Pantheon Report

Generated at 2018-02-20 18:46:26 (UTC).

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

Repeated the test of 17 congestion control schemes 10 times.

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

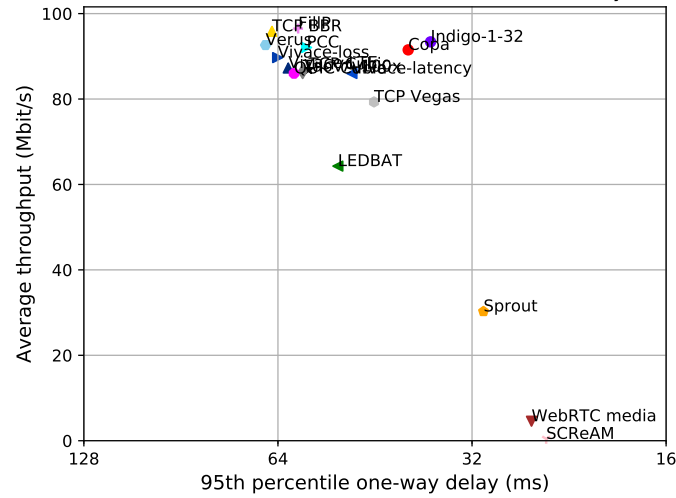Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

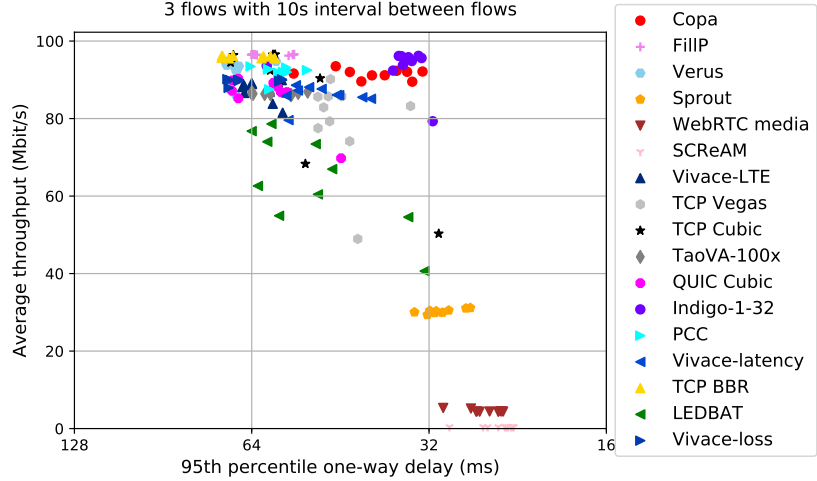NTP offsets were measured against `time.stanford.edu` and have been applied to correct the timestamps in logs.

```
Git summary:
branch: master @ f12c42a2c63fdd9a862eefa0468859bf379b6623
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 9249eea3238475c4d8cca1443d28df70bff6c4a2
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
 M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
 M receiver/src/buffer.h
 M receiver/src/core.cpp
 M sender/src/buffer.h
 M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
 M src/examples/cellsim.cc
 M src/examples/sproutbt2.cc
 M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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

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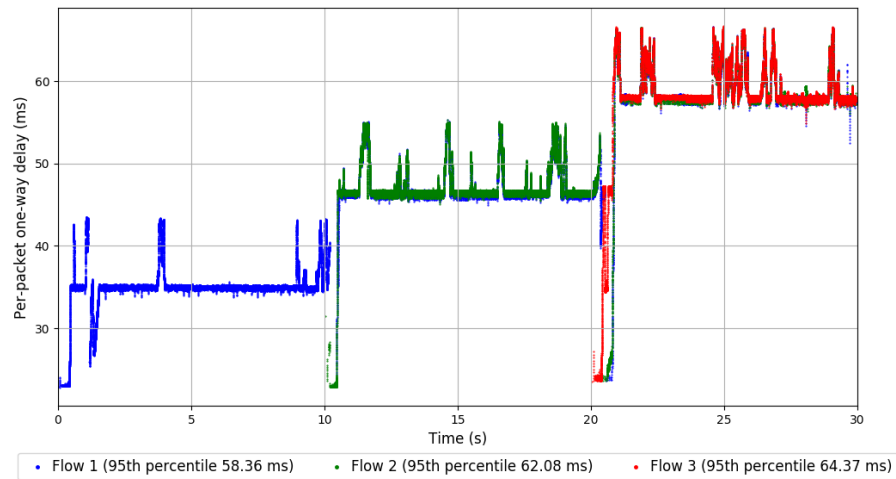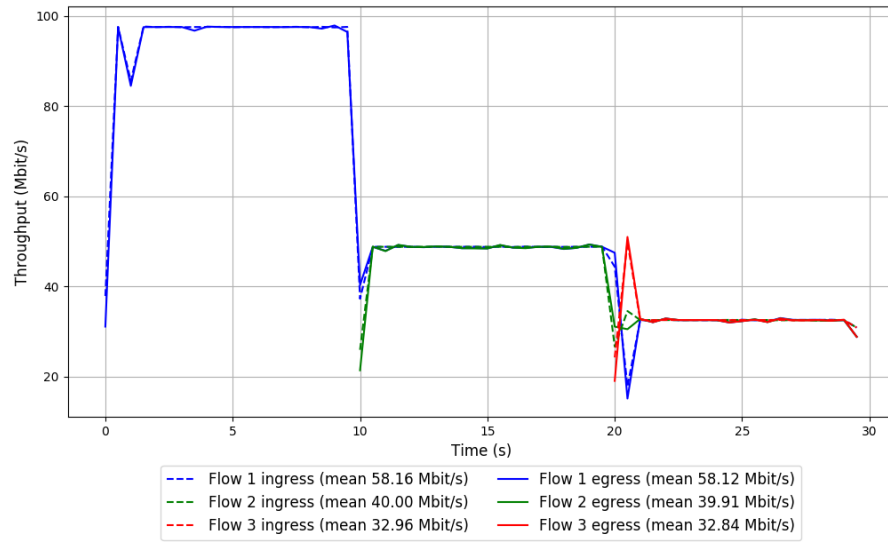3 flows with 10s interval between flows

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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	58.63	40.45	31.24	60.51	62.03	65.60	0.27	0.45	1.02
TCP Cubic	10	51.34	34.86	37.60	53.21	54.35	56.09	0.23	0.39	0.85
LEDBAT	10	38.53	29.78	18.12	50.05	49.81	48.94	0.19	0.34	0.98
PCC	10	58.54	37.76	25.65	55.99	54.10	56.18	0.22	0.43	0.81
QUIC Cubic	10	50.15	37.28	33.77	57.98	58.79	58.33	0.29	0.41	0.98
SCReAM	10	0.21	0.22	0.22	24.55	24.61	24.52	0.32	0.29	0.39
WebRTC media	10	2.40	1.54	0.64	25.91	25.82	25.95	0.24	0.42	0.49
Sprout	10	15.37	15.31	14.38	30.20	29.66	33.31	0.22	0.32	0.67
TaoVA-100x	10	48.36	39.83	34.96	58.28	55.22	54.24	0.24	0.49	1.00
TCP Vegas	10	42.95	35.75	38.05	42.53	44.66	48.20	0.17	0.27	0.60
Verus	10	57.29	37.81	30.89	60.40	63.38	62.34	0.34	0.51	1.01
Copa	10	59.29	37.14	22.67	37.60	41.67	40.94	0.20	0.32	0.72
FillP	9	57.85	43.28	29.86	58.82	51.67	59.64	0.28	0.72	1.58
Indigo-1-32	10	57.76	41.11	25.57	37.42	36.39	38.21	0.28	0.43	0.76
Vivace-latency	10	57.17	35.15	16.58	49.30	41.80	45.29	0.23	0.40	0.99
Vivace-loss	10	57.32	37.16	23.45	53.76	62.29	66.60	0.51	0.43	2.48
Vivace-LTE	10	54.44	36.69	25.74	57.11	58.42	60.57	0.24	0.45	0.98

```
Run 1: Statistics of TCP BBR

Start at: 2018-02-20 09:51:52
End at: 2018-02-20 09:52:22
Local clock offset: -2.203 ms
Remote clock offset: -4.868 ms


# Below is generated by plot.py at 2018-02-20 18:21:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.53 Mbit/s
95th percentile per-packet one-way delay: 61.590 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 58.12 Mbit/s
95th percentile per-packet one-way delay: 58.361 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 39.91 Mbit/s
95th percentile per-packet one-way delay: 62.083 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 32.84 Mbit/s
95th percentile per-packet one-way delay: 64.367 ms
Loss rate: 1.05%
```
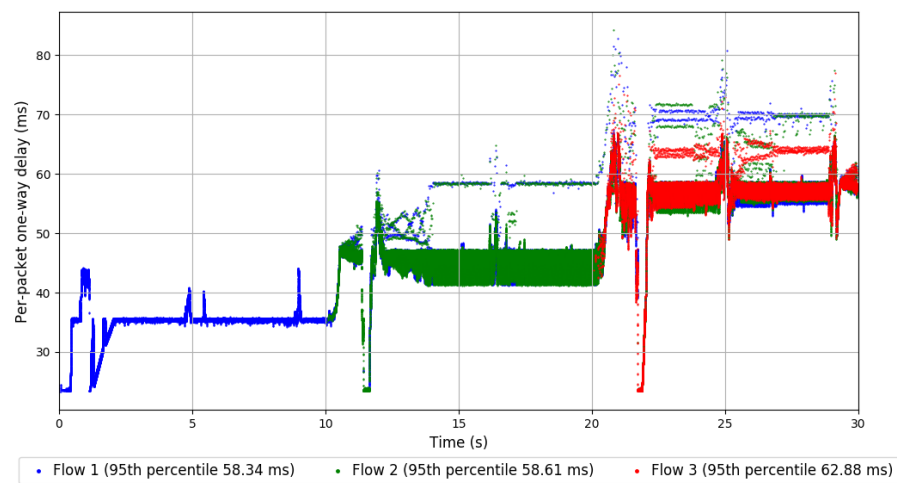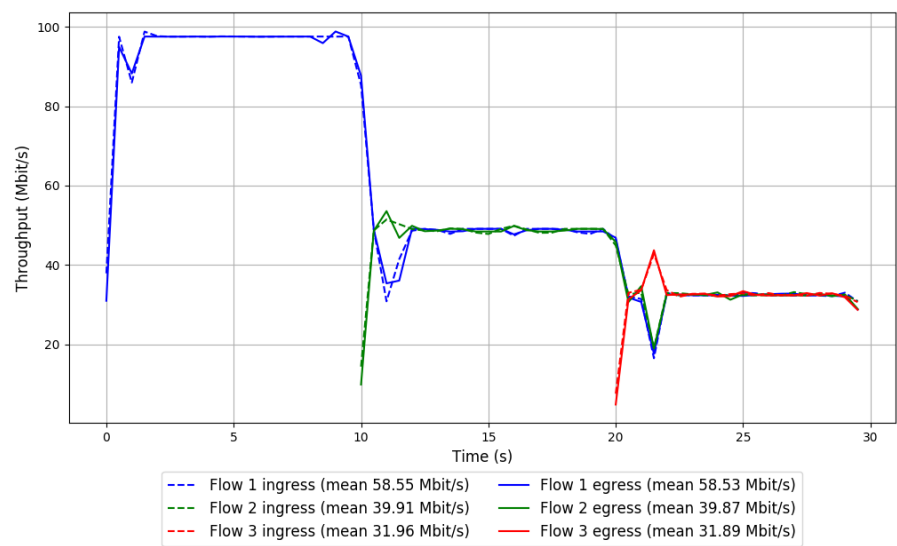
Run 1: Report of TCP BBR — Data Link

Flow 1 ingress (mean 58.16 Mbit/s) --- Flow 1 egress (mean 58.12 Mbit/s)
Flow 2 ingress (mean 40.00 Mbit/s) --- Flow 2 egress (mean 39.91 Mbit/s)
Flow 3 ingress (mean 32.96 Mbit/s) --- Flow 3 egress (mean 32.84 Mbit/s)

Flow 1 (95th percentile 58.36 ms)   Flow 2 (95th percentile 62.08 ms)   Flow 3 (95th percentile 64.37 ms)

```
Run 2: Statistics of TCP BBR

Start at: 2018-02-20 10:16:26
End at: 2018-02-20 10:16:56
Local clock offset: 5.899 ms
Remote clock offset: -1.619 ms


# Below is generated by plot.py at 2018-02-20 18:21:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.55 Mbit/s
95th percentile per-packet one-way delay: 58.517 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 58.53 Mbit/s
95th percentile per-packet one-way delay: 58.344 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 39.87 Mbit/s
95th percentile per-packet one-way delay: 58.609 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 31.89 Mbit/s
95th percentile per-packet one-way delay: 62.877 ms
Loss rate: 1.14%
```
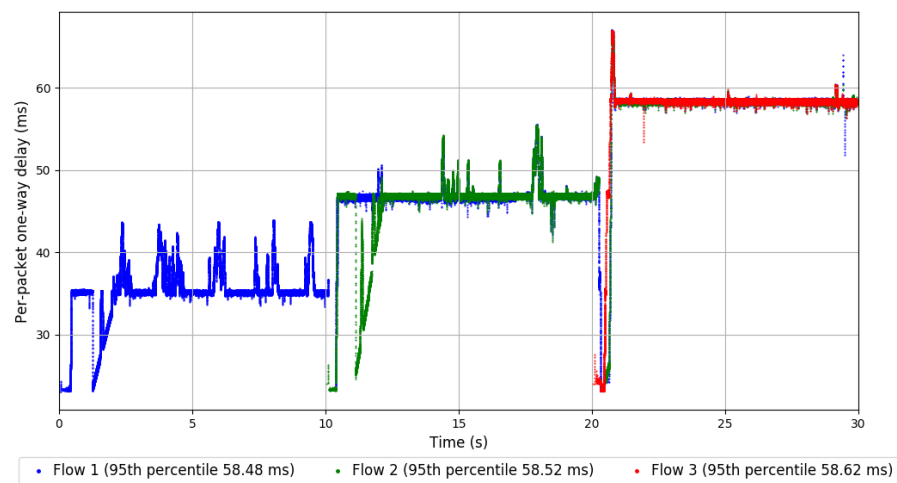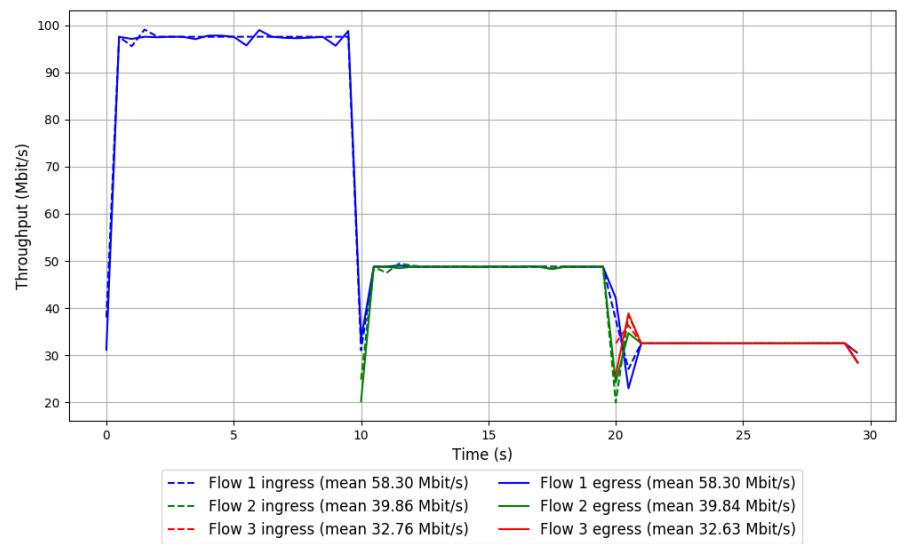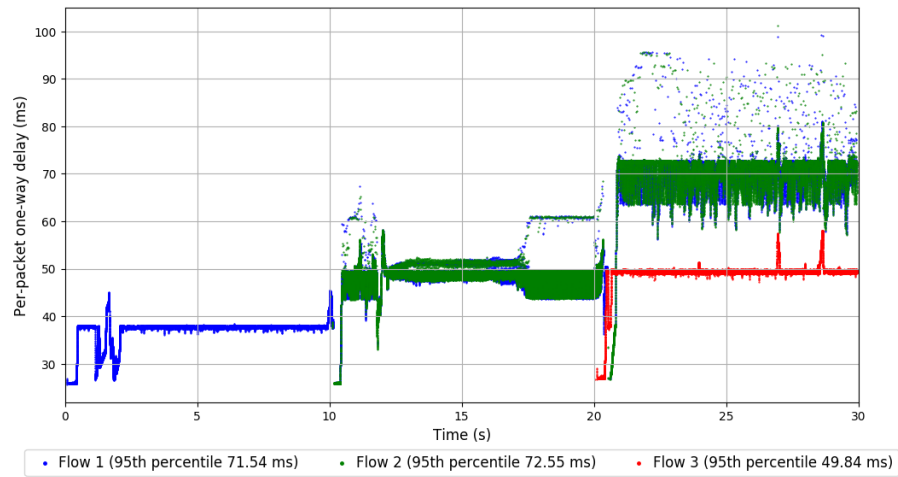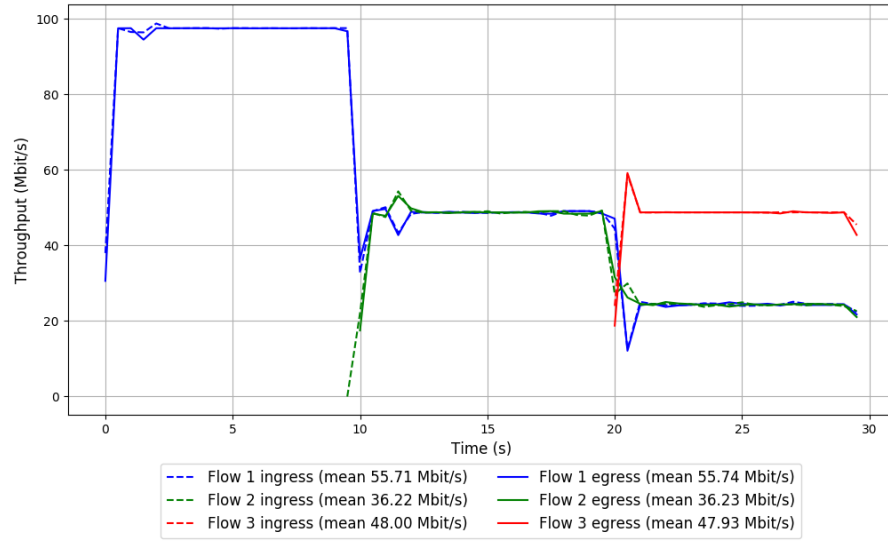
Run 2: Report of TCP BBR — Data Link

Flow 1 ingress (mean 58.55 Mbit/s)   Flow 1 egress (mean 58.53 Mbit/s)
Flow 2 ingress (mean 39.91 Mbit/s)   Flow 2 egress (mean 39.87 Mbit/s)
Flow 3 ingress (mean 31.96 Mbit/s)   Flow 3 egress (mean 31.89 Mbit/s)

Flow 1 (95th percentile 58.34 ms)   Flow 2 (95th percentile 58.61 ms)   Flow 3 (95th percentile 62.88 ms)

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```
Run 3: Statistics of TCP BBR

Start at: 2018-02-20 10:41:07
End at: 2018-02-20 10:41:37
Local clock offset: 1.721 ms
Remote clock offset: -4.25 ms


# Below is generated by plot.py at 2018-02-20 18:21:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.60 Mbit/s
95th percentile per-packet one-way delay: 58.536 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 58.30 Mbit/s
95th percentile per-packet one-way delay: 58.482 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 39.84 Mbit/s
95th percentile per-packet one-way delay: 58.518 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 32.63 Mbit/s
95th percentile per-packet one-way delay: 58.615 ms
Loss rate: 0.94%
```
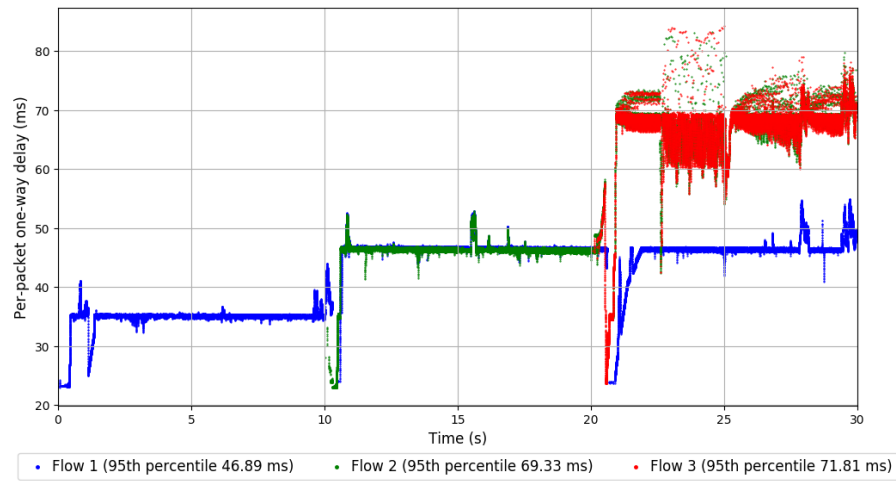
Run 3: Report of TCP BBR — Data Link

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Run 4: Statistics of TCP BBR

Start at: 2018-02-20 11:05:40
End at: 2018-02-20 11:06:10
Local clock offset: -3.426 ms
Remote clock offset: -7.613 ms


# Below is generated by plot.py at 2018-02-20 18:21:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.69 Mbit/s
95th percentile per-packet one-way delay: 71.999 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 55.74 Mbit/s
95th percentile per-packet one-way delay: 71.543 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 36.23 Mbit/s
95th percentile per-packet one-way delay: 72.549 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 47.93 Mbit/s
95th percentile per-packet one-way delay: 49.842 ms
Loss rate: 0.81%
```
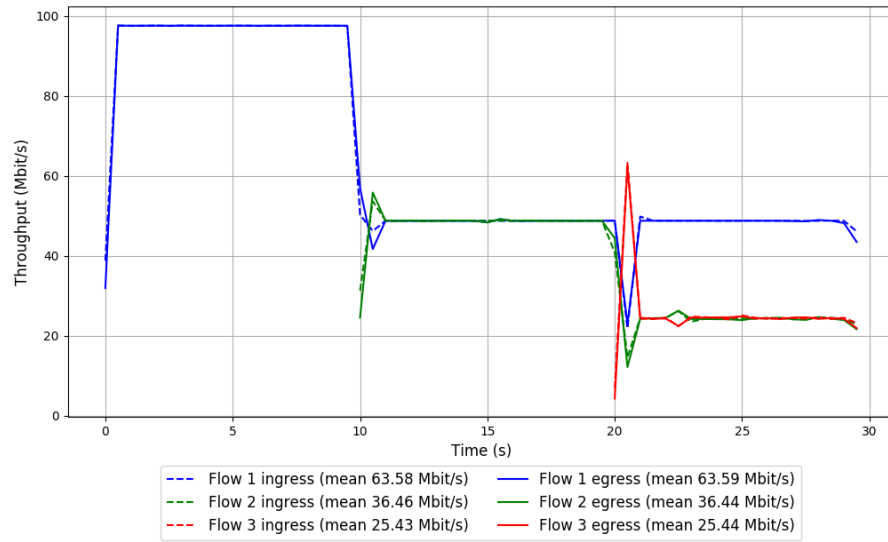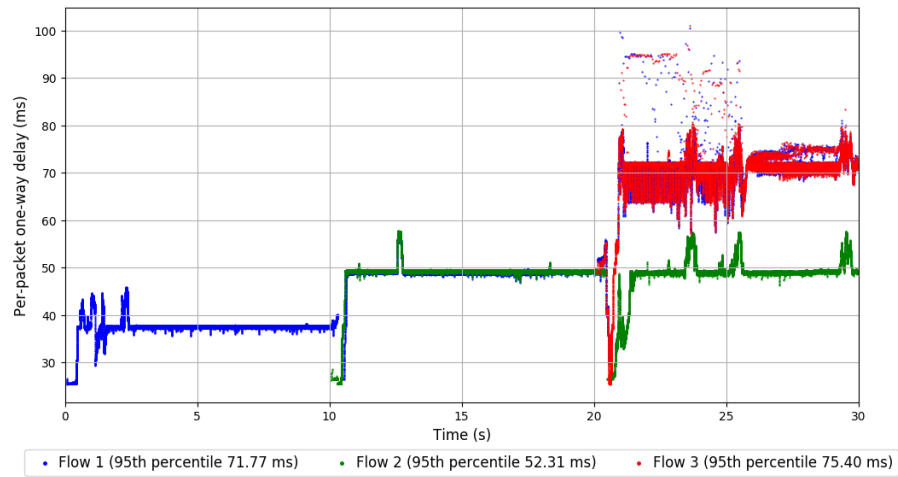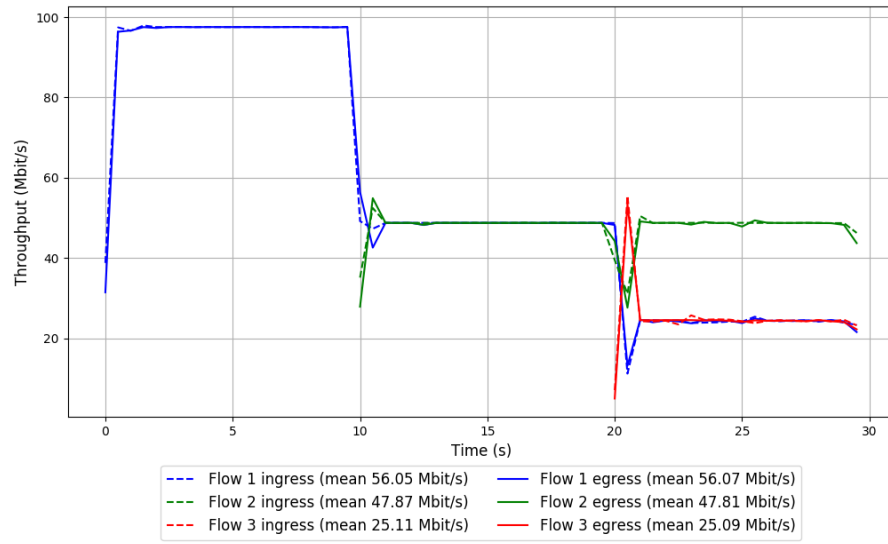
Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 55.71 Mbit/s)   Flow 1 egress (mean 55.74 Mbit/s)
Flow 2 ingress (mean 36.22 Mbit/s)   Flow 2 egress (mean 36.23 Mbit/s)
Flow 3 ingress (mean 48.00 Mbit/s)   Flow 3 egress (mean 47.93 Mbit/s)

Flow 1 (95th percentile 71.54 ms)   Flow 2 (95th percentile 72.55 ms)   Flow 3 (95th percentile 49.84 ms)

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```
Run 5: Statistics of TCP BBR

Start at: 2018-02-20 11:30:12
End at: 2018-02-20 11:30:42
Local clock offset: -7.294 ms
Remote clock offset: -3.919 ms


# Below is generated by plot.py at 2018-02-20 18:21:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.22 Mbit/s
95th percentile per-packet one-way delay: 68.914 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 63.59 Mbit/s
95th percentile per-packet one-way delay: 46.892 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 36.44 Mbit/s
95th percentile per-packet one-way delay: 69.333 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 25.44 Mbit/s
95th percentile per-packet one-way delay: 71.812 ms
Loss rate: 0.96%
```
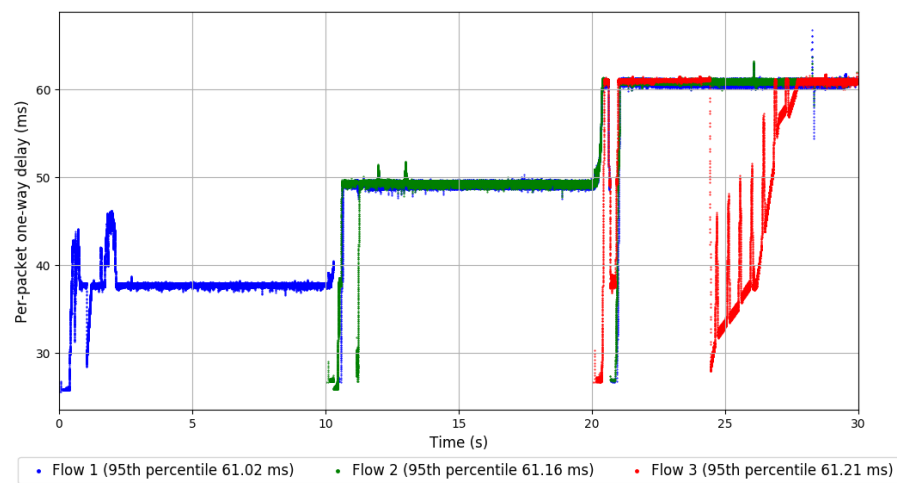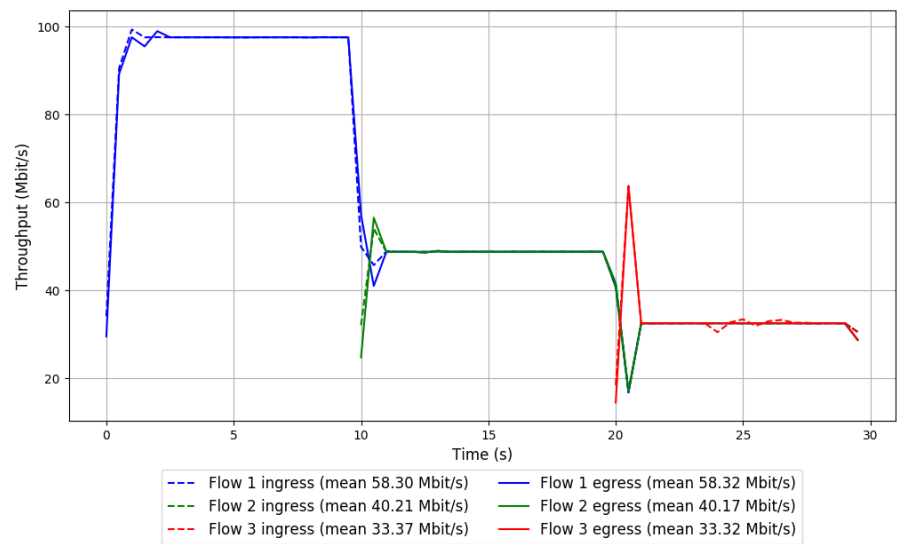
Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 63.58 Mbit/s) --- Flow 1 egress (mean 63.59 Mbit/s)
Flow 2 ingress (mean 36.46 Mbit/s) --- Flow 2 egress (mean 36.44 Mbit/s)
Flow 3 ingress (mean 25.43 Mbit/s) --- Flow 3 egress (mean 25.44 Mbit/s)

Flow 1 (95th percentile 46.89 ms)   Flow 2 (95th percentile 69.33 ms)   Flow 3 (95th percentile 71.81 ms)
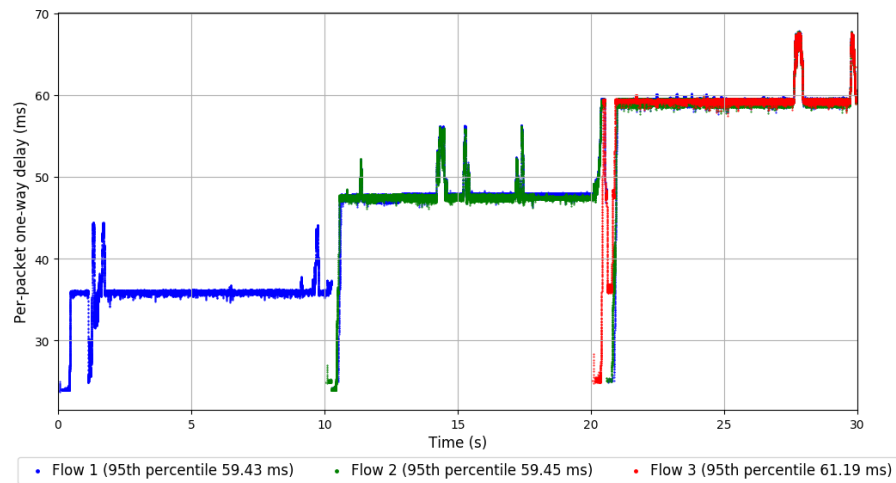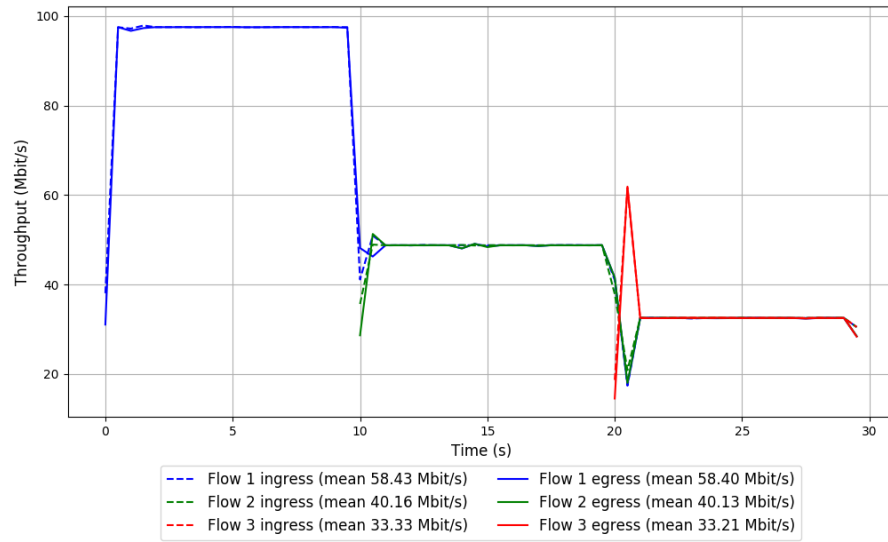
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```
Run 6: Statistics of TCP BBR

Start at: 2018-02-20 11:54:44
End at: 2018-02-20 11:55:14
Local clock offset: 1.648 ms
Remote clock offset: -6.102 ms


# Below is generated by plot.py at 2018-02-20 18:21:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.17 Mbit/s
95th percentile per-packet one-way delay: 71.893 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 56.07 Mbit/s
95th percentile per-packet one-way delay: 71.768 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 47.81 Mbit/s
95th percentile per-packet one-way delay: 52.315 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 25.09 Mbit/s
95th percentile per-packet one-way delay: 75.401 ms
Loss rate: 1.05%
```

Run 6: Report of TCP BBR — Data Link

Flow 1 ingress (mean 56.05 Mbit/s) --- Flow 1 egress (mean 56.07 Mbit/s)
Flow 2 ingress (mean 47.87 Mbit/s) --- Flow 2 egress (mean 47.81 Mbit/s)
Flow 3 ingress (mean 25.11 Mbit/s) --- Flow 3 egress (mean 25.09 Mbit/s)

Flow 1 (95th percentile 71.77 ms)   Flow 2 (95th percentile 52.31 ms)   Flow 3 (95th percentile 75.40 ms)

```
Run 7: Statistics of TCP BBR

Start at: 2018-02-20 12:19:17
End at: 2018-02-20 12:19:47
Local clock offset: 1.635 ms
Remote clock offset: -5.017 ms


# Below is generated by plot.py at 2018-02-20 18:21:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.06 Mbit/s
95th percentile per-packet one-way delay: 61.132 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 58.32 Mbit/s
95th percentile per-packet one-way delay: 61.024 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 40.17 Mbit/s
95th percentile per-packet one-way delay: 61.155 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 33.32 Mbit/s
95th percentile per-packet one-way delay: 61.207 ms
Loss rate: 0.86%
```
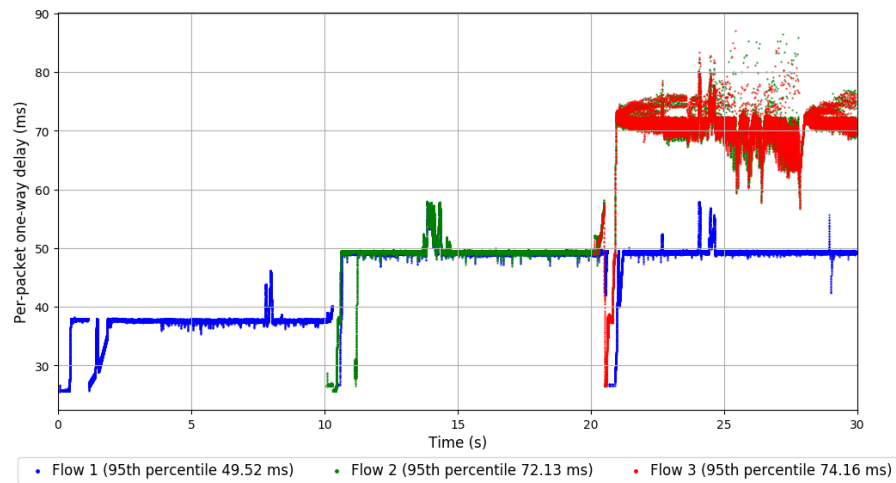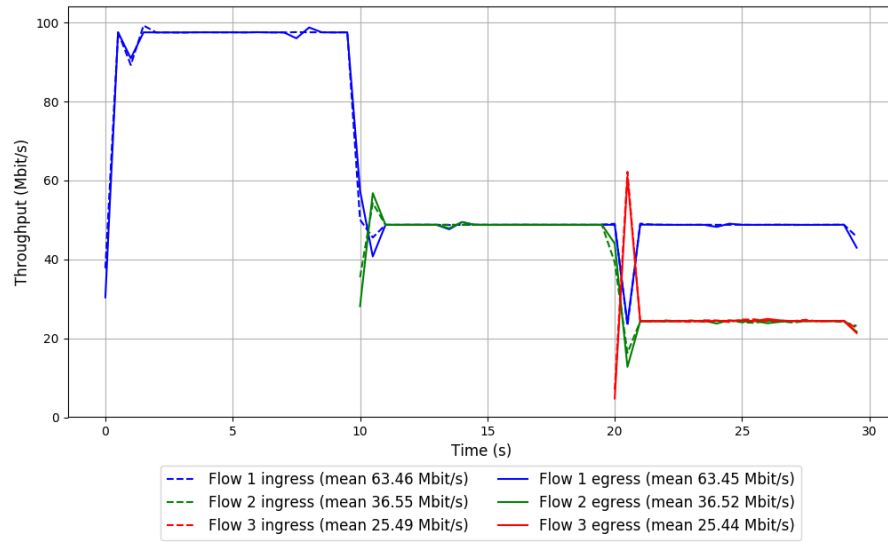
Run 7: Report of TCP BBR — Data Link

Flow 1 ingress (mean 58.30 Mbit/s)   Flow 1 egress (mean 58.32 Mbit/s)
Flow 2 ingress (mean 40.21 Mbit/s)   Flow 2 egress (mean 40.17 Mbit/s)
Flow 3 ingress (mean 33.37 Mbit/s)   Flow 3 egress (mean 33.32 Mbit/s)

Flow 1 (95th percentile 61.02 ms)   Flow 2 (95th percentile 61.16 ms)   Flow 3 (95th percentile 61.21 ms)

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```
Run 8: Statistics of TCP BBR

Start at: 2018-02-20 12:43:54
End at: 2018-02-20 12:44:24
Local clock offset: -1.25 ms
Remote clock offset: -1.761 ms


# Below is generated by plot.py at 2018-02-20 18:21:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.07 Mbit/s
95th percentile per-packet one-way delay: 59.469 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 58.40 Mbit/s
95th percentile per-packet one-way delay: 59.429 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 40.13 Mbit/s
95th percentile per-packet one-way delay: 59.454 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 33.21 Mbit/s
95th percentile per-packet one-way delay: 61.190 ms
Loss rate: 0.92%
```
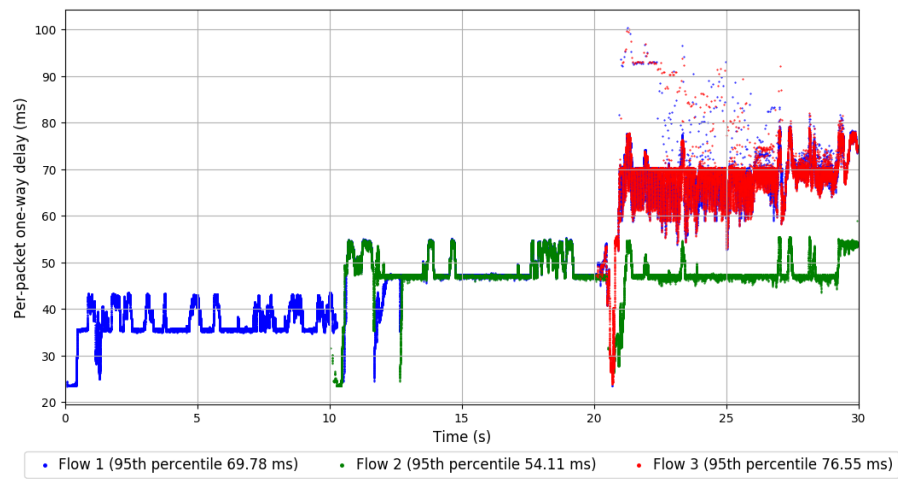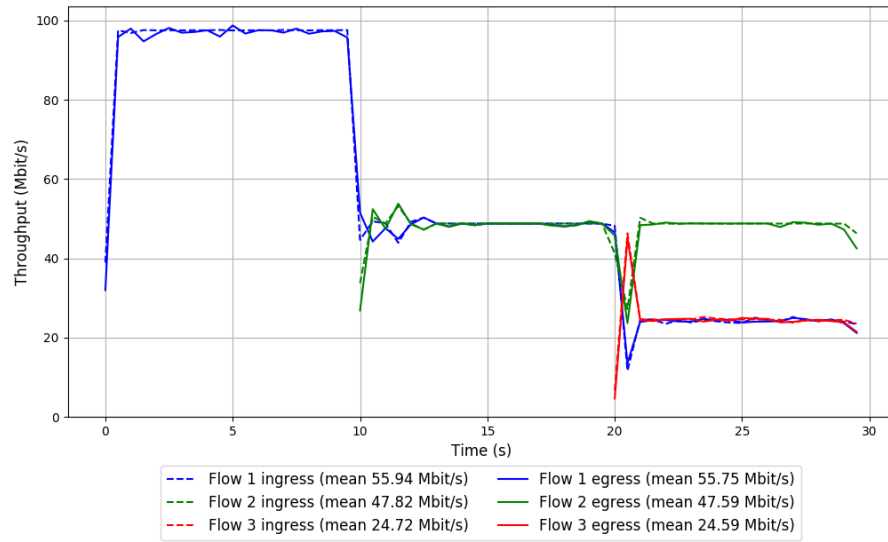
Run 8: Report of TCP BBR — Data Link

```
Run 9: Statistics of TCP BBR

Start at: 2018-02-20 13:08:26
End at: 2018-02-20 13:08:56
Local clock offset: -5.619 ms
Remote clock offset: -8.367 ms


# Below is generated by plot.py at 2018-02-20 18:22:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.15 Mbit/s
95th percentile per-packet one-way delay: 71.778 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 63.45 Mbit/s
95th percentile per-packet one-way delay: 49.521 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 36.52 Mbit/s
95th percentile per-packet one-way delay: 72.133 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 25.44 Mbit/s
95th percentile per-packet one-way delay: 74.157 ms
Loss rate: 0.96%
```
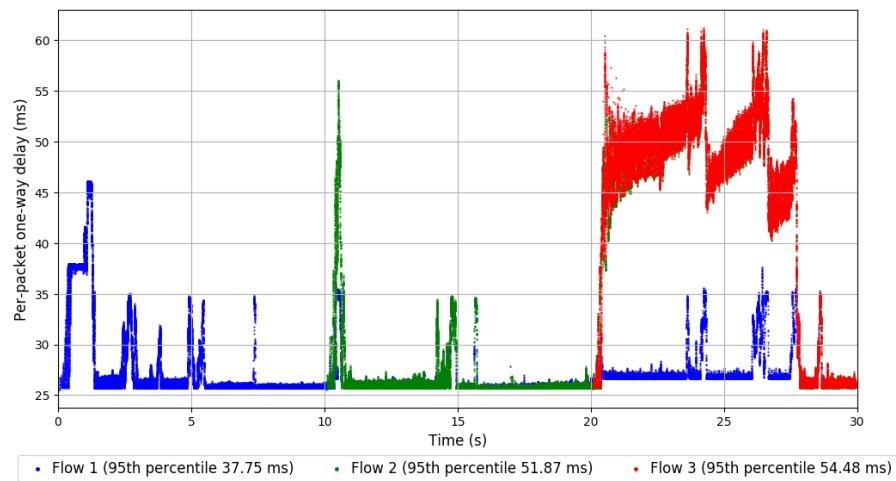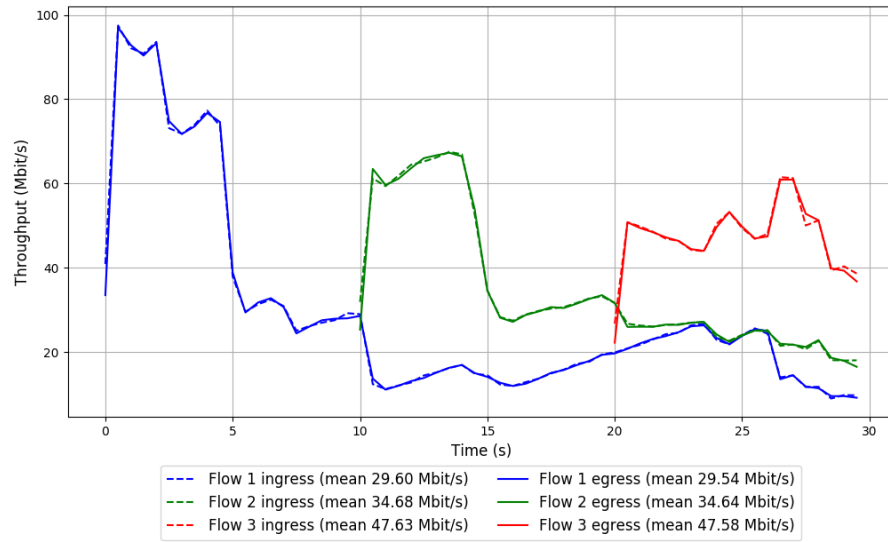
Run 9: Report of TCP BBR — Data Link

Flow 1 ingress (mean 63.46 Mbit/s) --- Flow 1 egress (mean 63.45 Mbit/s)
Flow 2 ingress (mean 36.55 Mbit/s) --- Flow 2 egress (mean 36.52 Mbit/s)
Flow 3 ingress (mean 25.49 Mbit/s) --- Flow 3 egress (mean 25.44 Mbit/s)

Flow 1 (95th percentile 49.52 ms)   Flow 2 (95th percentile 72.13 ms)   Flow 3 (95th percentile 74.16 ms)

```
Run 10: Statistics of TCP BBR

Start at: 2018-02-20 13:33:16
End at: 2018-02-20 13:33:46
Local clock offset: 3.596 ms
Remote clock offset: -3.873 ms


# Below is generated by plot.py at 2018-02-20 18:22:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.52 Mbit/s
95th percentile per-packet one-way delay: 69.978 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 55.75 Mbit/s
95th percentile per-packet one-way delay: 69.778 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 47.59 Mbit/s
95th percentile per-packet one-way delay: 54.111 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 24.59 Mbit/s
95th percentile per-packet one-way delay: 76.546 ms
Loss rate: 1.50%
```
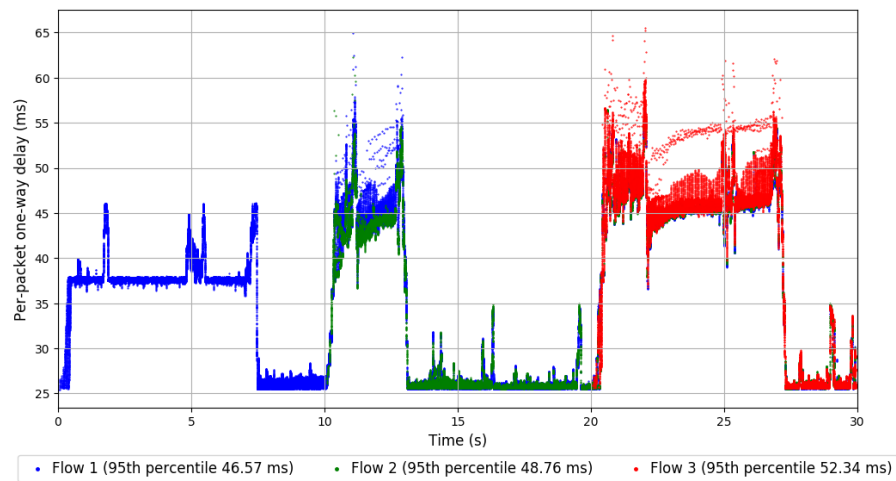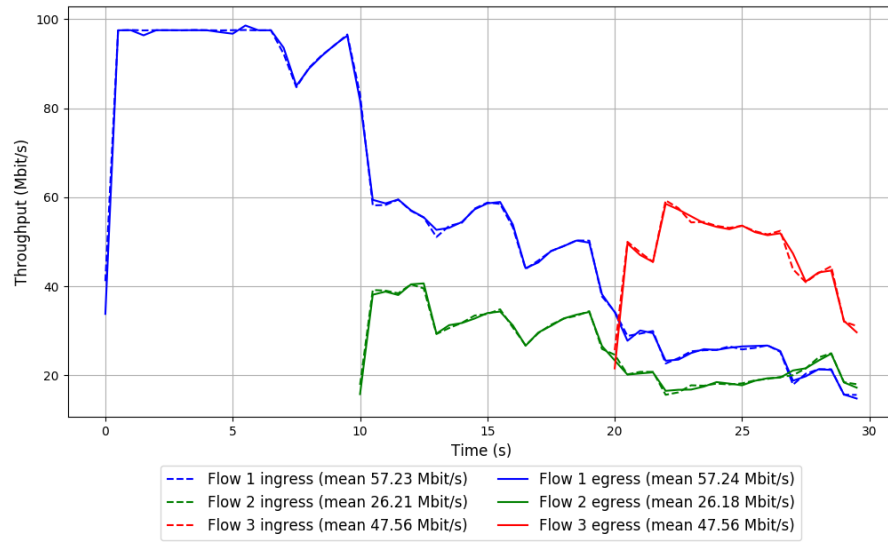
Run 10: Report of TCP BBR — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2018-02-20 09:46:19
End at: 2018-02-20 09:46:49
Local clock offset: -6.662 ms
Remote clock offset: -7.181 ms


# Below is generated by plot.py at 2018-02-20 18:22:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.31 Mbit/s
95th percentile per-packet one-way delay: 51.885 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 29.54 Mbit/s
95th percentile per-packet one-way delay: 37.747 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 34.64 Mbit/s
95th percentile per-packet one-way delay: 51.866 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 47.58 Mbit/s
95th percentile per-packet one-way delay: 54.479 ms
Loss rate: 0.63%
```
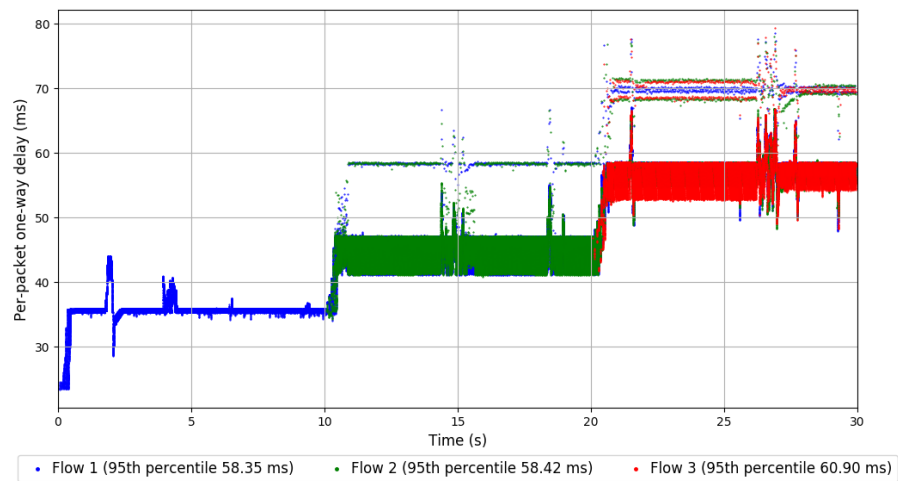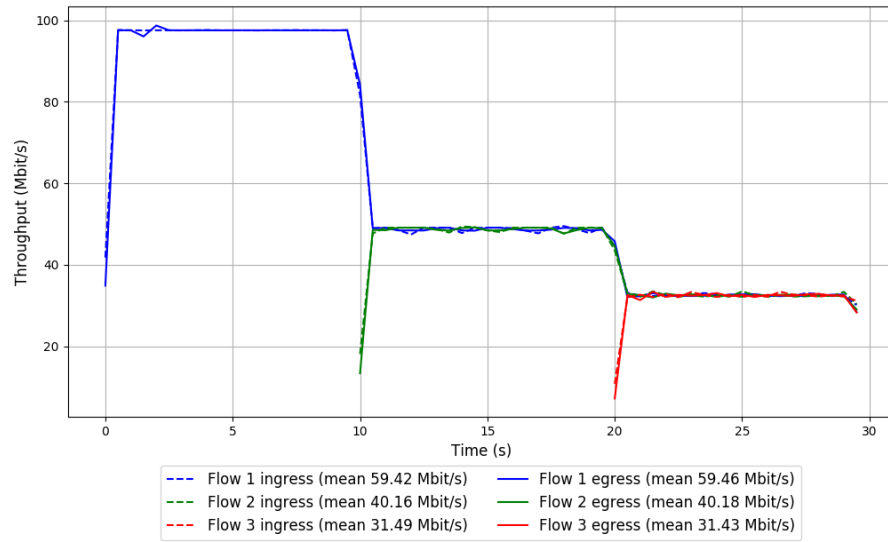
Run 1: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 29.60 Mbit/s)   Flow 1 egress (mean 29.54 Mbit/s)
Flow 2 ingress (mean 34.68 Mbit/s)   Flow 2 egress (mean 34.64 Mbit/s)
Flow 3 ingress (mean 47.63 Mbit/s)   Flow 3 egress (mean 47.58 Mbit/s)

Flow 1 (95th percentile 37.75 ms)   Flow 2 (95th percentile 51.87 ms)   Flow 3 (95th percentile 54.48 ms)

25

```
Run 2: Statistics of TCP Cubic

Start at: 2018-02-20 10:10:59
End at: 2018-02-20 10:11:29
Local clock offset: 5.145 ms
Remote clock offset: -4.288 ms


# Below is generated by plot.py at 2018-02-20 18:22:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.37 Mbit/s
95th percentile per-packet one-way delay: 48.986 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 57.24 Mbit/s
95th percentile per-packet one-way delay: 46.574 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 26.18 Mbit/s
95th percentile per-packet one-way delay: 48.755 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 47.56 Mbit/s
95th percentile per-packet one-way delay: 52.343 ms
Loss rate: 0.51%
```
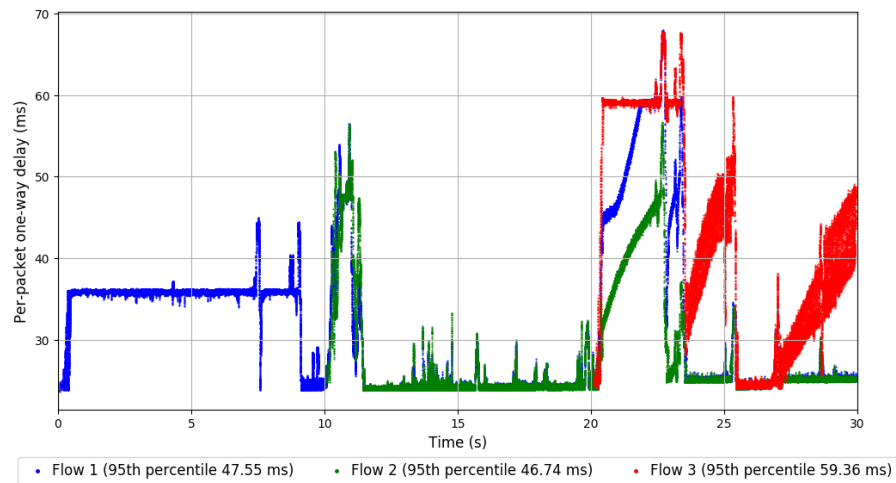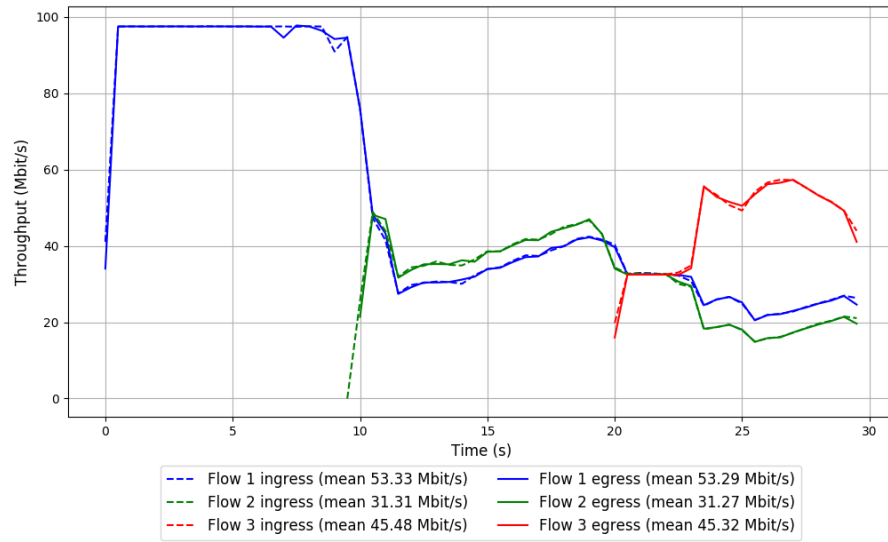
Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2018-02-20 10:35:37
End at: 2018-02-20 10:36:07
Local clock offset: 2.178 ms
Remote clock offset: -3.496 ms


# Below is generated by plot.py at 2018-02-20 18:22:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.53 Mbit/s
95th percentile per-packet one-way delay: 58.414 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 59.46 Mbit/s
95th percentile per-packet one-way delay: 58.346 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 40.18 Mbit/s
95th percentile per-packet one-way delay: 58.423 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 31.43 Mbit/s
95th percentile per-packet one-way delay: 60.897 ms
Loss rate: 0.97%
```
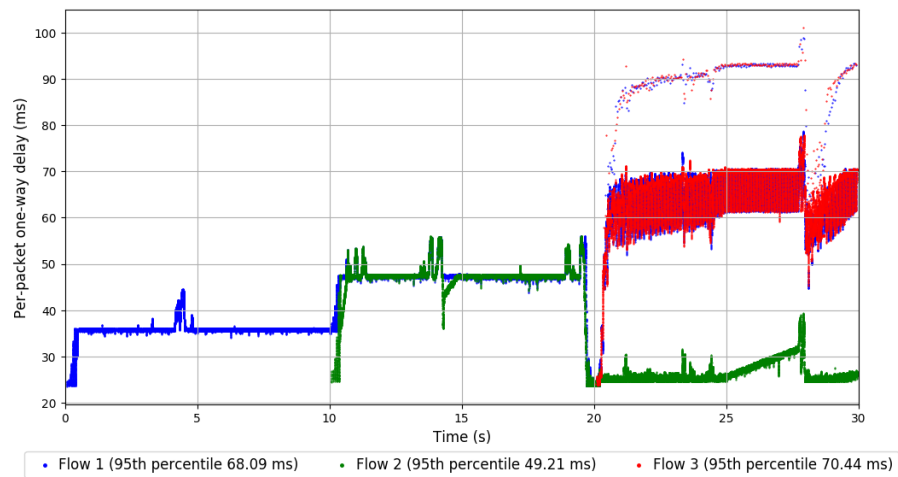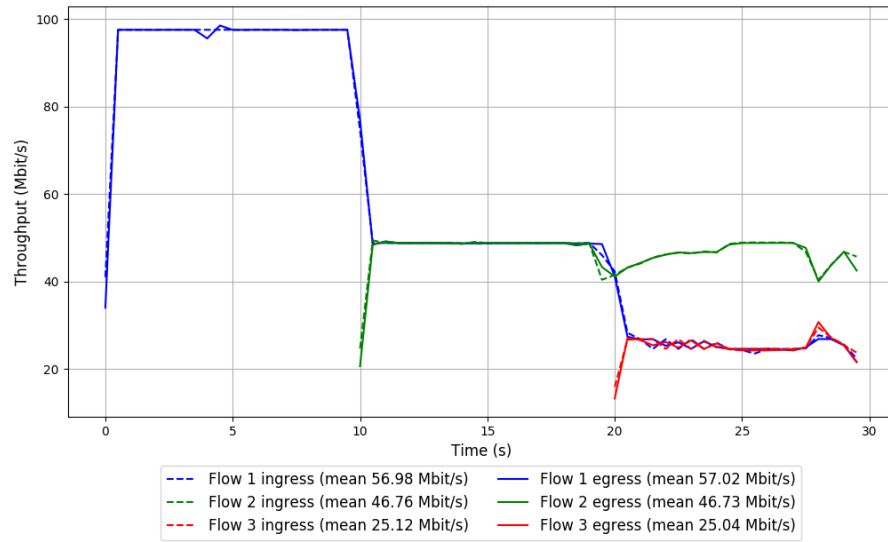
Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 59.42 Mbit/s) --- Flow 1 egress (mean 59.46 Mbit/s)
Flow 2 ingress (mean 40.16 Mbit/s) --- Flow 2 egress (mean 40.18 Mbit/s)
Flow 3 ingress (mean 31.49 Mbit/s) --- Flow 3 egress (mean 31.43 Mbit/s)

Flow 1 (95th percentile 58.35 ms)   Flow 2 (95th percentile 58.42 ms)   Flow 3 (95th percentile 60.90 ms)
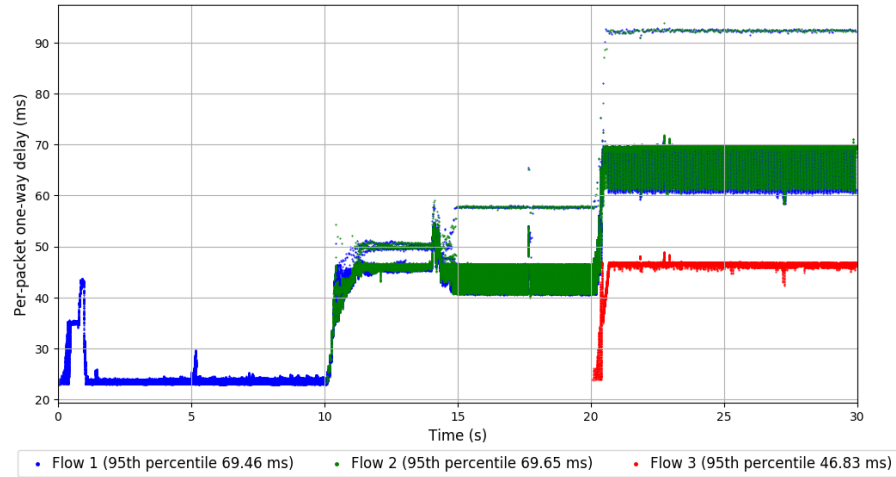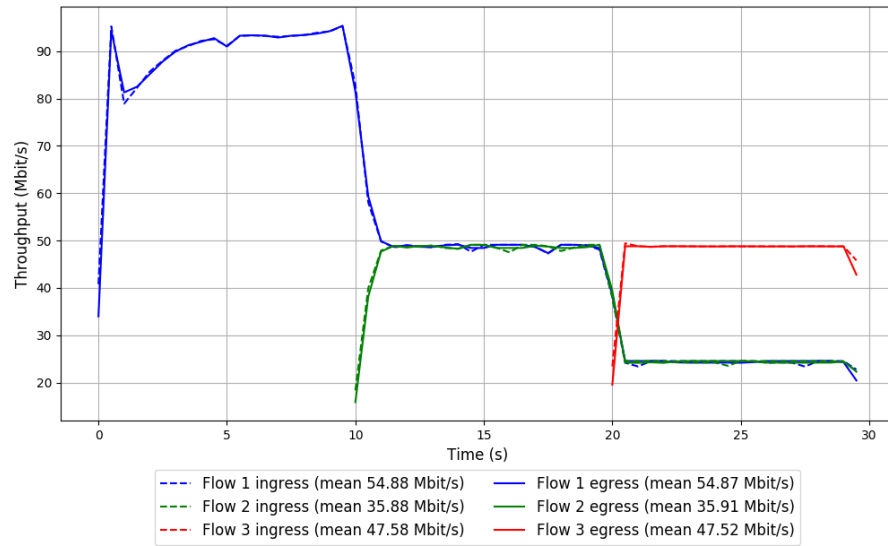
29

```
Run 4: Statistics of TCP Cubic

Start at: 2018-02-20 11:00:12
End at: 2018-02-20 11:00:42
Local clock offset: -1.305 ms
Remote clock offset: -6.01 ms


# Below is generated by plot.py at 2018-02-20 18:22:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.11 Mbit/s
95th percentile per-packet one-way delay: 57.439 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 53.29 Mbit/s
95th percentile per-packet one-way delay: 47.554 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 31.27 Mbit/s
95th percentile per-packet one-way delay: 46.740 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 45.32 Mbit/s
95th percentile per-packet one-way delay: 59.357 ms
Loss rate: 0.92%
```
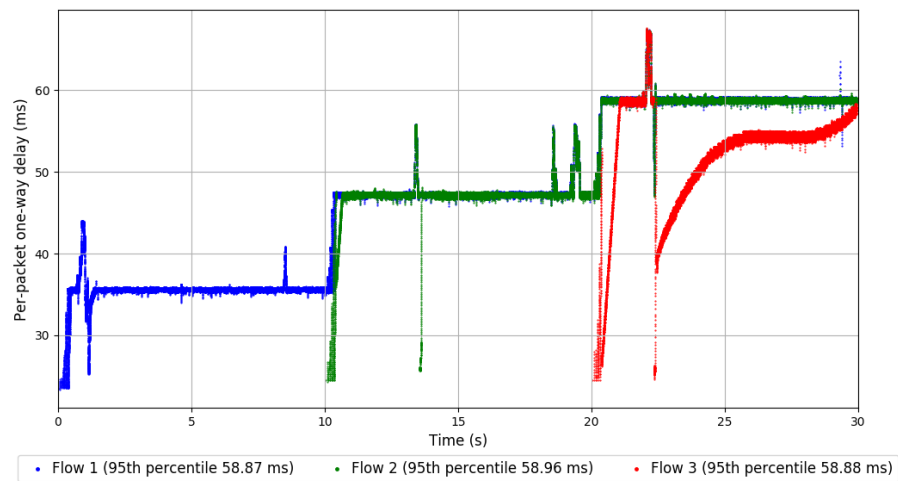
Run 4: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 53.33 Mbit/s) --- Flow 1 egress (mean 53.29 Mbit/s)
Flow 2 ingress (mean 31.31 Mbit/s) --- Flow 2 egress (mean 31.27 Mbit/s)
Flow 3 ingress (mean 45.48 Mbit/s) --- Flow 3 egress (mean 45.32 Mbit/s)

Flow 1 (95th percentile 47.55 ms) • Flow 2 (95th percentile 46.74 ms) • Flow 3 (95th percentile 59.36 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2018-02-20 11:24:43
End at: 2018-02-20 11:25:13
Local clock offset: -7.15 ms
Remote clock offset: -4.116 ms


# Below is generated by plot.py at 2018-02-20 18:22:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.37 Mbit/s
95th percentile per-packet one-way delay: 68.765 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 57.02 Mbit/s
95th percentile per-packet one-way delay: 68.089 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 46.73 Mbit/s
95th percentile per-packet one-way delay: 49.207 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 25.04 Mbit/s
95th percentile per-packet one-way delay: 70.437 ms
Loss rate: 1.04%
```
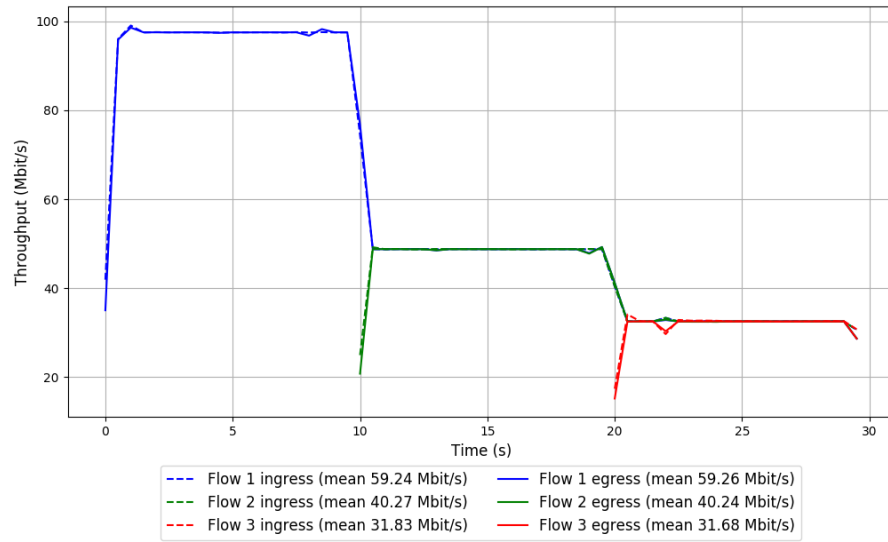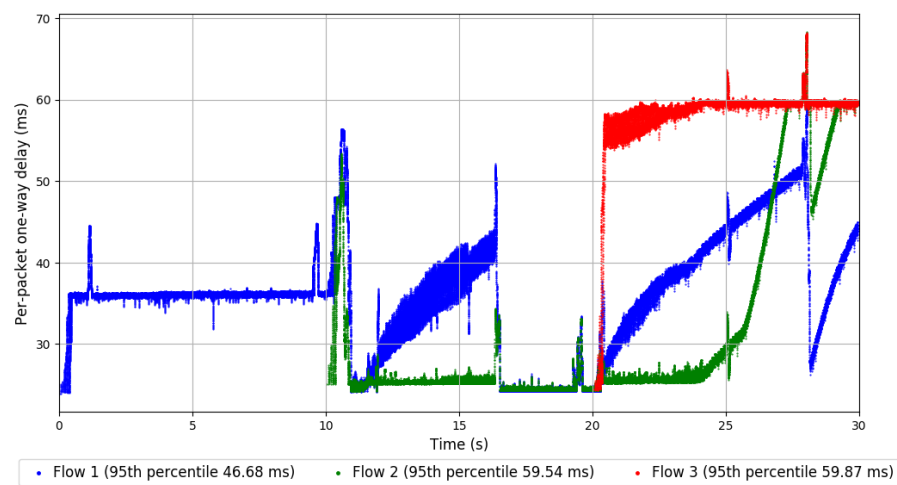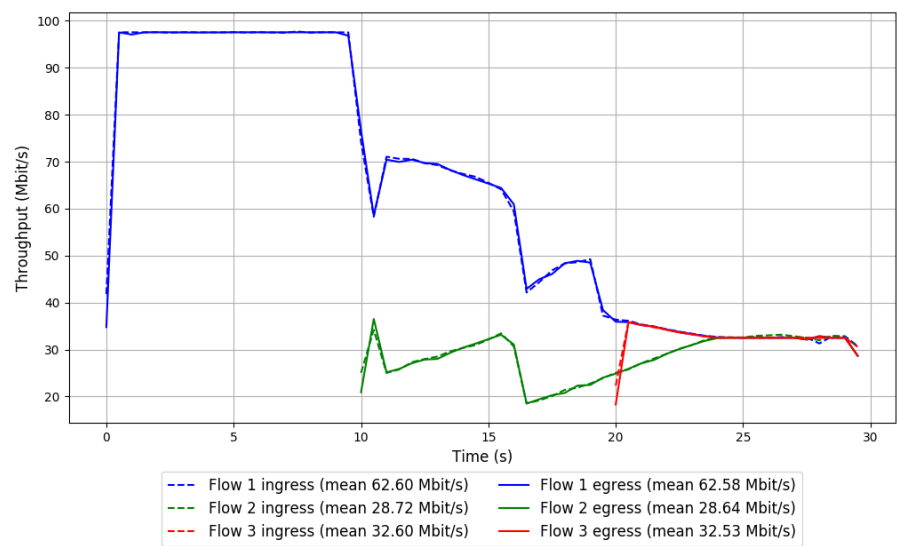
Run 5: Report of TCP Cubic — Data Link

- - - Flow 1 ingress (mean 56.98 Mbit/s) —— Flow 1 egress (mean 57.02 Mbit/s)
- - - Flow 2 ingress (mean 46.76 Mbit/s) —— Flow 2 egress (mean 46.73 Mbit/s)
- - - Flow 3 ingress (mean 25.12 Mbit/s) —— Flow 3 egress (mean 25.04 Mbit/s)

- Flow 1 (95th percentile 68.09 ms)   • Flow 2 (95th percentile 49.21 ms)   • Flow 3 (95th percentile 70.44 ms)

```
Run 6: Statistics of TCP Cubic

Start at: 2018-02-20 11:49:17
End at: 2018-02-20 11:49:47
Local clock offset: 1.055 ms
Remote clock offset: -3.609 ms


# Below is generated by plot.py at 2018-02-20 18:22:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.47 Mbit/s
95th percentile per-packet one-way delay: 69.517 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 54.87 Mbit/s
95th percentile per-packet one-way delay: 69.463 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 35.91 Mbit/s
95th percentile per-packet one-way delay: 69.651 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 47.52 Mbit/s
95th percentile per-packet one-way delay: 46.825 ms
Loss rate: 0.80%
```
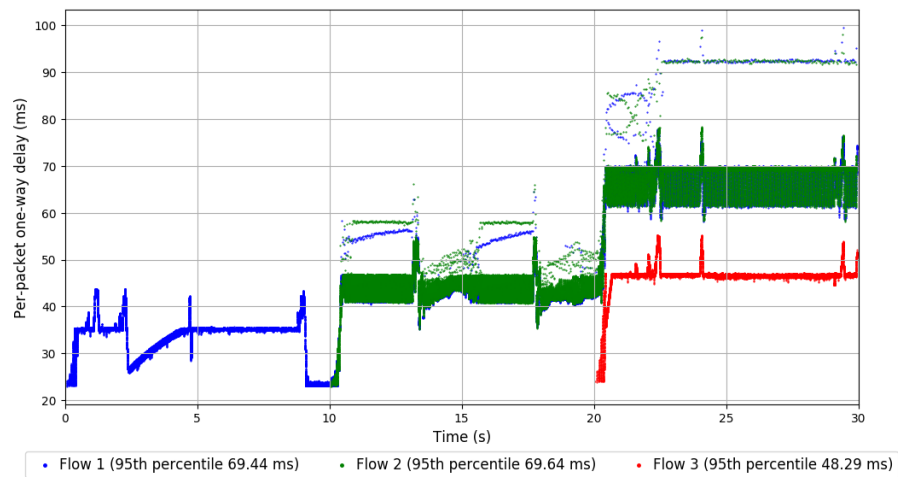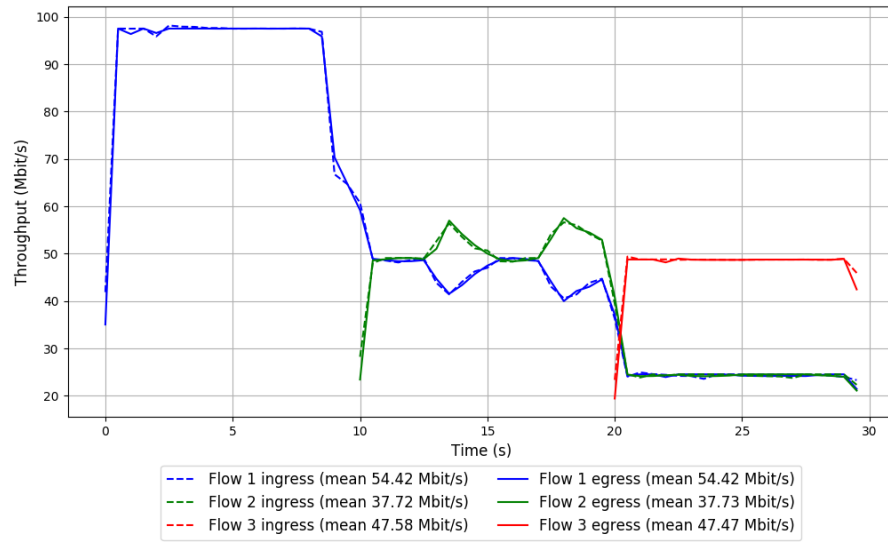
Run 6: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 54.88 Mbit/s)   Flow 1 egress (mean 54.87 Mbit/s)
Flow 2 ingress (mean 35.88 Mbit/s)   Flow 2 egress (mean 35.91 Mbit/s)
Flow 3 ingress (mean 47.58 Mbit/s)   Flow 3 egress (mean 47.52 Mbit/s)

Flow 1 (95th percentile 69.46 ms)   Flow 2 (95th percentile 69.65 ms)   Flow 3 (95th percentile 46.83 ms)

```
Run 7: Statistics of TCP Cubic

Start at: 2018-02-20 12:13:49
End at: 2018-02-20 12:14:19
Local clock offset: 1.607 ms
Remote clock offset: -3.437 ms


# Below is generated by plot.py at 2018-02-20 18:23:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.50 Mbit/s
95th percentile per-packet one-way delay: 58.905 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 59.26 Mbit/s
95th percentile per-packet one-way delay: 58.873 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 40.24 Mbit/s
95th percentile per-packet one-way delay: 58.956 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 31.68 Mbit/s
95th percentile per-packet one-way delay: 58.878 ms
Loss rate: 1.00%
```
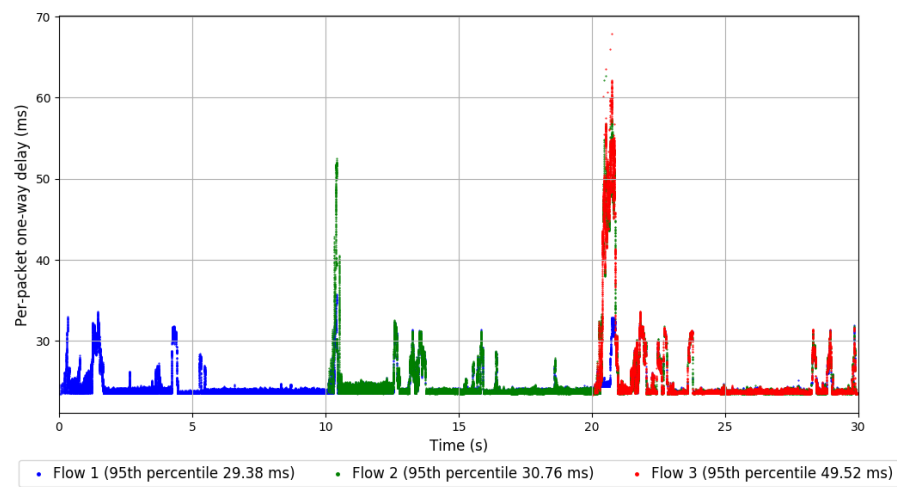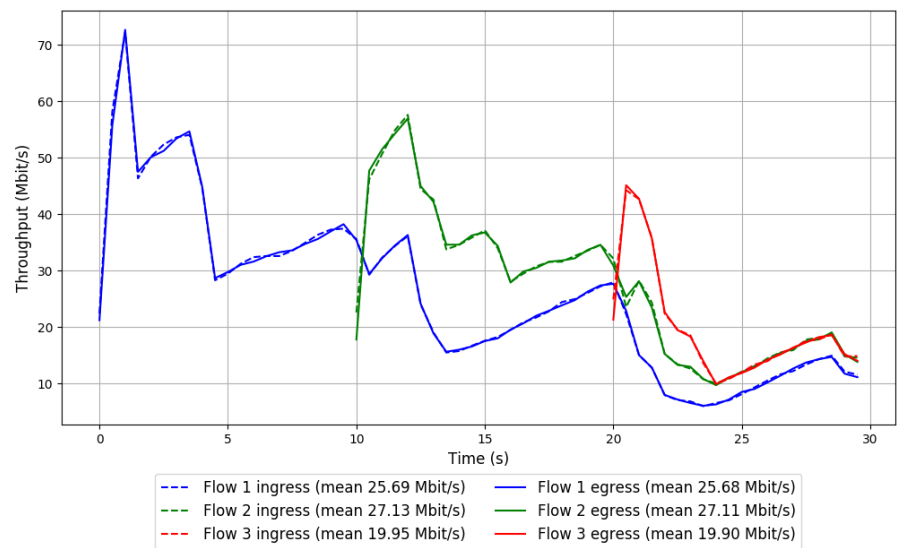
Run 7: Report of TCP Cubic — Data Link

```
Run 8: Statistics of TCP Cubic

Start at: 2018-02-20 12:38:26
End at: 2018-02-20 12:38:56
Local clock offset: 1.593 ms
Remote clock offset: -1.939 ms

# Below is generated by plot.py at 2018-02-20 18:24:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.40 Mbit/s
95th percentile per-packet one-way delay: 59.552 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 62.58 Mbit/s
95th percentile per-packet one-way delay: 46.680 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 28.64 Mbit/s
95th percentile per-packet one-way delay: 59.539 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 32.53 Mbit/s
95th percentile per-packet one-way delay: 59.874 ms
Loss rate: 0.90%
```
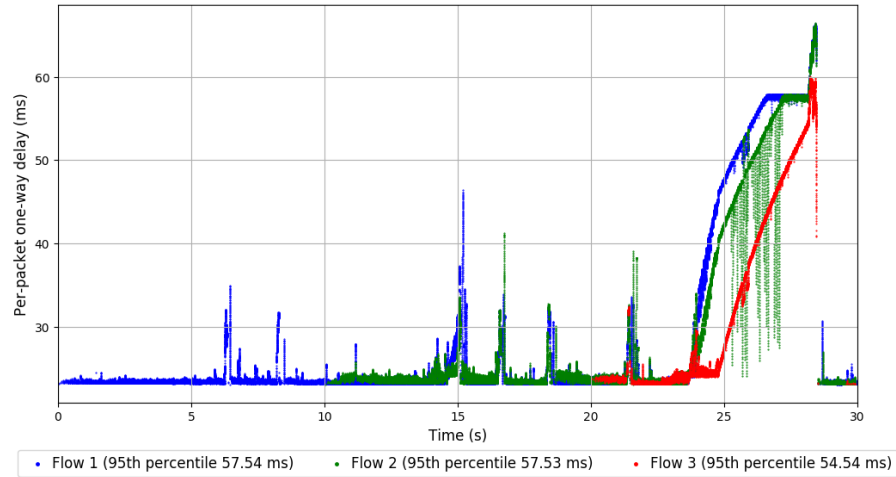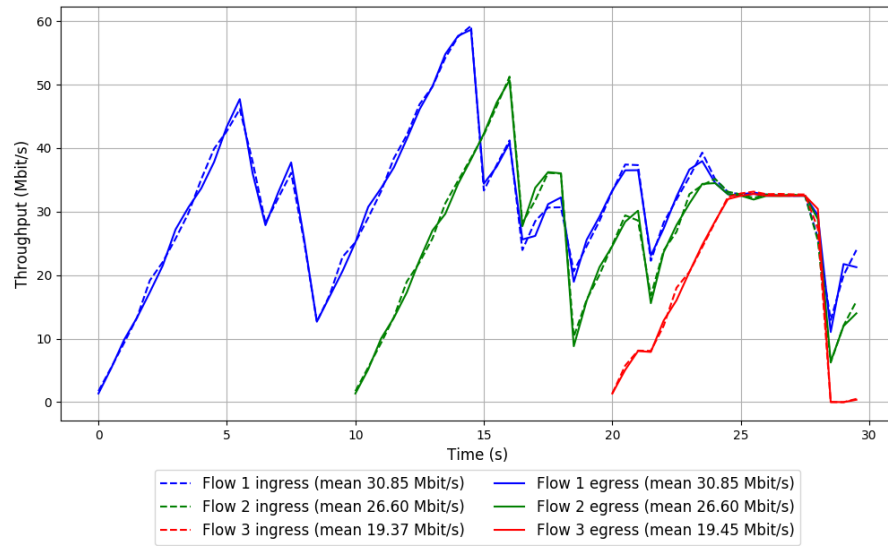
Run 8: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 62.60 Mbit/s)   Flow 1 egress (mean 62.58 Mbit/s)
Flow 2 ingress (mean 28.72 Mbit/s)   Flow 2 egress (mean 28.64 Mbit/s)
Flow 3 ingress (mean 32.60 Mbit/s)   Flow 3 egress (mean 32.53 Mbit/s)

Flow 1 (95th percentile 46.68 ms)   Flow 2 (95th percentile 59.54 ms)   Flow 3 (95th percentile 59.87 ms)

```
Run 9: Statistics of TCP Cubic

Start at: 2018-02-20 13:02:58
End at: 2018-02-20 13:03:28
Local clock offset: -5.09 ms
Remote clock offset: -5.294 ms


# Below is generated by plot.py at 2018-02-20 18:24:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.20 Mbit/s
95th percentile per-packet one-way delay: 69.478 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 54.42 Mbit/s
95th percentile per-packet one-way delay: 69.442 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 37.73 Mbit/s
95th percentile per-packet one-way delay: 69.635 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 47.47 Mbit/s
95th percentile per-packet one-way delay: 48.294 ms
Loss rate: 0.89%
```
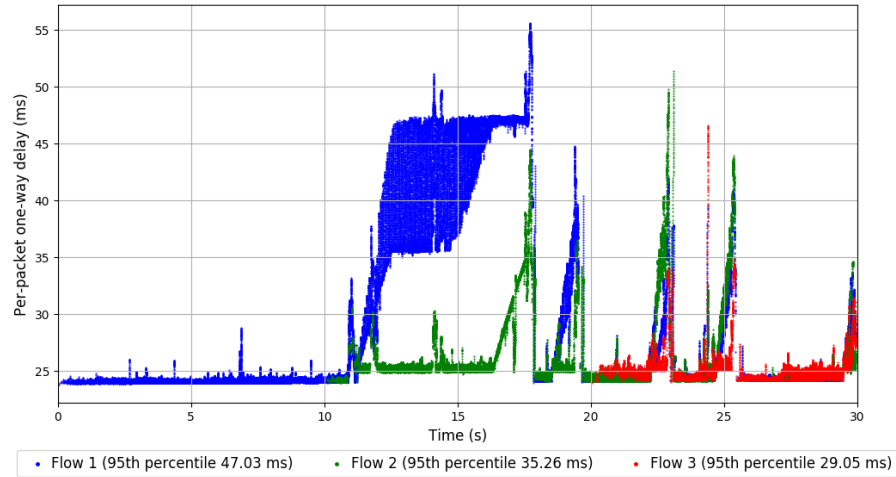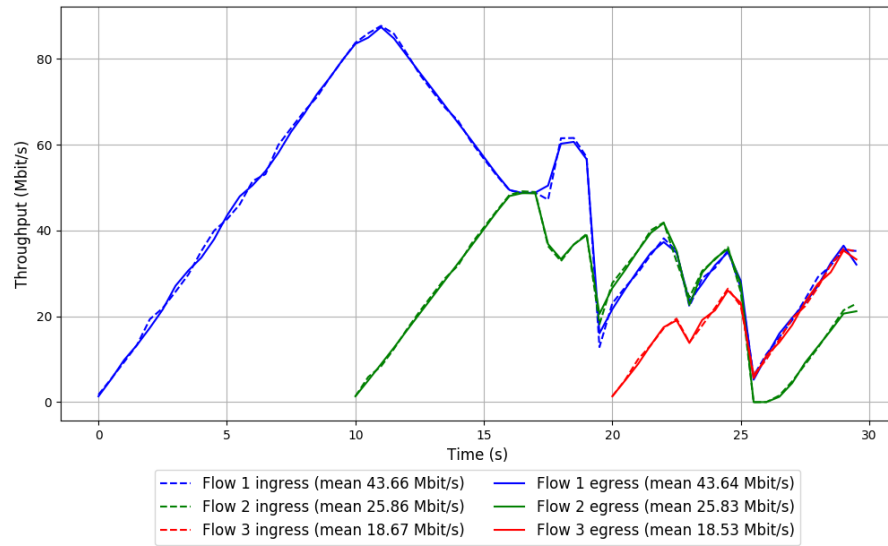
Run 9: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 54.42 Mbit/s) --- Flow 1 egress (mean 54.42 Mbit/s)
Flow 2 ingress (mean 37.72 Mbit/s) --- Flow 2 egress (mean 37.73 Mbit/s)
Flow 3 ingress (mean 47.58 Mbit/s) --- Flow 3 egress (mean 47.47 Mbit/s)

Flow 1 (95th percentile 69.44 ms)   Flow 2 (95th percentile 69.64 ms)   Flow 3 (95th percentile 48.29 ms)

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```
Run 10: Statistics of TCP Cubic

Start at: 2018-02-20 13:27:35
End at: 2018-02-20 13:28:05
Local clock offset: 2.376 ms
Remote clock offset: -4.507 ms


# Below is generated by plot.py at 2018-02-20 18:24:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 50.30 Mbit/s
95th percentile per-packet one-way delay: 30.815 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 25.68 Mbit/s
95th percentile per-packet one-way delay: 29.375 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 27.11 Mbit/s
95th percentile per-packet one-way delay: 30.761 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 19.90 Mbit/s
95th percentile per-packet one-way delay: 49.519 ms
Loss rate: 0.82%
```

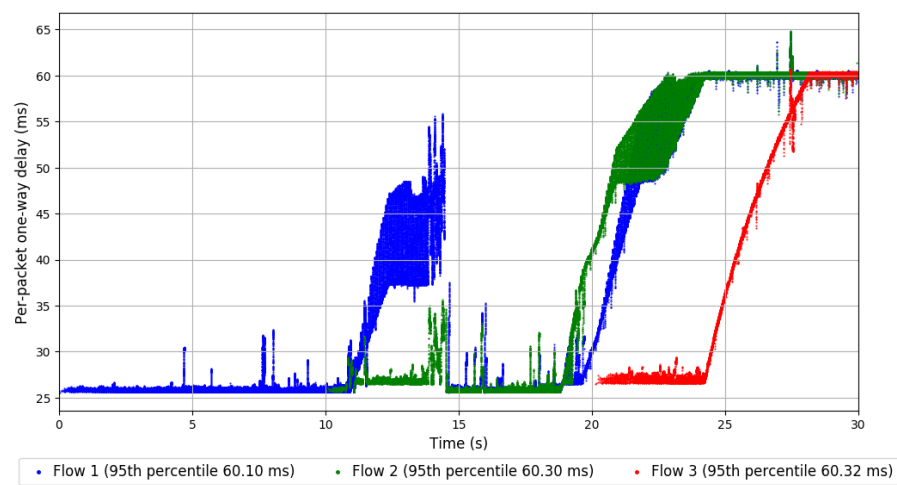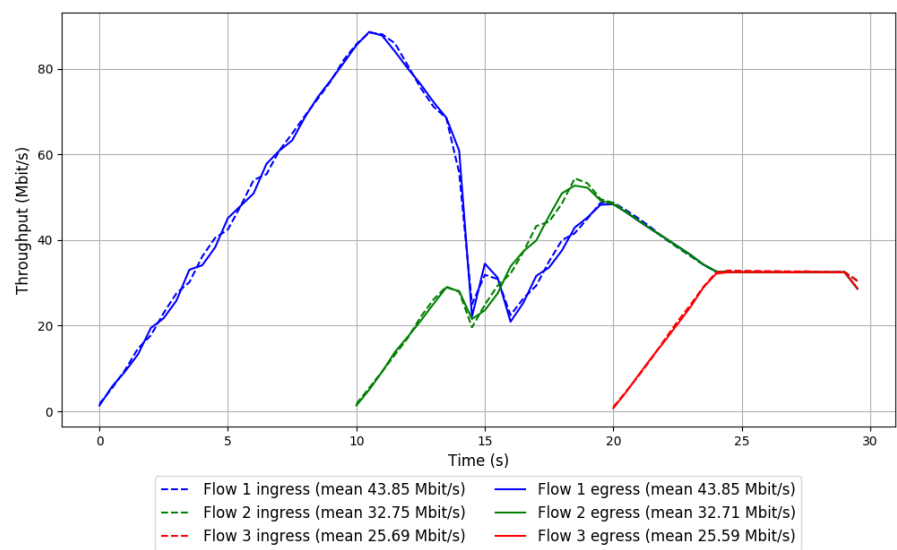Run 10: Report of TCP Cubic — Data Link

```
Run 1: Statistics of LEDBAT

Start at: 2018-02-20 09:57:25
End at: 2018-02-20 09:57:55
Local clock offset: 1.262 ms
Remote clock offset: -4.104 ms

# Below is generated by plot.py at 2018-02-20 18:24:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.92 Mbit/s
95th percentile per-packet one-way delay: 57.513 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 30.85 Mbit/s
95th percentile per-packet one-way delay: 57.537 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 26.60 Mbit/s
95th percentile per-packet one-way delay: 57.531 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 19.45 Mbit/s
95th percentile per-packet one-way delay: 54.542 ms
Loss rate: 0.15%
```
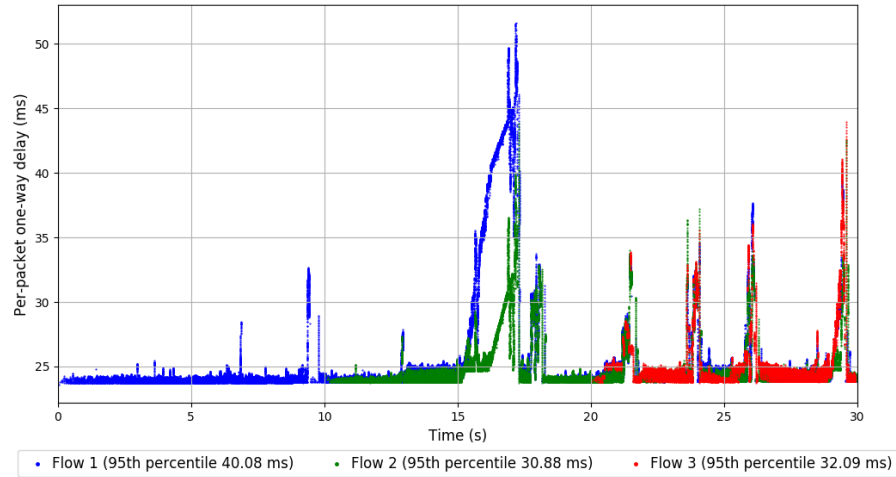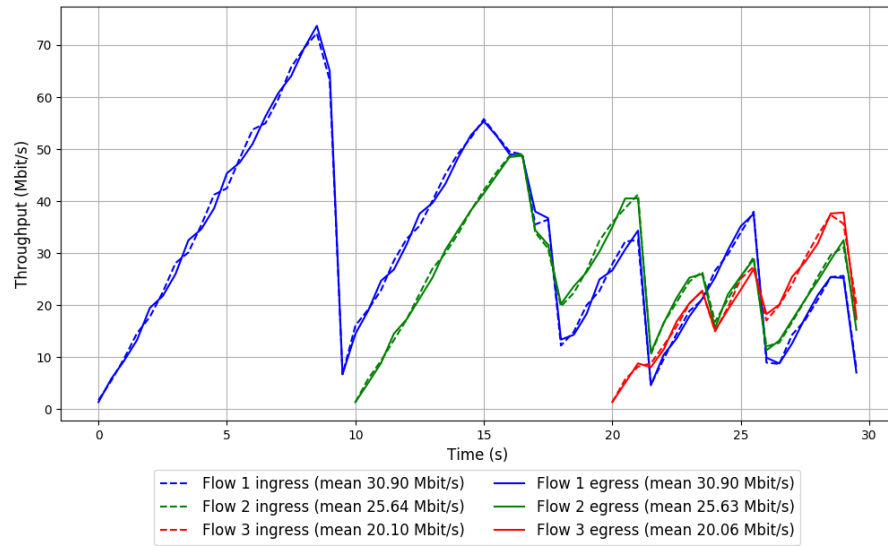
Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2018-02-20 10:21:56
End at: 2018-02-20 10:22:26
Local clock offset: 6.265 ms
Remote clock offset: -1.129 ms


# Below is generated by plot.py at 2018-02-20 18:24:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.96 Mbit/s
95th percentile per-packet one-way delay: 46.734 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 43.64 Mbit/s
95th percentile per-packet one-way delay: 47.033 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 25.83 Mbit/s
95th percentile per-packet one-way delay: 35.259 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 18.53 Mbit/s
95th percentile per-packet one-way delay: 29.054 ms
Loss rate: 1.29%
```
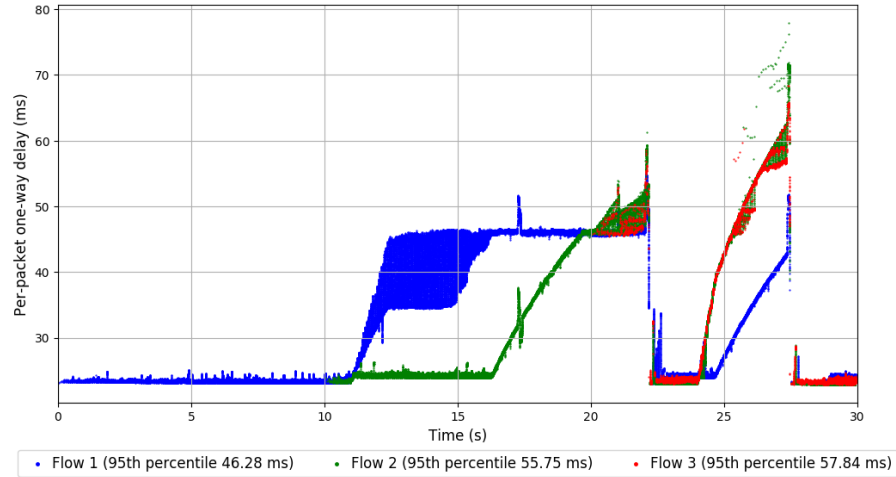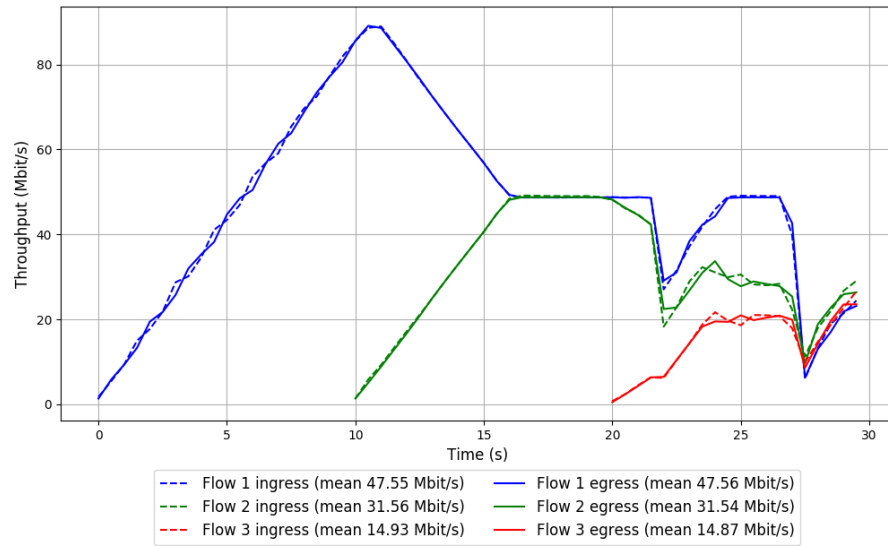
Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2018-02-20 10:46:37
End at: 2018-02-20 10:47:07
Local clock offset: 1.427 ms
Remote clock offset: -7.534 ms


# Below is generated by plot.py at 2018-02-20 18:24:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.02 Mbit/s
95th percentile per-packet one-way delay: 60.225 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 43.85 Mbit/s
95th percentile per-packet one-way delay: 60.101 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 32.71 Mbit/s
95th percentile per-packet one-way delay: 60.301 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 25.59 Mbit/s
95th percentile per-packet one-way delay: 60.323 ms
Loss rate: 1.13%
```
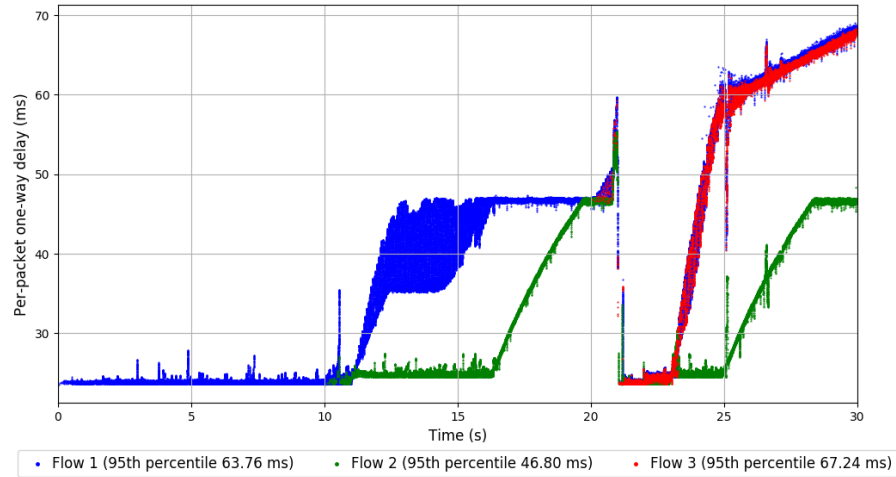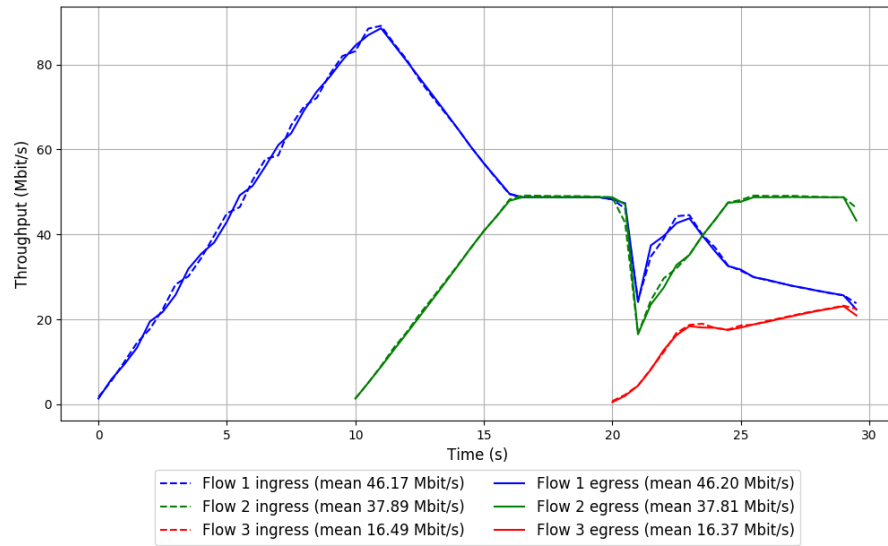
Run 3: Report of LEDBAT — Data Link

- - - Flow 1 ingress (mean 43.85 Mbit/s)   —— Flow 1 egress (mean 43.85 Mbit/s)
- - - Flow 2 ingress (mean 32.75 Mbit/s)   —— Flow 2 egress (mean 32.71 Mbit/s)
- - - Flow 3 ingress (mean 25.69 Mbit/s)   —— Flow 3 egress (mean 25.59 Mbit/s)

- Flow 1 (95th percentile 60.10 ms)   • Flow 2 (95th percentile 60.30 ms)   • Flow 3 (95th percentile 60.32 ms)

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```
Run 4: Statistics of LEDBAT

Start at: 2018-02-20 11:11:10
End at: 2018-02-20 11:11:40
Local clock offset: -4.786 ms
Remote clock offset: -4.856 ms

# Below is generated by plot.py at 2018-02-20 18:24:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.57 Mbit/s
95th percentile per-packet one-way delay: 34.710 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 30.90 Mbit/s
95th percentile per-packet one-way delay: 40.077 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 25.63 Mbit/s
95th percentile per-packet one-way delay: 30.876 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 20.06 Mbit/s
95th percentile per-packet one-way delay: 32.089 ms
Loss rate: 0.74%
```
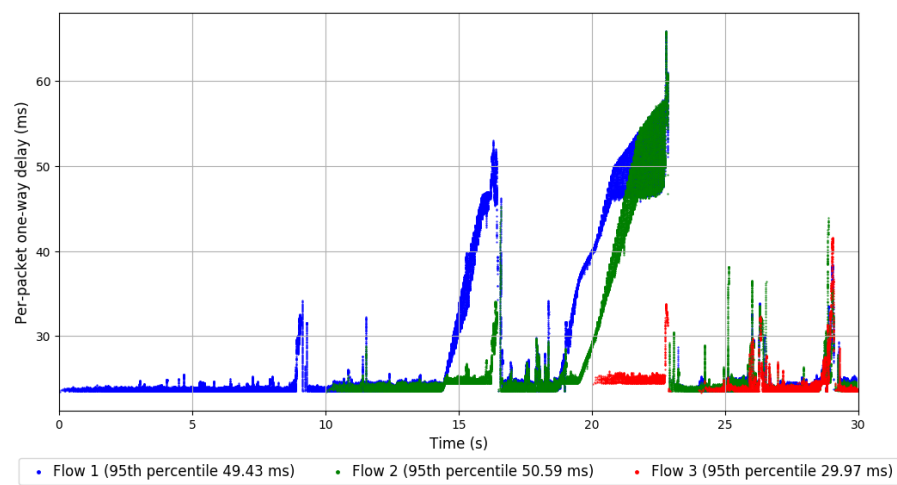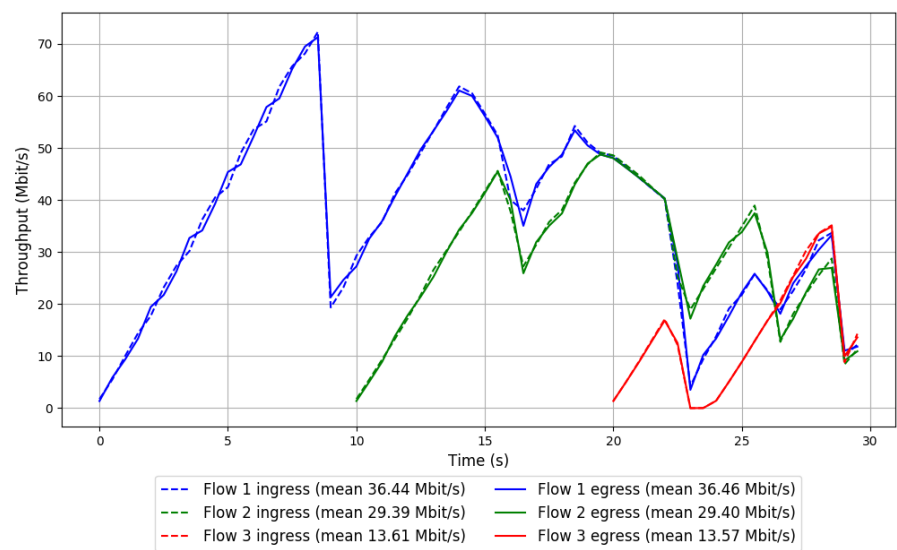
Run 4: Report of LEDBAT — Data Link

- - - Flow 1 ingress (mean 30.90 Mbit/s) —— Flow 1 egress (mean 30.90 Mbit/s)
- - - Flow 2 ingress (mean 25.64 Mbit/s) —— Flow 2 egress (mean 25.63 Mbit/s)
- - - Flow 3 ingress (mean 20.10 Mbit/s) —— Flow 3 egress (mean 20.06 Mbit/s)

• Flow 1 (95th percentile 40.08 ms)   • Flow 2 (95th percentile 30.88 ms)   • Flow 3 (95th percentile 32.09 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2018-02-20 11:35:42
End at: 2018-02-20 11:36:12
Local clock offset: -3.077 ms
Remote clock offset: -3.772 ms


# Below is generated by plot.py at 2018-02-20 18:24:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.43 Mbit/s
95th percentile per-packet one-way delay: 49.841 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 47.56 Mbit/s
95th percentile per-packet one-way delay: 46.283 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 31.54 Mbit/s
95th percentile per-packet one-way delay: 55.746 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 14.87 Mbit/s
95th percentile per-packet one-way delay: 57.835 ms
Loss rate: 1.17%
```
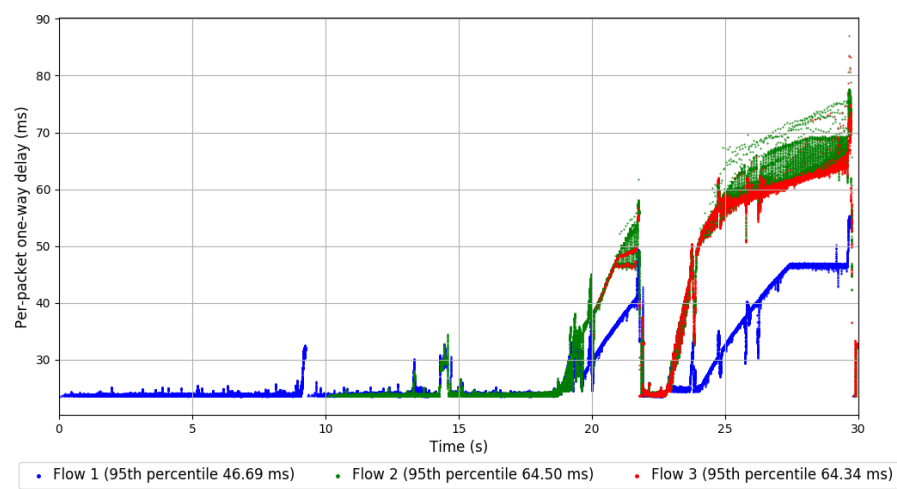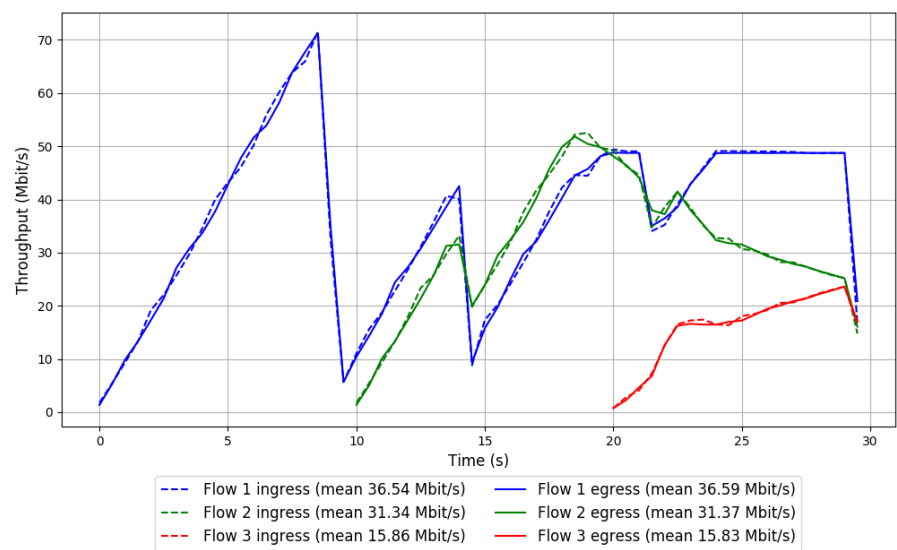
Run 5: Report of LEDBAT — Data Link

Flow 1 ingress (mean 47.55 Mbit/s)   Flow 1 egress (mean 47.56 Mbit/s)
Flow 2 ingress (mean 31.56 Mbit/s)   Flow 2 egress (mean 31.54 Mbit/s)
Flow 3 ingress (mean 14.93 Mbit/s)   Flow 3 egress (mean 14.87 Mbit/s)

Flow 1 (95th percentile 46.28 ms)   Flow 2 (95th percentile 55.75 ms)   Flow 3 (95th percentile 57.84 ms)

```
Run 6: Statistics of LEDBAT

Start at: 2018-02-20 12:00:13
End at: 2018-02-20 12:00:43
Local clock offset: 1.995 ms
Remote clock offset: -4.232 ms

# Below is generated by plot.py at 2018-02-20 18:24:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.75 Mbit/s
95th percentile per-packet one-way delay: 64.024 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 46.20 Mbit/s
95th percentile per-packet one-way delay: 63.756 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 37.81 Mbit/s
95th percentile per-packet one-way delay: 46.804 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 16.37 Mbit/s
95th percentile per-packet one-way delay: 67.237 ms
Loss rate: 1.44%
```
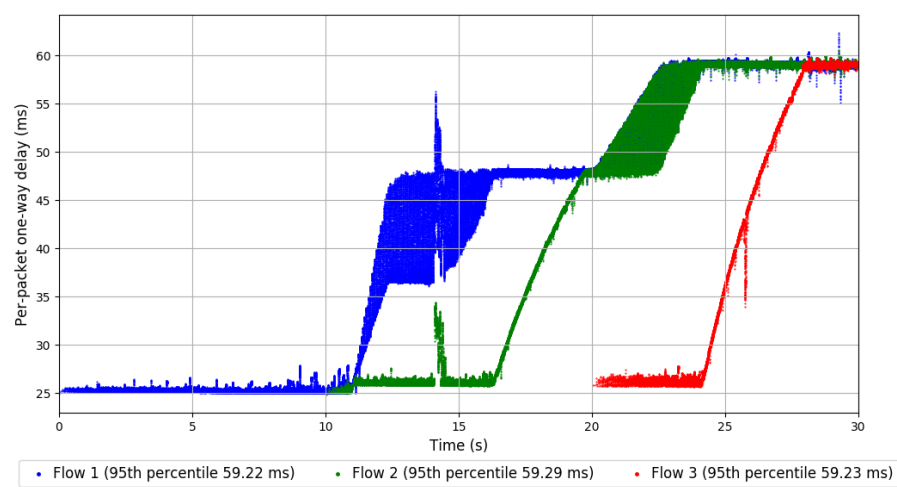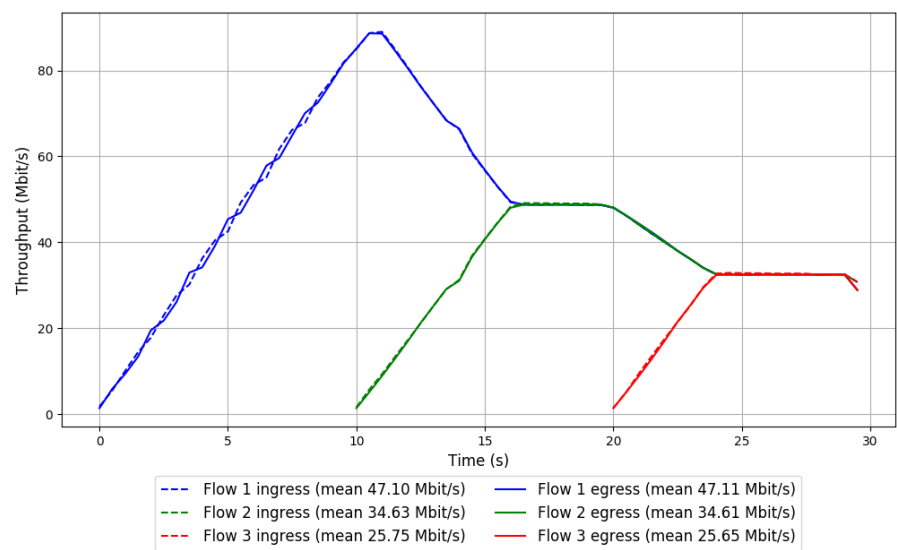
Run 6: Report of LEDBAT — Data Link

Flow 1 ingress (mean 46.17 Mbit/s)   Flow 1 egress (mean 46.20 Mbit/s)
Flow 2 ingress (mean 37.89 Mbit/s)   Flow 2 egress (mean 37.81 Mbit/s)
Flow 3 ingress (mean 16.49 Mbit/s)   Flow 3 egress (mean 16.37 Mbit/s)

Flow 1 (95th percentile 63.76 ms)   Flow 2 (95th percentile 46.80 ms)   Flow 3 (95th percentile 67.24 ms)

```
Run 7: Statistics of LEDBAT

Start at: 2018-02-20 12:24:50
End at: 2018-02-20 12:25:20
Local clock offset: 1.654 ms
Remote clock offset: -2.421 ms

# Below is generated by plot.py at 2018-02-20 18:24:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.44 Mbit/s
95th percentile per-packet one-way delay: 49.411 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 36.46 Mbit/s
95th percentile per-packet one-way delay: 49.427 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 29.40 Mbit/s
95th percentile per-packet one-way delay: 50.594 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 13.57 Mbit/s
95th percentile per-packet one-way delay: 29.966 ms
Loss rate: 0.87%
```
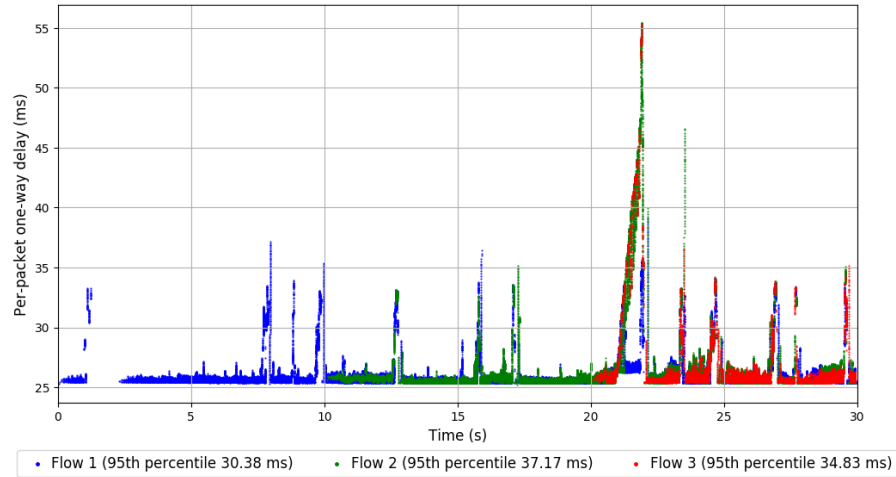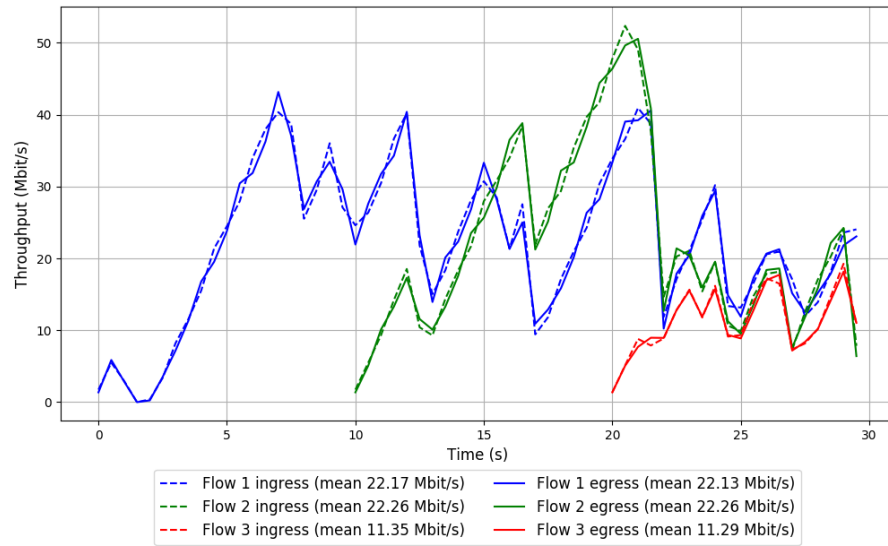
Run 7: Report of LEDBAT — Data Link

Legend:
- Flow 1 ingress (mean 36.44 Mbit/s)
- Flow 1 egress (mean 36.46 Mbit/s)
- Flow 2 ingress (mean 29.39 Mbit/s)
- Flow 2 egress (mean 29.40 Mbit/s)
- Flow 3 ingress (mean 13.61 Mbit/s)
- Flow 3 egress (mean 13.57 Mbit/s)

Legend:
- Flow 1 (95th percentile 49.43 ms)
- Flow 2 (95th percentile 50.59 ms)
- Flow 3 (95th percentile 29.97 ms)

```
Run 8: Statistics of LEDBAT

Start at: 2018-02-20 12:49:24
End at: 2018-02-20 12:49:54
Local clock offset: -2.956 ms
Remote clock offset: -3.342 ms

# Below is generated by plot.py at 2018-02-20 18:24:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.62 Mbit/s
95th percentile per-packet one-way delay: 62.480 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 36.59 Mbit/s
95th percentile per-packet one-way delay: 46.687 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 31.37 Mbit/s
95th percentile per-packet one-way delay: 64.499 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 15.83 Mbit/s
95th percentile per-packet one-way delay: 64.338 ms
Loss rate: 0.81%
```
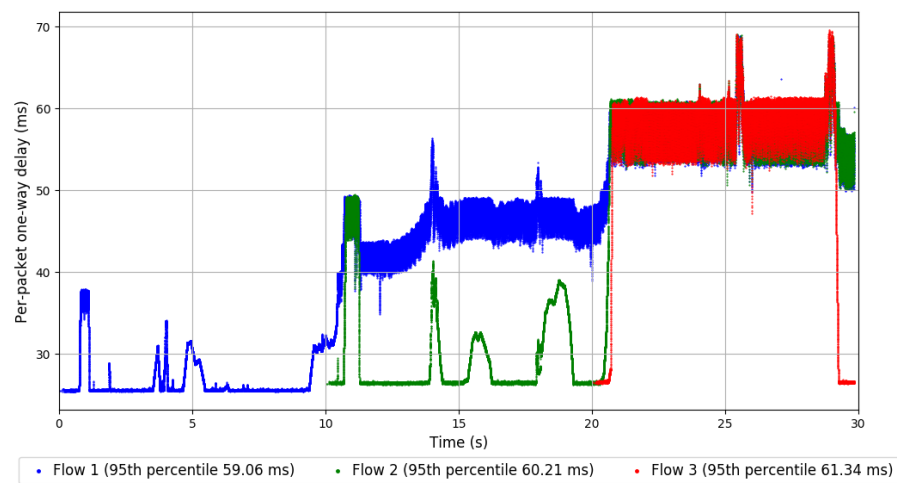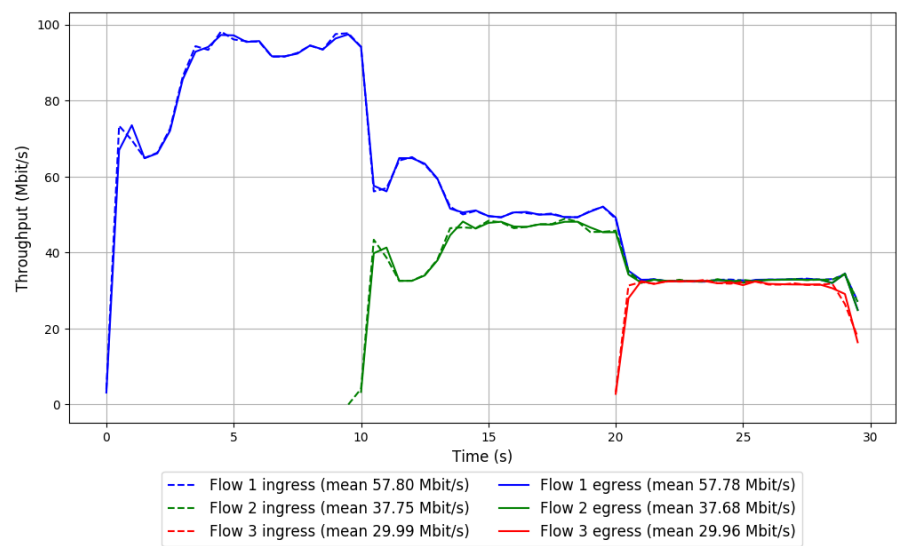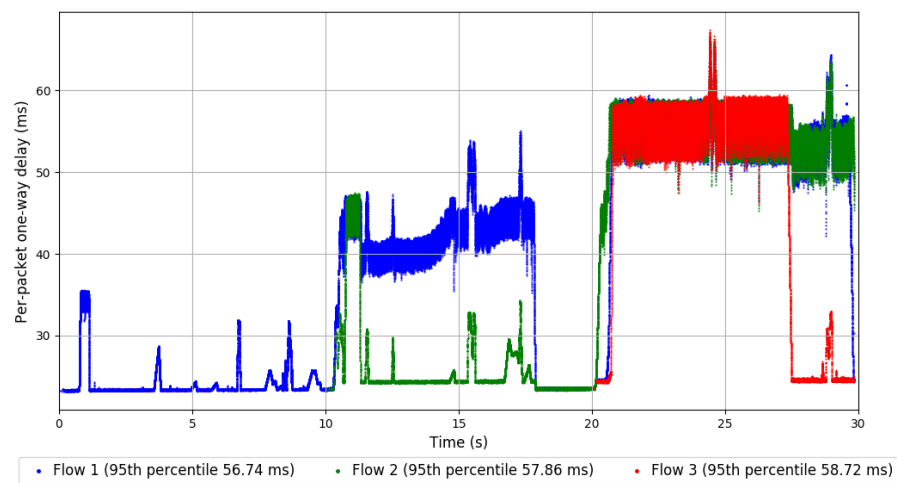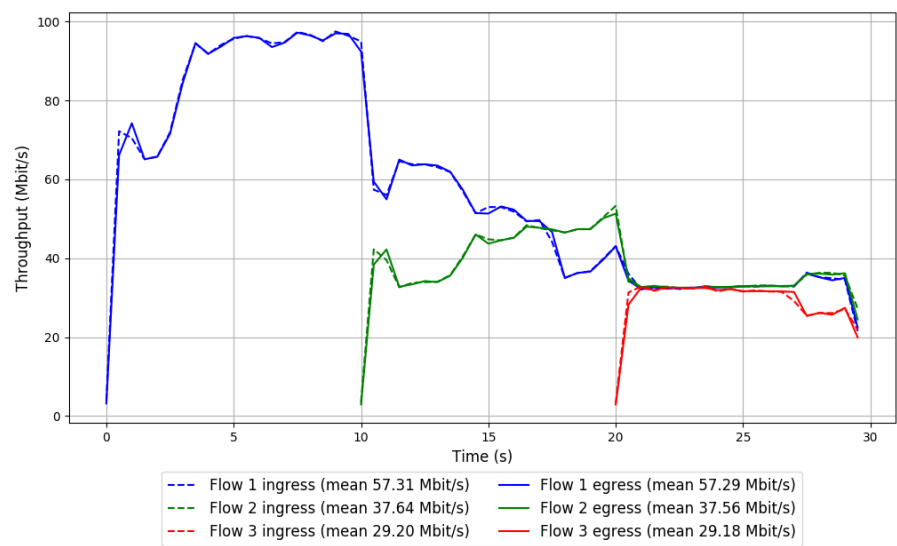
Run 8: Report of LEDBAT — Data Link

- - - Flow 1 ingress (mean 36.54 Mbit/s) ——— Flow 1 egress (mean 36.59 Mbit/s)
- - - Flow 2 ingress (mean 31.34 Mbit/s) ——— Flow 2 egress (mean 31.37 Mbit/s)
- - - Flow 3 ingress (mean 15.86 Mbit/s) ——— Flow 3 egress (mean 15.83 Mbit/s)

• Flow 1 (95th percentile 46.69 ms)   • Flow 2 (95th percentile 64.50 ms)   • Flow 3 (95th percentile 64.34 ms)

```
Run 9: Statistics of LEDBAT

Start at: 2018-02-20 13:13:58
End at: 2018-02-20 13:14:28
Local clock offset: -4.287 ms
Remote clock offset: -8.826 ms


# Below is generated by plot.py at 2018-02-20 18:25:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.62 Mbit/s
95th percentile per-packet one-way delay: 59.255 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 47.11 Mbit/s
95th percentile per-packet one-way delay: 59.215 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 34.61 Mbit/s
95th percentile per-packet one-way delay: 59.294 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 25.65 Mbit/s
95th percentile per-packet one-way delay: 59.230 ms
Loss rate: 1.12%
```
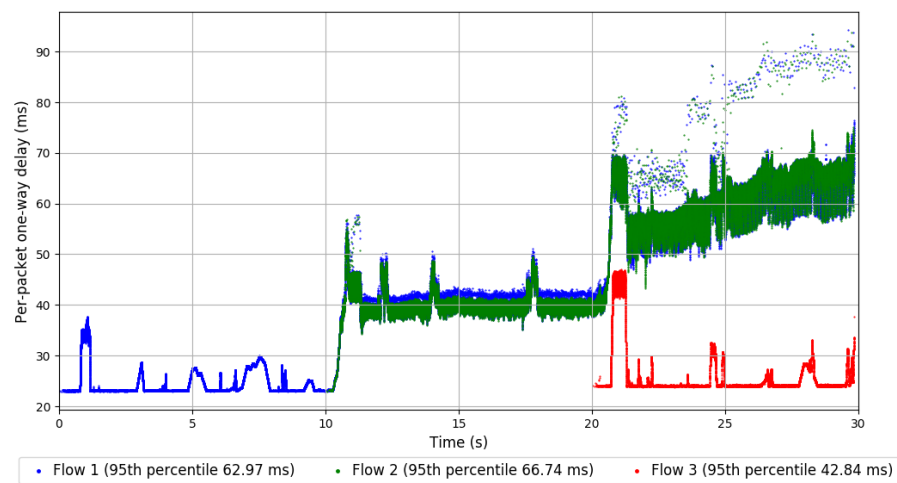
Run 9: Report of LEDBAT — Data Link

Flow 1 ingress (mean 47.10 Mbit/s) --- Flow 1 egress (mean 47.11 Mbit/s)
Flow 2 ingress (mean 34.63 Mbit/s) --- Flow 2 egress (mean 34.61 Mbit/s)
Flow 3 ingress (mean 25.75 Mbit/s) --- Flow 3 egress (mean 25.65 Mbit/s)

Flow 1 (95th percentile 59.22 ms)   Flow 2 (95th percentile 59.29 ms)   Flow 3 (95th percentile 59.23 ms)
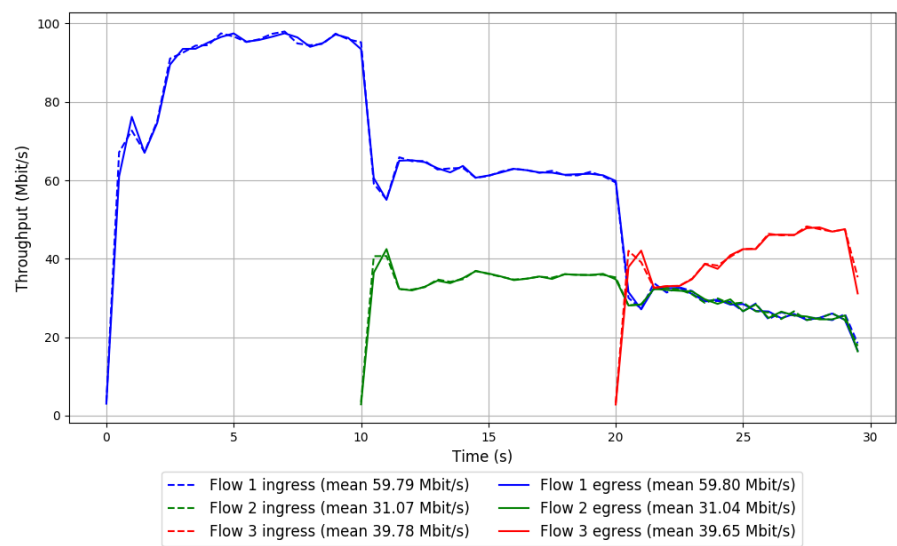
61

```
Run 10: Statistics of LEDBAT

Start at: 2018-02-20 13:39:11
End at: 2018-02-20 13:39:41
Local clock offset: 4.581 ms
Remote clock offset: -5.479 ms


# Below is generated by plot.py at 2018-02-20 18:25:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.65 Mbit/s
95th percentile per-packet one-way delay: 32.563 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 22.13 Mbit/s
95th percentile per-packet one-way delay: 30.376 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 22.26 Mbit/s
95th percentile per-packet one-way delay: 37.170 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 11.29 Mbit/s
95th percentile per-packet one-way delay: 34.834 ms
Loss rate: 1.08%
```

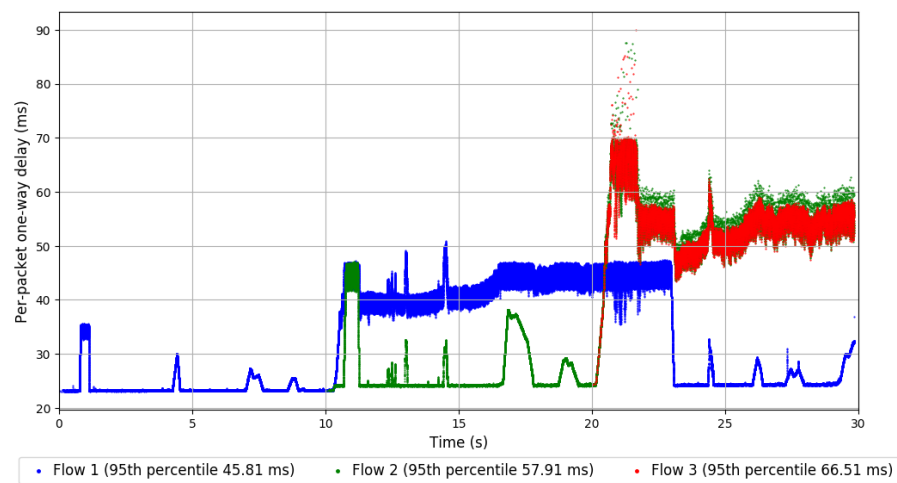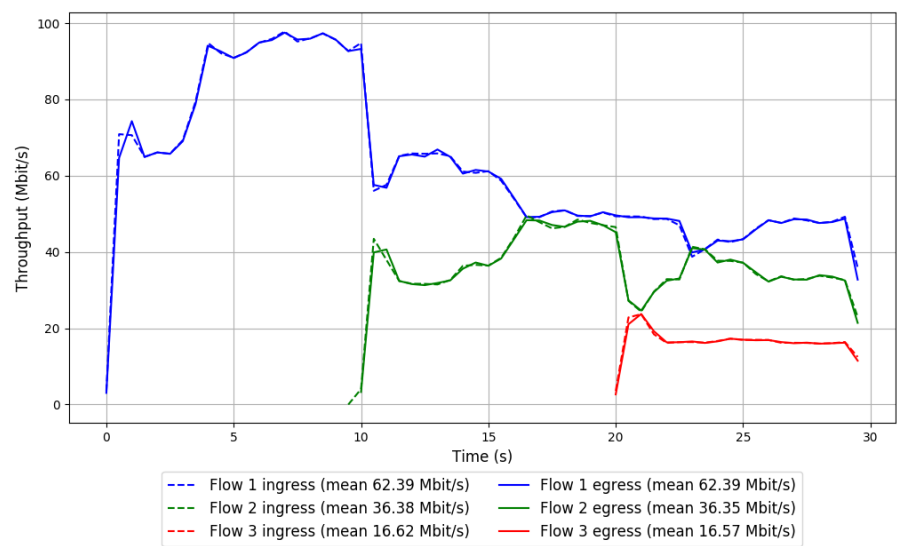Run 10: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC

Start at: 2018-02-20 10:00:11
End at: 2018-02-20 10:00:41
Local clock offset: 2.474 ms
Remote clock offset: -5.81 ms


# Below is generated by plot.py at 2018-02-20 18:25:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.68 Mbit/s
95th percentile per-packet one-way delay: 60.065 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 57.78 Mbit/s
95th percentile per-packet one-way delay: 59.059 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 37.68 Mbit/s
95th percentile per-packet one-way delay: 60.210 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 29.96 Mbit/s
95th percentile per-packet one-way delay: 61.339 ms
Loss rate: 0.66%
```
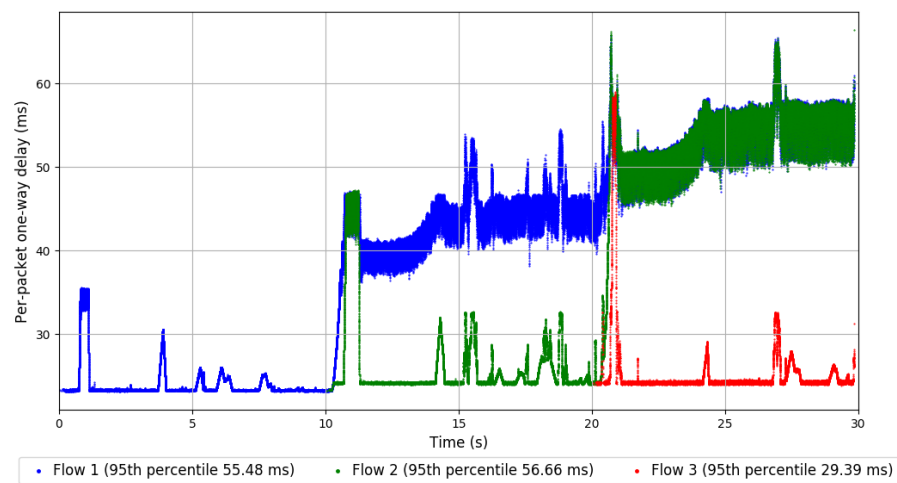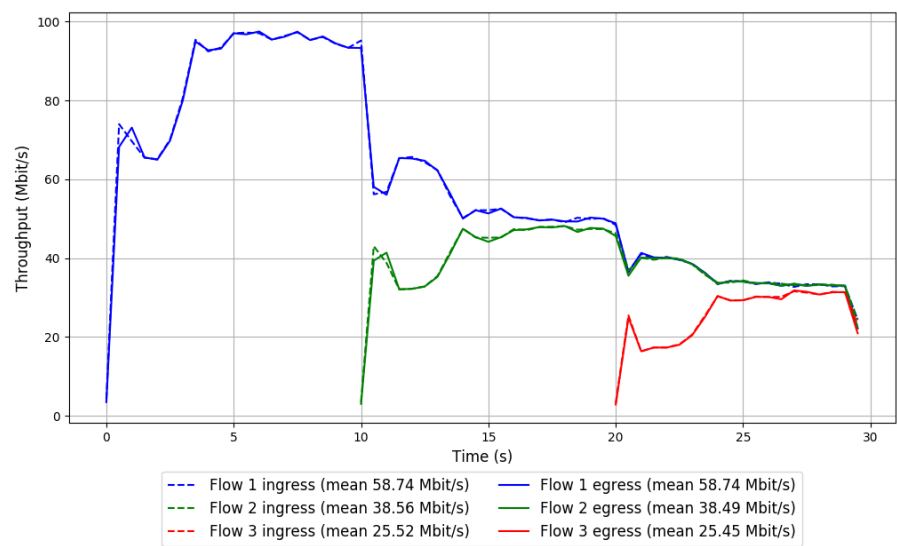
Run 1: Report of PCC — Data Link

```
Run 2: Statistics of PCC

Start at: 2018-02-20 10:24:43
End at: 2018-02-20 10:25:13
Local clock offset: 4.807 ms
Remote clock offset: -0.359 ms

# Below is generated by plot.py at 2018-02-20 18:25:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.84 Mbit/s
95th percentile per-packet one-way delay: 57.713 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 57.29 Mbit/s
95th percentile per-packet one-way delay: 56.739 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 37.56 Mbit/s
95th percentile per-packet one-way delay: 57.861 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 29.18 Mbit/s
95th percentile per-packet one-way delay: 58.715 ms
Loss rate: 0.59%
```
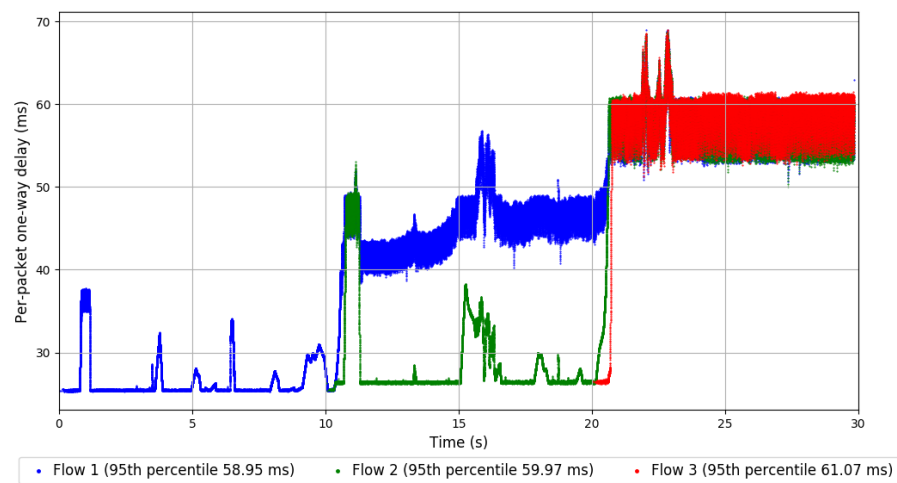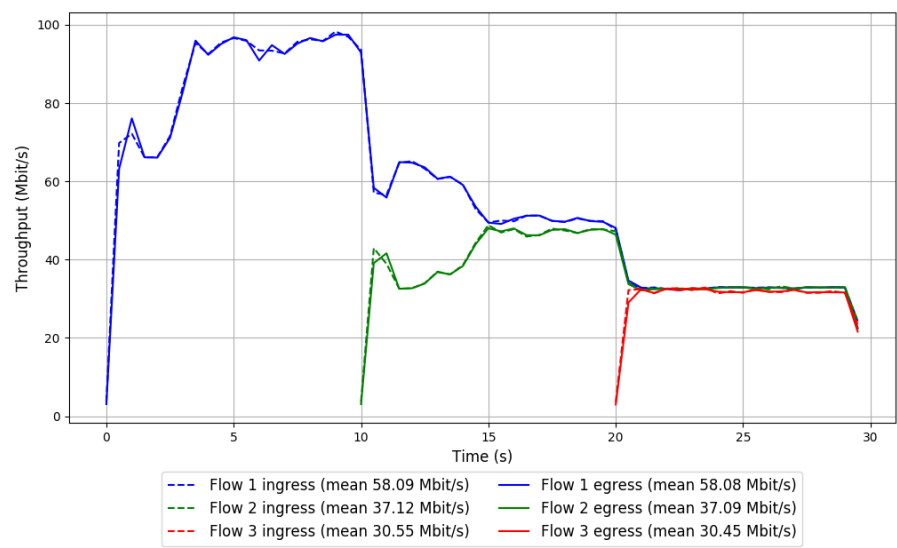
Run 2: Report of PCC — Data Link

Flow 1 ingress (mean 57.31 Mbit/s)   Flow 1 egress (mean 57.29 Mbit/s)
Flow 2 ingress (mean 37.64 Mbit/s)   Flow 2 egress (mean 37.56 Mbit/s)
Flow 3 ingress (mean 29.20 Mbit/s)   Flow 3 egress (mean 29.18 Mbit/s)

Flow 1 (95th percentile 56.74 ms)   Flow 2 (95th percentile 57.86 ms)   Flow 3 (95th percentile 58.72 ms)

67

```
Run 3: Statistics of PCC

Start at: 2018-02-20 10:49:24
End at: 2018-02-20 10:49:54
Local clock offset: 1.325 ms
Remote clock offset: -5.196 ms


# Below is generated by plot.py at 2018-02-20 18:25:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.45 Mbit/s
95th percentile per-packet one-way delay: 64.287 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 59.80 Mbit/s
95th percentile per-packet one-way delay: 62.966 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 31.04 Mbit/s
95th percentile per-packet one-way delay: 66.740 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 39.65 Mbit/s
95th percentile per-packet one-way delay: 42.836 ms
Loss rate: 0.84%
```
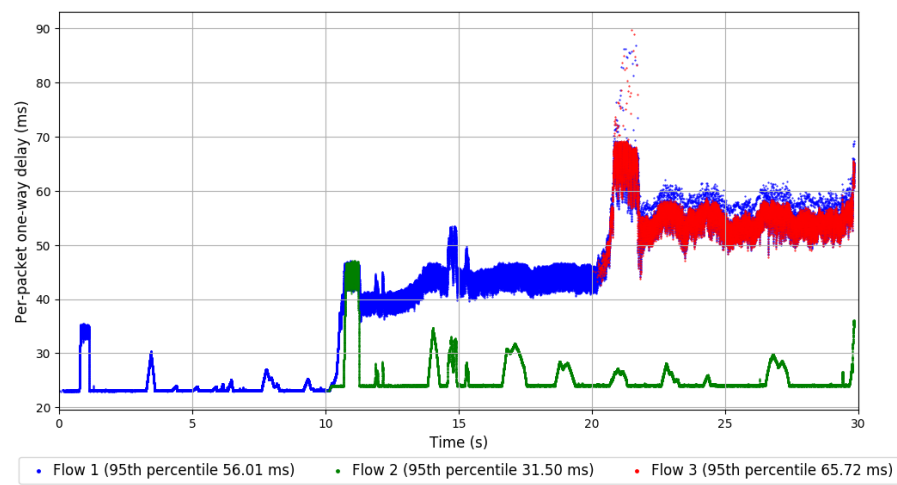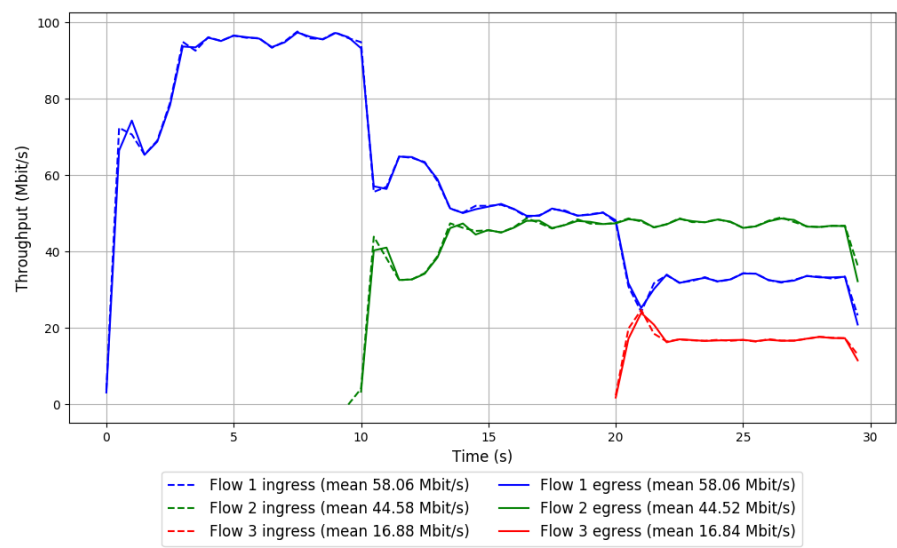
Run 3: Report of PCC — Data Link

Flow 1 ingress (mean 59.79 Mbit/s) --- Flow 1 egress (mean 59.80 Mbit/s)
Flow 2 ingress (mean 31.07 Mbit/s) --- Flow 2 egress (mean 31.04 Mbit/s)
Flow 3 ingress (mean 39.78 Mbit/s) --- Flow 3 egress (mean 39.65 Mbit/s)

Flow 1 (95th percentile 62.97 ms) • Flow 2 (95th percentile 66.74 ms) • Flow 3 (95th percentile 42.84 ms)

69

```
Run 4: Statistics of PCC

Start at: 2018-02-20 11:13:55
End at: 2018-02-20 11:14:25
Local clock offset: -5.453 ms
Remote clock offset: -4.323 ms


# Below is generated by plot.py at 2018-02-20 18:25:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.00 Mbit/s
95th percentile per-packet one-way delay: 55.783 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 62.39 Mbit/s
95th percentile per-packet one-way delay: 45.814 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 36.35 Mbit/s
95th percentile per-packet one-way delay: 57.905 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 16.57 Mbit/s
95th percentile per-packet one-way delay: 66.508 ms
Loss rate: 0.89%
```
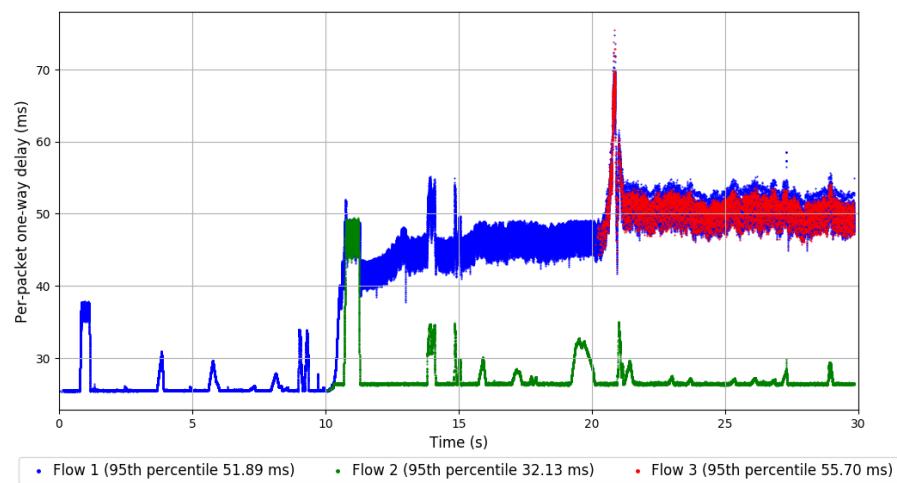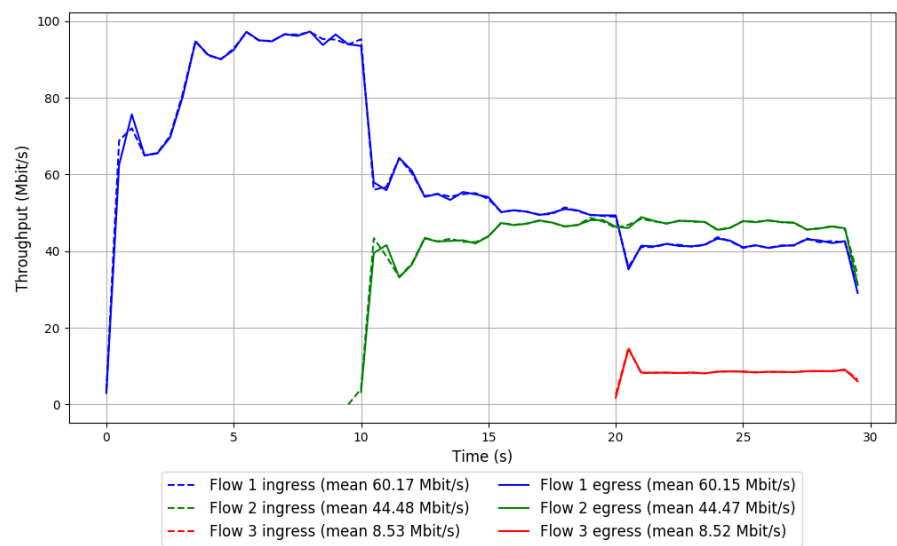
Run 4: Report of PCC — Data Link

- - - Flow 1 ingress (mean 62.39 Mbit/s) —— Flow 1 egress (mean 62.39 Mbit/s)
- - - Flow 2 ingress (mean 36.38 Mbit/s) —— Flow 2 egress (mean 36.35 Mbit/s)
- - - Flow 3 ingress (mean 16.62 Mbit/s) —— Flow 3 egress (mean 16.57 Mbit/s)

• Flow 1 (95th percentile 45.81 ms)　　• Flow 2 (95th percentile 57.91 ms)　　• Flow 3 (95th percentile 66.51 ms)

71

```
Run 5: Statistics of PCC

Start at: 2018-02-20 11:38:28
End at: 2018-02-20 11:38:58
Local clock offset: -1.679 ms
Remote clock offset: -3.873 ms


# Below is generated by plot.py at 2018-02-20 18:26:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.68 Mbit/s
95th percentile per-packet one-way delay: 55.943 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 58.74 Mbit/s
95th percentile per-packet one-way delay: 55.480 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 38.49 Mbit/s
95th percentile per-packet one-way delay: 56.659 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 25.45 Mbit/s
95th percentile per-packet one-way delay: 29.390 ms
Loss rate: 0.80%
```
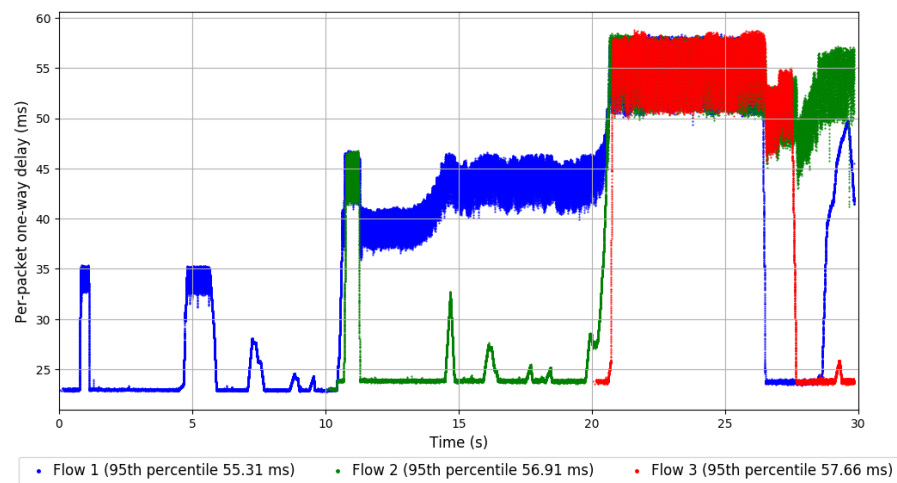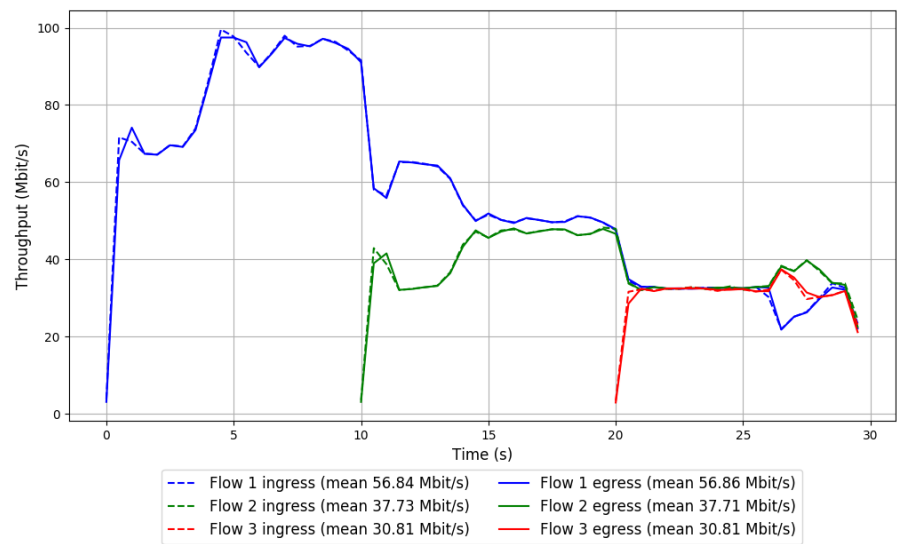
Run 5: Report of PCC — Data Link

Flow 1 ingress (mean 58.74 Mbit/s) ---- Flow 1 egress (mean 58.74 Mbit/s)
Flow 2 ingress (mean 38.56 Mbit/s) ---- Flow 2 egress (mean 38.49 Mbit/s)
Flow 3 ingress (mean 25.52 Mbit/s) ---- Flow 3 egress (mean 25.45 Mbit/s)

Flow 1 (95th percentile 55.48 ms)   Flow 2 (95th percentile 56.66 ms)   Flow 3 (95th percentile 29.39 ms)

73

```
Run 6: Statistics of PCC

Start at: 2018-02-20 12:03:00
End at: 2018-02-20 12:03:30
Local clock offset: 2.072 ms
Remote clock offset: -6.136 ms


# Below is generated by plot.py at 2018-02-20 18:26:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.74 Mbit/s
95th percentile per-packet one-way delay: 59.964 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 58.08 Mbit/s
95th percentile per-packet one-way delay: 58.955 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 37.09 Mbit/s
95th percentile per-packet one-way delay: 59.969 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 30.45 Mbit/s
95th percentile per-packet one-way delay: 61.074 ms
Loss rate: 0.97%
```
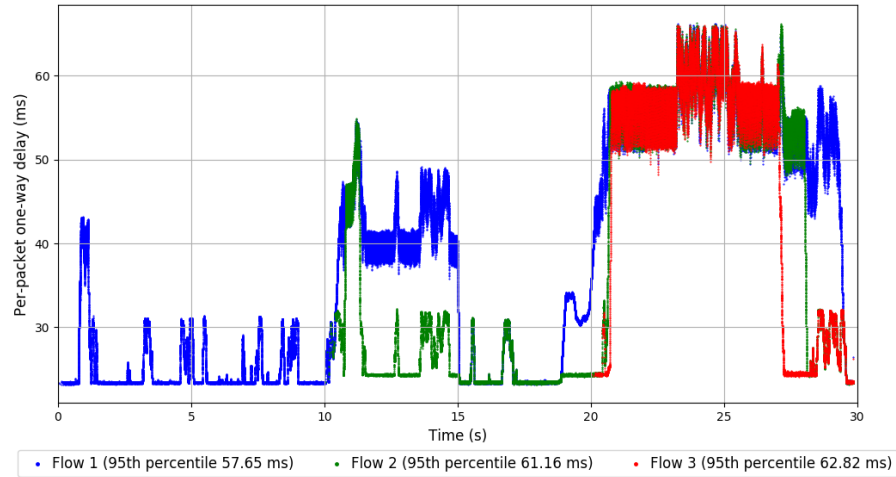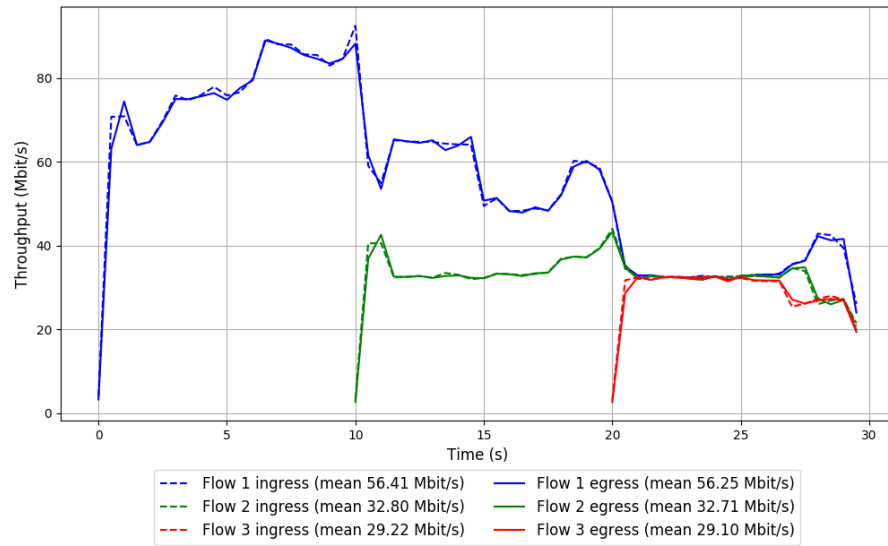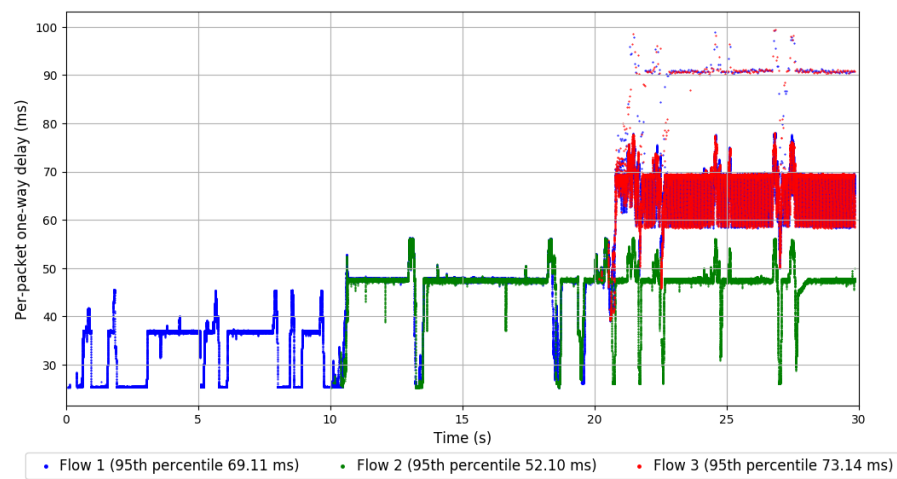
Run 6: Report of PCC — Data Link

Flow 1 ingress (mean 58.09 Mbit/s) — Flow 1 egress (mean 58.08 Mbit/s)
Flow 2 ingress (mean 37.12 Mbit/s) — Flow 2 egress (mean 37.09 Mbit/s)
Flow 3 ingress (mean 30.55 Mbit/s) — Flow 3 egress (mean 30.45 Mbit/s)

Flow 1 (95th percentile 58.95 ms)   Flow 2 (95th percentile 59.97 ms)   Flow 3 (95th percentile 61.07 ms)

```
Run 7: Statistics of PCC

Start at: 2018-02-20 12:27:36
End at: 2018-02-20 12:28:06
Local clock offset: 1.669 ms
Remote clock offset: -1.872 ms


# Below is generated by plot.py at 2018-02-20 18:26:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.18 Mbit/s
95th percentile per-packet one-way delay: 55.946 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 58.06 Mbit/s
95th percentile per-packet one-way delay: 56.009 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 44.52 Mbit/s
95th percentile per-packet one-way delay: 31.504 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 16.84 Mbit/s
95th percentile per-packet one-way delay: 65.718 ms
Loss rate: 1.03%
```
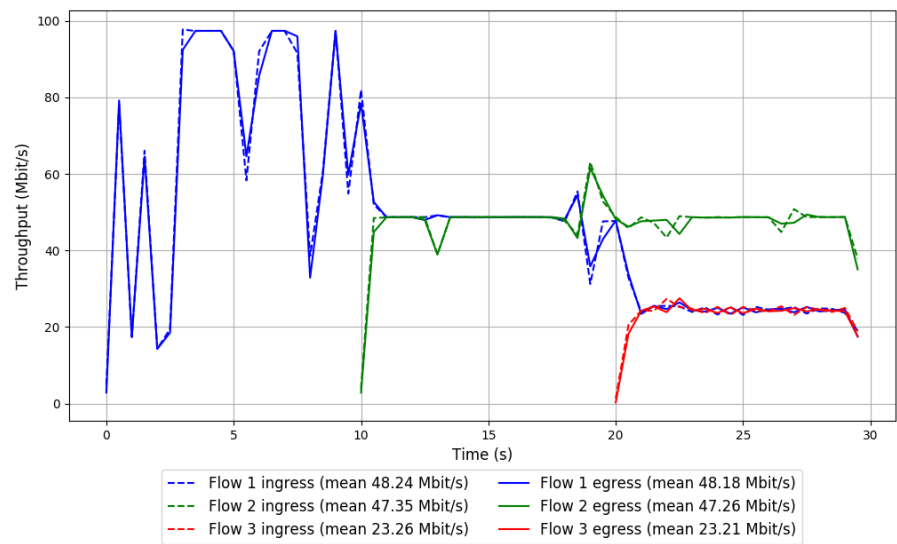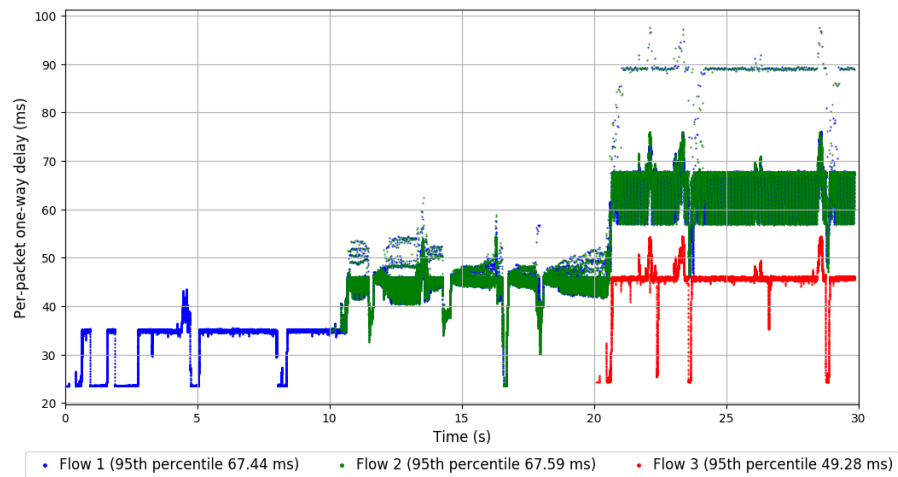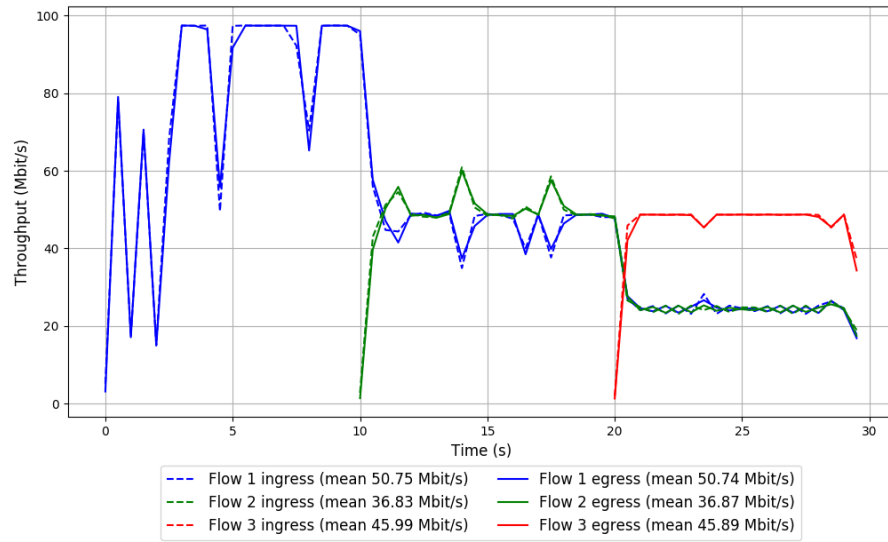
Run 7: Report of PCC — Data Link

- - - Flow 1 ingress (mean 58.06 Mbit/s) —— Flow 1 egress (mean 58.06 Mbit/s)
- - - Flow 2 ingress (mean 44.58 Mbit/s) —— Flow 2 egress (mean 44.52 Mbit/s)
- - - Flow 3 ingress (mean 16.88 Mbit/s) —— Flow 3 egress (mean 16.84 Mbit/s)

• Flow 1 (95th percentile 56.01 ms)   • Flow 2 (95th percentile 31.50 ms)   • Flow 3 (95th percentile 65.72 ms)

```
Run 8: Statistics of PCC

Start at: 2018-02-20 12:52:10
End at: 2018-02-20 12:52:40
Local clock offset: -3.624 ms
Remote clock offset: -6.007 ms


# Below is generated by plot.py at 2018-02-20 18:26:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.51 Mbit/s
95th percentile per-packet one-way delay: 51.565 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 60.15 Mbit/s
95th percentile per-packet one-way delay: 51.893 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 44.47 Mbit/s
95th percentile per-packet one-way delay: 32.127 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 8.52 Mbit/s
95th percentile per-packet one-way delay: 55.705 ms
Loss rate: 0.87%
```
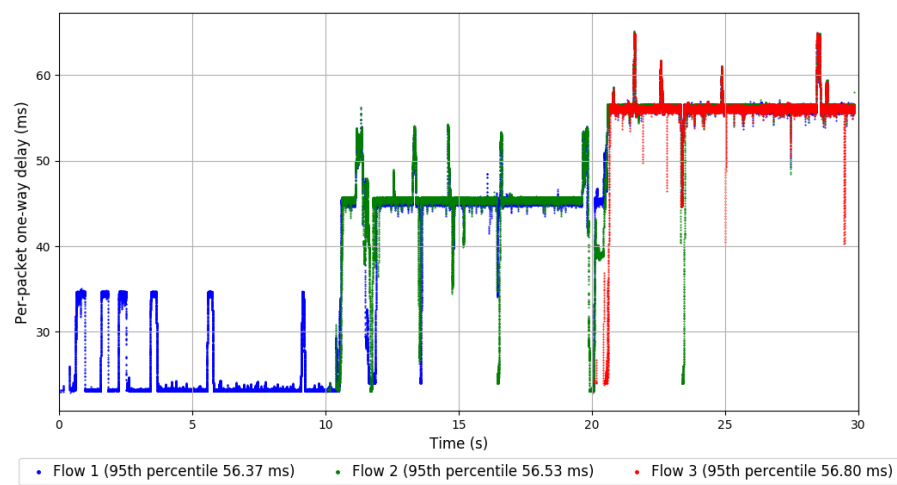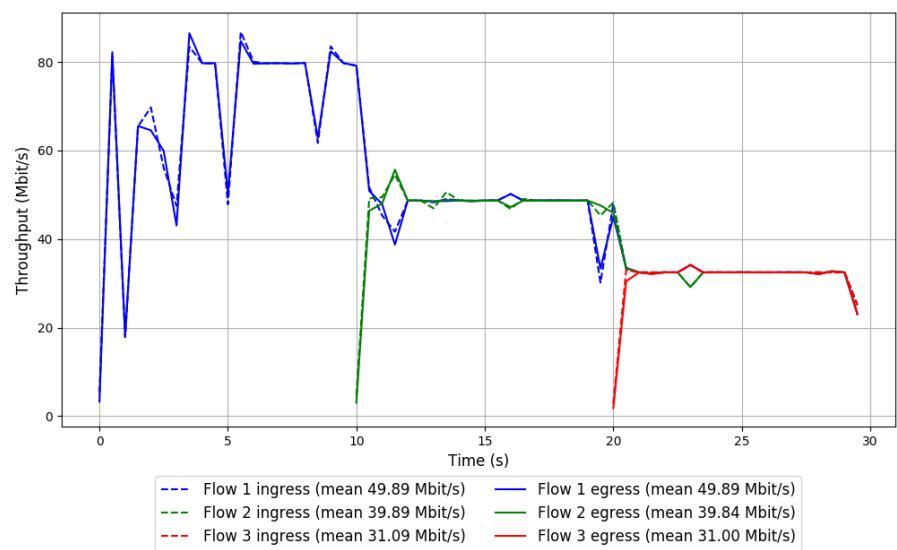
Run 8: Report of PCC — Data Link

- - - Flow 1 ingress (mean 60.17 Mbit/s) —— Flow 1 egress (mean 60.15 Mbit/s)
- - - Flow 2 ingress (mean 44.48 Mbit/s) —— Flow 2 egress (mean 44.47 Mbit/s)
- - - Flow 3 ingress (mean 8.53 Mbit/s) —— Flow 3 egress (mean 8.52 Mbit/s)

• Flow 1 (95th percentile 51.89 ms)   • Flow 2 (95th percentile 32.13 ms)   • Flow 3 (95th percentile 55.70 ms)

```
Run 9: Statistics of PCC

Start at: 2018-02-20 13:16:46
End at: 2018-02-20 13:17:16
Local clock offset: -2.289 ms
Remote clock offset: -6.971 ms


# Below is generated by plot.py at 2018-02-20 18:26:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.05 Mbit/s
95th percentile per-packet one-way delay: 56.672 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 56.86 Mbit/s
95th percentile per-packet one-way delay: 55.309 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 37.71 Mbit/s
95th percentile per-packet one-way delay: 56.910 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 30.81 Mbit/s
95th percentile per-packet one-way delay: 57.663 ms
Loss rate: 0.56%
```

Run 9: Report of PCC — Data Link

```
Run 10: Statistics of PCC

Start at: 2018-02-20 13:42:07
End at: 2018-02-20 13:42:37
Local clock offset: 4.988 ms
Remote clock offset: -3.355 ms


# Below is generated by plot.py at 2018-02-20 18:26:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.55 Mbit/s
95th percentile per-packet one-way delay: 59.765 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 56.25 Mbit/s
95th percentile per-packet one-way delay: 57.650 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 32.71 Mbit/s
95th percentile per-packet one-way delay: 61.162 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 29.10 Mbit/s
95th percentile per-packet one-way delay: 62.823 ms
Loss rate: 0.93%
```
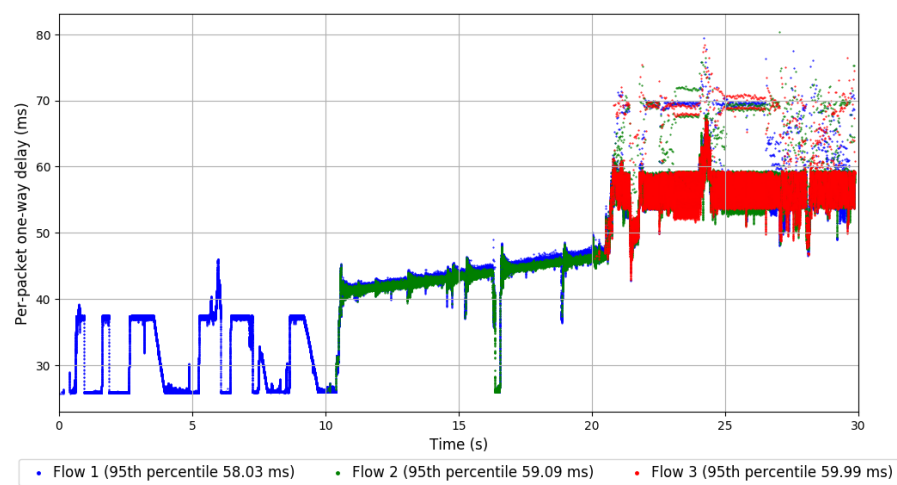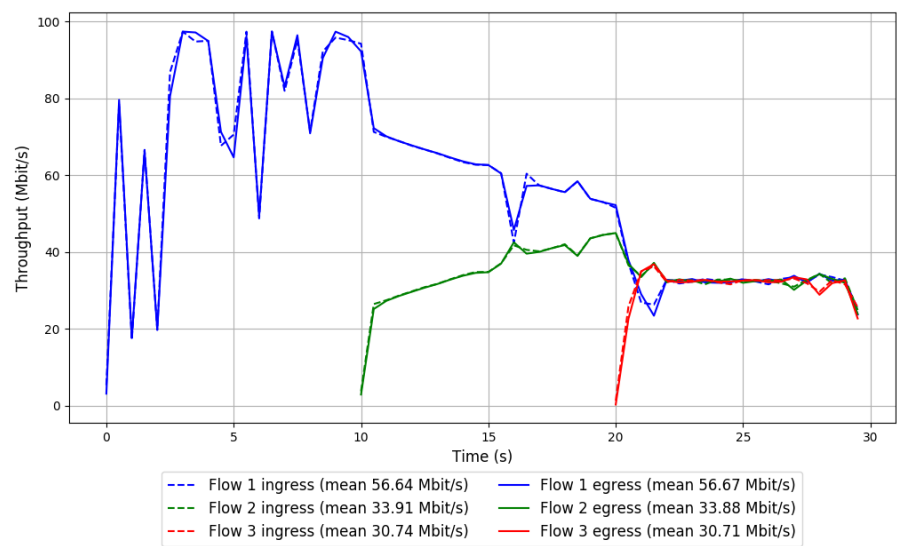
Run 10: Report of PCC — Data Link

- - - - Flow 1 ingress (mean 56.41 Mbit/s) — Flow 1 egress (mean 56.25 Mbit/s)
- - - - Flow 2 ingress (mean 32.80 Mbit/s) — Flow 2 egress (mean 32.71 Mbit/s)
- - - - Flow 3 ingress (mean 29.22 Mbit/s) — Flow 3 egress (mean 29.10 Mbit/s)

- Flow 1 (95th percentile 57.65 ms)   • Flow 2 (95th percentile 61.16 ms)   • Flow 3 (95th percentile 62.82 ms)

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```
Run 1: Statistics of QUIC Cubic

Start at: 2018-02-20 09:56:03
End at: 2018-02-20 09:56:33
Local clock offset: 0.711 ms
Remote clock offset: -6.365 ms


# Below is generated by plot.py at 2018-02-20 18:27:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.17 Mbit/s
95th percentile per-packet one-way delay: 69.149 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 48.18 Mbit/s
95th percentile per-packet one-way delay: 69.115 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 47.26 Mbit/s
95th percentile per-packet one-way delay: 52.098 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 23.21 Mbit/s
95th percentile per-packet one-way delay: 73.135 ms
Loss rate: 1.27%
```
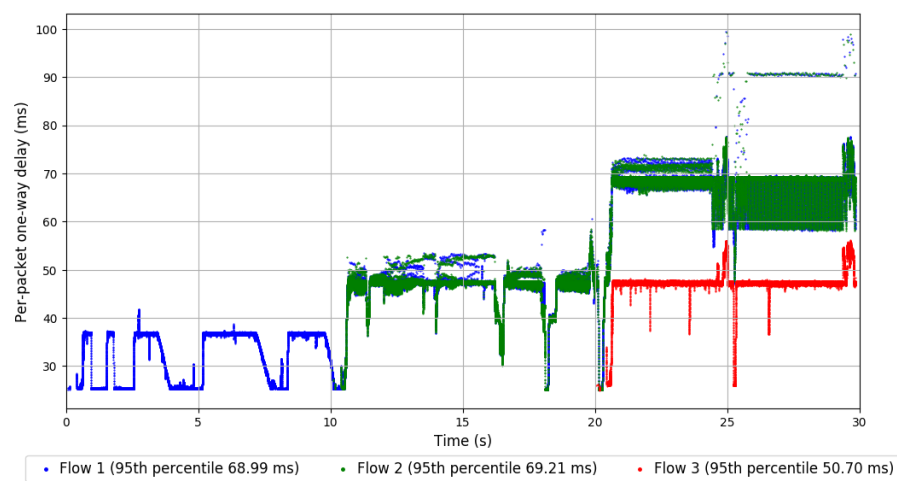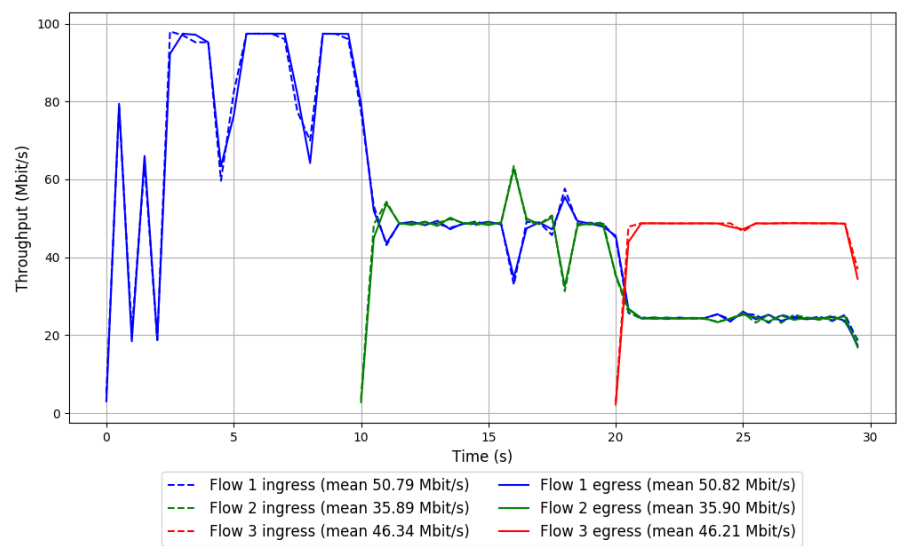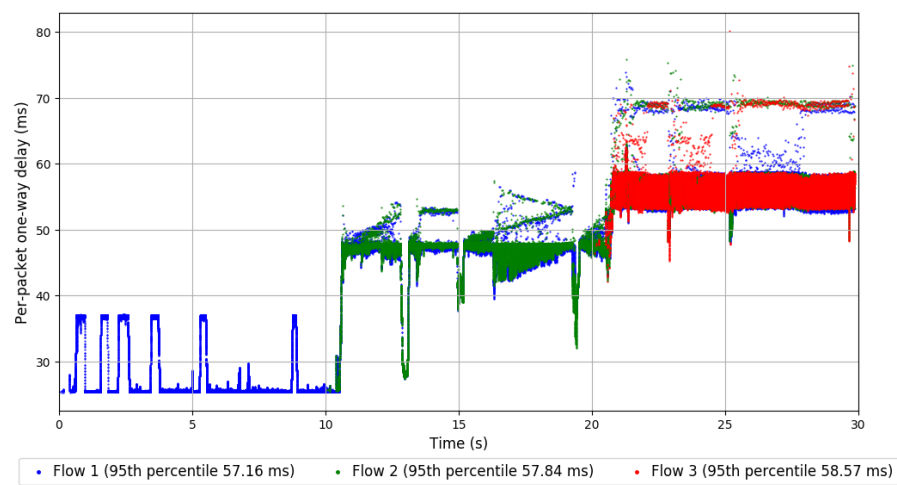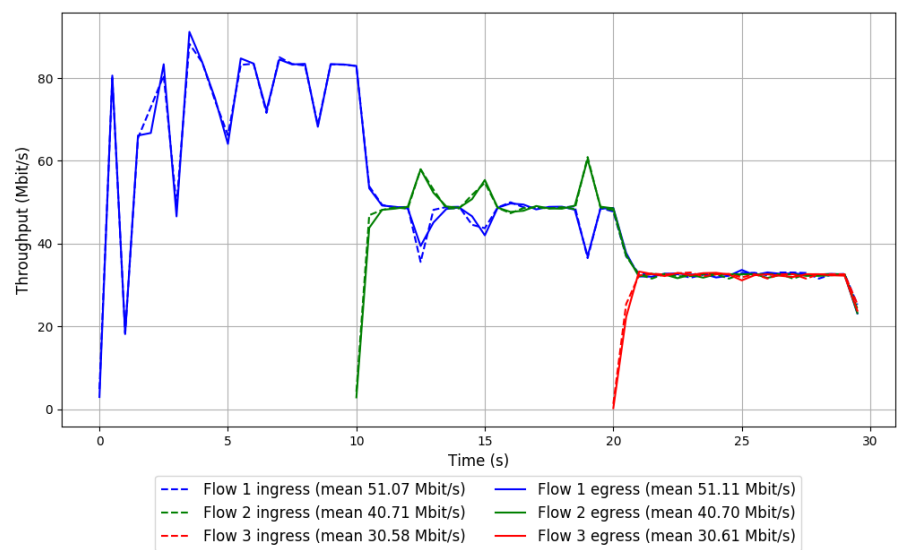
Run 1: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 48.24 Mbit/s) — Flow 1 egress (mean 48.18 Mbit/s)
Flow 2 ingress (mean 47.35 Mbit/s) — Flow 2 egress (mean 47.26 Mbit/s)
Flow 3 ingress (mean 23.26 Mbit/s) — Flow 3 egress (mean 23.21 Mbit/s)

Flow 1 (95th percentile 69.11 ms)   Flow 2 (95th percentile 52.10 ms)   Flow 3 (95th percentile 73.14 ms)

```
Run 2: Statistics of QUIC Cubic

Start at: 2018-02-20 10:20:35
End at: 2018-02-20 10:21:05
Local clock offset: 6.31 ms
Remote clock offset: -1.371 ms


# Below is generated by plot.py at 2018-02-20 18:27:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.28 Mbit/s
95th percentile per-packet one-way delay: 67.454 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 50.74 Mbit/s
95th percentile per-packet one-way delay: 67.441 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 36.87 Mbit/s
95th percentile per-packet one-way delay: 67.595 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 45.89 Mbit/s
95th percentile per-packet one-way delay: 49.285 ms
Loss rate: 0.88%
```
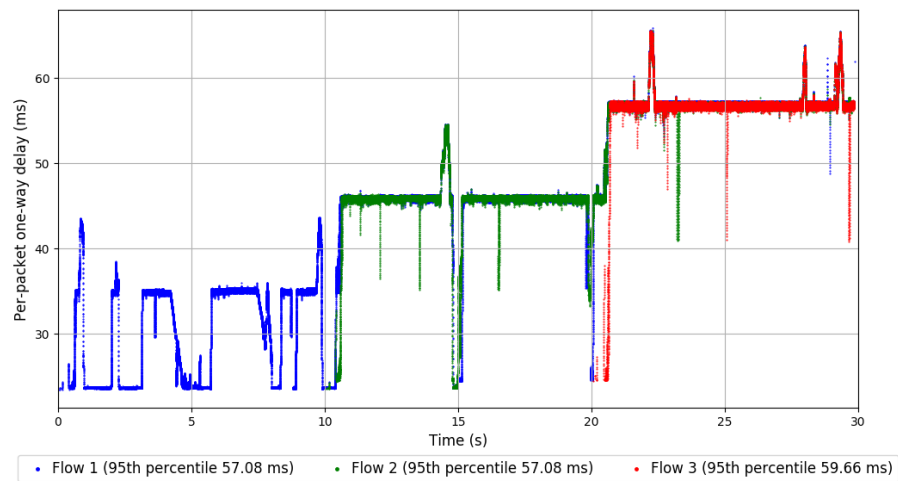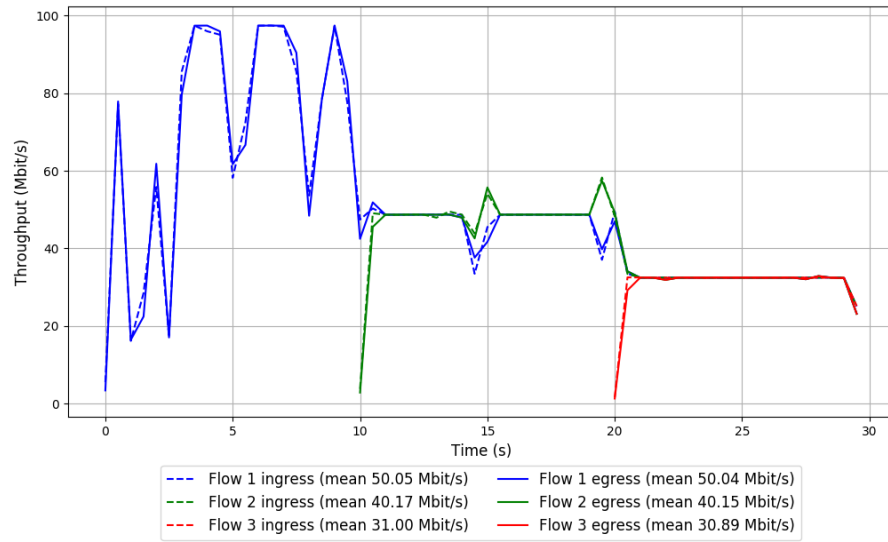
Run 2: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 50.75 Mbit/s)   Flow 1 egress (mean 50.74 Mbit/s)
Flow 2 ingress (mean 36.83 Mbit/s)   Flow 2 egress (mean 36.87 Mbit/s)
Flow 3 ingress (mean 45.99 Mbit/s)   Flow 3 egress (mean 45.89 Mbit/s)

Flow 1 (95th percentile 67.44 ms)   Flow 2 (95th percentile 67.59 ms)   Flow 3 (95th percentile 49.28 ms)

87

```
Run 3: Statistics of QUIC Cubic

Start at: 2018-02-20 10:45:15
End at: 2018-02-20 10:45:45
Local clock offset: 1.533 ms
Remote clock offset: -4.773 ms


# Below is generated by plot.py at 2018-02-20 18:27:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.56 Mbit/s
95th percentile per-packet one-way delay: 56.478 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 49.89 Mbit/s
95th percentile per-packet one-way delay: 56.370 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 39.84 Mbit/s
95th percentile per-packet one-way delay: 56.531 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 31.00 Mbit/s
95th percentile per-packet one-way delay: 56.799 ms
Loss rate: 1.02%
```
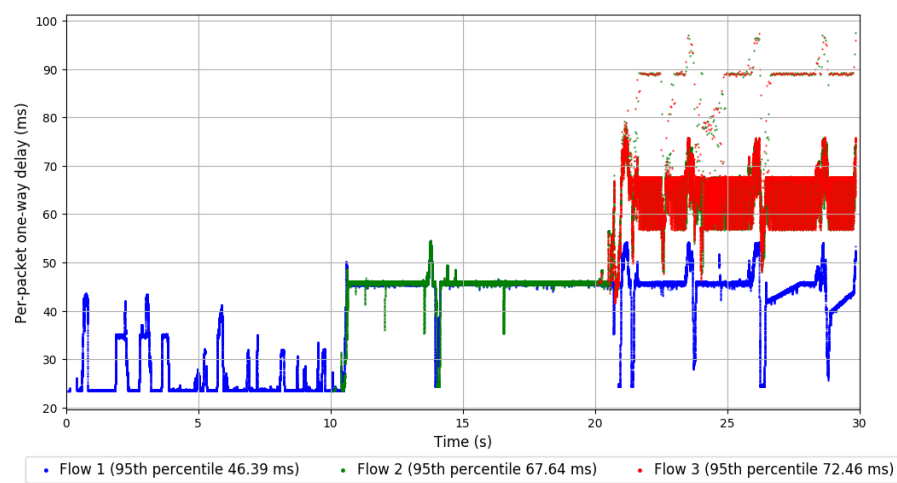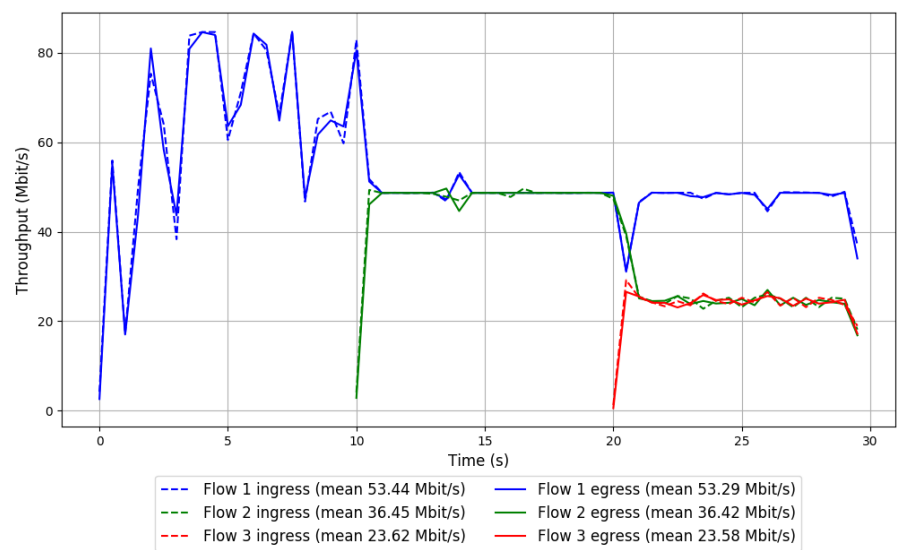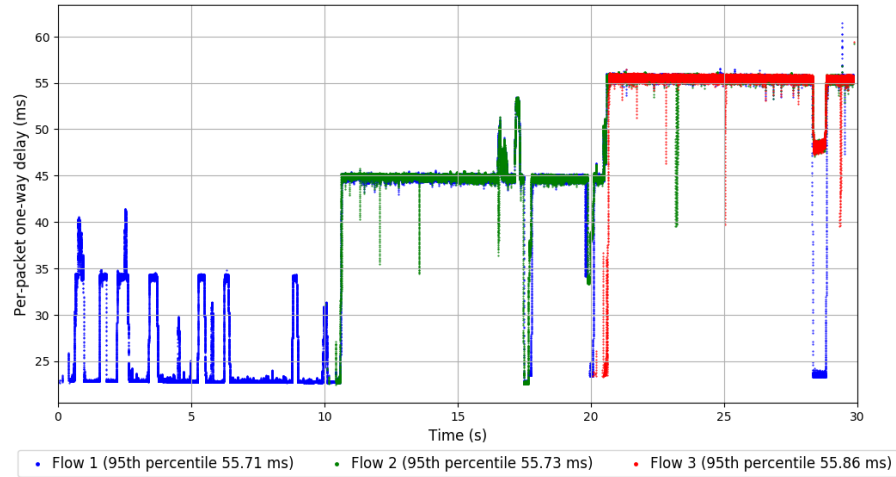
Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 49.89 Mbit/s) — Flow 1 egress (mean 49.89 Mbit/s)
Flow 2 ingress (mean 39.89 Mbit/s) — Flow 2 egress (mean 39.84 Mbit/s)
Flow 3 ingress (mean 31.09 Mbit/s) — Flow 3 egress (mean 31.00 Mbit/s)

Flow 1 (95th percentile 56.37 ms)   Flow 2 (95th percentile 56.53 ms)   Flow 3 (95th percentile 56.80 ms)

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```
Run 4: Statistics of QUIC Cubic

Start at: 2018-02-20 11:09:48
End at: 2018-02-20 11:10:18
Local clock offset: -4.538 ms
Remote clock offset: -7.24 ms


# Below is generated by plot.py at 2018-02-20 18:27:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.23 Mbit/s
95th percentile per-packet one-way delay: 58.815 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 56.67 Mbit/s
95th percentile per-packet one-way delay: 58.026 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 33.88 Mbit/s
95th percentile per-packet one-way delay: 59.086 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 30.71 Mbit/s
95th percentile per-packet one-way delay: 59.995 ms
Loss rate: 1.04%
```
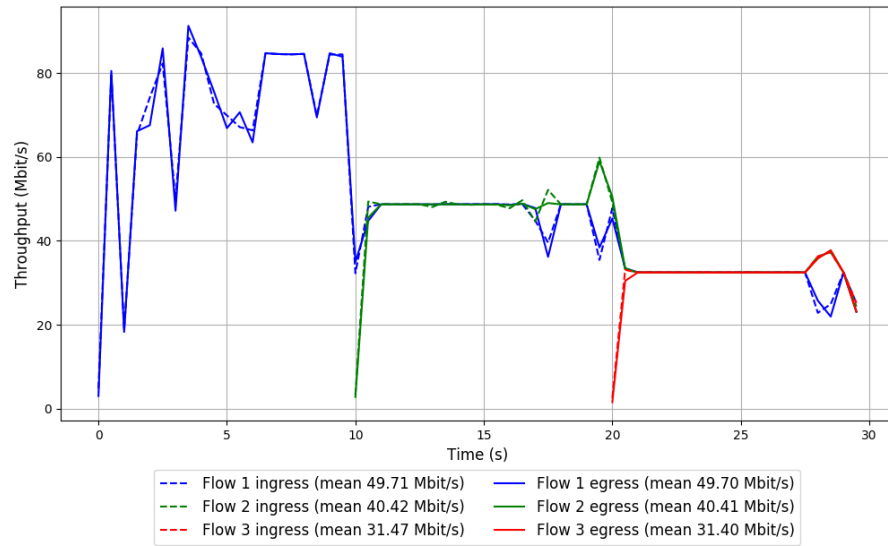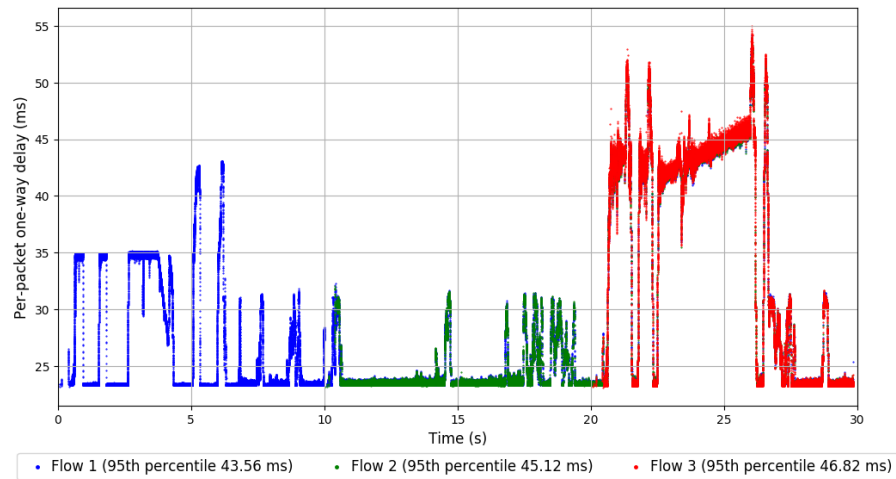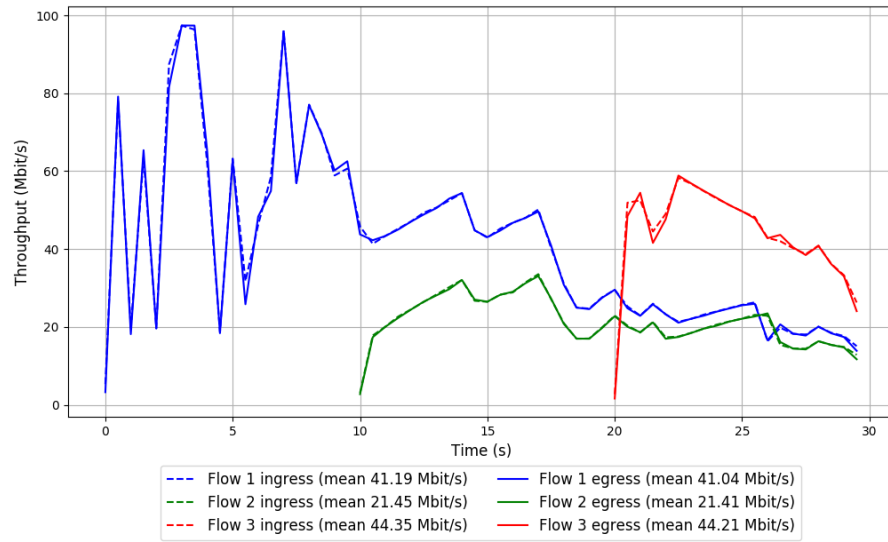
Run 4: Report of QUIC Cubic — Data Link

- - - Flow 1 ingress (mean 56.64 Mbit/s) ——— Flow 1 egress (mean 56.67 Mbit/s)
- - - Flow 2 ingress (mean 33.91 Mbit/s) ——— Flow 2 egress (mean 33.88 Mbit/s)
- - - Flow 3 ingress (mean 30.74 Mbit/s) ——— Flow 3 egress (mean 30.71 Mbit/s)

• Flow 1 (95th percentile 58.03 ms)   • Flow 2 (95th percentile 59.09 ms)   • Flow 3 (95th percentile 59.99 ms)

```
Run 5: Statistics of QUIC Cubic

Start at: 2018-02-20 11:34:20
End at: 2018-02-20 11:34:50
Local clock offset: -3.919 ms
Remote clock offset: -6.01 ms


# Below is generated by plot.py at 2018-02-20 18:27:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.84 Mbit/s
95th percentile per-packet one-way delay: 69.036 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 50.82 Mbit/s
95th percentile per-packet one-way delay: 68.988 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 35.90 Mbit/s
95th percentile per-packet one-way delay: 69.206 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 46.21 Mbit/s
95th percentile per-packet one-way delay: 50.701 ms
Loss rate: 0.82%
```
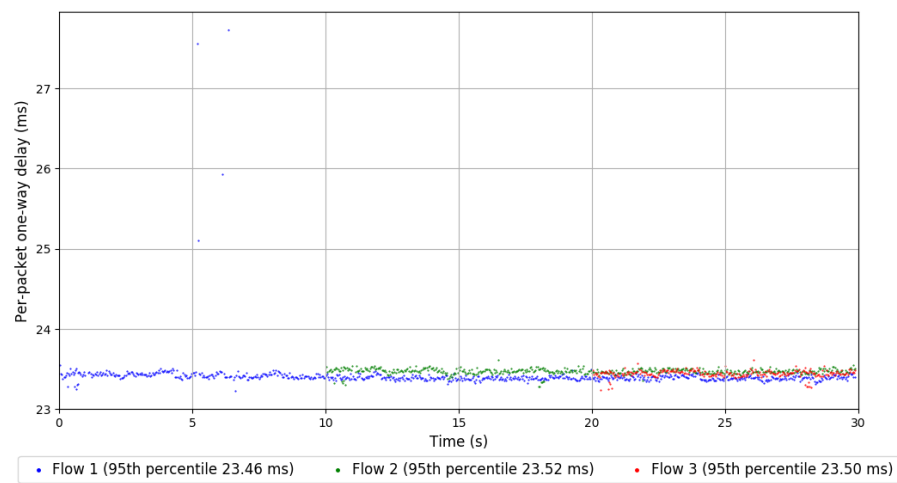
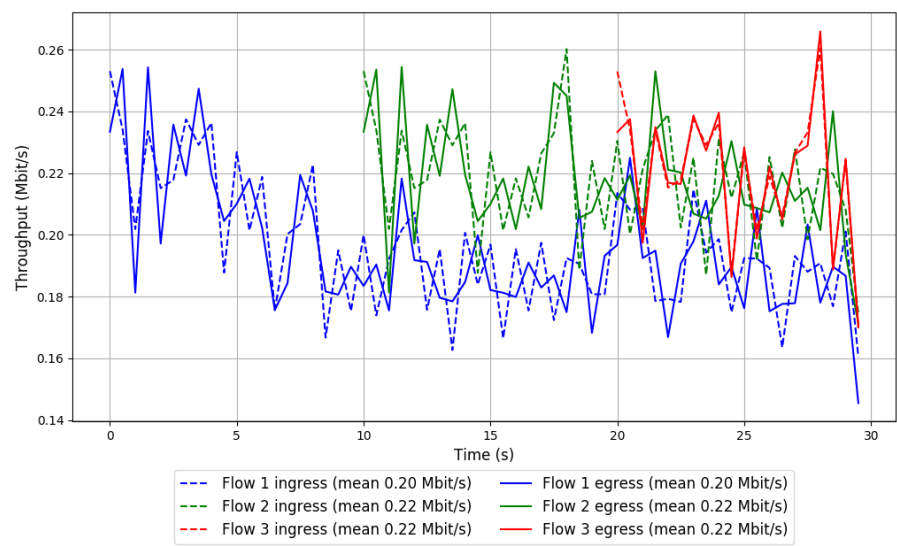Run 5: Report of QUIC Cubic — Data Link

```
Run 6: Statistics of QUIC Cubic

Start at: 2018-02-20 11:58:52
End at: 2018-02-20 11:59:22
Local clock offset: 1.836 ms
Remote clock offset: -6.166 ms


# Below is generated by plot.py at 2018-02-20 18:27:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.17 Mbit/s
95th percentile per-packet one-way delay: 57.876 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 51.11 Mbit/s
95th percentile per-packet one-way delay: 57.162 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 40.70 Mbit/s
95th percentile per-packet one-way delay: 57.838 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 30.61 Mbit/s
95th percentile per-packet one-way delay: 58.567 ms
Loss rate: 0.89%
```

Run 6: Report of QUIC Cubic — Data Link

- - - Flow 1 ingress (mean 51.07 Mbit/s)   —— Flow 1 egress (mean 51.11 Mbit/s)
- - - Flow 2 ingress (mean 40.71 Mbit/s)   —— Flow 2 egress (mean 40.70 Mbit/s)
- - - Flow 3 ingress (mean 30.58 Mbit/s)   —— Flow 3 egress (mean 30.61 Mbit/s)

• Flow 1 (95th percentile 57.16 ms)   • Flow 2 (95th percentile 57.84 ms)   • Flow 3 (95th percentile 58.57 ms)

```
Run 7: Statistics of QUIC Cubic

Start at: 2018-02-20 12:23:28
End at: 2018-02-20 12:23:58
Local clock offset: 1.663 ms
Remote clock offset: -2.582 ms

# Below is generated by plot.py at 2018-02-20 18:28:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.84 Mbit/s
95th percentile per-packet one-way delay: 57.104 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 50.04 Mbit/s
95th percentile per-packet one-way delay: 57.084 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 40.15 Mbit/s
95th percentile per-packet one-way delay: 57.079 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 30.89 Mbit/s
95th percentile per-packet one-way delay: 59.665 ms
Loss rate: 1.04%
```
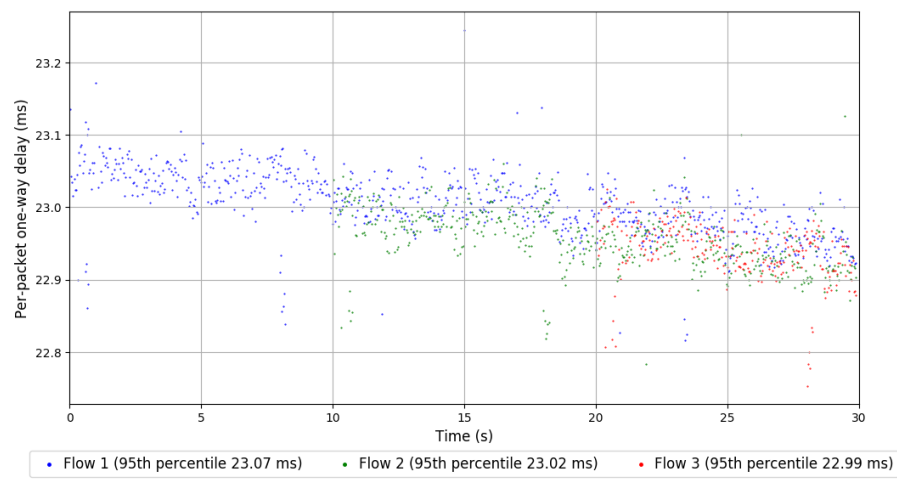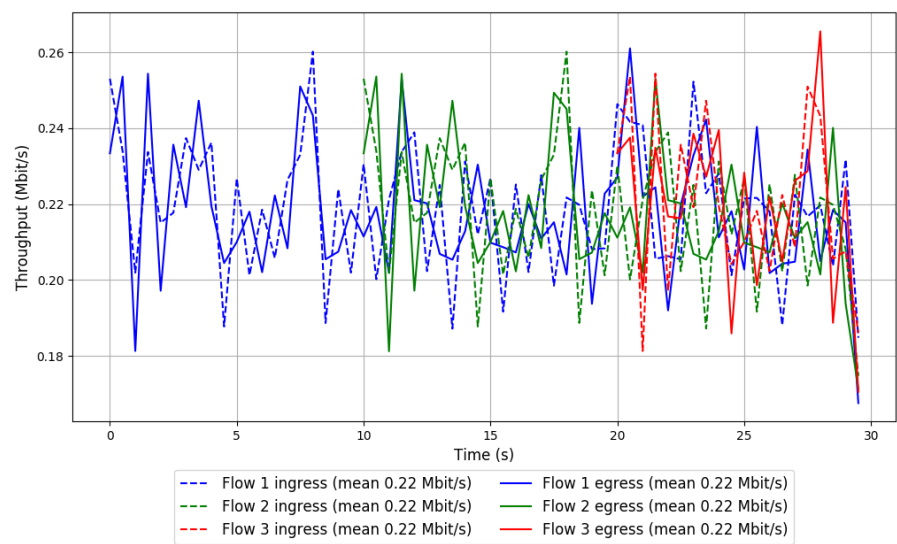
Run 7: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 50.05 Mbit/s)   Flow 1 egress (mean 50.04 Mbit/s)
Flow 2 ingress (mean 40.17 Mbit/s)   Flow 2 egress (mean 40.15 Mbit/s)
Flow 3 ingress (mean 31.00 Mbit/s)   Flow 3 egress (mean 30.89 Mbit/s)

Flow 1 (95th percentile 57.08 ms)   Flow 2 (95th percentile 57.08 ms)   Flow 3 (95th percentile 59.66 ms)

97

```
Run 8: Statistics of QUIC Cubic

Start at: 2018-02-20 12:48:02
End at: 2018-02-20 12:48:32
Local clock offset: -2.621 ms
Remote clock offset: -2.809 ms

# Below is generated by plot.py at 2018-02-20 18:28:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.22 Mbit/s
95th percentile per-packet one-way delay: 67.450 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 53.29 Mbit/s
95th percentile per-packet one-way delay: 46.392 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 36.42 Mbit/s
95th percentile per-packet one-way delay: 67.640 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 23.58 Mbit/s
95th percentile per-packet one-way delay: 72.458 ms
Loss rate: 1.07%
```
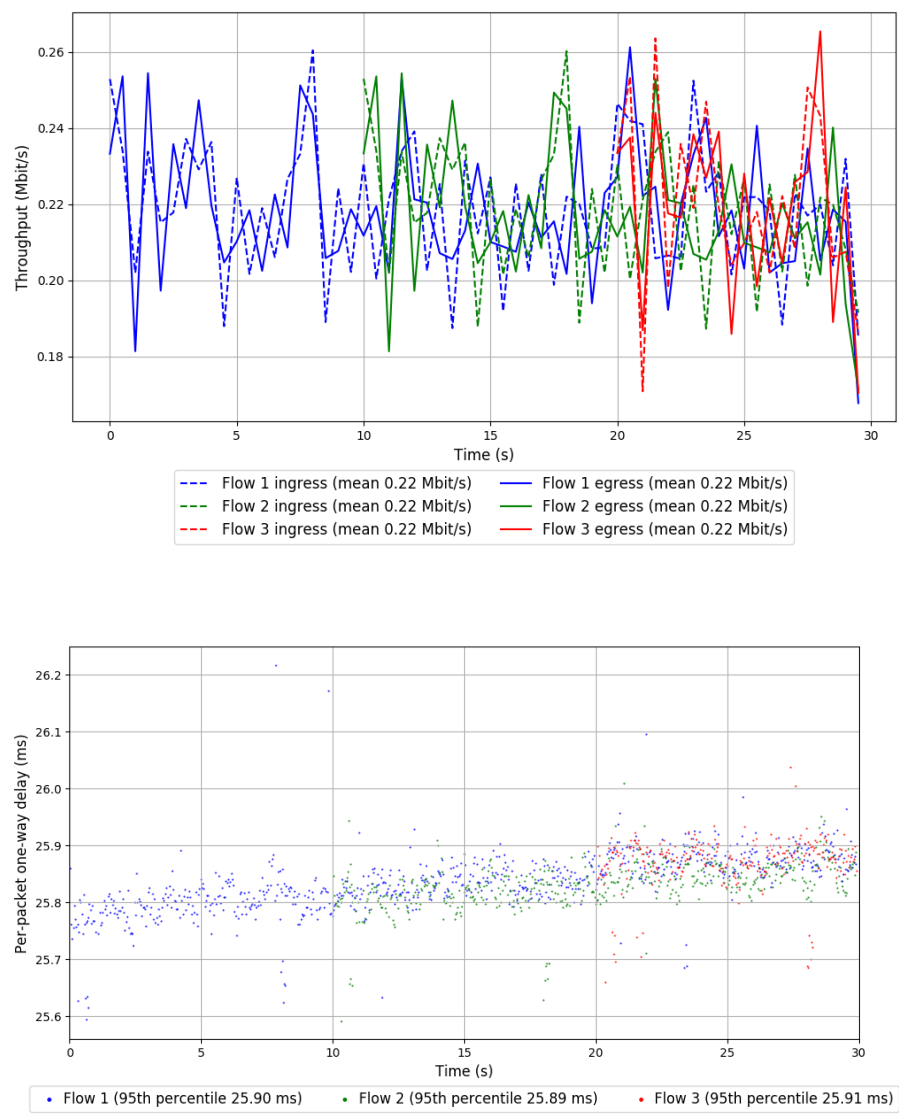
Run 8: Report of QUIC Cubic — Data Link

```
Run 9: Statistics of QUIC Cubic

Start at: 2018-02-20 13:12:36
End at: 2018-02-20 13:13:06
Local clock offset: -5.664 ms
Remote clock offset: -6.635 ms


# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.85 Mbit/s
95th percentile per-packet one-way delay: 55.768 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 49.70 Mbit/s
95th percentile per-packet one-way delay: 55.713 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 40.41 Mbit/s
95th percentile per-packet one-way delay: 55.725 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 31.40 Mbit/s
95th percentile per-packet one-way delay: 55.861 ms
Loss rate: 0.91%
```
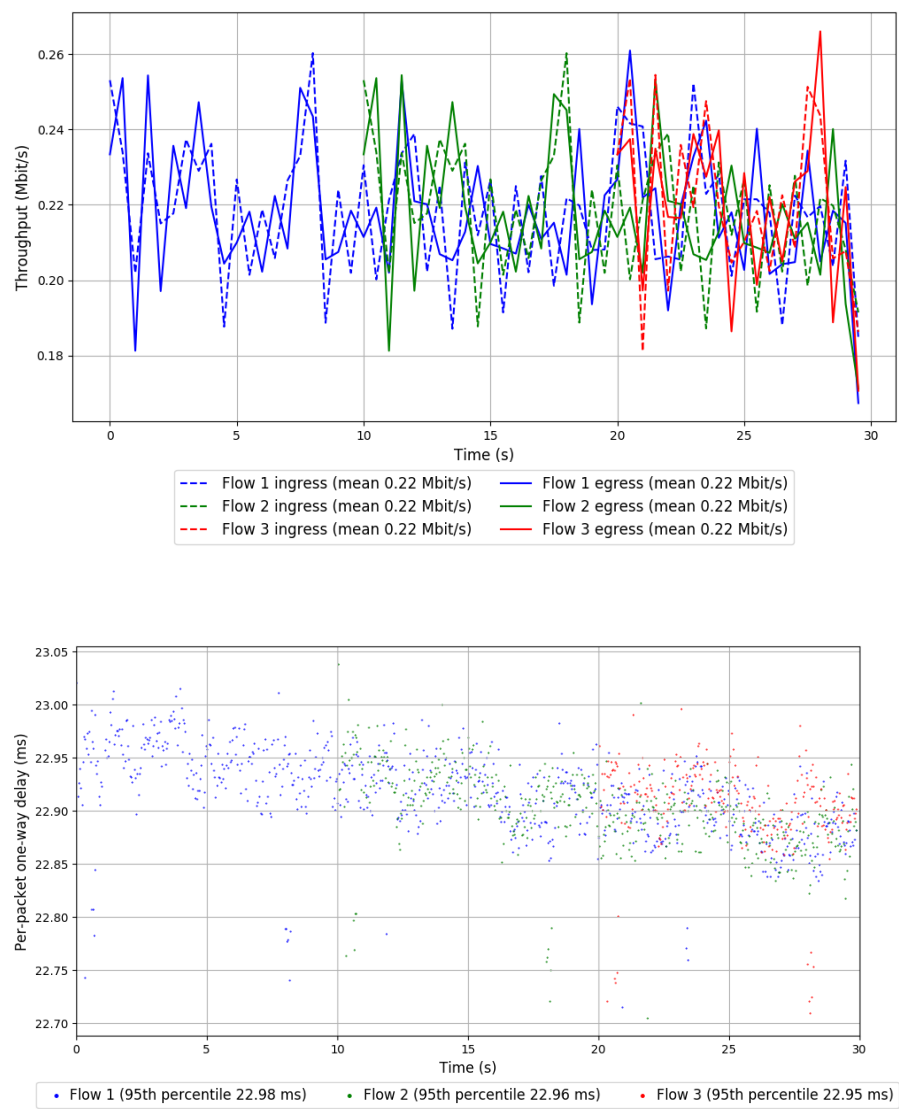
Run 9: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 49.71 Mbit/s) — Flow 1 egress (mean 49.70 Mbit/s)
Flow 2 ingress (mean 40.42 Mbit/s) — Flow 2 egress (mean 40.41 Mbit/s)
Flow 3 ingress (mean 31.47 Mbit/s) — Flow 3 egress (mean 31.40 Mbit/s)

Flow 1 (95th percentile 55.71 ms)   Flow 2 (95th percentile 55.73 ms)   Flow 3 (95th percentile 55.86 ms)

```
Run 10: Statistics of QUIC Cubic

Start at: 2018-02-20 13:37:44
End at: 2018-02-20 13:38:14
Local clock offset: 4.262 ms
Remote clock offset: -3.573 ms


# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.77 Mbit/s
95th percentile per-packet one-way delay: 45.131 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 41.04 Mbit/s
95th percentile per-packet one-way delay: 43.559 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 21.41 Mbit/s
95th percentile per-packet one-way delay: 45.115 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 44.21 Mbit/s
95th percentile per-packet one-way delay: 46.821 ms
Loss rate: 0.85%
```

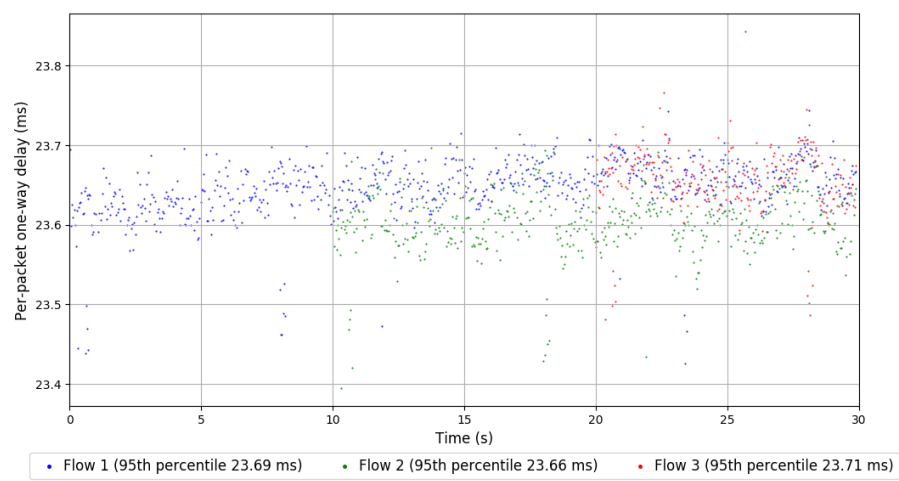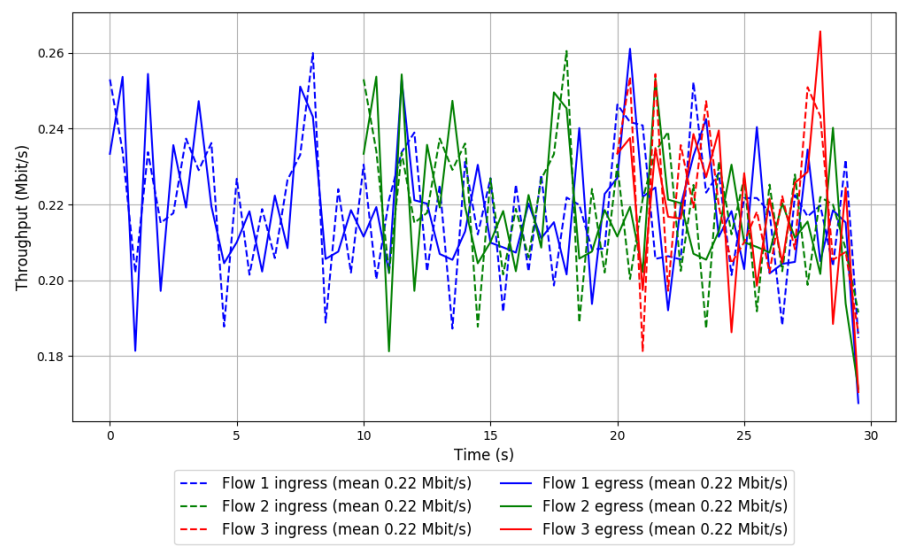Run 10: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of SCReAM

Start at: 2018-02-20 10:07:06
End at: 2018-02-20 10:07:36
Local clock offset: 4.395 ms
Remote clock offset: -2.704 ms


# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 23.509 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 23.465 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 23.521 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 23.499 ms
Loss rate: 0.35%
```
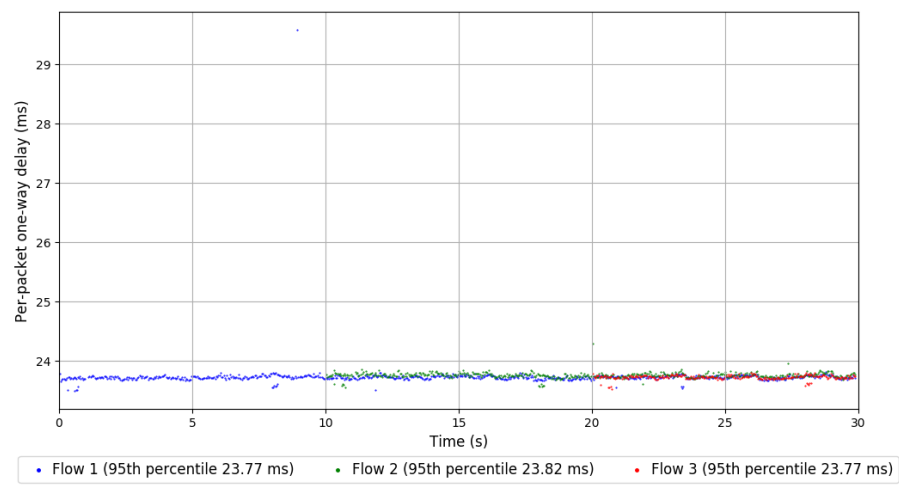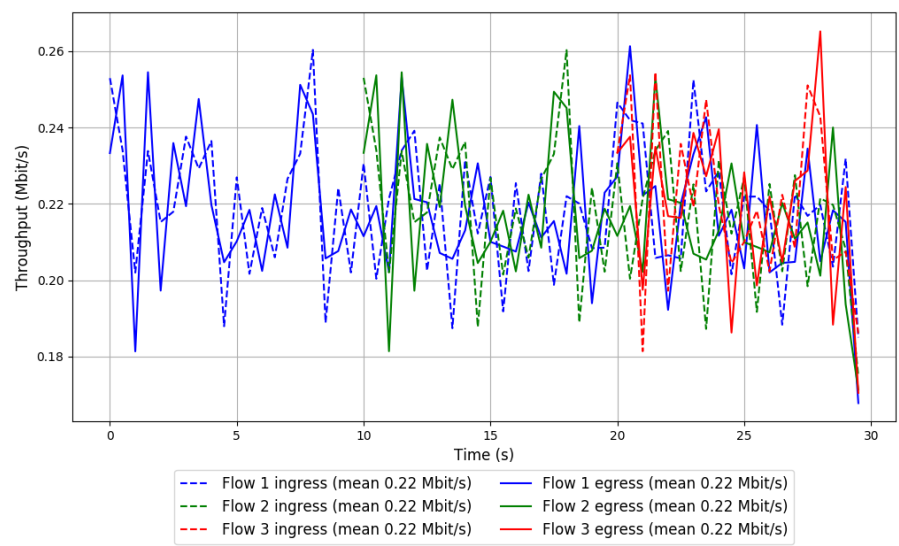
Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2018-02-20 10:31:44
End at: 2018-02-20 10:32:14
Local clock offset: 2.749 ms
Remote clock offset: -1.77 ms


# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 23.059 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 23.068 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 23.019 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 22.994 ms
Loss rate: 0.35%
```

Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2018-02-20 10:56:20
End at: 2018-02-20 10:56:50
Local clock offset: 0.999 ms
Remote clock offset: -6.036 ms

# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 24.416 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 24.385 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 24.392 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 24.457 ms
Loss rate: 0.35%
```
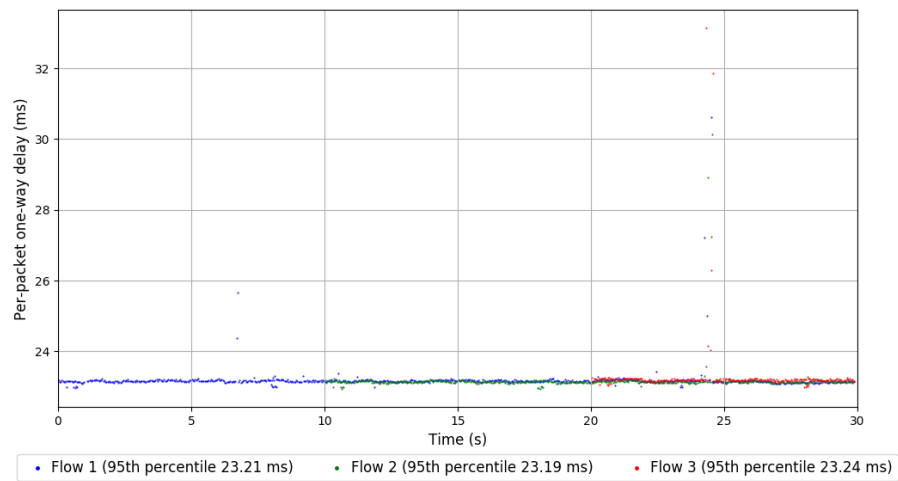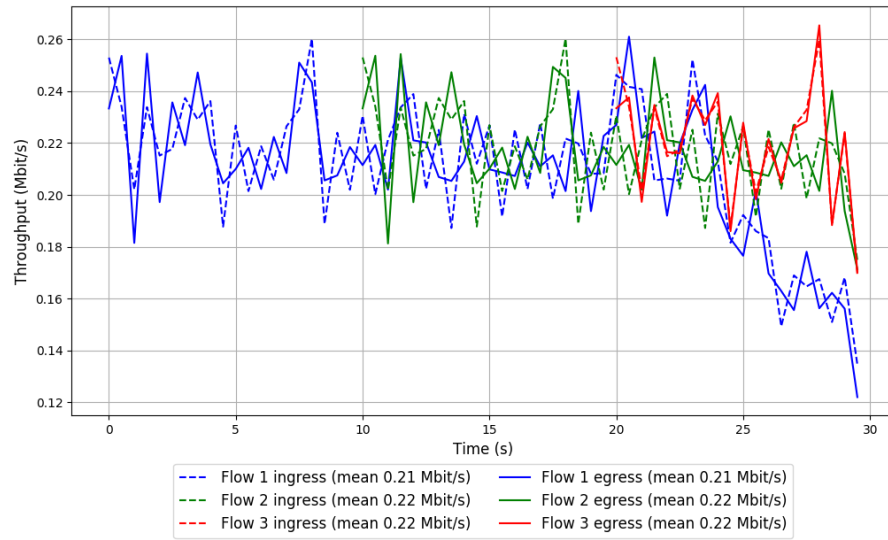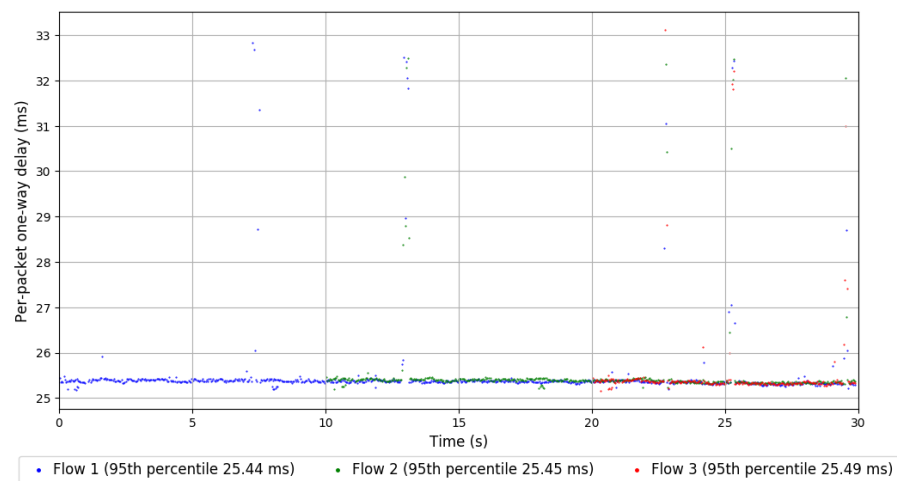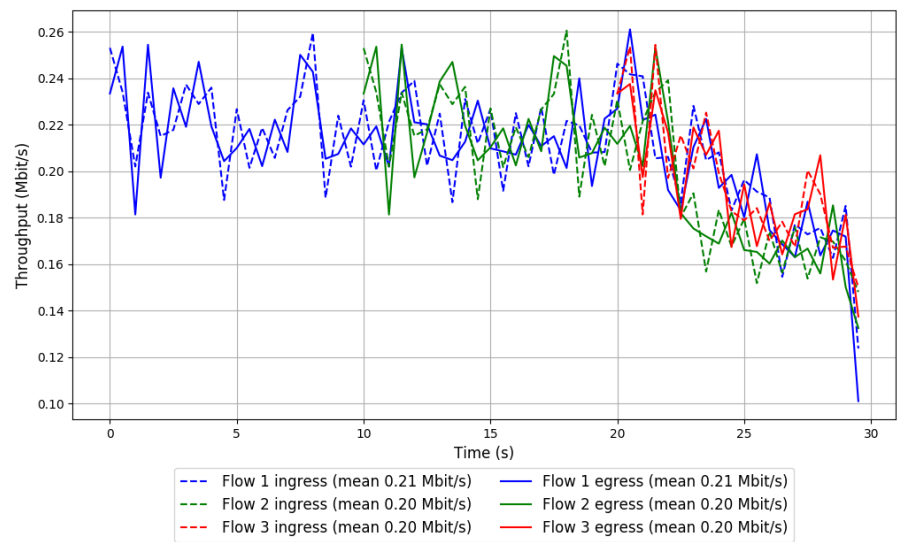
Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2018-02-20 11:20:50
End at: 2018-02-20 11:21:20
Local clock offset: -6.487 ms
Remote clock offset: -6.346 ms


# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 25.905 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 25.904 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 25.888 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 25.914 ms
Loss rate: 0.35%
```

Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2018-02-20 11:45:24
End at: 2018-02-20 11:45:54
Local clock offset: 0.414 ms
Remote clock offset: -3.521 ms


# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 22.970 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 22.978 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 22.958 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 22.952 ms
Loss rate: 0.35%
```
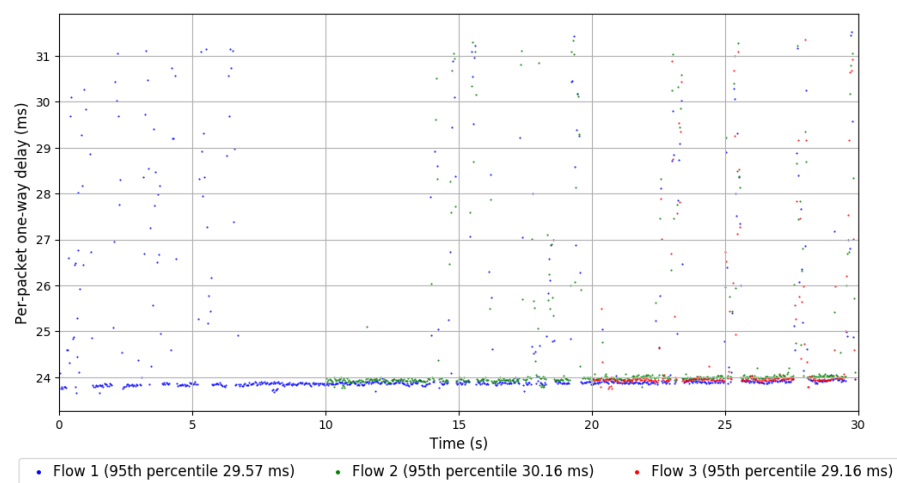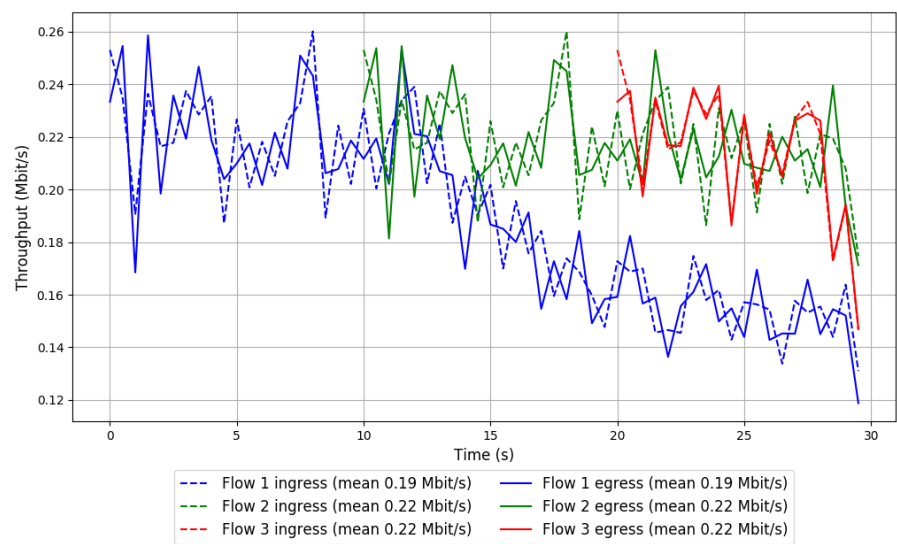
Run 5: Report of SCReAM — Data Link

```
Run 6: Statistics of SCReAM

Start at: 2018-02-20 12:09:56
End at: 2018-02-20 12:10:26
Local clock offset: 1.723 ms
Remote clock offset: -4.042 ms


# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 23.693 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 23.693 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 23.664 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 23.706 ms
Loss rate: 0.35%
```
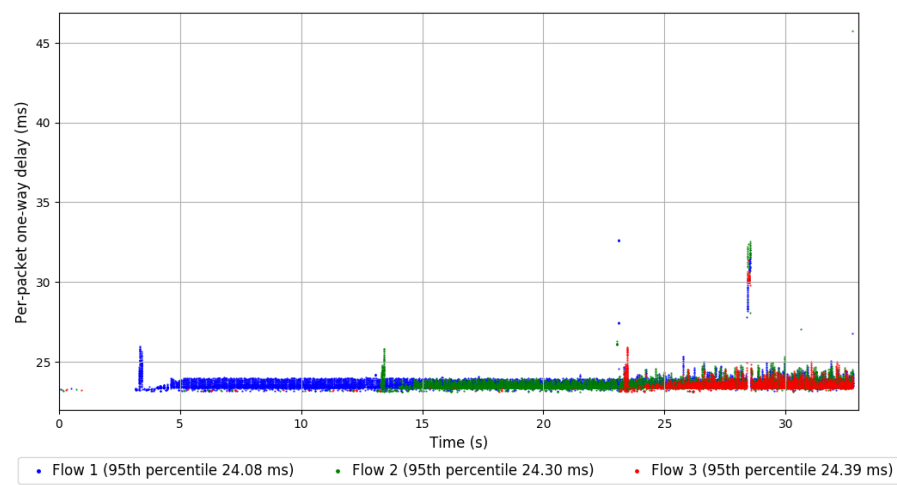
Run 6: Report of SCReAM — Data Link

```
Run 7: Statistics of SCReAM

Start at: 2018-02-20 12:34:33
End at: 2018-02-20 12:35:03
Local clock offset: 1.751 ms
Remote clock offset: -2.087 ms


# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 23.793 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 23.768 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 23.821 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 23.773 ms
Loss rate: 0.35%
```
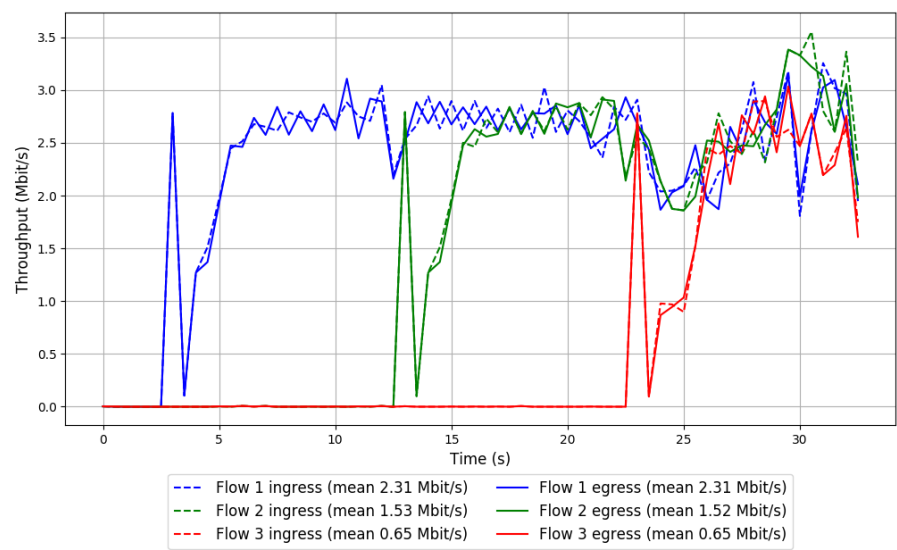
Run 7: Report of SCReAM — Data Link

```
Run 8: Statistics of SCReAM

Start at: 2018-02-20 12:59:05
End at: 2018-02-20 12:59:35
Local clock offset: -4.562 ms
Remote clock offset: -4.84 ms

# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 23.226 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 23.215 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 23.188 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 23.244 ms
Loss rate: 0.35%
```
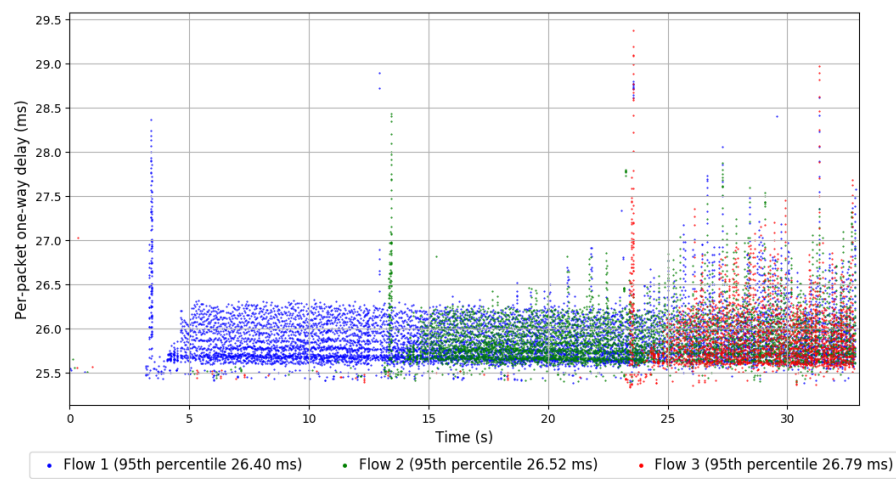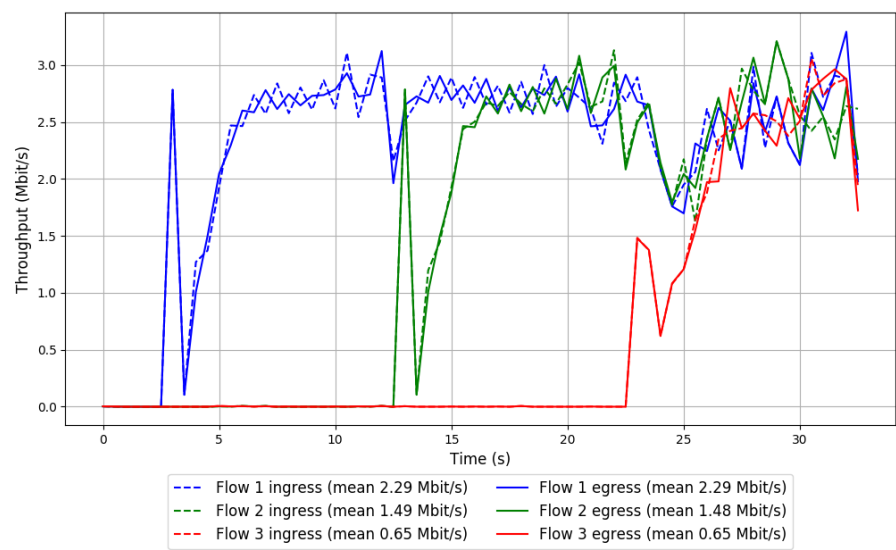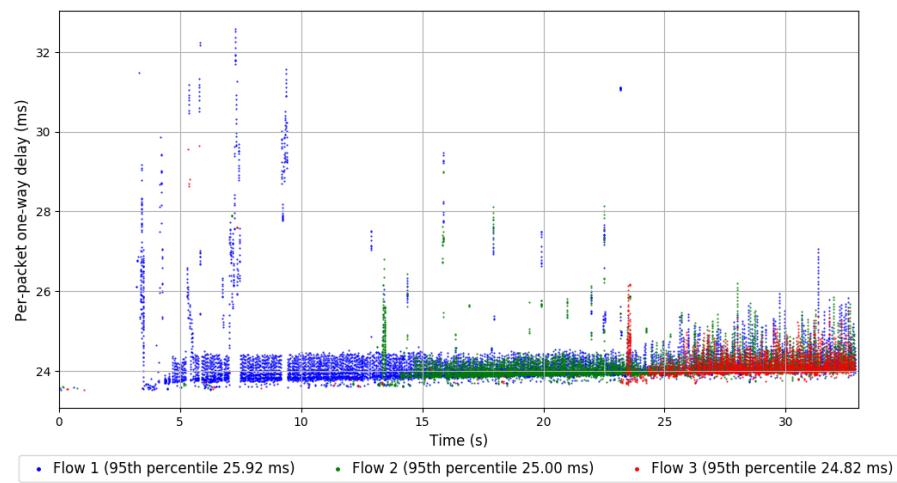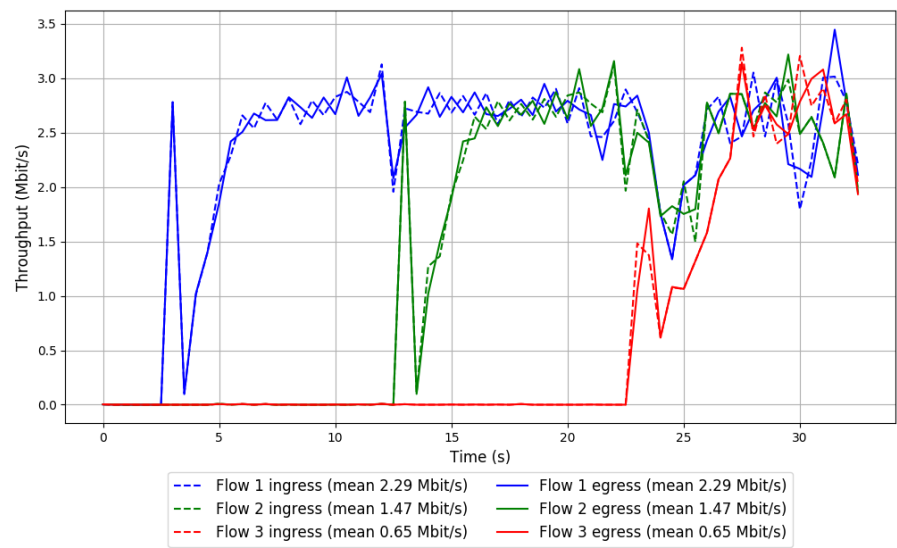
Run 8: Report of SCReAM — Data Link

```
Run 9: Statistics of SCReAM

Start at: 2018-02-20 13:23:41
End at: 2018-02-20 13:24:11
Local clock offset: 1.133 ms
Remote clock offset: -7.339 ms

# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 25.448 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 25.438 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 25.449 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 25.491 ms
Loss rate: 0.79%
```

Run 9: Report of SCReAM — Data Link

```
Run 10: Statistics of SCReAM

Start at: 2018-02-20 13:49:24
End at: 2018-02-20 13:49:55
Local clock offset: 4.135 ms
Remote clock offset: -3.36 ms

# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 29.539 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 29.573 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.165 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 29.158 ms
Loss rate: 0.35%
```
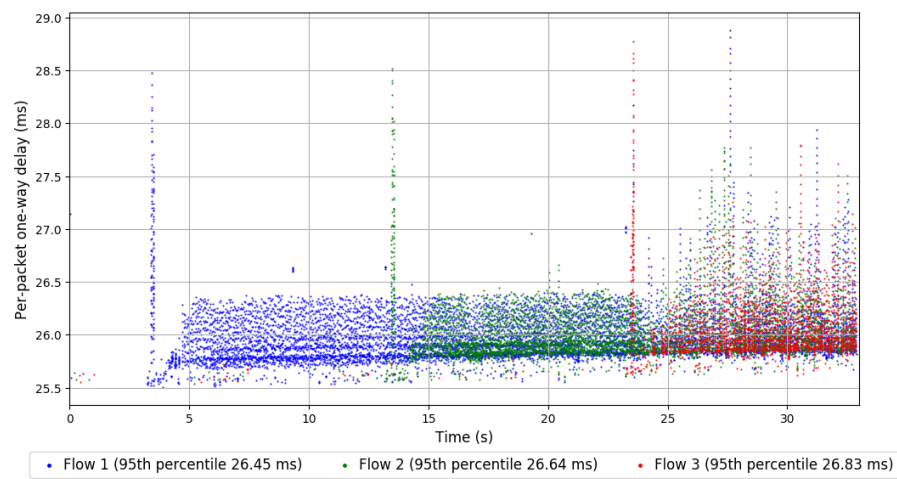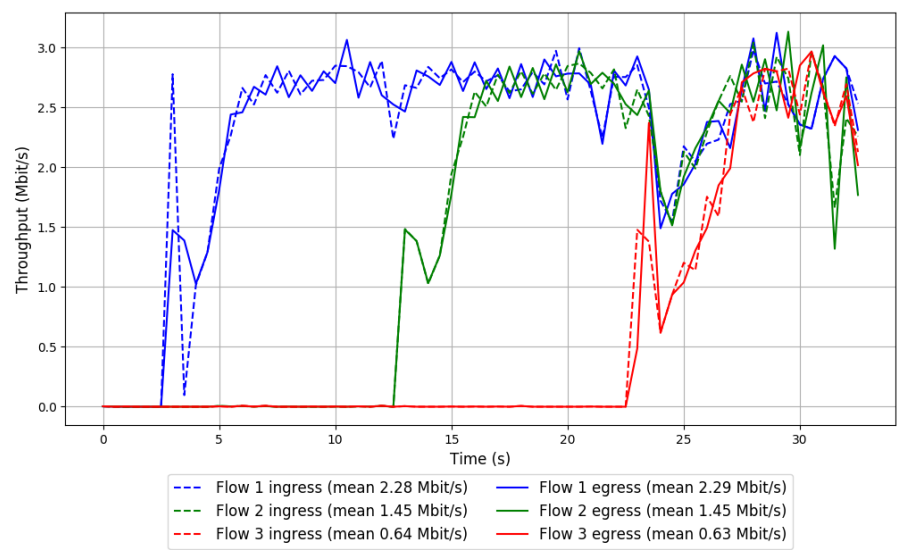
Run 10: Report of SCReAM — Data Link

```
Run 1: Statistics of WebRTC media

Start at: 2018-02-20 10:08:23
End at: 2018-02-20 10:08:54
Local clock offset: 4.566 ms
Remote clock offset: -2.51 ms

# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.47 Mbit/s
95th percentile per-packet one-way delay: 24.220 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 24.076 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 1.52 Mbit/s
95th percentile per-packet one-way delay: 24.298 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 24.385 ms
Loss rate: 0.33%
```

Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2018-02-20 10:33:01
End at: 2018-02-20 10:33:31
Local clock offset: 2.566 ms
Remote clock offset: -4.8 ms


# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.42 Mbit/s
95th percentile per-packet one-way delay: 26.523 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 26.396 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 26.525 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 26.785 ms
Loss rate: 0.49%
```
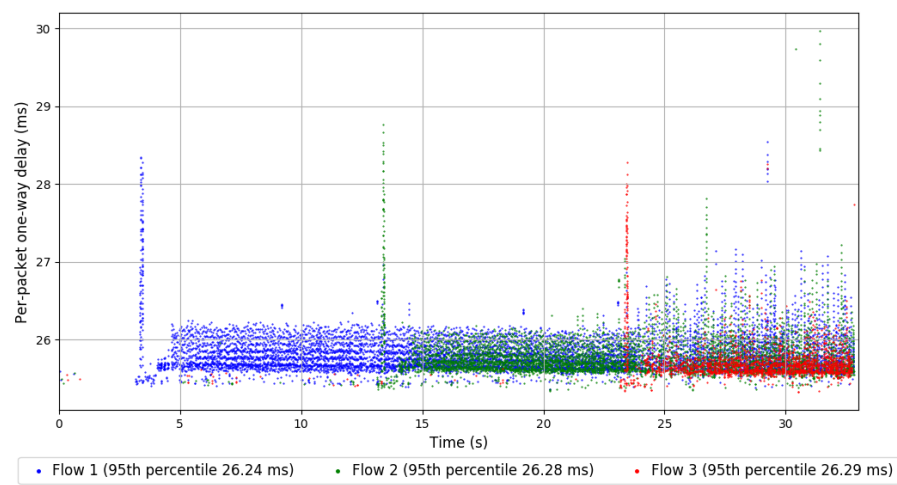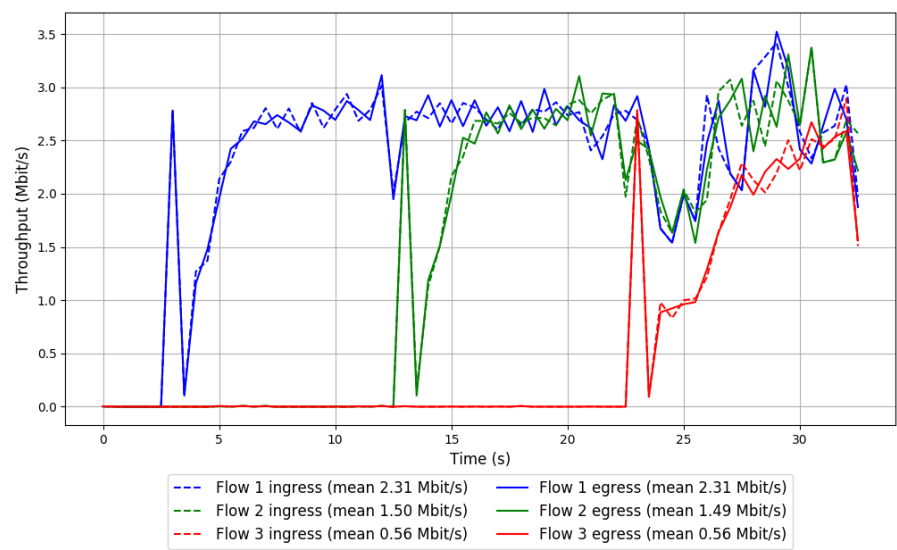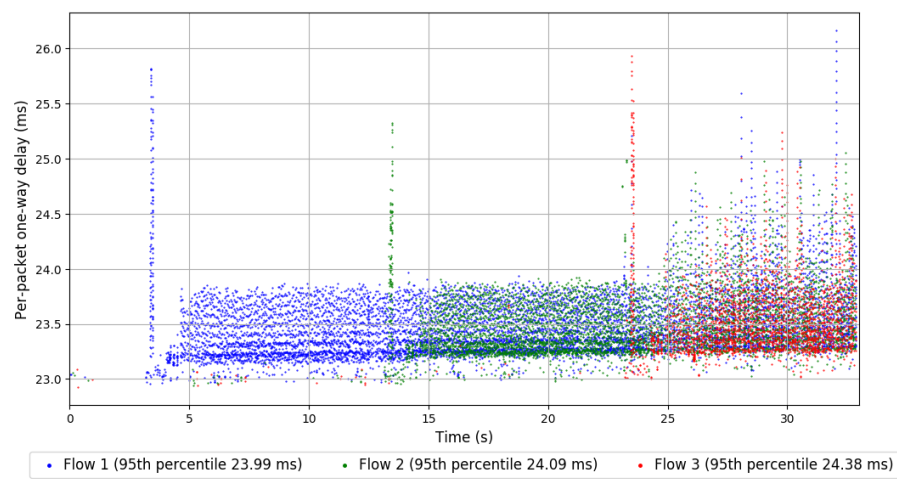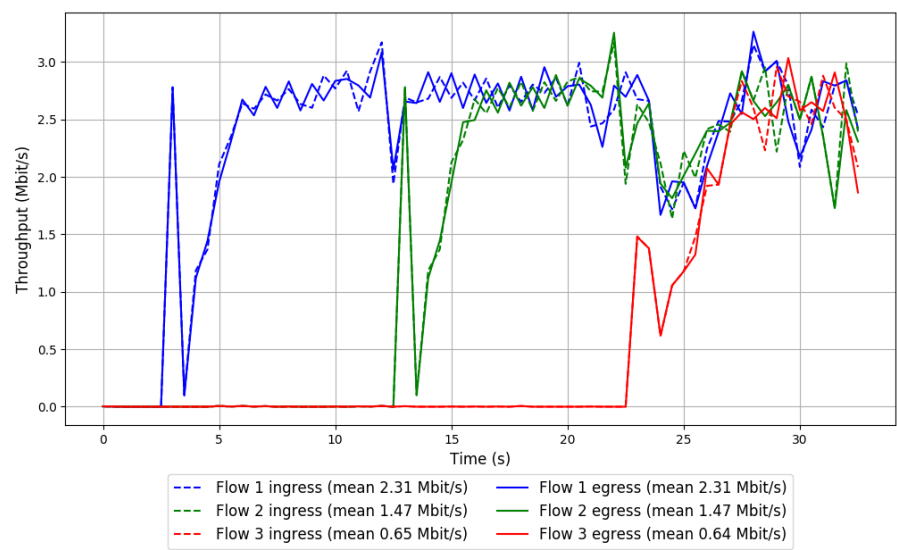
Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2018-02-20 10:57:37
End at: 2018-02-20 10:58:07
Local clock offset: -0.043 ms
Remote clock offset: -5.969 ms


# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.40 Mbit/s
95th percentile per-packet one-way delay: 25.256 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 25.920 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 24.996 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 24.820 ms
Loss rate: 0.54%
```
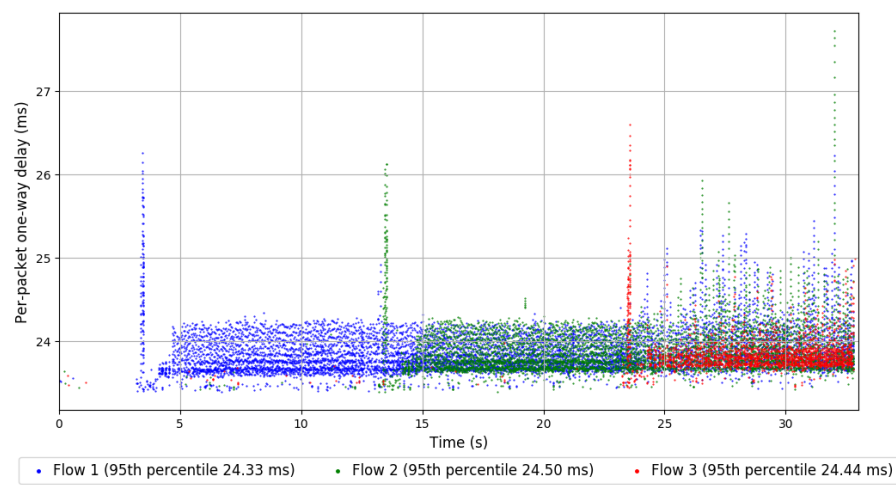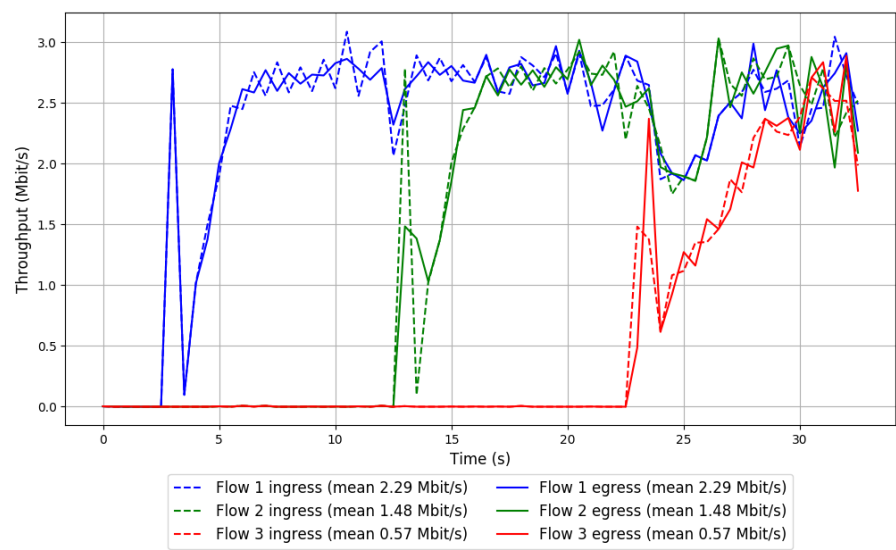
Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2018-02-20 11:22:07
End at: 2018-02-20 11:22:37
Local clock offset: -6.77 ms
Remote clock offset: -6.321 ms


# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.35 Mbit/s
95th percentile per-packet one-way delay: 26.615 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 26.447 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 26.638 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 0.63 Mbit/s
95th percentile per-packet one-way delay: 26.830 ms
Loss rate: 0.51%
```
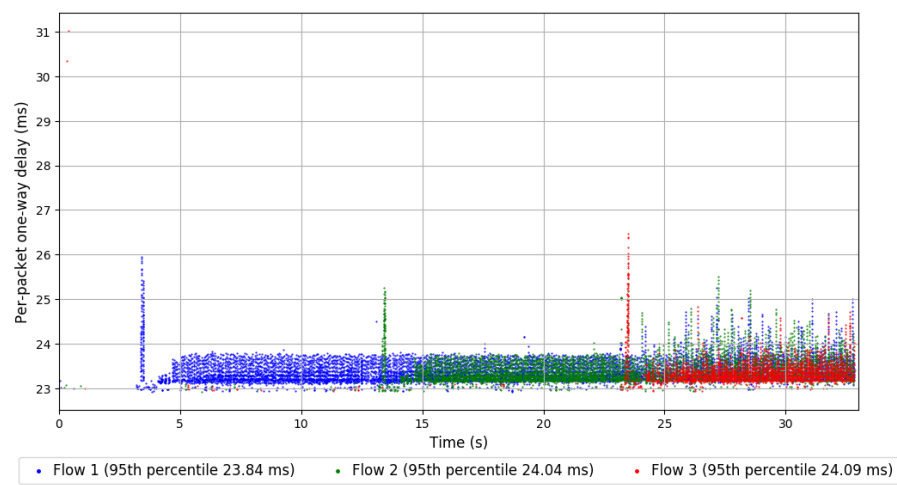
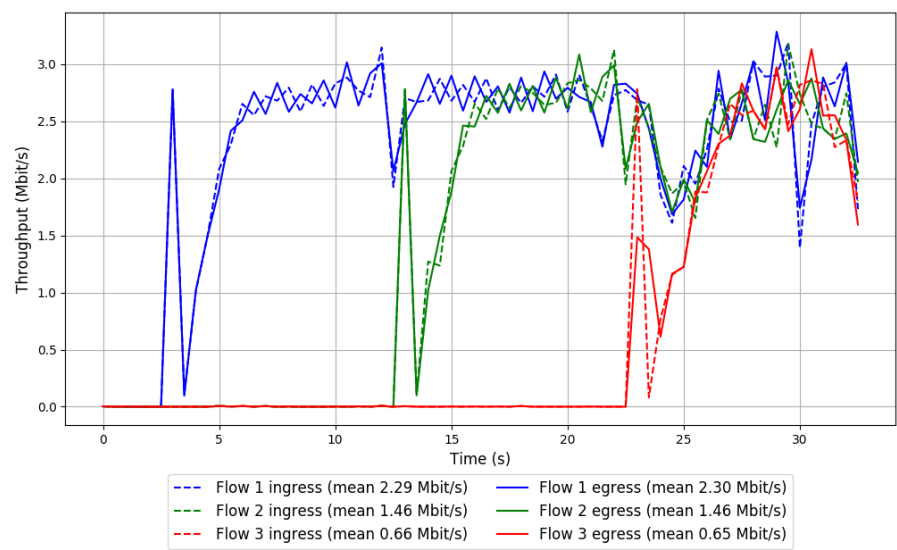Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2018-02-20 11:46:41
End at: 2018-02-20 11:47:11
Local clock offset: 0.646 ms
Remote clock offset: -6.2 ms


# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.35 Mbit/s
95th percentile per-packet one-way delay: 26.256 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 26.239 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 1.49 Mbit/s
95th percentile per-packet one-way delay: 26.281 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 26.290 ms
Loss rate: 0.68%
```

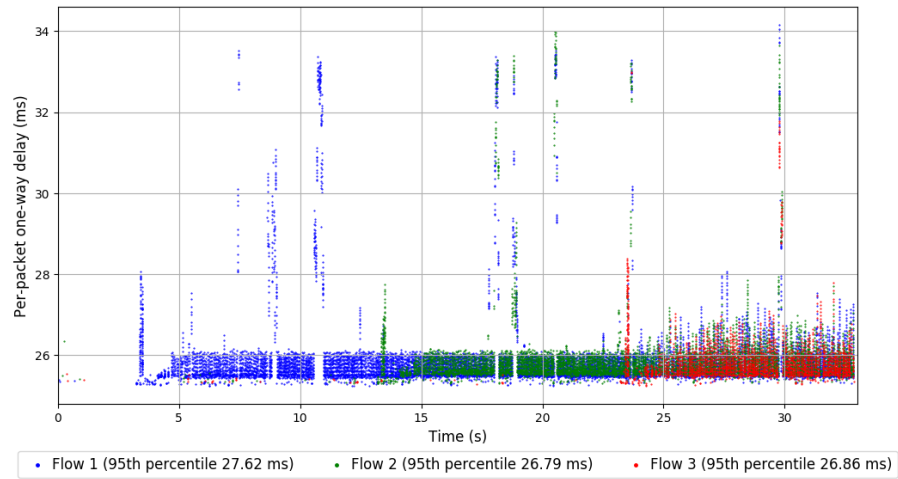Run 5: Report of WebRTC media — Data Link

```
Run 6: Statistics of WebRTC media

Start at: 2018-02-20 12:11:13
End at: 2018-02-20 12:11:43
Local clock offset: 1.674 ms
Remote clock offset: -3.466 ms


# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.41 Mbit/s
95th percentile per-packet one-way delay: 24.098 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 23.986 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 24.091 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 24.382 ms
Loss rate: 0.53%
```
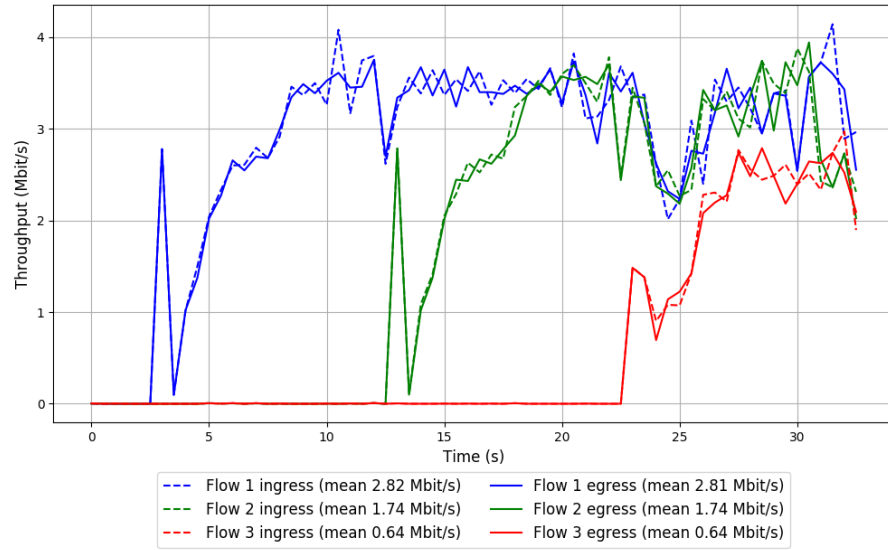
Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2018-02-20 12:35:50
End at: 2018-02-20 12:36:20
Local clock offset: 1.753 ms
Remote clock offset: -1.959 ms


# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.32 Mbit/s
95th percentile per-packet one-way delay: 24.409 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 24.327 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 24.500 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 24.436 ms
Loss rate: 0.56%
```

Run 7: Report of WebRTC media — Data Link

```
Run 8: Statistics of WebRTC media

Start at: 2018-02-20 13:00:22
End at: 2018-02-20 13:00:52
Local clock offset: -4.737 ms
Remote clock offset: -4.993 ms


# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.40 Mbit/s
95th percentile per-packet one-way delay: 23.951 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 23.837 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 24.044 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 24.086 ms
Loss rate: 0.49%
```
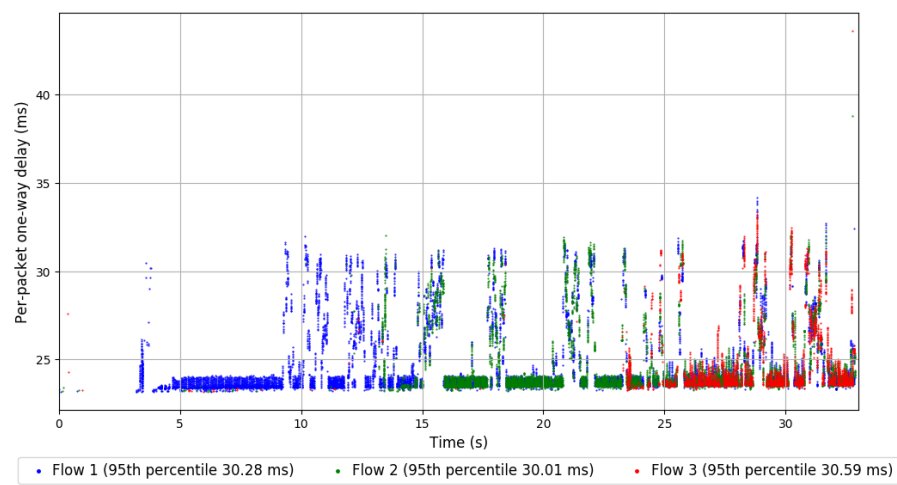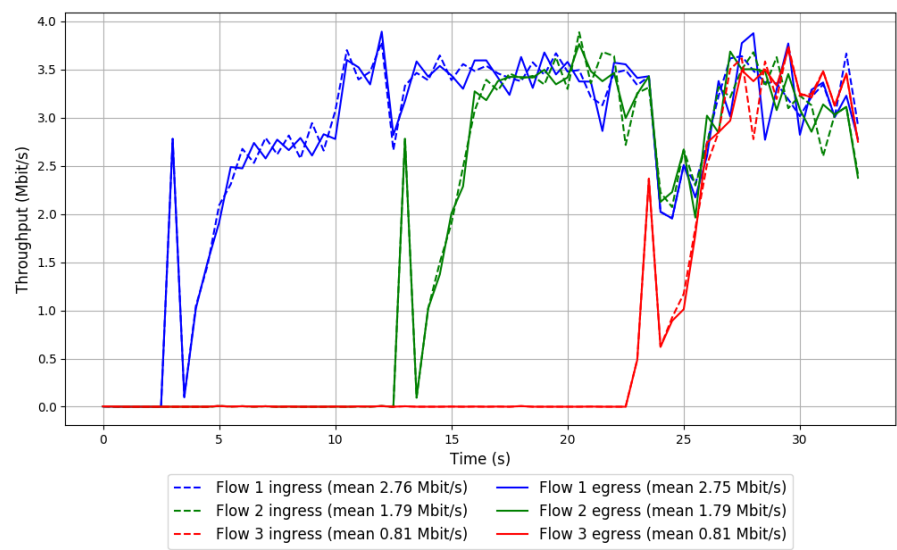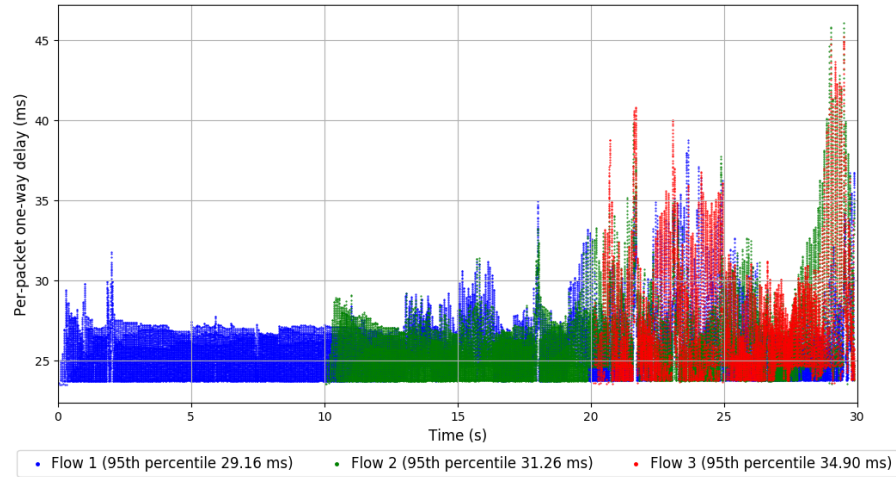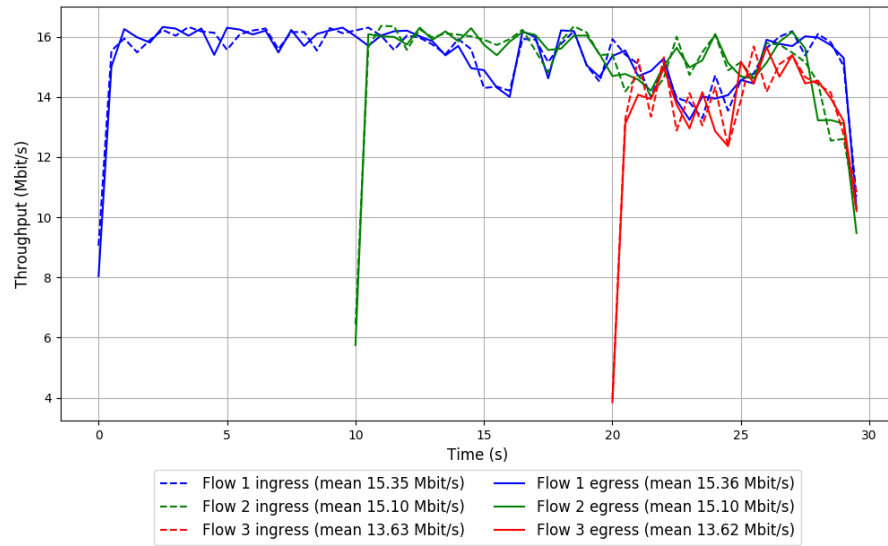
Run 8: Report of WebRTC media — Data Link

```
Run 9: Statistics of WebRTC media

Start at: 2018-02-20 13:24:58
End at: 2018-02-20 13:25:28
Local clock offset: 1.585 ms
Remote clock offset: -7.055 ms

# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.18 Mbit/s
95th percentile per-packet one-way delay: 27.167 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 2.81 Mbit/s
95th percentile per-packet one-way delay: 27.623 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 1.74 Mbit/s
95th percentile per-packet one-way delay: 26.791 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 26.855 ms
Loss rate: 0.61%
```
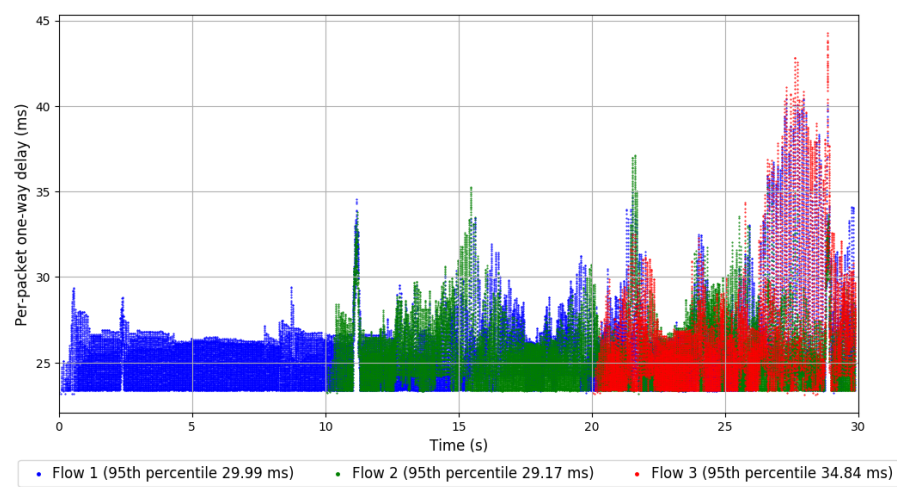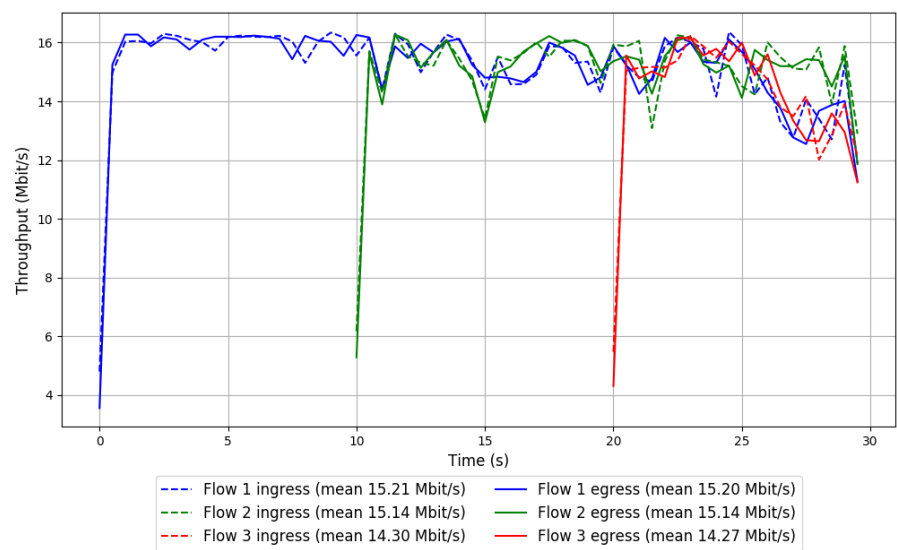
Run 9: Report of WebRTC media — Data Link

```
Run 10: Statistics of WebRTC media

Start at: 2018-02-20 13:50:42
End at: 2018-02-20 13:51:12
Local clock offset: 3.735 ms
Remote clock offset: -2.88 ms

# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.33 Mbit/s
95th percentile per-packet one-way delay: 30.276 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 2.75 Mbit/s
95th percentile per-packet one-way delay: 30.282 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 30.013 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 0.81 Mbit/s
95th percentile per-packet one-way delay: 30.587 ms
Loss rate: 0.19%
```

Run 10: Report of WebRTC media — Data Link

```
Run 1: Statistics of Sprout

Start at: 2018-02-20 09:45:00
End at: 2018-02-20 09:45:30
Local clock offset: -6.515 ms
Remote clock offset: -5.136 ms


# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 29.88 Mbit/s
95th percentile per-packet one-way delay: 31.284 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 15.36 Mbit/s
95th percentile per-packet one-way delay: 29.159 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 15.10 Mbit/s
95th percentile per-packet one-way delay: 31.258 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 13.62 Mbit/s
95th percentile per-packet one-way delay: 34.896 ms
Loss rate: 0.45%
```
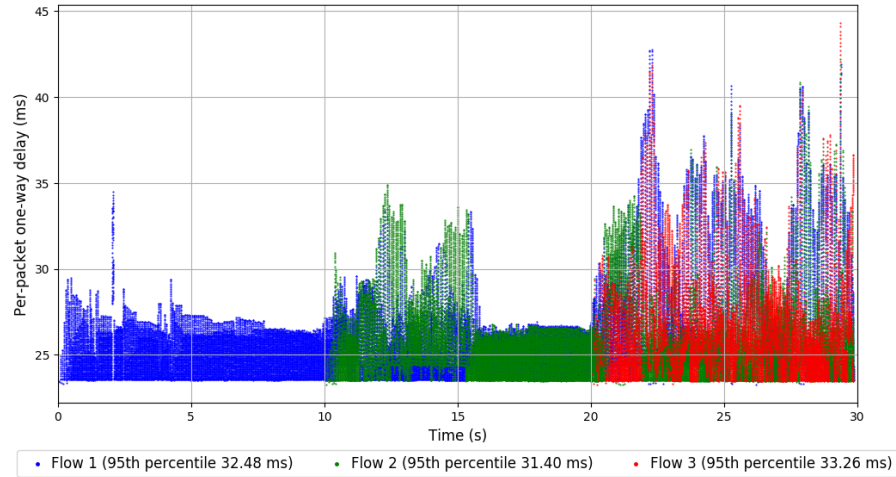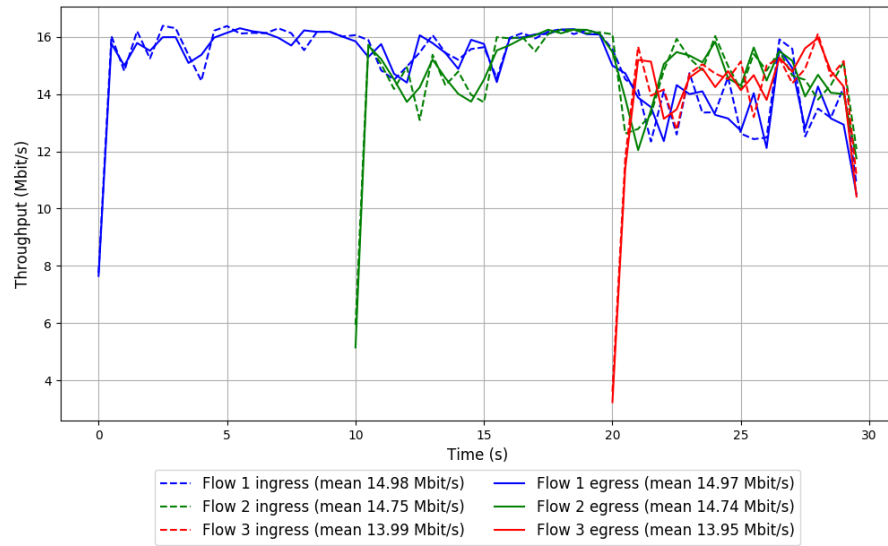
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2018-02-20 10:09:41
End at: 2018-02-20 10:10:11
Local clock offset: 4.813 ms
Remote clock offset: -2.327 ms


# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 29.96 Mbit/s
95th percentile per-packet one-way delay: 30.382 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 15.20 Mbit/s
95th percentile per-packet one-way delay: 29.987 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 15.14 Mbit/s
95th percentile per-packet one-way delay: 29.167 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 14.27 Mbit/s
95th percentile per-packet one-way delay: 34.843 ms
Loss rate: 0.77%
```
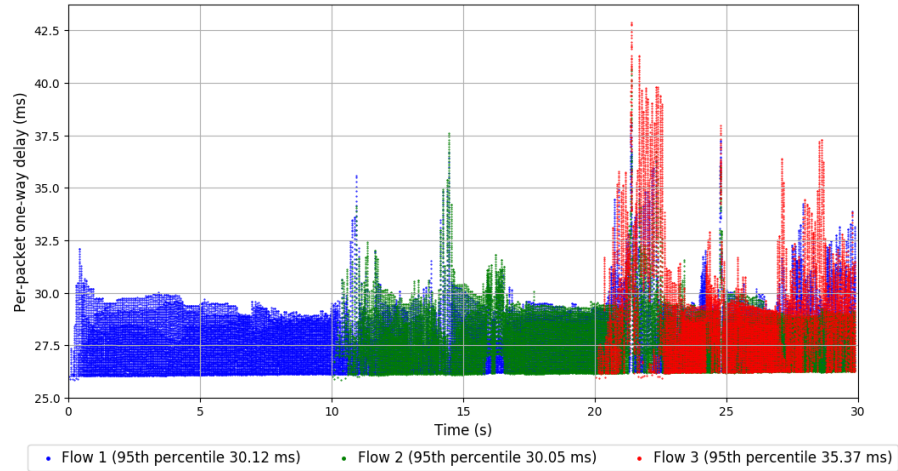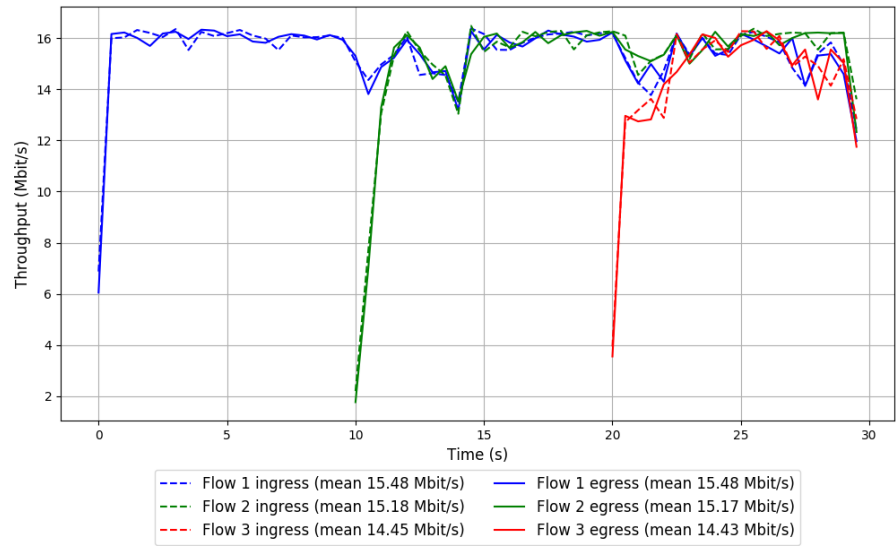
Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2018-02-20 10:34:19
End at: 2018-02-20 10:34:49
Local clock offset: 2.334 ms
Remote clock offset: -3.114 ms


# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 29.35 Mbit/s
95th percentile per-packet one-way delay: 32.206 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 14.97 Mbit/s
95th percentile per-packet one-way delay: 32.476 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 14.74 Mbit/s
95th percentile per-packet one-way delay: 31.402 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 13.95 Mbit/s
95th percentile per-packet one-way delay: 33.262 ms
Loss rate: 0.72%
```

Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2018-02-20 10:58:54
End at: 2018-02-20 10:59:24
Local clock offset: -0.649 ms
Remote clock offset: -8.158 ms


# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.31 Mbit/s
95th percentile per-packet one-way delay: 31.117 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 15.48 Mbit/s
95th percentile per-packet one-way delay: 30.121 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 15.17 Mbit/s
95th percentile per-packet one-way delay: 30.048 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 14.43 Mbit/s
95th percentile per-packet one-way delay: 35.370 ms
Loss rate: 0.66%
```
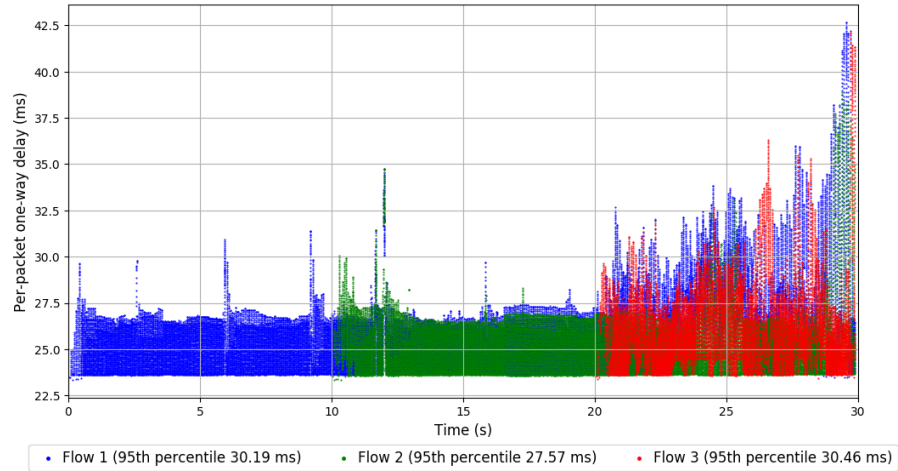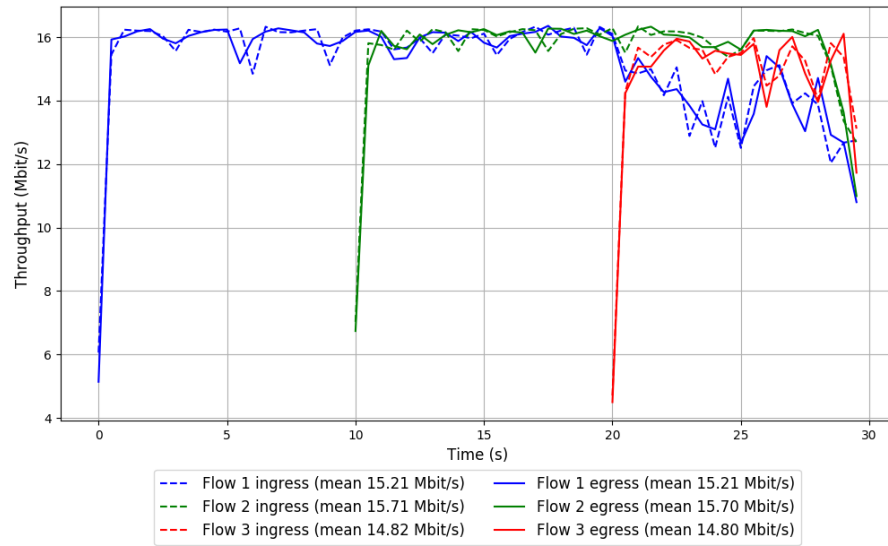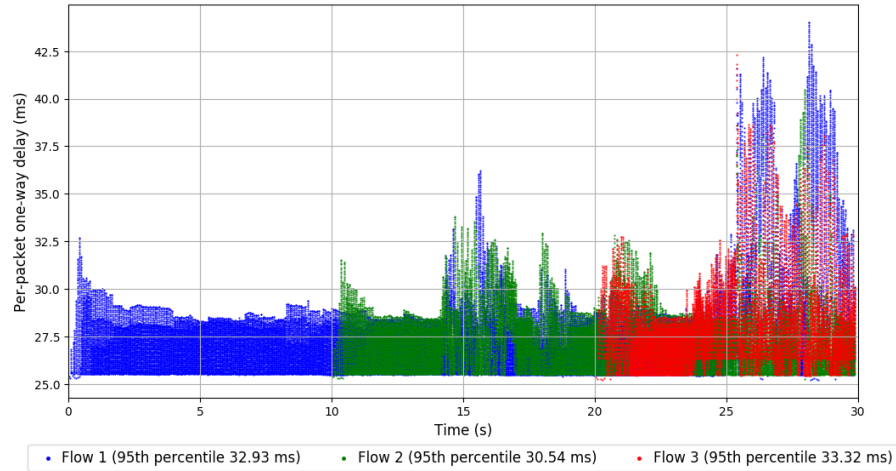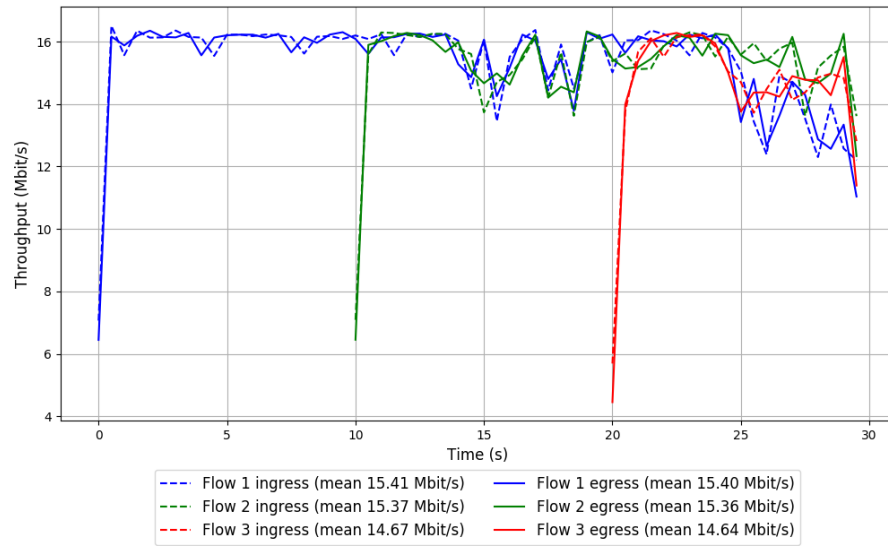
Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2018-02-20 11:23:25
End at: 2018-02-20 11:23:55
Local clock offset: -6.962 ms
Remote clock offset: -4.07 ms


# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.52 Mbit/s
95th percentile per-packet one-way delay: 29.631 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 15.21 Mbit/s
95th percentile per-packet one-way delay: 30.186 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 15.70 Mbit/s
95th percentile per-packet one-way delay: 27.565 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 14.80 Mbit/s
95th percentile per-packet one-way delay: 30.465 ms
Loss rate: 0.69%
```
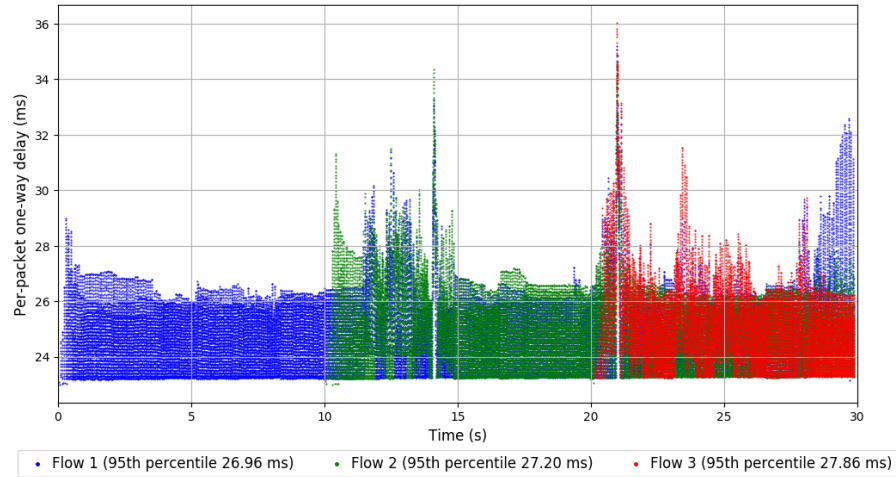
Run 5: Report of Sprout — Data Link

```
Run 6: Statistics of Sprout

Start at: 2018-02-20 11:47:59
End at: 2018-02-20 11:48:29
Local clock offset: 0.753 ms
Remote clock offset: -6.194 ms


# Below is generated by plot.py at 2018-02-20 18:28:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.43 Mbit/s
95th percentile per-packet one-way delay: 31.903 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 15.40 Mbit/s
95th percentile per-packet one-way delay: 32.931 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 15.36 Mbit/s
95th percentile per-packet one-way delay: 30.538 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 14.64 Mbit/s
95th percentile per-packet one-way delay: 33.324 ms
Loss rate: 0.77%
```

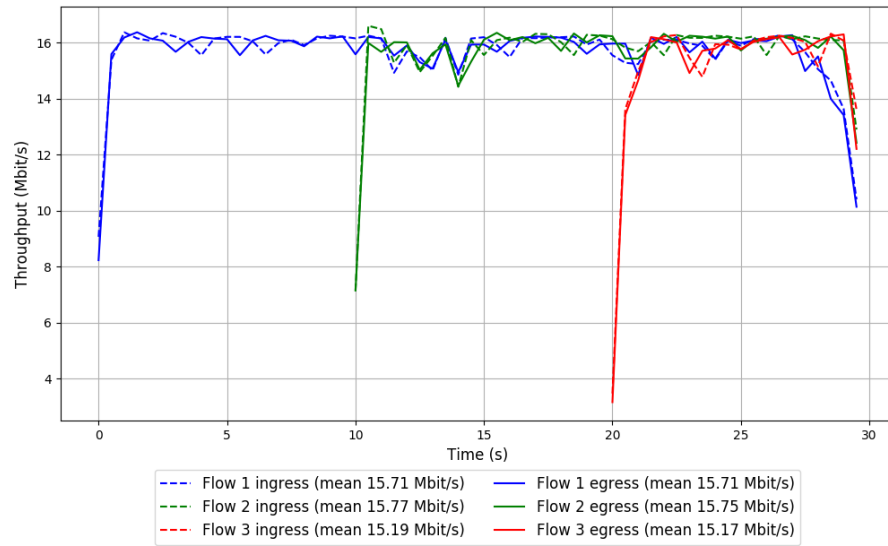# Run 6: Report of Sprout — Data Link

```
Run 7: Statistics of Sprout

Start at: 2018-02-20 12:12:31
End at: 2018-02-20 12:13:01
Local clock offset: 1.629 ms
Remote clock offset: -3.235 ms


# Below is generated by plot.py at 2018-02-20 18:29:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 31.16 Mbit/s
95th percentile per-packet one-way delay: 27.233 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 15.71 Mbit/s
95th percentile per-packet one-way delay: 26.965 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 15.75 Mbit/s
95th percentile per-packet one-way delay: 27.199 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 15.17 Mbit/s
95th percentile per-packet one-way delay: 27.859 ms
Loss rate: 0.68%
```

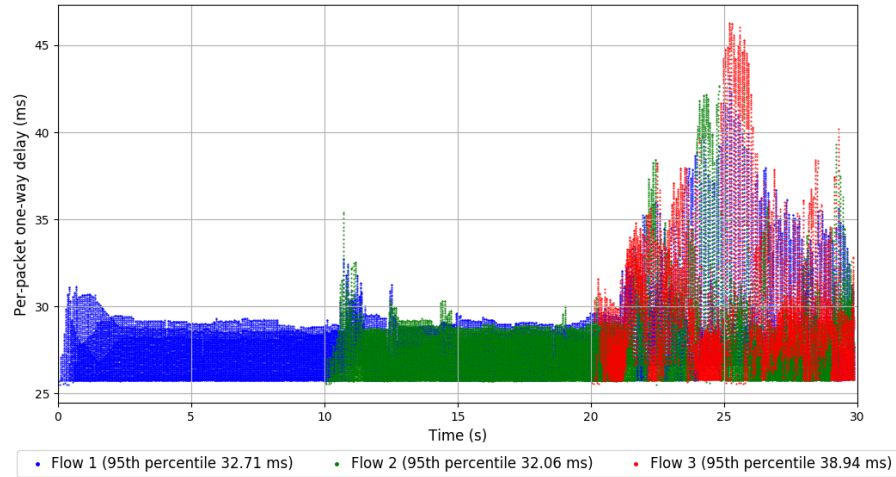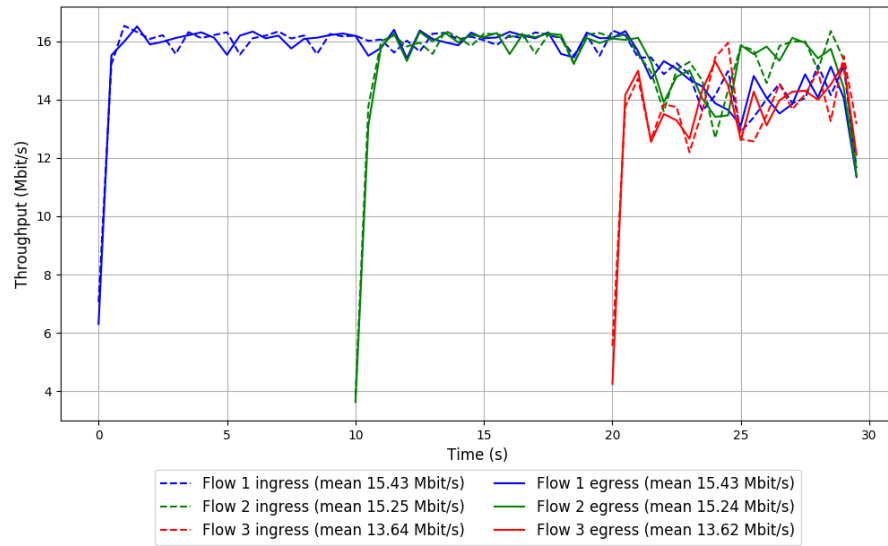Run 7: Report of Sprout — Data Link

```
Run 8: Statistics of Sprout

Start at: 2018-02-20 12:37:07
End at: 2018-02-20 12:37:37
Local clock offset: 1.757 ms
Remote clock offset: -4.053 ms


# Below is generated by plot.py at 2018-02-20 18:29:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.04 Mbit/s
95th percentile per-packet one-way delay: 33.874 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 15.43 Mbit/s
95th percentile per-packet one-way delay: 32.708 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 15.24 Mbit/s
95th percentile per-packet one-way delay: 32.058 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 13.62 Mbit/s
95th percentile per-packet one-way delay: 38.939 ms
Loss rate: 0.55%
```
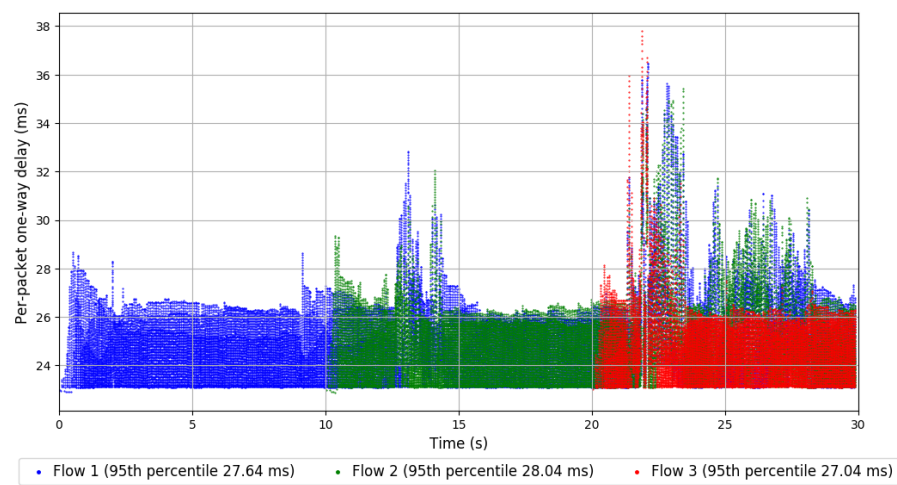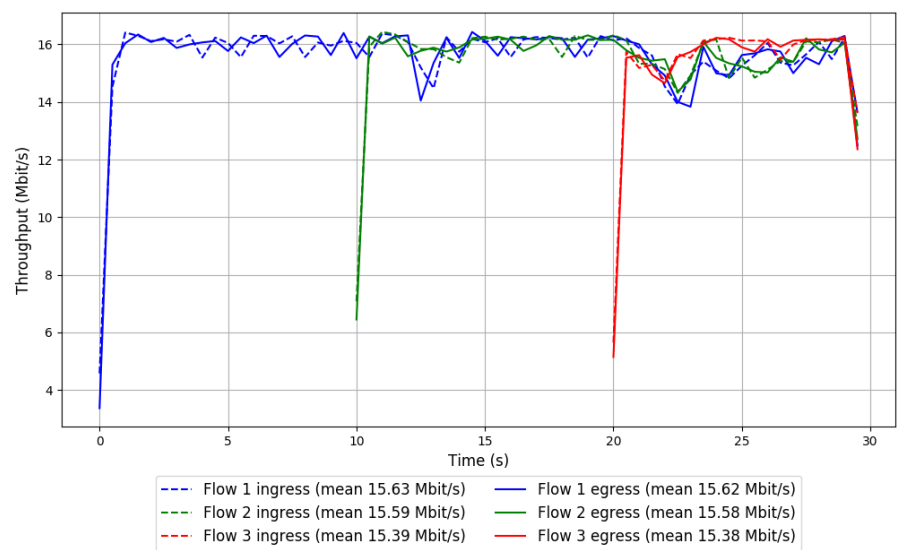
Run 8: Report of Sprout — Data Link

```
Run 9: Statistics of Sprout

Start at: 2018-02-20 13:01:39
End at: 2018-02-20 13:02:09
Local clock offset: -4.957 ms
Remote clock offset: -5.157 ms


# Below is generated by plot.py at 2018-02-20 18:29:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 31.04 Mbit/s
95th percentile per-packet one-way delay: 27.701 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 15.62 Mbit/s
95th percentile per-packet one-way delay: 27.641 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 15.58 Mbit/s
95th percentile per-packet one-way delay: 28.040 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 15.38 Mbit/s
95th percentile per-packet one-way delay: 27.041 ms
Loss rate: 0.65%
```
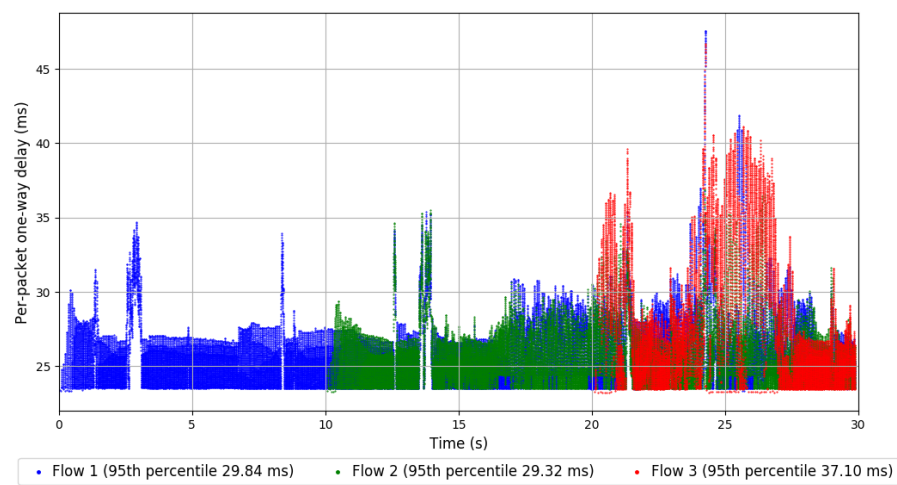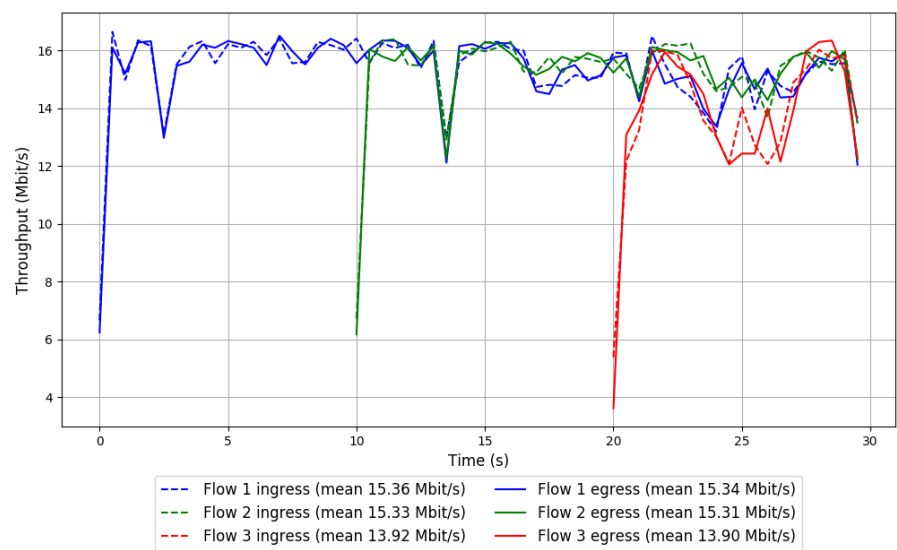
Run 9: Report of Sprout — Data Link

```
Run 10: Statistics of Sprout

Start at: 2018-02-20 13:26:16
End at: 2018-02-20 13:26:46
Local clock offset: 2.047 ms
Remote clock offset: -4.679 ms


# Below is generated by plot.py at 2018-02-20 18:29:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.09 Mbit/s
95th percentile per-packet one-way delay: 31.838 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 15.34 Mbit/s
95th percentile per-packet one-way delay: 29.845 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 15.31 Mbit/s
95th percentile per-packet one-way delay: 29.317 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 13.90 Mbit/s
95th percentile per-packet one-way delay: 37.101 ms
Loss rate: 0.77%
```
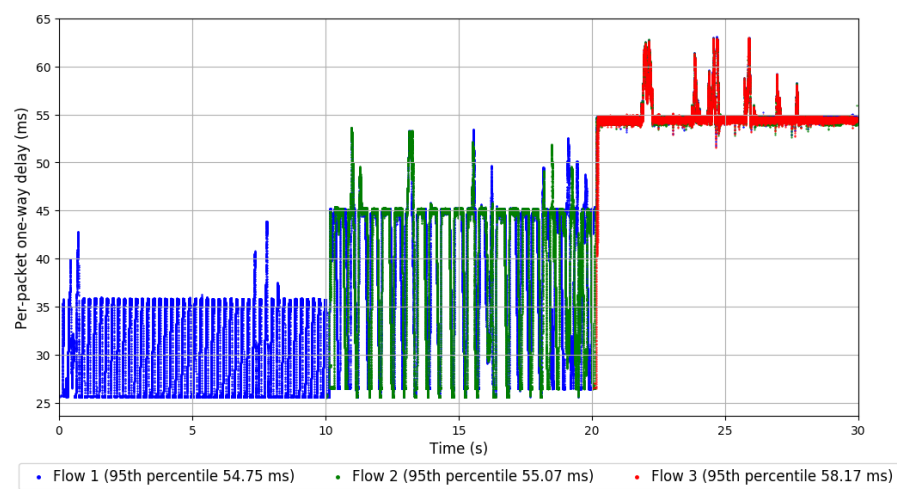
Run 10: Report of Sprout — Data Link

Flow 1 ingress (mean 15.36 Mbit/s)   Flow 1 egress (mean 15.34 Mbit/s)
Flow 2 ingress (mean 15.33 Mbit/s)   Flow 2 egress (mean 15.31 Mbit/s)
Flow 3 ingress (mean 13.92 Mbit/s)   Flow 3 egress (mean 13.90 Mbit/s)

Flow 1 (95th percentile 29.84 ms)   Flow 2 (95th percentile 29.32 ms)   Flow 3 (95th percentile 37.10 ms)
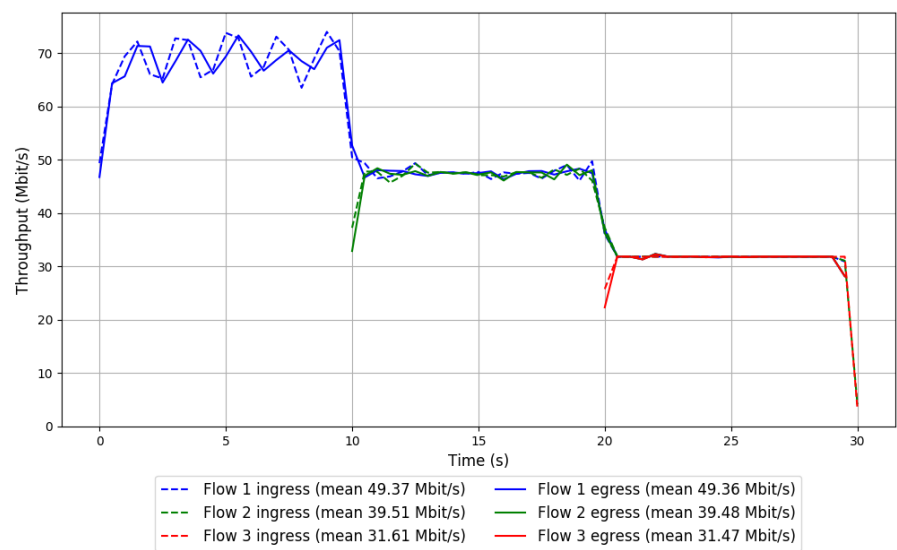
```
Run 1: Statistics of TaoVA-100x

Start at: 2018-02-20 09:58:46
End at: 2018-02-20 09:59:16
Local clock offset: 1.996 ms
Remote clock offset: -6.096 ms

# Below is generated by plot.py at 2018-02-20 18:30:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.05 Mbit/s
95th percentile per-packet one-way delay: 54.861 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 49.36 Mbit/s
95th percentile per-packet one-way delay: 54.746 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 39.48 Mbit/s
95th percentile per-packet one-way delay: 55.067 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 31.47 Mbit/s
95th percentile per-packet one-way delay: 58.173 ms
Loss rate: 1.70%
```

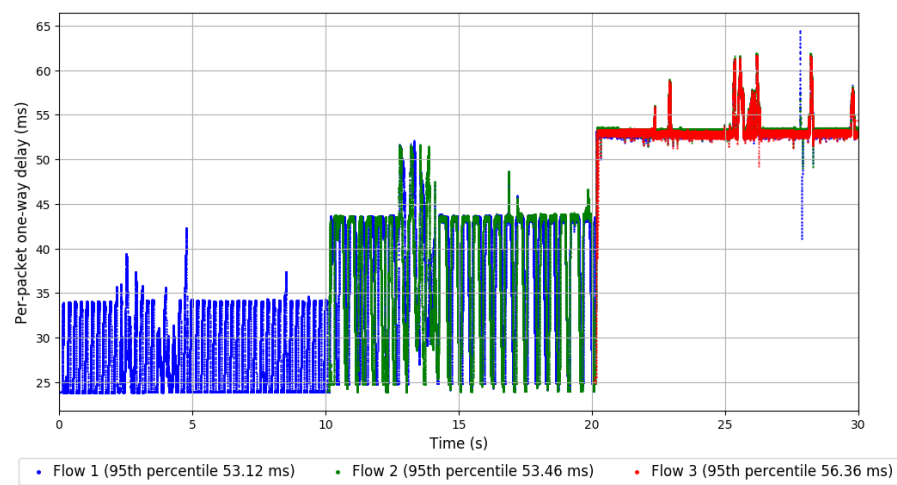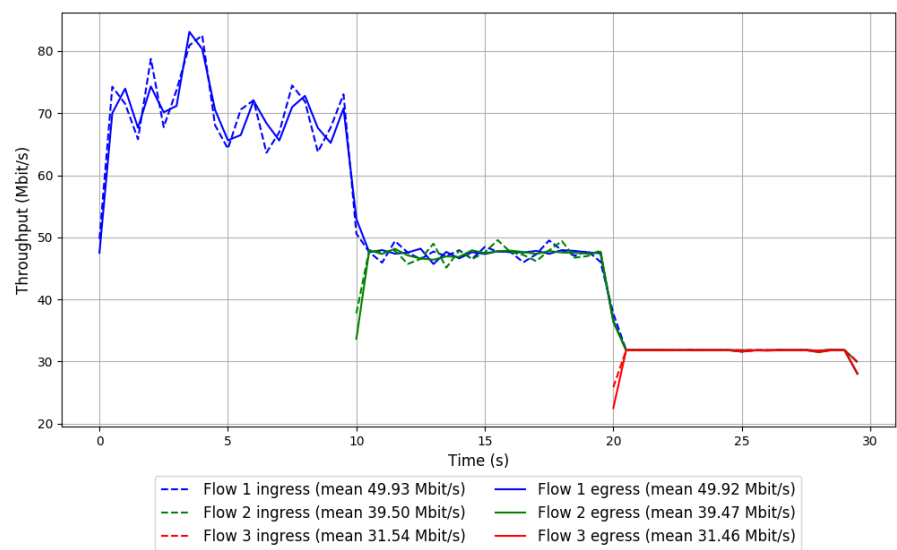Run 1: Report of TaoVA-100x — Data Link

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

Start at: 2018-02-20 10:23:18
End at: 2018-02-20 10:23:48
Local clock offset: 5.456 ms
Remote clock offset: -1.059 ms


# Below is generated by plot.py at 2018-02-20 18:31:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.60 Mbit/s
95th percentile per-packet one-way delay: 53.378 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 49.92 Mbit/s
95th percentile per-packet one-way delay: 53.123 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 39.47 Mbit/s
95th percentile per-packet one-way delay: 53.461 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 31.46 Mbit/s
95th percentile per-packet one-way delay: 56.361 ms
Loss rate: 0.93%
```

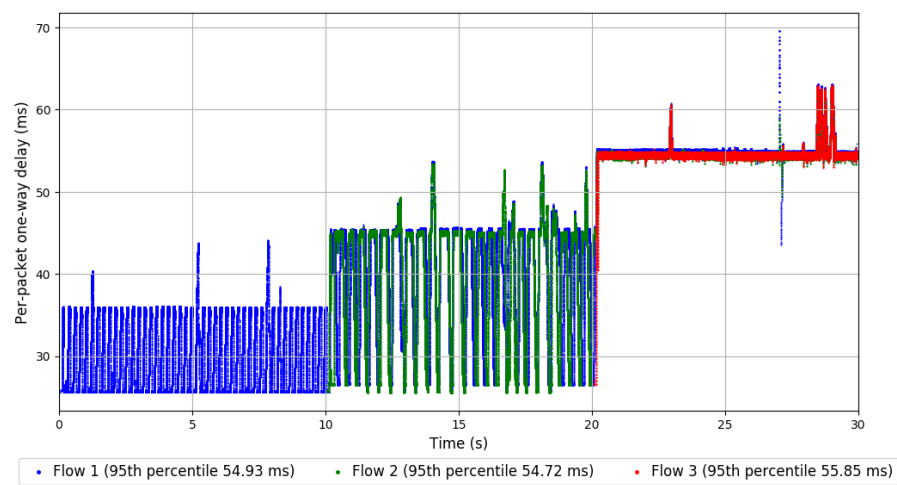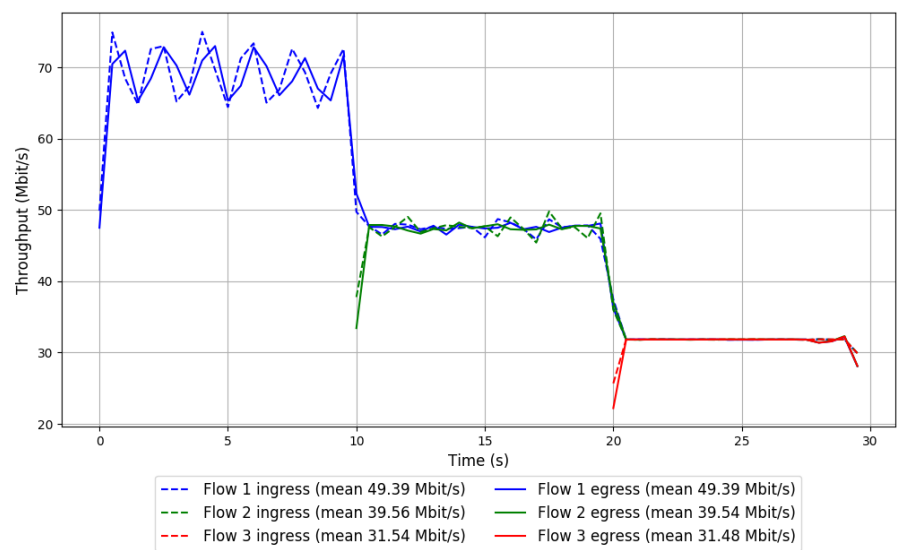Run 2: Report of TaoVA-100x — Data Link

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

Start at: 2018-02-20 10:47:59
End at: 2018-02-20 10:48:29
Local clock offset: 1.458 ms
Remote clock offset: -7.556 ms


# Below is generated by plot.py at 2018-02-20 18:31:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.12 Mbit/s
95th percentile per-packet one-way delay: 54.902 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 49.39 Mbit/s
95th percentile per-packet one-way delay: 54.928 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 39.54 Mbit/s
95th percentile per-packet one-way delay: 54.723 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 31.48 Mbit/s
95th percentile per-packet one-way delay: 55.854 ms
Loss rate: 0.89%
```

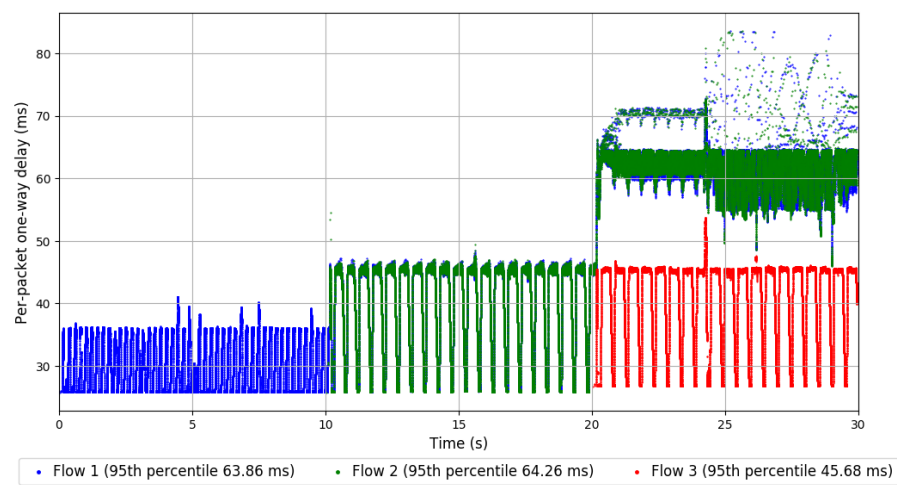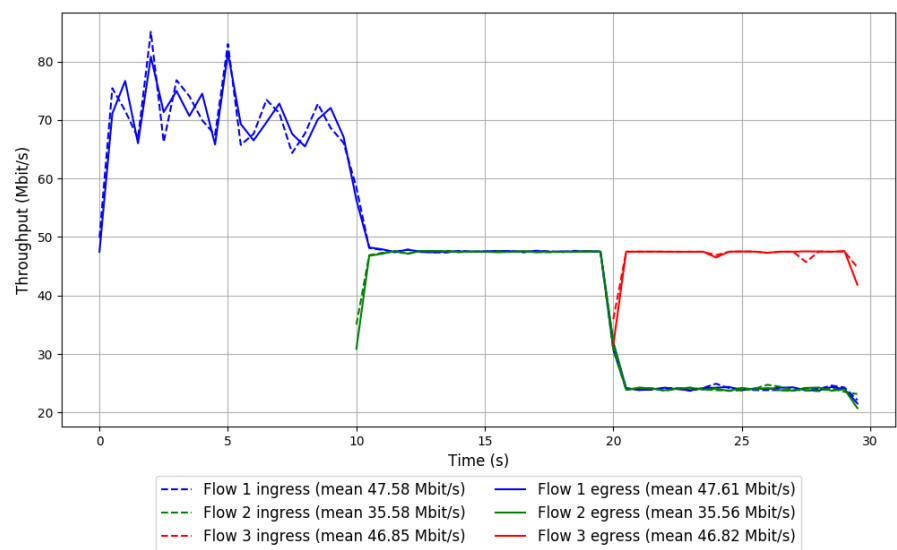Run 3: Report of TaoVA-100x — Data Link

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

Start at: 2018-02-20 11:12:30
End at: 2018-02-20 11:13:00
Local clock offset: -5.102 ms
Remote clock offset: -6.946 ms

# Below is generated by plot.py at 2018-02-20 18:31:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.78 Mbit/s
95th percentile per-packet one-way delay: 63.980 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 47.61 Mbit/s
95th percentile per-packet one-way delay: 63.861 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 35.56 Mbit/s
95th percentile per-packet one-way delay: 64.257 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 46.82 Mbit/s
95th percentile per-packet one-way delay: 45.678 ms
Loss rate: 0.62%
```

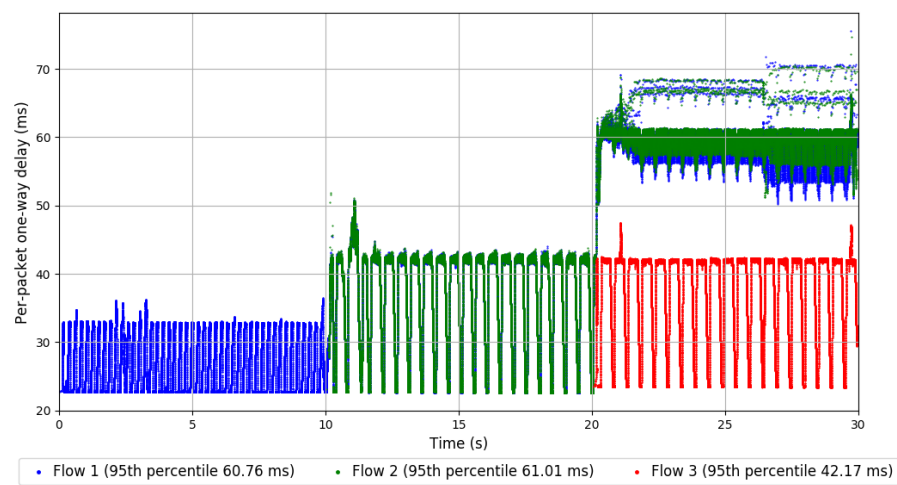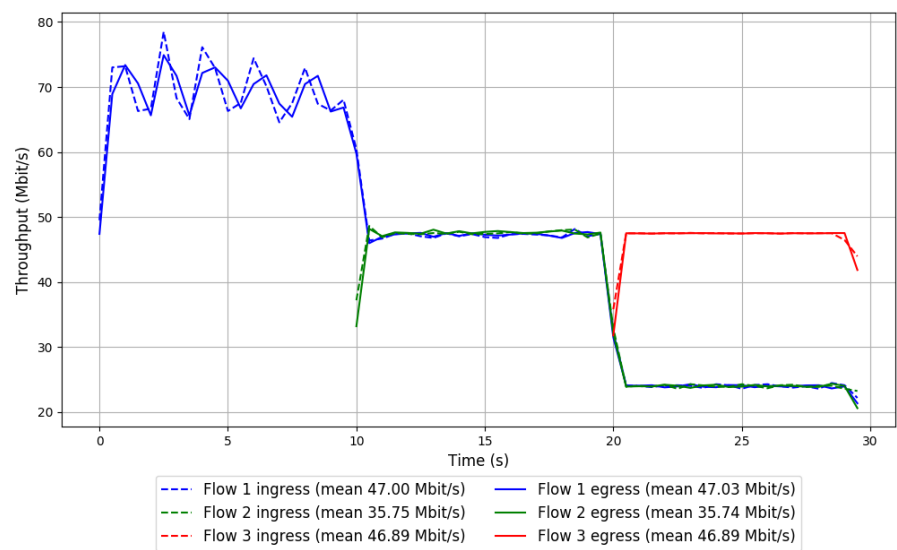Run 4: Report of TaoVA-100x — Data Link

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

Start at: 2018-02-20 11:37:04
End at: 2018-02-20 11:37:34
Local clock offset: -2.31 ms
Remote clock offset: -3.342 ms


# Below is generated by plot.py at 2018-02-20 18:31:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.33 Mbit/s
95th percentile per-packet one-way delay: 60.846 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 47.03 Mbit/s
95th percentile per-packet one-way delay: 60.756 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 35.74 Mbit/s
95th percentile per-packet one-way delay: 61.009 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 46.89 Mbit/s
95th percentile per-packet one-way delay: 42.175 ms
Loss rate: 0.54%
```

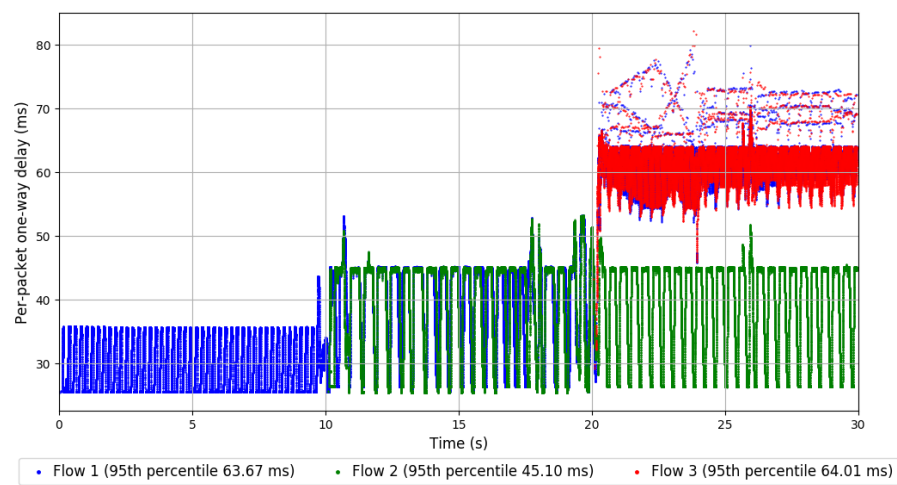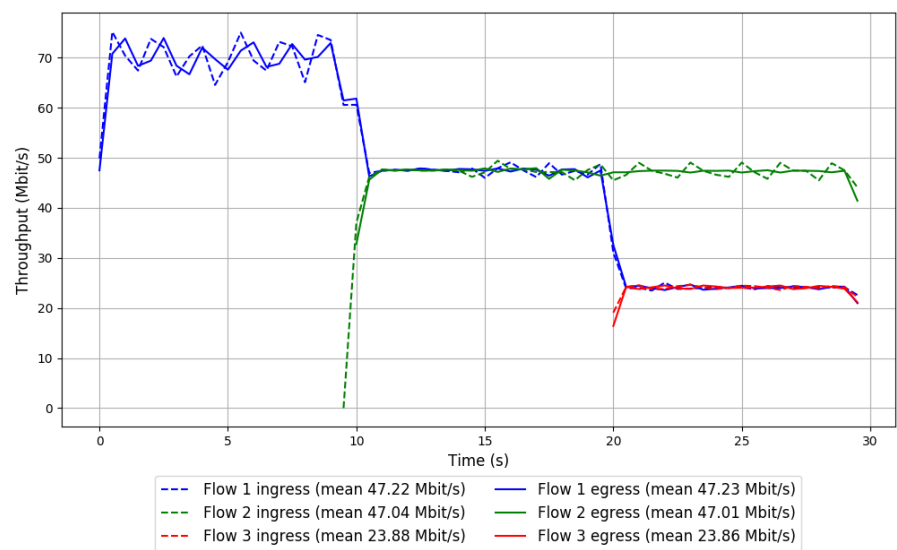Run 5: Report of TaoVA-100x — Data Link

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

Start at: 2018-02-20 12:01:36
End at: 2018-02-20 12:02:06
Local clock offset: 1.988 ms
Remote clock offset: -6.095 ms


# Below is generated by plot.py at 2018-02-20 18:31:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.40 Mbit/s
95th percentile per-packet one-way delay: 63.646 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 47.23 Mbit/s
95th percentile per-packet one-way delay: 63.671 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 47.01 Mbit/s
95th percentile per-packet one-way delay: 45.098 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 23.86 Mbit/s
95th percentile per-packet one-way delay: 64.011 ms
Loss rate: 0.93%
```

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

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

Start at: 2018-02-20 12:26:11
End at: 2018-02-20 12:26:41
Local clock offset: 1.657 ms
Remote clock offset: -2.38 ms

# Below is generated by plot.py at 2018-02-20 18:31:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.35 Mbit/s
95th percentile per-packet one-way delay: 59.454 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 45.38 Mbit/s
95th percentile per-packet one-way delay: 59.208 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 47.13 Mbit/s
95th percentile per-packet one-way delay: 43.311 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 29.08 Mbit/s
95th percentile per-packet one-way delay: 61.960 ms
Loss rate: 1.03%
```
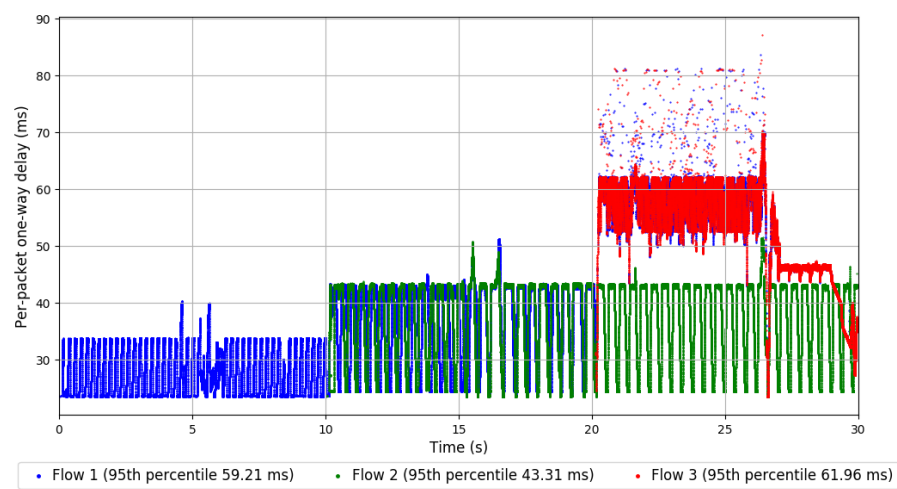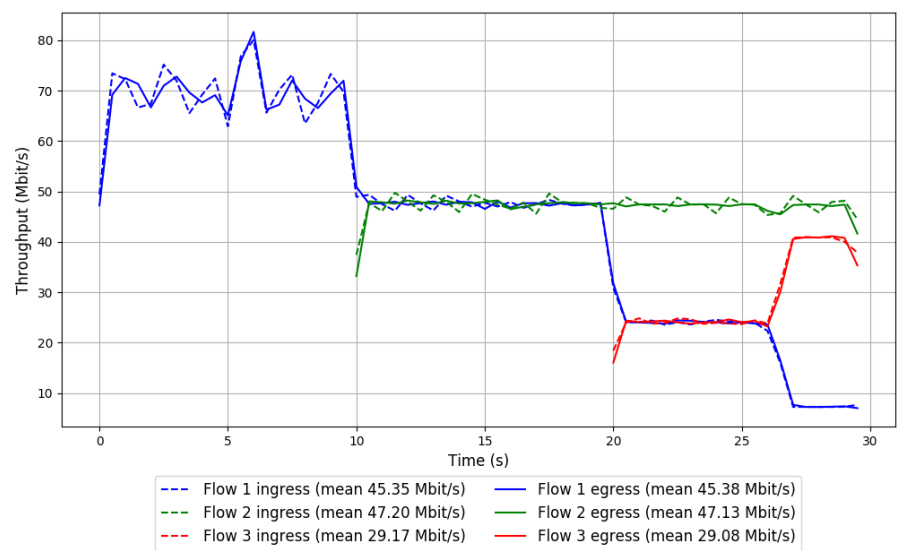
Run 7: Report of TaoVA-100x — Data Link

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

Start at: 2018-02-20 12:50:45
End at: 2018-02-20 12:51:15
Local clock offset: -3.321 ms
Remote clock offset: -5.821 ms


# Below is generated by plot.py at 2018-02-20 18:31:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.38 Mbit/s
95th percentile per-packet one-way delay: 63.972 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 47.24 Mbit/s
95th percentile per-packet one-way delay: 63.975 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 35.73 Mbit/s
95th percentile per-packet one-way delay: 64.134 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 46.48 Mbit/s
95th percentile per-packet one-way delay: 45.345 ms
Loss rate: 0.82%
```

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

- - - Flow 1 ingress (mean 47.21 Mbit/s) —— Flow 1 egress (mean 47.24 Mbit/s)
- - - Flow 2 ingress (mean 35.69 Mbit/s) —— Flow 2 egress (mean 35.73 Mbit/s)
- - - Flow 3 ingress (mean 46.56 Mbit/s) —— Flow 3 egress (mean 46.48 Mbit/s)

- Flow 1 (95th percentile 63.98 ms) - Flow 2 (95th percentile 64.13 ms) - Flow 3 (95th percentile 45.34 ms)
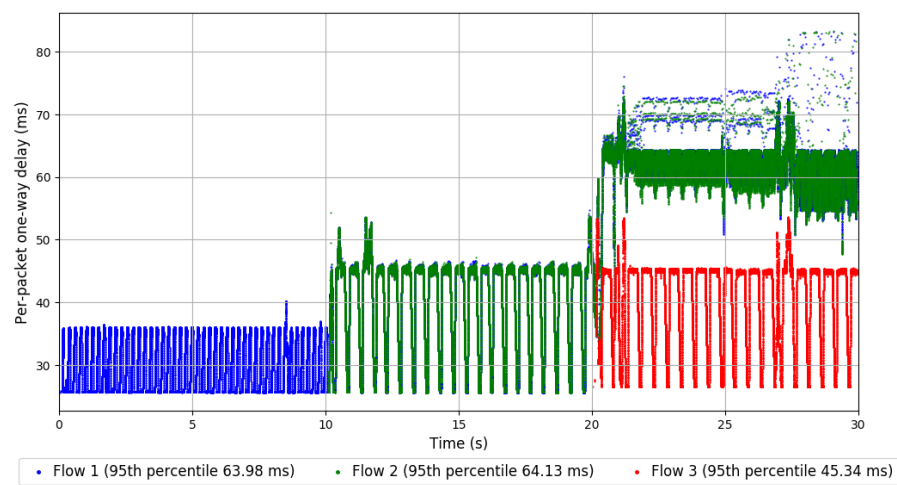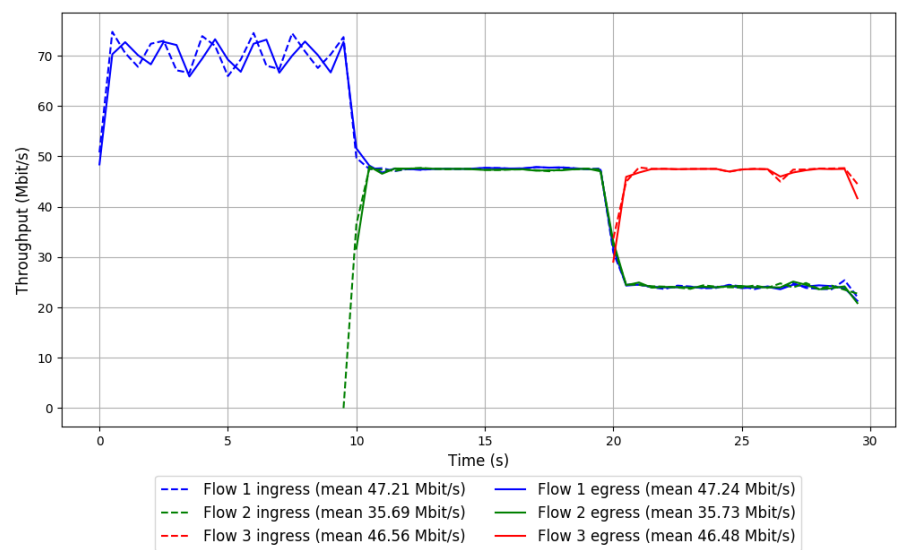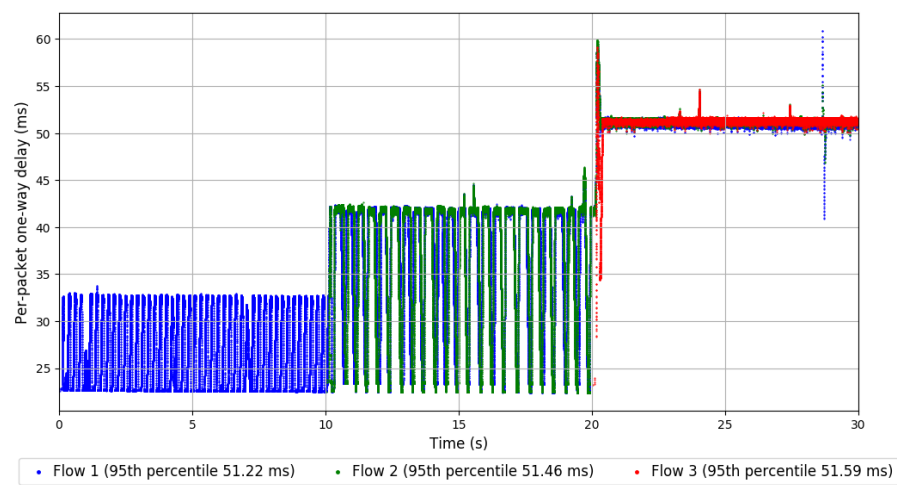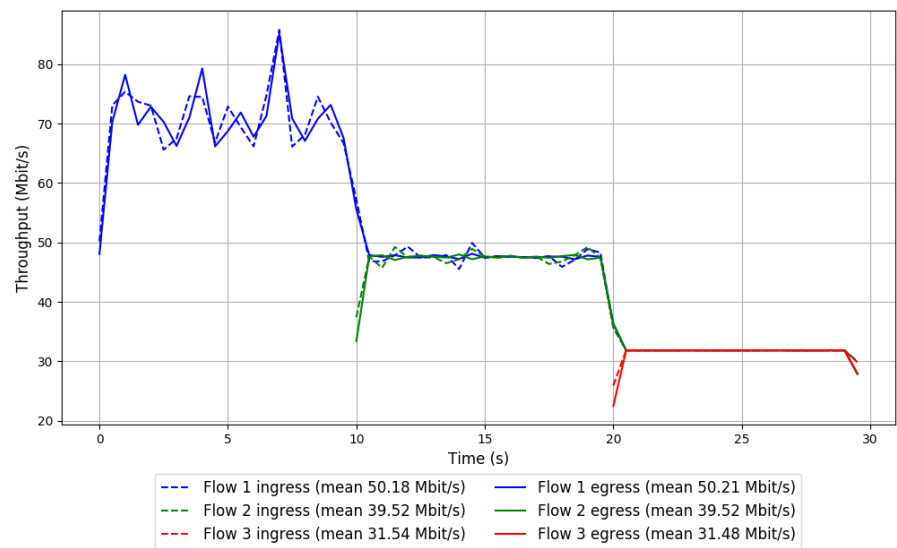
```
Run 9: Statistics of TaoVA-100x

Start at: 2018-02-20 13:15:21
End at: 2018-02-20 13:15:51
Local clock offset: -3.207 ms
Remote clock offset: -6.425 ms


# Below is generated by plot.py at 2018-02-20 18:33:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.93 Mbit/s
95th percentile per-packet one-way delay: 51.434 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 50.21 Mbit/s
95th percentile per-packet one-way delay: 51.216 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 39.52 Mbit/s
95th percentile per-packet one-way delay: 51.456 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 31.48 Mbit/s
95th percentile per-packet one-way delay: 51.588 ms
Loss rate: 0.86%
```

Run 9: Report of TaoVA-100x — Data Link

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

Start at: 2018-02-20 13:40:36
End at: 2018-02-20 13:41:06
Local clock offset: 4.692 ms
Remote clock offset: -5.62 ms

# Below is generated by plot.py at 2018-02-20 18:33:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.35 Mbit/s
95th percentile per-packet one-way delay: 59.483 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 50.26 Mbit/s
95th percentile per-packet one-way delay: 57.350 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 39.09 Mbit/s
95th percentile per-packet one-way delay: 59.730 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 30.60 Mbit/s
95th percentile per-packet one-way delay: 61.283 ms
Loss rate: 1.70%
```

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

Flow 1 ingress (mean 50.45 Mbit/s) --- Flow 1 egress (mean 50.26 Mbit/s)
Flow 2 ingress (mean 39.32 Mbit/s) --- Flow 2 egress (mean 39.09 Mbit/s)
Flow 3 ingress (mean 30.84 Mbit/s) --- Flow 3 egress (mean 30.60 Mbit/s)

Flow 1 (95th percentile 57.35 ms)   Flow 2 (95th percentile 59.73 ms)   Flow 3 (95th percentile 61.28 ms)

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```
Run 1: Statistics of TCP Vegas

Start at: 2018-02-20 09:50:25
End at: 2018-02-20 09:50:55
Local clock offset: -3.372 ms
Remote clock offset: -7.185 ms


# Below is generated by plot.py at 2018-02-20 18:33:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.89 Mbit/s
95th percentile per-packet one-way delay: 48.312 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 44.56 Mbit/s
95th percentile per-packet one-way delay: 43.499 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 39.03 Mbit/s
95th percentile per-packet one-way delay: 48.721 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 37.38 Mbit/s
95th percentile per-packet one-way delay: 55.605 ms
Loss rate: 0.64%
```
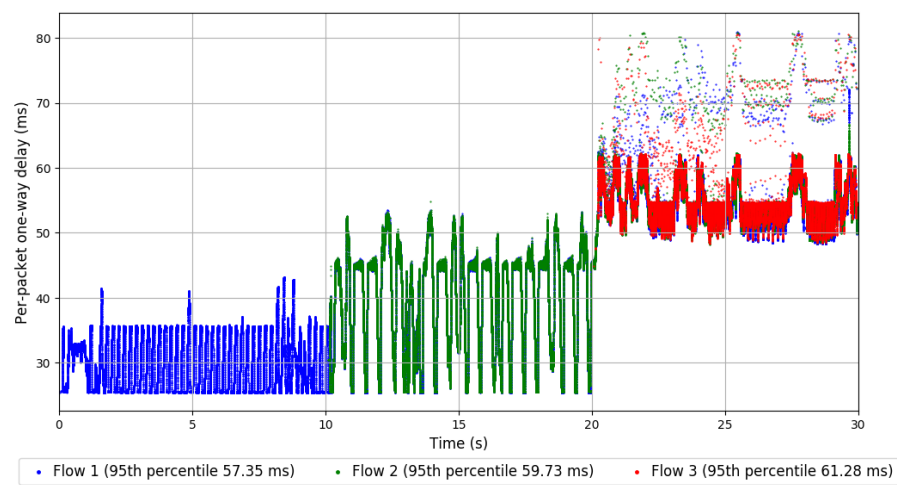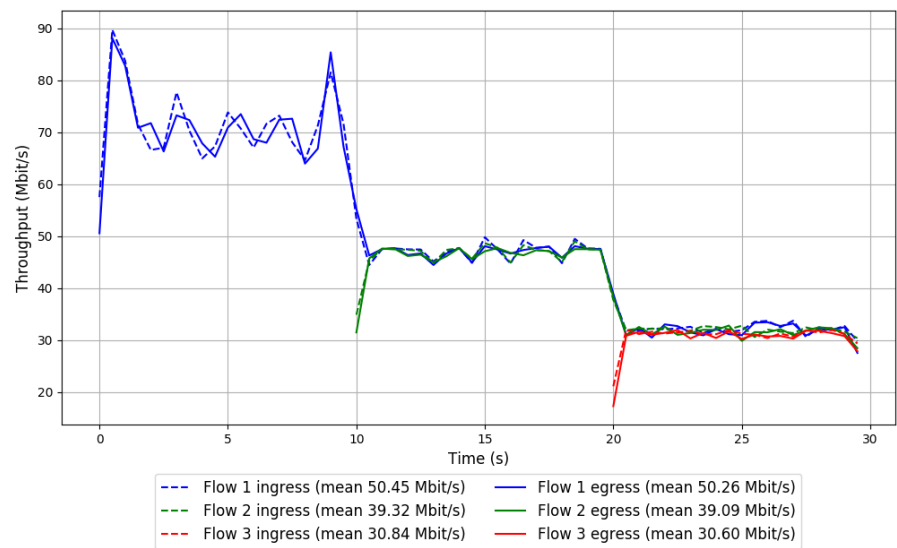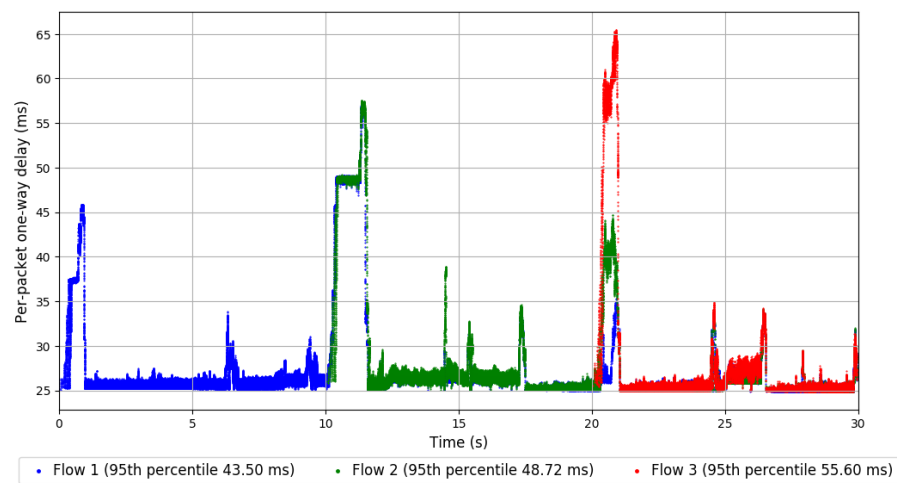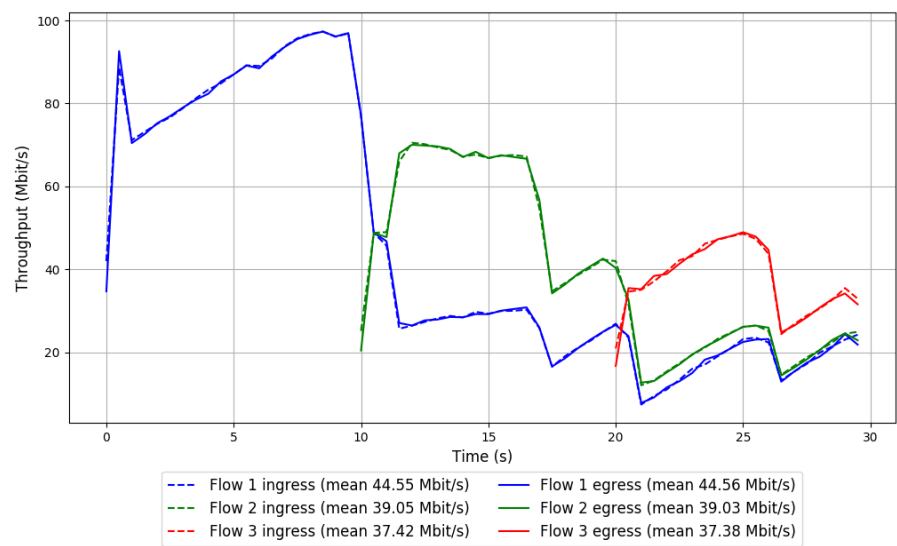
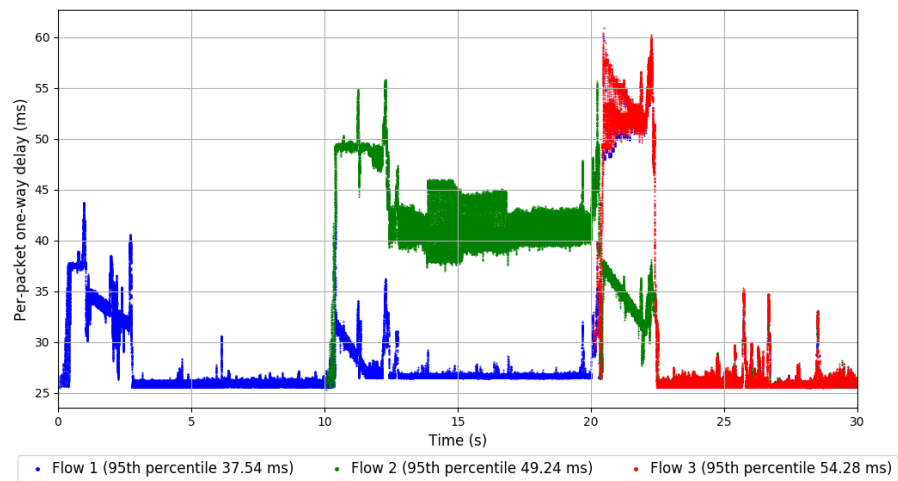Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2018-02-20 10:15:05
End at: 2018-02-20 10:15:35
Local clock offset: 5.734 ms
Remote clock offset: -3.814 ms


# Below is generated by plot.py at 2018-02-20 18:33:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.52 Mbit/s
95th percentile per-packet one-way delay: 49.388 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 34.02 Mbit/s
95th percentile per-packet one-way delay: 37.541 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 46.39 Mbit/s
95th percentile per-packet one-way delay: 49.238 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 38.11 Mbit/s
95th percentile per-packet one-way delay: 54.285 ms
Loss rate: 0.77%
```

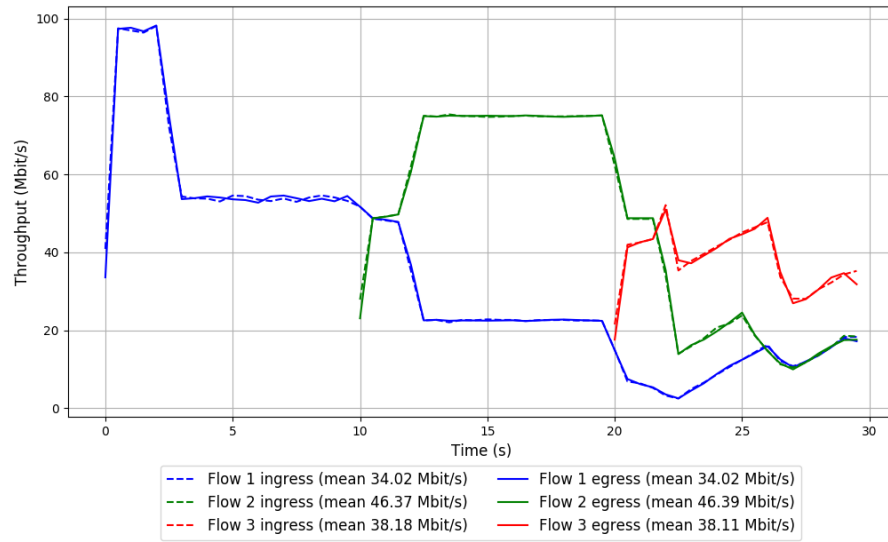Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2018-02-20 10:39:45
End at: 2018-02-20 10:40:15
Local clock offset: 1.809 ms
Remote clock offset: -4.023 ms


# Below is generated by plot.py at 2018-02-20 18:33:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.16 Mbit/s
95th percentile per-packet one-way delay: 47.047 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 51.31 Mbit/s
95th percentile per-packet one-way delay: 44.300 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 49.38 Mbit/s
95th percentile per-packet one-way delay: 47.158 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 18.17 Mbit/s
95th percentile per-packet one-way delay: 47.046 ms
Loss rate: 0.77%
```

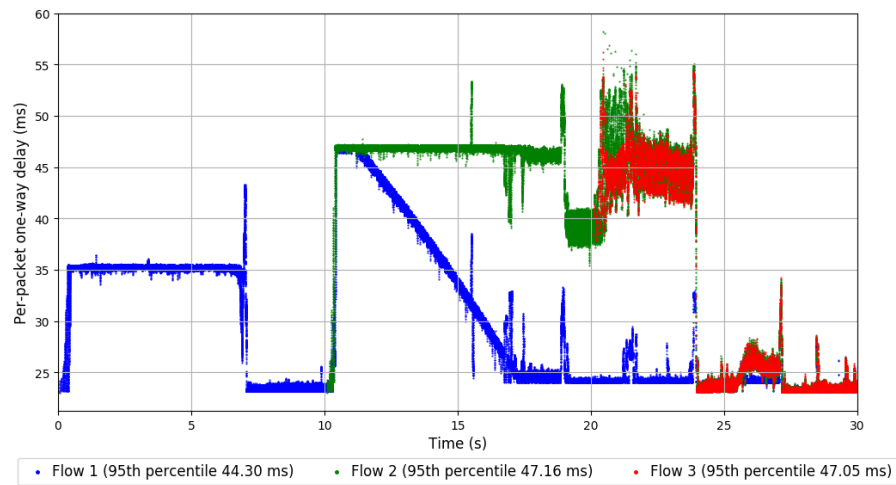Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2018-02-20 11:04:18
End at: 2018-02-20 11:04:48
Local clock offset: -3.08 ms
Remote clock offset: -7.829 ms


# Below is generated by plot.py at 2018-02-20 18:33:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.72 Mbit/s
95th percentile per-packet one-way delay: 45.027 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 43.84 Mbit/s
95th percentile per-packet one-way delay: 38.117 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 43.21 Mbit/s
95th percentile per-packet one-way delay: 44.330 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 39.75 Mbit/s
95th percentile per-packet one-way delay: 48.752 ms
Loss rate: 0.47%
```
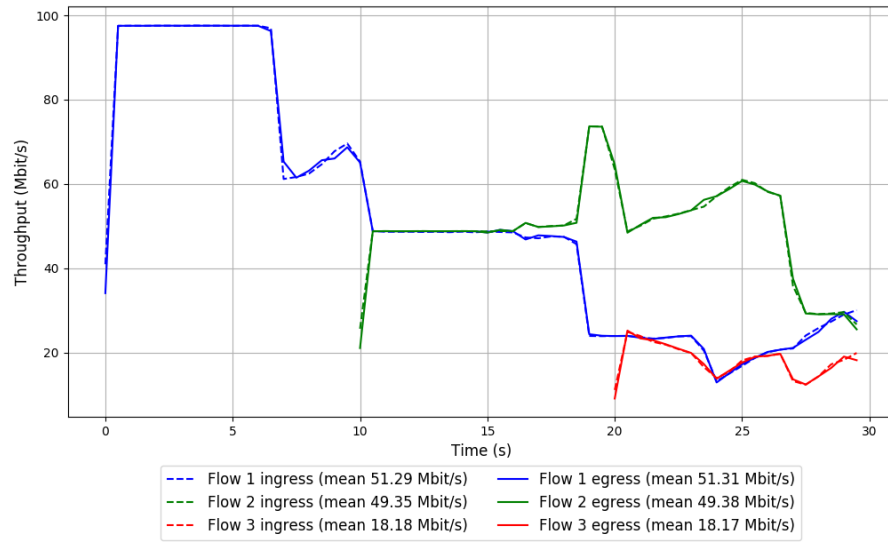
Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2018-02-20 11:28:50
End at: 2018-02-20 11:29:20
Local clock offset: -7.572 ms
Remote clock offset: -5.901 ms


# Below is generated by plot.py at 2018-02-20 18:33:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.22 Mbit/s
95th percentile per-packet one-way delay: 34.399 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 54.23 Mbit/s
95th percentile per-packet one-way delay: 35.850 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 26.91 Mbit/s
95th percentile per-packet one-way delay: 29.308 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 33.57 Mbit/s
95th percentile per-packet one-way delay: 33.251 ms
Loss rate: 0.82%
```
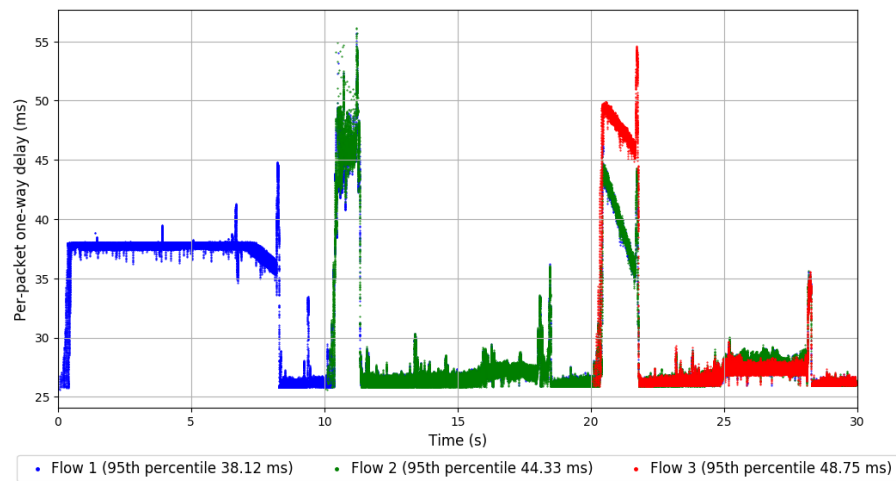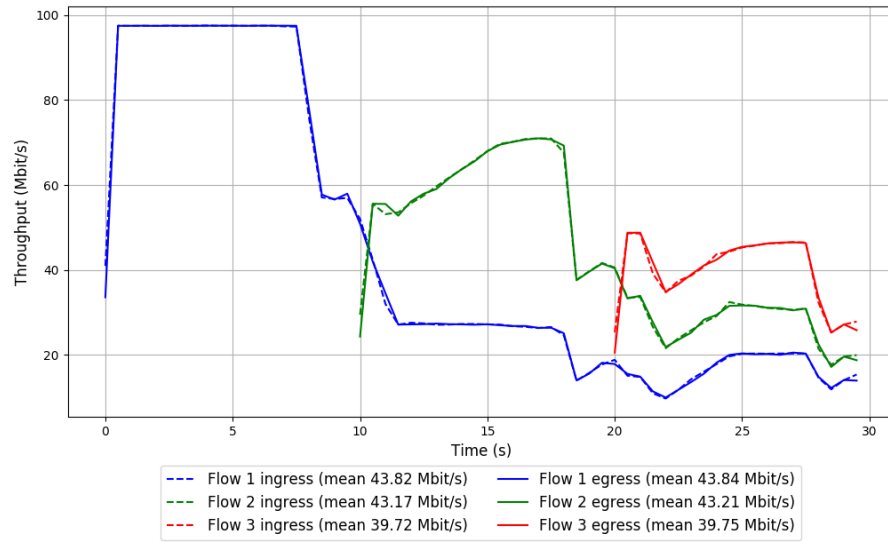
Run 5: Report of TCP Vegas — Data Link

```
Run 6: Statistics of TCP Vegas

Start at: 2018-02-20 11:53:23
End at: 2018-02-20 11:53:53
Local clock offset: 1.523 ms
Remote clock offset: -6.15 ms


# Below is generated by plot.py at 2018-02-20 18:33:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.62 Mbit/s
95th percentile per-packet one-way delay: 49.416 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 52.39 Mbit/s
95th percentile per-packet one-way delay: 49.385 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 34.21 Mbit/s
95th percentile per-packet one-way delay: 47.309 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 31.59 Mbit/s
95th percentile per-packet one-way delay: 60.823 ms
Loss rate: 0.50%
```
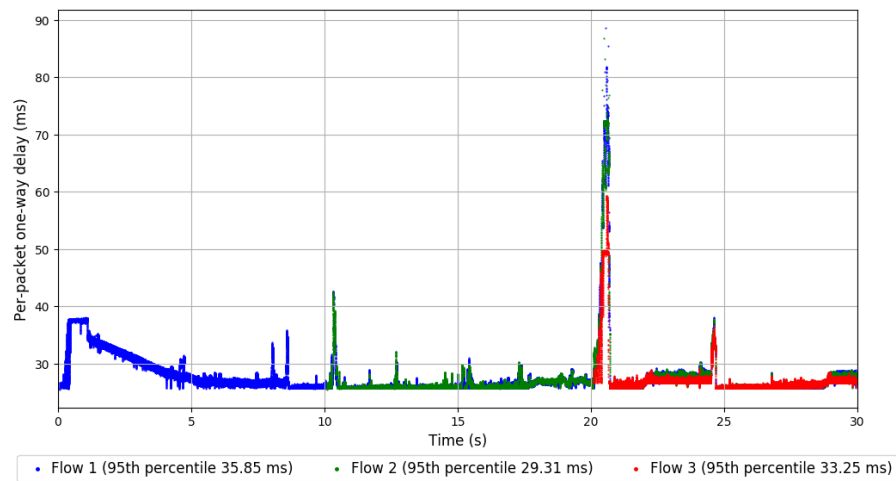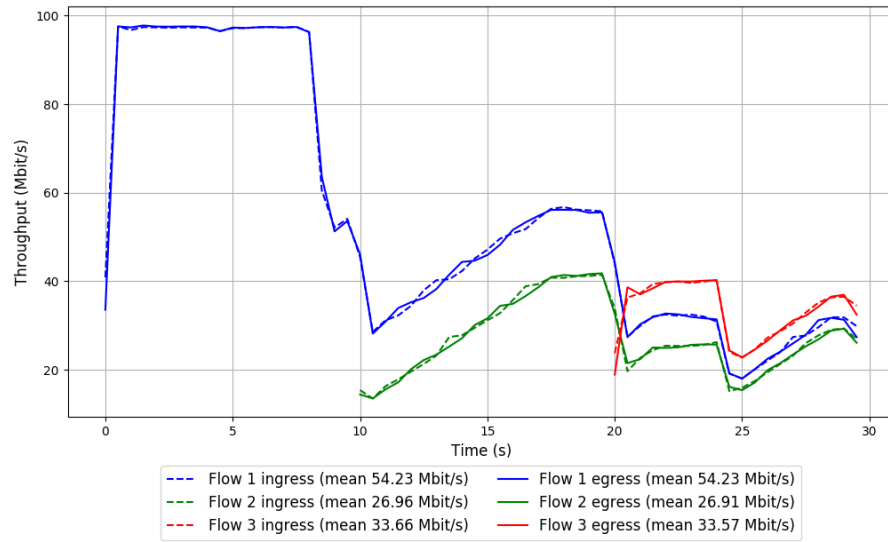
Run 6: Report of TCP Vegas — Data Link

```
Run 7: Statistics of TCP Vegas

Start at: 2018-02-20 12:17:55
End at: 2018-02-20 12:18:25
Local clock offset: 1.629 ms
Remote clock offset: -3.064 ms


# Below is generated by plot.py at 2018-02-20 18:33:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.28 Mbit/s
95th percentile per-packet one-way delay: 47.194 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 43.83 Mbit/s
95th percentile per-packet one-way delay: 47.301 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 27.84 Mbit/s
95th percentile per-packet one-way delay: 46.140 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 51.13 Mbit/s
95th percentile per-packet one-way delay: 45.008 ms
Loss rate: 0.40%
```

Run 7: Report of TCP Vegas — Data Link

```
Run 8: Statistics of TCP Vegas

Start at: 2018-02-20 12:42:32
End at: 2018-02-20 12:43:02
Local clock offset: -0.791 ms
Remote clock offset: -1.216 ms


# Below is generated by plot.py at 2018-02-20 18:33:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.14 Mbit/s
95th percentile per-packet one-way delay: 43.635 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 34.13 Mbit/s
95th percentile per-packet one-way delay: 40.707 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 31.06 Mbit/s
95th percentile per-packet one-way delay: 45.494 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 58.51 Mbit/s
95th percentile per-packet one-way delay: 44.455 ms
Loss rate: 0.48%
```
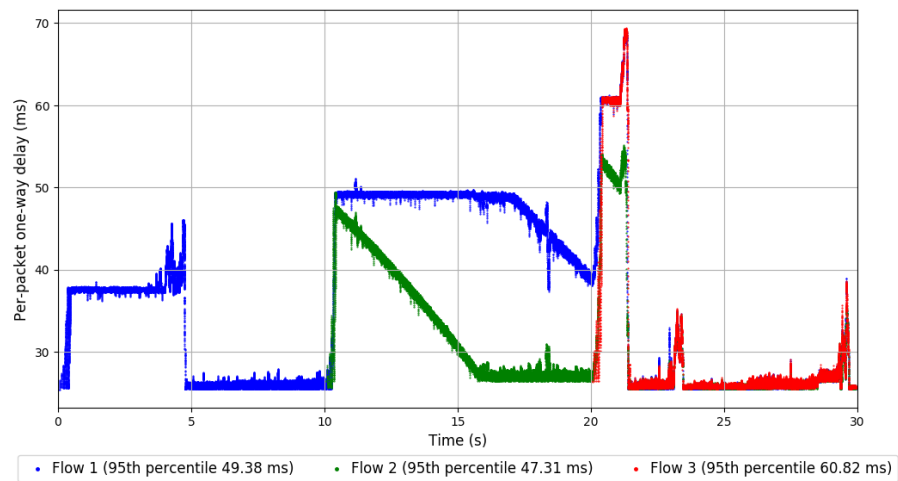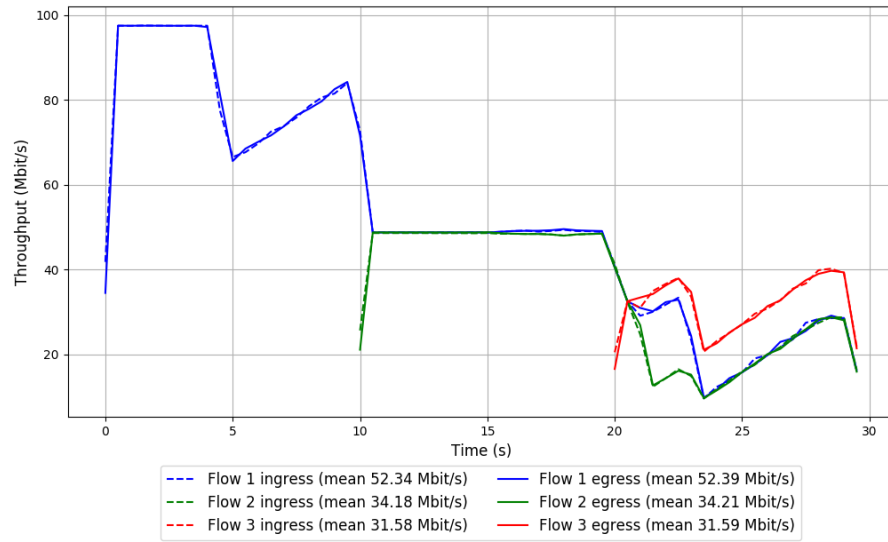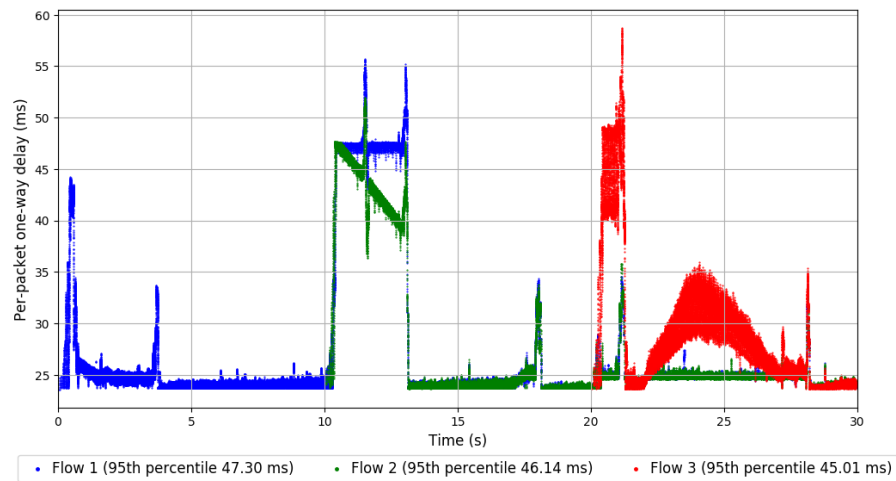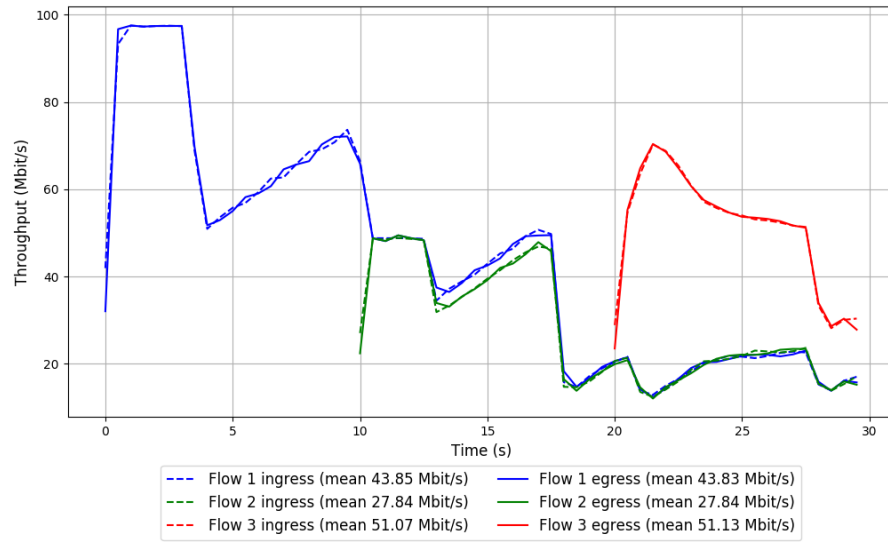
Run 8: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 34.13 Mbit/s) ——— Flow 1 egress (mean 34.13 Mbit/s)
Flow 2 ingress (mean 31.05 Mbit/s) ——— Flow 2 egress (mean 31.06 Mbit/s)
Flow 3 ingress (mean 58.48 Mbit/s) ——— Flow 3 egress (mean 58.51 Mbit/s)

Flow 1 (95th percentile 40.71 ms)   Flow 2 (95th percentile 45.49 ms)   Flow 3 (95th percentile 44.45 ms)

```
Run 9: Statistics of TCP Vegas

Start at: 2018-02-20 13:07:04
End at: 2018-02-20 13:07:34
Local clock offset: -5.509 ms
Remote clock offset: -6.216 ms


# Below is generated by plot.py at 2018-02-20 18:33:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.72 Mbit/s
95th percentile per-packet one-way delay: 47.448 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 47.76 Mbit/s
95th percentile per-packet one-way delay: 47.494 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 34.66 Mbit/s
95th percentile per-packet one-way delay: 47.398 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 45.05 Mbit/s
95th percentile per-packet one-way delay: 45.290 ms
Loss rate: 0.58%
```
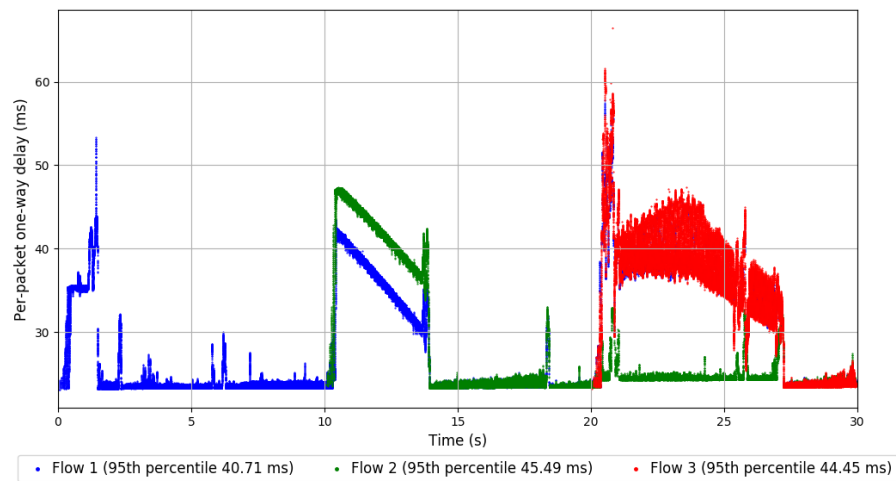
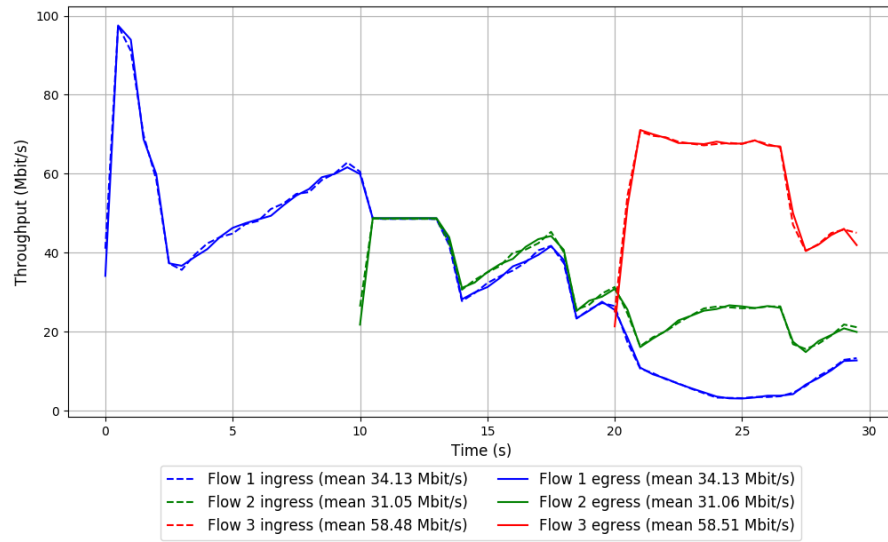Run 9: Report of TCP Vegas — Data Link

```
Run 10: Statistics of TCP Vegas

Start at: 2018-02-20 13:31:54
End at: 2018-02-20 13:32:24
Local clock offset: 3.343 ms
Remote clock offset: -6.129 ms


# Below is generated by plot.py at 2018-02-20 18:33:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.94 Mbit/s
95th percentile per-packet one-way delay: 42.286 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 23.45 Mbit/s
95th percentile per-packet one-way delay: 41.058 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 24.82 Mbit/s
95th percentile per-packet one-way delay: 41.535 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 27.20 Mbit/s
95th percentile per-packet one-way delay: 47.449 ms
Loss rate: 0.58%
```
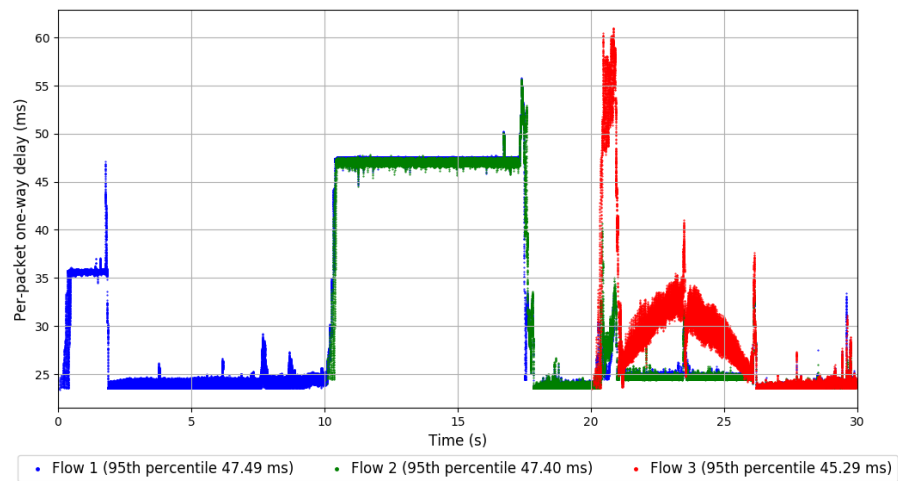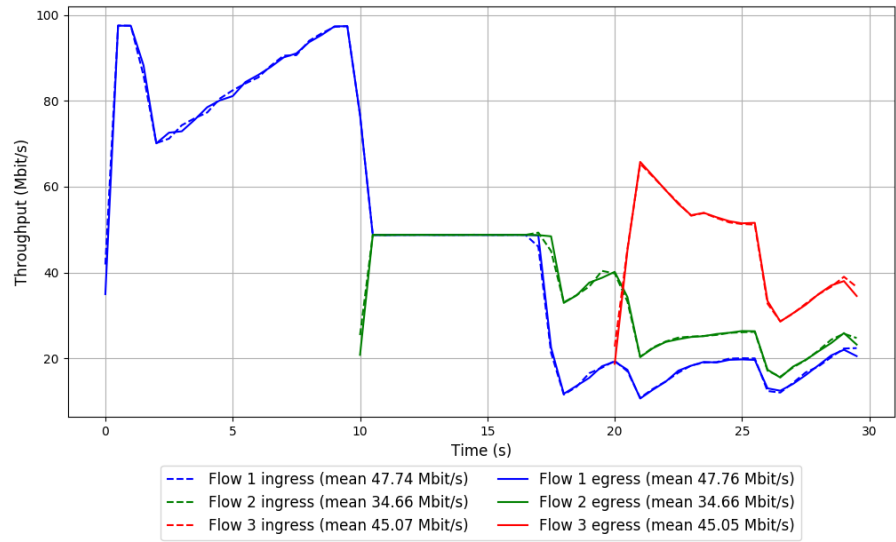
Run 10: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 23.48 Mbit/s) Flow 1 egress (mean 23.45 Mbit/s)
Flow 2 ingress (mean 24.84 Mbit/s) Flow 2 egress (mean 24.82 Mbit/s)
Flow 3 ingress (mean 27.21 Mbit/s) Flow 3 egress (mean 27.20 Mbit/s)

Flow 1 (95th percentile 41.06 ms)   Flow 2 (95th percentile 41.53 ms)   Flow 3 (95th percentile 47.45 ms)

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```
Run 1: Statistics of Verus

Start at: 2018-02-20 10:02:57
End at: 2018-02-20 10:03:27
Local clock offset: 3.351 ms
Remote clock offset: -5.301 ms


# Below is generated by plot.py at 2018-02-20 18:33:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.74 Mbit/s
95th percentile per-packet one-way delay: 71.001 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 63.18 Mbit/s
95th percentile per-packet one-way delay: 49.042 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 36.31 Mbit/s
95th percentile per-packet one-way delay: 71.358 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 22.41 Mbit/s
95th percentile per-packet one-way delay: 73.218 ms
Loss rate: 1.18%
```
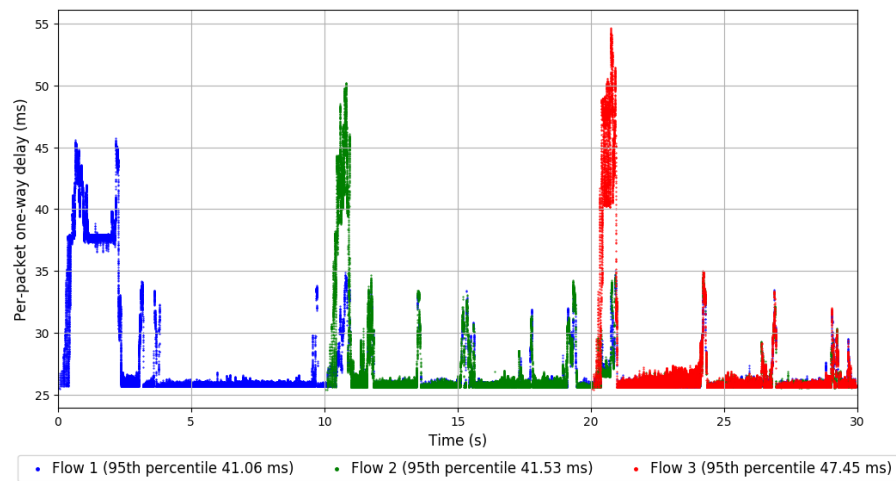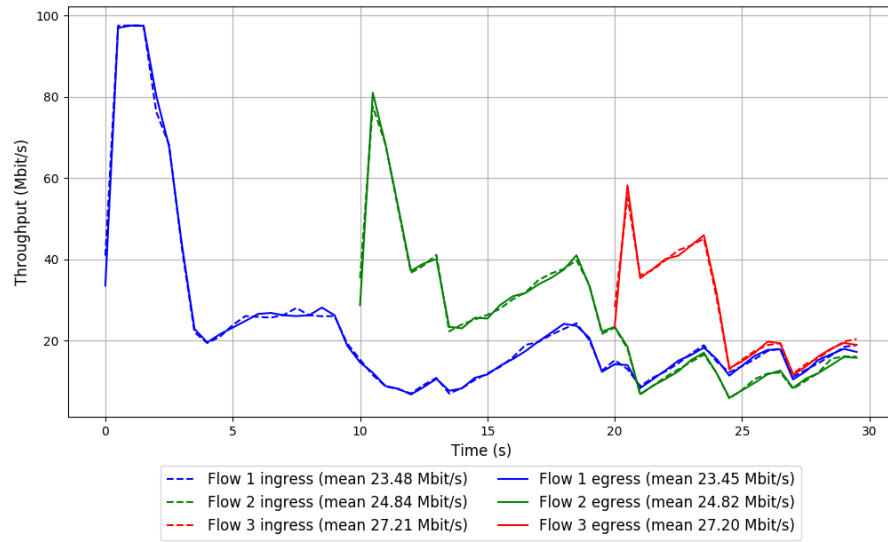
Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2018-02-20 10:27:30
End at: 2018-02-20 10:28:00
Local clock offset: 3.834 ms
Remote clock offset: -0.52 ms


# Below is generated by plot.py at 2018-02-20 18:33:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.67 Mbit/s
95th percentile per-packet one-way delay: 68.780 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 56.70 Mbit/s
95th percentile per-packet one-way delay: 67.725 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 45.72 Mbit/s
95th percentile per-packet one-way delay: 47.797 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 22.90 Mbit/s
95th percentile per-packet one-way delay: 69.956 ms
Loss rate: 1.02%
```
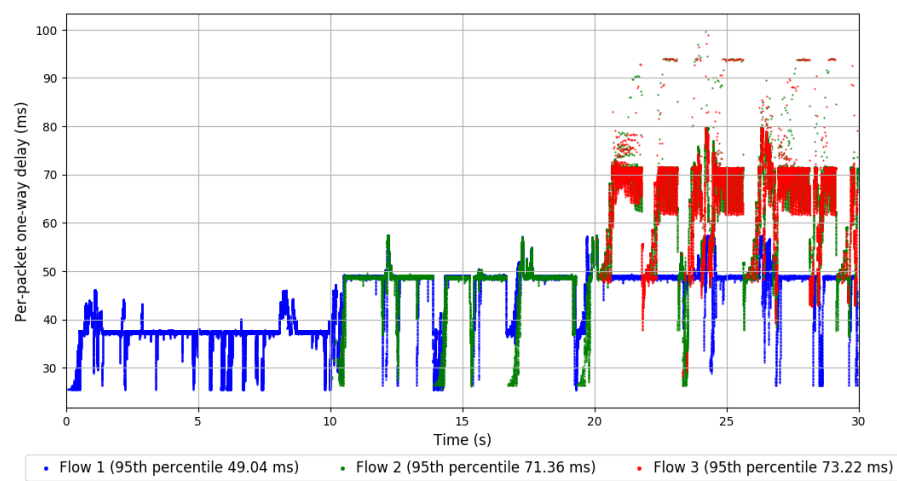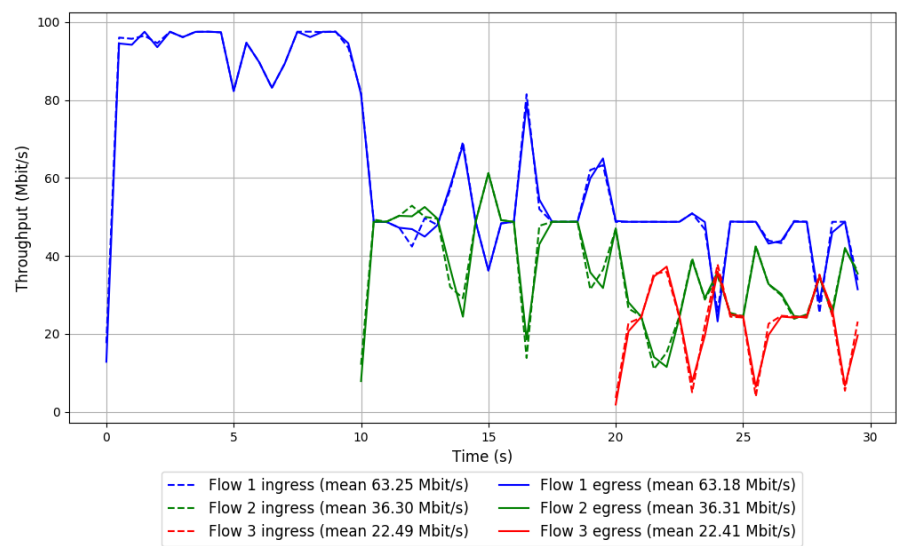
Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2018-02-20 10:52:10
End at: 2018-02-20 10:52:40
Local clock offset: 1.399 ms
Remote clock offset: -5.239 ms


# Below is generated by plot.py at 2018-02-20 18:34:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.17 Mbit/s
95th percentile per-packet one-way delay: 67.947 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 55.98 Mbit/s
95th percentile per-packet one-way delay: 66.141 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 33.90 Mbit/s
95th percentile per-packet one-way delay: 69.146 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 41.55 Mbit/s
95th percentile per-packet one-way delay: 50.036 ms
Loss rate: 0.99%
```

Run 3: Report of Verus — Data Link

Flow 1 ingress (mean 56.08 Mbit/s)   Flow 1 egress (mean 55.98 Mbit/s)
Flow 2 ingress (mean 33.96 Mbit/s)   Flow 2 egress (mean 33.90 Mbit/s)
Flow 3 ingress (mean 41.69 Mbit/s)   Flow 3 egress (mean 41.55 Mbit/s)

Flow 1 (95th percentile 66.14 ms)   Flow 2 (95th percentile 69.15 ms)   Flow 3 (95th percentile 50.04 ms)

```
Run 4: Statistics of Verus

Start at: 2018-02-20 11:16:40
End at: 2018-02-20 11:17:10
Local clock offset: -5.983 ms
Remote clock offset: -4.156 ms


# Below is generated by plot.py at 2018-02-20 18:34:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.45 Mbit/s
95th percentile per-packet one-way delay: 68.537 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 59.10 Mbit/s
95th percentile per-packet one-way delay: 66.356 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 29.62 Mbit/s
95th percentile per-packet one-way delay: 69.383 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 44.42 Mbit/s
95th percentile per-packet one-way delay: 49.231 ms
Loss rate: 1.05%
```
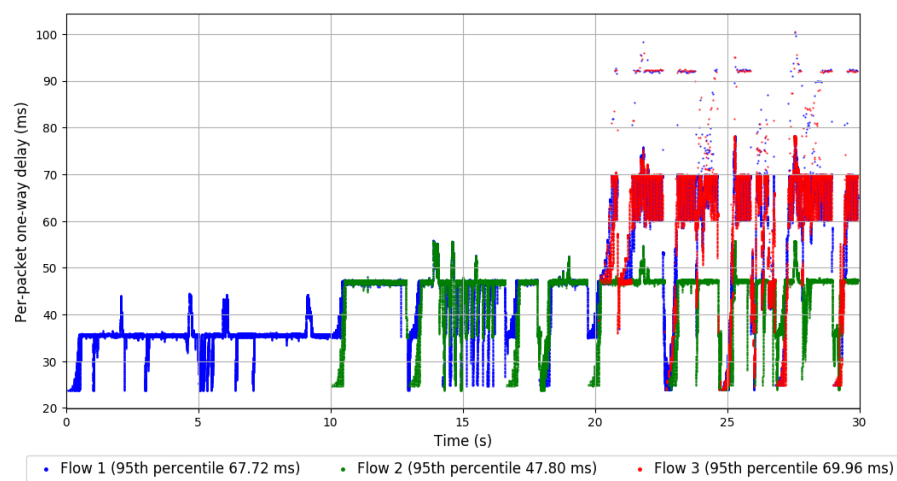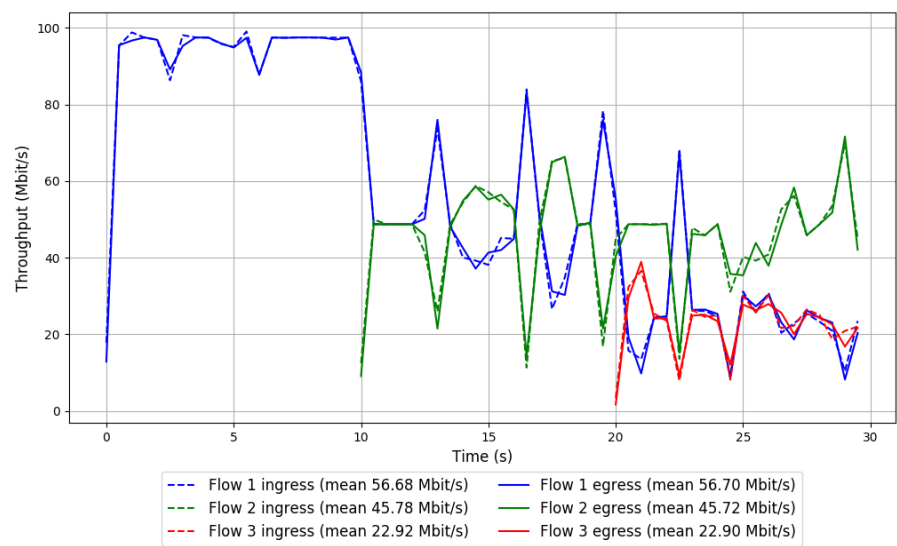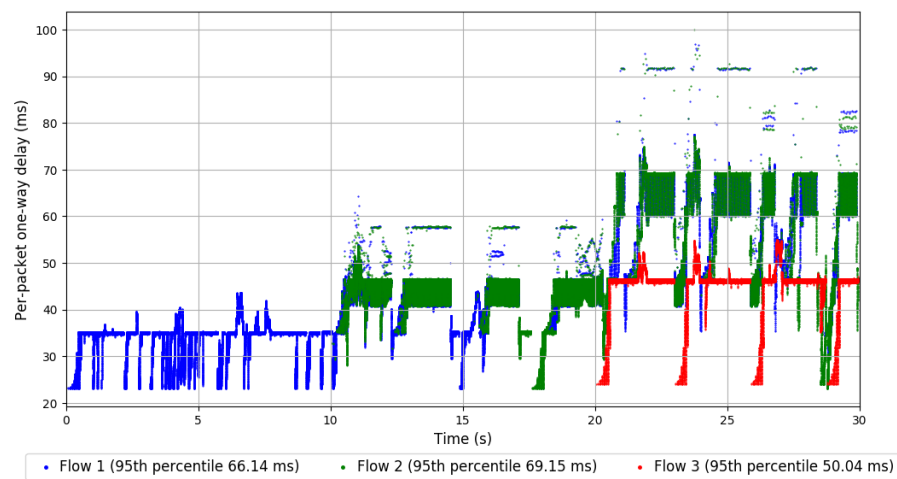
Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2018-02-20 11:41:14
End at: 2018-02-20 11:41:44
Local clock offset: -0.767 ms
Remote clock offset: -4.086 ms


# Below is generated by plot.py at 2018-02-20 18:34:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.77 Mbit/s
95th percentile per-packet one-way delay: 58.197 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 56.95 Mbit/s
95th percentile per-packet one-way delay: 58.176 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 41.94 Mbit/s
95th percentile per-packet one-way delay: 58.030 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 29.97 Mbit/s
95th percentile per-packet one-way delay: 58.286 ms
Loss rate: 0.09%
```
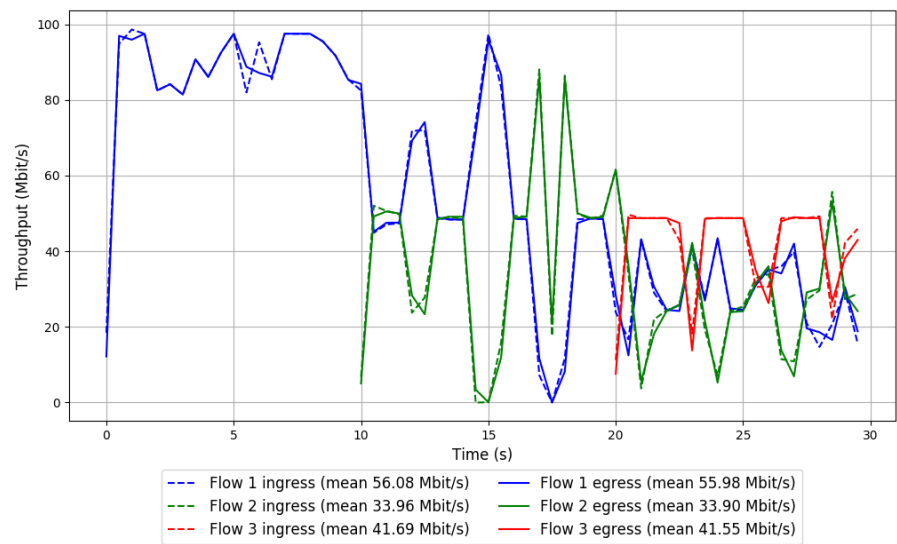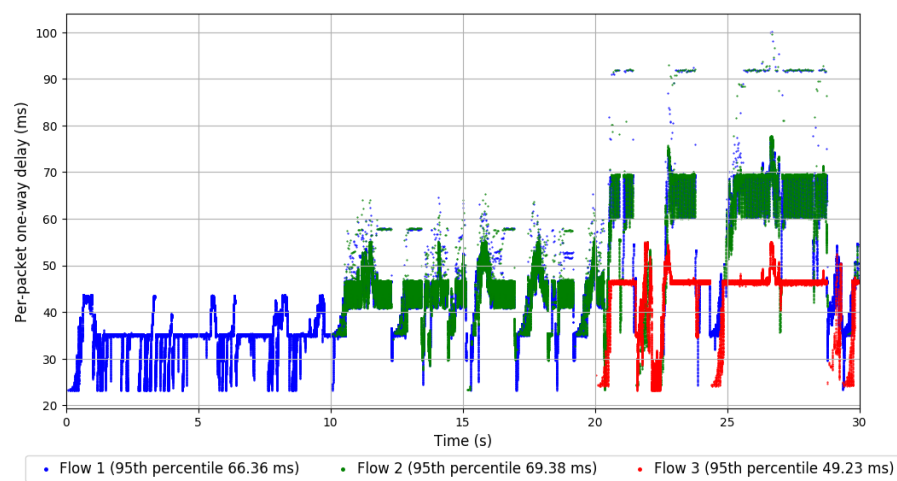
Run 5: Report of Verus — Data Link

Flow 1 ingress (mean 56.95 Mbit/s) ---- Flow 1 egress (mean 56.95 Mbit/s) ——
Flow 2 ingress (mean 42.00 Mbit/s) ---- Flow 2 egress (mean 41.94 Mbit/s) ——
Flow 3 ingress (mean 29.84 Mbit/s) ---- Flow 3 egress (mean 29.97 Mbit/s) ——

Flow 1 (95th percentile 58.18 ms)   Flow 2 (95th percentile 58.03 ms)   Flow 3 (95th percentile 58.29 ms)

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```
Run 6: Statistics of Verus

Start at: 2018-02-20 12:05:45
End at: 2018-02-20 12:06:15
Local clock offset: 2.061 ms
Remote clock offset: -6.131 ms


# Below is generated by plot.py at 2018-02-20 18:34:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.76 Mbit/s
95th percentile per-packet one-way delay: 70.593 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 53.36 Mbit/s
95th percentile per-packet one-way delay: 69.728 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 39.77 Mbit/s
95th percentile per-packet one-way delay: 71.543 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 42.26 Mbit/s
95th percentile per-packet one-way delay: 49.274 ms
Loss rate: 0.89%
```
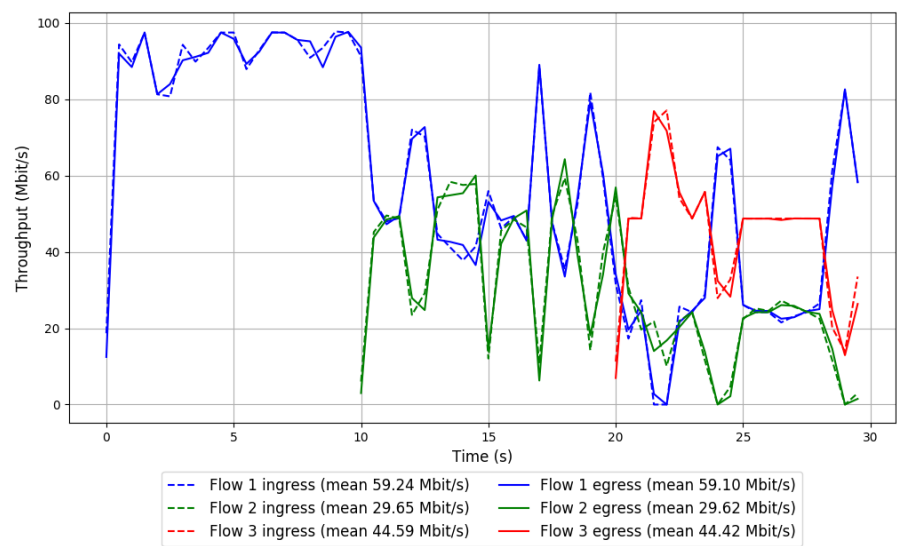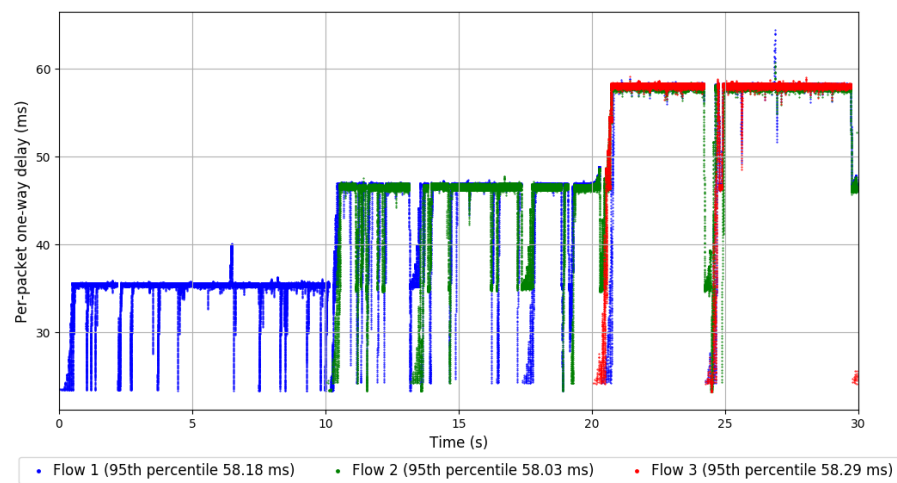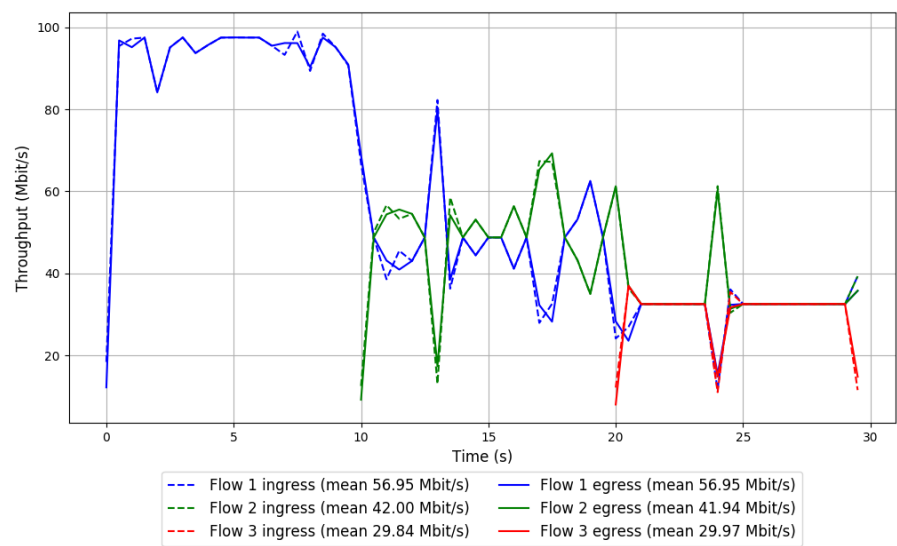
Run 6: Report of Verus — Data Link

- - - Flow 1 ingress (mean 53.30 Mbit/s)   —— Flow 1 egress (mean 53.36 Mbit/s)
- - - Flow 2 ingress (mean 39.70 Mbit/s)   —— Flow 2 egress (mean 39.77 Mbit/s)
- - - Flow 3 ingress (mean 42.36 Mbit/s)   —— Flow 3 egress (mean 42.26 Mbit/s)

- Flow 1 (95th percentile 69.73 ms)   • Flow 2 (95th percentile 71.54 ms)   • Flow 3 (95th percentile 49.27 ms)

215

```
Run 7: Statistics of Verus

Start at: 2018-02-20 12:30:22
End at: 2018-02-20 12:30:52
Local clock offset: 1.692 ms
Remote clock offset: -2.186 ms


# Below is generated by plot.py at 2018-02-20 18:34:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.16 Mbit/s
95th percentile per-packet one-way delay: 58.559 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 59.23 Mbit/s
95th percentile per-packet one-way delay: 58.451 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 38.21 Mbit/s
95th percentile per-packet one-way delay: 58.526 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 31.73 Mbit/s
95th percentile per-packet one-way delay: 58.679 ms
Loss rate: 0.91%
```
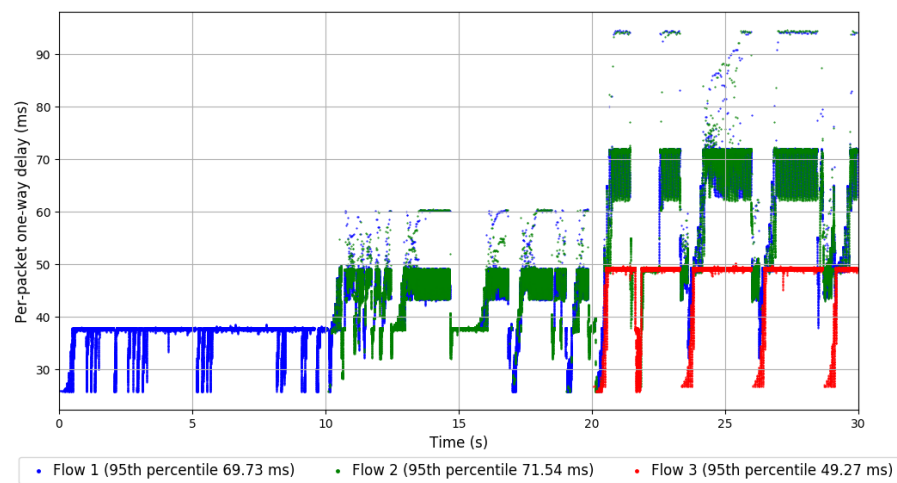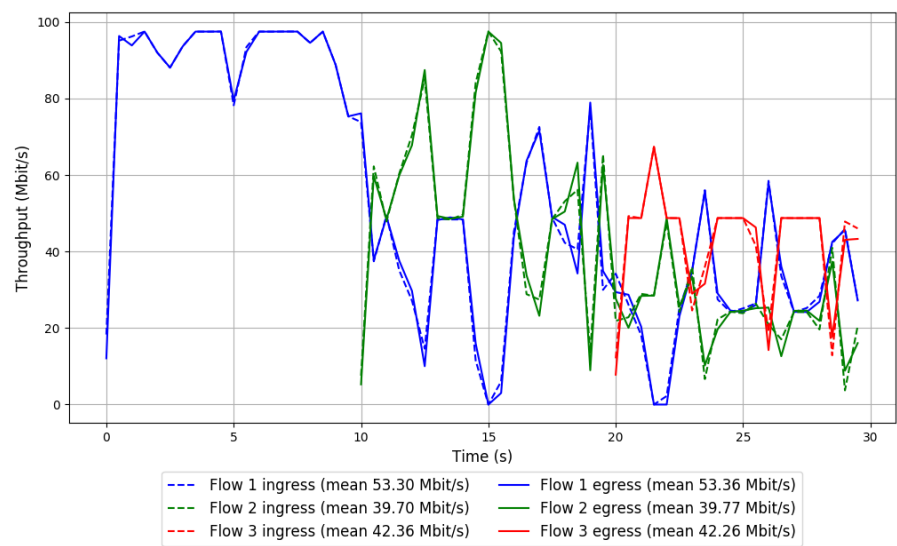
Run 7: Report of Verus — Data Link

Flow 1 ingress (mean 59.21 Mbit/s)   Flow 1 egress (mean 59.23 Mbit/s)
Flow 2 ingress (mean 38.25 Mbit/s)   Flow 2 egress (mean 38.21 Mbit/s)
Flow 3 ingress (mean 31.80 Mbit/s)   Flow 3 egress (mean 31.73 Mbit/s)

Flow 1 (95th percentile 58.45 ms)   Flow 2 (95th percentile 58.53 ms)   Flow 3 (95th percentile 58.68 ms)

```
Run 8: Statistics of Verus

Start at: 2018-02-20 12:54:55
End at: 2018-02-20 12:55:25
Local clock offset: -4.111 ms
Remote clock offset: -4.732 ms


# Below is generated by plot.py at 2018-02-20 18:35:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.52 Mbit/s
95th percentile per-packet one-way delay: 67.263 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 61.93 Mbit/s
95th percentile per-packet one-way delay: 47.107 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 35.15 Mbit/s
95th percentile per-packet one-way delay: 69.218 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 24.94 Mbit/s
95th percentile per-packet one-way delay: 69.468 ms
Loss rate: 0.90%
```
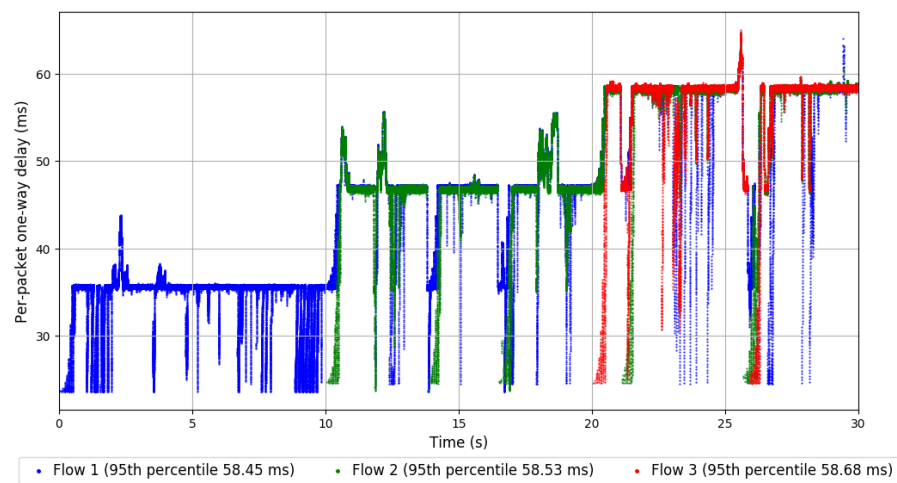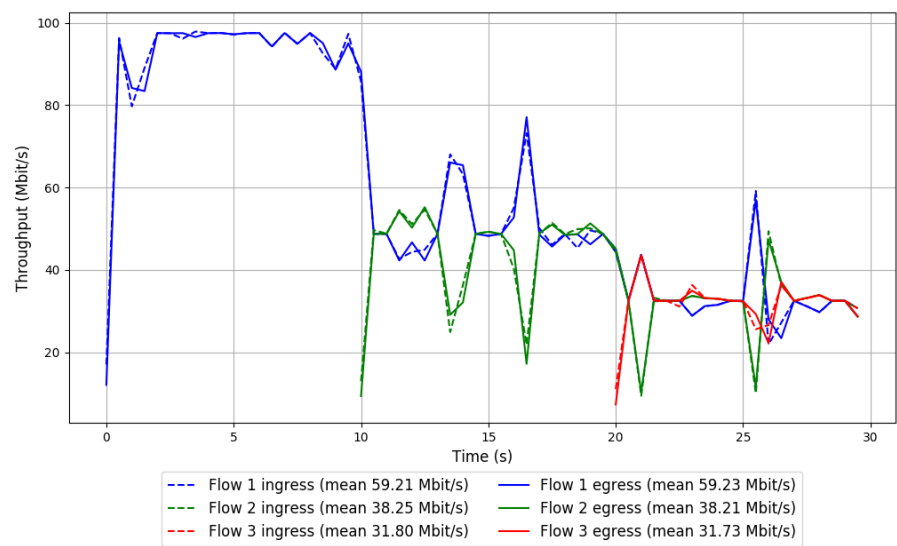
Run 8: Report of Verus — Data Link

Flow 1 ingress (mean 61.94 Mbit/s) — Flow 1 egress (mean 61.93 Mbit/s)
Flow 2 ingress (mean 35.14 Mbit/s) — Flow 2 egress (mean 35.15 Mbit/s)
Flow 3 ingress (mean 24.91 Mbit/s) — Flow 3 egress (mean 24.94 Mbit/s)

Flow 1 (95th percentile 47.11 ms)   Flow 2 (95th percentile 69.22 ms)   Flow 3 (95th percentile 69.47 ms)

```
Run 9: Statistics of Verus

Start at: 2018-02-20 13:19:32
End at: 2018-02-20 13:20:02
Local clock offset: -0.673 ms
Remote clock offset: -8.85 ms


# Below is generated by plot.py at 2018-02-20 18:35:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.83 Mbit/s
95th percentile per-packet one-way delay: 69.909 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 51.64 Mbit/s
95th percentile per-packet one-way delay: 68.602 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 43.18 Mbit/s
95th percentile per-packet one-way delay: 48.927 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 22.64 Mbit/s
95th percentile per-packet one-way delay: 71.332 ms
Loss rate: 1.17%
```
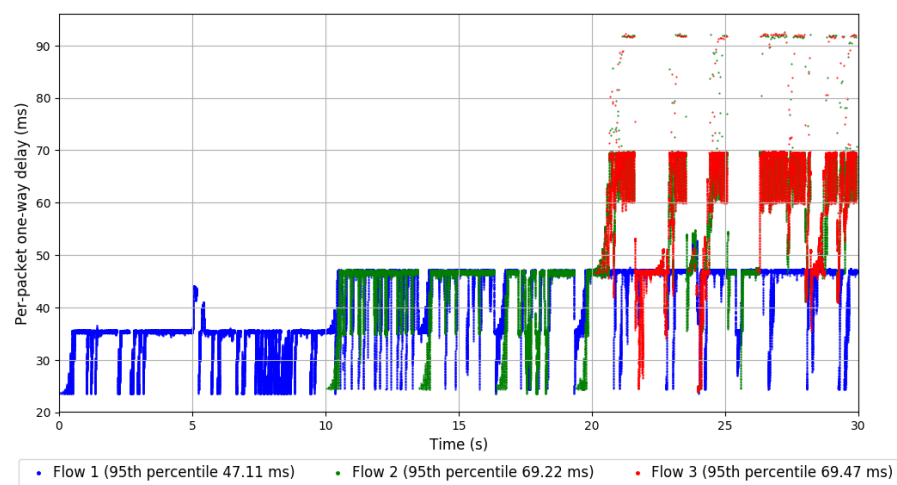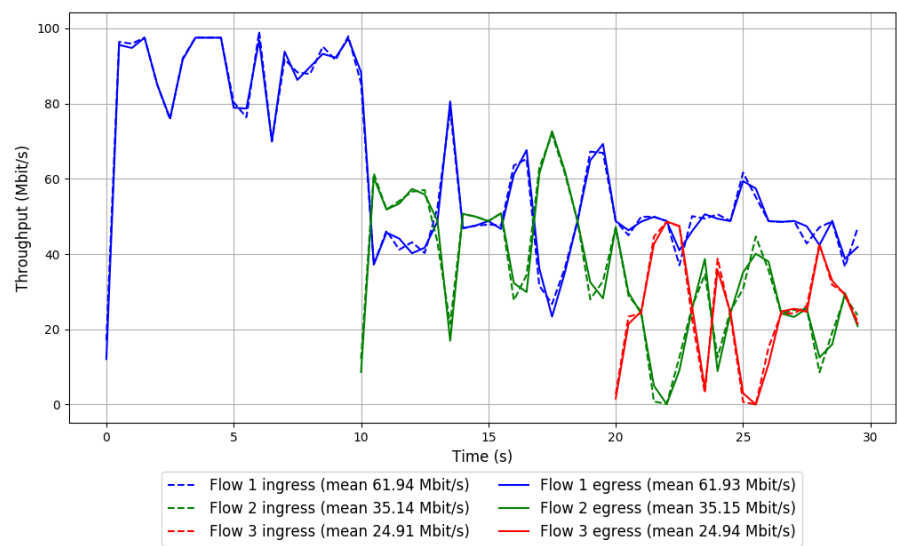
Run 9: Report of Verus — Data Link

Flow 1 ingress (mean 51.63 Mbit/s)   Flow 1 egress (mean 51.64 Mbit/s)
Flow 2 ingress (mean 43.24 Mbit/s)   Flow 2 egress (mean 43.18 Mbit/s)
Flow 3 ingress (mean 22.69 Mbit/s)   Flow 3 egress (mean 22.64 Mbit/s)

Flow 1 (95th percentile 68.60 ms)   Flow 2 (95th percentile 48.93 ms)   Flow 3 (95th percentile 71.33 ms)
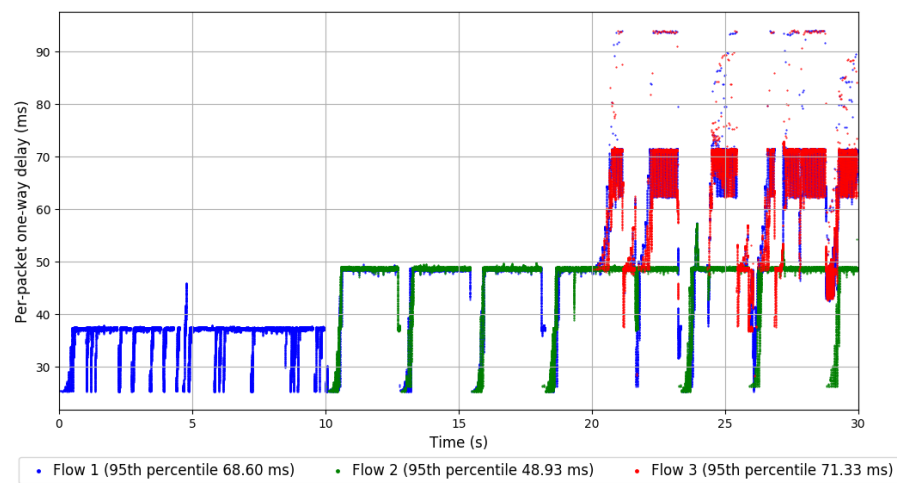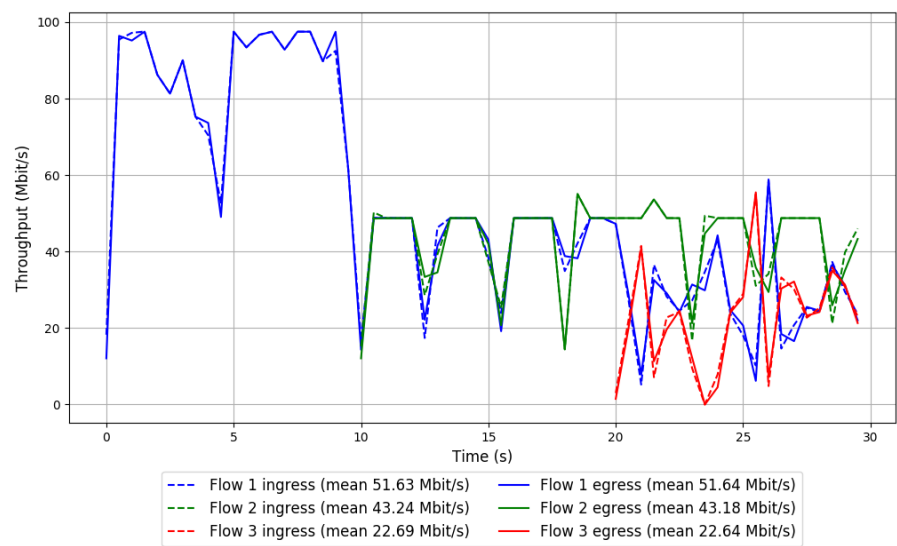
```
Run 10: Statistics of Verus

Start at: 2018-02-20 13:44:58
End at: 2018-02-20 13:45:28
Local clock offset: 5.254 ms
Remote clock offset: -3.437 ms


# Below is generated by plot.py at 2018-02-20 18:35:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.26 Mbit/s
95th percentile per-packet one-way delay: 68.230 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 54.87 Mbit/s
95th percentile per-packet one-way delay: 52.657 ms
Loss rate: 1.35%
-- Flow 2:
Average throughput: 34.26 Mbit/s
95th percentile per-packet one-way delay: 69.920 ms
Loss rate: 1.28%
-- Flow 3:
Average throughput: 26.06 Mbit/s
95th percentile per-packet one-way delay: 73.873 ms
Loss rate: 1.86%
```

Run 10: Report of Verus — Data Link

```
Run 1: Statistics of Copa

Start at: 2018-02-20 10:01:32
End at: 2018-02-20 10:02:02
Local clock offset: 2.974 ms
Remote clock offset: -3.04 ms


# Below is generated by plot.py at 2018-02-20 18:36:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.32 Mbit/s
95th percentile per-packet one-way delay: 36.322 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 55.08 Mbit/s
95th percentile per-packet one-way delay: 36.458 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 46.38 Mbit/s
95th percentile per-packet one-way delay: 35.070 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 19.27 Mbit/s
95th percentile per-packet one-way delay: 41.938 ms
Loss rate: 0.72%
```
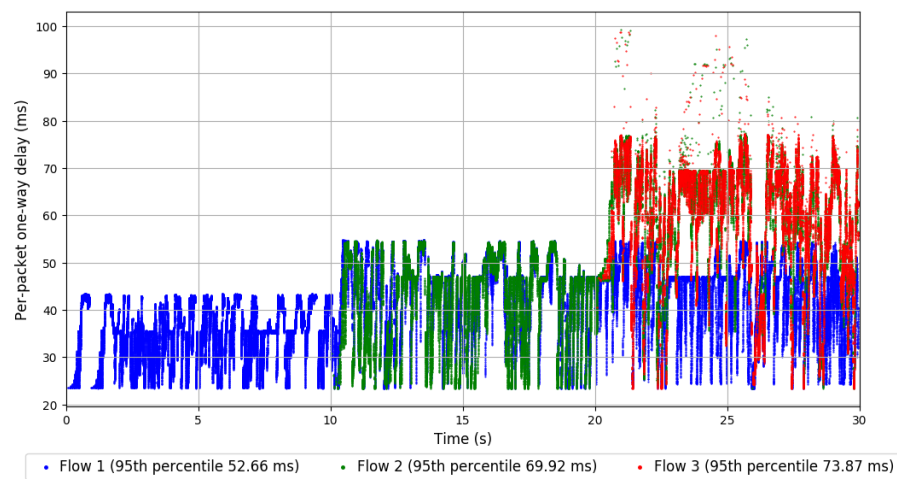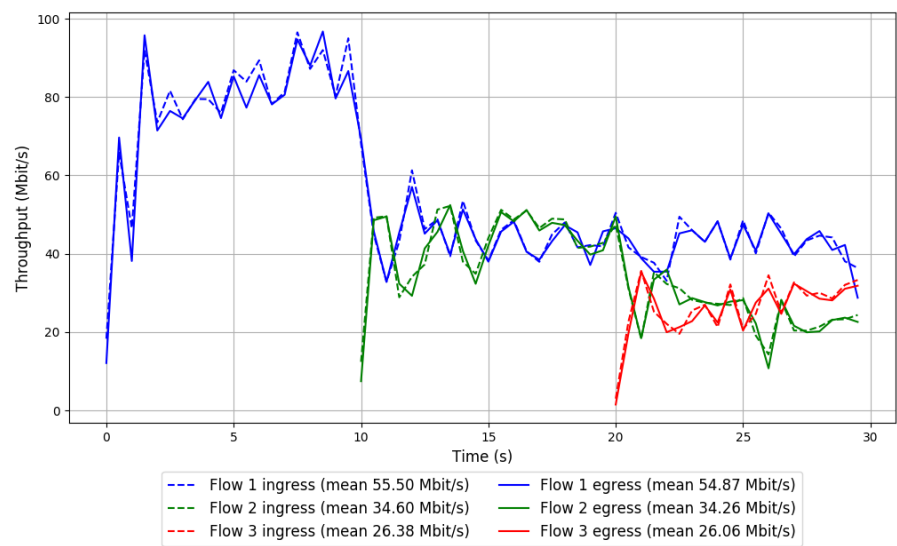
Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2018-02-20 10:26:04
End at: 2018-02-20 10:26:34
Local clock offset: 4.294 ms
Remote clock offset: -0.814 ms


# Below is generated by plot.py at 2018-02-20 18:37:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.03 Mbit/s
95th percentile per-packet one-way delay: 43.609 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 61.72 Mbit/s
95th percentile per-packet one-way delay: 43.649 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 35.94 Mbit/s
95th percentile per-packet one-way delay: 37.302 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 19.27 Mbit/s
95th percentile per-packet one-way delay: 38.063 ms
Loss rate: 0.68%
```
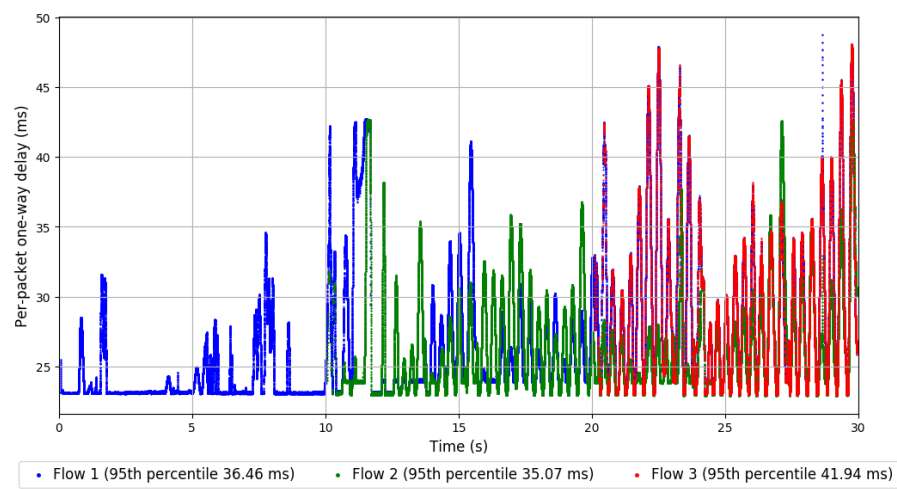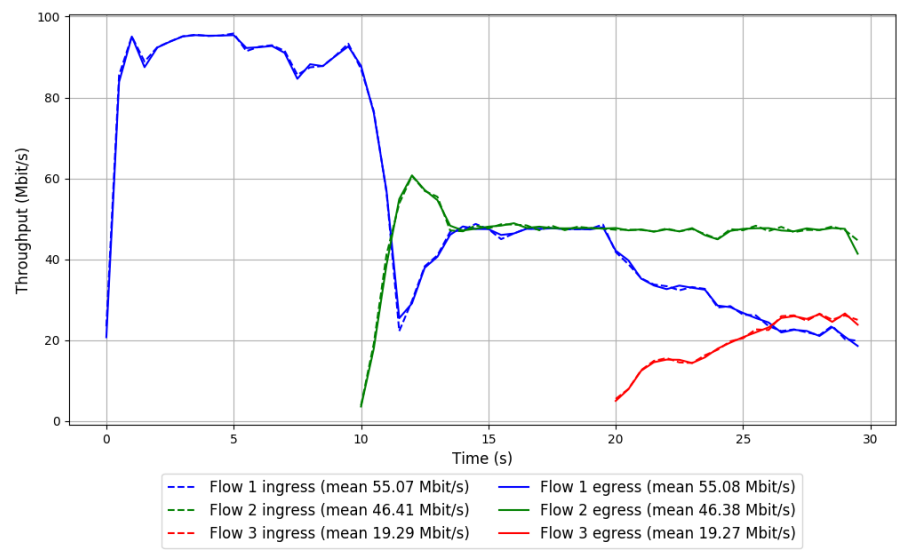
Run 2: Report of Copa — Data Link

Flow 1 ingress (mean 61.73 Mbit/s)   Flow 1 egress (mean 61.72 Mbit/s)
Flow 2 ingress (mean 35.94 Mbit/s)   Flow 2 egress (mean 35.94 Mbit/s)
Flow 3 ingress (mean 19.30 Mbit/s)   Flow 3 egress (mean 19.27 Mbit/s)

Flow 1 (95th percentile 43.65 ms)   Flow 2 (95th percentile 37.30 ms)   Flow 3 (95th percentile 38.06 ms)

227

```
Run 3: Statistics of Copa

Start at: 2018-02-20 10:50:45
End at: 2018-02-20 10:51:15
Local clock offset: 1.308 ms
Remote clock offset: -5.192 ms


# Below is generated by plot.py at 2018-02-20 18:37:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.14 Mbit/s
95th percentile per-packet one-way delay: 32.824 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 62.03 Mbit/s
95th percentile per-packet one-way delay: 29.696 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 34.96 Mbit/s
95th percentile per-packet one-way delay: 39.329 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 20.67 Mbit/s
95th percentile per-packet one-way delay: 34.820 ms
Loss rate: 0.64%
```
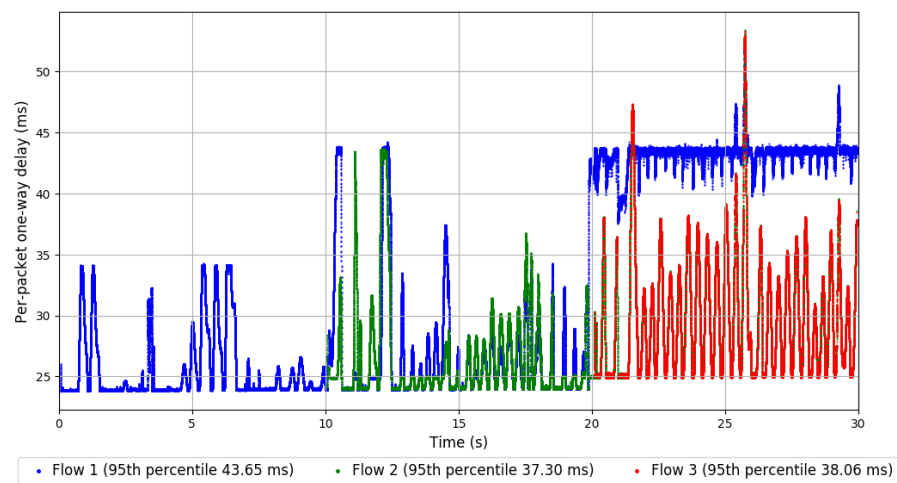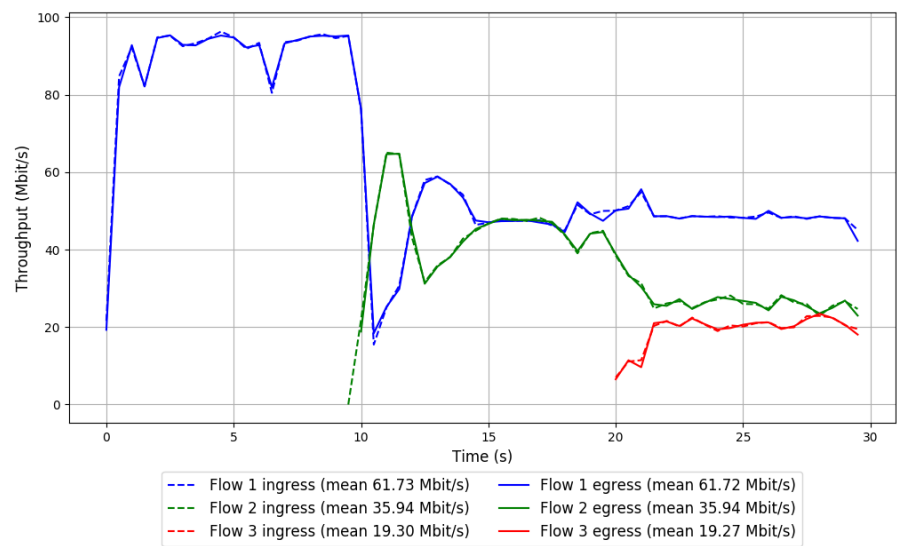
Run 3: Report of Copa — Data Link

Flow 1 ingress (mean 62.01 Mbit/s)   Flow 1 egress (mean 62.03 Mbit/s)
Flow 2 ingress (mean 34.93 Mbit/s)   Flow 2 egress (mean 34.96 Mbit/s)
Flow 3 ingress (mean 20.69 Mbit/s)   Flow 3 egress (mean 20.67 Mbit/s)

Flow 1 (95th percentile 29.70 ms)   Flow 2 (95th percentile 39.33 ms)   Flow 3 (95th percentile 34.82 ms)

229

```
Run 4: Statistics of Copa

Start at: 2018-02-20 11:15:15
End at: 2018-02-20 11:15:45
Local clock offset: -5.603 ms
Remote clock offset: -6.666 ms


# Below is generated by plot.py at 2018-02-20 18:37:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.15 Mbit/s
95th percentile per-packet one-way delay: 40.001 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 60.83 Mbit/s
95th percentile per-packet one-way delay: 37.405 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 37.72 Mbit/s
95th percentile per-packet one-way delay: 42.689 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 15.75 Mbit/s
95th percentile per-packet one-way delay: 40.352 ms
Loss rate: 0.69%
```
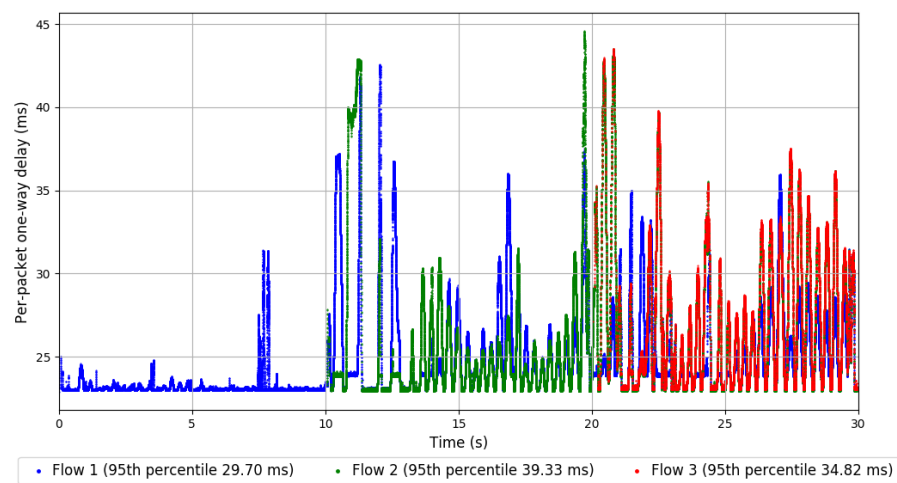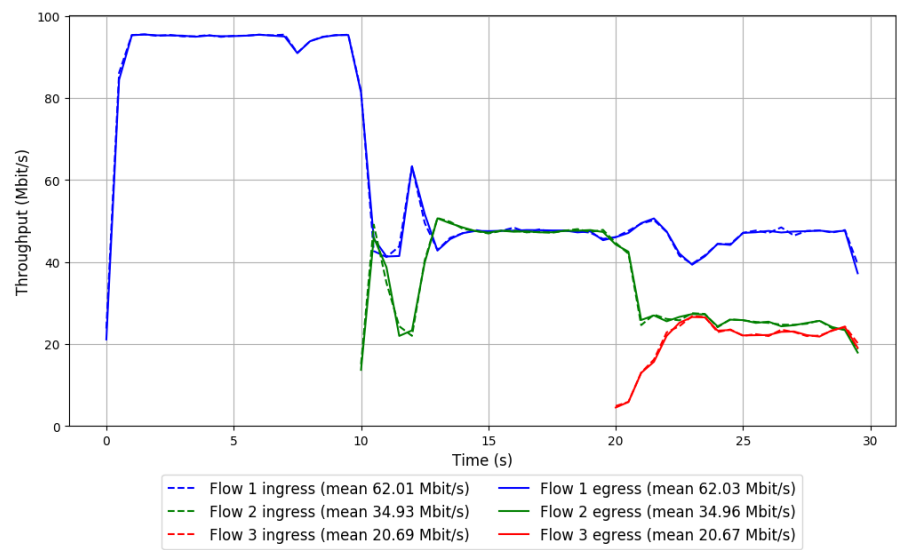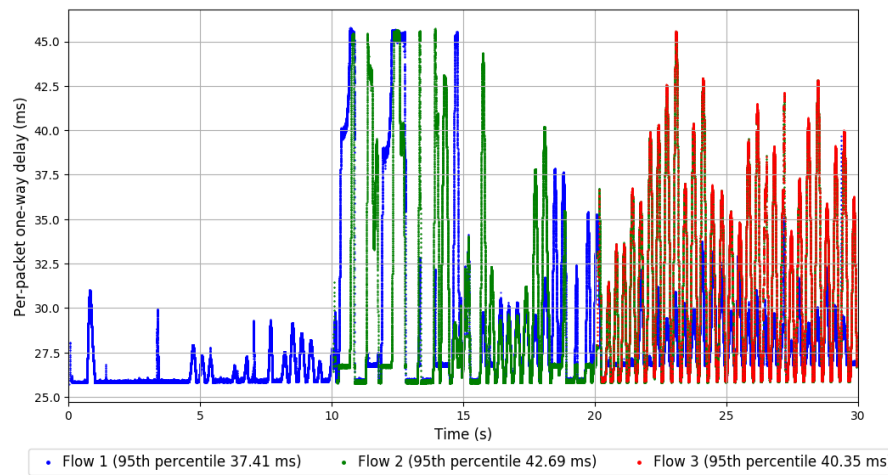
Run 4: Report of Copa — Data Link

Flow 1 ingress (mean 60.80 Mbit/s) --- Flow 1 egress (mean 60.83 Mbit/s)
Flow 2 ingress (mean 37.69 Mbit/s) --- Flow 2 egress (mean 37.72 Mbit/s)
Flow 3 ingress (mean 15.77 Mbit/s) --- Flow 3 egress (mean 15.75 Mbit/s)

Flow 1 (95th percentile 37.41 ms) • Flow 2 (95th percentile 42.69 ms) • Flow 3 (95th percentile 40.35 ms)

```
Run 5: Statistics of Copa

Start at: 2018-02-20 11:39:48
End at: 2018-02-20 11:40:18
Local clock offset: -1.175 ms
Remote clock offset: -4.016 ms


# Below is generated by plot.py at 2018-02-20 18:37:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.52 Mbit/s
95th percentile per-packet one-way delay: 34.170 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 53.67 Mbit/s
95th percentile per-packet one-way delay: 31.822 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 38.25 Mbit/s
95th percentile per-packet one-way delay: 35.650 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 31.41 Mbit/s
95th percentile per-packet one-way delay: 35.410 ms
Loss rate: 0.68%
```
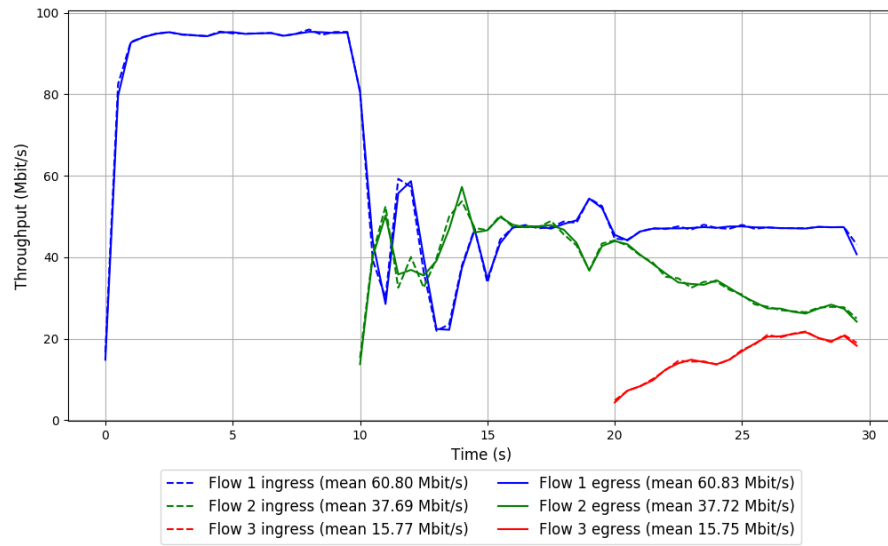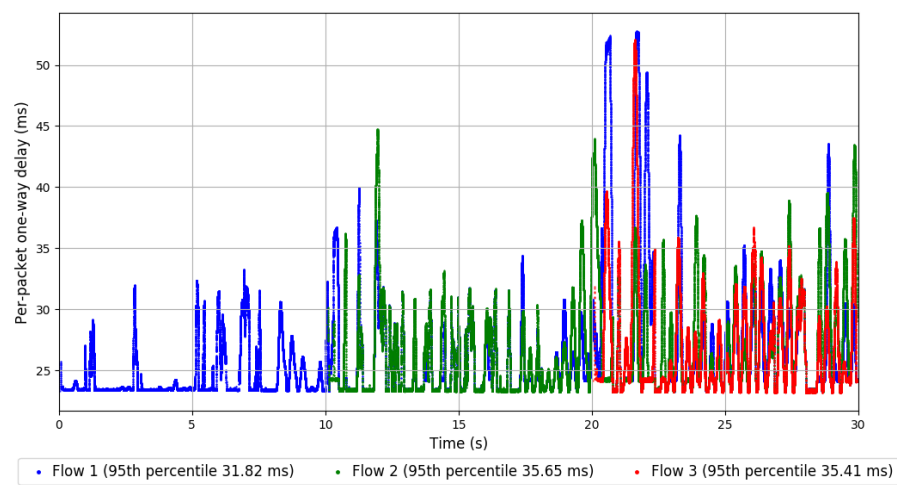
Run 5: Report of Copa — Data Link

```
Run 6: Statistics of Copa

Start at: 2018-02-20 12:04:20
End at: 2018-02-20 12:04:50
Local clock offset: 2.177 ms
Remote clock offset: -3.708 ms


# Below is generated by plot.py at 2018-02-20 18:37:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.17 Mbit/s
95th percentile per-packet one-way delay: 38.050 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 55.36 Mbit/s
95th percentile per-packet one-way delay: 37.447 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 44.80 Mbit/s
95th percentile per-packet one-way delay: 39.359 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 18.11 Mbit/s
95th percentile per-packet one-way delay: 42.409 ms
Loss rate: 0.42%
```
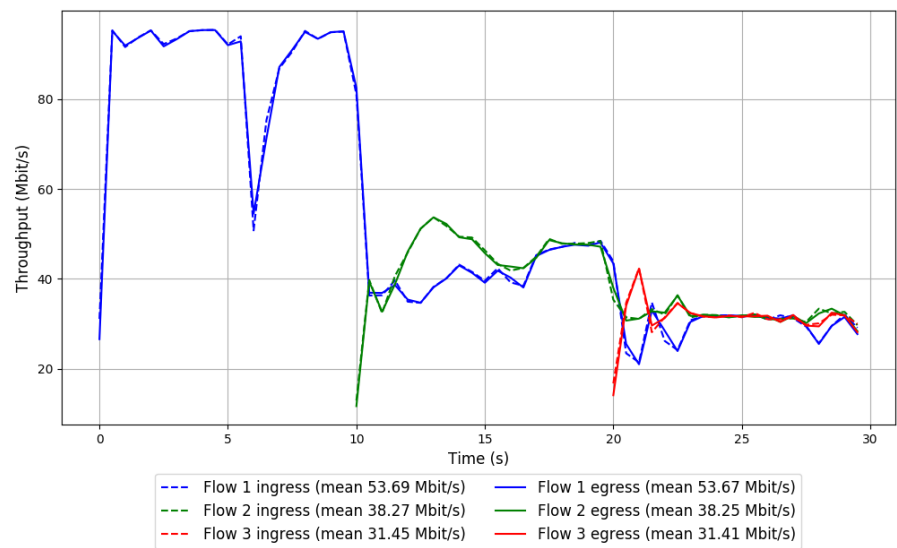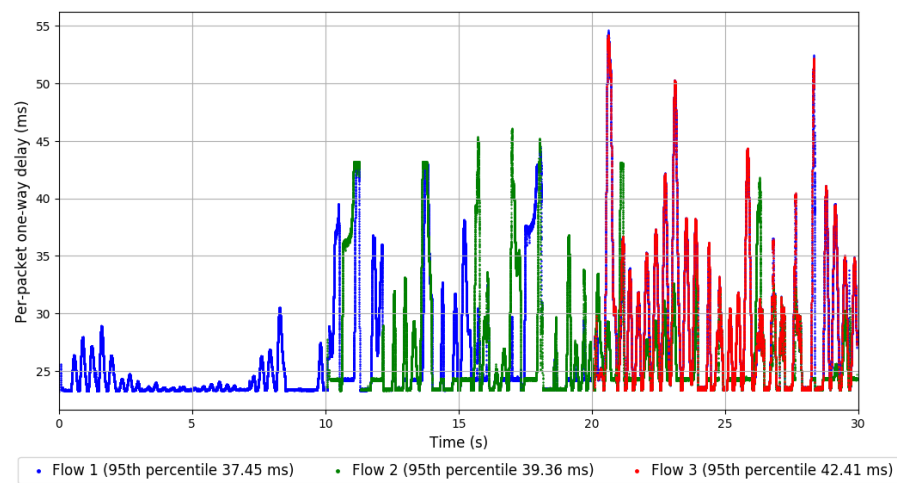
Run 6: Report of Copa — Data Link

Flow 1 ingress (mean 55.33 Mbit/s)   Flow 1 egress (mean 55.36 Mbit/s)
Flow 2 ingress (mean 44.82 Mbit/s)   Flow 2 egress (mean 44.80 Mbit/s)
Flow 3 ingress (mean 18.09 Mbit/s)   Flow 3 egress (mean 18.11 Mbit/s)

Flow 1 (95th percentile 37.45 ms)   Flow 2 (95th percentile 39.36 ms)   Flow 3 (95th percentile 42.41 ms)

```
Run 7: Statistics of Copa

Start at: 2018-02-20 12:28:57
End at: 2018-02-20 12:29:27
Local clock offset: 1.664 ms
Remote clock offset: -4.353 ms


# Below is generated by plot.py at 2018-02-20 18:37:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.61 Mbit/s
95th percentile per-packet one-way delay: 54.329 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 54.99 Mbit/s
95th percentile per-packet one-way delay: 41.019 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 41.67 Mbit/s
95th percentile per-packet one-way delay: 54.737 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 26.77 Mbit/s
95th percentile per-packet one-way delay: 54.518 ms
Loss rate: 0.79%
```
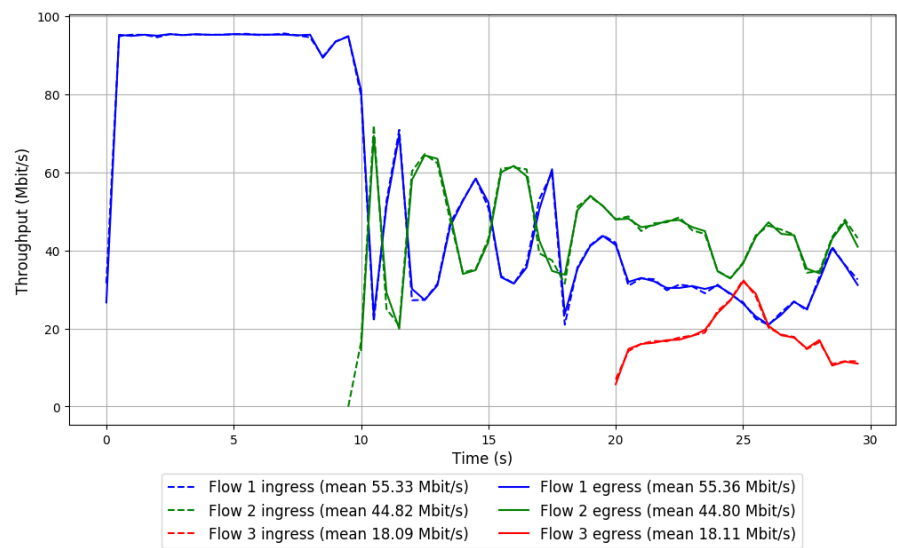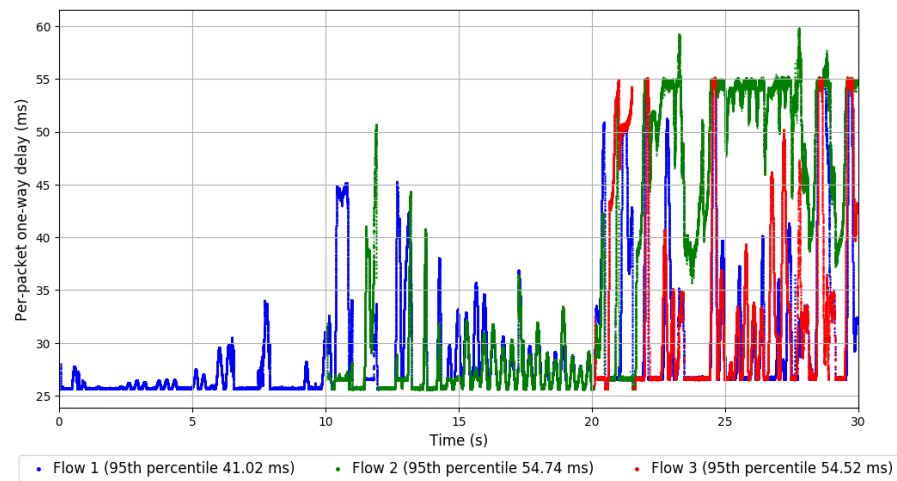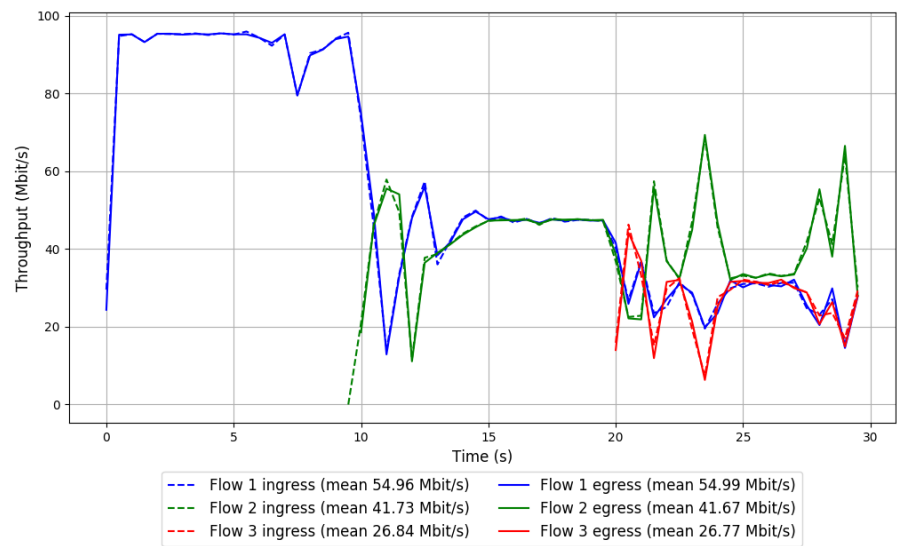
Run 7: Report of Copa — Data Link

Flow 1 ingress (mean 54.96 Mbit/s) --- Flow 1 egress (mean 54.99 Mbit/s)
Flow 2 ingress (mean 41.73 Mbit/s) --- Flow 2 egress (mean 41.67 Mbit/s)
Flow 3 ingress (mean 26.84 Mbit/s) --- Flow 3 egress (mean 26.77 Mbit/s)

Flow 1 (95th percentile 41.02 ms)   Flow 2 (95th percentile 54.74 ms)   Flow 3 (95th percentile 54.52 ms)
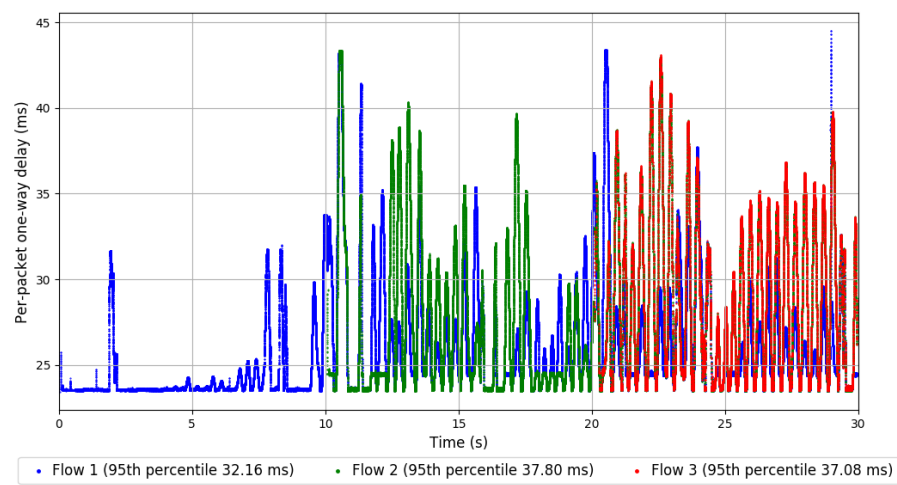
```
Run 8: Statistics of Copa

Start at: 2018-02-20 12:53:30
End at: 2018-02-20 12:54:00
Local clock offset: -3.883 ms
Remote clock offset: -4.393 ms


# Below is generated by plot.py at 2018-02-20 18:37:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.07 Mbit/s
95th percentile per-packet one-way delay: 34.866 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 61.17 Mbit/s
95th percentile per-packet one-way delay: 32.157 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 37.00 Mbit/s
95th percentile per-packet one-way delay: 37.804 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 18.96 Mbit/s
95th percentile per-packet one-way delay: 37.081 ms
Loss rate: 0.67%
```
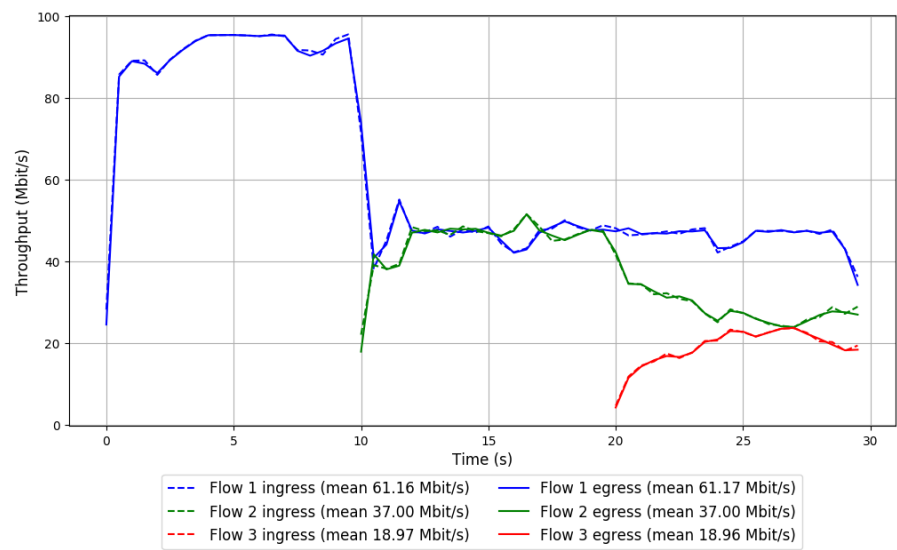
Run 8: Report of Copa — Data Link

Flow 1 ingress (mean 61.16 Mbit/s) --- Flow 1 egress (mean 61.17 Mbit/s)
Flow 2 ingress (mean 37.00 Mbit/s) --- Flow 2 egress (mean 37.00 Mbit/s)
Flow 3 ingress (mean 18.97 Mbit/s) --- Flow 3 egress (mean 18.96 Mbit/s)

Flow 1 (95th percentile 32.16 ms)   Flow 2 (95th percentile 37.80 ms)   Flow 3 (95th percentile 37.08 ms)
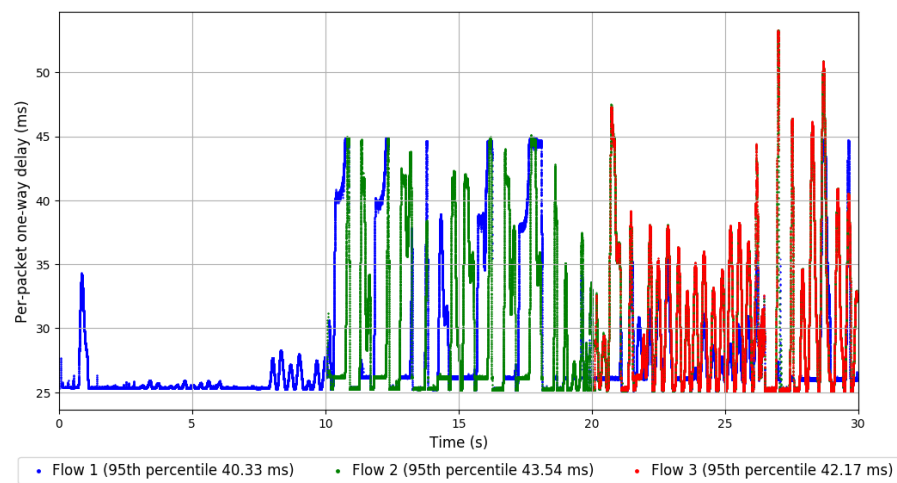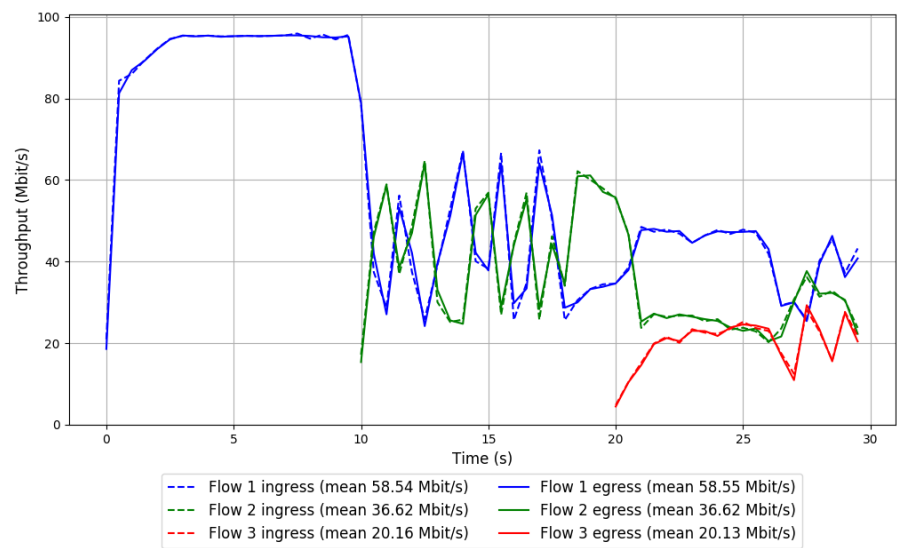
```
Run 9: Statistics of Copa

Start at: 2018-02-20 13:18:06
End at: 2018-02-20 13:18:36
Local clock offset: -1.324 ms
Remote clock offset: -9.175 ms


# Below is generated by plot.py at 2018-02-20 18:39:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.59 Mbit/s
95th percentile per-packet one-way delay: 41.693 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 58.55 Mbit/s
95th percentile per-packet one-way delay: 40.330 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 36.62 Mbit/s
95th percentile per-packet one-way delay: 43.537 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 20.13 Mbit/s
95th percentile per-packet one-way delay: 42.172 ms
Loss rate: 0.70%
```

Run 9: Report of Copa — Data Link

Flow 1 ingress (mean 58.54 Mbit/s) --- Flow 1 egress (mean 58.55 Mbit/s)
Flow 2 ingress (mean 36.62 Mbit/s) --- Flow 2 egress (mean 36.62 Mbit/s)
Flow 3 ingress (mean 20.16 Mbit/s) --- Flow 3 egress (mean 20.13 Mbit/s)

Flow 1 (95th percentile 40.33 ms)   Flow 2 (95th percentile 43.54 ms)   Flow 3 (95th percentile 42.17 ms)
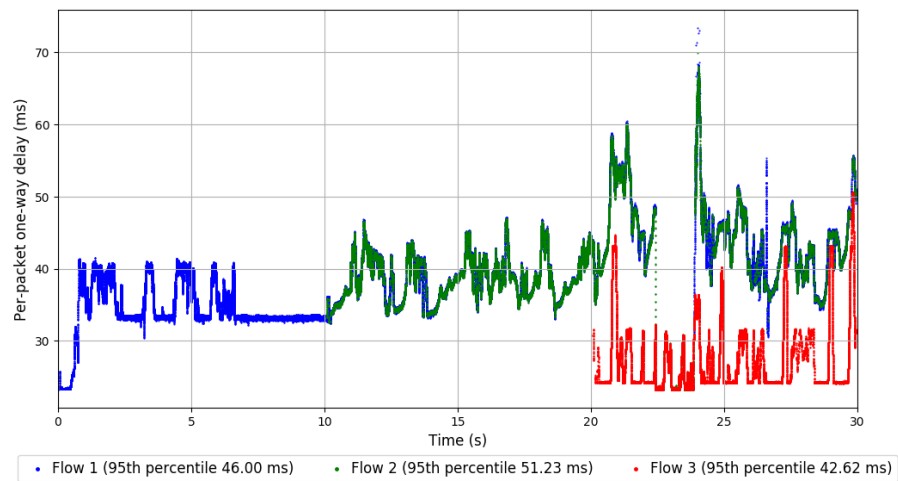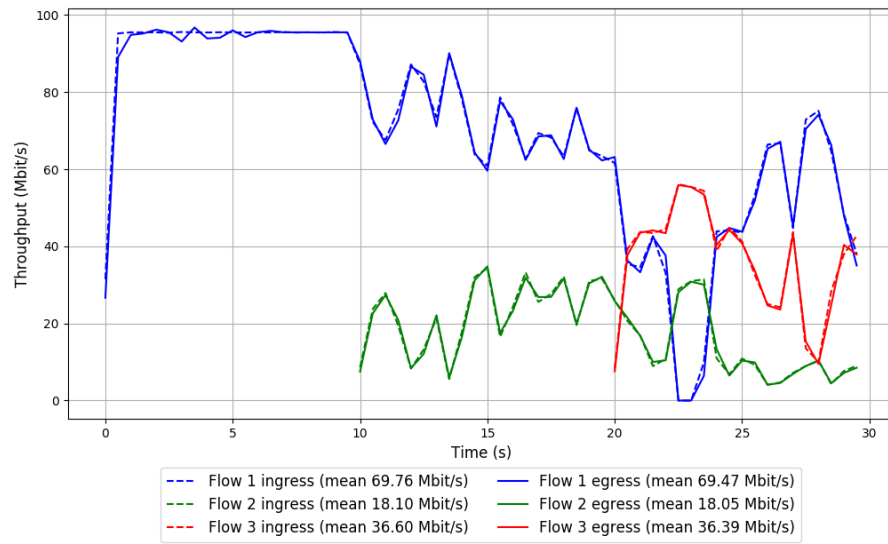
```
Run 10: Statistics of Copa

Start at: 2018-02-20 13:43:29
End at: 2018-02-20 13:43:59
Local clock offset: 5.043 ms
Remote clock offset: -3.363 ms


# Below is generated by plot.py at 2018-02-20 18:39:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.50 Mbit/s
95th percentile per-packet one-way delay: 46.085 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 69.47 Mbit/s
95th percentile per-packet one-way delay: 45.997 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 18.05 Mbit/s
95th percentile per-packet one-way delay: 51.235 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 36.39 Mbit/s
95th percentile per-packet one-way delay: 42.617 ms
Loss rate: 1.20%
```

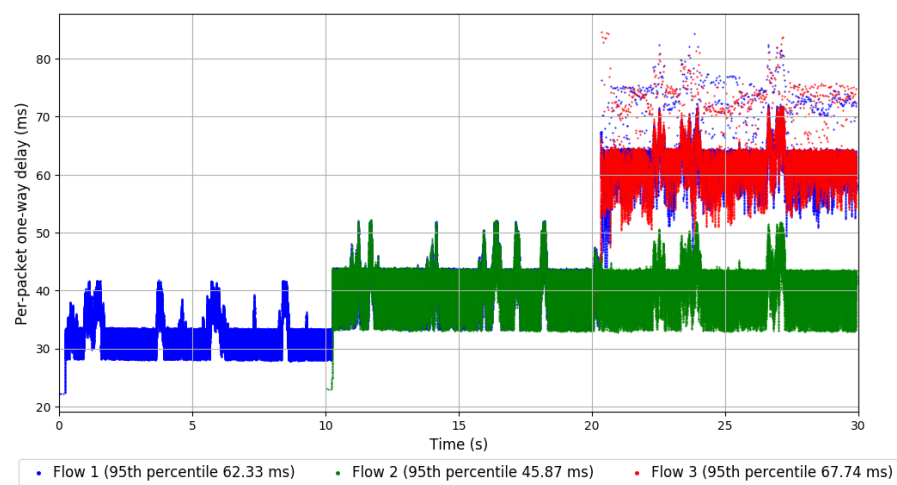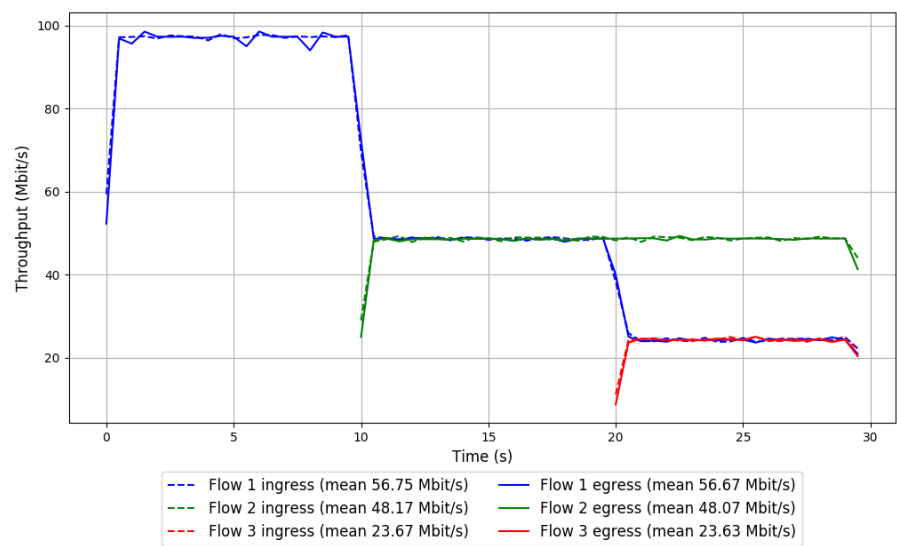## Run 10: Report of Copa — Data Link

```
Run 1: Statistics of FillP

Start at: 2018-02-20 09:47:40
End at: 2018-02-20 09:48:10
Local clock offset: -6.495 ms
Remote clock offset: -4.575 ms


# Below is generated by plot.py at 2018-02-20 18:39:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.42 Mbit/s
95th percentile per-packet one-way delay: 62.728 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 56.67 Mbit/s
95th percentile per-packet one-way delay: 62.327 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 48.07 Mbit/s
95th percentile per-packet one-way delay: 45.866 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 23.63 Mbit/s
95th percentile per-packet one-way delay: 67.742 ms
Loss rate: 1.12%
```
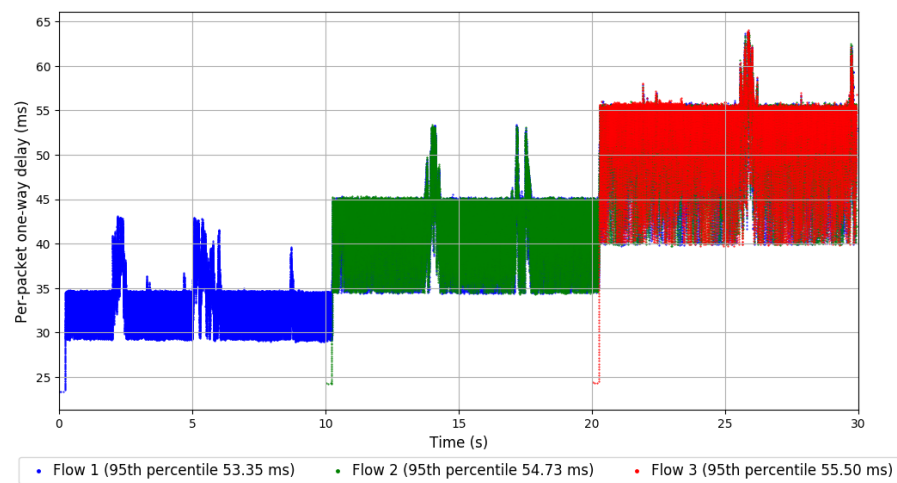
Run 1: Report of FillP — Data Link

```
Run 2: Statistics of FillP

Start at: 2018-02-20 10:12:21
End at: 2018-02-20 10:12:51
Local clock offset: 5.274 ms
Remote clock offset: -2.129 ms

# Below is generated by plot.py at 2018-02-20 18:39:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.46 Mbit/s
95th percentile per-packet one-way delay: 54.542 ms
Loss rate: 1.70%
-- Flow 1:
Average throughput: 59.26 Mbit/s
95th percentile per-packet one-way delay: 53.352 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 40.21 Mbit/s
95th percentile per-packet one-way delay: 54.726 ms
Loss rate: 2.81%
-- Flow 3:
Average throughput: 31.65 Mbit/s
95th percentile per-packet one-way delay: 55.502 ms
Loss rate: 6.08%
```
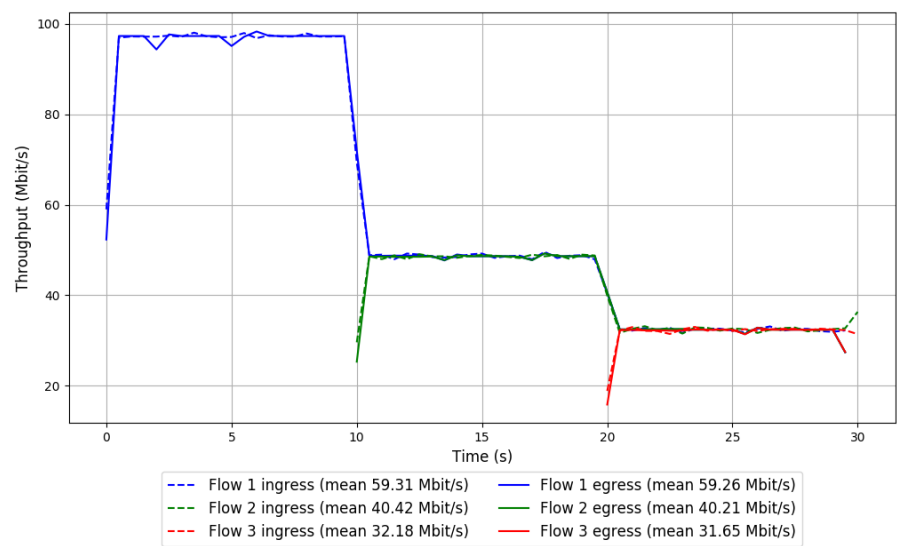
Run 2: Report of FillP — Data Link

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```
Run 3: Statistics of FillP

Start at: 2018-02-20 10:36:59
End at: 2018-02-20 10:37:29
Local clock offset: 1.947 ms
Remote clock offset: -3.945 ms

# Below is generated by plot.py at 2018-02-20 18:39:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.61 Mbit/s
95th percentile per-packet one-way delay: 63.589 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 56.66 Mbit/s
95th percentile per-packet one-way delay: 63.413 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 36.44 Mbit/s
95th percentile per-packet one-way delay: 64.591 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 47.60 Mbit/s
95th percentile per-packet one-way delay: 44.885 ms
Loss rate: 0.72%
```
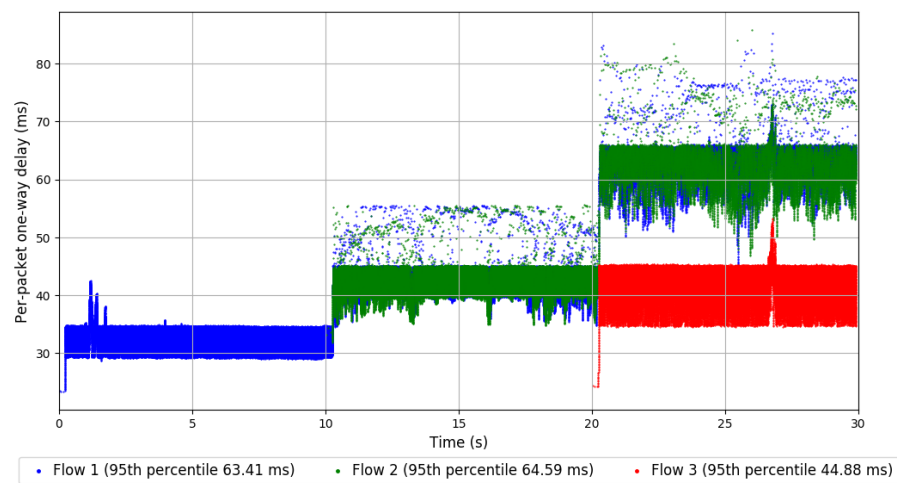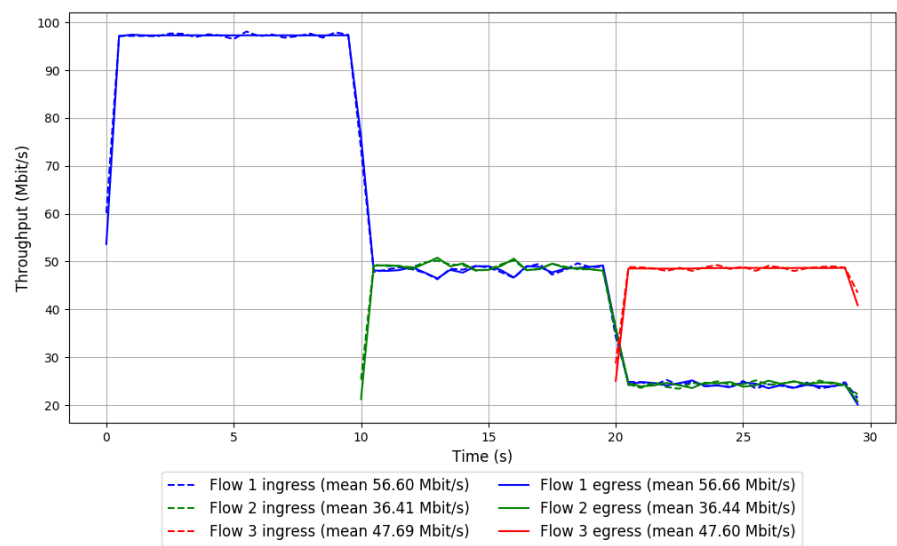
Run 3: Report of FillP — Data Link

Flow 1 ingress (mean 56.60 Mbit/s)   Flow 1 egress (mean 56.66 Mbit/s)
Flow 2 ingress (mean 36.41 Mbit/s)   Flow 2 egress (mean 36.44 Mbit/s)
Flow 3 ingress (mean 47.69 Mbit/s)   Flow 3 egress (mean 47.60 Mbit/s)

Flow 1 (95th percentile 63.41 ms)   Flow 2 (95th percentile 64.59 ms)   Flow 3 (95th percentile 44.88 ms)

249

```
Run 4: Statistics of FillP

Start at: 2018-02-20 11:01:34
End at: 2018-02-20 11:02:04
Local clock offset: -1.876 ms
Remote clock offset: -5.675 ms
```

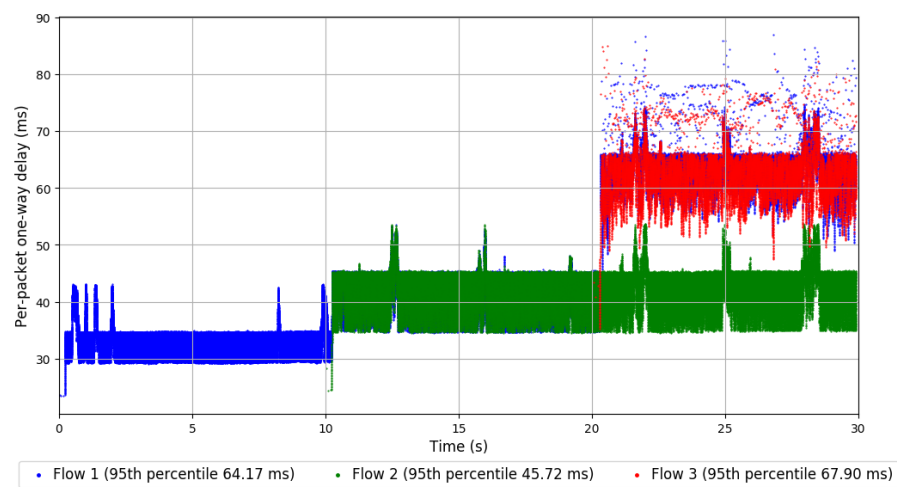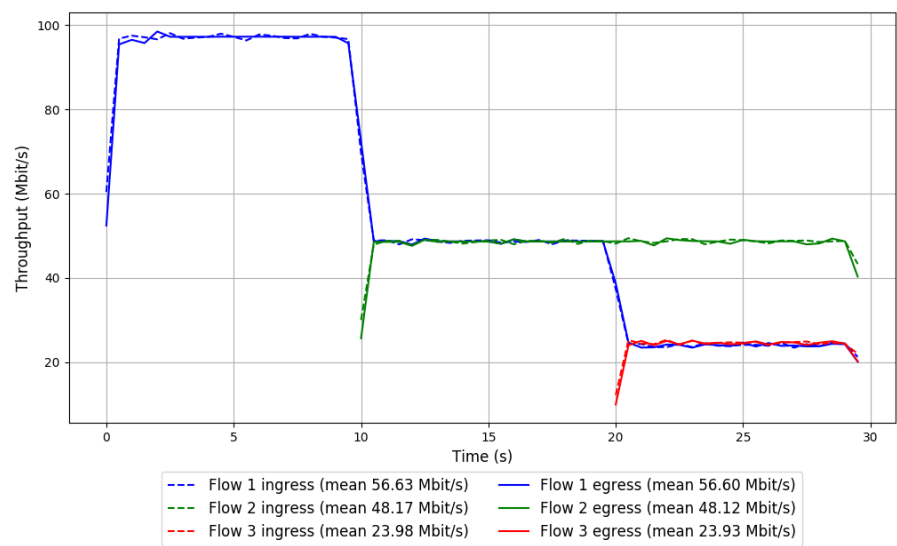Run 4: Report of FillP — Data Link

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Figure is missing

```
Run 5: Statistics of FillP

Start at: 2018-02-20 11:26:05
End at: 2018-02-20 11:26:35
Local clock offset: -7.235 ms
Remote clock offset: -3.969 ms


# Below is generated by plot.py at 2018-02-20 18:39:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.49 Mbit/s
95th percentile per-packet one-way delay: 64.094 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 56.60 Mbit/s
95th percentile per-packet one-way delay: 64.172 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 48.12 Mbit/s
95th percentile per-packet one-way delay: 45.724 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 23.93 Mbit/s
95th percentile per-packet one-way delay: 67.897 ms
Loss rate: 1.10%
```
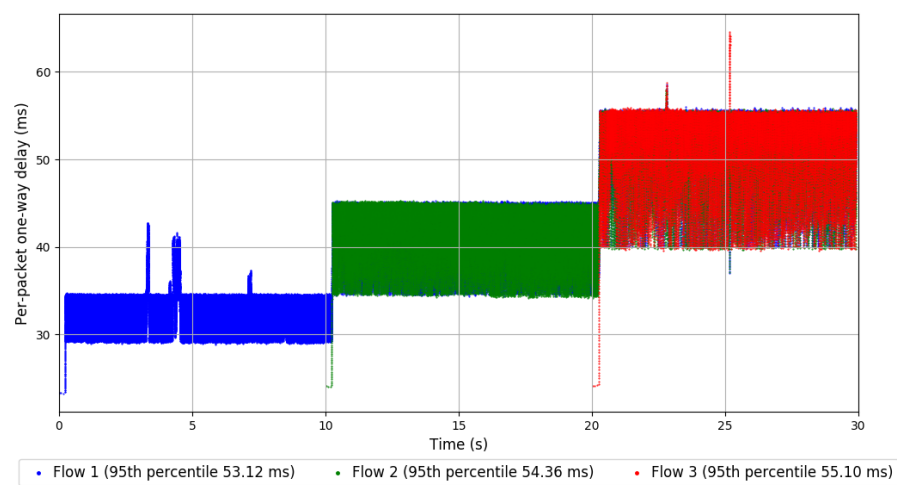
Run 5: Report of FillP — Data Link

```
Run 6: Statistics of FillP

Start at: 2018-02-20 11:50:39
End at: 2018-02-20 11:51:09
Local clock offset: 1.219 ms
Remote clock offset: -4.013 ms

# Below is generated by plot.py at 2018-02-20 18:39:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.62 Mbit/s
95th percentile per-packet one-way delay: 54.220 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 59.39 Mbit/s
95th percentile per-packet one-way delay: 53.117 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 40.26 Mbit/s
95th percentile per-packet one-way delay: 54.357 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 31.66 Mbit/s
95th percentile per-packet one-way delay: 55.103 ms
Loss rate: 0.85%
```
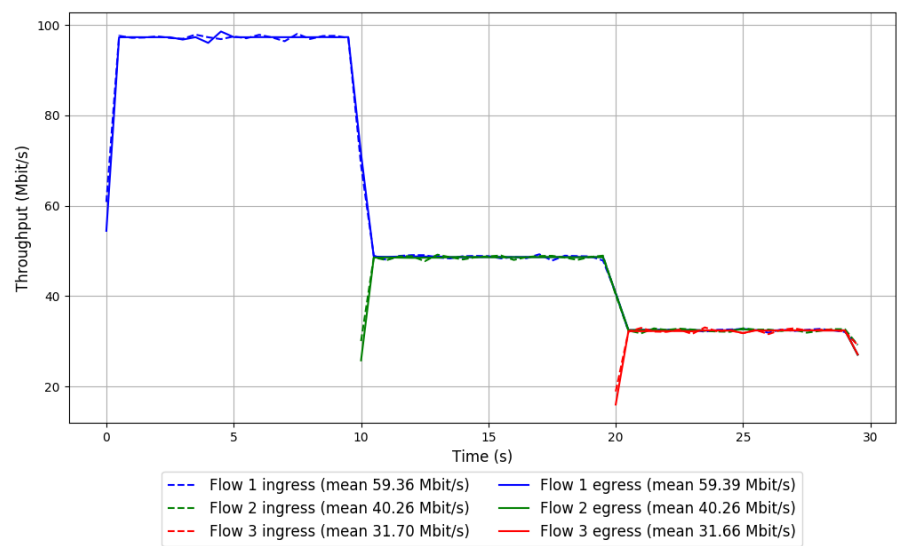
Run 6: Report of FillP — Data Link

Flow 1 ingress (mean 59.36 Mbit/s) ---- Flow 1 egress (mean 59.39 Mbit/s)
Flow 2 ingress (mean 40.26 Mbit/s) ---- Flow 2 egress (mean 40.26 Mbit/s)
Flow 3 ingress (mean 31.70 Mbit/s) ---- Flow 3 egress (mean 31.66 Mbit/s)

Flow 1 (95th percentile 53.12 ms)   Flow 2 (95th percentile 54.36 ms)   Flow 3 (95th percentile 55.10 ms)
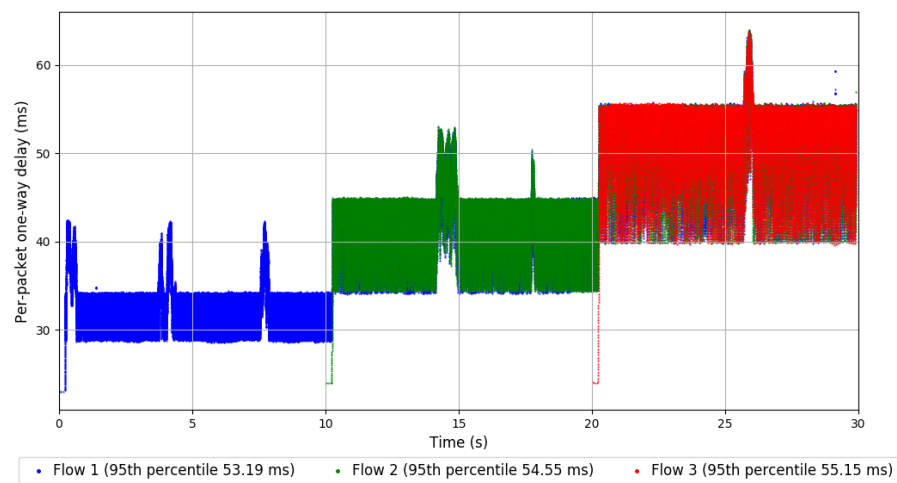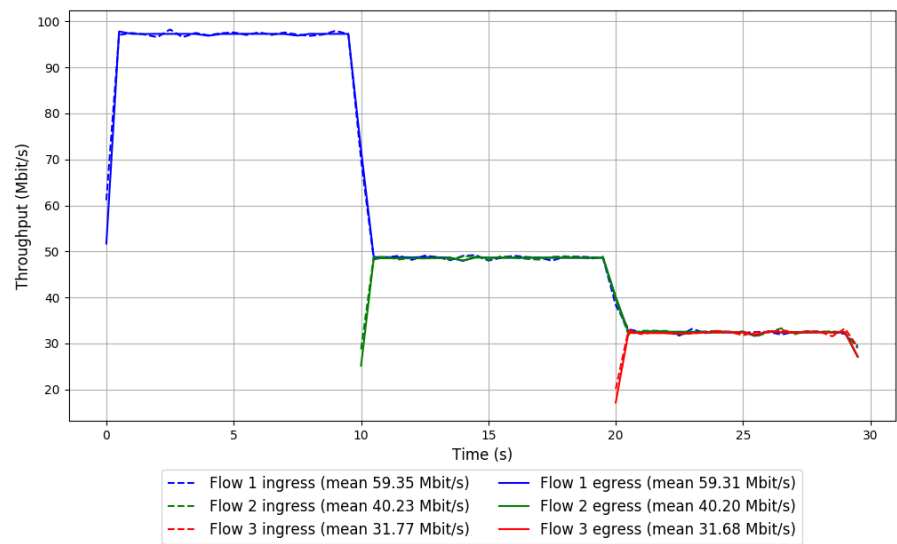
255

```
Run 7: Statistics of FillP

Start at: 2018-02-20 12:15:11
End at: 2018-02-20 12:15:41
Local clock offset: 1.671 ms
Remote clock offset: -2.795 ms


# Below is generated by plot.py at 2018-02-20 18:39:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.53 Mbit/s
95th percentile per-packet one-way delay: 54.327 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 59.31 Mbit/s
95th percentile per-packet one-way delay: 53.185 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 40.20 Mbit/s
95th percentile per-packet one-way delay: 54.555 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 31.68 Mbit/s
95th percentile per-packet one-way delay: 55.154 ms
Loss rate: 0.93%
```

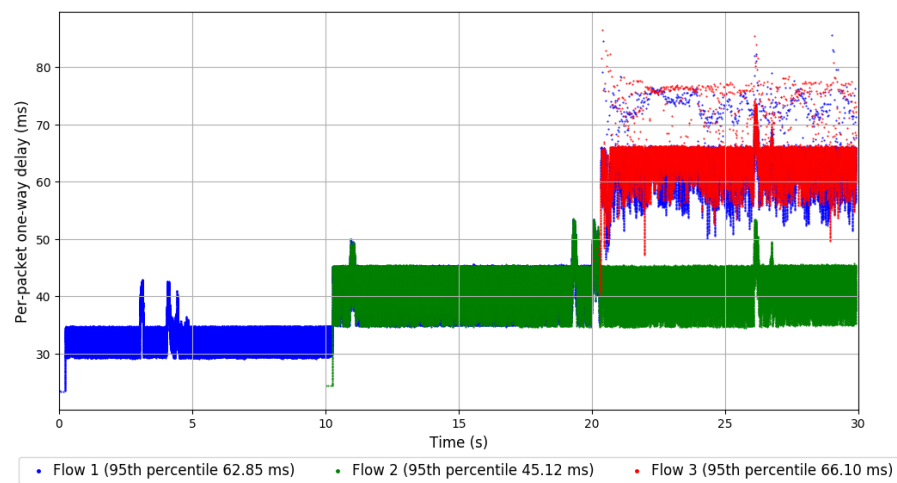Run 7: Report of FillP — Data Link

257

```
Run 8: Statistics of FillP

Start at: 2018-02-20 12:39:48
End at: 2018-02-20 12:40:18
Local clock offset: 0.674 ms
Remote clock offset: -1.427 ms


# Below is generated by plot.py at 2018-02-20 18:40:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.53 Mbit/s
95th percentile per-packet one-way delay: 63.841 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 56.86 Mbit/s
95th percentile per-packet one-way delay: 62.846 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 48.07 Mbit/s
95th percentile per-packet one-way delay: 45.125 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 23.39 Mbit/s
95th percentile per-packet one-way delay: 66.102 ms
Loss rate: 1.10%
```
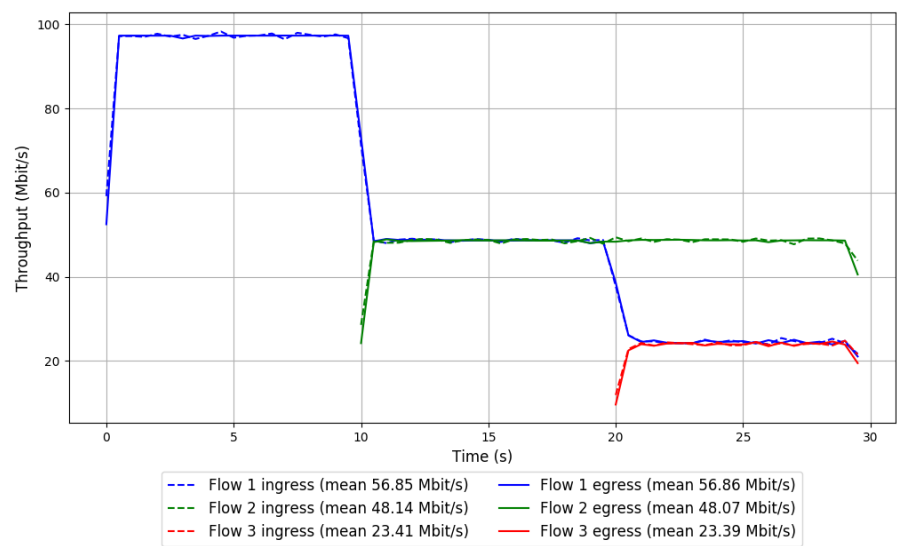
Run 8: Report of FillP — Data Link

Flow 1 ingress (mean 56.85 Mbit/s) — Flow 1 egress (mean 56.86 Mbit/s)
Flow 2 ingress (mean 48.14 Mbit/s) — Flow 2 egress (mean 48.07 Mbit/s)
Flow 3 ingress (mean 23.41 Mbit/s) — Flow 3 egress (mean 23.39 Mbit/s)

Flow 1 (95th percentile 62.85 ms)   Flow 2 (95th percentile 45.12 ms)   Flow 3 (95th percentile 66.10 ms)
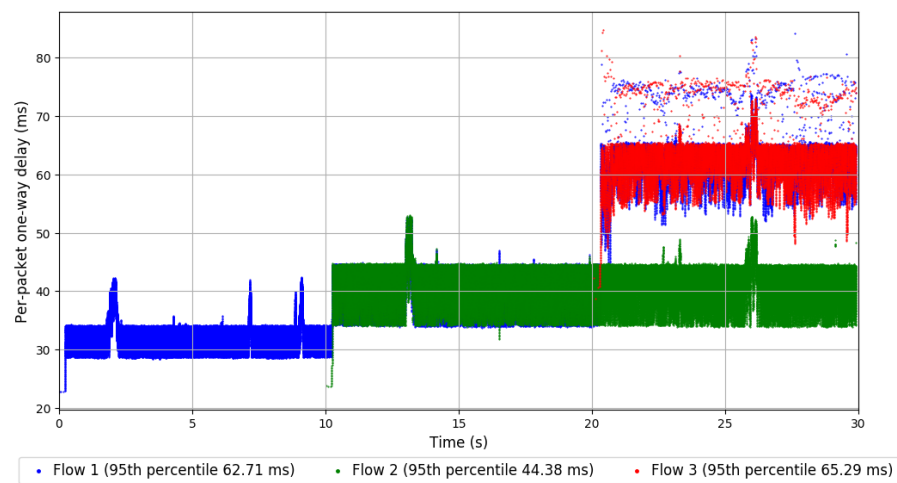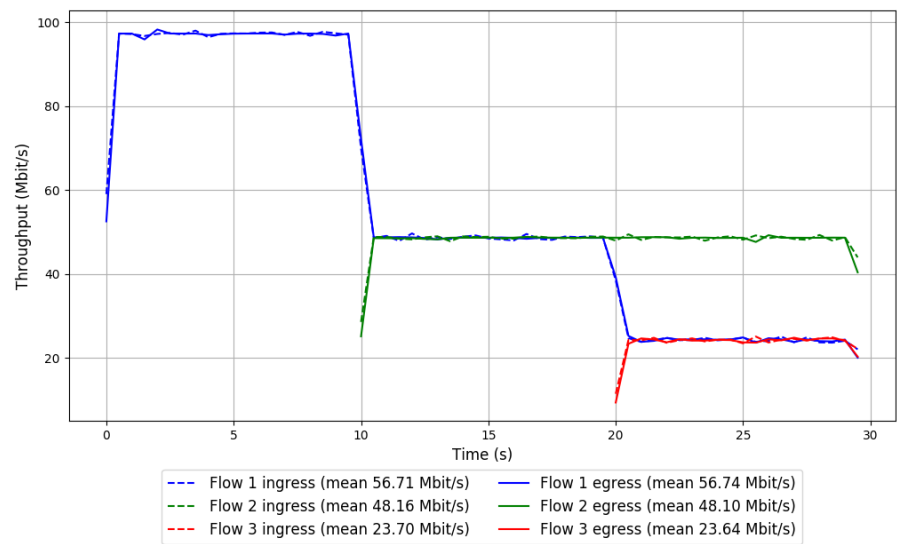
259

```
Run 9: Statistics of FillP

Start at: 2018-02-20 13:04:20
End at: 2018-02-20 13:04:50
Local clock offset: -5.234 ms
Remote clock offset: -5.305 ms


# Below is generated by plot.py at 2018-02-20 18:40:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.51 Mbit/s
95th percentile per-packet one-way delay: 63.169 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 56.74 Mbit/s
95th percentile per-packet one-way delay: 62.713 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 48.10 Mbit/s
95th percentile per-packet one-way delay: 44.385 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 23.64 Mbit/s
95th percentile per-packet one-way delay: 65.287 ms
Loss rate: 1.14%
```

Run 9: Report of FillP — Data Link

Flow 1 ingress (mean 56.71 Mbit/s) — Flow 1 egress (mean 56.74 Mbit/s)
Flow 2 ingress (mean 48.16 Mbit/s) — Flow 2 egress (mean 48.10 Mbit/s)
Flow 3 ingress (mean 23.70 Mbit/s) — Flow 3 egress (mean 23.64 Mbit/s)

Flow 1 (95th percentile 62.71 ms)   Flow 2 (95th percentile 44.38 ms)   Flow 3 (95th percentile 65.29 ms)
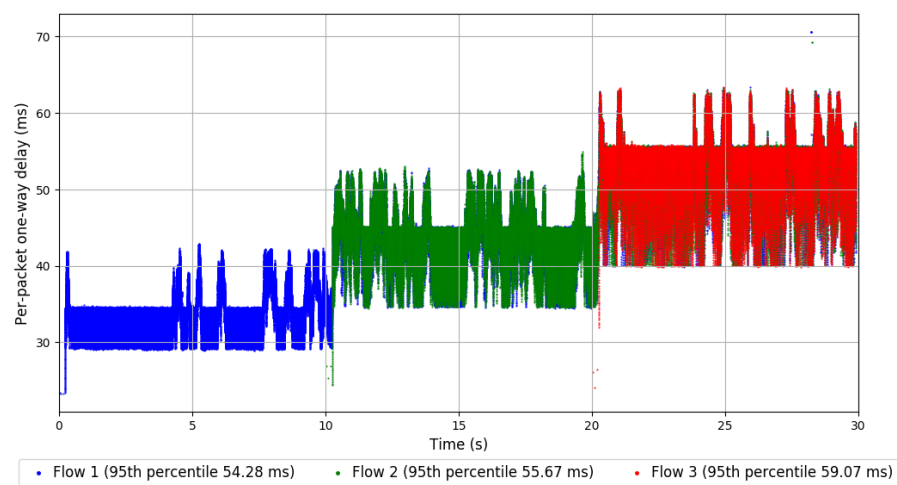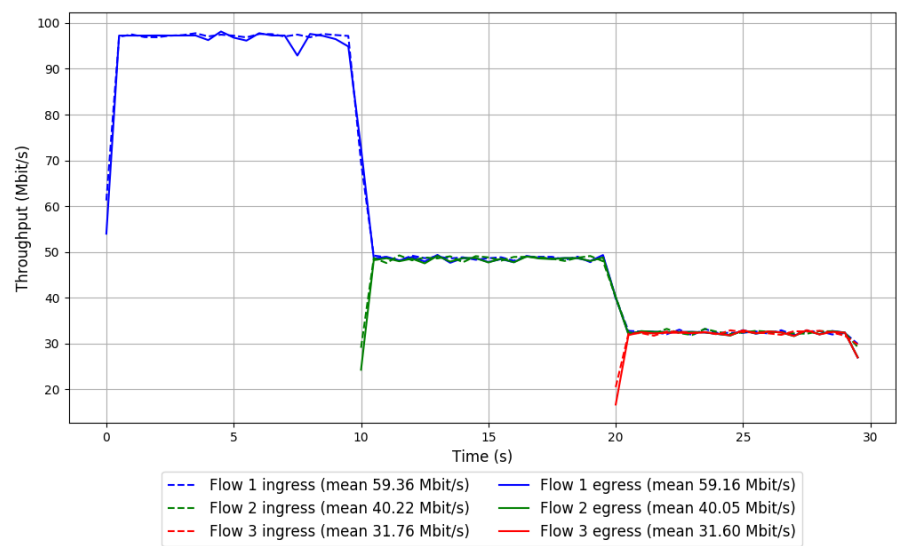
```
Run 10: Statistics of FillP

Start at: 2018-02-20 13:29:01
End at: 2018-02-20 13:29:31
Local clock offset: 2.627 ms
Remote clock offset: -4.269 ms


# Below is generated by plot.py at 2018-02-20 18:40:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.24 Mbit/s
95th percentile per-packet one-way delay: 55.404 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 59.16 Mbit/s
95th percentile per-packet one-way delay: 54.280 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 40.05 Mbit/s
95th percentile per-packet one-way delay: 55.670 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 31.60 Mbit/s
95th percentile per-packet one-way delay: 59.066 ms
Loss rate: 1.17%
```

Run 10: Report of FillP — Data Link

Flow 1 ingress (mean 59.36 Mbit/s)   Flow 1 egress (mean 59.16 Mbit/s)
Flow 2 ingress (mean 40.22 Mbit/s)   Flow 2 egress (mean 40.05 Mbit/s)
Flow 3 ingress (mean 31.76 Mbit/s)   Flow 3 egress (mean 31.60 Mbit/s)

Flow 1 (95th percentile 54.28 ms)   Flow 2 (95th percentile 55.67 ms)   Flow 3 (95th percentile 59.07 ms)
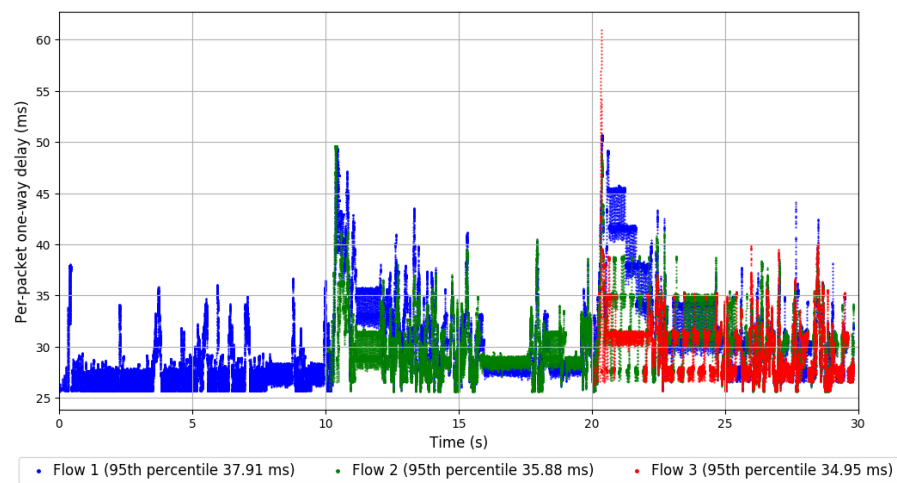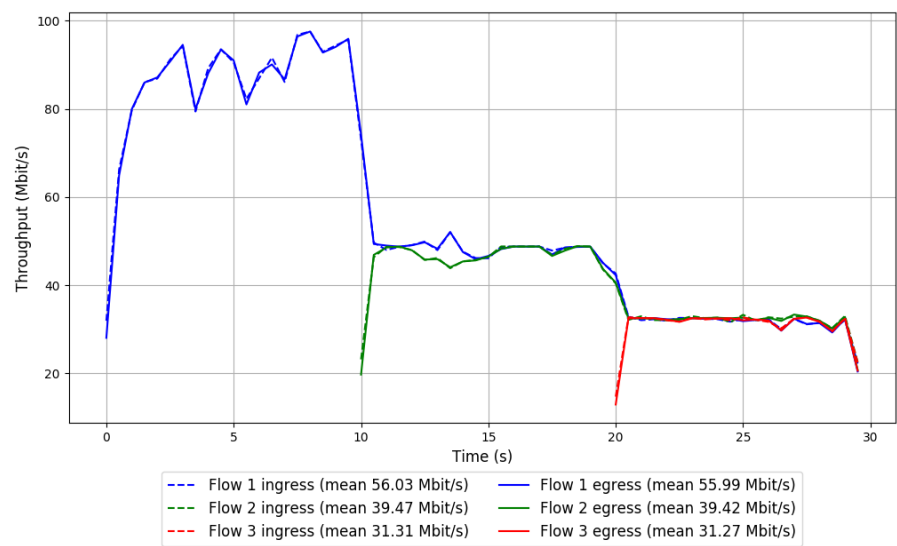
263

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

Start at: 2018-02-20 10:05:43
End at: 2018-02-20 10:06:13
Local clock offset: 4.136 ms
Remote clock offset: -5.081 ms


# Below is generated by plot.py at 2018-02-20 18:40:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.39 Mbit/s
95th percentile per-packet one-way delay: 36.834 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 55.99 Mbit/s
95th percentile per-packet one-way delay: 37.908 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 39.42 Mbit/s
95th percentile per-packet one-way delay: 35.885 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 31.27 Mbit/s
95th percentile per-packet one-way delay: 34.952 ms
Loss rate: 0.67%
```

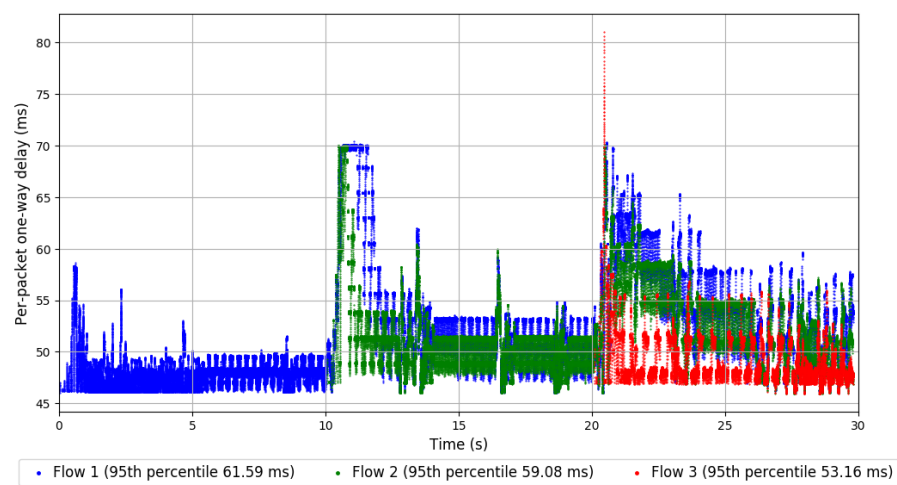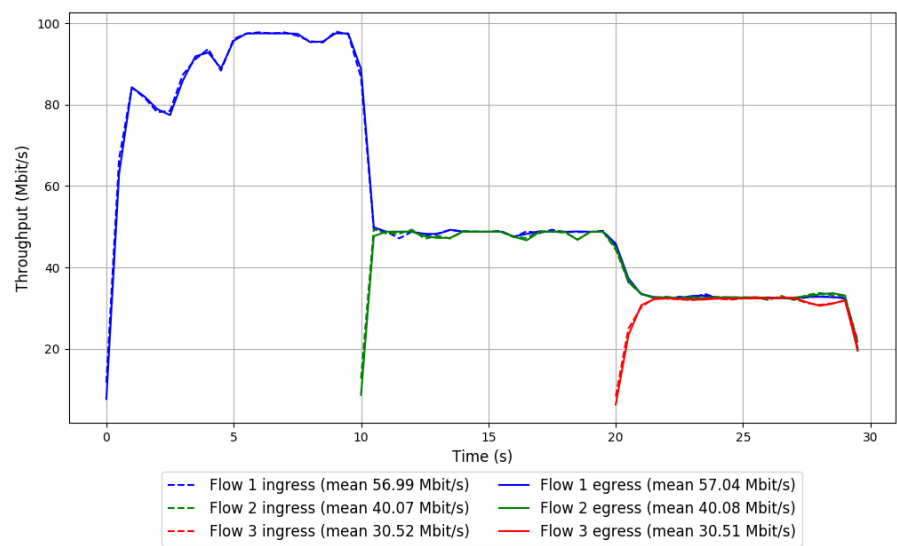Run 1: Report of Indigo-1-32 — Data Link

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

Start at: 2018-02-20 10:30:19
End at: 2018-02-20 10:30:49
Local clock offset: 3.066 ms
Remote clock offset: -1.698 ms


# Below is generated by plot.py at 2018-02-20 18:40:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.61 Mbit/s
95th percentile per-packet one-way delay: 60.362 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 57.04 Mbit/s
95th percentile per-packet one-way delay: 61.585 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 40.08 Mbit/s
95th percentile per-packet one-way delay: 59.081 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 30.51 Mbit/s
95th percentile per-packet one-way delay: 53.163 ms
Loss rate: 0.84%
```

Run 2: Report of Indigo-1-32 — Data Link

Flow 1 ingress (mean 56.99 Mbit/s) --- Flow 1 egress (mean 57.04 Mbit/s)
Flow 2 ingress (mean 40.07 Mbit/s) --- Flow 2 egress (mean 40.08 Mbit/s)
Flow 3 ingress (mean 30.52 Mbit/s) --- Flow 3 egress (mean 30.51 Mbit/s)

Flow 1 (95th percentile 61.59 ms)   Flow 2 (95th percentile 59.08 ms)   Flow 3 (95th percentile 53.16 ms)
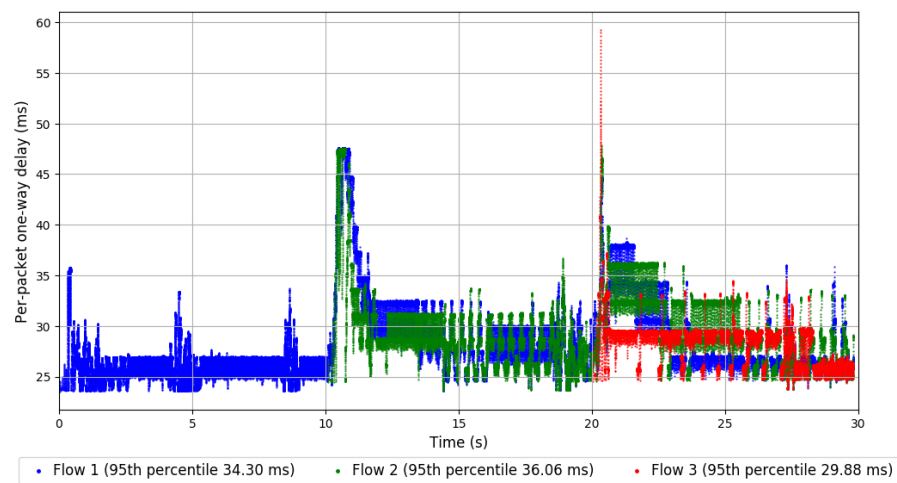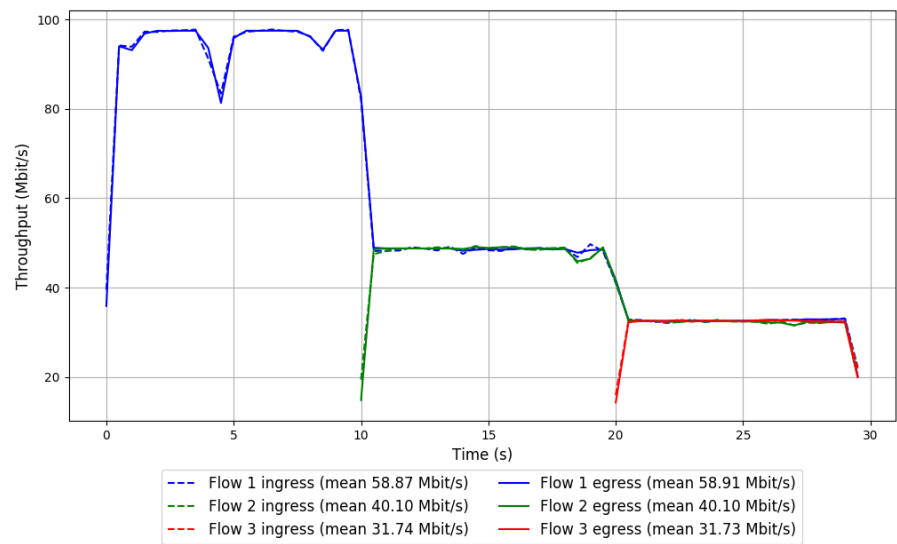
```
Run 3: Statistics of Indigo-1-32

Start at: 2018-02-20 10:54:56
End at: 2018-02-20 10:55:26
Local clock offset: 1.364 ms
Remote clock offset: -5.981 ms


# Below is generated by plot.py at 2018-02-20 18:40:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.83 Mbit/s
95th percentile per-packet one-way delay: 34.690 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 58.91 Mbit/s
95th percentile per-packet one-way delay: 34.299 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 40.10 Mbit/s
95th percentile per-packet one-way delay: 36.059 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 31.73 Mbit/s
95th percentile per-packet one-way delay: 29.878 ms
Loss rate: 0.58%
```

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

Flow 1 ingress (mean 58.87 Mbit/s) --- Flow 1 egress (mean 58.91 Mbit/s)
Flow 2 ingress (mean 40.10 Mbit/s) --- Flow 2 egress (mean 40.10 Mbit/s)
Flow 3 ingress (mean 31.74 Mbit/s) --- Flow 3 egress (mean 31.73 Mbit/s)

Flow 1 (95th percentile 34.30 ms)   Flow 2 (95th percentile 36.06 ms)   Flow 3 (95th percentile 29.88 ms)
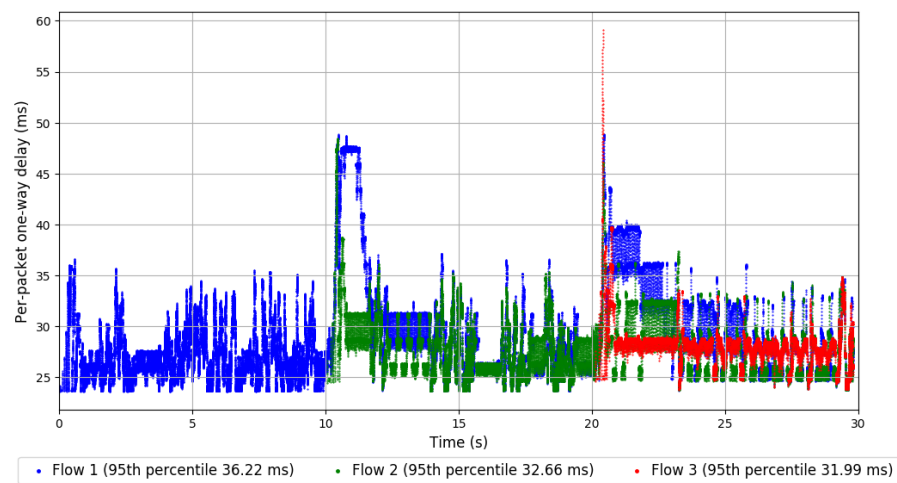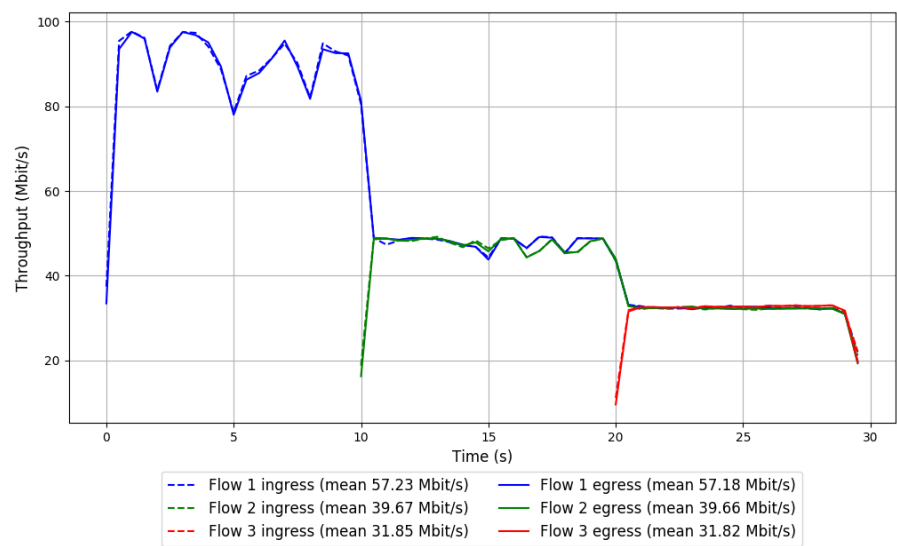
269

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

Start at: 2018-02-20 11:19:27
End at: 2018-02-20 11:19:57
Local clock offset: -6.281 ms
Remote clock offset: -4.325 ms


# Below is generated by plot.py at 2018-02-20 18:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.80 Mbit/s
95th percentile per-packet one-way delay: 35.434 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 57.18 Mbit/s
95th percentile per-packet one-way delay: 36.217 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 39.66 Mbit/s
95th percentile per-packet one-way delay: 32.658 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 31.82 Mbit/s
95th percentile per-packet one-way delay: 31.988 ms
Loss rate: 0.63%
```

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

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

Start at: 2018-02-20 11:44:01
End at: 2018-02-20 11:44:31
Local clock offset: 0.027 ms
Remote clock offset: -6.02 ms


# Below is generated by plot.py at 2018-02-20 18:40:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.16 Mbit/s
95th percentile per-packet one-way delay: 36.017 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 59.58 Mbit/s
95th percentile per-packet one-way delay: 37.007 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 47.46 Mbit/s
95th percentile per-packet one-way delay: 32.853 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 15.54 Mbit/s
95th percentile per-packet one-way delay: 43.831 ms
Loss rate: 0.79%
```
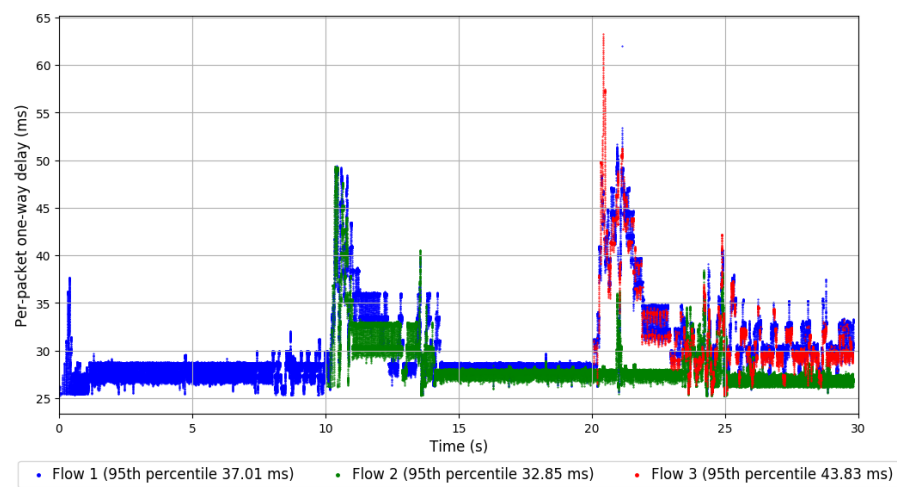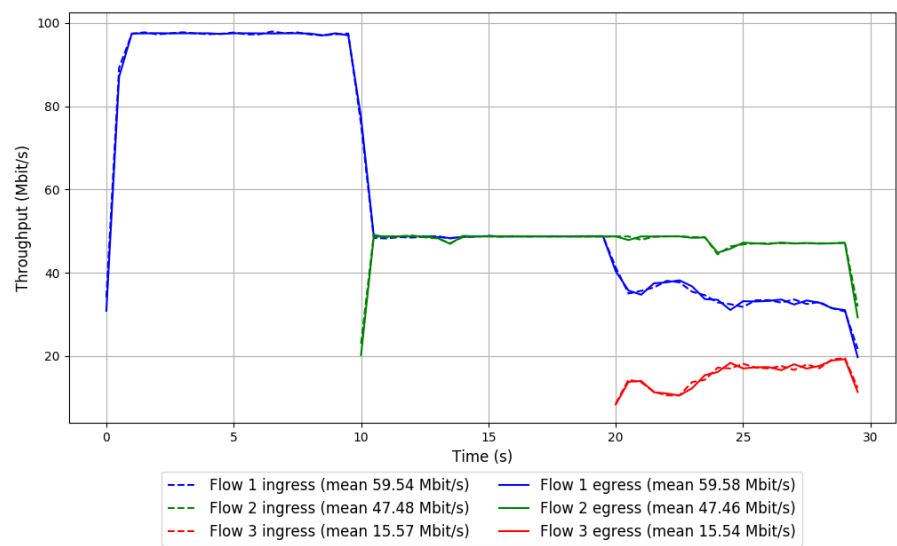
Run 5: Report of Indigo-1-32 — Data Link

Flow 1 ingress (mean 59.54 Mbit/s)   Flow 1 egress (mean 59.58 Mbit/s)
Flow 2 ingress (mean 47.48 Mbit/s)   Flow 2 egress (mean 47.46 Mbit/s)
Flow 3 ingress (mean 15.57 Mbit/s)   Flow 3 egress (mean 15.54 Mbit/s)

Flow 1 (95th percentile 37.01 ms)   Flow 2 (95th percentile 32.85 ms)   Flow 3 (95th percentile 43.83 ms)

273

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

Start at: 2018-02-20 12:08:33
End at: 2018-02-20 12:09:03
Local clock offset: 1.864 ms
Remote clock offset: -4.05 ms

# Below is generated by plot.py at 2018-02-20 18:41:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.11 Mbit/s
95th percentile per-packet one-way delay: 35.665 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 64.16 Mbit/s
95th percentile per-packet one-way delay: 31.226 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 38.39 Mbit/s
95th percentile per-packet one-way delay: 41.749 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 19.86 Mbit/s
95th percentile per-packet one-way delay: 46.864 ms
Loss rate: 0.66%
```
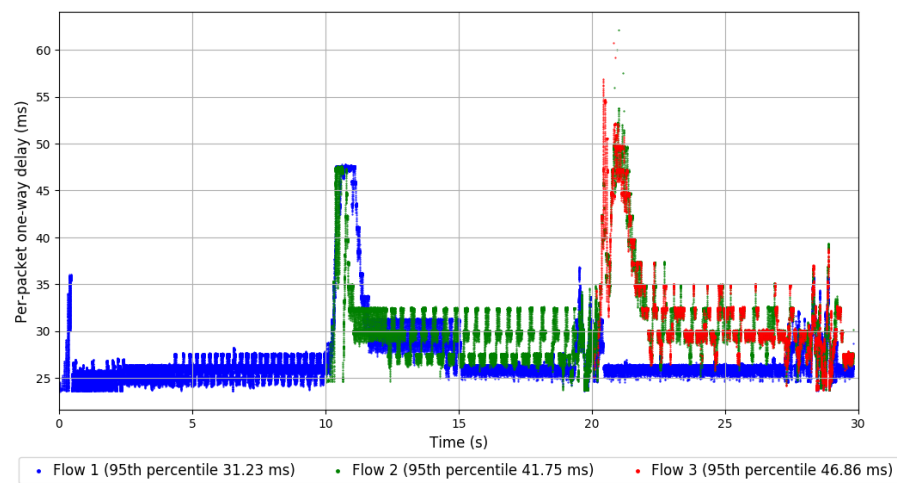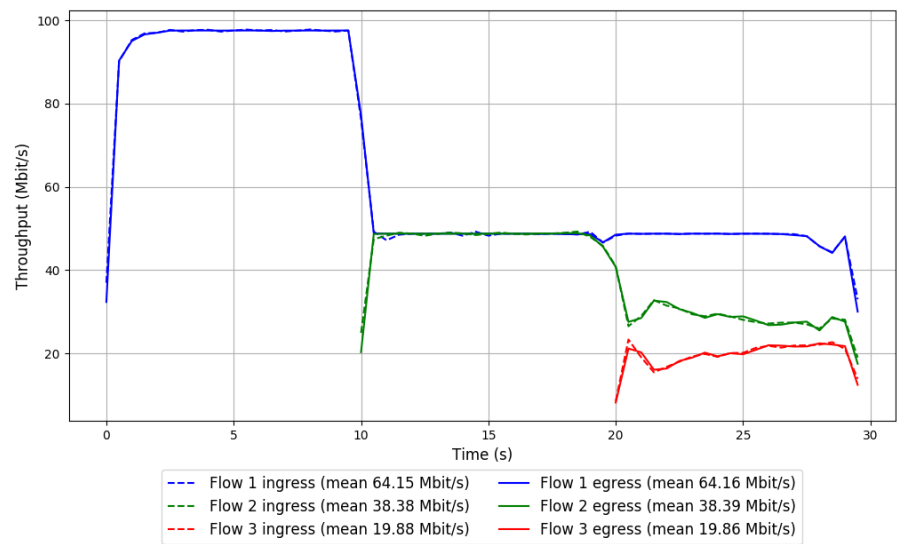
Run 6: Report of Indigo-1-32 — Data Link

Flow 1 ingress (mean 64.15 Mbit/s) — Flow 1 egress (mean 64.16 Mbit/s)
Flow 2 ingress (mean 38.38 Mbit/s) — Flow 2 egress (mean 38.39 Mbit/s)
Flow 3 ingress (mean 19.88 Mbit/s) — Flow 3 egress (mean 19.86 Mbit/s)

Flow 1 (95th percentile 31.23 ms)   Flow 2 (95th percentile 41.75 ms)   Flow 3 (95th percentile 46.86 ms)
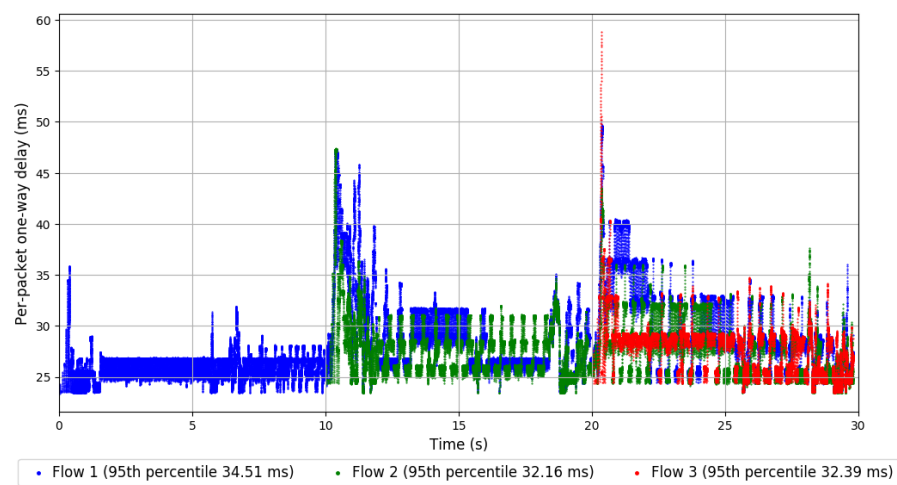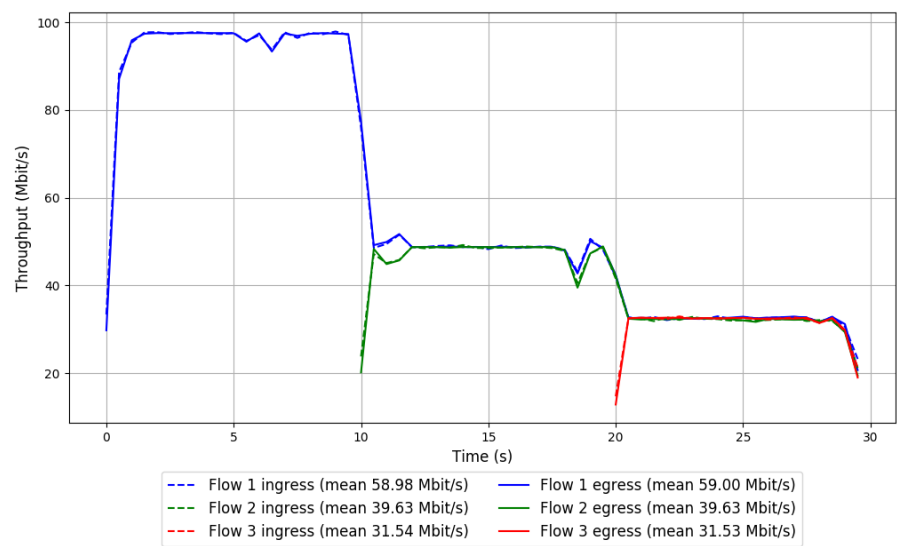
275

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

Start at: 2018-02-20 12:33:09
End at: 2018-02-20 12:33:39
Local clock offset: 1.614 ms
Remote clock offset: -2.029 ms


# Below is generated by plot.py at 2018-02-20 18:41:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.61 Mbit/s
95th percentile per-packet one-way delay: 32.950 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 59.00 Mbit/s
95th percentile per-packet one-way delay: 34.508 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 39.63 Mbit/s
95th percentile per-packet one-way delay: 32.157 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 31.53 Mbit/s
95th percentile per-packet one-way delay: 32.386 ms
Loss rate: 0.58%
```

Run 7: Report of Indigo-1-32 — Data Link

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

Start at: 2018-02-20 12:57:42
End at: 2018-02-20 12:58:12
Local clock offset: -4.421 ms
Remote clock offset: -4.72 ms


# Below is generated by plot.py at 2018-02-20 18:41:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.84 Mbit/s
95th percentile per-packet one-way delay: 34.226 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 59.18 Mbit/s
95th percentile per-packet one-way delay: 35.910 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 47.53 Mbit/s
95th percentile per-packet one-way delay: 30.681 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 12.64 Mbit/s
95th percentile per-packet one-way delay: 41.567 ms
Loss rate: 0.62%
```
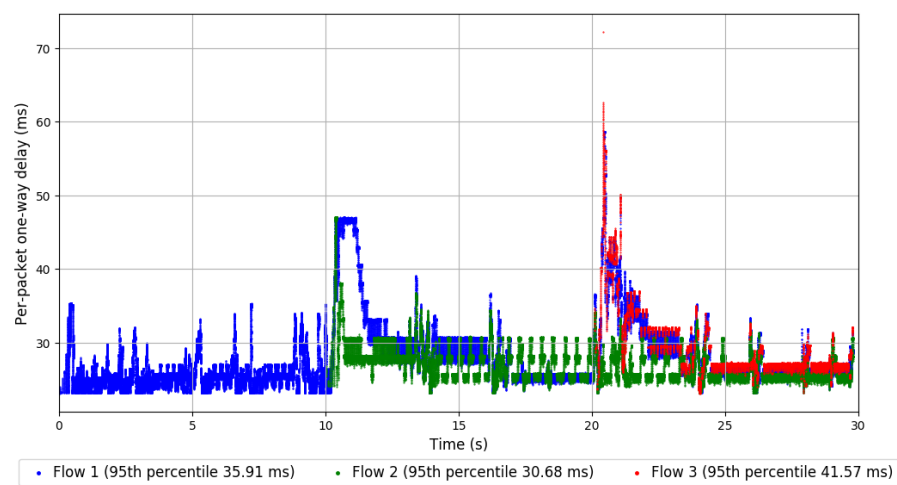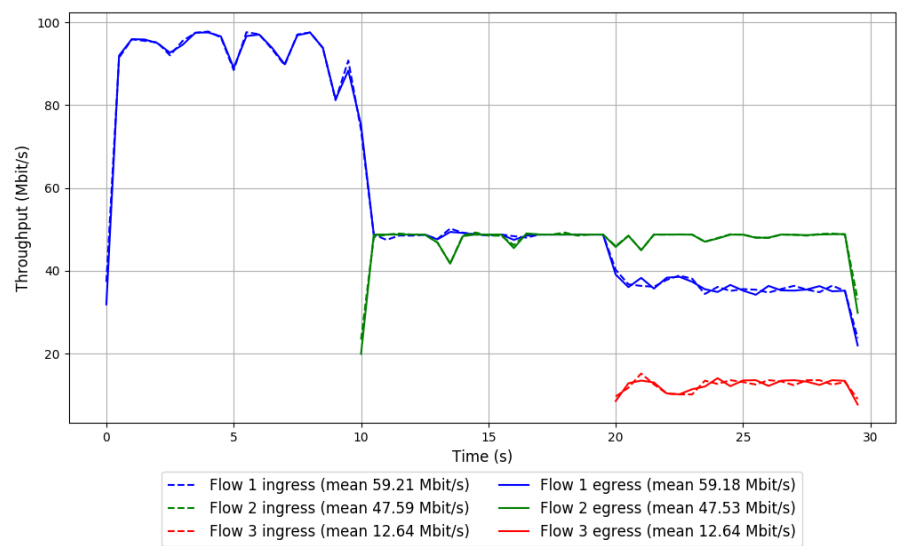
Run 8: Report of Indigo-1-32 — Data Link

- - - Flow 1 ingress (mean 59.21 Mbit/s) —— Flow 1 egress (mean 59.18 Mbit/s)
- - - Flow 2 ingress (mean 47.59 Mbit/s) —— Flow 2 egress (mean 47.53 Mbit/s)
- - - Flow 3 ingress (mean 12.64 Mbit/s) —— Flow 3 egress (mean 12.64 Mbit/s)

• Flow 1 (95th percentile 35.91 ms)   • Flow 2 (95th percentile 30.68 ms)   • Flow 3 (95th percentile 41.57 ms)
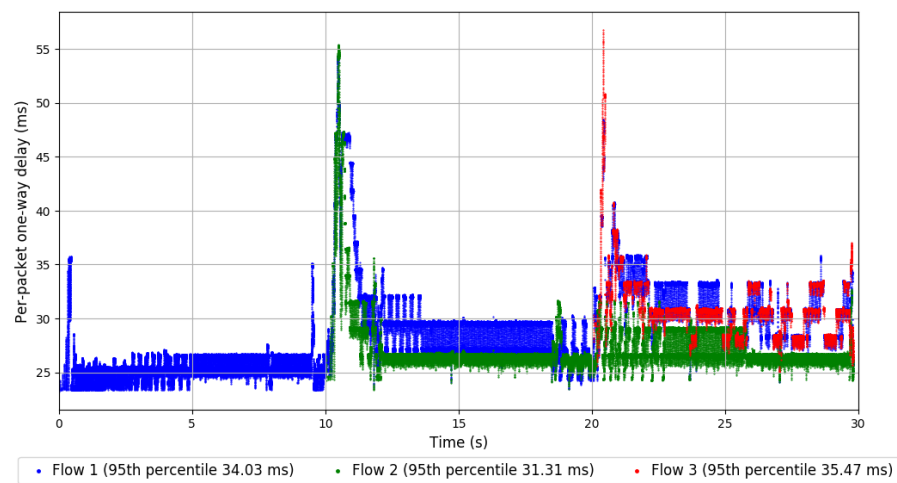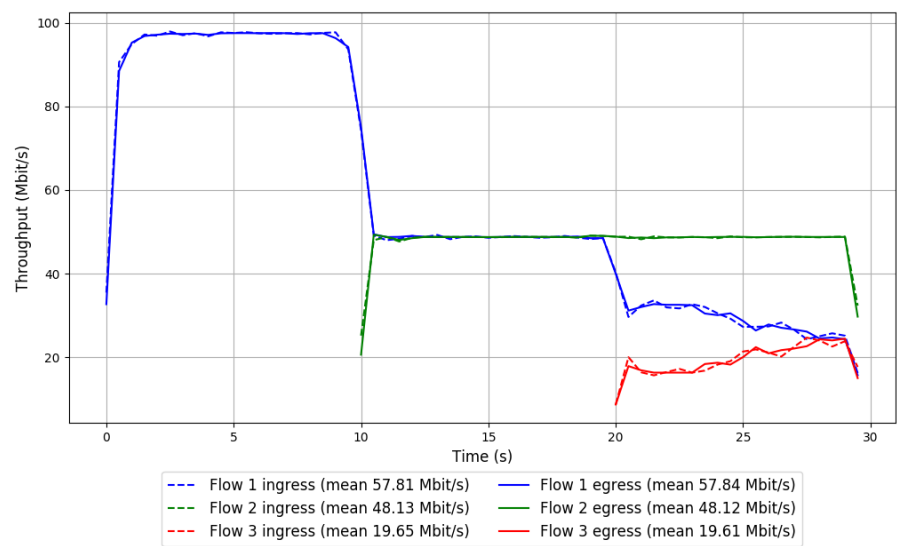
279

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

Start at: 2018-02-20 13:22:18
End at: 2018-02-20 13:22:48
Local clock offset: 0.641 ms
Remote clock offset: -5.711 ms


# Below is generated by plot.py at 2018-02-20 18:41:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.19 Mbit/s
95th percentile per-packet one-way delay: 33.347 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 57.84 Mbit/s
95th percentile per-packet one-way delay: 34.029 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 48.12 Mbit/s
95th percentile per-packet one-way delay: 31.312 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 19.61 Mbit/s
95th percentile per-packet one-way delay: 35.473 ms
Loss rate: 0.78%
```
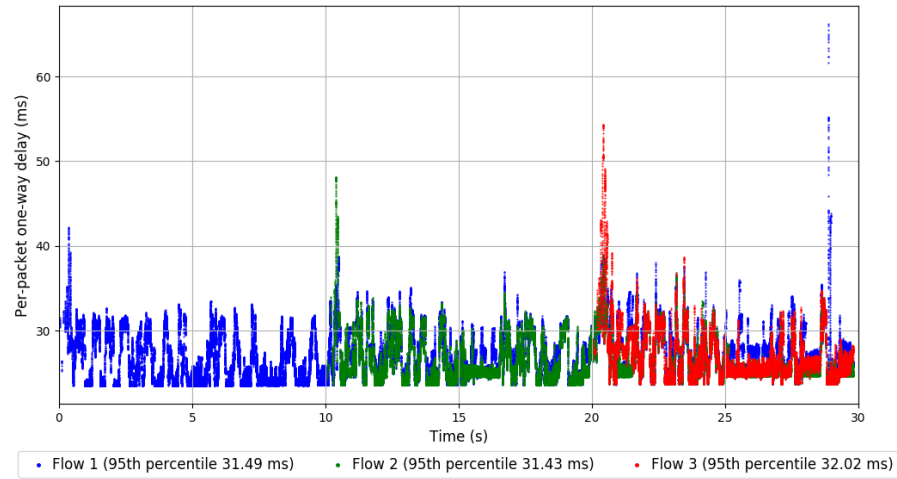
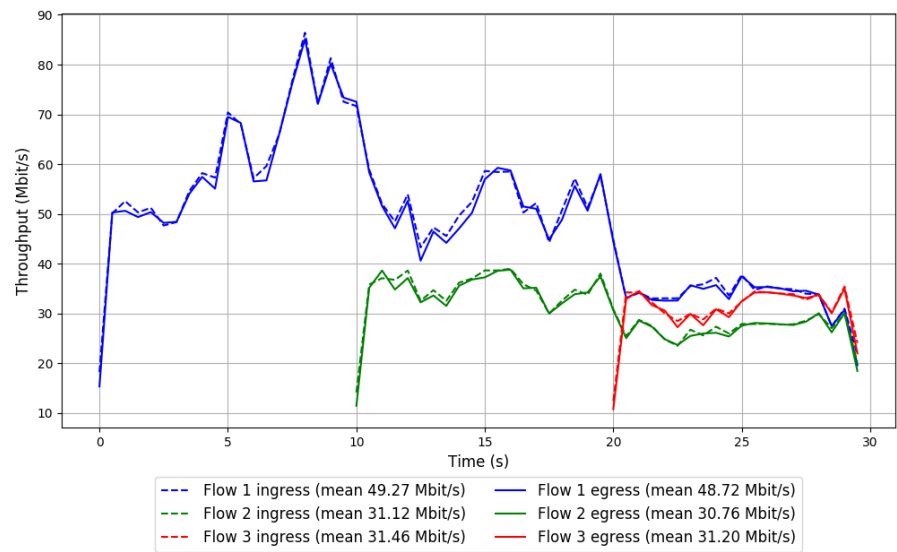Run 9: Report of Indigo-1-32 — Data Link

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

Start at: 2018-02-20 13:47:57
End at: 2018-02-20 13:48:27
Local clock offset: 4.811 ms
Remote clock offset: -2.927 ms


# Below is generated by plot.py at 2018-02-20 18:41:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.31 Mbit/s
95th percentile per-packet one-way delay: 31.543 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 48.72 Mbit/s
95th percentile per-packet one-way delay: 31.491 ms
Loss rate: 1.30%
-- Flow 2:
Average throughput: 30.76 Mbit/s
95th percentile per-packet one-way delay: 31.428 ms
Loss rate: 1.45%
-- Flow 3:
Average throughput: 31.20 Mbit/s
95th percentile per-packet one-way delay: 32.024 ms
Loss rate: 1.41%
```

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

Flow 1 ingress (mean 49.27 Mbit/s) --- Flow 1 egress (mean 48.72 Mbit/s)
Flow 2 ingress (mean 31.12 Mbit/s) --- Flow 2 egress (mean 30.76 Mbit/s)
Flow 3 ingress (mean 31.46 Mbit/s) --- Flow 3 egress (mean 31.20 Mbit/s)

Flow 1 (95th percentile 31.49 ms) • Flow 2 (95th percentile 31.43 ms) • Flow 3 (95th percentile 32.02 ms)
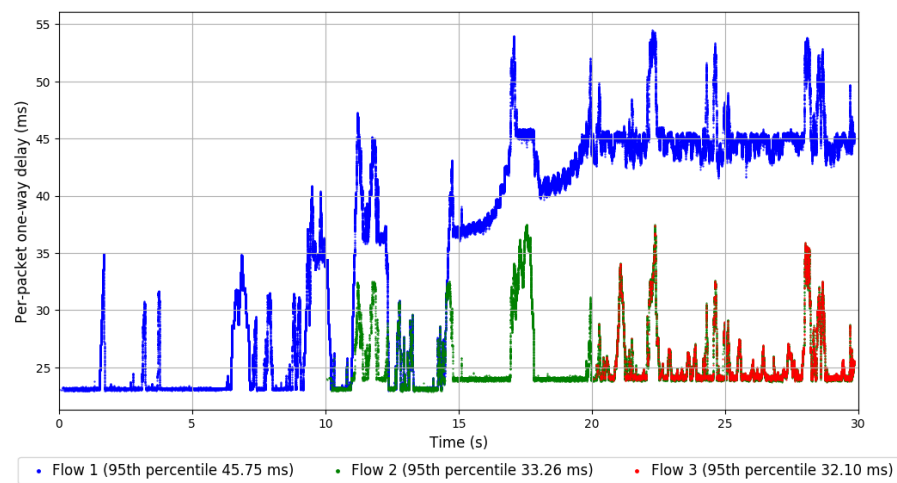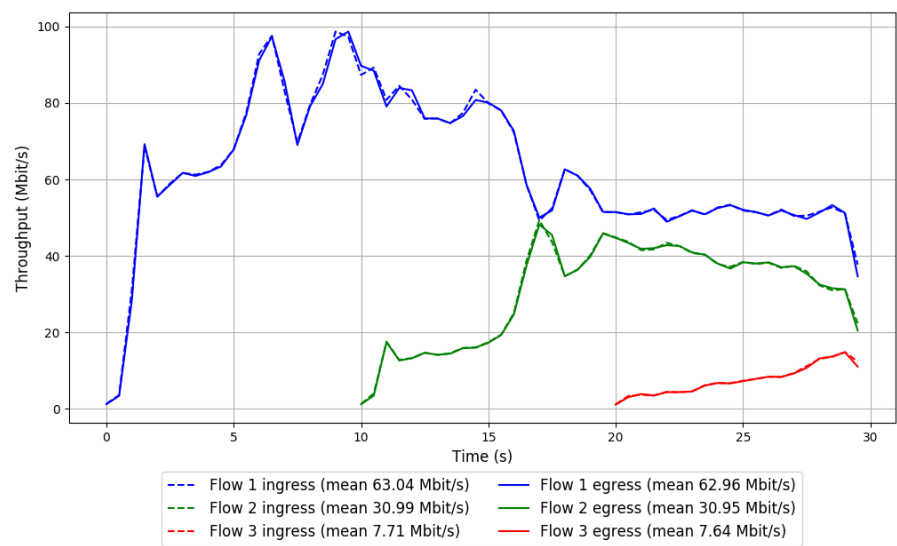
283

```
Run 1: Statistics of Vivace-latency

Start at: 2018-02-20 09:54:40
End at: 2018-02-20 09:55:10
Local clock offset: -0.184 ms
Remote clock offset: -4.638 ms


# Below is generated by plot.py at 2018-02-20 18:41:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.04 Mbit/s
95th percentile per-packet one-way delay: 45.465 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 62.96 Mbit/s
95th percentile per-packet one-way delay: 45.751 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 30.95 Mbit/s
95th percentile per-packet one-way delay: 33.258 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 7.64 Mbit/s
95th percentile per-packet one-way delay: 32.097 ms
Loss rate: 1.46%
```

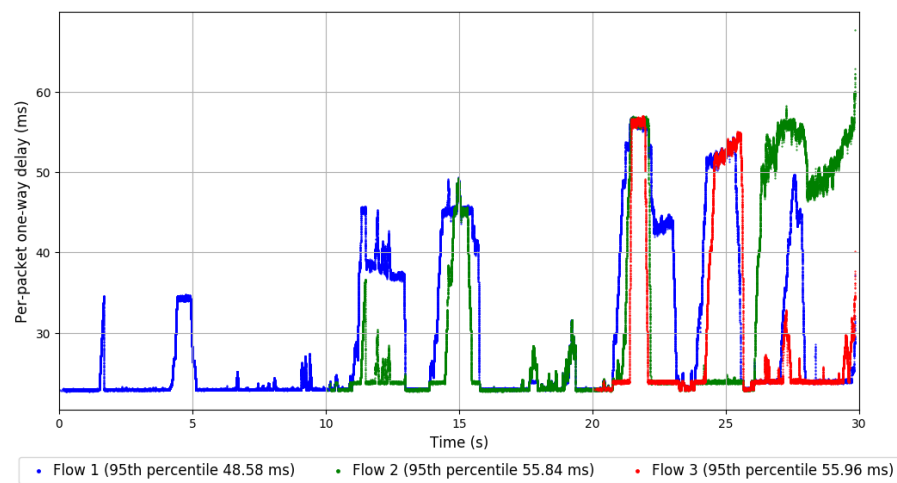Run 1: Report of Vivace-latency — Data Link

Flow 1 ingress (mean 63.04 Mbit/s) --- Flow 1 egress (mean 62.96 Mbit/s) ---
Flow 2 ingress (mean 30.99 Mbit/s) --- Flow 2 egress (mean 30.95 Mbit/s) ---
Flow 3 ingress (mean 7.71 Mbit/s) --- Flow 3 egress (mean 7.64 Mbit/s) ---

Flow 1 (95th percentile 45.75 ms)   Flow 2 (95th percentile 33.26 ms)   Flow 3 (95th percentile 32.10 ms)
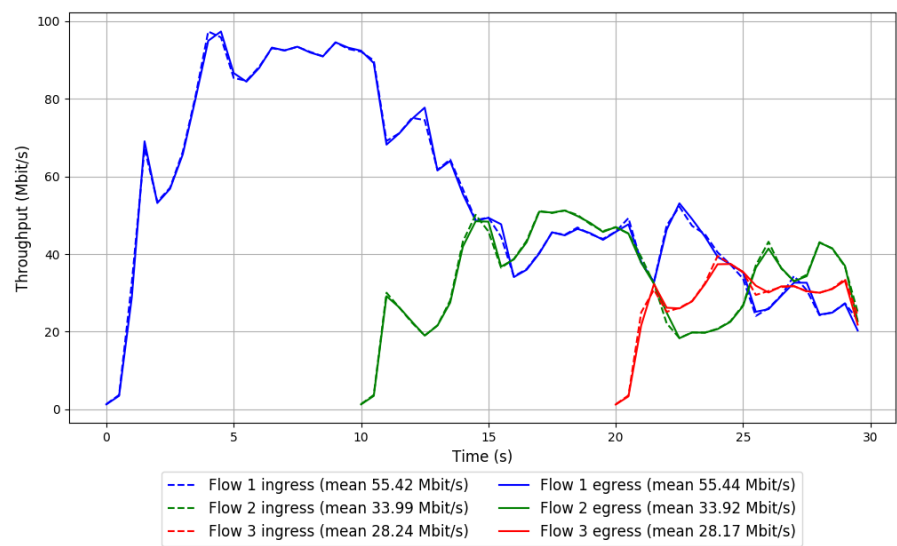
```
Run 2: Statistics of Vivace-latency

Start at: 2018-02-20 10:19:12
End at: 2018-02-20 10:19:42
Local clock offset: 6.172 ms
Remote clock offset: -0.906 ms


# Below is generated by plot.py at 2018-02-20 18:42:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.25 Mbit/s
95th percentile per-packet one-way delay: 53.429 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 55.44 Mbit/s
95th percentile per-packet one-way delay: 48.580 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 33.92 Mbit/s
95th percentile per-packet one-way delay: 55.838 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 28.17 Mbit/s
95th percentile per-packet one-way delay: 55.958 ms
Loss rate: 0.78%
```

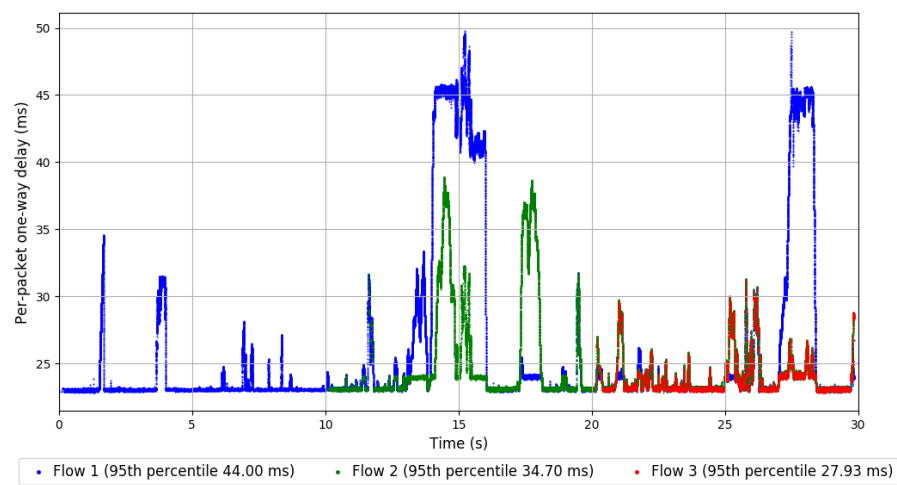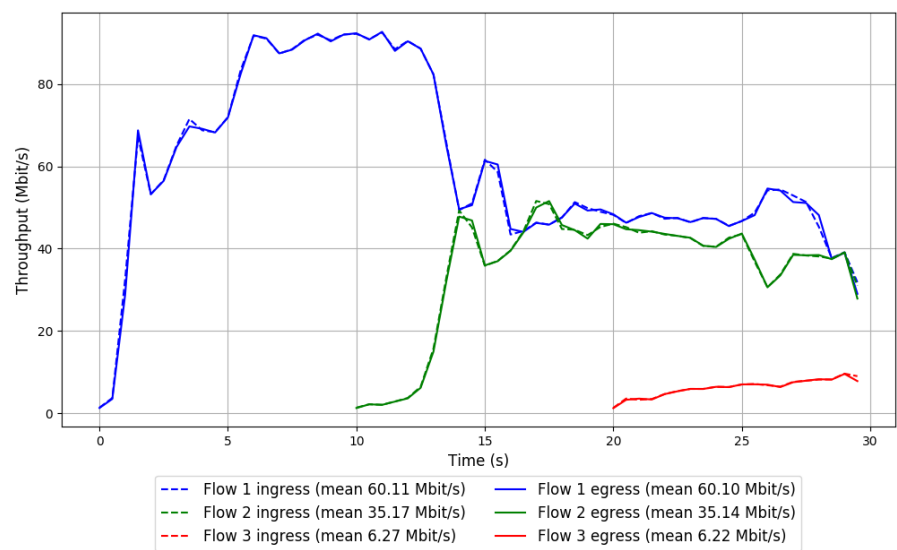Run 2: Report of Vivace-latency — Data Link

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```
Run 3: Statistics of Vivace-latency

Start at: 2018-02-20 10:43:52
End at: 2018-02-20 10:44:22
Local clock offset: 1.602 ms
Remote clock offset: -4.562 ms


# Below is generated by plot.py at 2018-02-20 18:42:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.49 Mbit/s
95th percentile per-packet one-way delay: 41.543 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 60.10 Mbit/s
95th percentile per-packet one-way delay: 44.000 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 35.14 Mbit/s
95th percentile per-packet one-way delay: 34.696 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 6.22 Mbit/s
95th percentile per-packet one-way delay: 27.933 ms
Loss rate: 1.34%
```

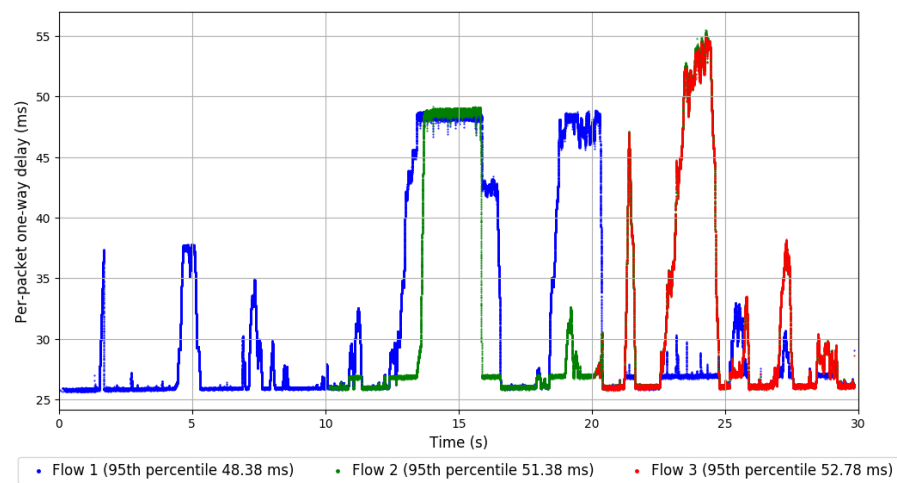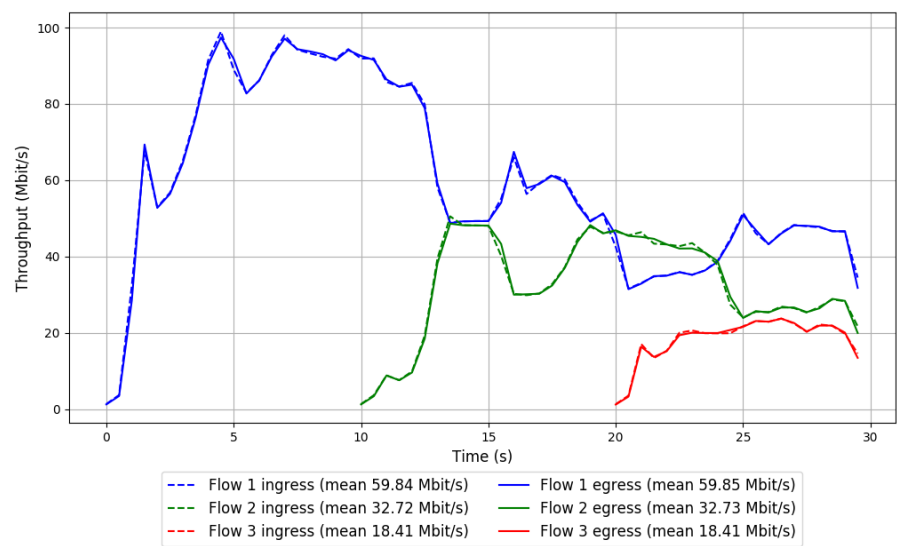Run 3: Report of Vivace-latency — Data Link

```
Run 4: Statistics of Vivace-latency

Start at: 2018-02-20 11:08:24
End at: 2018-02-20 11:08:54
Local clock offset: -4.191 ms
Remote clock offset: -7.342 ms


# Below is generated by plot.py at 2018-02-20 18:43:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.65 Mbit/s
95th percentile per-packet one-way delay: 48.702 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 59.85 Mbit/s
95th percentile per-packet one-way delay: 48.376 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 32.73 Mbit/s
95th percentile per-packet one-way delay: 51.385 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 18.41 Mbit/s
95th percentile per-packet one-way delay: 52.777 ms
Loss rate: 0.58%
```

Run 4: Report of Vivace-latency — Data Link

Flow 1 ingress (mean 59.84 Mbit/s)　　Flow 1 egress (mean 59.85 Mbit/s)
Flow 2 ingress (mean 32.72 Mbit/s)　　Flow 2 egress (mean 32.73 Mbit/s)
Flow 3 ingress (mean 18.41 Mbit/s)　　Flow 3 egress (mean 18.41 Mbit/s)

Flow 1 (95th percentile 48.38 ms)　　Flow 2 (95th percentile 51.38 ms)　　Flow 3 (95th percentile 52.78 ms)
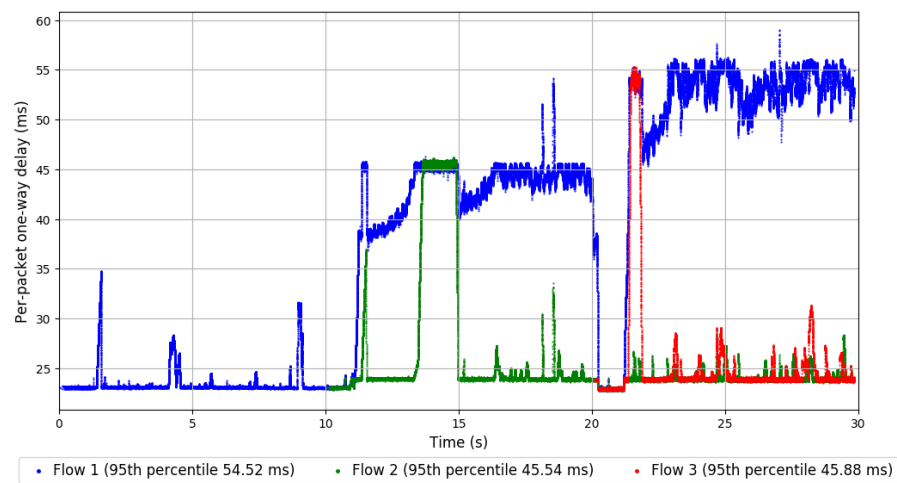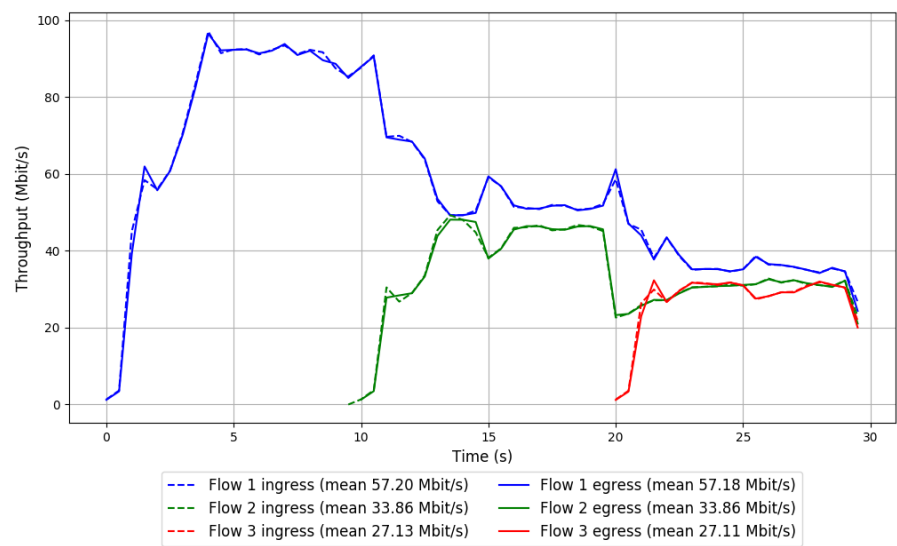
```
Run 5: Statistics of Vivace-latency

Start at: 2018-02-20 11:32:57
End at: 2018-02-20 11:33:27
Local clock offset: -4.923 ms
Remote clock offset: -3.895 ms


# Below is generated by plot.py at 2018-02-20 18:43:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.61 Mbit/s
95th percentile per-packet one-way delay: 53.856 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 57.18 Mbit/s
95th percentile per-packet one-way delay: 54.515 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 33.86 Mbit/s
95th percentile per-packet one-way delay: 45.541 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 27.11 Mbit/s
95th percentile per-packet one-way delay: 45.884 ms
Loss rate: 0.61%
```

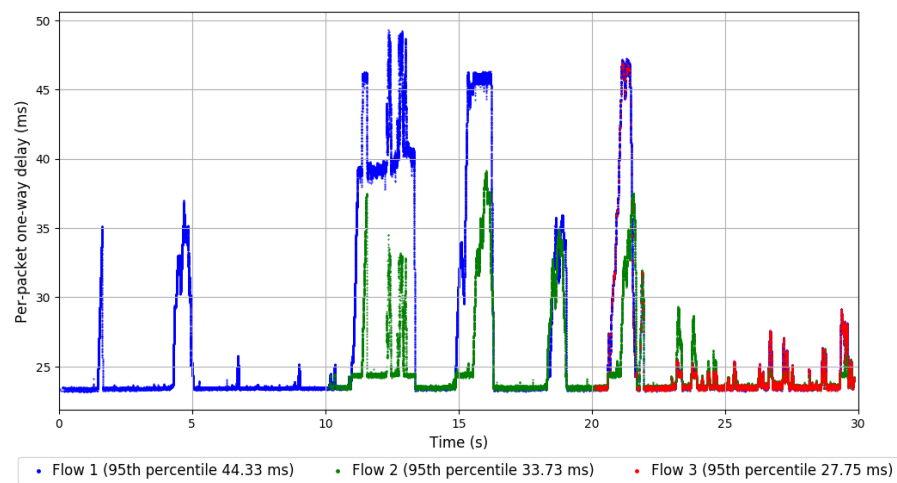Run 5: Report of Vivace-latency — Data Link

Flow 1 ingress (mean 57.20 Mbit/s) — Flow 1 egress (mean 57.18 Mbit/s)
Flow 2 ingress (mean 33.86 Mbit/s) — Flow 2 egress (mean 33.86 Mbit/s)
Flow 3 ingress (mean 27.13 Mbit/s) — Flow 3 egress (mean 27.11 Mbit/s)

Flow 1 (95th percentile 54.52 ms) • Flow 2 (95th percentile 45.54 ms) • Flow 3 (95th percentile 45.88 ms)
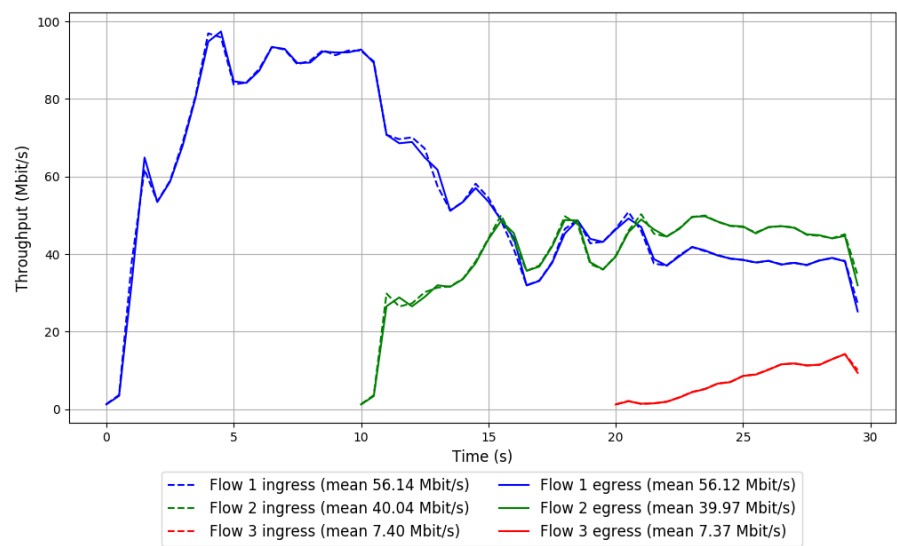
```
Run 6: Statistics of Vivace-latency

Start at: 2018-02-20 11:57:29
End at: 2018-02-20 11:57:59
Local clock offset: 1.744 ms
Remote clock offset: -4.115 ms


# Below is generated by plot.py at 2018-02-20 18:43:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.11 Mbit/s
95th percentile per-packet one-way delay: 40.152 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 56.12 Mbit/s
95th percentile per-packet one-way delay: 44.331 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 39.97 Mbit/s
95th percentile per-packet one-way delay: 33.725 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 7.37 Mbit/s
95th percentile per-packet one-way delay: 27.746 ms
Loss rate: 0.99%
```

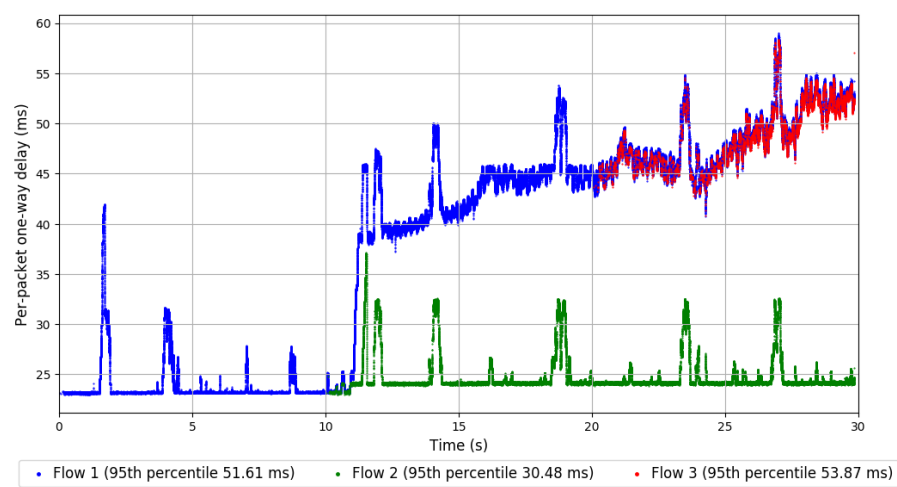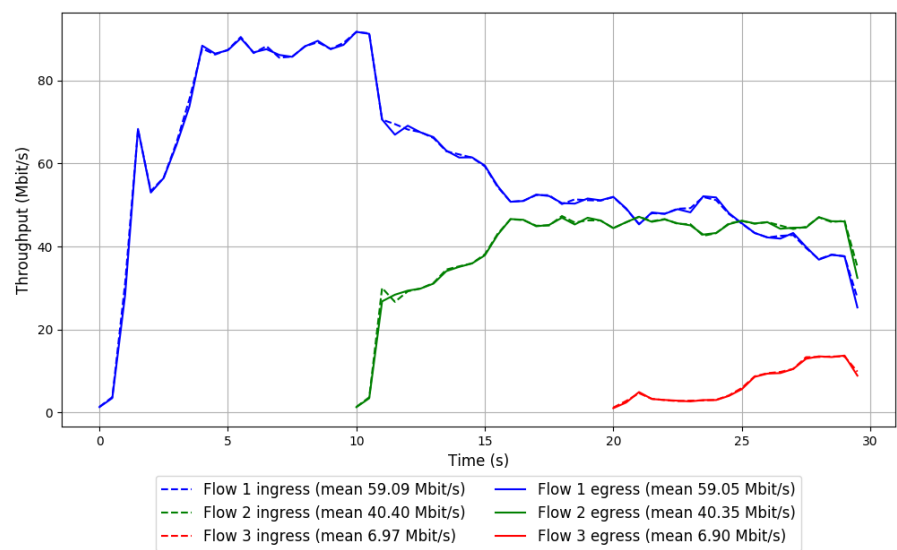Run 6: Report of Vivace-latency — Data Link

```
Run 7: Statistics of Vivace-latency

Start at: 2018-02-20 12:22:04
End at: 2018-02-20 12:22:34
Local clock offset: 1.642 ms
Remote clock offset: -2.228 ms


# Below is generated by plot.py at 2018-02-20 18:43:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.11 Mbit/s
95th percentile per-packet one-way delay: 51.136 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 59.05 Mbit/s
95th percentile per-packet one-way delay: 51.612 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 40.35 Mbit/s
95th percentile per-packet one-way delay: 30.481 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 6.90 Mbit/s
95th percentile per-packet one-way delay: 53.871 ms
Loss rate: 1.73%
```

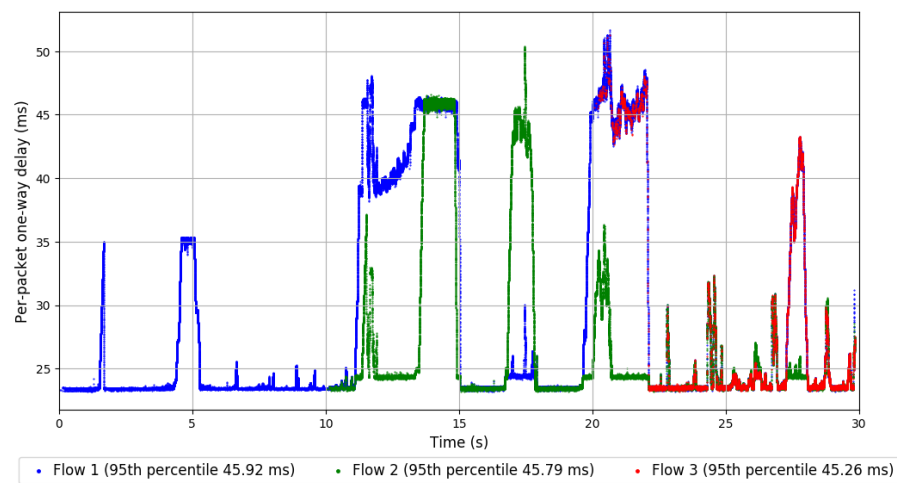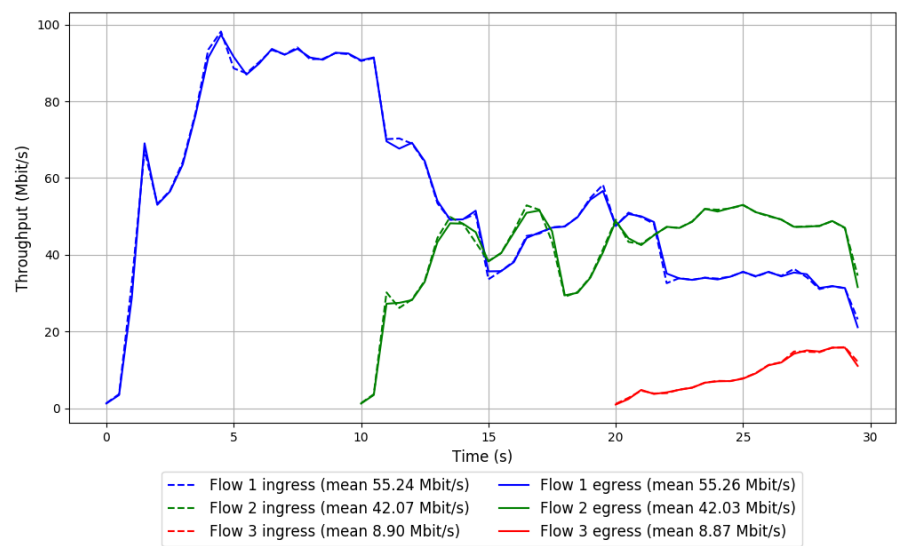Run 7: Report of Vivace-latency — Data Link

```
Run 8: Statistics of Vivace-latency

Start at: 2018-02-20 12:46:39
End at: 2018-02-20 12:47:09
Local clock offset: -2.232 ms
Remote clock offset: -2.295 ms


# Below is generated by plot.py at 2018-02-20 18:43:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.10 Mbit/s
95th percentile per-packet one-way delay: 45.878 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 55.26 Mbit/s
95th percentile per-packet one-way delay: 45.923 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 42.03 Mbit/s
95th percentile per-packet one-way delay: 45.793 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 8.87 Mbit/s
95th percentile per-packet one-way delay: 45.262 ms
Loss rate: 1.10%
```

Run 8: Report of Vivace-latency — Data Link

```
Run 9: Statistics of Vivace-latency

Start at: 2018-02-20 13:11:12
End at: 2018-02-20 13:11:42
Local clock offset: -5.759 ms
Remote clock offset: -6.48 ms


# Below is generated by plot.py at 2018-02-20 18:43:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.86 Mbit/s
95th percentile per-packet one-way delay: 55.882 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 52.97 Mbit/s
95th percentile per-packet one-way delay: 53.854 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 35.43 Mbit/s
95th percentile per-packet one-way delay: 56.318 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 28.39 Mbit/s
95th percentile per-packet one-way delay: 56.844 ms
Loss rate: 0.47%
```
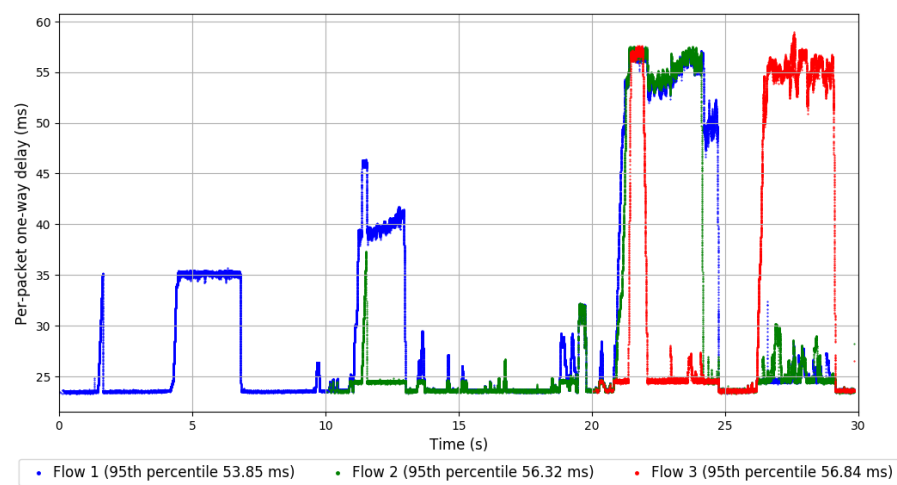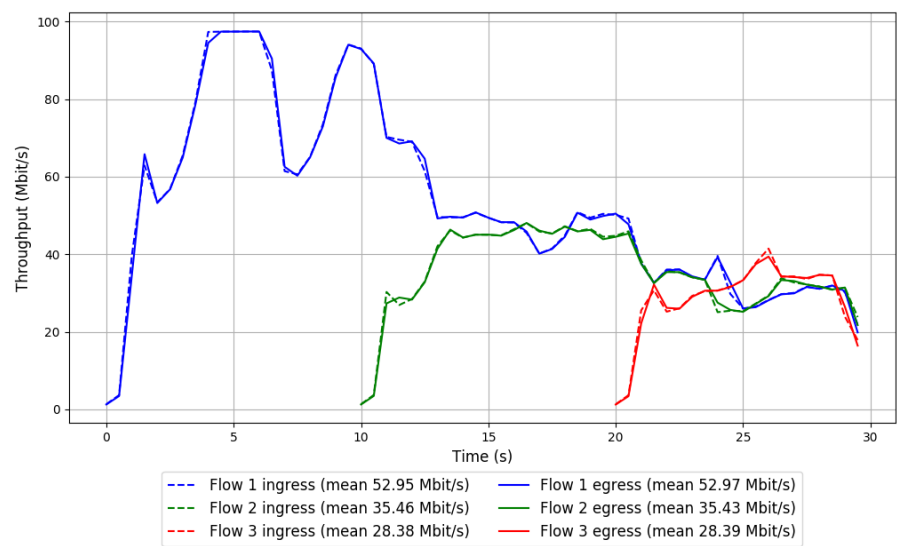
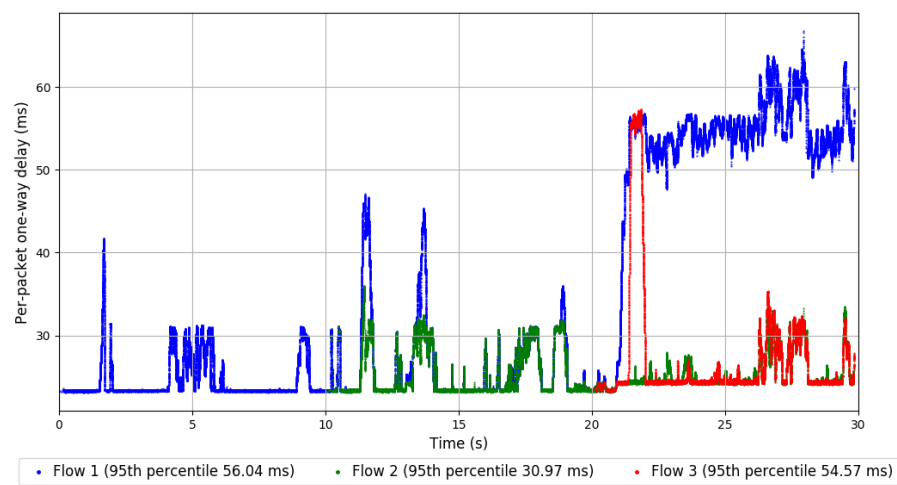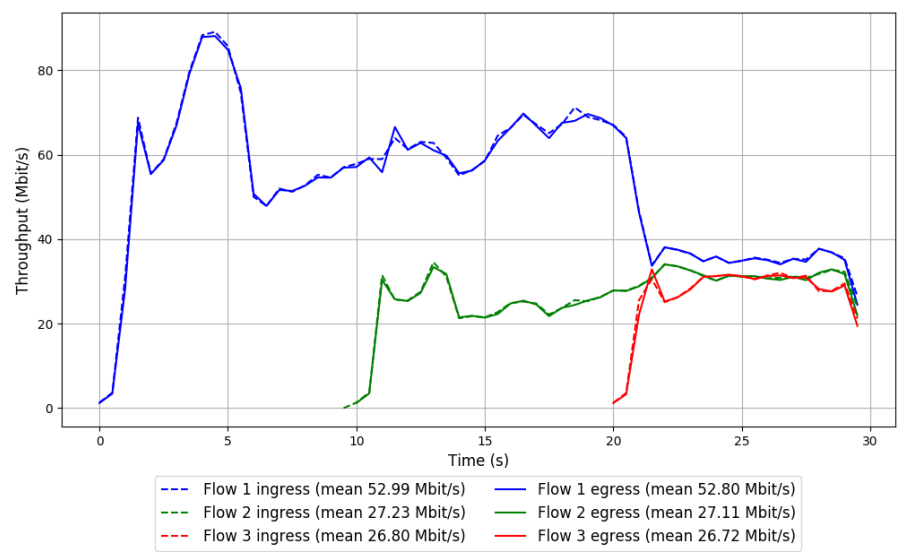Run 9: Report of Vivace-latency — Data Link

```
Run 10: Statistics of Vivace-latency

Start at: 2018-02-20 13:36:12
End at: 2018-02-20 13:36:42
Local clock offset: 4.028 ms
Remote clock offset: -3.655 ms


# Below is generated by plot.py at 2018-02-20 18:43:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.60 Mbit/s
95th percentile per-packet one-way delay: 55.430 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 52.80 Mbit/s
95th percentile per-packet one-way delay: 56.042 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 27.11 Mbit/s
95th percentile per-packet one-way delay: 30.972 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 26.72 Mbit/s
95th percentile per-packet one-way delay: 54.573 ms
Loss rate: 0.84%
```

Run 10: Report of Vivace-latency — Data Link

Flow 1 ingress (mean 52.99 Mbit/s) --- Flow 1 egress (mean 52.80 Mbit/s)
Flow 2 ingress (mean 27.23 Mbit/s) --- Flow 2 egress (mean 27.11 Mbit/s)
Flow 3 ingress (mean 26.80 Mbit/s) --- Flow 3 egress (mean 26.72 Mbit/s)

Flow 1 (95th percentile 56.04 ms)   Flow 2 (95th percentile 30.97 ms)   Flow 3 (95th percentile 54.57 ms)
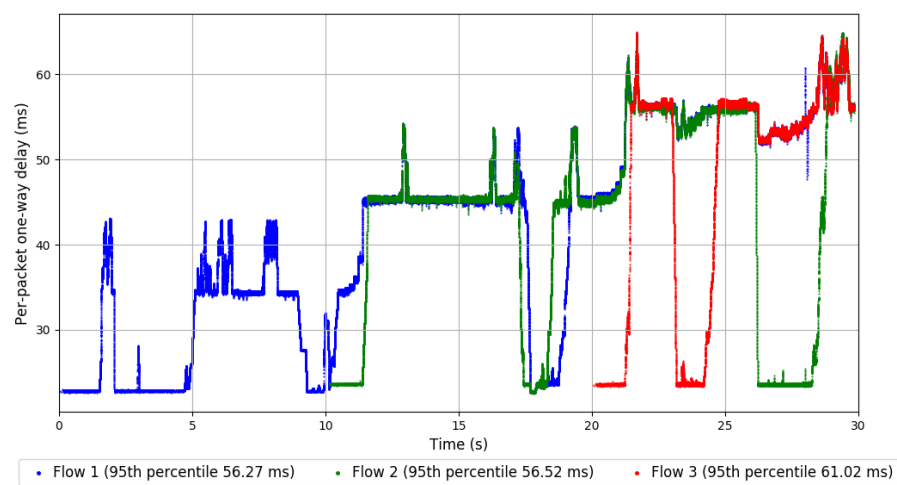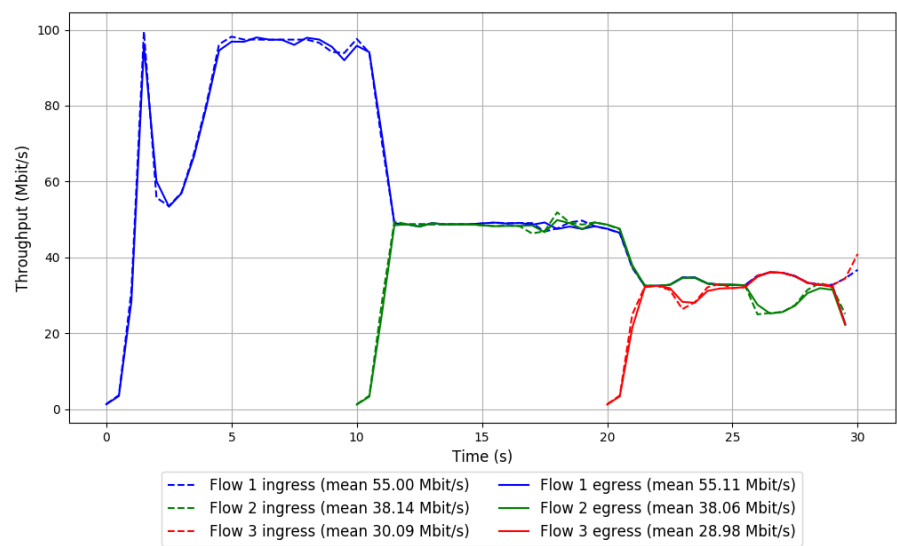
```
Run 1: Statistics of Vivace-loss

Start at: 2018-02-20 09:53:16
End at: 2018-02-20 09:53:46
Local clock offset: -0.991 ms
Remote clock offset: -4.396 ms


# Below is generated by plot.py at 2018-02-20 18:43:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.92 Mbit/s
95th percentile per-packet one-way delay: 56.820 ms
Loss rate: 2.28%
-- Flow 1:
Average throughput: 55.11 Mbit/s
95th percentile per-packet one-way delay: 56.270 ms
Loss rate: 1.74%
-- Flow 2:
Average throughput: 38.06 Mbit/s
95th percentile per-packet one-way delay: 56.522 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 28.98 Mbit/s
95th percentile per-packet one-way delay: 61.021 ms
Loss rate: 9.16%
```

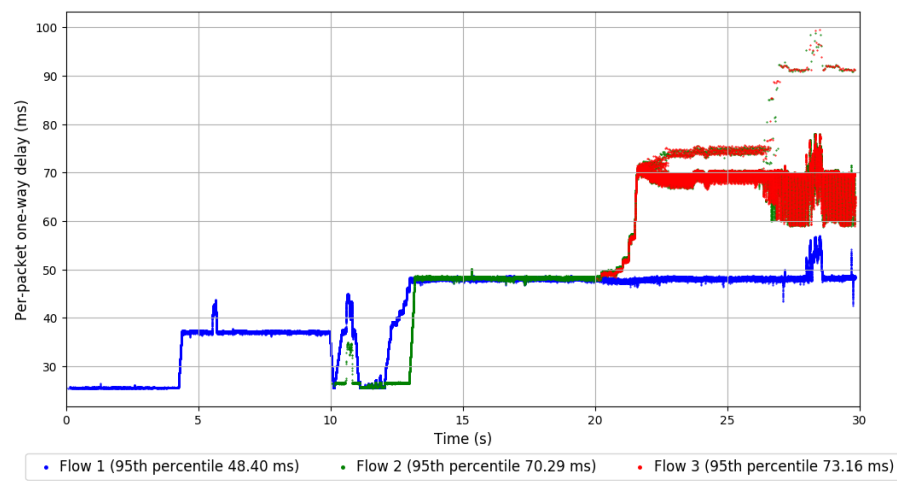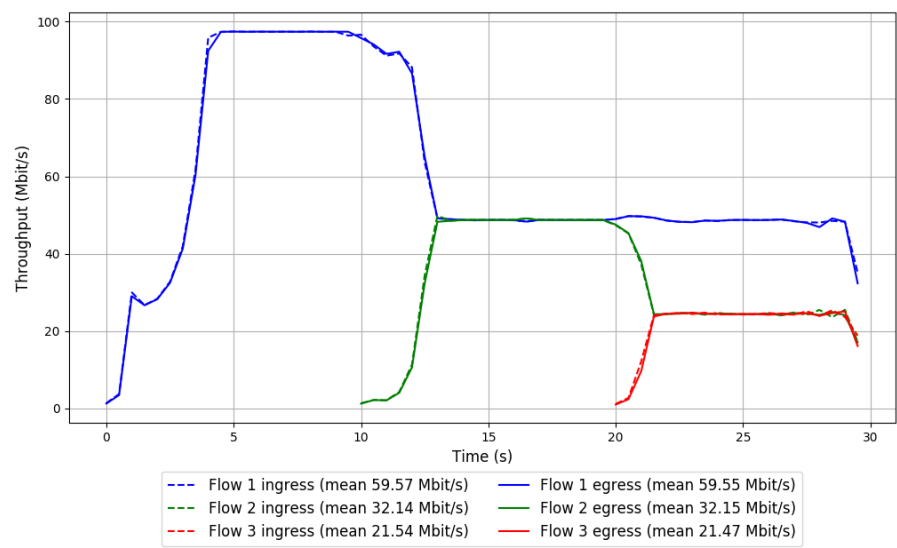Run 1: Report of Vivace-loss — Data Link

```
Run 2: Statistics of Vivace-loss

Start at: 2018-02-20 10:17:48
End at: 2018-02-20 10:18:18
Local clock offset: 5.992 ms
Remote clock offset: -3.764 ms


# Below is generated by plot.py at 2018-02-20 18:44:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.93 Mbit/s
95th percentile per-packet one-way delay: 70.051 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 59.55 Mbit/s
95th percentile per-packet one-way delay: 48.403 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 32.15 Mbit/s
95th percentile per-packet one-way delay: 70.288 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 21.47 Mbit/s
95th percentile per-packet one-way delay: 73.155 ms
Loss rate: 1.36%
```

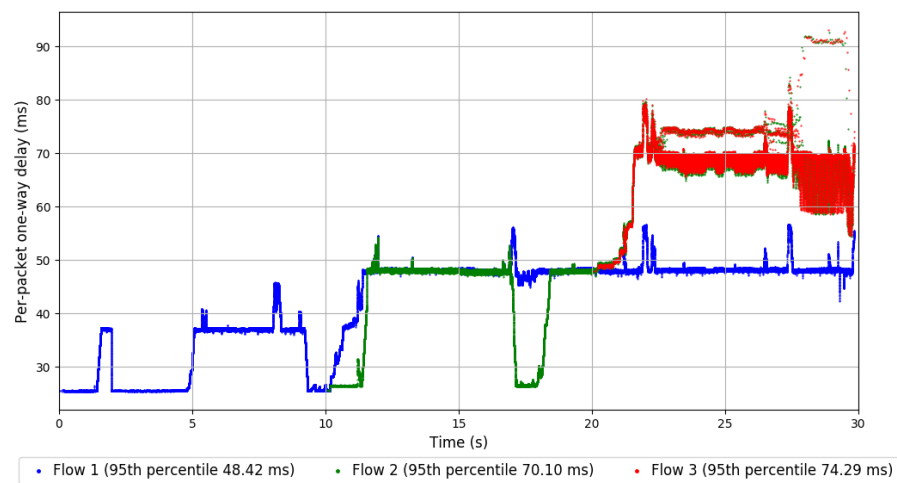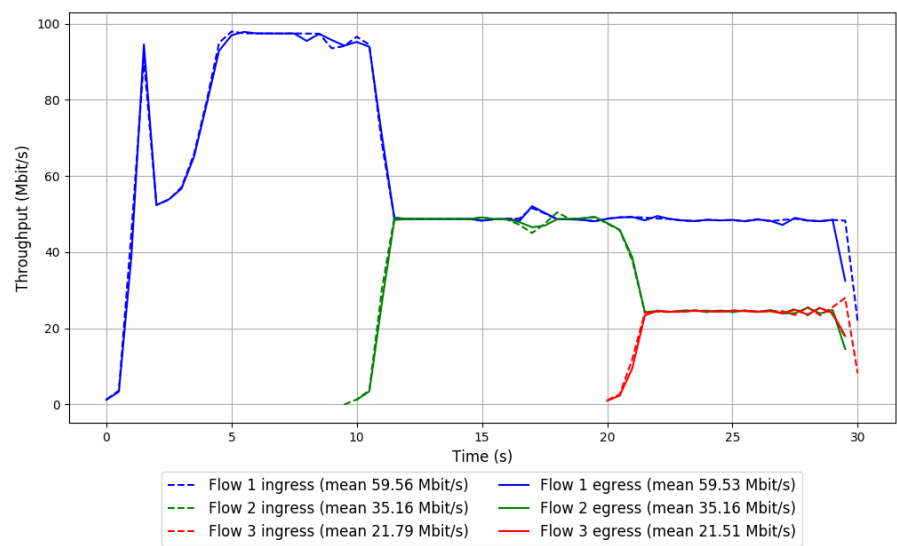Run 2: Report of Vivace-loss — Data Link

```
Run 3: Statistics of Vivace-loss

Start at: 2018-02-20 10:42:29
End at: 2018-02-20 10:42:59
Local clock offset: 1.654 ms
Remote clock offset: -6.842 ms


# Below is generated by plot.py at 2018-02-20 18:44:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.96 Mbit/s
95th percentile per-packet one-way delay: 69.678 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 59.53 Mbit/s
95th percentile per-packet one-way delay: 48.420 ms
Loss rate: 1.26%
-- Flow 2:
Average throughput: 35.16 Mbit/s
95th percentile per-packet one-way delay: 70.103 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 21.51 Mbit/s
95th percentile per-packet one-way delay: 74.290 ms
Loss rate: 5.05%
```

Run 3: Report of Vivace-loss — Data Link

Flow 1 ingress (mean 59.56 Mbit/s) --- Flow 1 egress (mean 59.53 Mbit/s)
Flow 2 ingress (mean 35.16 Mbit/s) --- Flow 2 egress (mean 35.16 Mbit/s)
Flow 3 ingress (mean 21.79 Mbit/s) --- Flow 3 egress (mean 21.51 Mbit/s)

Flow 1 (95th percentile 48.42 ms)   •   Flow 2 (95th percentile 70.10 ms)   •   Flow 3 (95th percentile 74.29 ms)
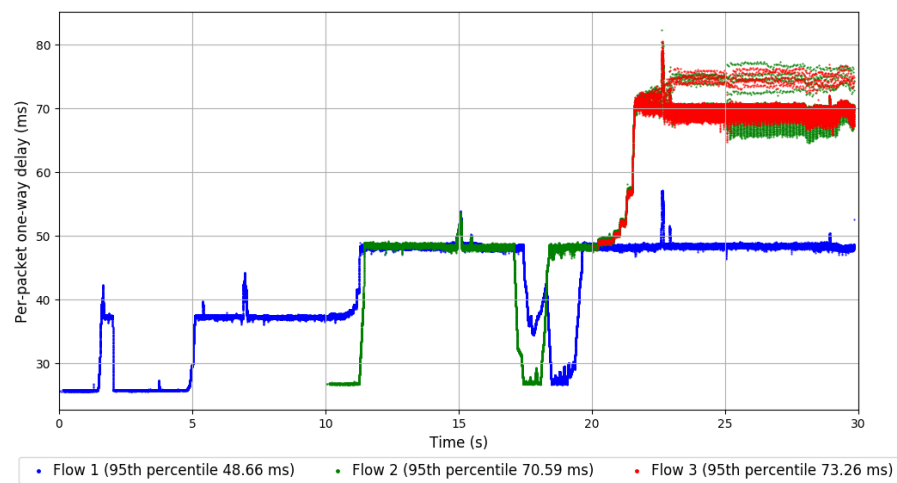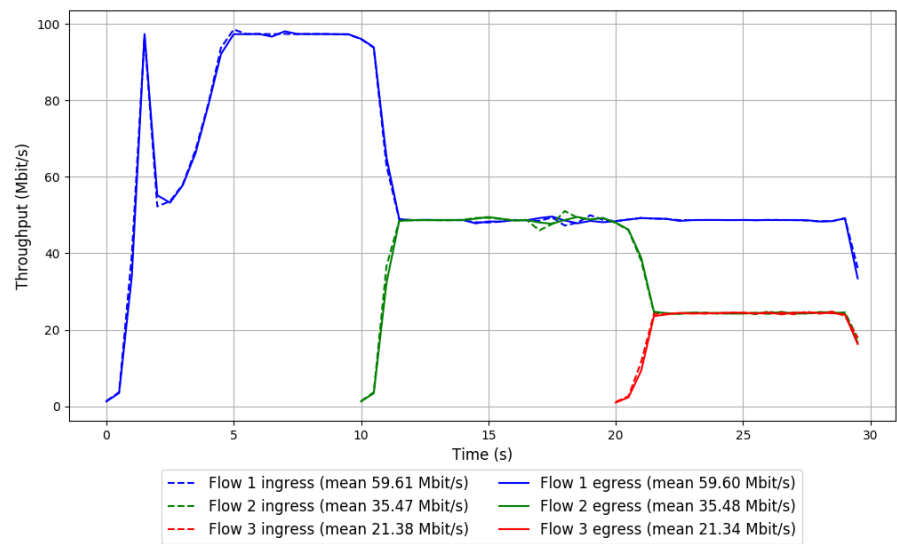
```
Run 4: Statistics of Vivace-loss

Start at: 2018-02-20 11:07:01
End at: 2018-02-20 11:07:31
Local clock offset: -3.778 ms
Remote clock offset: -7.408 ms


# Below is generated by plot.py at 2018-02-20 18:44:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.17 Mbit/s
95th percentile per-packet one-way delay: 70.380 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 59.60 Mbit/s
95th percentile per-packet one-way delay: 48.664 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 35.48 Mbit/s
95th percentile per-packet one-way delay: 70.595 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 21.34 Mbit/s
95th percentile per-packet one-way delay: 73.256 ms
Loss rate: 1.19%
```

Run 4: Report of Vivace-loss — Data Link

- - - Flow 1 ingress (mean 59.61 Mbit/s) —— Flow 1 egress (mean 59.60 Mbit/s)
- - - Flow 2 ingress (mean 35.47 Mbit/s) —— Flow 2 egress (mean 35.48 Mbit/s)
- - - Flow 3 ingress (mean 21.38 Mbit/s) —— Flow 3 egress (mean 21.34 Mbit/s)

• Flow 1 (95th percentile 48.66 ms)   • Flow 2 (95th percentile 70.59 ms)   • Flow 3 (95th percentile 73.26 ms)
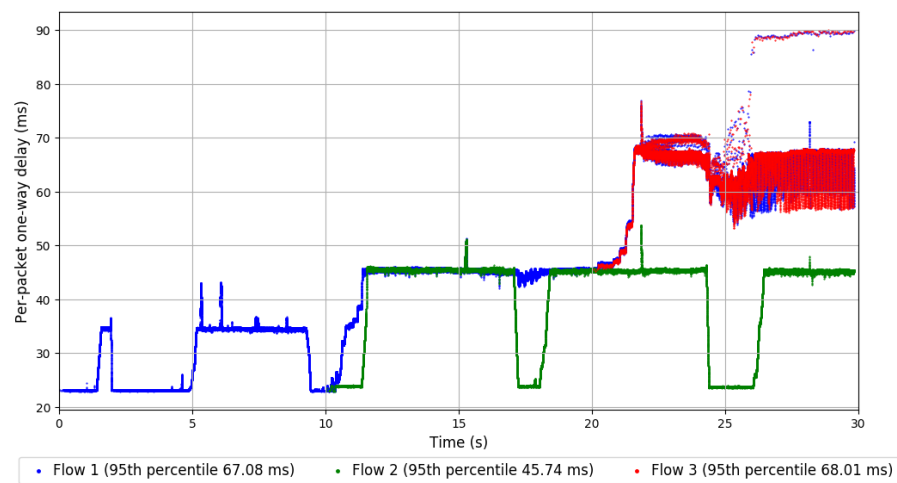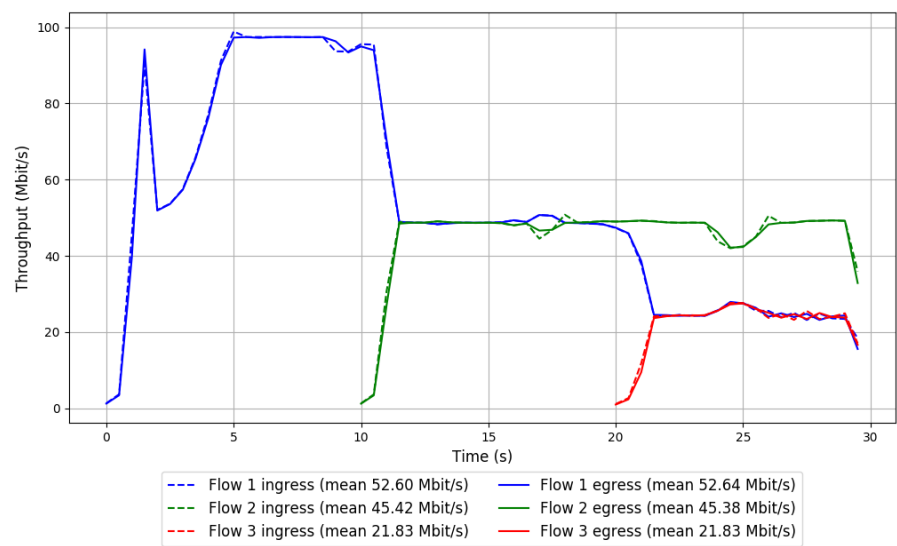
```
Run 5: Statistics of Vivace-loss

Start at: 2018-02-20 11:31:34
End at: 2018-02-20 11:32:04
Local clock offset: -6.039 ms
Remote clock offset: -3.937 ms


# Below is generated by plot.py at 2018-02-20 18:44:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.94 Mbit/s
95th percentile per-packet one-way delay: 67.198 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 52.64 Mbit/s
95th percentile per-packet one-way delay: 67.082 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 45.38 Mbit/s
95th percentile per-packet one-way delay: 45.741 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 21.83 Mbit/s
95th percentile per-packet one-way delay: 68.011 ms
Loss rate: 1.01%
```

Run 5: Report of Vivace-loss — Data Link

Flow 1 ingress (mean 52.60 Mbit/s) --- Flow 1 egress (mean 52.64 Mbit/s)
Flow 2 ingress (mean 45.42 Mbit/s) --- Flow 2 egress (mean 45.38 Mbit/s)
Flow 3 ingress (mean 21.83 Mbit/s) --- Flow 3 egress (mean 21.83 Mbit/s)

Flow 1 (95th percentile 67.08 ms)   Flow 2 (95th percentile 45.74 ms)   Flow 3 (95th percentile 68.01 ms)
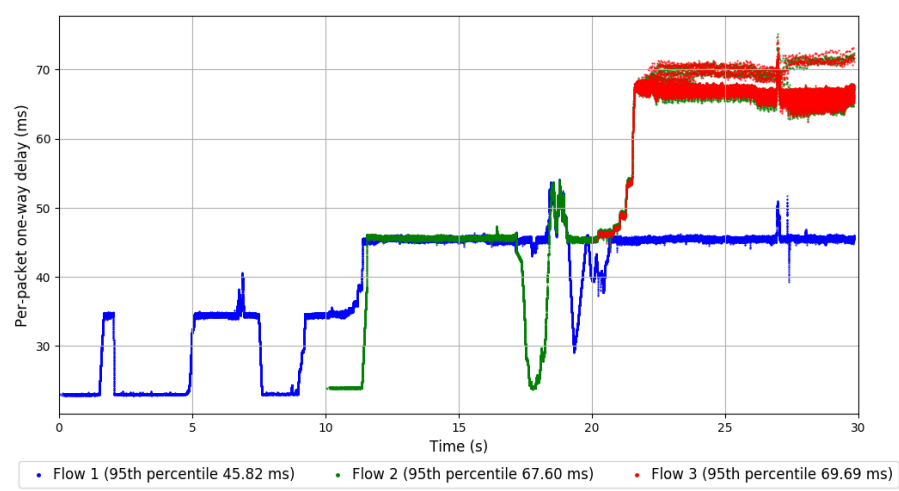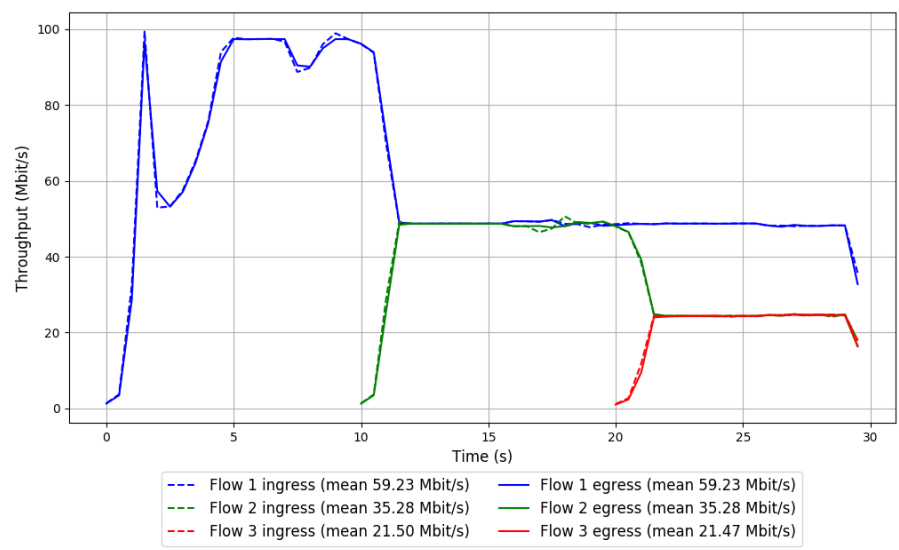
```
Run 6: Statistics of Vivace-loss

Start at: 2018-02-20 11:56:06
End at: 2018-02-20 11:56:36
Local clock offset: 1.739 ms
Remote clock offset: -3.638 ms


# Below is generated by plot.py at 2018-02-20 18:44:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.71 Mbit/s
95th percentile per-packet one-way delay: 67.332 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 59.23 Mbit/s
95th percentile per-packet one-way delay: 45.817 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 35.28 Mbit/s
95th percentile per-packet one-way delay: 67.597 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 21.47 Mbit/s
95th percentile per-packet one-way delay: 69.689 ms
Loss rate: 1.16%
```

Run 6: Report of Vivace-loss — Data Link

Flow 1 ingress (mean 59.23 Mbit/s) --- Flow 1 egress (mean 59.23 Mbit/s)
Flow 2 ingress (mean 35.28 Mbit/s) --- Flow 2 egress (mean 35.28 Mbit/s)
Flow 3 ingress (mean 21.50 Mbit/s) --- Flow 3 egress (mean 21.47 Mbit/s)

Flow 1 (95th percentile 45.82 ms) • Flow 2 (95th percentile 67.60 ms) • Flow 3 (95th percentile 69.69 ms)
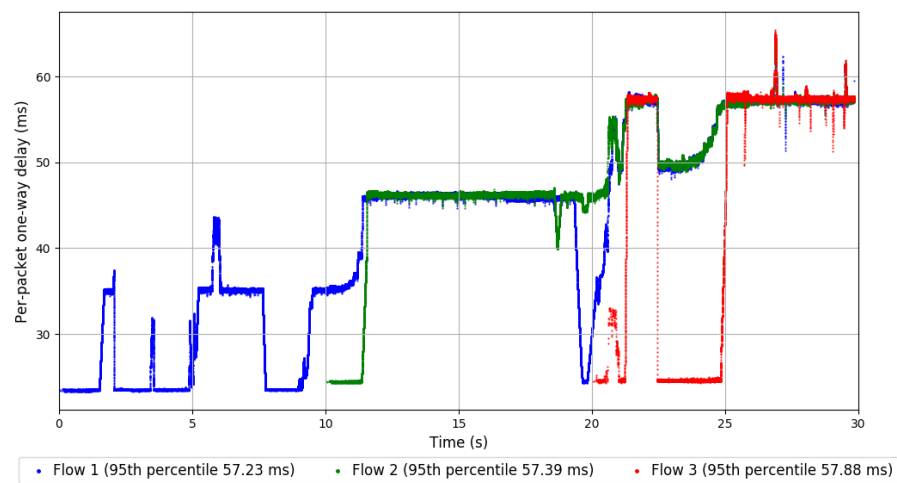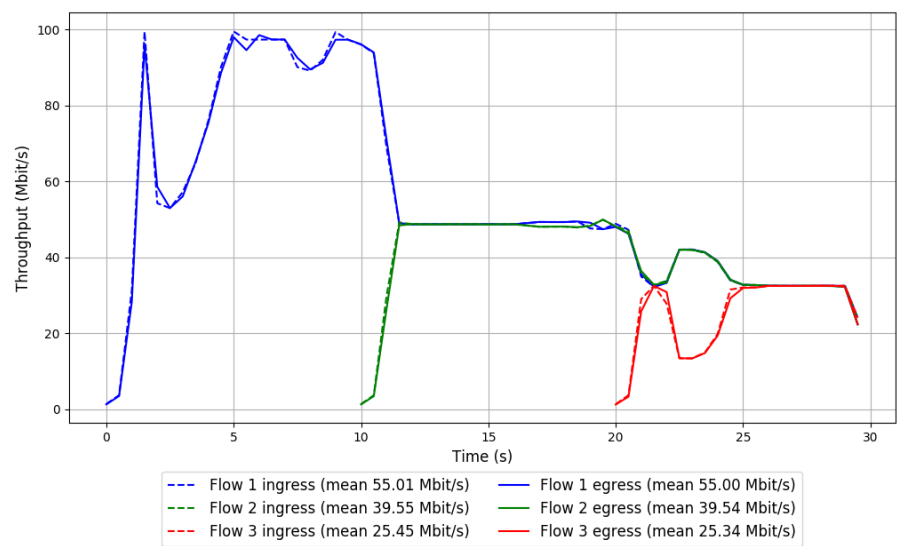
```
Run 7: Statistics of Vivace-loss

Start at: 2018-02-20 12:20:40
End at: 2018-02-20 12:21:10
Local clock offset: 1.557 ms
Remote clock offset: -2.813 ms


# Below is generated by plot.py at 2018-02-20 18:44:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.60 Mbit/s
95th percentile per-packet one-way delay: 57.477 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 55.00 Mbit/s
95th percentile per-packet one-way delay: 57.231 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 39.54 Mbit/s
95th percentile per-packet one-way delay: 57.393 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 25.34 Mbit/s
95th percentile per-packet one-way delay: 57.878 ms
Loss rate: 1.14%
```

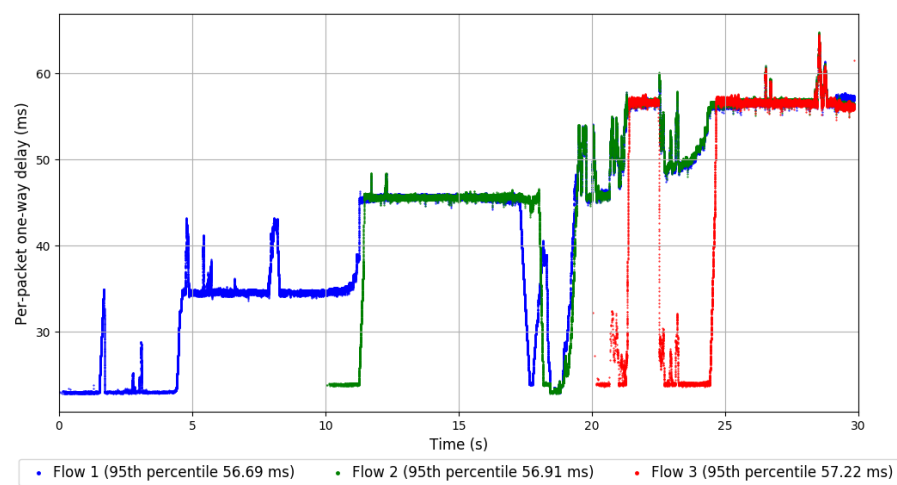Run 7: Report of Vivace-loss — Data Link
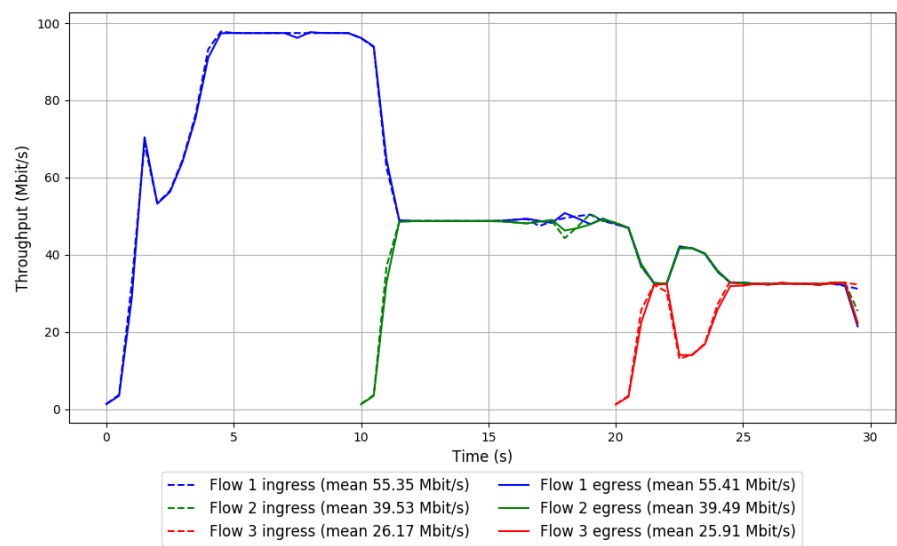

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```
Run 8: Statistics of Vivace-loss

Start at: 2018-02-20 12:45:16
End at: 2018-02-20 12:45:46
Local clock offset: -1.838 ms
Remote clock offset: -1.336 ms


# Below is generated by plot.py at 2018-02-20 18:44:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.15 Mbit/s
95th percentile per-packet one-way delay: 56.867 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 55.41 Mbit/s
95th percentile per-packet one-way delay: 56.694 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 39.49 Mbit/s
95th percentile per-packet one-way delay: 56.910 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 25.91 Mbit/s
95th percentile per-packet one-way delay: 57.217 ms
Loss rate: 2.62%
```

Run 8: Report of Vivace-loss — Data Link
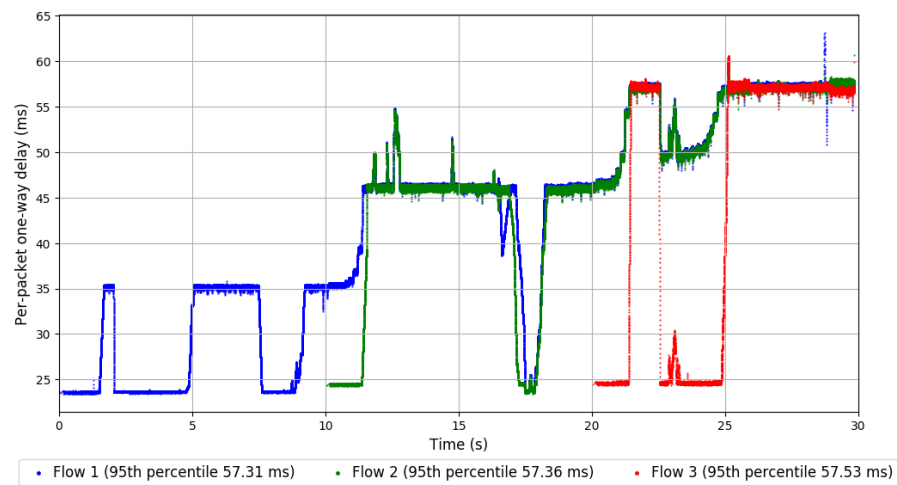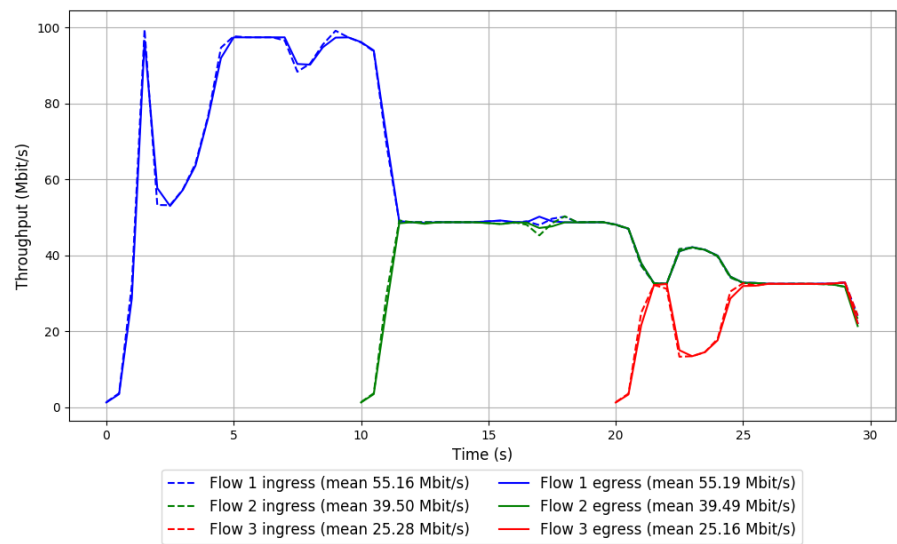

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```
Run 9: Statistics of Vivace-loss

Start at: 2018-02-20 13:09:48
End at: 2018-02-20 13:10:18
Local clock offset: -5.665 ms
Remote clock offset: -6.433 ms


# Below is generated by plot.py at 2018-02-20 18:44:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.70 Mbit/s
95th percentile per-packet one-way delay: 57.368 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 55.19 Mbit/s
95th percentile per-packet one-way delay: 57.308 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 39.49 Mbit/s
95th percentile per-packet one-way delay: 57.364 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 25.16 Mbit/s
95th percentile per-packet one-way delay: 57.534 ms
Loss rate: 1.14%
```

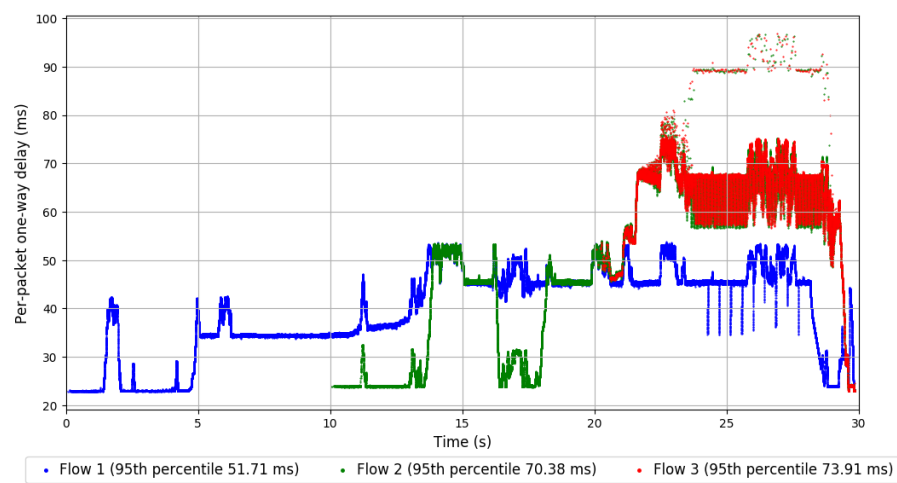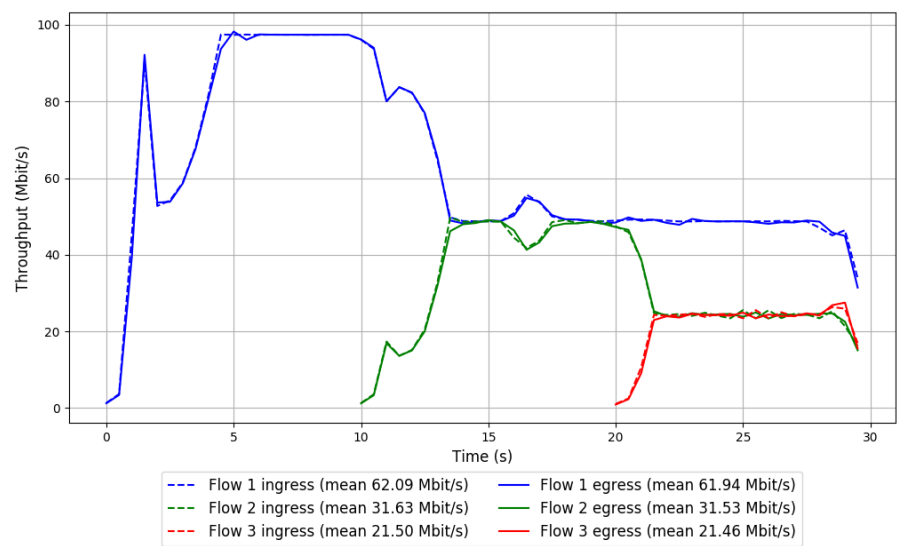Run 9: Report of Vivace-loss — Data Link

```
Run 10: Statistics of Vivace-loss

Start at: 2018-02-20 13:34:43
End at: 2018-02-20 13:35:13
Local clock offset: 3.852 ms
Remote clock offset: -3.333 ms


# Below is generated by plot.py at 2018-02-20 18:45:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.92 Mbit/s
95th percentile per-packet one-way delay: 67.510 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 61.94 Mbit/s
95th percentile per-packet one-way delay: 51.710 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 31.53 Mbit/s
95th percentile per-packet one-way delay: 70.377 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 21.46 Mbit/s
95th percentile per-packet one-way delay: 73.907 ms
Loss rate: 1.01%
```

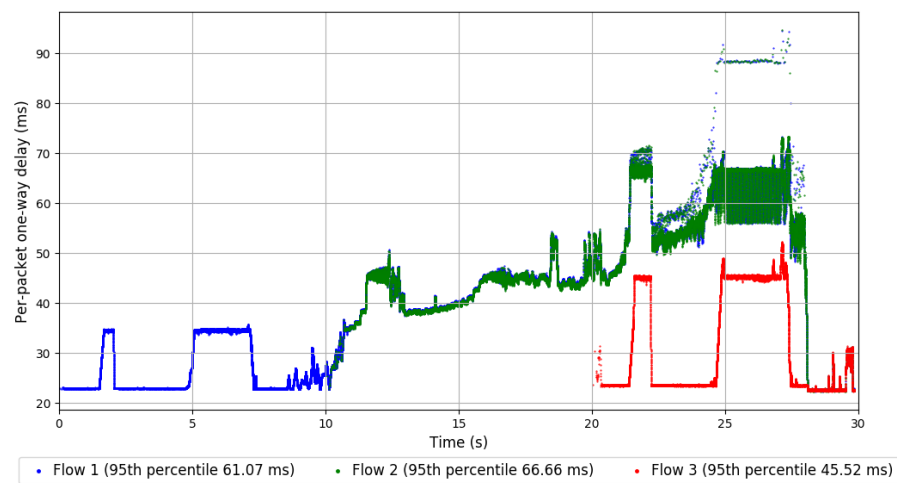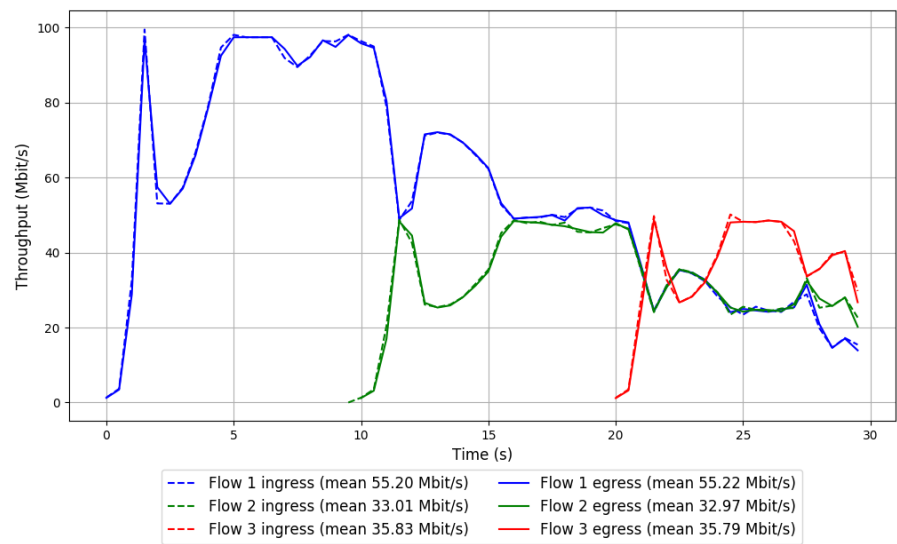# Run 10: Report of Vivace-loss — Data Link

```
Run 1: Statistics of Vivace-LTE

Start at: 2018-02-20 09:49:01
End at: 2018-02-20 09:49:31
Local clock offset: -4.961 ms
Remote clock offset: -5.124 ms

# Below is generated by plot.py at 2018-02-20 18:45:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.90 Mbit/s
95th percentile per-packet one-way delay: 63.924 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 55.22 Mbit/s
95th percentile per-packet one-way delay: 61.072 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 32.97 Mbit/s
95th percentile per-packet one-way delay: 66.655 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 35.79 Mbit/s
95th percentile per-packet one-way delay: 45.517 ms
Loss rate: 0.67%
```

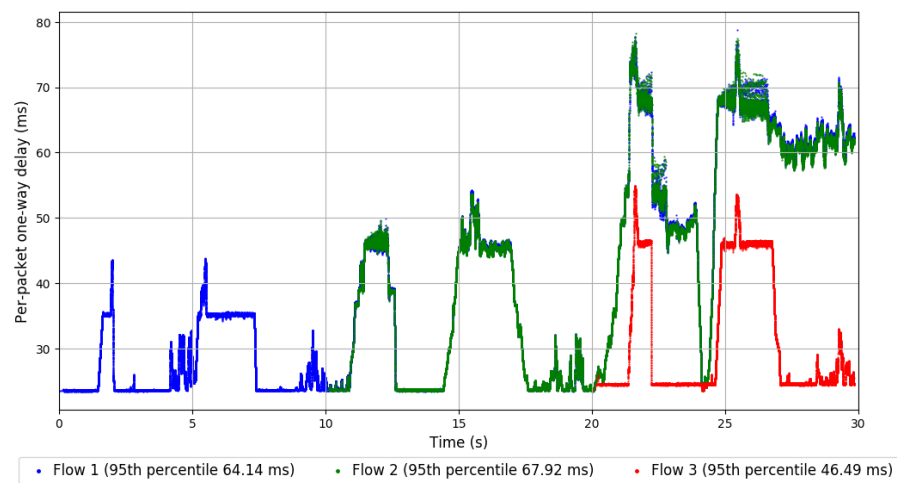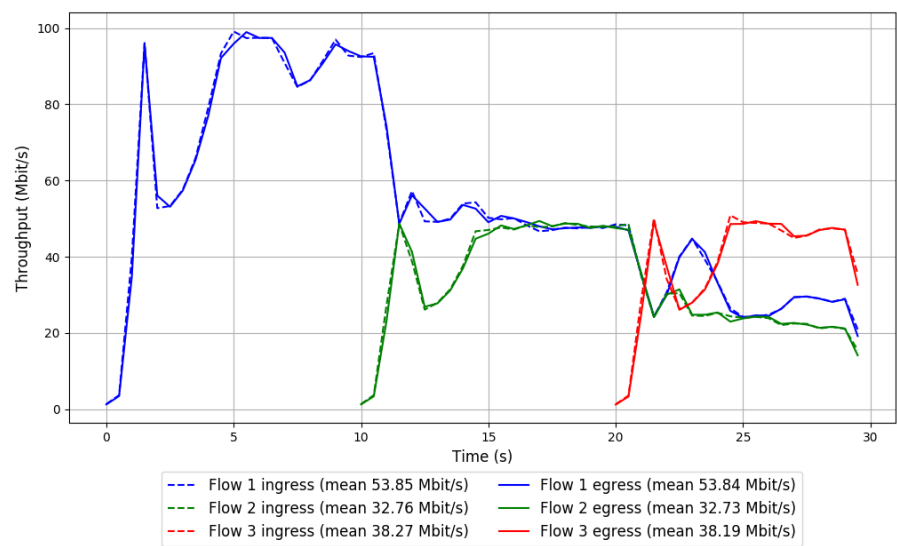Run 1: Report of Vivace-LTE — Data Link

```
Run 2: Statistics of Vivace-LTE

Start at: 2018-02-20 10:13:42
End at: 2018-02-20 10:14:12
Local clock offset: 5.553 ms
Remote clock offset: -2.026 ms


# Below is generated by plot.py at 2018-02-20 18:45:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.15 Mbit/s
95th percentile per-packet one-way delay: 66.390 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 53.84 Mbit/s
95th percentile per-packet one-way delay: 64.136 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 32.73 Mbit/s
95th percentile per-packet one-way delay: 67.920 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 38.19 Mbit/s
95th percentile per-packet one-way delay: 46.493 ms
Loss rate: 0.75%
```

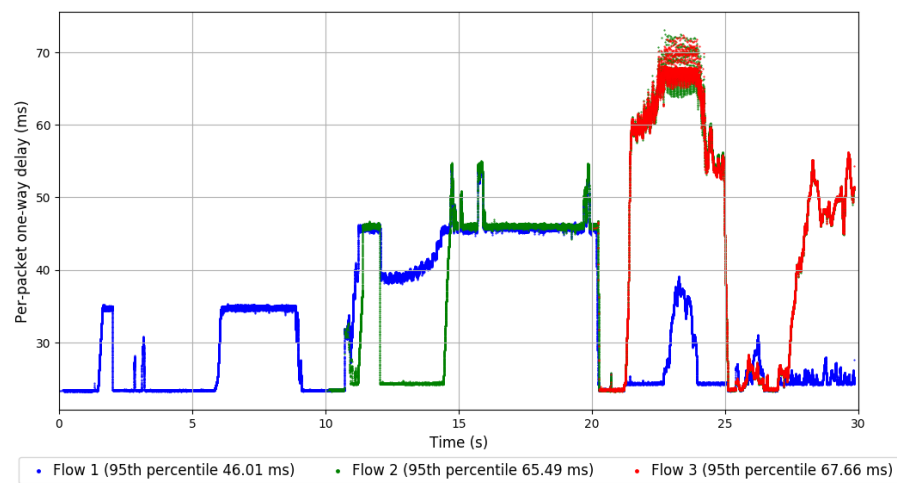Run 2: Report of Vivace-LTE — Data Link

```
Run 3: Statistics of Vivace-LTE

Start at: 2018-02-20 10:38:21
End at: 2018-02-20 10:38:51
Local clock offset: 1.815 ms
Remote clock offset: -4.123 ms


# Below is generated by plot.py at 2018-02-20 18:45:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.93 Mbit/s
95th percentile per-packet one-way delay: 59.645 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 57.38 Mbit/s
95th percentile per-packet one-way delay: 46.014 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 34.56 Mbit/s
95th percentile per-packet one-way delay: 65.487 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 20.06 Mbit/s
95th percentile per-packet one-way delay: 67.661 ms
Loss rate: 0.92%
```

Run 3: Report of Vivace-LTE — Data Link

Flow 1 ingress (mean 57.41 Mbit/s) --- Flow 1 egress (mean 57.38 Mbit/s)
Flow 2 ingress (mean 34.60 Mbit/s) --- Flow 2 egress (mean 34.56 Mbit/s)
Flow 3 ingress (mean 20.10 Mbit/s) --- Flow 3 egress (mean 20.06 Mbit/s)

Flow 1 (95th percentile 46.01 ms)   Flow 2 (95th percentile 65.49 ms)   Flow 3 (95th percentile 67.66 ms)
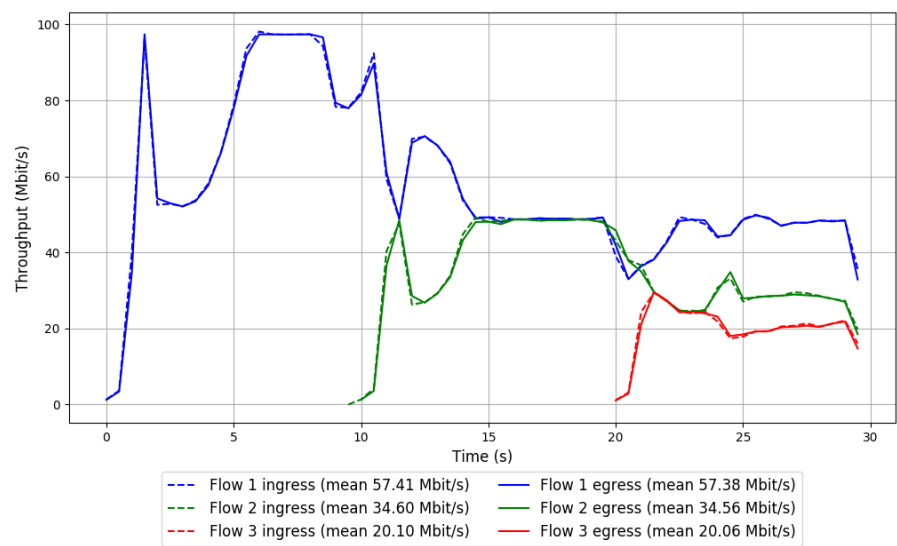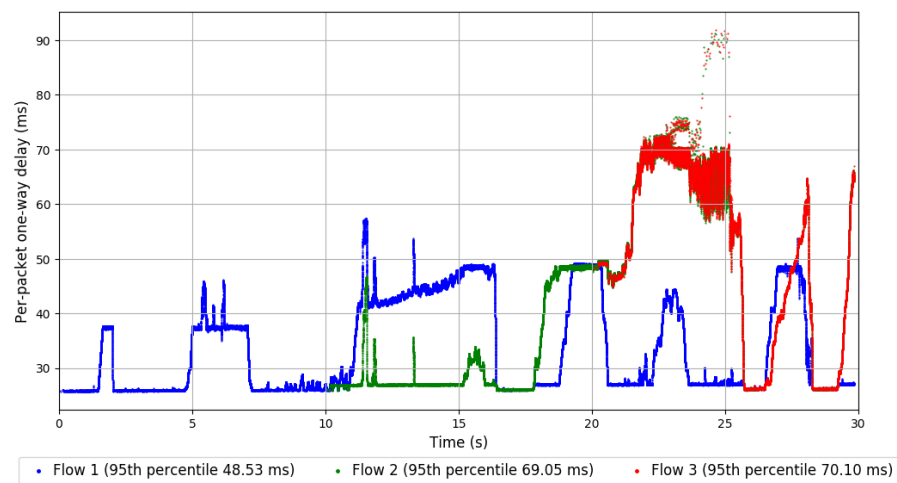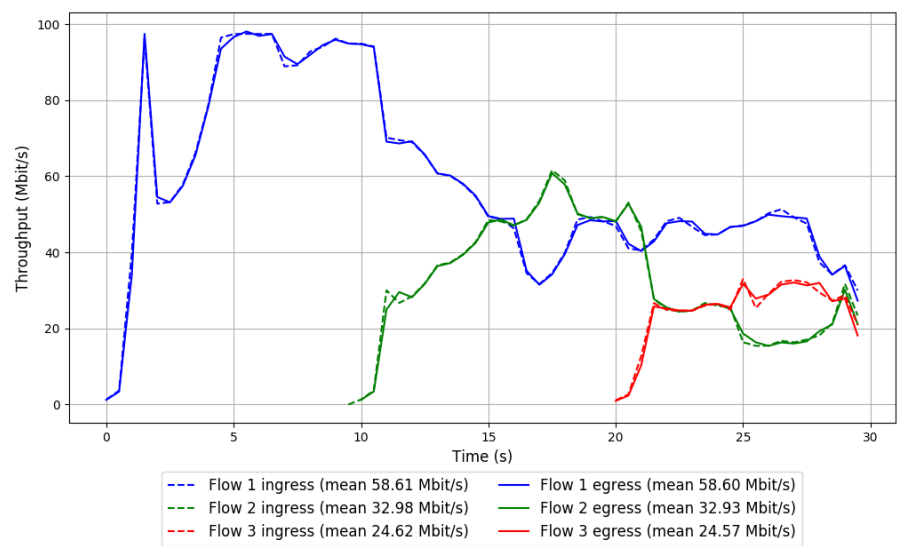
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```
Run 4: Statistics of Vivace-LTE

Start at: 2018-02-20 11:02:54
End at: 2018-02-20 11:03:24
Local clock offset: -2.551 ms
Remote clock offset: -8.159 ms


# Below is generated by plot.py at 2018-02-20 18:45:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.54 Mbit/s
95th percentile per-packet one-way delay: 65.905 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 58.60 Mbit/s
95th percentile per-packet one-way delay: 48.532 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 32.93 Mbit/s
95th percentile per-packet one-way delay: 69.046 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 24.57 Mbit/s
95th percentile per-packet one-way delay: 70.099 ms
Loss rate: 1.06%
```

Run 4: Report of Vivace-LTE — Data Link

Flow 1 ingress (mean 58.61 Mbit/s) Flow 1 egress (mean 58.60 Mbit/s)
Flow 2 ingress (mean 32.98 Mbit/s) Flow 2 egress (mean 32.93 Mbit/s)
Flow 3 ingress (mean 24.62 Mbit/s) Flow 3 egress (mean 24.57 Mbit/s)

Flow 1 (95th percentile 48.53 ms) Flow 2 (95th percentile 69.05 ms) Flow 3 (95th percentile 70.10 ms)
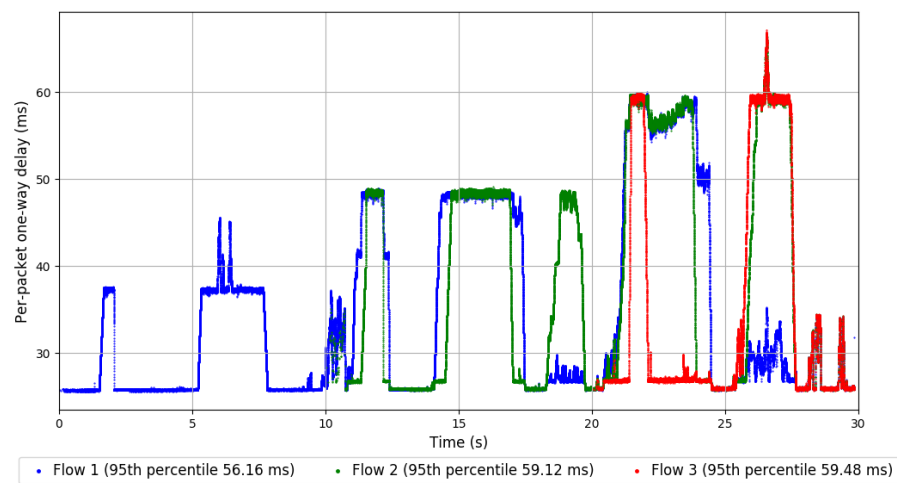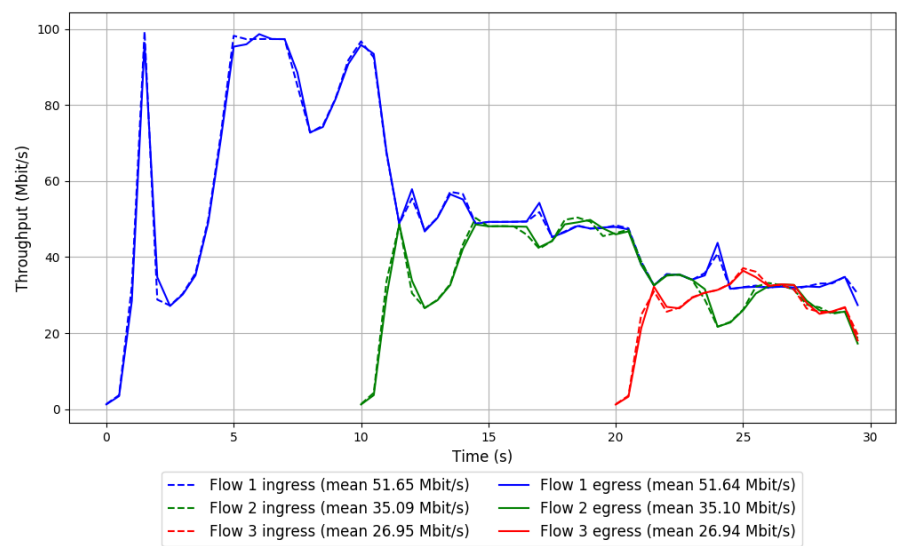
```
Run 5: Statistics of Vivace-LTE

Start at: 2018-02-20 11:27:26
End at: 2018-02-20 11:27:56
Local clock offset: -7.479 ms
Remote clock offset: -6.132 ms


# Below is generated by plot.py at 2018-02-20 18:45:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.81 Mbit/s
95th percentile per-packet one-way delay: 58.951 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 51.64 Mbit/s
95th percentile per-packet one-way delay: 56.163 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 35.10 Mbit/s
95th percentile per-packet one-way delay: 59.121 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 26.94 Mbit/s
95th percentile per-packet one-way delay: 59.480 ms
Loss rate: 0.59%
```

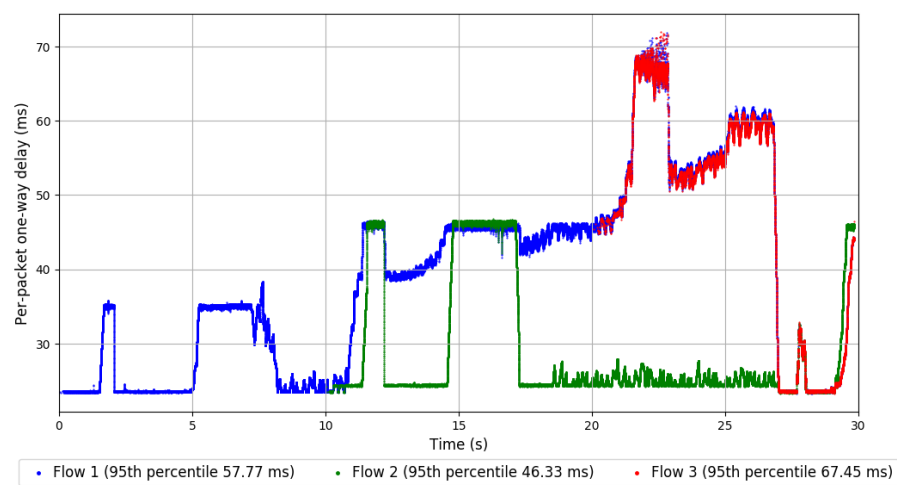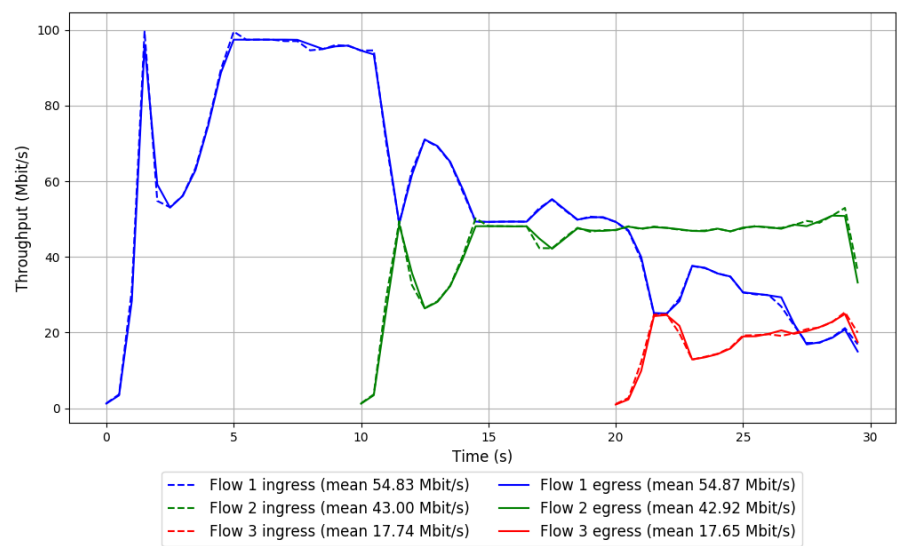Run 5: Report of Vivace-LTE — Data Link

```
Run 6: Statistics of Vivace-LTE

Start at: 2018-02-20 11:52:00
End at: 2018-02-20 11:52:30
Local clock offset: 1.286 ms
Remote clock offset: -4.239 ms


# Below is generated by plot.py at 2018-02-20 18:46:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.18 Mbit/s
95th percentile per-packet one-way delay: 58.648 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 54.87 Mbit/s
95th percentile per-packet one-way delay: 57.775 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 42.92 Mbit/s
95th percentile per-packet one-way delay: 46.333 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 17.65 Mbit/s
95th percentile per-packet one-way delay: 67.451 ms
Loss rate: 1.25%
```

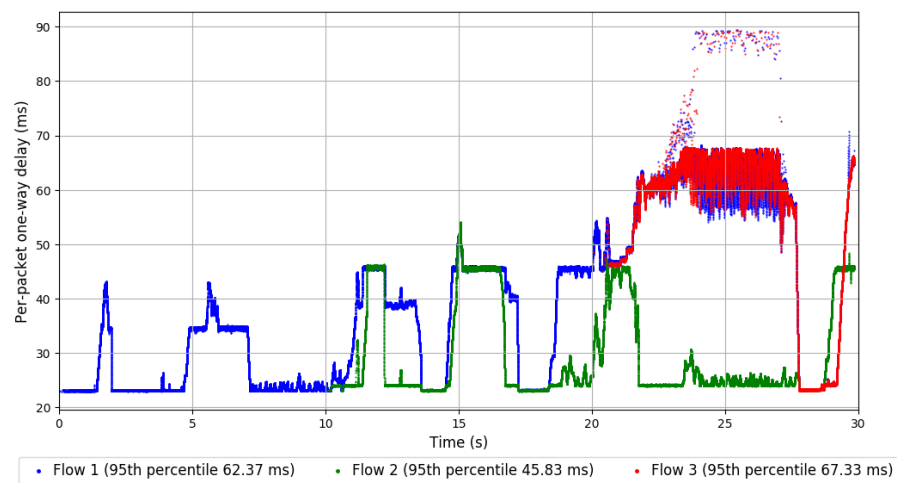# Run 6: Report of Vivace-LTE — Data Link

```
Run 7: Statistics of Vivace-LTE

Start at: 2018-02-20 12:16:32
End at: 2018-02-20 12:17:02
Local clock offset: 1.561 ms
Remote clock offset: -2.774 ms


# Below is generated by plot.py at 2018-02-20 18:46:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.16 Mbit/s
95th percentile per-packet one-way delay: 64.001 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 54.53 Mbit/s
95th percentile per-packet one-way delay: 62.369 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 41.84 Mbit/s
95th percentile per-packet one-way delay: 45.829 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 20.79 Mbit/s
95th percentile per-packet one-way delay: 67.326 ms
Loss rate: 1.19%
```

Run 7: Report of Vivace-LTE — Data Link

```
Run 8: Statistics of Vivace-LTE

Start at: 2018-02-20 12:41:09
End at: 2018-02-20 12:41:39
Local clock offset: -0.125 ms
Remote clock offset: -1.399 ms


# Below is generated by plot.py at 2018-02-20 18:46:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.61 Mbit/s
95th percentile per-packet one-way delay: 65.852 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 52.47 Mbit/s
95th percentile per-packet one-way delay: 65.177 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 42.16 Mbit/s
95th percentile per-packet one-way delay: 46.393 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 18.67 Mbit/s
95th percentile per-packet one-way delay: 67.884 ms
Loss rate: 1.45%
```
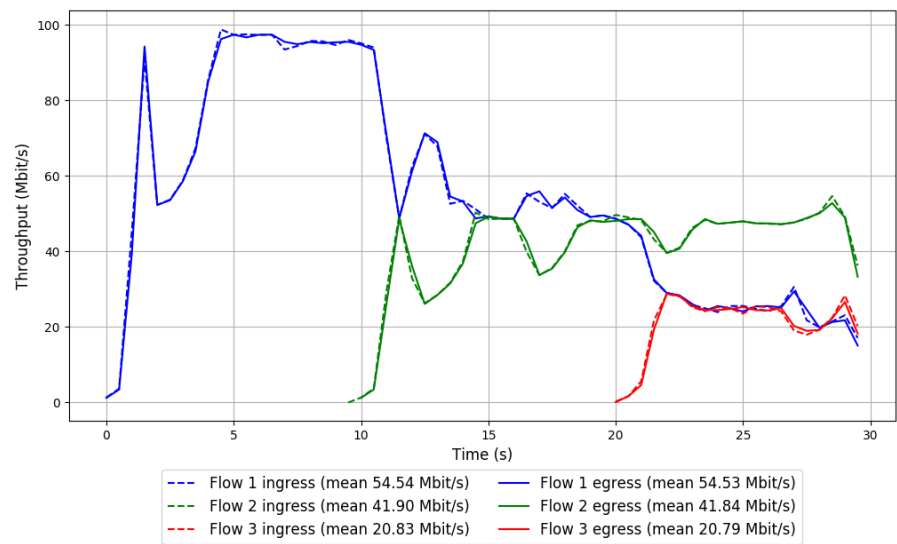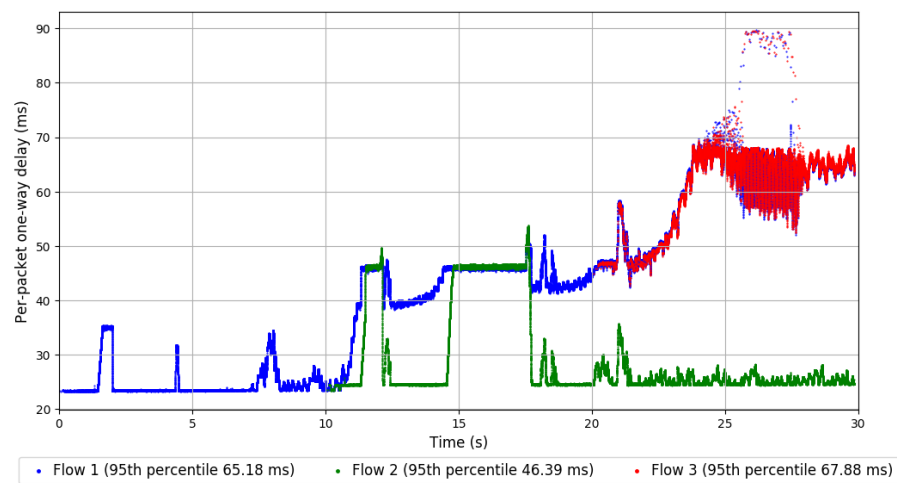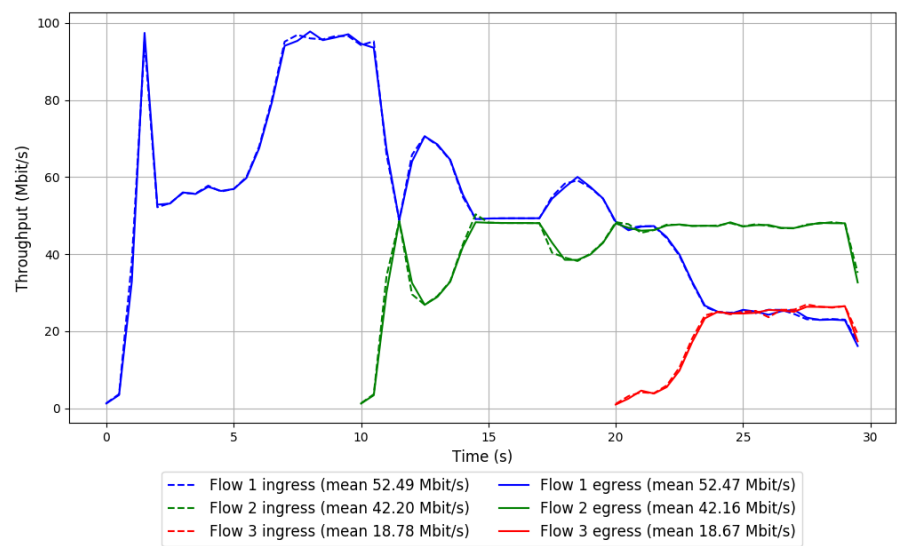
Run 8: Report of Vivace-LTE — Data Link

Flow 1 ingress (mean 52.49 Mbit/s) --- Flow 1 egress (mean 52.47 Mbit/s)
Flow 2 ingress (mean 42.20 Mbit/s) --- Flow 2 egress (mean 42.16 Mbit/s)
Flow 3 ingress (mean 18.78 Mbit/s) --- Flow 3 egress (mean 18.67 Mbit/s)

Flow 1 (95th percentile 65.18 ms)   Flow 2 (95th percentile 46.39 ms)   Flow 3 (95th percentile 67.88 ms)
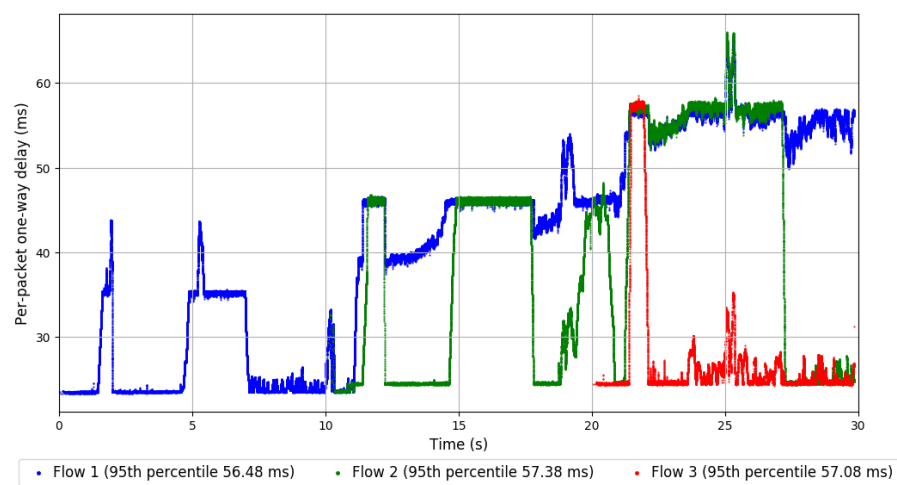
```
Run 9: Statistics of Vivace-LTE

Start at: 2018-02-20 13:05:41
End at: 2018-02-20 13:06:11
Local clock offset: -5.369 ms
Remote clock offset: -6.074 ms


# Below is generated by plot.py at 2018-02-20 18:46:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.92 Mbit/s
95th percentile per-packet one-way delay: 56.895 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 57.09 Mbit/s
95th percentile per-packet one-way delay: 56.482 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 35.79 Mbit/s
95th percentile per-packet one-way delay: 57.383 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 27.53 Mbit/s
95th percentile per-packet one-way delay: 57.077 ms
Loss rate: 0.73%
```

Run 9: Report of Vivace-LTE — Data Link

Flow 1 ingress (mean 57.12 Mbit/s) Flow 1 egress (mean 57.09 Mbit/s)
Flow 2 ingress (mean 35.80 Mbit/s) Flow 2 egress (mean 35.79 Mbit/s)
Flow 3 ingress (mean 27.60 Mbit/s) Flow 3 egress (mean 27.53 Mbit/s)

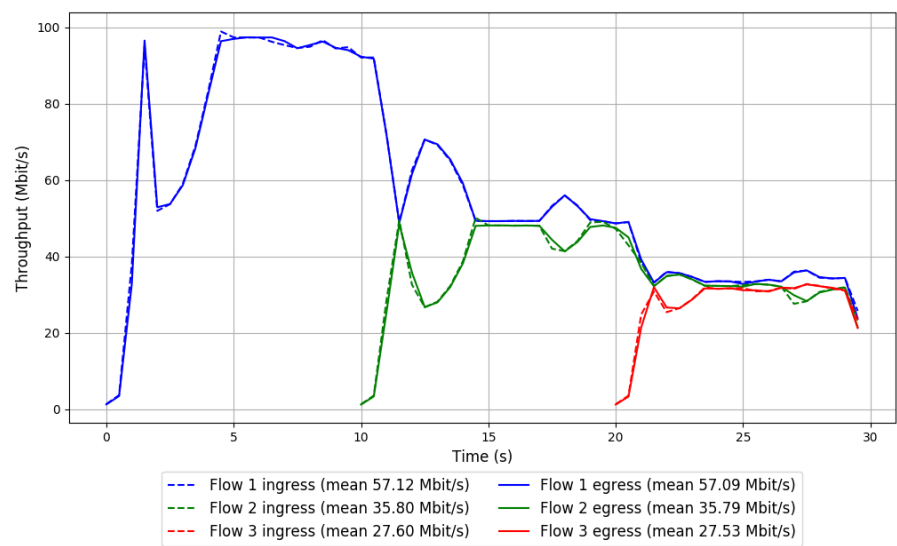Flow 1 (95th percentile 56.48 ms)   Flow 2 (95th percentile 57.38 ms)   Flow 3 (95th percentile 57.08 ms)

```
Run 10: Statistics of Vivace-LTE

Start at: 2018-02-20 13:30:27
End at: 2018-02-20 13:30:57
Local clock offset: 2.933 ms
Remote clock offset: -4.199 ms


# Below is generated by plot.py at 2018-02-20 18:46:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.52 Mbit/s
95th percentile per-packet one-way delay: 56.713 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 48.73 Mbit/s
95th percentile per-packet one-way delay: 53.403 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 35.87 Mbit/s
95th percentile per-packet one-way delay: 60.079 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 27.26 Mbit/s
95th percentile per-packet one-way delay: 56.757 ms
Loss rate: 1.15%
```

Run 10: Report of Vivace-LTE — Data Link

Flow 1 ingress (mean 48.93 Mbit/s) Flow 1 egress (mean 48.73 Mbit/s)
Flow 2 ingress (mean 36.10 Mbit/s) Flow 2 egress (mean 35.87 Mbit/s)
Flow 3 ingress (mean 27.42 Mbit/s) Flow 3 egress (mean 27.26 Mbit/s)

Flow 1 (95th percentile 53.40 ms) Flow 2 (95th percentile 60.08 ms) Flow 3 (95th percentile 56.76 ms)