Pantheon Report

Generated at 2018-07-03 22:01:18 (UTC).

Data path: AWS Brazil 1 Ethernet (*local*) →Brazil 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.
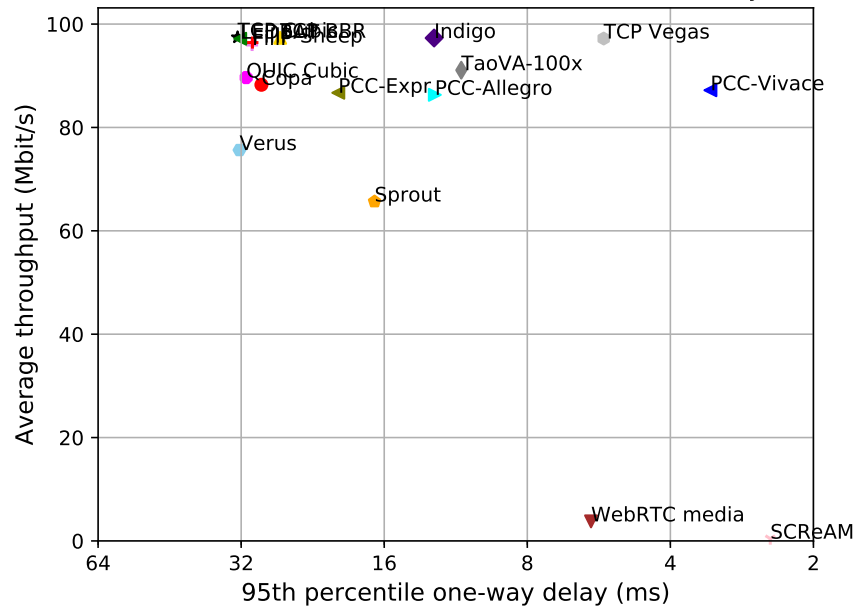
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

NTP offsets were measured against `gps.ntp.br` and have been applied to correct the timestamps in logs.
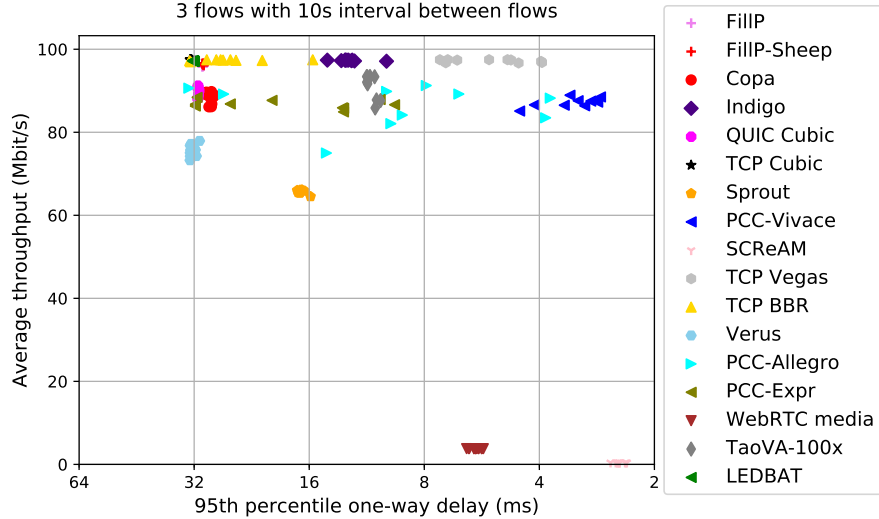
```
Git summary:
branch: master @ 9250dbeec7fb57193cdff1ba8c440b4e16ab30f0
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/fillp-sheep @ 37162fe9af85249aeccac061c93e75640ef710b5
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
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 Brazil 1 to Brazil, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)

test from AWS Brazil 1 to Brazil, 10 runs of 30s each per scheme
3 flows with 10s interval between flows

scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	67.19	32.97	24.62	26.23	25.93	31.30	0.15	0.06	0.71
Copa	10	53.35	37.29	30.23	27.15	29.52	30.58	0.01	0.01	0.03
TCP Cubic	10	64.88	34.86	28.16	32.47	32.66	32.79	0.03	0.08	0.10
FillP	10	53.76	45.88	35.30	30.28	30.38	30.39	11.89	22.38	26.09
FillP-Sheep	10	59.44	39.78	31.93	30.27	30.32	30.33	17.15	29.95	35.21
Indigo	10	47.72	43.41	63.85	10.89	12.72	12.89	0.00	0.00	0.00
LEDBAT	10	62.39	37.56	29.48	32.09	32.33	32.37	0.03	0.06	0.09
PCC-Allegro	10	67.11	21.56	14.72	11.23	16.60	16.59	0.05	0.10	0.29
PCC-Expr	10	53.26	36.41	27.96	18.44	19.16	15.23	0.40	0.15	0.10
QUIC Cubic	10	57.30	34.99	27.67	31.14	31.31	31.46	0.13	0.17	0.23
SCReAM	10	0.22	0.22	0.22	2.47	2.46	2.46	0.00	0.00	0.00
Sprout	10	34.02	32.41	30.54	15.32	16.81	19.16	0.00	0.00	0.00
TaoVA-100x	10	52.55	41.13	33.48	10.46	11.57	14.42	0.04	0.03	0.45
TCP Vegas	10	48.90	47.82	49.48	8.76	4.52	4.78	0.00	0.00	0.00
Verus	10	45.27	31.23	29.11	31.08	32.38	32.84	10.40	15.93	26.50
PCC-Vivace	10	54.06	37.78	24.26	3.02	3.59	4.15	0.00	0.00	0.00
WebRTC media	10	2.00	1.33	0.45	5.81	5.64	6.67	0.00	0.00	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2018-07-03 18:30:54
End at: 2018-07-03 18:31:24
Local clock offset: -2.283 ms
Remote clock offset: -2.81 ms

# Below is generated by plot.py at 2018-07-03 21:35:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.33 Mbit/s
95th percentile per-packet one-way delay: 24.873 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 50.28 Mbit/s
95th percentile per-packet one-way delay: 23.639 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 59.27 Mbit/s
95th percentile per-packet one-way delay: 24.938 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 22.67 Mbit/s
95th percentile per-packet one-way delay: 32.604 ms
Loss rate: 1.08%
```
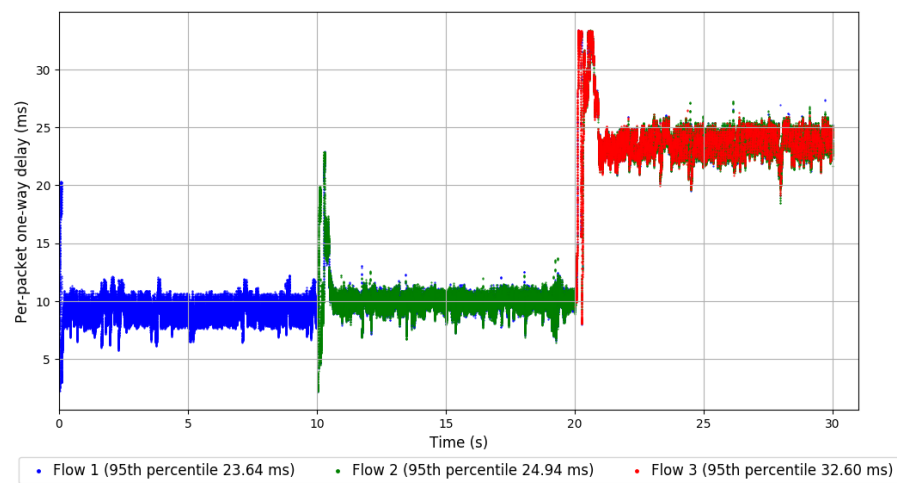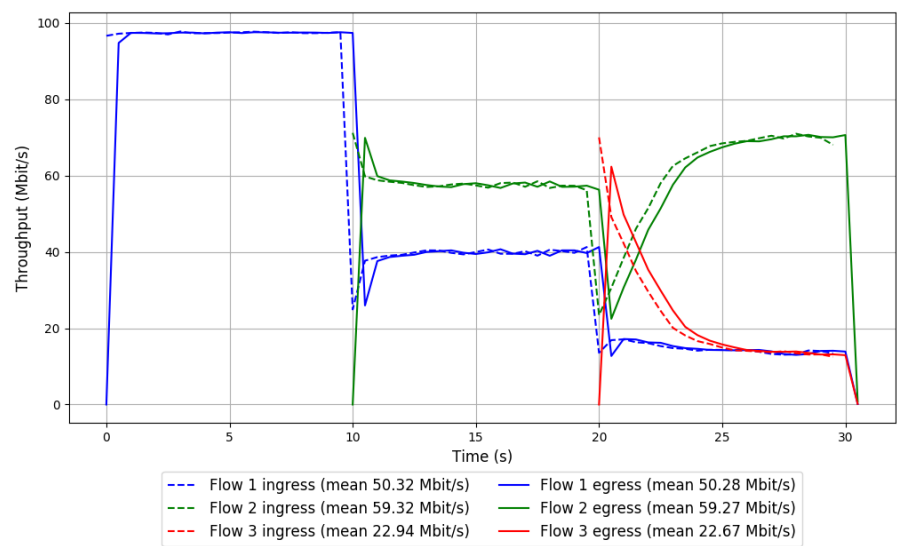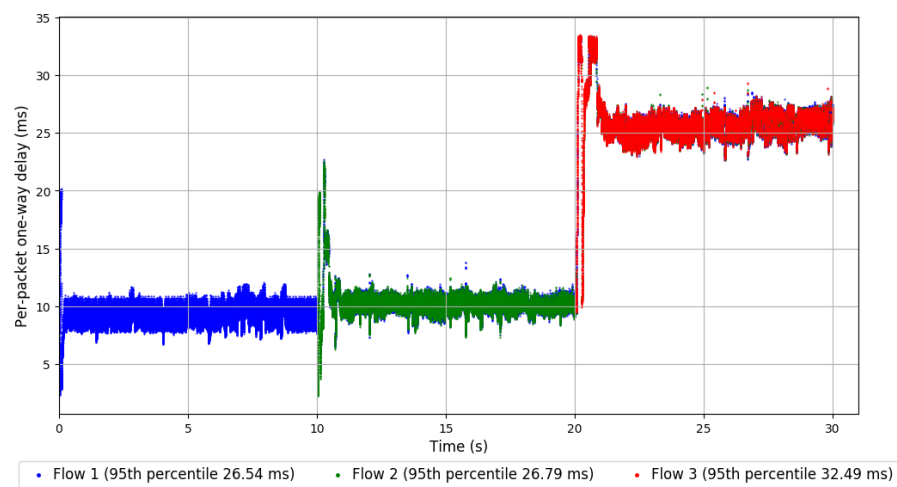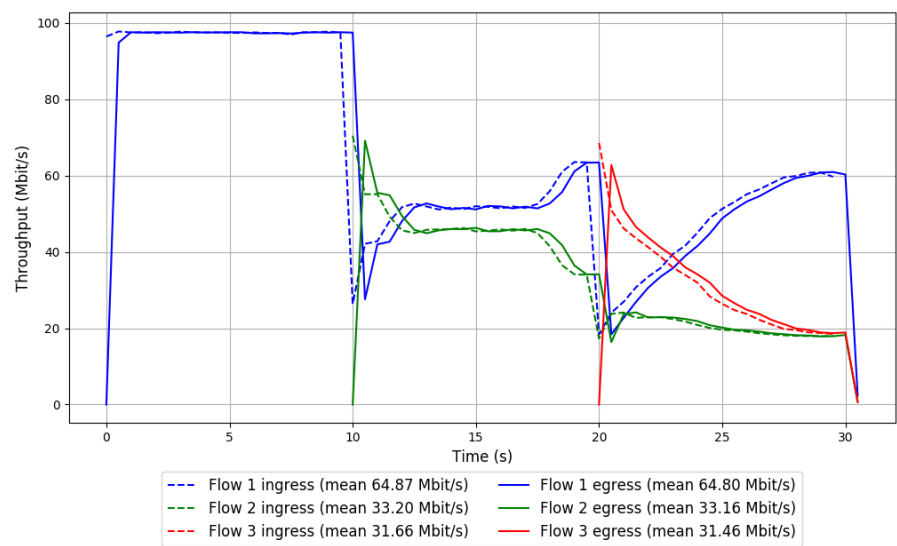
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2018-07-03 18:50:06
End at: 2018-07-03 18:50:36
Local clock offset: -2.958 ms
Remote clock offset: -2.338 ms


# Below is generated by plot.py at 2018-07-03 21:35:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.39 Mbit/s
95th percentile per-packet one-way delay: 26.888 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 64.80 Mbit/s
95th percentile per-packet one-way delay: 26.542 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 33.16 Mbit/s
95th percentile per-packet one-way delay: 26.786 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 31.46 Mbit/s
95th percentile per-packet one-way delay: 32.487 ms
Loss rate: 0.46%
```
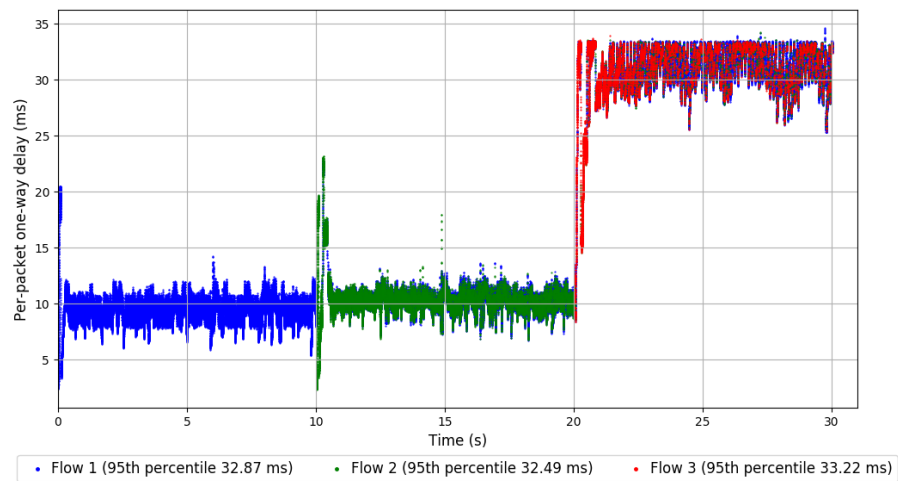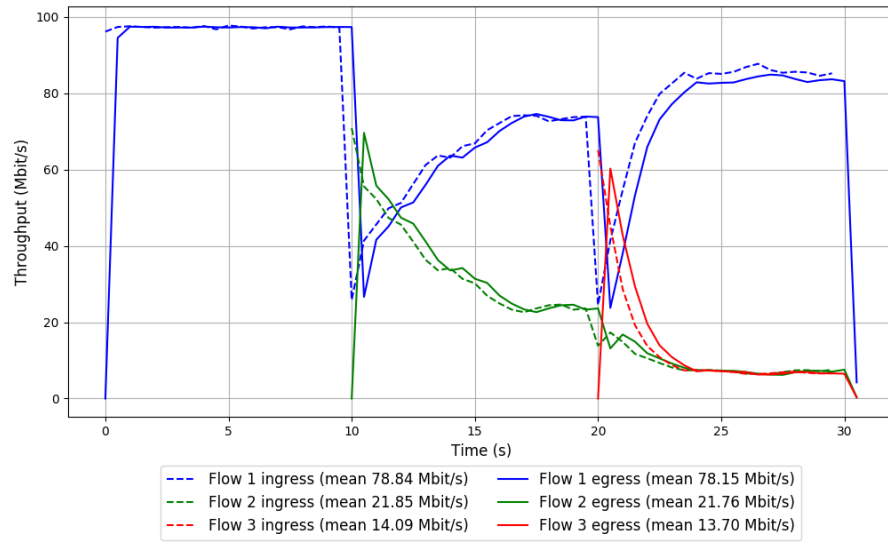
Run 2: Report of TCP BBR — Data Link

Flow 1 ingress (mean 64.87 Mbit/s) --- Flow 1 egress (mean 64.80 Mbit/s)
Flow 2 ingress (mean 33.20 Mbit/s) --- Flow 2 egress (mean 33.16 Mbit/s)
Flow 3 ingress (mean 31.66 Mbit/s) --- Flow 3 egress (mean 31.46 Mbit/s)

Flow 1 (95th percentile 26.54 ms)   Flow 2 (95th percentile 26.79 ms)   Flow 3 (95th percentile 32.49 ms)

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```
Run 3: Statistics of TCP BBR

Start at: 2018-07-03 19:09:19
End at: 2018-07-03 19:09:49
Local clock offset: -3.455 ms
Remote clock offset: -1.956 ms


# Below is generated by plot.py at 2018-07-03 21:35:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.23 Mbit/s
95th percentile per-packet one-way delay: 32.881 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 78.15 Mbit/s
95th percentile per-packet one-way delay: 32.870 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 21.76 Mbit/s
95th percentile per-packet one-way delay: 32.489 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 13.70 Mbit/s
95th percentile per-packet one-way delay: 33.216 ms
Loss rate: 2.51%
```

Run 3: Report of TCP BBR — Data Link

```
Run 4: Statistics of TCP BBR

Start at: 2018-07-03 19:28:32
End at: 2018-07-03 19:29:02
Local clock offset: -2.198 ms
Remote clock offset: -1.696 ms


# Below is generated by plot.py at 2018-07-03 21:35:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.30 Mbit/s
95th percentile per-packet one-way delay: 21.232 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 66.69 Mbit/s
95th percentile per-packet one-way delay: 21.002 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 35.49 Mbit/s
95th percentile per-packet one-way delay: 21.074 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 20.96 Mbit/s
95th percentile per-packet one-way delay: 29.490 ms
Loss rate: 0.22%
```
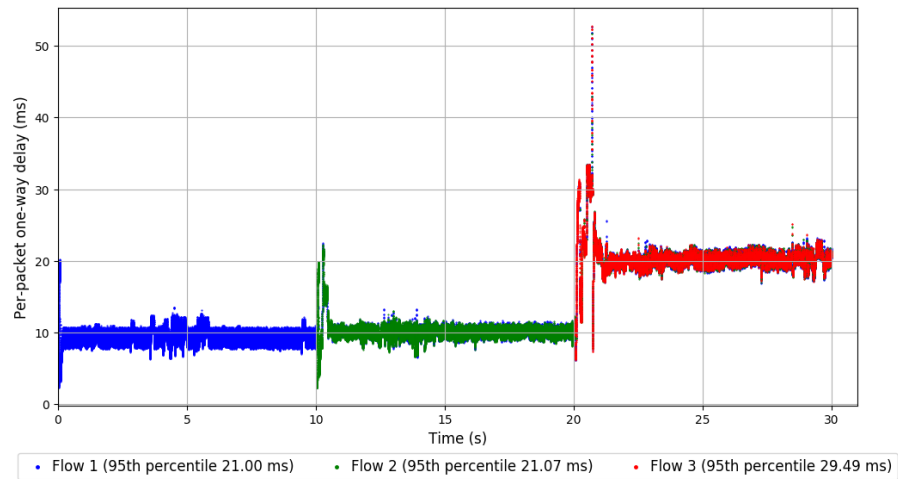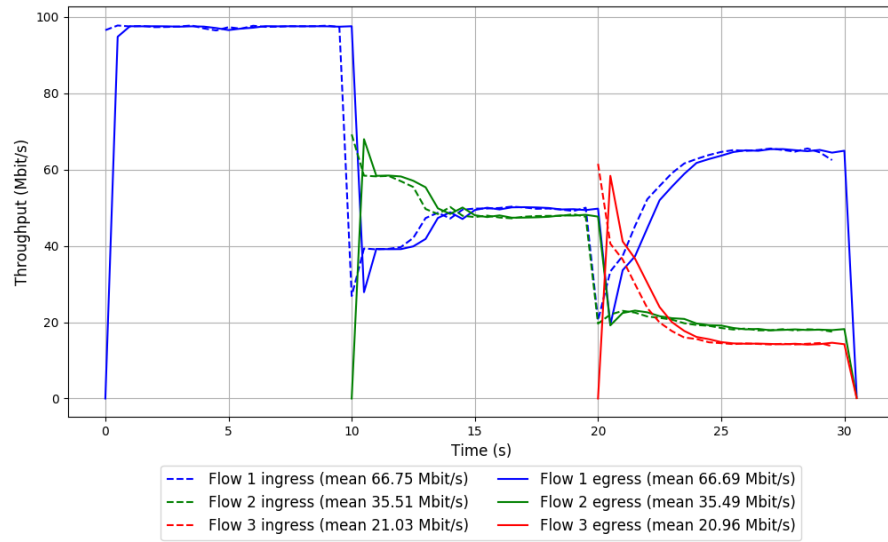
Run 4: Report of TCP BBR — Data Link

```
Run 5: Statistics of TCP BBR

Start at: 2018-07-03 19:47:45
End at: 2018-07-03 19:48:15
Local clock offset: -1.991 ms
Remote clock offset: -1.329 ms


# Below is generated by plot.py at 2018-07-03 21:35:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.46 Mbit/s
95th percentile per-packet one-way delay: 25.723 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 70.79 Mbit/s
95th percentile per-packet one-way delay: 25.468 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 26.28 Mbit/s
95th percentile per-packet one-way delay: 25.718 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 27.58 Mbit/s
95th percentile per-packet one-way delay: 33.012 ms
Loss rate: 0.83%
```
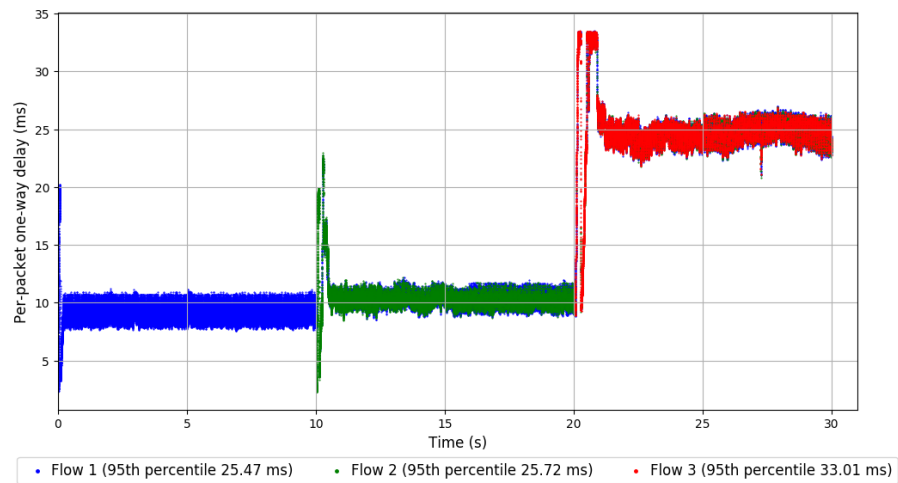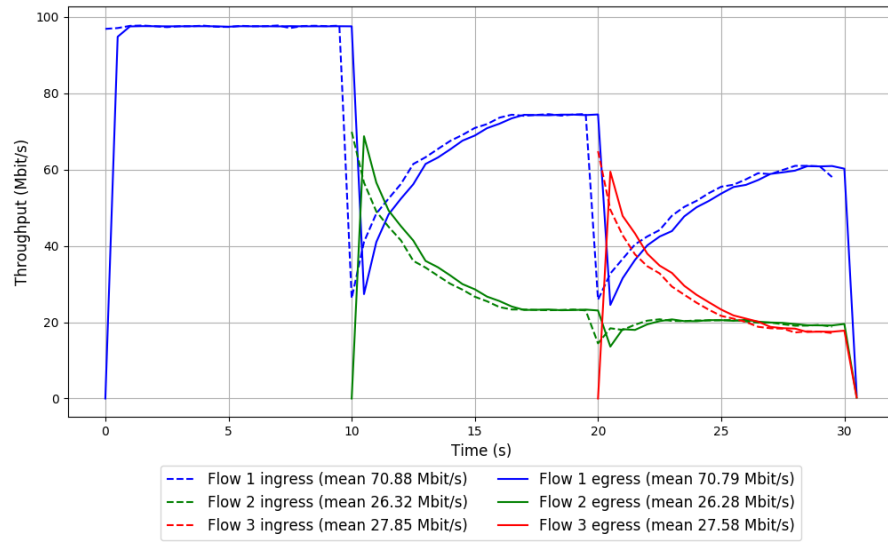
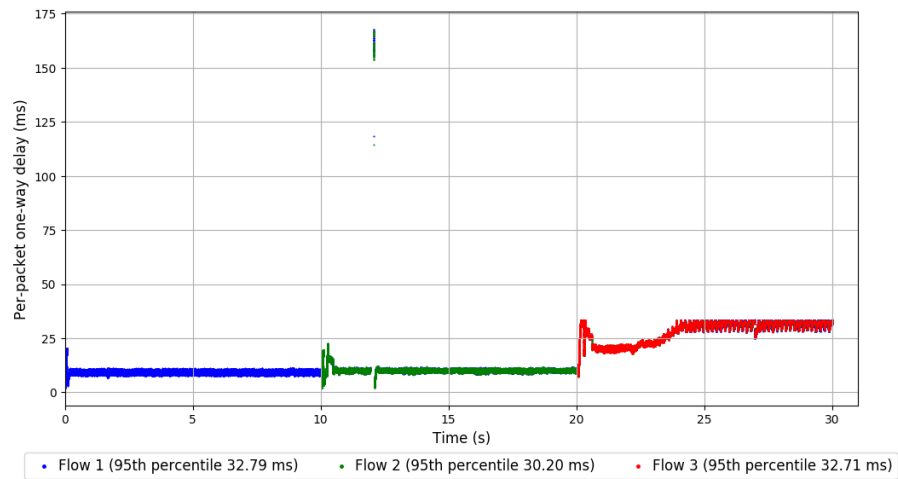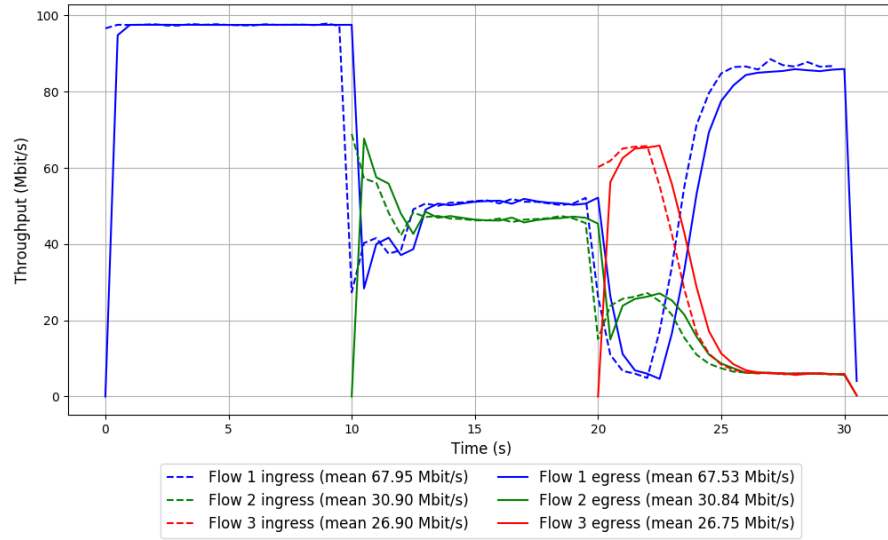Run 5: Report of TCP BBR — Data Link

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```
Run 6: Statistics of TCP BBR

Start at: 2018-07-03 20:06:58
End at: 2018-07-03 20:07:28
Local clock offset: -1.92 ms
Remote clock offset: -2.628 ms


# Below is generated by plot.py at 2018-07-03 21:35:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.99 Mbit/s
95th percentile per-packet one-way delay: 32.695 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 67.53 Mbit/s
95th percentile per-packet one-way delay: 32.788 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 30.84 Mbit/s
95th percentile per-packet one-way delay: 30.199 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 26.75 Mbit/s
95th percentile per-packet one-way delay: 32.709 ms
Loss rate: 0.30%
```
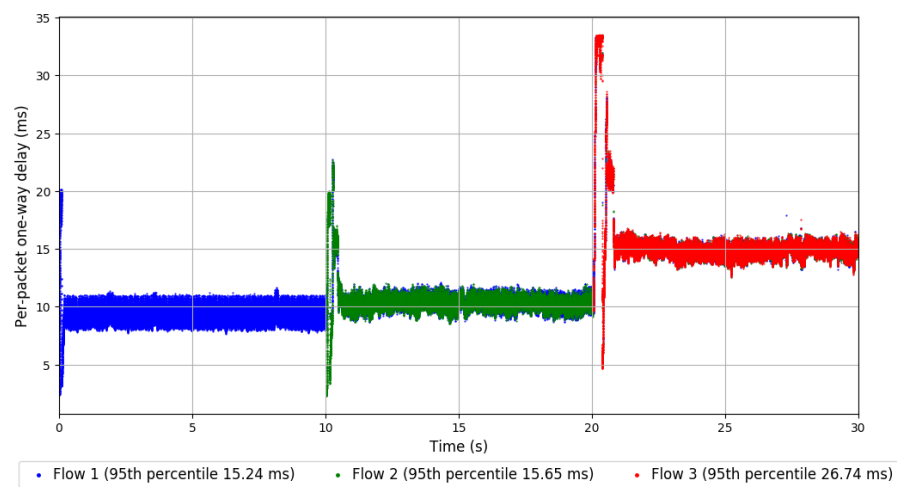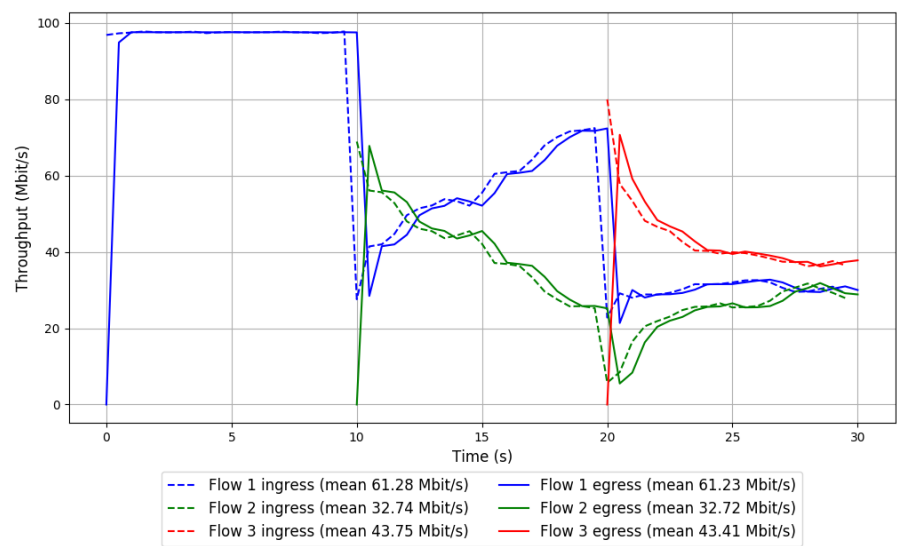
Run 6: Report of TCP BBR — Data Link

```
Run 7: Statistics of TCP BBR

Start at: 2018-07-03 20:26:11
End at: 2018-07-03 20:26:41
Local clock offset: -1.8 ms
Remote clock offset: -2.799 ms


# Below is generated by plot.py at 2018-07-03 21:35:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.46 Mbit/s
95th percentile per-packet one-way delay: 15.666 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 61.23 Mbit/s
95th percentile per-packet one-way delay: 15.240 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 32.72 Mbit/s
95th percentile per-packet one-way delay: 15.649 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 43.41 Mbit/s
95th percentile per-packet one-way delay: 26.742 ms
Loss rate: 0.74%
```

Run 7: Report of TCP BBR — Data Link

- - - Flow 1 ingress (mean 61.28 Mbit/s)   —— Flow 1 egress (mean 61.23 Mbit/s)
- - - Flow 2 ingress (mean 32.74 Mbit/s)   —— Flow 2 egress (mean 32.72 Mbit/s)
- - - Flow 3 ingress (mean 43.75 Mbit/s)   —— Flow 3 egress (mean 43.41 Mbit/s)

• Flow 1 (95th percentile 15.24 ms)   • Flow 2 (95th percentile 15.65 ms)   • Flow 3 (95th percentile 26.74 ms)
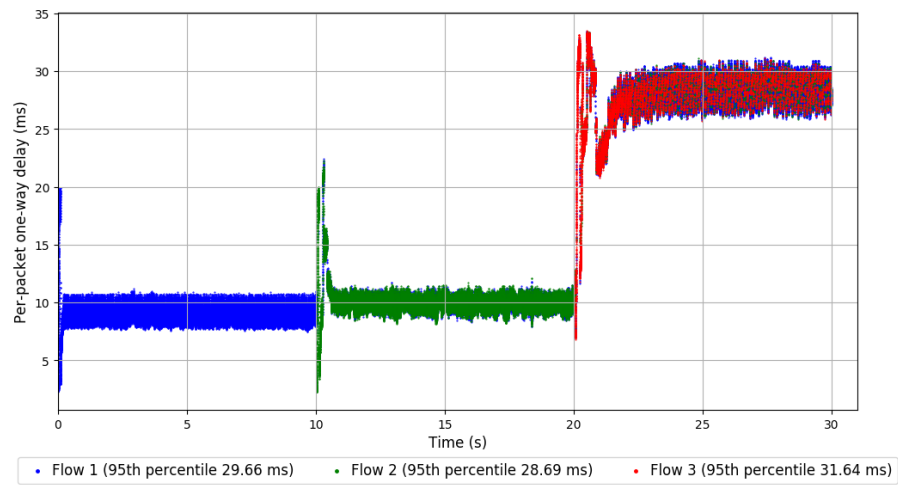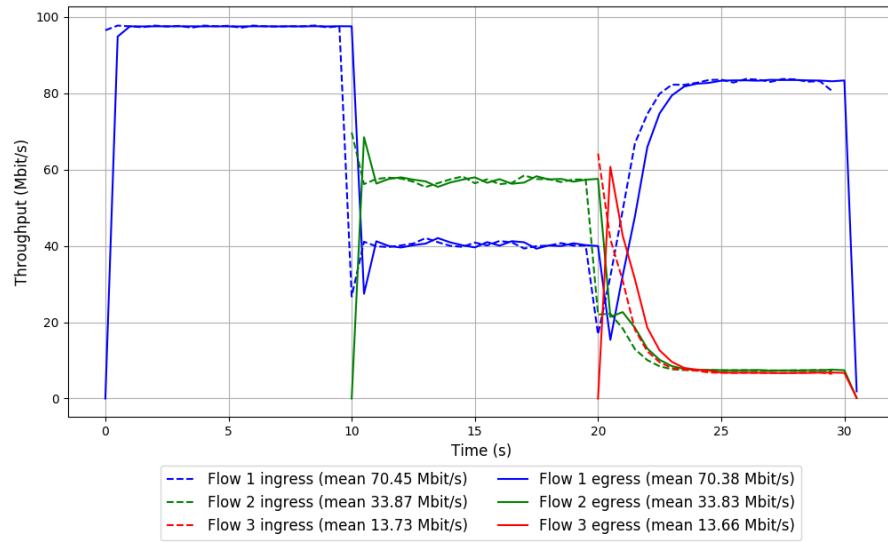
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```
Run 8: Statistics of TCP BBR

Start at: 2018-07-03 20:45:24
End at: 2018-07-03 20:45:54
Local clock offset: -2.244 ms
Remote clock offset: -2.942 ms


# Below is generated by plot.py at 2018-07-03 21:35:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 29.661 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 70.38 Mbit/s
95th percentile per-packet one-way delay: 29.665 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 33.83 Mbit/s
95th percentile per-packet one-way delay: 28.686 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 13.66 Mbit/s
95th percentile per-packet one-way delay: 31.639 ms
Loss rate: 0.32%
```
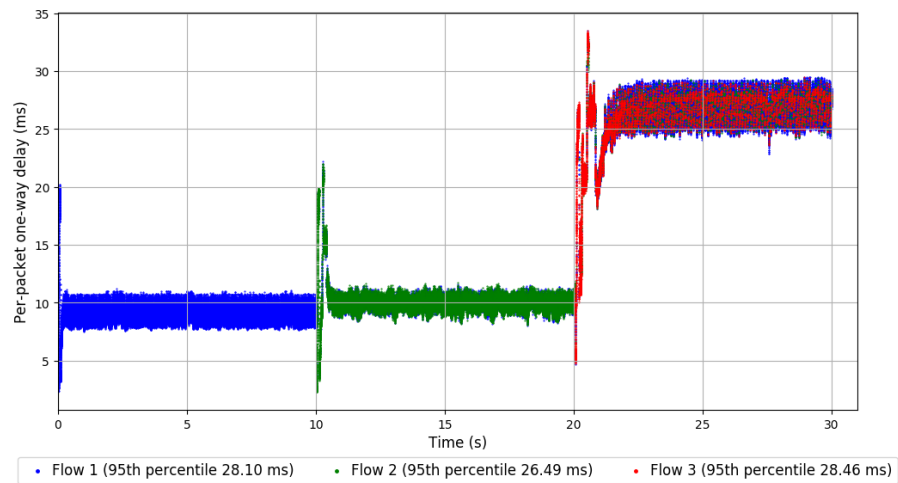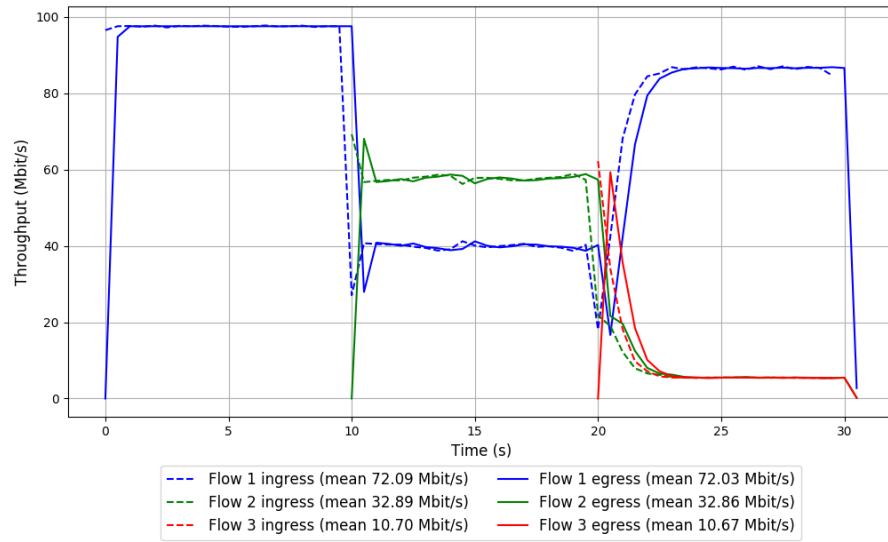
Run 8: Report of TCP BBR — Data Link

```
Run 9: Statistics of TCP BBR

Start at: 2018-07-03 21:04:36
End at: 2018-07-03 21:05:06
Local clock offset: -2.956 ms
Remote clock offset: -2.741 ms


# Below is generated by plot.py at 2018-07-03 21:36:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 27.999 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 72.03 Mbit/s
95th percentile per-packet one-way delay: 28.100 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.86 Mbit/s
95th percentile per-packet one-way delay: 26.491 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 10.67 Mbit/s
95th percentile per-packet one-way delay: 28.463 ms
Loss rate: 0.11%
```

Run 9: Report of TCP BBR — Data Link

```
Run 10: Statistics of TCP BBR

Start at: 2018-07-03 21:23:50
End at: 2018-07-03 21:24:20
Local clock offset: -2.83 ms
Remote clock offset: -2.49 ms

# Below is generated by plot.py at 2018-07-03 21:36:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 27.288 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 70.04 Mbit/s
95th percentile per-packet one-way delay: 26.995 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 23.50 Mbit/s
95th percentile per-packet one-way delay: 27.312 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 35.32 Mbit/s
95th percentile per-packet one-way delay: 32.649 ms
Loss rate: 0.56%
```
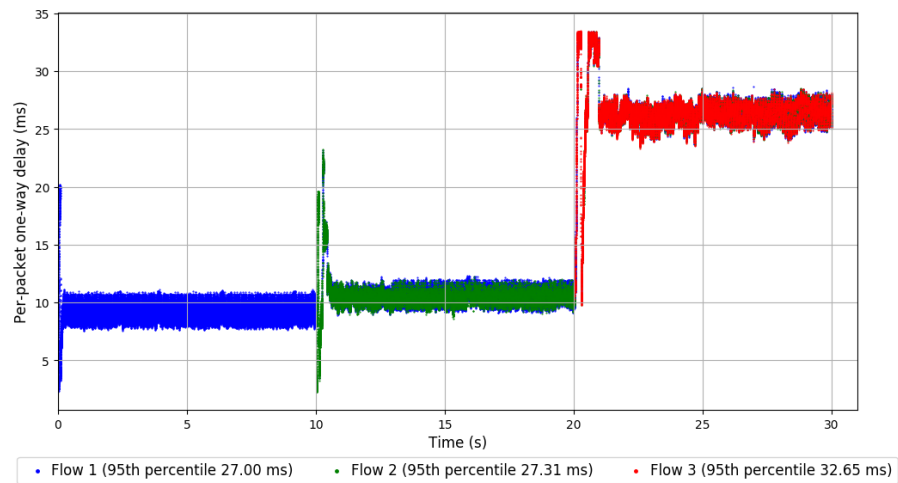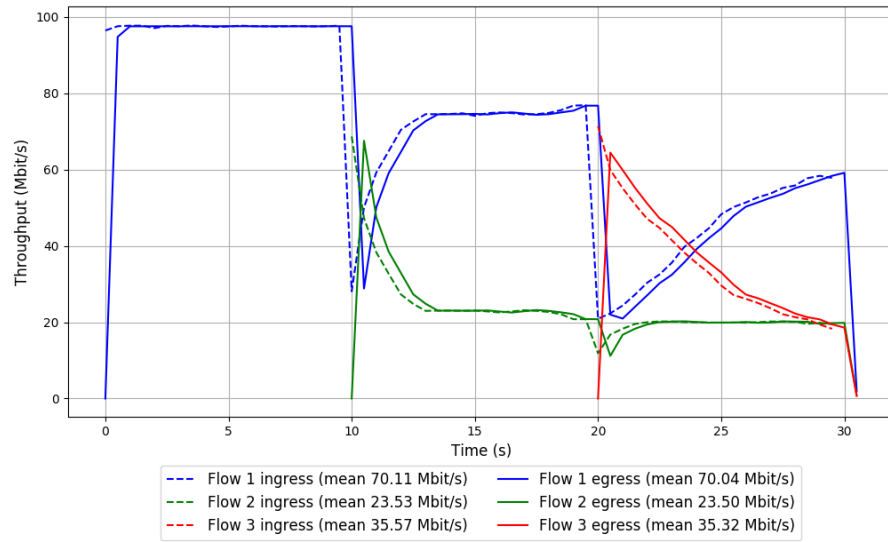
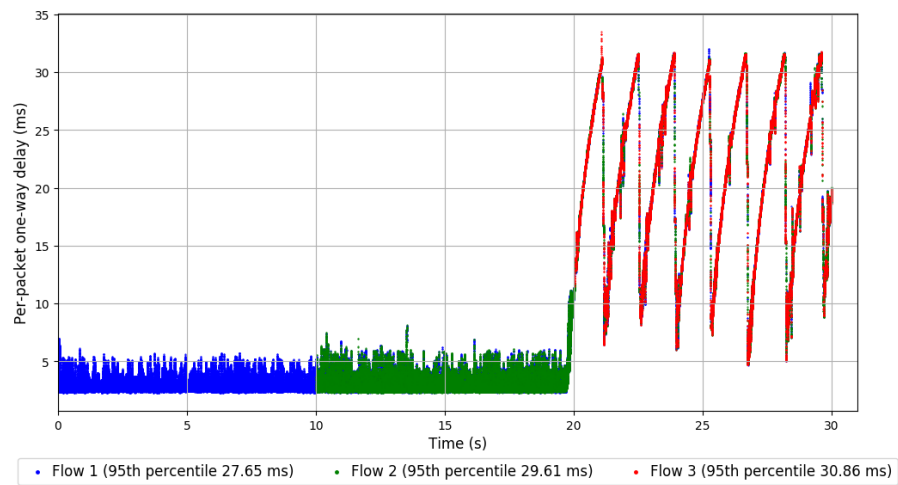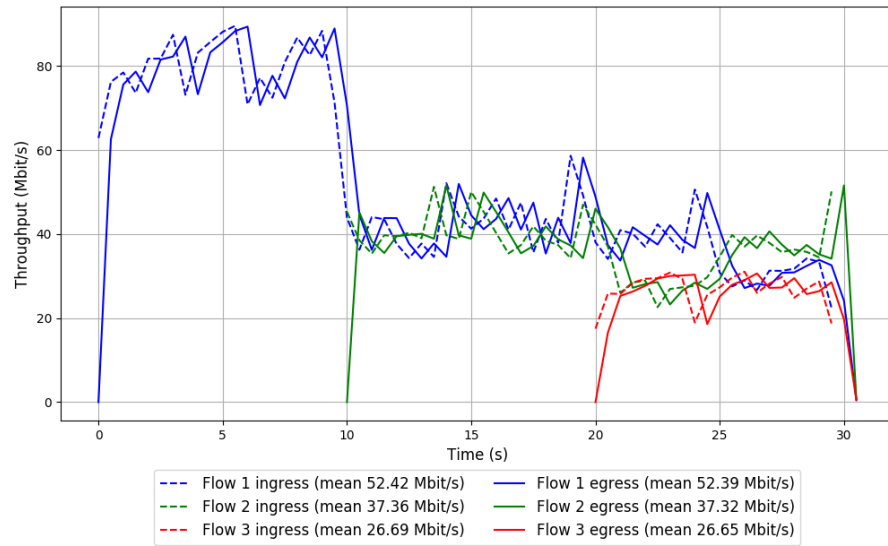Run 10: Report of TCP BBR — Data Link

```
Run 1: Statistics of Copa

Start at: 2018-07-03 18:36:32
End at: 2018-07-03 18:37:02
Local clock offset: -2.199 ms
Remote clock offset: -2.693 ms

# Below is generated by plot.py at 2018-07-03 21:37:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.13 Mbit/s
95th percentile per-packet one-way delay: 29.282 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 52.39 Mbit/s
95th percentile per-packet one-way delay: 27.646 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 37.32 Mbit/s
95th percentile per-packet one-way delay: 29.613 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 26.65 Mbit/s
95th percentile per-packet one-way delay: 30.858 ms
Loss rate: 0.05%
```

Run 1: Report of Copa — Data Link

Flow 1 ingress (mean 52.42 Mbit/s) --- Flow 1 egress (mean 52.39 Mbit/s)
Flow 2 ingress (mean 37.36 Mbit/s) --- Flow 2 egress (mean 37.32 Mbit/s)
Flow 3 ingress (mean 26.69 Mbit/s) --- Flow 3 egress (mean 26.65 Mbit/s)

Flow 1 (95th percentile 27.65 ms) · Flow 2 (95th percentile 29.61 ms) · Flow 3 (95th percentile 30.86 ms)
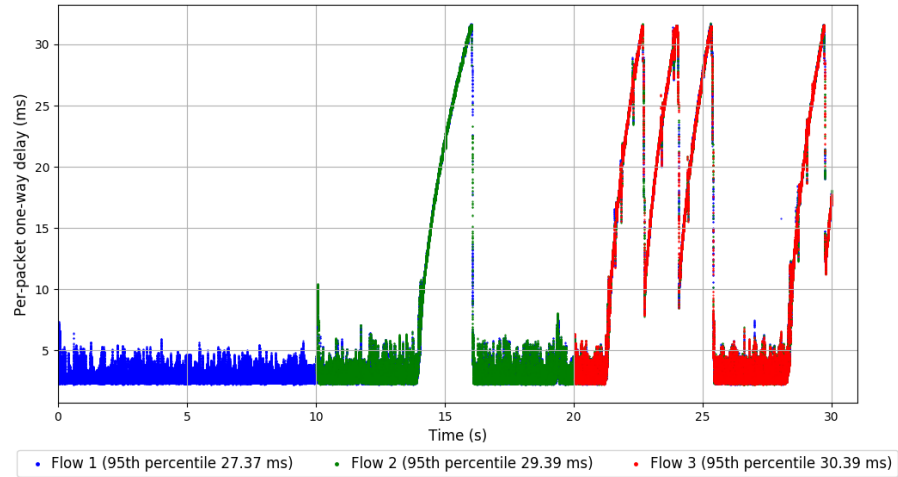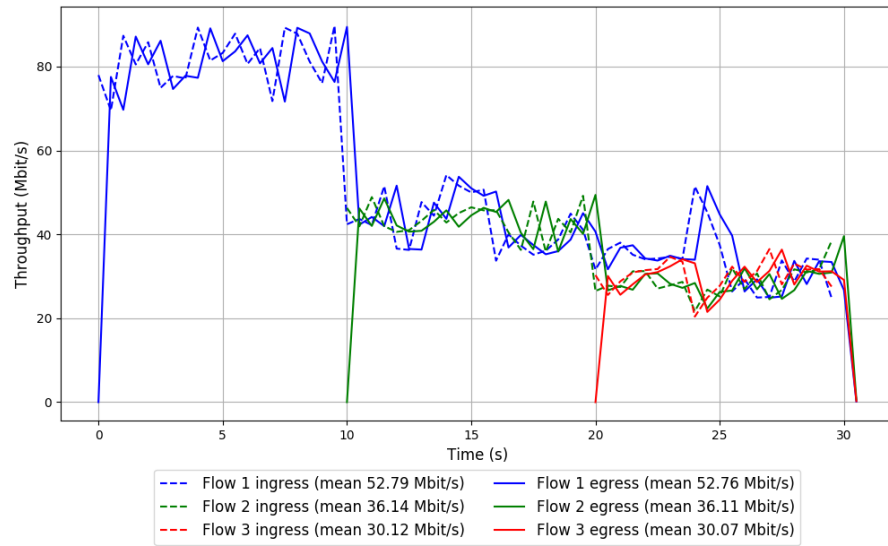
```
Run 2: Statistics of Copa

Start at: 2018-07-03 18:55:44
End at: 2018-07-03 18:56:14
Local clock offset: -3.159 ms
Remote clock offset: -2.178 ms


# Below is generated by plot.py at 2018-07-03 21:37:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.83 Mbit/s
95th percentile per-packet one-way delay: 28.773 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 52.76 Mbit/s
95th percentile per-packet one-way delay: 27.373 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.11 Mbit/s
95th percentile per-packet one-way delay: 29.393 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 30.07 Mbit/s
95th percentile per-packet one-way delay: 30.385 ms
Loss rate: 0.02%
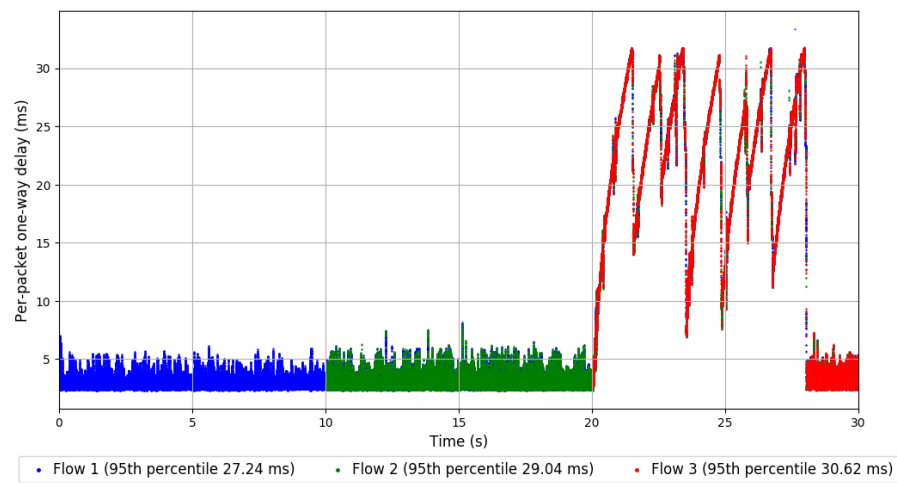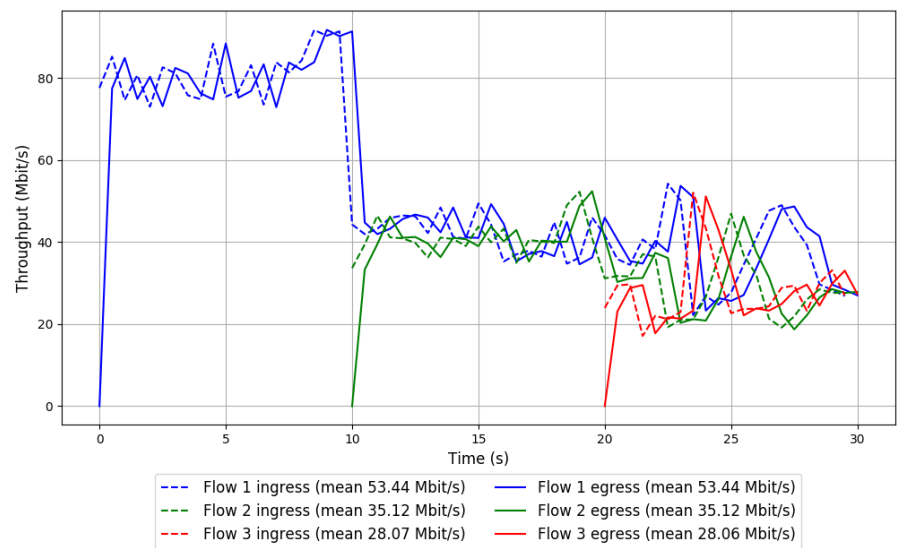```

Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2018-07-03 19:14:57
End at: 2018-07-03 19:15:27
Local clock offset: -2.866 ms
Remote clock offset: -1.886 ms

Below is generated by plot.py at 2018-07-03 21:37:18
Datalink statistics
-- Total of 3 flows:
Average throughput: 86.16 Mbit/s
95th percentile per-packet one-way delay: 28.853 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 53.44 Mbit/s
95th percentile per-packet one-way delay: 27.238 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 35.12 Mbit/s
95th percentile per-packet one-way delay: 29.037 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 28.06 Mbit/s
95th percentile per-packet one-way delay: 30.619 ms
Loss rate: 0.03%
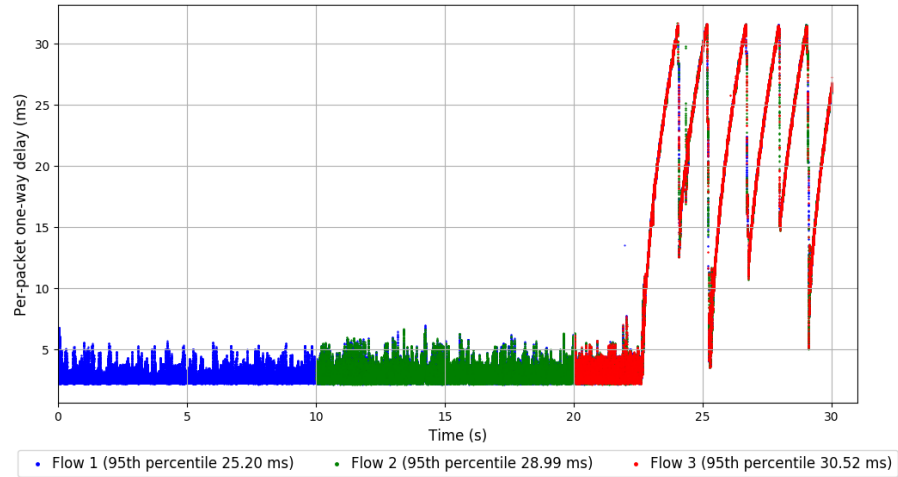```

Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2018-07-03 19:34:10
End at: 2018-07-03 19:34:40
Local clock offset: -2.009 ms
Remote clock offset: -1.686 ms


# Below is generated by plot.py at 2018-07-03 21:37:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.94 Mbit/s
95th percentile per-packet one-way delay: 28.314 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 53.31 Mbit/s
95th percentile per-packet one-way delay: 25.201 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.57 Mbit/s
95th percentile per-packet one-way delay: 28.991 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 27.83 Mbit/s
95th percentile per-packet one-way delay: 30.518 ms
Loss rate: 0.02%
```
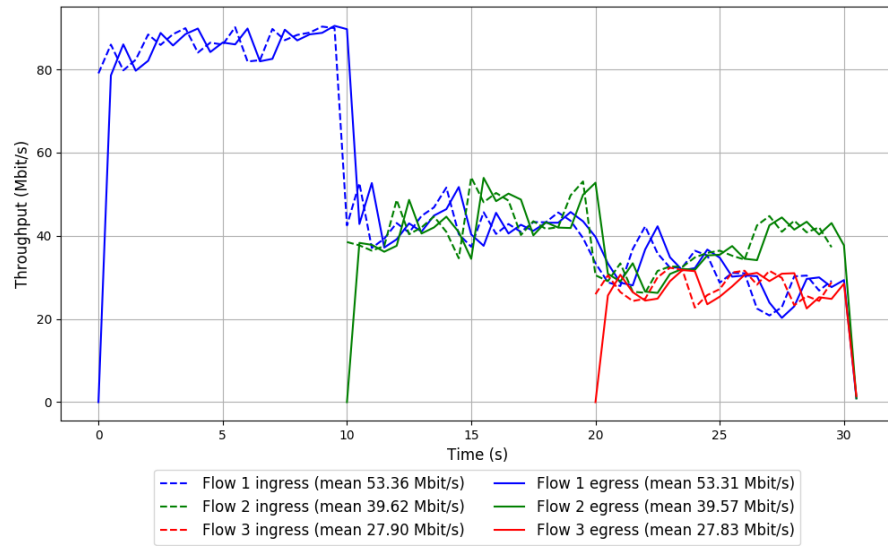
Run 4: Report of Copa — Data Link

Flow 1 ingress (mean 53.36 Mbit/s) Flow 1 egress (mean 53.31 Mbit/s)
Flow 2 ingress (mean 39.62 Mbit/s) Flow 2 egress (mean 39.57 Mbit/s)
Flow 3 ingress (mean 27.90 Mbit/s) Flow 3 egress (mean 27.83 Mbit/s)

Flow 1 (95th percentile 25.20 ms)   Flow 2 (95th percentile 28.99 ms)   Flow 3 (95th percentile 30.52 ms)
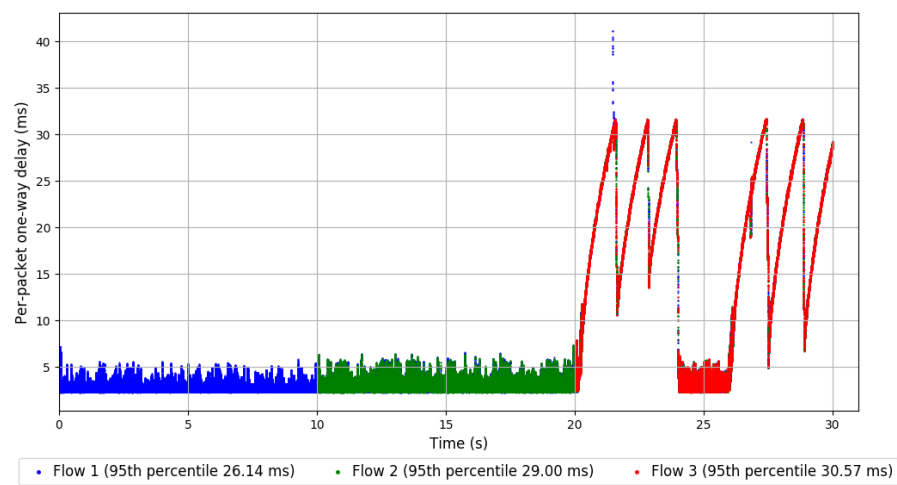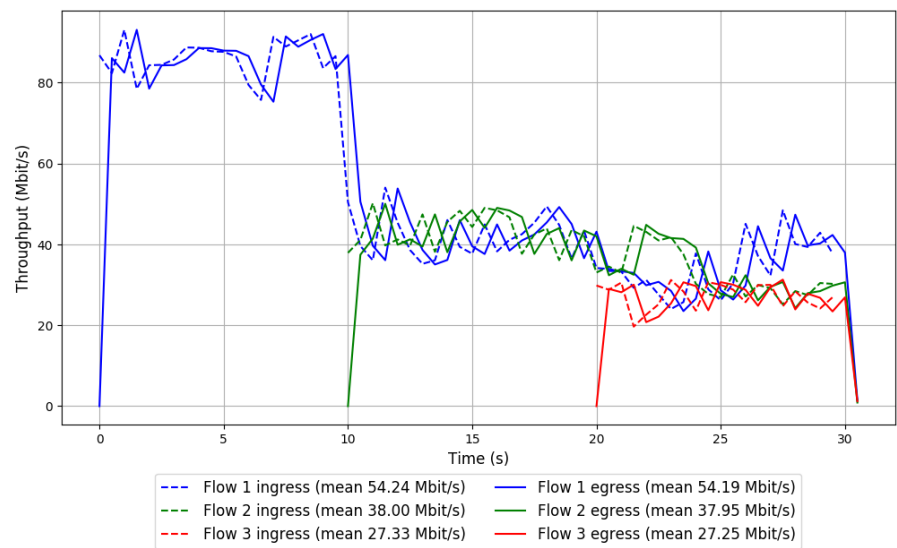
31

```
Run 5: Statistics of Copa

Start at: 2018-07-03 19:53:23
End at: 2018-07-03 19:53:54
Local clock offset: -1.993 ms
Remote clock offset: -1.912 ms


# Below is generated by plot.py at 2018-07-03 21:37:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.55 Mbit/s
95th percentile per-packet one-way delay: 28.470 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 54.19 Mbit/s
95th percentile per-packet one-way delay: 26.145 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.95 Mbit/s
95th percentile per-packet one-way delay: 29.005 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 27.25 Mbit/s
95th percentile per-packet one-way delay: 30.575 ms
Loss rate: 0.03%
```

Run 5: Report of Copa — Data Link

Flow 1 ingress (mean 54.24 Mbit/s) --- Flow 1 egress (mean 54.19 Mbit/s)
Flow 2 ingress (mean 38.00 Mbit/s) --- Flow 2 egress (mean 37.95 Mbit/s)
Flow 3 ingress (mean 27.33 Mbit/s) --- Flow 3 egress (mean 27.25 Mbit/s)

Flow 1 (95th percentile 26.14 ms) • Flow 2 (95th percentile 29.00 ms) • Flow 3 (95th percentile 30.57 ms)

```
Run 6: Statistics of Copa

Start at: 2018-07-03 20:12:36
End at: 2018-07-03 20:13:06
Local clock offset: -1.944 ms
Remote clock offset: -2.69 ms


# Below is generated by plot.py at 2018-07-03 21:37:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.16 Mbit/s
95th percentile per-packet one-way delay: 28.990 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 55.52 Mbit/s
95th percentile per-packet one-way delay: 27.798 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 35.63 Mbit/s
95th percentile per-packet one-way delay: 29.614 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 29.86 Mbit/s
95th percentile per-packet one-way delay: 30.337 ms
Loss rate: 0.06%
```
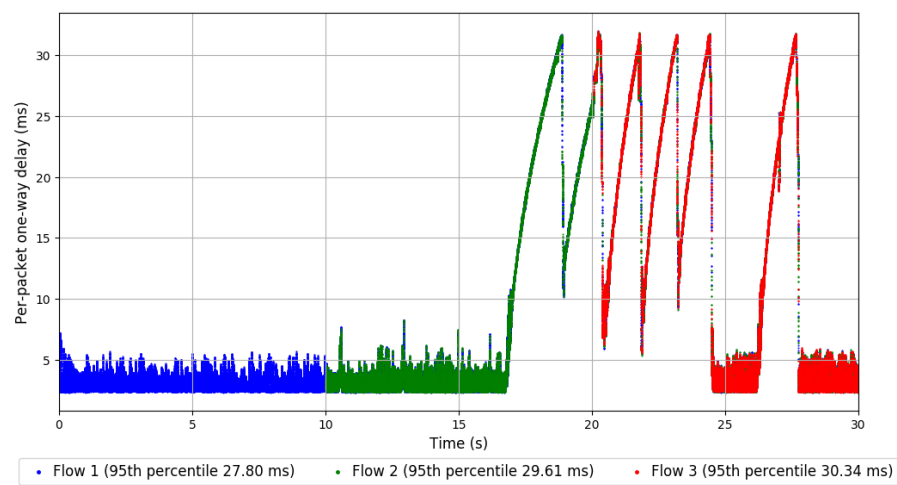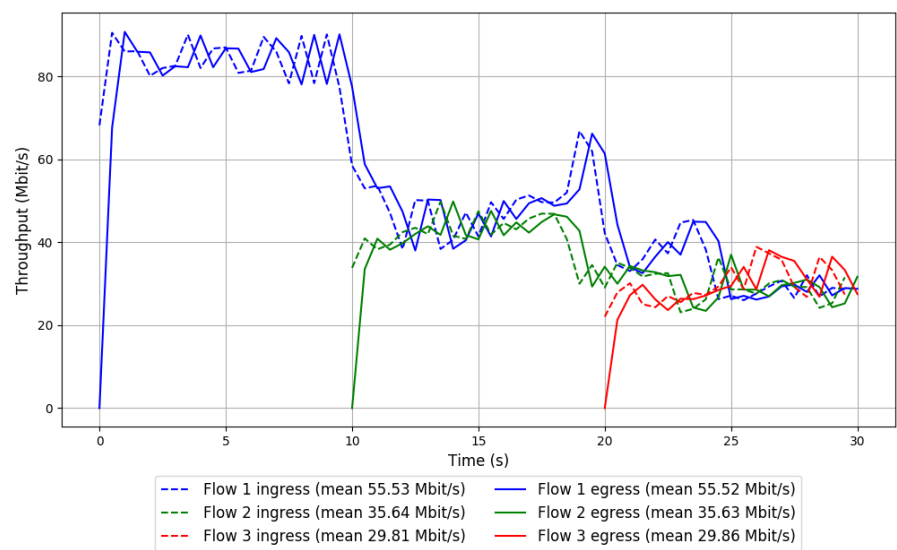
Run 6: Report of Copa — Data Link

- - - Flow 1 ingress (mean 55.53 Mbit/s) ——— Flow 1 egress (mean 55.52 Mbit/s)
- - - Flow 2 ingress (mean 35.64 Mbit/s) ——— Flow 2 egress (mean 35.63 Mbit/s)
- - - Flow 3 ingress (mean 29.81 Mbit/s) ——— Flow 3 egress (mean 29.86 Mbit/s)

- Flow 1 (95th percentile 27.80 ms)   - Flow 2 (95th percentile 29.61 ms)   - Flow 3 (95th percentile 30.34 ms)
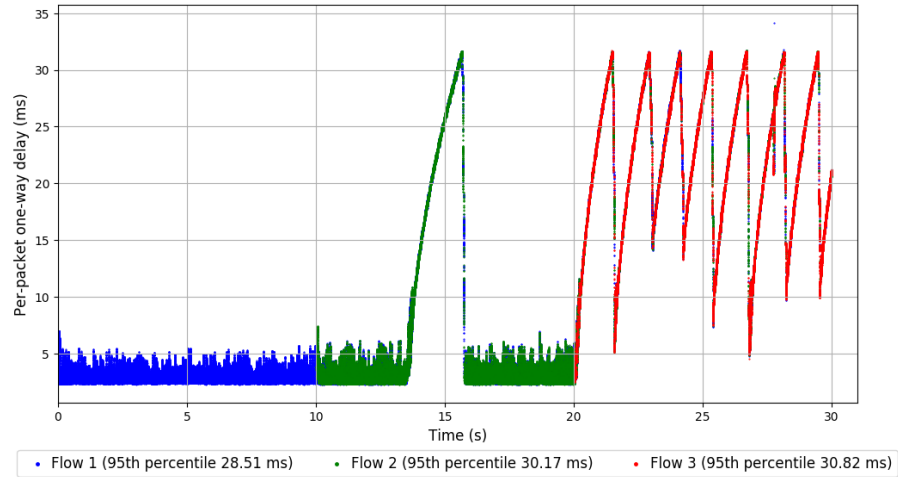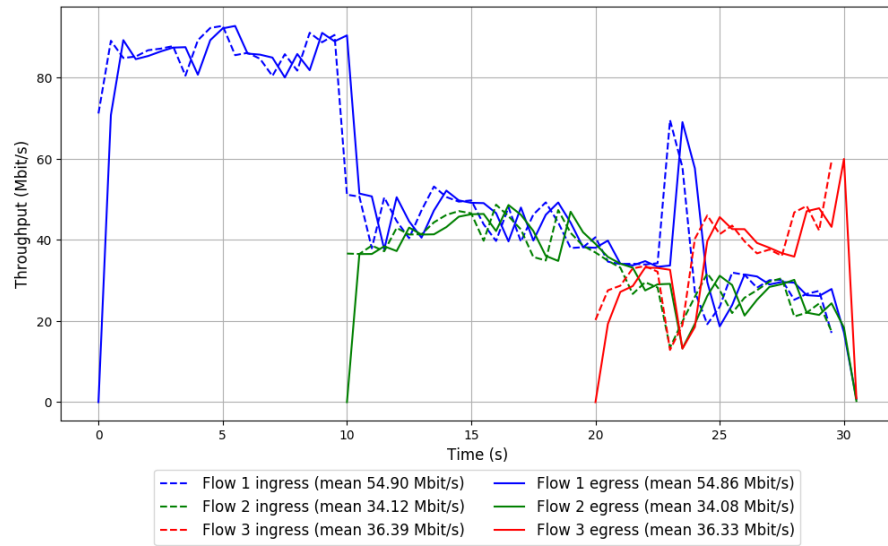
```
Run 7: Statistics of Copa

Start at: 2018-07-03 20:31:49
End at: 2018-07-03 20:32:19
Local clock offset: -1.758 ms
Remote clock offset: -2.848 ms


# Below is generated by plot.py at 2018-07-03 21:38:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.66 Mbit/s
95th percentile per-packet one-way delay: 29.729 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 54.86 Mbit/s
95th percentile per-packet one-way delay: 28.507 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 34.08 Mbit/s
95th percentile per-packet one-way delay: 30.166 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 36.33 Mbit/s
95th percentile per-packet one-way delay: 30.824 ms
Loss rate: 0.02%
```

Run 7: Report of Copa — Data Link

Flow 1 ingress (mean 54.90 Mbit/s) --- Flow 1 egress (mean 54.86 Mbit/s)
Flow 2 ingress (mean 34.12 Mbit/s) --- Flow 2 egress (mean 34.08 Mbit/s)
Flow 3 ingress (mean 36.39 Mbit/s) --- Flow 3 egress (mean 36.33 Mbit/s)

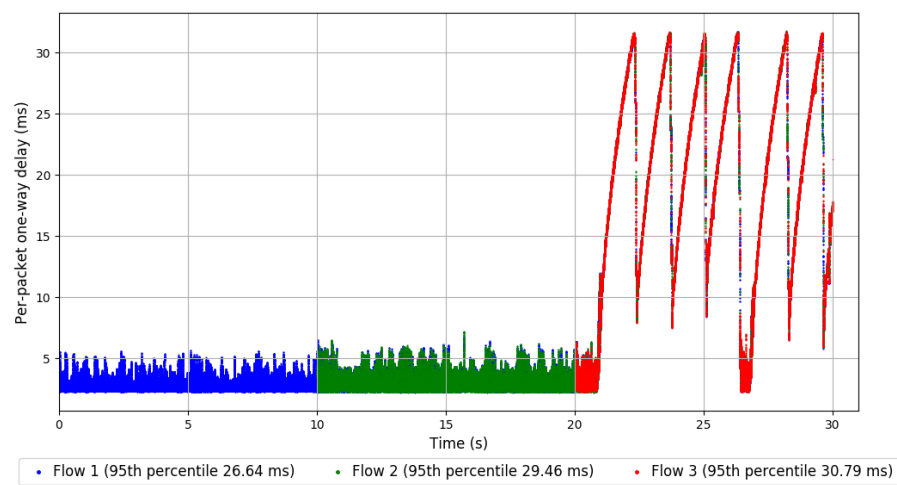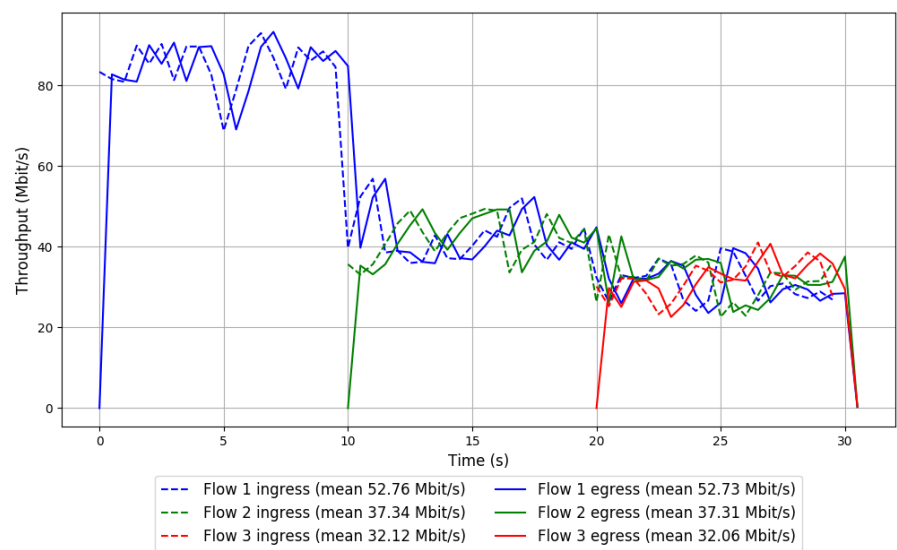Flow 1 (95th percentile 28.51 ms)   Flow 2 (95th percentile 30.17 ms)   Flow 3 (95th percentile 30.82 ms)

```
Run 8: Statistics of Copa

Start at: 2018-07-03 20:51:02
End at: 2018-07-03 20:51:32
Local clock offset: -2.5 ms
Remote clock offset: -2.925 ms


# Below is generated by plot.py at 2018-07-03 21:38:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.25 Mbit/s
95th percentile per-packet one-way delay: 29.026 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 52.73 Mbit/s
95th percentile per-packet one-way delay: 26.638 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 37.31 Mbit/s
95th percentile per-packet one-way delay: 29.461 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 32.06 Mbit/s
95th percentile per-packet one-way delay: 30.785 ms
Loss rate: 0.02%
```
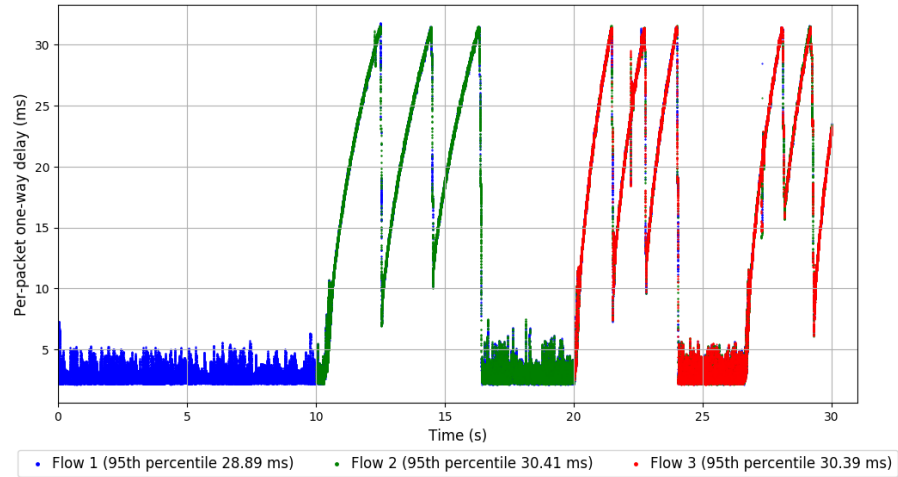
Run 8: Report of Copa — Data Link

Flow 1 ingress (mean 52.76 Mbit/s) --- Flow 1 egress (mean 52.73 Mbit/s)
Flow 2 ingress (mean 37.34 Mbit/s) --- Flow 2 egress (mean 37.31 Mbit/s)
Flow 3 ingress (mean 32.12 Mbit/s) --- Flow 3 egress (mean 32.06 Mbit/s)

Flow 1 (95th percentile 26.64 ms)   Flow 2 (95th percentile 29.46 ms)   Flow 3 (95th percentile 30.79 ms)
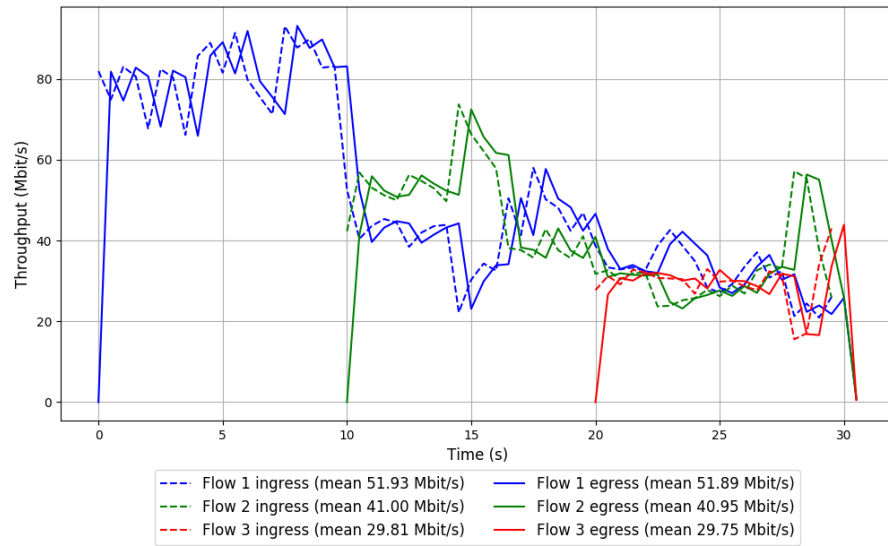
```
Run 9: Statistics of Copa

Start at: 2018-07-03 21:10:15
End at: 2018-07-03 21:10:45
Local clock offset: -2.963 ms
Remote clock offset: -2.741 ms


# Below is generated by plot.py at 2018-07-03 21:39:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.08 Mbit/s
95th percentile per-packet one-way delay: 29.831 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 51.89 Mbit/s
95th percentile per-packet one-way delay: 28.895 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.95 Mbit/s
95th percentile per-packet one-way delay: 30.411 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 29.75 Mbit/s
95th percentile per-packet one-way delay: 30.388 ms
Loss rate: 0.02%
```

Run 9: Report of Copa — Data Link

Flow 1 ingress (mean 51.93 Mbit/s) --- Flow 1 egress (mean 51.89 Mbit/s)
Flow 2 ingress (mean 41.00 Mbit/s) --- Flow 2 egress (mean 40.95 Mbit/s)
Flow 3 ingress (mean 29.81 Mbit/s) --- Flow 3 egress (mean 29.75 Mbit/s)

Flow 1 (95th percentile 28.89 ms) • Flow 2 (95th percentile 30.41 ms) • Flow 3 (95th percentile 30.39 ms)

```
Run 10: Statistics of Copa

Start at: 2018-07-03 21:29:28
End at: 2018-07-03 21:29:58
Local clock offset: -2.831 ms
Remote clock offset: -2.58 ms


# Below is generated by plot.py at 2018-07-03 21:39:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.80 Mbit/s
95th percentile per-packet one-way delay: 28.836 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 52.44 Mbit/s
95th percentile per-packet one-way delay: 26.105 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 38.85 Mbit/s
95th percentile per-packet one-way delay: 29.482 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 34.48 Mbit/s
95th percentile per-packet one-way delay: 30.532 ms
Loss rate: 0.02%
```
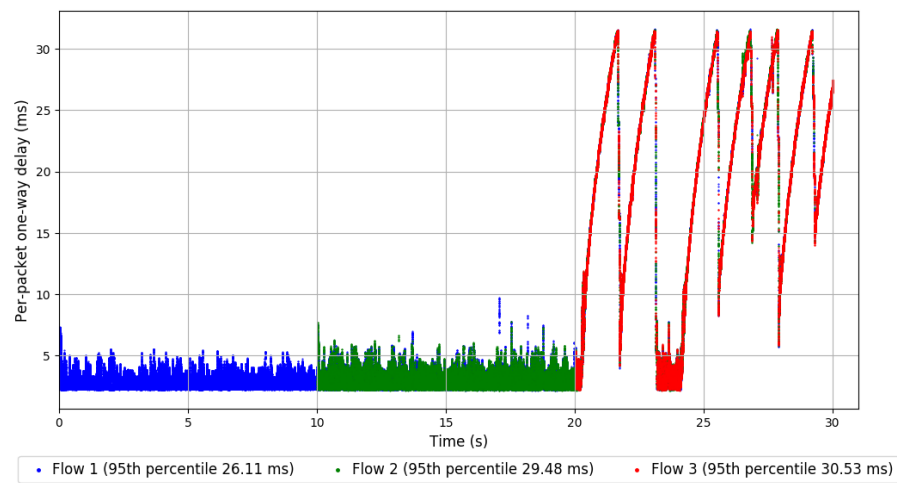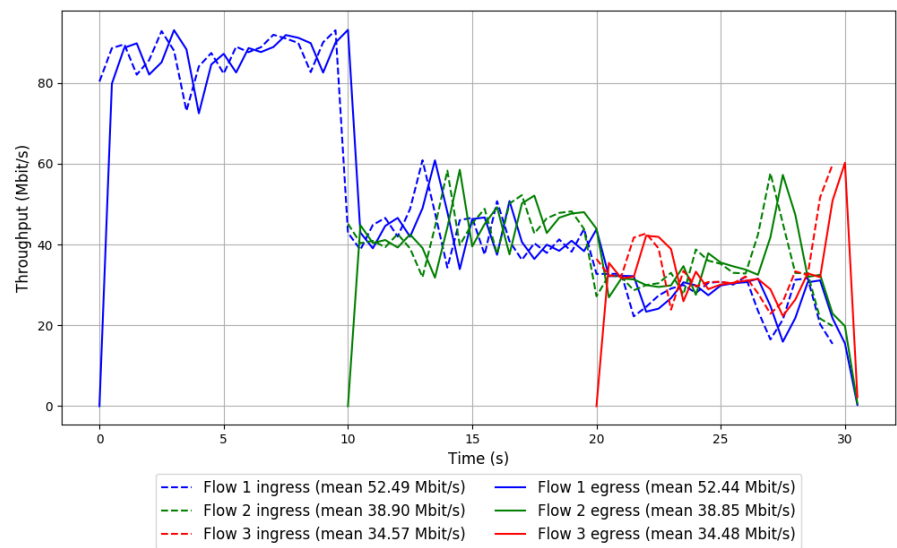
Run 10: Report of Copa — Data Link

Flow 1 ingress (mean 52.49 Mbit/s) --- Flow 1 egress (mean 52.44 Mbit/s)
Flow 2 ingress (mean 38.90 Mbit/s) --- Flow 2 egress (mean 38.85 Mbit/s)
Flow 3 ingress (mean 34.57 Mbit/s) --- Flow 3 egress (mean 34.48 Mbit/s)

Flow 1 (95th percentile 26.11 ms) ・ Flow 2 (95th percentile 29.48 ms) ・ Flow 3 (95th percentile 30.53 ms)

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```
Run 1: Statistics of TCP Cubic

Start at: 2018-07-03 18:29:46
End at: 2018-07-03 18:30:16
Local clock offset: -2.371 ms
Remote clock offset: -2.73 ms


# Below is generated by plot.py at 2018-07-03 21:39:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.34 Mbit/s
95th percentile per-packet one-way delay: 32.301 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 63.41 Mbit/s
95th percentile per-packet one-way delay: 32.089 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 34.15 Mbit/s
95th percentile per-packet one-way delay: 32.501 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 33.79 Mbit/s
95th percentile per-packet one-way delay: 32.555 ms
Loss rate: 0.06%
```
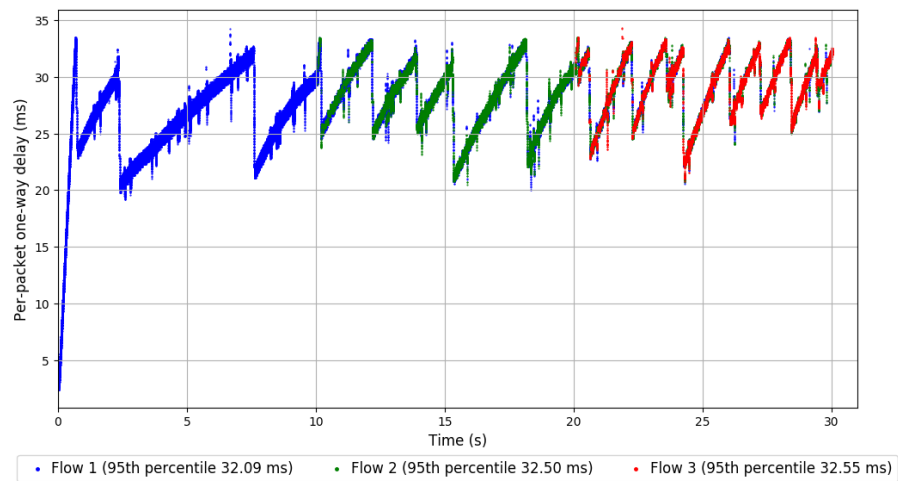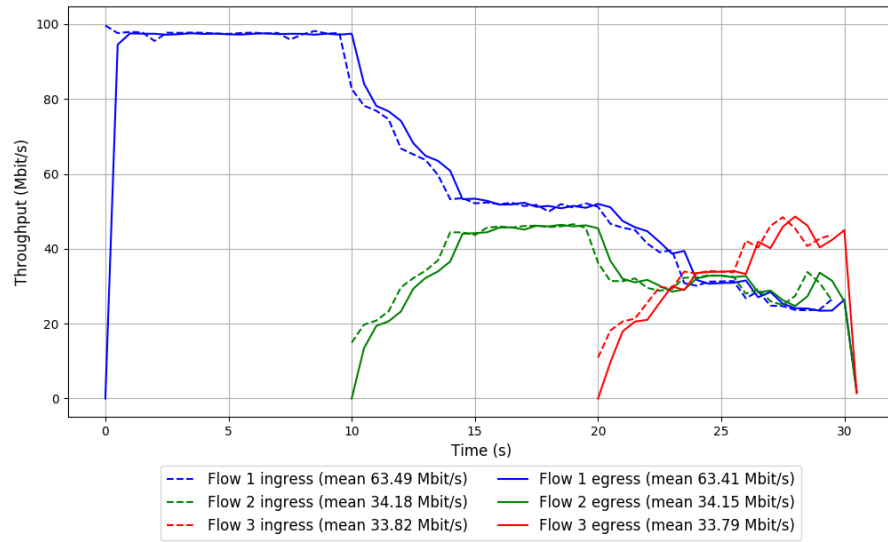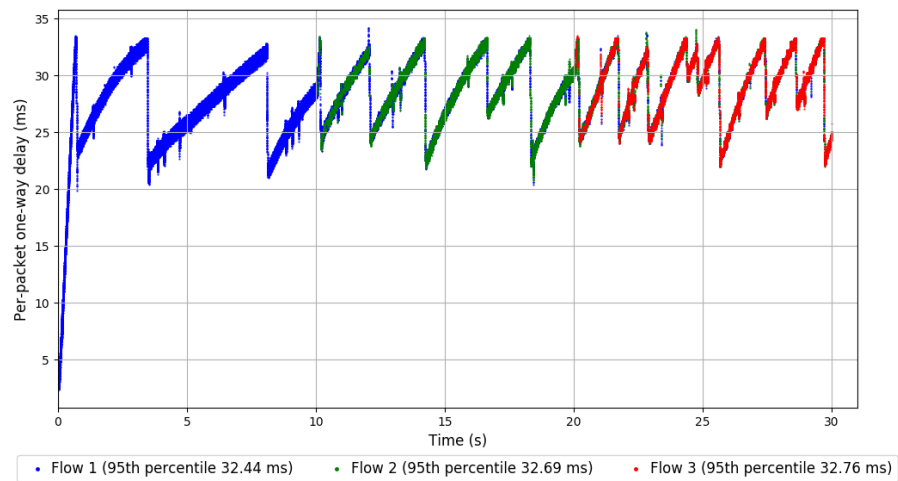
Run 1: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 63.49 Mbit/s) --- Flow 1 egress (mean 63.41 Mbit/s)
Flow 2 ingress (mean 34.18 Mbit/s) --- Flow 2 egress (mean 34.15 Mbit/s)
Flow 3 ingress (mean 33.82 Mbit/s) --- Flow 3 egress (mean 33.79 Mbit/s)

Flow 1 (95th percentile 32.09 ms) Flow 2 (95th percentile 32.50 ms) Flow 3 (95th percentile 32.55 ms)
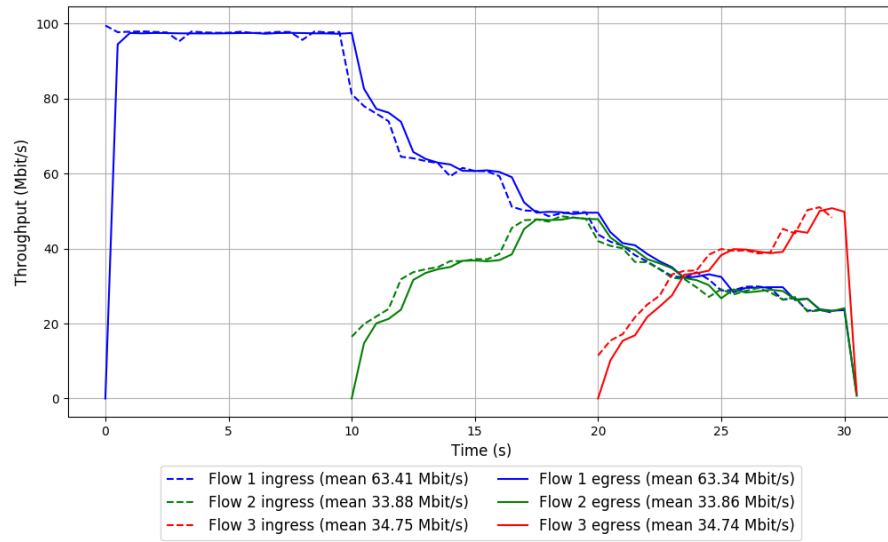
45

```
Run 2: Statistics of TCP Cubic

Start at: 2018-07-03 18:48:59
End at: 2018-07-03 18:49:29
Local clock offset: -2.941 ms
Remote clock offset: -2.365 ms


# Below is generated by plot.py at 2018-07-03 21:39:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.42 Mbit/s
95th percentile per-packet one-way delay: 32.500 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 63.34 Mbit/s
95th percentile per-packet one-way delay: 32.442 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 33.86 Mbit/s
95th percentile per-packet one-way delay: 32.688 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 34.74 Mbit/s
95th percentile per-packet one-way delay: 32.760 ms
Loss rate: 0.09%
```

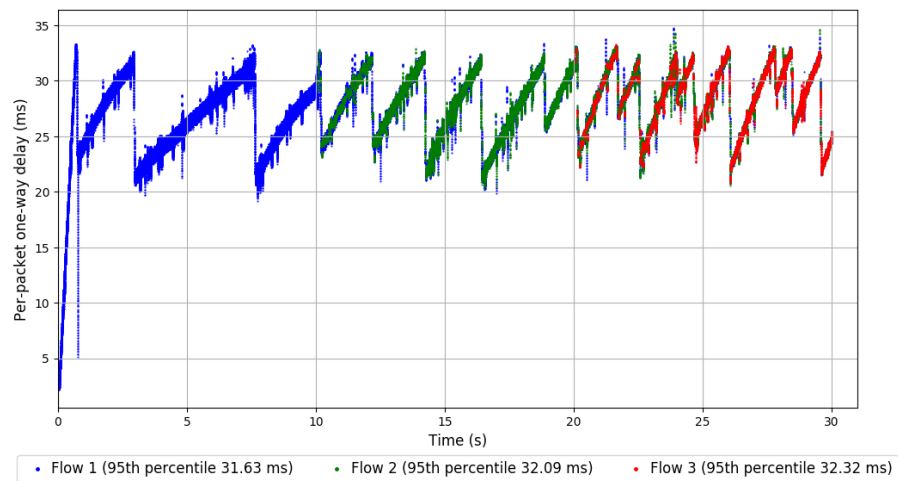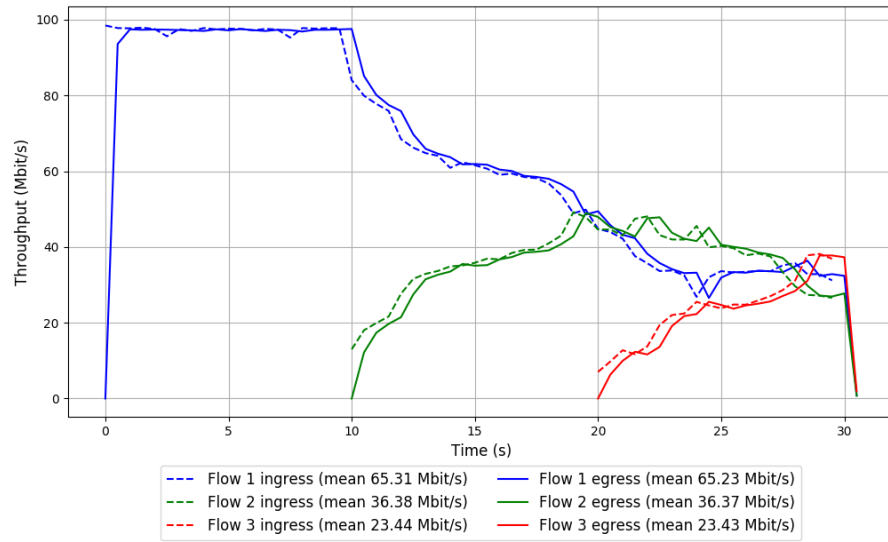Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2018-07-03 19:08:11
End at: 2018-07-03 19:08:41
Local clock offset: -3.385 ms
Remote clock offset: -2.062 ms


# Below is generated by plot.py at 2018-07-03 21:39:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.22 Mbit/s
95th percentile per-packet one-way delay: 31.851 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 65.23 Mbit/s
95th percentile per-packet one-way delay: 31.628 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 36.37 Mbit/s
95th percentile per-packet one-way delay: 32.091 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 23.43 Mbit/s
95th percentile per-packet one-way delay: 32.317 ms
Loss rate: 0.08%
```
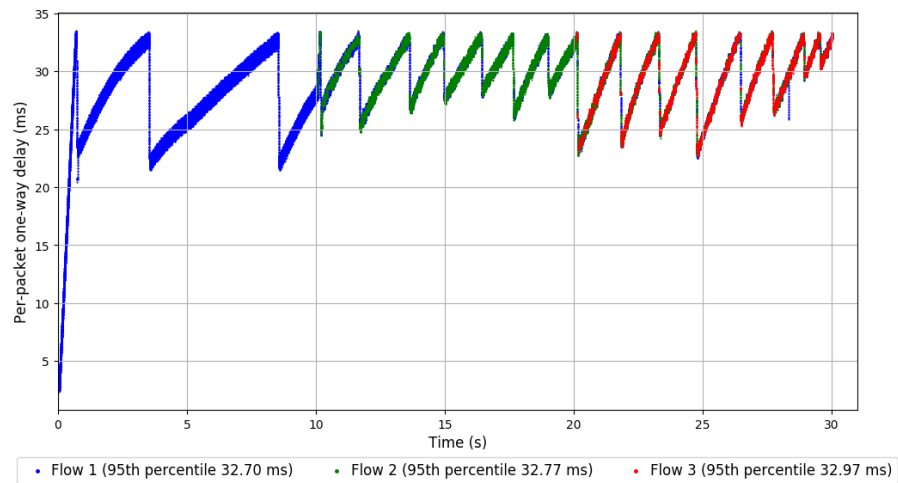
Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 65.31 Mbit/s) --- Flow 1 egress (mean 65.23 Mbit/s)
Flow 2 ingress (mean 36.38 Mbit/s) --- Flow 2 egress (mean 36.37 Mbit/s)
Flow 3 ingress (mean 23.44 Mbit/s) --- Flow 3 egress (mean 23.43 Mbit/s)

Flow 1 (95th percentile 31.63 ms)   Flow 2 (95th percentile 32.09 ms)   Flow 3 (95th percentile 32.32 ms)
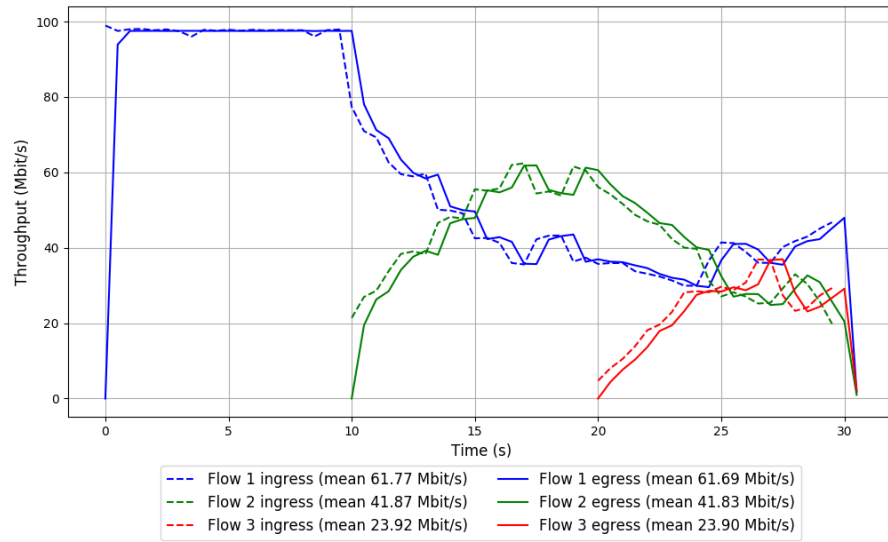
```
Run 4: Statistics of TCP Cubic

Start at: 2018-07-03 19:27:24
End at: 2018-07-03 19:27:54
Local clock offset: -2.185 ms
Remote clock offset: -1.669 ms


# Below is generated by plot.py at 2018-07-03 21:39:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 32.737 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 61.69 Mbit/s
95th percentile per-packet one-way delay: 32.702 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 41.83 Mbit/s
95th percentile per-packet one-way delay: 32.765 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 23.90 Mbit/s
95th percentile per-packet one-way delay: 32.970 ms
Loss rate: 0.05%
```
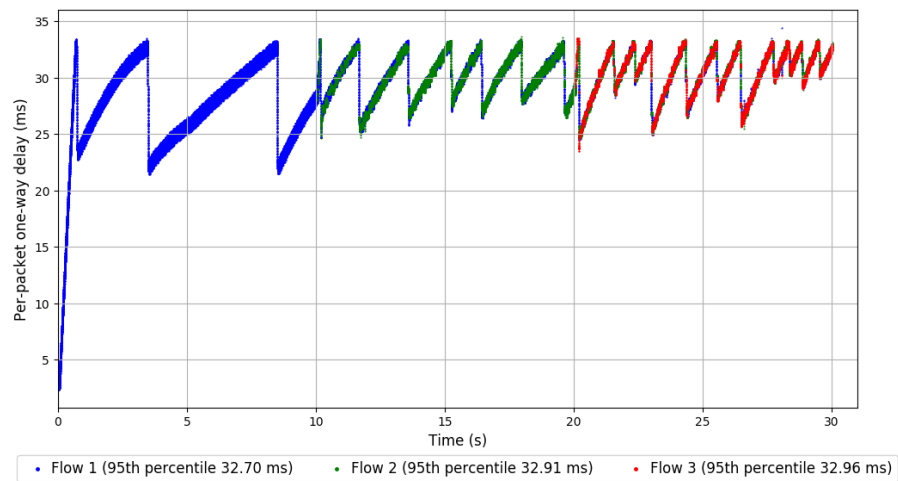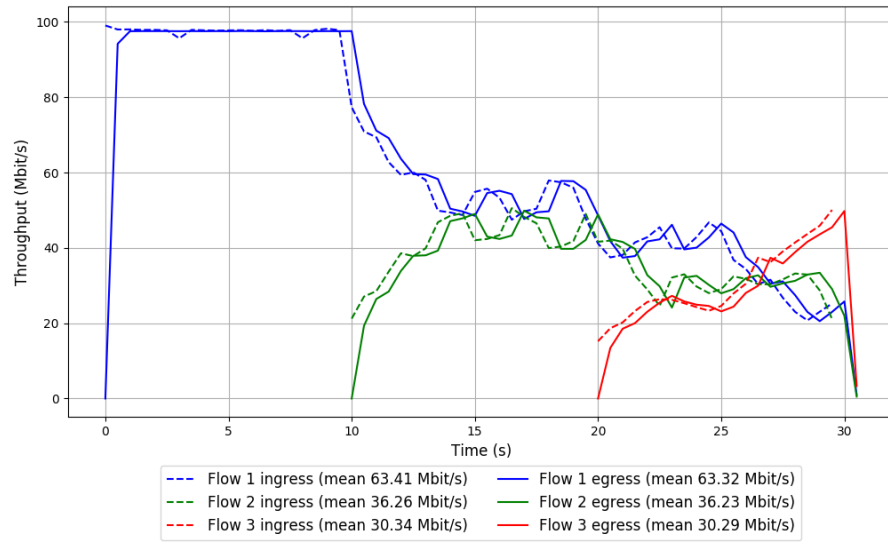
Run 4: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 61.77 Mbit/s)   Flow 1 egress (mean 61.69 Mbit/s)
Flow 2 ingress (mean 41.87 Mbit/s)   Flow 2 egress (mean 41.83 Mbit/s)
Flow 3 ingress (mean 23.92 Mbit/s)   Flow 3 egress (mean 23.90 Mbit/s)

Flow 1 (95th percentile 32.70 ms)   Flow 2 (95th percentile 32.77 ms)   Flow 3 (95th percentile 32.97 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2018-07-03 19:46:37
End at: 2018-07-03 19:47:07
Local clock offset: -1.982 ms
Remote clock offset: -1.355 ms


# Below is generated by plot.py at 2018-07-03 21:39:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 32.747 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 63.32 Mbit/s
95th percentile per-packet one-way delay: 32.702 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 36.23 Mbit/s
95th percentile per-packet one-way delay: 32.915 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 30.29 Mbit/s
95th percentile per-packet one-way delay: 32.962 ms
Loss rate: 0.12%
```
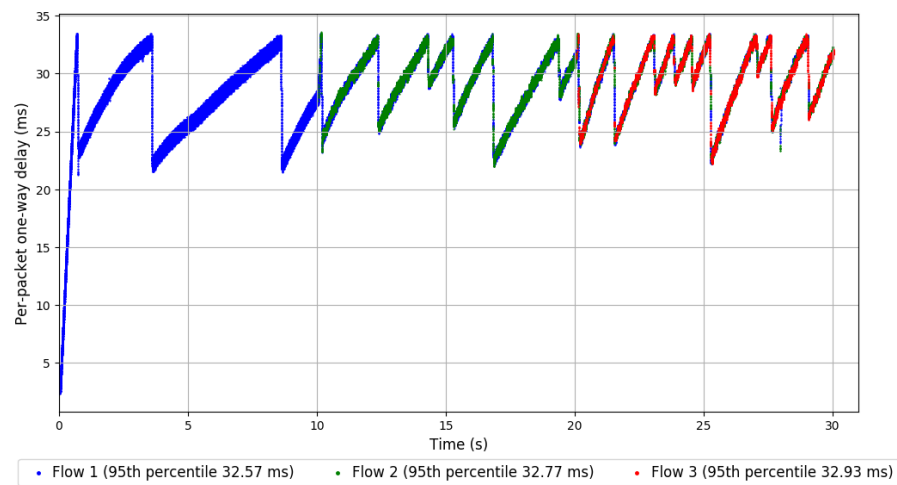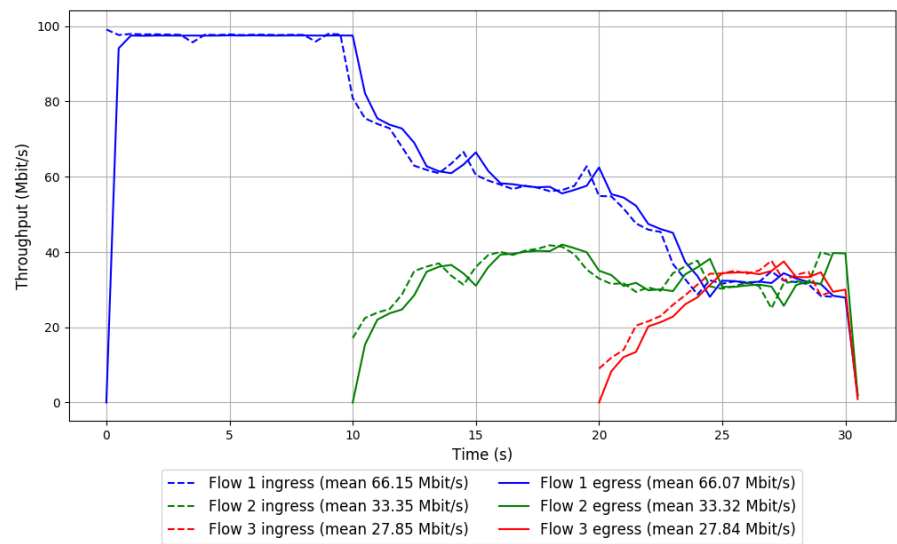
Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 63.41 Mbit/s)   Flow 1 egress (mean 63.32 Mbit/s)
Flow 2 ingress (mean 36.26 Mbit/s)   Flow 2 egress (mean 36.23 Mbit/s)
Flow 3 ingress (mean 30.34 Mbit/s)   Flow 3 egress (mean 30.29 Mbit/s)

Flow 1 (95th percentile 32.70 ms)   Flow 2 (95th percentile 32.91 ms)   Flow 3 (95th percentile 32.96 ms)

```
Run 6: Statistics of TCP Cubic

Start at: 2018-07-03 20:05:50
End at: 2018-07-03 20:06:20
Local clock offset: -1.94 ms
Remote clock offset: -2.518 ms


# Below is generated by plot.py at 2018-07-03 21:39:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 32.728 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 66.07 Mbit/s
95th percentile per-packet one-way delay: 32.572 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 33.32 Mbit/s
95th percentile per-packet one-way delay: 32.769 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 27.84 Mbit/s
95th percentile per-packet one-way delay: 32.929 ms
Loss rate: 0.03%
```
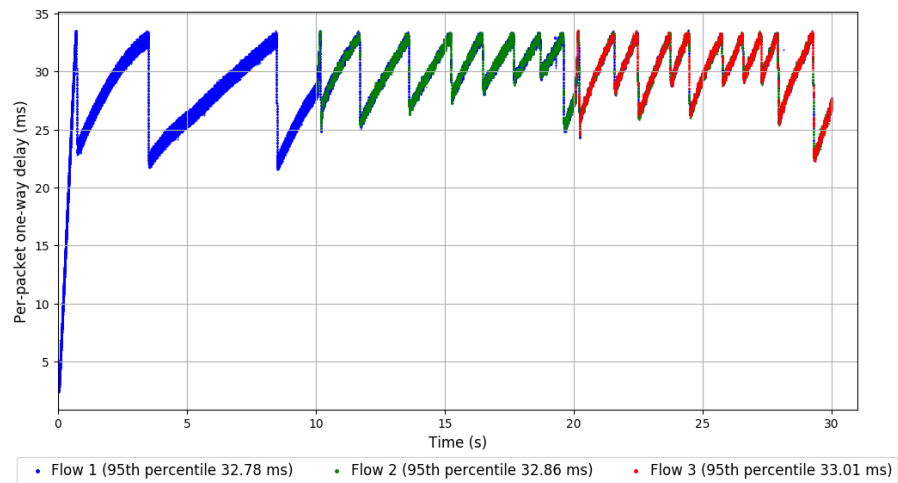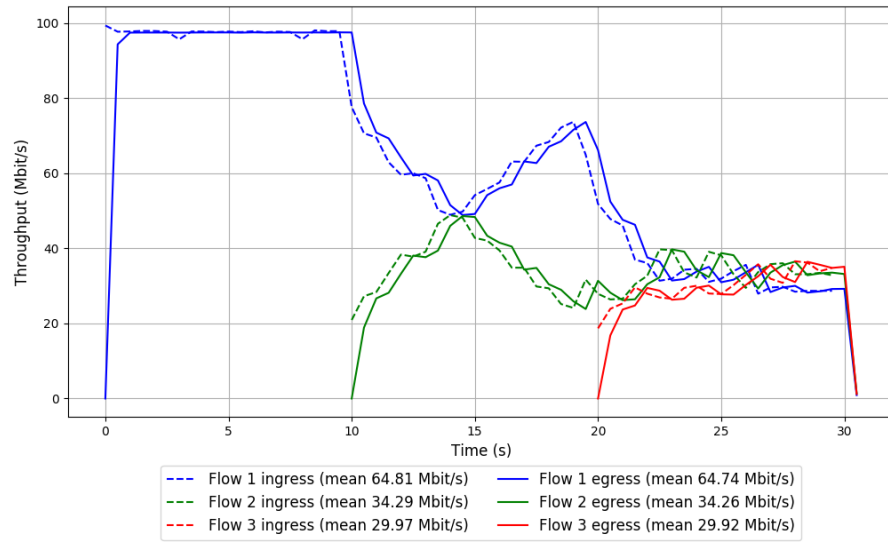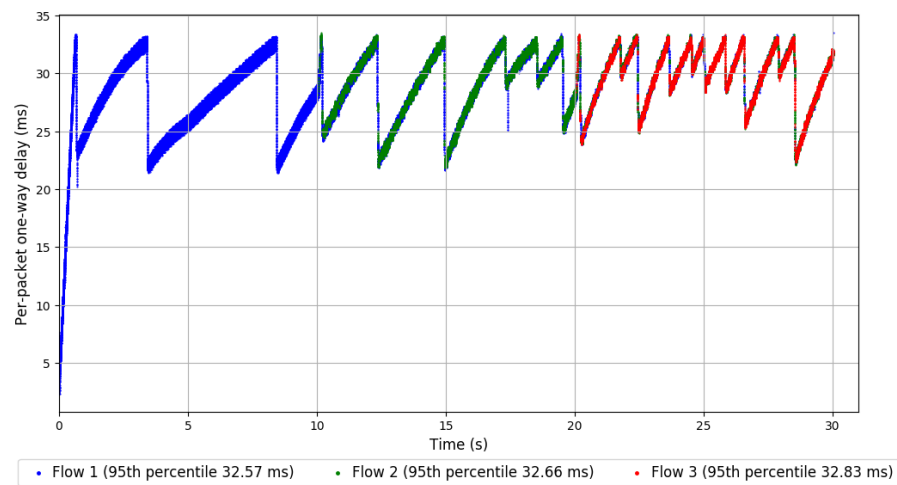
Run 6: Report of TCP Cubic — Data Link

- - - Flow 1 ingress (mean 66.15 Mbit/s) —— Flow 1 egress (mean 66.07 Mbit/s)
- - - Flow 2 ingress (mean 33.35 Mbit/s) —— Flow 2 egress (mean 33.32 Mbit/s)
- - - Flow 3 ingress (mean 27.85 Mbit/s) —— Flow 3 egress (mean 27.84 Mbit/s)

• Flow 1 (95th percentile 32.57 ms)   • Flow 2 (95th percentile 32.77 ms)   • Flow 3 (95th percentile 32.93 ms)

```
Run 7: Statistics of TCP Cubic

Start at: 2018-07-03 20:25:03
End at: 2018-07-03 20:25:33
Local clock offset: -1.89 ms
Remote clock offset: -2.828 ms


# Below is generated by plot.py at 2018-07-03 21:39:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 32.810 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 64.74 Mbit/s
95th percentile per-packet one-way delay: 32.783 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 34.26 Mbit/s
95th percentile per-packet one-way delay: 32.862 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 29.92 Mbit/s
95th percentile per-packet one-way delay: 33.005 ms
Loss rate: 0.17%
```
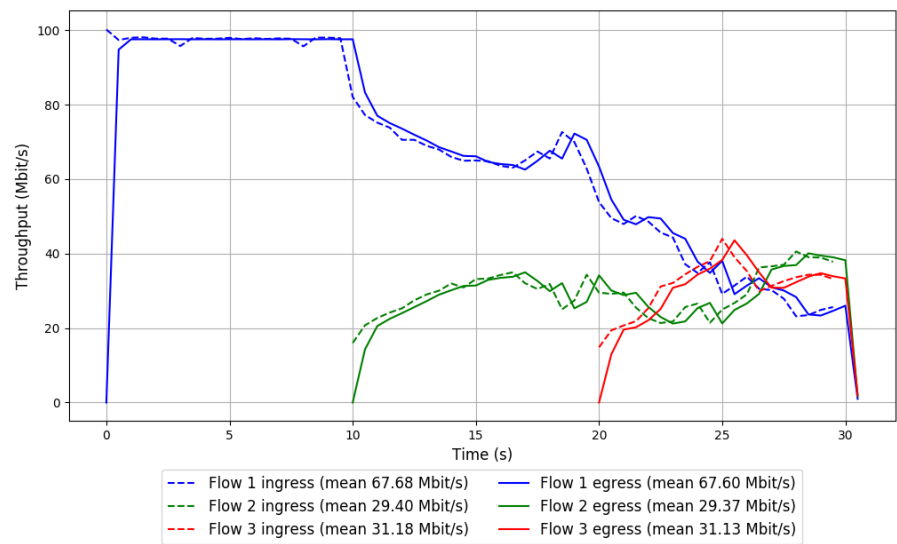
Run 7: Report of TCP Cubic — Data Link

Throughput (Mbit/s) vs Time (s)

- - - Flow 1 ingress (mean 64.81 Mbit/s)   —— Flow 1 egress (mean 64.74 Mbit/s)
- - - Flow 2 ingress (mean 34.29 Mbit/s)   —— Flow 2 egress (mean 34.26 Mbit/s)
- - - Flow 3 ingress (mean 29.97 Mbit/s)   —— Flow 3 egress (mean 29.92 Mbit/s)

Per-packet one-way delay (ms) vs Time (s)

• Flow 1 (95th percentile 32.78 ms)   • Flow 2 (95th percentile 32.86 ms)   • Flow 3 (95th percentile 33.01 ms)

```
Run 8: Statistics of TCP Cubic

Start at: 2018-07-03 20:44:16
End at: 2018-07-03 20:44:46
Local clock offset: -2.134 ms
Remote clock offset: -2.975 ms

# Below is generated by plot.py at 2018-07-03 21:39:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 32.626 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 67.60 Mbit/s
95th percentile per-packet one-way delay: 32.570 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 29.37 Mbit/s
95th percentile per-packet one-way delay: 32.665 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 31.13 Mbit/s
95th percentile per-packet one-way delay: 32.827 ms
Loss rate: 0.14%
```
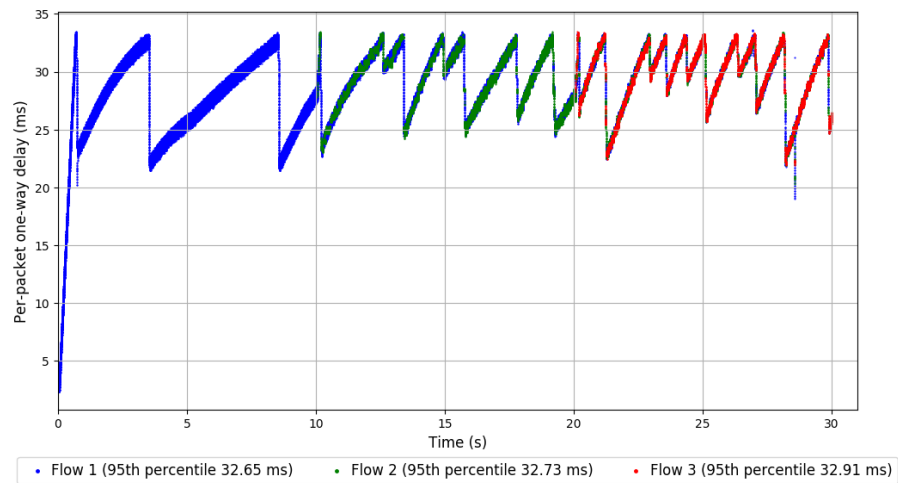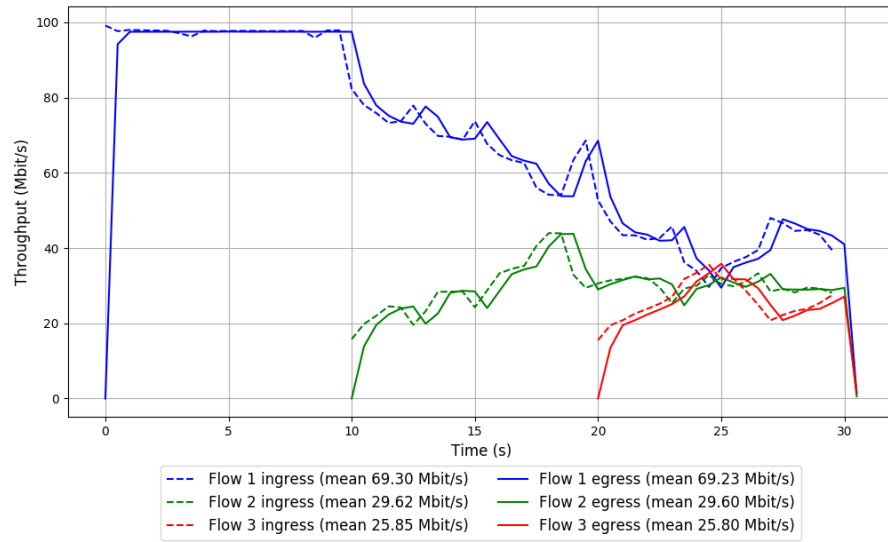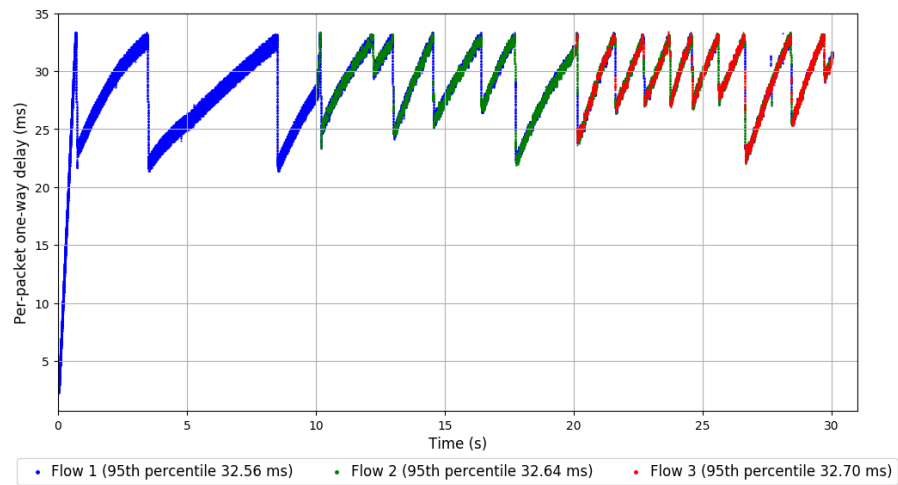
Run 8: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 67.68 Mbit/s) --- Flow 1 egress (mean 67.60 Mbit/s)
Flow 2 ingress (mean 29.40 Mbit/s) --- Flow 2 egress (mean 29.37 Mbit/s)
Flow 3 ingress (mean 31.18 Mbit/s) --- Flow 3 egress (mean 31.13 Mbit/s)

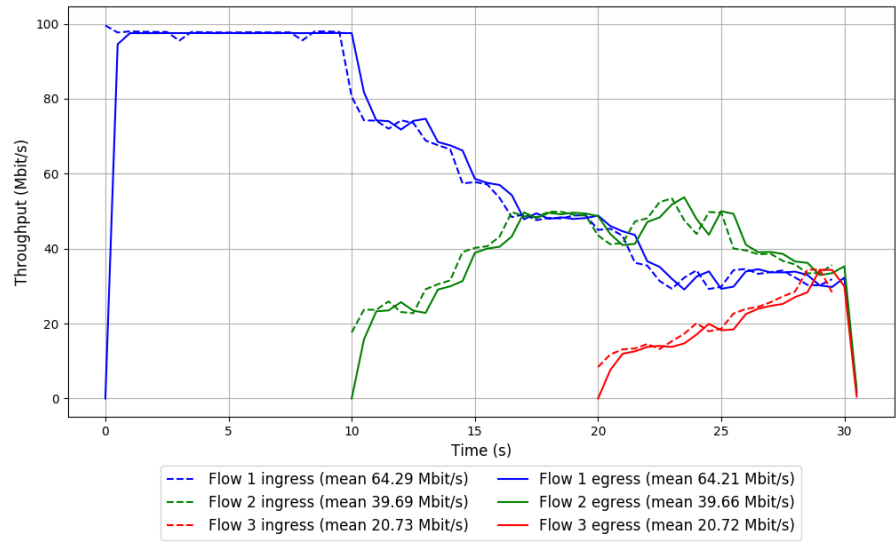Flow 1 (95th percentile 32.57 ms)   Flow 2 (95th percentile 32.66 ms)   Flow 3 (95th percentile 32.83 ms)

```
Run 9: Statistics of TCP Cubic

Start at: 2018-07-03 21:03:29
End at: 2018-07-03 21:03:59
Local clock offset: -2.848 ms
Remote clock offset: -2.73 ms


# Below is generated by plot.py at 2018-07-03 21:39:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 32.681 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 69.23 Mbit/s
95th percentile per-packet one-way delay: 32.652 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 29.60 Mbit/s
95th percentile per-packet one-way delay: 32.729 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 25.80 Mbit/s
95th percentile per-packet one-way delay: 32.905 ms
Loss rate: 0.20%
```
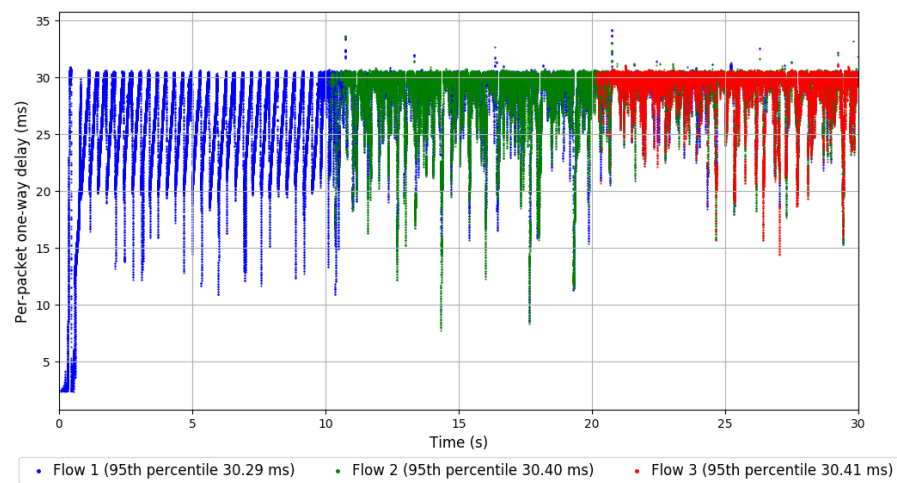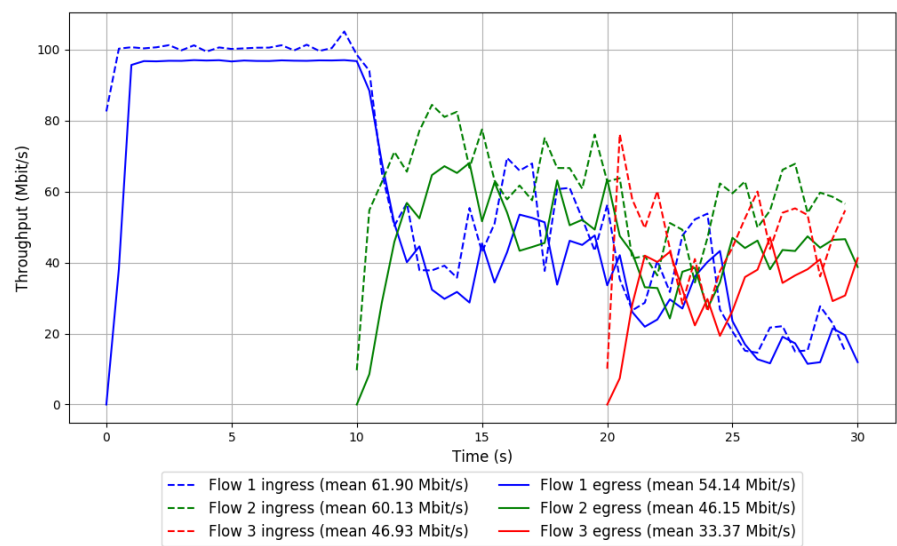
Run 9: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 69.30 Mbit/s) ----   Flow 1 egress (mean 69.23 Mbit/s) ——
Flow 2 ingress (mean 29.62 Mbit/s) ----   Flow 2 egress (mean 29.60 Mbit/s) ——
Flow 3 ingress (mean 25.85 Mbit/s) ----   Flow 3 egress (mean 25.80 Mbit/s) ——

• Flow 1 (95th percentile 32.65 ms)   • Flow 2 (95th percentile 32.73 ms)   • Flow 3 (95th percentile 32.91 ms)

```
Run 10: Statistics of TCP Cubic

Start at: 2018-07-03 21:22:42
End at: 2018-07-03 21:23:12
Local clock offset: -2.832 ms
Remote clock offset: -2.568 ms


# Below is generated by plot.py at 2018-07-03 21:39:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.49 Mbit/s
95th percentile per-packet one-way delay: 32.612 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 64.21 Mbit/s
95th percentile per-packet one-way delay: 32.563 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 39.66 Mbit/s
95th percentile per-packet one-way delay: 32.644 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 20.72 Mbit/s
95th percentile per-packet one-way delay: 32.704 ms
Loss rate: 0.06%
```
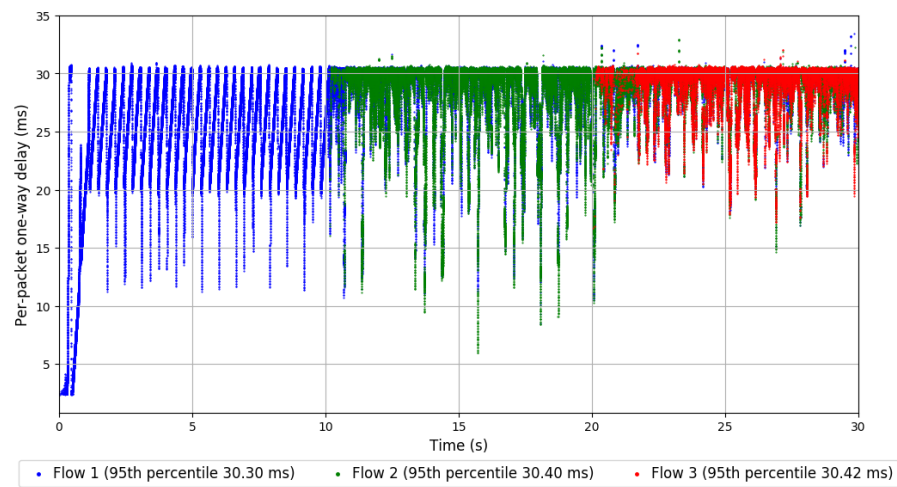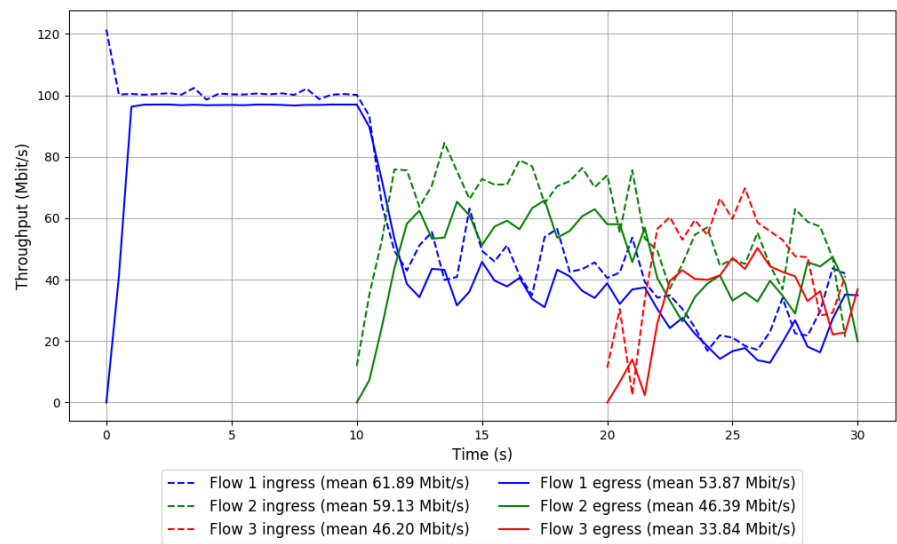
Run 10: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 64.29 Mbit/s) ---- Flow 1 egress (mean 64.21 Mbit/s)
Flow 2 ingress (mean 39.69 Mbit/s) ---- Flow 2 egress (mean 39.66 Mbit/s)
Flow 3 ingress (mean 20.73 Mbit/s) ---- Flow 3 egress (mean 20.72 Mbit/s)

Flow 1 (95th percentile 32.56 ms)   Flow 2 (95th percentile 32.64 ms)   Flow 3 (95th percentile 32.70 ms)

63

```
Run 1: Statistics of FillP

Start at: 2018-07-03 18:33:05
End at: 2018-07-03 18:33:35
Local clock offset: -2.276 ms
Remote clock offset: -2.703 ms


# Below is generated by plot.py at 2018-07-03 21:41:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.88 Mbit/s
95th percentile per-packet one-way delay: 30.363 ms
Loss rate: 18.31%
-- Flow 1:
Average throughput: 54.14 Mbit/s
95th percentile per-packet one-way delay: 30.289 ms
Loss rate: 12.46%
-- Flow 2:
Average throughput: 46.15 Mbit/s
95th percentile per-packet one-way delay: 30.398 ms
Loss rate: 23.25%
-- Flow 3:
Average throughput: 33.37 Mbit/s
95th percentile per-packet one-way delay: 30.413 ms
Loss rate: 28.88%
```
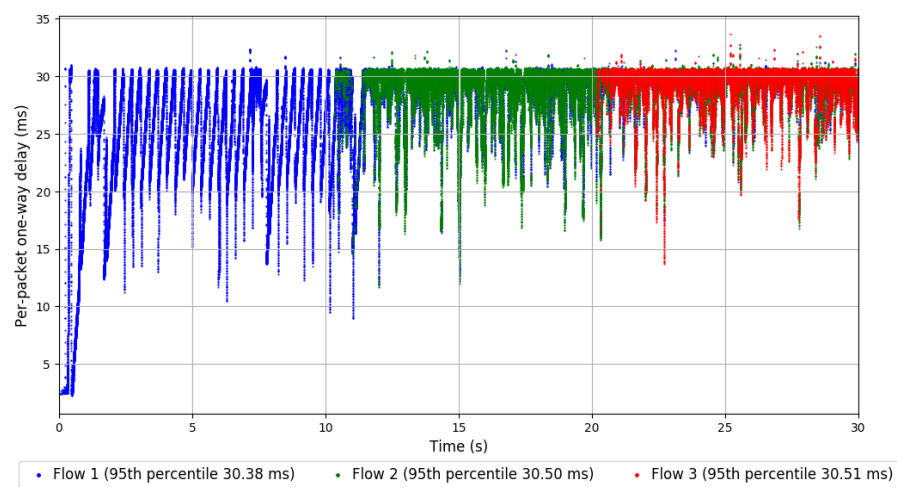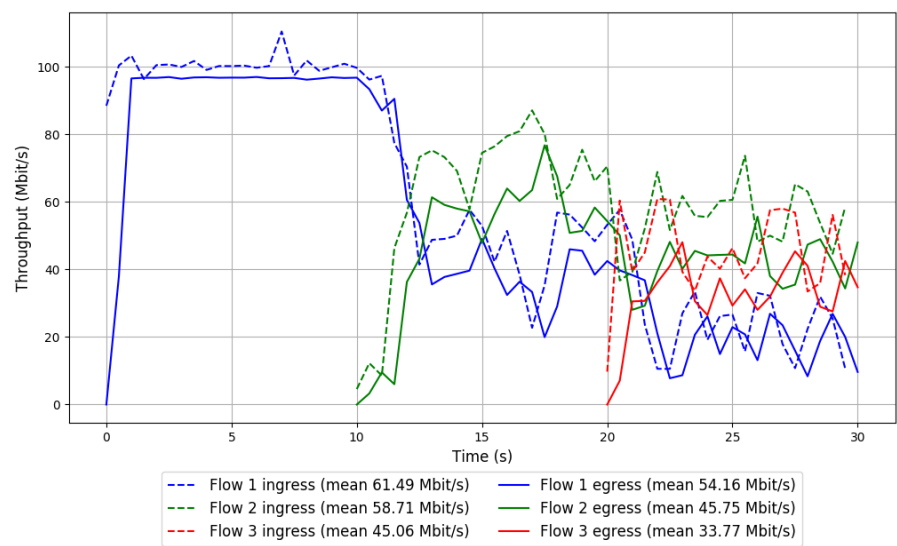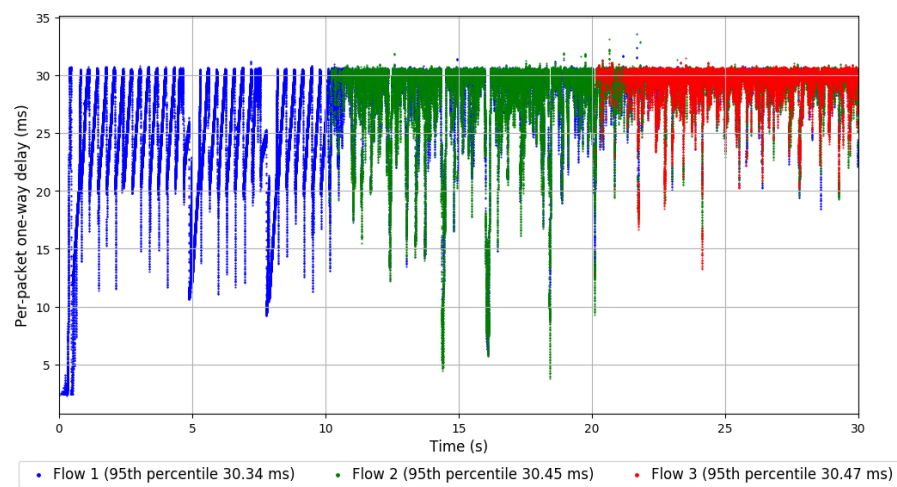
Run 1: Report of FillP — Data Link

- - - Flow 1 ingress (mean 61.90 Mbit/s)   —— Flow 1 egress (mean 54.14 Mbit/s)
- - - Flow 2 ingress (mean 60.13 Mbit/s)   —— Flow 2 egress (mean 46.15 Mbit/s)
- - - Flow 3 ingress (mean 46.93 Mbit/s)   —— Flow 3 egress (mean 33.37 Mbit/s)

· Flow 1 (95th percentile 30.29 ms)   · Flow 2 (95th percentile 30.40 ms)   · Flow 3 (95th percentile 30.41 ms)

```
Run 2: Statistics of FillP

Start at: 2018-07-03 18:52:18
End at: 2018-07-03 18:52:48
Local clock offset: -3.115 ms
Remote clock offset: -2.259 ms


# Below is generated by plot.py at 2018-07-03 21:41:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.96 Mbit/s
95th percentile per-packet one-way delay: 30.371 ms
Loss rate: 17.63%
-- Flow 1:
Average throughput: 53.87 Mbit/s
95th percentile per-packet one-way delay: 30.303 ms
Loss rate: 12.88%
-- Flow 2:
Average throughput: 46.39 Mbit/s
95th percentile per-packet one-way delay: 30.399 ms
Loss rate: 21.54%
-- Flow 3:
Average throughput: 33.84 Mbit/s
95th percentile per-packet one-way delay: 30.420 ms
Loss rate: 26.73%
```
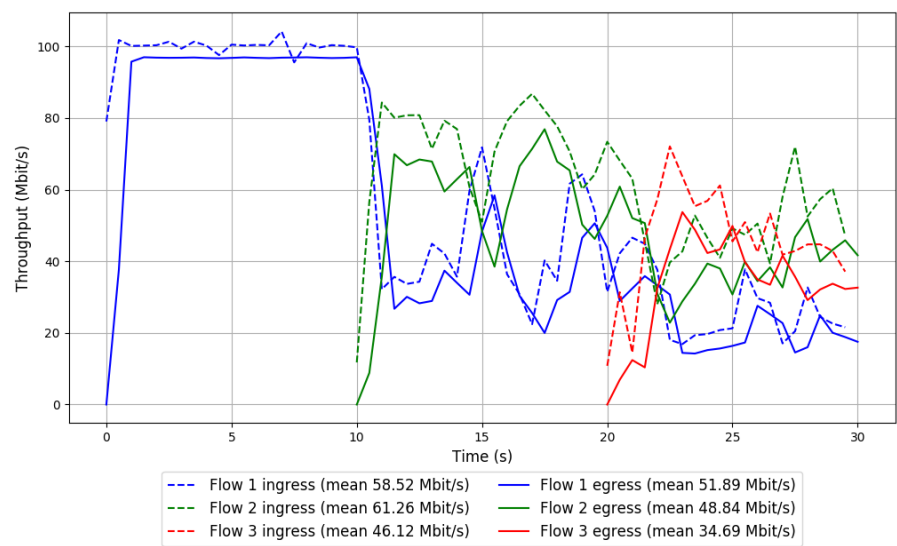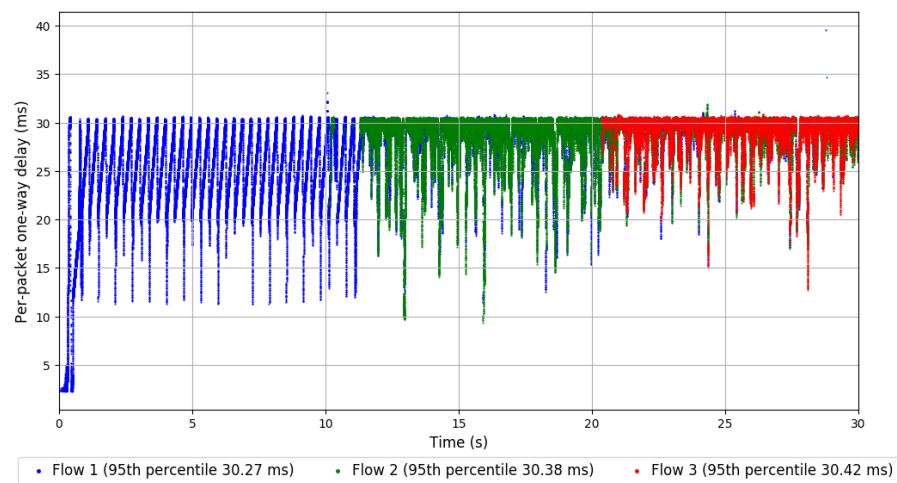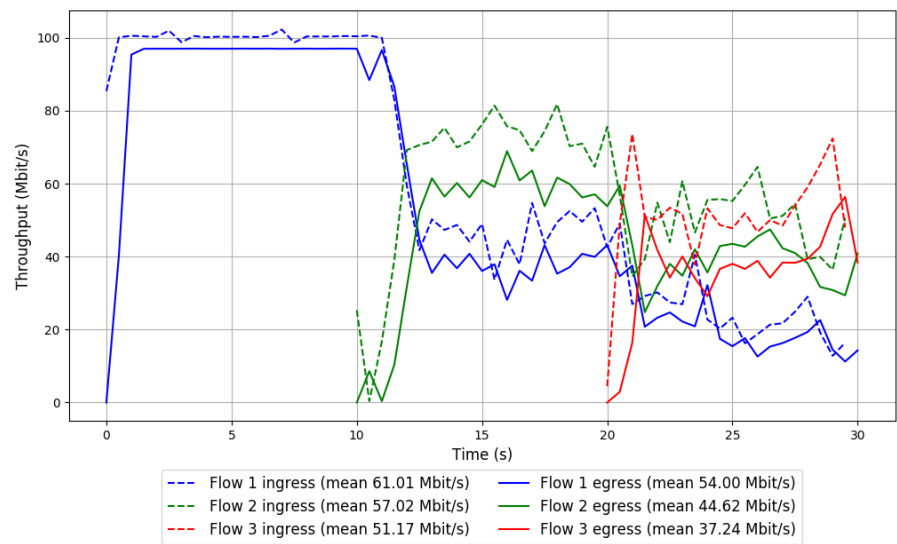
Run 2: Report of FillP — Data Link

Flow 1 ingress (mean 61.89 Mbit/s) Flow 1 egress (mean 53.87 Mbit/s)
Flow 2 ingress (mean 59.13 Mbit/s) Flow 2 egress (mean 46.39 Mbit/s)
Flow 3 ingress (mean 46.20 Mbit/s) Flow 3 egress (mean 33.84 Mbit/s)

Flow 1 (95th percentile 30.30 ms) Flow 2 (95th percentile 30.40 ms) Flow 3 (95th percentile 30.42 ms)

```
Run 3: Statistics of FillP

Start at: 2018-07-03 19:11:31
End at: 2018-07-03 19:12:01
Local clock offset: -3.28 ms
Remote clock offset: -1.88 ms


# Below is generated by plot.py at 2018-07-03 21:41:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.77 Mbit/s
95th percentile per-packet one-way delay: 30.455 ms
Loss rate: 17.01%
-- Flow 1:
Average throughput: 54.16 Mbit/s
95th percentile per-packet one-way delay: 30.376 ms
Loss rate: 11.84%
-- Flow 2:
Average throughput: 45.75 Mbit/s
95th percentile per-packet one-way delay: 30.498 ms
Loss rate: 22.07%
-- Flow 3:
Average throughput: 33.77 Mbit/s
95th percentile per-packet one-way delay: 30.508 ms
Loss rate: 25.07%
```
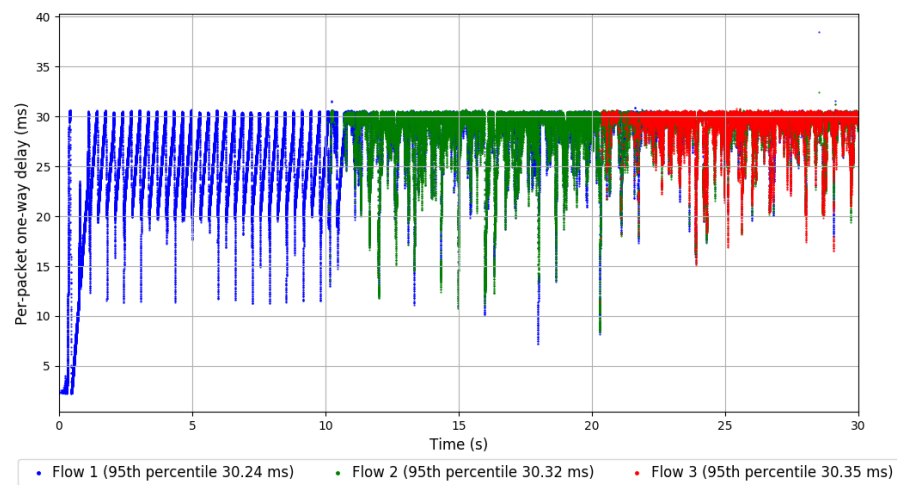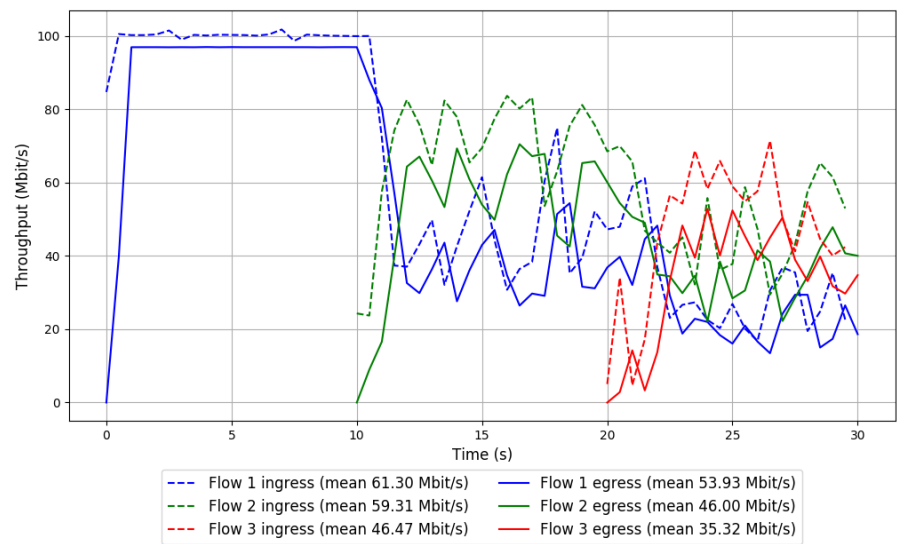
Run 3: Report of FillP — Data Link

Flow 1 ingress (mean 61.49 Mbit/s) --- Flow 1 egress (mean 54.16 Mbit/s)
Flow 2 ingress (mean 58.71 Mbit/s) --- Flow 2 egress (mean 45.75 Mbit/s)
Flow 3 ingress (mean 45.06 Mbit/s) --- Flow 3 egress (mean 33.77 Mbit/s)

Flow 1 (95th percentile 30.38 ms) • Flow 2 (95th percentile 30.50 ms) • Flow 3 (95th percentile 30.51 ms)

69

```
Run 4: Statistics of FillP

Start at: 2018-07-03 19:30:44
End at: 2018-07-03 19:31:14
Local clock offset: -2.16 ms
Remote clock offset: -1.605 ms

# Below is generated by plot.py at 2018-07-03 21:41:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.87 Mbit/s
95th percentile per-packet one-way delay: 30.418 ms
Loss rate: 16.29%
-- Flow 1:
Average throughput: 51.89 Mbit/s
95th percentile per-packet one-way delay: 30.342 ms
Loss rate: 11.28%
-- Flow 2:
Average throughput: 48.84 Mbit/s
95th percentile per-packet one-way delay: 30.452 ms
Loss rate: 20.29%
-- Flow 3:
Average throughput: 34.69 Mbit/s
95th percentile per-packet one-way delay: 30.473 ms
Loss rate: 24.82%
```
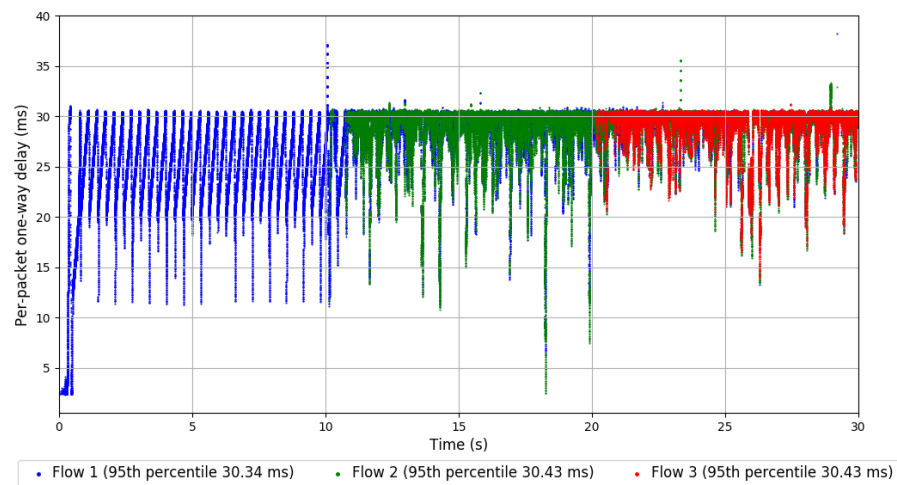
Run 4: Report of FillP — Data Link

Flow 1 ingress (mean 58.52 Mbit/s) — Flow 1 egress (mean 51.89 Mbit/s)
Flow 2 ingress (mean 61.26 Mbit/s) — Flow 2 egress (mean 48.84 Mbit/s)
Flow 3 ingress (mean 46.12 Mbit/s) — Flow 3 egress (mean 34.69 Mbit/s)

Flow 1 (95th percentile 30.34 ms)   Flow 2 (95th percentile 30.45 ms)   Flow 3 (95th percentile 30.47 ms)

```
Run 5: Statistics of FillP

Start at: 2018-07-03 19:49:56
End at: 2018-07-03 19:50:26
Local clock offset: -1.994 ms
Remote clock offset: -1.428 ms


# Below is generated by plot.py at 2018-07-03 21:41:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.01 Mbit/s
95th percentile per-packet one-way delay: 30.352 ms
Loss rate: 17.10%
-- Flow 1:
Average throughput: 54.00 Mbit/s
95th percentile per-packet one-way delay: 30.271 ms
Loss rate: 11.41%
-- Flow 2:
Average throughput: 44.62 Mbit/s
95th percentile per-packet one-way delay: 30.379 ms
Loss rate: 21.74%
-- Flow 3:
Average throughput: 37.24 Mbit/s
95th percentile per-packet one-way delay: 30.419 ms
Loss rate: 27.21%
```
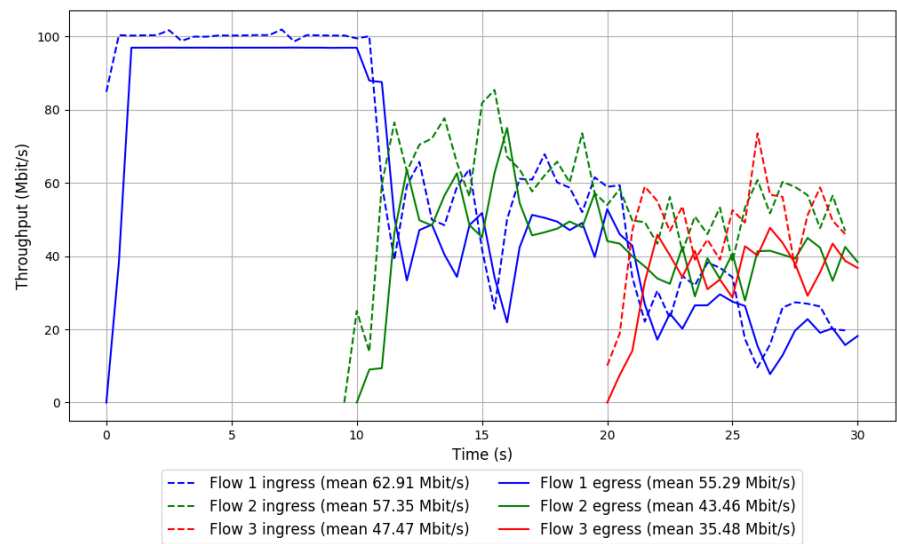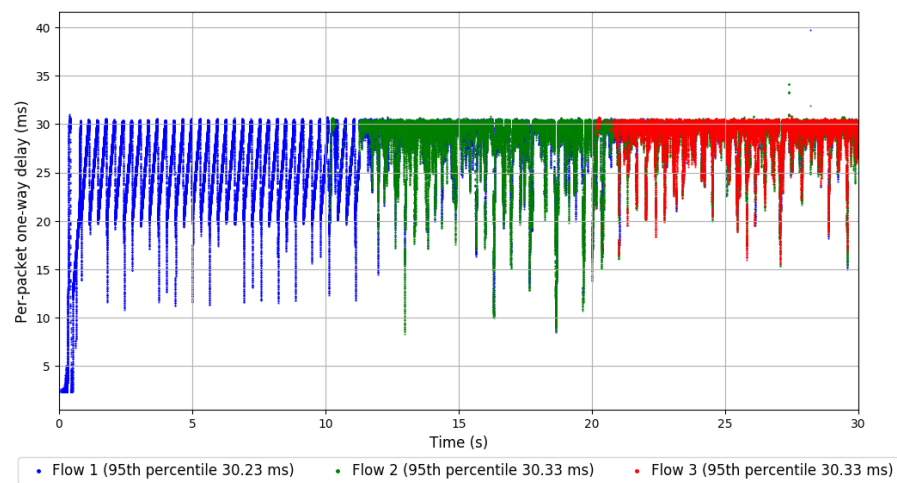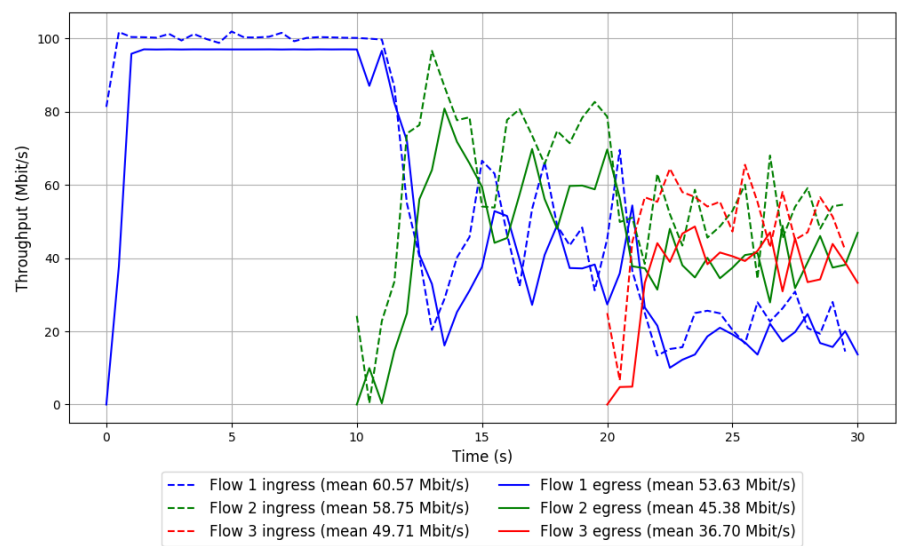
Run 5: Report of FillP — Data Link

Flow 1 ingress (mean 61.01 Mbit/s) — — — Flow 1 egress (mean 54.00 Mbit/s) ——
Flow 2 ingress (mean 57.02 Mbit/s) — — — Flow 2 egress (mean 44.62 Mbit/s) ——
Flow 3 ingress (mean 51.17 Mbit/s) — — — Flow 3 egress (mean 37.24 Mbit/s) ——

Flow 1 (95th percentile 30.27 ms)   Flow 2 (95th percentile 30.38 ms)   Flow 3 (95th percentile 30.42 ms)

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```
Run 6: Statistics of FillP

Start at: 2018-07-03 20:09:09
End at: 2018-07-03 20:09:39
Local clock offset: -1.922 ms
Remote clock offset: -2.662 ms


# Below is generated by plot.py at 2018-07-03 21:41:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.03 Mbit/s
95th percentile per-packet one-way delay: 30.292 ms
Loss rate: 17.31%
-- Flow 1:
Average throughput: 53.93 Mbit/s
95th percentile per-packet one-way delay: 30.239 ms
Loss rate: 11.94%
-- Flow 2:
Average throughput: 46.00 Mbit/s
95th percentile per-packet one-way delay: 30.317 ms
Loss rate: 22.43%
-- Flow 3:
Average throughput: 35.32 Mbit/s
95th percentile per-packet one-way delay: 30.346 ms
Loss rate: 25.53%
```
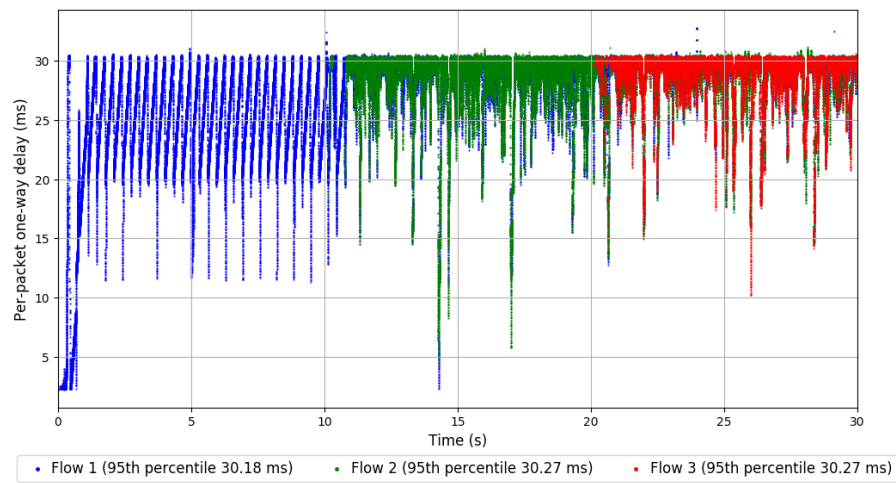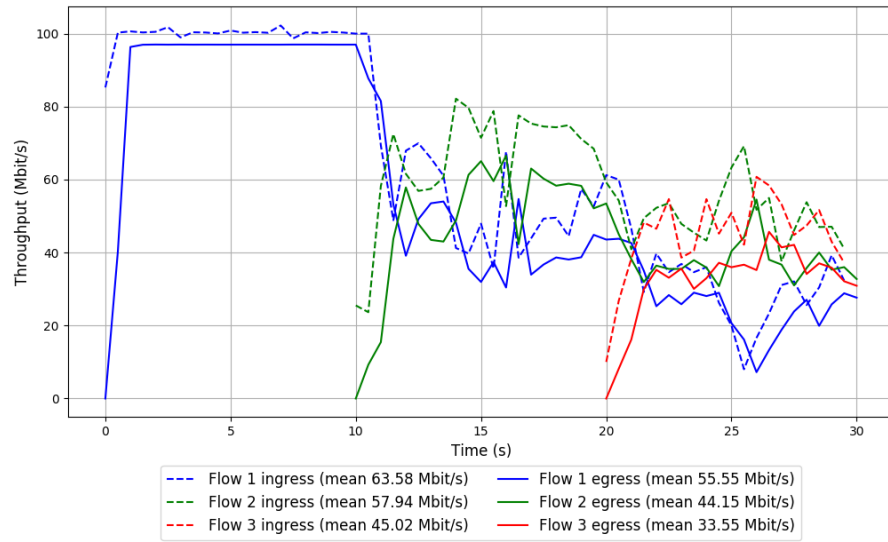
Run 6: Report of FillP — Data Link

Flow 1 ingress (mean 61.30 Mbit/s) --- Flow 1 egress (mean 53.93 Mbit/s)
Flow 2 ingress (mean 59.31 Mbit/s) --- Flow 2 egress (mean 46.00 Mbit/s)
Flow 3 ingress (mean 46.47 Mbit/s) --- Flow 3 egress (mean 35.32 Mbit/s)

Flow 1 (95th percentile 30.24 ms)   Flow 2 (95th percentile 30.32 ms)   Flow 3 (95th percentile 30.35 ms)

```
Run 7: Statistics of FillP

Start at: 2018-07-03 20:28:22
End at: 2018-07-03 20:28:52
Local clock offset: -1.848 ms
Remote clock offset: -2.83 ms


# Below is generated by plot.py at 2018-07-03 21:41:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.99 Mbit/s
95th percentile per-packet one-way delay: 30.398 ms
Loss rate: 17.79%
-- Flow 1:
Average throughput: 55.29 Mbit/s
95th percentile per-packet one-way delay: 30.341 ms
Loss rate: 12.02%
-- Flow 2:
Average throughput: 43.46 Mbit/s
95th percentile per-packet one-way delay: 30.429 ms
Loss rate: 24.22%
-- Flow 3:
Average throughput: 35.48 Mbit/s
95th percentile per-packet one-way delay: 30.432 ms
Loss rate: 25.24%
```
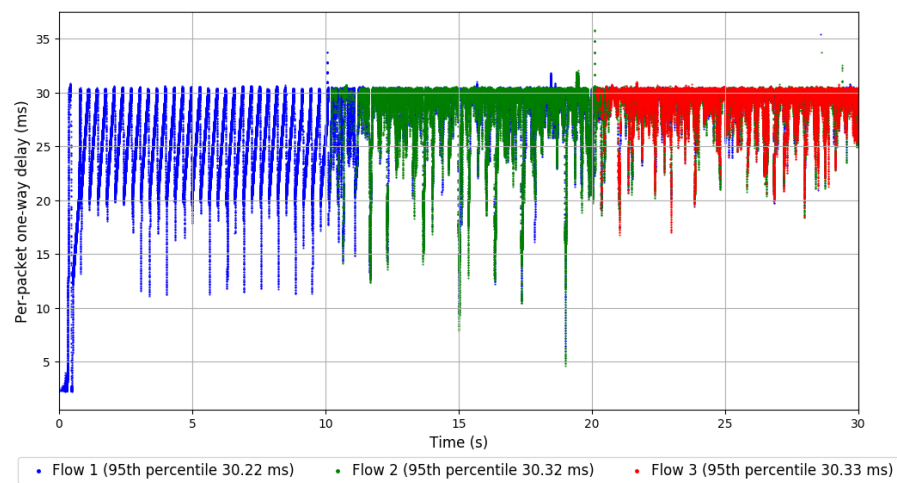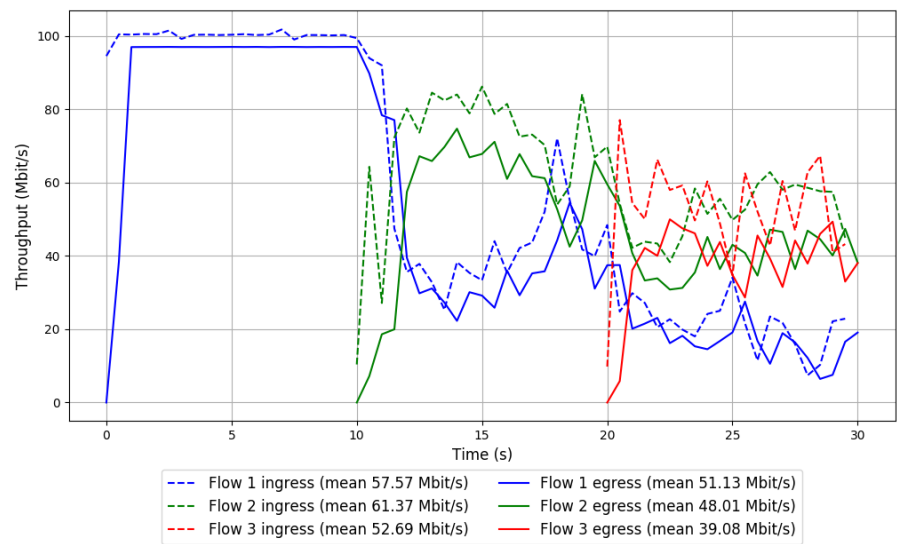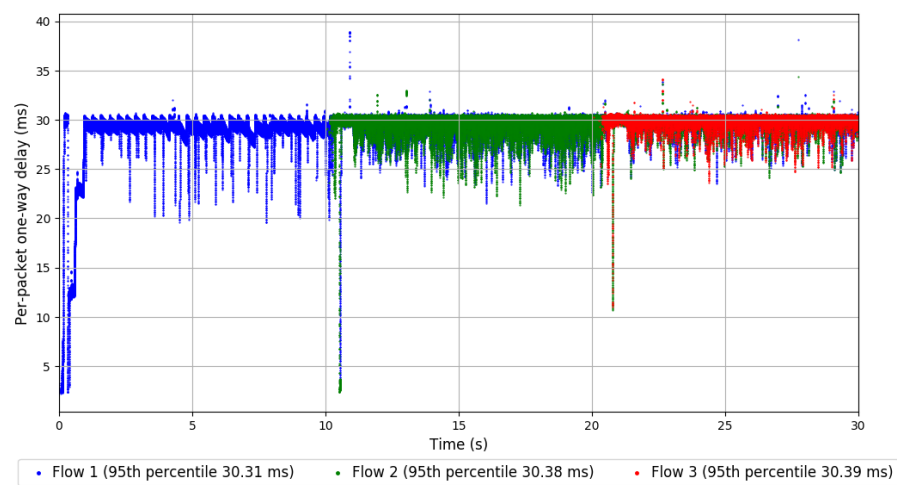
Run 7: Report of FillP — Data Link

Flow 1 ingress (mean 62.91 Mbit/s) --- Flow 1 egress (mean 55.29 Mbit/s)
Flow 2 ingress (mean 57.35 Mbit/s) --- Flow 2 egress (mean 43.46 Mbit/s)
Flow 3 ingress (mean 47.47 Mbit/s) --- Flow 3 egress (mean 35.48 Mbit/s)

Flow 1 (95th percentile 30.34 ms) · Flow 2 (95th percentile 30.43 ms) · Flow 3 (95th percentile 30.43 ms)

```
Run 8: Statistics of FillP

Start at: 2018-07-03 20:47:35
End at: 2018-07-03 20:48:05
Local clock offset: -2.388 ms
Remote clock offset: -2.969 ms

# Below is generated by plot.py at 2018-07-03 21:41:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.97 Mbit/s
95th percentile per-packet one-way delay: 30.295 ms
Loss rate: 17.31%
-- Flow 1:
Average throughput: 53.63 Mbit/s
95th percentile per-packet one-way delay: 30.225 ms
Loss rate: 11.39%
-- Flow 2:
Average throughput: 45.38 Mbit/s
95th percentile per-packet one-way delay: 30.328 ms
Loss rate: 22.75%
-- Flow 3:
Average throughput: 36.70 Mbit/s
95th percentile per-packet one-way delay: 30.333 ms
Loss rate: 26.14%
```
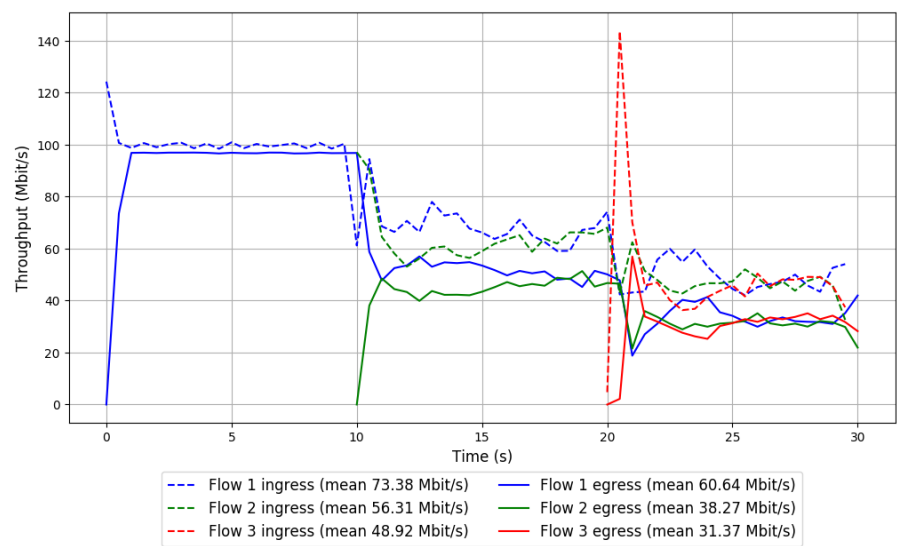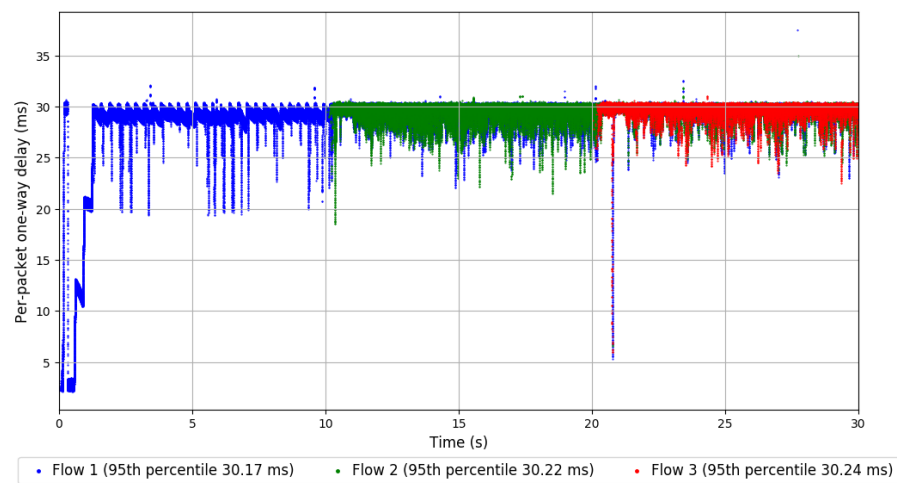
Run 8: Report of FillP — Data Link

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```
Run 9: Statistics of FillP

Start at: 2018-07-03 21:06:48
End at: 2018-07-03 21:07:18
Local clock offset: -2.897 ms
Remote clock offset: -2.694 ms


# Below is generated by plot.py at 2018-07-03 21:42:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.02 Mbit/s
95th percentile per-packet one-way delay: 30.240 ms
Loss rate: 17.89%
-- Flow 1:
Average throughput: 55.55 Mbit/s
95th percentile per-packet one-way delay: 30.177 ms
Loss rate: 12.54%
-- Flow 2:
Average throughput: 44.15 Mbit/s
95th percentile per-packet one-way delay: 30.273 ms
Loss rate: 23.78%
-- Flow 3:
Average throughput: 33.55 Mbit/s
95th percentile per-packet one-way delay: 30.274 ms
Loss rate: 25.46%
```
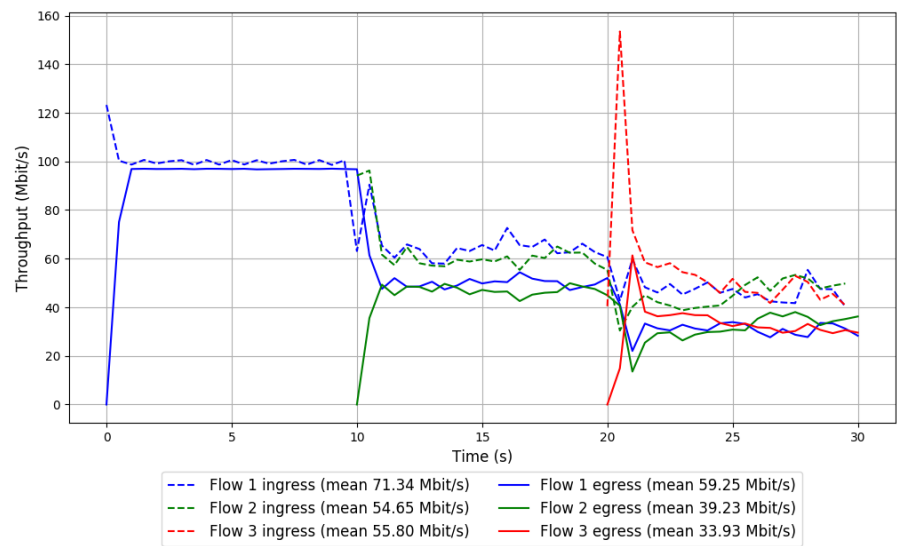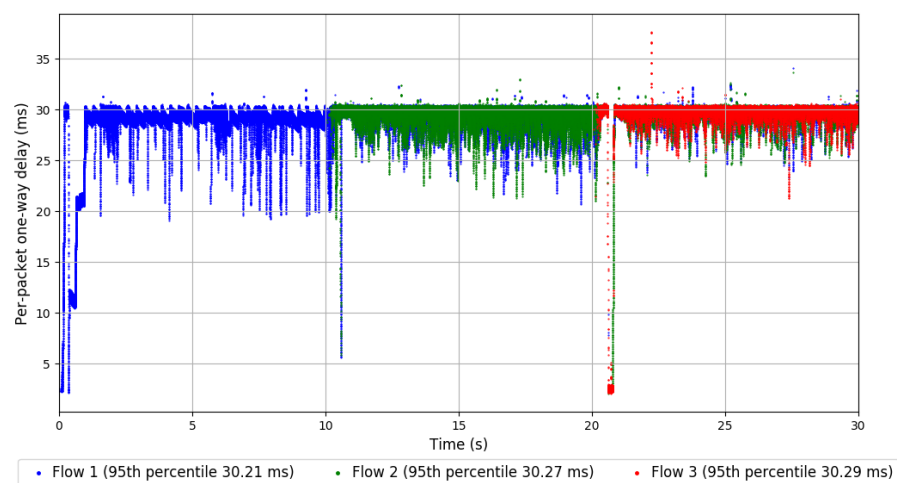
Run 9: Report of FillP — Data Link

Flow 1 ingress (mean 63.58 Mbit/s) --- Flow 1 egress (mean 55.55 Mbit/s) ---
Flow 2 ingress (mean 57.94 Mbit/s) --- Flow 2 egress (mean 44.15 Mbit/s) ---
Flow 3 ingress (mean 45.02 Mbit/s) --- Flow 3 egress (mean 33.55 Mbit/s) ---

Flow 1 (95th percentile 30.18 ms)   Flow 2 (95th percentile 30.27 ms)   Flow 3 (95th percentile 30.27 ms)

81

```
Run 10: Statistics of FillP

Start at: 2018-07-03 21:26:01
End at: 2018-07-03 21:26:31
Local clock offset: -2.829 ms
Remote clock offset: -2.53 ms

# Below is generated by plot.py at 2018-07-03 21:42:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.01 Mbit/s
95th percentile per-packet one-way delay: 30.292 ms
Loss rate: 17.08%
-- Flow 1:
Average throughput: 51.13 Mbit/s
95th percentile per-packet one-way delay: 30.219 ms
Loss rate: 11.12%
-- Flow 2:
Average throughput: 48.01 Mbit/s
95th percentile per-packet one-way delay: 30.322 ms
Loss rate: 21.76%
-- Flow 3:
Average throughput: 39.08 Mbit/s
95th percentile per-packet one-way delay: 30.329 ms
Loss rate: 25.81%
```
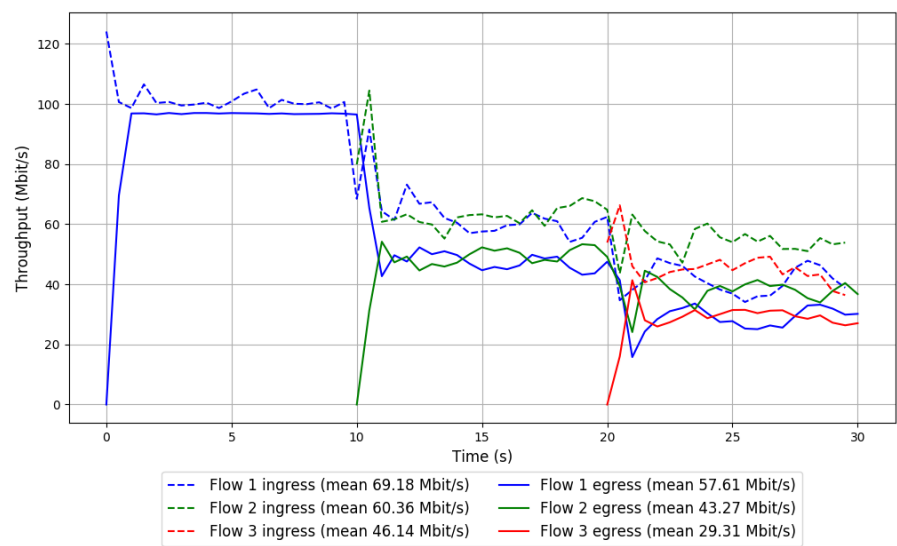
Run 10: Report of FillP — Data Link

Flow 1 ingress (mean 57.57 Mbit/s)   Flow 1 egress (mean 51.13 Mbit/s)
Flow 2 ingress (mean 61.37 Mbit/s)   Flow 2 egress (mean 48.01 Mbit/s)
Flow 3 ingress (mean 52.69 Mbit/s)   Flow 3 egress (mean 39.08 Mbit/s)

Flow 1 (95th percentile 30.22 ms)   Flow 2 (95th percentile 30.32 ms)   Flow 3 (95th percentile 30.33 ms)

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```
Run 1: Statistics of FillP-Sheep

Start at: 2018-07-03 18:27:29
End at: 2018-07-03 18:27:59
Local clock offset: -2.341 ms
Remote clock offset: -2.741 ms

# Below is generated by plot.py at 2018-07-03 21:43:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.48 Mbit/s
95th percentile per-packet one-way delay: 30.349 ms
Loss rate: 24.01%
-- Flow 1:
Average throughput: 60.64 Mbit/s
95th percentile per-packet one-way delay: 30.310 ms
Loss rate: 17.28%
-- Flow 2:
Average throughput: 38.27 Mbit/s
95th percentile per-packet one-way delay: 30.378 ms
Loss rate: 32.04%
-- Flow 3:
Average throughput: 31.37 Mbit/s
95th percentile per-packet one-way delay: 30.387 ms
Loss rate: 35.89%
```
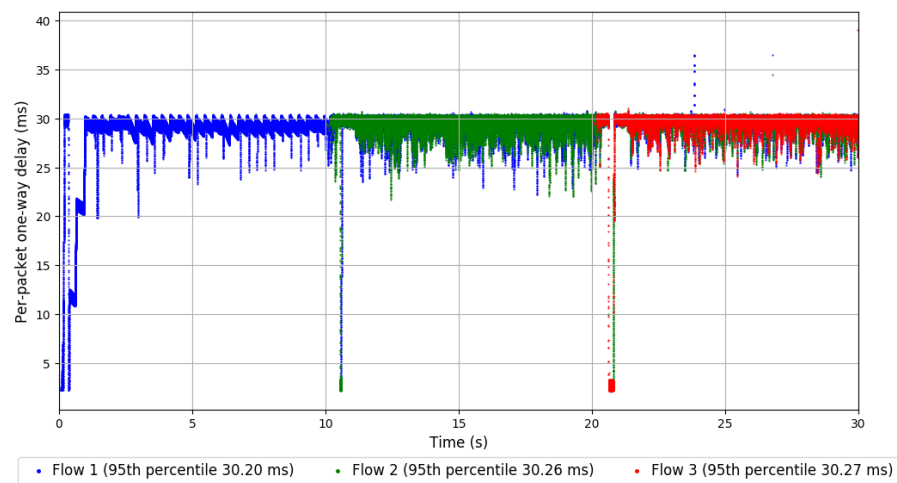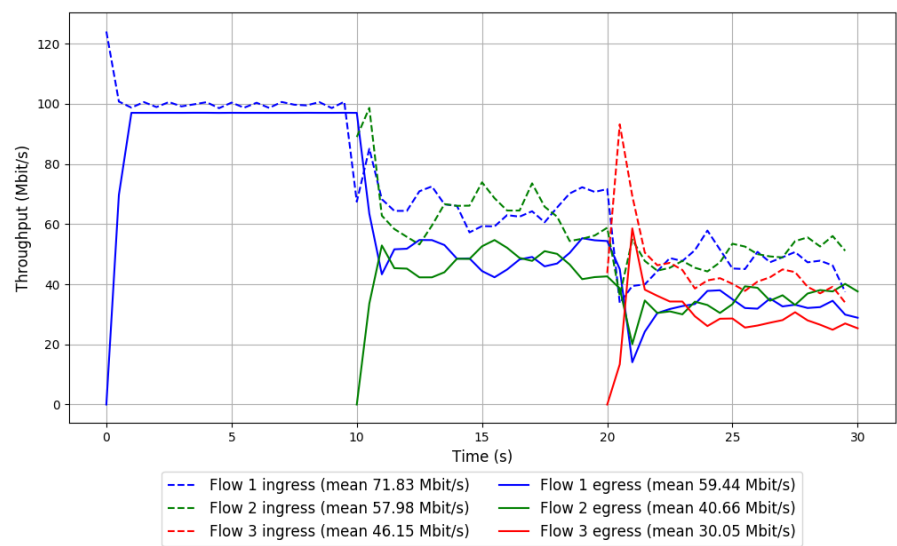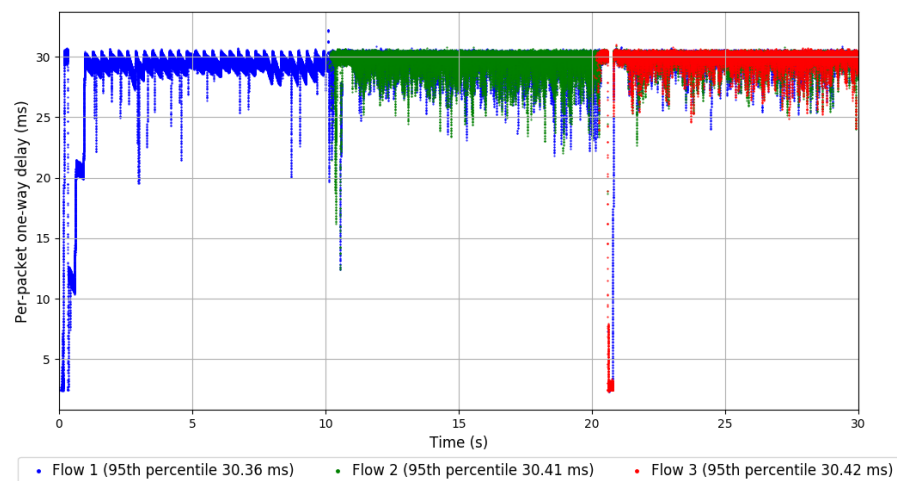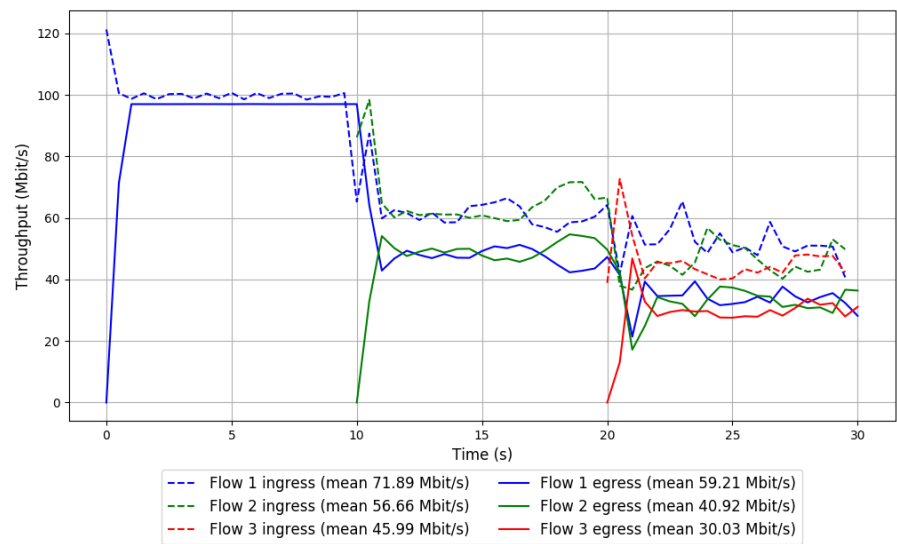
Run 1: Report of FillP-Sheep — Data Link

- - - Flow 1 ingress (mean 73.38 Mbit/s) ——— Flow 1 egress (mean 60.64 Mbit/s)
- - - Flow 2 ingress (mean 56.31 Mbit/s) ——— Flow 2 egress (mean 38.27 Mbit/s)
- - - Flow 3 ingress (mean 48.92 Mbit/s) ——— Flow 3 egress (mean 31.37 Mbit/s)

• Flow 1 (95th percentile 30.31 ms)　　• Flow 2 (95th percentile 30.38 ms)　　• Flow 3 (95th percentile 30.39 ms)

```
Run 2: Statistics of FillP-Sheep

Start at: 2018-07-03 18:46:42
End at: 2018-07-03 18:47:12
Local clock offset: -2.754 ms
Remote clock offset: -2.515 ms


# Below is generated by plot.py at 2018-07-03 21:43:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.57 Mbit/s
95th percentile per-packet one-way delay: 30.205 ms
Loss rate: 23.42%
-- Flow 1:
Average throughput: 59.25 Mbit/s
95th percentile per-packet one-way delay: 30.172 ms
Loss rate: 16.87%
-- Flow 2:
Average throughput: 39.23 Mbit/s
95th percentile per-packet one-way delay: 30.223 ms
Loss rate: 28.22%
-- Flow 3:
Average throughput: 33.93 Mbit/s
95th percentile per-packet one-way delay: 30.242 ms
Loss rate: 39.19%
```

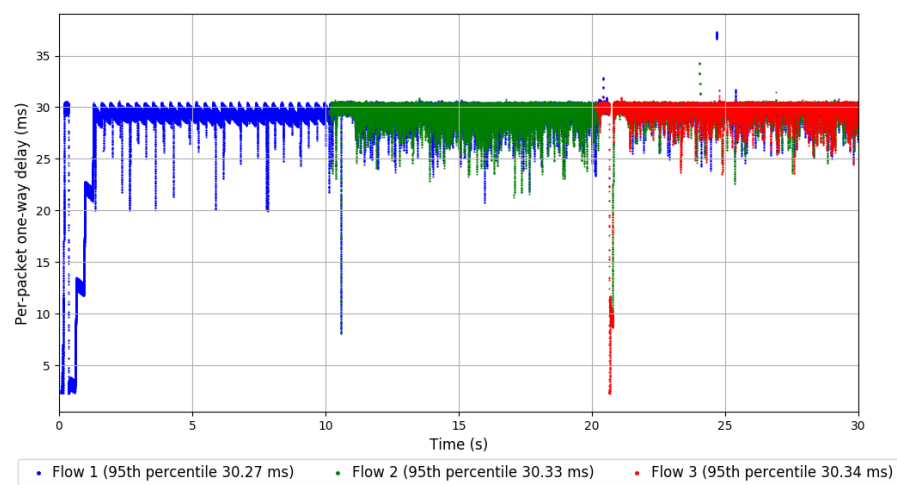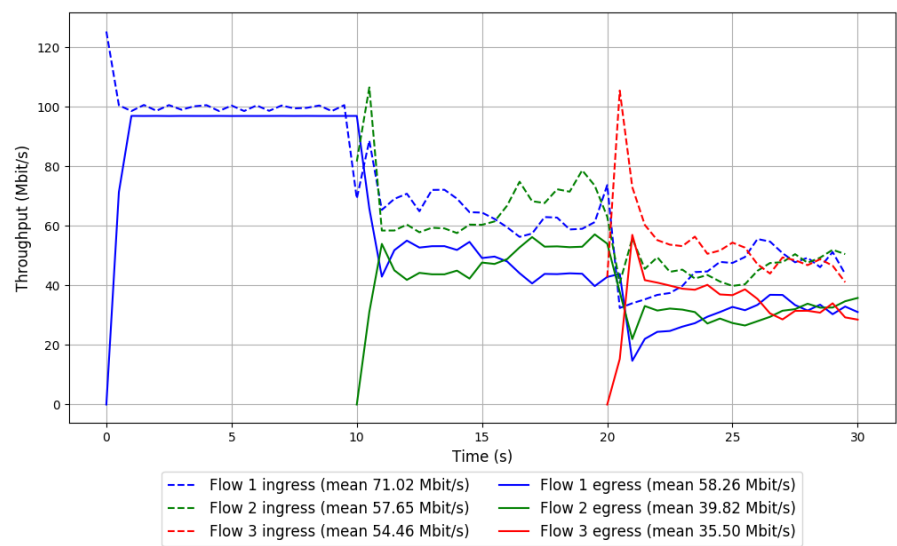Run 2: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 71.34 Mbit/s) --- Flow 1 egress (mean 59.25 Mbit/s)
Flow 2 ingress (mean 54.65 Mbit/s) --- Flow 2 egress (mean 39.23 Mbit/s)
Flow 3 ingress (mean 55.80 Mbit/s) --- Flow 3 egress (mean 33.93 Mbit/s)

Flow 1 (95th percentile 30.17 ms)   Flow 2 (95th percentile 30.22 ms)   Flow 3 (95th percentile 30.24 ms)

```
Run 3: Statistics of FillP-Sheep

Start at: 2018-07-03 19:05:54
End at: 2018-07-03 19:06:24
Local clock offset: -3.351 ms
Remote clock offset: -2.079 ms


# Below is generated by plot.py at 2018-07-03 21:43:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.10 Mbit/s
95th percentile per-packet one-way delay: 30.247 ms
Loss rate: 22.84%
-- Flow 1:
Average throughput: 57.61 Mbit/s
95th percentile per-packet one-way delay: 30.207 ms
Loss rate: 16.65%
-- Flow 2:
Average throughput: 43.27 Mbit/s
95th percentile per-packet one-way delay: 30.270 ms
Loss rate: 28.31%
-- Flow 3:
Average throughput: 29.31 Mbit/s
95th percentile per-packet one-way delay: 30.286 ms
Loss rate: 36.49%
```

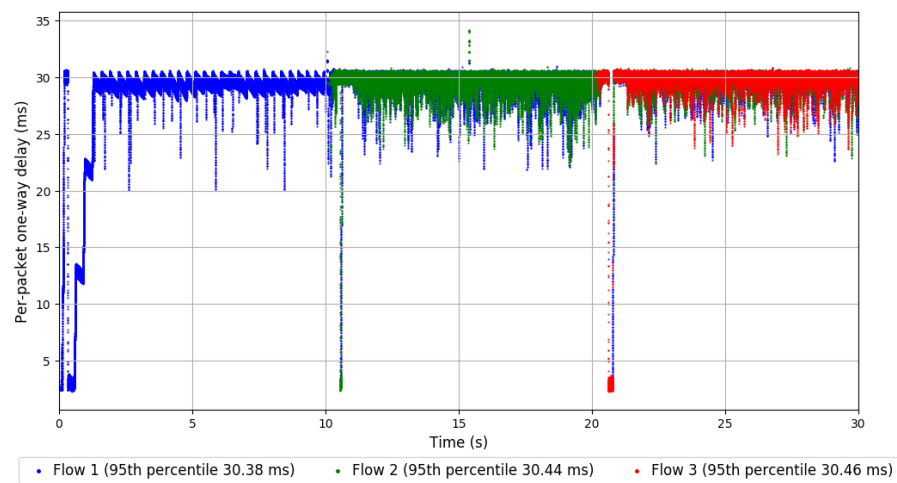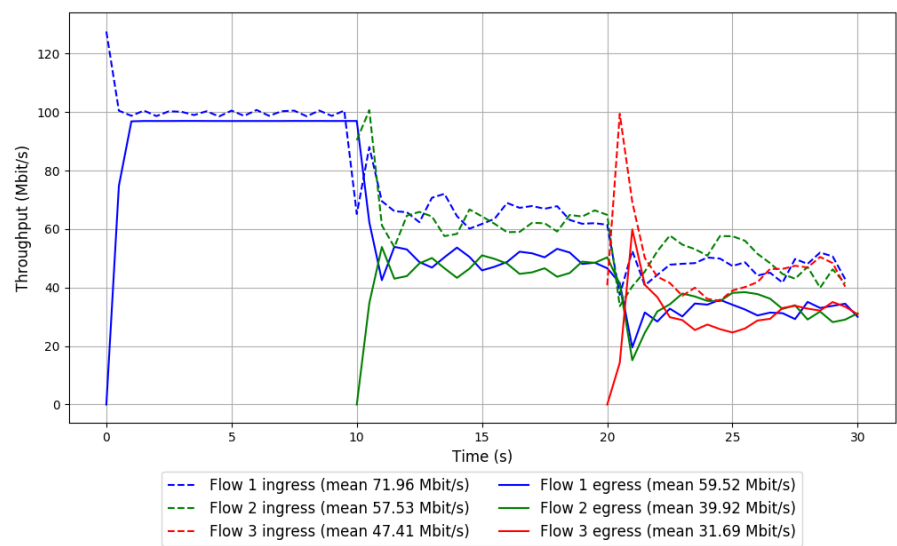# Run 3: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 69.18 Mbit/s) — Flow 1 egress (mean 57.61 Mbit/s)
Flow 2 ingress (mean 60.36 Mbit/s) — Flow 2 egress (mean 43.27 Mbit/s)
Flow 3 ingress (mean 46.14 Mbit/s) — Flow 3 egress (mean 29.31 Mbit/s)

Flow 1 (95th percentile 30.21 ms)   Flow 2 (95th percentile 30.27 ms)   Flow 3 (95th percentile 30.29 ms)

```
Run 4: Statistics of FillP-Sheep

Start at: 2018-07-03 19:25:08
End at: 2018-07-03 19:25:38
Local clock offset: -2.252 ms
Remote clock offset: -1.84 ms


# Below is generated by plot.py at 2018-07-03 21:43:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.40 Mbit/s
95th percentile per-packet one-way delay: 30.235 ms
Loss rate: 23.21%
-- Flow 1:
Average throughput: 59.44 Mbit/s
95th percentile per-packet one-way delay: 30.202 ms
Loss rate: 17.17%
-- Flow 2:
Average throughput: 40.66 Mbit/s
95th percentile per-packet one-way delay: 30.258 ms
Loss rate: 29.86%
-- Flow 3:
Average throughput: 30.05 Mbit/s
95th percentile per-packet one-way delay: 30.271 ms
Loss rate: 34.83%
```

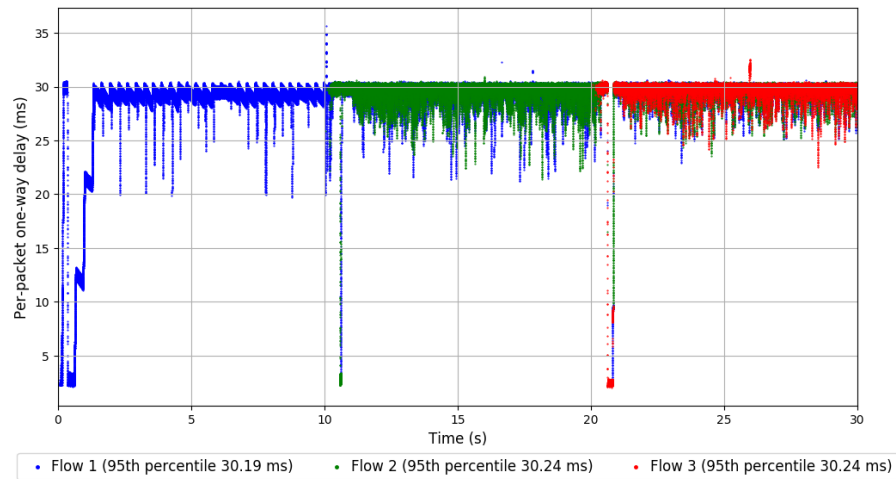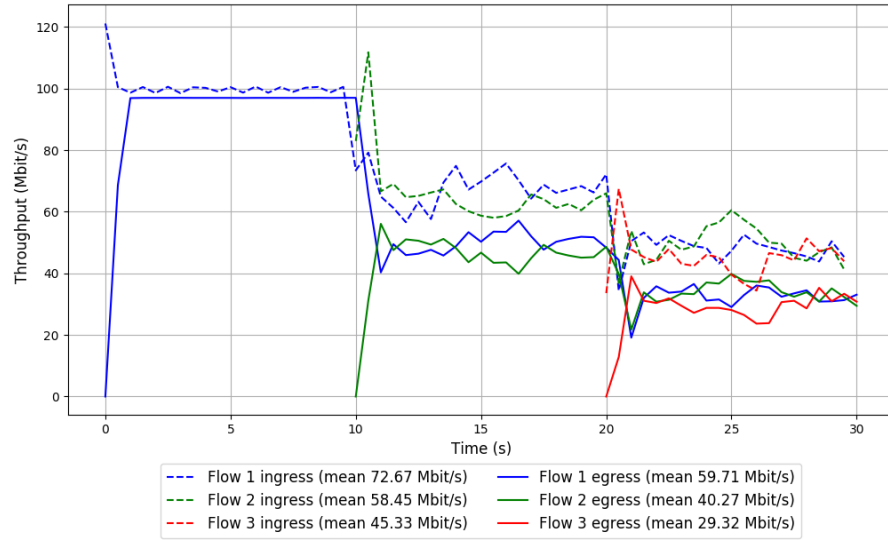Run 4: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 71.83 Mbit/s) --- Flow 1 egress (mean 59.44 Mbit/s)
Flow 2 ingress (mean 57.98 Mbit/s) --- Flow 2 egress (mean 40.66 Mbit/s)
Flow 3 ingress (mean 46.15 Mbit/s) --- Flow 3 egress (mean 30.05 Mbit/s)

Flow 1 (95th percentile 30.20 ms)   Flow 2 (95th percentile 30.26 ms)   Flow 3 (95th percentile 30.27 ms)

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```
Run 5: Statistics of FillP-Sheep

Start at: 2018-07-03 19:44:20
End at: 2018-07-03 19:44:50
Local clock offset: -2.016 ms
Remote clock offset: -1.406 ms


# Below is generated by plot.py at 2018-07-03 21:43:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.36 Mbit/s
95th percentile per-packet one-way delay: 30.386 ms
Loss rate: 22.73%
-- Flow 1:
Average throughput: 59.21 Mbit/s
95th percentile per-packet one-way delay: 30.357 ms
Loss rate: 17.55%
-- Flow 2:
Average throughput: 40.92 Mbit/s
95th percentile per-packet one-way delay: 30.410 ms
Loss rate: 27.77%
-- Flow 3:
Average throughput: 30.03 Mbit/s
95th percentile per-packet one-way delay: 30.421 ms
Loss rate: 34.69%
```

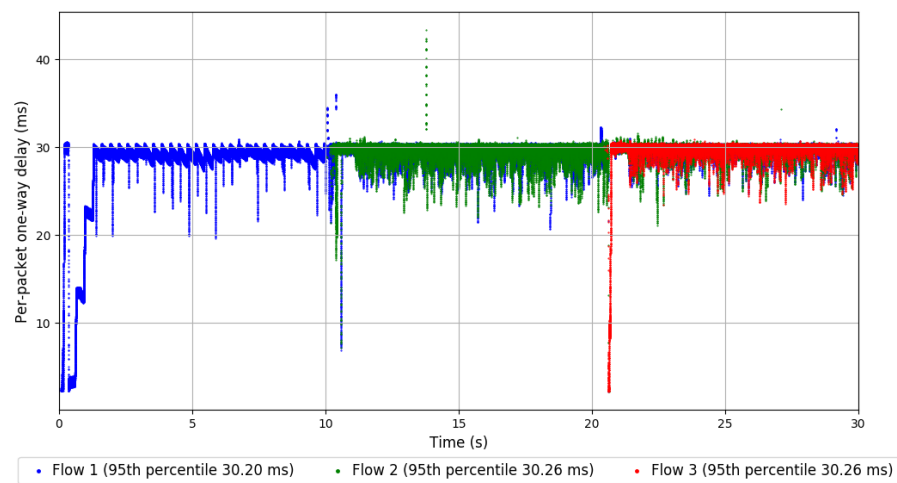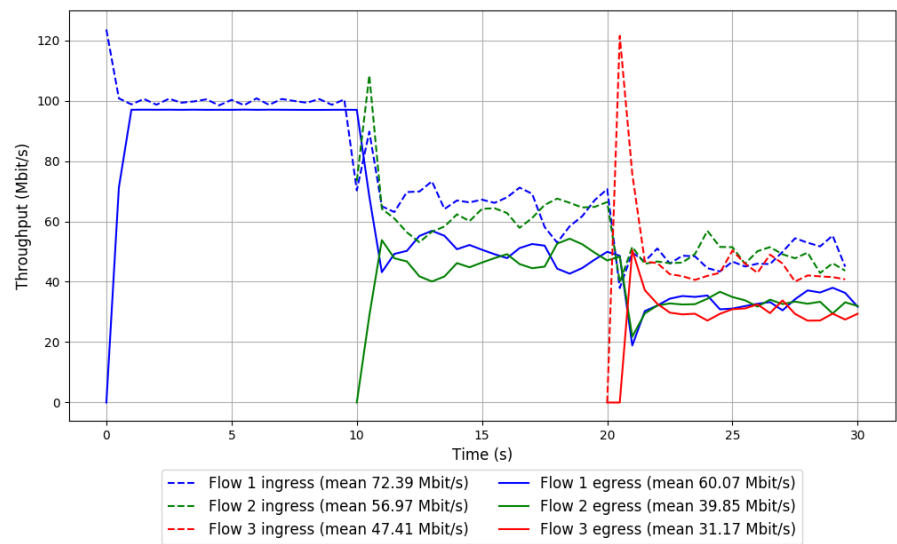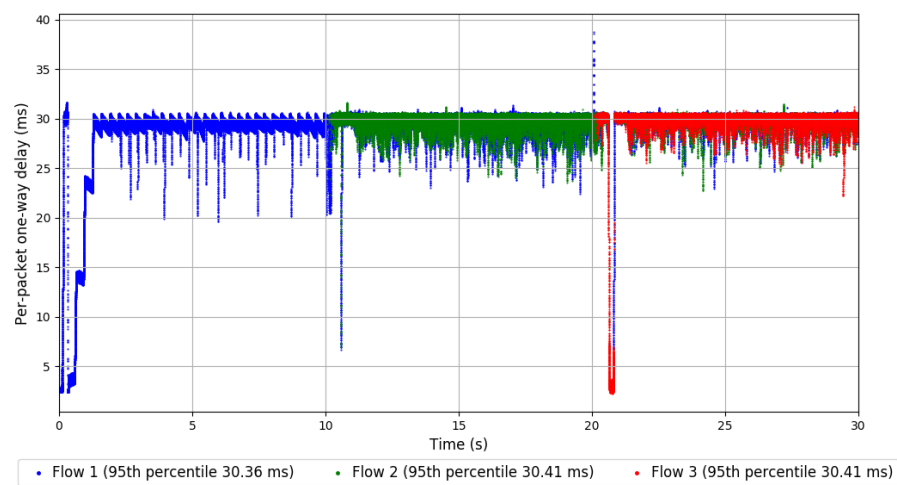Run 5: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 71.89 Mbit/s) --- Flow 1 egress (mean 59.21 Mbit/s)
Flow 2 ingress (mean 56.66 Mbit/s) --- Flow 2 egress (mean 40.92 Mbit/s)
Flow 3 ingress (mean 45.99 Mbit/s) --- Flow 3 egress (mean 30.03 Mbit/s)

Flow 1 (95th percentile 30.36 ms)   Flow 2 (95th percentile 30.41 ms)   Flow 3 (95th percentile 30.42 ms)

```
Run 6: Statistics of FillP-Sheep

Start at: 2018-07-03 20:03:34
End at: 2018-07-03 20:04:04
Local clock offset: -1.949 ms
Remote clock offset: -2.519 ms


# Below is generated by plot.py at 2018-07-03 21:43:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.50 Mbit/s
95th percentile per-packet one-way delay: 30.310 ms
Loss rate: 24.22%
-- Flow 1:
Average throughput: 58.26 Mbit/s
95th percentile per-packet one-way delay: 30.273 ms
Loss rate: 17.90%
-- Flow 2:
Average throughput: 39.82 Mbit/s
95th percentile per-packet one-way delay: 30.334 ms
Loss rate: 30.93%
-- Flow 3:
Average throughput: 35.50 Mbit/s
95th percentile per-packet one-way delay: 30.342 ms
Loss rate: 34.81%
```

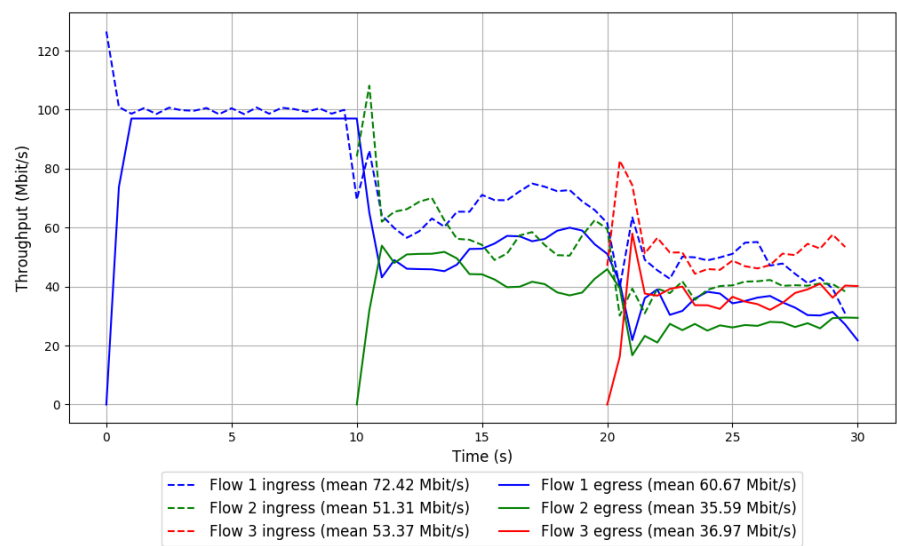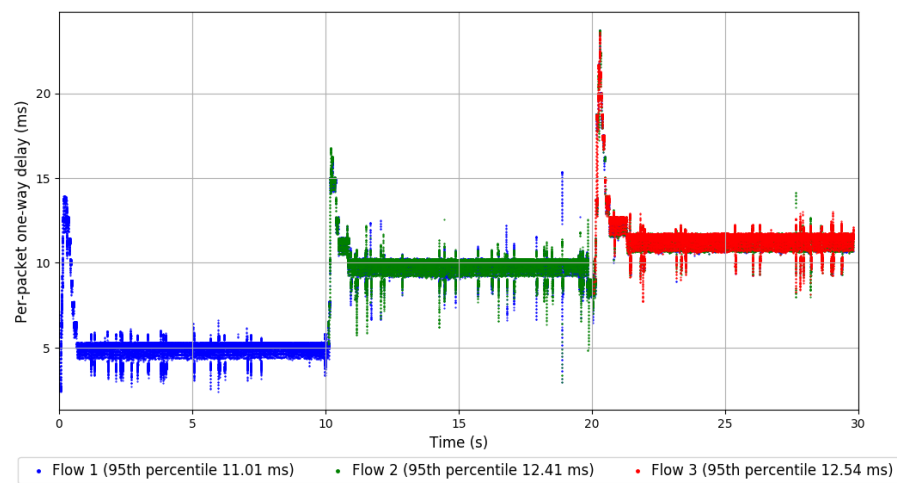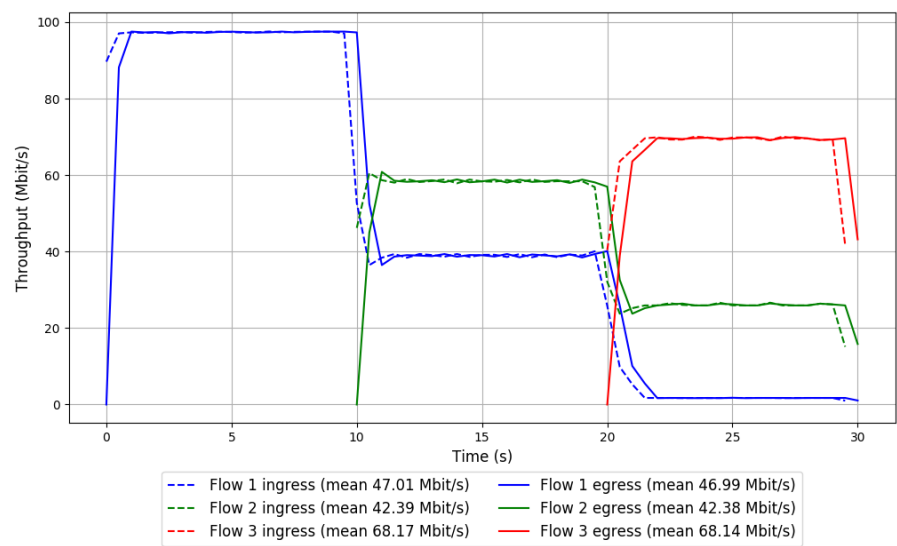Run 6: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 71.02 Mbit/s) --- Flow 1 egress (mean 58.26 Mbit/s)
Flow 2 ingress (mean 57.65 Mbit/s) --- Flow 2 egress (mean 39.82 Mbit/s)
Flow 3 ingress (mean 54.46 Mbit/s) --- Flow 3 egress (mean 35.50 Mbit/s)

Flow 1 (95th percentile 30.27 ms)   Flow 2 (95th percentile 30.33 ms)   Flow 3 (95th percentile 30.34 ms)

95

```
Run 7: Statistics of FillP-Sheep

Start at: 2018-07-03 20:22:46
End at: 2018-07-03 20:23:16
Local clock offset: -1.883 ms
Remote clock offset: -2.815 ms

# Below is generated by plot.py at 2018-07-03 21:44:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.56 Mbit/s
95th percentile per-packet one-way delay: 30.416 ms
Loss rate: 23.28%
-- Flow 1:
Average throughput: 59.52 Mbit/s
95th percentile per-packet one-way delay: 30.383 ms
Loss rate: 17.21%
-- Flow 2:
Average throughput: 39.92 Mbit/s
95th percentile per-packet one-way delay: 30.437 ms
Loss rate: 30.61%
-- Flow 3:
Average throughput: 31.69 Mbit/s
95th percentile per-packet one-way delay: 30.456 ms
Loss rate: 33.16%
```

Run 7: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 71.96 Mbit/s)   Flow 1 egress (mean 59.52 Mbit/s)
Flow 2 ingress (mean 57.53 Mbit/s)   Flow 2 egress (mean 39.92 Mbit/s)
Flow 3 ingress (mean 47.41 Mbit/s)   Flow 3 egress (mean 31.69 Mbit/s)

Flow 1 (95th percentile 30.38 ms)   Flow 2 (95th percentile 30.44 ms)   Flow 3 (95th percentile 30.46 ms)

```
Run 8: Statistics of FillP-Sheep

Start at: 2018-07-03 20:41:59
End at: 2018-07-03 20:42:30
Local clock offset: -1.878 ms
Remote clock offset: -2.967 ms

# Below is generated by plot.py at 2018-07-03 21:44:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.21 Mbit/s
95th percentile per-packet one-way delay: 30.213 ms
Loss rate: 23.93%
-- Flow 1:
Average throughput: 59.71 Mbit/s
95th percentile per-packet one-way delay: 30.191 ms
Loss rate: 17.75%
-- Flow 2:
Average throughput: 40.27 Mbit/s
95th percentile per-packet one-way delay: 30.236 ms
Loss rate: 31.09%
-- Flow 3:
Average throughput: 29.32 Mbit/s
95th percentile per-packet one-way delay: 30.236 ms
Loss rate: 35.32%
```
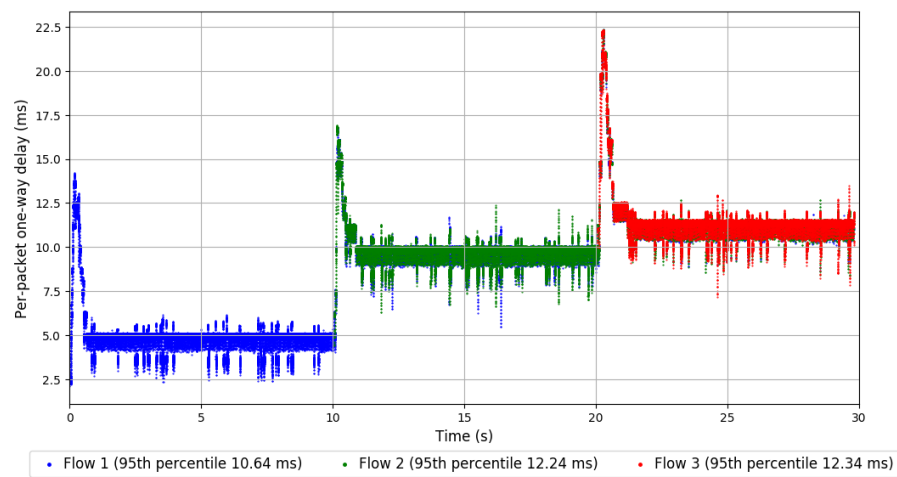
Run 8: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 72.67 Mbit/s) --- Flow 1 egress (mean 59.71 Mbit/s)
Flow 2 ingress (mean 58.45 Mbit/s) --- Flow 2 egress (mean 40.27 Mbit/s)
Flow 3 ingress (mean 45.33 Mbit/s) --- Flow 3 egress (mean 29.32 Mbit/s)

Flow 1 (95th percentile 30.19 ms)   Flow 2 (95th percentile 30.24 ms)   Flow 3 (95th percentile 30.24 ms)

```
Run 9: Statistics of FillP-Sheep

Start at: 2018-07-03 21:01:12
End at: 2018-07-03 21:01:42
Local clock offset: -2.792 ms
Remote clock offset: -2.891 ms


# Below is generated by plot.py at 2018-07-03 21:44:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.45 Mbit/s
95th percentile per-packet one-way delay: 30.233 ms
Loss rate: 23.38%
-- Flow 1:
Average throughput: 60.07 Mbit/s
95th percentile per-packet one-way delay: 30.199 ms
Loss rate: 16.95%
-- Flow 2:
Average throughput: 39.85 Mbit/s
95th percentile per-packet one-way delay: 30.262 ms
Loss rate: 30.05%
-- Flow 3:
Average throughput: 31.17 Mbit/s
95th percentile per-packet one-way delay: 30.261 ms
Loss rate: 36.93%
```
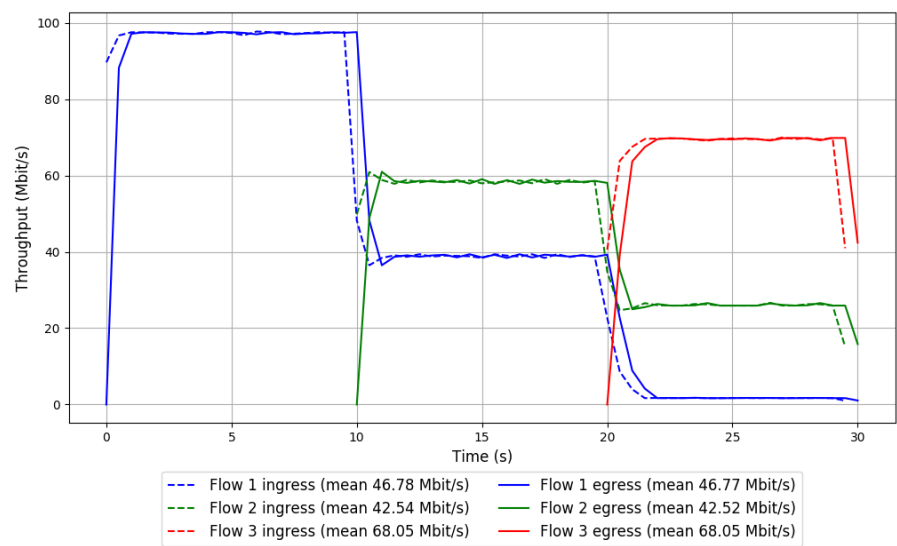
Run 9: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 72.39 Mbit/s) Flow 1 egress (mean 60.07 Mbit/s)
Flow 2 ingress (mean 56.97 Mbit/s) Flow 2 egress (mean 39.85 Mbit/s)
Flow 3 ingress (mean 47.41 Mbit/s) Flow 3 egress (mean 31.17 Mbit/s)

Flow 1 (95th percentile 30.20 ms) Flow 2 (95th percentile 30.26 ms) Flow 3 (95th percentile 30.26 ms)

```
Run 10: Statistics of FillP-Sheep

Start at: 2018-07-03 21:20:25
End at: 2018-07-03 21:20:55
Local clock offset: -2.861 ms
Remote clock offset: -2.502 ms


# Below is generated by plot.py at 2018-07-03 21:44:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.59 Mbit/s
95th percentile per-packet one-way delay: 30.388 ms
Loss rate: 22.21%
-- Flow 1:
Average throughput: 60.67 Mbit/s
95th percentile per-packet one-way delay: 30.364 ms
Loss rate: 16.15%
-- Flow 2:
Average throughput: 35.59 Mbit/s
95th percentile per-packet one-way delay: 30.411 ms
Loss rate: 30.64%
-- Flow 3:
Average throughput: 36.97 Mbit/s
95th percentile per-packet one-way delay: 30.409 ms
Loss rate: 30.75%
```

Run 10: Report of FillP-Sheep — Data Link
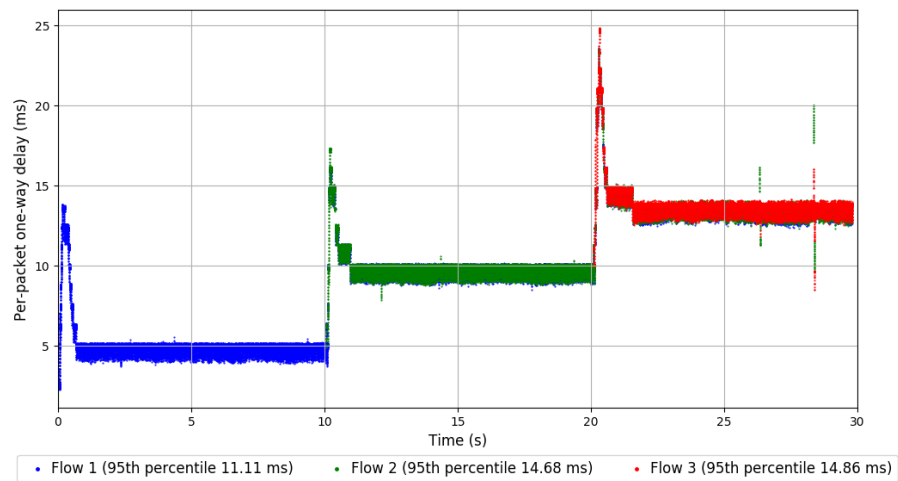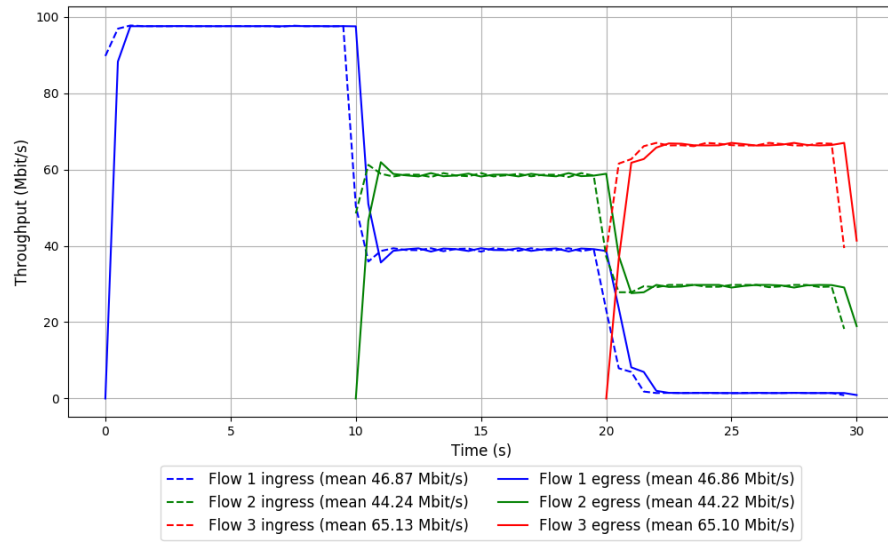

Flow 1 ingress (mean 72.42 Mbit/s) ——— Flow 1 egress (mean 60.67 Mbit/s)
Flow 2 ingress (mean 51.31 Mbit/s) ——— Flow 2 egress (mean 35.59 Mbit/s)
Flow 3 ingress (mean 53.37 Mbit/s) ——— Flow 3 egress (mean 36.97 Mbit/s)

• Flow 1 (95th percentile 30.36 ms)   • Flow 2 (95th percentile 30.41 ms)   • Flow 3 (95th percentile 30.41 ms)

```
Run 1: Statistics of Indigo

Start at: 2018-07-03 18:22:59
End at: 2018-07-03 18:23:29
Local clock offset: -2.494 ms
Remote clock offset: -2.696 ms


# Below is generated by plot.py at 2018-07-03 21:44:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.25 Mbit/s
95th percentile per-packet one-way delay: 12.410 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.99 Mbit/s
95th percentile per-packet one-way delay: 11.014 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.38 Mbit/s
95th percentile per-packet one-way delay: 12.407 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 68.14 Mbit/s
95th percentile per-packet one-way delay: 12.544 ms
Loss rate: 0.00%
```
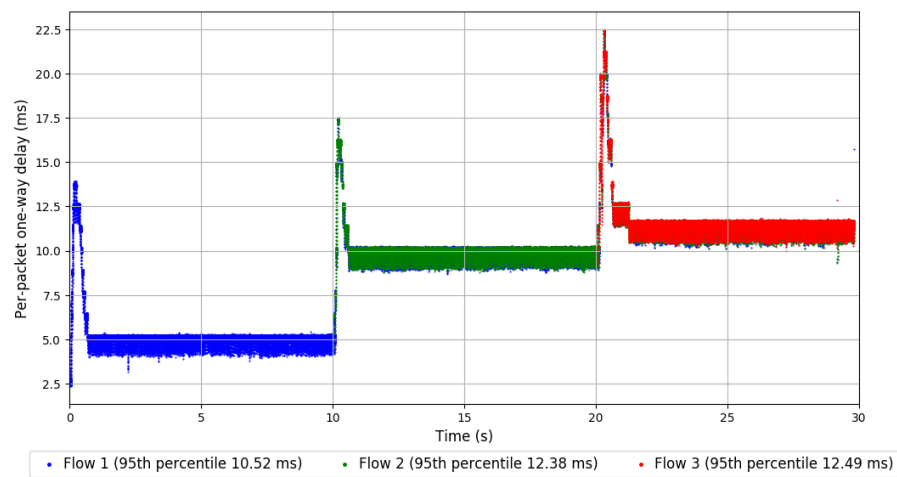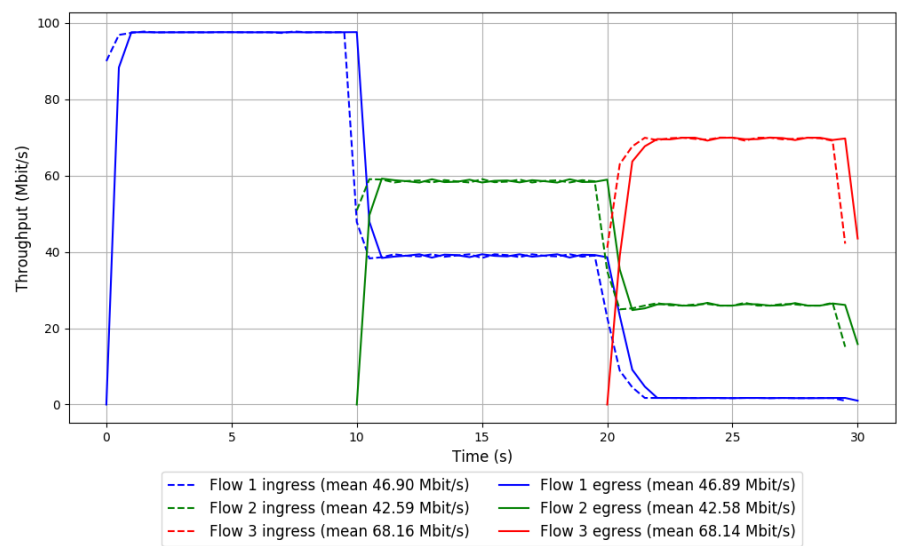
Run 1: Report of Indigo — Data Link

- - - Flow 1 ingress (mean 47.01 Mbit/s)   —— Flow 1 egress (mean 46.99 Mbit/s)
- - - Flow 2 ingress (mean 42.39 Mbit/s)   —— Flow 2 egress (mean 42.38 Mbit/s)
- - - Flow 3 ingress (mean 68.17 Mbit/s)   —— Flow 3 egress (mean 68.14 Mbit/s)

- Flow 1 (95th percentile 11.01 ms)   • Flow 2 (95th percentile 12.41 ms)   • Flow 3 (95th percentile 12.54 ms)

```
Run 2: Statistics of Indigo

Start at: 2018-07-03 18:42:12
End at: 2018-07-03 18:42:42
Local clock offset: -2.422 ms
Remote clock offset: -2.717 ms


# Below is generated by plot.py at 2018-07-03 21:44:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.11 Mbit/s
95th percentile per-packet one-way delay: 10.044 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.27 Mbit/s
95th percentile per-packet one-way delay: 9.981 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 53.50 Mbit/s
95th percentile per-packet one-way delay: 10.948 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.51 Mbit/s
95th percentile per-packet one-way delay: 9.969 ms
Loss rate: 0.00%
```
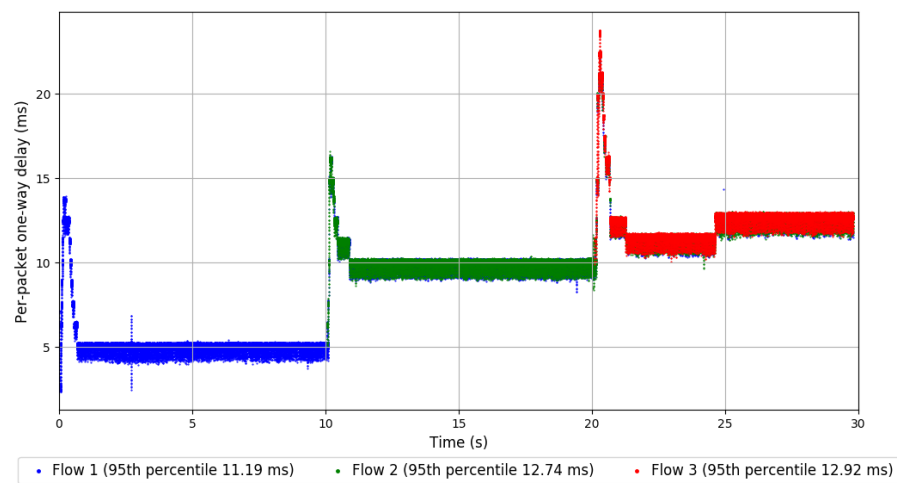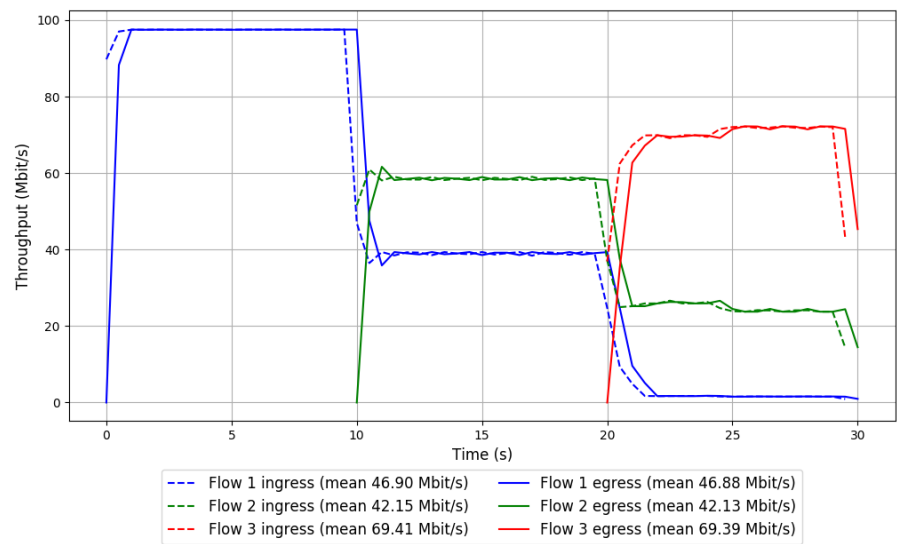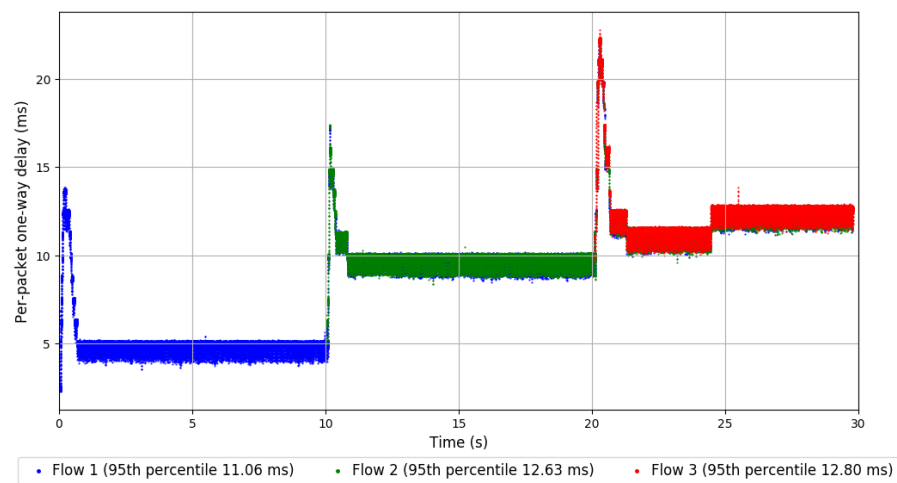
Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2018-07-03 19:01:24
End at: 2018-07-03 19:01:54
Local clock offset: -3.283 ms
Remote clock offset: -2.14 ms


# Below is generated by plot.py at 2018-07-03 21:44:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.17 Mbit/s
95th percentile per-packet one-way delay: 12.180 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.77 Mbit/s
95th percentile per-packet one-way delay: 10.642 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.52 Mbit/s
95th percentile per-packet one-way delay: 12.243 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 68.05 Mbit/s
95th percentile per-packet one-way delay: 12.341 ms
Loss rate: 0.00%
```
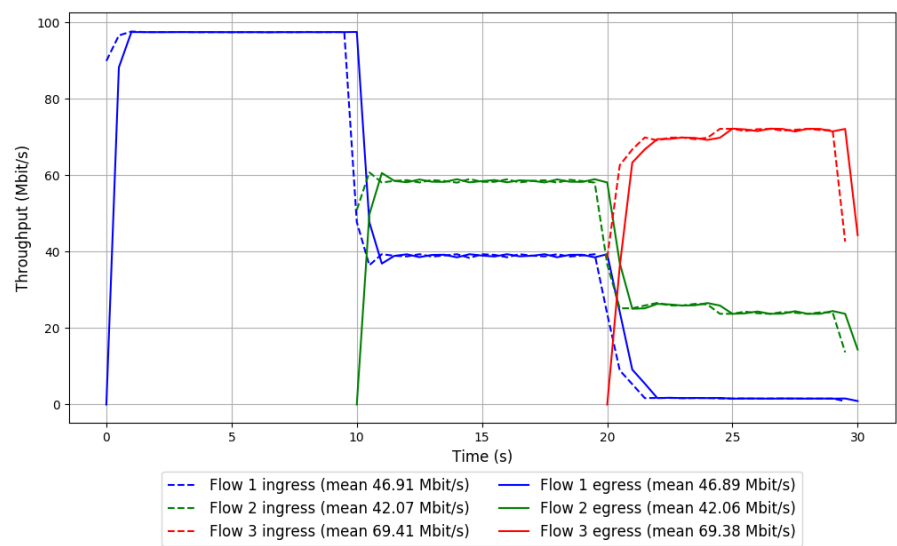
Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2018-07-03 19:20:37
End at: 2018-07-03 19:21:07
Local clock offset: -2.438 ms
Remote clock offset: -1.763 ms


# Below is generated by plot.py at 2018-07-03 21:44:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.26 Mbit/s
95th percentile per-packet one-way delay: 13.188 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.89 Mbit/s
95th percentile per-packet one-way delay: 11.062 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 41.47 Mbit/s
95th percentile per-packet one-way delay: 13.182 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 70.19 Mbit/s
95th percentile per-packet one-way delay: 13.681 ms
Loss rate: 0.00%
```
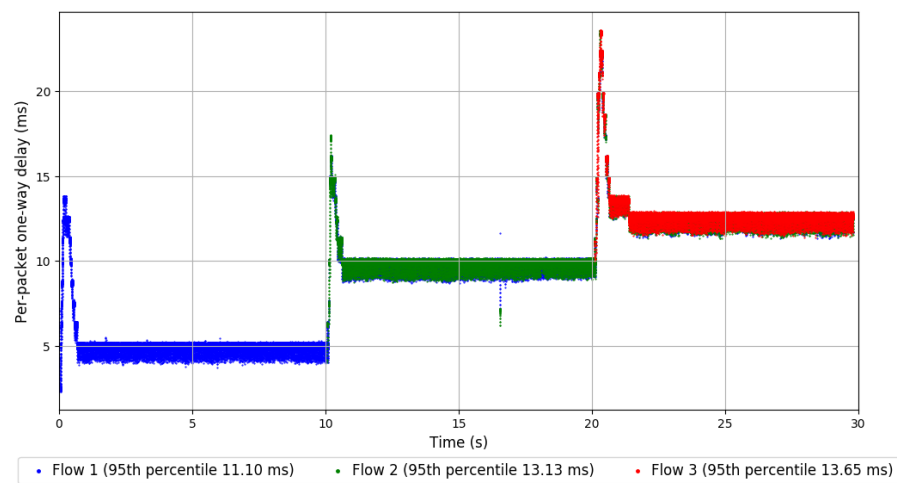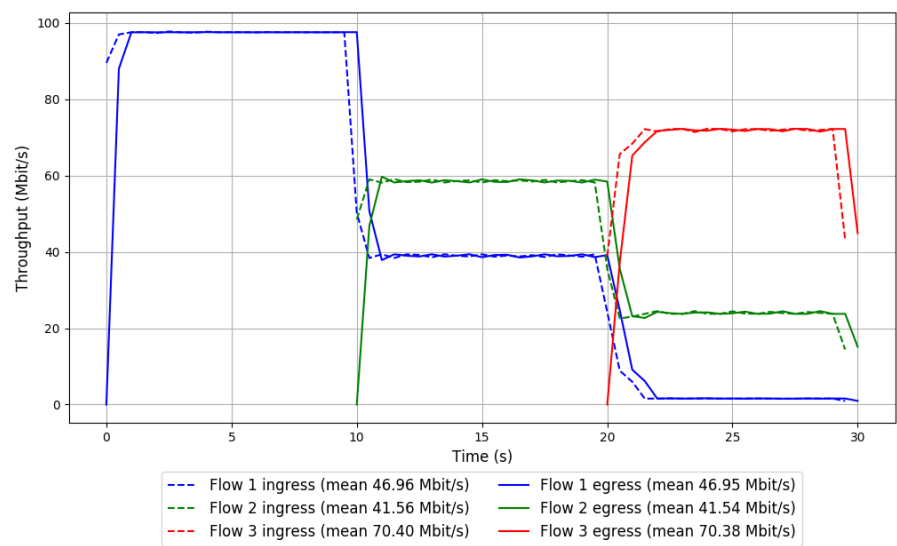
Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2018-07-03 19:39:50
End at: 2018-07-03 19:40:20
Local clock offset: -1.896 ms
Remote clock offset: -1.516 ms


# Below is generated by plot.py at 2018-07-03 21:45:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.38 Mbit/s
95th percentile per-packet one-way delay: 14.346 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.86 Mbit/s
95th percentile per-packet one-way delay: 11.111 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.22 Mbit/s
95th percentile per-packet one-way delay: 14.676 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 65.10 Mbit/s
95th percentile per-packet one-way delay: 14.860 ms
Loss rate: 0.00%
```
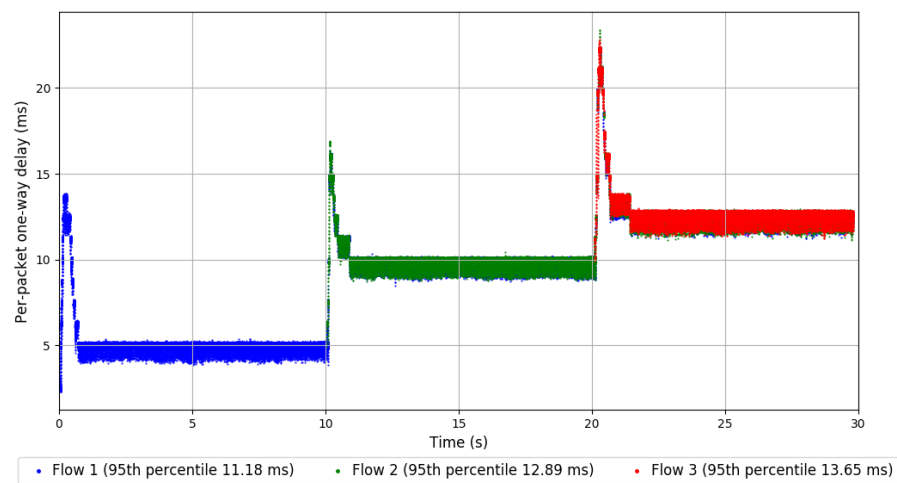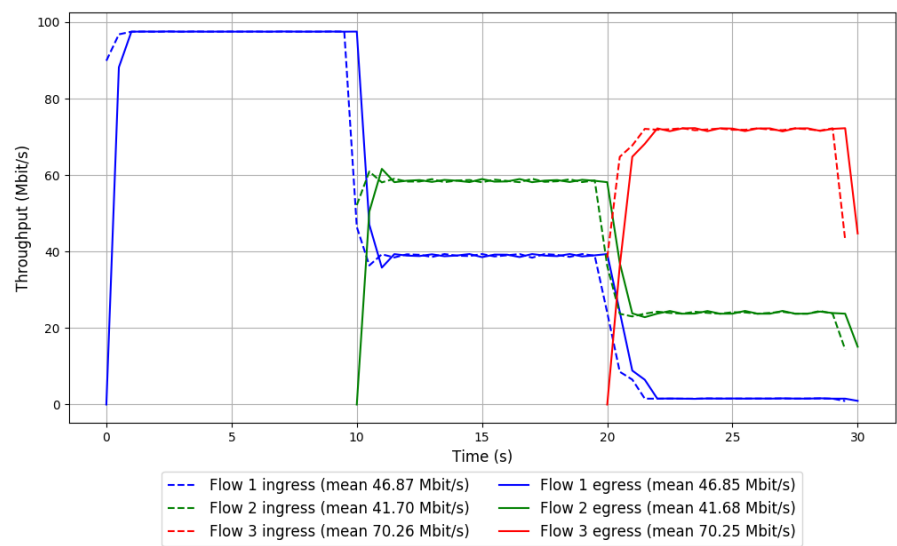
Run 5: Report of Indigo — Data Link

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```
Run 6: Statistics of Indigo

Start at: 2018-07-03 19:59:04
End at: 2018-07-03 19:59:34
Local clock offset: -2.038 ms
Remote clock offset: -2.279 ms

# Below is generated by plot.py at 2018-07-03 21:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.38 Mbit/s
95th percentile per-packet one-way delay: 12.346 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.89 Mbit/s
95th percentile per-packet one-way delay: 10.522 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.58 Mbit/s
95th percentile per-packet one-way delay: 12.375 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 68.14 Mbit/s
95th percentile per-packet one-way delay: 12.491 ms
Loss rate: 0.00%
```

Run 6: Report of Indigo — Data Link

```
Run 7: Statistics of Indigo

Start at: 2018-07-03 20:18:16
End at: 2018-07-03 20:18:46
Local clock offset: -1.903 ms
Remote clock offset: -2.75 ms


# Below is generated by plot.py at 2018-07-03 21:45:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.37 Mbit/s
95th percentile per-packet one-way delay: 12.752 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.88 Mbit/s
95th percentile per-packet one-way delay: 11.191 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.13 Mbit/s
95th percentile per-packet one-way delay: 12.743 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 69.39 Mbit/s
95th percentile per-packet one-way delay: 12.920 ms
Loss rate: 0.00%
```
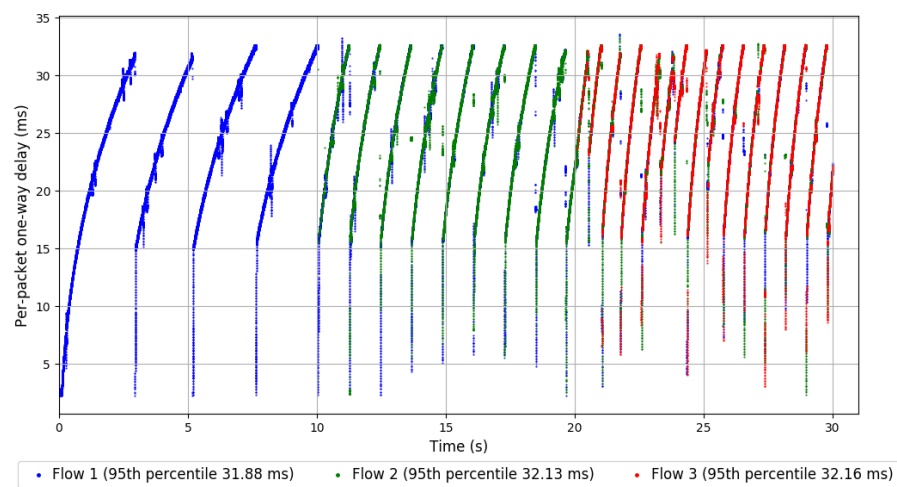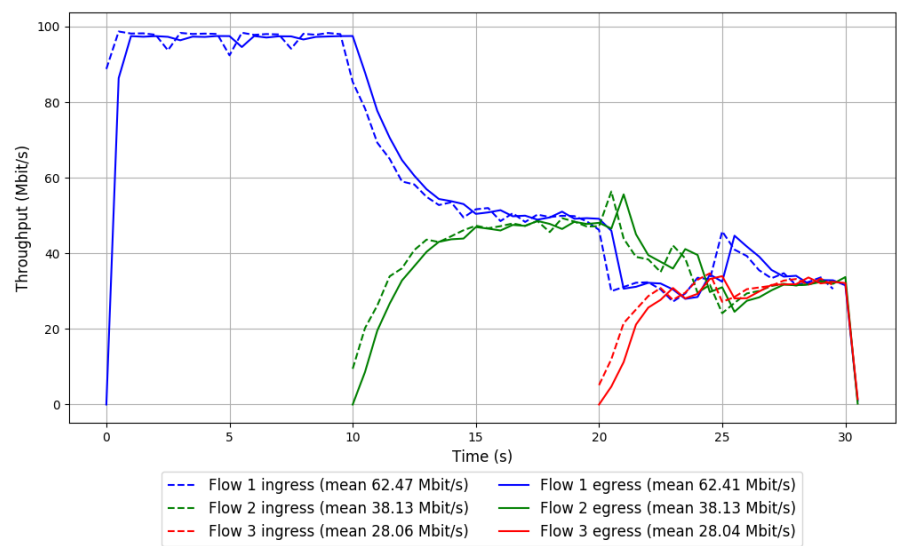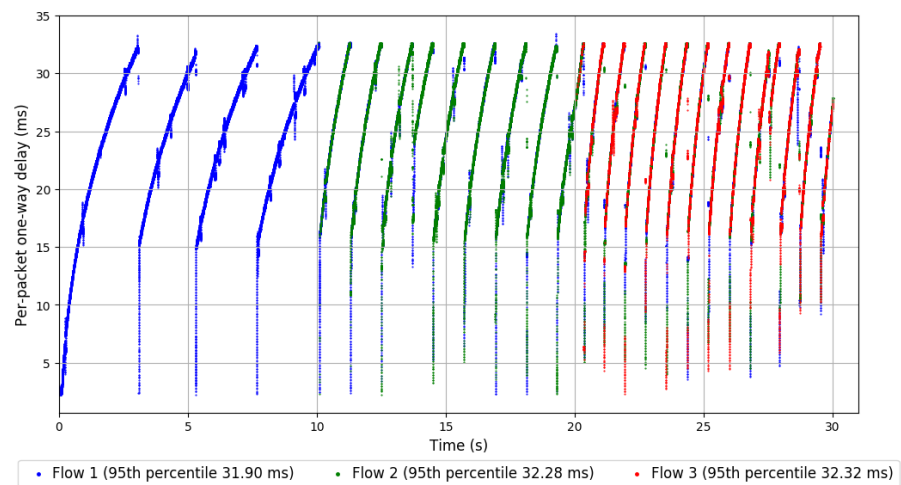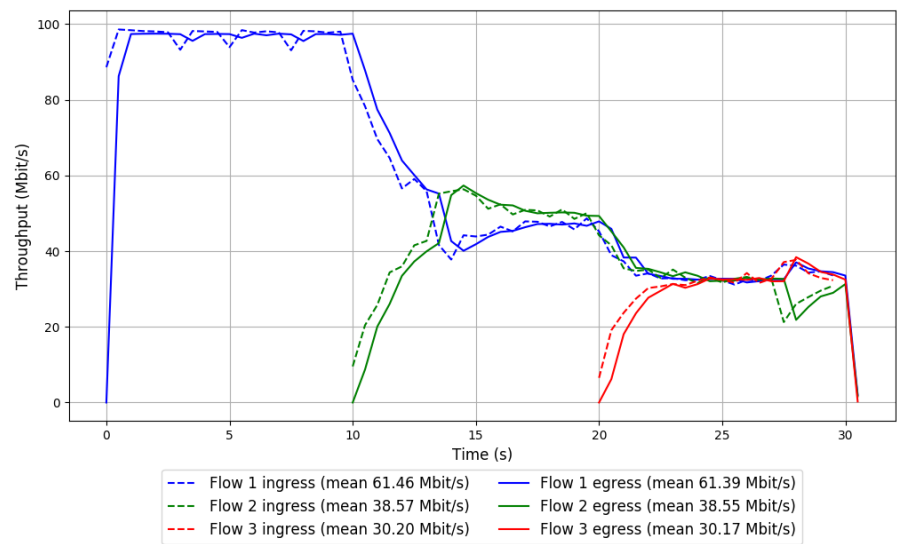
Run 7: Report of Indigo — Data Link

Flow 1 ingress (mean 46.90 Mbit/s) --- Flow 1 egress (mean 46.88 Mbit/s)
Flow 2 ingress (mean 42.15 Mbit/s) --- Flow 2 egress (mean 42.13 Mbit/s)
Flow 3 ingress (mean 69.41 Mbit/s) --- Flow 3 egress (mean 69.39 Mbit/s)

Flow 1 (95th percentile 11.19 ms) Flow 2 (95th percentile 12.74 ms) Flow 3 (95th percentile 12.92 ms)

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```
Run 8: Statistics of Indigo

Start at: 2018-07-03 20:37:29
End at: 2018-07-03 20:37:59
Local clock offset: -1.704 ms
Remote clock offset: -2.909 ms

# Below is generated by plot.py at 2018-07-03 21:45:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.38 Mbit/s
95th percentile per-packet one-way delay: 12.631 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.89 Mbit/s
95th percentile per-packet one-way delay: 11.064 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.06 Mbit/s
95th percentile per-packet one-way delay: 12.628 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 69.38 Mbit/s
95th percentile per-packet one-way delay: 12.803 ms
Loss rate: 0.00%
```
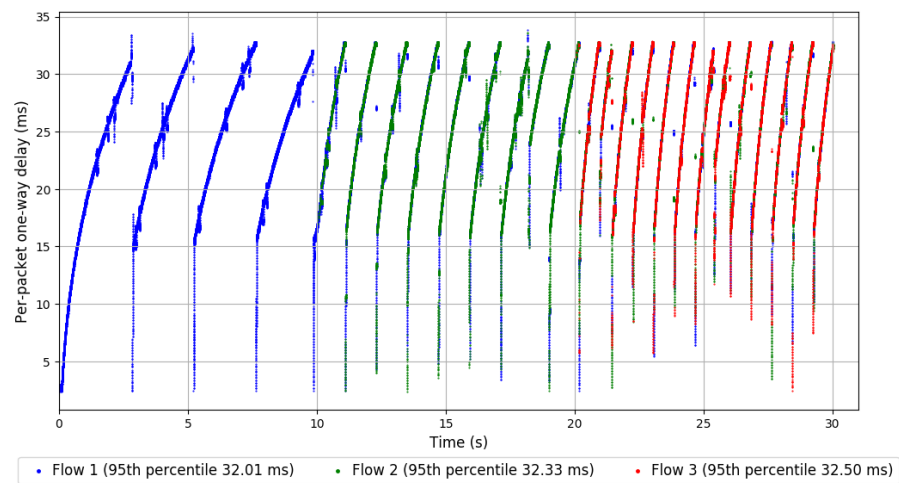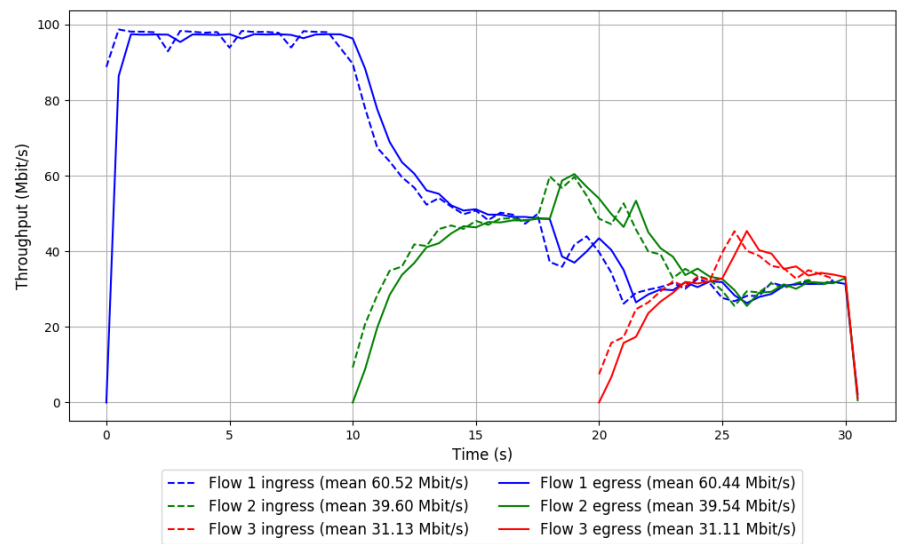
Run 8: Report of Indigo — Data Link

- - - Flow 1 ingress (mean 46.91 Mbit/s)   —— Flow 1 egress (mean 46.89 Mbit/s)
- - - Flow 2 ingress (mean 42.07 Mbit/s)   —— Flow 2 egress (mean 42.06 Mbit/s)
- - - Flow 3 ingress (mean 69.41 Mbit/s)   —— Flow 3 egress (mean 69.38 Mbit/s)

- Flow 1 (95th percentile 11.06 ms)   • Flow 2 (95th percentile 12.63 ms)   • Flow 3 (95th percentile 12.80 ms)

```
Run 9: Statistics of Indigo

Start at: 2018-07-03 20:56:42
End at: 2018-07-03 20:57:12
Local clock offset: -2.692 ms
Remote clock offset: -2.956 ms

# Below is generated by plot.py at 2018-07-03 21:45:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.38 Mbit/s
95th percentile per-packet one-way delay: 12.886 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.95 Mbit/s
95th percentile per-packet one-way delay: 11.100 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 41.54 Mbit/s
95th percentile per-packet one-way delay: 13.131 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 70.38 Mbit/s
95th percentile per-packet one-way delay: 13.651 ms
Loss rate: 0.00%
```
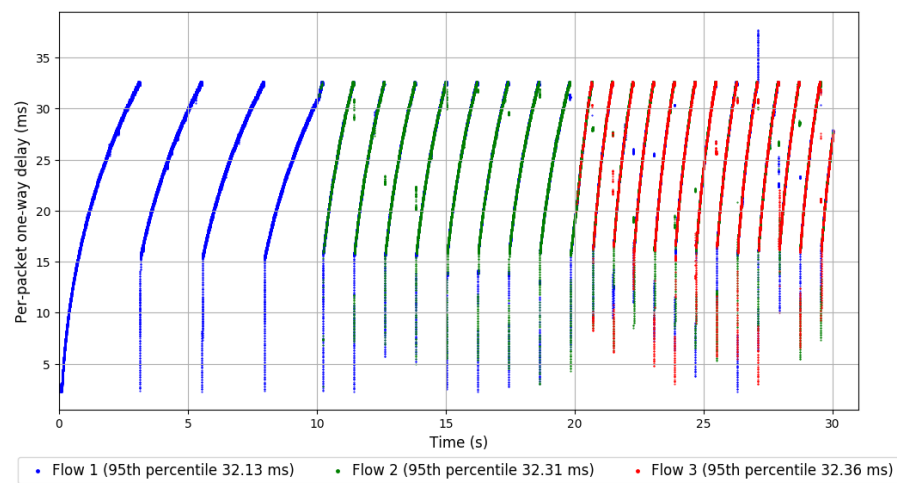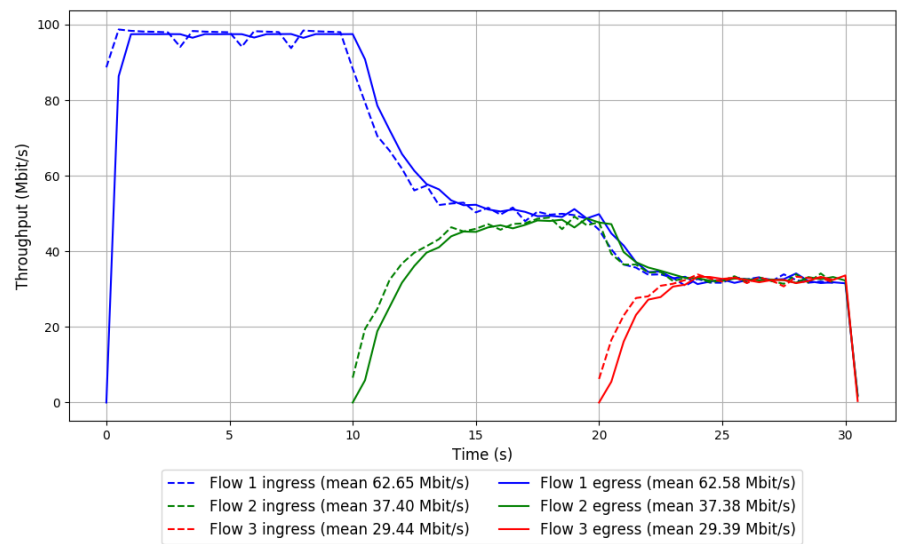
Run 9: Report of Indigo — Data Link

- - - Flow 1 ingress (mean 46.96 Mbit/s) —— Flow 1 egress (mean 46.95 Mbit/s)
- - - Flow 2 ingress (mean 41.56 Mbit/s) —— Flow 2 egress (mean 41.54 Mbit/s)
- - - Flow 3 ingress (mean 70.40 Mbit/s) —— Flow 3 egress (mean 70.38 Mbit/s)

- Flow 1 (95th percentile 11.10 ms)   - Flow 2 (95th percentile 13.13 ms)   - Flow 3 (95th percentile 13.65 ms)

```
Run 10: Statistics of Indigo

Start at: 2018-07-03 21:15:55
End at: 2018-07-03 21:16:25
Local clock offset: -2.926 ms
Remote clock offset: -2.612 ms


# Below is generated by plot.py at 2018-07-03 21:45:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.38 Mbit/s
95th percentile per-packet one-way delay: 12.873 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.85 Mbit/s
95th percentile per-packet one-way delay: 11.180 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 41.68 Mbit/s
95th percentile per-packet one-way delay: 12.889 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 70.25 Mbit/s
95th percentile per-packet one-way delay: 13.646 ms
Loss rate: 0.00%
```
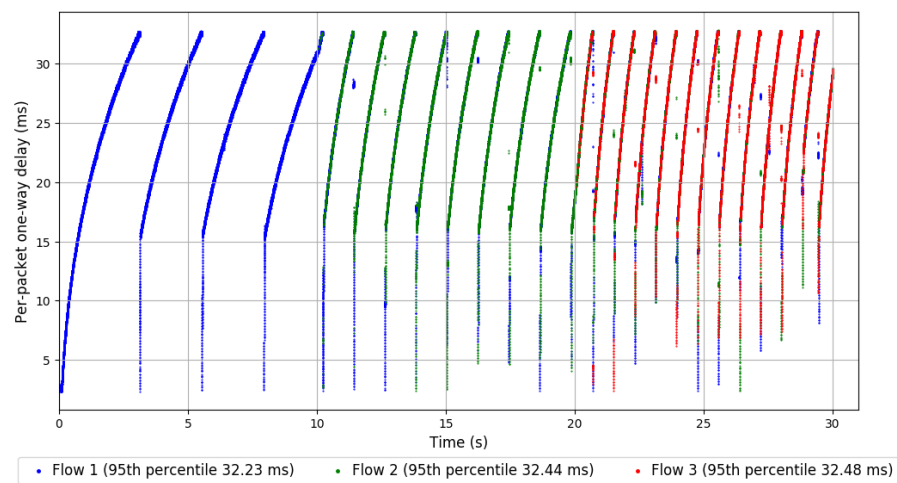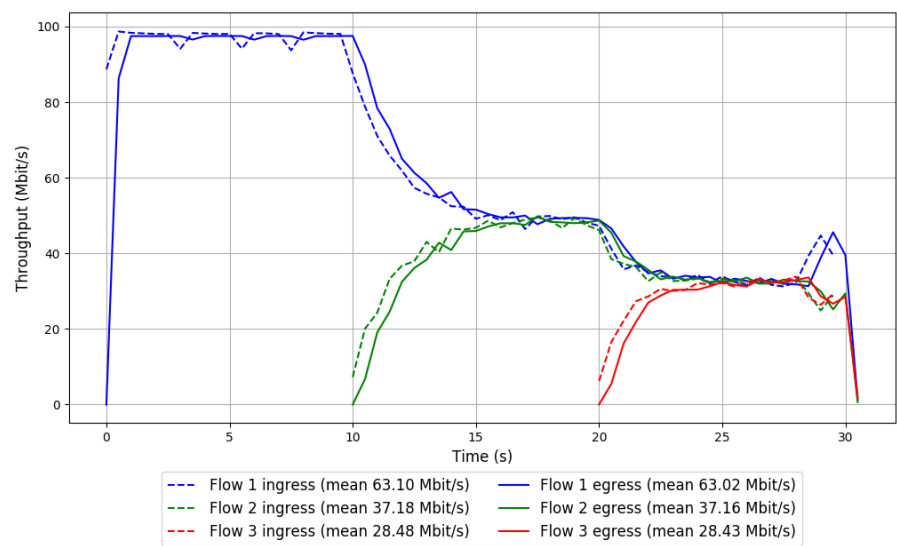
Run 10: Report of Indigo — Data Link

Flow 1 ingress (mean 46.87 Mbit/s) — Flow 1 egress (mean 46.85 Mbit/s)
Flow 2 ingress (mean 41.70 Mbit/s) — Flow 2 egress (mean 41.68 Mbit/s)
Flow 3 ingress (mean 70.26 Mbit/s) — Flow 3 egress (mean 70.25 Mbit/s)

Flow 1 (95th percentile 11.18 ms)   Flow 2 (95th percentile 12.89 ms)   Flow 3 (95th percentile 13.65 ms)

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```
Run 1: Statistics of LEDBAT

Start at: 2018-07-03 18:34:13
End at: 2018-07-03 18:34:43
Local clock offset: -2.253 ms
Remote clock offset: -2.81 ms


# Below is generated by plot.py at 2018-07-03 21:46:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.08 Mbit/s
95th percentile per-packet one-way delay: 31.957 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 62.41 Mbit/s
95th percentile per-packet one-way delay: 31.880 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 38.13 Mbit/s
95th percentile per-packet one-way delay: 32.128 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 28.04 Mbit/s
95th percentile per-packet one-way delay: 32.160 ms
Loss rate: 0.09%
```
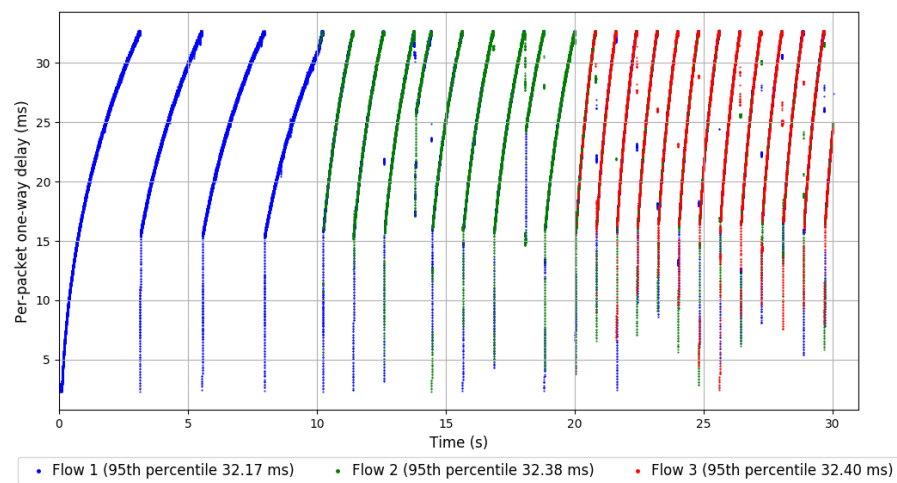
Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2018-07-03 18:53:25
End at: 2018-07-03 18:53:55
Local clock offset: -3.088 ms
Remote clock offset: -2.286 ms


# Below is generated by plot.py at 2018-07-03 21:46:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.05 Mbit/s
95th percentile per-packet one-way delay: 32.101 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 61.39 Mbit/s
95th percentile per-packet one-way delay: 31.899 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 38.55 Mbit/s
95th percentile per-packet one-way delay: 32.285 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 30.17 Mbit/s
95th percentile per-packet one-way delay: 32.321 ms
Loss rate: 0.09%
```
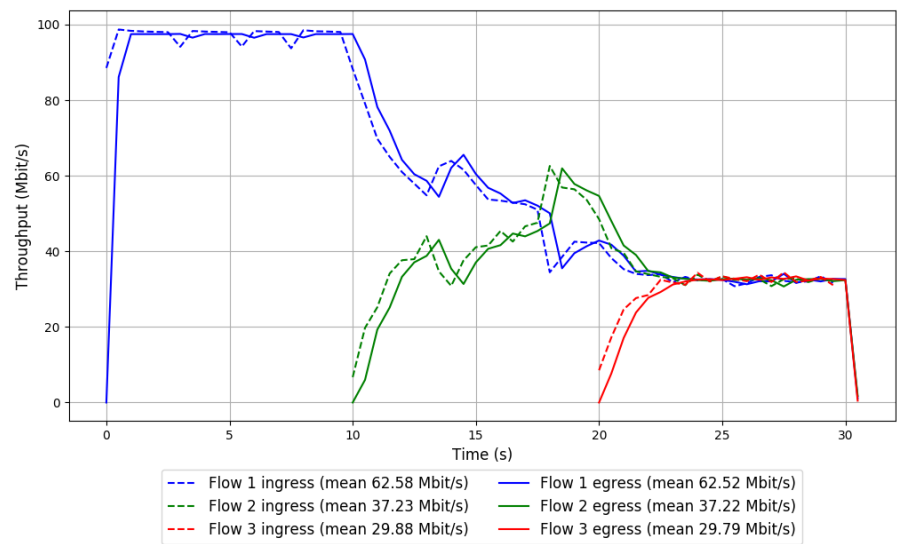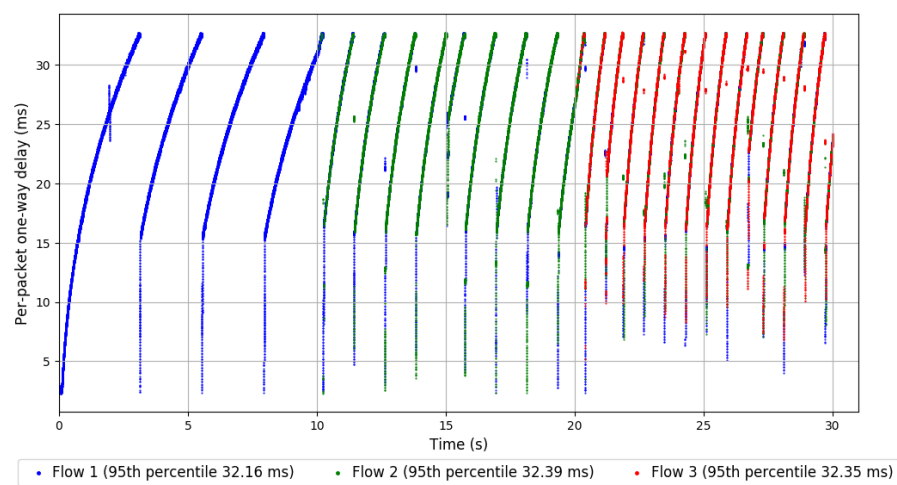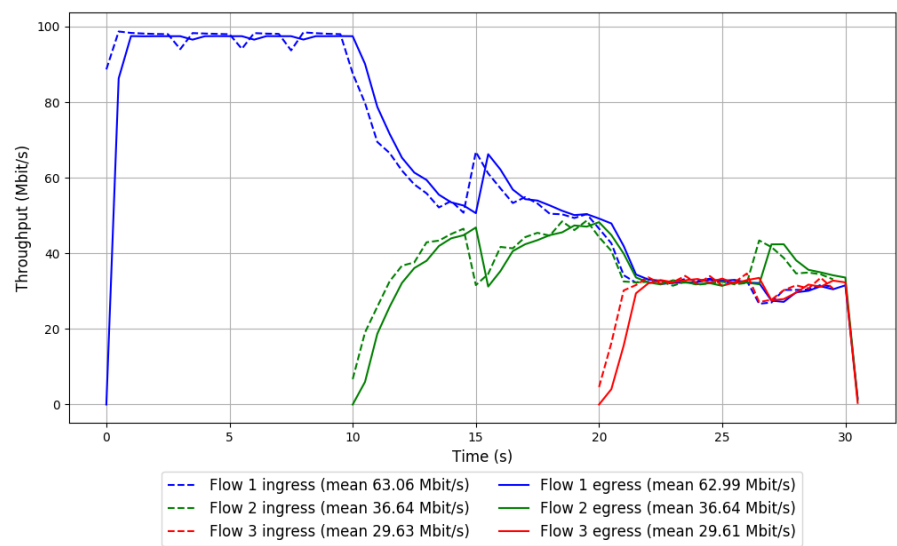
Run 2: Report of LEDBAT — Data Link

Flow 1 ingress (mean 61.46 Mbit/s)   Flow 1 egress (mean 61.39 Mbit/s)
Flow 2 ingress (mean 38.57 Mbit/s)   Flow 2 egress (mean 38.55 Mbit/s)
Flow 3 ingress (mean 30.20 Mbit/s)   Flow 3 egress (mean 30.17 Mbit/s)

Flow 1 (95th percentile 31.90 ms)   Flow 2 (95th percentile 32.28 ms)   Flow 3 (95th percentile 32.32 ms)

```
Run 3: Statistics of LEDBAT

Start at: 2018-07-03 19:12:38
End at: 2018-07-03 19:13:08
Local clock offset: -3.173 ms
Remote clock offset: -1.958 ms

# Below is generated by plot.py at 2018-07-03 21:46:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.09 Mbit/s
95th percentile per-packet one-way delay: 32.114 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 60.44 Mbit/s
95th percentile per-packet one-way delay: 32.011 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 39.54 Mbit/s
95th percentile per-packet one-way delay: 32.327 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 31.11 Mbit/s
95th percentile per-packet one-way delay: 32.499 ms
Loss rate: 0.08%
```
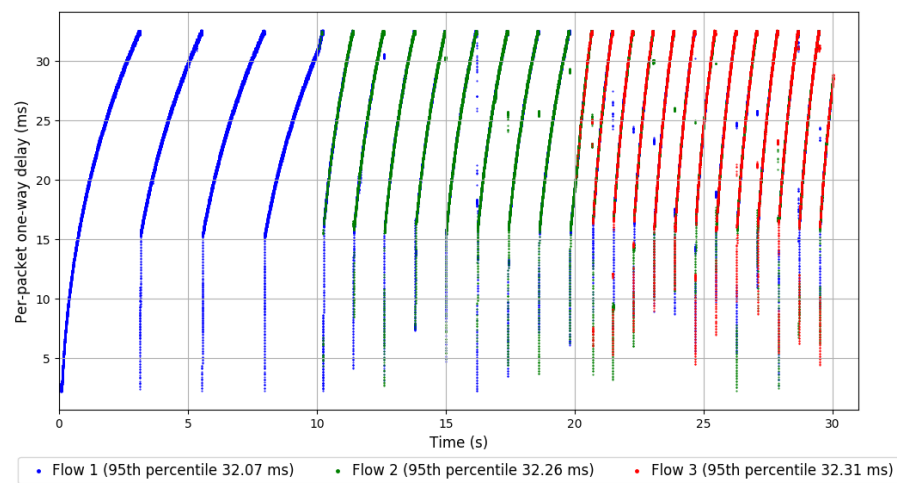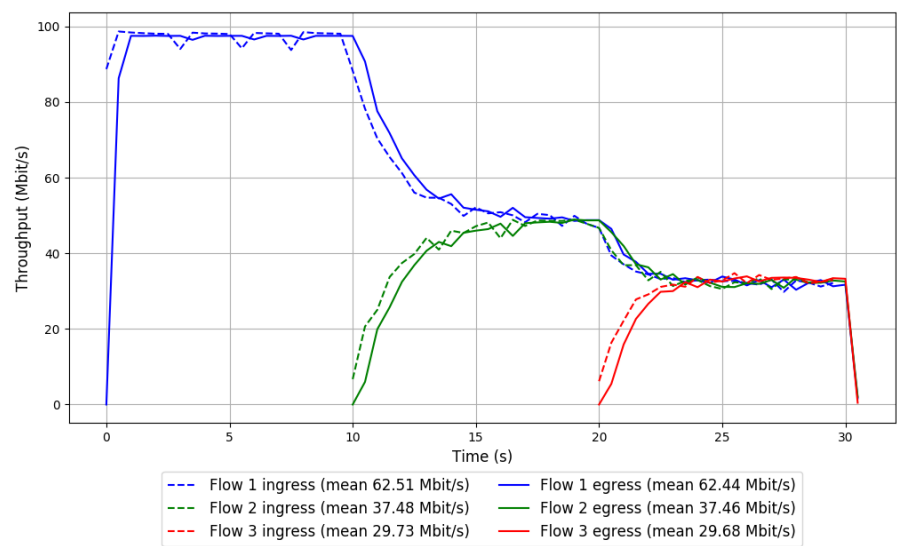
Run 3: Report of LEDBAT — Data Link

Flow 1 ingress (mean 60.52 Mbit/s) --- Flow 1 egress (mean 60.44 Mbit/s)
Flow 2 ingress (mean 39.60 Mbit/s) --- Flow 2 egress (mean 39.54 Mbit/s)
Flow 3 ingress (mean 31.13 Mbit/s) --- Flow 3 egress (mean 31.11 Mbit/s)

Flow 1 (95th percentile 32.01 ms)   Flow 2 (95th percentile 32.33 ms)   Flow 3 (95th percentile 32.50 ms)

```
Run 4: Statistics of LEDBAT

Start at: 2018-07-03 19:31:52
End at: 2018-07-03 19:32:22
Local clock offset: -2.066 ms
Remote clock offset: -1.685 ms

# Below is generated by plot.py at 2018-07-03 21:46:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.22 Mbit/s
95th percentile per-packet one-way delay: 32.158 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 62.58 Mbit/s
95th percentile per-packet one-way delay: 32.129 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 37.38 Mbit/s
95th percentile per-packet one-way delay: 32.314 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 29.39 Mbit/s
95th percentile per-packet one-way delay: 32.356 ms
Loss rate: 0.07%
```
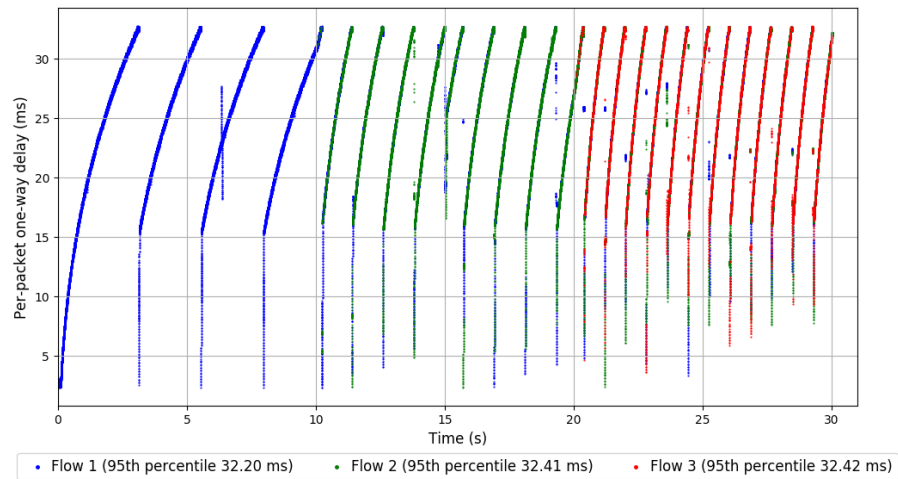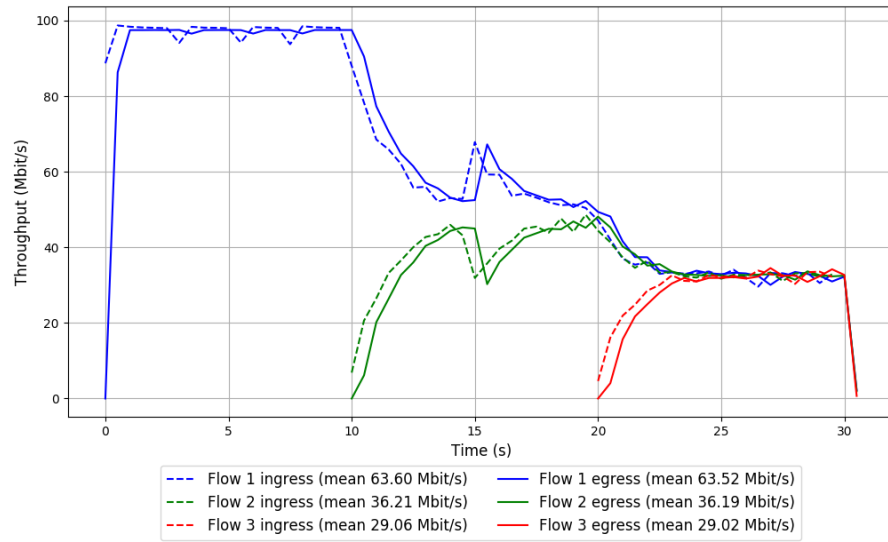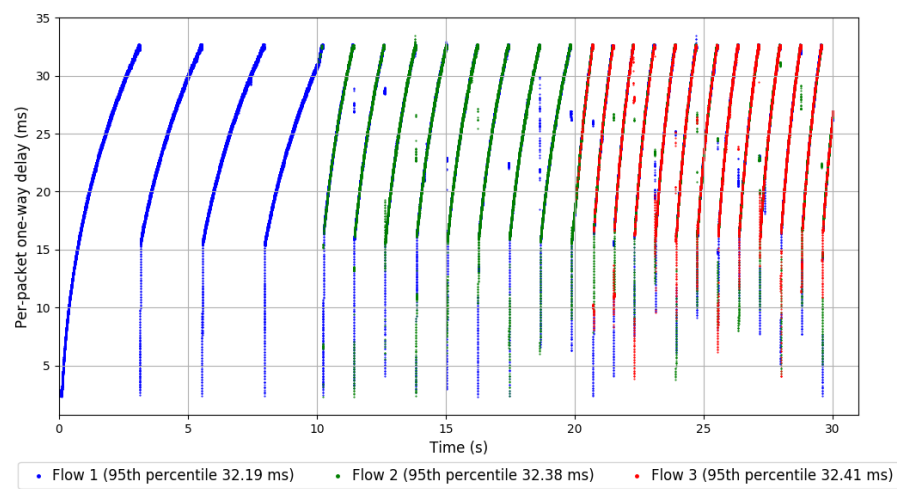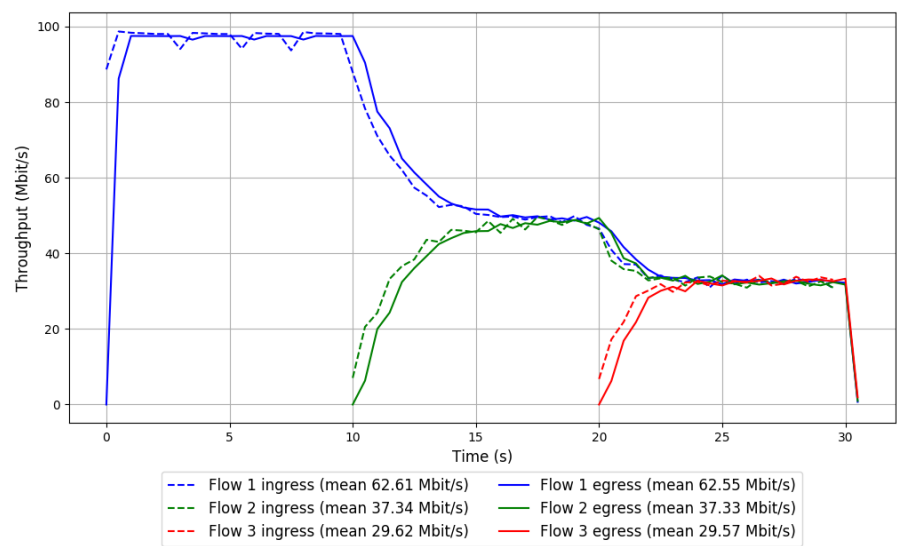
Run 4: Report of LEDBAT — Data Link

- - - Flow 1 ingress (mean 62.65 Mbit/s) ——— Flow 1 egress (mean 62.58 Mbit/s)
- - - Flow 2 ingress (mean 37.40 Mbit/s) ——— Flow 2 egress (mean 37.38 Mbit/s)
- - - Flow 3 ingress (mean 29.44 Mbit/s) ——— Flow 3 egress (mean 29.39 Mbit/s)

- Flow 1 (95th percentile 32.13 ms)   - Flow 2 (95th percentile 32.31 ms)   - Flow 3 (95th percentile 32.36 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2018-07-03 19:51:04
End at: 2018-07-03 19:51:34
Local clock offset: -1.994 ms
Remote clock offset: -1.549 ms


# Below is generated by plot.py at 2018-07-03 21:46:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.20 Mbit/s
95th percentile per-packet one-way delay: 32.265 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 63.02 Mbit/s
95th percentile per-packet one-way delay: 32.227 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 37.16 Mbit/s
95th percentile per-packet one-way delay: 32.440 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 28.43 Mbit/s
95th percentile per-packet one-way delay: 32.478 ms
Loss rate: 0.09%
```
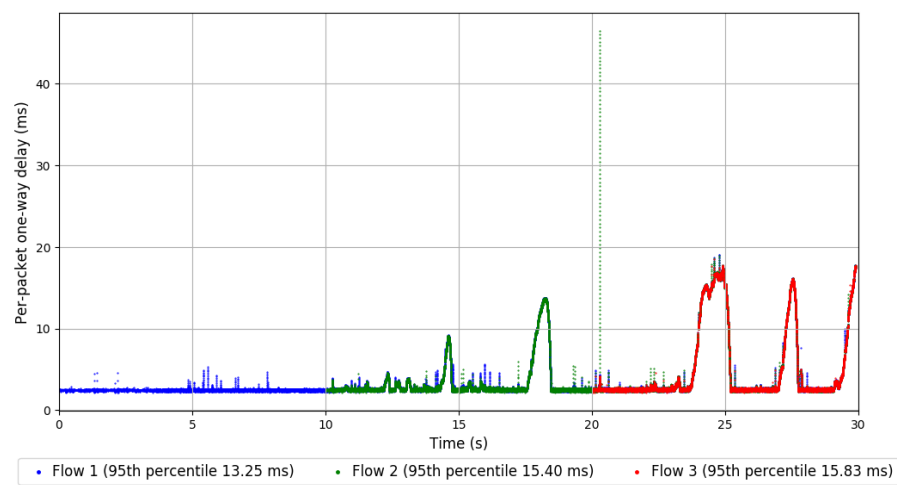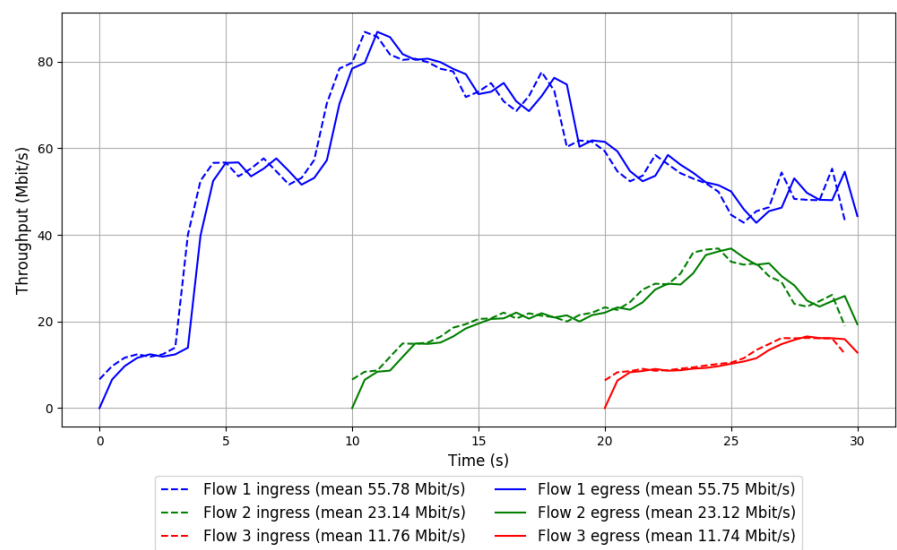
Run 5: Report of LEDBAT — Data Link

Flow 1 ingress (mean 63.10 Mbit/s)   Flow 1 egress (mean 63.02 Mbit/s)
Flow 2 ingress (mean 37.18 Mbit/s)   Flow 2 egress (mean 37.16 Mbit/s)
Flow 3 ingress (mean 28.48 Mbit/s)   Flow 3 egress (mean 28.43 Mbit/s)

Flow 1 (95th percentile 32.23 ms)   Flow 2 (95th percentile 32.44 ms)   Flow 3 (95th percentile 32.48 ms)

```
Run 6: Statistics of LEDBAT

Start at: 2018-07-03 20:10:17
End at: 2018-07-03 20:10:47
Local clock offset: -1.908 ms
Remote clock offset: -2.68 ms

# Below is generated by plot.py at 2018-07-03 21:46:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.18 Mbit/s
95th percentile per-packet one-way delay: 32.209 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 62.52 Mbit/s
95th percentile per-packet one-way delay: 32.170 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 37.22 Mbit/s
95th percentile per-packet one-way delay: 32.385 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 29.79 Mbit/s
95th percentile per-packet one-way delay: 32.398 ms
Loss rate: 0.09%
```
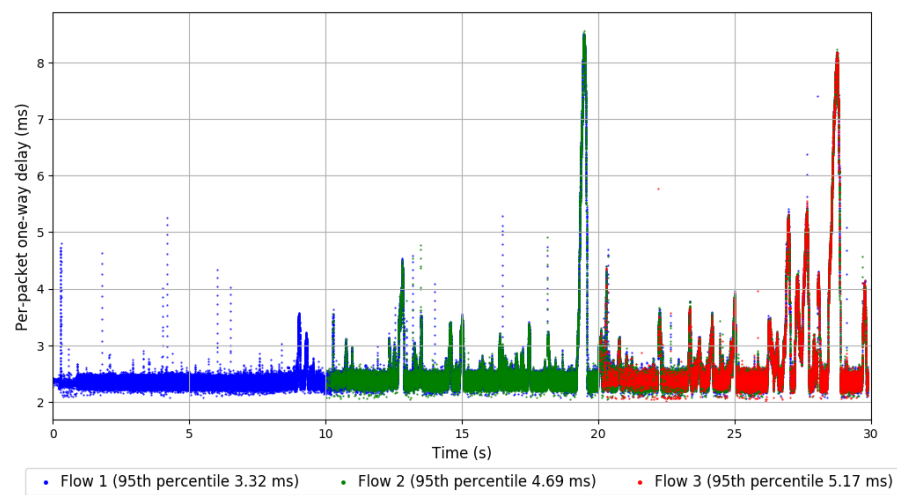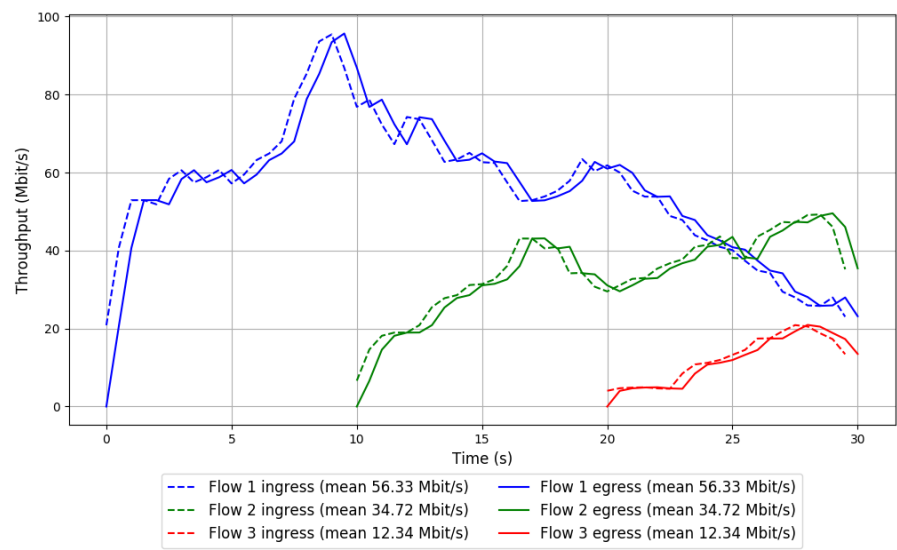
Run 6: Report of LEDBAT — Data Link

Flow 1 ingress (mean 62.58 Mbit/s) — Flow 1 egress (mean 62.52 Mbit/s)
Flow 2 ingress (mean 37.23 Mbit/s) — Flow 2 egress (mean 37.22 Mbit/s)
Flow 3 ingress (mean 29.88 Mbit/s) — Flow 3 egress (mean 29.79 Mbit/s)

Flow 1 (95th percentile 32.17 ms)   Flow 2 (95th percentile 32.38 ms)   Flow 3 (95th percentile 32.40 ms)

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```
Run 7: Statistics of LEDBAT

Start at: 2018-07-03 20:29:30
End at: 2018-07-03 20:30:00
Local clock offset: -1.767 ms
Remote clock offset: -2.863 ms


# Below is generated by plot.py at 2018-07-03 21:46:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.19 Mbit/s
95th percentile per-packet one-way delay: 32.202 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 62.99 Mbit/s
95th percentile per-packet one-way delay: 32.160 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 36.64 Mbit/s
95th percentile per-packet one-way delay: 32.387 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 29.61 Mbit/s
95th percentile per-packet one-way delay: 32.353 ms
Loss rate: 0.09%
```

Run 7: Report of LEDBAT — Data Link

Flow 1 ingress (mean 63.06 Mbit/s) --- Flow 1 egress (mean 62.99 Mbit/s)
Flow 2 ingress (mean 36.64 Mbit/s) --- Flow 2 egress (mean 36.64 Mbit/s)
Flow 3 ingress (mean 29.63 Mbit/s) --- Flow 3 egress (mean 29.61 Mbit/s)

Flow 1 (95th percentile 32.16 ms)   Flow 2 (95th percentile 32.39 ms)   Flow 3 (95th percentile 32.35 ms)

```
Run 8: Statistics of LEDBAT

Start at: 2018-07-03 20:48:43
End at: 2018-07-03 20:49:13
Local clock offset: -2.398 ms
Remote clock offset: -3.017 ms


# Below is generated by plot.py at 2018-07-03 21:46:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.22 Mbit/s
95th percentile per-packet one-way delay: 32.095 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 62.44 Mbit/s
95th percentile per-packet one-way delay: 32.068 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 37.46 Mbit/s
95th percentile per-packet one-way delay: 32.262 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 29.68 Mbit/s
95th percentile per-packet one-way delay: 32.307 ms
Loss rate: 0.09%
```
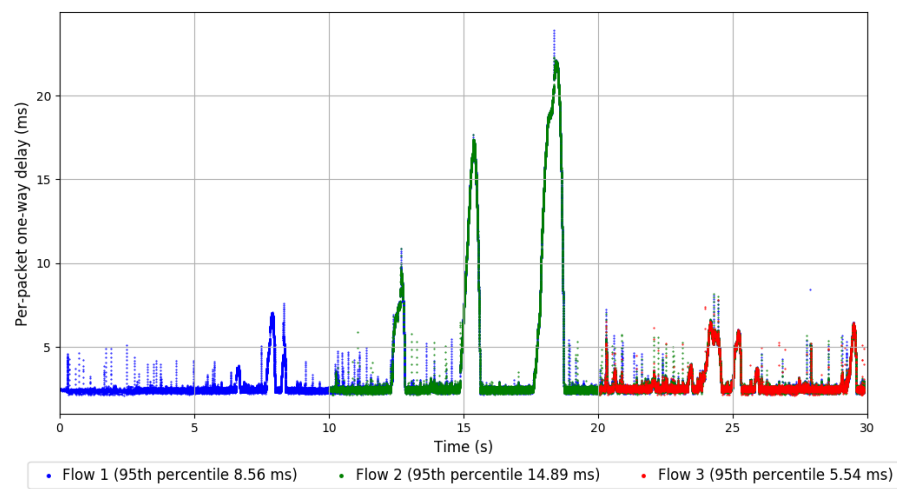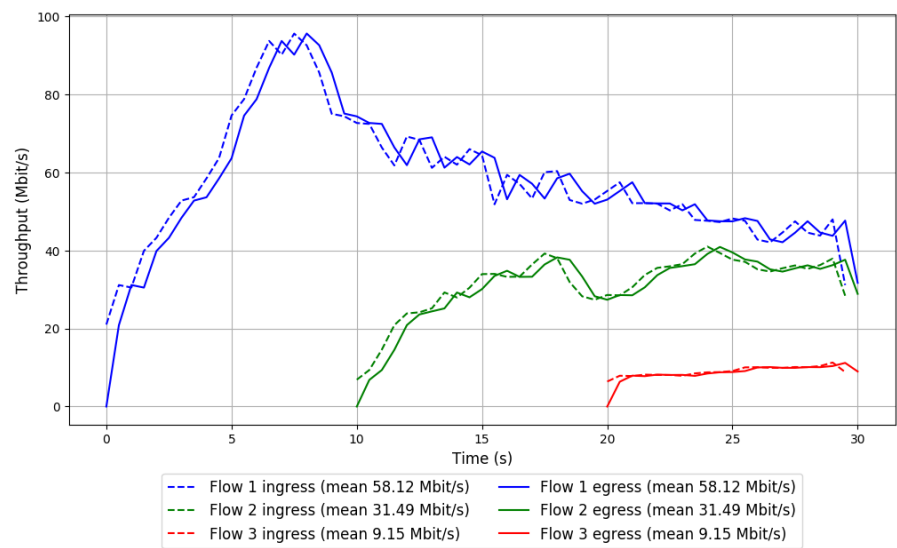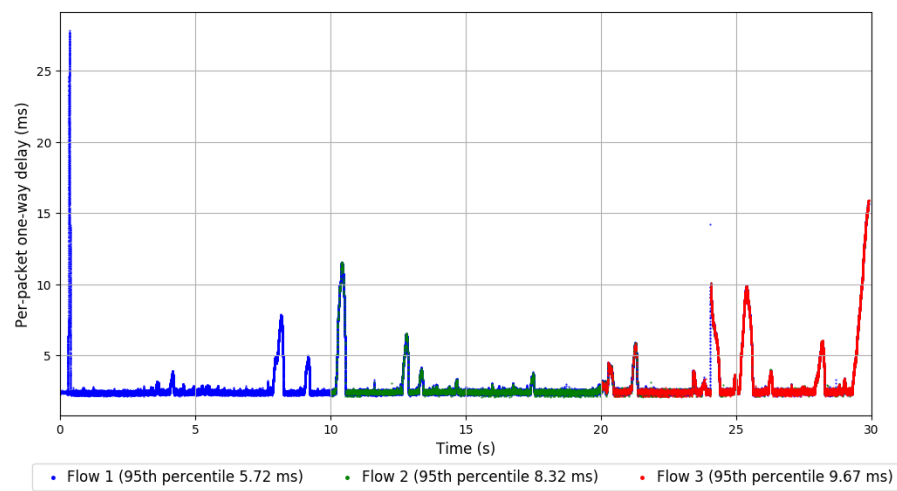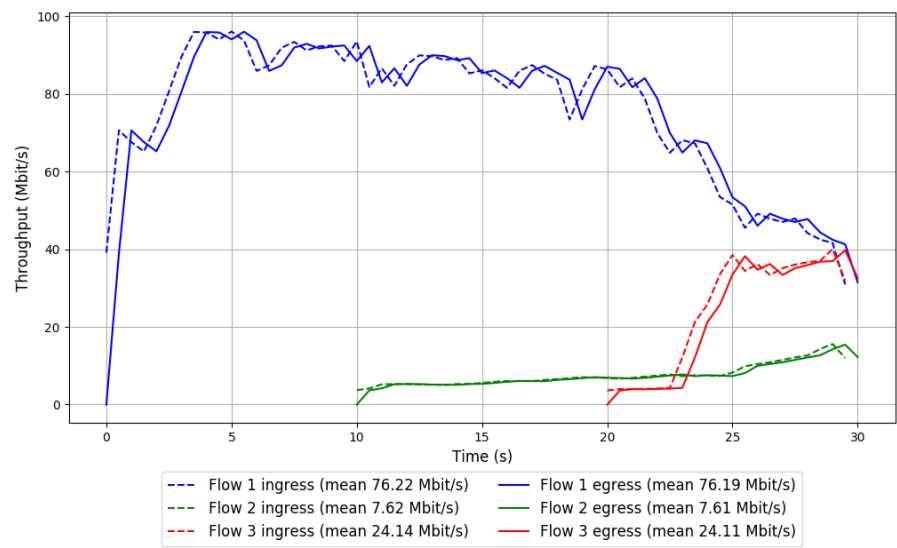
Run 8: Report of LEDBAT — Data Link

- - - Flow 1 ingress (mean 62.51 Mbit/s) ——— Flow 1 egress (mean 62.44 Mbit/s)
- - - Flow 2 ingress (mean 37.48 Mbit/s) ——— Flow 2 egress (mean 37.46 Mbit/s)
- - - Flow 3 ingress (mean 29.73 Mbit/s) ——— Flow 3 egress (mean 29.68 Mbit/s)

• Flow 1 (95th percentile 32.07 ms)   • Flow 2 (95th percentile 32.26 ms)   • Flow 3 (95th percentile 32.31 ms)

```
Run 9: Statistics of LEDBAT

Start at: 2018-07-03 21:07:56
End at: 2018-07-03 21:08:26
Local clock offset: -2.949 ms
Remote clock offset: -2.609 ms


# Below is generated by plot.py at 2018-07-03 21:47:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.21 Mbit/s
95th percentile per-packet one-way delay: 32.230 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 63.52 Mbit/s
95th percentile per-packet one-way delay: 32.205 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 36.19 Mbit/s
95th percentile per-packet one-way delay: 32.408 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 29.02 Mbit/s
95th percentile per-packet one-way delay: 32.421 ms
Loss rate: 0.10%
```
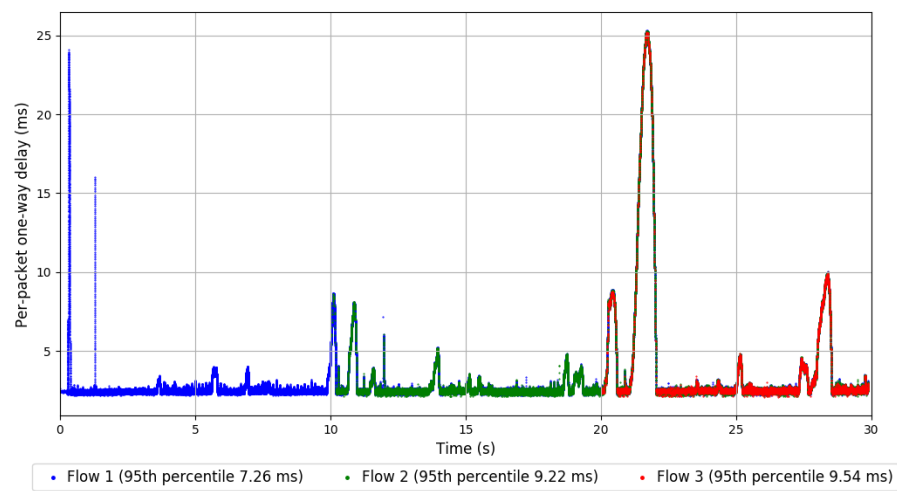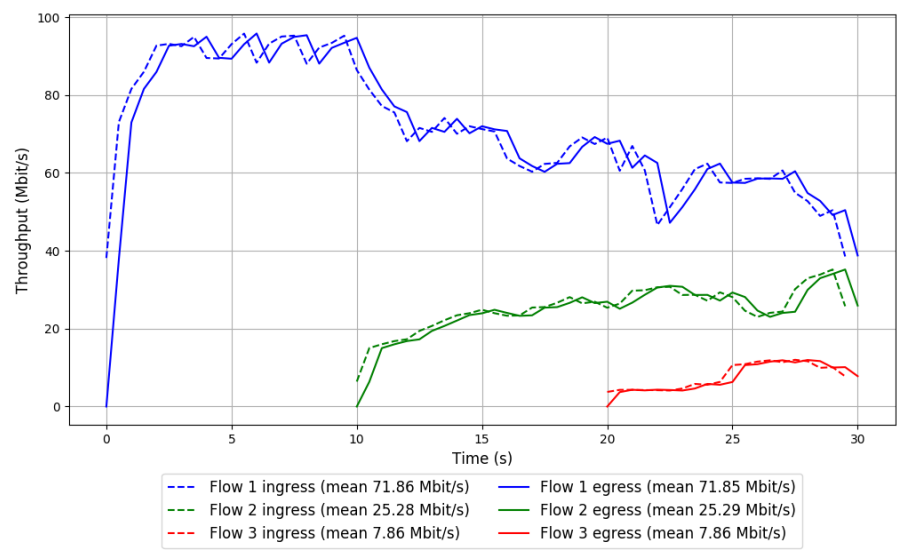
Run 9: Report of LEDBAT — Data Link

Flow 1 ingress (mean 63.60 Mbit/s) --- Flow 1 egress (mean 63.52 Mbit/s)
Flow 2 ingress (mean 36.21 Mbit/s) --- Flow 2 egress (mean 36.19 Mbit/s)
Flow 3 ingress (mean 29.06 Mbit/s) --- Flow 3 egress (mean 29.02 Mbit/s)

Flow 1 (95th percentile 32.20 ms) · Flow 2 (95th percentile 32.41 ms) · Flow 3 (95th percentile 32.42 ms)

```
Run 10: Statistics of LEDBAT

Start at: 2018-07-03 21:27:09
End at: 2018-07-03 21:27:39
Local clock offset: -2.825 ms
Remote clock offset: -2.482 ms

# Below is generated by plot.py at 2018-07-03 21:47:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.21 Mbit/s
95th percentile per-packet one-way delay: 32.216 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 62.55 Mbit/s
95th percentile per-packet one-way delay: 32.190 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 37.33 Mbit/s
95th percentile per-packet one-way delay: 32.380 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 29.57 Mbit/s
95th percentile per-packet one-way delay: 32.410 ms
Loss rate: 0.09%
```

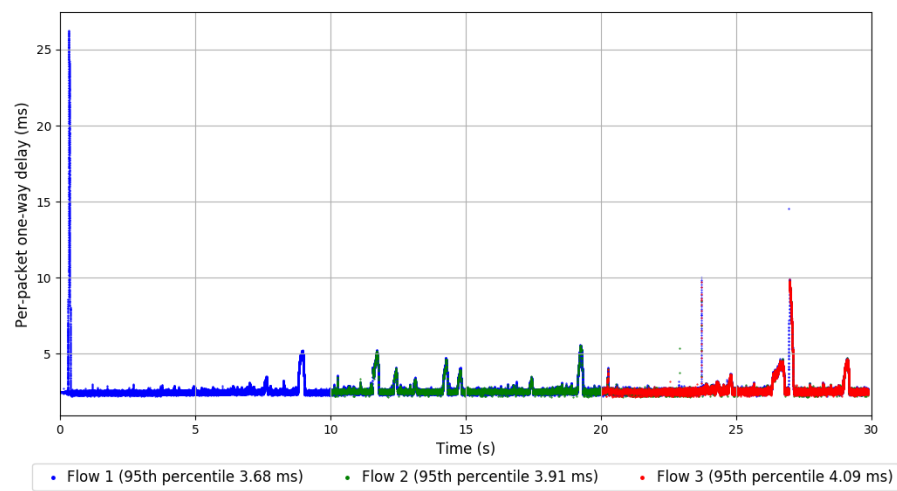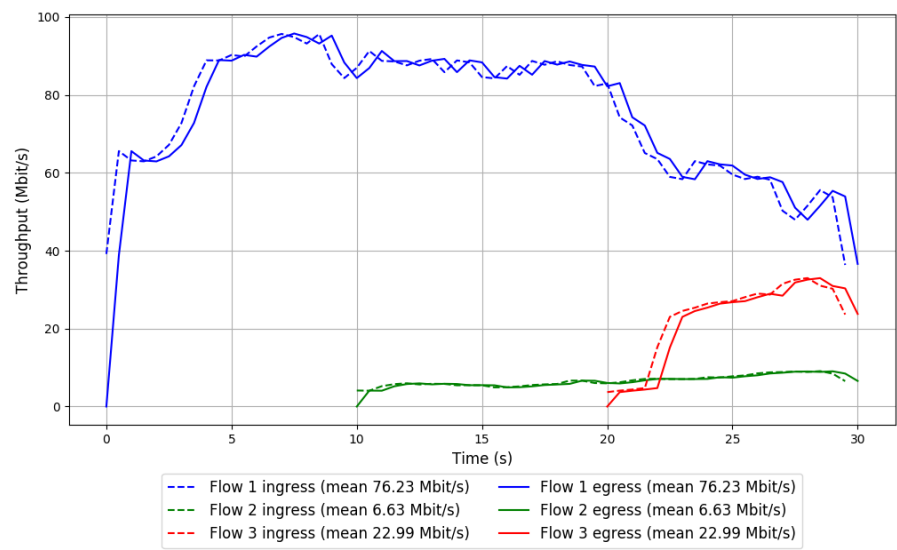Run 10: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC-Allegro

Start at: 2018-07-03 18:25:16
End at: 2018-07-03 18:25:46
Local clock offset: -2.367 ms
Remote clock offset: -2.704 ms


# Below is generated by plot.py at 2018-07-03 21:47:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.00 Mbit/s
95th percentile per-packet one-way delay: 14.424 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.75 Mbit/s
95th percentile per-packet one-way delay: 13.252 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 23.12 Mbit/s
95th percentile per-packet one-way delay: 15.396 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.74 Mbit/s
95th percentile per-packet one-way delay: 15.826 ms
Loss rate: 0.00%
```
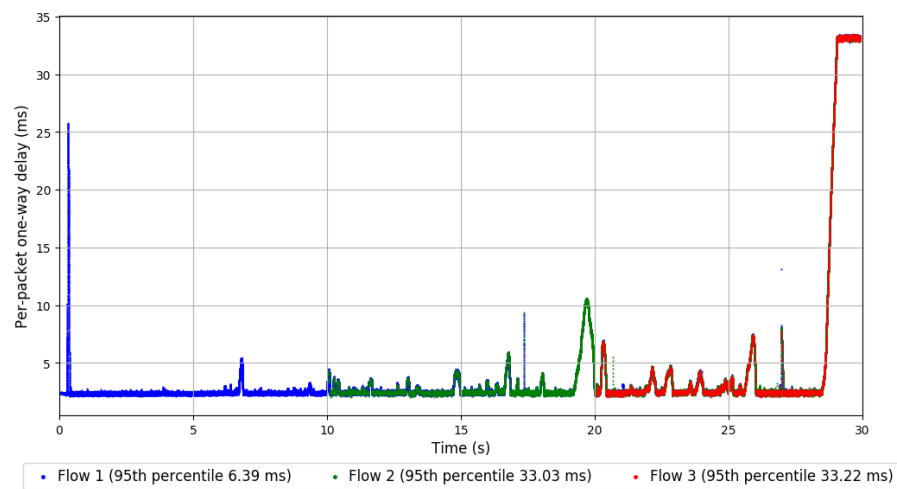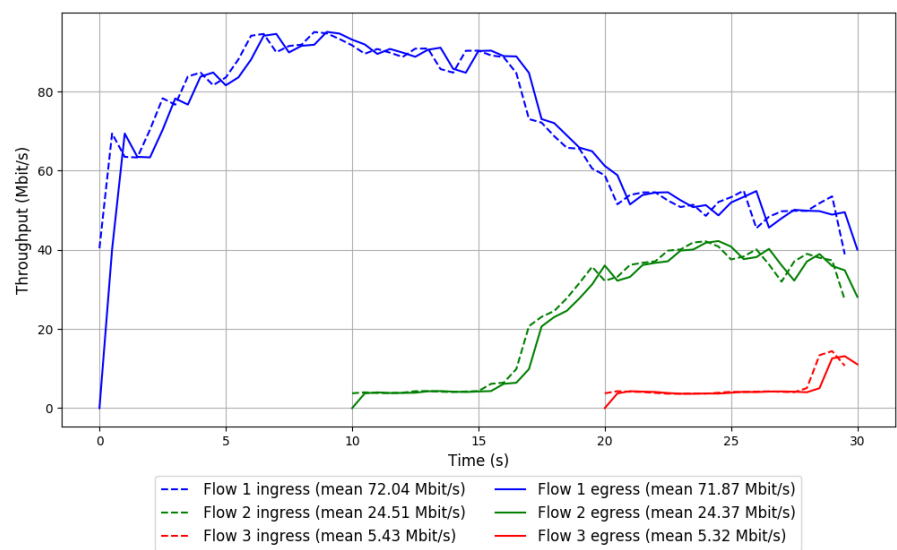
Run 1: Report of PCC-Allegro — Data Link

```
Run 2: Statistics of PCC-Allegro

Start at: 2018-07-03 18:44:28
End at: 2018-07-03 18:44:58
Local clock offset: -2.589 ms
Remote clock offset: -2.556 ms


# Below is generated by plot.py at 2018-07-03 21:48:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.49 Mbit/s
95th percentile per-packet one-way delay: 3.851 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 56.33 Mbit/s
95th percentile per-packet one-way delay: 3.324 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 34.72 Mbit/s
95th percentile per-packet one-way delay: 4.692 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 12.34 Mbit/s
95th percentile per-packet one-way delay: 5.166 ms
Loss rate: 0.00%
```
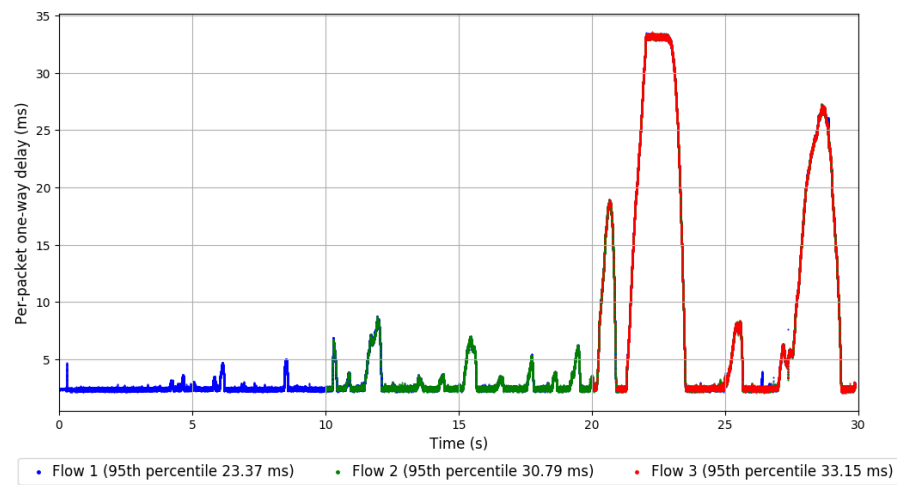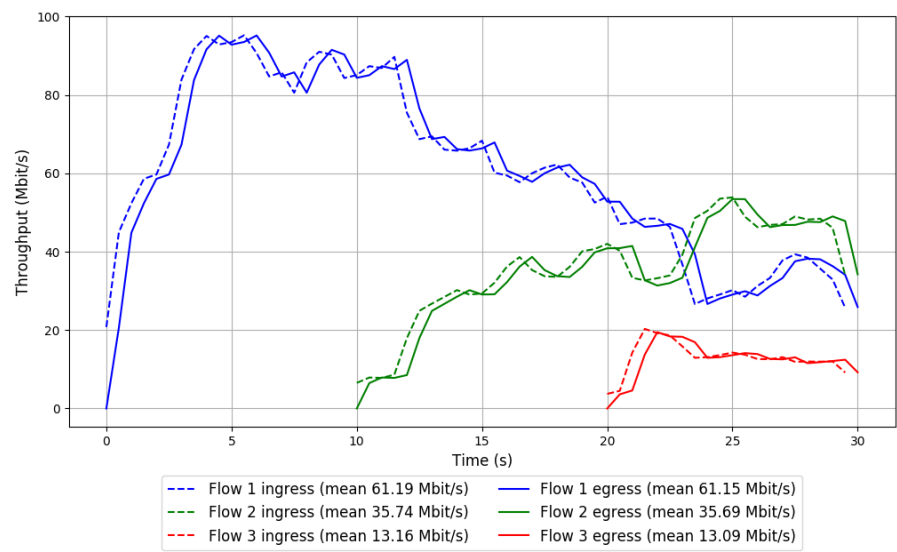
Run 2: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 56.33 Mbit/s)   Flow 1 egress (mean 56.33 Mbit/s)
Flow 2 ingress (mean 34.72 Mbit/s)   Flow 2 egress (mean 34.72 Mbit/s)
Flow 3 ingress (mean 12.34 Mbit/s)   Flow 3 egress (mean 12.34 Mbit/s)

Flow 1 (95th percentile 3.32 ms)   Flow 2 (95th percentile 4.69 ms)   Flow 3 (95th percentile 5.17 ms)

```
Run 3: Statistics of PCC-Allegro

Start at: 2018-07-03 19:03:41
End at: 2018-07-03 19:04:11
Local clock offset: -3.312 ms
Remote clock offset: -2.04 ms


# Below is generated by plot.py at 2018-07-03 21:48:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.08 Mbit/s
95th percentile per-packet one-way delay: 9.782 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 58.12 Mbit/s
95th percentile per-packet one-way delay: 8.557 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 31.49 Mbit/s
95th percentile per-packet one-way delay: 14.893 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.15 Mbit/s
95th percentile per-packet one-way delay: 5.544 ms
Loss rate: 0.00%
```
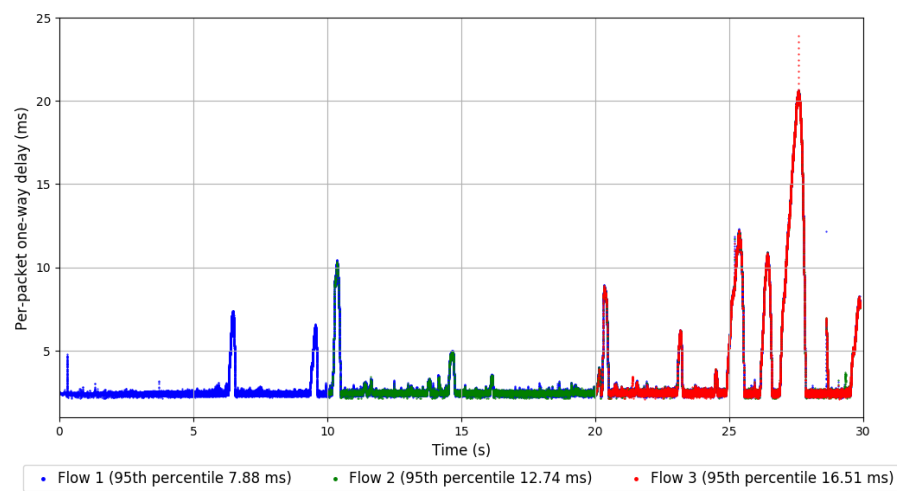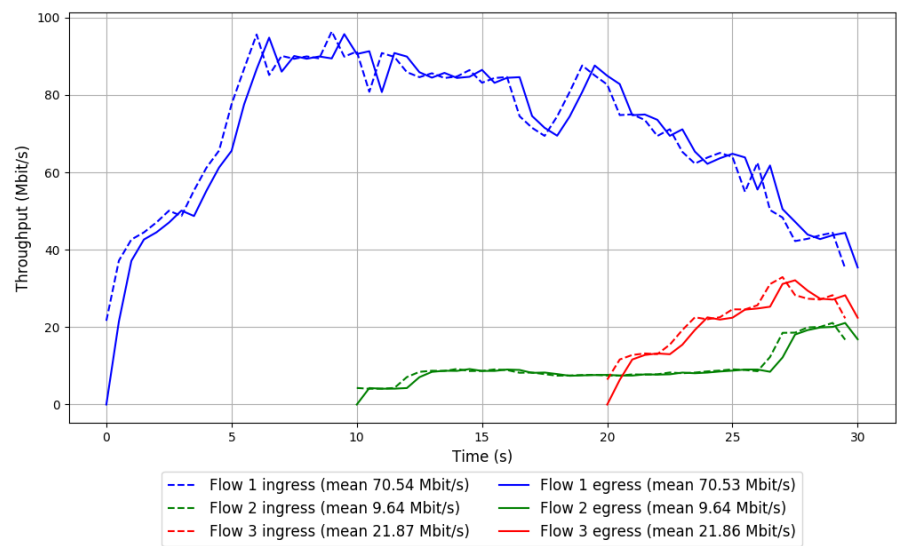
Run 3: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 58.12 Mbit/s) --- Flow 1 egress (mean 58.12 Mbit/s)
Flow 2 ingress (mean 31.49 Mbit/s) --- Flow 2 egress (mean 31.49 Mbit/s)
Flow 3 ingress (mean 9.15 Mbit/s) --- Flow 3 egress (mean 9.15 Mbit/s)

• Flow 1 (95th percentile 8.56 ms)   • Flow 2 (95th percentile 14.89 ms)   • Flow 3 (95th percentile 5.54 ms)

```
Run 4: Statistics of PCC-Allegro

Start at: 2018-07-03 19:22:54
End at: 2018-07-03 19:23:24
Local clock offset: -2.352 ms
Remote clock offset: -1.821 ms


# Below is generated by plot.py at 2018-07-03 21:48:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.21 Mbit/s
95th percentile per-packet one-way delay: 6.495 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 76.19 Mbit/s
95th percentile per-packet one-way delay: 5.720 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.61 Mbit/s
95th percentile per-packet one-way delay: 8.320 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.11 Mbit/s
95th percentile per-packet one-way delay: 9.671 ms
Loss rate: 0.00%
```
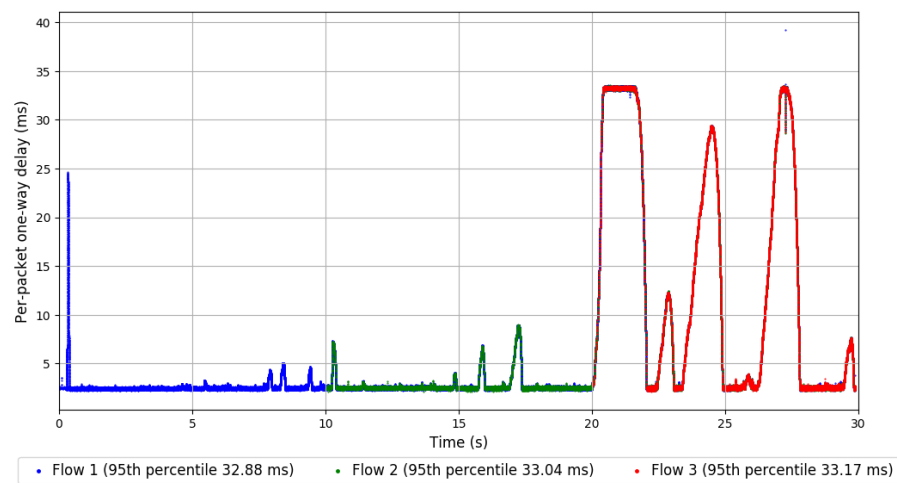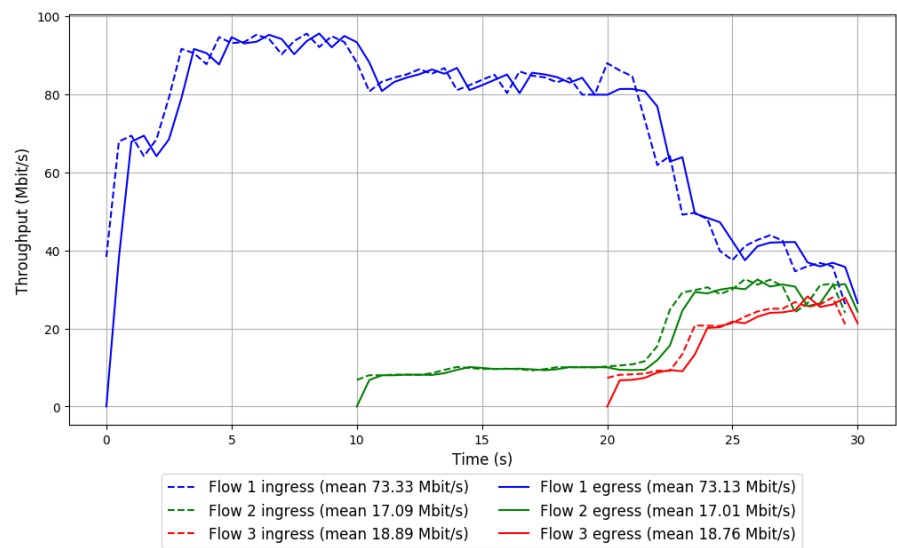
Run 4: Report of PCC-Allegro — Data Link

```
Run 5: Statistics of PCC-Allegro

Start at: 2018-07-03 19:42:07
End at: 2018-07-03 19:42:37
Local clock offset: -1.931 ms
Remote clock offset: -1.471 ms


# Below is generated by plot.py at 2018-07-03 21:48:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.26 Mbit/s
95th percentile per-packet one-way delay: 7.904 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 71.85 Mbit/s
95th percentile per-packet one-way delay: 7.256 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 25.29 Mbit/s
95th percentile per-packet one-way delay: 9.222 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.86 Mbit/s
95th percentile per-packet one-way delay: 9.541 ms
Loss rate: 0.00%
```
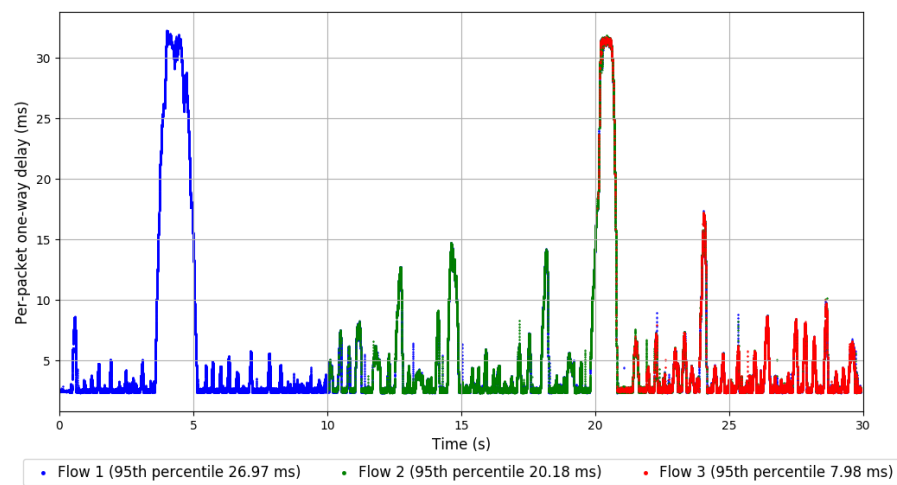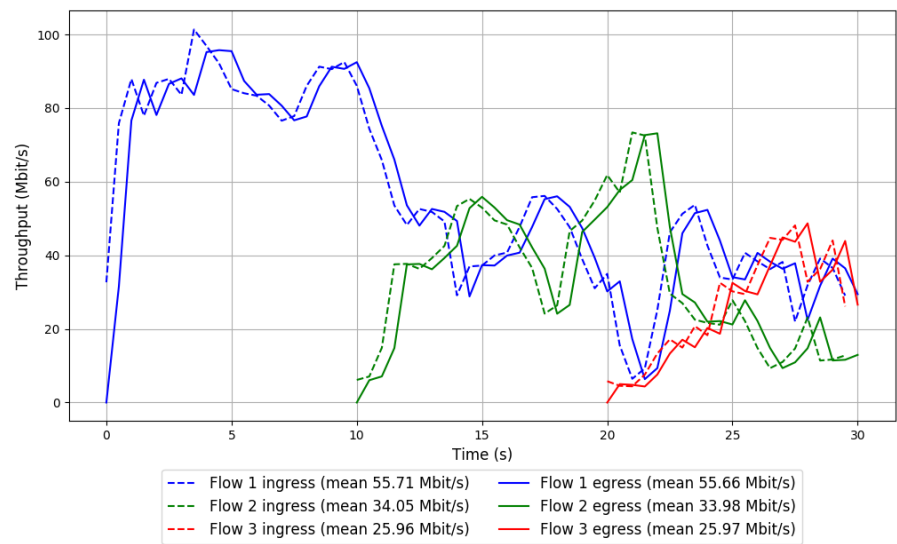
Run 5: Report of PCC-Allegro — Data Link

- - - Flow 1 ingress (mean 71.86 Mbit/s) —— Flow 1 egress (mean 71.85 Mbit/s)
- - - Flow 2 ingress (mean 25.28 Mbit/s) —— Flow 2 egress (mean 25.29 Mbit/s)
- - - Flow 3 ingress (mean 7.86 Mbit/s) —— Flow 3 egress (mean 7.86 Mbit/s)

• Flow 1 (95th percentile 7.26 ms)   • Flow 2 (95th percentile 9.22 ms)   • Flow 3 (95th percentile 9.54 ms)

```
Run 6: Statistics of PCC-Allegro

Start at: 2018-07-03 20:01:20
End at: 2018-07-03 20:01:50
Local clock offset: -2.038 ms
Remote clock offset: -2.453 ms


# Below is generated by plot.py at 2018-07-03 21:48:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.23 Mbit/s
95th percentile per-packet one-way delay: 3.745 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 76.23 Mbit/s
95th percentile per-packet one-way delay: 3.676 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.63 Mbit/s
95th percentile per-packet one-way delay: 3.913 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 22.99 Mbit/s
95th percentile per-packet one-way delay: 4.086 ms
Loss rate: 0.00%
```
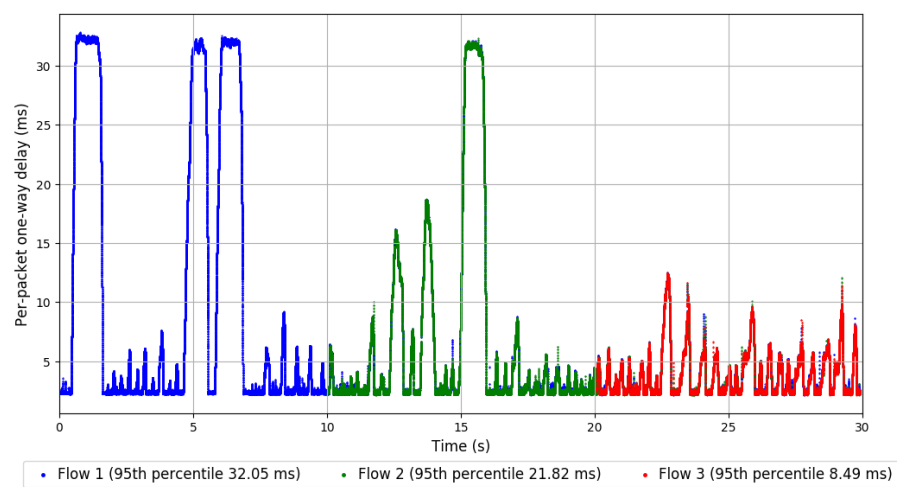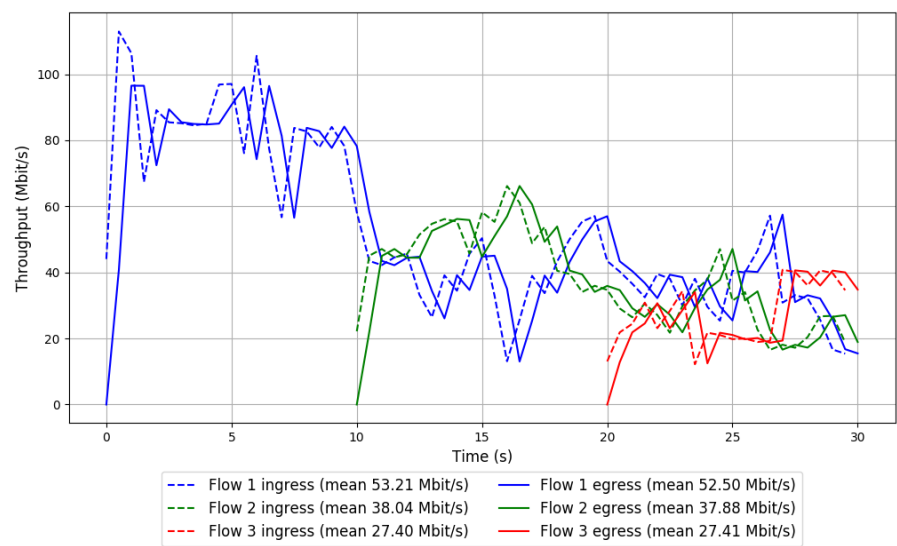
Run 6: Report of PCC-Allegro — Data Link

```
Run 7: Statistics of PCC-Allegro

Start at: 2018-07-03 20:20:33
End at: 2018-07-03 20:21:03
Local clock offset: -1.845 ms
Remote clock offset: -2.881 ms


# Below is generated by plot.py at 2018-07-03 21:48:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.84 Mbit/s
95th percentile per-packet one-way delay: 10.037 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 71.87 Mbit/s
95th percentile per-packet one-way delay: 6.392 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 24.37 Mbit/s
95th percentile per-packet one-way delay: 33.026 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 5.32 Mbit/s
95th percentile per-packet one-way delay: 33.221 ms
Loss rate: 1.65%
```
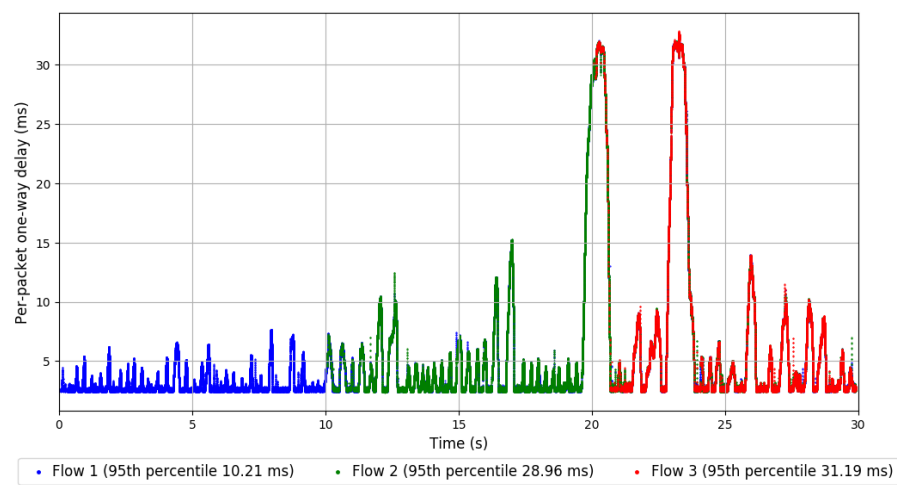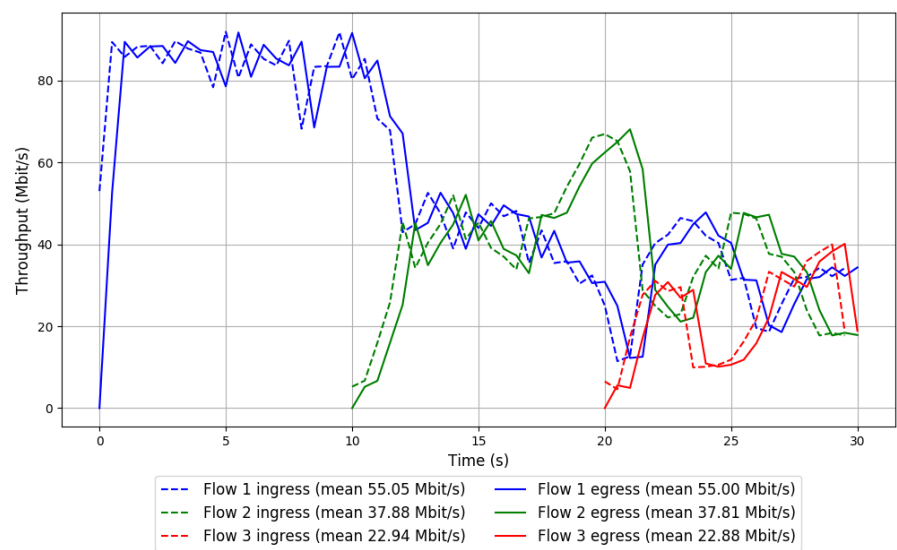
Run 7: Report of PCC-Allegro — Data Link

```
Run 8: Statistics of PCC-Allegro

Start at: 2018-07-03 20:39:46
End at: 2018-07-03 20:40:16
Local clock offset: -1.771 ms
Remote clock offset: -2.976 ms


# Below is generated by plot.py at 2018-07-03 21:48:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.20 Mbit/s
95th percentile per-packet one-way delay: 26.802 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 61.15 Mbit/s
95th percentile per-packet one-way delay: 23.366 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 35.69 Mbit/s
95th percentile per-packet one-way delay: 30.790 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 13.09 Mbit/s
95th percentile per-packet one-way delay: 33.153 ms
Loss rate: 0.54%
```
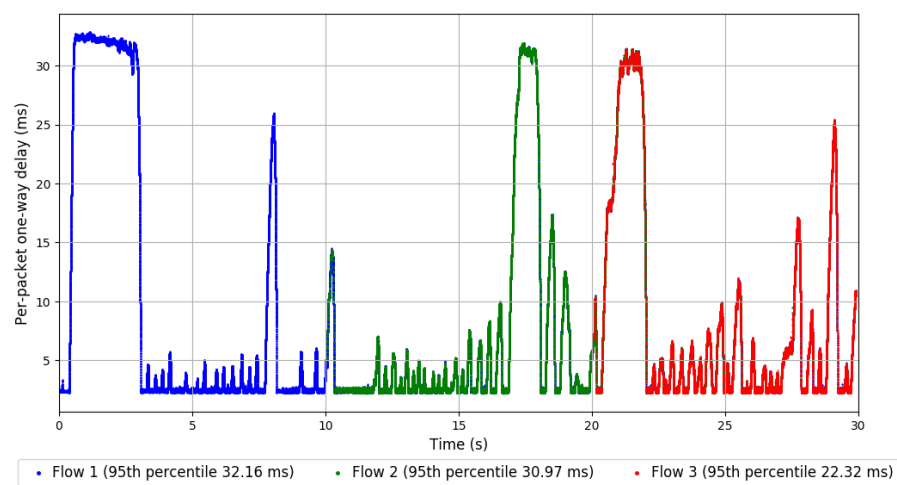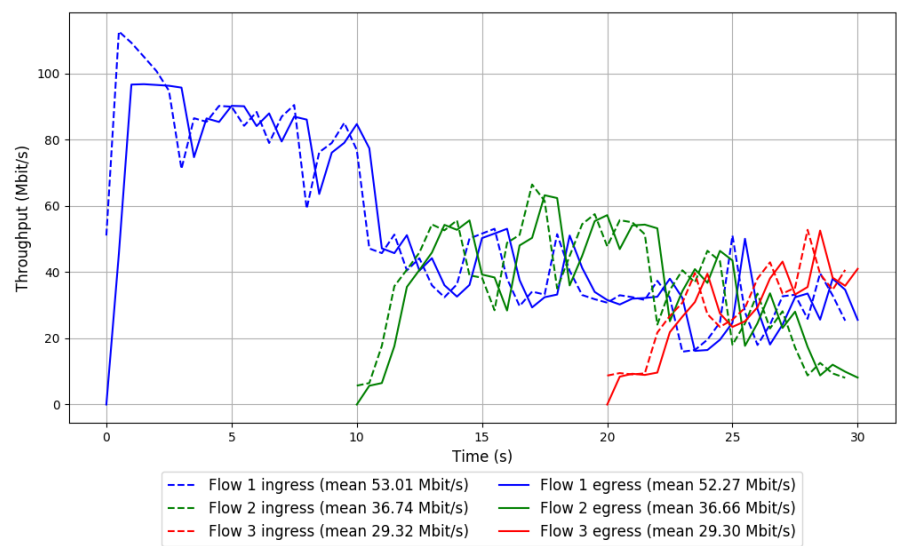
Run 8: Report of PCC-Allegro — Data Link

```
Run 9: Statistics of PCC-Allegro

Start at: 2018-07-03 20:58:58
End at: 2018-07-03 20:59:28
Local clock offset: -2.748 ms
Remote clock offset: -2.902 ms


# Below is generated by plot.py at 2018-07-03 21:48:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.15 Mbit/s
95th percentile per-packet one-way delay: 9.132 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 70.53 Mbit/s
95th percentile per-packet one-way delay: 7.879 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 9.64 Mbit/s
95th percentile per-packet one-way delay: 12.742 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 21.86 Mbit/s
95th percentile per-packet one-way delay: 16.508 ms
Loss rate: 0.00%
```
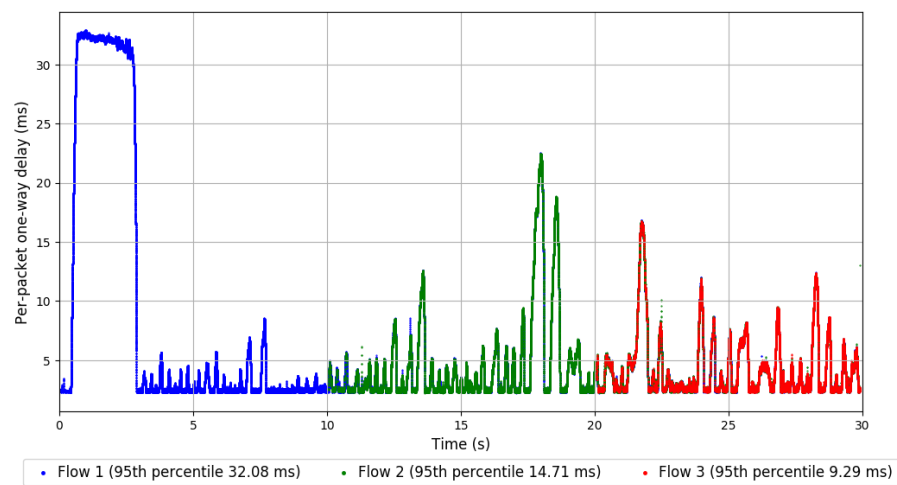
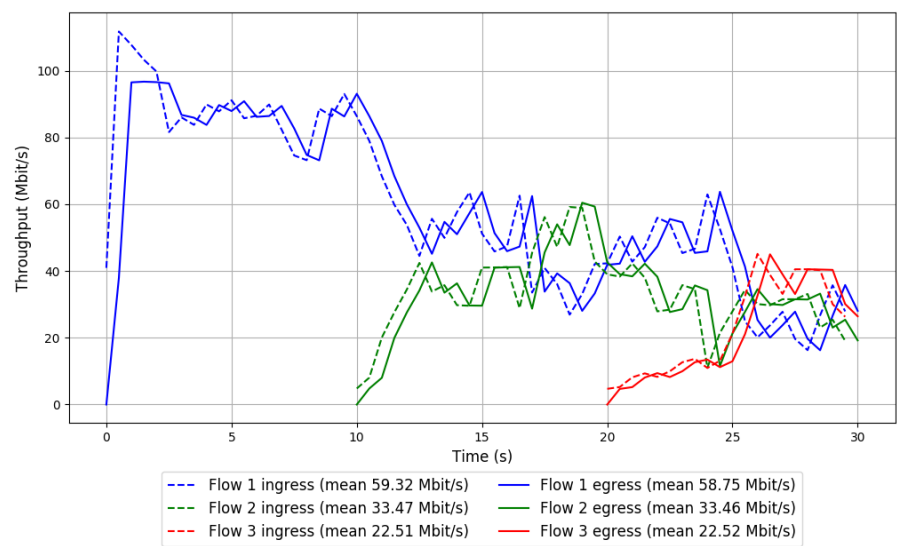Run 9: Report of PCC-Allegro — Data Link

```
Run 10: Statistics of PCC-Allegro

Start at: 2018-07-03 21:18:11
End at: 2018-07-03 21:18:41
Local clock offset: -2.847 ms
Remote clock offset: -2.514 ms


# Below is generated by plot.py at 2018-07-03 21:49:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.63 Mbit/s
95th percentile per-packet one-way delay: 33.035 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 73.13 Mbit/s
95th percentile per-packet one-way delay: 32.875 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 17.01 Mbit/s
95th percentile per-packet one-way delay: 33.038 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 18.76 Mbit/s
95th percentile per-packet one-way delay: 33.171 ms
Loss rate: 0.71%
```

Run 10: Report of PCC-Allegro — Data Link

```
Run 1: Statistics of PCC-Expr

Start at: 2018-07-03 18:35:22
End at: 2018-07-03 18:35:52
Local clock offset: -2.22 ms
Remote clock offset: -2.69 ms


# Below is generated by plot.py at 2018-07-03 21:50:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.82 Mbit/s
95th percentile per-packet one-way delay: 25.748 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 55.66 Mbit/s
95th percentile per-packet one-way delay: 26.968 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 33.98 Mbit/s
95th percentile per-packet one-way delay: 20.180 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 25.97 Mbit/s
95th percentile per-packet one-way delay: 7.978 ms
Loss rate: 0.10%
```
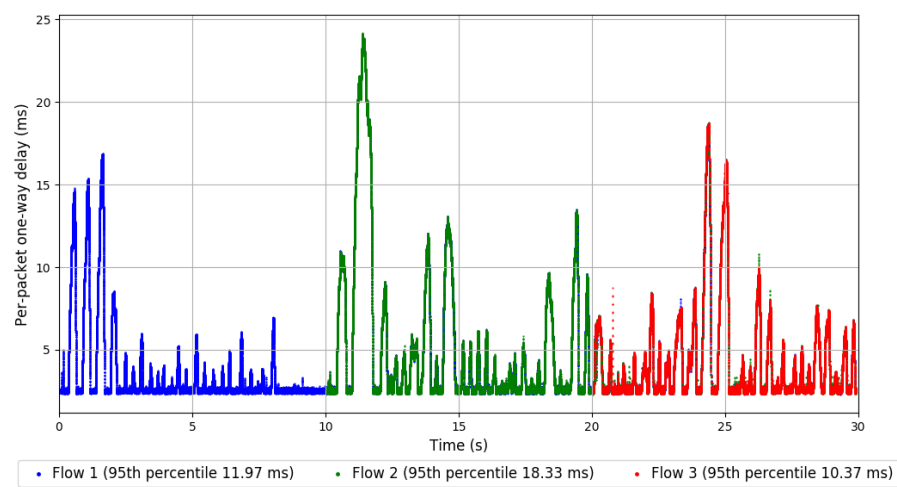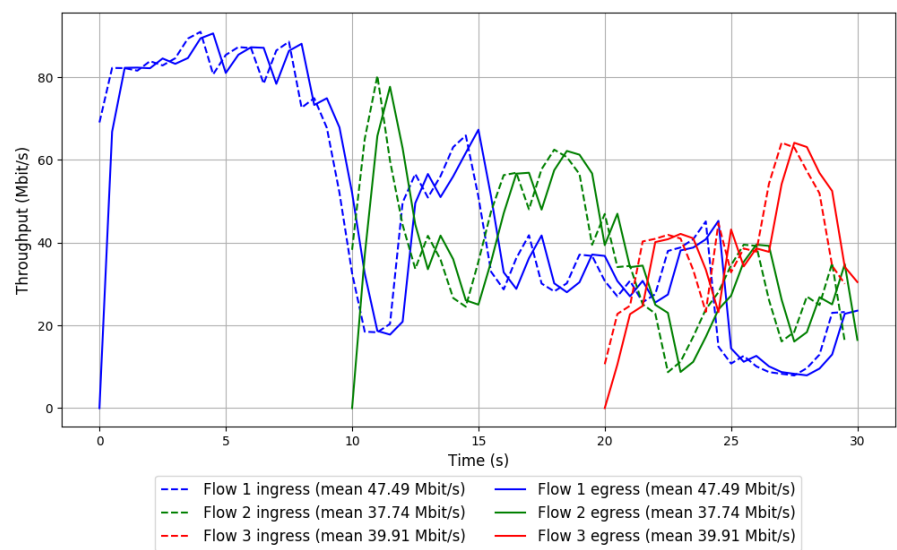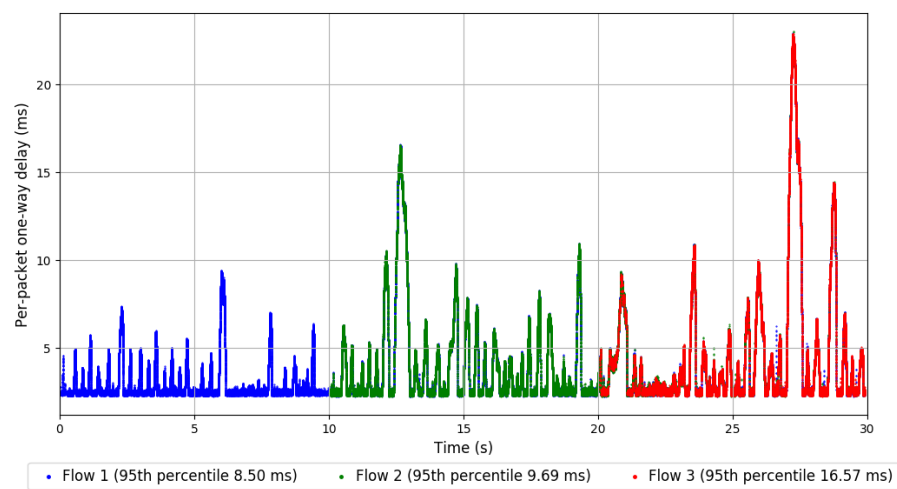
Run 1: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 55.71 Mbit/s)   Flow 1 egress (mean 55.66 Mbit/s)
Flow 2 ingress (mean 34.05 Mbit/s)   Flow 2 egress (mean 33.98 Mbit/s)
Flow 3 ingress (mean 25.96 Mbit/s)   Flow 3 egress (mean 25.97 Mbit/s)

Flow 1 (95th percentile 26.97 ms)   Flow 2 (95th percentile 20.18 ms)   Flow 3 (95th percentile 7.98 ms)

```
Run 2: Statistics of PCC-Expr

Start at: 2018-07-03 18:54:34
End at: 2018-07-03 18:55:04
Local clock offset: -3.125 ms
Remote clock offset: -2.275 ms

# Below is generated by plot.py at 2018-07-03 21:50:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.75 Mbit/s
95th percentile per-packet one-way delay: 31.771 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 52.50 Mbit/s
95th percentile per-packet one-way delay: 32.045 ms
Loss rate: 1.33%
-- Flow 2:
Average throughput: 37.88 Mbit/s
95th percentile per-packet one-way delay: 21.819 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 27.41 Mbit/s
95th percentile per-packet one-way delay: 8.492 ms
Loss rate: 0.00%
```
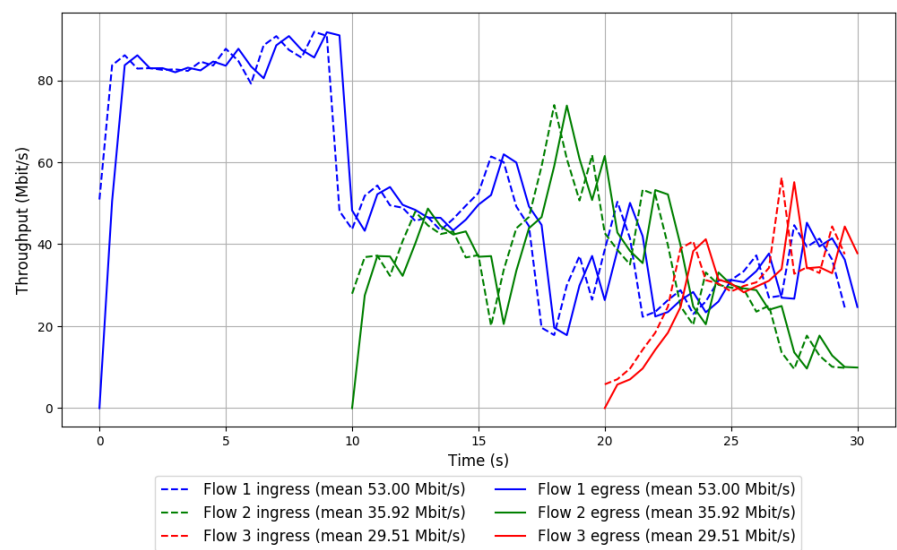
Run 2: Report of PCC-Expr — Data Link

```
Run 3: Statistics of PCC-Expr

Start at: 2018-07-03 19:13:47
End at: 2018-07-03 19:14:17
Local clock offset: -3.048 ms
Remote clock offset: -1.895 ms


# Below is generated by plot.py at 2018-07-03 21:50:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.68 Mbit/s
95th percentile per-packet one-way delay: 20.020 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 55.00 Mbit/s
95th percentile per-packet one-way delay: 10.207 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 37.81 Mbit/s
95th percentile per-packet one-way delay: 28.961 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 22.88 Mbit/s
95th percentile per-packet one-way delay: 31.188 ms
Loss rate: 0.52%
```
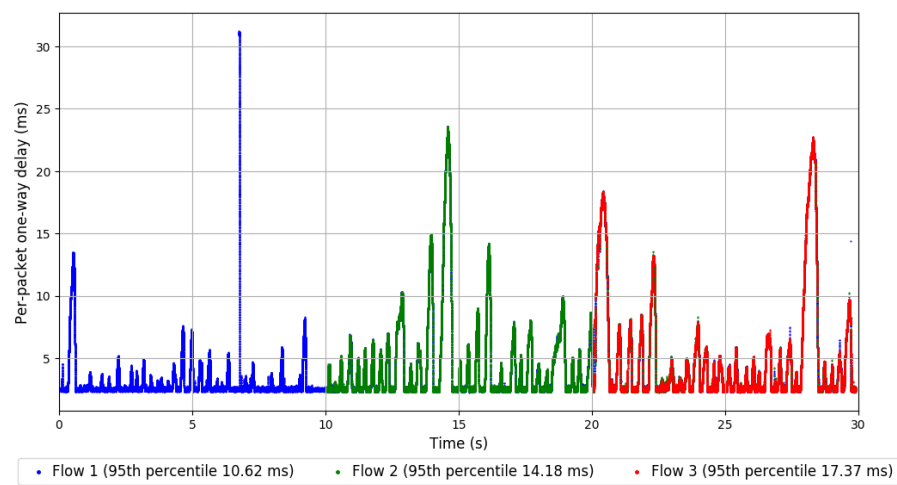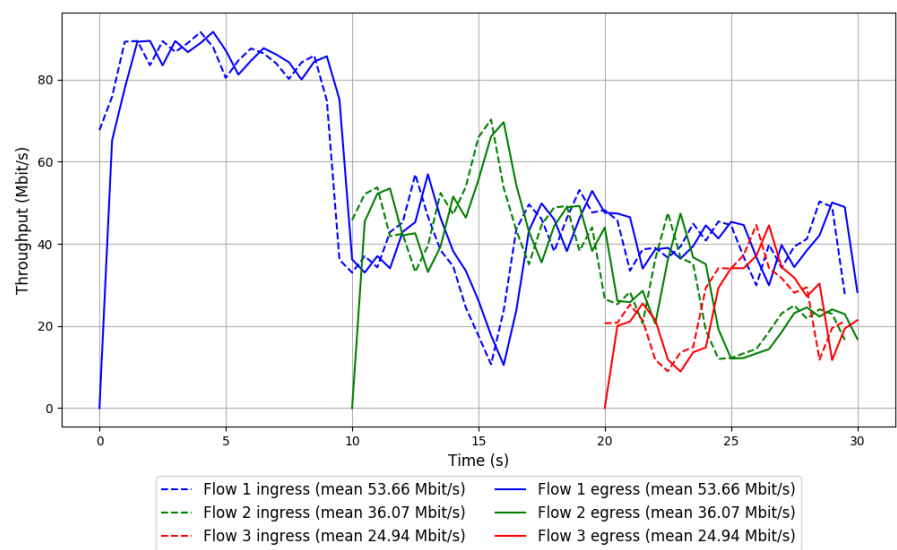
Run 3: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 55.05 Mbit/s) --- Flow 1 egress (mean 55.00 Mbit/s)
Flow 2 ingress (mean 37.88 Mbit/s) --- Flow 2 egress (mean 37.81 Mbit/s)
Flow 3 ingress (mean 22.94 Mbit/s) --- Flow 3 egress (mean 22.88 Mbit/s)

Flow 1 (95th percentile 10.21 ms)   Flow 2 (95th percentile 28.96 ms)   Flow 3 (95th percentile 31.19 ms)
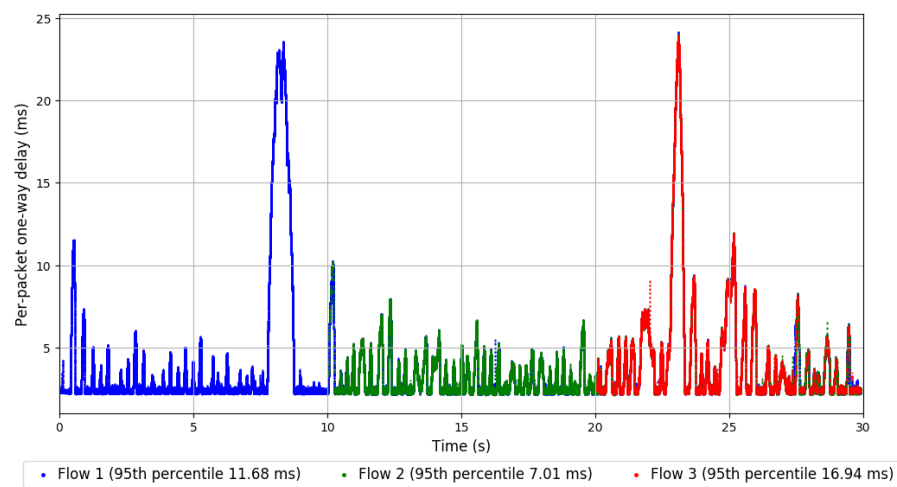
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```
Run 4: Statistics of PCC-Expr

Start at: 2018-07-03 19:33:00
End at: 2018-07-03 19:33:30
Local clock offset: -2.028 ms
Remote clock offset: -1.664 ms


# Below is generated by plot.py at 2018-07-03 21:50:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.32 Mbit/s
95th percentile per-packet one-way delay: 31.790 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 52.27 Mbit/s
95th percentile per-packet one-way delay: 32.164 ms
Loss rate: 1.38%
-- Flow 2:
Average throughput: 36.66 Mbit/s
95th percentile per-packet one-way delay: 30.967 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 29.30 Mbit/s
95th percentile per-packet one-way delay: 22.316 ms
Loss rate: 0.03%
```
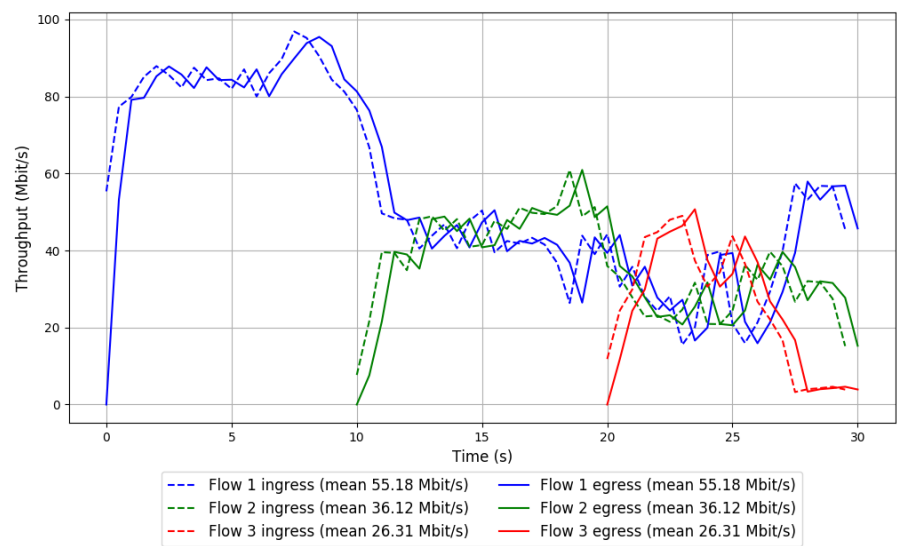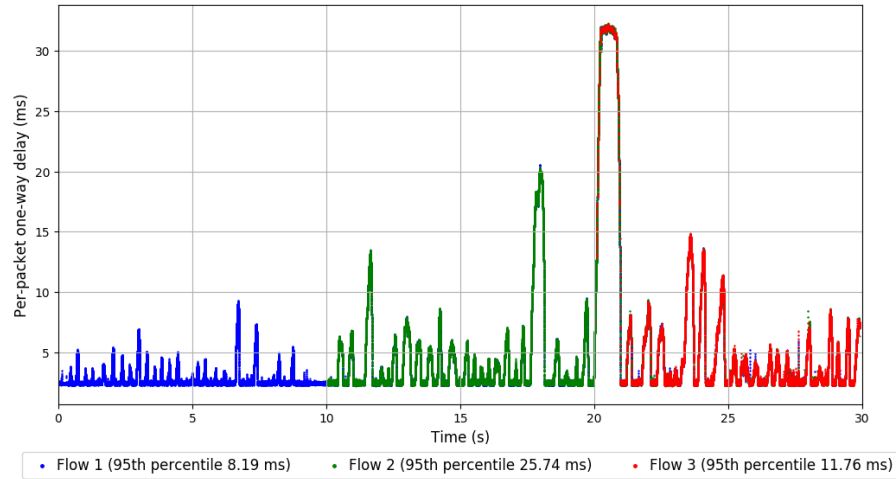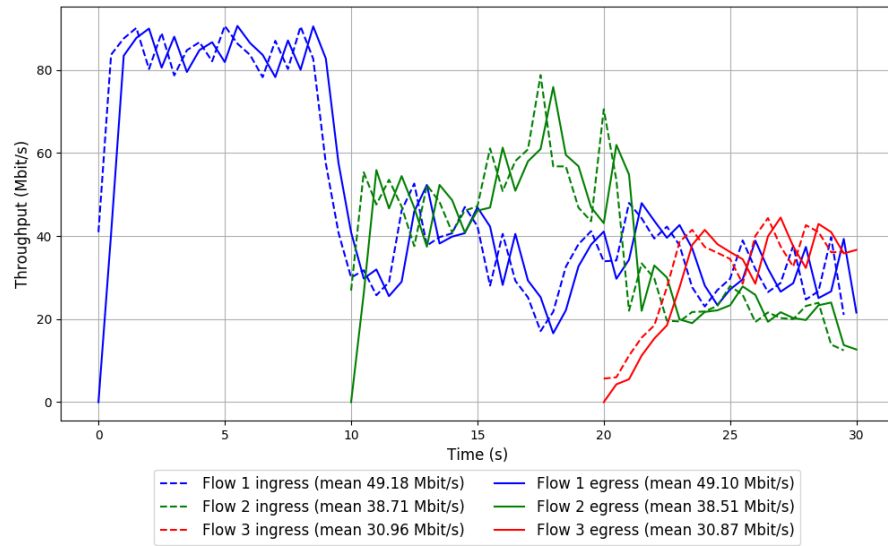
Run 4: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 53.01 Mbit/s) — — — Flow 1 egress (mean 52.27 Mbit/s)
Flow 2 ingress (mean 36.74 Mbit/s) — — — Flow 2 egress (mean 36.66 Mbit/s)
Flow 3 ingress (mean 29.32 Mbit/s) — — — Flow 3 egress (mean 29.30 Mbit/s)

Flow 1 (95th percentile 32.16 ms)   Flow 2 (95th percentile 30.97 ms)   Flow 3 (95th percentile 22.32 ms)

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```
Run 5: Statistics of PCC-Expr

Start at: 2018-07-03 19:52:13
End at: 2018-07-03 19:52:43
Local clock offset: -1.996 ms
Remote clock offset: -1.744 ms


# Below is generated by plot.py at 2018-07-03 21:50:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.41 Mbit/s
95th percentile per-packet one-way delay: 31.444 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 58.75 Mbit/s
95th percentile per-packet one-way delay: 32.075 ms
Loss rate: 0.96%
-- Flow 2:
Average throughput: 33.46 Mbit/s
95th percentile per-packet one-way delay: 14.712 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 22.52 Mbit/s
95th percentile per-packet one-way delay: 9.293 ms
Loss rate: 0.00%
```

Run 5: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 59.32 Mbit/s) --- Flow 1 egress (mean 58.75 Mbit/s)
Flow 2 ingress (mean 33.47 Mbit/s) --- Flow 2 egress (mean 33.46 Mbit/s)
Flow 3 ingress (mean 22.51 Mbit/s) --- Flow 3 egress (mean 22.52 Mbit/s)

Flow 1 (95th percentile 32.08 ms) • Flow 2 (95th percentile 14.71 ms) • Flow 3 (95th percentile 9.29 ms)

```
Run 6: Statistics of PCC-Expr

Start at: 2018-07-03 20:11:26
End at: 2018-07-03 20:11:56
Local clock offset: -1.912 ms
Remote clock offset: -2.649 ms


# Below is generated by plot.py at 2018-07-03 21:50:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.76 Mbit/s
95th percentile per-packet one-way delay: 13.006 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 47.49 Mbit/s
95th percentile per-packet one-way delay: 11.975 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.74 Mbit/s
95th percentile per-packet one-way delay: 18.327 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 39.91 Mbit/s
95th percentile per-packet one-way delay: 10.368 ms
Loss rate: 0.00%
```
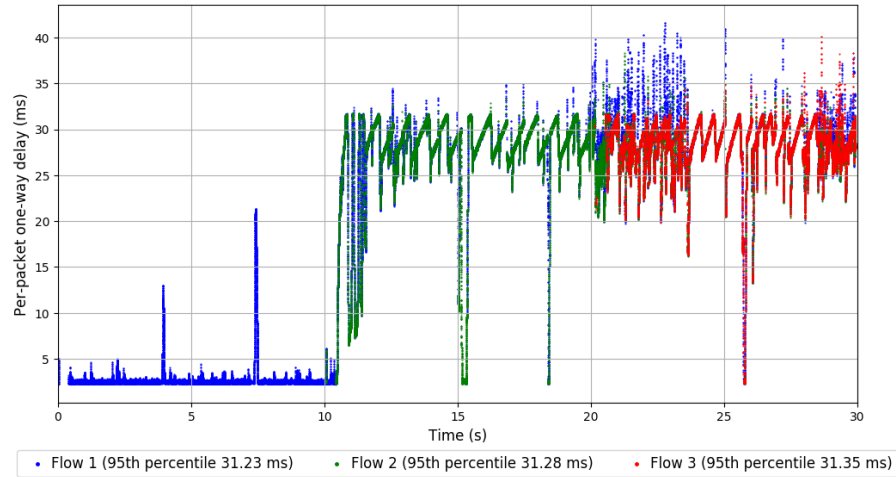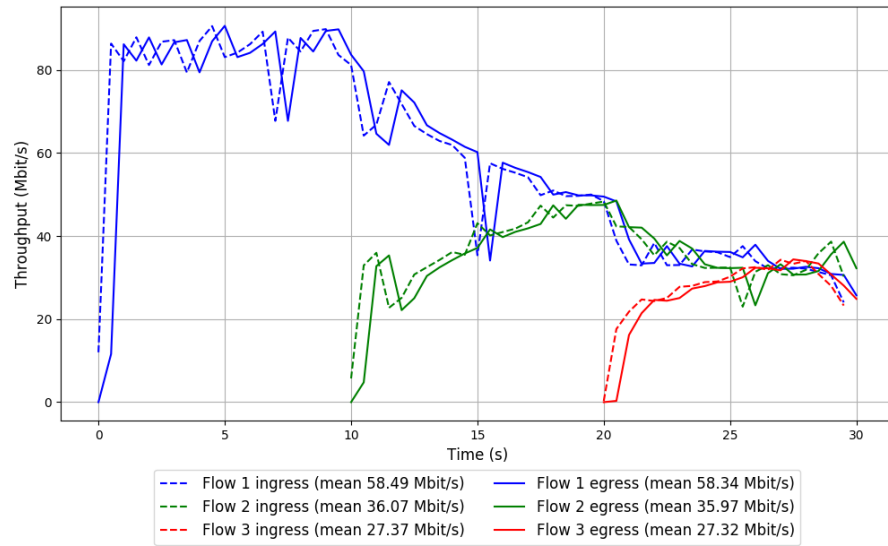
Run 6: Report of PCC-Expr — Data Link

```
Run 7: Statistics of PCC-Expr

Start at: 2018-07-03 20:30:39
End at: 2018-07-03 20:31:09
Local clock offset: -1.841 ms
Remote clock offset: -2.904 ms


# Below is generated by plot.py at 2018-07-03 21:51:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.64 Mbit/s
95th percentile per-packet one-way delay: 9.570 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 53.00 Mbit/s
95th percentile per-packet one-way delay: 8.497 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 35.92 Mbit/s
95th percentile per-packet one-way delay: 9.693 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.51 Mbit/s
95th percentile per-packet one-way delay: 16.569 ms
Loss rate: 0.00%
```
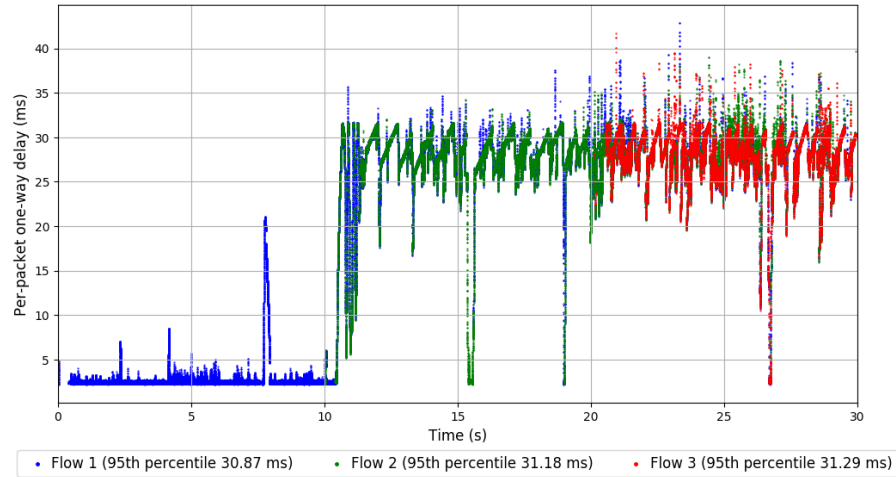
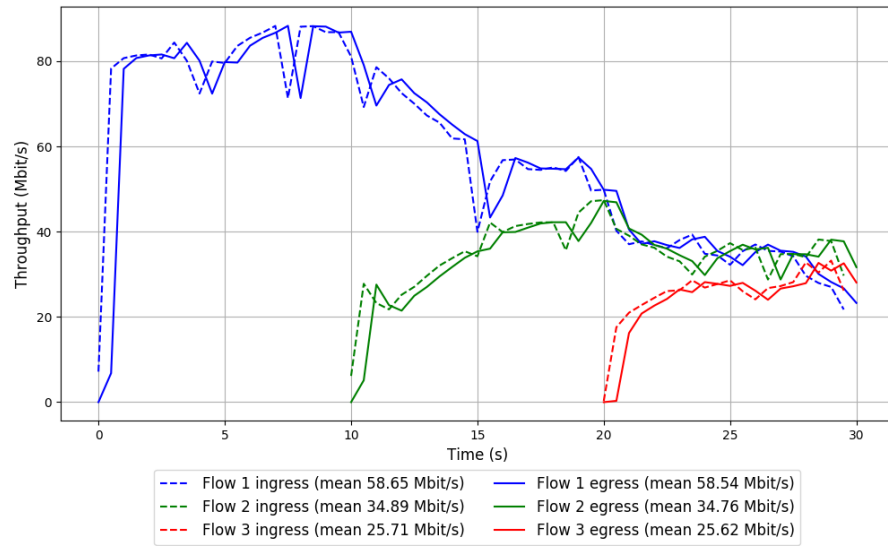# Run 7: Report of PCC-Expr — Data Link

```
Run 8: Statistics of PCC-Expr

Start at: 2018-07-03 20:49:52
End at: 2018-07-03 20:50:22
Local clock offset: -2.499 ms
Remote clock offset: -2.93 ms


# Below is generated by plot.py at 2018-07-03 21:51:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.89 Mbit/s
95th percentile per-packet one-way delay: 13.099 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 53.66 Mbit/s
95th percentile per-packet one-way delay: 10.624 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.07 Mbit/s
95th percentile per-packet one-way delay: 14.180 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.94 Mbit/s
95th percentile per-packet one-way delay: 17.366 ms
Loss rate: 0.00%
```
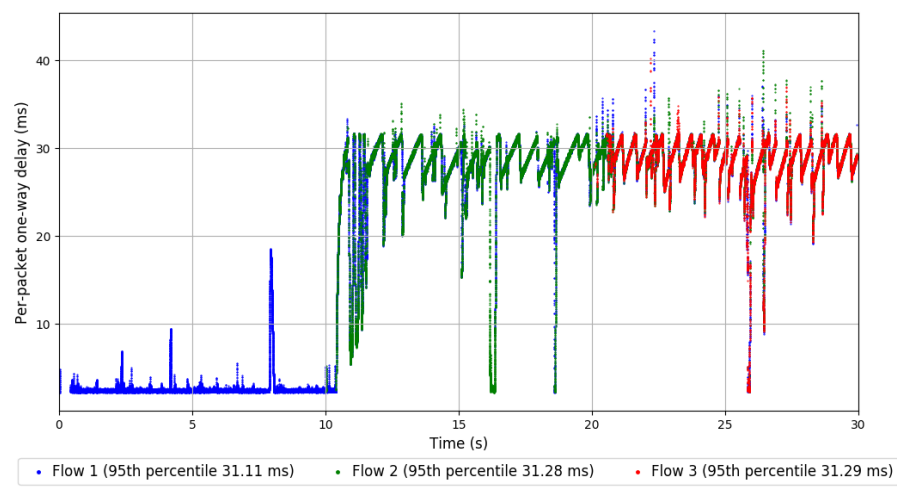
Run 8: Report of PCC-Expr — Data Link

```
Run 9: Statistics of PCC-Expr

Start at: 2018-07-03 21:09:04
End at: 2018-07-03 21:09:34
Local clock offset: -2.946 ms
Remote clock offset: -2.679 ms


# Below is generated by plot.py at 2018-07-03 21:52:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.89 Mbit/s
95th percentile per-packet one-way delay: 10.439 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.18 Mbit/s
95th percentile per-packet one-way delay: 11.680 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.12 Mbit/s
95th percentile per-packet one-way delay: 7.015 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 26.31 Mbit/s
95th percentile per-packet one-way delay: 16.940 ms
Loss rate: 0.00%
```
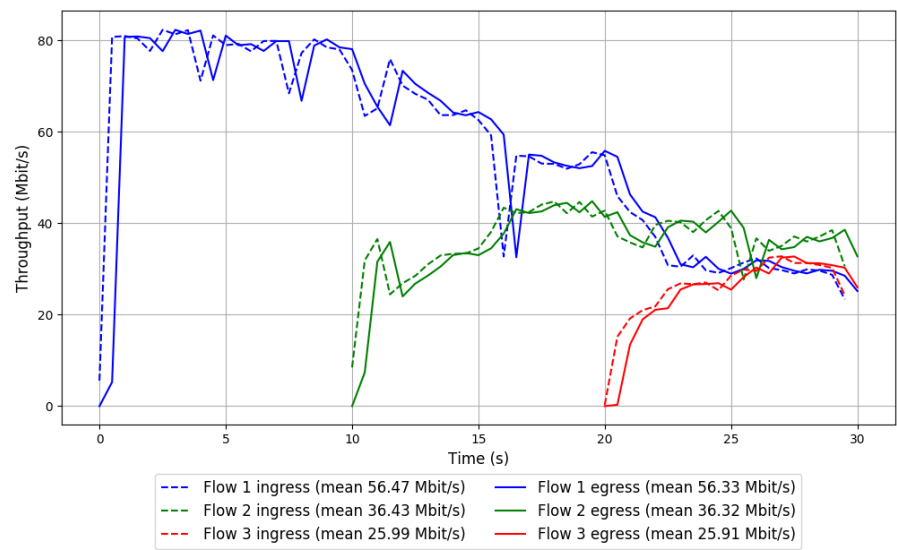
Run 9: Report of PCC-Expr — Data Link

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```
Run 10: Statistics of PCC-Expr

Start at: 2018-07-03 21:28:18
End at: 2018-07-03 21:28:48
Local clock offset: -2.839 ms
Remote clock offset: -2.506 ms


# Below is generated by plot.py at 2018-07-03 21:52:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.91 Mbit/s
95th percentile per-packet one-way delay: 13.018 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 49.10 Mbit/s
95th percentile per-packet one-way delay: 8.187 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 38.51 Mbit/s
95th percentile per-packet one-way delay: 25.744 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 30.87 Mbit/s
95th percentile per-packet one-way delay: 11.759 ms
Loss rate: 0.30%
```
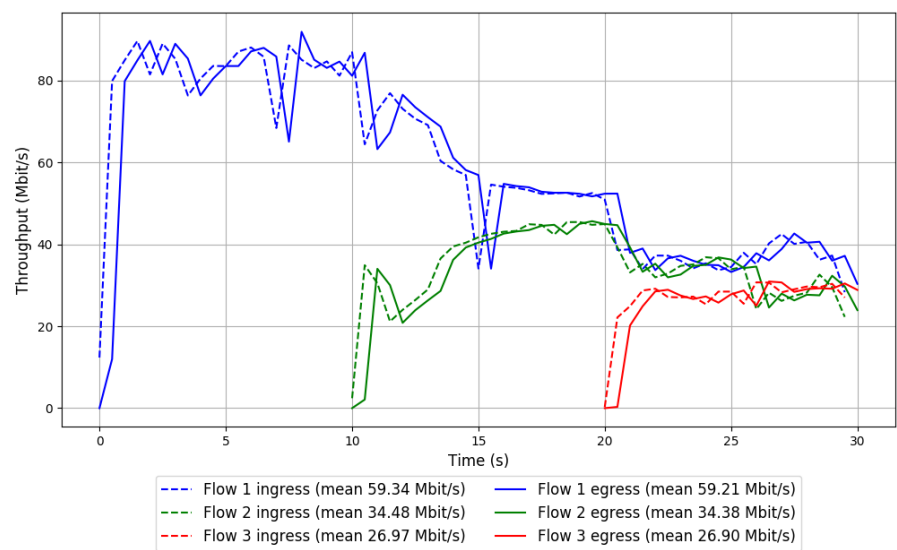
Run 10: Report of PCC-Expr — Data Link

```
Run 1: Statistics of QUIC Cubic

Start at: 2018-07-03 18:24:08
End at: 2018-07-03 18:24:38
Local clock offset: -2.406 ms
Remote clock offset: -2.72 ms


# Below is generated by plot.py at 2018-07-03 21:52:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.22 Mbit/s
95th percentile per-packet one-way delay: 31.261 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 58.34 Mbit/s
95th percentile per-packet one-way delay: 31.230 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 35.97 Mbit/s
95th percentile per-packet one-way delay: 31.279 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 27.32 Mbit/s
95th percentile per-packet one-way delay: 31.353 ms
Loss rate: 0.21%
```
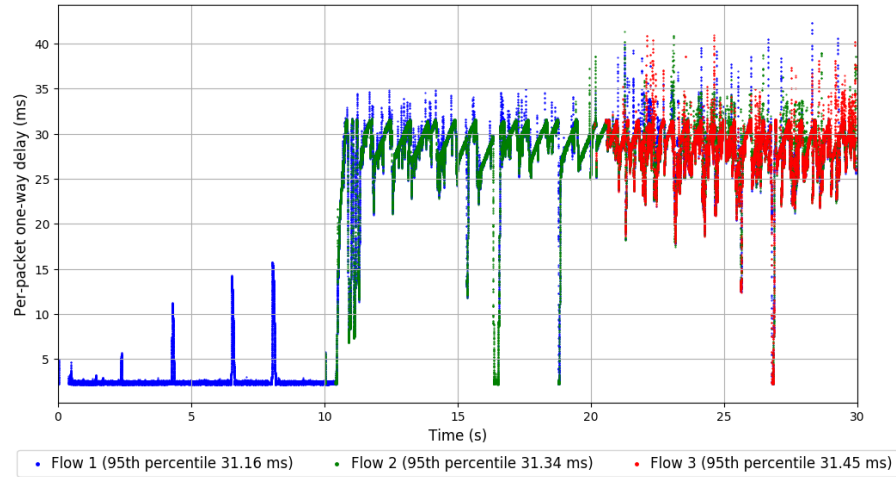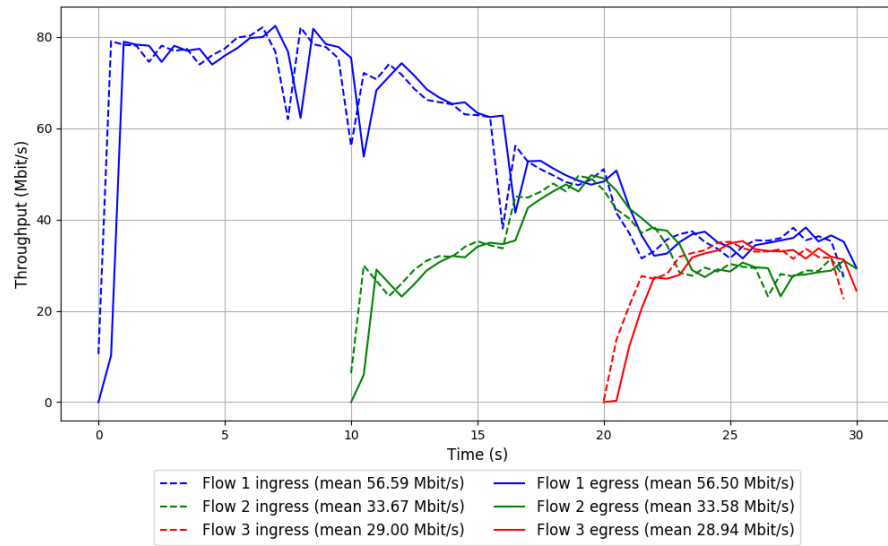
Run 1: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 58.49 Mbit/s)   Flow 1 egress (mean 58.34 Mbit/s)
Flow 2 ingress (mean 36.07 Mbit/s)   Flow 2 egress (mean 35.97 Mbit/s)
Flow 3 ingress (mean 27.37 Mbit/s)   Flow 3 egress (mean 27.32 Mbit/s)

Flow 1 (95th percentile 31.23 ms)   Flow 2 (95th percentile 31.28 ms)   Flow 3 (95th percentile 31.35 ms)

```
Run 2: Statistics of QUIC Cubic

Start at: 2018-07-03 18:43:21
End at: 2018-07-03 18:43:51
Local clock offset: -2.5 ms
Remote clock offset: -2.591 ms


# Below is generated by plot.py at 2018-07-03 21:52:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.26 Mbit/s
95th percentile per-packet one-way delay: 31.171 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 58.57 Mbit/s
95th percentile per-packet one-way delay: 31.020 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 33.85 Mbit/s
95th percentile per-packet one-way delay: 31.301 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 24.89 Mbit/s
95th percentile per-packet one-way delay: 32.106 ms
Loss rate: 0.33%
```
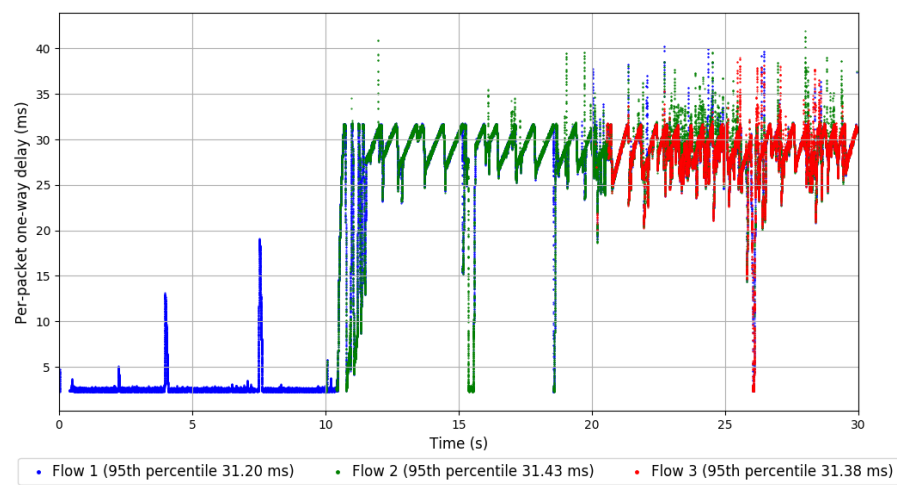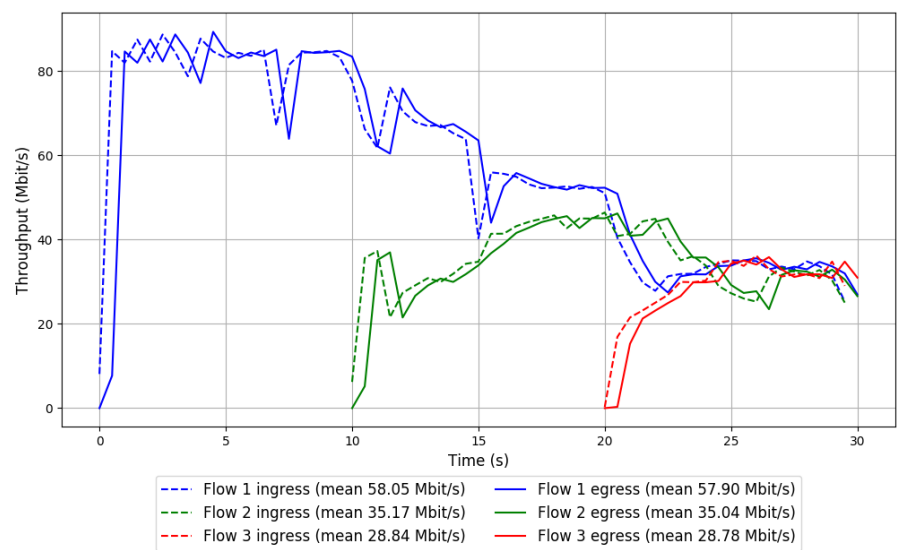
Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2018-07-03 19:02:33
End at: 2018-07-03 19:03:03
Local clock offset: -3.308 ms
Remote clock offset: -2.089 ms


# Below is generated by plot.py at 2018-07-03 21:52:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.07 Mbit/s
95th percentile per-packet one-way delay: 31.041 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 58.54 Mbit/s
95th percentile per-packet one-way delay: 30.867 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 34.76 Mbit/s
95th percentile per-packet one-way delay: 31.182 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 25.62 Mbit/s
95th percentile per-packet one-way delay: 31.287 ms
Loss rate: 0.26%
```
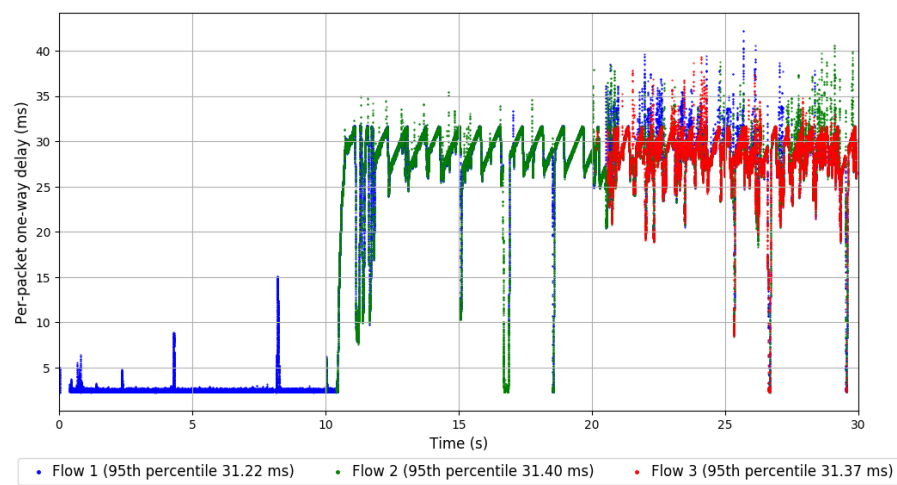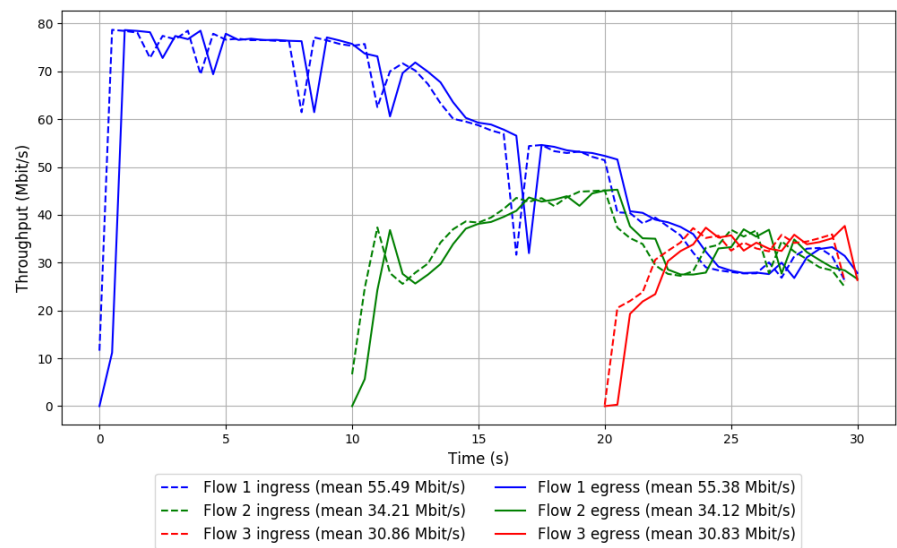
Run 3: Report of QUIC Cubic — Data Link

- - - Flow 1 ingress (mean 58.65 Mbit/s) ——— Flow 1 egress (mean 58.54 Mbit/s)
- - - Flow 2 ingress (mean 34.89 Mbit/s) ——— Flow 2 egress (mean 34.76 Mbit/s)
- - - Flow 3 ingress (mean 25.71 Mbit/s) ——— Flow 3 egress (mean 25.62 Mbit/s)

• Flow 1 (95th percentile 30.87 ms)　　• Flow 2 (95th percentile 31.18 ms)　　• Flow 3 (95th percentile 31.29 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2018-07-03 19:21:46
End at: 2018-07-03 19:22:16
Local clock offset: -2.393 ms
Remote clock offset: -1.806 ms


# Below is generated by plot.py at 2018-07-03 21:52:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.01 Mbit/s
95th percentile per-packet one-way delay: 31.186 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 56.33 Mbit/s
95th percentile per-packet one-way delay: 31.110 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 36.32 Mbit/s
95th percentile per-packet one-way delay: 31.282 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 25.91 Mbit/s
95th percentile per-packet one-way delay: 31.285 ms
Loss rate: 0.27%
```

Run 4: Report of QUIC Cubic — Data Link

```
Run 5: Statistics of QUIC Cubic

Start at: 2018-07-03 19:40:59
End at: 2018-07-03 19:41:29
Local clock offset: -1.983 ms
Remote clock offset: -1.508 ms


# Below is generated by plot.py at 2018-07-03 21:52:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.90 Mbit/s
95th percentile per-packet one-way delay: 31.311 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 59.21 Mbit/s
95th percentile per-packet one-way delay: 31.257 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 34.38 Mbit/s
95th percentile per-packet one-way delay: 31.350 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 26.90 Mbit/s
95th percentile per-packet one-way delay: 31.455 ms
Loss rate: 0.26%
```
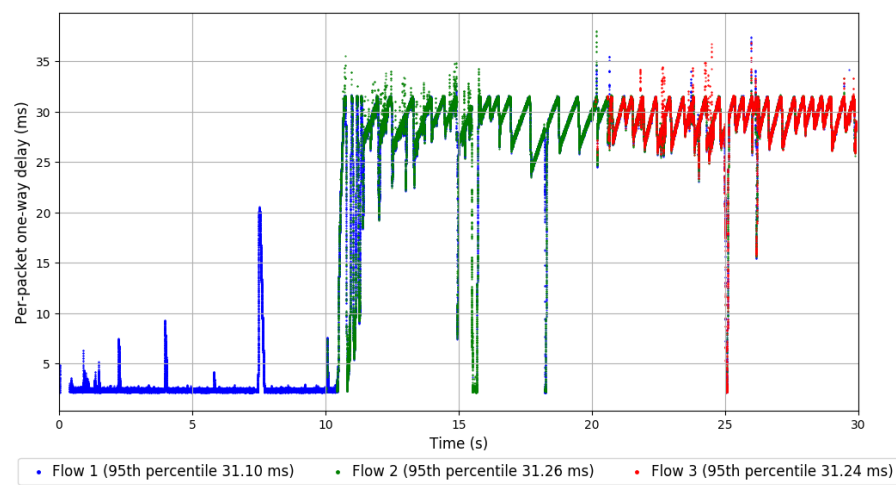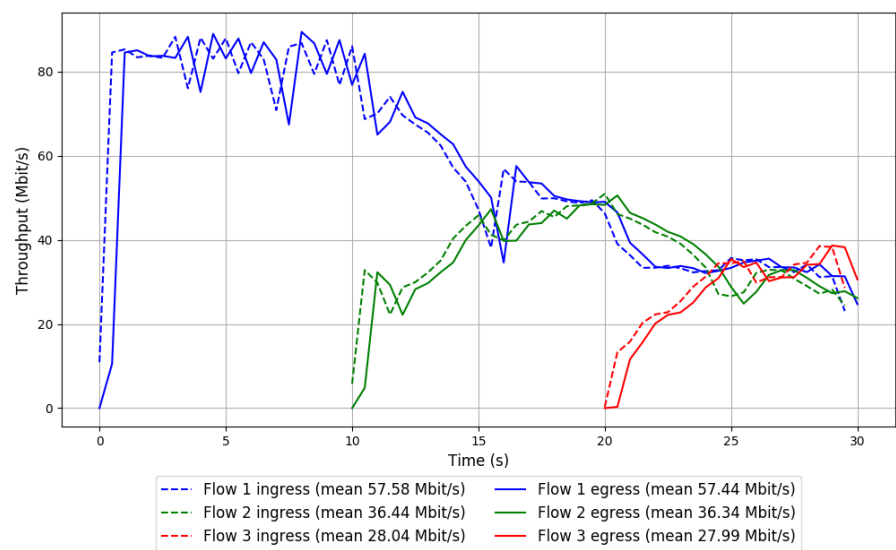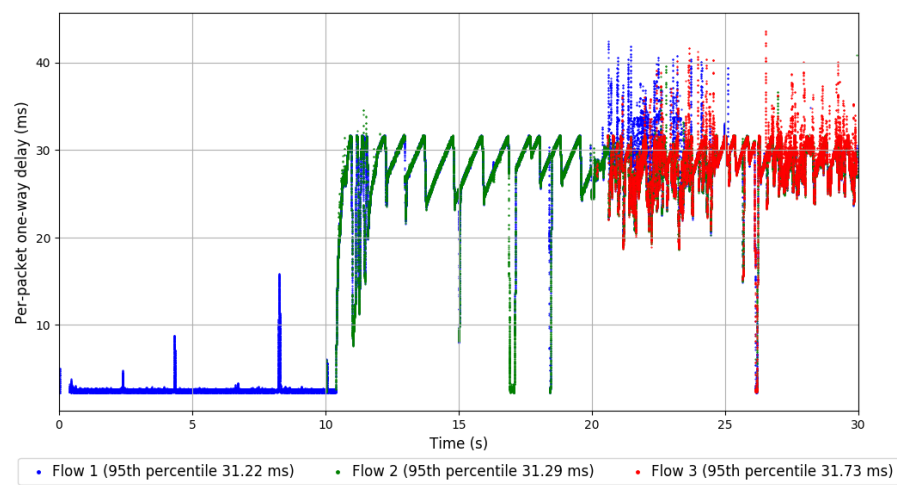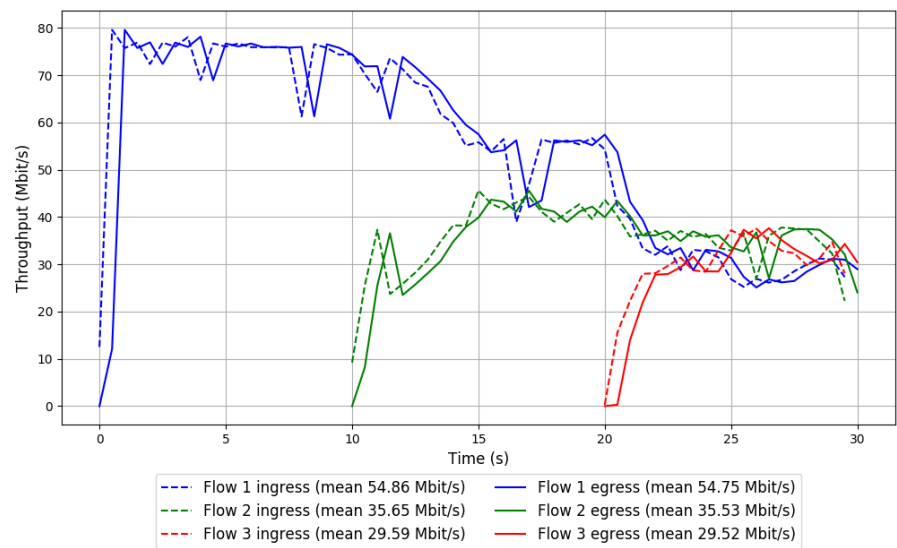
Run 5: Report of QUIC Cubic — Data Link

- - - Flow 1 ingress (mean 59.34 Mbit/s) ——— Flow 1 egress (mean 59.21 Mbit/s)
- - - Flow 2 ingress (mean 34.48 Mbit/s) ——— Flow 2 egress (mean 34.38 Mbit/s)
- - - Flow 3 ingress (mean 26.97 Mbit/s) ——— Flow 3 egress (mean 26.90 Mbit/s)

• Flow 1 (95th percentile 31.26 ms)   • Flow 2 (95th percentile 31.35 ms)   • Flow 3 (95th percentile 31.45 ms)

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```
Run 6: Statistics of QUIC Cubic

Start at: 2018-07-03 20:00:12
End at: 2018-07-03 20:00:42
Local clock offset: -1.957 ms
Remote clock offset: -2.377 ms


# Below is generated by plot.py at 2018-07-03 21:52:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.34 Mbit/s
95th percentile per-packet one-way delay: 31.254 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 56.50 Mbit/s
95th percentile per-packet one-way delay: 31.156 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 33.58 Mbit/s
95th percentile per-packet one-way delay: 31.339 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 28.94 Mbit/s
95th percentile per-packet one-way delay: 31.447 ms
Loss rate: 0.23%
```
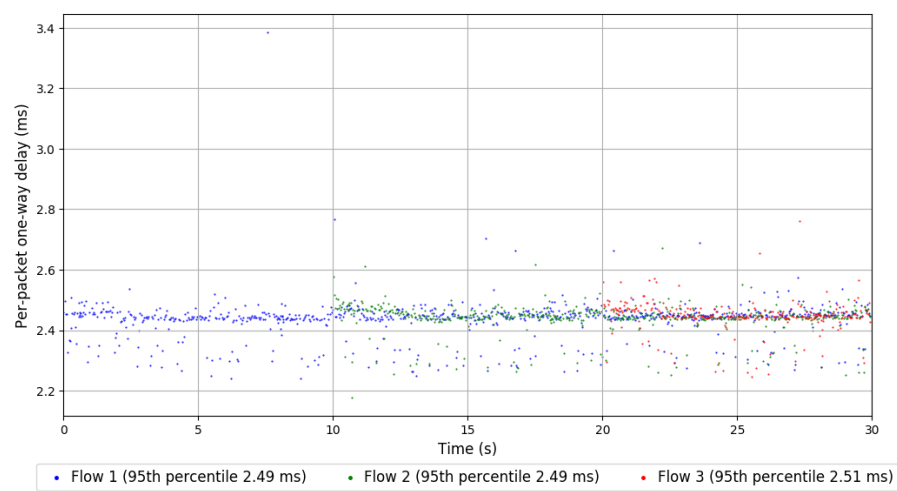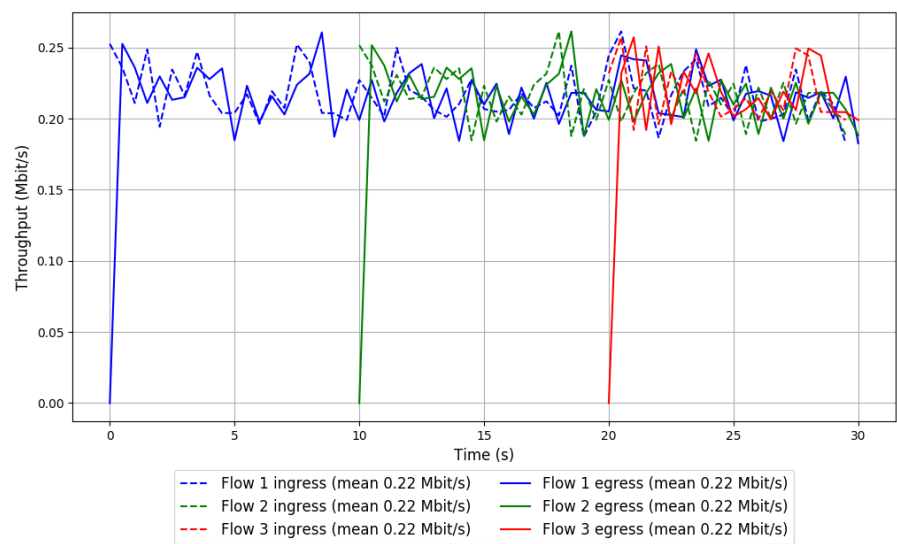
Run 6: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 56.59 Mbit/s)
Flow 1 egress (mean 56.50 Mbit/s)
Flow 2 ingress (mean 33.67 Mbit/s)
Flow 2 egress (mean 33.58 Mbit/s)
Flow 3 ingress (mean 29.00 Mbit/s)
Flow 3 egress (mean 28.94 Mbit/s)

Flow 1 (95th percentile 31.16 ms)
Flow 2 (95th percentile 31.34 ms)
Flow 3 (95th percentile 31.45 ms)

```
Run 7: Statistics of QUIC Cubic

Start at: 2018-07-03 20:19:25
End at: 2018-07-03 20:19:55
Local clock offset: -1.907 ms
Remote clock offset: -2.828 ms


# Below is generated by plot.py at 2018-07-03 21:52:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.65 Mbit/s
95th percentile per-packet one-way delay: 31.297 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 57.90 Mbit/s
95th percentile per-packet one-way delay: 31.205 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 35.04 Mbit/s
95th percentile per-packet one-way delay: 31.428 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 28.78 Mbit/s
95th percentile per-packet one-way delay: 31.378 ms
Loss rate: 0.20%
```

Run 7: Report of QUIC Cubic — Data Link

```
Run 8: Statistics of QUIC Cubic

Start at: 2018-07-03 20:38:38
End at: 2018-07-03 20:39:08
Local clock offset: -1.708 ms
Remote clock offset: -2.867 ms


# Below is generated by plot.py at 2018-07-03 21:52:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.20 Mbit/s
95th percentile per-packet one-way delay: 31.295 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 55.38 Mbit/s
95th percentile per-packet one-way delay: 31.220 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 34.12 Mbit/s
95th percentile per-packet one-way delay: 31.403 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 30.83 Mbit/s
95th percentile per-packet one-way delay: 31.367 ms
Loss rate: 0.10%
```
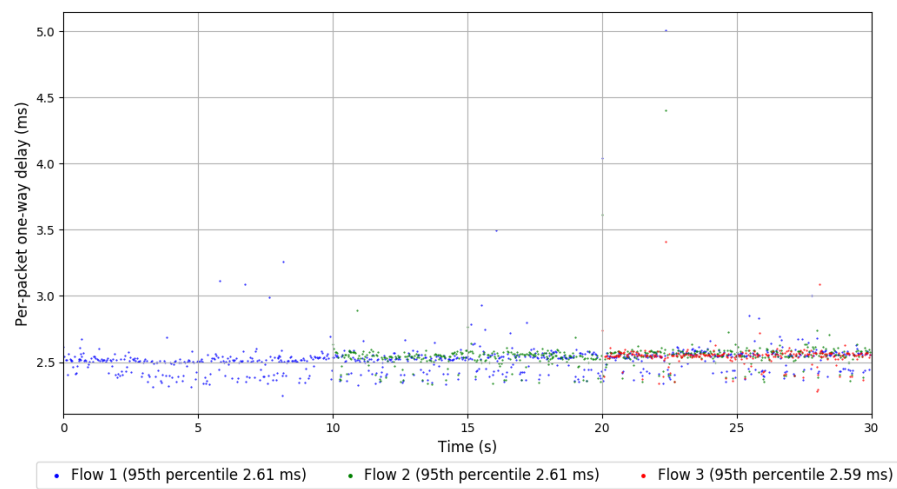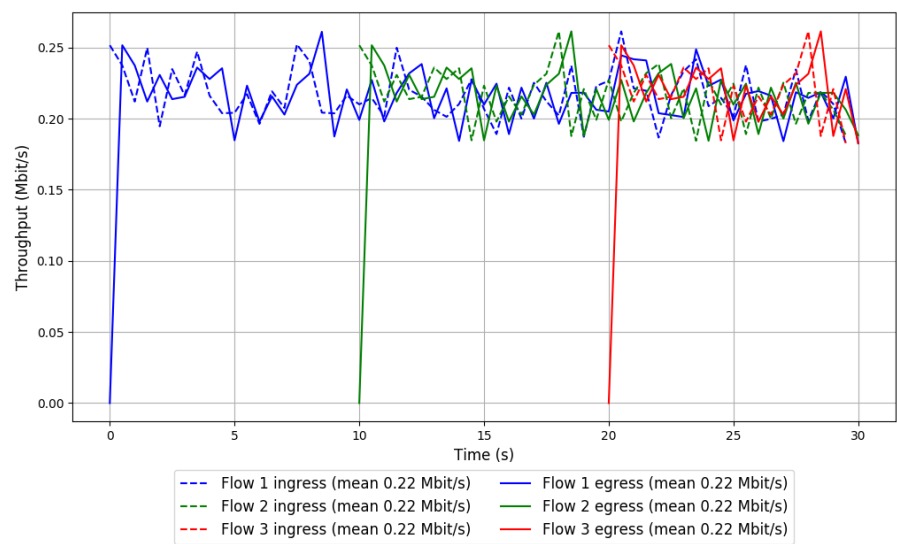
Run 8: Report of QUIC Cubic — Data Link

```
Run 9: Statistics of QUIC Cubic

Start at: 2018-07-03 20:57:51
End at: 2018-07-03 20:58:21
Local clock offset: -2.715 ms
Remote clock offset: -3.04 ms


# Below is generated by plot.py at 2018-07-03 21:53:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.79 Mbit/s
95th percentile per-packet one-way delay: 31.183 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 57.44 Mbit/s
95th percentile per-packet one-way delay: 31.099 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 36.34 Mbit/s
95th percentile per-packet one-way delay: 31.260 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 27.99 Mbit/s
95th percentile per-packet one-way delay: 31.237 ms
Loss rate: 0.22%
```

Run 9: Report of QUIC Cubic — Data Link

- Flow 1 ingress (mean 57.58 Mbit/s)
- Flow 1 egress (mean 57.44 Mbit/s)
- Flow 2 ingress (mean 36.44 Mbit/s)
- Flow 2 egress (mean 36.34 Mbit/s)
- Flow 3 ingress (mean 28.04 Mbit/s)
- Flow 3 egress (mean 27.99 Mbit/s)

- Flow 1 (95th percentile 31.10 ms)
- Flow 2 (95th percentile 31.26 ms)
- Flow 3 (95th percentile 31.24 ms)

```
Run 10: Statistics of QUIC Cubic

Start at: 2018-07-03 21:17:04
End at: 2018-07-03 21:17:34
Local clock offset: -2.85 ms
Remote clock offset: -2.517 ms


# Below is generated by plot.py at 2018-07-03 21:53:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.03 Mbit/s
95th percentile per-packet one-way delay: 31.296 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 54.75 Mbit/s
95th percentile per-packet one-way delay: 31.222 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 35.53 Mbit/s
95th percentile per-packet one-way delay: 31.294 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 29.52 Mbit/s
95th percentile per-packet one-way delay: 31.727 ms
Loss rate: 0.21%
```
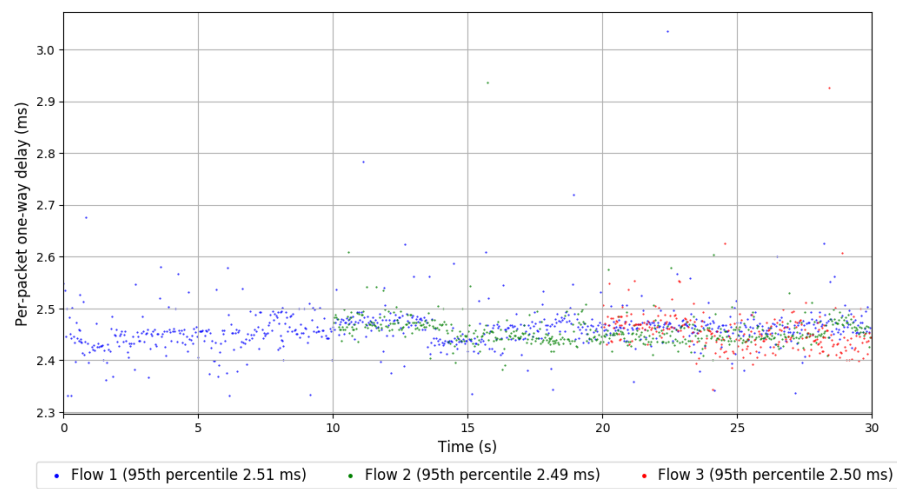
Run 10: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 54.86 Mbit/s) --- Flow 1 egress (mean 54.75 Mbit/s)
Flow 2 ingress (mean 35.65 Mbit/s) --- Flow 2 egress (mean 35.53 Mbit/s)
Flow 3 ingress (mean 29.59 Mbit/s) --- Flow 3 egress (mean 29.52 Mbit/s)

Flow 1 (95th percentile 31.22 ms)   Flow 2 (95th percentile 31.29 ms)   Flow 3 (95th percentile 31.73 ms)

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```
Run 1: Statistics of SCReAM

Start at: 2018-07-03 18:32:01
End at: 2018-07-03 18:32:31
Local clock offset: -2.262 ms
Remote clock offset: -2.711 ms


# Below is generated by plot.py at 2018-07-03 21:53:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 2.493 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.489 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.490 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.507 ms
Loss rate: 0.00%
```
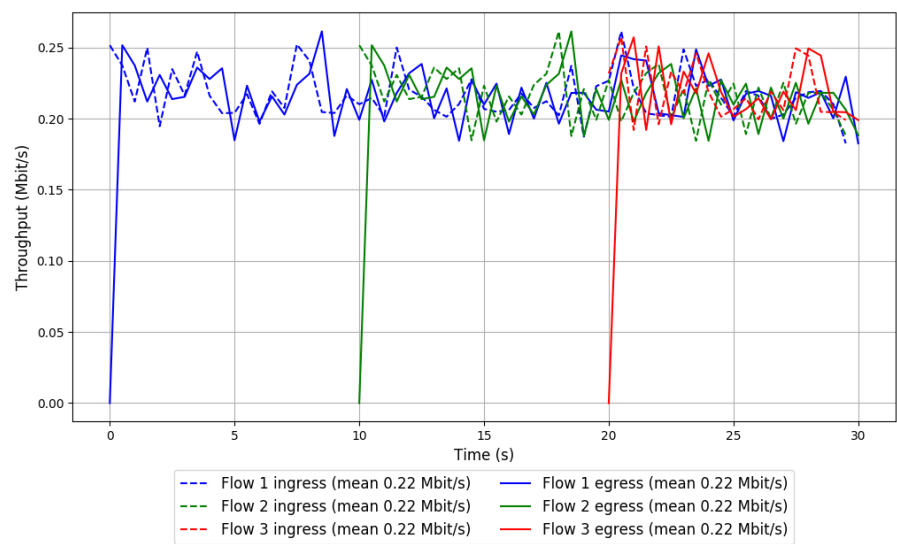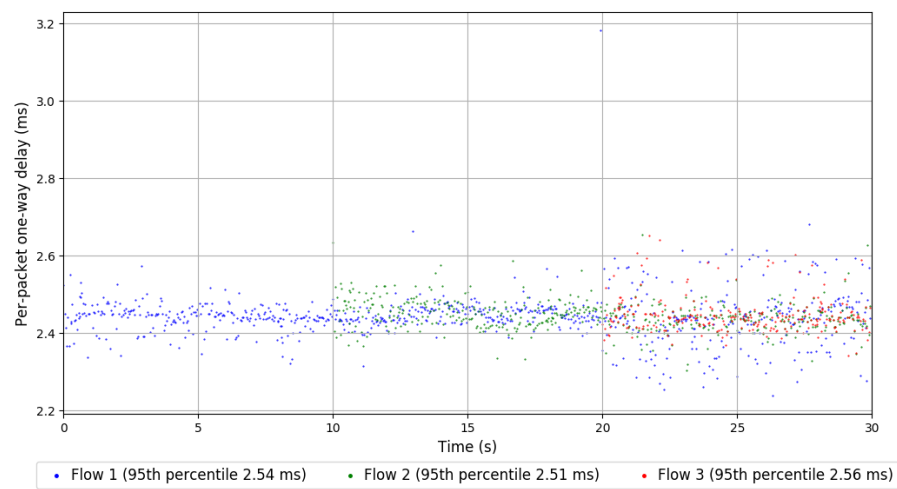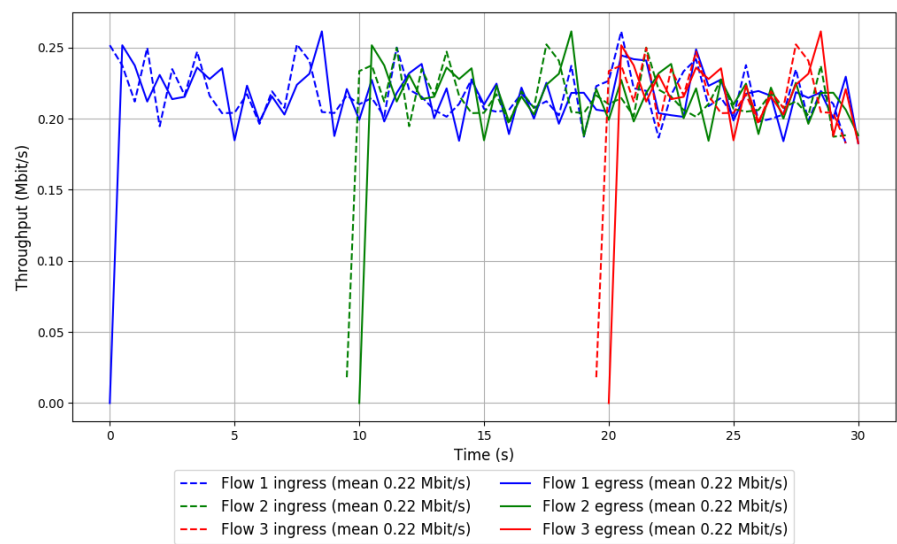
Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2018-07-03 18:51:14
End at: 2018-07-03 18:51:44
Local clock offset: -2.995 ms
Remote clock offset: -2.276 ms


# Below is generated by plot.py at 2018-07-03 21:53:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 2.479 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.484 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.504 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.450 ms
Loss rate: 0.00%
```
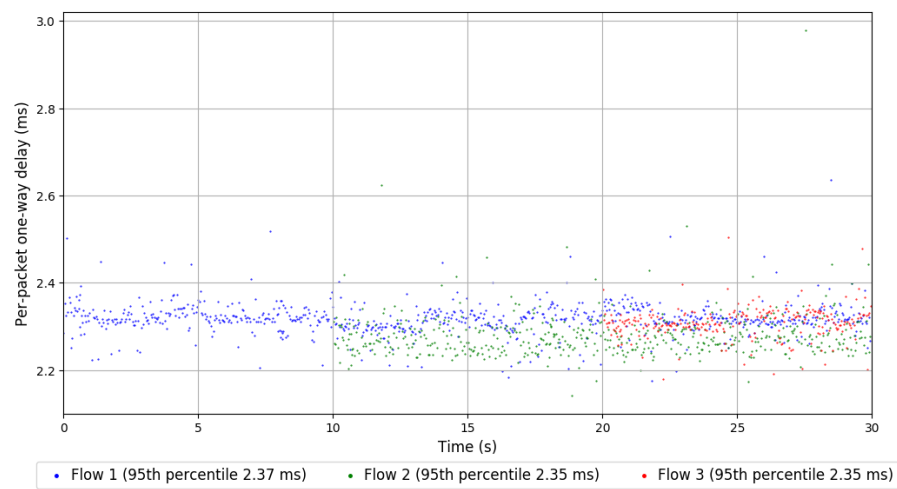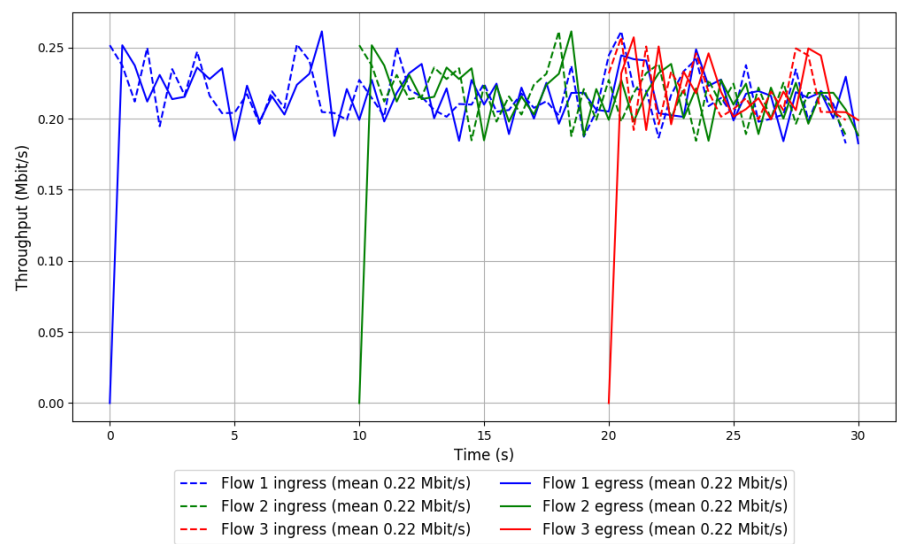
Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2018-07-03 19:10:27
End at: 2018-07-03 19:10:57
Local clock offset: -3.423 ms
Remote clock offset: -1.934 ms


# Below is generated by plot.py at 2018-07-03 21:53:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 2.605 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.607 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.607 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.591 ms
Loss rate: 0.00%
```
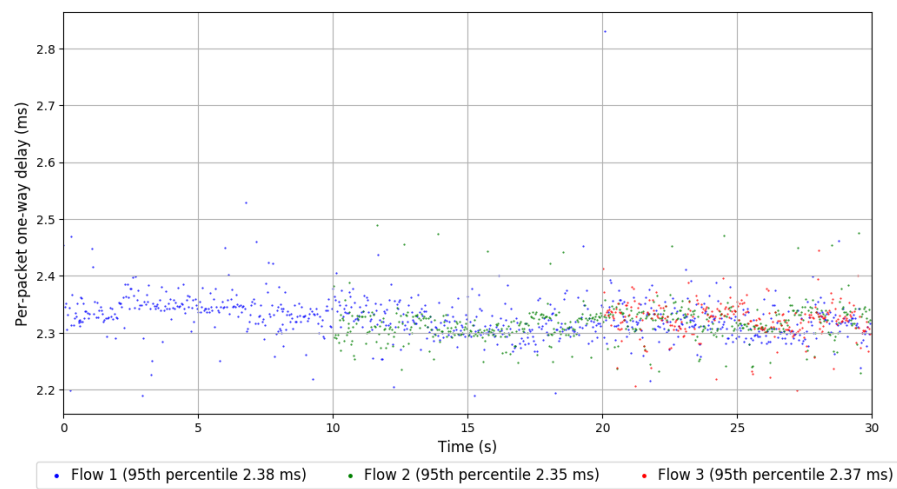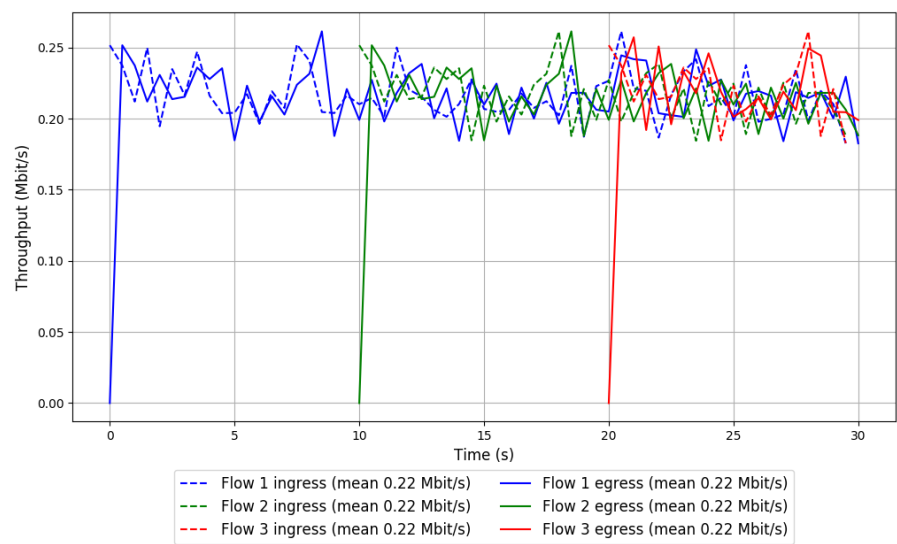
Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2018-07-03 19:29:40
End at: 2018-07-03 19:30:10
Local clock offset: -2.12 ms
Remote clock offset: -1.681 ms


# Below is generated by plot.py at 2018-07-03 21:53:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 2.465 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.473 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.452 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.448 ms
Loss rate: 0.00%
```
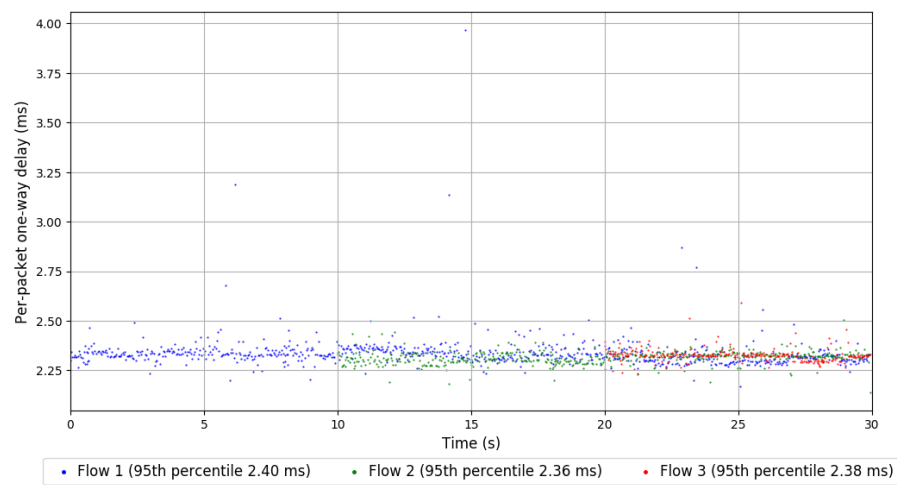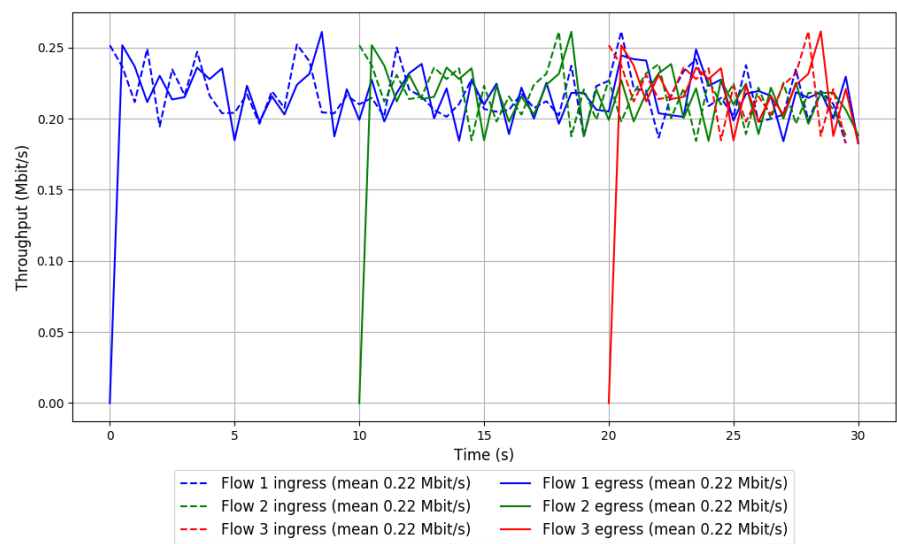
Run 4: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 2.47 ms) ・ Flow 2 (95th percentile 2.45 ms) ・ Flow 3 (95th percentile 2.45 ms)

```
Run 5: Statistics of SCReAM

Start at: 2018-07-03 19:48:53
End at: 2018-07-03 19:49:23
Local clock offset: -2.004 ms
Remote clock offset: -1.32 ms


# Below is generated by plot.py at 2018-07-03 21:53:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 2.502 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.510 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.494 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.503 ms
Loss rate: 0.00%
```
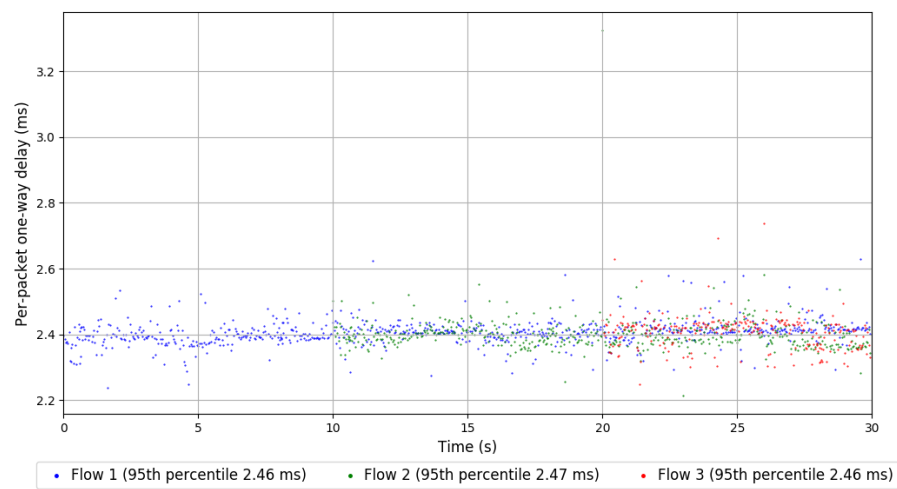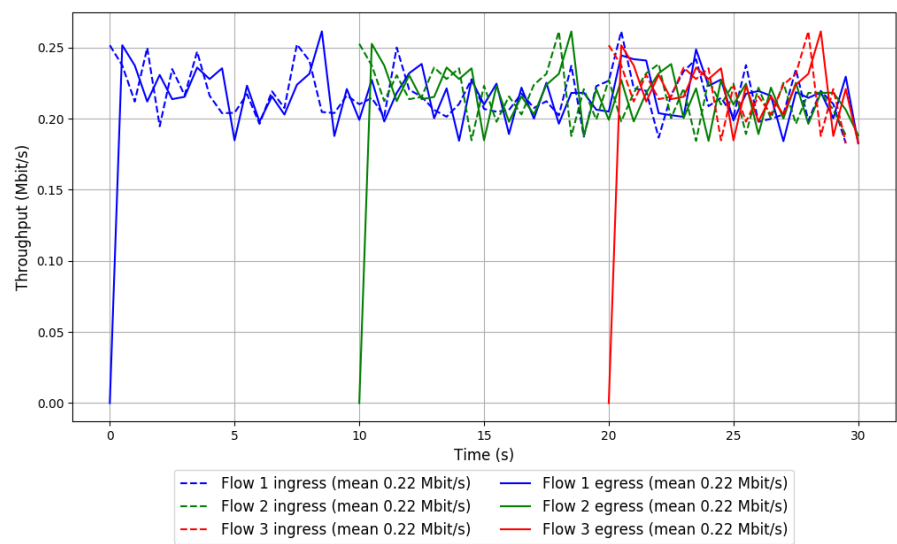
Run 5: Report of SCReAM — Data Link

```
Run 6: Statistics of SCReAM

Start at: 2018-07-03 20:08:06
End at: 2018-07-03 20:08:36
Local clock offset: -1.922 ms
Remote clock offset: -2.596 ms

# Below is generated by plot.py at 2018-07-03 21:53:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 2.525 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.538 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.512 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.558 ms
Loss rate: 0.00%
```

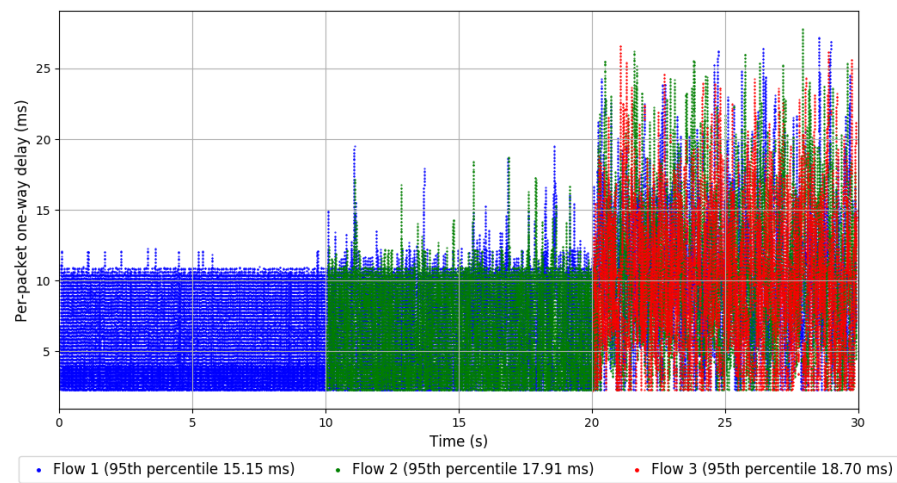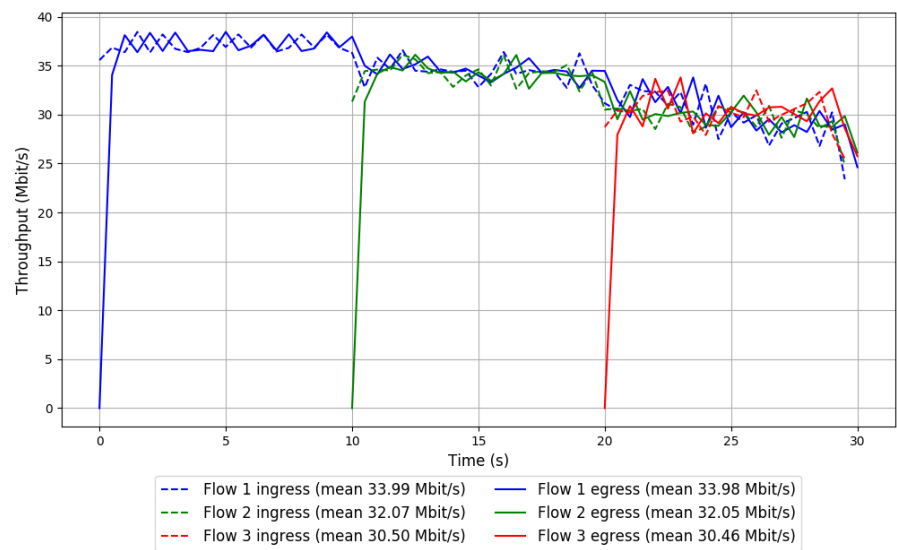# Run 6: Report of SCReAM — Data Link

```
Run 7: Statistics of SCReAM

Start at: 2018-07-03 20:27:19
End at: 2018-07-03 20:27:49
Local clock offset: -1.796 ms
Remote clock offset: -2.965 ms

# Below is generated by plot.py at 2018-07-03 21:53:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 2.361 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.365 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.348 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.354 ms
Loss rate: 0.00%
```

Run 7: Report of SCReAM — Data Link

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```
Run 8: Statistics of SCReAM

Start at: 2018-07-03 20:46:32
End at: 2018-07-03 20:47:02
Local clock offset: -2.263 ms
Remote clock offset: -2.994 ms

# Below is generated by plot.py at 2018-07-03 21:53:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 2.372 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.378 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.355 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.367 ms
Loss rate: 0.00%
```
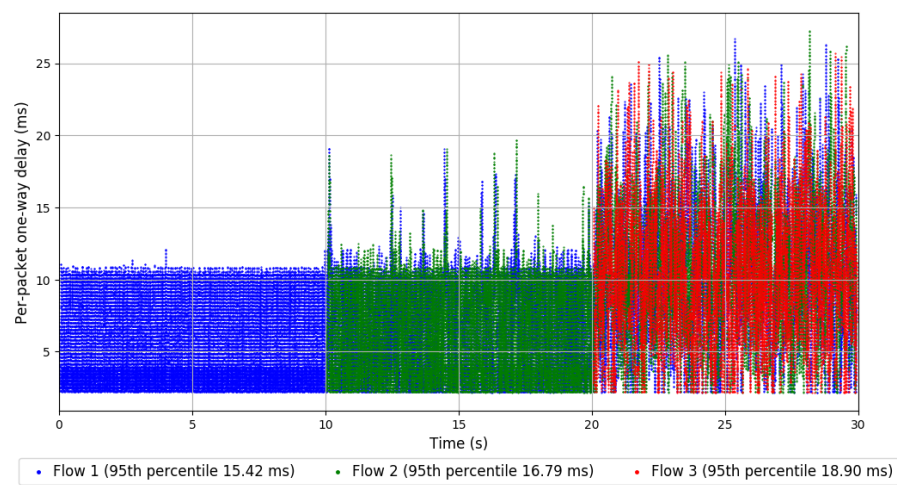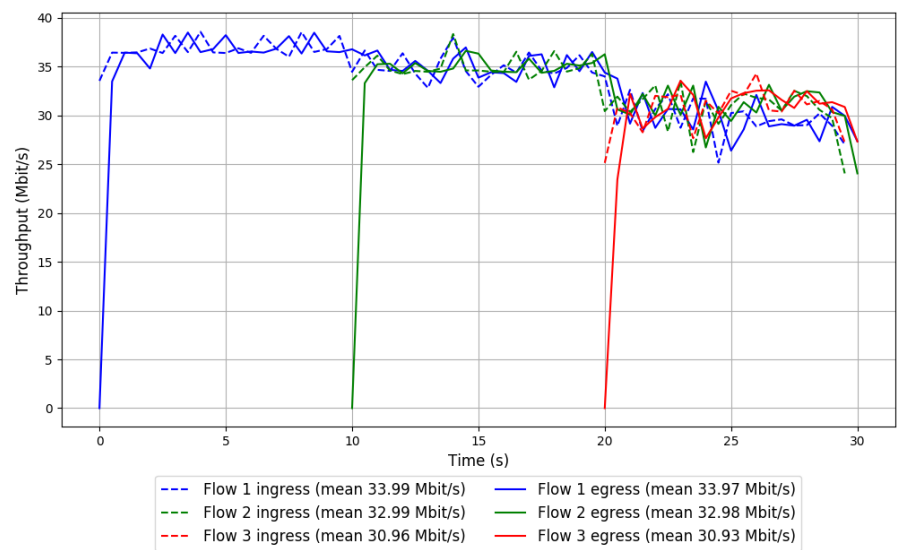
Run 8: Report of SCReAM — Data Link

```
Run 9: Statistics of SCReAM

Start at: 2018-07-03 21:05:44
End at: 2018-07-03 21:06:14
Local clock offset: -2.881 ms
Remote clock offset: -2.763 ms

# Below is generated by plot.py at 2018-07-03 21:53:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 2.387 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.402 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.358 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.385 ms
Loss rate: 0.00%
```
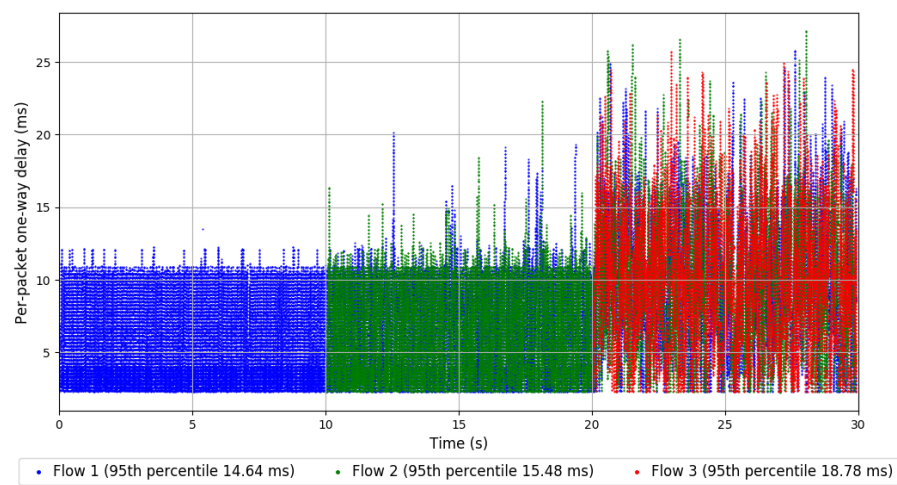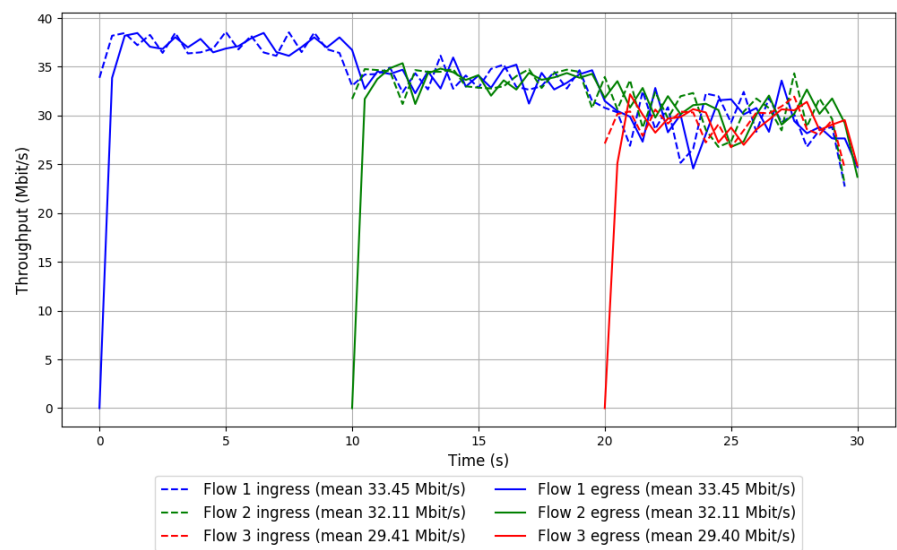
Run 9: Report of SCReAM — Data Link

```
Run 10: Statistics of SCReAM

Start at: 2018-07-03 21:24:57
End at: 2018-07-03 21:25:27
Local clock offset: -2.823 ms
Remote clock offset: -2.537 ms


# Below is generated by plot.py at 2018-07-03 21:53:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 2.464 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.464 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.466 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.464 ms
Loss rate: 0.00%
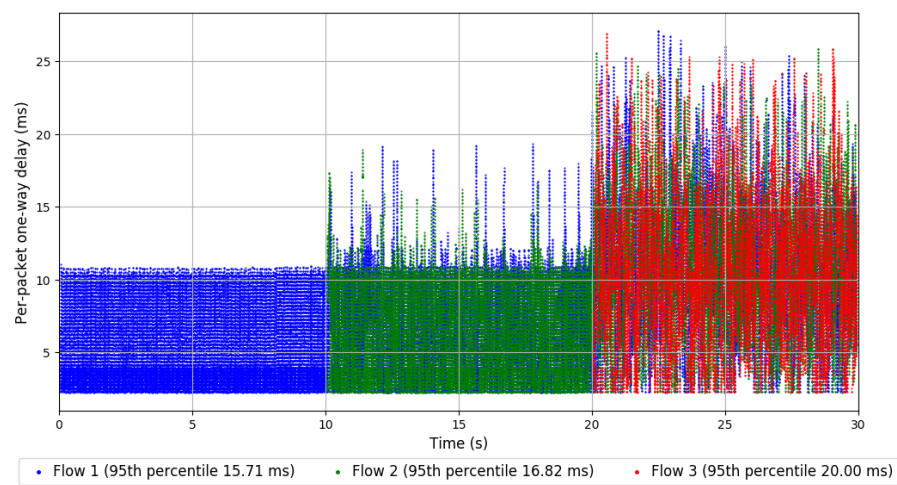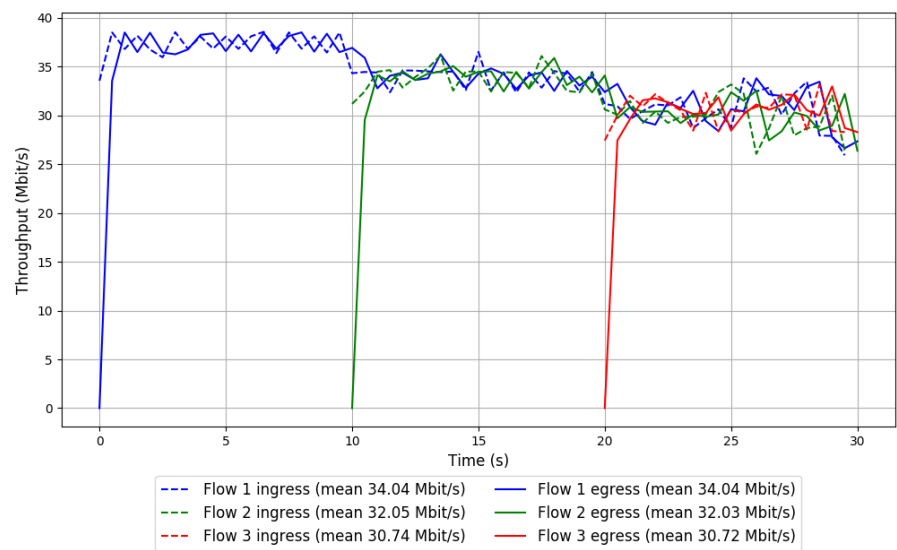```

## Run 10: Report of SCReAM — Data Link





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```
Run 1: Statistics of Sprout

Start at: 2018-07-03 18:26:22
End at: 2018-07-03 18:26:52
Local clock offset: -2.349 ms
Remote clock offset: -2.733 ms


# Below is generated by plot.py at 2018-07-03 21:53:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.36 Mbit/s
95th percentile per-packet one-way delay: 16.944 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 33.98 Mbit/s
95th percentile per-packet one-way delay: 15.147 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.05 Mbit/s
95th percentile per-packet one-way delay: 17.911 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.46 Mbit/s
95th percentile per-packet one-way delay: 18.703 ms
Loss rate: 0.00%
```

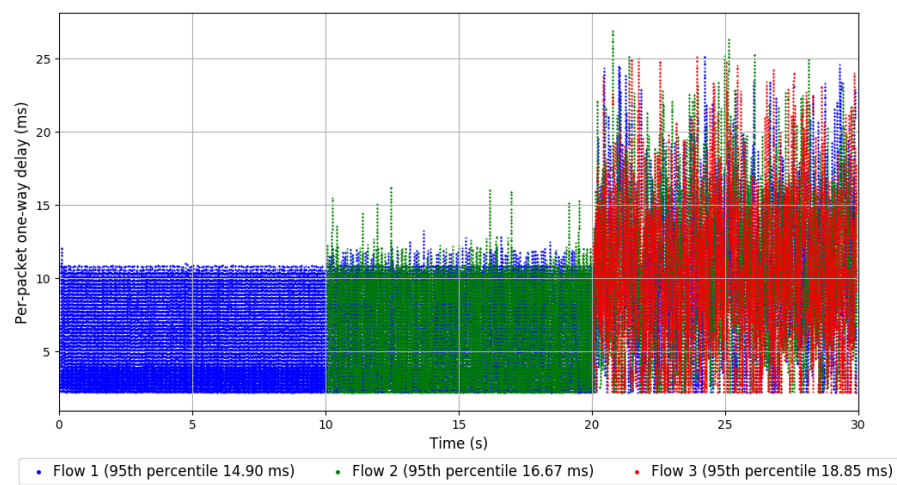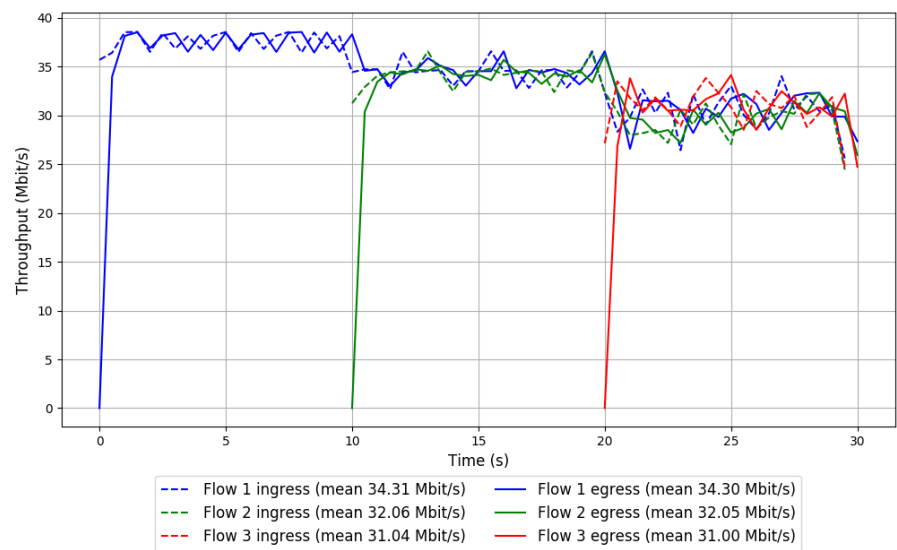## Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2018-07-03 18:45:34
End at: 2018-07-03 18:46:04
Local clock offset: -2.66 ms
Remote clock offset: -2.483 ms


# Below is generated by plot.py at 2018-07-03 21:53:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.13 Mbit/s
95th percentile per-packet one-way delay: 16.719 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 33.97 Mbit/s
95th percentile per-packet one-way delay: 15.420 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.98 Mbit/s
95th percentile per-packet one-way delay: 16.792 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.93 Mbit/s
95th percentile per-packet one-way delay: 18.904 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2018-07-03 19:04:47
End at: 2018-07-03 19:05:17
Local clock offset: -3.354 ms
Remote clock offset: -2.027 ms


# Below is generated by plot.py at 2018-07-03 21:53:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.53 Mbit/s
95th percentile per-packet one-way delay: 15.875 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 33.45 Mbit/s
95th percentile per-packet one-way delay: 14.636 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.11 Mbit/s
95th percentile per-packet one-way delay: 15.485 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.40 Mbit/s
95th percentile per-packet one-way delay: 18.783 ms
Loss rate: 0.00%
```
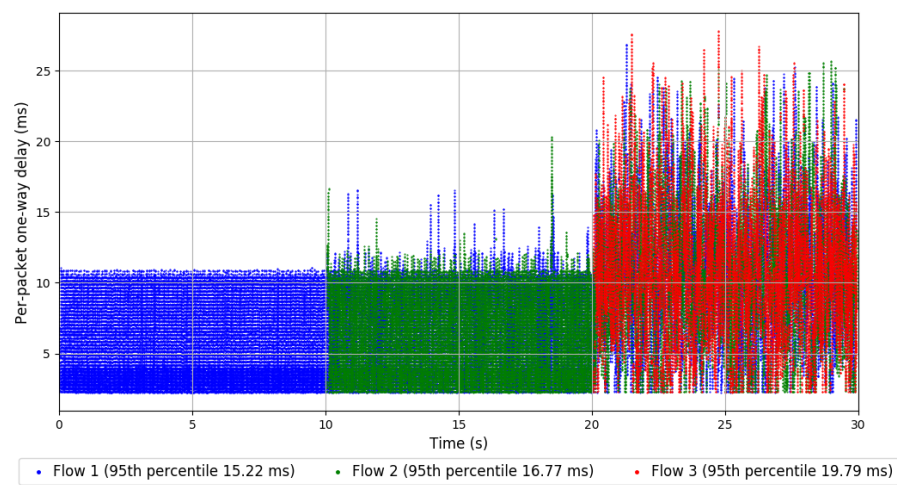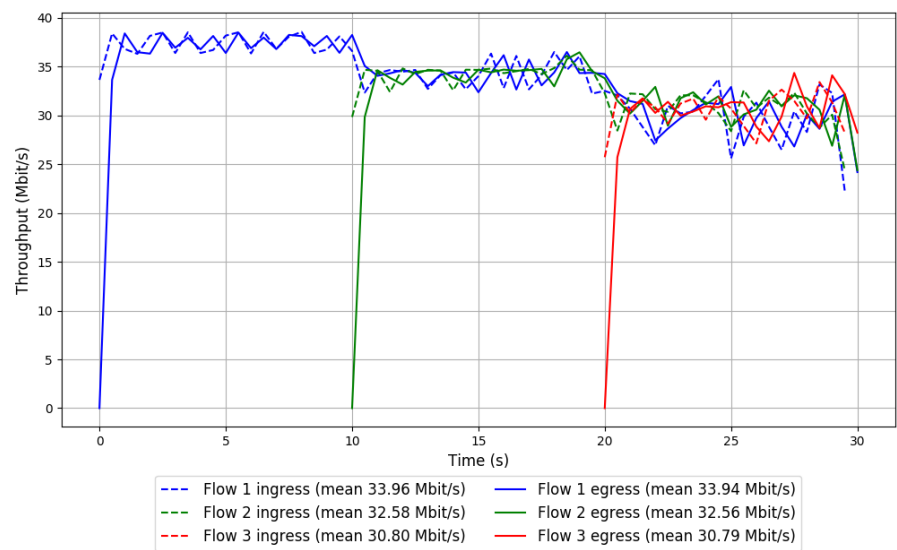
Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2018-07-03 19:24:00
End at: 2018-07-03 19:24:30
Local clock offset: -2.297 ms
Remote clock offset: -1.776 ms


# Below is generated by plot.py at 2018-07-03 21:53:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.49 Mbit/s
95th percentile per-packet one-way delay: 17.108 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 34.04 Mbit/s
95th percentile per-packet one-way delay: 15.714 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.03 Mbit/s
95th percentile per-packet one-way delay: 16.825 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.72 Mbit/s
95th percentile per-packet one-way delay: 19.998 ms
Loss rate: 0.00%
```
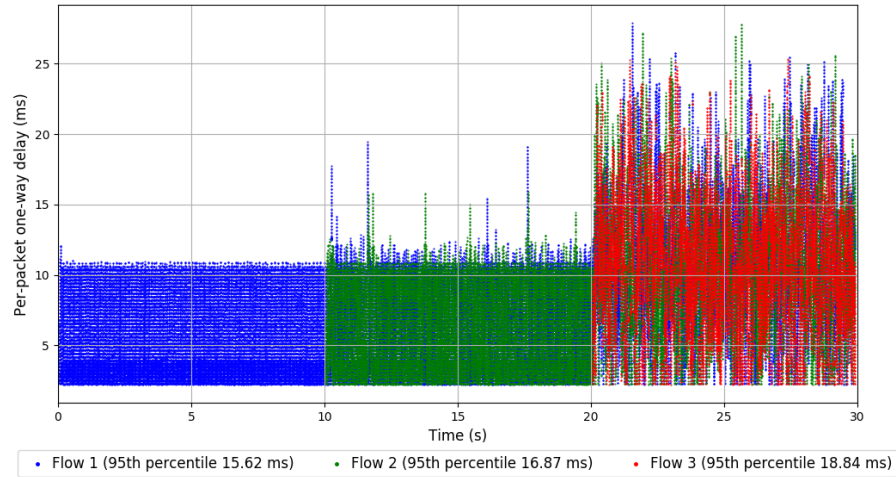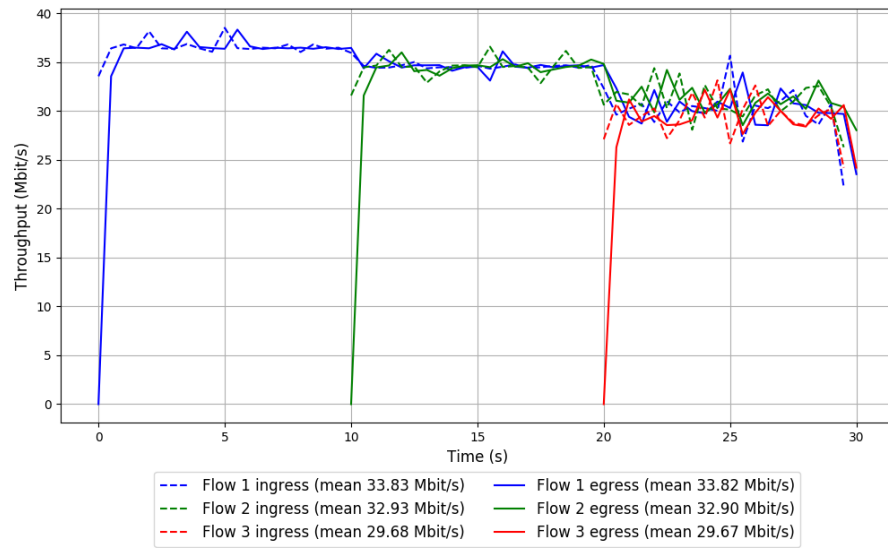
Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2018-07-03 19:43:13
End at: 2018-07-03 19:43:43
Local clock offset: -1.95 ms
Remote clock offset: -1.485 ms


# Below is generated by plot.py at 2018-07-03 21:53:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.85 Mbit/s
95th percentile per-packet one-way delay: 16.434 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 34.30 Mbit/s
95th percentile per-packet one-way delay: 14.902 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.05 Mbit/s
95th percentile per-packet one-way delay: 16.671 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 31.00 Mbit/s
95th percentile per-packet one-way delay: 18.850 ms
Loss rate: 0.00%
```
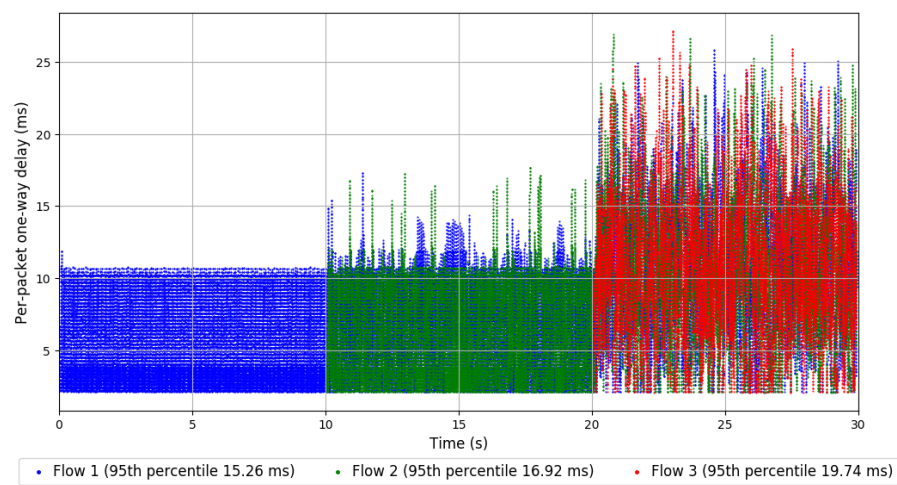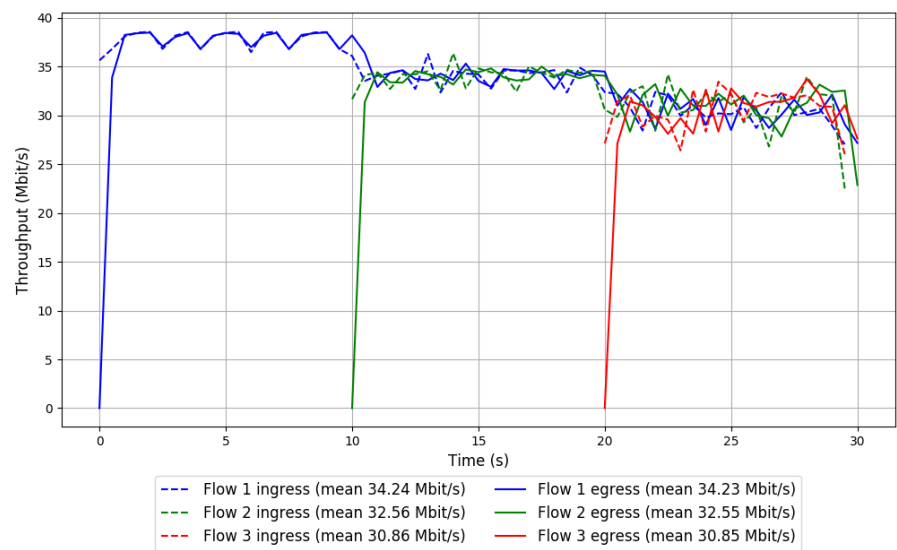
Run 5: Report of Sprout — Data Link

```
Run 6: Statistics of Sprout

Start at: 2018-07-03 20:02:26
End at: 2018-07-03 20:02:56
Local clock offset: -1.963 ms
Remote clock offset: -2.459 ms


# Below is generated by plot.py at 2018-07-03 21:53:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.77 Mbit/s
95th percentile per-packet one-way delay: 16.888 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 33.94 Mbit/s
95th percentile per-packet one-way delay: 15.223 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.56 Mbit/s
95th percentile per-packet one-way delay: 16.774 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.79 Mbit/s
95th percentile per-packet one-way delay: 19.794 ms
Loss rate: 0.00%
```
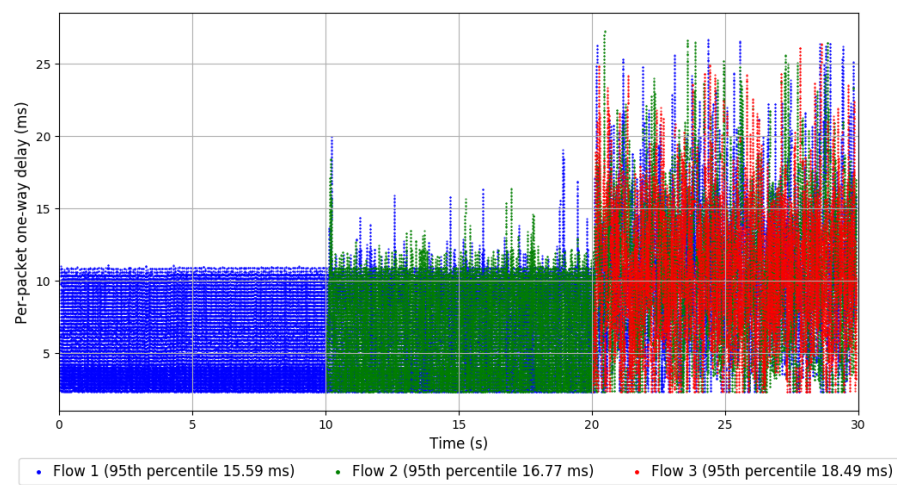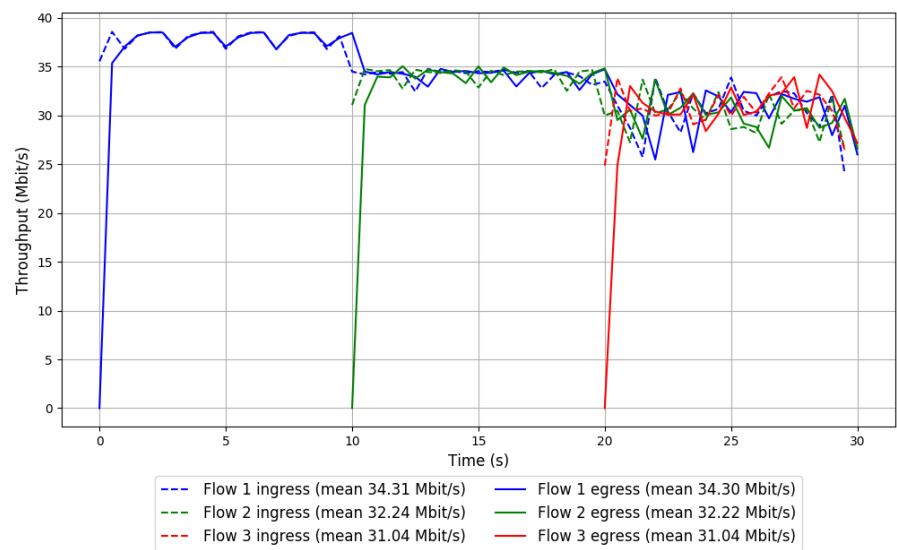
Run 6: Report of Sprout — Data Link

```
Run 7: Statistics of Sprout

Start at: 2018-07-03 20:21:39
End at: 2018-07-03 20:22:09
Local clock offset: -1.832 ms
Remote clock offset: -2.843 ms


# Below is generated by plot.py at 2018-07-03 21:54:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.51 Mbit/s
95th percentile per-packet one-way delay: 16.900 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 33.82 Mbit/s
95th percentile per-packet one-way delay: 15.622 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.90 Mbit/s
95th percentile per-packet one-way delay: 16.869 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.67 Mbit/s
95th percentile per-packet one-way delay: 18.841 ms
Loss rate: 0.00%
```
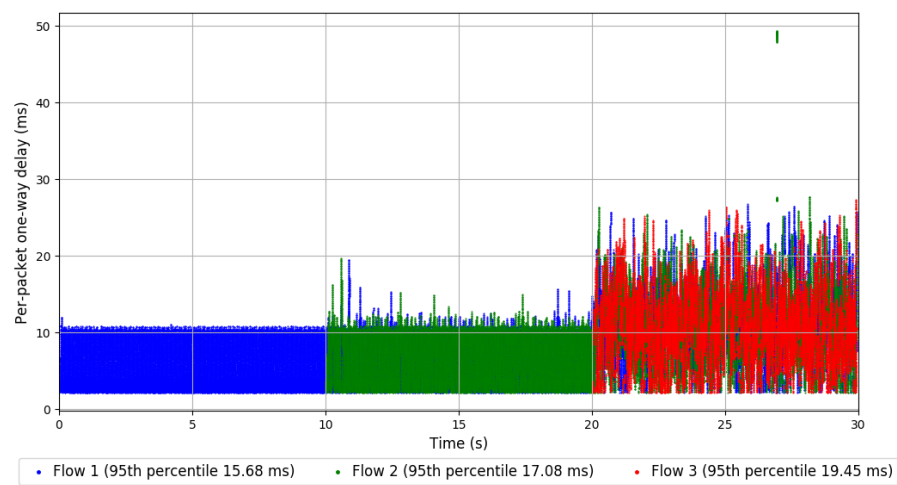
Run 7: Report of Sprout — Data Link

Flow 1 ingress (mean 33.83 Mbit/s) --- Flow 1 egress (mean 33.82 Mbit/s)
Flow 2 ingress (mean 32.93 Mbit/s) --- Flow 2 egress (mean 32.90 Mbit/s)
Flow 3 ingress (mean 29.68 Mbit/s) --- Flow 3 egress (mean 29.67 Mbit/s)

Flow 1 (95th percentile 15.62 ms)   Flow 2 (95th percentile 16.87 ms)   Flow 3 (95th percentile 18.84 ms)

```
Run 8: Statistics of Sprout

Start at: 2018-07-03 20:40:52
End at: 2018-07-03 20:41:22
Local clock offset: -1.714 ms
Remote clock offset: -2.945 ms


# Below is generated by plot.py at 2018-07-03 21:54:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.07 Mbit/s
95th percentile per-packet one-way delay: 16.914 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 34.23 Mbit/s
95th percentile per-packet one-way delay: 15.264 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.55 Mbit/s
95th percentile per-packet one-way delay: 16.924 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.85 Mbit/s
95th percentile per-packet one-way delay: 19.743 ms
Loss rate: 0.00%
```
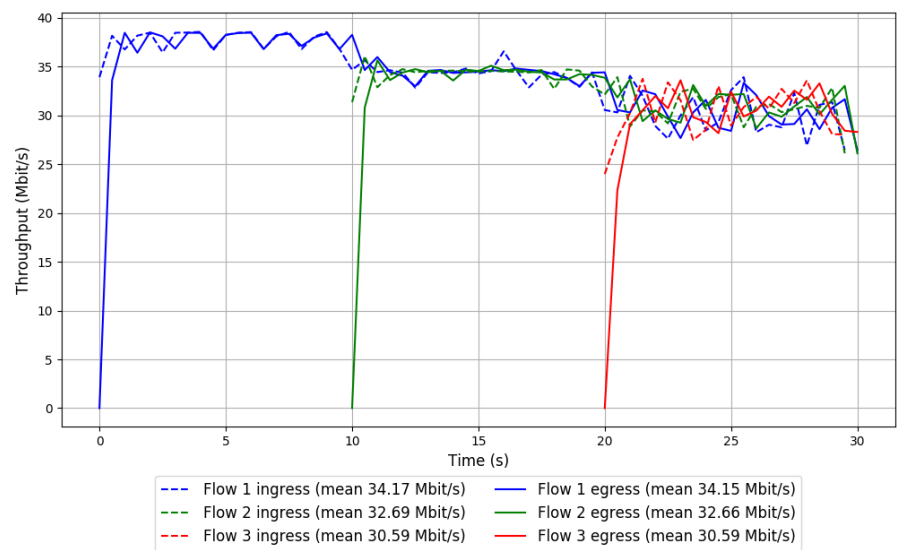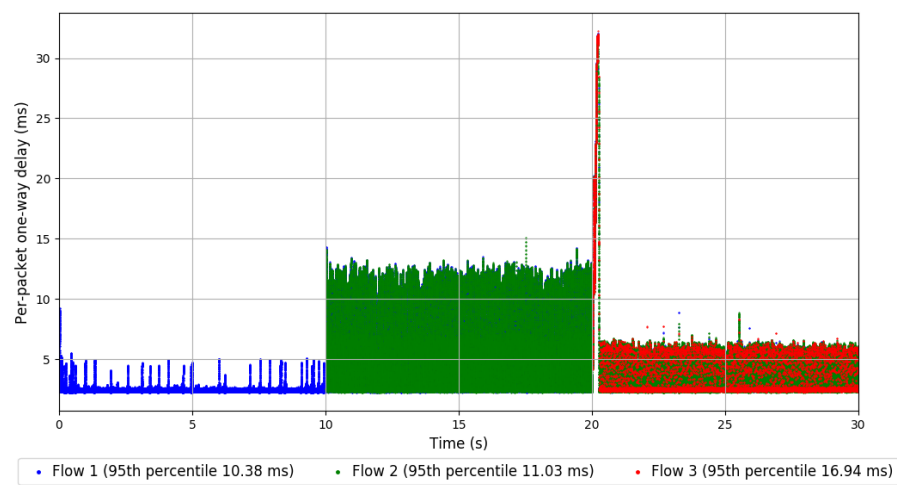
Run 8: Report of Sprout — Data Link

```
Run 9: Statistics of Sprout

Start at: 2018-07-03 21:00:04
End at: 2018-07-03 21:00:34
Local clock offset: -2.835 ms
Remote clock offset: -2.865 ms


# Below is generated by plot.py at 2018-07-03 21:54:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.99 Mbit/s
95th percentile per-packet one-way delay: 16.703 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 34.30 Mbit/s
95th percentile per-packet one-way delay: 15.593 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.22 Mbit/s
95th percentile per-packet one-way delay: 16.766 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 31.04 Mbit/s
95th percentile per-packet one-way delay: 18.492 ms
Loss rate: 0.00%
```
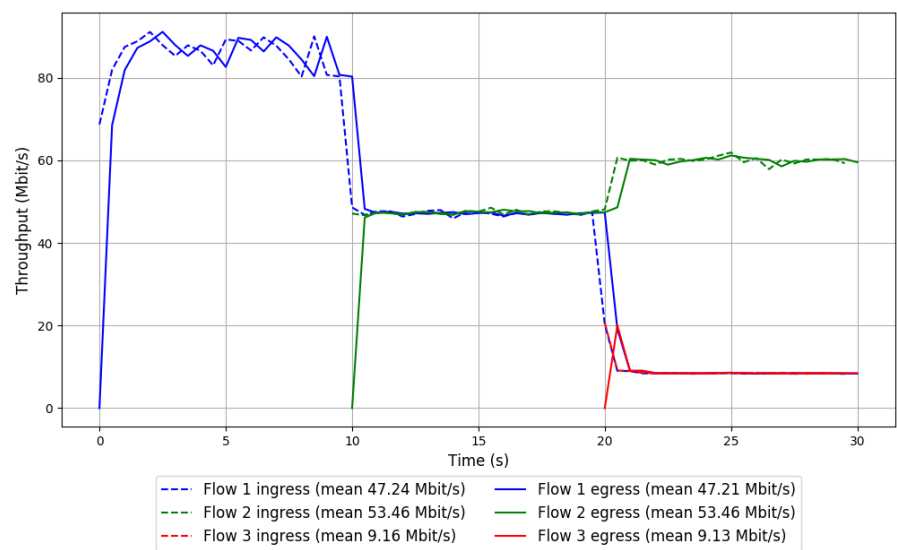
Run 9: Report of Sprout — Data Link

```
Run 10: Statistics of Sprout

Start at: 2018-07-03 21:19:18
End at: 2018-07-03 21:19:48
Local clock offset: -2.837 ms
Remote clock offset: -2.597 ms


# Below is generated by plot.py at 2018-07-03 21:54:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.00 Mbit/s
95th percentile per-packet one-way delay: 17.202 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 34.15 Mbit/s
95th percentile per-packet one-way delay: 15.676 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.66 Mbit/s
95th percentile per-packet one-way delay: 17.082 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.59 Mbit/s
95th percentile per-packet one-way delay: 19.455 ms
Loss rate: 0.00%
```

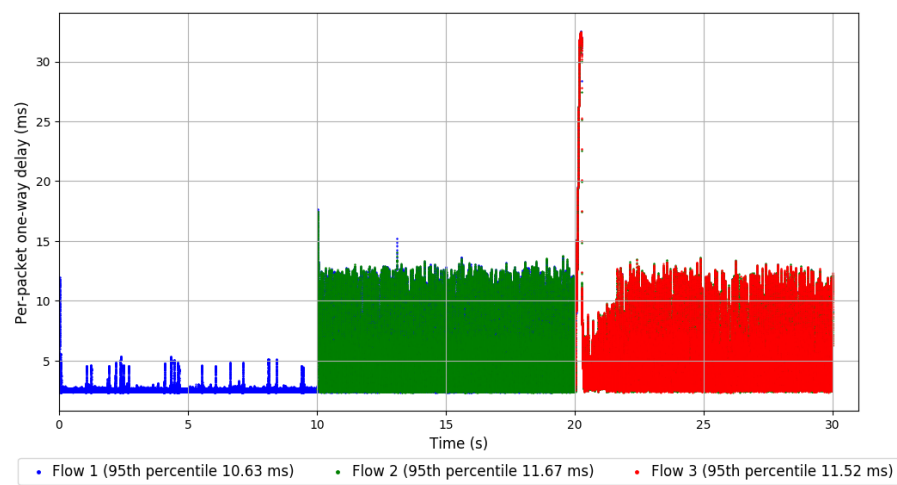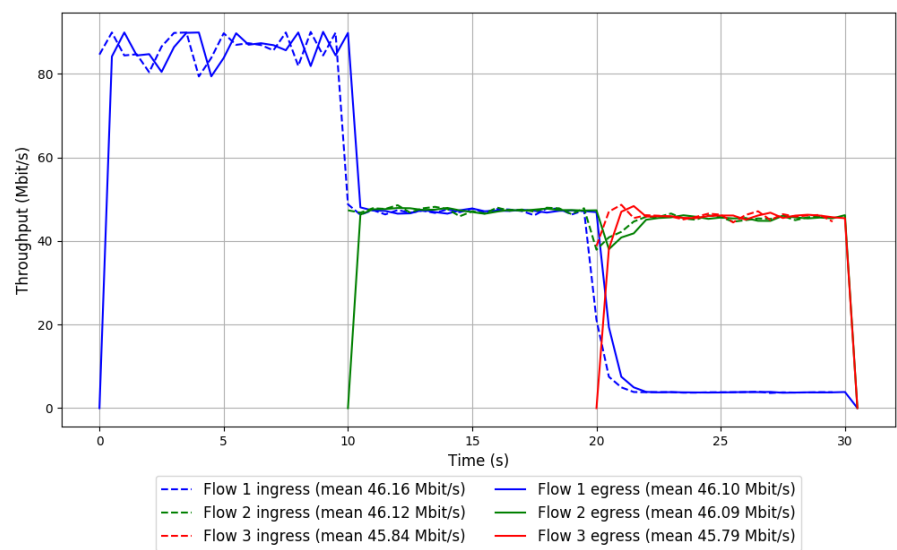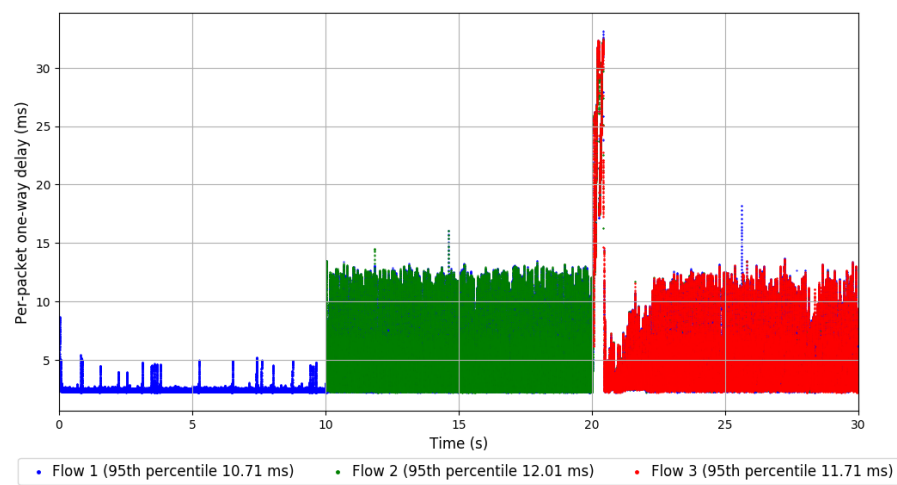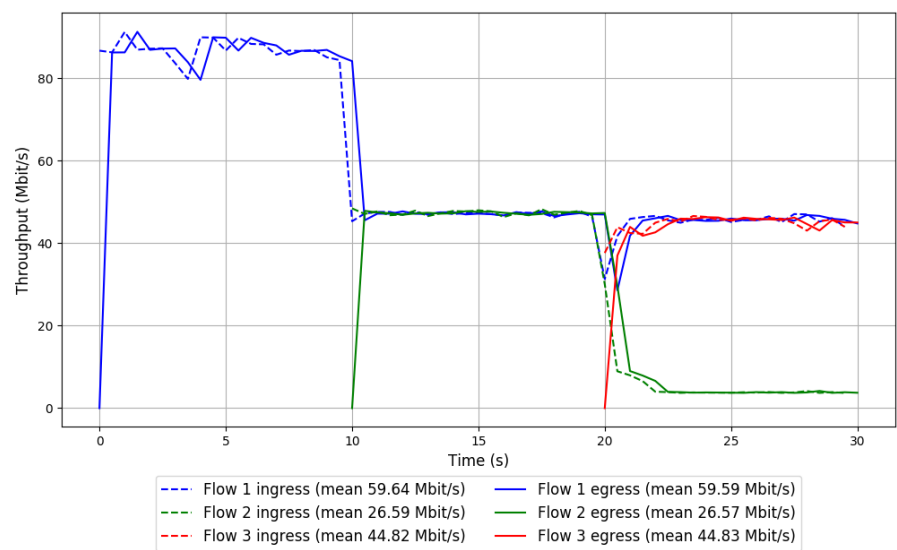Run 10: Report of Sprout — Data Link

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

Start at: 2018-07-03 18:19:34
End at: 2018-07-03 18:20:04
Local clock offset: -2.533 ms
Remote clock offset: -2.72 ms

# Below is generated by plot.py at 2018-07-03 21:55:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.86 Mbit/s
95th percentile per-packet one-way delay: 10.752 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 47.21 Mbit/s
95th percentile per-packet one-way delay: 10.384 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 53.46 Mbit/s
95th percentile per-packet one-way delay: 11.034 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.13 Mbit/s
95th percentile per-packet one-way delay: 16.938 ms
Loss rate: 0.35%
```

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

- - - - Flow 1 ingress (mean 47.24 Mbit/s) — Flow 1 egress (mean 47.21 Mbit/s)
- - - - Flow 2 ingress (mean 53.46 Mbit/s) — Flow 2 egress (mean 53.46 Mbit/s)
- - - - Flow 3 ingress (mean 9.16 Mbit/s) — Flow 3 egress (mean 9.13 Mbit/s)

- Flow 1 (95th percentile 10.38 ms)　　· Flow 2 (95th percentile 11.03 ms)　　· Flow 3 (95th percentile 16.94 ms)

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

Start at: 2018-07-03 18:38:46
End at: 2018-07-03 18:39:16
Local clock offset: -2.24 ms
Remote clock offset: -2.707 ms


# Below is generated by plot.py at 2018-07-03 21:55:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.04 Mbit/s
95th percentile per-packet one-way delay: 11.303 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 46.10 Mbit/s
95th percentile per-packet one-way delay: 10.634 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 46.09 Mbit/s
95th percentile per-packet one-way delay: 11.673 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 45.79 Mbit/s
95th percentile per-packet one-way delay: 11.516 ms
Loss rate: 0.04%
```
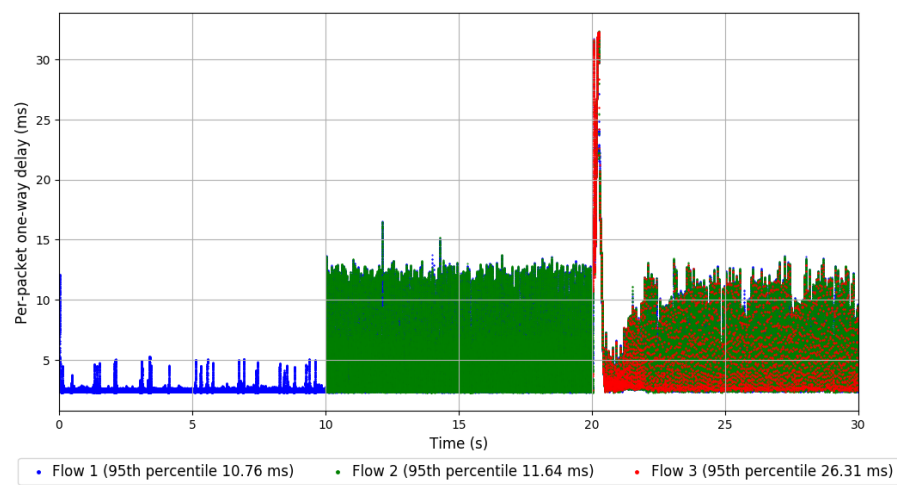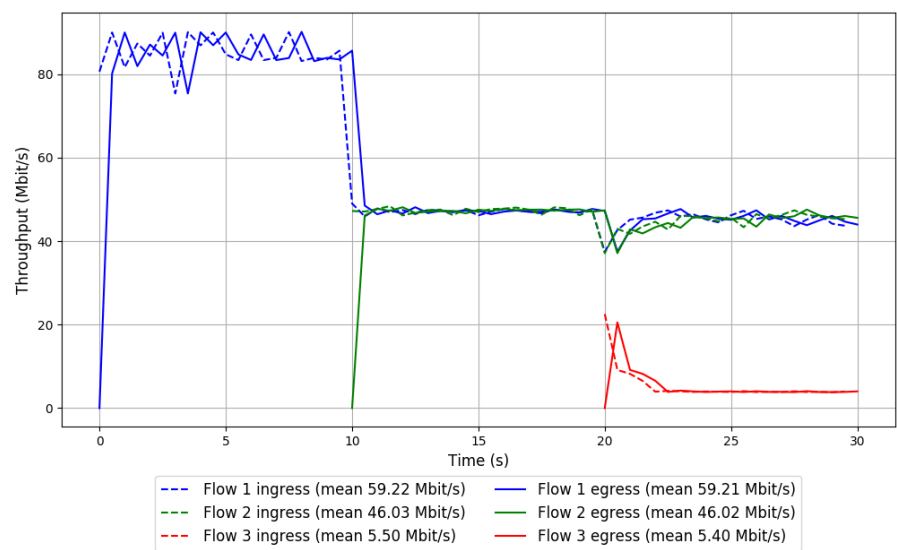
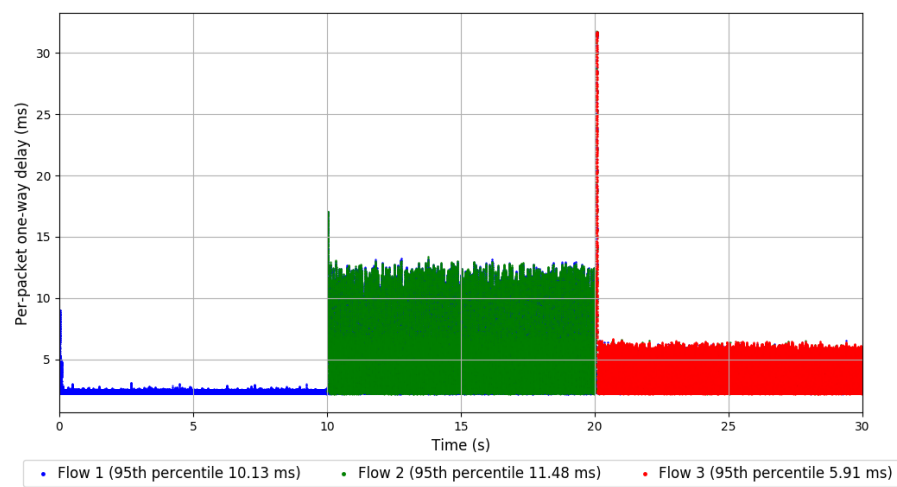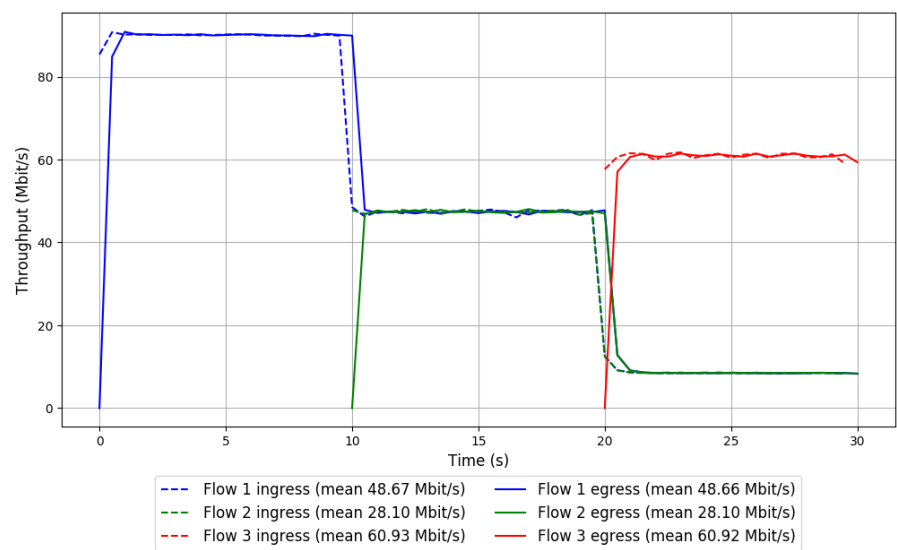Run 2: Report of TaoVA-100x — Data Link

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

Start at: 2018-07-03 18:57:58
End at: 2018-07-03 18:58:28
Local clock offset: -3.219 ms
Remote clock offset: -2.202 ms

# Below is generated by plot.py at 2018-07-03 21:55:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.17 Mbit/s
95th percentile per-packet one-way delay: 11.283 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 59.59 Mbit/s
95th percentile per-packet one-way delay: 10.706 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 26.57 Mbit/s
95th percentile per-packet one-way delay: 12.005 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 44.83 Mbit/s
95th percentile per-packet one-way delay: 11.715 ms
Loss rate: 0.04%
```

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

Flow 1 ingress (mean 59.64 Mbit/s) — — — — Flow 1 egress (mean 59.59 Mbit/s)
Flow 2 ingress (mean 26.59 Mbit/s) — — — — Flow 2 egress (mean 26.57 Mbit/s)
Flow 3 ingress (mean 44.82 Mbit/s) — — — — Flow 3 egress (mean 44.83 Mbit/s)

Flow 1 (95th percentile 10.71 ms)   Flow 2 (95th percentile 12.01 ms)   Flow 3 (95th percentile 11.71 ms)

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

Start at: 2018-07-03 19:17:11
End at: 2018-07-03 19:17:41
Local clock offset: -2.674 ms
Remote clock offset: -1.833 ms


# Below is generated by plot.py at 2018-07-03 21:55:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.66 Mbit/s
95th percentile per-packet one-way delay: 11.258 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 59.21 Mbit/s
95th percentile per-packet one-way delay: 10.764 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 46.02 Mbit/s
95th percentile per-packet one-way delay: 11.640 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 5.40 Mbit/s
95th percentile per-packet one-way delay: 26.307 ms
Loss rate: 1.79%
```
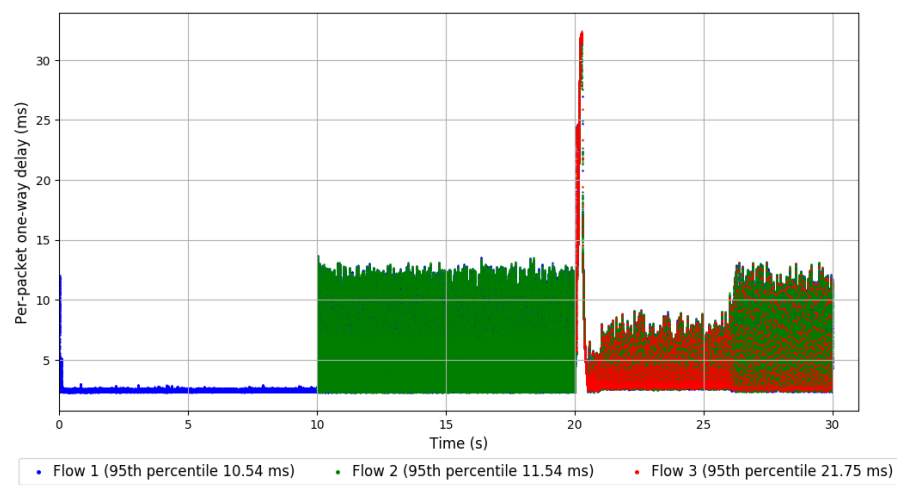
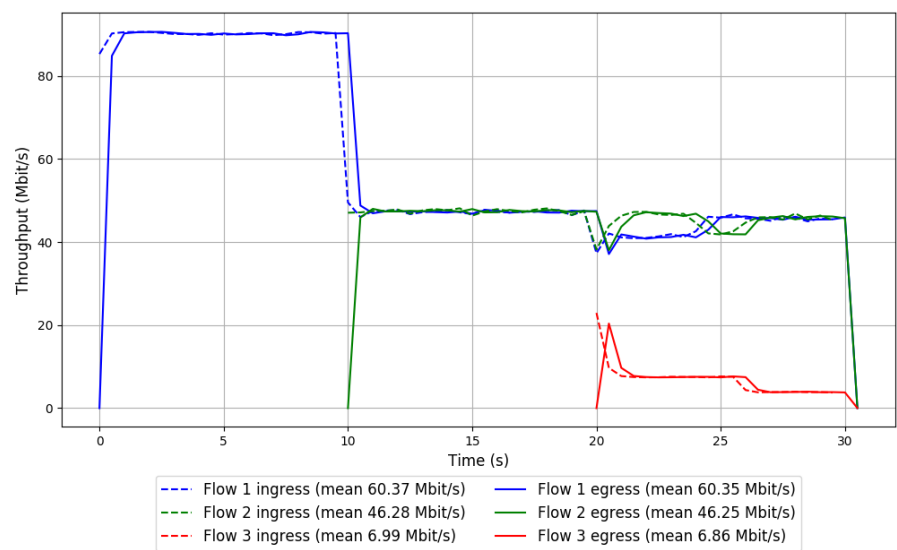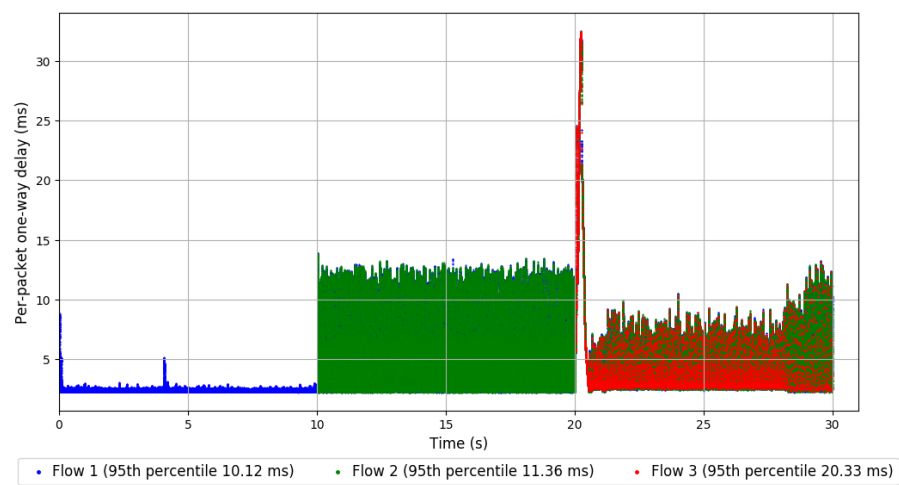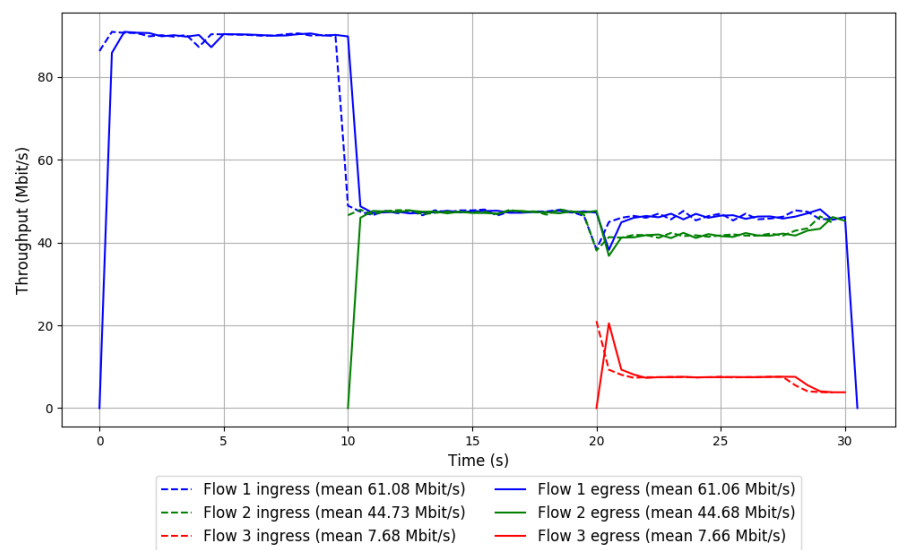Run 4: Report of TaoVA-100x — Data Link

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

Start at: 2018-07-03 19:36:24
End at: 2018-07-03 19:36:54
Local clock offset: -1.944 ms
Remote clock offset: -1.615 ms


# Below is generated by plot.py at 2018-07-03 21:56:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.63 Mbit/s
95th percentile per-packet one-way delay: 10.413 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 48.66 Mbit/s
95th percentile per-packet one-way delay: 10.127 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 28.10 Mbit/s
95th percentile per-packet one-way delay: 11.485 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 60.92 Mbit/s
95th percentile per-packet one-way delay: 5.913 ms
Loss rate: 0.03%
```

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

- - - Flow 1 ingress (mean 48.67 Mbit/s)   —— Flow 1 egress (mean 48.66 Mbit/s)
- - - Flow 2 ingress (mean 28.10 Mbit/s)   —— Flow 2 egress (mean 28.10 Mbit/s)
- - - Flow 3 ingress (mean 60.93 Mbit/s)   —— Flow 3 egress (mean 60.92 Mbit/s)

- Flow 1 (95th percentile 10.13 ms)   • Flow 2 (95th percentile 11.48 ms)   • Flow 3 (95th percentile 5.91 ms)

253

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

Start at: 2018-07-03 19:55:38
End at: 2018-07-03 19:56:08
Local clock offset: -2.0 ms
Remote clock offset: -2.062 ms


# Below is generated by plot.py at 2018-07-03 21:56:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.44 Mbit/s
95th percentile per-packet one-way delay: 11.095 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 60.35 Mbit/s
95th percentile per-packet one-way delay: 10.543 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 46.25 Mbit/s
95th percentile per-packet one-way delay: 11.543 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 6.86 Mbit/s
95th percentile per-packet one-way delay: 21.754 ms
Loss rate: 1.79%
```

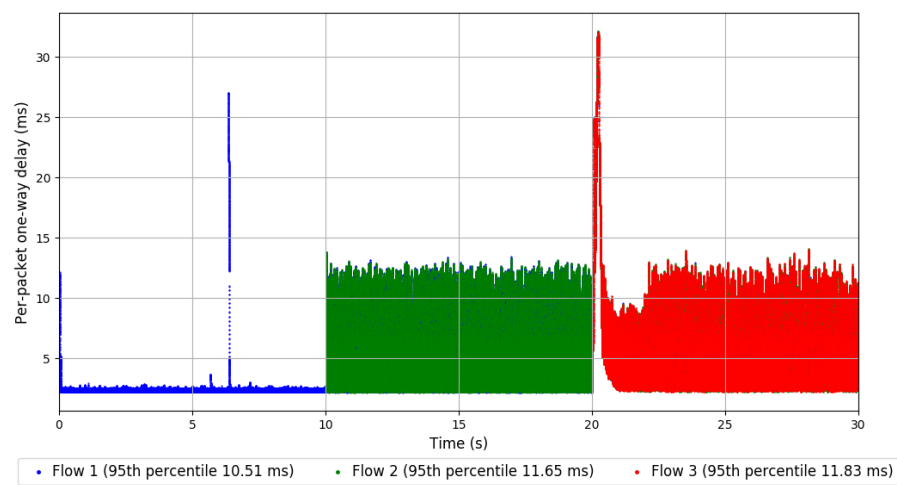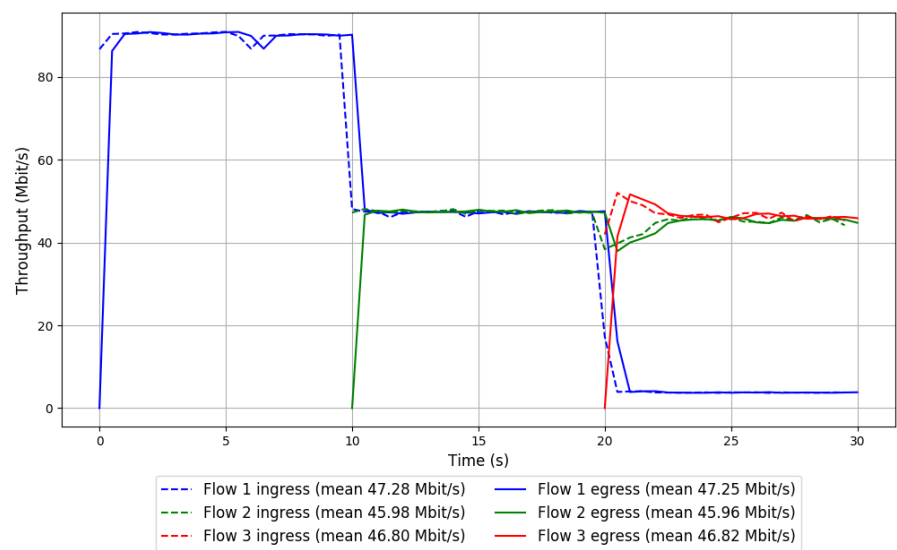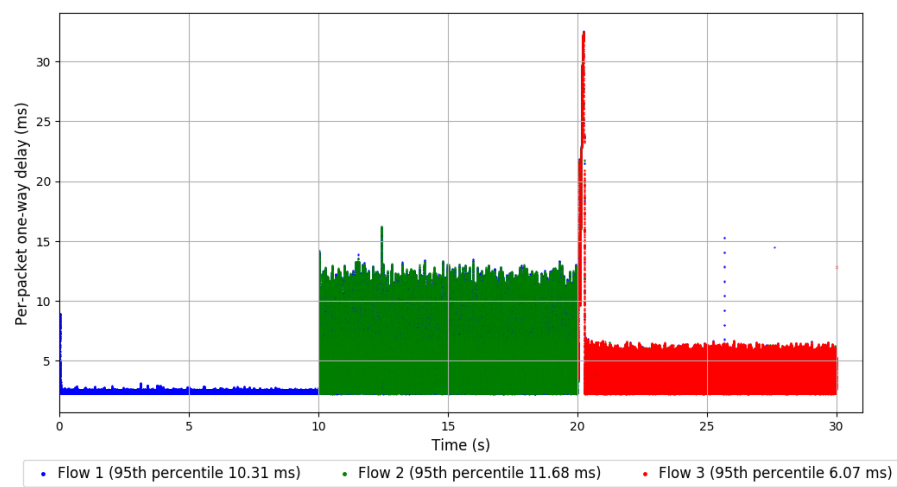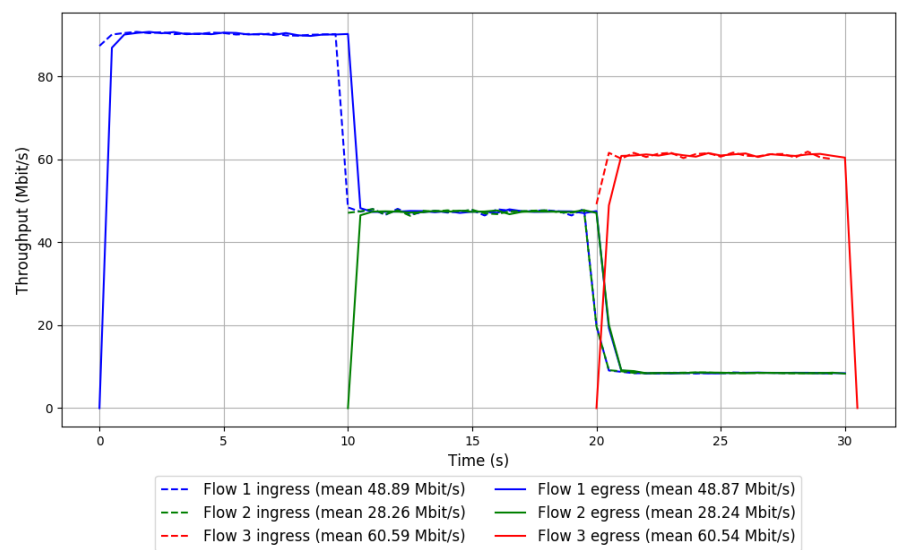# Run 6: Report of TaoVA-100x — Data Link

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

Start at: 2018-07-03 20:14:50
End at: 2018-07-03 20:15:20
Local clock offset: -1.885 ms
Remote clock offset: -2.798 ms

# Below is generated by plot.py at 2018-07-03 21:56:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.37 Mbit/s
95th percentile per-packet one-way delay: 10.790 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 61.06 Mbit/s
95th percentile per-packet one-way delay: 10.116 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.68 Mbit/s
95th percentile per-packet one-way delay: 11.355 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 7.66 Mbit/s
95th percentile per-packet one-way delay: 20.334 ms
Loss rate: 0.28%
```

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

Flow 1 ingress (mean 61.08 Mbit/s) — — — Flow 1 egress (mean 61.06 Mbit/s)
Flow 2 ingress (mean 44.73 Mbit/s) — — — Flow 2 egress (mean 44.68 Mbit/s)
Flow 3 ingress (mean 7.68 Mbit/s) — — — Flow 3 egress (mean 7.66 Mbit/s)

Flow 1 (95th percentile 10.12 ms)   Flow 2 (95th percentile 11.36 ms)   Flow 3 (95th percentile 20.33 ms)

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

Start at: 2018-07-03 20:34:03
End at: 2018-07-03 20:34:33
Local clock offset: -1.733 ms
Remote clock offset: -2.938 ms


# Below is generated by plot.py at 2018-07-03 21:56:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.42 Mbit/s
95th percentile per-packet one-way delay: 11.315 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 47.25 Mbit/s
95th percentile per-packet one-way delay: 10.509 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 45.96 Mbit/s
95th percentile per-packet one-way delay: 11.652 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 46.82 Mbit/s
95th percentile per-packet one-way delay: 11.828 ms
Loss rate: 0.01%
```
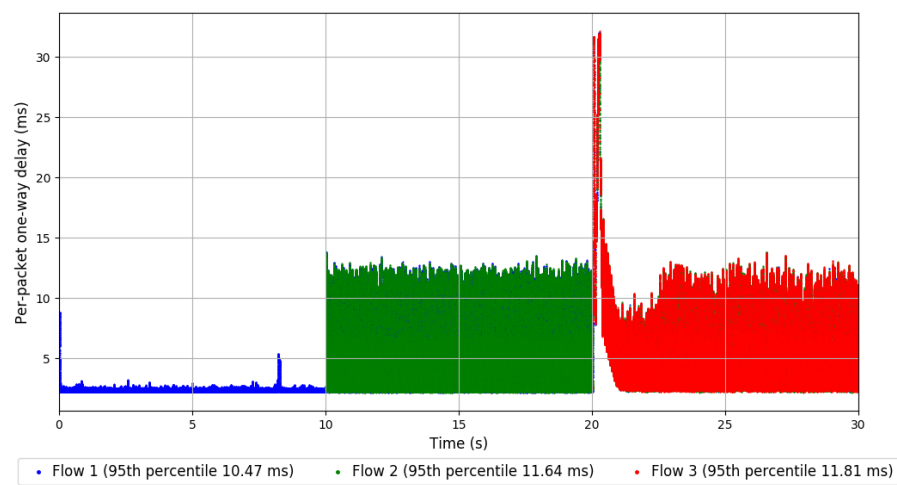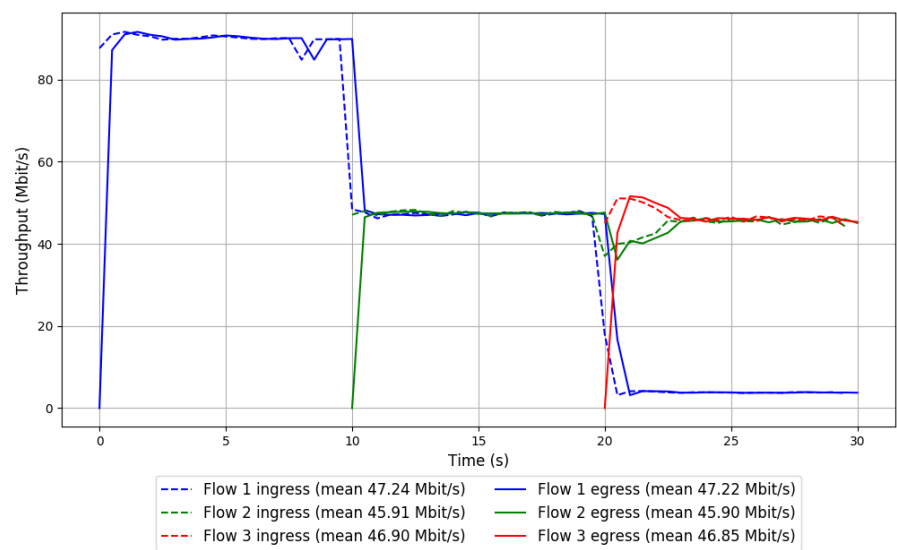
Run 8: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 47.28 Mbit/s)   Flow 1 egress (mean 47.25 Mbit/s)
Flow 2 ingress (mean 45.98 Mbit/s)   Flow 2 egress (mean 45.96 Mbit/s)
Flow 3 ingress (mean 46.80 Mbit/s)   Flow 3 egress (mean 46.82 Mbit/s)

Flow 1 (95th percentile 10.51 ms)   Flow 2 (95th percentile 11.65 ms)   Flow 3 (95th percentile 11.83 ms)

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

Start at: 2018-07-03 20:53:16
End at: 2018-07-03 20:53:46
Local clock offset: -2.591 ms
Remote clock offset: -2.943 ms


# Below is generated by plot.py at 2018-07-03 21:57:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.79 Mbit/s
95th percentile per-packet one-way delay: 10.670 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 48.87 Mbit/s
95th percentile per-packet one-way delay: 10.309 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 28.24 Mbit/s
95th percentile per-packet one-way delay: 11.683 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 60.54 Mbit/s
95th percentile per-packet one-way delay: 6.074 ms
Loss rate: 0.01%
```
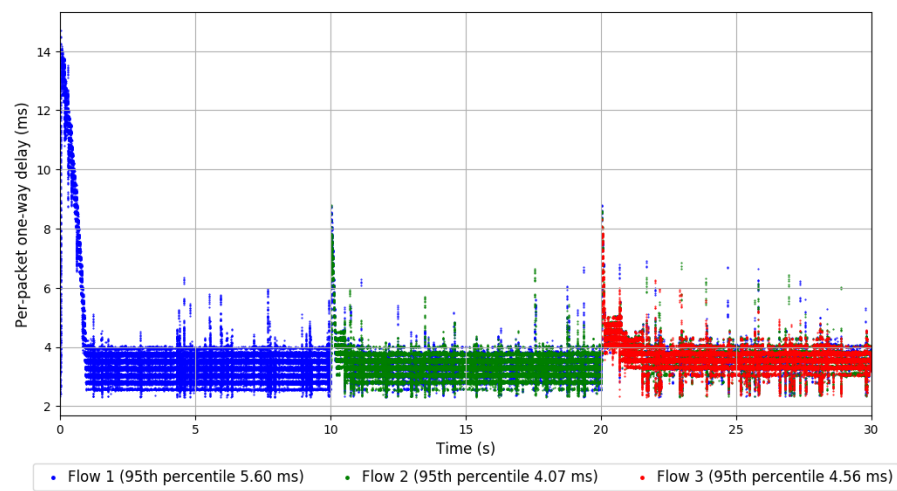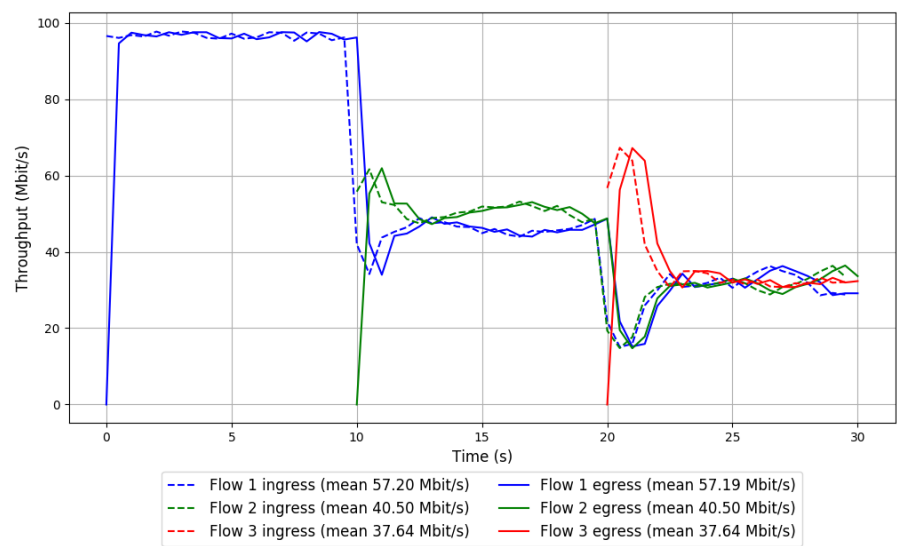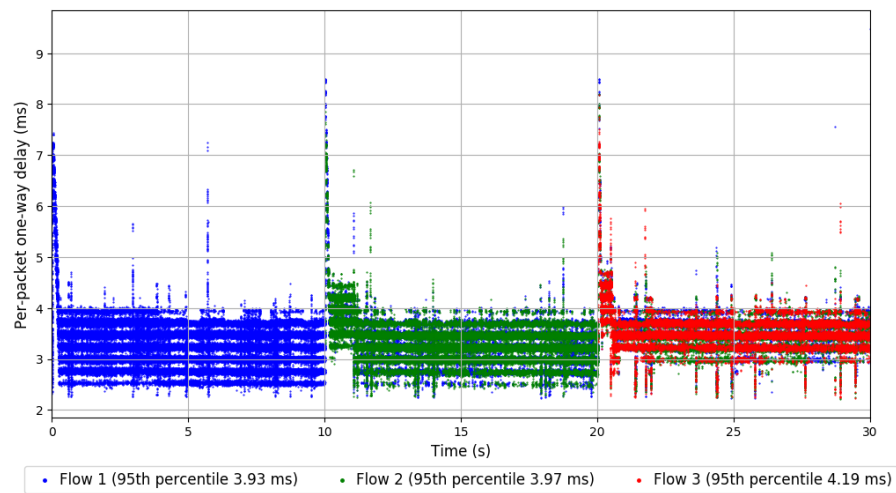
Run 9: Report of TaoVA-100x — Data Link

- - - Flow 1 ingress (mean 48.89 Mbit/s) —— Flow 1 egress (mean 48.87 Mbit/s)
- - - Flow 2 ingress (mean 28.26 Mbit/s) —— Flow 2 egress (mean 28.24 Mbit/s)
- - - Flow 3 ingress (mean 60.59 Mbit/s) —— Flow 3 egress (mean 60.54 Mbit/s)

- Flow 1 (95th percentile 10.31 ms) • Flow 2 (95th percentile 11.68 ms) • Flow 3 (95th percentile 6.07 ms)
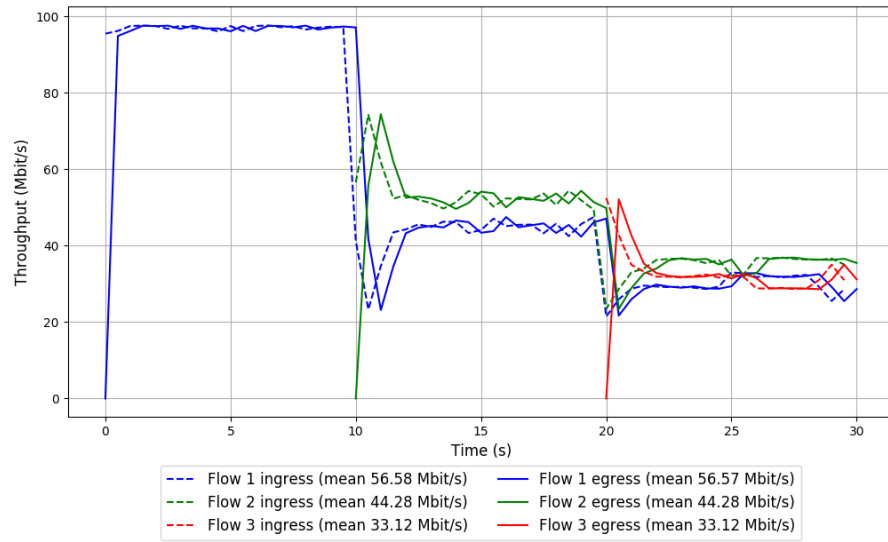
```
Run 10: Statistics of TaoVA-100x

Start at: 2018-07-03 21:12:29
End at: 2018-07-03 21:12:59
Local clock offset: -2.91 ms
Remote clock offset: -2.683 ms

# Below is generated by plot.py at 2018-07-03 21:58:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.37 Mbit/s
95th percentile per-packet one-way delay: 11.272 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 47.22 Mbit/s
95th percentile per-packet one-way delay: 10.469 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 45.90 Mbit/s
95th percentile per-packet one-way delay: 11.643 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 46.85 Mbit/s
95th percentile per-packet one-way delay: 11.814 ms
Loss rate: 0.11%
```

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

Flow 1 ingress (mean 47.24 Mbit/s) --- Flow 1 egress (mean 47.22 Mbit/s)
Flow 2 ingress (mean 45.91 Mbit/s) --- Flow 2 egress (mean 45.90 Mbit/s)
Flow 3 ingress (mean 46.90 Mbit/s) --- Flow 3 egress (mean 46.85 Mbit/s)

Flow 1 (95th percentile 10.47 ms)   Flow 2 (95th percentile 11.64 ms)   Flow 3 (95th percentile 11.81 ms)
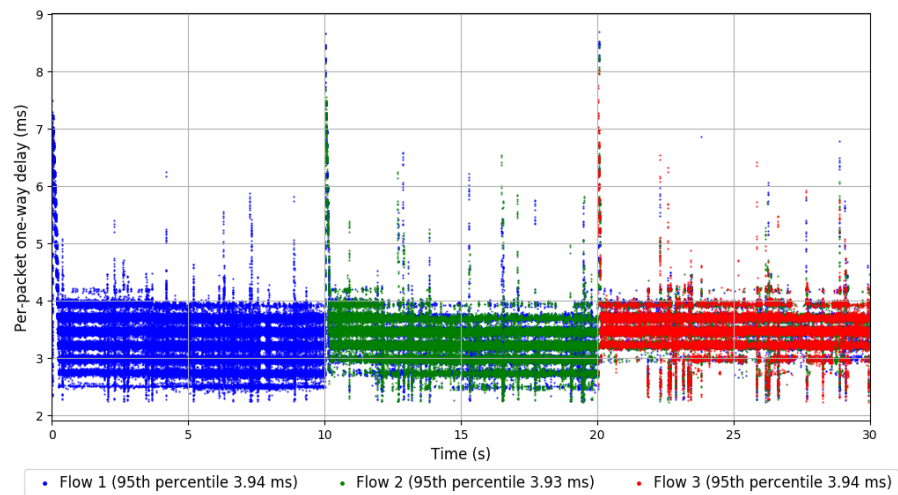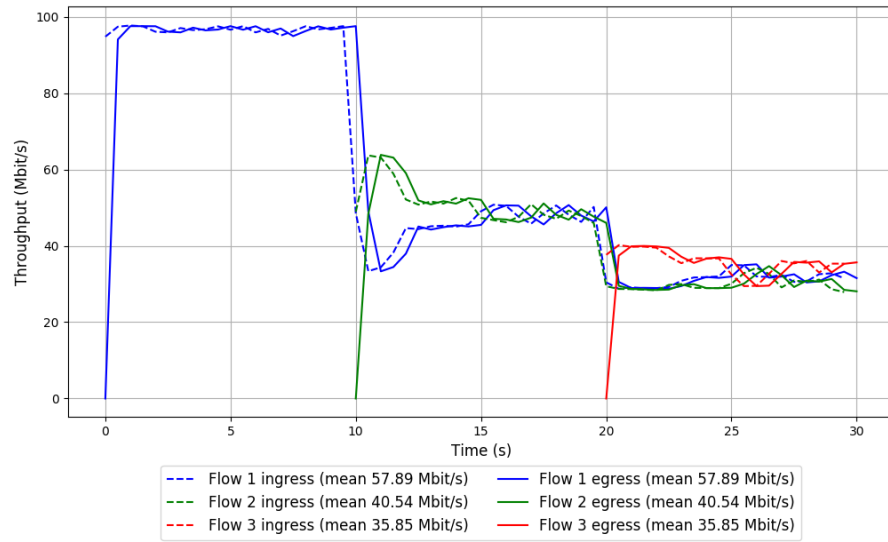
263

```
Run 1: Statistics of TCP Vegas

Start at: 2018-07-03 18:20:44
End at: 2018-07-03 18:21:14
Local clock offset: -2.559 ms
Remote clock offset: -2.729 ms

# Below is generated by plot.py at 2018-07-03 21:58:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.69 Mbit/s
95th percentile per-packet one-way delay: 4.533 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 57.19 Mbit/s
95th percentile per-packet one-way delay: 5.601 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.50 Mbit/s
95th percentile per-packet one-way delay: 4.068 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 37.64 Mbit/s
95th percentile per-packet one-way delay: 4.556 ms
Loss rate: 0.00%
```

Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2018-07-03 18:39:56
End at: 2018-07-03 18:40:26
Local clock offset: -2.177 ms
Remote clock offset: -2.723 ms


# Below is generated by plot.py at 2018-07-03 21:58:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.06 Mbit/s
95th percentile per-packet one-way delay: 3.958 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 56.57 Mbit/s
95th percentile per-packet one-way delay: 3.934 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.28 Mbit/s
95th percentile per-packet one-way delay: 3.973 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 33.12 Mbit/s
95th percentile per-packet one-way delay: 4.189 ms
Loss rate: 0.00%
```
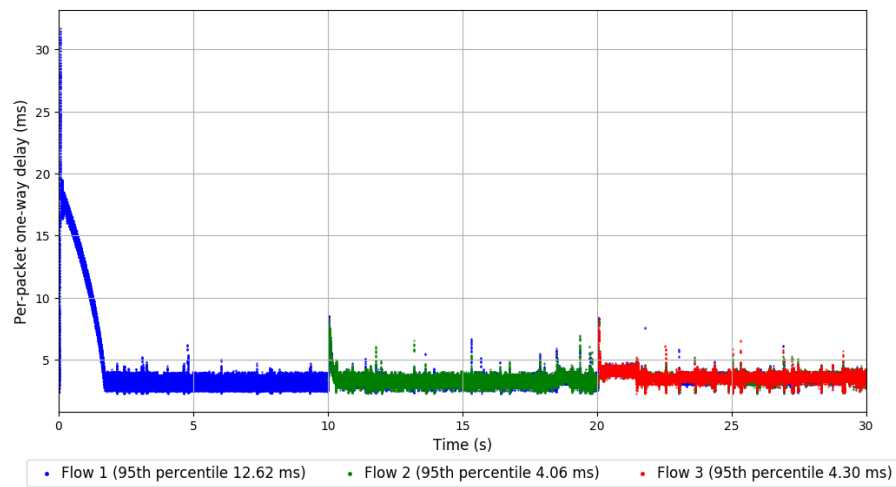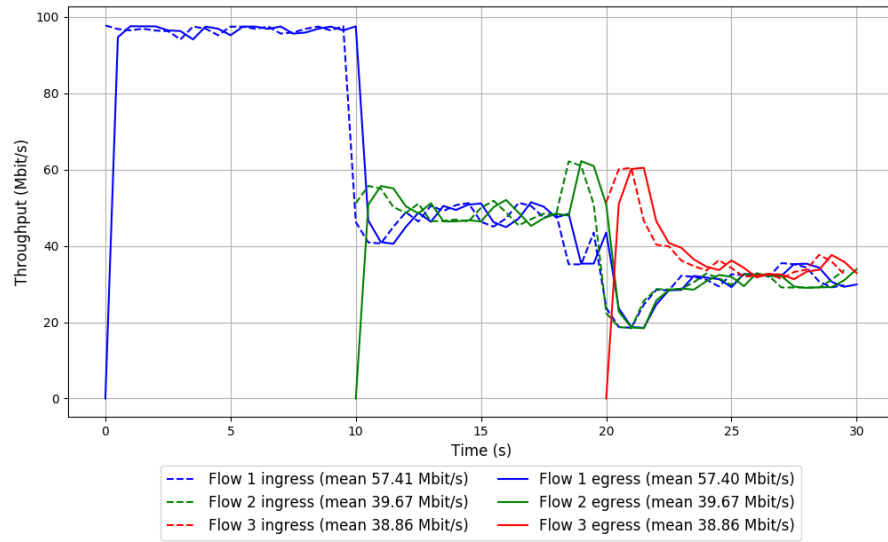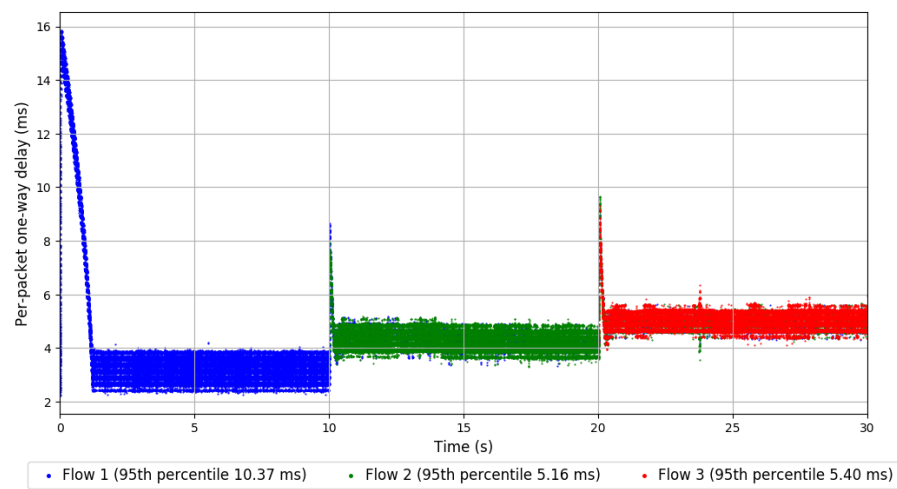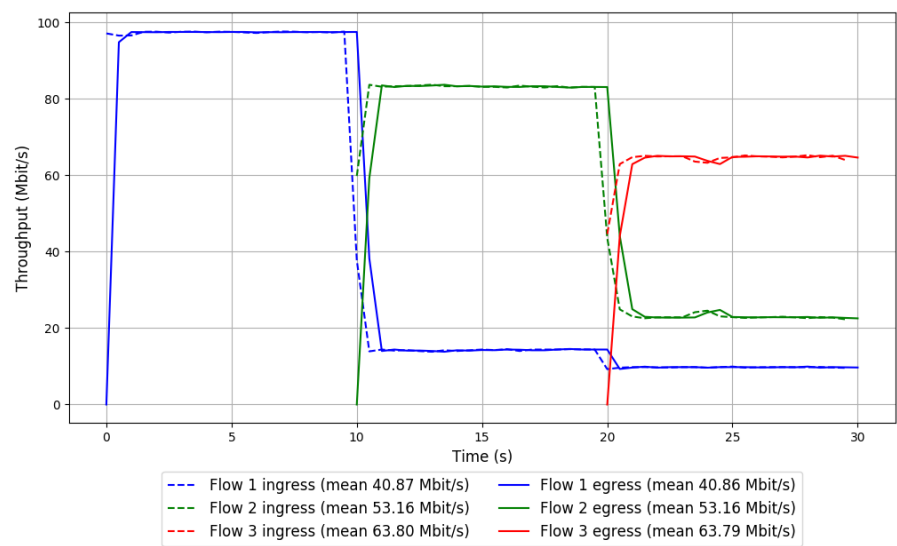
Run 2: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 56.58 Mbit/s) --- Flow 1 egress (mean 56.57 Mbit/s)
Flow 2 ingress (mean 44.28 Mbit/s) --- Flow 2 egress (mean 44.28 Mbit/s)
Flow 3 ingress (mean 33.12 Mbit/s) --- Flow 3 egress (mean 33.12 Mbit/s)

Flow 1 (95th percentile 3.93 ms)   Flow 2 (95th percentile 3.97 ms)   Flow 3 (95th percentile 4.19 ms)

267

```
Run 3: Statistics of TCP Vegas

Start at: 2018-07-03 18:59:09
End at: 2018-07-03 18:59:39
Local clock offset: -3.244 ms
Remote clock offset: -2.128 ms


# Below is generated by plot.py at 2018-07-03 21:58:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.81 Mbit/s
95th percentile per-packet one-way delay: 3.937 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 57.89 Mbit/s
95th percentile per-packet one-way delay: 3.940 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.54 Mbit/s
95th percentile per-packet one-way delay: 3.927 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 35.85 Mbit/s
95th percentile per-packet one-way delay: 3.941 ms
Loss rate: 0.00%
```

Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2018-07-03 19:18:22
End at: 2018-07-03 19:18:52
Local clock offset: -2.584 ms
Remote clock offset: -1.83 ms


# Below is generated by plot.py at 2018-07-03 21:58:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.74 Mbit/s
95th percentile per-packet one-way delay: 7.029 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 57.40 Mbit/s
95th percentile per-packet one-way delay: 12.621 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.67 Mbit/s
95th percentile per-packet one-way delay: 4.064 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 38.86 Mbit/s
95th percentile per-packet one-way delay: 4.302 ms
Loss rate: 0.00%
```
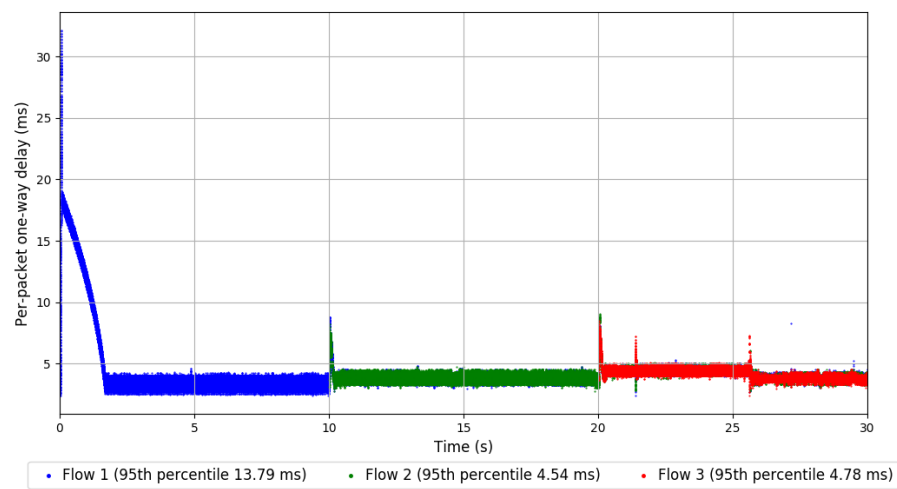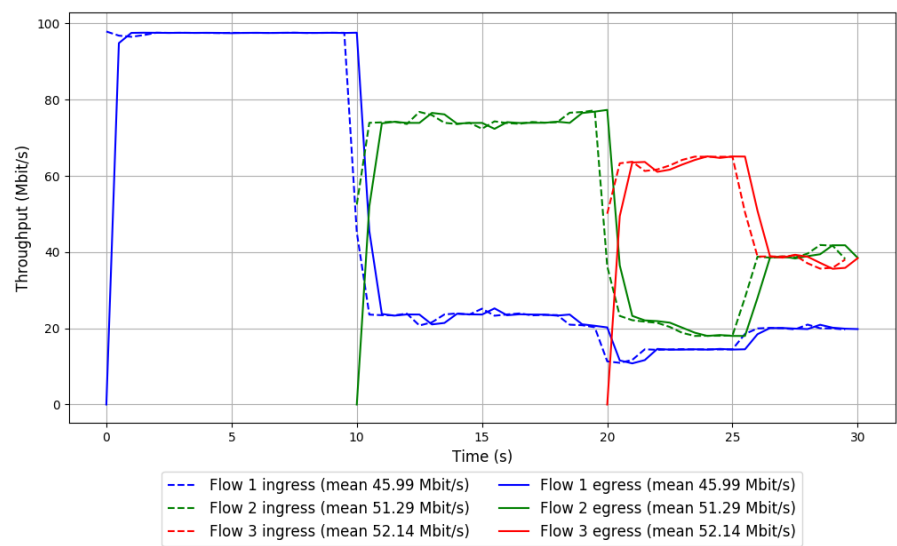
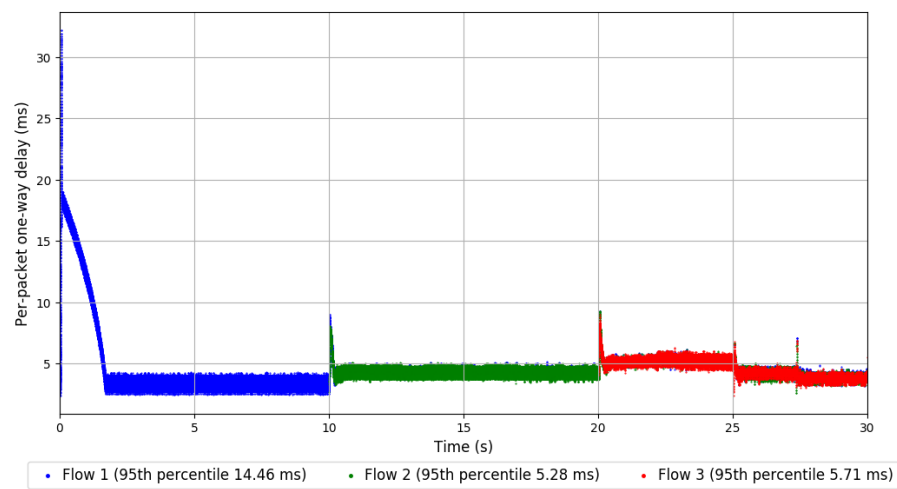# Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2018-07-03 19:37:35
End at: 2018-07-03 19:38:05
Local clock offset: -1.945 ms
Remote clock offset: -1.627 ms


# Below is generated by plot.py at 2018-07-03 21:58:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 5.415 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.86 Mbit/s
95th percentile per-packet one-way delay: 10.368 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 53.16 Mbit/s
95th percentile per-packet one-way delay: 5.157 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 63.79 Mbit/s
95th percentile per-packet one-way delay: 5.401 ms
Loss rate: 0.01%
```
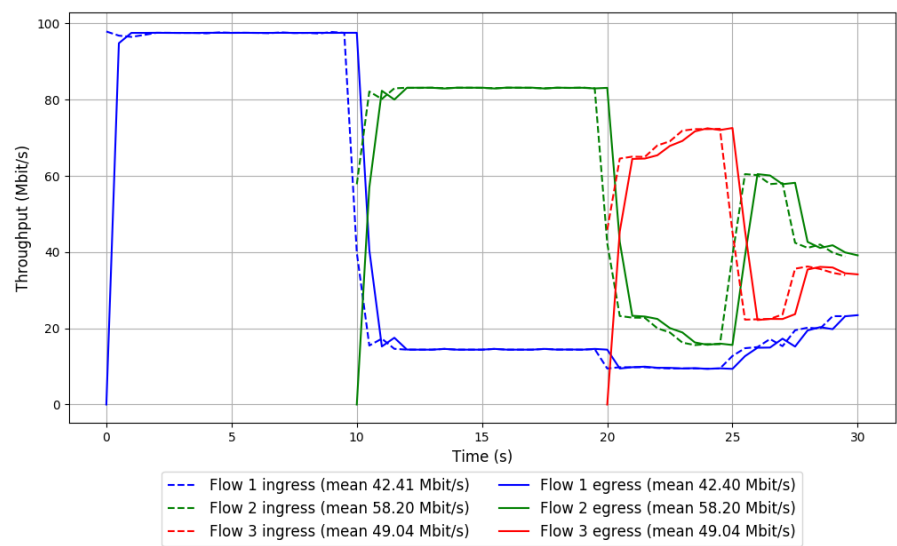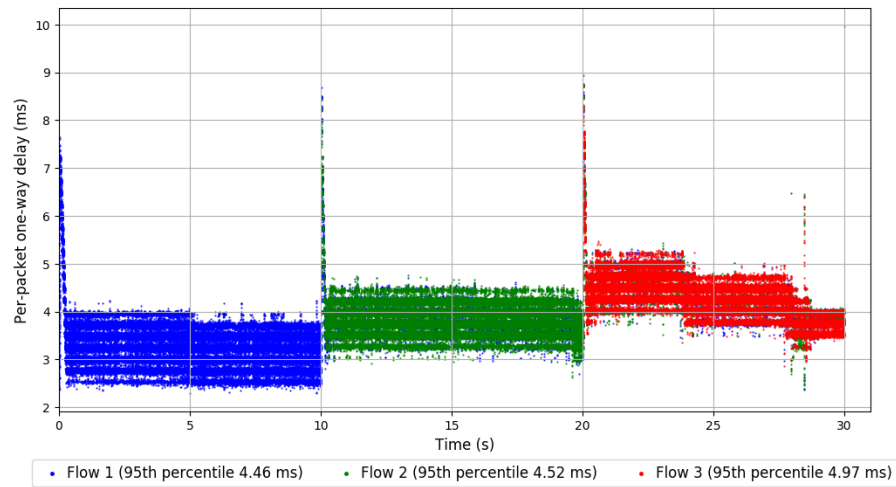
Run 5: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 40.87 Mbit/s)   Flow 1 egress (mean 40.86 Mbit/s)
Flow 2 ingress (mean 53.16 Mbit/s)   Flow 2 egress (mean 53.16 Mbit/s)
Flow 3 ingress (mean 63.80 Mbit/s)   Flow 3 egress (mean 63.79 Mbit/s)

Flow 1 (95th percentile 10.37 ms)   Flow 2 (95th percentile 5.16 ms)   Flow 3 (95th percentile 5.40 ms)

273

```
Run 6: Statistics of TCP Vegas

Start at: 2018-07-03 19:56:48
End at: 2018-07-03 19:57:18
Local clock offset: -1.981 ms
Remote clock offset: -2.1 ms


# Below is generated by plot.py at 2018-07-03 21:58:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 6.947 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 45.99 Mbit/s
95th percentile per-packet one-way delay: 13.793 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 51.29 Mbit/s
95th percentile per-packet one-way delay: 4.537 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 52.14 Mbit/s
95th percentile per-packet one-way delay: 4.784 ms
Loss rate: 0.00%
```
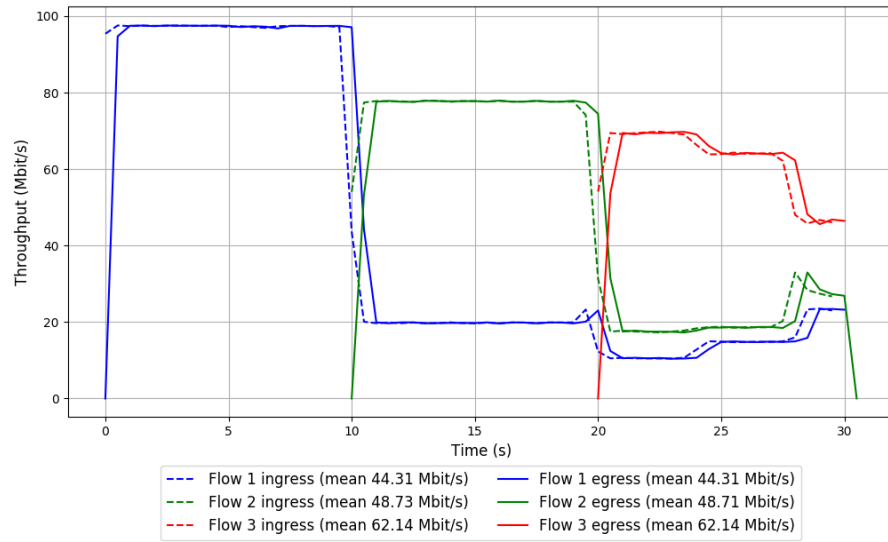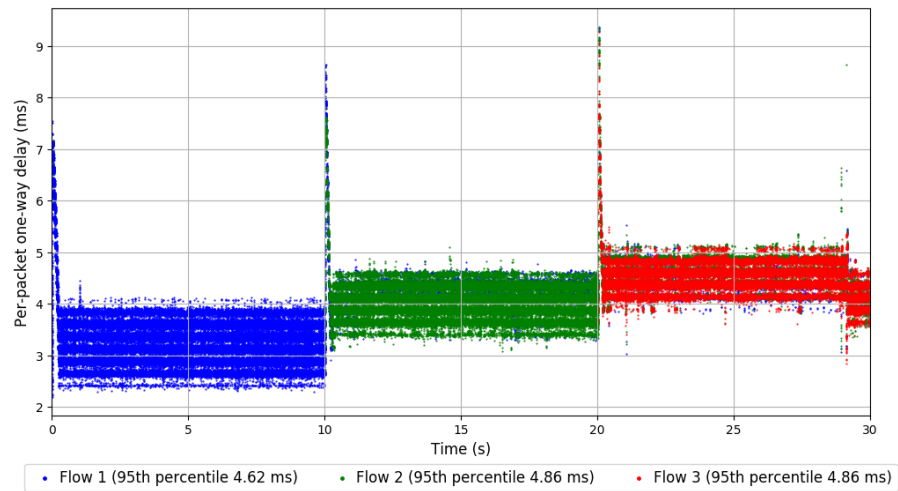
Run 6: Report of TCP Vegas — Data Link

```
Run 7: Statistics of TCP Vegas

Start at: 2018-07-03 20:16:01
End at: 2018-07-03 20:16:31
Local clock offset: -1.94 ms
Remote clock offset: -2.786 ms


# Below is generated by plot.py at 2018-07-03 21:58:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 7.281 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 42.40 Mbit/s
95th percentile per-packet one-way delay: 14.460 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 58.20 Mbit/s
95th percentile per-packet one-way delay: 5.281 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.04 Mbit/s
95th percentile per-packet one-way delay: 5.715 ms
Loss rate: 0.00%
```

Run 7: Report of TCP Vegas — Data Link

```
Run 8: Statistics of TCP Vegas

Start at: 2018-07-03 20:35:14
End at: 2018-07-03 20:35:44
Local clock offset: -1.731 ms
Remote clock offset: -2.854 ms


# Below is generated by plot.py at 2018-07-03 21:58:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.41 Mbit/s
95th percentile per-packet one-way delay: 4.747 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 44.31 Mbit/s
95th percentile per-packet one-way delay: 4.457 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 48.71 Mbit/s
95th percentile per-packet one-way delay: 4.522 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 62.14 Mbit/s
95th percentile per-packet one-way delay: 4.970 ms
Loss rate: 0.00%
```
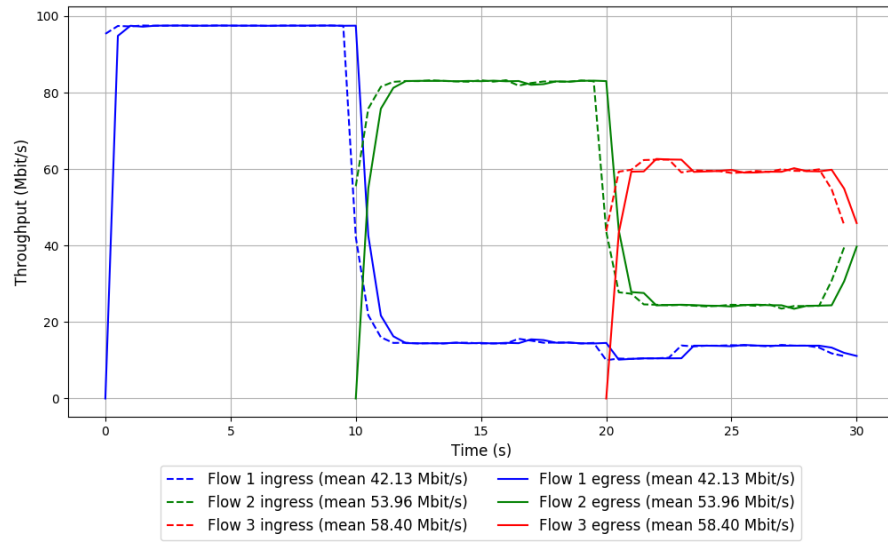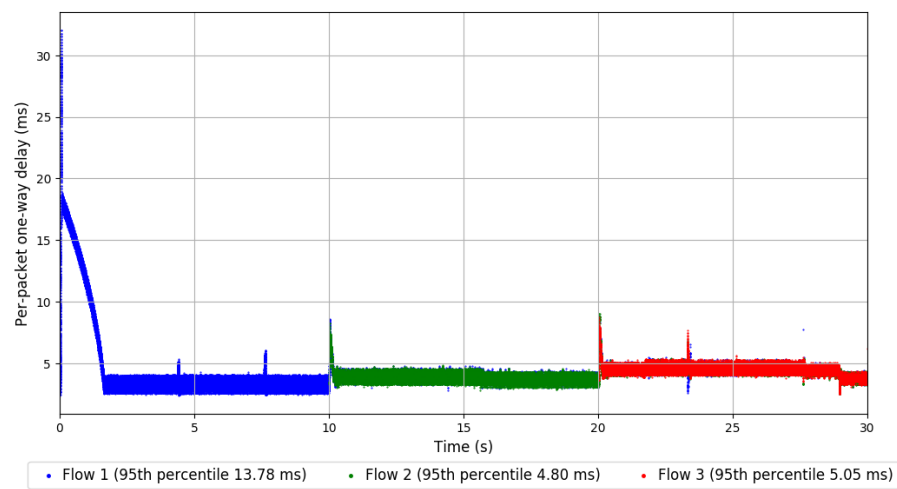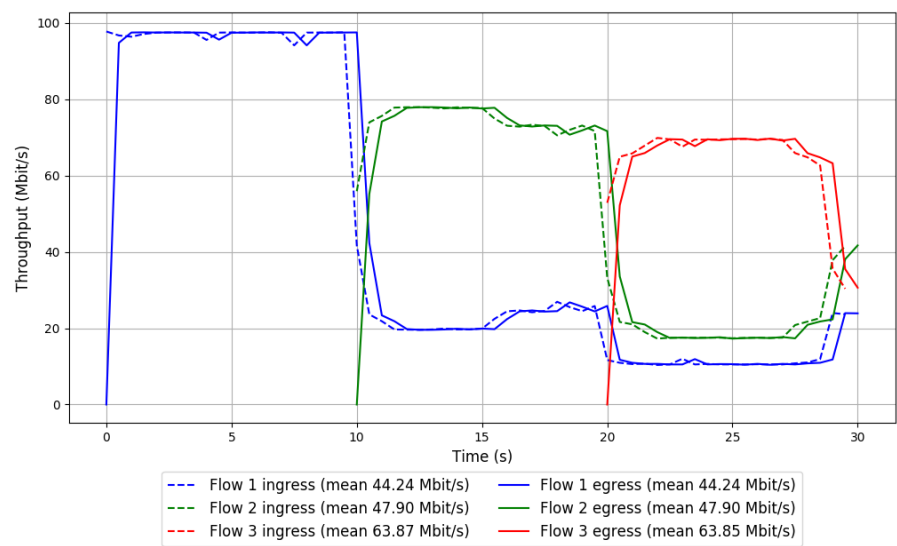
Run 8: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 44.31 Mbit/s) --- Flow 1 egress (mean 44.31 Mbit/s)
Flow 2 ingress (mean 48.73 Mbit/s) --- Flow 2 egress (mean 48.71 Mbit/s)
Flow 3 ingress (mean 62.14 Mbit/s) --- Flow 3 egress (mean 62.14 Mbit/s)

Flow 1 (95th percentile 4.46 ms)   •   Flow 2 (95th percentile 4.52 ms)   •   Flow 3 (95th percentile 4.97 ms)

```
Run 9: Statistics of TCP Vegas

Start at: 2018-07-03 20:54:26
End at: 2018-07-03 20:54:56
Local clock offset: -2.616 ms
Remote clock offset: -3.04 ms


# Below is generated by plot.py at 2018-07-03 21:58:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 4.846 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 42.13 Mbit/s
95th percentile per-packet one-way delay: 4.623 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 53.96 Mbit/s
95th percentile per-packet one-way delay: 4.859 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 58.40 Mbit/s
95th percentile per-packet one-way delay: 4.864 ms
Loss rate: 0.00%
```
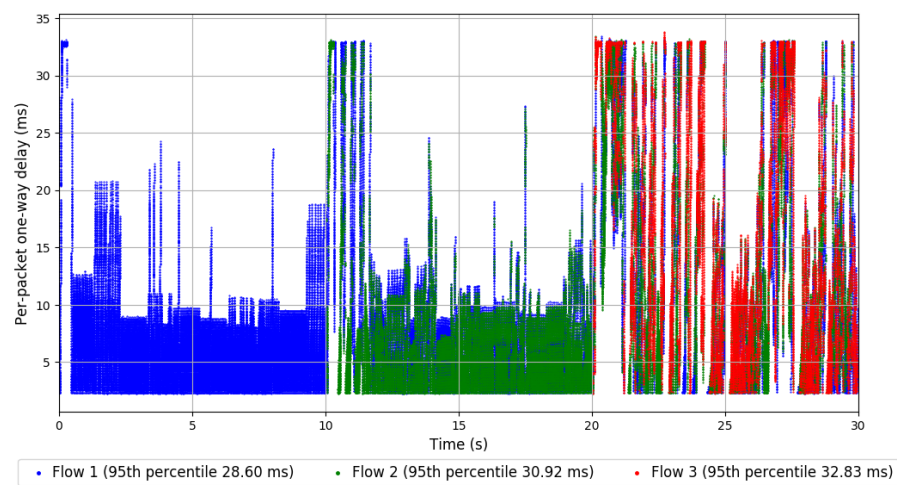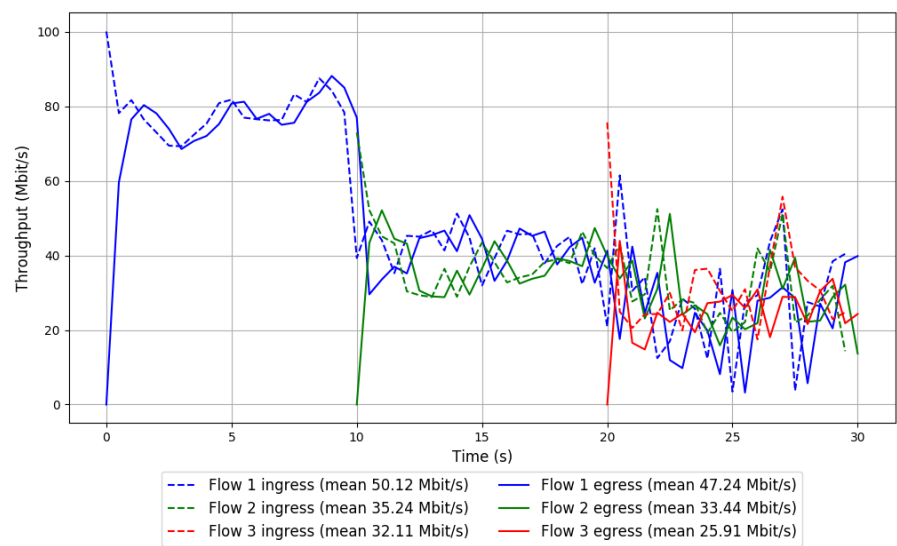
Run 9: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 42.13 Mbit/s) — — — — Flow 1 egress (mean 42.13 Mbit/s)
Flow 2 ingress (mean 53.96 Mbit/s) — — — — Flow 2 egress (mean 53.96 Mbit/s)
Flow 3 ingress (mean 58.40 Mbit/s) — — — — Flow 3 egress (mean 58.40 Mbit/s)

Flow 1 (95th percentile 4.62 ms) • Flow 2 (95th percentile 4.86 ms) • Flow 3 (95th percentile 4.86 ms)
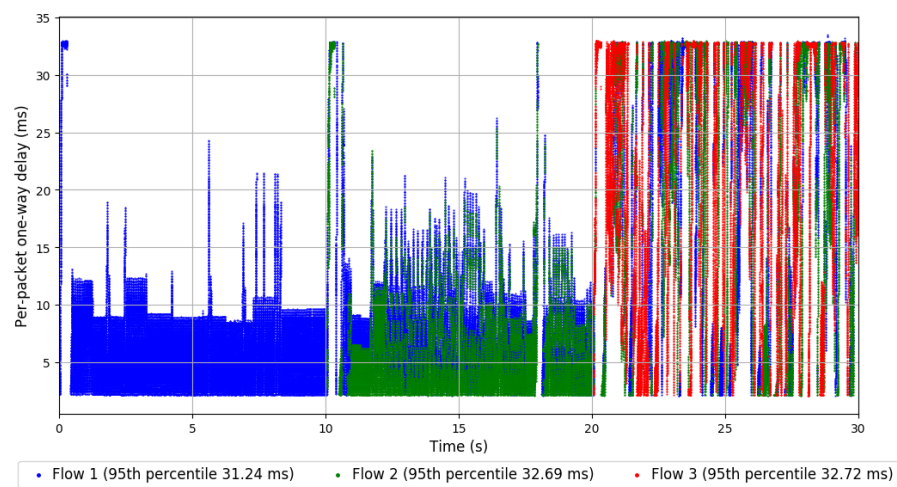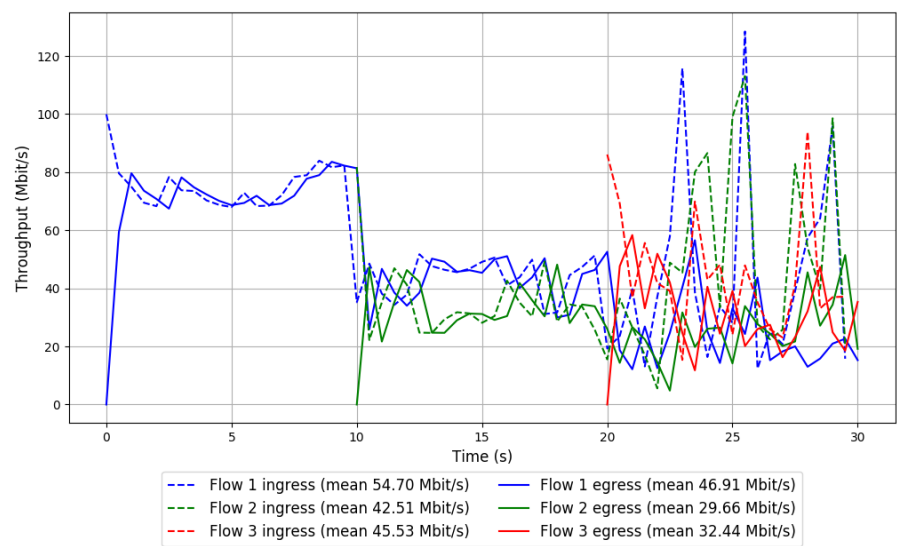
```
Run 10: Statistics of TCP Vegas

Start at: 2018-07-03 21:13:39
End at: 2018-07-03 21:14:09
Local clock offset: -2.947 ms
Remote clock offset: -2.544 ms


# Below is generated by plot.py at 2018-07-03 21:58:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.38 Mbit/s
95th percentile per-packet one-way delay: 6.561 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 44.24 Mbit/s
95th percentile per-packet one-way delay: 13.778 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 47.90 Mbit/s
95th percentile per-packet one-way delay: 4.799 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 63.85 Mbit/s
95th percentile per-packet one-way delay: 5.055 ms
Loss rate: 0.00%
```

Run 10: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 44.24 Mbit/s) --- Flow 1 egress (mean 44.24 Mbit/s)
Flow 2 ingress (mean 47.90 Mbit/s) --- Flow 2 egress (mean 47.90 Mbit/s)
Flow 3 ingress (mean 63.87 Mbit/s) --- Flow 3 egress (mean 63.85 Mbit/s)

Flow 1 (95th percentile 13.78 ms)   Flow 2 (95th percentile 4.80 ms)   Flow 3 (95th percentile 5.05 ms)

```
Run 1: Statistics of Verus

Start at: 2018-07-03 18:21:51
End at: 2018-07-03 18:22:21
Local clock offset: -2.463 ms
Remote clock offset: -2.742 ms


# Below is generated by plot.py at 2018-07-03 21:58:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.92 Mbit/s
95th percentile per-packet one-way delay: 30.970 ms
Loss rate: 7.23%
-- Flow 1:
Average throughput: 47.24 Mbit/s
95th percentile per-packet one-way delay: 28.604 ms
Loss rate: 5.71%
-- Flow 2:
Average throughput: 33.44 Mbit/s
95th percentile per-packet one-way delay: 30.923 ms
Loss rate: 4.99%
-- Flow 3:
Average throughput: 25.91 Mbit/s
95th percentile per-packet one-way delay: 32.829 ms
Loss rate: 19.27%
```
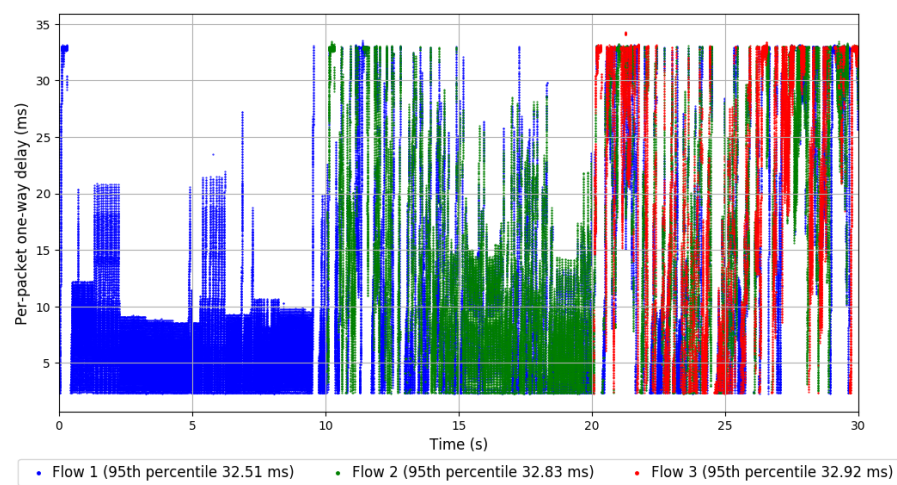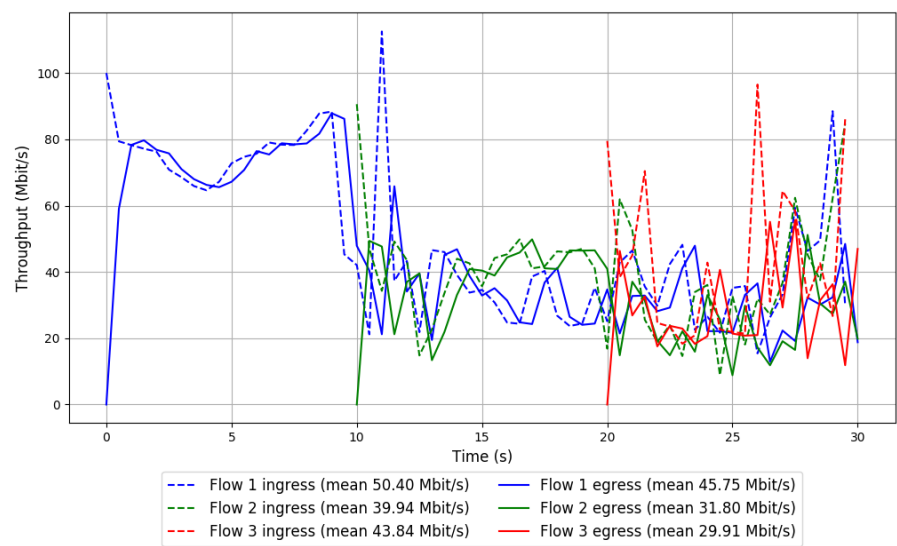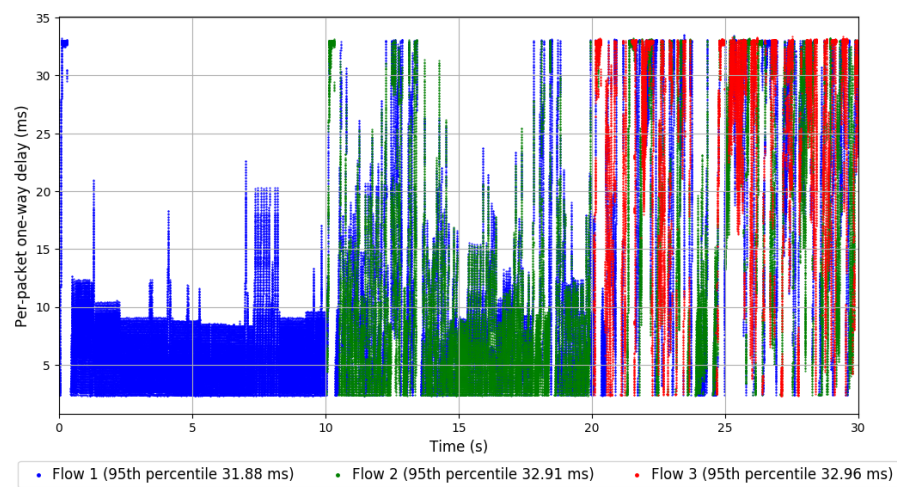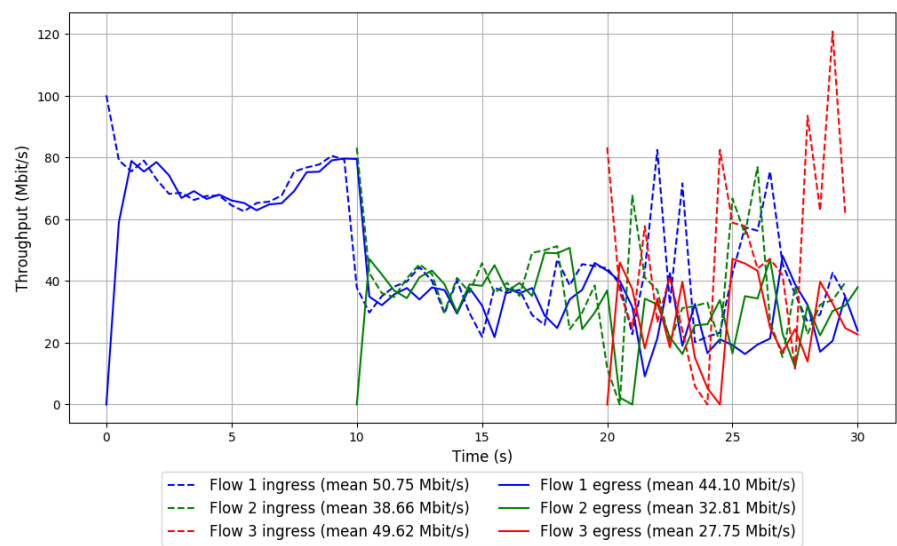
Run 1: Report of Verus — Data Link

Flow 1 ingress (mean 50.12 Mbit/s) --- Flow 1 egress (mean 47.24 Mbit/s) ---
Flow 2 ingress (mean 35.24 Mbit/s) --- Flow 2 egress (mean 33.44 Mbit/s) ---
Flow 3 ingress (mean 32.11 Mbit/s) --- Flow 3 egress (mean 25.91 Mbit/s) ---

Flow 1 (95th percentile 28.60 ms)   Flow 2 (95th percentile 30.92 ms)   Flow 3 (95th percentile 32.83 ms)

```
Run 2: Statistics of Verus

Start at: 2018-07-03 18:41:04
End at: 2018-07-03 18:41:34
Local clock offset: -2.231 ms
Remote clock offset: -2.748 ms


# Below is generated by plot.py at 2018-07-03 21:58:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.20 Mbit/s
95th percentile per-packet one-way delay: 32.607 ms
Loss rate: 20.99%
-- Flow 1:
Average throughput: 46.91 Mbit/s
95th percentile per-packet one-way delay: 31.236 ms
Loss rate: 14.16%
-- Flow 2:
Average throughput: 29.66 Mbit/s
95th percentile per-packet one-way delay: 32.686 ms
Loss rate: 30.13%
-- Flow 3:
Average throughput: 32.44 Mbit/s
95th percentile per-packet one-way delay: 32.720 ms
Loss rate: 28.65%
```
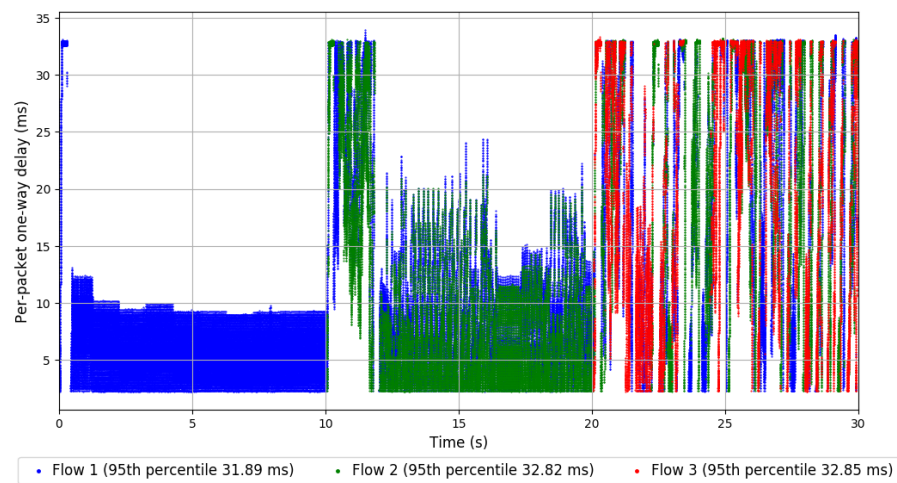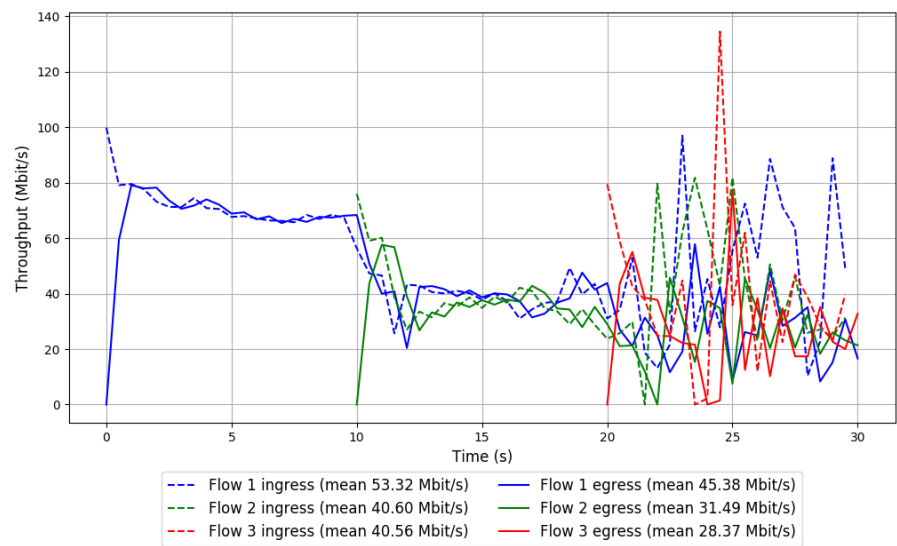
Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2018-07-03 19:00:16
End at: 2018-07-03 19:00:46
Local clock offset: -3.263 ms
Remote clock offset: -2.06 ms


# Below is generated by plot.py at 2018-07-03 21:58:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.80 Mbit/s
95th percentile per-packet one-way delay: 32.767 ms
Loss rate: 15.94%
-- Flow 1:
Average throughput: 45.75 Mbit/s
95th percentile per-packet one-way delay: 32.505 ms
Loss rate: 9.14%
-- Flow 2:
Average throughput: 31.80 Mbit/s
95th percentile per-packet one-way delay: 32.828 ms
Loss rate: 20.29%
-- Flow 3:
Average throughput: 29.91 Mbit/s
95th percentile per-packet one-way delay: 32.916 ms
Loss rate: 31.59%
```

Run 3: Report of Verus — Data Link

- - - - Flow 1 ingress (mean 50.40 Mbit/s)   —— Flow 1 egress (mean 45.75 Mbit/s)
- - - - Flow 2 ingress (mean 39.94 Mbit/s)   —— Flow 2 egress (mean 31.80 Mbit/s)
- - - - Flow 3 ingress (mean 43.84 Mbit/s)   —— Flow 3 egress (mean 29.91 Mbit/s)

• Flow 1 (95th percentile 32.51 ms)   • Flow 2 (95th percentile 32.83 ms)   • Flow 3 (95th percentile 32.92 ms)
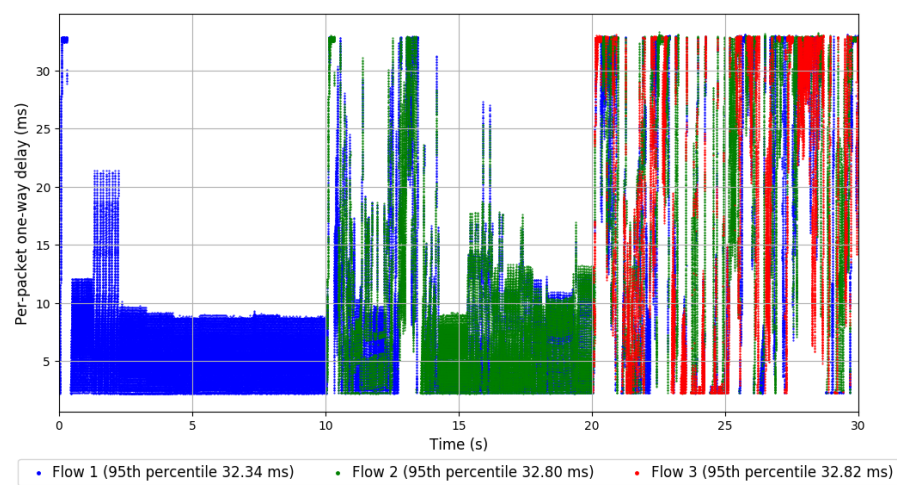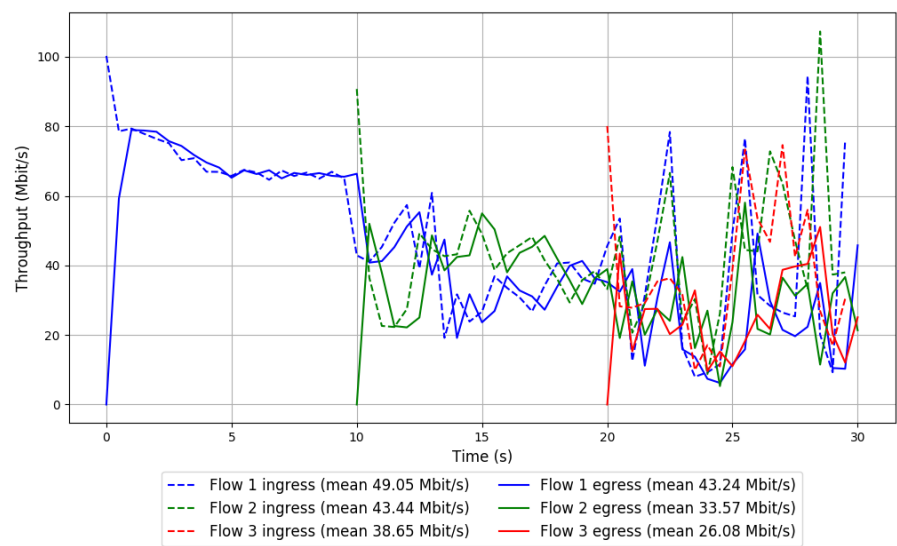
```
Run 4: Statistics of Verus

Start at: 2018-07-03 19:19:29
End at: 2018-07-03 19:19:59
Local clock offset: -2.573 ms
Remote clock offset: -1.833 ms


# Below is generated by plot.py at 2018-07-03 21:59:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.05 Mbit/s
95th percentile per-packet one-way delay: 32.772 ms
Loss rate: 19.05%
-- Flow 1:
Average throughput: 44.10 Mbit/s
95th percentile per-packet one-way delay: 31.883 ms
Loss rate: 13.03%
-- Flow 2:
Average throughput: 32.81 Mbit/s
95th percentile per-packet one-way delay: 32.908 ms
Loss rate: 15.00%
-- Flow 3:
Average throughput: 27.75 Mbit/s
95th percentile per-packet one-way delay: 32.959 ms
Loss rate: 43.96%
```
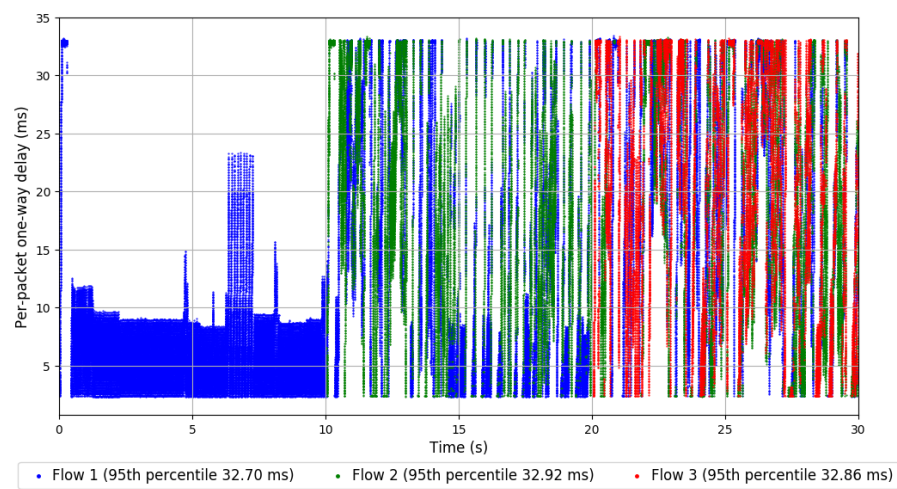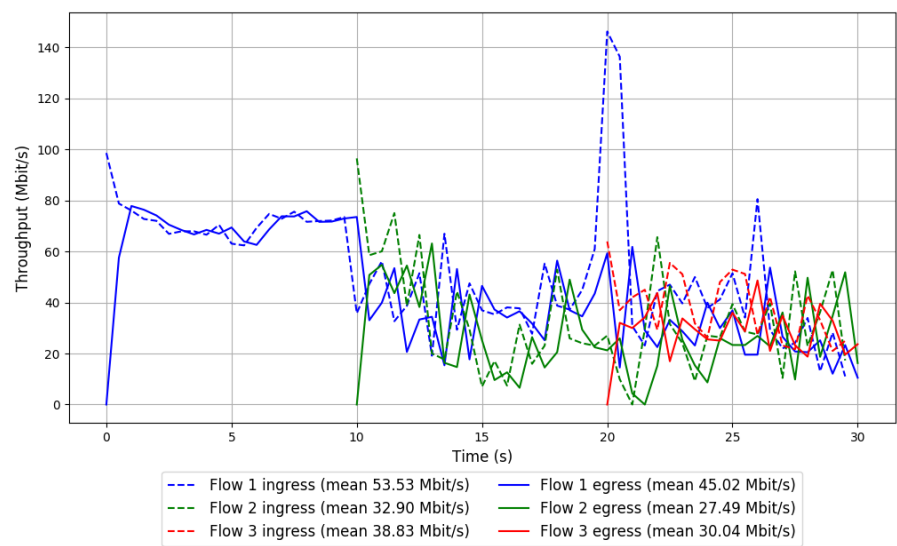
Run 4: Report of Verus — Data Link

- - - - Flow 1 ingress (mean 50.75 Mbit/s)   —— Flow 1 egress (mean 44.10 Mbit/s)
- - - - Flow 2 ingress (mean 38.66 Mbit/s)   —— Flow 2 egress (mean 32.81 Mbit/s)
- - - - Flow 3 ingress (mean 49.62 Mbit/s)   —— Flow 3 egress (mean 27.75 Mbit/s)

• Flow 1 (95th percentile 31.88 ms)   • Flow 2 (95th percentile 32.91 ms)   • Flow 3 (95th percentile 32.96 ms)
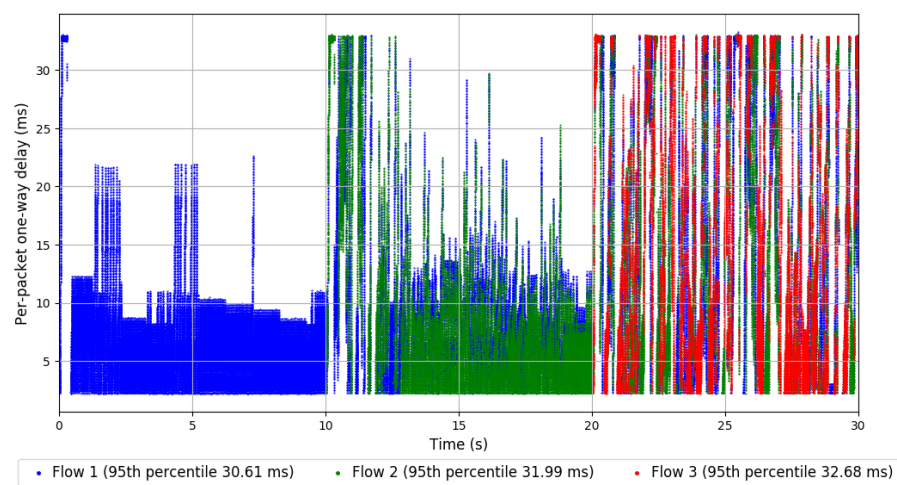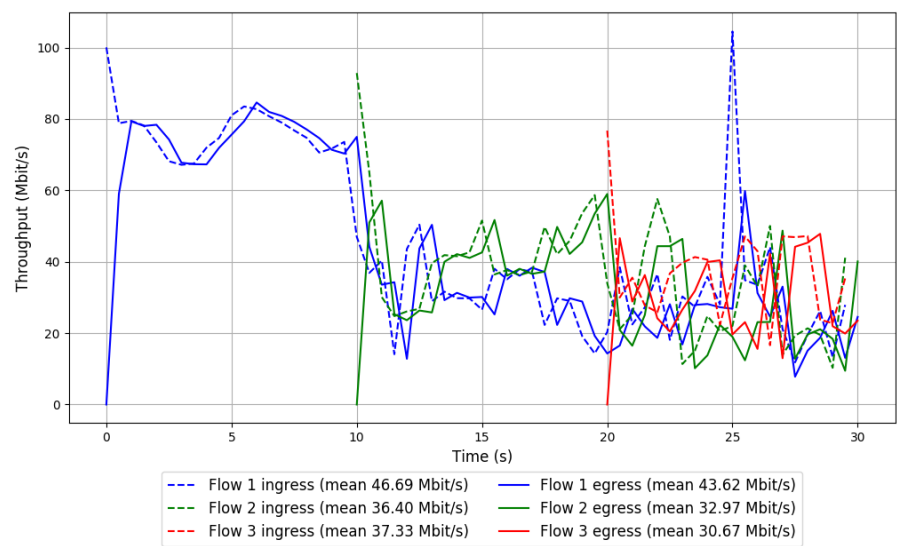
```
Run 5: Statistics of Verus

Start at: 2018-07-03 19:38:42
End at: 2018-07-03 19:39:12
Local clock offset: -1.923 ms
Remote clock offset: -1.549 ms


# Below is generated by plot.py at 2018-07-03 21:59:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.72 Mbit/s
95th percentile per-packet one-way delay: 32.701 ms
Loss rate: 19.14%
-- Flow 1:
Average throughput: 45.38 Mbit/s
95th percentile per-packet one-way delay: 31.891 ms
Loss rate: 14.81%
-- Flow 2:
Average throughput: 31.49 Mbit/s
95th percentile per-packet one-way delay: 32.823 ms
Loss rate: 22.35%
-- Flow 3:
Average throughput: 28.37 Mbit/s
95th percentile per-packet one-way delay: 32.852 ms
Loss rate: 29.86%
```

Run 5: Report of Verus — Data Link

Flow 1 ingress (mean 53.32 Mbit/s) — — — Flow 1 egress (mean 45.38 Mbit/s)
Flow 2 ingress (mean 40.60 Mbit/s) — — — Flow 2 egress (mean 31.49 Mbit/s)
Flow 3 ingress (mean 40.56 Mbit/s) — — — Flow 3 egress (mean 28.37 Mbit/s)

Flow 1 (95th percentile 31.89 ms)   Flow 2 (95th percentile 32.82 ms)   Flow 3 (95th percentile 32.85 ms)

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```
Run 6: Statistics of Verus

Start at: 2018-07-03 19:57:56
End at: 2018-07-03 19:58:26
Local clock offset: -1.974 ms
Remote clock offset: -2.285 ms


# Below is generated by plot.py at 2018-07-03 21:59:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.23 Mbit/s
95th percentile per-packet one-way delay: 32.751 ms
Loss rate: 18.12%
-- Flow 1:
Average throughput: 43.24 Mbit/s
95th percentile per-packet one-way delay: 32.339 ms
Loss rate: 11.75%
-- Flow 2:
Average throughput: 33.57 Mbit/s
95th percentile per-packet one-way delay: 32.798 ms
Loss rate: 22.63%
-- Flow 3:
Average throughput: 26.08 Mbit/s
95th percentile per-packet one-way delay: 32.824 ms
Loss rate: 32.34%
```
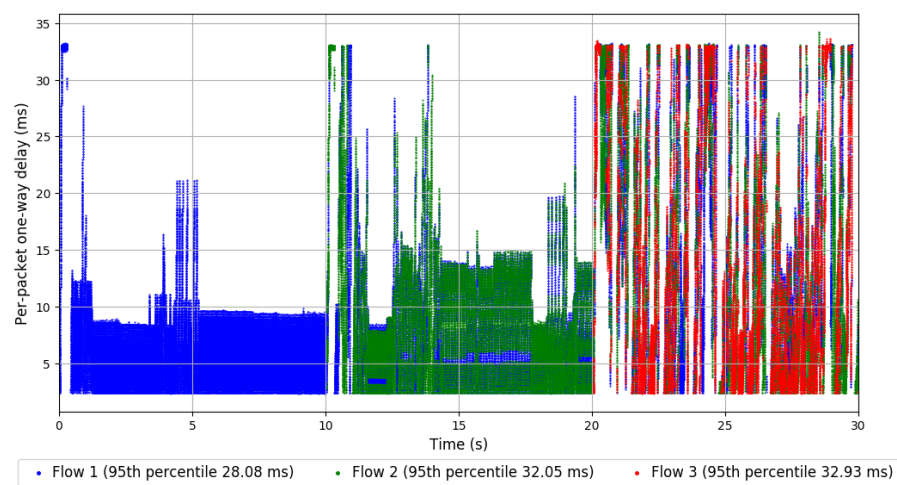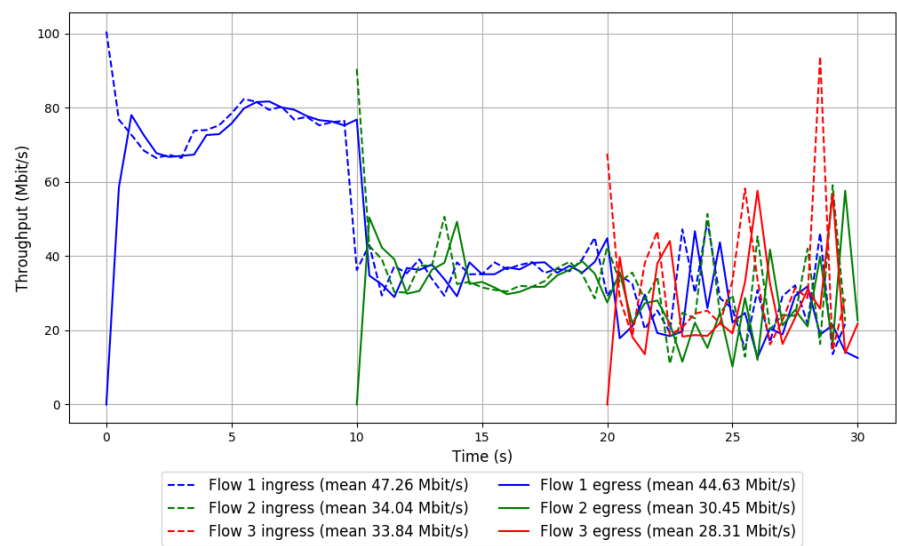
Run 6: Report of Verus — Data Link

```
Run 7: Statistics of Verus

Start at: 2018-07-03 20:17:08
End at: 2018-07-03 20:17:38
Local clock offset: -1.915 ms
Remote clock offset: -2.773 ms


# Below is generated by plot.py at 2018-07-03 21:59:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.26 Mbit/s
95th percentile per-packet one-way delay: 32.810 ms
Loss rate: 16.92%
-- Flow 1:
Average throughput: 45.02 Mbit/s
95th percentile per-packet one-way delay: 32.695 ms
Loss rate: 15.85%
-- Flow 2:
Average throughput: 27.49 Mbit/s
95th percentile per-packet one-way delay: 32.921 ms
Loss rate: 16.34%
-- Flow 3:
Average throughput: 30.04 Mbit/s
95th percentile per-packet one-way delay: 32.861 ms
Loss rate: 22.42%
```
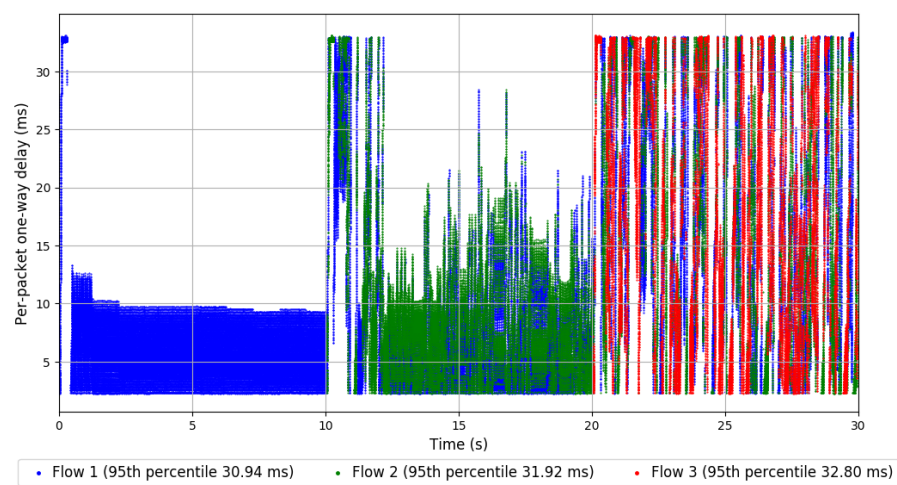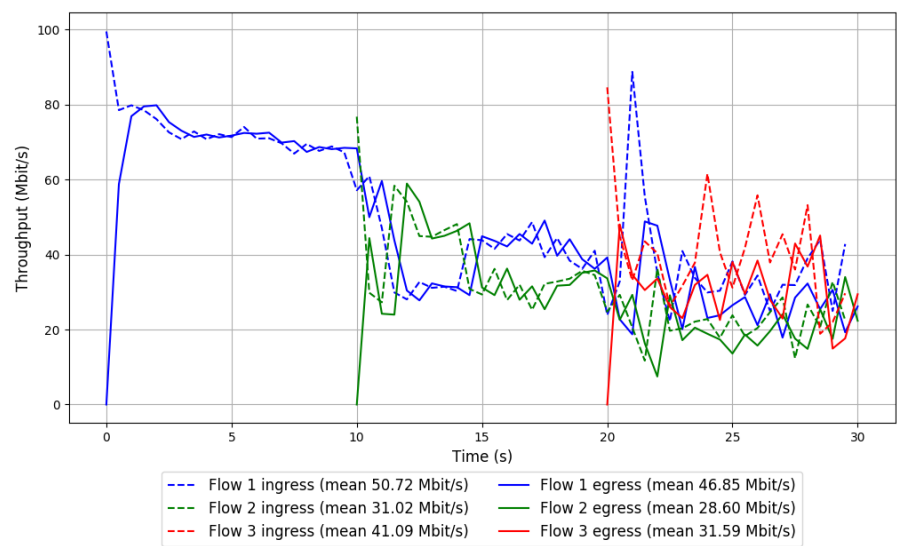
Run 7: Report of Verus — Data Link

```
Run 8: Statistics of Verus

Start at: 2018-07-03 20:36:22
End at: 2018-07-03 20:36:52
Local clock offset: -1.72 ms
Remote clock offset: -2.936 ms


# Below is generated by plot.py at 2018-07-03 21:59:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.76 Mbit/s
95th percentile per-packet one-way delay: 31.761 ms
Loss rate: 8.96%
-- Flow 1:
Average throughput: 43.62 Mbit/s
95th percentile per-packet one-way delay: 30.606 ms
Loss rate: 6.50%
-- Flow 2:
Average throughput: 32.97 Mbit/s
95th percentile per-packet one-way delay: 31.988 ms
Loss rate: 9.31%
-- Flow 3:
Average throughput: 30.67 Mbit/s
95th percentile per-packet one-way delay: 32.682 ms
Loss rate: 17.59%
```
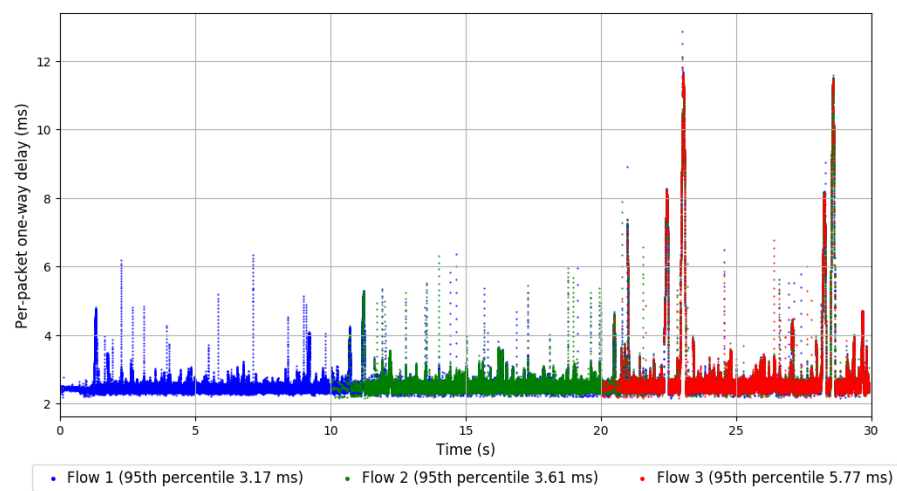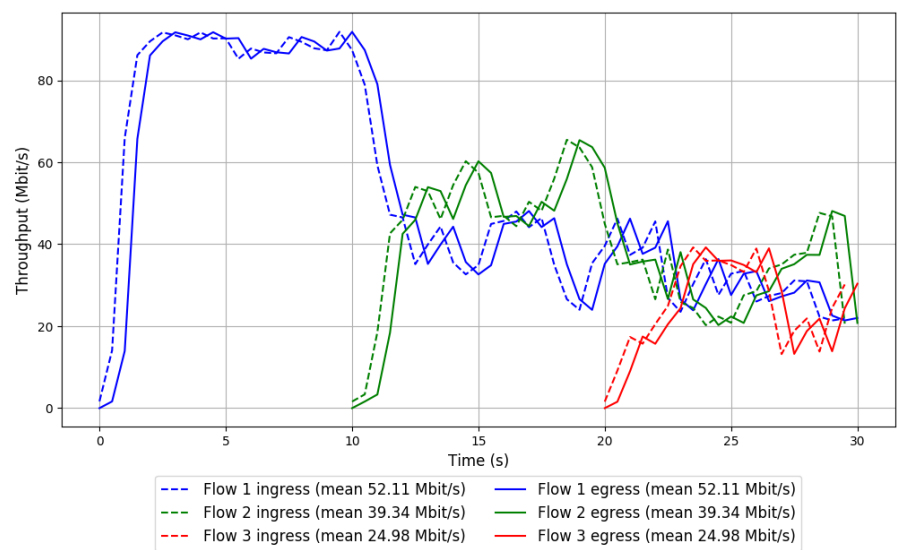
Run 8: Report of Verus — Data Link

Flow 1 ingress (mean 46.69 Mbit/s) — — — Flow 1 egress (mean 43.62 Mbit/s)
Flow 2 ingress (mean 36.40 Mbit/s) — — — Flow 2 egress (mean 32.97 Mbit/s)
Flow 3 ingress (mean 37.33 Mbit/s) — — — Flow 3 egress (mean 30.67 Mbit/s)

Flow 1 (95th percentile 30.61 ms) · Flow 2 (95th percentile 31.99 ms) · Flow 3 (95th percentile 32.68 ms)

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```
Run 9: Statistics of Verus

Start at: 2018-07-03 20:55:34
End at: 2018-07-03 20:56:04
Local clock offset: -2.723 ms
Remote clock offset: -2.947 ms


# Below is generated by plot.py at 2018-07-03 21:59:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.27 Mbit/s
95th percentile per-packet one-way delay: 31.573 ms
Loss rate: 8.42%
-- Flow 1:
Average throughput: 44.63 Mbit/s
95th percentile per-packet one-way delay: 28.076 ms
Loss rate: 5.55%
-- Flow 2:
Average throughput: 30.45 Mbit/s
95th percentile per-packet one-way delay: 32.049 ms
Loss rate: 10.51%
-- Flow 3:
Average throughput: 28.31 Mbit/s
95th percentile per-packet one-way delay: 32.926 ms
Loss rate: 16.30%
```
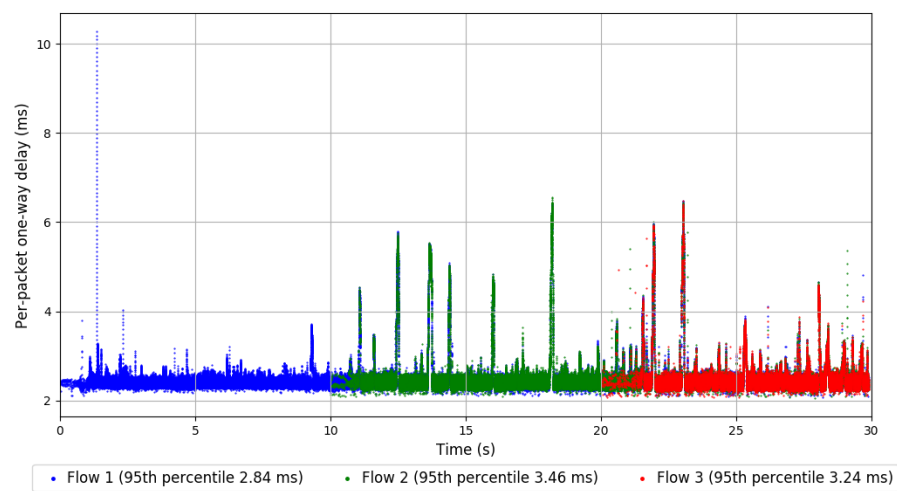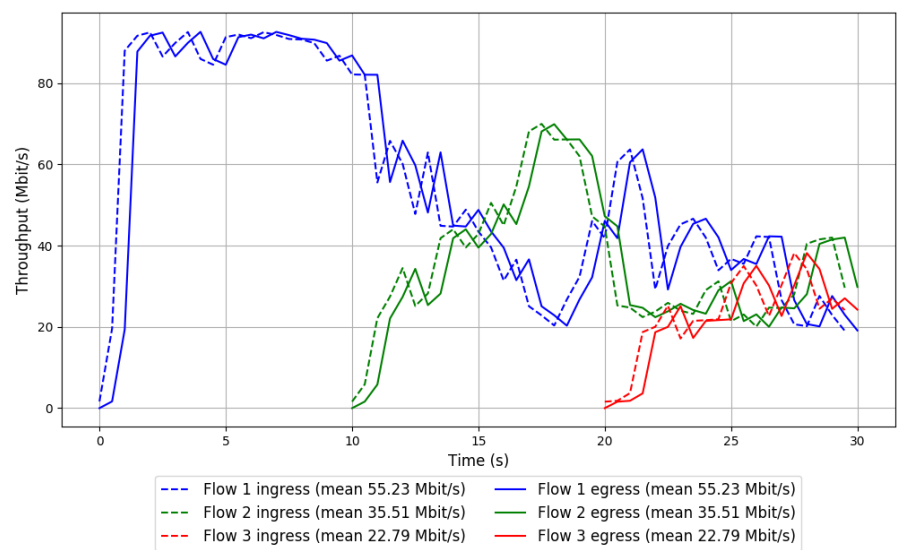
Run 9: Report of Verus — Data Link

```
Run 10: Statistics of Verus

Start at: 2018-07-03 21:14:47
End at: 2018-07-03 21:15:17
Local clock offset: -2.874 ms
Remote clock offset: -2.588 ms


# Below is generated by plot.py at 2018-07-03 21:59:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.07 Mbit/s
95th percentile per-packet one-way delay: 31.919 ms
Loss rate: 10.07%
-- Flow 1:
Average throughput: 46.85 Mbit/s
95th percentile per-packet one-way delay: 30.941 ms
Loss rate: 7.54%
-- Flow 2:
Average throughput: 28.60 Mbit/s
95th percentile per-packet one-way delay: 31.919 ms
Loss rate: 7.72%
-- Flow 3:
Average throughput: 31.59 Mbit/s
95th percentile per-packet one-way delay: 32.805 ms
Loss rate: 22.97%
```

Run 10: Report of Verus — Data Link

Flow 1 ingress (mean 50.72 Mbit/s) — Flow 1 egress (mean 46.85 Mbit/s)
Flow 2 ingress (mean 31.02 Mbit/s) — Flow 2 egress (mean 28.60 Mbit/s)
Flow 3 ingress (mean 41.09 Mbit/s) — Flow 3 egress (mean 31.59 Mbit/s)

Flow 1 (95th percentile 30.94 ms) • Flow 2 (95th percentile 31.92 ms) • Flow 3 (95th percentile 32.80 ms)
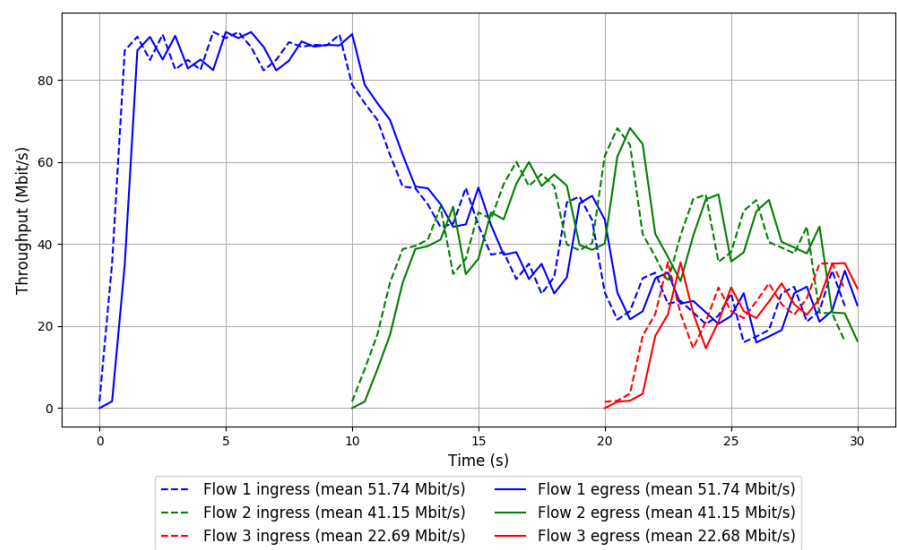
```
Run 1: Statistics of PCC-Vivace

Start at: 2018-07-03 18:28:37
End at: 2018-07-03 18:29:07
Local clock offset: -2.338 ms
Remote clock offset: -2.727 ms

# Below is generated by plot.py at 2018-07-03 22:00:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.52 Mbit/s
95th percentile per-packet one-way delay: 3.444 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.11 Mbit/s
95th percentile per-packet one-way delay: 3.172 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.34 Mbit/s
95th percentile per-packet one-way delay: 3.613 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.98 Mbit/s
95th percentile per-packet one-way delay: 5.774 ms
Loss rate: 0.00%
```
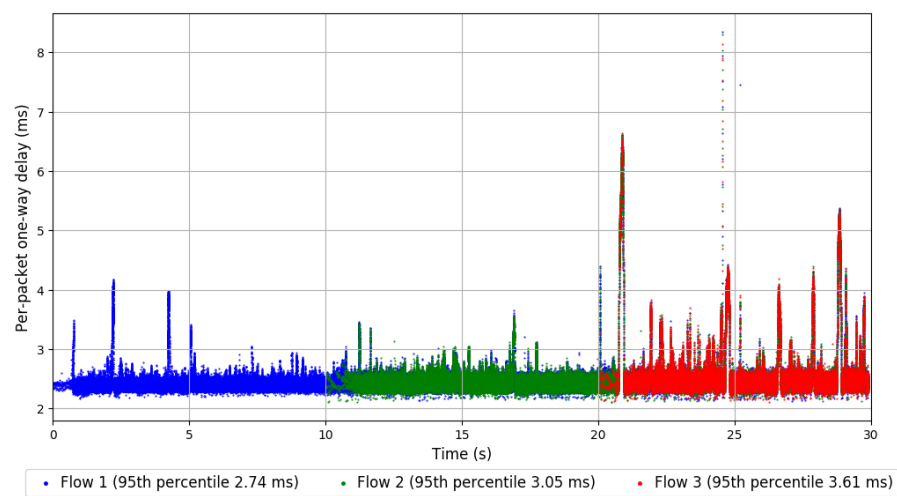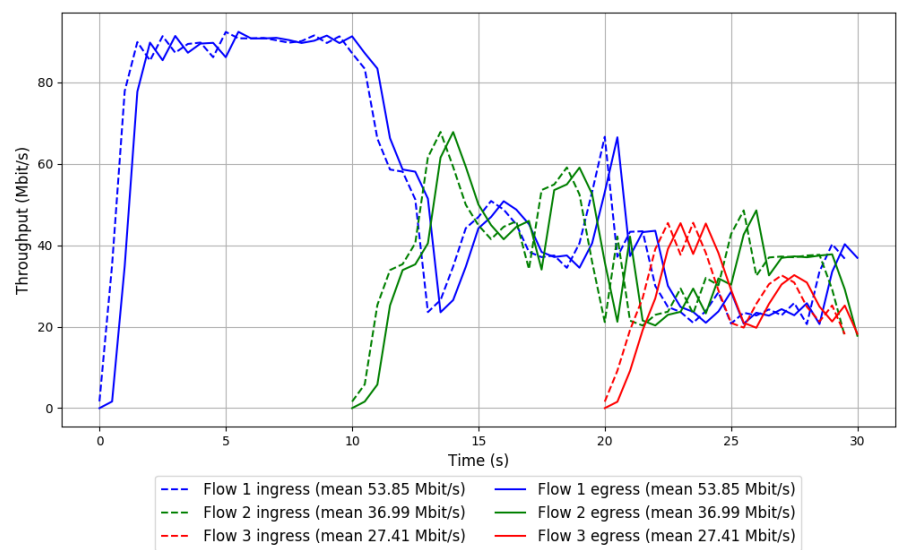
Run 1: Report of PCC-Vivace — Data Link

- - - Flow 1 ingress (mean 52.11 Mbit/s) ——— Flow 1 egress (mean 52.11 Mbit/s)
- - - Flow 2 ingress (mean 39.34 Mbit/s) ——— Flow 2 egress (mean 39.34 Mbit/s)
- - - Flow 3 ingress (mean 24.98 Mbit/s) ——— Flow 3 egress (mean 24.98 Mbit/s)

- Flow 1 (95th percentile 3.17 ms) - Flow 2 (95th percentile 3.61 ms) - Flow 3 (95th percentile 5.77 ms)

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```
Run 2: Statistics of PCC-Vivace

Start at: 2018-07-03 18:47:50
End at: 2018-07-03 18:48:20
Local clock offset: -2.839 ms
Remote clock offset: -2.407 ms


# Below is generated by plot.py at 2018-07-03 22:00:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.38 Mbit/s
95th percentile per-packet one-way delay: 3.044 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.23 Mbit/s
95th percentile per-packet one-way delay: 2.844 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 35.51 Mbit/s
95th percentile per-packet one-way delay: 3.463 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 22.79 Mbit/s
95th percentile per-packet one-way delay: 3.239 ms
Loss rate: 0.00%
```
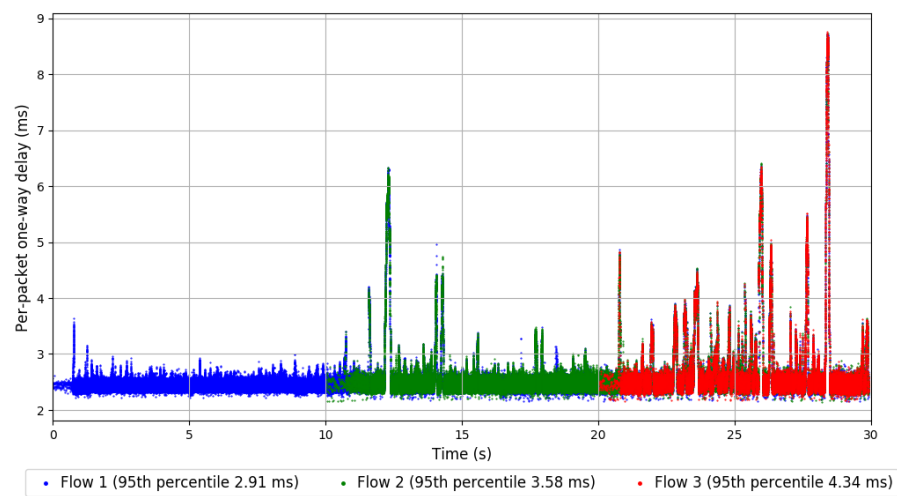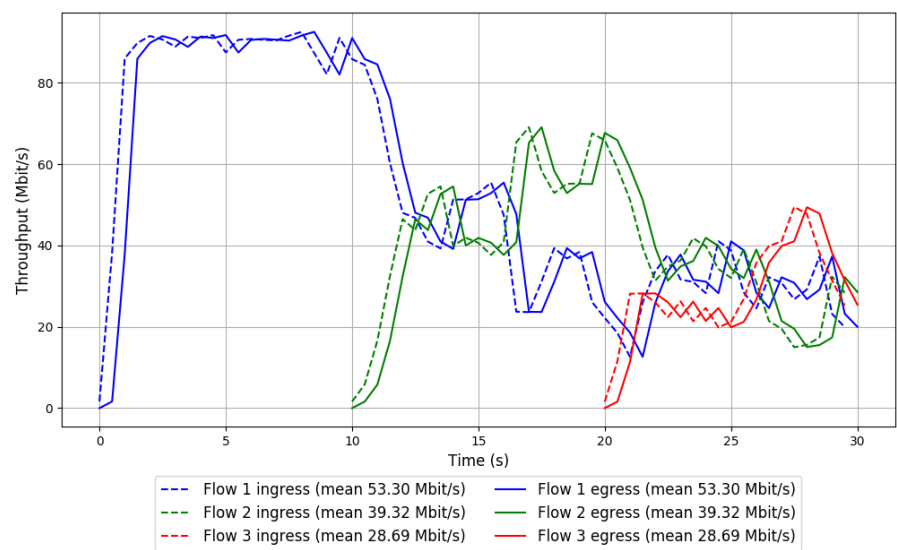
Run 2: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 55.23 Mbit/s)   Flow 1 egress (mean 55.23 Mbit/s)
Flow 2 ingress (mean 35.51 Mbit/s)   Flow 2 egress (mean 35.51 Mbit/s)
Flow 3 ingress (mean 22.79 Mbit/s)   Flow 3 egress (mean 22.79 Mbit/s)

Flow 1 (95th percentile 2.84 ms)   Flow 2 (95th percentile 3.46 ms)   Flow 3 (95th percentile 3.24 ms)

```
Run 3: Statistics of PCC-Vivace

Start at: 2018-07-03 19:07:03
End at: 2018-07-03 19:07:33
Local clock offset: -3.369 ms
Remote clock offset: -1.994 ms


# Below is generated by plot.py at 2018-07-03 22:00:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.59 Mbit/s
95th percentile per-packet one-way delay: 4.121 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 51.74 Mbit/s
95th percentile per-packet one-way delay: 3.694 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 41.15 Mbit/s
95th percentile per-packet one-way delay: 5.058 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 22.68 Mbit/s
95th percentile per-packet one-way delay: 4.688 ms
Loss rate: 0.00%
```
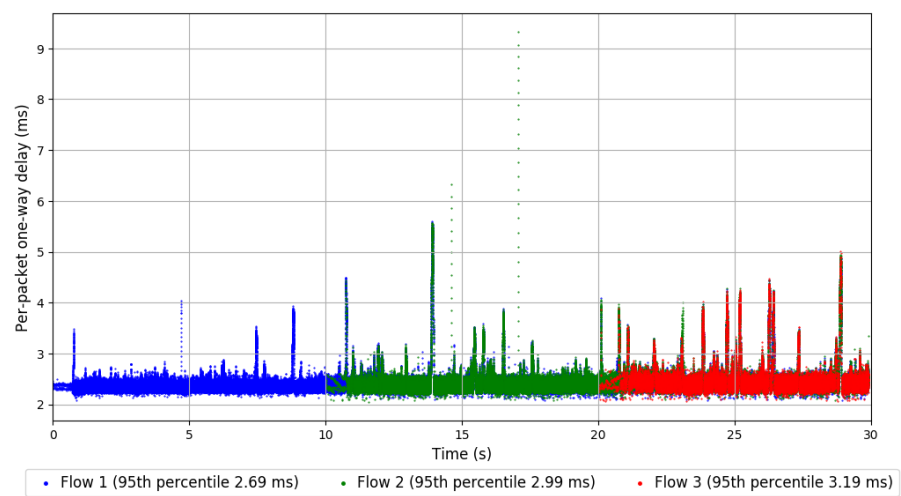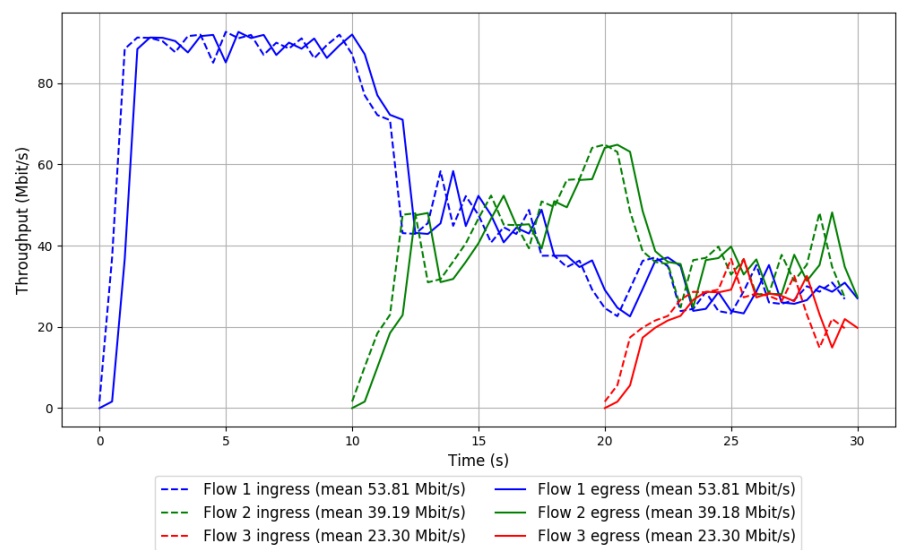
Run 3: Report of PCC-Vivace — Data Link

```
Run 4: Statistics of PCC-Vivace

Start at: 2018-07-03 19:26:16
End at: 2018-07-03 19:26:46
Local clock offset: -2.22 ms
Remote clock offset: -1.729 ms


# Below is generated by plot.py at 2018-07-03 22:00:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.50 Mbit/s
95th percentile per-packet one-way delay: 2.935 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 53.85 Mbit/s
95th percentile per-packet one-way delay: 2.743 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.99 Mbit/s
95th percentile per-packet one-way delay: 3.047 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 27.41 Mbit/s
95th percentile per-packet one-way delay: 3.610 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Vivace — Data Link

```
Run 5: Statistics of PCC-Vivace

Start at: 2018-07-03 19:45:29
End at: 2018-07-03 19:45:59
Local clock offset: -1.967 ms
Remote clock offset: -1.367 ms


# Below is generated by plot.py at 2018-07-03 22:00:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.93 Mbit/s
95th percentile per-packet one-way delay: 3.327 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 53.30 Mbit/s
95th percentile per-packet one-way delay: 2.910 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.32 Mbit/s
95th percentile per-packet one-way delay: 3.581 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 28.69 Mbit/s
95th percentile per-packet one-way delay: 4.336 ms
Loss rate: 0.00%
```
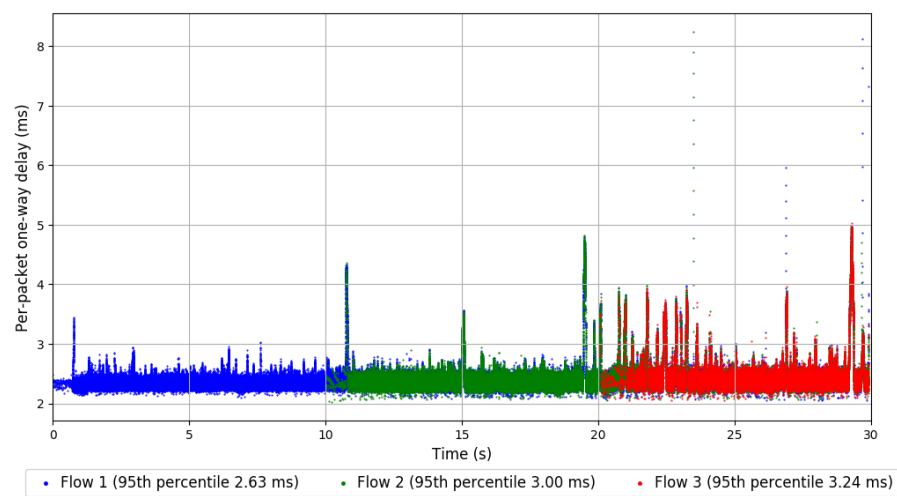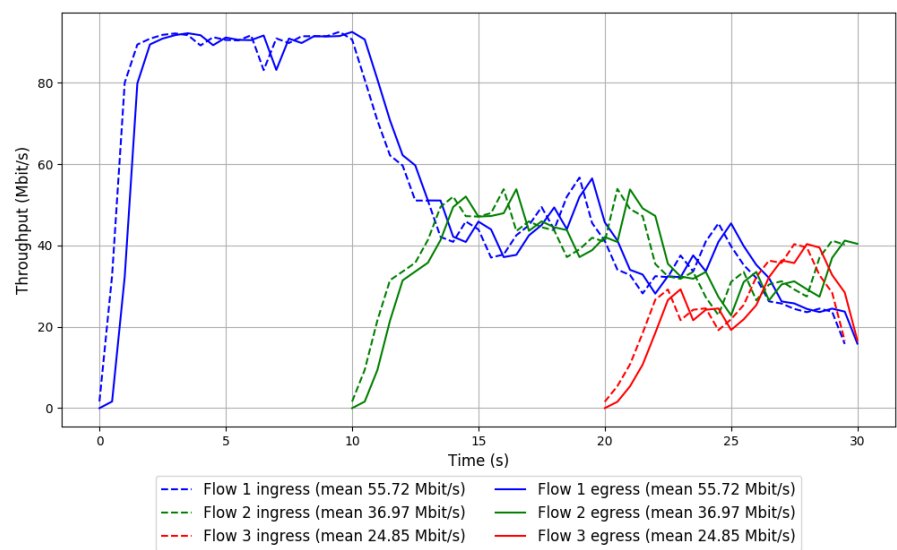
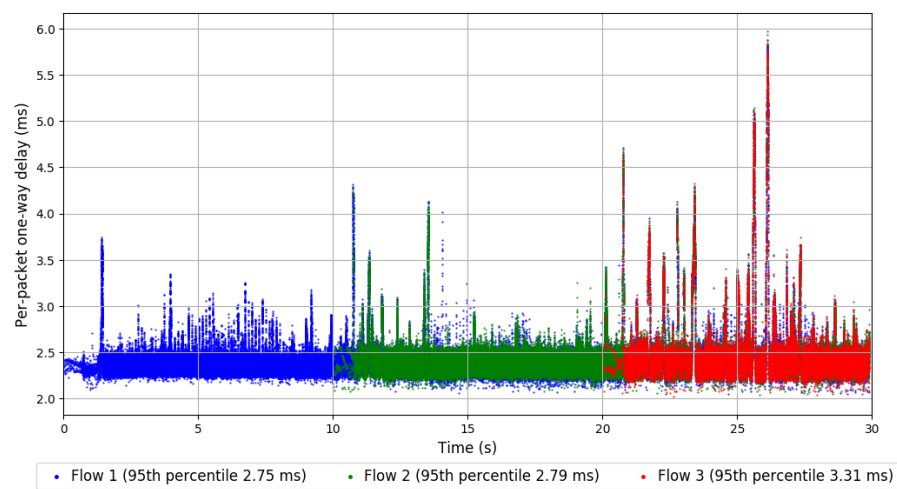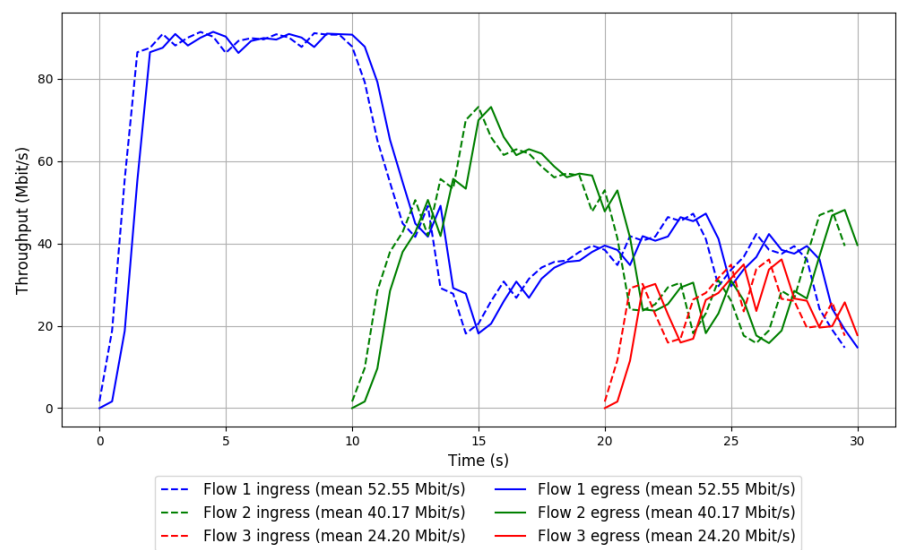# Run 5: Report of PCC-Vivace — Data Link

```
Run 6: Statistics of PCC-Vivace

Start at: 2018-07-03 20:04:42
End at: 2018-07-03 20:05:12
Local clock offset: -1.939 ms
Remote clock offset: -2.583 ms


# Below is generated by plot.py at 2018-07-03 22:01:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.56 Mbit/s
95th percentile per-packet one-way delay: 2.821 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 53.81 Mbit/s
95th percentile per-packet one-way delay: 2.690 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.18 Mbit/s
95th percentile per-packet one-way delay: 2.990 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 23.30 Mbit/s
95th percentile per-packet one-way delay: 3.191 ms
Loss rate: 0.00%
```
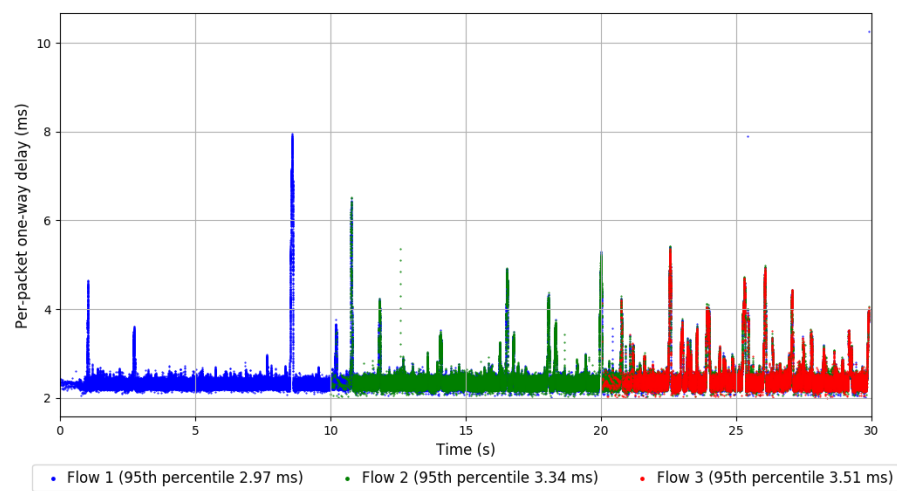
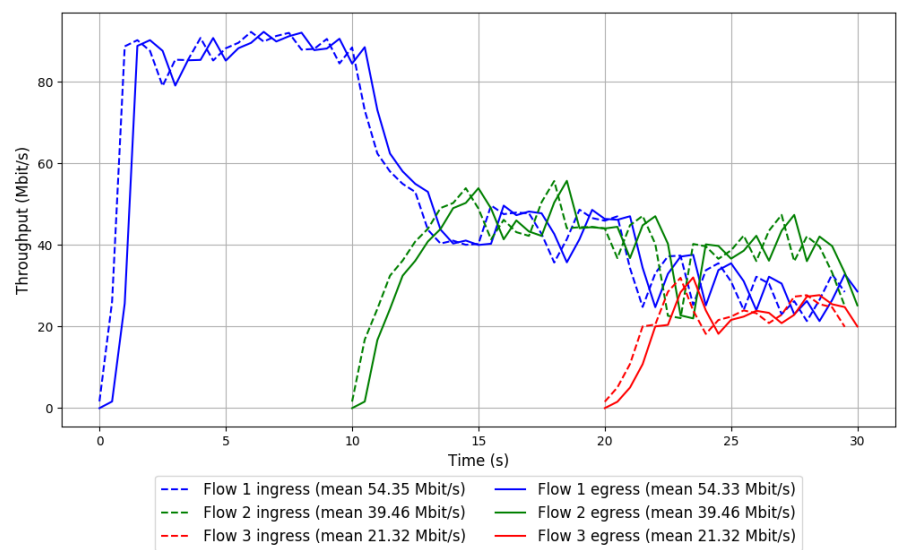# Run 6: Report of PCC-Vivace — Data Link

```
Run 7: Statistics of PCC-Vivace

Start at: 2018-07-03 20:23:55
End at: 2018-07-03 20:24:25
Local clock offset: -1.879 ms
Remote clock offset: -2.98 ms

# Below is generated by plot.py at 2018-07-03 22:01:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.51 Mbit/s
95th percentile per-packet one-way delay: 2.768 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.72 Mbit/s
95th percentile per-packet one-way delay: 2.626 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.97 Mbit/s
95th percentile per-packet one-way delay: 2.997 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.85 Mbit/s
95th percentile per-packet one-way delay: 3.241 ms
Loss rate: 0.00%
```

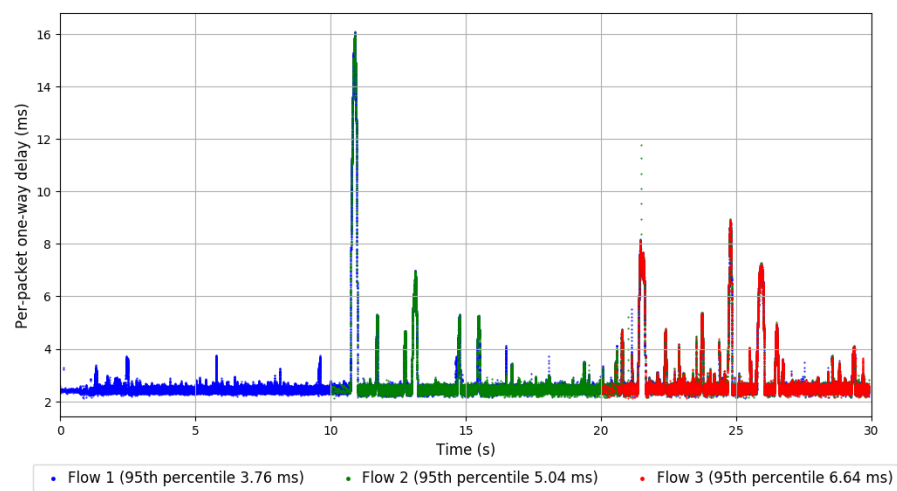# Run 7: Report of PCC-Vivace — Data Link

```
Run 8: Statistics of PCC-Vivace

Start at: 2018-07-03 20:43:08
End at: 2018-07-03 20:43:38
Local clock offset: -2.049 ms
Remote clock offset: -2.984 ms


# Below is generated by plot.py at 2018-07-03 22:01:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.26 Mbit/s
95th percentile per-packet one-way delay: 2.815 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.55 Mbit/s
95th percentile per-packet one-way delay: 2.748 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.17 Mbit/s
95th percentile per-packet one-way delay: 2.792 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.20 Mbit/s
95th percentile per-packet one-way delay: 3.315 ms
Loss rate: 0.00%
```
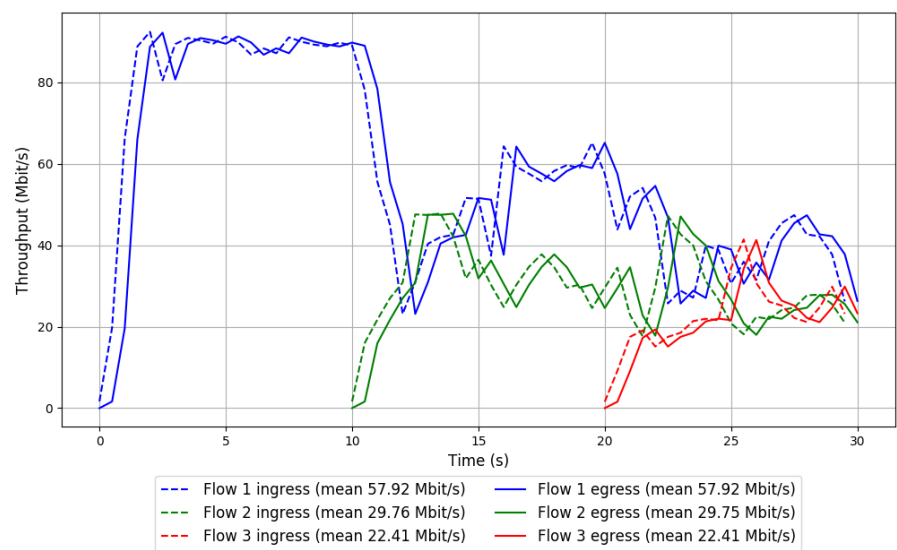
Run 8: Report of PCC-Vivace — Data Link

```
Run 9: Statistics of PCC-Vivace

Start at: 2018-07-03 21:02:20
End at: 2018-07-03 21:02:50
Local clock offset: -2.814 ms
Remote clock offset: -2.853 ms


# Below is generated by plot.py at 2018-07-03 22:01:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.61 Mbit/s
95th percentile per-packet one-way delay: 3.168 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.33 Mbit/s
95th percentile per-packet one-way delay: 2.974 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.46 Mbit/s
95th percentile per-packet one-way delay: 3.342 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 21.32 Mbit/s
95th percentile per-packet one-way delay: 3.511 ms
Loss rate: 0.00%
```
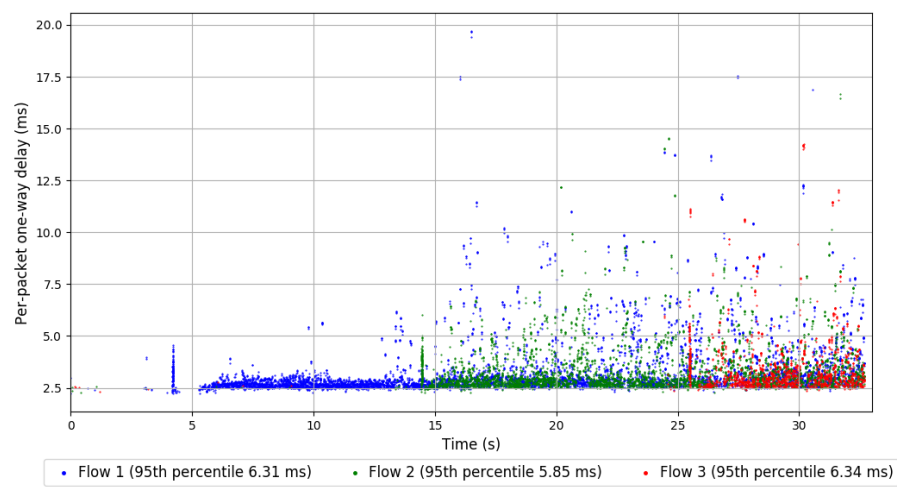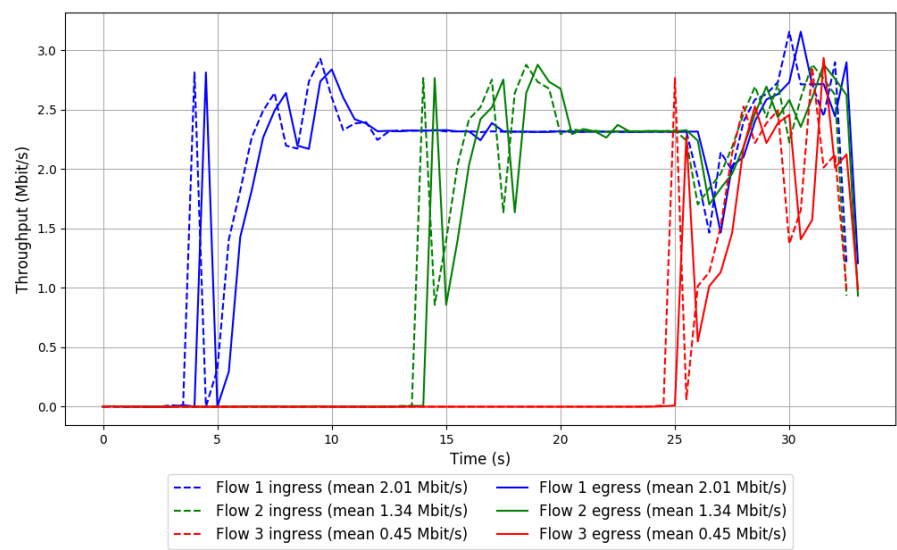
Run 9: Report of PCC-Vivace — Data Link

```
Run 10: Statistics of PCC-Vivace

Start at: 2018-07-03 21:21:33
End at: 2018-07-03 21:22:03
Local clock offset: -2.833 ms
Remote clock offset: -2.501 ms


# Below is generated by plot.py at 2018-07-03 22:01:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.11 Mbit/s
95th percentile per-packet one-way delay: 4.505 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 57.92 Mbit/s
95th percentile per-packet one-way delay: 3.764 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 29.75 Mbit/s
95th percentile per-packet one-way delay: 5.039 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 22.41 Mbit/s
95th percentile per-packet one-way delay: 6.644 ms
Loss rate: 0.00%
```
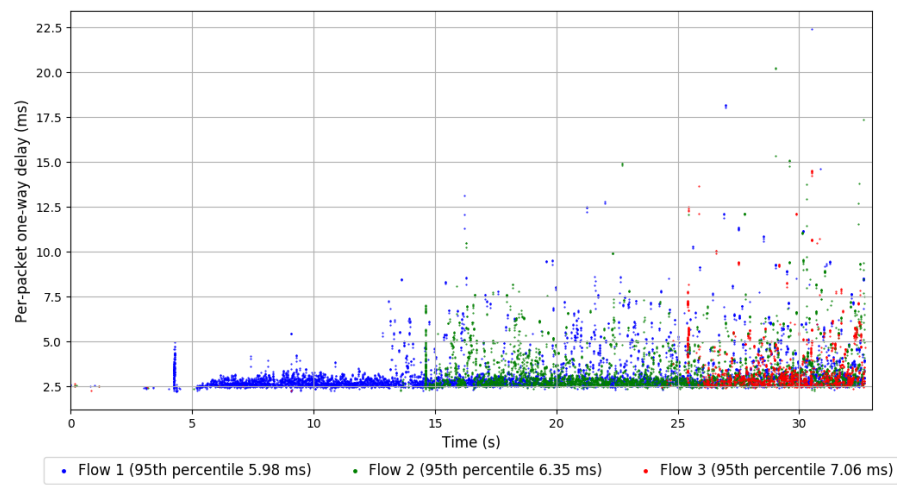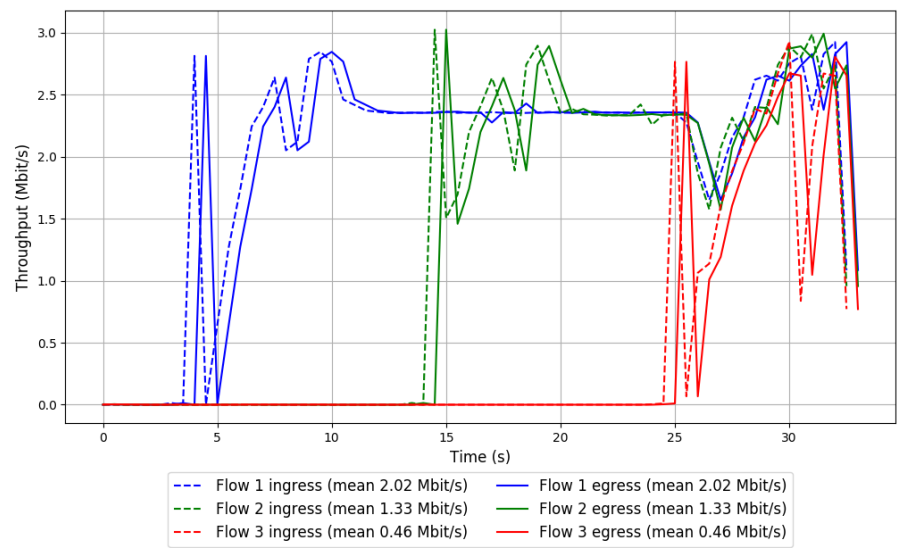
Run 10: Report of PCC-Vivace — Data Link

```
Run 1: Statistics of WebRTC media

Start at: 2018-07-03 18:18:30
End at: 2018-07-03 18:19:00
Local clock offset: -2.573 ms
Remote clock offset: -2.608 ms


# Below is generated by plot.py at 2018-07-03 22:01:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.79 Mbit/s
95th percentile per-packet one-way delay: 6.103 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 6.314 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.34 Mbit/s
95th percentile per-packet one-way delay: 5.849 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 6.336 ms
Loss rate: 0.00%
```
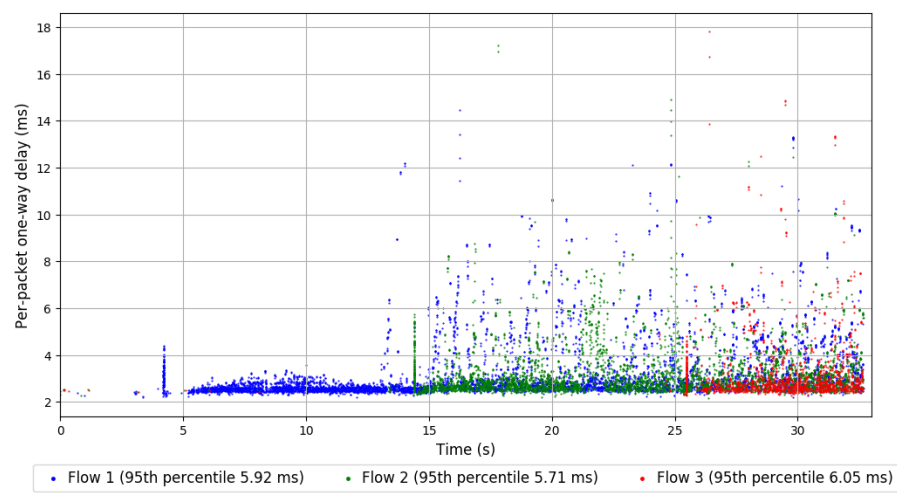
Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2018-07-03 18:37:42
End at: 2018-07-03 18:38:12
Local clock offset: -2.26 ms
Remote clock offset: -2.766 ms


# Below is generated by plot.py at 2018-07-03 22:01:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.80 Mbit/s
95th percentile per-packet one-way delay: 6.199 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 5.980 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.33 Mbit/s
95th percentile per-packet one-way delay: 6.351 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 7.058 ms
Loss rate: 0.00%
```

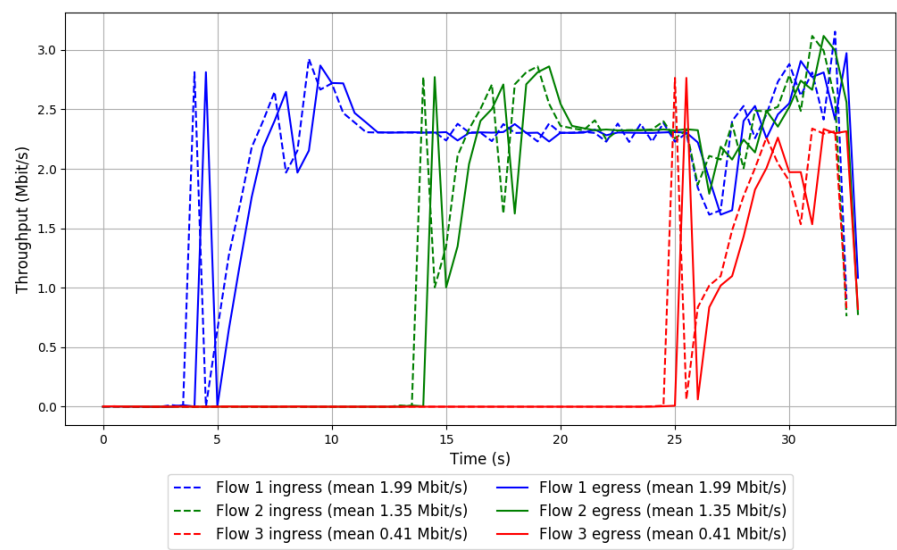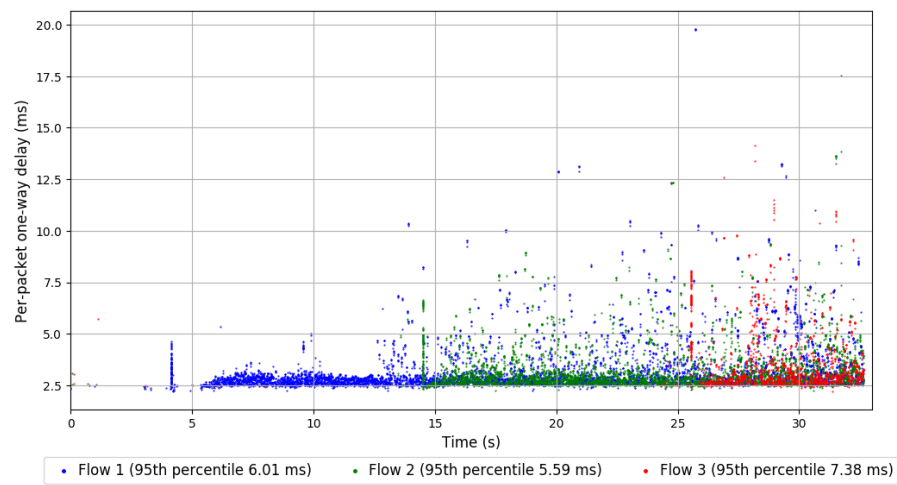Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2018-07-03 18:56:55
End at: 2018-07-03 18:57:25
Local clock offset: -3.202 ms
Remote clock offset: -2.166 ms


# Below is generated by plot.py at 2018-07-03 22:01:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.74 Mbit/s
95th percentile per-packet one-way delay: 5.876 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.99 Mbit/s
95th percentile per-packet one-way delay: 5.925 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.35 Mbit/s
95th percentile per-packet one-way delay: 5.709 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 6.052 ms
Loss rate: 0.00%
```
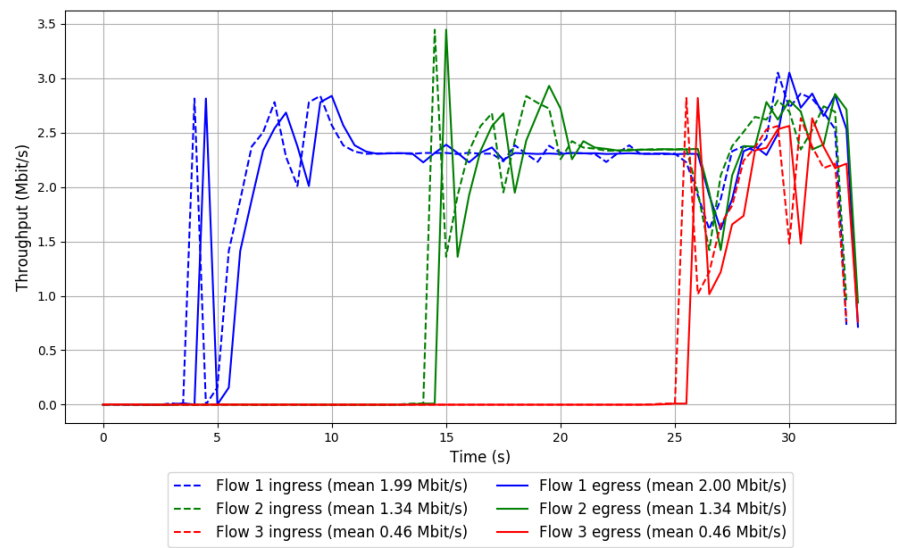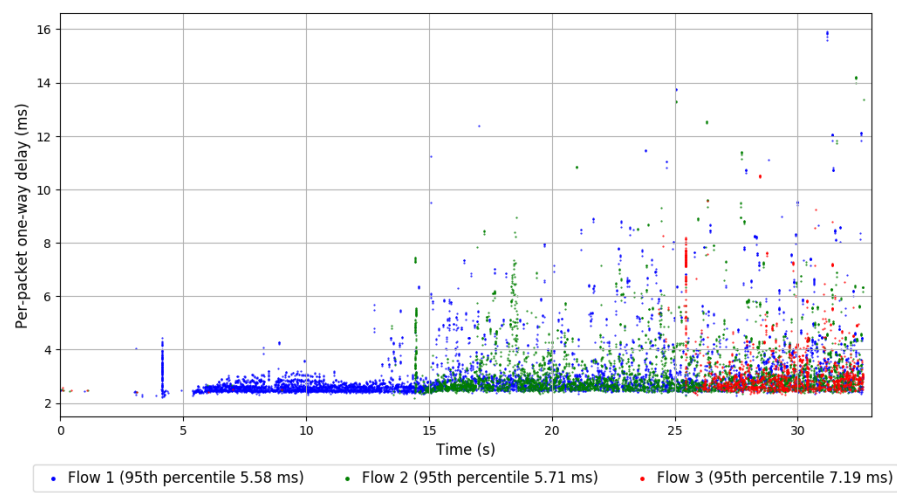
Run 3: Report of WebRTC media — Data Link

Flow 1 ingress (mean 1.99 Mbit/s) ---- Flow 1 egress (mean 1.99 Mbit/s) ——
Flow 2 ingress (mean 1.35 Mbit/s) ---- Flow 2 egress (mean 1.35 Mbit/s) ——
Flow 3 ingress (mean 0.41 Mbit/s) ---- Flow 3 egress (mean 0.41 Mbit/s) ——

Flow 1 (95th percentile 5.92 ms)   •   Flow 2 (95th percentile 5.71 ms)   •   Flow 3 (95th percentile 6.05 ms)

```
Run 4: Statistics of WebRTC media

Start at: 2018-07-03 19:16:08
End at: 2018-07-03 19:16:38
Local clock offset: -2.817 ms
Remote clock offset: -1.899 ms


# Below is generated by plot.py at 2018-07-03 22:01:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.79 Mbit/s
95th percentile per-packet one-way delay: 6.123 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.00 Mbit/s
95th percentile per-packet one-way delay: 6.015 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.34 Mbit/s
95th percentile per-packet one-way delay: 5.594 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 7.375 ms
Loss rate: 0.00%
```

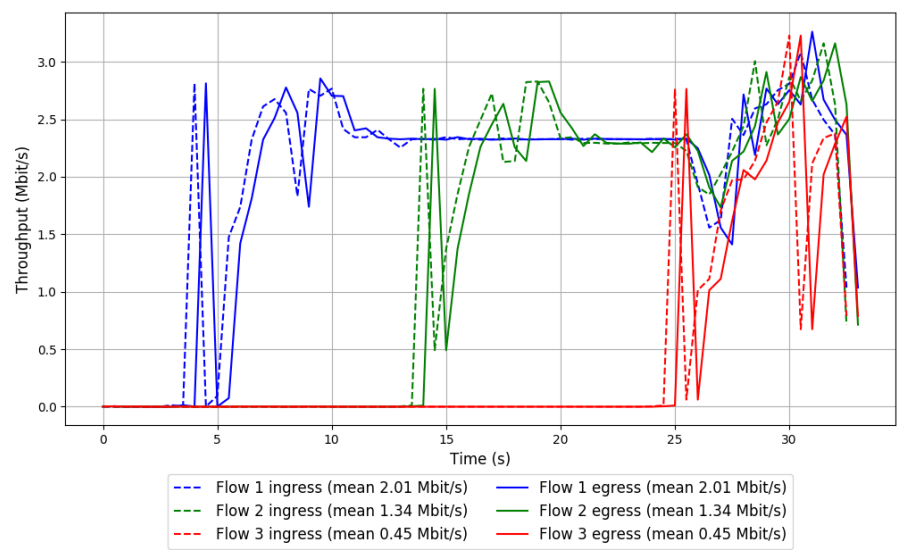Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2018-07-03 19:35:20
End at: 2018-07-03 19:35:50
Local clock offset: -1.979 ms
Remote clock offset: -1.564 ms


# Below is generated by plot.py at 2018-07-03 22:01:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.79 Mbit/s
95th percentile per-packet one-way delay: 5.828 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 5.580 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.34 Mbit/s
95th percentile per-packet one-way delay: 5.712 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 7.191 ms
Loss rate: 0.00%
```

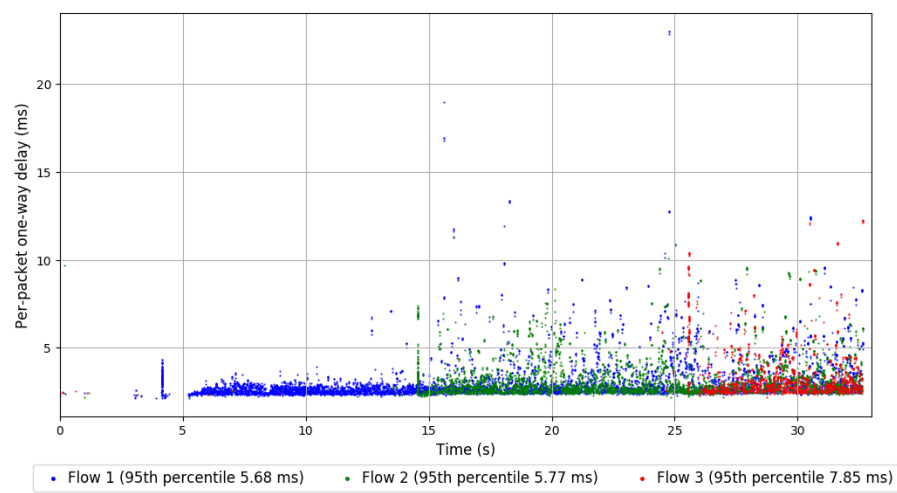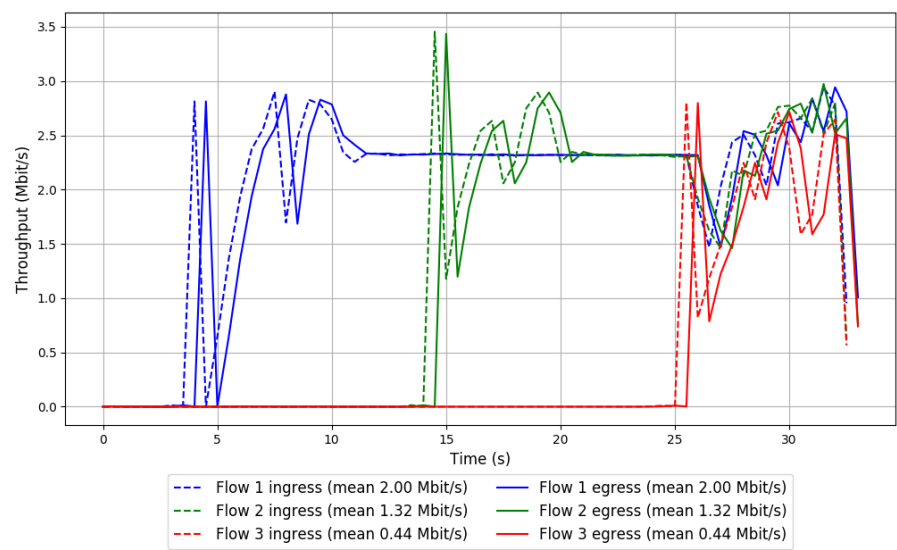Run 5: Report of WebRTC media — Data Link

```
Run 6: Statistics of WebRTC media

Start at: 2018-07-03 19:54:34
End at: 2018-07-03 19:55:04
Local clock offset: -2.008 ms
Remote clock offset: -2.029 ms


# Below is generated by plot.py at 2018-07-03 22:01:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.76 Mbit/s
95th percentile per-packet one-way delay: 5.932 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.00 Mbit/s
95th percentile per-packet one-way delay: 5.683 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 5.769 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 7.852 ms
Loss rate: 0.00%
```

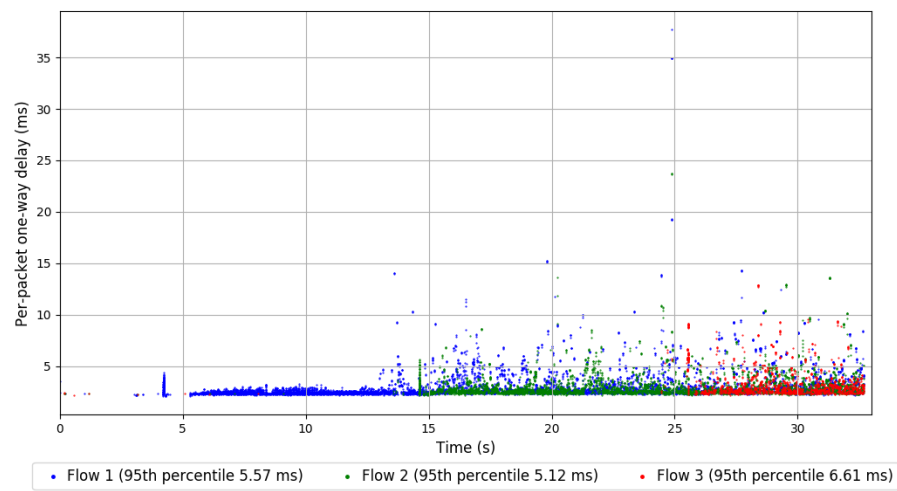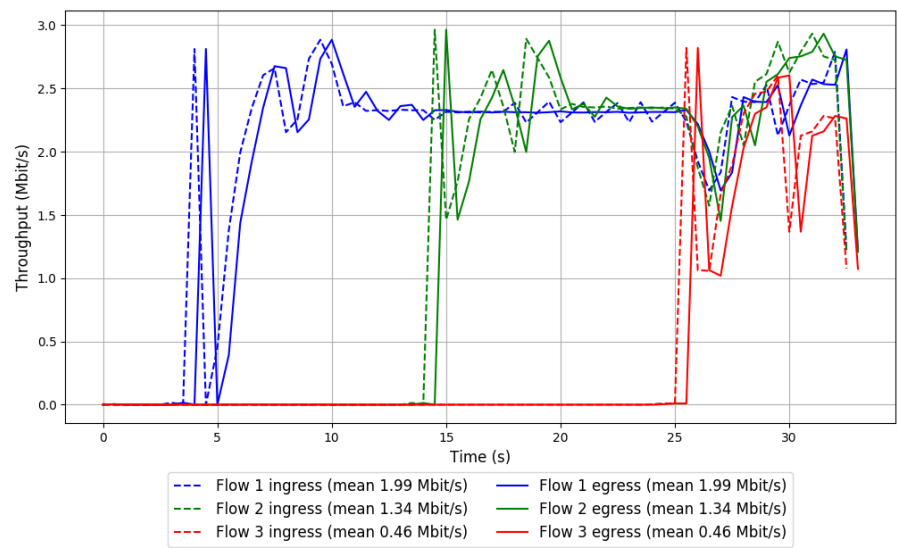## Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2018-07-03 20:13:46
End at: 2018-07-03 20:14:16
Local clock offset: -1.889 ms
Remote clock offset: -2.866 ms


# Below is generated by plot.py at 2018-07-03 22:01:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.78 Mbit/s
95th percentile per-packet one-way delay: 5.667 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.99 Mbit/s
95th percentile per-packet one-way delay: 5.567 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.34 Mbit/s
95th percentile per-packet one-way delay: 5.115 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 6.609 ms
Loss rate: 0.00%
```

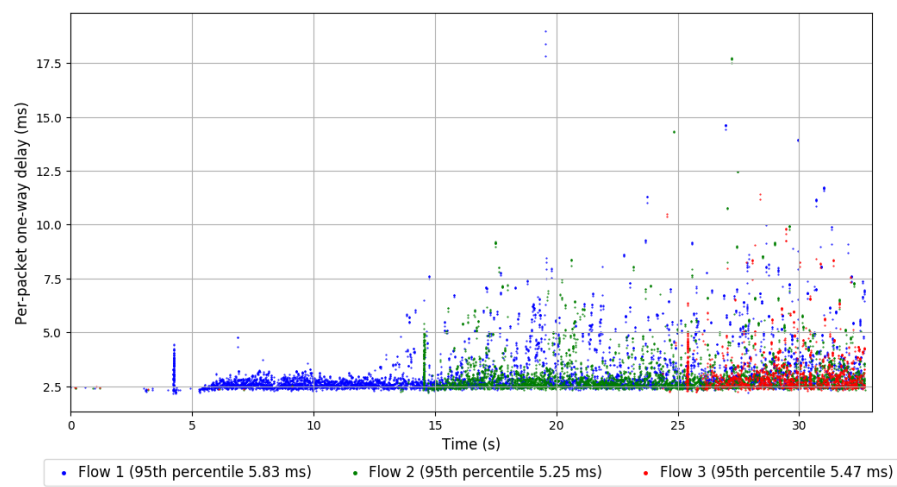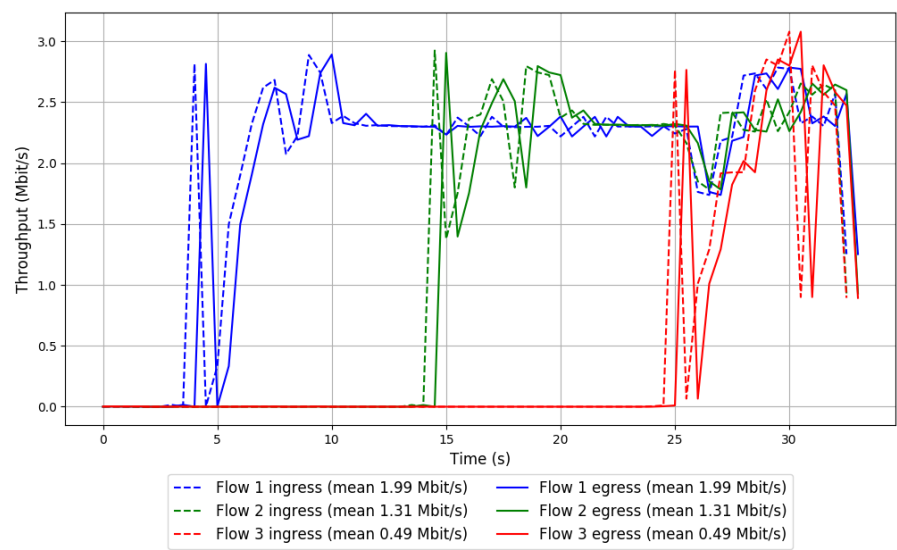Run 7: Report of WebRTC media — Data Link

```
Run 8: Statistics of WebRTC media

Start at: 2018-07-03 20:33:00
End at: 2018-07-03 20:33:30
Local clock offset: -1.762 ms
Remote clock offset: -2.914 ms


# Below is generated by plot.py at 2018-07-03 22:01:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.78 Mbit/s
95th percentile per-packet one-way delay: 5.606 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.99 Mbit/s
95th percentile per-packet one-way delay: 5.832 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 5.253 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 5.471 ms
Loss rate: 0.00%
```

Run 8: Report of WebRTC media — Data Link

```
Run 9: Statistics of WebRTC media

Start at: 2018-07-03 20:52:12
End at: 2018-07-03 20:52:42
Local clock offset: -2.56 ms
Remote clock offset: -3.03 ms

# Below is generated by plot.py at 2018-07-03 22:01:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.76 Mbit/s
95th percentile per-packet one-way delay: 5.765 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 5.704 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 5.650 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 6.488 ms
Loss rate: 0.00%
```
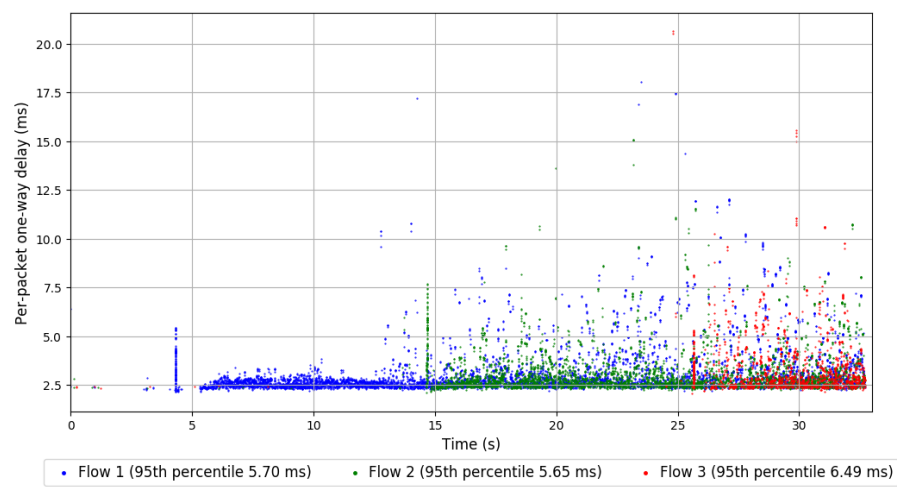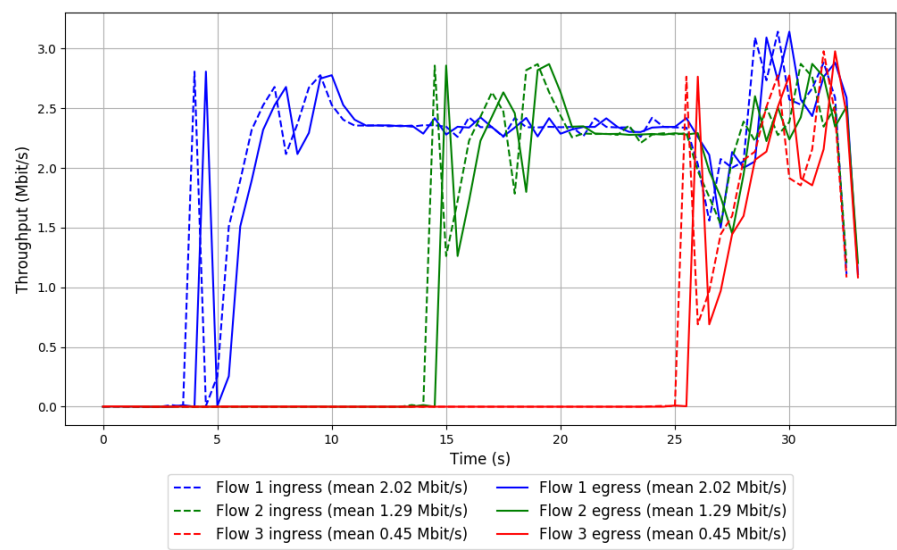
Run 9: Report of WebRTC media — Data Link

```
Run 10: Statistics of WebRTC media

Start at: 2018-07-03 21:11:25
End at: 2018-07-03 21:11:55
Local clock offset: -3.003 ms
Remote clock offset: -2.631 ms

# Below is generated by plot.py at 2018-07-03 22:01:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.79 Mbit/s
95th percentile per-packet one-way delay: 5.651 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.00 Mbit/s
95th percentile per-packet one-way delay: 5.525 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.34 Mbit/s
95th percentile per-packet one-way delay: 5.439 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 6.308 ms
Loss rate: 0.00%
```

Run 10: Report of WebRTC media — Data Link