Pantheon Report

Generated at 2018-07-24 18:39:38 (UTC).

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

Repeated the test of 17 congestion control schemes 10 times.

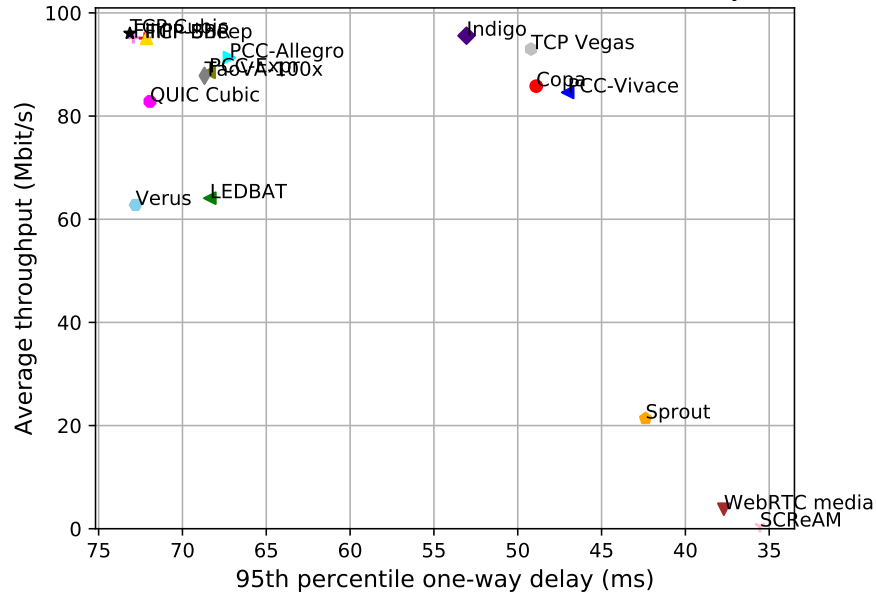Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.

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

NTP offsets were measured against `time.stanford.edu` and have been applied to correct the timestamps in logs.
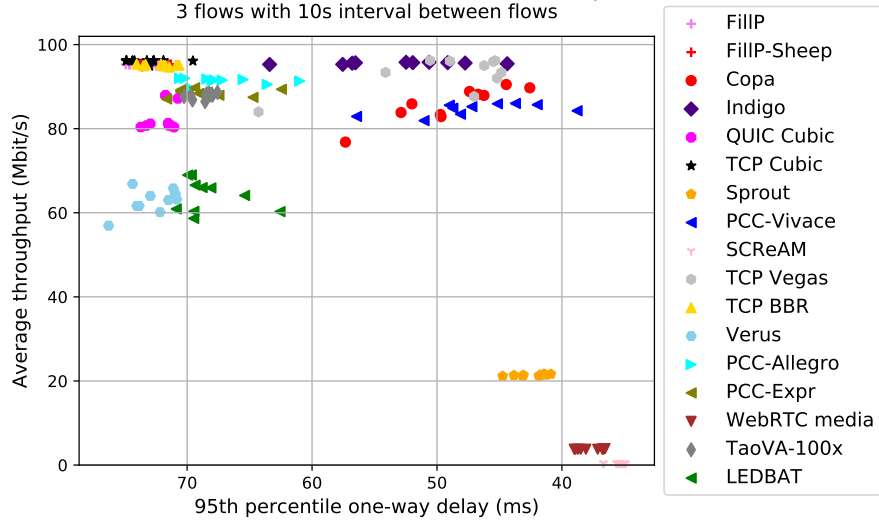
```
Git summary:
branch: master @ 640164b5b17c7c6561fff57729b3b5935d8596ce
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/fillp-sheep @ daed0c84f98531712514b2231f43ec6901114ffe
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
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-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
 M src/ScreamClient
 M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

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

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

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scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	62.98	34.10	28.28	71.34	73.05	73.15	7.86	10.70	10.64
Copa	10	64.62	23.05	17.60	50.17	45.82	44.78	0.79	0.13	0.07
TCP Cubic	10	68.99	26.13	29.05	73.25	72.96	71.53	0.79	0.84	0.56
FillP	10	59.78	37.13	32.60	72.51	73.30	73.74	21.87	32.98	36.73
FillP-Sheep	10	58.34	39.91	30.80	70.88	73.26	73.38	14.16	25.61	32.39
Indigo	10	65.40	30.13	31.20	50.29	55.78	59.77	0.07	0.10	0.21
LEDBAT	10	41.39	25.01	18.31	67.61	69.34	63.04	0.13	0.16	0.11
PCC-Allegro	10	81.34	10.28	9.59	66.63	69.80	69.46	2.47	2.69	3.61
PCC-Expr	10	67.07	24.96	14.55	67.93	69.67	69.87	1.68	1.42	1.35
QUIC Cubic	10	59.13	24.47	22.71	71.82	72.03	71.68	2.75	1.30	1.73
SCReAM	10	0.21	0.21	0.22	35.34	35.13	35.23	0.01	0.02	0.00
Sprout	10	10.84	10.71	10.34	42.28	42.26	42.83	0.03	0.00	0.07
TaoVA-100x	10	51.99	38.77	30.20	66.05	69.79	71.47	12.59	22.73	19.61
TCP Vegas	10	67.97	25.42	24.36	48.77	48.49	47.32	0.49	0.11	0.05
Verus	10	38.50	30.11	16.71	72.46	73.15	70.53	40.13	44.80	38.10
PCC-Vivace	10	63.24	25.93	12.41	46.38	47.70	48.76	0.06	0.06	0.02
WebRTC media	10	2.01	1.31	0.48	37.37	37.50	38.66	0.01	0.01	0.01

```
Run 1: Statistics of TCP BBR

Start at: 2018-07-24 14:31:36
End at: 2018-07-24 14:32:06
Local clock offset: 0.682 ms
Remote clock offset: 4.341 ms


# Below is generated by plot.py at 2018-07-24 18:16:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.36 Mbit/s
95th percentile per-packet one-way delay: 74.037 ms
Loss rate: 9.65%
-- Flow 1:
Average throughput: 66.66 Mbit/s
95th percentile per-packet one-way delay: 73.283 ms
Loss rate: 8.71%
-- Flow 2:
Average throughput: 28.19 Mbit/s
95th percentile per-packet one-way delay: 74.730 ms
Loss rate: 12.09%
-- Flow 3:
Average throughput: 29.98 Mbit/s
95th percentile per-packet one-way delay: 75.327 ms
Loss rate: 11.19%
```
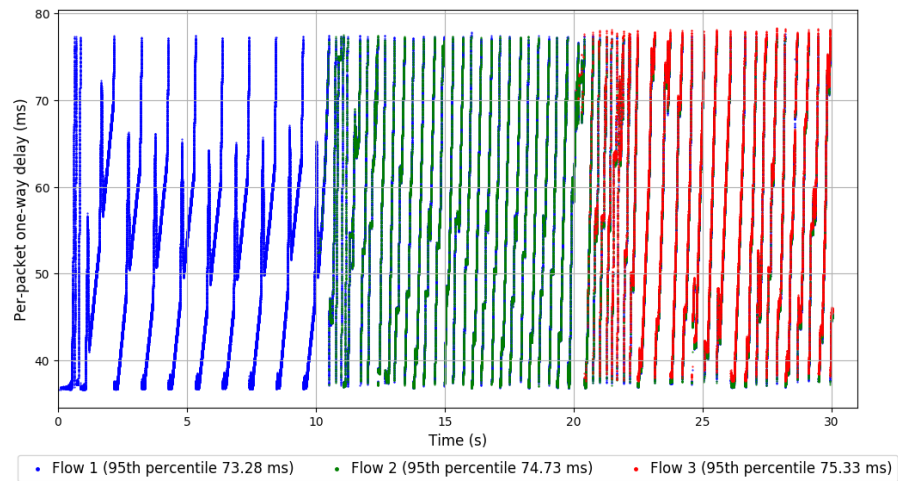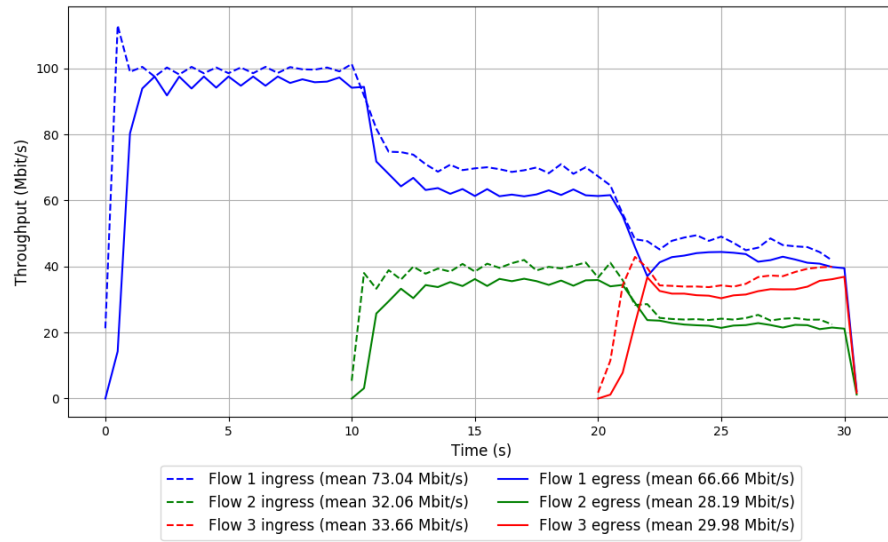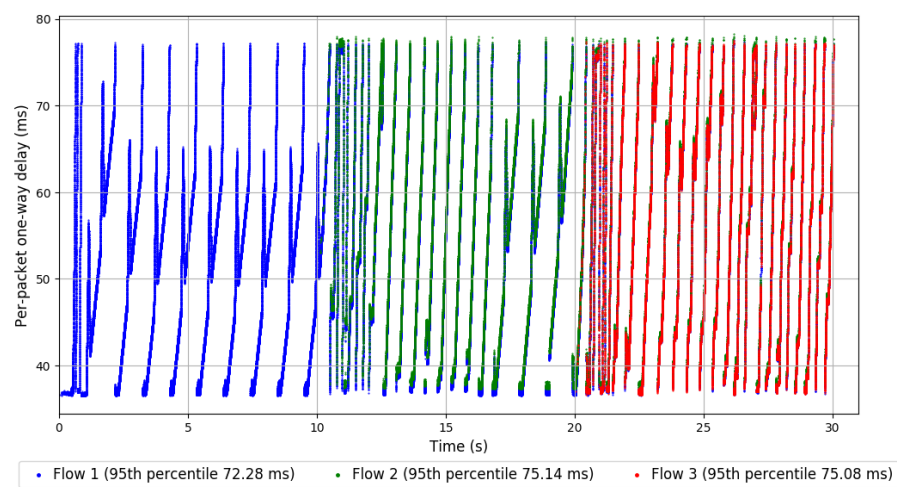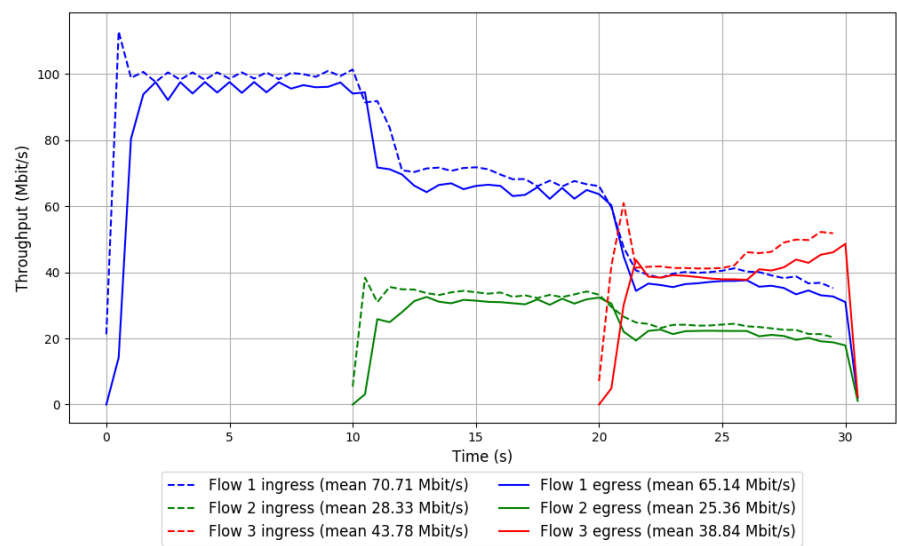
Run 1: Report of TCP BBR — Data Link

Flow 1 ingress (mean 73.04 Mbit/s)   Flow 1 egress (mean 66.66 Mbit/s)
Flow 2 ingress (mean 32.06 Mbit/s)   Flow 2 egress (mean 28.19 Mbit/s)
Flow 3 ingress (mean 33.66 Mbit/s)   Flow 3 egress (mean 29.98 Mbit/s)

Flow 1 (95th percentile 73.28 ms)   Flow 2 (95th percentile 74.73 ms)   Flow 3 (95th percentile 75.33 ms)

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```
Run 2: Statistics of TCP BBR

Start at: 2018-07-24 14:54:37
End at: 2018-07-24 14:55:07
Local clock offset: 4.673 ms
Remote clock offset: 4.656 ms


# Below is generated by plot.py at 2018-07-24 18:16:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.96 Mbit/s
95th percentile per-packet one-way delay: 73.500 ms
Loss rate: 8.80%
-- Flow 1:
Average throughput: 65.14 Mbit/s
95th percentile per-packet one-way delay: 72.276 ms
Loss rate: 7.85%
-- Flow 2:
Average throughput: 25.36 Mbit/s
95th percentile per-packet one-way delay: 75.144 ms
Loss rate: 10.53%
-- Flow 3:
Average throughput: 38.84 Mbit/s
95th percentile per-packet one-way delay: 75.075 ms
Loss rate: 11.19%
```
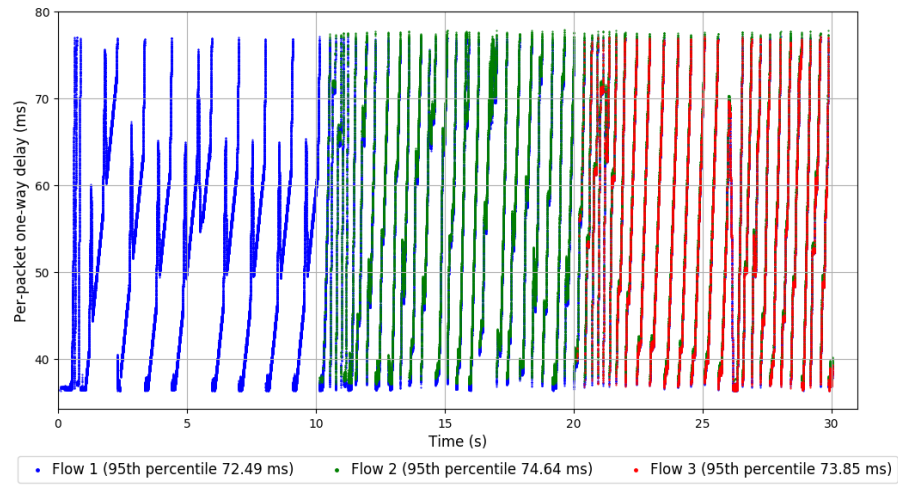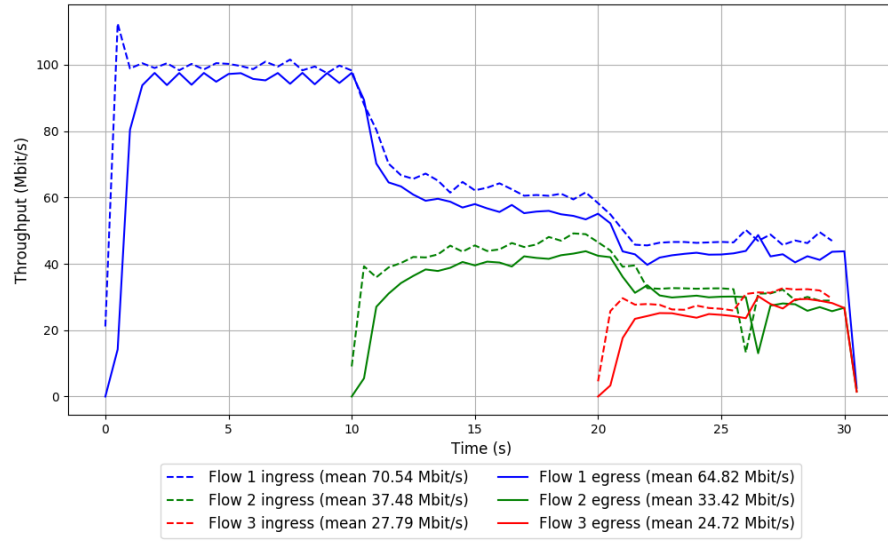
Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2018-07-24 15:17:50
End at: 2018-07-24 15:18:20
Local clock offset: 1.027 ms
Remote clock offset: 4.221 ms


# Below is generated by plot.py at 2018-07-24 18:16:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.27 Mbit/s
95th percentile per-packet one-way delay: 73.327 ms
Loss rate: 9.04%
-- Flow 1:
Average throughput: 64.82 Mbit/s
95th percentile per-packet one-way delay: 72.490 ms
Loss rate: 8.10%
-- Flow 2:
Average throughput: 33.42 Mbit/s
95th percentile per-packet one-way delay: 74.638 ms
Loss rate: 10.94%
-- Flow 3:
Average throughput: 24.72 Mbit/s
95th percentile per-packet one-way delay: 73.851 ms
Loss rate: 11.08%
```
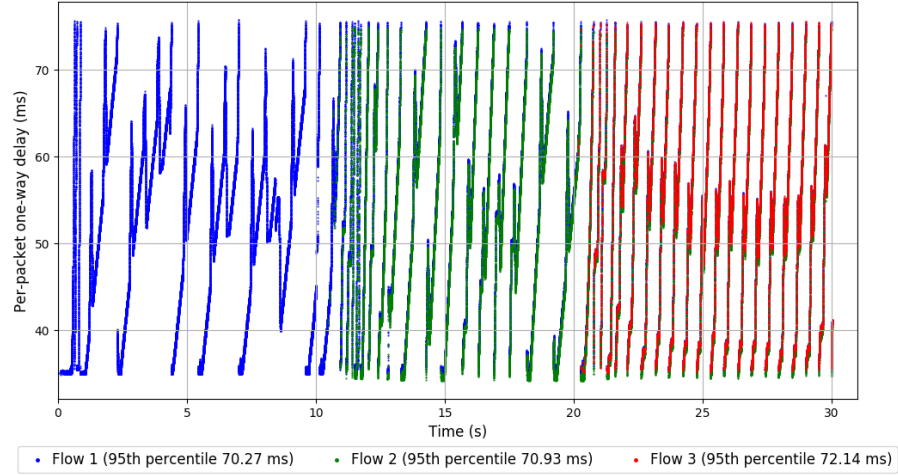
Run 3: Report of TCP BBR — Data Link

```
Run 4: Statistics of TCP BBR

Start at: 2018-07-24 15:40:48
End at: 2018-07-24 15:41:18
Local clock offset: -0.171 ms
Remote clock offset: 1.967 ms


# Below is generated by plot.py at 2018-07-24 18:16:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.12 Mbit/s
95th percentile per-packet one-way delay: 70.648 ms
Loss rate: 7.55%
-- Flow 1:
Average throughput: 63.54 Mbit/s
95th percentile per-packet one-way delay: 70.268 ms
Loss rate: 6.80%
-- Flow 2:
Average throughput: 35.51 Mbit/s
95th percentile per-packet one-way delay: 70.931 ms
Loss rate: 8.70%
-- Flow 3:
Average throughput: 23.88 Mbit/s
95th percentile per-packet one-way delay: 72.139 ms
Loss rate: 9.95%
```
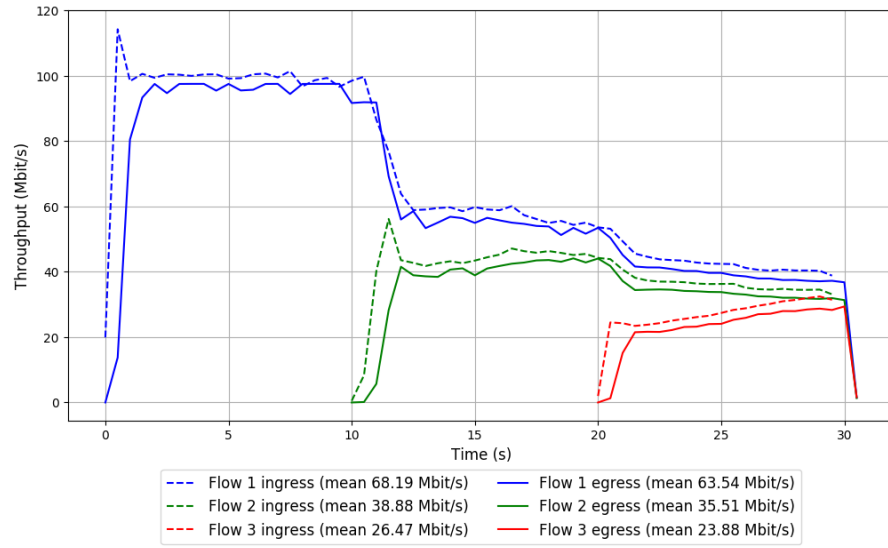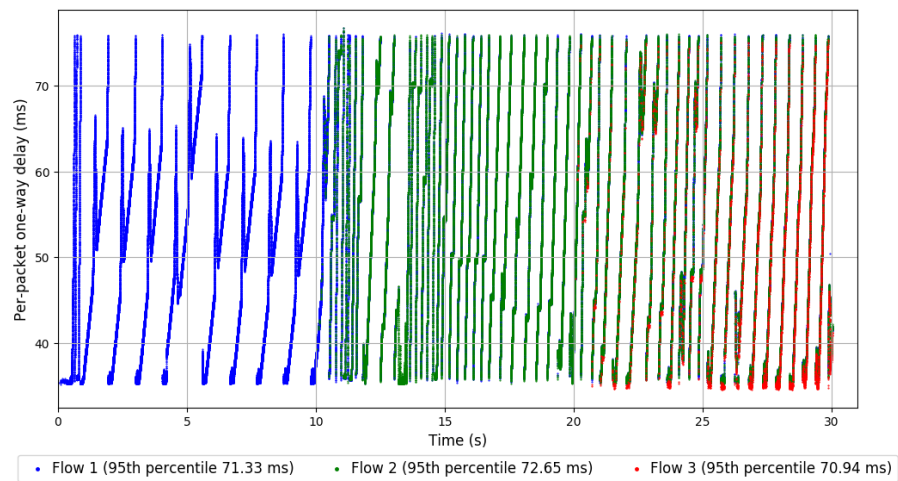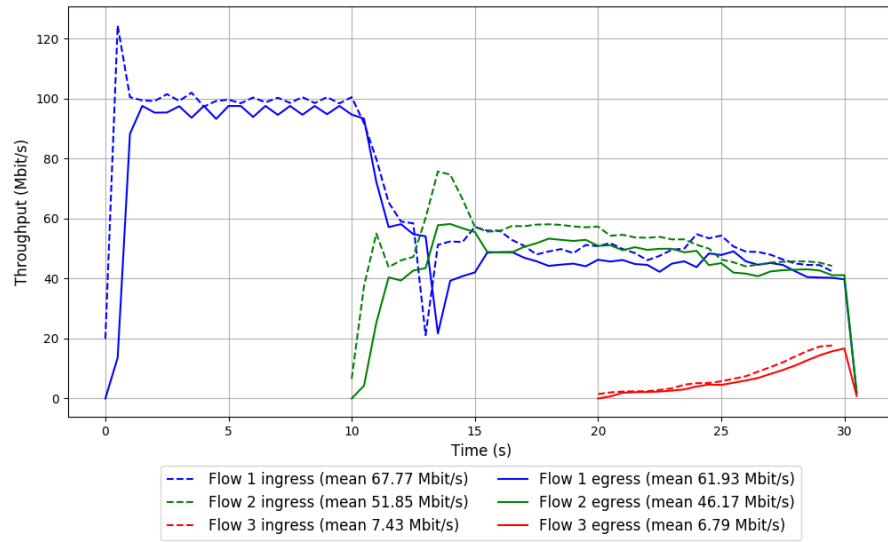
Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 68.19 Mbit/s) --- Flow 1 egress (mean 63.54 Mbit/s)
Flow 2 ingress (mean 38.88 Mbit/s) --- Flow 2 egress (mean 35.51 Mbit/s)
Flow 3 ingress (mean 26.47 Mbit/s) --- Flow 3 egress (mean 23.88 Mbit/s)

Flow 1 (95th percentile 70.27 ms)   Flow 2 (95th percentile 70.93 ms)   Flow 3 (95th percentile 72.14 ms)

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```
Run 5: Statistics of TCP BBR

Start at: 2018-07-24 16:03:51
End at: 2018-07-24 16:04:21
Local clock offset: -0.326 ms
Remote clock offset: 2.46 ms


# Below is generated by plot.py at 2018-07-24 18:16:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.95 Mbit/s
95th percentile per-packet one-way delay: 71.875 ms
Loss rate: 9.37%
-- Flow 1:
Average throughput: 61.93 Mbit/s
95th percentile per-packet one-way delay: 71.332 ms
Loss rate: 8.59%
-- Flow 2:
Average throughput: 46.17 Mbit/s
95th percentile per-packet one-way delay: 72.651 ms
Loss rate: 10.95%
-- Flow 3:
Average throughput: 6.79 Mbit/s
95th percentile per-packet one-way delay: 70.936 ms
Loss rate: 8.59%
```
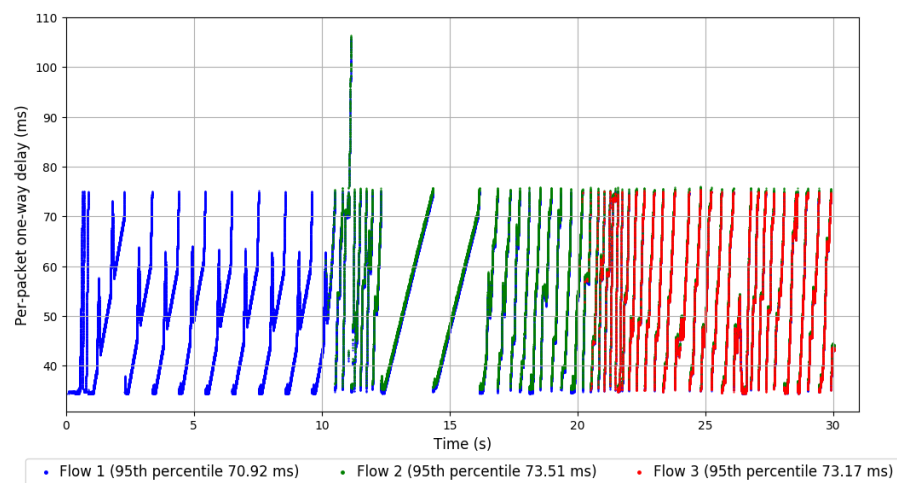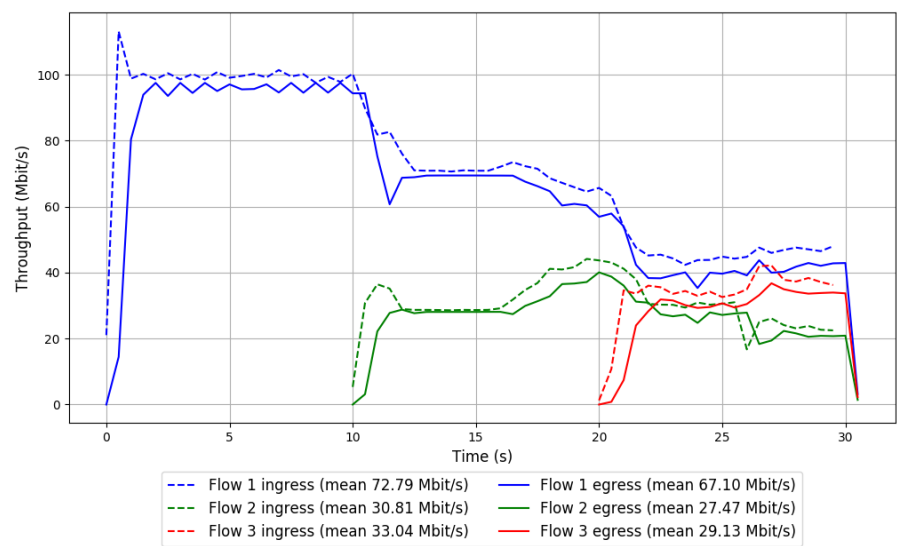
Run 5: Report of TCP BBR — Data Link

- - - - Flow 1 ingress (mean 67.77 Mbit/s) ——— Flow 1 egress (mean 61.93 Mbit/s)
- - - - Flow 2 ingress (mean 51.85 Mbit/s) ——— Flow 2 egress (mean 46.17 Mbit/s)
- - - - Flow 3 ingress (mean 7.43 Mbit/s) ——— Flow 3 egress (mean 6.79 Mbit/s)

- Flow 1 (95th percentile 71.33 ms)   - Flow 2 (95th percentile 72.65 ms)   - Flow 3 (95th percentile 70.94 ms)

```
Run 6: Statistics of TCP BBR

Start at: 2018-07-24 16:26:46
End at: 2018-07-24 16:27:16
Local clock offset: 0.882 ms
Remote clock offset: 2.602 ms


# Below is generated by plot.py at 2018-07-24 18:16:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.06 Mbit/s
95th percentile per-packet one-way delay: 71.893 ms
Loss rate: 8.83%
-- Flow 1:
Average throughput: 67.10 Mbit/s
95th percentile per-packet one-way delay: 70.915 ms
Loss rate: 7.79%
-- Flow 2:
Average throughput: 27.47 Mbit/s
95th percentile per-packet one-way delay: 73.507 ms
Loss rate: 10.83%
-- Flow 3:
Average throughput: 29.13 Mbit/s
95th percentile per-packet one-way delay: 73.175 ms
Loss rate: 11.98%
```
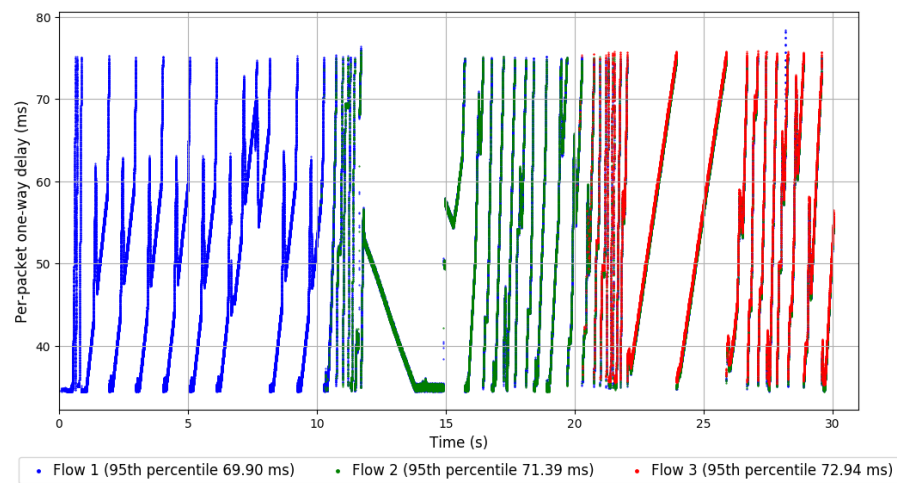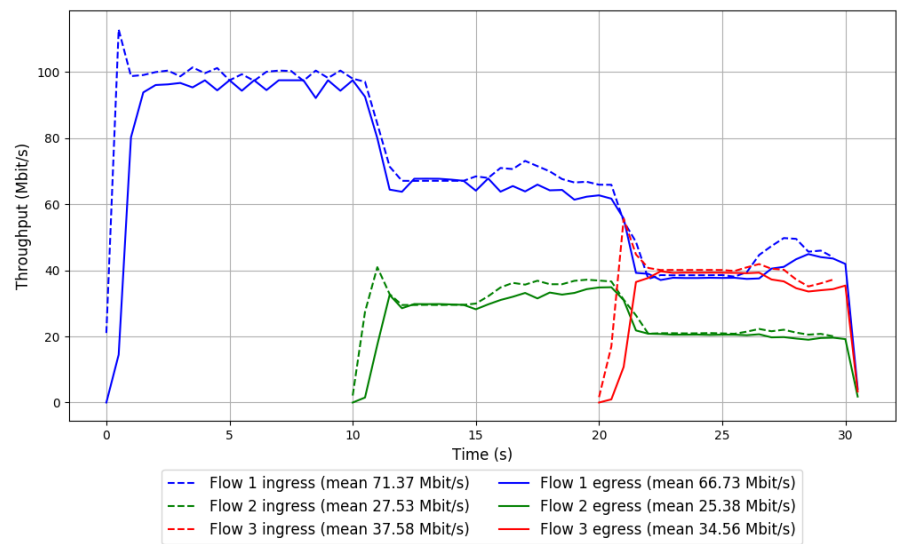
Run 6: Report of TCP BBR — Data Link

Flow 1 ingress (mean 72.79 Mbit/s) --- Flow 1 egress (mean 67.10 Mbit/s)
Flow 2 ingress (mean 30.81 Mbit/s) --- Flow 2 egress (mean 27.47 Mbit/s)
Flow 3 ingress (mean 33.04 Mbit/s) --- Flow 3 egress (mean 29.13 Mbit/s)

Flow 1 (95th percentile 70.92 ms)   Flow 2 (95th percentile 73.51 ms)   Flow 3 (95th percentile 73.17 ms)

```
Run 7: Statistics of TCP BBR

Start at: 2018-07-24 16:49:45
End at: 2018-07-24 16:50:15
Local clock offset: 0.948 ms
Remote clock offset: 2.407 ms


# Below is generated by plot.py at 2018-07-24 18:16:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.10 Mbit/s
95th percentile per-packet one-way delay: 70.862 ms
Loss rate: 6.88%
-- Flow 1:
Average throughput: 66.73 Mbit/s
95th percentile per-packet one-way delay: 69.901 ms
Loss rate: 6.43%
-- Flow 2:
Average throughput: 25.38 Mbit/s
95th percentile per-packet one-way delay: 71.392 ms
Loss rate: 7.82%
-- Flow 3:
Average throughput: 34.56 Mbit/s
95th percentile per-packet one-way delay: 72.938 ms
Loss rate: 8.07%
```
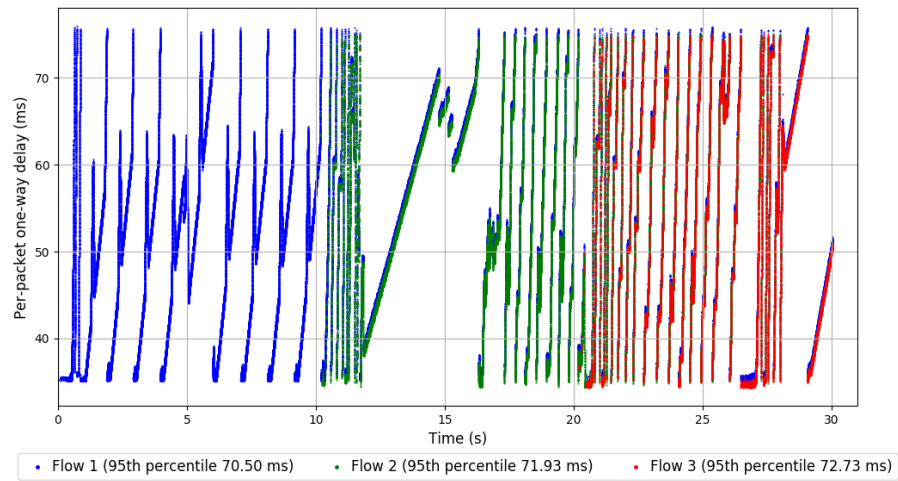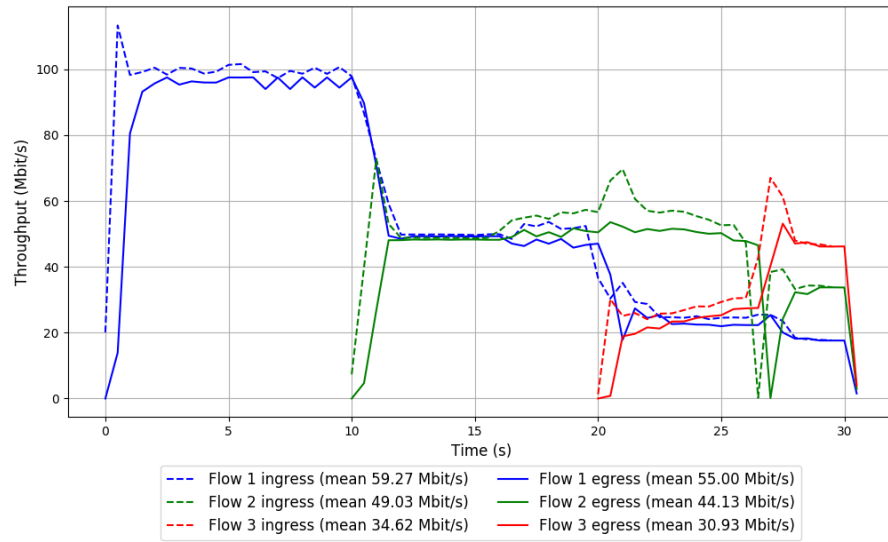
Run 7: Report of TCP BBR — Data Link

Flow 1 ingress (mean 71.37 Mbit/s) — Flow 1 egress (mean 66.73 Mbit/s)
Flow 2 ingress (mean 27.53 Mbit/s) — Flow 2 egress (mean 25.38 Mbit/s)
Flow 3 ingress (mean 37.58 Mbit/s) — Flow 3 egress (mean 34.56 Mbit/s)

Flow 1 (95th percentile 69.90 ms)   Flow 2 (95th percentile 71.39 ms)   Flow 3 (95th percentile 72.94 ms)

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```
Run 8: Statistics of TCP BBR

Start at: 2018-07-24 17:12:41
End at: 2018-07-24 17:13:11
Local clock offset: 0.577 ms
Remote clock offset: 1.918 ms


# Below is generated by plot.py at 2018-07-24 18:16:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.65 Mbit/s
95th percentile per-packet one-way delay: 71.430 ms
Loss rate: 8.46%
-- Flow 1:
Average throughput: 55.00 Mbit/s
95th percentile per-packet one-way delay: 70.505 ms
Loss rate: 7.15%
-- Flow 2:
Average throughput: 44.13 Mbit/s
95th percentile per-packet one-way delay: 71.932 ms
Loss rate: 10.02%
-- Flow 3:
Average throughput: 30.93 Mbit/s
95th percentile per-packet one-way delay: 72.729 ms
Loss rate: 10.75%
```
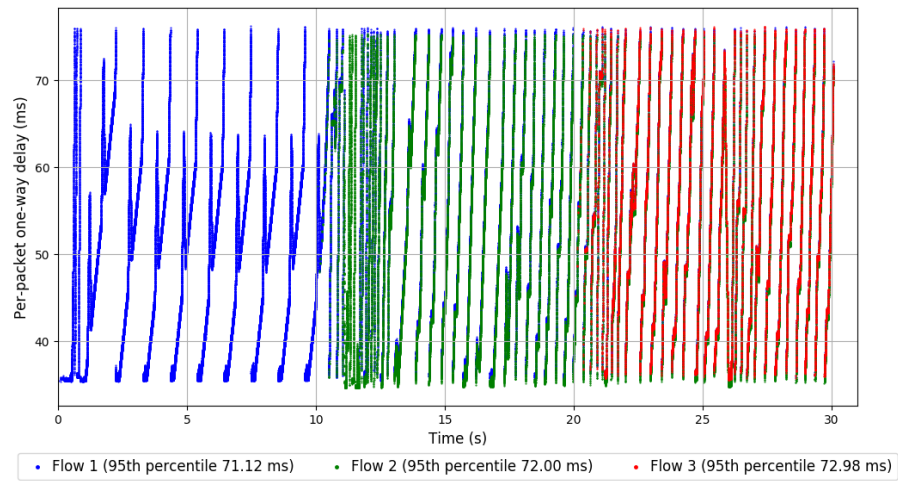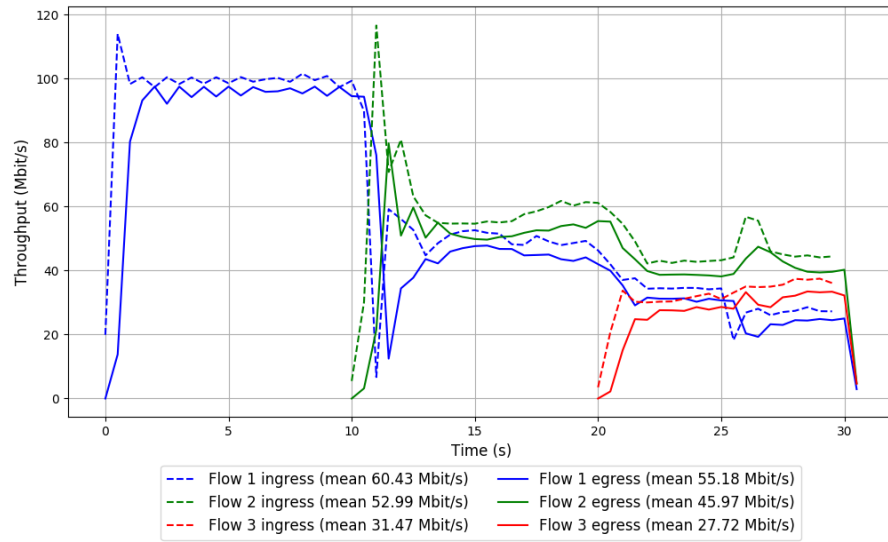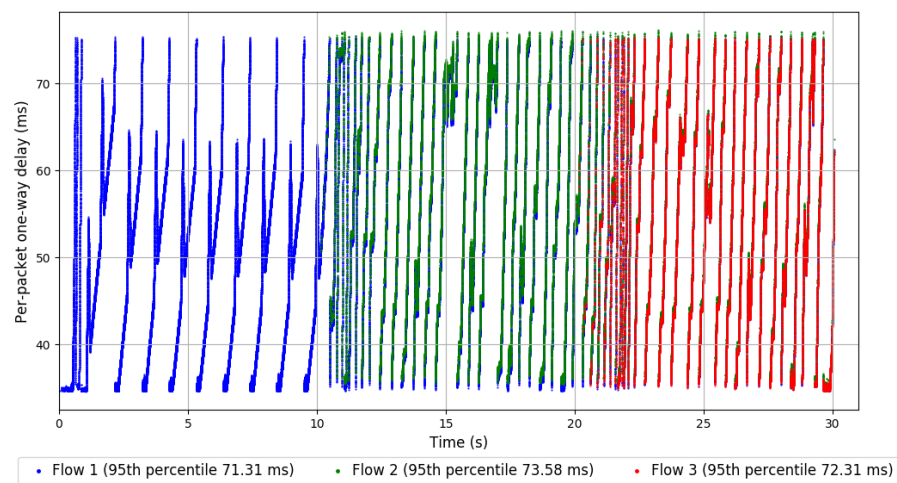
Run 8: Report of TCP BBR — Data Link

Flow 1 ingress (mean 59.27 Mbit/s) --- Flow 1 egress (mean 55.00 Mbit/s)
Flow 2 ingress (mean 49.03 Mbit/s) --- Flow 2 egress (mean 44.13 Mbit/s)
Flow 3 ingress (mean 34.62 Mbit/s) --- Flow 3 egress (mean 30.93 Mbit/s)

Flow 1 (95th percentile 70.50 ms)   Flow 2 (95th percentile 71.93 ms)   Flow 3 (95th percentile 72.73 ms)

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```
Run 9: Statistics of TCP BBR

Start at: 2018-07-24 17:35:36
End at: 2018-07-24 17:36:06
Local clock offset: 1.364 ms
Remote clock offset: 1.736 ms


# Below is generated by plot.py at 2018-07-24 18:17:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.03 Mbit/s
95th percentile per-packet one-way delay: 71.748 ms
Loss rate: 10.42%
-- Flow 1:
Average throughput: 55.18 Mbit/s
95th percentile per-packet one-way delay: 71.124 ms
Loss rate: 8.58%
-- Flow 2:
Average throughput: 45.97 Mbit/s
95th percentile per-packet one-way delay: 72.001 ms
Loss rate: 13.19%
-- Flow 3:
Average throughput: 27.72 Mbit/s
95th percentile per-packet one-way delay: 72.984 ms
Loss rate: 11.70%
```
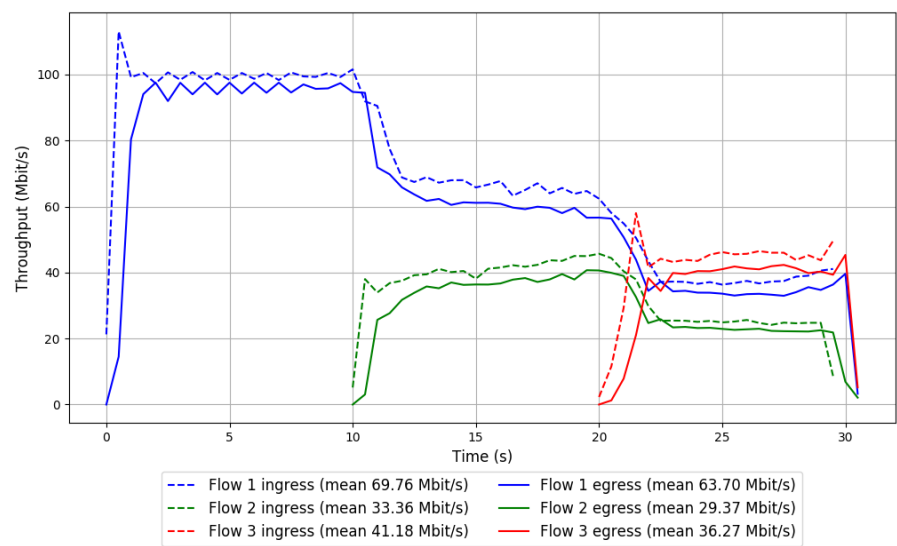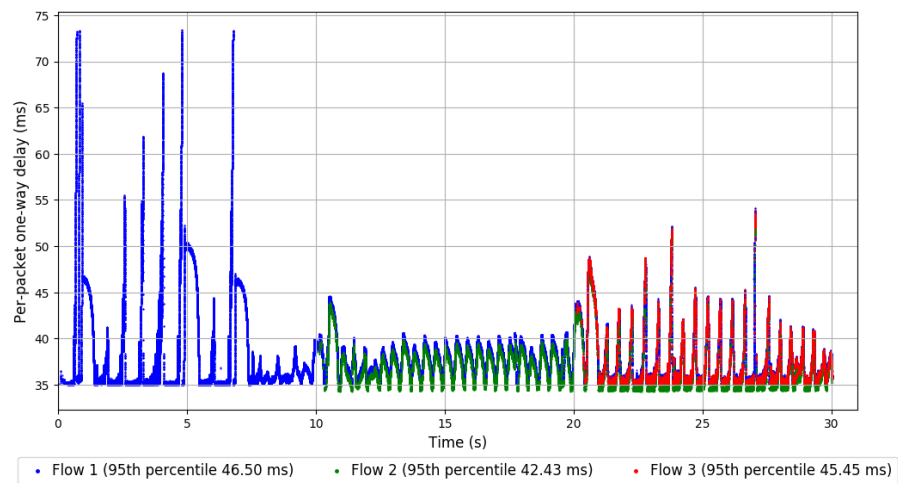
Run 9: Report of TCP BBR — Data Link

Flow 1 ingress (mean 60.43 Mbit/s) — Flow 1 egress (mean 55.18 Mbit/s)
Flow 2 ingress (mean 52.99 Mbit/s) — Flow 2 egress (mean 45.97 Mbit/s)
Flow 3 ingress (mean 31.47 Mbit/s) — Flow 3 egress (mean 27.72 Mbit/s)

Flow 1 (95th percentile 71.12 ms)   Flow 2 (95th percentile 72.00 ms)   Flow 3 (95th percentile 72.98 ms)

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```
Run 10: Statistics of TCP BBR

Start at: 2018-07-24 17:58:33
End at: 2018-07-24 17:59:03
Local clock offset: 3.972 ms
Remote clock offset: 1.858 ms


# Below is generated by plot.py at 2018-07-24 18:17:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.32 Mbit/s
95th percentile per-packet one-way delay: 72.091 ms
Loss rate: 9.72%
-- Flow 1:
Average throughput: 63.70 Mbit/s
95th percentile per-packet one-way delay: 71.307 ms
Loss rate: 8.61%
-- Flow 2:
Average throughput: 29.37 Mbit/s
95th percentile per-packet one-way delay: 73.577 ms
Loss rate: 11.90%
-- Flow 3:
Average throughput: 36.27 Mbit/s
95th percentile per-packet one-way delay: 72.310 ms
Loss rate: 11.86%
```
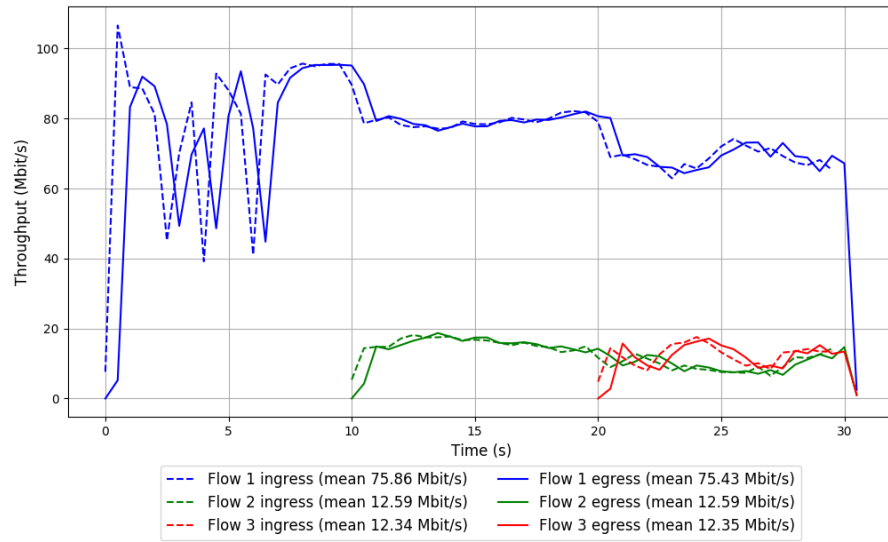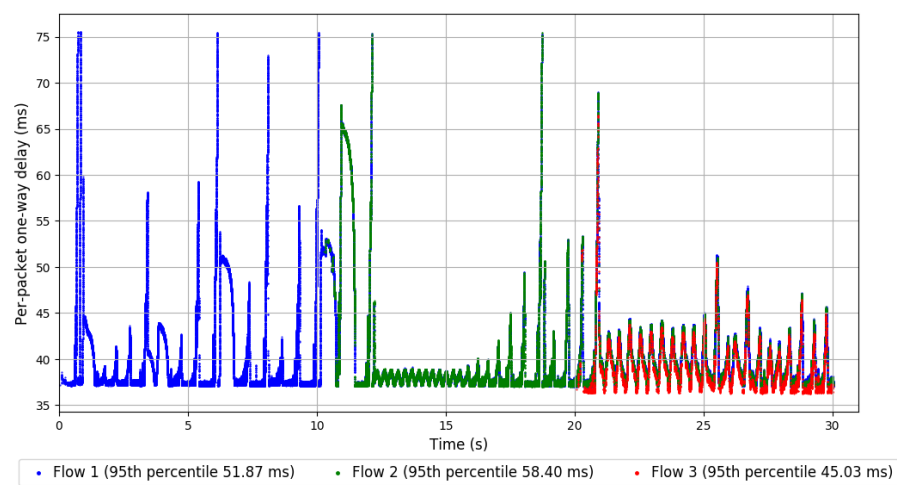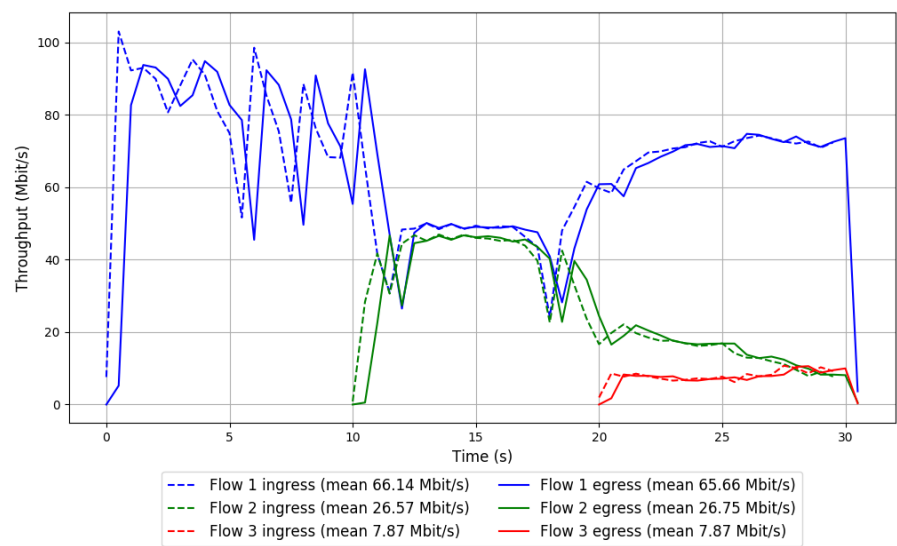
Run 10: Report of TCP BBR — Data Link

Flow 1 ingress (mean 69.76 Mbit/s) --- Flow 1 egress (mean 63.70 Mbit/s)
Flow 2 ingress (mean 33.36 Mbit/s) --- Flow 2 egress (mean 29.37 Mbit/s)
Flow 3 ingress (mean 41.18 Mbit/s) --- Flow 3 egress (mean 36.27 Mbit/s)

Flow 1 (95th percentile 71.31 ms)   Flow 2 (95th percentile 73.58 ms)   Flow 3 (95th percentile 72.31 ms)

```
Run 1: Statistics of Copa

Start at: 2018-07-24 14:42:30
End at: 2018-07-24 14:43:00
Local clock offset: 3.395 ms
Remote clock offset: 2.008 ms


# Below is generated by plot.py at 2018-07-24 18:18:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.91 Mbit/s
95th percentile per-packet one-way delay: 46.240 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 75.43 Mbit/s
95th percentile per-packet one-way delay: 46.496 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 12.59 Mbit/s
95th percentile per-packet one-way delay: 42.434 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 12.35 Mbit/s
95th percentile per-packet one-way delay: 45.446 ms
Loss rate: 0.01%
```
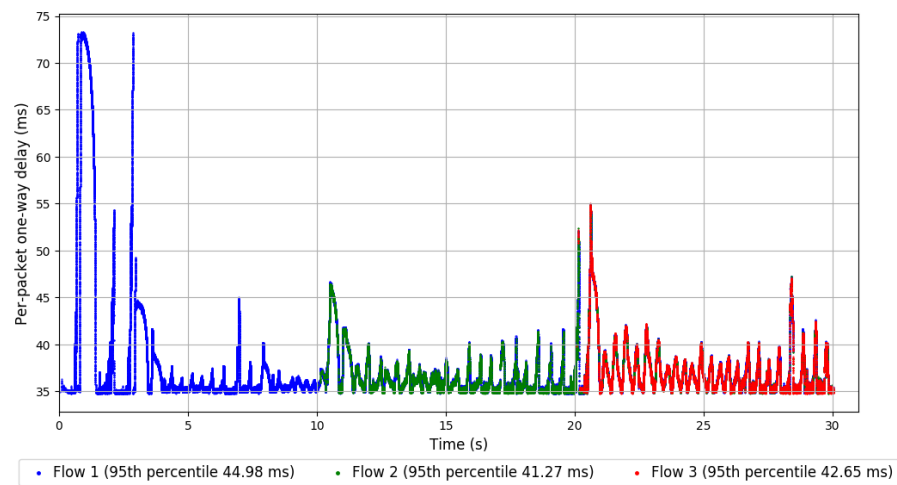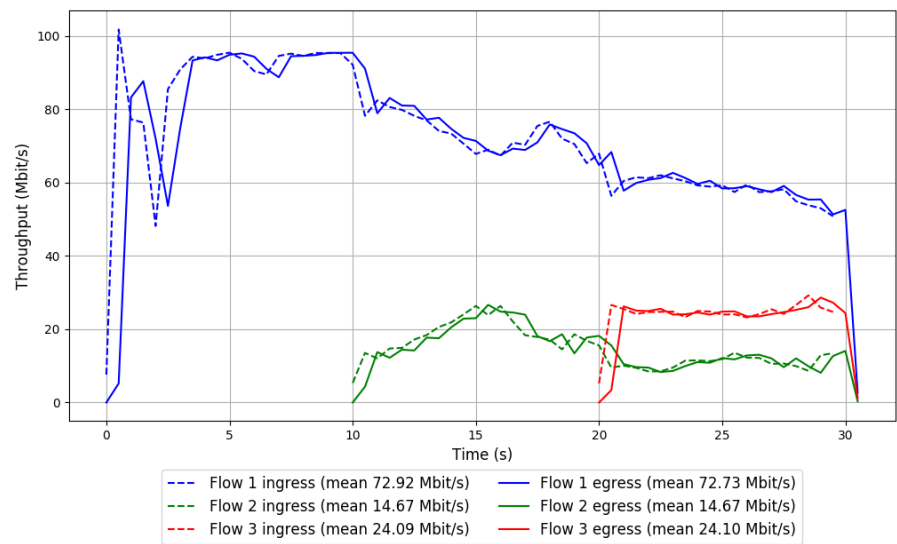
Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2018-07-24 15:05:37
End at: 2018-07-24 15:06:07
Local clock offset: 3.391 ms
Remote clock offset: 4.467 ms


# Below is generated by plot.py at 2018-07-24 18:18:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.90 Mbit/s
95th percentile per-packet one-way delay: 52.008 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 65.66 Mbit/s
95th percentile per-packet one-way delay: 51.871 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 26.75 Mbit/s
95th percentile per-packet one-way delay: 58.401 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 7.87 Mbit/s
95th percentile per-packet one-way delay: 45.026 ms
Loss rate: 0.00%
```
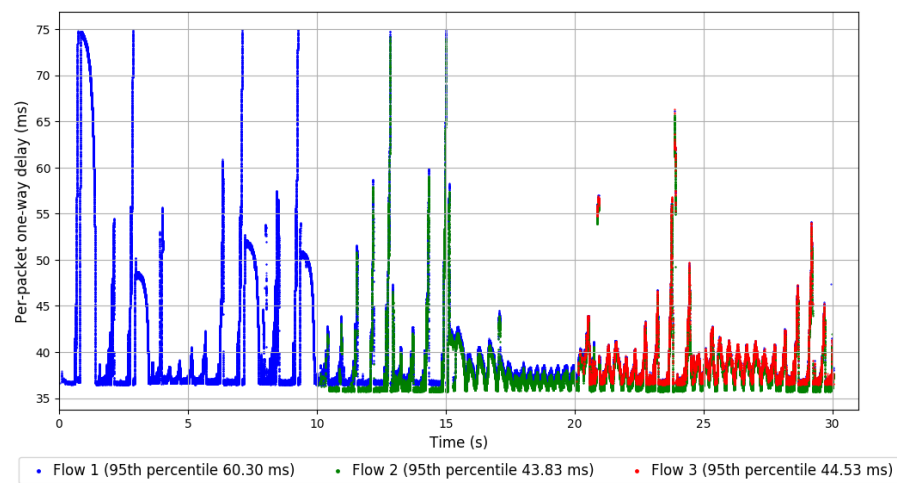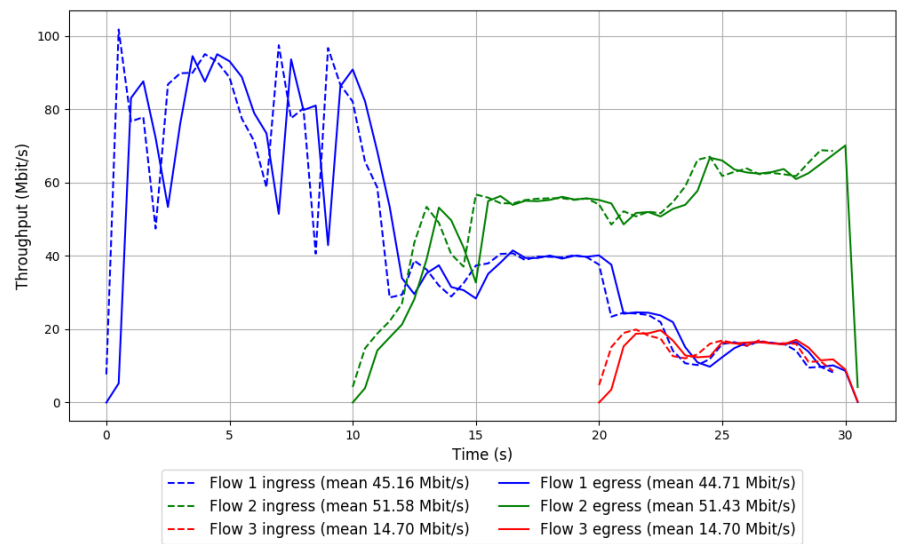
Run 2: Report of Copa — Data Link

- - - Flow 1 ingress (mean 66.14 Mbit/s) — Flow 1 egress (mean 65.66 Mbit/s)
- - - Flow 2 ingress (mean 26.57 Mbit/s) — Flow 2 egress (mean 26.75 Mbit/s)
- - - Flow 3 ingress (mean 7.87 Mbit/s) — Flow 3 egress (mean 7.87 Mbit/s)

- Flow 1 (95th percentile 51.87 ms)   - Flow 2 (95th percentile 58.40 ms)   - Flow 3 (95th percentile 45.03 ms)

```
Run 3: Statistics of Copa

Start at: 2018-07-24 15:28:38
End at: 2018-07-24 15:29:08
Local clock offset: 0.304 ms
Remote clock offset: 1.941 ms


# Below is generated by plot.py at 2018-07-24 18:18:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.51 Mbit/s
95th percentile per-packet one-way delay: 44.452 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 72.73 Mbit/s
95th percentile per-packet one-way delay: 44.978 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 14.67 Mbit/s
95th percentile per-packet one-way delay: 41.274 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.10 Mbit/s
95th percentile per-packet one-way delay: 42.654 ms
Loss rate: 0.01%
```
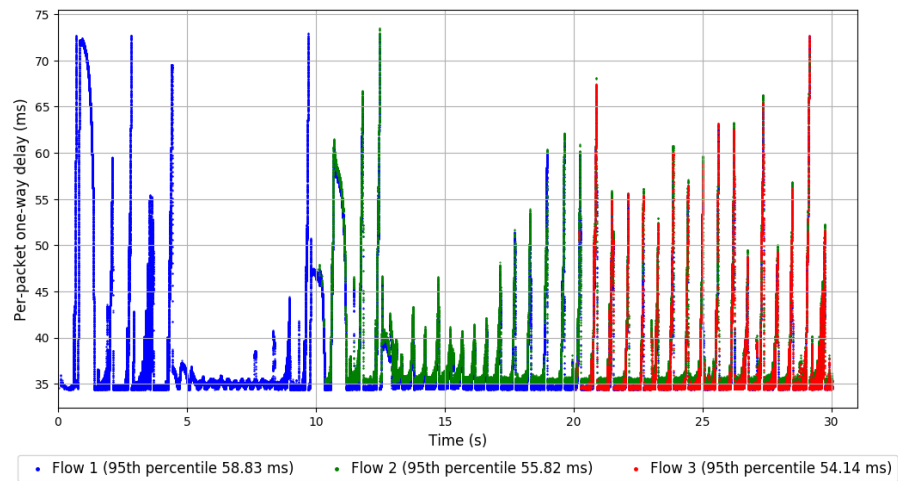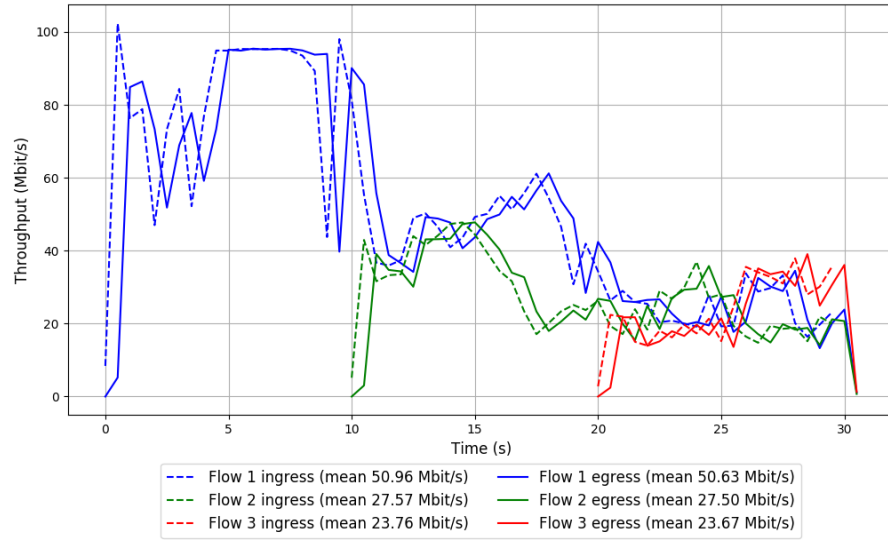
Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2018-07-24 15:51:44
End at: 2018-07-24 15:52:15
Local clock offset: -0.308 ms
Remote clock offset: 3.727 ms


# Below is generated by plot.py at 2018-07-24 18:18:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.84 Mbit/s
95th percentile per-packet one-way delay: 52.877 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 44.71 Mbit/s
95th percentile per-packet one-way delay: 60.297 ms
Loss rate: 1.01%
-- Flow 2:
Average throughput: 51.43 Mbit/s
95th percentile per-packet one-way delay: 43.830 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 14.70 Mbit/s
95th percentile per-packet one-way delay: 44.531 ms
Loss rate: 0.04%
```
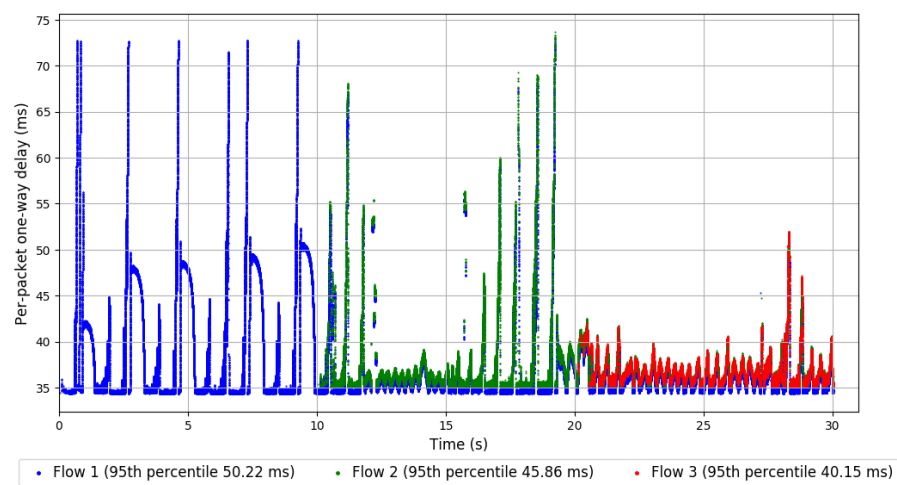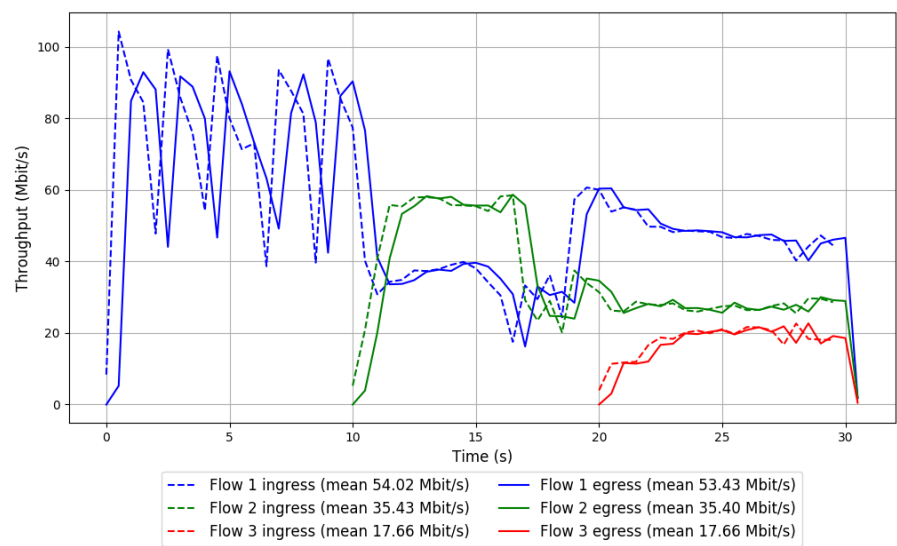
Run 4: Report of Copa — Data Link

Legend:
- Flow 1 ingress (mean 45.16 Mbit/s) — Flow 1 egress (mean 44.71 Mbit/s)
- Flow 2 ingress (mean 51.58 Mbit/s) — Flow 2 egress (mean 51.43 Mbit/s)
- Flow 3 ingress (mean 14.70 Mbit/s) — Flow 3 egress (mean 14.70 Mbit/s)

Legend:
- Flow 1 (95th percentile 60.30 ms)
- Flow 2 (95th percentile 43.83 ms)
- Flow 3 (95th percentile 44.53 ms)

```
Run 5: Statistics of Copa

Start at: 2018-07-24 16:14:36
End at: 2018-07-24 16:15:06
Local clock offset: 0.578 ms
Remote clock offset: 2.517 ms


# Below is generated by plot.py at 2018-07-24 18:18:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.81 Mbit/s
95th percentile per-packet one-way delay: 57.329 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 50.63 Mbit/s
95th percentile per-packet one-way delay: 58.831 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 27.50 Mbit/s
95th percentile per-packet one-way delay: 55.821 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 23.67 Mbit/s
95th percentile per-packet one-way delay: 54.136 ms
Loss rate: 0.37%
```
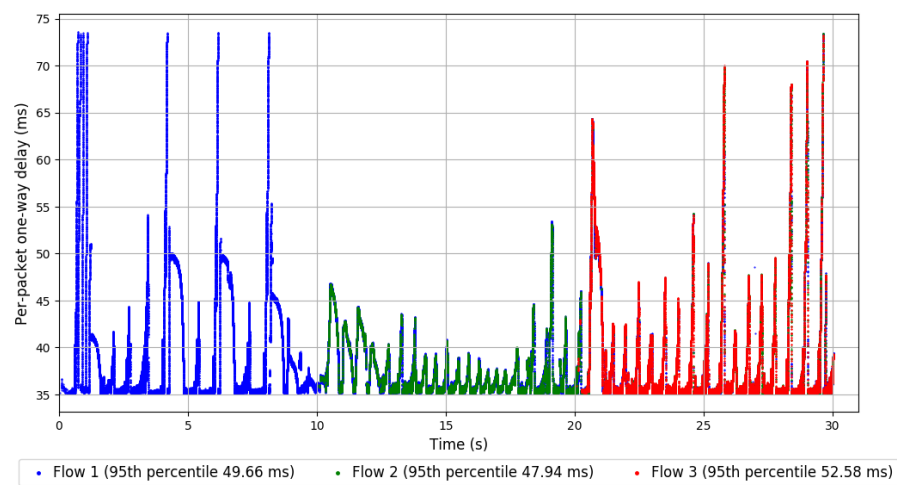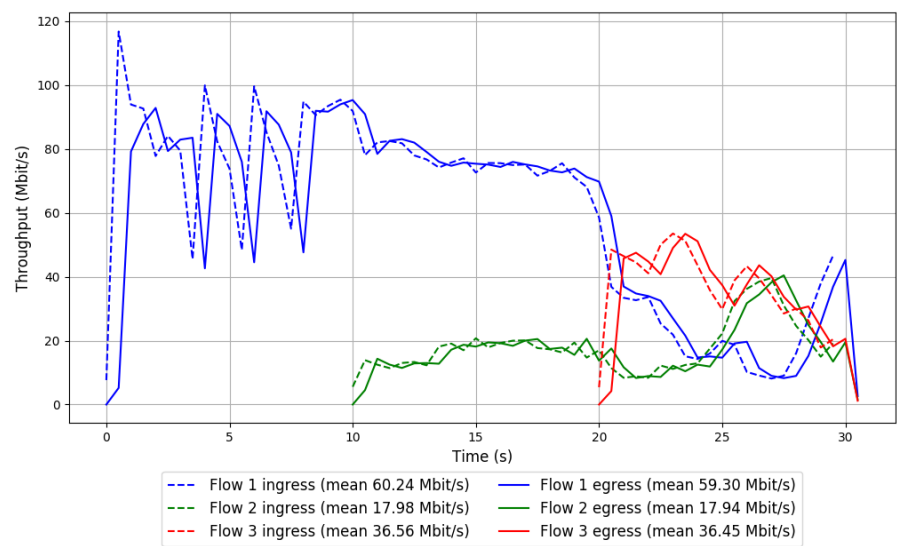
Run 5: Report of Copa — Data Link

```
Run 6: Statistics of Copa

Start at: 2018-07-24 16:37:35
End at: 2018-07-24 16:38:05
Local clock offset: 0.912 ms
Remote clock offset: 2.726 ms


# Below is generated by plot.py at 2018-07-24 18:18:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.87 Mbit/s
95th percentile per-packet one-way delay: 49.677 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 53.43 Mbit/s
95th percentile per-packet one-way delay: 50.215 ms
Loss rate: 1.10%
-- Flow 2:
Average throughput: 35.40 Mbit/s
95th percentile per-packet one-way delay: 45.856 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 17.66 Mbit/s
95th percentile per-packet one-way delay: 40.146 ms
Loss rate: 0.01%
```
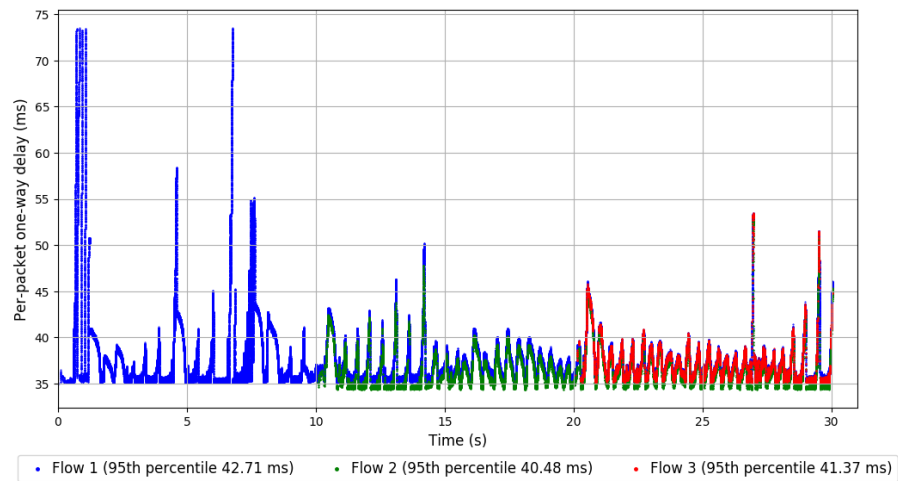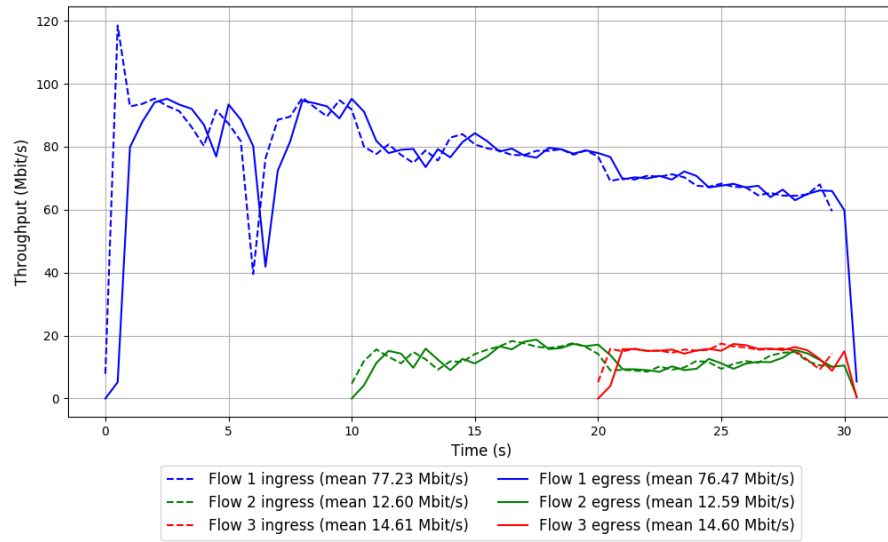
Run 6: Report of Copa — Data Link

```
Run 7: Statistics of Copa

Start at: 2018-07-24 17:00:33
End at: 2018-07-24 17:01:03
Local clock offset: 0.934 ms
Remote clock offset: 2.005 ms


# Below is generated by plot.py at 2018-07-24 18:19:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.37 Mbit/s
95th percentile per-packet one-way delay: 49.722 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 59.30 Mbit/s
95th percentile per-packet one-way delay: 49.657 ms
Loss rate: 1.55%
-- Flow 2:
Average throughput: 17.94 Mbit/s
95th percentile per-packet one-way delay: 47.943 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 36.45 Mbit/s
95th percentile per-packet one-way delay: 52.584 ms
Loss rate: 0.27%
```
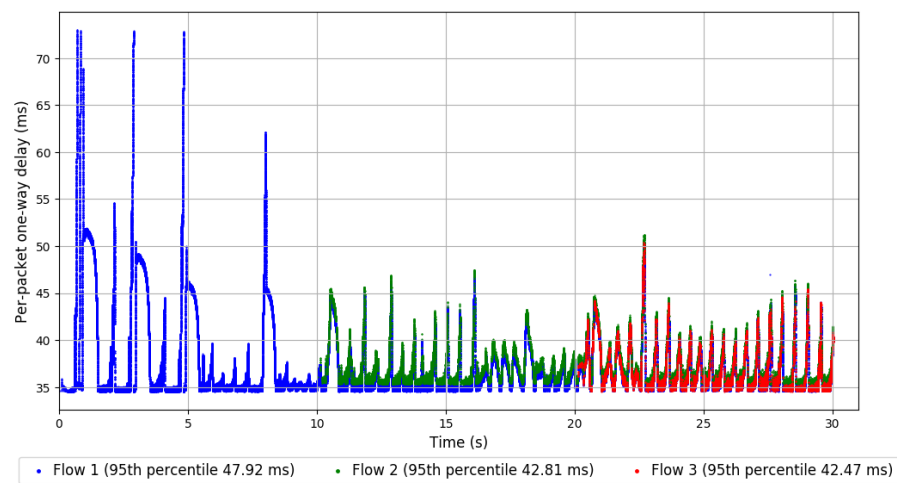
Run 7: Report of Copa — Data Link

```
Run 8: Statistics of Copa

Start at: 2018-07-24 17:23:28
End at: 2018-07-24 17:23:58
Local clock offset: 0.319 ms
Remote clock offset: 1.779 ms


# Below is generated by plot.py at 2018-07-24 18:19:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.72 Mbit/s
95th percentile per-packet one-way delay: 42.571 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 76.47 Mbit/s
95th percentile per-packet one-way delay: 42.710 ms
Loss rate: 0.95%
-- Flow 2:
Average throughput: 12.59 Mbit/s
95th percentile per-packet one-way delay: 40.481 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 14.60 Mbit/s
95th percentile per-packet one-way delay: 41.367 ms
Loss rate: 0.00%
```
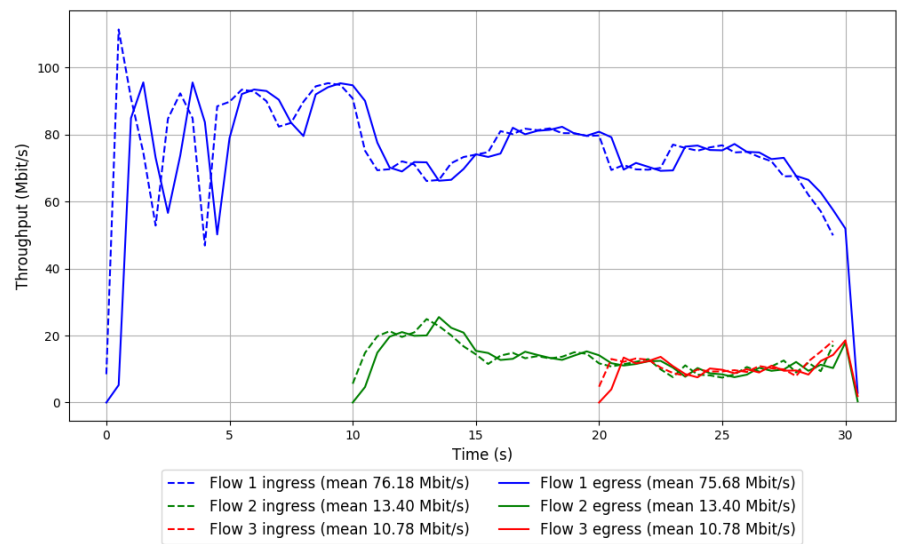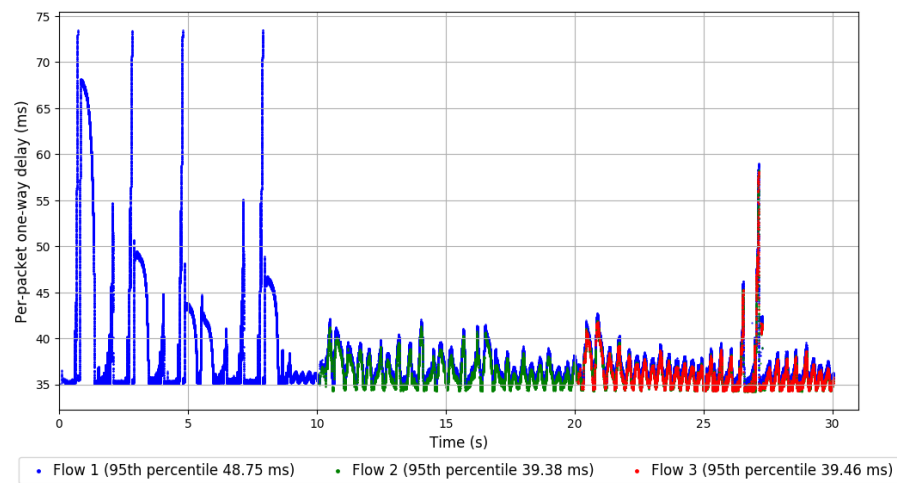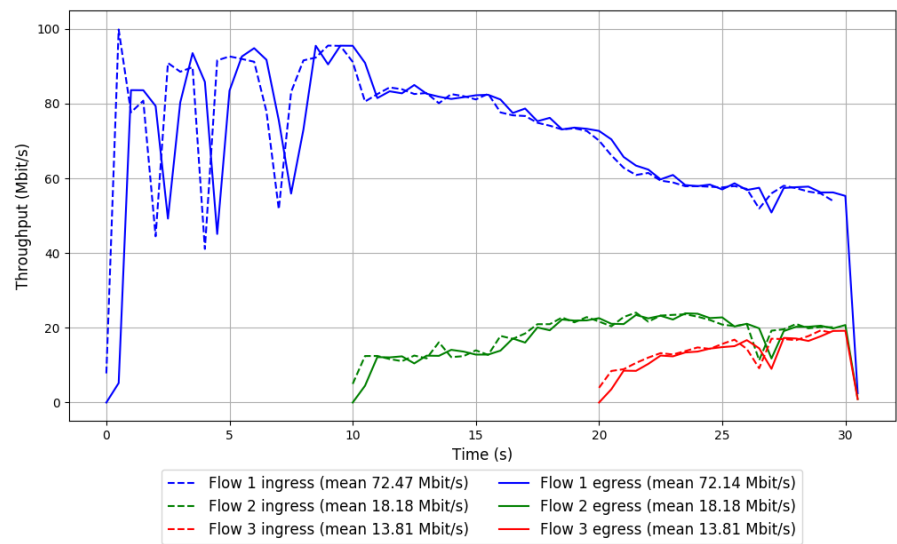
Run 8: Report of Copa — Data Link

- - - - Flow 1 ingress (mean 77.23 Mbit/s) —— Flow 1 egress (mean 76.47 Mbit/s)
- - - - Flow 2 ingress (mean 12.60 Mbit/s) —— Flow 2 egress (mean 12.59 Mbit/s)
- - - - Flow 3 ingress (mean 14.61 Mbit/s) —— Flow 3 egress (mean 14.60 Mbit/s)

- Flow 1 (95th percentile 42.71 ms)   - Flow 2 (95th percentile 40.48 ms)   - Flow 3 (95th percentile 41.37 ms)

```
Run 9: Statistics of Copa

Start at: 2018-07-24 17:46:21
End at: 2018-07-24 17:46:51
Local clock offset: 3.103 ms
Remote clock offset: 1.65 ms


# Below is generated by plot.py at 2018-07-24 18:19:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.19 Mbit/s
95th percentile per-packet one-way delay: 46.708 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 75.68 Mbit/s
95th percentile per-packet one-way delay: 47.920 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 13.40 Mbit/s
95th percentile per-packet one-way delay: 42.809 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.78 Mbit/s
95th percentile per-packet one-way delay: 42.467 ms
Loss rate: 0.00%
```
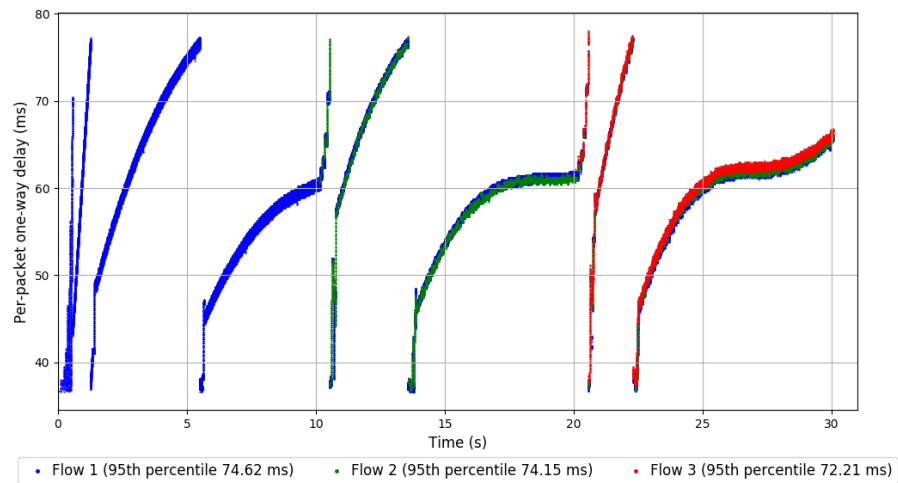
Run 9: Report of Copa — Data Link

```
Run 10: Statistics of Copa

Start at: 2018-07-24 18:09:22
End at: 2018-07-24 18:09:52
Local clock offset: 1.859 ms
Remote clock offset: 1.939 ms


# Below is generated by plot.py at 2018-07-24 18:19:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.85 Mbit/s
95th percentile per-packet one-way delay: 47.396 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 72.14 Mbit/s
95th percentile per-packet one-way delay: 48.746 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 18.18 Mbit/s
95th percentile per-packet one-way delay: 39.380 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 13.81 Mbit/s
95th percentile per-packet one-way delay: 39.464 ms
Loss rate: 0.00%
```
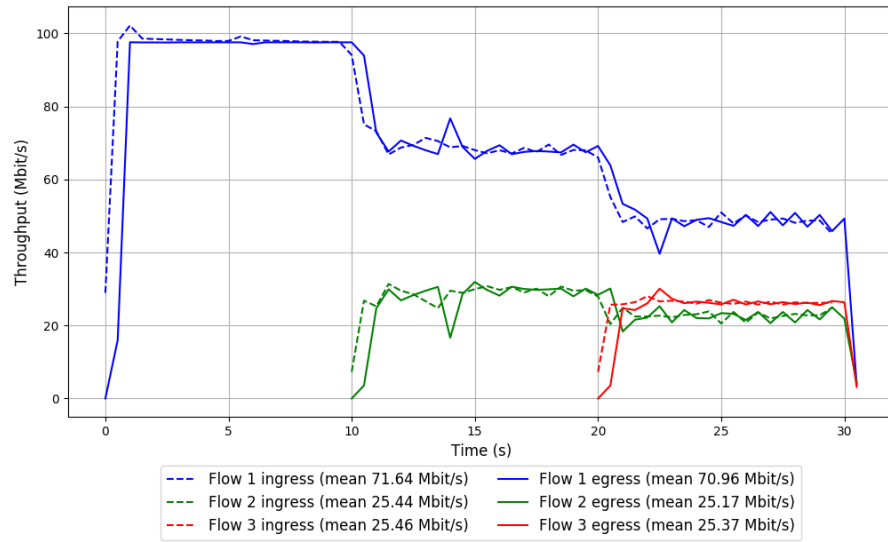
Run 10: Report of Copa — Data Link

43

```
Run 1: Statistics of TCP Cubic

Start at: 2018-07-24 14:41:09
End at: 2018-07-24 14:41:39
Local clock offset: 3.156 ms
Remote clock offset: 4.301 ms


# Below is generated by plot.py at 2018-07-24 18:19:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.15 Mbit/s
95th percentile per-packet one-way delay: 74.384 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 70.96 Mbit/s
95th percentile per-packet one-way delay: 74.617 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 25.17 Mbit/s
95th percentile per-packet one-way delay: 74.152 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 25.37 Mbit/s
95th percentile per-packet one-way delay: 72.211 ms
Loss rate: 0.32%
```
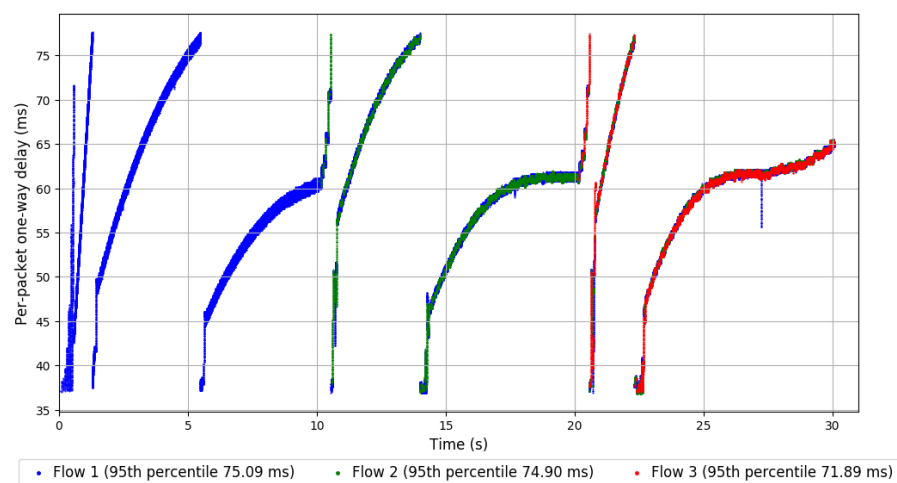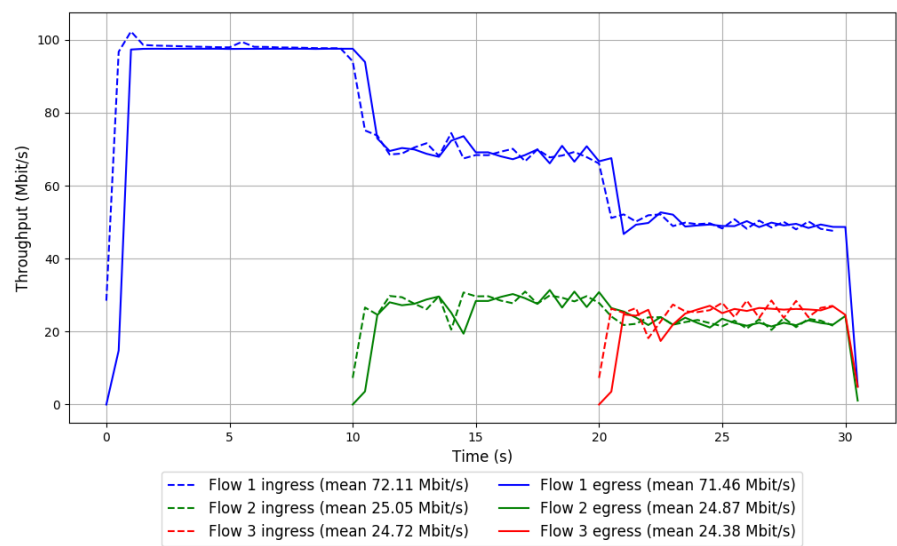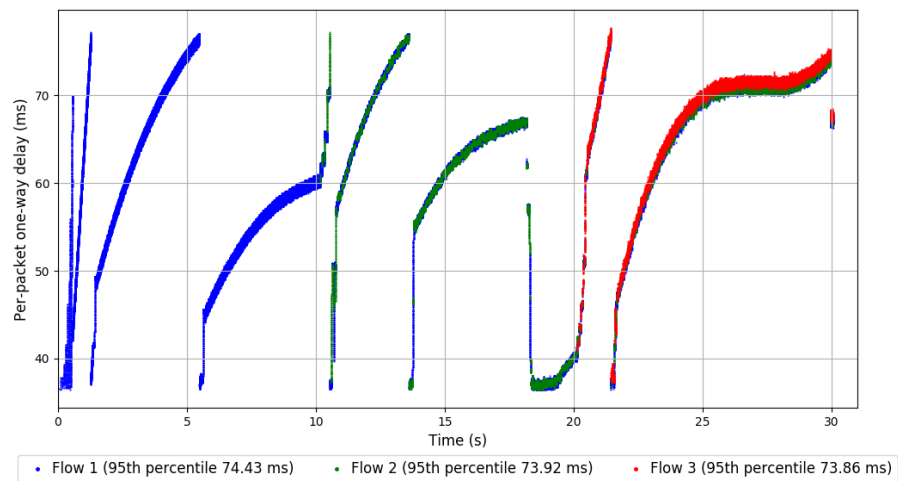
Run 1: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 71.64 Mbit/s) --- Flow 1 egress (mean 70.96 Mbit/s)
Flow 2 ingress (mean 25.44 Mbit/s) --- Flow 2 egress (mean 25.17 Mbit/s)
Flow 3 ingress (mean 25.46 Mbit/s) --- Flow 3 egress (mean 25.37 Mbit/s)

Flow 1 (95th percentile 74.62 ms) · Flow 2 (95th percentile 74.15 ms) · Flow 3 (95th percentile 72.21 ms)

```
Run 2: Statistics of TCP Cubic

Start at: 2018-07-24 15:04:14
End at: 2018-07-24 15:04:44
Local clock offset: 3.998 ms
Remote clock offset: 4.489 ms


# Below is generated by plot.py at 2018-07-24 18:19:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.09 Mbit/s
95th percentile per-packet one-way delay: 74.884 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 71.46 Mbit/s
95th percentile per-packet one-way delay: 75.089 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 24.87 Mbit/s
95th percentile per-packet one-way delay: 74.901 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 24.38 Mbit/s
95th percentile per-packet one-way delay: 71.890 ms
Loss rate: 1.32%
```
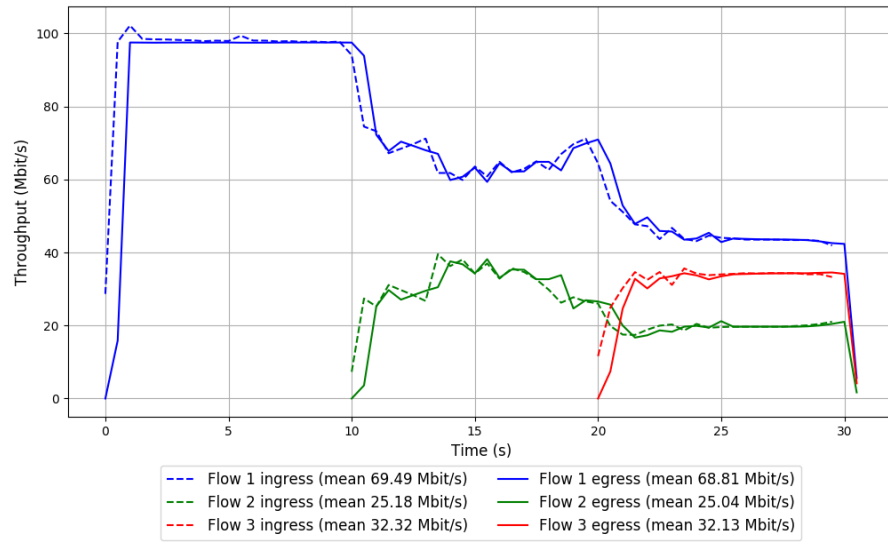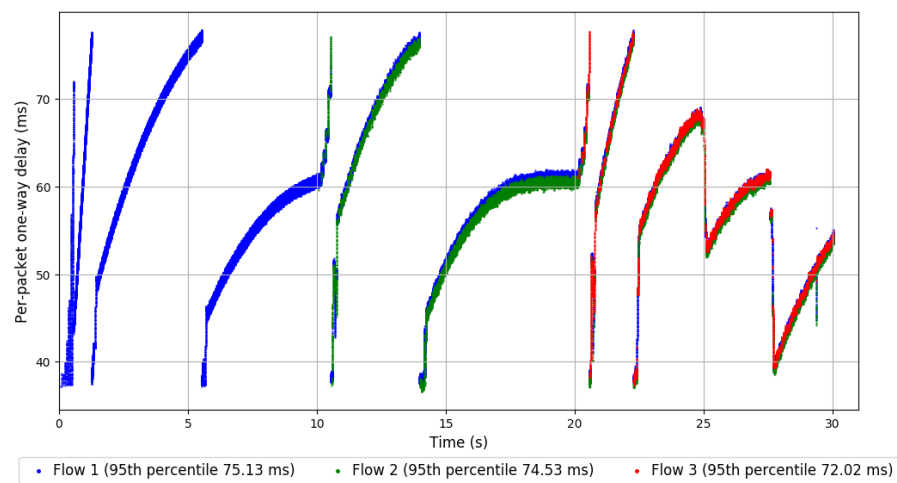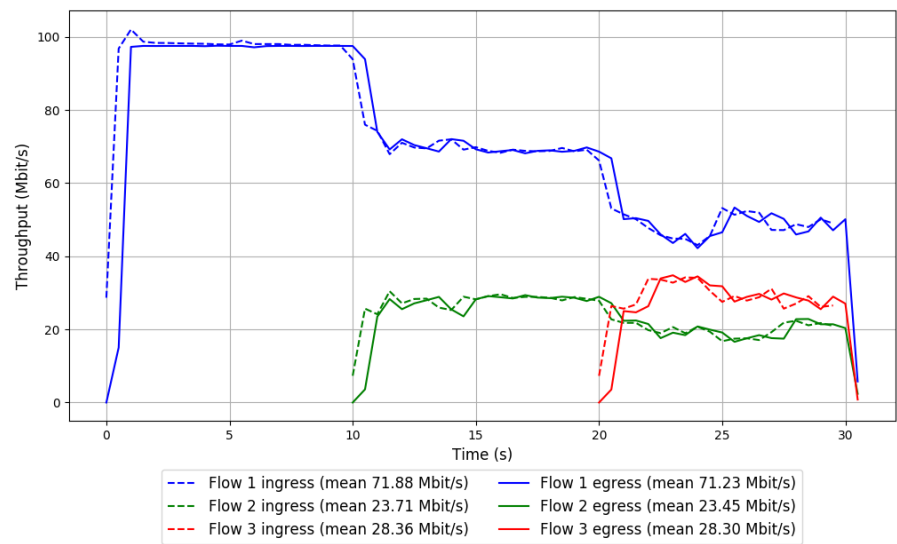
Run 2: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 72.11 Mbit/s) --- Flow 1 egress (mean 71.46 Mbit/s)
Flow 2 ingress (mean 25.05 Mbit/s) --- Flow 2 egress (mean 24.87 Mbit/s)
Flow 3 ingress (mean 24.72 Mbit/s) --- Flow 3 egress (mean 24.38 Mbit/s)

Flow 1 (95th percentile 75.09 ms)   Flow 2 (95th percentile 74.90 ms)   Flow 3 (95th percentile 71.89 ms)

```
Run 3: Statistics of TCP Cubic

Start at: 2018-07-24 15:27:16
End at: 2018-07-24 15:27:46
Local clock offset: 0.339 ms
Remote clock offset: 4.272 ms


# Below is generated by plot.py at 2018-07-24 18:19:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.17 Mbit/s
95th percentile per-packet one-way delay: 74.219 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 68.81 Mbit/s
95th percentile per-packet one-way delay: 74.432 ms
Loss rate: 0.87%
-- Flow 2:
Average throughput: 25.04 Mbit/s
95th percentile per-packet one-way delay: 73.920 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 32.13 Mbit/s
95th percentile per-packet one-way delay: 73.859 ms
Loss rate: 0.32%
```
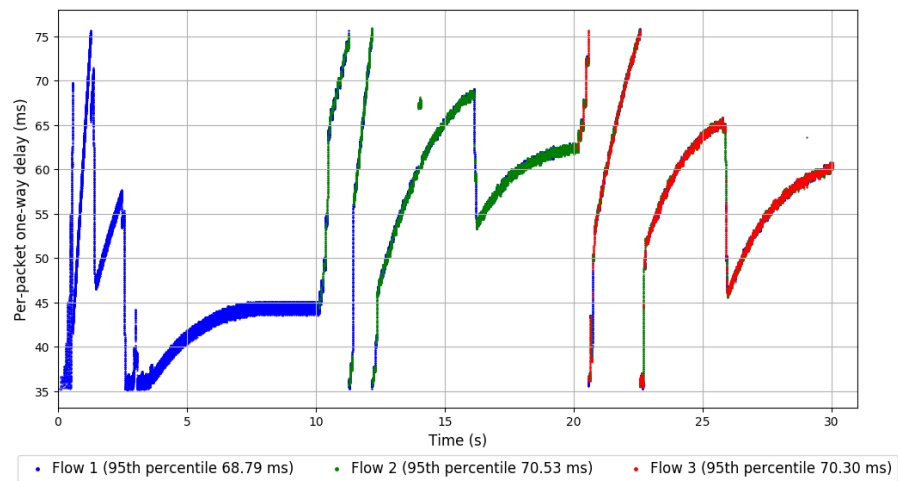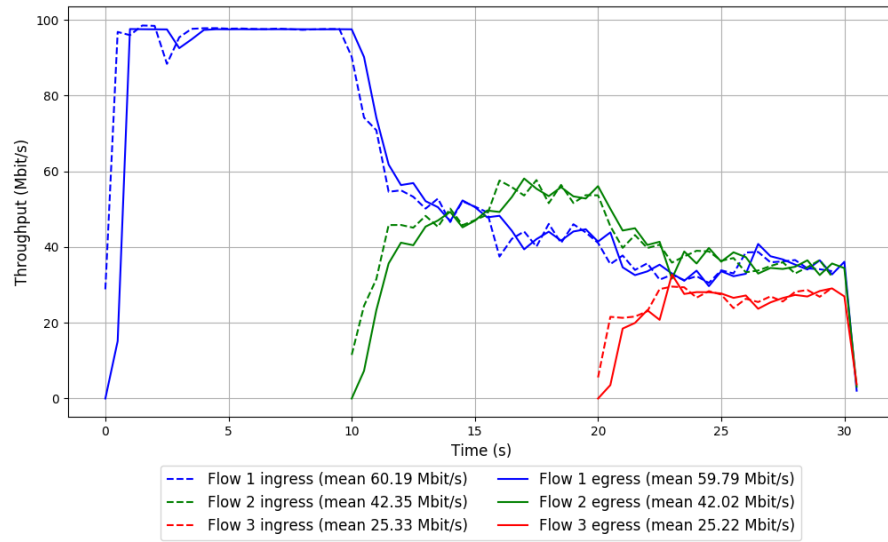
Run 3: Report of TCP Cubic — Data Link

- - - - Flow 1 ingress (mean 69.49 Mbit/s)   ——— Flow 1 egress (mean 68.81 Mbit/s)
- - - - Flow 2 ingress (mean 25.18 Mbit/s)   ——— Flow 2 egress (mean 25.04 Mbit/s)
- - - - Flow 3 ingress (mean 32.32 Mbit/s)   ——— Flow 3 egress (mean 32.13 Mbit/s)

• Flow 1 (95th percentile 74.43 ms)   • Flow 2 (95th percentile 73.92 ms)   • Flow 3 (95th percentile 73.86 ms)

```
Run 4: Statistics of TCP Cubic

Start at: 2018-07-24 15:50:23
End at: 2018-07-24 15:50:53
Local clock offset: -0.289 ms
Remote clock offset: 4.399 ms


# Below is generated by plot.py at 2018-07-24 18:19:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.22 Mbit/s
95th percentile per-packet one-way delay: 74.851 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 71.23 Mbit/s
95th percentile per-packet one-way delay: 75.127 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 23.45 Mbit/s
95th percentile per-packet one-way delay: 74.533 ms
Loss rate: 1.13%
-- Flow 3:
Average throughput: 28.30 Mbit/s
95th percentile per-packet one-way delay: 72.019 ms
Loss rate: 0.27%
```
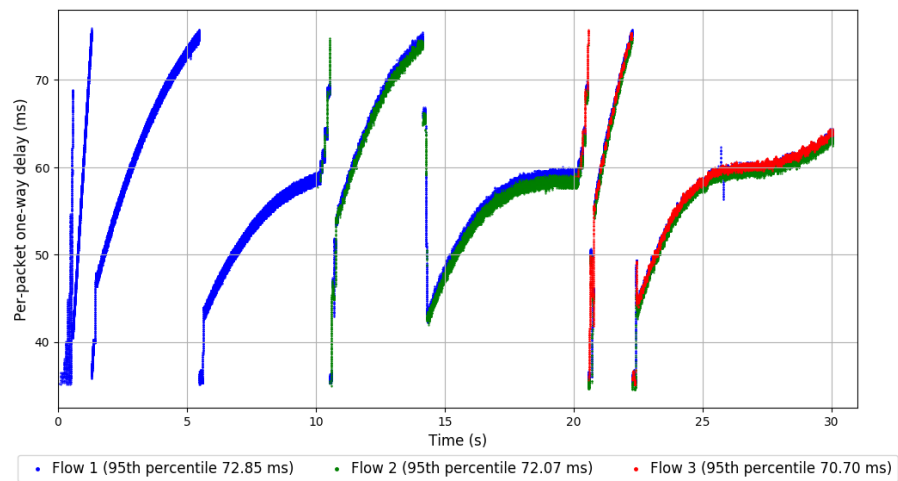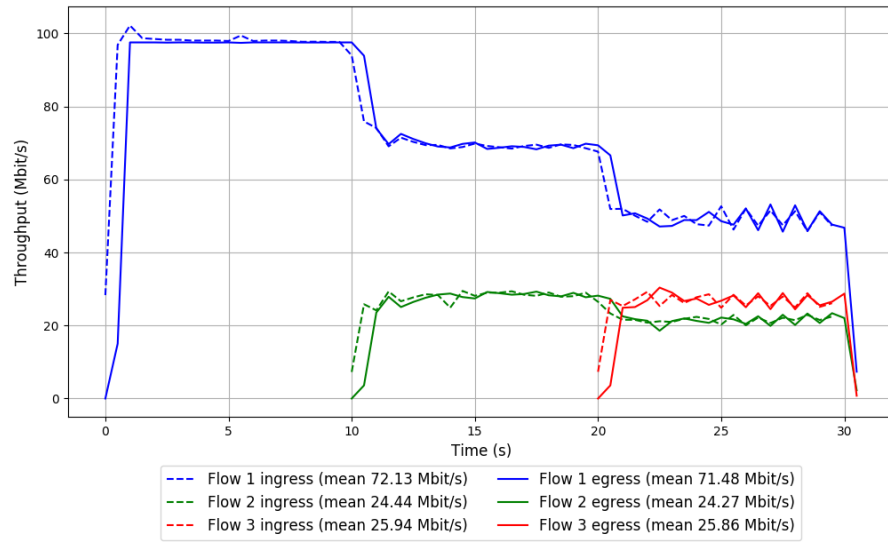
Run 4: Report of TCP Cubic — Data Link

- - - - Flow 1 ingress (mean 71.88 Mbit/s)   —— Flow 1 egress (mean 71.23 Mbit/s)
- - - - Flow 2 ingress (mean 23.71 Mbit/s)   —— Flow 2 egress (mean 23.45 Mbit/s)
- - - - Flow 3 ingress (mean 28.36 Mbit/s)   —— Flow 3 egress (mean 28.30 Mbit/s)

• Flow 1 (95th percentile 75.13 ms)   • Flow 2 (95th percentile 74.53 ms)   • Flow 3 (95th percentile 72.02 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2018-07-24 16:13:15
End at: 2018-07-24 16:13:45
Local clock offset: 0.499 ms
Remote clock offset: 2.53 ms


# Below is generated by plot.py at 2018-07-24 18:20:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.11 Mbit/s
95th percentile per-packet one-way delay: 69.538 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 59.79 Mbit/s
95th percentile per-packet one-way delay: 68.791 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 42.02 Mbit/s
95th percentile per-packet one-way delay: 70.528 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 25.22 Mbit/s
95th percentile per-packet one-way delay: 70.302 ms
Loss rate: 0.47%
```
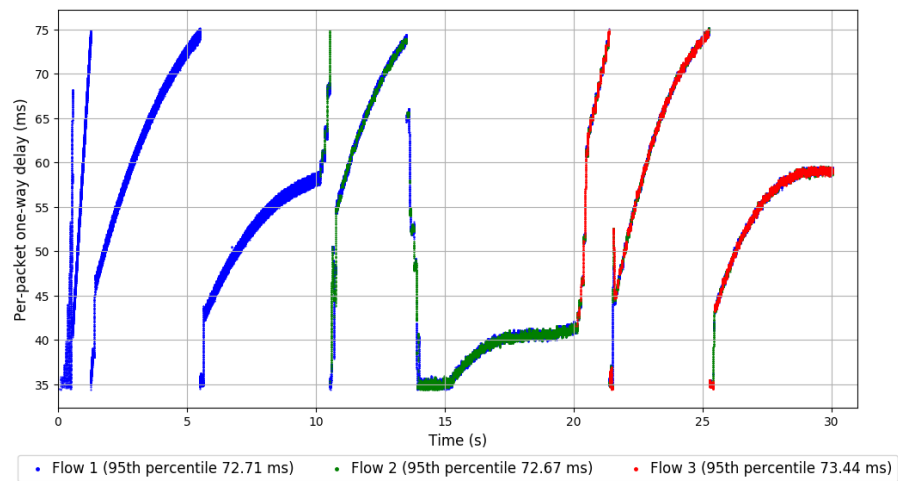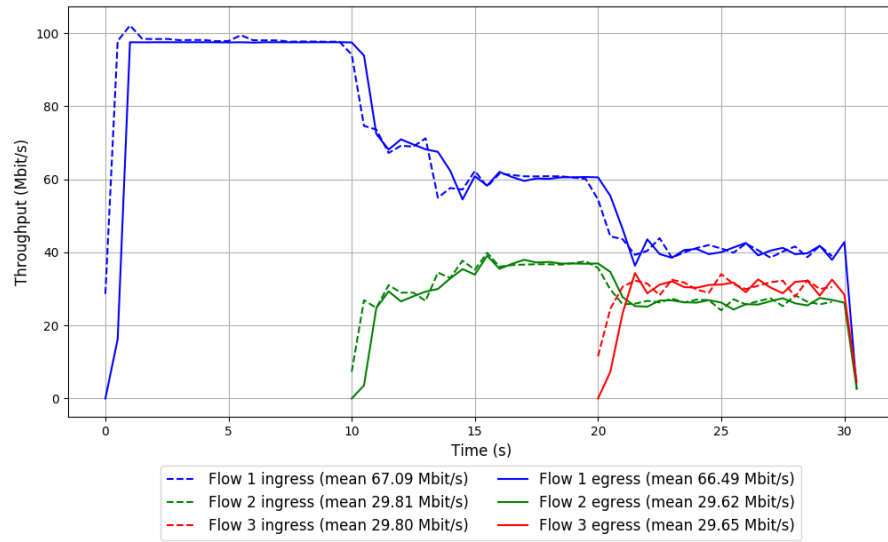
Run 5: Report of TCP Cubic — Data Link

- - - - Flow 1 ingress (mean 60.19 Mbit/s) —— Flow 1 egress (mean 59.79 Mbit/s)
- - - - Flow 2 ingress (mean 42.35 Mbit/s) —— Flow 2 egress (mean 42.02 Mbit/s)
- - - - Flow 3 ingress (mean 25.33 Mbit/s) —— Flow 3 egress (mean 25.22 Mbit/s)

- Flow 1 (95th percentile 68.79 ms) - Flow 2 (95th percentile 70.53 ms) - Flow 3 (95th percentile 70.30 ms)

53

```
Run 6: Statistics of TCP Cubic

Start at: 2018-07-24 16:36:14
End at: 2018-07-24 16:36:44
Local clock offset: 0.919 ms
Remote clock offset: 2.701 ms


# Below is generated by plot.py at 2018-07-24 18:20:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.24 Mbit/s
95th percentile per-packet one-way delay: 72.672 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 71.48 Mbit/s
95th percentile per-packet one-way delay: 72.846 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 24.27 Mbit/s
95th percentile per-packet one-way delay: 72.069 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 25.86 Mbit/s
95th percentile per-packet one-way delay: 70.697 ms
Loss rate: 0.23%
```
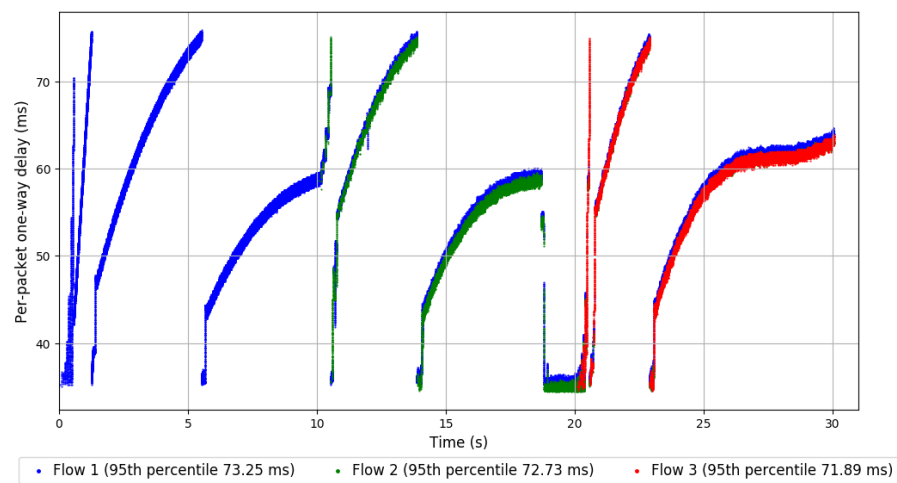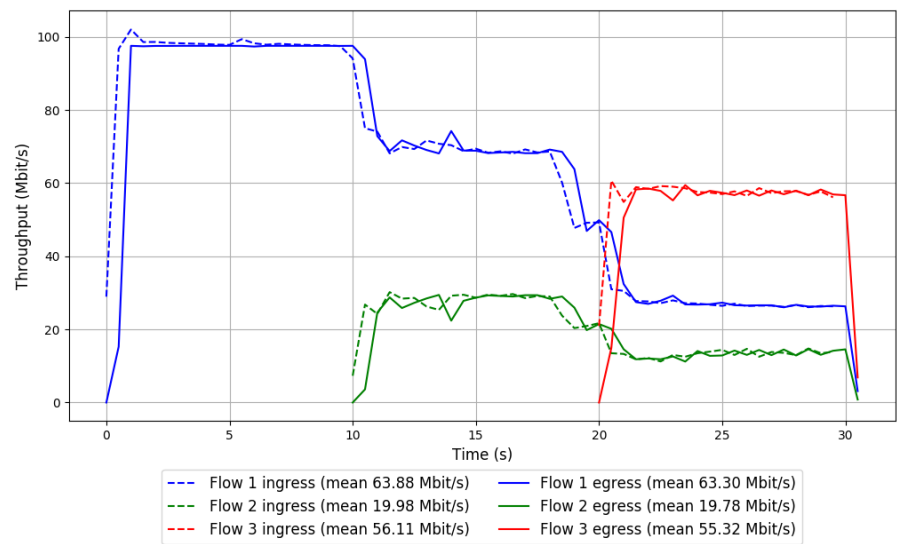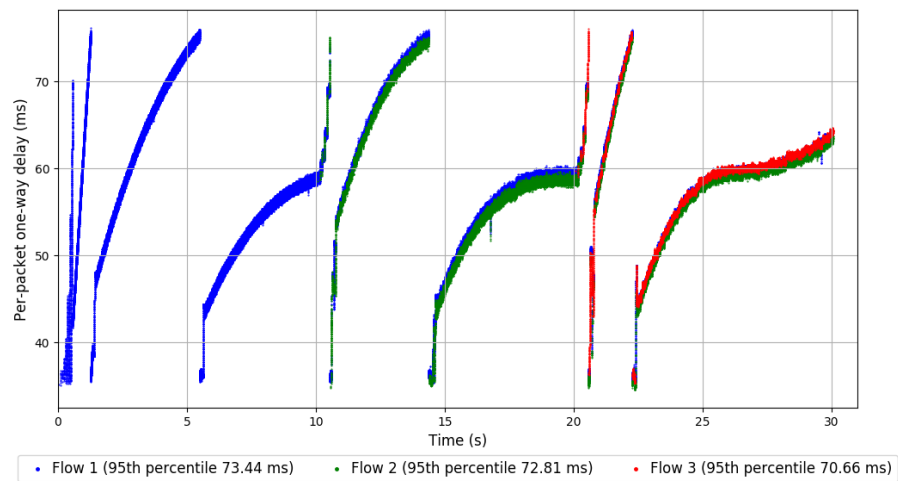
Run 6: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 72.13 Mbit/s) -------- Flow 1 egress (mean 71.48 Mbit/s)
Flow 2 ingress (mean 24.44 Mbit/s) -------- Flow 2 egress (mean 24.27 Mbit/s)
Flow 3 ingress (mean 25.94 Mbit/s) -------- Flow 3 egress (mean 25.86 Mbit/s)

• Flow 1 (95th percentile 72.85 ms)   • Flow 2 (95th percentile 72.07 ms)   • Flow 3 (95th percentile 70.70 ms)

```
Run 7: Statistics of TCP Cubic

Start at: 2018-07-24 16:59:12
End at: 2018-07-24 16:59:42
Local clock offset: 0.935 ms
Remote clock offset: 2.101 ms


# Below is generated by plot.py at 2018-07-24 18:20:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.04 Mbit/s
95th percentile per-packet one-way delay: 72.726 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 66.49 Mbit/s
95th percentile per-packet one-way delay: 72.709 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 29.62 Mbit/s
95th percentile per-packet one-way delay: 72.668 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 29.65 Mbit/s
95th percentile per-packet one-way delay: 73.444 ms
Loss rate: 0.33%
```
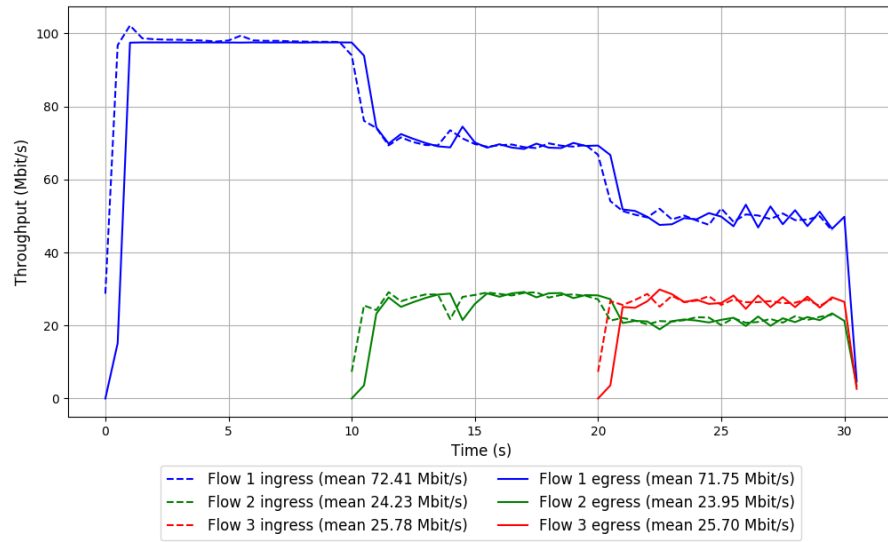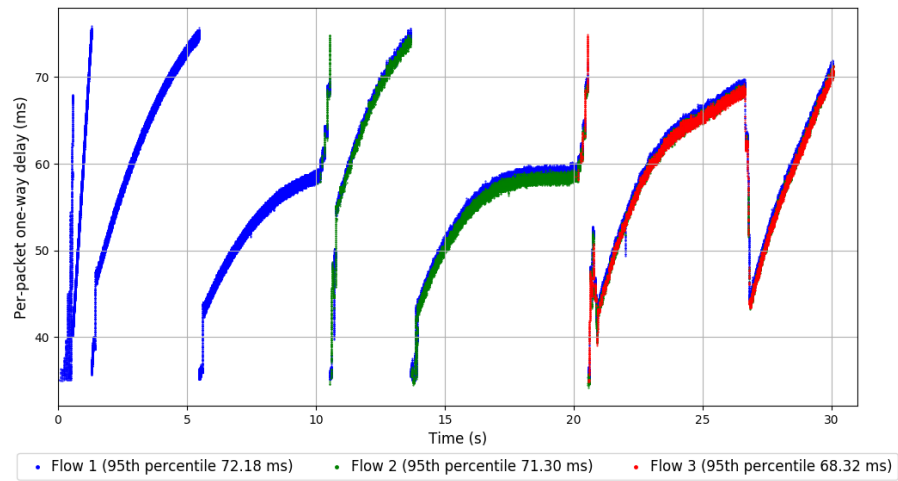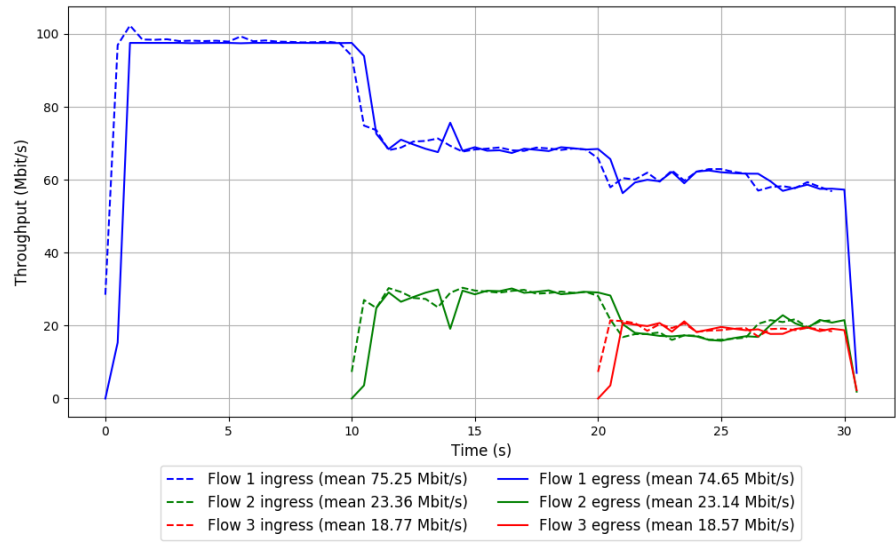
Run 7: Report of TCP Cubic — Data Link

- - - - Flow 1 ingress (mean 67.09 Mbit/s) ——— Flow 1 egress (mean 66.49 Mbit/s)
- - - - Flow 2 ingress (mean 29.81 Mbit/s) ——— Flow 2 egress (mean 29.62 Mbit/s)
- - - - Flow 3 ingress (mean 29.80 Mbit/s) ——— Flow 3 egress (mean 29.65 Mbit/s)

• Flow 1 (95th percentile 72.71 ms)   • Flow 2 (95th percentile 72.67 ms)   • Flow 3 (95th percentile 73.44 ms)

57

```
Run 8: Statistics of TCP Cubic

Start at: 2018-07-24 17:22:08
End at: 2018-07-24 17:22:38
Local clock offset: 0.322 ms
Remote clock offset: 1.908 ms


# Below is generated by plot.py at 2018-07-24 18:20:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.89 Mbit/s
95th percentile per-packet one-way delay: 72.997 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 63.30 Mbit/s
95th percentile per-packet one-way delay: 73.253 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 19.78 Mbit/s
95th percentile per-packet one-way delay: 72.726 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 55.32 Mbit/s
95th percentile per-packet one-way delay: 71.890 ms
Loss rate: 1.12%
```
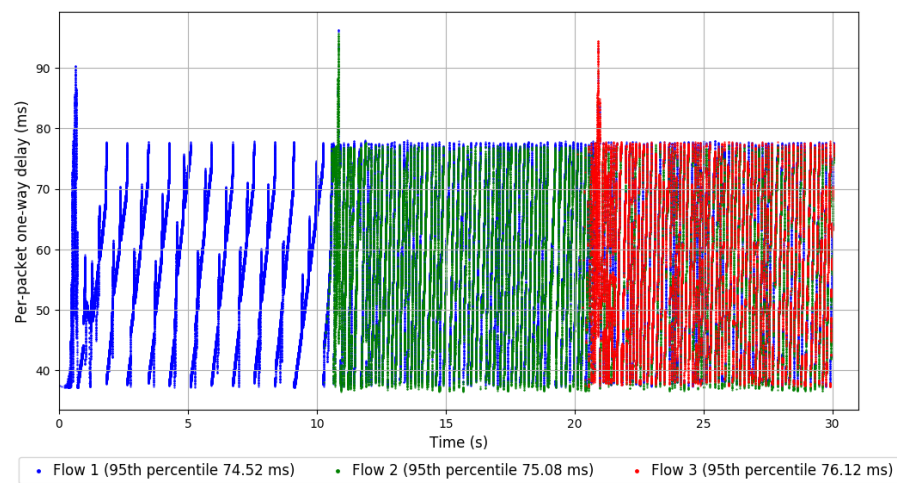
Run 8: Report of TCP Cubic — Data Link

```
Run 9: Statistics of TCP Cubic

Start at: 2018-07-24 17:45:00
End at: 2018-07-24 17:45:30
Local clock offset: 2.971 ms
Remote clock offset: 1.64 ms


# Below is generated by plot.py at 2018-07-24 18:20:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.20 Mbit/s
95th percentile per-packet one-way delay: 73.220 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 71.75 Mbit/s
95th percentile per-packet one-way delay: 73.440 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 23.95 Mbit/s
95th percentile per-packet one-way delay: 72.809 ms
Loss rate: 1.13%
-- Flow 3:
Average throughput: 25.70 Mbit/s
95th percentile per-packet one-way delay: 70.660 ms
Loss rate: 0.29%
```
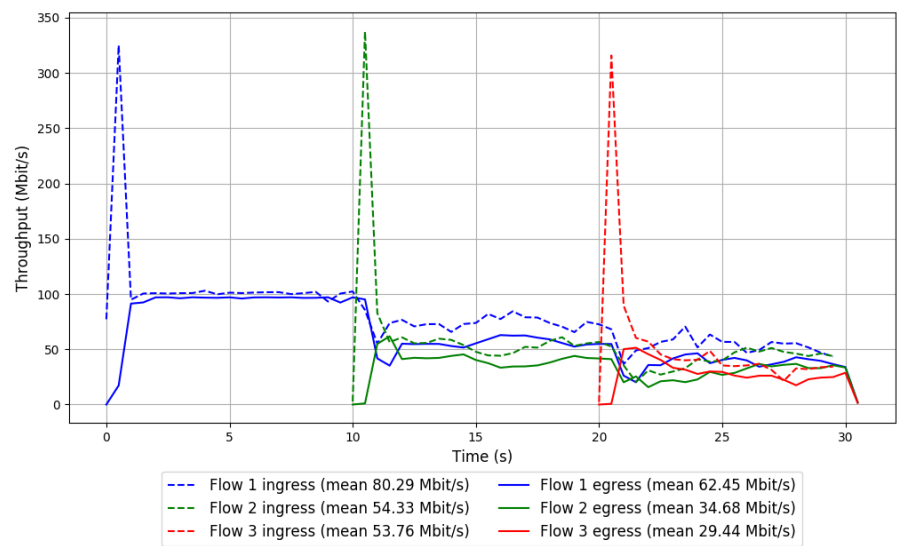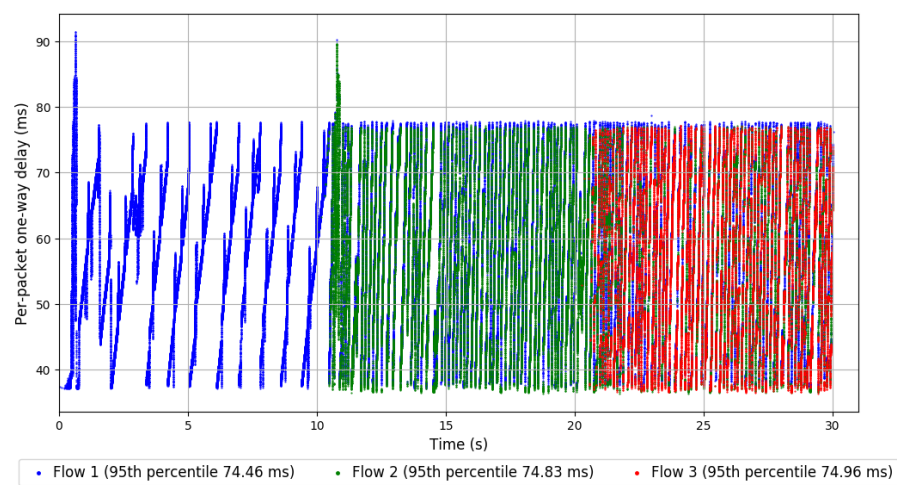
Run 9: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 72.41 Mbit/s) --- Flow 1 egress (mean 71.75 Mbit/s)
Flow 2 ingress (mean 24.23 Mbit/s) --- Flow 2 egress (mean 23.95 Mbit/s)
Flow 3 ingress (mean 25.78 Mbit/s) --- Flow 3 egress (mean 25.70 Mbit/s)

Flow 1 (95th percentile 73.44 ms)   Flow 2 (95th percentile 72.81 ms)   Flow 3 (95th percentile 70.66 ms)

61

```
Run 10: Statistics of TCP Cubic

Start at: 2018-07-24 18:08:01
End at: 2018-07-24 18:08:31
Local clock offset: 2.182 ms
Remote clock offset: 1.88 ms


# Below is generated by plot.py at 2018-07-24 18:20:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.20 Mbit/s
95th percentile per-packet one-way delay: 71.892 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 74.65 Mbit/s
95th percentile per-packet one-way delay: 72.183 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 23.14 Mbit/s
95th percentile per-packet one-way delay: 71.303 ms
Loss rate: 0.89%
-- Flow 3:
Average throughput: 18.57 Mbit/s
95th percentile per-packet one-way delay: 68.317 ms
Loss rate: 0.92%
```
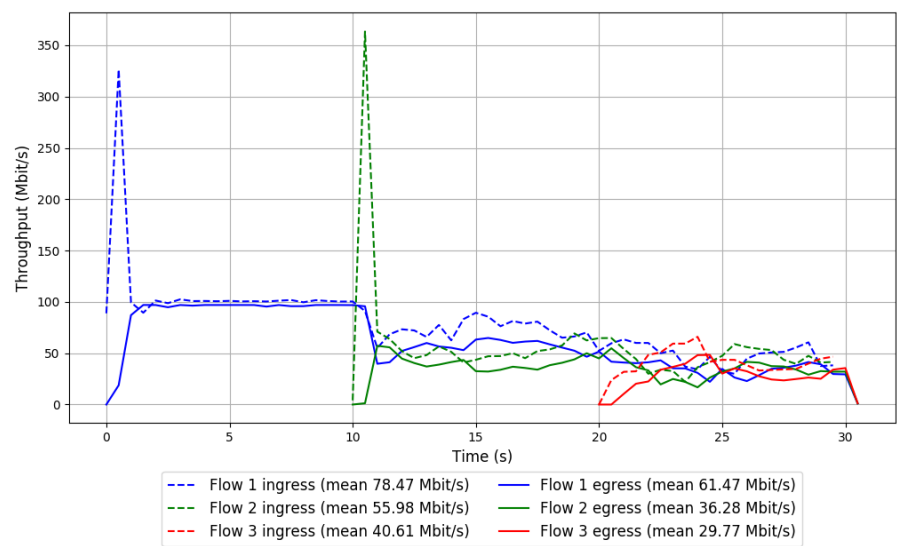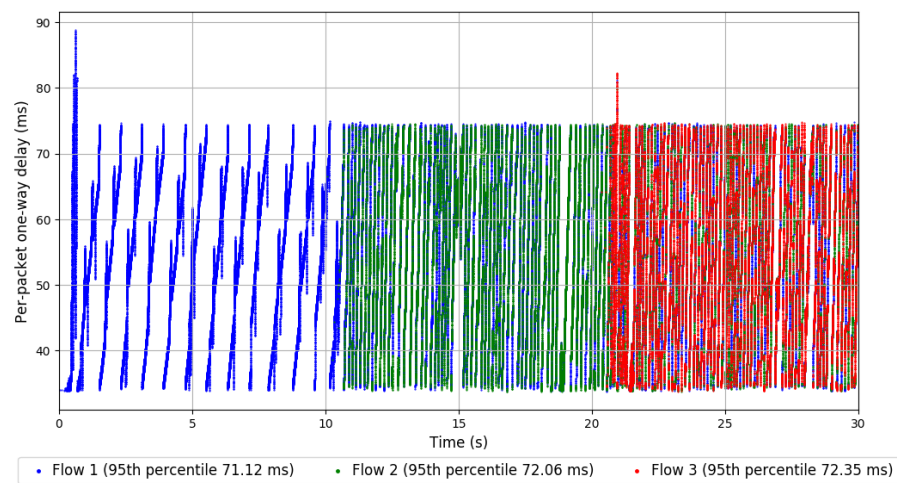
Run 10: Report of TCP Cubic — Data Link

```
Run 1: Statistics of FillP

Start at: 2018-07-24 14:24:53
End at: 2018-07-24 14:25:23
Local clock offset: 0.708 ms
Remote clock offset: 4.434 ms


# Below is generated by plot.py at 2018-07-24 18:21:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.27 Mbit/s
95th percentile per-packet one-way delay: 74.914 ms
Loss rate: 28.96%
-- Flow 1:
Average throughput: 62.45 Mbit/s
95th percentile per-packet one-way delay: 74.524 ms
Loss rate: 22.11%
-- Flow 2:
Average throughput: 34.68 Mbit/s
95th percentile per-packet one-way delay: 75.078 ms
Loss rate: 36.15%
-- Flow 3:
Average throughput: 29.44 Mbit/s
95th percentile per-packet one-way delay: 76.124 ms
Loss rate: 45.24%
```
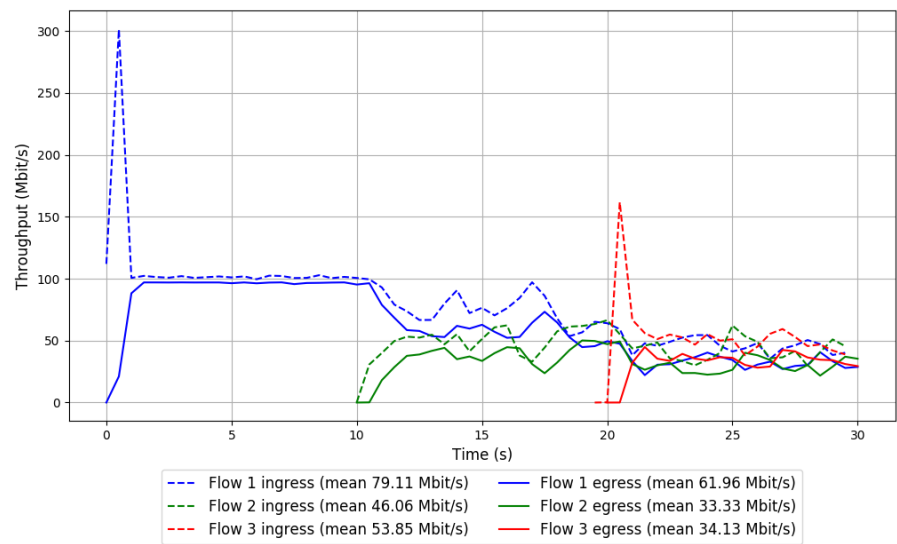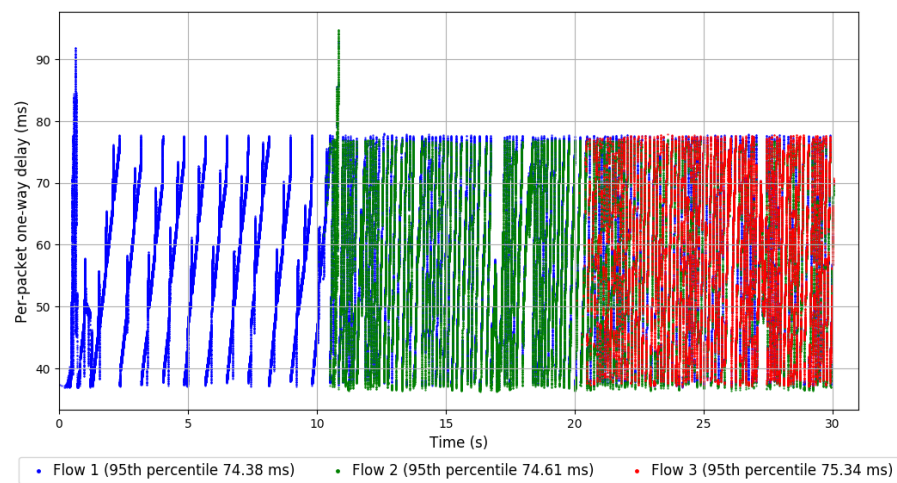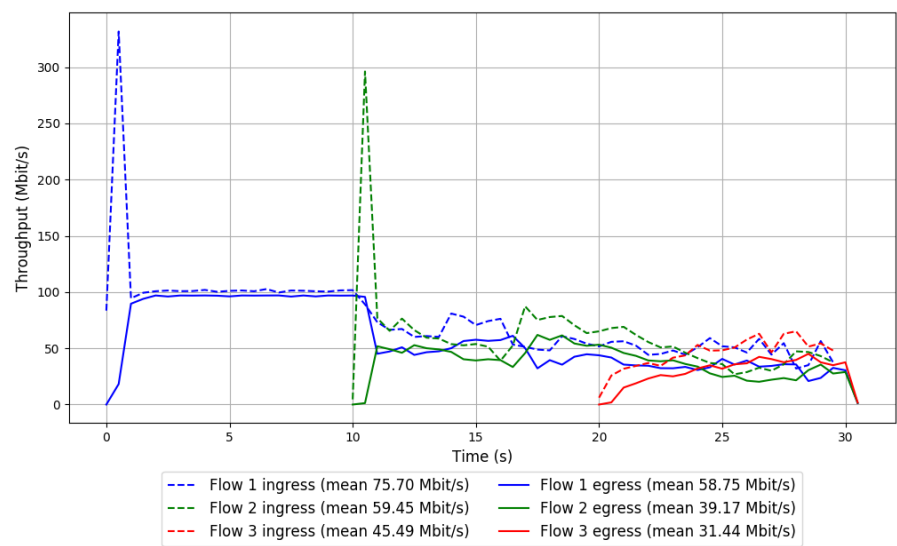
Run 1: Report of FillP — Data Link

```
Run 2: Statistics of FillP

Start at: 2018-07-24 14:47:55
End at: 2018-07-24 14:48:25
Local clock offset: 4.094 ms
Remote clock offset: 4.468 ms


# Below is generated by plot.py at 2018-07-24 18:21:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.28 Mbit/s
95th percentile per-packet one-way delay: 74.629 ms
Loss rate: 26.15%
-- Flow 1:
Average throughput: 61.47 Mbit/s
95th percentile per-packet one-way delay: 74.458 ms
Loss rate: 21.56%
-- Flow 2:
Average throughput: 36.28 Mbit/s
95th percentile per-packet one-way delay: 74.832 ms
Loss rate: 35.15%
-- Flow 3:
Average throughput: 29.77 Mbit/s
95th percentile per-packet one-way delay: 74.958 ms
Loss rate: 28.01%
```
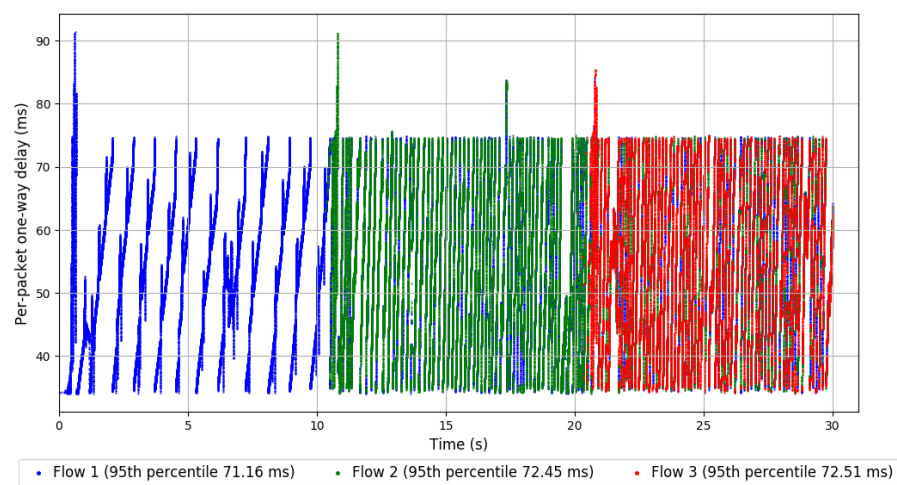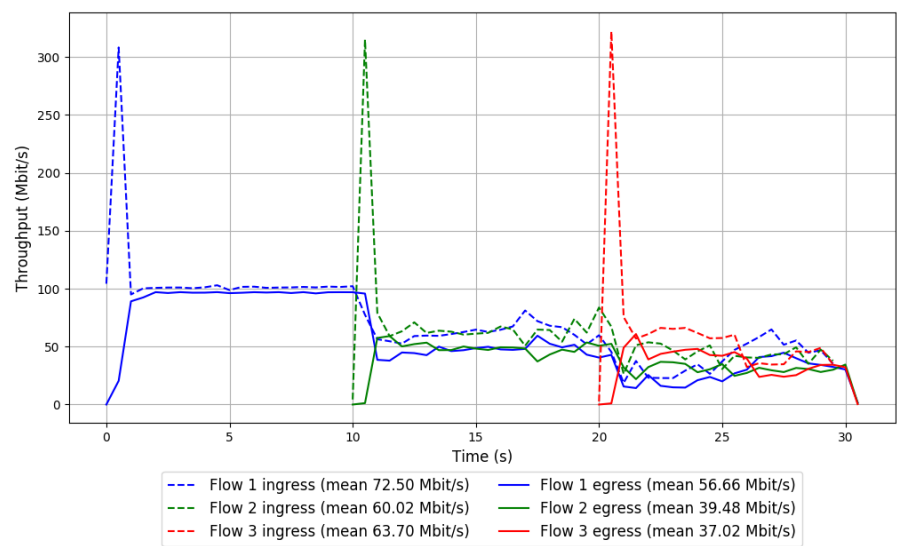
Run 2: Report of FillP — Data Link

Flow 1 ingress (mean 78.47 Mbit/s)   Flow 1 egress (mean 61.47 Mbit/s)
Flow 2 ingress (mean 55.98 Mbit/s)   Flow 2 egress (mean 36.28 Mbit/s)
Flow 3 ingress (mean 40.61 Mbit/s)   Flow 3 egress (mean 29.77 Mbit/s)

Flow 1 (95th percentile 74.46 ms)   Flow 2 (95th percentile 74.83 ms)   Flow 3 (95th percentile 74.96 ms)

```
Run 3: Statistics of FillP

Start at: 2018-07-24 15:11:06
End at: 2018-07-24 15:11:36
Local clock offset: 1.918 ms
Remote clock offset: 1.892 ms


# Below is generated by plot.py at 2018-07-24 18:21:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.22 Mbit/s
95th percentile per-packet one-way delay: 71.582 ms
Loss rate: 25.40%
-- Flow 1:
Average throughput: 61.96 Mbit/s
95th percentile per-packet one-way delay: 71.118 ms
Loss rate: 21.67%
-- Flow 2:
Average throughput: 33.33 Mbit/s
95th percentile per-packet one-way delay: 72.063 ms
Loss rate: 27.73%
-- Flow 3:
Average throughput: 34.13 Mbit/s
95th percentile per-packet one-way delay: 72.352 ms
Loss rate: 37.95%
```
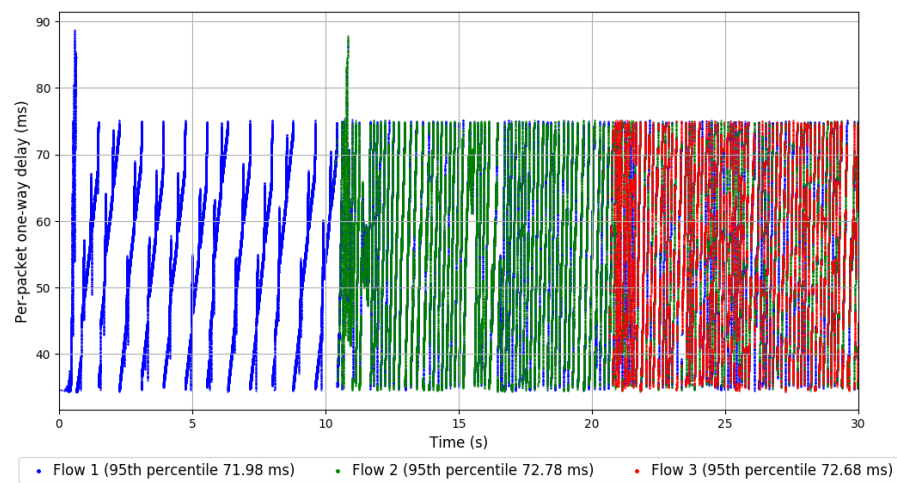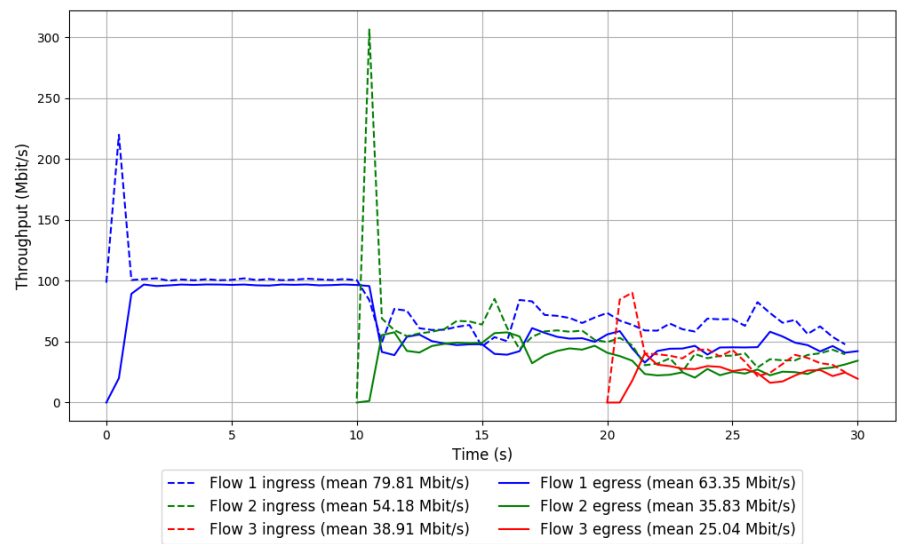
Run 3: Report of FillP — Data Link

```
Run 4: Statistics of FillP

Start at: 2018-07-24 15:34:03
End at: 2018-07-24 15:34:33
Local clock offset: 0.094 ms
Remote clock offset: 4.374 ms


# Below is generated by plot.py at 2018-07-24 18:21:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.25 Mbit/s
95th percentile per-packet one-way delay: 74.576 ms
Loss rate: 26.86%
-- Flow 1:
Average throughput: 58.75 Mbit/s
95th percentile per-packet one-way delay: 74.376 ms
Loss rate: 22.31%
-- Flow 2:
Average throughput: 39.17 Mbit/s
95th percentile per-packet one-way delay: 74.611 ms
Loss rate: 34.08%
-- Flow 3:
Average throughput: 31.44 Mbit/s
95th percentile per-packet one-way delay: 75.342 ms
Loss rate: 30.74%
```

Run 4: Report of FillP — Data Link

```
Run 5: Statistics of FillP

Start at: 2018-07-24 15:57:09
End at: 2018-07-24 15:57:39
Local clock offset: -0.523 ms
Remote clock offset: 2.16 ms


# Below is generated by plot.py at 2018-07-24 18:21:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.17 Mbit/s
95th percentile per-packet one-way delay: 71.819 ms
Loss rate: 28.66%
-- Flow 1:
Average throughput: 56.66 Mbit/s
95th percentile per-packet one-way delay: 71.159 ms
Loss rate: 21.78%
-- Flow 2:
Average throughput: 39.48 Mbit/s
95th percentile per-packet one-way delay: 72.450 ms
Loss rate: 34.18%
-- Flow 3:
Average throughput: 37.02 Mbit/s
95th percentile per-packet one-way delay: 72.510 ms
Loss rate: 41.88%
```
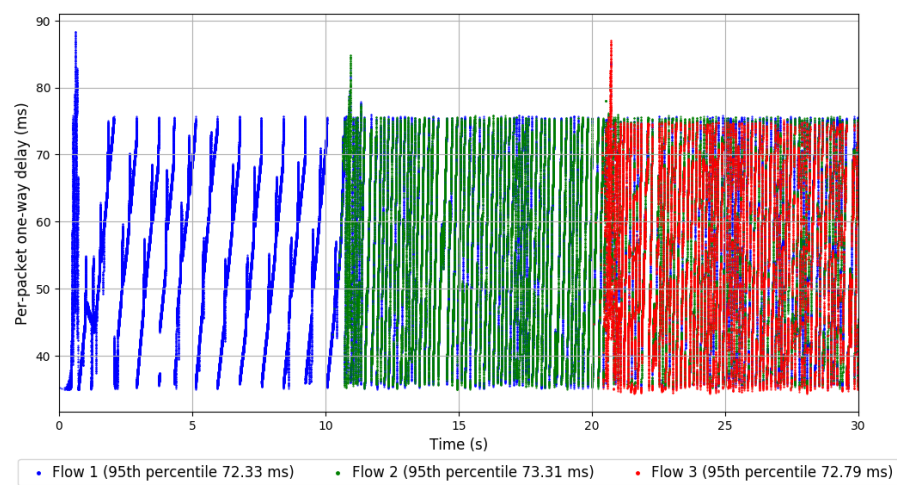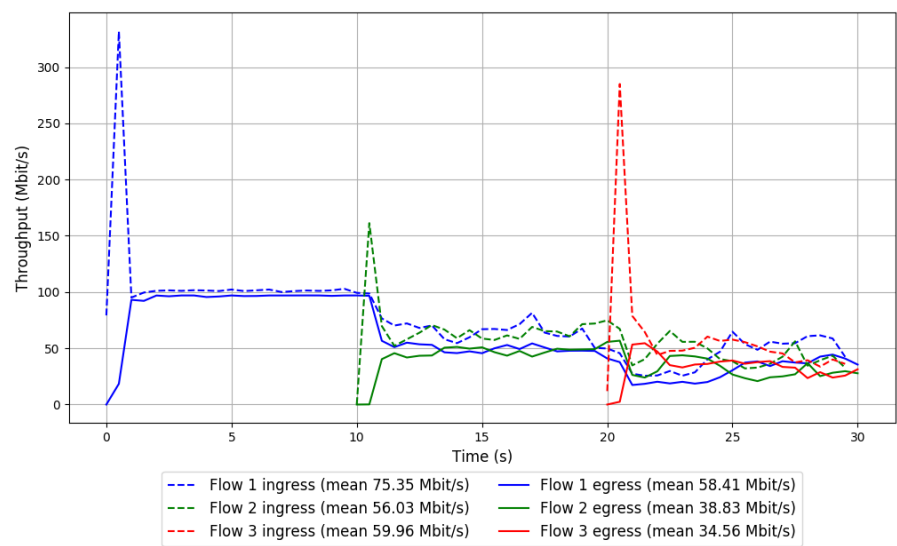
Run 5: Report of FillP — Data Link

```
Run 6: Statistics of FillP

Start at: 2018-07-24 16:20:00
End at: 2018-07-24 16:20:30
Local clock offset: 0.67 ms
Remote clock offset: 2.544 ms


# Below is generated by plot.py at 2018-07-24 18:21:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.30 Mbit/s
95th percentile per-packet one-way delay: 72.274 ms
Loss rate: 25.98%
-- Flow 1:
Average throughput: 63.35 Mbit/s
95th percentile per-packet one-way delay: 71.977 ms
Loss rate: 20.60%
-- Flow 2:
Average throughput: 35.83 Mbit/s
95th percentile per-packet one-way delay: 72.775 ms
Loss rate: 33.90%
-- Flow 3:
Average throughput: 25.04 Mbit/s
95th percentile per-packet one-way delay: 72.683 ms
Loss rate: 37.10%
```
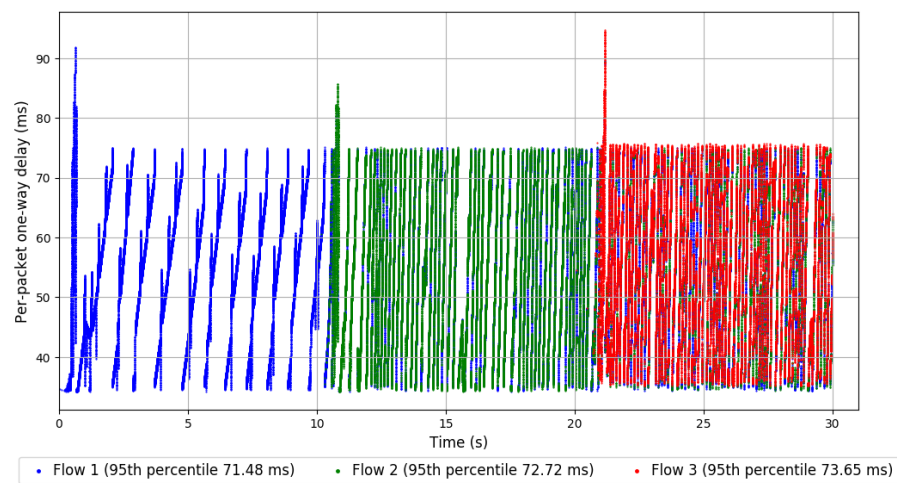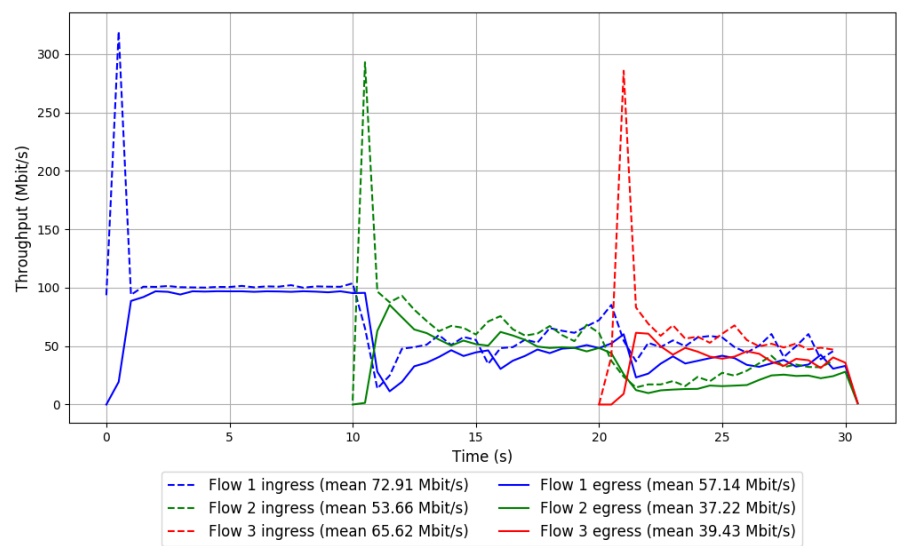
Run 6: Report of FillP — Data Link

Flow 1 ingress (mean 79.81 Mbit/s) --- Flow 1 egress (mean 63.35 Mbit/s)
Flow 2 ingress (mean 54.18 Mbit/s) --- Flow 2 egress (mean 35.83 Mbit/s)
Flow 3 ingress (mean 38.91 Mbit/s) --- Flow 3 egress (mean 25.04 Mbit/s)

Flow 1 (95th percentile 71.98 ms) • Flow 2 (95th percentile 72.78 ms) • Flow 3 (95th percentile 72.68 ms)

```
Run 7: Statistics of FillP

Start at: 2018-07-24 16:43:00
End at: 2018-07-24 16:43:30
Local clock offset: 0.907 ms
Remote clock offset: 2.878 ms


# Below is generated by plot.py at 2018-07-24 18:22:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.45 Mbit/s
95th percentile per-packet one-way delay: 72.678 ms
Loss rate: 27.96%
-- Flow 1:
Average throughput: 58.41 Mbit/s
95th percentile per-packet one-way delay: 72.329 ms
Loss rate: 22.45%
-- Flow 2:
Average throughput: 38.83 Mbit/s
95th percentile per-packet one-way delay: 73.311 ms
Loss rate: 31.40%
-- Flow 3:
Average throughput: 34.56 Mbit/s
95th percentile per-packet one-way delay: 72.790 ms
Loss rate: 42.36%
```
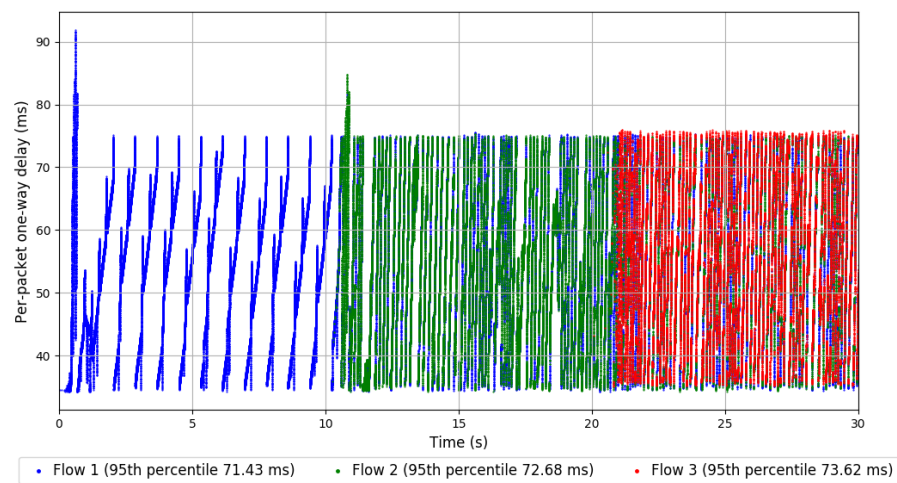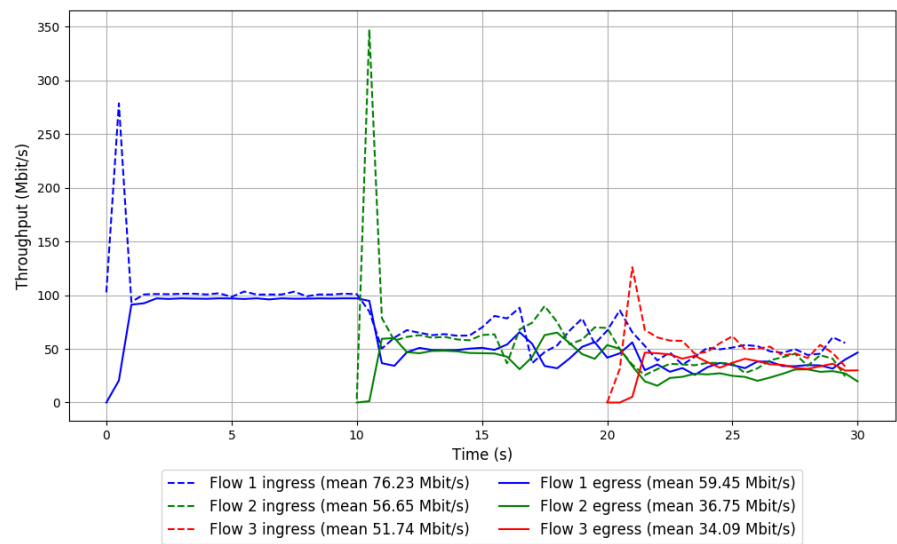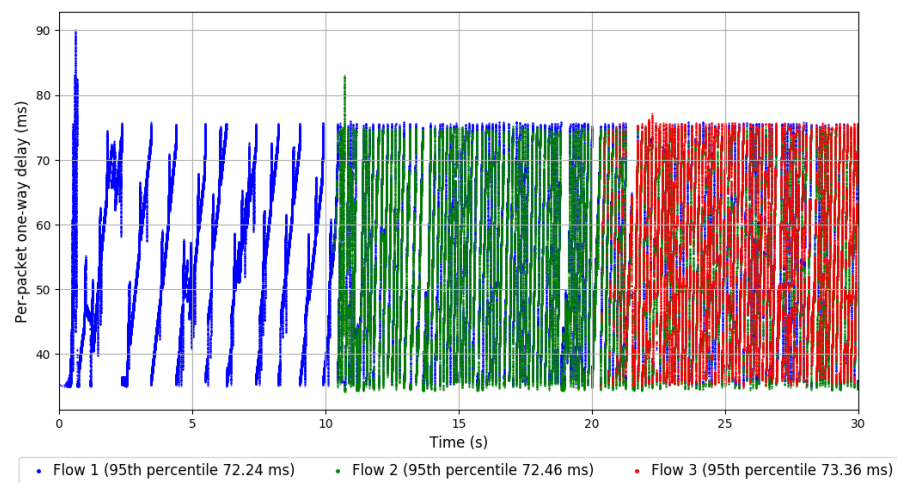
Run 7: Report of FillP — Data Link

Flow 1 ingress (mean 75.35 Mbit/s) --- Flow 1 egress (mean 58.41 Mbit/s)
Flow 2 ingress (mean 56.03 Mbit/s) --- Flow 2 egress (mean 38.83 Mbit/s)
Flow 3 ingress (mean 59.96 Mbit/s) --- Flow 3 egress (mean 34.56 Mbit/s)

Flow 1 (95th percentile 72.33 ms)   Flow 2 (95th percentile 73.31 ms)   Flow 3 (95th percentile 72.79 ms)

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```
Run 8: Statistics of FillP

Start at: 2018-07-24 17:05:58
End at: 2018-07-24 17:06:28
Local clock offset: 0.665 ms
Remote clock offset: 1.917 ms


# Below is generated by plot.py at 2018-07-24 18:22:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.95 Mbit/s
95th percentile per-packet one-way delay: 72.228 ms
Loss rate: 27.09%
-- Flow 1:
Average throughput: 57.14 Mbit/s
95th percentile per-packet one-way delay: 71.481 ms
Loss rate: 21.56%
-- Flow 2:
Average throughput: 37.22 Mbit/s
95th percentile per-packet one-way delay: 72.716 ms
Loss rate: 30.63%
-- Flow 3:
Average throughput: 39.43 Mbit/s
95th percentile per-packet one-way delay: 73.649 ms
Loss rate: 39.85%
```
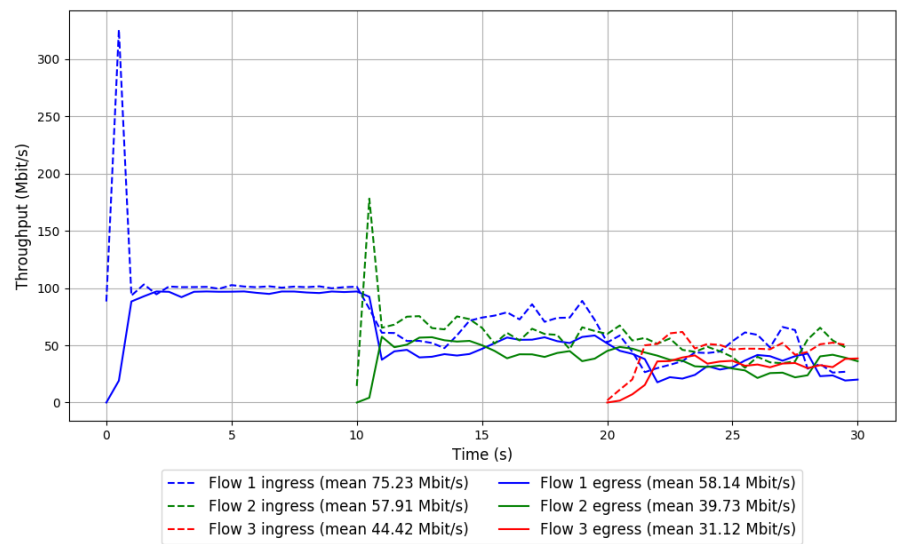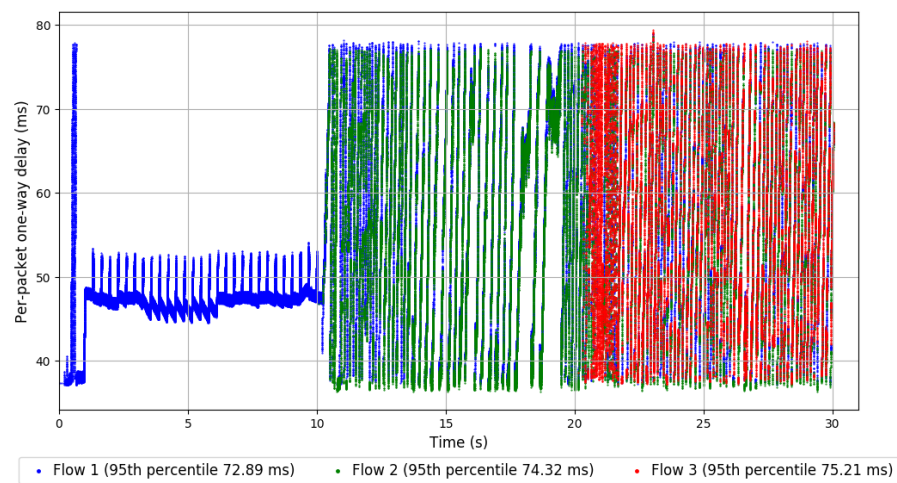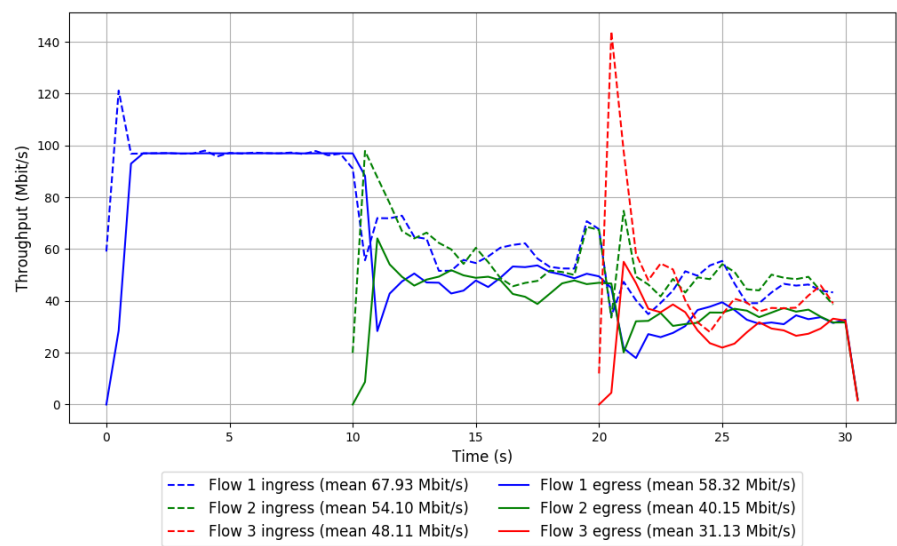
Run 8: Report of FillP — Data Link

Flow 1 ingress (mean 72.91 Mbit/s) --- Flow 1 egress (mean 57.14 Mbit/s)
Flow 2 ingress (mean 53.66 Mbit/s) --- Flow 2 egress (mean 37.22 Mbit/s)
Flow 3 ingress (mean 65.62 Mbit/s) --- Flow 3 egress (mean 39.43 Mbit/s)

Flow 1 (95th percentile 71.48 ms) • Flow 2 (95th percentile 72.72 ms) • Flow 3 (95th percentile 73.65 ms)

79

```
Run 9: Statistics of FillP

Start at: 2018-07-24 17:28:54
End at: 2018-07-24 17:29:24
Local clock offset: 0.14 ms
Remote clock offset: 1.802 ms


# Below is generated by plot.py at 2018-07-24 18:23:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.19 Mbit/s
95th percentile per-packet one-way delay: 72.140 ms
Loss rate: 27.34%
-- Flow 1:
Average throughput: 59.45 Mbit/s
95th percentile per-packet one-way delay: 71.427 ms
Loss rate: 21.97%
-- Flow 2:
Average throughput: 36.75 Mbit/s
95th percentile per-packet one-way delay: 72.677 ms
Loss rate: 35.15%
-- Flow 3:
Average throughput: 34.09 Mbit/s
95th percentile per-packet one-way delay: 73.621 ms
Loss rate: 34.05%
```
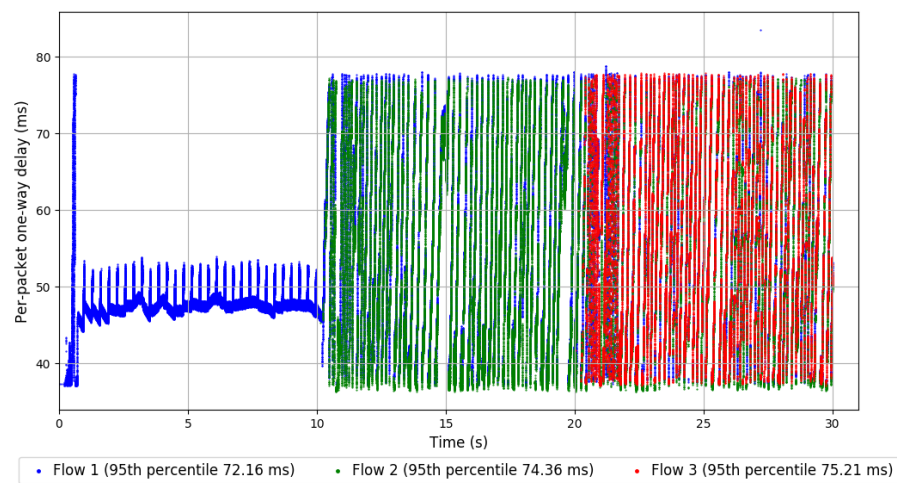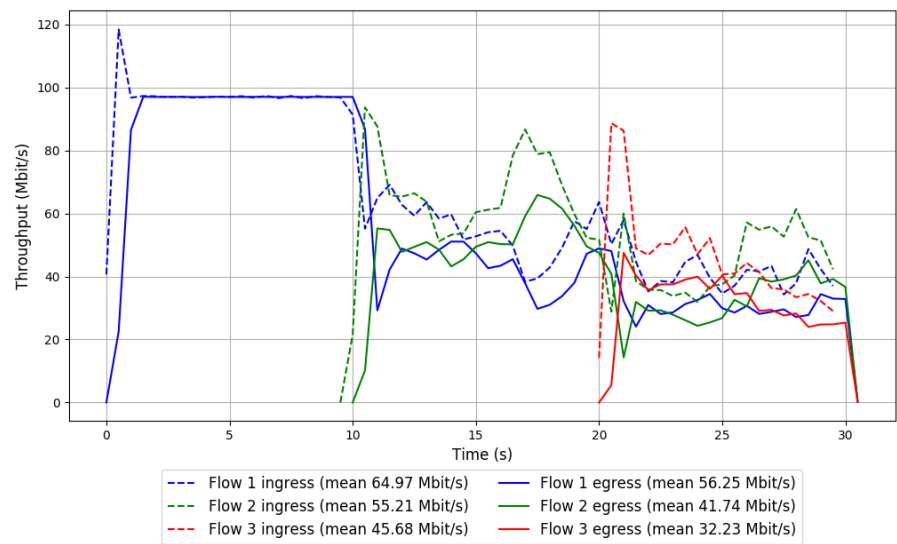
Run 9: Report of FillP — Data Link

Flow 1 ingress (mean 76.23 Mbit/s) --- Flow 1 egress (mean 59.45 Mbit/s)
Flow 2 ingress (mean 56.65 Mbit/s) --- Flow 2 egress (mean 36.75 Mbit/s)
Flow 3 ingress (mean 51.74 Mbit/s) --- Flow 3 egress (mean 34.09 Mbit/s)

Flow 1 (95th percentile 71.43 ms) • Flow 2 (95th percentile 72.68 ms) • Flow 3 (95th percentile 73.62 ms)

```
Run 10: Statistics of FillP

Start at: 2018-07-24 17:51:45
End at: 2018-07-24 17:52:15
Local clock offset: 3.657 ms
Remote clock offset: 1.695 ms

# Below is generated by plot.py at 2018-07-24 18:23:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.90 Mbit/s
95th percentile per-packet one-way delay: 72.455 ms
Loss rate: 26.16%
-- Flow 1:
Average throughput: 58.14 Mbit/s
95th percentile per-packet one-way delay: 72.240 ms
Loss rate: 22.71%
-- Flow 2:
Average throughput: 39.73 Mbit/s
95th percentile per-packet one-way delay: 72.456 ms
Loss rate: 31.41%
-- Flow 3:
Average throughput: 31.12 Mbit/s
95th percentile per-packet one-way delay: 73.360 ms
Loss rate: 30.07%
```
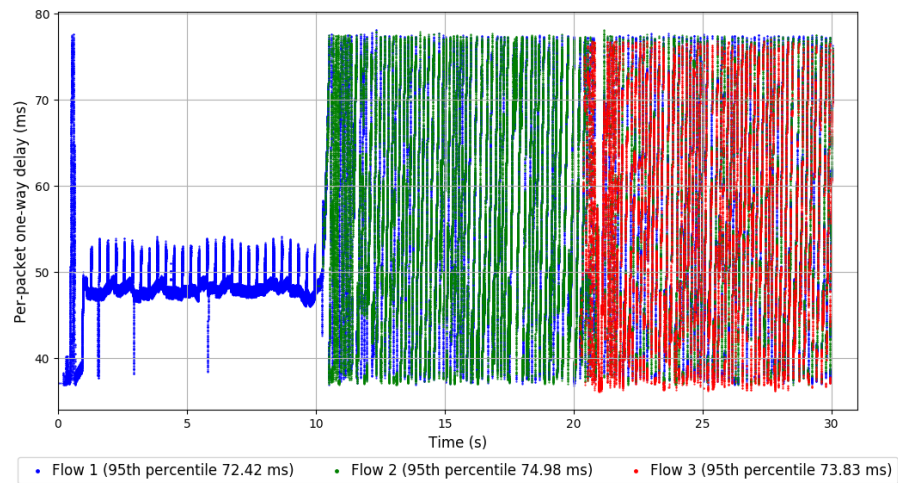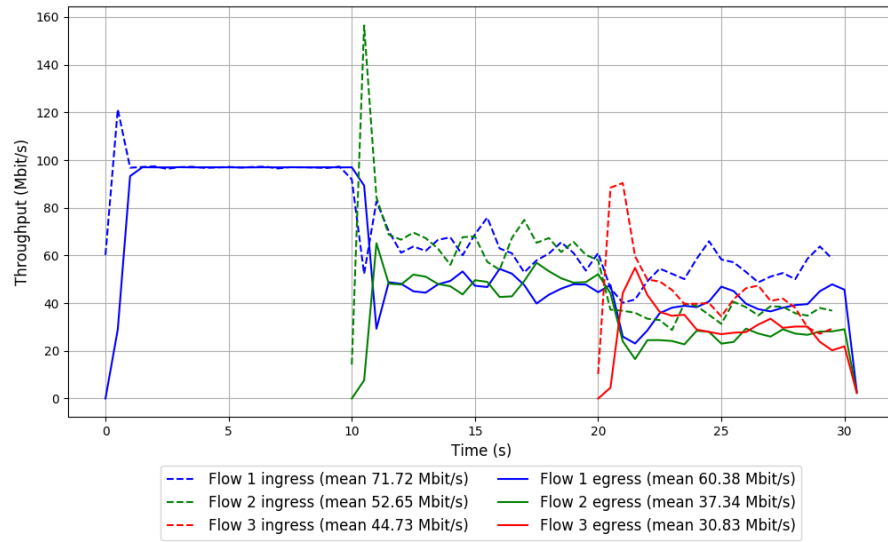
Run 10: Report of FillP — Data Link

- - - Flow 1 ingress (mean 75.23 Mbit/s) —— Flow 1 egress (mean 58.14 Mbit/s)
- - - Flow 2 ingress (mean 57.91 Mbit/s) —— Flow 2 egress (mean 39.73 Mbit/s)
- - - Flow 3 ingress (mean 44.42 Mbit/s) —— Flow 3 egress (mean 31.12 Mbit/s)

• Flow 1 (95th percentile 72.24 ms)   • Flow 2 (95th percentile 72.46 ms)   • Flow 3 (95th percentile 73.36 ms)

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```
Run 1: Statistics of FillP-Sheep

Start at: 2018-07-24 14:26:15
End at: 2018-07-24 14:26:45
Local clock offset: 0.625 ms
Remote clock offset: 4.406 ms


# Below is generated by plot.py at 2018-07-24 18:23:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.37 Mbit/s
95th percentile per-packet one-way delay: 73.774 ms
Loss rate: 20.39%
-- Flow 1:
Average throughput: 58.32 Mbit/s
95th percentile per-packet one-way delay: 72.894 ms
Loss rate: 14.07%
-- Flow 2:
Average throughput: 40.15 Mbit/s
95th percentile per-packet one-way delay: 74.316 ms
Loss rate: 25.71%
-- Flow 3:
Average throughput: 31.13 Mbit/s
95th percentile per-packet one-way delay: 75.214 ms
Loss rate: 35.25%
```
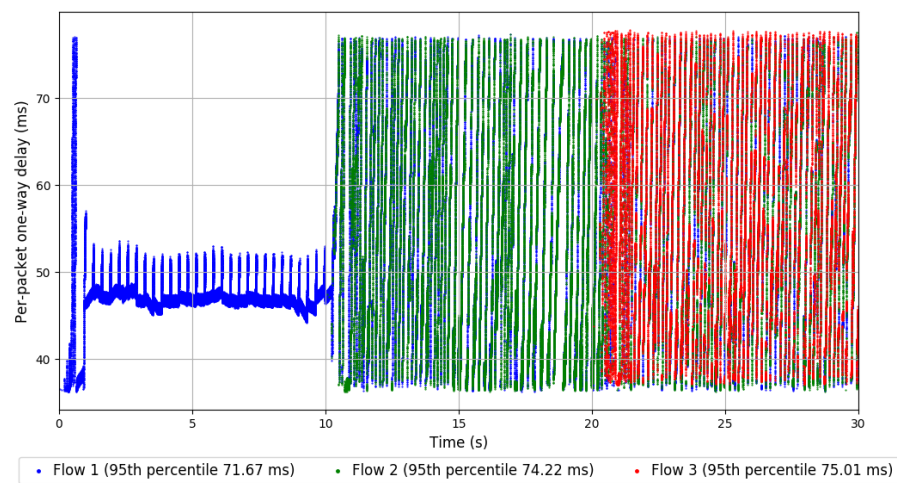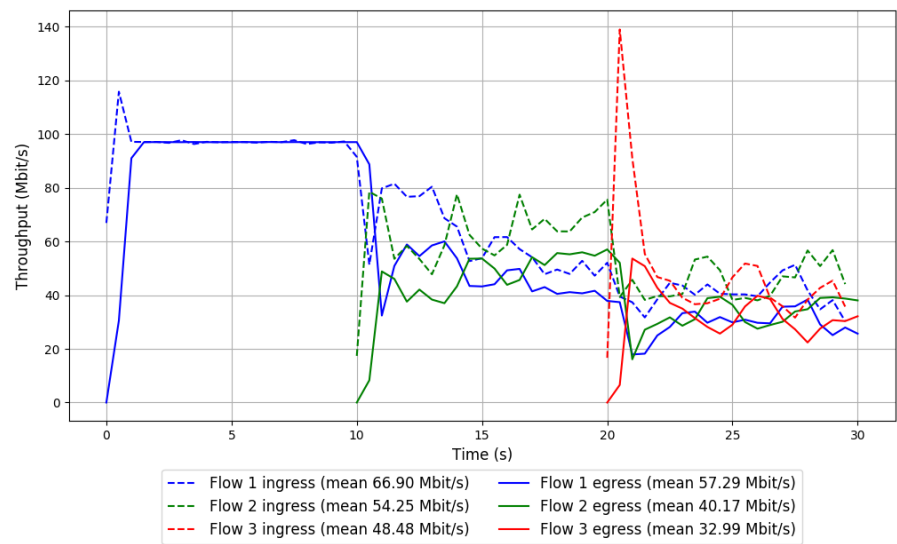
Run 1: Report of FillP-Sheep — Data Link

```
Run 2: Statistics of FillP-Sheep

Start at: 2018-07-24 14:49:16
End at: 2018-07-24 14:49:46
Local clock offset: 4.205 ms
Remote clock offset: 4.478 ms


# Below is generated by plot.py at 2018-07-24 18:23:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.76 Mbit/s
95th percentile per-packet one-way delay: 73.605 ms
Loss rate: 18.91%
-- Flow 1:
Average throughput: 56.25 Mbit/s
95th percentile per-packet one-way delay: 72.160 ms
Loss rate: 13.37%
-- Flow 2:
Average throughput: 41.74 Mbit/s
95th percentile per-packet one-way delay: 74.359 ms
Loss rate: 24.38%
-- Flow 3:
Average throughput: 32.23 Mbit/s
95th percentile per-packet one-way delay: 75.214 ms
Loss rate: 29.37%
```
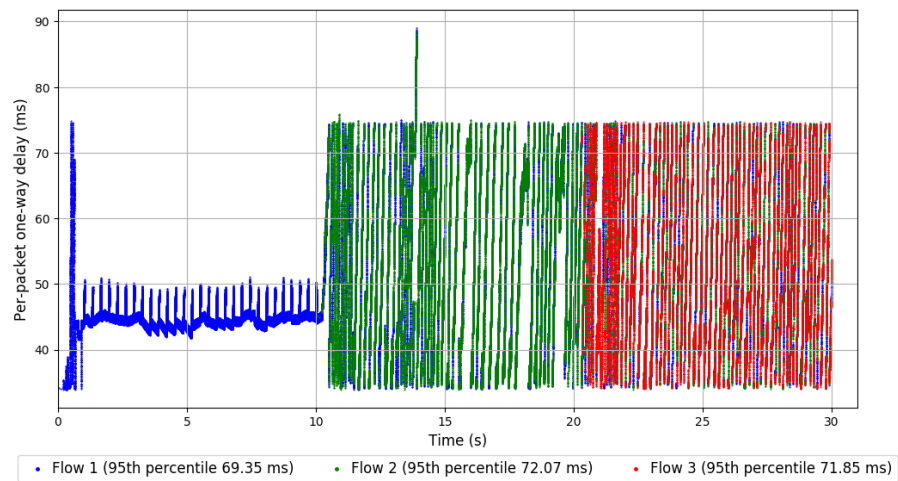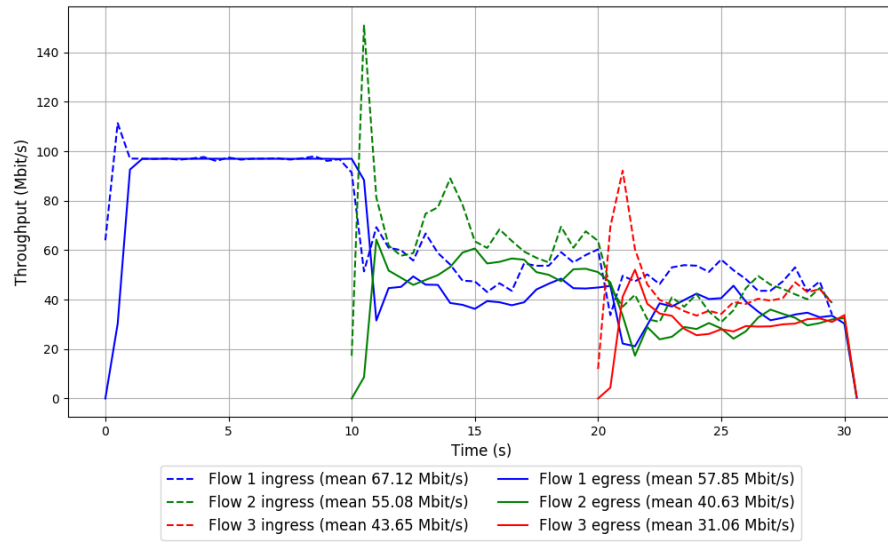
Run 2: Report of FillP-Sheep — Data Link

- - - Flow 1 ingress (mean 64.97 Mbit/s) —— Flow 1 egress (mean 56.25 Mbit/s)
- - - Flow 2 ingress (mean 55.21 Mbit/s) —— Flow 2 egress (mean 41.74 Mbit/s)
- - - Flow 3 ingress (mean 45.68 Mbit/s) —— Flow 3 egress (mean 32.23 Mbit/s)

• Flow 1 (95th percentile 72.16 ms)   • Flow 2 (95th percentile 74.36 ms)   • Flow 3 (95th percentile 75.21 ms)

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```
Run 3: Statistics of FillP-Sheep

Start at: 2018-07-24 15:12:27
End at: 2018-07-24 15:12:57
Local clock offset: 1.754 ms
Remote clock offset: 4.233 ms


# Below is generated by plot.py at 2018-07-24 18:23:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.48 Mbit/s
95th percentile per-packet one-way delay: 73.657 ms
Loss rate: 21.38%
-- Flow 1:
Average throughput: 60.38 Mbit/s
95th percentile per-packet one-way delay: 72.419 ms
Loss rate: 15.70%
-- Flow 2:
Average throughput: 37.34 Mbit/s
95th percentile per-packet one-way delay: 74.980 ms
Loss rate: 28.99%
-- Flow 3:
Average throughput: 30.83 Mbit/s
95th percentile per-packet one-way delay: 73.834 ms
Loss rate: 30.83%
```
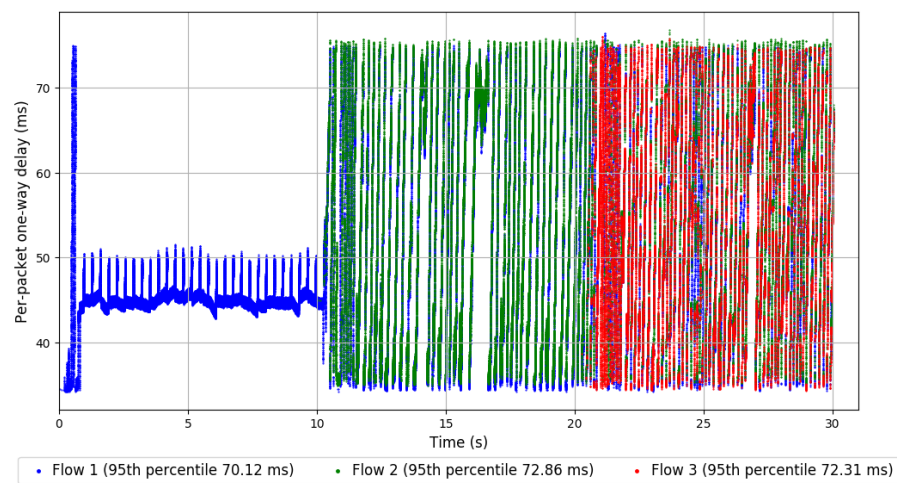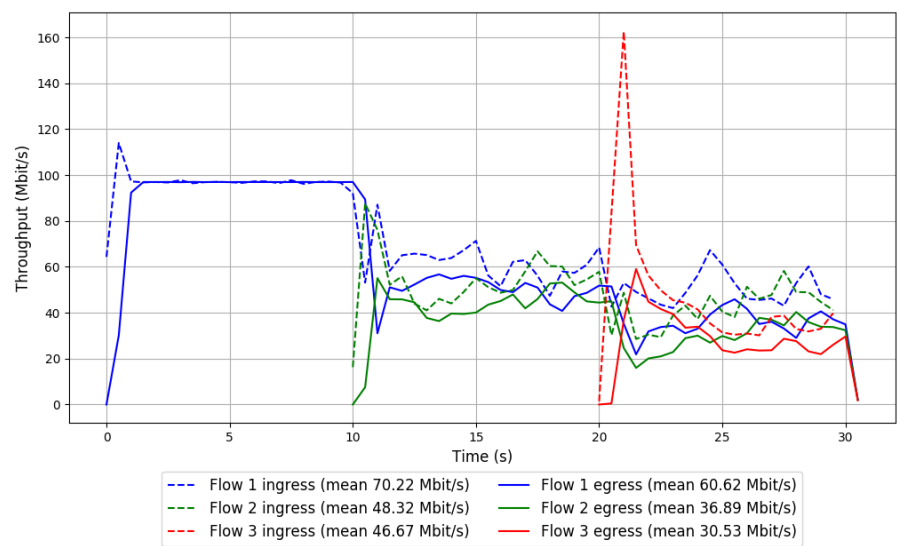
Run 3: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 71.72 Mbit/s) — — —   Flow 1 egress (mean 60.38 Mbit/s) ——
Flow 2 ingress (mean 52.65 Mbit/s) — — —   Flow 2 egress (mean 37.34 Mbit/s) ——
Flow 3 ingress (mean 44.73 Mbit/s) — — —   Flow 3 egress (mean 30.83 Mbit/s) ——

Flow 1 (95th percentile 72.42 ms)   Flow 2 (95th percentile 74.98 ms)   Flow 3 (95th percentile 73.83 ms)

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```
Run 4: Statistics of FillP-Sheep

Start at: 2018-07-24 15:35:25
End at: 2018-07-24 15:35:55
Local clock offset: -0.046 ms
Remote clock offset: 4.306 ms


# Below is generated by plot.py at 2018-07-24 18:23:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.97 Mbit/s
95th percentile per-packet one-way delay: 73.320 ms
Loss rate: 20.24%
-- Flow 1:
Average throughput: 57.29 Mbit/s
95th percentile per-packet one-way delay: 71.672 ms
Loss rate: 14.35%
-- Flow 2:
Average throughput: 40.17 Mbit/s
95th percentile per-packet one-way delay: 74.225 ms
Loss rate: 25.95%
-- Flow 3:
Average throughput: 32.99 Mbit/s
95th percentile per-packet one-way delay: 75.008 ms
Loss rate: 31.95%
```
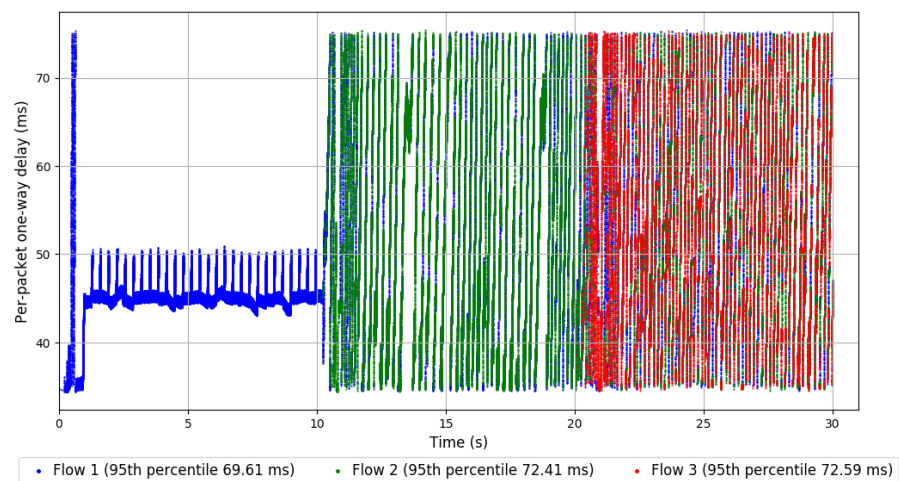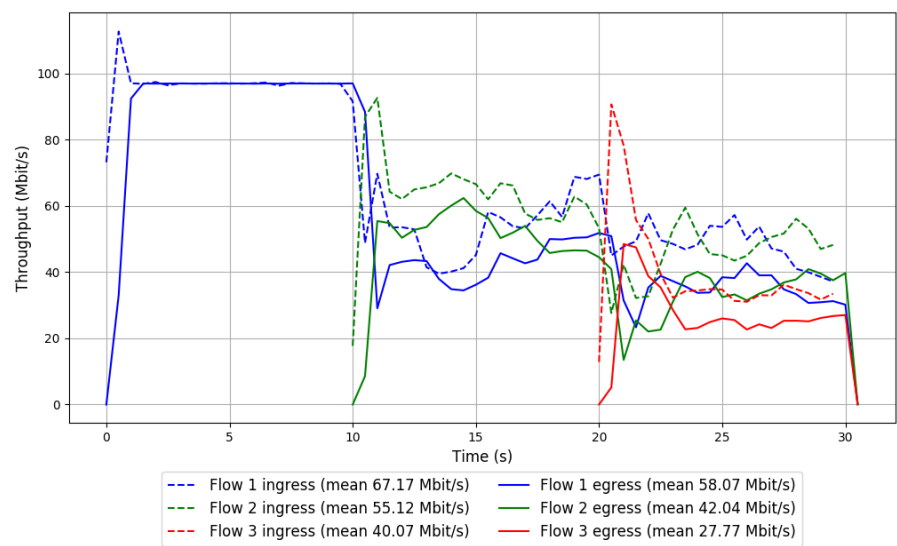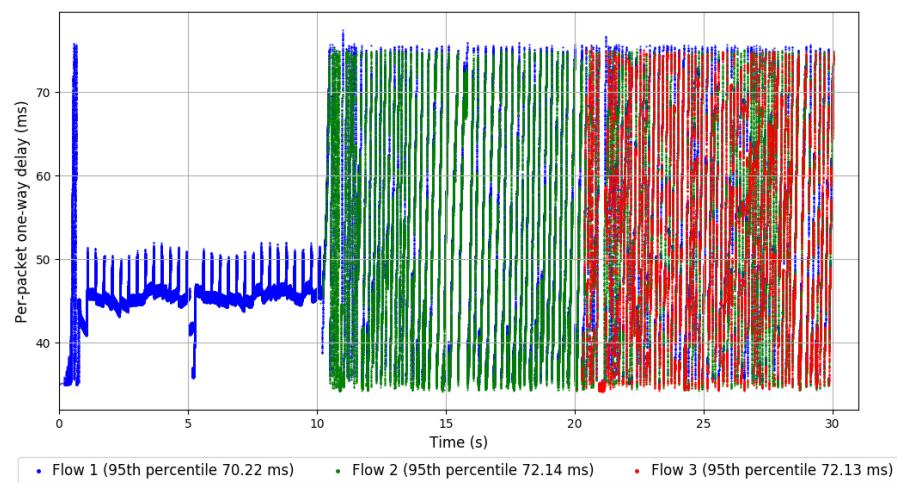
Run 4: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 66.90 Mbit/s) — — — Flow 1 egress (mean 57.29 Mbit/s) ——
Flow 2 ingress (mean 54.25 Mbit/s) — — — Flow 2 egress (mean 40.17 Mbit/s) ——
Flow 3 ingress (mean 48.48 Mbit/s) — — — Flow 3 egress (mean 32.99 Mbit/s) ——

Flow 1 (95th percentile 71.67 ms) • Flow 2 (95th percentile 74.22 ms) • Flow 3 (95th percentile 75.01 ms)

```
Run 5: Statistics of FillP-Sheep

Start at: 2018-07-24 15:58:30
End at: 2018-07-24 15:59:00
Local clock offset: -0.47 ms
Remote clock offset: 2.158 ms


# Below is generated by plot.py at 2018-07-24 18:23:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.18 Mbit/s
95th percentile per-packet one-way delay: 70.876 ms
Loss rate: 19.46%
-- Flow 1:
Average throughput: 57.85 Mbit/s
95th percentile per-packet one-way delay: 69.352 ms
Loss rate: 13.75%
-- Flow 2:
Average throughput: 40.63 Mbit/s
95th percentile per-packet one-way delay: 72.069 ms
Loss rate: 26.19%
-- Flow 3:
Average throughput: 31.06 Mbit/s
95th percentile per-packet one-way delay: 71.850 ms
Loss rate: 28.89%
```
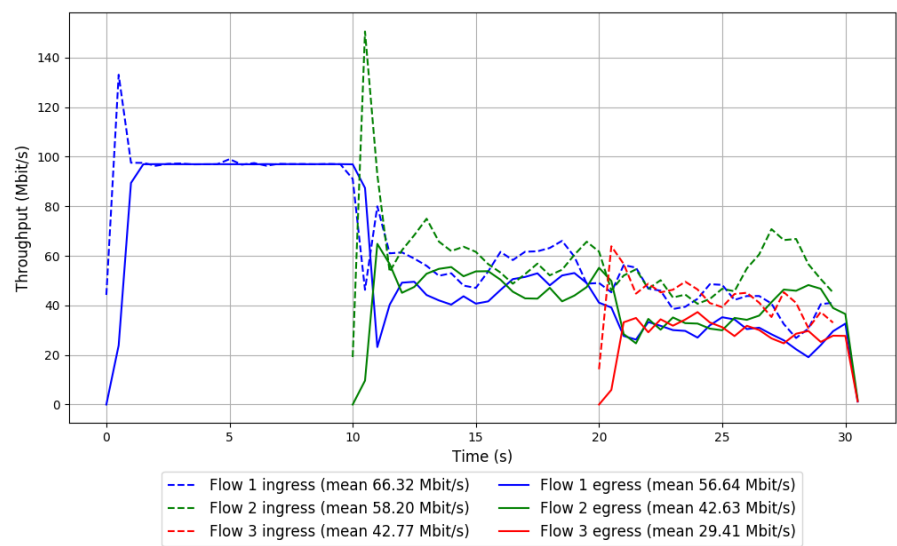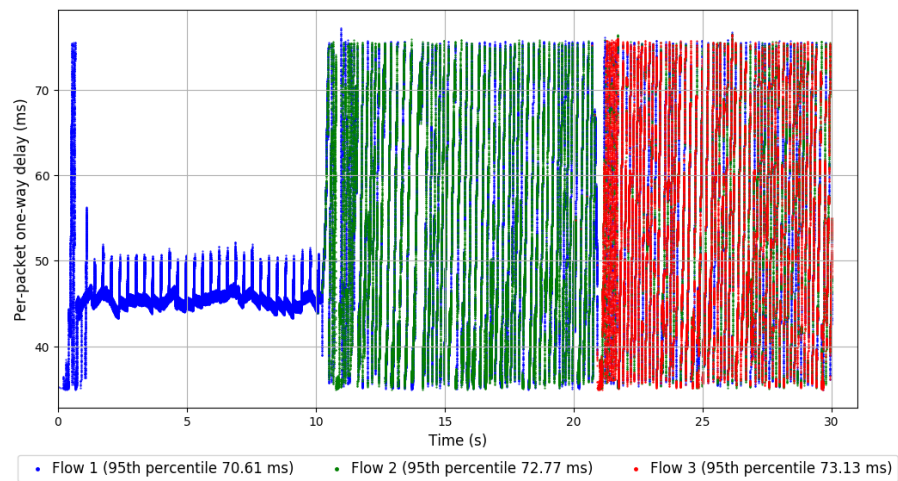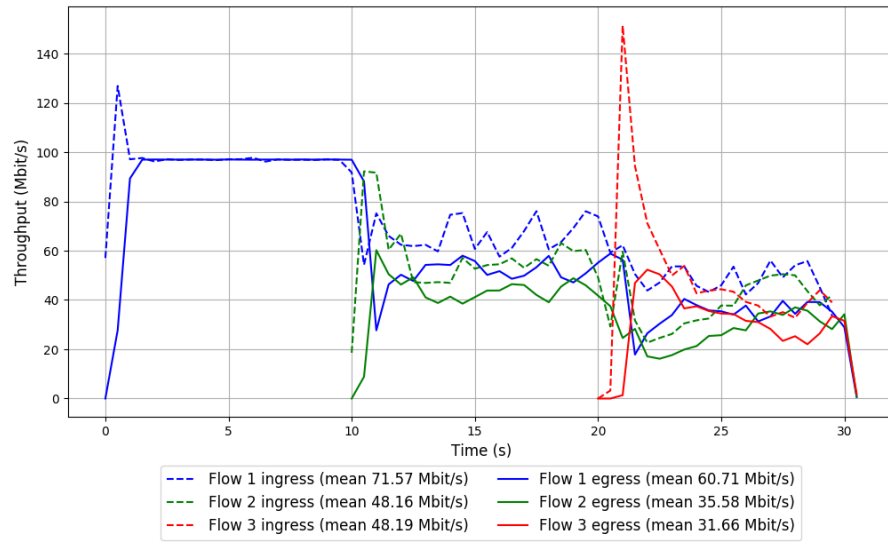
Run 5: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 67.12 Mbit/s) --- Flow 1 egress (mean 57.85 Mbit/s)
Flow 2 ingress (mean 55.08 Mbit/s) --- Flow 2 egress (mean 40.63 Mbit/s)
Flow 3 ingress (mean 43.65 Mbit/s) --- Flow 3 egress (mean 31.06 Mbit/s)

Flow 1 (95th percentile 69.35 ms)   Flow 2 (95th percentile 72.07 ms)   Flow 3 (95th percentile 71.85 ms)

```
Run 6: Statistics of FillP-Sheep

Start at: 2018-07-24 16:21:22
End at: 2018-07-24 16:21:52
Local clock offset: 0.788 ms
Remote clock offset: 2.528 ms


# Below is generated by plot.py at 2018-07-24 18:23:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.11 Mbit/s
95th percentile per-packet one-way delay: 71.463 ms
Loss rate: 19.21%
-- Flow 1:
Average throughput: 60.62 Mbit/s
95th percentile per-packet one-way delay: 70.119 ms
Loss rate: 13.58%
-- Flow 2:
Average throughput: 36.89 Mbit/s
95th percentile per-packet one-way delay: 72.864 ms
Loss rate: 23.55%
-- Flow 3:
Average throughput: 30.53 Mbit/s
95th percentile per-packet one-way delay: 72.311 ms
Loss rate: 35.71%
```
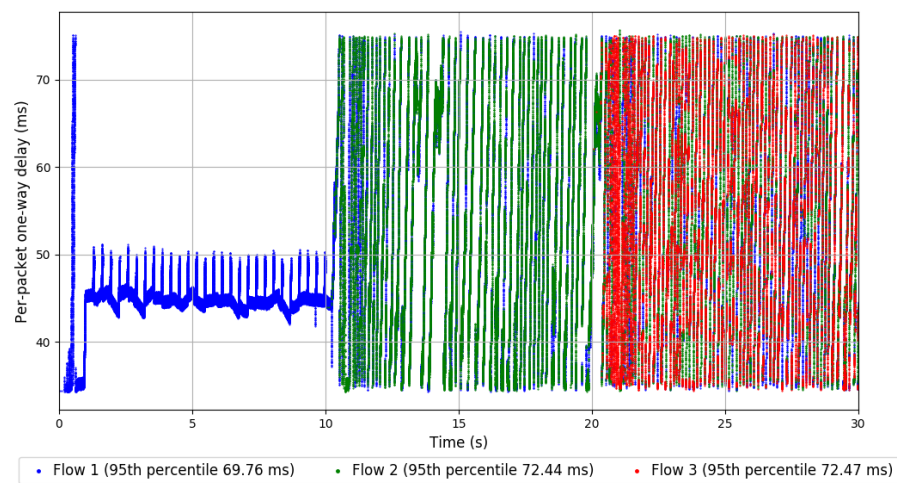
Run 6: Report of FillP-Sheep — Data Link

```
Run 7: Statistics of FillP-Sheep

Start at: 2018-07-24 16:44:21
End at: 2018-07-24 16:44:51
Local clock offset: 0.817 ms
Remote clock offset: 2.919 ms


# Below is generated by plot.py at 2018-07-24 18:24:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.25 Mbit/s
95th percentile per-packet one-way delay: 71.309 ms
Loss rate: 18.66%
-- Flow 1:
Average throughput: 58.07 Mbit/s
95th percentile per-packet one-way delay: 69.614 ms
Loss rate: 13.51%
-- Flow 2:
Average throughput: 42.04 Mbit/s
95th percentile per-packet one-way delay: 72.410 ms
Loss rate: 23.73%
-- Flow 3:
Average throughput: 27.77 Mbit/s
95th percentile per-packet one-way delay: 72.594 ms
Loss rate: 30.65%
```
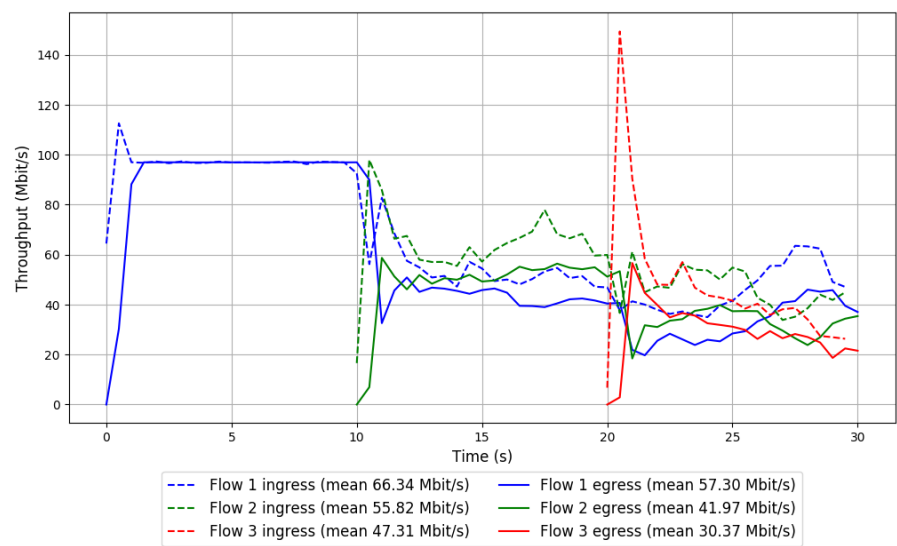
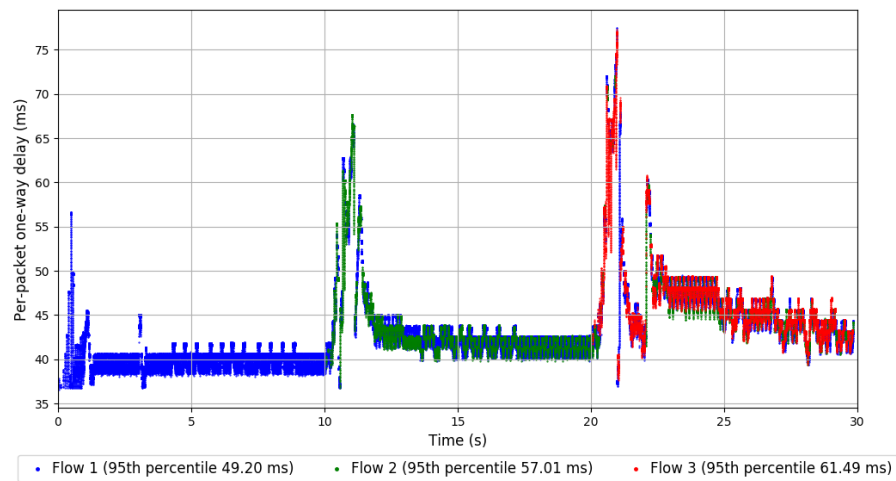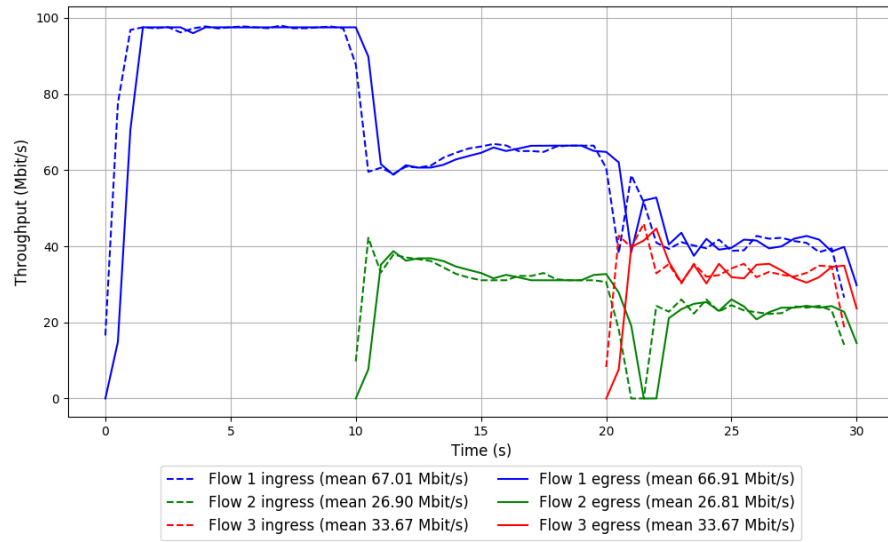Run 7: Report of FillP-Sheep — Data Link

```
Run 8: Statistics of FillP-Sheep

Start at: 2018-07-24 17:07:19
End at: 2018-07-24 17:07:49
Local clock offset: 0.73 ms
Remote clock offset: 1.987 ms


# Below is generated by plot.py at 2018-07-24 18:24:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.79 Mbit/s
95th percentile per-packet one-way delay: 71.293 ms
Loss rate: 20.42%
-- Flow 1:
Average throughput: 56.64 Mbit/s
95th percentile per-packet one-way delay: 70.215 ms
Loss rate: 14.52%
-- Flow 2:
Average throughput: 42.63 Mbit/s
95th percentile per-packet one-way delay: 72.145 ms
Loss rate: 26.66%
-- Flow 3:
Average throughput: 29.41 Mbit/s
95th percentile per-packet one-way delay: 72.134 ms
Loss rate: 30.99%
```

Run 8: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 66.32 Mbit/s) --- Flow 1 egress (mean 56.64 Mbit/s)
Flow 2 ingress (mean 58.20 Mbit/s) --- Flow 2 egress (mean 42.63 Mbit/s)
Flow 3 ingress (mean 42.77 Mbit/s) --- Flow 3 egress (mean 29.41 Mbit/s)

Flow 1 (95th percentile 70.22 ms) Flow 2 (95th percentile 72.14 ms) Flow 3 (95th percentile 72.13 ms)

```
Run 9: Statistics of FillP-Sheep

Start at: 2018-07-24 17:30:15
End at: 2018-07-24 17:30:45
Local clock offset: 0.203 ms
Remote clock offset: 1.755 ms


# Below is generated by plot.py at 2018-07-24 18:24:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.87 Mbit/s
95th percentile per-packet one-way delay: 71.797 ms
Loss rate: 20.63%
-- Flow 1:
Average throughput: 60.71 Mbit/s
95th percentile per-packet one-way delay: 70.606 ms
Loss rate: 15.13%
-- Flow 2:
Average throughput: 35.58 Mbit/s
95th percentile per-packet one-way delay: 72.774 ms
Loss rate: 26.09%
-- Flow 3:
Average throughput: 31.66 Mbit/s
95th percentile per-packet one-way delay: 73.127 ms
Loss rate: 34.32%
```
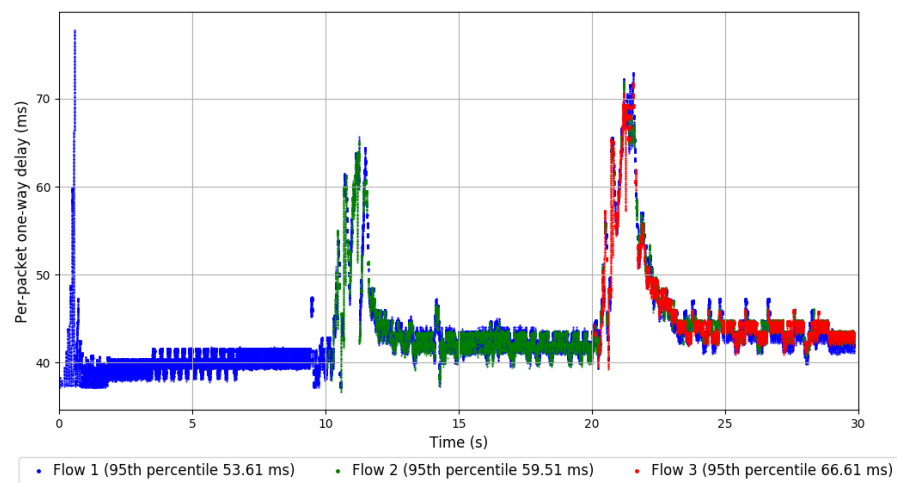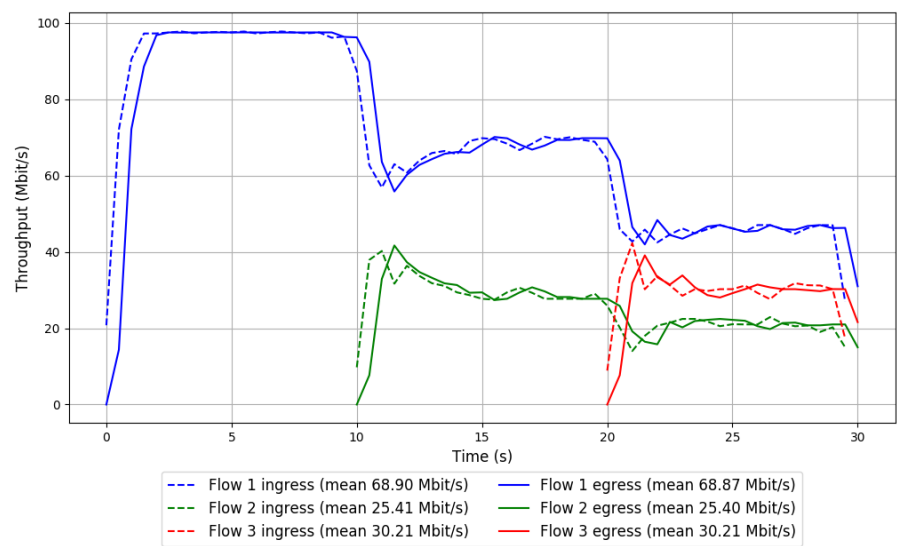
Run 9: Report of FillP-Sheep — Data Link

```
Run 10: Statistics of FillP-Sheep

Start at: 2018-07-24 17:53:08
End at: 2018-07-24 17:53:38
Local clock offset: 3.76 ms
Remote clock offset: 1.772 ms


# Below is generated by plot.py at 2018-07-24 18:24:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.27 Mbit/s
95th percentile per-packet one-way delay: 71.344 ms
Loss rate: 20.03%
-- Flow 1:
Average throughput: 57.30 Mbit/s
95th percentile per-packet one-way delay: 69.760 ms
Loss rate: 13.59%
-- Flow 2:
Average throughput: 41.97 Mbit/s
95th percentile per-packet one-way delay: 72.439 ms
Loss rate: 24.81%
-- Flow 3:
Average throughput: 30.37 Mbit/s
95th percentile per-packet one-way delay: 72.474 ms
Loss rate: 35.92%
```
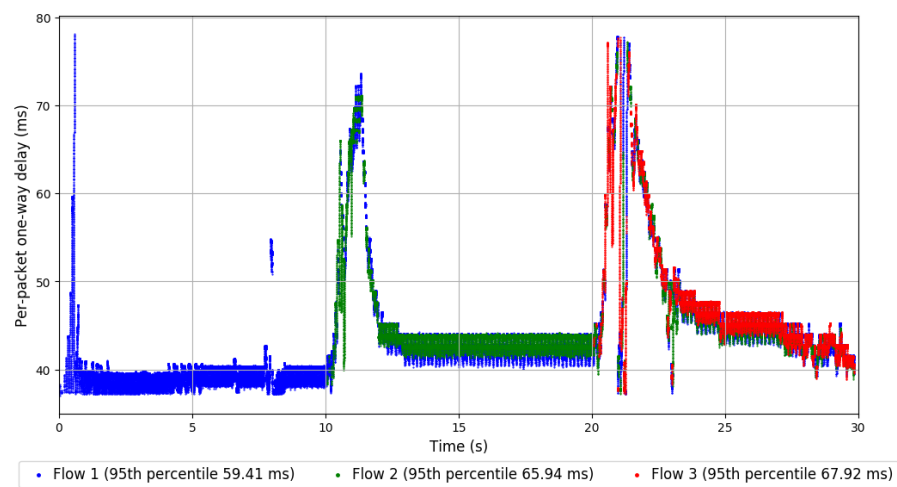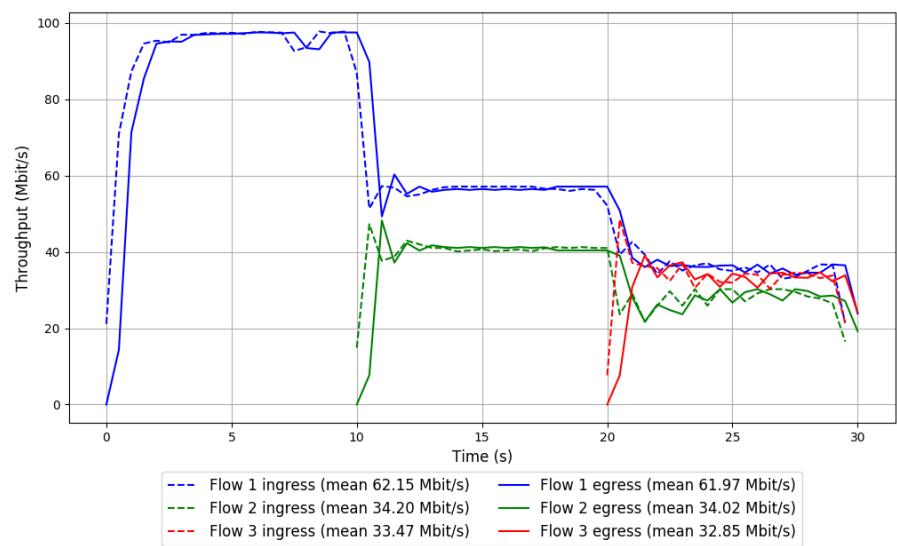
Run 10: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 66.34 Mbit/s)   Flow 1 egress (mean 57.30 Mbit/s)
Flow 2 ingress (mean 55.82 Mbit/s)   Flow 2 egress (mean 41.97 Mbit/s)
Flow 3 ingress (mean 47.31 Mbit/s)   Flow 3 egress (mean 30.37 Mbit/s)

Flow 1 (95th percentile 69.76 ms)   Flow 2 (95th percentile 72.44 ms)   Flow 3 (95th percentile 72.47 ms)

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```
Run 1: Statistics of Indigo

Start at: 2018-07-24 14:34:15
End at: 2018-07-24 14:34:45
Local clock offset: 1.571 ms
Remote clock offset: 4.344 ms


# Below is generated by plot.py at 2018-07-24 18:24:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.70 Mbit/s
95th percentile per-packet one-way delay: 51.938 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 66.91 Mbit/s
95th percentile per-packet one-way delay: 49.196 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 26.81 Mbit/s
95th percentile per-packet one-way delay: 57.012 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 33.67 Mbit/s
95th percentile per-packet one-way delay: 61.486 ms
Loss rate: 0.00%
```
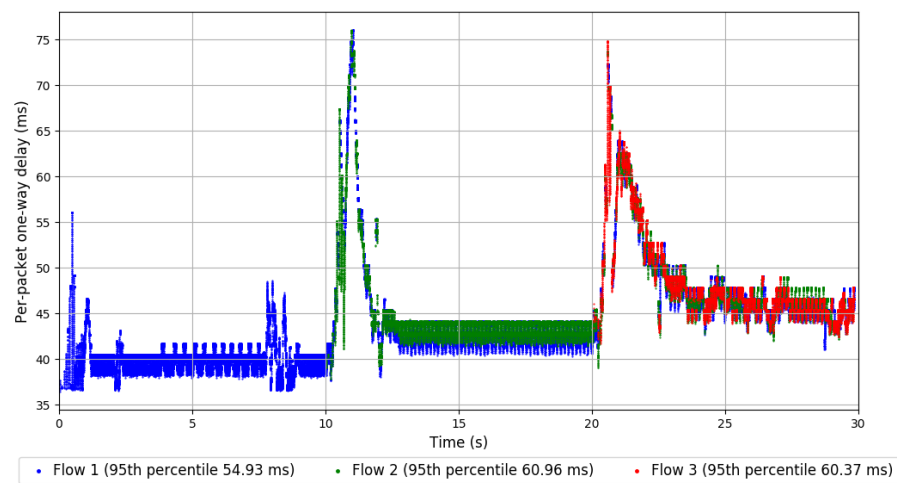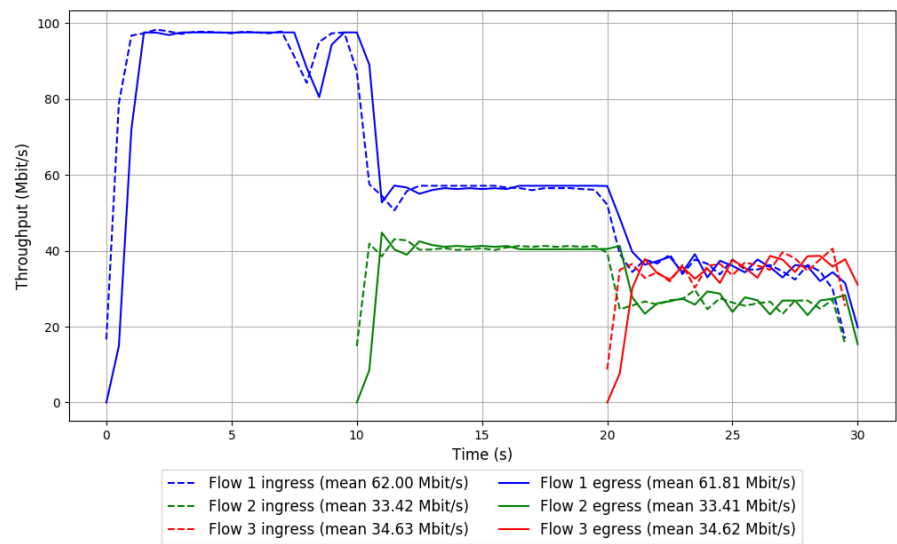
Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2018-07-24 14:57:17
End at: 2018-07-24 14:57:47
Local clock offset: 4.893 ms
Remote clock offset: 4.692 ms


# Below is generated by plot.py at 2018-07-24 18:24:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.57 Mbit/s
95th percentile per-packet one-way delay: 56.787 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 68.87 Mbit/s
95th percentile per-packet one-way delay: 53.607 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 25.40 Mbit/s
95th percentile per-packet one-way delay: 59.505 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.21 Mbit/s
95th percentile per-packet one-way delay: 66.609 ms
Loss rate: 0.00%
```
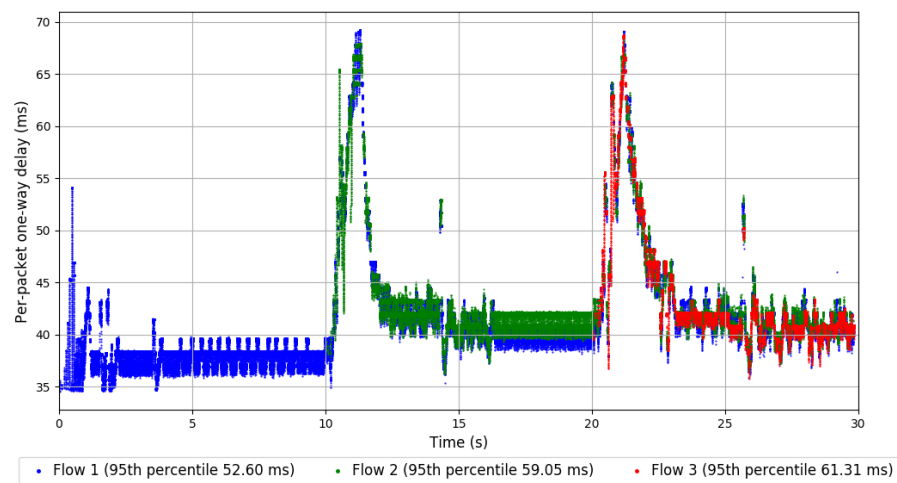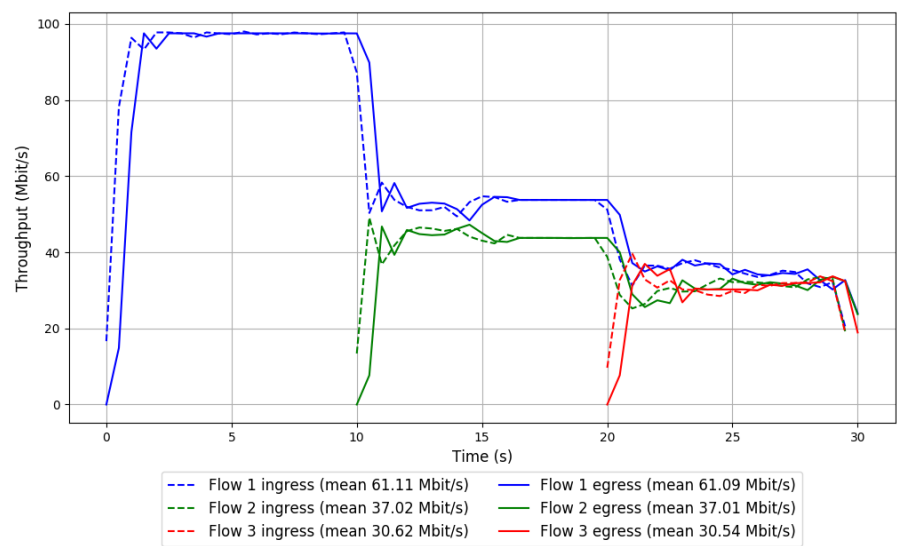
Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2018-07-24 15:20:30
End at: 2018-07-24 15:21:01
Local clock offset: 0.682 ms
Remote clock offset: 4.186 ms


# Below is generated by plot.py at 2018-07-24 18:24:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.28 Mbit/s
95th percentile per-packet one-way delay: 63.397 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 61.97 Mbit/s
95th percentile per-packet one-way delay: 59.405 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 34.02 Mbit/s
95th percentile per-packet one-way delay: 65.936 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 32.85 Mbit/s
95th percentile per-packet one-way delay: 67.921 ms
Loss rate: 1.88%
```
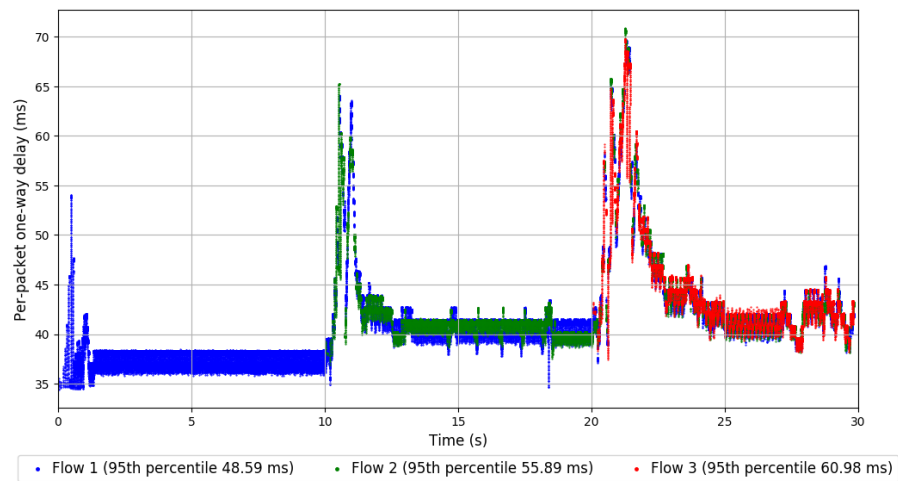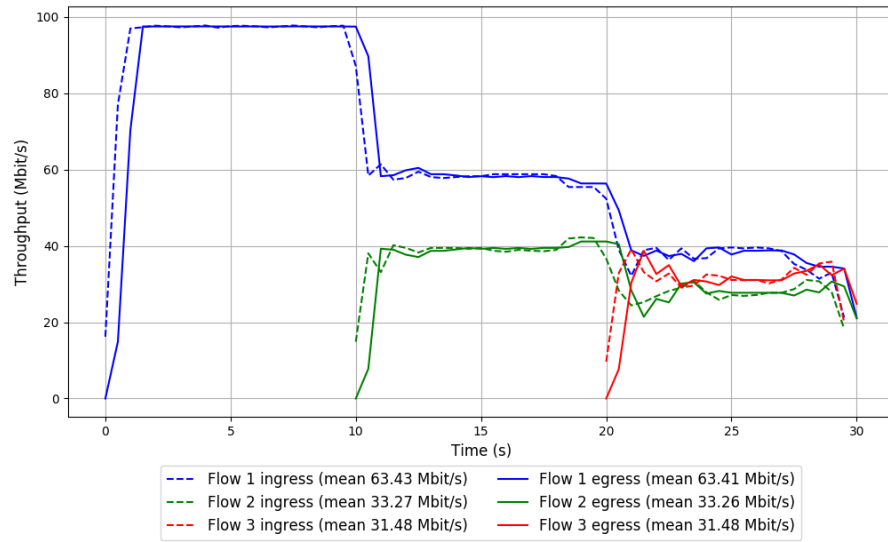
Run 3: Report of Indigo — Data Link

- - - - Flow 1 ingress (mean 62.15 Mbit/s) ——— Flow 1 egress (mean 61.97 Mbit/s)
- - - - Flow 2 ingress (mean 34.20 Mbit/s) ——— Flow 2 egress (mean 34.02 Mbit/s)
- - - - Flow 3 ingress (mean 33.47 Mbit/s) ——— Flow 3 egress (mean 32.85 Mbit/s)

- Flow 1 (95th percentile 59.41 ms)   - Flow 2 (95th percentile 65.94 ms)   - Flow 3 (95th percentile 67.92 ms)

```
Run 4: Statistics of Indigo

Start at: 2018-07-24 15:43:28
End at: 2018-07-24 15:43:58
Local clock offset: -0.236 ms
Remote clock offset: 4.372 ms


# Below is generated by plot.py at 2018-07-24 18:24:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.29 Mbit/s
95th percentile per-packet one-way delay: 57.546 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 61.81 Mbit/s
95th percentile per-packet one-way delay: 54.927 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 33.41 Mbit/s
95th percentile per-packet one-way delay: 60.958 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 34.62 Mbit/s
95th percentile per-packet one-way delay: 60.373 ms
Loss rate: 0.00%
```
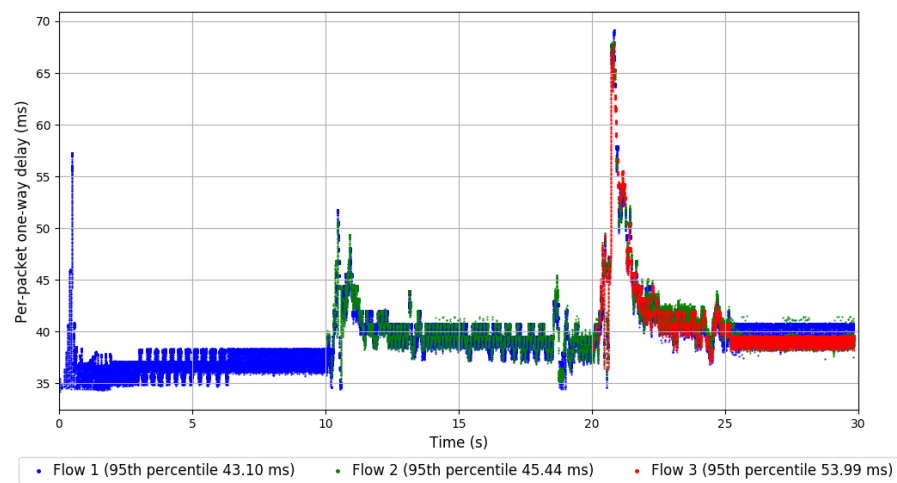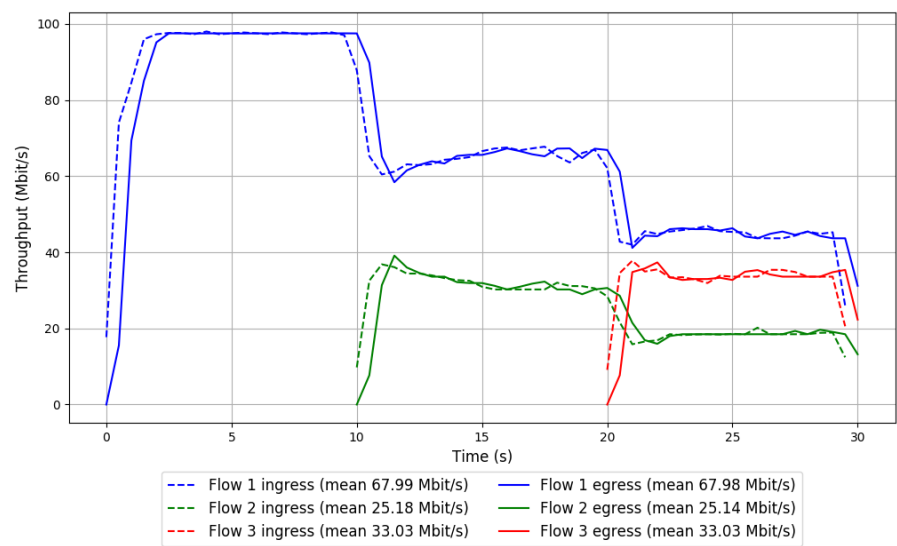
Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2018-07-24 16:06:30
End at: 2018-07-24 16:07:00
Local clock offset: -0.033 ms
Remote clock offset: 2.525 ms


# Below is generated by plot.py at 2018-07-24 18:25:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.67 Mbit/s
95th percentile per-packet one-way delay: 56.528 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 61.09 Mbit/s
95th percentile per-packet one-way delay: 52.604 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 37.01 Mbit/s
95th percentile per-packet one-way delay: 59.049 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.54 Mbit/s
95th percentile per-packet one-way delay: 61.309 ms
Loss rate: 0.23%
```
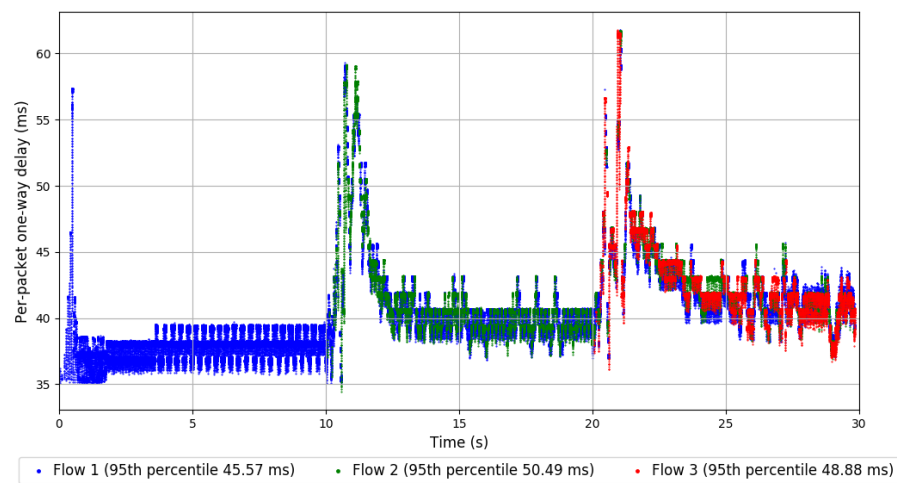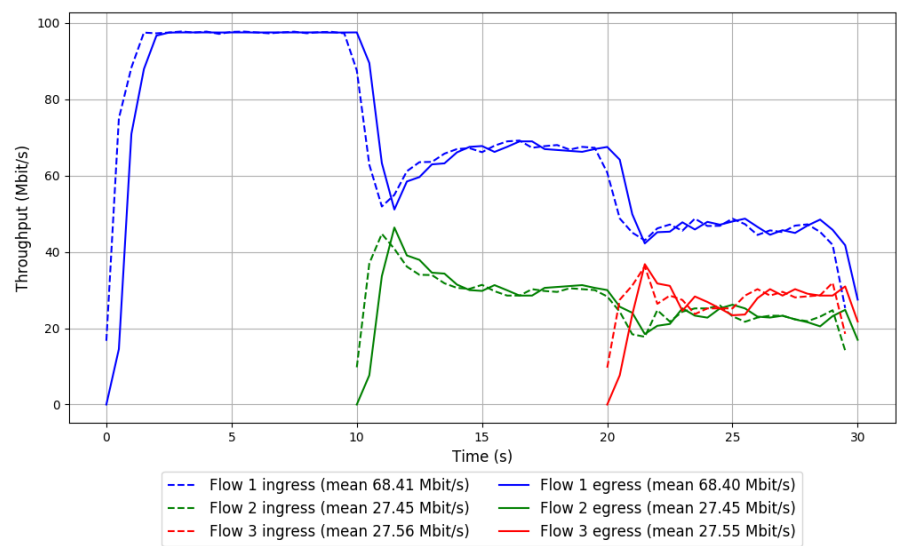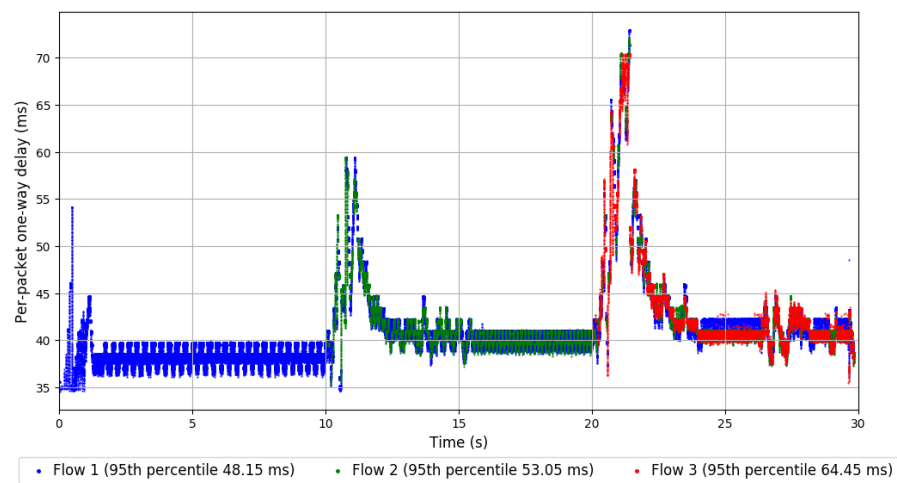
Run 5: Report of Indigo — Data Link

- - - - Flow 1 ingress (mean 61.11 Mbit/s)   —— Flow 1 egress (mean 61.09 Mbit/s)
- - - - Flow 2 ingress (mean 37.02 Mbit/s)   —— Flow 2 egress (mean 37.01 Mbit/s)
- - - - Flow 3 ingress (mean 30.62 Mbit/s)   —— Flow 3 egress (mean 30.54 Mbit/s)

- Flow 1 (95th percentile 52.60 ms)   • Flow 2 (95th percentile 59.05 ms)   • Flow 3 (95th percentile 61.31 ms)

```
Run 6: Statistics of Indigo

Start at: 2018-07-24 16:29:26
End at: 2018-07-24 16:29:56
Local clock offset: 0.856 ms
Remote clock offset: 2.56 ms


# Below is generated by plot.py at 2018-07-24 18:25:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.80 Mbit/s
95th percentile per-packet one-way delay: 52.475 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 63.41 Mbit/s
95th percentile per-packet one-way delay: 48.593 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 33.26 Mbit/s
95th percentile per-packet one-way delay: 55.893 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 31.48 Mbit/s
95th percentile per-packet one-way delay: 60.975 ms
Loss rate: 0.00%
```
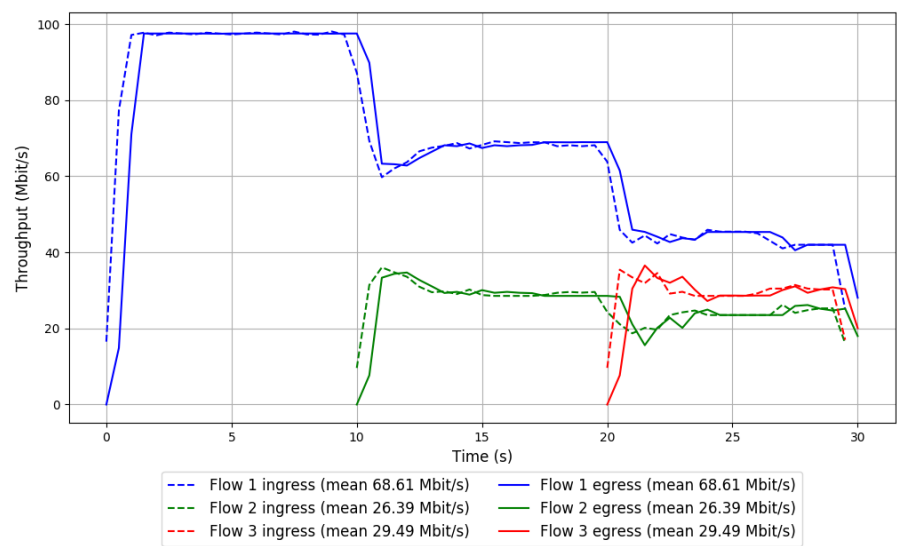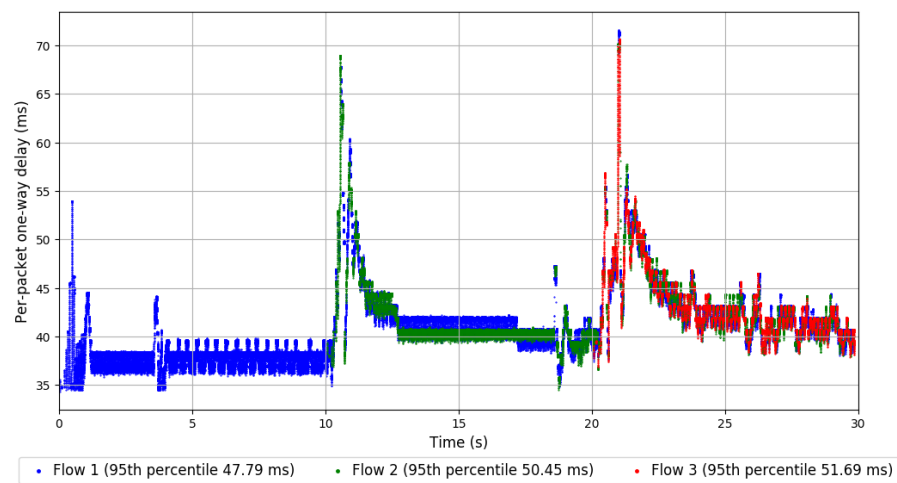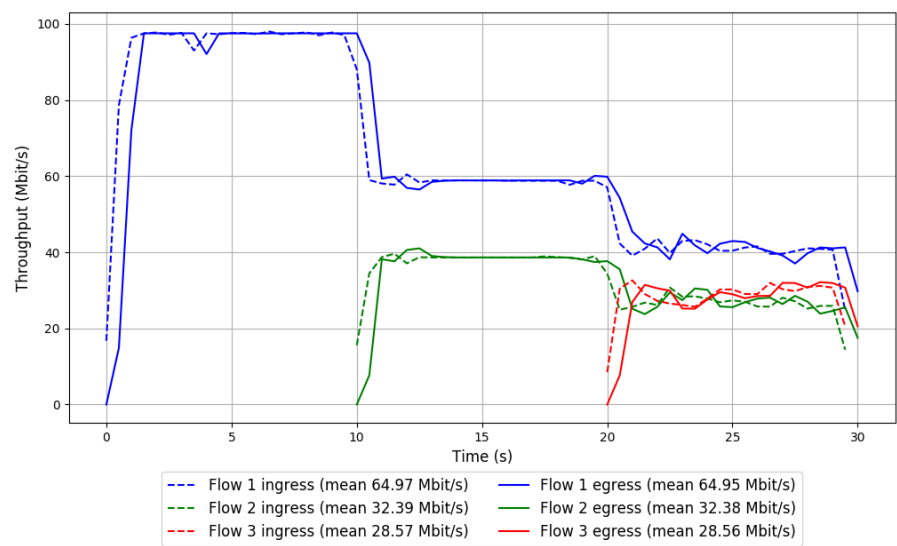
Run 6: Report of Indigo — Data Link

Flow 1 ingress (mean 63.43 Mbit/s) Flow 1 egress (mean 63.41 Mbit/s)
Flow 2 ingress (mean 33.27 Mbit/s) Flow 2 egress (mean 33.26 Mbit/s)
Flow 3 ingress (mean 31.48 Mbit/s) Flow 3 egress (mean 31.48 Mbit/s)

Flow 1 (95th percentile 48.59 ms)   Flow 2 (95th percentile 55.89 ms)   Flow 3 (95th percentile 60.98 ms)

```
Run 7: Statistics of Indigo

Start at: 2018-07-24 16:52:25
End at: 2018-07-24 16:52:55
Local clock offset: 0.966 ms
Remote clock offset: 2.26 ms


# Below is generated by plot.py at 2018-07-24 18:25:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.44 Mbit/s
95th percentile per-packet one-way delay: 44.379 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 67.98 Mbit/s
95th percentile per-packet one-way delay: 43.097 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 25.14 Mbit/s
95th percentile per-packet one-way delay: 45.443 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 33.03 Mbit/s
95th percentile per-packet one-way delay: 53.994 ms
Loss rate: 0.01%
```
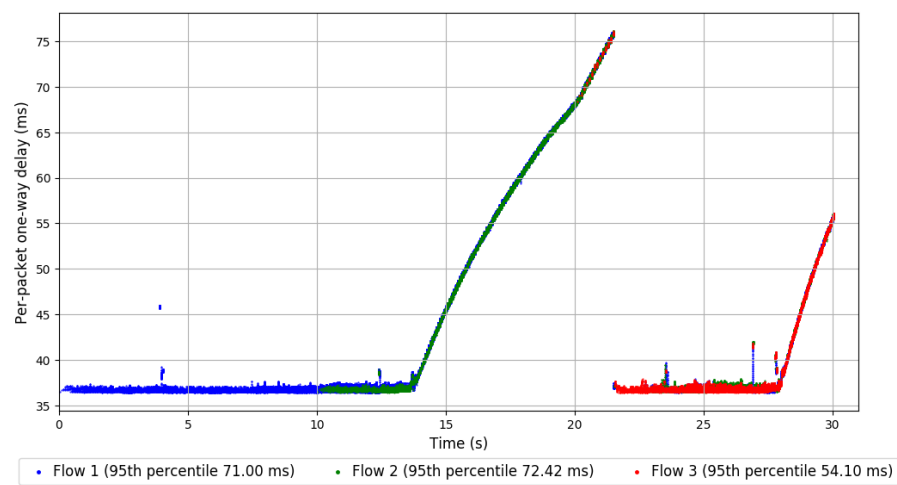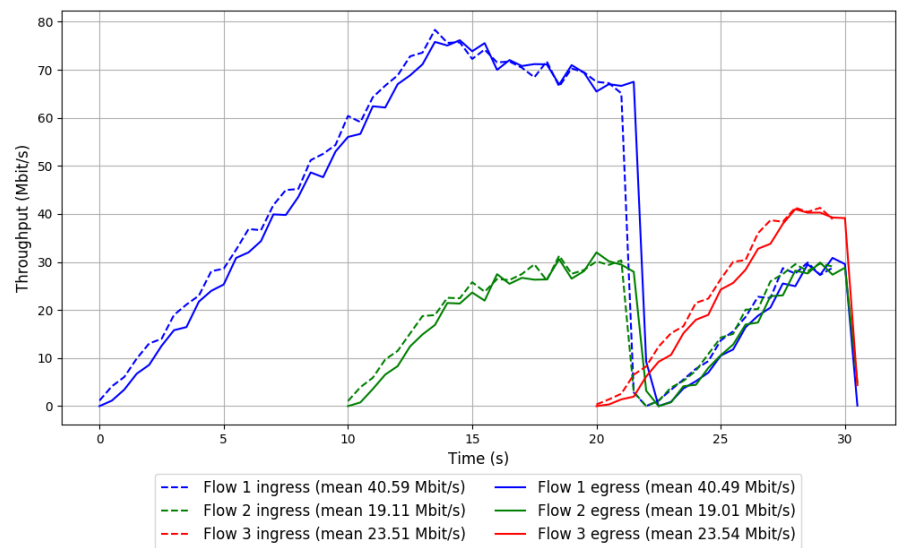
Run 7: Report of Indigo — Data Link

```
Run 8: Statistics of Indigo

Start at: 2018-07-24 17:15:21
End at: 2018-07-24 17:15:51
Local clock offset: 0.498 ms
Remote clock offset: 1.925 ms


# Below is generated by plot.py at 2018-07-24 18:25:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.61 Mbit/s
95th percentile per-packet one-way delay: 47.748 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 68.40 Mbit/s
95th percentile per-packet one-way delay: 45.568 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 27.45 Mbit/s
95th percentile per-packet one-way delay: 50.490 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 27.55 Mbit/s
95th percentile per-packet one-way delay: 48.883 ms
Loss rate: 0.00%
```
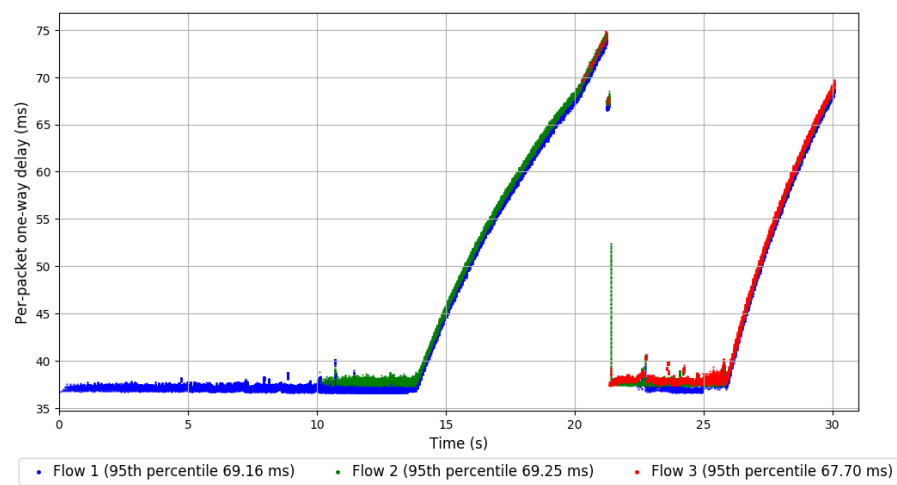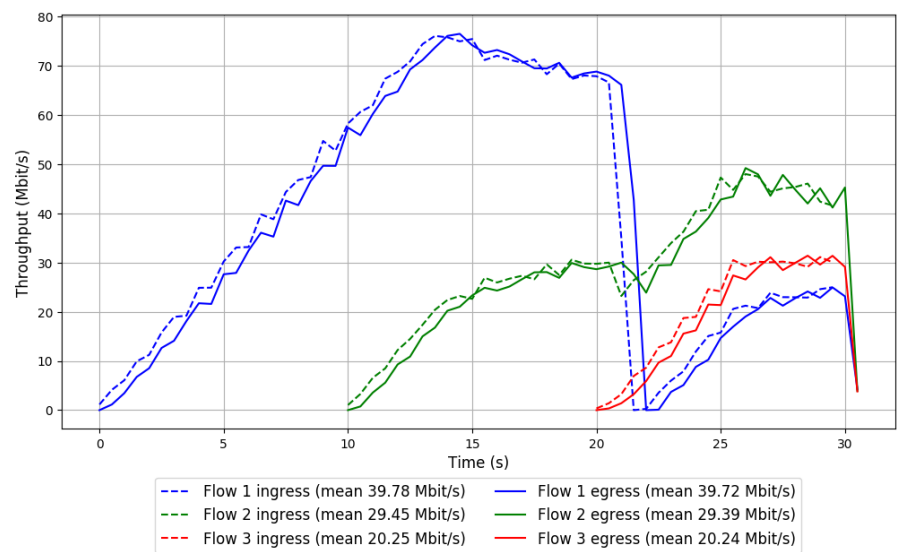
Run 8: Report of Indigo — Data Link

Flow 1 ingress (mean 68.41 Mbit/s)   Flow 1 egress (mean 68.40 Mbit/s)
Flow 2 ingress (mean 27.45 Mbit/s)   Flow 2 egress (mean 27.45 Mbit/s)
Flow 3 ingress (mean 27.56 Mbit/s)   Flow 3 egress (mean 27.55 Mbit/s)

Flow 1 (95th percentile 45.57 ms)   Flow 2 (95th percentile 50.49 ms)   Flow 3 (95th percentile 48.88 ms)

```
Run 9: Statistics of Indigo

Start at: 2018-07-24 17:38:15
End at: 2018-07-24 17:38:45
Local clock offset: 2.052 ms
Remote clock offset: 1.773 ms


# Below is generated by plot.py at 2018-07-24 18:26:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.79 Mbit/s
95th percentile per-packet one-way delay: 50.629 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 68.61 Mbit/s
95th percentile per-packet one-way delay: 48.149 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 26.39 Mbit/s
95th percentile per-packet one-way delay: 53.045 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.49 Mbit/s
95th percentile per-packet one-way delay: 64.451 ms
Loss rate: 0.00%
```
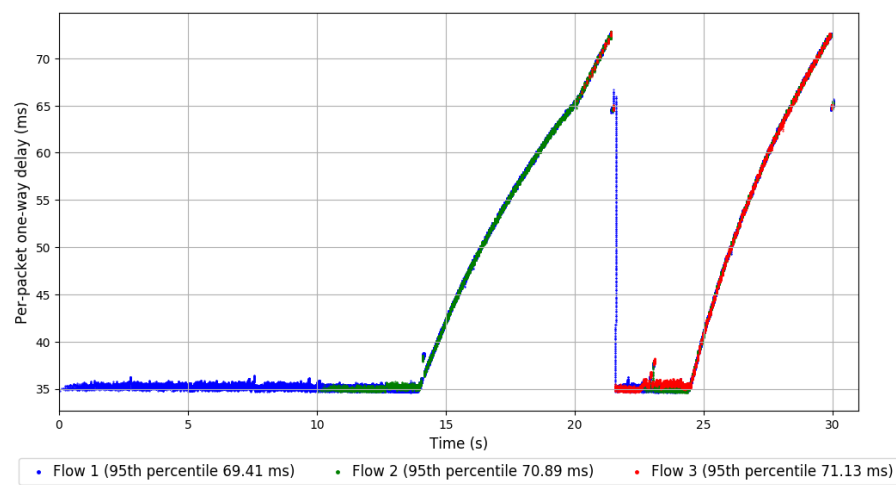
Run 9: Report of Indigo — Data Link

```
Run 10: Statistics of Indigo

Start at: 2018-07-24 18:01:13
End at: 2018-07-24 18:01:43
Local clock offset: 4.189 ms
Remote clock offset: 1.834 ms


# Below is generated by plot.py at 2018-07-24 18:26:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.70 Mbit/s
95th percentile per-packet one-way delay: 49.142 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 64.95 Mbit/s
95th percentile per-packet one-way delay: 47.789 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 32.38 Mbit/s
95th percentile per-packet one-way delay: 50.452 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 28.56 Mbit/s
95th percentile per-packet one-way delay: 51.692 ms
Loss rate: 0.01%
```
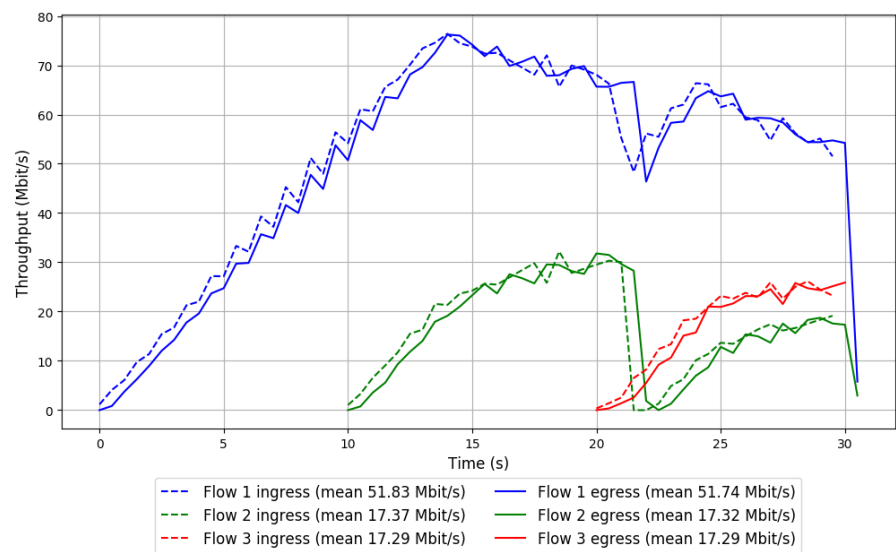
Run 10: Report of Indigo — Data Link

```
Run 1: Statistics of LEDBAT

Start at: 2018-07-24 14:22:16
End at: 2018-07-24 14:22:46
Local clock offset: 0.698 ms
Remote clock offset: 4.285 ms


# Below is generated by plot.py at 2018-07-24 18:26:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.90 Mbit/s
95th percentile per-packet one-way delay: 70.872 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 40.49 Mbit/s
95th percentile per-packet one-way delay: 71.002 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 19.01 Mbit/s
95th percentile per-packet one-way delay: 72.422 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 23.54 Mbit/s
95th percentile per-packet one-way delay: 54.102 ms
Loss rate: 0.01%
```
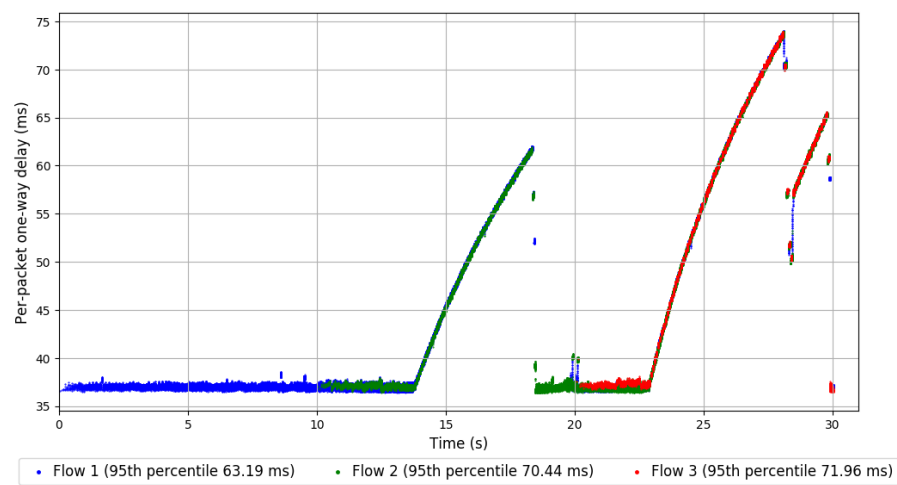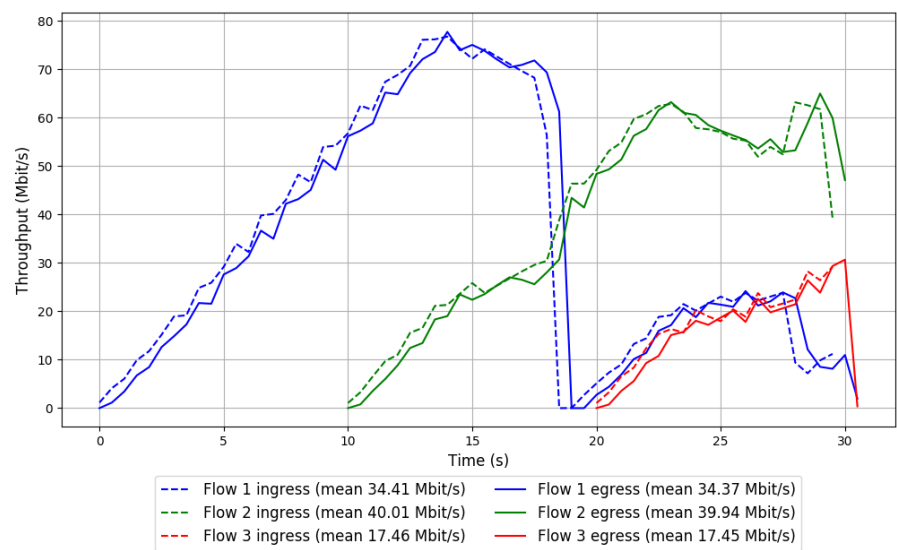
Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2018-07-24 14:45:17
End at: 2018-07-24 14:45:47
Local clock offset: 3.806 ms
Remote clock offset: 4.472 ms


# Below is generated by plot.py at 2018-07-24 18:26:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.00 Mbit/s
95th percentile per-packet one-way delay: 68.800 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 39.72 Mbit/s
95th percentile per-packet one-way delay: 69.155 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 29.39 Mbit/s
95th percentile per-packet one-way delay: 69.250 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 20.24 Mbit/s
95th percentile per-packet one-way delay: 67.696 ms
Loss rate: 0.01%
```
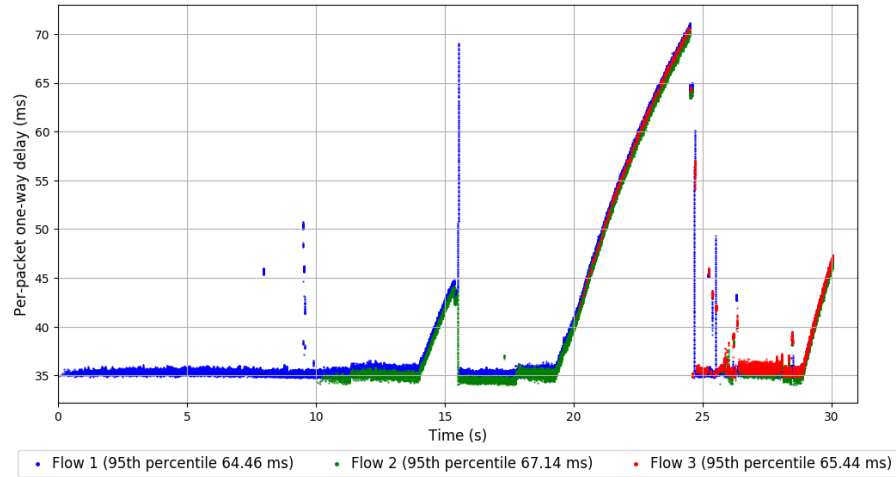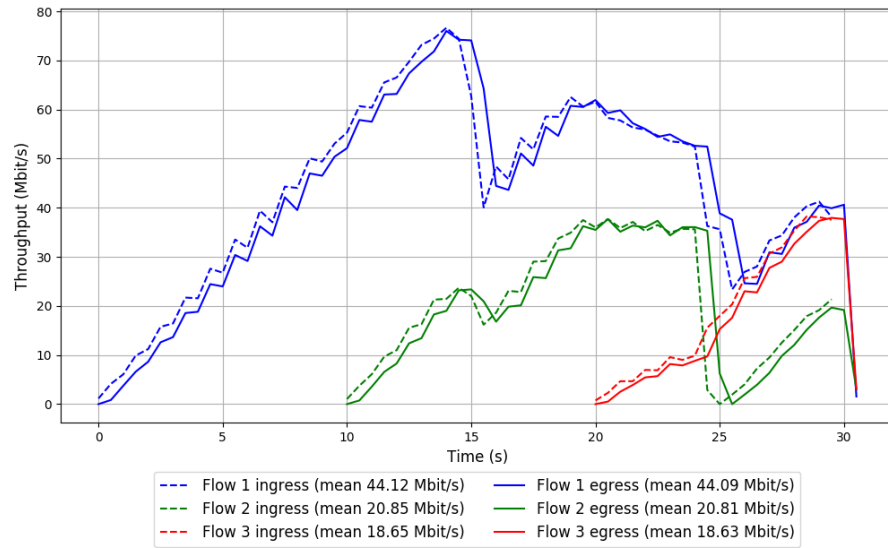
Run 2: Report of LEDBAT — Data Link

Flow 1 ingress (mean 39.78 Mbit/s) --- Flow 1 egress (mean 39.72 Mbit/s)
Flow 2 ingress (mean 29.45 Mbit/s) --- Flow 2 egress (mean 29.39 Mbit/s)
Flow 3 ingress (mean 20.25 Mbit/s) --- Flow 3 egress (mean 20.24 Mbit/s)

Flow 1 (95th percentile 69.16 ms)   Flow 2 (95th percentile 69.25 ms)   Flow 3 (95th percentile 67.70 ms)

```
Run 3: Statistics of LEDBAT

Start at: 2018-07-24 15:08:28
End at: 2018-07-24 15:08:58
Local clock offset: 2.623 ms
Remote clock offset: 2.013 ms


# Below is generated by plot.py at 2018-07-24 18:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.97 Mbit/s
95th percentile per-packet one-way delay: 69.963 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 51.74 Mbit/s
95th percentile per-packet one-way delay: 69.414 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 17.32 Mbit/s
95th percentile per-packet one-way delay: 70.891 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 17.29 Mbit/s
95th percentile per-packet one-way delay: 71.133 ms
Loss rate: 0.00%
```
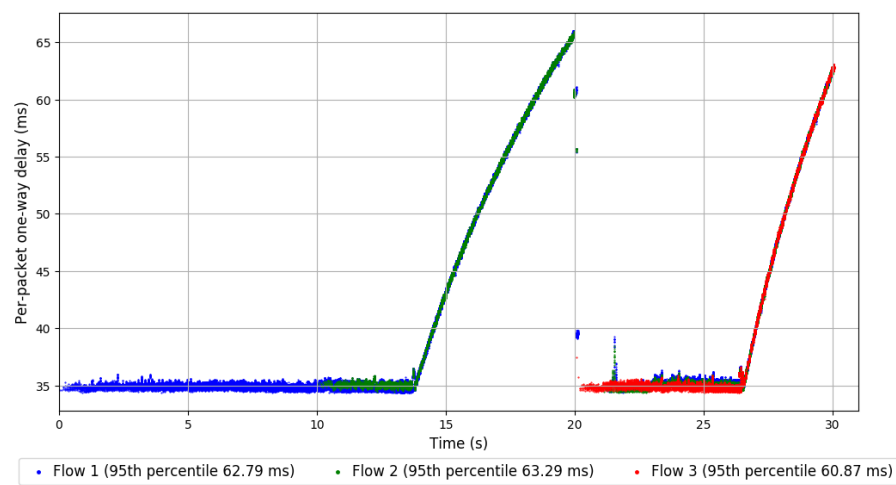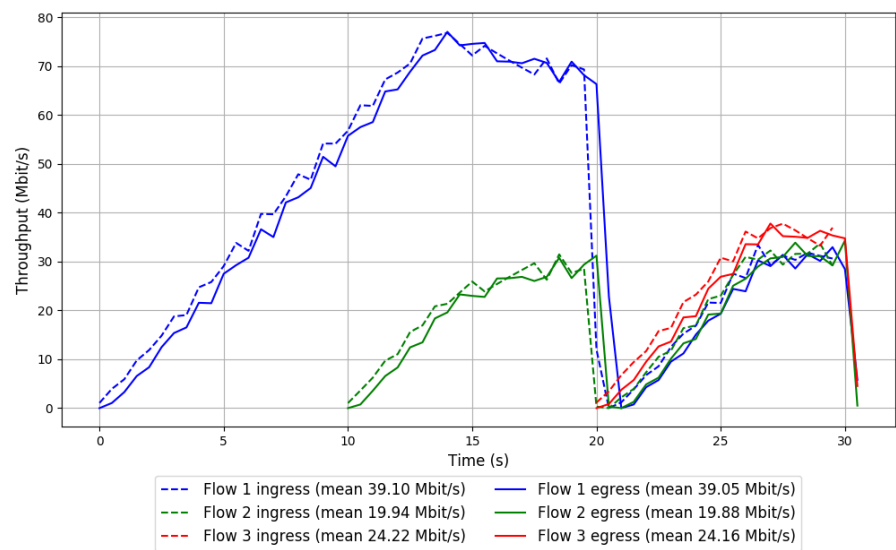
Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2018-07-24 15:31:26
End at: 2018-07-24 15:31:56
Local clock offset: 0.164 ms
Remote clock offset: 4.304 ms


# Below is generated by plot.py at 2018-07-24 18:26:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.57 Mbit/s
95th percentile per-packet one-way delay: 69.362 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 34.37 Mbit/s
95th percentile per-packet one-way delay: 63.193 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 39.94 Mbit/s
95th percentile per-packet one-way delay: 70.437 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 17.45 Mbit/s
95th percentile per-packet one-way delay: 71.964 ms
Loss rate: 0.02%
```
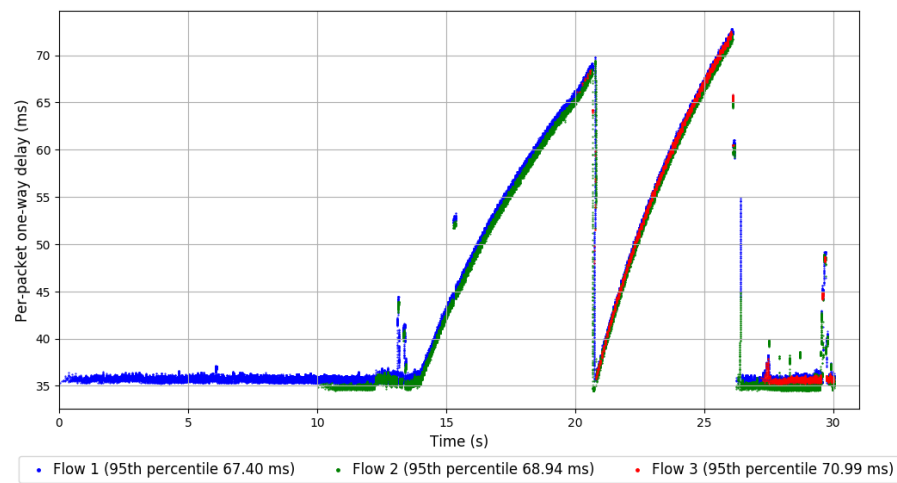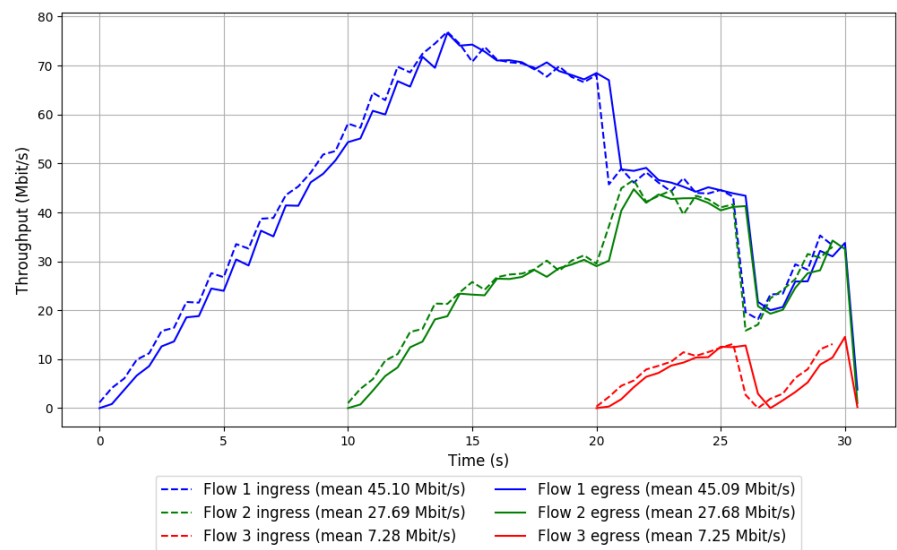
Run 4: Report of LEDBAT — Data Link

Flow 1 ingress (mean 34.41 Mbit/s)   Flow 1 egress (mean 34.37 Mbit/s)
Flow 2 ingress (mean 40.01 Mbit/s)   Flow 2 egress (mean 39.94 Mbit/s)
Flow 3 ingress (mean 17.46 Mbit/s)   Flow 3 egress (mean 17.45 Mbit/s)

Flow 1 (95th percentile 63.19 ms)   Flow 2 (95th percentile 70.44 ms)   Flow 3 (95th percentile 71.96 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2018-07-24 15:54:32
End at: 2018-07-24 15:55:02
Local clock offset: -0.373 ms
Remote clock offset: 2.09 ms


# Below is generated by plot.py at 2018-07-24 18:26:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.11 Mbit/s
95th percentile per-packet one-way delay: 65.402 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 44.09 Mbit/s
95th percentile per-packet one-way delay: 64.464 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 20.81 Mbit/s
95th percentile per-packet one-way delay: 67.139 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 18.63 Mbit/s
95th percentile per-packet one-way delay: 65.445 ms
Loss rate: 0.03%
```
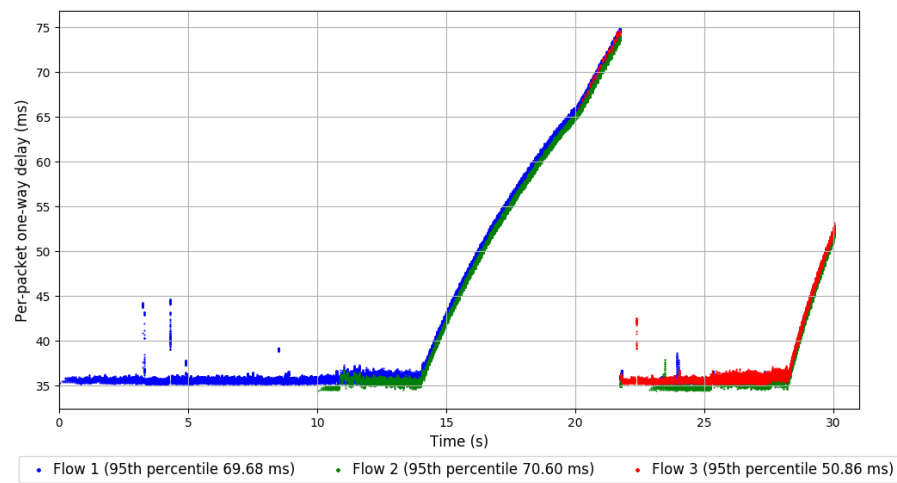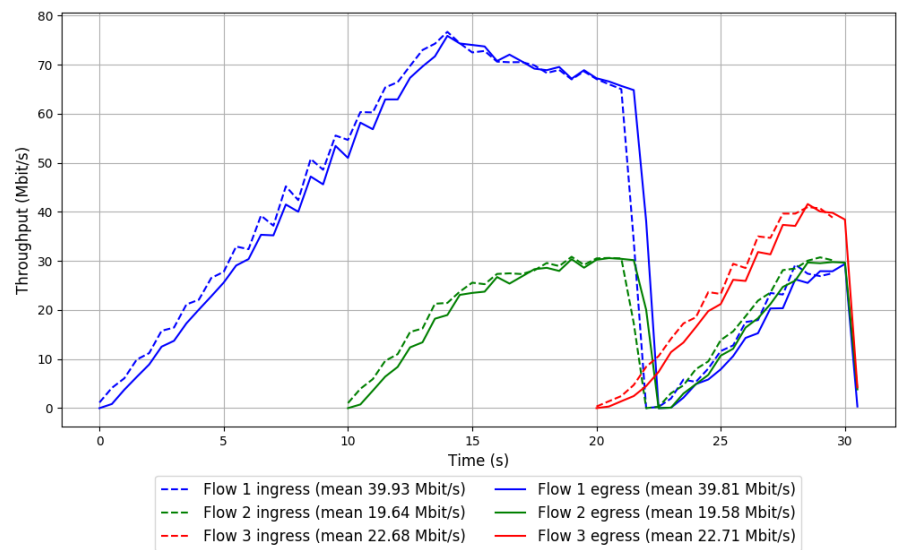
Run 5: Report of LEDBAT — Data Link

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```
Run 6: Statistics of LEDBAT

Start at: 2018-07-24 16:17:23
End at: 2018-07-24 16:17:53
Local clock offset: 0.678 ms
Remote clock offset: 2.506 ms

# Below is generated by plot.py at 2018-07-24 18:26:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.28 Mbit/s
95th percentile per-packet one-way delay: 62.567 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 39.05 Mbit/s
95th percentile per-packet one-way delay: 62.789 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 19.88 Mbit/s
95th percentile per-packet one-way delay: 63.292 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 24.16 Mbit/s
95th percentile per-packet one-way delay: 60.870 ms
Loss rate: 0.00%
```
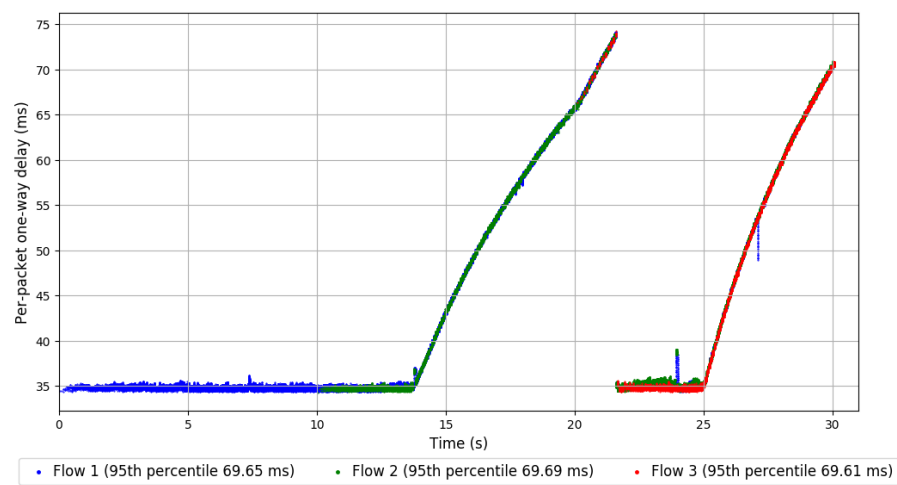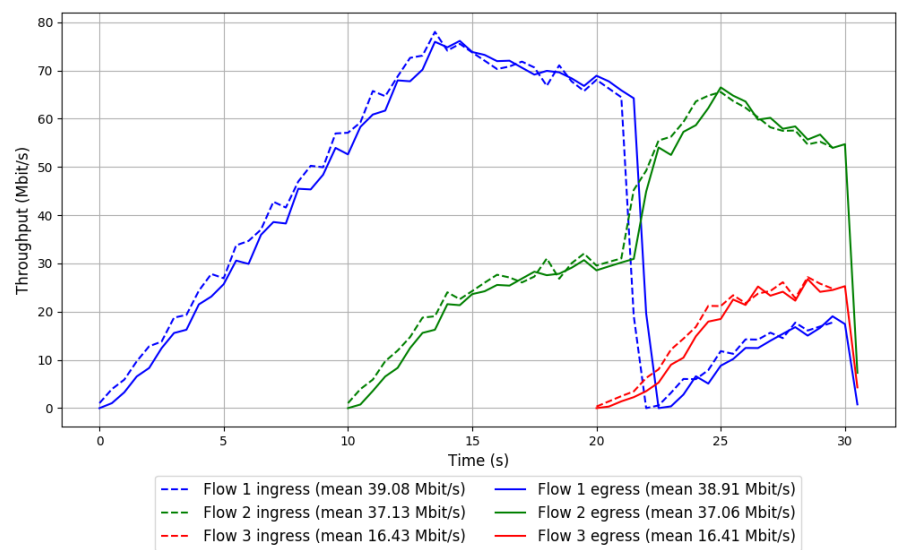
Run 6: Report of LEDBAT — Data Link

```
Run 7: Statistics of LEDBAT

Start at: 2018-07-24 16:40:22
End at: 2018-07-24 16:40:52
Local clock offset: 0.805 ms
Remote clock offset: 2.843 ms


# Below is generated by plot.py at 2018-07-24 18:26:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.92 Mbit/s
95th percentile per-packet one-way delay: 68.098 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 45.09 Mbit/s
95th percentile per-packet one-way delay: 67.396 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 27.68 Mbit/s
95th percentile per-packet one-way delay: 68.945 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 7.25 Mbit/s
95th percentile per-packet one-way delay: 70.993 ms
Loss rate: 0.76%
```
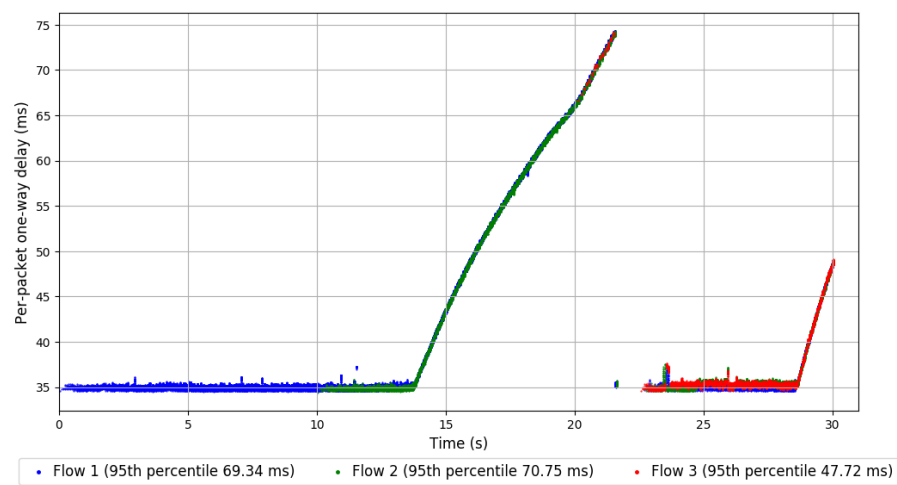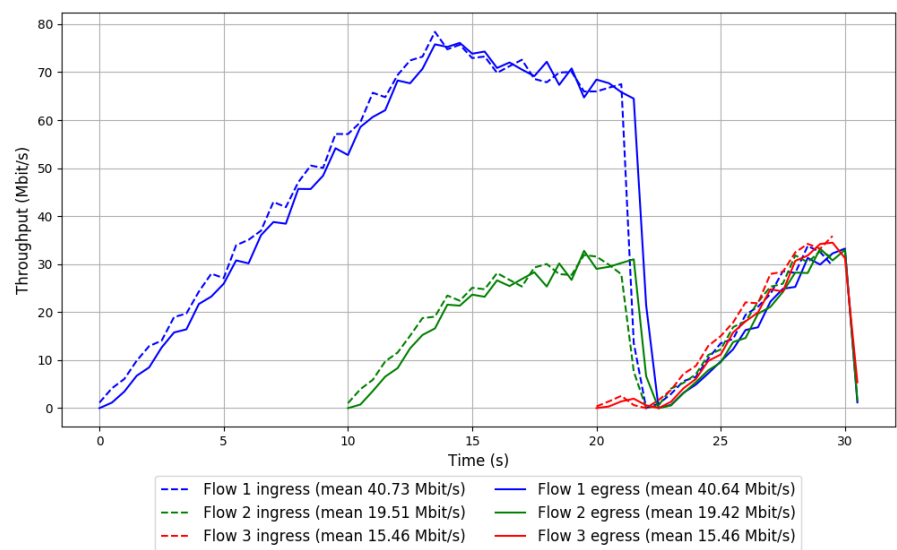
Run 7: Report of LEDBAT — Data Link

Flow 1 ingress (mean 45.10 Mbit/s) --- Flow 1 egress (mean 45.09 Mbit/s)
Flow 2 ingress (mean 27.69 Mbit/s) --- Flow 2 egress (mean 27.68 Mbit/s)
Flow 3 ingress (mean 7.28 Mbit/s) --- Flow 3 egress (mean 7.25 Mbit/s)

Flow 1 (95th percentile 67.40 ms)   Flow 2 (95th percentile 68.94 ms)   Flow 3 (95th percentile 70.99 ms)

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```
Run 8: Statistics of LEDBAT

Start at: 2018-07-24 17:03:21
End at: 2018-07-24 17:03:51
Local clock offset: 0.852 ms
Remote clock offset: 2.043 ms


# Below is generated by plot.py at 2018-07-24 18:26:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.34 Mbit/s
95th percentile per-packet one-way delay: 69.461 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 39.81 Mbit/s
95th percentile per-packet one-way delay: 69.677 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 19.58 Mbit/s
95th percentile per-packet one-way delay: 70.602 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 22.71 Mbit/s
95th percentile per-packet one-way delay: 50.861 ms
Loss rate: 0.01%
```
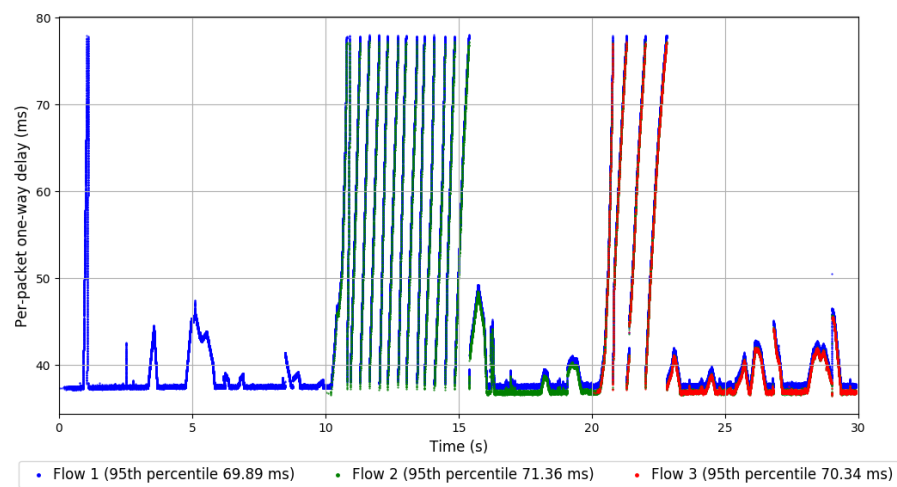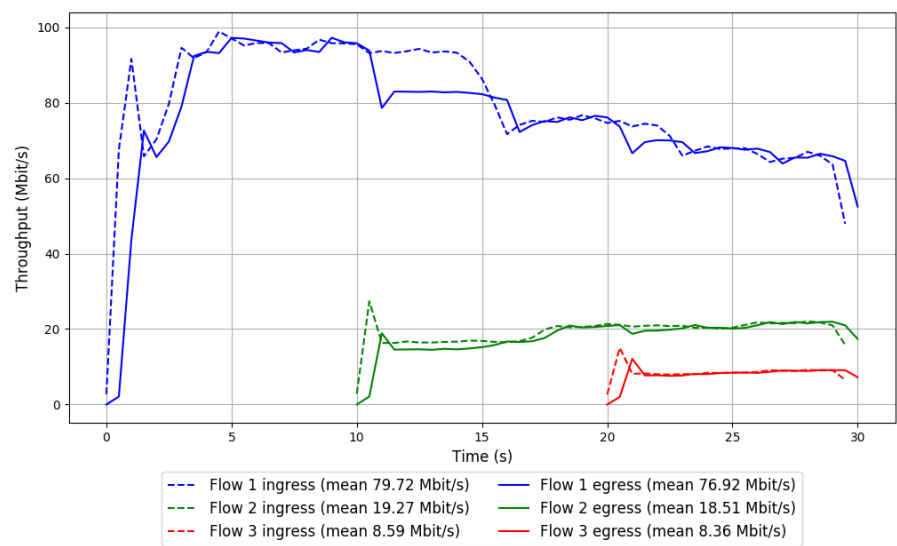
Run 8: Report of LEDBAT — Data Link

Flow 1 ingress (mean 39.93 Mbit/s) — Flow 1 egress (mean 39.81 Mbit/s)
Flow 2 ingress (mean 19.64 Mbit/s) — Flow 2 egress (mean 19.58 Mbit/s)
Flow 3 ingress (mean 22.68 Mbit/s) — Flow 3 egress (mean 22.71 Mbit/s)

Flow 1 (95th percentile 69.68 ms)   Flow 2 (95th percentile 70.60 ms)   Flow 3 (95th percentile 50.86 ms)

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```
Run 9: Statistics of LEDBAT

Start at: 2018-07-24 17:26:17
End at: 2018-07-24 17:26:47
Local clock offset: 0.269 ms
Remote clock offset: 1.761 ms


# Below is generated by plot.py at 2018-07-24 18:26:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.99 Mbit/s
95th percentile per-packet one-way delay: 69.668 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 38.91 Mbit/s
95th percentile per-packet one-way delay: 69.653 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 37.06 Mbit/s
95th percentile per-packet one-way delay: 69.692 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 16.41 Mbit/s
95th percentile per-packet one-way delay: 69.613 ms
Loss rate: 0.06%
```
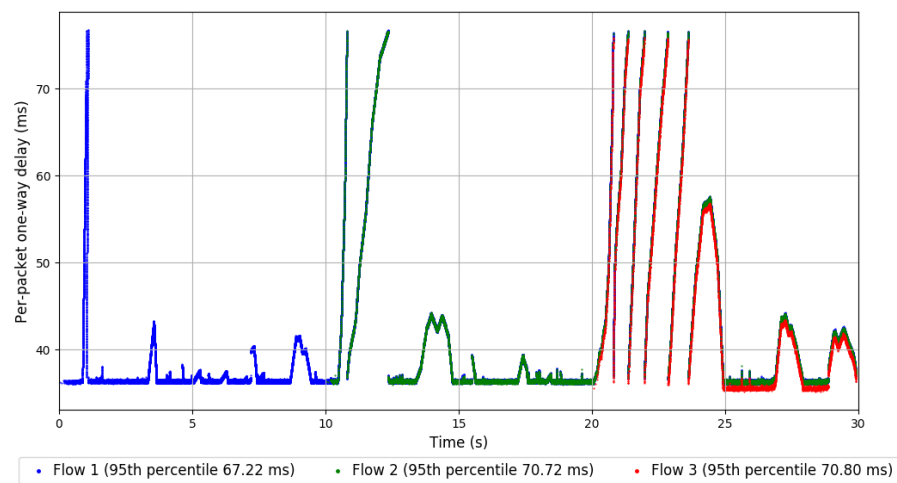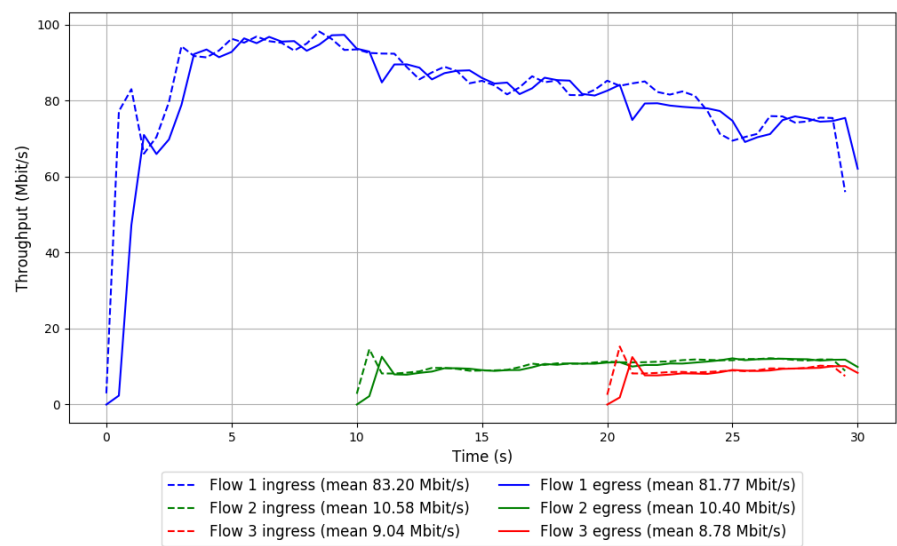
Run 9: Report of LEDBAT — Data Link

```
Run 10: Statistics of LEDBAT

Start at: 2018-07-24 17:49:08
End at: 2018-07-24 17:49:38
Local clock offset: 3.382 ms
Remote clock offset: 1.7 ms


# Below is generated by plot.py at 2018-07-24 18:26:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 58.66 Mbit/s
95th percentile per-packet one-way delay: 69.474 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 40.64 Mbit/s
95th percentile per-packet one-way delay: 69.344 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 19.42 Mbit/s
95th percentile per-packet one-way delay: 70.749 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 15.46 Mbit/s
95th percentile per-packet one-way delay: 47.720 ms
Loss rate: 0.21%
```
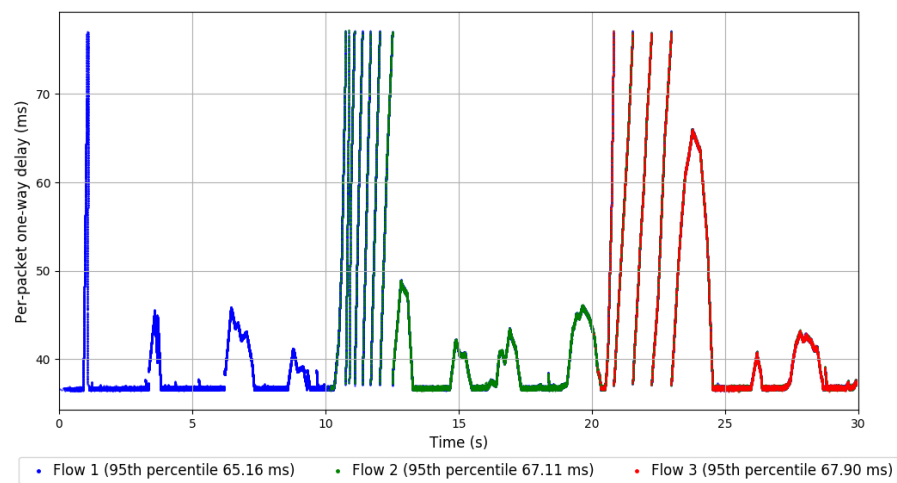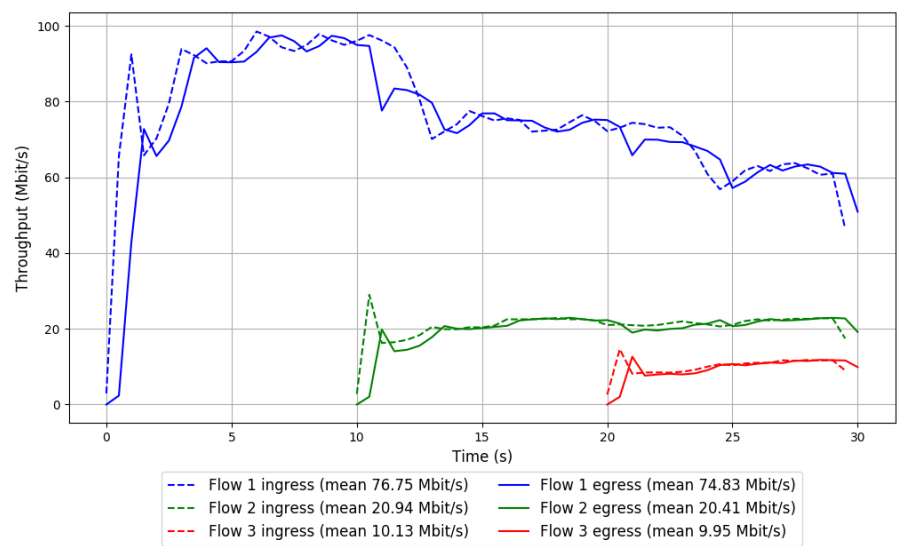
Run 10: Report of LEDBAT — Data Link

Flow 1 ingress (mean 40.73 Mbit/s) --- Flow 1 egress (mean 40.64 Mbit/s)
Flow 2 ingress (mean 19.51 Mbit/s) --- Flow 2 egress (mean 19.42 Mbit/s)
Flow 3 ingress (mean 15.46 Mbit/s) --- Flow 3 egress (mean 15.46 Mbit/s)

Flow 1 (95th percentile 69.34 ms)   Flow 2 (95th percentile 70.75 ms)   Flow 3 (95th percentile 47.72 ms)

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```
Run 1: Statistics of PCC-Allegro

Start at: 2018-07-24 14:39:49
End at: 2018-07-24 14:40:19
Local clock offset: 2.985 ms
Remote clock offset: 4.275 ms

# Below is generated by plot.py at 2018-07-24 18:27:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.98 Mbit/s
95th percentile per-packet one-way delay: 70.174 ms
Loss rate: 3.54%
-- Flow 1:
Average throughput: 76.92 Mbit/s
95th percentile per-packet one-way delay: 69.894 ms
Loss rate: 3.51%
-- Flow 2:
Average throughput: 18.51 Mbit/s
95th percentile per-packet one-way delay: 71.361 ms
Loss rate: 3.94%
-- Flow 3:
Average throughput: 8.36 Mbit/s
95th percentile per-packet one-way delay: 70.344 ms
Loss rate: 2.68%
```
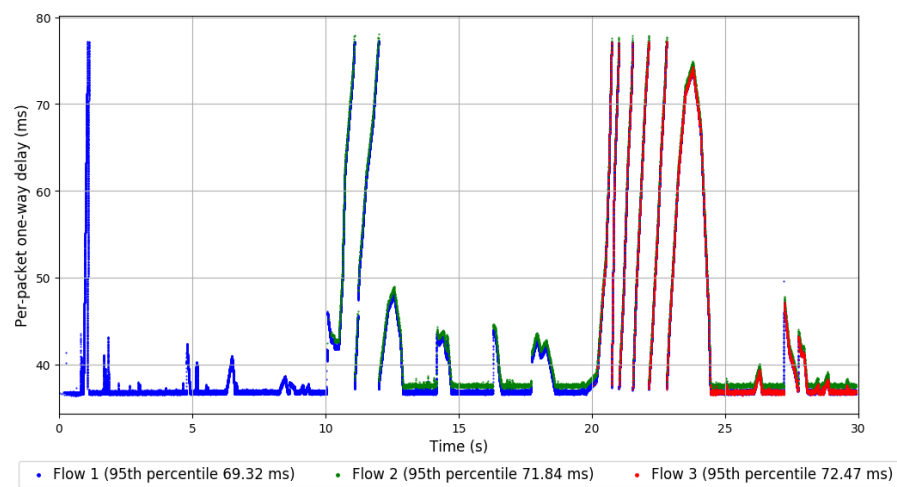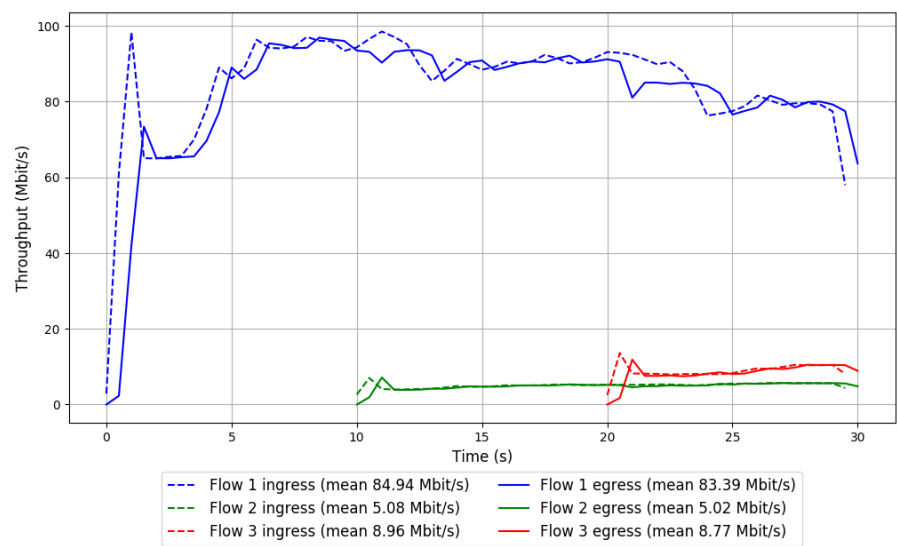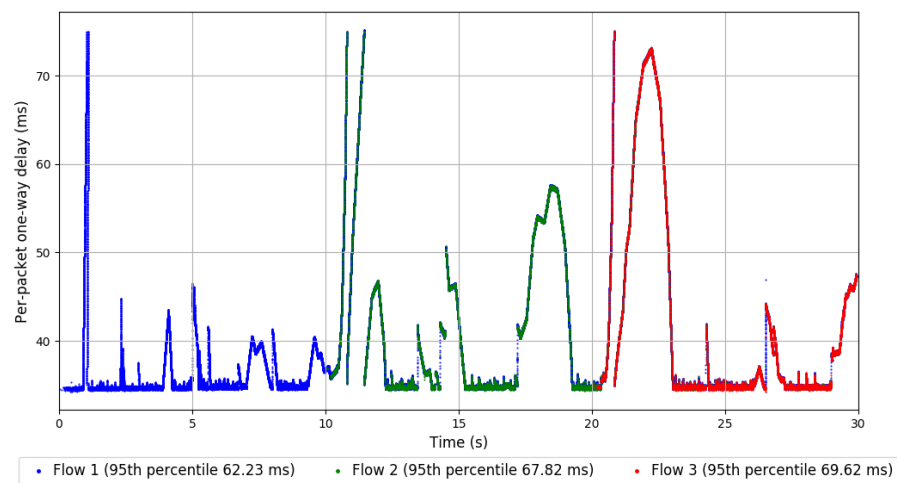
Run 1: Report of PCC-Allegro — Data Link

- - - Flow 1 ingress (mean 79.72 Mbit/s)   ── Flow 1 egress (mean 76.92 Mbit/s)
- - - Flow 2 ingress (mean 19.27 Mbit/s)   ── Flow 2 egress (mean 18.51 Mbit/s)
- - - Flow 3 ingress (mean 8.59 Mbit/s)   ── Flow 3 egress (mean 8.36 Mbit/s)

• Flow 1 (95th percentile 69.89 ms)   • Flow 2 (95th percentile 71.36 ms)   • Flow 3 (95th percentile 70.34 ms)

```
Run 2: Statistics of PCC-Allegro

Start at: 2018-07-24 15:02:52
End at: 2018-07-24 15:03:22
Local clock offset: 4.707 ms
Remote clock offset: 3.916 ms


# Below is generated by plot.py at 2018-07-24 18:27:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.57 Mbit/s
95th percentile per-packet one-way delay: 67.818 ms
Loss rate: 1.76%
-- Flow 1:
Average throughput: 81.77 Mbit/s
95th percentile per-packet one-way delay: 67.219 ms
Loss rate: 1.72%
-- Flow 2:
Average throughput: 10.40 Mbit/s
95th percentile per-packet one-way delay: 70.717 ms
Loss rate: 1.69%
-- Flow 3:
Average throughput: 8.78 Mbit/s
95th percentile per-packet one-way delay: 70.799 ms
Loss rate: 2.92%
```
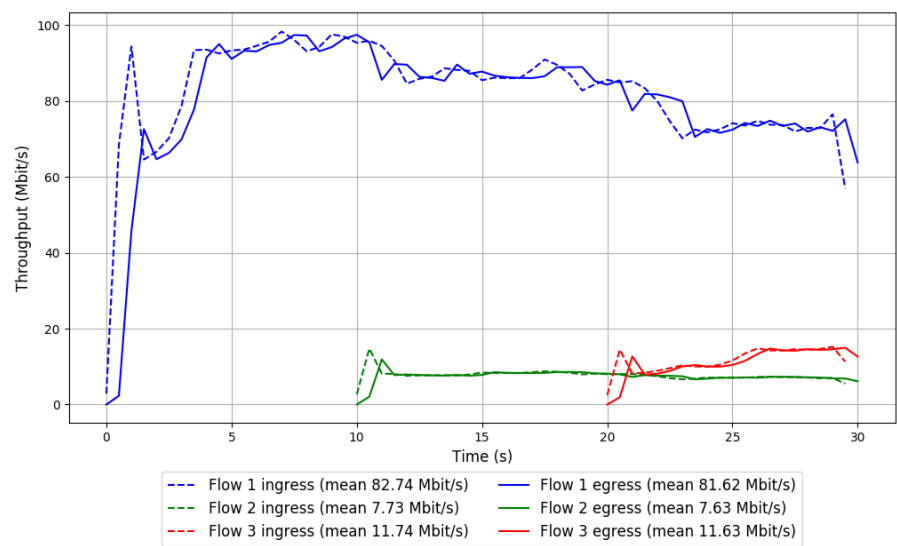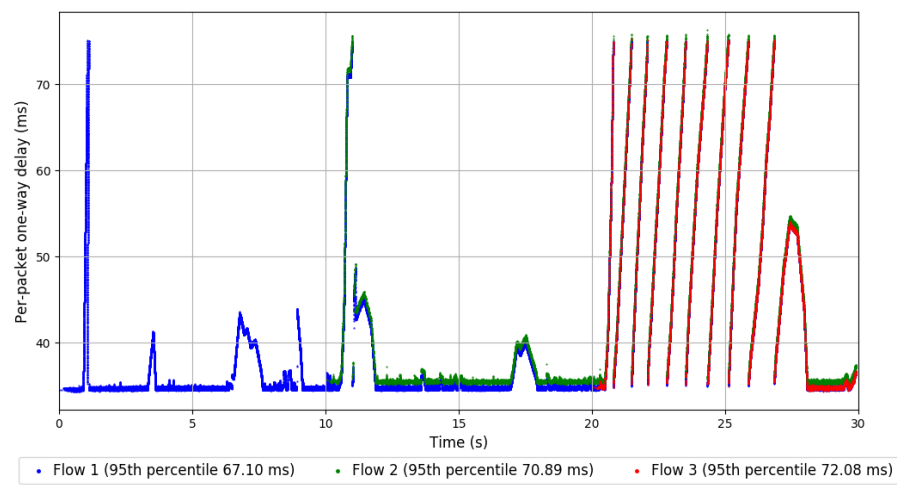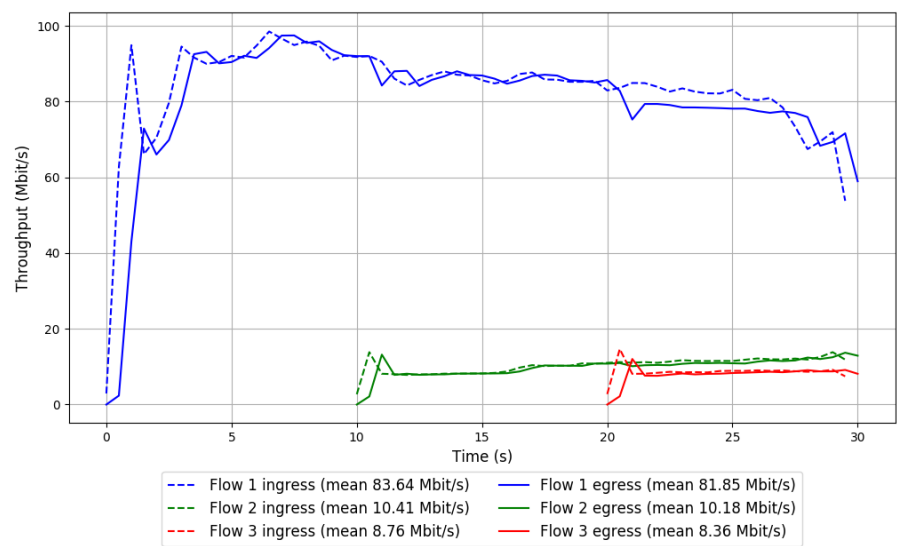
Run 2: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 83.20 Mbit/s) --- Flow 1 egress (mean 81.77 Mbit/s)
Flow 2 ingress (mean 10.58 Mbit/s) --- Flow 2 egress (mean 10.40 Mbit/s)
Flow 3 ingress (mean 9.04 Mbit/s) --- Flow 3 egress (mean 8.78 Mbit/s)

Flow 1 (95th percentile 67.22 ms)   Flow 2 (95th percentile 70.72 ms)   Flow 3 (95th percentile 70.80 ms)

```
Run 3: Statistics of PCC-Allegro

Start at: 2018-07-24 15:25:57
End at: 2018-07-24 15:26:27
Local clock offset: 0.323 ms
Remote clock offset: 4.222 ms


# Below is generated by plot.py at 2018-07-24 18:27:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.69 Mbit/s
95th percentile per-packet one-way delay: 65.515 ms
Loss rate: 2.48%
-- Flow 1:
Average throughput: 74.83 Mbit/s
95th percentile per-packet one-way delay: 65.161 ms
Loss rate: 2.50%
-- Flow 2:
Average throughput: 20.41 Mbit/s
95th percentile per-packet one-way delay: 67.111 ms
Loss rate: 2.54%
-- Flow 3:
Average throughput: 9.95 Mbit/s
95th percentile per-packet one-way delay: 67.903 ms
Loss rate: 1.91%
```
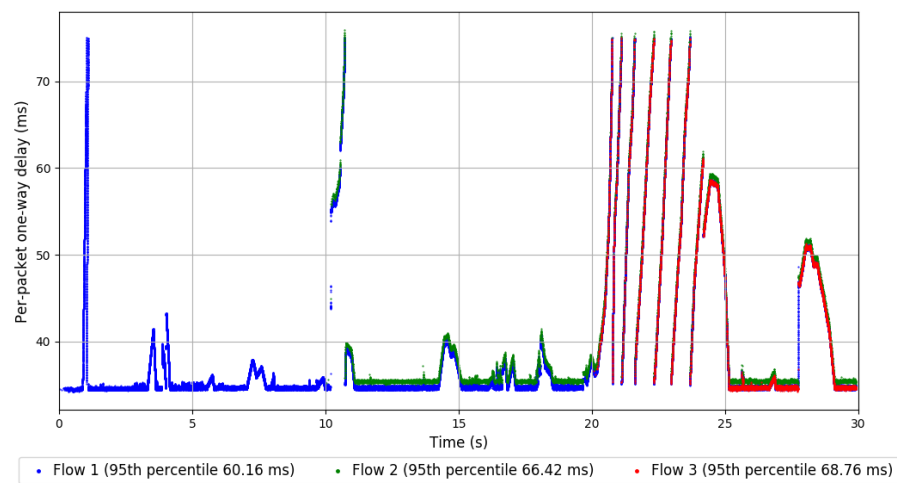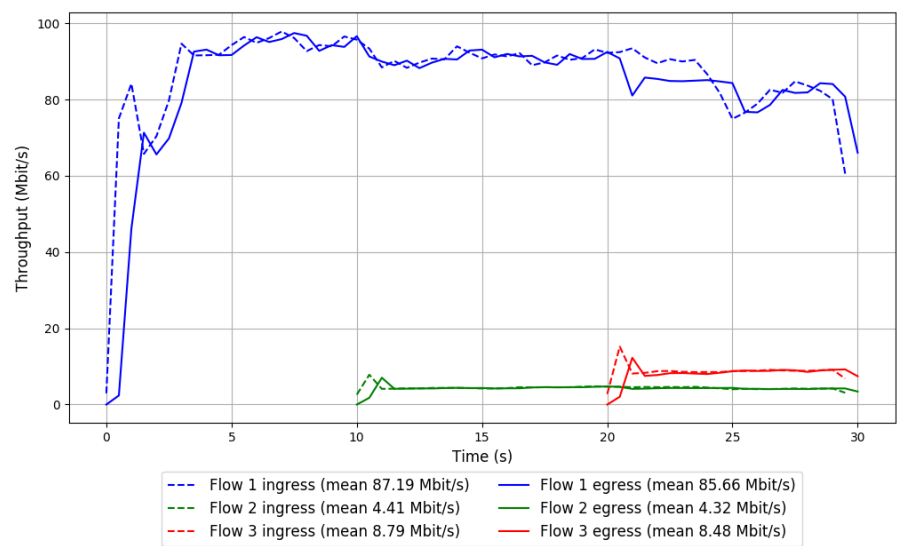
Run 3: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 76.75 Mbit/s)   Flow 1 egress (mean 74.83 Mbit/s)
Flow 2 ingress (mean 20.94 Mbit/s)   Flow 2 egress (mean 20.41 Mbit/s)
Flow 3 ingress (mean 10.13 Mbit/s)   Flow 3 egress (mean 9.95 Mbit/s)

Flow 1 (95th percentile 65.16 ms)   Flow 2 (95th percentile 67.11 ms)   Flow 3 (95th percentile 67.90 ms)

```
Run 4: Statistics of PCC-Allegro

Start at: 2018-07-24 15:49:03
End at: 2018-07-24 15:49:33
Local clock offset: -0.348 ms
Remote clock offset: 4.441 ms


# Below is generated by plot.py at 2018-07-24 18:27:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.62 Mbit/s
95th percentile per-packet one-way delay: 69.702 ms
Loss rate: 1.81%
-- Flow 1:
Average throughput: 83.39 Mbit/s
95th percentile per-packet one-way delay: 69.316 ms
Loss rate: 1.82%
-- Flow 2:
Average throughput: 5.02 Mbit/s
95th percentile per-packet one-way delay: 71.837 ms
Loss rate: 1.36%
-- Flow 3:
Average throughput: 8.77 Mbit/s
95th percentile per-packet one-way delay: 72.466 ms
Loss rate: 2.20%
```
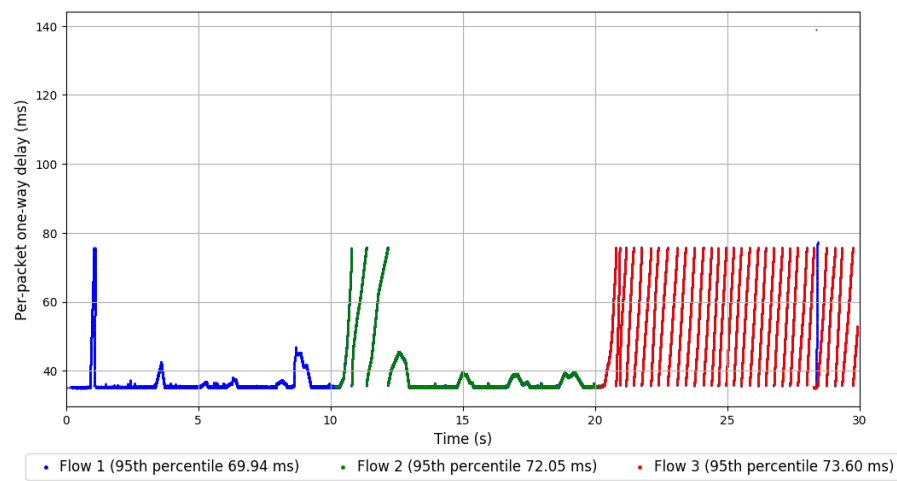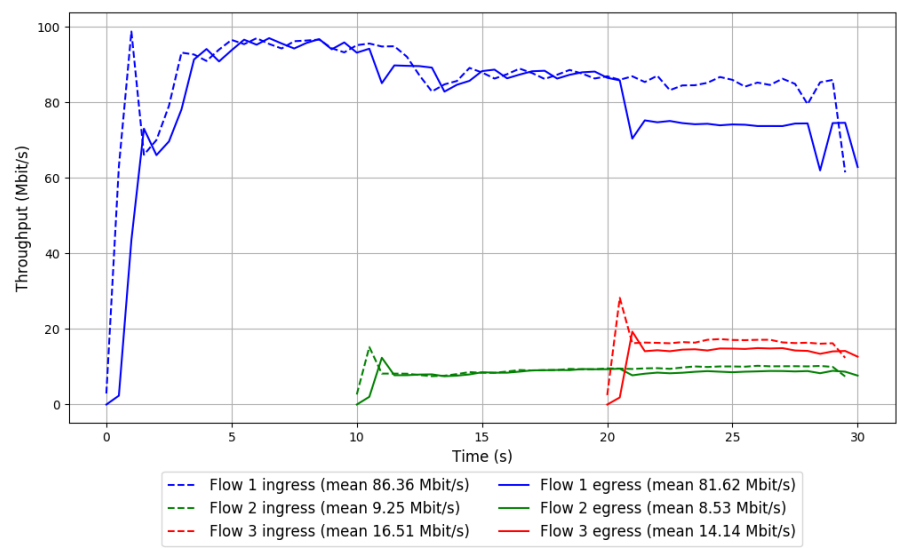
Run 4: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 84.94 Mbit/s) — Flow 1 egress (mean 83.39 Mbit/s)
Flow 2 ingress (mean 5.08 Mbit/s) — Flow 2 egress (mean 5.02 Mbit/s)
Flow 3 ingress (mean 8.96 Mbit/s) — Flow 3 egress (mean 8.77 Mbit/s)

Flow 1 (95th percentile 69.32 ms)   Flow 2 (95th percentile 71.84 ms)   Flow 3 (95th percentile 72.47 ms)

```
Run 5: Statistics of PCC-Allegro

Start at: 2018-07-24 16:11:56
End at: 2018-07-24 16:12:26
Local clock offset: 0.441 ms
Remote clock offset: 2.546 ms


# Below is generated by plot.py at 2018-07-24 18:27:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.53 Mbit/s
95th percentile per-packet one-way delay: 63.589 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 81.62 Mbit/s
95th percentile per-packet one-way delay: 62.234 ms
Loss rate: 1.31%
-- Flow 2:
Average throughput: 7.63 Mbit/s
95th percentile per-packet one-way delay: 67.822 ms
Loss rate: 1.29%
-- Flow 3:
Average throughput: 11.63 Mbit/s
95th percentile per-packet one-way delay: 69.623 ms
Loss rate: 0.77%
```
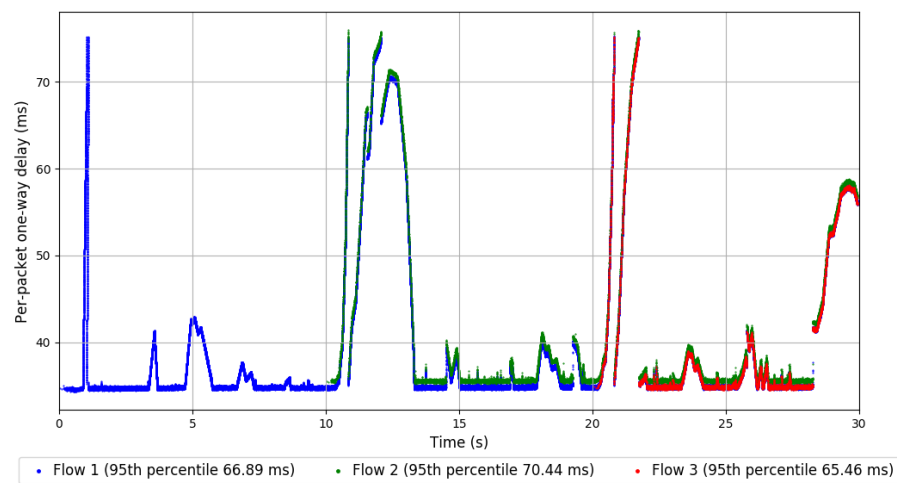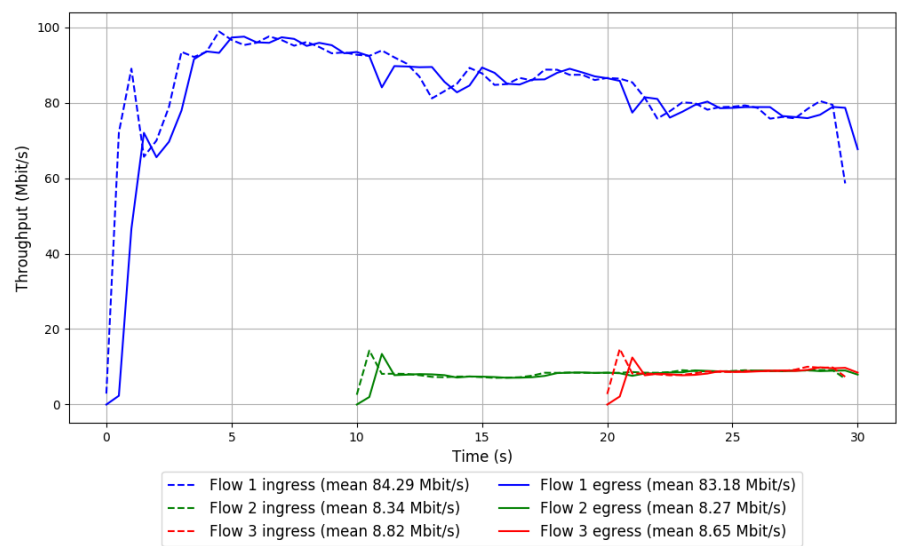
Run 5: Report of PCC-Allegro — Data Link

```
Run 6: Statistics of PCC-Allegro

Start at: 2018-07-24 16:34:54
End at: 2018-07-24 16:35:24
Local clock offset: 0.923 ms
Remote clock offset: 2.758 ms


# Below is generated by plot.py at 2018-07-24 18:27:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.38 Mbit/s
95th percentile per-packet one-way delay: 67.987 ms
Loss rate: 2.21%
-- Flow 1:
Average throughput: 81.85 Mbit/s
95th percentile per-packet one-way delay: 67.101 ms
Loss rate: 2.13%
-- Flow 2:
Average throughput: 10.18 Mbit/s
95th percentile per-packet one-way delay: 70.888 ms
Loss rate: 2.18%
-- Flow 3:
Average throughput: 8.36 Mbit/s
95th percentile per-packet one-way delay: 72.084 ms
Loss rate: 4.57%
```
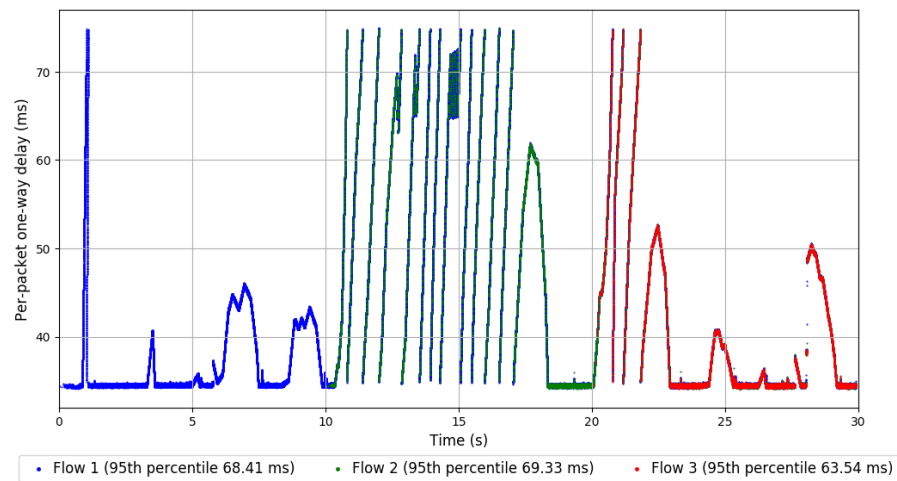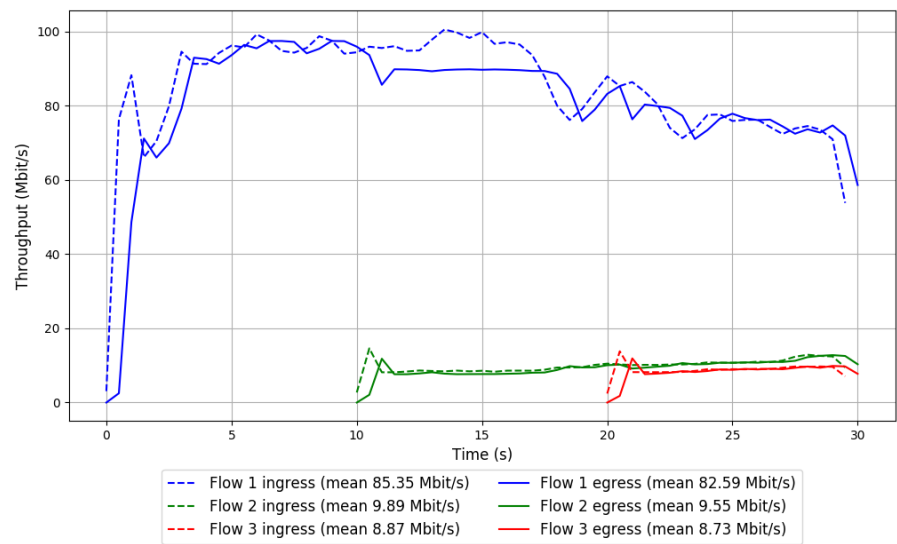
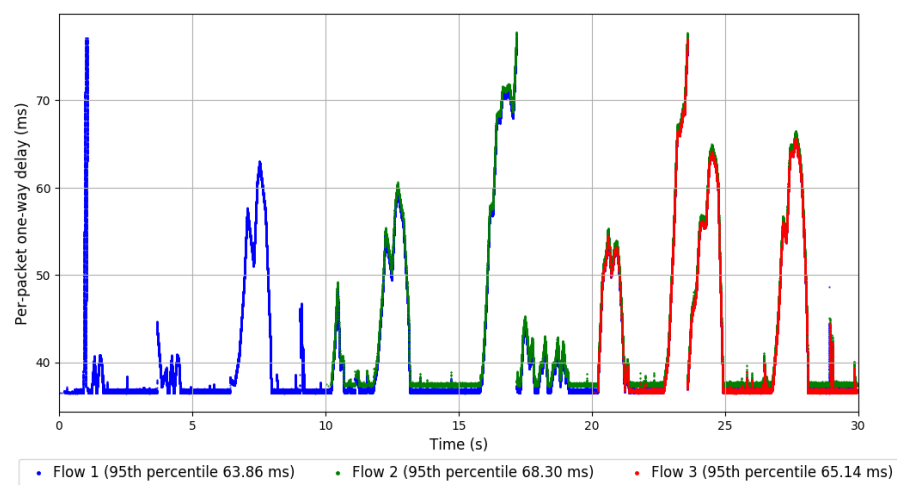Run 6: Report of PCC-Allegro — Data Link

```
Run 7: Statistics of PCC-Allegro

Start at: 2018-07-24 16:57:52
End at: 2018-07-24 16:58:22
Local clock offset: 0.931 ms
Remote clock offset: 2.048 ms


# Below is generated by plot.py at 2018-07-24 18:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.33 Mbit/s
95th percentile per-packet one-way delay: 60.994 ms
Loss rate: 1.82%
-- Flow 1:
Average throughput: 85.66 Mbit/s
95th percentile per-packet one-way delay: 60.160 ms
Loss rate: 1.76%
-- Flow 2:
Average throughput: 4.32 Mbit/s
95th percentile per-packet one-way delay: 66.419 ms
Loss rate: 2.04%
-- Flow 3:
Average throughput: 8.48 Mbit/s
95th percentile per-packet one-way delay: 68.756 ms
Loss rate: 3.53%
```
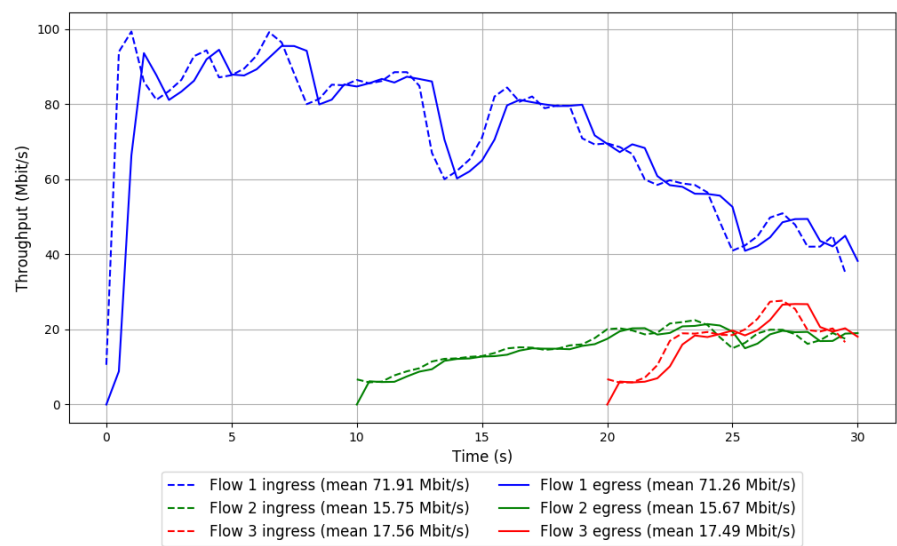
Run 7: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 87.19 Mbit/s) — — — Flow 1 egress (mean 85.66 Mbit/s)
Flow 2 ingress (mean 4.41 Mbit/s) — — — Flow 2 egress (mean 4.32 Mbit/s)
Flow 3 ingress (mean 8.79 Mbit/s) — — — Flow 3 egress (mean 8.48 Mbit/s)

Flow 1 (95th percentile 60.16 ms) · Flow 2 (95th percentile 66.42 ms) · Flow 3 (95th percentile 68.76 ms)

```
Run 8: Statistics of PCC-Allegro

Start at: 2018-07-24 17:20:48
End at: 2018-07-24 17:21:18
Local clock offset: 0.372 ms
Remote clock offset: 1.853 ms


# Below is generated by plot.py at 2018-07-24 18:28:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.96 Mbit/s
95th percentile per-packet one-way delay: 70.598 ms
Loss rate: 6.07%
-- Flow 1:
Average throughput: 81.62 Mbit/s
95th percentile per-packet one-way delay: 69.938 ms
Loss rate: 5.43%
-- Flow 2:
Average throughput: 8.53 Mbit/s
95th percentile per-packet one-way delay: 72.048 ms
Loss rate: 7.73%
-- Flow 3:
Average throughput: 14.14 Mbit/s
95th percentile per-packet one-way delay: 73.596 ms
Loss rate: 14.23%
```
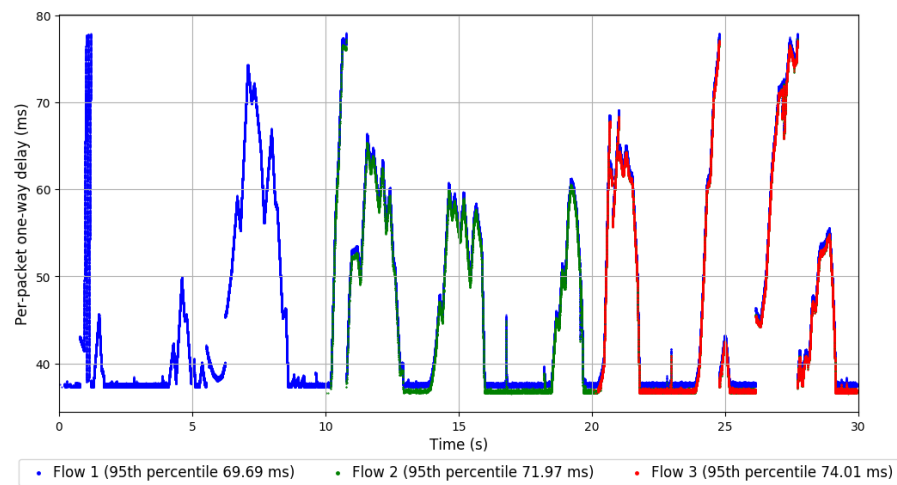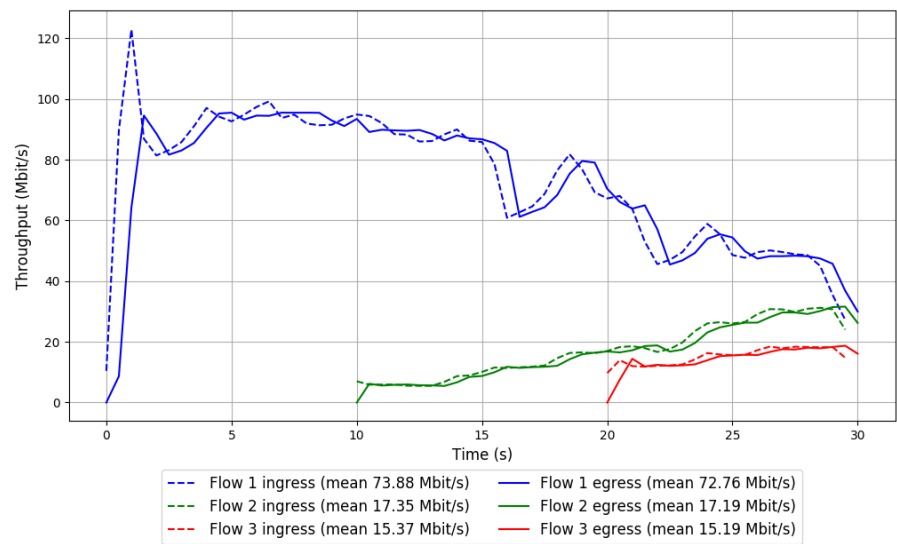
Run 8: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 86.36 Mbit/s) --- Flow 1 egress (mean 81.62 Mbit/s)
Flow 2 ingress (mean 9.25 Mbit/s) --- Flow 2 egress (mean 8.53 Mbit/s)
Flow 3 ingress (mean 16.51 Mbit/s) --- Flow 3 egress (mean 14.14 Mbit/s)

Flow 1 (95th percentile 69.94 ms) · Flow 2 (95th percentile 72.05 ms) · Flow 3 (95th percentile 73.60 ms)

```
Run 9: Statistics of PCC-Allegro

Start at: 2018-07-24 17:43:41
End at: 2018-07-24 17:44:11
Local clock offset: 2.921 ms
Remote clock offset: 1.718 ms


# Below is generated by plot.py at 2018-07-24 18:28:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.54 Mbit/s
95th percentile per-packet one-way delay: 67.189 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 83.18 Mbit/s
95th percentile per-packet one-way delay: 66.893 ms
Loss rate: 1.25%
-- Flow 2:
Average throughput: 8.27 Mbit/s
95th percentile per-packet one-way delay: 70.442 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 8.65 Mbit/s
95th percentile per-packet one-way delay: 65.457 ms
Loss rate: 1.67%
```
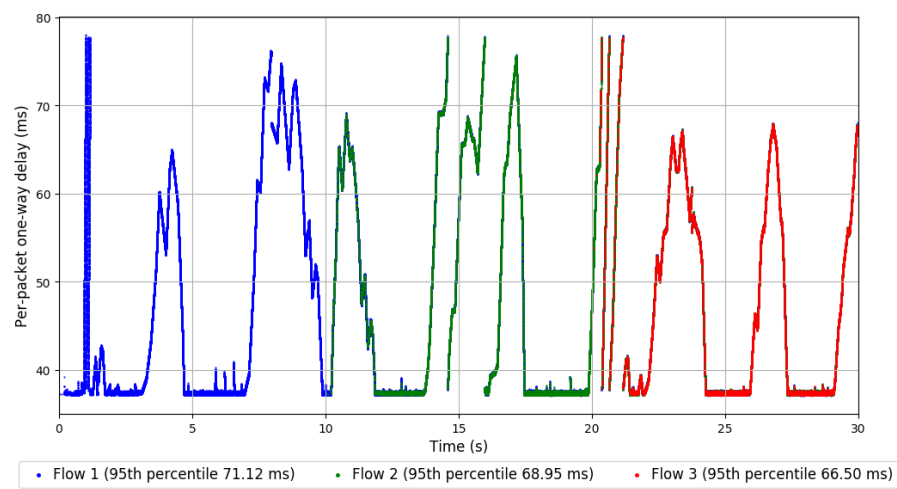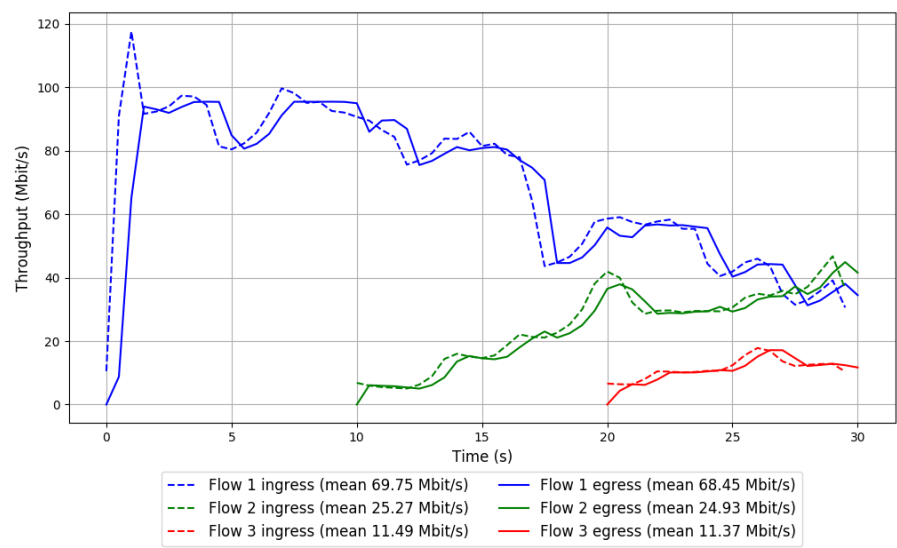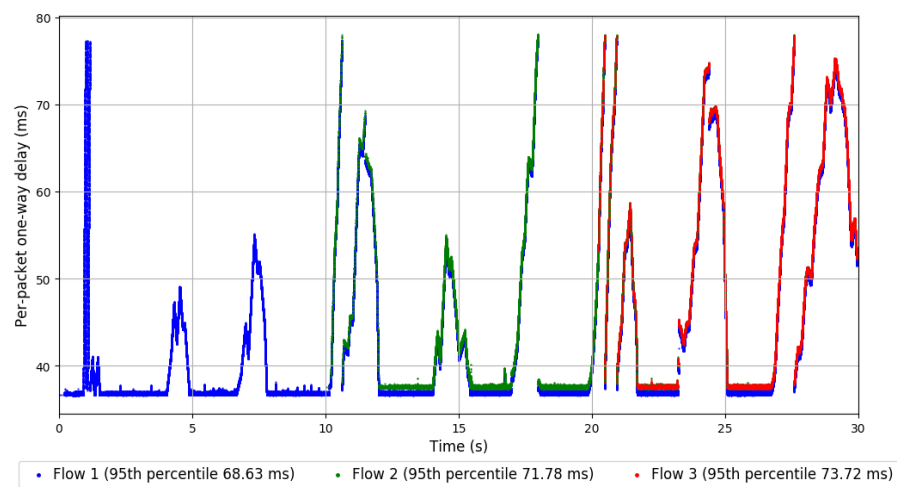
Run 9: Report of PCC-Allegro — Data Link

```
Run 10: Statistics of PCC-Allegro

Start at: 2018-07-24 18:06:41
End at: 2018-07-24 18:07:11
Local clock offset: 2.496 ms
Remote clock offset: 1.907 ms

# Below is generated by plot.py at 2018-07-24 18:28:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.82 Mbit/s
95th percentile per-packet one-way delay: 68.415 ms
Loss rate: 3.19%
-- Flow 1:
Average throughput: 82.59 Mbit/s
95th percentile per-packet one-way delay: 68.411 ms
Loss rate: 3.23%
-- Flow 2:
Average throughput: 9.55 Mbit/s
95th percentile per-packet one-way delay: 69.327 ms
Loss rate: 3.40%
-- Flow 3:
Average throughput: 8.73 Mbit/s
95th percentile per-packet one-way delay: 63.537 ms
Loss rate: 1.59%
```

Run 10: Report of PCC-Allegro — Data Link
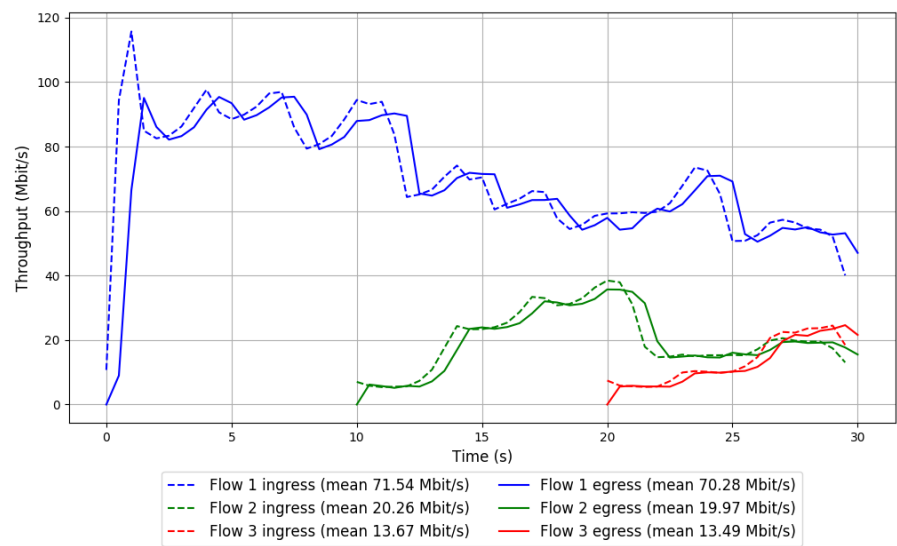
```
Run 1: Statistics of PCC-Expr

Start at: 2018-07-24 14:28:52
End at: 2018-07-24 14:29:22
Local clock offset: 0.682 ms
Remote clock offset: 4.308 ms


# Below is generated by plot.py at 2018-07-24 18:29:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.45 Mbit/s
95th percentile per-packet one-way delay: 64.727 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 71.26 Mbit/s
95th percentile per-packet one-way delay: 63.858 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 15.67 Mbit/s
95th percentile per-packet one-way delay: 68.304 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 17.49 Mbit/s
95th percentile per-packet one-way delay: 65.142 ms
Loss rate: 0.44%
```
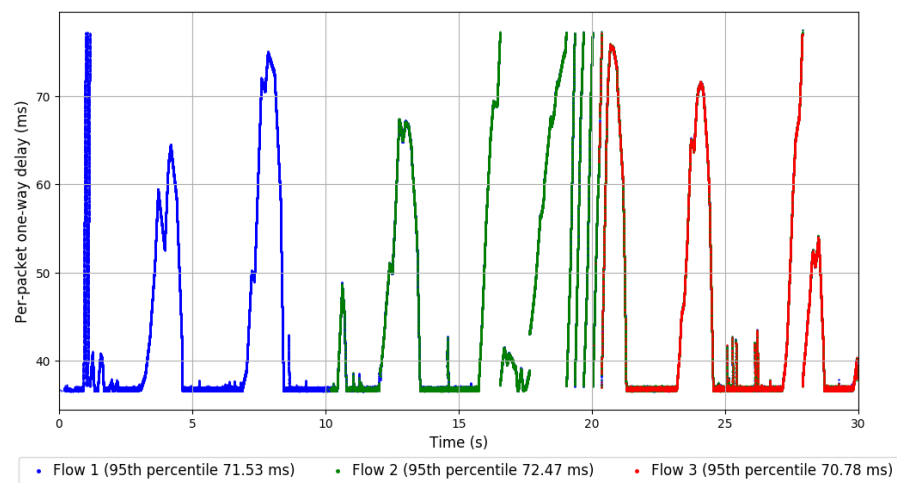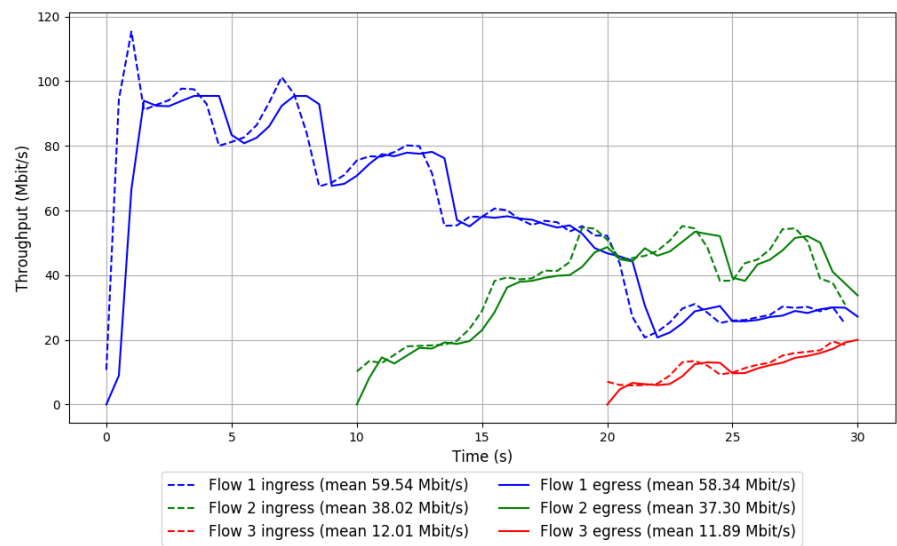
Run 1: Report of PCC-Expr — Data Link

```
Run 2: Statistics of PCC-Expr

Start at: 2018-07-24 14:51:53
End at: 2018-07-24 14:52:23
Local clock offset: 4.453 ms
Remote clock offset: 4.593 ms

# Below is generated by plot.py at 2018-07-24 18:29:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.21 Mbit/s
95th percentile per-packet one-way delay: 70.533 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 72.76 Mbit/s
95th percentile per-packet one-way delay: 69.692 ms
Loss rate: 1.52%
-- Flow 2:
Average throughput: 17.19 Mbit/s
95th percentile per-packet one-way delay: 71.968 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 15.19 Mbit/s
95th percentile per-packet one-way delay: 74.008 ms
Loss rate: 1.12%
```
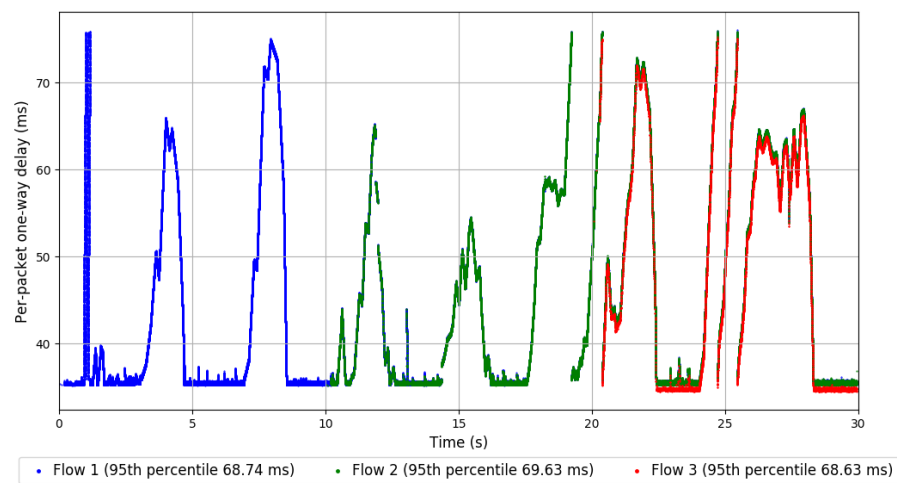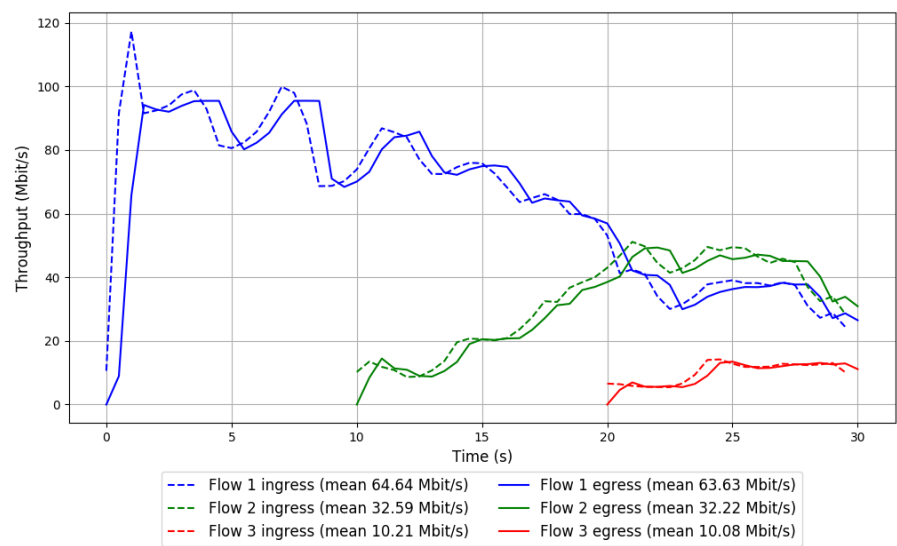
Run 2: Report of PCC-Expr — Data Link

```
Run 3: Statistics of PCC-Expr

Start at: 2018-07-24 15:15:05
End at: 2018-07-24 15:15:35
Local clock offset: 1.33 ms
Remote clock offset: 4.274 ms


# Below is generated by plot.py at 2018-07-24 18:29:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.80 Mbit/s
95th percentile per-packet one-way delay: 70.528 ms
Loss rate: 1.62%
-- Flow 1:
Average throughput: 68.45 Mbit/s
95th percentile per-packet one-way delay: 71.124 ms
Loss rate: 1.76%
-- Flow 2:
Average throughput: 24.93 Mbit/s
95th percentile per-packet one-way delay: 68.954 ms
Loss rate: 1.20%
-- Flow 3:
Average throughput: 11.37 Mbit/s
95th percentile per-packet one-way delay: 66.501 ms
Loss rate: 0.90%
```
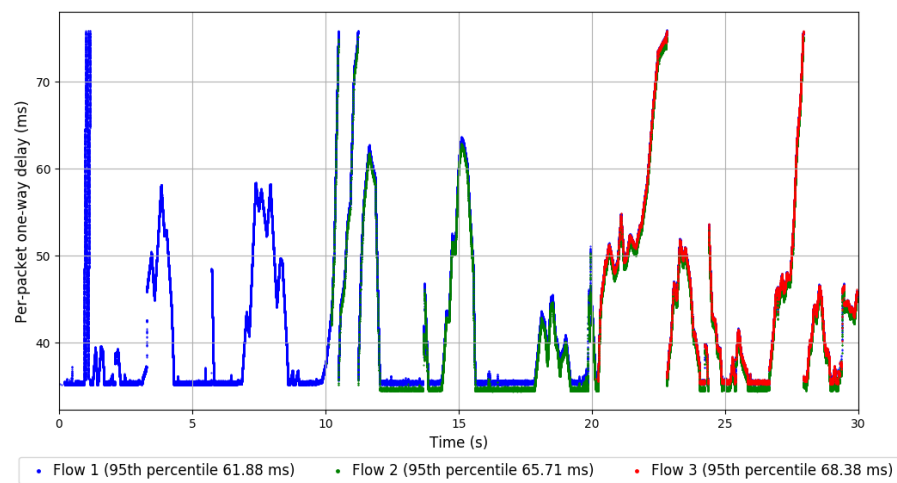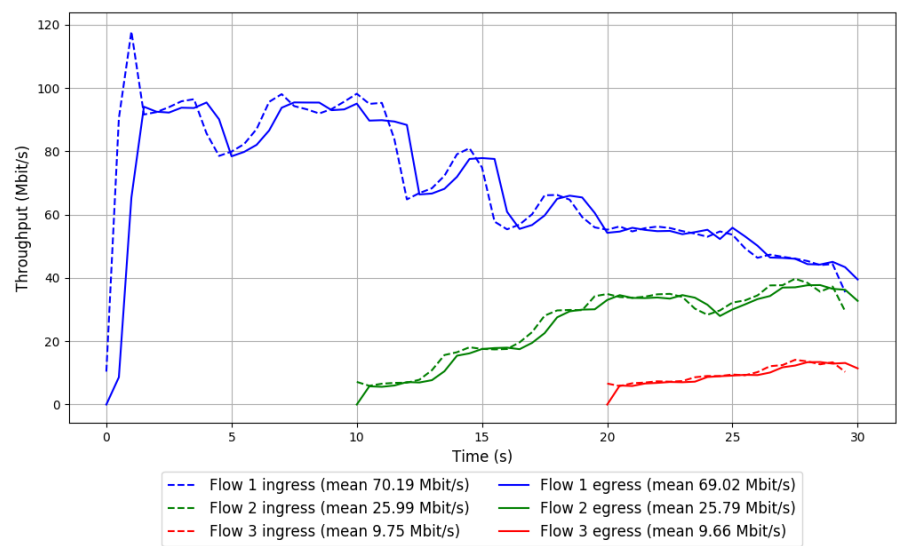
Run 3: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 69.75 Mbit/s)   Flow 1 egress (mean 68.45 Mbit/s)
Flow 2 ingress (mean 25.27 Mbit/s)   Flow 2 egress (mean 24.93 Mbit/s)
Flow 3 ingress (mean 11.49 Mbit/s)   Flow 3 egress (mean 11.37 Mbit/s)

Flow 1 (95th percentile 71.12 ms)   Flow 2 (95th percentile 68.95 ms)   Flow 3 (95th percentile 66.50 ms)

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```
Run 4: Statistics of PCC-Expr

Start at: 2018-07-24 15:38:03
End at: 2018-07-24 15:38:33
Local clock offset: -0.109 ms
Remote clock offset: 4.453 ms


# Below is generated by plot.py at 2018-07-24 18:29:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.03 Mbit/s
95th percentile per-packet one-way delay: 69.917 ms
Loss rate: 1.62%
-- Flow 1:
Average throughput: 70.28 Mbit/s
95th percentile per-packet one-way delay: 68.634 ms
Loss rate: 1.70%
-- Flow 2:
Average throughput: 19.97 Mbit/s
95th percentile per-packet one-way delay: 71.785 ms
Loss rate: 1.34%
-- Flow 3:
Average throughput: 13.49 Mbit/s
95th percentile per-packet one-way delay: 73.724 ms
Loss rate: 1.23%
```
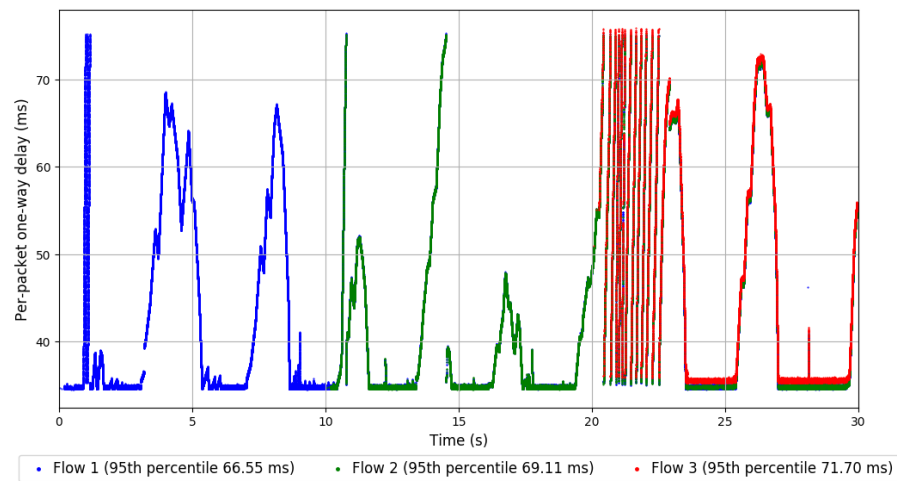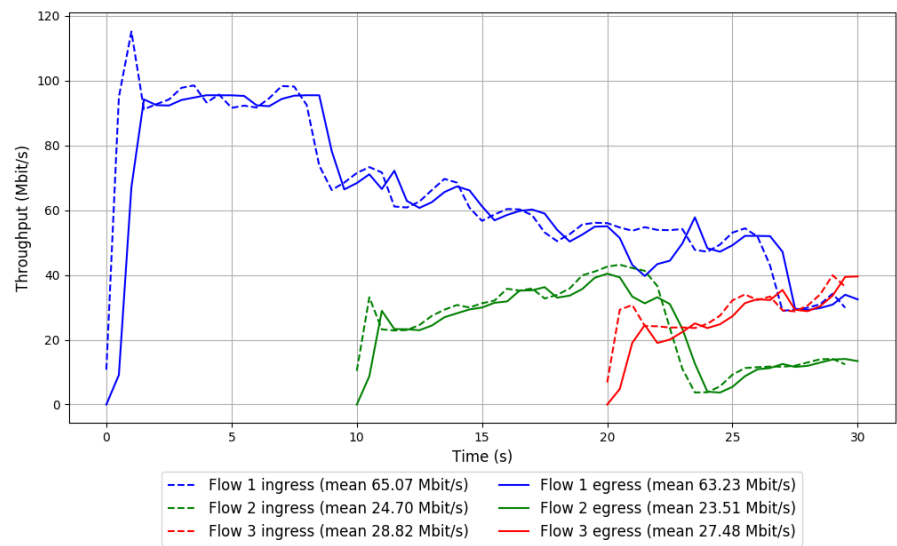
Run 4: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 71.54 Mbit/s) --- Flow 1 egress (mean 70.28 Mbit/s)
Flow 2 ingress (mean 20.26 Mbit/s) --- Flow 2 egress (mean 19.97 Mbit/s)
Flow 3 ingress (mean 13.67 Mbit/s) --- Flow 3 egress (mean 13.49 Mbit/s)

Flow 1 (95th percentile 68.63 ms)   Flow 2 (95th percentile 71.78 ms)   Flow 3 (95th percentile 73.72 ms)

```
Run 5: Statistics of PCC-Expr

Start at: 2018-07-24 16:01:07
End at: 2018-07-24 16:01:37
Local clock offset: -0.595 ms
Remote clock offset: 4.557 ms


# Below is generated by plot.py at 2018-07-24 18:29:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.07 Mbit/s
95th percentile per-packet one-way delay: 71.638 ms
Loss rate: 1.92%
-- Flow 1:
Average throughput: 58.34 Mbit/s
95th percentile per-packet one-way delay: 71.527 ms
Loss rate: 2.01%
-- Flow 2:
Average throughput: 37.30 Mbit/s
95th percentile per-packet one-way delay: 72.472 ms
Loss rate: 1.88%
-- Flow 3:
Average throughput: 11.89 Mbit/s
95th percentile per-packet one-way delay: 70.778 ms
Loss rate: 0.94%
```
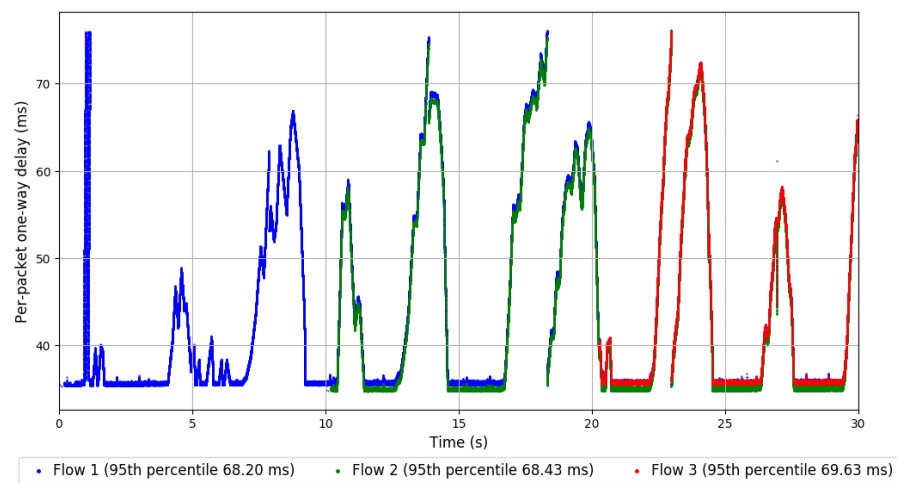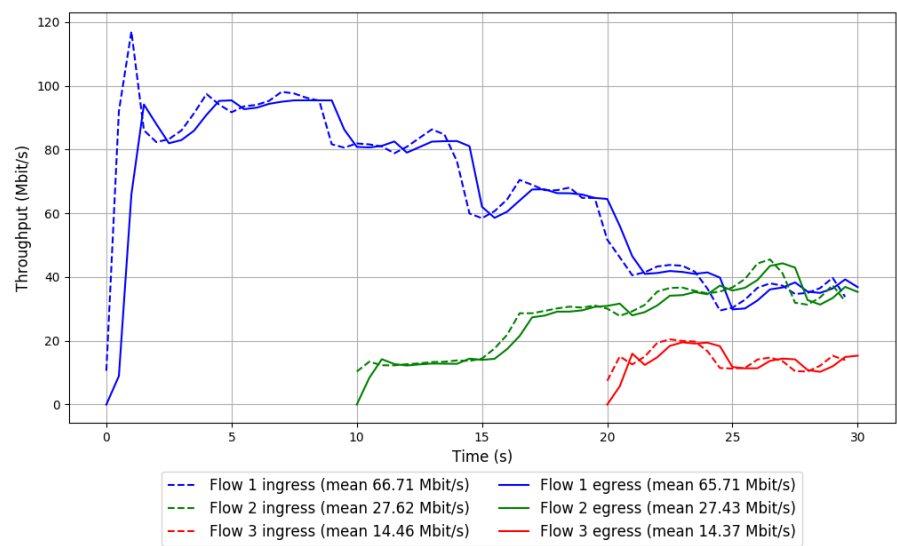
Run 5: Report of PCC-Expr — Data Link

- - - Flow 1 ingress (mean 59.54 Mbit/s) —— Flow 1 egress (mean 58.34 Mbit/s)
- - - Flow 2 ingress (mean 38.02 Mbit/s) —— Flow 2 egress (mean 37.30 Mbit/s)
- - - Flow 3 ingress (mean 12.01 Mbit/s) —— Flow 3 egress (mean 11.89 Mbit/s)

• Flow 1 (95th percentile 71.53 ms)   • Flow 2 (95th percentile 72.47 ms)   • Flow 3 (95th percentile 70.78 ms)

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```
Run 6: Statistics of PCC-Expr

Start at: 2018-07-24 16:24:00
End at: 2018-07-24 16:24:30
Local clock offset: 0.761 ms
Remote clock offset: 2.532 ms


# Below is generated by plot.py at 2018-07-24 18:30:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.38 Mbit/s
95th percentile per-packet one-way delay: 69.062 ms
Loss rate: 1.46%
-- Flow 1:
Average throughput: 63.63 Mbit/s
95th percentile per-packet one-way delay: 68.736 ms
Loss rate: 1.56%
-- Flow 2:
Average throughput: 32.22 Mbit/s
95th percentile per-packet one-way delay: 69.633 ms
Loss rate: 1.16%
-- Flow 3:
Average throughput: 10.08 Mbit/s
95th percentile per-packet one-way delay: 68.628 ms
Loss rate: 1.46%
```
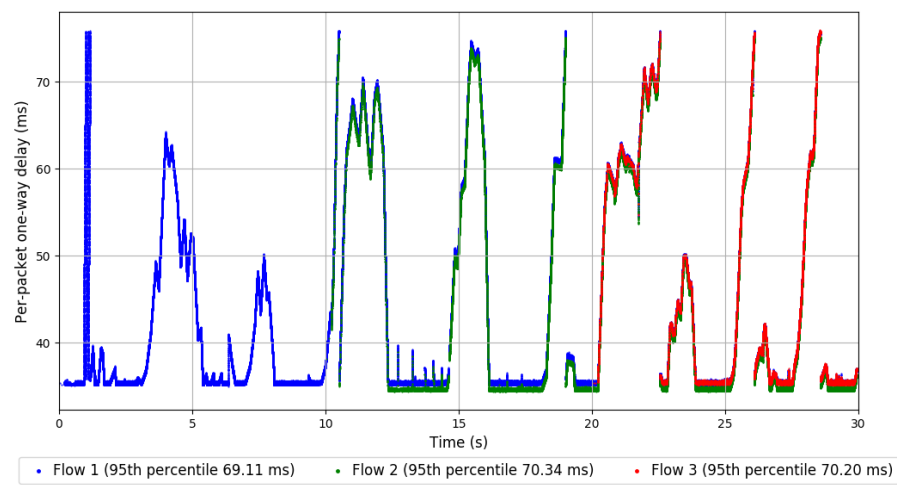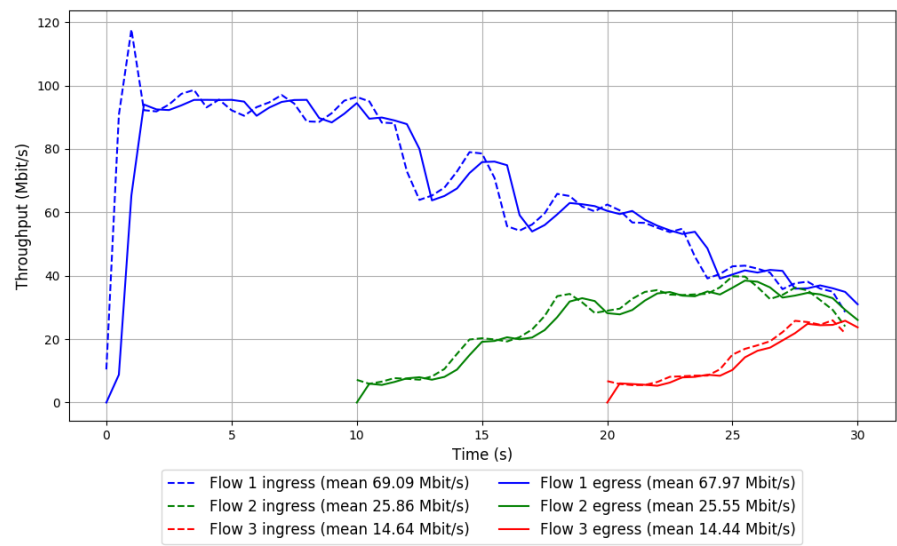
Run 6: Report of PCC-Expr — Data Link

```
Run 7: Statistics of PCC-Expr

Start at: 2018-07-24 16:47:00
End at: 2018-07-24 16:47:30
Local clock offset: 0.918 ms
Remote clock offset: 2.586 ms


# Below is generated by plot.py at 2018-07-24 18:31:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.36 Mbit/s
95th percentile per-packet one-way delay: 62.452 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 69.02 Mbit/s
95th percentile per-packet one-way delay: 61.882 ms
Loss rate: 1.63%
-- Flow 2:
Average throughput: 25.79 Mbit/s
95th percentile per-packet one-way delay: 65.711 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 9.66 Mbit/s
95th percentile per-packet one-way delay: 68.382 ms
Loss rate: 0.91%
```
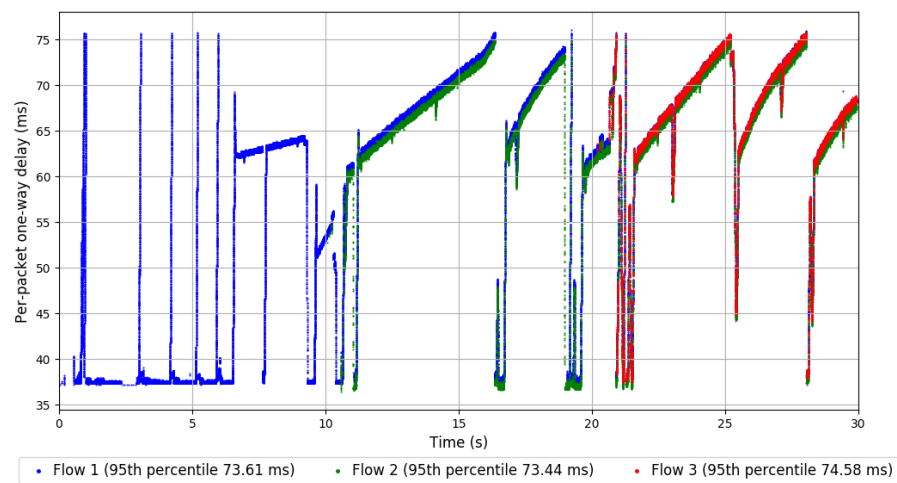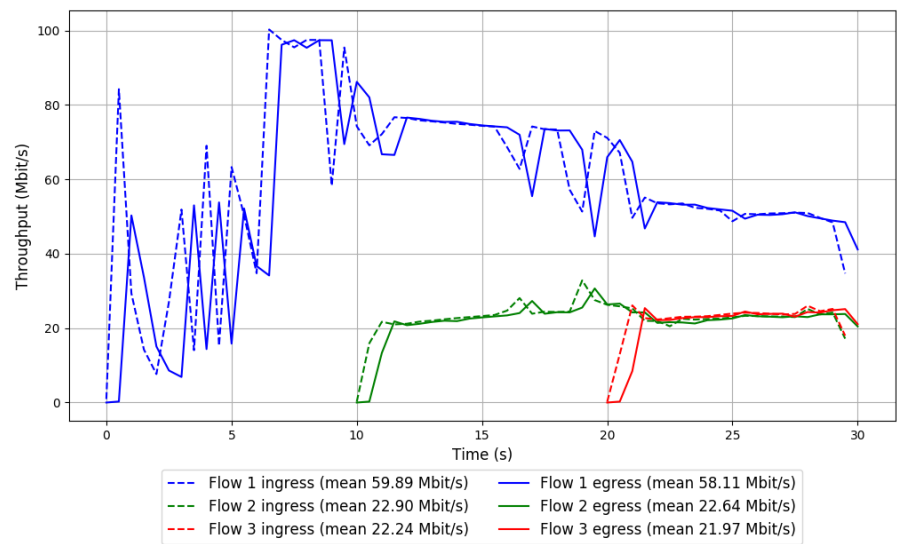
Run 7: Report of PCC-Expr — Data Link

- - - - Flow 1 ingress (mean 70.19 Mbit/s)   —— Flow 1 egress (mean 69.02 Mbit/s)
- - - - Flow 2 ingress (mean 25.99 Mbit/s)   —— Flow 2 egress (mean 25.79 Mbit/s)
- - - - Flow 3 ingress (mean 9.75 Mbit/s)   —— Flow 3 egress (mean 9.66 Mbit/s)

- Flow 1 (95th percentile 61.88 ms)   • Flow 2 (95th percentile 65.71 ms)   • Flow 3 (95th percentile 68.38 ms)

```
Run 8: Statistics of PCC-Expr

Start at: 2018-07-24 17:09:56
End at: 2018-07-24 17:10:26
Local clock offset: 0.535 ms
Remote clock offset: 2.01 ms


# Below is generated by plot.py at 2018-07-24 18:31:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.95 Mbit/s
95th percentile per-packet one-way delay: 67.454 ms
Loss rate: 3.30%
-- Flow 1:
Average throughput: 63.23 Mbit/s
95th percentile per-packet one-way delay: 66.547 ms
Loss rate: 2.75%
-- Flow 2:
Average throughput: 23.51 Mbit/s
95th percentile per-packet one-way delay: 69.113 ms
Loss rate: 4.71%
-- Flow 3:
Average throughput: 27.48 Mbit/s
95th percentile per-packet one-way delay: 71.703 ms
Loss rate: 4.60%
```
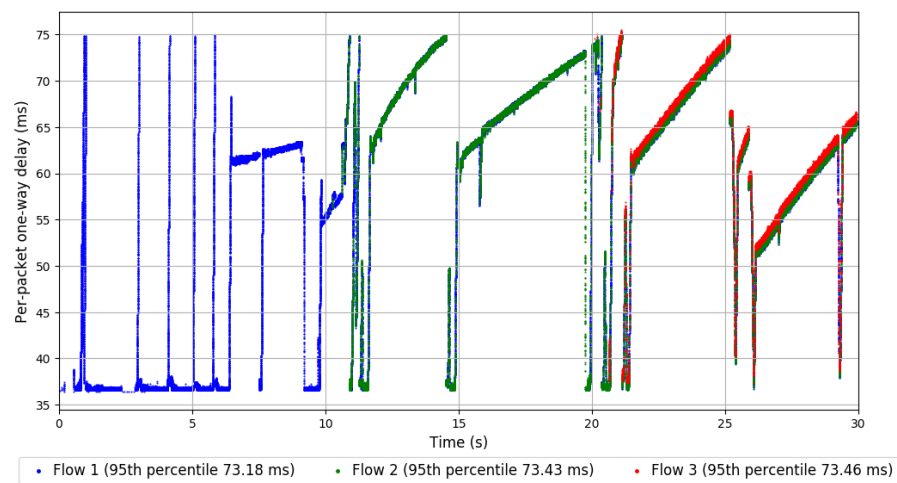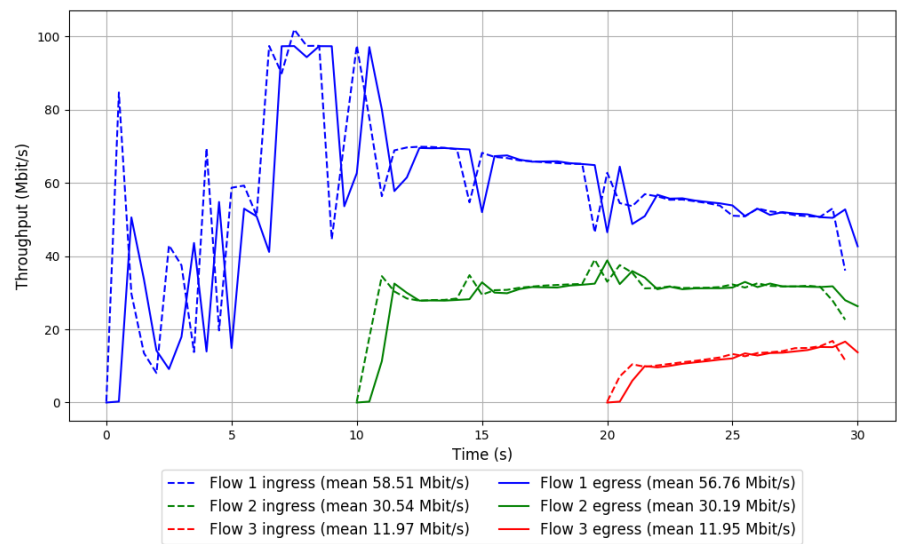
Run 8: Report of PCC-Expr — Data Link

- - - - Flow 1 ingress (mean 65.07 Mbit/s) ——— Flow 1 egress (mean 63.23 Mbit/s)
- - - - Flow 2 ingress (mean 24.70 Mbit/s) ——— Flow 2 egress (mean 23.51 Mbit/s)
- - - - Flow 3 ingress (mean 28.82 Mbit/s) ——— Flow 3 egress (mean 27.48 Mbit/s)

• Flow 1 (95th percentile 66.55 ms)   • Flow 2 (95th percentile 69.11 ms)   • Flow 3 (95th percentile 71.70 ms)

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```
Run 9: Statistics of PCC-Expr

Start at: 2018-07-24 17:32:52
End at: 2018-07-24 17:33:22
Local clock offset: 0.58 ms
Remote clock offset: 1.768 ms


# Below is generated by plot.py at 2018-07-24 18:31:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.70 Mbit/s
95th percentile per-packet one-way delay: 68.387 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 65.71 Mbit/s
95th percentile per-packet one-way delay: 68.198 ms
Loss rate: 1.40%
-- Flow 2:
Average throughput: 27.43 Mbit/s
95th percentile per-packet one-way delay: 68.434 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 14.37 Mbit/s
95th percentile per-packet one-way delay: 69.627 ms
Loss rate: 0.55%
```
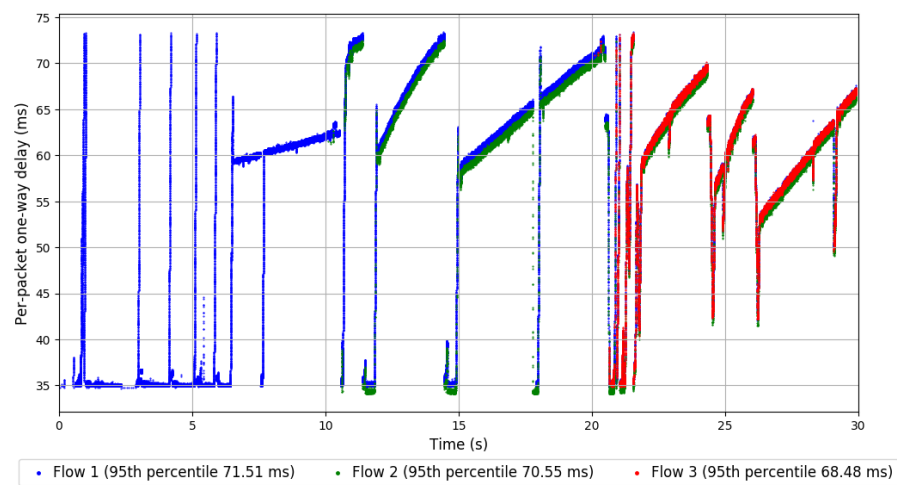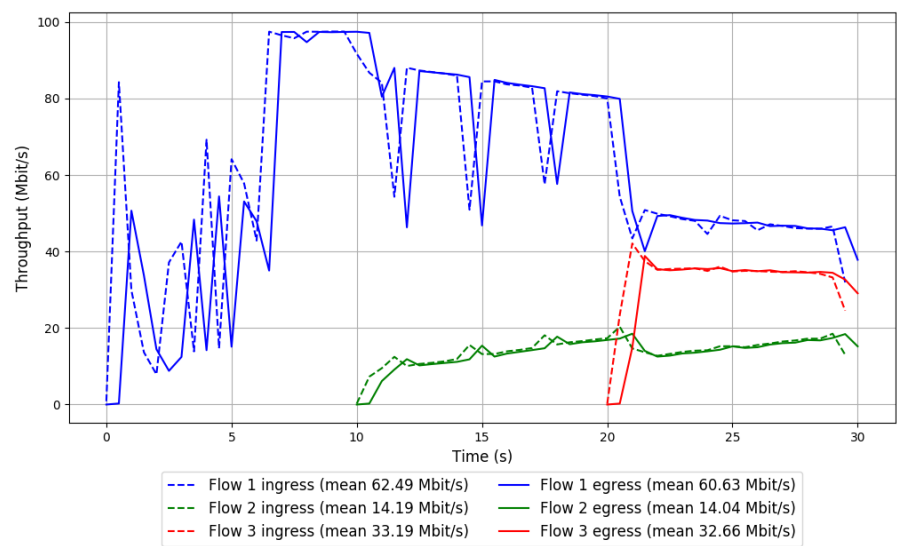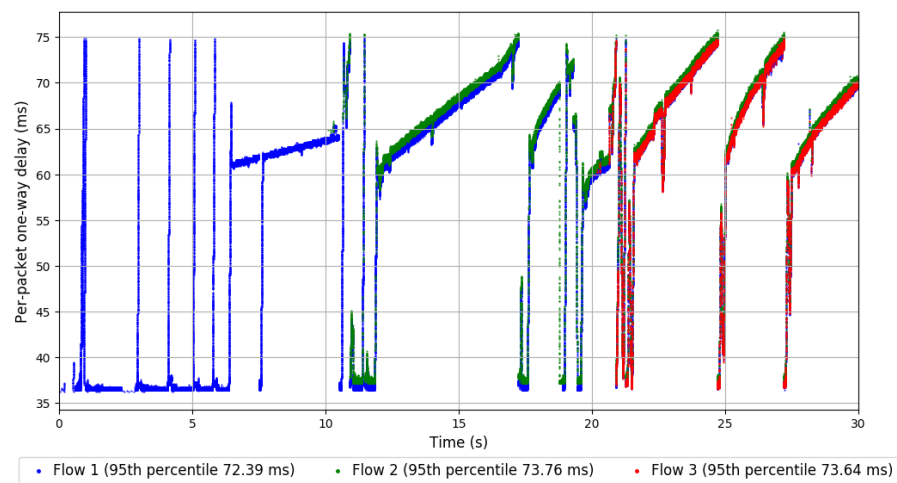
Run 9: Report of PCC-Expr — Data Link

Legend:
- Flow 1 ingress (mean 66.71 Mbit/s) — Flow 1 egress (mean 65.71 Mbit/s)
- Flow 2 ingress (mean 27.62 Mbit/s) — Flow 2 egress (mean 27.43 Mbit/s)
- Flow 3 ingress (mean 14.46 Mbit/s) — Flow 3 egress (mean 14.37 Mbit/s)

Legend:
- Flow 1 (95th percentile 68.20 ms)
- Flow 2 (95th percentile 68.43 ms)
- Flow 3 (95th percentile 69.63 ms)

```
Run 10: Statistics of PCC-Expr

Start at: 2018-07-24 17:55:47
End at: 2018-07-24 17:56:17
Local clock offset: 3.913 ms
Remote clock offset: 1.751 ms


# Below is generated by plot.py at 2018-07-24 18:31:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.73 Mbit/s
95th percentile per-packet one-way delay: 69.400 ms
Loss rate: 1.52%
-- Flow 1:
Average throughput: 67.97 Mbit/s
95th percentile per-packet one-way delay: 69.107 ms
Loss rate: 1.62%
-- Flow 2:
Average throughput: 25.55 Mbit/s
95th percentile per-packet one-way delay: 70.345 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 14.44 Mbit/s
95th percentile per-packet one-way delay: 70.201 ms
Loss rate: 1.34%
```
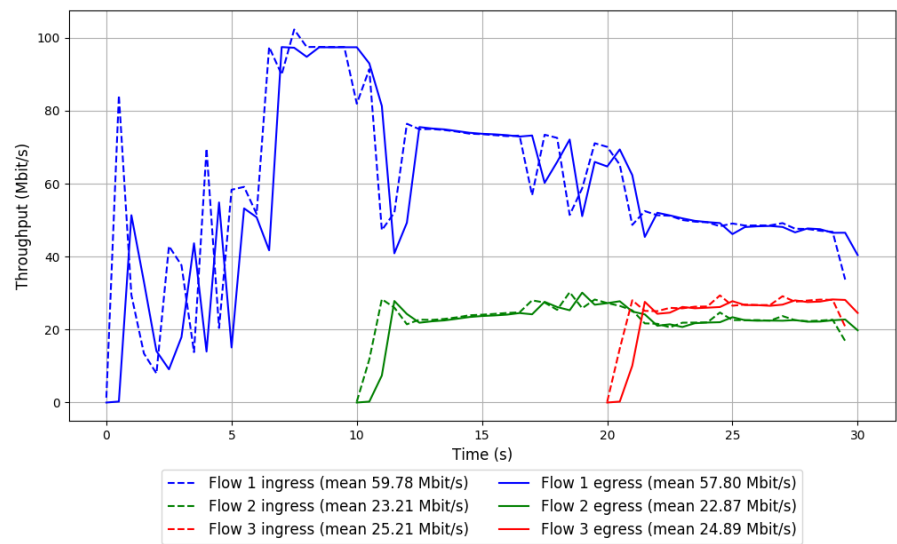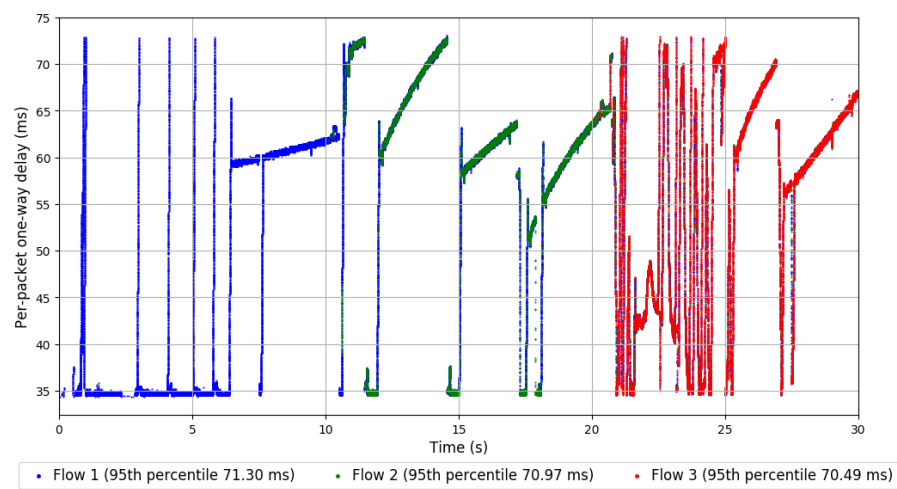
Run 10: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 69.09 Mbit/s) --- Flow 1 egress (mean 67.97 Mbit/s)
Flow 2 ingress (mean 25.86 Mbit/s) --- Flow 2 egress (mean 25.55 Mbit/s)
Flow 3 ingress (mean 14.64 Mbit/s) --- Flow 3 egress (mean 14.44 Mbit/s)

Flow 1 (95th percentile 69.11 ms)   Flow 2 (95th percentile 70.34 ms)   Flow 3 (95th percentile 70.20 ms)

```
Run 1: Statistics of QUIC Cubic

Start at: 2018-07-24 14:35:43
End at: 2018-07-24 14:36:13
Local clock offset: 2.016 ms
Remote clock offset: 4.239 ms


# Below is generated by plot.py at 2018-07-24 18:31:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.38 Mbit/s
95th percentile per-packet one-way delay: 73.709 ms
Loss rate: 2.40%
-- Flow 1:
Average throughput: 58.11 Mbit/s
95th percentile per-packet one-way delay: 73.606 ms
Loss rate: 2.88%
-- Flow 2:
Average throughput: 22.64 Mbit/s
95th percentile per-packet one-way delay: 73.438 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 21.97 Mbit/s
95th percentile per-packet one-way delay: 74.576 ms
Loss rate: 1.17%
```
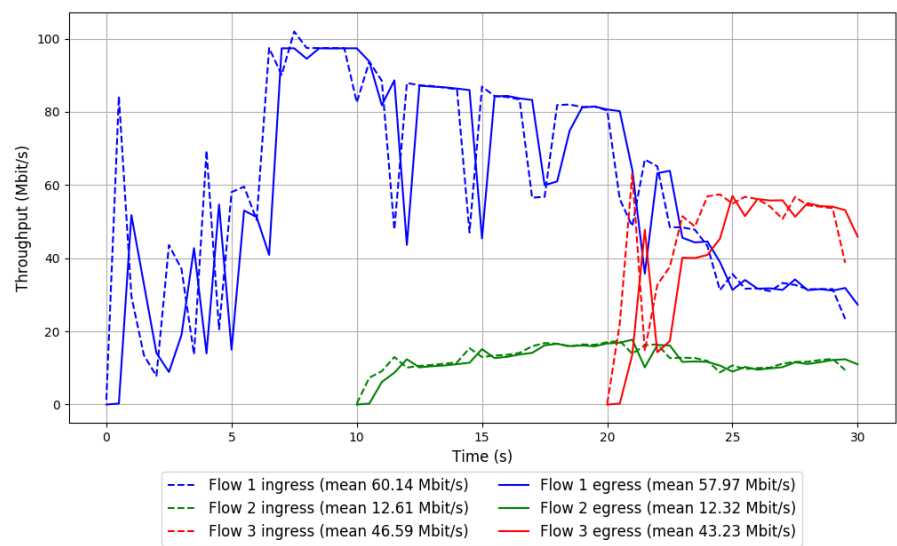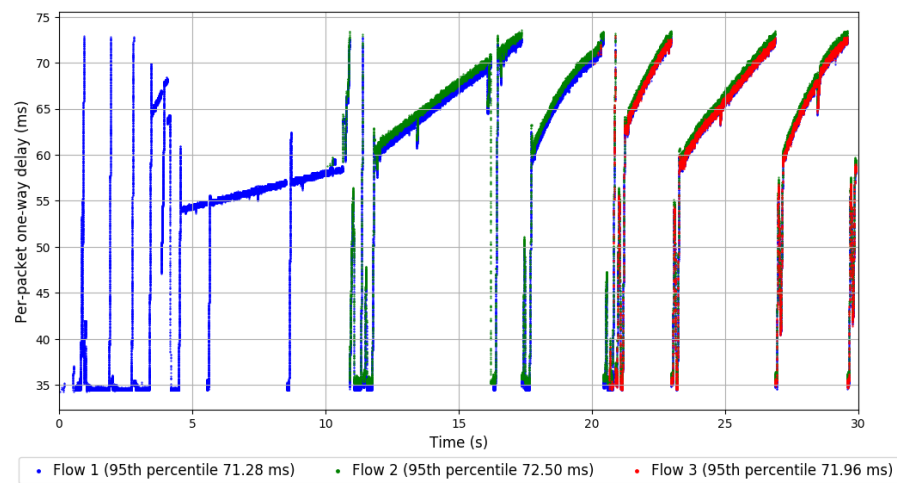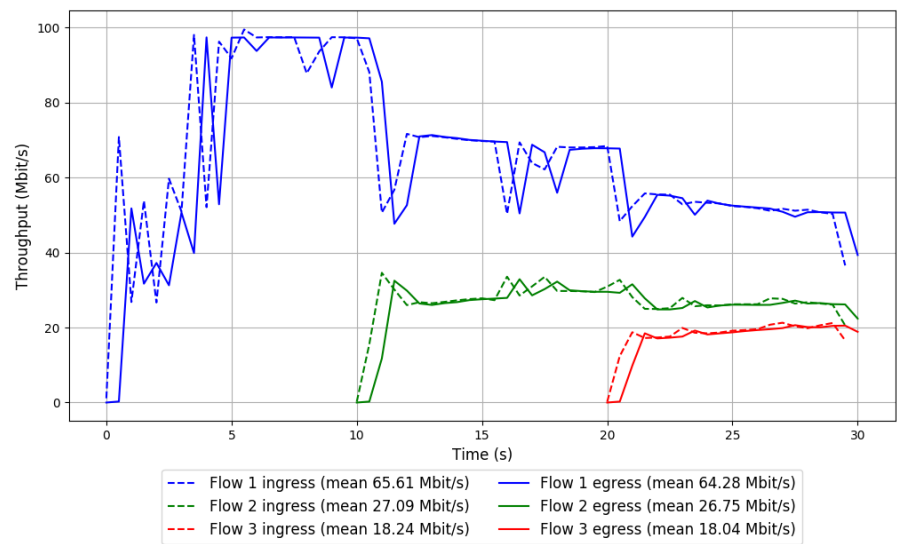
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2018-07-24 14:58:41
End at: 2018-07-24 14:59:11
Local clock offset: 4.879 ms
Remote clock offset: 4.769 ms


# Below is generated by plot.py at 2018-07-24 18:31:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.74 Mbit/s
95th percentile per-packet one-way delay: 73.253 ms
Loss rate: 2.34%
-- Flow 1:
Average throughput: 56.76 Mbit/s
95th percentile per-packet one-way delay: 73.182 ms
Loss rate: 2.91%
-- Flow 2:
Average throughput: 30.19 Mbit/s
95th percentile per-packet one-way delay: 73.432 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 11.95 Mbit/s
95th percentile per-packet one-way delay: 73.456 ms
Loss rate: 0.31%
```
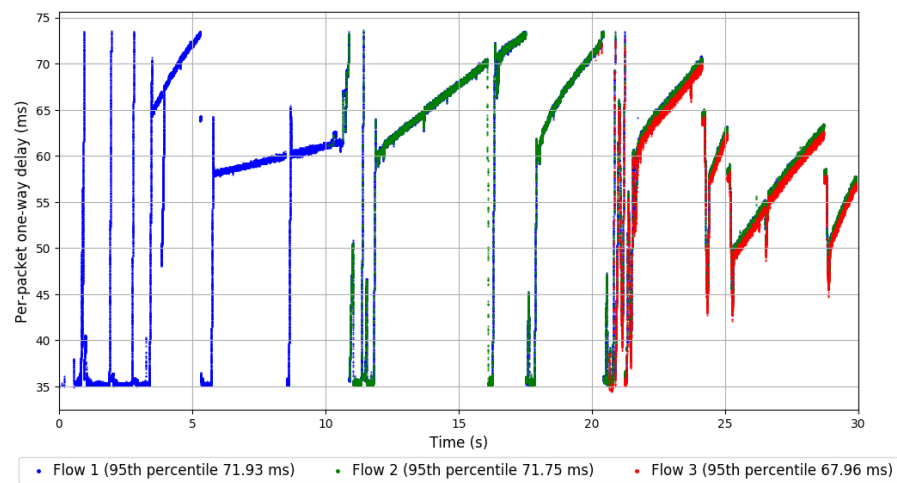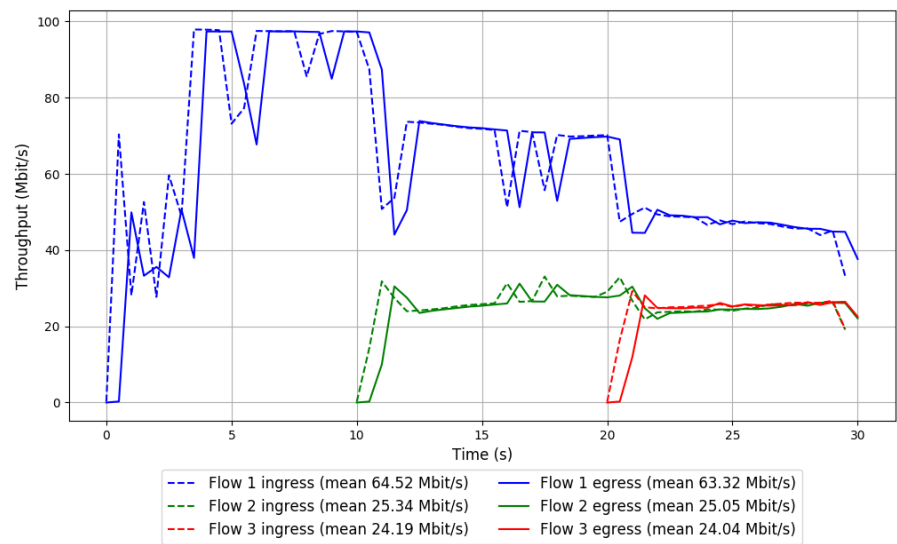
Run 2: Report of QUIC Cubic — Data Link

- - - Flow 1 ingress (mean 58.51 Mbit/s)   —— Flow 1 egress (mean 56.76 Mbit/s)
- - - Flow 2 ingress (mean 30.54 Mbit/s)   —— Flow 2 egress (mean 30.19 Mbit/s)
- - - Flow 3 ingress (mean 11.97 Mbit/s)   —— Flow 3 egress (mean 11.95 Mbit/s)

- Flow 1 (95th percentile 73.18 ms)   • Flow 2 (95th percentile 73.43 ms)   • Flow 3 (95th percentile 73.46 ms)

```
Run 3: Statistics of QUIC Cubic

Start at: 2018-07-24 15:21:53
End at: 2018-07-24 15:22:23
Local clock offset: 0.561 ms
Remote clock offset: 1.895 ms


# Below is generated by plot.py at 2018-07-24 18:31:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.66 Mbit/s
95th percentile per-packet one-way delay: 71.243 ms
Loss rate: 2.51%
-- Flow 1:
Average throughput: 60.63 Mbit/s
95th percentile per-packet one-way delay: 71.512 ms
Loss rate: 2.88%
-- Flow 2:
Average throughput: 14.04 Mbit/s
95th percentile per-packet one-way delay: 70.551 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 32.66 Mbit/s
95th percentile per-packet one-way delay: 68.477 ms
Loss rate: 1.62%
```
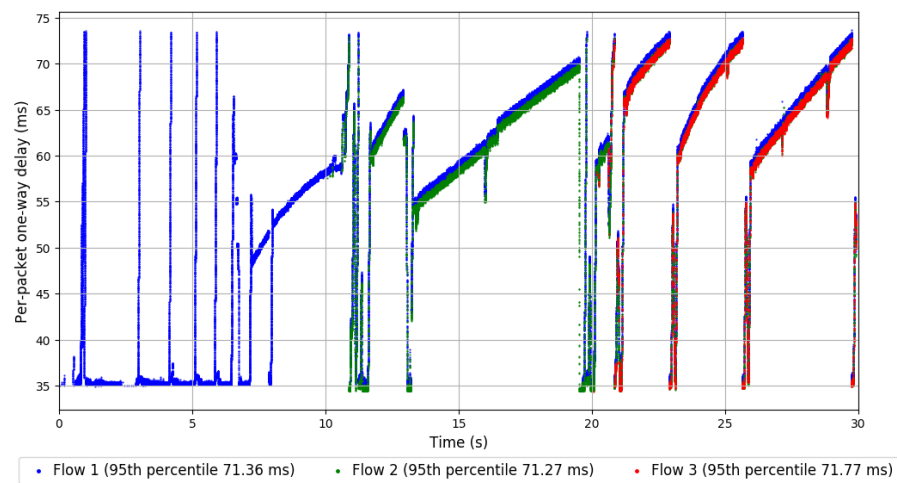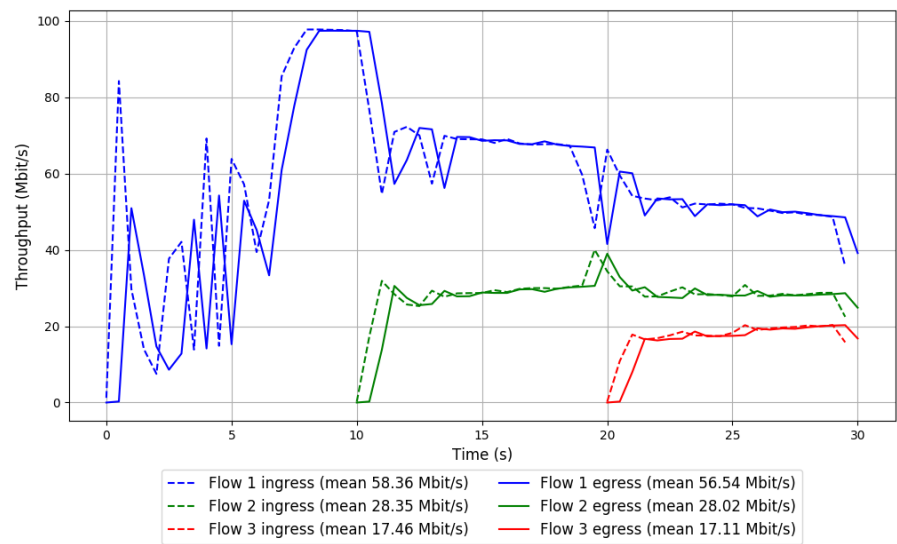
Run 3: Report of QUIC Cubic — Data Link

```
Run 4: Statistics of QUIC Cubic

Start at: 2018-07-24 15:44:51
End at: 2018-07-24 15:45:21
Local clock offset: -0.199 ms
Remote clock offset: 4.334 ms


# Below is generated by plot.py at 2018-07-24 18:31:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.17 Mbit/s
95th percentile per-packet one-way delay: 72.946 ms
Loss rate: 2.66%
-- Flow 1:
Average throughput: 57.80 Mbit/s
95th percentile per-packet one-way delay: 72.387 ms
Loss rate: 3.19%
-- Flow 2:
Average throughput: 22.87 Mbit/s
95th percentile per-packet one-way delay: 73.757 ms
Loss rate: 1.41%
-- Flow 3:
Average throughput: 24.89 Mbit/s
95th percentile per-packet one-way delay: 73.635 ms
Loss rate: 1.19%
```
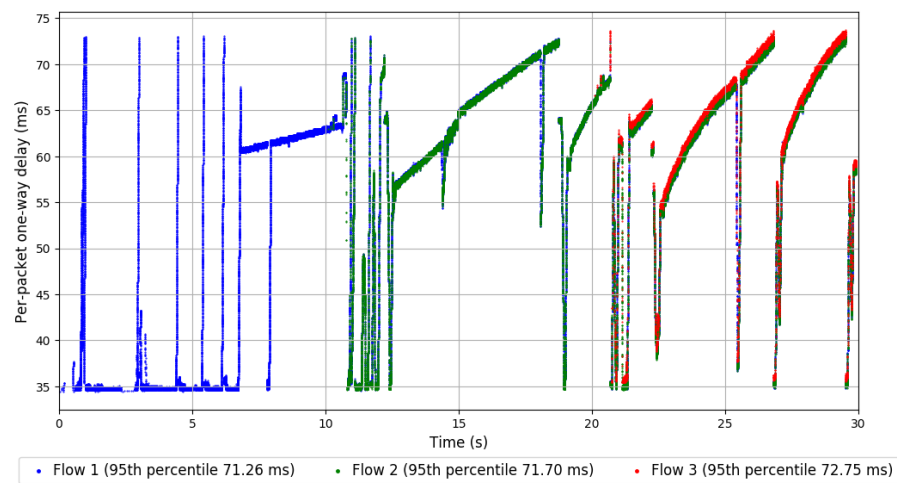
Run 4: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 59.78 Mbit/s) --- Flow 1 egress (mean 57.80 Mbit/s)
Flow 2 ingress (mean 23.21 Mbit/s) --- Flow 2 egress (mean 22.87 Mbit/s)
Flow 3 ingress (mean 25.21 Mbit/s) --- Flow 3 egress (mean 24.89 Mbit/s)

Flow 1 (95th percentile 72.39 ms)   Flow 2 (95th percentile 73.76 ms)   Flow 3 (95th percentile 73.64 ms)

```
Run 5: Statistics of QUIC Cubic

Start at: 2018-07-24 16:07:53
End at: 2018-07-24 16:08:23
Local clock offset: 0.104 ms
Remote clock offset: 2.56 ms


# Below is generated by plot.py at 2018-07-24 18:32:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.36 Mbit/s
95th percentile per-packet one-way delay: 71.049 ms
Loss rate: 4.05%
-- Flow 1:
Average throughput: 57.97 Mbit/s
95th percentile per-packet one-way delay: 71.298 ms
Loss rate: 3.50%
-- Flow 2:
Average throughput: 12.32 Mbit/s
95th percentile per-packet one-way delay: 70.972 ms
Loss rate: 2.25%
-- Flow 3:
Average throughput: 43.23 Mbit/s
95th percentile per-packet one-way delay: 70.490 ms
Loss rate: 7.18%
```
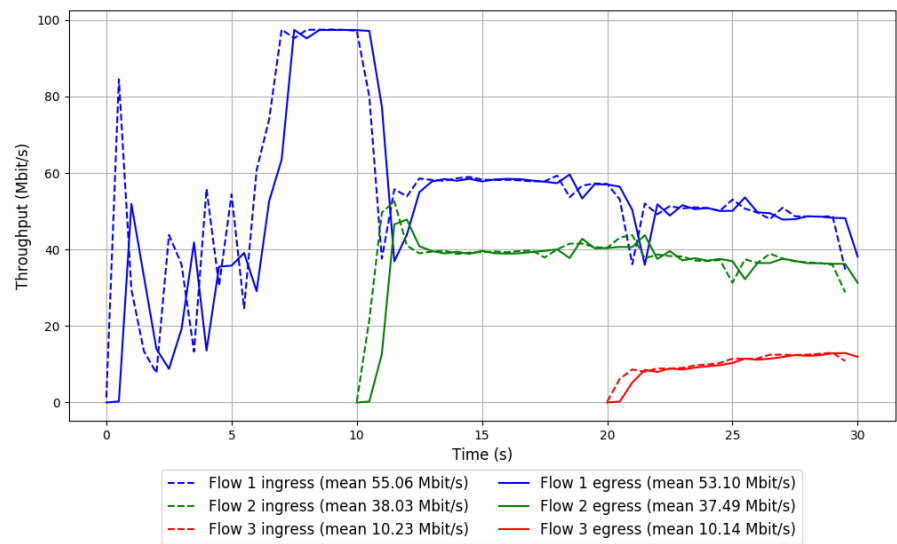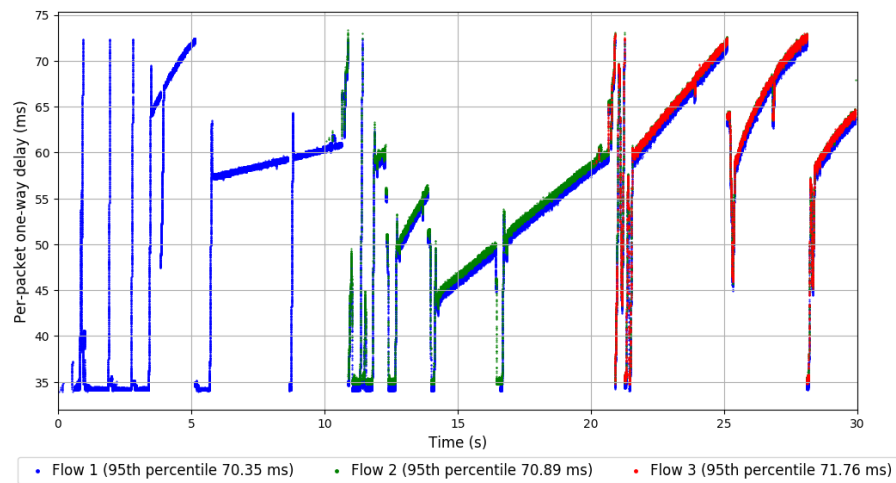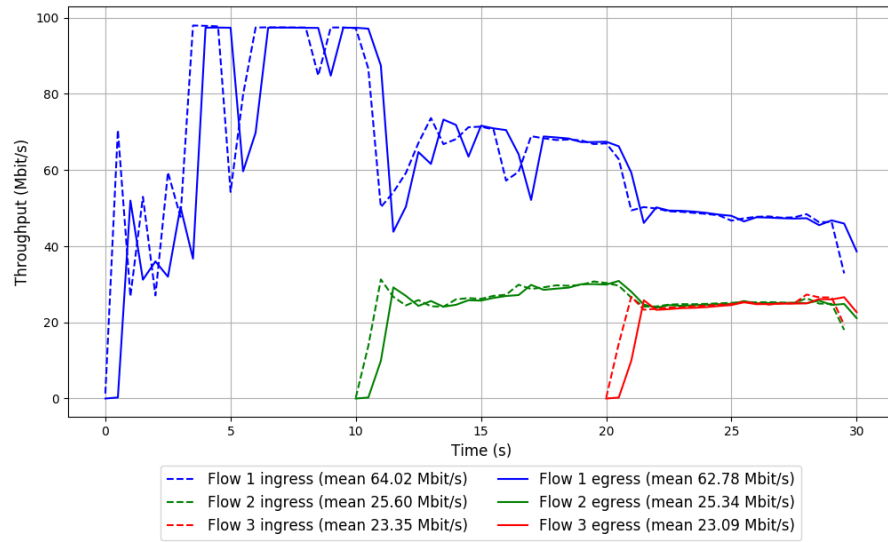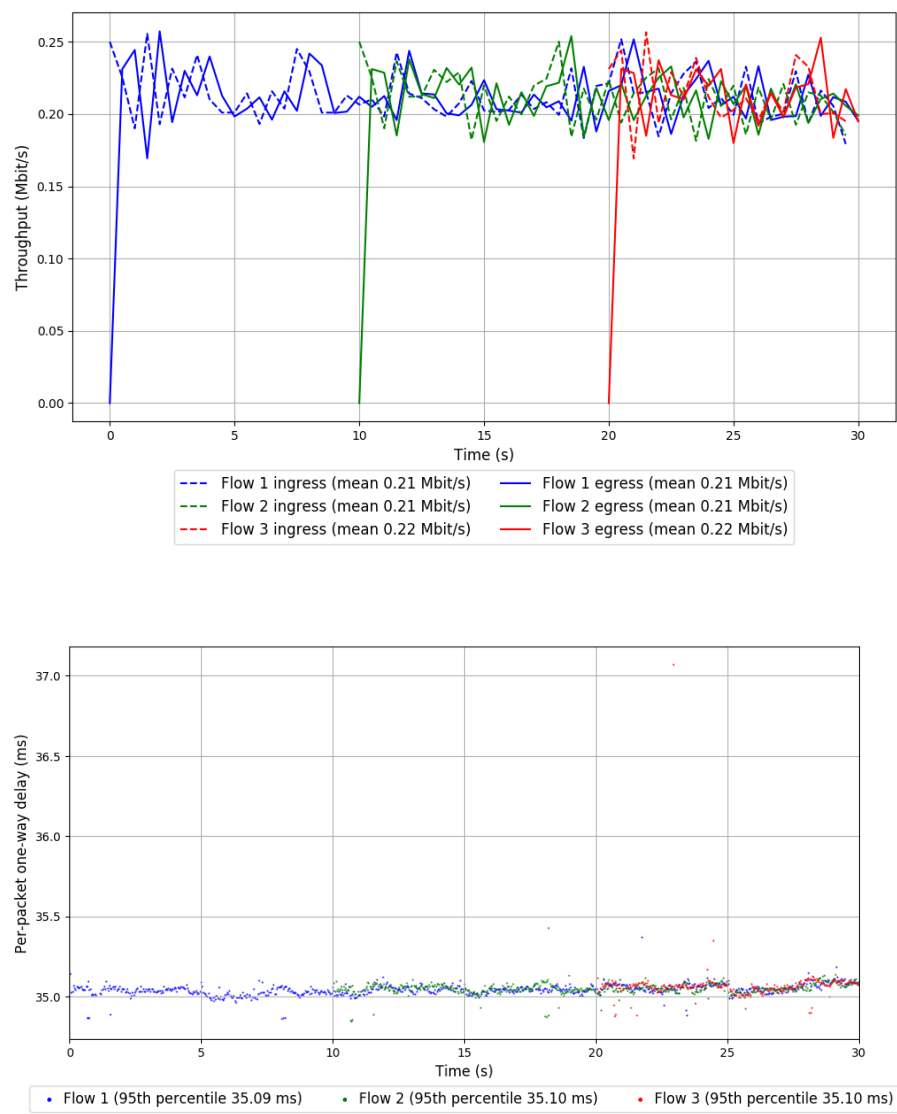
Run 5: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 60.14 Mbit/s) — Flow 1 egress (mean 57.97 Mbit/s)
Flow 2 ingress (mean 12.61 Mbit/s) — Flow 2 egress (mean 12.32 Mbit/s)
Flow 3 ingress (mean 46.59 Mbit/s) — Flow 3 egress (mean 43.23 Mbit/s)

Flow 1 (95th percentile 71.30 ms)　　Flow 2 (95th percentile 70.97 ms)　　Flow 3 (95th percentile 70.49 ms)

```
Run 6: Statistics of QUIC Cubic

Start at: 2018-07-24 16:30:49
End at: 2018-07-24 16:31:19
Local clock offset: 0.88 ms
Remote clock offset: 2.588 ms


# Below is generated by plot.py at 2018-07-24 18:32:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.95 Mbit/s
95th percentile per-packet one-way delay: 71.734 ms
Loss rate: 1.77%
-- Flow 1:
Average throughput: 64.28 Mbit/s
95th percentile per-packet one-way delay: 71.284 ms
Loss rate: 1.95%
-- Flow 2:
Average throughput: 26.75 Mbit/s
95th percentile per-packet one-way delay: 72.498 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 18.04 Mbit/s
95th percentile per-packet one-way delay: 71.959 ms
Loss rate: 1.21%
```
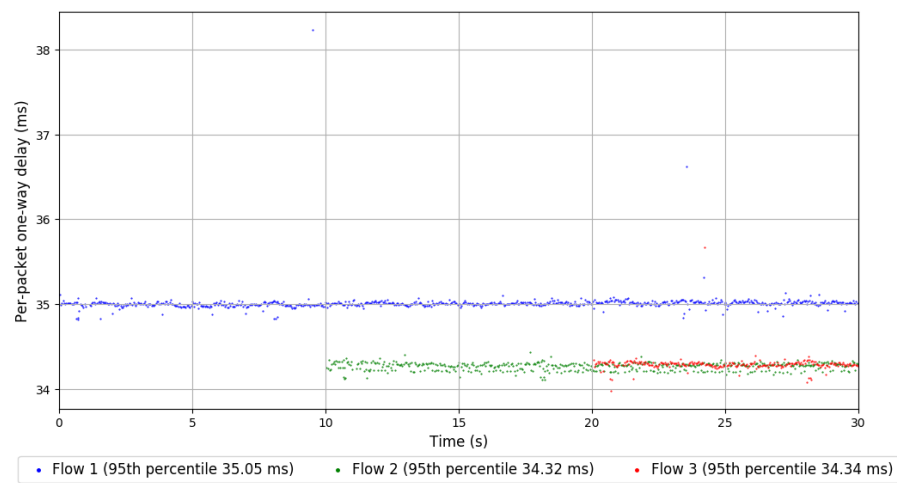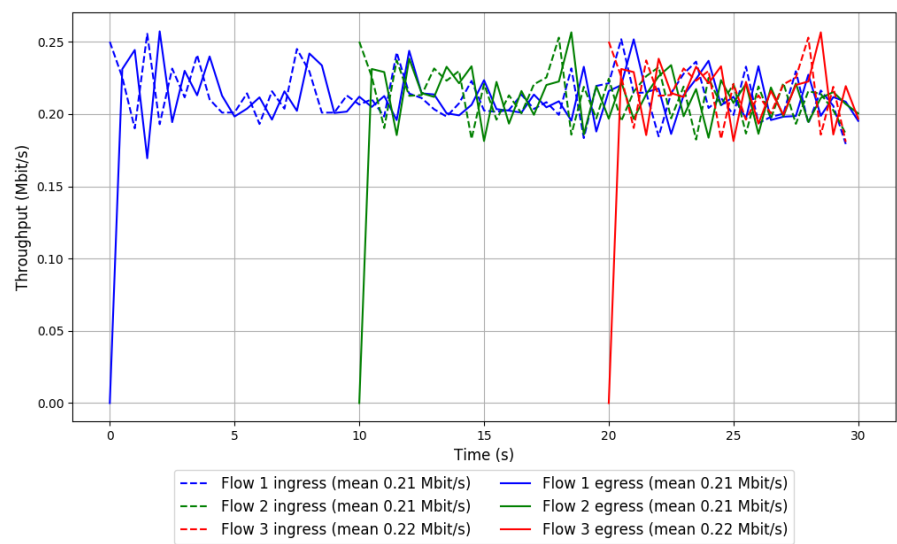
Run 6: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 65.61 Mbit/s) --- Flow 1 egress (mean 64.28 Mbit/s)
Flow 2 ingress (mean 27.09 Mbit/s) --- Flow 2 egress (mean 26.75 Mbit/s)
Flow 3 ingress (mean 18.24 Mbit/s) --- Flow 3 egress (mean 18.04 Mbit/s)

Flow 1 (95th percentile 71.28 ms)   Flow 2 (95th percentile 72.50 ms)   Flow 3 (95th percentile 71.96 ms)

```
Run 7: Statistics of QUIC Cubic

Start at: 2018-07-24 16:53:47
End at: 2018-07-24 16:54:17
Local clock offset: 0.949 ms
Remote clock offset: 2.199 ms


# Below is generated by plot.py at 2018-07-24 18:32:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.82 Mbit/s
95th percentile per-packet one-way delay: 71.729 ms
Loss rate: 1.59%
-- Flow 1:
Average throughput: 63.32 Mbit/s
95th percentile per-packet one-way delay: 71.928 ms
Loss rate: 1.80%
-- Flow 2:
Average throughput: 25.05 Mbit/s
95th percentile per-packet one-way delay: 71.752 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 24.04 Mbit/s
95th percentile per-packet one-way delay: 67.959 ms
Loss rate: 0.77%
```

Run 7: Report of QUIC Cubic — Data Link

```
Run 8: Statistics of QUIC Cubic

Start at: 2018-07-24 17:16:43
End at: 2018-07-24 17:17:13
Local clock offset: 0.465 ms
Remote clock offset: 1.993 ms


# Below is generated by plot.py at 2018-07-24 18:32:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.78 Mbit/s
95th percentile per-packet one-way delay: 71.464 ms
Loss rate: 2.56%
-- Flow 1:
Average throughput: 56.54 Mbit/s
95th percentile per-packet one-way delay: 71.358 ms
Loss rate: 3.07%
-- Flow 2:
Average throughput: 28.02 Mbit/s
95th percentile per-packet one-way delay: 71.273 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 17.11 Mbit/s
95th percentile per-packet one-way delay: 71.772 ms
Loss rate: 1.85%
```
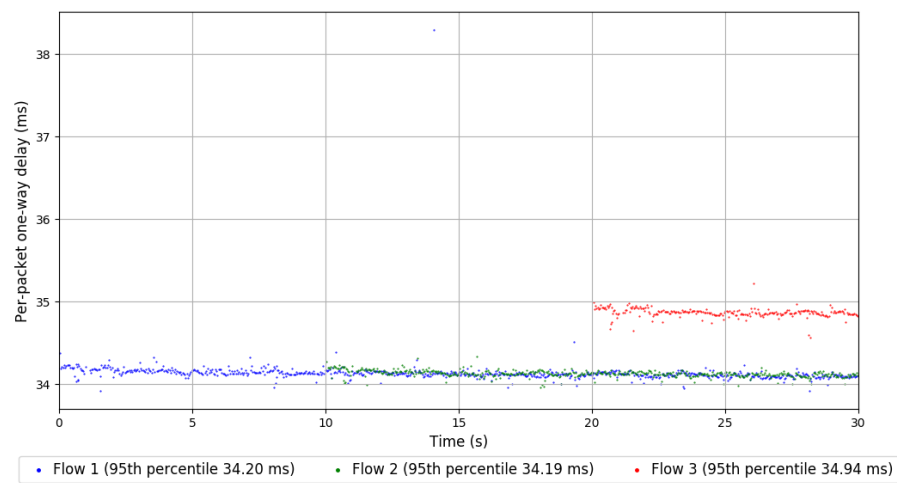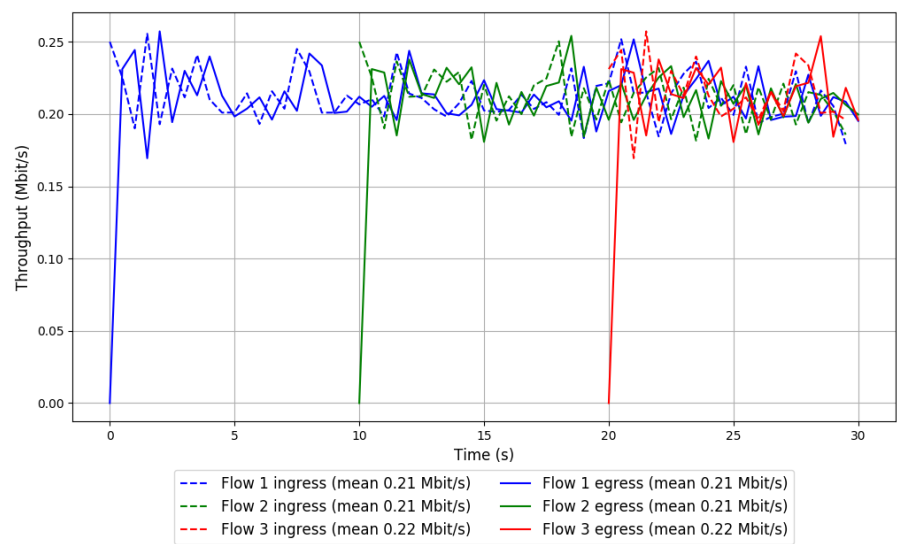
Run 8: Report of QUIC Cubic — Data Link

- - - Flow 1 ingress (mean 58.36 Mbit/s) —— Flow 1 egress (mean 56.54 Mbit/s)
- - - Flow 2 ingress (mean 28.35 Mbit/s) —— Flow 2 egress (mean 28.02 Mbit/s)
- - - Flow 3 ingress (mean 17.46 Mbit/s) —— Flow 3 egress (mean 17.11 Mbit/s)

- Flow 1 (95th percentile 71.36 ms)   - Flow 2 (95th percentile 71.27 ms)   - Flow 3 (95th percentile 71.77 ms)

```
Run 9: Statistics of QUIC Cubic

Start at: 2018-07-24 17:39:37
End at: 2018-07-24 17:40:07
Local clock offset: 2.215 ms
Remote clock offset: 1.71 ms


# Below is generated by plot.py at 2018-07-24 18:32:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.31 Mbit/s
95th percentile per-packet one-way delay: 71.517 ms
Loss rate: 2.76%
-- Flow 1:
Average throughput: 53.10 Mbit/s
95th percentile per-packet one-way delay: 71.258 ms
Loss rate: 3.48%
-- Flow 2:
Average throughput: 37.49 Mbit/s
95th percentile per-packet one-way delay: 71.702 ms
Loss rate: 1.43%
-- Flow 3:
Average throughput: 10.14 Mbit/s
95th percentile per-packet one-way delay: 72.749 ms
Loss rate: 0.96%
```
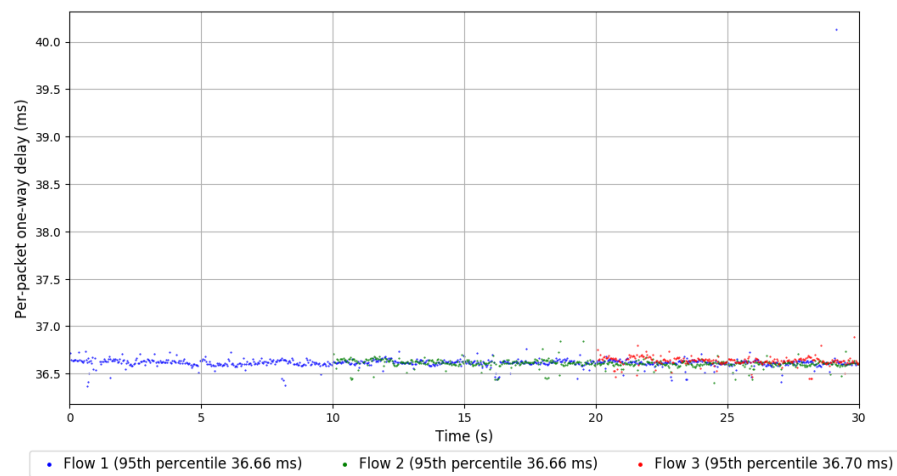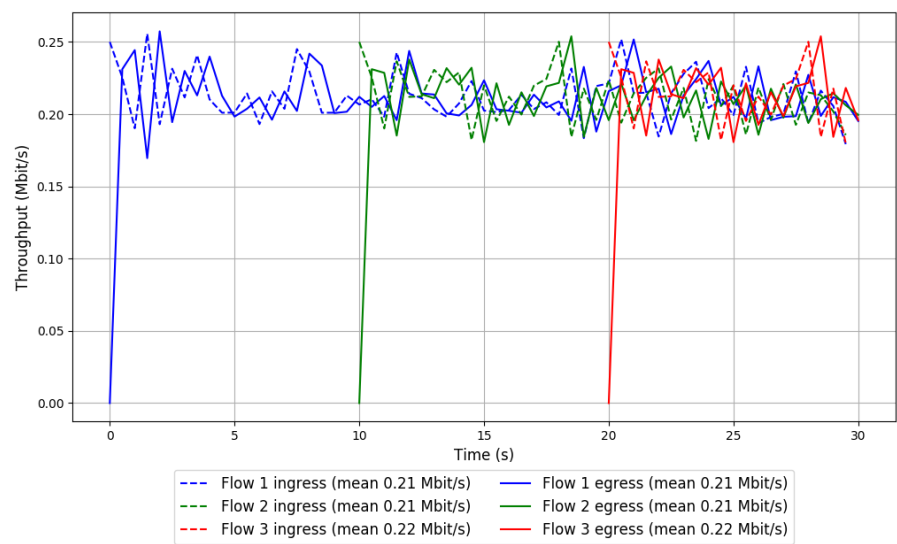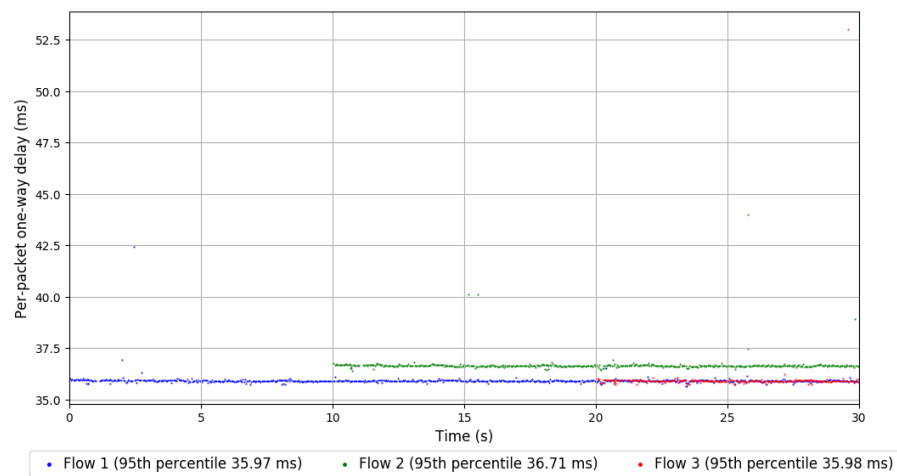
Run 9: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 55.06 Mbit/s) --- Flow 1 egress (mean 53.10 Mbit/s)
Flow 2 ingress (mean 38.03 Mbit/s) --- Flow 2 egress (mean 37.49 Mbit/s)
Flow 3 ingress (mean 10.23 Mbit/s) --- Flow 3 egress (mean 10.14 Mbit/s)

Flow 1 (95th percentile 71.26 ms)   Flow 2 (95th percentile 71.70 ms)   Flow 3 (95th percentile 72.75 ms)

```
Run 10: Statistics of QUIC Cubic

Start at: 2018-07-24 18:02:36
End at: 2018-07-24 18:03:06
Local clock offset: 3.928 ms
Remote clock offset: 1.83 ms


# Below is generated by plot.py at 2018-07-24 18:32:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.19 Mbit/s
95th percentile per-packet one-way delay: 70.742 ms
Loss rate: 1.61%
-- Flow 1:
Average throughput: 62.78 Mbit/s
95th percentile per-packet one-way delay: 70.348 ms
Loss rate: 1.84%
-- Flow 2:
Average throughput: 25.34 Mbit/s
95th percentile per-packet one-way delay: 70.889 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 23.09 Mbit/s
95th percentile per-packet one-way delay: 71.758 ms
Loss rate: 1.03%
```
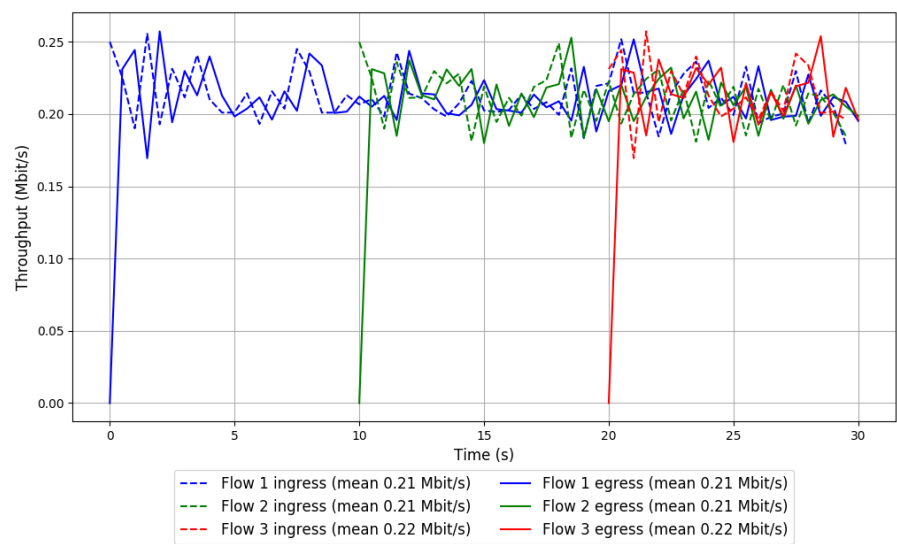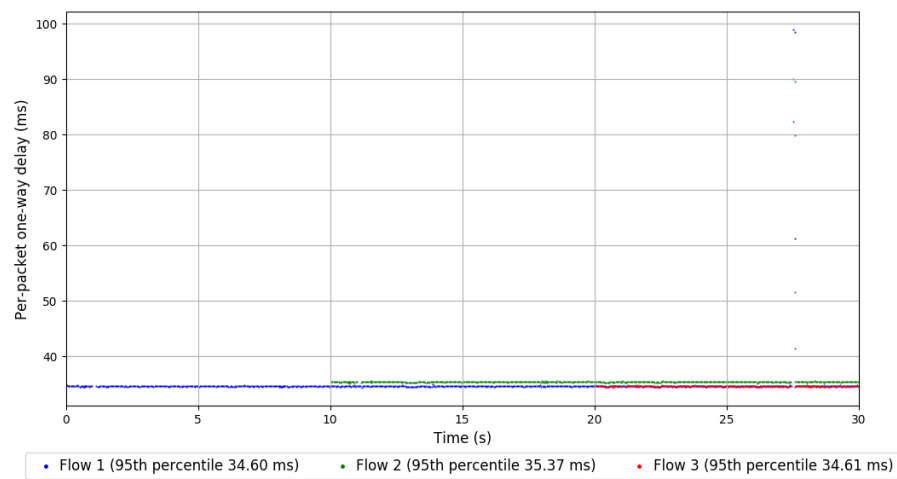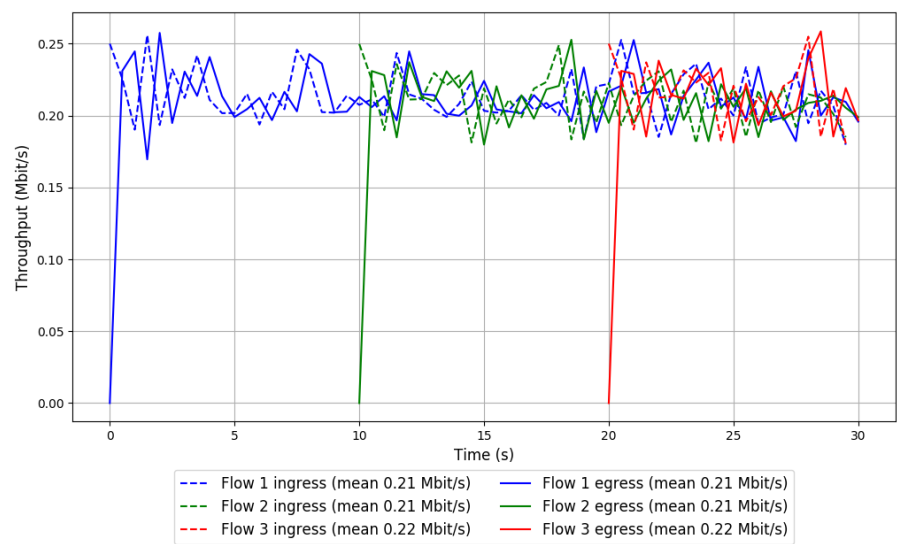
Run 10: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 64.02 Mbit/s) — Flow 1 egress (mean 62.78 Mbit/s)
Flow 2 ingress (mean 25.60 Mbit/s) — Flow 2 egress (mean 25.34 Mbit/s)
Flow 3 ingress (mean 23.35 Mbit/s) — Flow 3 egress (mean 23.09 Mbit/s)

Flow 1 (95th percentile 70.35 ms)   Flow 2 (95th percentile 70.89 ms)   Flow 3 (95th percentile 71.76 ms)

```
Run 1: Statistics of SCReAM

Start at: 2018-07-24 14:27:35
End at: 2018-07-24 14:28:05
Local clock offset: 0.614 ms
Remote clock offset: 1.987 ms

# Below is generated by plot.py at 2018-07-24 18:32:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 35.099 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 35.091 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 35.098 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 35.105 ms
Loss rate: 0.00%
```
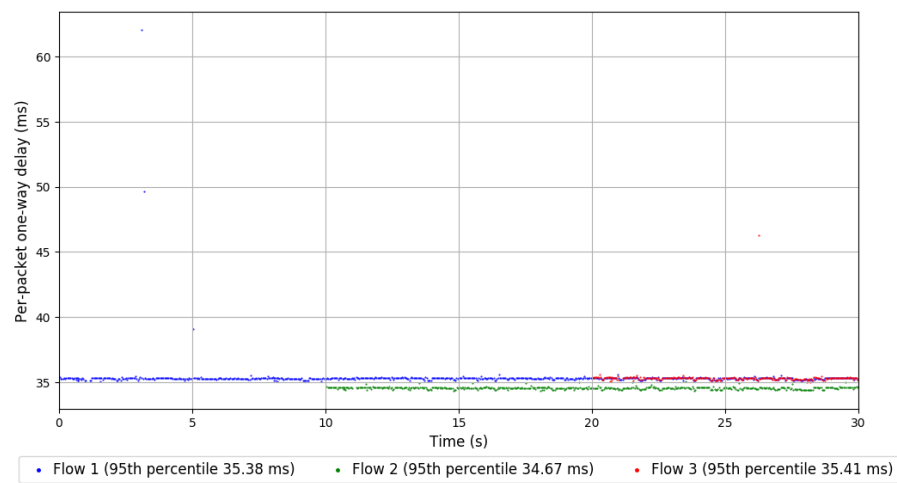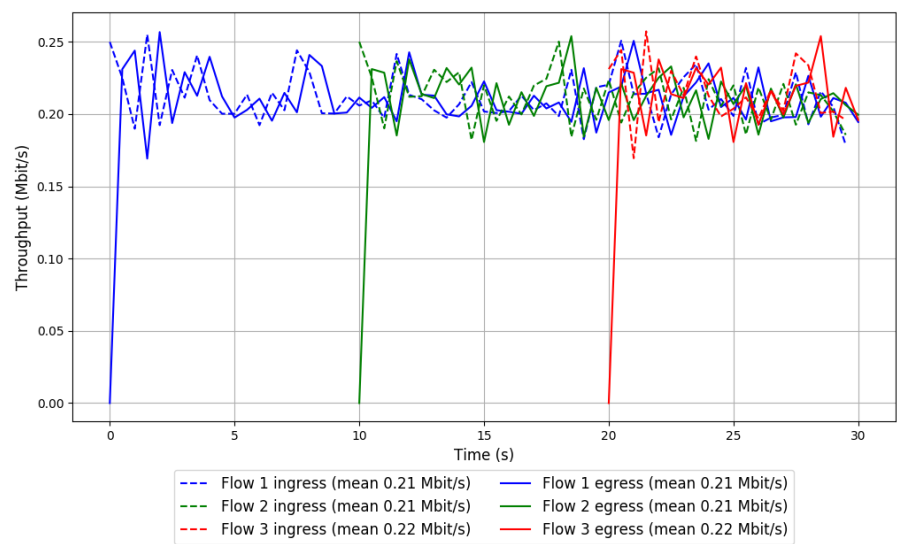
Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2018-07-24 14:50:36
End at: 2018-07-24 14:51:06
Local clock offset: 4.385 ms
Remote clock offset: 2.155 ms


# Below is generated by plot.py at 2018-07-24 18:32:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 35.039 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 35.049 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 34.323 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 34.338 ms
Loss rate: 0.00%
```
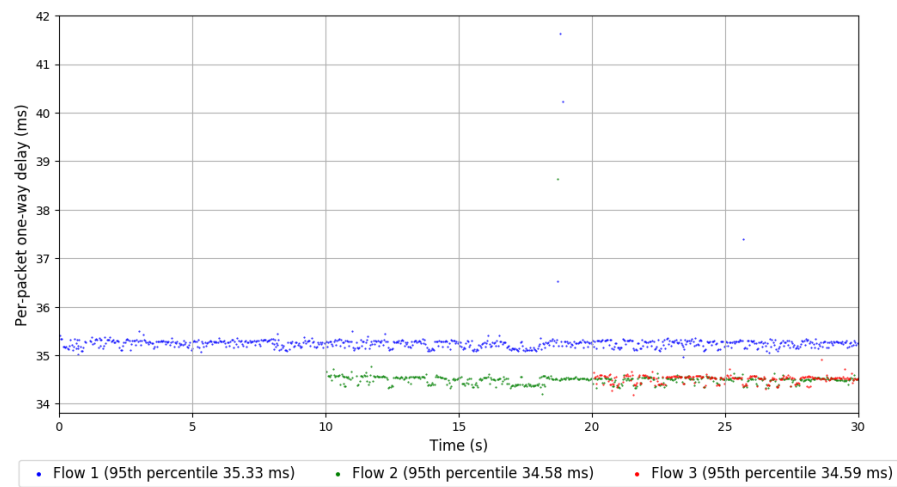
Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2018-07-24 15:13:48
End at: 2018-07-24 15:14:18
Local clock offset: 1.494 ms
Remote clock offset: 1.873 ms


# Below is generated by plot.py at 2018-07-24 18:32:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 34.884 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 34.203 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 34.189 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 34.944 ms
Loss rate: 0.00%
```
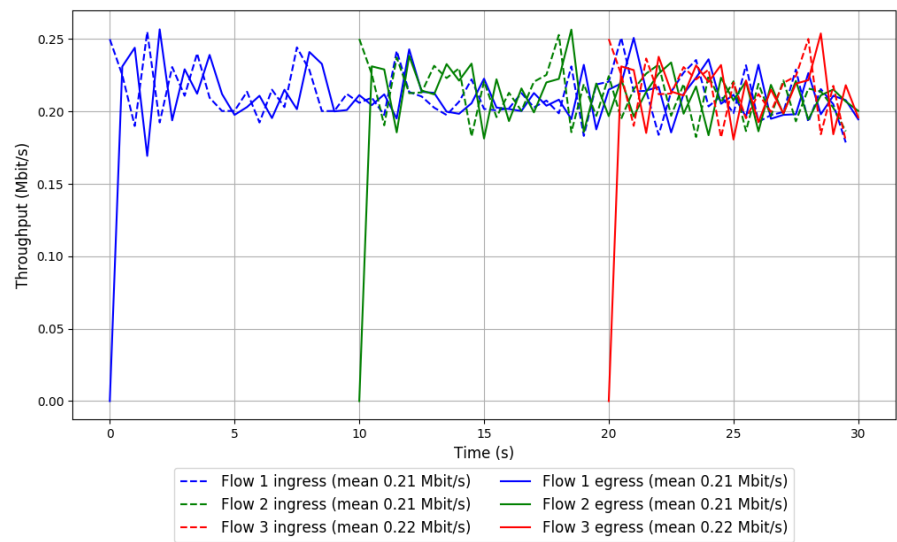
Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2018-07-24 15:36:46
End at: 2018-07-24 15:37:16
Local clock offset: -0.071 ms
Remote clock offset: 4.303 ms


# Below is generated by plot.py at 2018-07-24 18:32:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 36.675 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 36.663 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 36.659 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 36.695 ms
Loss rate: 0.00%
```
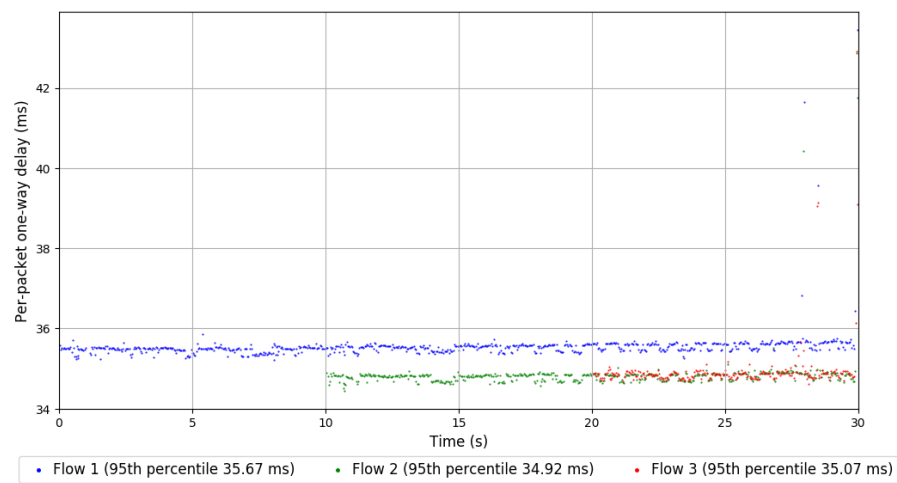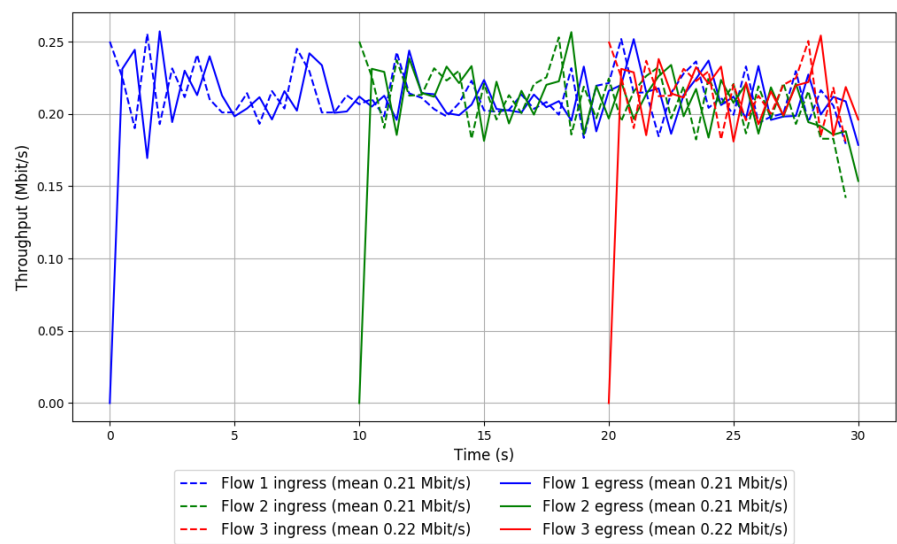
Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2018-07-24 15:59:50
End at: 2018-07-24 16:00:20
Local clock offset: -0.473 ms
Remote clock offset: 3.822 ms

# Below is generated by plot.py at 2018-07-24 18:32:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 36.678 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 35.968 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 36.713 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 35.978 ms
Loss rate: 0.00%
```
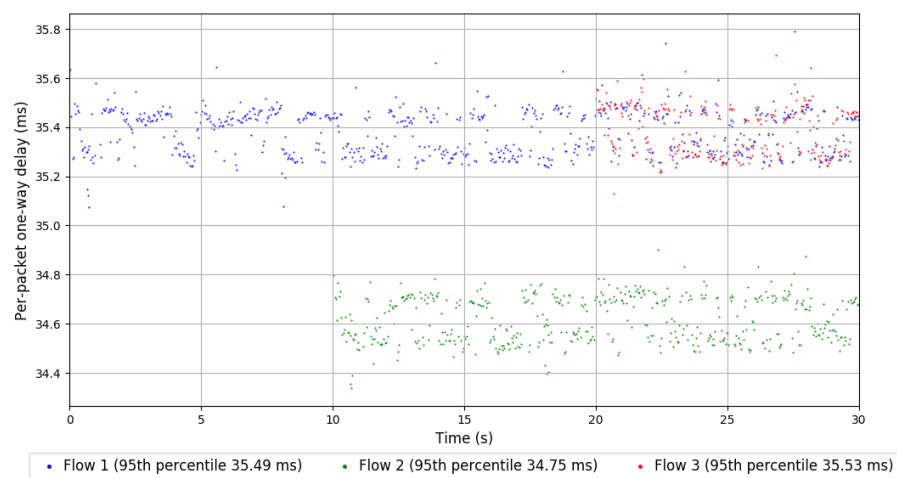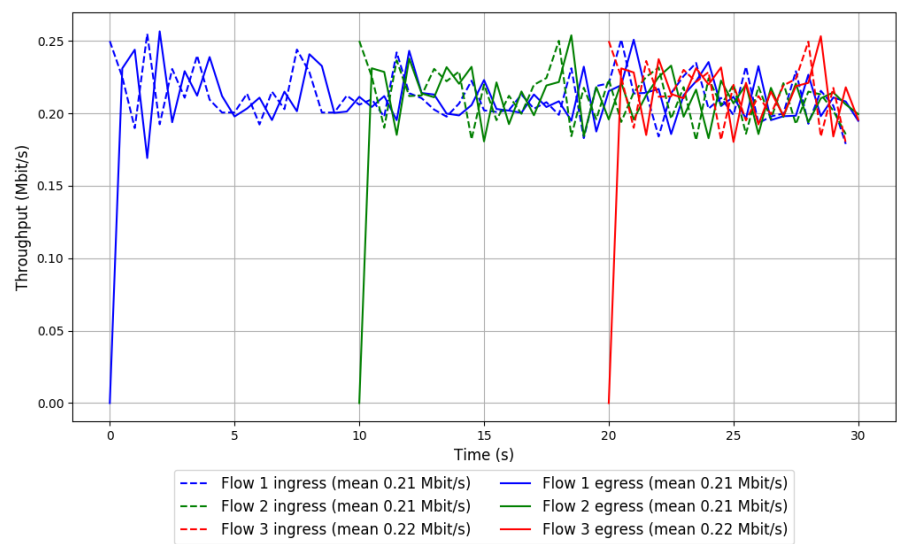
Run 5: Report of SCReAM — Data Link

```
Run 6: Statistics of SCReAM

Start at: 2018-07-24 16:22:43
End at: 2018-07-24 16:23:13
Local clock offset: 0.825 ms
Remote clock offset: 2.547 ms


# Below is generated by plot.py at 2018-07-24 18:32:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 35.340 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 34.596 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 35.367 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 34.614 ms
Loss rate: 0.00%
```
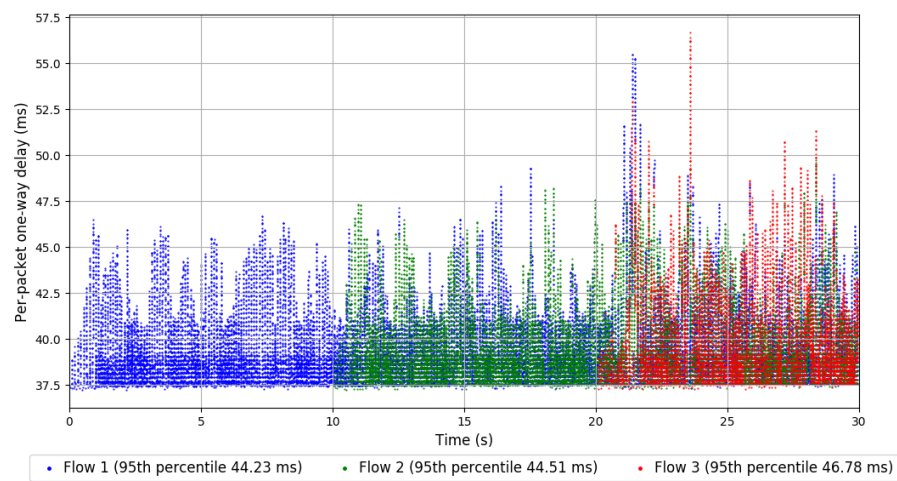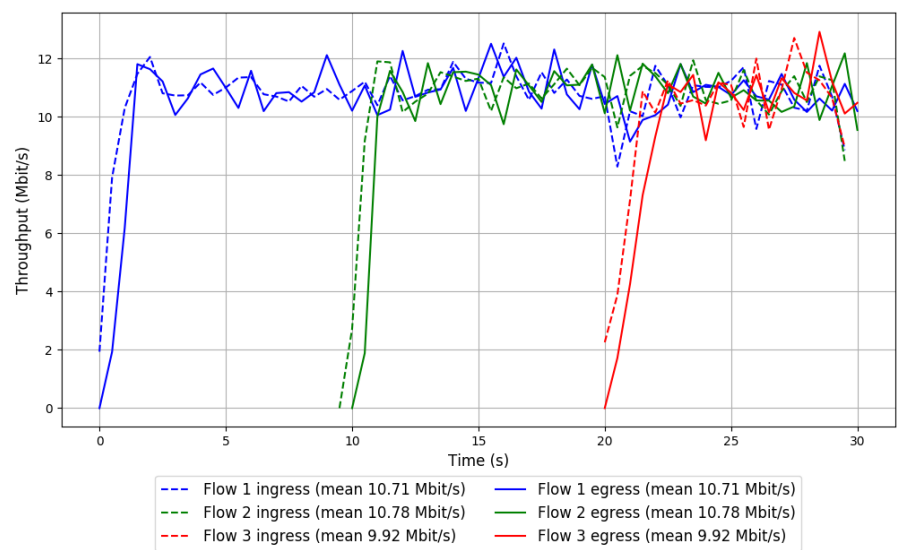
Run 6: Report of SCReAM — Data Link

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```
Run 7: Statistics of SCReAM

Start at: 2018-07-24 16:45:42
End at: 2018-07-24 16:46:13
Local clock offset: 0.923 ms
Remote clock offset: 2.701 ms


# Below is generated by plot.py at 2018-07-24 18:32:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 35.381 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 35.380 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 34.669 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 35.410 ms
Loss rate: 0.00%
```
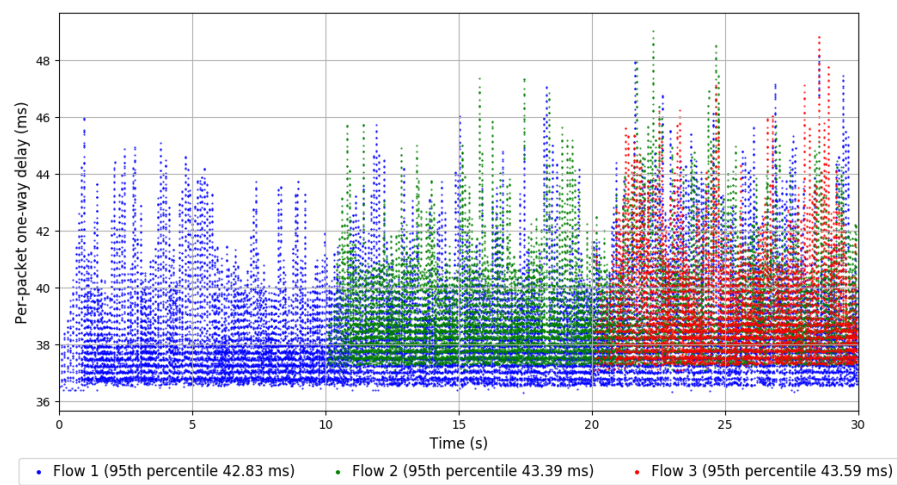
Run 7: Report of SCReAM — Data Link

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```
Run 8: Statistics of SCReAM

Start at: 2018-07-24 17:08:40
End at: 2018-07-24 17:09:10
Local clock offset: 0.674 ms
Remote clock offset: 1.952 ms


# Below is generated by plot.py at 2018-07-24 18:32:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 35.319 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 35.330 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 34.582 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 34.593 ms
Loss rate: 0.00%
```
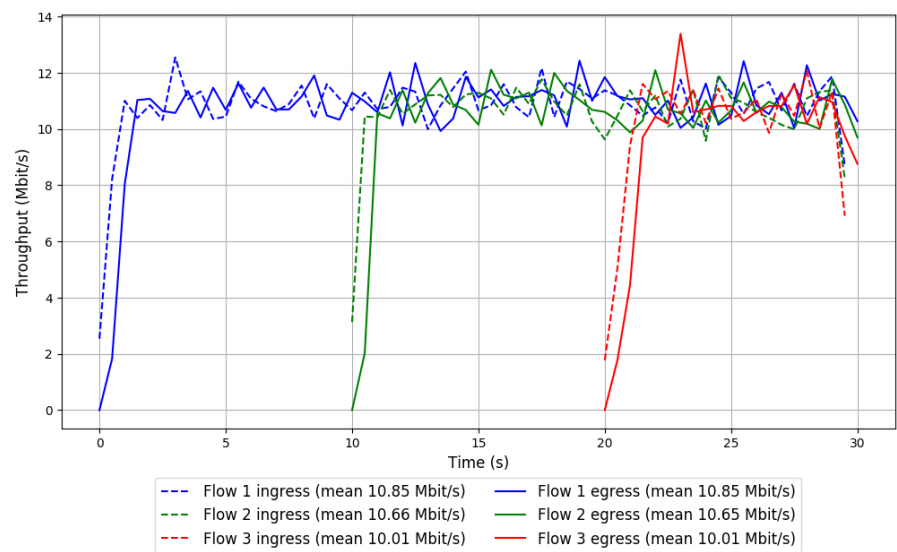
Run 8: Report of SCReAM — Data Link

```
Run 9: Statistics of SCReAM

Start at: 2018-07-24 17:31:35
End at: 2018-07-24 17:32:05
Local clock offset: 0.172 ms
Remote clock offset: 1.791 ms


# Below is generated by plot.py at 2018-07-24 18:32:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 35.642 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 35.667 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 34.922 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 35.067 ms
Loss rate: 0.00%
```
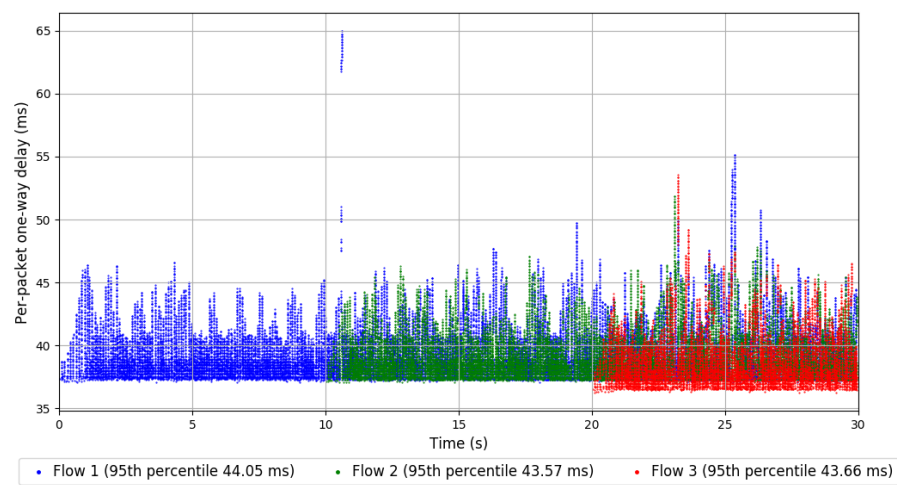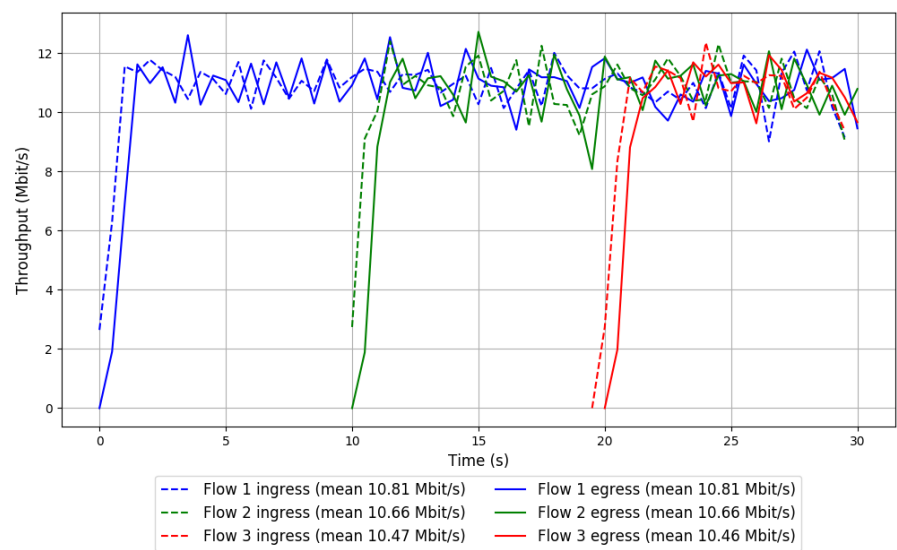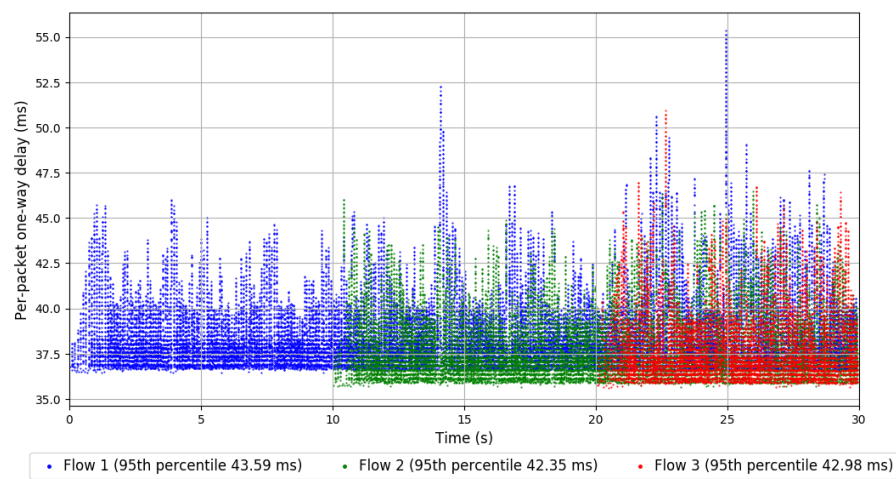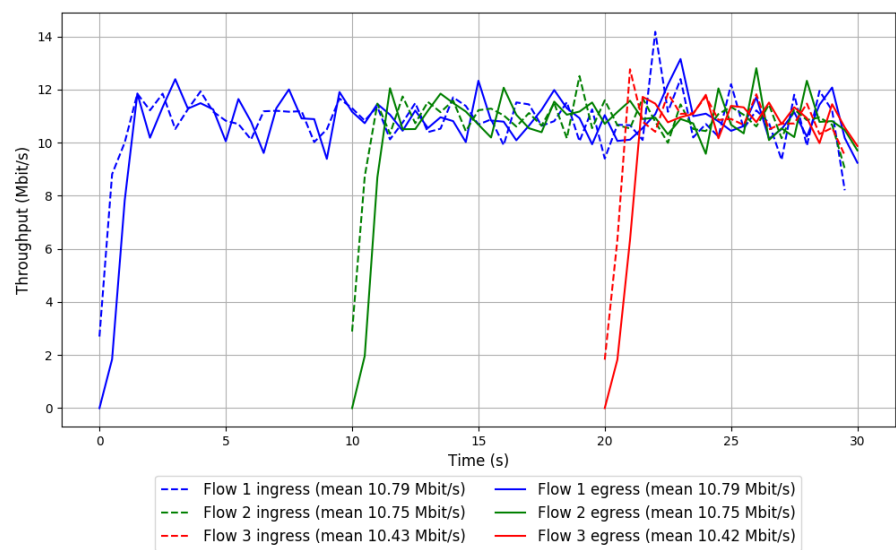
Run 9: Report of SCReAM — Data Link

```
Run 10: Statistics of SCReAM

Start at: 2018-07-24 17:54:30
End at: 2018-07-24 17:55:00
Local clock offset: 3.752 ms
Remote clock offset: 1.742 ms


# Below is generated by plot.py at 2018-07-24 18:32:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 35.490 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 35.494 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 34.746 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 35.527 ms
Loss rate: 0.00%
```

Run 10: Report of SCReAM — Data Link

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```
Run 1: Statistics of Sprout

Start at: 2018-07-24 14:32:58
End at: 2018-07-24 14:33:28
Local clock offset: 1.158 ms
Remote clock offset: 4.232 ms


# Below is generated by plot.py at 2018-07-24 18:32:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.16 Mbit/s
95th percentile per-packet one-way delay: 44.744 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 10.71 Mbit/s
95th percentile per-packet one-way delay: 44.233 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 10.78 Mbit/s
95th percentile per-packet one-way delay: 44.508 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.92 Mbit/s
95th percentile per-packet one-way delay: 46.778 ms
Loss rate: 0.00%
```
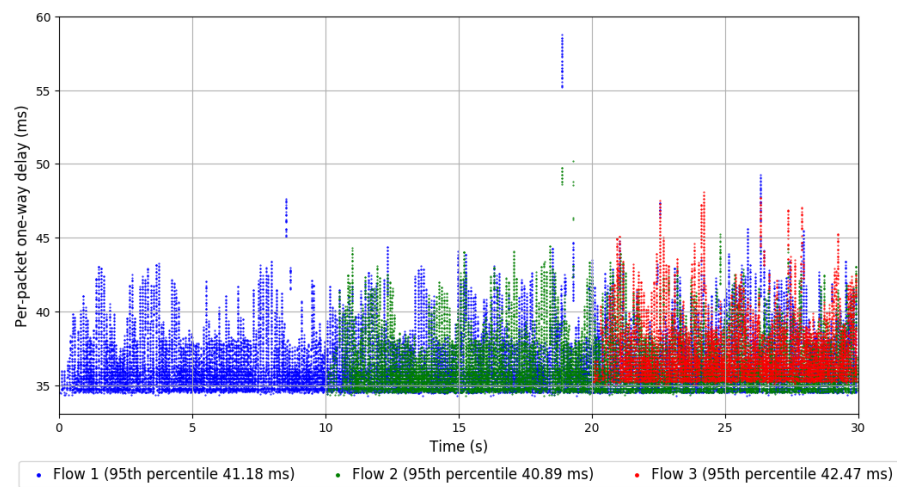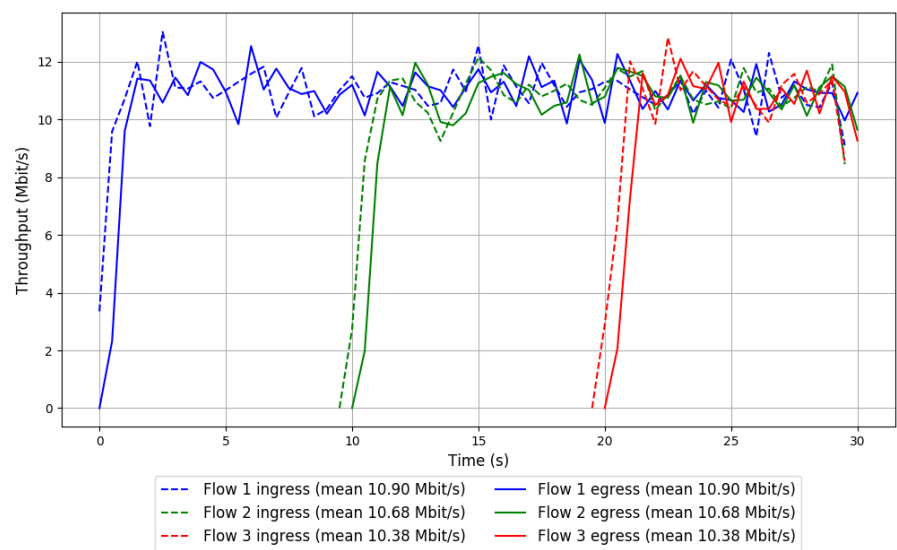
Run 1: Report of Sprout — Data Link

225

```
Run 2: Statistics of Sprout

Start at: 2018-07-24 14:55:59
End at: 2018-07-24 14:56:29
Local clock offset: 4.77 ms
Remote clock offset: 4.631 ms


# Below is generated by plot.py at 2018-07-24 18:32:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.23 Mbit/s
95th percentile per-packet one-way delay: 43.145 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 10.85 Mbit/s
95th percentile per-packet one-way delay: 42.825 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 10.65 Mbit/s
95th percentile per-packet one-way delay: 43.394 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.01 Mbit/s
95th percentile per-packet one-way delay: 43.585 ms
Loss rate: 0.00%
```
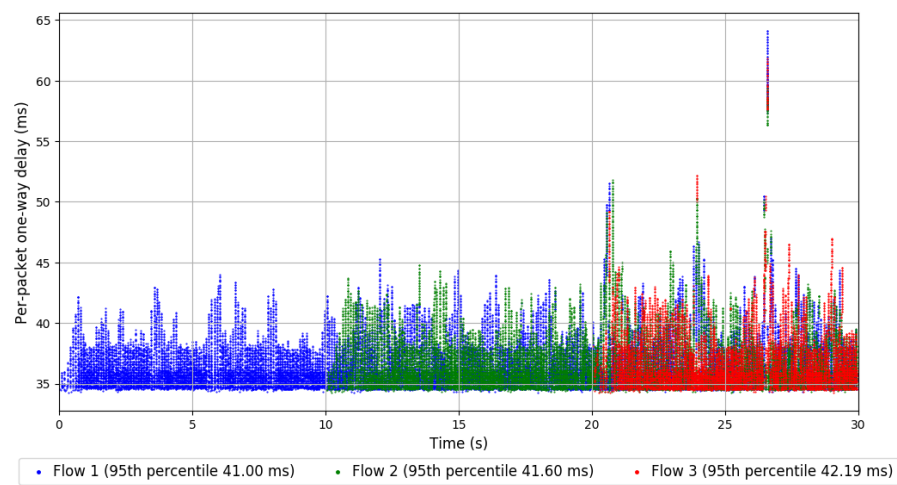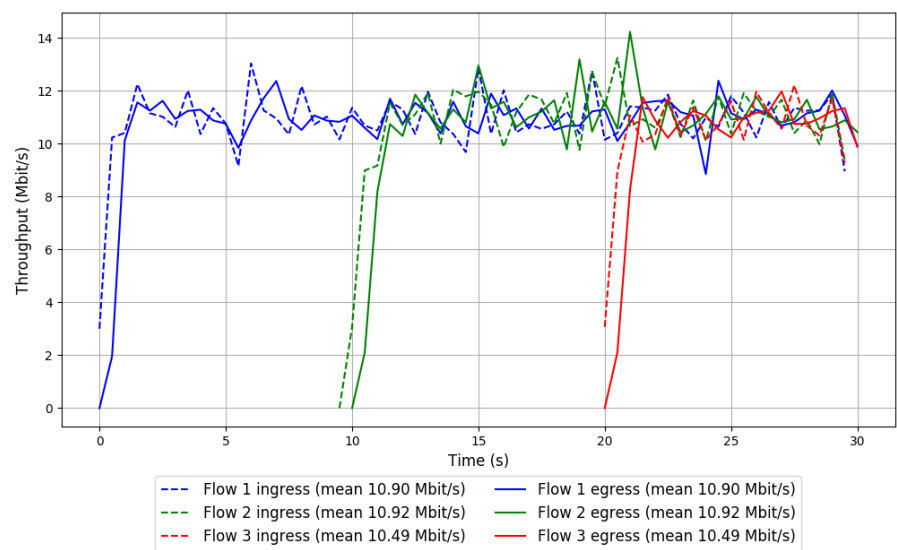
Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2018-07-24 15:19:12
End at: 2018-07-24 15:19:42
Local clock offset: 0.882 ms
Remote clock offset: 4.276 ms


# Below is generated by plot.py at 2018-07-24 18:32:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.36 Mbit/s
95th percentile per-packet one-way delay: 43.839 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 10.81 Mbit/s
95th percentile per-packet one-way delay: 44.047 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 10.66 Mbit/s
95th percentile per-packet one-way delay: 43.570 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.46 Mbit/s
95th percentile per-packet one-way delay: 43.661 ms
Loss rate: 0.00%
```
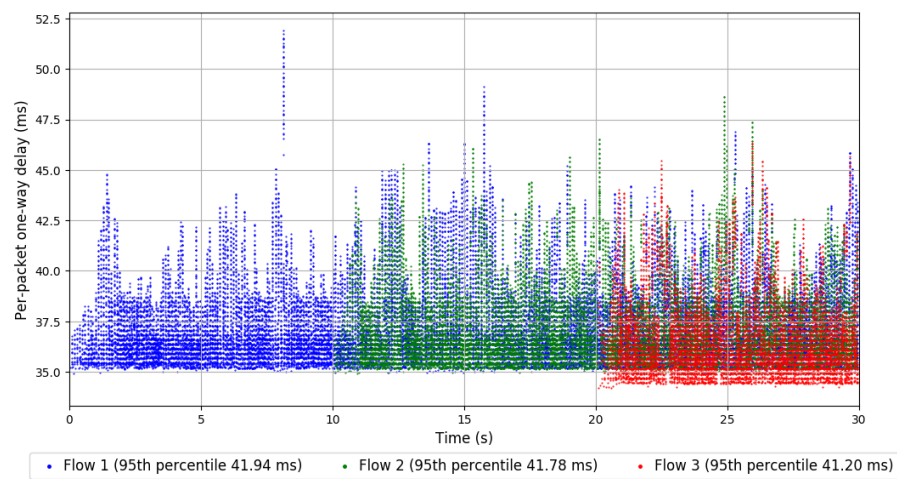
Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2018-07-24 15:42:10
End at: 2018-07-24 15:42:40
Local clock offset: -0.213 ms
Remote clock offset: 3.635 ms


# Below is generated by plot.py at 2018-07-24 18:32:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.38 Mbit/s
95th percentile per-packet one-way delay: 43.076 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 10.79 Mbit/s
95th percentile per-packet one-way delay: 43.586 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 10.75 Mbit/s
95th percentile per-packet one-way delay: 42.353 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.42 Mbit/s
95th percentile per-packet one-way delay: 42.981 ms
Loss rate: 0.00%
```
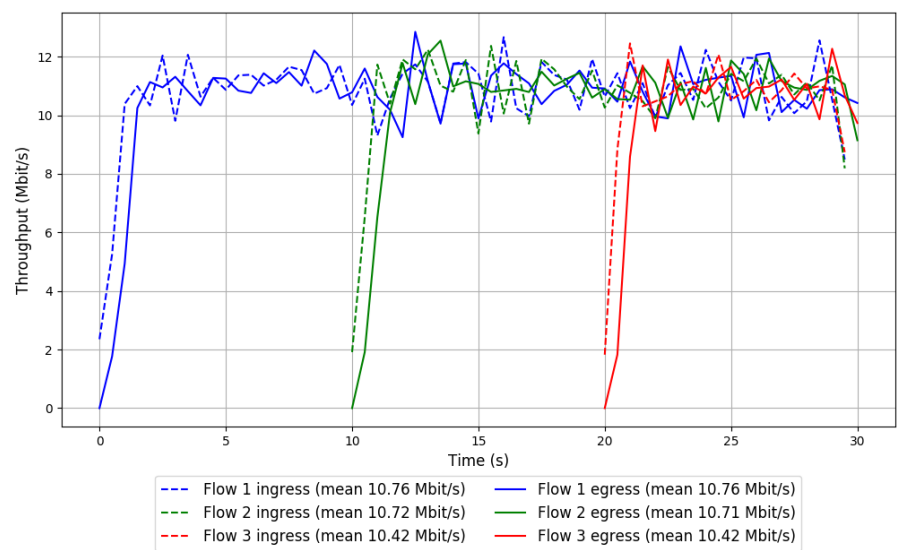
Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2018-07-24 16:05:12
End at: 2018-07-24 16:05:42
Local clock offset: -0.081 ms
Remote clock offset: 2.491 ms


# Below is generated by plot.py at 2018-07-24 18:32:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.44 Mbit/s
95th percentile per-packet one-way delay: 41.268 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 10.90 Mbit/s
95th percentile per-packet one-way delay: 41.178 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 10.68 Mbit/s
95th percentile per-packet one-way delay: 40.891 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.38 Mbit/s
95th percentile per-packet one-way delay: 42.470 ms
Loss rate: 0.00%
```
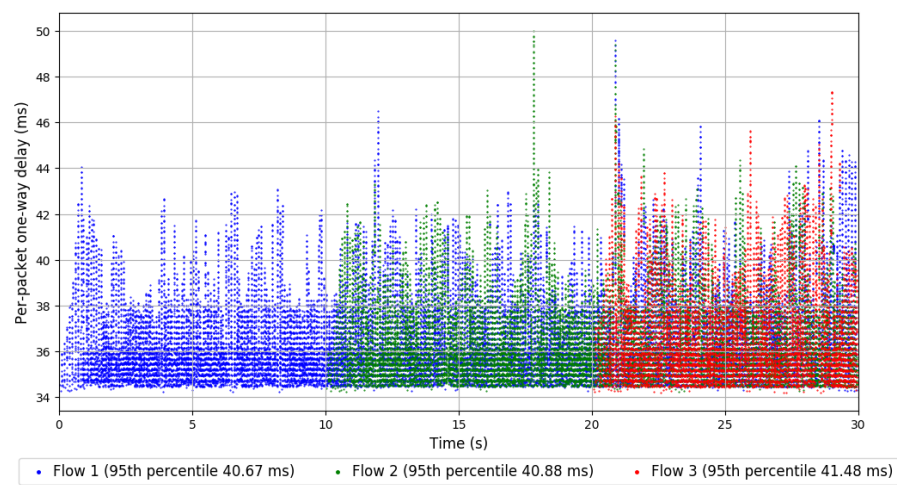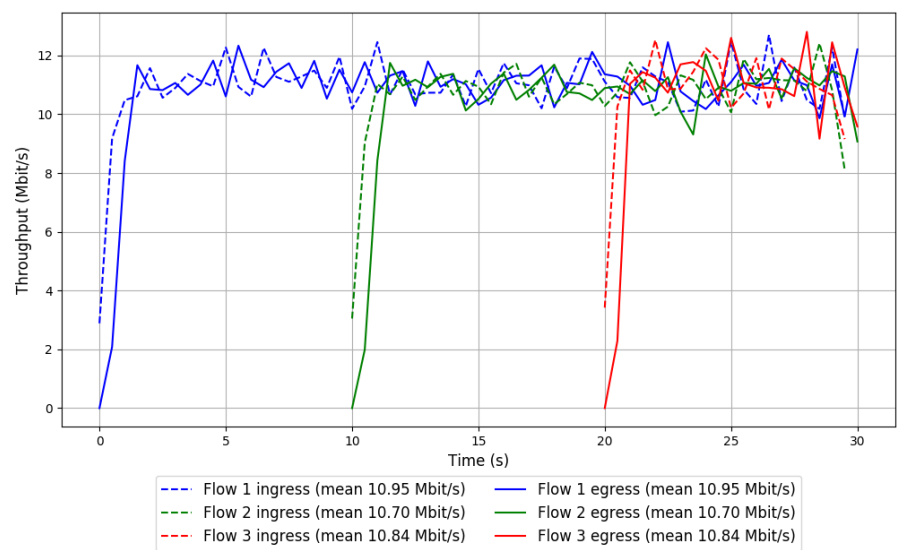
Run 5: Report of Sprout — Data Link

```
Run 6: Statistics of Sprout

Start at: 2018-07-24 16:28:08
End at: 2018-07-24 16:28:38
Local clock offset: 0.83 ms
Remote clock offset: 2.568 ms


# Below is generated by plot.py at 2018-07-24 18:32:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.63 Mbit/s
95th percentile per-packet one-way delay: 41.438 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 10.90 Mbit/s
95th percentile per-packet one-way delay: 41.003 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 10.92 Mbit/s
95th percentile per-packet one-way delay: 41.601 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.49 Mbit/s
95th percentile per-packet one-way delay: 42.186 ms
Loss rate: 0.00%
```
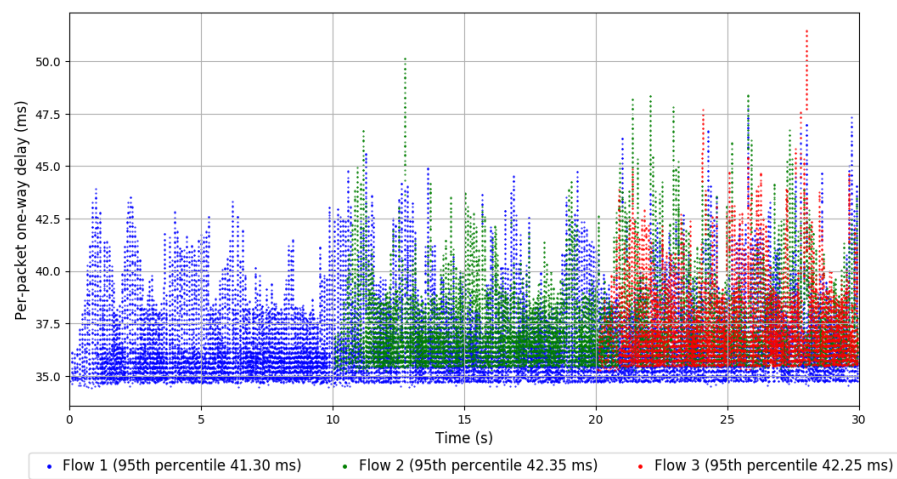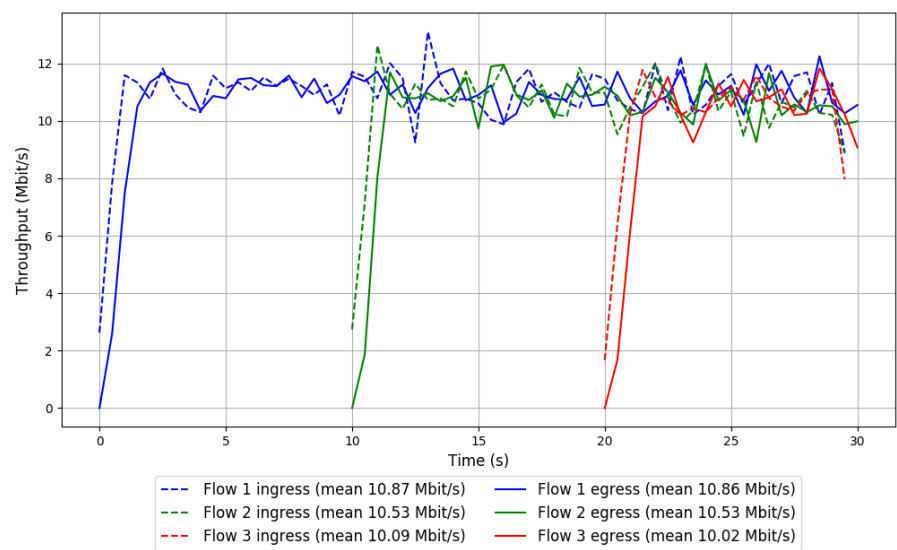
Run 6: Report of Sprout — Data Link

```
Run 7: Statistics of Sprout

Start at: 2018-07-24 16:51:06
End at: 2018-07-24 16:51:36
Local clock offset: 0.944 ms
Remote clock offset: 2.283 ms


# Below is generated by plot.py at 2018-07-24 18:32:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.32 Mbit/s
95th percentile per-packet one-way delay: 41.788 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 10.76 Mbit/s
95th percentile per-packet one-way delay: 41.943 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 10.71 Mbit/s
95th percentile per-packet one-way delay: 41.785 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.42 Mbit/s
95th percentile per-packet one-way delay: 41.205 ms
Loss rate: 0.00%
```
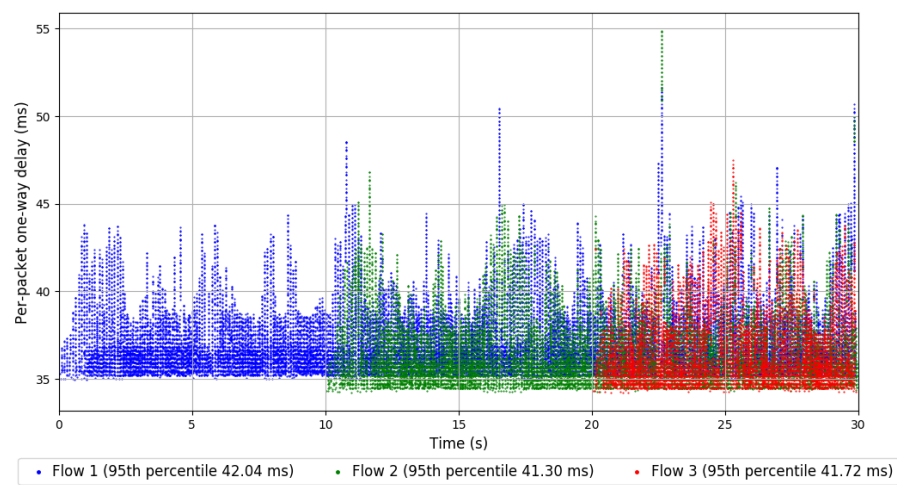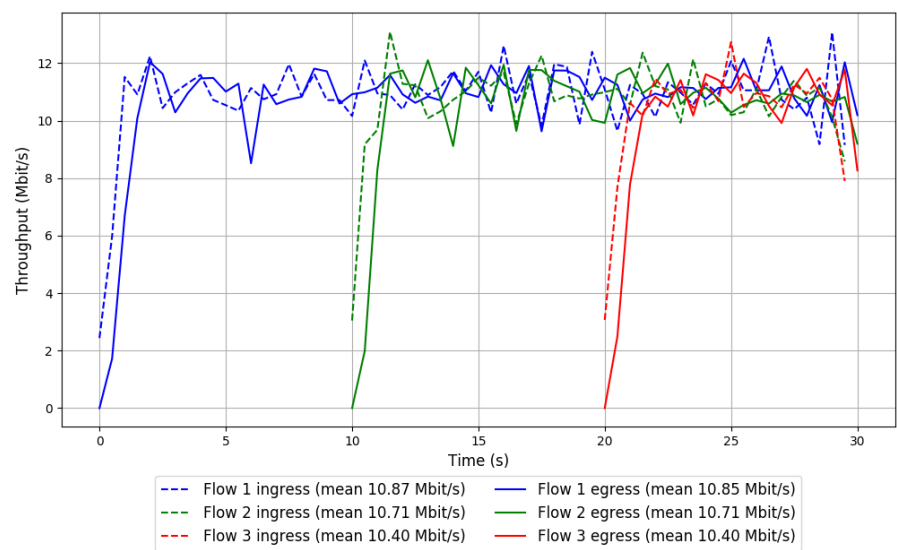
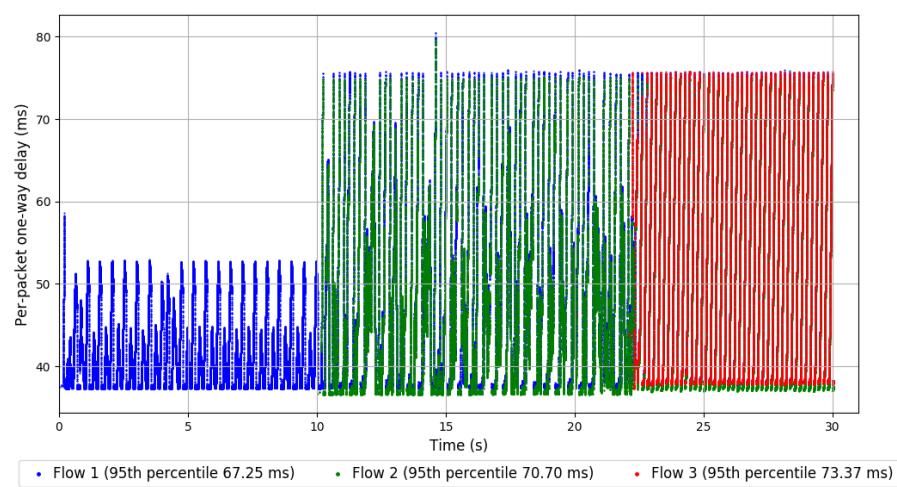## Run 7: Report of Sprout — Data Link

```
Run 8: Statistics of Sprout

Start at: 2018-07-24 17:14:03
End at: 2018-07-24 17:14:33
Local clock offset: 0.534 ms
Remote clock offset: 2.007 ms


# Below is generated by plot.py at 2018-07-24 18:32:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.64 Mbit/s
95th percentile per-packet one-way delay: 40.891 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 10.95 Mbit/s
95th percentile per-packet one-way delay: 40.668 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 10.70 Mbit/s
95th percentile per-packet one-way delay: 40.879 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.84 Mbit/s
95th percentile per-packet one-way delay: 41.479 ms
Loss rate: 0.00%
```
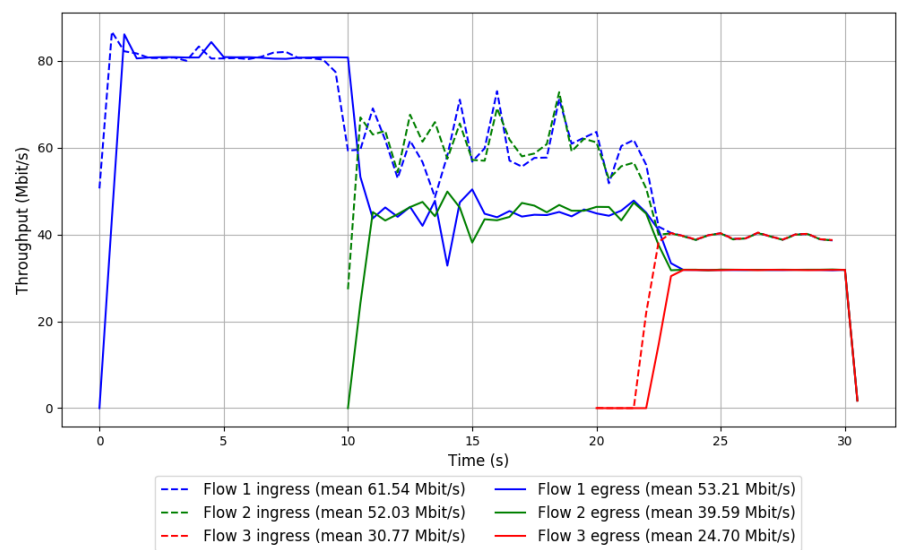
Run 8: Report of Sprout — Data Link

```
Run 9: Statistics of Sprout

Start at: 2018-07-24 17:36:57
End at: 2018-07-24 17:37:27
Local clock offset: 1.66 ms
Remote clock offset: 1.692 ms


# Below is generated by plot.py at 2018-07-24 18:32:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.18 Mbit/s
95th percentile per-packet one-way delay: 41.845 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 10.86 Mbit/s
95th percentile per-packet one-way delay: 41.297 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 10.53 Mbit/s
95th percentile per-packet one-way delay: 42.347 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.02 Mbit/s
95th percentile per-packet one-way delay: 42.250 ms
Loss rate: 0.67%
```

Run 9: Report of Sprout — Data Link

```
Run 10: Statistics of Sprout

Start at: 2018-07-24 17:59:55
End at: 2018-07-24 18:00:25
Local clock offset: 4.136 ms
Remote clock offset: 1.802 ms


# Below is generated by plot.py at 2018-07-24 18:32:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.40 Mbit/s
95th percentile per-packet one-way delay: 41.737 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 10.85 Mbit/s
95th percentile per-packet one-way delay: 42.039 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 10.71 Mbit/s
95th percentile per-packet one-way delay: 41.298 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.40 Mbit/s
95th percentile per-packet one-way delay: 41.717 ms
Loss rate: 0.00%
```
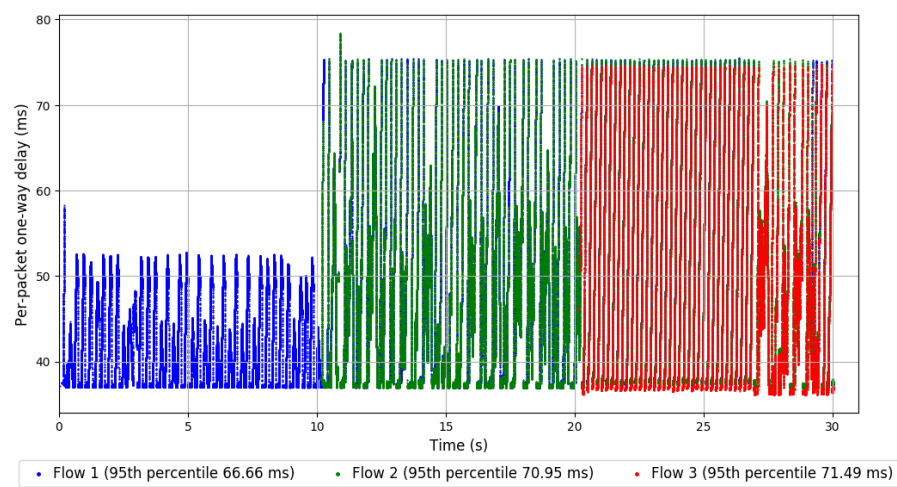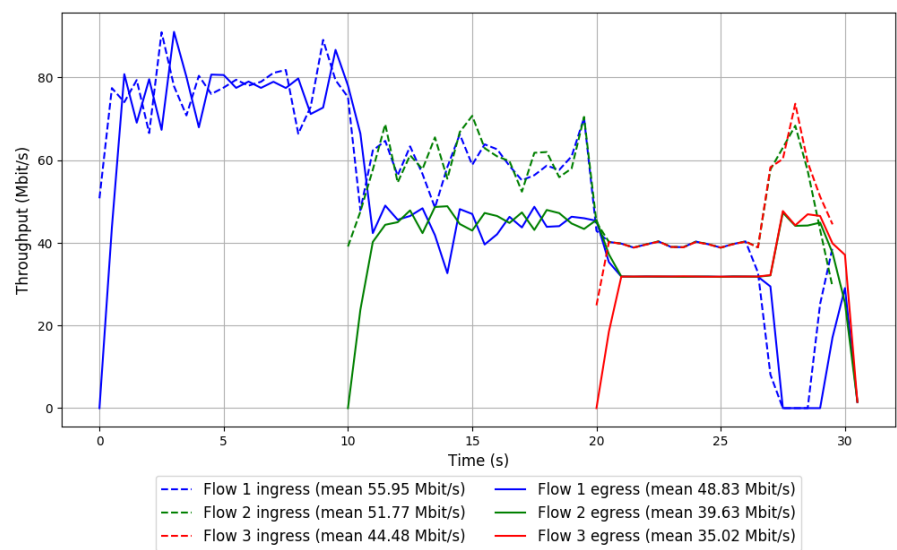
Run 10: Report of Sprout — Data Link

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

Start at: 2018-07-24 14:43:53
End at: 2018-07-24 14:44:23
Local clock offset: 3.632 ms
Remote clock offset: 4.388 ms

# Below is generated by plot.py at 2018-07-24 18:34:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.79 Mbit/s
95th percentile per-packet one-way delay: 69.723 ms
Loss rate: 17.51%
-- Flow 1:
Average throughput: 53.21 Mbit/s
95th percentile per-packet one-way delay: 67.253 ms
Loss rate: 13.53%
-- Flow 2:
Average throughput: 39.59 Mbit/s
95th percentile per-packet one-way delay: 70.696 ms
Loss rate: 23.90%
-- Flow 3:
Average throughput: 24.70 Mbit/s
95th percentile per-packet one-way delay: 73.366 ms
Loss rate: 19.80%
```
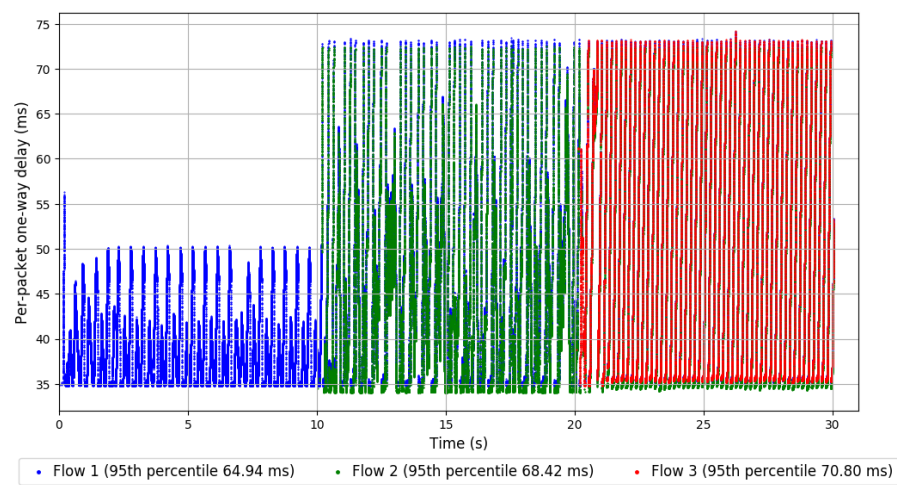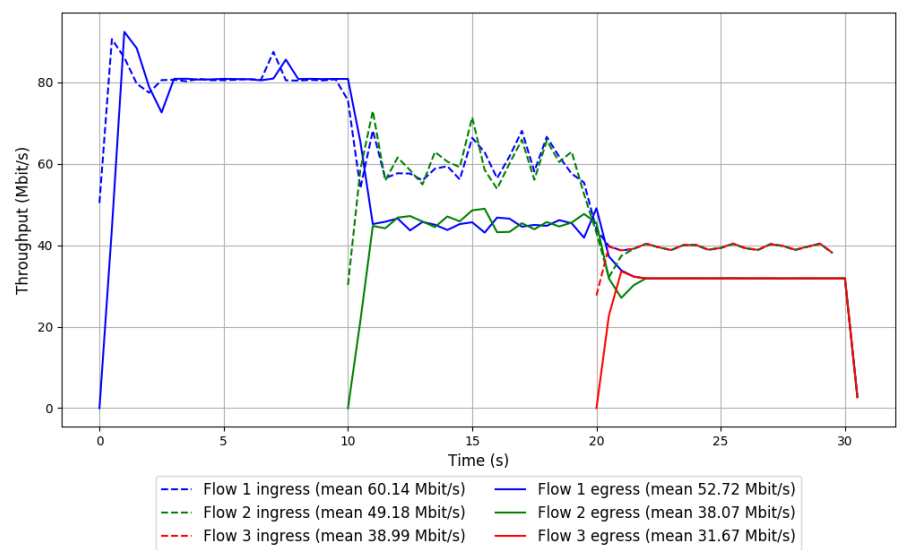
Run 1: Report of TaoVA-100x — Data Link

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

Start at: 2018-07-24 15:07:03
End at: 2018-07-24 15:07:33
Local clock offset: 3.048 ms
Remote clock offset: 4.422 ms


# Below is generated by plot.py at 2018-07-24 18:34:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.83 Mbit/s
95th percentile per-packet one-way delay: 69.571 ms
Loss rate: 17.47%
-- Flow 1:
Average throughput: 48.83 Mbit/s
95th percentile per-packet one-way delay: 66.655 ms
Loss rate: 12.73%
-- Flow 2:
Average throughput: 39.63 Mbit/s
95th percentile per-packet one-way delay: 70.954 ms
Loss rate: 23.47%
-- Flow 3:
Average throughput: 35.02 Mbit/s
95th percentile per-packet one-way delay: 71.487 ms
Loss rate: 21.41%
```
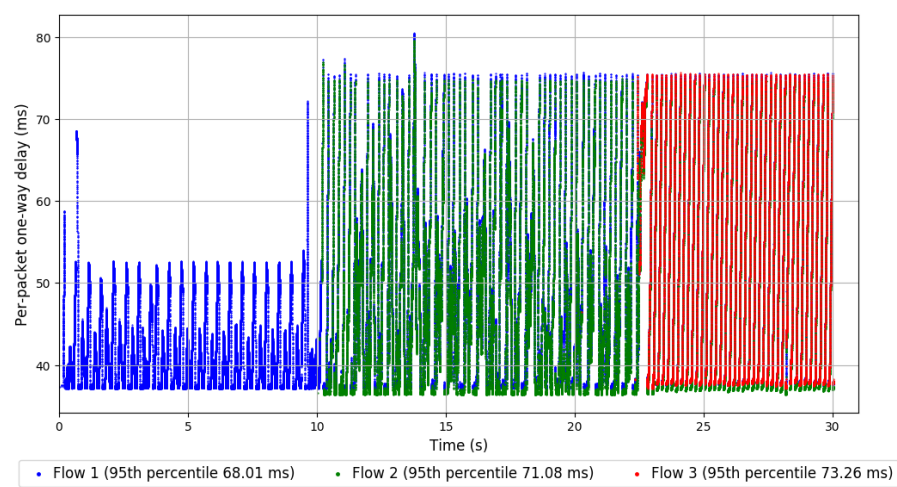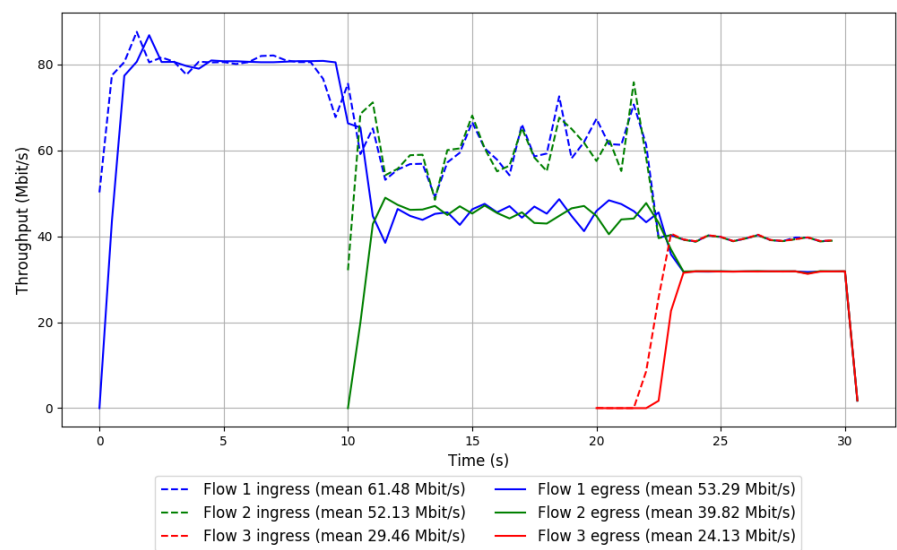
Run 2: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 55.95 Mbit/s) --- Flow 1 egress (mean 48.83 Mbit/s)
Flow 2 ingress (mean 51.77 Mbit/s) --- Flow 2 egress (mean 39.63 Mbit/s)
Flow 3 ingress (mean 44.48 Mbit/s) --- Flow 3 egress (mean 35.02 Mbit/s)

Flow 1 (95th percentile 66.66 ms)   Flow 2 (95th percentile 70.95 ms)   Flow 3 (95th percentile 71.49 ms)

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

Start at: 2018-07-24 15:30:01
End at: 2018-07-24 15:30:31
Local clock offset: 0.221 ms
Remote clock offset: 1.923 ms

# Below is generated by plot.py at 2018-07-24 18:34:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.63 Mbit/s
95th percentile per-packet one-way delay: 67.568 ms
Loss rate: 16.23%
-- Flow 1:
Average throughput: 52.72 Mbit/s
95th percentile per-packet one-way delay: 64.936 ms
Loss rate: 12.28%
-- Flow 2:
Average throughput: 38.07 Mbit/s
95th percentile per-packet one-way delay: 68.419 ms
Loss rate: 22.53%
-- Flow 3:
Average throughput: 31.67 Mbit/s
95th percentile per-packet one-way delay: 70.802 ms
Loss rate: 18.68%
```
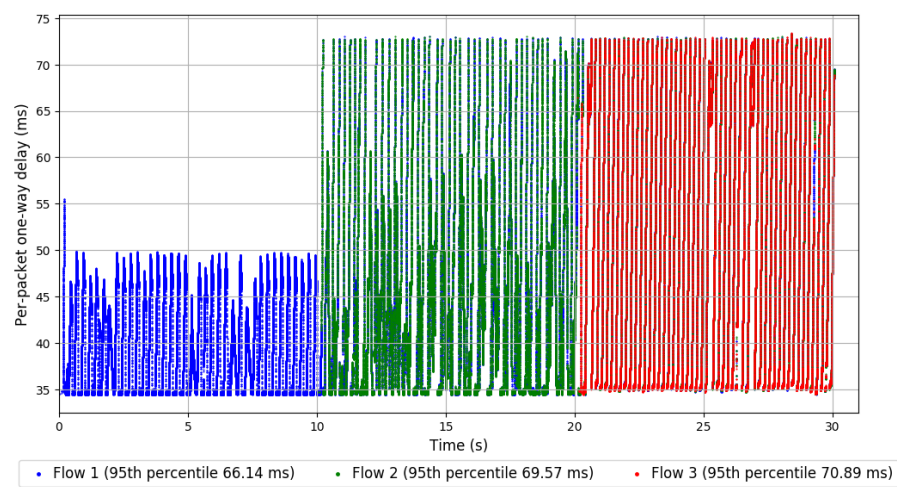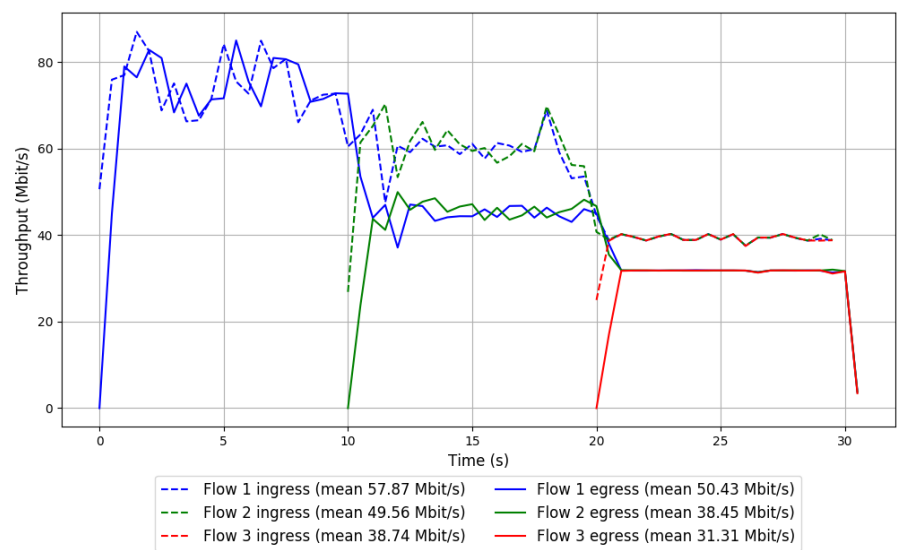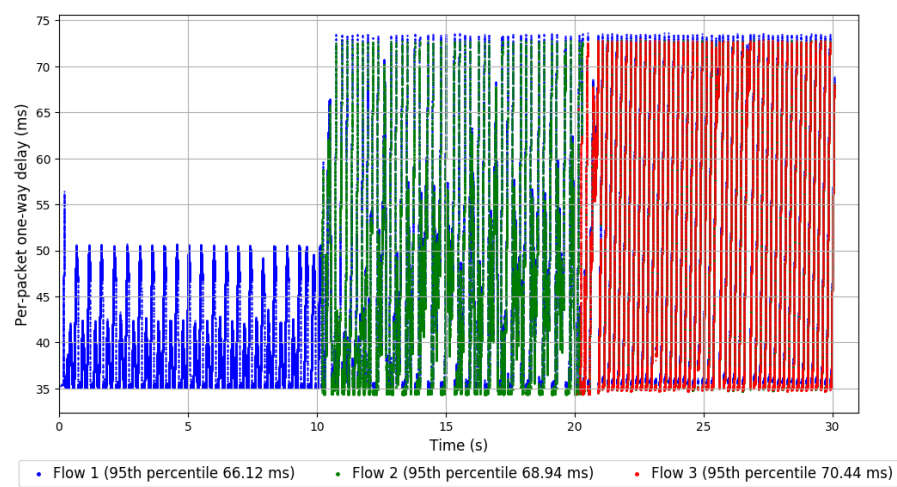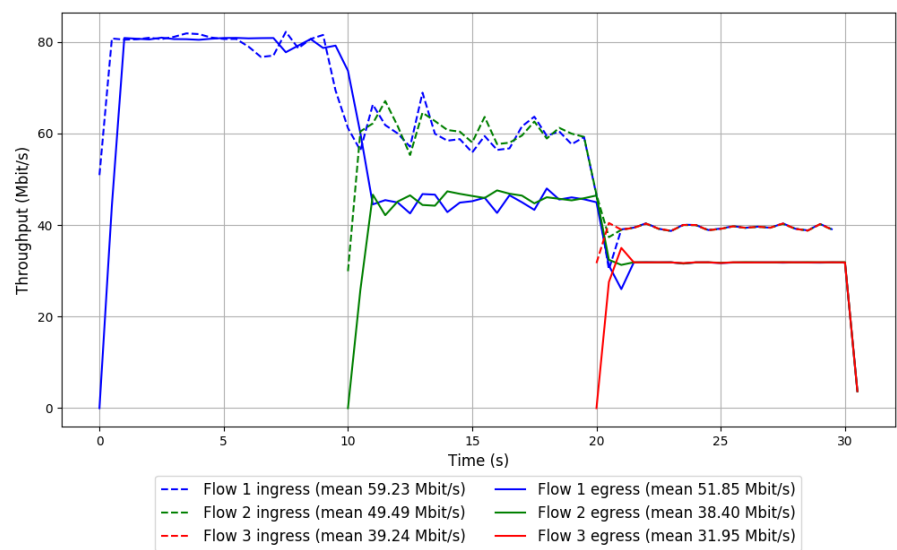
Run 3: Report of TaoVA-100x — Data Link

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

Start at: 2018-07-24 15:53:08
End at: 2018-07-24 15:53:38
Local clock offset: -0.357 ms
Remote clock offset: 4.414 ms


# Below is generated by plot.py at 2018-07-24 18:34:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.66 Mbit/s
95th percentile per-packet one-way delay: 70.241 ms
Loss rate: 17.29%
-- Flow 1:
Average throughput: 53.29 Mbit/s
95th percentile per-packet one-way delay: 68.007 ms
Loss rate: 13.32%
-- Flow 2:
Average throughput: 39.82 Mbit/s
95th percentile per-packet one-way delay: 71.078 ms
Loss rate: 23.61%
-- Flow 3:
Average throughput: 24.13 Mbit/s
95th percentile per-packet one-way delay: 73.262 ms
Loss rate: 19.82%
```

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

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

Start at: 2018-07-24 16:15:59
End at: 2018-07-24 16:16:29
Local clock offset: 0.623 ms
Remote clock offset: 2.557 ms

# Below is generated by plot.py at 2018-07-24 18:34:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.45 Mbit/s
95th percentile per-packet one-way delay: 68.557 ms
Loss rate: 16.58%
-- Flow 1:
Average throughput: 50.43 Mbit/s
95th percentile per-packet one-way delay: 66.144 ms
Loss rate: 12.75%
-- Flow 2:
Average throughput: 38.45 Mbit/s
95th percentile per-packet one-way delay: 69.574 ms
Loss rate: 22.29%
-- Flow 3:
Average throughput: 31.31 Mbit/s
95th percentile per-packet one-way delay: 70.885 ms
Loss rate: 19.19%
```
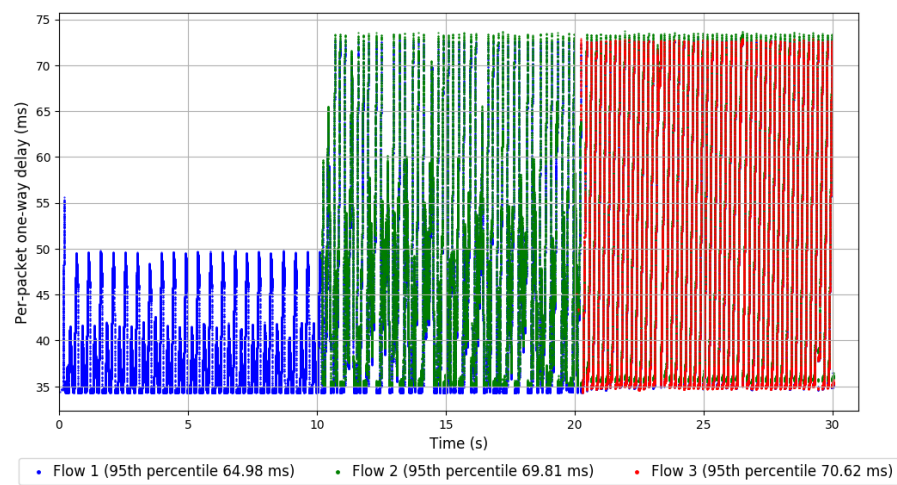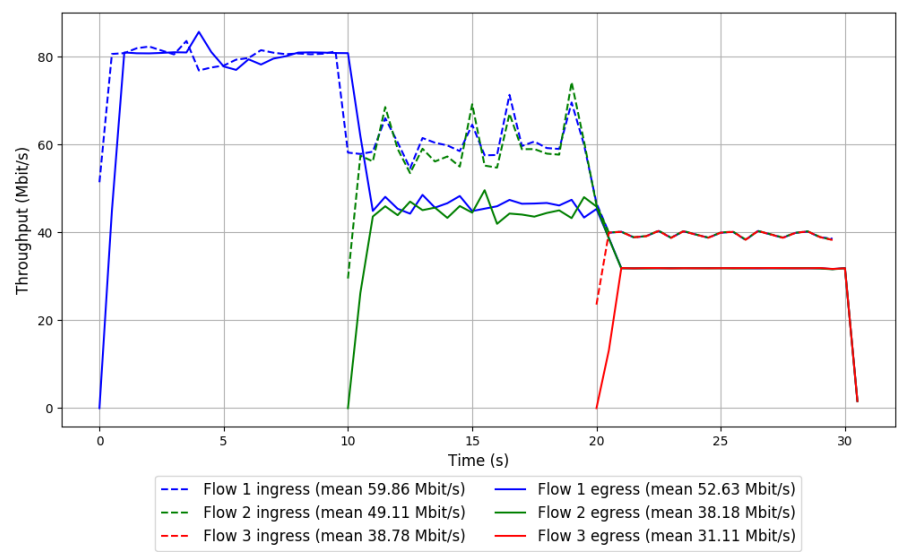
Run 5: Report of TaoVA-100x — Data Link

- - - Flow 1 ingress (mean 57.87 Mbit/s) —— Flow 1 egress (mean 50.43 Mbit/s)
- - - Flow 2 ingress (mean 49.56 Mbit/s) —— Flow 2 egress (mean 38.45 Mbit/s)
- - - Flow 3 ingress (mean 38.74 Mbit/s) —— Flow 3 egress (mean 31.31 Mbit/s)

• Flow 1 (95th percentile 66.14 ms) • Flow 2 (95th percentile 69.57 ms) • Flow 3 (95th percentile 70.89 ms)

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

Start at: 2018-07-24 16:38:58
End at: 2018-07-24 16:39:28
Local clock offset: 0.897 ms
Remote clock offset: 2.758 ms


# Below is generated by plot.py at 2018-07-24 18:34:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.08 Mbit/s
95th percentile per-packet one-way delay: 68.104 ms
Loss rate: 16.21%
-- Flow 1:
Average throughput: 51.85 Mbit/s
95th percentile per-packet one-way delay: 66.119 ms
Loss rate: 12.37%
-- Flow 2:
Average throughput: 38.40 Mbit/s
95th percentile per-packet one-way delay: 68.937 ms
Loss rate: 22.30%
-- Flow 3:
Average throughput: 31.95 Mbit/s
95th percentile per-packet one-way delay: 70.442 ms
Loss rate: 18.30%
```
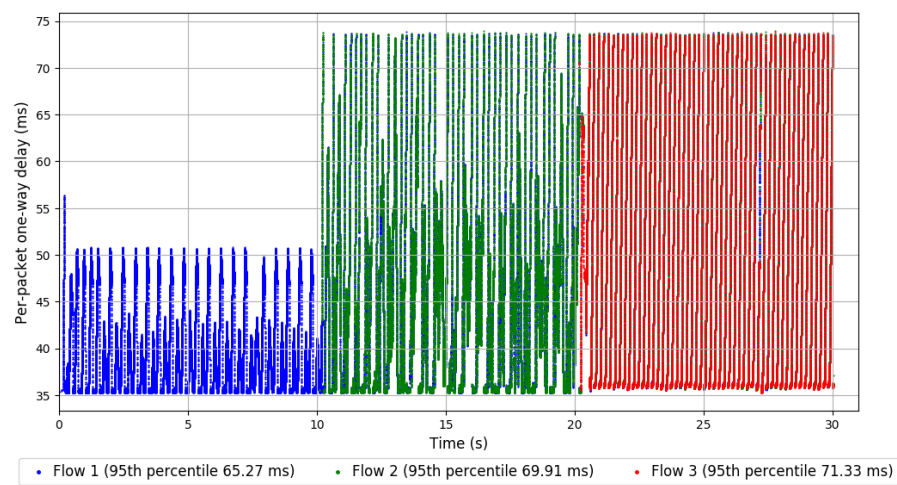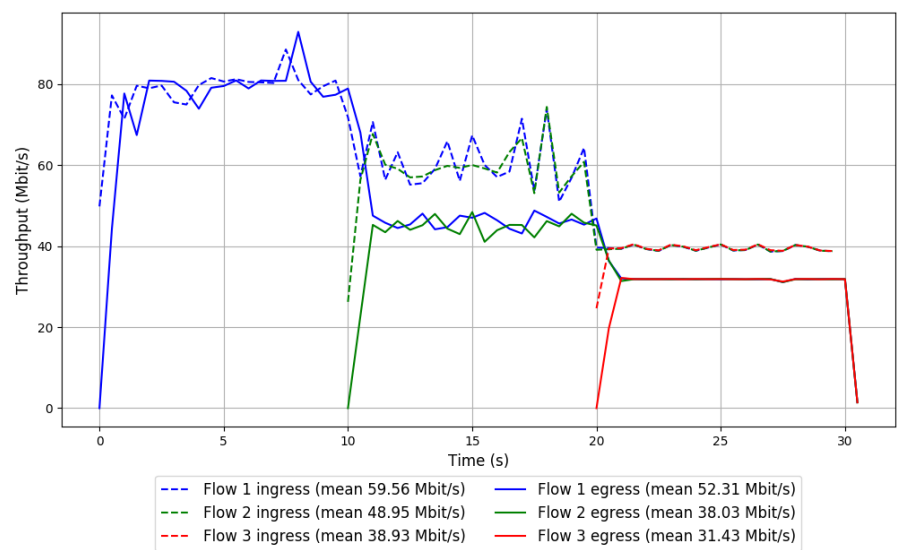
Run 6: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 59.23 Mbit/s) --- Flow 1 egress (mean 51.85 Mbit/s)
Flow 2 ingress (mean 49.49 Mbit/s) --- Flow 2 egress (mean 38.40 Mbit/s)
Flow 3 ingress (mean 39.24 Mbit/s) --- Flow 3 egress (mean 31.95 Mbit/s)

Flow 1 (95th percentile 66.12 ms) · Flow 2 (95th percentile 68.94 ms) · Flow 3 (95th percentile 70.44 ms)

255

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

Start at: 2018-07-24 17:01:57
End at: 2018-07-24 17:02:27
Local clock offset: 0.902 ms
Remote clock offset: 1.958 ms

# Below is generated by plot.py at 2018-07-24 18:34:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.39 Mbit/s
95th percentile per-packet one-way delay: 68.243 ms
Loss rate: 16.18%
-- Flow 1:
Average throughput: 52.63 Mbit/s
95th percentile per-packet one-way delay: 64.979 ms
Loss rate: 12.07%
-- Flow 2:
Average throughput: 38.18 Mbit/s
95th percentile per-packet one-way delay: 69.808 ms
Loss rate: 22.26%
-- Flow 3:
Average throughput: 31.11 Mbit/s
95th percentile per-packet one-way delay: 70.624 ms
Loss rate: 19.84%
```
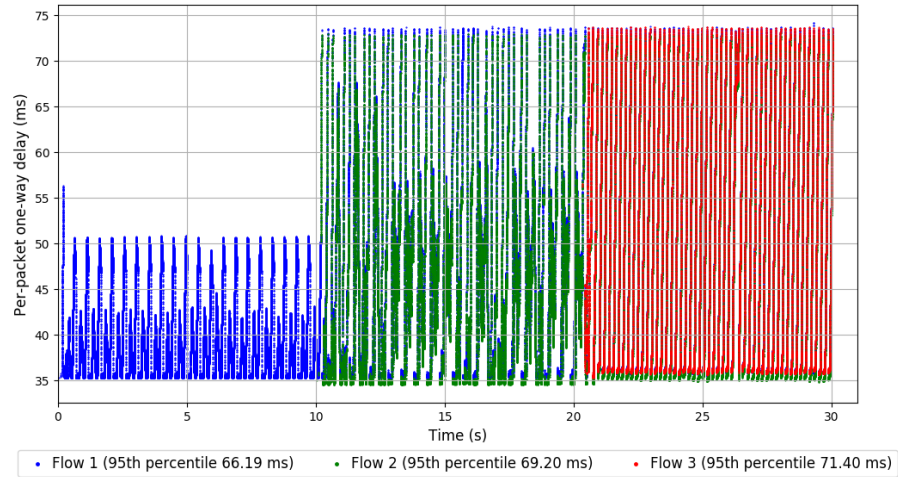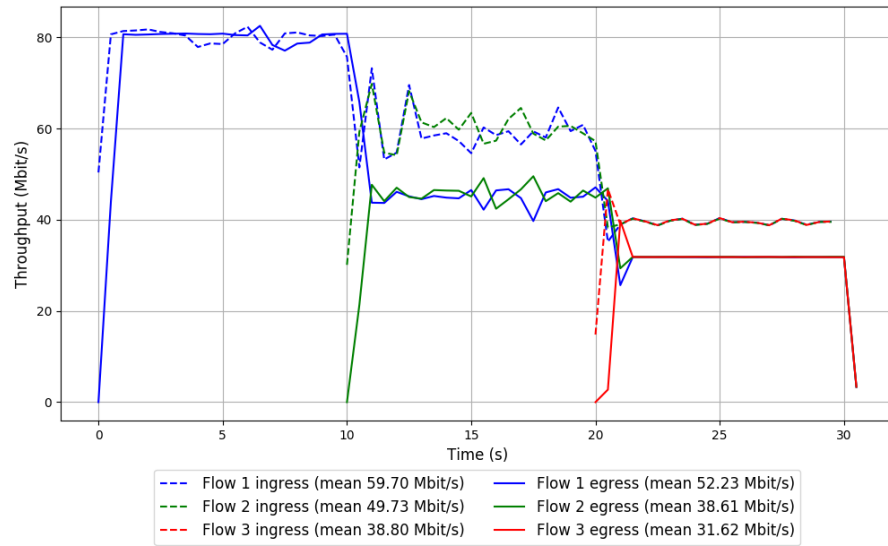
Run 7: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 59.86 Mbit/s) — Flow 1 egress (mean 52.63 Mbit/s)
Flow 2 ingress (mean 49.11 Mbit/s) — Flow 2 egress (mean 38.18 Mbit/s)
Flow 3 ingress (mean 38.78 Mbit/s) — Flow 3 egress (mean 31.11 Mbit/s)

Flow 1 (95th percentile 64.98 ms)   Flow 2 (95th percentile 69.81 ms)   Flow 3 (95th percentile 70.62 ms)

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

Start at: 2018-07-24 17:24:52
End at: 2018-07-24 17:25:22
Local clock offset: 0.19 ms
Remote clock offset: 1.842 ms

# Below is generated by plot.py at 2018-07-24 18:34:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.08 Mbit/s
95th percentile per-packet one-way delay: 68.480 ms
Loss rate: 16.20%
-- Flow 1:
Average throughput: 52.31 Mbit/s
95th percentile per-packet one-way delay: 65.272 ms
Loss rate: 12.17%
-- Flow 2:
Average throughput: 38.03 Mbit/s
95th percentile per-packet one-way delay: 69.905 ms
Loss rate: 22.32%
-- Flow 3:
Average throughput: 31.43 Mbit/s
95th percentile per-packet one-way delay: 71.328 ms
Loss rate: 19.33%
```
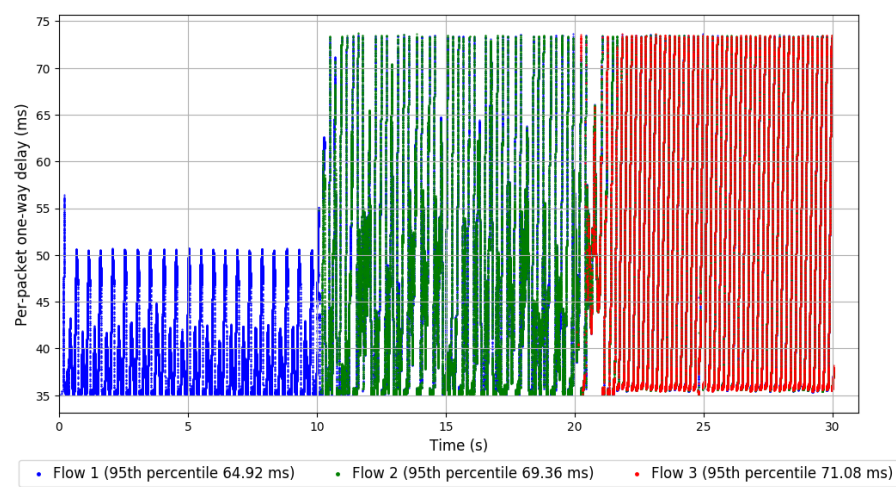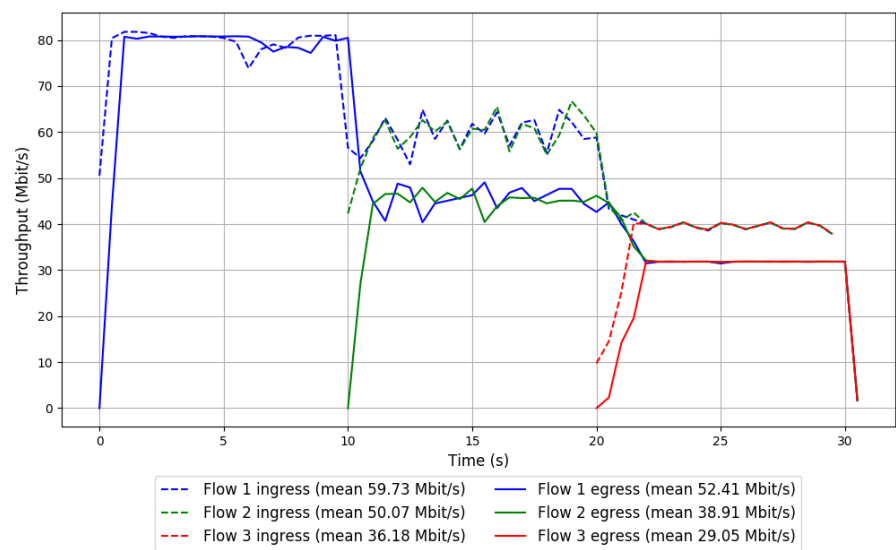
Run 8: Report of TaoVA-100x — Data Link

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

Start at: 2018-07-24 17:47:44
End at: 2018-07-24 17:48:14
Local clock offset: 3.327 ms
Remote clock offset: 1.744 ms


# Below is generated by plot.py at 2018-07-24 18:36:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.27 Mbit/s
95th percentile per-packet one-way delay: 68.409 ms
Loss rate: 16.43%
-- Flow 1:
Average throughput: 52.23 Mbit/s
95th percentile per-packet one-way delay: 66.191 ms
Loss rate: 12.44%
-- Flow 2:
Average throughput: 38.61 Mbit/s
95th percentile per-packet one-way delay: 69.204 ms
Loss rate: 22.26%
-- Flow 3:
Average throughput: 31.62 Mbit/s
95th percentile per-packet one-way delay: 71.400 ms
Loss rate: 19.97%
```
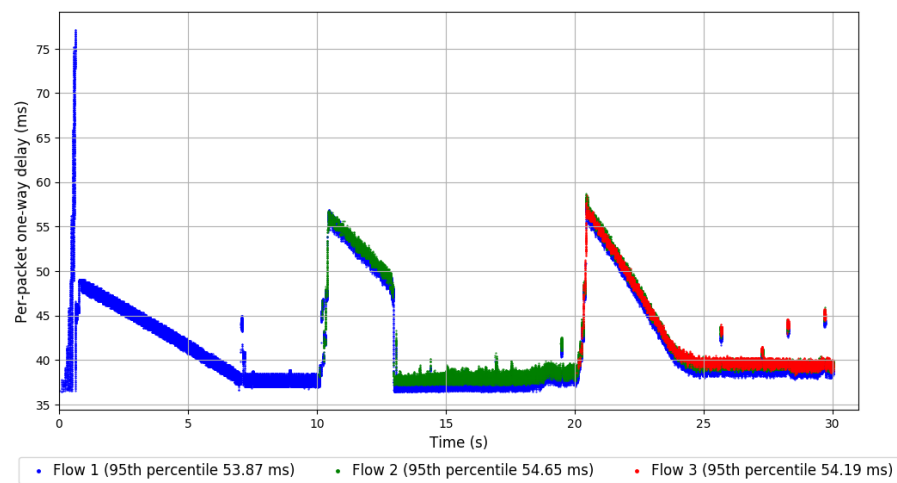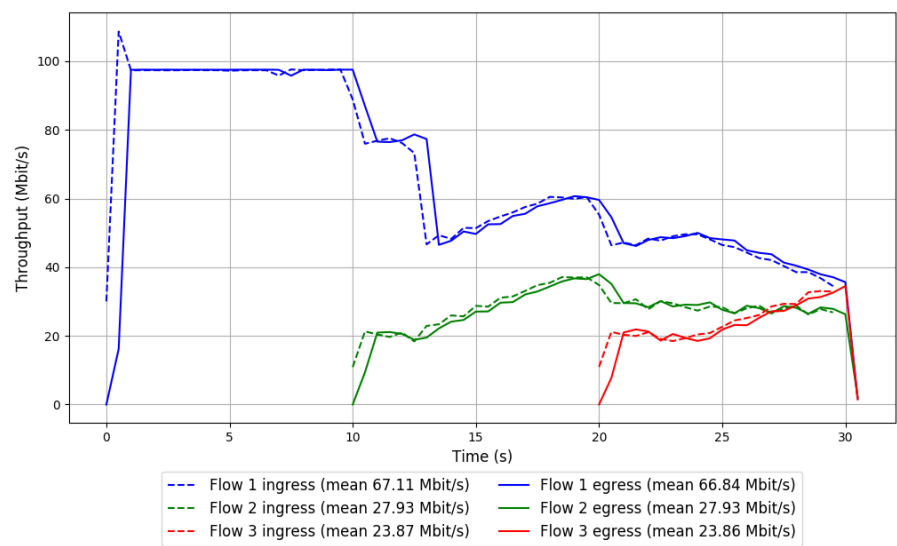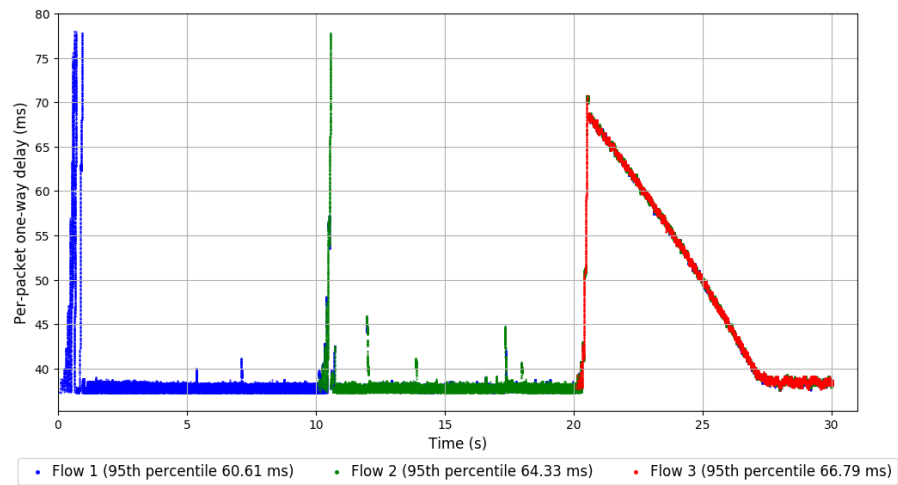
Run 9: Report of TaoVA-100x — Data Link

- - - Flow 1 ingress (mean 59.70 Mbit/s)   —— Flow 1 egress (mean 52.23 Mbit/s)
- - - Flow 2 ingress (mean 49.73 Mbit/s)   —— Flow 2 egress (mean 38.61 Mbit/s)
- - - Flow 3 ingress (mean 38.80 Mbit/s)   —— Flow 3 egress (mean 31.62 Mbit/s)

• Flow 1 (95th percentile 66.19 ms)   • Flow 2 (95th percentile 69.20 ms)   • Flow 3 (95th percentile 71.40 ms)

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

Start at: 2018-07-24 18:10:46
End at: 2018-07-24 18:11:16
Local clock offset: 1.53 ms
Remote clock offset: 1.943 ms


# Below is generated by plot.py at 2018-07-24 18:36:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.95 Mbit/s
95th percentile per-packet one-way delay: 67.970 ms
Loss rate: 16.31%
-- Flow 1:
Average throughput: 52.41 Mbit/s
95th percentile per-packet one-way delay: 64.924 ms
Loss rate: 12.25%
-- Flow 2:
Average throughput: 38.91 Mbit/s
95th percentile per-packet one-way delay: 69.365 ms
Loss rate: 22.35%
-- Flow 3:
Average throughput: 29.05 Mbit/s
95th percentile per-packet one-way delay: 71.077 ms
Loss rate: 19.74%
```
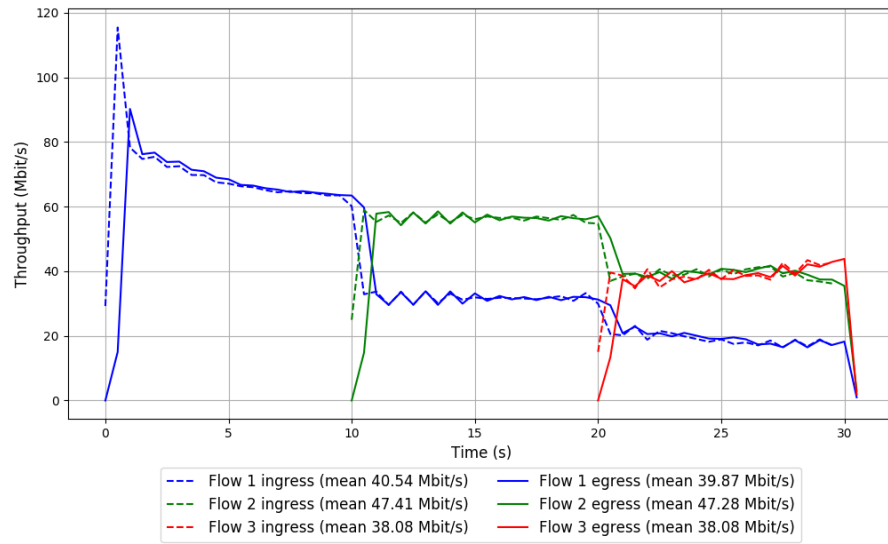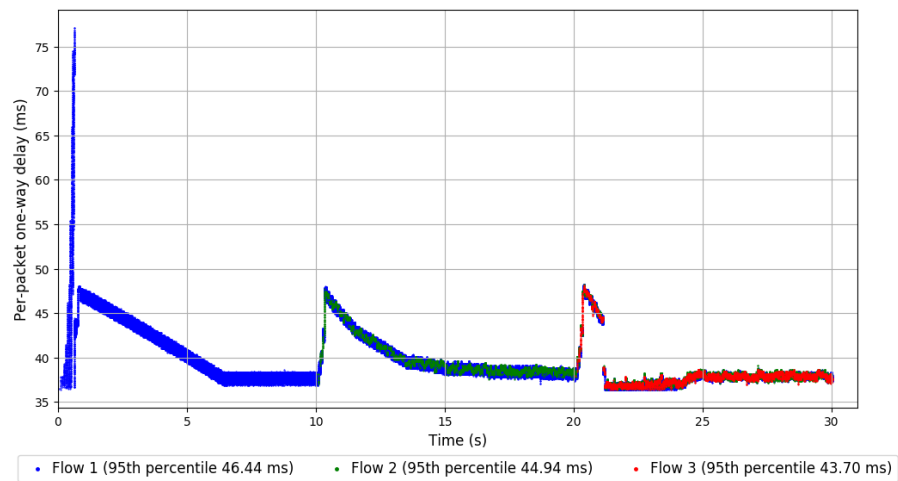
Run 10: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 59.73 Mbit/s) --- Flow 1 egress (mean 52.41 Mbit/s)
Flow 2 ingress (mean 50.07 Mbit/s) --- Flow 2 egress (mean 38.91 Mbit/s)
Flow 3 ingress (mean 36.18 Mbit/s) --- Flow 3 egress (mean 29.05 Mbit/s)

Flow 1 (95th percentile 64.92 ms)   Flow 2 (95th percentile 69.36 ms)   Flow 3 (95th percentile 71.08 ms)

```
Run 1: Statistics of TCP Vegas

Start at: 2018-07-24 14:30:16
End at: 2018-07-24 14:30:46
Local clock offset: 0.707 ms
Remote clock offset: 4.303 ms


# Below is generated by plot.py at 2018-07-24 18:36:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.38 Mbit/s
95th percentile per-packet one-way delay: 54.117 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 66.84 Mbit/s
95th percentile per-packet one-way delay: 53.874 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 27.93 Mbit/s
95th percentile per-packet one-way delay: 54.645 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 23.86 Mbit/s
95th percentile per-packet one-way delay: 54.193 ms
Loss rate: 0.03%
```
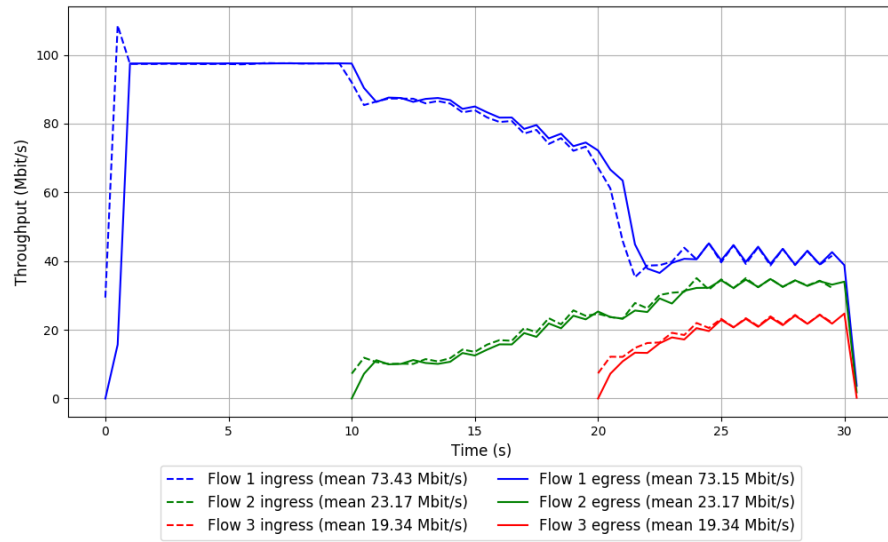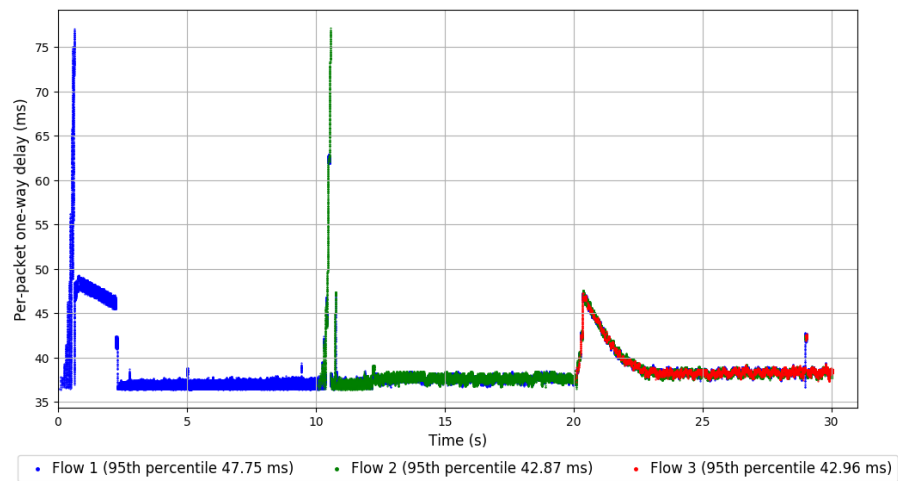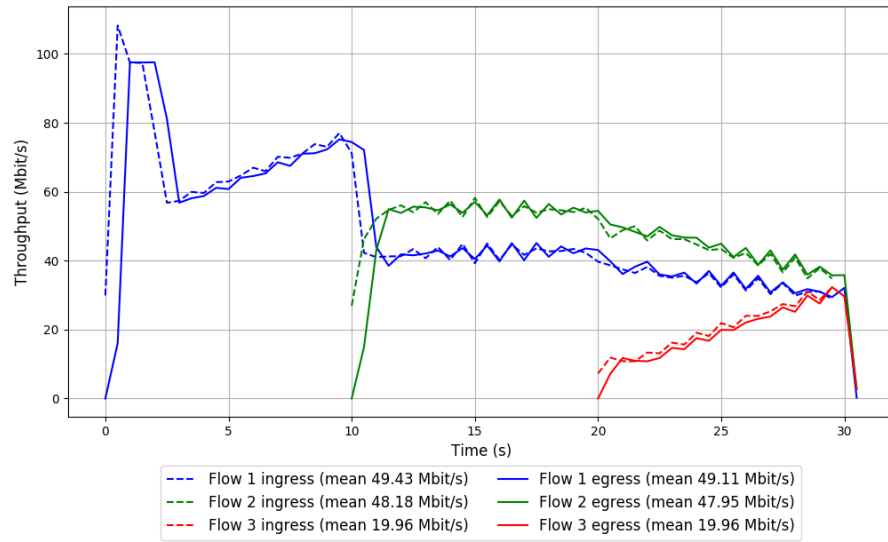
Run 1: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 67.11 Mbit/s) ---- Flow 1 egress (mean 66.84 Mbit/s)
Flow 2 ingress (mean 27.93 Mbit/s) ---- Flow 2 egress (mean 27.93 Mbit/s)
Flow 3 ingress (mean 23.87 Mbit/s) ---- Flow 3 egress (mean 23.86 Mbit/s)

Flow 1 (95th percentile 53.87 ms)   Flow 2 (95th percentile 54.65 ms)   Flow 3 (95th percentile 54.19 ms)

```
Run 2: Statistics of TCP Vegas

Start at: 2018-07-24 14:53:16
End at: 2018-07-24 14:53:46
Local clock offset: 4.502 ms
Remote clock offset: 4.56 ms


# Below is generated by plot.py at 2018-07-24 18:36:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.99 Mbit/s
95th percentile per-packet one-way delay: 64.286 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 39.87 Mbit/s
95th percentile per-packet one-way delay: 60.613 ms
Loss rate: 1.64%
-- Flow 2:
Average throughput: 47.28 Mbit/s
95th percentile per-packet one-way delay: 64.330 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 38.08 Mbit/s
95th percentile per-packet one-way delay: 66.791 ms
Loss rate: 0.01%
```
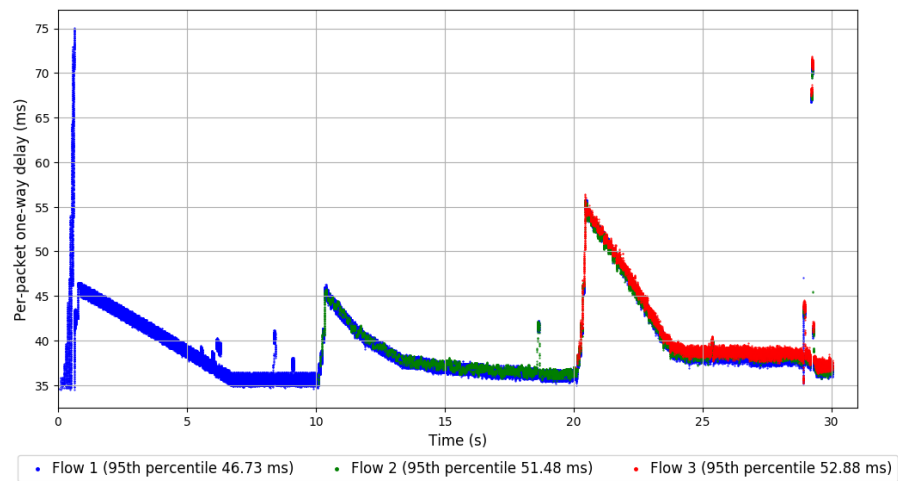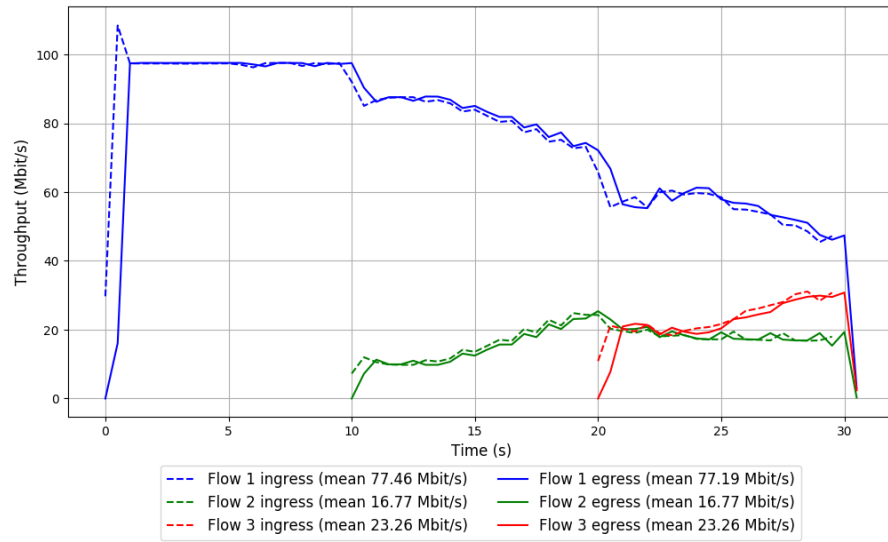
Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2018-07-24 15:16:29
End at: 2018-07-24 15:16:59
Local clock offset: 1.143 ms
Remote clock offset: 4.28 ms


# Below is generated by plot.py at 2018-07-24 18:36:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.00 Mbit/s
95th percentile per-packet one-way delay: 46.220 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 73.15 Mbit/s
95th percentile per-packet one-way delay: 46.436 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 23.17 Mbit/s
95th percentile per-packet one-way delay: 44.941 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.34 Mbit/s
95th percentile per-packet one-way delay: 43.704 ms
Loss rate: 0.00%
```
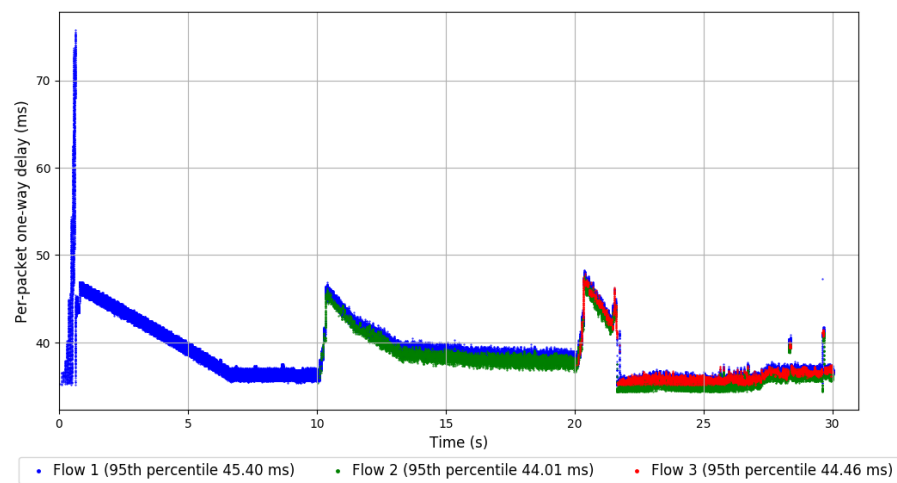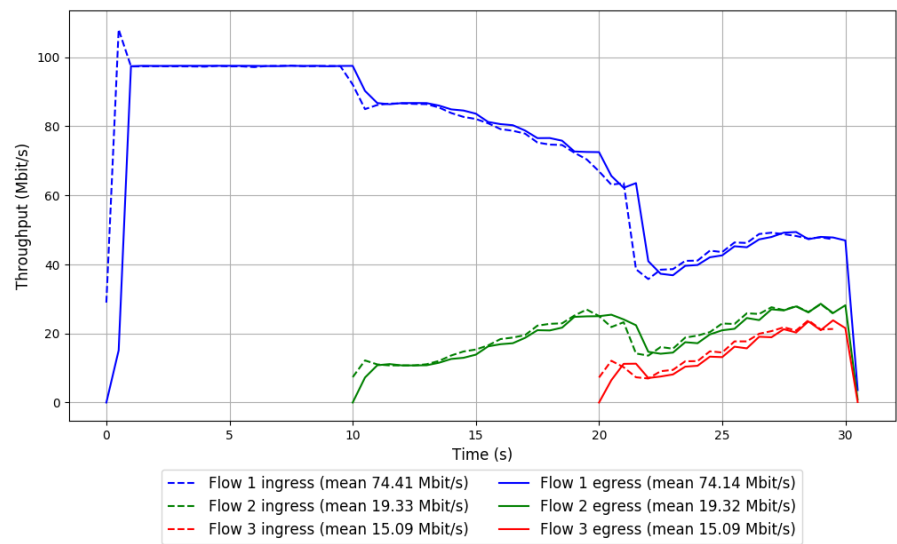
Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2018-07-24 15:39:27
End at: 2018-07-24 15:39:57
Local clock offset: -0.039 ms
Remote clock offset: 4.341 ms


# Below is generated by plot.py at 2018-07-24 18:36:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.65 Mbit/s
95th percentile per-packet one-way delay: 47.027 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 49.11 Mbit/s
95th percentile per-packet one-way delay: 47.751 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 47.95 Mbit/s
95th percentile per-packet one-way delay: 42.865 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 19.96 Mbit/s
95th percentile per-packet one-way delay: 42.962 ms
Loss rate: 0.00%
```
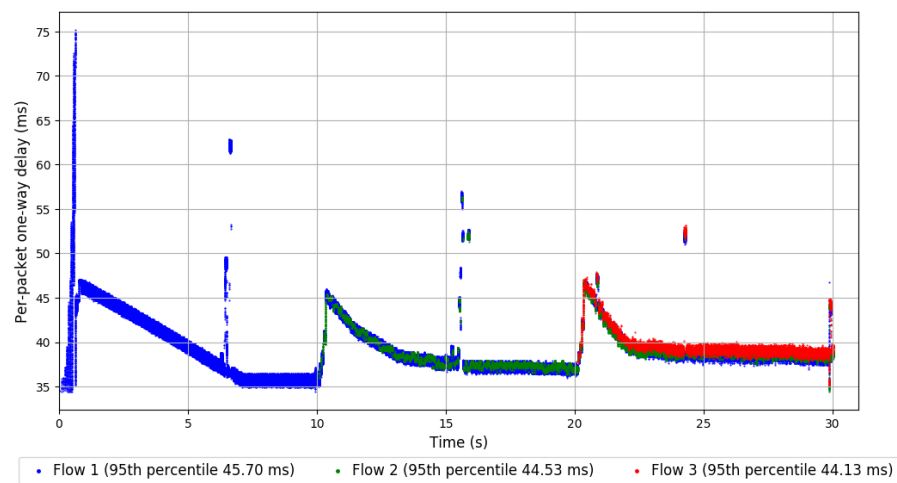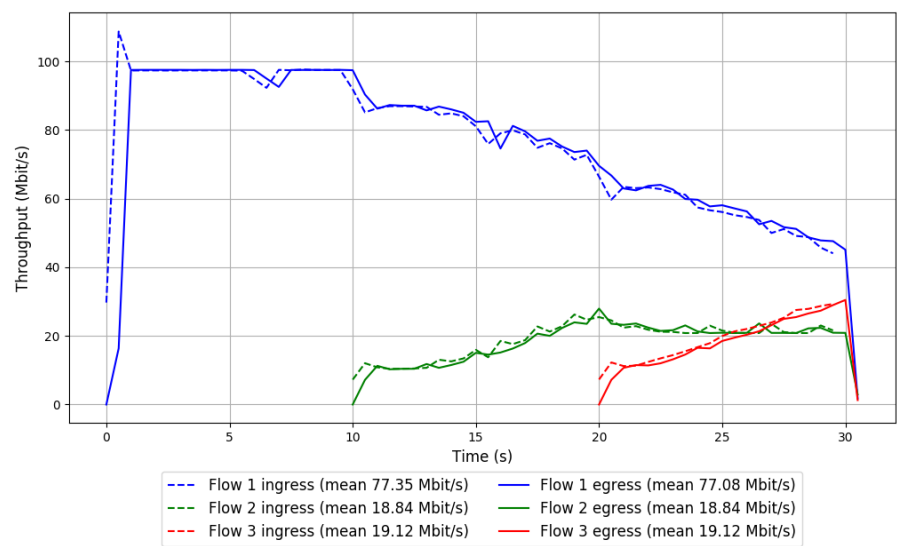
Run 4: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 49.43 Mbit/s)   Flow 1 egress (mean 49.11 Mbit/s)
Flow 2 ingress (mean 48.18 Mbit/s)   Flow 2 egress (mean 47.95 Mbit/s)
Flow 3 ingress (mean 19.96 Mbit/s)   Flow 3 egress (mean 19.96 Mbit/s)

Flow 1 (95th percentile 47.75 ms)   Flow 2 (95th percentile 42.87 ms)   Flow 3 (95th percentile 42.96 ms)

```
Run 5: Statistics of TCP Vegas

Start at: 2018-07-24 16:02:30
End at: 2018-07-24 16:03:00
Local clock offset: -0.43 ms
Remote clock offset: 2.469 ms


# Below is generated by plot.py at 2018-07-24 18:36:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.09 Mbit/s
95th percentile per-packet one-way delay: 48.968 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 77.19 Mbit/s
95th percentile per-packet one-way delay: 46.732 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 16.77 Mbit/s
95th percentile per-packet one-way delay: 51.475 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 23.26 Mbit/s
95th percentile per-packet one-way delay: 52.884 ms
Loss rate: 0.00%
```
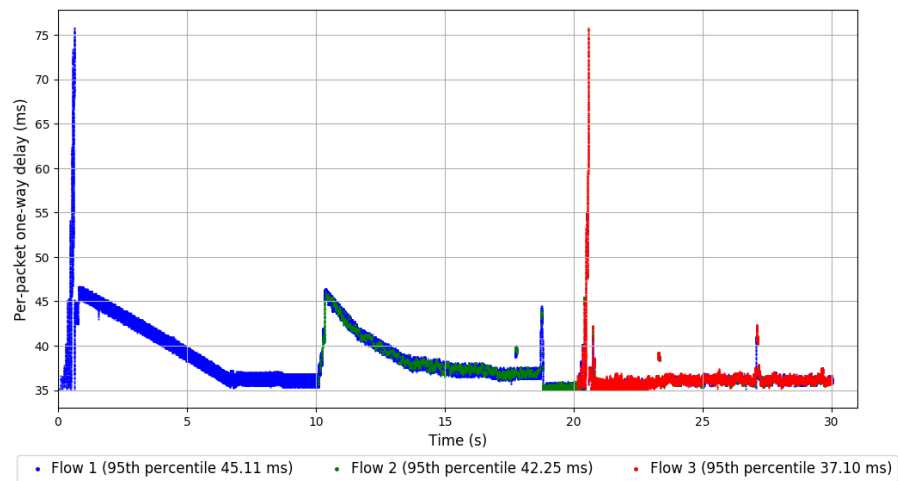
Run 5: Report of TCP Vegas — Data Link

```
Run 6: Statistics of TCP Vegas

Start at: 2018-07-24 16:25:25
End at: 2018-07-24 16:25:55
Local clock offset: 0.874 ms
Remote clock offset: 2.563 ms


# Below is generated by plot.py at 2018-07-24 18:36:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.01 Mbit/s
95th percentile per-packet one-way delay: 45.192 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 74.14 Mbit/s
95th percentile per-packet one-way delay: 45.395 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 19.32 Mbit/s
95th percentile per-packet one-way delay: 44.010 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 15.09 Mbit/s
95th percentile per-packet one-way delay: 44.460 ms
Loss rate: 0.04%
```
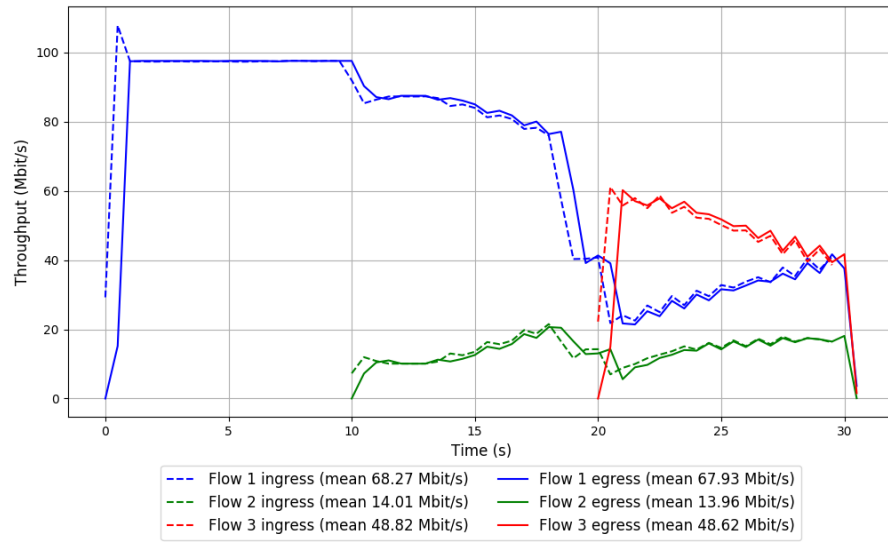
Run 6: Report of TCP Vegas — Data Link

```
Run 7: Statistics of TCP Vegas

Start at: 2018-07-24 16:48:24
End at: 2018-07-24 16:48:54
Local clock offset: 0.943 ms
Remote clock offset: 2.47 ms


# Below is generated by plot.py at 2018-07-24 18:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.95 Mbit/s
95th percentile per-packet one-way delay: 45.495 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 77.08 Mbit/s
95th percentile per-packet one-way delay: 45.695 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 18.84 Mbit/s
95th percentile per-packet one-way delay: 44.535 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.12 Mbit/s
95th percentile per-packet one-way delay: 44.132 ms
Loss rate: 0.00%
```
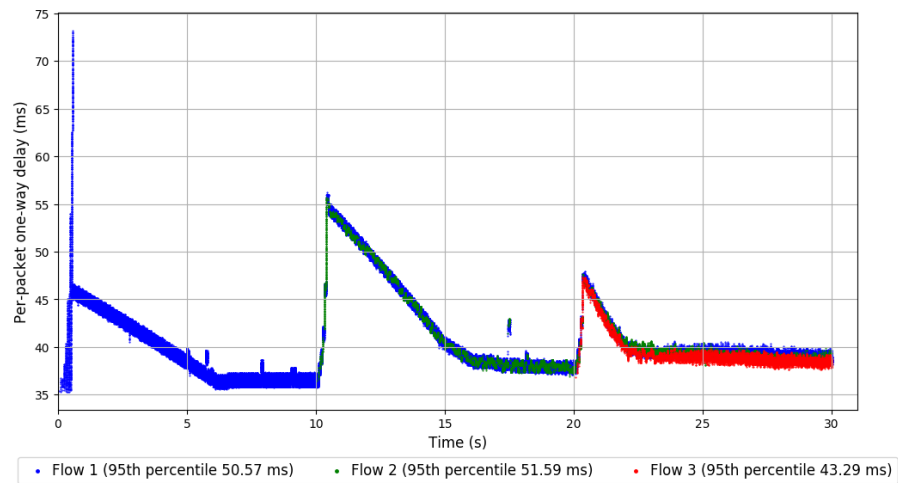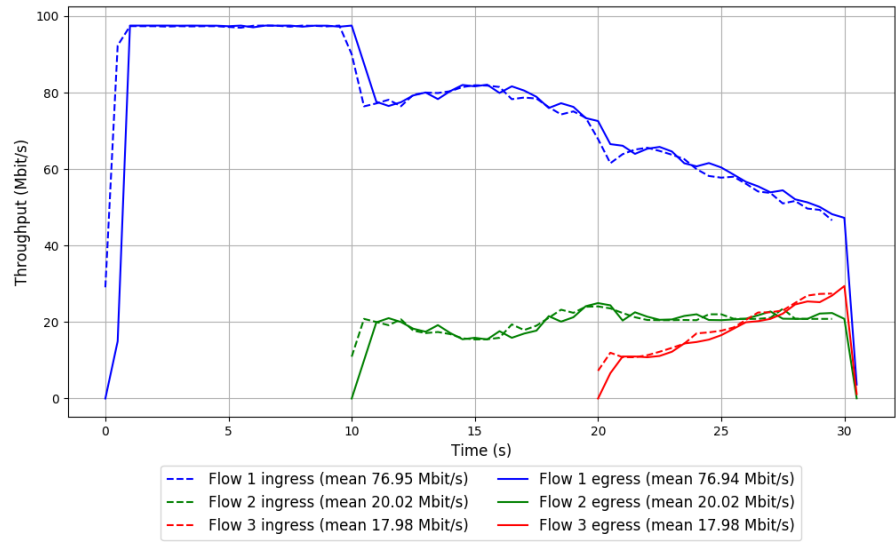
Run 7: Report of TCP Vegas — Data Link

```
Run 8: Statistics of TCP Vegas

Start at: 2018-07-24 17:11:20
End at: 2018-07-24 17:11:50
Local clock offset: 0.599 ms
Remote clock offset: 1.91 ms


# Below is generated by plot.py at 2018-07-24 18:37:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.36 Mbit/s
95th percentile per-packet one-way delay: 44.849 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 67.93 Mbit/s
95th percentile per-packet one-way delay: 45.109 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 13.96 Mbit/s
95th percentile per-packet one-way delay: 42.254 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 48.62 Mbit/s
95th percentile per-packet one-way delay: 37.103 ms
Loss rate: 0.40%
```
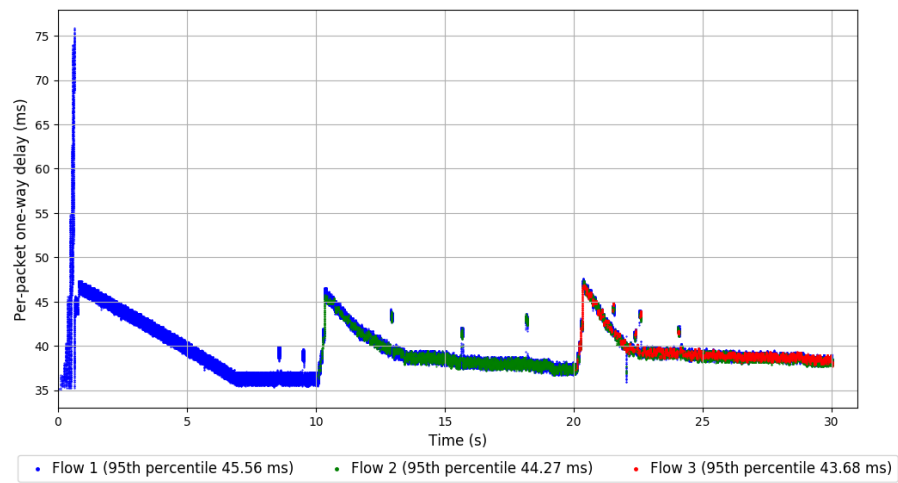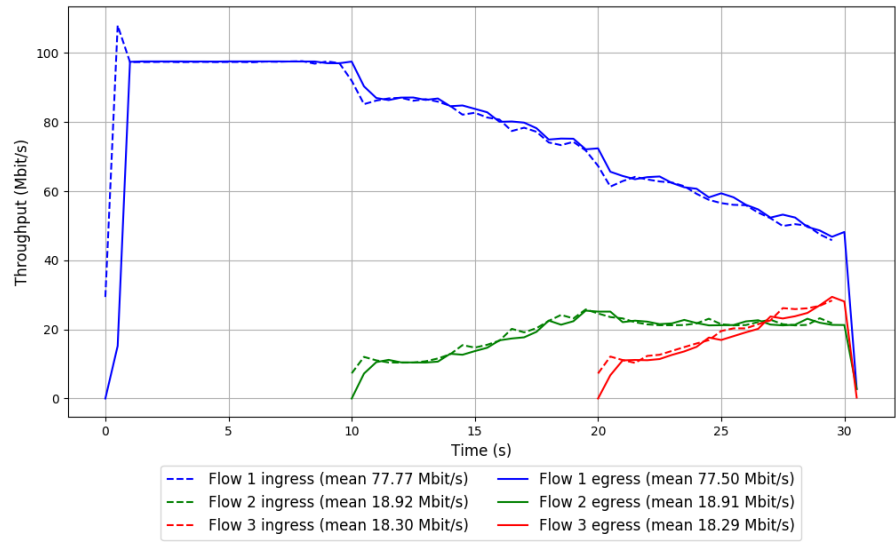
Run 8: Report of TCP Vegas — Data Link

```
Run 9: Statistics of TCP Vegas

Start at: 2018-07-24 17:34:15
End at: 2018-07-24 17:34:45
Local clock offset: 1.008 ms
Remote clock offset: 1.689 ms


# Below is generated by plot.py at 2018-07-24 18:37:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.23 Mbit/s
95th percentile per-packet one-way delay: 50.556 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 76.94 Mbit/s
95th percentile per-packet one-way delay: 50.573 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 20.02 Mbit/s
95th percentile per-packet one-way delay: 51.592 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 17.98 Mbit/s
95th percentile per-packet one-way delay: 43.292 ms
Loss rate: 0.00%
```
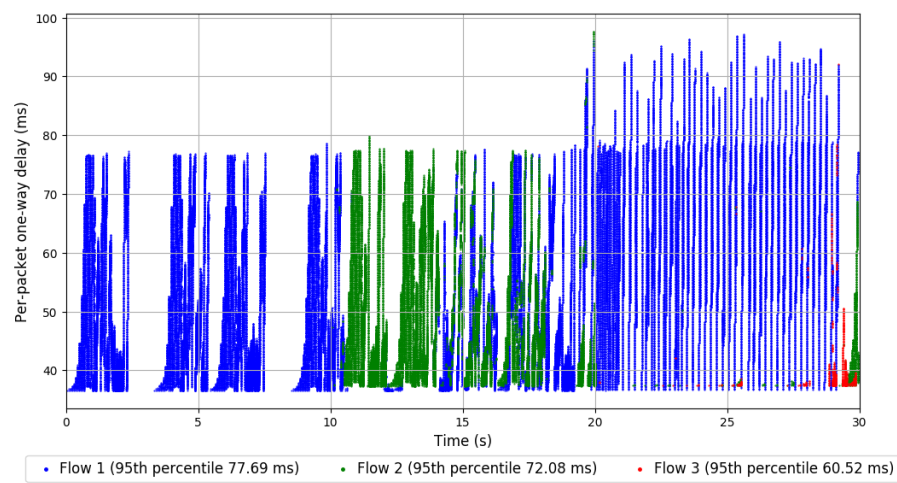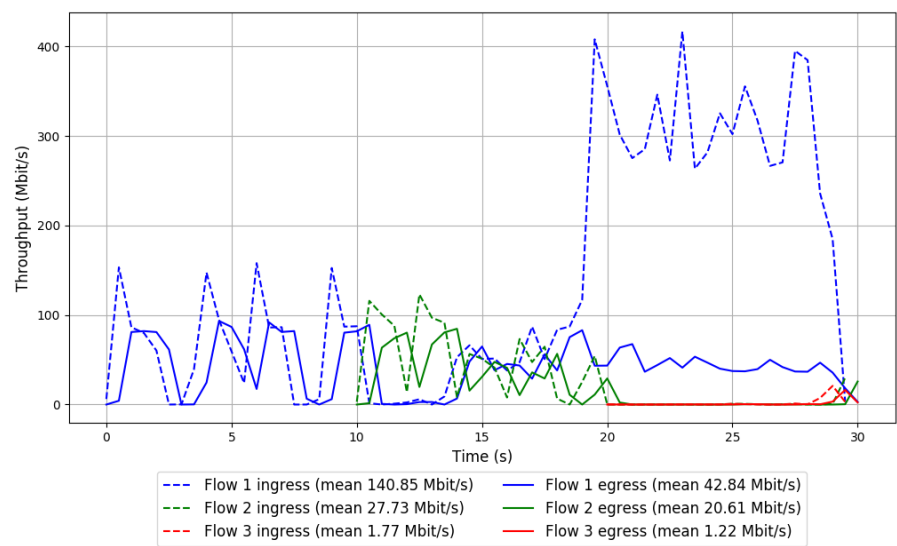
Run 9: Report of TCP Vegas — Data Link

```
Run 10: Statistics of TCP Vegas

Start at: 2018-07-24 17:57:12
End at: 2018-07-24 17:57:42
Local clock offset: 3.987 ms
Remote clock offset: 1.791 ms


# Below is generated by plot.py at 2018-07-24 18:37:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.17 Mbit/s
95th percentile per-packet one-way delay: 45.346 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 77.50 Mbit/s
95th percentile per-packet one-way delay: 45.565 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 18.91 Mbit/s
95th percentile per-packet one-way delay: 44.272 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 18.29 Mbit/s
95th percentile per-packet one-way delay: 43.678 ms
Loss rate: 0.03%
```
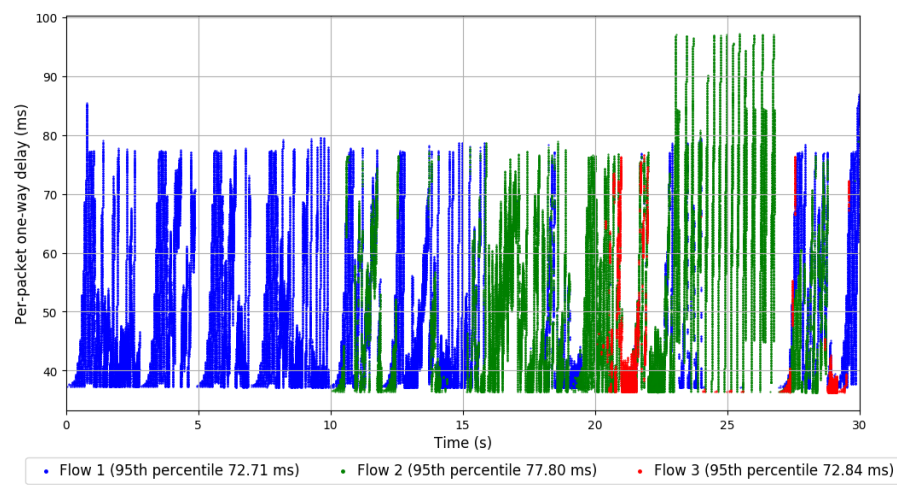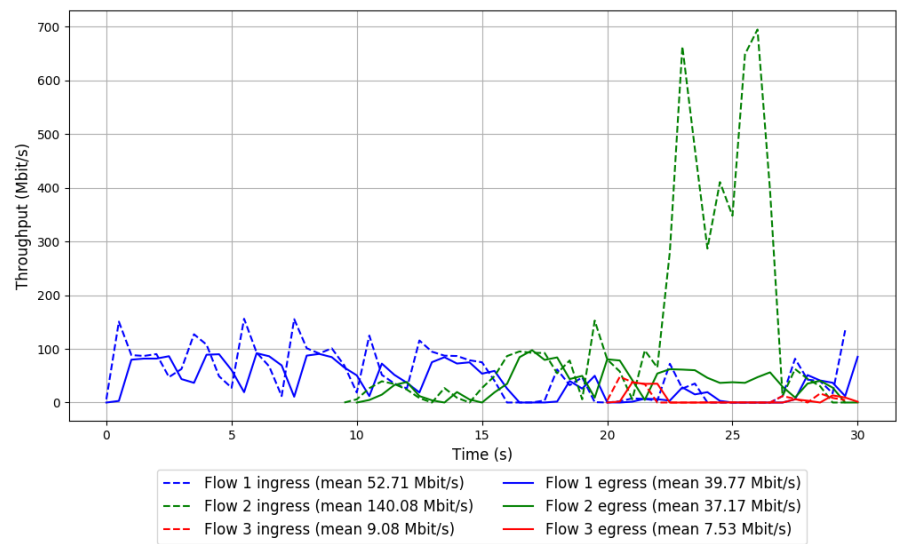
Run 10: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 77.77 Mbit/s) --- Flow 1 egress (mean 77.50 Mbit/s)
Flow 2 ingress (mean 18.92 Mbit/s) --- Flow 2 egress (mean 18.91 Mbit/s)
Flow 3 ingress (mean 18.30 Mbit/s) --- Flow 3 egress (mean 18.29 Mbit/s)

Flow 1 (95th percentile 45.56 ms)   Flow 2 (95th percentile 44.27 ms)   Flow 3 (95th percentile 43.68 ms)

283

```
Run 1: Statistics of Verus

Start at: 2018-07-24 14:38:28
End at: 2018-07-24 14:38:58
Local clock offset: 2.724 ms
Remote clock offset: 4.314 ms


# Below is generated by plot.py at 2018-07-24 18:37:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.93 Mbit/s
95th percentile per-packet one-way delay: 76.284 ms
Loss rate: 64.34%
-- Flow 1:
Average throughput: 42.84 Mbit/s
95th percentile per-packet one-way delay: 77.694 ms
Loss rate: 69.54%
-- Flow 2:
Average throughput: 20.61 Mbit/s
95th percentile per-packet one-way delay: 72.076 ms
Loss rate: 25.68%
-- Flow 3:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 60.517 ms
Loss rate: 31.78%
```
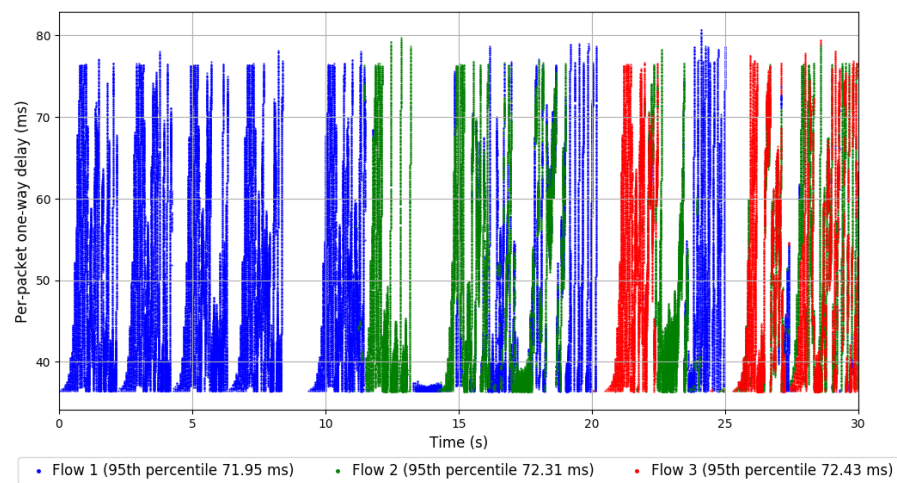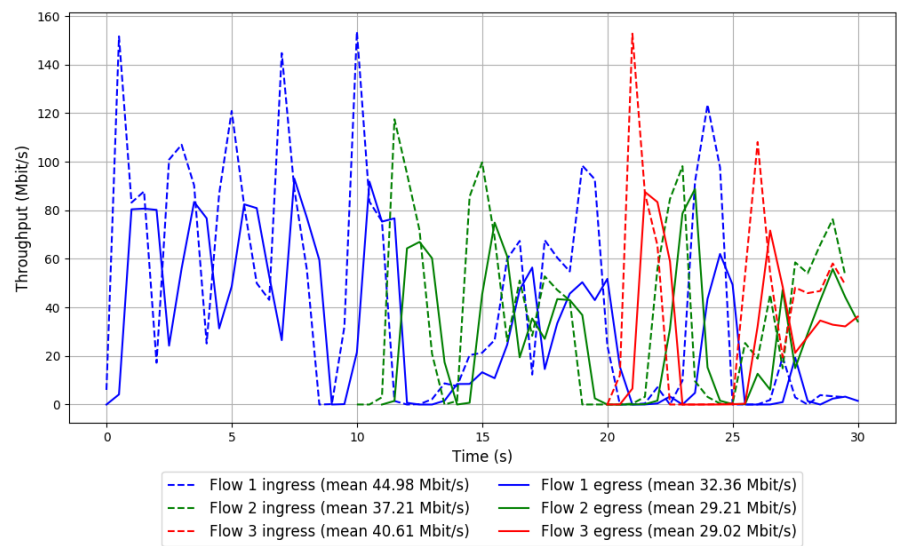
Run 1: Report of Verus — Data Link

Flow 1 ingress (mean 140.85 Mbit/s) — — — Flow 1 egress (mean 42.84 Mbit/s)
Flow 2 ingress (mean 27.73 Mbit/s) — — — Flow 2 egress (mean 20.61 Mbit/s)
Flow 3 ingress (mean 1.77 Mbit/s) — — — Flow 3 egress (mean 1.22 Mbit/s)

Flow 1 (95th percentile 77.69 ms) Flow 2 (95th percentile 72.08 ms) Flow 3 (95th percentile 60.52 ms)

285

```
Run 2: Statistics of Verus

Start at: 2018-07-24 15:01:28
End at: 2018-07-24 15:01:58
Local clock offset: 5.055 ms
Remote clock offset: 4.794 ms


# Below is generated by plot.py at 2018-07-24 18:37:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.87 Mbit/s
95th percentile per-packet one-way delay: 74.367 ms
Loss rate: 54.97%
-- Flow 1:
Average throughput: 39.77 Mbit/s
95th percentile per-packet one-way delay: 72.708 ms
Loss rate: 24.48%
-- Flow 2:
Average throughput: 37.17 Mbit/s
95th percentile per-packet one-way delay: 77.795 ms
Loss rate: 73.41%
-- Flow 3:
Average throughput: 7.53 Mbit/s
95th percentile per-packet one-way delay: 72.845 ms
Loss rate: 17.69%
```
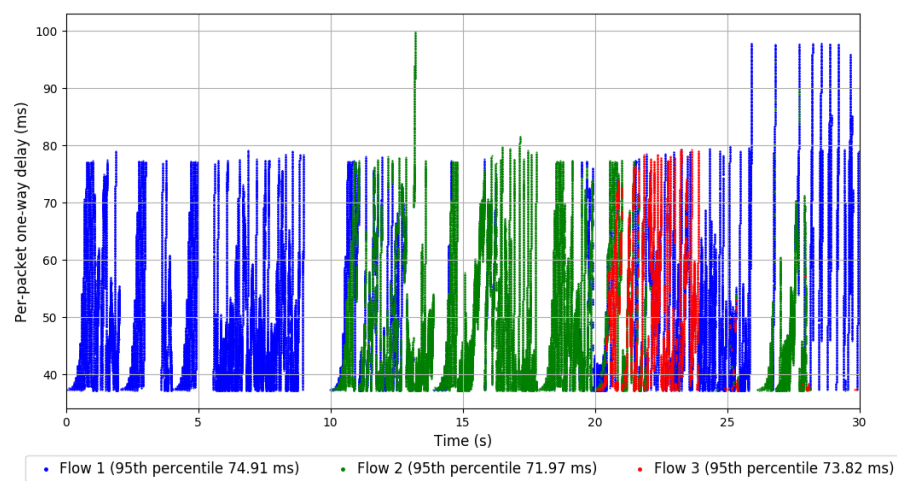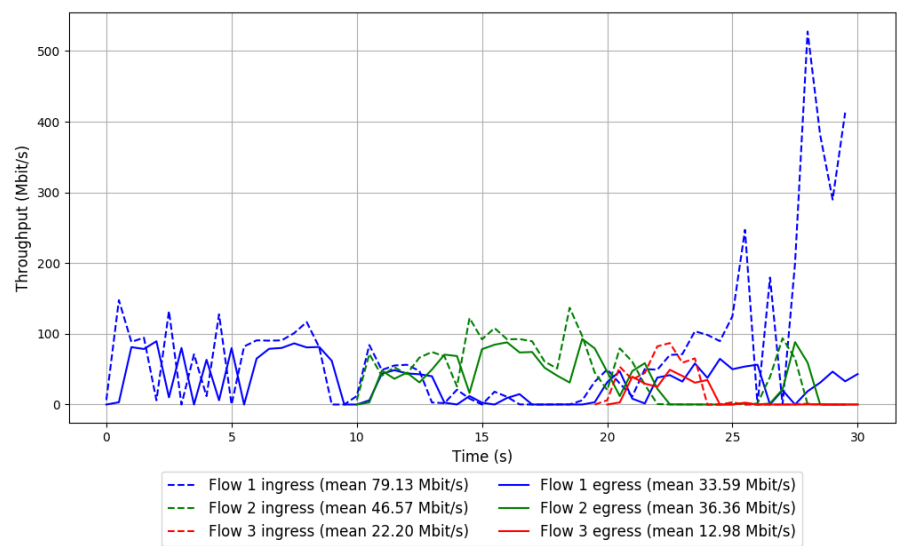
Run 2: Report of Verus — Data Link

Flow 1 ingress (mean 52.71 Mbit/s)
Flow 2 ingress (mean 140.08 Mbit/s)
Flow 3 ingress (mean 9.08 Mbit/s)
Flow 1 egress (mean 39.77 Mbit/s)
Flow 2 egress (mean 37.17 Mbit/s)
Flow 3 egress (mean 7.53 Mbit/s)

Flow 1 (95th percentile 72.71 ms)
Flow 2 (95th percentile 77.80 ms)
Flow 3 (95th percentile 72.84 ms)

287

```
Run 3: Statistics of Verus

Start at: 2018-07-24 15:24:36
End at: 2018-07-24 15:25:06
Local clock offset: 0.462 ms
Remote clock offset: 4.205 ms


# Below is generated by plot.py at 2018-07-24 18:37:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.15 Mbit/s
95th percentile per-packet one-way delay: 72.165 ms
Loss rate: 27.37%
-- Flow 1:
Average throughput: 32.36 Mbit/s
95th percentile per-packet one-way delay: 71.953 ms
Loss rate: 28.21%
-- Flow 2:
Average throughput: 29.21 Mbit/s
95th percentile per-packet one-way delay: 72.306 ms
Loss rate: 25.34%
-- Flow 3:
Average throughput: 29.02 Mbit/s
95th percentile per-packet one-way delay: 72.430 ms
Loss rate: 28.32%
```
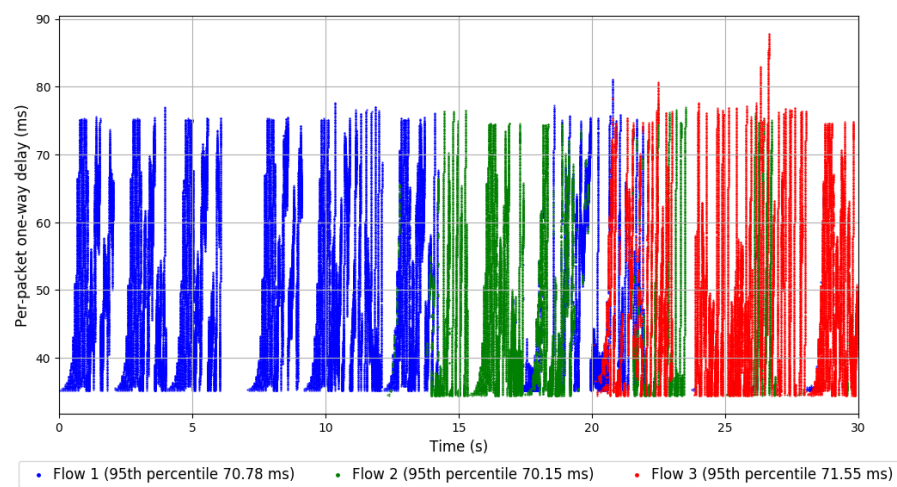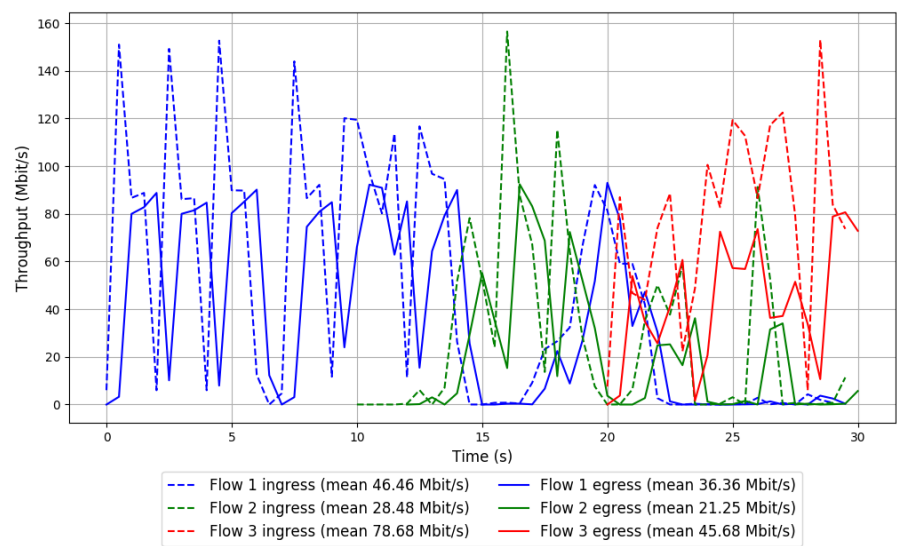
Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2018-07-24 15:47:42
End at: 2018-07-24 15:48:12
Local clock offset: -0.248 ms
Remote clock offset: 4.329 ms


# Below is generated by plot.py at 2018-07-24 18:37:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.65 Mbit/s
95th percentile per-packet one-way delay: 73.839 ms
Loss rate: 47.29%
-- Flow 1:
Average throughput: 33.59 Mbit/s
95th percentile per-packet one-way delay: 74.910 ms
Loss rate: 57.53%
-- Flow 2:
Average throughput: 36.36 Mbit/s
95th percentile per-packet one-way delay: 71.974 ms
Loss rate: 22.19%
-- Flow 3:
Average throughput: 12.98 Mbit/s
95th percentile per-packet one-way delay: 73.822 ms
Loss rate: 41.52%
```
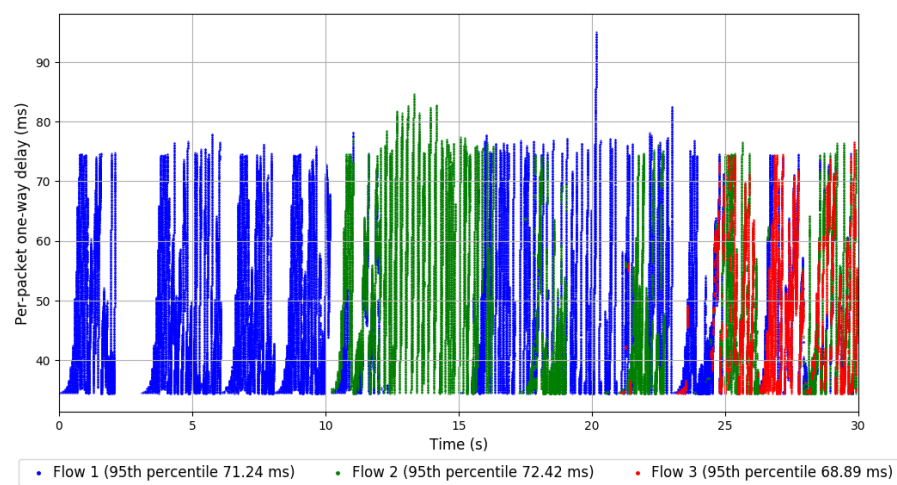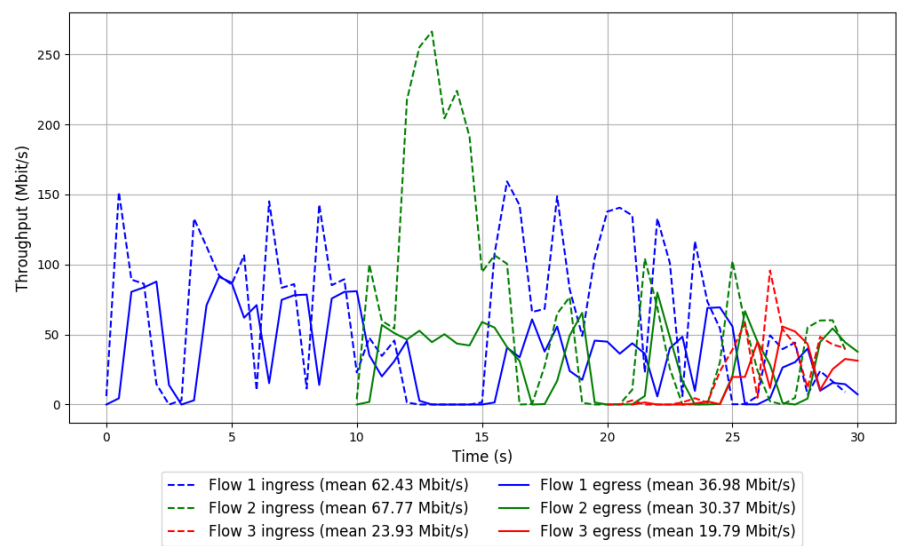
Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2018-07-24 16:10:35
End at: 2018-07-24 16:11:05
Local clock offset: 0.385 ms
Remote clock offset: 2.559 ms


# Below is generated by plot.py at 2018-07-24 18:37:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.18 Mbit/s
95th percentile per-packet one-way delay: 70.831 ms
Loss rate: 30.01%
-- Flow 1:
Average throughput: 36.36 Mbit/s
95th percentile per-packet one-way delay: 70.777 ms
Loss rate: 21.91%
-- Flow 2:
Average throughput: 21.25 Mbit/s
95th percentile per-packet one-way delay: 70.152 ms
Loss rate: 33.28%
-- Flow 3:
Average throughput: 45.68 Mbit/s
95th percentile per-packet one-way delay: 71.554 ms
Loss rate: 41.91%
```
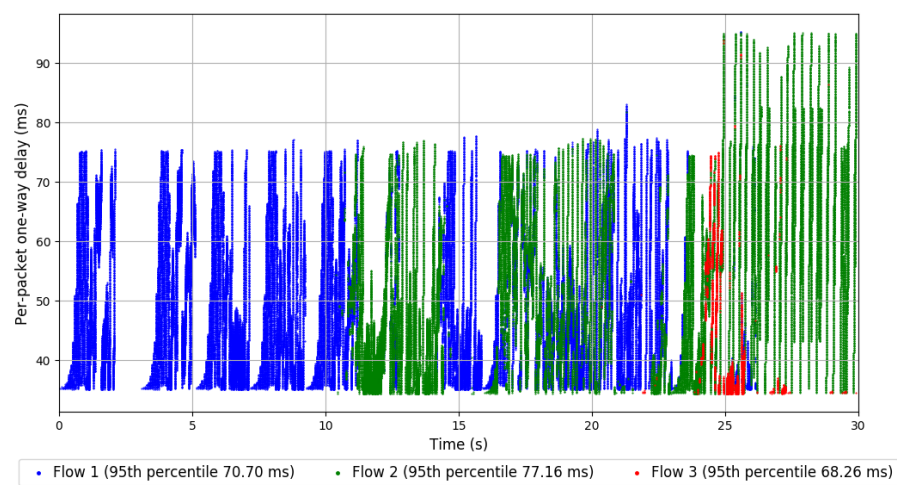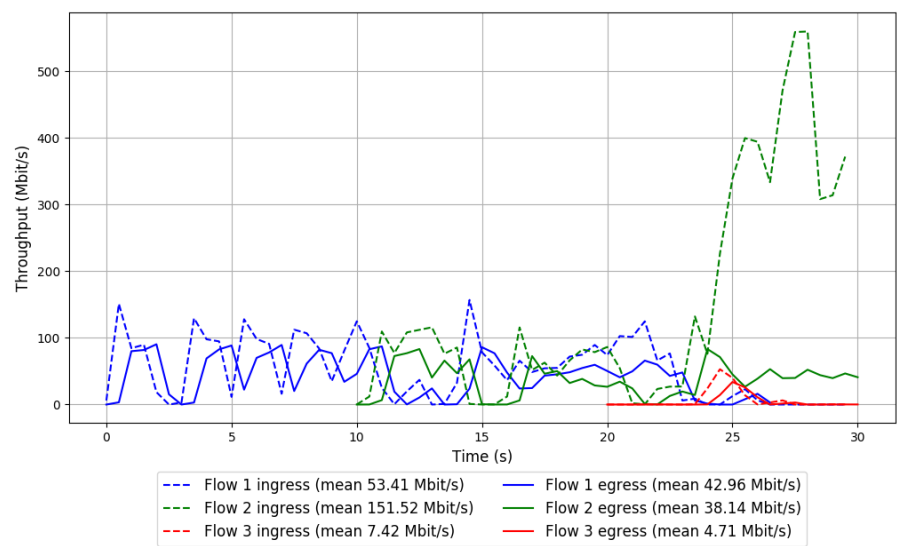
Run 5: Report of Verus — Data Link

```
Run 6: Statistics of Verus

Start at: 2018-07-24 16:33:32
End at: 2018-07-24 16:34:02
Local clock offset: 0.941 ms
Remote clock offset: 2.673 ms


# Below is generated by plot.py at 2018-07-24 18:37:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.03 Mbit/s
95th percentile per-packet one-way delay: 71.494 ms
Loss rate: 45.34%
-- Flow 1:
Average throughput: 36.98 Mbit/s
95th percentile per-packet one-way delay: 71.239 ms
Loss rate: 40.72%
-- Flow 2:
Average throughput: 30.37 Mbit/s
95th percentile per-packet one-way delay: 72.419 ms
Loss rate: 55.22%
-- Flow 3:
Average throughput: 19.79 Mbit/s
95th percentile per-packet one-way delay: 68.885 ms
Loss rate: 25.51%
```
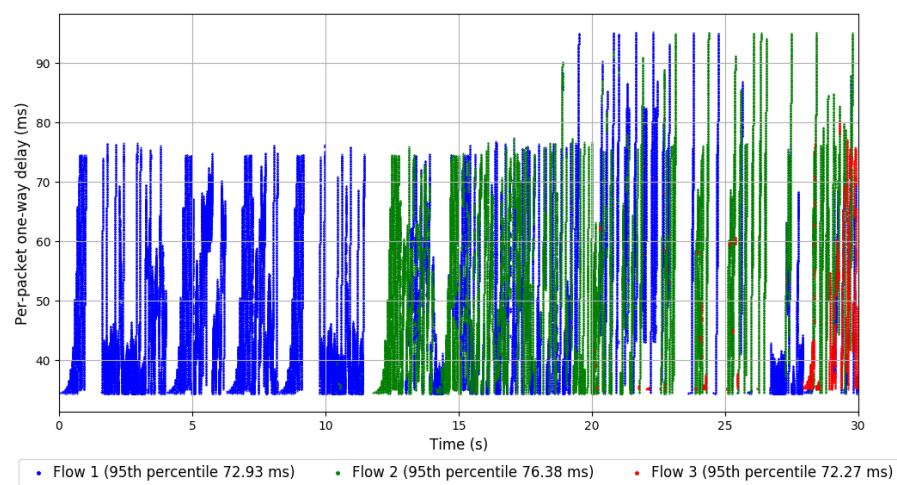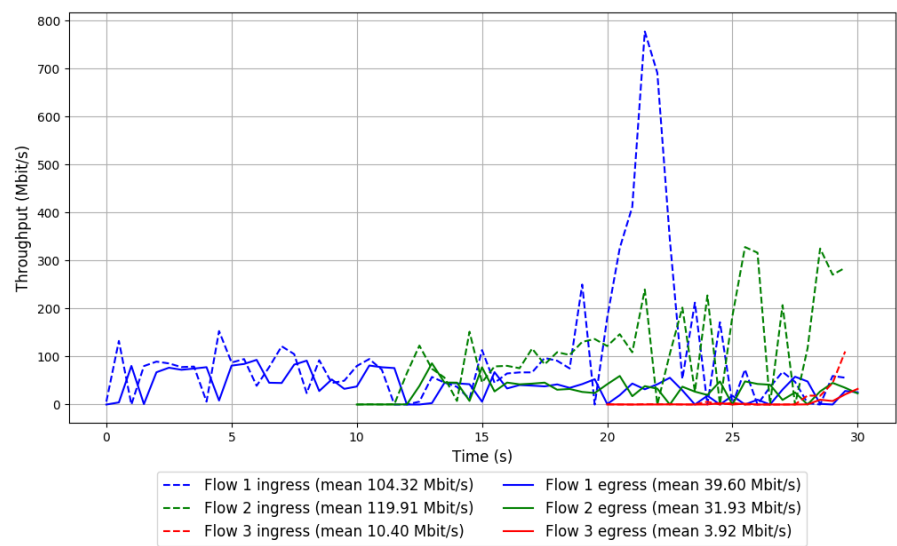
Run 6: Report of Verus — Data Link

- Flow 1 ingress (mean 62.43 Mbit/s)
- Flow 1 egress (mean 36.98 Mbit/s)
- Flow 2 ingress (mean 67.77 Mbit/s)
- Flow 2 egress (mean 30.37 Mbit/s)
- Flow 3 ingress (mean 23.93 Mbit/s)
- Flow 3 egress (mean 19.79 Mbit/s)

- Flow 1 (95th percentile 71.24 ms)
- Flow 2 (95th percentile 72.42 ms)
- Flow 3 (95th percentile 68.89 ms)

```
Run 7: Statistics of Verus

Start at: 2018-07-24 16:56:31
End at: 2018-07-24 16:57:01
Local clock offset: 0.943 ms
Remote clock offset: 2.105 ms


# Below is generated by plot.py at 2018-07-24 18:38:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.02 Mbit/s
95th percentile per-packet one-way delay: 72.945 ms
Loss rate: 58.46%
-- Flow 1:
Average throughput: 42.96 Mbit/s
95th percentile per-packet one-way delay: 70.702 ms
Loss rate: 28.82%
-- Flow 2:
Average throughput: 38.14 Mbit/s
95th percentile per-packet one-way delay: 77.162 ms
Loss rate: 74.81%
-- Flow 3:
Average throughput: 4.71 Mbit/s
95th percentile per-packet one-way delay: 68.256 ms
Loss rate: 36.61%
```
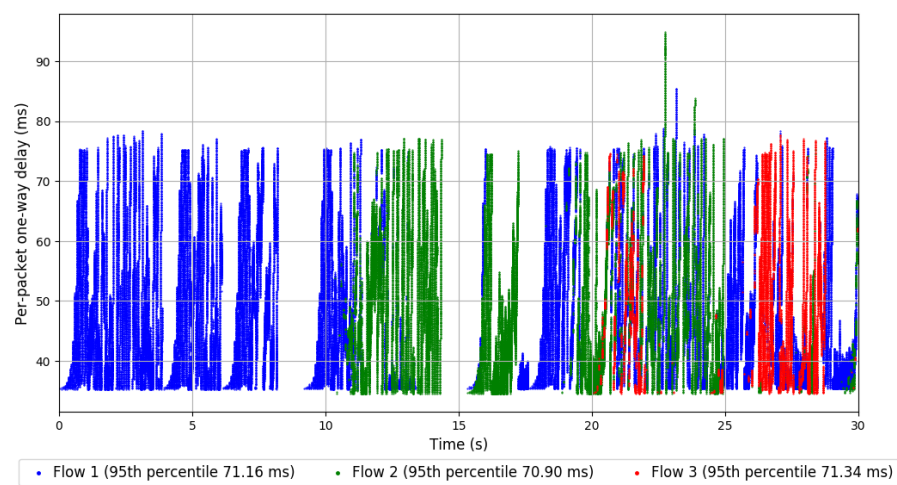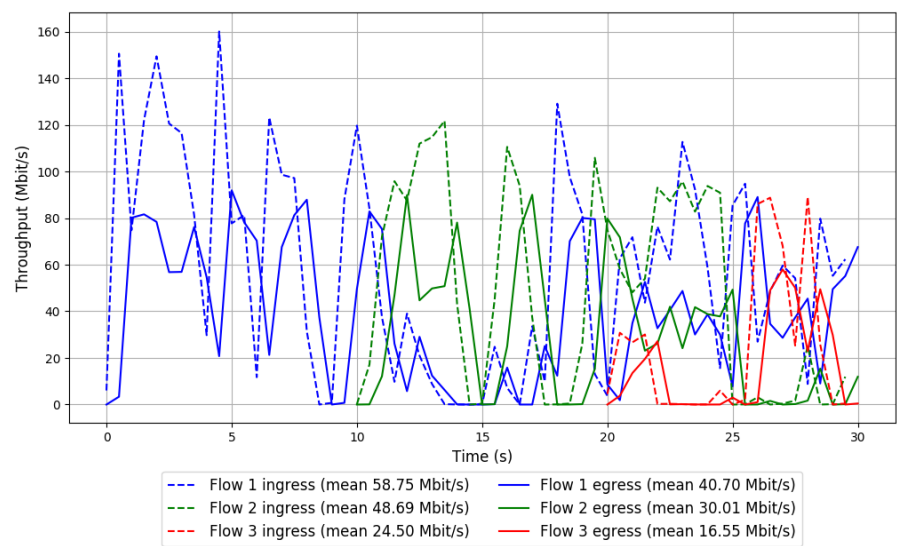
Run 7: Report of Verus — Data Link

Flow 1 ingress (mean 53.41 Mbit/s)   Flow 1 egress (mean 42.96 Mbit/s)
Flow 2 ingress (mean 151.52 Mbit/s)   Flow 2 egress (mean 38.14 Mbit/s)
Flow 3 ingress (mean 7.42 Mbit/s)   Flow 3 egress (mean 4.71 Mbit/s)

Flow 1 (95th percentile 70.70 ms)   Flow 2 (95th percentile 77.16 ms)   Flow 3 (95th percentile 68.26 ms)

297

```
Run 8: Statistics of Verus

Start at: 2018-07-24 17:19:26
End at: 2018-07-24 17:19:56
Local clock offset: 0.391 ms
Remote clock offset: 1.878 ms


# Below is generated by plot.py at 2018-07-24 18:38:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.62 Mbit/s
95th percentile per-packet one-way delay: 74.023 ms
Loss rate: 66.79%
-- Flow 1:
Average throughput: 39.60 Mbit/s
95th percentile per-packet one-way delay: 72.927 ms
Loss rate: 62.04%
-- Flow 2:
Average throughput: 31.93 Mbit/s
95th percentile per-packet one-way delay: 76.382 ms
Loss rate: 73.36%
-- Flow 3:
Average throughput: 3.92 Mbit/s
95th percentile per-packet one-way delay: 72.269 ms
Loss rate: 62.31%
```
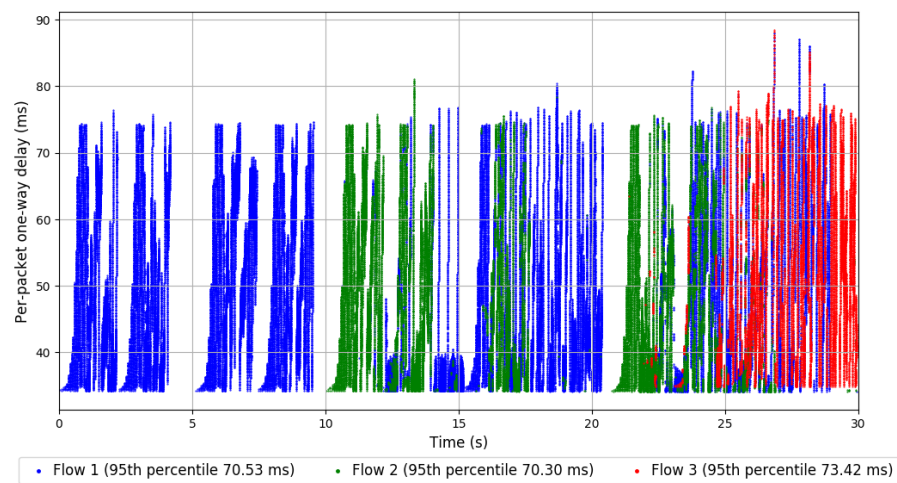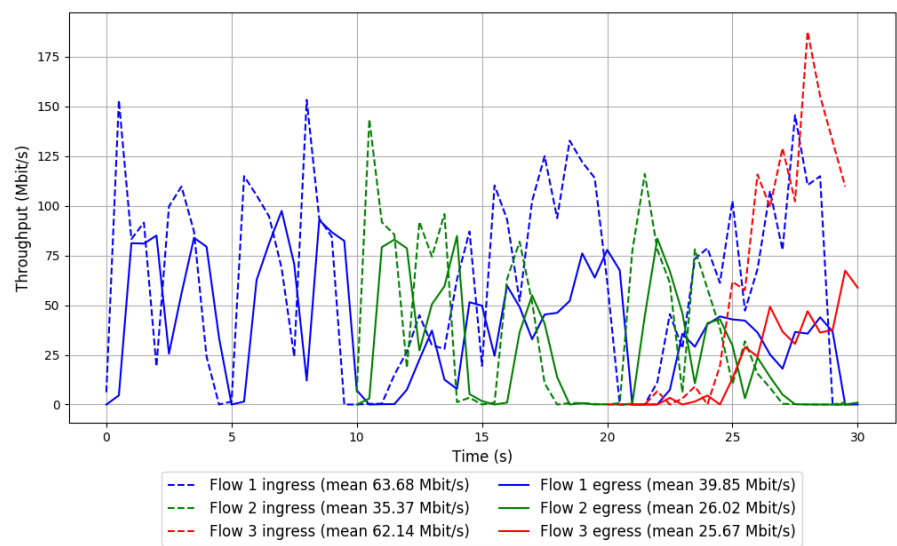
Run 8: Report of Verus — Data Link

Flow 1 ingress (mean 104.32 Mbit/s) ---- Flow 1 egress (mean 39.60 Mbit/s)
Flow 2 ingress (mean 119.91 Mbit/s) ---- Flow 2 egress (mean 31.93 Mbit/s)
Flow 3 ingress (mean 10.40 Mbit/s) ---- Flow 3 egress (mean 3.92 Mbit/s)

Flow 1 (95th percentile 72.93 ms)　　Flow 2 (95th percentile 76.38 ms)　　Flow 3 (95th percentile 72.27 ms)

299

```
Run 9: Statistics of Verus

Start at: 2018-07-24 17:42:20
End at: 2018-07-24 17:42:50
Local clock offset: 2.644 ms
Remote clock offset: 1.638 ms


# Below is generated by plot.py at 2018-07-24 18:38:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.80 Mbit/s
95th percentile per-packet one-way delay: 71.109 ms
Loss rate: 33.26%
-- Flow 1:
Average throughput: 40.70 Mbit/s
95th percentile per-packet one-way delay: 71.161 ms
Loss rate: 30.66%
-- Flow 2:
Average throughput: 30.01 Mbit/s
95th percentile per-packet one-way delay: 70.904 ms
Loss rate: 38.33%
-- Flow 3:
Average throughput: 16.55 Mbit/s
95th percentile per-packet one-way delay: 71.337 ms
Loss rate: 32.26%
```
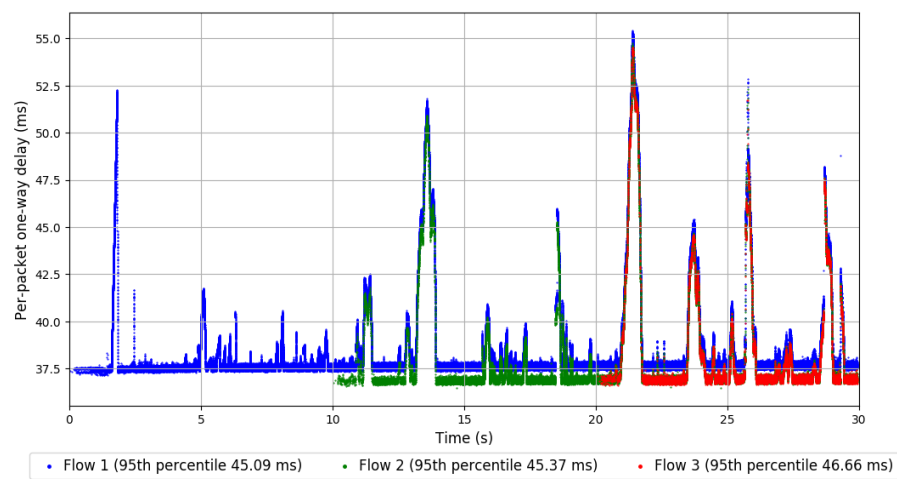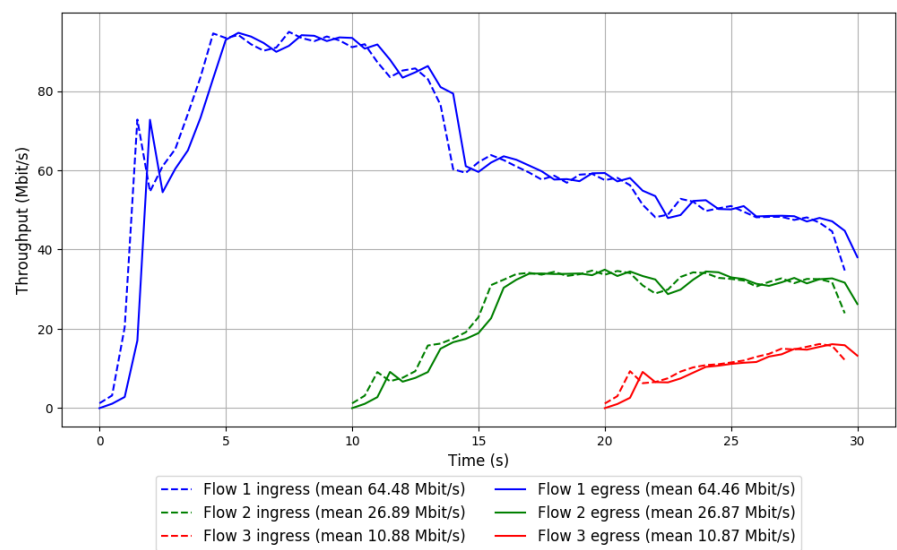
Run 9: Report of Verus — Data Link

```
Run 10: Statistics of Verus

Start at: 2018-07-24 18:05:19
End at: 2018-07-24 18:05:49
Local clock offset: 2.923 ms
Remote clock offset: 1.869 ms


# Below is generated by plot.py at 2018-07-24 18:38:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.47 Mbit/s
95th percentile per-packet one-way delay: 70.932 ms
Loss rate: 39.77%
-- Flow 1:
Average throughput: 39.85 Mbit/s
95th percentile per-packet one-way delay: 70.528 ms
Loss rate: 37.41%
-- Flow 2:
Average throughput: 26.02 Mbit/s
95th percentile per-packet one-way delay: 70.301 ms
Loss rate: 26.41%
-- Flow 3:
Average throughput: 25.67 Mbit/s
95th percentile per-packet one-way delay: 73.424 ms
Loss rate: 63.10%
```
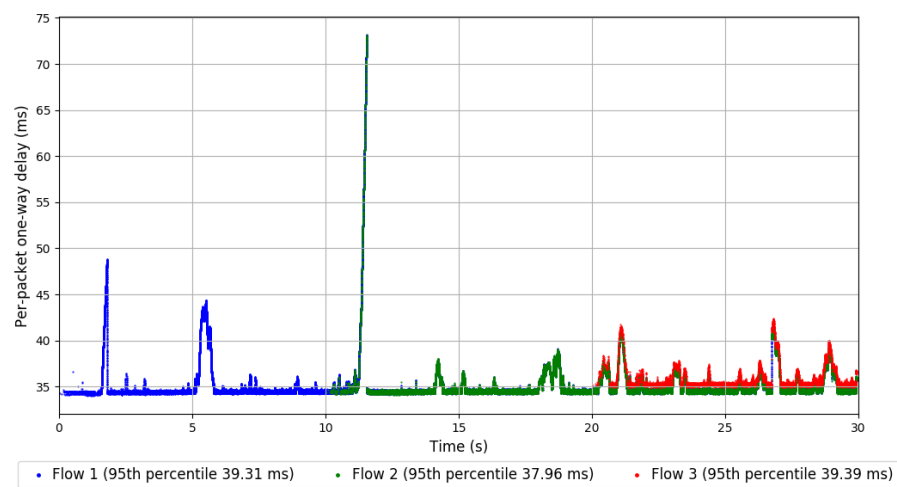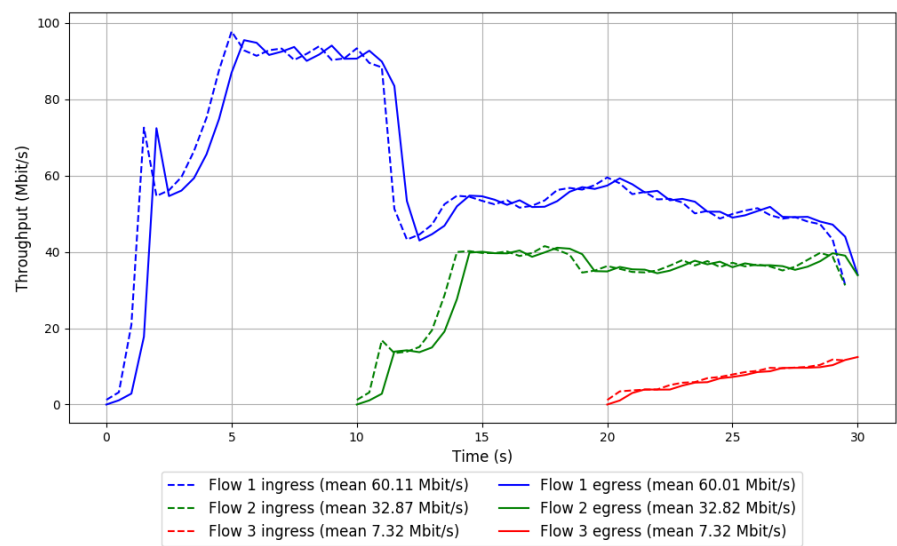
Run 10: Report of Verus — Data Link

```
Run 1: Statistics of PCC-Vivace

Start at: 2018-07-24 14:37:05
End at: 2018-07-24 14:37:35
Local clock offset: 2.388 ms
Remote clock offset: 4.285 ms


# Below is generated by plot.py at 2018-07-24 18:38:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.92 Mbit/s
95th percentile per-packet one-way delay: 45.168 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 64.46 Mbit/s
95th percentile per-packet one-way delay: 45.091 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 26.87 Mbit/s
95th percentile per-packet one-way delay: 45.370 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 10.87 Mbit/s
95th percentile per-packet one-way delay: 46.656 ms
Loss rate: 0.11%
```
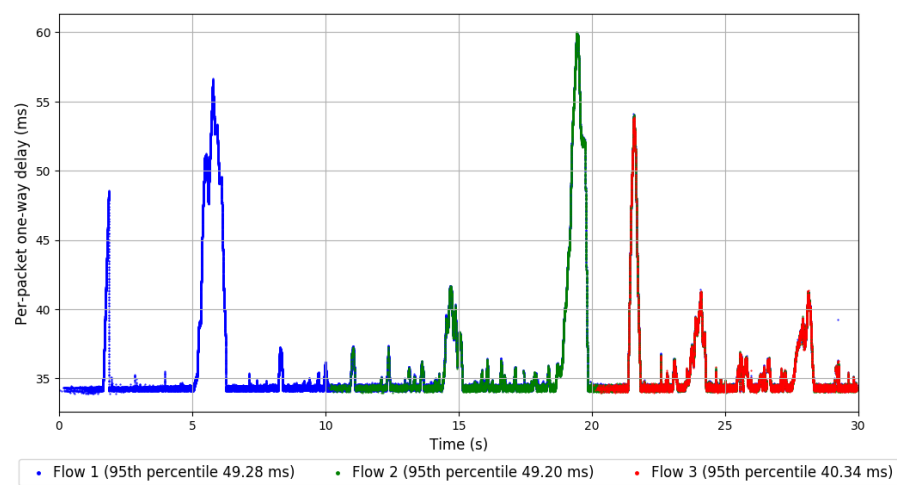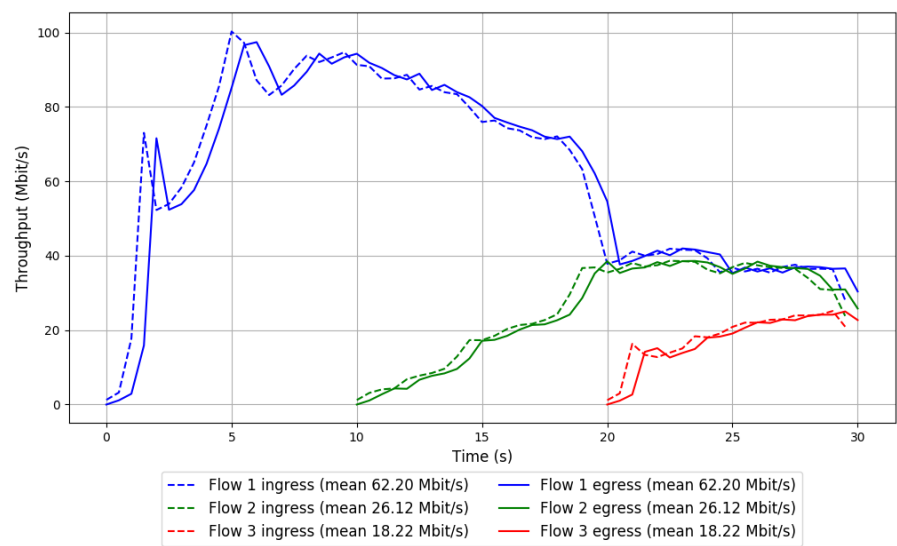
Run 1: Report of PCC-Vivace — Data Link

```
Run 2: Statistics of PCC-Vivace

Start at: 2018-07-24 15:00:03
End at: 2018-07-24 15:00:33
Local clock offset: 5.002 ms
Remote clock offset: 2.435 ms


# Below is generated by plot.py at 2018-07-24 18:38:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.26 Mbit/s
95th percentile per-packet one-way delay: 38.788 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 60.01 Mbit/s
95th percentile per-packet one-way delay: 39.313 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 32.82 Mbit/s
95th percentile per-packet one-way delay: 37.957 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 7.32 Mbit/s
95th percentile per-packet one-way delay: 39.390 ms
Loss rate: 0.02%
```
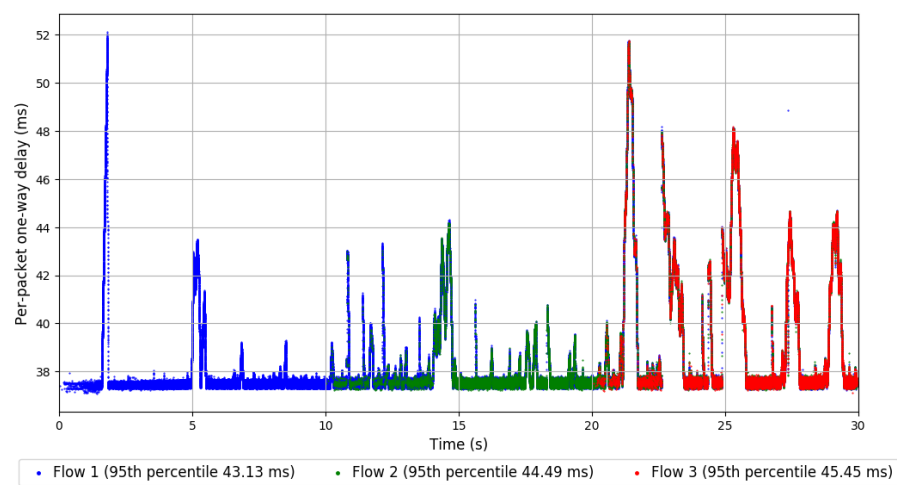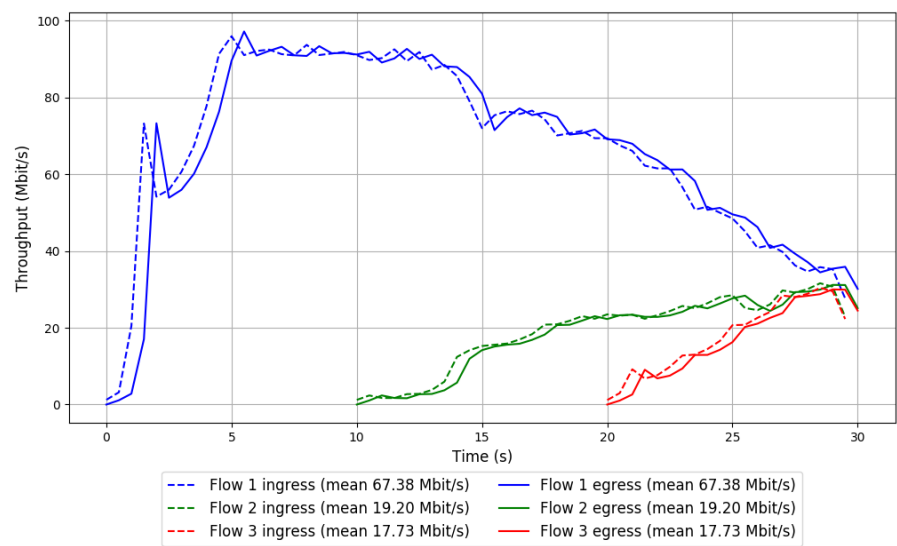
Run 2: Report of PCC-Vivace — Data Link

```
Run 3: Statistics of PCC-Vivace

Start at: 2018-07-24 15:23:14
End at: 2018-07-24 15:23:44
Local clock offset: 0.557 ms
Remote clock offset: 1.899 ms


# Below is generated by plot.py at 2018-07-24 18:38:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.58 Mbit/s
95th percentile per-packet one-way delay: 49.015 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 62.20 Mbit/s
95th percentile per-packet one-way delay: 49.276 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 26.12 Mbit/s
95th percentile per-packet one-way delay: 49.202 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 18.22 Mbit/s
95th percentile per-packet one-way delay: 40.343 ms
Loss rate: 0.00%
```
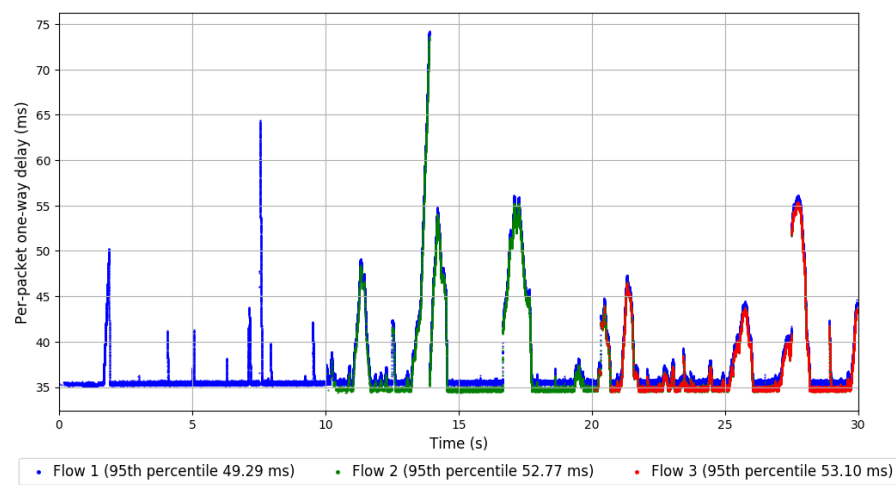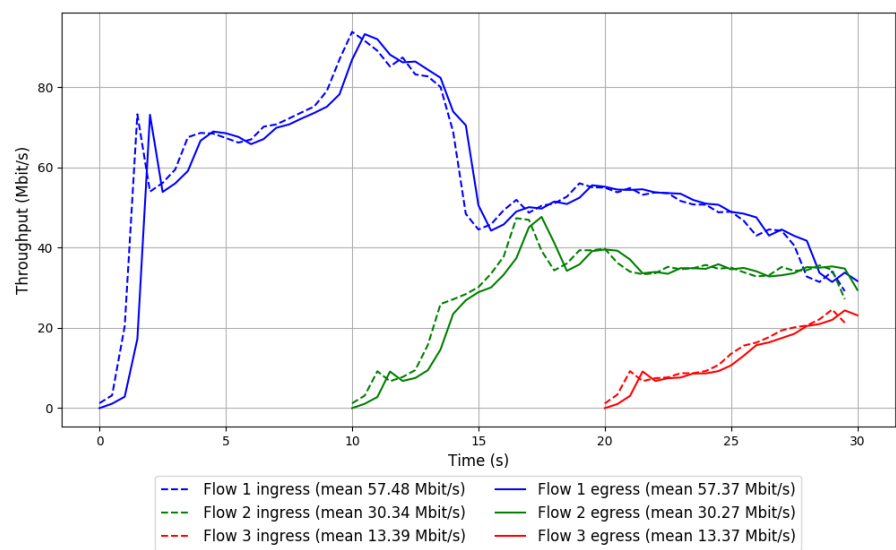
Run 3: Report of PCC-Vivace — Data Link

Legend:
- Flow 1 ingress (mean 62.20 Mbit/s)
- Flow 1 egress (mean 62.20 Mbit/s)
- Flow 2 ingress (mean 26.12 Mbit/s)
- Flow 2 egress (mean 26.12 Mbit/s)
- Flow 3 ingress (mean 18.22 Mbit/s)
- Flow 3 egress (mean 18.22 Mbit/s)

Legend:
- Flow 1 (95th percentile 49.28 ms)
- Flow 2 (95th percentile 49.20 ms)
- Flow 3 (95th percentile 40.34 ms)

```
Run 4: Statistics of PCC-Vivace

Start at: 2018-07-24 15:46:18
End at: 2018-07-24 15:46:48
Local clock offset: -0.29 ms
Remote clock offset: 4.389 ms


# Below is generated by plot.py at 2018-07-24 18:39:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.01 Mbit/s
95th percentile per-packet one-way delay: 43.729 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 67.38 Mbit/s
95th percentile per-packet one-way delay: 43.133 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 19.20 Mbit/s
95th percentile per-packet one-way delay: 44.492 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 17.73 Mbit/s
95th percentile per-packet one-way delay: 45.450 ms
Loss rate: 0.01%
```
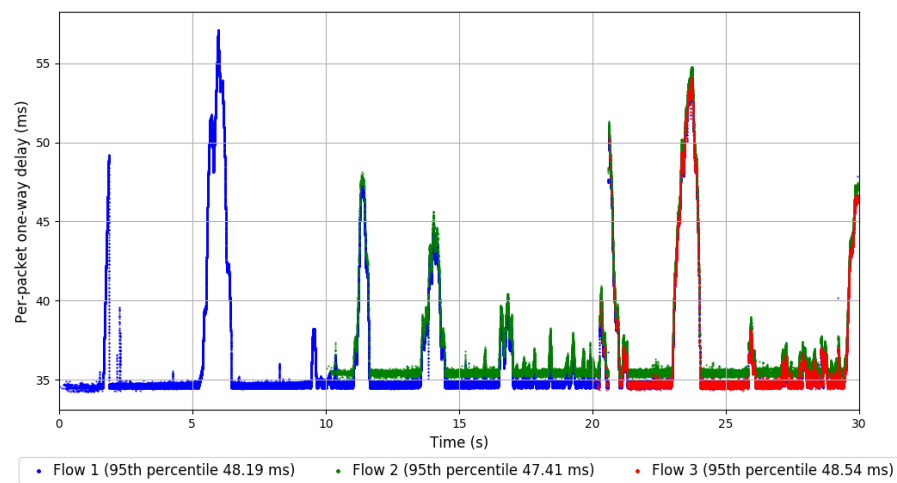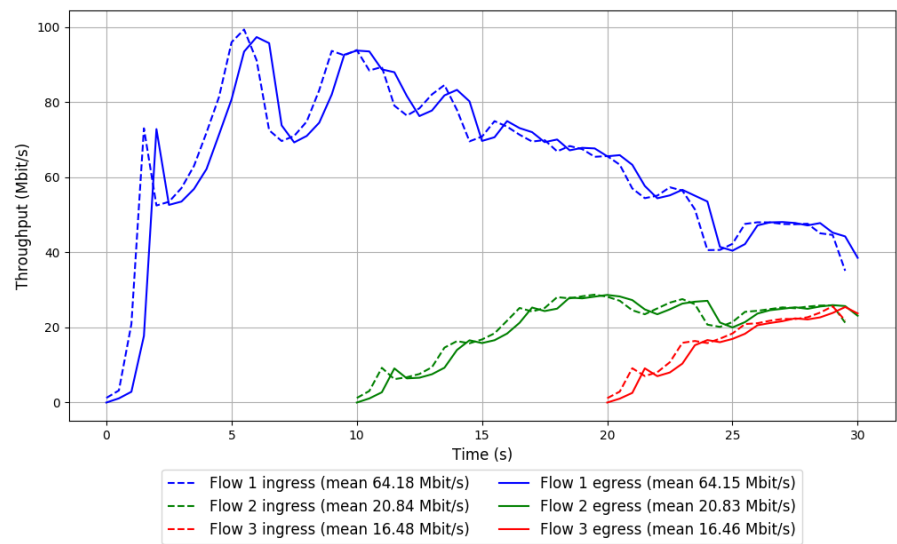
Run 4: Report of PCC-Vivace — Data Link

```
Run 5: Statistics of PCC-Vivace

Start at: 2018-07-24 16:09:13
End at: 2018-07-24 16:09:43
Local clock offset: 0.181 ms
Remote clock offset: 2.522 ms


# Below is generated by plot.py at 2018-07-24 18:39:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.92 Mbit/s
95th percentile per-packet one-way delay: 51.037 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 57.37 Mbit/s
95th percentile per-packet one-way delay: 49.290 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 30.27 Mbit/s
95th percentile per-packet one-way delay: 52.767 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 13.37 Mbit/s
95th percentile per-packet one-way delay: 53.104 ms
Loss rate: 0.00%
```
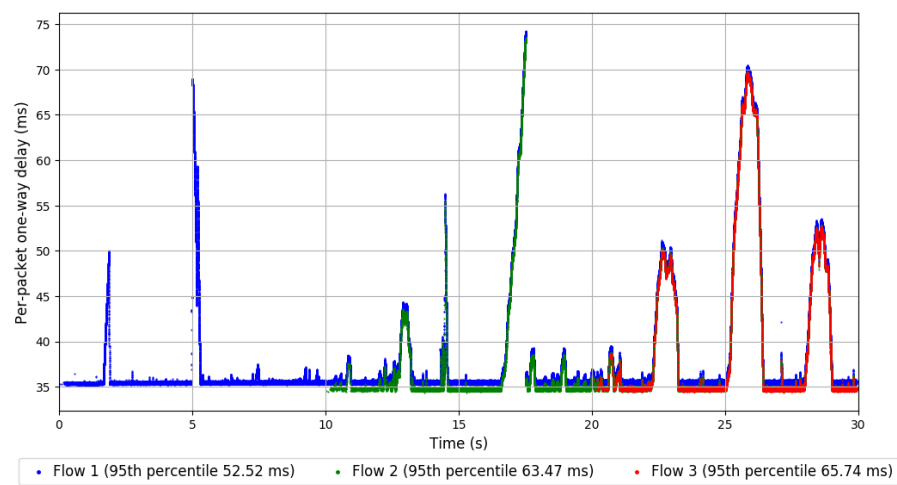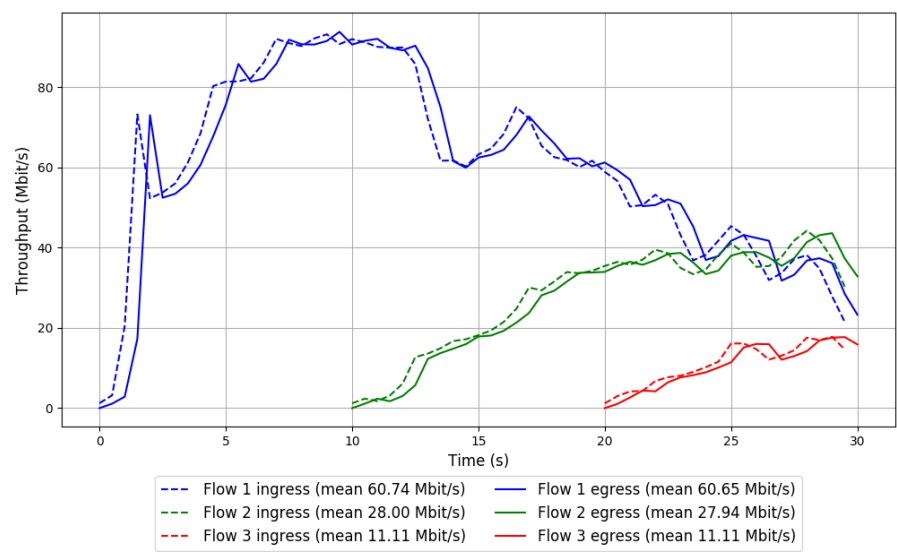
Run 5: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 57.48 Mbit/s)   Flow 1 egress (mean 57.37 Mbit/s)
Flow 2 ingress (mean 30.34 Mbit/s)   Flow 2 egress (mean 30.27 Mbit/s)
Flow 3 ingress (mean 13.39 Mbit/s)   Flow 3 egress (mean 13.37 Mbit/s)

Flow 1 (95th percentile 49.29 ms)   Flow 2 (95th percentile 52.77 ms)   Flow 3 (95th percentile 53.10 ms)

```
Run 6: Statistics of PCC-Vivace

Start at: 2018-07-24 16:32:10
End at: 2018-07-24 16:32:40
Local clock offset: 0.877 ms
Remote clock offset: 2.623 ms


# Below is generated by plot.py at 2018-07-24 18:39:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.44 Mbit/s
95th percentile per-packet one-way delay: 48.124 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 64.15 Mbit/s
95th percentile per-packet one-way delay: 48.192 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 20.83 Mbit/s
95th percentile per-packet one-way delay: 47.414 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 16.46 Mbit/s
95th percentile per-packet one-way delay: 48.536 ms
Loss rate: 0.00%
```
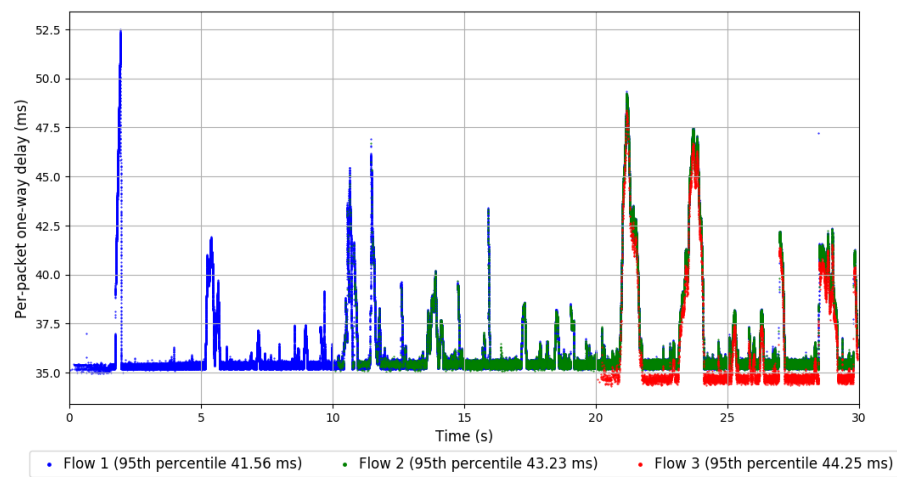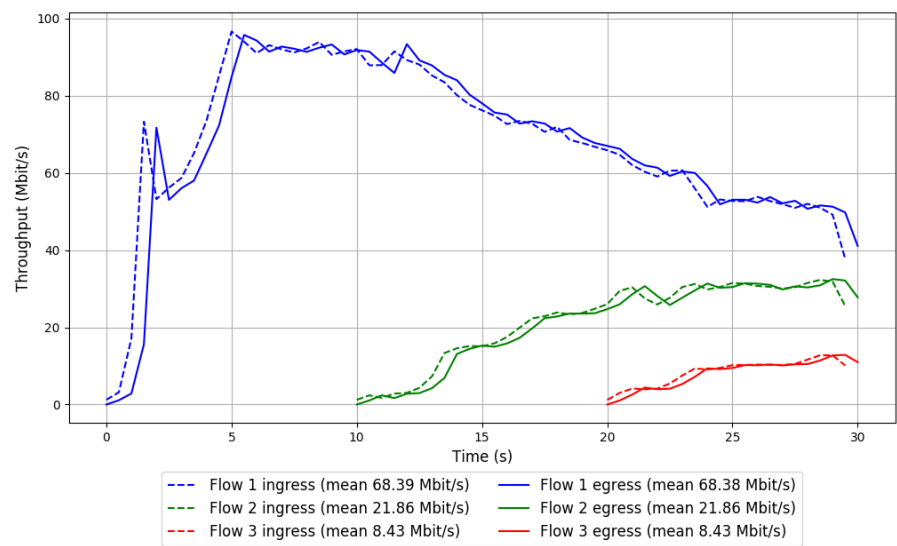
Run 6: Report of PCC-Vivace — Data Link

```
Run 7: Statistics of PCC-Vivace

Start at: 2018-07-24 16:55:09
End at: 2018-07-24 16:55:39
Local clock offset: 0.868 ms
Remote clock offset: 2.183 ms


# Below is generated by plot.py at 2018-07-24 18:39:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.91 Mbit/s
95th percentile per-packet one-way delay: 56.442 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 60.65 Mbit/s
95th percentile per-packet one-way delay: 52.521 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 27.94 Mbit/s
95th percentile per-packet one-way delay: 63.471 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 11.11 Mbit/s
95th percentile per-packet one-way delay: 65.739 ms
Loss rate: 0.00%
```
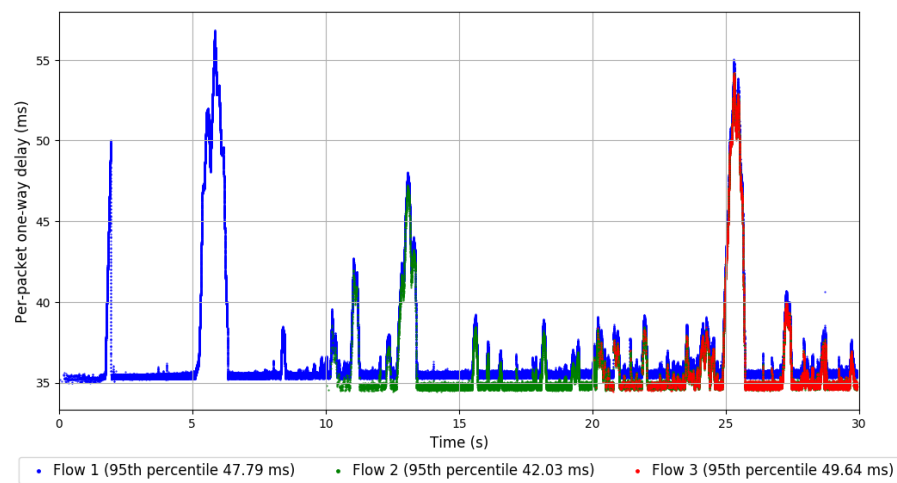
Run 7: Report of PCC-Vivace — Data Link

```
Run 8: Statistics of PCC-Vivace

Start at: 2018-07-24 17:18:04
End at: 2018-07-24 17:18:34
Local clock offset: 0.346 ms
Remote clock offset: 1.898 ms


# Below is generated by plot.py at 2018-07-24 18:39:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.70 Mbit/s
95th percentile per-packet one-way delay: 41.980 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 68.38 Mbit/s
95th percentile per-packet one-way delay: 41.556 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 21.86 Mbit/s
95th percentile per-packet one-way delay: 43.226 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 8.43 Mbit/s
95th percentile per-packet one-way delay: 44.254 ms
Loss rate: 0.00%
```
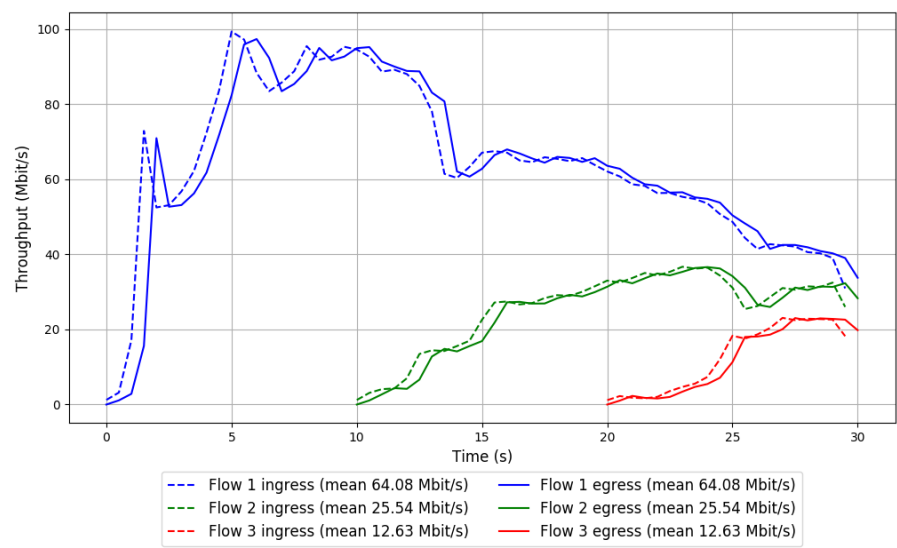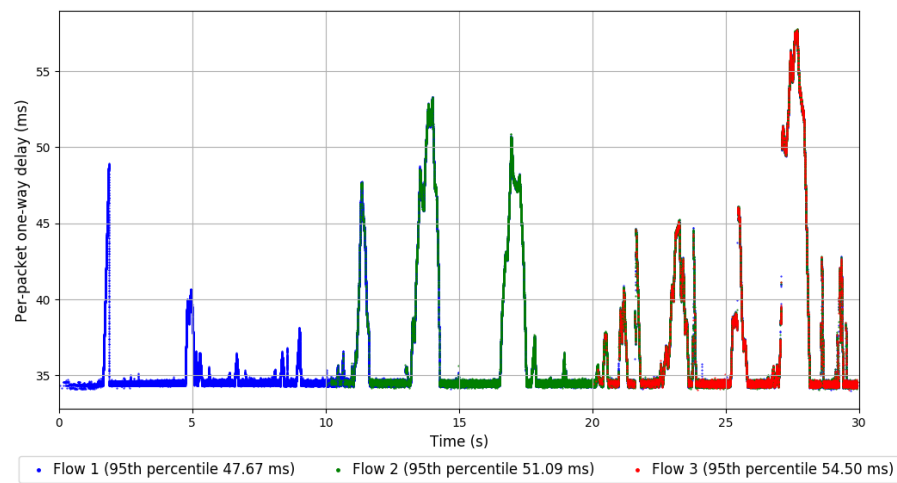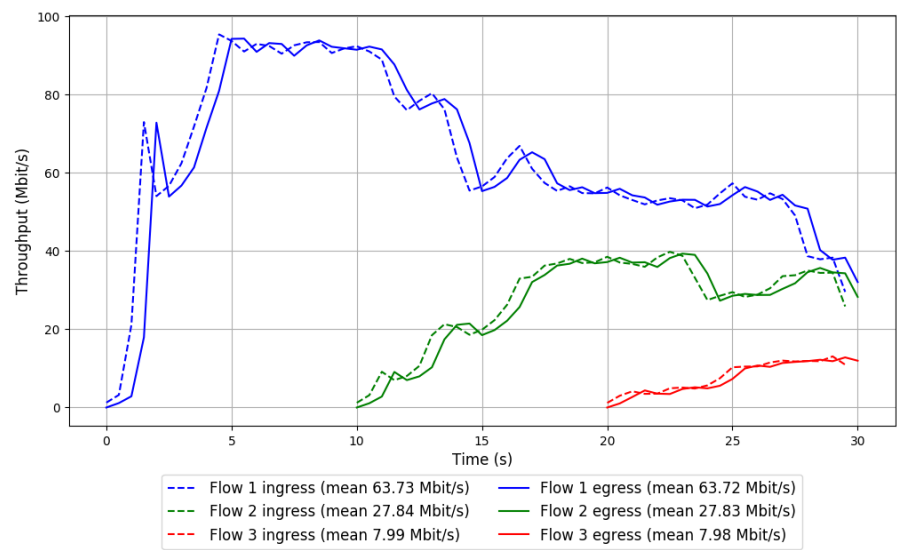
Run 8: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 68.39 Mbit/s) --- Flow 1 egress (mean 68.38 Mbit/s)
Flow 2 ingress (mean 21.86 Mbit/s) --- Flow 2 egress (mean 21.86 Mbit/s)
Flow 3 ingress (mean 8.43 Mbit/s) --- Flow 3 egress (mean 8.43 Mbit/s)

Flow 1 (95th percentile 41.56 ms) • Flow 2 (95th percentile 43.23 ms) • Flow 3 (95th percentile 44.25 ms)

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```
Run 9: Statistics of PCC-Vivace

Start at: 2018-07-24 17:40:58
End at: 2018-07-24 17:41:28
Local clock offset: 2.558 ms
Remote clock offset: 1.696 ms


# Below is generated by plot.py at 2018-07-24 18:39:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.23 Mbit/s
95th percentile per-packet one-way delay: 47.208 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 64.08 Mbit/s
95th percentile per-packet one-way delay: 47.794 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 25.54 Mbit/s
95th percentile per-packet one-way delay: 42.026 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 12.63 Mbit/s
95th percentile per-packet one-way delay: 49.636 ms
Loss rate: 0.00%
```
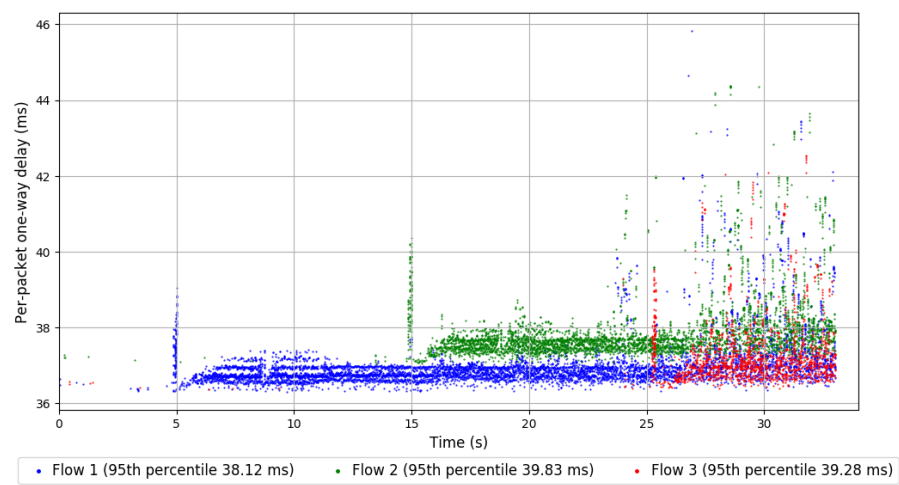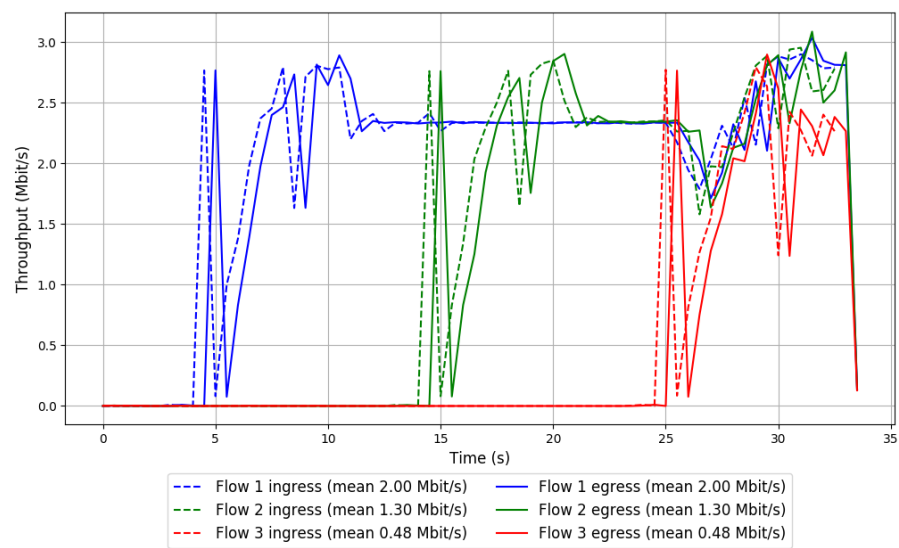
Run 9: Report of PCC-Vivace — Data Link

```
Run 10: Statistics of PCC-Vivace

Start at: 2018-07-24 18:03:57
End at: 2018-07-24 18:04:27
Local clock offset: 3.247 ms
Remote clock offset: 1.838 ms


# Below is generated by plot.py at 2018-07-24 18:39:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.87 Mbit/s
95th percentile per-packet one-way delay: 48.733 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 63.72 Mbit/s
95th percentile per-packet one-way delay: 47.674 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 27.83 Mbit/s
95th percentile per-packet one-way delay: 51.093 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 7.98 Mbit/s
95th percentile per-packet one-way delay: 54.502 ms
Loss rate: 0.04%
```

Run 10: Report of PCC-Vivace — Data Link

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```
Run 1: Statistics of WebRTC media

Start at: 2018-07-24 14:23:36
End at: 2018-07-24 14:24:06
Local clock offset: 0.617 ms
Remote clock offset: 4.293 ms


# Below is generated by plot.py at 2018-07-24 18:39:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.77 Mbit/s
95th percentile per-packet one-way delay: 39.011 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.00 Mbit/s
95th percentile per-packet one-way delay: 38.116 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 39.829 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 39.277 ms
Loss rate: 0.00%
```
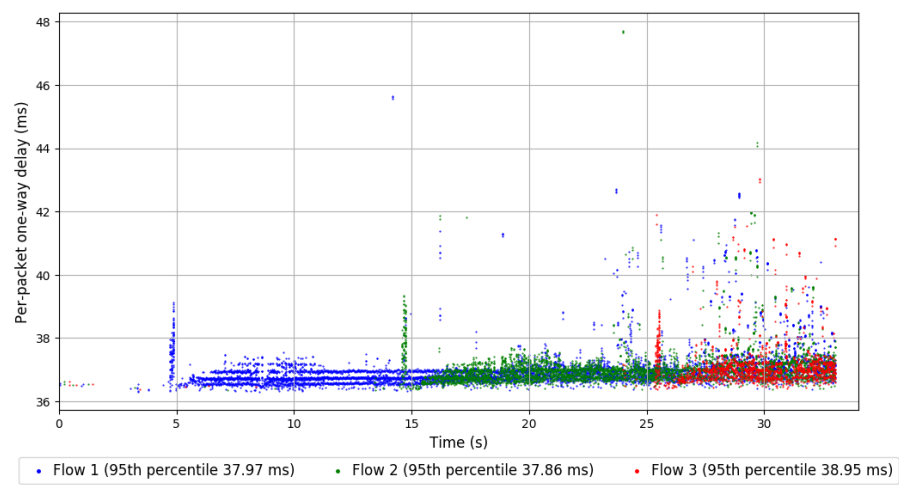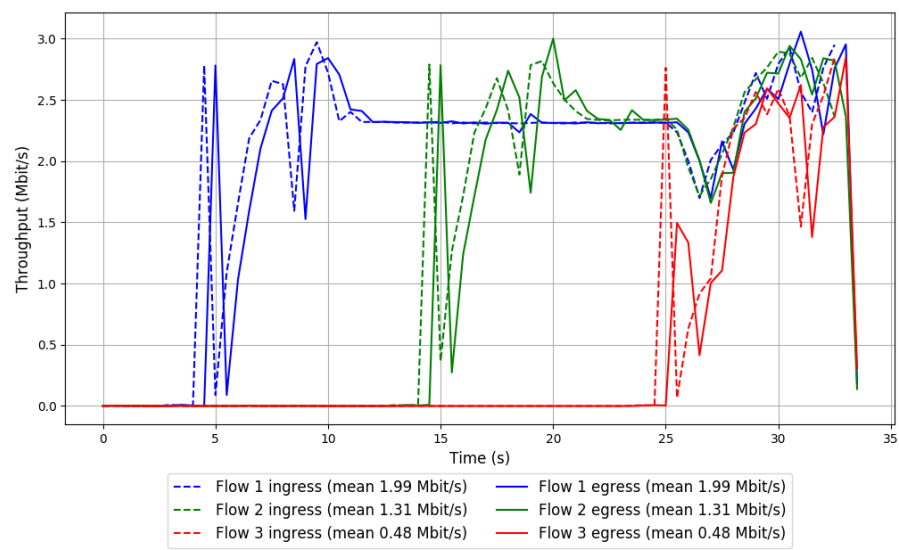
Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2018-07-24 14:46:38
End at: 2018-07-24 14:47:08
Local clock offset: 3.953 ms
Remote clock offset: 4.421 ms


# Below is generated by plot.py at 2018-07-24 18:39:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.77 Mbit/s
95th percentile per-packet one-way delay: 38.084 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.99 Mbit/s
95th percentile per-packet one-way delay: 37.965 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 37.862 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 38.952 ms
Loss rate: 0.00%
```
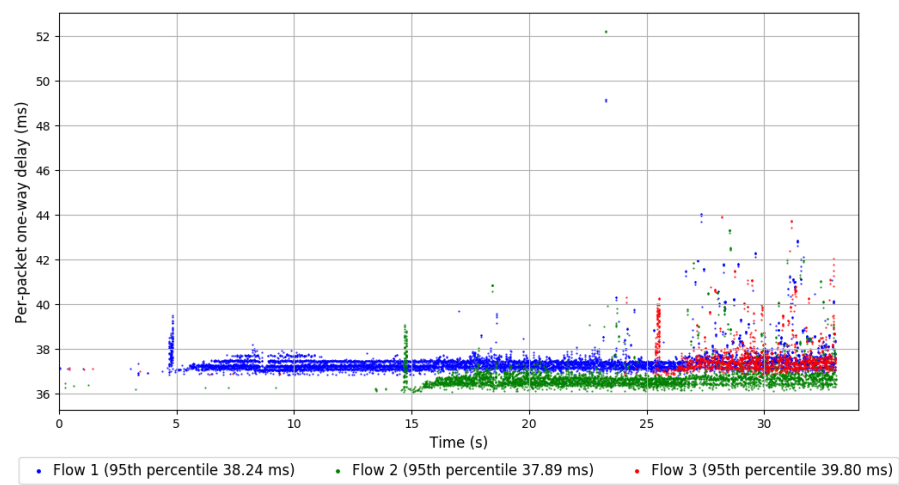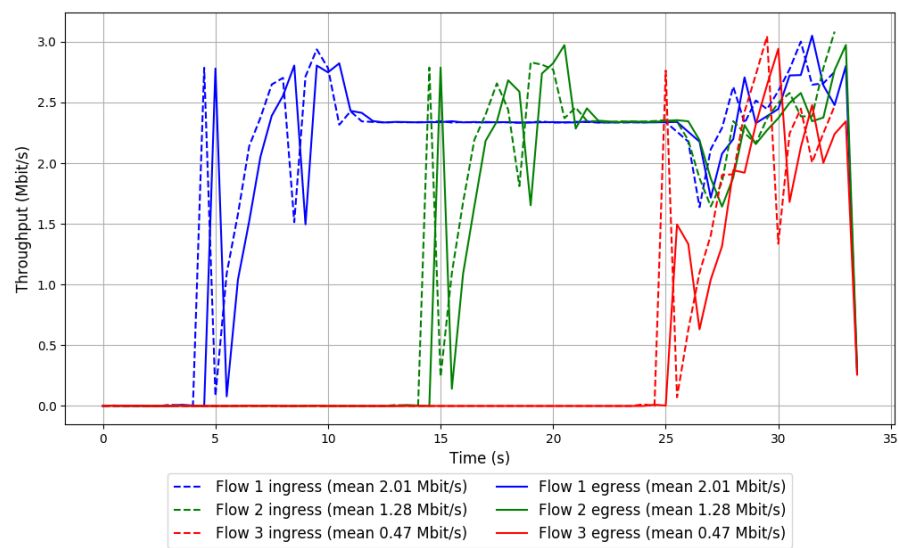
Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2018-07-24 15:09:49
End at: 2018-07-24 15:10:19
Local clock offset: 2.283 ms
Remote clock offset: 4.3 ms


# Below is generated by plot.py at 2018-07-24 18:39:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.75 Mbit/s
95th percentile per-packet one-way delay: 38.494 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 38.242 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.28 Mbit/s
95th percentile per-packet one-way delay: 37.889 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 39.795 ms
Loss rate: 0.00%
```
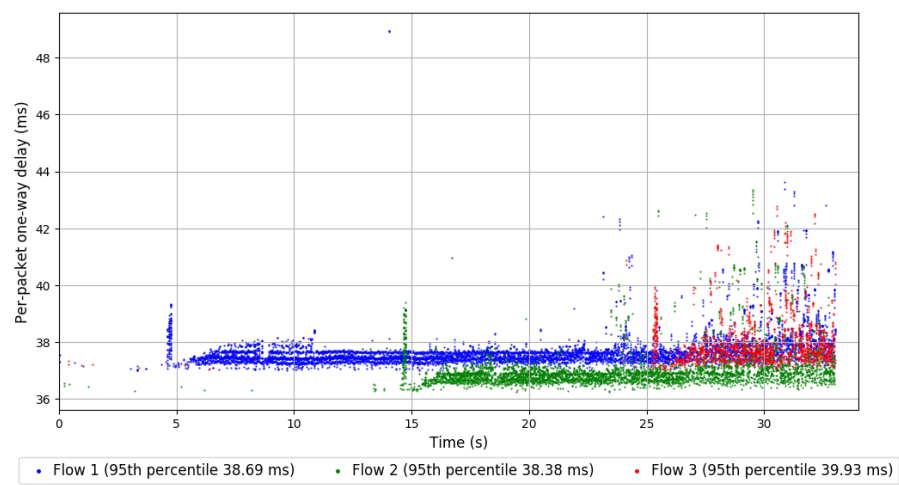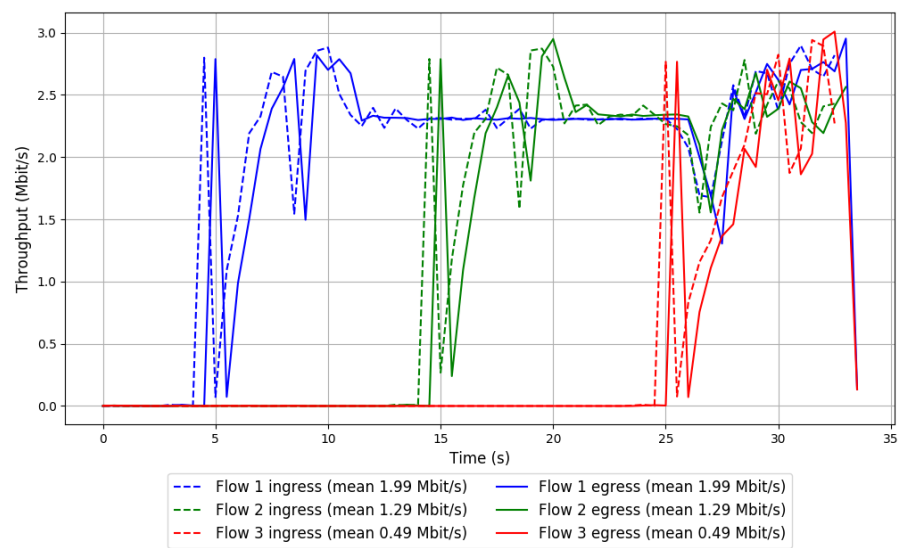
Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2018-07-24 15:32:46
End at: 2018-07-24 15:33:16
Local clock offset: 0.104 ms
Remote clock offset: 4.33 ms


# Below is generated by plot.py at 2018-07-24 18:39:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.74 Mbit/s
95th percentile per-packet one-way delay: 38.915 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.99 Mbit/s
95th percentile per-packet one-way delay: 38.689 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 38.377 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 39.928 ms
Loss rate: 0.00%
```
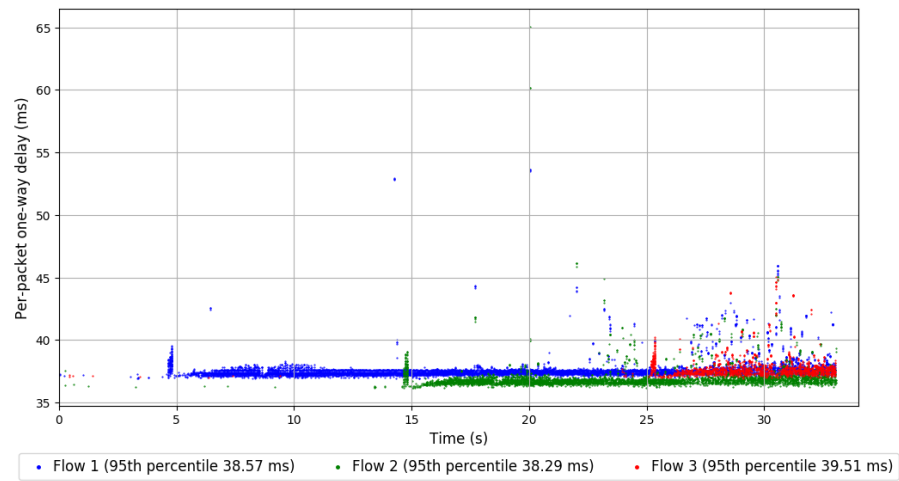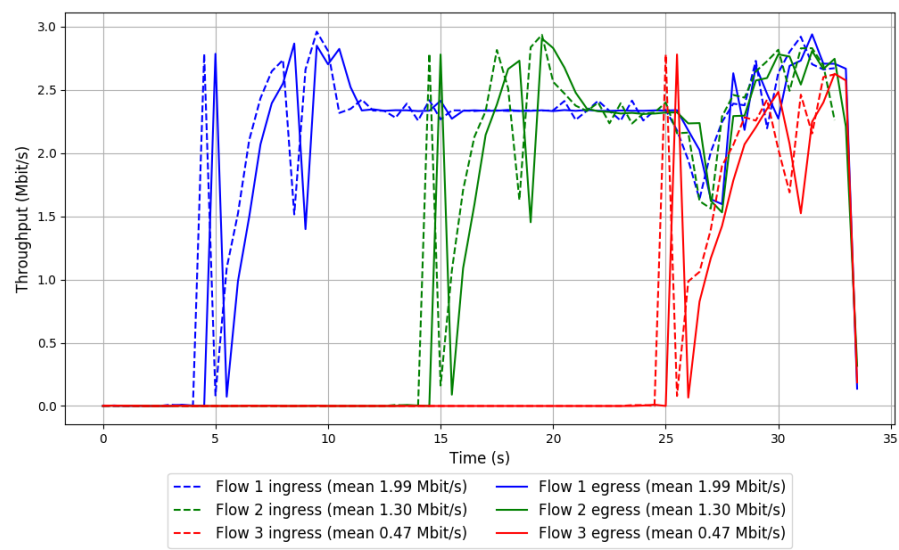
Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2018-07-24 15:55:52
End at: 2018-07-24 15:56:22
Local clock offset: -0.406 ms
Remote clock offset: 4.432 ms


# Below is generated by plot.py at 2018-07-24 18:39:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.75 Mbit/s
95th percentile per-packet one-way delay: 38.713 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.99 Mbit/s
95th percentile per-packet one-way delay: 38.571 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 38.287 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 39.511 ms
Loss rate: 0.00%
```
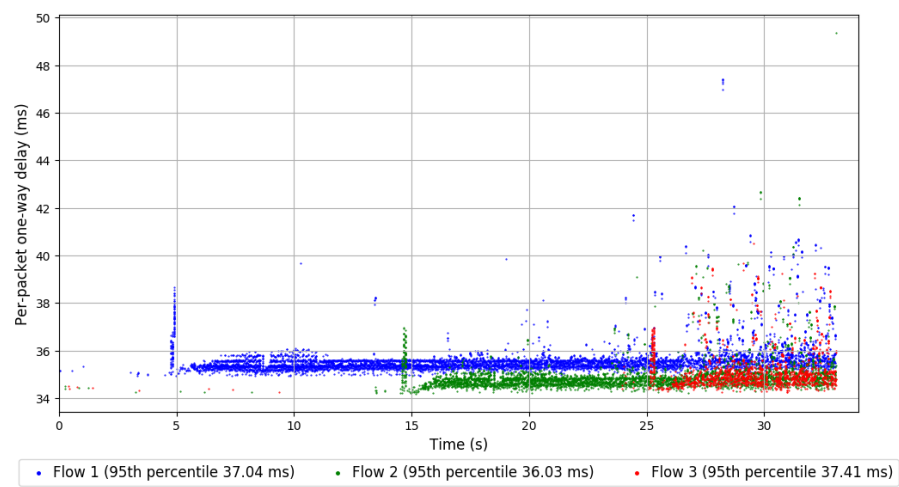
Run 5: Report of WebRTC media — Data Link

```
Run 6: Statistics of WebRTC media

Start at: 2018-07-24 16:18:43
End at: 2018-07-24 16:19:13
Local clock offset: 0.72 ms
Remote clock offset: 2.523 ms


# Below is generated by plot.py at 2018-07-24 18:39:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.81 Mbit/s
95th percentile per-packet one-way delay: 36.748 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 37.041 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 36.030 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 37.405 ms
Loss rate: 0.00%
```
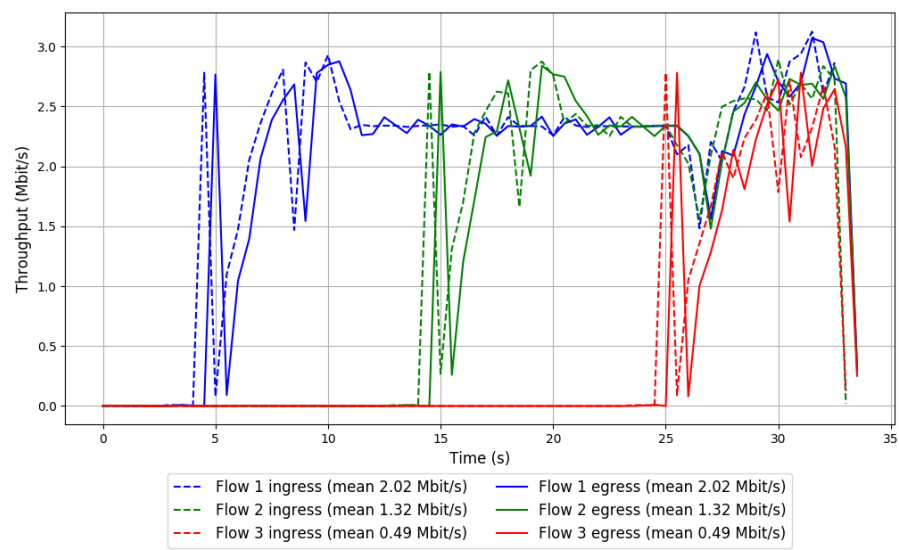
Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2018-07-24 16:41:43
End at: 2018-07-24 16:42:13
Local clock offset: 0.91 ms
Remote clock offset: 2.781 ms


# Below is generated by plot.py at 2018-07-24 18:39:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.76 Mbit/s
95th percentile per-packet one-way delay: 36.759 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.00 Mbit/s
95th percentile per-packet one-way delay: 36.651 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 36.657 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 37.277 ms
Loss rate: 0.00%
```
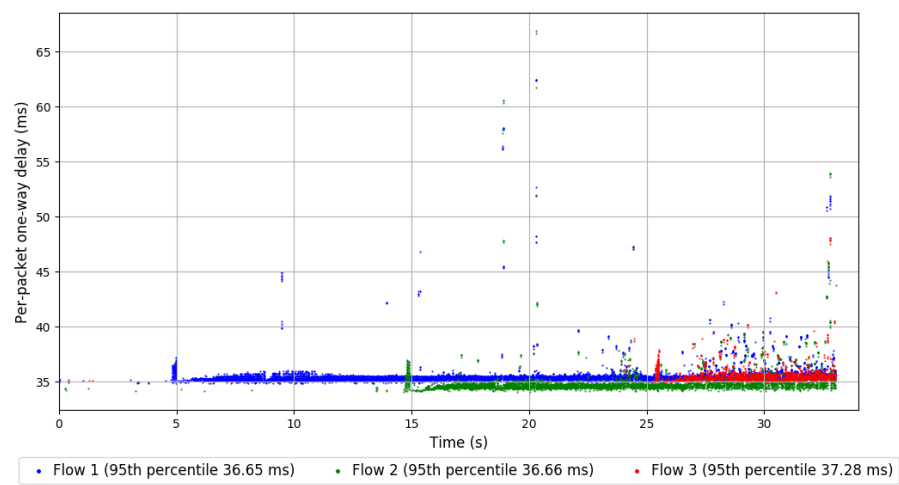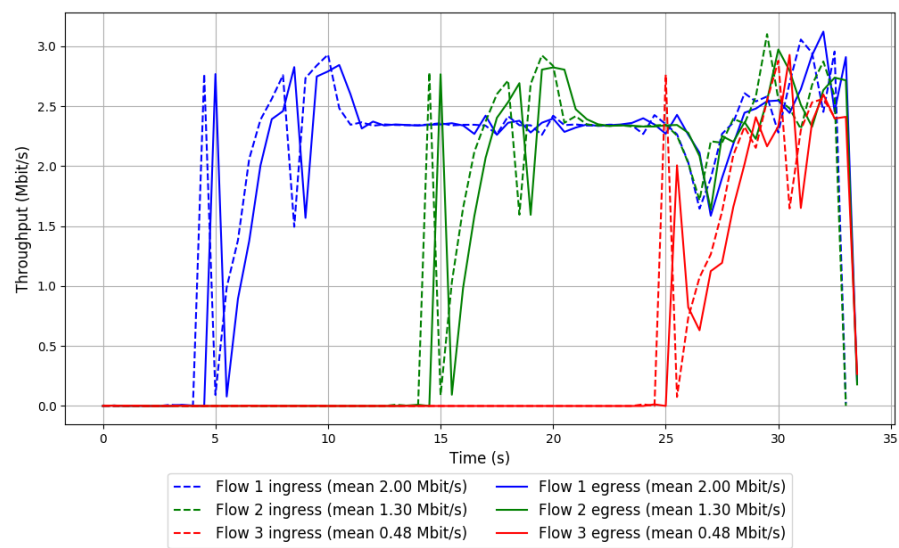
Run 7: Report of WebRTC media — Data Link

```
Run 8: Statistics of WebRTC media

Start at: 2018-07-24 17:04:41
End at: 2018-07-24 17:05:11
Local clock offset: 0.794 ms
Remote clock offset: 1.97 ms


# Below is generated by plot.py at 2018-07-24 18:39:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.76 Mbit/s
95th percentile per-packet one-way delay: 37.138 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.00 Mbit/s
95th percentile per-packet one-way delay: 36.052 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 37.494 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 37.914 ms
Loss rate: 0.00%
```
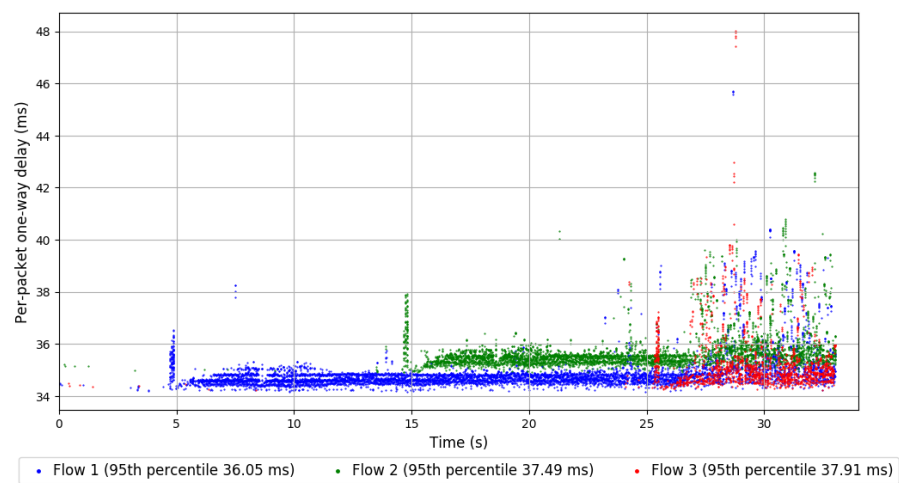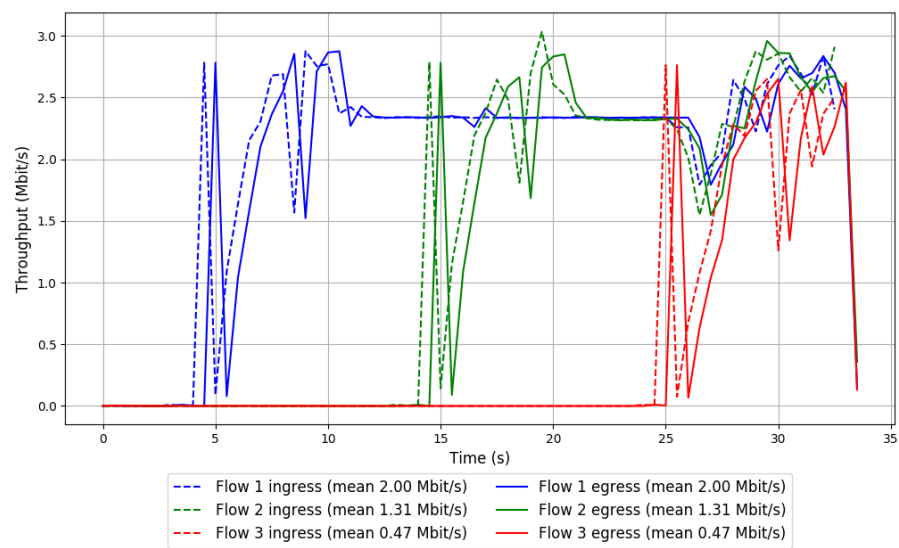
Run 8: Report of WebRTC media — Data Link

```
Run 9: Statistics of WebRTC media

Start at: 2018-07-24 17:27:37
End at: 2018-07-24 17:28:07
Local clock offset: 0.158 ms
Remote clock offset: 1.797 ms


# Below is generated by plot.py at 2018-07-24 18:39:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.77 Mbit/s
95th percentile per-packet one-way delay: 36.658 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 35.821 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 36.381 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 38.973 ms
Loss rate: 0.00%
```
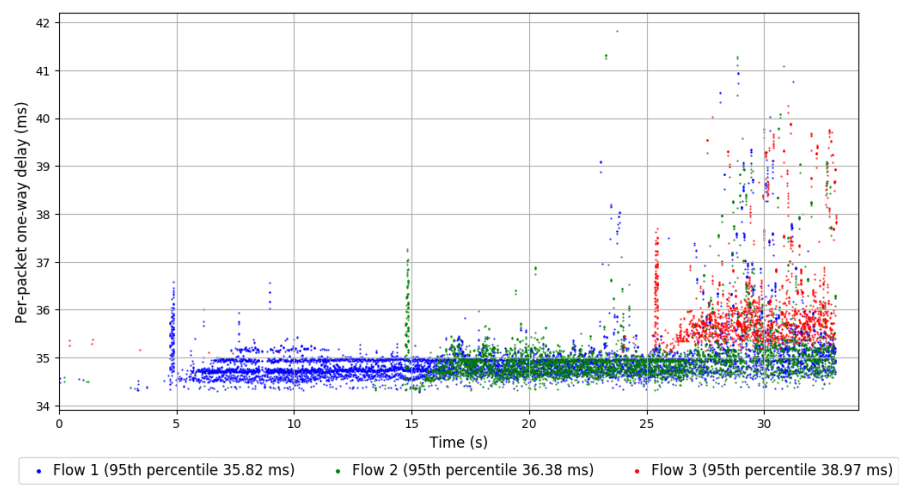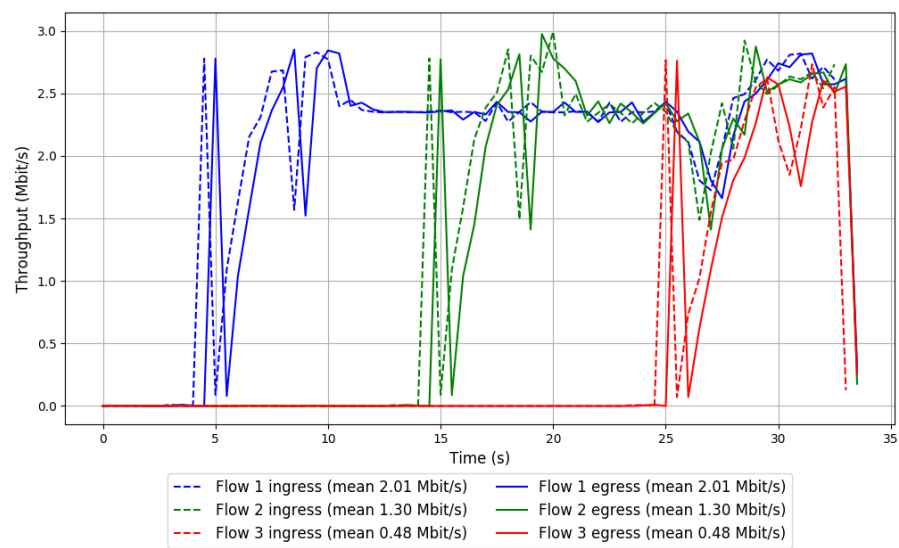
Run 9: Report of WebRTC media — Data Link

```
Run 10: Statistics of WebRTC media

Start at: 2018-07-24 17:50:28
End at: 2018-07-24 17:50:58
Local clock offset: 3.557 ms
Remote clock offset: 1.729 ms


# Below is generated by plot.py at 2018-07-24 18:39:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.91 Mbit/s
95th percentile per-packet one-way delay: 36.548 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 36.525 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 1.39 Mbit/s
95th percentile per-packet one-way delay: 36.225 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 37.535 ms
Loss rate: 0.12%
```

Run 10: Report of WebRTC media — Data Link