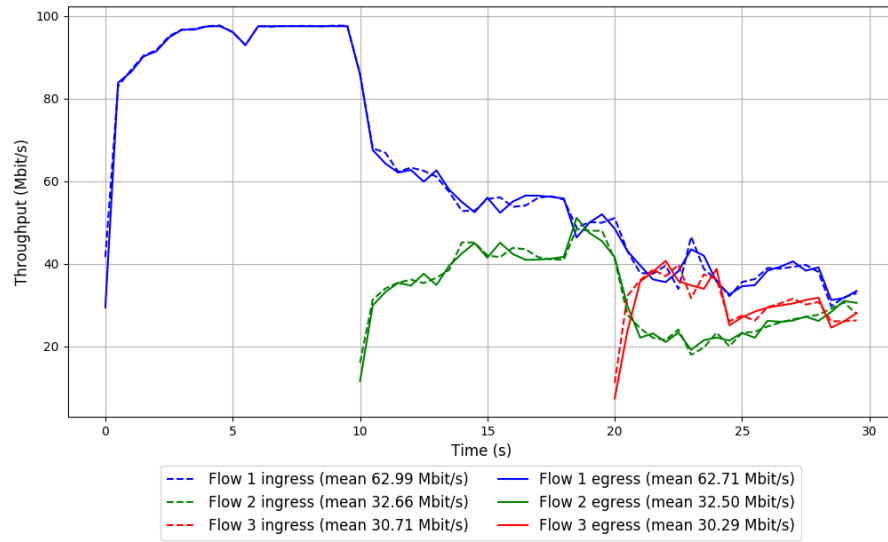
Run 10: Report of TCP BBR — Data Link

Flow 1 ingress (mean 103.94 Mbit/s)   Flow 1 egress (mean 77.93 Mbit/s)
Flow 2 ingress (mean 28.78 Mbit/s)   Flow 2 egress (mean 21.12 Mbit/s)
Flow 3 ingress (mean 13.26 Mbit/s)   Flow 3 egress (mean 8.99 Mbit/s)

Flow 1 (95th percentile 66.60 ms)   Flow 2 (95th percentile 67.05 ms)   Flow 3 (95th percentile 66.31 ms)
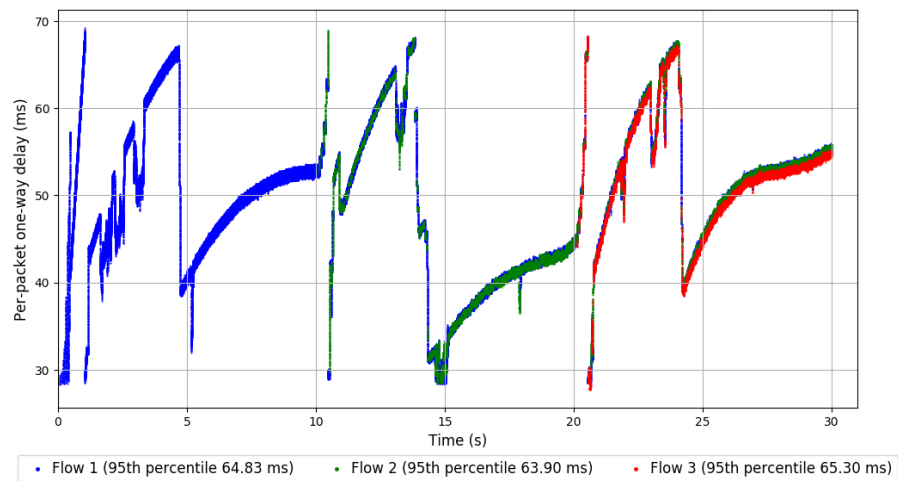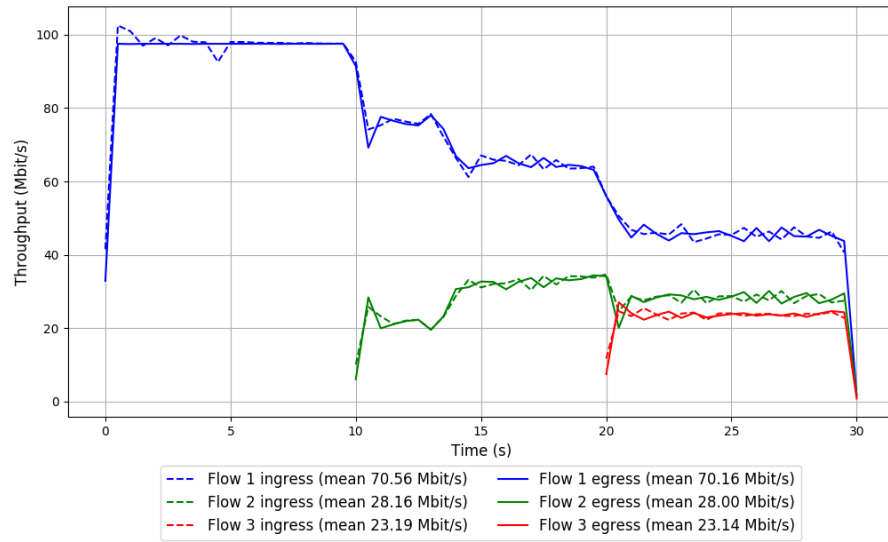
23

```
Run 1: Statistics of TCP Cubic

Start at: 2018-01-17 03:29:19
End at: 2018-01-17 03:29:49
Local clock offset: -0.662 ms
Remote clock offset: -4.267 ms


# Below is generated by plot.py at 2018-01-17 08:08:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.26 Mbit/s
95th percentile per-packet one-way delay: 60.937 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 64.27 Mbit/s
95th percentile per-packet one-way delay: 61.116 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 31.43 Mbit/s
95th percentile per-packet one-way delay: 60.633 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 33.40 Mbit/s
95th percentile per-packet one-way delay: 60.931 ms
Loss rate: 0.23%
```

Run 1: Report of TCP Cubic — Data Link

- - - Flow 1 ingress (mean 64.65 Mbit/s)   —— Flow 1 egress (mean 64.27 Mbit/s)
- - - Flow 2 ingress (mean 31.60 Mbit/s)   —— Flow 2 egress (mean 31.43 Mbit/s)
- - - Flow 3 ingress (mean 33.53 Mbit/s)   —— Flow 3 egress (mean 33.40 Mbit/s)

• Flow 1 (95th percentile 61.12 ms)   • Flow 2 (95th percentile 60.63 ms)   • Flow 3 (95th percentile 60.93 ms)

25

```
Run 2: Statistics of TCP Cubic

Start at: 2018-01-17 03:55:32
End at: 2018-01-17 03:56:02
Local clock offset: -0.749 ms
Remote clock offset: -4.128 ms


# Below is generated by plot.py at 2018-01-17 08:08:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.37 Mbit/s
95th percentile per-packet one-way delay: 62.211 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 62.71 Mbit/s
95th percentile per-packet one-way delay: 60.215 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 32.50 Mbit/s
95th percentile per-packet one-way delay: 62.700 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 30.29 Mbit/s
95th percentile per-packet one-way delay: 65.888 ms
Loss rate: 1.61%
```
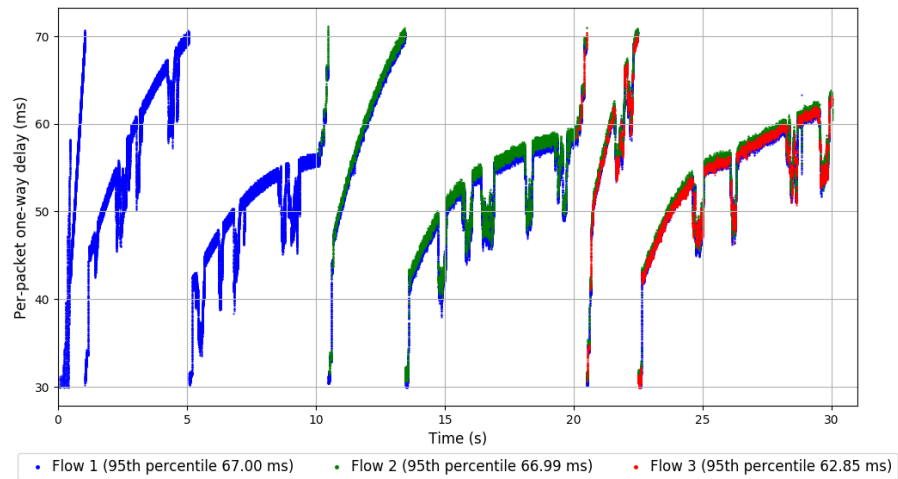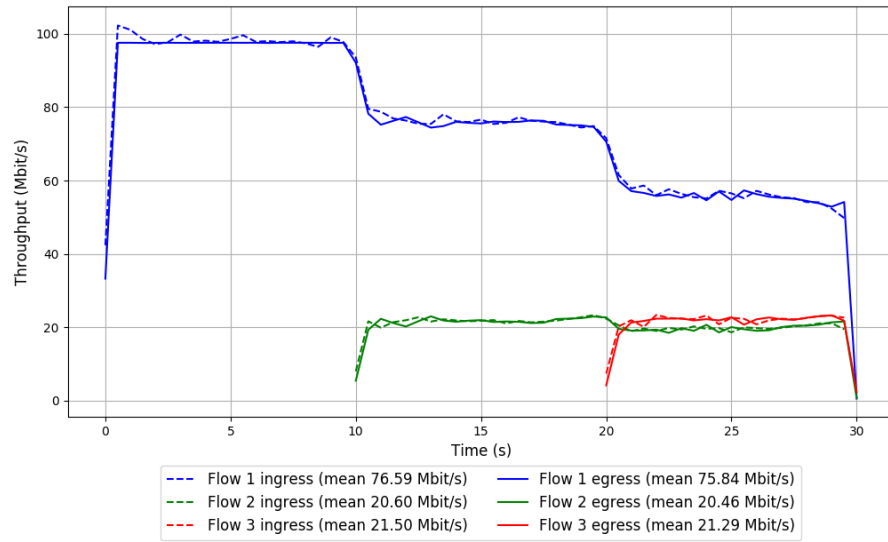
Run 2: Report of TCP Cubic — Data Link

- - - Flow 1 ingress (mean 62.99 Mbit/s)   —— Flow 1 egress (mean 62.71 Mbit/s)
- - - Flow 2 ingress (mean 32.66 Mbit/s)   —— Flow 2 egress (mean 32.50 Mbit/s)
- - - Flow 3 ingress (mean 30.71 Mbit/s)   —— Flow 3 egress (mean 30.29 Mbit/s)

• Flow 1 (95th percentile 60.22 ms)   • Flow 2 (95th percentile 62.70 ms)   • Flow 3 (95th percentile 65.89 ms)

```
Run 3: Statistics of TCP Cubic

Start at: 2018-01-17 04:21:14
End at: 2018-01-17 04:21:44
Local clock offset: -0.754 ms
Remote clock offset: -4.227 ms


# Below is generated by plot.py at 2018-01-17 08:08:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.48 Mbit/s
95th percentile per-packet one-way delay: 64.827 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 70.16 Mbit/s
95th percentile per-packet one-way delay: 64.834 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 28.00 Mbit/s
95th percentile per-packet one-way delay: 63.903 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 23.14 Mbit/s
95th percentile per-packet one-way delay: 65.300 ms
Loss rate: 0.14%
```
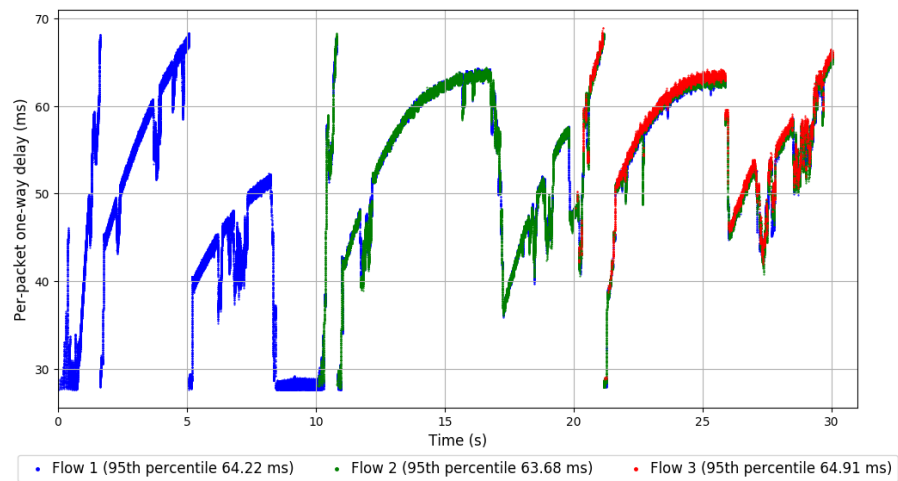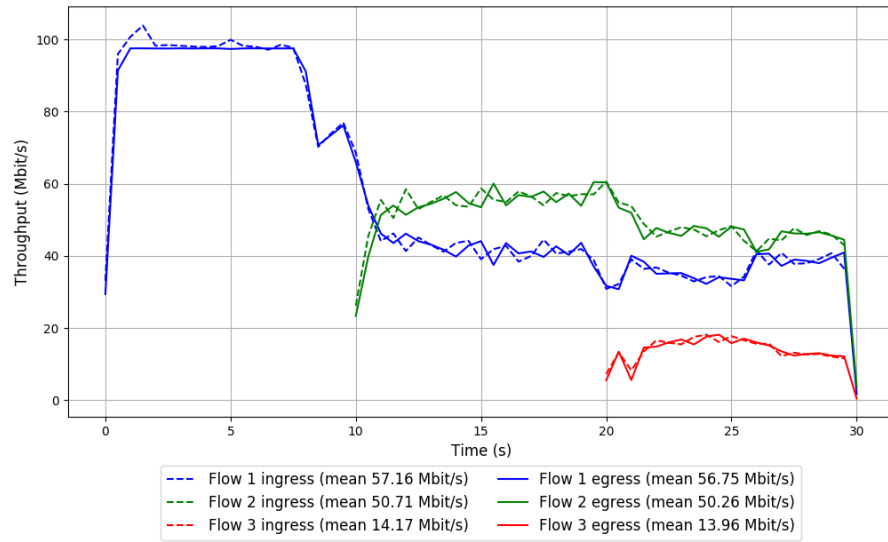
Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 70.56 Mbit/s) ---- Flow 1 egress (mean 70.16 Mbit/s) ——
Flow 2 ingress (mean 28.16 Mbit/s) ---- Flow 2 egress (mean 28.00 Mbit/s) ——
Flow 3 ingress (mean 23.19 Mbit/s) ---- Flow 3 egress (mean 23.14 Mbit/s) ——

Flow 1 (95th percentile 64.83 ms)   •   Flow 2 (95th percentile 63.90 ms)   •   Flow 3 (95th percentile 65.30 ms)
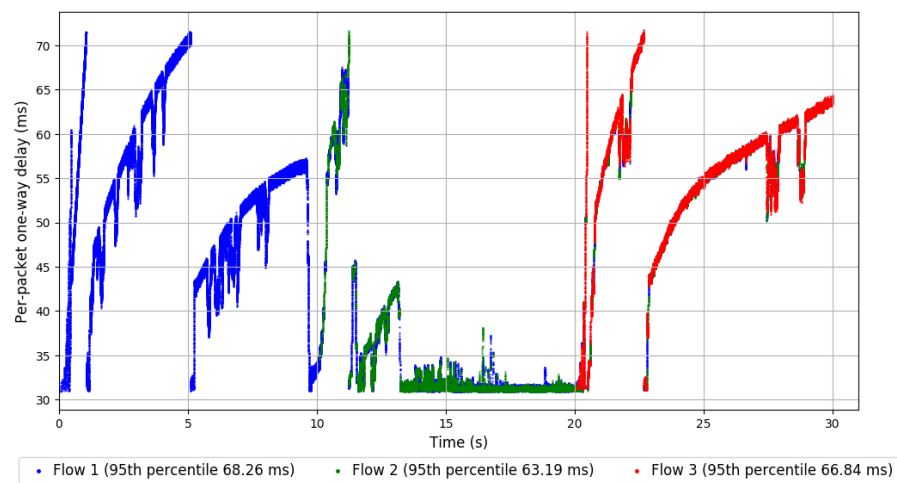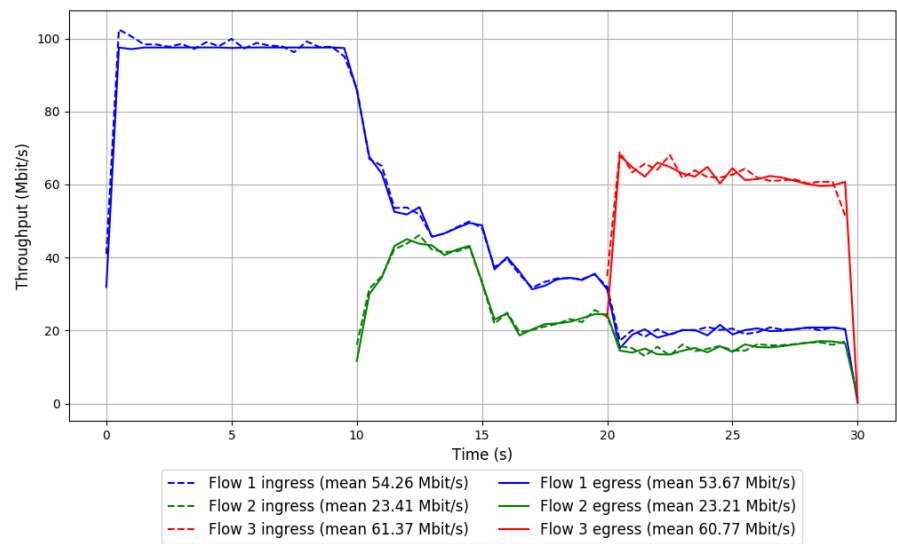
```
Run 4: Statistics of TCP Cubic

Start at: 2018-01-17 04:47:19
End at: 2018-01-17 04:47:49
Local clock offset: -0.727 ms
Remote clock offset: -2.038 ms


# Below is generated by plot.py at 2018-01-17 08:08:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.50 Mbit/s
95th percentile per-packet one-way delay: 66.771 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 75.84 Mbit/s
95th percentile per-packet one-way delay: 66.995 ms
Loss rate: 0.91%
-- Flow 2:
Average throughput: 20.46 Mbit/s
95th percentile per-packet one-way delay: 66.991 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 21.29 Mbit/s
95th percentile per-packet one-way delay: 62.853 ms
Loss rate: 0.90%
```
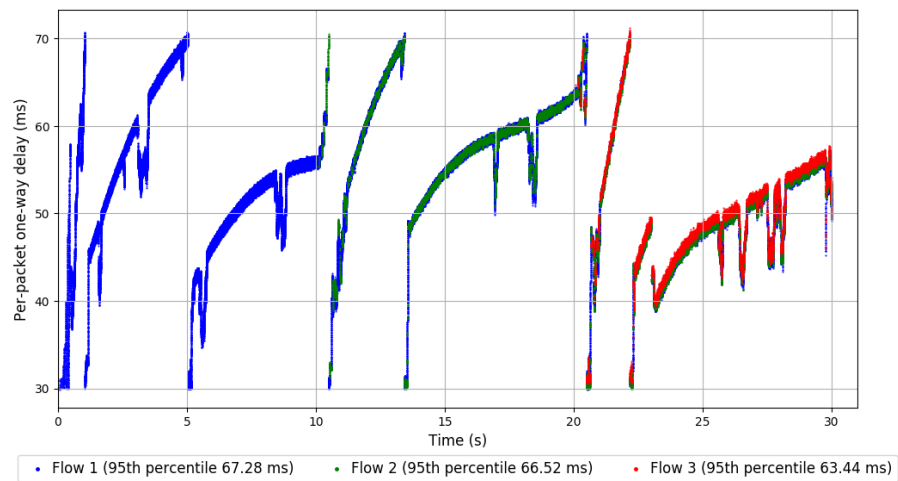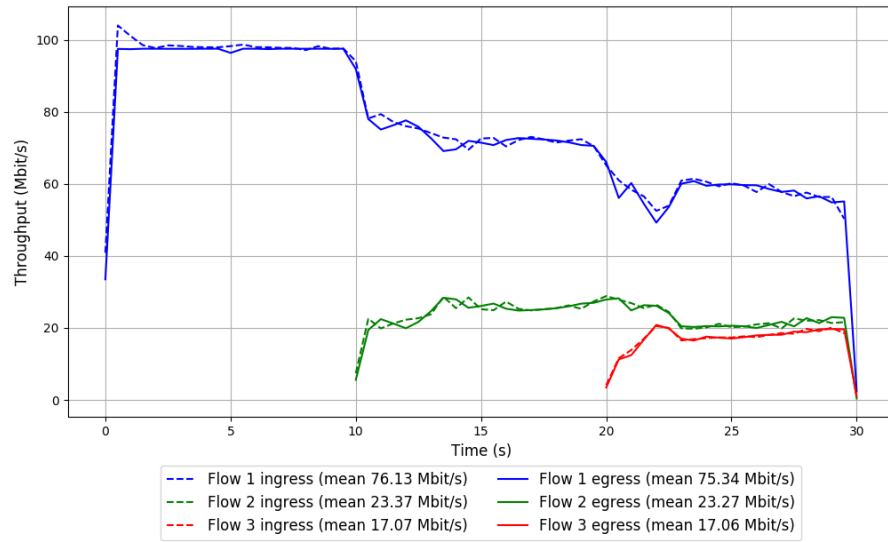
Run 4: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 76.59 Mbit/s) --- Flow 1 egress (mean 75.84 Mbit/s)
Flow 2 ingress (mean 20.60 Mbit/s) --- Flow 2 egress (mean 20.46 Mbit/s)
Flow 3 ingress (mean 21.50 Mbit/s) --- Flow 3 egress (mean 21.29 Mbit/s)

Flow 1 (95th percentile 67.00 ms) Flow 2 (95th percentile 66.99 ms) Flow 3 (95th percentile 62.85 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2018-01-17 05:14:23
End at: 2018-01-17 05:14:53
Local clock offset: -0.346 ms
Remote clock offset: -4.02 ms

# Below is generated by plot.py at 2018-01-17 08:08:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.87 Mbit/s
95th percentile per-packet one-way delay: 63.992 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 56.75 Mbit/s
95th percentile per-packet one-way delay: 64.216 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 50.26 Mbit/s
95th percentile per-packet one-way delay: 63.684 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 13.96 Mbit/s
95th percentile per-packet one-way delay: 64.912 ms
Loss rate: 1.26%
```
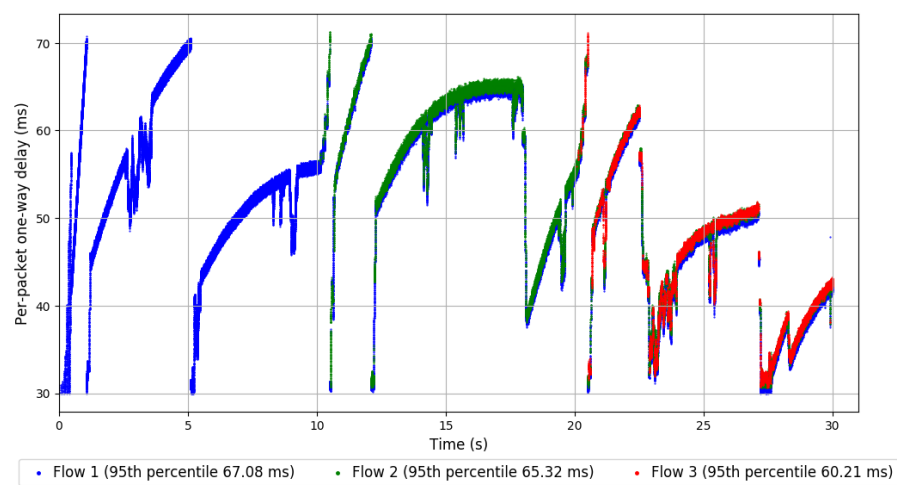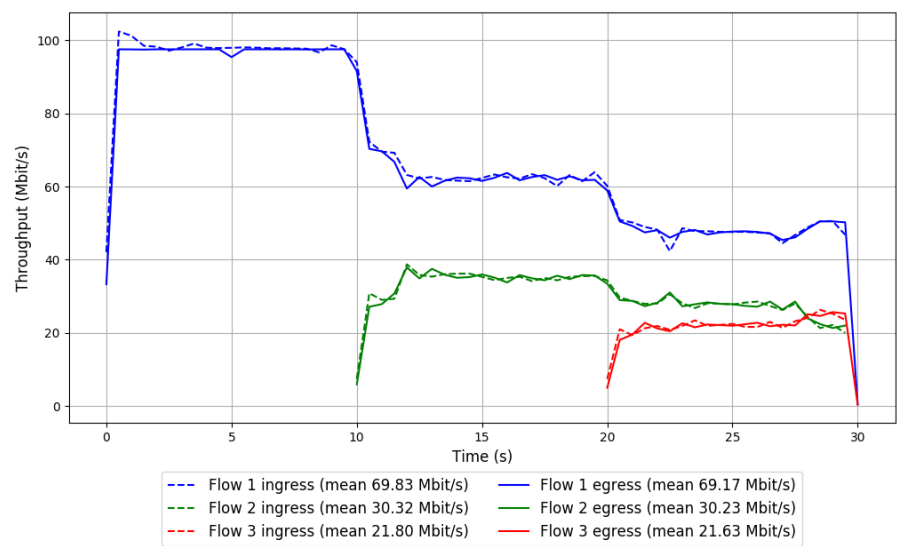
Run 5: Report of TCP Cubic — Data Link

- - - - Flow 1 ingress (mean 57.16 Mbit/s)   —— Flow 1 egress (mean 56.75 Mbit/s)
- - - - Flow 2 ingress (mean 50.71 Mbit/s)   —— Flow 2 egress (mean 50.26 Mbit/s)
- - - - Flow 3 ingress (mean 14.17 Mbit/s)   —— Flow 3 egress (mean 13.96 Mbit/s)

• Flow 1 (95th percentile 64.22 ms)   • Flow 2 (95th percentile 63.68 ms)   • Flow 3 (95th percentile 64.91 ms)

```
Run 6: Statistics of TCP Cubic

Start at: 2018-01-17 05:41:37
End at: 2018-01-17 05:42:07
Local clock offset: -0.2 ms
Remote clock offset: -1.605 ms


# Below is generated by plot.py at 2018-01-17 08:08:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.32 Mbit/s
95th percentile per-packet one-way delay: 67.587 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 53.67 Mbit/s
95th percentile per-packet one-way delay: 68.258 ms
Loss rate: 1.03%
-- Flow 2:
Average throughput: 23.21 Mbit/s
95th percentile per-packet one-way delay: 63.187 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 60.77 Mbit/s
95th percentile per-packet one-way delay: 66.838 ms
Loss rate: 0.64%
```
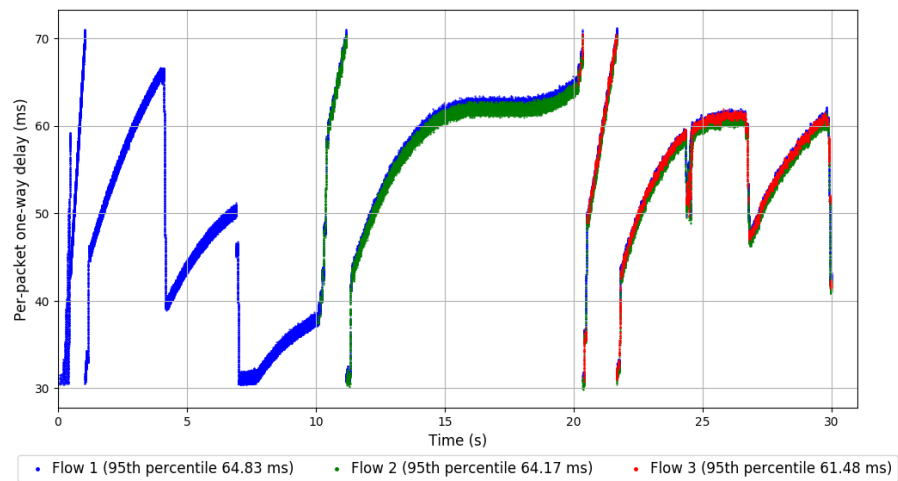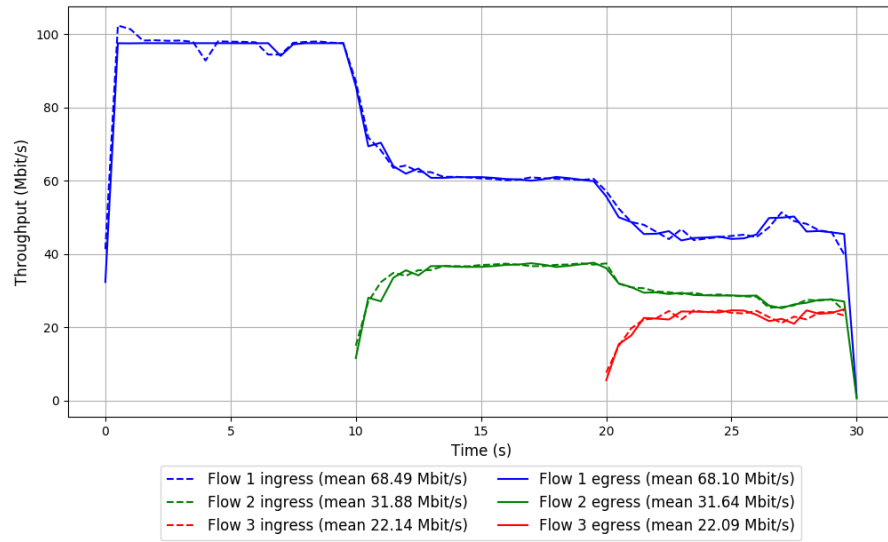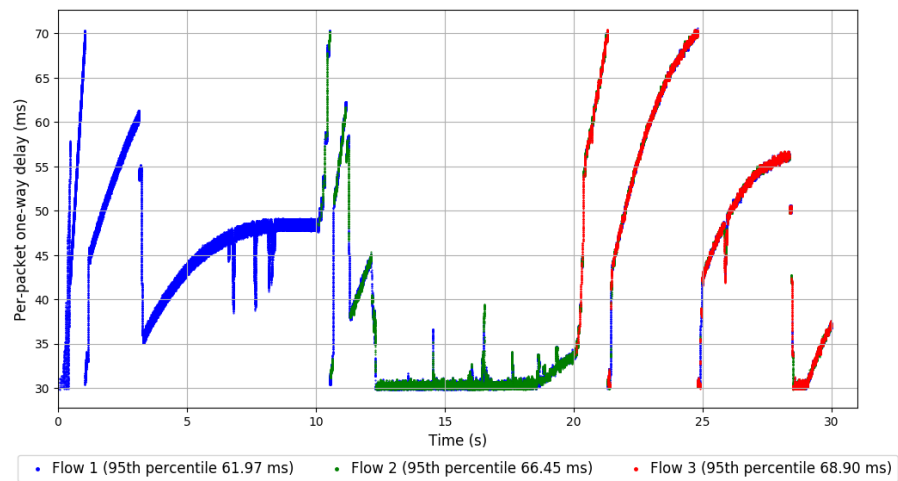
Run 6: Report of TCP Cubic — Data Link

- - - Flow 1 ingress (mean 54.26 Mbit/s)   —— Flow 1 egress (mean 53.67 Mbit/s)
- - - Flow 2 ingress (mean 23.41 Mbit/s)   —— Flow 2 egress (mean 23.21 Mbit/s)
- - - Flow 3 ingress (mean 61.37 Mbit/s)   —— Flow 3 egress (mean 60.77 Mbit/s)

• Flow 1 (95th percentile 68.26 ms)   • Flow 2 (95th percentile 63.19 ms)   • Flow 3 (95th percentile 66.84 ms)

```
Run 7: Statistics of TCP Cubic

Start at: 2018-01-17 06:08:03
End at: 2018-01-17 06:08:33
Local clock offset: -0.118 ms
Remote clock offset: -2.099 ms


# Below is generated by plot.py at 2018-01-17 08:09:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.47 Mbit/s
95th percentile per-packet one-way delay: 67.175 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 75.34 Mbit/s
95th percentile per-packet one-way delay: 67.278 ms
Loss rate: 0.97%
-- Flow 2:
Average throughput: 23.27 Mbit/s
95th percentile per-packet one-way delay: 66.517 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 17.06 Mbit/s
95th percentile per-packet one-way delay: 63.444 ms
Loss rate: 0.21%
```
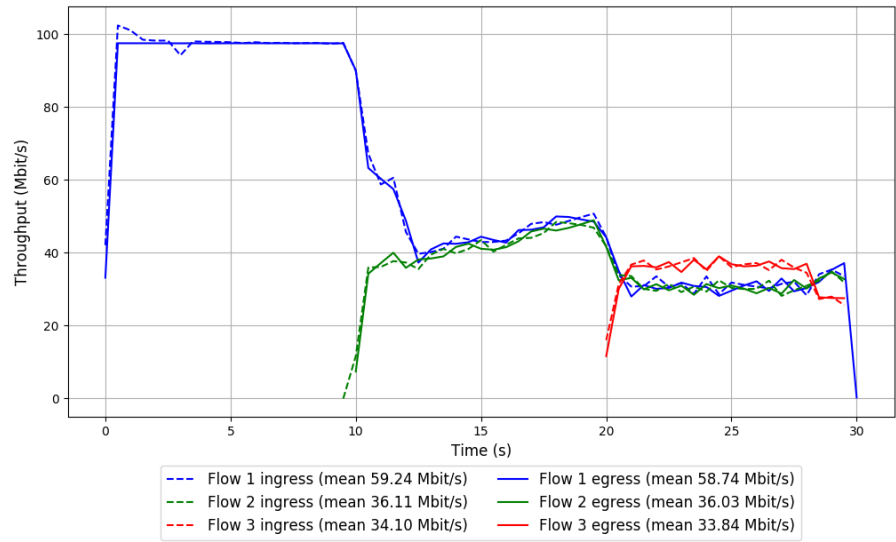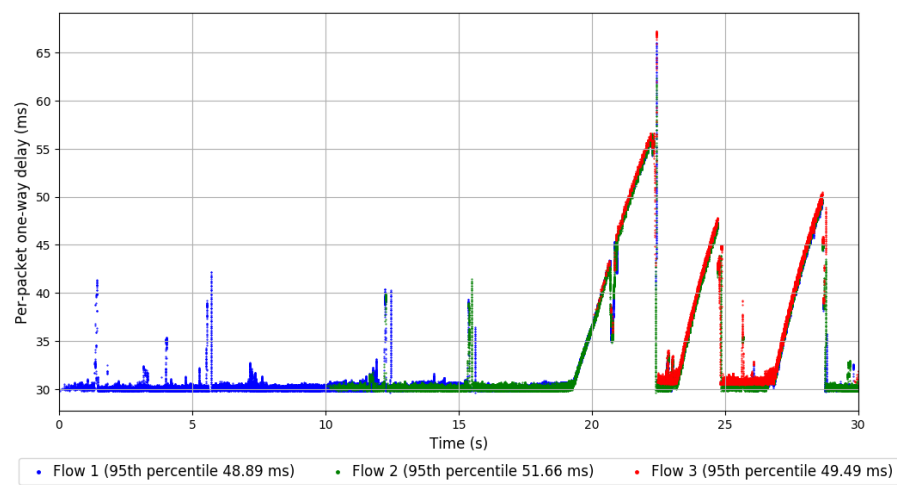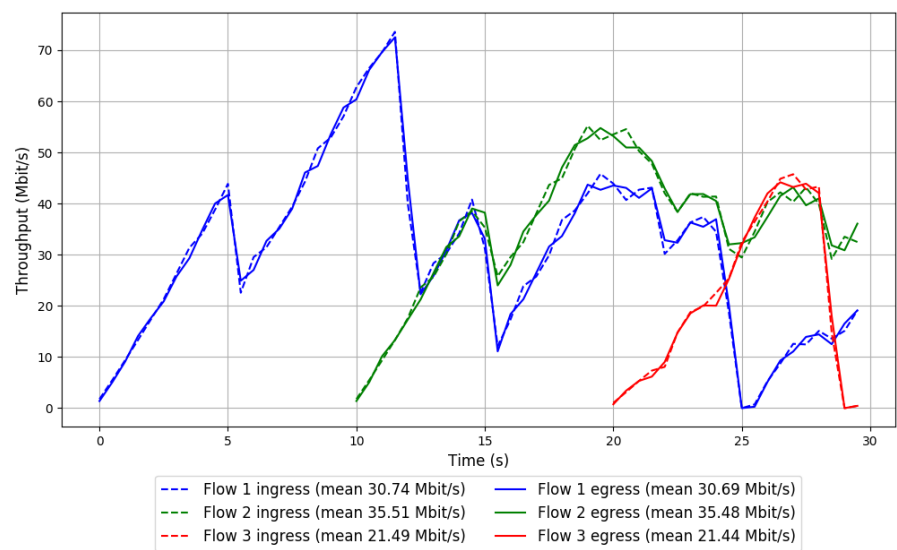
Run 7: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 76.13 Mbit/s) ---- Flow 1 egress (mean 75.34 Mbit/s)
Flow 2 ingress (mean 23.37 Mbit/s) ---- Flow 2 egress (mean 23.27 Mbit/s)
Flow 3 ingress (mean 17.07 Mbit/s) ---- Flow 3 egress (mean 17.06 Mbit/s)

• Flow 1 (95th percentile 67.28 ms)   • Flow 2 (95th percentile 66.52 ms)   • Flow 3 (95th percentile 63.44 ms)

```
Run 8: Statistics of TCP Cubic

Start at: 2018-01-17 06:34:27
End at: 2018-01-17 06:34:57
Local clock offset: -0.07 ms
Remote clock offset: -2.359 ms

# Below is generated by plot.py at 2018-01-17 08:09:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.44 Mbit/s
95th percentile per-packet one-way delay: 66.358 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 69.17 Mbit/s
95th percentile per-packet one-way delay: 67.076 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 30.23 Mbit/s
95th percentile per-packet one-way delay: 65.322 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 21.63 Mbit/s
95th percentile per-packet one-way delay: 60.206 ms
Loss rate: 0.89%
```
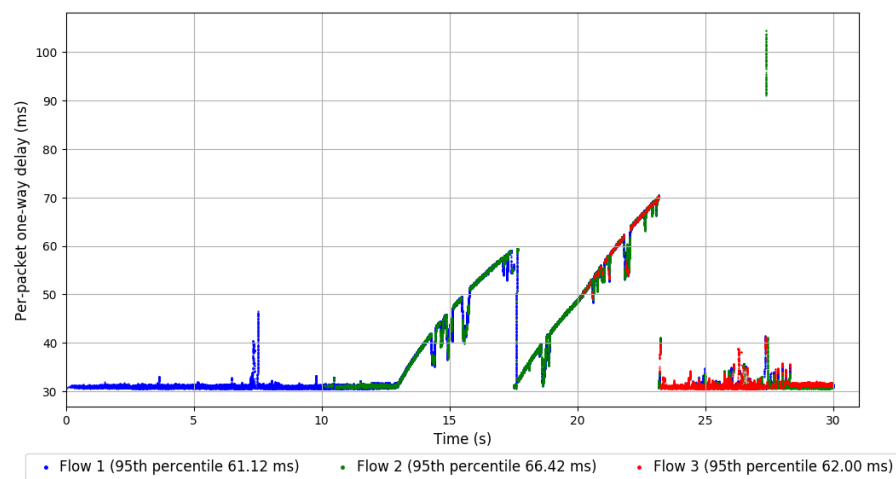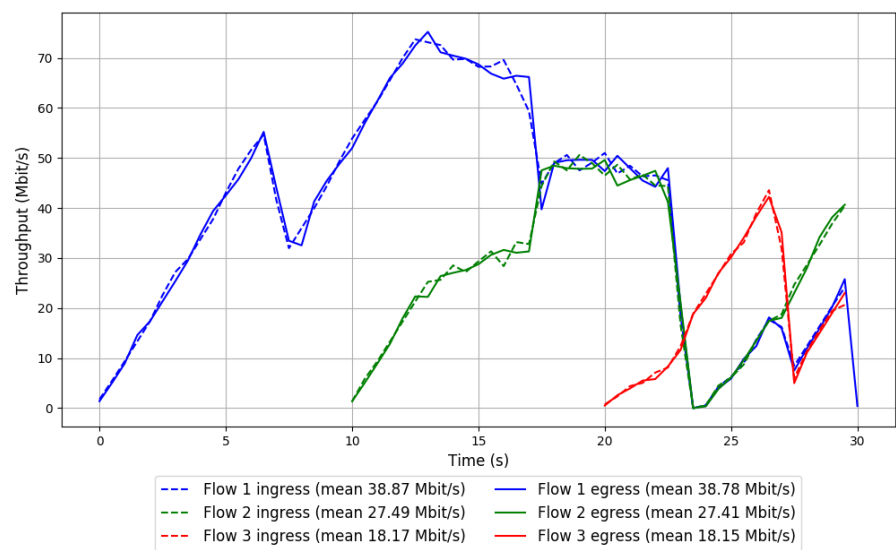
Run 8: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 69.83 Mbit/s) — Flow 1 egress (mean 69.17 Mbit/s)
Flow 2 ingress (mean 30.32 Mbit/s) — Flow 2 egress (mean 30.23 Mbit/s)
Flow 3 ingress (mean 21.80 Mbit/s) — Flow 3 egress (mean 21.63 Mbit/s)

Flow 1 (95th percentile 67.08 ms)   Flow 2 (95th percentile 65.32 ms)   Flow 3 (95th percentile 60.21 ms)

```
Run 9: Statistics of TCP Cubic

Start at: 2018-01-17 06:59:47
End at: 2018-01-17 07:00:17
Local clock offset: 0.066 ms
Remote clock offset: -2.311 ms


# Below is generated by plot.py at 2018-01-17 08:09:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.48 Mbit/s
95th percentile per-packet one-way delay: 64.618 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 68.10 Mbit/s
95th percentile per-packet one-way delay: 64.834 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 31.64 Mbit/s
95th percentile per-packet one-way delay: 64.175 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 22.09 Mbit/s
95th percentile per-packet one-way delay: 61.477 ms
Loss rate: 0.48%
```
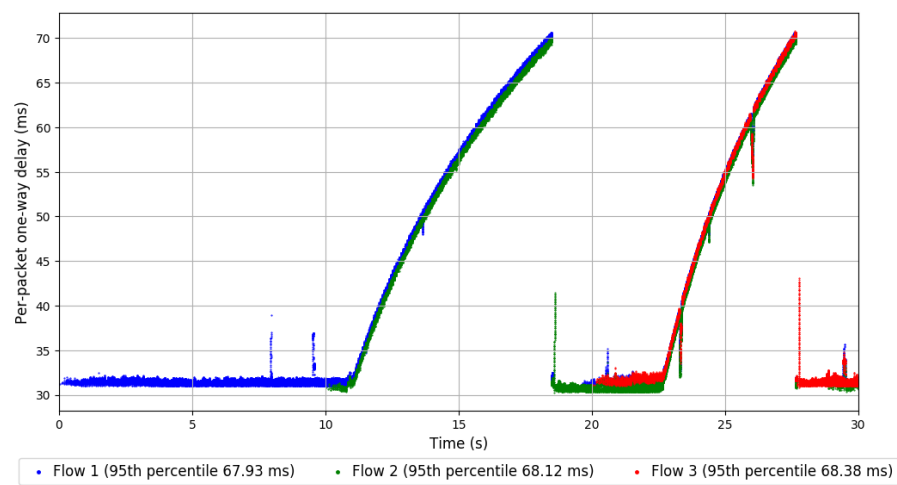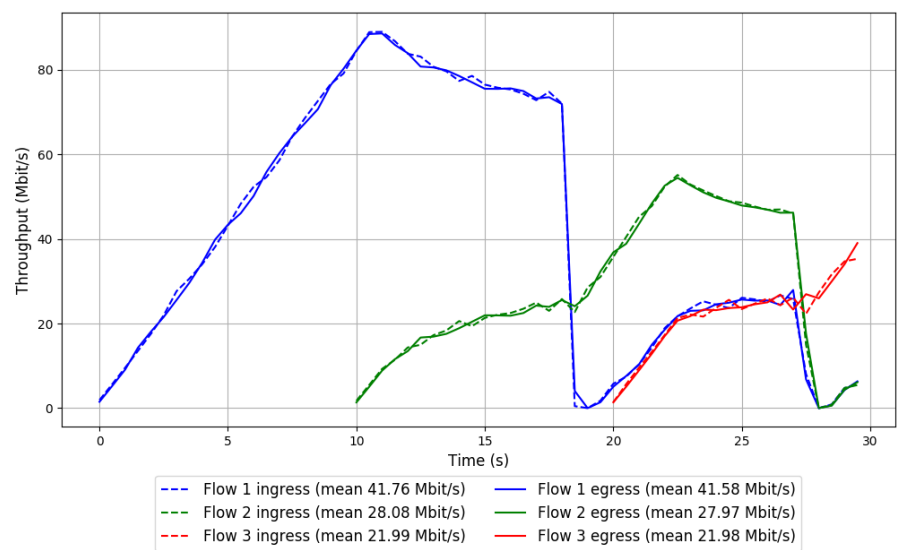
Run 9: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 68.49 Mbit/s)   Flow 1 egress (mean 68.10 Mbit/s)
Flow 2 ingress (mean 31.88 Mbit/s)   Flow 2 egress (mean 31.64 Mbit/s)
Flow 3 ingress (mean 22.14 Mbit/s)   Flow 3 egress (mean 22.09 Mbit/s)

Flow 1 (95th percentile 64.83 ms)   Flow 2 (95th percentile 64.17 ms)   Flow 3 (95th percentile 61.48 ms)

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```
Run 10: Statistics of TCP Cubic

Start at: 2018-01-17 07:24:46
End at: 2018-01-17 07:25:16
Local clock offset: -0.026 ms
Remote clock offset: -2.233 ms


# Below is generated by plot.py at 2018-01-17 08:09:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.92 Mbit/s
95th percentile per-packet one-way delay: 65.936 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 58.74 Mbit/s
95th percentile per-packet one-way delay: 61.969 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 36.03 Mbit/s
95th percentile per-packet one-way delay: 66.455 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 33.84 Mbit/s
95th percentile per-packet one-way delay: 68.899 ms
Loss rate: 0.73%
```
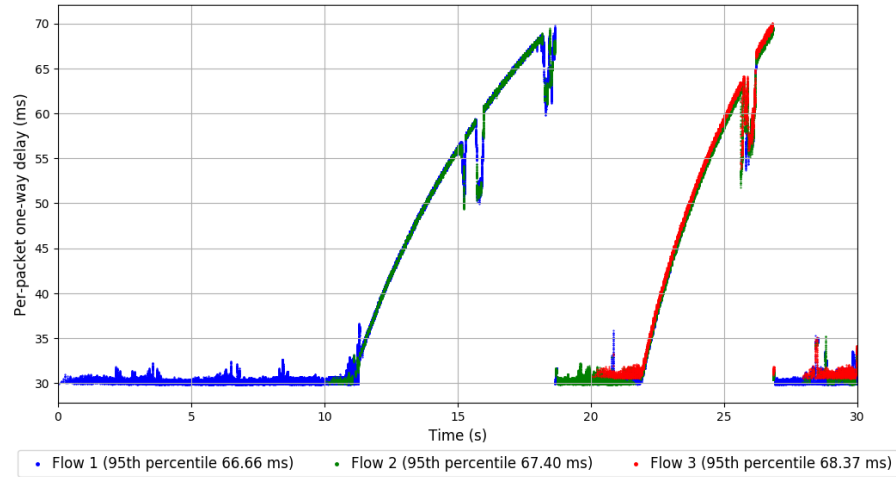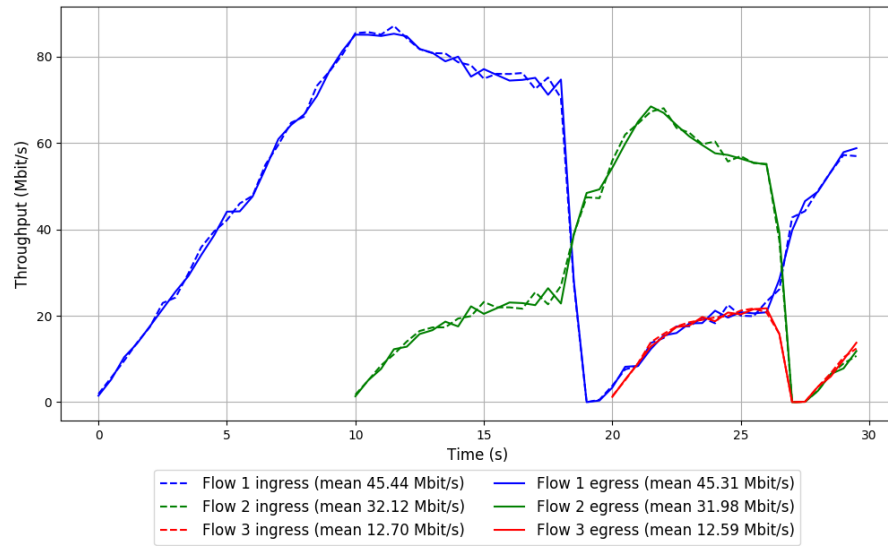
Run 10: Report of TCP Cubic — Data Link

- - - Flow 1 ingress (mean 59.24 Mbit/s) —— Flow 1 egress (mean 58.74 Mbit/s)
- - - Flow 2 ingress (mean 36.11 Mbit/s) —— Flow 2 egress (mean 36.03 Mbit/s)
- - - Flow 3 ingress (mean 34.10 Mbit/s) —— Flow 3 egress (mean 33.84 Mbit/s)

· Flow 1 (95th percentile 61.97 ms)   · Flow 2 (95th percentile 66.45 ms)   · Flow 3 (95th percentile 68.90 ms)

```
Run 1: Statistics of LEDBAT

Start at: 2018-01-17 03:45:26
End at: 2018-01-17 03:45:56
Local clock offset: -0.697 ms
Remote clock offset: -2.151 ms


# Below is generated by plot.py at 2018-01-17 08:09:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.42 Mbit/s
95th percentile per-packet one-way delay: 50.137 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 30.69 Mbit/s
95th percentile per-packet one-way delay: 48.888 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 35.48 Mbit/s
95th percentile per-packet one-way delay: 51.661 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 21.44 Mbit/s
95th percentile per-packet one-way delay: 49.488 ms
Loss rate: 0.29%
```
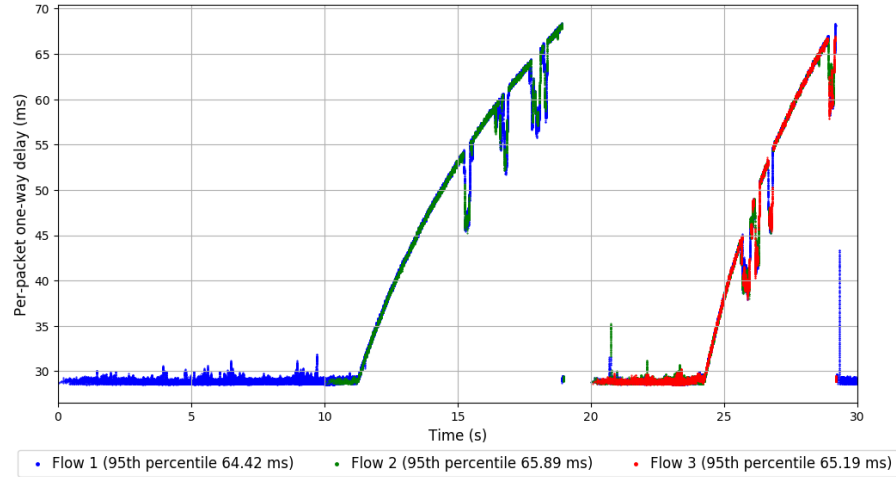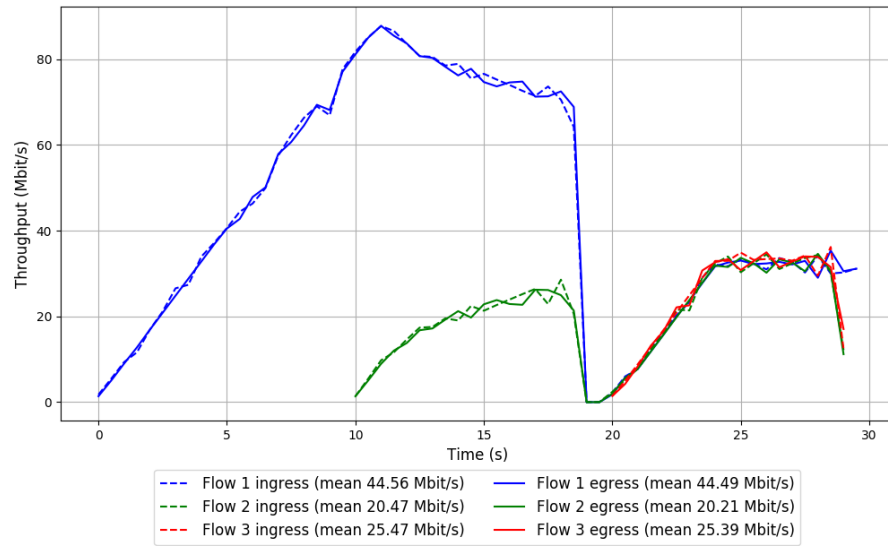
Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2018-01-17 04:11:20
End at: 2018-01-17 04:11:50
Local clock offset: -0.907 ms
Remote clock offset: -2.056 ms


# Below is generated by plot.py at 2018-01-17 08:09:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.02 Mbit/s
95th percentile per-packet one-way delay: 64.582 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 38.78 Mbit/s
95th percentile per-packet one-way delay: 61.121 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 27.41 Mbit/s
95th percentile per-packet one-way delay: 66.420 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 18.15 Mbit/s
95th percentile per-packet one-way delay: 61.997 ms
Loss rate: 0.29%
```
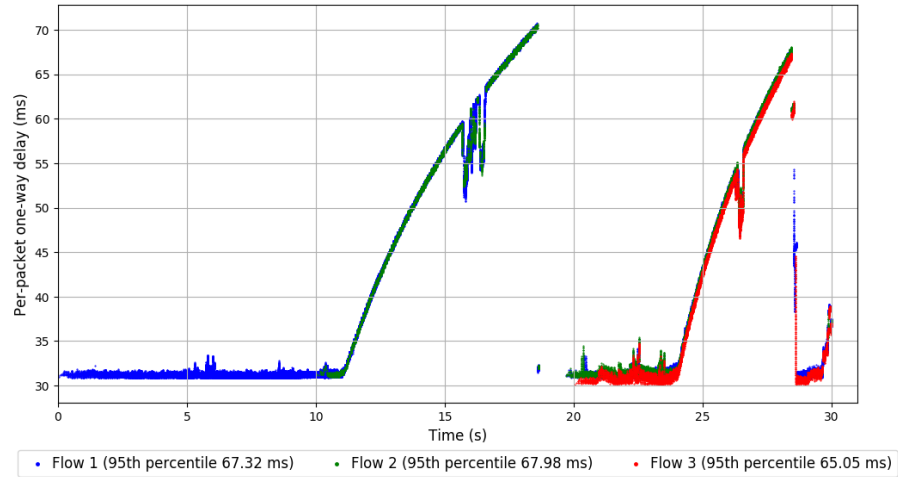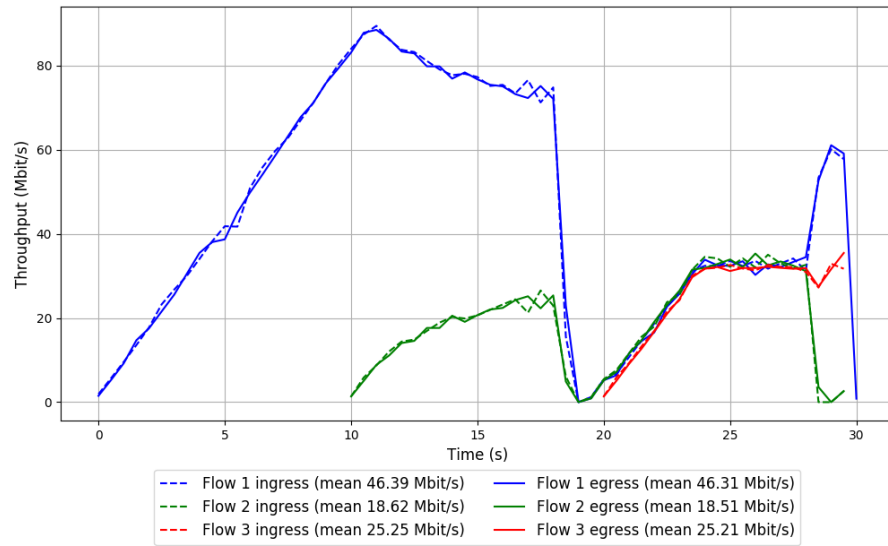
Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2018-01-17 04:37:20
End at: 2018-01-17 04:37:50
Local clock offset: -0.722 ms
Remote clock offset: -1.564 ms


# Below is generated by plot.py at 2018-01-17 08:09:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.46 Mbit/s
95th percentile per-packet one-way delay: 68.083 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 41.58 Mbit/s
95th percentile per-packet one-way delay: 67.930 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 27.97 Mbit/s
95th percentile per-packet one-way delay: 68.123 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 21.98 Mbit/s
95th percentile per-packet one-way delay: 68.375 ms
Loss rate: 0.03%
```
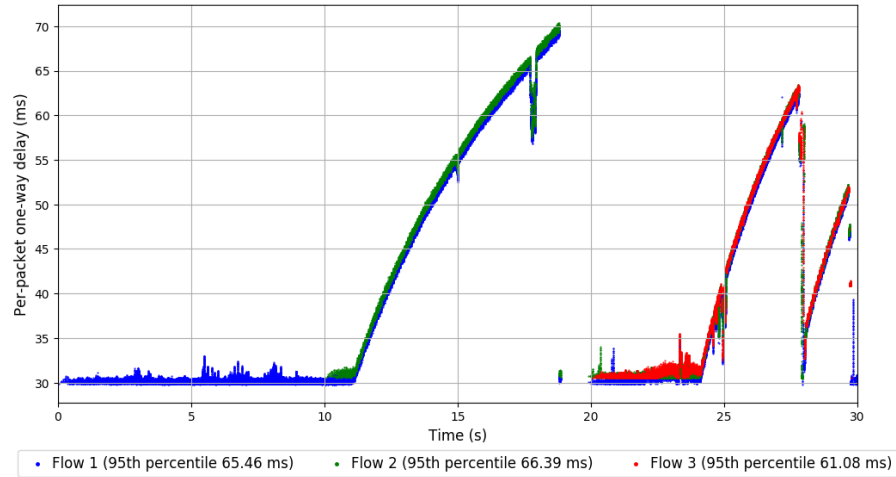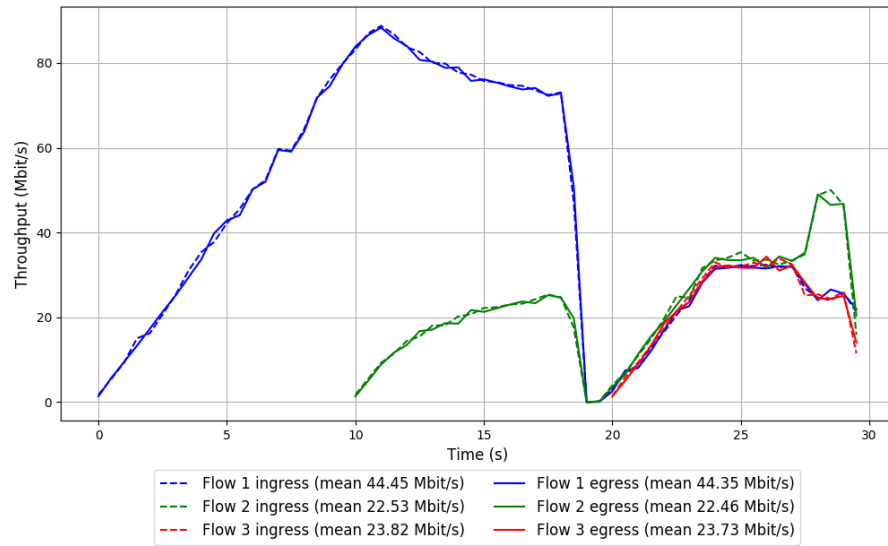
Run 3: Report of LEDBAT — Data Link

- - - - Flow 1 ingress (mean 41.76 Mbit/s) ——— Flow 1 egress (mean 41.58 Mbit/s)
- - - - Flow 2 ingress (mean 28.08 Mbit/s) ——— Flow 2 egress (mean 27.97 Mbit/s)
- - - - Flow 3 ingress (mean 21.99 Mbit/s) ——— Flow 3 egress (mean 21.98 Mbit/s)

- Flow 1 (95th percentile 67.93 ms)　　• Flow 2 (95th percentile 68.12 ms)　　• Flow 3 (95th percentile 68.38 ms)

49

```
Run 4: Statistics of LEDBAT

Start at: 2018-01-17 05:03:52
End at: 2018-01-17 05:04:22
Local clock offset: -0.482 ms
Remote clock offset: -1.862 ms


# Below is generated by plot.py at 2018-01-17 08:09:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.76 Mbit/s
95th percentile per-packet one-way delay: 66.994 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 45.31 Mbit/s
95th percentile per-packet one-way delay: 66.659 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 31.98 Mbit/s
95th percentile per-packet one-way delay: 67.396 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 12.59 Mbit/s
95th percentile per-packet one-way delay: 68.371 ms
Loss rate: 0.86%
```
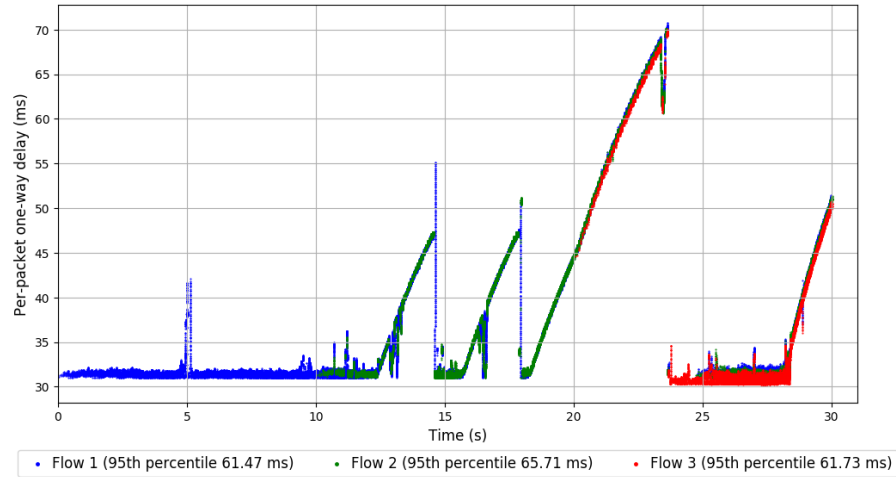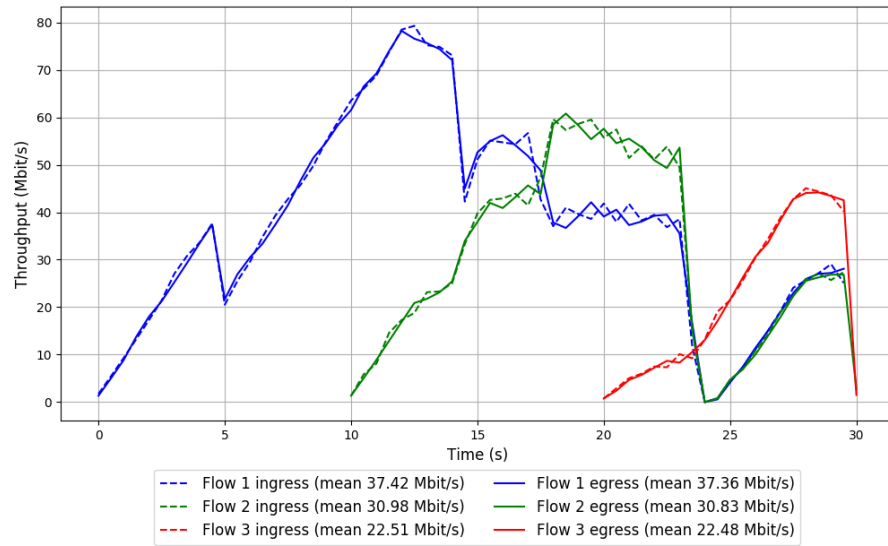
Run 4: Report of LEDBAT — Data Link

```
Run 5: Statistics of LEDBAT

Start at: 2018-01-17 05:31:16
End at: 2018-01-17 05:31:46
Local clock offset: -0.252 ms
Remote clock offset: -3.897 ms

# Below is generated by plot.py at 2018-01-17 08:10:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.15 Mbit/s
95th percentile per-packet one-way delay: 65.148 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 44.49 Mbit/s
95th percentile per-packet one-way delay: 64.424 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 20.21 Mbit/s
95th percentile per-packet one-way delay: 65.886 ms
Loss rate: 1.29%
-- Flow 3:
Average throughput: 25.39 Mbit/s
95th percentile per-packet one-way delay: 65.191 ms
Loss rate: 0.31%
```
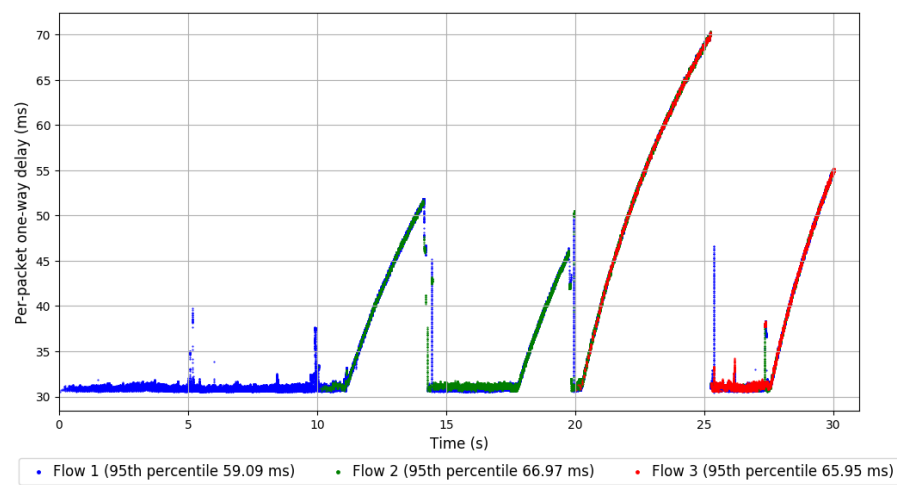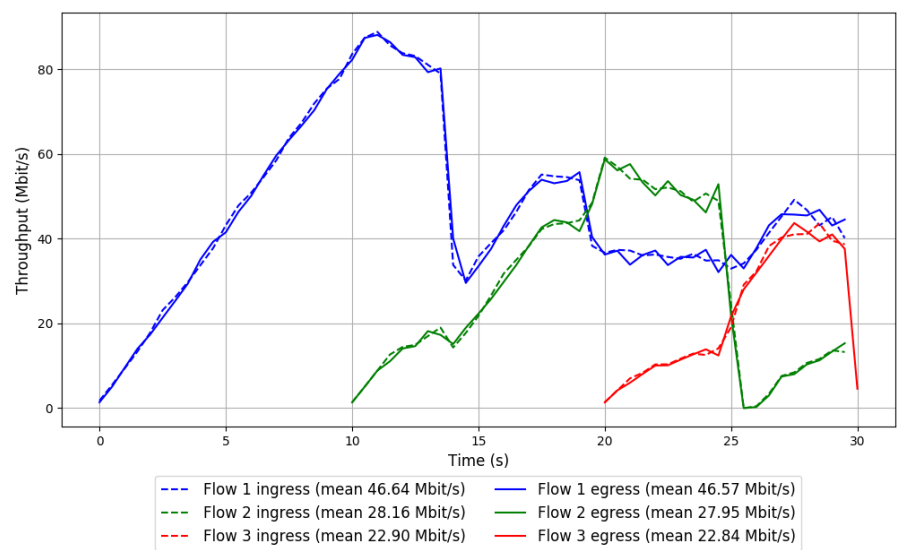
Run 5: Report of LEDBAT — Data Link

- - - Flow 1 ingress (mean 44.56 Mbit/s) —— Flow 1 egress (mean 44.49 Mbit/s)
- - - Flow 2 ingress (mean 20.47 Mbit/s) —— Flow 2 egress (mean 20.21 Mbit/s)
- - - Flow 3 ingress (mean 25.47 Mbit/s) —— Flow 3 egress (mean 25.39 Mbit/s)

• Flow 1 (95th percentile 64.42 ms)　　• Flow 2 (95th percentile 65.89 ms)　　• Flow 3 (95th percentile 65.19 ms)

```
Run 6: Statistics of LEDBAT

Start at: 2018-01-17 05:57:51
End at: 2018-01-17 05:58:21
Local clock offset: -0.086 ms
Remote clock offset: -1.679 ms

# Below is generated by plot.py at 2018-01-17 08:10:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.99 Mbit/s
95th percentile per-packet one-way delay: 67.247 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 46.31 Mbit/s
95th percentile per-packet one-way delay: 67.317 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 18.51 Mbit/s
95th percentile per-packet one-way delay: 67.976 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 25.21 Mbit/s
95th percentile per-packet one-way delay: 65.054 ms
Loss rate: 0.10%
```
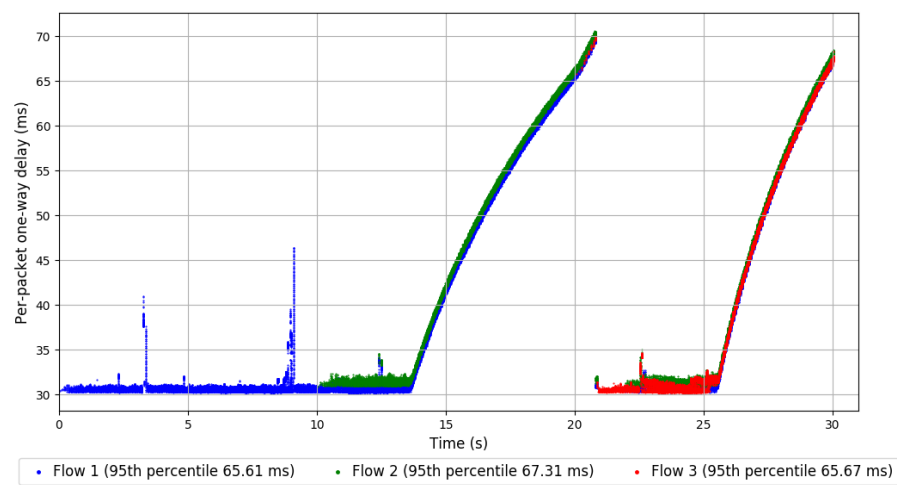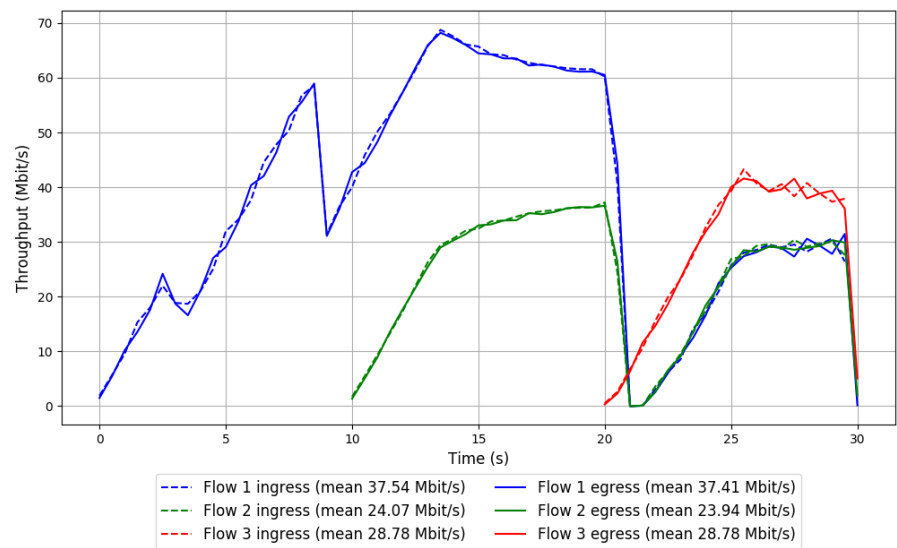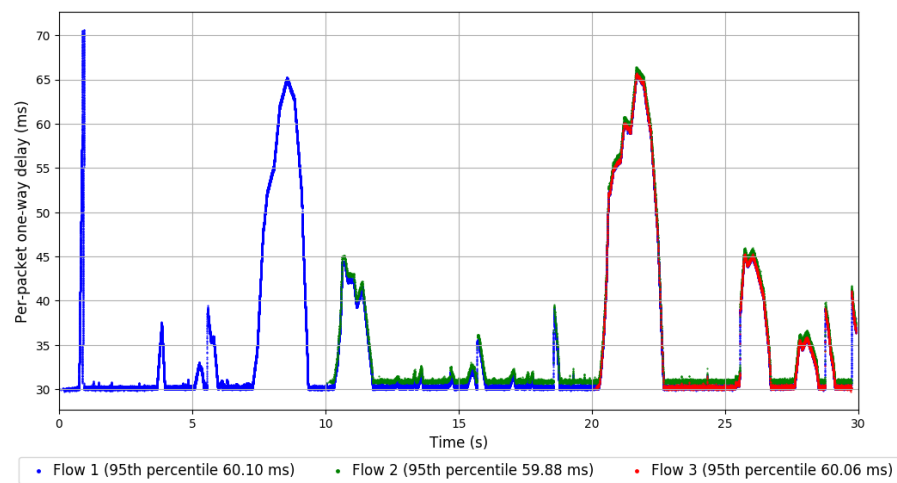
Run 6: Report of LEDBAT — Data Link

Flow 1 ingress (mean 46.39 Mbit/s) --- Flow 1 egress (mean 46.31 Mbit/s)
Flow 2 ingress (mean 18.62 Mbit/s) --- Flow 2 egress (mean 18.51 Mbit/s)
Flow 3 ingress (mean 25.25 Mbit/s) --- Flow 3 egress (mean 25.21 Mbit/s)

Flow 1 (95th percentile 67.32 ms) • Flow 2 (95th percentile 67.98 ms) • Flow 3 (95th percentile 65.05 ms)

```
Run 7: Statistics of LEDBAT

Start at: 2018-01-17 06:24:26
End at: 2018-01-17 06:24:56
Local clock offset: 0.001 ms
Remote clock offset: -2.173 ms

# Below is generated by plot.py at 2018-01-17 08:10:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.84 Mbit/s
95th percentile per-packet one-way delay: 65.241 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 44.35 Mbit/s
95th percentile per-packet one-way delay: 65.460 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 22.46 Mbit/s
95th percentile per-packet one-way delay: 66.387 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 23.73 Mbit/s
95th percentile per-packet one-way delay: 61.076 ms
Loss rate: 0.40%
```
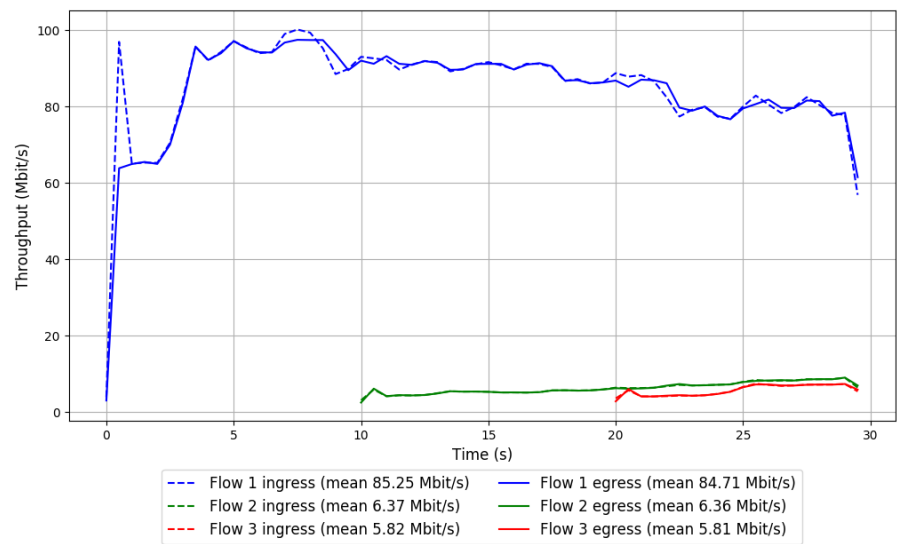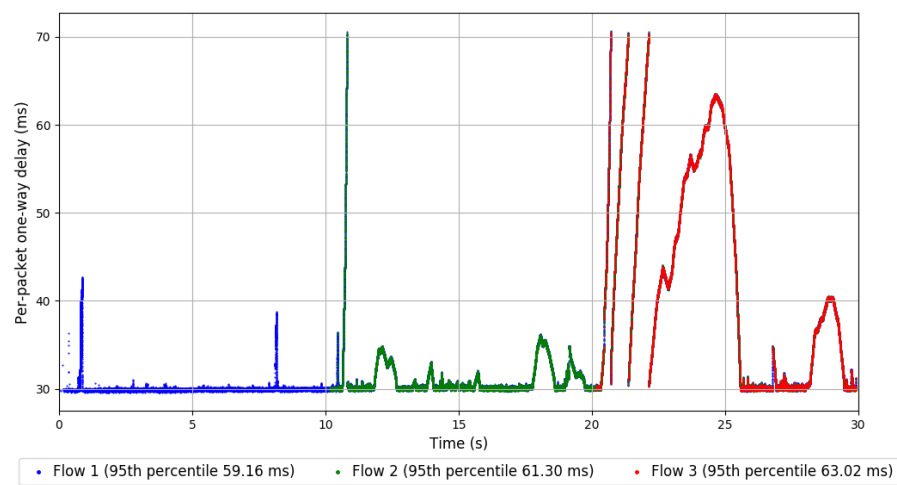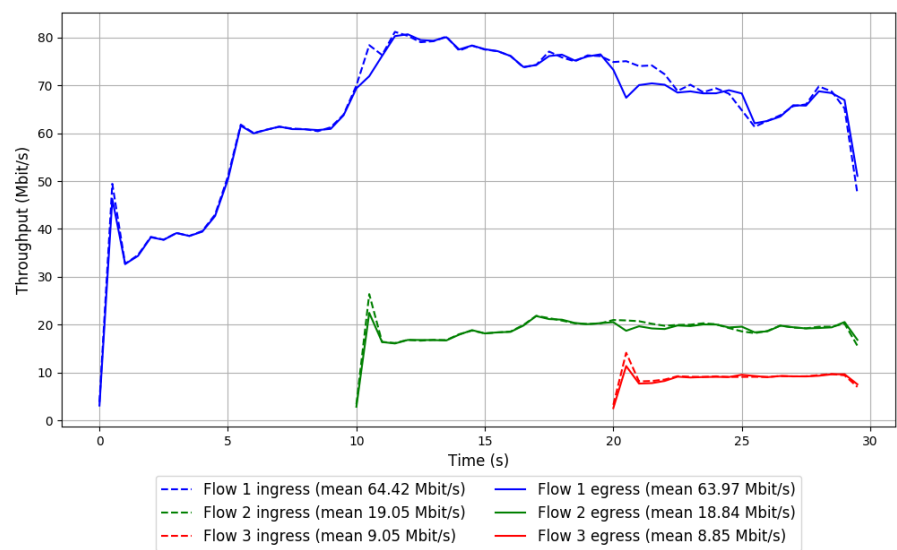
Run 7: Report of LEDBAT — Data Link

Flow 1 ingress (mean 44.45 Mbit/s) --- Flow 1 egress (mean 44.35 Mbit/s)
Flow 2 ingress (mean 22.53 Mbit/s) --- Flow 2 egress (mean 22.46 Mbit/s)
Flow 3 ingress (mean 23.82 Mbit/s) --- Flow 3 egress (mean 23.73 Mbit/s)

Flow 1 (95th percentile 65.46 ms)   Flow 2 (95th percentile 66.39 ms)   Flow 3 (95th percentile 61.08 ms)

```
Run 8: Statistics of LEDBAT

Start at: 2018-01-17 06:50:10
End at: 2018-01-17 06:50:40
Local clock offset: 0.022 ms
Remote clock offset: -1.799 ms


# Below is generated by plot.py at 2018-01-17 08:10:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.32 Mbit/s
95th percentile per-packet one-way delay: 63.497 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 37.36 Mbit/s
95th percentile per-packet one-way delay: 61.466 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 30.83 Mbit/s
95th percentile per-packet one-way delay: 65.708 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 22.48 Mbit/s
95th percentile per-packet one-way delay: 61.725 ms
Loss rate: 0.10%
```
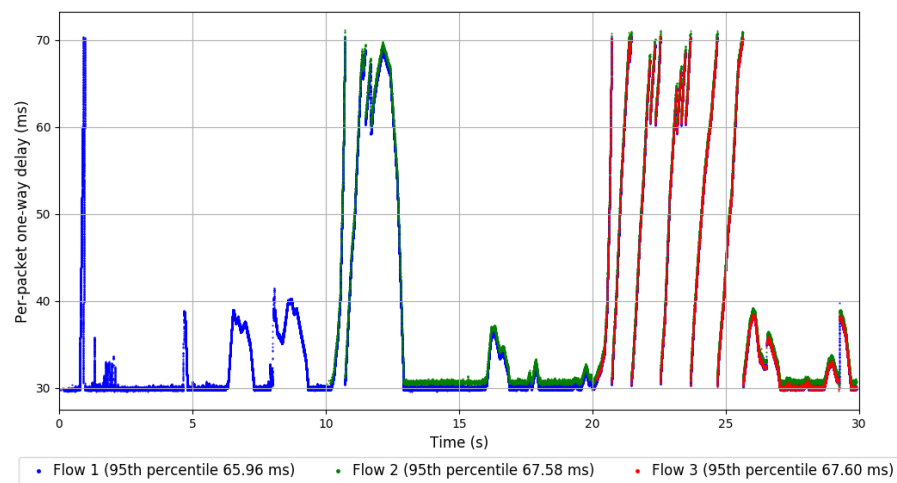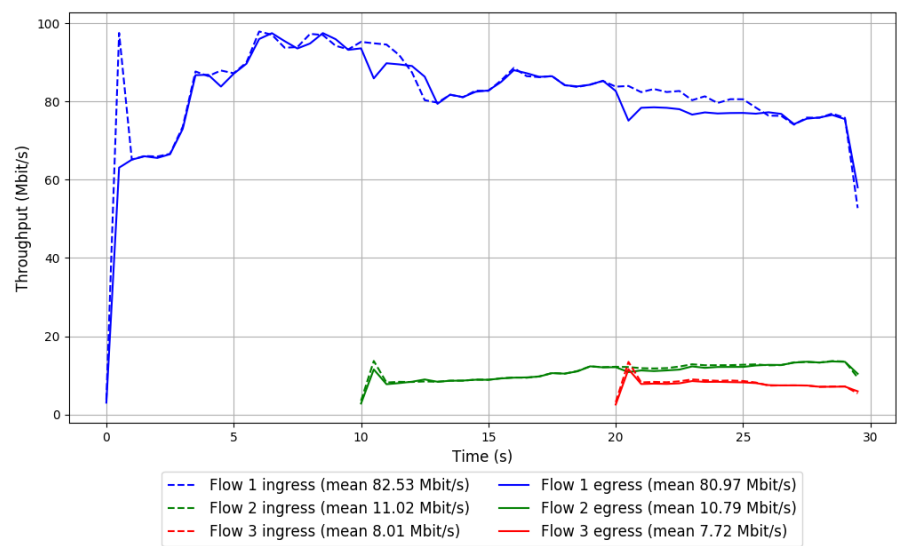
Run 8: Report of LEDBAT — Data Link

Flow 1 ingress (mean 37.42 Mbit/s)   Flow 1 egress (mean 37.36 Mbit/s)
Flow 2 ingress (mean 30.98 Mbit/s)   Flow 2 egress (mean 30.83 Mbit/s)
Flow 3 ingress (mean 22.51 Mbit/s)   Flow 3 egress (mean 22.48 Mbit/s)

Flow 1 (95th percentile 61.47 ms)   Flow 2 (95th percentile 65.71 ms)   Flow 3 (95th percentile 61.73 ms)

```
Run 9: Statistics of LEDBAT

Start at: 2018-01-17 07:15:10
End at: 2018-01-17 07:15:40
Local clock offset: 0.089 ms
Remote clock offset: -2.137 ms

# Below is generated by plot.py at 2018-01-17 08:11:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.71 Mbit/s
95th percentile per-packet one-way delay: 64.261 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 46.57 Mbit/s
95th percentile per-packet one-way delay: 59.094 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 27.95 Mbit/s
95th percentile per-packet one-way delay: 66.970 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 22.84 Mbit/s
95th percentile per-packet one-way delay: 65.948 ms
Loss rate: 0.03%
```
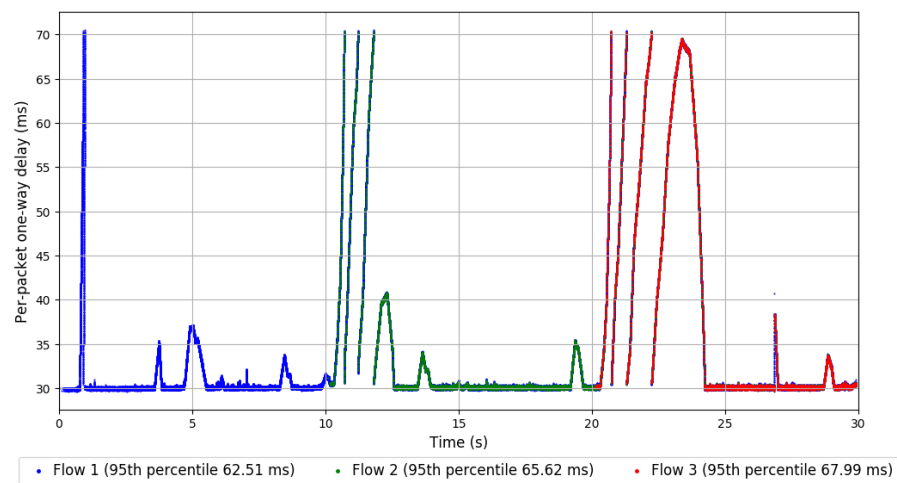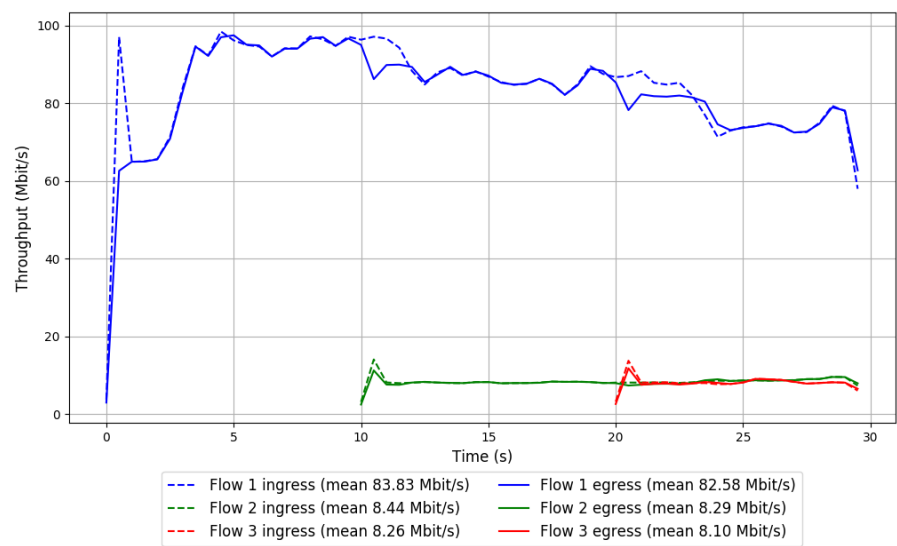
Run 9: Report of LEDBAT — Data Link

Flow 1 ingress (mean 46.64 Mbit/s) — — — Flow 1 egress (mean 46.57 Mbit/s)
Flow 2 ingress (mean 28.16 Mbit/s) — — — Flow 2 egress (mean 27.95 Mbit/s)
Flow 3 ingress (mean 22.90 Mbit/s) — — — Flow 3 egress (mean 22.84 Mbit/s)

Flow 1 (95th percentile 59.09 ms)   Flow 2 (95th percentile 66.97 ms)   Flow 3 (95th percentile 65.95 ms)
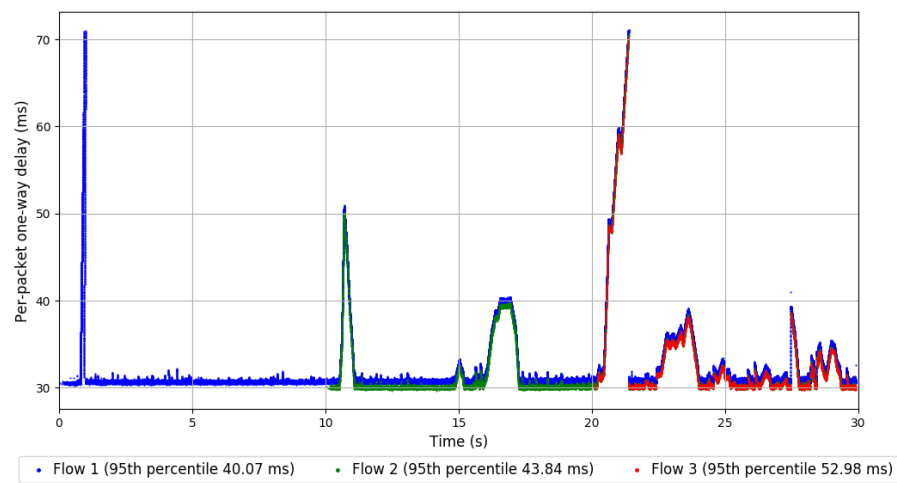
61

```
Run 10: Statistics of LEDBAT

Start at: 2018-01-17 07:40:20
End at: 2018-01-17 07:40:50
Local clock offset: 0.014 ms
Remote clock offset: -1.625 ms


# Below is generated by plot.py at 2018-01-17 08:11:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.87 Mbit/s
95th percentile per-packet one-way delay: 66.260 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 37.41 Mbit/s
95th percentile per-packet one-way delay: 65.615 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 23.94 Mbit/s
95th percentile per-packet one-way delay: 67.311 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 28.78 Mbit/s
95th percentile per-packet one-way delay: 65.673 ms
Loss rate: 0.00%
```

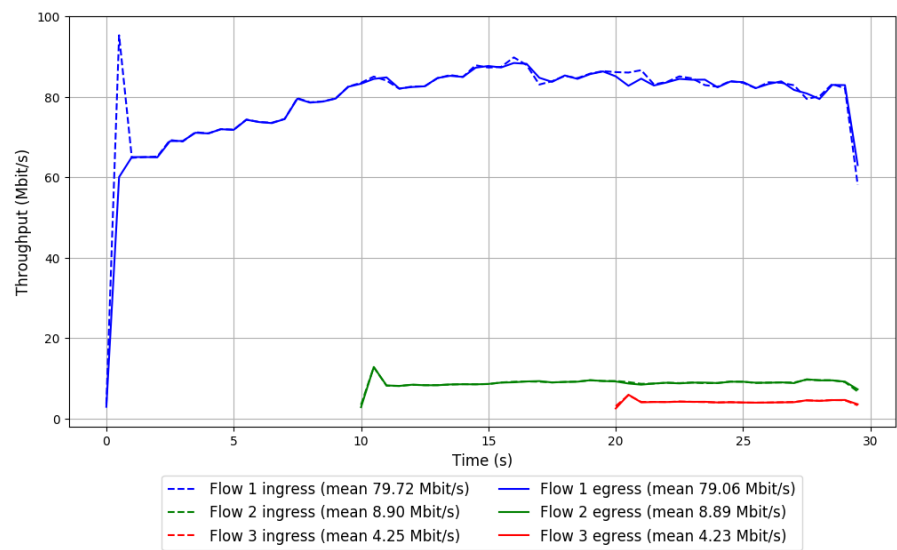Run 10: Report of LEDBAT — Data Link

63

```
Run 1: Statistics of PCC

Start at: 2018-01-17 03:44:03
End at: 2018-01-17 03:44:33
Local clock offset: -0.768 ms
Remote clock offset: -2.055 ms

# Below is generated by plot.py at 2018-01-17 08:11:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.86 Mbit/s
95th percentile per-packet one-way delay: 60.074 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 84.71 Mbit/s
95th percentile per-packet one-way delay: 60.100 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 6.36 Mbit/s
95th percentile per-packet one-way delay: 59.885 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 5.81 Mbit/s
95th percentile per-packet one-way delay: 60.056 ms
Loss rate: 0.00%
```
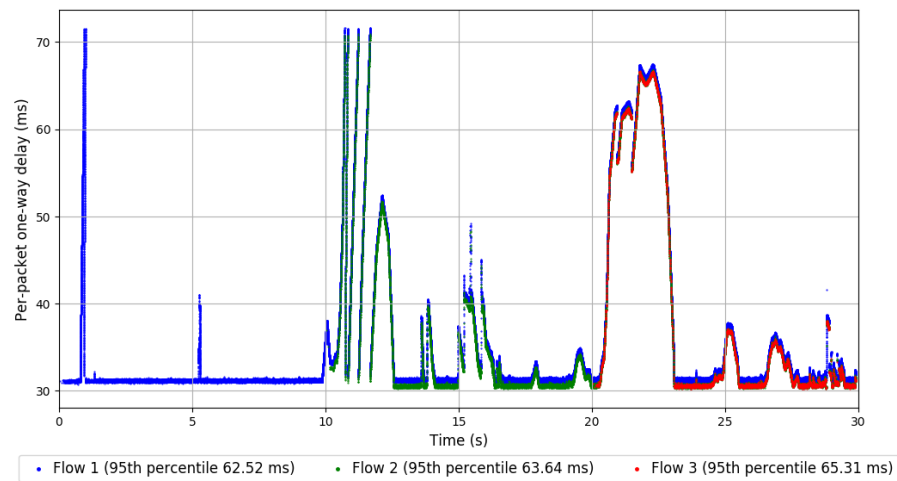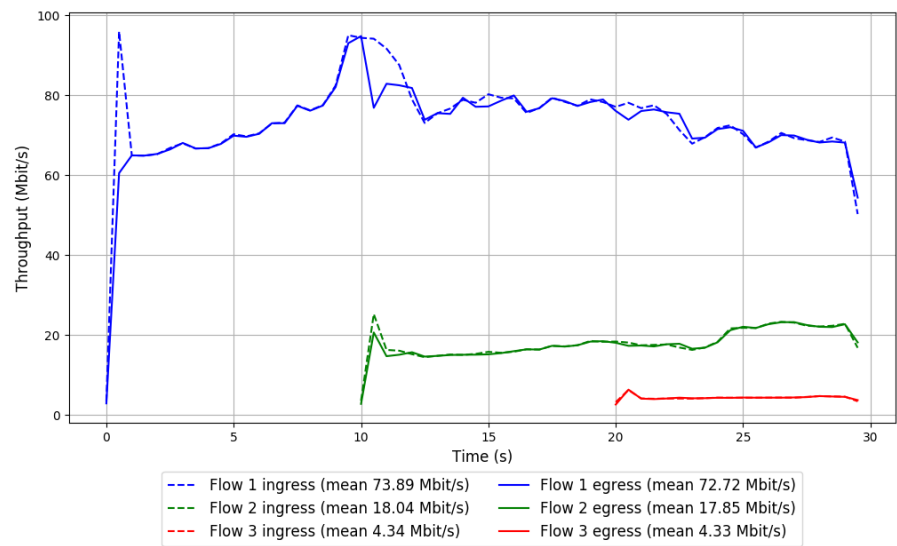
Run 1: Report of PCC — Data Link

- - - Flow 1 ingress (mean 85.25 Mbit/s) ——— Flow 1 egress (mean 84.71 Mbit/s)
- - - Flow 2 ingress (mean 6.37 Mbit/s) ——— Flow 2 egress (mean 6.36 Mbit/s)
- - - Flow 3 ingress (mean 5.82 Mbit/s) ——— Flow 3 egress (mean 5.81 Mbit/s)

• Flow 1 (95th percentile 60.10 ms)   • Flow 2 (95th percentile 59.88 ms)   • Flow 3 (95th percentile 60.06 ms)

65

```
Run 2: Statistics of PCC

Start at: 2018-01-17 04:09:57
End at: 2018-01-17 04:10:27
Local clock offset: -0.79 ms
Remote clock offset: -2.077 ms


# Below is generated by plot.py at 2018-01-17 08:11:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.41 Mbit/s
95th percentile per-packet one-way delay: 59.742 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 63.97 Mbit/s
95th percentile per-packet one-way delay: 59.160 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 18.84 Mbit/s
95th percentile per-packet one-way delay: 61.302 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 8.85 Mbit/s
95th percentile per-packet one-way delay: 63.022 ms
Loss rate: 2.20%
```
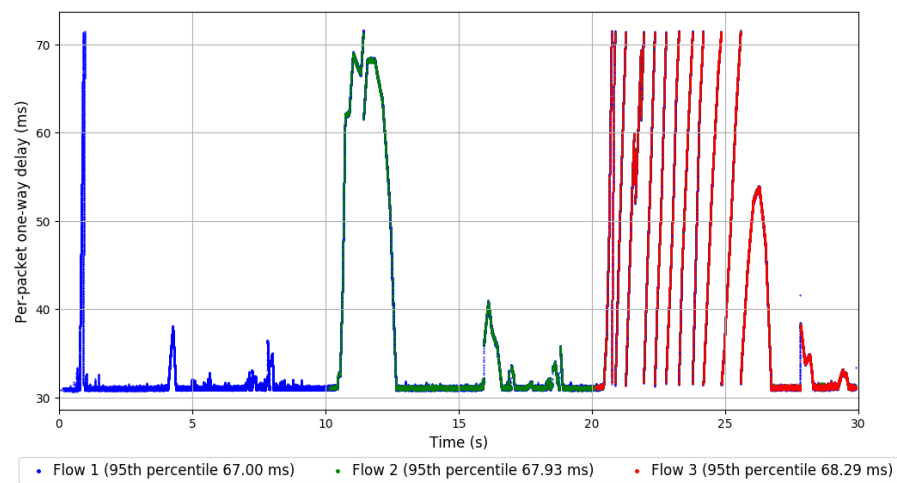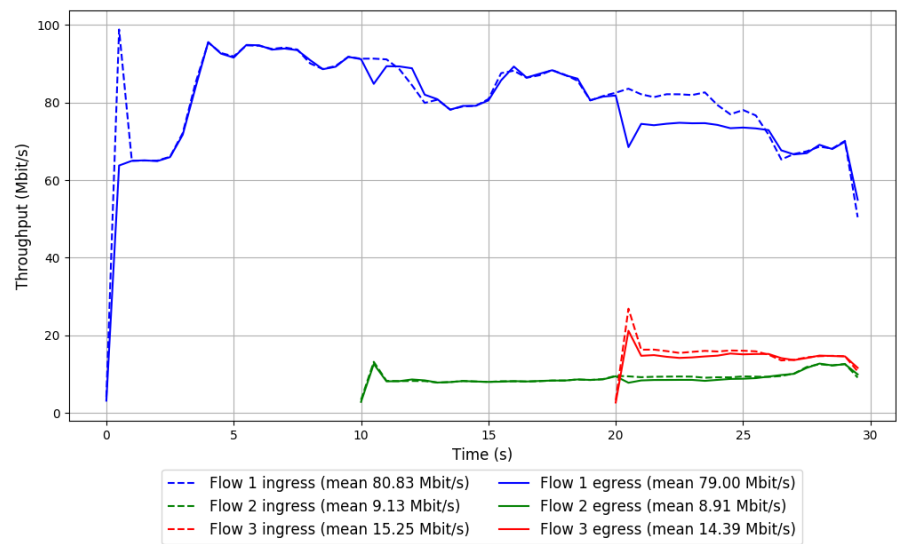
Run 2: Report of PCC — Data Link

```
Run 3: Statistics of PCC

Start at: 2018-01-17 04:35:57
End at: 2018-01-17 04:36:27
Local clock offset: -0.705 ms
Remote clock offset: -2.142 ms


# Below is generated by plot.py at 2018-01-17 08:11:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.69 Mbit/s
95th percentile per-packet one-way delay: 66.169 ms
Loss rate: 1.96%
-- Flow 1:
Average throughput: 80.97 Mbit/s
95th percentile per-packet one-way delay: 65.957 ms
Loss rate: 1.89%
-- Flow 2:
Average throughput: 10.79 Mbit/s
95th percentile per-packet one-way delay: 67.580 ms
Loss rate: 2.13%
-- Flow 3:
Average throughput: 7.72 Mbit/s
95th percentile per-packet one-way delay: 67.600 ms
Loss rate: 3.66%
```
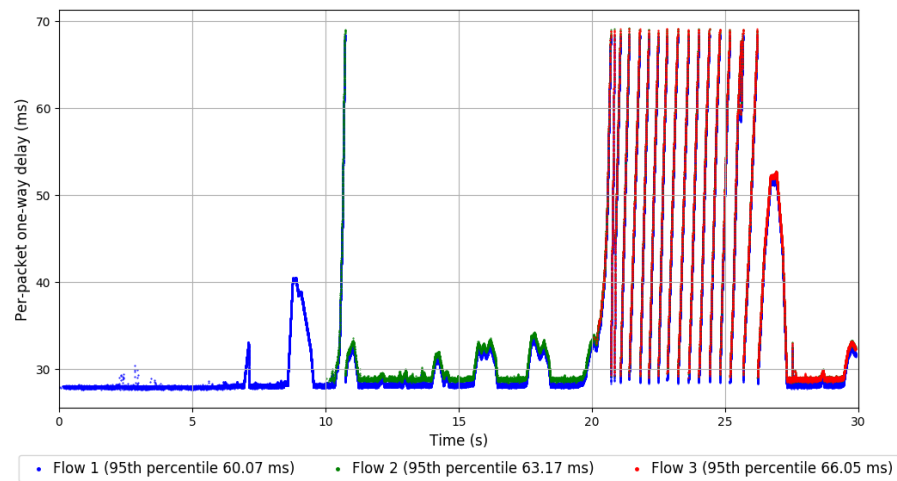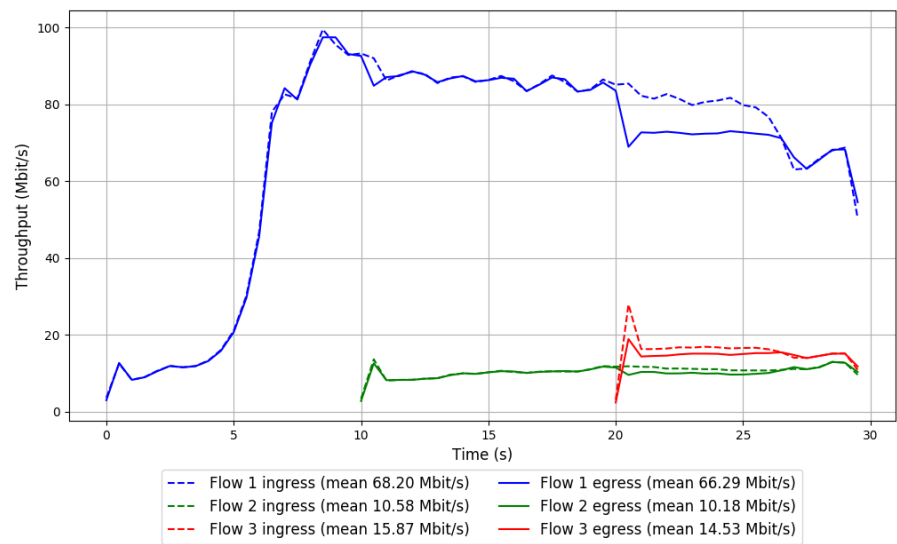
Run 3: Report of PCC — Data Link

Flow 1 ingress (mean 82.53 Mbit/s)   Flow 1 egress (mean 80.97 Mbit/s)
Flow 2 ingress (mean 11.02 Mbit/s)   Flow 2 egress (mean 10.79 Mbit/s)
Flow 3 ingress (mean 8.01 Mbit/s)   Flow 3 egress (mean 7.72 Mbit/s)

Flow 1 (95th percentile 65.96 ms)   Flow 2 (95th percentile 67.58 ms)   Flow 3 (95th percentile 67.60 ms)

69

```
Run 4: Statistics of PCC

Start at: 2018-01-17 05:02:27
End at: 2018-01-17 05:02:57
Local clock offset: -0.474 ms
Remote clock offset: -1.865 ms


# Below is generated by plot.py at 2018-01-17 08:11:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.76 Mbit/s
95th percentile per-packet one-way delay: 63.224 ms
Loss rate: 1.52%
-- Flow 1:
Average throughput: 82.58 Mbit/s
95th percentile per-packet one-way delay: 62.512 ms
Loss rate: 1.49%
-- Flow 2:
Average throughput: 8.29 Mbit/s
95th percentile per-packet one-way delay: 65.622 ms
Loss rate: 1.73%
-- Flow 3:
Average throughput: 8.10 Mbit/s
95th percentile per-packet one-way delay: 67.989 ms
Loss rate: 1.92%
```
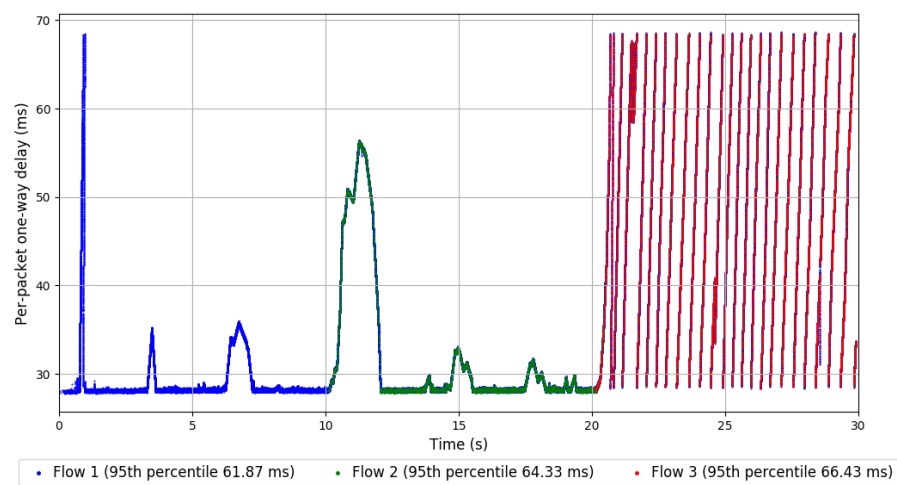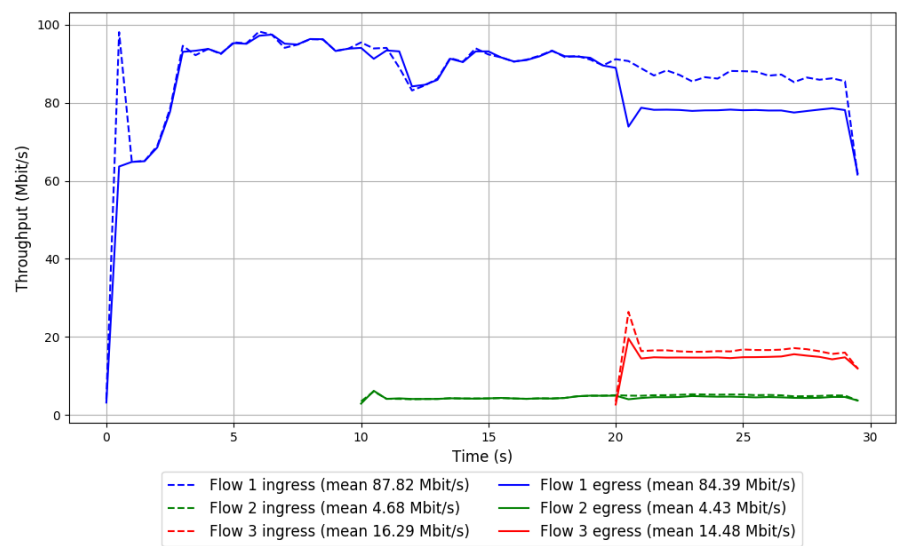
Run 4: Report of PCC — Data Link

Flow 1 ingress (mean 83.83 Mbit/s) — Flow 1 egress (mean 82.58 Mbit/s)
Flow 2 ingress (mean 8.44 Mbit/s) — Flow 2 egress (mean 8.29 Mbit/s)
Flow 3 ingress (mean 8.26 Mbit/s) — Flow 3 egress (mean 8.10 Mbit/s)

Flow 1 (95th percentile 62.51 ms)   Flow 2 (95th percentile 65.62 ms)   Flow 3 (95th percentile 67.99 ms)

71

```
Run 5: Statistics of PCC

Start at: 2018-01-17 05:29:50
End at: 2018-01-17 05:30:20
Local clock offset: -0.283 ms
Remote clock offset: -1.991 ms


# Below is generated by plot.py at 2018-01-17 08:12:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.37 Mbit/s
95th percentile per-packet one-way delay: 40.106 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 79.06 Mbit/s
95th percentile per-packet one-way delay: 40.072 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 8.89 Mbit/s
95th percentile per-packet one-way delay: 43.843 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 4.23 Mbit/s
95th percentile per-packet one-way delay: 52.980 ms
Loss rate: 0.41%
```
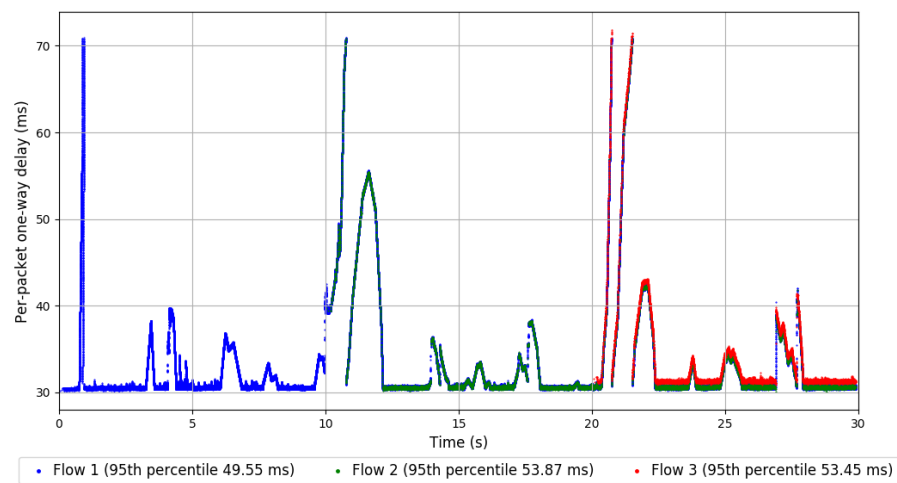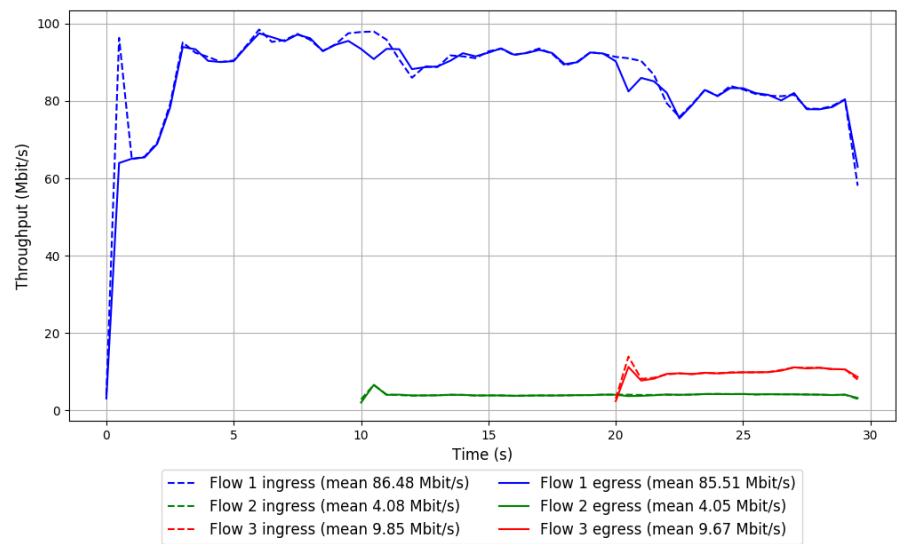
Run 5: Report of PCC — Data Link

```
Run 6: Statistics of PCC

Start at: 2018-01-17 05:56:27
End at: 2018-01-17 05:56:57
Local clock offset: -0.149 ms
Remote clock offset: -1.622 ms

# Below is generated by plot.py at 2018-01-17 08:12:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.01 Mbit/s
95th percentile per-packet one-way delay: 62.627 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 72.72 Mbit/s
95th percentile per-packet one-way delay: 62.521 ms
Loss rate: 1.58%
-- Flow 2:
Average throughput: 17.85 Mbit/s
95th percentile per-packet one-way delay: 63.643 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 4.33 Mbit/s
95th percentile per-packet one-way delay: 65.314 ms
Loss rate: 0.20%
```
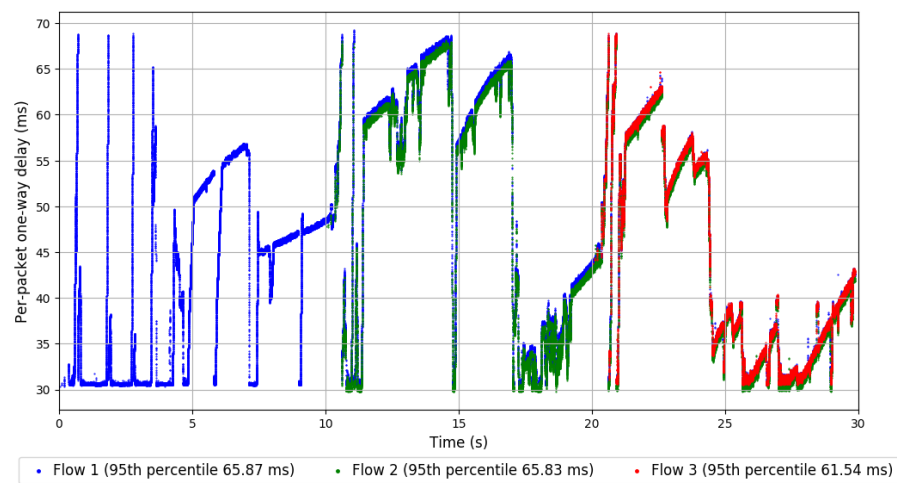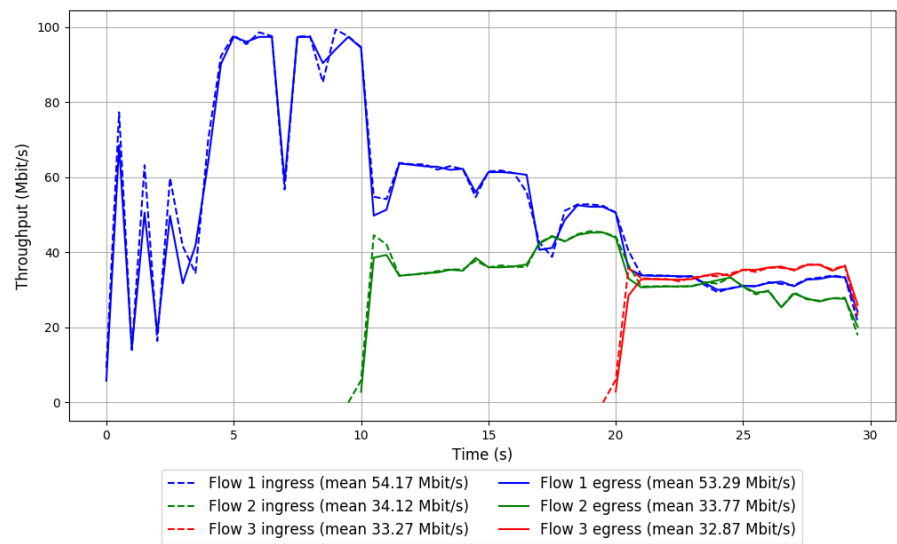
Run 6: Report of PCC — Data Link

Flow 1 ingress (mean 73.89 Mbit/s) ----- Flow 1 egress (mean 72.72 Mbit/s)
Flow 2 ingress (mean 18.04 Mbit/s) ----- Flow 2 egress (mean 17.85 Mbit/s)
Flow 3 ingress (mean 4.34 Mbit/s) ----- Flow 3 egress (mean 4.33 Mbit/s)

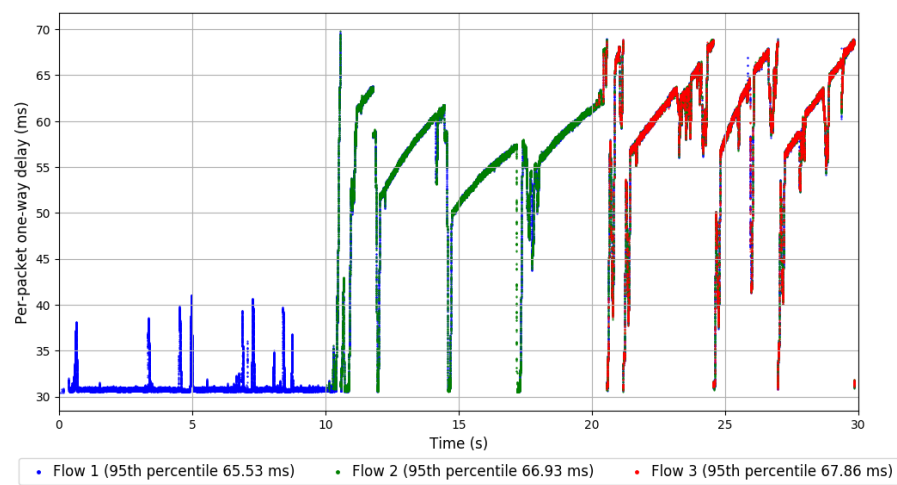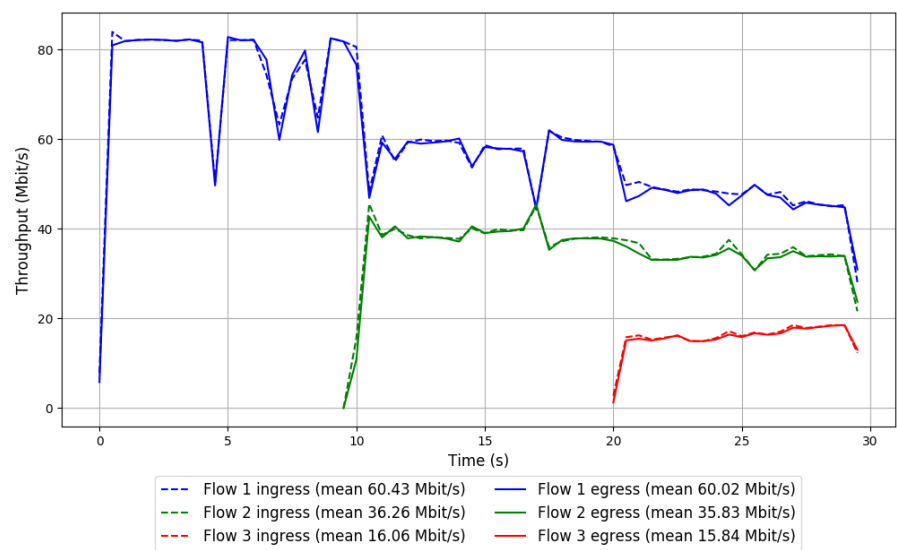Flow 1 (95th percentile 62.52 ms)   Flow 2 (95th percentile 63.64 ms)   Flow 3 (95th percentile 65.31 ms)

```
Run 7: Statistics of PCC

Start at: 2018-01-17 06:23:03
End at: 2018-01-17 06:23:33
Local clock offset: -0.009 ms
Remote clock offset: -1.783 ms


# Below is generated by plot.py at 2018-01-17 08:12:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.66 Mbit/s
95th percentile per-packet one-way delay: 67.164 ms
Loss rate: 2.45%
-- Flow 1:
Average throughput: 79.00 Mbit/s
95th percentile per-packet one-way delay: 67.005 ms
Loss rate: 2.26%
-- Flow 2:
Average throughput: 8.91 Mbit/s
95th percentile per-packet one-way delay: 67.933 ms
Loss rate: 2.39%
-- Flow 3:
Average throughput: 14.39 Mbit/s
95th percentile per-packet one-way delay: 68.291 ms
Loss rate: 5.61%
```

Run 7: Report of PCC — Data Link

```
Run 8: Statistics of PCC

Start at: 2018-01-17 06:48:50
End at: 2018-01-17 06:49:20
Local clock offset: -0.071 ms
Remote clock offset: -4.352 ms

# Below is generated by plot.py at 2018-01-17 08:12:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.85 Mbit/s
95th percentile per-packet one-way delay: 61.364 ms
Loss rate: 3.23%
-- Flow 1:
Average throughput: 66.29 Mbit/s
95th percentile per-packet one-way delay: 60.071 ms
Loss rate: 2.78%
-- Flow 2:
Average throughput: 10.18 Mbit/s
95th percentile per-packet one-way delay: 63.169 ms
Loss rate: 3.71%
-- Flow 3:
Average throughput: 14.53 Mbit/s
95th percentile per-packet one-way delay: 66.045 ms
Loss rate: 8.46%
```
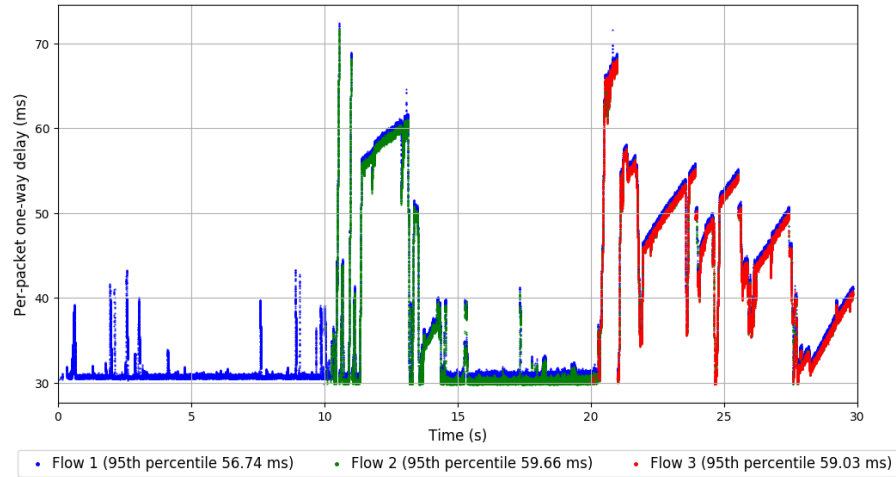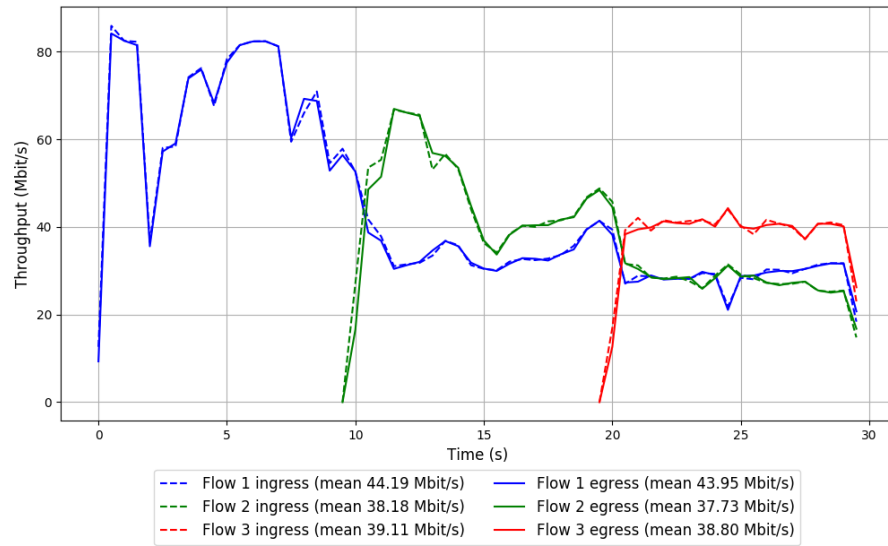
Run 8: Report of PCC — Data Link

- - - Flow 1 ingress (mean 68.20 Mbit/s)   —— Flow 1 egress (mean 66.29 Mbit/s)
- - - Flow 2 ingress (mean 10.58 Mbit/s)   —— Flow 2 egress (mean 10.18 Mbit/s)
- - - Flow 3 ingress (mean 15.87 Mbit/s)   —— Flow 3 egress (mean 14.53 Mbit/s)

- Flow 1 (95th percentile 60.07 ms)   • Flow 2 (95th percentile 63.17 ms)   • Flow 3 (95th percentile 66.05 ms)

79

```
Run 9: Statistics of PCC

Start at: 2018-01-17 07:13:49
End at: 2018-01-17 07:14:19
Local clock offset: 0.006 ms
Remote clock offset: -4.21 ms


# Below is generated by plot.py at 2018-01-17 08:12:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.11 Mbit/s
95th percentile per-packet one-way delay: 62.725 ms
Loss rate: 4.34%
-- Flow 1:
Average throughput: 84.39 Mbit/s
95th percentile per-packet one-way delay: 61.866 ms
Loss rate: 3.89%
-- Flow 2:
Average throughput: 4.43 Mbit/s
95th percentile per-packet one-way delay: 64.331 ms
Loss rate: 5.33%
-- Flow 3:
Average throughput: 14.48 Mbit/s
95th percentile per-packet one-way delay: 66.429 ms
Loss rate: 11.07%
```
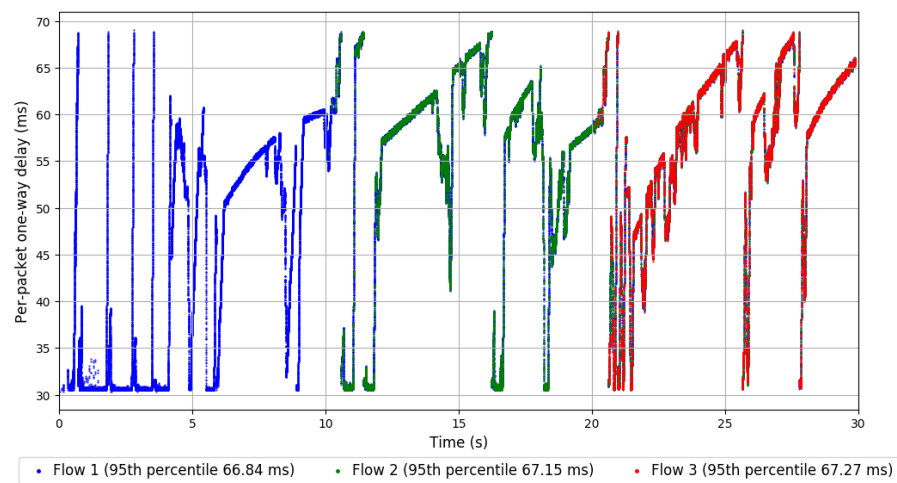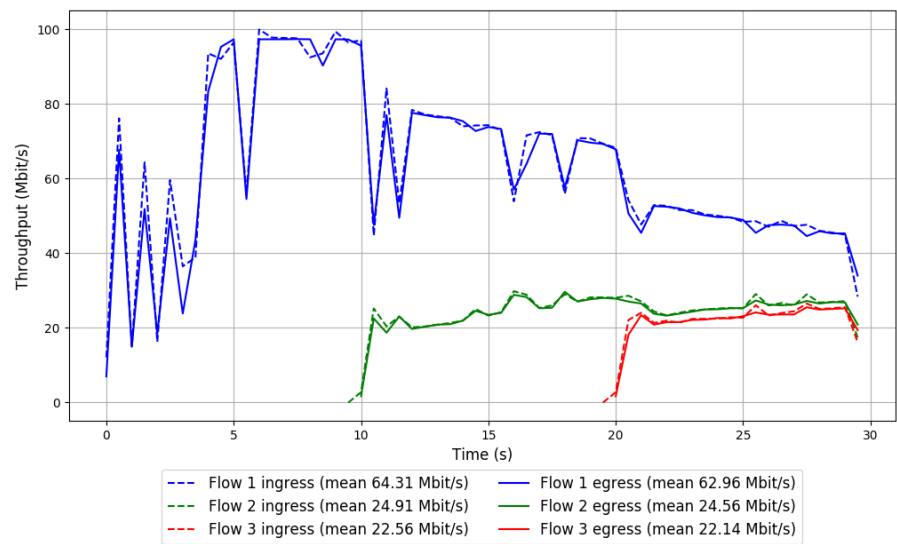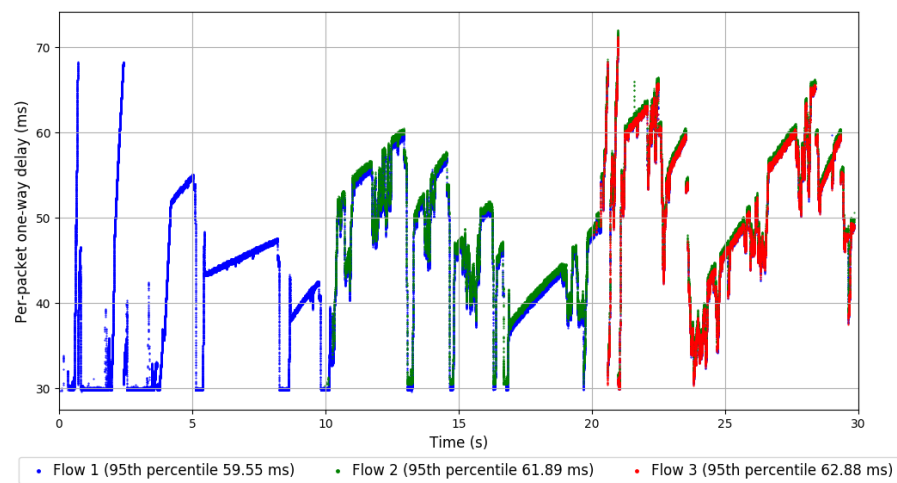
Run 9: Report of PCC — Data Link

Flow 1 ingress (mean 87.82 Mbit/s) — — — Flow 1 egress (mean 84.39 Mbit/s) ——
Flow 2 ingress (mean 4.68 Mbit/s) — — — Flow 2 egress (mean 4.43 Mbit/s) ——
Flow 3 ingress (mean 16.29 Mbit/s) — — — Flow 3 egress (mean 14.48 Mbit/s) ——

Flow 1 (95th percentile 61.87 ms)   Flow 2 (95th percentile 64.33 ms)   Flow 3 (95th percentile 66.43 ms)

81

```
Run 10: Statistics of PCC

Start at: 2018-01-17 07:38:59
End at: 2018-01-17 07:39:29
Local clock offset: 0.044 ms
Remote clock offset: -1.535 ms


# Below is generated by plot.py at 2018-01-17 08:12:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.39 Mbit/s
95th percentile per-packet one-way delay: 49.962 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 85.51 Mbit/s
95th percentile per-packet one-way delay: 49.545 ms
Loss rate: 1.11%
-- Flow 2:
Average throughput: 4.05 Mbit/s
95th percentile per-packet one-way delay: 53.869 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 9.67 Mbit/s
95th percentile per-packet one-way delay: 53.446 ms
Loss rate: 1.81%
```
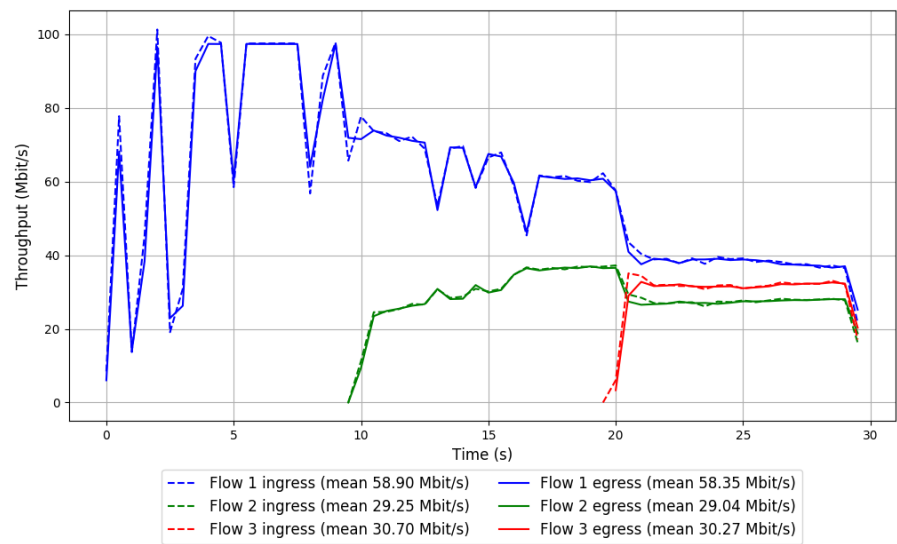
Run 10: Report of PCC — Data Link

- - - Flow 1 ingress (mean 86.48 Mbit/s) —— Flow 1 egress (mean 85.51 Mbit/s)
- - - Flow 2 ingress (mean 4.08 Mbit/s) —— Flow 2 egress (mean 4.05 Mbit/s)
- - - Flow 3 ingress (mean 9.85 Mbit/s) —— Flow 3 egress (mean 9.67 Mbit/s)

• Flow 1 (95th percentile 49.55 ms)   • Flow 2 (95th percentile 53.87 ms)   • Flow 3 (95th percentile 53.45 ms)
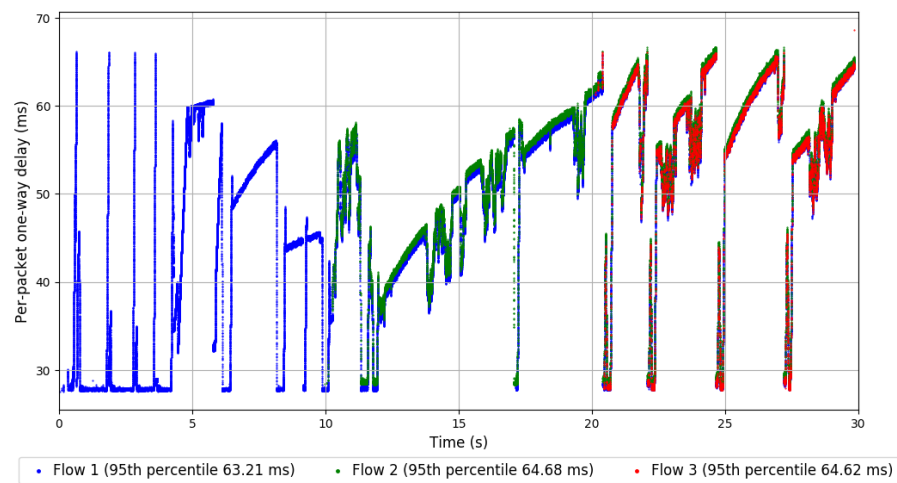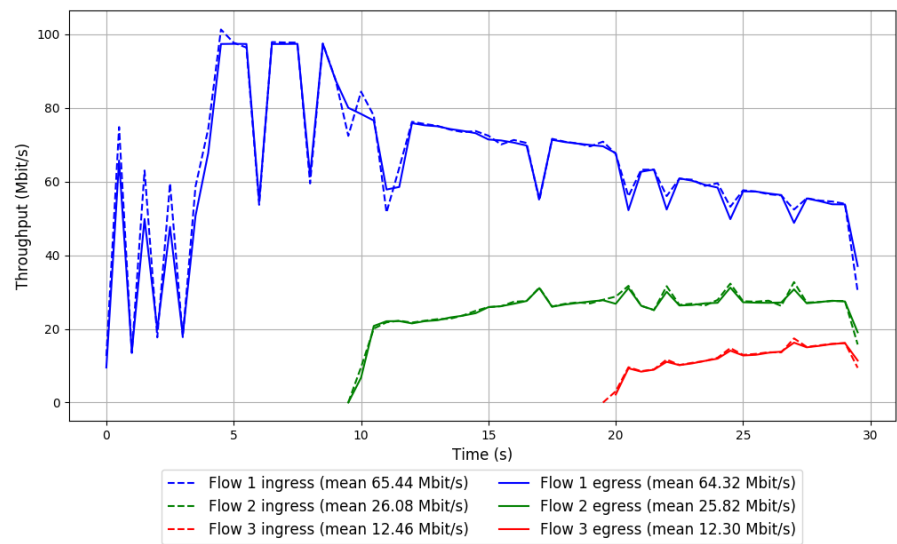
83

```
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-17 03:27:54
End at: 2018-01-17 03:28:24
Local clock offset: -0.622 ms
Remote clock offset: -2.119 ms


# Below is generated by plot.py at 2018-01-17 08:13:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.56 Mbit/s
95th percentile per-packet one-way delay: 65.572 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 53.29 Mbit/s
95th percentile per-packet one-way delay: 65.874 ms
Loss rate: 1.60%
-- Flow 2:
Average throughput: 33.77 Mbit/s
95th percentile per-packet one-way delay: 65.827 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 32.87 Mbit/s
95th percentile per-packet one-way delay: 61.544 ms
Loss rate: 1.20%
```
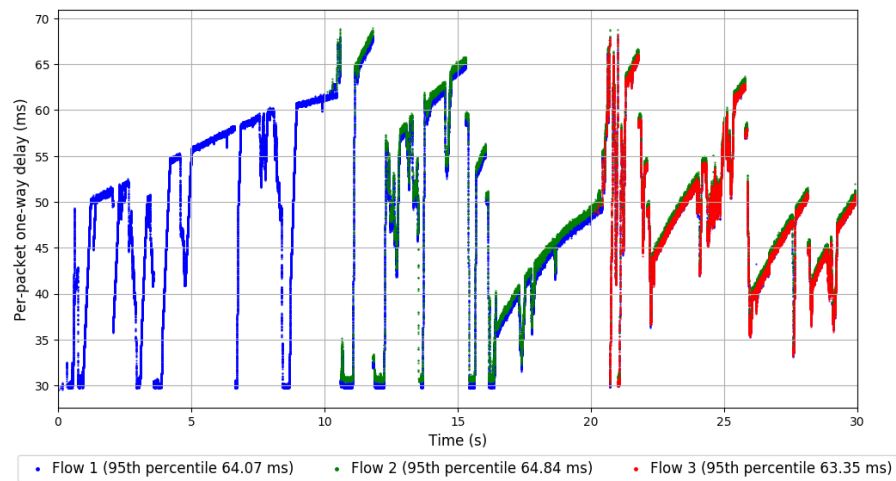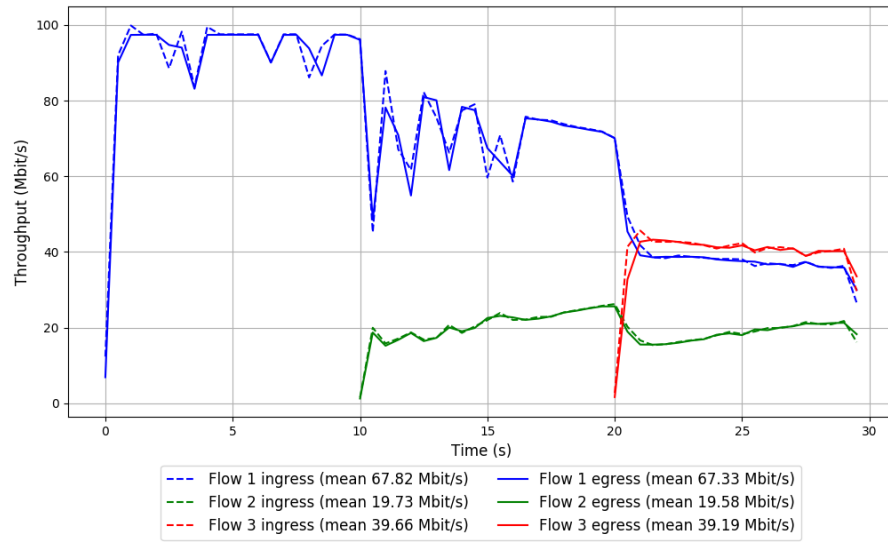
Run 1: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 54.17 Mbit/s)   Flow 1 egress (mean 53.29 Mbit/s)
Flow 2 ingress (mean 34.12 Mbit/s)   Flow 2 egress (mean 33.77 Mbit/s)
Flow 3 ingress (mean 33.27 Mbit/s)   Flow 3 egress (mean 32.87 Mbit/s)

Flow 1 (95th percentile 65.87 ms)   Flow 2 (95th percentile 65.83 ms)   Flow 3 (95th percentile 61.54 ms)

```
Run 2: Statistics of QUIC Cubic

Start at: 2018-01-17 03:54:07
End at: 2018-01-17 03:54:37
Local clock offset: -0.859 ms
Remote clock offset: -2.181 ms


# Below is generated by plot.py at 2018-01-17 08:13:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.08 Mbit/s
95th percentile per-packet one-way delay: 66.292 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 60.02 Mbit/s
95th percentile per-packet one-way delay: 65.529 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 35.83 Mbit/s
95th percentile per-packet one-way delay: 66.929 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 15.84 Mbit/s
95th percentile per-packet one-way delay: 67.857 ms
Loss rate: 1.69%
```
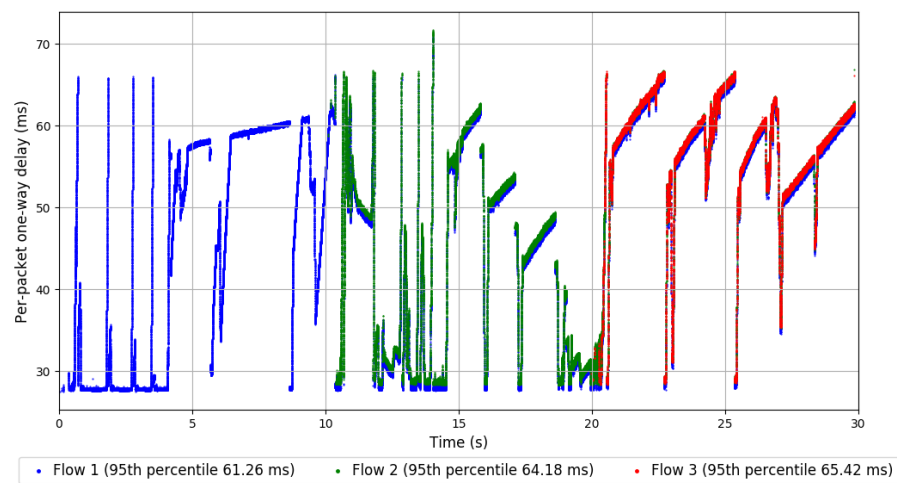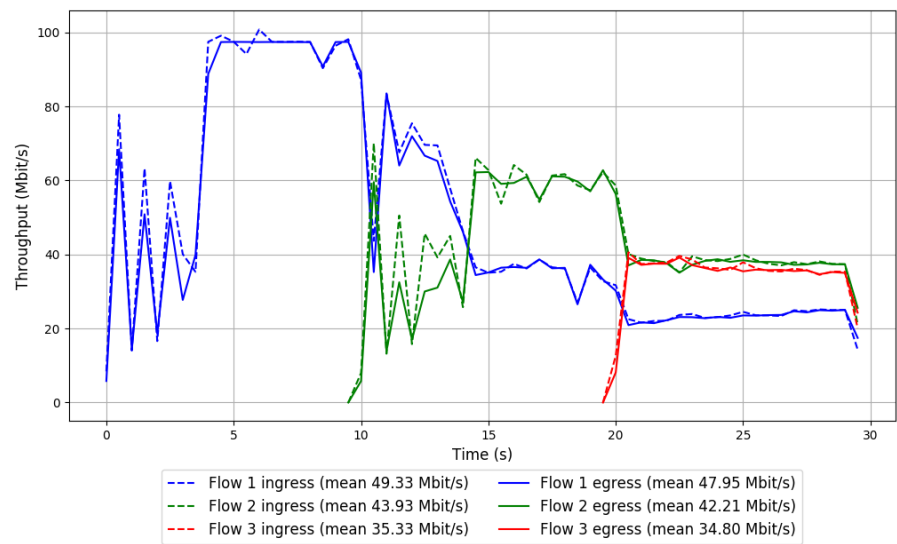
Run 2: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 60.43 Mbit/s)   Flow 1 egress (mean 60.02 Mbit/s)
Flow 2 ingress (mean 36.26 Mbit/s)   Flow 2 egress (mean 35.83 Mbit/s)
Flow 3 ingress (mean 16.06 Mbit/s)   Flow 3 egress (mean 15.84 Mbit/s)

Flow 1 (95th percentile 65.53 ms)   Flow 2 (95th percentile 66.93 ms)   Flow 3 (95th percentile 67.86 ms)

```
Run 3: Statistics of QUIC Cubic

Start at: 2018-01-17 04:19:50
End at: 2018-01-17 04:20:20
Local clock offset: -0.848 ms
Remote clock offset: -2.157 ms

# Below is generated by plot.py at 2018-01-17 08:13:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.95 Mbit/s
95th percentile per-packet one-way delay: 58.973 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 43.95 Mbit/s
95th percentile per-packet one-way delay: 56.740 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 37.73 Mbit/s
95th percentile per-packet one-way delay: 59.661 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 38.80 Mbit/s
95th percentile per-packet one-way delay: 59.031 ms
Loss rate: 0.69%
```
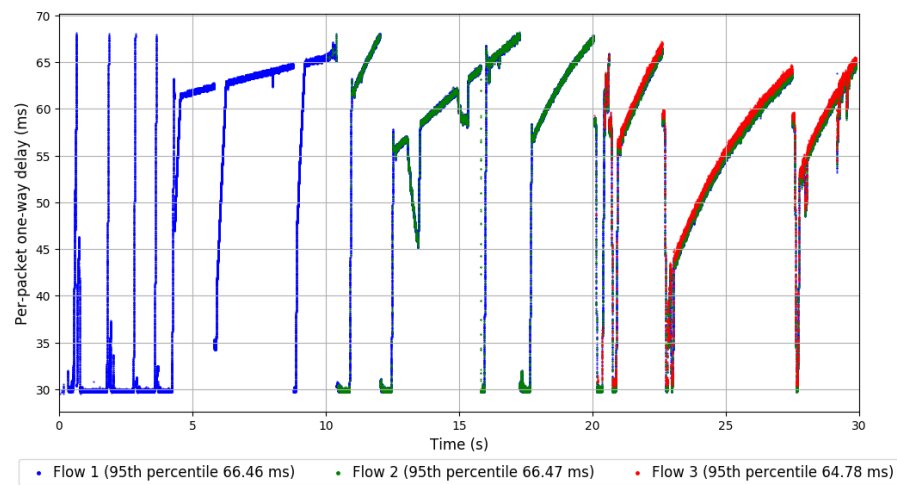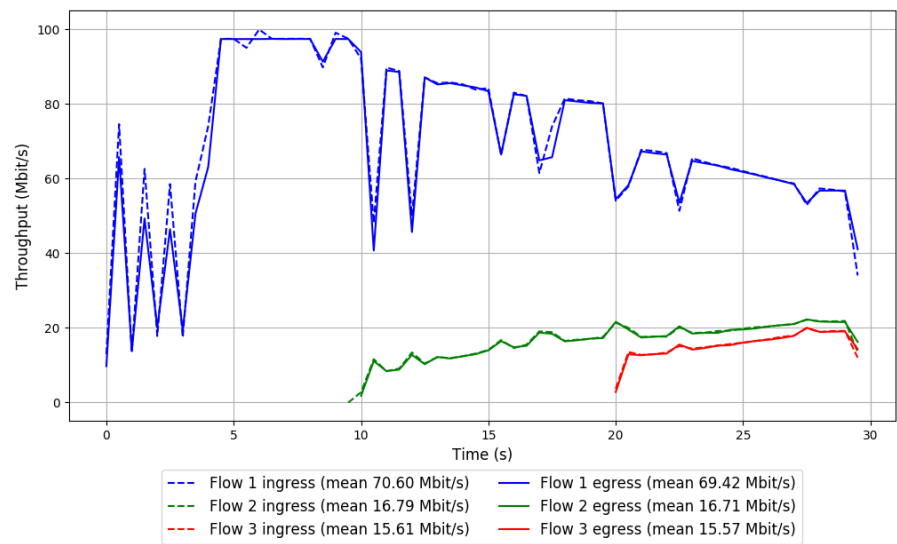
Run 3: Report of QUIC Cubic — Data Link

- - - - Flow 1 ingress (mean 44.19 Mbit/s)   —— Flow 1 egress (mean 43.95 Mbit/s)
- - - - Flow 2 ingress (mean 38.18 Mbit/s)   —— Flow 2 egress (mean 37.73 Mbit/s)
- - - - Flow 3 ingress (mean 39.11 Mbit/s)   —— Flow 3 egress (mean 38.80 Mbit/s)

- Flow 1 (95th percentile 56.74 ms)   • Flow 2 (95th percentile 59.66 ms)   • Flow 3 (95th percentile 59.03 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2018-01-17 04:45:50
End at: 2018-01-17 04:46:20
Local clock offset: -0.76 ms
Remote clock offset: -2.134 ms

# Below is generated by plot.py at 2018-01-17 08:13:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.56 Mbit/s
95th percentile per-packet one-way delay: 66.928 ms
Loss rate: 1.86%
-- Flow 1:
Average throughput: 62.96 Mbit/s
95th percentile per-packet one-way delay: 66.836 ms
Loss rate: 1.99%
-- Flow 2:
Average throughput: 24.56 Mbit/s
95th percentile per-packet one-way delay: 67.148 ms
Loss rate: 1.37%
-- Flow 3:
Average throughput: 22.14 Mbit/s
95th percentile per-packet one-way delay: 67.268 ms
Loss rate: 1.78%
```
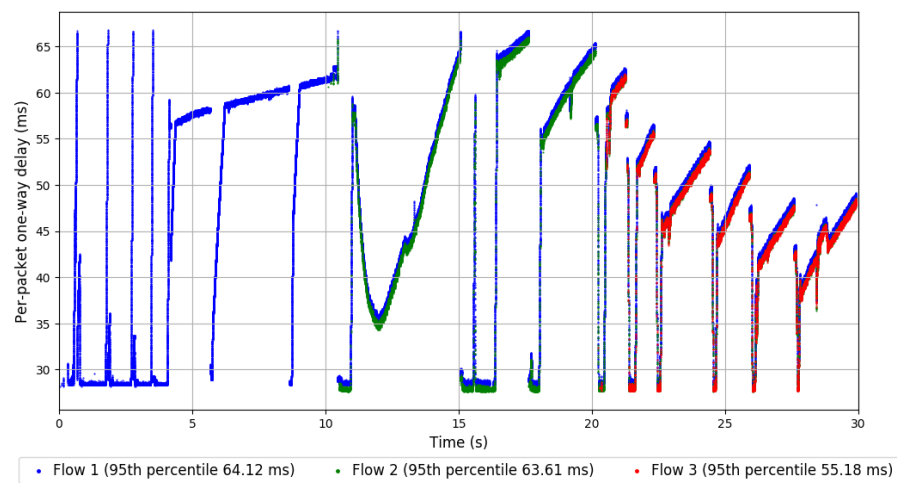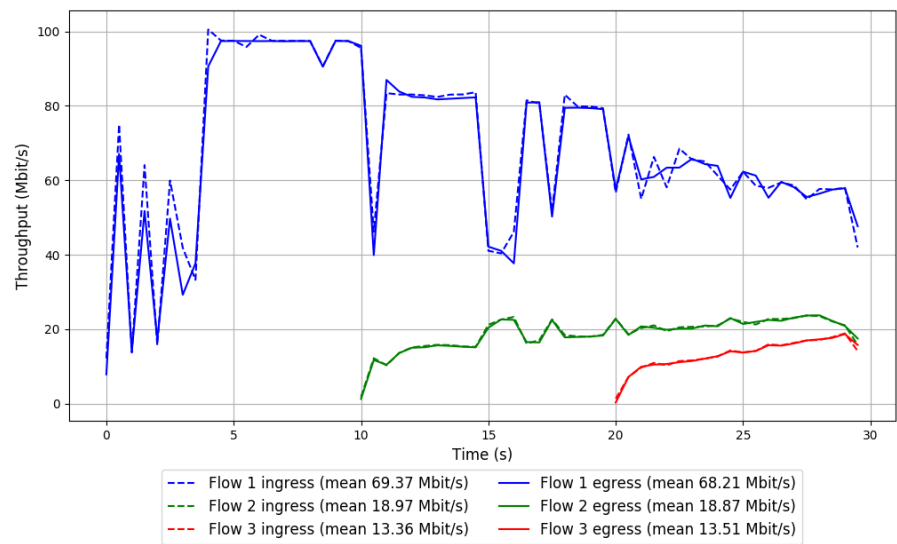
Run 4: Report of QUIC Cubic — Data Link

- - - Flow 1 ingress (mean 64.31 Mbit/s) —— Flow 1 egress (mean 62.96 Mbit/s)
- - - Flow 2 ingress (mean 24.91 Mbit/s) —— Flow 2 egress (mean 24.56 Mbit/s)
- - - Flow 3 ingress (mean 22.56 Mbit/s) —— Flow 3 egress (mean 22.14 Mbit/s)

- Flow 1 (95th percentile 66.84 ms)   • Flow 2 (95th percentile 67.15 ms)   • Flow 3 (95th percentile 67.27 ms)

```
Run 5: Statistics of QUIC Cubic

Start at: 2018-01-17 05:12:54
End at: 2018-01-17 05:13:24
Local clock offset: -0.368 ms
Remote clock offset: -1.828 ms


# Below is generated by plot.py at 2018-01-17 08:13:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.68 Mbit/s
95th percentile per-packet one-way delay: 60.983 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 58.35 Mbit/s
95th percentile per-packet one-way delay: 59.546 ms
Loss rate: 0.87%
-- Flow 2:
Average throughput: 29.04 Mbit/s
95th percentile per-packet one-way delay: 61.889 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 30.27 Mbit/s
95th percentile per-packet one-way delay: 62.877 ms
Loss rate: 1.40%
```

Run 5: Report of QUIC Cubic — Data Link

- - - Flow 1 ingress (mean 58.90 Mbit/s) —— Flow 1 egress (mean 58.35 Mbit/s)
- - - Flow 2 ingress (mean 29.25 Mbit/s) —— Flow 2 egress (mean 29.04 Mbit/s)
- - - Flow 3 ingress (mean 30.70 Mbit/s) —— Flow 3 egress (mean 30.27 Mbit/s)

- Flow 1 (95th percentile 59.55 ms)   - Flow 2 (95th percentile 61.89 ms)   - Flow 3 (95th percentile 62.88 ms)

```
Run 6: Statistics of QUIC Cubic

Start at: 2018-01-17 05:40:08
End at: 2018-01-17 05:40:38
Local clock offset: -0.199 ms
Remote clock offset: -4.142 ms


# Below is generated by plot.py at 2018-01-17 08:13:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.57 Mbit/s
95th percentile per-packet one-way delay: 63.800 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 64.32 Mbit/s
95th percentile per-packet one-way delay: 63.206 ms
Loss rate: 1.59%
-- Flow 2:
Average throughput: 25.82 Mbit/s
95th percentile per-packet one-way delay: 64.680 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 12.30 Mbit/s
95th percentile per-packet one-way delay: 64.625 ms
Loss rate: 1.21%
```

Run 6: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 65.44 Mbit/s)   Flow 1 egress (mean 64.32 Mbit/s)
Flow 2 ingress (mean 26.08 Mbit/s)   Flow 2 egress (mean 25.82 Mbit/s)
Flow 3 ingress (mean 12.46 Mbit/s)   Flow 3 egress (mean 12.30 Mbit/s)

• Flow 1 (95th percentile 63.21 ms)   • Flow 2 (95th percentile 64.68 ms)   • Flow 3 (95th percentile 64.62 ms)

```
Run 7: Statistics of QUIC Cubic

Start at: 2018-01-17 06:06:29
End at: 2018-01-17 06:06:59
Local clock offset: -0.05 ms
Remote clock offset: -2.183 ms


# Below is generated by plot.py at 2018-01-17 08:14:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.19 Mbit/s
95th percentile per-packet one-way delay: 64.093 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 67.33 Mbit/s
95th percentile per-packet one-way delay: 64.066 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 19.58 Mbit/s
95th percentile per-packet one-way delay: 64.843 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 39.19 Mbit/s
95th percentile per-packet one-way delay: 63.354 ms
Loss rate: 1.17%
```

Run 7: Report of QUIC Cubic — Data Link

```
Run 8: Statistics of QUIC Cubic

Start at: 2018-01-17 06:32:59
End at: 2018-01-17 06:33:29
Local clock offset: 0.007 ms
Remote clock offset: -4.571 ms


# Below is generated by plot.py at 2018-01-17 08:14:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.56 Mbit/s
95th percentile per-packet one-way delay: 63.421 ms
Loss rate: 2.86%
-- Flow 1:
Average throughput: 47.95 Mbit/s
95th percentile per-packet one-way delay: 61.264 ms
Loss rate: 2.69%
-- Flow 2:
Average throughput: 42.21 Mbit/s
95th percentile per-packet one-way delay: 64.183 ms
Loss rate: 3.85%
-- Flow 3:
Average throughput: 34.80 Mbit/s
95th percentile per-packet one-way delay: 65.422 ms
Loss rate: 1.13%
```

Run 8: Report of QUIC Cubic — Data Link

- - - Flow 1 ingress (mean 49.33 Mbit/s) ——— Flow 1 egress (mean 47.95 Mbit/s)
- - - Flow 2 ingress (mean 43.93 Mbit/s) ——— Flow 2 egress (mean 42.21 Mbit/s)
- - - Flow 3 ingress (mean 35.33 Mbit/s) ——— Flow 3 egress (mean 34.80 Mbit/s)

- Flow 1 (95th percentile 61.26 ms)   • Flow 2 (95th percentile 64.18 ms)   • Flow 3 (95th percentile 65.42 ms)
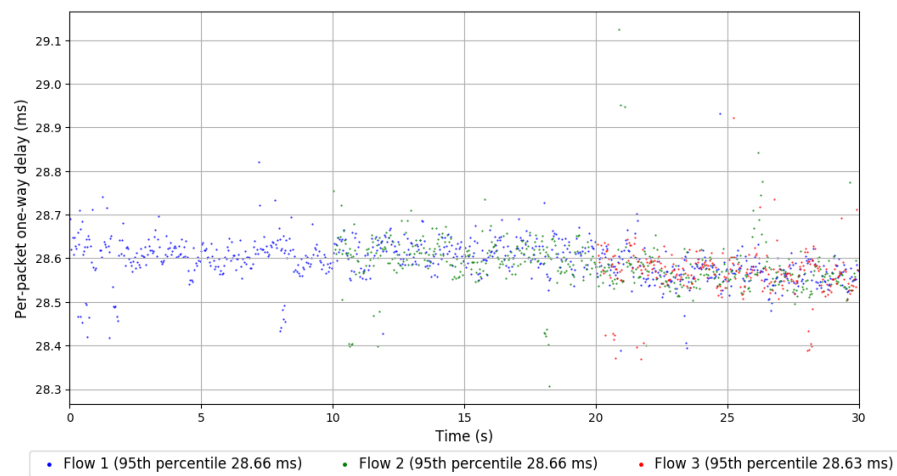
99

```
Run 9: Statistics of QUIC Cubic

Start at: 2018-01-17 06:58:24
End at: 2018-01-17 06:58:54
Local clock offset: 0.058 ms
Remote clock offset: -2.341 ms


# Below is generated by plot.py at 2018-01-17 08:14:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.64 Mbit/s
95th percentile per-packet one-way delay: 66.359 ms
Loss rate: 1.34%
-- Flow 1:
Average throughput: 69.42 Mbit/s
95th percentile per-packet one-way delay: 66.464 ms
Loss rate: 1.55%
-- Flow 2:
Average throughput: 16.71 Mbit/s
95th percentile per-packet one-way delay: 66.472 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 15.57 Mbit/s
95th percentile per-packet one-way delay: 64.778 ms
Loss rate: 0.19%
```

Run 9: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 70.60 Mbit/s) -------- Flow 1 egress (mean 69.42 Mbit/s)
Flow 2 ingress (mean 16.79 Mbit/s) -------- Flow 2 egress (mean 16.71 Mbit/s)
Flow 3 ingress (mean 15.61 Mbit/s) -------- Flow 3 egress (mean 15.57 Mbit/s)

Flow 1 (95th percentile 66.46 ms)   Flow 2 (95th percentile 66.47 ms)   Flow 3 (95th percentile 64.78 ms)
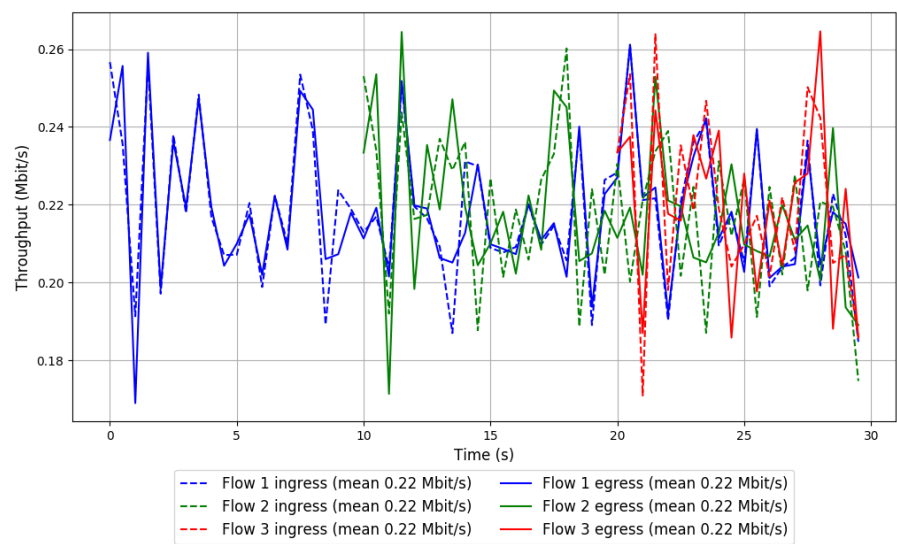
101

```
Run 10: Statistics of QUIC Cubic

Start at: 2018-01-17 07:23:24
End at: 2018-01-17 07:23:54
Local clock offset: 0.085 ms
Remote clock offset: -4.315 ms


# Below is generated by plot.py at 2018-01-17 08:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.09 Mbit/s
95th percentile per-packet one-way delay: 63.959 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 68.21 Mbit/s
95th percentile per-packet one-way delay: 64.123 ms
Loss rate: 1.60%
-- Flow 2:
Average throughput: 18.87 Mbit/s
95th percentile per-packet one-way delay: 63.614 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 13.51 Mbit/s
95th percentile per-packet one-way delay: 55.184 ms
Loss rate: 0.25%
```

Run 10: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 69.37 Mbit/s)   Flow 1 egress (mean 68.21 Mbit/s)
Flow 2 ingress (mean 18.97 Mbit/s)   Flow 2 egress (mean 18.87 Mbit/s)
Flow 3 ingress (mean 13.36 Mbit/s)   Flow 3 egress (mean 13.51 Mbit/s)

Flow 1 (95th percentile 64.12 ms)   Flow 2 (95th percentile 63.61 ms)   Flow 3 (95th percentile 55.18 ms)

103

```
Run 1: Statistics of SCReAM

Start at: 2018-01-17 03:23:52
End at: 2018-01-17 03:24:22
Local clock offset: -0.659 ms
Remote clock offset: -1.531 ms
```

Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2018-01-17 03:50:00
End at: 2018-01-17 03:50:30
Local clock offset: -0.809 ms
Remote clock offset: -4.205 ms

# Below is generated by plot.py at 2018-01-17 08:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 28.627 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 28.027 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 28.013 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 28.679 ms
Loss rate: 0.00%
```
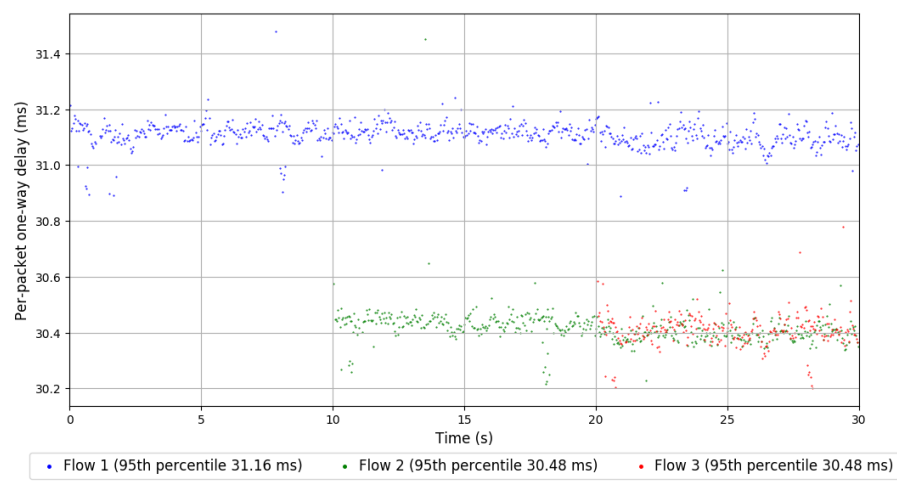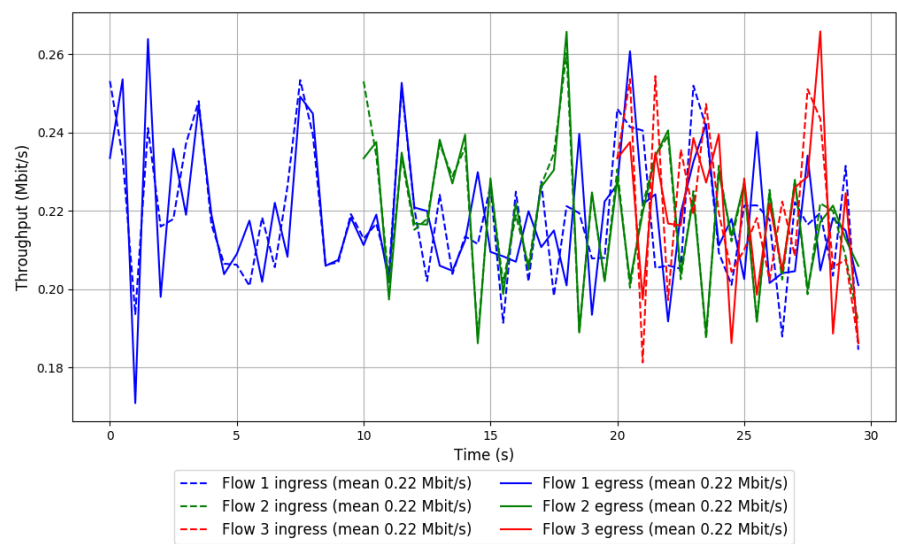
Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2018-01-17 04:15:50
End at: 2018-01-17 04:16:20
Local clock offset: -0.875 ms
Remote clock offset: -4.198 ms

# Below is generated by plot.py at 2018-01-17 08:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 28.680 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 28.018 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 28.697 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 28.696 ms
Loss rate: 0.00%
```
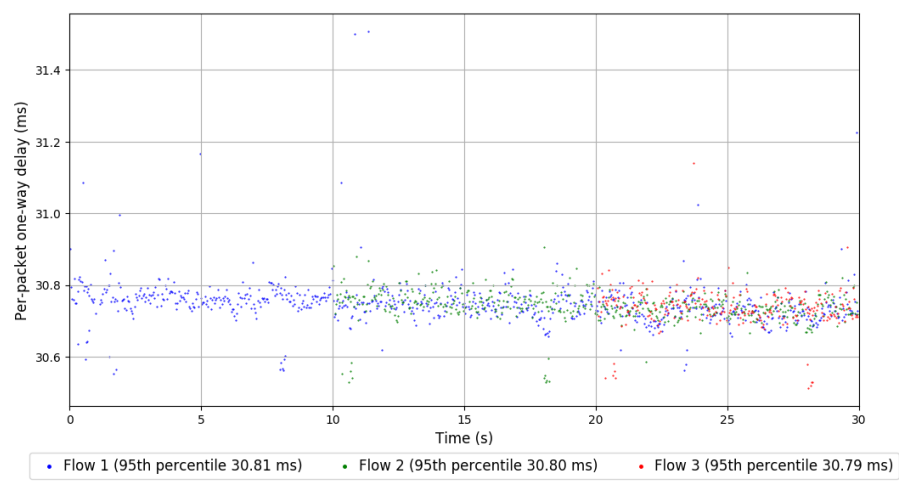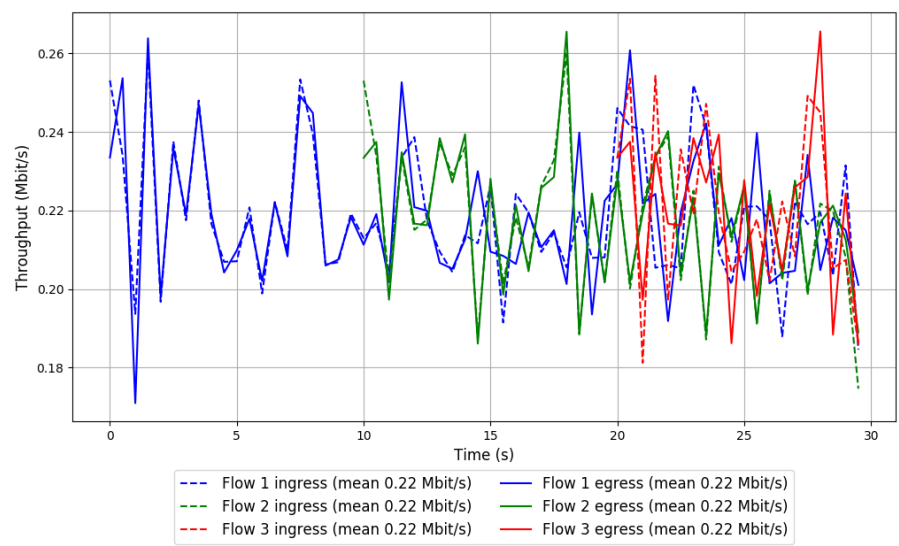
Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2018-01-17 04:41:47
End at: 2018-01-17 04:42:18
Local clock offset: -0.719 ms
Remote clock offset: -2.016 ms


# Below is generated by plot.py at 2018-01-17 08:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 30.762 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 30.783 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.167 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.133 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2018-01-17 05:08:44
End at: 2018-01-17 05:09:14
Local clock offset: -0.513 ms
Remote clock offset: -1.919 ms


# Below is generated by plot.py at 2018-01-17 08:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 30.605 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.074 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.079 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.654 ms
Loss rate: 0.00%
```
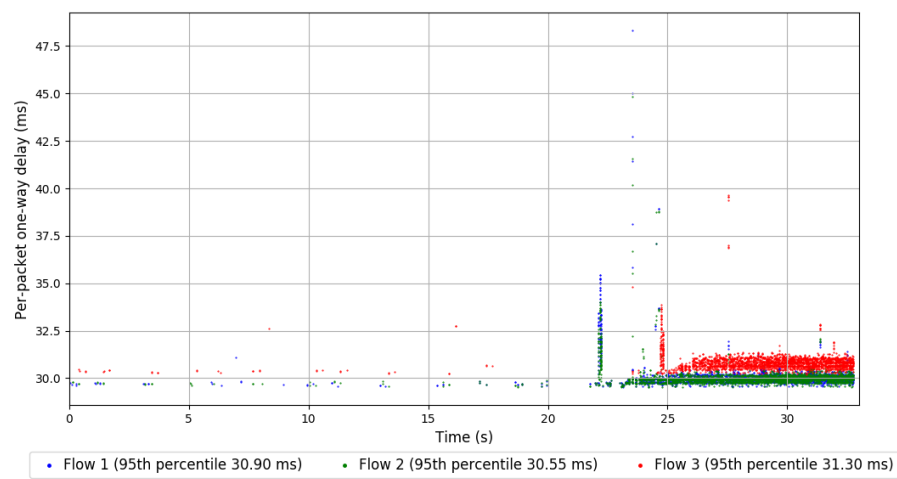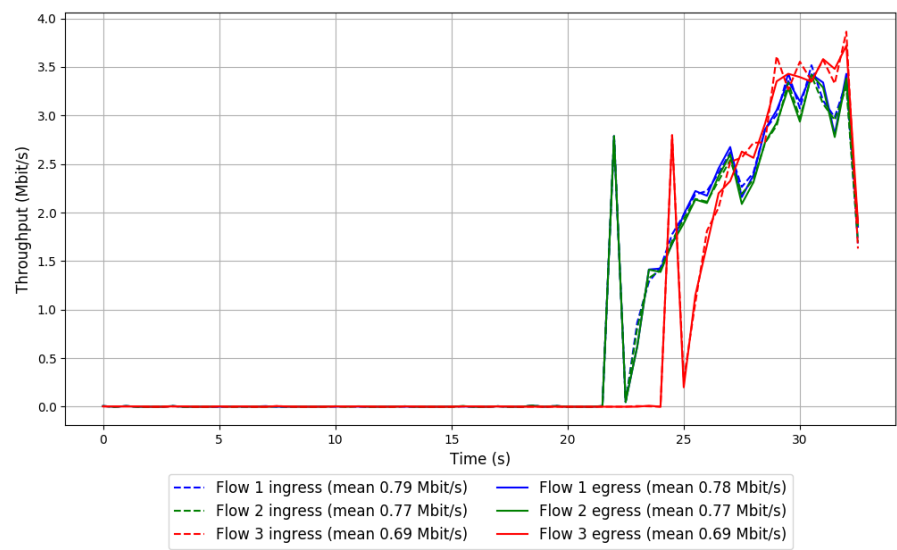
Run 5: Report of SCReAM — Data Link

```
Run 6: Statistics of SCReAM

Start at: 2018-01-17 05:36:01
End at: 2018-01-17 05:36:31
Local clock offset: -0.248 ms
Remote clock offset: -1.894 ms

# Below is generated by plot.py at 2018-01-17 08:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 30.145 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.139 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.156 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.145 ms
Loss rate: 0.00%
```
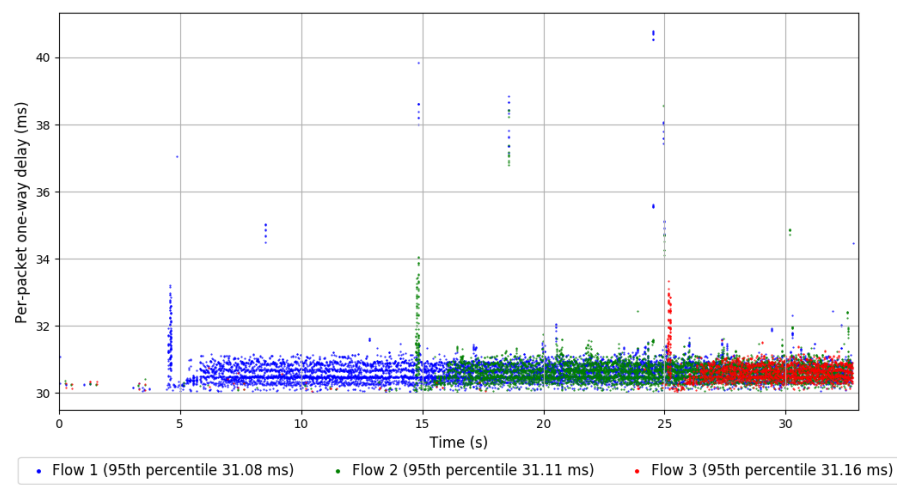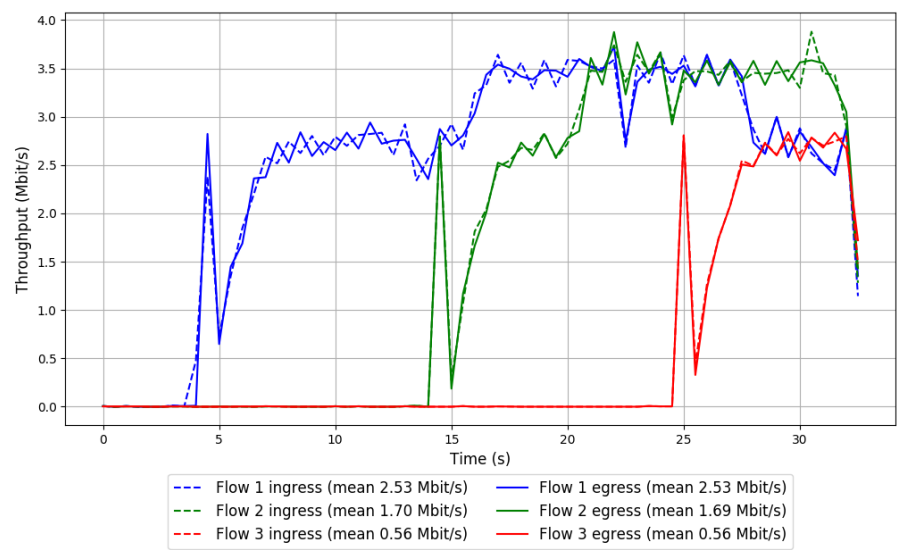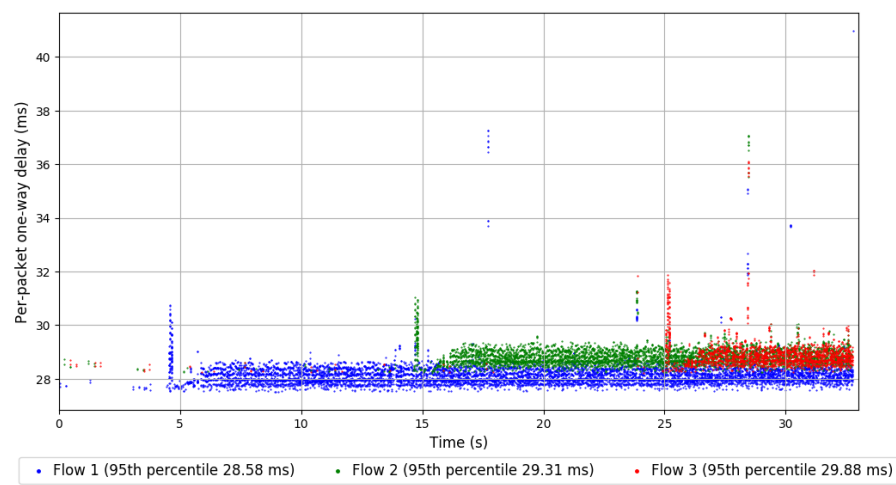
Run 6: Report of SCReAM — Data Link

```
Run 7: Statistics of SCReAM

Start at: 2018-01-17 06:02:25
End at: 2018-01-17 06:02:55
Local clock offset: -0.083 ms
Remote clock offset: -4.169 ms


# Below is generated by plot.py at 2018-01-17 08:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 28.654 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 28.657 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 28.659 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 28.630 ms
Loss rate: 0.00%
```
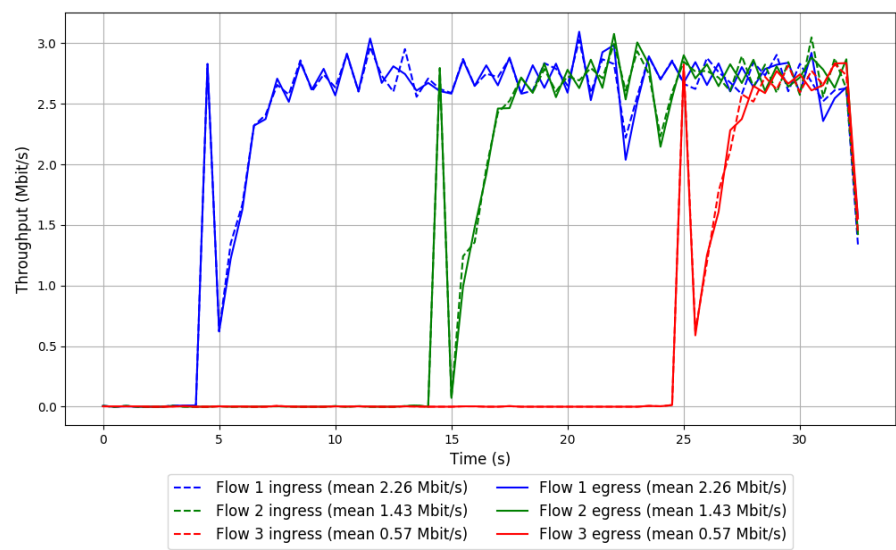
Run 7: Report of SCReAM — Data Link

```
Run 8: Statistics of SCReAM

Start at: 2018-01-17 06:28:50
End at: 2018-01-17 06:29:20
Local clock offset: -0.009 ms
Remote clock offset: -2.194 ms


# Below is generated by plot.py at 2018-01-17 08:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 30.739 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.141 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.132 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.777 ms
Loss rate: 0.00%
```
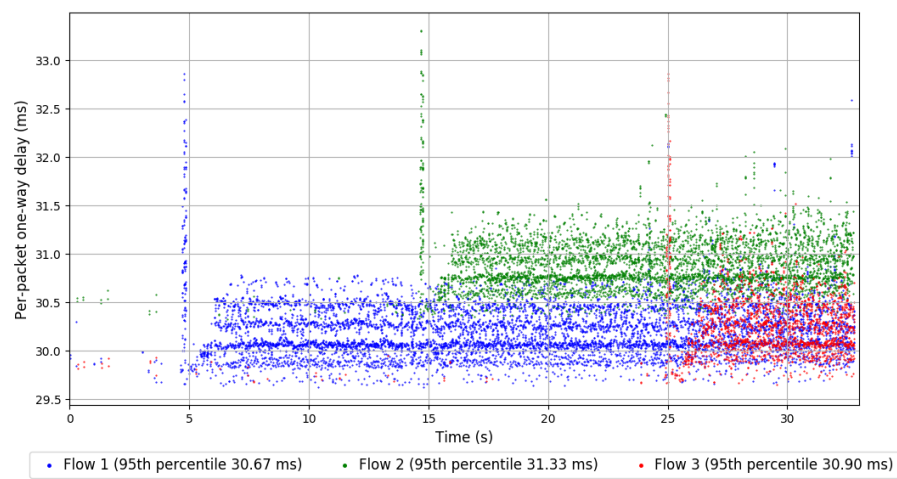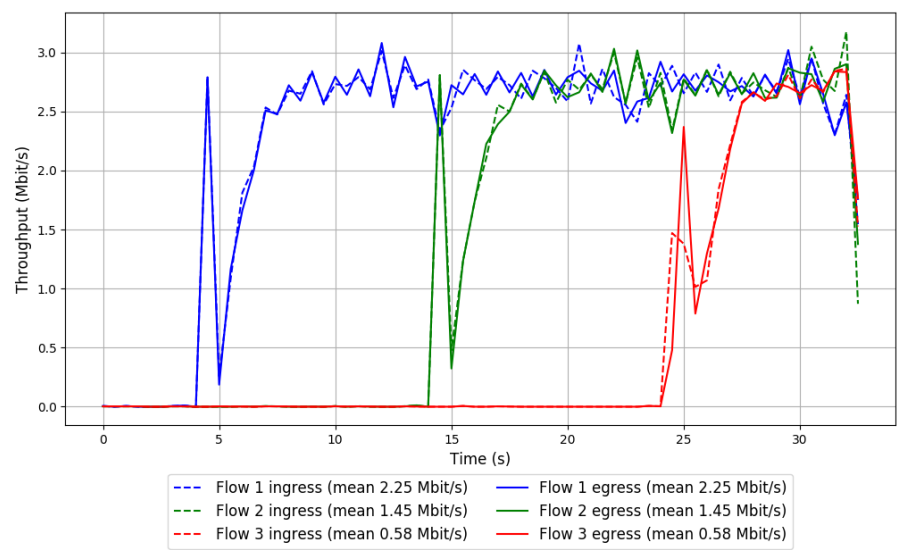
Run 8: Report of SCReAM — Data Link

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```
Run 9: Statistics of SCReAM

Start at: 2018-01-17 06:54:24
End at: 2018-01-17 06:54:54
Local clock offset: 0.03 ms
Remote clock offset: -1.802 ms


# Below is generated by plot.py at 2018-01-17 08:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 31.153 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 31.165 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.481 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.478 ms
Loss rate: 0.00%
```
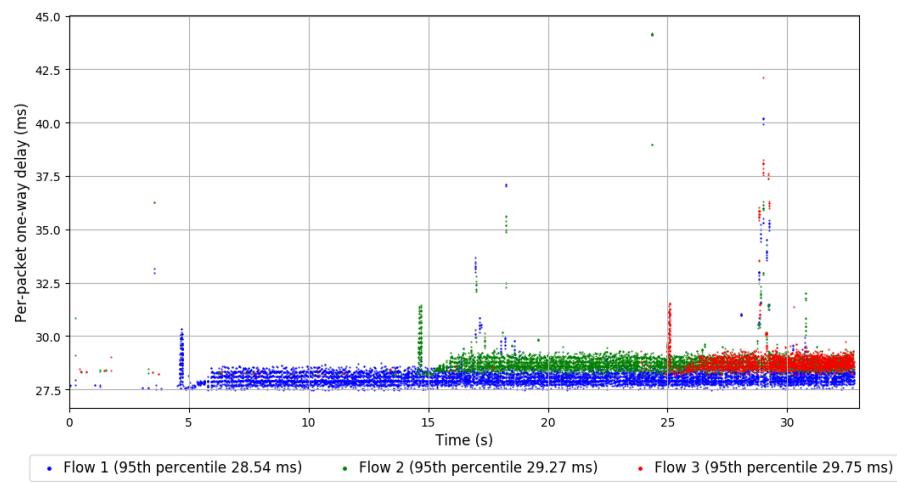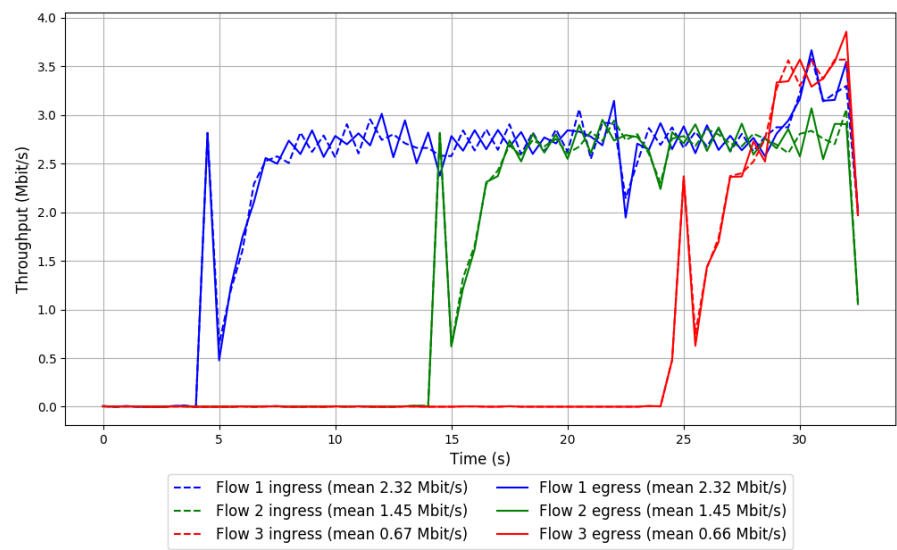
Run 9: Report of SCReAM — Data Link

```
Run 10: Statistics of SCReAM

Start at: 2018-01-17 07:19:25
End at: 2018-01-17 07:19:55
Local clock offset: -0.006 ms
Remote clock offset: -2.175 ms


# Below is generated by plot.py at 2018-01-17 08:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 30.806 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.811 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.803 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.793 ms
Loss rate: 0.00%
```
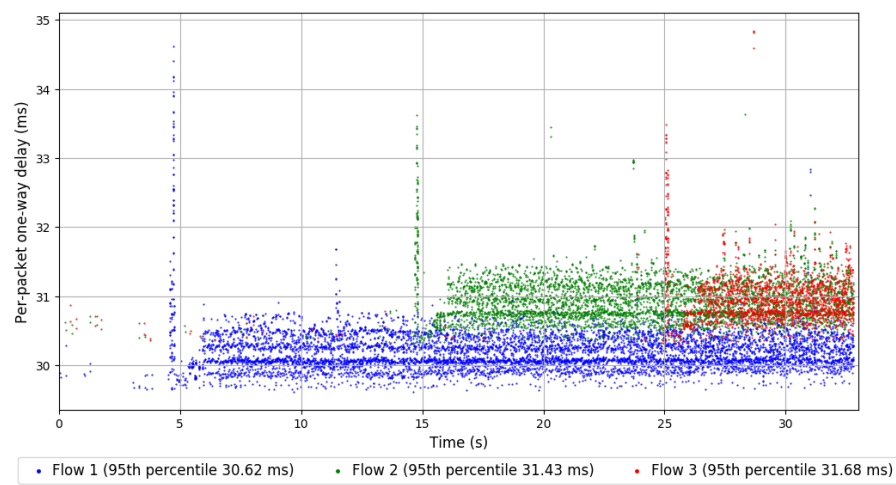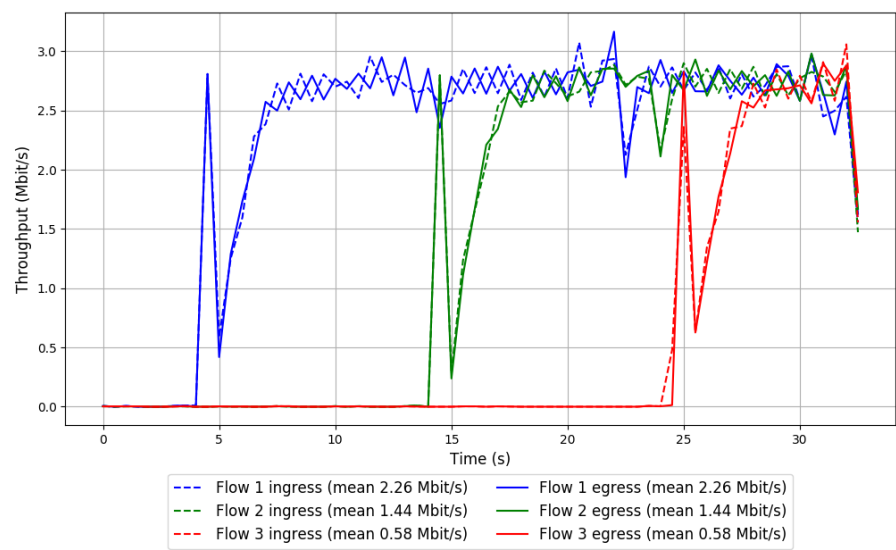
Run 10: Report of SCReAM — Data Link

```
Run 1: Statistics of WebRTC media

Start at: 2018-01-17 03:26:37
End at: 2018-01-17 03:27:07
Local clock offset: -0.64 ms
Remote clock offset: -2.19 ms

# Below is generated by plot.py at 2018-01-17 08:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 31.187 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 0.78 Mbit/s
95th percentile per-packet one-way delay: 30.898 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 0.77 Mbit/s
95th percentile per-packet one-way delay: 30.555 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 0.69 Mbit/s
95th percentile per-packet one-way delay: 31.297 ms
Loss rate: 0.18%
```

Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2018-01-17 03:52:50
End at: 2018-01-17 03:53:20
Local clock offset: -0.707 ms
Remote clock offset: -1.65 ms


# Below is generated by plot.py at 2018-01-17 08:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.77 Mbit/s
95th percentile per-packet one-way delay: 31.095 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 2.53 Mbit/s
95th percentile per-packet one-way delay: 31.077 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 1.69 Mbit/s
95th percentile per-packet one-way delay: 31.113 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 31.160 ms
Loss rate: 0.10%
```
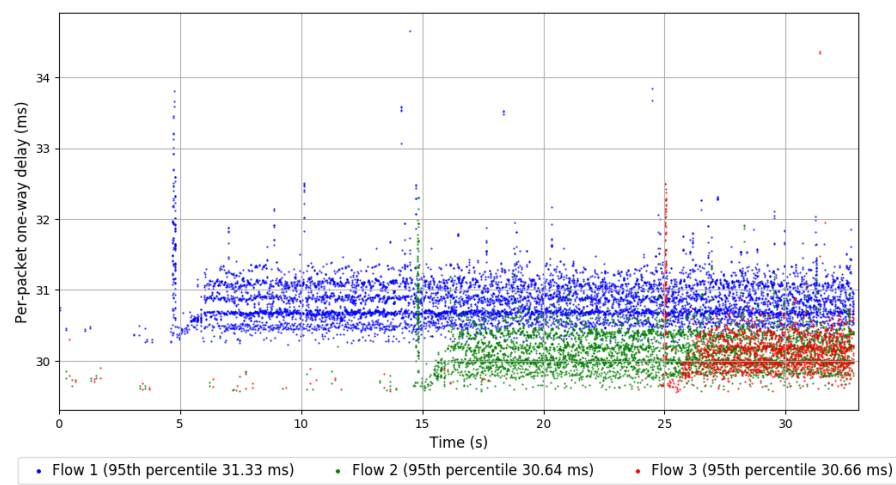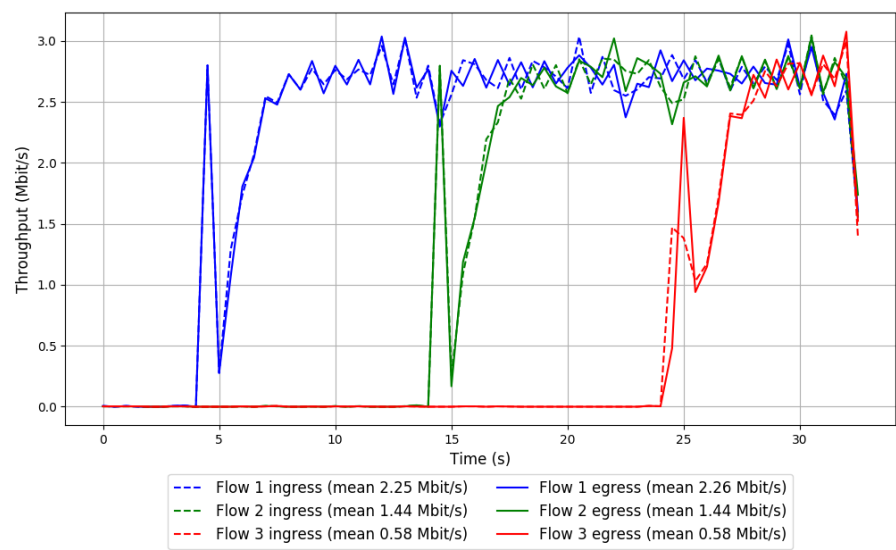
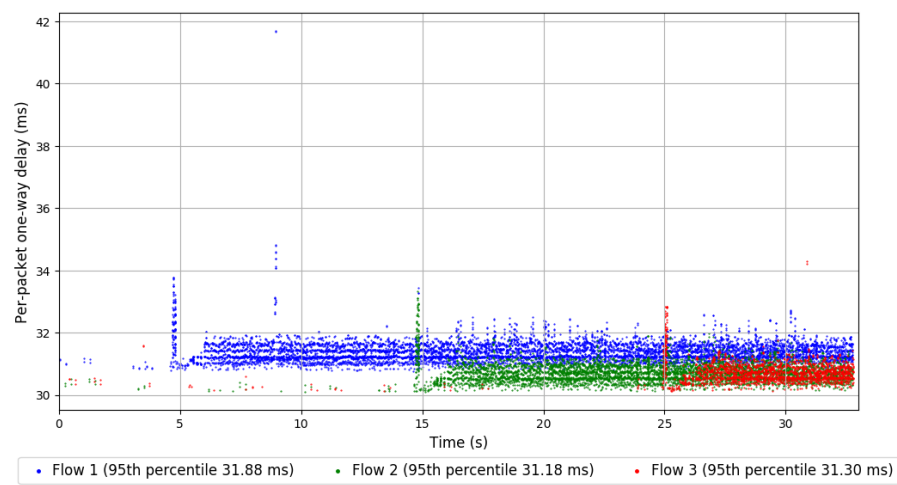Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2018-01-17 04:18:33
End at: 2018-01-17 04:19:03
Local clock offset: -0.776 ms
Remote clock offset: -4.169 ms


# Below is generated by plot.py at 2018-01-17 08:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.24 Mbit/s
95th percentile per-packet one-way delay: 29.223 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 28.584 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 29.309 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 29.881 ms
Loss rate: 0.00%
```
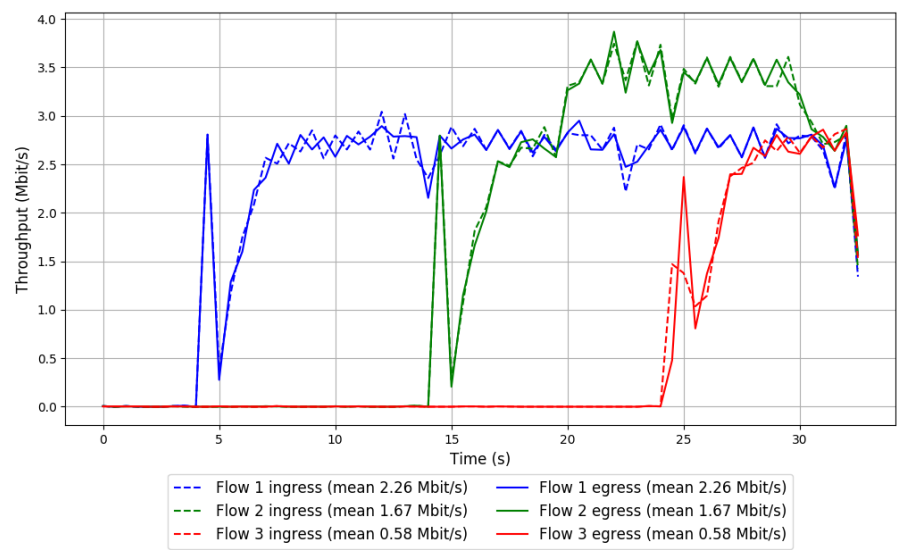
Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2018-01-17 04:44:31
End at: 2018-01-17 04:45:01
Local clock offset: -0.776 ms
Remote clock offset: -2.129 ms


# Below is generated by plot.py at 2018-01-17 08:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.26 Mbit/s
95th percentile per-packet one-way delay: 31.182 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 30.667 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 31.334 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 30.897 ms
Loss rate: 0.00%
```
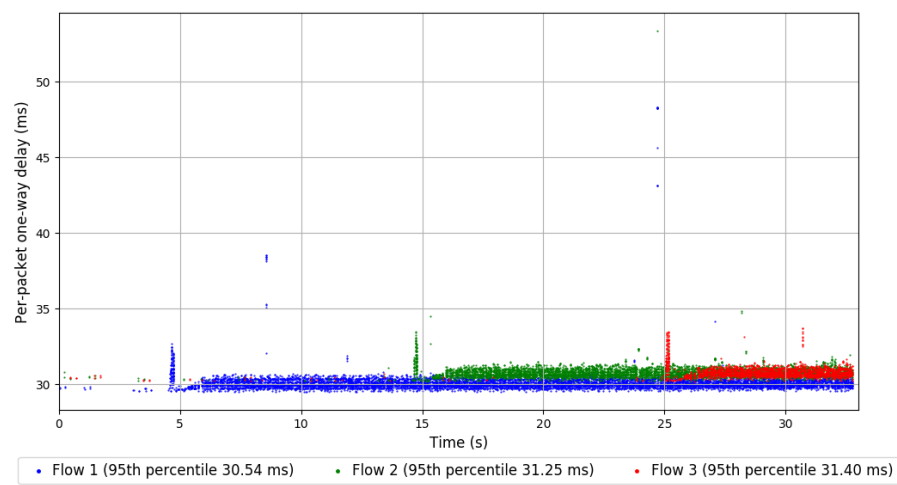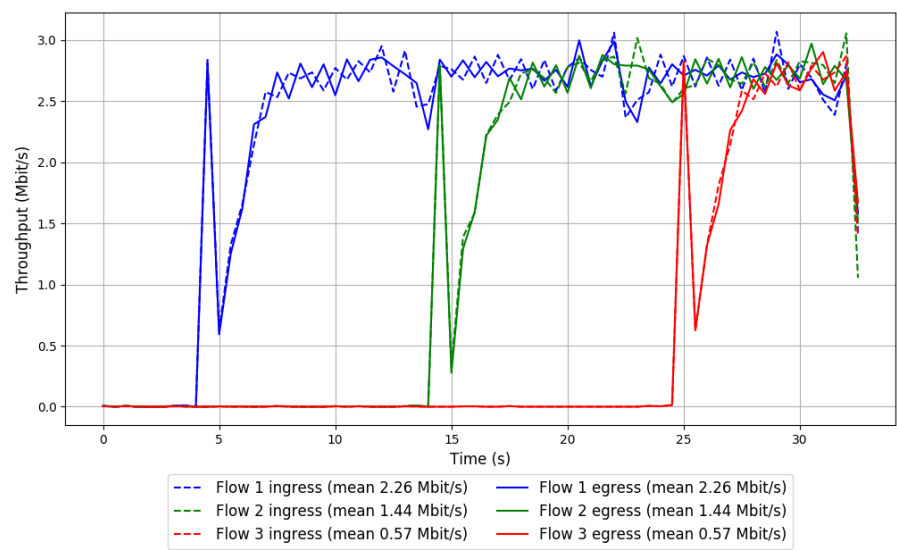
Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2018-01-17 05:11:35
End at: 2018-01-17 05:12:05
Local clock offset: -0.408 ms
Remote clock offset: -4.005 ms

# Below is generated by plot.py at 2018-01-17 08:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.41 Mbit/s
95th percentile per-packet one-way delay: 29.168 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 28.542 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 29.265 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 29.750 ms
Loss rate: 0.26%
```

Run 5: Report of WebRTC media — Data Link

```
Run 6: Statistics of WebRTC media

Start at: 2018-01-17 05:38:50
End at: 2018-01-17 05:39:20
Local clock offset: -0.221 ms
Remote clock offset: -1.983 ms


# Below is generated by plot.py at 2018-01-17 08:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.26 Mbit/s
95th percentile per-packet one-way delay: 31.342 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 30.618 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 31.431 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 31.684 ms
Loss rate: 0.00%
```
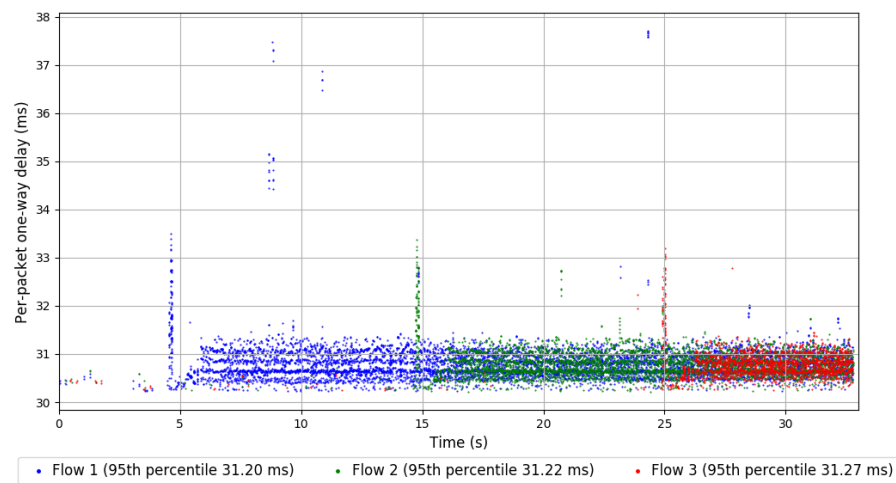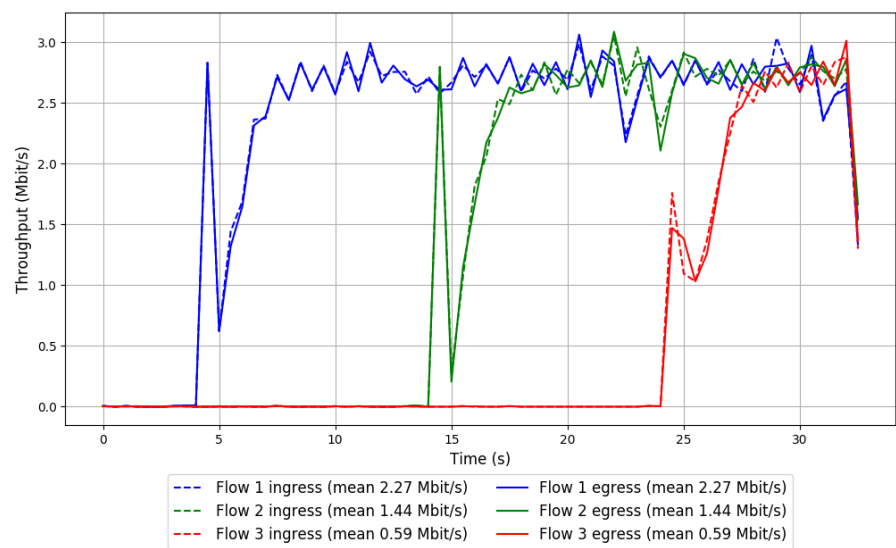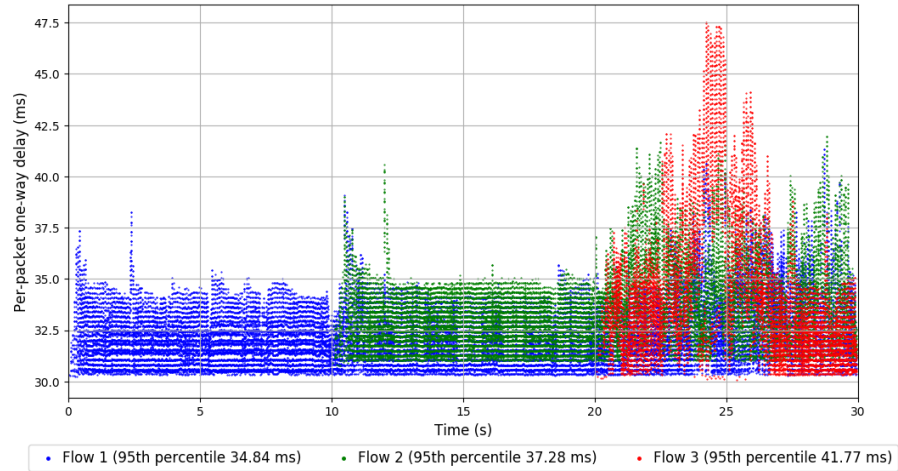
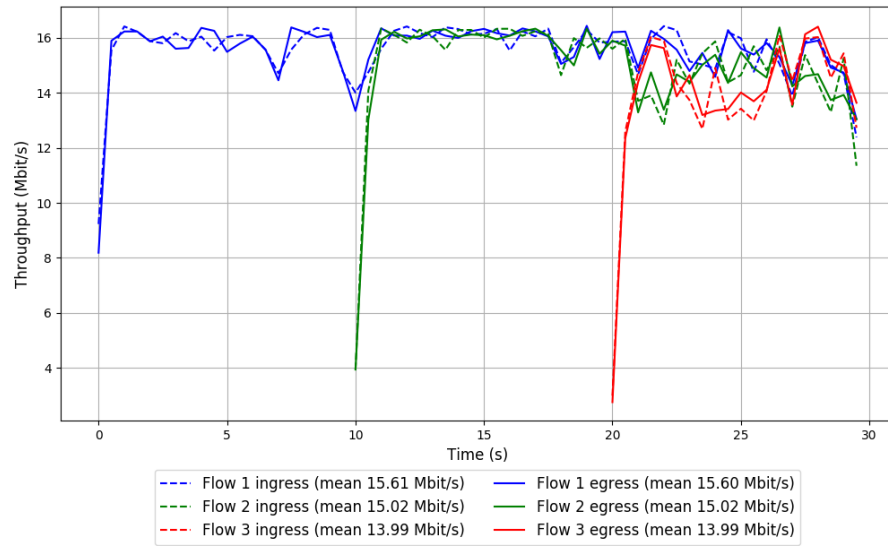Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2018-01-17 06:05:11
End at: 2018-01-17 06:05:41
Local clock offset: -0.05 ms
Remote clock offset: -2.14 ms

# Below is generated by plot.py at 2018-01-17 08:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.26 Mbit/s
95th percentile per-packet one-way delay: 31.238 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 31.329 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 30.640 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 30.663 ms
Loss rate: 0.00%
```
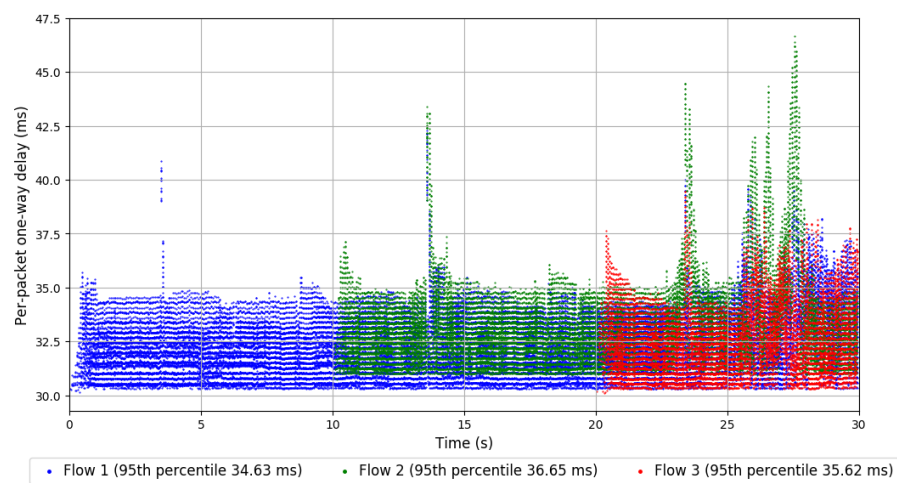
Run 7: Report of WebRTC media — Data Link

```
Run 8: Statistics of WebRTC media

Start at: 2018-01-17 06:31:41
End at: 2018-01-17 06:32:11
Local clock offset: 0.008 ms
Remote clock offset: -1.837 ms

# Below is generated by plot.py at 2018-01-17 08:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.49 Mbit/s
95th percentile per-packet one-way delay: 31.768 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 31.876 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 1.67 Mbit/s
95th percentile per-packet one-way delay: 31.184 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 31.305 ms
Loss rate: 0.00%
```
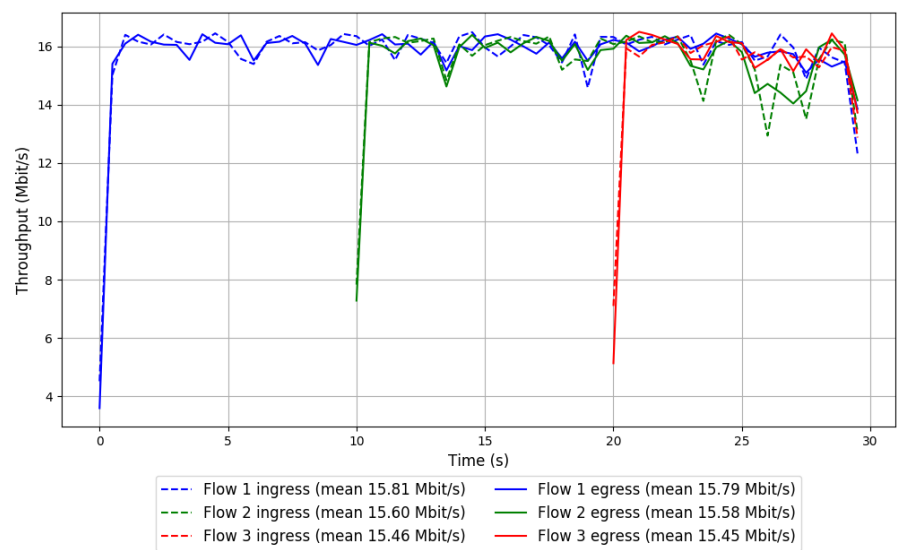
Run 8: Report of WebRTC media — Data Link

```
Run 9: Statistics of WebRTC media

Start at: 2018-01-17 06:57:07
End at: 2018-01-17 06:57:37
Local clock offset: 0.057 ms
Remote clock offset: -2.323 ms


# Below is generated by plot.py at 2018-01-17 08:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.26 Mbit/s
95th percentile per-packet one-way delay: 31.149 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 30.535 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 31.255 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 31.401 ms
Loss rate: 0.00%
```
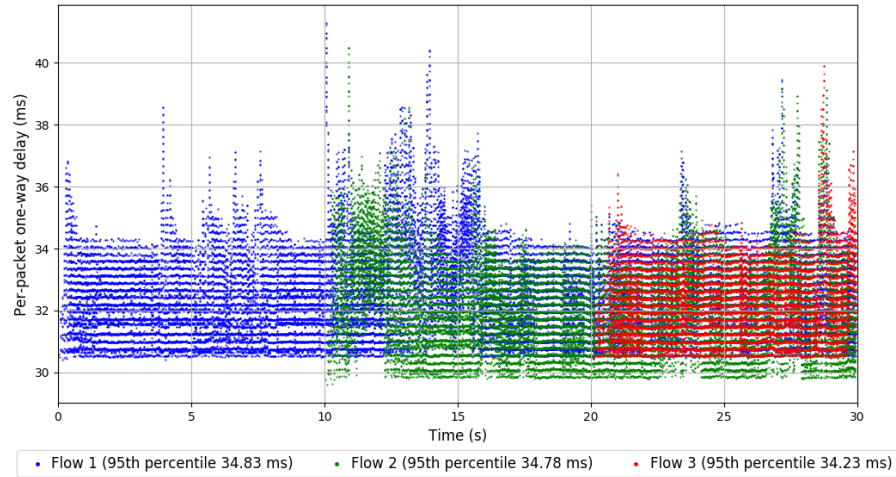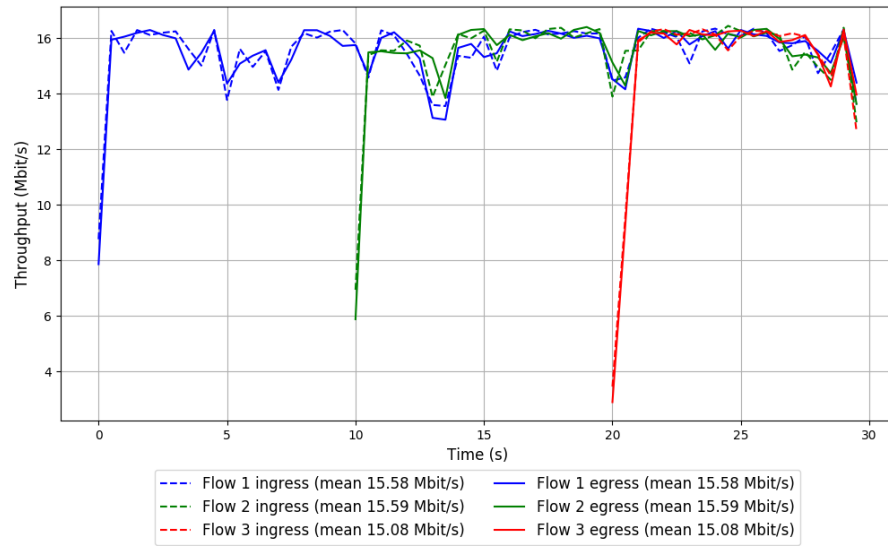
Run 9: Report of WebRTC media — Data Link

```
Run 10: Statistics of WebRTC media

Start at: 2018-01-17 07:22:06
End at: 2018-01-17 07:22:36
Local clock offset: 0.074 ms
Remote clock offset: -2.25 ms


# Below is generated by plot.py at 2018-01-17 08:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.27 Mbit/s
95th percentile per-packet one-way delay: 31.214 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.27 Mbit/s
95th percentile per-packet one-way delay: 31.204 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 31.216 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 31.272 ms
Loss rate: 0.00%
```
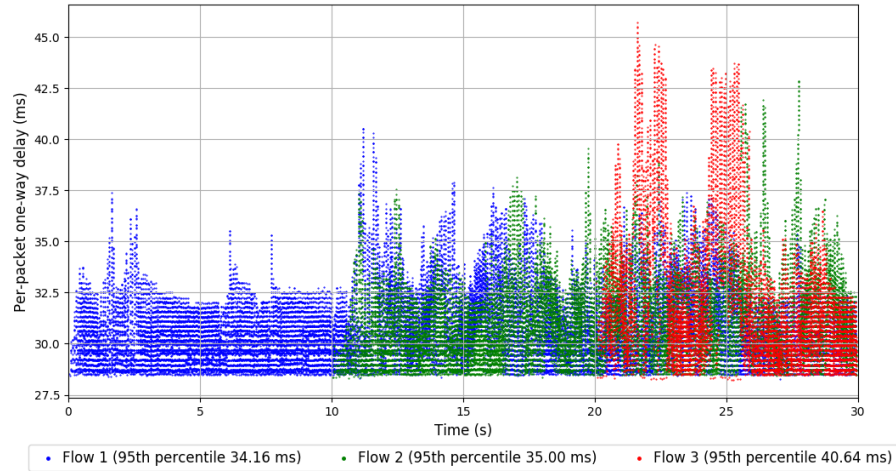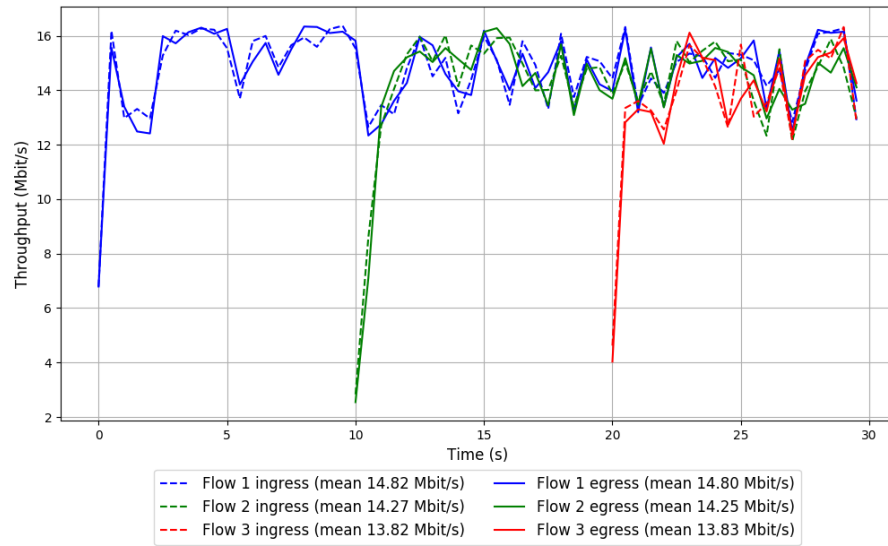
Run 10: Report of WebRTC media — Data Link

```
Run 1: Statistics of Sprout

Start at: 2018-01-17 03:35:07
End at: 2018-01-17 03:35:37
Local clock offset: -0.744 ms
Remote clock offset: -1.762 ms


# Below is generated by plot.py at 2018-01-17 08:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.21 Mbit/s
95th percentile per-packet one-way delay: 37.281 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 15.60 Mbit/s
95th percentile per-packet one-way delay: 34.836 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 15.02 Mbit/s
95th percentile per-packet one-way delay: 37.277 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 13.99 Mbit/s
95th percentile per-packet one-way delay: 41.765 ms
Loss rate: 0.00%
```
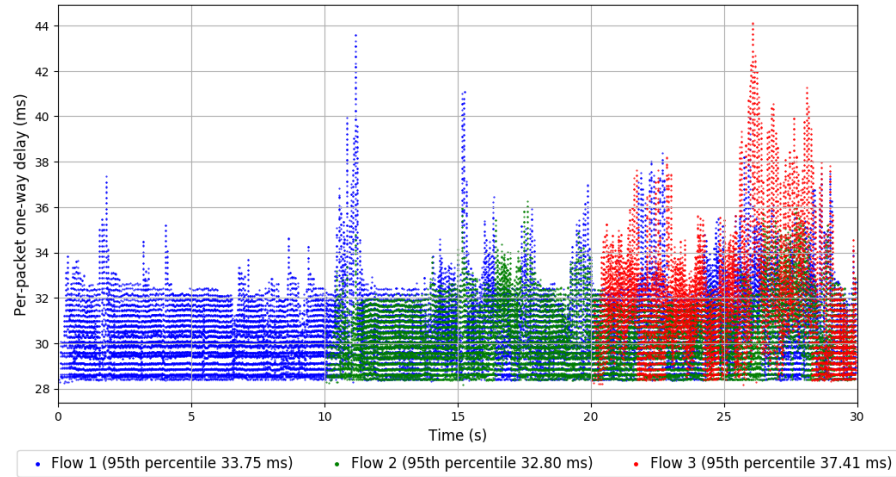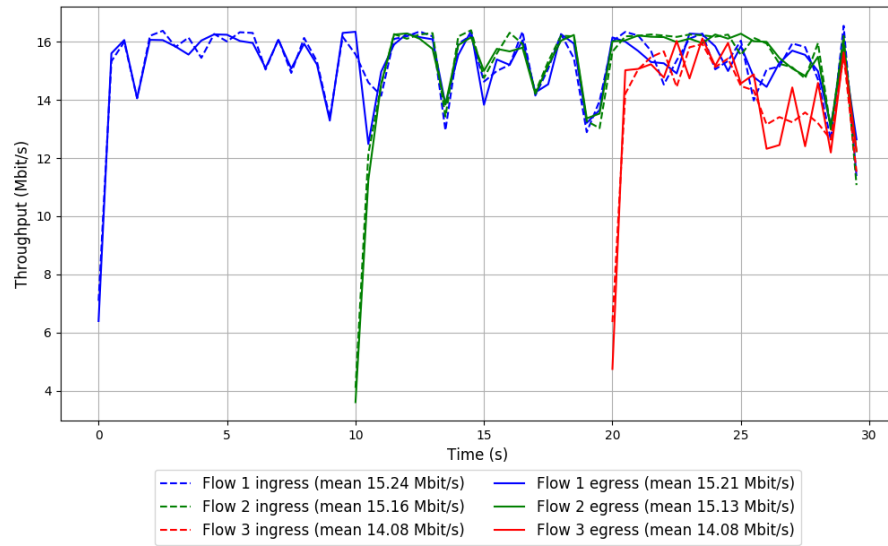
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2018-01-17 04:01:09
End at: 2018-01-17 04:01:39
Local clock offset: -0.858 ms
Remote clock offset: -1.693 ms


# Below is generated by plot.py at 2018-01-17 08:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 31.26 Mbit/s
95th percentile per-packet one-way delay: 35.380 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 15.79 Mbit/s
95th percentile per-packet one-way delay: 34.633 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 15.58 Mbit/s
95th percentile per-packet one-way delay: 36.654 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 15.45 Mbit/s
95th percentile per-packet one-way delay: 35.621 ms
Loss rate: 0.00%
```
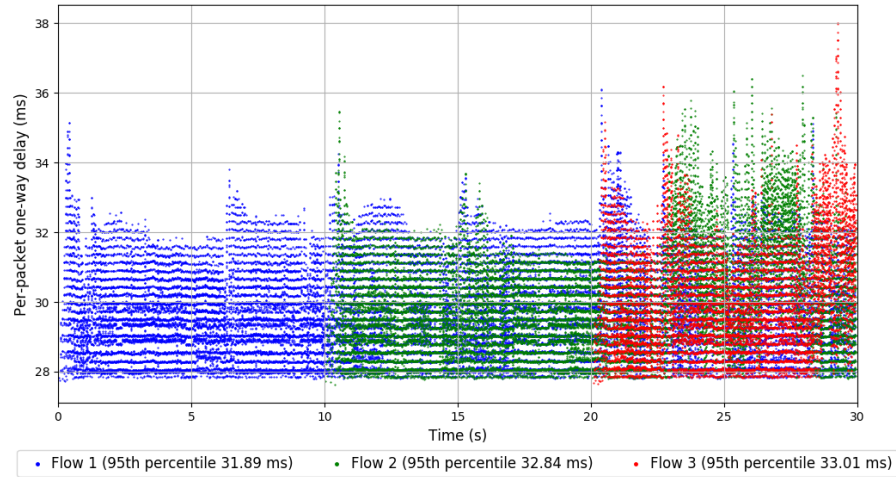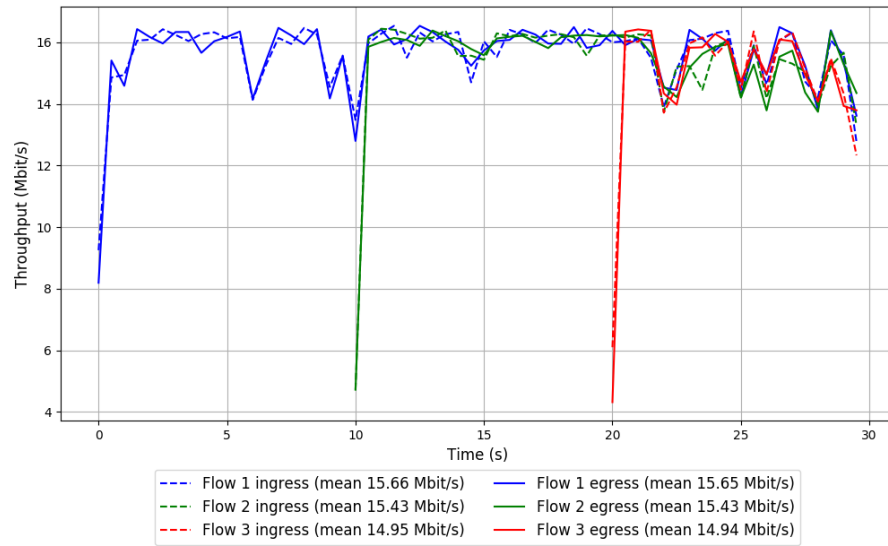
Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2018-01-17 04:27:08
End at: 2018-01-17 04:27:38
Local clock offset: -0.743 ms
Remote clock offset: -2.121 ms


# Below is generated by plot.py at 2018-01-17 08:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.91 Mbit/s
95th percentile per-packet one-way delay: 34.745 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 15.58 Mbit/s
95th percentile per-packet one-way delay: 34.826 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 15.59 Mbit/s
95th percentile per-packet one-way delay: 34.777 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 15.08 Mbit/s
95th percentile per-packet one-way delay: 34.232 ms
Loss rate: 0.00%
```
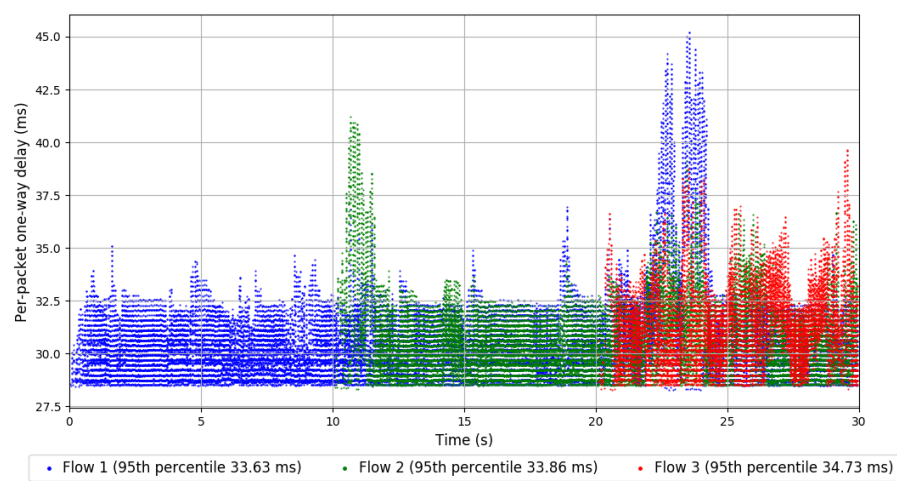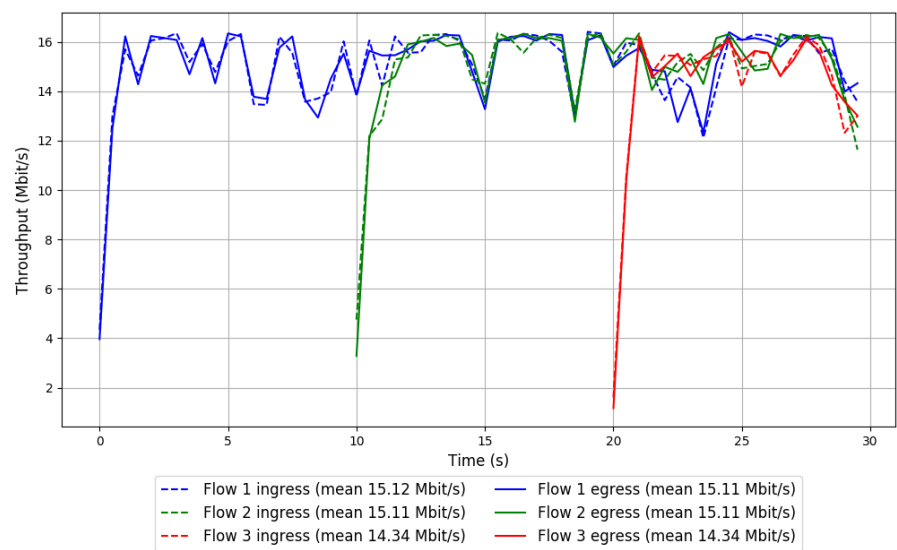
Run 3: Report of Sprout — Data Link

Flow 1 ingress (mean 15.58 Mbit/s) --- Flow 1 egress (mean 15.58 Mbit/s)
Flow 2 ingress (mean 15.59 Mbit/s) --- Flow 2 egress (mean 15.59 Mbit/s)
Flow 3 ingress (mean 15.08 Mbit/s) --- Flow 3 egress (mean 15.08 Mbit/s)

Flow 1 (95th percentile 34.83 ms) • Flow 2 (95th percentile 34.78 ms) • Flow 3 (95th percentile 34.23 ms)

```
Run 4: Statistics of Sprout

Start at: 2018-01-17 04:53:27
End at: 2018-01-17 04:53:57
Local clock offset: -0.709 ms
Remote clock offset: -4.143 ms


# Below is generated by plot.py at 2018-01-17 08:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 28.84 Mbit/s
95th percentile per-packet one-way delay: 35.543 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 14.80 Mbit/s
95th percentile per-packet one-way delay: 34.158 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 14.25 Mbit/s
95th percentile per-packet one-way delay: 35.001 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 13.83 Mbit/s
95th percentile per-packet one-way delay: 40.640 ms
Loss rate: 0.00%
```
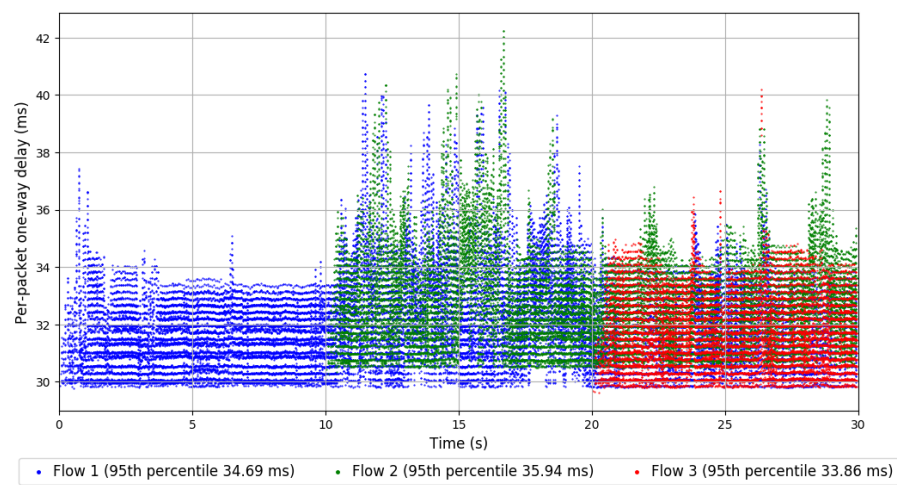
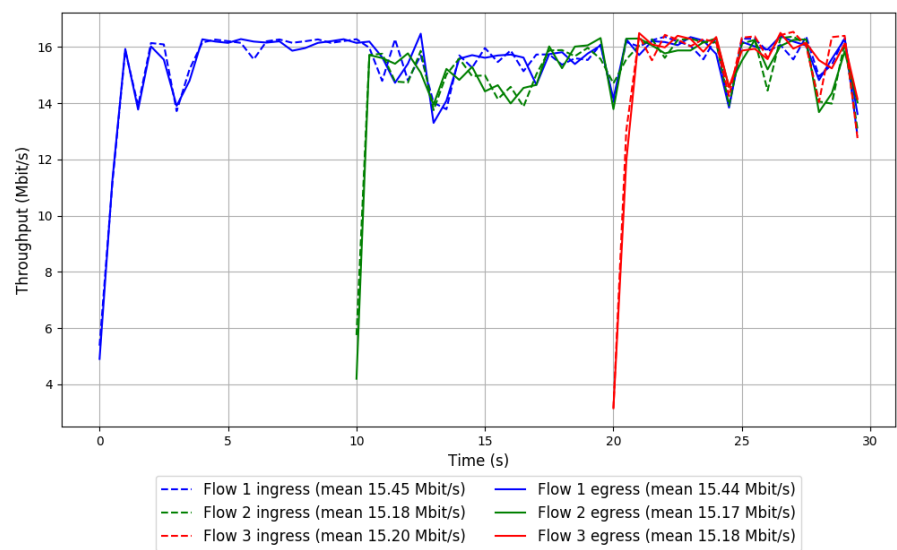## Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2018-01-17 05:20:30
End at: 2018-01-17 05:21:00
Local clock offset: -0.336 ms
Remote clock offset: -4.002 ms


# Below is generated by plot.py at 2018-01-17 08:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 29.93 Mbit/s
95th percentile per-packet one-way delay: 34.234 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 15.21 Mbit/s
95th percentile per-packet one-way delay: 33.753 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 15.13 Mbit/s
95th percentile per-packet one-way delay: 32.805 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 14.08 Mbit/s
95th percentile per-packet one-way delay: 37.415 ms
Loss rate: 0.00%
```
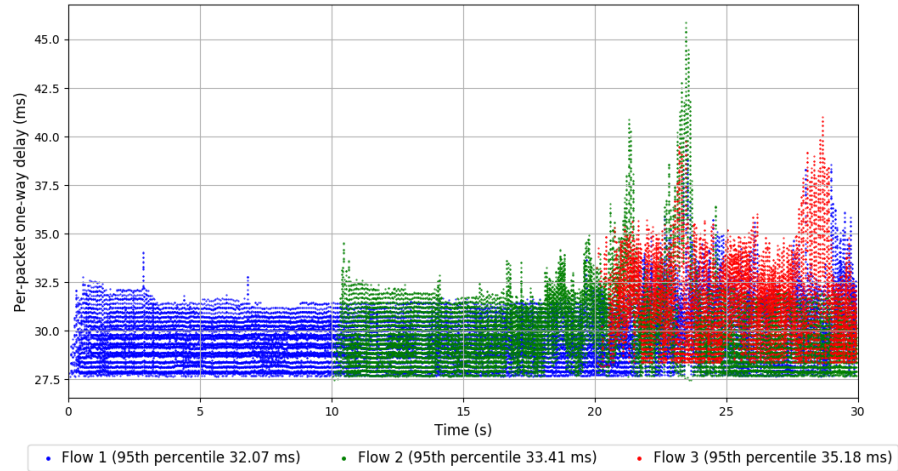
Run 5: Report of Sprout — Data Link

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```
Run 6: Statistics of Sprout

Start at: 2018-01-17 05:47:34
End at: 2018-01-17 05:48:04
Local clock offset: -0.171 ms
Remote clock offset: -4.064 ms


# Below is generated by plot.py at 2018-01-17 08:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.85 Mbit/s
95th percentile per-packet one-way delay: 32.373 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 15.65 Mbit/s
95th percentile per-packet one-way delay: 31.886 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 15.43 Mbit/s
95th percentile per-packet one-way delay: 32.837 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 14.94 Mbit/s
95th percentile per-packet one-way delay: 33.009 ms
Loss rate: 0.00%
```
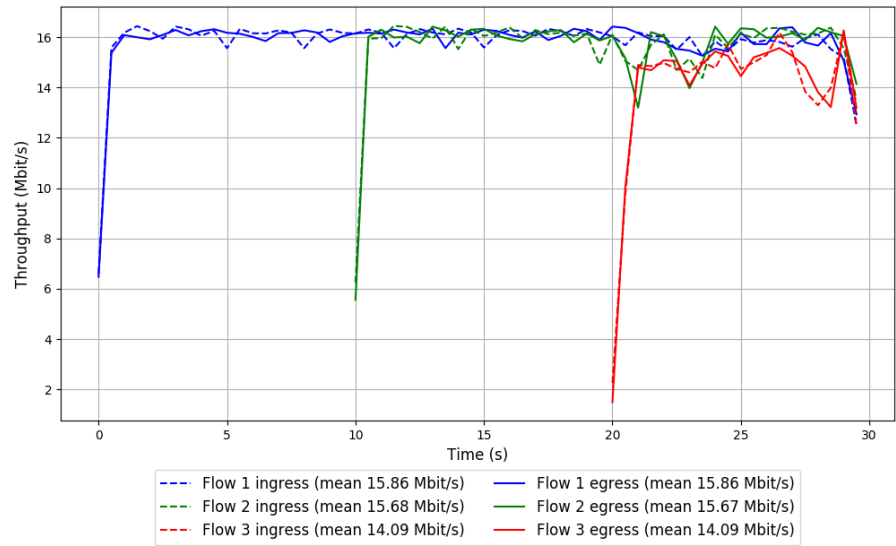
Run 6: Report of Sprout — Data Link

```
Run 7: Statistics of Sprout

Start at: 2018-01-17 06:14:02
End at: 2018-01-17 06:14:32
Local clock offset: -0.117 ms
Remote clock offset: -4.206 ms


# Below is generated by plot.py at 2018-01-17 08:15:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 29.89 Mbit/s
95th percentile per-packet one-way delay: 34.097 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 15.11 Mbit/s
95th percentile per-packet one-way delay: 33.633 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 15.11 Mbit/s
95th percentile per-packet one-way delay: 33.857 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 14.34 Mbit/s
95th percentile per-packet one-way delay: 34.730 ms
Loss rate: 0.00%
```
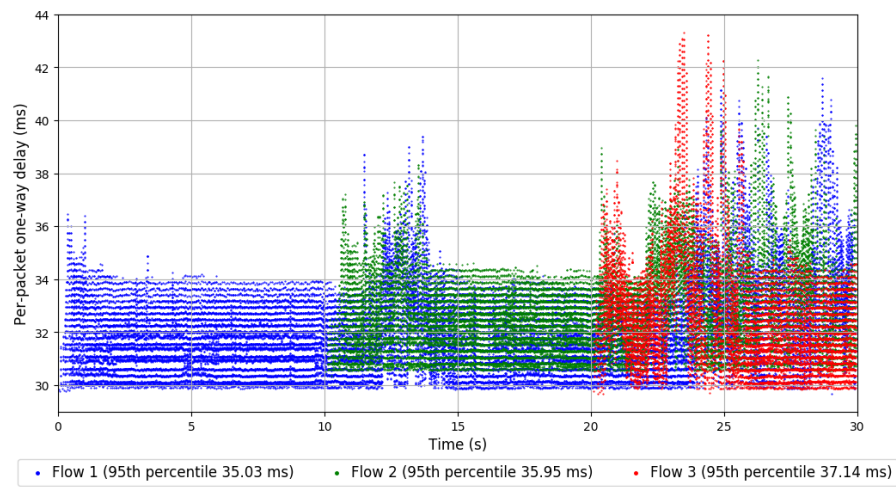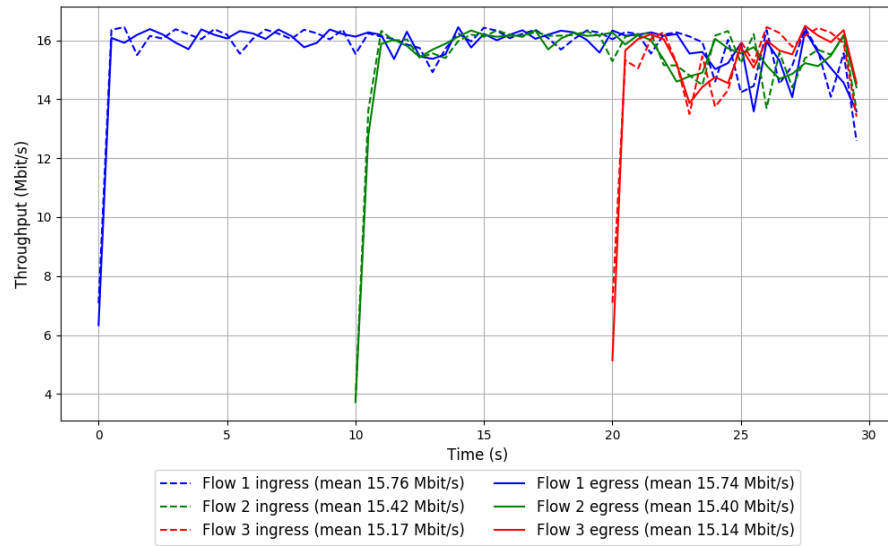
Run 7: Report of Sprout — Data Link

- - - Flow 1 ingress (mean 15.12 Mbit/s)   —— Flow 1 egress (mean 15.11 Mbit/s)
- - - Flow 2 ingress (mean 15.11 Mbit/s)   —— Flow 2 egress (mean 15.11 Mbit/s)
- - - Flow 3 ingress (mean 14.34 Mbit/s)   —— Flow 3 egress (mean 14.34 Mbit/s)

- Flow 1 (95th percentile 33.63 ms)   • Flow 2 (95th percentile 33.86 ms)   • Flow 3 (95th percentile 34.73 ms)

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```
Run 8: Statistics of Sprout

Start at: 2018-01-17 06:40:11
End at: 2018-01-17 06:40:41
Local clock offset: -0.084 ms
Remote clock offset: -2.485 ms


# Below is generated by plot.py at 2018-01-17 08:15:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.55 Mbit/s
95th percentile per-packet one-way delay: 35.065 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 15.44 Mbit/s
95th percentile per-packet one-way delay: 34.693 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 15.17 Mbit/s
95th percentile per-packet one-way delay: 35.939 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 15.18 Mbit/s
95th percentile per-packet one-way delay: 33.864 ms
Loss rate: 0.09%
```
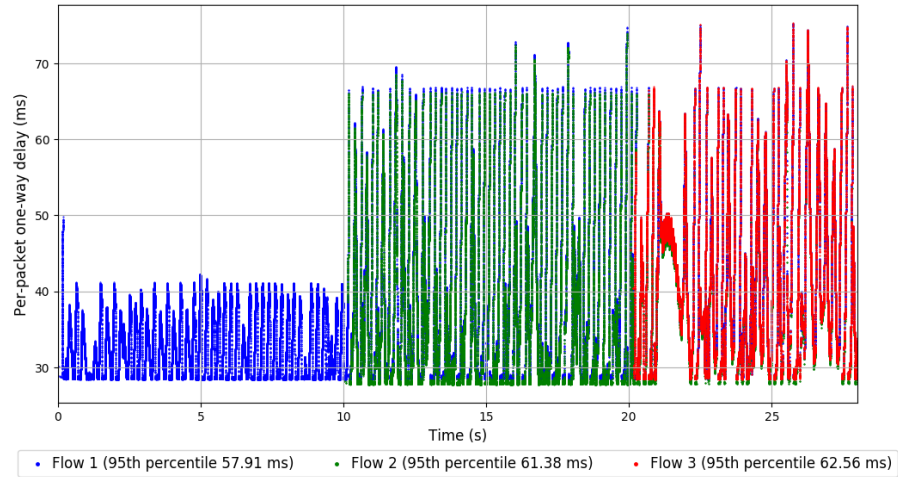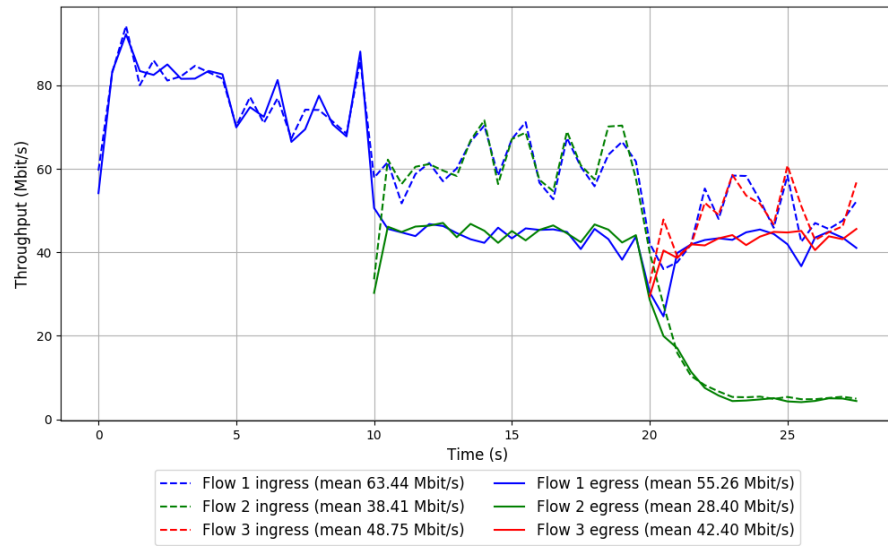
Run 8: Report of Sprout — Data Link

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```
Run 9: Statistics of Sprout

Start at: 2018-01-17 07:05:20
End at: 2018-01-17 07:05:50
Local clock offset: 0.078 ms
Remote clock offset: -4.384 ms


# Below is generated by plot.py at 2018-01-17 08:15:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.92 Mbit/s
95th percentile per-packet one-way delay: 33.493 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 15.86 Mbit/s
95th percentile per-packet one-way delay: 32.067 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 15.67 Mbit/s
95th percentile per-packet one-way delay: 33.414 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 14.09 Mbit/s
95th percentile per-packet one-way delay: 35.178 ms
Loss rate: 0.00%
```
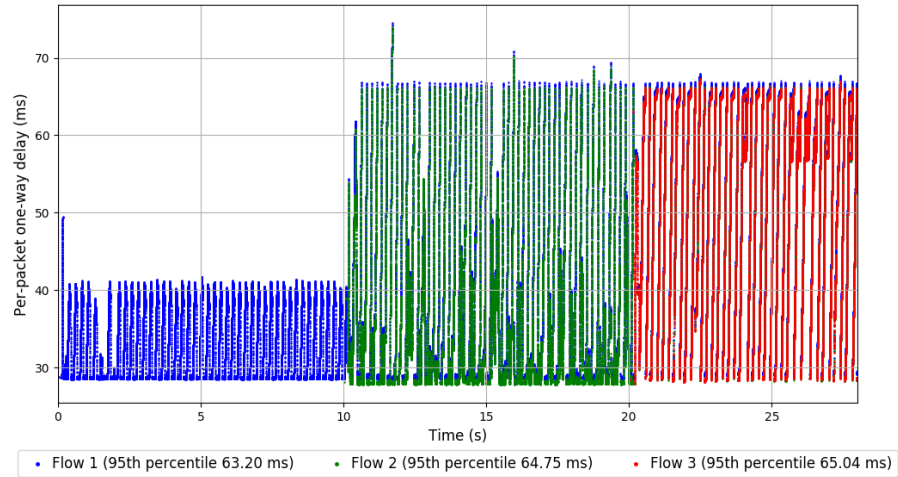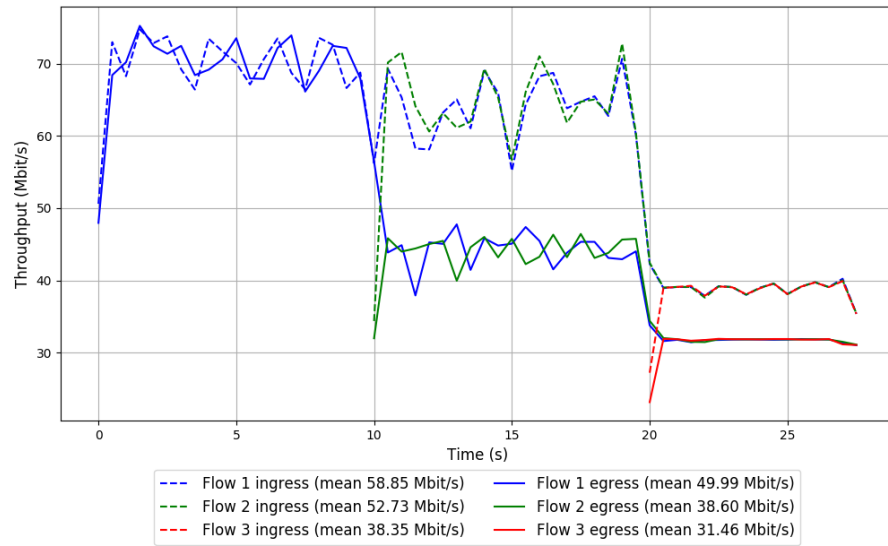
Run 9: Report of Sprout — Data Link

```
Run 10: Statistics of Sprout

Start at: 2018-01-17 07:30:24
End at: 2018-01-17 07:30:54
Local clock offset: 0.069 ms
Remote clock offset: -2.055 ms


# Below is generated by plot.py at 2018-01-17 08:15:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.97 Mbit/s
95th percentile per-packet one-way delay: 35.759 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 15.74 Mbit/s
95th percentile per-packet one-way delay: 35.028 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 15.40 Mbit/s
95th percentile per-packet one-way delay: 35.950 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 15.14 Mbit/s
95th percentile per-packet one-way delay: 37.140 ms
Loss rate: 0.18%
```

Run 10: Report of Sprout — Data Link

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

Start at: 2018-01-17 03:22:20
End at: 2018-01-17 03:22:50
Local clock offset: -0.645 ms
Remote clock offset: -4.133 ms


# Below is generated by plot.py at 2018-01-17 08:17:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.52 Mbit/s
95th percentile per-packet one-way delay: 59.910 ms
Loss rate: 16.12%
-- Flow 1:
Average throughput: 55.26 Mbit/s
95th percentile per-packet one-way delay: 57.907 ms
Loss rate: 12.89%
-- Flow 2:
Average throughput: 28.40 Mbit/s
95th percentile per-packet one-way delay: 61.380 ms
Loss rate: 26.06%
-- Flow 3:
Average throughput: 42.40 Mbit/s
95th percentile per-packet one-way delay: 62.563 ms
Loss rate: 13.18%
```
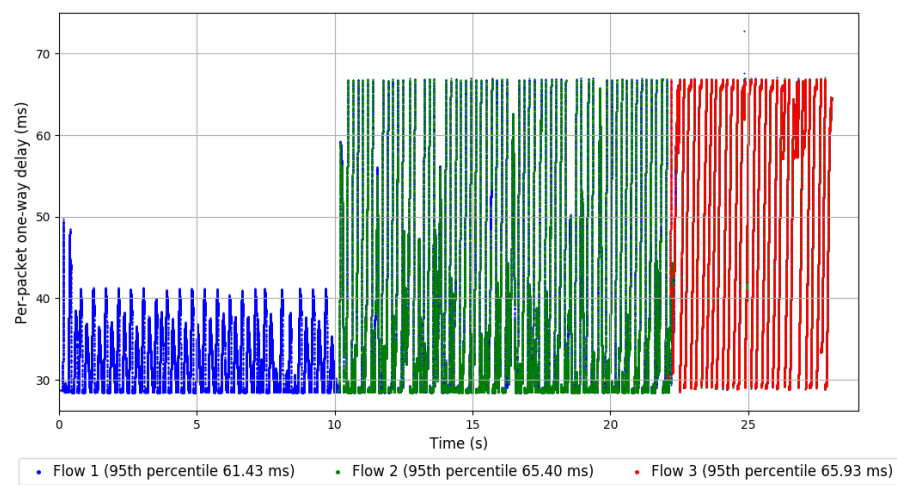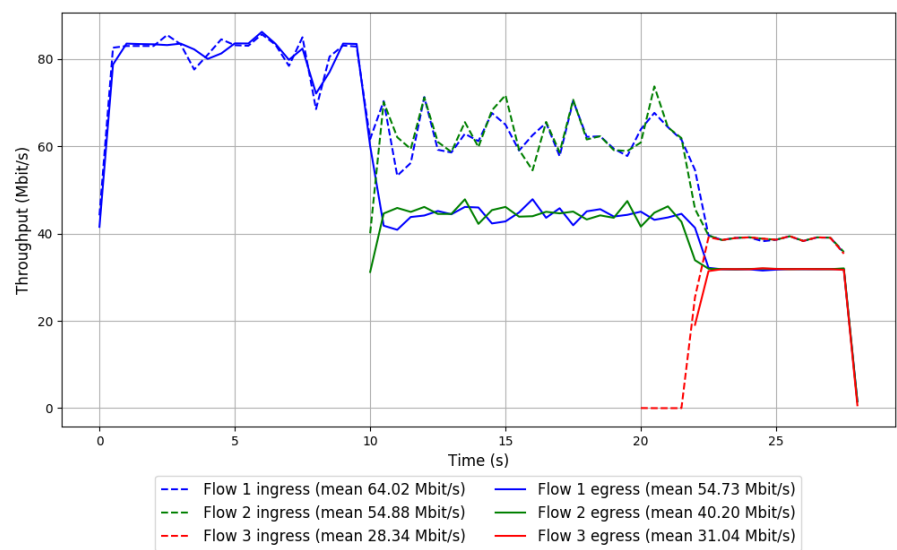
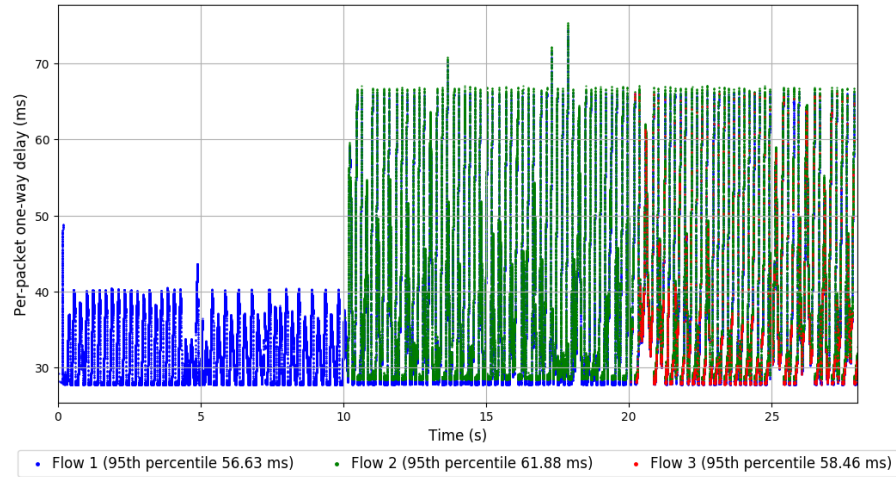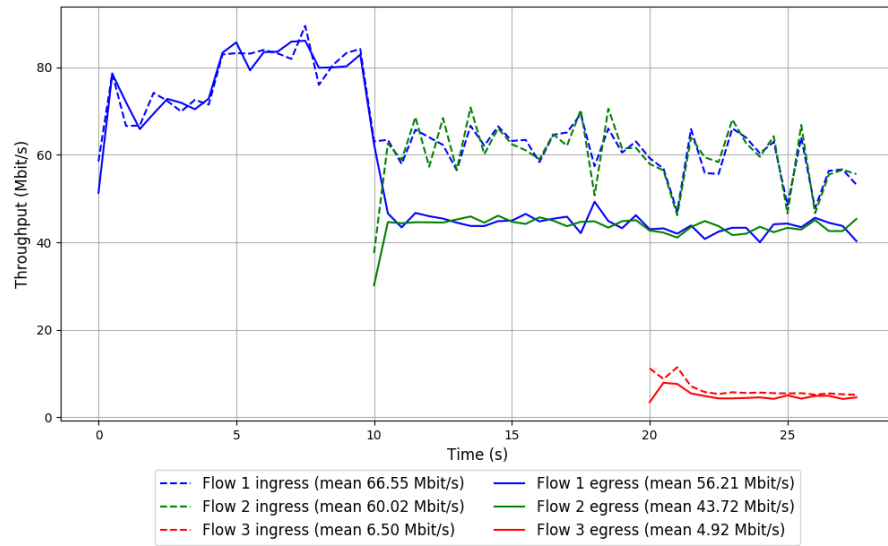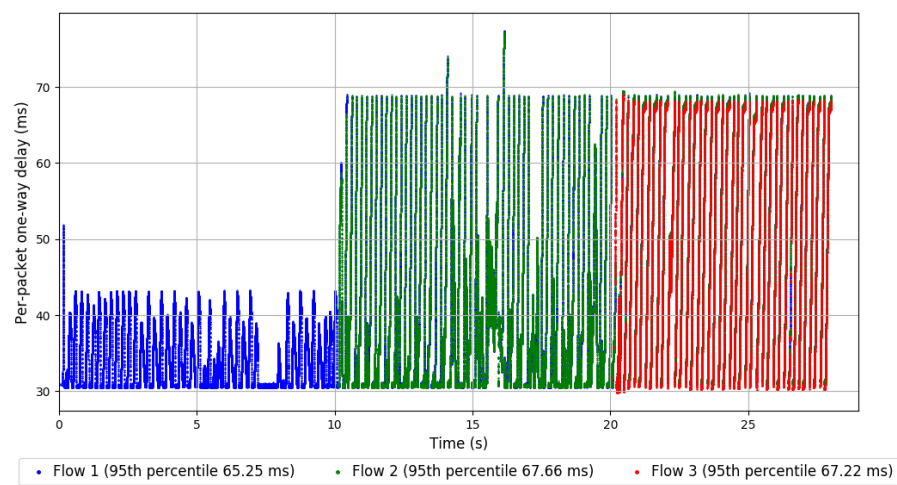Run 1: Report of TaoVA-100x — Data Link

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

Start at: 2018-01-17 03:48:28
End at: 2018-01-17 03:48:58
Local clock offset: -0.797 ms
Remote clock offset: -4.203 ms


# Below is generated by plot.py at 2018-01-17 08:17:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.71 Mbit/s
95th percentile per-packet one-way delay: 64.728 ms
Loss rate: 19.20%
-- Flow 1:
Average throughput: 49.99 Mbit/s
95th percentile per-packet one-way delay: 63.205 ms
Loss rate: 15.06%
-- Flow 2:
Average throughput: 38.60 Mbit/s
95th percentile per-packet one-way delay: 64.751 ms
Loss rate: 26.80%
-- Flow 3:
Average throughput: 31.46 Mbit/s
95th percentile per-packet one-way delay: 65.040 ms
Loss rate: 17.95%
```

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

Flow 1 ingress (mean 58.85 Mbit/s) — — — Flow 1 egress (mean 49.99 Mbit/s)
Flow 2 ingress (mean 52.73 Mbit/s) — — — Flow 2 egress (mean 38.60 Mbit/s)
Flow 3 ingress (mean 38.35 Mbit/s) — — — Flow 3 egress (mean 31.46 Mbit/s)

Flow 1 (95th percentile 63.20 ms)   Flow 2 (95th percentile 64.75 ms)   Flow 3 (95th percentile 65.04 ms)
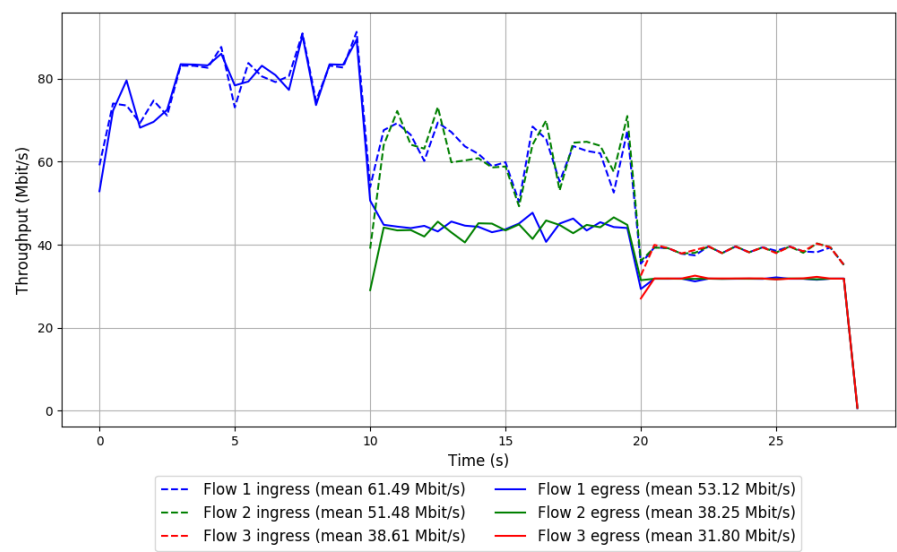
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```
Run 3: Statistics of TaoVA-100x

Start at: 2018-01-17 04:14:18
End at: 2018-01-17 04:14:48
Local clock offset: -0.873 ms
Remote clock offset: -4.21 ms

# Below is generated by plot.py at 2018-01-17 08:17:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.14 Mbit/s
95th percentile per-packet one-way delay: 64.586 ms
Loss rate: 18.67%
-- Flow 1:
Average throughput: 54.73 Mbit/s
95th percentile per-packet one-way delay: 61.427 ms
Loss rate: 14.41%
-- Flow 2:
Average throughput: 40.20 Mbit/s
95th percentile per-packet one-way delay: 65.400 ms
Loss rate: 26.61%
-- Flow 3:
Average throughput: 31.04 Mbit/s
95th percentile per-packet one-way delay: 65.933 ms
Loss rate: 17.84%
```
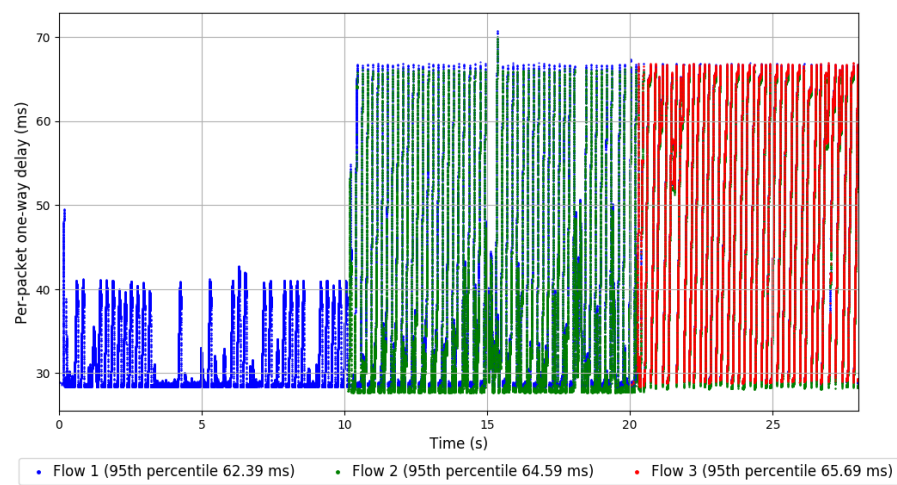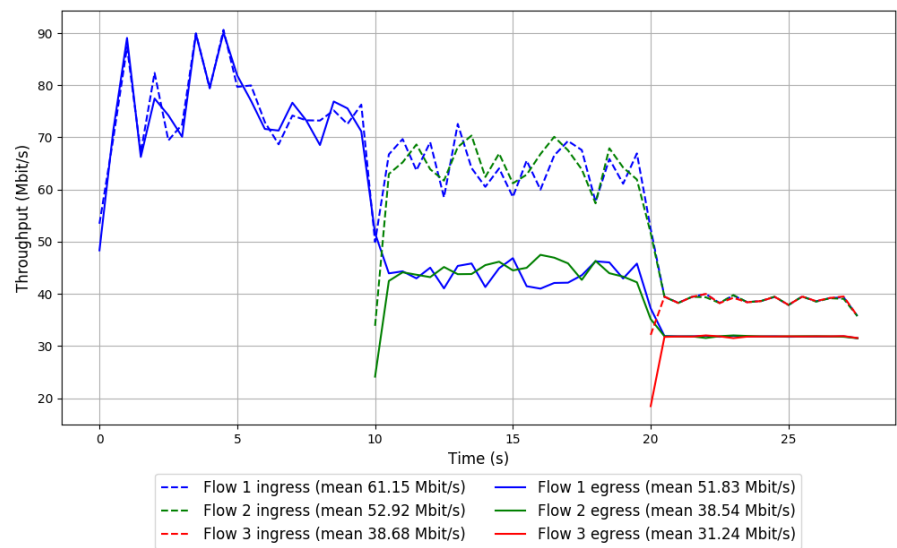
Run 3: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 64.02 Mbit/s)   Flow 1 egress (mean 54.73 Mbit/s)
Flow 2 ingress (mean 54.88 Mbit/s)   Flow 2 egress (mean 40.20 Mbit/s)
Flow 3 ingress (mean 28.34 Mbit/s)   Flow 3 egress (mean 31.04 Mbit/s)

Flow 1 (95th percentile 61.43 ms)   Flow 2 (95th percentile 65.40 ms)   Flow 3 (95th percentile 65.93 ms)
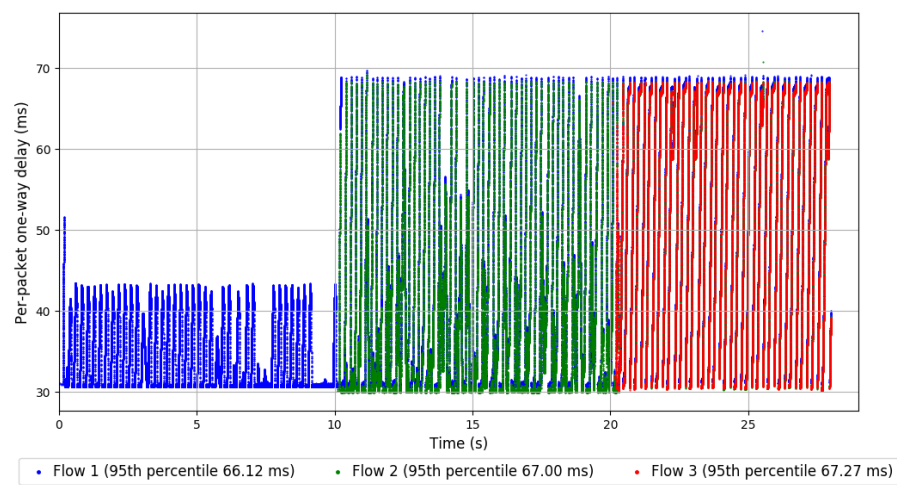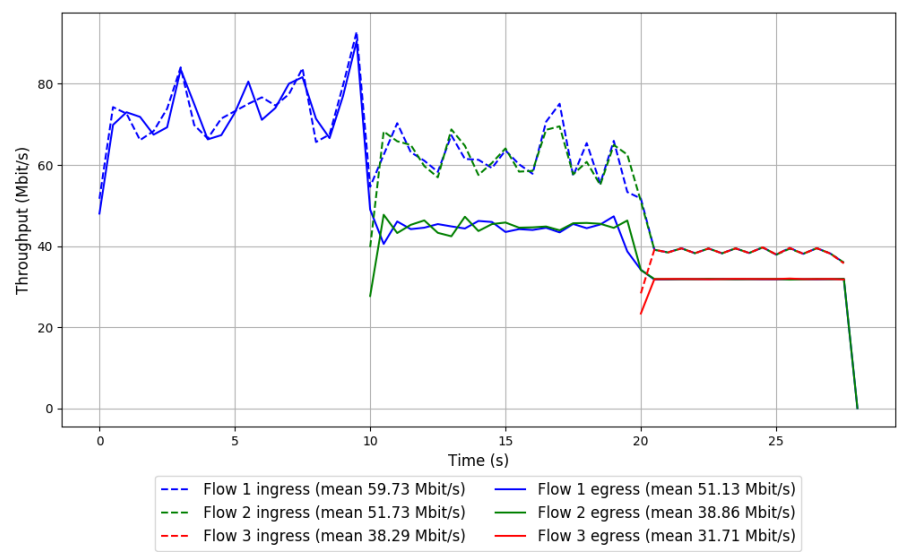
```
Run 4: Statistics of TaoVA-100x

Start at: 2018-01-17 04:40:19
End at: 2018-01-17 04:40:49
Local clock offset: -0.796 ms
Remote clock offset: -4.179 ms


# Below is generated by plot.py at 2018-01-17 08:17:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.66 Mbit/s
95th percentile per-packet one-way delay: 59.004 ms
Loss rate: 19.89%
-- Flow 1:
Average throughput: 56.21 Mbit/s
95th percentile per-packet one-way delay: 56.628 ms
Loss rate: 15.54%
-- Flow 2:
Average throughput: 43.72 Mbit/s
95th percentile per-packet one-way delay: 61.878 ms
Loss rate: 27.18%
-- Flow 3:
Average throughput: 4.92 Mbit/s
95th percentile per-packet one-way delay: 58.461 ms
Loss rate: 24.26%
```

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

Flow 1 ingress (mean 66.55 Mbit/s)   Flow 1 egress (mean 56.21 Mbit/s)
Flow 2 ingress (mean 60.02 Mbit/s)   Flow 2 egress (mean 43.72 Mbit/s)
Flow 3 ingress (mean 6.50 Mbit/s)   Flow 3 egress (mean 4.92 Mbit/s)

Flow 1 (95th percentile 56.63 ms)   Flow 2 (95th percentile 61.88 ms)   Flow 3 (95th percentile 58.46 ms)

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

Start at: 2018-01-17 05:07:07
End at: 2018-01-17 05:07:37
Local clock offset: -0.41 ms
Remote clock offset: -1.845 ms

# Below is generated by plot.py at 2018-01-17 08:17:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.74 Mbit/s
95th percentile per-packet one-way delay: 67.192 ms
Loss rate: 17.75%
-- Flow 1:
Average throughput: 53.12 Mbit/s
95th percentile per-packet one-way delay: 65.245 ms
Loss rate: 13.55%
-- Flow 2:
Average throughput: 38.25 Mbit/s
95th percentile per-packet one-way delay: 67.660 ms
Loss rate: 25.65%
-- Flow 3:
Average throughput: 31.80 Mbit/s
95th percentile per-packet one-way delay: 67.225 ms
Loss rate: 17.46%
```
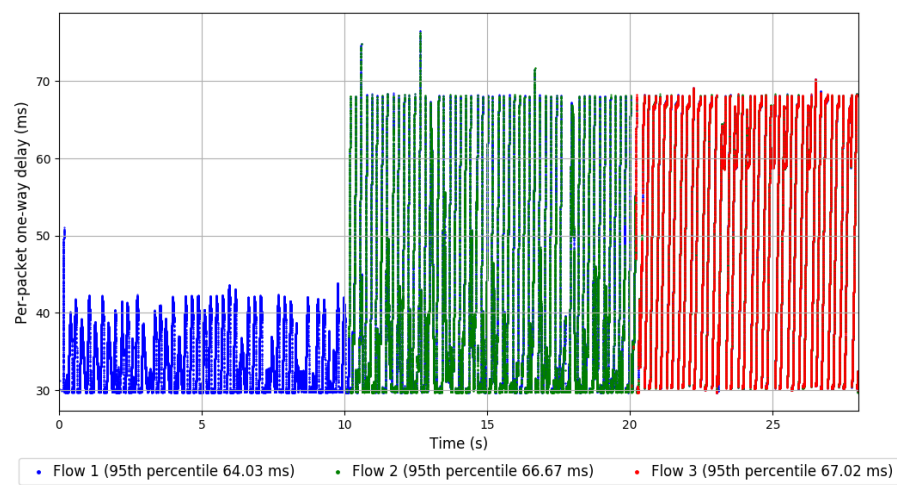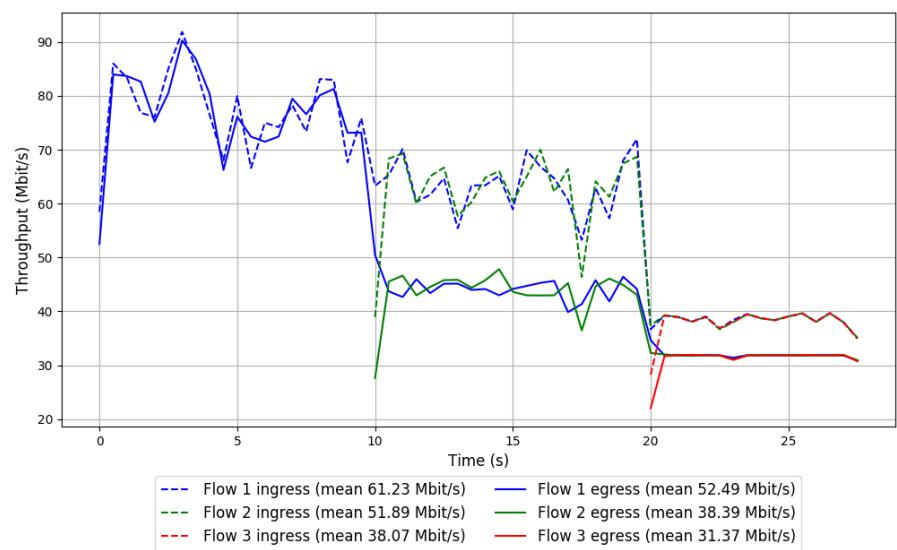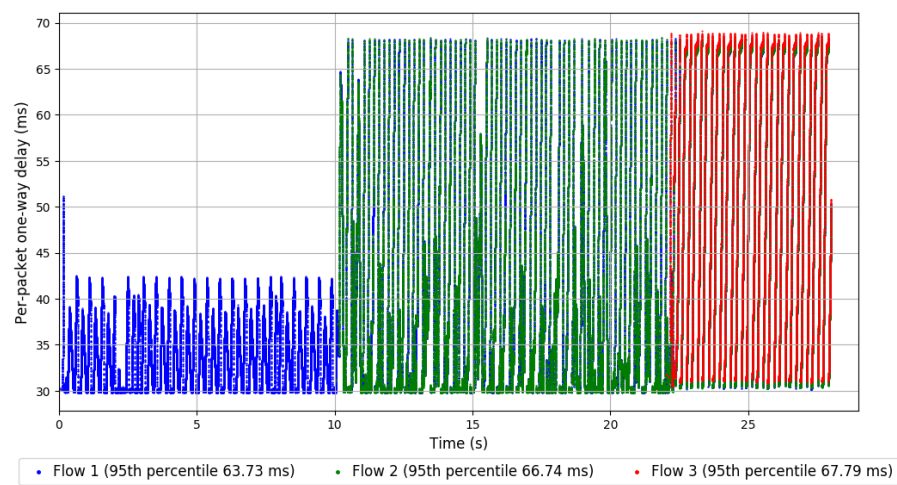
Run 5: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 61.49 Mbit/s) Flow 1 egress (mean 53.12 Mbit/s)
Flow 2 ingress (mean 51.48 Mbit/s) Flow 2 egress (mean 38.25 Mbit/s)
Flow 3 ingress (mean 38.61 Mbit/s) Flow 3 egress (mean 31.80 Mbit/s)

Flow 1 (95th percentile 65.25 ms)   Flow 2 (95th percentile 67.66 ms)   Flow 3 (95th percentile 67.22 ms)

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

Start at: 2018-01-17 05:34:25
End at: 2018-01-17 05:34:55
Local clock offset: -0.227 ms
Remote clock offset: -4.048 ms


# Below is generated by plot.py at 2018-01-17 08:17:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.42 Mbit/s
95th percentile per-packet one-way delay: 64.565 ms
Loss rate: 19.49%
-- Flow 1:
Average throughput: 51.83 Mbit/s
95th percentile per-packet one-way delay: 62.386 ms
Loss rate: 15.23%
-- Flow 2:
Average throughput: 38.54 Mbit/s
95th percentile per-packet one-way delay: 64.587 ms
Loss rate: 27.23%
-- Flow 3:
Average throughput: 31.24 Mbit/s
95th percentile per-packet one-way delay: 65.695 ms
Loss rate: 19.24%
```

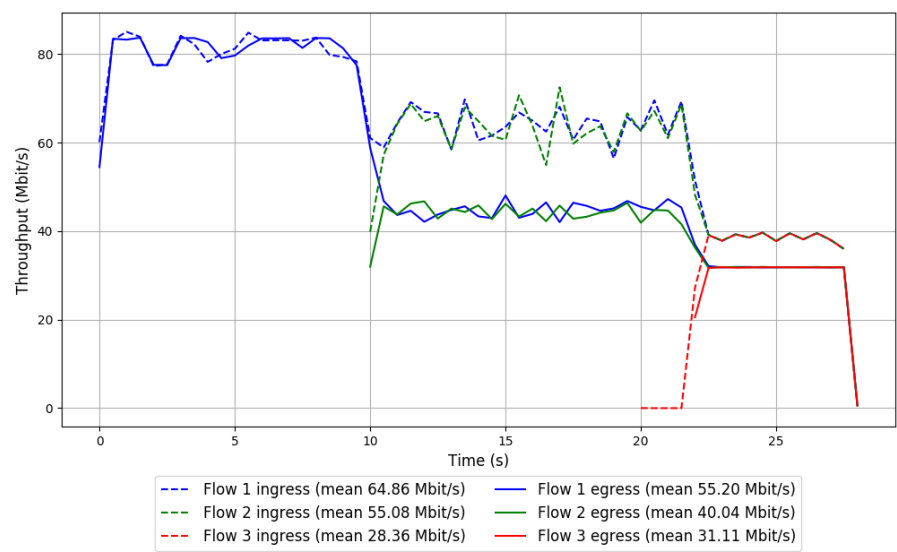Run 6: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 61.15 Mbit/s)   Flow 1 egress (mean 51.83 Mbit/s)
Flow 2 ingress (mean 52.92 Mbit/s)   Flow 2 egress (mean 38.54 Mbit/s)
Flow 3 ingress (mean 38.68 Mbit/s)   Flow 3 egress (mean 31.24 Mbit/s)

Flow 1 (95th percentile 62.39 ms)   Flow 2 (95th percentile 64.59 ms)   Flow 3 (95th percentile 65.69 ms)
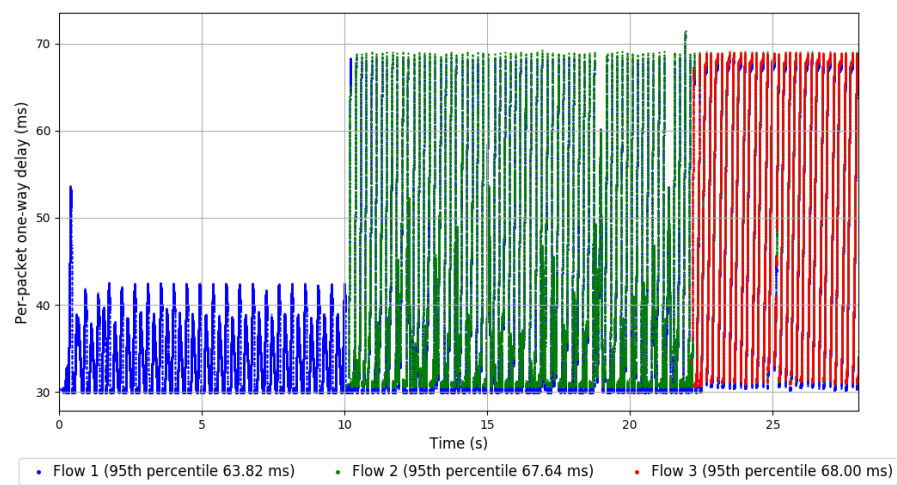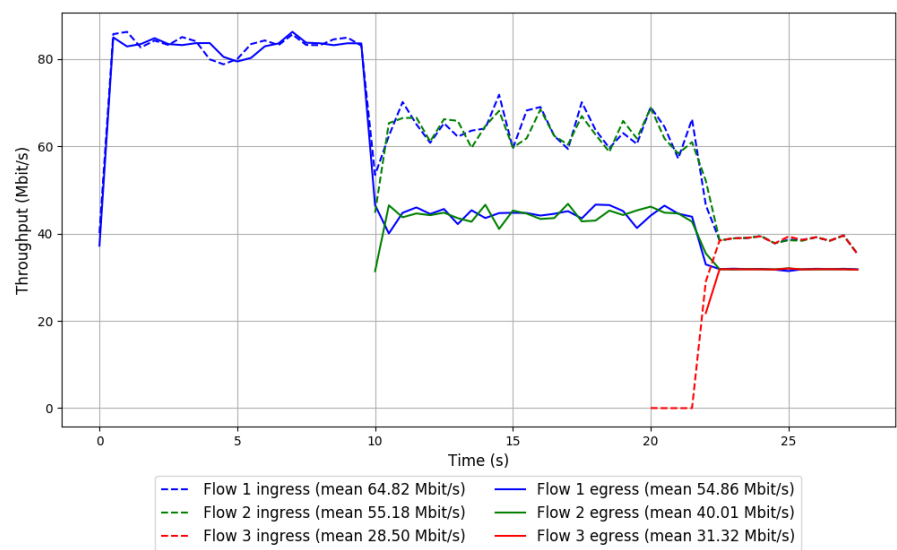
```
Run 7: Statistics of TaoVA-100x

Start at: 2018-01-17 06:00:54
End at: 2018-01-17 06:01:24
Local clock offset: -0.078 ms
Remote clock offset: -1.982 ms

# Below is generated by plot.py at 2018-01-17 08:17:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.04 Mbit/s
95th percentile per-packet one-way delay: 67.052 ms
Loss rate: 18.05%
-- Flow 1:
Average throughput: 51.13 Mbit/s
95th percentile per-packet one-way delay: 66.119 ms
Loss rate: 14.36%
-- Flow 2:
Average throughput: 38.86 Mbit/s
95th percentile per-packet one-way delay: 67.004 ms
Loss rate: 24.87%
-- Flow 3:
Average throughput: 31.71 Mbit/s
95th percentile per-packet one-way delay: 67.267 ms
Loss rate: 17.47%
```

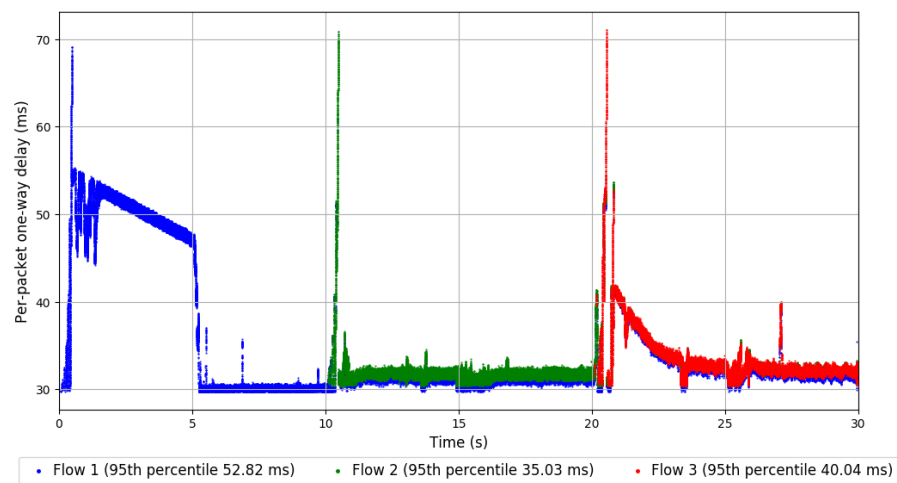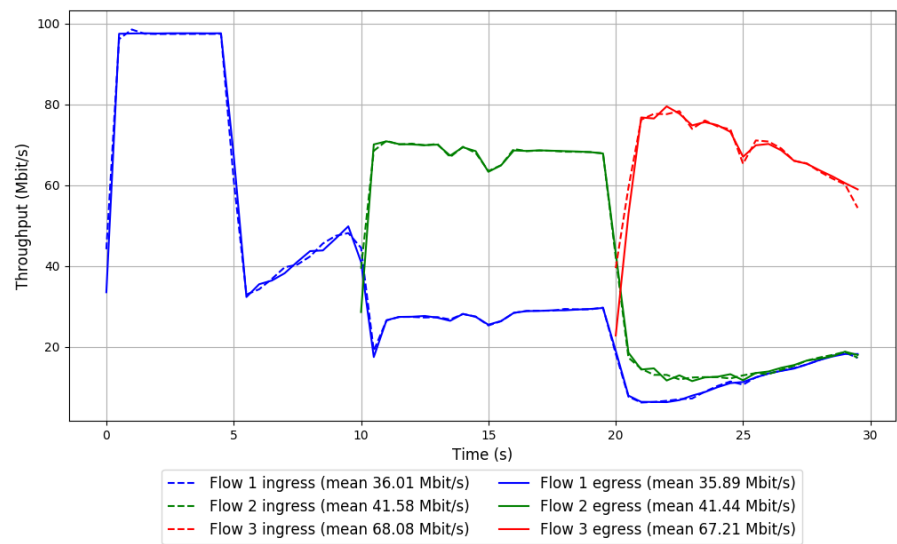## Run 7: Report of TaoVA-100x — Data Link

- Flow 1 ingress (mean 59.73 Mbit/s)
- Flow 2 ingress (mean 51.73 Mbit/s)
- Flow 3 ingress (mean 38.29 Mbit/s)
- Flow 1 egress (mean 51.13 Mbit/s)
- Flow 2 egress (mean 38.86 Mbit/s)
- Flow 3 egress (mean 31.71 Mbit/s)

- Flow 1 (95th percentile 66.12 ms)
- Flow 2 (95th percentile 67.00 ms)
- Flow 3 (95th percentile 67.27 ms)

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

Start at: 2018-01-17 06:27:22
End at: 2018-01-17 06:27:52
Local clock offset: 0.017 ms
Remote clock offset: -2.302 ms

# Below is generated by plot.py at 2018-01-17 08:17:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.03 Mbit/s
95th percentile per-packet one-way delay: 66.468 ms
Loss rate: 18.33%
-- Flow 1:
Average throughput: 52.49 Mbit/s
95th percentile per-packet one-way delay: 64.034 ms
Loss rate: 14.27%
-- Flow 2:
Average throughput: 38.39 Mbit/s
95th percentile per-packet one-way delay: 66.668 ms
Loss rate: 26.02%
-- Flow 3:
Average throughput: 31.37 Mbit/s
95th percentile per-packet one-way delay: 67.021 ms
Loss rate: 17.60%
```

Run 8: Report of TaoVA-100x — Data Link

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

Start at: 2018-01-17 06:52:58
End at: 2018-01-17 06:53:28
Local clock offset: 0.029 ms
Remote clock offset: -2.253 ms


# Below is generated by plot.py at 2018-01-17 08:19:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.54 Mbit/s
95th percentile per-packet one-way delay: 66.695 ms
Loss rate: 19.10%
-- Flow 1:
Average throughput: 55.20 Mbit/s
95th percentile per-packet one-way delay: 63.729 ms
Loss rate: 14.84%
-- Flow 2:
Average throughput: 40.04 Mbit/s
95th percentile per-packet one-way delay: 66.744 ms
Loss rate: 27.23%
-- Flow 3:
Average throughput: 31.11 Mbit/s
95th percentile per-packet one-way delay: 67.787 ms
Loss rate: 17.69%
```
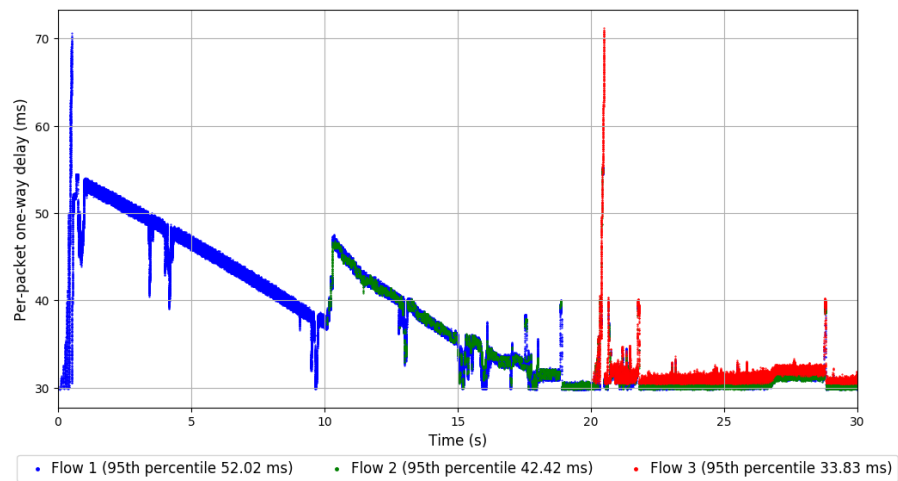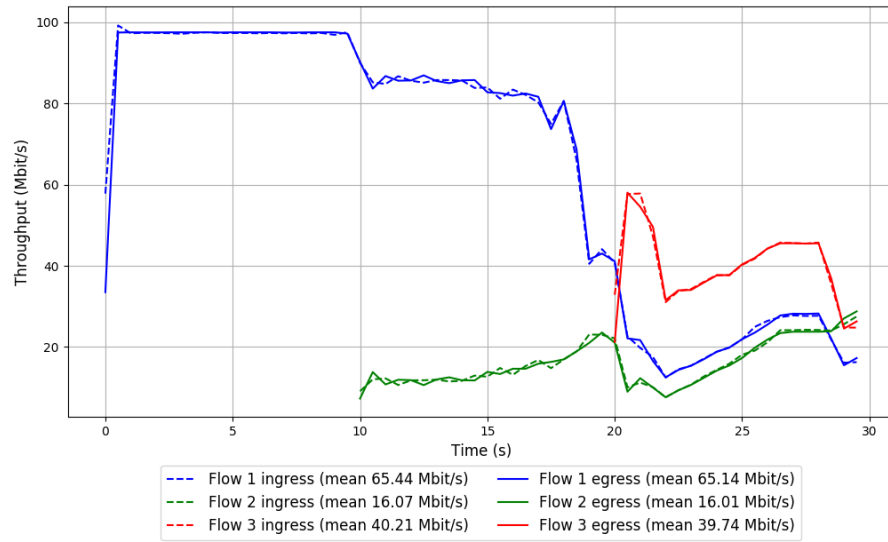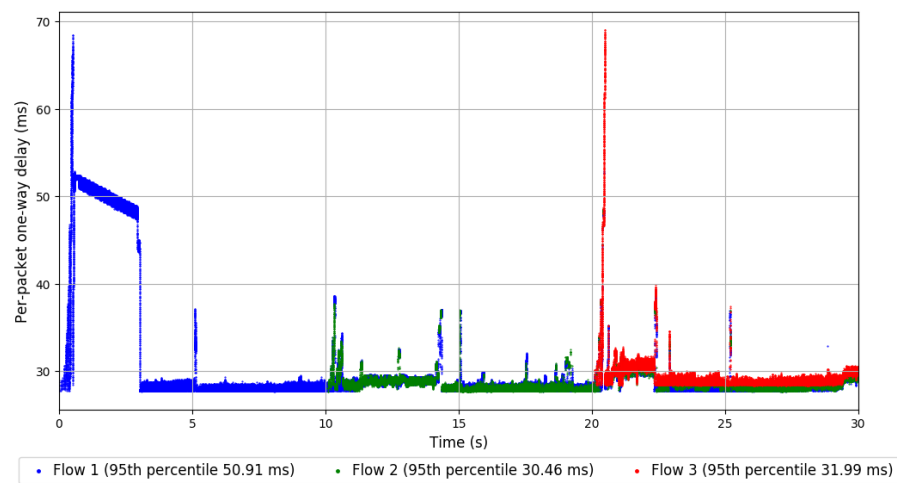
Run 9: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 64.86 Mbit/s) --- Flow 1 egress (mean 55.20 Mbit/s)
Flow 2 ingress (mean 55.08 Mbit/s) --- Flow 2 egress (mean 40.04 Mbit/s)
Flow 3 ingress (mean 28.36 Mbit/s) --- Flow 3 egress (mean 31.11 Mbit/s)

Flow 1 (95th percentile 63.73 ms) · Flow 2 (95th percentile 66.74 ms) · Flow 3 (95th percentile 67.79 ms)
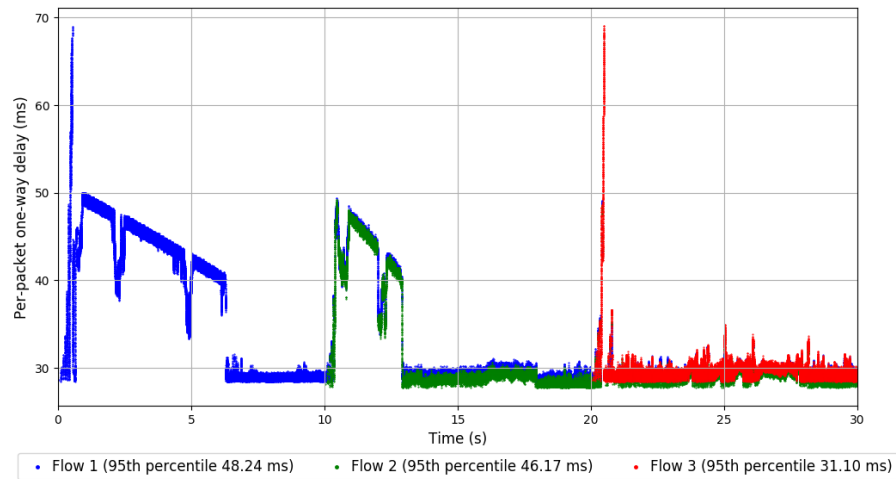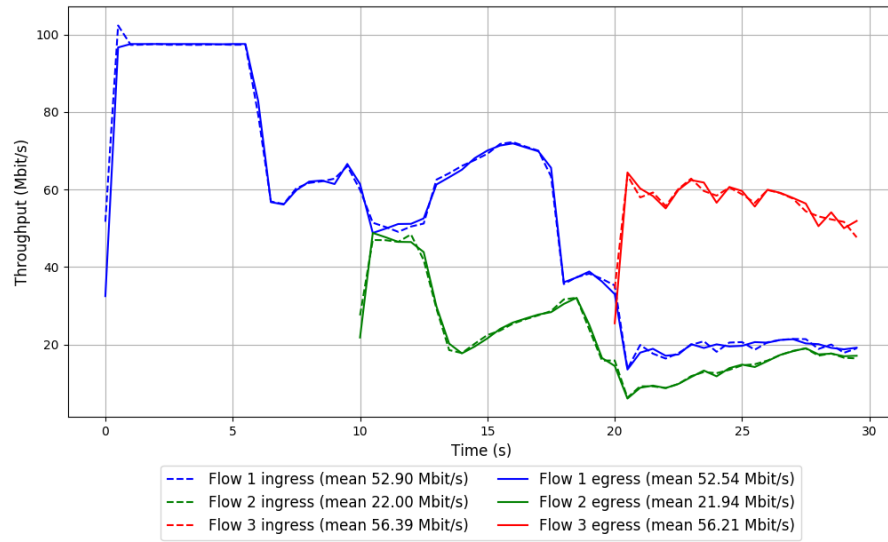
```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-17 07:17:59
End at: 2018-01-17 07:18:29
Local clock offset: 0.022 ms
Remote clock offset: -2.186 ms


# Below is generated by plot.py at 2018-01-17 08:19:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.19 Mbit/s
95th percentile per-packet one-way delay: 67.046 ms
Loss rate: 19.52%
-- Flow 1:
Average throughput: 54.86 Mbit/s
95th percentile per-packet one-way delay: 63.816 ms
Loss rate: 15.36%
-- Flow 2:
Average throughput: 40.01 Mbit/s
95th percentile per-packet one-way delay: 67.643 ms
Loss rate: 27.50%
-- Flow 3:
Average throughput: 31.32 Mbit/s
95th percentile per-packet one-way delay: 68.003 ms
Loss rate: 17.89%
```

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

Flow 1 ingress (mean 64.82 Mbit/s)   Flow 1 egress (mean 54.86 Mbit/s)
Flow 2 ingress (mean 55.18 Mbit/s)   Flow 2 egress (mean 40.01 Mbit/s)
Flow 3 ingress (mean 28.50 Mbit/s)   Flow 3 egress (mean 31.32 Mbit/s)

Flow 1 (95th percentile 63.82 ms)   Flow 2 (95th percentile 67.64 ms)   Flow 3 (95th percentile 68.00 ms)

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```
Run 1: Statistics of TCP Vegas

Start at: 2018-01-17 03:33:42
End at: 2018-01-17 03:34:12
Local clock offset: -0.655 ms
Remote clock offset: -2.246 ms


# Below is generated by plot.py at 2018-01-17 08:19:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.78 Mbit/s
95th percentile per-packet one-way delay: 51.836 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 35.89 Mbit/s
95th percentile per-packet one-way delay: 52.822 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 41.44 Mbit/s
95th percentile per-packet one-way delay: 35.028 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 67.21 Mbit/s
95th percentile per-packet one-way delay: 40.042 ms
Loss rate: 1.27%
```
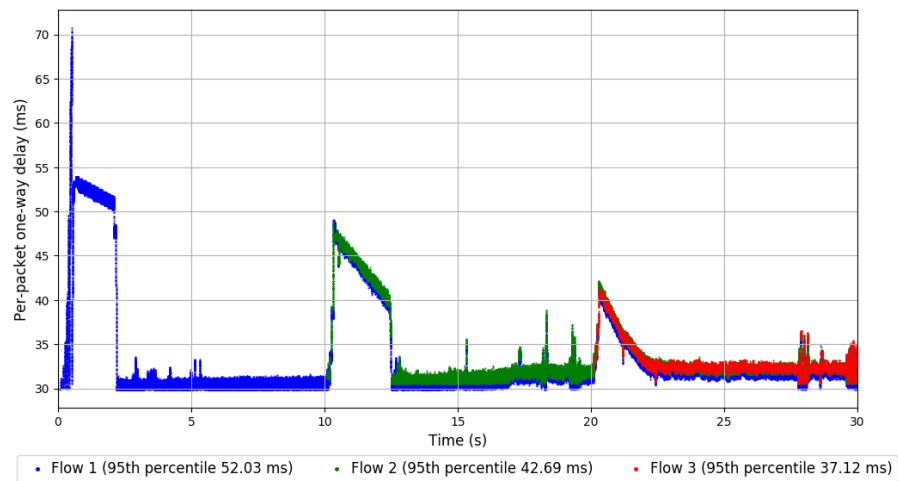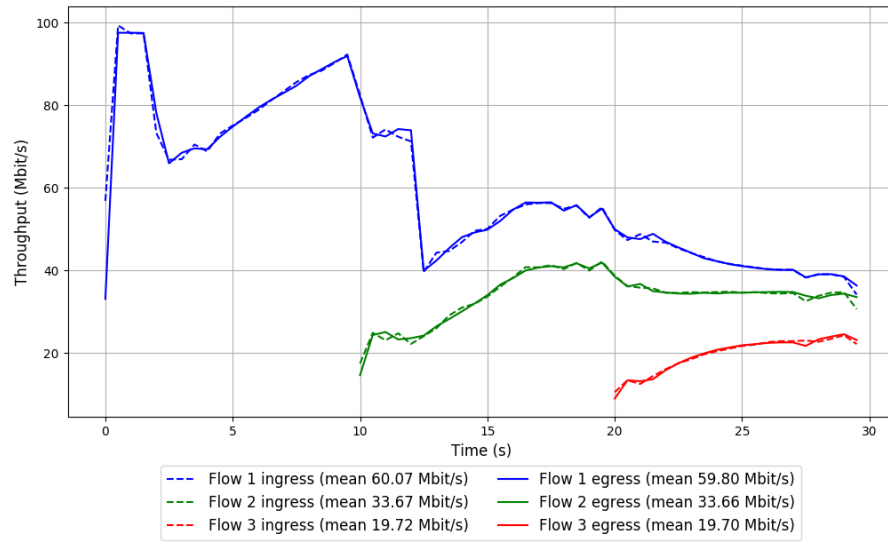
Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2018-01-17 03:59:43
End at: 2018-01-17 04:00:13
Local clock offset: -0.868 ms
Remote clock offset: -2.18 ms


# Below is generated by plot.py at 2018-01-17 08:19:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.99 Mbit/s
95th percentile per-packet one-way delay: 51.666 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 65.14 Mbit/s
95th percentile per-packet one-way delay: 52.023 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 16.01 Mbit/s
95th percentile per-packet one-way delay: 42.418 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 39.74 Mbit/s
95th percentile per-packet one-way delay: 33.828 ms
Loss rate: 1.18%
```
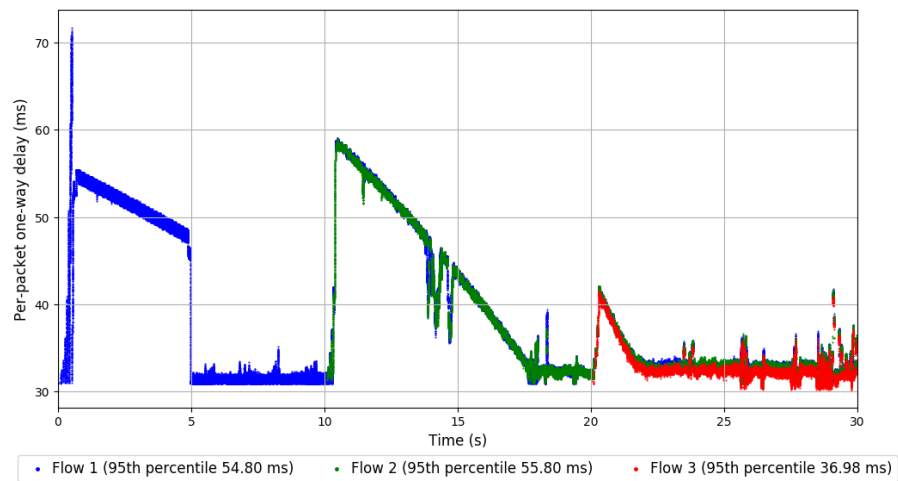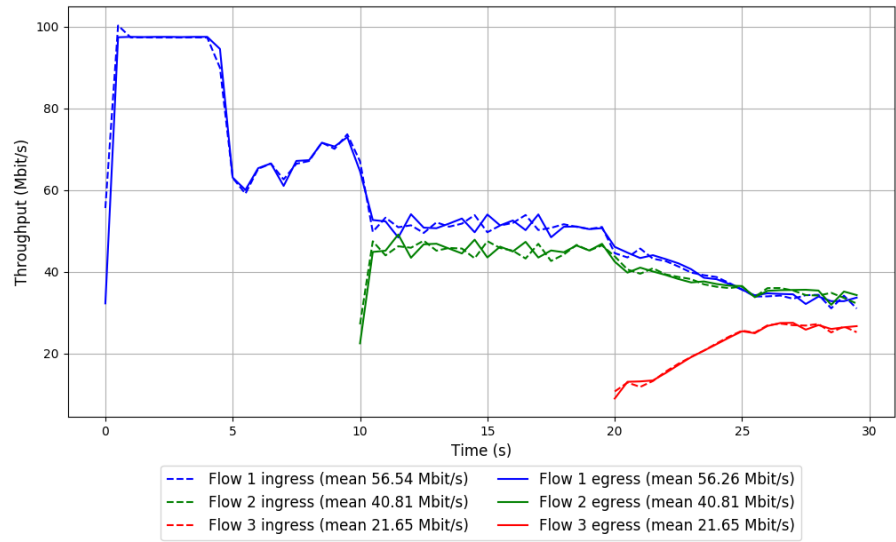
Run 2: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 65.44 Mbit/s)   Flow 1 egress (mean 65.14 Mbit/s)
Flow 2 ingress (mean 16.07 Mbit/s)   Flow 2 egress (mean 16.01 Mbit/s)
Flow 3 ingress (mean 40.21 Mbit/s)   Flow 3 egress (mean 39.74 Mbit/s)

Flow 1 (95th percentile 52.02 ms)   Flow 2 (95th percentile 42.42 ms)   Flow 3 (95th percentile 33.83 ms)

```
Run 3: Statistics of TCP Vegas

Start at: 2018-01-17 04:25:43
End at: 2018-01-17 04:26:13
Local clock offset: -0.83 ms
Remote clock offset: -4.264 ms


# Below is generated by plot.py at 2018-01-17 08:19:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.95 Mbit/s
95th percentile per-packet one-way delay: 50.372 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 47.27 Mbit/s
95th percentile per-packet one-way delay: 50.905 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 22.83 Mbit/s
95th percentile per-packet one-way delay: 30.459 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 31.53 Mbit/s
95th percentile per-packet one-way delay: 31.988 ms
Loss rate: 1.31%
```
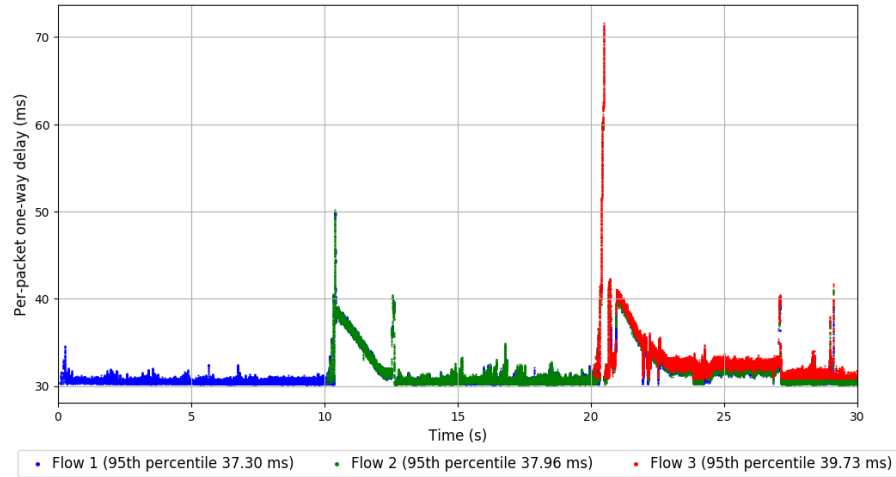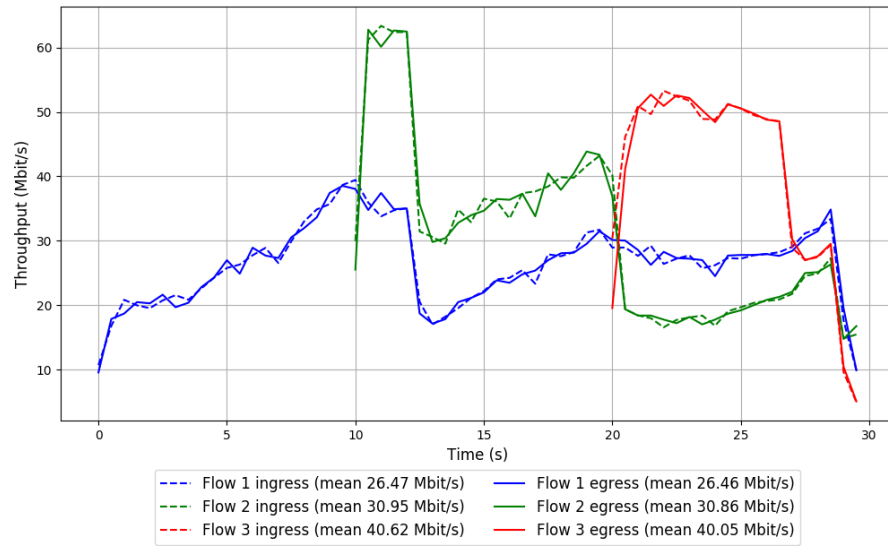
Run 3: Report of TCP Vegas — Data Link

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```
Run 4: Statistics of TCP Vegas

Start at: 2018-01-17 04:51:56
End at: 2018-01-17 04:52:26
Local clock offset: -0.605 ms
Remote clock offset: -4.031 ms


# Below is generated by plot.py at 2018-01-17 08:19:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.83 Mbit/s
95th percentile per-packet one-way delay: 47.469 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 52.54 Mbit/s
95th percentile per-packet one-way delay: 48.243 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 21.94 Mbit/s
95th percentile per-packet one-way delay: 46.170 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 56.21 Mbit/s
95th percentile per-packet one-way delay: 31.098 ms
Loss rate: 0.31%
```

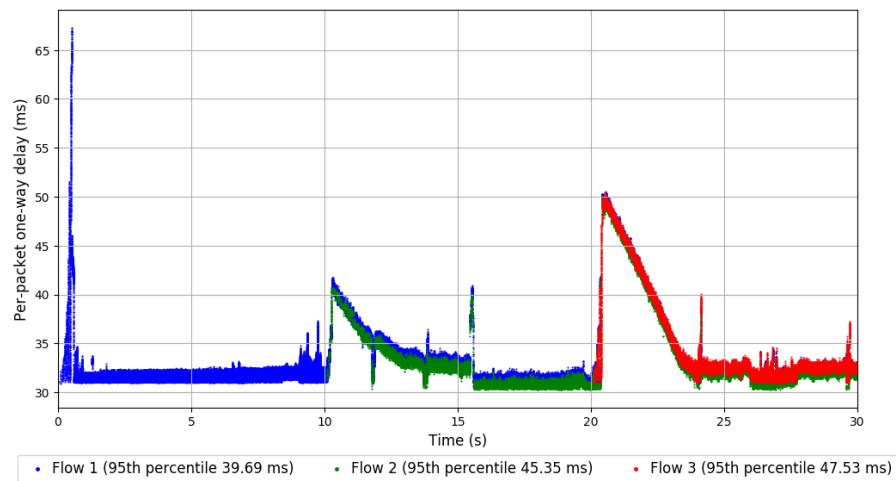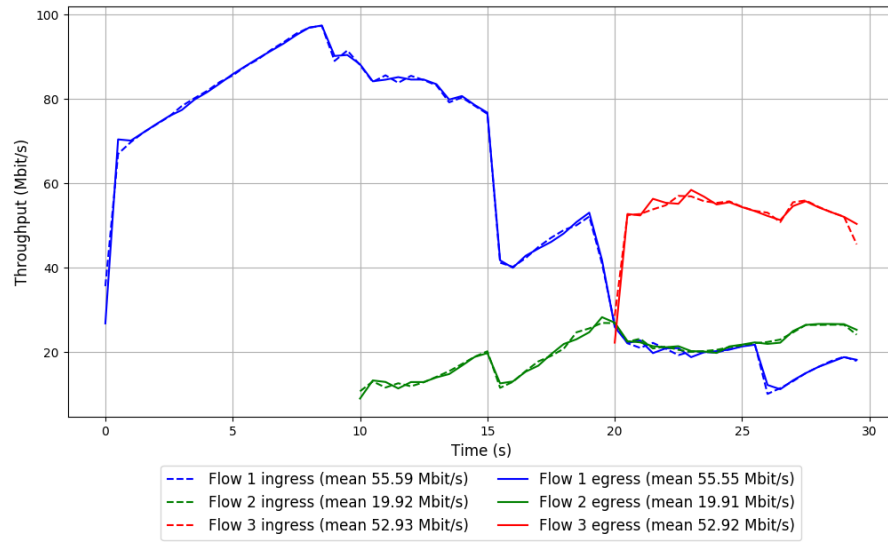Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2018-01-17 05:19:04
End at: 2018-01-17 05:19:34
Local clock offset: -0.347 ms
Remote clock offset: -1.798 ms


# Below is generated by plot.py at 2018-01-17 08:19:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.77 Mbit/s
95th percentile per-packet one-way delay: 51.302 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 59.80 Mbit/s
95th percentile per-packet one-way delay: 52.035 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 33.66 Mbit/s
95th percentile per-packet one-way delay: 42.687 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.70 Mbit/s
95th percentile per-packet one-way delay: 37.115 ms
Loss rate: 0.04%
```
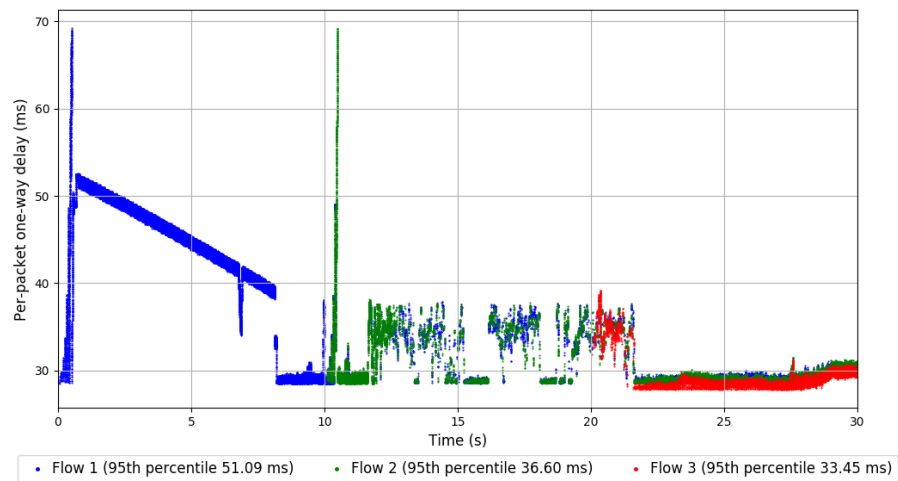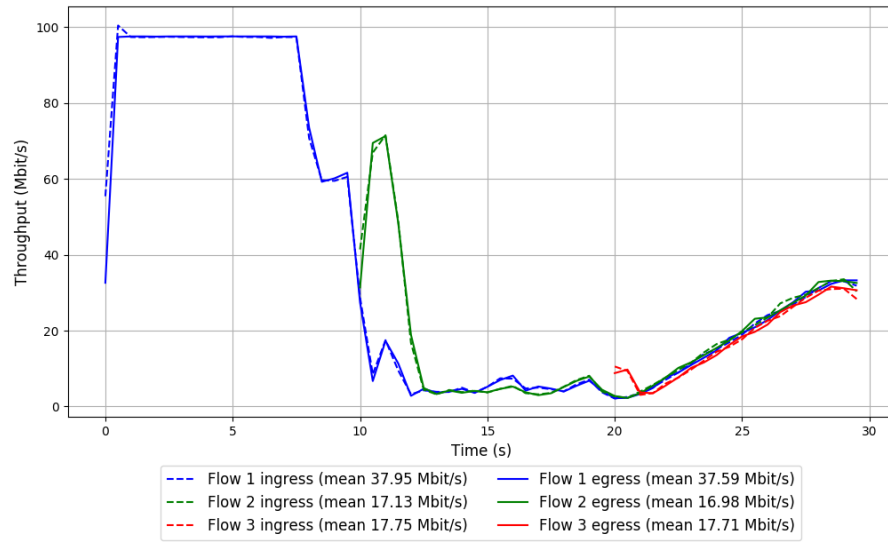
Run 5: Report of TCP Vegas — Data Link

```
Run 6: Statistics of TCP Vegas

Start at: 2018-01-17 05:46:05
End at: 2018-01-17 05:46:35
Local clock offset: -0.193 ms
Remote clock offset: -1.636 ms


# Below is generated by plot.py at 2018-01-17 08:19:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.63 Mbit/s
95th percentile per-packet one-way delay: 54.820 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 56.26 Mbit/s
95th percentile per-packet one-way delay: 54.802 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 40.81 Mbit/s
95th percentile per-packet one-way delay: 55.800 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 21.65 Mbit/s
95th percentile per-packet one-way delay: 36.984 ms
Loss rate: 0.00%
```
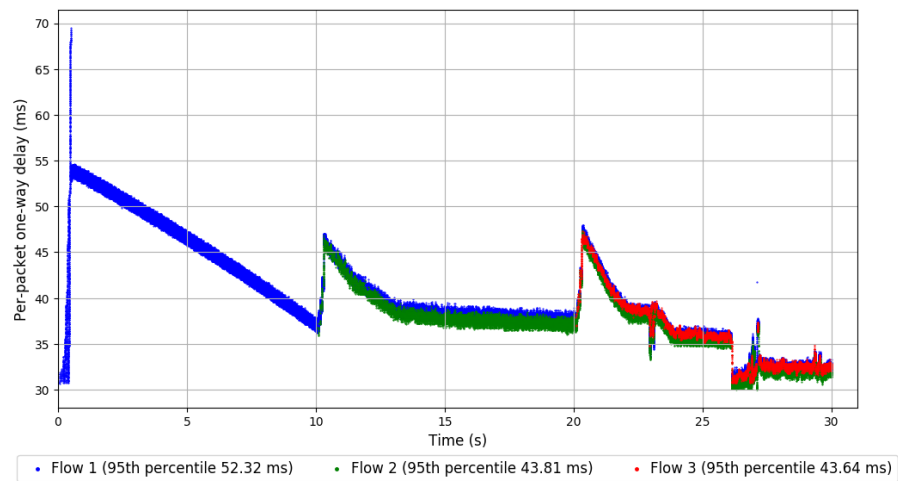
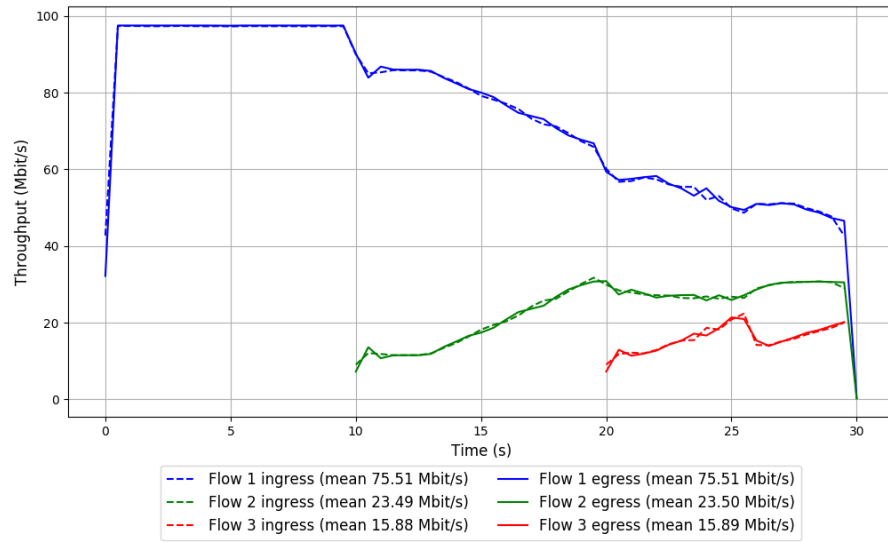Run 6: Report of TCP Vegas — Data Link

```
Run 7: Statistics of TCP Vegas

Start at: 2018-01-17 06:12:32
End at: 2018-01-17 06:13:02
Local clock offset: -0.009 ms
Remote clock offset: -1.685 ms


# Below is generated by plot.py at 2018-01-17 08:19:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.30 Mbit/s
95th percentile per-packet one-way delay: 38.146 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 26.46 Mbit/s
95th percentile per-packet one-way delay: 37.303 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 30.86 Mbit/s
95th percentile per-packet one-way delay: 37.964 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 40.05 Mbit/s
95th percentile per-packet one-way delay: 39.732 ms
Loss rate: 1.40%
```
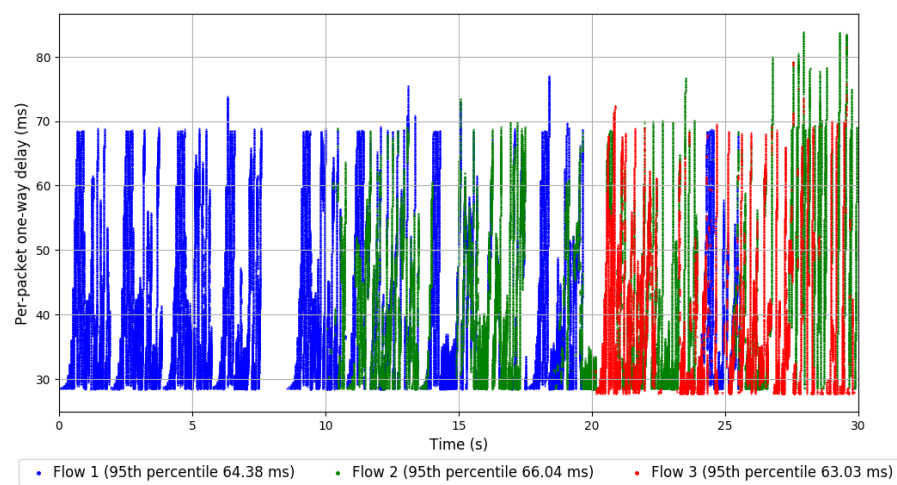
Run 7: Report of TCP Vegas — Data Link

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```
Run 8: Statistics of TCP Vegas

Start at: 2018-01-17 06:38:47
End at: 2018-01-17 06:39:17
Local clock offset: -0.074 ms
Remote clock offset: -1.977 ms


# Below is generated by plot.py at 2018-01-17 08:19:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.36 Mbit/s
95th percentile per-packet one-way delay: 43.618 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 55.55 Mbit/s
95th percentile per-packet one-way delay: 39.686 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 19.91 Mbit/s
95th percentile per-packet one-way delay: 45.352 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 52.92 Mbit/s
95th percentile per-packet one-way delay: 47.534 ms
Loss rate: 0.00%
```
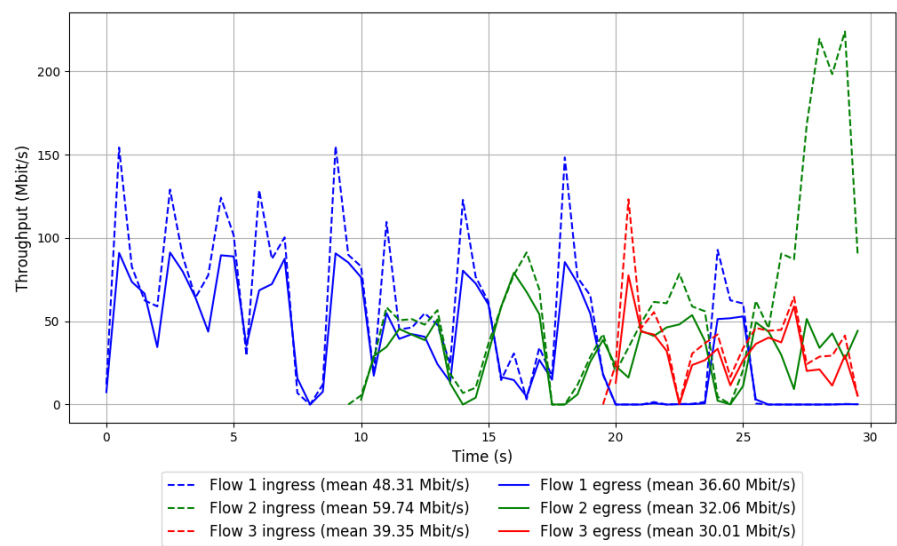
Run 8: Report of TCP Vegas — Data Link

- - - Flow 1 ingress (mean 55.59 Mbit/s) —— Flow 1 egress (mean 55.55 Mbit/s)
- - - Flow 2 ingress (mean 19.92 Mbit/s) —— Flow 2 egress (mean 19.91 Mbit/s)
- - - Flow 3 ingress (mean 52.93 Mbit/s) —— Flow 3 egress (mean 52.92 Mbit/s)

• Flow 1 (95th percentile 39.69 ms)   • Flow 2 (95th percentile 45.35 ms)   • Flow 3 (95th percentile 47.53 ms)
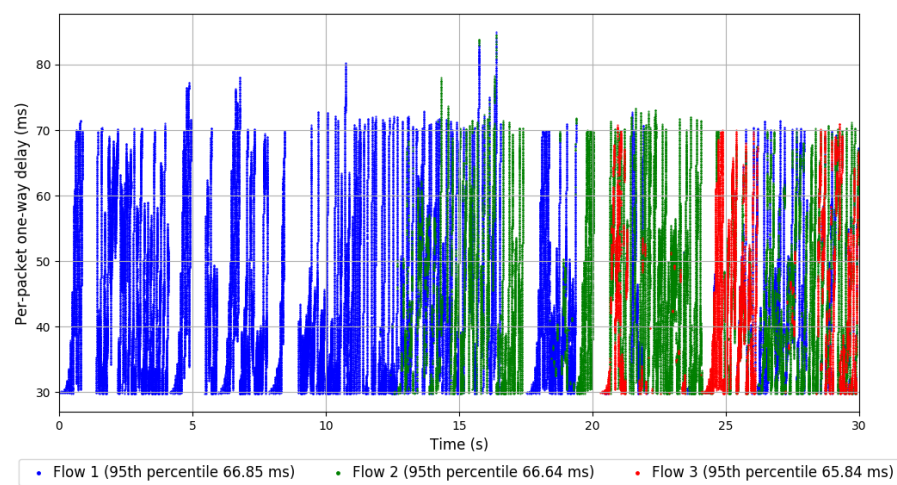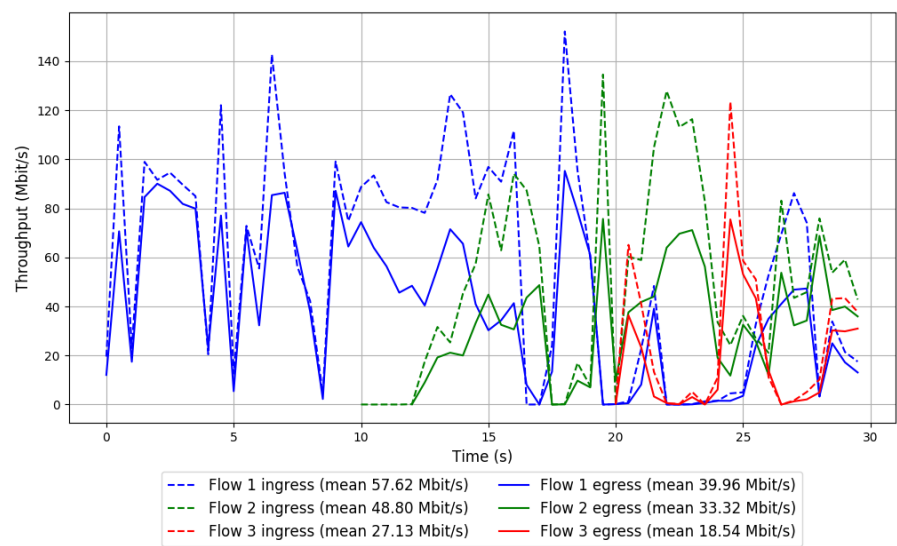
199

```
Run 9: Statistics of TCP Vegas

Start at: 2018-01-17 07:03:59
End at: 2018-01-17 07:04:29
Local clock offset: 0.058 ms
Remote clock offset: -4.224 ms


# Below is generated by plot.py at 2018-01-17 08:19:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.78 Mbit/s
95th percentile per-packet one-way delay: 50.709 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 37.59 Mbit/s
95th percentile per-packet one-way delay: 51.095 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 16.98 Mbit/s
95th percentile per-packet one-way delay: 36.601 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 17.71 Mbit/s
95th percentile per-packet one-way delay: 33.446 ms
Loss rate: 0.20%
```

Run 9: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 37.95 Mbit/s) --- Flow 1 egress (mean 37.59 Mbit/s)
Flow 2 ingress (mean 17.13 Mbit/s) --- Flow 2 egress (mean 16.98 Mbit/s)
Flow 3 ingress (mean 17.75 Mbit/s) --- Flow 3 egress (mean 17.71 Mbit/s)

Flow 1 (95th percentile 51.09 ms)   Flow 2 (95th percentile 36.60 ms)   Flow 3 (95th percentile 33.45 ms)
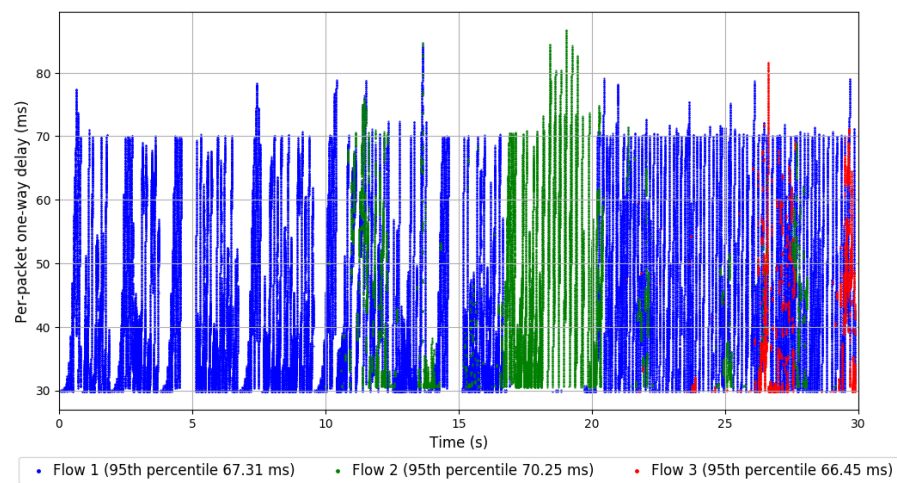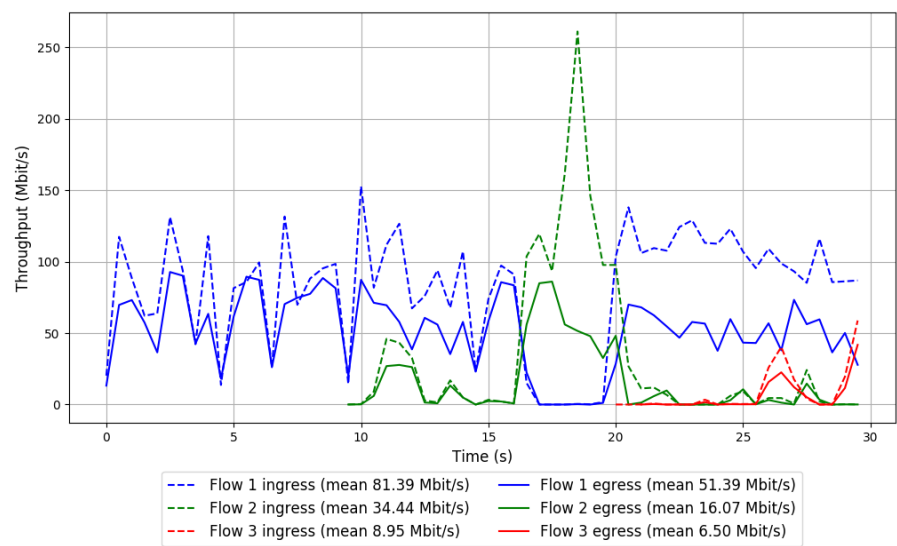
201

```
Run 10: Statistics of TCP Vegas

Start at: 2018-01-17 07:29:00
End at: 2018-01-17 07:29:30
Local clock offset: -0.02 ms
Remote clock offset: -2.001 ms


# Below is generated by plot.py at 2018-01-17 08:20:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.42 Mbit/s
95th percentile per-packet one-way delay: 51.791 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 75.51 Mbit/s
95th percentile per-packet one-way delay: 52.322 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 23.50 Mbit/s
95th percentile per-packet one-way delay: 43.812 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 15.89 Mbit/s
95th percentile per-packet one-way delay: 43.640 ms
Loss rate: 0.02%
```

Run 10: Report of TCP Vegas — Data Link

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```
Run 1: Statistics of Verus

Start at: 2018-01-17 03:36:26
End at: 2018-01-17 03:36:56
Local clock offset: -0.633 ms
Remote clock offset: -4.209 ms


# Below is generated by plot.py at 2018-01-17 08:20:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.79 Mbit/s
95th percentile per-packet one-way delay: 64.728 ms
Loss rate: 32.85%
-- Flow 1:
Average throughput: 36.60 Mbit/s
95th percentile per-packet one-way delay: 64.383 ms
Loss rate: 24.21%
-- Flow 2:
Average throughput: 32.06 Mbit/s
95th percentile per-packet one-way delay: 66.038 ms
Loss rate: 46.29%
-- Flow 3:
Average throughput: 30.01 Mbit/s
95th percentile per-packet one-way delay: 63.030 ms
Loss rate: 23.77%
```

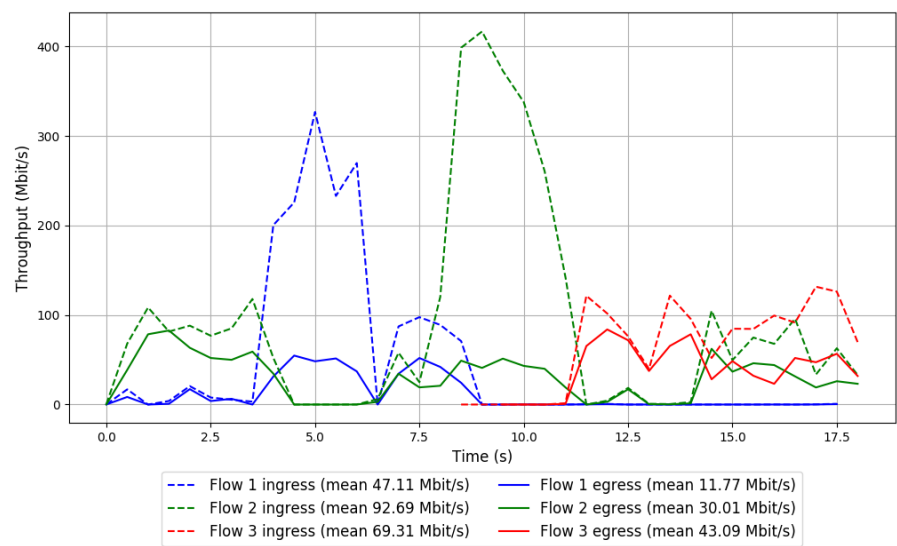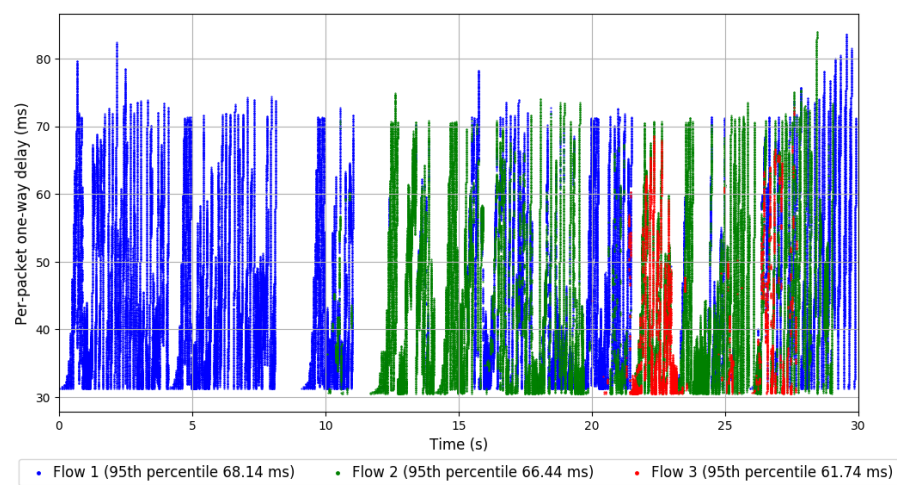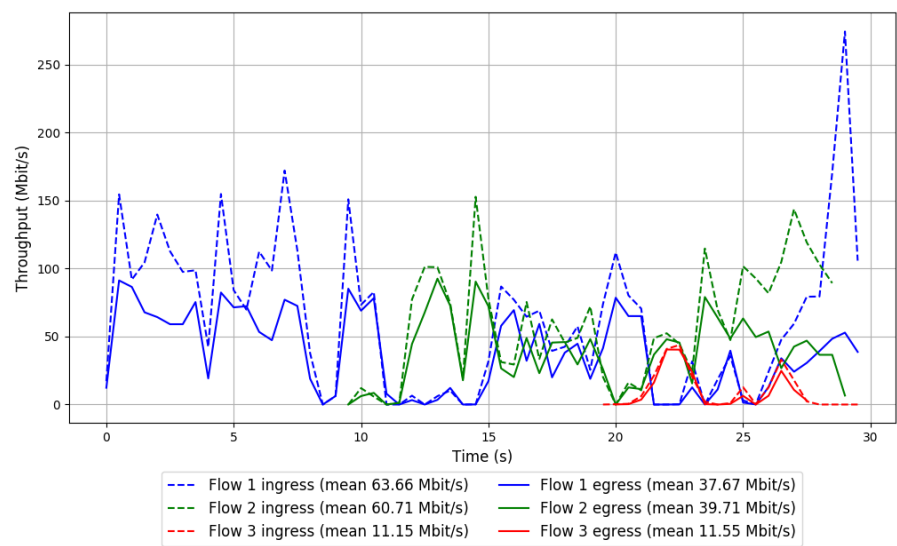Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2018-01-17 04:02:30
End at: 2018-01-17 04:03:00
Local clock offset: -0.885 ms
Remote clock offset: -2.171 ms


# Below is generated by plot.py at 2018-01-17 08:20:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.89 Mbit/s
95th percentile per-packet one-way delay: 66.685 ms
Loss rate: 33.24%
-- Flow 1:
Average throughput: 39.96 Mbit/s
95th percentile per-packet one-way delay: 66.854 ms
Loss rate: 30.57%
-- Flow 2:
Average throughput: 33.32 Mbit/s
95th percentile per-packet one-way delay: 66.638 ms
Loss rate: 38.47%
-- Flow 3:
Average throughput: 18.54 Mbit/s
95th percentile per-packet one-way delay: 65.841 ms
Loss rate: 31.44%
```
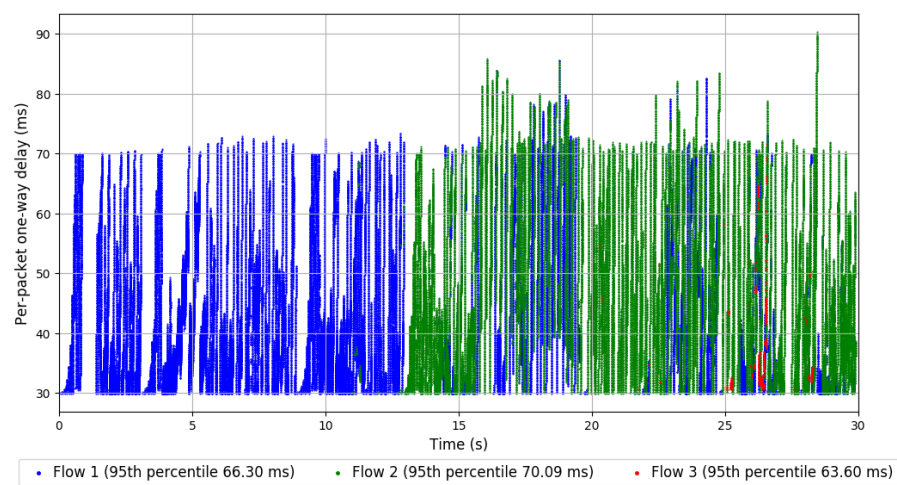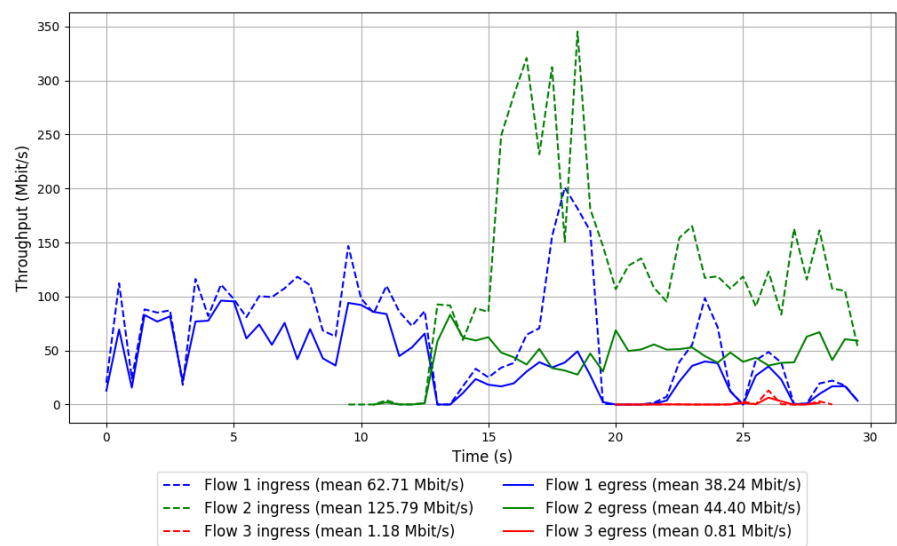
Run 2: Report of Verus — Data Link

Flow 1 ingress (mean 57.62 Mbit/s)   Flow 1 egress (mean 39.96 Mbit/s)
Flow 2 ingress (mean 48.80 Mbit/s)   Flow 2 egress (mean 33.32 Mbit/s)
Flow 3 ingress (mean 27.13 Mbit/s)   Flow 3 egress (mean 18.54 Mbit/s)

Flow 1 (95th percentile 66.85 ms)   Flow 2 (95th percentile 66.64 ms)   Flow 3 (95th percentile 65.84 ms)

```
Run 3: Statistics of Verus

Start at: 2018-01-17 04:28:27
End at: 2018-01-17 04:28:57
Local clock offset: -0.729 ms
Remote clock offset: -2.062 ms


# Below is generated by plot.py at 2018-01-17 08:20:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.79 Mbit/s
95th percentile per-packet one-way delay: 67.714 ms
Loss rate: 40.31%
-- Flow 1:
Average throughput: 51.39 Mbit/s
95th percentile per-packet one-way delay: 67.307 ms
Loss rate: 36.83%
-- Flow 2:
Average throughput: 16.07 Mbit/s
95th percentile per-packet one-way delay: 70.252 ms
Loss rate: 53.48%
-- Flow 3:
Average throughput: 6.50 Mbit/s
95th percentile per-packet one-way delay: 66.449 ms
Loss rate: 35.02%
```

Run 3: Report of Verus — Data Link

Flow 1 ingress (mean 81.39 Mbit/s) --- Flow 1 egress (mean 51.39 Mbit/s)
Flow 2 ingress (mean 34.44 Mbit/s) --- Flow 2 egress (mean 16.07 Mbit/s)
Flow 3 ingress (mean 8.95 Mbit/s) --- Flow 3 egress (mean 6.50 Mbit/s)

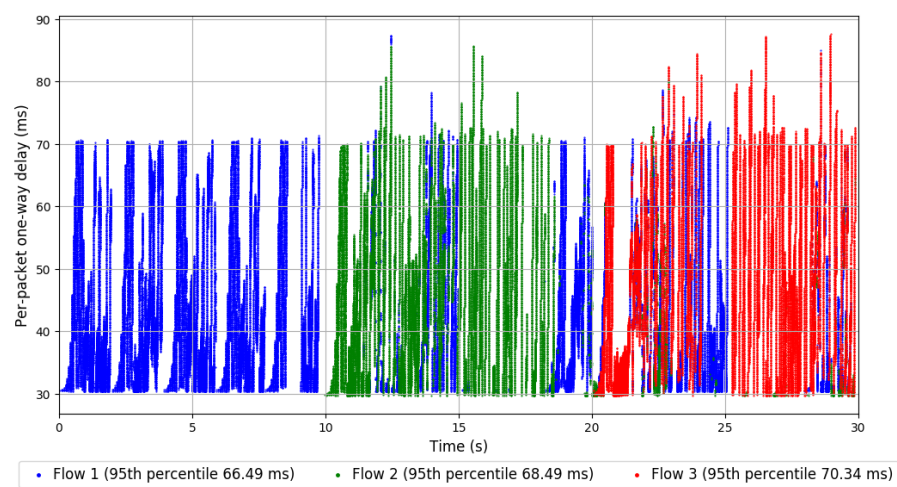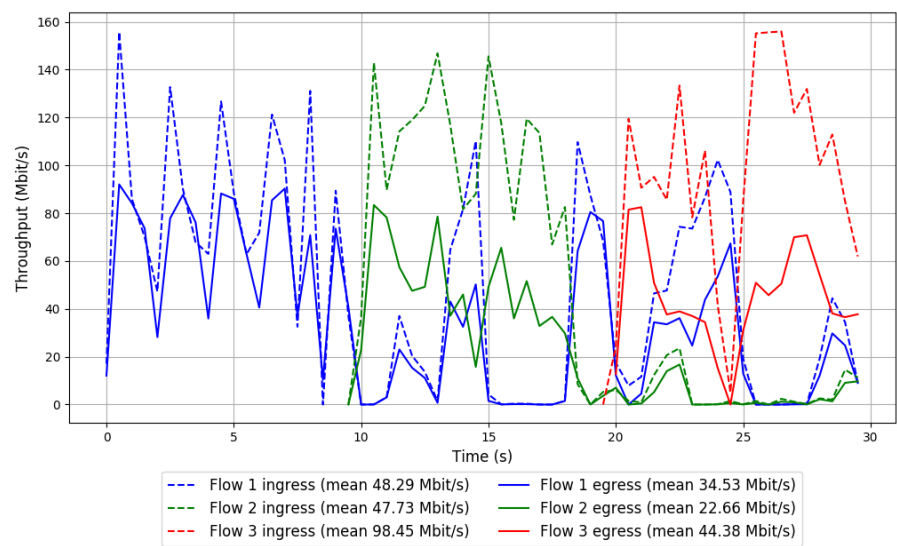• Flow 1 (95th percentile 67.31 ms)   • Flow 2 (95th percentile 70.25 ms)   • Flow 3 (95th percentile 66.45 ms)

```
Run 4: Statistics of Verus

Start at: 2018-01-17 04:54:47
End at: 2018-01-17 04:55:17
Local clock offset: -0.54 ms
Remote clock offset: -2.009 ms
```

Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2018-01-17 05:21:51
End at: 2018-01-17 05:22:21
Local clock offset: -0.419 ms
Remote clock offset: -1.217 ms


# Below is generated by plot.py at 2018-01-17 08:20:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.94 Mbit/s
95th percentile per-packet one-way delay: 67.326 ms
Loss rate: 37.70%
-- Flow 1:
Average throughput: 37.67 Mbit/s
95th percentile per-packet one-way delay: 68.140 ms
Loss rate: 40.78%
-- Flow 2:
Average throughput: 39.71 Mbit/s
95th percentile per-packet one-way delay: 66.441 ms
Loss rate: 34.47%
-- Flow 3:
Average throughput: 11.55 Mbit/s
95th percentile per-packet one-way delay: 61.743 ms
Loss rate: 17.87%
```

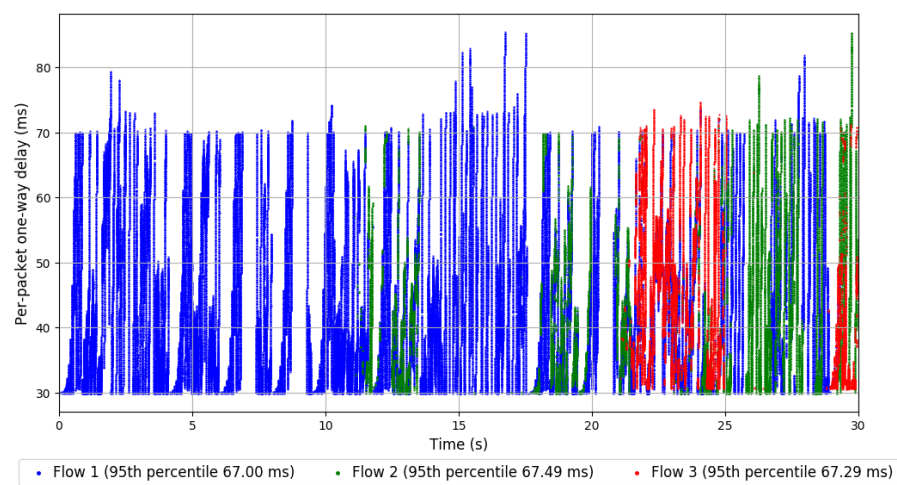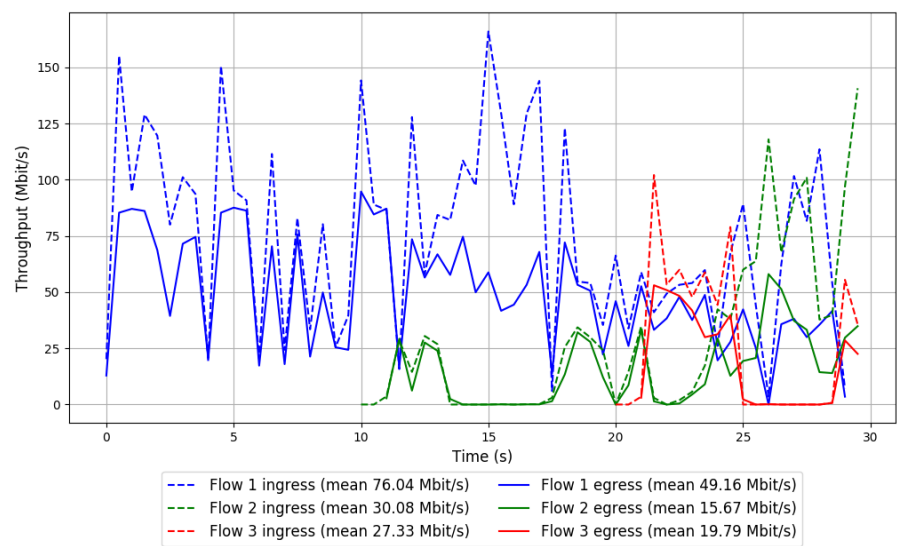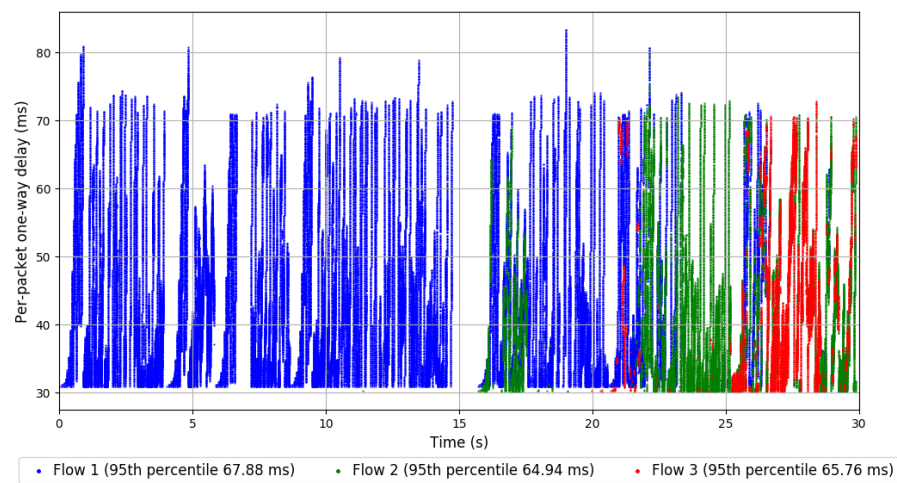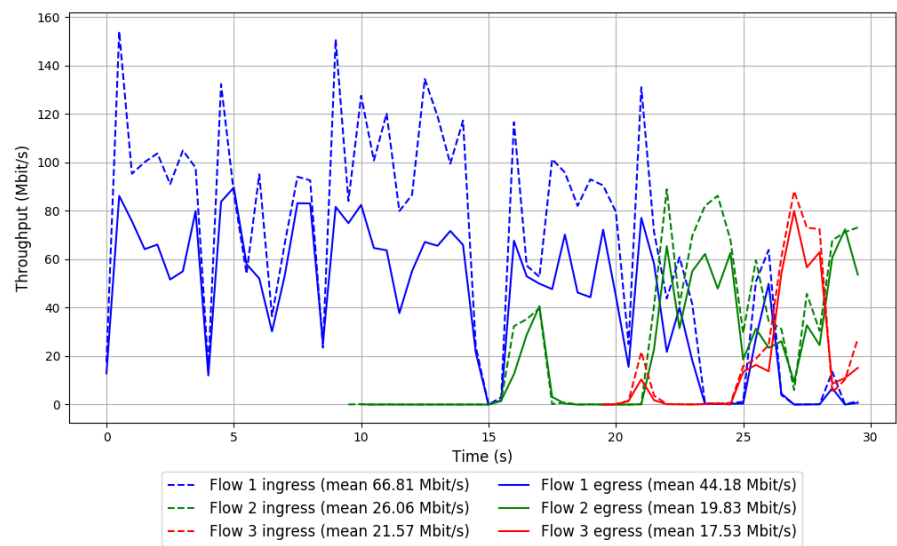## Run 5: Report of Verus — Data Link

```
Run 6: Statistics of Verus

Start at: 2018-01-17 05:48:53
End at: 2018-01-17 05:49:23
Local clock offset: -0.138 ms
Remote clock offset: -1.875 ms


# Below is generated by plot.py at 2018-01-17 08:20:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.51 Mbit/s
95th percentile per-packet one-way delay: 68.248 ms
Loss rate: 54.69%
-- Flow 1:
Average throughput: 38.24 Mbit/s
95th percentile per-packet one-way delay: 66.300 ms
Loss rate: 39.01%
-- Flow 2:
Average throughput: 44.40 Mbit/s
95th percentile per-packet one-way delay: 70.090 ms
Loss rate: 66.46%
-- Flow 3:
Average throughput: 0.81 Mbit/s
95th percentile per-packet one-way delay: 63.596 ms
Loss rate: 36.59%
```

Run 6: Report of Verus — Data Link

- - - Flow 1 ingress (mean 62.71 Mbit/s)   —— Flow 1 egress (mean 38.24 Mbit/s)
- - - Flow 2 ingress (mean 125.79 Mbit/s)   —— Flow 2 egress (mean 44.40 Mbit/s)
- - - Flow 3 ingress (mean 1.18 Mbit/s)   —— Flow 3 egress (mean 0.81 Mbit/s)

- Flow 1 (95th percentile 66.30 ms)   • Flow 2 (95th percentile 70.09 ms)   • Flow 3 (95th percentile 63.60 ms)

```
Run 7: Statistics of Verus

Start at: 2018-01-17 06:15:25
End at: 2018-01-17 06:15:55
Local clock offset: -0.029 ms
Remote clock offset: -4.191 ms
```

Run 7: Report of Verus — Data Link

```
Run 8: Statistics of Verus

Start at: 2018-01-17 06:41:29
End at: 2018-01-17 06:41:59
Local clock offset: 0.01 ms
Remote clock offset: -2.408 ms

# Below is generated by plot.py at 2018-01-17 08:21:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.23 Mbit/s
95th percentile per-packet one-way delay: 67.949 ms
Loss rate: 42.99%
-- Flow 1:
Average throughput: 34.53 Mbit/s
95th percentile per-packet one-way delay: 66.486 ms
Loss rate: 28.63%
-- Flow 2:
Average throughput: 22.66 Mbit/s
95th percentile per-packet one-way delay: 68.494 ms
Loss rate: 52.54%
-- Flow 3:
Average throughput: 44.38 Mbit/s
95th percentile per-packet one-way delay: 70.339 ms
Loss rate: 54.95%
```
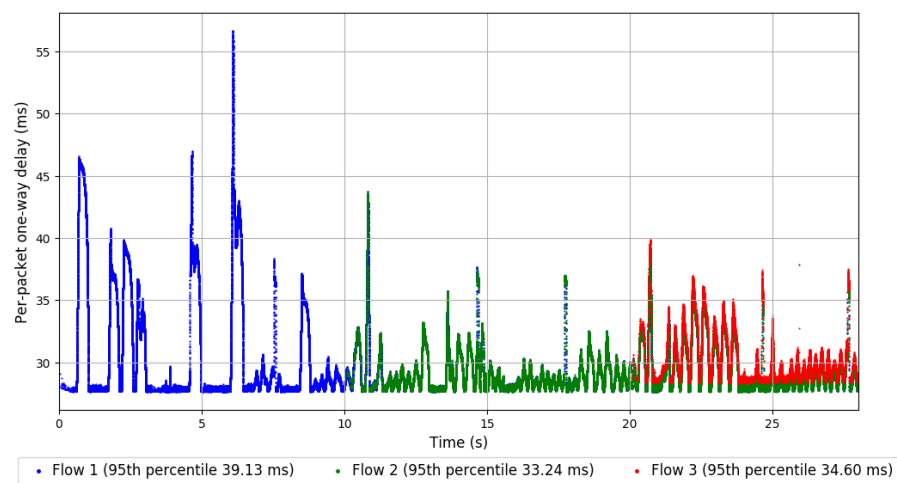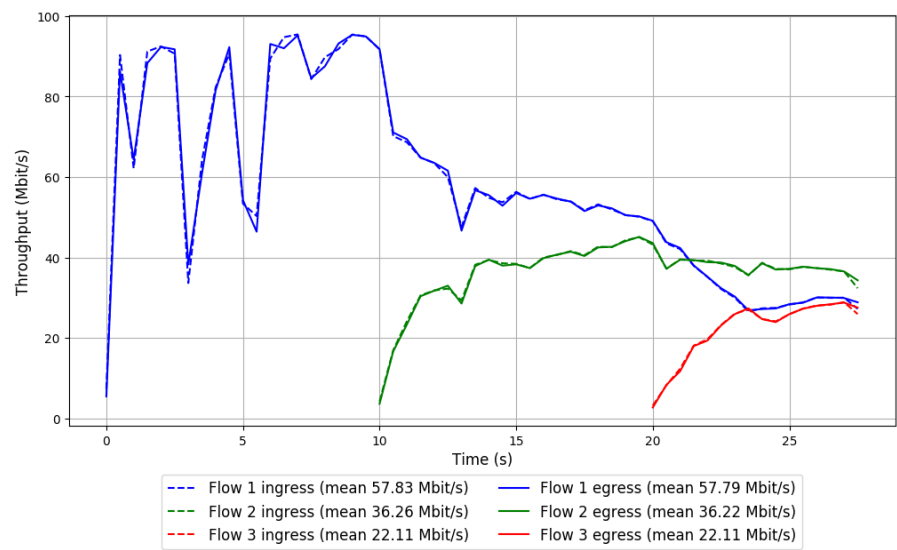
Run 8: Report of Verus — Data Link

Flow 1 ingress (mean 48.29 Mbit/s) --- Flow 1 egress (mean 34.53 Mbit/s)
Flow 2 ingress (mean 47.73 Mbit/s) --- Flow 2 egress (mean 22.66 Mbit/s)
Flow 3 ingress (mean 98.45 Mbit/s) --- Flow 3 egress (mean 44.38 Mbit/s)

Flow 1 (95th percentile 66.49 ms)   Flow 2 (95th percentile 68.49 ms)   Flow 3 (95th percentile 70.34 ms)
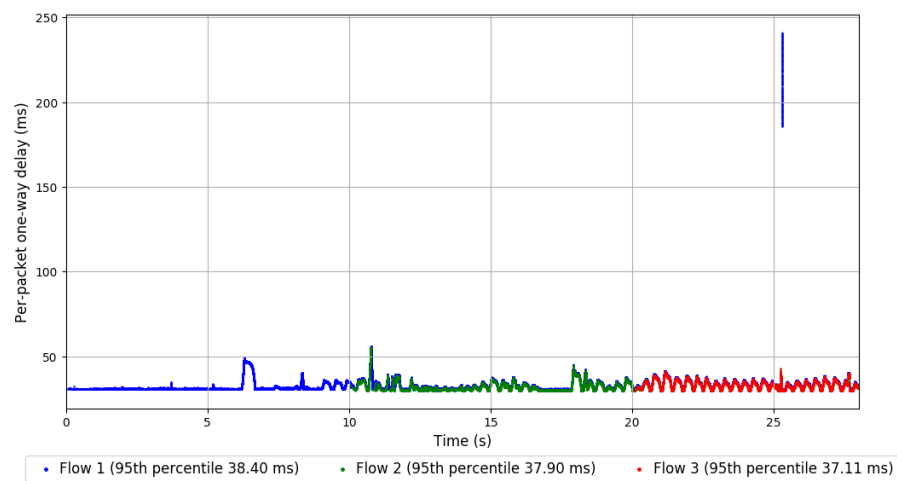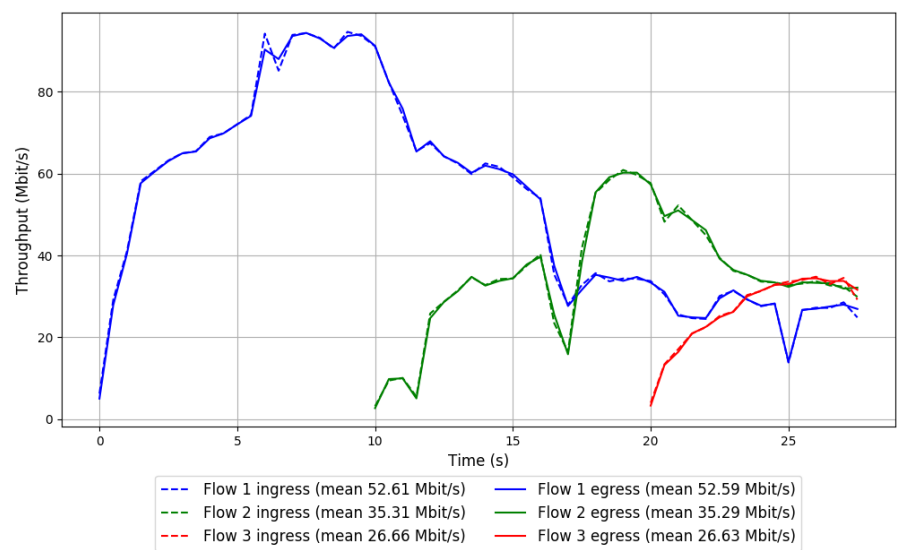
219

```
Run 9: Statistics of Verus

Start at: 2018-01-17 07:06:39
End at: 2018-01-17 07:07:09
Local clock offset: -0.002 ms
Remote clock offset: -2.192 ms


# Below is generated by plot.py at 2018-01-17 08:21:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.84 Mbit/s
95th percentile per-packet one-way delay: 67.122 ms
Loss rate: 38.32%
-- Flow 1:
Average throughput: 49.16 Mbit/s
95th percentile per-packet one-way delay: 67.004 ms
Loss rate: 35.47%
-- Flow 2:
Average throughput: 15.67 Mbit/s
95th percentile per-packet one-way delay: 67.494 ms
Loss rate: 50.52%
-- Flow 3:
Average throughput: 19.79 Mbit/s
95th percentile per-packet one-way delay: 67.286 ms
Loss rate: 34.87%
```
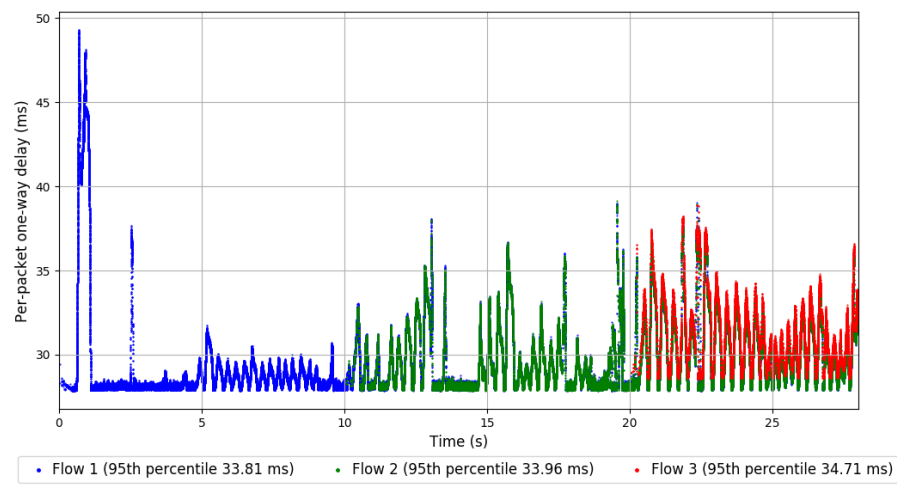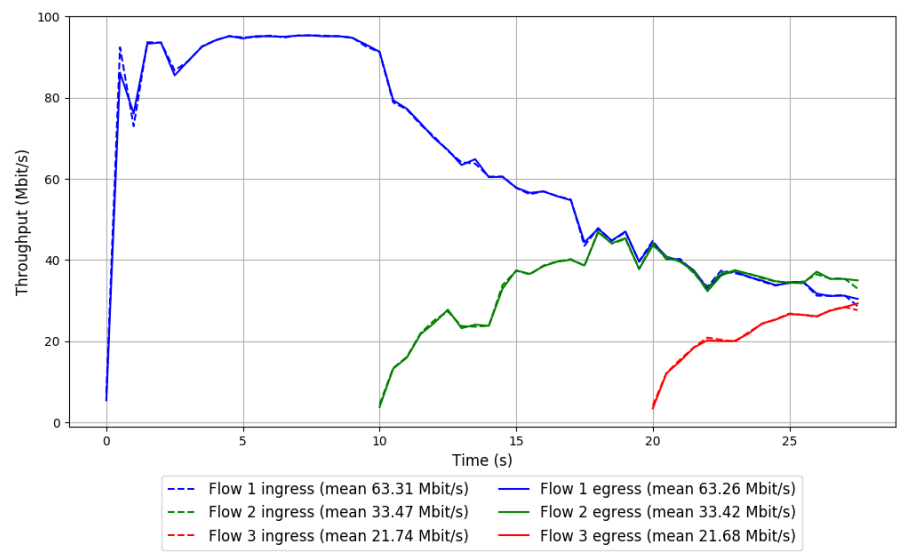
Run 9: Report of Verus — Data Link

```
Run 10: Statistics of Verus

Start at: 2018-01-17 07:31:43
End at: 2018-01-17 07:32:13
Local clock offset: 0.064 ms
Remote clock offset: -1.695 ms


# Below is generated by plot.py at 2018-01-17 08:21:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.13 Mbit/s
95th percentile per-packet one-way delay: 67.165 ms
Loss rate: 30.87%
-- Flow 1:
Average throughput: 44.18 Mbit/s
95th percentile per-packet one-way delay: 67.879 ms
Loss rate: 33.97%
-- Flow 2:
Average throughput: 19.83 Mbit/s
95th percentile per-packet one-way delay: 64.945 ms
Loss rate: 24.03%
-- Flow 3:
Average throughput: 17.53 Mbit/s
95th percentile per-packet one-way delay: 65.763 ms
Loss rate: 18.49%
```

Run 10: Report of Verus — Data Link

```
Run 1: Statistics of Copa

Start at: 2018-01-17 03:39:32
End at: 2018-01-17 03:40:02
Local clock offset: -0.729 ms
Remote clock offset: -4.348 ms


# Below is generated by plot.py at 2018-01-17 08:22:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.33 Mbit/s
95th percentile per-packet one-way delay: 37.708 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 57.79 Mbit/s
95th percentile per-packet one-way delay: 39.132 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 36.22 Mbit/s
95th percentile per-packet one-way delay: 33.240 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 22.11 Mbit/s
95th percentile per-packet one-way delay: 34.598 ms
Loss rate: 0.02%
```
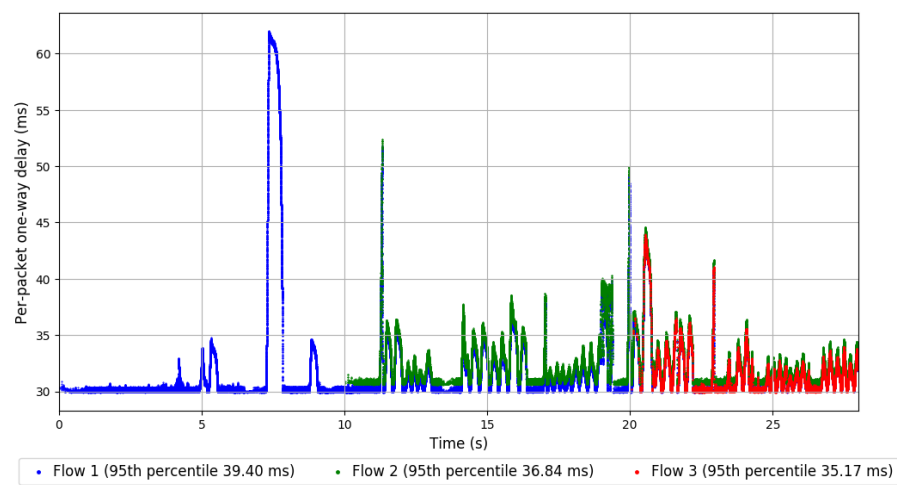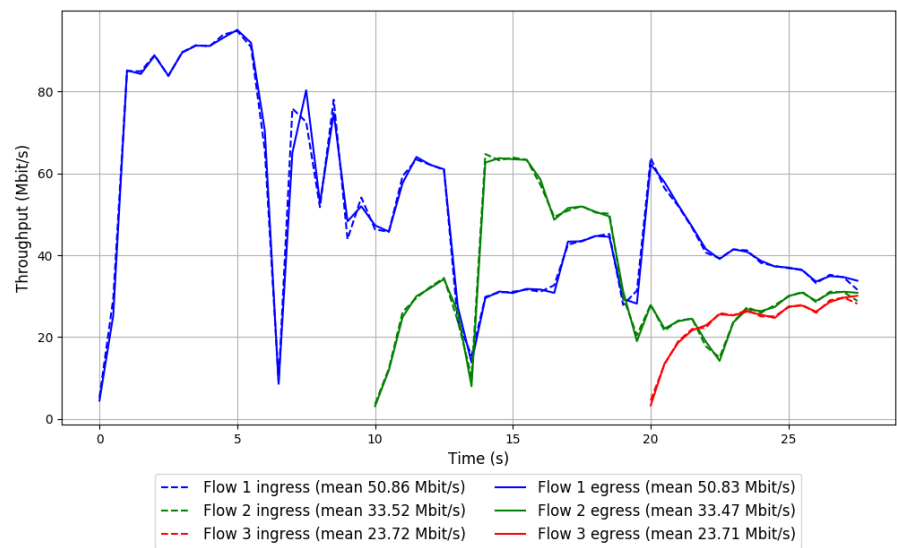
Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2018-01-17 04:05:32
End at: 2018-01-17 04:06:02
Local clock offset: -0.811 ms
Remote clock offset: -2.059 ms


# Below is generated by plot.py at 2018-01-17 08:22:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.81 Mbit/s
95th percentile per-packet one-way delay: 37.986 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 52.59 Mbit/s
95th percentile per-packet one-way delay: 38.404 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 35.29 Mbit/s
95th percentile per-packet one-way delay: 37.902 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 26.63 Mbit/s
95th percentile per-packet one-way delay: 37.110 ms
Loss rate: 0.10%
```
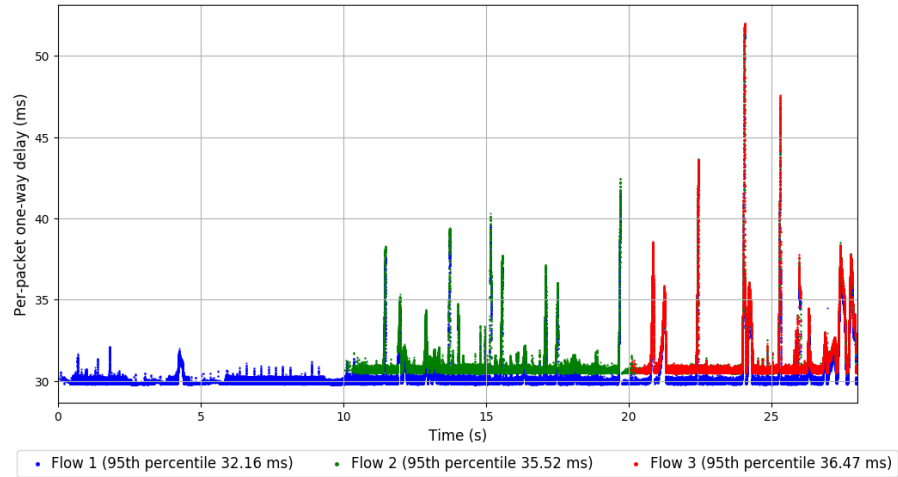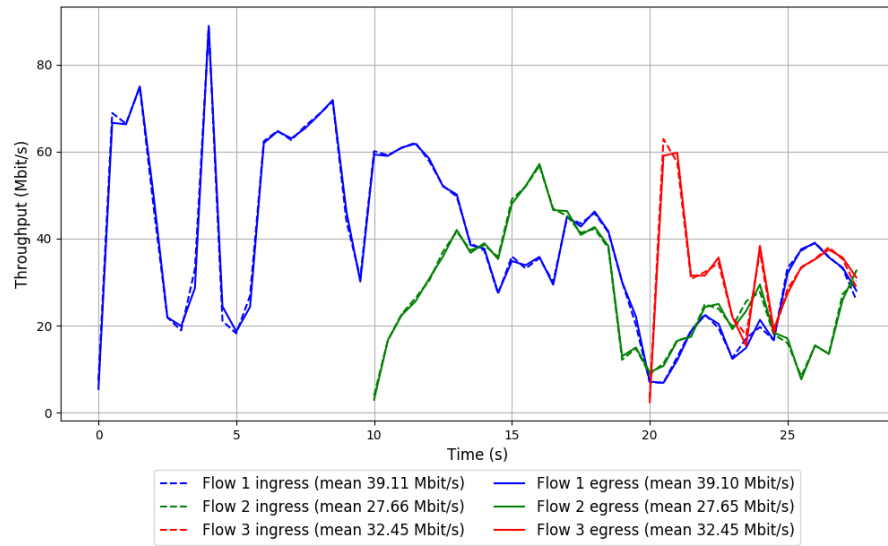
Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2018-01-17 04:31:23
End at: 2018-01-17 04:31:53
Local clock offset: -0.715 ms
Remote clock offset: -4.043 ms


# Below is generated by plot.py at 2018-01-17 08:22:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.88 Mbit/s
95th percentile per-packet one-way delay: 33.980 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 63.26 Mbit/s
95th percentile per-packet one-way delay: 33.815 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 33.42 Mbit/s
95th percentile per-packet one-way delay: 33.960 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 21.68 Mbit/s
95th percentile per-packet one-way delay: 34.707 ms
Loss rate: 0.24%
```
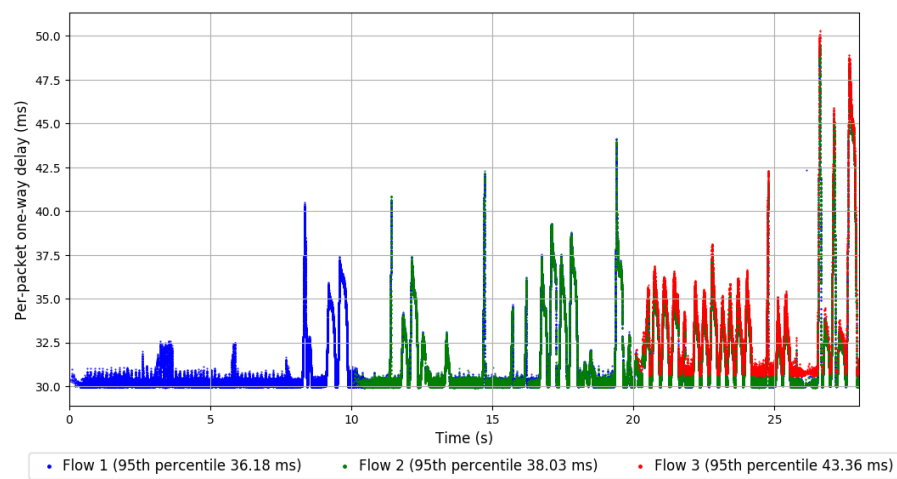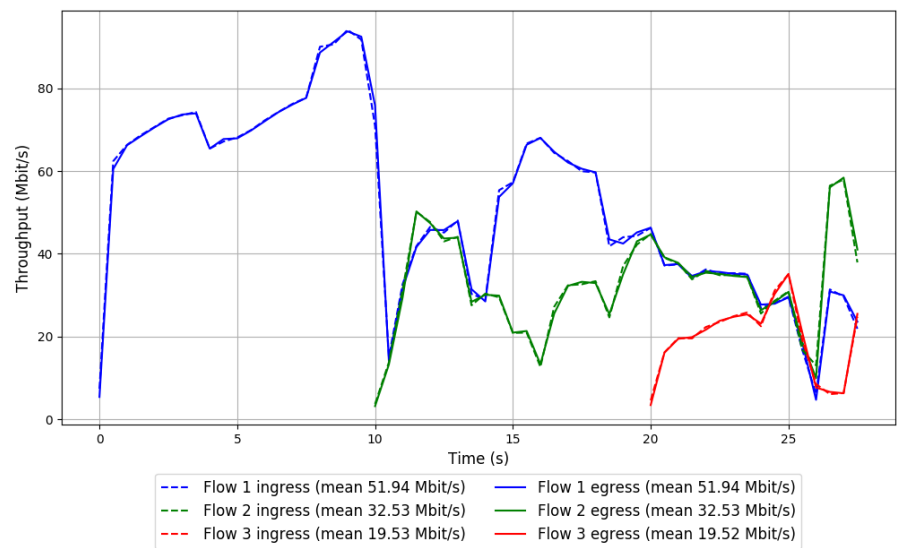
Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2018-01-17 04:57:46
End at: 2018-01-17 04:58:16
Local clock offset: -0.522 ms
Remote clock offset: -1.818 ms


# Below is generated by plot.py at 2018-01-17 08:22:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.05 Mbit/s
95th percentile per-packet one-way delay: 37.553 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 50.83 Mbit/s
95th percentile per-packet one-way delay: 39.397 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 33.47 Mbit/s
95th percentile per-packet one-way delay: 36.844 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 23.71 Mbit/s
95th percentile per-packet one-way delay: 35.174 ms
Loss rate: 0.01%
```

Run 4: Report of Copa — Data Link

```
Run 5: Statistics of Copa

Start at: 2018-01-17 05:25:02
End at: 2018-01-17 05:25:32
Local clock offset: -0.28 ms
Remote clock offset: -1.892 ms


# Below is generated by plot.py at 2018-01-17 08:22:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.06 Mbit/s
95th percentile per-packet one-way delay: 34.556 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 39.10 Mbit/s
95th percentile per-packet one-way delay: 32.162 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 27.65 Mbit/s
95th percentile per-packet one-way delay: 35.516 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 32.45 Mbit/s
95th percentile per-packet one-way delay: 36.469 ms
Loss rate: 0.01%
```
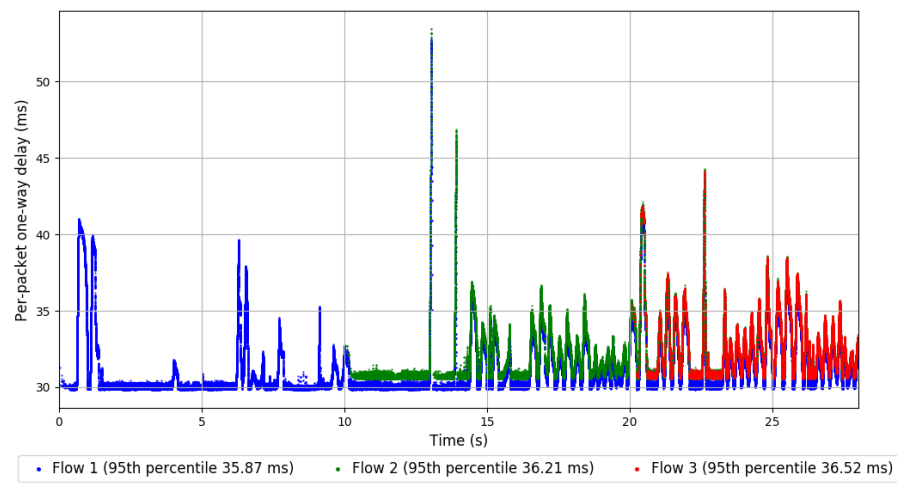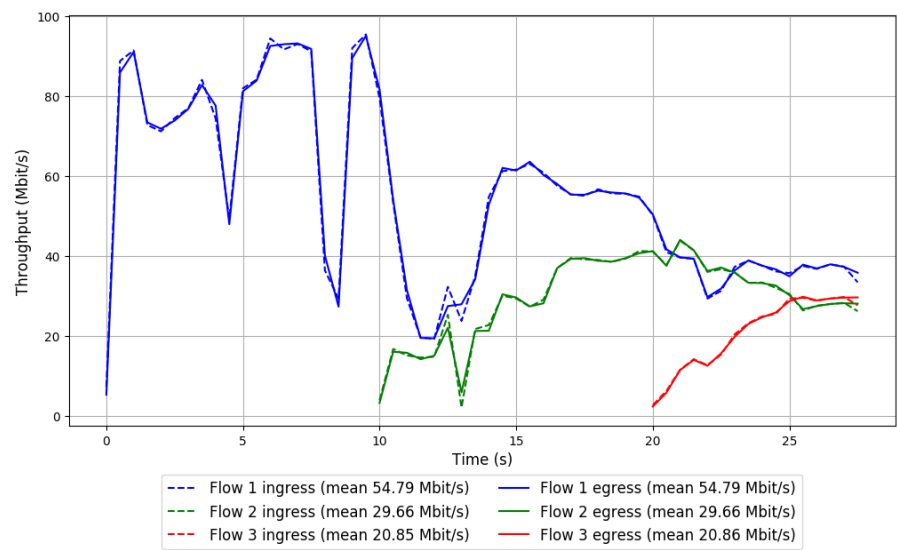
Run 5: Report of Copa — Data Link

Flow 1 ingress (mean 39.11 Mbit/s) — — Flow 1 egress (mean 39.10 Mbit/s)
Flow 2 ingress (mean 27.66 Mbit/s) — — Flow 2 egress (mean 27.65 Mbit/s)
Flow 3 ingress (mean 32.45 Mbit/s) — — Flow 3 egress (mean 32.45 Mbit/s)

Flow 1 (95th percentile 32.16 ms)   Flow 2 (95th percentile 35.52 ms)   Flow 3 (95th percentile 36.47 ms)

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```
Run 6: Statistics of Copa

Start at: 2018-01-17 05:51:56
End at: 2018-01-17 05:52:26
Local clock offset: -0.196 ms
Remote clock offset: -2.008 ms


# Below is generated by plot.py at 2018-01-17 08:23:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.36 Mbit/s
95th percentile per-packet one-way delay: 36.668 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 51.94 Mbit/s
95th percentile per-packet one-way delay: 36.184 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.53 Mbit/s
95th percentile per-packet one-way delay: 38.031 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.52 Mbit/s
95th percentile per-packet one-way delay: 43.362 ms
Loss rate: 0.03%
```
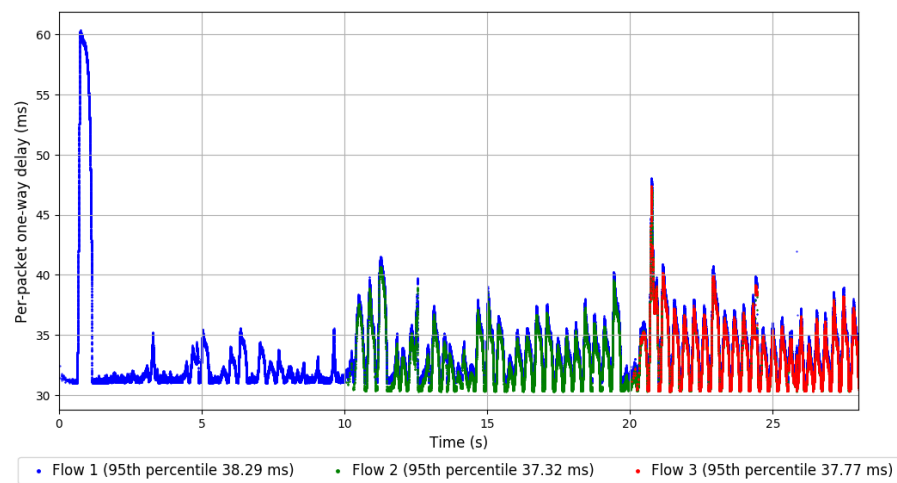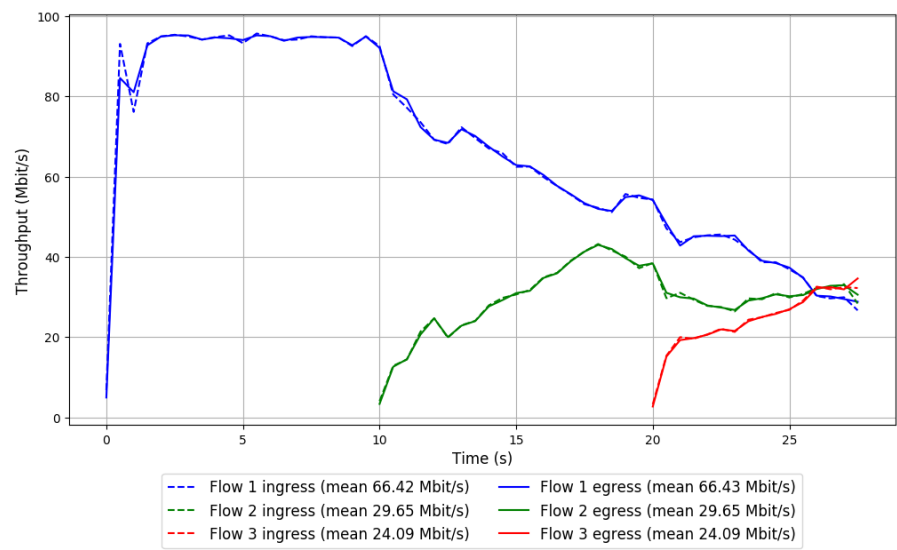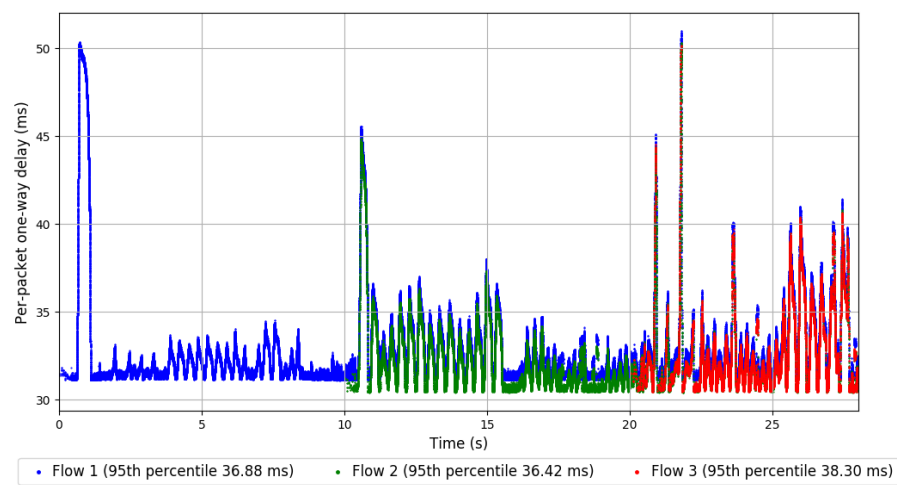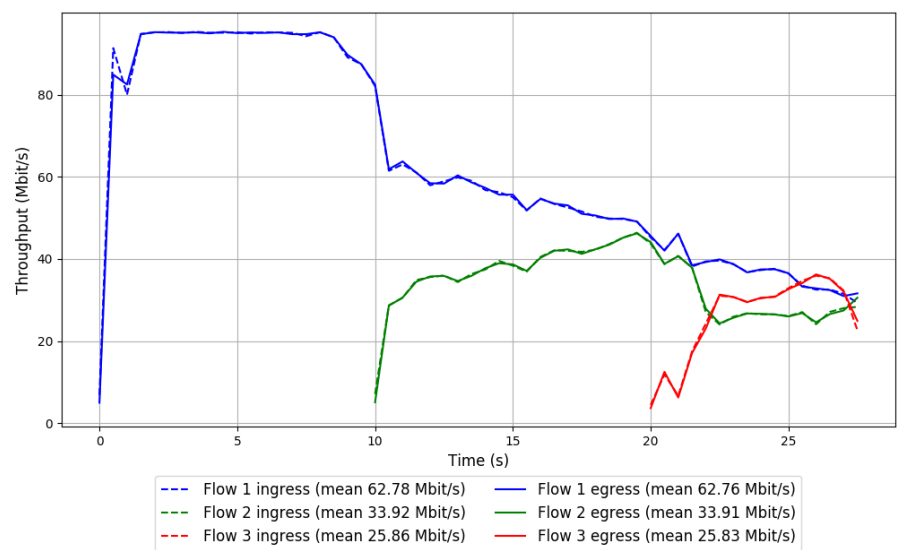
Run 6: Report of Copa — Data Link

```
Run 7: Statistics of Copa

Start at: 2018-01-17 06:18:33
End at: 2018-01-17 06:19:03
Local clock offset: -0.006 ms
Remote clock offset: -2.03 ms


# Below is generated by plot.py at 2018-01-17 08:23:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.76 Mbit/s
95th percentile per-packet one-way delay: 36.108 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.79 Mbit/s
95th percentile per-packet one-way delay: 35.870 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 29.66 Mbit/s
95th percentile per-packet one-way delay: 36.213 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 20.86 Mbit/s
95th percentile per-packet one-way delay: 36.519 ms
Loss rate: 0.01%
```
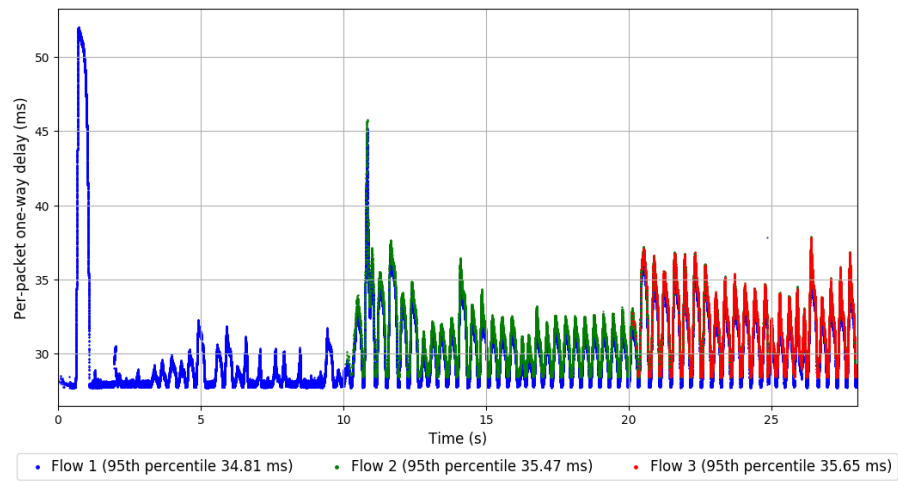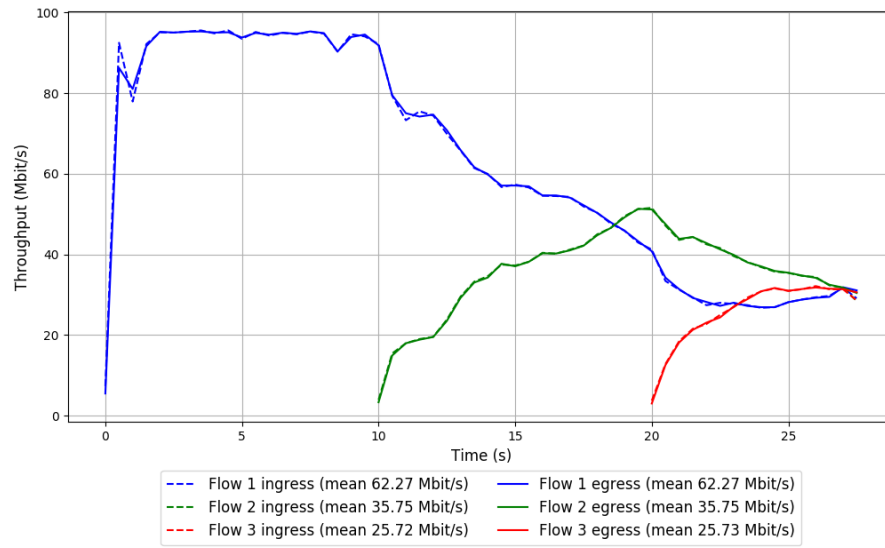
Run 7: Report of Copa — Data Link

- - - Flow 1 ingress (mean 54.79 Mbit/s) —— Flow 1 egress (mean 54.79 Mbit/s)
- - - Flow 2 ingress (mean 29.66 Mbit/s) —— Flow 2 egress (mean 29.66 Mbit/s)
- - - Flow 3 ingress (mean 20.85 Mbit/s) —— Flow 3 egress (mean 20.86 Mbit/s)

• Flow 1 (95th percentile 35.87 ms)   • Flow 2 (95th percentile 36.21 ms)   • Flow 3 (95th percentile 36.52 ms)

```
Run 8: Statistics of Copa

Start at: 2018-01-17 06:44:28
End at: 2018-01-17 06:44:58
Local clock offset: 0.011 ms
Remote clock offset: -1.83 ms


# Below is generated by plot.py at 2018-01-17 08:23:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.28 Mbit/s
95th percentile per-packet one-way delay: 37.990 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 66.43 Mbit/s
95th percentile per-packet one-way delay: 38.293 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 29.65 Mbit/s
95th percentile per-packet one-way delay: 37.317 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.09 Mbit/s
95th percentile per-packet one-way delay: 37.765 ms
Loss rate: 0.02%
```
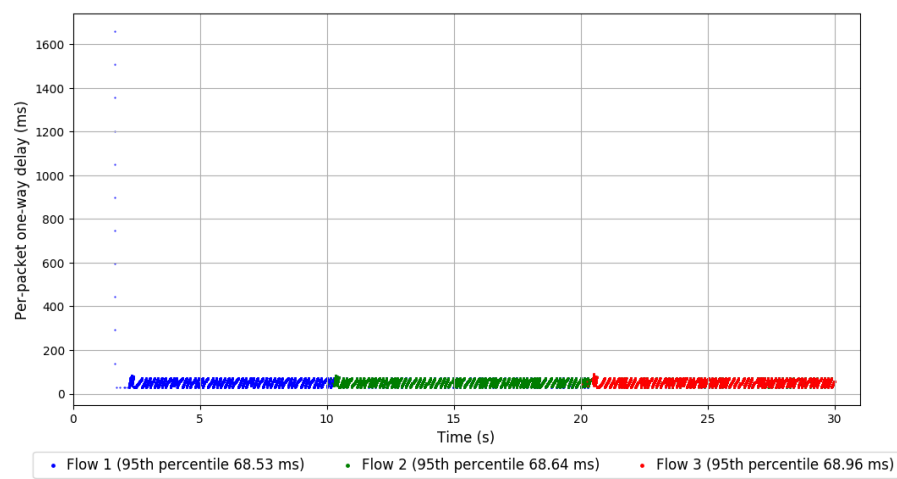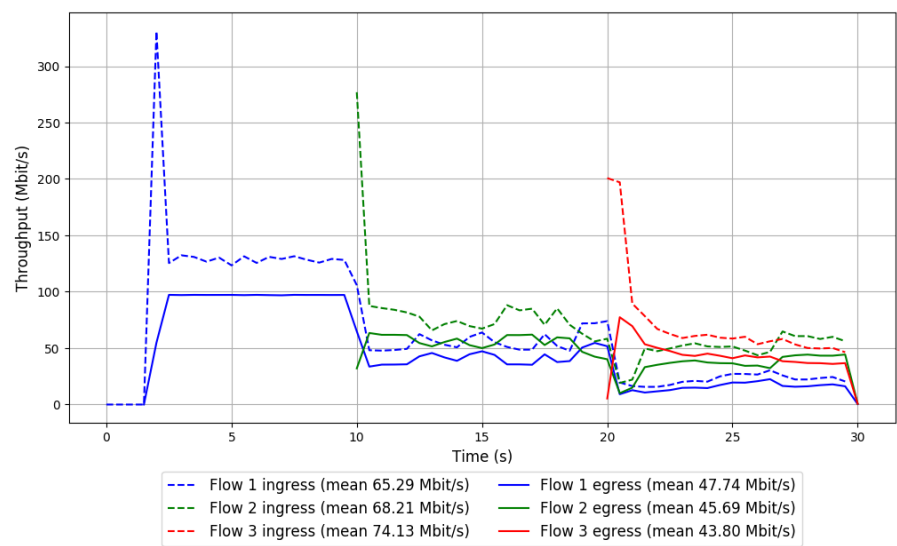
Run 8: Report of Copa — Data Link

Flow 1 ingress (mean 66.42 Mbit/s) ---- Flow 1 egress (mean 66.43 Mbit/s) ——
Flow 2 ingress (mean 29.65 Mbit/s) ---- Flow 2 egress (mean 29.65 Mbit/s) ——
Flow 3 ingress (mean 24.09 Mbit/s) ---- Flow 3 egress (mean 24.09 Mbit/s) ——

• Flow 1 (95th percentile 38.29 ms)   • Flow 2 (95th percentile 37.32 ms)   • Flow 3 (95th percentile 37.77 ms)

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```
Run 9: Statistics of Copa

Start at: 2018-01-17 07:09:31
End at: 2018-01-17 07:10:01
Local clock offset: -0.003 ms
Remote clock offset: -1.692 ms


# Below is generated by plot.py at 2018-01-17 08:24:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.88 Mbit/s
95th percentile per-packet one-way delay: 36.996 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 62.76 Mbit/s
95th percentile per-packet one-way delay: 36.885 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 33.91 Mbit/s
95th percentile per-packet one-way delay: 36.418 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 25.83 Mbit/s
95th percentile per-packet one-way delay: 38.302 ms
Loss rate: 0.13%
```
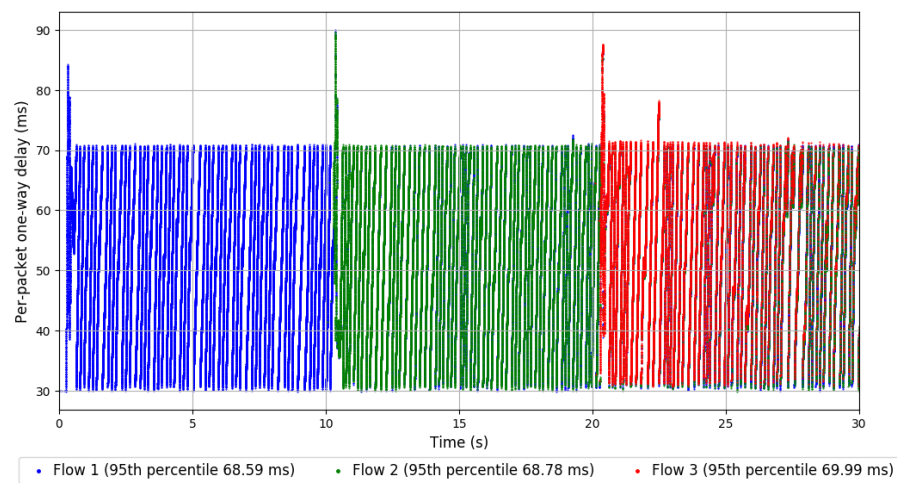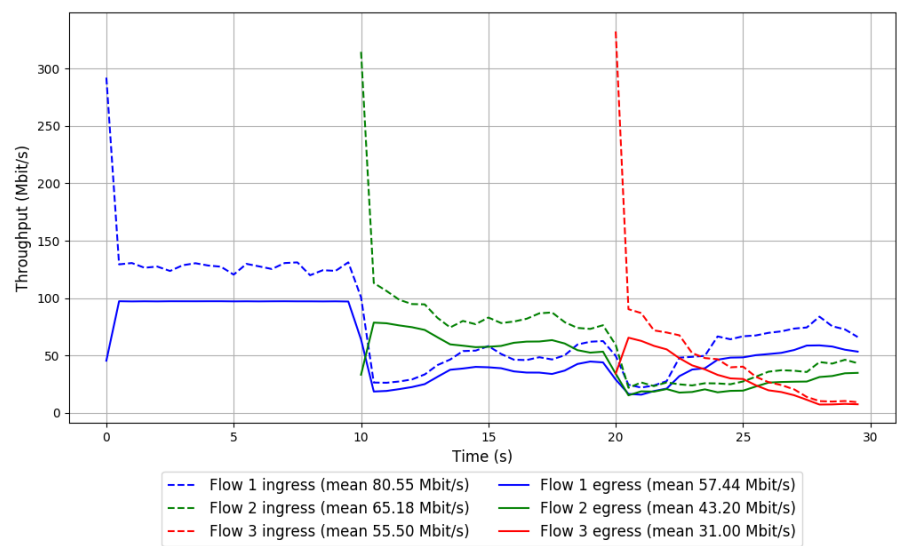
Run 9: Report of Copa — Data Link

Flow 1 ingress (mean 62.78 Mbit/s) --- Flow 1 egress (mean 62.76 Mbit/s)
Flow 2 ingress (mean 33.92 Mbit/s) --- Flow 2 egress (mean 33.91 Mbit/s)
Flow 3 ingress (mean 25.86 Mbit/s) --- Flow 3 egress (mean 25.83 Mbit/s)

Flow 1 (95th percentile 36.88 ms)   Flow 2 (95th percentile 36.42 ms)   Flow 3 (95th percentile 38.30 ms)

```
Run 10: Statistics of Copa

Start at: 2018-01-17 07:34:33
End at: 2018-01-17 07:35:03
Local clock offset: 0.055 ms
Remote clock offset: -4.142 ms


# Below is generated by plot.py at 2018-01-17 08:24:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.51 Mbit/s
95th percentile per-packet one-way delay: 35.244 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 62.27 Mbit/s
95th percentile per-packet one-way delay: 34.815 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 35.75 Mbit/s
95th percentile per-packet one-way delay: 35.471 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 25.73 Mbit/s
95th percentile per-packet one-way delay: 35.646 ms
Loss rate: 0.01%
```

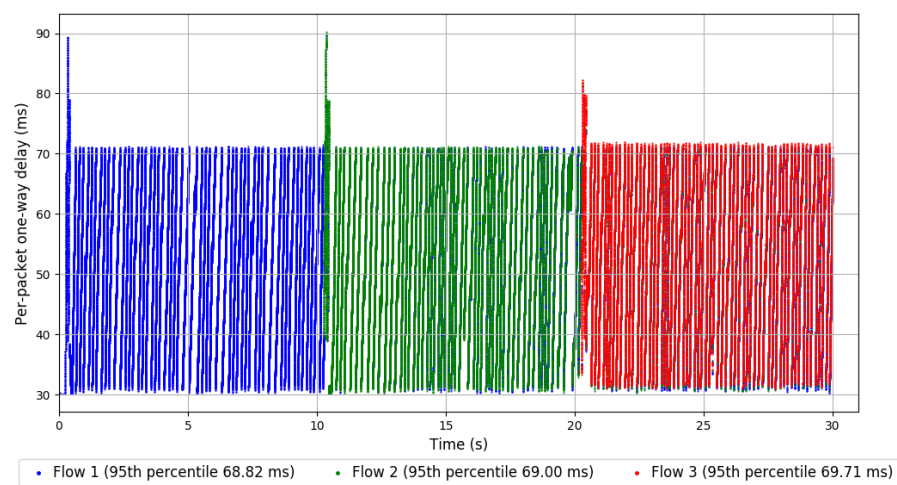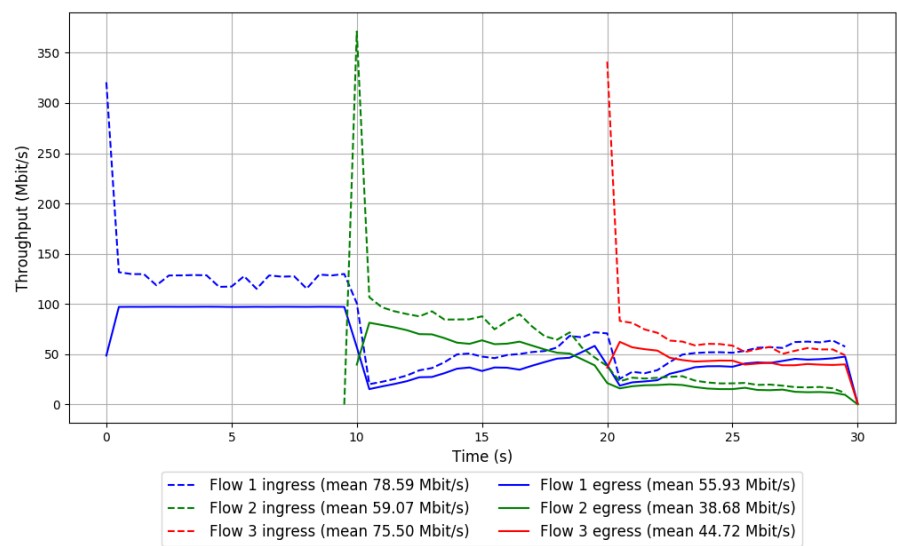# Run 10: Report of Copa — Data Link

```
Run 1: Statistics of FillP

Start at: 2018-01-17 03:32:14
End at: 2018-01-17 03:32:44
Local clock offset: -0.746 ms
Remote clock offset: -2.206 ms


# Below is generated by plot.py at 2018-01-17 08:24:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.26 Mbit/s
95th percentile per-packet one-way delay: 68.639 ms
Loss rate: 33.34%
-- Flow 1:
Average throughput: 47.74 Mbit/s
95th percentile per-packet one-way delay: 68.532 ms
Loss rate: 30.78%
-- Flow 2:
Average throughput: 45.69 Mbit/s
95th percentile per-packet one-way delay: 68.636 ms
Loss rate: 32.97%
-- Flow 3:
Average throughput: 43.80 Mbit/s
95th percentile per-packet one-way delay: 68.957 ms
Loss rate: 40.83%
```

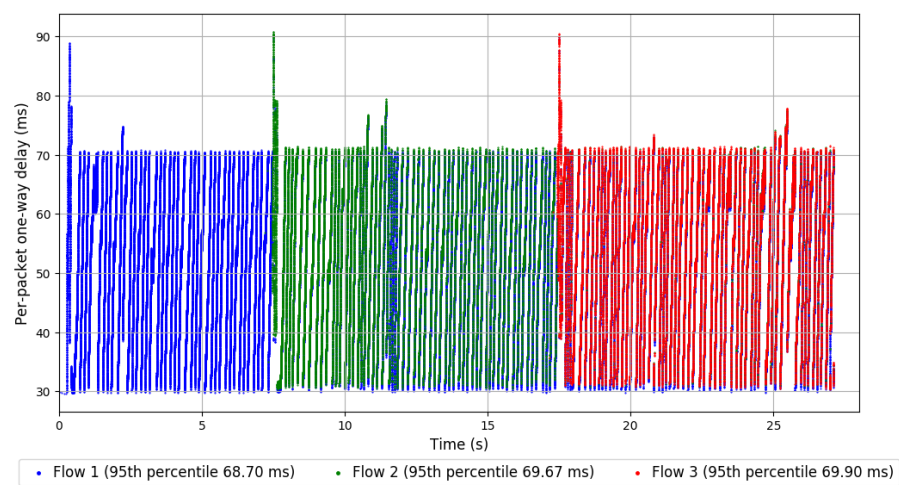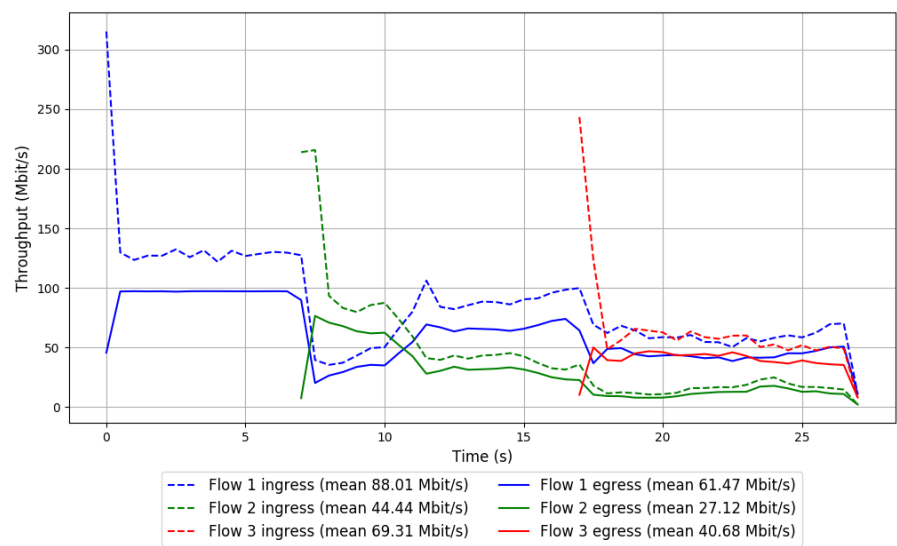# Run 1: Report of FillP — Data Link

```
Run 2: Statistics of FillP

Start at: 2018-01-17 03:58:20
End at: 2018-01-17 03:58:50
Local clock offset: -0.843 ms
Remote clock offset: -2.076 ms


# Below is generated by plot.py at 2018-01-17 08:24:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.43 Mbit/s
95th percentile per-packet one-way delay: 68.789 ms
Loss rate: 32.23%
-- Flow 1:
Average throughput: 57.44 Mbit/s
95th percentile per-packet one-way delay: 68.587 ms
Loss rate: 28.68%
-- Flow 2:
Average throughput: 43.20 Mbit/s
95th percentile per-packet one-way delay: 68.777 ms
Loss rate: 33.72%
-- Flow 3:
Average throughput: 31.00 Mbit/s
95th percentile per-packet one-way delay: 69.987 ms
Loss rate: 44.28%
```
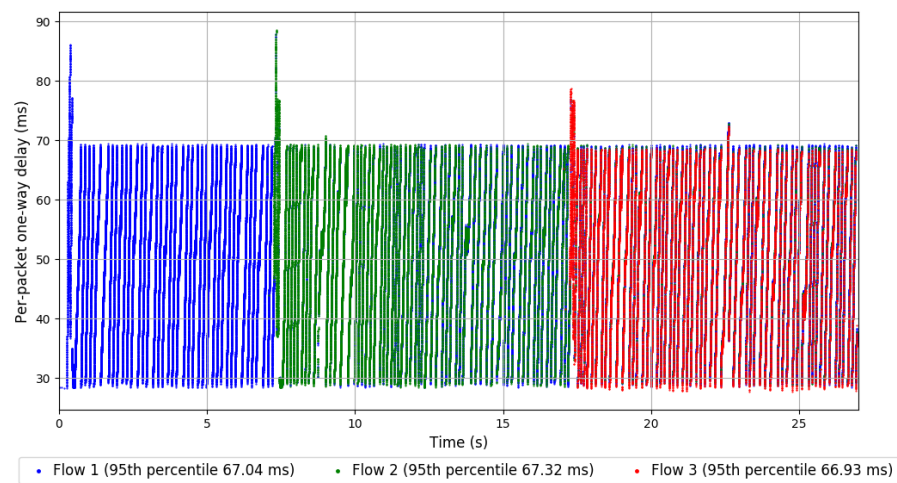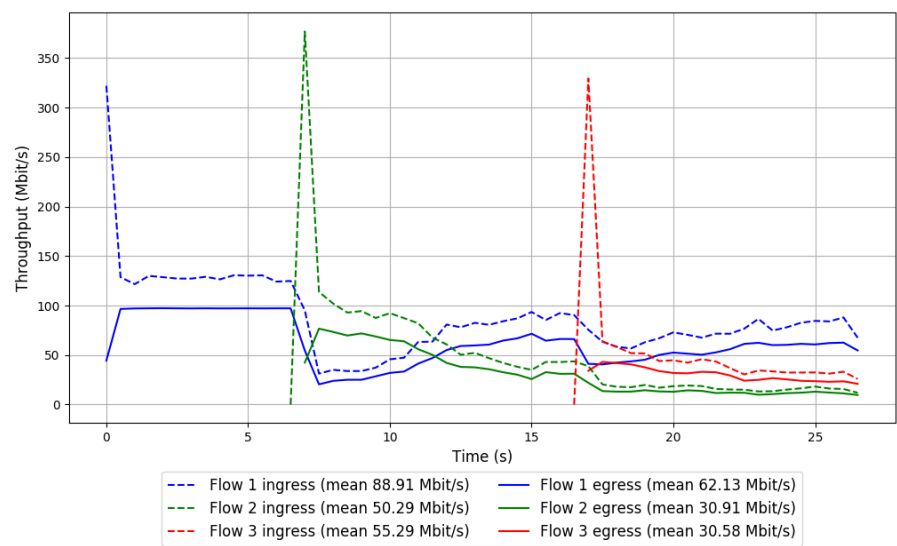
Run 2: Report of FillP — Data Link

Flow 1 ingress (mean 80.55 Mbit/s) --- Flow 1 egress (mean 57.44 Mbit/s)
Flow 2 ingress (mean 65.18 Mbit/s) --- Flow 2 egress (mean 43.20 Mbit/s)
Flow 3 ingress (mean 55.50 Mbit/s) --- Flow 3 egress (mean 31.00 Mbit/s)

Flow 1 (95th percentile 68.59 ms) • Flow 2 (95th percentile 68.78 ms) • Flow 3 (95th percentile 69.99 ms)

```
Run 3: Statistics of FillP

Start at: 2018-01-17 04:24:13
End at: 2018-01-17 04:24:43
Local clock offset: -0.712 ms
Remote clock offset: -1.673 ms

# Below is generated by plot.py at 2018-01-17 08:24:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.49 Mbit/s
95th percentile per-packet one-way delay: 68.994 ms
Loss rate: 32.42%
-- Flow 1:
Average throughput: 55.93 Mbit/s
95th percentile per-packet one-way delay: 68.819 ms
Loss rate: 28.74%
-- Flow 2:
Average throughput: 38.68 Mbit/s
95th percentile per-packet one-way delay: 68.996 ms
Loss rate: 34.51%
-- Flow 3:
Average throughput: 44.72 Mbit/s
95th percentile per-packet one-way delay: 69.710 ms
Loss rate: 40.67%
```
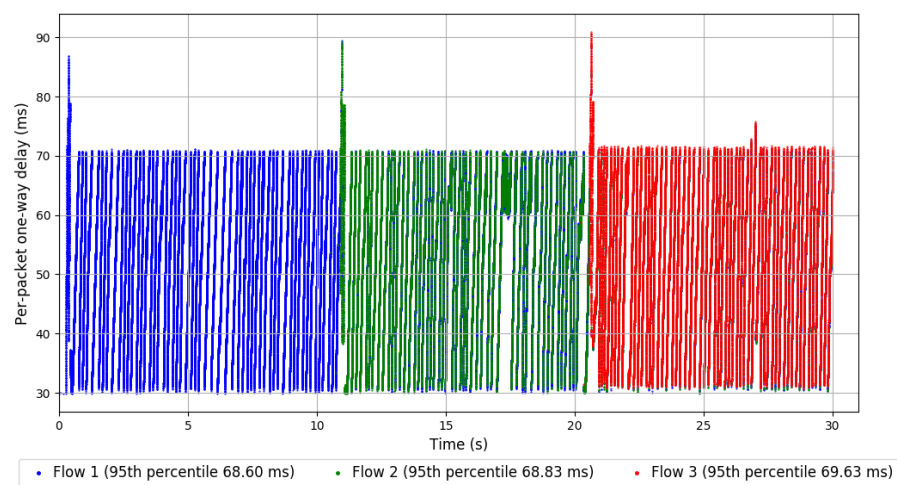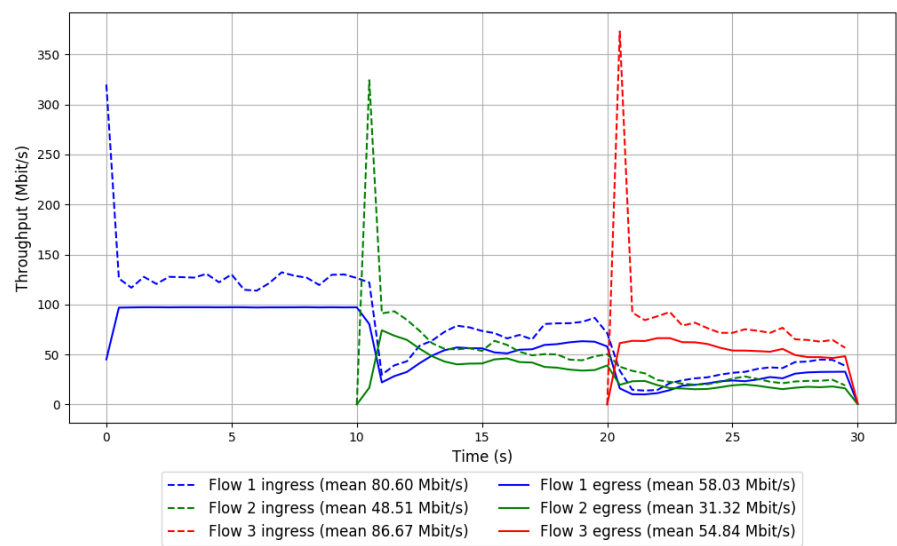
Run 3: Report of FillP — Data Link

```
Run 4: Statistics of FillP

Start at: 2018-01-17 04:50:27
End at: 2018-01-17 04:50:57
Local clock offset: -0.635 ms
Remote clock offset: -2.092 ms

# Below is generated by plot.py at 2018-01-17 08:24:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.33 Mbit/s
95th percentile per-packet one-way delay: 69.103 ms
Loss rate: 34.08%
-- Flow 1:
Average throughput: 61.47 Mbit/s
95th percentile per-packet one-way delay: 68.704 ms
Loss rate: 30.14%
-- Flow 2:
Average throughput: 27.12 Mbit/s
95th percentile per-packet one-way delay: 69.670 ms
Loss rate: 39.06%
-- Flow 3:
Average throughput: 40.68 Mbit/s
95th percentile per-packet one-way delay: 69.896 ms
Loss rate: 41.33%
```
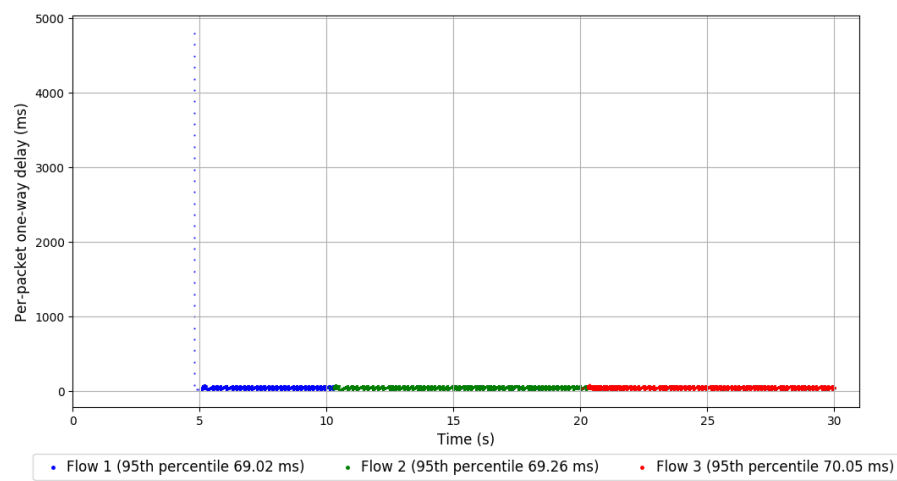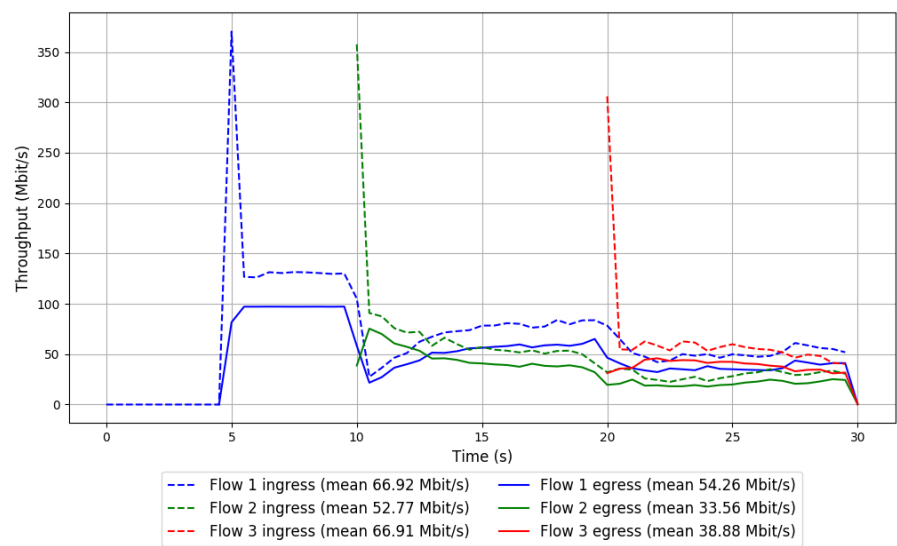
Run 4: Report of FillP — Data Link

Flow 1 ingress (mean 88.01 Mbit/s) --- Flow 1 egress (mean 61.47 Mbit/s)
Flow 2 ingress (mean 44.44 Mbit/s) --- Flow 2 egress (mean 27.12 Mbit/s)
Flow 3 ingress (mean 69.31 Mbit/s) --- Flow 3 egress (mean 40.68 Mbit/s)

Flow 1 (95th percentile 68.70 ms)   Flow 2 (95th percentile 69.67 ms)   Flow 3 (95th percentile 69.90 ms)

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```
Run 5: Statistics of FillP

Start at: 2018-01-17 05:17:34
End at: 2018-01-17 05:18:04
Local clock offset: -0.356 ms
Remote clock offset: -3.978 ms


# Below is generated by plot.py at 2018-01-17 08:24:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.25 Mbit/s
95th percentile per-packet one-way delay: 67.105 ms
Loss rate: 34.31%
-- Flow 1:
Average throughput: 62.13 Mbit/s
95th percentile per-packet one-way delay: 67.038 ms
Loss rate: 30.09%
-- Flow 2:
Average throughput: 30.91 Mbit/s
95th percentile per-packet one-way delay: 67.322 ms
Loss rate: 38.63%
-- Flow 3:
Average throughput: 30.58 Mbit/s
95th percentile per-packet one-way delay: 66.930 ms
Loss rate: 44.84%
```
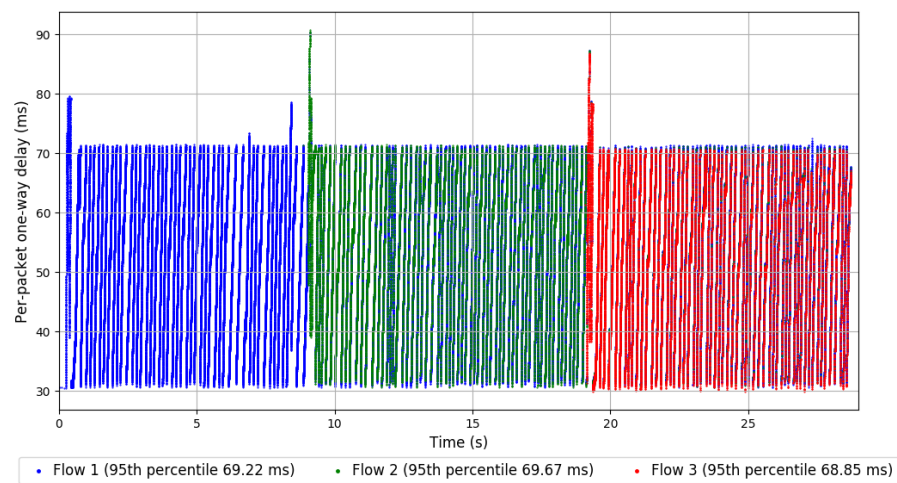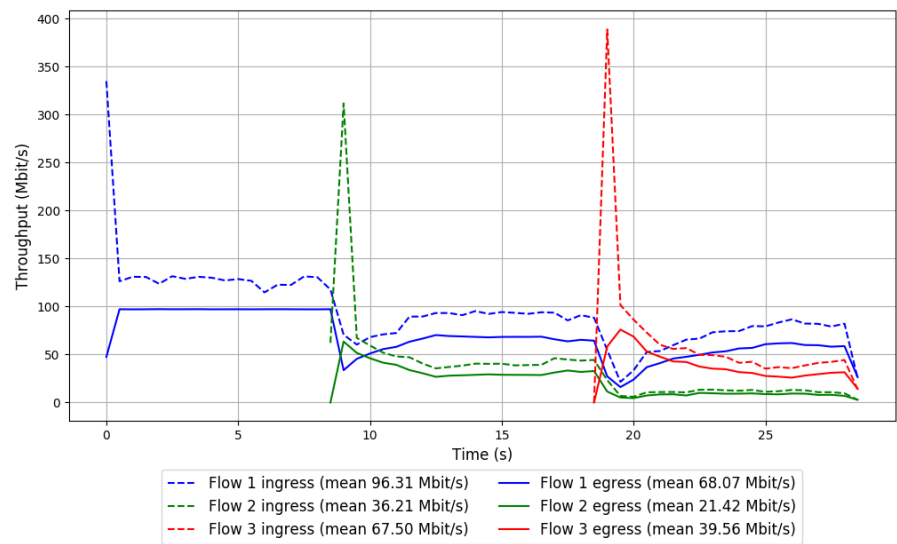
Run 5: Report of FillP — Data Link

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```
Run 6: Statistics of FillP

Start at: 2018-01-17 05:44:39
End at: 2018-01-17 05:45:09
Local clock offset: -0.282 ms
Remote clock offset: -1.999 ms


# Below is generated by plot.py at 2018-01-17 08:25:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.45 Mbit/s
95th percentile per-packet one-way delay: 68.831 ms
Loss rate: 31.83%
-- Flow 1:
Average throughput: 58.03 Mbit/s
95th percentile per-packet one-way delay: 68.596 ms
Loss rate: 27.92%
-- Flow 2:
Average throughput: 31.32 Mbit/s
95th percentile per-packet one-way delay: 68.830 ms
Loss rate: 36.40%
-- Flow 3:
Average throughput: 54.84 Mbit/s
95th percentile per-packet one-way delay: 69.633 ms
Loss rate: 37.66%
```
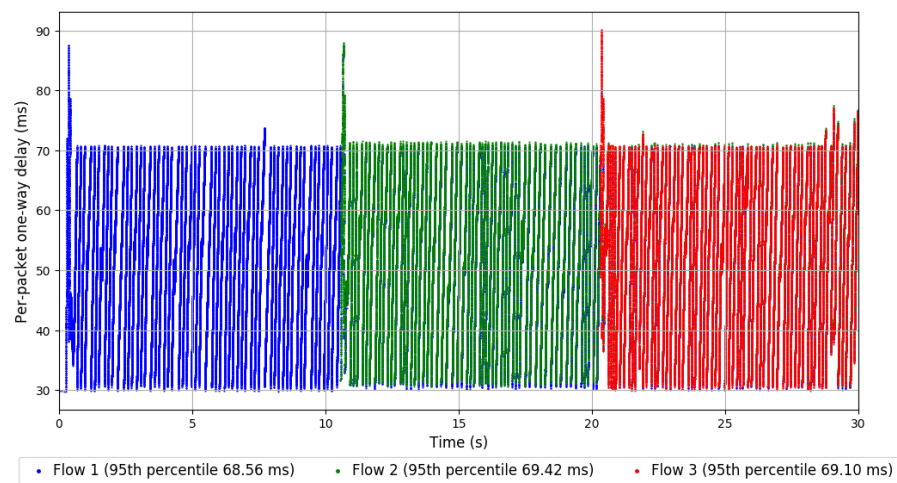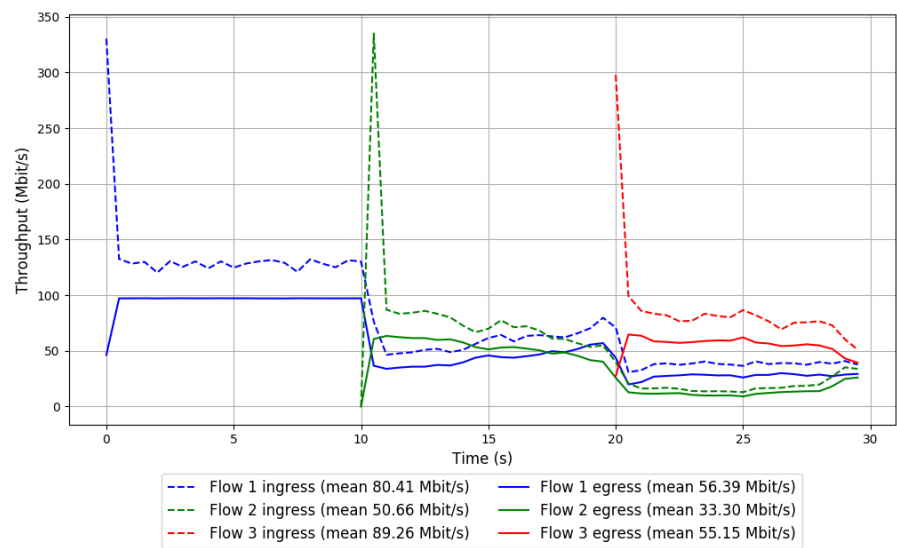
Run 6: Report of FillP — Data Link

```
Run 7: Statistics of FillP

Start at: 2018-01-17 06:11:01
End at: 2018-01-17 06:11:31
Local clock offset: -0.049 ms
Remote clock offset: -1.596 ms


# Below is generated by plot.py at 2018-01-17 08:25:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.15 Mbit/s
95th percentile per-packet one-way delay: 69.259 ms
Loss rate: 34.87%
-- Flow 1:
Average throughput: 54.26 Mbit/s
95th percentile per-packet one-way delay: 69.024 ms
Loss rate: 31.76%
-- Flow 2:
Average throughput: 33.56 Mbit/s
95th percentile per-packet one-way delay: 69.256 ms
Loss rate: 36.42%
-- Flow 3:
Average throughput: 38.88 Mbit/s
95th percentile per-packet one-way delay: 70.054 ms
Loss rate: 41.80%
```

Run 7: Report of FillP — Data Link

Flow 1 ingress (mean 66.92 Mbit/s)   Flow 1 egress (mean 54.26 Mbit/s)
Flow 2 ingress (mean 52.77 Mbit/s)   Flow 2 egress (mean 33.56 Mbit/s)
Flow 3 ingress (mean 66.91 Mbit/s)   Flow 3 egress (mean 38.88 Mbit/s)

Flow 1 (95th percentile 69.02 ms)   Flow 2 (95th percentile 69.26 ms)   Flow 3 (95th percentile 70.05 ms)
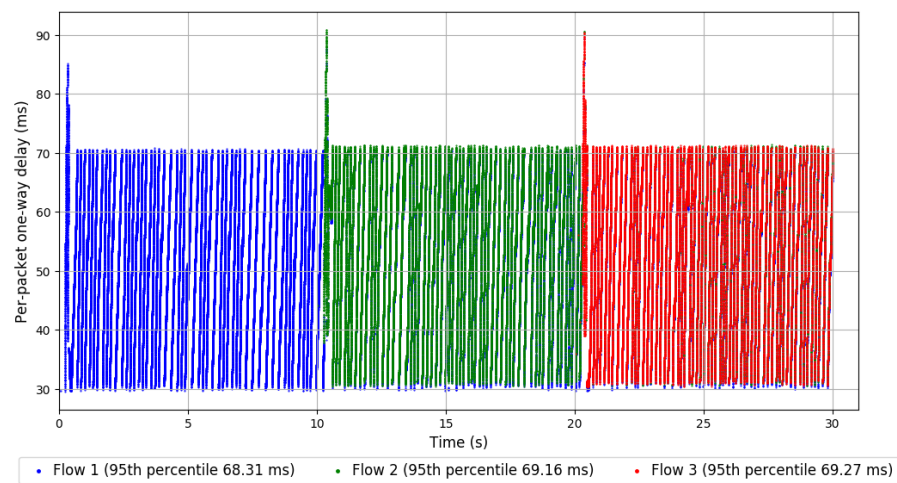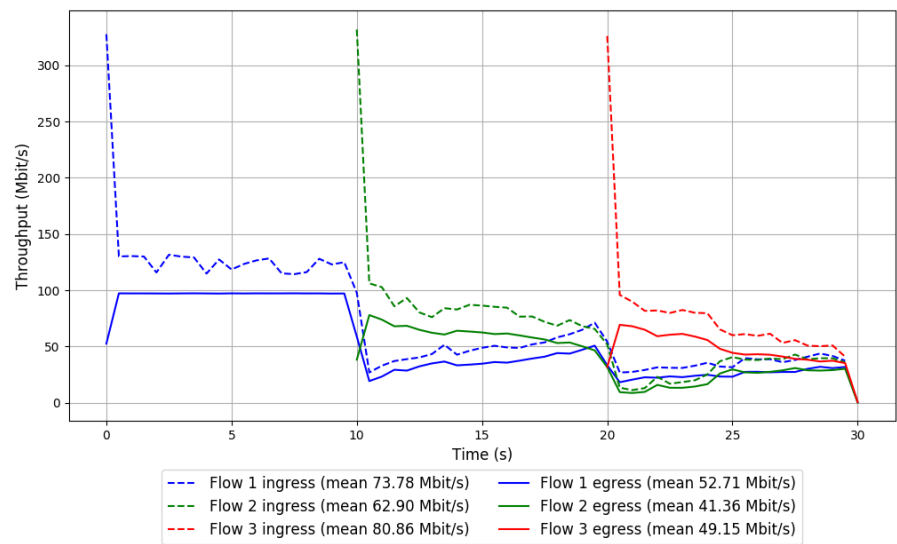
257

```
Run 8: Statistics of FillP

Start at: 2018-01-17 06:37:23
End at: 2018-01-17 06:37:53
Local clock offset: 0.03 ms
Remote clock offset: -2.401 ms

# Below is generated by plot.py at 2018-01-17 08:26:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.45 Mbit/s
95th percentile per-packet one-way delay: 69.244 ms
Loss rate: 33.35%
-- Flow 1:
Average throughput: 68.07 Mbit/s
95th percentile per-packet one-way delay: 69.217 ms
Loss rate: 29.24%
-- Flow 2:
Average throughput: 21.42 Mbit/s
95th percentile per-packet one-way delay: 69.666 ms
Loss rate: 40.80%
-- Flow 3:
Average throughput: 39.56 Mbit/s
95th percentile per-packet one-way delay: 68.853 ms
Loss rate: 42.27%
```

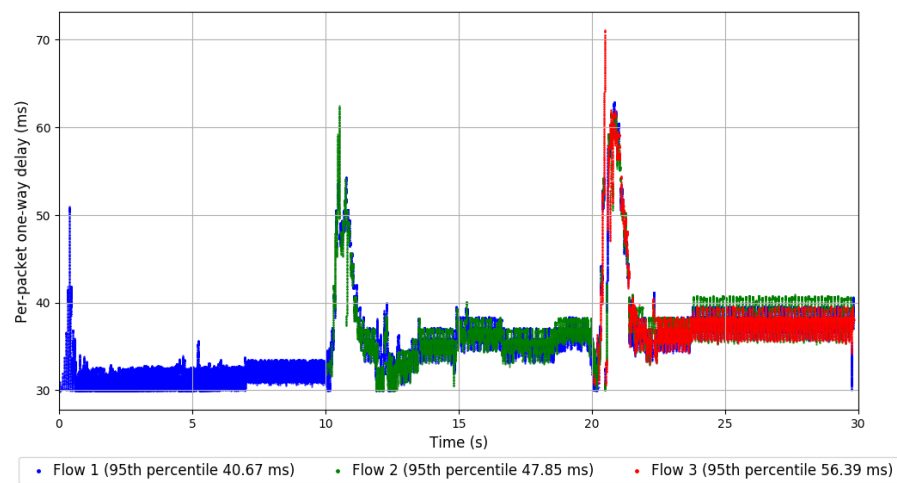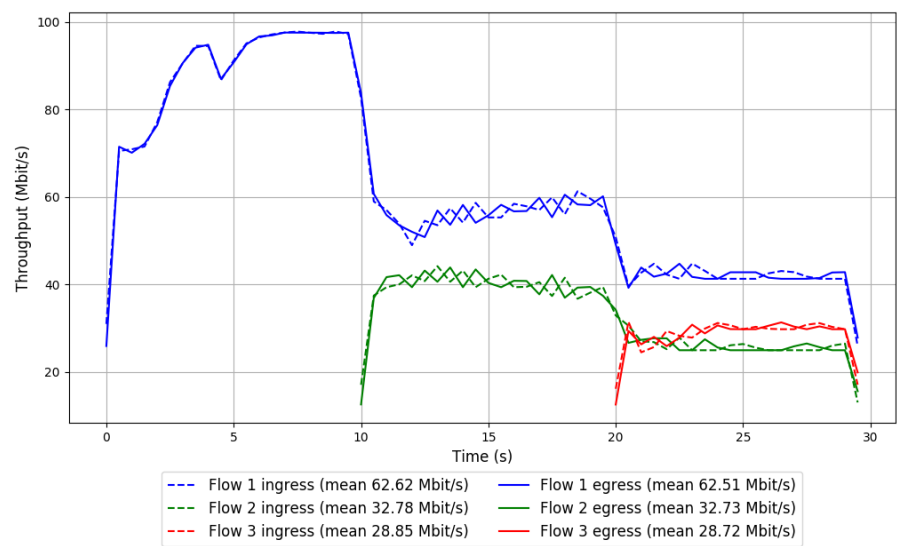# Run 8: Report of FillP — Data Link

```
Run 9: Statistics of FillP

Start at: 2018-01-17 07:02:36
End at: 2018-01-17 07:03:06
Local clock offset: 0.064 ms
Remote clock offset: -2.183 ms


# Below is generated by plot.py at 2018-01-17 08:26:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.47 Mbit/s
95th percentile per-packet one-way delay: 68.860 ms
Loss rate: 32.87%
-- Flow 1:
Average throughput: 56.39 Mbit/s
95th percentile per-packet one-way delay: 68.565 ms
Loss rate: 29.85%
-- Flow 2:
Average throughput: 33.30 Mbit/s
95th percentile per-packet one-way delay: 69.419 ms
Loss rate: 35.35%
-- Flow 3:
Average throughput: 55.15 Mbit/s
95th percentile per-packet one-way delay: 69.103 ms
Loss rate: 38.24%
```
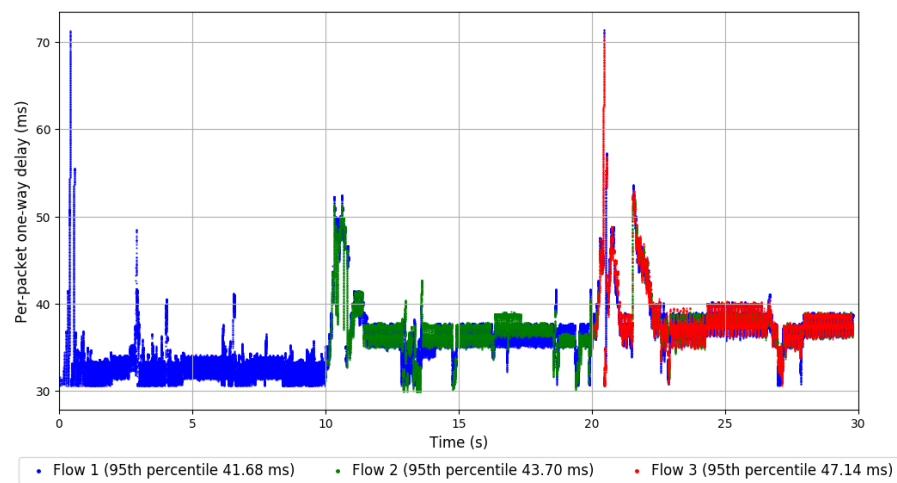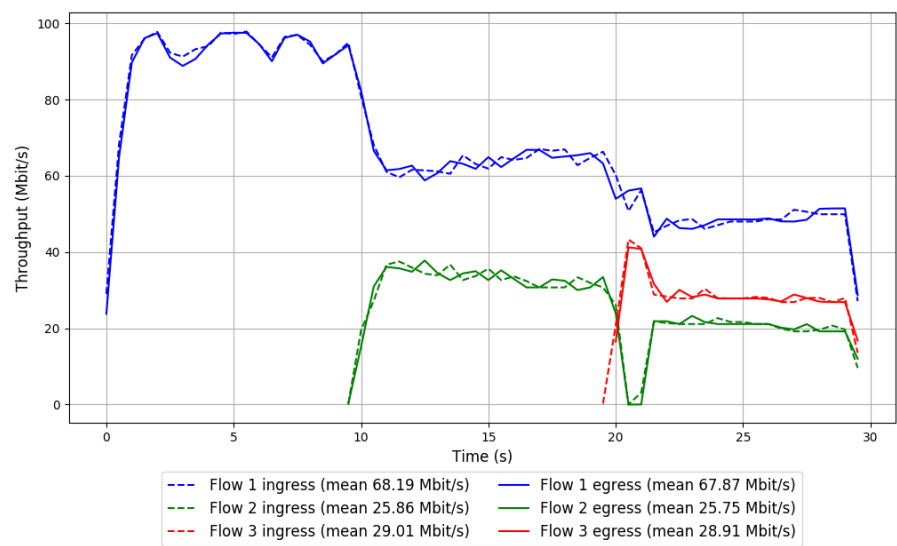
Run 9: Report of FillP — Data Link

```
Run 10: Statistics of FillP

Start at: 2018-01-17 07:27:35
End at: 2018-01-17 07:28:05
Local clock offset: 0.056 ms
Remote clock offset: -2.249 ms

# Below is generated by plot.py at 2018-01-17 08:26:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.57 Mbit/s
95th percentile per-packet one-way delay: 68.733 ms
Loss rate: 32.16%
-- Flow 1:
Average throughput: 52.71 Mbit/s
95th percentile per-packet one-way delay: 68.310 ms
Loss rate: 28.48%
-- Flow 2:
Average throughput: 41.36 Mbit/s
95th percentile per-packet one-way delay: 69.157 ms
Loss rate: 34.20%
-- Flow 3:
Average throughput: 49.15 Mbit/s
95th percentile per-packet one-way delay: 69.269 ms
Loss rate: 39.07%
```

Run 10: Report of FillP — Data Link

Flow 1 ingress (mean 73.78 Mbit/s) — Flow 1 egress (mean 52.71 Mbit/s)
Flow 2 ingress (mean 62.90 Mbit/s) — Flow 2 egress (mean 41.36 Mbit/s)
Flow 3 ingress (mean 80.86 Mbit/s) — Flow 3 egress (mean 49.15 Mbit/s)

Flow 1 (95th percentile 68.31 ms) — Flow 2 (95th percentile 69.16 ms) — Flow 3 (95th percentile 69.27 ms)
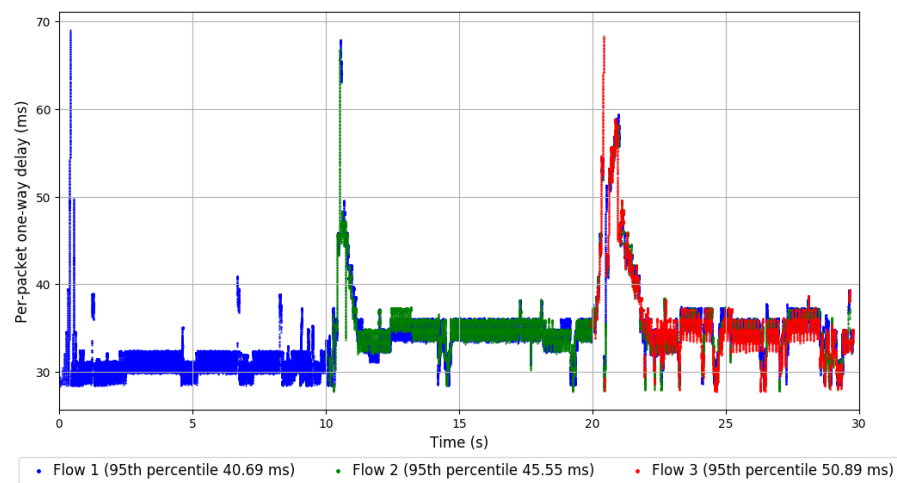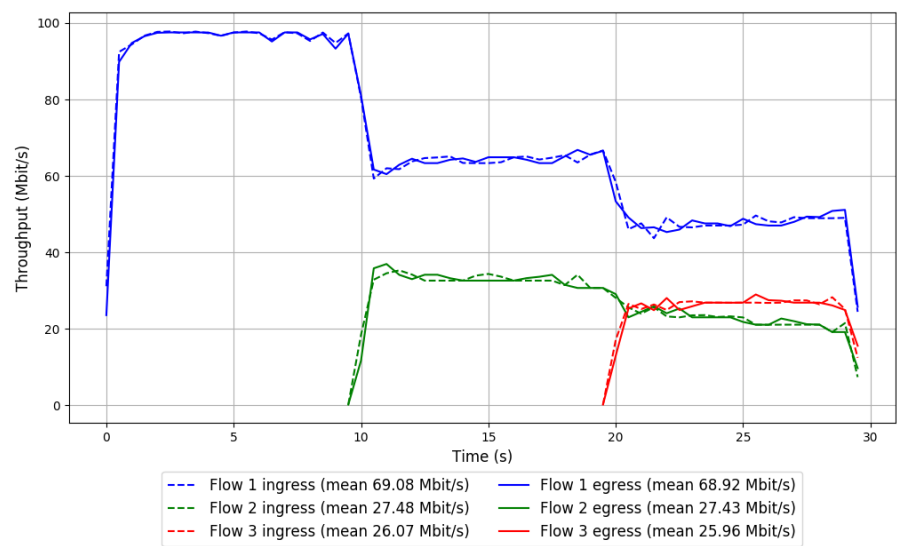
```
Run 1: Statistics of Indigo

Start at: 2018-01-17 03:30:46
End at: 2018-01-17 03:31:16
Local clock offset: -0.646 ms
Remote clock offset: -2.035 ms


# Below is generated by plot.py at 2018-01-17 08:26:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.60 Mbit/s
95th percentile per-packet one-way delay: 45.350 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 62.51 Mbit/s
95th percentile per-packet one-way delay: 40.668 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 32.73 Mbit/s
95th percentile per-packet one-way delay: 47.855 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 28.72 Mbit/s
95th percentile per-packet one-way delay: 56.391 ms
Loss rate: 0.38%
```
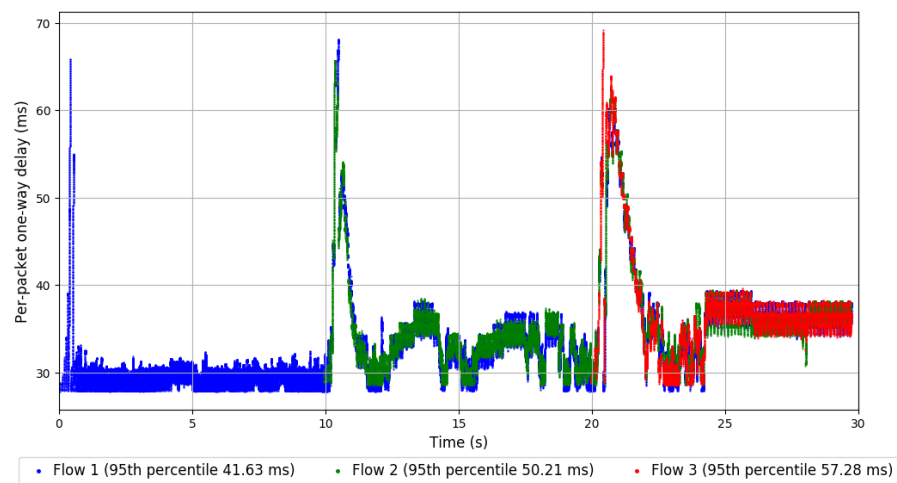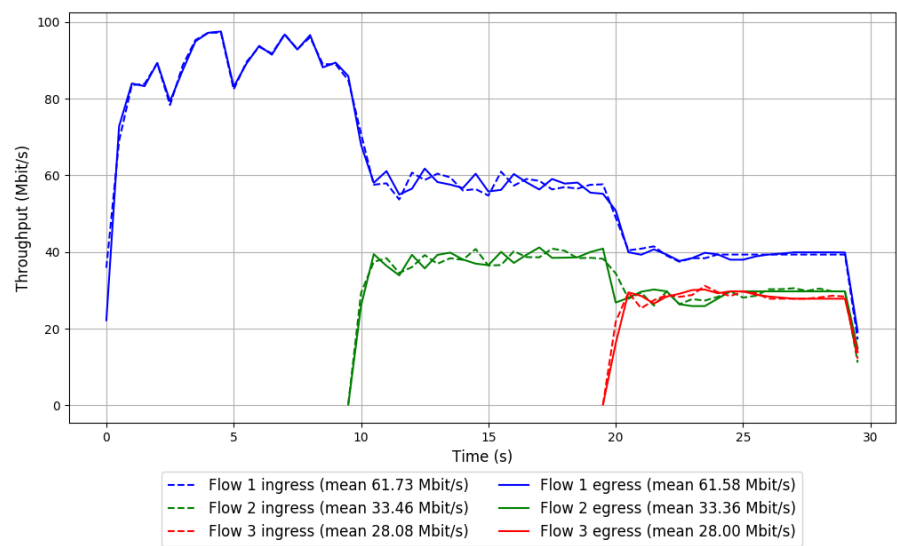
Run 1: Report of Indigo — Data Link

- - - Flow 1 ingress (mean 62.62 Mbit/s) ——— Flow 1 egress (mean 62.51 Mbit/s)
- - - Flow 2 ingress (mean 32.78 Mbit/s) ——— Flow 2 egress (mean 32.73 Mbit/s)
- - - Flow 3 ingress (mean 28.85 Mbit/s) ——— Flow 3 egress (mean 28.72 Mbit/s)

• Flow 1 (95th percentile 40.67 ms)   • Flow 2 (95th percentile 47.85 ms)   • Flow 3 (95th percentile 56.39 ms)

```
Run 2: Statistics of Indigo

Start at: 2018-01-17 03:56:55
End at: 2018-01-17 03:57:25
Local clock offset: -0.861 ms
Remote clock offset: -2.071 ms


# Below is generated by plot.py at 2018-01-17 08:26:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.47 Mbit/s
95th percentile per-packet one-way delay: 43.668 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 67.87 Mbit/s
95th percentile per-packet one-way delay: 41.684 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 25.75 Mbit/s
95th percentile per-packet one-way delay: 43.705 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 28.91 Mbit/s
95th percentile per-packet one-way delay: 47.136 ms
Loss rate: 0.31%
```
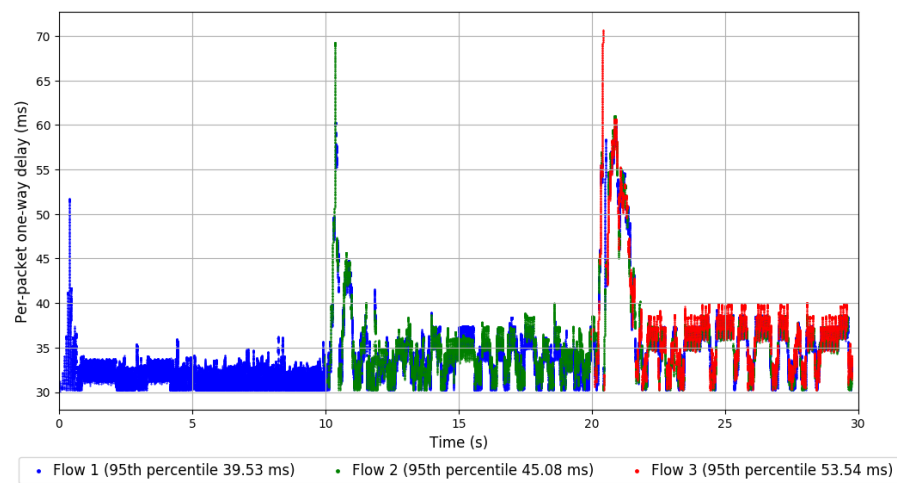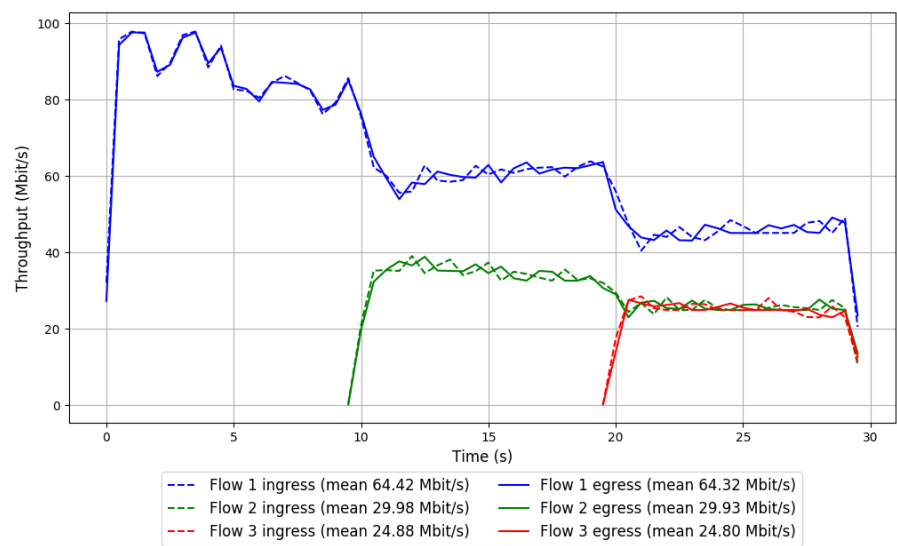
Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2018-01-17 04:22:39
End at: 2018-01-17 04:23:09
Local clock offset: -0.732 ms
Remote clock offset: -4.139 ms


# Below is generated by plot.py at 2018-01-17 08:26:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.66 Mbit/s
95th percentile per-packet one-way delay: 43.107 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 68.92 Mbit/s
95th percentile per-packet one-way delay: 40.692 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 27.43 Mbit/s
95th percentile per-packet one-way delay: 45.550 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 25.96 Mbit/s
95th percentile per-packet one-way delay: 50.887 ms
Loss rate: 0.43%
```
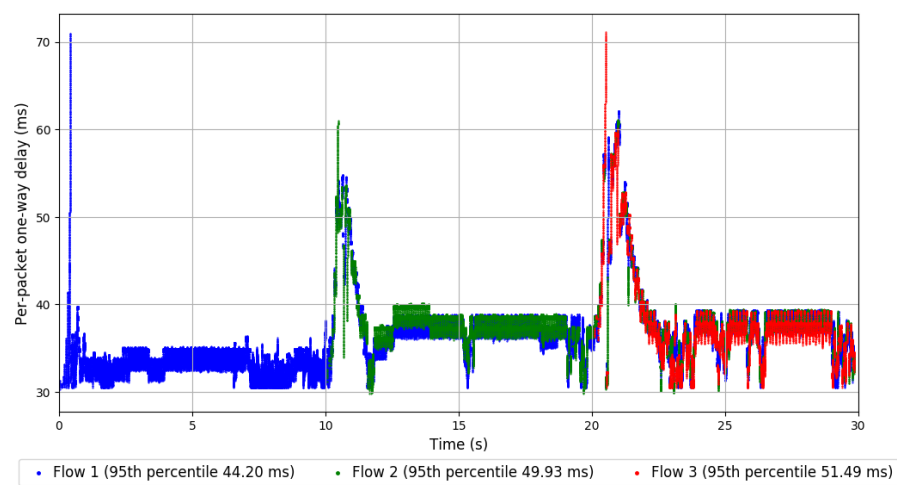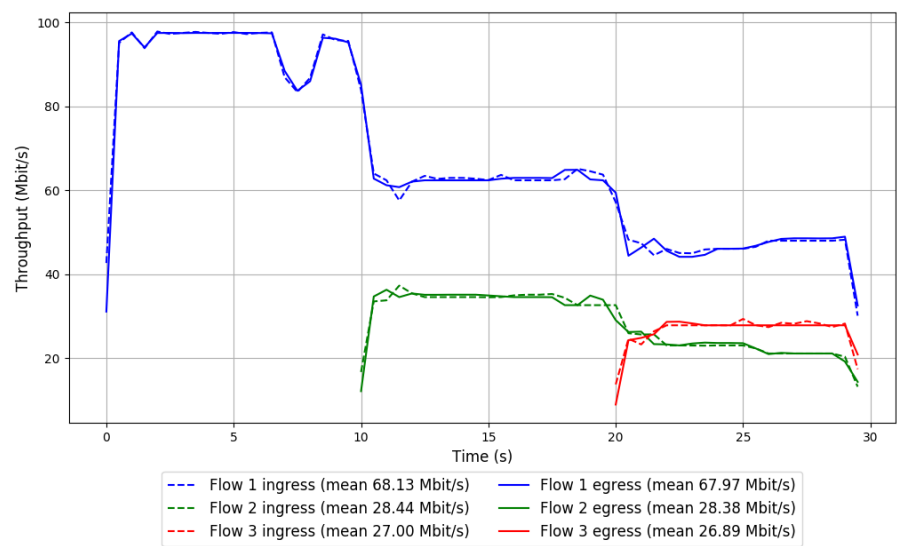
Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2018-01-17 04:48:49
End at: 2018-01-17 04:49:19
Local clock offset: -0.721 ms
Remote clock offset: -4.064 ms


# Below is generated by plot.py at 2018-01-17 08:26:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.96 Mbit/s
95th percentile per-packet one-way delay: 46.962 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 61.58 Mbit/s
95th percentile per-packet one-way delay: 41.632 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 33.36 Mbit/s
95th percentile per-packet one-way delay: 50.210 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 28.00 Mbit/s
95th percentile per-packet one-way delay: 57.279 ms
Loss rate: 0.20%
```
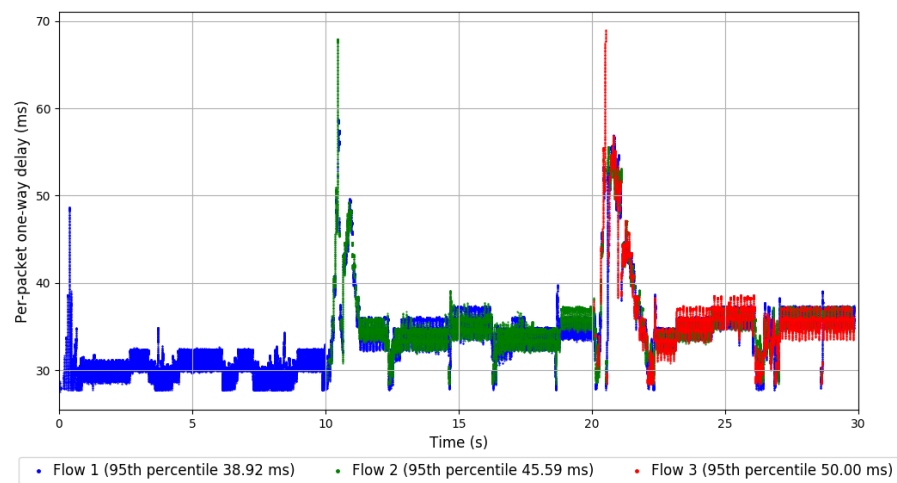
Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2018-01-17 05:15:55
End at: 2018-01-17 05:16:25
Local clock offset: -0.344 ms
Remote clock offset: -1.421 ms


# Below is generated by plot.py at 2018-01-17 08:27:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.35 Mbit/s
95th percentile per-packet one-way delay: 43.239 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 64.32 Mbit/s
95th percentile per-packet one-way delay: 39.533 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 29.93 Mbit/s
95th percentile per-packet one-way delay: 45.078 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 24.80 Mbit/s
95th percentile per-packet one-way delay: 53.544 ms
Loss rate: 0.35%
```
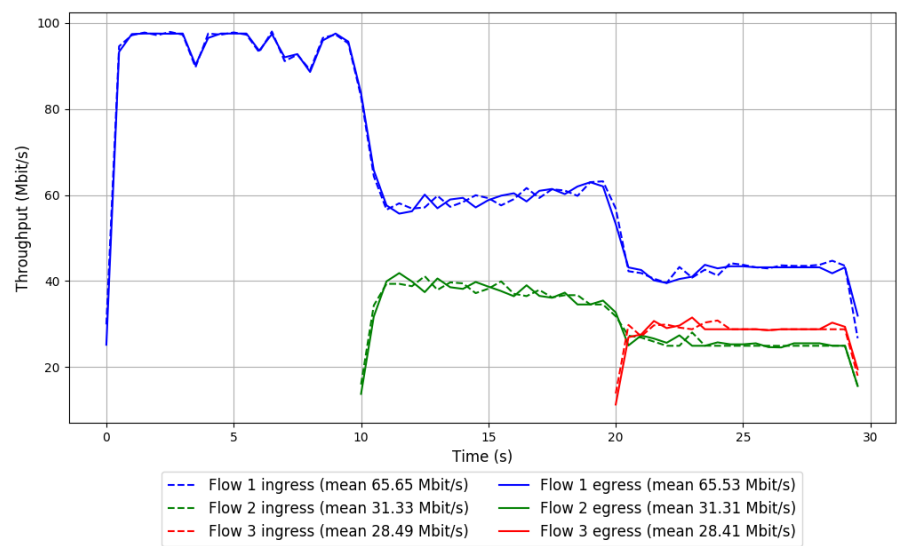
Run 5: Report of Indigo — Data Link

```
Run 6: Statistics of Indigo

Start at: 2018-01-17 05:43:07
End at: 2018-01-17 05:43:37
Local clock offset: -0.225 ms
Remote clock offset: -2.114 ms


# Below is generated by plot.py at 2018-01-17 08:27:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.53 Mbit/s
95th percentile per-packet one-way delay: 46.657 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 67.97 Mbit/s
95th percentile per-packet one-way delay: 44.203 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 28.38 Mbit/s
95th percentile per-packet one-way delay: 49.932 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 26.89 Mbit/s
95th percentile per-packet one-way delay: 51.493 ms
Loss rate: 0.41%
```
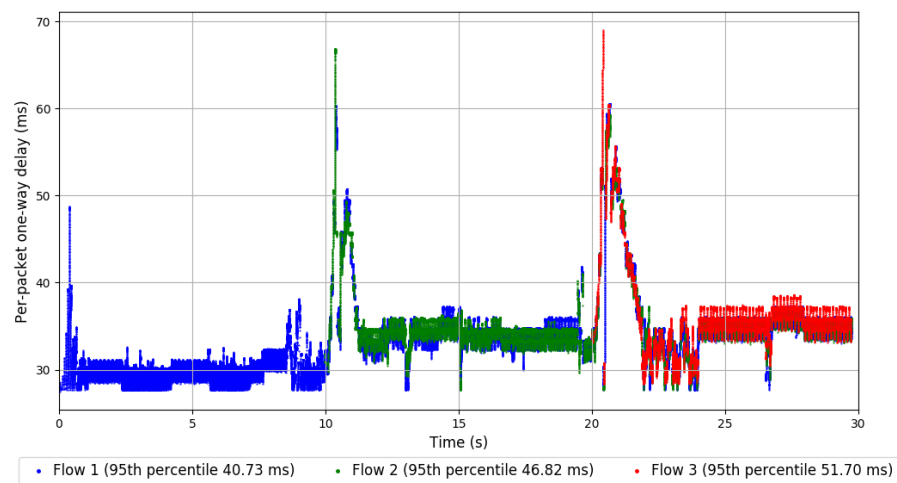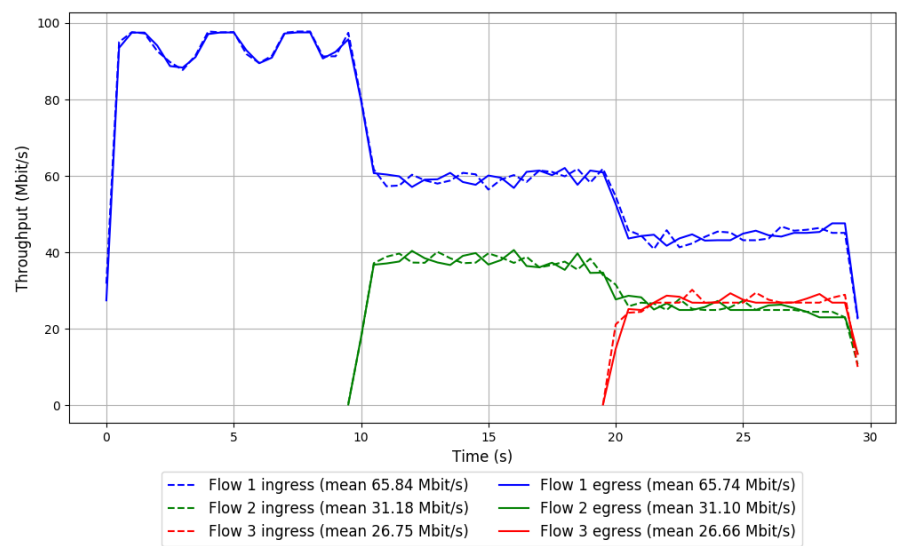
Run 6: Report of Indigo — Data Link

```
Run 7: Statistics of Indigo

Start at: 2018-01-17 06:09:30
End at: 2018-01-17 06:10:00
Local clock offset: -0.108 ms
Remote clock offset: -4.275 ms


# Below is generated by plot.py at 2018-01-17 08:27:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.54 Mbit/s
95th percentile per-packet one-way delay: 43.056 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 65.53 Mbit/s
95th percentile per-packet one-way delay: 38.920 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 31.31 Mbit/s
95th percentile per-packet one-way delay: 45.592 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 28.41 Mbit/s
95th percentile per-packet one-way delay: 50.000 ms
Loss rate: 0.29%
```
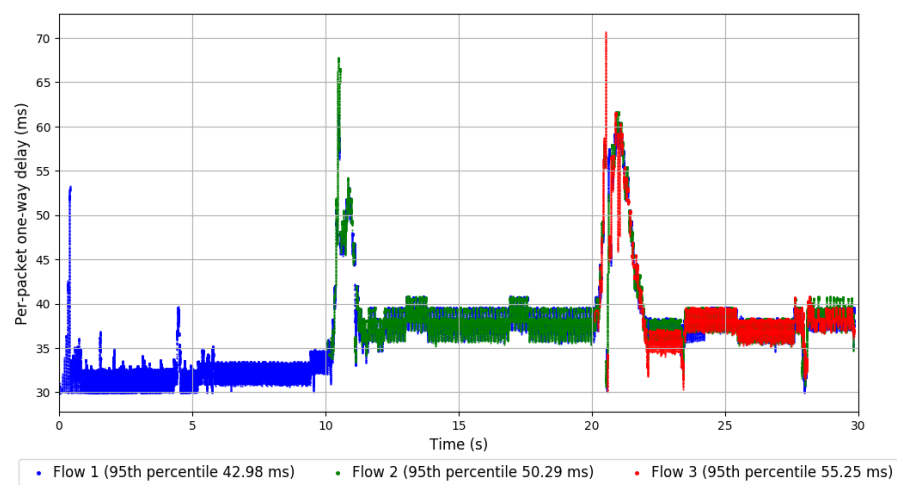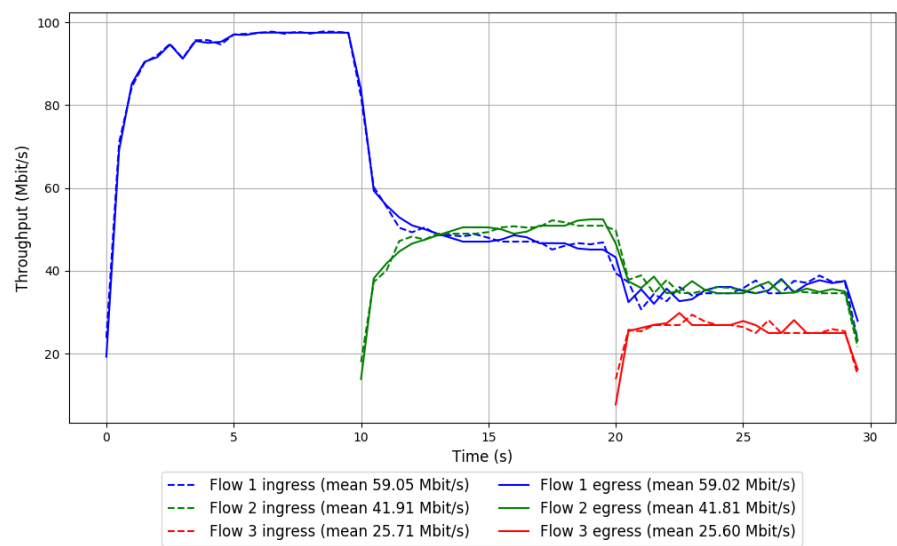
Run 7: Report of Indigo — Data Link

```
Run 8: Statistics of Indigo

Start at: 2018-01-17 06:35:54
End at: 2018-01-17 06:36:24
Local clock offset: 0.002 ms
Remote clock offset: -4.588 ms


# Below is generated by plot.py at 2018-01-17 08:27:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.14 Mbit/s
95th percentile per-packet one-way delay: 43.513 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 65.74 Mbit/s
95th percentile per-packet one-way delay: 40.731 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 31.10 Mbit/s
95th percentile per-packet one-way delay: 46.816 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 26.66 Mbit/s
95th percentile per-packet one-way delay: 51.701 ms
Loss rate: 0.30%
```
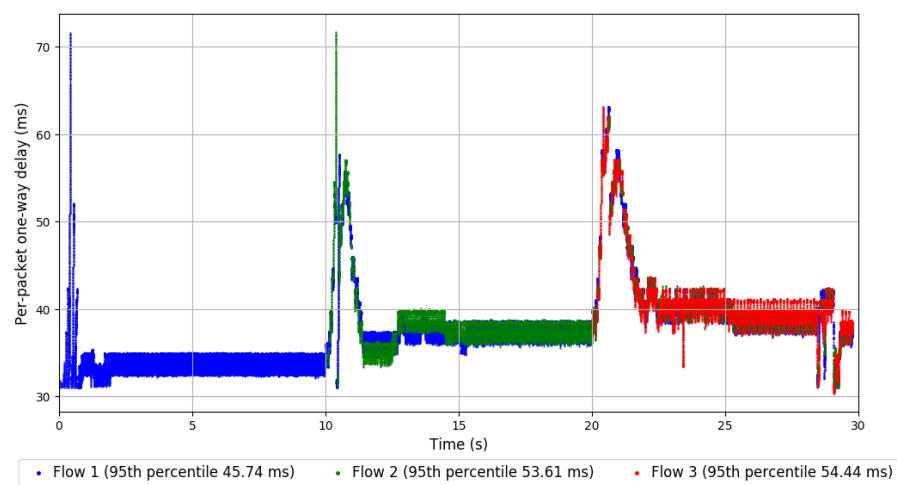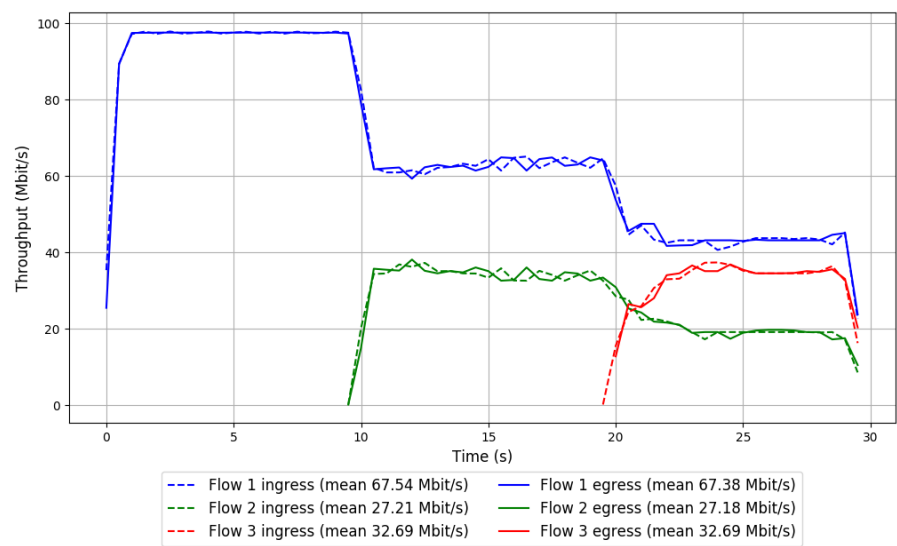
Run 8: Report of Indigo — Data Link

Flow 1 ingress (mean 65.84 Mbit/s) —— Flow 1 egress (mean 65.74 Mbit/s)
Flow 2 ingress (mean 31.18 Mbit/s) —— Flow 2 egress (mean 31.10 Mbit/s)
Flow 3 ingress (mean 26.75 Mbit/s) —— Flow 3 egress (mean 26.66 Mbit/s)

Flow 1 (95th percentile 40.73 ms)   Flow 2 (95th percentile 46.82 ms)   Flow 3 (95th percentile 51.70 ms)

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```
Run 9: Statistics of Indigo

Start at: 2018-01-17 07:01:10
End at: 2018-01-17 07:01:40
Local clock offset: 0.067 ms
Remote clock offset: -2.108 ms


# Below is generated by plot.py at 2018-01-17 08:27:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.09 Mbit/s
95th percentile per-packet one-way delay: 47.842 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 59.02 Mbit/s
95th percentile per-packet one-way delay: 42.979 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 41.81 Mbit/s
95th percentile per-packet one-way delay: 50.289 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 25.60 Mbit/s
95th percentile per-packet one-way delay: 55.253 ms
Loss rate: 0.45%
```

Run 9: Report of Indigo — Data Link

```
Run 10: Statistics of Indigo

Start at: 2018-01-17 07:26:08
End at: 2018-01-17 07:26:38
Local clock offset: 0.066 ms
Remote clock offset: -1.663 ms


# Below is generated by plot.py at 2018-01-17 08:27:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.19 Mbit/s
95th percentile per-packet one-way delay: 49.418 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 67.38 Mbit/s
95th percentile per-packet one-way delay: 45.742 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 27.18 Mbit/s
95th percentile per-packet one-way delay: 53.609 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 32.69 Mbit/s
95th percentile per-packet one-way delay: 54.443 ms
Loss rate: 0.00%
```
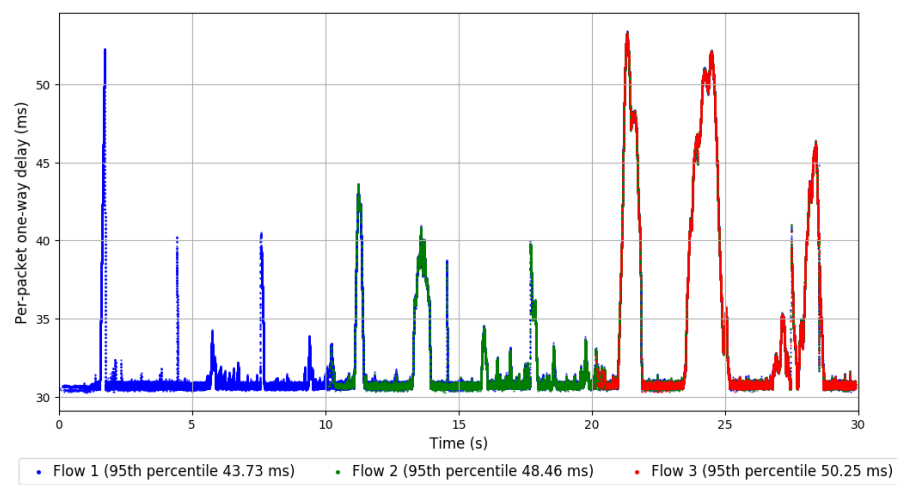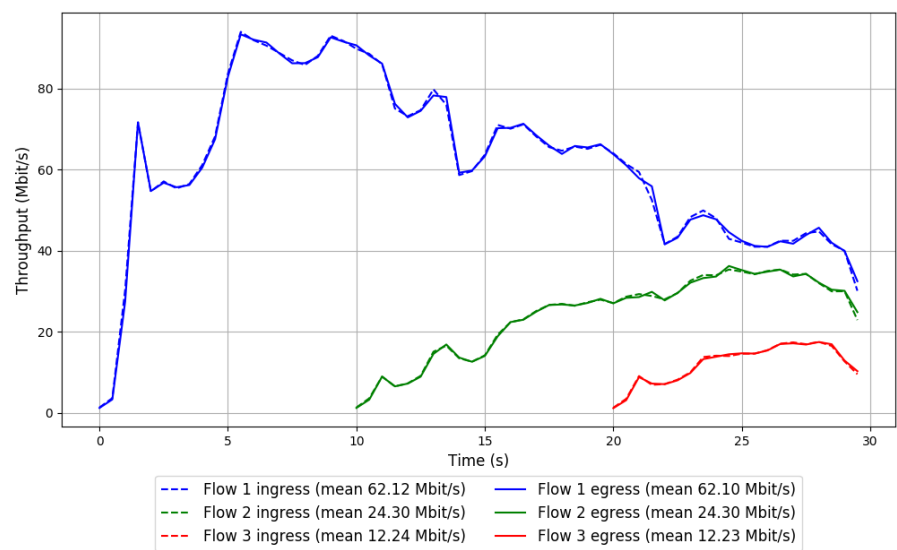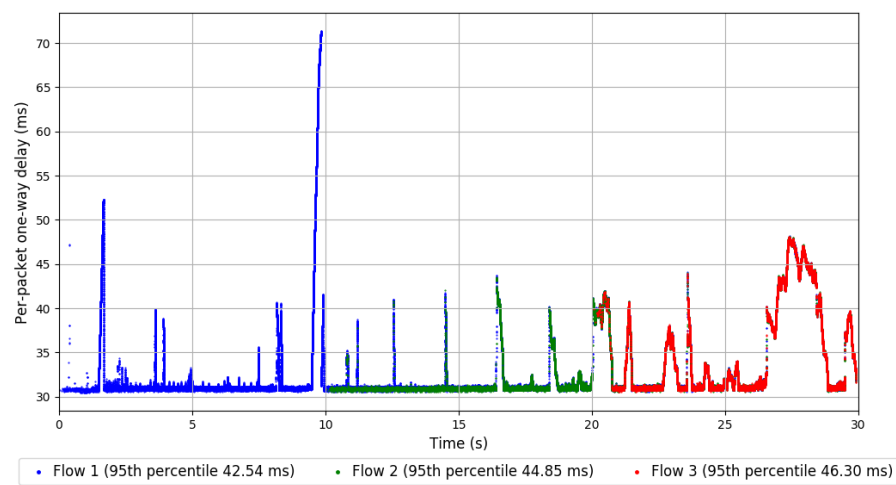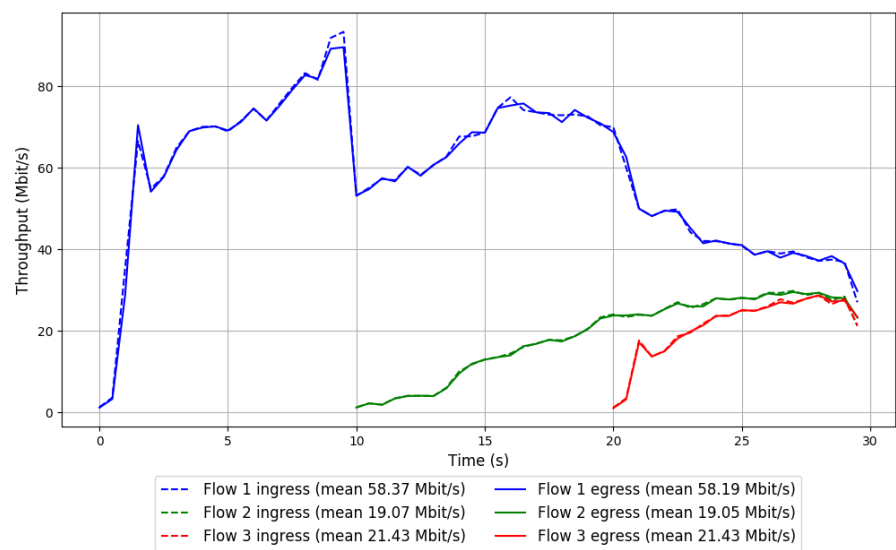
Run 10: Report of Indigo — Data Link

- - - Flow 1 ingress (mean 67.54 Mbit/s) ——— Flow 1 egress (mean 67.38 Mbit/s)
- - - Flow 2 ingress (mean 27.21 Mbit/s) ——— Flow 2 egress (mean 27.18 Mbit/s)
- - - Flow 3 ingress (mean 32.69 Mbit/s) ——— Flow 3 egress (mean 32.69 Mbit/s)

- Flow 1 (95th percentile 45.74 ms)   - Flow 2 (95th percentile 53.61 ms)   - Flow 3 (95th percentile 54.44 ms)

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```
Run 1: Statistics of Vivace-latency

Start at: 2018-01-17 03:41:04
End at: 2018-01-17 03:41:34
Local clock offset: -0.641 ms
Remote clock offset: -2.1 ms


# Below is generated by plot.py at 2018-01-17 08:28:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.29 Mbit/s
95th percentile per-packet one-way delay: 46.298 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 62.10 Mbit/s
95th percentile per-packet one-way delay: 43.726 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 24.30 Mbit/s
95th percentile per-packet one-way delay: 48.463 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 12.23 Mbit/s
95th percentile per-packet one-way delay: 50.251 ms
Loss rate: 0.04%
```
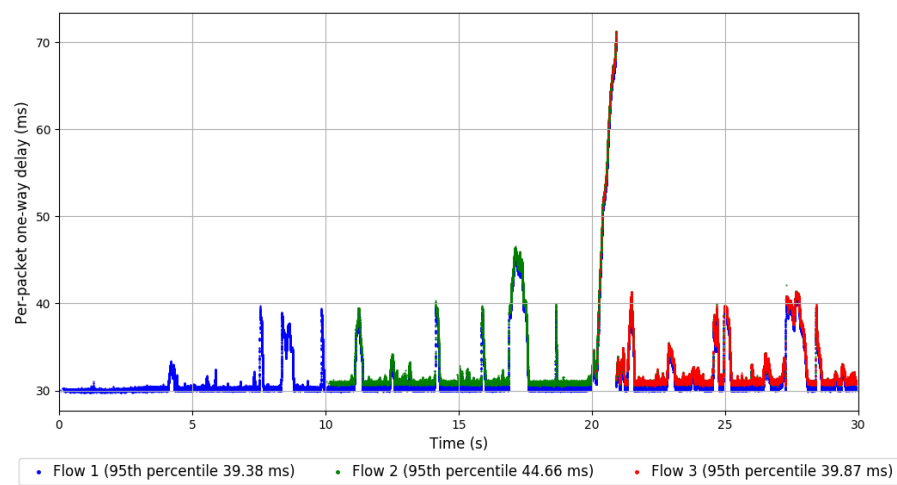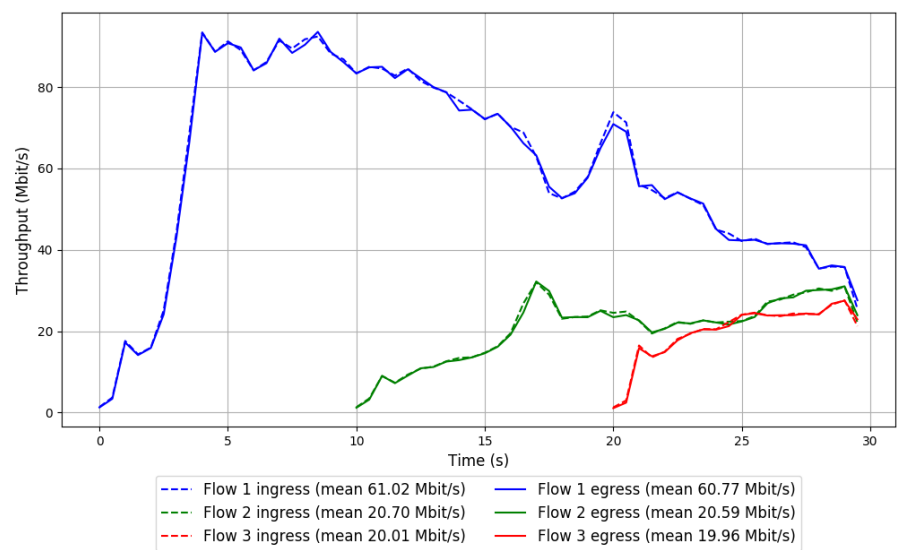
Run 1: Report of Vivace-latency — Data Link

```
Run 2: Statistics of Vivace-latency

Start at: 2018-01-17 04:06:59
End at: 2018-01-17 04:07:29
Local clock offset: -0.9 ms
Remote clock offset: -1.986 ms


# Below is generated by plot.py at 2018-01-17 08:28:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.91 Mbit/s
95th percentile per-packet one-way delay: 44.064 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 58.19 Mbit/s
95th percentile per-packet one-way delay: 42.543 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 19.05 Mbit/s
95th percentile per-packet one-way delay: 44.851 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 21.43 Mbit/s
95th percentile per-packet one-way delay: 46.300 ms
Loss rate: 0.10%
```
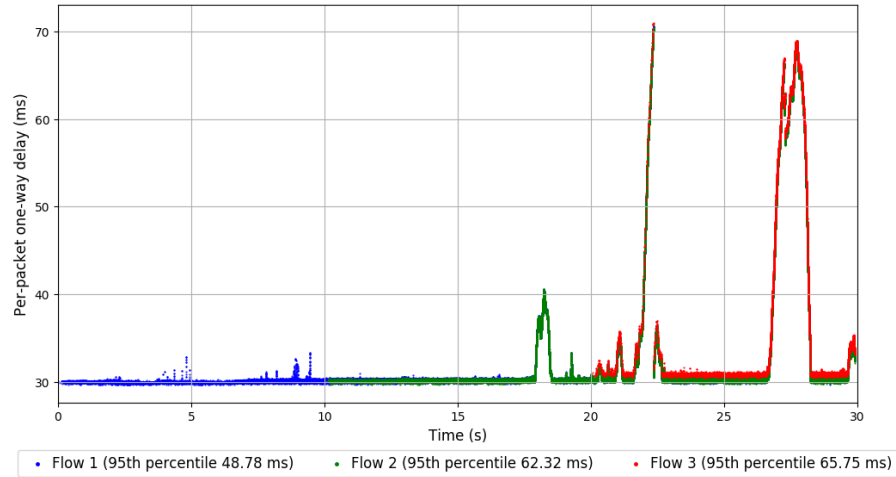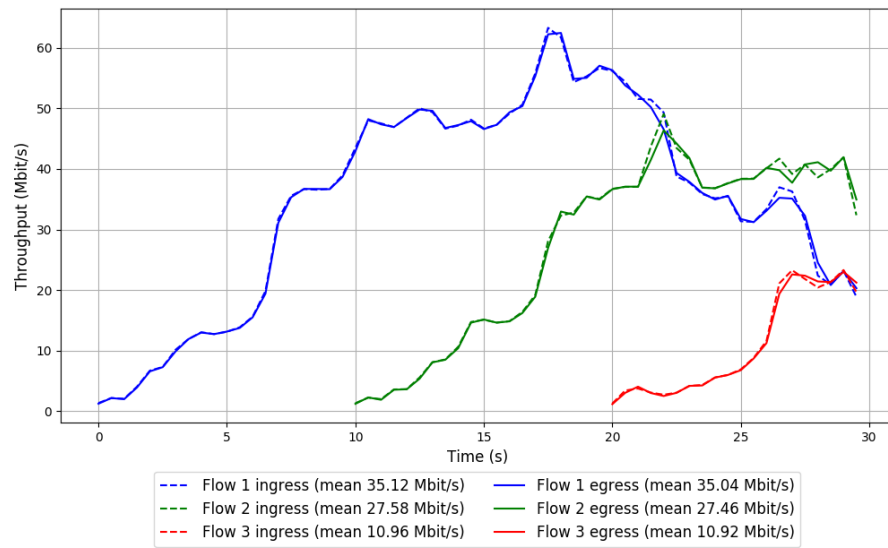
Run 2: Report of Vivace-latency — Data Link

```
Run 3: Statistics of Vivace-latency

Start at: 2018-01-17 04:32:59
End at: 2018-01-17 04:33:29
Local clock offset: -0.711 ms
Remote clock offset: -1.916 ms


# Below is generated by plot.py at 2018-01-17 08:29:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.03 Mbit/s
95th percentile per-packet one-way delay: 40.299 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 60.77 Mbit/s
95th percentile per-packet one-way delay: 39.385 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 20.59 Mbit/s
95th percentile per-packet one-way delay: 44.656 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 19.96 Mbit/s
95th percentile per-packet one-way delay: 39.872 ms
Loss rate: 0.32%
```

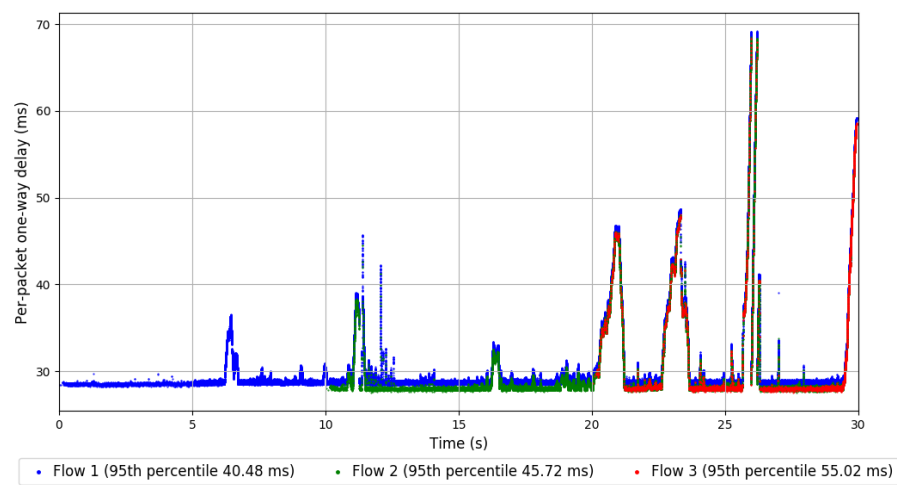Run 3: Report of Vivace-latency — Data Link

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```
Run 4: Statistics of Vivace-latency

Start at: 2018-01-17 04:59:23
End at: 2018-01-17 04:59:53
Local clock offset: -0.583 ms
Remote clock offset: -1.852 ms


# Below is generated by plot.py at 2018-01-17 08:29:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.89 Mbit/s
95th percentile per-packet one-way delay: 60.046 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 35.04 Mbit/s
95th percentile per-packet one-way delay: 48.783 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 27.46 Mbit/s
95th percentile per-packet one-way delay: 62.317 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 10.92 Mbit/s
95th percentile per-packet one-way delay: 65.752 ms
Loss rate: 0.38%
```

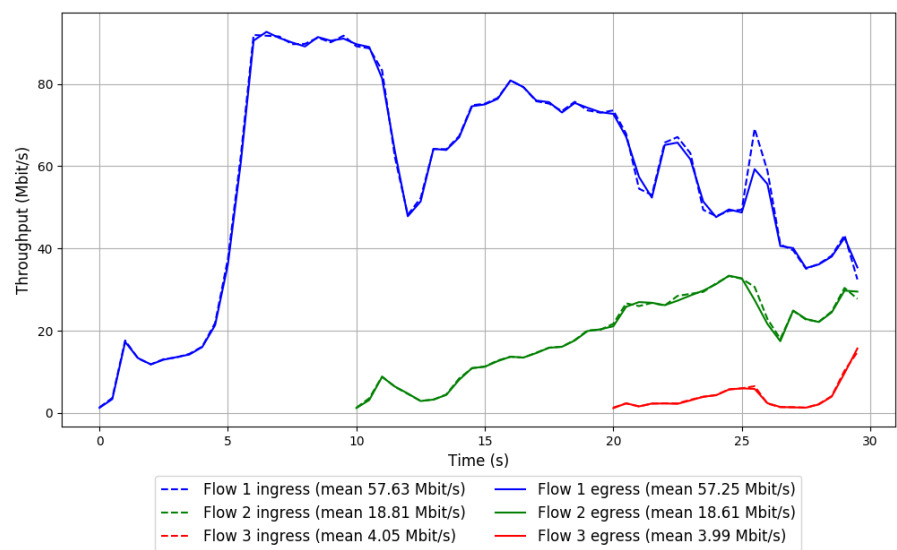# Run 4: Report of Vivace-latency — Data Link

```
Run 5: Statistics of Vivace-latency

Start at: 2018-01-17 05:26:41
End at: 2018-01-17 05:27:11
Local clock offset: -0.311 ms
Remote clock offset: -3.937 ms


# Below is generated by plot.py at 2018-01-17 08:29:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.94 Mbit/s
95th percentile per-packet one-way delay: 42.290 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 57.25 Mbit/s
95th percentile per-packet one-way delay: 40.481 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 18.61 Mbit/s
95th percentile per-packet one-way delay: 45.723 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 3.99 Mbit/s
95th percentile per-packet one-way delay: 55.020 ms
Loss rate: 1.19%
```

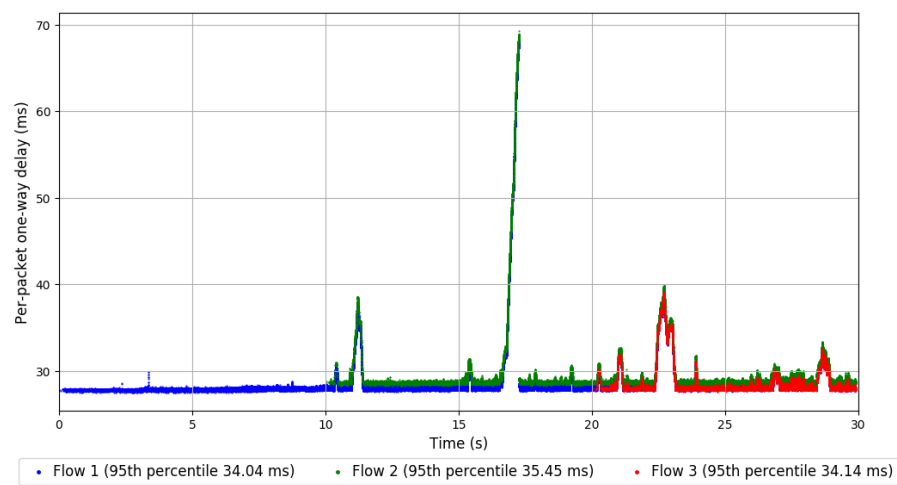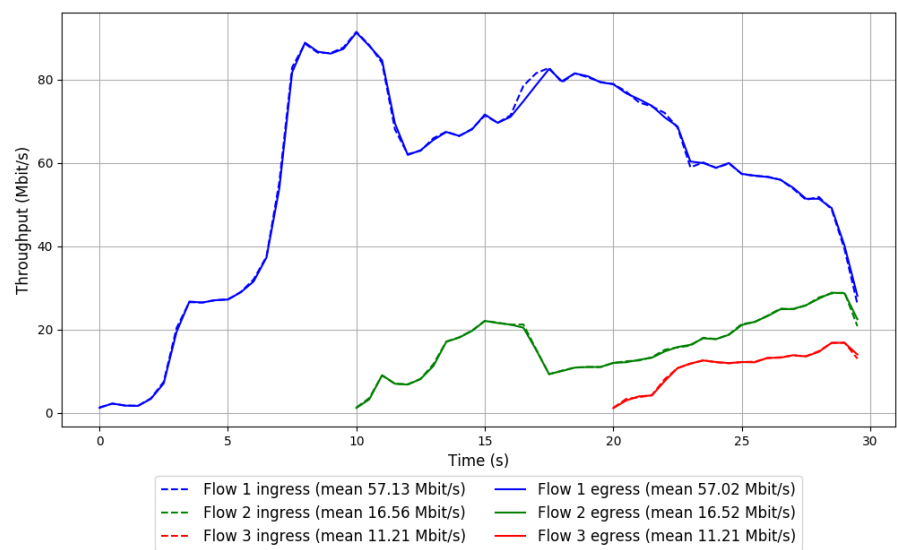Run 5: Report of Vivace-latency — Data Link

```
Run 6: Statistics of Vivace-latency

Start at: 2018-01-17 05:53:25
End at: 2018-01-17 05:53:55
Local clock offset: -0.168 ms
Remote clock offset: -4.188 ms


# Below is generated by plot.py at 2018-01-17 08:29:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.69 Mbit/s
95th percentile per-packet one-way delay: 34.307 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 57.02 Mbit/s
95th percentile per-packet one-way delay: 34.042 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 16.52 Mbit/s
95th percentile per-packet one-way delay: 35.446 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 11.21 Mbit/s
95th percentile per-packet one-way delay: 34.144 ms
Loss rate: 0.00%
```

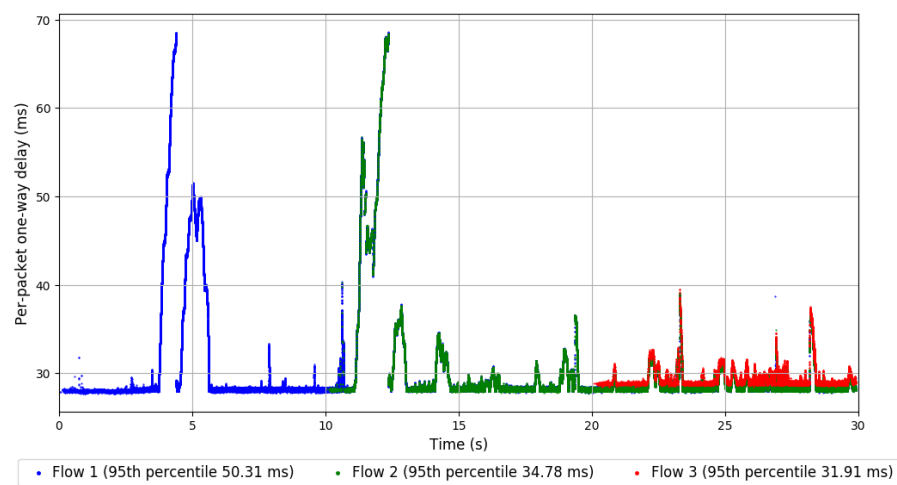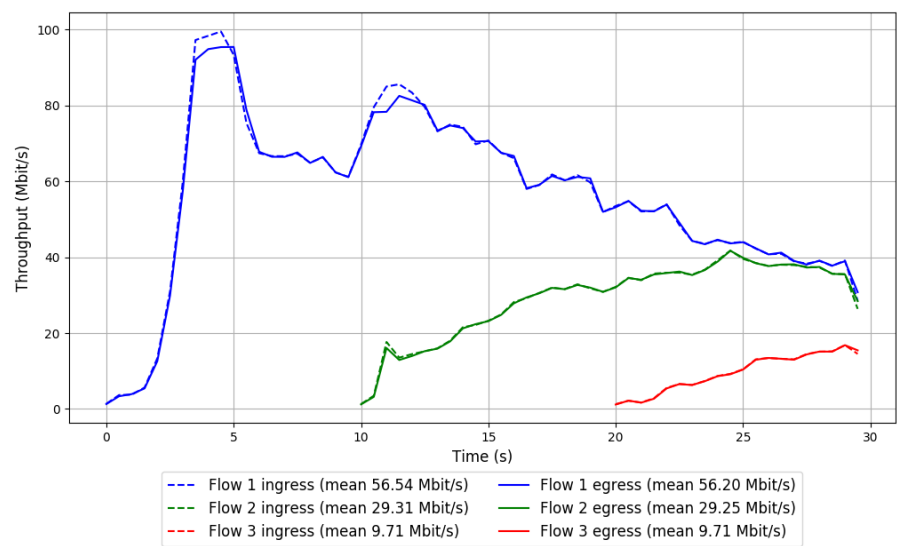Run 6: Report of Vivace-latency — Data Link

```
Run 7: Statistics of Vivace-latency

Start at: 2018-01-17 06:20:05
End at: 2018-01-17 06:20:35
Local clock offset: -0.117 ms
Remote clock offset: -4.086 ms


# Below is generated by plot.py at 2018-01-17 08:29:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.83 Mbit/s
95th percentile per-packet one-way delay: 48.939 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 56.20 Mbit/s
95th percentile per-packet one-way delay: 50.315 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 29.25 Mbit/s
95th percentile per-packet one-way delay: 34.777 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 9.71 Mbit/s
95th percentile per-packet one-way delay: 31.911 ms
Loss rate: 0.03%
```

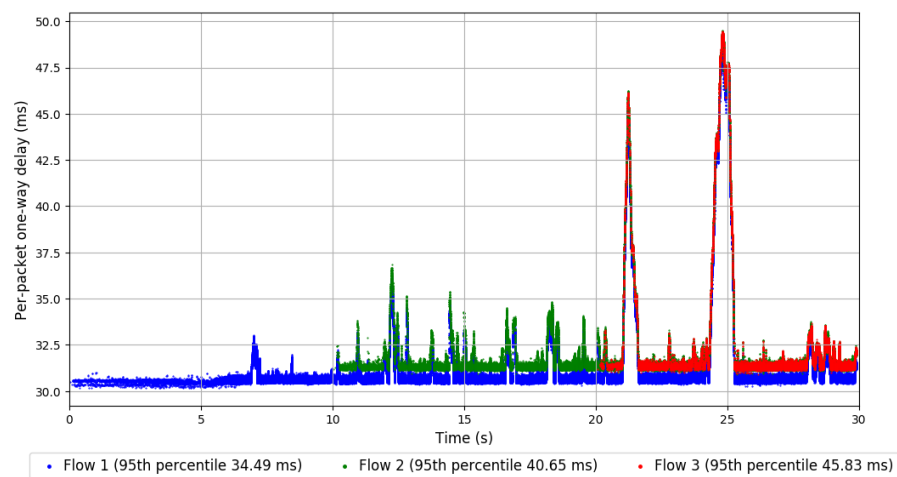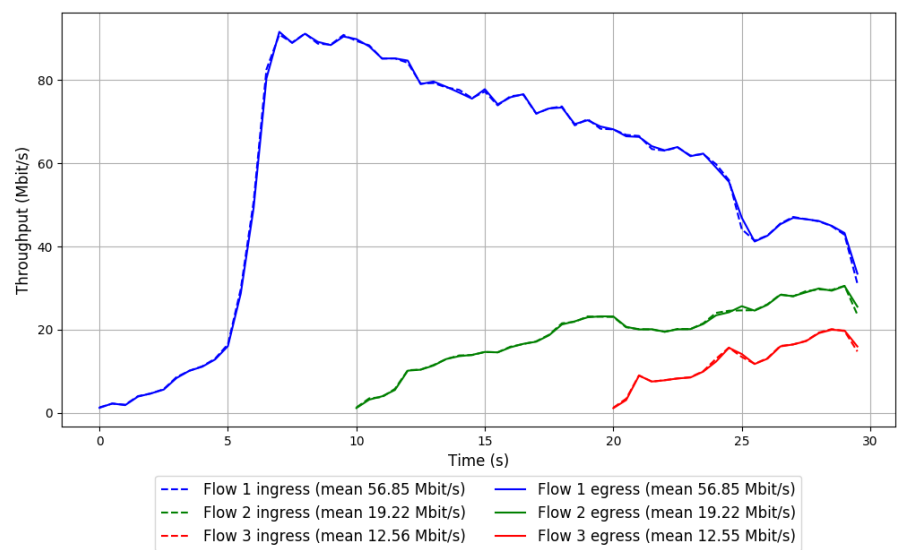Run 7: Report of Vivace-latency — Data Link

Run 8: Statistics of Vivace-latency

Start at: 2018-01-17 06:45:57
End at: 2018-01-17 06:46:27
Local clock offset: -0.077 ms
Remote clock offset: -1.808 ms

Below is generated by plot.py at 2018-01-17 08:29:54
Datalink statistics
-- Total of 3 flows:
Average throughput: 73.77 Mbit/s
95th percentile per-packet one-way delay: 36.597 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 56.85 Mbit/s
95th percentile per-packet one-way delay: 34.494 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 19.22 Mbit/s
95th percentile per-packet one-way delay: 40.649 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 12.55 Mbit/s
95th percentile per-packet one-way delay: 45.834 ms
Loss rate: 0.01%

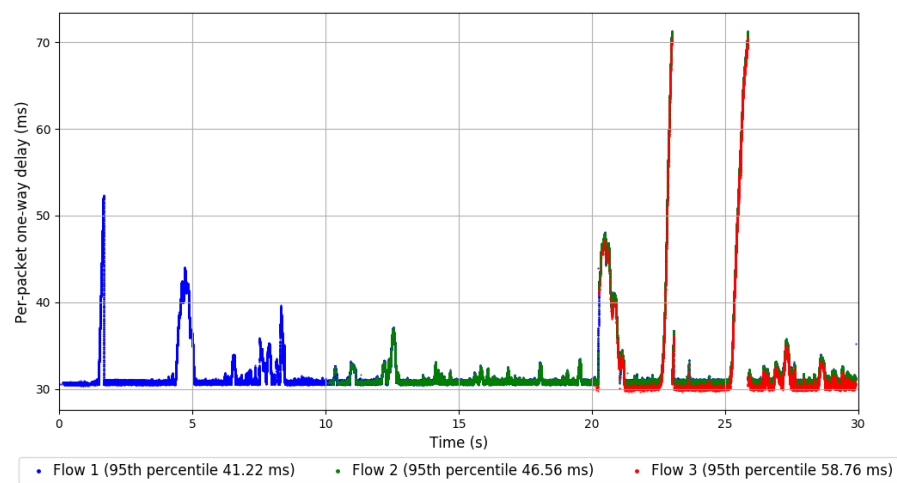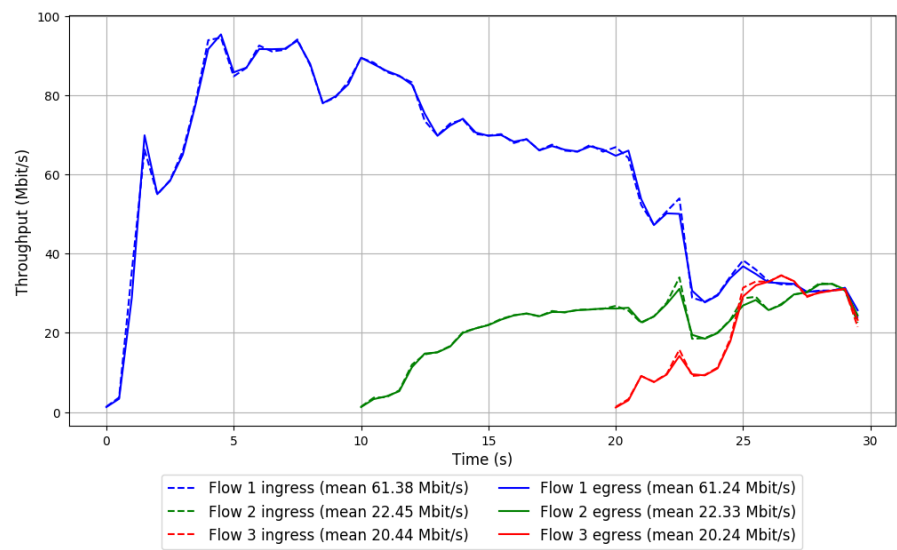# Run 8: Report of Vivace-latency — Data Link

```
Run 9: Statistics of Vivace-latency

Start at: 2018-01-17 07:10:58
End at: 2018-01-17 07:11:29
Local clock offset: 0.092 ms
Remote clock offset: -2.157 ms


# Below is generated by plot.py at 2018-01-17 08:30:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.75 Mbit/s
95th percentile per-packet one-way delay: 42.313 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 61.24 Mbit/s
95th percentile per-packet one-way delay: 41.216 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 22.33 Mbit/s
95th percentile per-packet one-way delay: 46.557 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 20.24 Mbit/s
95th percentile per-packet one-way delay: 58.760 ms
Loss rate: 0.96%
```

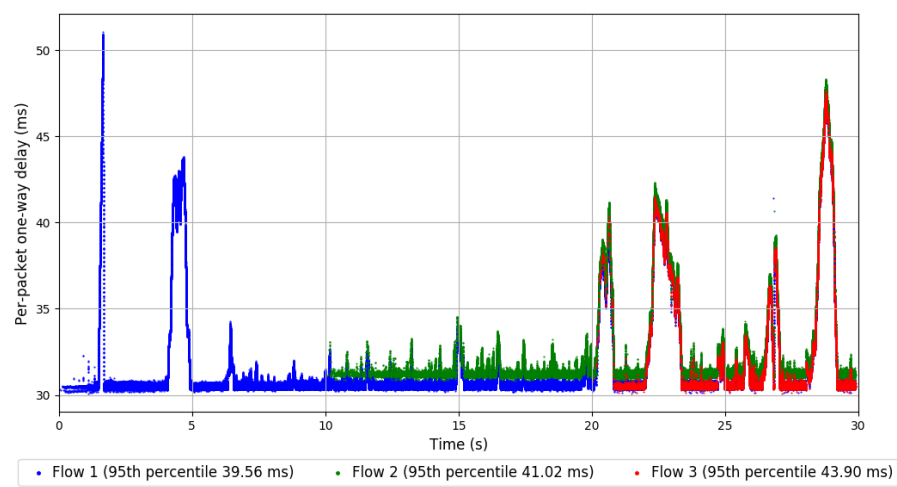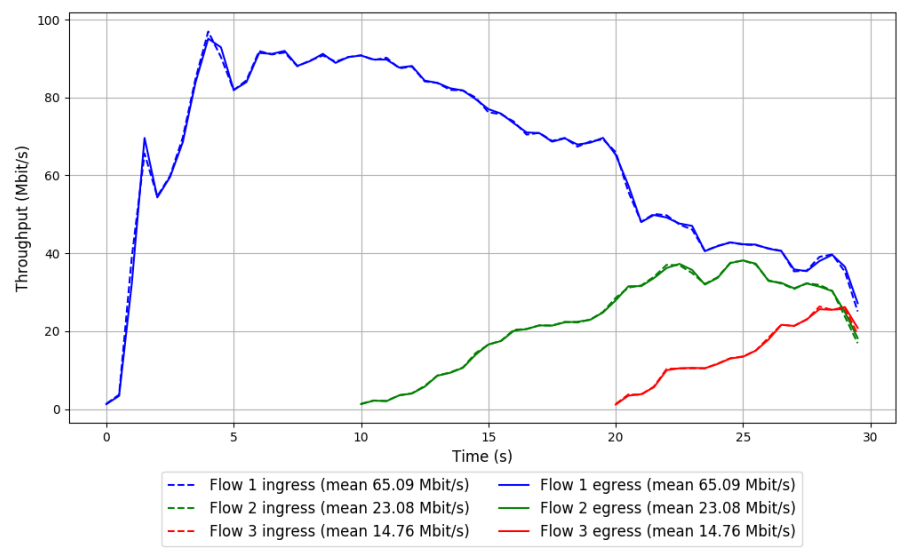Run 9: Report of Vivace-latency — Data Link

```
Run 10: Statistics of Vivace-latency

Start at: 2018-01-17 07:36:05
End at: 2018-01-17 07:36:35
Local clock offset: -0.044 ms
Remote clock offset: -1.654 ms


# Below is generated by plot.py at 2018-01-17 08:31:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.30 Mbit/s
95th percentile per-packet one-way delay: 40.288 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 65.09 Mbit/s
95th percentile per-packet one-way delay: 39.560 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 23.08 Mbit/s
95th percentile per-packet one-way delay: 41.019 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 14.76 Mbit/s
95th percentile per-packet one-way delay: 43.901 ms
Loss rate: 0.01%
```

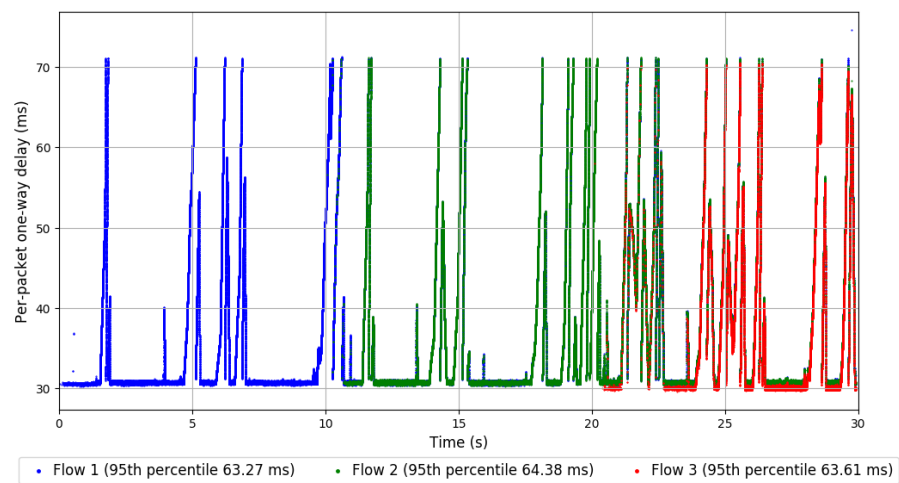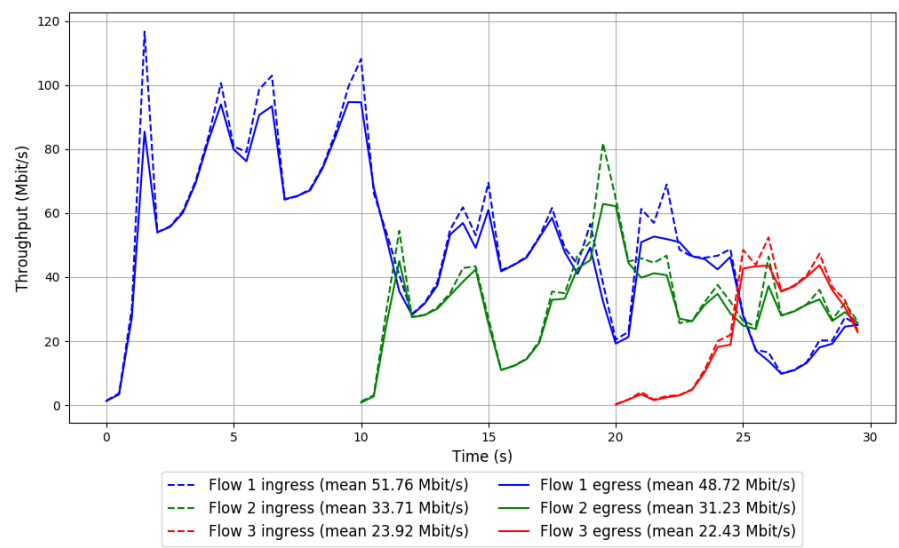# Run 10: Report of Vivace-latency — Data Link

```
Run 1: Statistics of Vivace-loss

Start at: 2018-01-17 03:37:58
End at: 2018-01-17 03:38:28
Local clock offset: -0.645 ms
Remote clock offset: -2.134 ms


# Below is generated by plot.py at 2018-01-17 08:31:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.82 Mbit/s
95th percentile per-packet one-way delay: 63.660 ms
Loss rate: 6.37%
-- Flow 1:
Average throughput: 48.72 Mbit/s
95th percentile per-packet one-way delay: 63.268 ms
Loss rate: 5.87%
-- Flow 2:
Average throughput: 31.23 Mbit/s
95th percentile per-packet one-way delay: 64.384 ms
Loss rate: 7.46%
-- Flow 3:
Average throughput: 22.43 Mbit/s
95th percentile per-packet one-way delay: 63.606 ms
Loss rate: 6.49%
```

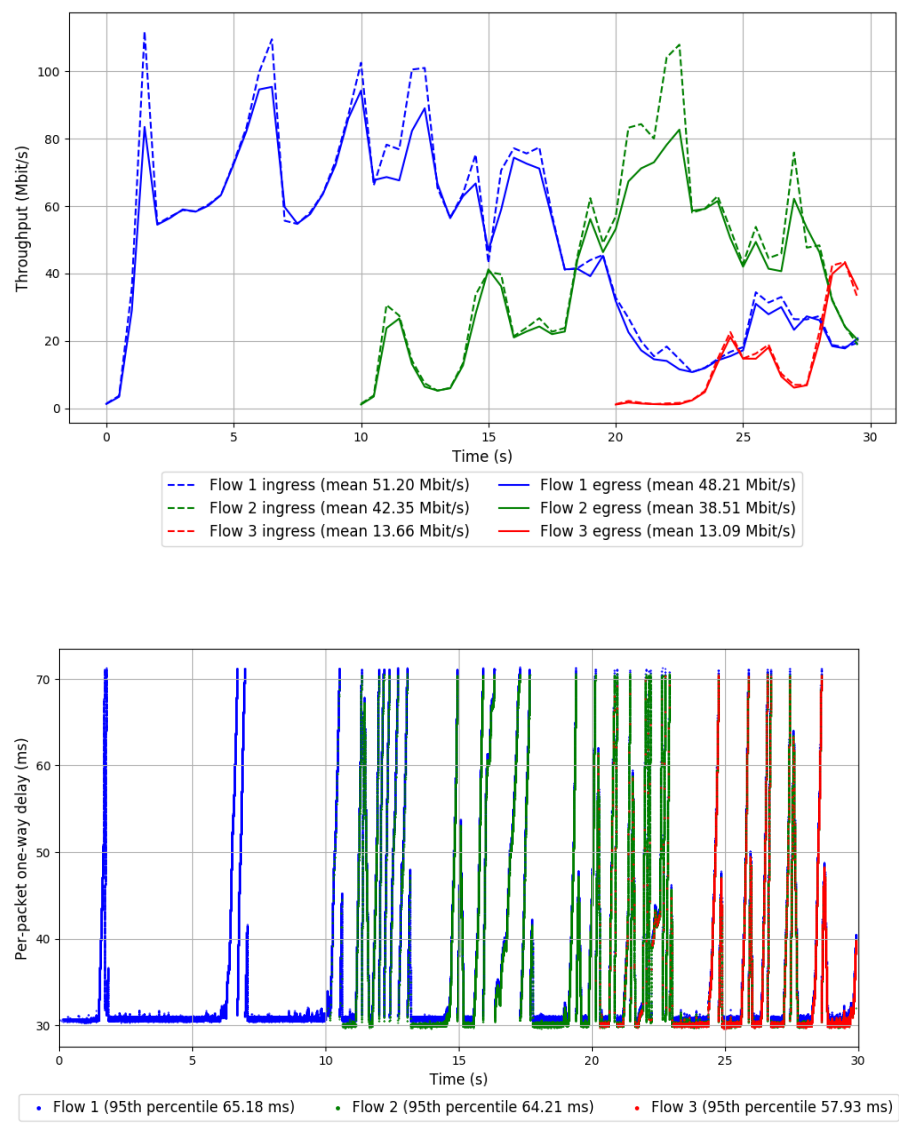Run 1: Report of Vivace-loss — Data Link

```
Run 2: Statistics of Vivace-loss

Start at: 2018-01-17 04:04:00
End at: 2018-01-17 04:04:30
Local clock offset: -0.81 ms
Remote clock offset: -2.043 ms


# Below is generated by plot.py at 2018-01-17 08:31:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.13 Mbit/s
95th percentile per-packet one-way delay: 64.591 ms
Loss rate: 6.82%
-- Flow 1:
Average throughput: 48.21 Mbit/s
95th percentile per-packet one-way delay: 65.176 ms
Loss rate: 5.81%
-- Flow 2:
Average throughput: 38.51 Mbit/s
95th percentile per-packet one-way delay: 64.206 ms
Loss rate: 9.05%
-- Flow 3:
Average throughput: 13.09 Mbit/s
95th percentile per-packet one-way delay: 57.932 ms
Loss rate: 4.34%
```

Run 2: Report of Vivace-loss — Data Link

- - - Flow 1 ingress (mean 51.20 Mbit/s) —— Flow 1 egress (mean 48.21 Mbit/s)
- - - Flow 2 ingress (mean 42.35 Mbit/s) —— Flow 2 egress (mean 38.51 Mbit/s)
- - - Flow 3 ingress (mean 13.66 Mbit/s) —— Flow 3 egress (mean 13.09 Mbit/s)

- Flow 1 (95th percentile 65.18 ms) - Flow 2 (95th percentile 64.21 ms) - Flow 3 (95th percentile 57.93 ms)
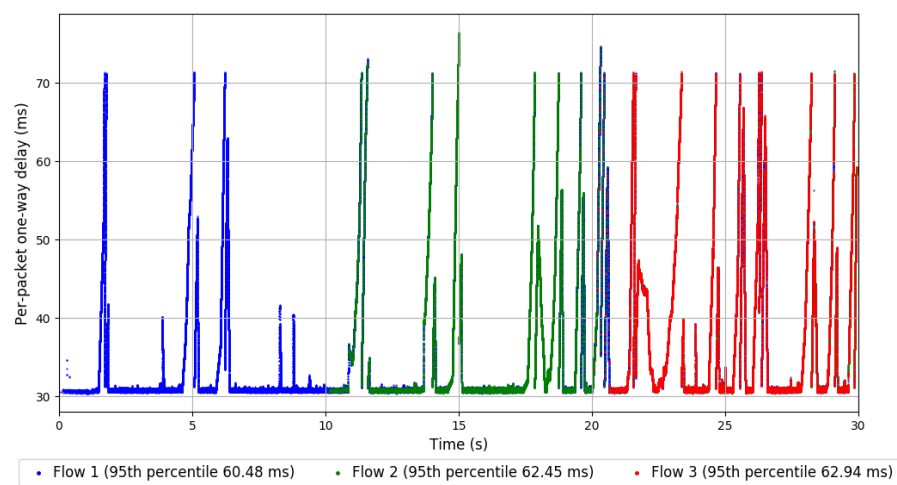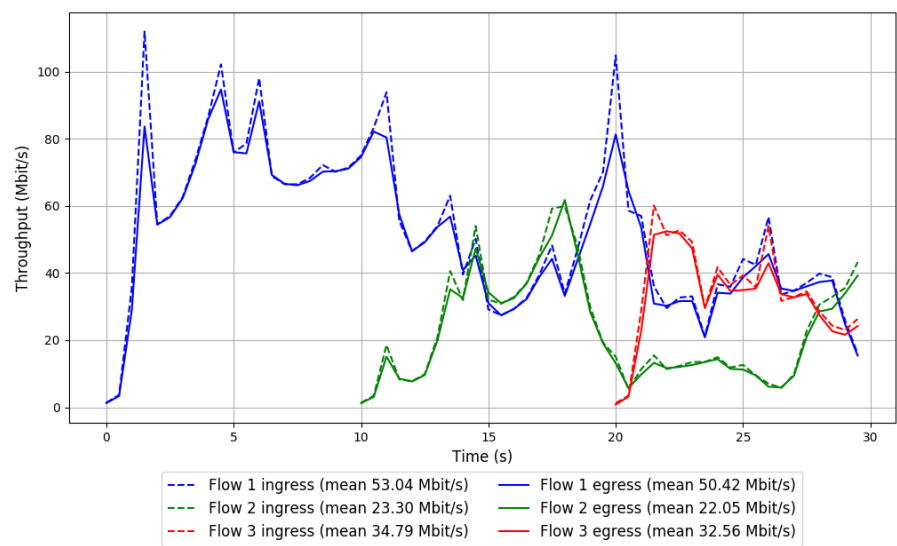
```
Run 3: Statistics of Vivace-loss

Start at: 2018-01-17 04:29:54
End at: 2018-01-17 04:30:24
Local clock offset: -0.722 ms
Remote clock offset: -1.983 ms


# Below is generated by plot.py at 2018-01-17 08:31:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.82 Mbit/s
95th percentile per-packet one-way delay: 61.361 ms
Loss rate: 5.13%
-- Flow 1:
Average throughput: 50.42 Mbit/s
95th percentile per-packet one-way delay: 60.484 ms
Loss rate: 4.87%
-- Flow 2:
Average throughput: 22.05 Mbit/s
95th percentile per-packet one-way delay: 62.455 ms
Loss rate: 5.24%
-- Flow 3:
Average throughput: 32.56 Mbit/s
95th percentile per-packet one-way delay: 62.944 ms
Loss rate: 6.18%
```

Run 3: Report of Vivace-loss — Data Link

Flow 1 ingress (mean 53.04 Mbit/s) --- Flow 1 egress (mean 50.42 Mbit/s)
Flow 2 ingress (mean 23.30 Mbit/s) --- Flow 2 egress (mean 22.05 Mbit/s)
Flow 3 ingress (mean 34.79 Mbit/s) --- Flow 3 egress (mean 32.56 Mbit/s)

Flow 1 (95th percentile 60.48 ms) • Flow 2 (95th percentile 62.45 ms) • Flow 3 (95th percentile 62.94 ms)
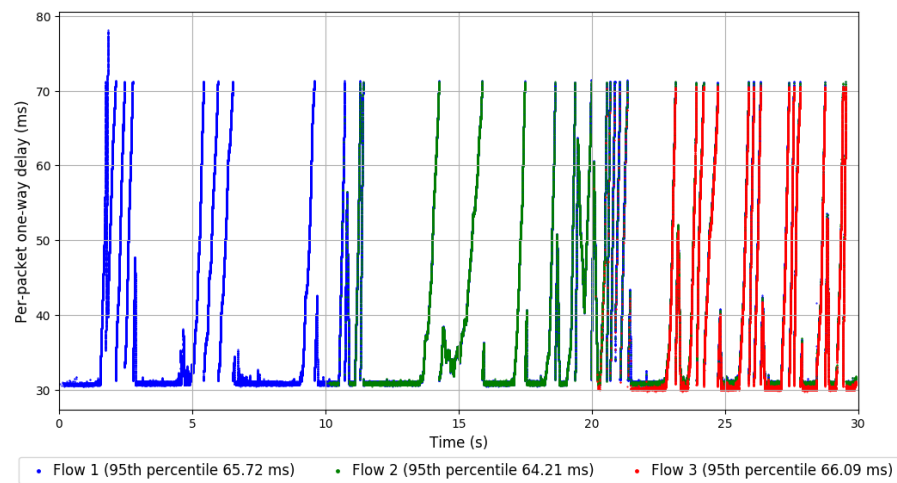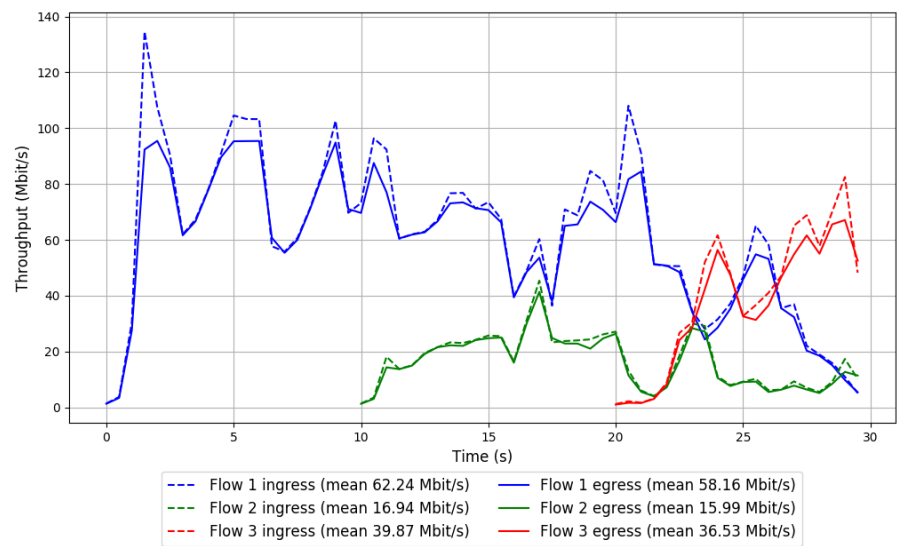
```
Run 4: Statistics of Vivace-loss

Start at: 2018-01-17 04:56:11
End at: 2018-01-17 04:56:41
Local clock offset: -0.654 ms
Remote clock offset: -1.921 ms


# Below is generated by plot.py at 2018-01-17 08:31:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.80 Mbit/s
95th percentile per-packet one-way delay: 65.618 ms
Loss rate: 6.74%
-- Flow 1:
Average throughput: 58.16 Mbit/s
95th percentile per-packet one-way delay: 65.718 ms
Loss rate: 6.54%
-- Flow 2:
Average throughput: 15.99 Mbit/s
95th percentile per-packet one-way delay: 64.213 ms
Loss rate: 5.61%
-- Flow 3:
Average throughput: 36.53 Mbit/s
95th percentile per-packet one-way delay: 66.094 ms
Loss rate: 8.63%
```

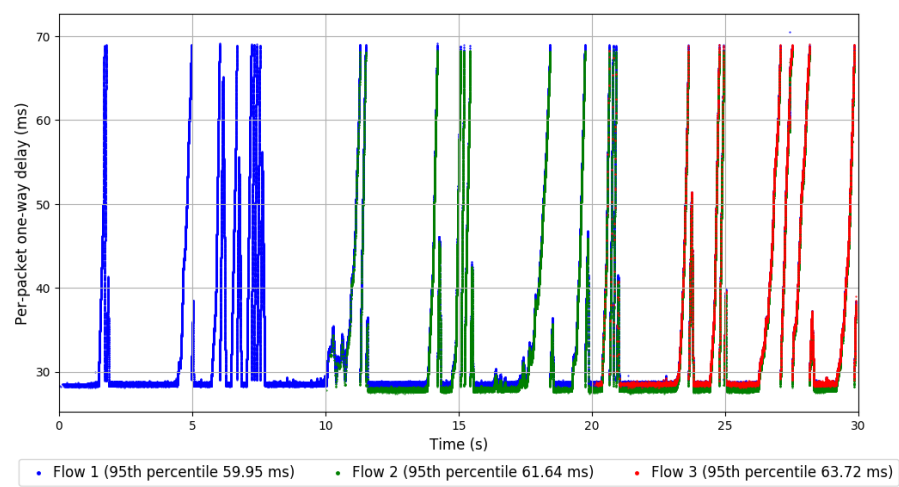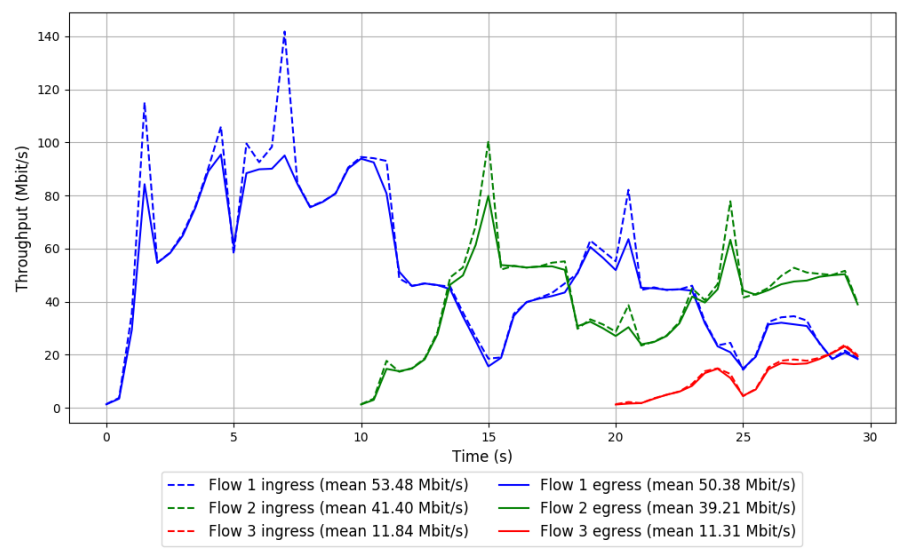Run 4: Report of Vivace-loss — Data Link

311

```
Run 5: Statistics of Vivace-loss

Start at: 2018-01-17 05:23:21
End at: 2018-01-17 05:23:51
Local clock offset: -0.299 ms
Remote clock offset: -4.047 ms


# Below is generated by plot.py at 2018-01-17 08:32:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.19 Mbit/s
95th percentile per-packet one-way delay: 60.817 ms
Loss rate: 5.53%
-- Flow 1:
Average throughput: 50.38 Mbit/s
95th percentile per-packet one-way delay: 59.951 ms
Loss rate: 5.76%
-- Flow 2:
Average throughput: 39.21 Mbit/s
95th percentile per-packet one-way delay: 61.641 ms
Loss rate: 5.24%
-- Flow 3:
Average throughput: 11.31 Mbit/s
95th percentile per-packet one-way delay: 63.717 ms
Loss rate: 4.37%
```

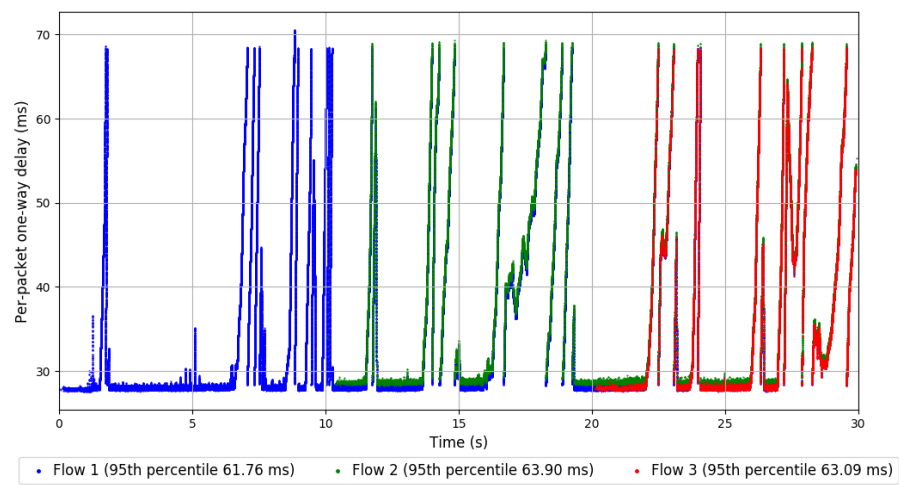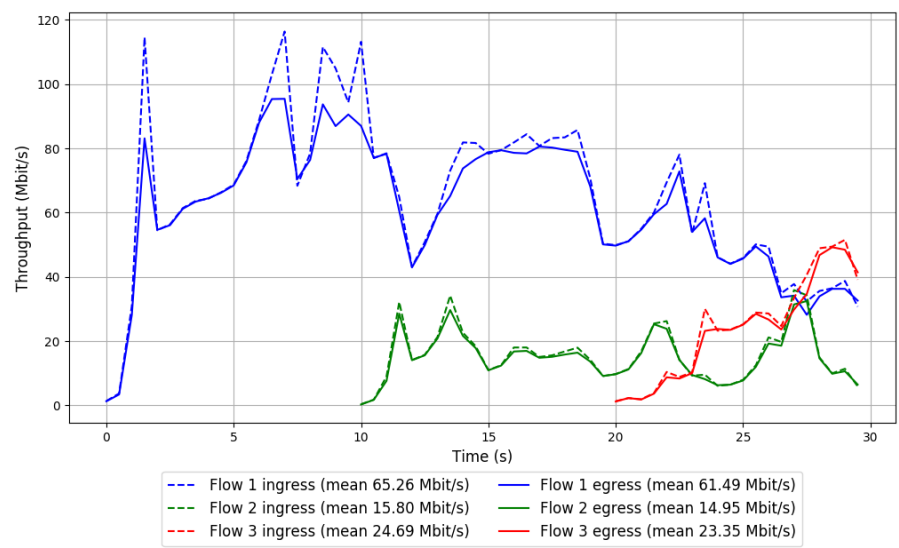Run 5: Report of Vivace-loss — Data Link

313

```
Run 6: Statistics of Vivace-loss

Start at: 2018-01-17 05:50:21
End at: 2018-01-17 05:50:51
Local clock offset: -0.116 ms
Remote clock offset: -4.079 ms


# Below is generated by plot.py at 2018-01-17 08:32:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.13 Mbit/s
95th percentile per-packet one-way delay: 62.284 ms
Loss rate: 5.59%
-- Flow 1:
Average throughput: 61.49 Mbit/s
95th percentile per-packet one-way delay: 61.758 ms
Loss rate: 5.69%
-- Flow 2:
Average throughput: 14.95 Mbit/s
95th percentile per-packet one-way delay: 63.899 ms
Loss rate: 5.28%
-- Flow 3:
Average throughput: 23.35 Mbit/s
95th percentile per-packet one-way delay: 63.085 ms
Loss rate: 5.20%
```

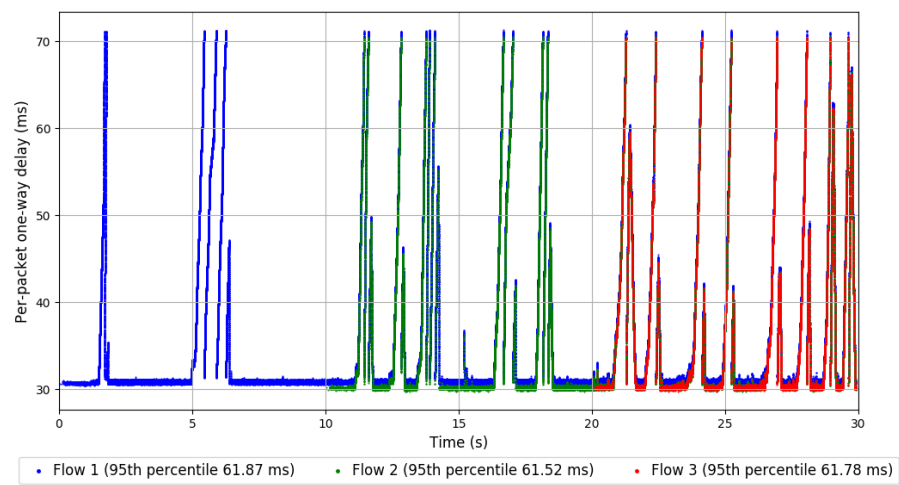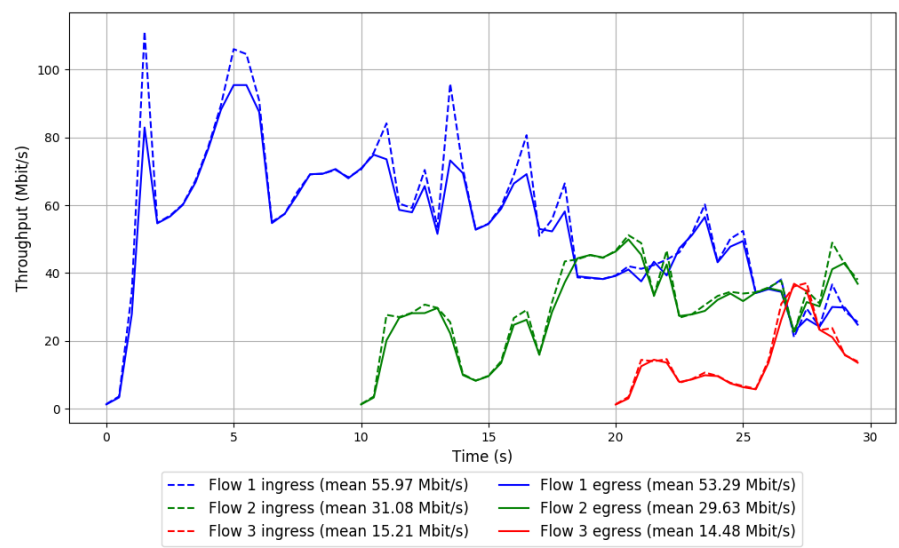Run 6: Report of Vivace-loss — Data Link

```
Run 7: Statistics of Vivace-loss

Start at: 2018-01-17 06:16:55
End at: 2018-01-17 06:17:25
Local clock offset: -0.048 ms
Remote clock offset: -1.998 ms


# Below is generated by plot.py at 2018-01-17 08:33:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.77 Mbit/s
95th percentile per-packet one-way delay: 61.767 ms
Loss rate: 4.76%
-- Flow 1:
Average throughput: 53.29 Mbit/s
95th percentile per-packet one-way delay: 61.868 ms
Loss rate: 4.79%
-- Flow 2:
Average throughput: 29.63 Mbit/s
95th percentile per-packet one-way delay: 61.518 ms
Loss rate: 4.69%
-- Flow 3:
Average throughput: 14.48 Mbit/s
95th percentile per-packet one-way delay: 61.777 ms
Loss rate: 4.77%
```

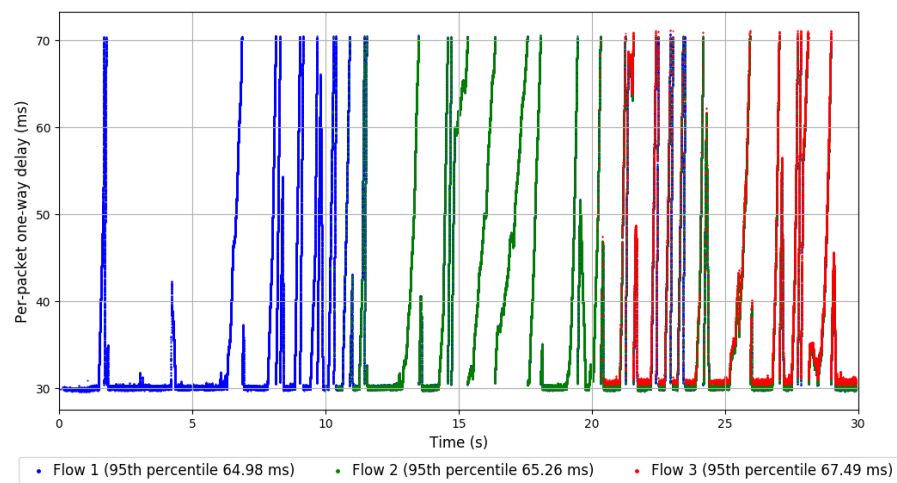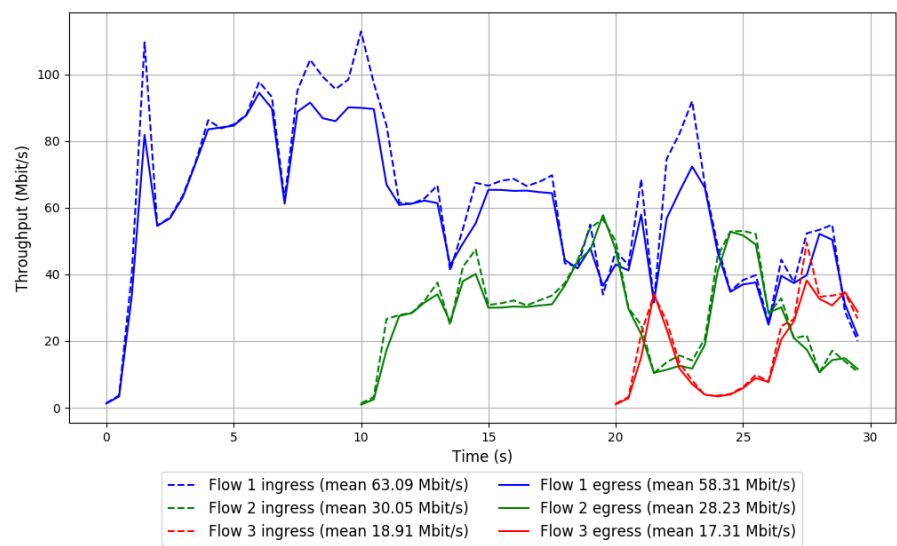Run 7: Report of Vivace-loss — Data Link

317

```
Run 8: Statistics of Vivace-loss

Start at: 2018-01-17 06:42:53
End at: 2018-01-17 06:43:23
Local clock offset: 0.004 ms
Remote clock offset: -2.321 ms


# Below is generated by plot.py at 2018-01-17 08:33:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.78 Mbit/s
95th percentile per-packet one-way delay: 65.202 ms
Loss rate: 7.29%
-- Flow 1:
Average throughput: 58.31 Mbit/s
95th percentile per-packet one-way delay: 64.980 ms
Loss rate: 7.57%
-- Flow 2:
Average throughput: 28.23 Mbit/s
95th percentile per-packet one-way delay: 65.262 ms
Loss rate: 6.05%
-- Flow 3:
Average throughput: 17.31 Mbit/s
95th percentile per-packet one-way delay: 67.490 ms
Loss rate: 8.48%
```

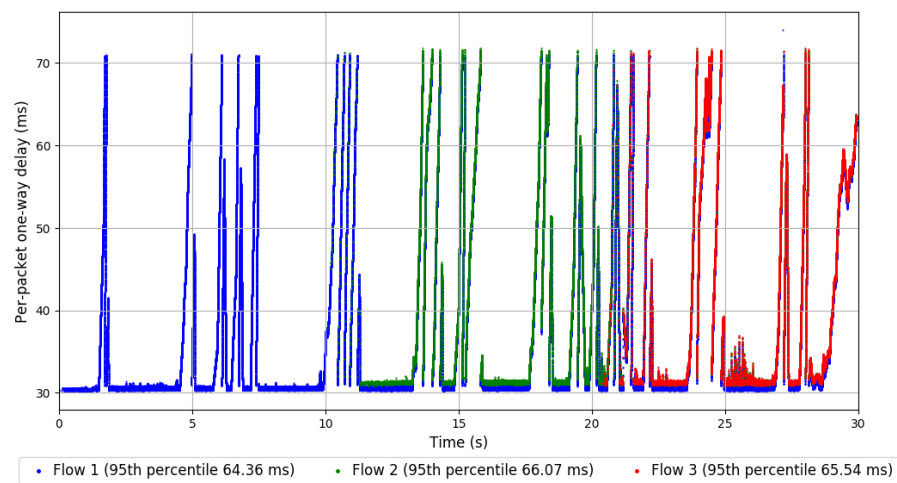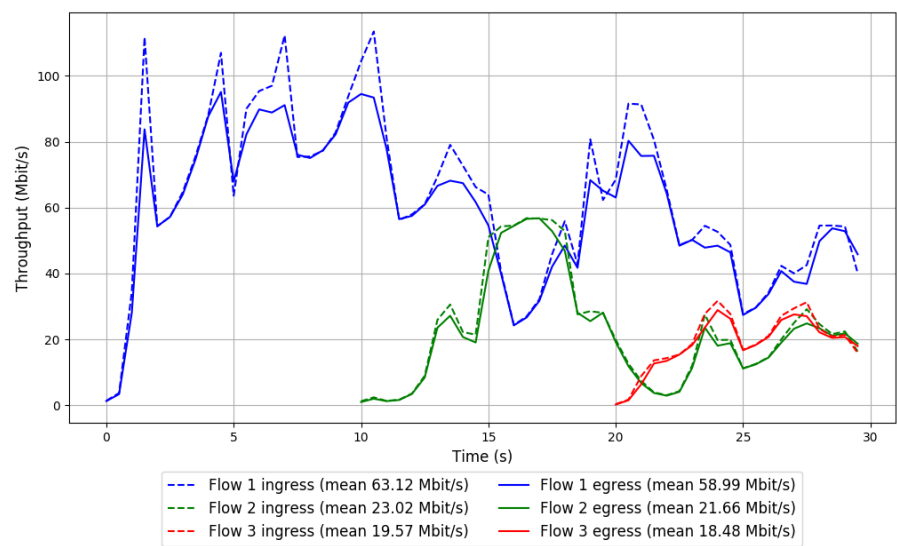Run 8: Report of Vivace-loss — Data Link

319

```
Run 9: Statistics of Vivace-loss

Start at: 2018-01-17 07:08:03
End at: 2018-01-17 07:08:33
Local clock offset: 0.02 ms
Remote clock offset: -1.751 ms


# Below is generated by plot.py at 2018-01-17 08:33:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.47 Mbit/s
95th percentile per-packet one-way delay: 64.822 ms
Loss rate: 6.25%
-- Flow 1:
Average throughput: 58.99 Mbit/s
95th percentile per-packet one-way delay: 64.355 ms
Loss rate: 6.44%
-- Flow 2:
Average throughput: 21.66 Mbit/s
95th percentile per-packet one-way delay: 66.066 ms
Loss rate: 5.78%
-- Flow 3:
Average throughput: 18.48 Mbit/s
95th percentile per-packet one-way delay: 65.544 ms
Loss rate: 5.53%
```

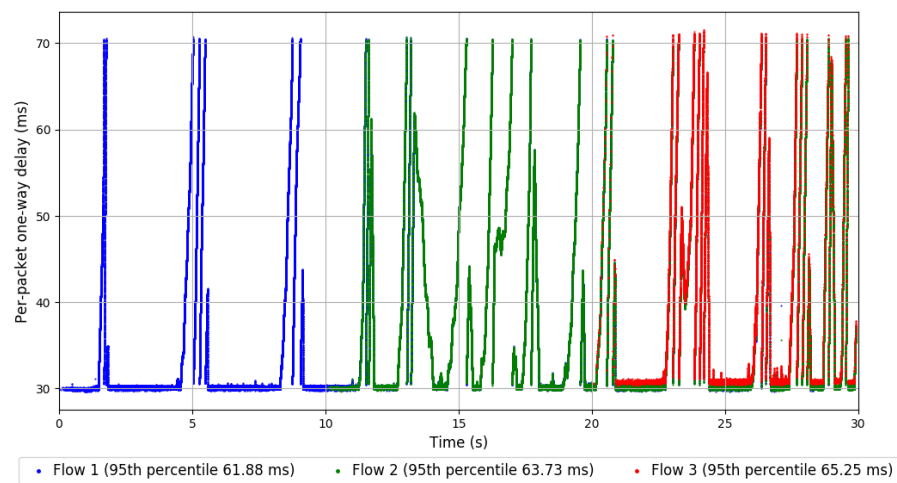Run 9: Report of Vivace-loss — Data Link

321

```
Run 10: Statistics of Vivace-loss

Start at: 2018-01-17 07:33:05
End at: 2018-01-17 07:33:35
Local clock offset: 0.037 ms
Remote clock offset: -2.024 ms


# Below is generated by plot.py at 2018-01-17 08:33:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.90 Mbit/s
95th percentile per-packet one-way delay: 63.202 ms
Loss rate: 6.14%
-- Flow 1:
Average throughput: 39.92 Mbit/s
95th percentile per-packet one-way delay: 61.881 ms
Loss rate: 5.46%
-- Flow 2:
Average throughput: 45.07 Mbit/s
95th percentile per-packet one-way delay: 63.735 ms
Loss rate: 6.52%
-- Flow 3:
Average throughput: 27.35 Mbit/s
95th percentile per-packet one-way delay: 65.249 ms
Loss rate: 7.84%
```
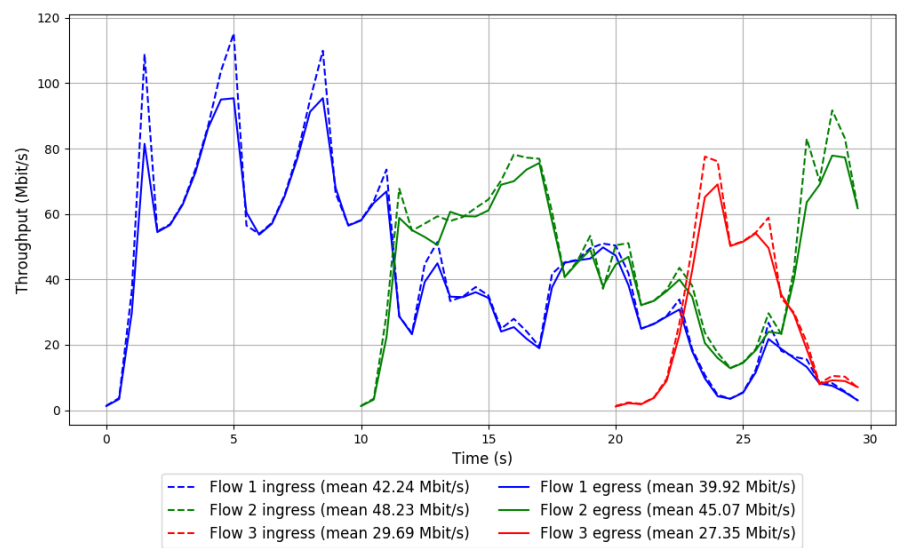
Run 10: Report of Vivace-loss — Data Link

Flow 1 ingress (mean 42.24 Mbit/s) --- Flow 1 egress (mean 39.92 Mbit/s)
Flow 2 ingress (mean 48.23 Mbit/s) --- Flow 2 egress (mean 45.07 Mbit/s)
Flow 3 ingress (mean 29.69 Mbit/s) --- Flow 3 egress (mean 27.35 Mbit/s)

Flow 1 (95th percentile 61.88 ms)   Flow 2 (95th percentile 63.73 ms)   Flow 3 (95th percentile 65.25 ms)
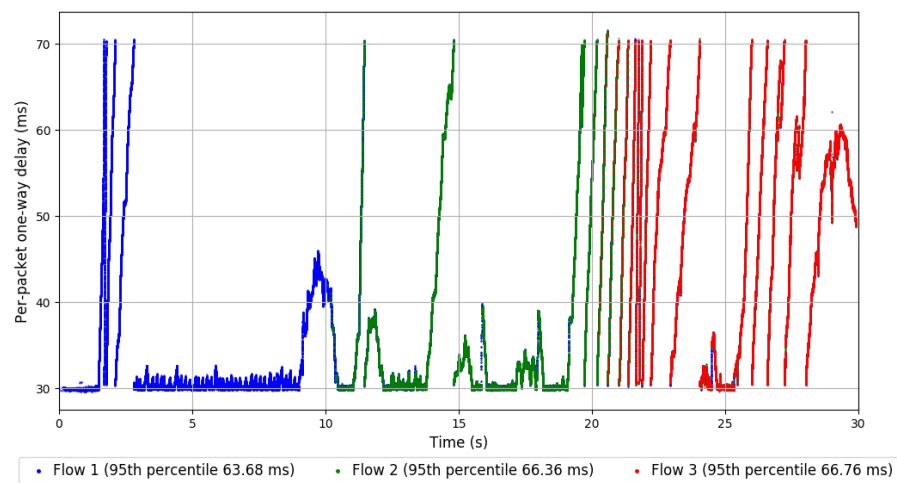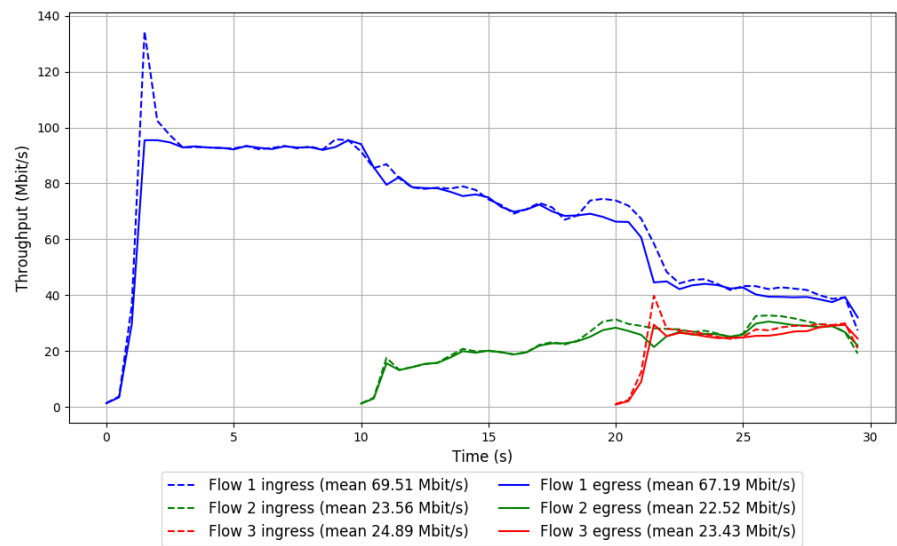
323

```
Run 1: Statistics of Vivace-LTE

Start at: 2018-01-17 03:46:52
End at: 2018-01-17 03:47:22
Local clock offset: -0.775 ms
Remote clock offset: -2.146 ms


# Below is generated by plot.py at 2018-01-17 08:34:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.86 Mbit/s
95th percentile per-packet one-way delay: 64.529 ms
Loss rate: 3.69%
-- Flow 1:
Average throughput: 67.19 Mbit/s
95th percentile per-packet one-way delay: 63.676 ms
Loss rate: 3.27%
-- Flow 2:
Average throughput: 22.52 Mbit/s
95th percentile per-packet one-way delay: 66.359 ms
Loss rate: 4.37%
-- Flow 3:
Average throughput: 23.43 Mbit/s
95th percentile per-packet one-way delay: 66.757 ms
Loss rate: 5.96%
```

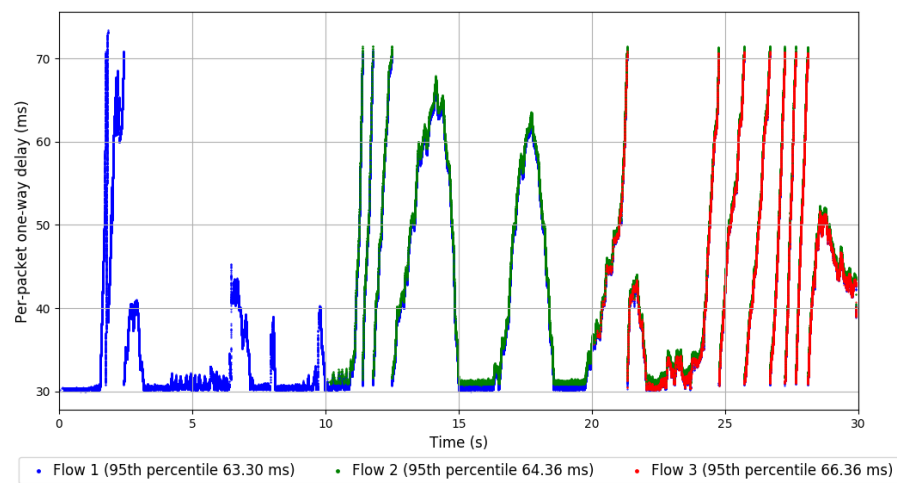Run 1: Report of Vivace-LTE — Data Link

```
Run 2: Statistics of Vivace-LTE

Start at: 2018-01-17 04:12:48
End at: 2018-01-17 04:13:18
Local clock offset: -0.786 ms
Remote clock offset: -1.696 ms


# Below is generated by plot.py at 2018-01-17 08:34:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.12 Mbit/s
95th percentile per-packet one-way delay: 63.592 ms
Loss rate: 2.42%
-- Flow 1:
Average throughput: 67.60 Mbit/s
95th percentile per-packet one-way delay: 63.302 ms
Loss rate: 2.34%
-- Flow 2:
Average throughput: 24.58 Mbit/s
95th percentile per-packet one-way delay: 64.362 ms
Loss rate: 2.25%
-- Flow 3:
Average throughput: 15.74 Mbit/s
95th percentile per-packet one-way delay: 66.361 ms
Loss rate: 3.97%
```
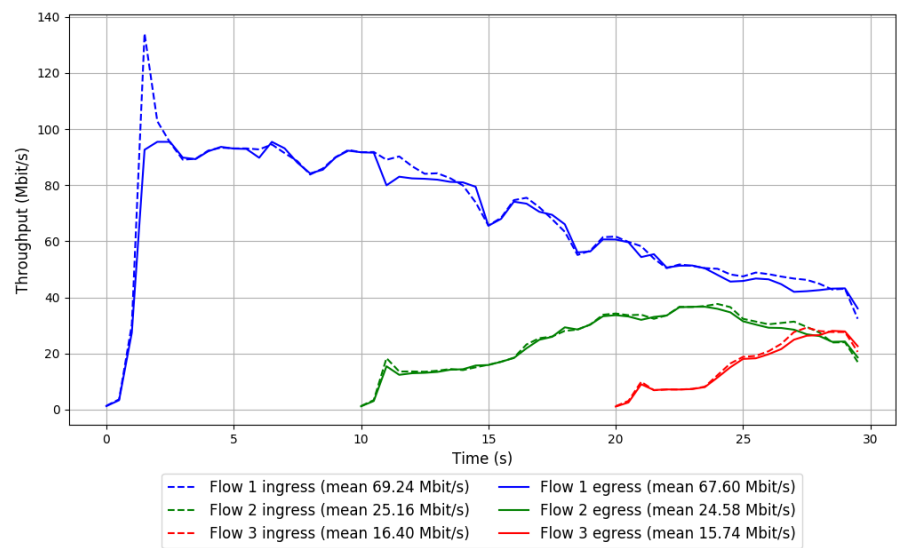
Run 2: Report of Vivace-LTE — Data Link

```
Run 3: Statistics of Vivace-LTE

Start at: 2018-01-17 04:38:48
End at: 2018-01-17 04:39:18
Local clock offset: -0.772 ms
Remote clock offset: -2.051 ms


# Below is generated by plot.py at 2018-01-17 08:34:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.43 Mbit/s
95th percentile per-packet one-way delay: 65.312 ms
Loss rate: 3.16%
-- Flow 1:
Average throughput: 64.59 Mbit/s
95th percentile per-packet one-way delay: 64.968 ms
Loss rate: 3.27%
-- Flow 2:
Average throughput: 29.57 Mbit/s
95th percentile per-packet one-way delay: 65.820 ms
Loss rate: 2.77%
-- Flow 3:
Average throughput: 15.70 Mbit/s
95th percentile per-packet one-way delay: 66.877 ms
Loss rate: 3.37%
```
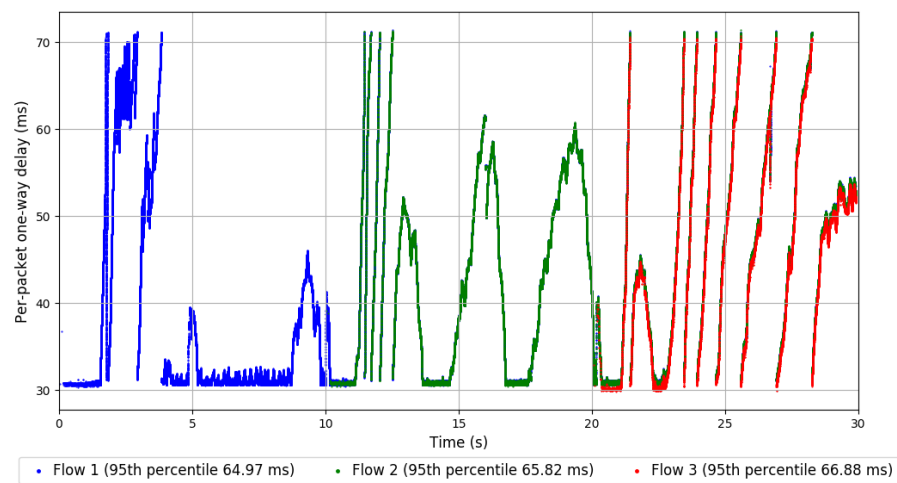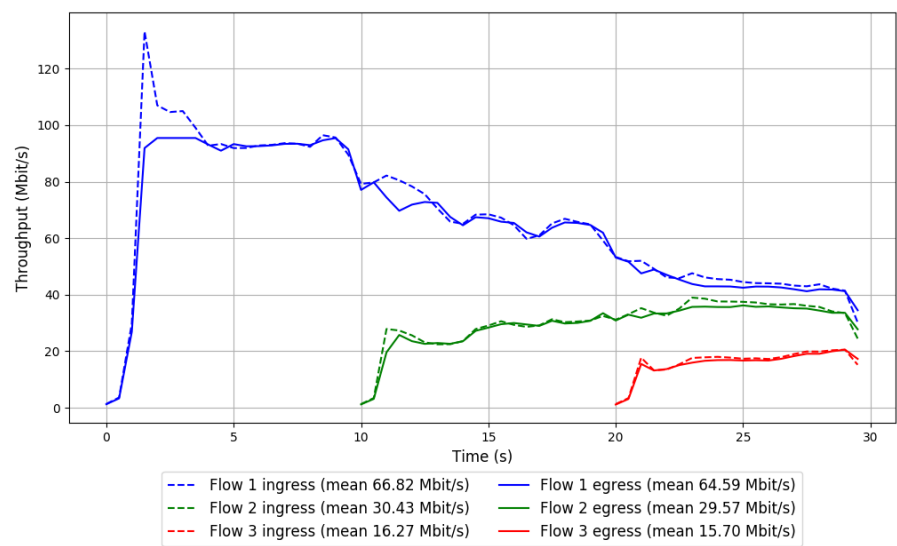
Run 3: Report of Vivace-LTE — Data Link

Flow 1 ingress (mean 66.82 Mbit/s)   Flow 1 egress (mean 64.59 Mbit/s)
Flow 2 ingress (mean 30.43 Mbit/s)   Flow 2 egress (mean 29.57 Mbit/s)
Flow 3 ingress (mean 16.27 Mbit/s)   Flow 3 egress (mean 15.70 Mbit/s)

Flow 1 (95th percentile 64.97 ms)   Flow 2 (95th percentile 65.82 ms)   Flow 3 (95th percentile 66.88 ms)
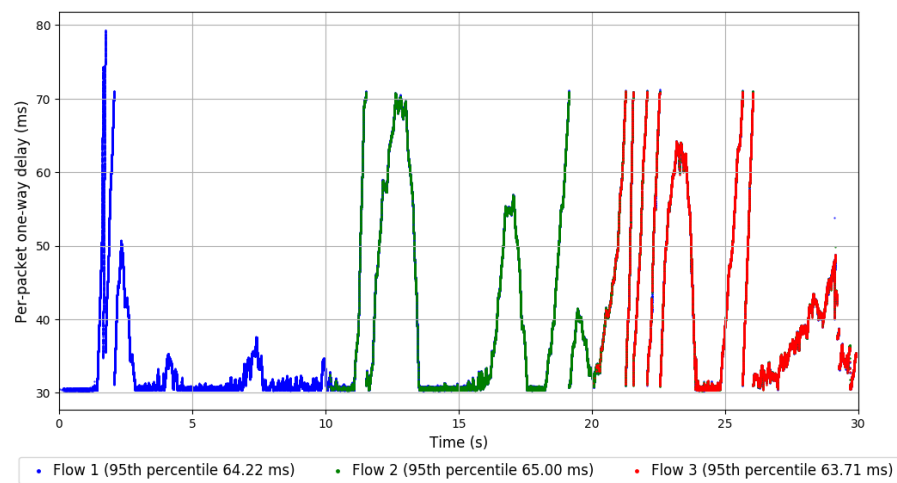
```
Run 4: Statistics of Vivace-LTE

Start at: 2018-01-17 05:05:29
End at: 2018-01-17 05:05:59
Local clock offset: -0.535 ms
Remote clock offset: -1.382 ms


# Below is generated by plot.py at 2018-01-17 08:34:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.57 Mbit/s
95th percentile per-packet one-way delay: 64.280 ms
Loss rate: 2.06%
-- Flow 1:
Average throughput: 67.68 Mbit/s
95th percentile per-packet one-way delay: 64.223 ms
Loss rate: 1.96%
-- Flow 2:
Average throughput: 22.85 Mbit/s
95th percentile per-packet one-way delay: 65.004 ms
Loss rate: 2.17%
-- Flow 3:
Average throughput: 20.30 Mbit/s
95th percentile per-packet one-way delay: 63.708 ms
Loss rate: 2.76%
```
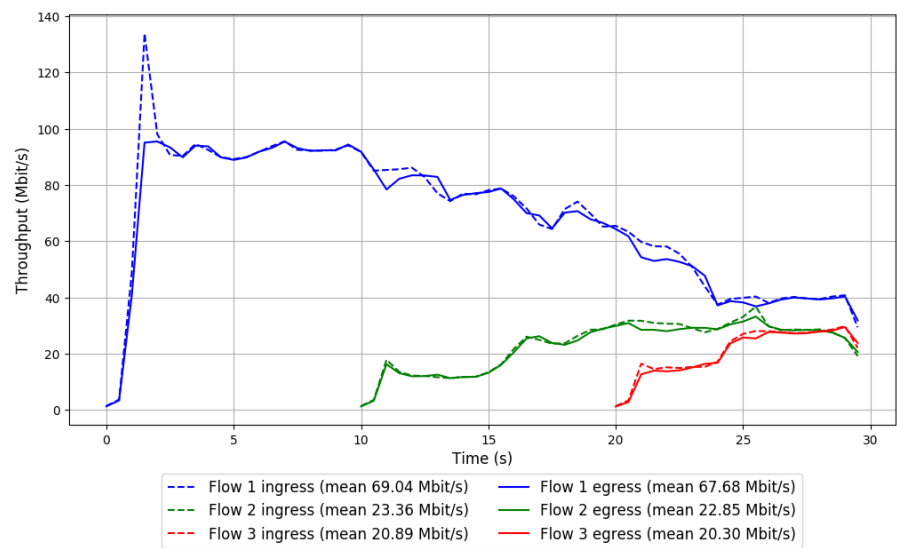
Run 4: Report of Vivace-LTE — Data Link

```
Run 5: Statistics of Vivace-LTE

Start at: 2018-01-17 05:32:46
End at: 2018-01-17 05:33:16
Local clock offset: -0.229 ms
Remote clock offset: -1.902 ms


# Below is generated by plot.py at 2018-01-17 08:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.82 Mbit/s
95th percentile per-packet one-way delay: 63.363 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 58.23 Mbit/s
95th percentile per-packet one-way delay: 63.107 ms
Loss rate: 1.36%
-- Flow 2:
Average throughput: 22.56 Mbit/s
95th percentile per-packet one-way delay: 64.044 ms
Loss rate: 1.81%
-- Flow 3:
Average throughput: 13.97 Mbit/s
95th percentile per-packet one-way delay: 66.185 ms
Loss rate: 2.01%
```
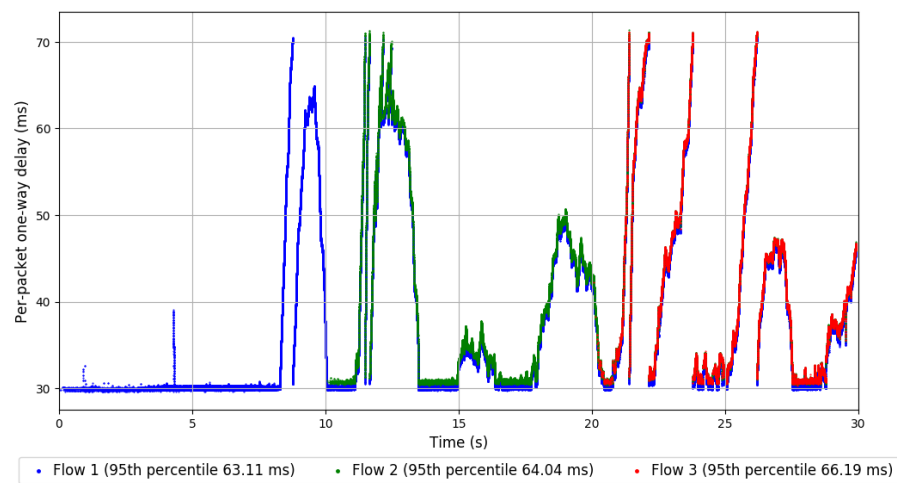
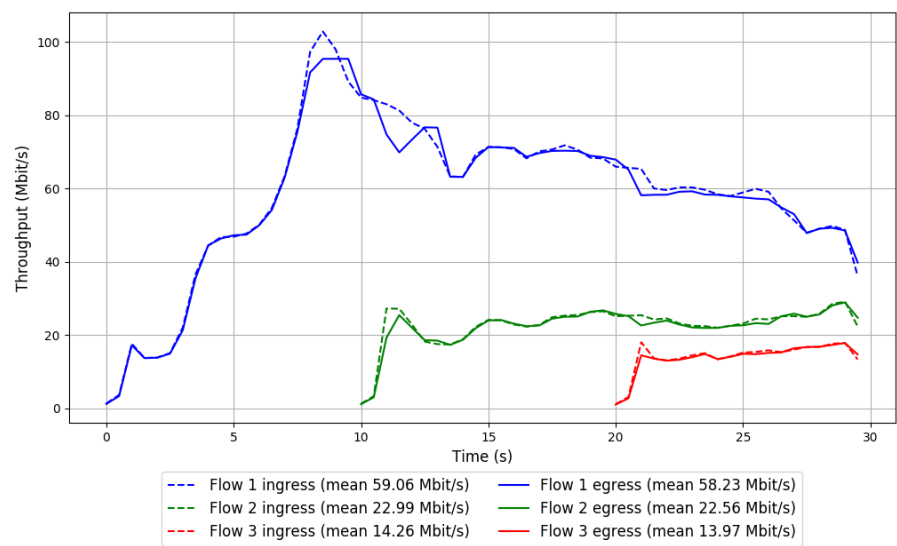Run 5: Report of Vivace-LTE — Data Link

```
Run 6: Statistics of Vivace-LTE

Start at: 2018-01-17 05:59:20
End at: 2018-01-17 05:59:50
Local clock offset: -0.079 ms
Remote clock offset: -4.221 ms


# Below is generated by plot.py at 2018-01-17 08:35:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.12 Mbit/s
95th percentile per-packet one-way delay: 62.137 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 60.75 Mbit/s
95th percentile per-packet one-way delay: 61.863 ms
Loss rate: 0.99%
-- Flow 2:
Average throughput: 28.53 Mbit/s
95th percentile per-packet one-way delay: 63.187 ms
Loss rate: 1.83%
-- Flow 3:
Average throughput: 16.40 Mbit/s
95th percentile per-packet one-way delay: 63.501 ms
Loss rate: 2.32%
```

Run 6: Report of Vivace-LTE — Data Link

Flow 1 ingress (mean 61.37 Mbit/s) --- Flow 1 egress (mean 60.75 Mbit/s)
Flow 2 ingress (mean 29.07 Mbit/s) --- Flow 2 egress (mean 28.53 Mbit/s)
Flow 3 ingress (mean 16.80 Mbit/s) --- Flow 3 egress (mean 16.40 Mbit/s)

Flow 1 (95th percentile 61.86 ms) • Flow 2 (95th percentile 63.19 ms) • Flow 3 (95th percentile 63.50 ms)
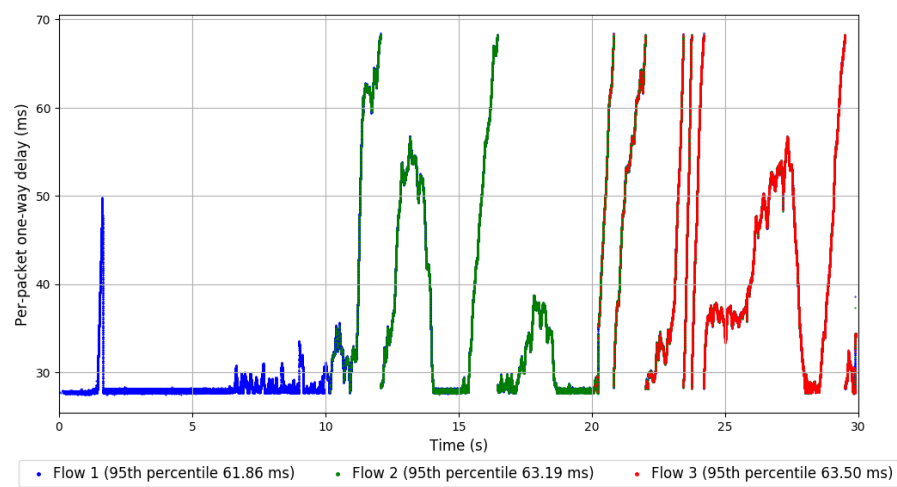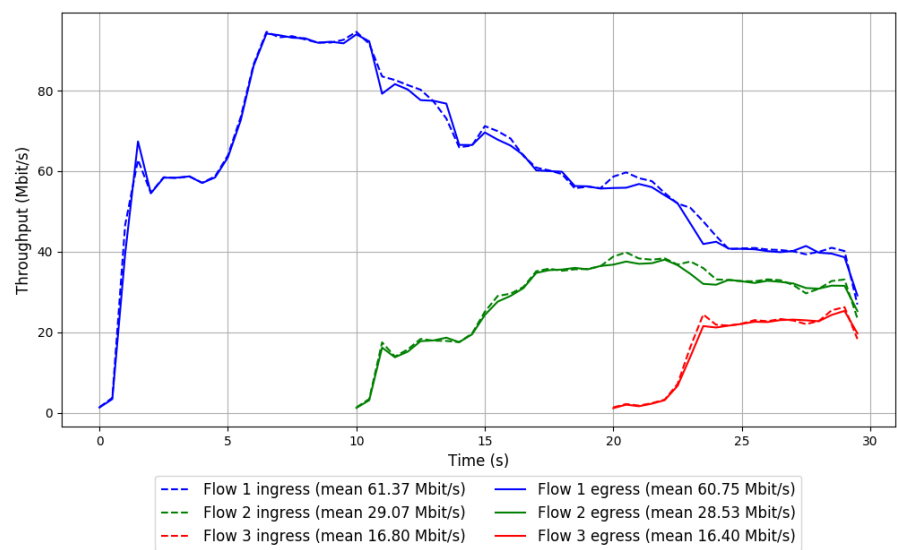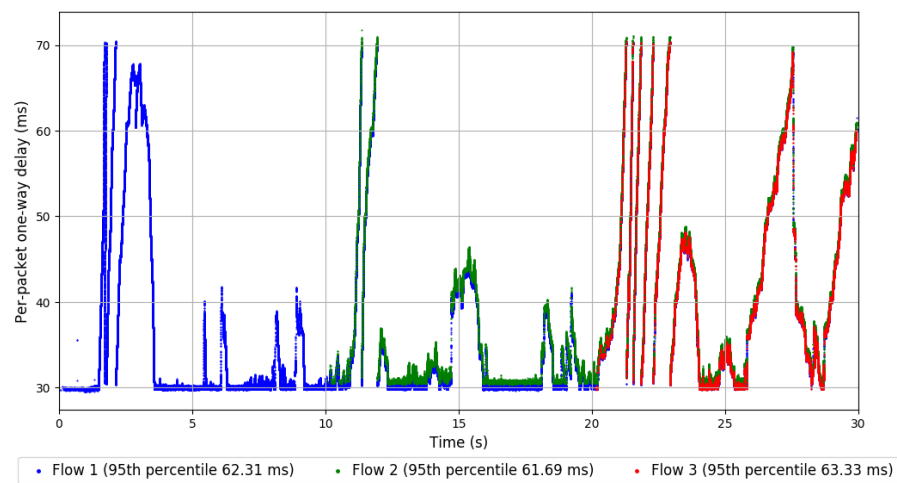
```
Run 7: Statistics of Vivace-LTE

Start at: 2018-01-17 06:25:50
End at: 2018-01-17 06:26:20
Local clock offset: 0.011 ms
Remote clock offset: -2.272 ms


# Below is generated by plot.py at 2018-01-17 08:35:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.76 Mbit/s
95th percentile per-packet one-way delay: 62.337 ms
Loss rate: 2.31%
-- Flow 1:
Average throughput: 70.30 Mbit/s
95th percentile per-packet one-way delay: 62.307 ms
Loss rate: 2.31%
-- Flow 2:
Average throughput: 18.79 Mbit/s
95th percentile per-packet one-way delay: 61.691 ms
Loss rate: 2.10%
-- Flow 3:
Average throughput: 15.04 Mbit/s
95th percentile per-packet one-way delay: 63.325 ms
Loss rate: 2.78%
```

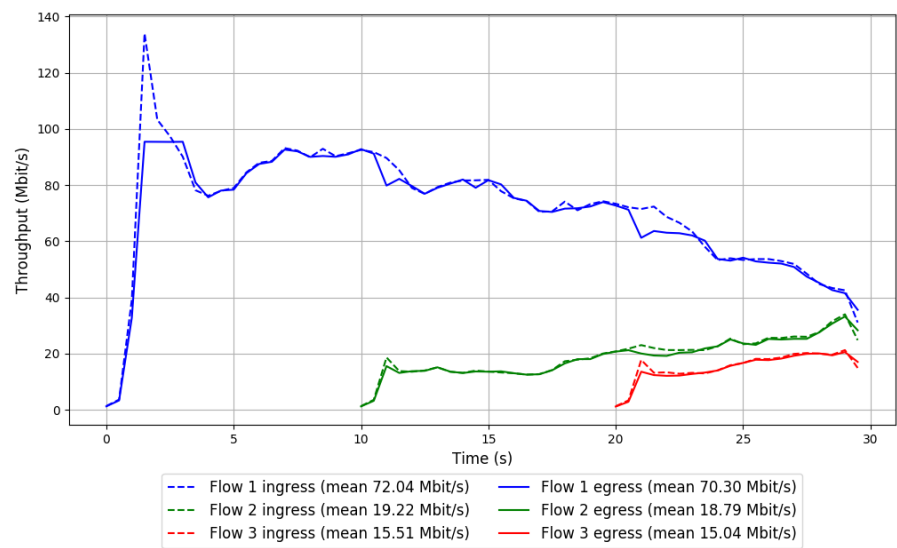# Run 7: Report of Vivace-LTE — Data Link

```
Run 8: Statistics of Vivace-LTE

Start at: 2018-01-17 06:51:32
End at: 2018-01-17 06:52:02
Local clock offset: 0.025 ms
Remote clock offset: -2.247 ms


# Below is generated by plot.py at 2018-01-17 08:35:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.94 Mbit/s
95th percentile per-packet one-way delay: 66.357 ms
Loss rate: 3.34%
-- Flow 1:
Average throughput: 62.67 Mbit/s
95th percentile per-packet one-way delay: 64.766 ms
Loss rate: 3.23%
-- Flow 2:
Average throughput: 26.98 Mbit/s
95th percentile per-packet one-way delay: 67.680 ms
Loss rate: 3.17%
-- Flow 3:
Average throughput: 26.05 Mbit/s
95th percentile per-packet one-way delay: 67.560 ms
Loss rate: 4.48%
```

Run 8: Report of Vivace-LTE — Data Link

Flow 1 ingress (mean 64.76 Mbit/s) — — — Flow 1 egress (mean 62.67 Mbit/s)
Flow 2 ingress (mean 27.86 Mbit/s) — — — Flow 2 egress (mean 26.98 Mbit/s)
Flow 3 ingress (mean 26.51 Mbit/s) — — — Flow 3 egress (mean 26.05 Mbit/s)

• Flow 1 (95th percentile 64.77 ms)   • Flow 2 (95th percentile 67.68 ms)   • Flow 3 (95th percentile 67.56 ms)
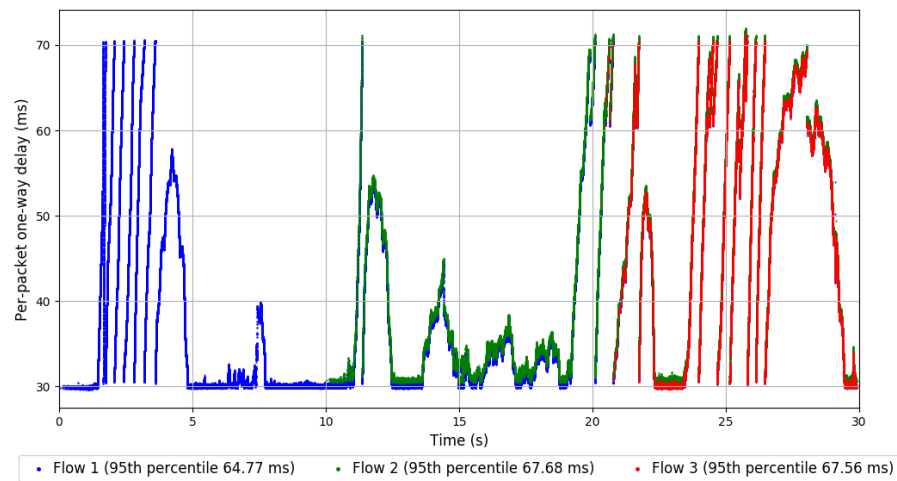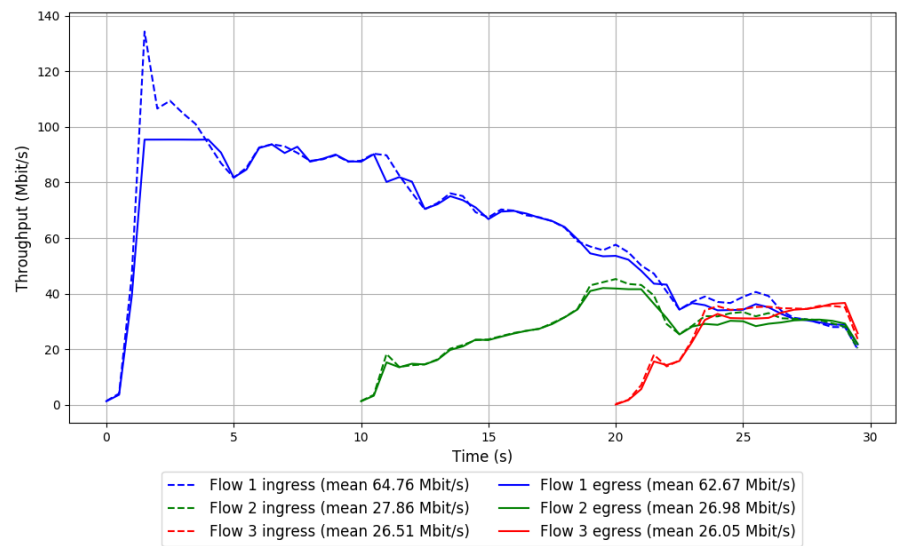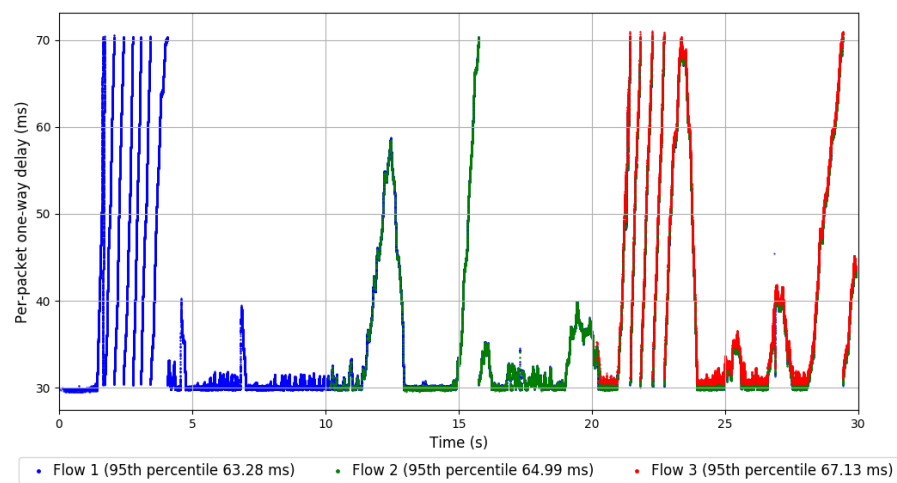
```
Run 9: Statistics of Vivace-LTE

Start at: 2018-01-17 07:16:32
End at: 2018-01-17 07:17:02
Local clock offset: 0.111 ms
Remote clock offset: -2.279 ms


# Below is generated by plot.py at 2018-01-17 08:35:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.43 Mbit/s
95th percentile per-packet one-way delay: 63.786 ms
Loss rate: 2.58%
-- Flow 1:
Average throughput: 68.68 Mbit/s
95th percentile per-packet one-way delay: 63.278 ms
Loss rate: 2.79%
-- Flow 2:
Average throughput: 21.33 Mbit/s
95th percentile per-packet one-way delay: 64.992 ms
Loss rate: 1.72%
-- Flow 3:
Average throughput: 19.92 Mbit/s
95th percentile per-packet one-way delay: 67.134 ms
Loss rate: 2.20%
```

Run 9: Report of Vivace-LTE — Data Link

- - - - Flow 1 ingress (mean 70.68 Mbit/s) — Flow 1 egress (mean 68.68 Mbit/s)
- - - - Flow 2 ingress (mean 21.72 Mbit/s) — Flow 2 egress (mean 21.33 Mbit/s)
- - - - Flow 3 ingress (mean 20.39 Mbit/s) — Flow 3 egress (mean 19.92 Mbit/s)

- Flow 1 (95th percentile 63.28 ms)   - Flow 2 (95th percentile 64.99 ms)   - Flow 3 (95th percentile 67.13 ms)
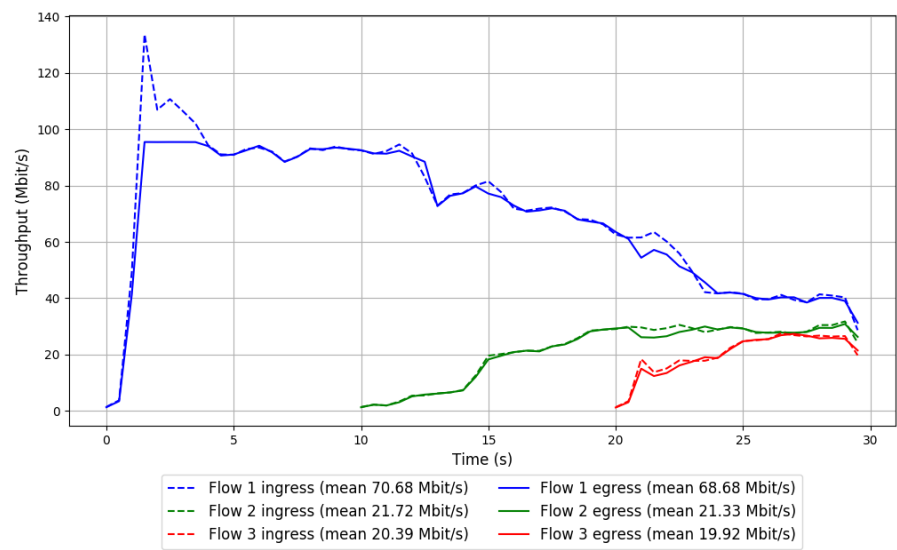
```
Run 10: Statistics of Vivace-LTE

Start at: 2018-01-17 07:41:42
End at: 2018-01-17 07:42:12
Local clock offset: 0.025 ms
Remote clock offset: -1.937 ms


# Below is generated by plot.py at 2018-01-17 08:35:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.61 Mbit/s
95th percentile per-packet one-way delay: 65.018 ms
Loss rate: 3.36%
-- Flow 1:
Average throughput: 64.92 Mbit/s
95th percentile per-packet one-way delay: 64.336 ms
Loss rate: 3.37%
-- Flow 2:
Average throughput: 31.11 Mbit/s
95th percentile per-packet one-way delay: 66.095 ms
Loss rate: 3.42%
-- Flow 3:
Average throughput: 12.09 Mbit/s
95th percentile per-packet one-way delay: 66.462 ms
Loss rate: 2.94%
```

Run 10: Report of Vivace-LTE — Data Link

Flow 1 ingress (mean 67.24 Mbit/s)   Flow 1 egress (mean 64.92 Mbit/s)
Flow 2 ingress (mean 32.25 Mbit/s)   Flow 2 egress (mean 31.11 Mbit/s)
Flow 3 ingress (mean 12.49 Mbit/s)   Flow 3 egress (mean 12.09 Mbit/s)

Flow 1 (95th percentile 64.34 ms)   Flow 2 (95th percentile 66.09 ms)   Flow 3 (95th percentile 66.46 ms)

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