Pantheon Report

Generated at 2018-04-25 01:19:15 (UTC).

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

Repeated the test of 16 congestion control schemes 10 times.

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

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

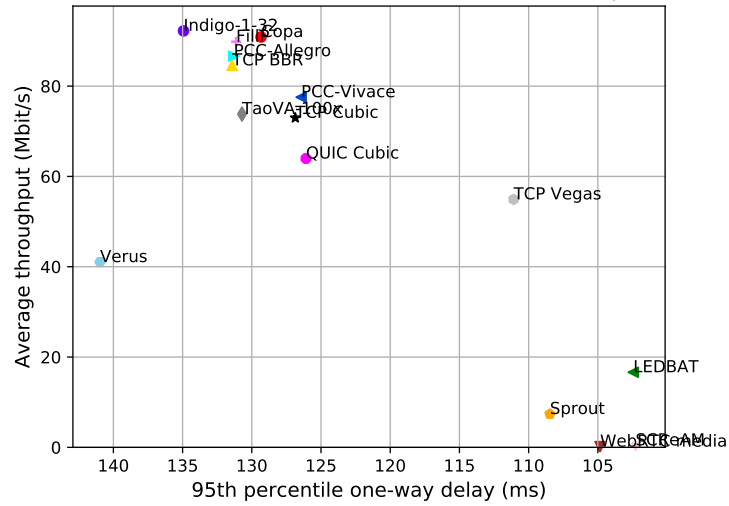Tested BBR with qdisc of Fair Queuing (`fq`), and other schemes with the default Linux qdisc (`pfifo_fast`).

NTP offsets were measured against `gps.ntp.br` and have been applied to correct the timestamps in logs.
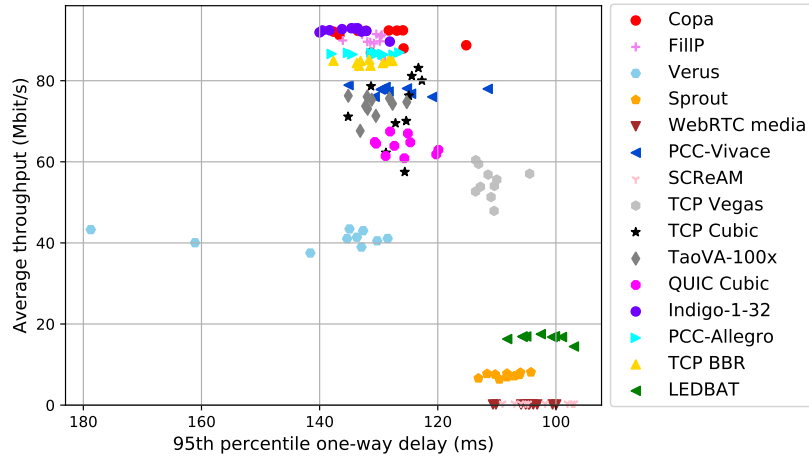
```
Git summary:
branch: master @ 114e807ac1bad7b85168ceb1f8a969063ee6c12c
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/fillp @ 11f8c46a2bf1dc797253db7e8ca04076272b2a44
third_party/genericCC @ d223989828276fa83a807da6e0341dc0c7b89aec
third_party/indigo @ 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/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
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 @ f271183af822eee5d0031620f4bebf38aedc5581

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

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

scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	52.75	36.56	22.78	129.31	130.41	130.32	7.02	9.68	13.22
TCP Cubic	10	38.11	39.47	25.86	123.95	128.45	129.01	0.60	0.79	1.05
LEDBAT	10	10.72	7.19	3.45	100.90	101.52	102.32	0.01	0.00	0.00
PCC-Allegro	10	78.81	8.08	7.44	131.30	130.12	132.16	3.06	4.77	6.66
QUIC Cubic	10	41.02	27.32	14.86	126.44	124.46	125.22	0.76	0.99	3.31
SCReAM	10	0.22	0.22	0.22	100.90	100.39	99.55	0.00	0.04	0.00
WebRTC media	10	0.06	0.06	0.05	103.00	114.27	102.16	0.00	0.01	0.00
Sprout	10	3.86	3.62	3.39	106.56	109.47	106.00	0.00	0.00	0.00
TaoVA-100x	10	43.48	31.64	28.73	129.98	130.36	131.28	4.77	8.85	9.63
TCP Vegas	10	25.41	28.60	31.52	111.20	111.28	110.60	0.57	0.67	1.10
Verus	10	21.75	23.87	11.06	137.39	142.10	139.40	32.20	45.23	29.29
Copa	10	80.31	14.70	3.35	128.72	130.02	124.93	70.96	60.90	42.34
FillP	10	50.05	41.25	37.18	128.65	130.51	129.07	12.31	21.89	23.62
Indigo-1-32	10	61.79	23.42	47.42	132.09	132.07	133.19	21.52	48.72	64.12
PCC-Vivace	10	65.58	13.82	8.45	126.46	124.86	123.89	0.49	0.92	0.75
PCC-Expr	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

```
Run 1: Statistics of TCP BBR

Start at: 2018-04-24 20:53:09
End at: 2018-04-24 20:53:39
Local clock offset: -5.516 ms
Remote clock offset: 3.752 ms


# Below is generated by plot.py at 2018-04-25 00:54:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.94 Mbit/s
95th percentile per-packet one-way delay: 128.338 ms
Loss rate: 5.74%
-- Flow 1:
Average throughput: 55.45 Mbit/s
95th percentile per-packet one-way delay: 127.953 ms
Loss rate: 5.38%
-- Flow 2:
Average throughput: 37.44 Mbit/s
95th percentile per-packet one-way delay: 128.558 ms
Loss rate: 6.96%
-- Flow 3:
Average throughput: 13.69 Mbit/s
95th percentile per-packet one-way delay: 126.483 ms
Loss rate: 3.25%
```
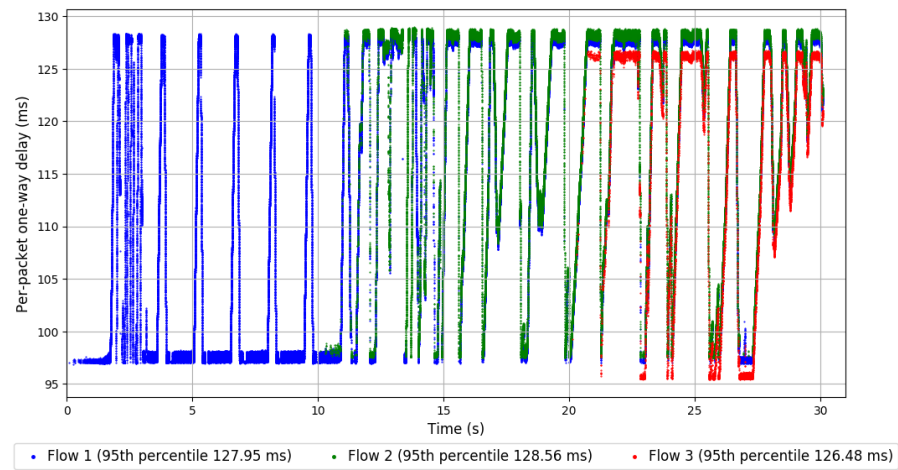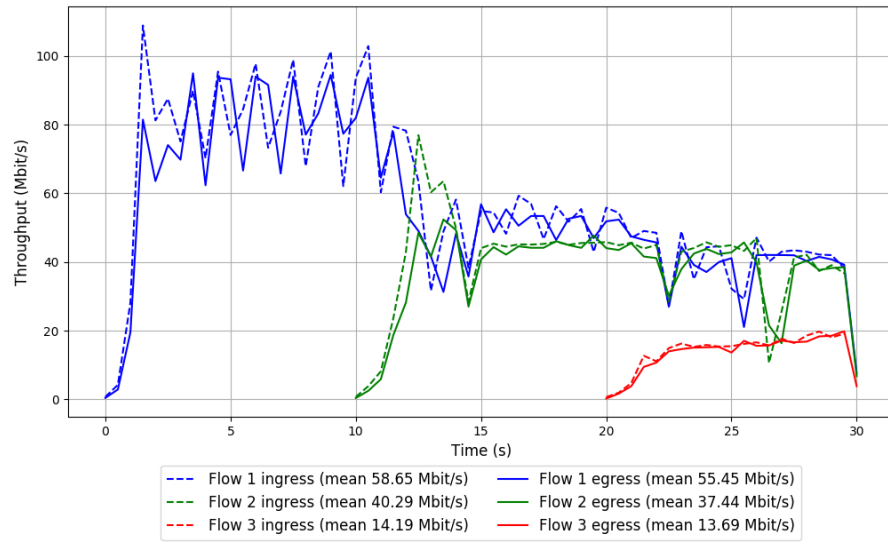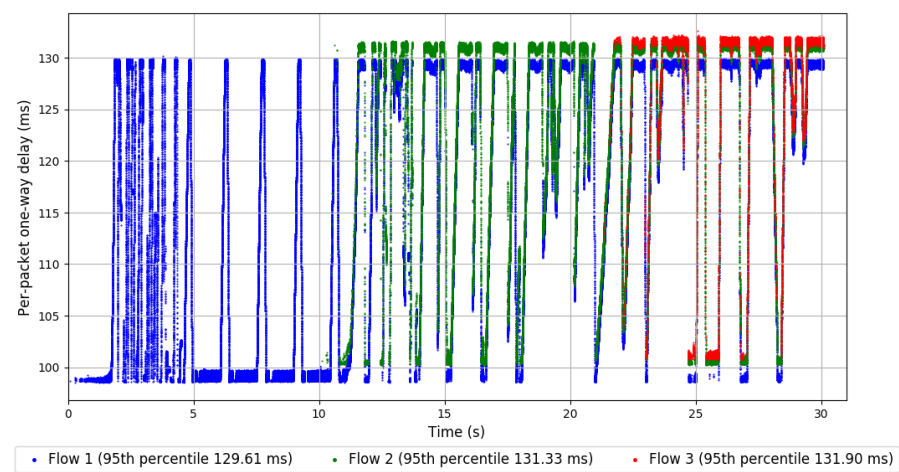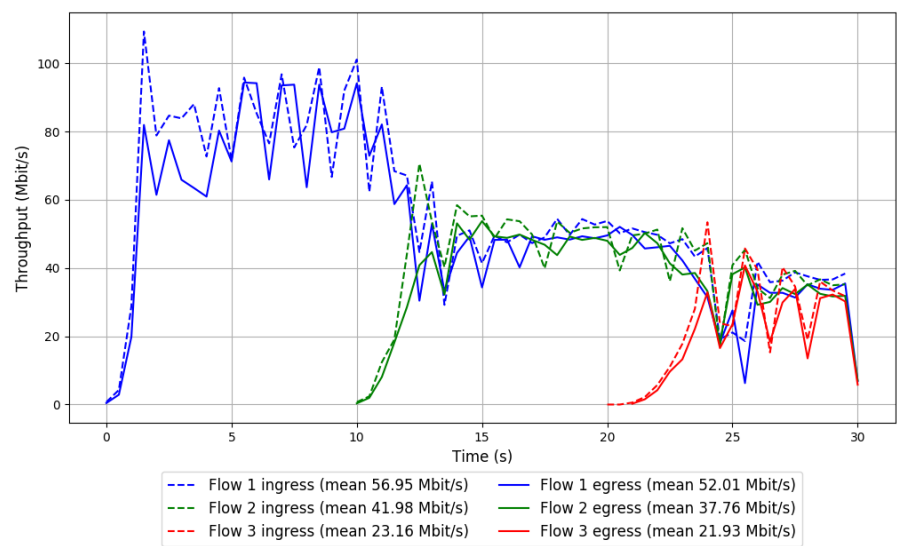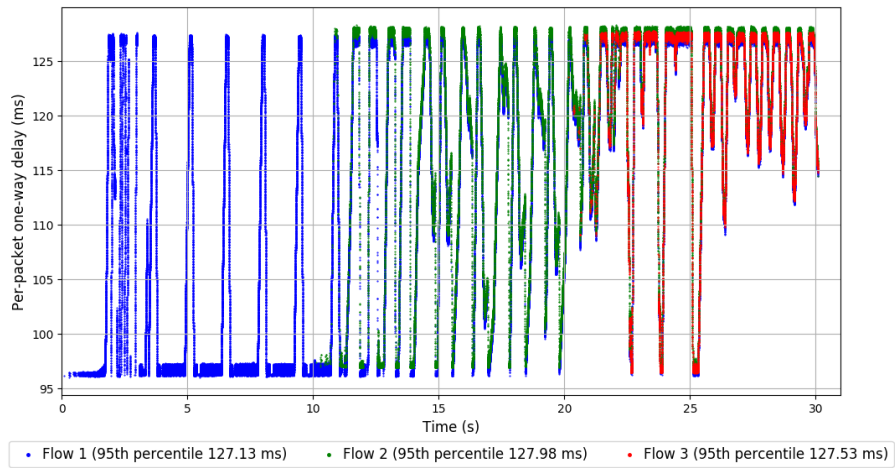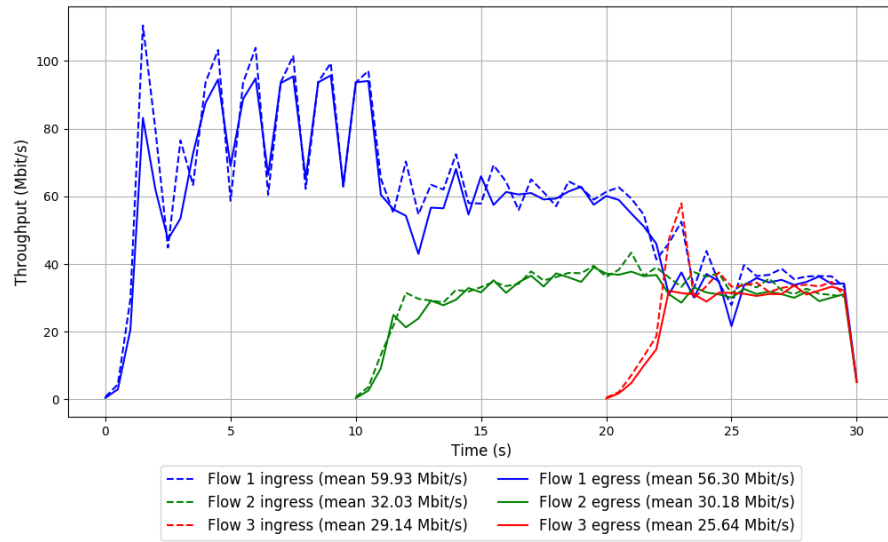
Run 1: Report of TCP BBR — Data Link

- - - Flow 1 ingress (mean 58.65 Mbit/s) —— Flow 1 egress (mean 55.45 Mbit/s)
- - - Flow 2 ingress (mean 40.29 Mbit/s) —— Flow 2 egress (mean 37.44 Mbit/s)
- - - Flow 3 ingress (mean 14.19 Mbit/s) —— Flow 3 egress (mean 13.69 Mbit/s)

· Flow 1 (95th percentile 127.95 ms)   · Flow 2 (95th percentile 128.56 ms)   · Flow 3 (95th percentile 126.48 ms)

```
Run 2: Statistics of TCP BBR

Start at: 2018-04-24 21:15:45
End at: 2018-04-24 21:16:15
Local clock offset: -4.158 ms
Remote clock offset: 8.517 ms


# Below is generated by plot.py at 2018-04-25 00:54:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.71 Mbit/s
95th percentile per-packet one-way delay: 131.388 ms
Loss rate: 9.50%
-- Flow 1:
Average throughput: 52.01 Mbit/s
95th percentile per-packet one-way delay: 129.613 ms
Loss rate: 8.58%
-- Flow 2:
Average throughput: 37.76 Mbit/s
95th percentile per-packet one-way delay: 131.334 ms
Loss rate: 9.91%
-- Flow 3:
Average throughput: 21.93 Mbit/s
95th percentile per-packet one-way delay: 131.896 ms
Loss rate: 14.79%
```
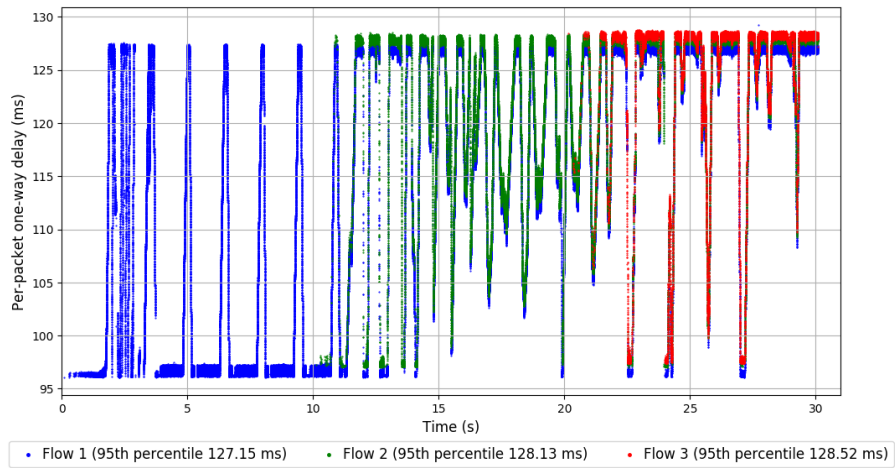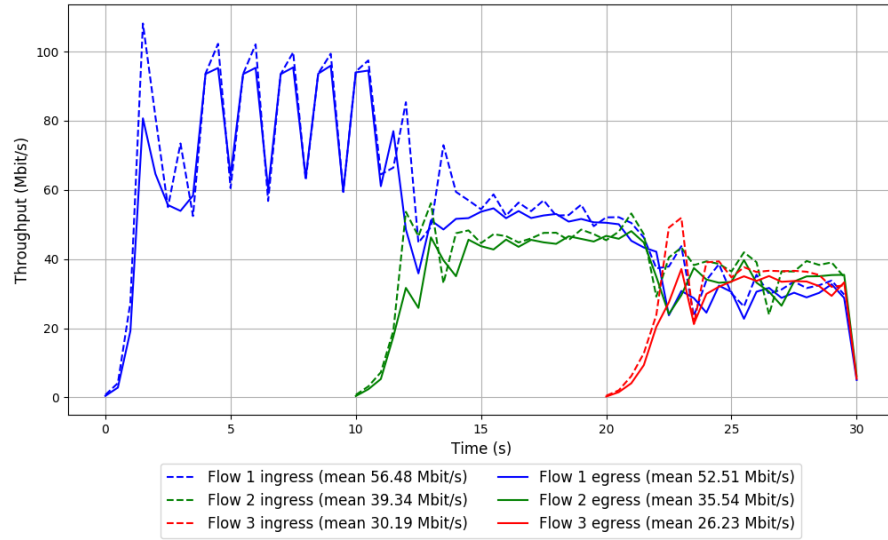
Run 2: Report of TCP BBR — Data Link

Flow 1 ingress (mean 56.95 Mbit/s) — — —   Flow 1 egress (mean 52.01 Mbit/s)
Flow 2 ingress (mean 41.98 Mbit/s) — — —   Flow 2 egress (mean 37.76 Mbit/s)
Flow 3 ingress (mean 23.16 Mbit/s) — — —   Flow 3 egress (mean 21.93 Mbit/s)

• Flow 1 (95th percentile 129.61 ms)   • Flow 2 (95th percentile 131.33 ms)   • Flow 3 (95th percentile 131.90 ms)

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Run 3: Statistics of TCP BBR

Start at: 2018-04-24 21:38:21
End at: 2018-04-24 21:38:51
Local clock offset: -5.692 ms
Remote clock offset: 4.694 ms

# Below is generated by plot.py at 2018-04-25 00:54:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.90 Mbit/s
95th percentile per-packet one-way delay: 127.670 ms
Loss rate: 6.57%
-- Flow 1:
Average throughput: 56.30 Mbit/s
95th percentile per-packet one-way delay: 127.131 ms
Loss rate: 6.00%
-- Flow 2:
Average throughput: 30.18 Mbit/s
95th percentile per-packet one-way delay: 127.977 ms
Loss rate: 5.68%
-- Flow 3:
Average throughput: 25.64 Mbit/s
95th percentile per-packet one-way delay: 127.529 ms
Loss rate: 12.09%
```
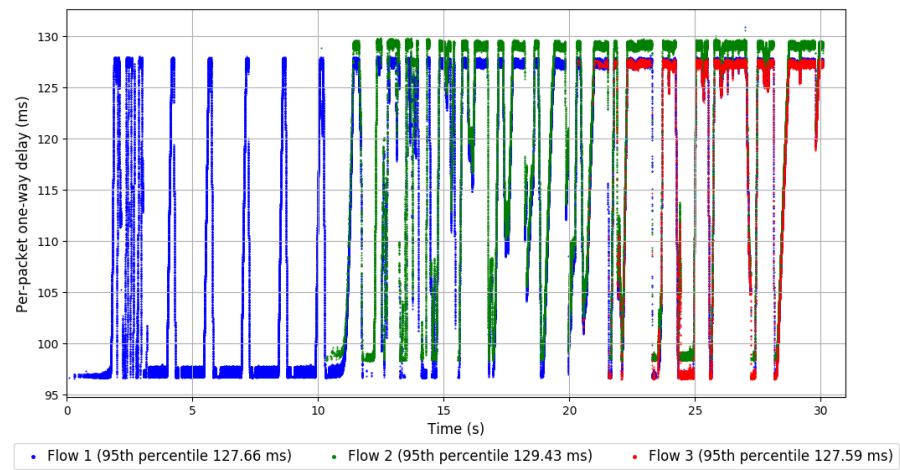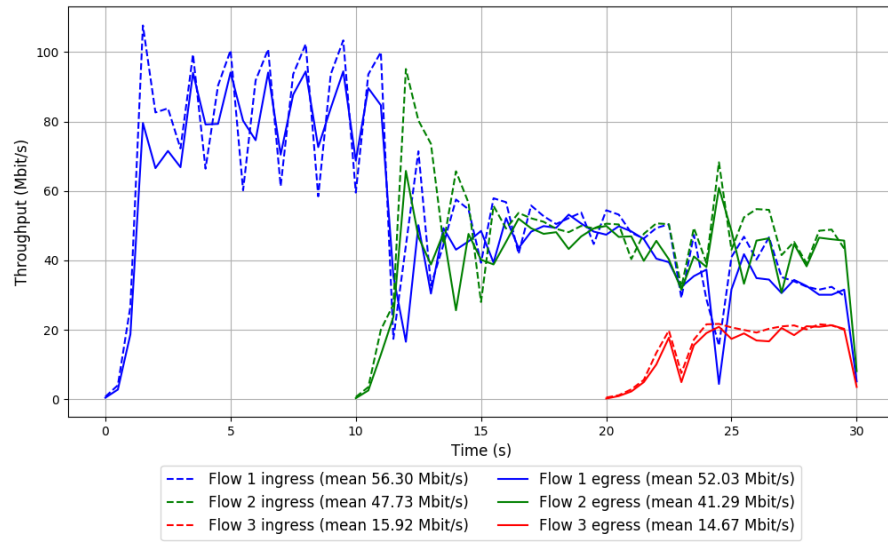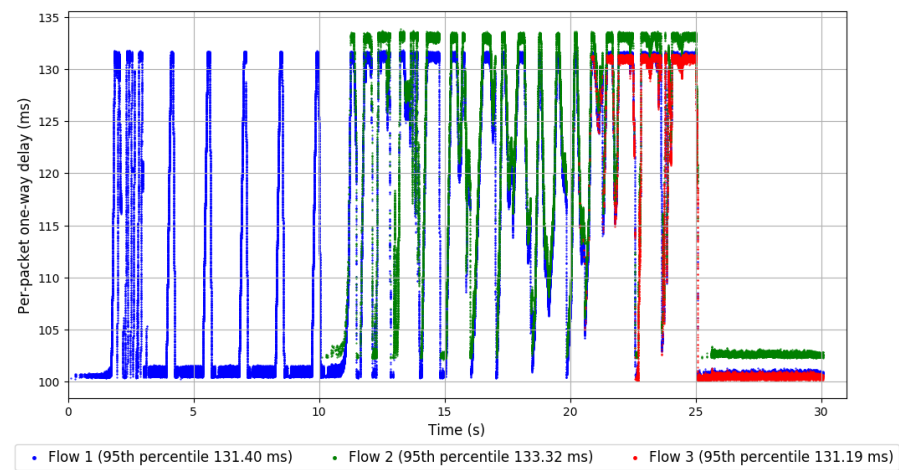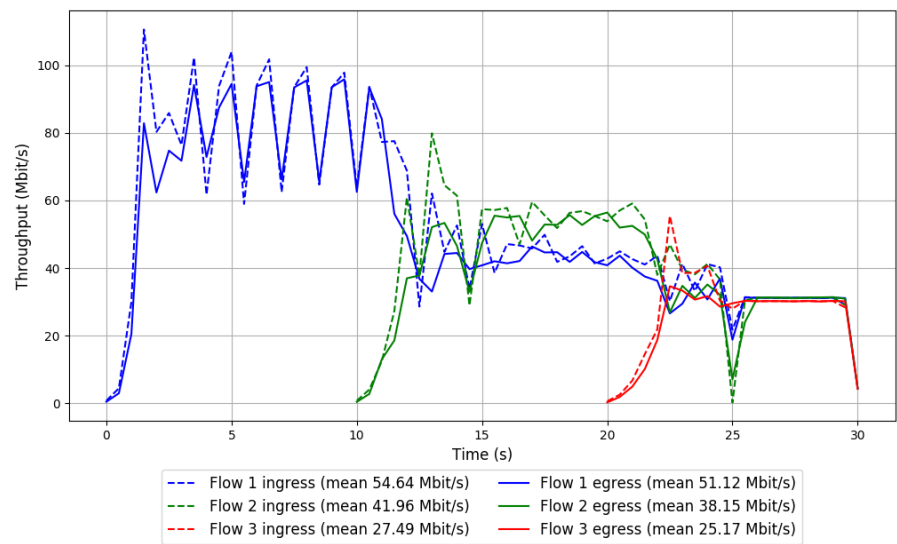
Run 3: Report of TCP BBR — Data Link

Flow 1 ingress (mean 59.93 Mbit/s) --- Flow 1 egress (mean 56.30 Mbit/s)
Flow 2 ingress (mean 32.03 Mbit/s) --- Flow 2 egress (mean 30.18 Mbit/s)
Flow 3 ingress (mean 29.14 Mbit/s) --- Flow 3 egress (mean 25.64 Mbit/s)

Flow 1 (95th percentile 127.13 ms)   Flow 2 (95th percentile 127.98 ms)   Flow 3 (95th percentile 127.53 ms)

```
Run 4: Statistics of TCP BBR

Start at: 2018-04-24 22:00:51
End at: 2018-04-24 22:01:21
Local clock offset: -4.905 ms
Remote clock offset: 4.465 ms

# Below is generated by plot.py at 2018-04-25 00:54:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.88 Mbit/s
95th percentile per-packet one-way delay: 128.182 ms
Loss rate: 8.34%
-- Flow 1:
Average throughput: 52.51 Mbit/s
95th percentile per-packet one-way delay: 127.147 ms
Loss rate: 6.94%
-- Flow 2:
Average throughput: 35.54 Mbit/s
95th percentile per-packet one-way delay: 128.130 ms
Loss rate: 9.54%
-- Flow 3:
Average throughput: 26.23 Mbit/s
95th percentile per-packet one-way delay: 128.519 ms
Loss rate: 13.14%
```
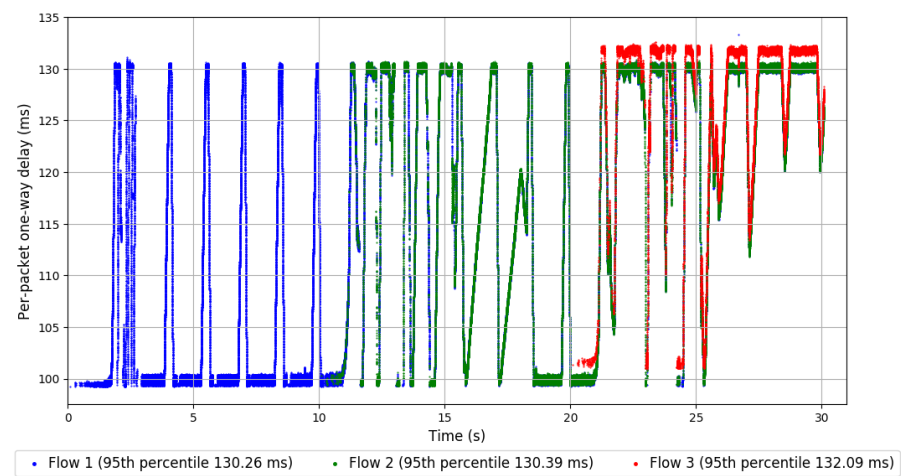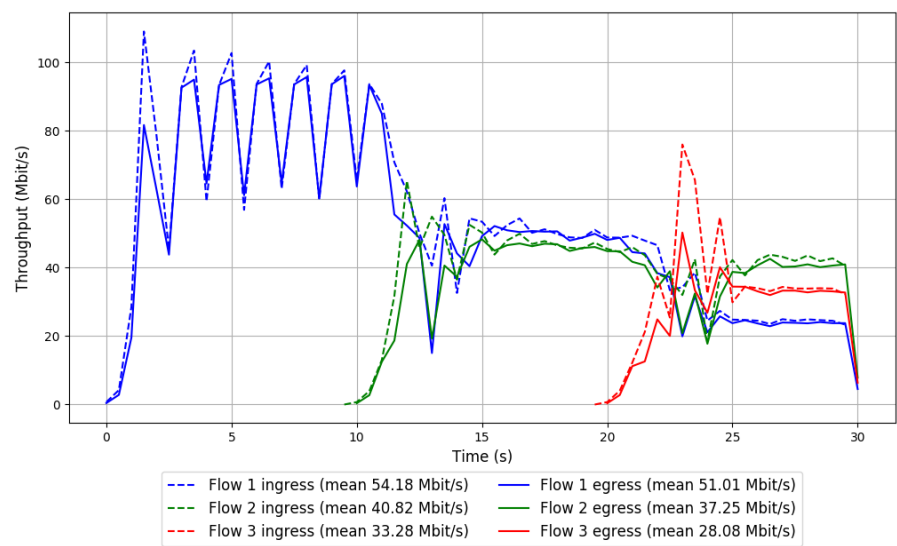
Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 56.48 Mbit/s) — Flow 1 egress (mean 52.51 Mbit/s)
Flow 2 ingress (mean 39.34 Mbit/s) — Flow 2 egress (mean 35.54 Mbit/s)
Flow 3 ingress (mean 30.19 Mbit/s) — Flow 3 egress (mean 26.23 Mbit/s)

Flow 1 (95th percentile 127.15 ms) • Flow 2 (95th percentile 128.13 ms) • Flow 3 (95th percentile 128.52 ms)

```
Run 5: Statistics of TCP BBR

Start at: 2018-04-24 22:23:24
End at: 2018-04-24 22:23:54
Local clock offset: -4.588 ms
Remote clock offset: 4.257 ms

# Below is generated by plot.py at 2018-04-25 00:54:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.37 Mbit/s
95th percentile per-packet one-way delay: 129.272 ms
Loss rate: 9.54%
-- Flow 1:
Average throughput: 52.03 Mbit/s
95th percentile per-packet one-way delay: 127.660 ms
Loss rate: 7.49%
-- Flow 2:
Average throughput: 41.29 Mbit/s
95th percentile per-packet one-way delay: 129.427 ms
Loss rate: 13.49%
-- Flow 3:
Average throughput: 14.67 Mbit/s
95th percentile per-packet one-way delay: 127.586 ms
Loss rate: 7.65%
```
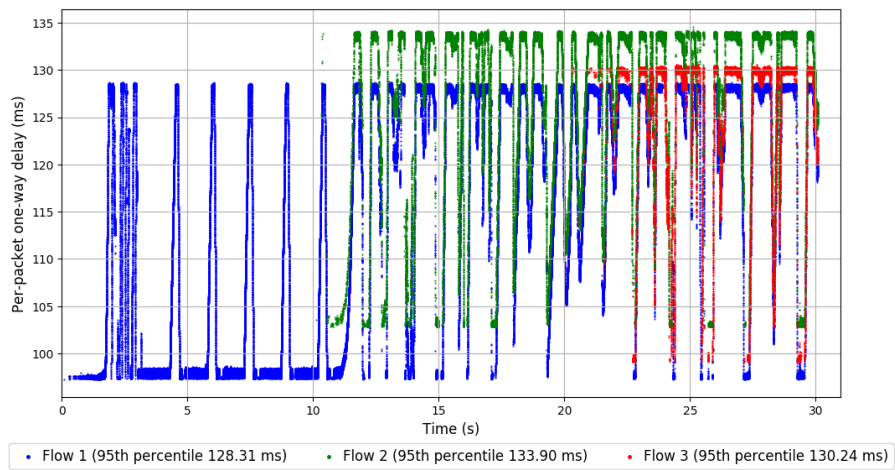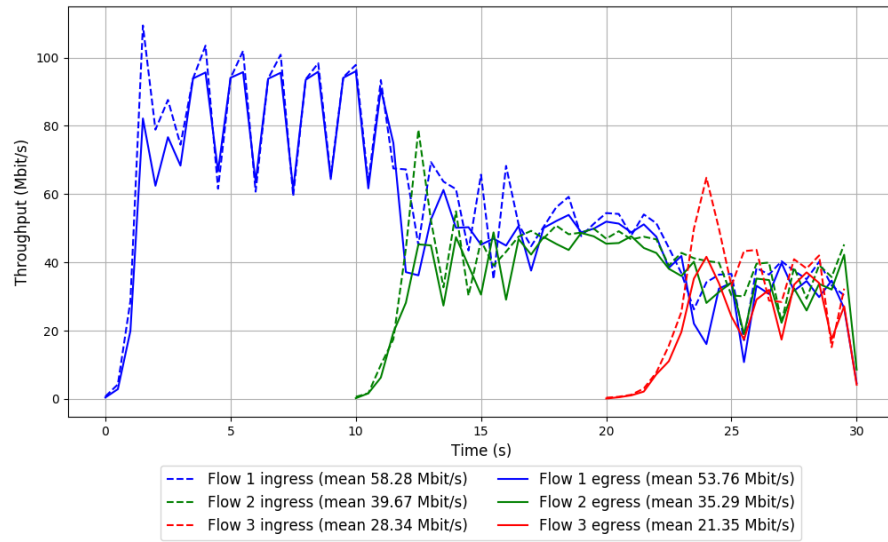
Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 56.30 Mbit/s) — Flow 1 egress (mean 52.03 Mbit/s)
Flow 2 ingress (mean 47.73 Mbit/s) — Flow 2 egress (mean 41.29 Mbit/s)
Flow 3 ingress (mean 15.92 Mbit/s) — Flow 3 egress (mean 14.67 Mbit/s)

Flow 1 (95th percentile 127.66 ms)   Flow 2 (95th percentile 129.43 ms)   Flow 3 (95th percentile 127.59 ms)

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Run 6: Statistics of TCP BBR

Start at: 2018-04-24 22:45:55
End at: 2018-04-24 22:46:25
Local clock offset: -6.194 ms
Remote clock offset: 7.858 ms


# Below is generated by plot.py at 2018-04-25 00:54:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.88 Mbit/s
95th percentile per-packet one-way delay: 133.083 ms
Loss rate: 7.46%
-- Flow 1:
Average throughput: 51.12 Mbit/s
95th percentile per-packet one-way delay: 131.395 ms
Loss rate: 6.43%
-- Flow 2:
Average throughput: 38.15 Mbit/s
95th percentile per-packet one-way delay: 133.324 ms
Loss rate: 9.07%
-- Flow 3:
Average throughput: 25.17 Mbit/s
95th percentile per-packet one-way delay: 131.191 ms
Loss rate: 8.65%
```
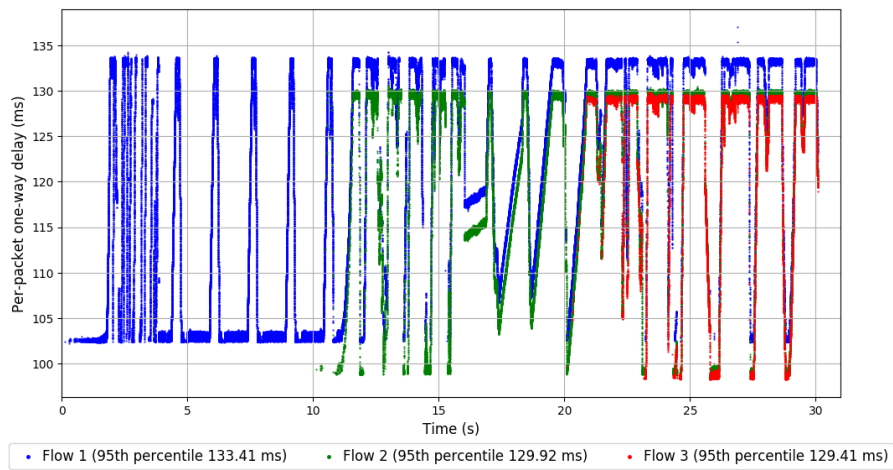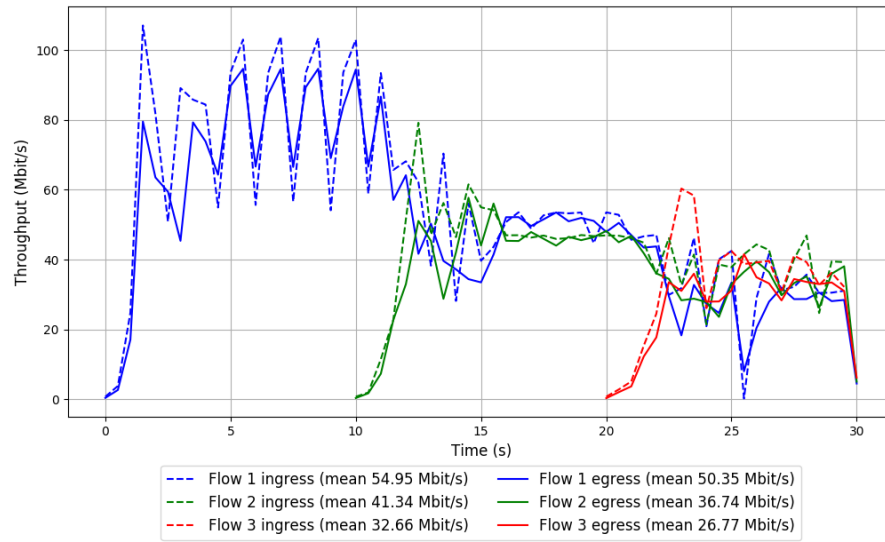
Run 6: Report of TCP BBR — Data Link

Flow 1 ingress (mean 54.64 Mbit/s) — — — Flow 1 egress (mean 51.12 Mbit/s)
Flow 2 ingress (mean 41.96 Mbit/s) — — — Flow 2 egress (mean 38.15 Mbit/s)
Flow 3 ingress (mean 27.49 Mbit/s) — — — Flow 3 egress (mean 25.17 Mbit/s)

Flow 1 (95th percentile 131.40 ms)   Flow 2 (95th percentile 133.32 ms)   Flow 3 (95th percentile 131.19 ms)

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```
Run 7: Statistics of TCP BBR

Start at: 2018-04-24 23:08:31
End at: 2018-04-24 23:09:01
Local clock offset: -4.366 ms
Remote clock offset: 6.502 ms


# Below is generated by plot.py at 2018-04-25 00:54:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.20 Mbit/s
95th percentile per-packet one-way delay: 131.619 ms
Loss rate: 7.76%
-- Flow 1:
Average throughput: 51.01 Mbit/s
95th percentile per-packet one-way delay: 130.259 ms
Loss rate: 5.76%
-- Flow 2:
Average throughput: 37.25 Mbit/s
95th percentile per-packet one-way delay: 130.389 ms
Loss rate: 8.62%
-- Flow 3:
Average throughput: 28.08 Mbit/s
95th percentile per-packet one-way delay: 132.091 ms
Loss rate: 15.41%
```
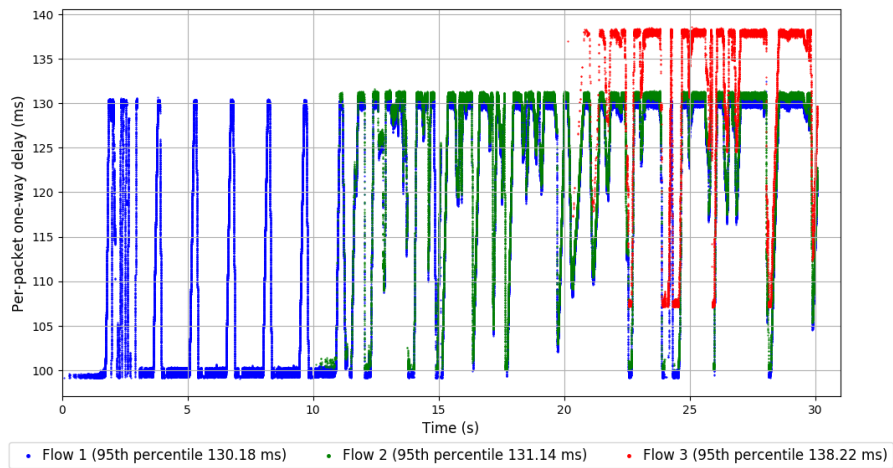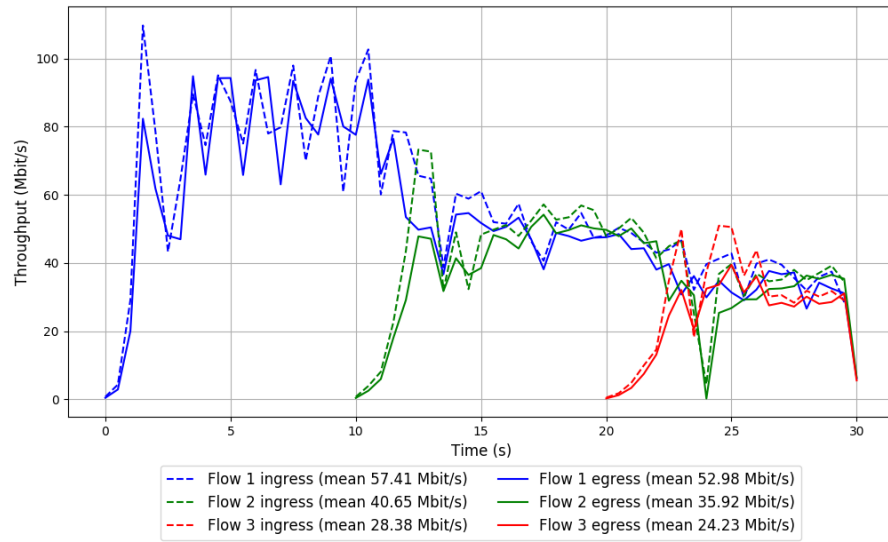
Run 7: Report of TCP BBR — Data Link

Flow 1 ingress (mean 54.18 Mbit/s) — Flow 1 egress (mean 51.01 Mbit/s)
Flow 2 ingress (mean 40.82 Mbit/s) — Flow 2 egress (mean 37.25 Mbit/s)
Flow 3 ingress (mean 33.28 Mbit/s) — Flow 3 egress (mean 28.08 Mbit/s)

Flow 1 (95th percentile 130.26 ms) • Flow 2 (95th percentile 130.39 ms) • Flow 3 (95th percentile 132.09 ms)

```
Run 8: Statistics of TCP BBR

Start at: 2018-04-24 23:31:06
End at: 2018-04-24 23:31:36
Local clock offset: -5.04 ms
Remote clock offset: 3.2 ms


# Below is generated by plot.py at 2018-04-25 00:54:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.36 Mbit/s
95th percentile per-packet one-way delay: 133.710 ms
Loss rate: 10.30%
-- Flow 1:
Average throughput: 53.76 Mbit/s
95th percentile per-packet one-way delay: 128.315 ms
Loss rate: 7.68%
-- Flow 2:
Average throughput: 35.29 Mbit/s
95th percentile per-packet one-way delay: 133.904 ms
Loss rate: 10.97%
-- Flow 3:
Average throughput: 21.35 Mbit/s
95th percentile per-packet one-way delay: 130.242 ms
Loss rate: 24.57%
```
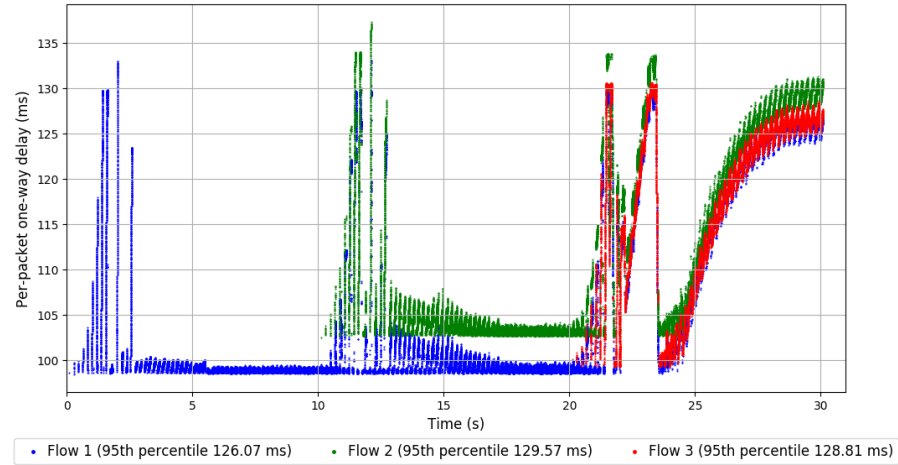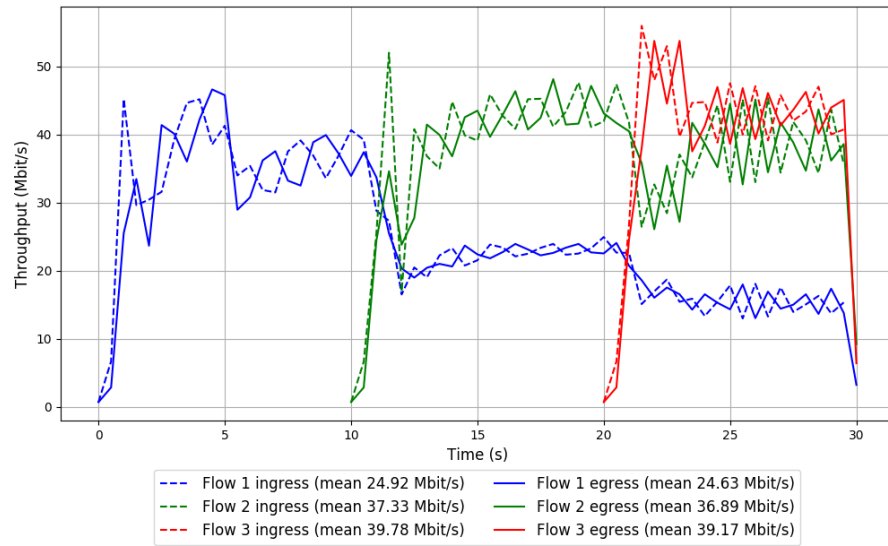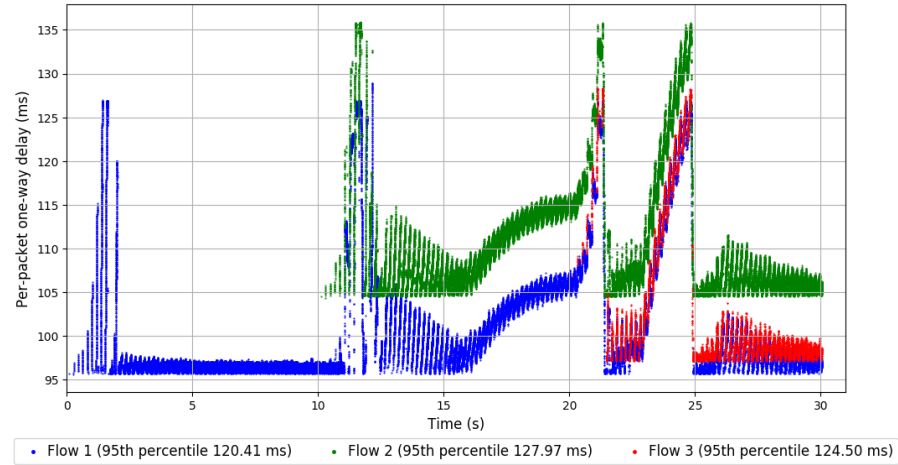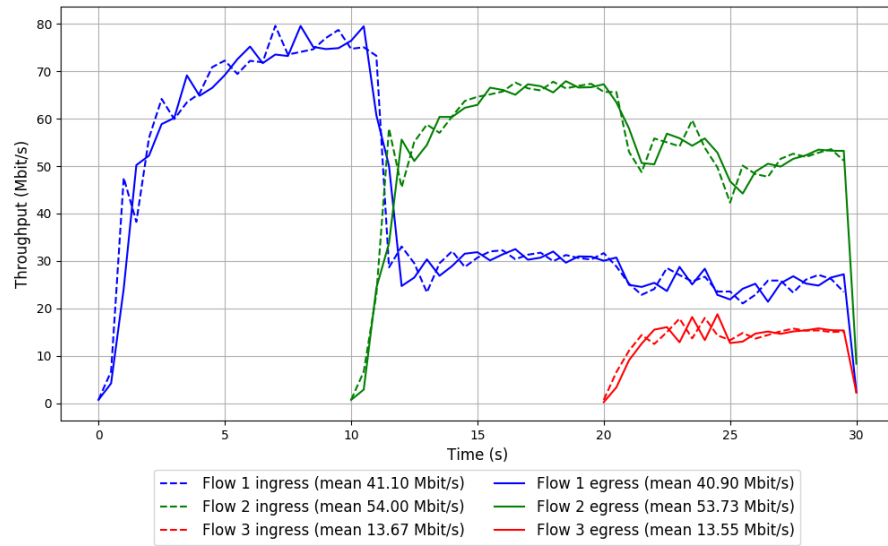
Run 8: Report of TCP BBR — Data Link

- - - - Flow 1 ingress (mean 58.28 Mbit/s)   —— Flow 1 egress (mean 53.76 Mbit/s)
- - - - Flow 2 ingress (mean 39.67 Mbit/s)   —— Flow 2 egress (mean 35.29 Mbit/s)
- - - - Flow 3 ingress (mean 28.34 Mbit/s)   —— Flow 3 egress (mean 21.35 Mbit/s)

- Flow 1 (95th percentile 128.31 ms)   • Flow 2 (95th percentile 133.90 ms)   • Flow 3 (95th percentile 130.24 ms)

```
Run 9: Statistics of TCP BBR

Start at: 2018-04-24 23:53:19
End at: 2018-04-24 23:53:49
Local clock offset: -4.228 ms
Remote clock offset: 6.666 ms


# Below is generated by plot.py at 2018-04-25 00:56:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.71 Mbit/s
95th percentile per-packet one-way delay: 133.316 ms
Loss rate: 10.23%
-- Flow 1:
Average throughput: 50.35 Mbit/s
95th percentile per-packet one-way delay: 133.407 ms
Loss rate: 8.33%
-- Flow 2:
Average throughput: 36.74 Mbit/s
95th percentile per-packet one-way delay: 129.923 ms
Loss rate: 11.04%
-- Flow 3:
Average throughput: 26.77 Mbit/s
95th percentile per-packet one-way delay: 129.407 ms
Loss rate: 17.87%
```
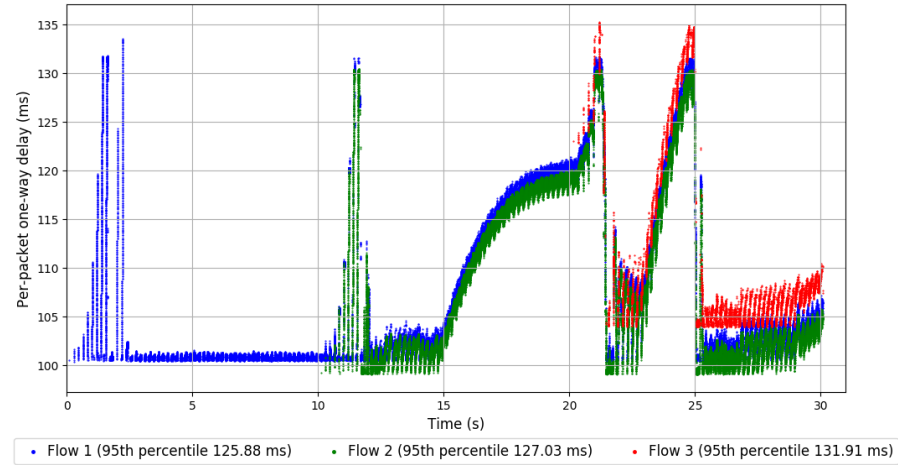
Run 9: Report of TCP BBR — Data Link

```
Run 10: Statistics of TCP BBR

Start at: 2018-04-25 00:15:57
End at: 2018-04-25 00:16:27
Local clock offset: -5.058 ms
Remote clock offset: 6.129 ms


# Below is generated by plot.py at 2018-04-25 00:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.94 Mbit/s
95th percentile per-packet one-way delay: 137.656 ms
Loss rate: 9.47%
-- Flow 1:
Average throughput: 52.98 Mbit/s
95th percentile per-packet one-way delay: 130.180 ms
Loss rate: 7.63%
-- Flow 2:
Average throughput: 35.92 Mbit/s
95th percentile per-packet one-way delay: 131.142 ms
Loss rate: 11.54%
-- Flow 3:
Average throughput: 24.23 Mbit/s
95th percentile per-packet one-way delay: 138.219 ms
Loss rate: 14.75%
```
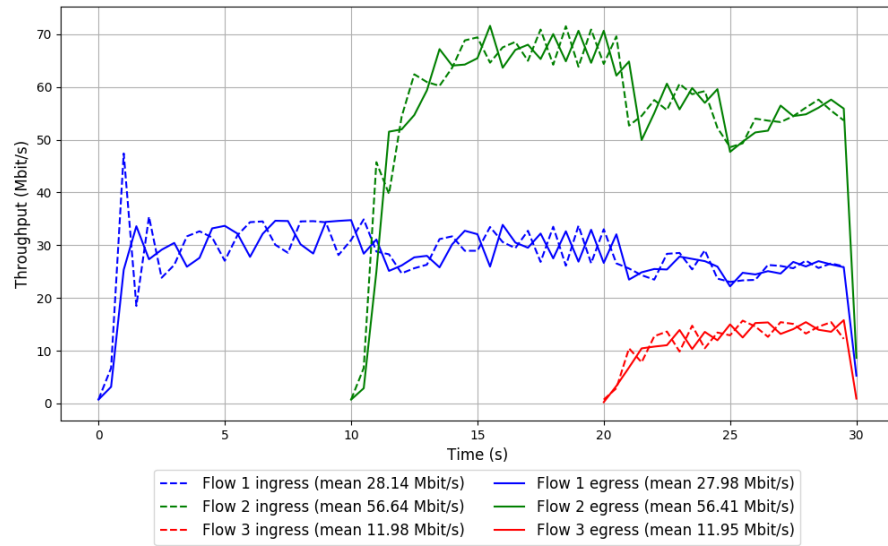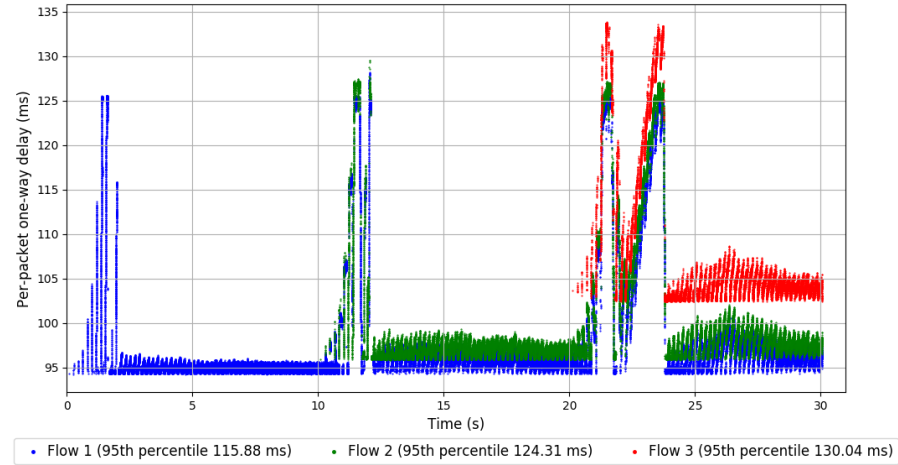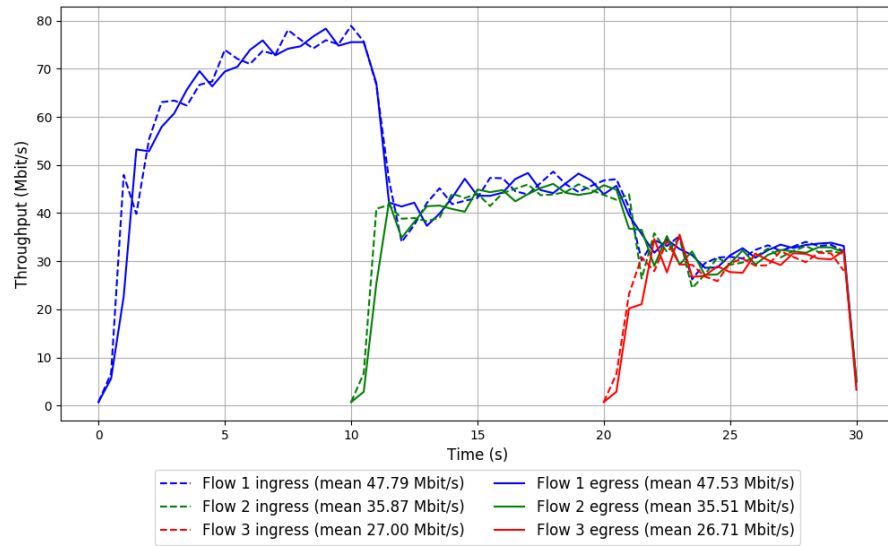
Run 10: Report of TCP BBR — Data Link

Flow 1 ingress (mean 57.41 Mbit/s)   Flow 1 egress (mean 52.98 Mbit/s)
Flow 2 ingress (mean 40.65 Mbit/s)   Flow 2 egress (mean 35.92 Mbit/s)
Flow 3 ingress (mean 28.38 Mbit/s)   Flow 3 egress (mean 24.23 Mbit/s)

Flow 1 (95th percentile 130.18 ms)   Flow 2 (95th percentile 131.14 ms)   Flow 3 (95th percentile 138.22 ms)

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```
Run 1: Statistics of TCP Cubic

Start at: 2018-04-24 20:45:20
End at: 2018-04-24 20:45:50
Local clock offset: -5.589 ms
Remote clock offset: 3.419 ms


# Below is generated by plot.py at 2018-04-25 00:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.24 Mbit/s
95th percentile per-packet one-way delay: 128.778 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 24.63 Mbit/s
95th percentile per-packet one-way delay: 126.066 ms
Loss rate: 1.06%
-- Flow 2:
Average throughput: 36.89 Mbit/s
95th percentile per-packet one-way delay: 129.573 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 39.17 Mbit/s
95th percentile per-packet one-way delay: 128.805 ms
Loss rate: 1.27%
```
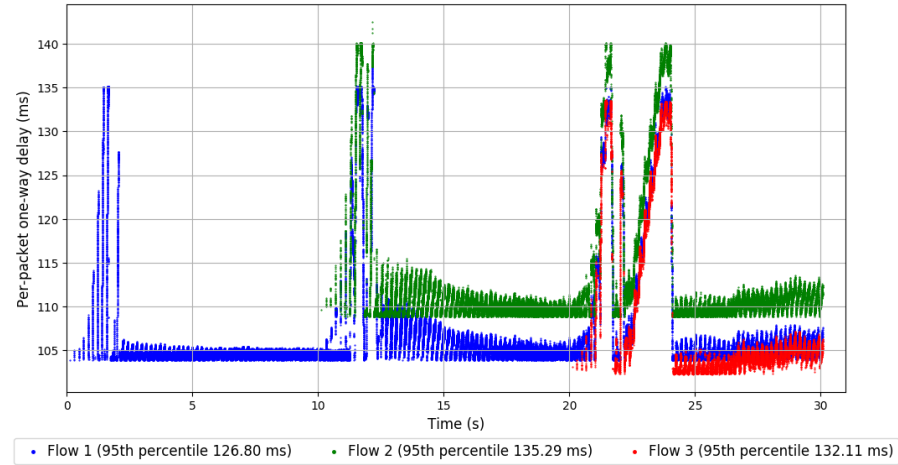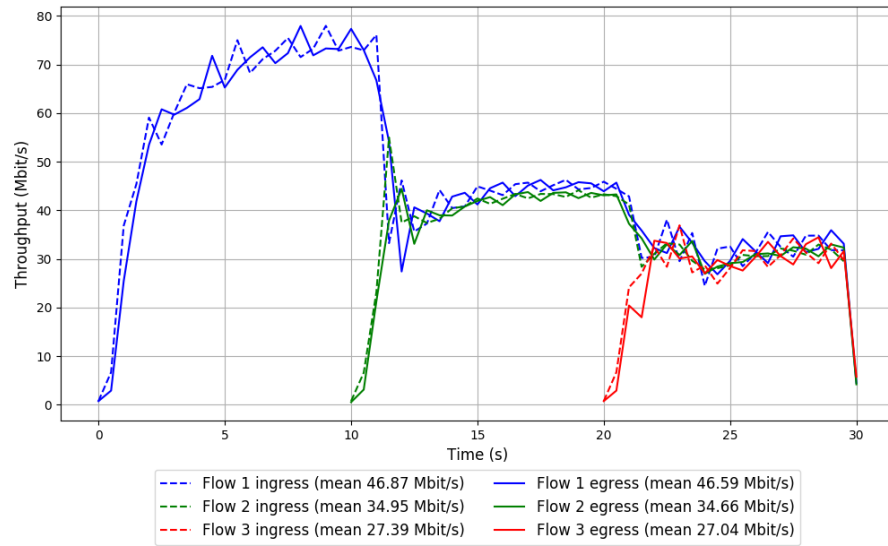
Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2018-04-24 21:07:56
End at: 2018-04-24 21:08:26
Local clock offset: -4.964 ms
Remote clock offset: 4.703 ms


# Below is generated by plot.py at 2018-04-25 00:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.16 Mbit/s
95th percentile per-packet one-way delay: 124.398 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 40.90 Mbit/s
95th percentile per-packet one-way delay: 120.411 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 53.73 Mbit/s
95th percentile per-packet one-way delay: 127.974 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 13.55 Mbit/s
95th percentile per-packet one-way delay: 124.501 ms
Loss rate: 0.94%
```
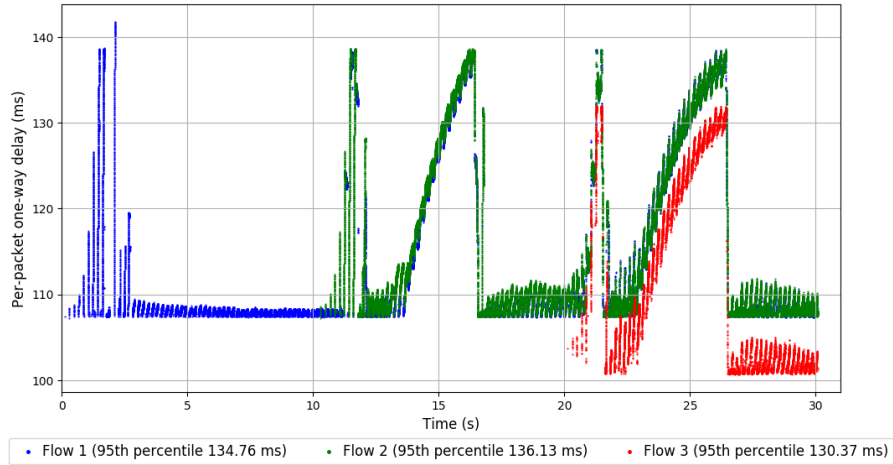
Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2018-04-24 21:30:26
End at: 2018-04-24 21:30:56
Local clock offset: -4.125 ms
Remote clock offset: 8.459 ms


# Below is generated by plot.py at 2018-04-25 00:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.51 Mbit/s
95th percentile per-packet one-way delay: 127.159 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 27.98 Mbit/s
95th percentile per-packet one-way delay: 125.876 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 56.41 Mbit/s
95th percentile per-packet one-way delay: 127.027 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 11.95 Mbit/s
95th percentile per-packet one-way delay: 131.911 ms
Loss rate: 0.43%
```
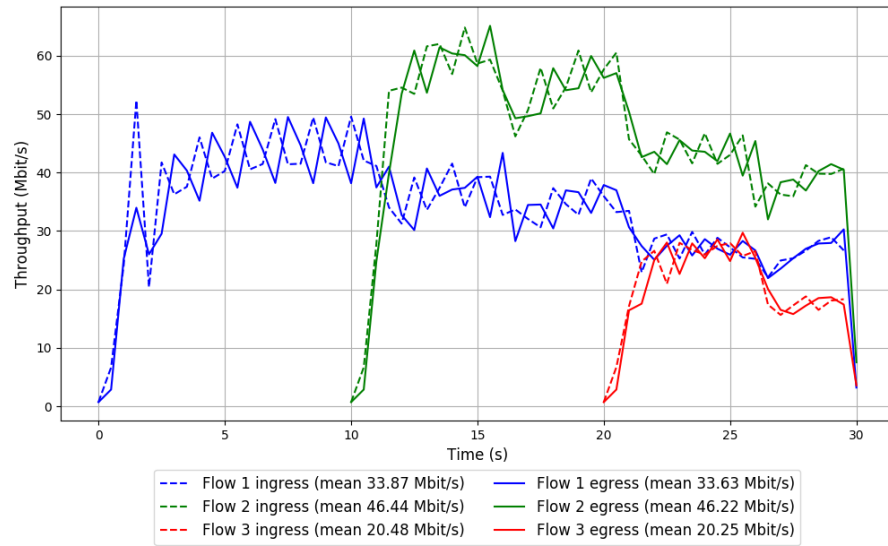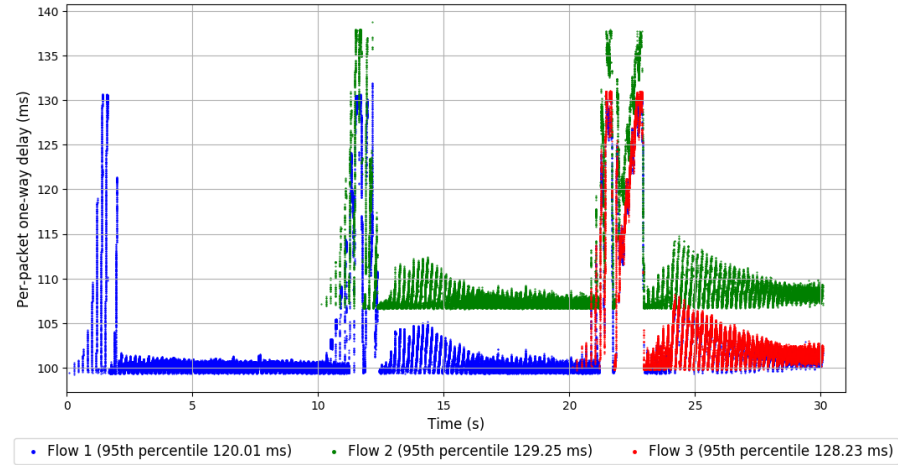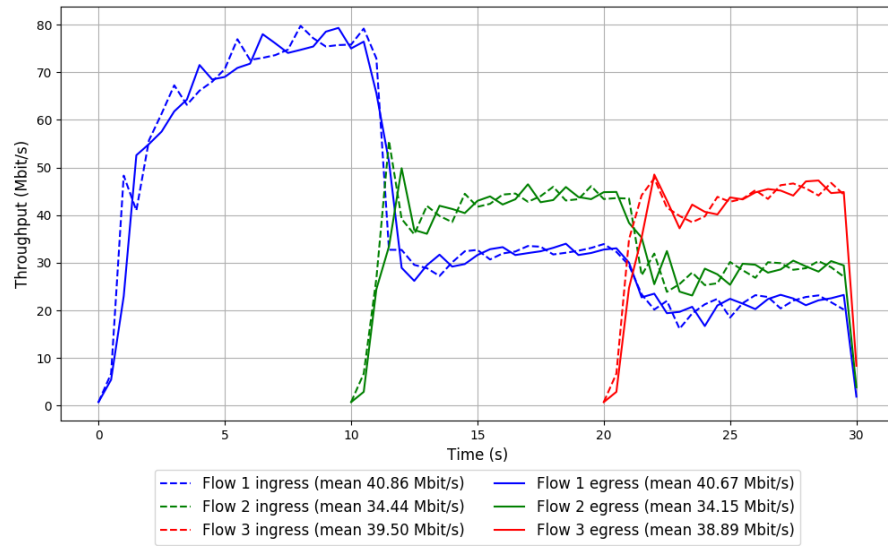
Run 3: Report of TCP Cubic — Data Link

- - - Flow 1 ingress (mean 28.14 Mbit/s) —— Flow 1 egress (mean 27.98 Mbit/s)
- - - Flow 2 ingress (mean 56.64 Mbit/s) —— Flow 2 egress (mean 56.41 Mbit/s)
- - - Flow 3 ingress (mean 11.98 Mbit/s) —— Flow 3 egress (mean 11.95 Mbit/s)

• Flow 1 (95th percentile 125.88 ms)   • Flow 2 (95th percentile 127.03 ms)   • Flow 3 (95th percentile 131.91 ms)

```
Run 4: Statistics of TCP Cubic

Start at: 2018-04-24 21:53:01
End at: 2018-04-24 21:53:31
Local clock offset: -4.986 ms
Remote clock offset: 4.576 ms


# Below is generated by plot.py at 2018-04-25 00:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.04 Mbit/s
95th percentile per-packet one-way delay: 122.686 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 47.53 Mbit/s
95th percentile per-packet one-way delay: 115.882 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 35.51 Mbit/s
95th percentile per-packet one-way delay: 124.309 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 26.71 Mbit/s
95th percentile per-packet one-way delay: 130.038 ms
Loss rate: 1.12%
```
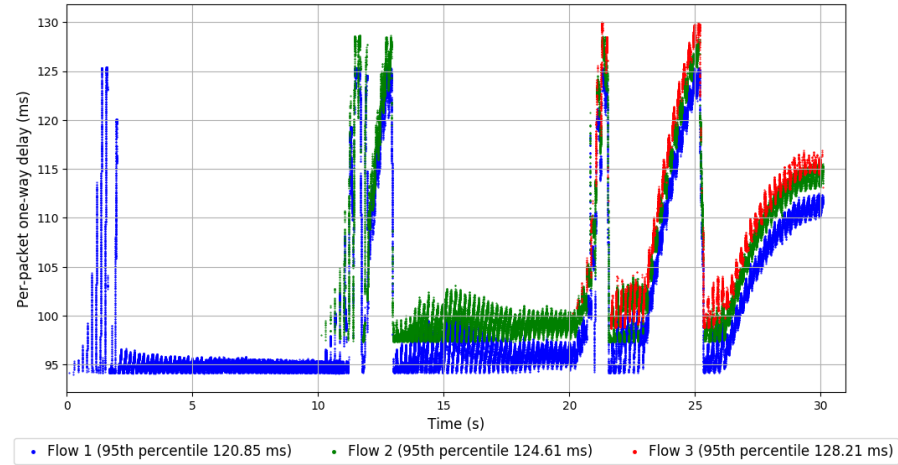
Run 4: Report of TCP Cubic — Data Link

```
Run 5: Statistics of TCP Cubic

Start at: 2018-04-24 22:15:32
End at: 2018-04-24 22:16:02
Local clock offset: -5.174 ms
Remote clock offset: 8.866 ms


# Below is generated by plot.py at 2018-04-25 00:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.65 Mbit/s
95th percentile per-packet one-way delay: 131.305 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 46.59 Mbit/s
95th percentile per-packet one-way delay: 126.803 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 34.66 Mbit/s
95th percentile per-packet one-way delay: 135.289 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 27.04 Mbit/s
95th percentile per-packet one-way delay: 132.106 ms
Loss rate: 1.22%
```
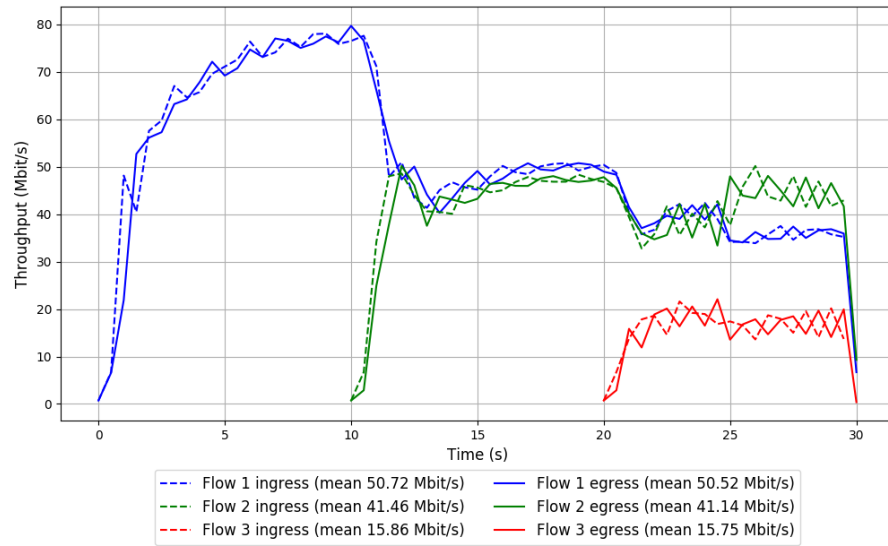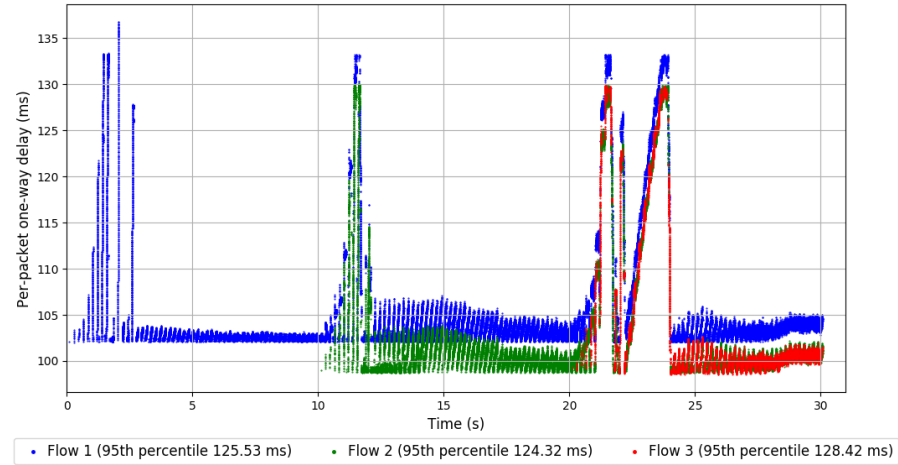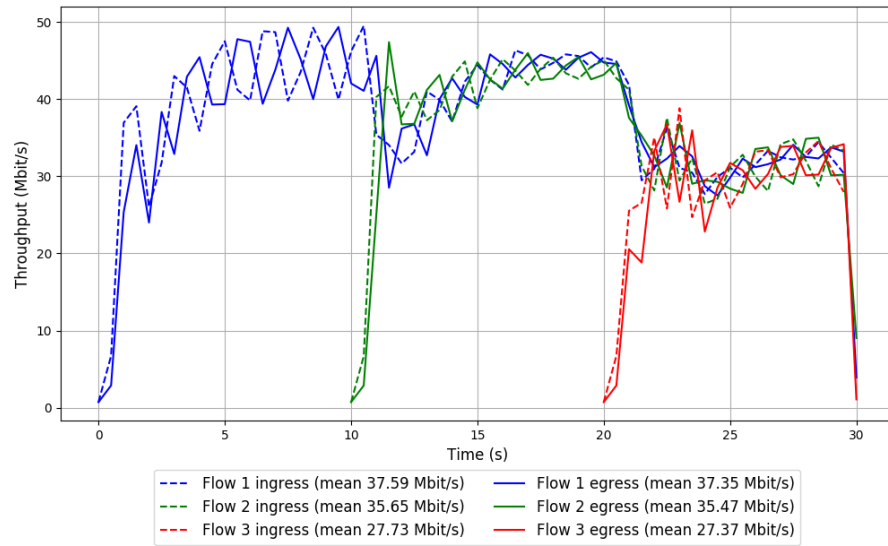
Run 5: Report of TCP Cubic — Data Link

- - - Flow 1 ingress (mean 46.87 Mbit/s) —— Flow 1 egress (mean 46.59 Mbit/s)
- - - Flow 2 ingress (mean 34.95 Mbit/s) —— Flow 2 egress (mean 34.66 Mbit/s)
- - - Flow 3 ingress (mean 27.39 Mbit/s) —— Flow 3 egress (mean 27.04 Mbit/s)

• Flow 1 (95th percentile 126.80 ms)   • Flow 2 (95th percentile 135.29 ms)   • Flow 3 (95th percentile 132.11 ms)

```
Run 6: Statistics of TCP Cubic

Start at: 2018-04-24 22:38:04
End at: 2018-04-24 22:38:34
Local clock offset: -6.249 ms
Remote clock offset: 7.91 ms


# Below is generated by plot.py at 2018-04-25 00:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.13 Mbit/s
95th percentile per-packet one-way delay: 135.177 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 33.63 Mbit/s
95th percentile per-packet one-way delay: 134.762 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 46.22 Mbit/s
95th percentile per-packet one-way delay: 136.135 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 20.25 Mbit/s
95th percentile per-packet one-way delay: 130.374 ms
Loss rate: 1.11%
```
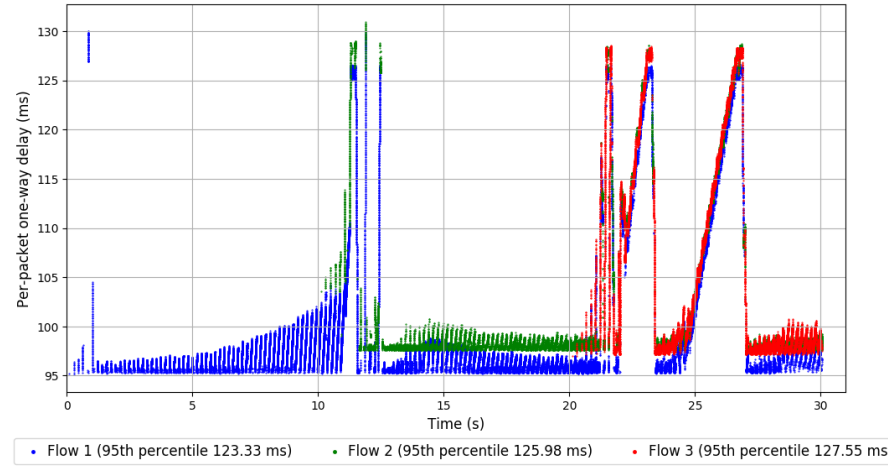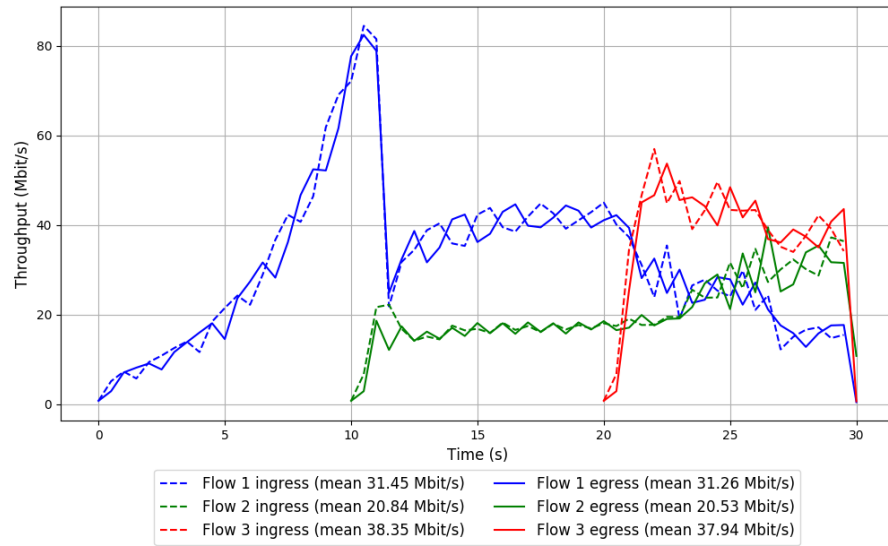
Run 6: Report of TCP Cubic — Data Link

```
Run 7: Statistics of TCP Cubic

Start at: 2018-04-24 23:00:37
End at: 2018-04-24 23:01:07
Local clock offset: -5.212 ms
Remote clock offset: 7.687 ms


# Below is generated by plot.py at 2018-04-25 00:57:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.32 Mbit/s
95th percentile per-packet one-way delay: 124.889 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 40.67 Mbit/s
95th percentile per-packet one-way delay: 120.010 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 34.15 Mbit/s
95th percentile per-packet one-way delay: 129.245 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 38.89 Mbit/s
95th percentile per-packet one-way delay: 128.232 ms
Loss rate: 1.54%
```
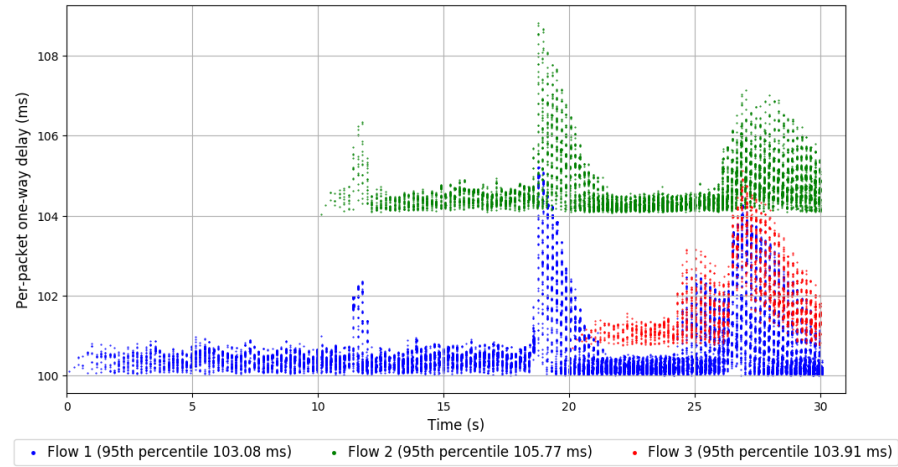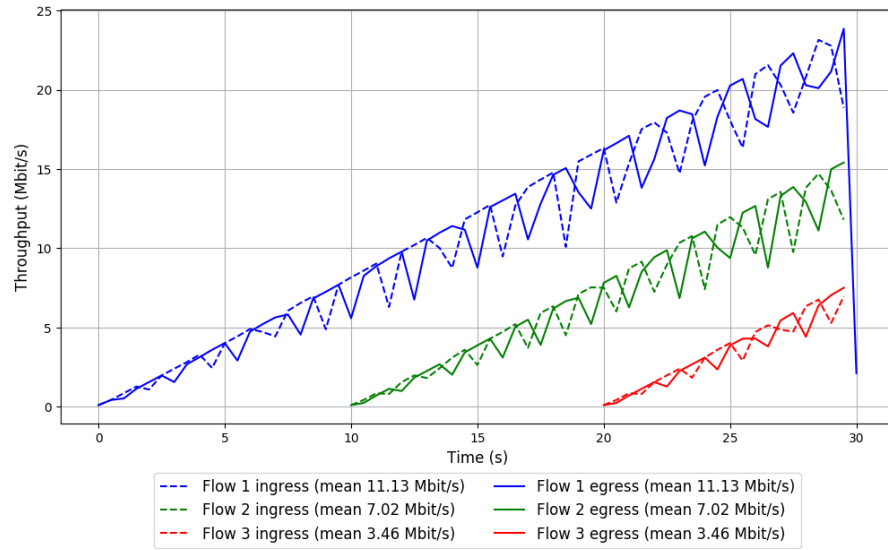
Run 7: Report of TCP Cubic — Data Link

```
Run 8: Statistics of TCP Cubic

Start at: 2018-04-24 23:23:16
End at: 2018-04-24 23:23:46
Local clock offset: -5.865 ms
Remote clock offset: 2.457 ms


# Below is generated by plot.py at 2018-04-25 00:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.14 Mbit/s
95th percentile per-packet one-way delay: 123.278 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 50.52 Mbit/s
95th percentile per-packet one-way delay: 120.853 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 41.14 Mbit/s
95th percentile per-packet one-way delay: 124.605 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 15.75 Mbit/s
95th percentile per-packet one-way delay: 128.205 ms
Loss rate: 0.58%
```

Run 8: Report of TCP Cubic — Data Link

```
Run 9: Statistics of TCP Cubic

Start at: 2018-04-24 23:45:30
End at: 2018-04-24 23:46:00
Local clock offset: -4.947 ms
Remote clock offset: 6.02 ms


# Below is generated by plot.py at 2018-04-25 00:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.07 Mbit/s
95th percentile per-packet one-way delay: 125.336 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 37.35 Mbit/s
95th percentile per-packet one-way delay: 125.529 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 35.47 Mbit/s
95th percentile per-packet one-way delay: 124.317 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 27.37 Mbit/s
95th percentile per-packet one-way delay: 128.418 ms
Loss rate: 1.26%
```
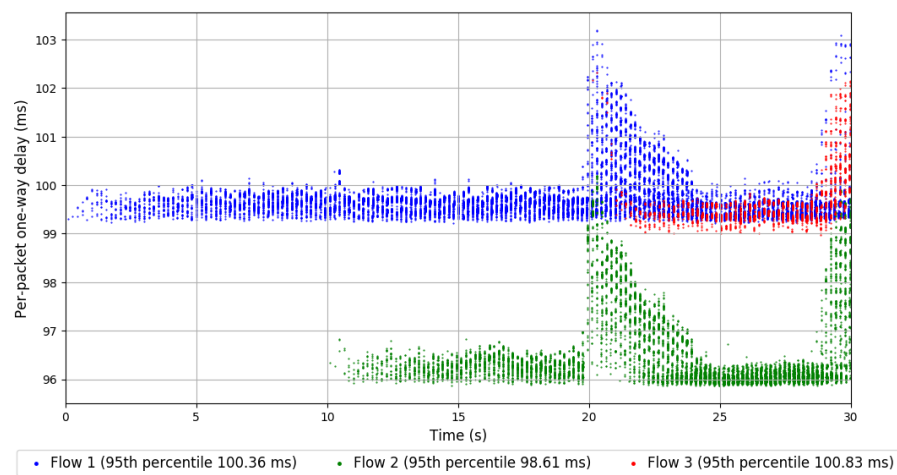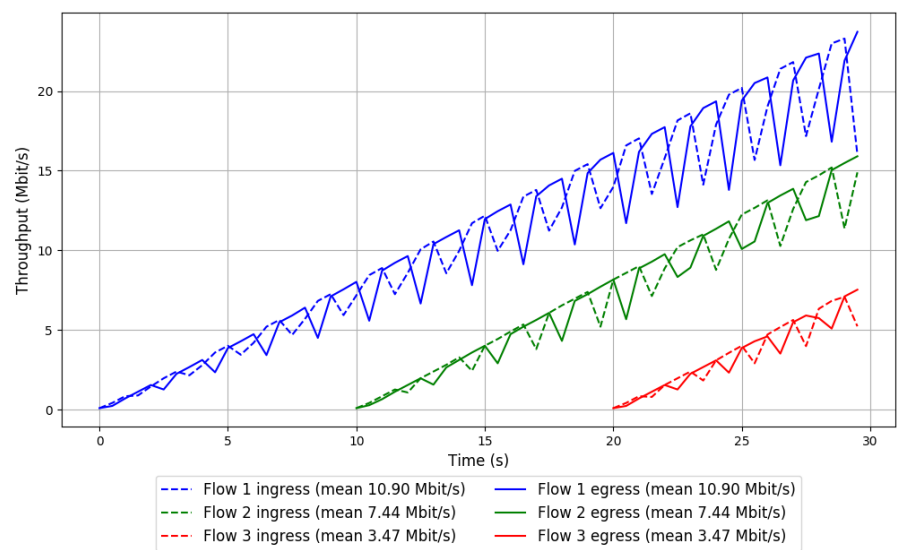
Run 9: Report of TCP Cubic — Data Link

```
Run 10: Statistics of TCP Cubic

Start at: 2018-04-25 00:08:07
End at: 2018-04-25 00:08:37
Local clock offset: -5.789 ms
Remote clock offset: 1.905 ms


# Below is generated by plot.py at 2018-04-25 00:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 57.50 Mbit/s
95th percentile per-packet one-way delay: 125.586 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 31.26 Mbit/s
95th percentile per-packet one-way delay: 123.326 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 20.53 Mbit/s
95th percentile per-packet one-way delay: 125.979 ms
Loss rate: 1.53%
-- Flow 3:
Average throughput: 37.94 Mbit/s
95th percentile per-packet one-way delay: 127.549 ms
Loss rate: 1.06%
```
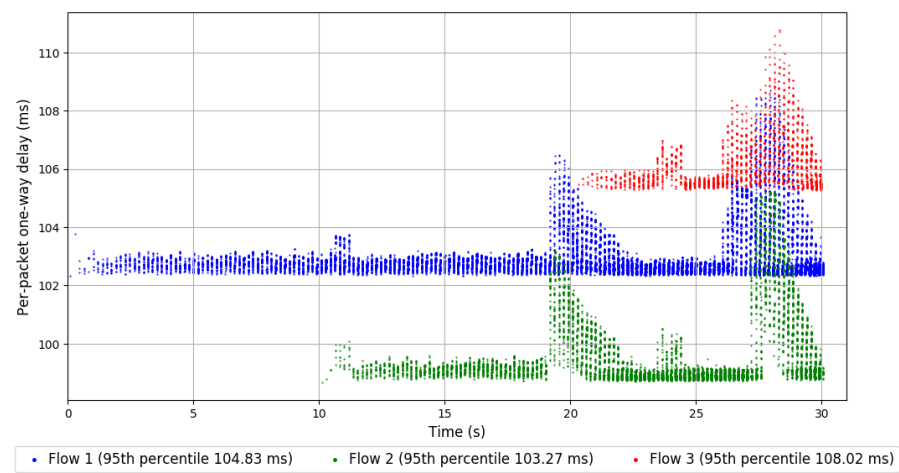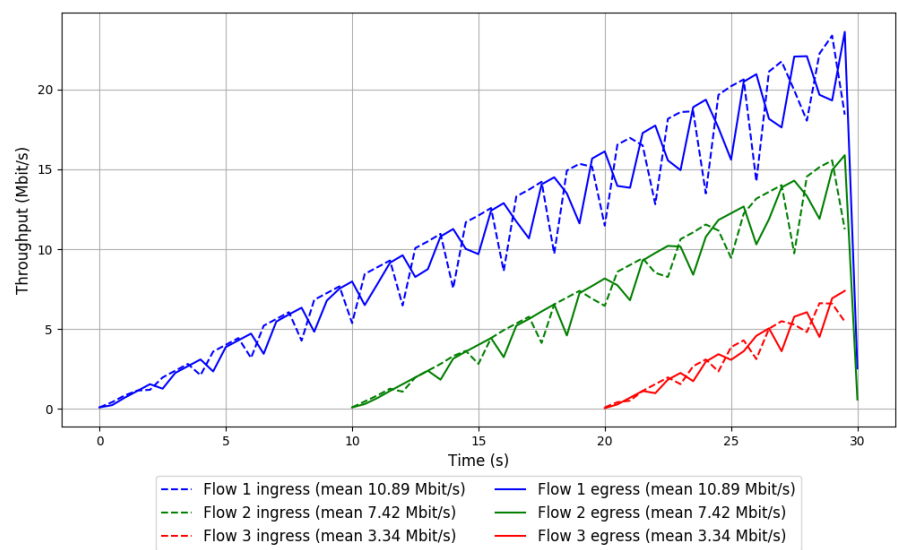
Run 10: Report of TCP Cubic — Data Link

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```
Run 1: Statistics of LEDBAT

Start at: 2018-04-24 20:58:20
End at: 2018-04-24 20:58:50
Local clock offset: -3.961 ms
Remote clock offset: 8.379 ms


# Below is generated by plot.py at 2018-04-25 00:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.93 Mbit/s
95th percentile per-packet one-way delay: 105.028 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.13 Mbit/s
95th percentile per-packet one-way delay: 103.079 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.02 Mbit/s
95th percentile per-packet one-way delay: 105.768 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.46 Mbit/s
95th percentile per-packet one-way delay: 103.906 ms
Loss rate: 0.00%
```
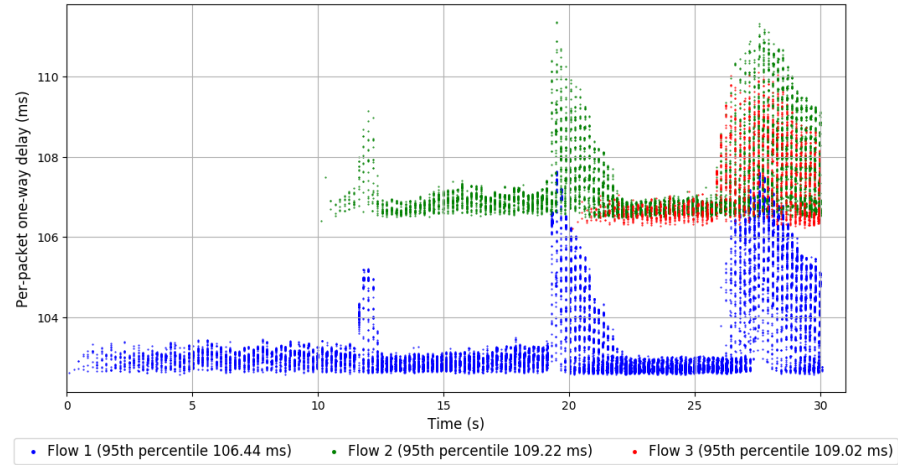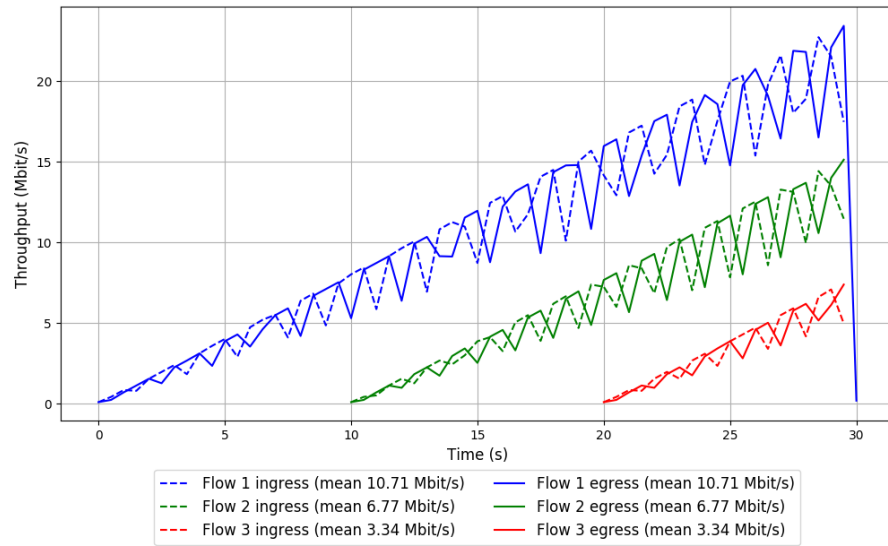
Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2018-04-24 21:20:56
End at: 2018-04-24 21:21:26
Local clock offset: -5.691 ms
Remote clock offset: 3.879 ms


# Below is generated by plot.py at 2018-04-25 00:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.99 Mbit/s
95th percentile per-packet one-way delay: 100.161 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 10.90 Mbit/s
95th percentile per-packet one-way delay: 100.359 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.44 Mbit/s
95th percentile per-packet one-way delay: 98.614 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.47 Mbit/s
95th percentile per-packet one-way delay: 100.834 ms
Loss rate: 0.00%
```
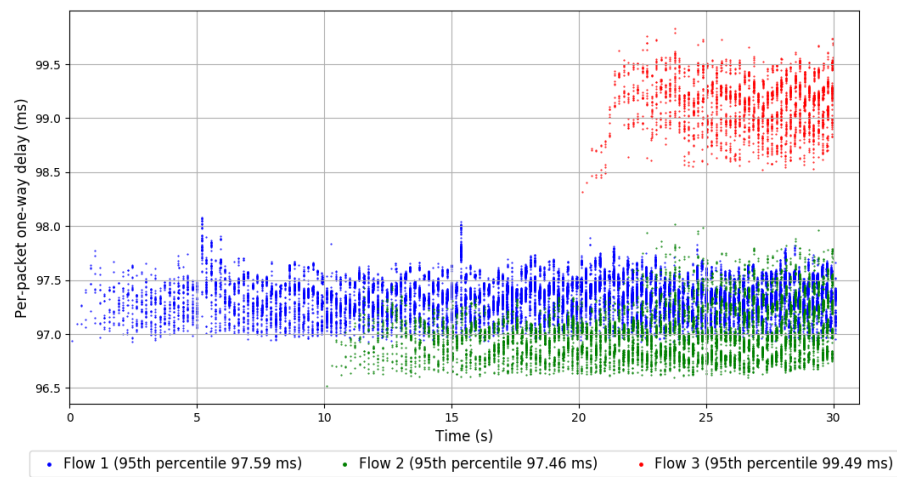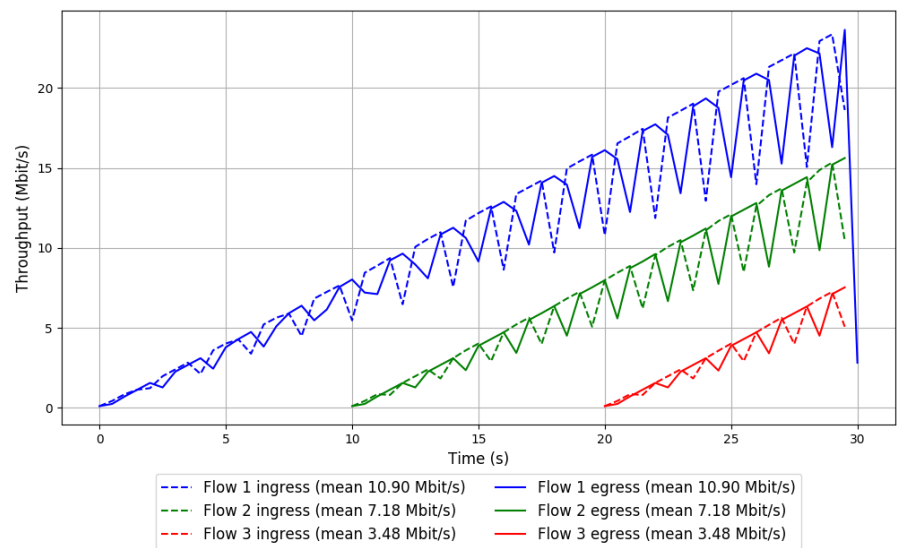
Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2018-04-24 21:43:32
End at: 2018-04-24 21:44:02
Local clock offset: -4.17 ms
Remote clock offset: 8.344 ms

# Below is generated by plot.py at 2018-04-25 00:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.93 Mbit/s
95th percentile per-packet one-way delay: 105.674 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 10.89 Mbit/s
95th percentile per-packet one-way delay: 104.833 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 7.42 Mbit/s
95th percentile per-packet one-way delay: 103.265 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.34 Mbit/s
95th percentile per-packet one-way delay: 108.023 ms
Loss rate: 0.00%
```
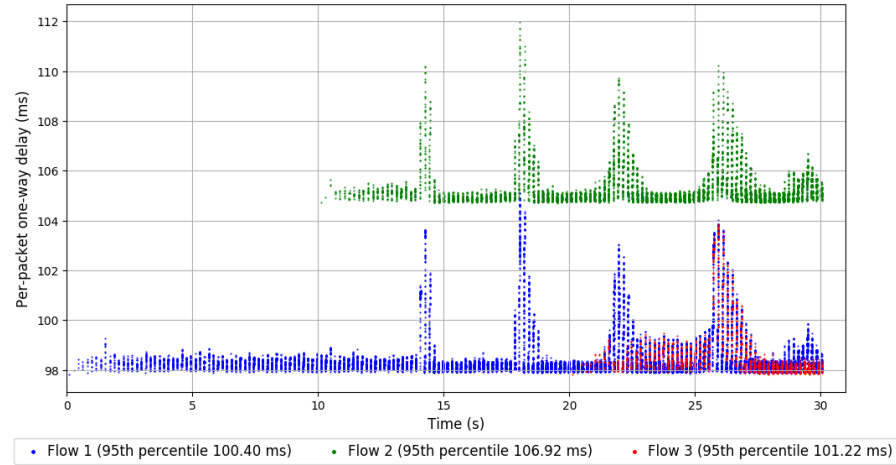
Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2018-04-24 22:06:01
End at: 2018-04-24 22:06:31
Local clock offset: -4.844 ms
Remote clock offset: 8.118 ms


# Below is generated by plot.py at 2018-04-25 00:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.30 Mbit/s
95th percentile per-packet one-way delay: 108.252 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 10.71 Mbit/s
95th percentile per-packet one-way delay: 106.442 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.77 Mbit/s
95th percentile per-packet one-way delay: 109.223 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.34 Mbit/s
95th percentile per-packet one-way delay: 109.019 ms
Loss rate: 0.00%
```
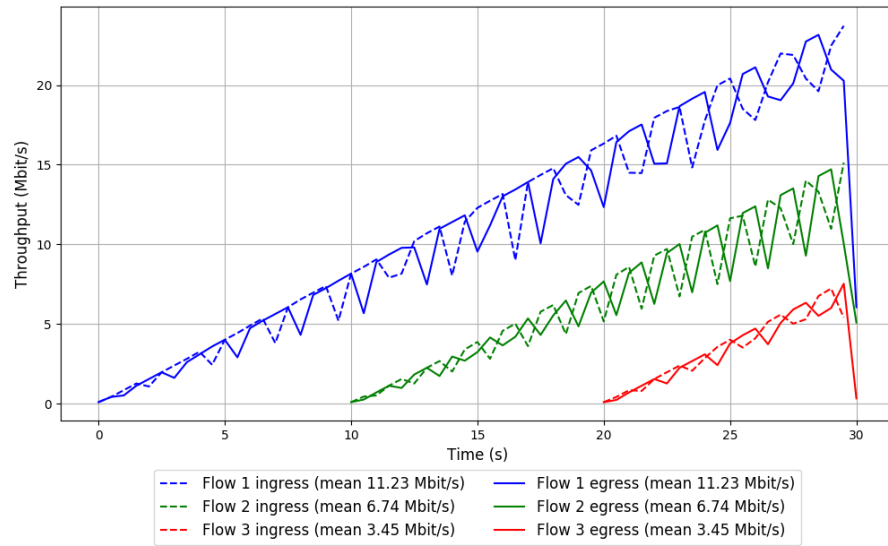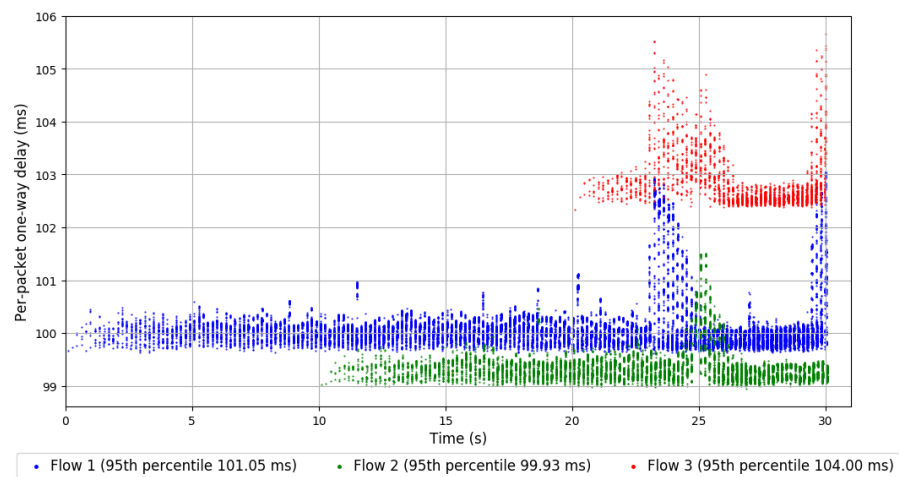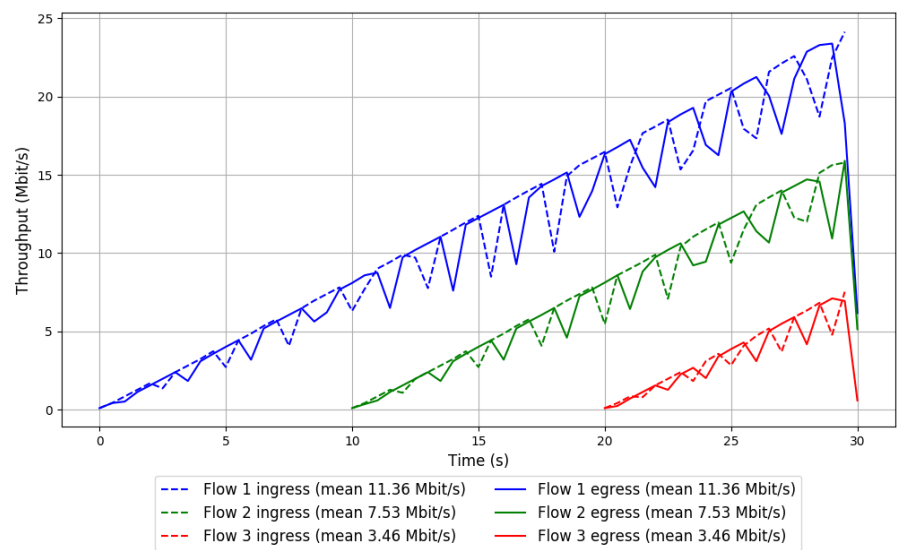
Run 4: Report of LEDBAT — Data Link

```
Run 5: Statistics of LEDBAT

Start at: 2018-04-24 22:28:35
End at: 2018-04-24 22:29:05
Local clock offset: -5.454 ms
Remote clock offset: 3.343 ms


# Below is generated by plot.py at 2018-04-25 00:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.80 Mbit/s
95th percentile per-packet one-way delay: 98.976 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 10.90 Mbit/s
95th percentile per-packet one-way delay: 97.592 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.18 Mbit/s
95th percentile per-packet one-way delay: 97.456 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.48 Mbit/s
95th percentile per-packet one-way delay: 99.494 ms
Loss rate: 0.00%
```
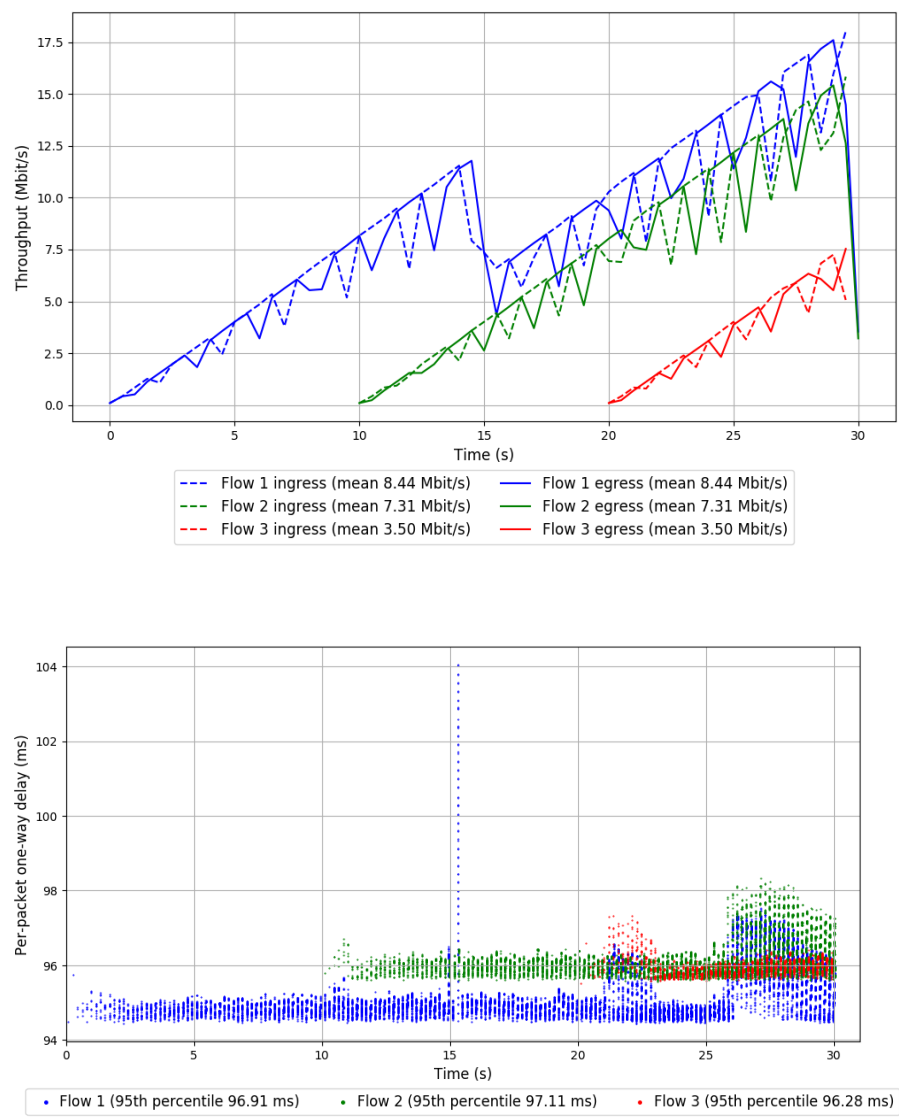
Run 5: Report of LEDBAT — Data Link

```
Run 6: Statistics of LEDBAT

Start at: 2018-04-24 22:51:05
End at: 2018-04-24 22:51:35
Local clock offset: -6.057 ms
Remote clock offset: 3.909 ms


# Below is generated by plot.py at 2018-04-25 00:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.85 Mbit/s
95th percentile per-packet one-way delay: 105.631 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.23 Mbit/s
95th percentile per-packet one-way delay: 100.404 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.74 Mbit/s
95th percentile per-packet one-way delay: 106.916 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.45 Mbit/s
95th percentile per-packet one-way delay: 101.221 ms
Loss rate: 0.00%
```

Run 6: Report of LEDBAT — Data Link

```
Run 7: Statistics of LEDBAT

Start at: 2018-04-24 23:13:41
End at: 2018-04-24 23:14:11
Local clock offset: -5.864 ms
Remote clock offset: 6.429 ms

# Below is generated by plot.py at 2018-04-25 00:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.50 Mbit/s
95th percentile per-packet one-way delay: 102.565 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.36 Mbit/s
95th percentile per-packet one-way delay: 101.054 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.53 Mbit/s
95th percentile per-packet one-way delay: 99.931 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.46 Mbit/s
95th percentile per-packet one-way delay: 104.002 ms
Loss rate: 0.00%
```
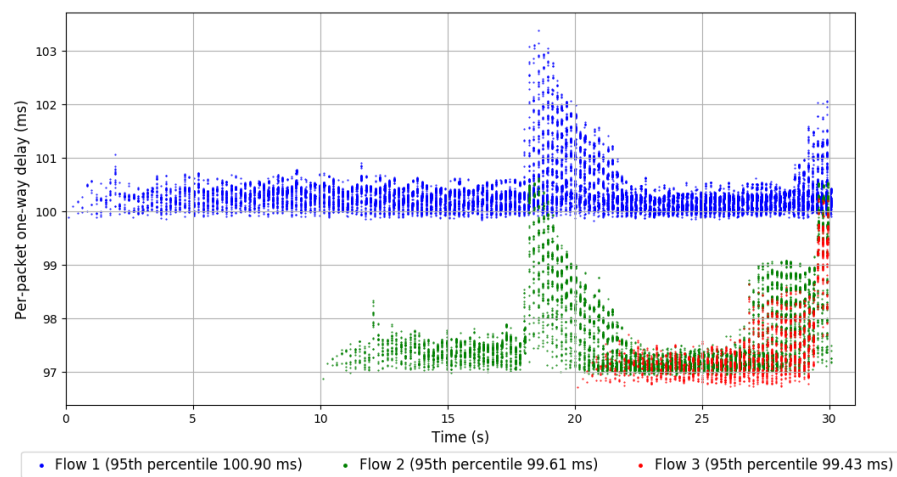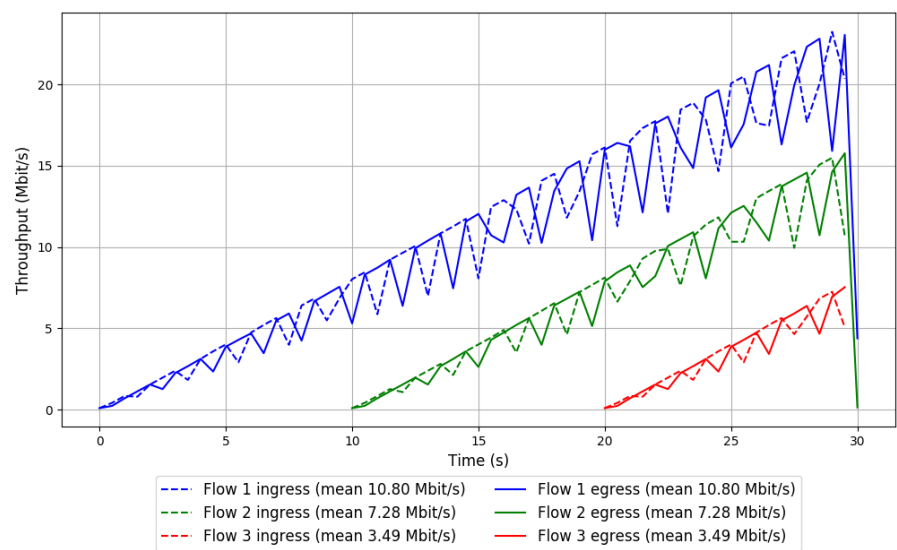
Run 7: Report of LEDBAT — Data Link

```
Run 8: Statistics of LEDBAT

Start at: 2018-04-24 23:36:16
End at: 2018-04-24 23:36:46
Local clock offset: -4.252 ms
Remote clock offset: 2.225 ms


# Below is generated by plot.py at 2018-04-25 00:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.44 Mbit/s
95th percentile per-packet one-way delay: 96.952 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 8.44 Mbit/s
95th percentile per-packet one-way delay: 96.906 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 7.31 Mbit/s
95th percentile per-packet one-way delay: 97.105 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.50 Mbit/s
95th percentile per-packet one-way delay: 96.278 ms
Loss rate: 0.00%
```
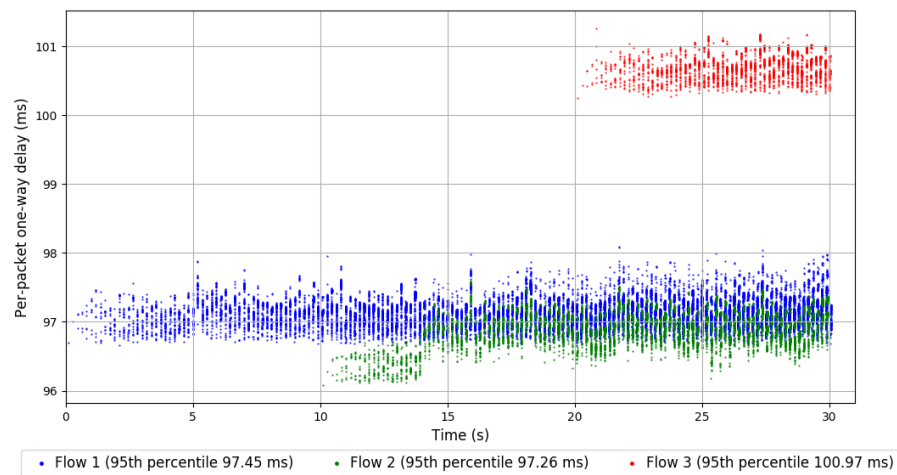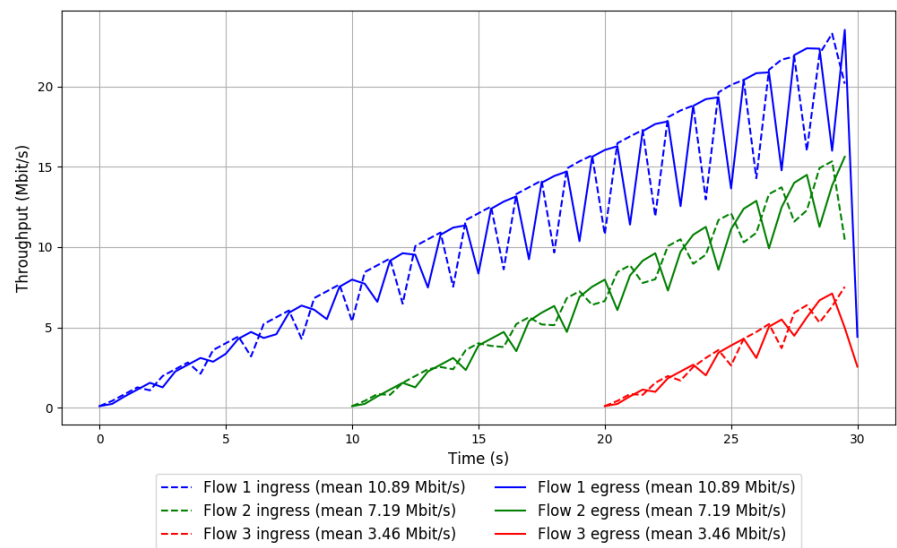
Run 8: Report of LEDBAT — Data Link

```
Run 9: Statistics of LEDBAT

Start at: 2018-04-24 23:58:31
End at: 2018-04-24 23:59:01
Local clock offset: -5.079 ms
Remote clock offset: 2.051 ms


# Below is generated by plot.py at 2018-04-25 00:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.79 Mbit/s
95th percentile per-packet one-way delay: 100.624 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 10.80 Mbit/s
95th percentile per-packet one-way delay: 100.904 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 7.28 Mbit/s
95th percentile per-packet one-way delay: 99.615 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.49 Mbit/s
95th percentile per-packet one-way delay: 99.429 ms
Loss rate: 0.00%
```
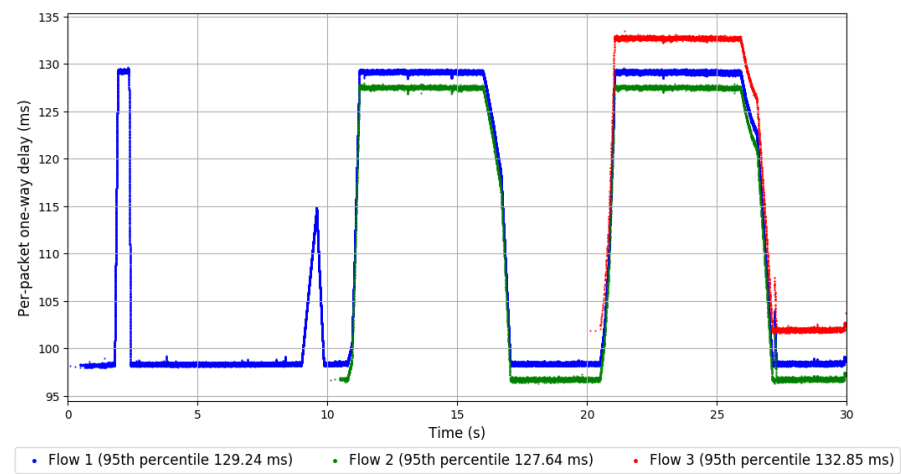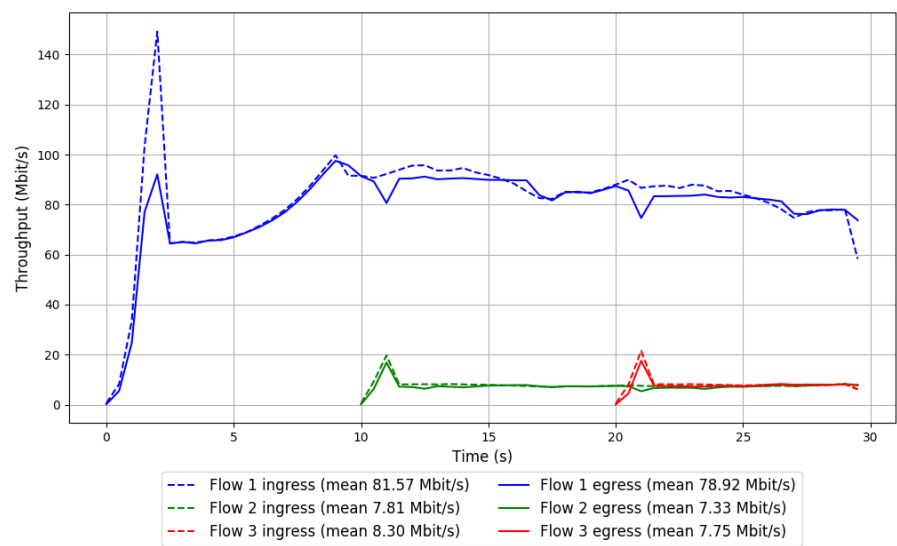
Run 9: Report of LEDBAT — Data Link

Flow 1 ingress (mean 10.80 Mbit/s) Flow 1 egress (mean 10.80 Mbit/s)
Flow 2 ingress (mean 7.28 Mbit/s) Flow 2 egress (mean 7.28 Mbit/s)
Flow 3 ingress (mean 3.49 Mbit/s) Flow 3 egress (mean 3.49 Mbit/s)

Flow 1 (95th percentile 100.90 ms) Flow 2 (95th percentile 99.61 ms) Flow 3 (95th percentile 99.43 ms)

```
Run 10: Statistics of LEDBAT

Start at: 2018-04-25 00:21:07
End at: 2018-04-25 00:21:38
Local clock offset: -4.219 ms
Remote clock offset: 3.151 ms


# Below is generated by plot.py at 2018-04-25 00:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.79 Mbit/s
95th percentile per-packet one-way delay: 100.577 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 10.89 Mbit/s
95th percentile per-packet one-way delay: 97.454 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.19 Mbit/s
95th percentile per-packet one-way delay: 97.262 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.46 Mbit/s
95th percentile per-packet one-way delay: 100.970 ms
Loss rate: 0.00%
```
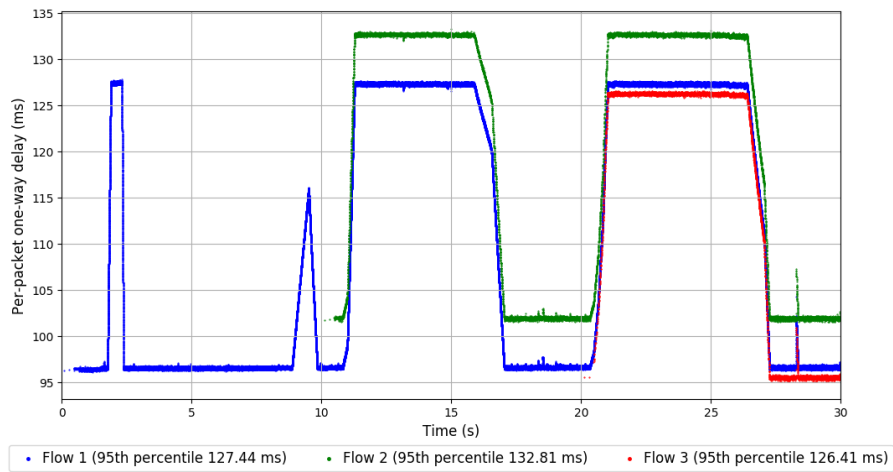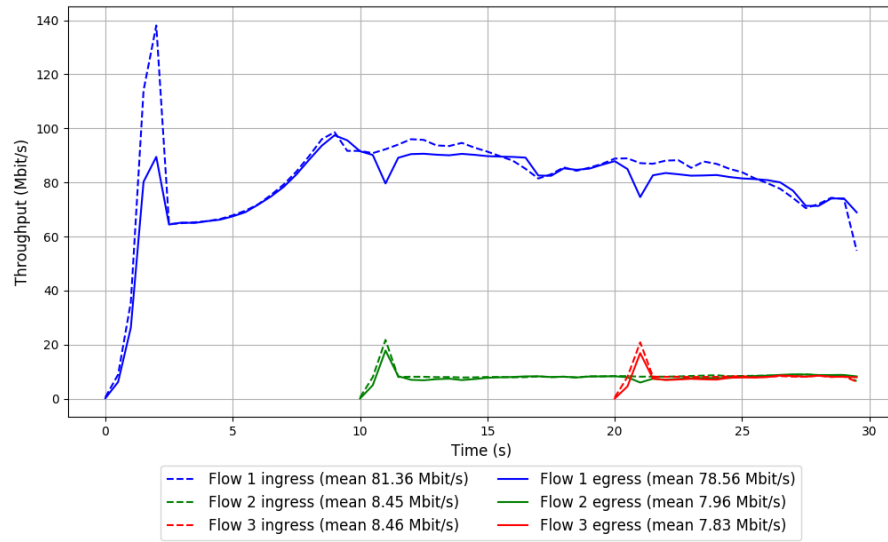
Run 10: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC-Allegro

Start at: 2018-04-24 20:49:18
End at: 2018-04-24 20:49:48
Local clock offset: -4.794 ms
Remote clock offset: 3.615 ms


# Below is generated by plot.py at 2018-04-25 00:58:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.34 Mbit/s
95th percentile per-packet one-way delay: 129.255 ms
Loss rate: 3.53%
-- Flow 1:
Average throughput: 78.92 Mbit/s
95th percentile per-packet one-way delay: 129.238 ms
Loss rate: 3.25%
-- Flow 2:
Average throughput: 7.33 Mbit/s
95th percentile per-packet one-way delay: 127.637 ms
Loss rate: 6.19%
-- Flow 3:
Average throughput: 7.75 Mbit/s
95th percentile per-packet one-way delay: 132.853 ms
Loss rate: 6.67%
```
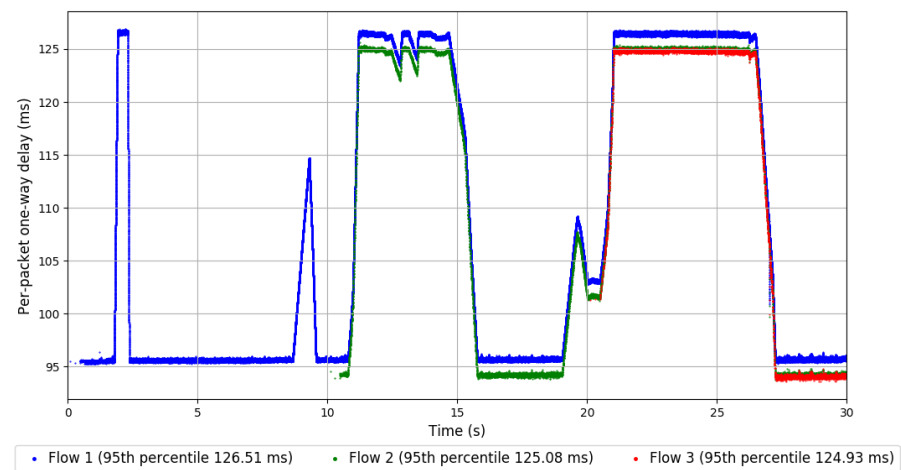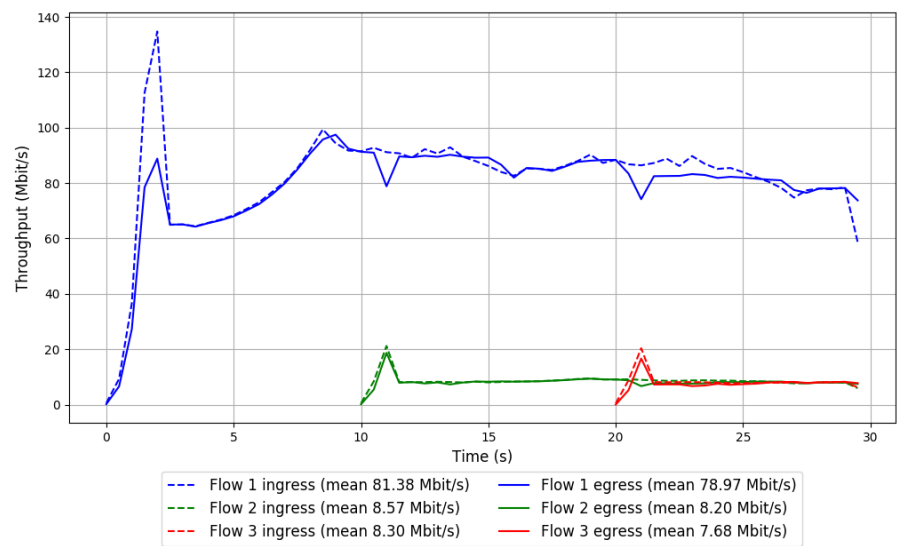
Run 1: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 81.57 Mbit/s)   Flow 1 egress (mean 78.92 Mbit/s)
Flow 2 ingress (mean 7.81 Mbit/s)   Flow 2 egress (mean 7.33 Mbit/s)
Flow 3 ingress (mean 8.30 Mbit/s)   Flow 3 egress (mean 7.75 Mbit/s)

Flow 1 (95th percentile 129.24 ms)   Flow 2 (95th percentile 127.64 ms)   Flow 3 (95th percentile 132.85 ms)

```
Run 2: Statistics of PCC-Allegro

Start at: 2018-04-24 21:11:54
End at: 2018-04-24 21:12:24
Local clock offset: -4.916 ms
Remote clock offset: 3.88 ms


# Below is generated by plot.py at 2018-04-25 00:58:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.42 Mbit/s
95th percentile per-packet one-way delay: 127.489 ms
Loss rate: 3.72%
-- Flow 1:
Average throughput: 78.56 Mbit/s
95th percentile per-packet one-way delay: 127.438 ms
Loss rate: 3.45%
-- Flow 2:
Average throughput: 7.96 Mbit/s
95th percentile per-packet one-way delay: 132.815 ms
Loss rate: 5.83%
-- Flow 3:
Average throughput: 7.83 Mbit/s
95th percentile per-packet one-way delay: 126.405 ms
Loss rate: 7.45%
```
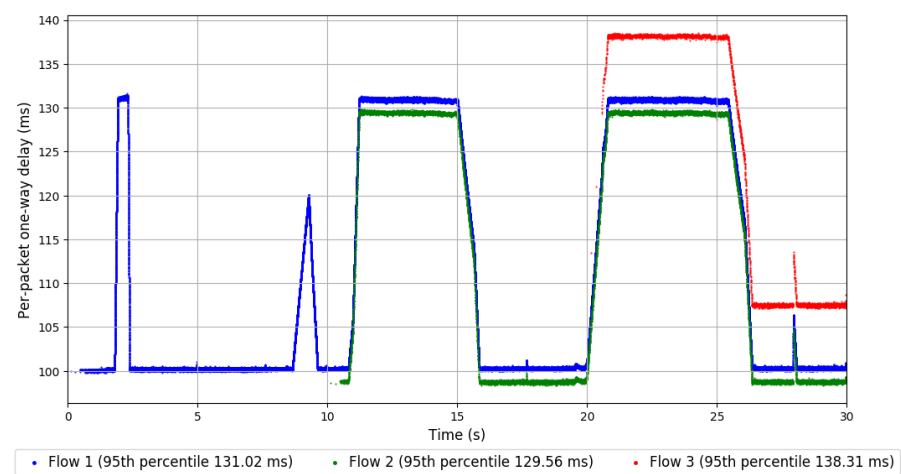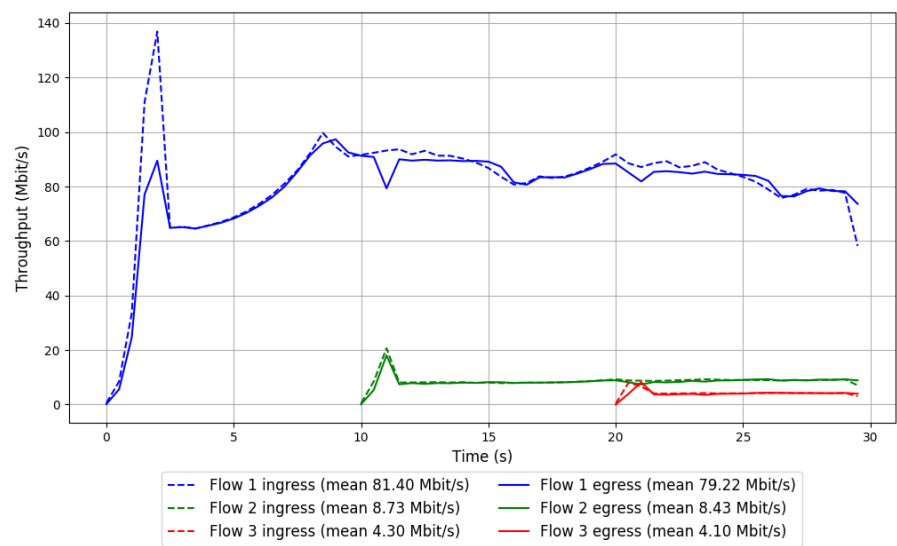
Run 2: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 81.36 Mbit/s) — Flow 1 egress (mean 78.56 Mbit/s)
Flow 2 ingress (mean 8.45 Mbit/s) — Flow 2 egress (mean 7.96 Mbit/s)
Flow 3 ingress (mean 8.46 Mbit/s) — Flow 3 egress (mean 7.83 Mbit/s)

Flow 1 (95th percentile 127.44 ms)   Flow 2 (95th percentile 132.81 ms)   Flow 3 (95th percentile 126.41 ms)

68

```
Run 3: Statistics of PCC-Allegro

Start at: 2018-04-24 21:34:28
End at: 2018-04-24 21:34:58
Local clock offset: -4.1 ms
Remote clock offset: 3.844 ms


# Below is generated by plot.py at 2018-04-25 00:58:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.95 Mbit/s
95th percentile per-packet one-way delay: 126.499 ms
Loss rate: 3.19%
-- Flow 1:
Average throughput: 78.97 Mbit/s
95th percentile per-packet one-way delay: 126.506 ms
Loss rate: 2.96%
-- Flow 2:
Average throughput: 8.20 Mbit/s
95th percentile per-packet one-way delay: 125.084 ms
Loss rate: 4.32%
-- Flow 3:
Average throughput: 7.68 Mbit/s
95th percentile per-packet one-way delay: 124.930 ms
Loss rate: 7.60%
```
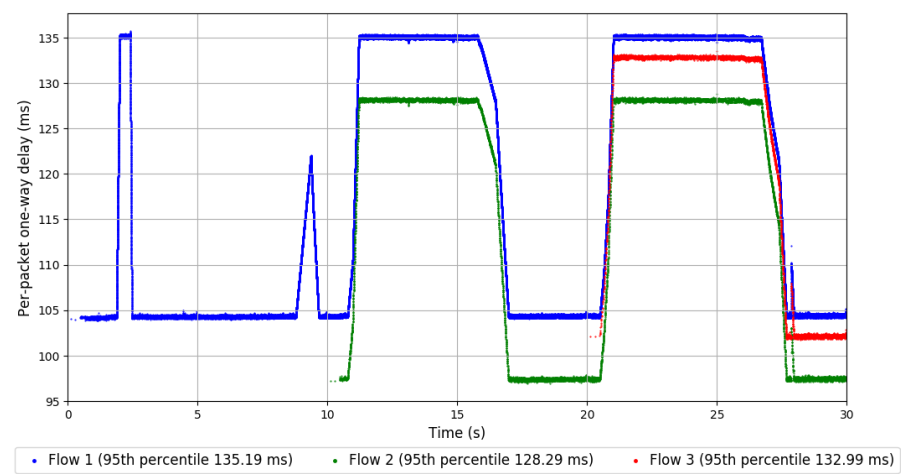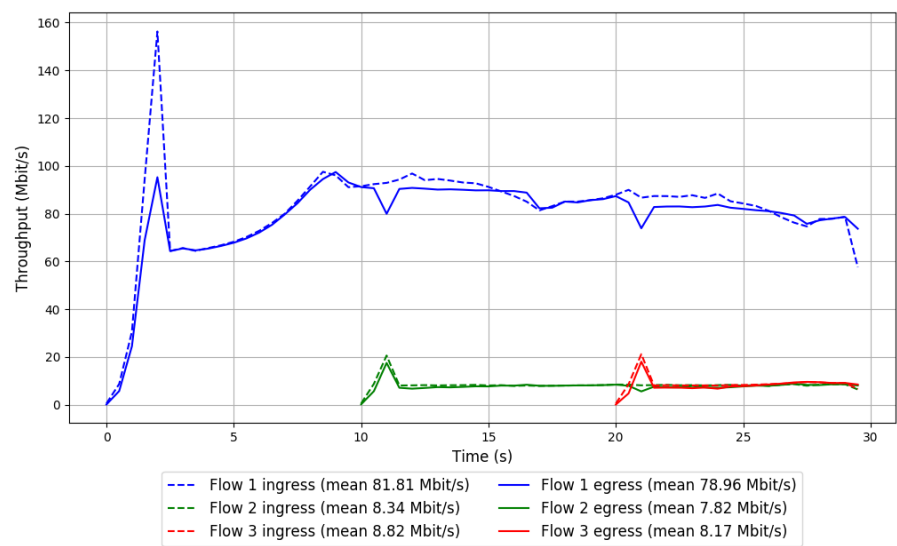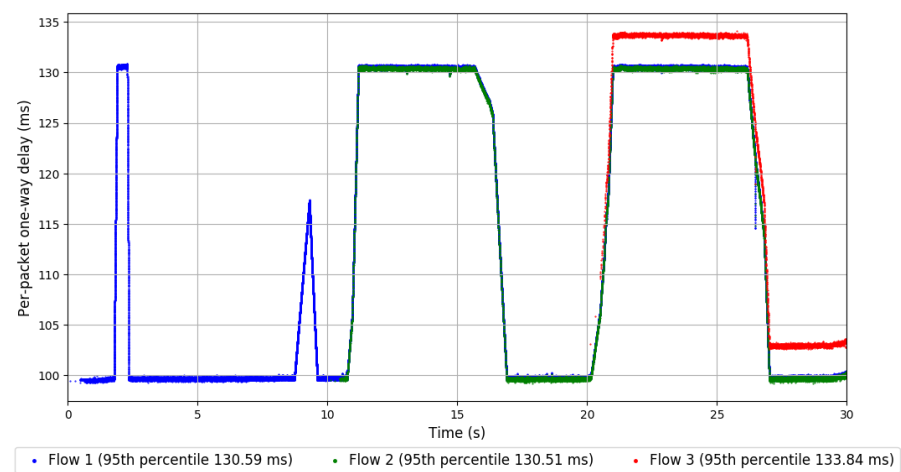
Run 3: Report of PCC-Allegro — Data Link

- - - Flow 1 ingress (mean 81.38 Mbit/s)   —— Flow 1 egress (mean 78.97 Mbit/s)
- - - Flow 2 ingress (mean 8.57 Mbit/s)   —— Flow 2 egress (mean 8.20 Mbit/s)
- - - Flow 3 ingress (mean 8.30 Mbit/s)   —— Flow 3 egress (mean 7.68 Mbit/s)

• Flow 1 (95th percentile 126.51 ms)   • Flow 2 (95th percentile 125.08 ms)   • Flow 3 (95th percentile 124.93 ms)

70

```
Run 4: Statistics of PCC-Allegro

Start at: 2018-04-24 21:57:00
End at: 2018-04-24 21:57:30
Local clock offset: -4.149 ms
Remote clock offset: 8.198 ms

# Below is generated by plot.py at 2018-04-25 00:58:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.16 Mbit/s
95th percentile per-packet one-way delay: 131.027 ms
Loss rate: 2.76%
-- Flow 1:
Average throughput: 79.22 Mbit/s
95th percentile per-packet one-way delay: 131.018 ms
Loss rate: 2.68%
-- Flow 2:
Average throughput: 8.43 Mbit/s
95th percentile per-packet one-way delay: 129.560 ms
Loss rate: 3.35%
-- Flow 3:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 138.308 ms
Loss rate: 4.79%
```
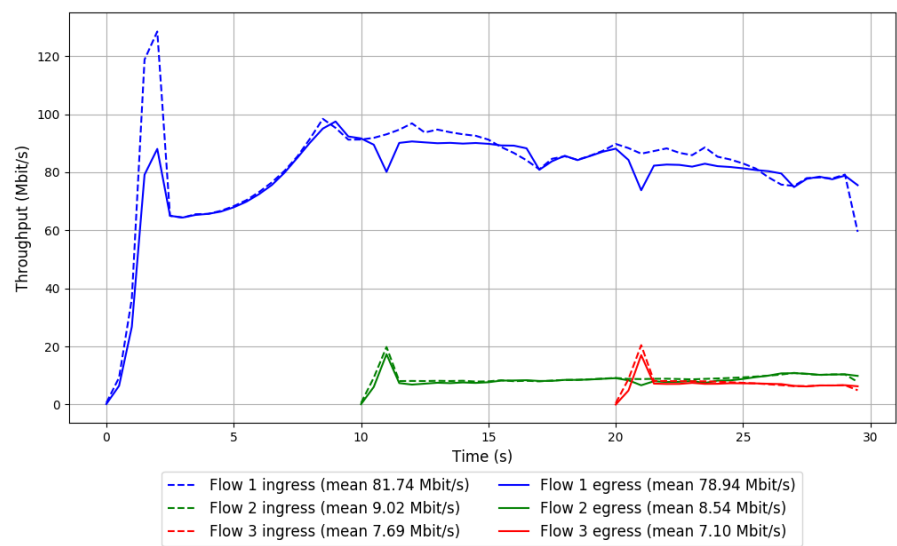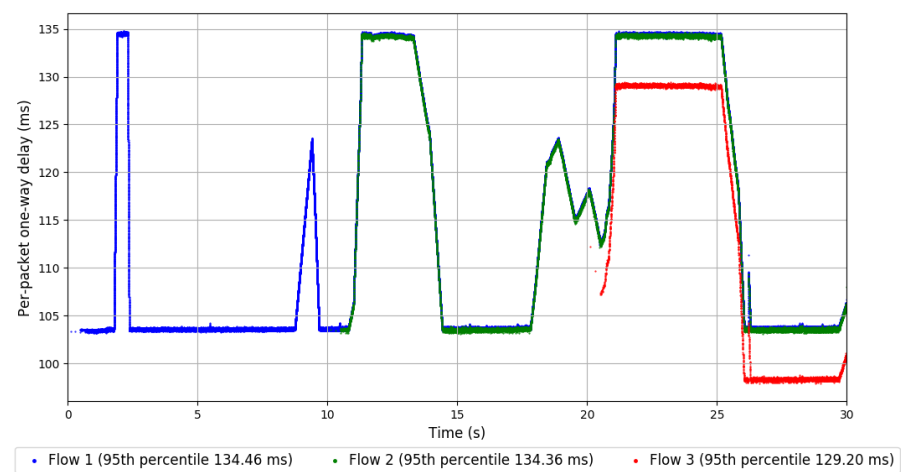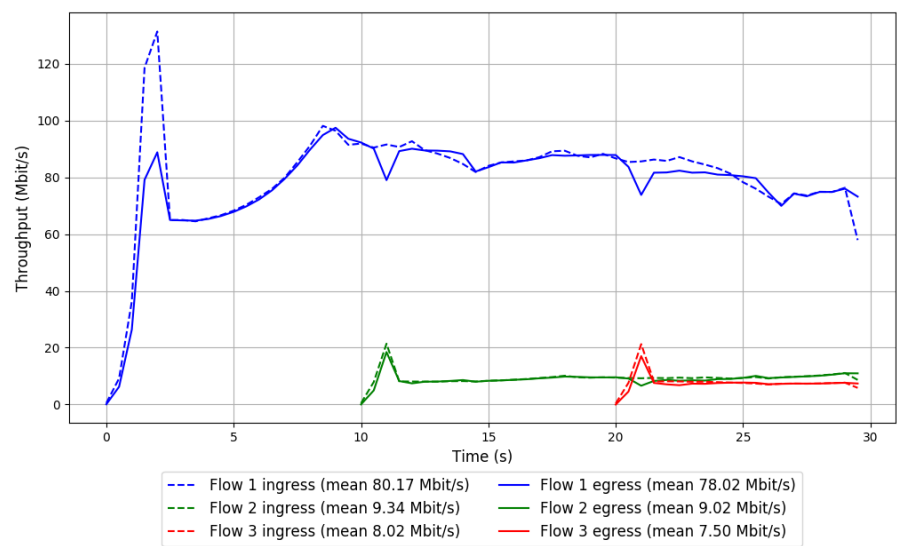
Run 4: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 81.40 Mbit/s) --- Flow 1 egress (mean 79.22 Mbit/s)
Flow 2 ingress (mean 8.73 Mbit/s) --- Flow 2 egress (mean 8.43 Mbit/s)
Flow 3 ingress (mean 4.30 Mbit/s) --- Flow 3 egress (mean 4.10 Mbit/s)

Flow 1 (95th percentile 131.02 ms)   Flow 2 (95th percentile 129.56 ms)   Flow 3 (95th percentile 138.31 ms)

72

```
Run 5: Statistics of PCC-Allegro

Start at: 2018-04-24 22:19:32
End at: 2018-04-24 22:20:02
Local clock offset: -5.279 ms
Remote clock offset: 7.241 ms


# Below is generated by plot.py at 2018-04-25 00:58:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.85 Mbit/s
95th percentile per-packet one-way delay: 135.185 ms
Loss rate: 3.78%
-- Flow 1:
Average throughput: 78.96 Mbit/s
95th percentile per-packet one-way delay: 135.191 ms
Loss rate: 3.49%
-- Flow 2:
Average throughput: 7.82 Mbit/s
95th percentile per-packet one-way delay: 128.288 ms
Loss rate: 6.22%
-- Flow 3:
Average throughput: 8.17 Mbit/s
95th percentile per-packet one-way delay: 132.992 ms
Loss rate: 7.39%
```
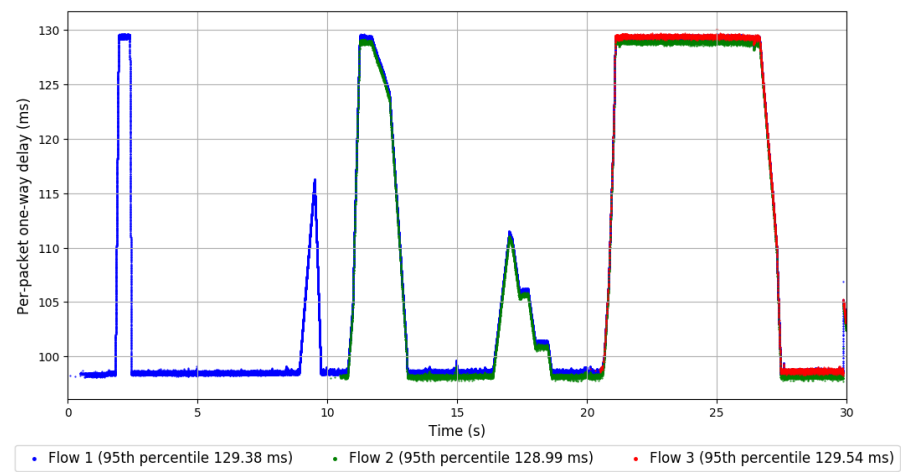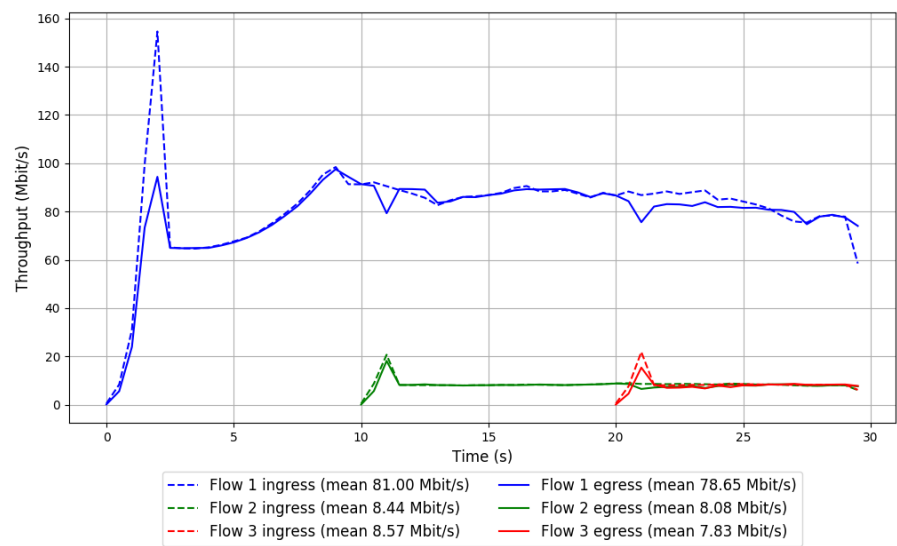
Run 5: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 81.81 Mbit/s) — — —   Flow 1 egress (mean 78.96 Mbit/s) ———
Flow 2 ingress (mean 8.34 Mbit/s) — — —   Flow 2 egress (mean 7.82 Mbit/s) ———
Flow 3 ingress (mean 8.82 Mbit/s) — — —   Flow 3 egress (mean 8.17 Mbit/s) ———

• Flow 1 (95th percentile 135.19 ms)   • Flow 2 (95th percentile 128.29 ms)   • Flow 3 (95th percentile 132.99 ms)

```
Run 6: Statistics of PCC-Allegro

Start at: 2018-04-24 22:42:03
End at: 2018-04-24 22:42:33
Local clock offset: -5.532 ms
Remote clock offset: 7.866 ms


# Below is generated by plot.py at 2018-04-25 00:58:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.96 Mbit/s
95th percentile per-packet one-way delay: 130.603 ms
Loss rate: 3.66%
-- Flow 1:
Average throughput: 78.94 Mbit/s
95th percentile per-packet one-way delay: 130.585 ms
Loss rate: 3.42%
-- Flow 2:
Average throughput: 8.54 Mbit/s
95th percentile per-packet one-way delay: 130.511 ms
Loss rate: 5.30%
-- Flow 3:
Average throughput: 7.10 Mbit/s
95th percentile per-packet one-way delay: 133.836 ms
Loss rate: 7.60%
```
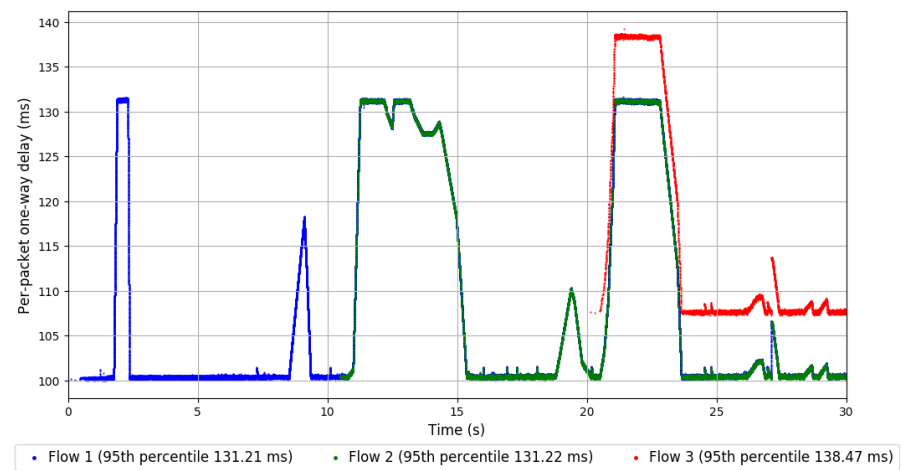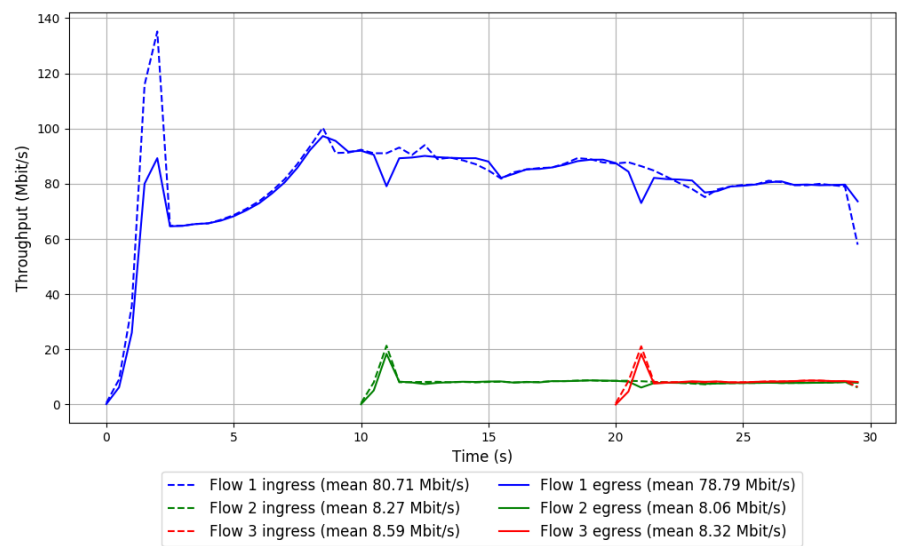
Run 6: Report of PCC-Allegro — Data Link

- - - Flow 1 ingress (mean 81.74 Mbit/s) — Flow 1 egress (mean 78.94 Mbit/s)
- - - Flow 2 ingress (mean 9.02 Mbit/s) — Flow 2 egress (mean 8.54 Mbit/s)
- - - Flow 3 ingress (mean 7.69 Mbit/s) — Flow 3 egress (mean 7.10 Mbit/s)

- Flow 1 (95th percentile 130.59 ms) • Flow 2 (95th percentile 130.51 ms) • Flow 3 (95th percentile 133.84 ms)

```
Run 7: Statistics of PCC-Allegro

Start at: 2018-04-24 23:04:36
End at: 2018-04-24 23:05:06
Local clock offset: -5.924 ms
Remote clock offset: 3.746 ms

# Below is generated by plot.py at 2018-04-25 00:58:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.49 Mbit/s
95th percentile per-packet one-way delay: 134.449 ms
Loss rate: 2.85%
-- Flow 1:
Average throughput: 78.02 Mbit/s
95th percentile per-packet one-way delay: 134.457 ms
Loss rate: 2.68%
-- Flow 2:
Average throughput: 9.02 Mbit/s
95th percentile per-packet one-way delay: 134.360 ms
Loss rate: 3.39%
-- Flow 3:
Average throughput: 7.50 Mbit/s
95th percentile per-packet one-way delay: 129.204 ms
Loss rate: 6.56%
```
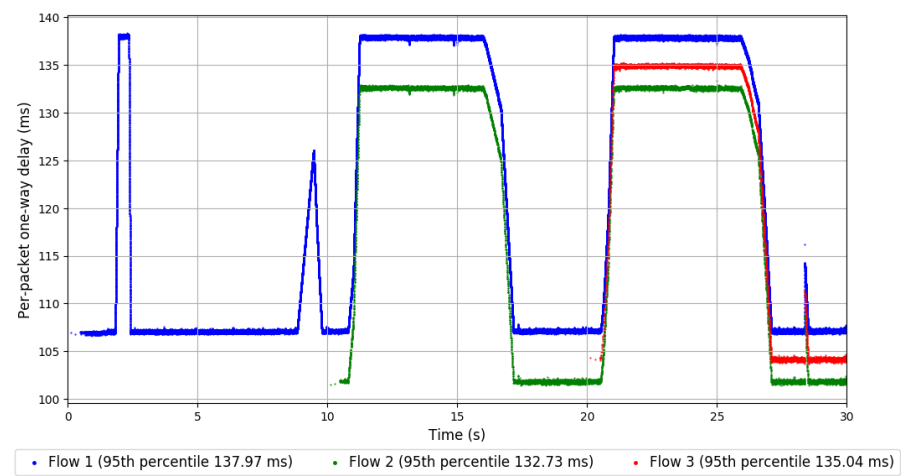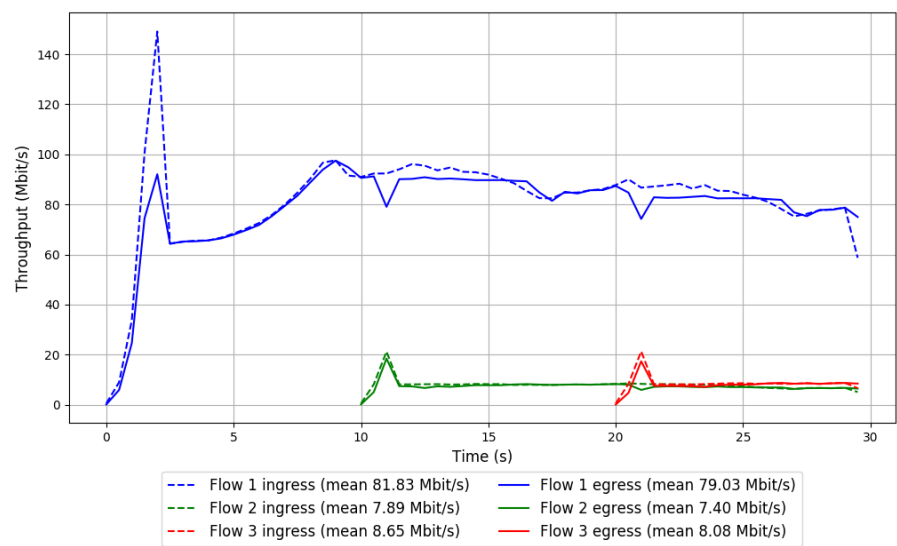
Run 7: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 80.17 Mbit/s)   Flow 1 egress (mean 78.02 Mbit/s)
Flow 2 ingress (mean 9.34 Mbit/s)   Flow 2 egress (mean 9.02 Mbit/s)
Flow 3 ingress (mean 8.02 Mbit/s)   Flow 3 egress (mean 7.50 Mbit/s)

Flow 1 (95th percentile 134.46 ms)   Flow 2 (95th percentile 134.36 ms)   Flow 3 (95th percentile 129.20 ms)

```
Run 8: Statistics of PCC-Allegro

Start at: 2018-04-24 23:27:15
End at: 2018-04-24 23:27:45
Local clock offset: -4.29 ms
Remote clock offset: 3.262 ms

# Below is generated by plot.py at 2018-04-25 00:58:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.60 Mbit/s
95th percentile per-packet one-way delay: 129.386 ms
Loss rate: 3.15%
-- Flow 1:
Average throughput: 78.65 Mbit/s
95th percentile per-packet one-way delay: 129.377 ms
Loss rate: 2.89%
-- Flow 2:
Average throughput: 8.08 Mbit/s
95th percentile per-packet one-way delay: 128.987 ms
Loss rate: 4.24%
-- Flow 3:
Average throughput: 7.83 Mbit/s
95th percentile per-packet one-way delay: 129.541 ms
Loss rate: 8.62%
```
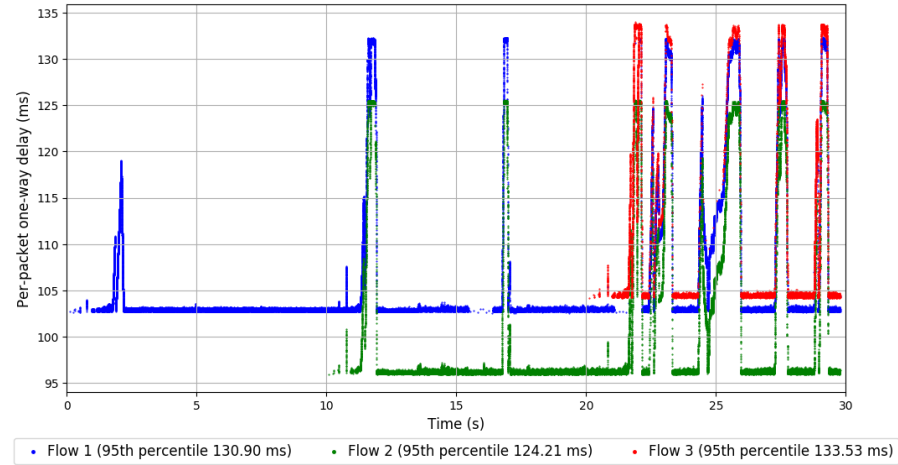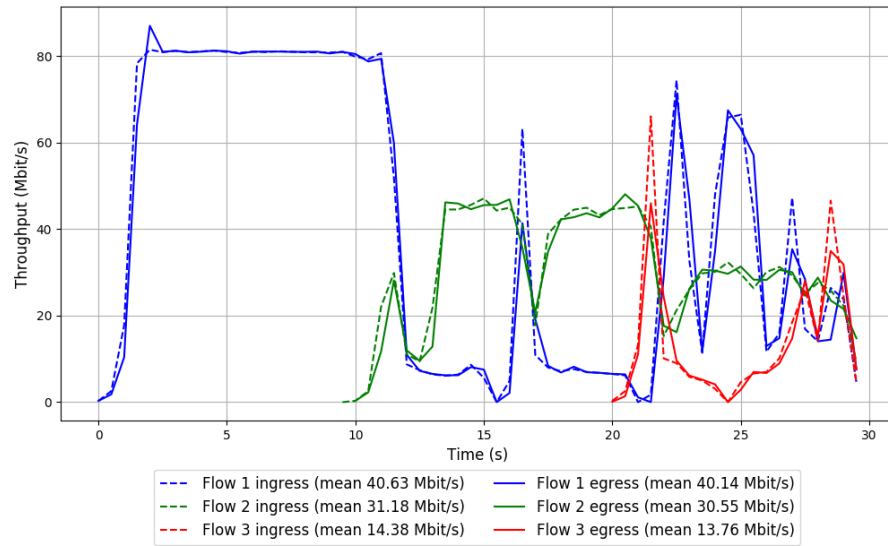
Run 8: Report of PCC-Allegro — Data Link

```
Run 9: Statistics of PCC-Allegro

Start at: 2018-04-24 23:49:29
End at: 2018-04-24 23:49:59
Local clock offset: -4.981 ms
Remote clock offset: 7.584 ms


# Below is generated by plot.py at 2018-04-25 00:59:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.87 Mbit/s
95th percentile per-packet one-way delay: 131.227 ms
Loss rate: 2.42%
-- Flow 1:
Average throughput: 78.79 Mbit/s
95th percentile per-packet one-way delay: 131.212 ms
Loss rate: 2.38%
-- Flow 2:
Average throughput: 8.06 Mbit/s
95th percentile per-packet one-way delay: 131.223 ms
Loss rate: 2.53%
-- Flow 3:
Average throughput: 8.32 Mbit/s
95th percentile per-packet one-way delay: 138.466 ms
Loss rate: 3.25%
```
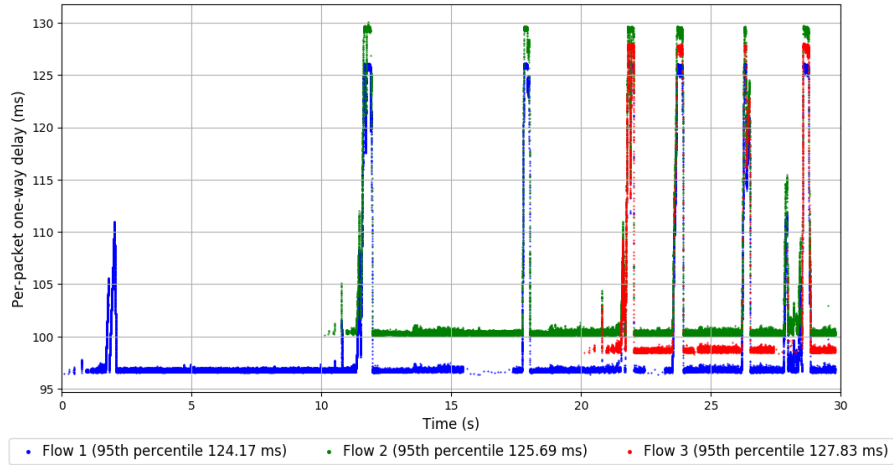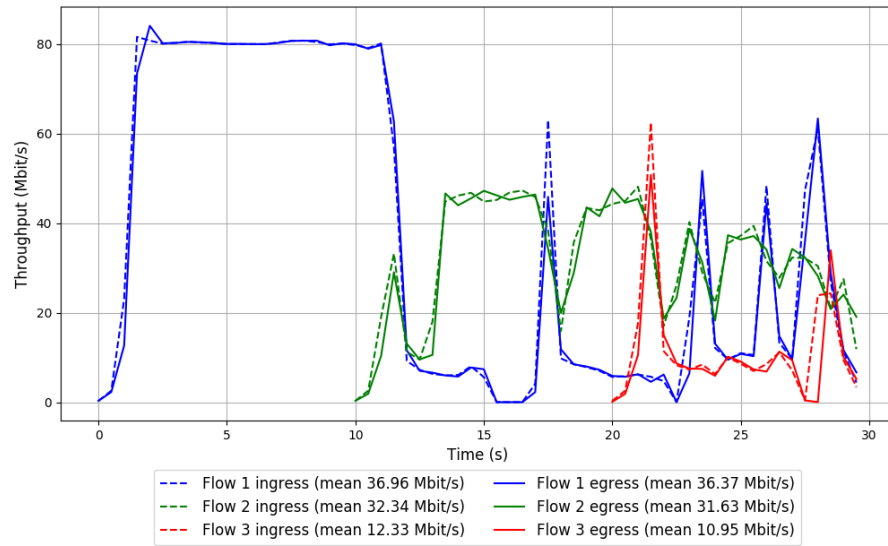
Run 9: Report of PCC-Allegro — Data Link

```
Run 10: Statistics of PCC-Allegro

Start at: 2018-04-25 00:12:06
End at: 2018-04-25 00:12:36
Local clock offset: -5.824 ms
Remote clock offset: 6.706 ms


# Below is generated by plot.py at 2018-04-25 00:59:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.61 Mbit/s
95th percentile per-packet one-way delay: 137.965 ms
Loss rate: 3.71%
-- Flow 1:
Average throughput: 79.03 Mbit/s
95th percentile per-packet one-way delay: 137.971 ms
Loss rate: 3.44%
-- Flow 2:
Average throughput: 7.40 Mbit/s
95th percentile per-packet one-way delay: 132.727 ms
Loss rate: 6.29%
-- Flow 3:
Average throughput: 8.08 Mbit/s
95th percentile per-packet one-way delay: 135.041 ms
Loss rate: 6.63%
```
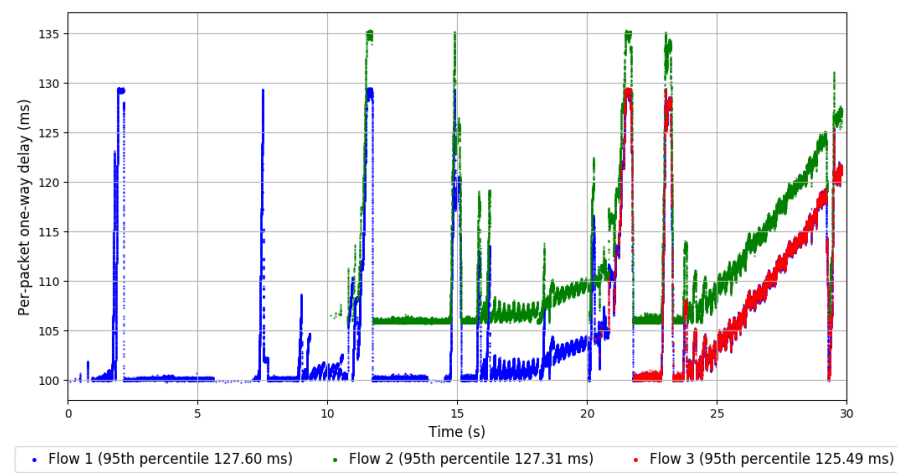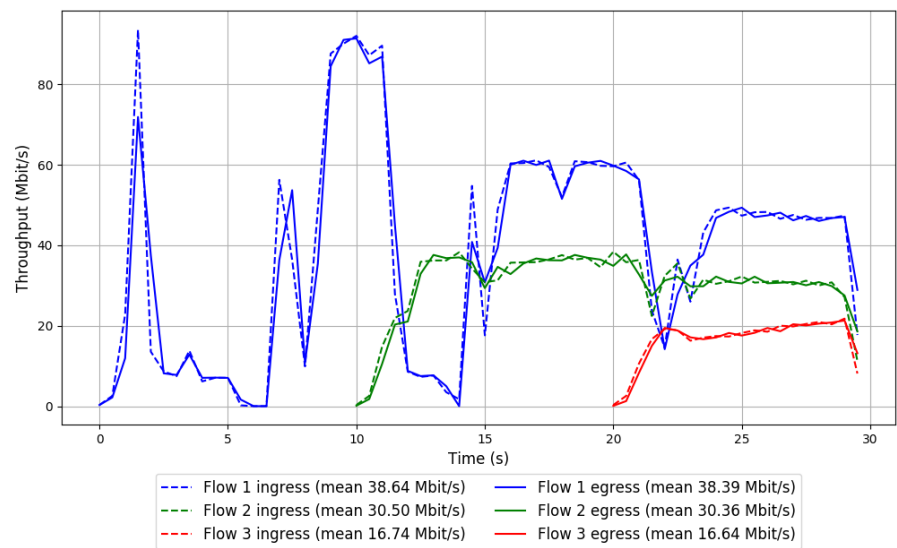
Run 10: Report of PCC-Allegro — Data Link

```
Run 1: Statistics of QUIC Cubic

Start at: 2018-04-24 20:48:00
End at: 2018-04-24 20:48:30
Local clock offset: -5.548 ms
Remote clock offset: 3.611 ms


# Below is generated by plot.py at 2018-04-25 00:59:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.89 Mbit/s
95th percentile per-packet one-way delay: 130.652 ms
Loss rate: 1.67%
-- Flow 1:
Average throughput: 40.14 Mbit/s
95th percentile per-packet one-way delay: 130.903 ms
Loss rate: 1.19%
-- Flow 2:
Average throughput: 30.55 Mbit/s
95th percentile per-packet one-way delay: 124.212 ms
Loss rate: 2.01%
-- Flow 3:
Average throughput: 13.76 Mbit/s
95th percentile per-packet one-way delay: 133.528 ms
Loss rate: 4.36%
```
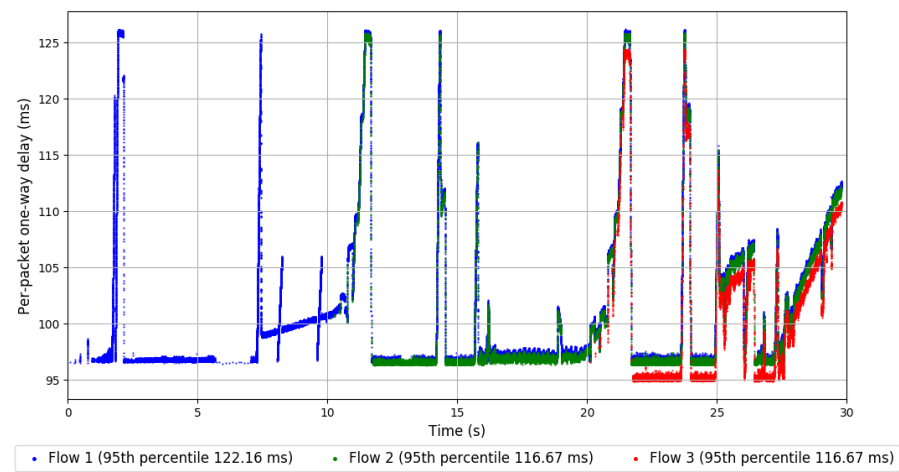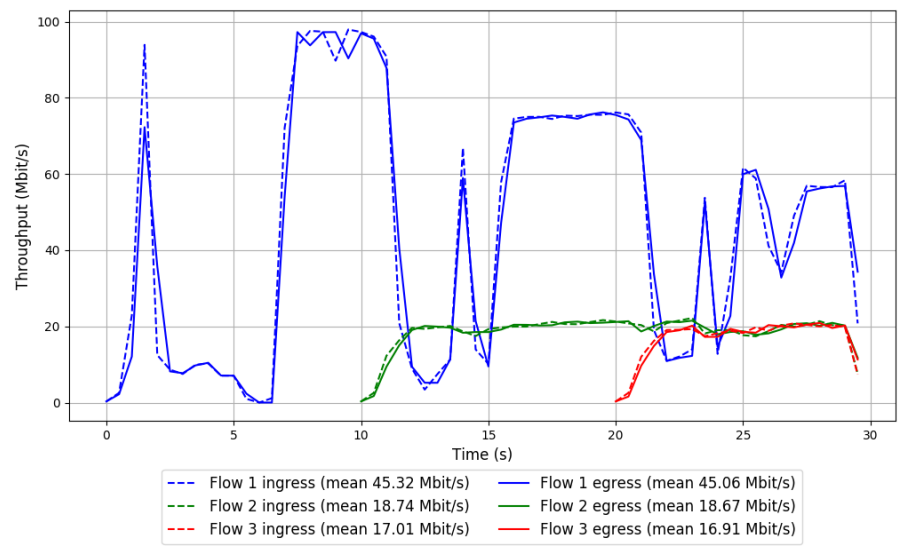
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2018-04-24 21:10:36
End at: 2018-04-24 21:11:06
Local clock offset: -5.637 ms
Remote clock offset: 4.673 ms


# Below is generated by plot.py at 2018-04-25 00:59:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.89 Mbit/s
95th percentile per-packet one-way delay: 125.657 ms
Loss rate: 2.44%
-- Flow 1:
Average throughput: 36.37 Mbit/s
95th percentile per-packet one-way delay: 124.168 ms
Loss rate: 1.61%
-- Flow 2:
Average throughput: 31.63 Mbit/s
95th percentile per-packet one-way delay: 125.695 ms
Loss rate: 2.21%
-- Flow 3:
Average throughput: 10.95 Mbit/s
95th percentile per-packet one-way delay: 127.826 ms
Loss rate: 11.22%
```
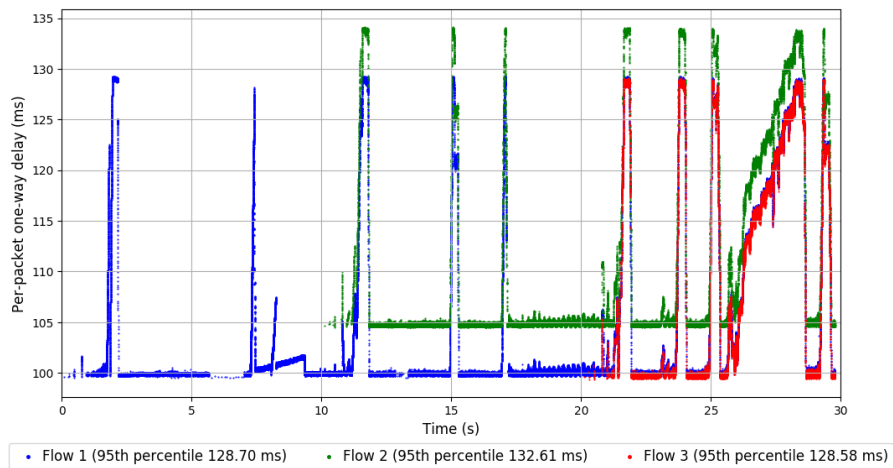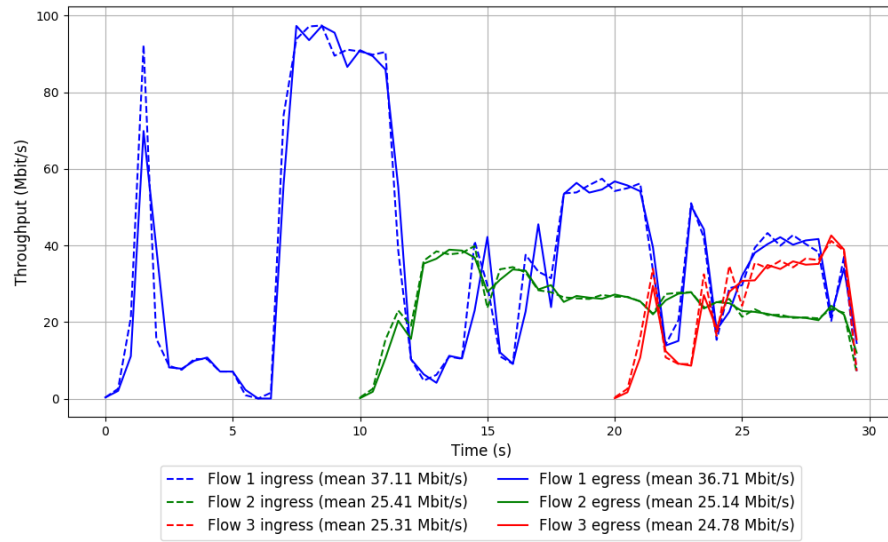
Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2018-04-24 21:33:10
End at: 2018-04-24 21:33:40
Local clock offset: -4.113 ms
Remote clock offset: 8.364 ms


# Below is generated by plot.py at 2018-04-25 00:59:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.94 Mbit/s
95th percentile per-packet one-way delay: 127.351 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 38.39 Mbit/s
95th percentile per-packet one-way delay: 127.597 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 30.36 Mbit/s
95th percentile per-packet one-way delay: 127.311 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 16.64 Mbit/s
95th percentile per-packet one-way delay: 125.491 ms
Loss rate: 0.37%
```
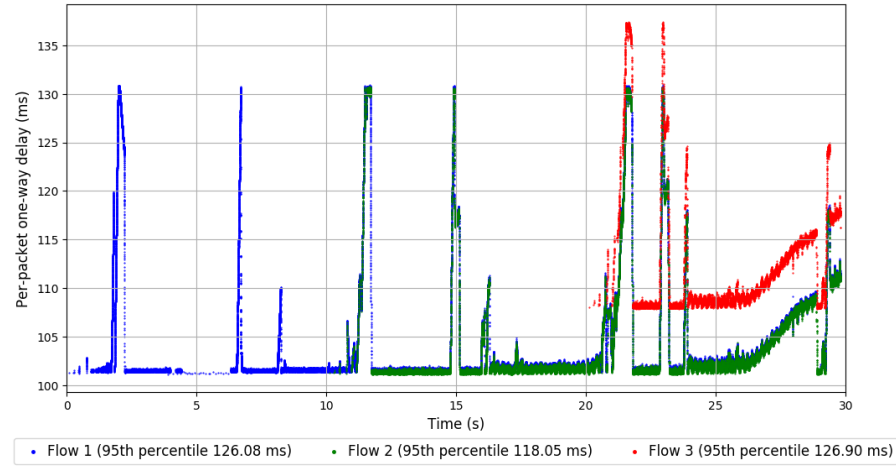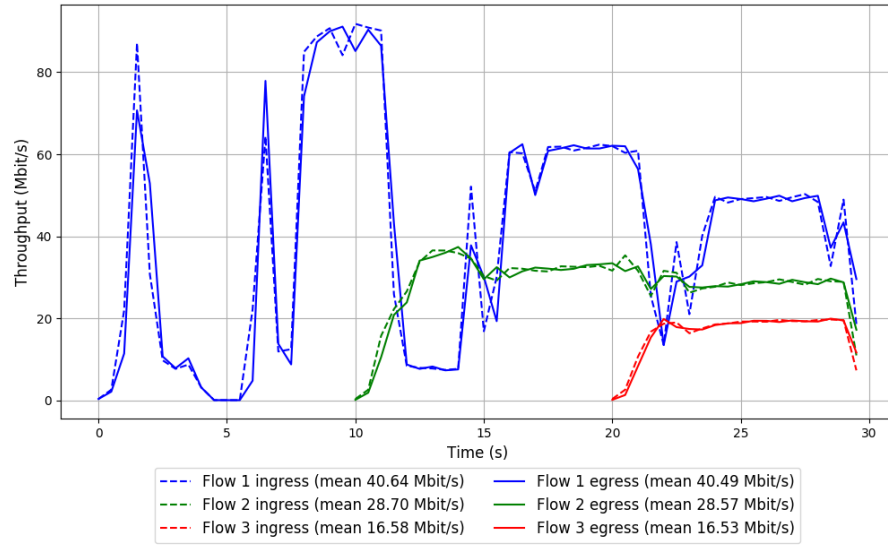
Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 38.64 Mbit/s) — Flow 1 egress (mean 38.39 Mbit/s)
Flow 2 ingress (mean 30.50 Mbit/s) — Flow 2 egress (mean 30.36 Mbit/s)
Flow 3 ingress (mean 16.74 Mbit/s) — Flow 3 egress (mean 16.64 Mbit/s)

Flow 1 (95th percentile 127.60 ms)   Flow 2 (95th percentile 127.31 ms)   Flow 3 (95th percentile 125.49 ms)

90

```
Run 4: Statistics of QUIC Cubic

Start at: 2018-04-24 21:55:41
End at: 2018-04-24 21:56:12
Local clock offset: -4.155 ms
Remote clock offset: 4.539 ms


# Below is generated by plot.py at 2018-04-25 00:59:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.95 Mbit/s
95th percentile per-packet one-way delay: 119.896 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 45.06 Mbit/s
95th percentile per-packet one-way delay: 122.160 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 18.67 Mbit/s
95th percentile per-packet one-way delay: 116.673 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 16.91 Mbit/s
95th percentile per-packet one-way delay: 116.669 ms
Loss rate: 0.44%
```
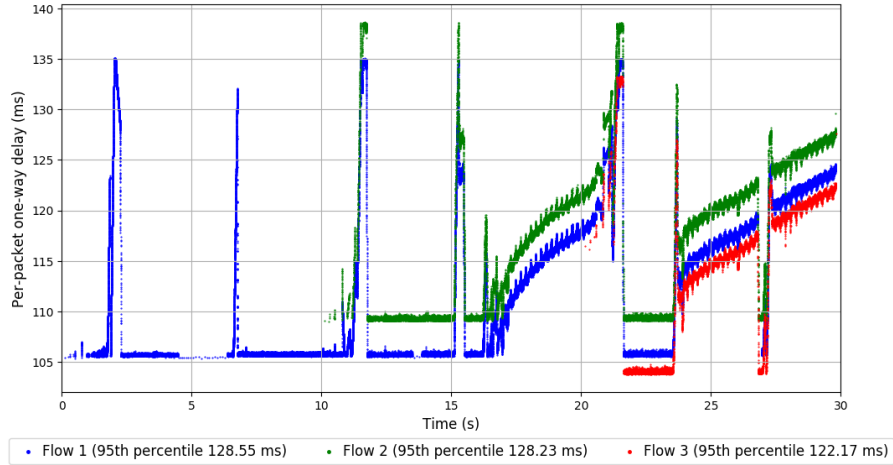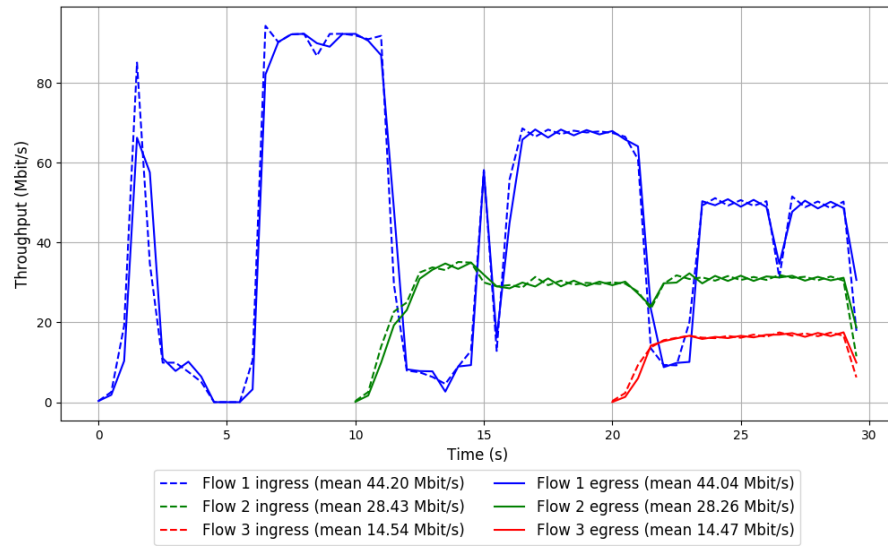
Run 4: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 45.32 Mbit/s)   Flow 1 egress (mean 45.06 Mbit/s)
Flow 2 ingress (mean 18.74 Mbit/s)   Flow 2 egress (mean 18.67 Mbit/s)
Flow 3 ingress (mean 17.01 Mbit/s)   Flow 3 egress (mean 16.91 Mbit/s)

Flow 1 (95th percentile 122.16 ms)   Flow 2 (95th percentile 116.67 ms)   Flow 3 (95th percentile 116.67 ms)

```
Run 5: Statistics of QUIC Cubic

Start at: 2018-04-24 22:18:14
End at: 2018-04-24 22:18:44
Local clock offset: -4.504 ms
Remote clock offset: 7.249 ms


# Below is generated by plot.py at 2018-04-25 00:59:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.43 Mbit/s
95th percentile per-packet one-way delay: 128.824 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 36.71 Mbit/s
95th percentile per-packet one-way delay: 128.697 ms
Loss rate: 1.08%
-- Flow 2:
Average throughput: 25.14 Mbit/s
95th percentile per-packet one-way delay: 132.614 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 24.78 Mbit/s
95th percentile per-packet one-way delay: 128.578 ms
Loss rate: 2.07%
```
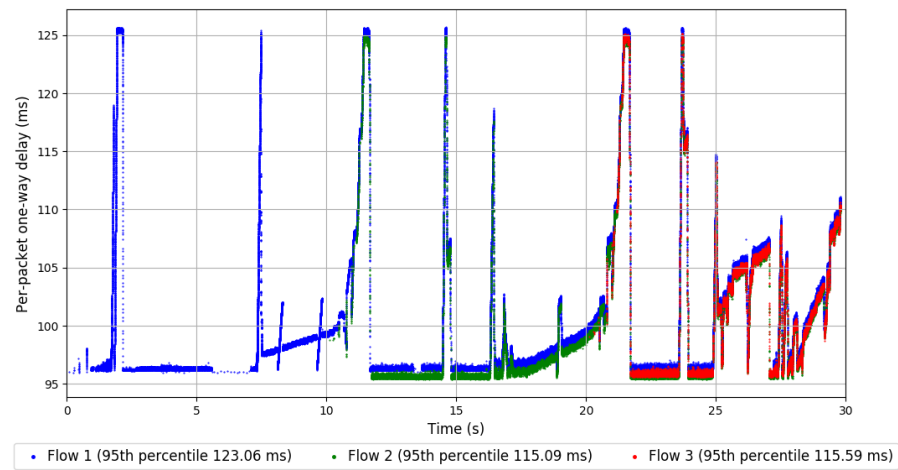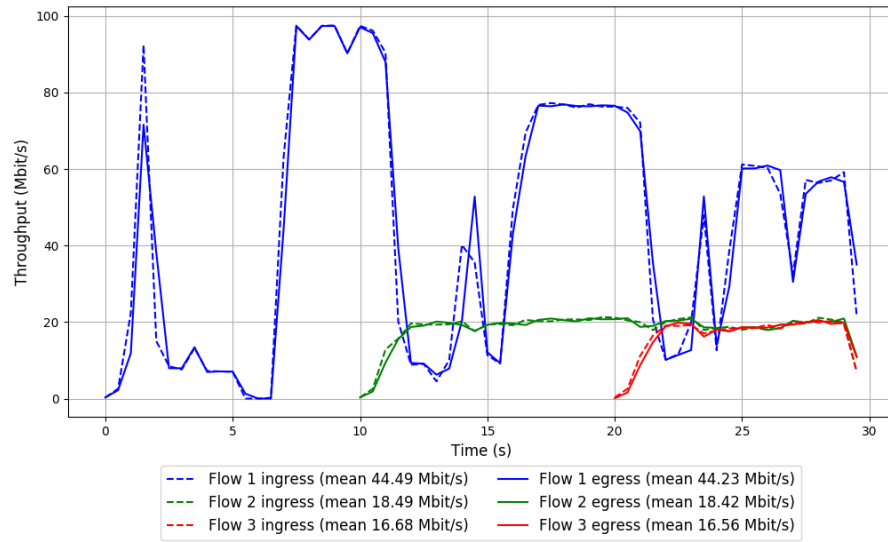
Run 5: Report of QUIC Cubic — Data Link

- - - Flow 1 ingress (mean 37.11 Mbit/s) —— Flow 1 egress (mean 36.71 Mbit/s)
- - - Flow 2 ingress (mean 25.41 Mbit/s) —— Flow 2 egress (mean 25.14 Mbit/s)
- - - Flow 3 ingress (mean 25.31 Mbit/s) —— Flow 3 egress (mean 24.78 Mbit/s)

• Flow 1 (95th percentile 128.70 ms)   • Flow 2 (95th percentile 132.61 ms)   • Flow 3 (95th percentile 128.58 ms)

```
Run 6: Statistics of QUIC Cubic

Start at: 2018-04-24 22:40:45
End at: 2018-04-24 22:41:15
Local clock offset: -6.255 ms
Remote clock offset: 6.978 ms


# Below is generated by plot.py at 2018-04-25 01:00:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.80 Mbit/s
95th percentile per-packet one-way delay: 124.652 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 40.49 Mbit/s
95th percentile per-packet one-way delay: 126.084 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 28.57 Mbit/s
95th percentile per-packet one-way delay: 118.052 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 16.53 Mbit/s
95th percentile per-packet one-way delay: 126.896 ms
Loss rate: 0.23%
```
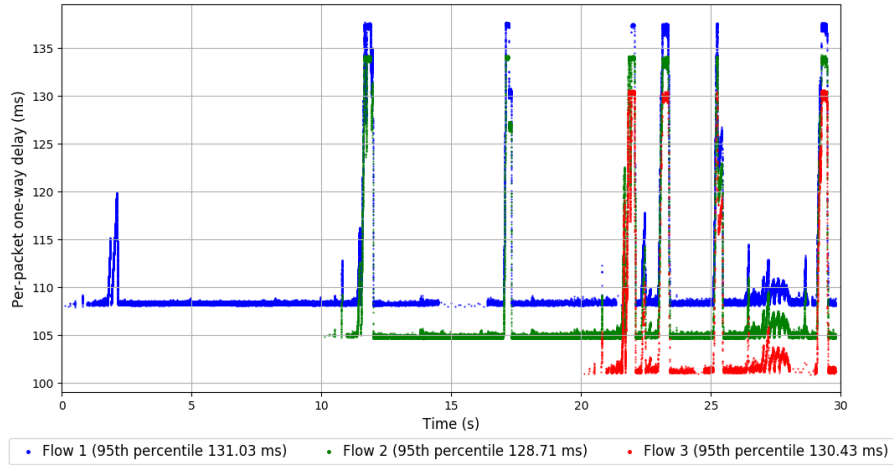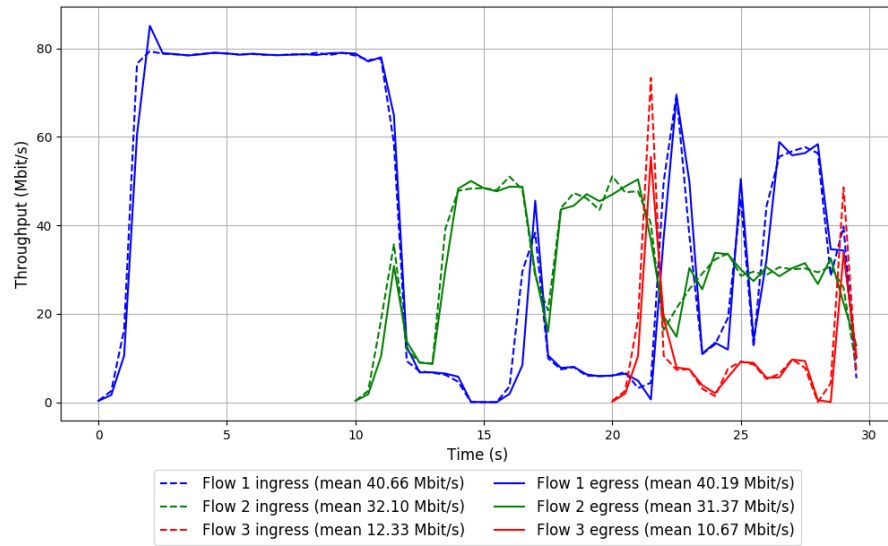
Run 6: Report of QUIC Cubic — Data Link

```
Run 7: Statistics of QUIC Cubic

Start at: 2018-04-24 23:03:17
End at: 2018-04-24 23:03:47
Local clock offset: -5.176 ms
Remote clock offset: 8.434 ms


# Below is generated by plot.py at 2018-04-25 01:01:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.47 Mbit/s
95th percentile per-packet one-way delay: 128.072 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 44.04 Mbit/s
95th percentile per-packet one-way delay: 128.554 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 28.26 Mbit/s
95th percentile per-packet one-way delay: 128.226 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 14.47 Mbit/s
95th percentile per-packet one-way delay: 122.174 ms
Loss rate: 0.39%
```
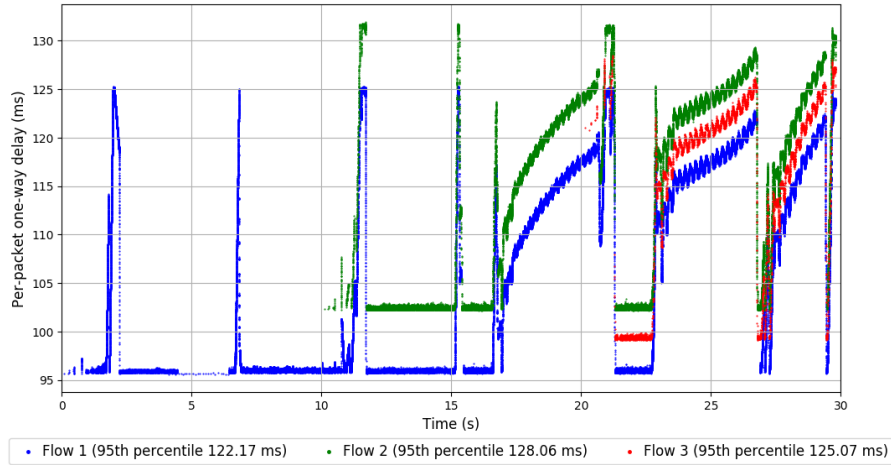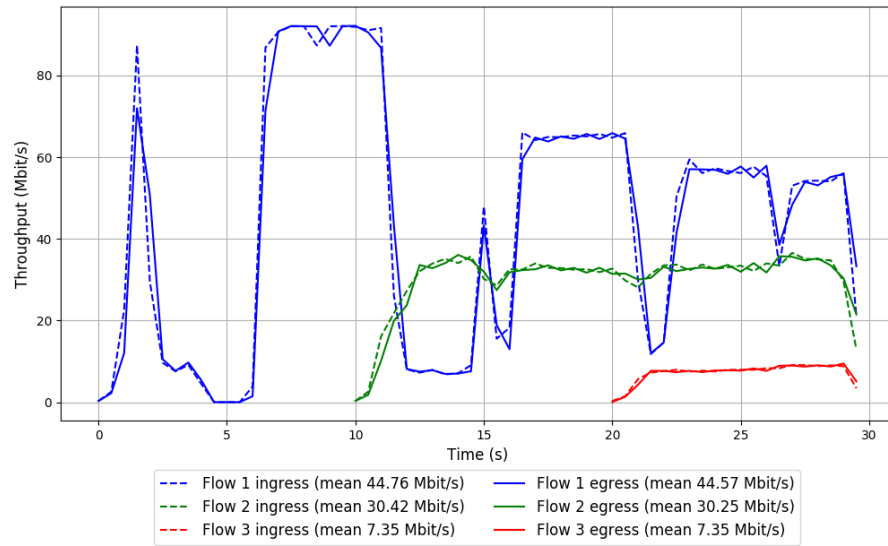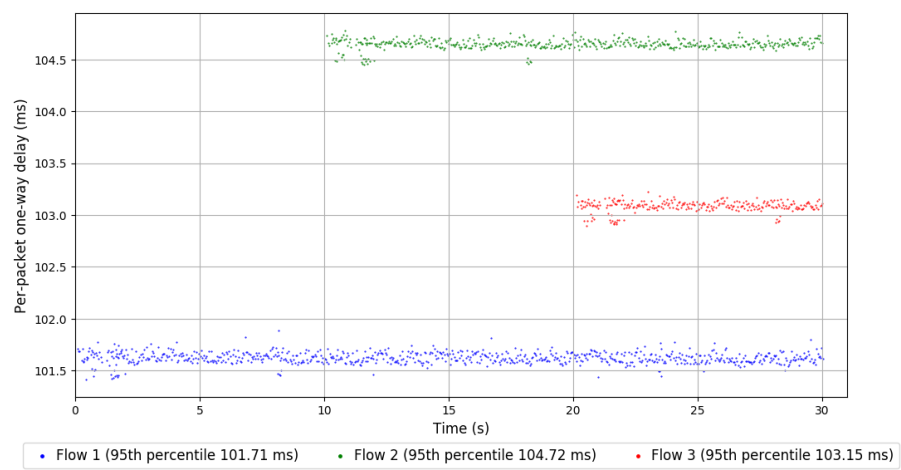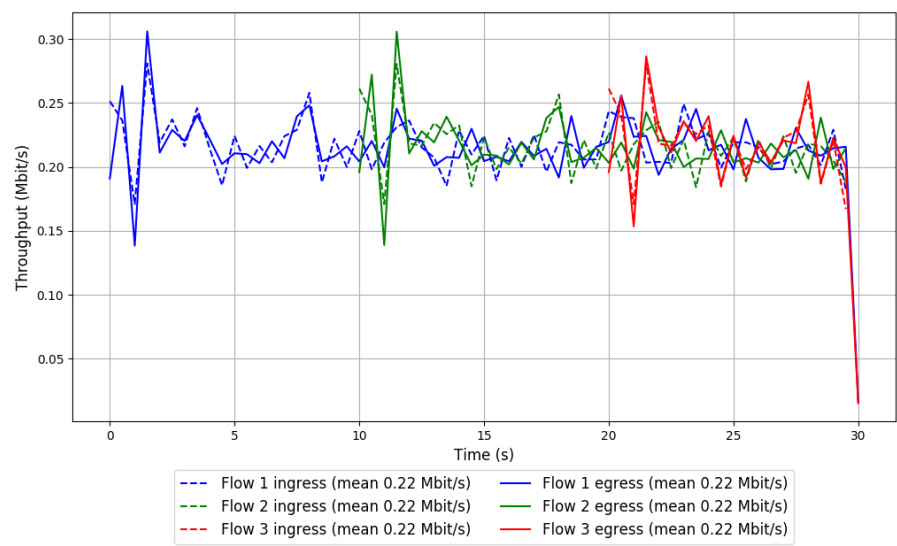
Run 7: Report of QUIC Cubic — Data Link

Legend (top plot):
- Flow 1 ingress (mean 44.20 Mbit/s) — Flow 1 egress (mean 44.04 Mbit/s)
- Flow 2 ingress (mean 28.43 Mbit/s) — Flow 2 egress (mean 28.26 Mbit/s)
- Flow 3 ingress (mean 14.54 Mbit/s) — Flow 3 egress (mean 14.47 Mbit/s)

Legend (bottom plot):
- Flow 1 (95th percentile 128.55 ms)
- Flow 2 (95th percentile 128.23 ms)
- Flow 3 (95th percentile 122.17 ms)

98

```
Run 8: Statistics of QUIC Cubic

Start at: 2018-04-24 23:25:56
End at: 2018-04-24 23:26:26
Local clock offset: -4.296 ms
Remote clock offset: 2.421 ms


# Below is generated by plot.py at 2018-04-25 01:01:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.83 Mbit/s
95th percentile per-packet one-way delay: 120.260 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 44.23 Mbit/s
95th percentile per-packet one-way delay: 123.060 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 18.42 Mbit/s
95th percentile per-packet one-way delay: 115.094 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 16.56 Mbit/s
95th percentile per-packet one-way delay: 115.589 ms
Loss rate: 0.56%
```

Run 8: Report of QUIC Cubic — Data Link

```
Run 9: Statistics of QUIC Cubic

Start at: 2018-04-24 23:48:10
End at: 2018-04-24 23:48:40
Local clock offset: -5.024 ms
Remote clock offset: 6.762 ms


# Below is generated by plot.py at 2018-04-25 01:01:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.47 Mbit/s
95th percentile per-packet one-way delay: 130.446 ms
Loss rate: 2.27%
-- Flow 1:
Average throughput: 40.19 Mbit/s
95th percentile per-packet one-way delay: 131.025 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 31.37 Mbit/s
95th percentile per-packet one-way delay: 128.713 ms
Loss rate: 2.29%
-- Flow 3:
Average throughput: 10.67 Mbit/s
95th percentile per-packet one-way delay: 130.429 ms
Loss rate: 13.45%
```
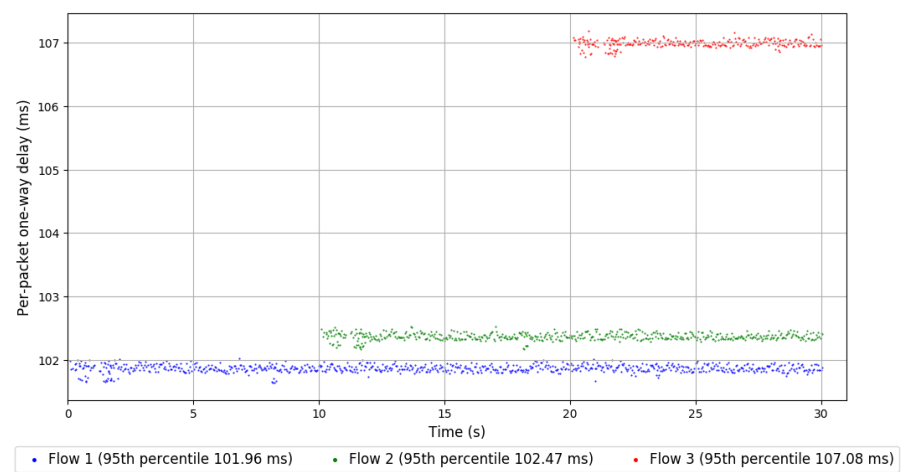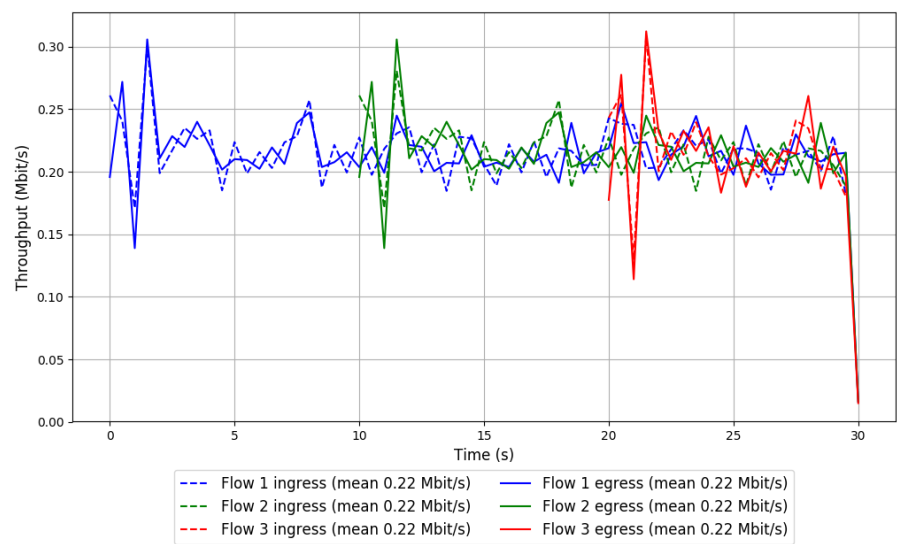
Run 9: Report of QUIC Cubic — Data Link

- - - - Flow 1 ingress (mean 40.66 Mbit/s) — Flow 1 egress (mean 40.19 Mbit/s)
- - - - Flow 2 ingress (mean 32.10 Mbit/s) — Flow 2 egress (mean 31.37 Mbit/s)
- - - - Flow 3 ingress (mean 12.33 Mbit/s) — Flow 3 egress (mean 10.67 Mbit/s)

- Flow 1 (95th percentile 131.03 ms)   • Flow 2 (95th percentile 128.71 ms)   • Flow 3 (95th percentile 130.43 ms)

```
Run 10: Statistics of QUIC Cubic

Start at: 2018-04-25 00:10:47
End at: 2018-04-25 00:11:17
Local clock offset: -4.962 ms
Remote clock offset: 2.795 ms


# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.01 Mbit/s
95th percentile per-packet one-way delay: 125.063 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 44.57 Mbit/s
95th percentile per-packet one-way delay: 122.171 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 30.25 Mbit/s
95th percentile per-packet one-way delay: 128.059 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 7.35 Mbit/s
95th percentile per-packet one-way delay: 125.066 ms
Loss rate: 0.02%
```

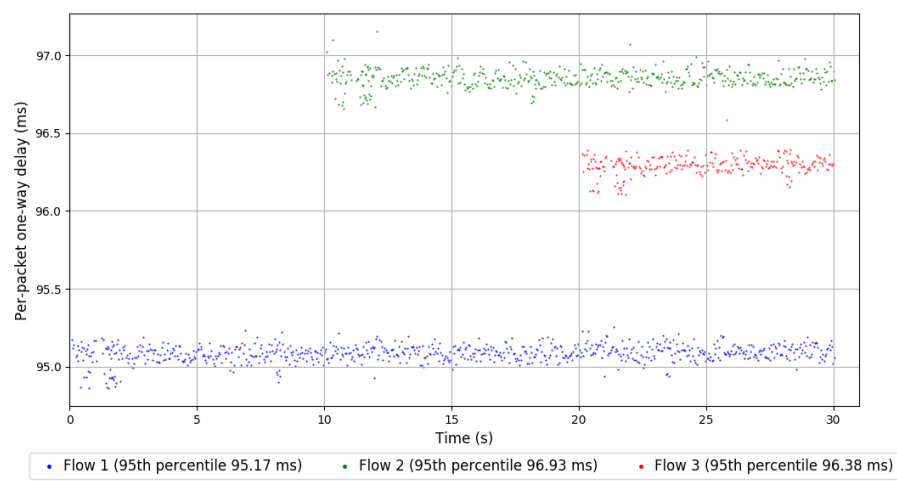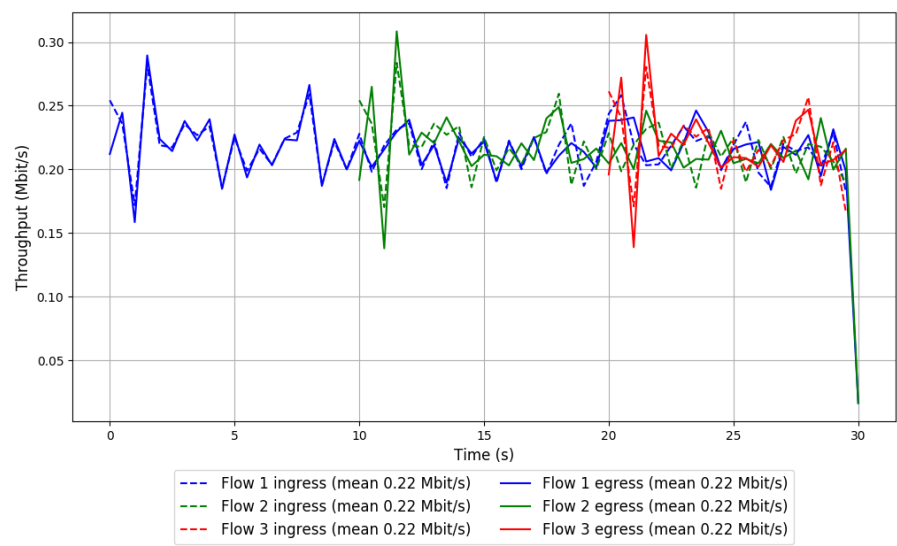# Run 10: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of SCReAM

Start at: 2018-04-24 20:55:50
End at: 2018-04-24 20:56:20
Local clock offset: -5.567 ms
Remote clock offset: 9.274 ms


# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 104.695 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 101.707 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 104.719 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 103.153 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2018-04-24 21:18:26
End at: 2018-04-24 21:18:56
Local clock offset: -4.912 ms
Remote clock offset: 9.286 ms

# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 107.028 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 101.962 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 102.465 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 107.076 ms
Loss rate: 0.00%
```
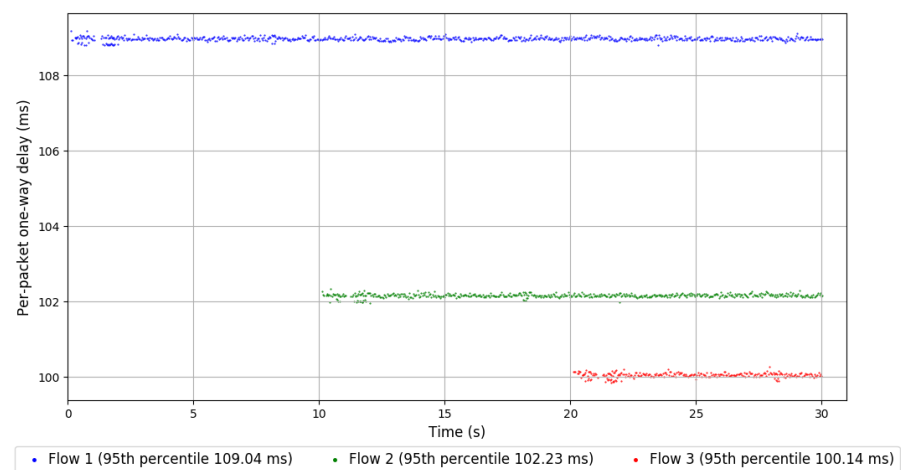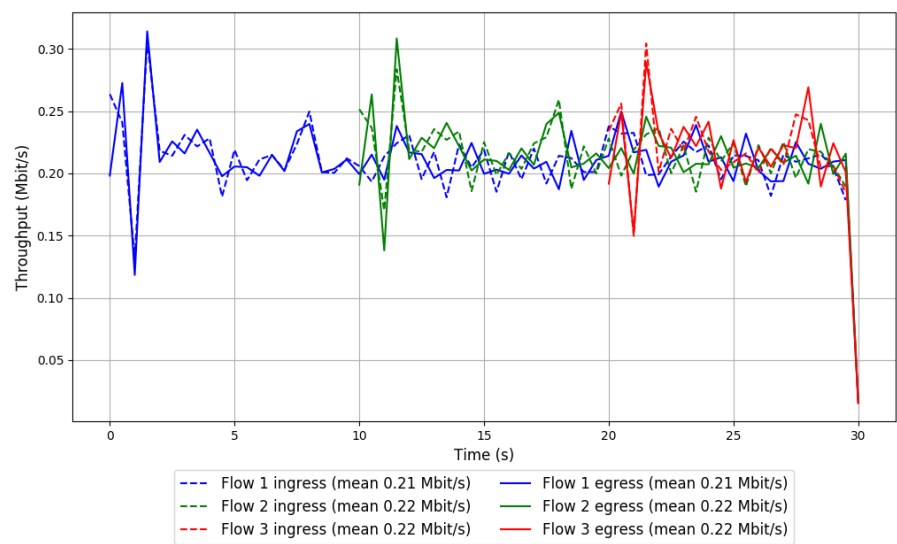
Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2018-04-24 21:41:03
End at: 2018-04-24 21:41:33
Local clock offset: -4.921 ms
Remote clock offset: 3.798 ms


# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 101.843 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 101.863 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 96.353 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 98.813 ms
Loss rate: 0.00%
```
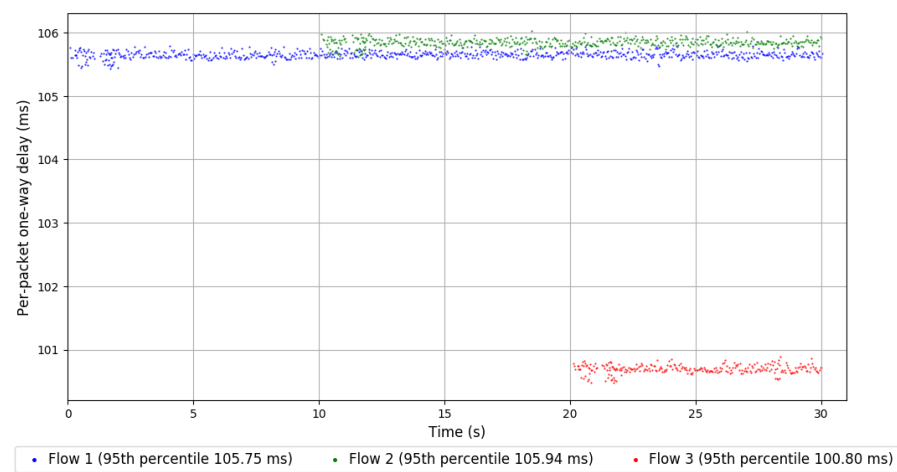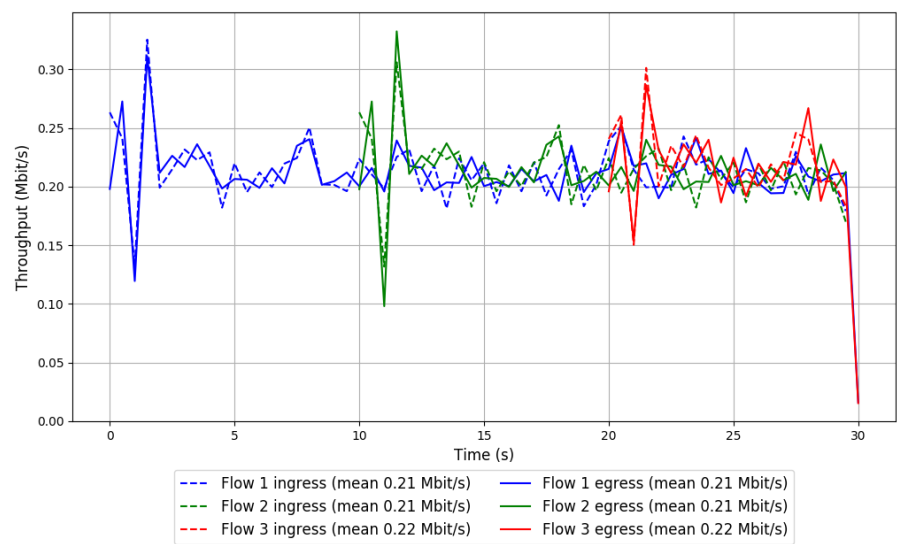
Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2018-04-24 22:03:32
End at: 2018-04-24 22:04:02
Local clock offset: -4.142 ms
Remote clock offset: 4.449 ms


# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 96.909 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 95.167 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 96.932 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 96.376 ms
Loss rate: 0.00%
```
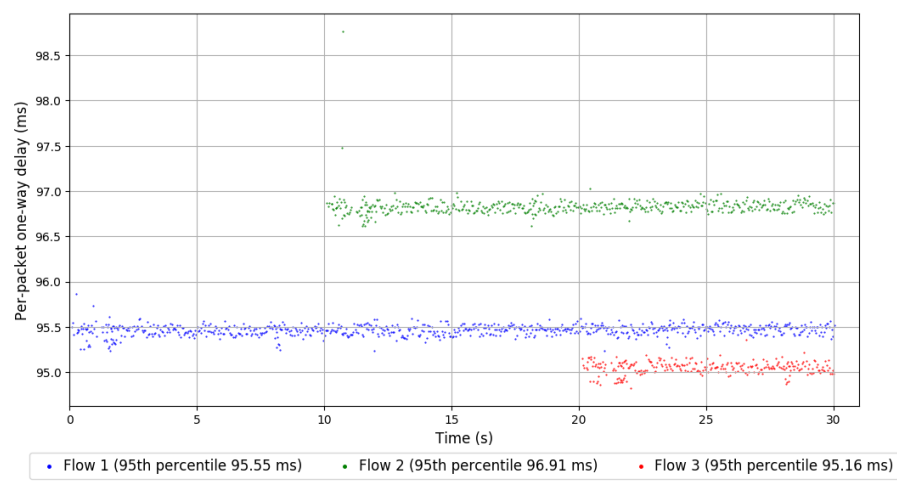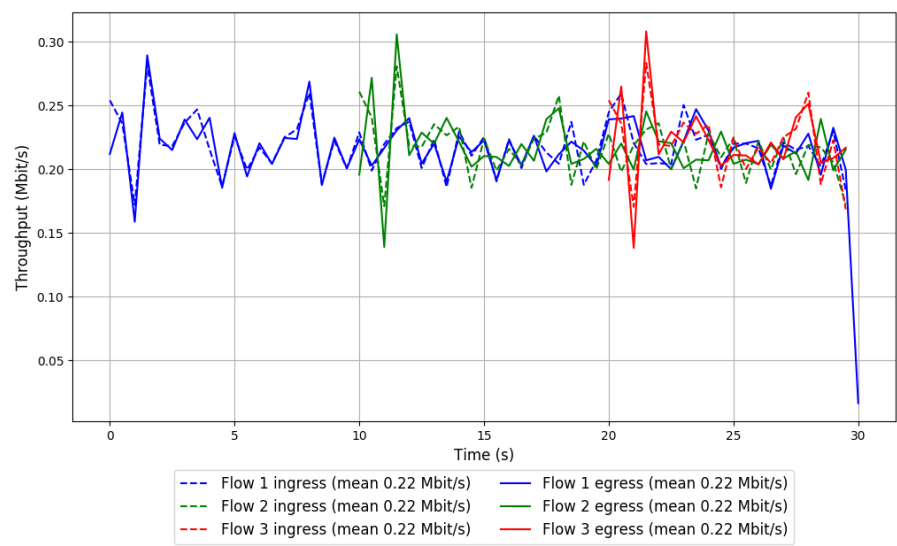
Run 4: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 95.17 ms)   Flow 2 (95th percentile 96.93 ms)   Flow 3 (95th percentile 96.38 ms)

```
Run 5: Statistics of SCReAM

Start at: 2018-04-24 22:26:05
End at: 2018-04-24 22:26:35
Local clock offset: -5.35 ms
Remote clock offset: 8.913 ms


# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 109.027 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 109.044 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 102.232 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 100.143 ms
Loss rate: 0.00%
```
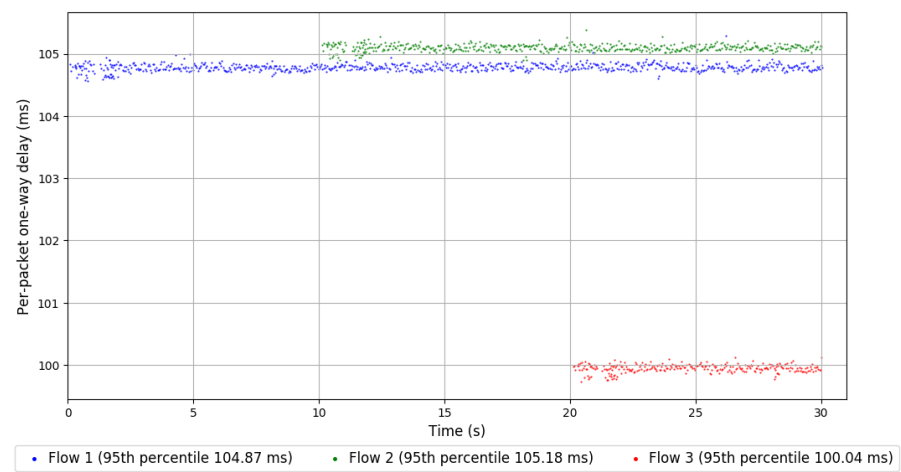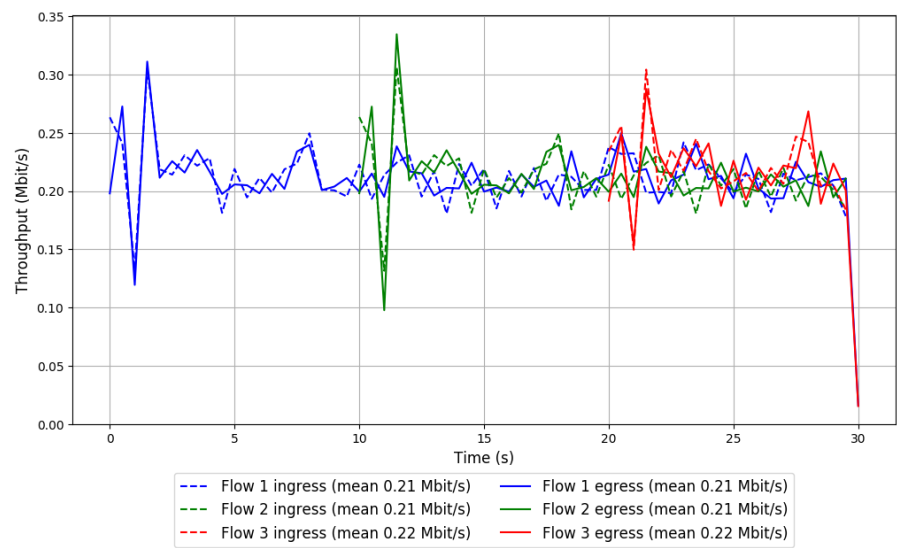
Run 5: Report of SCReAM — Data Link

```
Run 6: Statistics of SCReAM

Start at: 2018-04-24 22:48:36
End at: 2018-04-24 22:49:06
Local clock offset: -4.555 ms
Remote clock offset: 7.782 ms

# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 105.906 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 105.747 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 105.940 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 100.796 ms
Loss rate: 0.00%
```
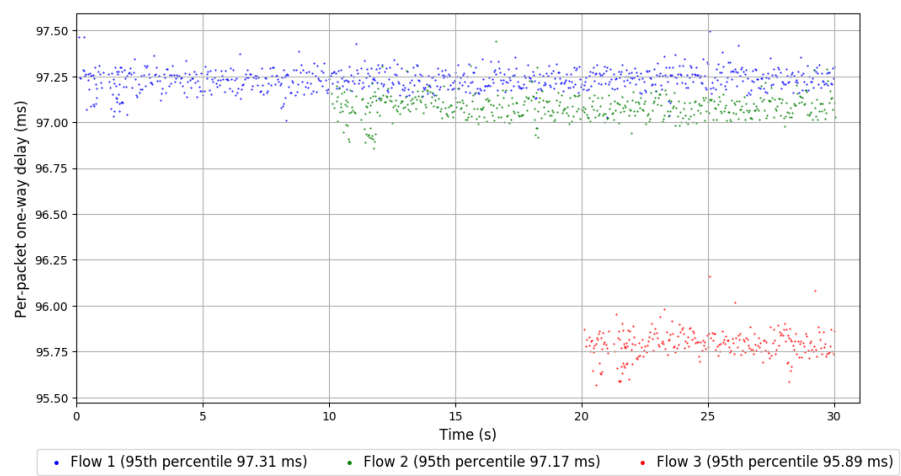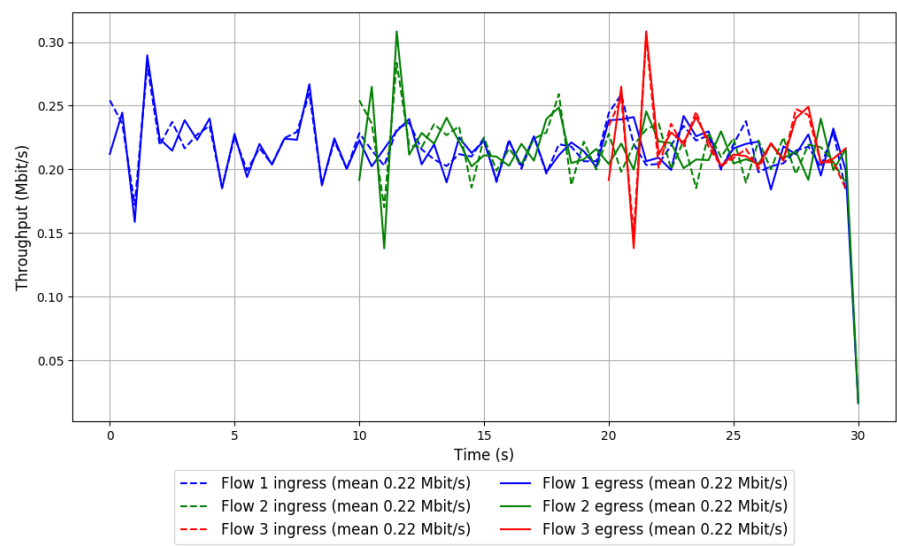
Run 6: Report of SCReAM — Data Link

```
Run 7: Statistics of SCReAM

Start at: 2018-04-24 23:11:12
End at: 2018-04-24 23:11:42
Local clock offset: -4.36 ms
Remote clock offset: 3.599 ms


# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 96.880 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 95.548 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 96.913 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 95.157 ms
Loss rate: 0.00%
```
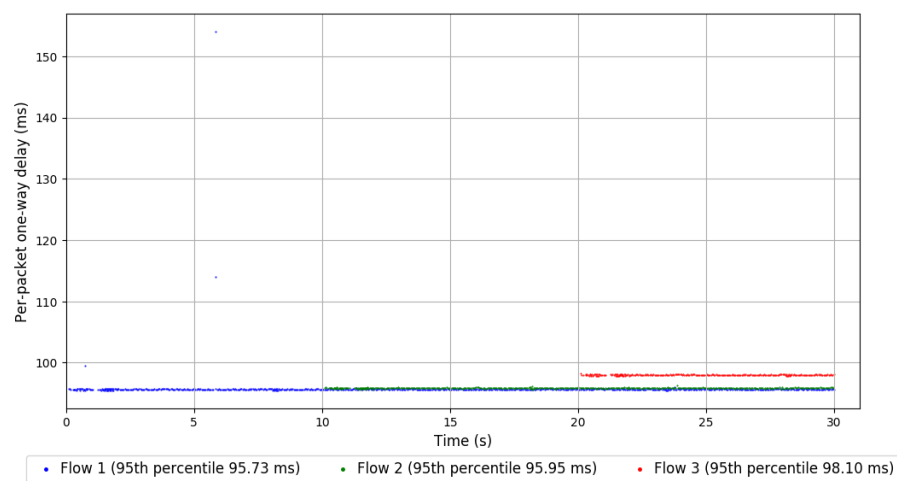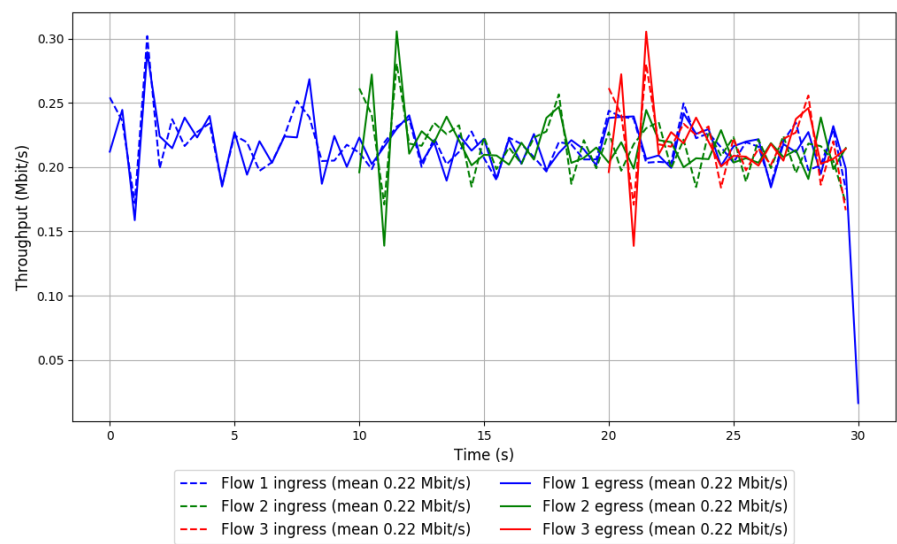
Run 7: Report of SCReAM — Data Link

```
Run 8: Statistics of SCReAM

Start at: 2018-04-24 23:33:47
End at: 2018-04-24 23:34:17
Local clock offset: -4.25 ms
Remote clock offset: 6.151 ms


# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 105.150 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 104.870 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 105.181 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 100.044 ms
Loss rate: 0.00%
```
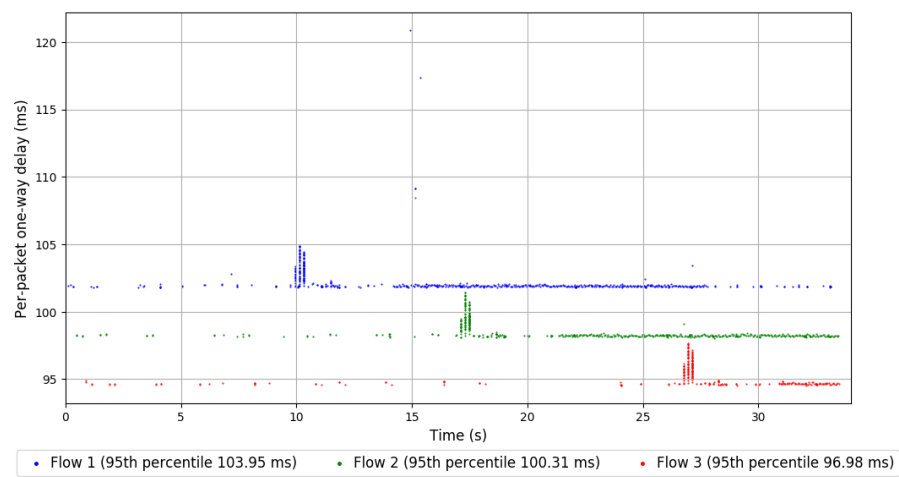
Run 8: Report of SCReAM — Data Link

```
Run 9: Statistics of SCReAM

Start at: 2018-04-24 23:56:02
End at: 2018-04-24 23:56:32
Local clock offset: -4.953 ms
Remote clock offset: 2.876 ms


# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 97.299 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 97.314 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 97.174 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 95.887 ms
Loss rate: 0.00%
```
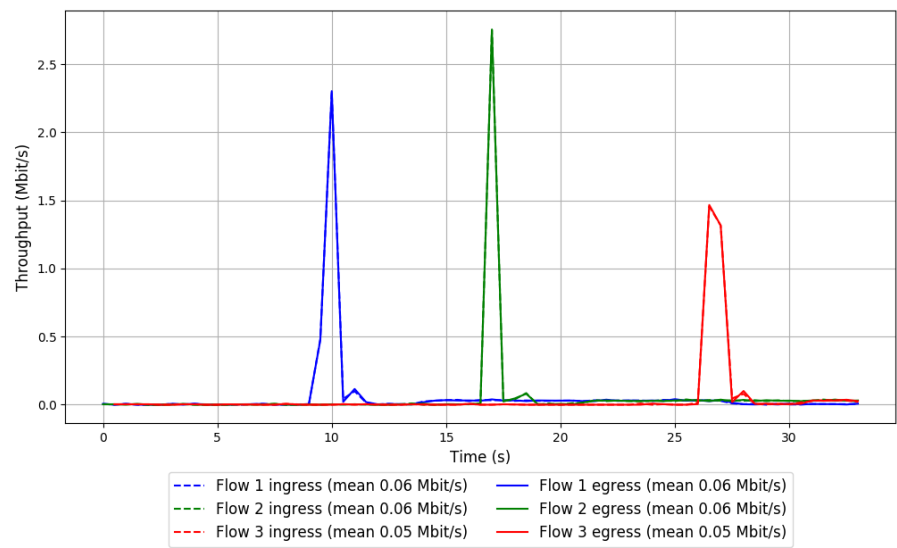
Run 9: Report of SCReAM — Data Link

```
Run 10: Statistics of SCReAM

Start at: 2018-04-25 00:18:38
End at: 2018-04-25 00:19:08
Local clock offset: -4.202 ms
Remote clock offset: 2.395 ms


# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 98.047 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 95.730 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 95.954 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 98.097 ms
Loss rate: 0.00%
```
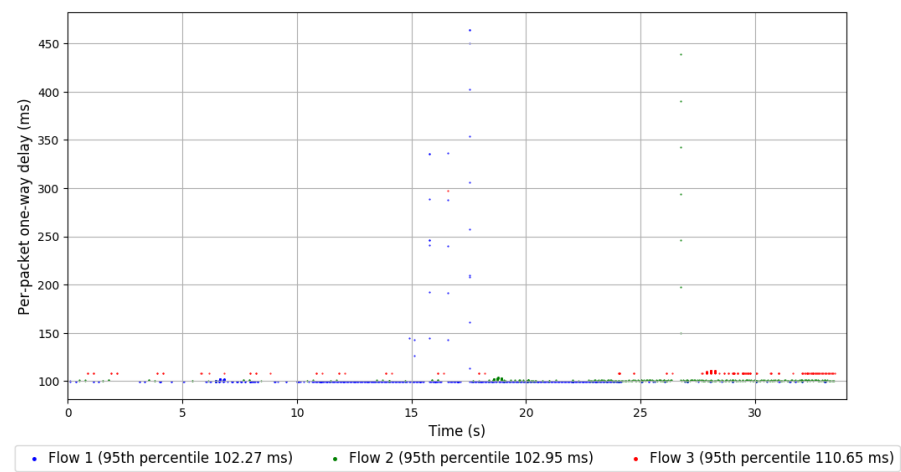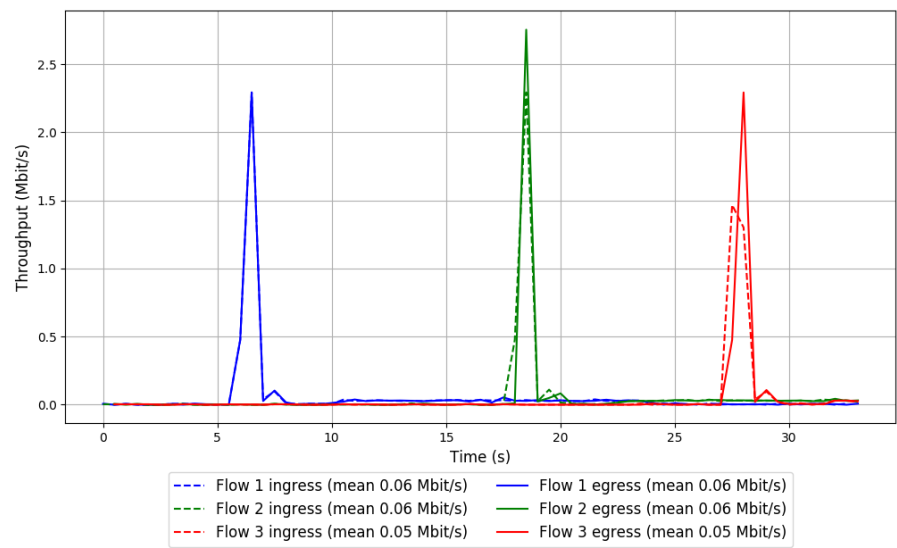
Run 10: Report of SCReAM — Data Link

```
Run 1: Statistics of WebRTC media

Start at: 2018-04-24 20:44:06
End at: 2018-04-24 20:44:36
Local clock offset: -4.842 ms
Remote clock offset: 3.395 ms


# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 103.163 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 103.947 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 100.309 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 96.984 ms
Loss rate: 0.00%
```
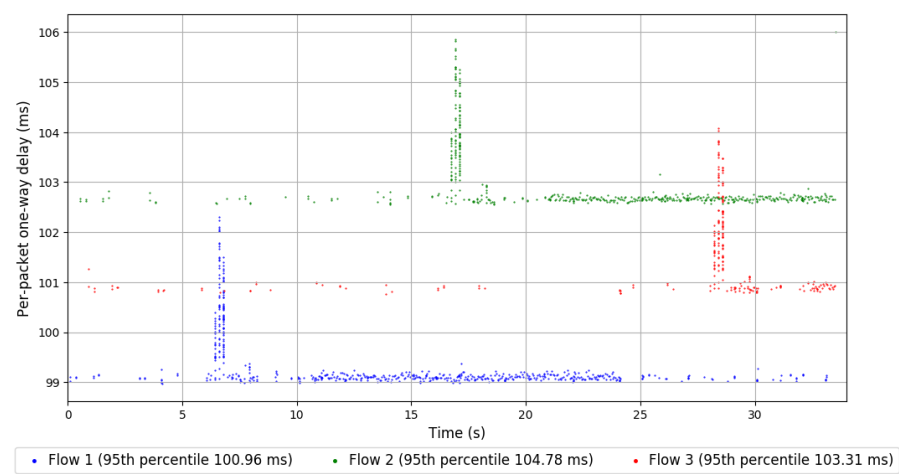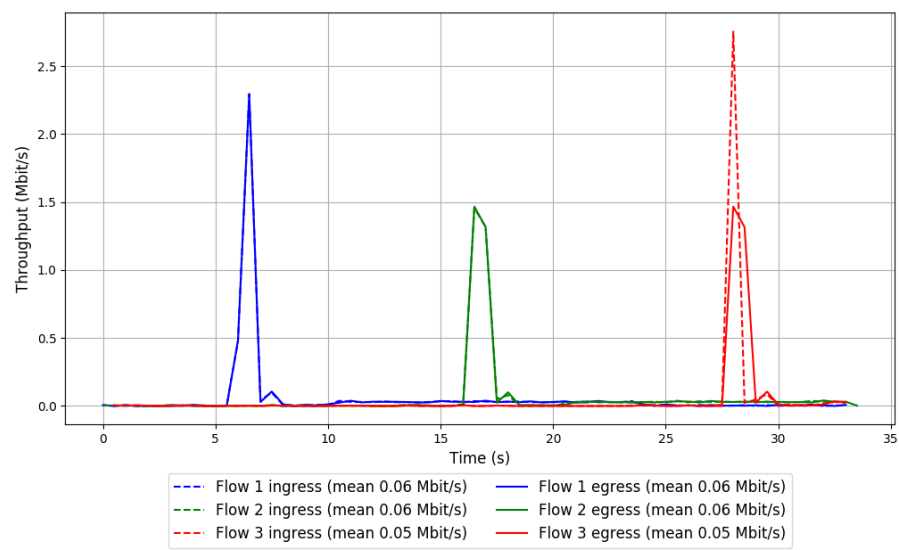
Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2018-04-24 21:06:42
End at: 2018-04-24 21:07:12
Local clock offset: -4.12 ms
Remote clock offset: 9.255 ms


# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 110.155 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 102.271 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 102.951 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 110.651 ms
Loss rate: 0.00%
```
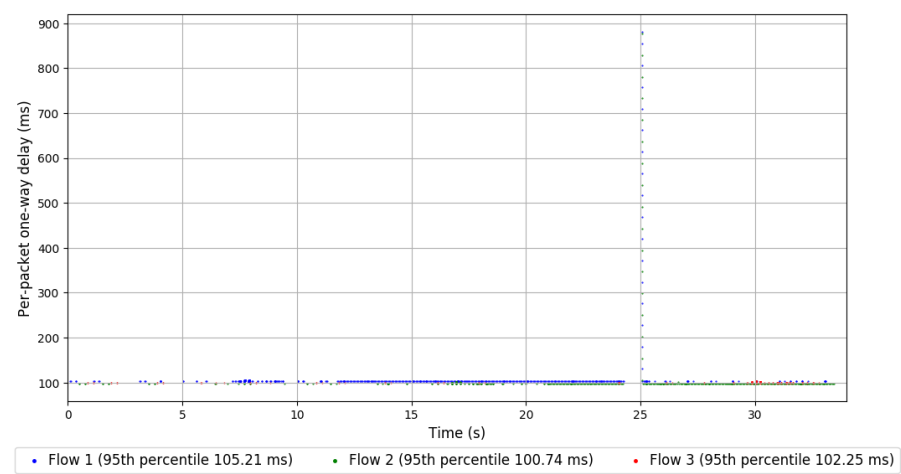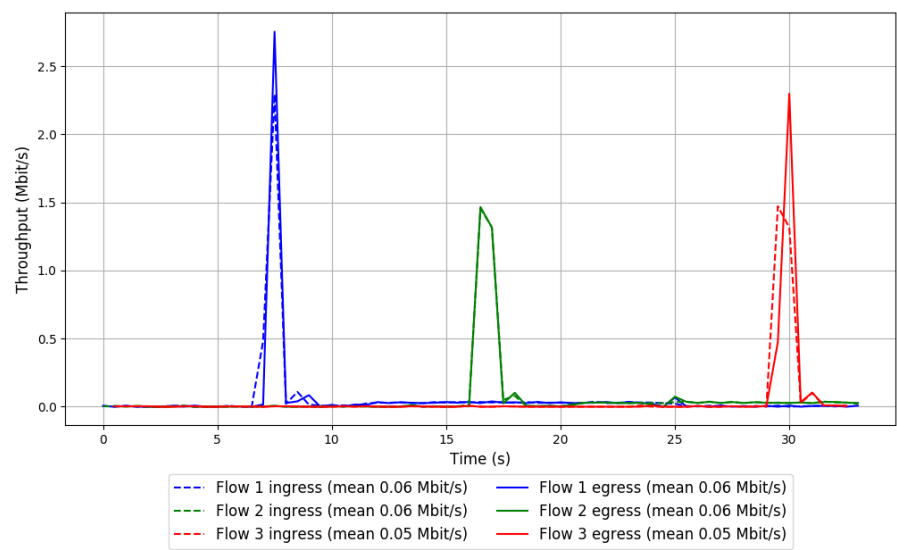
Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2018-04-24 21:29:12
End at: 2018-04-24 21:29:42
Local clock offset: -4.949 ms
Remote clock offset: 8.397 ms


# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 103.831 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 100.957 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 104.779 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 103.309 ms
Loss rate: 0.00%
```
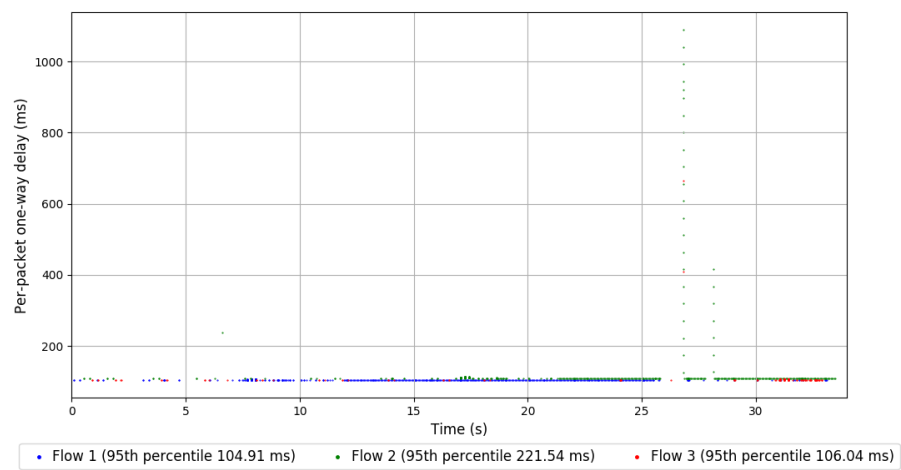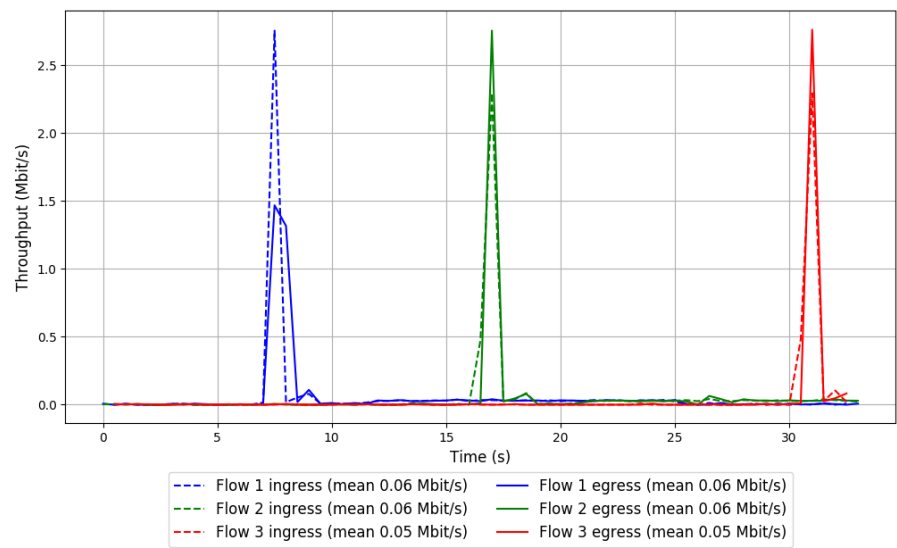
Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2018-04-24 21:51:47
End at: 2018-04-24 21:52:17
Local clock offset: -5.709 ms
Remote clock offset: 7.529 ms


# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 104.483 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 105.210 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 100.740 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 102.248 ms
Loss rate: 0.00%
```
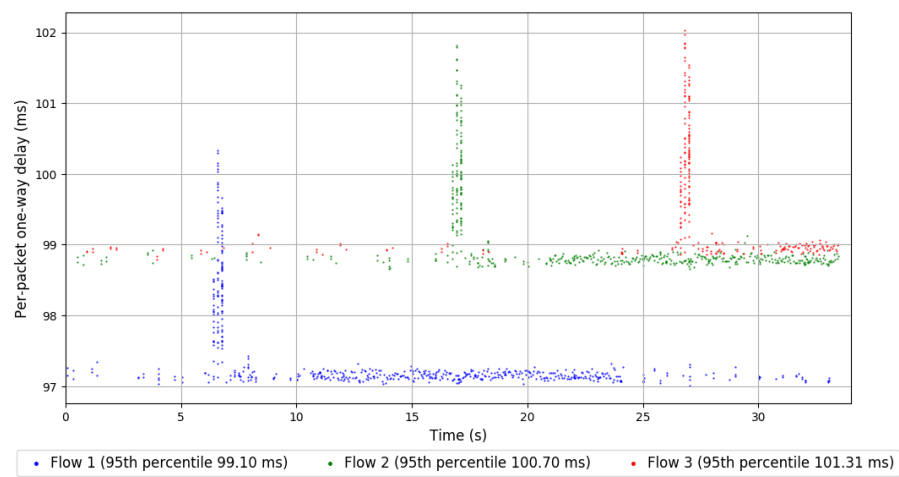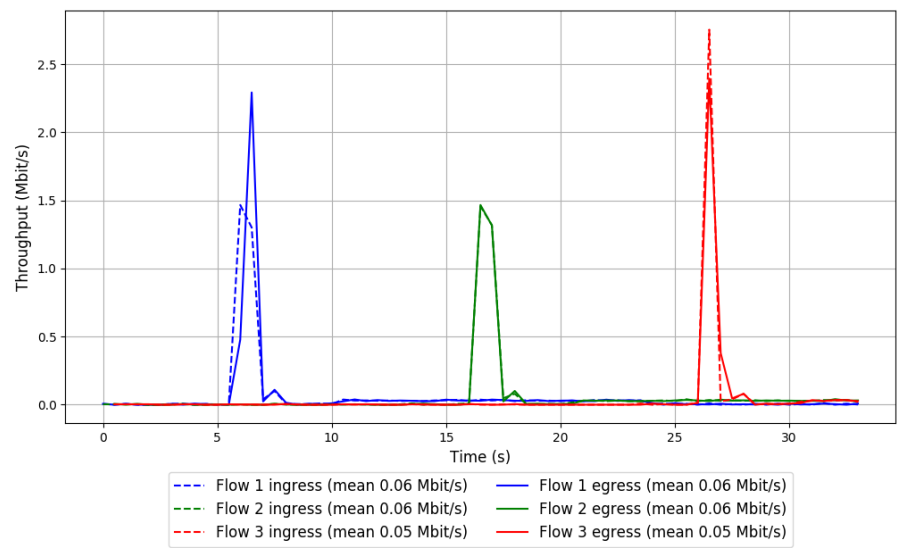
Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2018-04-24 22:14:18
End at: 2018-04-24 22:14:48
Local clock offset: -5.896 ms
Remote clock offset: 7.997 ms


# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 110.656 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 104.905 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 221.543 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 106.037 ms
Loss rate: 0.00%
```
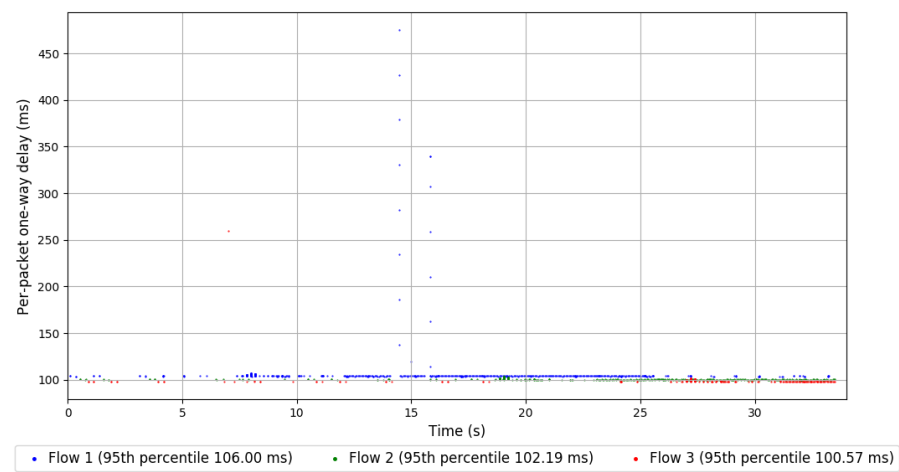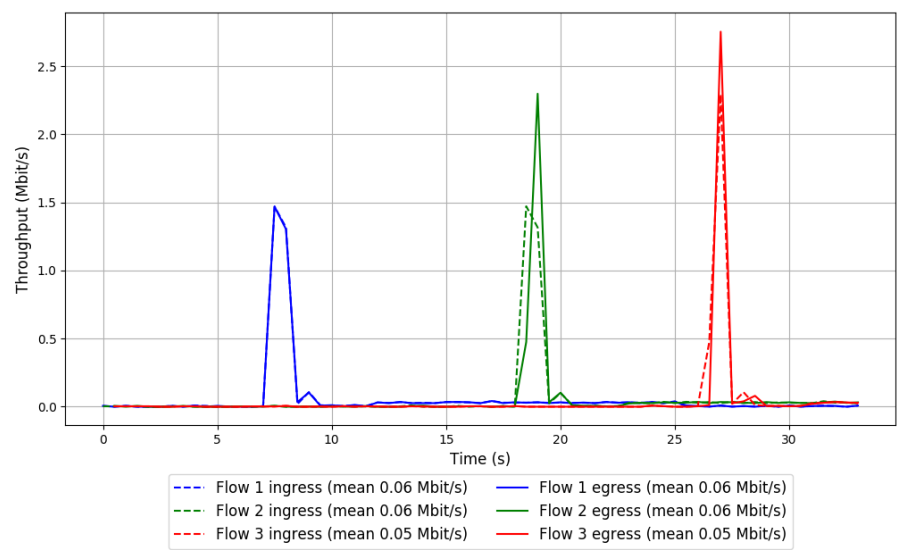
Run 5: Report of WebRTC media — Data Link

Flow 1 ingress (mean 0.06 Mbit/s)   Flow 1 egress (mean 0.06 Mbit/s)
Flow 2 ingress (mean 0.06 Mbit/s)   Flow 2 egress (mean 0.06 Mbit/s)
Flow 3 ingress (mean 0.05 Mbit/s)   Flow 3 egress (mean 0.05 Mbit/s)

Flow 1 (95th percentile 104.91 ms)   Flow 2 (95th percentile 221.54 ms)   Flow 3 (95th percentile 106.04 ms)

```
Run 6: Statistics of WebRTC media

Start at: 2018-04-24 22:36:50
End at: 2018-04-24 22:37:20
Local clock offset: -5.424 ms
Remote clock offset: 4.077 ms


# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 100.561 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 99.104 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 100.697 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 101.309 ms
Loss rate: 0.00%
```
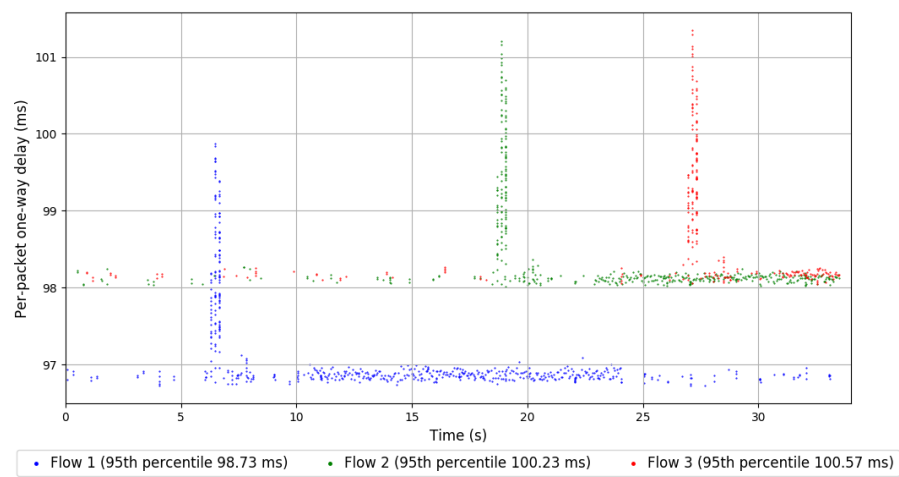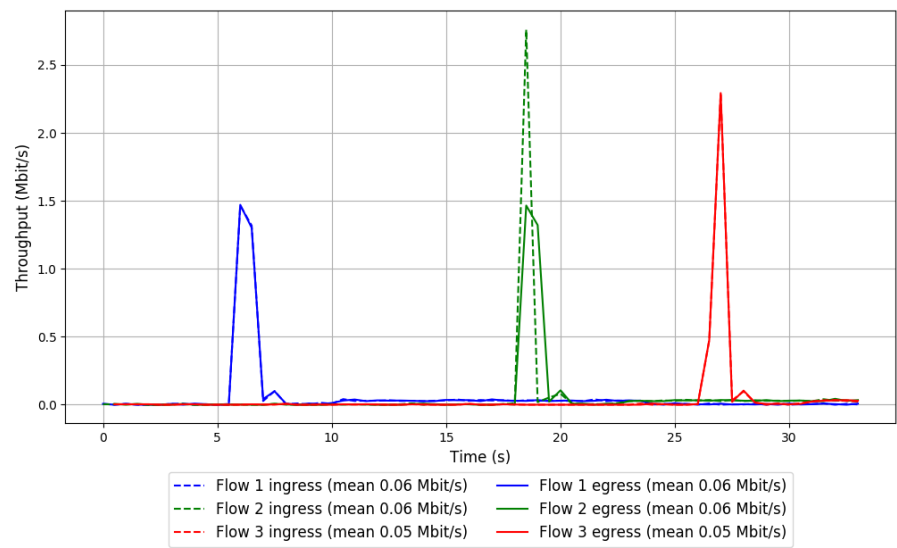
Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2018-04-24 22:59:23
End at: 2018-04-24 22:59:53
Local clock offset: -5.197 ms
Remote clock offset: 6.796 ms


# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 105.116 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 106.004 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 102.191 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 100.567 ms
Loss rate: 0.00%
```

Run 7: Report of WebRTC media — Data Link

```
Run 8: Statistics of WebRTC media

Start at: 2018-04-24 23:22:01
End at: 2018-04-24 23:22:31
Local clock offset: -5.074 ms
Remote clock offset: 2.478 ms


# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 99.944 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 98.727 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 100.233 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 100.567 ms
Loss rate: 0.00%
```
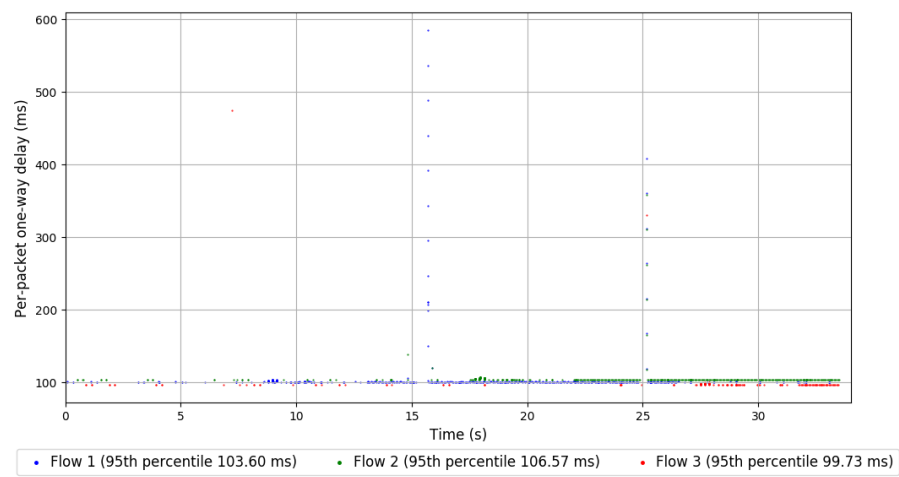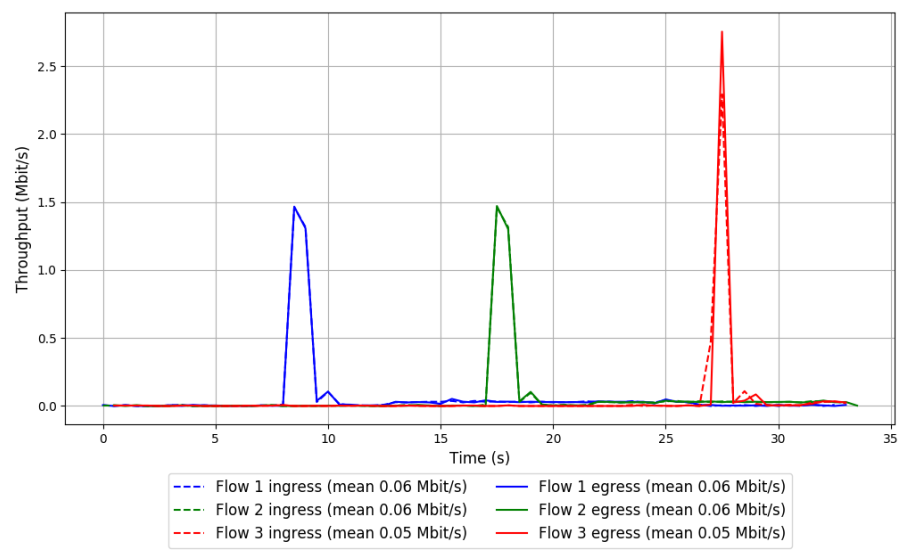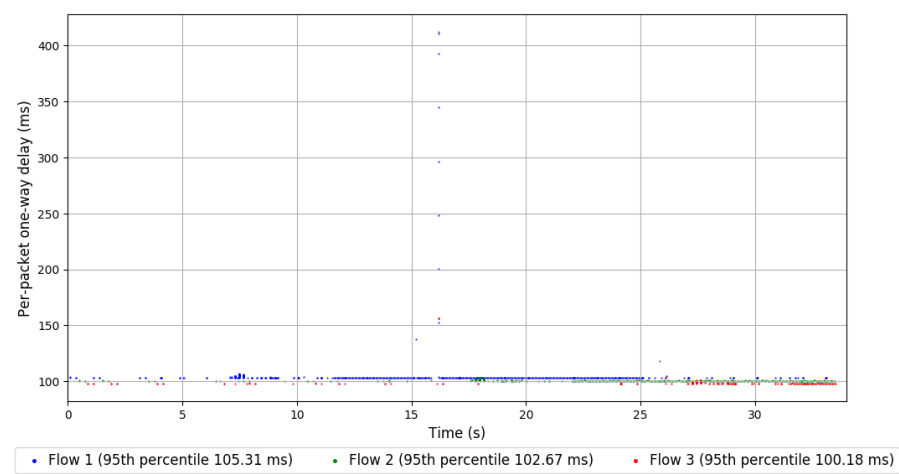
Run 8: Report of WebRTC media — Data Link

Flow 1 ingress (mean 0.06 Mbit/s)   Flow 1 egress (mean 0.06 Mbit/s)
Flow 2 ingress (mean 0.06 Mbit/s)   Flow 2 egress (mean 0.06 Mbit/s)
Flow 3 ingress (mean 0.05 Mbit/s)   Flow 3 egress (mean 0.05 Mbit/s)

Flow 1 (95th percentile 98.73 ms)   Flow 2 (95th percentile 100.23 ms)   Flow 3 (95th percentile 100.57 ms)

```
Run 9: Statistics of WebRTC media

Start at: 2018-04-24 23:44:16
End at: 2018-04-24 23:44:46
Local clock offset: -5.019 ms
Remote clock offset: 2.977 ms


# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 105.891 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 103.600 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 106.573 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 99.735 ms
Loss rate: 0.00%
```
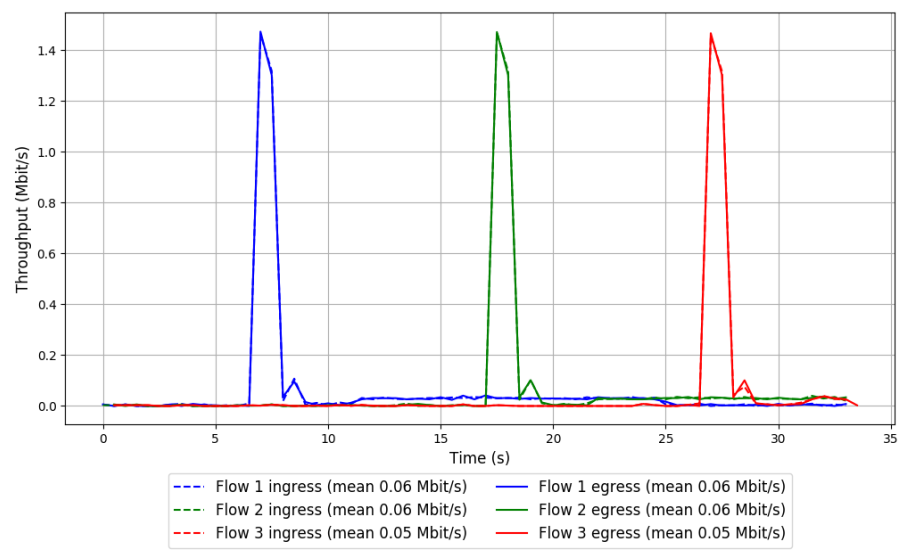
Run 9: Report of WebRTC media — Data Link

```
Run 10: Statistics of WebRTC media

Start at: 2018-04-25 00:06:53
End at: 2018-04-25 00:07:23
Local clock offset: -5.024 ms
Remote clock offset: 1.987 ms


# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 104.618 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 105.313 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 102.674 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 100.183 ms
Loss rate: 0.00%
```
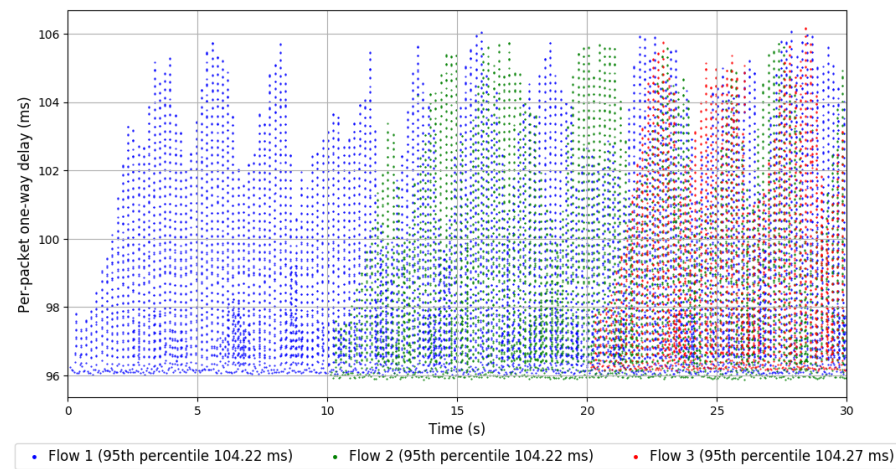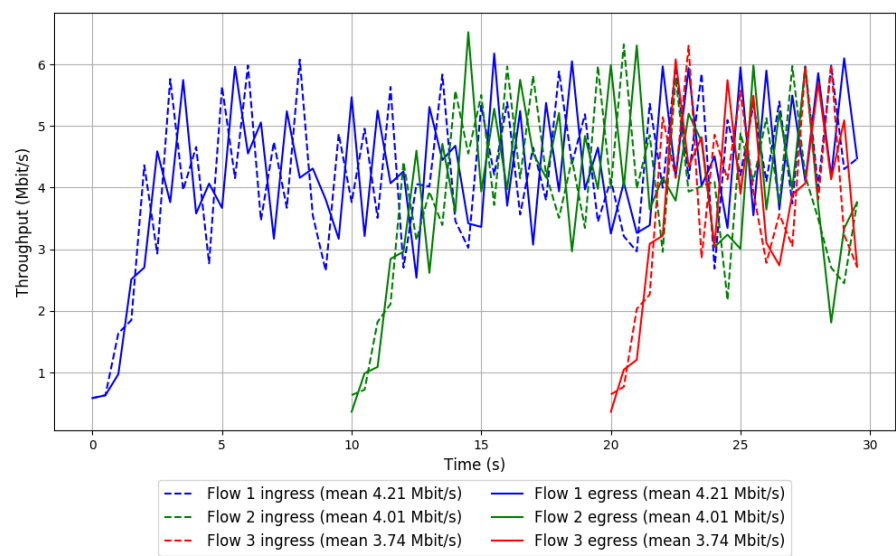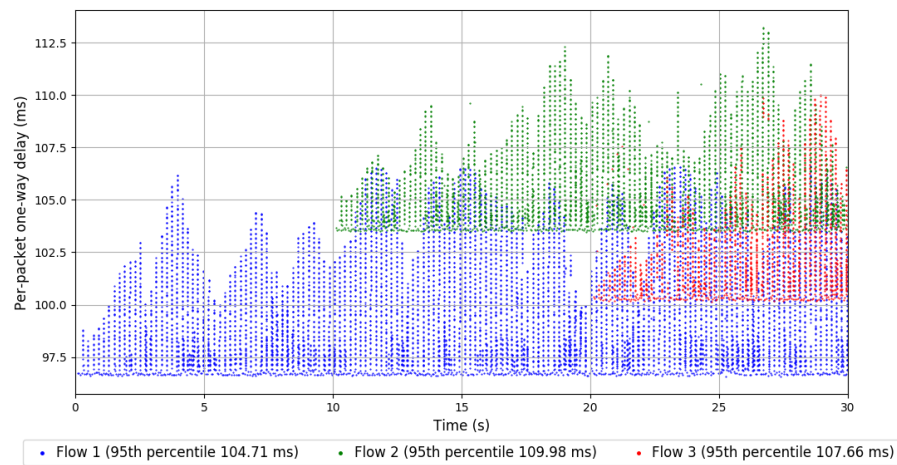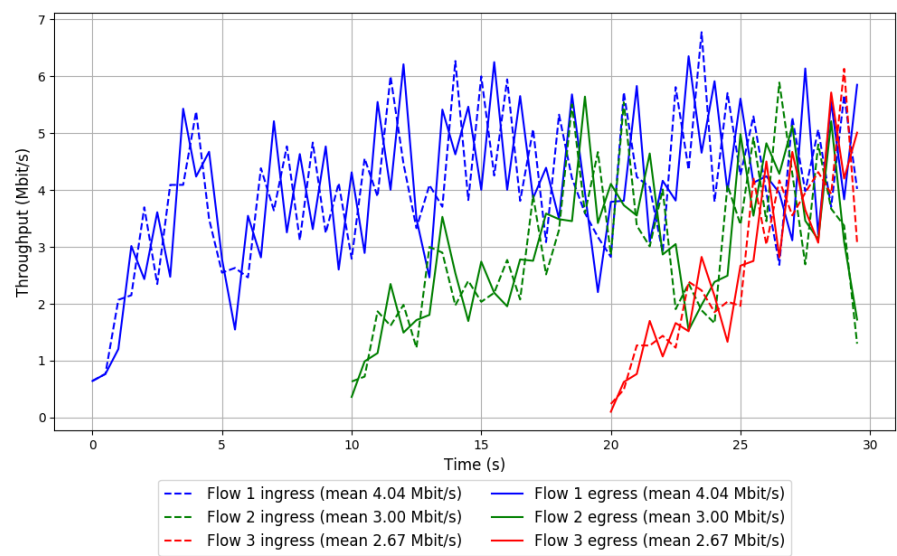
Run 10: Report of WebRTC media — Data Link

```
Run 1: Statistics of Sprout

Start at: 2018-04-24 20:57:05
End at: 2018-04-24 20:57:35
Local clock offset: -4.763 ms
Remote clock offset: 3.733 ms


# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.11 Mbit/s
95th percentile per-packet one-way delay: 104.234 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.21 Mbit/s
95th percentile per-packet one-way delay: 104.221 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.01 Mbit/s
95th percentile per-packet one-way delay: 104.221 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.74 Mbit/s
95th percentile per-packet one-way delay: 104.271 ms
Loss rate: 0.00%
```
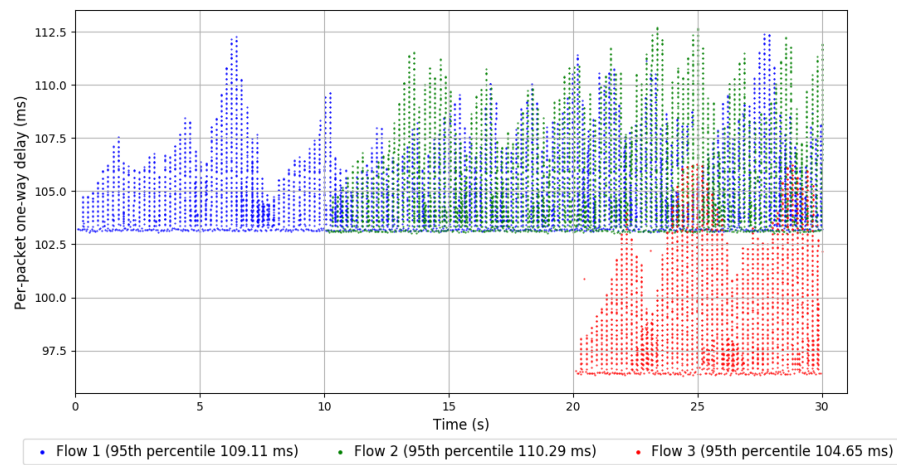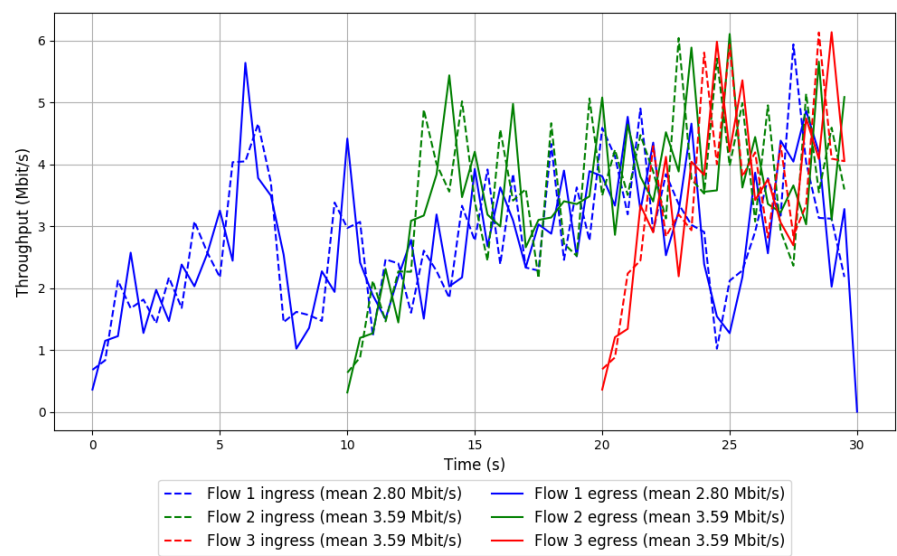
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2018-04-24 21:19:41
End at: 2018-04-24 21:20:11
Local clock offset: -5.768 ms
Remote clock offset: 4.713 ms


# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.92 Mbit/s
95th percentile per-packet one-way delay: 108.282 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.04 Mbit/s
95th percentile per-packet one-way delay: 104.714 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.00 Mbit/s
95th percentile per-packet one-way delay: 109.979 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.67 Mbit/s
95th percentile per-packet one-way delay: 107.661 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2018-04-24 21:42:17
End at: 2018-04-24 21:42:47
Local clock offset: -4.979 ms
Remote clock offset: 3.836 ms

# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.37 Mbit/s
95th percentile per-packet one-way delay: 109.571 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.80 Mbit/s
95th percentile per-packet one-way delay: 109.115 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.59 Mbit/s
95th percentile per-packet one-way delay: 110.286 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.59 Mbit/s
95th percentile per-packet one-way delay: 104.646 ms
Loss rate: 0.00%
```
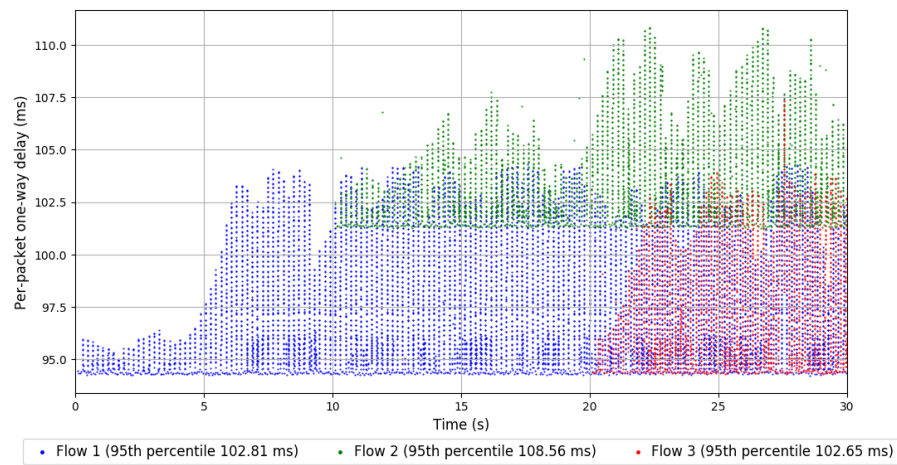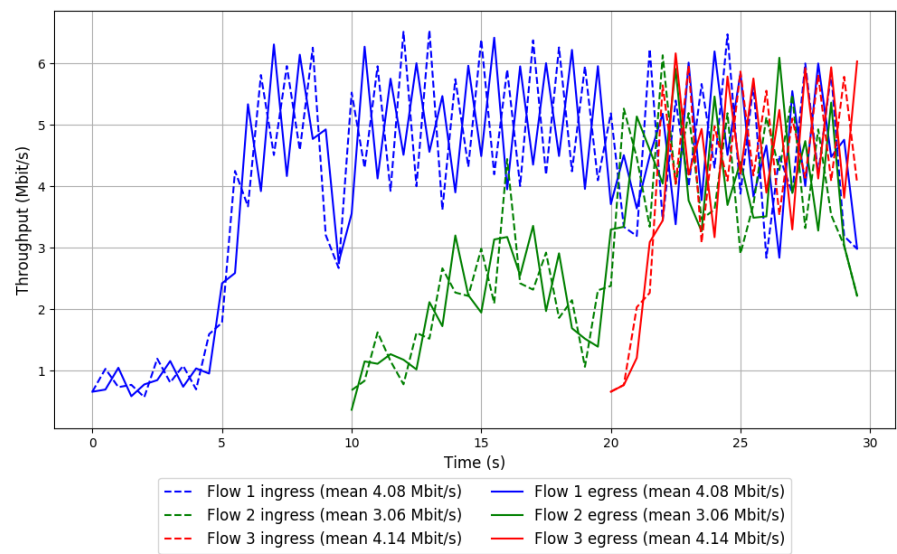
Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2018-04-24 22:04:47
End at: 2018-04-24 22:05:17
Local clock offset: -4.884 ms
Remote clock offset: 3.5 ms


# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.48 Mbit/s
95th percentile per-packet one-way delay: 106.202 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.08 Mbit/s
95th percentile per-packet one-way delay: 102.807 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.06 Mbit/s
95th percentile per-packet one-way delay: 108.555 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.14 Mbit/s
95th percentile per-packet one-way delay: 102.653 ms
Loss rate: 0.00%
```
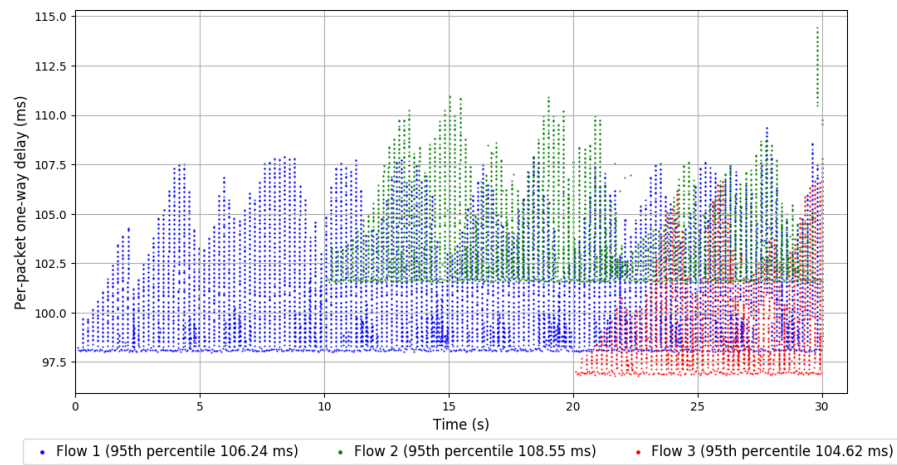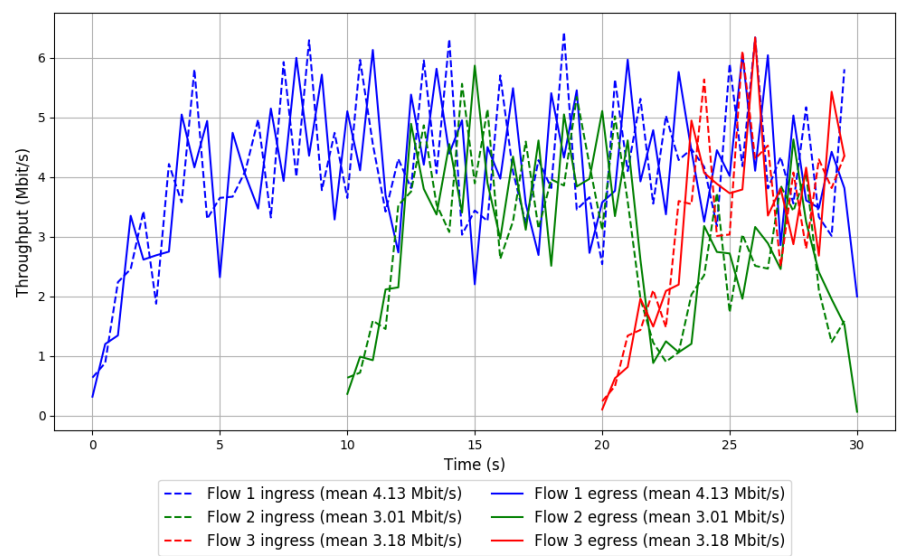
Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2018-04-24 22:27:20
End at: 2018-04-24 22:27:50
Local clock offset: -4.626 ms
Remote clock offset: 4.301 ms


# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.17 Mbit/s
95th percentile per-packet one-way delay: 107.051 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.13 Mbit/s
95th percentile per-packet one-way delay: 106.243 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.01 Mbit/s
95th percentile per-packet one-way delay: 108.546 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.18 Mbit/s
95th percentile per-packet one-way delay: 104.618 ms
Loss rate: 0.00%
```
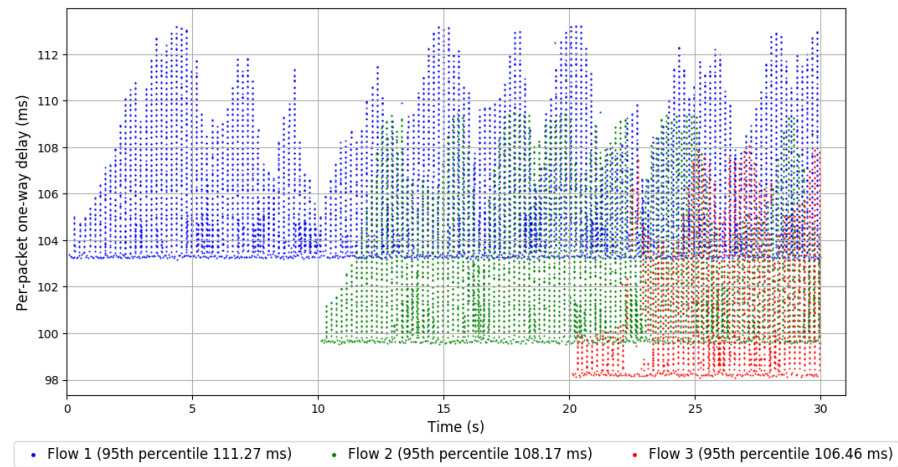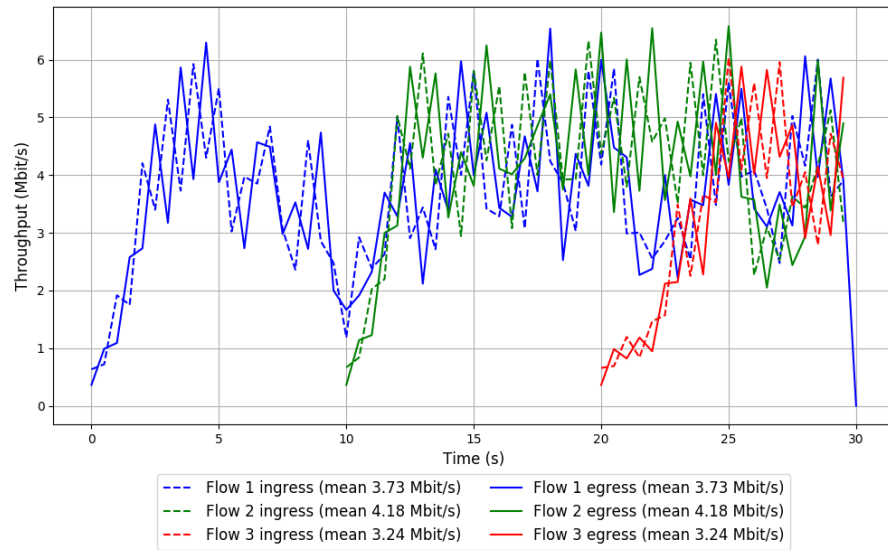
Run 5: Report of Sprout — Data Link

```
Run 6: Statistics of Sprout

Start at: 2018-04-24 22:49:50
End at: 2018-04-24 22:50:20
Local clock offset: -5.346 ms
Remote clock offset: 7.823 ms

# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.57 Mbit/s
95th percentile per-packet one-way delay: 110.280 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.73 Mbit/s
95th percentile per-packet one-way delay: 111.272 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.18 Mbit/s
95th percentile per-packet one-way delay: 108.169 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.24 Mbit/s
95th percentile per-packet one-way delay: 106.456 ms
Loss rate: 0.00%
```

Run 6: Report of Sprout — Data Link

```
Run 7: Statistics of Sprout

Start at: 2018-04-24 23:12:26
End at: 2018-04-24 23:12:56
Local clock offset: -5.152 ms
Remote clock offset: 7.344 ms


# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.63 Mbit/s
95th percentile per-packet one-way delay: 113.115 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.09 Mbit/s
95th percentile per-packet one-way delay: 109.798 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.70 Mbit/s
95th percentile per-packet one-way delay: 114.815 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.26 Mbit/s
95th percentile per-packet one-way delay: 107.628 ms
Loss rate: 0.00%
```
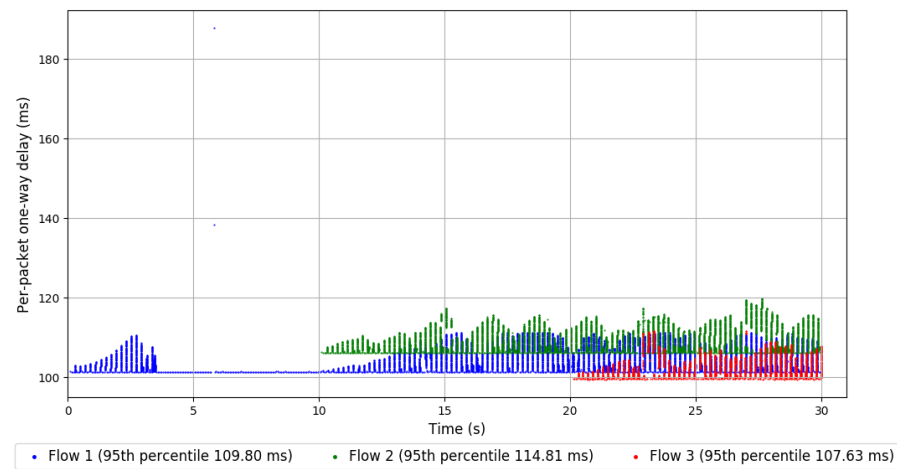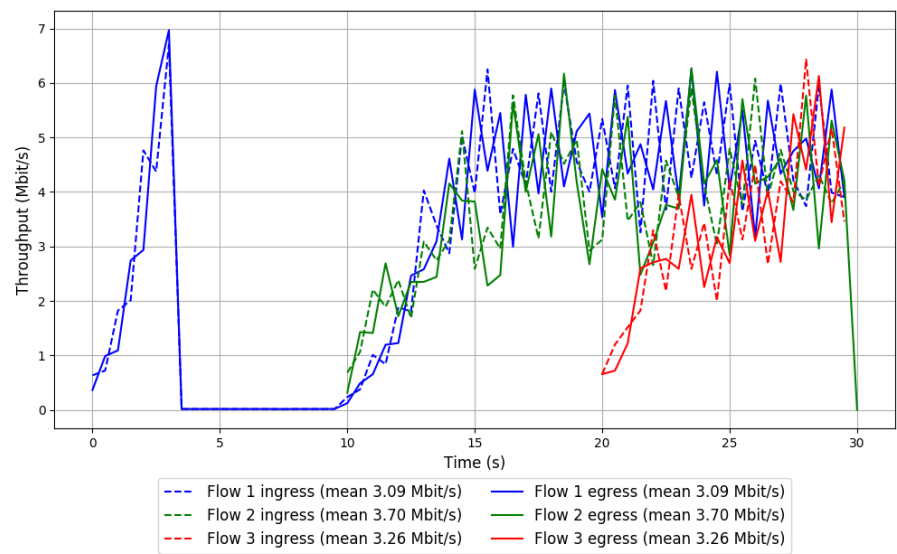
Run 7: Report of Sprout — Data Link

```
Run 8: Statistics of Sprout

Start at: 2018-04-24 23:35:01
End at: 2018-04-24 23:35:31
Local clock offset: -5.824 ms
Remote clock offset: 3.112 ms


# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.03 Mbit/s
95th percentile per-packet one-way delay: 106.009 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.40 Mbit/s
95th percentile per-packet one-way delay: 104.269 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.99 Mbit/s
95th percentile per-packet one-way delay: 106.884 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.97 Mbit/s
95th percentile per-packet one-way delay: 108.088 ms
Loss rate: 0.00%
```
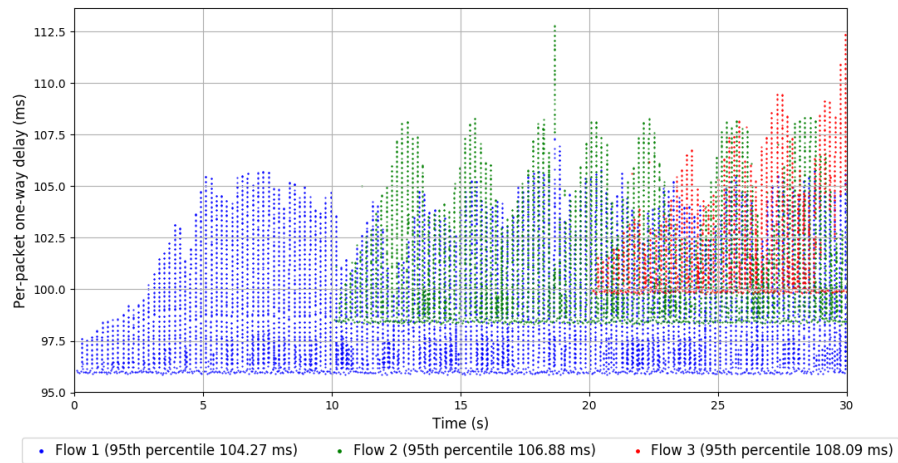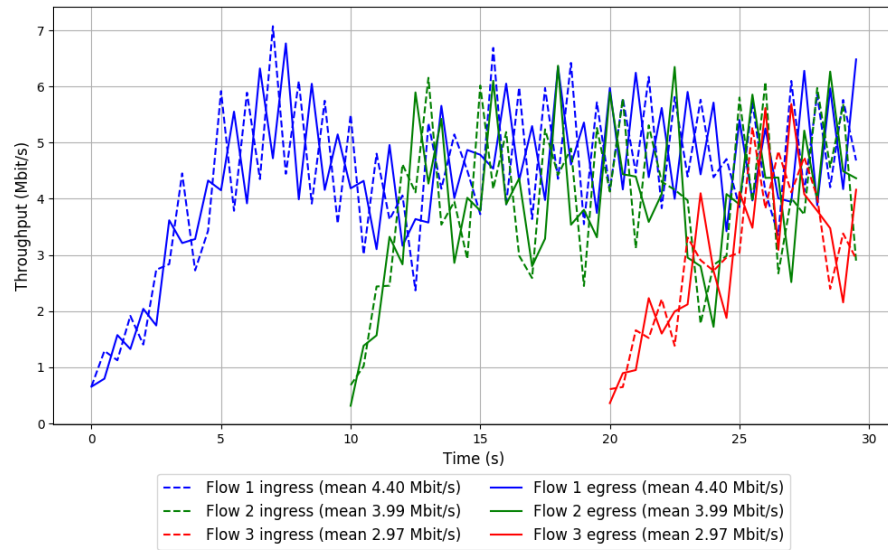
Run 8: Report of Sprout — Data Link

```
Run 9: Statistics of Sprout

Start at: 2018-04-24 23:57:16
End at: 2018-04-24 23:57:46
Local clock offset: -5.743 ms
Remote clock offset: 2.051 ms


# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.79 Mbit/s
95th percentile per-packet one-way delay: 108.282 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.09 Mbit/s
95th percentile per-packet one-way delay: 104.988 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.85 Mbit/s
95th percentile per-packet one-way delay: 109.831 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.47 Mbit/s
95th percentile per-packet one-way delay: 107.076 ms
Loss rate: 0.00%
```
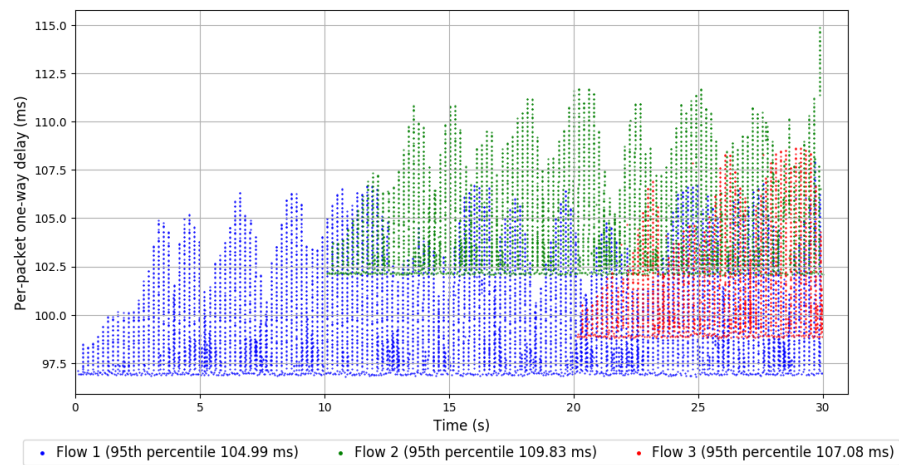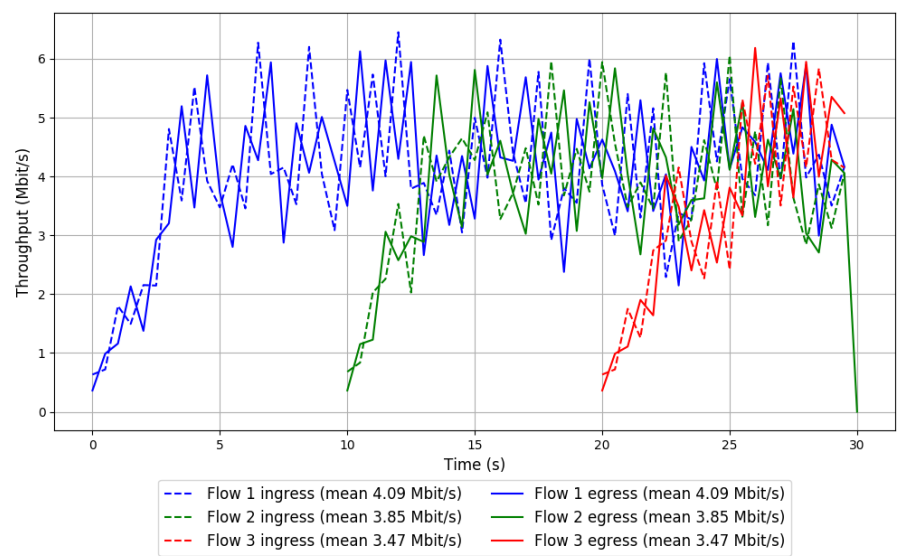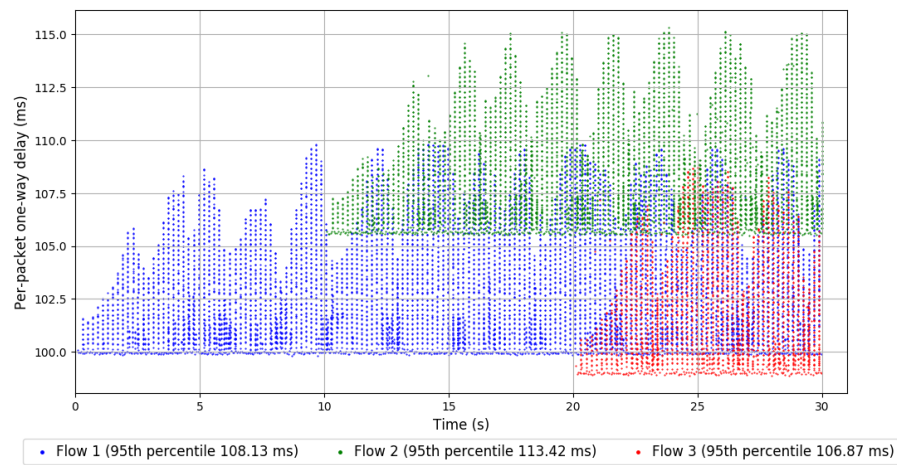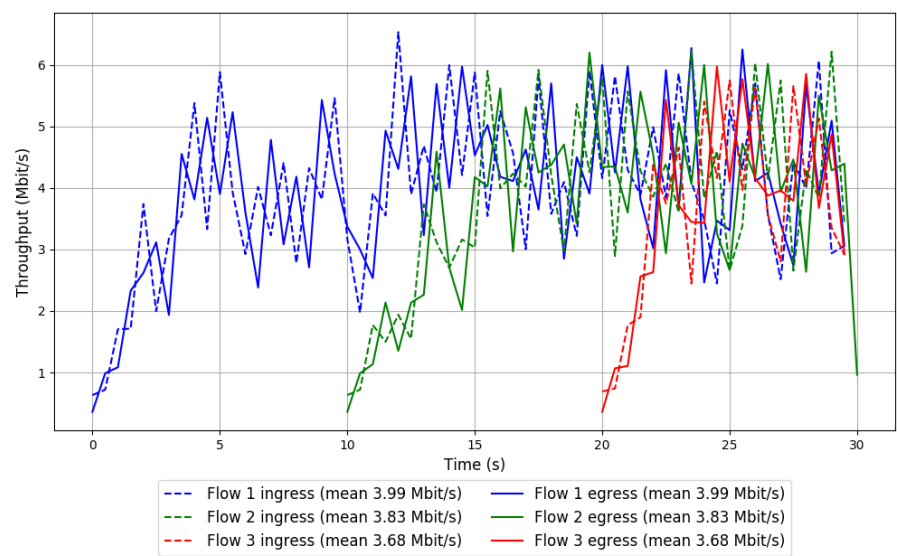
Run 9: Report of Sprout — Data Link

```
Run 10: Statistics of Sprout

Start at: 2018-04-25 00:19:53
End at: 2018-04-25 00:20:23
Local clock offset: -4.979 ms
Remote clock offset: 6.161 ms


# Below is generated by plot.py at 2018-04-25 01:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.74 Mbit/s
95th percentile per-packet one-way delay: 111.651 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.99 Mbit/s
95th percentile per-packet one-way delay: 108.131 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.83 Mbit/s
95th percentile per-packet one-way delay: 113.422 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.68 Mbit/s
95th percentile per-packet one-way delay: 106.872 ms
Loss rate: 0.00%
```
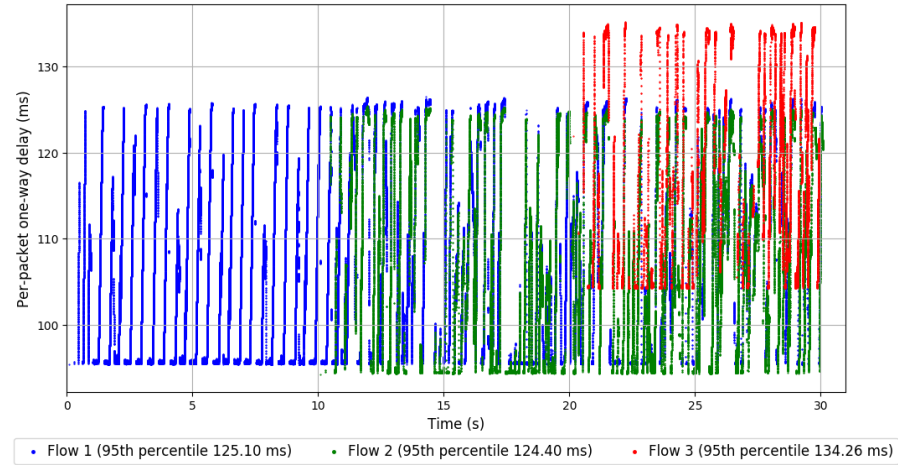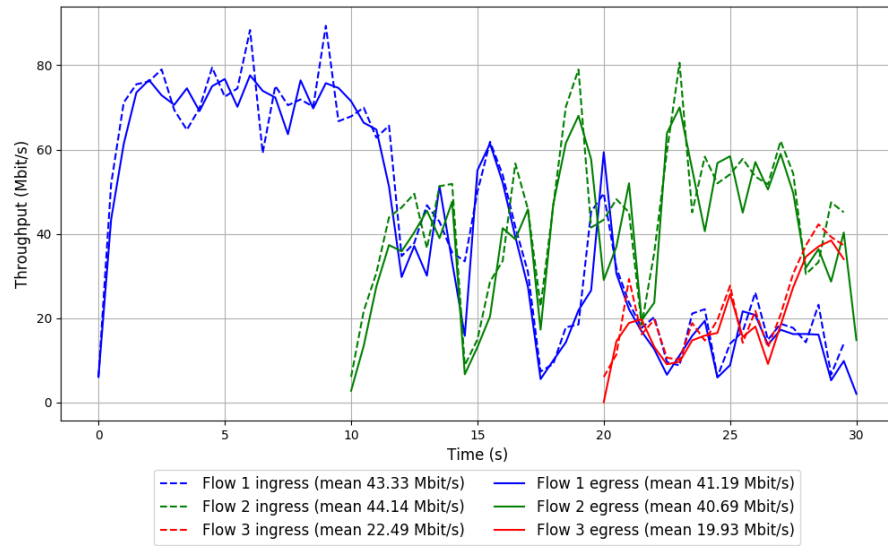
Run 10: Report of Sprout — Data Link

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

Start at: 2018-04-24 21:05:19
End at: 2018-04-24 21:05:49
Local clock offset: -4.855 ms
Remote clock offset: 4.635 ms

# Below is generated by plot.py at 2018-04-25 01:02:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.72 Mbit/s
95th percentile per-packet one-way delay: 125.246 ms
Loss rate: 6.50%
-- Flow 1:
Average throughput: 41.19 Mbit/s
95th percentile per-packet one-way delay: 125.097 ms
Loss rate: 4.84%
-- Flow 2:
Average throughput: 40.69 Mbit/s
95th percentile per-packet one-way delay: 124.398 ms
Loss rate: 7.71%
-- Flow 3:
Average throughput: 19.93 Mbit/s
95th percentile per-packet one-way delay: 134.265 ms
Loss rate: 11.42%
```

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

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

Start at: 2018-04-24 21:27:49
End at: 2018-04-24 21:28:19
Local clock offset: -5.707 ms
Remote clock offset: 7.609 ms

# Below is generated by plot.py at 2018-04-25 01:02:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.09 Mbit/s
95th percentile per-packet one-way delay: 131.881 ms
Loss rate: 5.53%
-- Flow 1:
Average throughput: 43.05 Mbit/s
95th percentile per-packet one-way delay: 131.332 ms
Loss rate: 4.82%
-- Flow 2:
Average throughput: 27.94 Mbit/s
95th percentile per-packet one-way delay: 129.488 ms
Loss rate: 6.91%
-- Flow 3:
Average throughput: 40.22 Mbit/s
95th percentile per-packet one-way delay: 137.625 ms
Loss rate: 6.06%
```
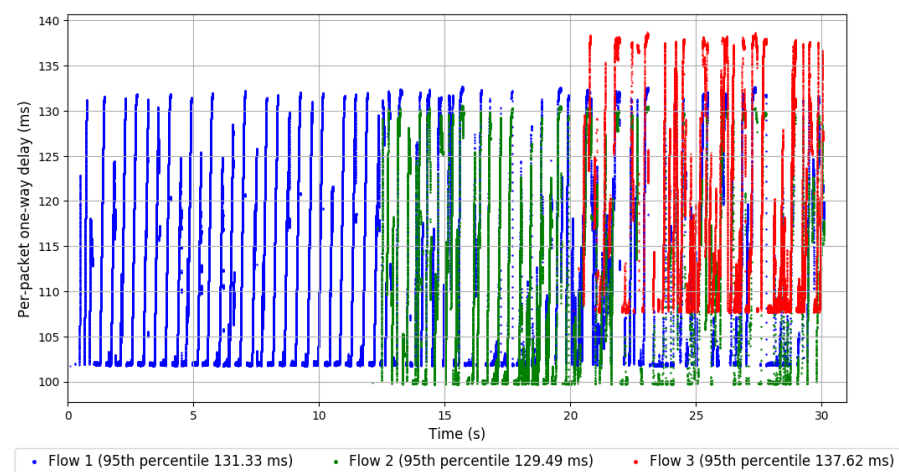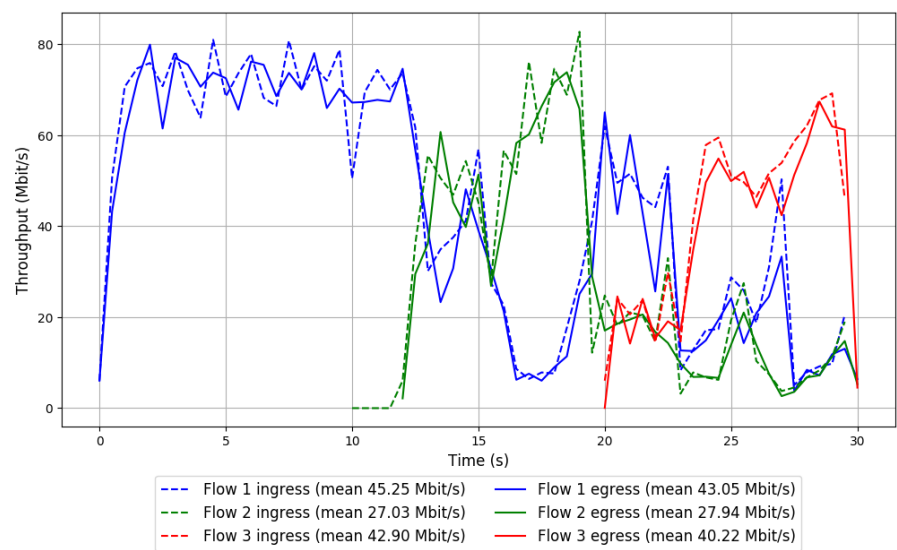
Run 2: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 45.25 Mbit/s)   Flow 1 egress (mean 43.05 Mbit/s)
Flow 2 ingress (mean 27.03 Mbit/s)   Flow 2 egress (mean 27.94 Mbit/s)
Flow 3 ingress (mean 42.90 Mbit/s)   Flow 3 egress (mean 40.22 Mbit/s)

Flow 1 (95th percentile 131.33 ms)   Flow 2 (95th percentile 129.49 ms)   Flow 3 (95th percentile 137.62 ms)

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

Start at: 2018-04-24 21:50:24
End at: 2018-04-24 21:50:54
Local clock offset: -4.173 ms
Remote clock offset: 3.793 ms


# Below is generated by plot.py at 2018-04-25 01:02:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.33 Mbit/s
95th percentile per-packet one-way delay: 130.481 ms
Loss rate: 5.66%
-- Flow 1:
Average throughput: 41.16 Mbit/s
95th percentile per-packet one-way delay: 130.464 ms
Loss rate: 4.16%
-- Flow 2:
Average throughput: 25.54 Mbit/s
95th percentile per-packet one-way delay: 130.897 ms
Loss rate: 9.63%
-- Flow 3:
Average throughput: 40.06 Mbit/s
95th percentile per-packet one-way delay: 126.859 ms
Loss rate: 4.92%
```
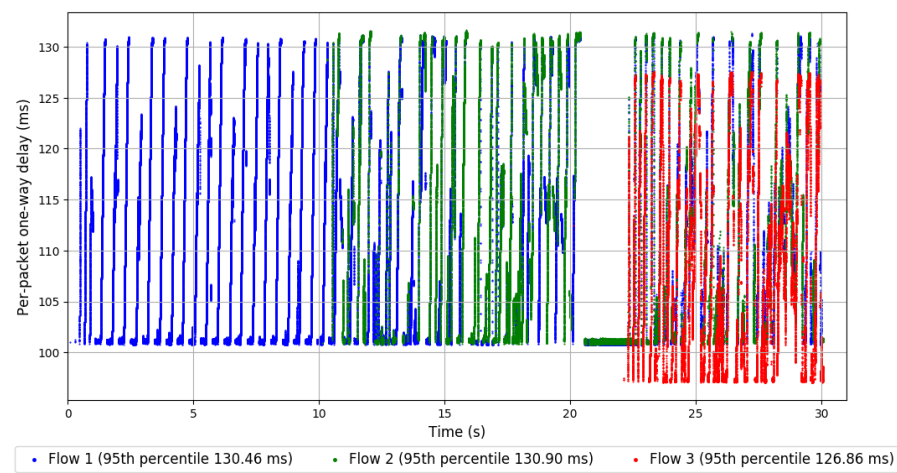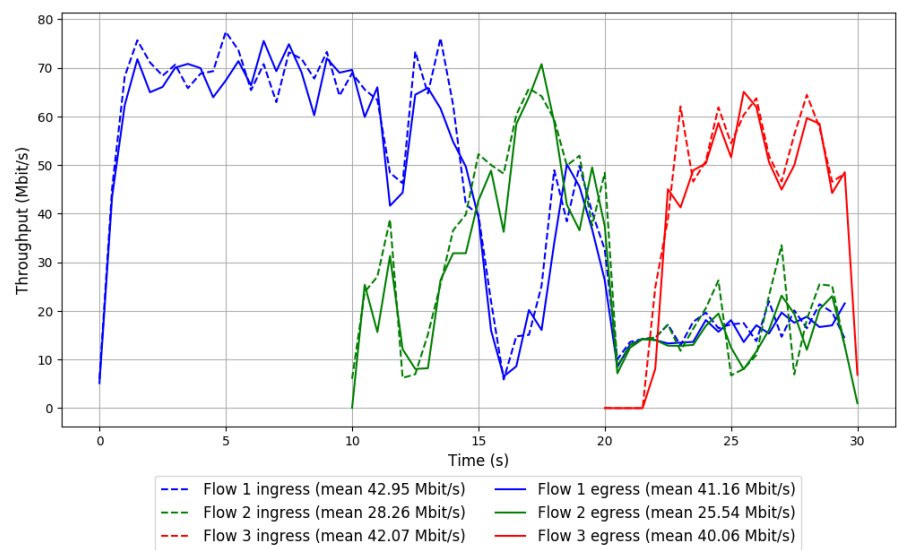
Run 3: Report of TaoVA-100x — Data Link

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

Start at: 2018-04-24 22:12:55
End at: 2018-04-24 22:13:25
Local clock offset: -4.345 ms
Remote clock offset: 8.134 ms


# Below is generated by plot.py at 2018-04-25 01:02:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.04 Mbit/s
95th percentile per-packet one-way delay: 131.959 ms
Loss rate: 5.73%
-- Flow 1:
Average throughput: 40.33 Mbit/s
95th percentile per-packet one-way delay: 131.704 ms
Loss rate: 3.53%
-- Flow 2:
Average throughput: 40.42 Mbit/s
95th percentile per-packet one-way delay: 132.302 ms
Loss rate: 7.21%
-- Flow 3:
Average throughput: 26.84 Mbit/s
95th percentile per-packet one-way delay: 130.395 ms
Loss rate: 10.61%
```
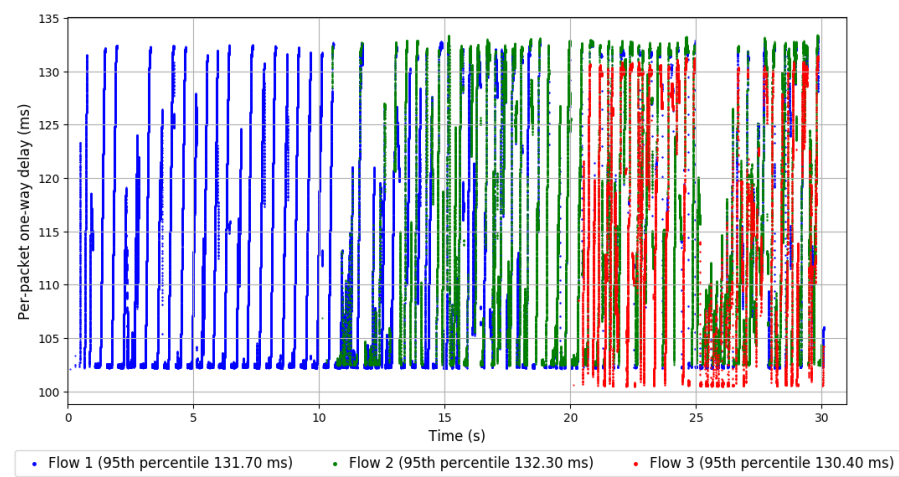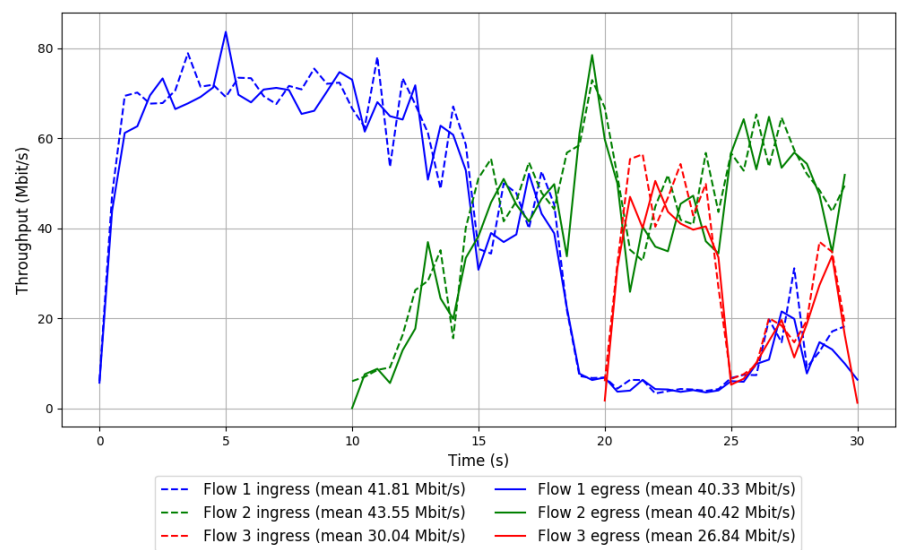
Run 4: Report of TaoVA-100x — Data Link

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

Start at: 2018-04-24 22:35:27
End at: 2018-04-24 22:35:57
Local clock offset: -4.663 ms
Remote clock offset: 7.85 ms


# Below is generated by plot.py at 2018-04-25 01:03:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.28 Mbit/s
95th percentile per-packet one-way delay: 135.151 ms
Loss rate: 5.50%
-- Flow 1:
Average throughput: 47.01 Mbit/s
95th percentile per-packet one-way delay: 135.192 ms
Loss rate: 4.50%
-- Flow 2:
Average throughput: 34.84 Mbit/s
95th percentile per-packet one-way delay: 128.019 ms
Loss rate: 6.05%
-- Flow 3:
Average throughput: 18.70 Mbit/s
95th percentile per-packet one-way delay: 137.093 ms
Loss rate: 10.64%
```
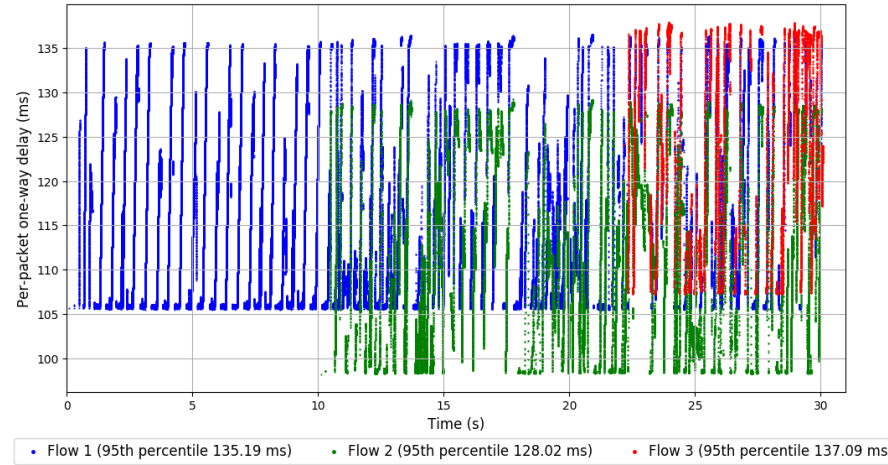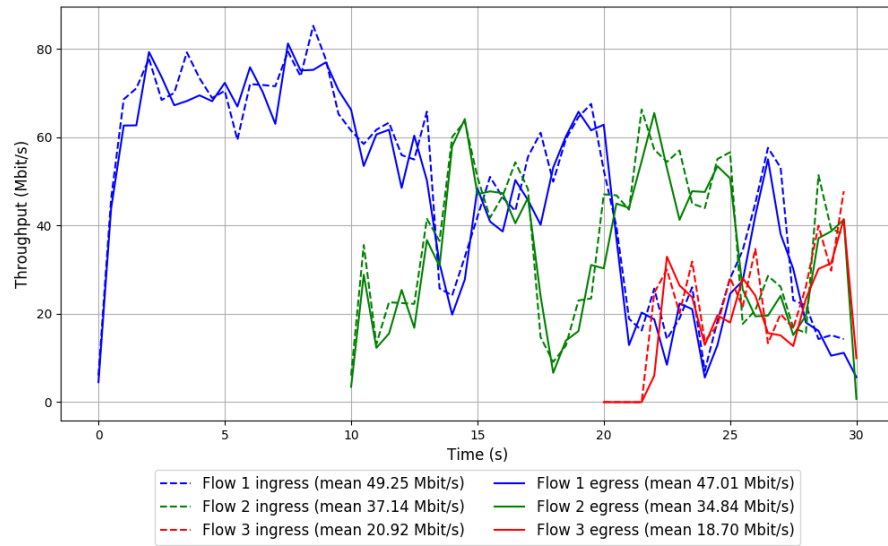
Run 5: Report of TaoVA-100x — Data Link

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

Start at: 2018-04-24 22:58:01
End at: 2018-04-24 22:58:31
Local clock offset: -4.443 ms
Remote clock offset: 7.692 ms

# Below is generated by plot.py at 2018-04-25 01:03:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.31 Mbit/s
95th percentile per-packet one-way delay: 131.189 ms
Loss rate: 6.94%
-- Flow 1:
Average throughput: 46.75 Mbit/s
95th percentile per-packet one-way delay: 128.508 ms
Loss rate: 5.36%
-- Flow 2:
Average throughput: 39.40 Mbit/s
95th percentile per-packet one-way delay: 132.183 ms
Loss rate: 8.82%
-- Flow 3:
Average throughput: 7.21 Mbit/s
95th percentile per-packet one-way delay: 130.538 ms
Loss rate: 15.41%
```
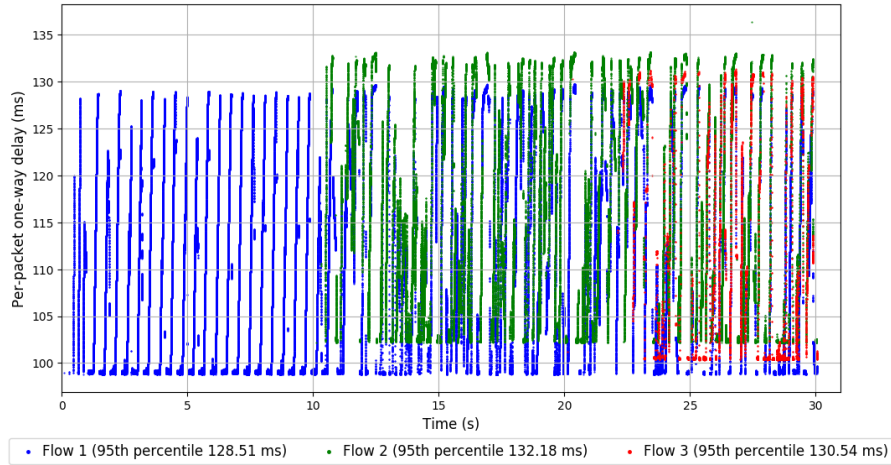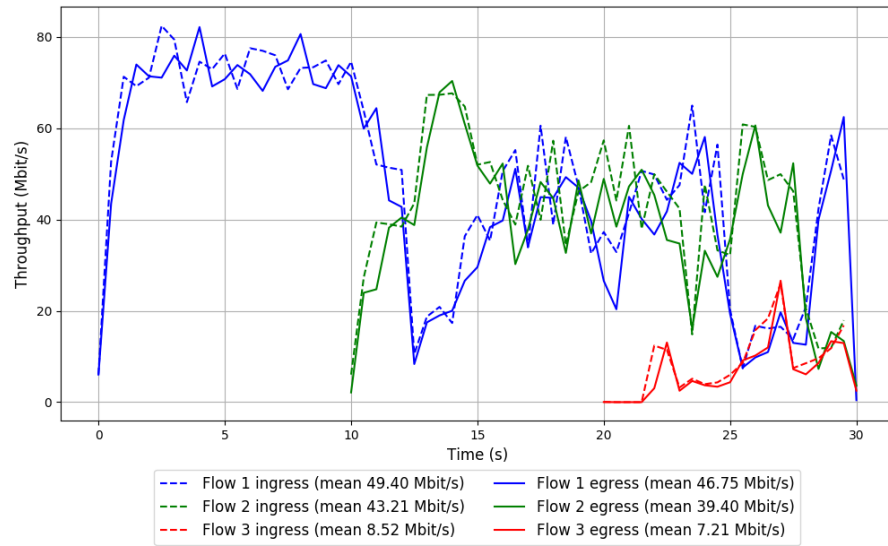
Run 6: Report of TaoVA-100x — Data Link

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

Start at: 2018-04-24 23:20:39
End at: 2018-04-24 23:21:09
Local clock offset: -4.328 ms
Remote clock offset: 7.983 ms


# Below is generated by plot.py at 2018-04-25 01:03:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.75 Mbit/s
95th percentile per-packet one-way delay: 132.220 ms
Loss rate: 7.63%
-- Flow 1:
Average throughput: 45.98 Mbit/s
95th percentile per-packet one-way delay: 132.600 ms
Loss rate: 5.82%
-- Flow 2:
Average throughput: 25.81 Mbit/s
95th percentile per-packet one-way delay: 130.110 ms
Loss rate: 10.46%
-- Flow 3:
Average throughput: 31.83 Mbit/s
95th percentile per-packet one-way delay: 131.281 ms
Loss rate: 10.53%
```

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

Flow 1 ingress (mean 48.86 Mbit/s) --- Flow 1 egress (mean 45.98 Mbit/s)
Flow 2 ingress (mean 28.86 Mbit/s) --- Flow 2 egress (mean 25.81 Mbit/s)
Flow 3 ingress (mean 35.66 Mbit/s) --- Flow 3 egress (mean 31.83 Mbit/s)

Flow 1 (95th percentile 132.60 ms) Flow 2 (95th percentile 130.11 ms) Flow 3 (95th percentile 131.28 ms)

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

Start at: 2018-04-24 23:42:54
End at: 2018-04-24 23:43:24
Local clock offset: -4.234 ms
Remote clock offset: 7.686 ms


# Below is generated by plot.py at 2018-04-25 01:03:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.63 Mbit/s
95th percentile per-packet one-way delay: 133.128 ms
Loss rate: 6.04%
-- Flow 1:
Average throughput: 43.11 Mbit/s
95th percentile per-packet one-way delay: 132.400 ms
Loss rate: 4.01%
-- Flow 2:
Average throughput: 21.46 Mbit/s
95th percentile per-packet one-way delay: 138.265 ms
Loss rate: 10.10%
-- Flow 3:
Average throughput: 30.88 Mbit/s
95th percentile per-packet one-way delay: 131.227 ms
Loss rate: 8.44%
```
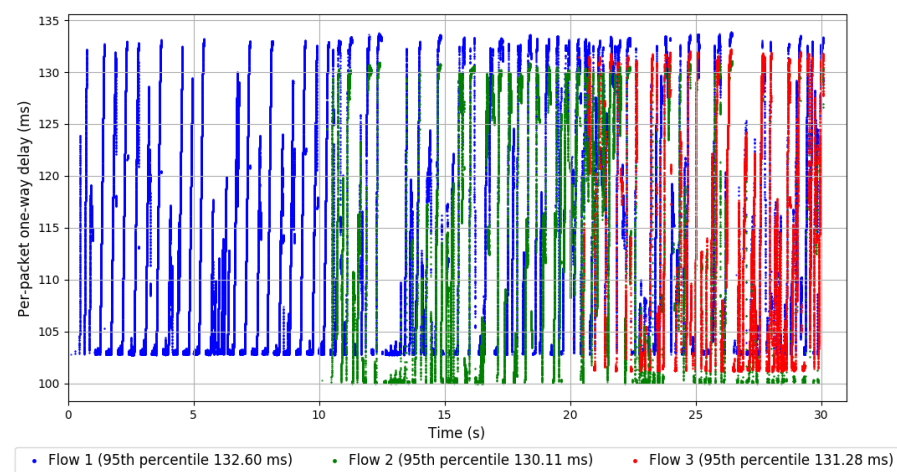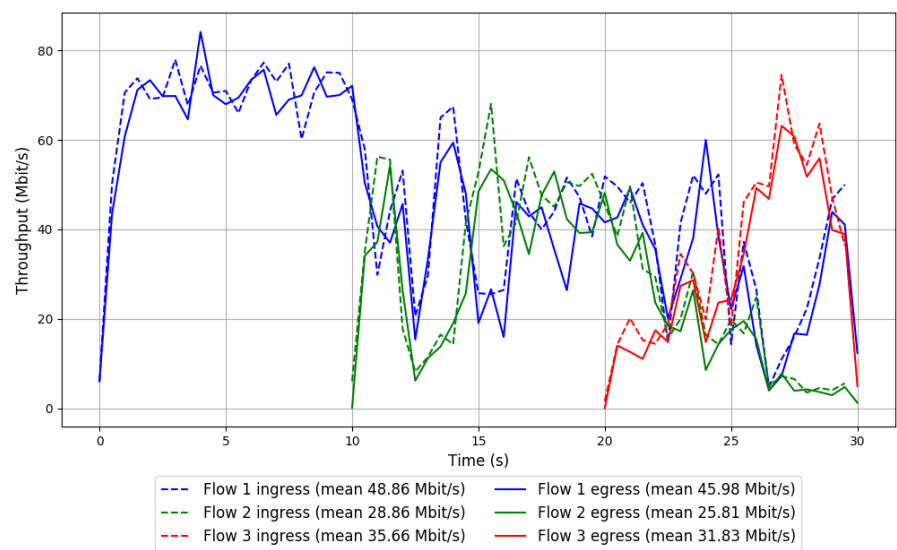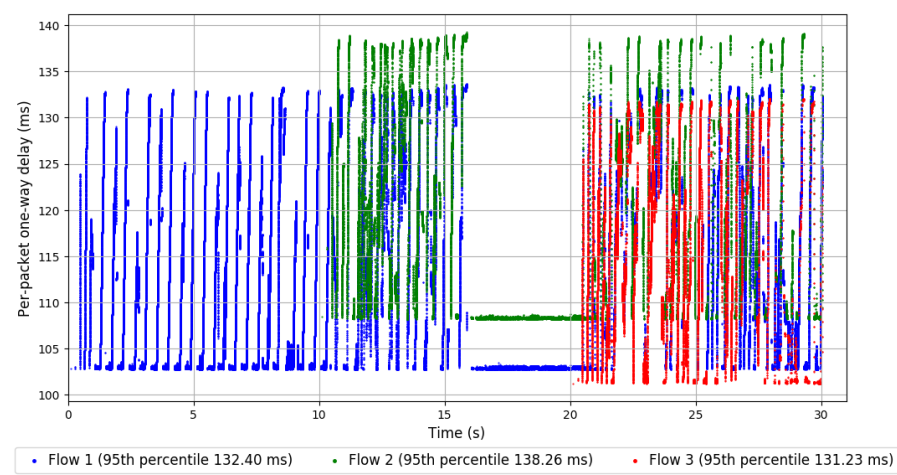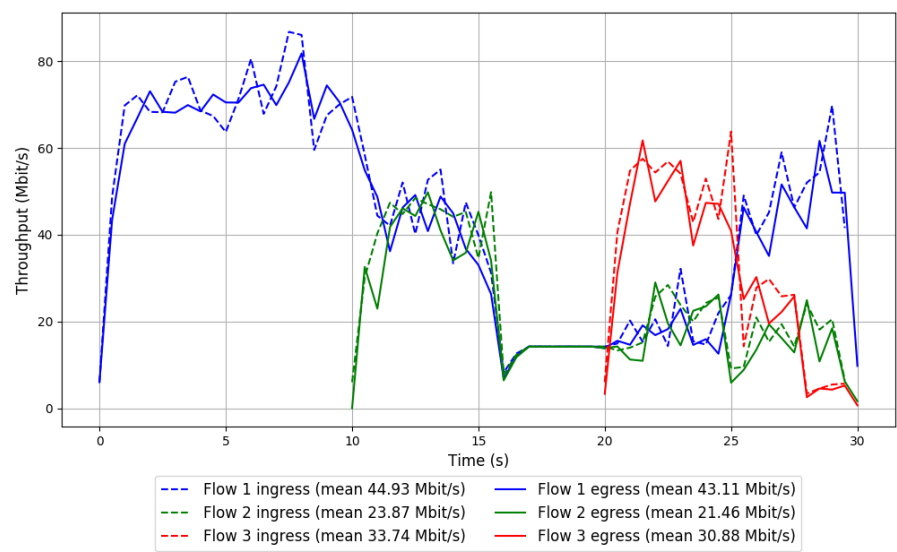
Run 8: Report of TaoVA-100x — Data Link

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

Start at: 2018-04-25 00:05:29
End at: 2018-04-25 00:05:59
Local clock offset: -4.966 ms
Remote clock offset: 2.764 ms


# Below is generated by plot.py at 2018-04-25 01:04:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.32 Mbit/s
95th percentile per-packet one-way delay: 127.649 ms
Loss rate: 7.23%
-- Flow 1:
Average throughput: 40.08 Mbit/s
95th percentile per-packet one-way delay: 124.974 ms
Loss rate: 5.44%
-- Flow 2:
Average throughput: 26.88 Mbit/s
95th percentile per-packet one-way delay: 129.029 ms
Loss rate: 11.62%
-- Flow 3:
Average throughput: 49.50 Mbit/s
95th percentile per-packet one-way delay: 127.469 ms
Loss rate: 6.47%
```
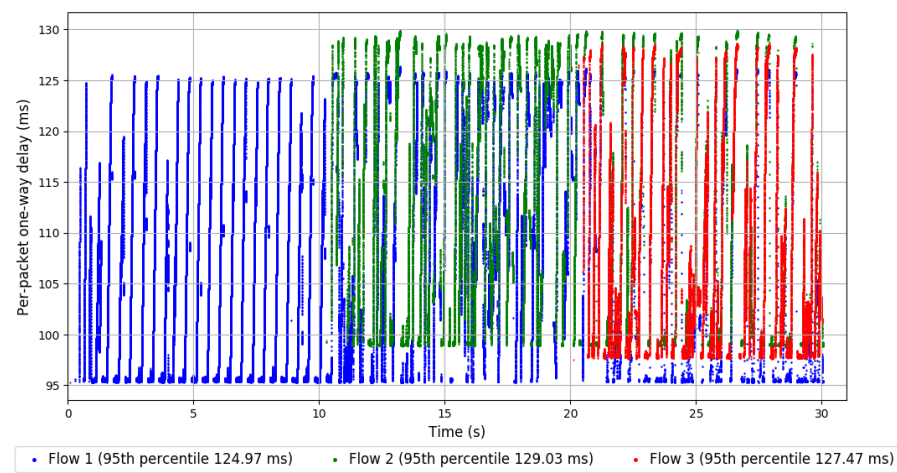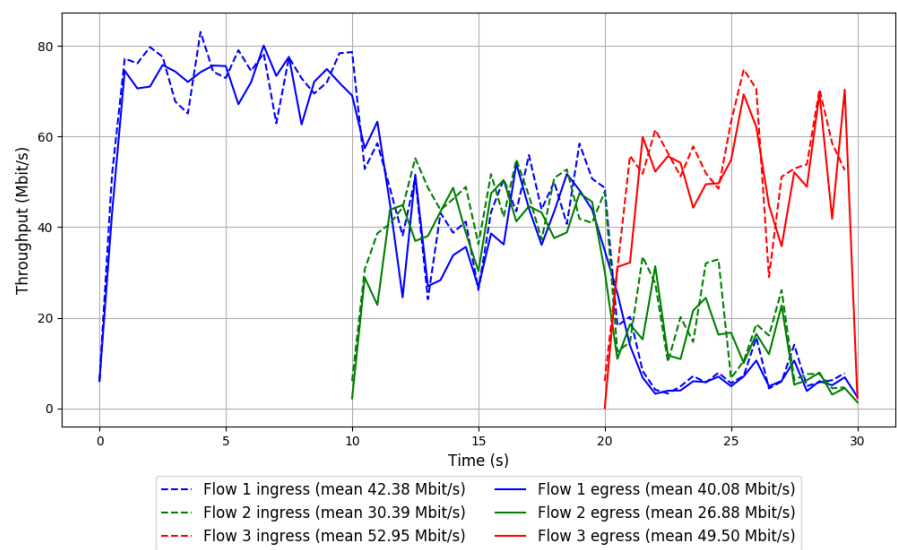
Run 9: Report of TaoVA-100x — Data Link

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

Start at: 2018-04-25 00:27:47
End at: 2018-04-25 00:28:17
Local clock offset: -4.925 ms
Remote clock offset: 3.293 ms


# Below is generated by plot.py at 2018-04-25 01:04:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.63 Mbit/s
95th percentile per-packet one-way delay: 128.187 ms
Loss rate: 7.34%
-- Flow 1:
Average throughput: 46.09 Mbit/s
95th percentile per-packet one-way delay: 127.571 ms
Loss rate: 5.23%
-- Flow 2:
Average throughput: 33.42 Mbit/s
95th percentile per-packet one-way delay: 128.909 ms
Loss rate: 10.00%
-- Flow 3:
Average throughput: 22.17 Mbit/s
95th percentile per-packet one-way delay: 126.010 ms
Loss rate: 11.81%
```
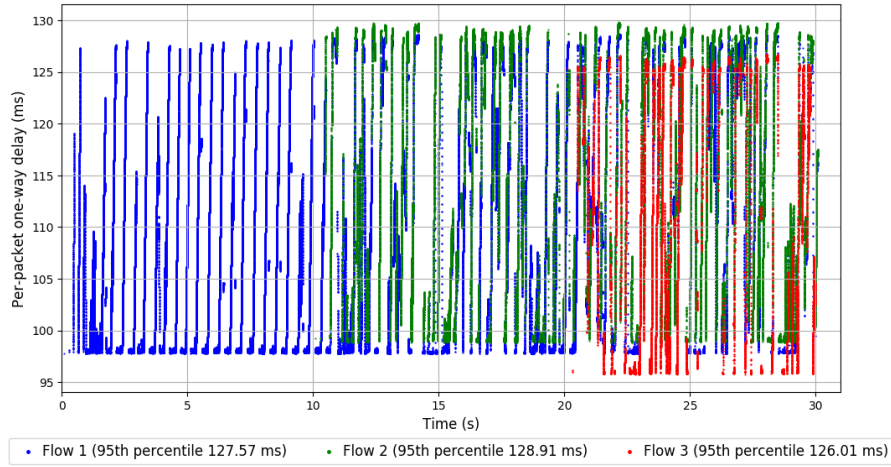
Run 10: Report of TaoVA-100x — Data Link

```
Run 1: Statistics of TCP Vegas

Start at: 2018-04-24 21:04:02
End at: 2018-04-24 21:04:32
Local clock offset: -4.91 ms
Remote clock offset: 8.498 ms


# Below is generated by plot.py at 2018-04-25 01:04:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 53.84 Mbit/s
95th percentile per-packet one-way delay: 112.784 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 23.56 Mbit/s
95th percentile per-packet one-way delay: 109.028 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 28.09 Mbit/s
95th percentile per-packet one-way delay: 115.925 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 34.91 Mbit/s
95th percentile per-packet one-way delay: 111.171 ms
Loss rate: 1.20%
```
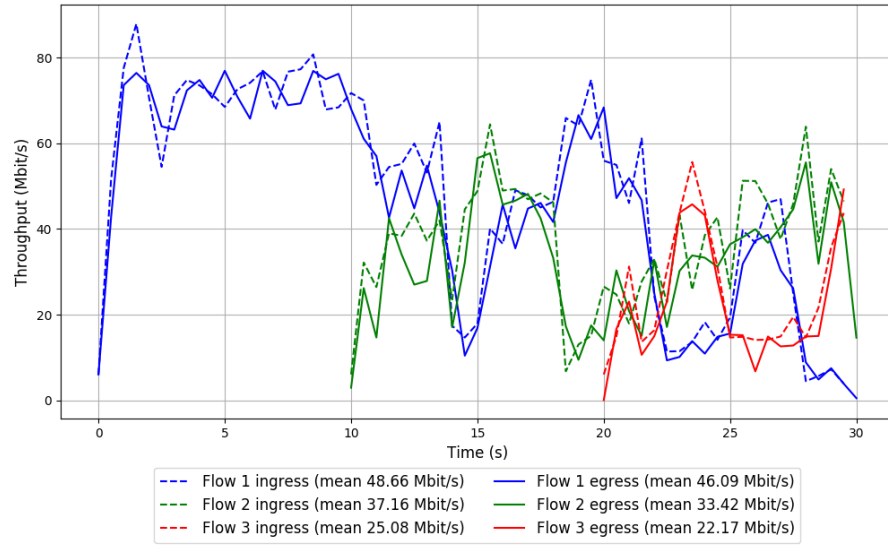
Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2018-04-24 21:26:32
End at: 2018-04-24 21:27:02
Local clock offset: -4.9 ms
Remote clock offset: 4.741 ms


# Below is generated by plot.py at 2018-04-25 01:04:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 55.61 Mbit/s
95th percentile per-packet one-way delay: 110.010 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 24.53 Mbit/s
95th percentile per-packet one-way delay: 110.655 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 29.48 Mbit/s
95th percentile per-packet one-way delay: 109.824 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 34.49 Mbit/s
95th percentile per-packet one-way delay: 106.291 ms
Loss rate: 1.19%
```
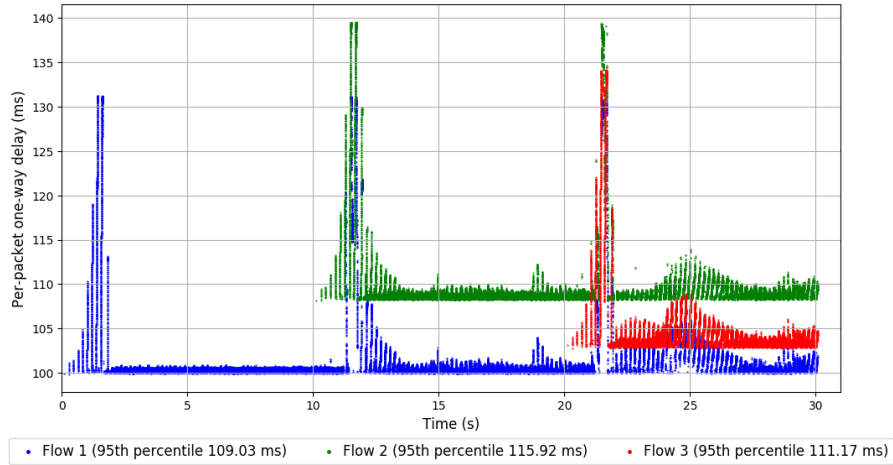
Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2018-04-24 21:49:07
End at: 2018-04-24 21:49:37
Local clock offset: -5.645 ms
Remote clock offset: 4.618 ms


# Below is generated by plot.py at 2018-04-25 01:04:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.04 Mbit/s
95th percentile per-packet one-way delay: 110.422 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 23.90 Mbit/s
95th percentile per-packet one-way delay: 115.324 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 29.12 Mbit/s
95th percentile per-packet one-way delay: 106.235 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 32.36 Mbit/s
95th percentile per-packet one-way delay: 108.450 ms
Loss rate: 1.13%
```
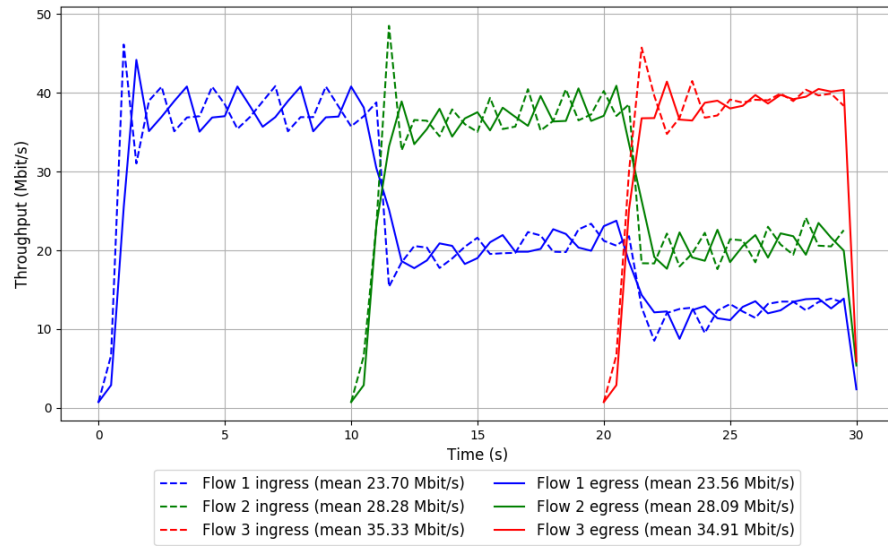
Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2018-04-24 22:11:38
End at: 2018-04-24 22:12:08
Local clock offset: -5.826 ms
Remote clock offset: 4.317 ms


# Below is generated by plot.py at 2018-04-25 01:04:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 47.89 Mbit/s
95th percentile per-packet one-way delay: 110.472 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 16.43 Mbit/s
95th percentile per-packet one-way delay: 116.447 ms
Loss rate: 1.21%
-- Flow 2:
Average throughput: 29.75 Mbit/s
95th percentile per-packet one-way delay: 109.511 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 35.13 Mbit/s
95th percentile per-packet one-way delay: 104.341 ms
Loss rate: 1.04%
```
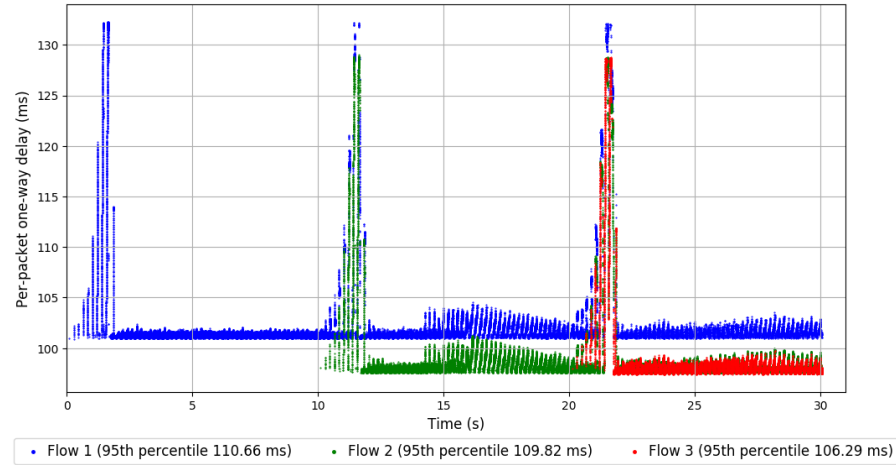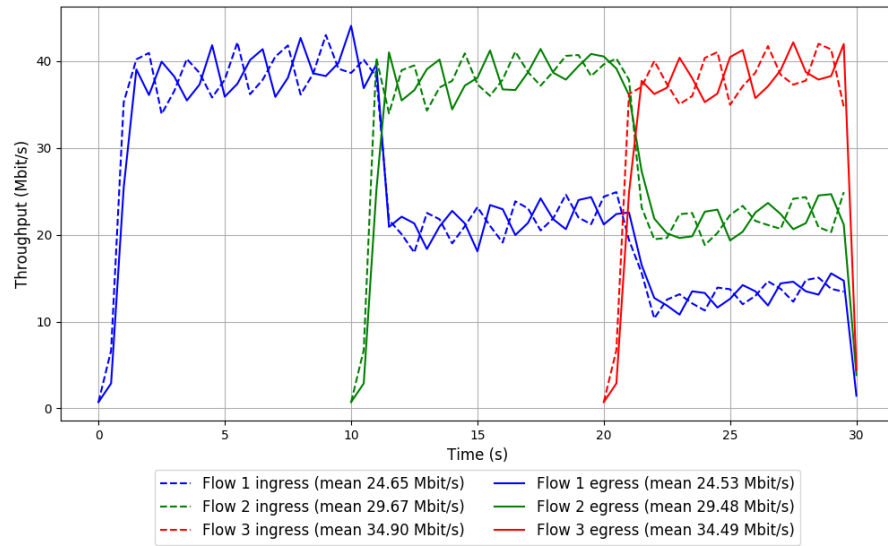
Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2018-04-24 22:34:09
End at: 2018-04-24 22:34:39
Local clock offset: -6.234 ms
Remote clock offset: 3.371 ms


# Below is generated by plot.py at 2018-04-25 01:04:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 57.06 Mbit/s
95th percentile per-packet one-way delay: 104.449 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 25.32 Mbit/s
95th percentile per-packet one-way delay: 106.196 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 30.27 Mbit/s
95th percentile per-packet one-way delay: 101.912 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 35.05 Mbit/s
95th percentile per-packet one-way delay: 104.952 ms
Loss rate: 1.33%
```
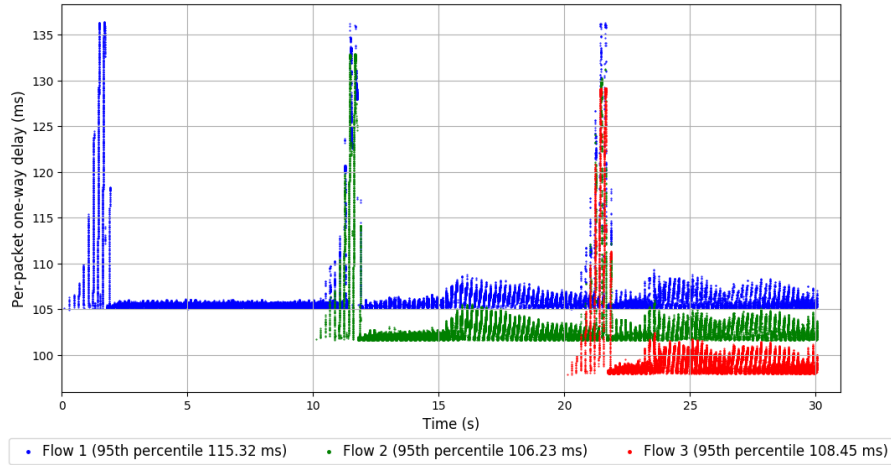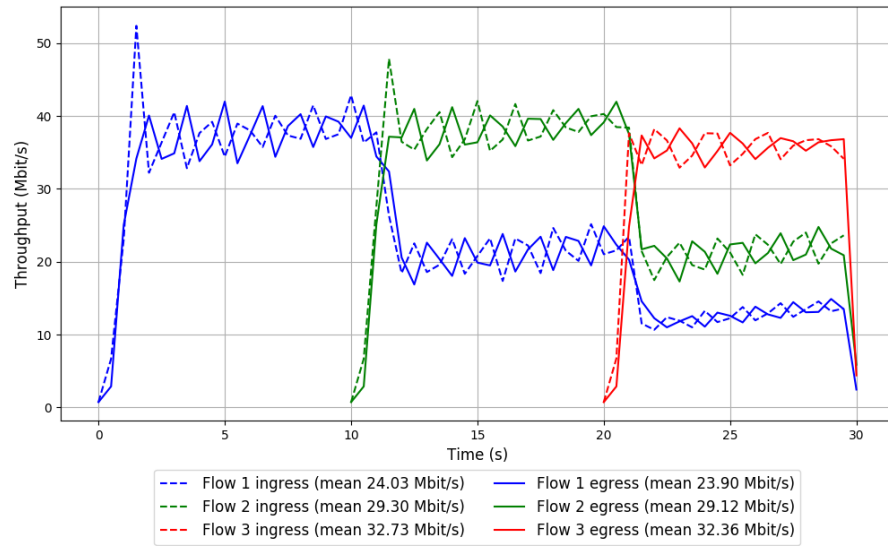
Run 5: Report of TCP Vegas — Data Link

```
Run 6: Statistics of TCP Vegas

Start at: 2018-04-24 22:56:43
End at: 2018-04-24 22:57:13
Local clock offset: -4.448 ms
Remote clock offset: 7.68 ms


# Below is generated by plot.py at 2018-04-25 01:04:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.41 Mbit/s
95th percentile per-packet one-way delay: 113.572 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 33.60 Mbit/s
95th percentile per-packet one-way delay: 113.083 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 29.93 Mbit/s
95th percentile per-packet one-way delay: 114.028 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 20.71 Mbit/s
95th percentile per-packet one-way delay: 117.701 ms
Loss rate: 0.83%
```
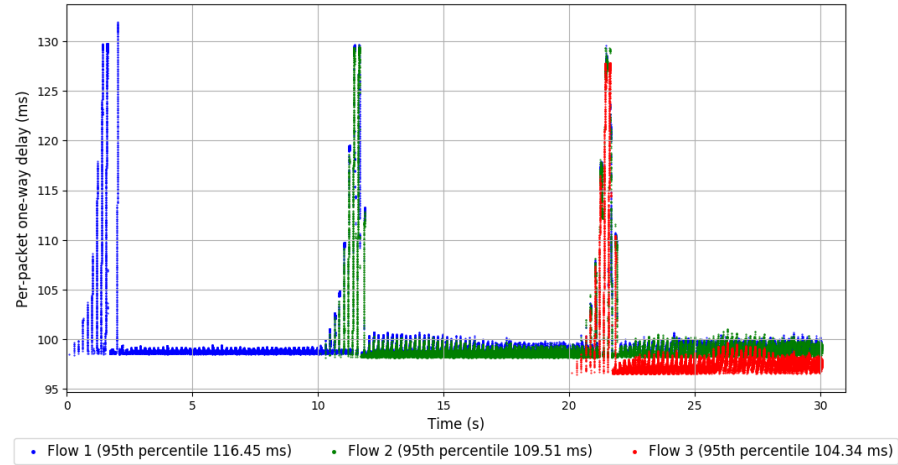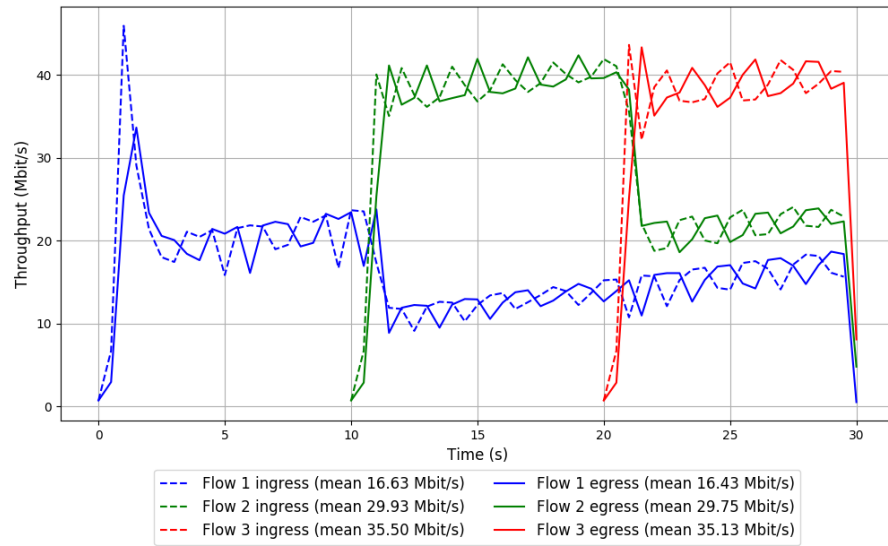
Run 6: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 33.72 Mbit/s) --- Flow 1 egress (mean 33.60 Mbit/s)
Flow 2 ingress (mean 30.13 Mbit/s) --- Flow 2 egress (mean 29.93 Mbit/s)
Flow 3 ingress (mean 20.88 Mbit/s) --- Flow 3 egress (mean 20.71 Mbit/s)

Flow 1 (95th percentile 113.08 ms)   Flow 2 (95th percentile 114.03 ms)   Flow 3 (95th percentile 117.70 ms)

```
Run 7: Statistics of TCP Vegas

Start at: 2018-04-24 23:19:21
End at: 2018-04-24 23:19:51
Local clock offset: -5.795 ms
Remote clock offset: 6.317 ms


# Below is generated by plot.py at 2018-04-25 01:04:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.83 Mbit/s
95th percentile per-packet one-way delay: 111.482 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 25.16 Mbit/s
95th percentile per-packet one-way delay: 109.338 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 30.14 Mbit/s
95th percentile per-packet one-way delay: 113.110 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 34.97 Mbit/s
95th percentile per-packet one-way delay: 109.779 ms
Loss rate: 1.35%
```
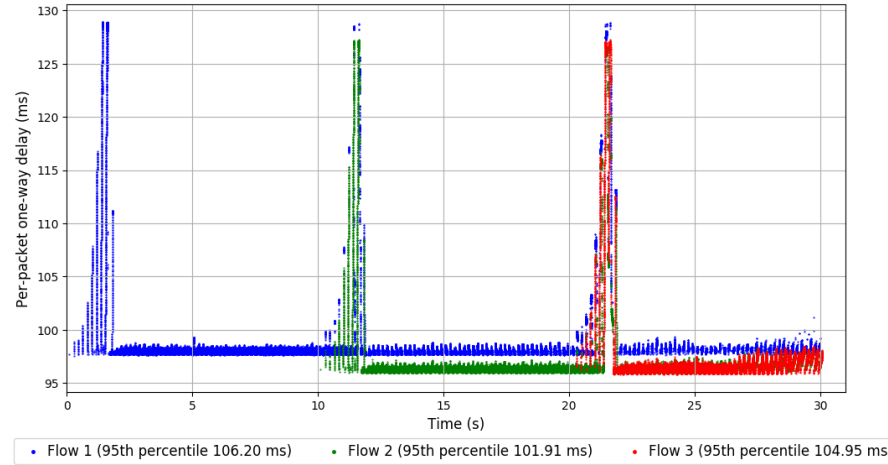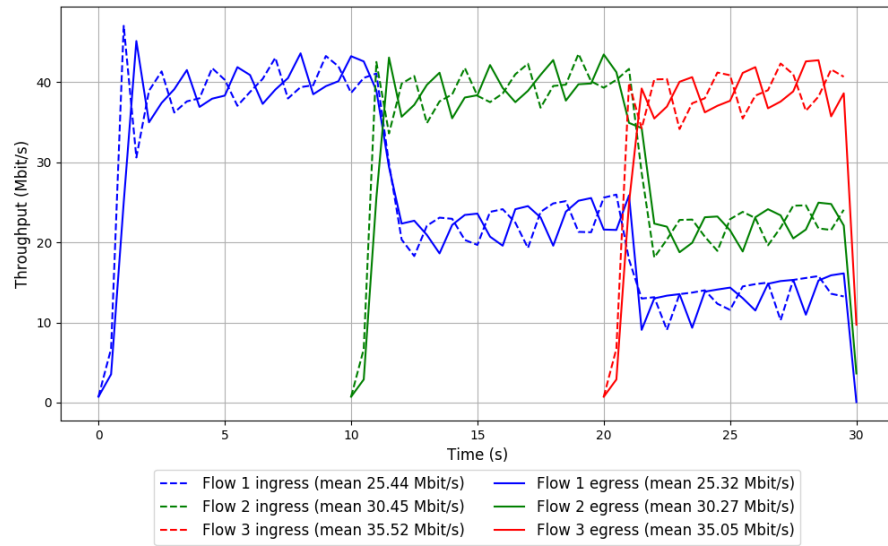
Run 7: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 25.28 Mbit/s)   Flow 1 egress (mean 25.16 Mbit/s)
Flow 2 ingress (mean 30.33 Mbit/s)   Flow 2 egress (mean 30.14 Mbit/s)
Flow 3 ingress (mean 35.45 Mbit/s)   Flow 3 egress (mean 34.97 Mbit/s)

Flow 1 (95th percentile 109.34 ms)   Flow 2 (95th percentile 113.11 ms)   Flow 3 (95th percentile 109.78 ms)

```
Run 8: Statistics of TCP Vegas

Start at: 2018-04-24 23:41:37
End at: 2018-04-24 23:42:07
Local clock offset: -4.971 ms
Remote clock offset: 6.834 ms


# Below is generated by plot.py at 2018-04-25 01:04:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 51.31 Mbit/s
95th percentile per-packet one-way delay: 110.981 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 23.08 Mbit/s
95th percentile per-packet one-way delay: 106.755 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 25.88 Mbit/s
95th percentile per-packet one-way delay: 115.812 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 33.13 Mbit/s
95th percentile per-packet one-way delay: 109.721 ms
Loss rate: 1.02%
```
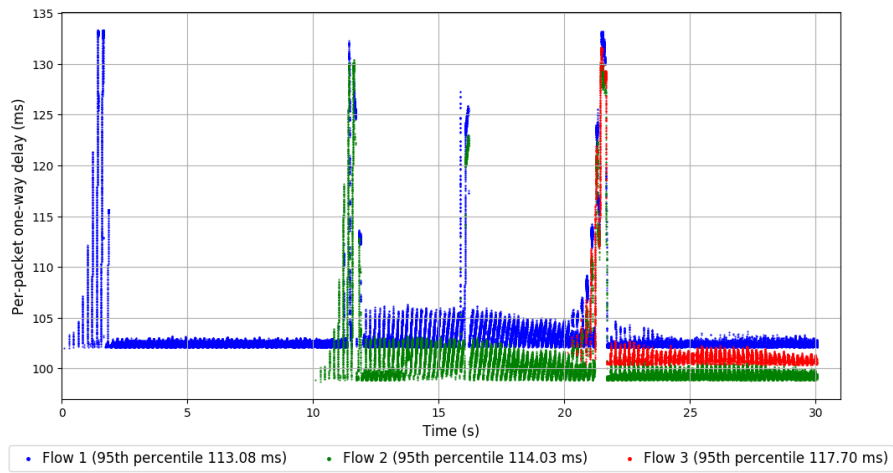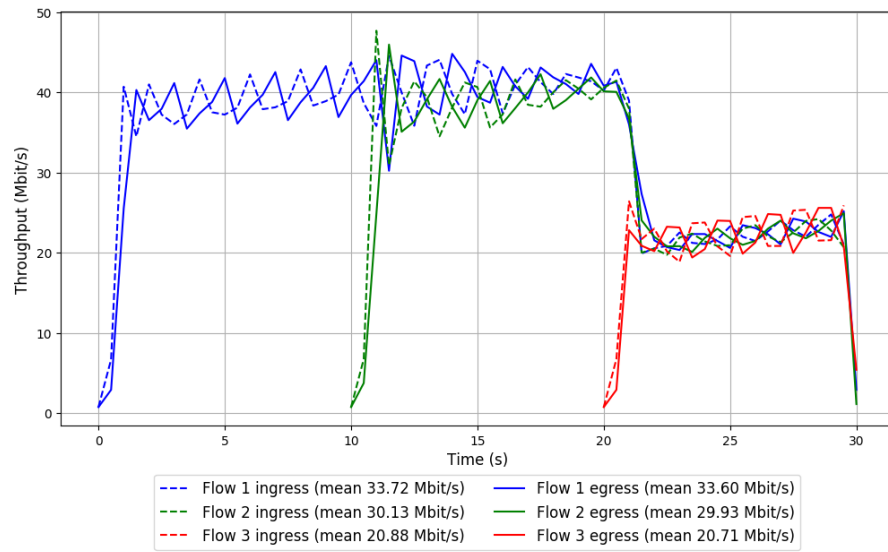
Run 8: Report of TCP Vegas — Data Link

```
Run 9: Statistics of TCP Vegas

Start at: 2018-04-25 00:04:11
End at: 2018-04-25 00:04:41
Local clock offset: -4.977 ms
Remote clock offset: 6.646 ms


# Below is generated by plot.py at 2018-04-25 01:04:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.47 Mbit/s
95th percentile per-packet one-way delay: 113.091 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 33.69 Mbit/s
95th percentile per-packet one-way delay: 113.193 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 28.23 Mbit/s
95th percentile per-packet one-way delay: 112.252 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 21.04 Mbit/s
95th percentile per-packet one-way delay: 117.768 ms
Loss rate: 0.88%
```
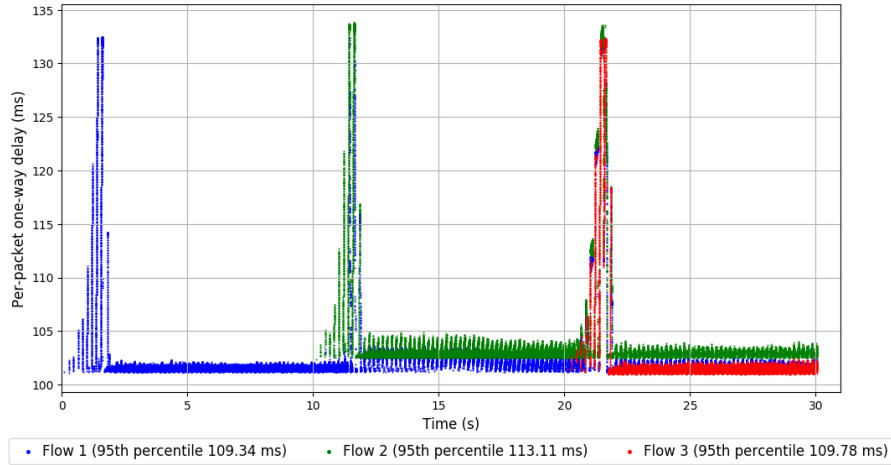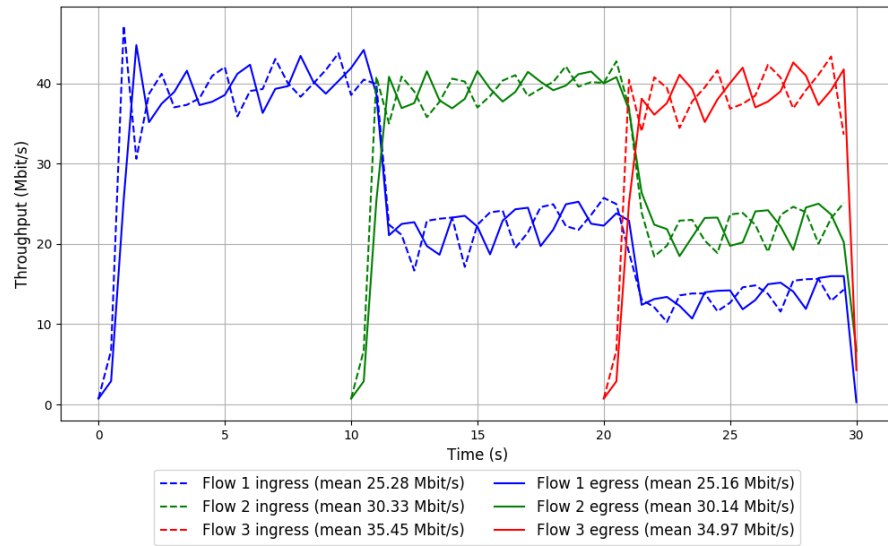
Run 9: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 33.82 Mbit/s)   Flow 1 egress (mean 33.69 Mbit/s)
Flow 2 ingress (mean 28.41 Mbit/s)   Flow 2 egress (mean 28.23 Mbit/s)
Flow 3 ingress (mean 21.23 Mbit/s)   Flow 3 egress (mean 21.04 Mbit/s)

Flow 1 (95th percentile 113.19 ms)   Flow 2 (95th percentile 112.25 ms)   Flow 3 (95th percentile 117.77 ms)

202

```
Run 10: Statistics of TCP Vegas

Start at: 2018-04-25 00:26:29
End at: 2018-04-25 00:26:59
Local clock offset: -4.886 ms
Remote clock offset: 7.105 ms


# Below is generated by plot.py at 2018-04-25 01:04:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.67 Mbit/s
95th percentile per-packet one-way delay: 113.606 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 24.84 Mbit/s
95th percentile per-packet one-way delay: 111.945 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 25.13 Mbit/s
95th percentile per-packet one-way delay: 114.221 ms
Loss rate: 0.86%
-- Flow 3:
Average throughput: 33.45 Mbit/s
95th percentile per-packet one-way delay: 115.804 ms
Loss rate: 1.04%
```
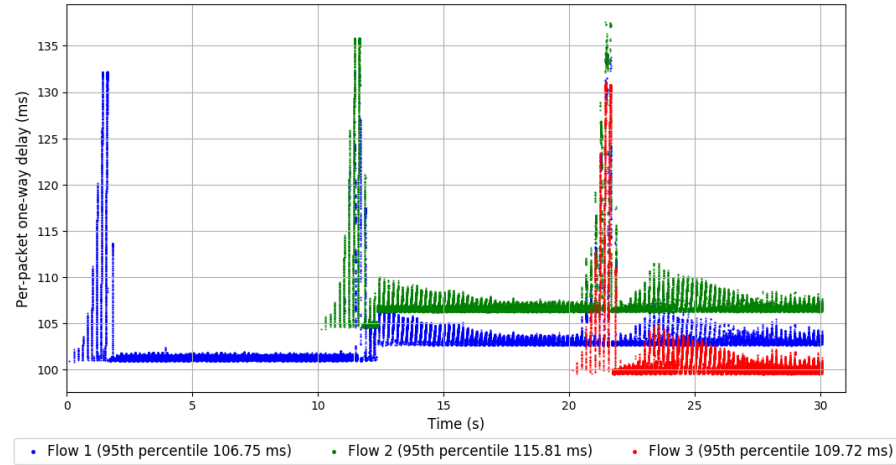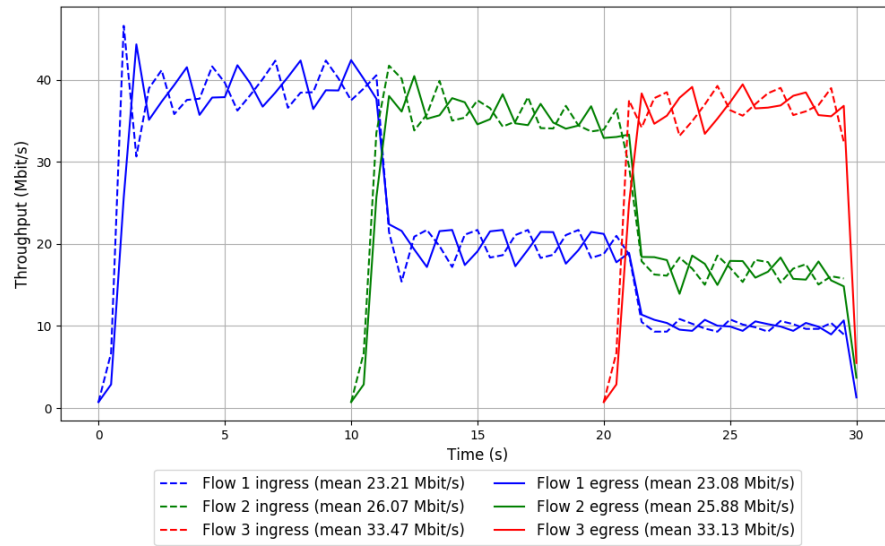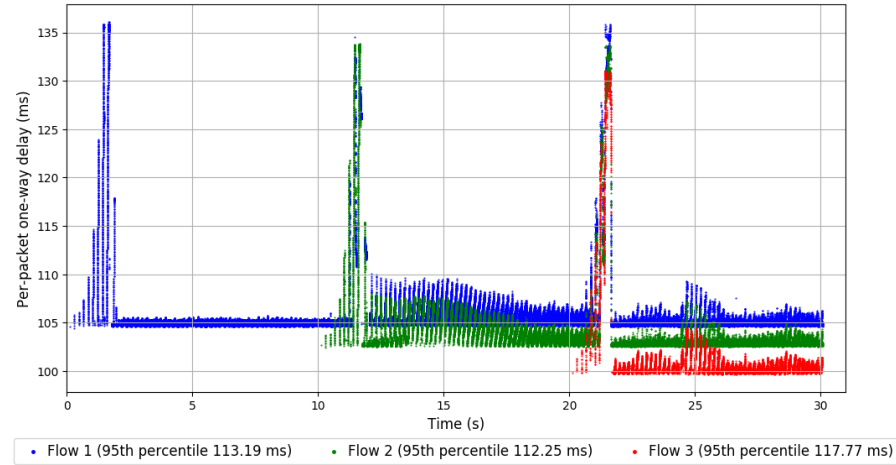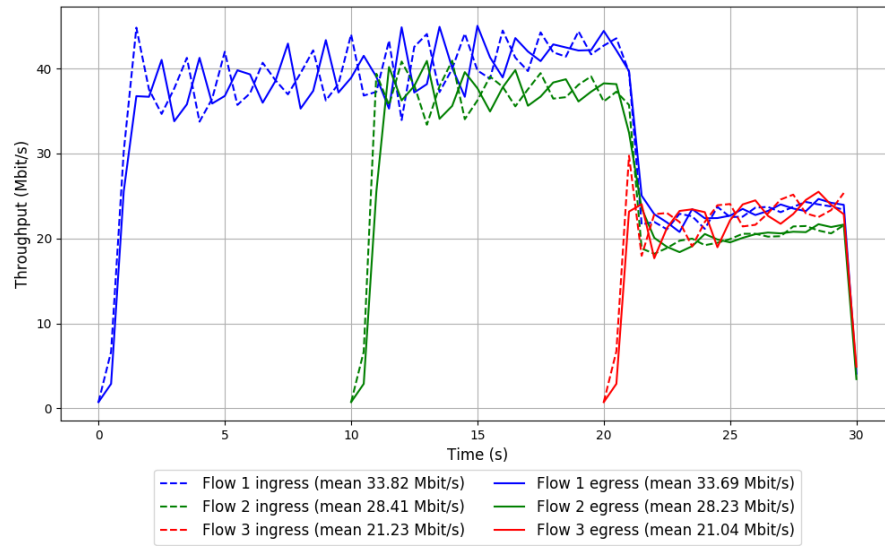
Run 10: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: 2018-04-24 20:50:37
End at: 2018-04-24 20:51:07
Local clock offset: -4.8 ms
Remote clock offset: 9.036 ms


# Below is generated by plot.py at 2018-04-25 01:04:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.98 Mbit/s
95th percentile per-packet one-way delay: 132.916 ms
Loss rate: 27.38%
-- Flow 1:
Average throughput: 20.94 Mbit/s
95th percentile per-packet one-way delay: 132.873 ms
Loss rate: 10.23%
-- Flow 2:
Average throughput: 19.69 Mbit/s
95th percentile per-packet one-way delay: 144.082 ms
Loss rate: 46.60%
-- Flow 3:
Average throughput: 15.46 Mbit/s
95th percentile per-packet one-way delay: 131.313 ms
Loss rate: 16.13%
```

Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2018-04-24 21:13:13
End at: 2018-04-24 21:13:43
Local clock offset: -4.191 ms
Remote clock offset: 3.877 ms


# Below is generated by plot.py at 2018-04-25 01:04:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 41.09 Mbit/s
95th percentile per-packet one-way delay: 128.484 ms
Loss rate: 33.82%
-- Flow 1:
Average throughput: 22.37 Mbit/s
95th percentile per-packet one-way delay: 128.361 ms
Loss rate: 14.88%
-- Flow 2:
Average throughput: 24.18 Mbit/s
95th percentile per-packet one-way delay: 128.869 ms
Loss rate: 50.81%
-- Flow 3:
Average throughput: 8.61 Mbit/s
95th percentile per-packet one-way delay: 133.502 ms
Loss rate: 17.18%
```
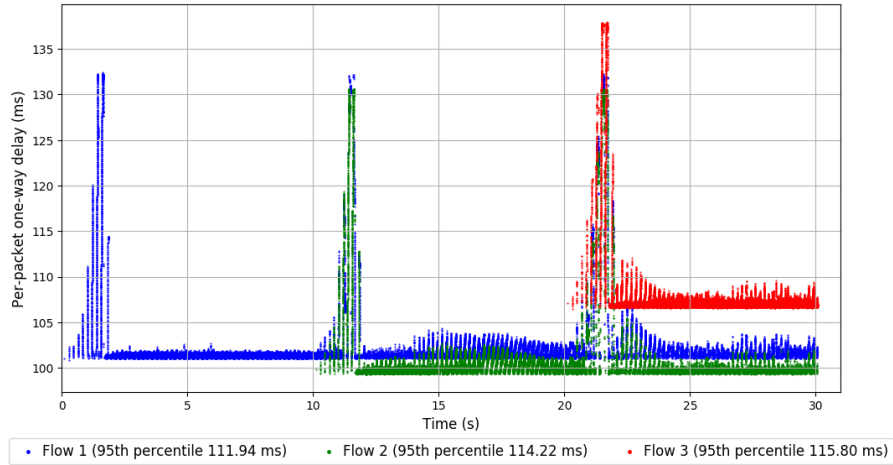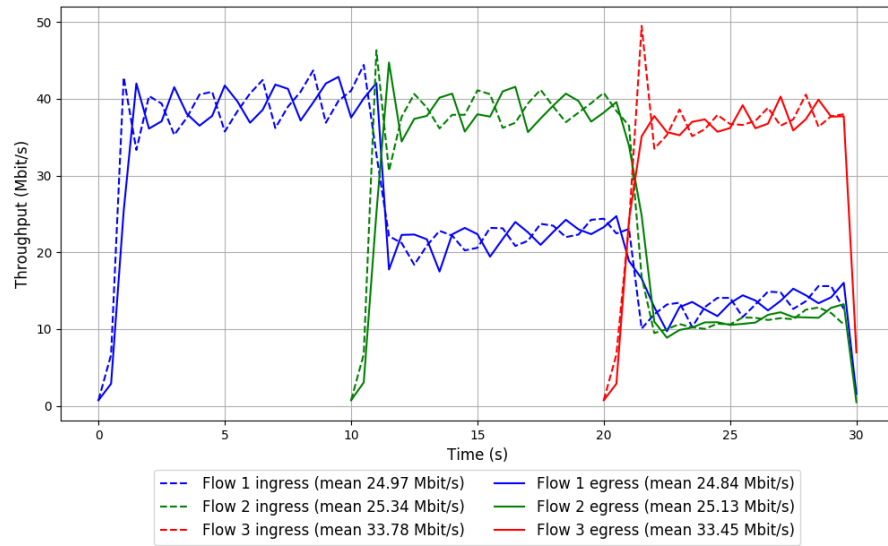
Run 2: Report of Verus — Data Link

Flow 1 ingress (mean 26.29 Mbit/s) --- Flow 1 egress (mean 22.37 Mbit/s)
Flow 2 ingress (mean 49.15 Mbit/s) --- Flow 2 egress (mean 24.18 Mbit/s)
Flow 3 ingress (mean 10.39 Mbit/s) --- Flow 3 egress (mean 8.61 Mbit/s)

Flow 1 (95th percentile 128.36 ms)   Flow 2 (95th percentile 128.87 ms)   Flow 3 (95th percentile 133.50 ms)

```
Run 3: Statistics of Verus

Start at: 2018-04-24 21:35:47
End at: 2018-04-24 21:36:17
Local clock offset: -4.886 ms
Remote clock offset: 8.423 ms


# Below is generated by plot.py at 2018-04-25 01:05:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.04 Mbit/s
95th percentile per-packet one-way delay: 161.091 ms
Loss rate: 68.65%
-- Flow 1:
Average throughput: 30.02 Mbit/s
95th percentile per-packet one-way delay: 163.619 ms
Loss rate: 73.06%
-- Flow 2:
Average throughput: 12.92 Mbit/s
95th percentile per-packet one-way delay: 132.562 ms
Loss rate: 36.25%
-- Flow 3:
Average throughput: 4.59 Mbit/s
95th percentile per-packet one-way delay: 154.048 ms
Loss rate: 51.17%
```
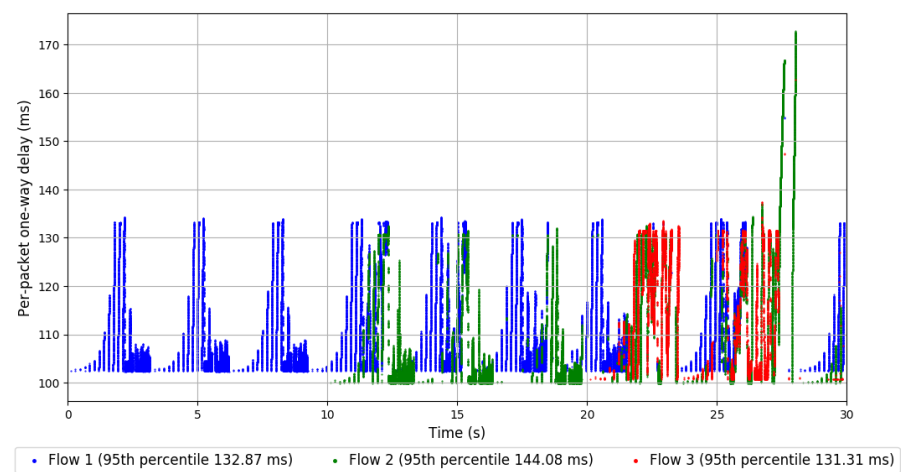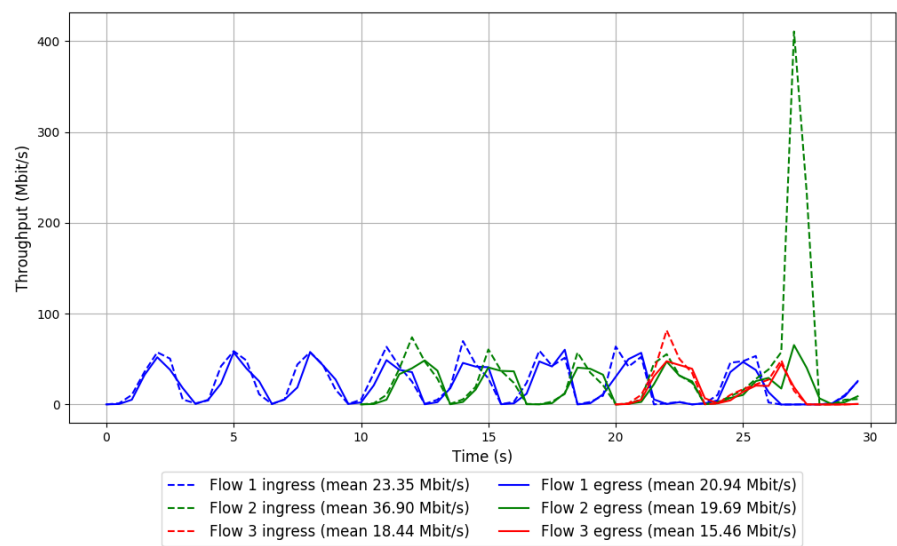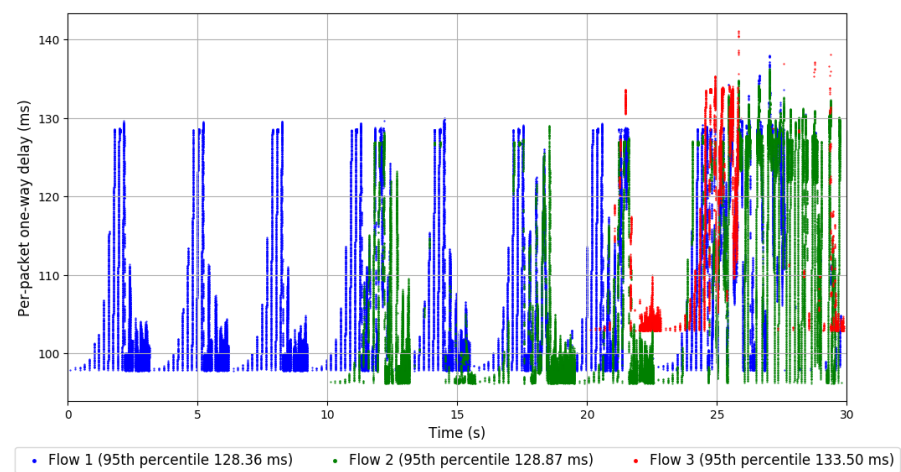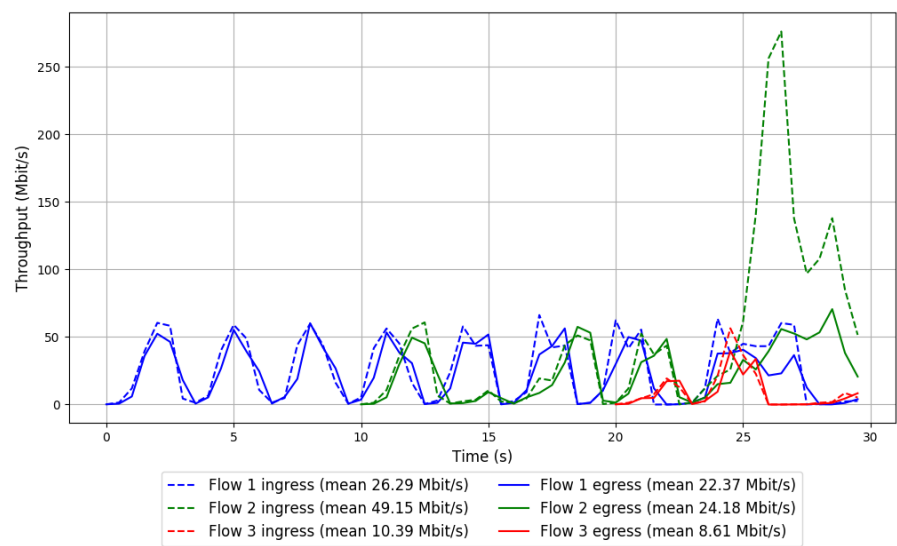
Run 3: Report of Verus — Data Link

Flow 1 ingress (mean 111.43 Mbit/s) --- Flow 1 egress (mean 30.02 Mbit/s)
Flow 2 ingress (mean 20.27 Mbit/s) --- Flow 2 egress (mean 12.92 Mbit/s)
Flow 3 ingress (mean 9.43 Mbit/s) --- Flow 3 egress (mean 4.59 Mbit/s)

Flow 1 (95th percentile 163.62 ms) ・ Flow 2 (95th percentile 132.56 ms) ・ Flow 3 (95th percentile 154.05 ms)

```
Run 4: Statistics of Verus

Start at: 2018-04-24 21:58:18
End at: 2018-04-24 21:58:48
Local clock offset: -5.676 ms
Remote clock offset: 8.206 ms

# Below is generated by plot.py at 2018-04-25 01:05:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 43.01 Mbit/s
95th percentile per-packet one-way delay: 132.630 ms
Loss rate: 15.04%
-- Flow 1:
Average throughput: 22.39 Mbit/s
95th percentile per-packet one-way delay: 132.573 ms
Loss rate: 10.21%
-- Flow 2:
Average throughput: 21.67 Mbit/s
95th percentile per-packet one-way delay: 132.744 ms
Loss rate: 22.97%
-- Flow 3:
Average throughput: 19.35 Mbit/s
95th percentile per-packet one-way delay: 131.049 ms
Loss rate: 11.04%
```
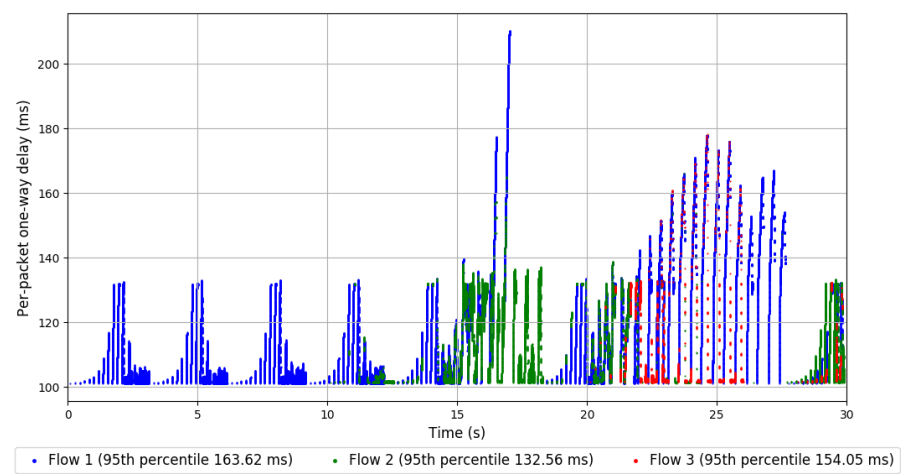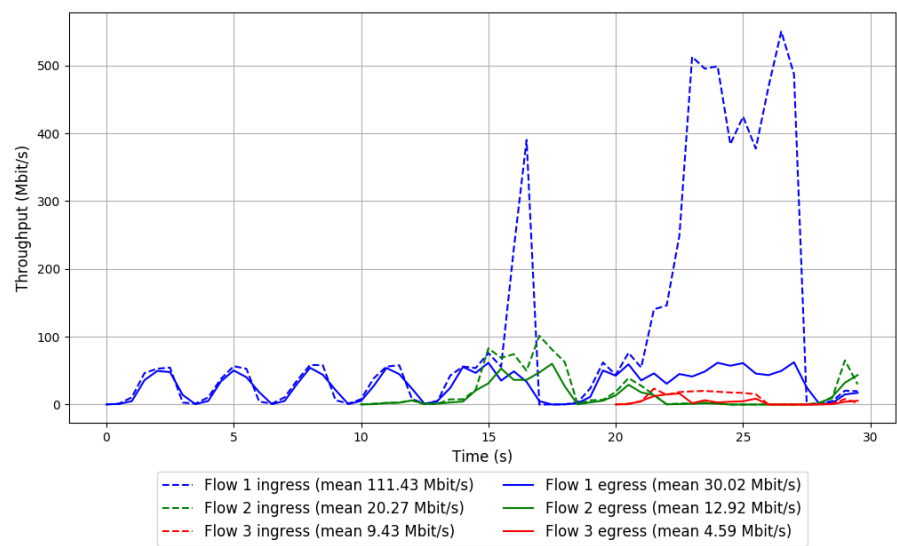
Run 4: Report of Verus — Data Link

Flow 1 ingress (mean 24.94 Mbit/s)   Flow 1 egress (mean 22.39 Mbit/s)
Flow 2 ingress (mean 28.17 Mbit/s)   Flow 2 egress (mean 21.67 Mbit/s)
Flow 3 ingress (mean 21.82 Mbit/s)   Flow 3 egress (mean 19.35 Mbit/s)

Flow 1 (95th percentile 132.57 ms)   Flow 2 (95th percentile 132.74 ms)   Flow 3 (95th percentile 131.05 ms)

```
Run 5: Statistics of Verus

Start at: 2018-04-24 22:20:51
End at: 2018-04-24 22:21:21
Local clock offset: -5.36 ms
Remote clock offset: 3.364 ms


# Below is generated by plot.py at 2018-04-25 01:05:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.51 Mbit/s
95th percentile per-packet one-way delay: 130.254 ms
Loss rate: 55.98%
-- Flow 1:
Average throughput: 17.84 Mbit/s
95th percentile per-packet one-way delay: 127.445 ms
Loss rate: 30.81%
-- Flow 2:
Average throughput: 32.04 Mbit/s
95th percentile per-packet one-way delay: 131.273 ms
Loss rate: 66.86%
-- Flow 3:
Average throughput: 4.80 Mbit/s
95th percentile per-packet one-way delay: 134.444 ms
Loss rate: 33.78%
```
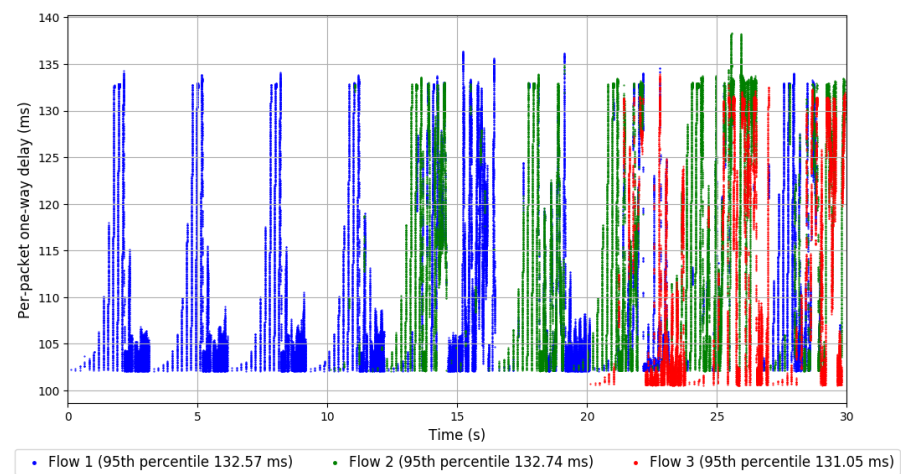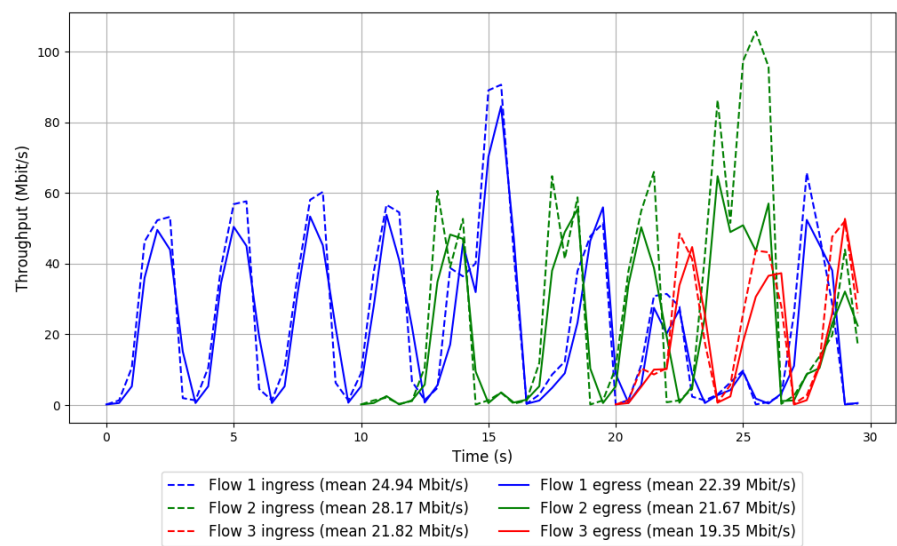
Run 5: Report of Verus — Data Link

- - - Flow 1 ingress (mean 25.81 Mbit/s) —— Flow 1 egress (mean 17.84 Mbit/s)
- - - Flow 2 ingress (mean 96.85 Mbit/s) —— Flow 2 egress (mean 32.04 Mbit/s)
- - - Flow 3 ingress (mean 7.23 Mbit/s) —— Flow 3 egress (mean 4.80 Mbit/s)

- Flow 1 (95th percentile 127.44 ms)   • Flow 2 (95th percentile 131.27 ms)   • Flow 3 (95th percentile 134.44 ms)

```
Run 6: Statistics of Verus

Start at: 2018-04-24 22:43:22
End at: 2018-04-24 22:43:52
Local clock offset: -4.669 ms
Remote clock offset: 4.036 ms


# Below is generated by plot.py at 2018-04-25 01:05:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 43.44 Mbit/s
95th percentile per-packet one-way delay: 134.943 ms
Loss rate: 59.51%
-- Flow 1:
Average throughput: 26.61 Mbit/s
95th percentile per-packet one-way delay: 128.024 ms
Loss rate: 48.60%
-- Flow 2:
Average throughput: 18.11 Mbit/s
95th percentile per-packet one-way delay: 178.930 ms
Loss rate: 75.96%
-- Flow 3:
Average throughput: 16.07 Mbit/s
95th percentile per-packet one-way delay: 127.024 ms
Loss rate: 29.22%
```
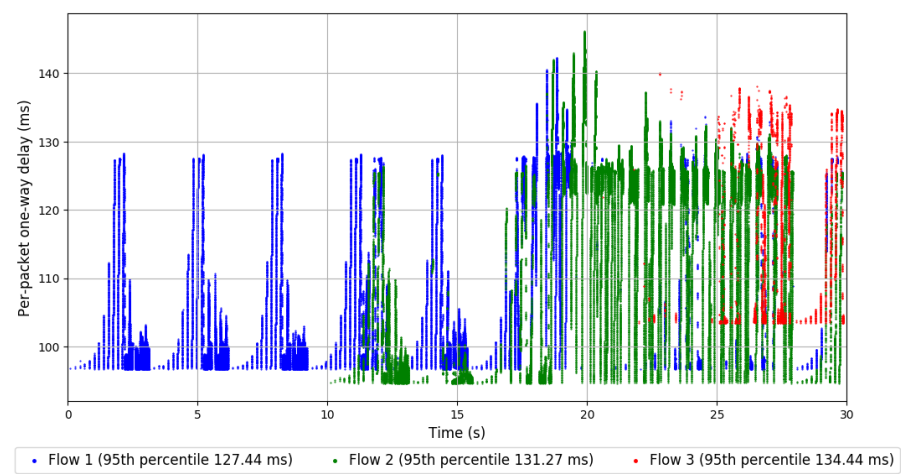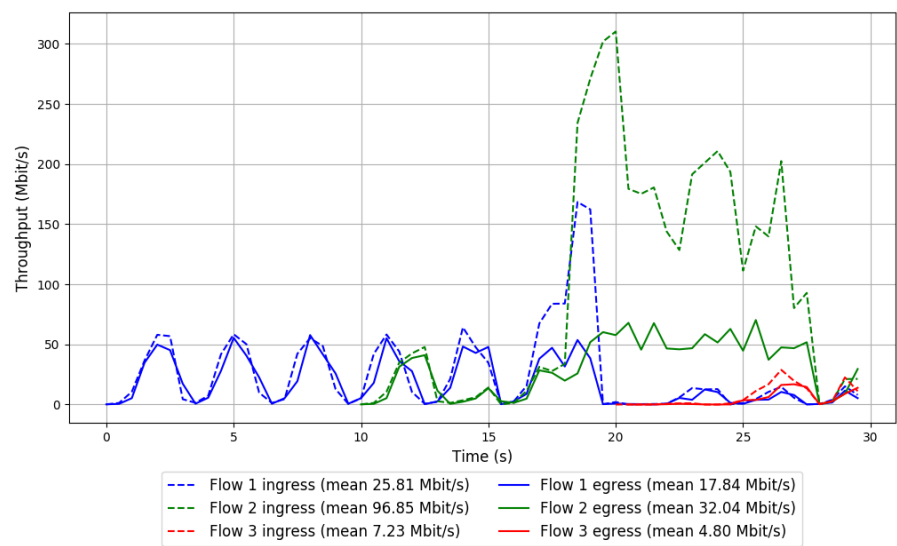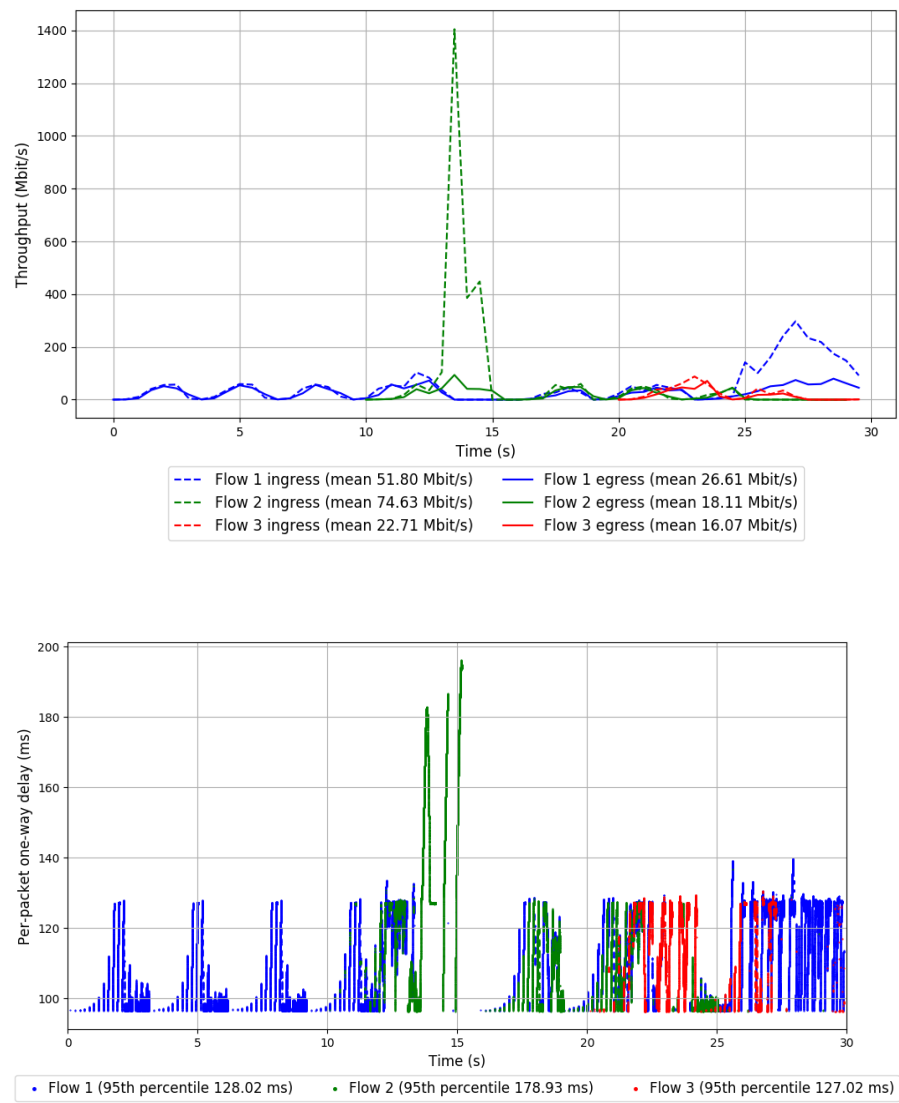
Run 6: Report of Verus — Data Link

```
Run 7: Statistics of Verus

Start at: 2018-04-24 23:05:54
End at: 2018-04-24 23:06:24
Local clock offset: -5.959 ms
Remote clock offset: 3.672 ms


# Below is generated by plot.py at 2018-04-25 01:06:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 43.28 Mbit/s
95th percentile per-packet one-way delay: 178.743 ms
Loss rate: 85.10%
-- Flow 1:
Average throughput: 10.54 Mbit/s
95th percentile per-packet one-way delay: 135.482 ms
Loss rate: 8.35%
-- Flow 2:
Average throughput: 47.13 Mbit/s
95th percentile per-packet one-way delay: 180.376 ms
Loss rate: 88.38%
-- Flow 3:
Average throughput: 6.27 Mbit/s
95th percentile per-packet one-way delay: 190.441 ms
Loss rate: 81.21%
```
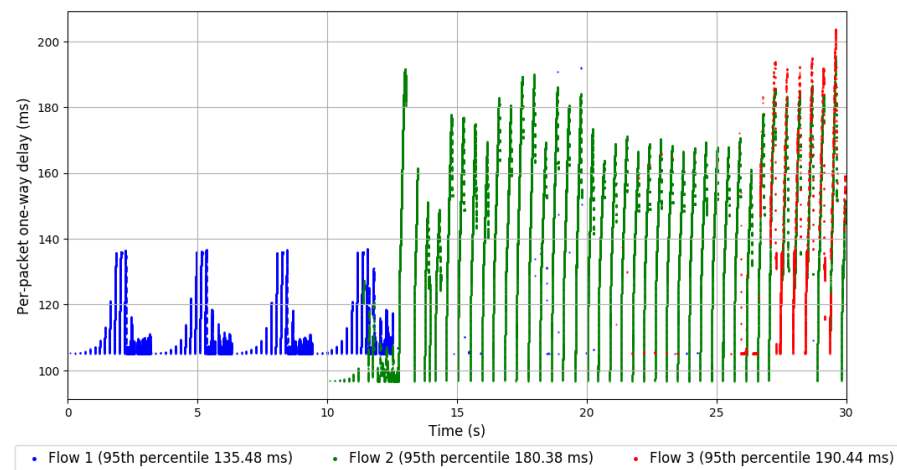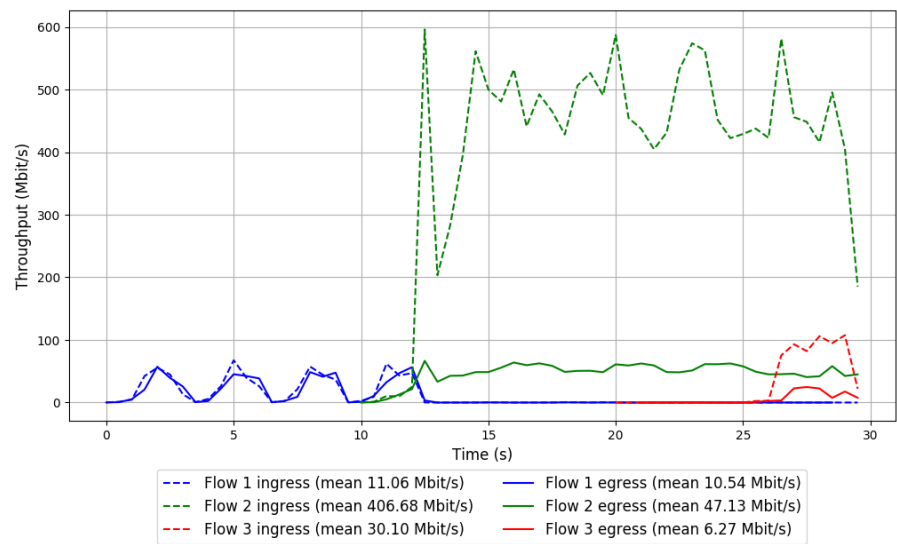
Run 7: Report of Verus — Data Link

Flow 1 ingress (mean 11.06 Mbit/s)   Flow 1 egress (mean 10.54 Mbit/s)
Flow 2 ingress (mean 406.68 Mbit/s)   Flow 2 egress (mean 47.13 Mbit/s)
Flow 3 ingress (mean 30.10 Mbit/s)   Flow 3 egress (mean 6.27 Mbit/s)

Flow 1 (95th percentile 135.48 ms)   Flow 2 (95th percentile 180.38 ms)   Flow 3 (95th percentile 190.44 ms)

```
Run 8: Statistics of Verus

Start at: 2018-04-24 23:28:33
End at: 2018-04-24 23:29:03
Local clock offset: -5.766 ms
Remote clock offset: 6.123 ms


# Below is generated by plot.py at 2018-04-25 01:06:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 41.41 Mbit/s
95th percentile per-packet one-way delay: 133.694 ms
Loss rate: 35.21%
-- Flow 1:
Average throughput: 18.84 Mbit/s
95th percentile per-packet one-way delay: 134.202 ms
Loss rate: 42.25%
-- Flow 2:
Average throughput: 27.56 Mbit/s
95th percentile per-packet one-way delay: 133.616 ms
Loss rate: 29.18%
-- Flow 3:
Average throughput: 13.29 Mbit/s
95th percentile per-packet one-way delay: 133.728 ms
Loss rate: 21.63%
```
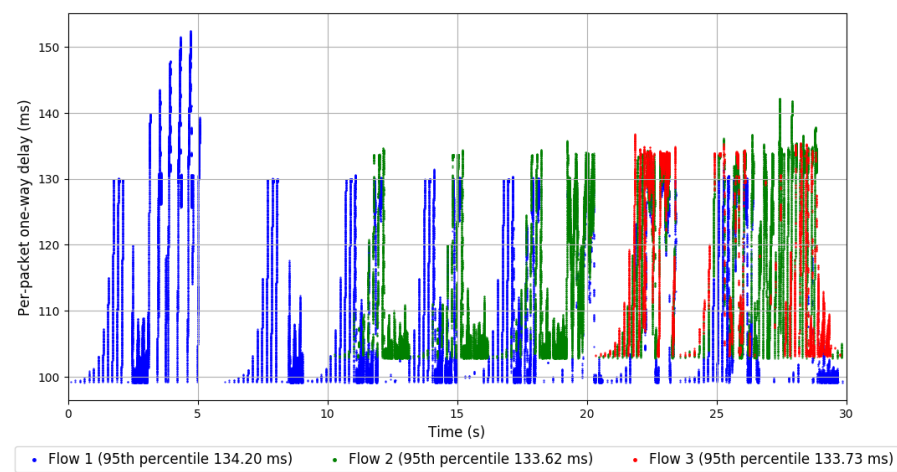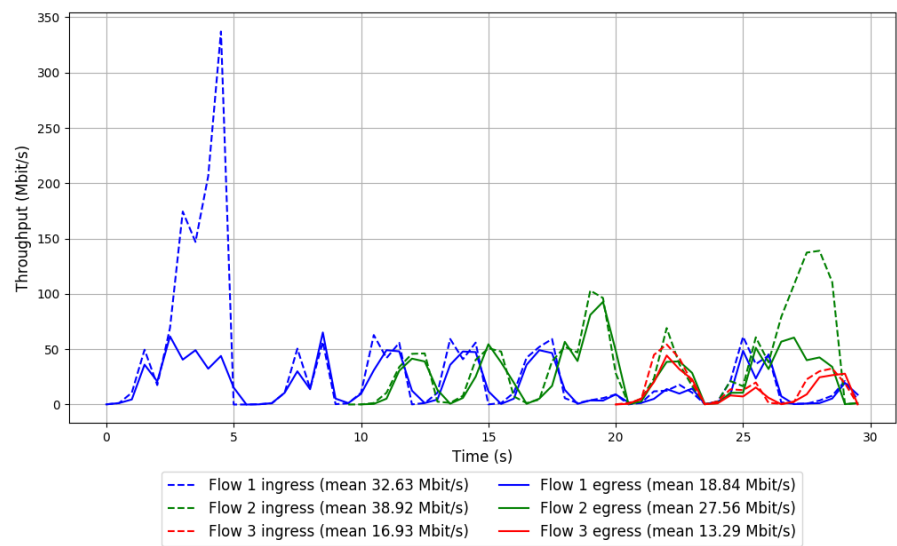
Run 8: Report of Verus — Data Link

```
Run 9: Statistics of Verus

Start at: 2018-04-24 23:50:47
End at: 2018-04-24 23:51:17
Local clock offset: -4.966 ms
Remote clock offset: 6.766 ms


# Below is generated by plot.py at 2018-04-25 01:06:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 41.04 Mbit/s
95th percentile per-packet one-way delay: 135.345 ms
Loss rate: 25.94%
-- Flow 1:
Average throughput: 25.32 Mbit/s
95th percentile per-packet one-way delay: 135.606 ms
Loss rate: 29.68%
-- Flow 2:
Average throughput: 20.81 Mbit/s
95th percentile per-packet one-way delay: 133.347 ms
Loss rate: 20.06%
-- Flow 3:
Average throughput: 5.86 Mbit/s
95th percentile per-packet one-way delay: 131.319 ms
Loss rate: 10.34%
```
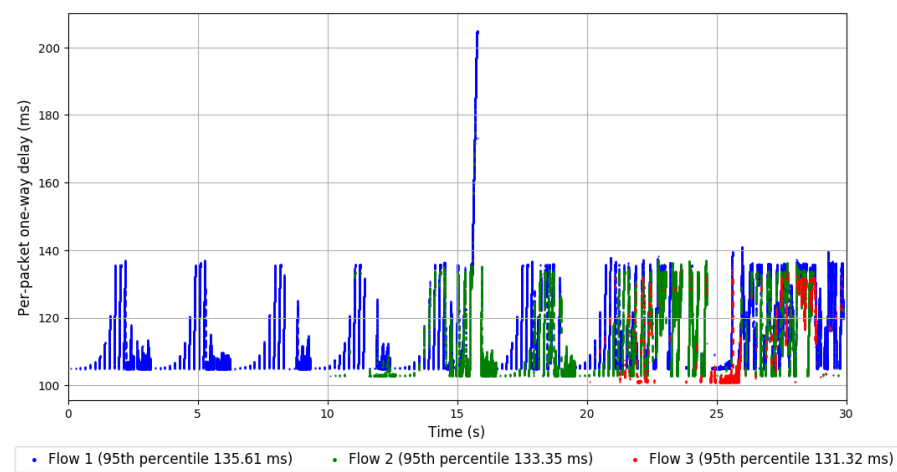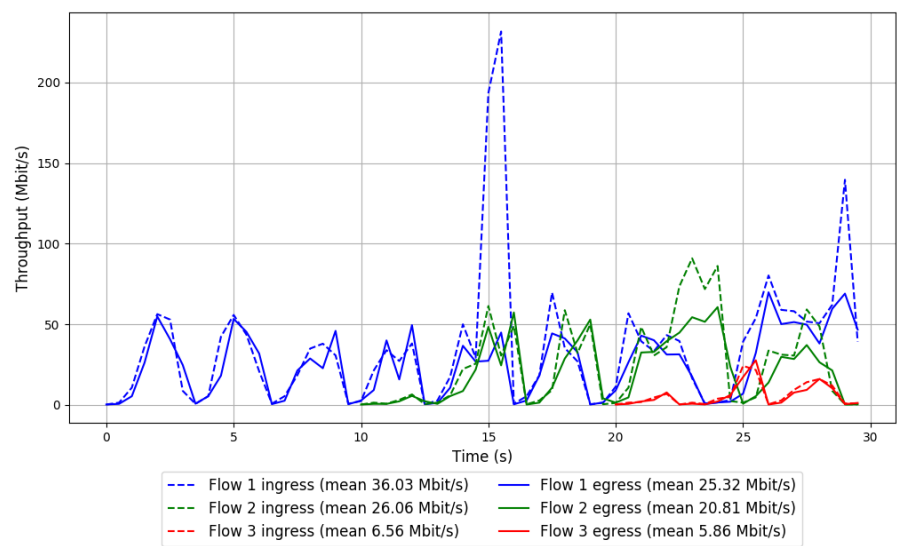
Run 9: Report of Verus — Data Link

- - - Flow 1 ingress (mean 36.03 Mbit/s)   —— Flow 1 egress (mean 25.32 Mbit/s)
- - - Flow 2 ingress (mean 26.06 Mbit/s)   —— Flow 2 egress (mean 20.81 Mbit/s)
- - - Flow 3 ingress (mean 6.56 Mbit/s)   —— Flow 3 egress (mean 5.86 Mbit/s)

- Flow 1 (95th percentile 135.61 ms)   • Flow 2 (95th percentile 133.35 ms)   • Flow 3 (95th percentile 131.32 ms)

222

```
Run 10: Statistics of Verus

Start at: 2018-04-25 00:13:24
End at: 2018-04-25 00:13:54
Local clock offset: -5.011 ms
Remote clock offset: 2.151 ms


# Below is generated by plot.py at 2018-04-25 01:06:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 37.51 Mbit/s
95th percentile per-packet one-way delay: 141.574 ms
Loss rate: 44.07%
-- Flow 1:
Average throughput: 22.61 Mbit/s
95th percentile per-packet one-way delay: 155.701 ms
Loss rate: 53.94%
-- Flow 2:
Average throughput: 14.63 Mbit/s
95th percentile per-packet one-way delay: 125.211 ms
Loss rate: 15.28%
-- Flow 3:
Average throughput: 16.30 Mbit/s
95th percentile per-packet one-way delay: 127.157 ms
Loss rate: 21.25%
```
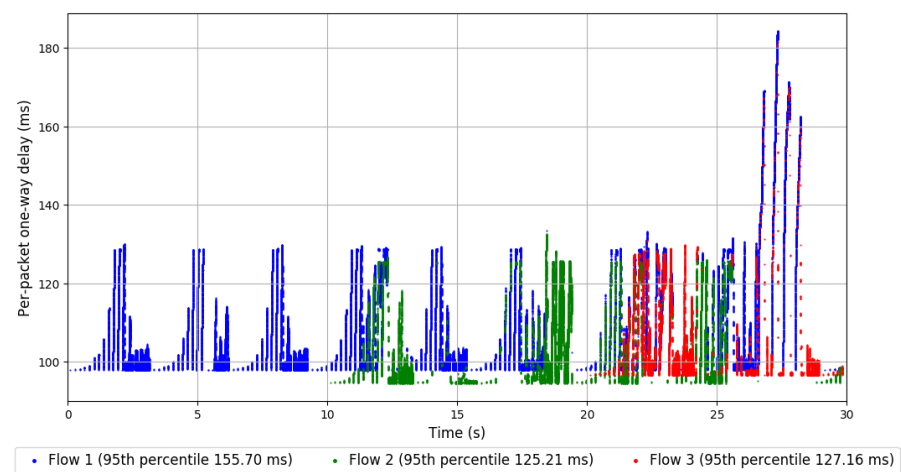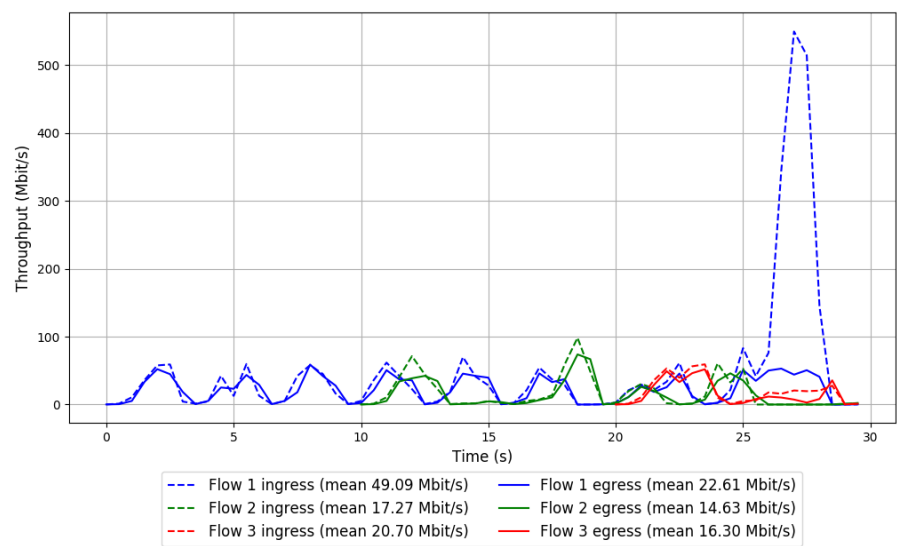
Run 10: Report of Verus — Data Link

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```
Run 1: Statistics of Copa

Start at: 2018-04-24 21:02:17
End at: 2018-04-24 21:02:47
Local clock offset: -5.542 ms
Remote clock offset: 3.869 ms


# Below is generated by plot.py at 2018-04-25 01:13:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.26 Mbit/s
95th percentile per-packet one-way delay: 136.644 ms
Loss rate: 91.08%
-- Flow 1:
Average throughput: 59.50 Mbit/s
95th percentile per-packet one-way delay: 136.614 ms
Loss rate: 87.81%
-- Flow 2:
Average throughput: 47.66 Mbit/s
95th percentile per-packet one-way delay: 136.690 ms
Loss rate: 94.07%
-- Flow 3:
Average throughput: 0.00 Mbit/s
```
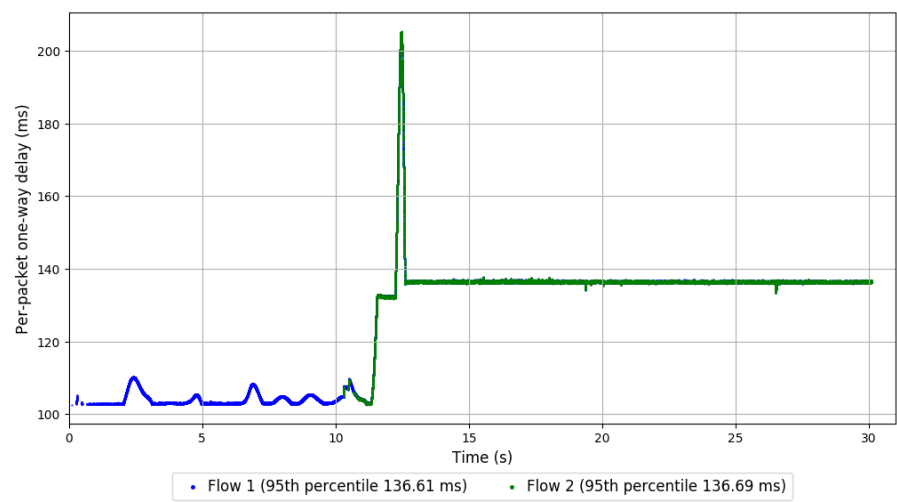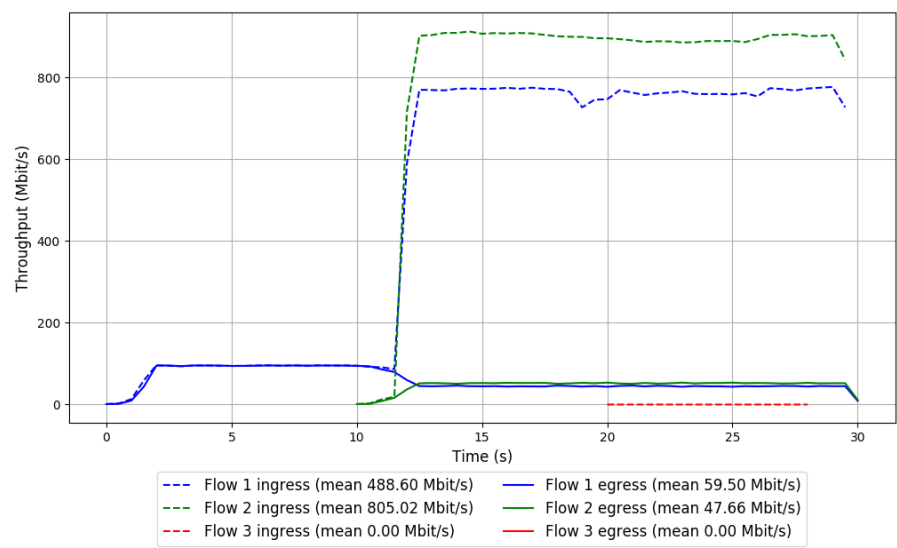
Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2018-04-24 21:24:53
End at: 2018-04-24 21:25:23
Local clock offset: -4.96 ms
Remote clock offset: 8.409 ms


# Below is generated by plot.py at 2018-04-25 01:13:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.29 Mbit/s
95th percentile per-packet one-way delay: 132.158 ms
Loss rate: 89.60%
-- Flow 1:
Average throughput: 92.29 Mbit/s
95th percentile per-packet one-way delay: 132.158 ms
Loss rate: 89.60%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2018-04-24 21:47:30
End at: 2018-04-24 21:48:00
Local clock offset: -4.962 ms
Remote clock offset: 3.759 ms


# Below is generated by plot.py at 2018-04-25 01:13:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.42 Mbit/s
95th percentile per-packet one-way delay: 125.889 ms
Loss rate: 88.09%
-- Flow 1:
Average throughput: 92.42 Mbit/s
95th percentile per-packet one-way delay: 125.889 ms
Loss rate: 88.09%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```
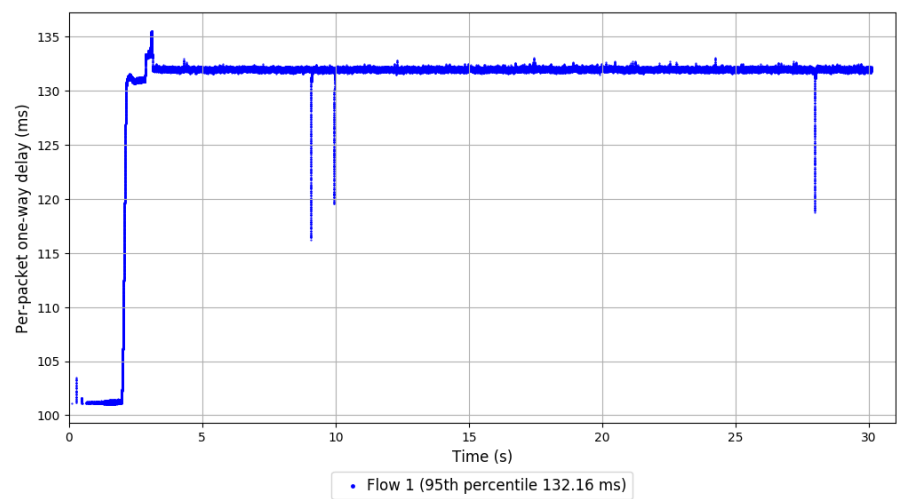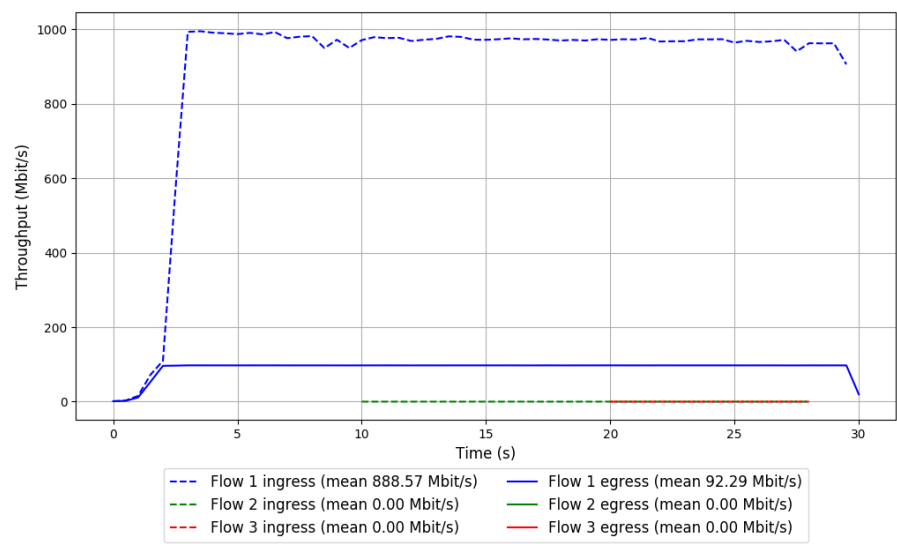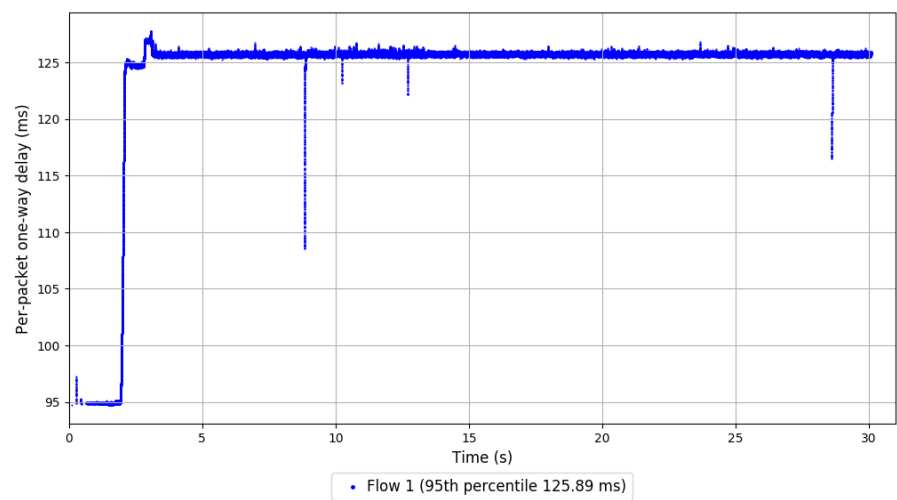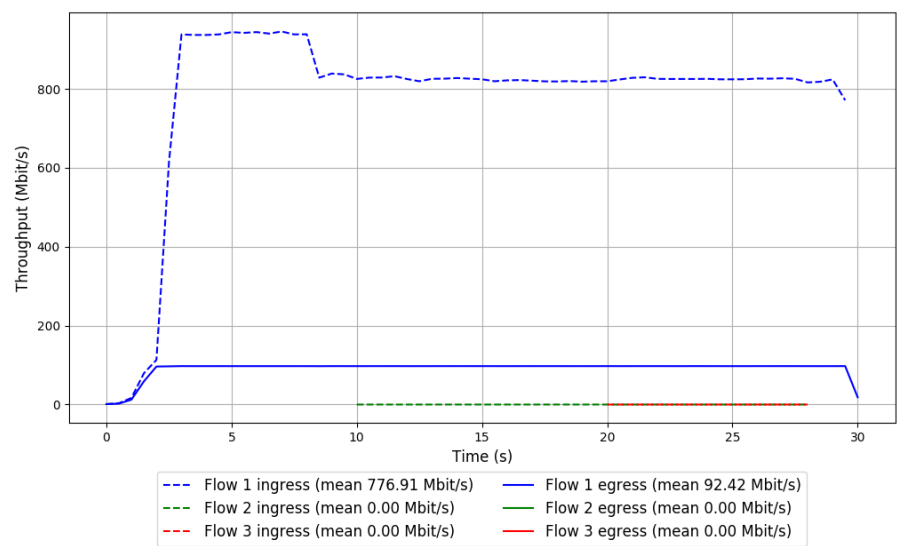
Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2018-04-24 22:10:00
End at: 2018-04-24 22:10:30
Local clock offset: -4.954 ms
Remote clock offset: 8.101 ms


# Below is generated by plot.py at 2018-04-25 01:13:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.10 Mbit/s
95th percentile per-packet one-way delay: 137.656 ms
Loss rate: 88.99%
-- Flow 1:
Average throughput: 92.10 Mbit/s
95th percentile per-packet one-way delay: 137.656 ms
Loss rate: 88.99%
-- Flow 2:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 137.089 ms
Loss rate: 83.33%
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 4: Report of Copa — Data Link

- - - Flow 1 ingress (mean 837.05 Mbit/s)   —— Flow 1 egress (mean 92.10 Mbit/s)
- - - Flow 2 ingress (mean 0.00 Mbit/s)   —— Flow 2 egress (mean 0.00 Mbit/s)
- - - Flow 3 ingress (mean 0.00 Mbit/s)   —— Flow 3 egress (mean 0.00 Mbit/s)

- Flow 1 (95th percentile 137.66 ms)   • Flow 2 (95th percentile 137.09 ms)

```
Run 5: Statistics of Copa

Start at: 2018-04-24 22:32:32
End at: 2018-04-24 22:33:02
Local clock offset: -5.414 ms
Remote clock offset: 8.756 ms


# Below is generated by plot.py at 2018-04-25 01:13:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.29 Mbit/s
95th percentile per-packet one-way delay: 133.500 ms
Loss rate: 88.63%
-- Flow 1:
Average throughput: 92.28 Mbit/s
95th percentile per-packet one-way delay: 133.500 ms
Loss rate: 88.63%
-- Flow 2:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 132.734 ms
Loss rate: 80.00%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 140.063 ms
Loss rate: 94.31%
```
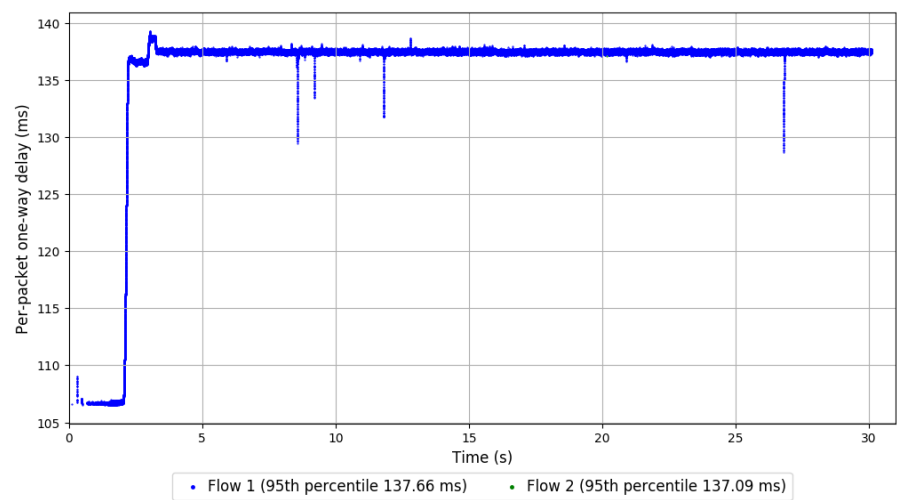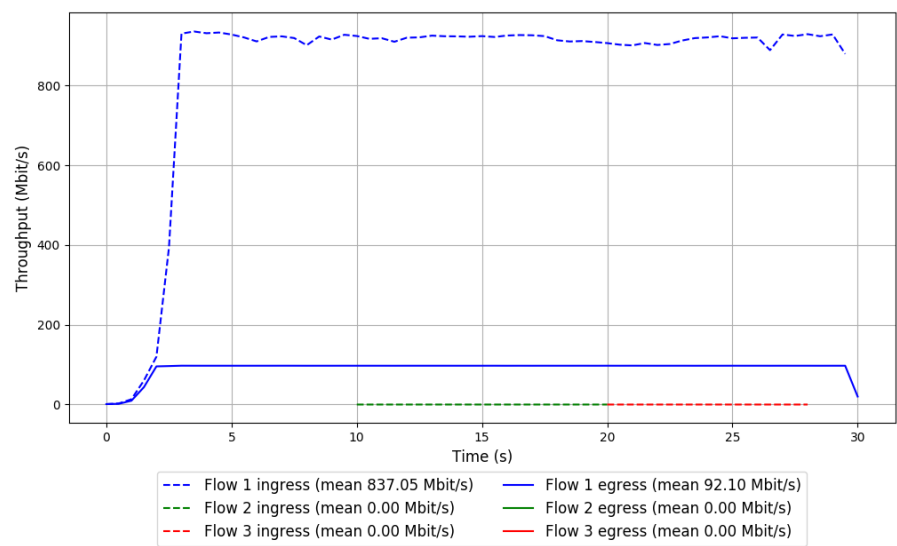
Run 5: Report of Copa — Data Link

- Flow 1 ingress (mean 812.68 Mbit/s)
- Flow 2 ingress (mean 0.00 Mbit/s)
- Flow 3 ingress (mean 0.16 Mbit/s)
- Flow 1 egress (mean 92.28 Mbit/s)
- Flow 2 egress (mean 0.00 Mbit/s)
- Flow 3 egress (mean 0.01 Mbit/s)

- Flow 1 (95th percentile 133.50 ms)
- Flow 2 (95th percentile 132.73 ms)
- Flow 3 (95th percentile 140.06 ms)

```
Run 6: Statistics of Copa

Start at: 2018-04-24 22:55:04
End at: 2018-04-24 22:55:34
Local clock offset: -4.451 ms
Remote clock offset: 3.115 ms


# Below is generated by plot.py at 2018-04-25 01:13:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.36 Mbit/s
95th percentile per-packet one-way delay: 126.917 ms
Loss rate: 89.38%
-- Flow 1:
Average throughput: 92.36 Mbit/s
95th percentile per-packet one-way delay: 126.917 ms
Loss rate: 89.38%
-- Flow 2:
Average throughput: 0.00 Mbit/s
-- Flow 3:
Average throughput: 0.00 Mbit/s
```
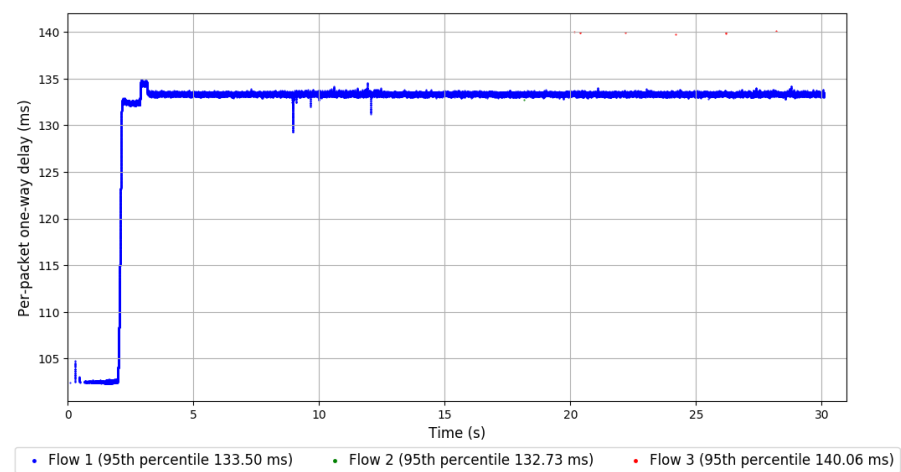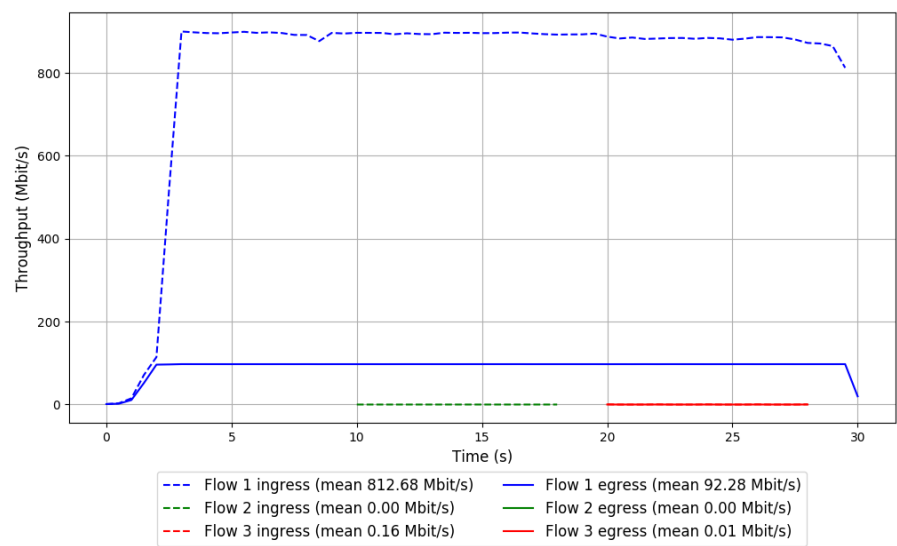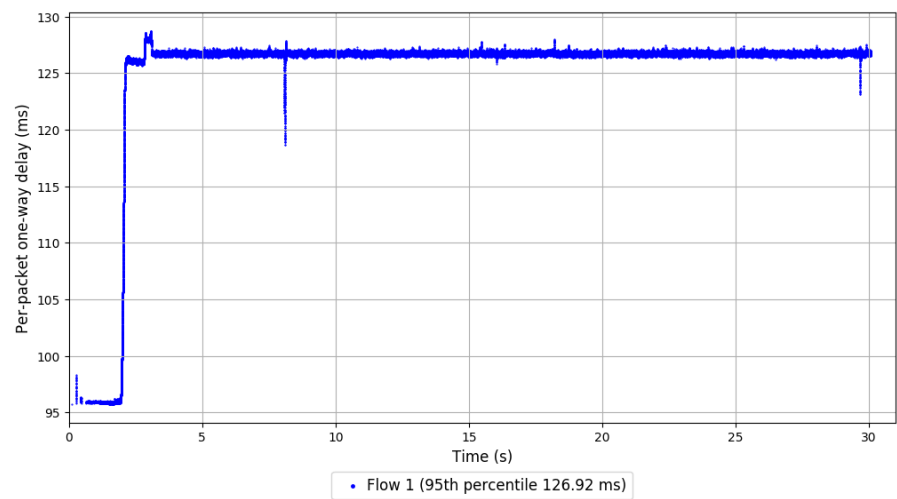
Run 6: Report of Copa — Data Link

```
Run 7: Statistics of Copa

Start at: 2018-04-24 23:17:38
End at: 2018-04-24 23:18:08
Local clock offset: -5.147 ms
Remote clock offset: 2.52 ms


# Below is generated by plot.py at 2018-04-25 01:13:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.92 Mbit/s
95th percentile per-packet one-way delay: 131.312 ms
Loss rate: 90.74%
-- Flow 1:
Average throughput: 55.78 Mbit/s
95th percentile per-packet one-way delay: 125.470 ms
Loss rate: 87.14%
-- Flow 2:
Average throughput: 46.82 Mbit/s
95th percentile per-packet one-way delay: 131.430 ms
Loss rate: 93.83%
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

Run 7: Report of Copa — Data Link

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```
Run 8: Statistics of Copa

Start at: 2018-04-24 23:40:13
End at: 2018-04-24 23:40:43
Local clock offset: -4.251 ms
Remote clock offset: 2.329 ms


# Below is generated by plot.py at 2018-04-25 01:13:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.96 Mbit/s
95th percentile per-packet one-way delay: 125.794 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 66.20 Mbit/s
95th percentile per-packet one-way delay: 125.793 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 26.36 Mbit/s
95th percentile per-packet one-way delay: 127.570 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 12.73 Mbit/s
95th percentile per-packet one-way delay: 116.725 ms
Loss rate: 0.01%
```
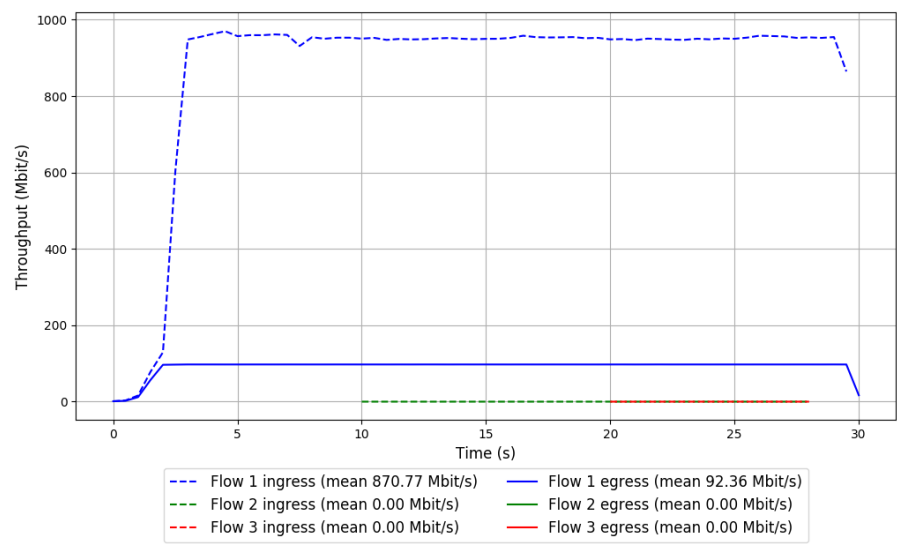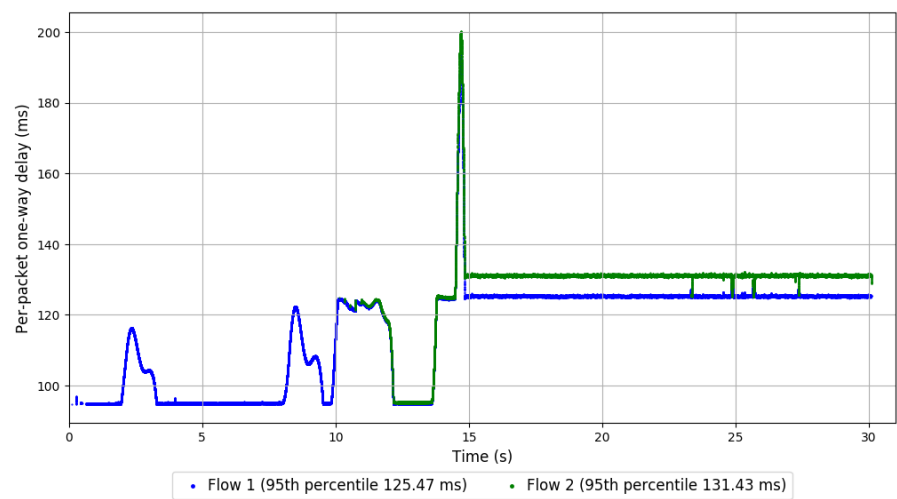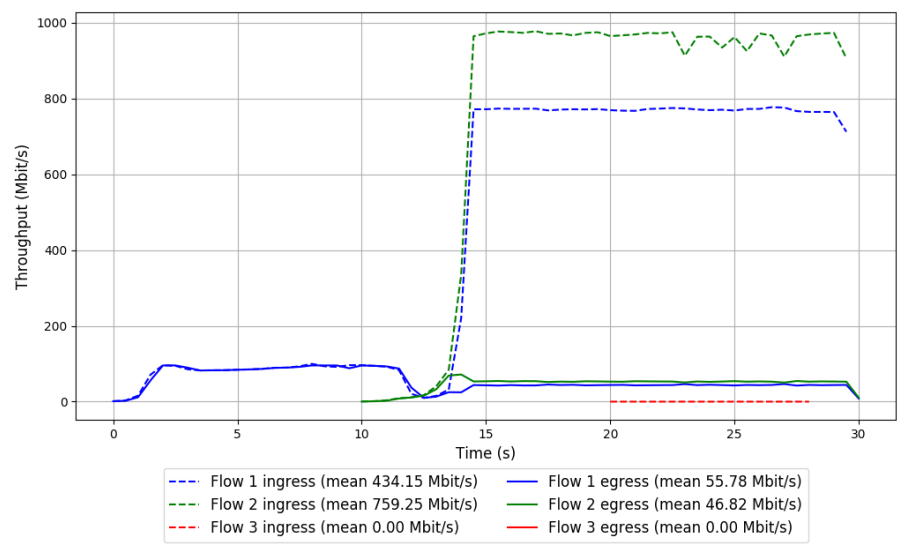
Run 8: Report of Copa — Data Link

- - - Flow 1 ingress (mean 66.28 Mbit/s) —— Flow 1 egress (mean 66.20 Mbit/s)
- - - Flow 2 ingress (mean 26.36 Mbit/s) —— Flow 2 egress (mean 26.36 Mbit/s)
- - - Flow 3 ingress (mean 12.73 Mbit/s) —— Flow 3 egress (mean 12.73 Mbit/s)

• Flow 1 (95th percentile 125.79 ms)   • Flow 2 (95th percentile 127.57 ms)   • Flow 3 (95th percentile 116.72 ms)
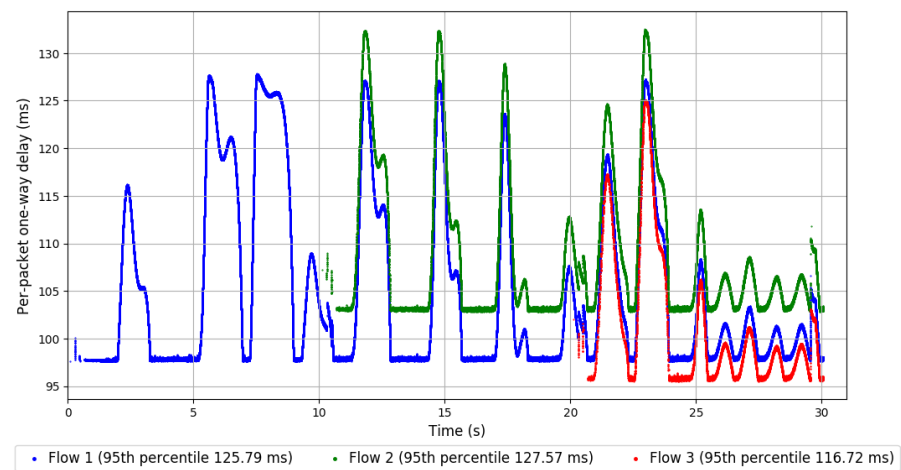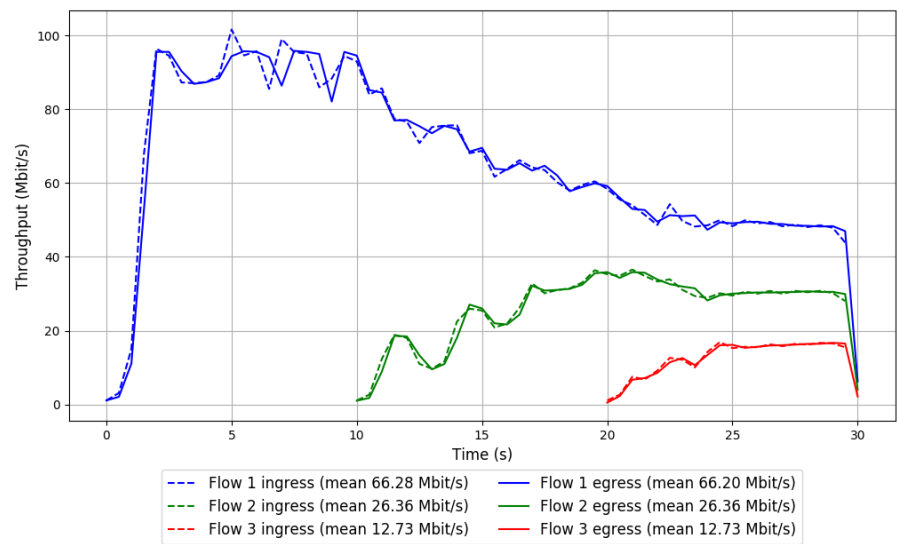
```
Run 9: Statistics of Copa

Start at: 2018-04-25 00:02:31
End at: 2018-04-25 00:03:01
Local clock offset: -5.789 ms
Remote clock offset: 2.035 ms


# Below is generated by plot.py at 2018-04-25 01:16:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.38 Mbit/s
95th percentile per-packet one-way delay: 128.296 ms
Loss rate: 89.83%
-- Flow 1:
Average throughput: 92.38 Mbit/s
95th percentile per-packet one-way delay: 128.296 ms
Loss rate: 89.83%
-- Flow 2:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 128.211 ms
Loss rate: 75.00%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 128.265 ms
Loss rate: 75.00%
```

Run 9: Report of Copa — Data Link

Flow 1 ingress (mean 909.07 Mbit/s) ---- Flow 1 egress (mean 92.38 Mbit/s) ——
Flow 2 ingress (mean 0.00 Mbit/s) ---- Flow 2 egress (mean 0.00 Mbit/s) ——
Flow 3 ingress (mean 0.00 Mbit/s) ---- Flow 3 egress (mean 0.00 Mbit/s) ——

• Flow 1 (95th percentile 128.30 ms)   • Flow 2 (95th percentile 128.21 ms)   • Flow 3 (95th percentile 128.26 ms)

```
Run 10: Statistics of Copa

Start at: 2018-04-25 00:25:05
End at: 2018-04-25 00:25:35
Local clock offset: -4.89 ms
Remote clock offset: 3.308 ms


# Below is generated by plot.py at 2018-04-25 01:16:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.75 Mbit/s
95th percentile per-packet one-way delay: 115.181 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 67.76 Mbit/s
95th percentile per-packet one-way delay: 114.893 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 26.18 Mbit/s
95th percentile per-packet one-way delay: 116.389 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 10.70 Mbit/s
95th percentile per-packet one-way delay: 114.660 ms
Loss rate: 0.02%
```
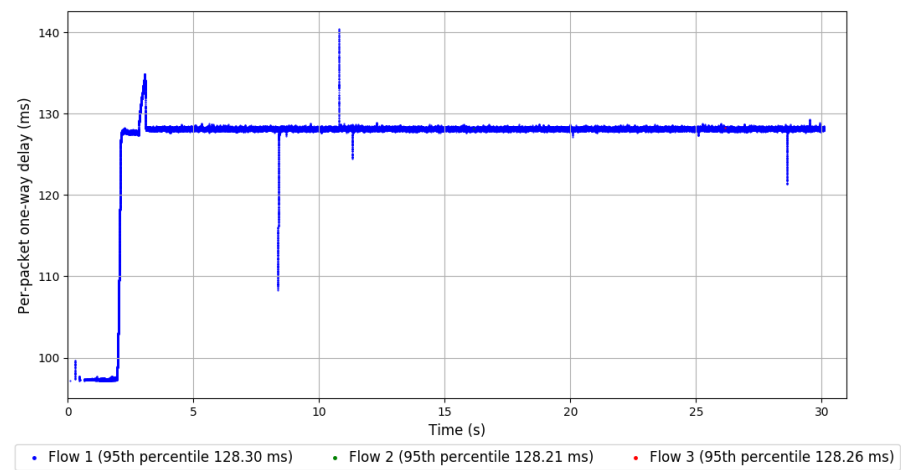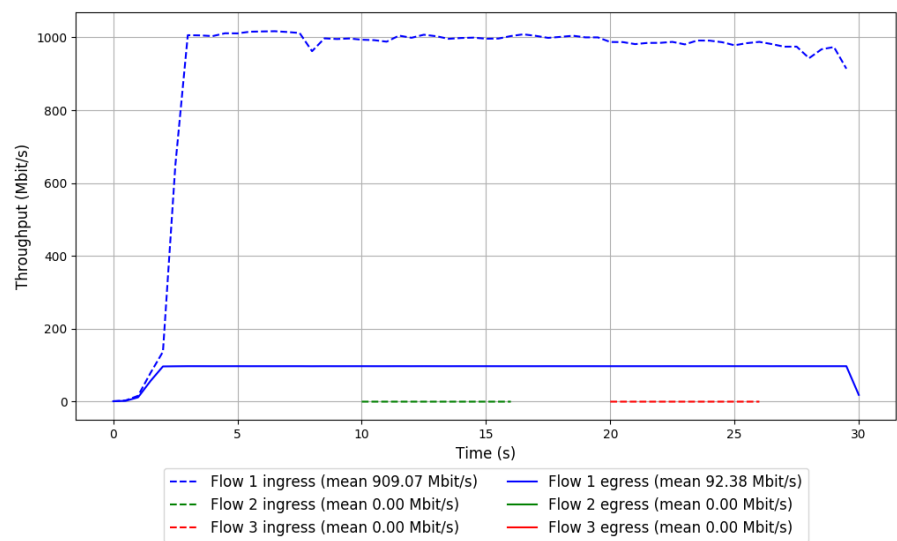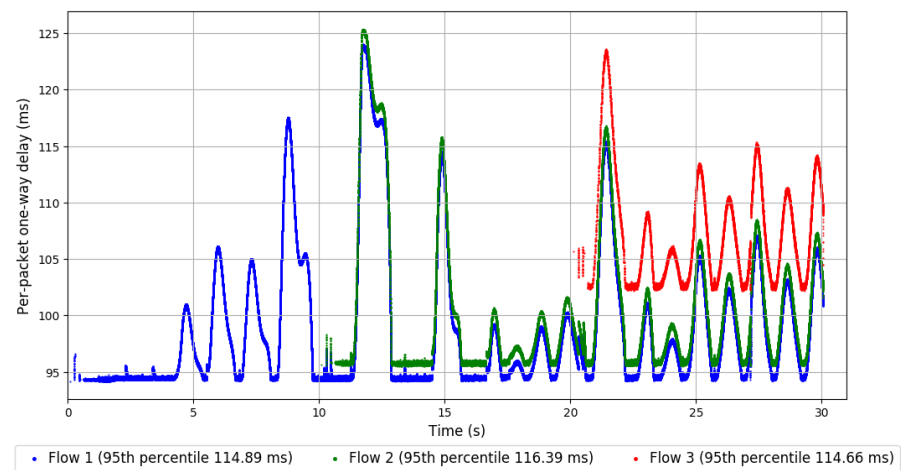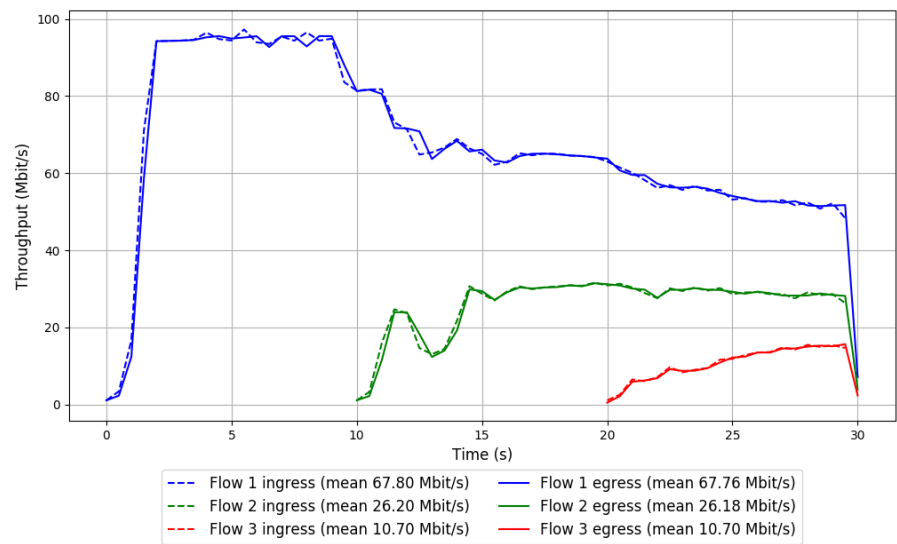
Run 10: Report of Copa — Data Link

```
Run 1: Statistics of FillP

Start at: 2018-04-24 20:59:36
End at: 2018-04-24 21:00:06
Local clock offset: -4.691 ms
Remote clock offset: 9.26 ms


# Below is generated by plot.py at 2018-04-25 01:16:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.20 Mbit/s
95th percentile per-packet one-way delay: 130.795 ms
Loss rate: 18.03%
-- Flow 1:
Average throughput: 36.85 Mbit/s
95th percentile per-packet one-way delay: 130.501 ms
Loss rate: 15.87%
-- Flow 2:
Average throughput: 57.41 Mbit/s
95th percentile per-packet one-way delay: 130.924 ms
Loss rate: 17.84%
-- Flow 3:
Average throughput: 42.53 Mbit/s
95th percentile per-packet one-way delay: 129.159 ms
Loss rate: 23.61%
```
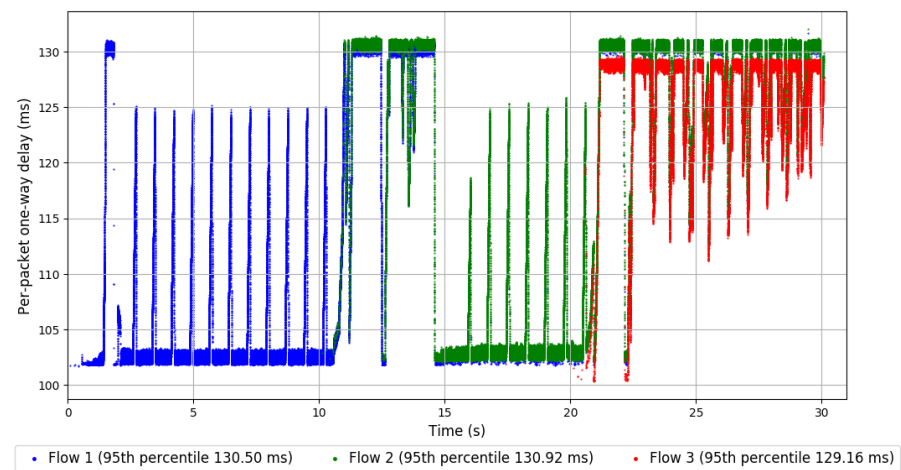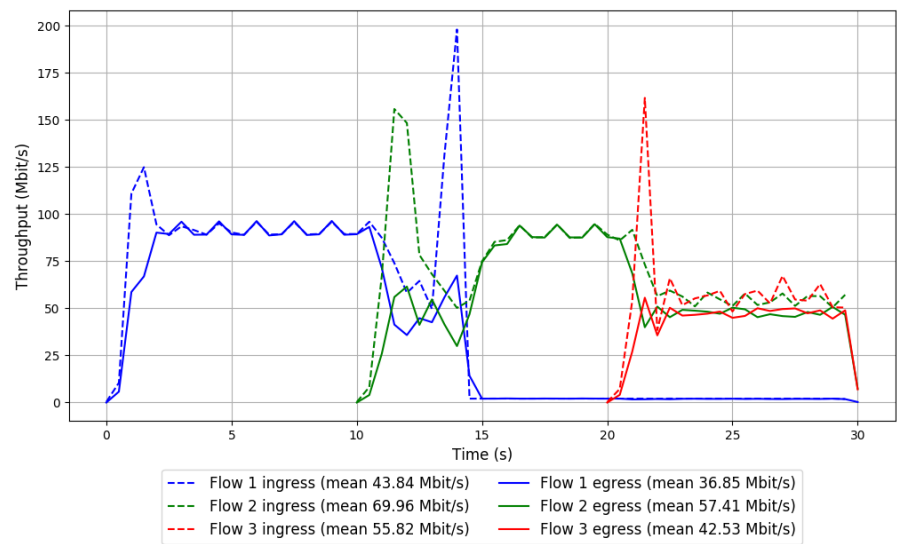
Run 1: Report of FillP — Data Link

```
Run 2: Statistics of FillP

Start at: 2018-04-24 21:22:12
End at: 2018-04-24 21:22:42
Local clock offset: -4.916 ms
Remote clock offset: 4.695 ms


# Below is generated by plot.py at 2018-04-25 01:16:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.37 Mbit/s
95th percentile per-packet one-way delay: 132.819 ms
Loss rate: 14.28%
-- Flow 1:
Average throughput: 52.66 Mbit/s
95th percentile per-packet one-way delay: 130.999 ms
Loss rate: 11.78%
-- Flow 2:
Average throughput: 44.74 Mbit/s
95th percentile per-packet one-way delay: 132.958 ms
Loss rate: 15.75%
-- Flow 3:
Average throughput: 26.93 Mbit/s
95th percentile per-packet one-way delay: 124.178 ms
Loss rate: 22.70%
```

Run 2: Report of FillP — Data Link

Flow 1 ingress (mean 59.74 Mbit/s) --- Flow 1 egress (mean 52.66 Mbit/s)
Flow 2 ingress (mean 53.16 Mbit/s) --- Flow 2 egress (mean 44.74 Mbit/s)
Flow 3 ingress (mean 34.84 Mbit/s) --- Flow 3 egress (mean 26.93 Mbit/s)

Flow 1 (95th percentile 131.00 ms) • Flow 2 (95th percentile 132.96 ms) • Flow 3 (95th percentile 124.18 ms)

```
Run 3: Statistics of FillP

Start at: 2018-04-24 21:44:48
End at: 2018-04-24 21:45:18
Local clock offset: -4.94 ms
Remote clock offset: 7.633 ms


# Below is generated by plot.py at 2018-04-25 01:16:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.93 Mbit/s
95th percentile per-packet one-way delay: 136.074 ms
Loss rate: 18.67%
-- Flow 1:
Average throughput: 57.31 Mbit/s
95th percentile per-packet one-way delay: 126.956 ms
Loss rate: 12.36%
-- Flow 2:
Average throughput: 31.25 Mbit/s
95th percentile per-packet one-way delay: 136.251 ms
Loss rate: 28.10%
-- Flow 3:
Average throughput: 35.68 Mbit/s
95th percentile per-packet one-way delay: 129.581 ms
Loss rate: 27.24%
```
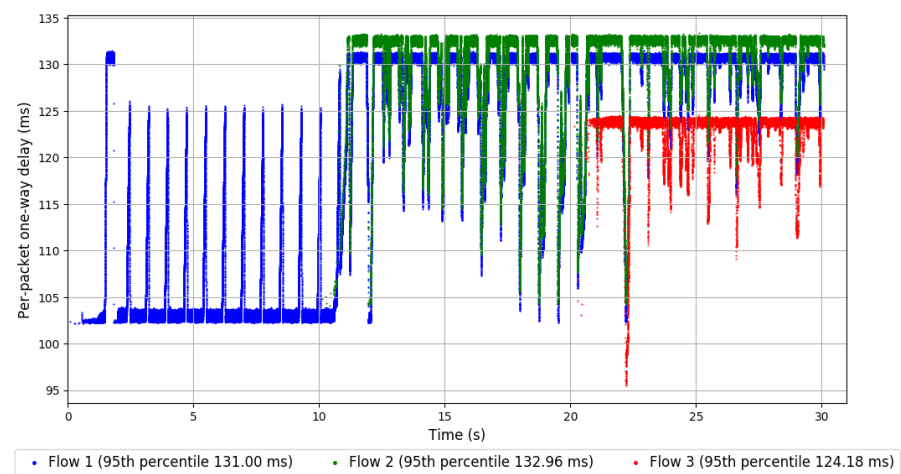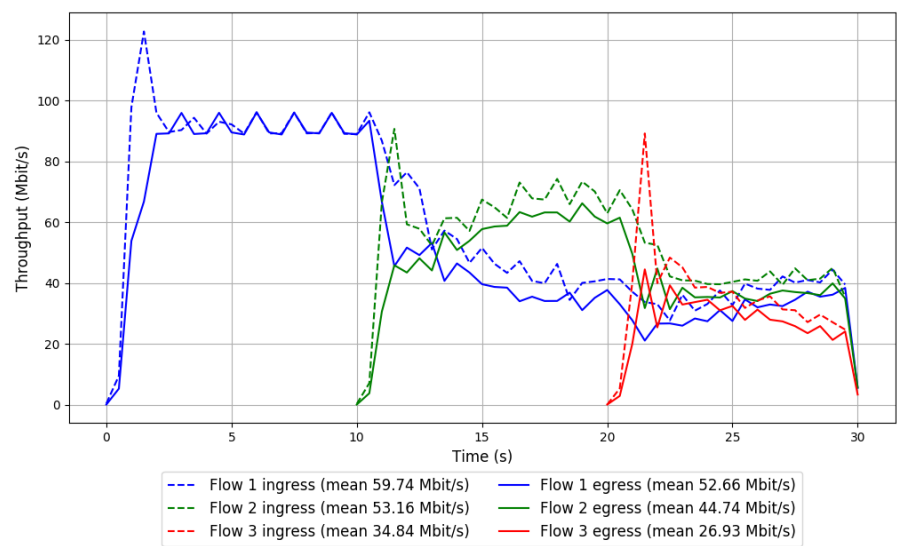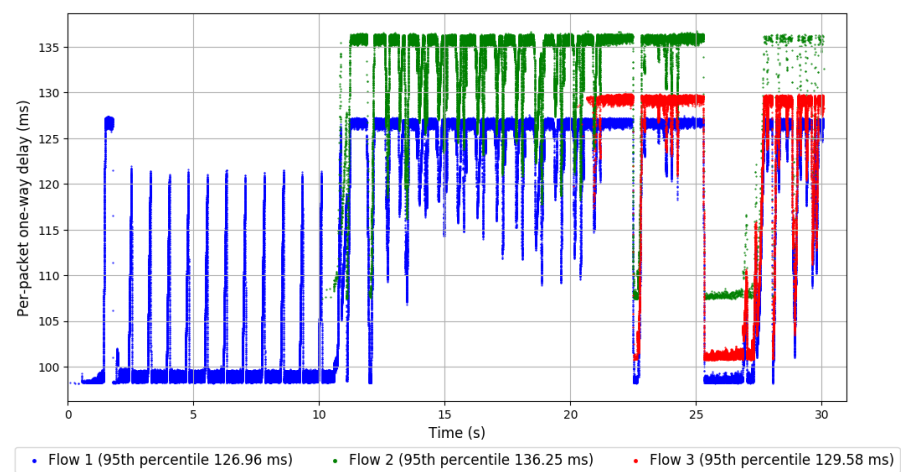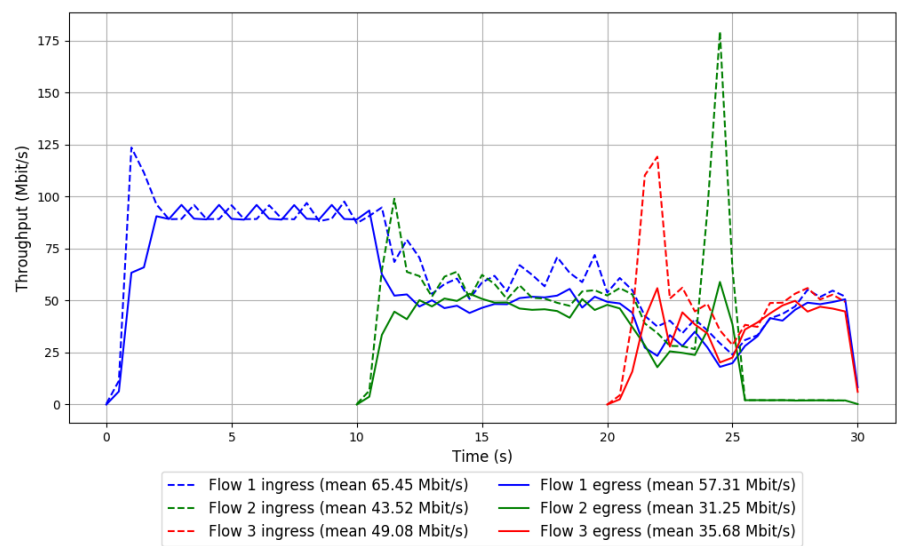
Run 3: Report of FillP — Data Link

```
Run 4: Statistics of FillP

Start at: 2018-04-24 22:07:17
End at: 2018-04-24 22:07:47
Local clock offset: -4.104 ms
Remote clock offset: 3.571 ms


# Below is generated by plot.py at 2018-04-25 01:16:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.34 Mbit/s
95th percentile per-packet one-way delay: 129.495 ms
Loss rate: 16.00%
-- Flow 1:
Average throughput: 61.17 Mbit/s
95th percentile per-packet one-way delay: 124.622 ms
Loss rate: 10.70%
-- Flow 2:
Average throughput: 32.42 Mbit/s
95th percentile per-packet one-way delay: 126.124 ms
Loss rate: 26.11%
-- Flow 3:
Average throughput: 26.30 Mbit/s
95th percentile per-packet one-way delay: 129.965 ms
Loss rate: 22.12%
```
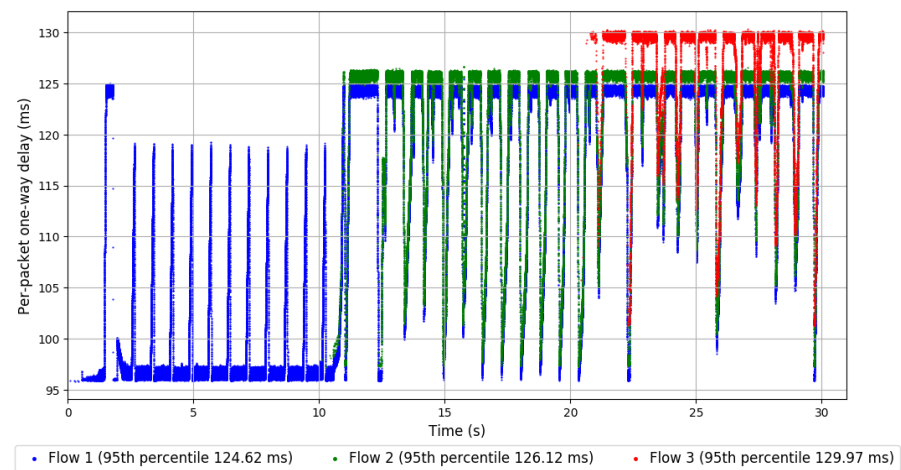
Run 4: Report of FillP — Data Link

```
Run 5: Statistics of FillP

Start at: 2018-04-24 22:29:51
End at: 2018-04-24 22:30:21
Local clock offset: -5.365 ms
Remote clock offset: 7.203 ms


# Below is generated by plot.py at 2018-04-25 01:16:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.49 Mbit/s
95th percentile per-packet one-way delay: 130.401 ms
Loss rate: 13.14%
-- Flow 1:
Average throughput: 60.16 Mbit/s
95th percentile per-packet one-way delay: 129.118 ms
Loss rate: 9.71%
-- Flow 2:
Average throughput: 34.42 Mbit/s
95th percentile per-packet one-way delay: 130.460 ms
Loss rate: 15.56%
-- Flow 3:
Average throughput: 25.42 Mbit/s
95th percentile per-packet one-way delay: 130.642 ms
Loss rate: 27.25%
```
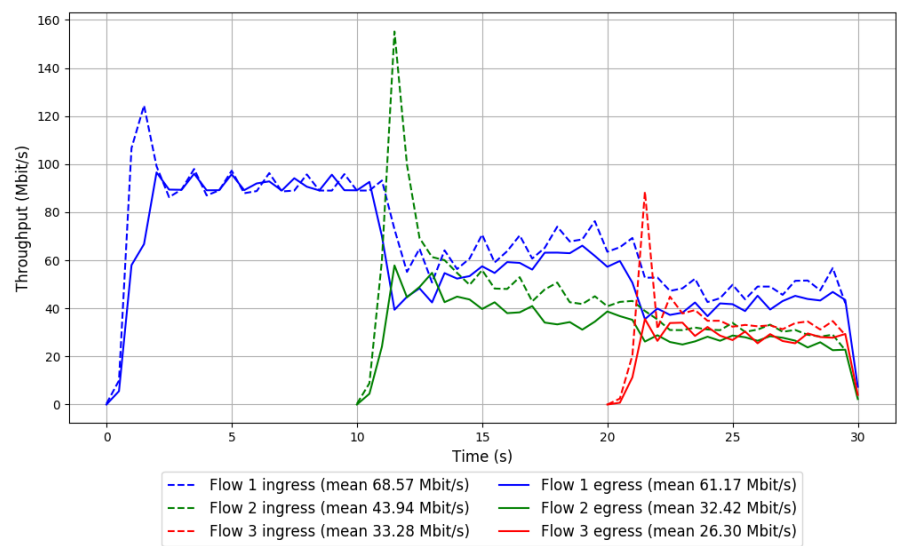
Run 5: Report of FillP — Data Link

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```
Run 6: Statistics of FillP

Start at: 2018-04-24 22:52:21
End at: 2018-04-24 22:52:51
Local clock offset: -6.012 ms
Remote clock offset: 3.103 ms


# Below is generated by plot.py at 2018-04-25 01:16:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.96 Mbit/s
95th percentile per-packet one-way delay: 129.676 ms
Loss rate: 16.67%
-- Flow 1:
Average throughput: 56.65 Mbit/s
95th percentile per-packet one-way delay: 129.742 ms
Loss rate: 12.02%
-- Flow 2:
Average throughput: 31.50 Mbit/s
95th percentile per-packet one-way delay: 125.873 ms
Loss rate: 23.59%
-- Flow 3:
Average throughput: 40.28 Mbit/s
95th percentile per-packet one-way delay: 124.588 ms
Loss rate: 22.97%
```
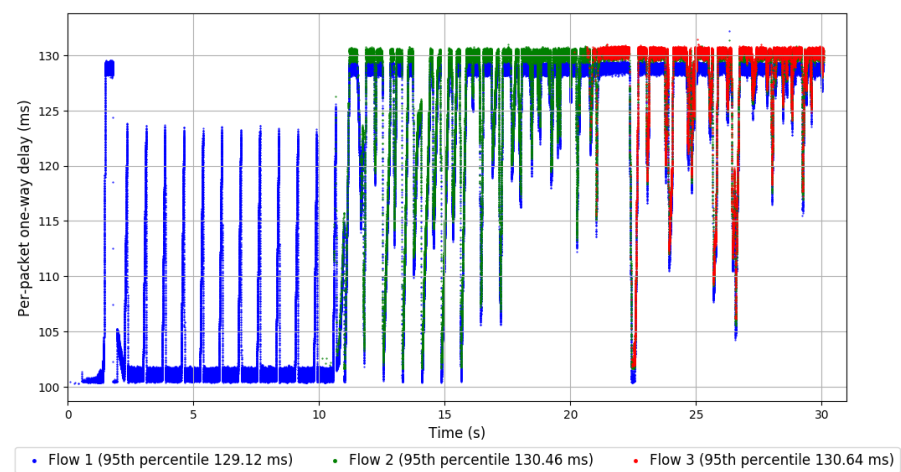
Run 6: Report of FillP — Data Link

```
Run 7: Statistics of FillP

Start at: 2018-04-24 23:14:57
End at: 2018-04-24 23:15:27
Local clock offset: -4.337 ms
Remote clock offset: 8.079 ms


# Below is generated by plot.py at 2018-04-25 01:16:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.50 Mbit/s
95th percentile per-packet one-way delay: 131.424 ms
Loss rate: 16.21%
-- Flow 1:
Average throughput: 36.43 Mbit/s
95th percentile per-packet one-way delay: 129.778 ms
Loss rate: 13.89%
-- Flow 2:
Average throughput: 55.46 Mbit/s
95th percentile per-packet one-way delay: 131.548 ms
Loss rate: 16.22%
-- Flow 3:
Average throughput: 48.73 Mbit/s
95th percentile per-packet one-way delay: 130.068 ms
Loss rate: 20.98%
```
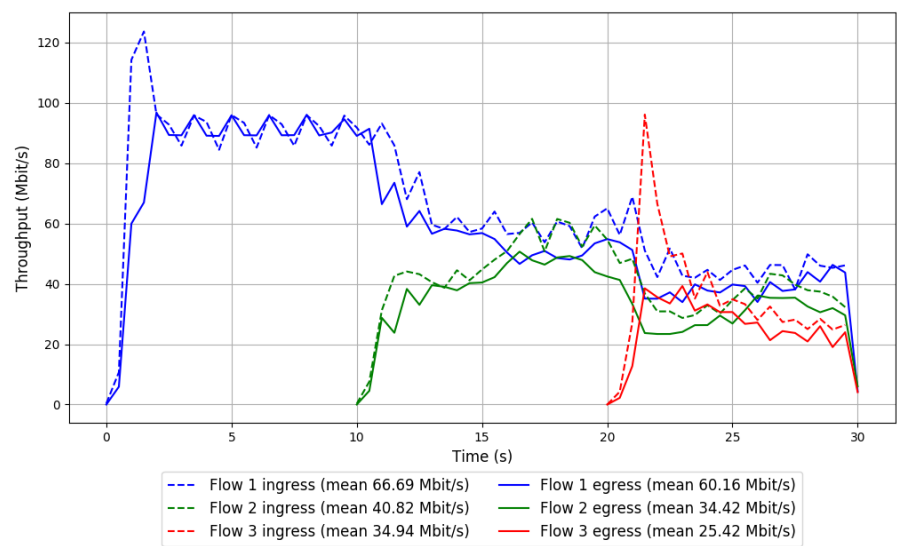
Run 7: Report of FillP — Data Link

```
Run 8: Statistics of FillP

Start at: 2018-04-24 23:37:32
End at: 2018-04-24 23:38:02
Local clock offset: -5.075 ms
Remote clock offset: 6.017 ms


# Below is generated by plot.py at 2018-04-25 01:16:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.13 Mbit/s
95th percentile per-packet one-way delay: 128.944 ms
Loss rate: 17.46%
-- Flow 1:
Average throughput: 50.50 Mbit/s
95th percentile per-packet one-way delay: 127.553 ms
Loss rate: 12.72%
-- Flow 2:
Average throughput: 31.10 Mbit/s
95th percentile per-packet one-way delay: 128.898 ms
Loss rate: 27.39%
-- Flow 3:
Average throughput: 42.19 Mbit/s
95th percentile per-packet one-way delay: 134.253 ms
Loss rate: 16.92%
```
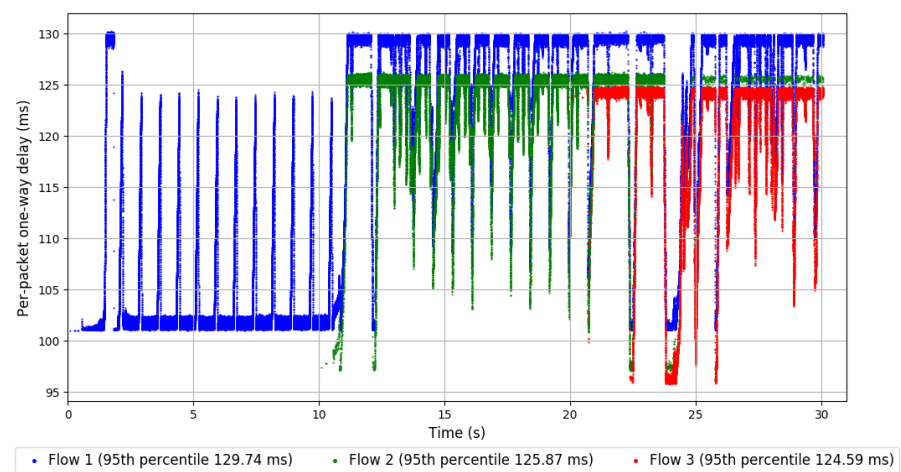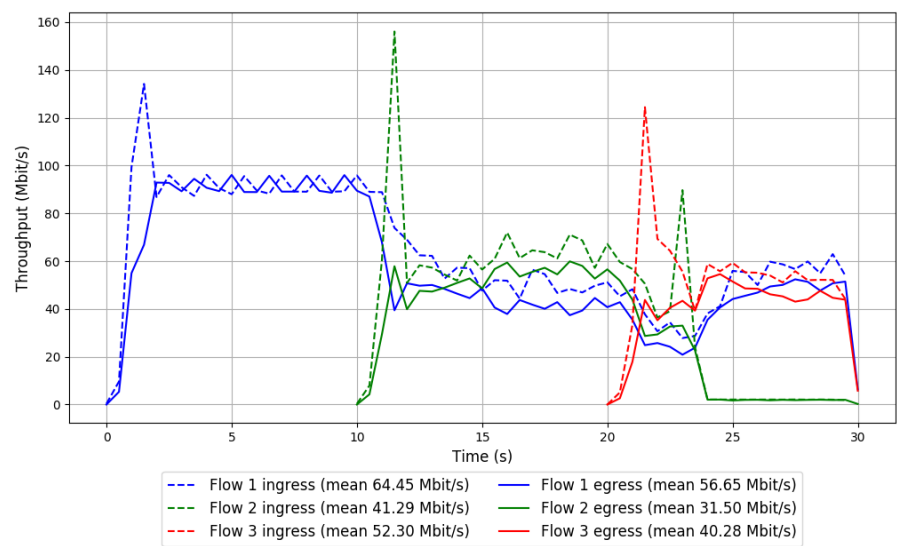
Run 8: Report of FillP — Data Link

```
Run 9: Statistics of FillP

Start at: 2018-04-24 23:59:47
End at: 2018-04-25 00:00:17
Local clock offset: -5.068 ms
Remote clock offset: 2.859 ms


# Below is generated by plot.py at 2018-04-25 01:16:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.73 Mbit/s
95th percentile per-packet one-way delay: 129.818 ms
Loss rate: 18.27%
-- Flow 1:
Average throughput: 35.47 Mbit/s
95th percentile per-packet one-way delay: 126.475 ms
Loss rate: 13.30%
-- Flow 2:
Average throughput: 61.71 Mbit/s
95th percentile per-packet one-way delay: 129.958 ms
Loss rate: 17.69%
-- Flow 3:
Average throughput: 39.62 Mbit/s
95th percentile per-packet one-way delay: 127.790 ms
Loss rate: 30.53%
```
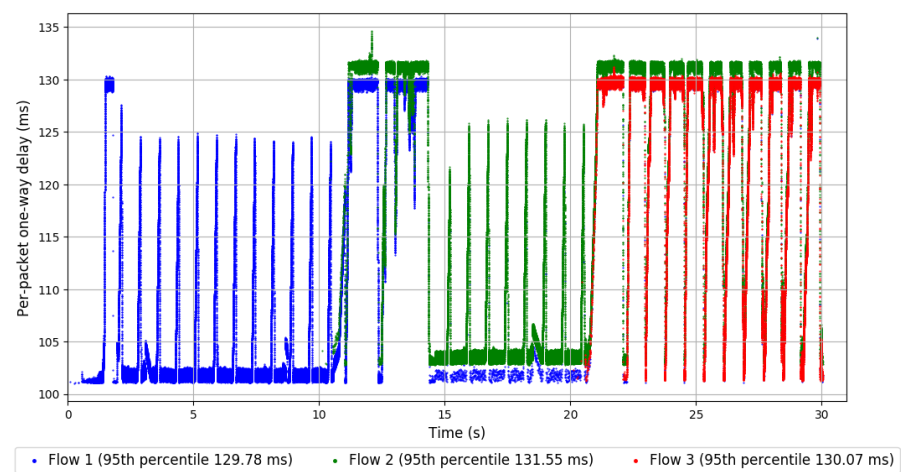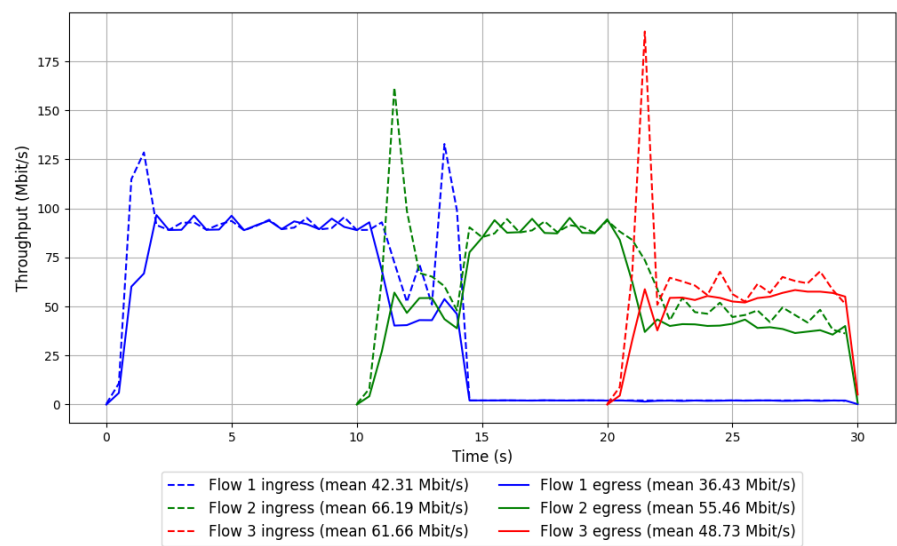
Run 9: Report of FillP — Data Link

```
Run 10: Statistics of FillP

Start at: 2018-04-25 00:22:24
End at: 2018-04-25 00:22:54
Local clock offset: -4.982 ms
Remote clock offset: 7.797 ms


# Below is generated by plot.py at 2018-04-25 01:16:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.61 Mbit/s
95th percentile per-packet one-way delay: 131.923 ms
Loss rate: 18.31%
-- Flow 1:
Average throughput: 53.32 Mbit/s
95th percentile per-packet one-way delay: 130.721 ms
Loss rate: 10.74%
-- Flow 2:
Average throughput: 32.53 Mbit/s
95th percentile per-packet one-way delay: 132.105 ms
Loss rate: 30.67%
-- Flow 3:
Average throughput: 44.11 Mbit/s
95th percentile per-packet one-way delay: 130.505 ms
Loss rate: 21.84%
```
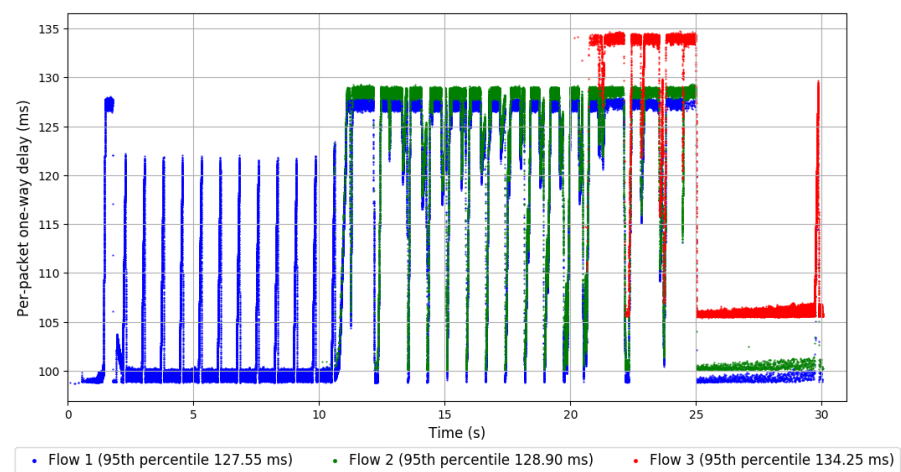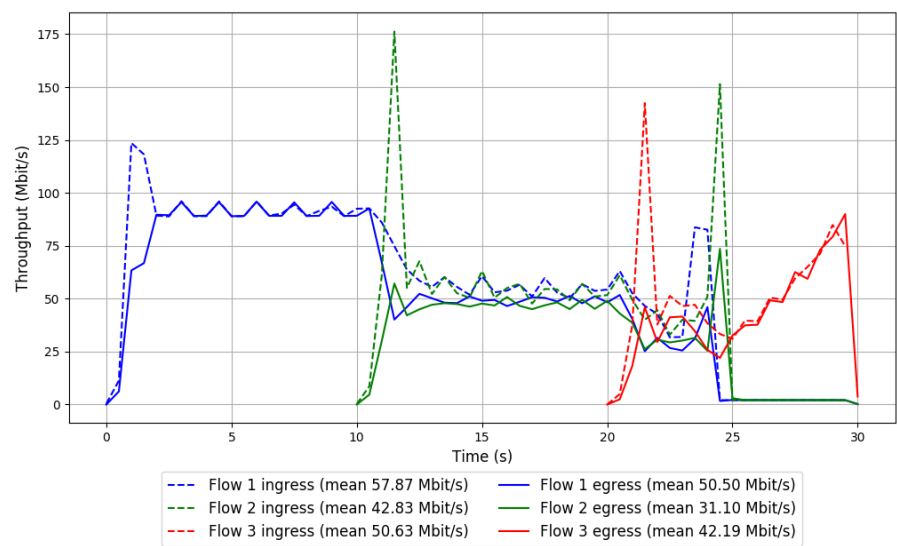
Run 10: Report of FillP — Data Link

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

Start at: 2018-04-24 21:00:55
End at: 2018-04-24 21:01:25
Local clock offset: -3.999 ms
Remote clock offset: 3.77 ms


# Below is generated by plot.py at 2018-04-25 01:16:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.28 Mbit/s
95th percentile per-packet one-way delay: 132.082 ms
Loss rate: 40.32%
-- Flow 1:
Average throughput: 62.54 Mbit/s
95th percentile per-packet one-way delay: 132.123 ms
Loss rate: 20.33%
-- Flow 2:
Average throughput: 20.07 Mbit/s
95th percentile per-packet one-way delay: 127.505 ms
Loss rate: 49.73%
-- Flow 3:
Average throughput: 57.53 Mbit/s
95th percentile per-packet one-way delay: 125.503 ms
Loss rate: 66.81%
```
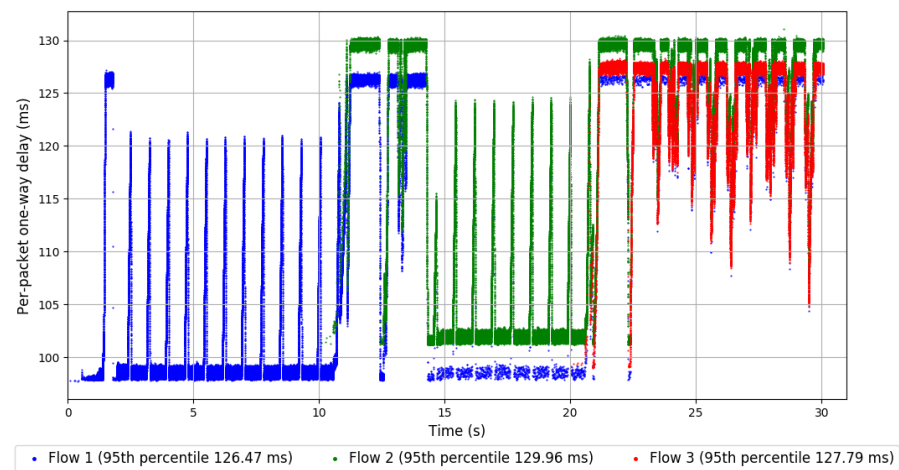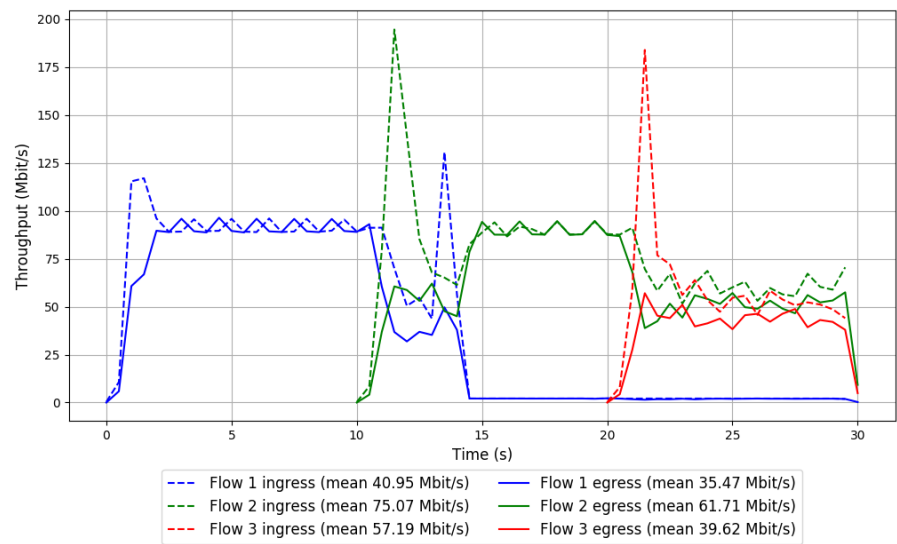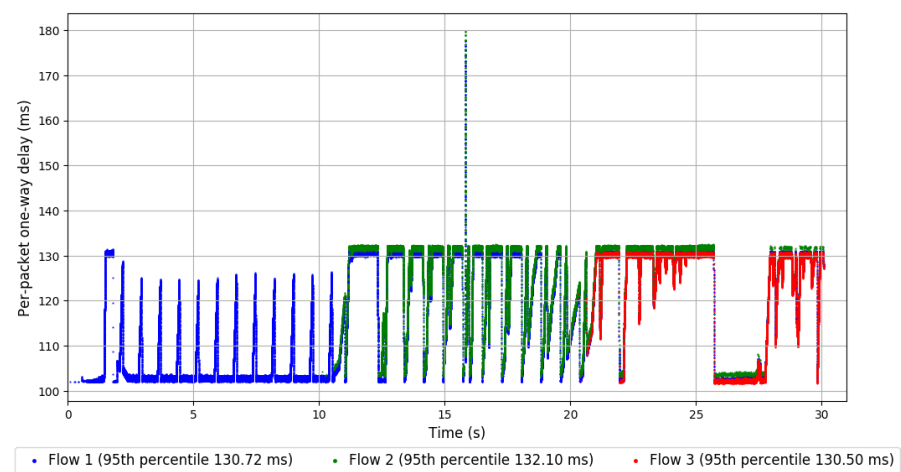
Run 1: Report of Indigo-1-32 — Data Link

- - - Flow 1 ingress (mean 78.58 Mbit/s) ——— Flow 1 egress (mean 62.54 Mbit/s)
- - - Flow 2 ingress (mean 39.98 Mbit/s) ——— Flow 2 egress (mean 20.07 Mbit/s)
- - - Flow 3 ingress (mean 155.15 Mbit/s) ——— Flow 3 egress (mean 57.53 Mbit/s)

· Flow 1 (95th percentile 132.12 ms)   · Flow 2 (95th percentile 127.50 ms)   · Flow 3 (95th percentile 125.50 ms)

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

Start at: 2018-04-24 21:23:31
End at: 2018-04-24 21:24:01
Local clock offset: -4.891 ms
Remote clock offset: 9.248 ms


# Below is generated by plot.py at 2018-04-25 01:16:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.95 Mbit/s
95th percentile per-packet one-way delay: 134.607 ms
Loss rate: 37.46%
-- Flow 1:
Average throughput: 62.04 Mbit/s
95th percentile per-packet one-way delay: 134.297 ms
Loss rate: 21.68%
-- Flow 2:
Average throughput: 25.00 Mbit/s
95th percentile per-packet one-way delay: 134.815 ms
Loss rate: 39.97%
-- Flow 3:
Average throughput: 45.12 Mbit/s
95th percentile per-packet one-way delay: 133.521 ms
Loss rate: 65.44%
```

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

- - - Flow 1 ingress (mean 79.30 Mbit/s) ——— Flow 1 egress (mean 62.04 Mbit/s)
- - - Flow 2 ingress (mean 41.70 Mbit/s) ——— Flow 2 egress (mean 25.00 Mbit/s)
- - - Flow 3 ingress (mean 130.58 Mbit/s) ——— Flow 3 egress (mean 45.12 Mbit/s)

- Flow 1 (95th percentile 134.30 ms)   - Flow 2 (95th percentile 134.81 ms)   - Flow 3 (95th percentile 133.52 ms)

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

Start at: 2018-04-24 21:46:08
End at: 2018-04-24 21:46:38
Local clock offset: -5.724 ms
Remote clock offset: 8.383 ms


# Below is generated by plot.py at 2018-04-25 01:16:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.39 Mbit/s
95th percentile per-packet one-way delay: 139.538 ms
Loss rate: 39.57%
-- Flow 1:
Average throughput: 61.78 Mbit/s
95th percentile per-packet one-way delay: 135.277 ms
Loss rate: 21.49%
-- Flow 2:
Average throughput: 24.60 Mbit/s
95th percentile per-packet one-way delay: 139.724 ms
Loss rate: 52.69%
-- Flow 3:
Average throughput: 46.79 Mbit/s
95th percentile per-packet one-way delay: 138.379 ms
Loss rate: 63.92%
```
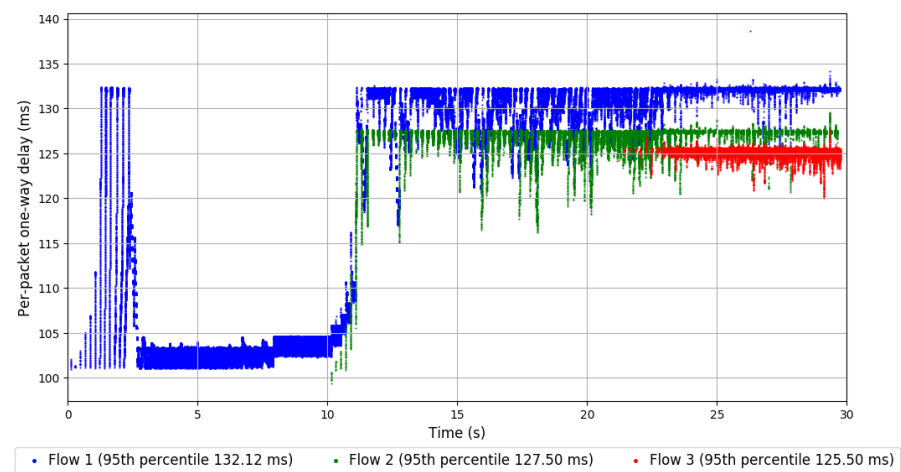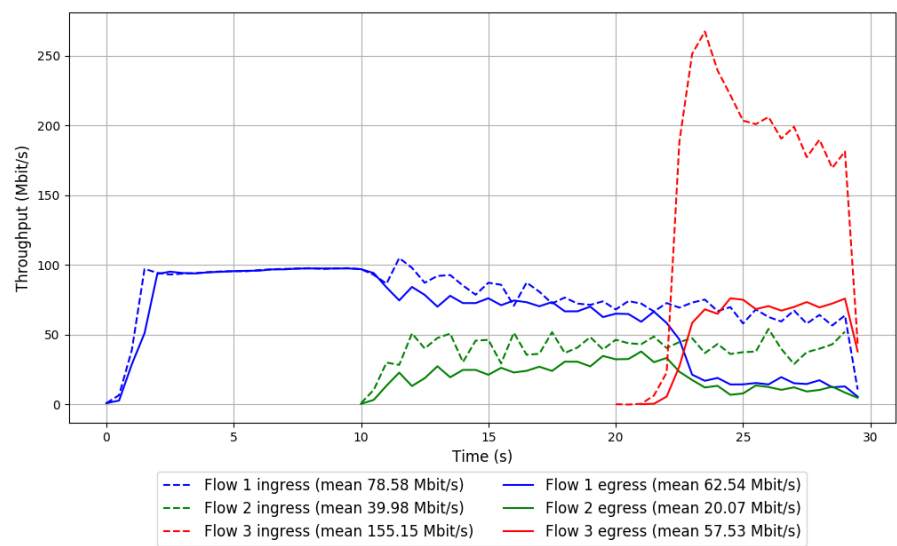
Run 3: Report of Indigo-1-32 — Data Link

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

Start at: 2018-04-24 22:08:37
End at: 2018-04-24 22:09:07
Local clock offset: -5.63 ms
Remote clock offset: 4.362 ms


# Below is generated by plot.py at 2018-04-25 01:17:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.72 Mbit/s
95th percentile per-packet one-way delay: 136.201 ms
Loss rate: 42.48%
-- Flow 1:
Average throughput: 60.47 Mbit/s
95th percentile per-packet one-way delay: 130.503 ms
Loss rate: 23.51%
-- Flow 2:
Average throughput: 27.90 Mbit/s
95th percentile per-packet one-way delay: 136.339 ms
Loss rate: 49.46%
-- Flow 3:
Average throughput: 43.25 Mbit/s
95th percentile per-packet one-way delay: 127.467 ms
Loss rate: 69.61%
```
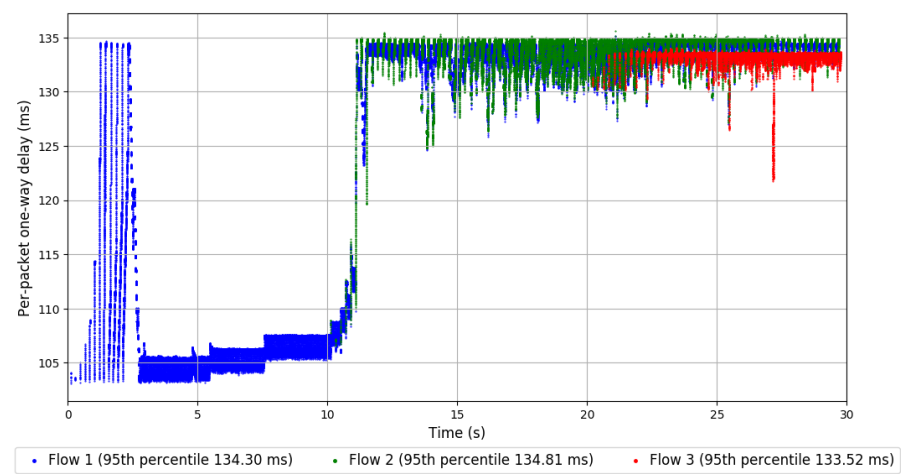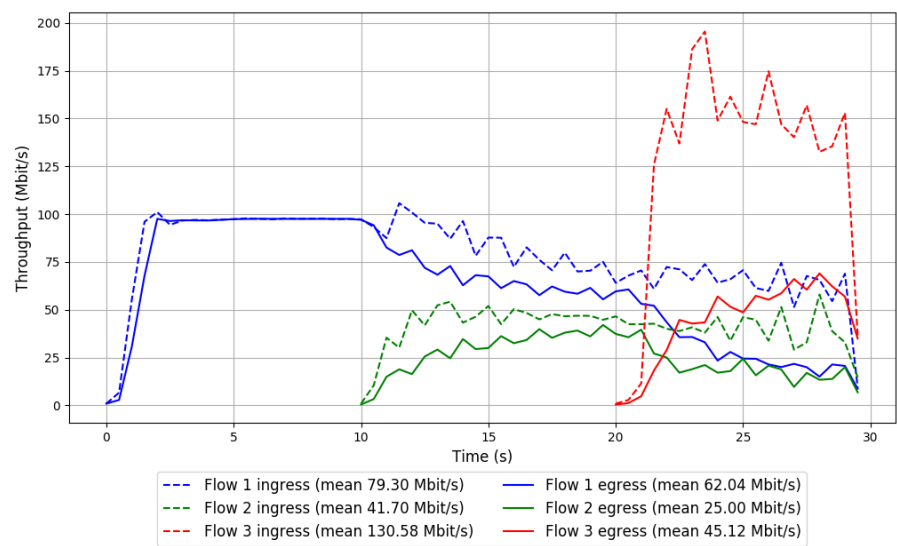
Run 4: Report of Indigo-1-32 — Data Link

Flow 1 ingress (mean 79.14 Mbit/s)   Flow 1 egress (mean 60.47 Mbit/s)
Flow 2 ingress (mean 55.29 Mbit/s)   Flow 2 egress (mean 27.90 Mbit/s)
Flow 3 ingress (mean 142.34 Mbit/s)   Flow 3 egress (mean 43.25 Mbit/s)

Flow 1 (95th percentile 130.50 ms)   Flow 2 (95th percentile 136.34 ms)   Flow 3 (95th percentile 127.47 ms)

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

Start at: 2018-04-24 22:31:10
End at: 2018-04-24 22:31:40
Local clock offset: -4.651 ms
Remote clock offset: 4.141 ms


# Below is generated by plot.py at 2018-04-25 01:17:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.11 Mbit/s
95th percentile per-packet one-way delay: 132.914 ms
Loss rate: 34.72%
-- Flow 1:
Average throughput: 63.56 Mbit/s
95th percentile per-packet one-way delay: 132.918 ms
Loss rate: 18.37%
-- Flow 2:
Average throughput: 19.04 Mbit/s
95th percentile per-packet one-way delay: 125.943 ms
Loss rate: 48.81%
-- Flow 3:
Average throughput: 49.57 Mbit/s
95th percentile per-packet one-way delay: 132.942 ms
Loss rate: 58.69%
```
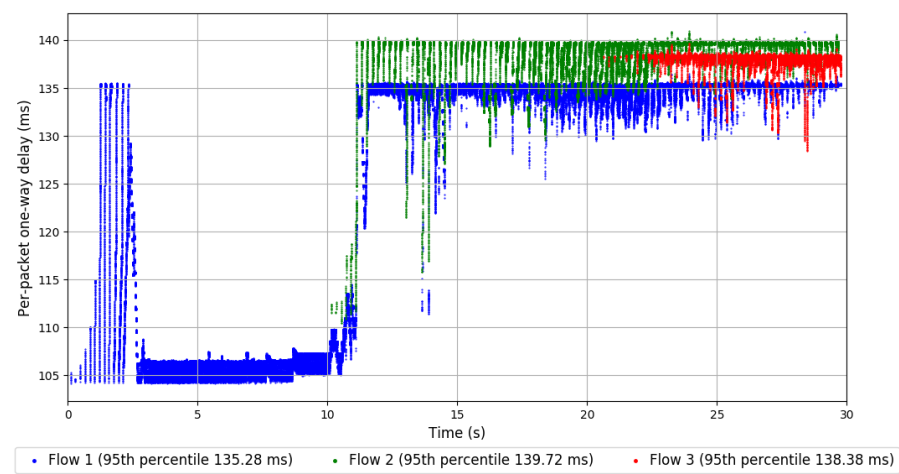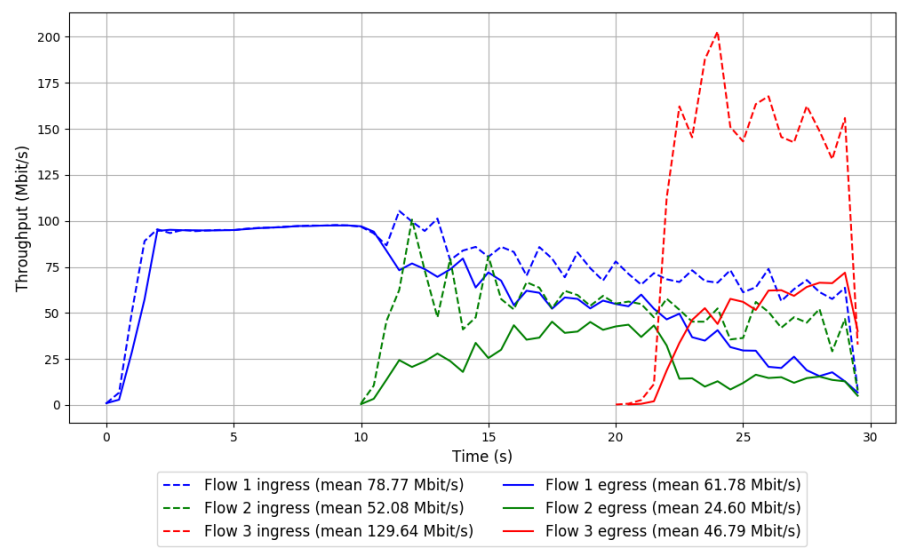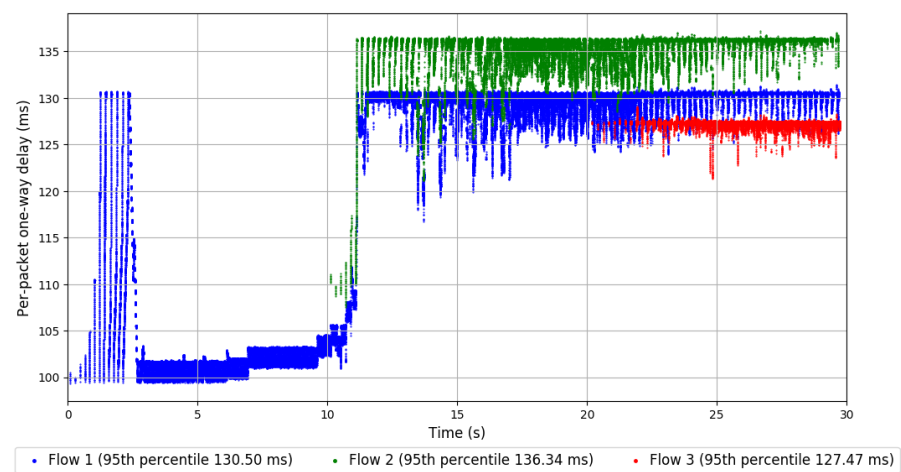
Run 5: Report of Indigo-1-32 — Data Link

- - - Flow 1 ingress (mean 77.95 Mbit/s) —— Flow 1 egress (mean 63.56 Mbit/s)
- - - Flow 2 ingress (mean 37.25 Mbit/s) —— Flow 2 egress (mean 19.04 Mbit/s)
- - - Flow 3 ingress (mean 119.98 Mbit/s) —— Flow 3 egress (mean 49.57 Mbit/s)

• Flow 1 (95th percentile 132.92 ms)   • Flow 2 (95th percentile 125.94 ms)   • Flow 3 (95th percentile 132.94 ms)

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

Start at: 2018-04-24 22:53:41
End at: 2018-04-24 22:54:11
Local clock offset: -6.051 ms
Remote clock offset: 7.817 ms


# Below is generated by plot.py at 2018-04-25 01:17:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.93 Mbit/s
95th percentile per-packet one-way delay: 133.558 ms
Loss rate: 44.72%
-- Flow 1:
Average throughput: 66.66 Mbit/s
95th percentile per-packet one-way delay: 133.573 ms
Loss rate: 23.12%
-- Flow 2:
Average throughput: 14.41 Mbit/s
95th percentile per-packet one-way delay: 131.460 ms
Loss rate: 63.75%
-- Flow 3:
Average throughput: 51.97 Mbit/s
95th percentile per-packet one-way delay: 132.928 ms
Loss rate: 69.59%
```
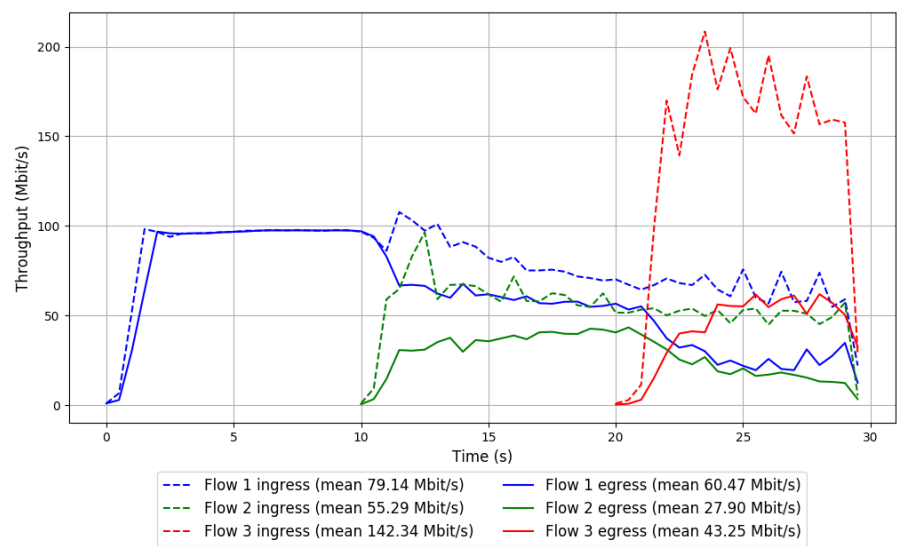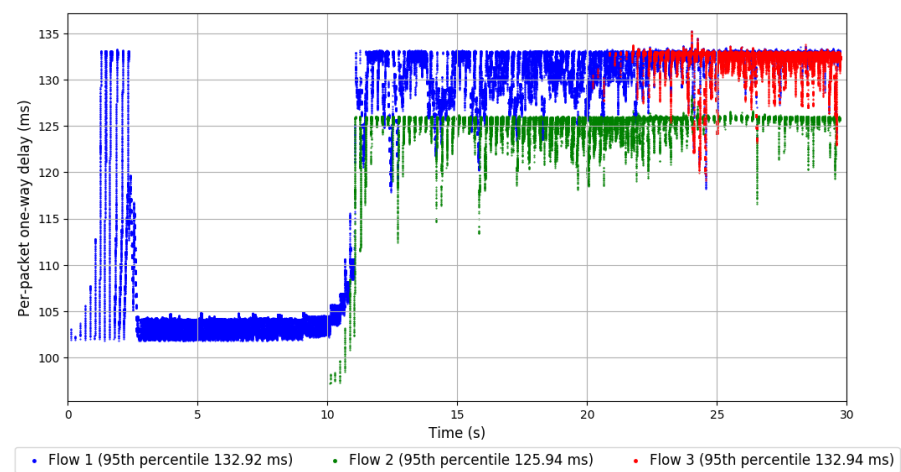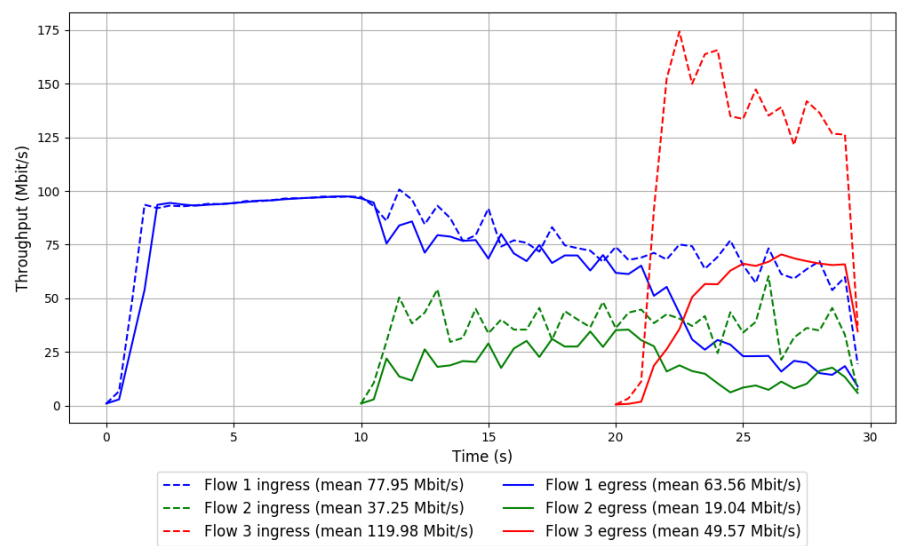
Run 6: Report of Indigo-1-32 — Data Link

Flow 1 ingress (mean 86.81 Mbit/s) --- Flow 1 egress (mean 66.66 Mbit/s)
Flow 2 ingress (mean 39.80 Mbit/s) --- Flow 2 egress (mean 14.41 Mbit/s)
Flow 3 ingress (mean 170.92 Mbit/s) --- Flow 3 egress (mean 51.97 Mbit/s)

Flow 1 (95th percentile 133.57 ms)   Flow 2 (95th percentile 131.46 ms)   Flow 3 (95th percentile 132.93 ms)

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

Start at: 2018-04-24 23:16:17
End at: 2018-04-24 23:16:47
Local clock offset: -5.121 ms
Remote clock offset: 6.377 ms


# Below is generated by plot.py at 2018-04-25 01:17:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.45 Mbit/s
95th percentile per-packet one-way delay: 138.318 ms
Loss rate: 31.25%
-- Flow 1:
Average throughput: 65.06 Mbit/s
95th percentile per-packet one-way delay: 131.287 ms
Loss rate: 16.43%
-- Flow 2:
Average throughput: 18.59 Mbit/s
95th percentile per-packet one-way delay: 128.351 ms
Loss rate: 49.44%
-- Flow 3:
Average throughput: 47.05 Mbit/s
95th percentile per-packet one-way delay: 138.472 ms
Loss rate: 53.22%
```
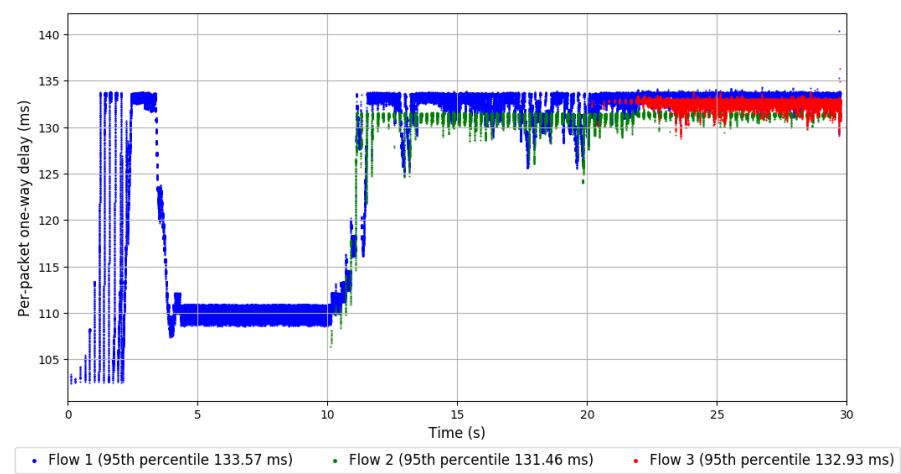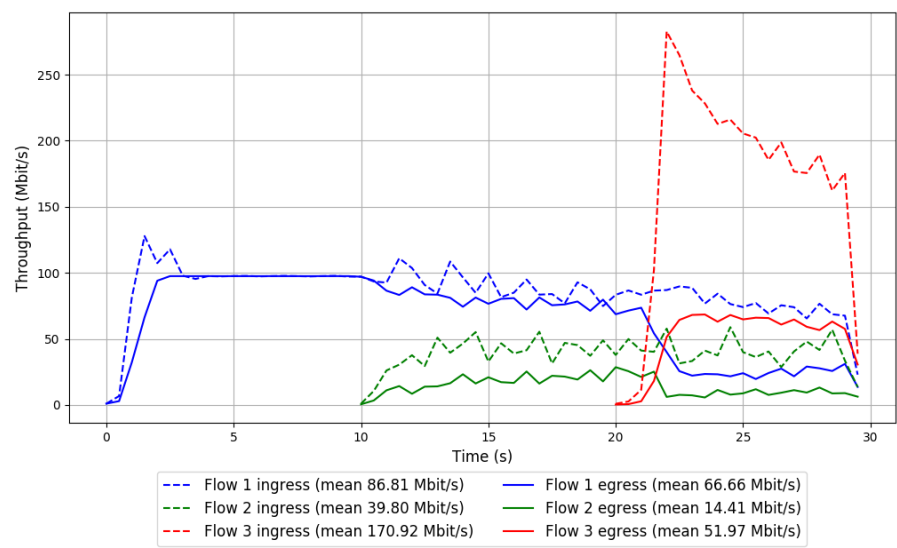
Run 7: Report of Indigo-1-32 — Data Link

Flow 1 ingress (mean 77.93 Mbit/s)   Flow 1 egress (mean 65.06 Mbit/s)
Flow 2 ingress (mean 36.82 Mbit/s)   Flow 2 egress (mean 18.59 Mbit/s)
Flow 3 ingress (mean 100.55 Mbit/s)   Flow 3 egress (mean 47.05 Mbit/s)

Flow 1 (95th percentile 131.29 ms)   Flow 2 (95th percentile 128.35 ms)   Flow 3 (95th percentile 138.47 ms)

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

Start at: 2018-04-24 23:38:51
End at: 2018-04-24 23:39:22
Local clock offset: -5.095 ms
Remote clock offset: 6.842 ms


# Below is generated by plot.py at 2018-04-25 01:17:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.89 Mbit/s
95th percentile per-packet one-way delay: 133.985 ms
Loss rate: 37.50%
-- Flow 1:
Average throughput: 60.40 Mbit/s
95th percentile per-packet one-way delay: 132.465 ms
Loss rate: 22.88%
-- Flow 2:
Average throughput: 25.12 Mbit/s
95th percentile per-packet one-way delay: 133.936 ms
Loss rate: 45.45%
-- Flow 3:
Average throughput: 49.37 Mbit/s
95th percentile per-packet one-way delay: 134.113 ms
Loss rate: 60.15%
```
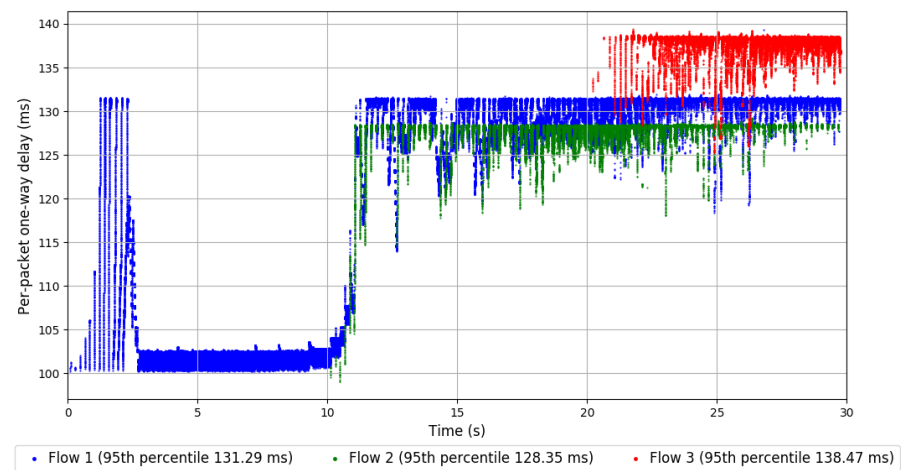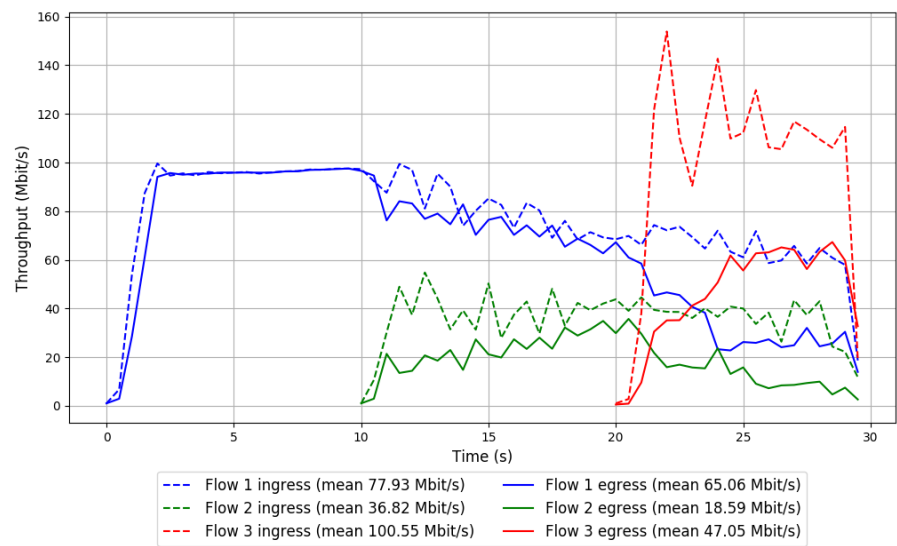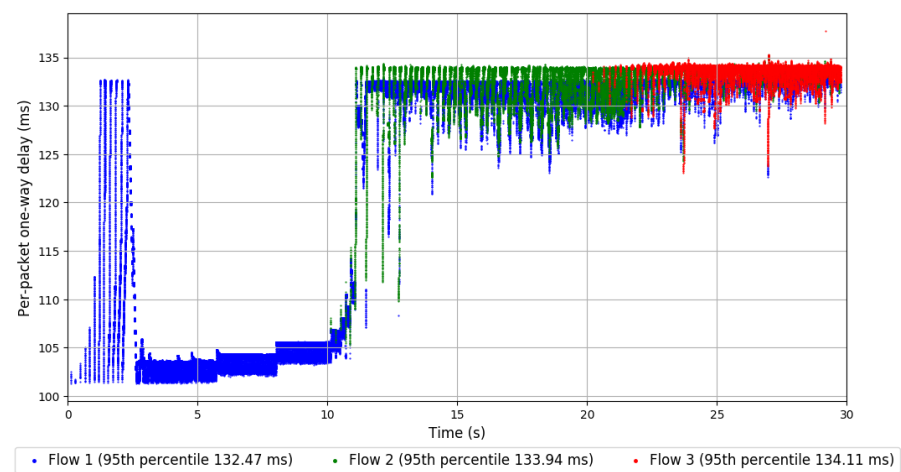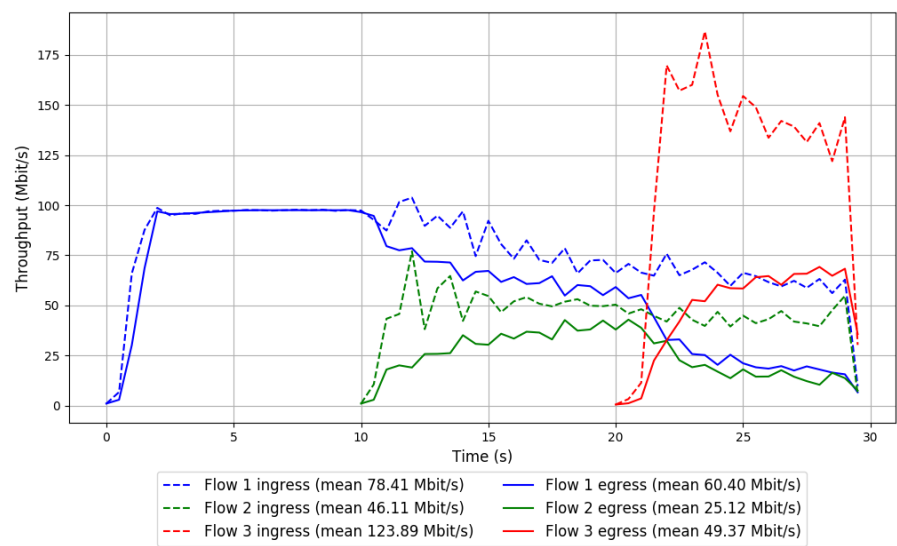
Run 8: Report of Indigo-1-32 — Data Link

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

Start at: 2018-04-25 00:01:07
End at: 2018-04-25 00:01:37
Local clock offset: -4.968 ms
Remote clock offset: 7.451 ms


# Below is generated by plot.py at 2018-04-25 01:18:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.91 Mbit/s
95th percentile per-packet one-way delay: 140.014 ms
Loss rate: 43.21%
-- Flow 1:
Average throughput: 58.35 Mbit/s
95th percentile per-packet one-way delay: 133.194 ms
Loss rate: 26.55%
-- Flow 2:
Average throughput: 27.01 Mbit/s
95th percentile per-packet one-way delay: 134.496 ms
Loss rate: 47.72%
-- Flow 3:
Average throughput: 48.93 Mbit/s
95th percentile per-packet one-way delay: 140.282 ms
Loss rate: 67.39%
```

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

- - - - Flow 1 ingress (mean 79.52 Mbit/s)   —— Flow 1 egress (mean 58.35 Mbit/s)
- - - - Flow 2 ingress (mean 51.72 Mbit/s)   —— Flow 2 egress (mean 27.01 Mbit/s)
- - - - Flow 3 ingress (mean 149.97 Mbit/s)   —— Flow 3 egress (mean 48.93 Mbit/s)

• Flow 1 (95th percentile 133.19 ms)   • Flow 2 (95th percentile 134.50 ms)   • Flow 3 (95th percentile 140.28 ms)

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

Start at: 2018-04-25 00:23:43
End at: 2018-04-25 00:24:13
Local clock offset: -5.749 ms
Remote clock offset: 2.409 ms


# Below is generated by plot.py at 2018-04-25 01:18:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.65 Mbit/s
95th percentile per-packet one-way delay: 128.120 ms
Loss rate: 36.47%
-- Flow 1:
Average throughput: 57.04 Mbit/s
95th percentile per-packet one-way delay: 125.266 ms
Loss rate: 20.84%
-- Flow 2:
Average throughput: 32.45 Mbit/s
95th percentile per-packet one-way delay: 128.114 ms
Loss rate: 40.21%
-- Flow 3:
Average throughput: 34.62 Mbit/s
95th percentile per-packet one-way delay: 128.254 ms
Loss rate: 66.35%
```
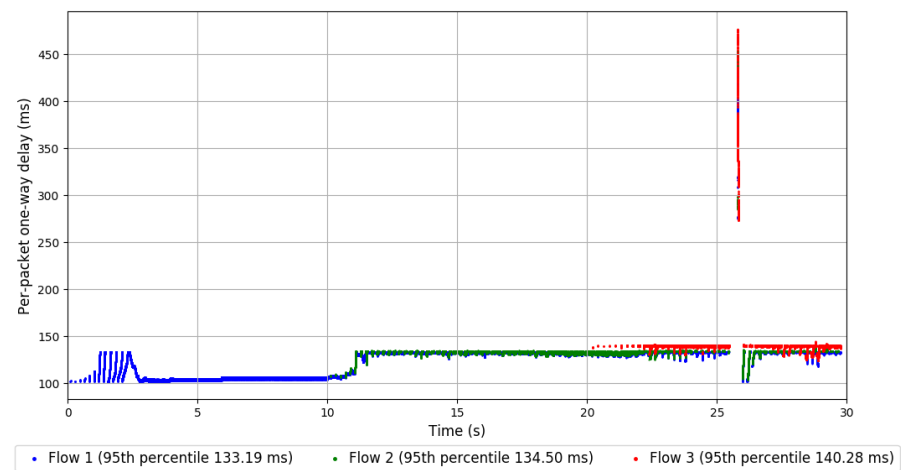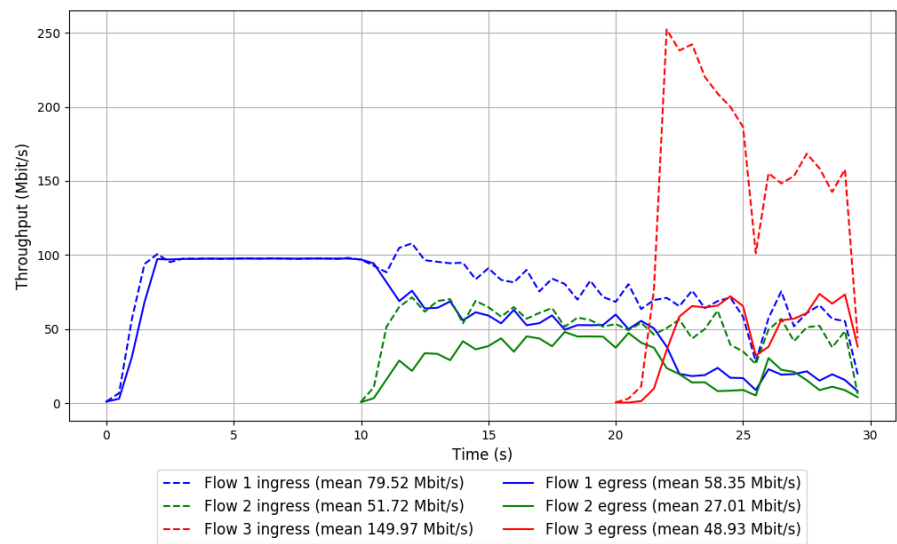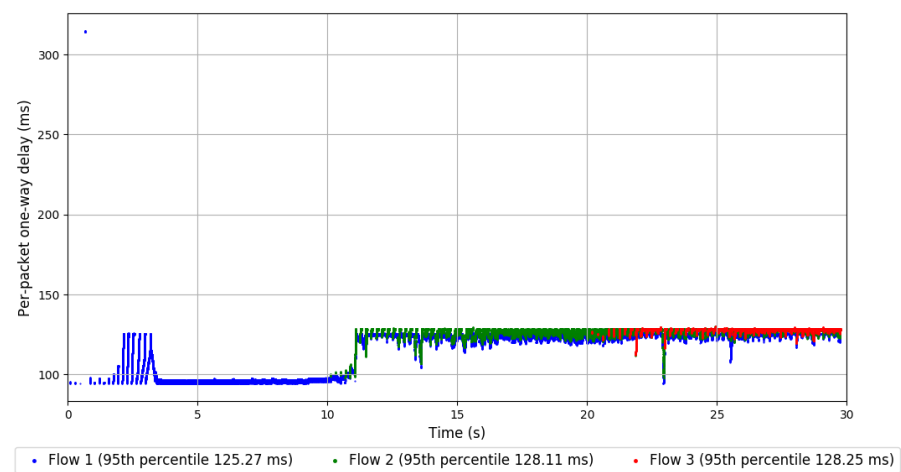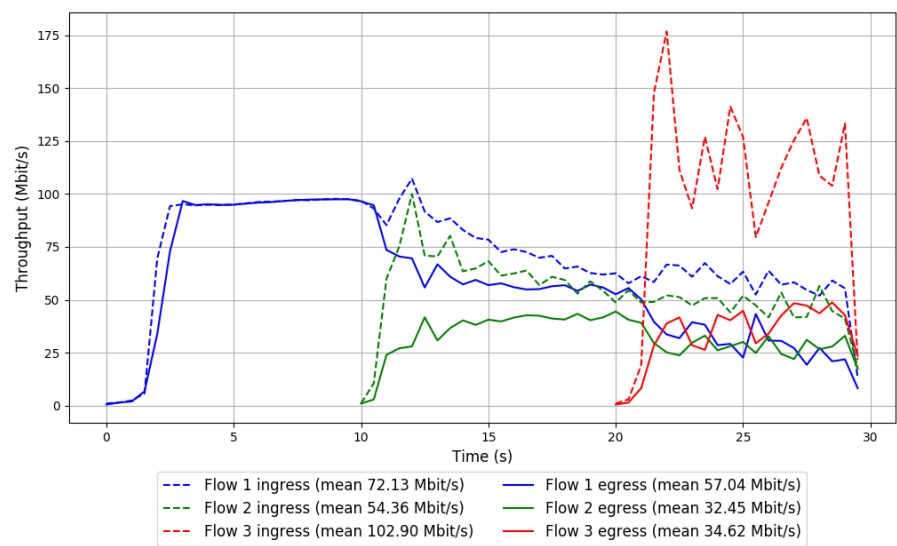
Run 10: Report of Indigo-1-32 — Data Link

```
Run 1: Statistics of PCC-Vivace

Start at: 2018-04-24 20:54:29
End at: 2018-04-24 20:54:59
Local clock offset: -3.991 ms
Remote clock offset: 9.13 ms


# Below is generated by plot.py at 2018-04-25 01:18:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.82 Mbit/s
95th percentile per-packet one-way delay: 129.665 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 67.75 Mbit/s
95th percentile per-packet one-way delay: 129.589 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 10.15 Mbit/s
95th percentile per-packet one-way delay: 130.853 ms
Loss rate: 2.39%
-- Flow 3:
Average throughput: 10.08 Mbit/s
95th percentile per-packet one-way delay: 132.716 ms
Loss rate: 2.51%
```
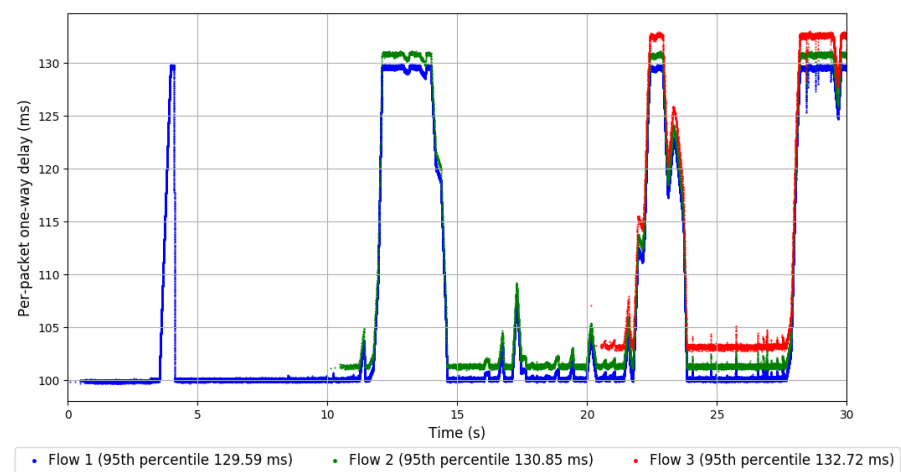
Run 1: Report of PCC-Vivace — Data Link

```
Run 2: Statistics of PCC-Vivace

Start at: 2018-04-24 21:17:05
End at: 2018-04-24 21:17:35
Local clock offset: -5.713 ms
Remote clock offset: 7.707 ms


# Below is generated by plot.py at 2018-04-25 01:18:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.04 Mbit/s
95th percentile per-packet one-way delay: 130.686 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 62.73 Mbit/s
95th percentile per-packet one-way delay: 130.698 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 16.52 Mbit/s
95th percentile per-packet one-way delay: 129.552 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 7.08 Mbit/s
95th percentile per-packet one-way delay: 131.045 ms
Loss rate: 0.58%
```
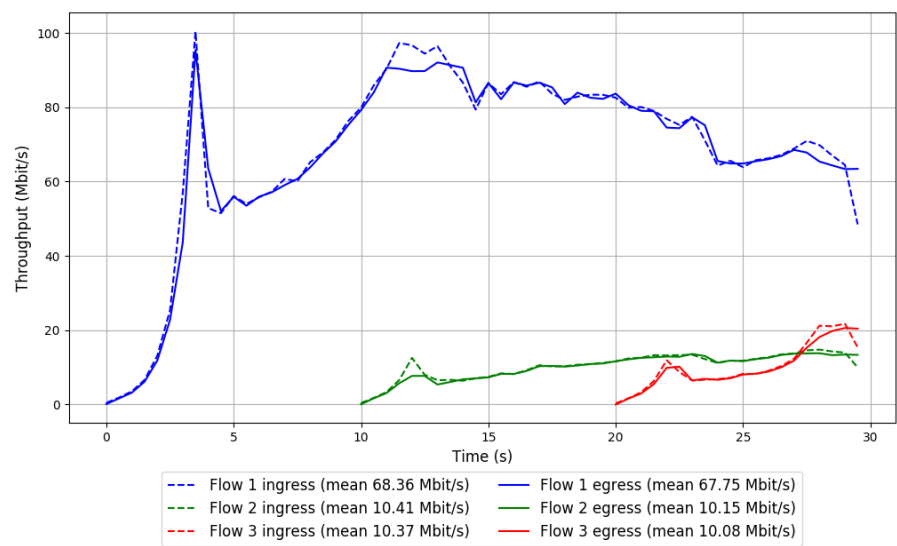
Run 2: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 63.06 Mbit/s) — Flow 1 egress (mean 62.73 Mbit/s)
Flow 2 ingress (mean 16.69 Mbit/s) — Flow 2 egress (mean 16.52 Mbit/s)
Flow 3 ingress (mean 7.11 Mbit/s) — Flow 3 egress (mean 7.08 Mbit/s)

Flow 1 (95th percentile 130.70 ms) · Flow 2 (95th percentile 129.55 ms) · Flow 3 (95th percentile 131.04 ms)

```
Run 3: Statistics of PCC-Vivace

Start at: 2018-04-24 21:39:42
End at: 2018-04-24 21:40:12
Local clock offset: -5.722 ms
Remote clock offset: 8.341 ms


# Below is generated by plot.py at 2018-04-25 01:18:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.91 Mbit/s
95th percentile per-packet one-way delay: 135.110 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 64.87 Mbit/s
95th percentile per-packet one-way delay: 135.126 ms
Loss rate: 1.30%
-- Flow 2:
Average throughput: 14.16 Mbit/s
95th percentile per-packet one-way delay: 129.828 ms
Loss rate: 1.78%
-- Flow 3:
Average throughput: 14.43 Mbit/s
95th percentile per-packet one-way delay: 131.720 ms
Loss rate: 1.48%
```
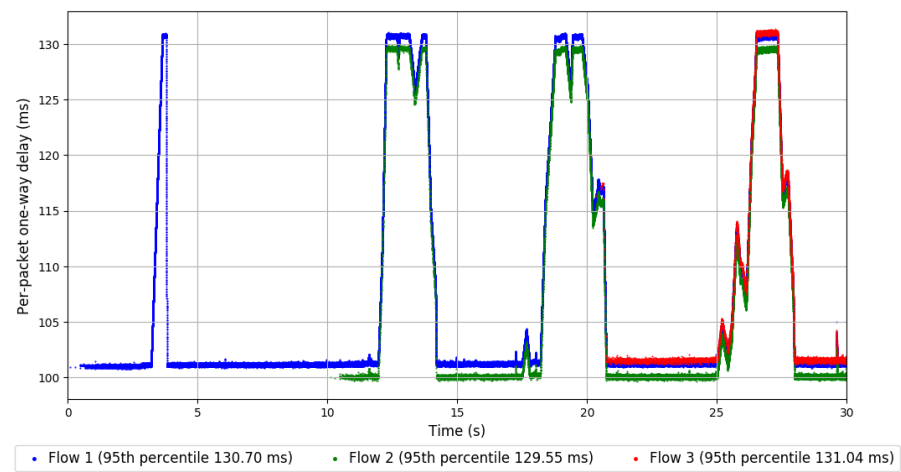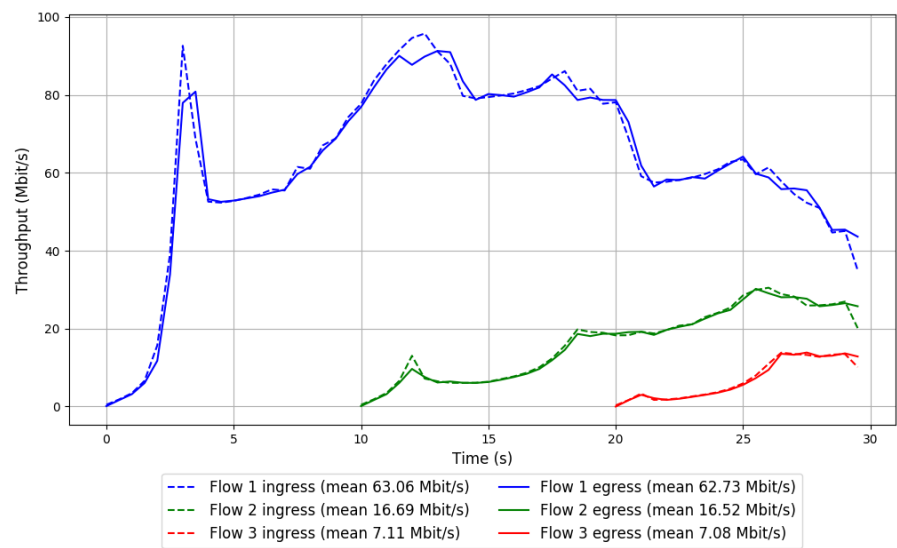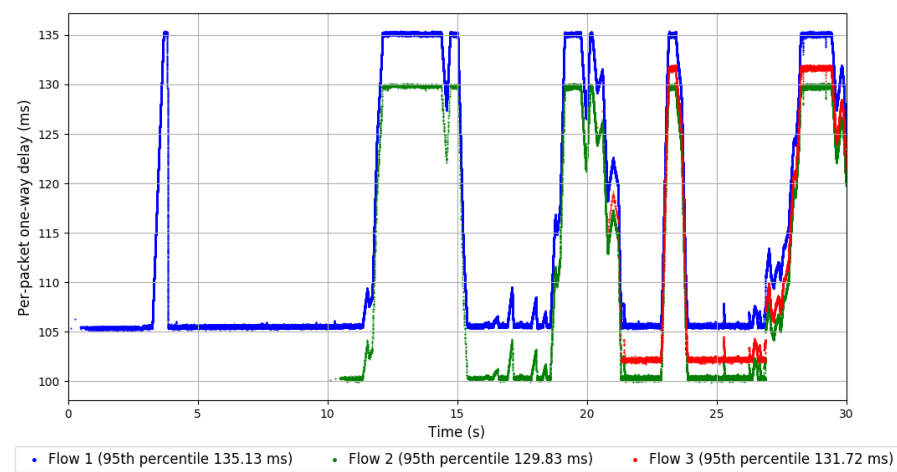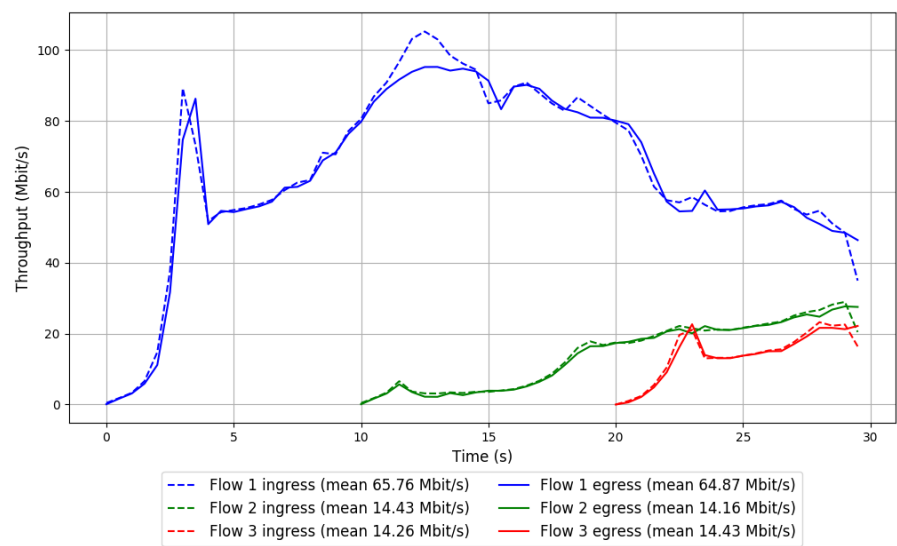
Run 3: Report of PCC-Vivace — Data Link

```
Run 4: Statistics of PCC-Vivace

Start at: 2018-04-24 22:02:11
End at: 2018-04-24 22:02:41
Local clock offset: -4.896 ms
Remote clock offset: 9.055 ms


# Below is generated by plot.py at 2018-04-25 01:18:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.46 Mbit/s
95th percentile per-packet one-way delay: 128.842 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 68.01 Mbit/s
95th percentile per-packet one-way delay: 130.309 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 13.76 Mbit/s
95th percentile per-packet one-way delay: 111.407 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 3.95 Mbit/s
95th percentile per-packet one-way delay: 105.966 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 68.14 Mbit/s) — Flow 1 egress (mean 68.01 Mbit/s)
Flow 2 ingress (mean 13.79 Mbit/s) — Flow 2 egress (mean 13.76 Mbit/s)
Flow 3 ingress (mean 3.95 Mbit/s) — Flow 3 egress (mean 3.95 Mbit/s)

Flow 1 (95th percentile 130.31 ms) — Flow 2 (95th percentile 111.41 ms) — Flow 3 (95th percentile 105.97 ms)

```
Run 5: Statistics of PCC-Vivace

Start at: 2018-04-24 22:24:44
End at: 2018-04-24 22:25:14
Local clock offset: -4.592 ms
Remote clock offset: 7.972 ms


# Below is generated by plot.py at 2018-04-25 01:18:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.98 Mbit/s
95th percentile per-packet one-way delay: 129.492 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 67.48 Mbit/s
95th percentile per-packet one-way delay: 129.501 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 12.59 Mbit/s
95th percentile per-packet one-way delay: 129.483 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 6.47 Mbit/s
95th percentile per-packet one-way delay: 118.414 ms
Loss rate: 0.02%
```
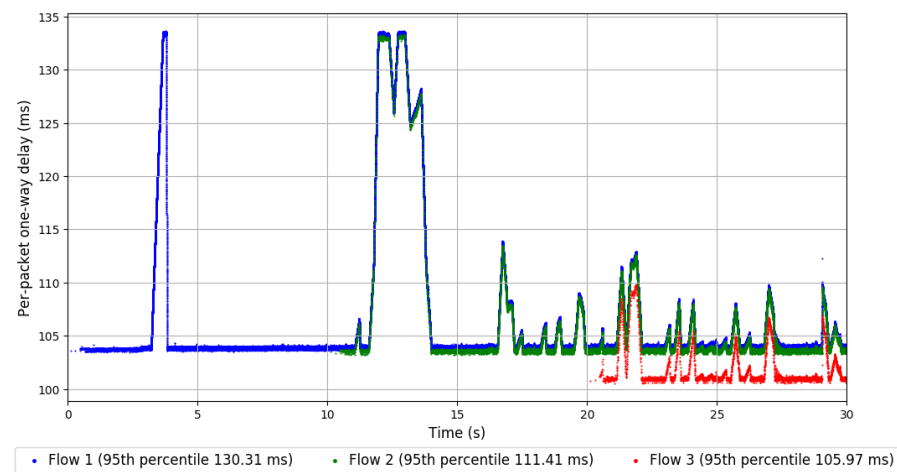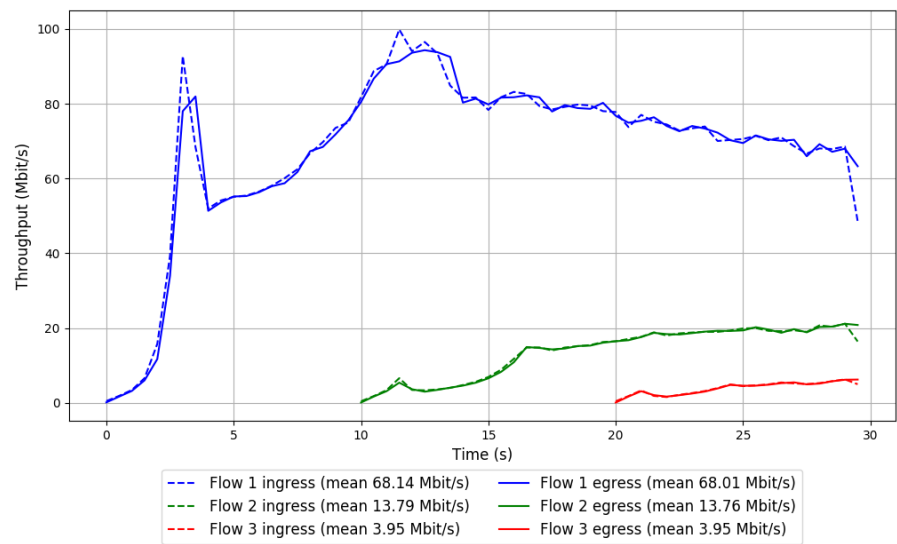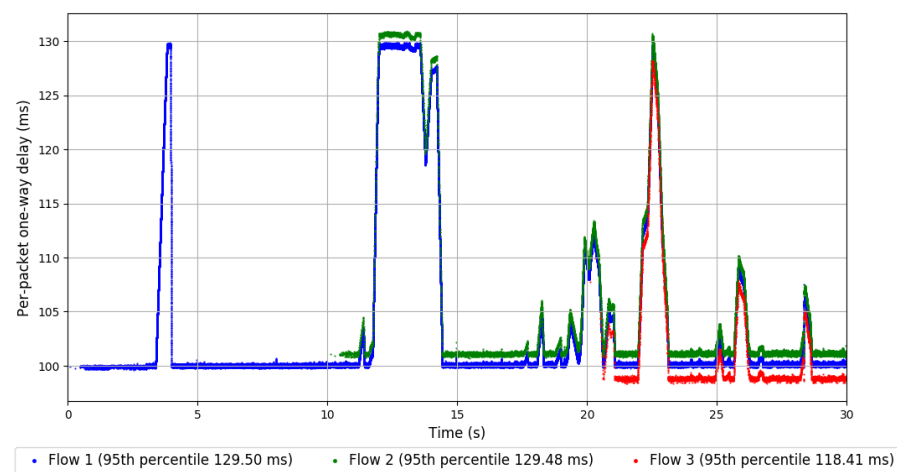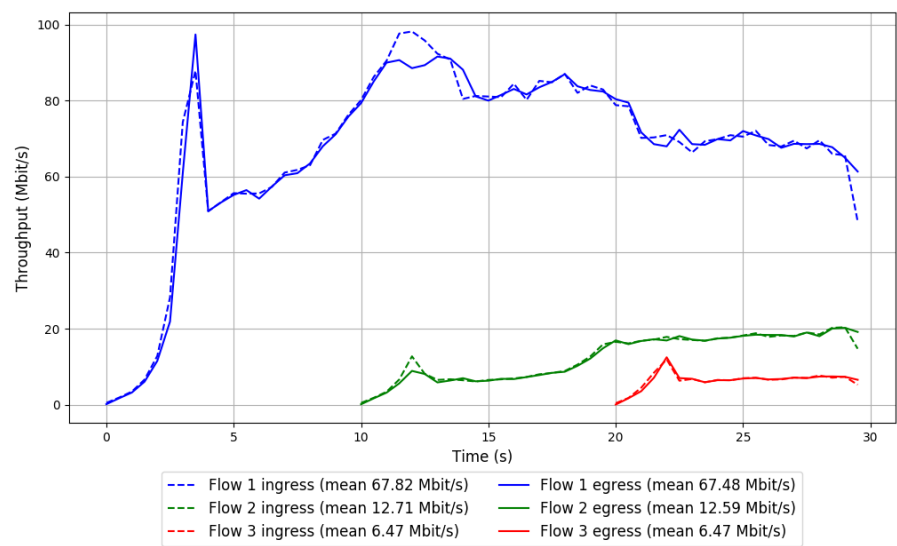
Run 5: Report of PCC-Vivace — Data Link

```
Run 6: Statistics of PCC-Vivace

Start at: 2018-04-24 22:47:15
End at: 2018-04-24 22:47:45
Local clock offset: -6.075 ms
Remote clock offset: 4.008 ms


# Below is generated by plot.py at 2018-04-25 01:18:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.78 Mbit/s
95th percentile per-packet one-way delay: 124.527 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 63.11 Mbit/s
95th percentile per-packet one-way delay: 124.593 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 13.90 Mbit/s
95th percentile per-packet one-way delay: 123.574 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 13.45 Mbit/s
95th percentile per-packet one-way delay: 127.778 ms
Loss rate: 0.48%
```

Run 6: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 63.27 Mbit/s)   Flow 1 egress (mean 63.11 Mbit/s)
Flow 2 ingress (mean 13.94 Mbit/s)   Flow 2 egress (mean 13.90 Mbit/s)
Flow 3 ingress (mean 13.51 Mbit/s)   Flow 3 egress (mean 13.45 Mbit/s)

Flow 1 (95th percentile 124.59 ms)   Flow 2 (95th percentile 123.57 ms)   Flow 3 (95th percentile 127.78 ms)

```
Run 7: Statistics of PCC-Vivace

Start at: 2018-04-24 23:09:51
End at: 2018-04-24 23:10:21
Local clock offset: -5.149 ms
Remote clock offset: 6.597 ms


# Below is generated by plot.py at 2018-04-25 01:19:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.33 Mbit/s
95th percentile per-packet one-way delay: 128.330 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 66.40 Mbit/s
95th percentile per-packet one-way delay: 128.251 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 12.35 Mbit/s
95th percentile per-packet one-way delay: 130.456 ms
Loss rate: 1.20%
-- Flow 3:
Average throughput: 8.24 Mbit/s
95th percentile per-packet one-way delay: 130.092 ms
Loss rate: 1.10%
```
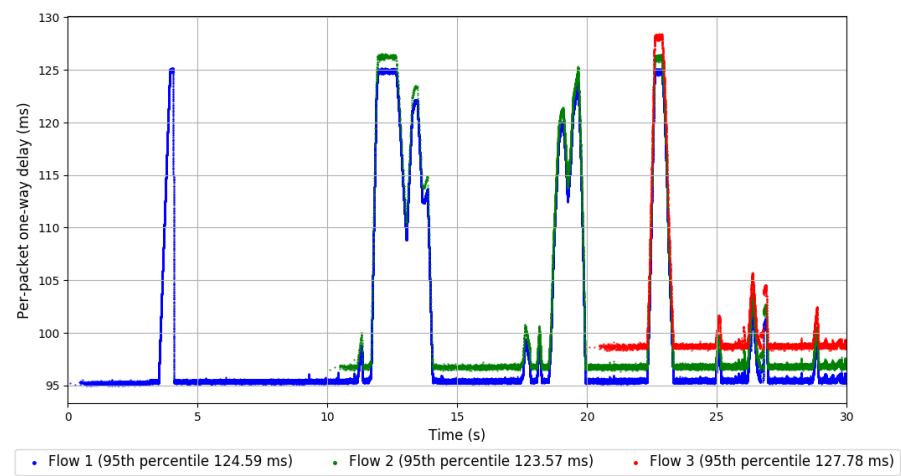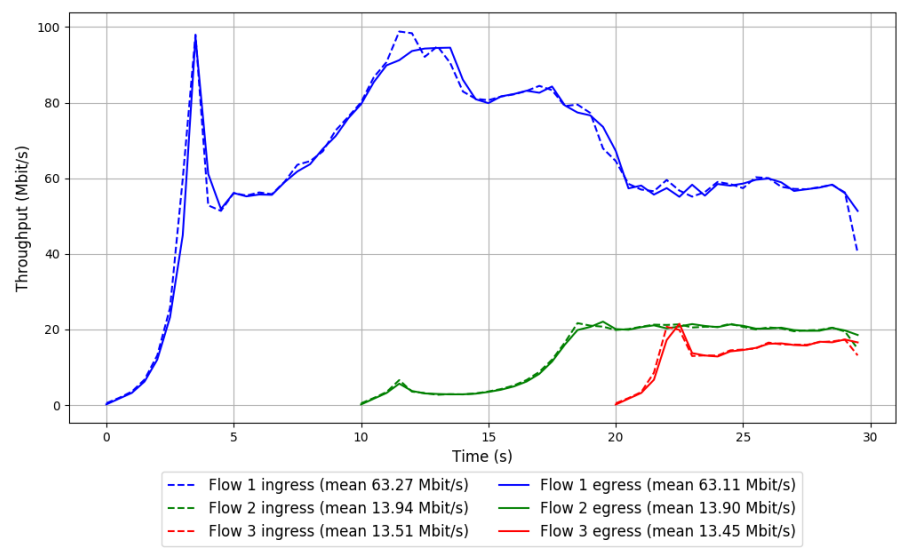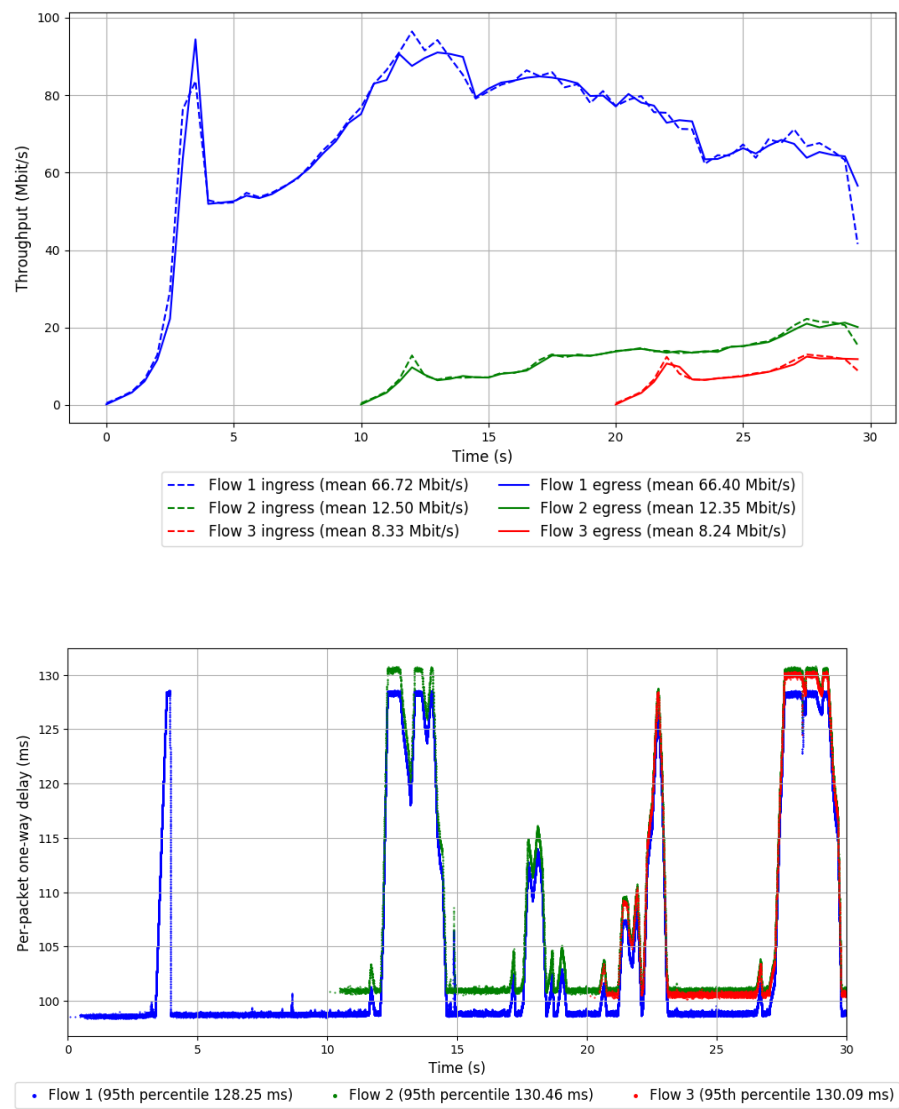
Run 7: Report of PCC-Vivace — Data Link

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```
Run 8: Statistics of PCC-Vivace

Start at: 2018-04-24 23:32:26
End at: 2018-04-24 23:32:56
Local clock offset: -5.85 ms
Remote clock offset: 2.321 ms


# Below is generated by plot.py at 2018-04-25 01:19:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.00 Mbit/s
95th percentile per-packet one-way delay: 120.949 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 62.90 Mbit/s
95th percentile per-packet one-way delay: 121.072 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 16.83 Mbit/s
95th percentile per-packet one-way delay: 119.374 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 5.82 Mbit/s
95th percentile per-packet one-way delay: 120.913 ms
Loss rate: 0.02%
```

Run 8: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 63.06 Mbit/s)   Flow 1 egress (mean 62.90 Mbit/s)
Flow 2 ingress (mean 16.91 Mbit/s)   Flow 2 egress (mean 16.83 Mbit/s)
Flow 3 ingress (mean 5.81 Mbit/s)   Flow 3 egress (mean 5.82 Mbit/s)

Flow 1 (95th percentile 121.07 ms)   Flow 2 (95th percentile 119.37 ms)   Flow 3 (95th percentile 120.91 ms)

```
Run 9: Statistics of PCC-Vivace

Start at: 2018-04-24 23:54:40
End at: 2018-04-24 23:55:10
Local clock offset: -5.01 ms
Remote clock offset: 5.856 ms


# Below is generated by plot.py at 2018-04-25 01:19:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.99 Mbit/s
95th percentile per-packet one-way delay: 111.549 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 66.70 Mbit/s
95th percentile per-packet one-way delay: 110.391 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 14.05 Mbit/s
95th percentile per-packet one-way delay: 113.206 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 5.90 Mbit/s
95th percentile per-packet one-way delay: 109.367 ms
Loss rate: 0.00%
```
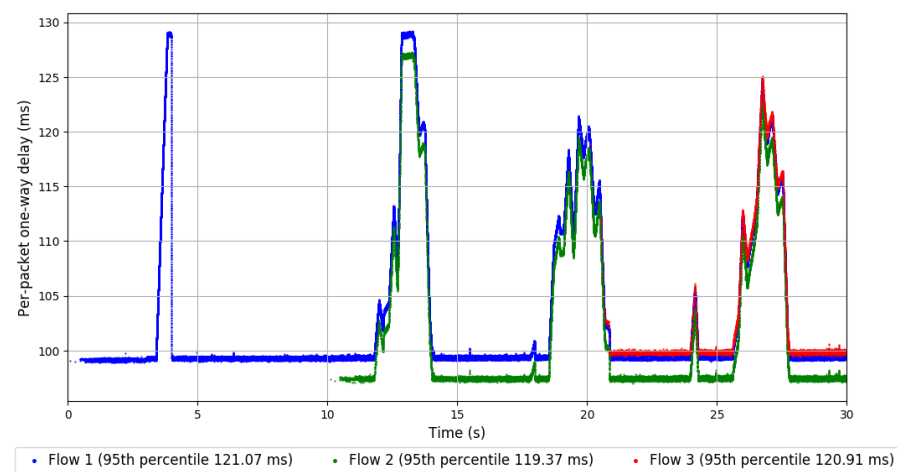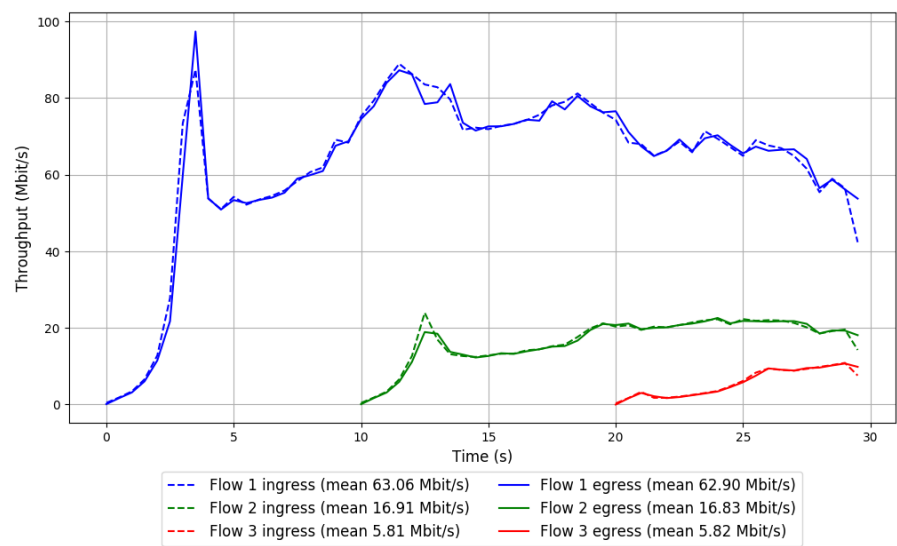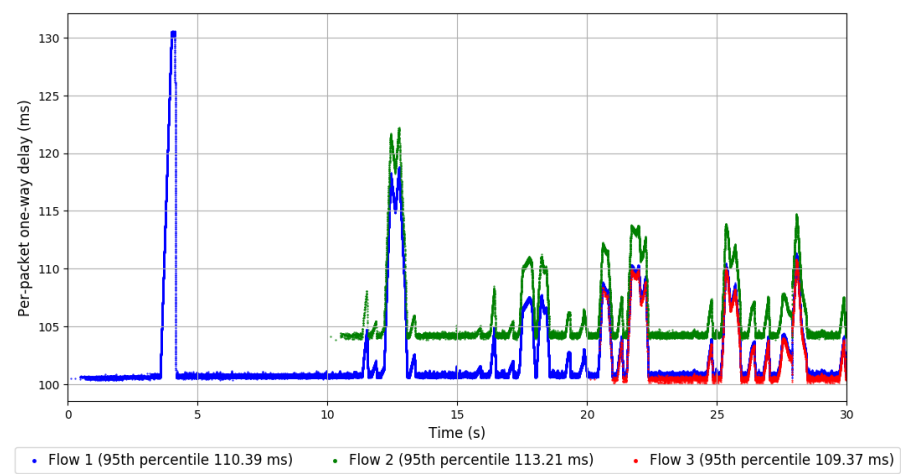
Run 9: Report of PCC-Vivace — Data Link

Legend:
- Flow 1 ingress (mean 66.74 Mbit/s) — Flow 1 egress (mean 66.70 Mbit/s)
- Flow 2 ingress (mean 14.05 Mbit/s) — Flow 2 egress (mean 14.05 Mbit/s)
- Flow 3 ingress (mean 5.90 Mbit/s) — Flow 3 egress (mean 5.90 Mbit/s)

Legend:
- Flow 1 (95th percentile 110.39 ms) — Flow 2 (95th percentile 113.21 ms) — Flow 3 (95th percentile 109.37 ms)

```
Run 10: Statistics of PCC-Vivace

Start at: 2018-04-25 00:17:17
End at: 2018-04-25 00:17:47
Local clock offset: -4.203 ms
Remote clock offset: 2.345 ms


# Below is generated by plot.py at 2018-04-25 01:19:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.09 Mbit/s
95th percentile per-packet one-way delay: 125.227 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 65.85 Mbit/s
95th percentile per-packet one-way delay: 125.104 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 13.94 Mbit/s
95th percentile per-packet one-way delay: 130.881 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 9.03 Mbit/s
95th percentile per-packet one-way delay: 130.937 ms
Loss rate: 1.27%
```
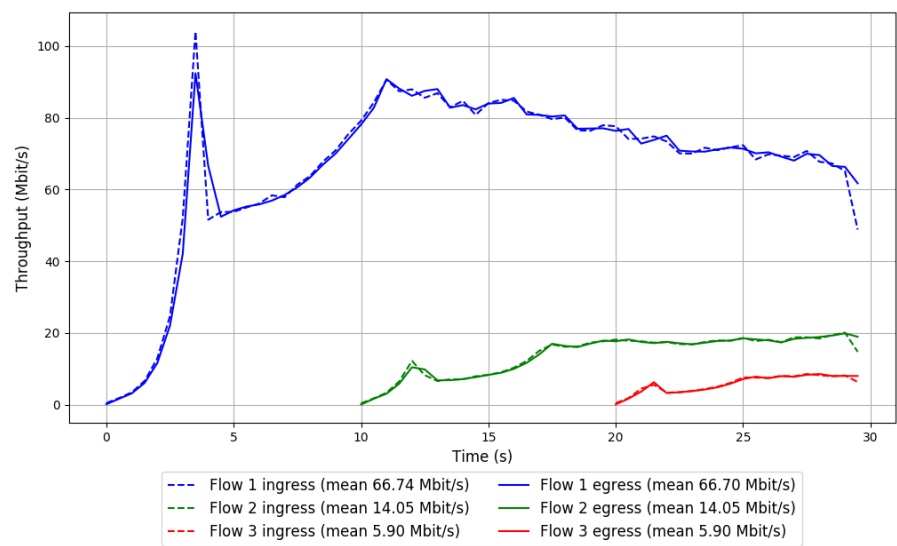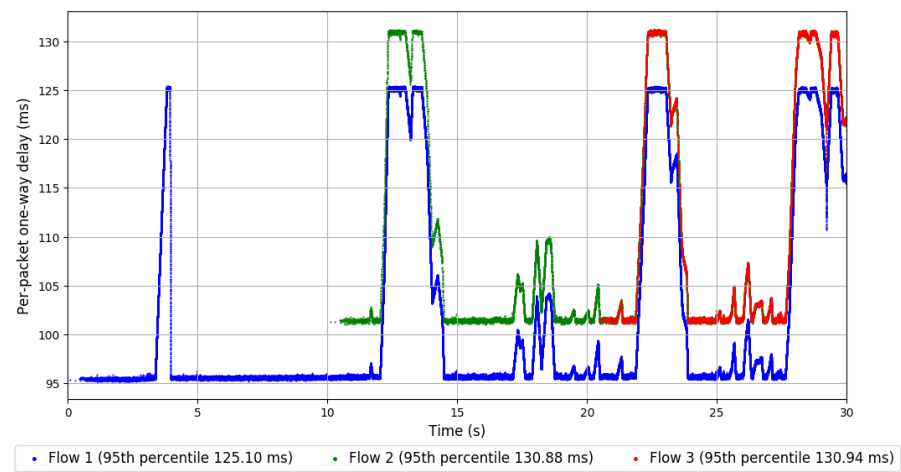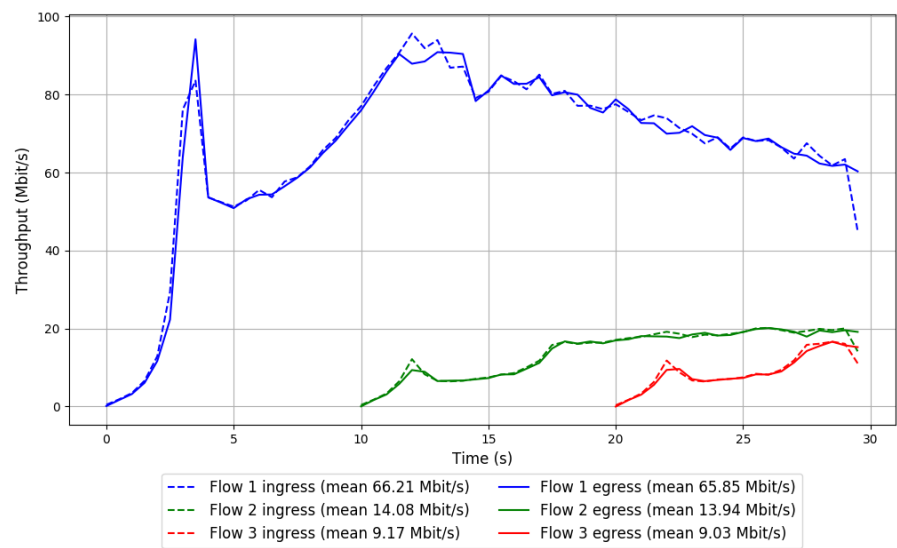
Run 10: Report of PCC-Vivace — Data Link

```
Run 1: Statistics of PCC-Expr

Start at: 2018-04-24 20:51:54
End at: 2018-04-24 20:52:24
Local clock offset: -4.853 ms
Remote clock offset: 3.661 ms
```

Run 1: Report of PCC-Expr — Data Link

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```
Run 2: Statistics of PCC-Expr

Start at: 2018-04-24 21:14:31
End at: 2018-04-24 21:15:01
Local clock offset: -5.746 ms
Remote clock offset: 8.484 ms
```

Run 2: Report of PCC-Expr — Data Link

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```
Run 3: Statistics of PCC-Expr

Start at: 2018-04-24 21:37:06
End at: 2018-04-24 21:37:36
Local clock offset: -4.143 ms
Remote clock offset: 3.805 ms
```

Run 3: Report of PCC-Expr — Data Link

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```
Run 4: Statistics of PCC-Expr

Start at: 2018-04-24 21:59:36
End at: 2018-04-24 22:00:06
Local clock offset: -4.916 ms
Remote clock offset: 4.485 ms
```

Run 4: Report of PCC-Expr — Data Link

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```
Run 5: Statistics of PCC-Expr

Start at: 2018-04-24 22:22:09
End at: 2018-04-24 22:22:39
Local clock offset: -5.314 ms
Remote clock offset: 4.314 ms
```

Run 5: Report of PCC-Expr — Data Link

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```
Run 6: Statistics of PCC-Expr

Start at: 2018-04-24 22:44:41
End at: 2018-04-24 22:45:11
Local clock offset: -5.357 ms
Remote clock offset: 8.595 ms
```

Run 6: Report of PCC-Expr — Data Link

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```
Run 7: Statistics of PCC-Expr

Start at: 2018-04-24 23:07:17
End at: 2018-04-24 23:07:47
Local clock offset: -5.873 ms
Remote clock offset: 6.635 ms
```

Run 7: Report of PCC-Expr — Data Link

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```
Run 8: Statistics of PCC-Expr

Start at: 2018-04-24 23:29:51
End at: 2018-04-24 23:30:21
Local clock offset: -5.035 ms
Remote clock offset: 3.23 ms
```

Run 8: Report of PCC-Expr — Data Link

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```
Run 9: Statistics of PCC-Expr

Start at: 2018-04-24 23:52:05
End at: 2018-04-24 23:52:35
Local clock offset: -5.715 ms
Remote clock offset: 2.919 ms
```

Run 9: Report of PCC-Expr — Data Link

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```
Run 10: Statistics of PCC-Expr

Start at: 2018-04-25 00:14:42
End at: 2018-04-25 00:15:12
Local clock offset: -5.084 ms
Remote clock offset: 7.606 ms
```

Run 10: Report of PCC-Expr — Data Link

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