Pantheon Report

Generated at 2019-02-12 06:24:24 (UTC).

Data path: Brazil on `p4p1` (*remote*) →AWS Brazil 1 on `ens5` (*local*).

Repeated the test of 21 congestion control schemes 5 times.

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

NTP offsets were measured against `gps.ntp.br` and have been applied to correct the timestamps in logs.
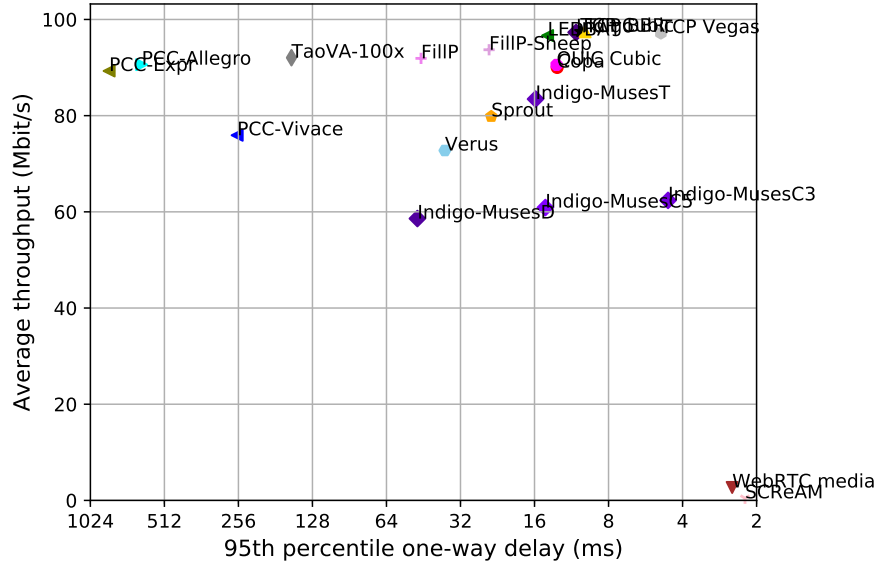
```
System info:
Linux 4.15.0-1031-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
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
 M src/examples/cellsim.cc
 M src/examples/sproutbt2.cc
 M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
```
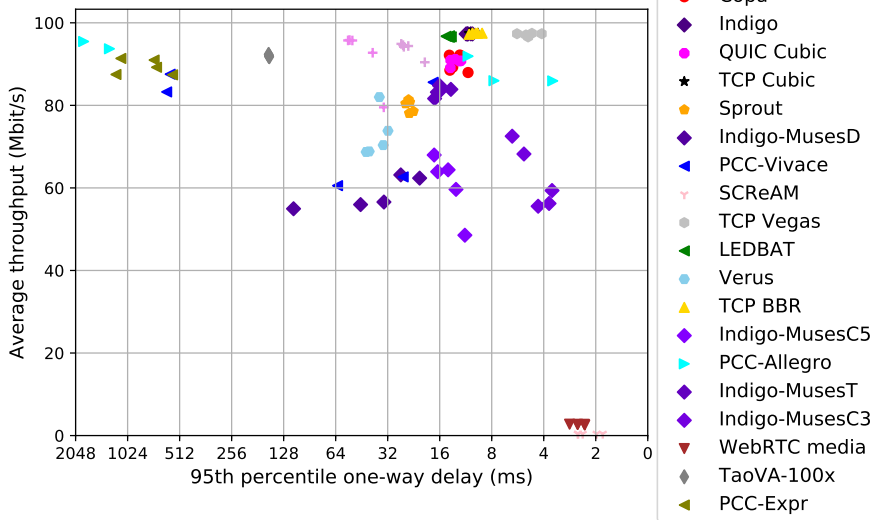
```
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

test from Brazil to AWS Brazil 1, 5 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)

test from Brazil to AWS Brazil 1, 5 runs of 30s each per scheme
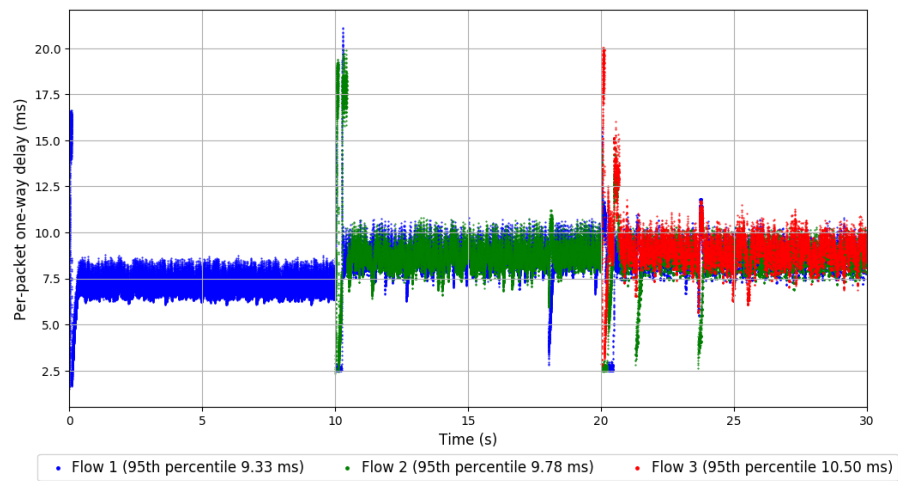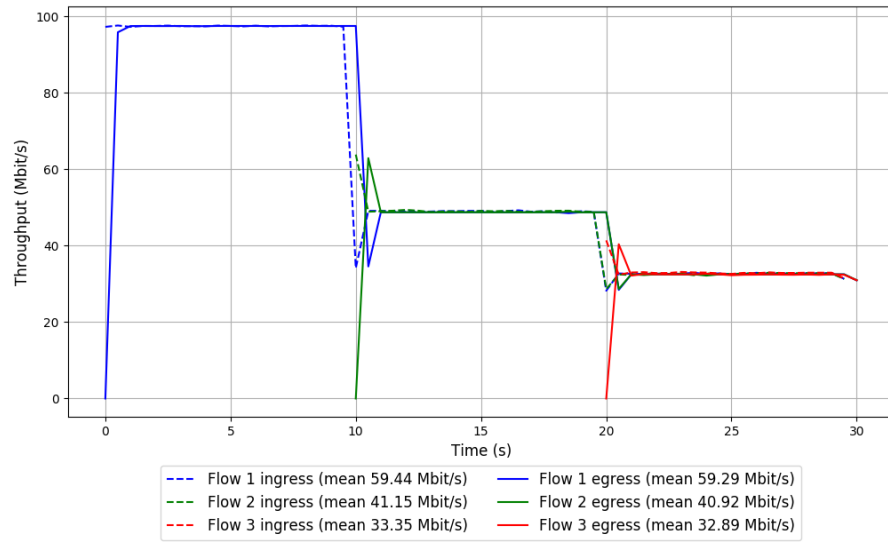3 flows with 10s interval between flows

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	5	59.25	40.90	32.95	9.32	10.11	11.64	0.17	0.46	0.69
Copa	5	53.58	38.90	31.66	11.88	14.38	12.97	0.04	0.07	0.14
TCP Cubic	5	59.61	40.64	32.50	10.41	10.32	10.56	0.08	0.15	0.24
FillP	5	57.03	40.27	24.32	33.58	50.85	48.53	0.19	2.15	0.82
FillP-Sheep	5	58.97	35.88	32.64	22.84	23.49	34.79	0.05	0.04	0.29
Indigo	5	57.15	42.80	35.57	9.65	11.12	9.13	0.04	1.06	0.11
Indigo-MusesC3	5	43.48	23.68	14.75	4.48	4.63	4.67	0.00	0.04	0.09
Indigo-MusesC5	5	34.93	27.43	32.44	11.82	14.91	16.77	0.04	0.07	0.19
Indigo-MusesD	5	31.91	25.43	39.46	18.88	15.15	54.99	0.08	0.06	2.75
Indigo-MusesT	5	53.45	36.50	26.40	14.10	17.68	16.98	0.04	0.11	0.17
LEDBAT	5	58.89	40.55	32.40	13.65	14.49	14.04	0.12	0.21	0.37
PCC-Allegro	5	73.44	18.50	14.76	680.07	204.57	3.59	4.14	1.85	0.08
PCC-Expr	5	58.59	30.54	31.45	813.22	360.88	394.07	21.78	4.92	4.94
QUIC Cubic	5	53.54	40.18	31.06	12.70	13.00	13.58	0.16	0.30	0.45
SCReAM	5	0.22	0.22	0.22	2.23	2.22	2.23	0.00	0.04	0.07
Sprout	5	43.21	39.10	32.18	22.77	24.05	25.18	0.07	0.11	0.28
TaoVA-100x	5	55.28	39.35	31.80	154.50	156.10	155.99	0.52	1.10	2.75
TCP Vegas	5	52.26	47.37	40.17	3.98	4.19	5.28	0.01	0.02	0.05
Verus	5	38.47	36.40	30.27	33.32	25.92	180.61	0.05	0.08	0.35
PCC-Vivace	5	45.95	31.99	26.34	243.39	209.05	34.21	1.16	1.18	0.21
WebRTC media	5	1.53	0.79	0.39	2.47	2.47	2.78	0.02	0.02	0.03

```
Run 1: Statistics of TCP BBR

Start at: 2019-02-12 04:26:01
End at: 2019-02-12 04:26:31
Local clock offset: -0.845 ms
Remote clock offset: -1.934 ms


# Below is generated by plot.py at 2019-02-12 06:11:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 9.654 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 59.29 Mbit/s
95th percentile per-packet one-way delay: 9.329 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 40.92 Mbit/s
95th percentile per-packet one-way delay: 9.784 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 32.89 Mbit/s
95th percentile per-packet one-way delay: 10.503 ms
Loss rate: 1.42%
```
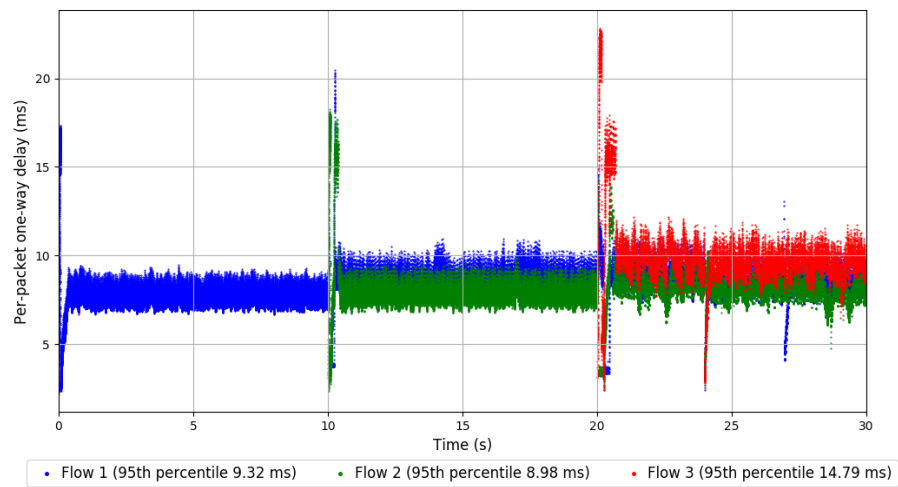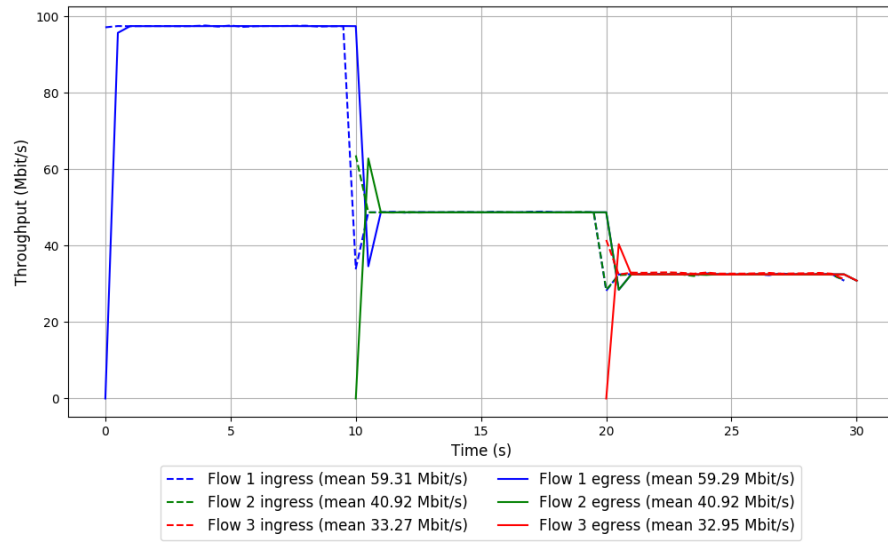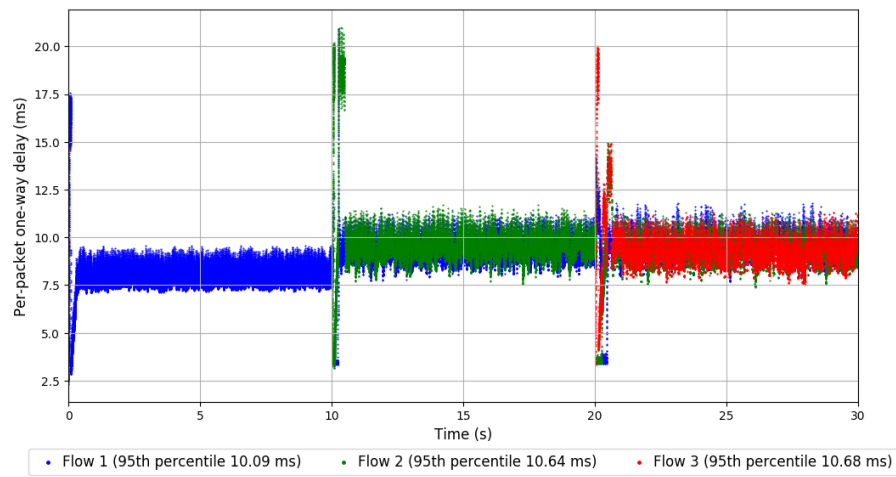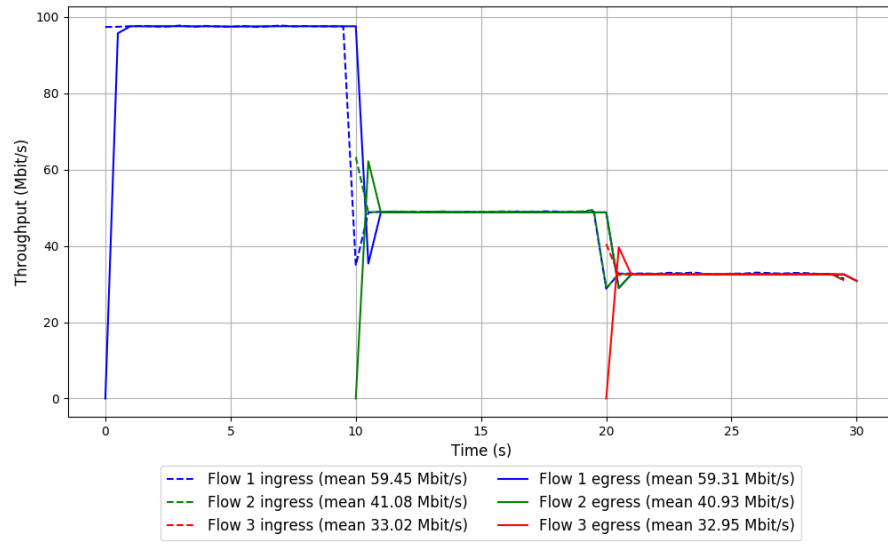
Run 1: Report of TCP BBR — Data Link

Flow 1 ingress (mean 59.44 Mbit/s)   Flow 1 egress (mean 59.29 Mbit/s)
Flow 2 ingress (mean 41.15 Mbit/s)   Flow 2 egress (mean 40.92 Mbit/s)
Flow 3 ingress (mean 33.35 Mbit/s)   Flow 3 egress (mean 32.89 Mbit/s)

Flow 1 (95th percentile 9.33 ms)   Flow 2 (95th percentile 9.78 ms)   Flow 3 (95th percentile 10.50 ms)

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```
Run 2: Statistics of TCP BBR

Start at: 2019-02-12 04:50:14
End at: 2019-02-12 04:50:44
Local clock offset: -1.204 ms
Remote clock offset: -1.038 ms


# Below is generated by plot.py at 2019-02-12 06:11:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.49 Mbit/s
95th percentile per-packet one-way delay: 9.912 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 59.29 Mbit/s
95th percentile per-packet one-way delay: 9.318 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 40.92 Mbit/s
95th percentile per-packet one-way delay: 8.978 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 32.95 Mbit/s
95th percentile per-packet one-way delay: 14.785 ms
Loss rate: 1.05%
```
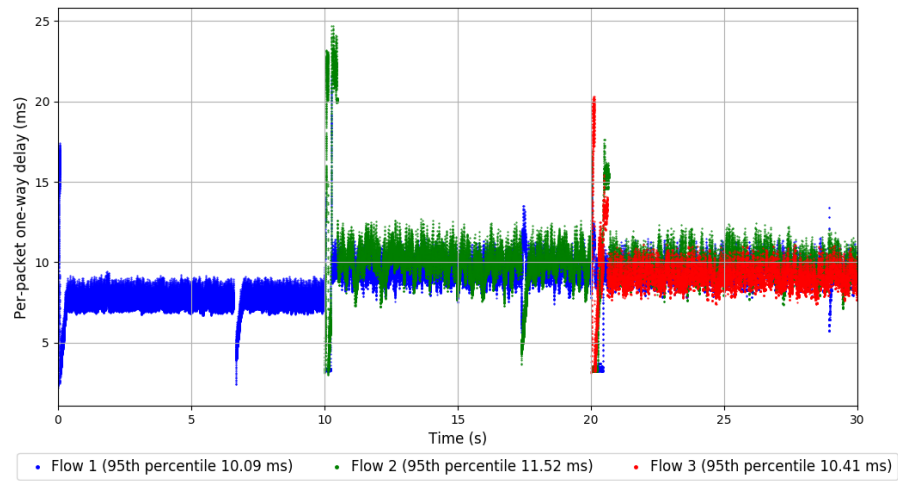
Run 2: Report of TCP BBR — Data Link

- - - Flow 1 ingress (mean 59.31 Mbit/s) ——— Flow 1 egress (mean 59.29 Mbit/s)
- - - Flow 2 ingress (mean 40.92 Mbit/s) ——— Flow 2 egress (mean 40.92 Mbit/s)
- - - Flow 3 ingress (mean 33.27 Mbit/s) ——— Flow 3 egress (mean 32.95 Mbit/s)

• Flow 1 (95th percentile 9.32 ms)   • Flow 2 (95th percentile 8.98 ms)   • Flow 3 (95th percentile 14.79 ms)

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```
Run 3: Statistics of TCP BBR

Start at: 2019-02-12 05:14:28
End at: 2019-02-12 05:14:58
Local clock offset: -5.162 ms
Remote clock offset: -0.081 ms


# Below is generated by plot.py at 2019-02-12 06:11:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.50 Mbit/s
95th percentile per-packet one-way delay: 10.339 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 59.31 Mbit/s
95th percentile per-packet one-way delay: 10.086 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 40.93 Mbit/s
95th percentile per-packet one-way delay: 10.638 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 32.95 Mbit/s
95th percentile per-packet one-way delay: 10.675 ms
Loss rate: 0.27%
```
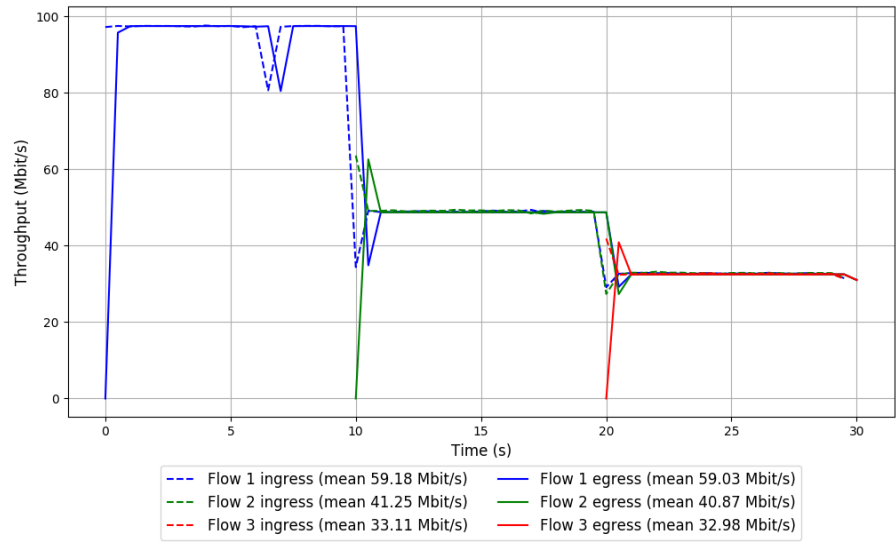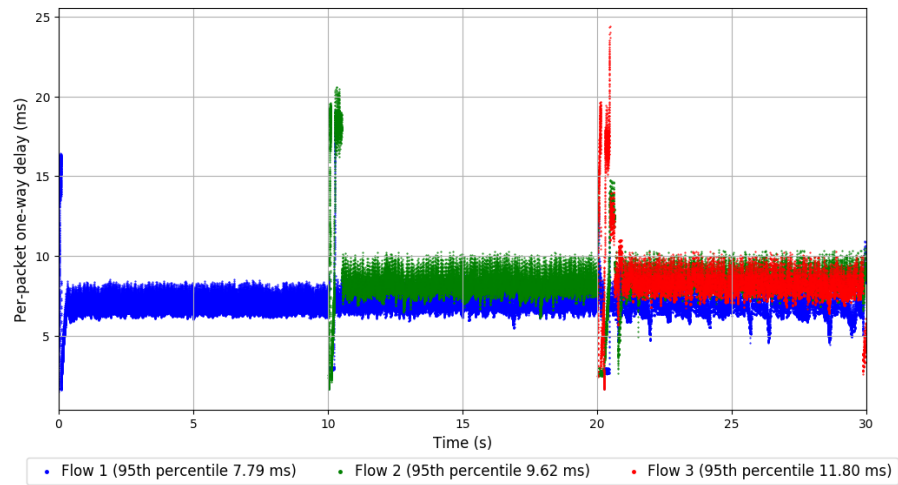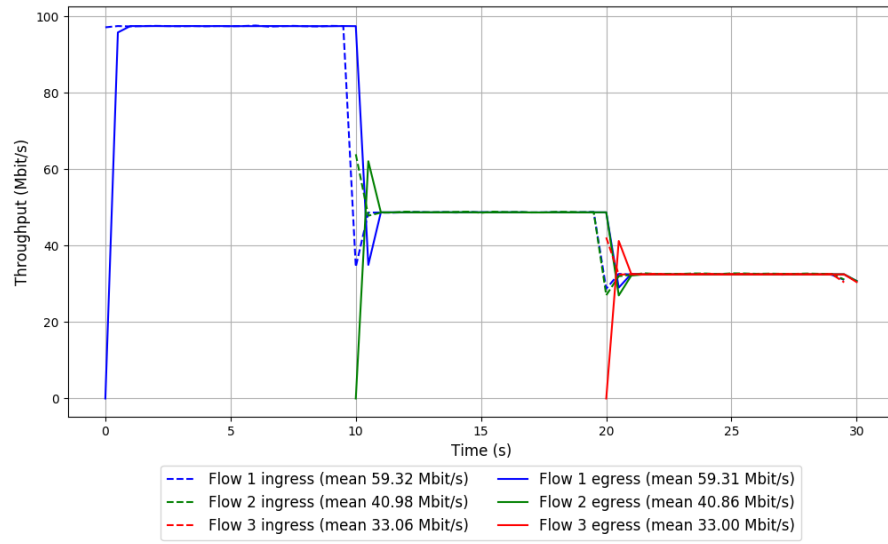
Run 3: Report of TCP BBR — Data Link

Legend:
- Flow 1 ingress (mean 59.45 Mbit/s)
- Flow 1 egress (mean 59.31 Mbit/s)
- Flow 2 ingress (mean 41.08 Mbit/s)
- Flow 2 egress (mean 40.93 Mbit/s)
- Flow 3 ingress (mean 33.02 Mbit/s)
- Flow 3 egress (mean 32.95 Mbit/s)

Legend:
- Flow 1 (95th percentile 10.09 ms)
- Flow 2 (95th percentile 10.64 ms)
- Flow 3 (95th percentile 10.68 ms)

```
Run 4: Statistics of TCP BBR

Start at: 2019-02-12 05:38:41
End at: 2019-02-12 05:39:11
Local clock offset: -7.248 ms
Remote clock offset: 0.435 ms


# Below is generated by plot.py at 2019-02-12 06:11:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.22 Mbit/s
95th percentile per-packet one-way delay: 10.805 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 59.03 Mbit/s
95th percentile per-packet one-way delay: 10.085 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 40.87 Mbit/s
95th percentile per-packet one-way delay: 11.517 ms
Loss rate: 0.96%
-- Flow 3:
Average throughput: 32.98 Mbit/s
95th percentile per-packet one-way delay: 10.408 ms
Loss rate: 0.45%
```
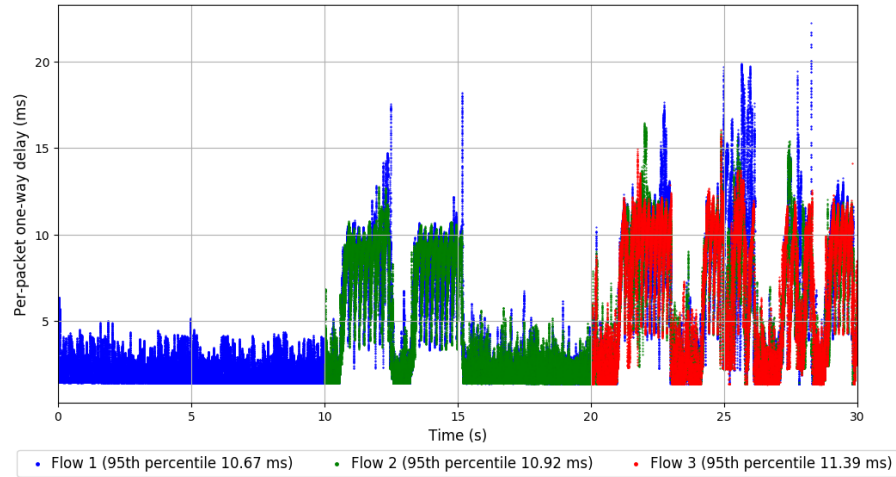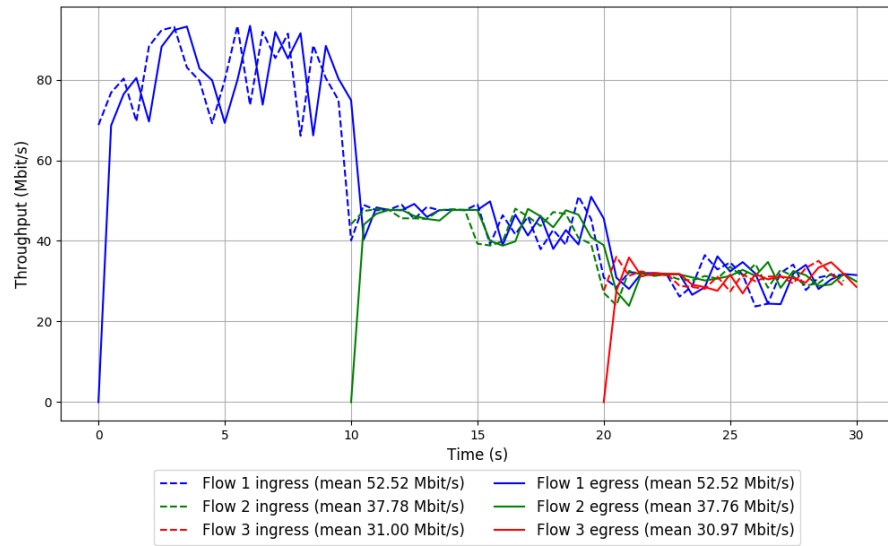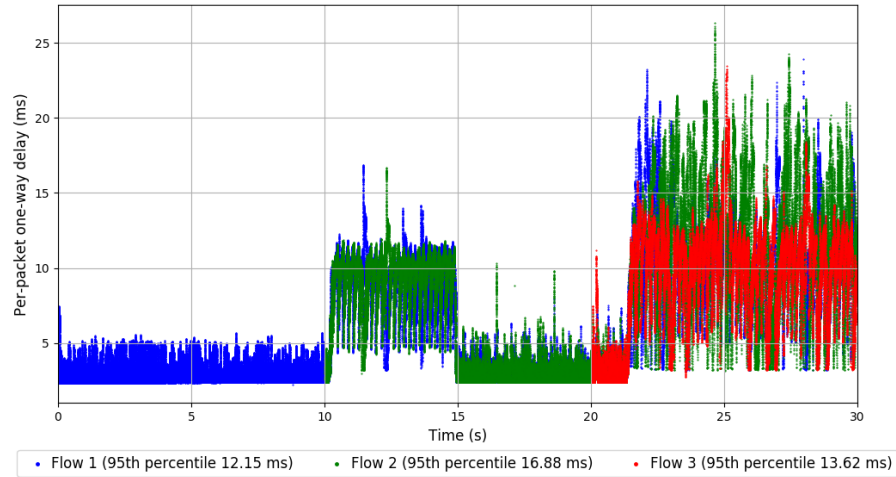
Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 59.18 Mbit/s) — Flow 1 egress (mean 59.03 Mbit/s)
Flow 2 ingress (mean 41.25 Mbit/s) — Flow 2 egress (mean 40.87 Mbit/s)
Flow 3 ingress (mean 33.11 Mbit/s) — Flow 3 egress (mean 32.98 Mbit/s)

Flow 1 (95th percentile 10.09 ms)   Flow 2 (95th percentile 11.52 ms)   Flow 3 (95th percentile 10.41 ms)

```
Run 5: Statistics of TCP BBR

Start at: 2019-02-12 06:02:52
End at: 2019-02-12 06:03:22
Local clock offset: -8.32 ms
Remote clock offset: 0.72 ms


# Below is generated by plot.py at 2019-02-12 06:11:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 9.091 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 59.31 Mbit/s
95th percentile per-packet one-way delay: 7.795 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 40.86 Mbit/s
95th percentile per-packet one-way delay: 9.621 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 33.00 Mbit/s
95th percentile per-packet one-way delay: 11.804 ms
Loss rate: 0.27%
```
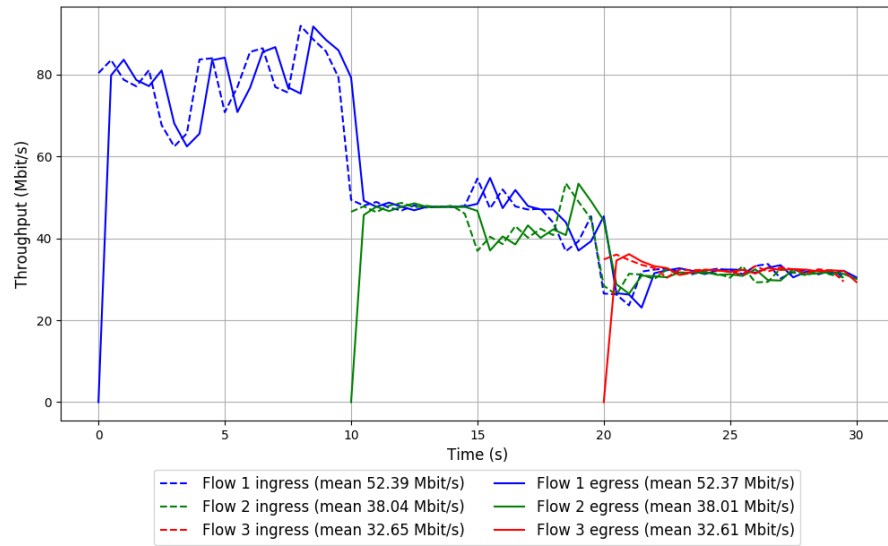
Run 5: Report of TCP BBR — Data Link

```
Run 1: Statistics of Copa

Start at: 2019-02-12 04:15:40
End at: 2019-02-12 04:16:10
Local clock offset: -2.746 ms
Remote clock offset: -2.349 ms


# Below is generated by plot.py at 2019-02-12 06:12:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.96 Mbit/s
95th percentile per-packet one-way delay: 10.968 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 52.52 Mbit/s
95th percentile per-packet one-way delay: 10.674 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 37.76 Mbit/s
95th percentile per-packet one-way delay: 10.921 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 30.97 Mbit/s
95th percentile per-packet one-way delay: 11.395 ms
Loss rate: 0.13%
```
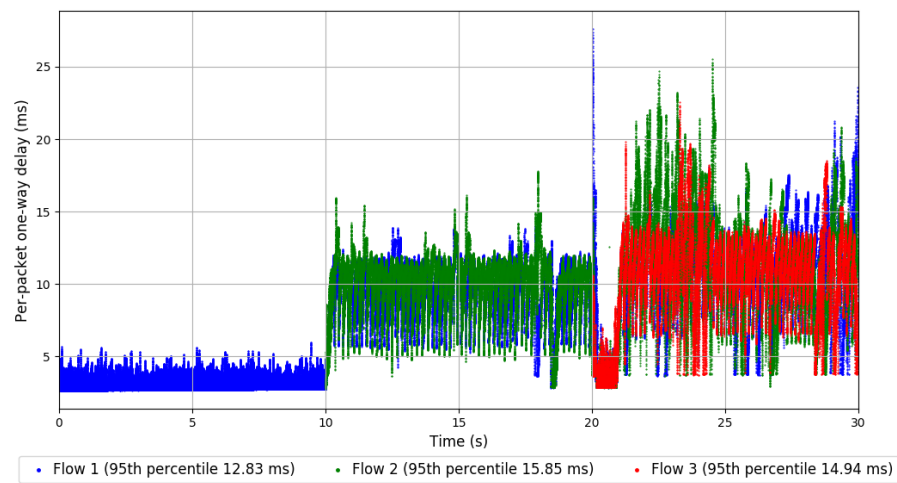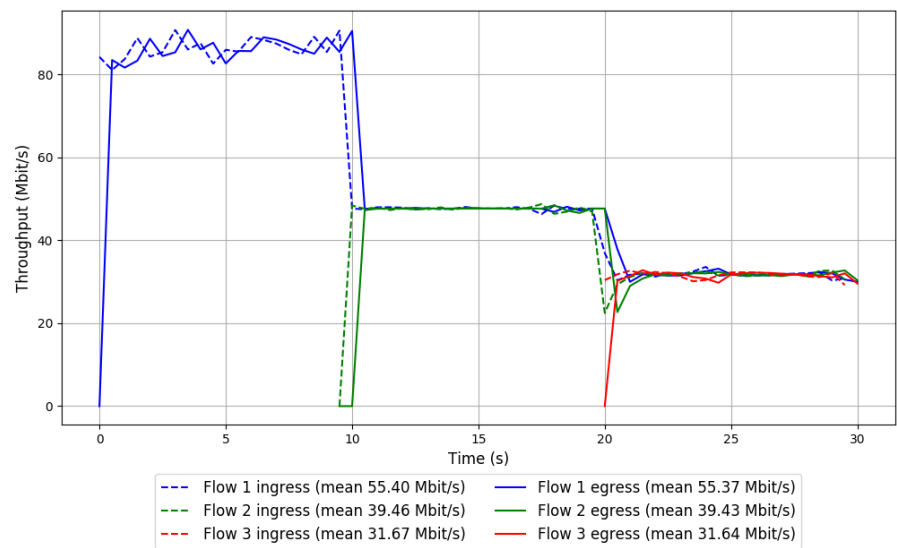
Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2019-02-12 04:39:54
End at: 2019-02-12 04:40:24
Local clock offset: -0.502 ms
Remote clock offset: -1.369 ms


# Below is generated by plot.py at 2019-02-12 06:12:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.52 Mbit/s
95th percentile per-packet one-way delay: 13.973 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 52.37 Mbit/s
95th percentile per-packet one-way delay: 12.147 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 38.01 Mbit/s
95th percentile per-packet one-way delay: 16.875 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 32.61 Mbit/s
95th percentile per-packet one-way delay: 13.623 ms
Loss rate: 0.16%
```

Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2019-02-12 05:04:07
End at: 2019-02-12 05:04:37
Local clock offset: -1.151 ms
Remote clock offset: -0.554 ms


# Below is generated by plot.py at 2019-02-12 06:12:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.15 Mbit/s
95th percentile per-packet one-way delay: 14.071 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 55.37 Mbit/s
95th percentile per-packet one-way delay: 12.832 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 39.43 Mbit/s
95th percentile per-packet one-way delay: 15.854 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 31.64 Mbit/s
95th percentile per-packet one-way delay: 14.942 ms
Loss rate: 0.12%
```
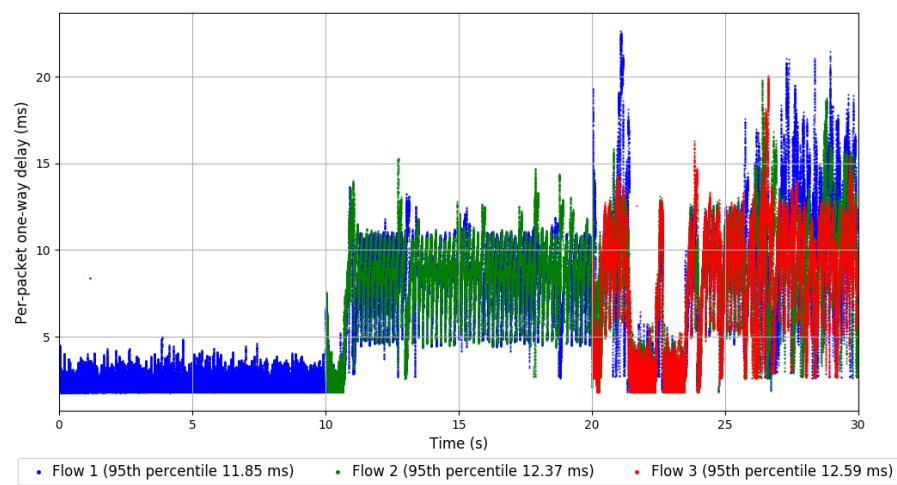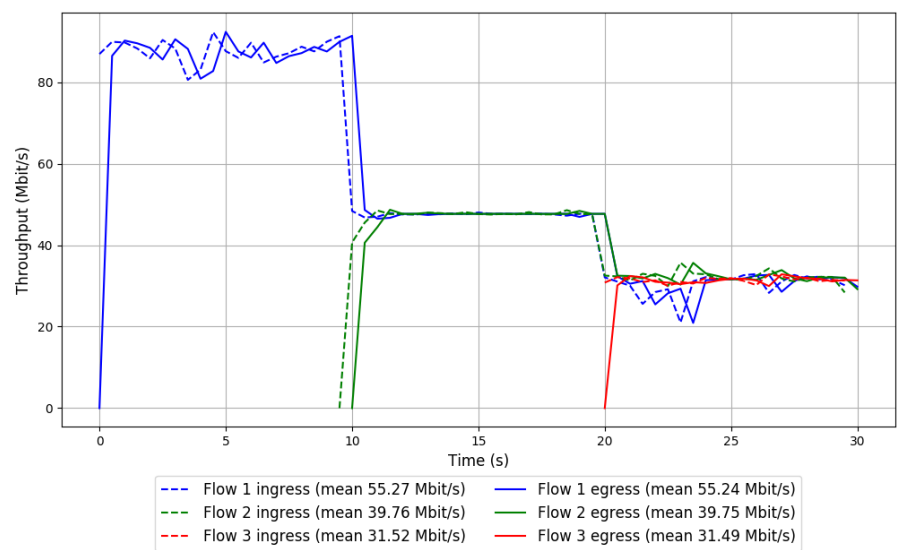
Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2019-02-12 05:28:20
End at: 2019-02-12 05:28:50
Local clock offset: -7.803 ms
Remote clock offset: 0.116 ms


# Below is generated by plot.py at 2019-02-12 06:13:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.20 Mbit/s
95th percentile per-packet one-way delay: 12.237 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 55.24 Mbit/s
95th percentile per-packet one-way delay: 11.852 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 39.75 Mbit/s
95th percentile per-packet one-way delay: 12.368 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 31.49 Mbit/s
95th percentile per-packet one-way delay: 12.591 ms
Loss rate: 0.14%
```
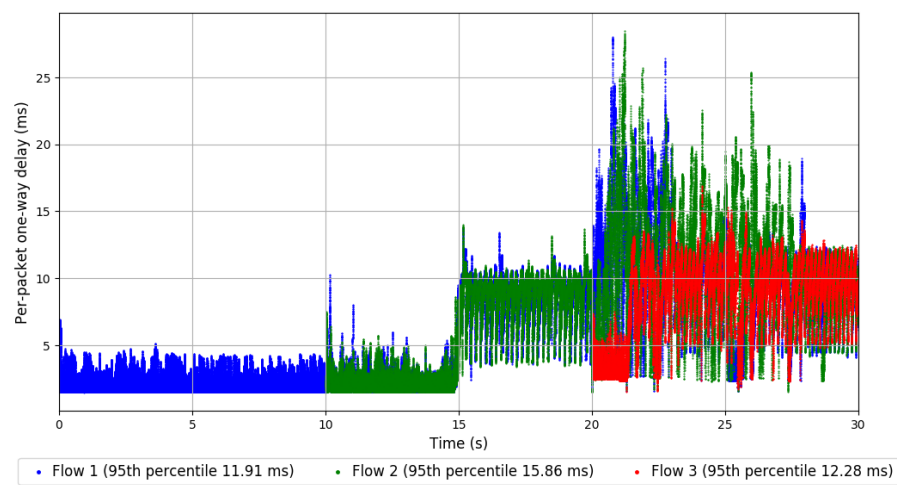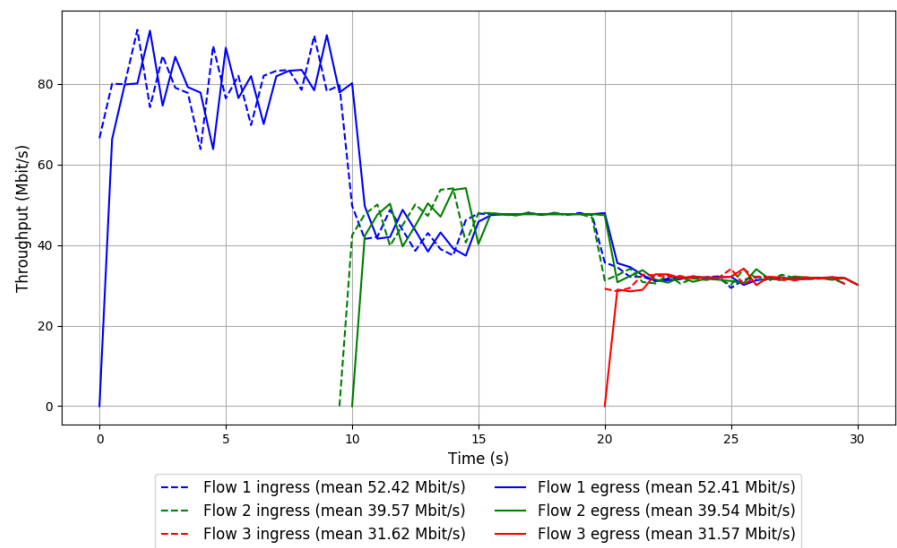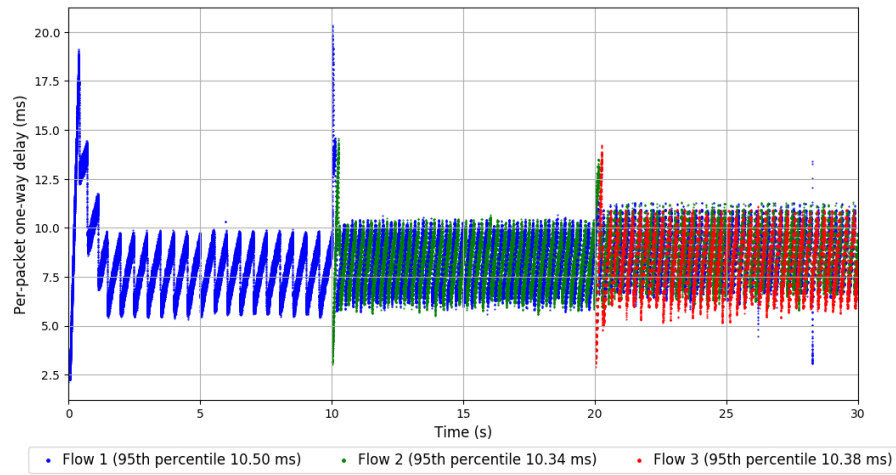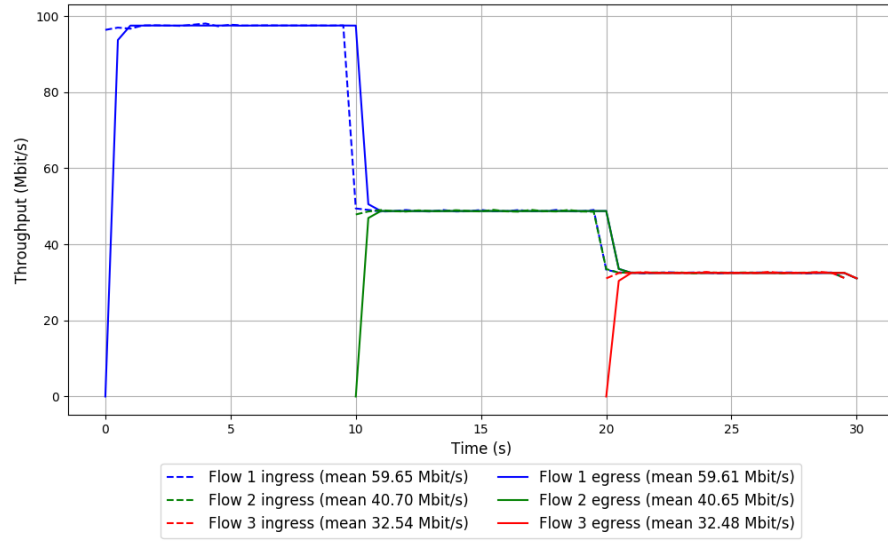
Run 4: Report of Copa — Data Link

Flow 1 ingress (mean 55.27 Mbit/s) —— Flow 1 egress (mean 55.24 Mbit/s)
Flow 2 ingress (mean 39.76 Mbit/s) —— Flow 2 egress (mean 39.75 Mbit/s)
Flow 3 ingress (mean 31.52 Mbit/s) —— Flow 3 egress (mean 31.49 Mbit/s)

• Flow 1 (95th percentile 11.85 ms)   • Flow 2 (95th percentile 12.37 ms)   • Flow 3 (95th percentile 12.59 ms)

```
Run 5: Statistics of Copa

Start at: 2019-02-12 05:52:32
End at: 2019-02-12 05:53:02
Local clock offset: -8.114 ms
Remote clock offset: 0.616 ms


# Below is generated by plot.py at 2019-02-12 06:13:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.24 Mbit/s
95th percentile per-packet one-way delay: 13.454 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 52.41 Mbit/s
95th percentile per-packet one-way delay: 11.915 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 39.54 Mbit/s
95th percentile per-packet one-way delay: 15.864 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 31.57 Mbit/s
95th percentile per-packet one-way delay: 12.283 ms
Loss rate: 0.16%
```
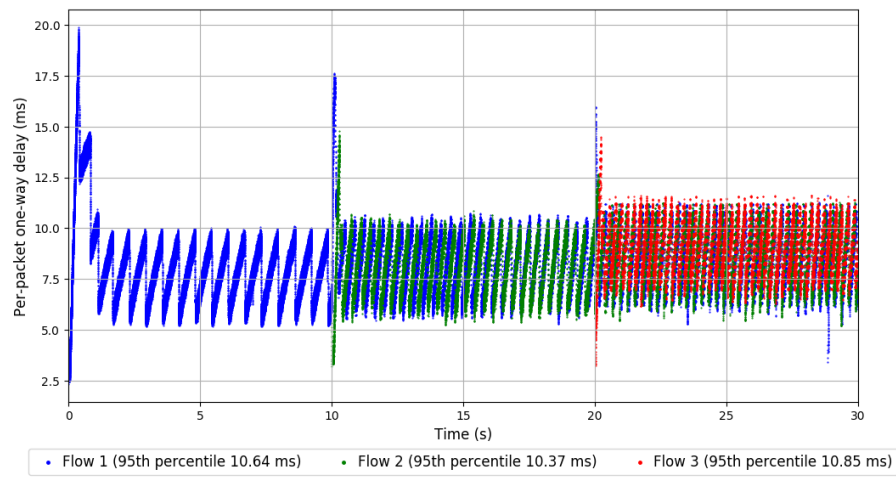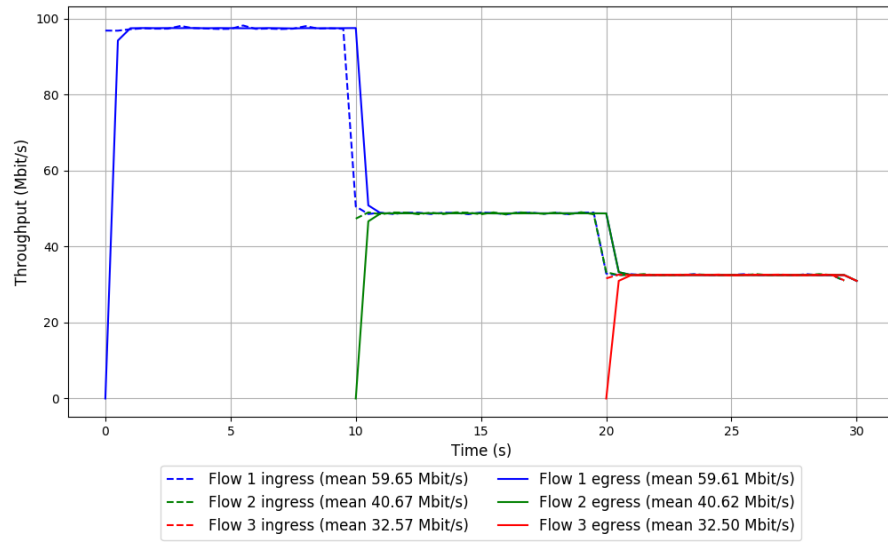
Run 5: Report of Copa — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2019-02-12 04:23:41
End at: 2019-02-12 04:24:11
Local clock offset: -0.485 ms
Remote clock offset: -1.968 ms


# Below is generated by plot.py at 2019-02-12 06:13:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.46 Mbit/s
95th percentile per-packet one-way delay: 10.413 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 59.61 Mbit/s
95th percentile per-packet one-way delay: 10.502 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 40.65 Mbit/s
95th percentile per-packet one-way delay: 10.340 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 32.48 Mbit/s
95th percentile per-packet one-way delay: 10.376 ms
Loss rate: 0.24%
```
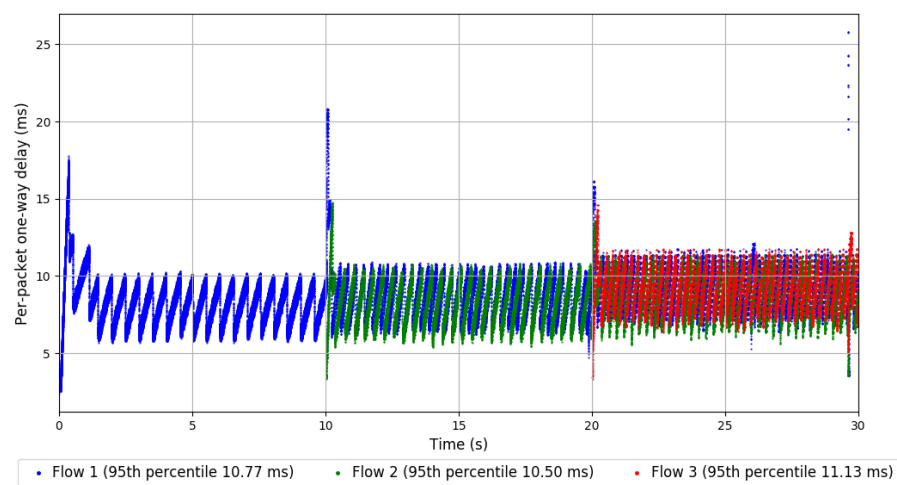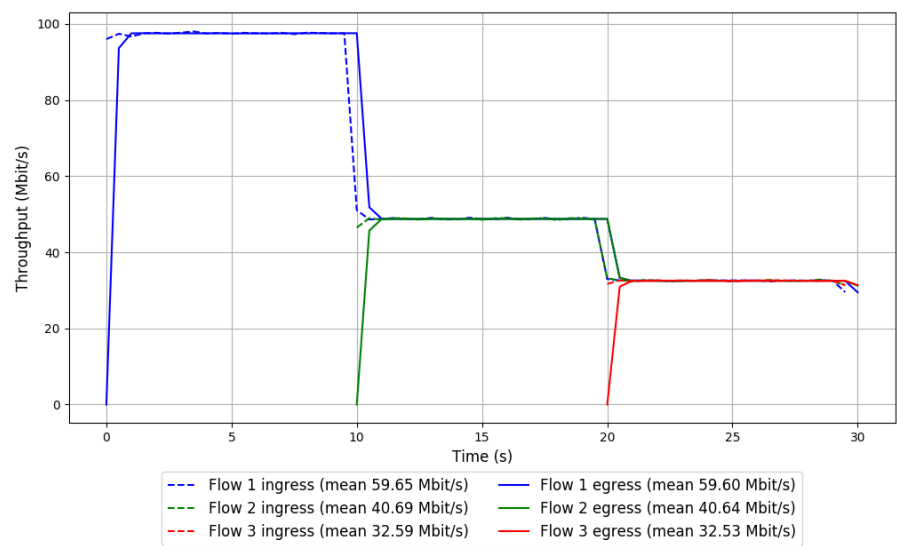
Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2019-02-12 04:47:54
End at: 2019-02-12 04:48:24
Local clock offset: -1.061 ms
Remote clock offset: -1.184 ms


# Below is generated by plot.py at 2019-02-12 06:13:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 10.641 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 59.61 Mbit/s
95th percentile per-packet one-way delay: 10.645 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 40.62 Mbit/s
95th percentile per-packet one-way delay: 10.370 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 32.50 Mbit/s
95th percentile per-packet one-way delay: 10.848 ms
Loss rate: 0.26%
```

Run 2: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 59.65 Mbit/s) ---- Flow 1 egress (mean 59.61 Mbit/s) ——
Flow 2 ingress (mean 40.67 Mbit/s) ---- Flow 2 egress (mean 40.62 Mbit/s) ——
Flow 3 ingress (mean 32.57 Mbit/s) ---- Flow 3 egress (mean 32.50 Mbit/s) ——

- Flow 1 (95th percentile 10.64 ms)   - Flow 2 (95th percentile 10.37 ms)   - Flow 3 (95th percentile 10.85 ms)

28

```
Run 3: Statistics of TCP Cubic

Start at: 2019-02-12 05:12:08
End at: 2019-02-12 05:12:38
Local clock offset: -4.556 ms
Remote clock offset: -0.156 ms


# Below is generated by plot.py at 2019-02-12 06:13:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.46 Mbit/s
95th percentile per-packet one-way delay: 10.789 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 59.60 Mbit/s
95th percentile per-packet one-way delay: 10.768 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 40.64 Mbit/s
95th percentile per-packet one-way delay: 10.497 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 32.53 Mbit/s
95th percentile per-packet one-way delay: 11.132 ms
Loss rate: 0.24%
```
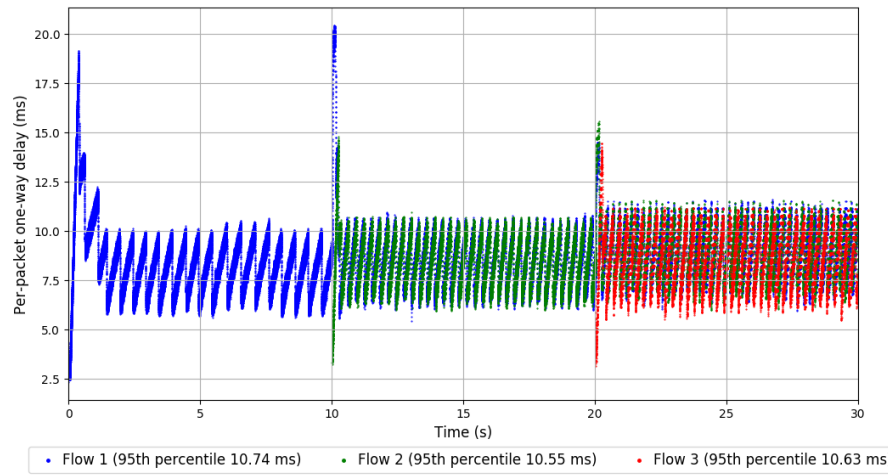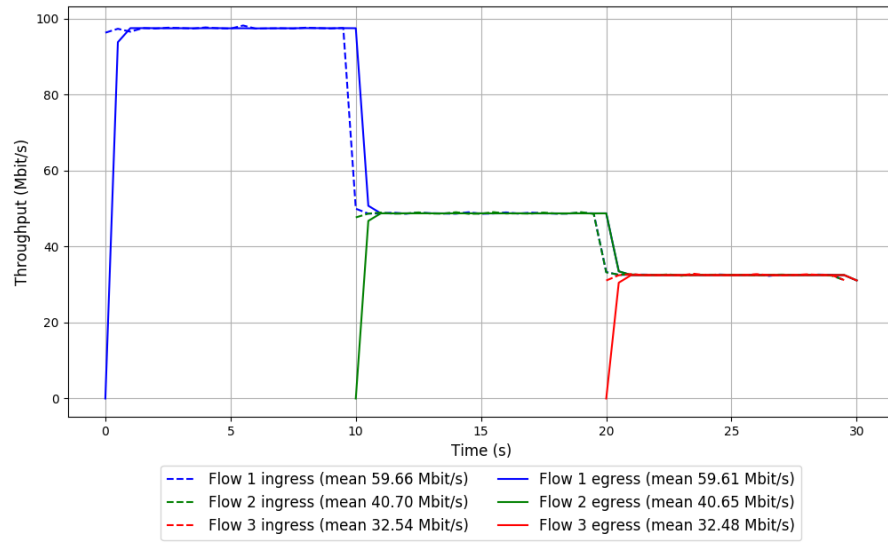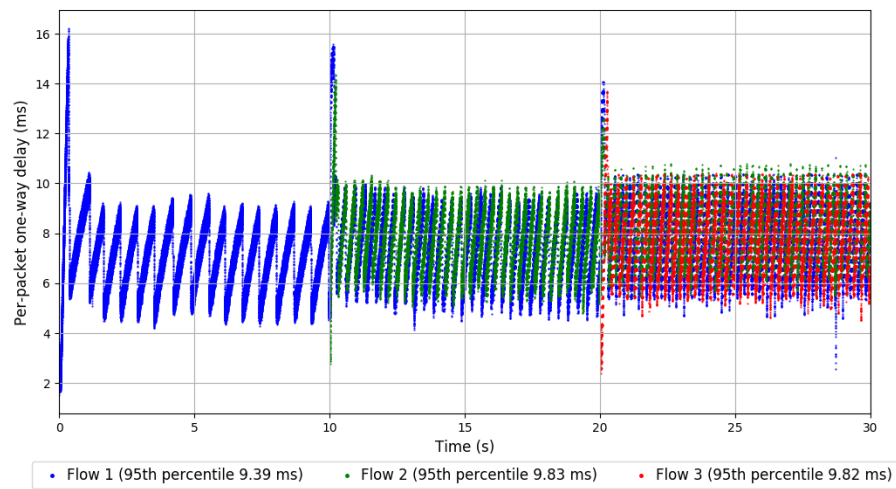
Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 59.65 Mbit/s) ---- Flow 1 egress (mean 59.60 Mbit/s) ——
Flow 2 ingress (mean 40.69 Mbit/s) ---- Flow 2 egress (mean 40.64 Mbit/s) ——
Flow 3 ingress (mean 32.59 Mbit/s) ---- Flow 3 egress (mean 32.53 Mbit/s) ——

• Flow 1 (95th percentile 10.77 ms)   • Flow 2 (95th percentile 10.50 ms)   • Flow 3 (95th percentile 11.13 ms)

30

```
Run 4: Statistics of TCP Cubic

Start at: 2019-02-12 05:36:21
End at: 2019-02-12 05:36:51
Local clock offset: -7.335 ms
Remote clock offset: 0.287 ms


# Below is generated by plot.py at 2019-02-12 06:13:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 10.641 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 59.61 Mbit/s
95th percentile per-packet one-way delay: 10.743 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 40.65 Mbit/s
95th percentile per-packet one-way delay: 10.547 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 32.48 Mbit/s
95th percentile per-packet one-way delay: 10.630 ms
Loss rate: 0.23%
```
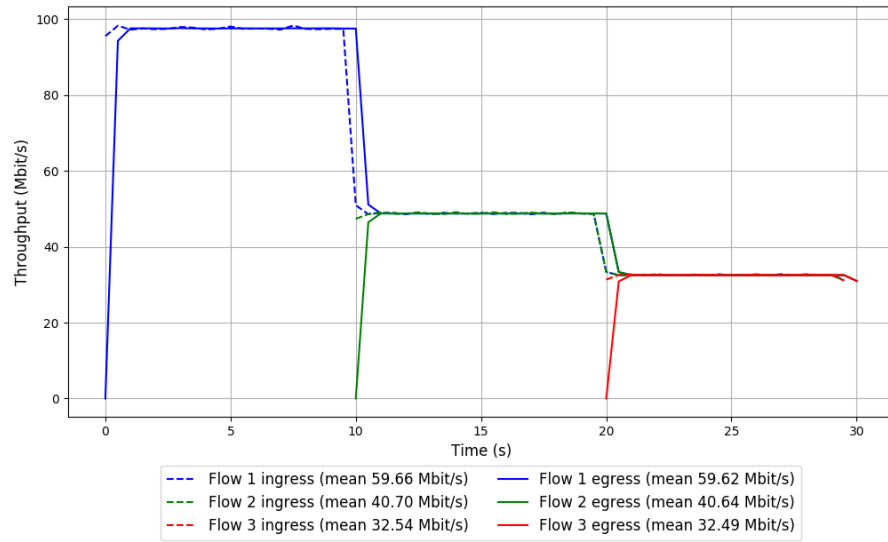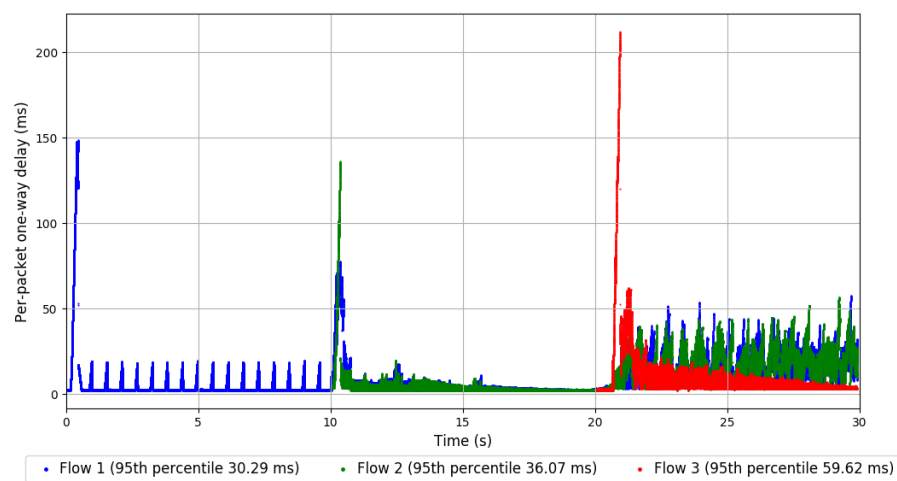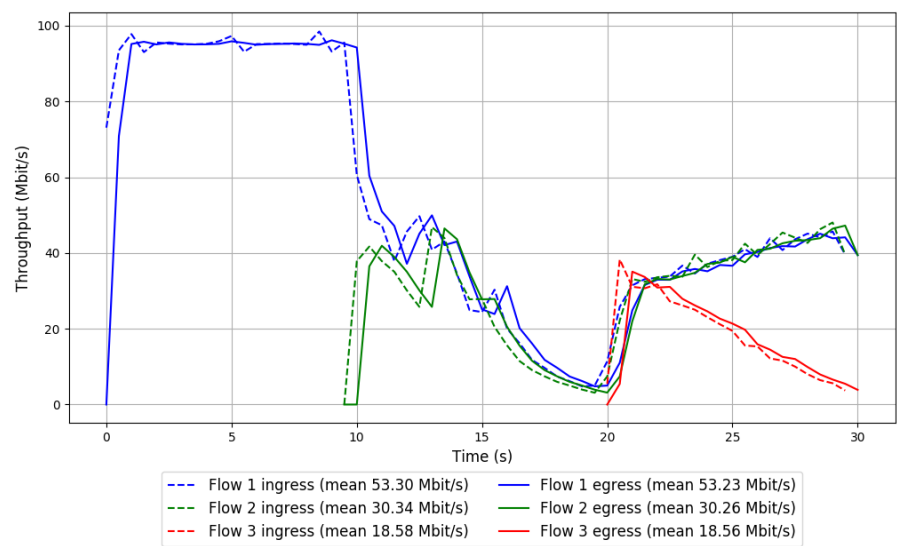
Run 4: Report of TCP Cubic — Data Link

- - - - Flow 1 ingress (mean 59.66 Mbit/s)   —— Flow 1 egress (mean 59.61 Mbit/s)
- - - - Flow 2 ingress (mean 40.70 Mbit/s)   —— Flow 2 egress (mean 40.65 Mbit/s)
- - - - Flow 3 ingress (mean 32.54 Mbit/s)   —— Flow 3 egress (mean 32.48 Mbit/s)

- Flow 1 (95th percentile 10.74 ms)   • Flow 2 (95th percentile 10.55 ms)   • Flow 3 (95th percentile 10.63 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2019-02-12 06:00:32
End at: 2019-02-12 06:01:02
Local clock offset: -8.249 ms
Remote clock offset: 0.692 ms


# Below is generated by plot.py at 2019-02-12 06:13:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 9.607 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 59.62 Mbit/s
95th percentile per-packet one-way delay: 9.390 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 40.64 Mbit/s
95th percentile per-packet one-way delay: 9.830 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 32.49 Mbit/s
95th percentile per-packet one-way delay: 9.820 ms
Loss rate: 0.22%
```
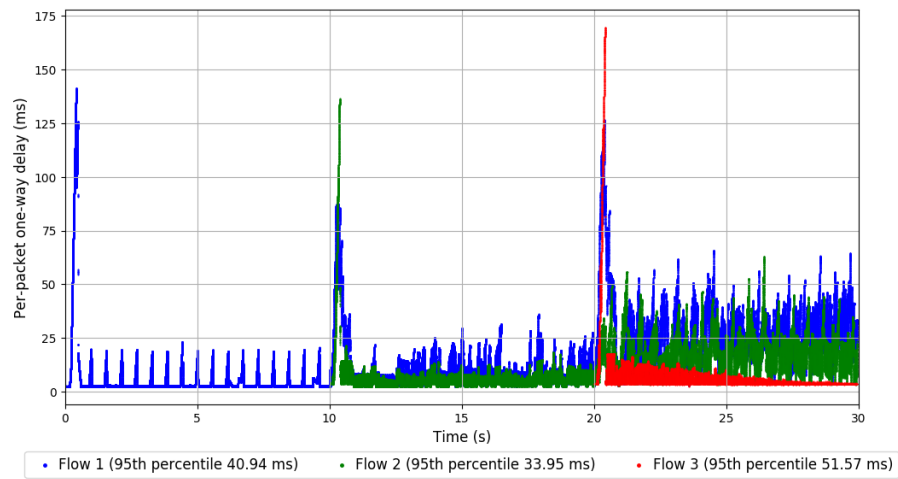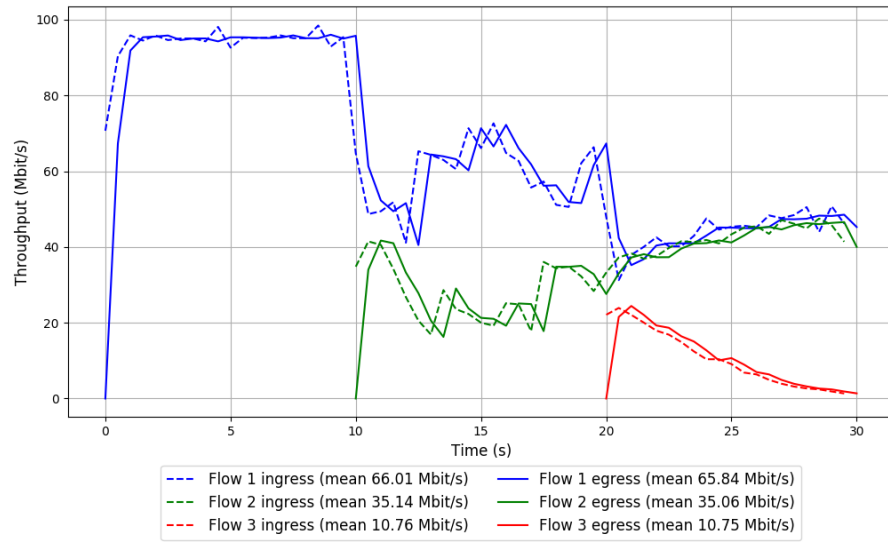
Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 59.66 Mbit/s) --- Flow 1 egress (mean 59.62 Mbit/s)
Flow 2 ingress (mean 40.70 Mbit/s) --- Flow 2 egress (mean 40.64 Mbit/s)
Flow 3 ingress (mean 32.54 Mbit/s) --- Flow 3 egress (mean 32.49 Mbit/s)

Flow 1 (95th percentile 9.39 ms)   Flow 2 (95th percentile 9.83 ms)   Flow 3 (95th percentile 9.82 ms)

```
Run 1: Statistics of FillP

Start at: 2019-02-12 04:12:10
End at: 2019-02-12 04:12:40
Local clock offset: -2.992 ms
Remote clock offset: -2.543 ms


# Below is generated by plot.py at 2019-02-12 06:13:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.52 Mbit/s
95th percentile per-packet one-way delay: 33.717 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 53.23 Mbit/s
95th percentile per-packet one-way delay: 30.285 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 30.26 Mbit/s
95th percentile per-packet one-way delay: 36.070 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 18.56 Mbit/s
95th percentile per-packet one-way delay: 59.625 ms
Loss rate: 0.12%
```
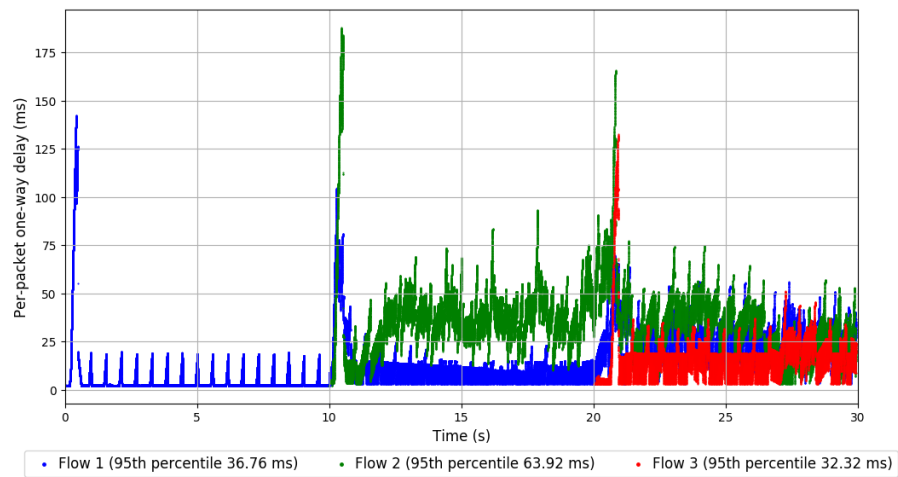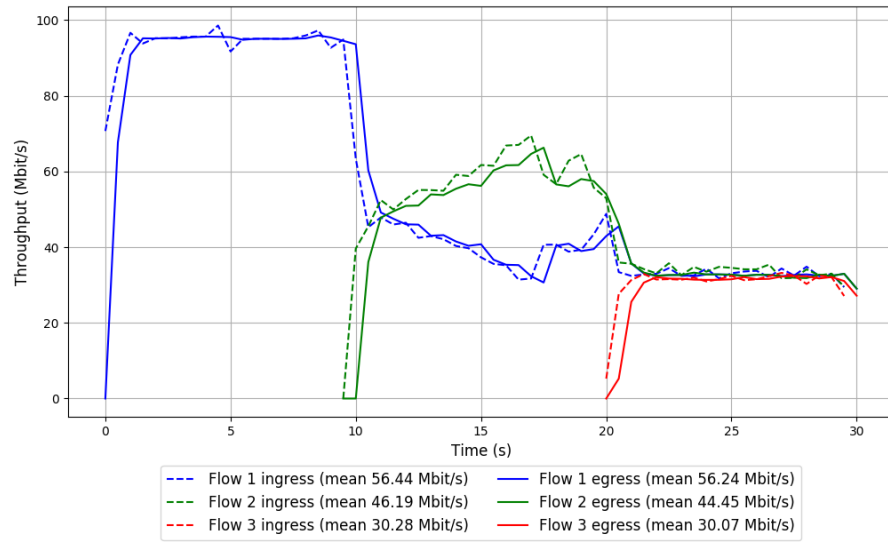
Run 1: Report of FillP — Data Link

```
Run 2: Statistics of FillP

Start at: 2019-02-12 04:36:24
End at: 2019-02-12 04:36:54
Local clock offset: 0.102 ms
Remote clock offset: -1.567 ms


# Below is generated by plot.py at 2019-02-12 06:13:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.75 Mbit/s
95th percentile per-packet one-way delay: 39.085 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 65.84 Mbit/s
95th percentile per-packet one-way delay: 40.943 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 35.06 Mbit/s
95th percentile per-packet one-way delay: 33.945 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 10.75 Mbit/s
95th percentile per-packet one-way delay: 51.568 ms
Loss rate: 0.02%
```
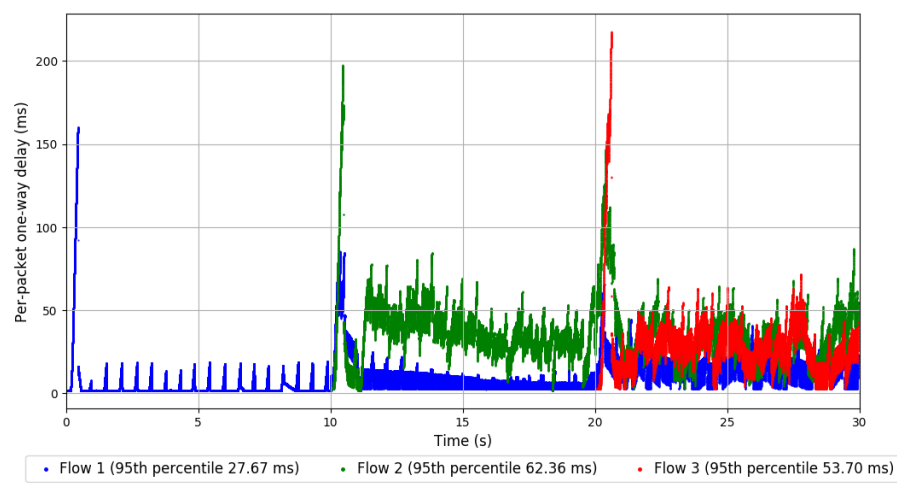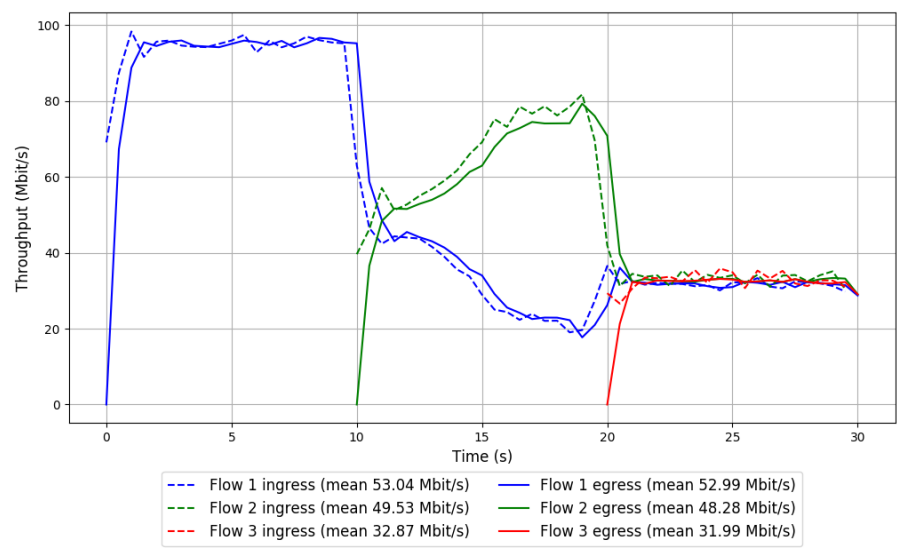
Run 2: Report of FillP — Data Link

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```
Run 3: Statistics of FillP

Start at: 2019-02-12 05:00:37
End at: 2019-02-12 05:01:07
Local clock offset: -1.145 ms
Remote clock offset: -0.62 ms

# Below is generated by plot.py at 2019-02-12 06:13:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.83 Mbit/s
95th percentile per-packet one-way delay: 53.181 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 56.24 Mbit/s
95th percentile per-packet one-way delay: 36.757 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 44.45 Mbit/s
95th percentile per-packet one-way delay: 63.918 ms
Loss rate: 3.79%
-- Flow 3:
Average throughput: 30.07 Mbit/s
95th percentile per-packet one-way delay: 32.318 ms
Loss rate: 0.72%
```
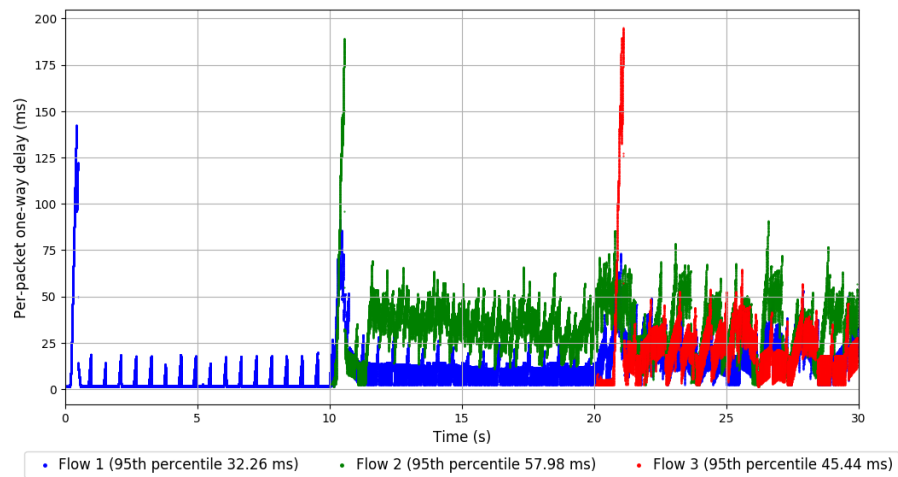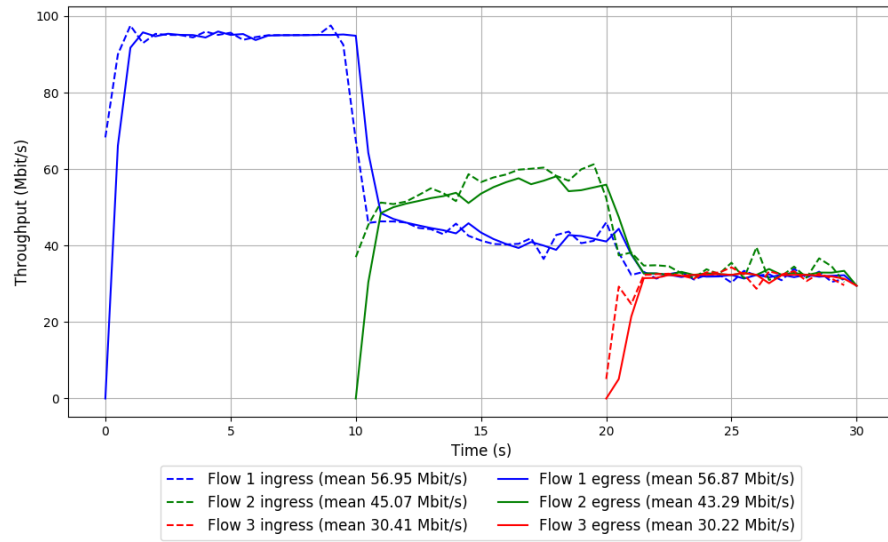
Run 3: Report of FillP — Data Link

```
Run 4: Statistics of FillP

Start at: 2019-02-12 05:24:50
End at: 2019-02-12 05:25:20
Local clock offset: -7.565 ms
Remote clock offset: 0.104 ms


# Below is generated by plot.py at 2019-02-12 06:13:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.74 Mbit/s
95th percentile per-packet one-way delay: 54.289 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 52.99 Mbit/s
95th percentile per-packet one-way delay: 27.669 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 48.28 Mbit/s
95th percentile per-packet one-way delay: 62.356 ms
Loss rate: 2.52%
-- Flow 3:
Average throughput: 31.99 Mbit/s
95th percentile per-packet one-way delay: 53.704 ms
Loss rate: 2.54%
```
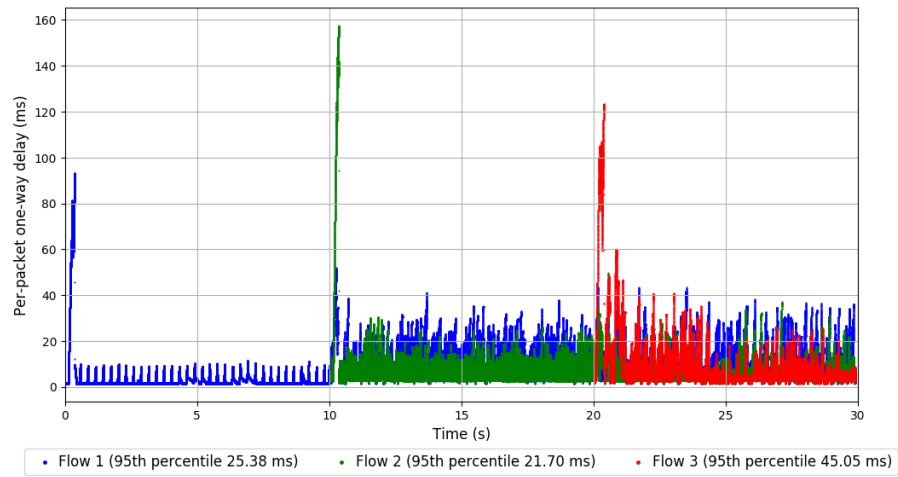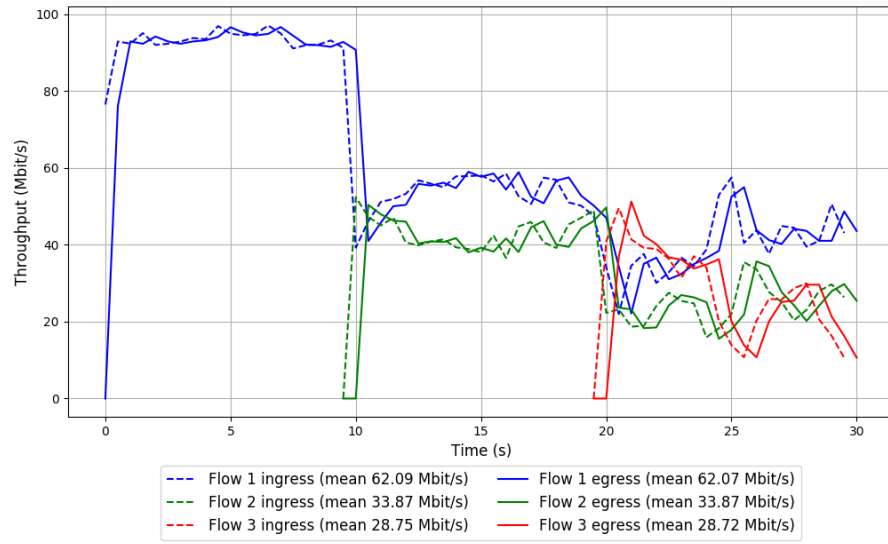
Run 4: Report of FillP — Data Link

- - - Flow 1 ingress (mean 53.04 Mbit/s) —— Flow 1 egress (mean 52.99 Mbit/s)
- - - Flow 2 ingress (mean 49.53 Mbit/s) —— Flow 2 egress (mean 48.28 Mbit/s)
- - - Flow 3 ingress (mean 32.87 Mbit/s) —— Flow 3 egress (mean 31.99 Mbit/s)

• Flow 1 (95th percentile 27.67 ms)   • Flow 2 (95th percentile 62.36 ms)   • Flow 3 (95th percentile 53.70 ms)

```
Run 5: Statistics of FillP

Start at: 2019-02-12 05:49:02
End at: 2019-02-12 05:49:32
Local clock offset: -8.047 ms
Remote clock offset: 0.553 ms


# Below is generated by plot.py at 2019-02-12 06:14:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.72 Mbit/s
95th percentile per-packet one-way delay: 51.242 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 56.87 Mbit/s
95th percentile per-packet one-way delay: 32.264 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 43.29 Mbit/s
95th percentile per-packet one-way delay: 57.980 ms
Loss rate: 3.94%
-- Flow 3:
Average throughput: 30.22 Mbit/s
95th percentile per-packet one-way delay: 45.440 ms
Loss rate: 0.70%
```
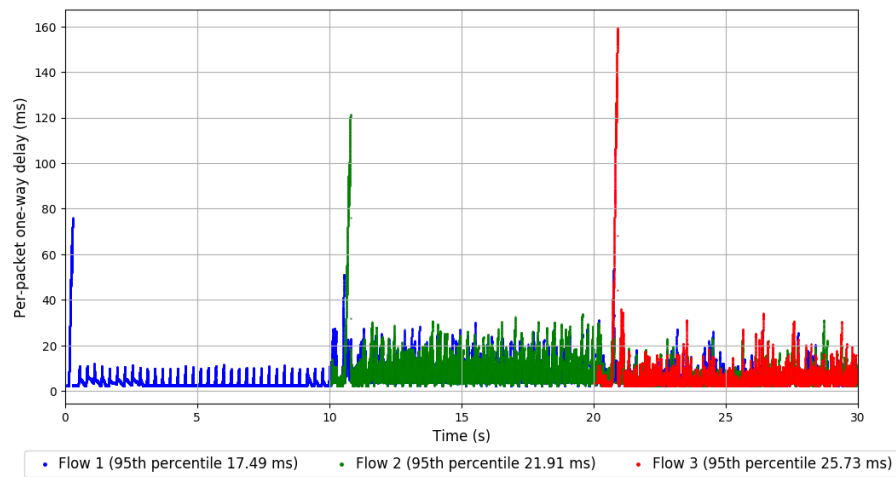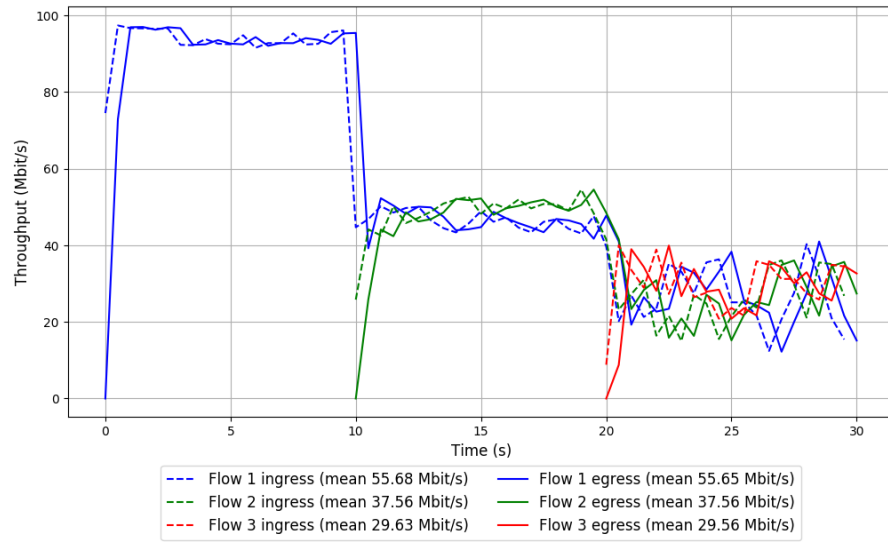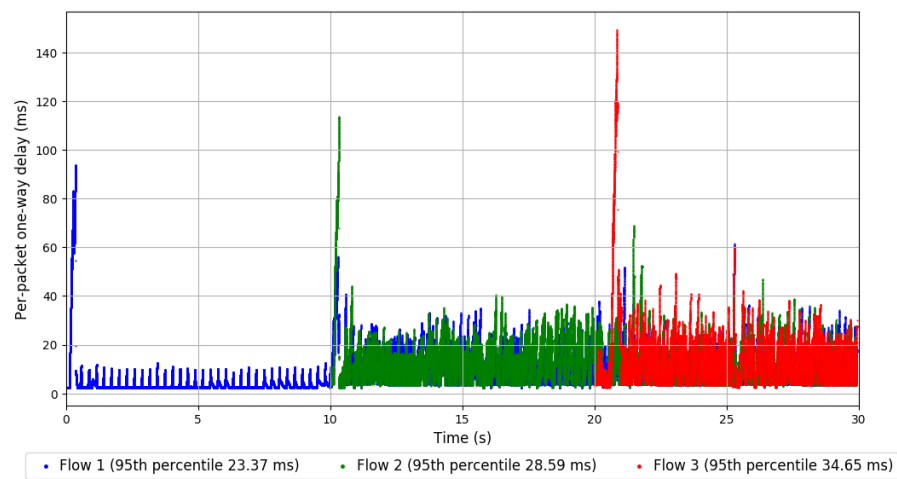
Run 5: Report of FillP — Data Link

Flow 1 ingress (mean 56.95 Mbit/s) --- Flow 1 egress (mean 56.87 Mbit/s)
Flow 2 ingress (mean 45.07 Mbit/s) --- Flow 2 egress (mean 43.29 Mbit/s)
Flow 3 ingress (mean 30.41 Mbit/s) --- Flow 3 egress (mean 30.22 Mbit/s)

Flow 1 (95th percentile 32.26 ms)   Flow 2 (95th percentile 57.98 ms)   Flow 3 (95th percentile 45.44 ms)

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```
Run 1: Statistics of FillP-Sheep

Start at: 2019-02-12 04:27:11
End at: 2019-02-12 04:27:41
Local clock offset: -0.717 ms
Remote clock offset: -1.834 ms


# Below is generated by plot.py at 2019-02-12 06:14:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.19 Mbit/s
95th percentile per-packet one-way delay: 25.815 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 62.07 Mbit/s
95th percentile per-packet one-way delay: 25.377 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 33.87 Mbit/s
95th percentile per-packet one-way delay: 21.705 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 28.72 Mbit/s
95th percentile per-packet one-way delay: 45.052 ms
Loss rate: 0.06%
```
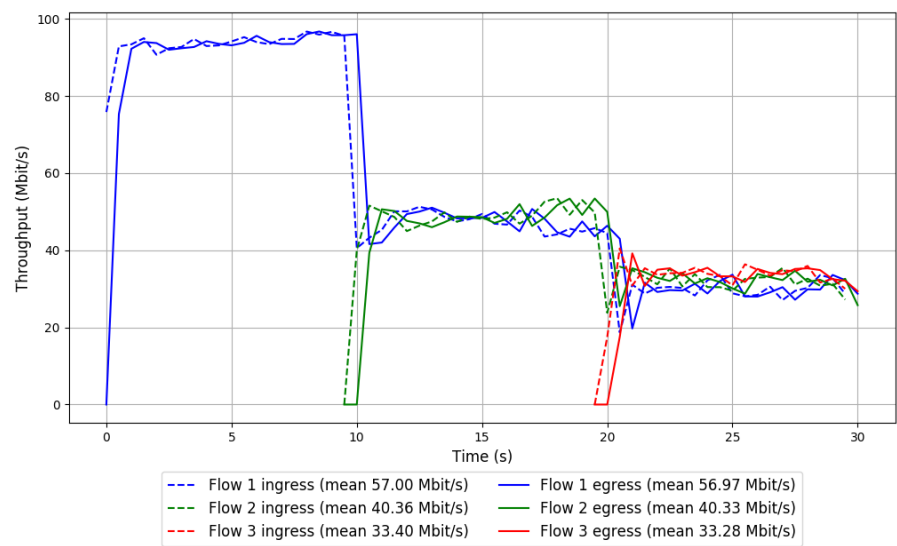
Run 1: Report of FillP-Sheep — Data Link

```
Run 2: Statistics of FillP-Sheep

Start at: 2019-02-12 04:51:24
End at: 2019-02-12 04:51:54
Local clock offset: -1.157 ms
Remote clock offset: -1.011 ms


# Below is generated by plot.py at 2019-02-12 06:14:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.44 Mbit/s
95th percentile per-packet one-way delay: 19.512 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 55.65 Mbit/s
95th percentile per-packet one-way delay: 17.486 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 37.56 Mbit/s
95th percentile per-packet one-way delay: 21.910 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.56 Mbit/s
95th percentile per-packet one-way delay: 25.735 ms
Loss rate: 0.41%
```
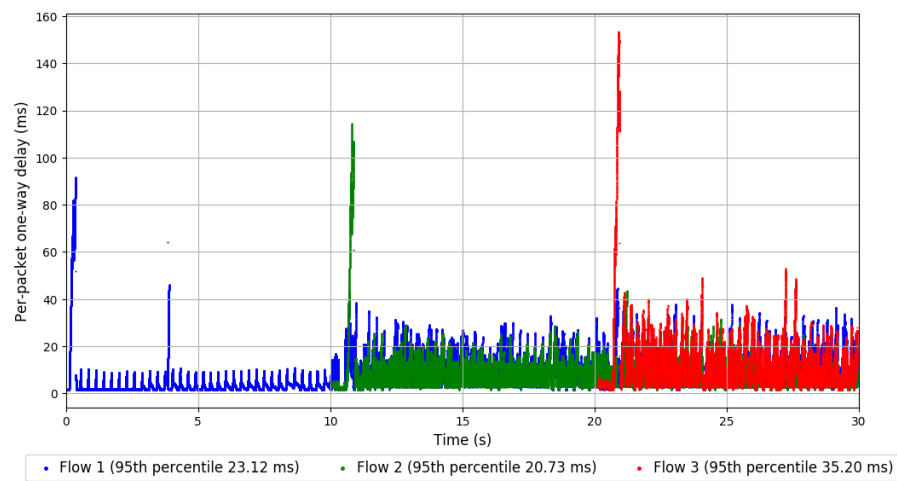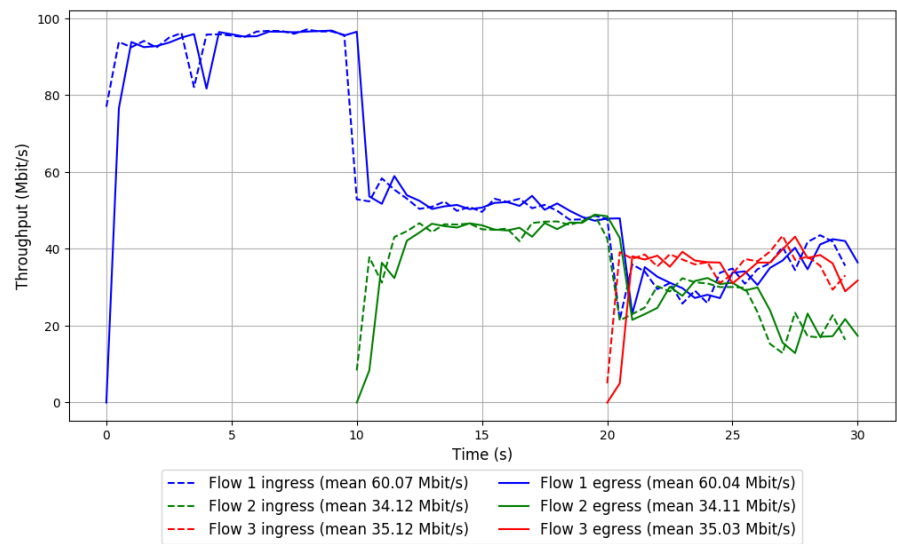
Run 2: Report of FillP-Sheep — Data Link

```
Run 3: Statistics of FillP-Sheep

Start at: 2019-02-12 05:15:38
End at: 2019-02-12 05:16:08
Local clock offset: -5.423 ms
Remote clock offset: -0.075 ms


# Below is generated by plot.py at 2019-02-12 06:14:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.90 Mbit/s
95th percentile per-packet one-way delay: 26.709 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 56.97 Mbit/s
95th percentile per-packet one-way delay: 23.371 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 40.33 Mbit/s
95th percentile per-packet one-way delay: 28.585 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 33.28 Mbit/s
95th percentile per-packet one-way delay: 34.650 ms
Loss rate: 0.34%
```
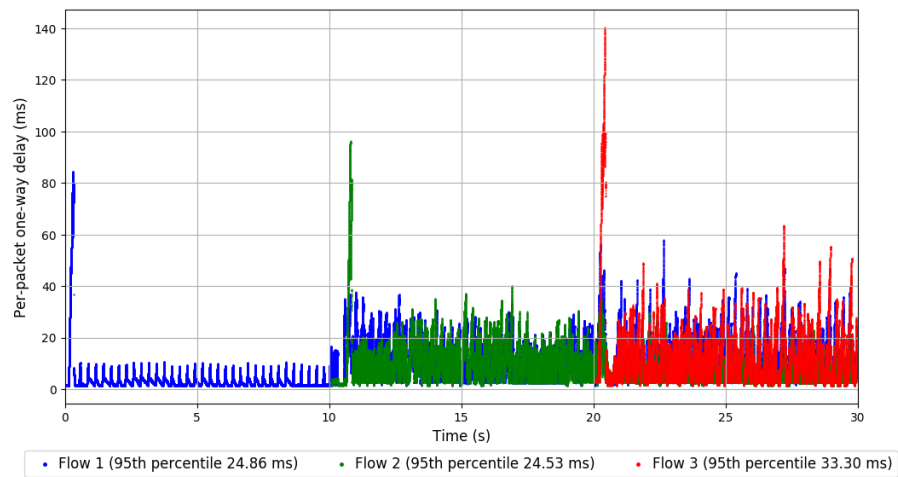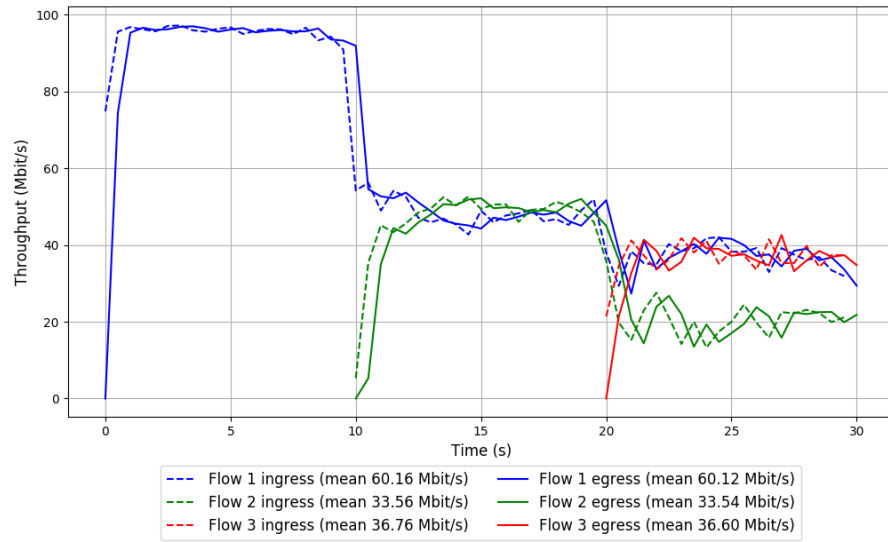
Run 3: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 57.00 Mbit/s)   Flow 1 egress (mean 56.97 Mbit/s)
Flow 2 ingress (mean 40.36 Mbit/s)   Flow 2 egress (mean 40.33 Mbit/s)
Flow 3 ingress (mean 33.40 Mbit/s)   Flow 3 egress (mean 33.28 Mbit/s)

Flow 1 (95th percentile 23.37 ms)   Flow 2 (95th percentile 28.59 ms)   Flow 3 (95th percentile 34.65 ms)

```
Run 4: Statistics of FillP-Sheep

Start at: 2019-02-12 05:39:51
End at: 2019-02-12 05:40:21
Local clock offset: -7.977 ms
Remote clock offset: 0.373 ms


# Below is generated by plot.py at 2019-02-12 06:14:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.38 Mbit/s
95th percentile per-packet one-way delay: 24.319 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 60.04 Mbit/s
95th percentile per-packet one-way delay: 23.117 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 34.11 Mbit/s
95th percentile per-packet one-way delay: 20.728 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 35.03 Mbit/s
95th percentile per-packet one-way delay: 35.196 ms
Loss rate: 0.27%
```
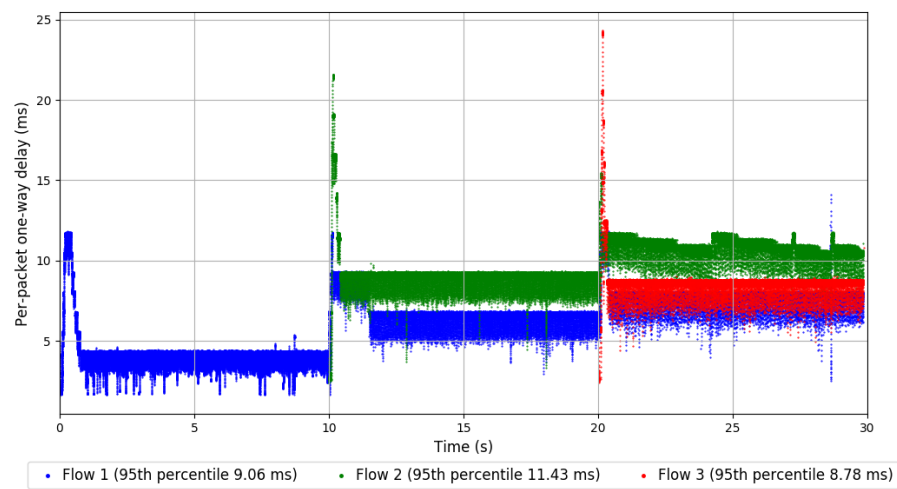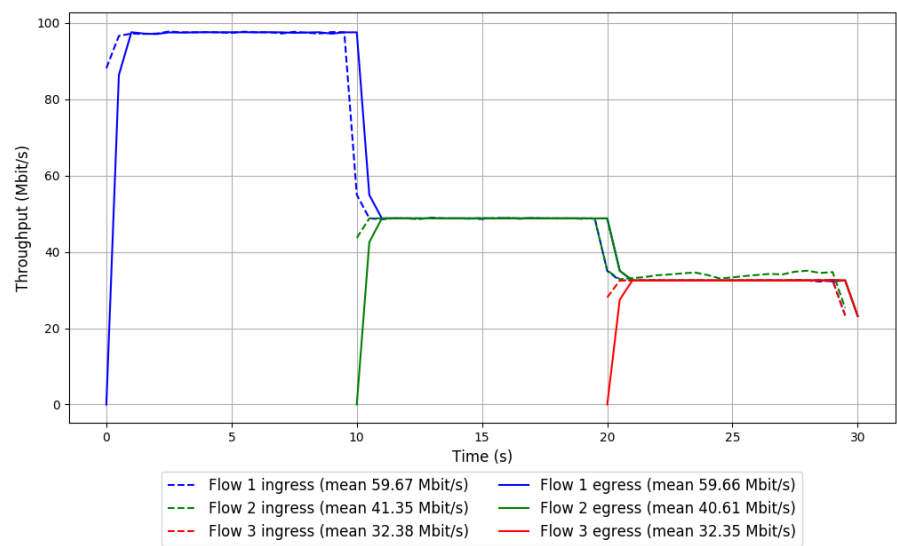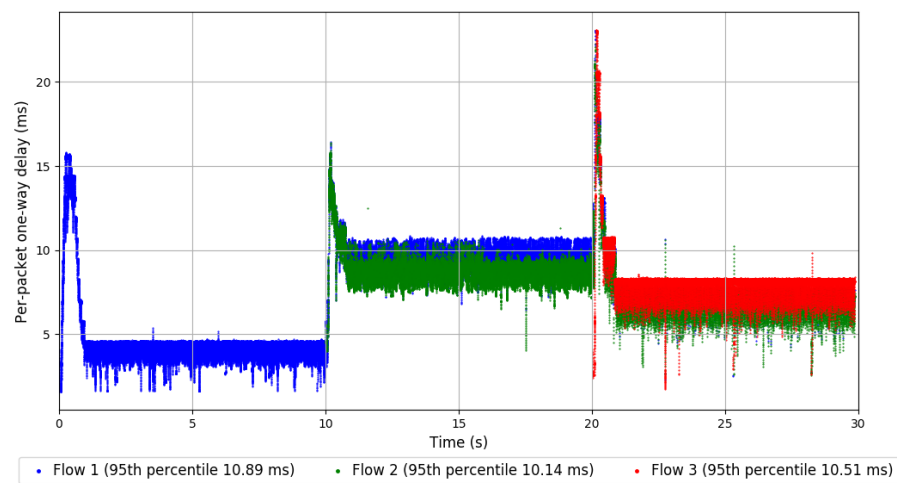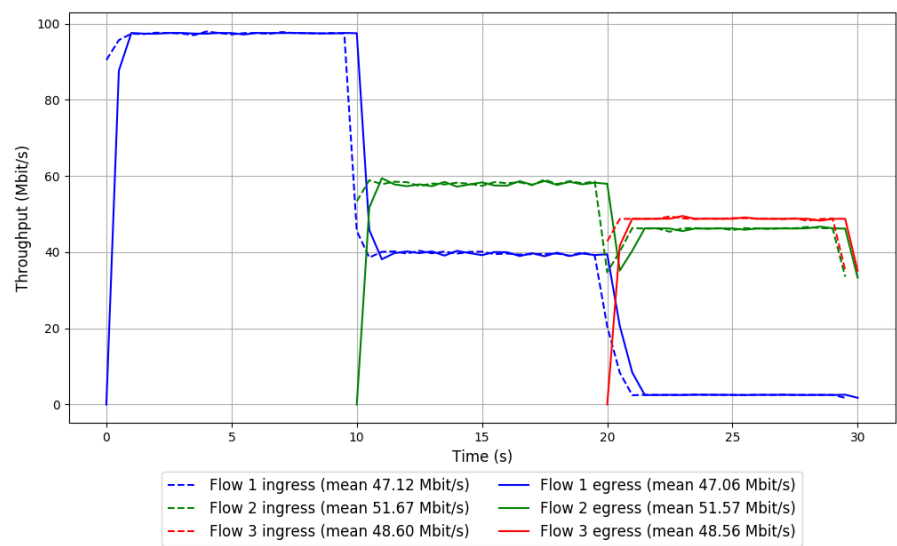
Run 4: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 60.07 Mbit/s)   Flow 1 egress (mean 60.04 Mbit/s)
Flow 2 ingress (mean 34.12 Mbit/s)   Flow 2 egress (mean 34.11 Mbit/s)
Flow 3 ingress (mean 35.12 Mbit/s)   Flow 3 egress (mean 35.03 Mbit/s)

Flow 1 (95th percentile 23.12 ms)   Flow 2 (95th percentile 20.73 ms)   Flow 3 (95th percentile 35.20 ms)

```
Run 5: Statistics of FillP-Sheep

Start at: 2019-02-12 06:04:01
End at: 2019-02-12 06:04:31
Local clock offset: -8.421 ms
Remote clock offset: 0.642 ms


# Below is generated by plot.py at 2019-02-12 06:15:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.59 Mbit/s
95th percentile per-packet one-way delay: 26.067 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 60.12 Mbit/s
95th percentile per-packet one-way delay: 24.855 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 33.54 Mbit/s
95th percentile per-packet one-way delay: 24.533 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 36.60 Mbit/s
95th percentile per-packet one-way delay: 33.305 ms
Loss rate: 0.37%
```

Run 5: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 60.16 Mbit/s) --- Flow 1 egress (mean 60.12 Mbit/s)
Flow 2 ingress (mean 33.56 Mbit/s) --- Flow 2 egress (mean 33.54 Mbit/s)
Flow 3 ingress (mean 36.76 Mbit/s) --- Flow 3 egress (mean 36.60 Mbit/s)

Flow 1 (95th percentile 24.86 ms)   Flow 2 (95th percentile 24.53 ms)   Flow 3 (95th percentile 33.30 ms)

```
Run 1: Statistics of Indigo

Start at: 2019-02-12 04:30:35
End at: 2019-02-12 04:31:05
Local clock offset: -0.339 ms
Remote clock offset: -1.777 ms


# Below is generated by plot.py at 2019-02-12 06:15:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.31 Mbit/s
95th percentile per-packet one-way delay: 11.044 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 59.66 Mbit/s
95th percentile per-packet one-way delay: 9.056 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 40.61 Mbit/s
95th percentile per-packet one-way delay: 11.433 ms
Loss rate: 1.81%
-- Flow 3:
Average throughput: 32.35 Mbit/s
95th percentile per-packet one-way delay: 8.775 ms
Loss rate: 0.11%
```
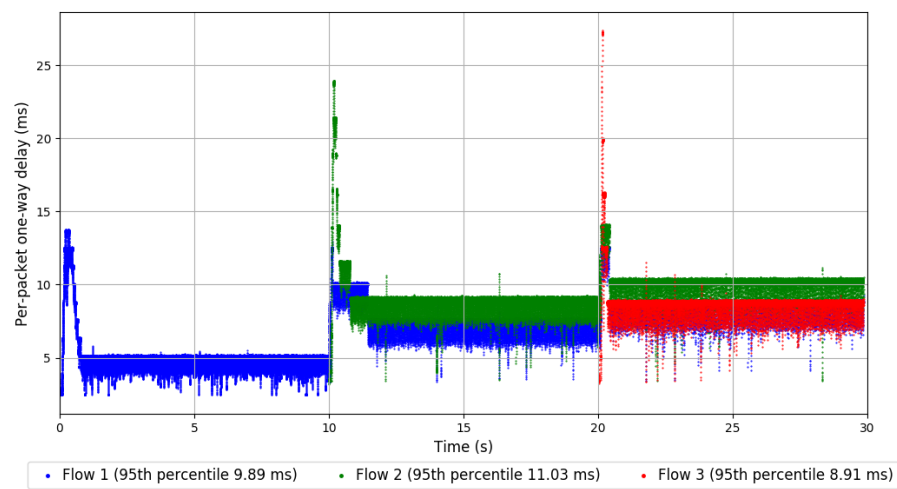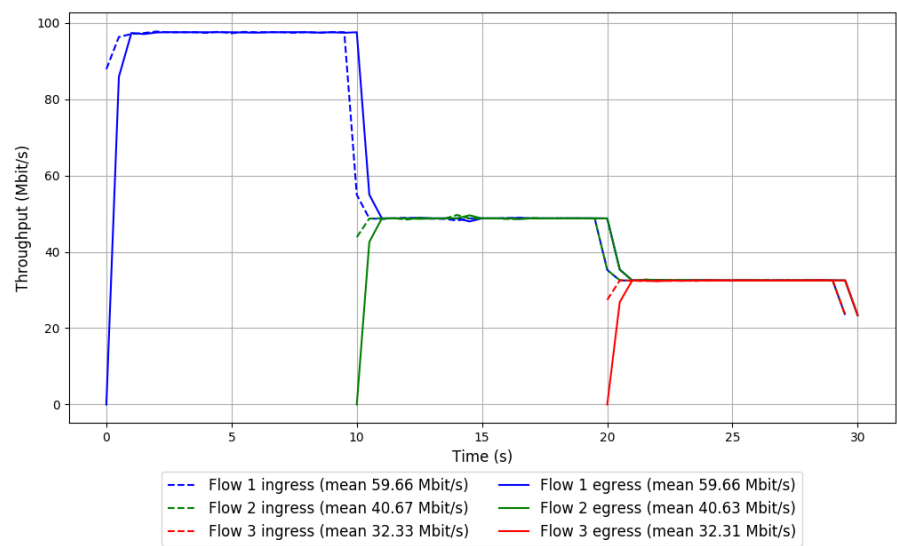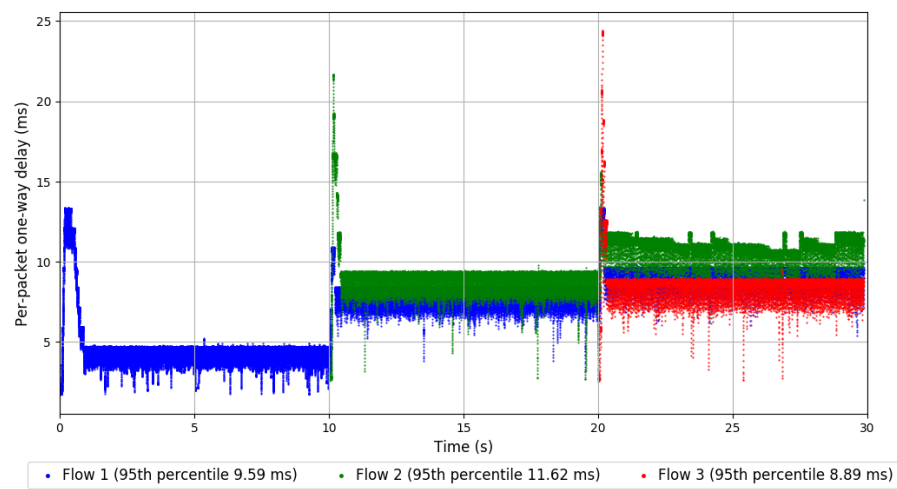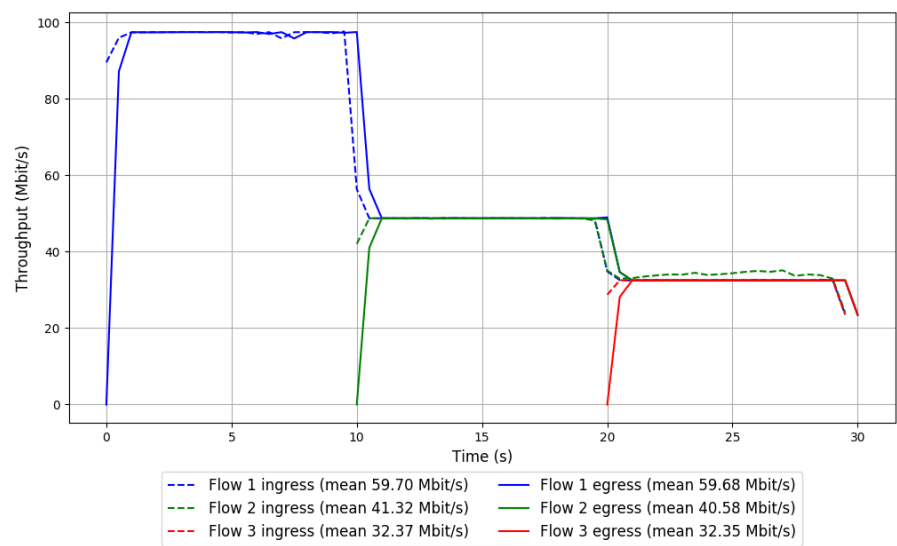
Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2019-02-12 04:54:48
End at: 2019-02-12 04:55:18
Local clock offset: -1.935 ms
Remote clock offset: -0.833 ms


# Below is generated by plot.py at 2019-02-12 06:15:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.34 Mbit/s
95th percentile per-packet one-way delay: 10.584 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 47.06 Mbit/s
95th percentile per-packet one-way delay: 10.886 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 51.57 Mbit/s
95th percentile per-packet one-way delay: 10.142 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 48.56 Mbit/s
95th percentile per-packet one-way delay: 10.510 ms
Loss rate: 0.13%
```

Run 2: Report of Indigo — Data Link

- - - Flow 1 ingress (mean 47.12 Mbit/s) — Flow 1 egress (mean 47.06 Mbit/s)
- - - Flow 2 ingress (mean 51.67 Mbit/s) — Flow 2 egress (mean 51.57 Mbit/s)
- - - Flow 3 ingress (mean 48.60 Mbit/s) — Flow 3 egress (mean 48.56 Mbit/s)

• Flow 1 (95th percentile 10.89 ms)   • Flow 2 (95th percentile 10.14 ms)   • Flow 3 (95th percentile 10.51 ms)

```
Run 3: Statistics of Indigo

Start at: 2019-02-12 05:19:02
End at: 2019-02-12 05:19:32
Local clock offset: -6.008 ms
Remote clock offset: 0.03 ms


# Below is generated by plot.py at 2019-02-12 06:15:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.31 Mbit/s
95th percentile per-packet one-way delay: 10.337 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 59.66 Mbit/s
95th percentile per-packet one-way delay: 9.890 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 40.63 Mbit/s
95th percentile per-packet one-way delay: 11.026 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 32.31 Mbit/s
95th percentile per-packet one-way delay: 8.914 ms
Loss rate: 0.11%
```
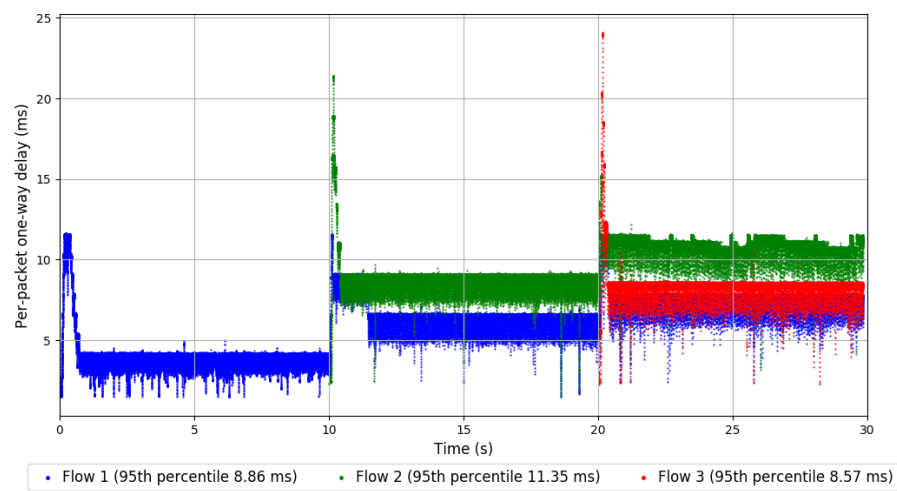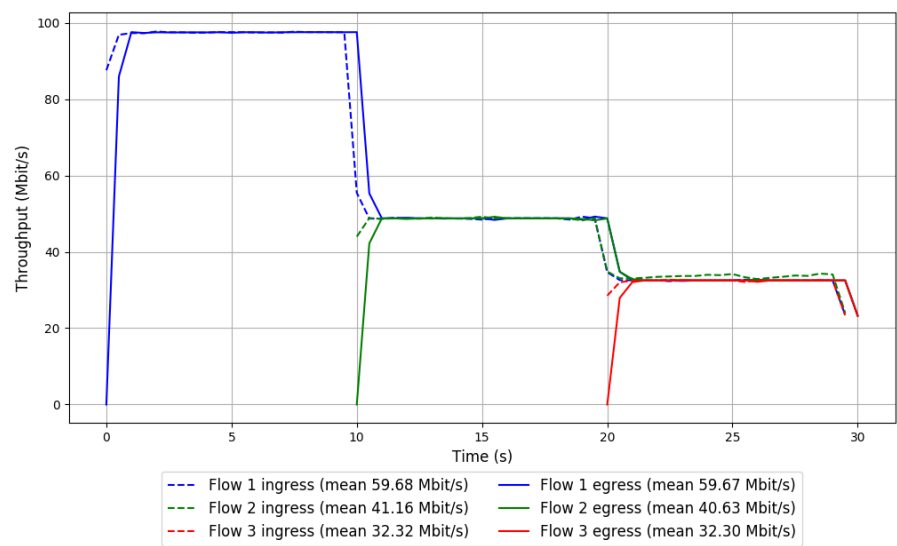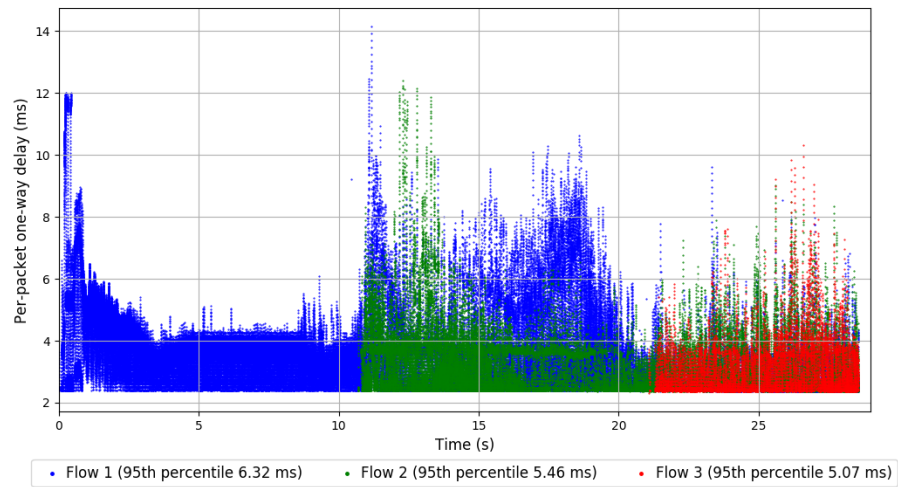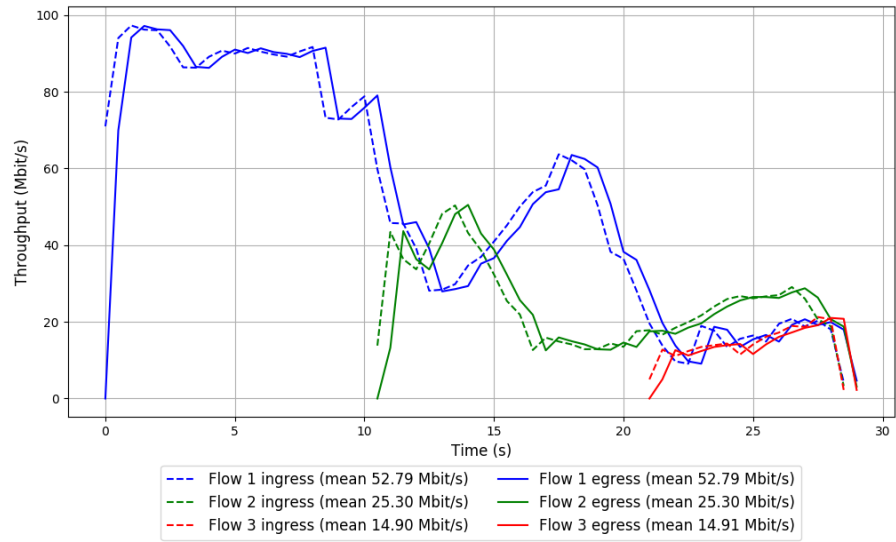
Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2019-02-12 05:43:15
End at: 2019-02-12 05:43:45
Local clock offset: -7.935 ms
Remote clock offset: 0.349 ms


# Below is generated by plot.py at 2019-02-12 06:15:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.31 Mbit/s
95th percentile per-packet one-way delay: 11.242 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 59.68 Mbit/s
95th percentile per-packet one-way delay: 9.586 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 40.58 Mbit/s
95th percentile per-packet one-way delay: 11.625 ms
Loss rate: 1.81%
-- Flow 3:
Average throughput: 32.35 Mbit/s
95th percentile per-packet one-way delay: 8.893 ms
Loss rate: 0.11%
```
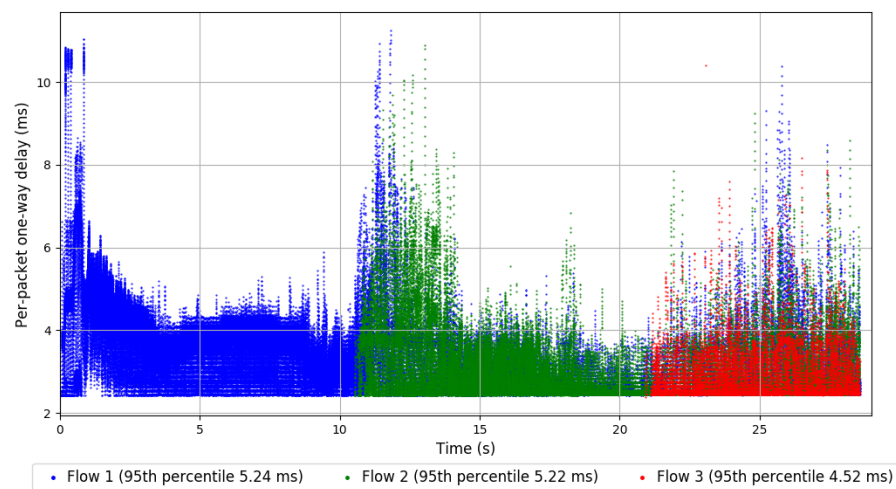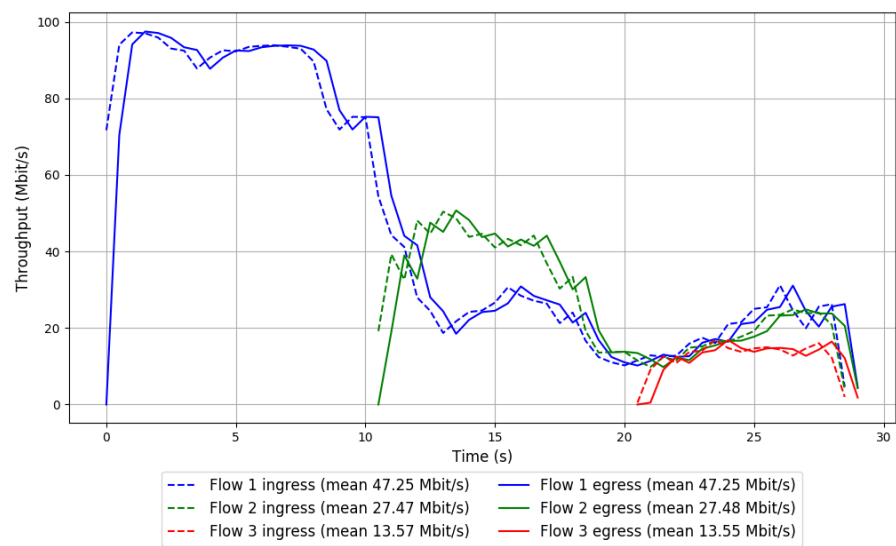
Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2019-02-12 06:07:25
End at: 2019-02-12 06:07:55
Local clock offset: -7.767 ms
Remote clock offset: 0.706 ms


# Below is generated by plot.py at 2019-02-12 06:15:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.31 Mbit/s
95th percentile per-packet one-way delay: 10.993 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 59.67 Mbit/s
95th percentile per-packet one-way delay: 8.857 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 40.63 Mbit/s
95th percentile per-packet one-way delay: 11.350 ms
Loss rate: 1.32%
-- Flow 3:
Average throughput: 32.30 Mbit/s
95th percentile per-packet one-way delay: 8.574 ms
Loss rate: 0.11%
```
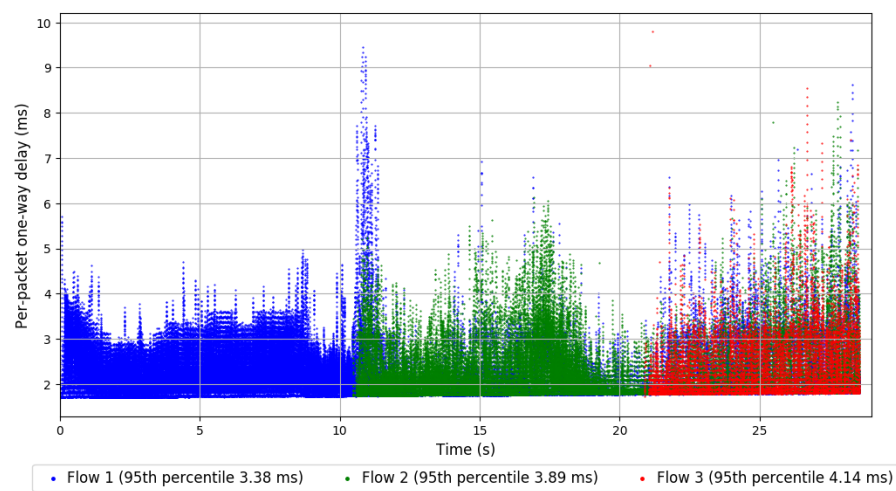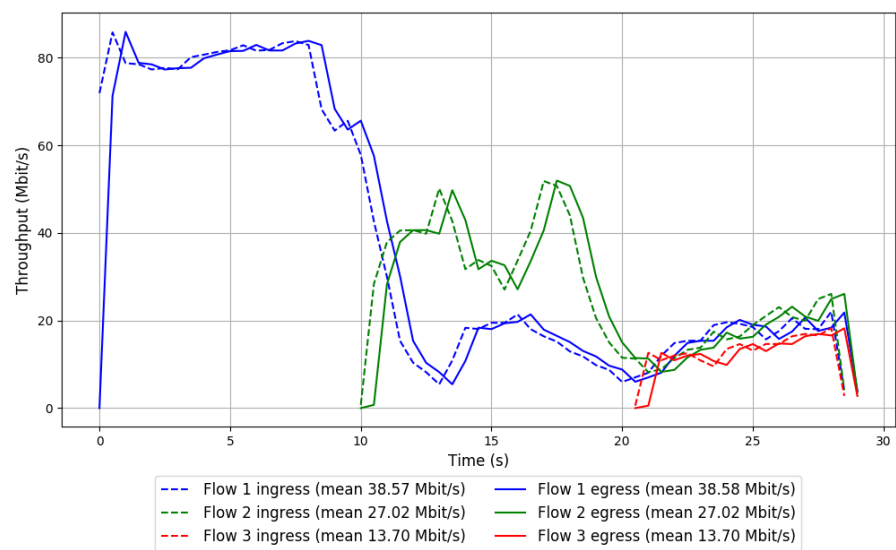
Run 5: Report of Indigo — Data Link

```
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-02-12 04:28:19
End at: 2019-02-12 04:28:49
Local clock offset: 0.164 ms
Remote clock offset: -1.843 ms


# Below is generated by plot.py at 2019-02-12 06:15:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.53 Mbit/s
95th percentile per-packet one-way delay: 6.089 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 52.79 Mbit/s
95th percentile per-packet one-way delay: 6.321 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 25.30 Mbit/s
95th percentile per-packet one-way delay: 5.457 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 14.91 Mbit/s
95th percentile per-packet one-way delay: 5.074 ms
Loss rate: 0.05%
```

Run 1: Report of Indigo-MusesC3 — Data Link

```
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-02-12 04:52:32
End at: 2019-02-12 04:53:02
Local clock offset: -1.163 ms
Remote clock offset: -0.956 ms


# Below is generated by plot.py at 2019-02-12 06:15:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.22 Mbit/s
95th percentile per-packet one-way delay: 5.207 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 47.25 Mbit/s
95th percentile per-packet one-way delay: 5.236 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 27.48 Mbit/s
95th percentile per-packet one-way delay: 5.225 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 13.55 Mbit/s
95th percentile per-packet one-way delay: 4.519 ms
Loss rate: 0.13%
```
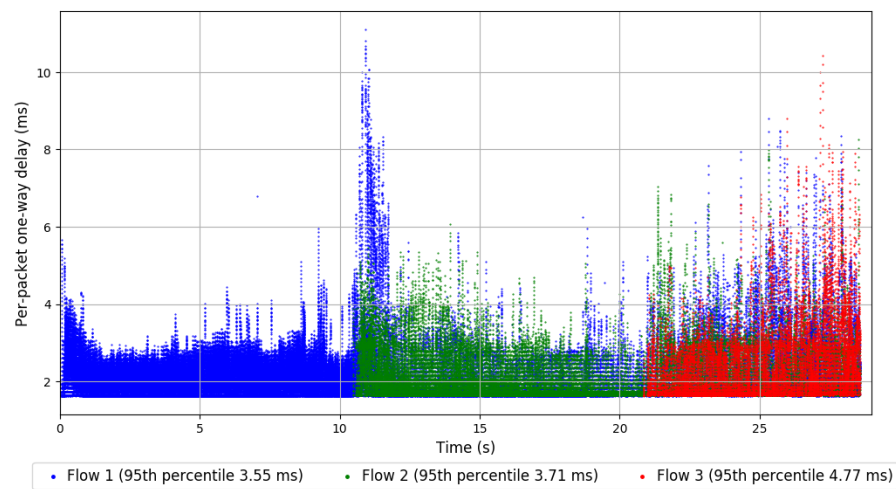
Run 2: Report of Indigo-MusesC3 — Data Link

```
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-02-12 05:16:46
End at: 2019-02-12 05:17:16
Local clock offset: -6.427 ms
Remote clock offset: -0.064 ms


# Below is generated by plot.py at 2019-02-12 06:15:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.37 Mbit/s
95th percentile per-packet one-way delay: 3.581 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 38.58 Mbit/s
95th percentile per-packet one-way delay: 3.377 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 27.02 Mbit/s
95th percentile per-packet one-way delay: 3.886 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 13.70 Mbit/s
95th percentile per-packet one-way delay: 4.143 ms
Loss rate: 0.00%
```
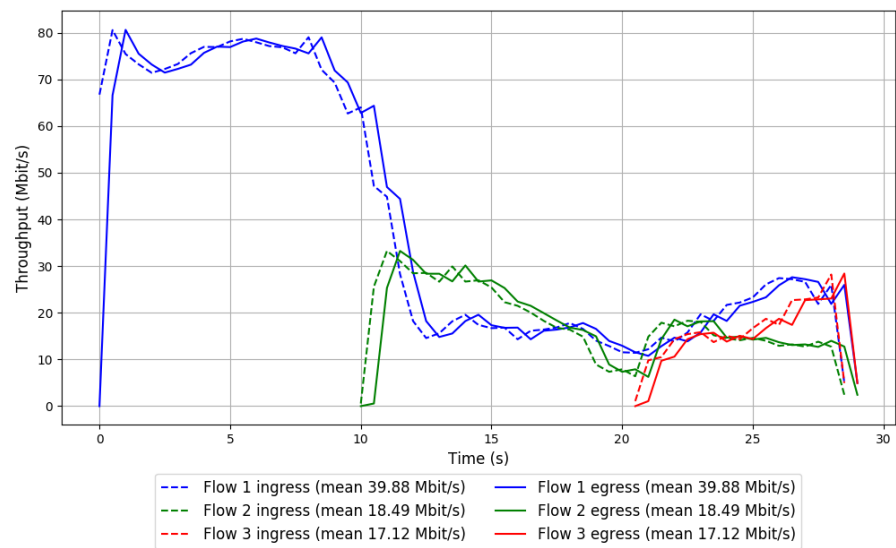
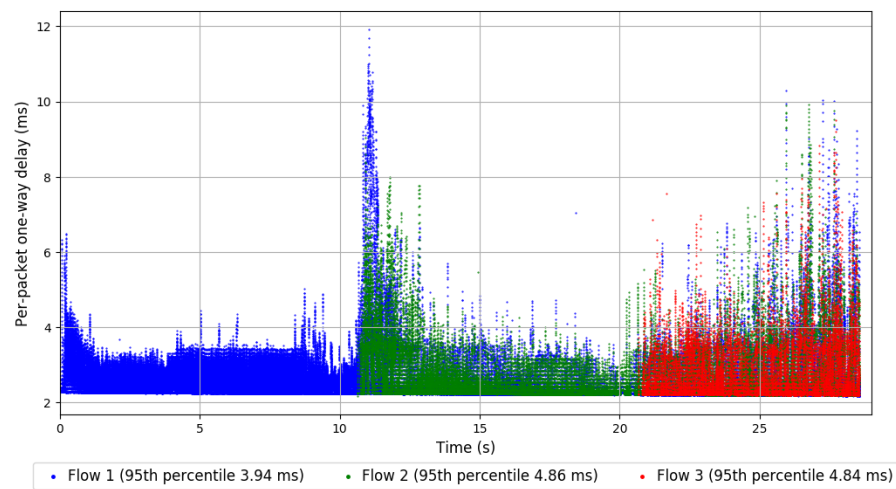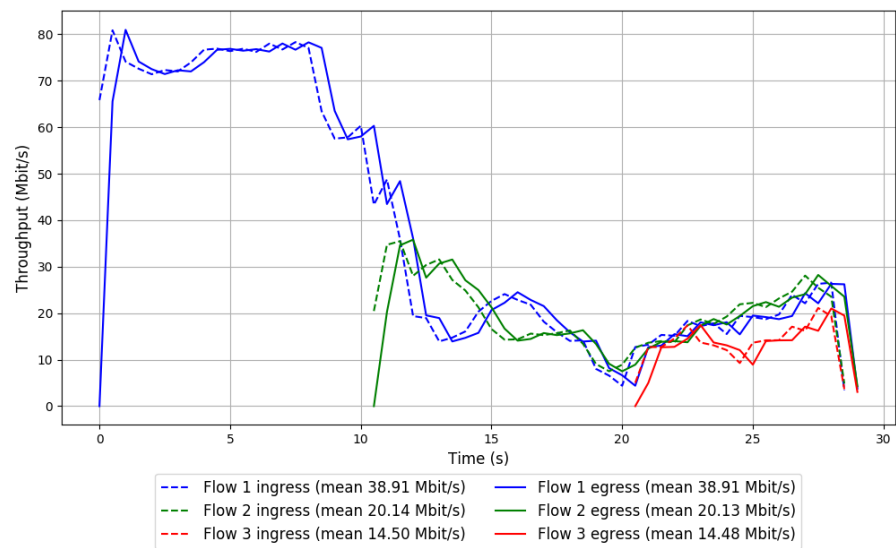Run 3: Report of Indigo-MusesC3 — Data Link

```
Run 4: Statistics of Indigo-MusesC3

Start at: 2019-02-12 05:40:59
End at: 2019-02-12 05:41:29
Local clock offset: -7.95 ms
Remote clock offset: 0.438 ms


# Below is generated by plot.py at 2019-02-12 06:15:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.23 Mbit/s
95th percentile per-packet one-way delay: 3.726 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 39.88 Mbit/s
95th percentile per-packet one-way delay: 3.548 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 18.49 Mbit/s
95th percentile per-packet one-way delay: 3.714 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 17.12 Mbit/s
95th percentile per-packet one-way delay: 4.774 ms
Loss rate: 0.01%
```
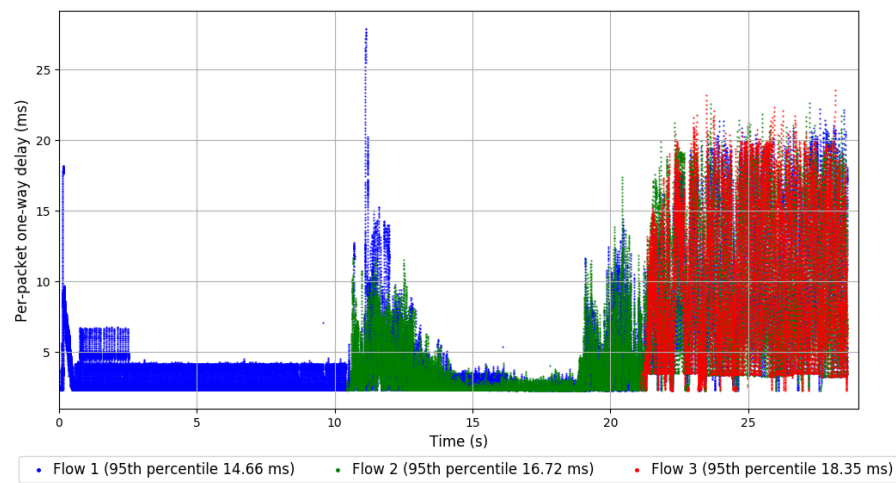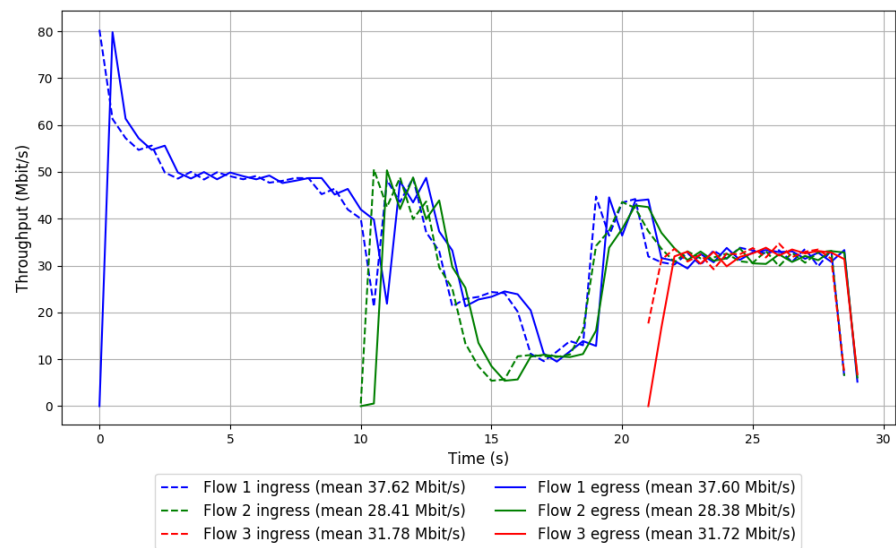
Run 4: Report of Indigo-MusesC3 — Data Link

```
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-02-12 06:05:10
End at: 2019-02-12 06:05:40
Local clock offset: -7.444 ms
Remote clock offset: 0.649 ms


# Below is generated by plot.py at 2019-02-12 06:15:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 55.56 Mbit/s
95th percentile per-packet one-way delay: 4.309 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 38.91 Mbit/s
95th percentile per-packet one-way delay: 3.938 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 20.13 Mbit/s
95th percentile per-packet one-way delay: 4.855 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 14.48 Mbit/s
95th percentile per-packet one-way delay: 4.838 ms
Loss rate: 0.26%
```
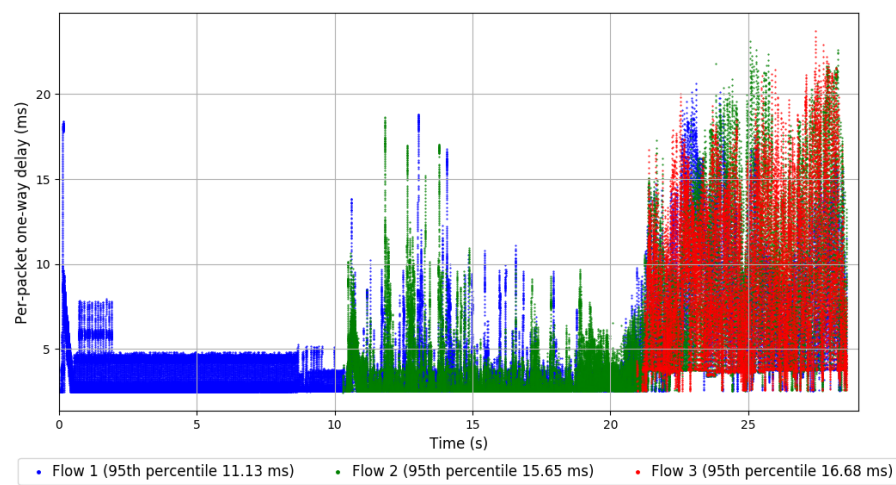
Run 5: Report of Indigo-MusesC3 — Data Link

```
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-02-12 04:18:01
End at: 2019-02-12 04:18:31
Local clock offset: -1.36 ms
Remote clock offset: -2.276 ms

# Below is generated by plot.py at 2019-02-12 06:16:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.93 Mbit/s
95th percentile per-packet one-way delay: 16.438 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 37.60 Mbit/s
95th percentile per-packet one-way delay: 14.657 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 28.38 Mbit/s
95th percentile per-packet one-way delay: 16.717 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 31.72 Mbit/s
95th percentile per-packet one-way delay: 18.351 ms
Loss rate: 0.25%
```
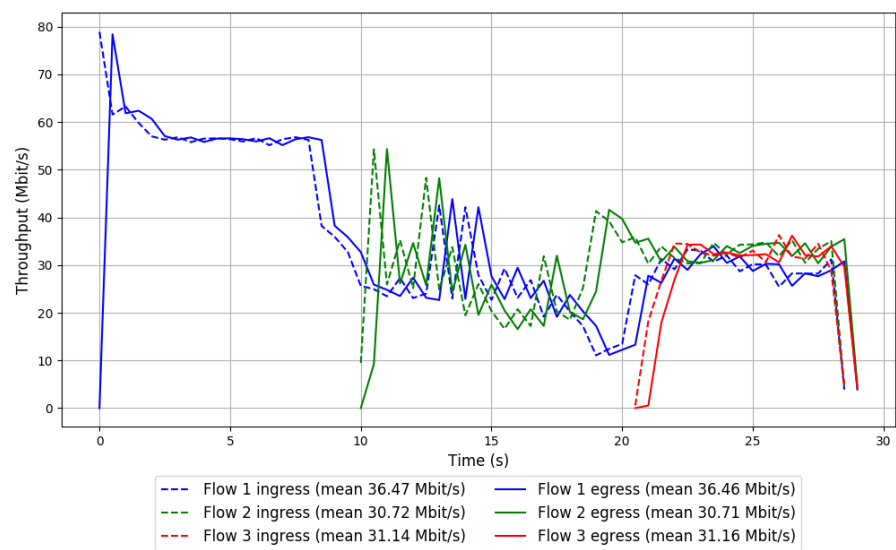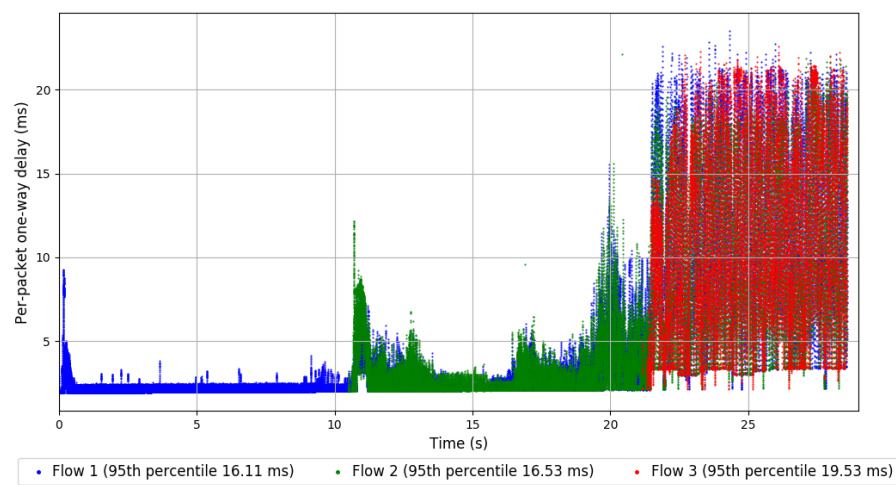
Run 1: Report of Indigo-MusesC5 — Data Link

```
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-02-12 04:42:15
End at: 2019-02-12 04:42:45
Local clock offset: -0.768 ms
Remote clock offset: -1.433 ms


# Below is generated by plot.py at 2019-02-12 06:16:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.38 Mbit/s
95th percentile per-packet one-way delay: 14.303 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 36.46 Mbit/s
95th percentile per-packet one-way delay: 11.126 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 30.71 Mbit/s
95th percentile per-packet one-way delay: 15.648 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 31.16 Mbit/s
95th percentile per-packet one-way delay: 16.678 ms
Loss rate: 0.10%
```

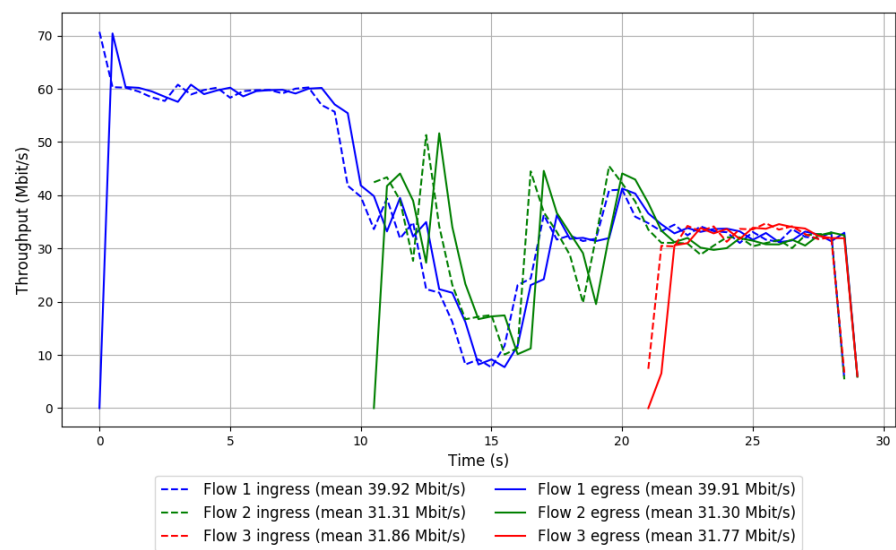Run 2: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 36.47 Mbit/s) --- Flow 1 egress (mean 36.46 Mbit/s)
Flow 2 ingress (mean 30.72 Mbit/s) --- Flow 2 egress (mean 30.71 Mbit/s)
Flow 3 ingress (mean 31.14 Mbit/s) --- Flow 3 egress (mean 31.16 Mbit/s)

Flow 1 (95th percentile 11.13 ms)   Flow 2 (95th percentile 15.65 ms)   Flow 3 (95th percentile 16.68 ms)

```
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-02-12 05:06:29
End at: 2019-02-12 05:06:59
Local clock offset: -3.135 ms
Remote clock offset: -0.374 ms


# Below is generated by plot.py at 2019-02-12 06:16:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.97 Mbit/s
95th percentile per-packet one-way delay: 17.222 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 39.91 Mbit/s
95th percentile per-packet one-way delay: 16.113 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 31.30 Mbit/s
95th percentile per-packet one-way delay: 16.529 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 31.77 Mbit/s
95th percentile per-packet one-way delay: 19.526 ms
Loss rate: 0.33%
```
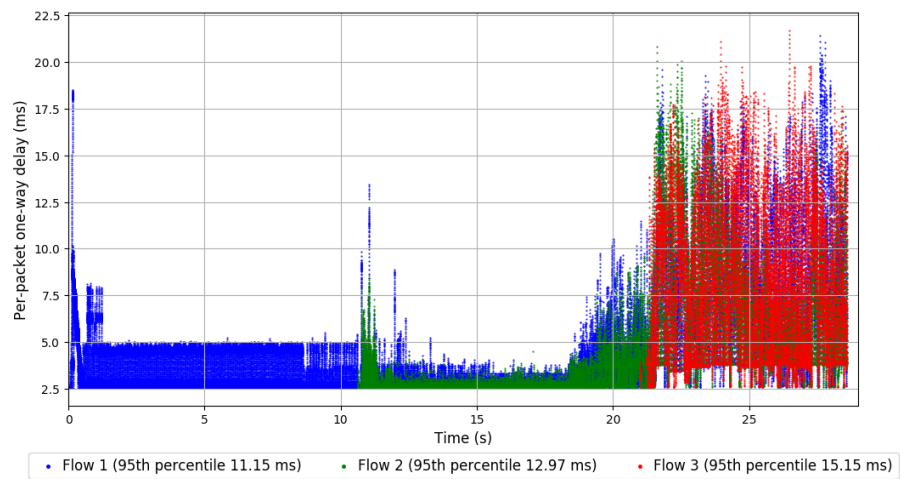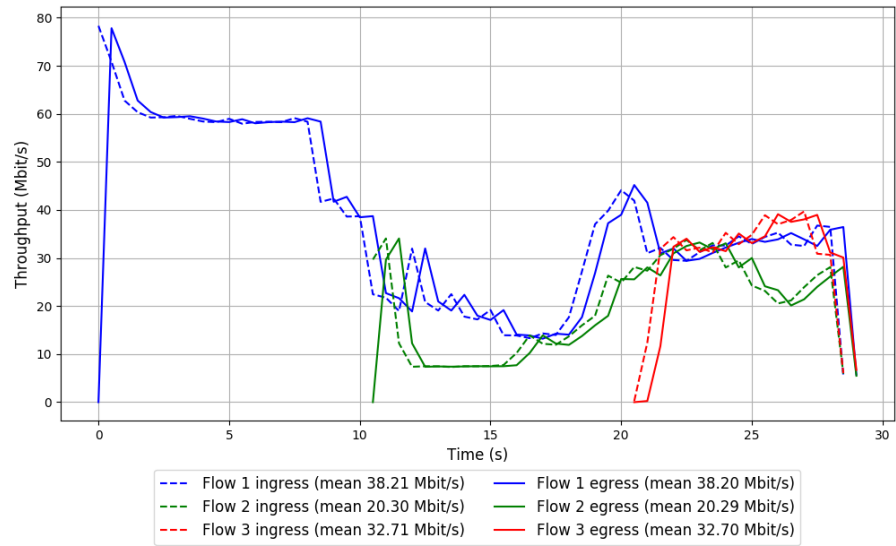
Run 3: Report of Indigo-MusesC5 — Data Link

```
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-02-12 05:30:42
End at: 2019-02-12 05:31:12
Local clock offset: -7.243 ms
Remote clock offset: 0.139 ms


# Below is generated by plot.py at 2019-02-12 06:16:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.65 Mbit/s
95th percentile per-packet one-way delay: 12.878 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 38.20 Mbit/s
95th percentile per-packet one-way delay: 11.149 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 20.29 Mbit/s
95th percentile per-packet one-way delay: 12.971 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 32.70 Mbit/s
95th percentile per-packet one-way delay: 15.149 ms
Loss rate: 0.08%
```
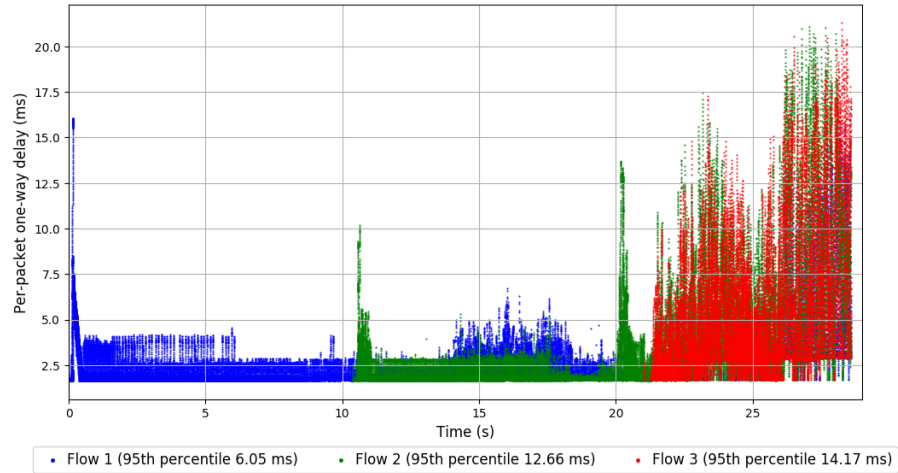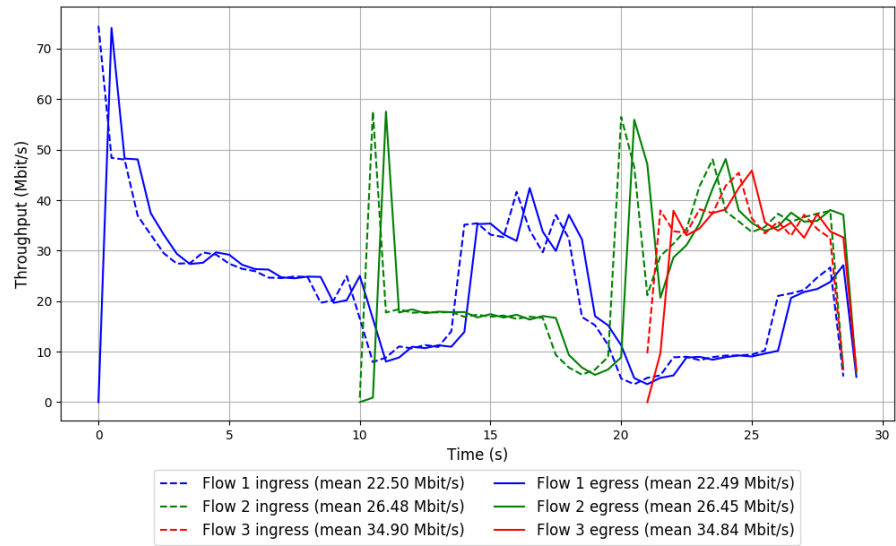
Run 4: Report of Indigo-MusesC5 — Data Link

```
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-02-12 05:54:54
End at: 2019-02-12 05:55:24
Local clock offset: -8.087 ms
Remote clock offset: 0.629 ms

# Below is generated by plot.py at 2019-02-12 06:16:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.54 Mbit/s
95th percentile per-packet one-way delay: 11.442 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 22.49 Mbit/s
95th percentile per-packet one-way delay: 6.049 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 26.45 Mbit/s
95th percentile per-packet one-way delay: 12.661 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 34.84 Mbit/s
95th percentile per-packet one-way delay: 14.170 ms
Loss rate: 0.18%
```

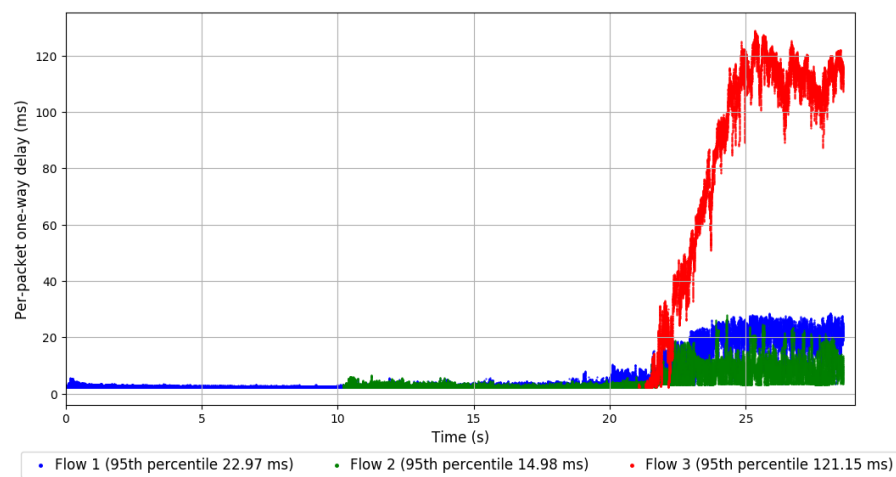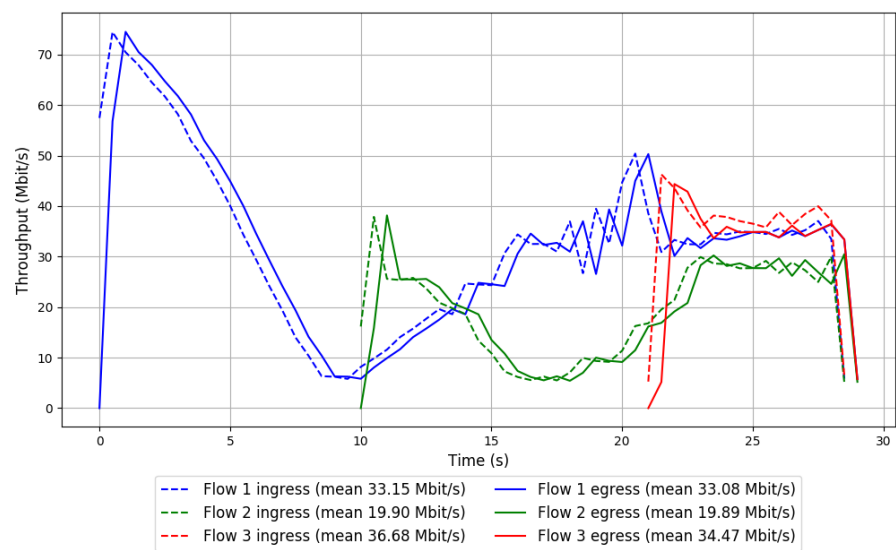Run 5: Report of Indigo-MusesC5 — Data Link

```
Run 1: Statistics of Indigo-MusesD

Start at: 2019-02-12 04:20:15
End at: 2019-02-12 04:20:45
Local clock offset: -0.905 ms
Remote clock offset: -2.188 ms

# Below is generated by plot.py at 2019-02-12 06:16:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.95 Mbit/s
95th percentile per-packet one-way delay: 112.220 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 33.08 Mbit/s
95th percentile per-packet one-way delay: 22.969 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 19.89 Mbit/s
95th percentile per-packet one-way delay: 14.981 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 34.47 Mbit/s
95th percentile per-packet one-way delay: 121.148 ms
Loss rate: 6.06%
```

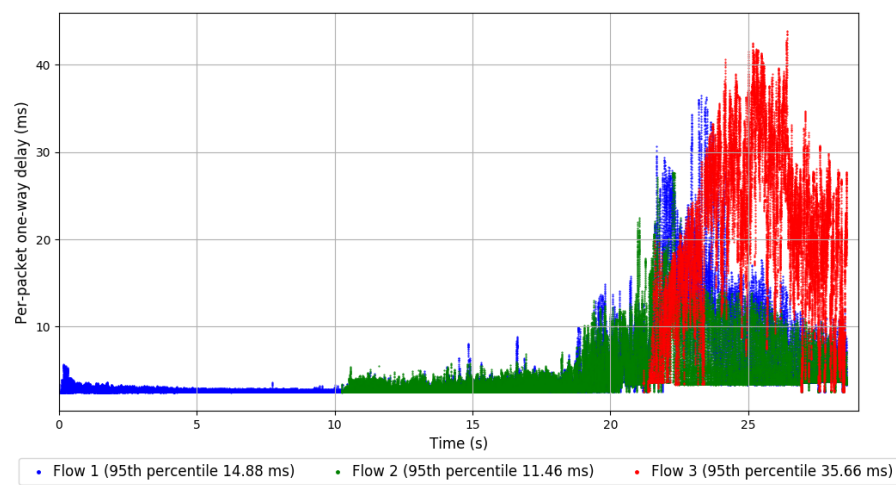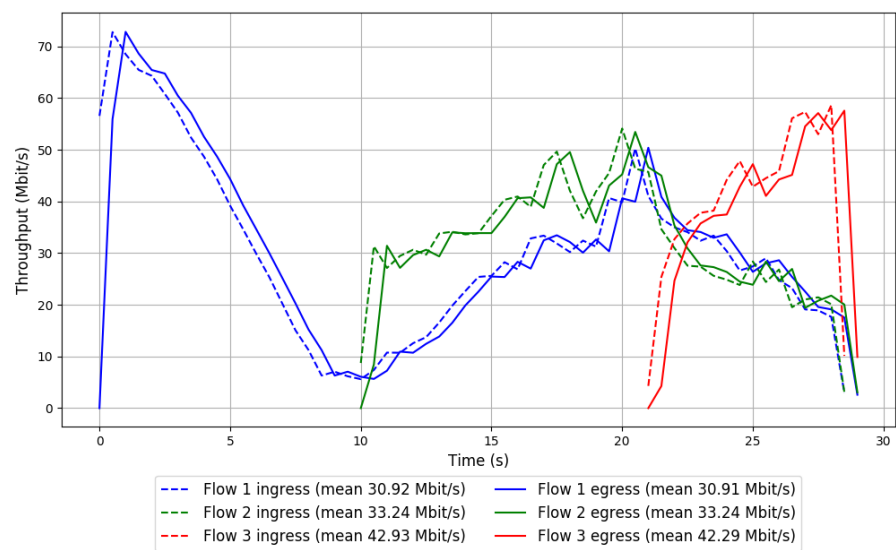Run 1: Report of Indigo-MusesD — Data Link

```
Run 2: Statistics of Indigo-MusesD

Start at: 2019-02-12 04:44:29
End at: 2019-02-12 04:44:59
Local clock offset: -0.896 ms
Remote clock offset: -1.297 ms


# Below is generated by plot.py at 2019-02-12 06:16:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.15 Mbit/s
95th percentile per-packet one-way delay: 26.877 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 30.91 Mbit/s
95th percentile per-packet one-way delay: 14.878 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 33.24 Mbit/s
95th percentile per-packet one-way delay: 11.464 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 42.29 Mbit/s
95th percentile per-packet one-way delay: 35.665 ms
Loss rate: 1.52%
```

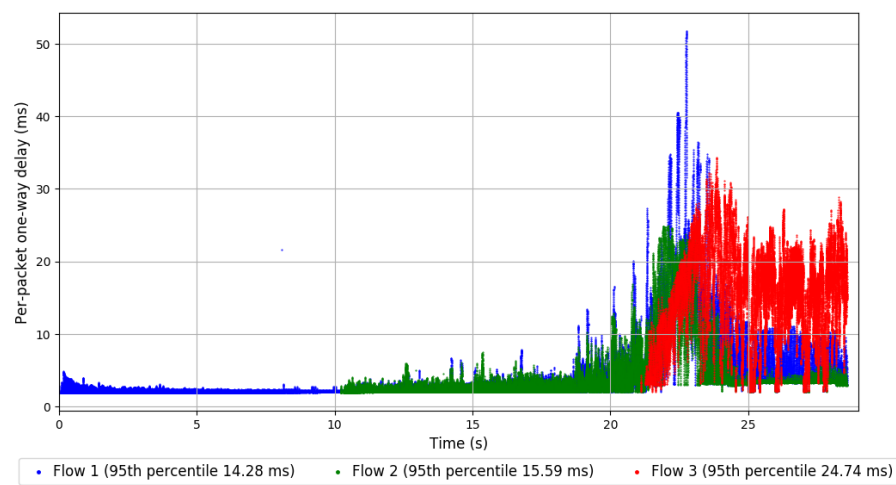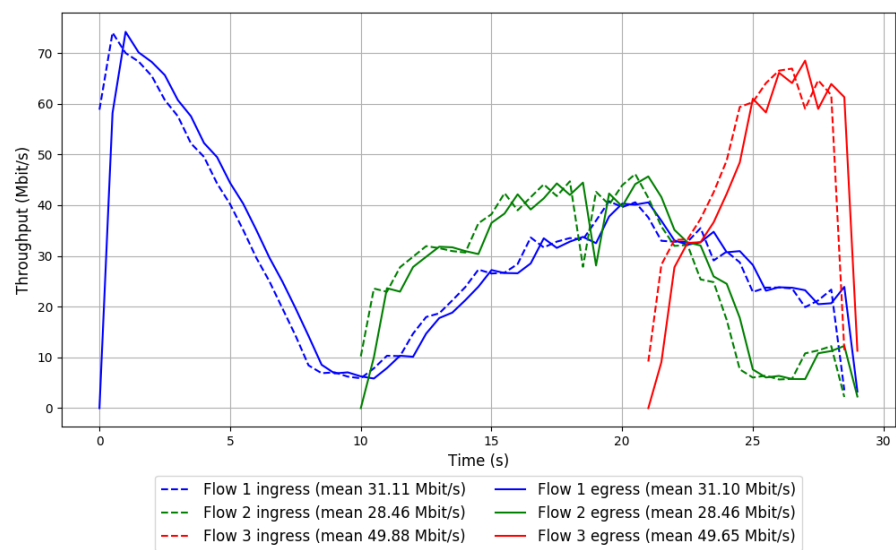# Run 2: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 30.92 Mbit/s) --- Flow 1 egress (mean 30.91 Mbit/s)
Flow 2 ingress (mean 33.24 Mbit/s) --- Flow 2 egress (mean 33.24 Mbit/s)
Flow 3 ingress (mean 42.93 Mbit/s) --- Flow 3 egress (mean 42.29 Mbit/s)

Flow 1 (95th percentile 14.88 ms)   Flow 2 (95th percentile 11.46 ms)   Flow 3 (95th percentile 35.66 ms)

```
Run 3: Statistics of Indigo-MusesD

Start at: 2019-02-12 05:08:42
End at: 2019-02-12 05:09:12
Local clock offset: -4.146 ms
Remote clock offset: -0.361 ms


# Below is generated by plot.py at 2019-02-12 06:16:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.37 Mbit/s
95th percentile per-packet one-way delay: 20.906 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 31.10 Mbit/s
95th percentile per-packet one-way delay: 14.279 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 28.46 Mbit/s
95th percentile per-packet one-way delay: 15.589 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 49.65 Mbit/s
95th percentile per-packet one-way delay: 24.742 ms
Loss rate: 0.49%
```
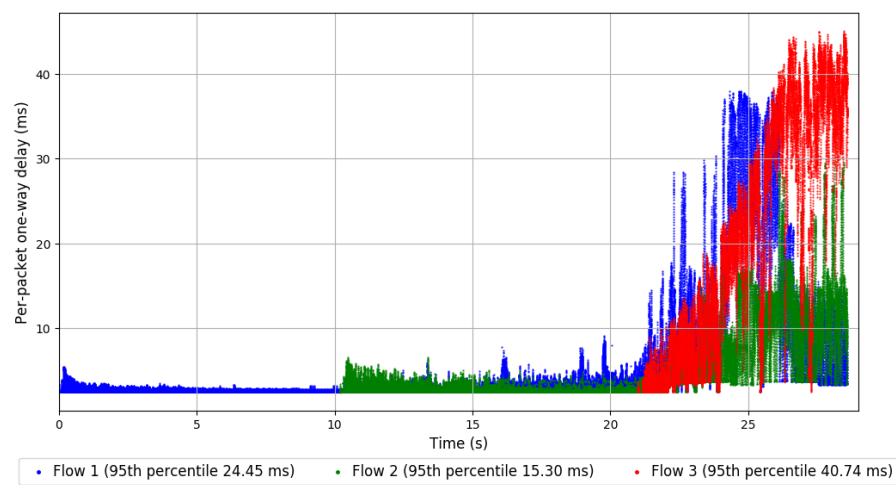
Run 3: Report of Indigo-MusesD — Data Link

```
Run 4: Statistics of Indigo-MusesD

Start at: 2019-02-12 05:32:55
End at: 2019-02-12 05:33:25
Local clock offset: -7.394 ms
Remote clock offset: 0.298 ms


# Below is generated by plot.py at 2019-02-12 06:16:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.58 Mbit/s
95th percentile per-packet one-way delay: 33.646 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 32.22 Mbit/s
95th percentile per-packet one-way delay: 24.445 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 23.77 Mbit/s
95th percentile per-packet one-way delay: 15.296 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 34.10 Mbit/s
95th percentile per-packet one-way delay: 40.739 ms
Loss rate: 1.56%
```
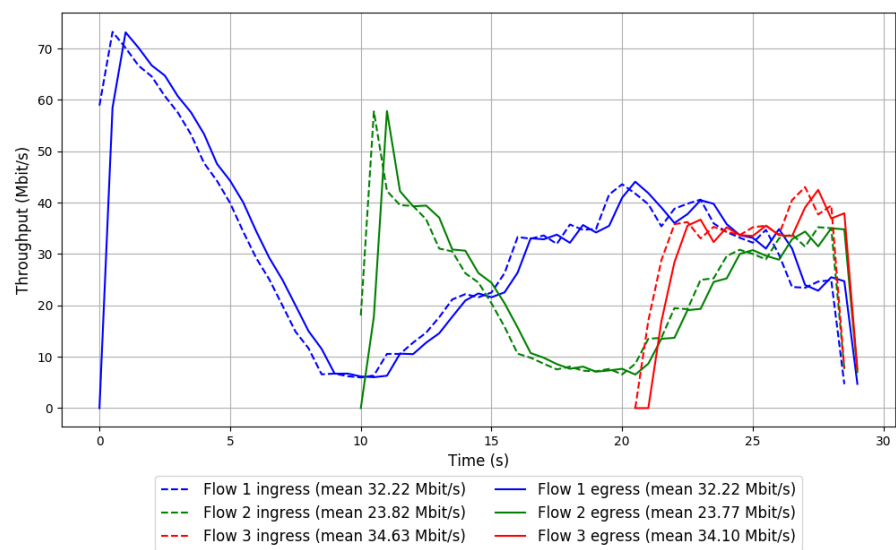
Run 4: Report of Indigo-MusesD — Data Link

```
Run 5: Statistics of Indigo-MusesD

Start at: 2019-02-12 05:57:07
End at: 2019-02-12 05:57:37
Local clock offset: -7.363 ms
Remote clock offset: 0.598 ms


# Below is generated by plot.py at 2019-02-12 06:16:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 55.96 Mbit/s
95th percentile per-packet one-way delay: 45.919 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 32.24 Mbit/s
95th percentile per-packet one-way delay: 17.811 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 21.81 Mbit/s
95th percentile per-packet one-way delay: 18.398 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 36.78 Mbit/s
95th percentile per-packet one-way delay: 52.654 ms
Loss rate: 4.11%
```
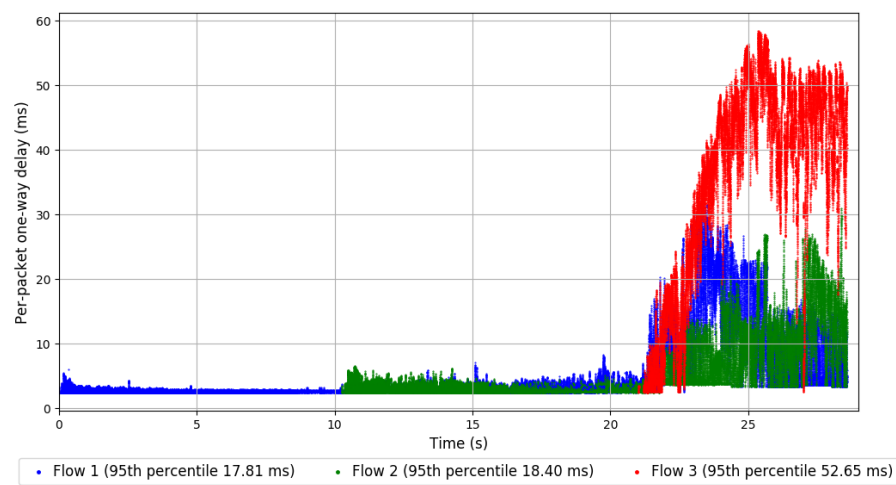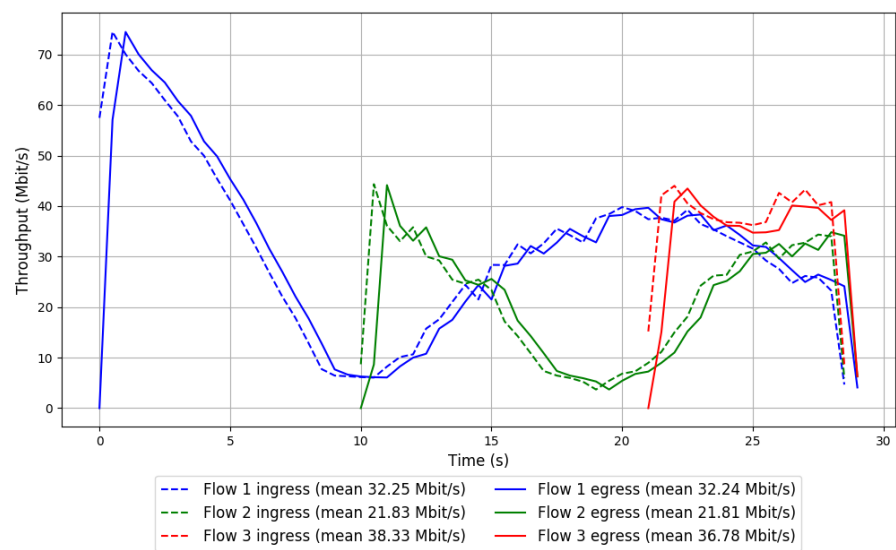
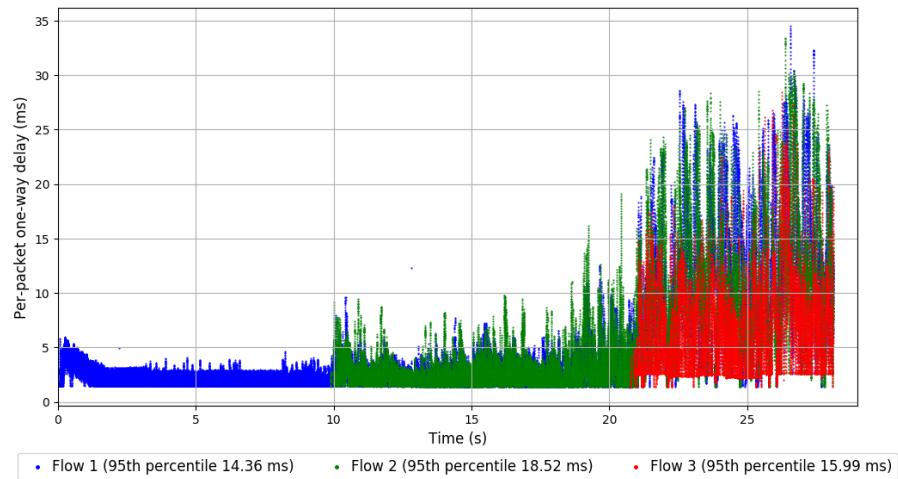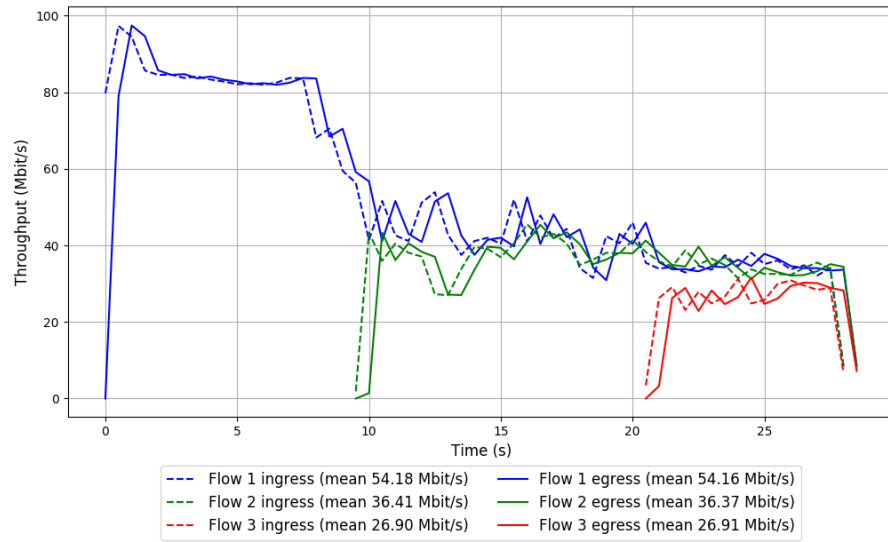Run 5: Report of Indigo-MusesD — Data Link

```
Run 1: Statistics of Indigo-MusesT

Start at: 2019-02-12 04:13:18
End at: 2019-02-12 04:13:48
Local clock offset: -3.323 ms
Remote clock offset: -2.424 ms


# Below is generated by plot.py at 2019-02-12 06:17:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.81 Mbit/s
95th percentile per-packet one-way delay: 16.048 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 54.16 Mbit/s
95th percentile per-packet one-way delay: 14.364 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 36.37 Mbit/s
95th percentile per-packet one-way delay: 18.523 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 26.91 Mbit/s
95th percentile per-packet one-way delay: 15.993 ms
Loss rate: 0.04%
```

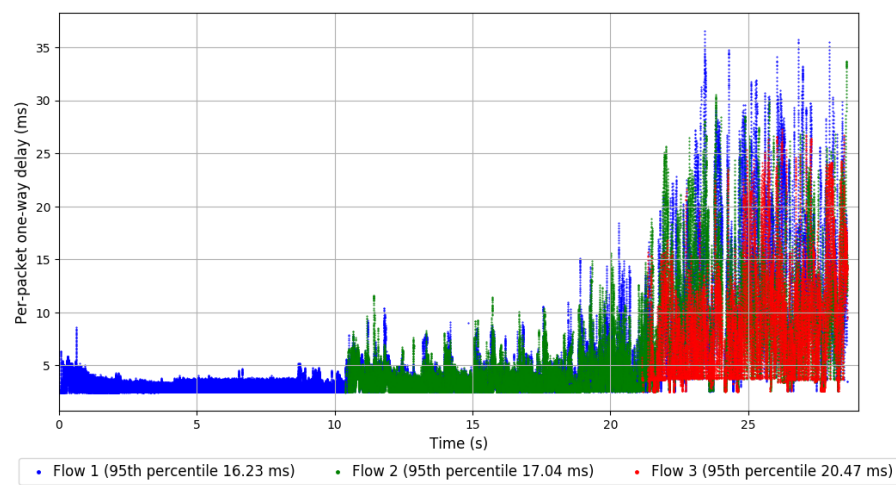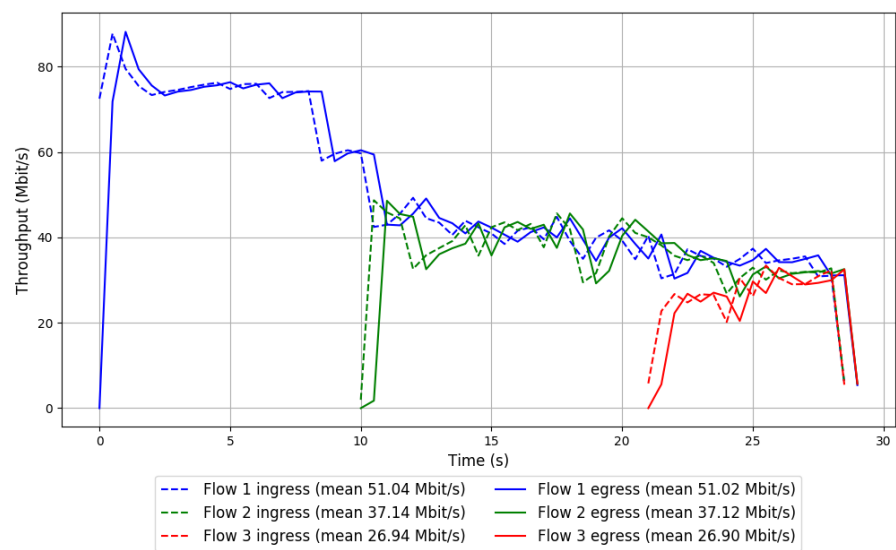Run 1: Report of Indigo-MusesT — Data Link

```
Run 2: Statistics of Indigo-MusesT

Start at: 2019-02-12 04:37:33
End at: 2019-02-12 04:38:03
Local clock offset: -0.075 ms
Remote clock offset: -1.497 ms


# Below is generated by plot.py at 2019-02-12 06:17:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.64 Mbit/s
95th percentile per-packet one-way delay: 17.123 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 51.02 Mbit/s
95th percentile per-packet one-way delay: 16.234 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 37.12 Mbit/s
95th percentile per-packet one-way delay: 17.037 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 26.90 Mbit/s
95th percentile per-packet one-way delay: 20.468 ms
Loss rate: 0.16%
```
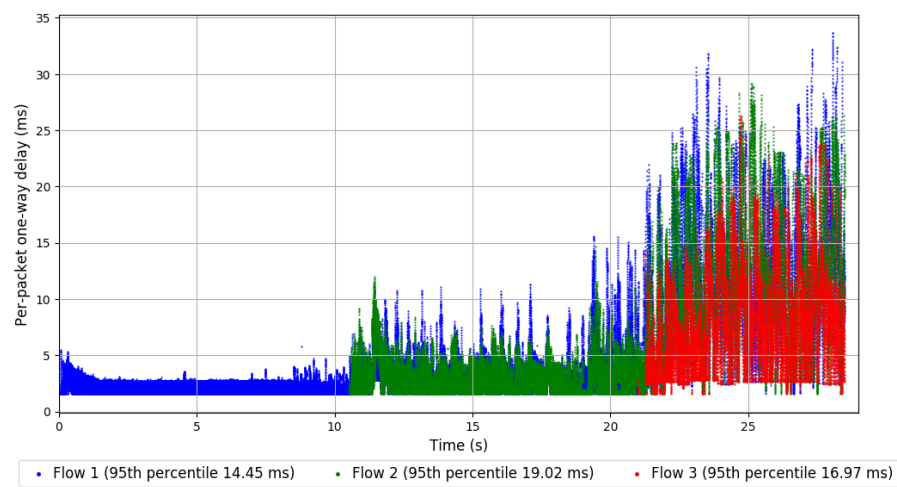
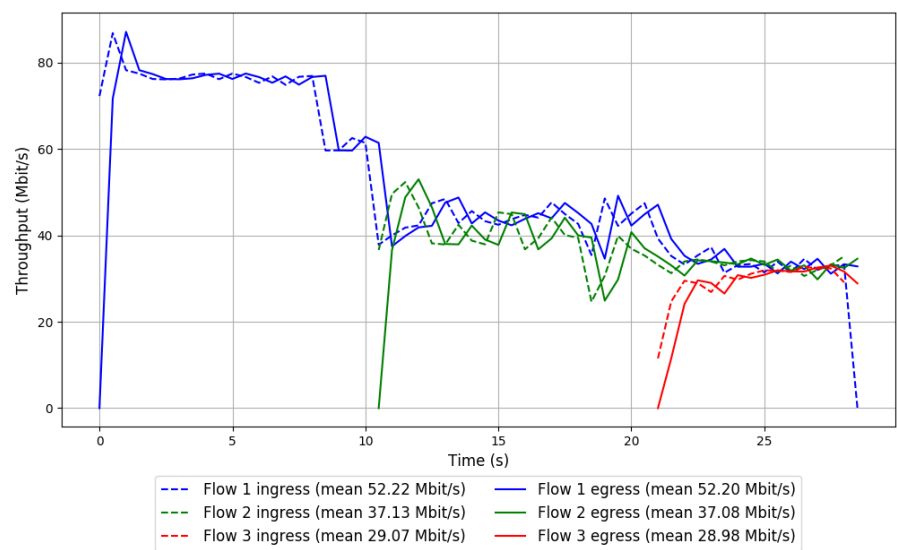Run 2: Report of Indigo-MusesT — Data Link

```
Run 3: Statistics of Indigo-MusesT

Start at: 2019-02-12 05:01:46
End at: 2019-02-12 05:02:16
Local clock offset: -1.94 ms
Remote clock offset: -0.556 ms

# Below is generated by plot.py at 2019-02-12 06:17:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.20 Mbit/s
95th percentile per-packet one-way delay: 16.503 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 52.20 Mbit/s
95th percentile per-packet one-way delay: 14.445 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 37.08 Mbit/s
95th percentile per-packet one-way delay: 19.015 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 28.98 Mbit/s
95th percentile per-packet one-way delay: 16.973 ms
Loss rate: 0.23%
```

Run 3: Report of Indigo-MusesT — Data Link

```
Run 4: Statistics of Indigo-MusesT

Start at: 2019-02-12 05:25:58
End at: 2019-02-12 05:26:28
Local clock offset: -7.628 ms
Remote clock offset: 0.128 ms


# Below is generated by plot.py at 2019-02-12 06:17:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.88 Mbit/s
95th percentile per-packet one-way delay: 13.786 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 54.76 Mbit/s
95th percentile per-packet one-way delay: 13.105 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 37.19 Mbit/s
95th percentile per-packet one-way delay: 15.202 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 22.22 Mbit/s
95th percentile per-packet one-way delay: 11.929 ms
Loss rate: 0.16%
```
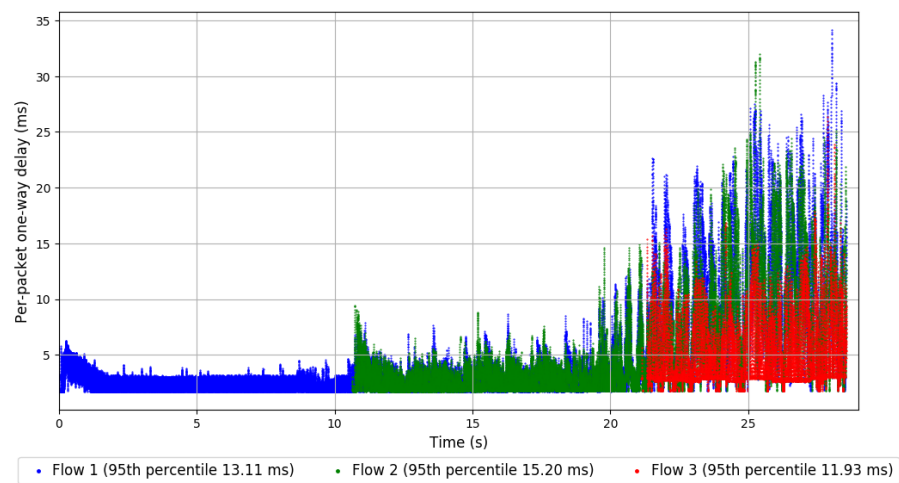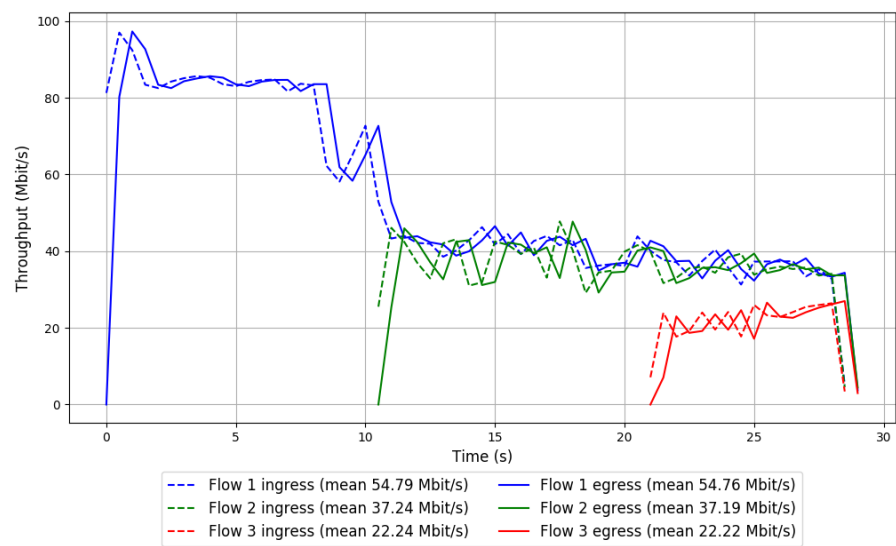
Run 4: Report of Indigo-MusesT — Data Link

```
Run 5: Statistics of Indigo-MusesT

Start at: 2019-02-12 05:50:11
End at: 2019-02-12 05:50:41
Local clock offset: -7.238 ms
Remote clock offset: 0.56 ms


# Below is generated by plot.py at 2019-02-12 06:17:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.73 Mbit/s
95th percentile per-packet one-way delay: 15.787 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 55.11 Mbit/s
95th percentile per-packet one-way delay: 12.363 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 34.73 Mbit/s
95th percentile per-packet one-way delay: 18.630 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 26.98 Mbit/s
95th percentile per-packet one-way delay: 19.556 ms
Loss rate: 0.27%
```
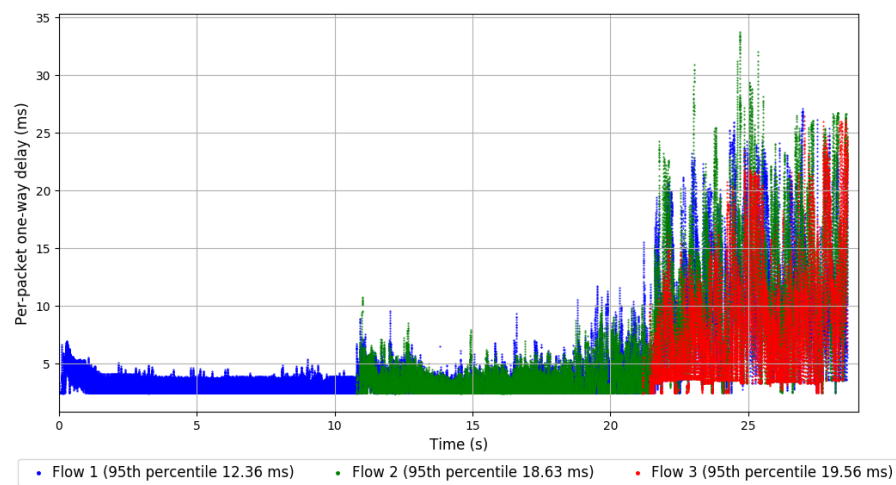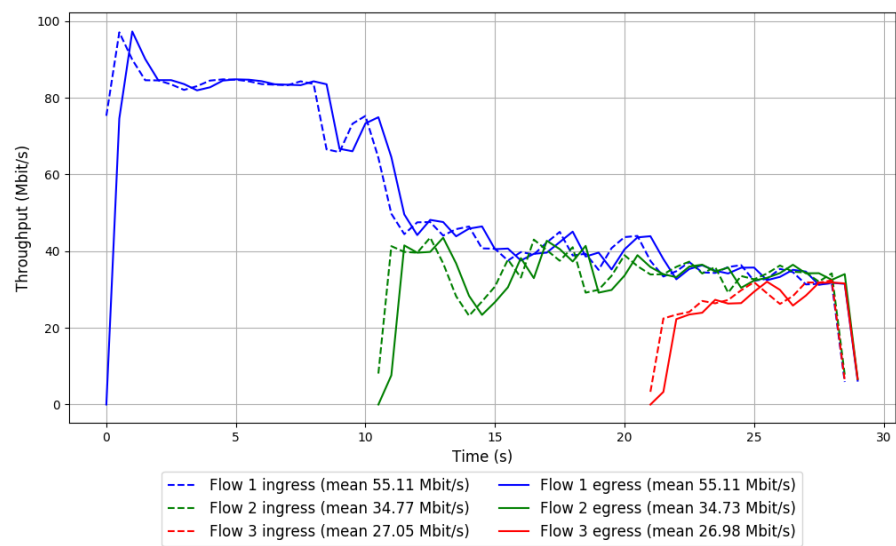
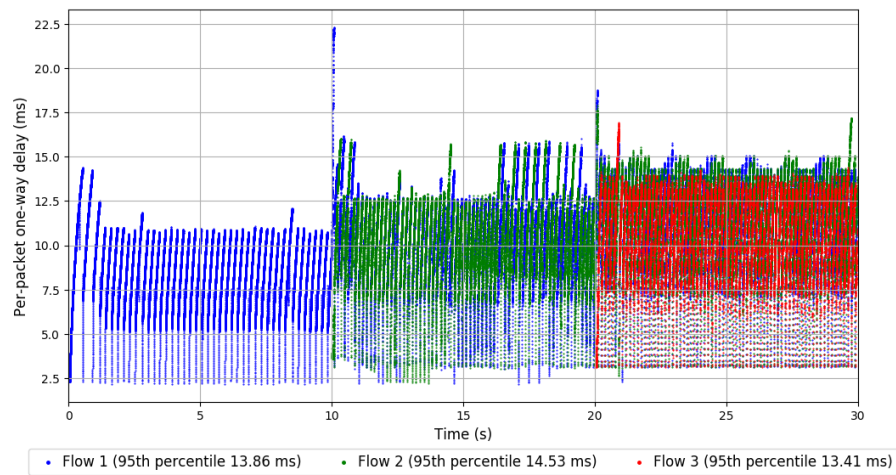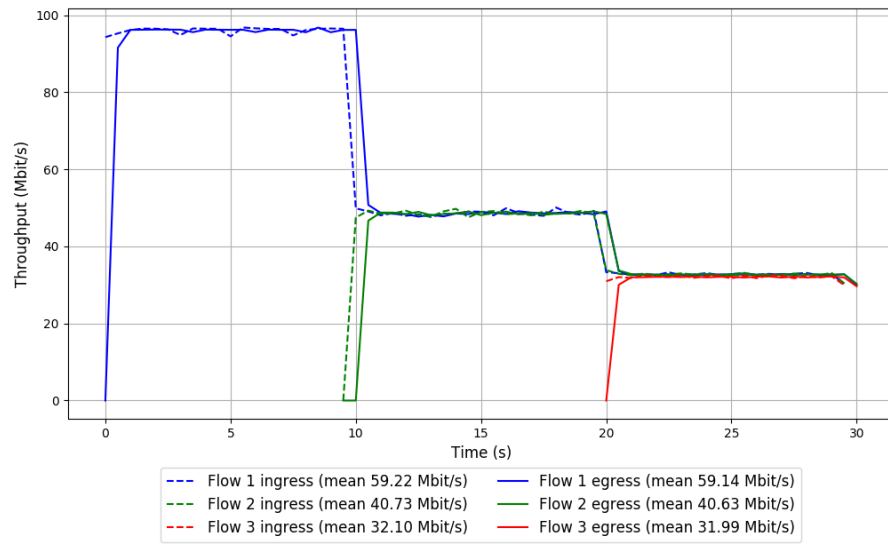# Run 5: Report of Indigo-MusesT — Data Link

```
Run 1: Statistics of LEDBAT

Start at: 2019-02-12 04:24:50
End at: 2019-02-12 04:25:20
Local clock offset: -0.252 ms
Remote clock offset: -1.926 ms


# Below is generated by plot.py at 2019-02-12 06:17:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.85 Mbit/s
95th percentile per-packet one-way delay: 14.036 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 59.14 Mbit/s
95th percentile per-packet one-way delay: 13.856 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 40.63 Mbit/s
95th percentile per-packet one-way delay: 14.531 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 31.99 Mbit/s
95th percentile per-packet one-way delay: 13.415 ms
Loss rate: 0.38%
```

Run 1: Report of LEDBAT — Data Link

- - - - Flow 1 ingress (mean 59.22 Mbit/s) —— Flow 1 egress (mean 59.14 Mbit/s)
- - - - Flow 2 ingress (mean 40.73 Mbit/s) —— Flow 2 egress (mean 40.63 Mbit/s)
- - - - Flow 3 ingress (mean 32.10 Mbit/s) —— Flow 3 egress (mean 31.99 Mbit/s)

- Flow 1 (95th percentile 13.86 ms)   • Flow 2 (95th percentile 14.53 ms)   • Flow 3 (95th percentile 13.41 ms)
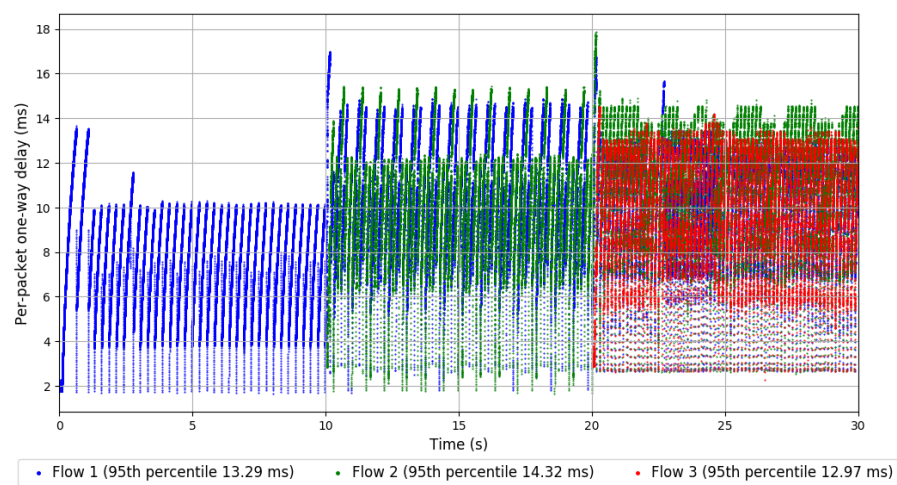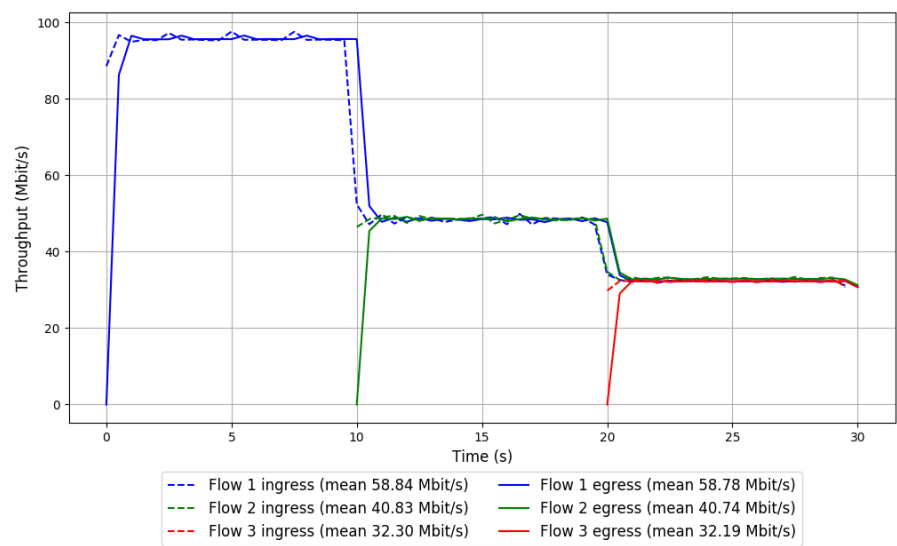
```
Run 2: Statistics of LEDBAT

Start at: 2019-02-12 04:49:04
End at: 2019-02-12 04:49:34
Local clock offset: -1.86 ms
Remote clock offset: -1.193 ms


# Below is generated by plot.py at 2019-02-12 06:17:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.61 Mbit/s
95th percentile per-packet one-way delay: 13.724 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 58.78 Mbit/s
95th percentile per-packet one-way delay: 13.286 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 40.74 Mbit/s
95th percentile per-packet one-way delay: 14.320 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 32.19 Mbit/s
95th percentile per-packet one-way delay: 12.975 ms
Loss rate: 0.40%
```

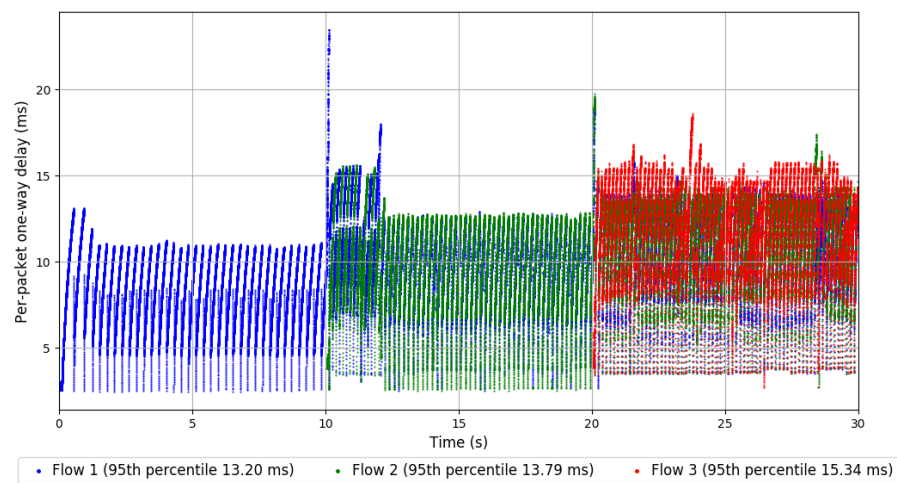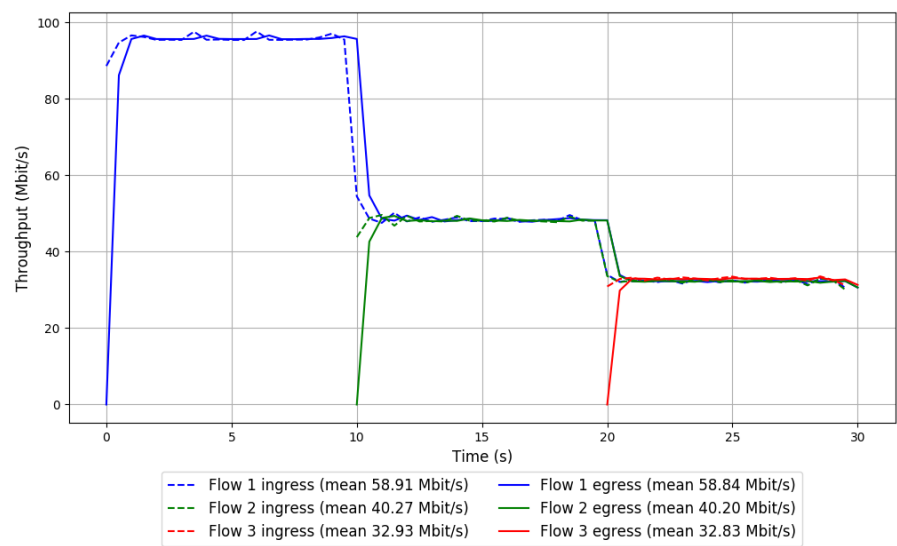# Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2019-02-12 05:13:17
End at: 2019-02-12 05:13:47
Local clock offset: -4.9 ms
Remote clock offset: -0.222 ms


# Below is generated by plot.py at 2019-02-12 06:17:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.50 Mbit/s
95th percentile per-packet one-way delay: 14.044 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 58.84 Mbit/s
95th percentile per-packet one-way delay: 13.199 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 40.20 Mbit/s
95th percentile per-packet one-way delay: 13.795 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 32.83 Mbit/s
95th percentile per-packet one-way delay: 15.335 ms
Loss rate: 0.33%
```

Run 3: Report of LEDBAT — Data Link

Flow 1 ingress (mean 58.91 Mbit/s) --- Flow 1 egress (mean 58.84 Mbit/s)
Flow 2 ingress (mean 40.27 Mbit/s) --- Flow 2 egress (mean 40.20 Mbit/s)
Flow 3 ingress (mean 32.93 Mbit/s) --- Flow 3 egress (mean 32.83 Mbit/s)

Flow 1 (95th percentile 13.20 ms)   Flow 2 (95th percentile 13.79 ms)   Flow 3 (95th percentile 15.34 ms)

```
Run 4: Statistics of LEDBAT

Start at: 2019-02-12 05:37:30
End at: 2019-02-12 05:38:00
Local clock offset: -7.376 ms
Remote clock offset: 0.392 ms


# Below is generated by plot.py at 2019-02-12 06:18:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.59 Mbit/s
95th percentile per-packet one-way delay: 14.287 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 58.78 Mbit/s
95th percentile per-packet one-way delay: 13.736 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 40.73 Mbit/s
95th percentile per-packet one-way delay: 14.912 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 32.17 Mbit/s
95th percentile per-packet one-way delay: 13.417 ms
Loss rate: 0.36%
```
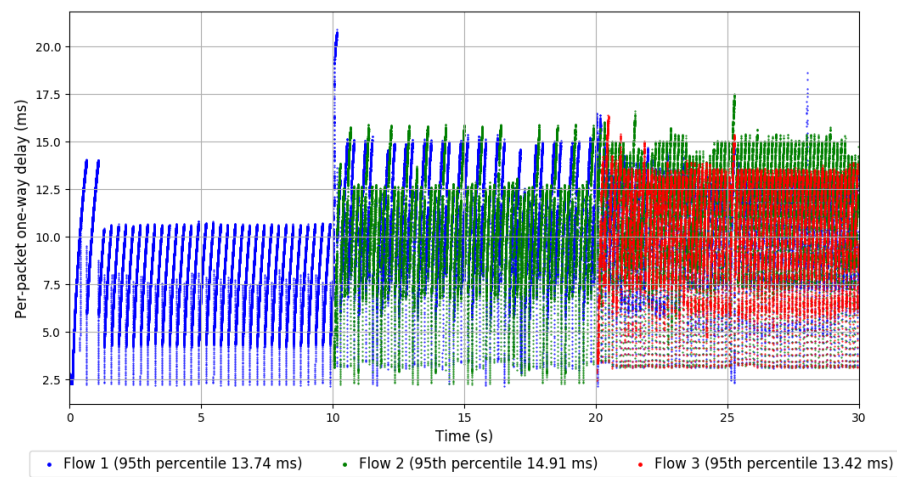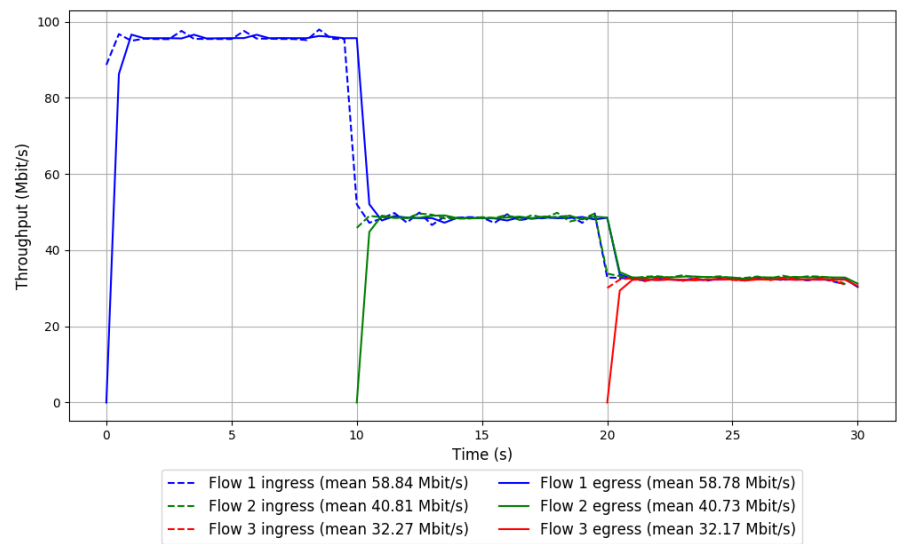
Run 4: Report of LEDBAT — Data Link

- - - Flow 1 ingress (mean 58.84 Mbit/s) —— Flow 1 egress (mean 58.78 Mbit/s)
- - - Flow 2 ingress (mean 40.81 Mbit/s) —— Flow 2 egress (mean 40.73 Mbit/s)
- - - Flow 3 ingress (mean 32.27 Mbit/s) —— Flow 3 egress (mean 32.17 Mbit/s)

• Flow 1 (95th percentile 13.74 ms)   • Flow 2 (95th percentile 14.91 ms)   • Flow 3 (95th percentile 13.42 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2019-02-12 06:01:41
End at: 2019-02-12 06:02:11
Local clock offset: -7.582 ms
Remote clock offset: 0.689 ms


# Below is generated by plot.py at 2019-02-12 06:18:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.74 Mbit/s
95th percentile per-packet one-way delay: 14.711 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 58.90 Mbit/s
95th percentile per-packet one-way delay: 14.196 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 40.44 Mbit/s
95th percentile per-packet one-way delay: 14.886 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 32.82 Mbit/s
95th percentile per-packet one-way delay: 15.042 ms
Loss rate: 0.36%
```
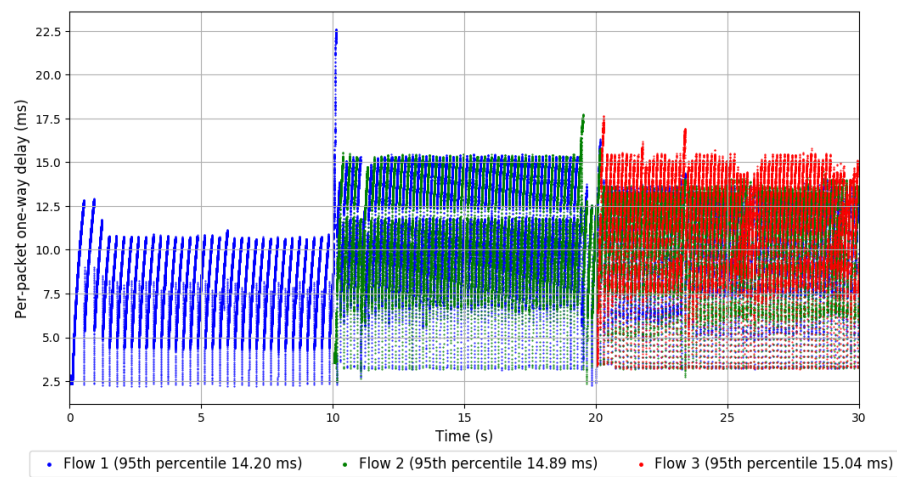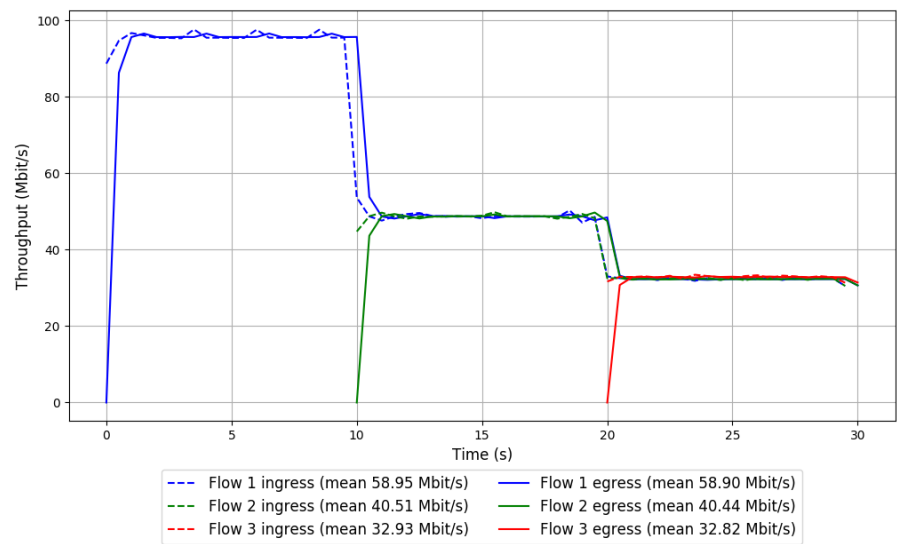
Run 5: Report of LEDBAT — Data Link

- - - - Flow 1 ingress (mean 58.95 Mbit/s)   ——— Flow 1 egress (mean 58.90 Mbit/s)
- - - - Flow 2 ingress (mean 40.51 Mbit/s)   ——— Flow 2 egress (mean 40.44 Mbit/s)
- - - - Flow 3 ingress (mean 32.93 Mbit/s)   ——— Flow 3 egress (mean 32.82 Mbit/s)

- Flow 1 (95th percentile 14.20 ms)   • Flow 2 (95th percentile 14.89 ms)   • Flow 3 (95th percentile 15.04 ms)
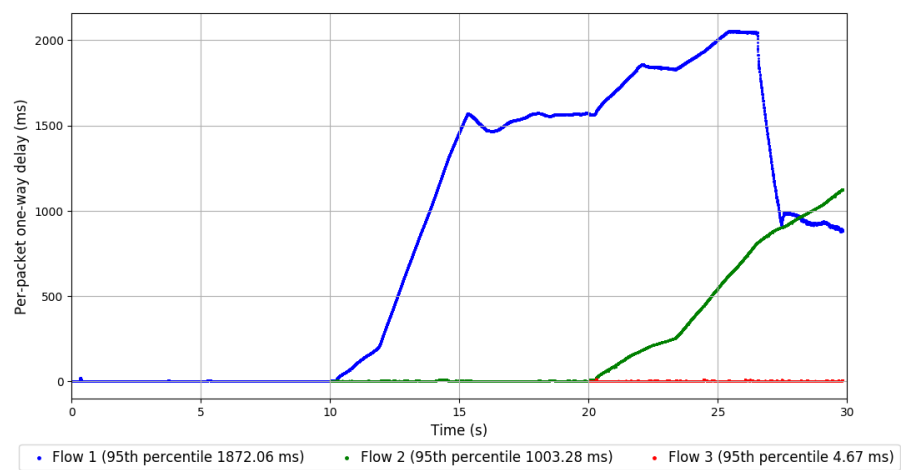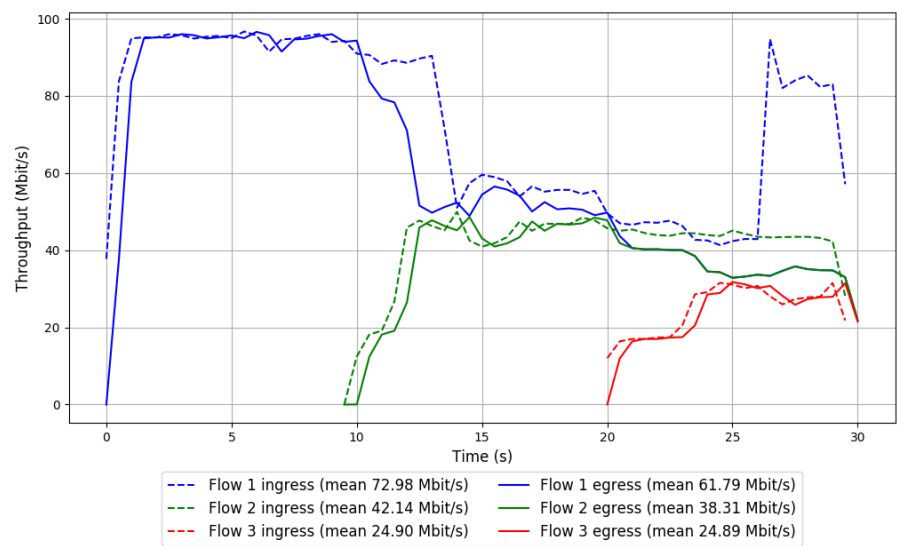
```
Run 1: Statistics of PCC-Allegro

Start at: 2019-02-12 04:22:31
End at: 2019-02-12 04:23:01
Local clock offset: -1.418 ms
Remote clock offset: -2.057 ms


# Below is generated by plot.py at 2019-02-12 06:18:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.48 Mbit/s
95th percentile per-packet one-way delay: 1839.786 ms
Loss rate: 12.63%
-- Flow 1:
Average throughput: 61.79 Mbit/s
95th percentile per-packet one-way delay: 1872.056 ms
Loss rate: 15.39%
-- Flow 2:
Average throughput: 38.31 Mbit/s
95th percentile per-packet one-way delay: 1003.277 ms
Loss rate: 9.11%
-- Flow 3:
Average throughput: 24.89 Mbit/s
95th percentile per-packet one-way delay: 4.665 ms
Loss rate: 0.09%
```

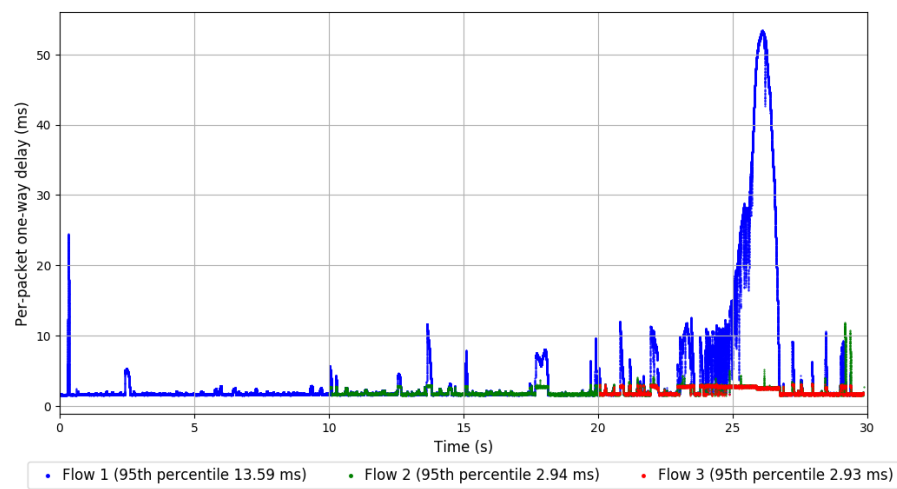Run 1: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 72.98 Mbit/s) --- Flow 1 egress (mean 61.79 Mbit/s)
Flow 2 ingress (mean 42.14 Mbit/s) --- Flow 2 egress (mean 38.31 Mbit/s)
Flow 3 ingress (mean 24.90 Mbit/s) --- Flow 3 egress (mean 24.89 Mbit/s)

Flow 1 (95th percentile 1872.06 ms)   Flow 2 (95th percentile 1003.28 ms)   Flow 3 (95th percentile 4.67 ms)
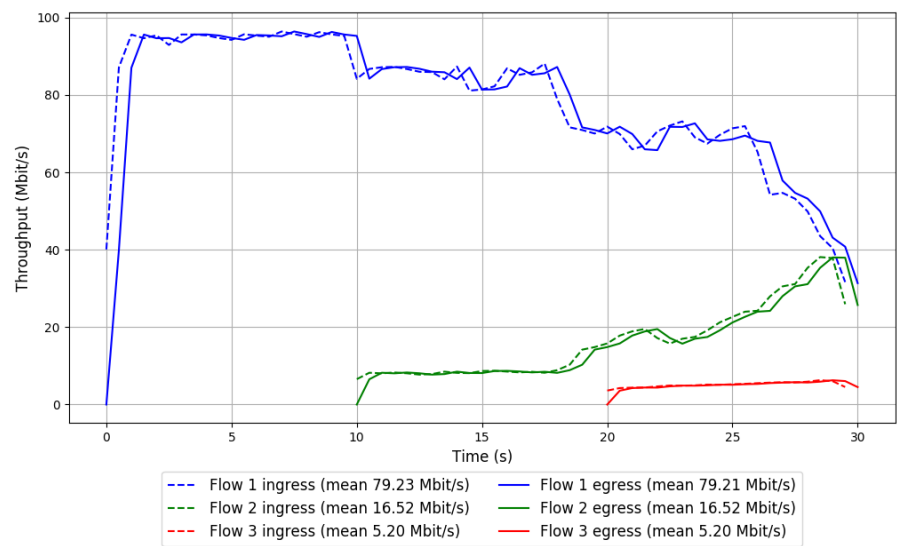
```
Run 2: Statistics of PCC-Allegro

Start at: 2019-02-12 04:46:46
End at: 2019-02-12 04:47:16
Local clock offset: -1.784 ms
Remote clock offset: -1.147 ms


# Below is generated by plot.py at 2019-02-12 06:18:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.90 Mbit/s
95th percentile per-packet one-way delay: 10.961 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 79.21 Mbit/s
95th percentile per-packet one-way delay: 13.589 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 16.52 Mbit/s
95th percentile per-packet one-way delay: 2.936 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 5.20 Mbit/s
95th percentile per-packet one-way delay: 2.928 ms
Loss rate: 0.05%
```
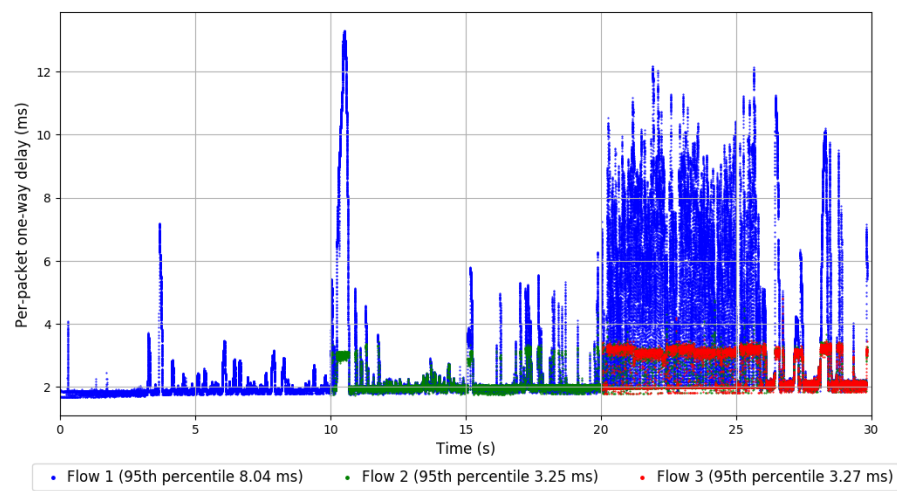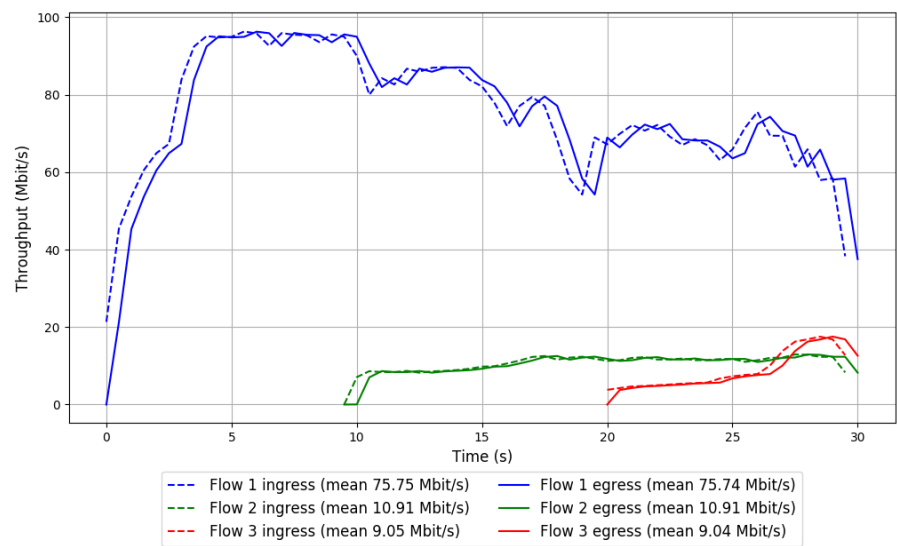
Run 2: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 79.23 Mbit/s) --- Flow 1 egress (mean 79.21 Mbit/s)
Flow 2 ingress (mean 16.52 Mbit/s) --- Flow 2 egress (mean 16.52 Mbit/s)
Flow 3 ingress (mean 5.20 Mbit/s) --- Flow 3 egress (mean 5.20 Mbit/s)

Flow 1 (95th percentile 13.59 ms)   Flow 2 (95th percentile 2.94 ms)   Flow 3 (95th percentile 2.93 ms)

```
Run 3: Statistics of PCC-Allegro

Start at: 2019-02-12 05:11:00
End at: 2019-02-12 05:11:30
Local clock offset: -5.026 ms
Remote clock offset: -0.313 ms


# Below is generated by plot.py at 2019-02-12 06:18:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.98 Mbit/s
95th percentile per-packet one-way delay: 7.764 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 75.74 Mbit/s
95th percentile per-packet one-way delay: 8.039 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 10.91 Mbit/s
95th percentile per-packet one-way delay: 3.248 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 9.04 Mbit/s
95th percentile per-packet one-way delay: 3.275 ms
Loss rate: 0.12%
```

Run 3: Report of PCC-Allegro — Data Link

```
Run 4: Statistics of PCC-Allegro

Start at: 2019-02-12 05:35:12
End at: 2019-02-12 05:35:42
Local clock offset: -8.163 ms
Remote clock offset: 0.322 ms


# Below is generated by plot.py at 2019-02-12 06:18:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.71 Mbit/s
95th percentile per-packet one-way delay: 1304.343 ms
Loss rate: 3.95%
-- Flow 1:
Average throughput: 69.89 Mbit/s
95th percentile per-packet one-way delay: 1502.978 ms
Loss rate: 5.21%
-- Flow 2:
Average throughput: 24.60 Mbit/s
95th percentile per-packet one-way delay: 10.609 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 22.70 Mbit/s
95th percentile per-packet one-way delay: 4.234 ms
Loss rate: 0.08%
```
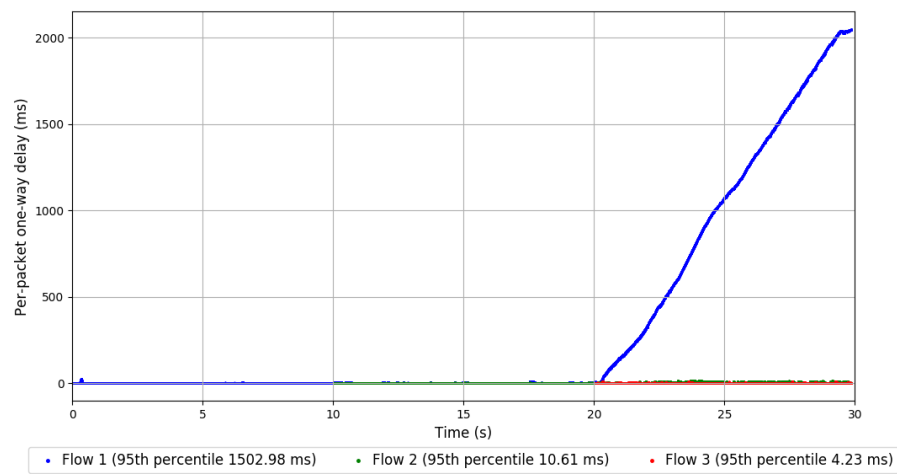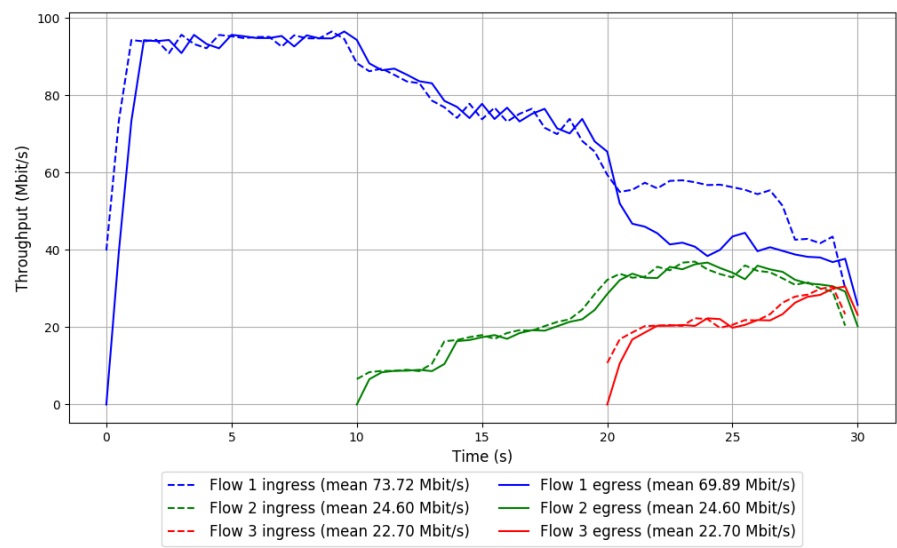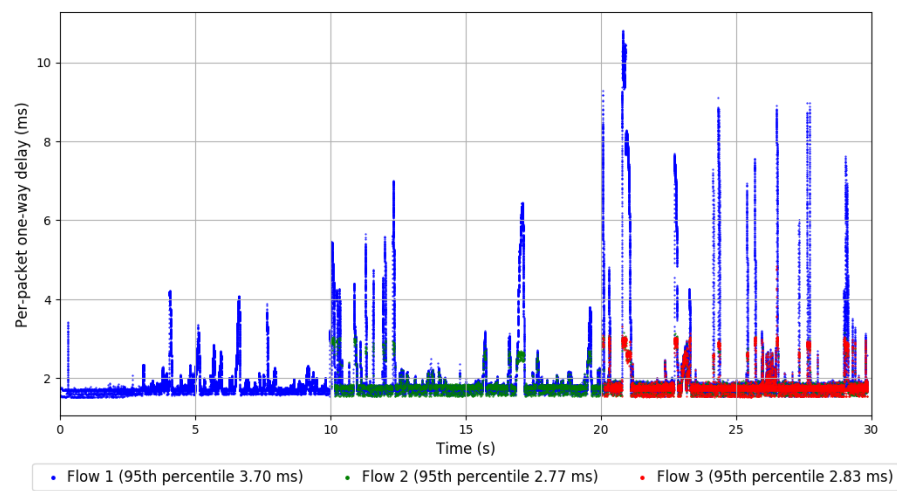
Run 4: Report of PCC-Allegro — Data Link

- - - Flow 1 ingress (mean 73.72 Mbit/s)   —— Flow 1 egress (mean 69.89 Mbit/s)
- - - Flow 2 ingress (mean 24.60 Mbit/s)   —— Flow 2 egress (mean 24.60 Mbit/s)
- - - Flow 3 ingress (mean 22.70 Mbit/s)   —— Flow 3 egress (mean 22.70 Mbit/s)

- Flow 1 (95th percentile 1502.98 ms)   • Flow 2 (95th percentile 10.61 ms)   • Flow 3 (95th percentile 4.23 ms)

```
Run 5: Statistics of PCC-Allegro

Start at: 2019-02-12 05:59:24
End at: 2019-02-12 05:59:54
Local clock offset: -8.208 ms
Remote clock offset: 0.649 ms


# Below is generated by plot.py at 2019-02-12 06:19:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.93 Mbit/s
95th percentile per-packet one-way delay: 3.547 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 80.56 Mbit/s
95th percentile per-packet one-way delay: 3.701 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 2.766 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 11.97 Mbit/s
95th percentile per-packet one-way delay: 2.831 ms
Loss rate: 0.07%
```
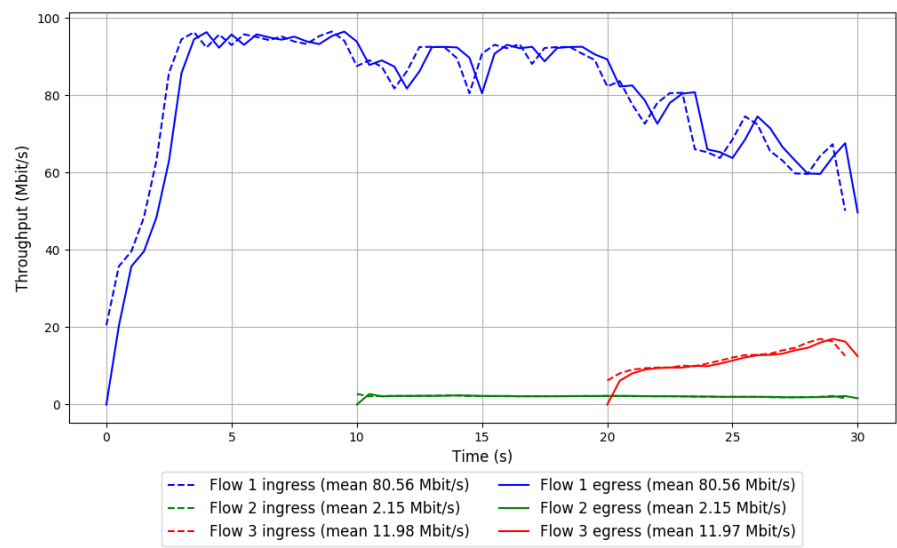
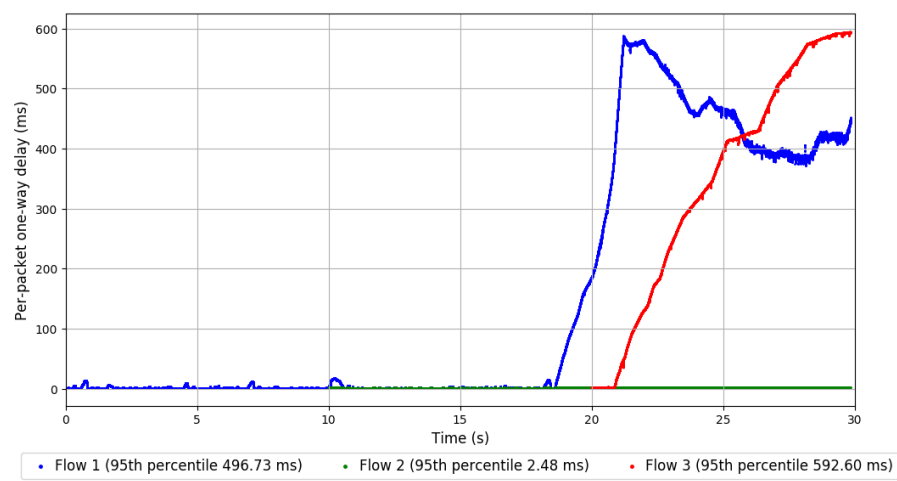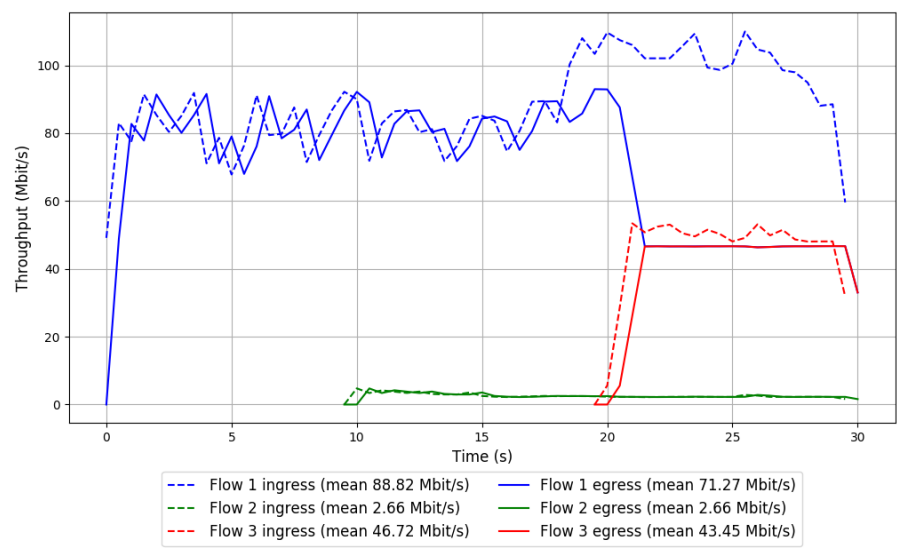Run 5: Report of PCC-Allegro — Data Link

```
Run 1: Statistics of PCC-Expr

Start at: 2019-02-12 04:09:51
End at: 2019-02-12 04:10:21
Local clock offset: -4.463 ms
Remote clock offset: -2.448 ms


# Below is generated by plot.py at 2019-02-12 06:19:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.40 Mbit/s
95th percentile per-packet one-way delay: 562.458 ms
Loss rate: 17.59%
-- Flow 1:
Average throughput: 71.27 Mbit/s
95th percentile per-packet one-way delay: 496.726 ms
Loss rate: 19.77%
-- Flow 2:
Average throughput: 2.66 Mbit/s
95th percentile per-packet one-way delay: 2.476 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 43.45 Mbit/s
95th percentile per-packet one-way delay: 592.599 ms
Loss rate: 7.04%
```

Run 1: Report of PCC-Expr — Data Link

```
Run 2: Statistics of PCC-Expr

Start at: 2019-02-12 04:34:05
End at: 2019-02-12 04:34:35
Local clock offset: -0.074 ms
Remote clock offset: -1.65 ms


# Below is generated by plot.py at 2019-02-12 06:20:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.22 Mbit/s
95th percentile per-packet one-way delay: 696.820 ms
Loss rate: 22.39%
-- Flow 1:
Average throughput: 53.98 Mbit/s
95th percentile per-packet one-way delay: 578.888 ms
Loss rate: 26.41%
-- Flow 2:
Average throughput: 39.91 Mbit/s
95th percentile per-packet one-way delay: 718.146 ms
Loss rate: 19.35%
-- Flow 3:
Average throughput: 26.38 Mbit/s
95th percentile per-packet one-way delay: 12.958 ms
Loss rate: 0.04%
```
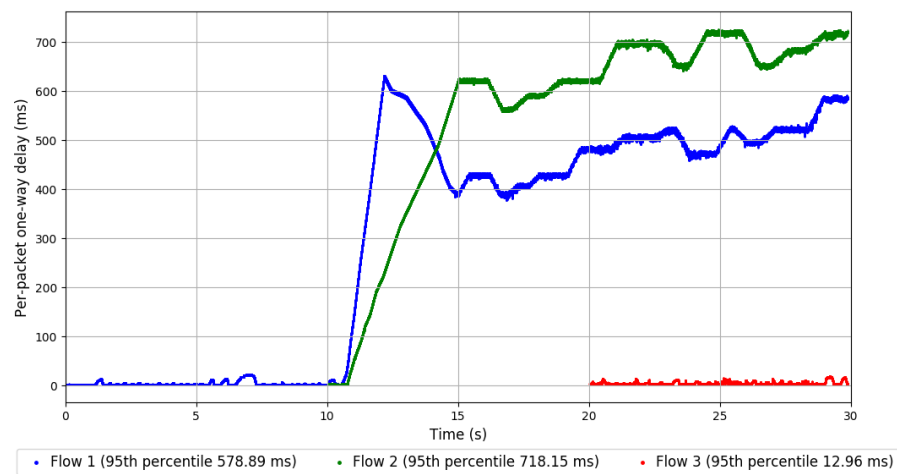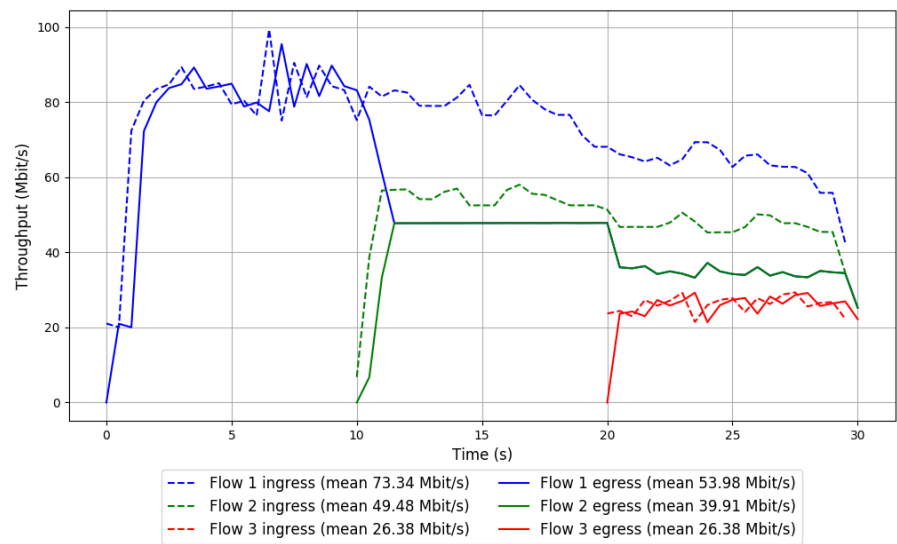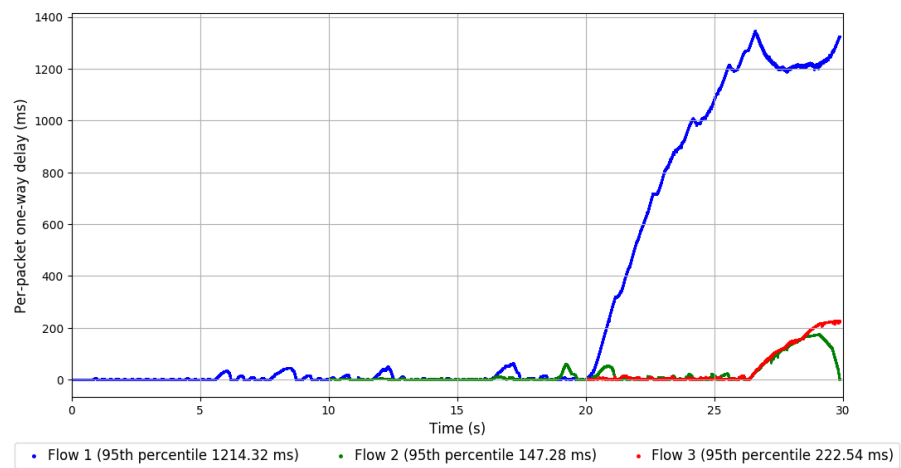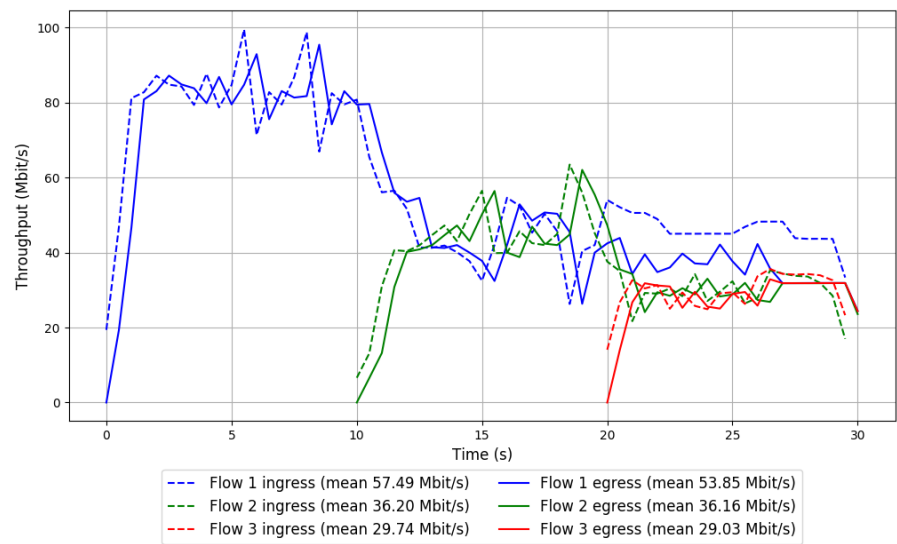
Run 2: Report of PCC-Expr — Data Link

- - - Flow 1 ingress (mean 73.34 Mbit/s)   —— Flow 1 egress (mean 53.98 Mbit/s)
- - - Flow 2 ingress (mean 49.48 Mbit/s)   —— Flow 2 egress (mean 39.91 Mbit/s)
- - - Flow 3 ingress (mean 26.38 Mbit/s)   —— Flow 3 egress (mean 26.38 Mbit/s)

- Flow 1 (95th percentile 578.89 ms)   • Flow 2 (95th percentile 718.15 ms)   • Flow 3 (95th percentile 12.96 ms)

```
Run 3: Statistics of PCC-Expr

Start at: 2019-02-12 04:58:19
End at: 2019-02-12 04:58:49
Local clock offset: -1.989 ms
Remote clock offset: -0.687 ms


# Below is generated by plot.py at 2019-02-12 06:20:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.48 Mbit/s
95th percentile per-packet one-way delay: 1196.531 ms
Loss rate: 4.28%
-- Flow 1:
Average throughput: 53.85 Mbit/s
95th percentile per-packet one-way delay: 1214.316 ms
Loss rate: 6.34%
-- Flow 2:
Average throughput: 36.16 Mbit/s
95th percentile per-packet one-way delay: 147.278 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 29.03 Mbit/s
95th percentile per-packet one-way delay: 222.538 ms
Loss rate: 2.42%
```
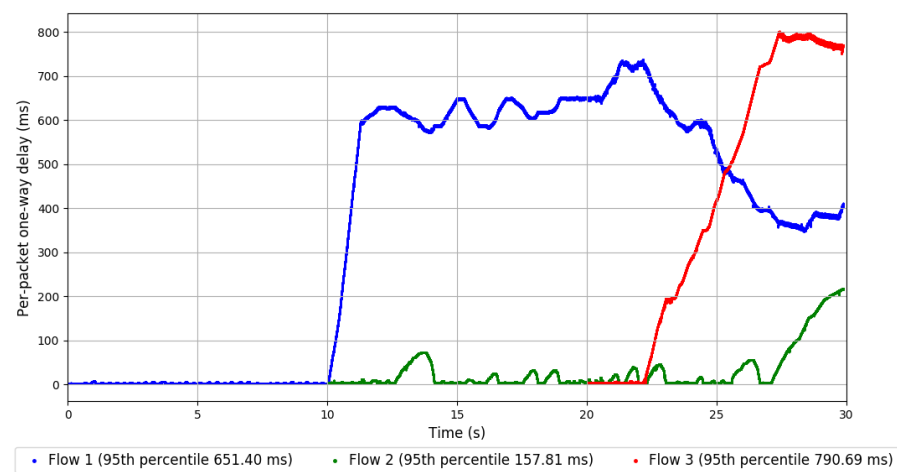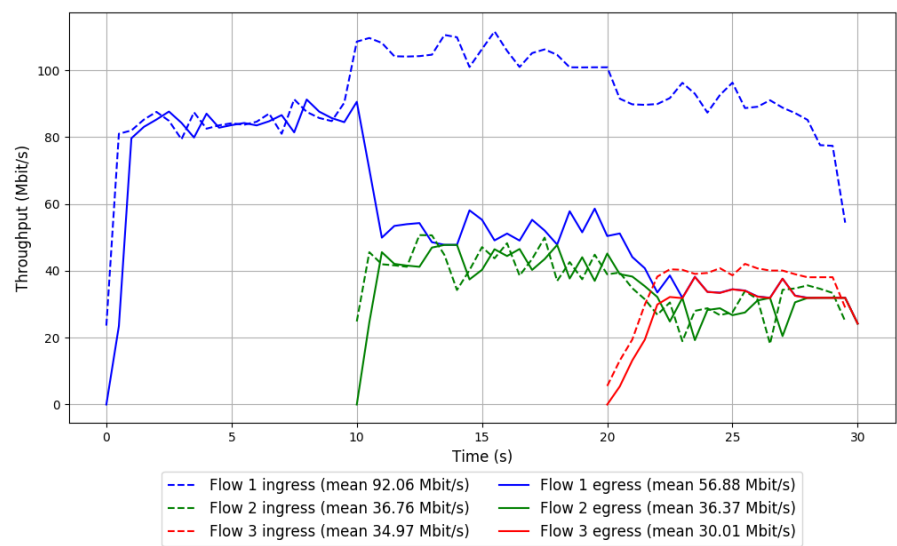
Run 3: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 57.49 Mbit/s) — — — Flow 1 egress (mean 53.85 Mbit/s)
Flow 2 ingress (mean 36.20 Mbit/s) — — — Flow 2 egress (mean 36.16 Mbit/s)
Flow 3 ingress (mean 29.74 Mbit/s) — — — Flow 3 egress (mean 29.03 Mbit/s)

Flow 1 (95th percentile 1214.32 ms)   Flow 2 (95th percentile 147.28 ms)   Flow 3 (95th percentile 222.54 ms)

```
Run 4: Statistics of PCC-Expr

Start at: 2019-02-12 05:22:30
End at: 2019-02-12 05:23:00
Local clock offset: -6.589 ms
Remote clock offset: 0.086 ms


# Below is generated by plot.py at 2019-02-12 06:20:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.97 Mbit/s
95th percentile per-packet one-way delay: 719.590 ms
Loss rate: 28.98%
-- Flow 1:
Average throughput: 56.88 Mbit/s
95th percentile per-packet one-way delay: 651.404 ms
Loss rate: 38.23%
-- Flow 2:
Average throughput: 36.37 Mbit/s
95th percentile per-packet one-way delay: 157.807 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 30.01 Mbit/s
95th percentile per-packet one-way delay: 790.690 ms
Loss rate: 14.25%
```
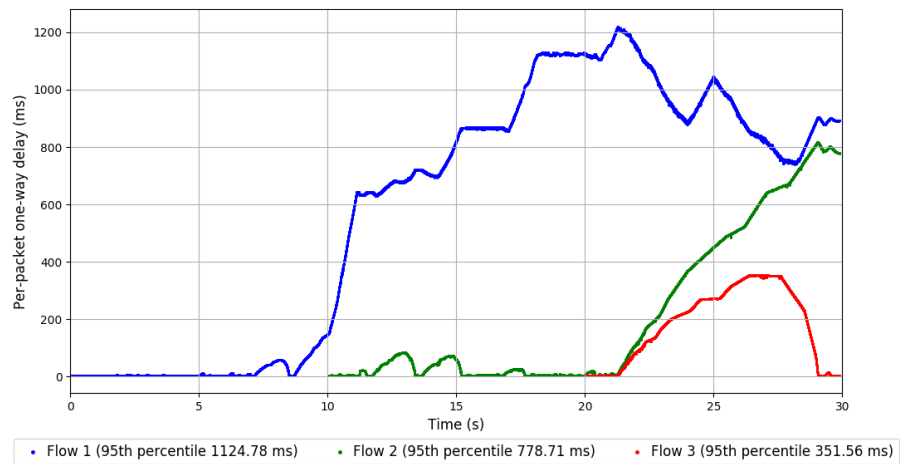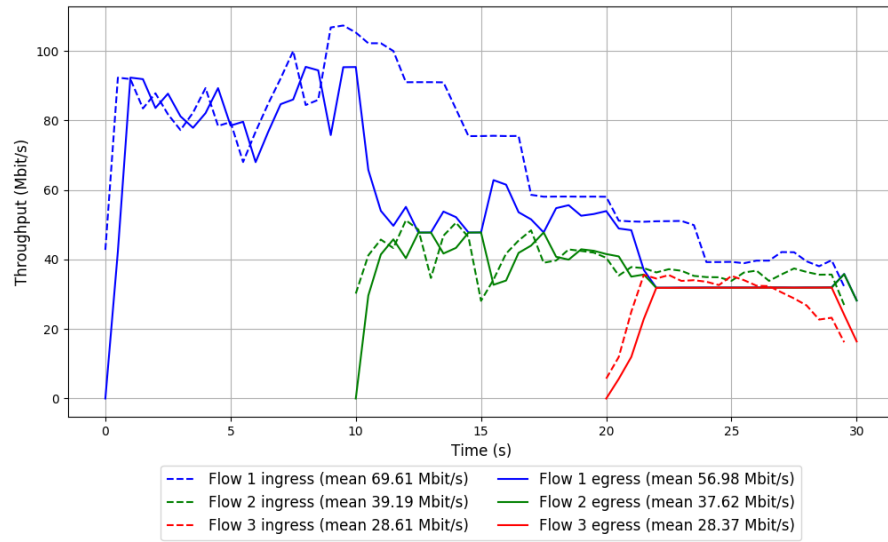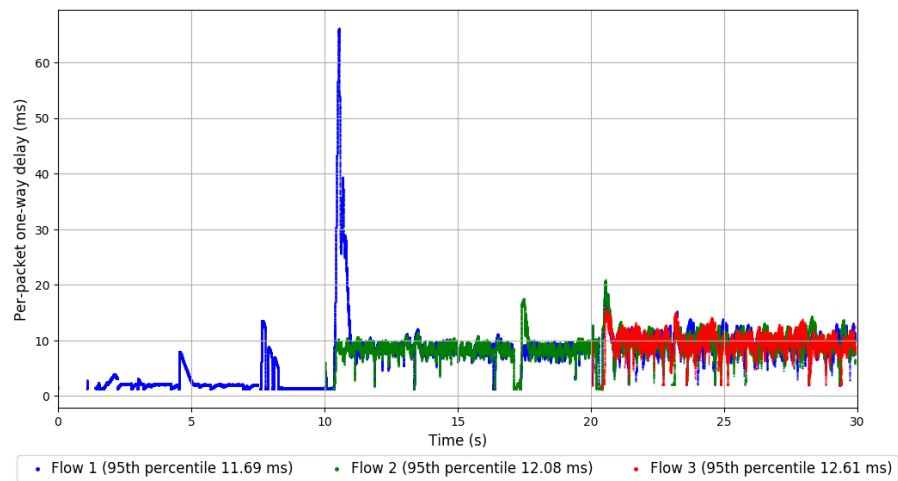
Run 4: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 92.06 Mbit/s) --- Flow 1 egress (mean 56.88 Mbit/s)
Flow 2 ingress (mean 36.76 Mbit/s) --- Flow 2 egress (mean 36.37 Mbit/s)
Flow 3 ingress (mean 34.97 Mbit/s) --- Flow 3 egress (mean 30.01 Mbit/s)

Flow 1 (95th percentile 651.40 ms)   Flow 2 (95th percentile 157.81 ms)   Flow 3 (95th percentile 790.69 ms)

```
Run 5: Statistics of PCC-Expr

Start at: 2019-02-12 05:46:44
End at: 2019-02-12 05:47:14
Local clock offset: -7.196 ms
Remote clock offset: 0.541 ms


# Below is generated by plot.py at 2019-02-12 06:20:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.37 Mbit/s
95th percentile per-packet one-way delay: 1120.770 ms
Loss rate: 13.11%
-- Flow 1:
Average throughput: 56.98 Mbit/s
95th percentile per-packet one-way delay: 1124.781 ms
Loss rate: 18.17%
-- Flow 2:
Average throughput: 37.62 Mbit/s
95th percentile per-packet one-way delay: 778.705 ms
Loss rate: 4.02%
-- Flow 3:
Average throughput: 28.37 Mbit/s
95th percentile per-packet one-way delay: 351.561 ms
Loss rate: 0.97%
```

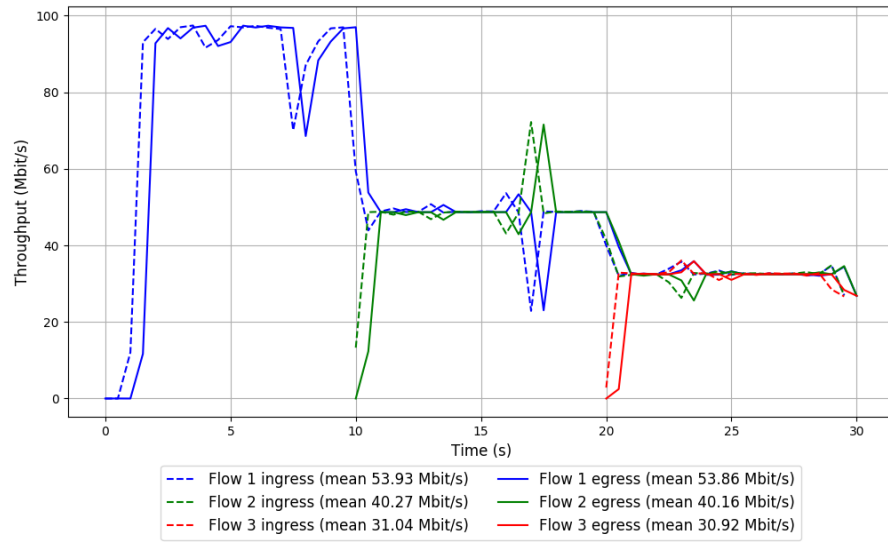Run 5: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 69.61 Mbit/s) --- Flow 1 egress (mean 56.98 Mbit/s)
Flow 2 ingress (mean 39.19 Mbit/s) --- Flow 2 egress (mean 37.62 Mbit/s)
Flow 3 ingress (mean 28.61 Mbit/s) --- Flow 3 egress (mean 28.37 Mbit/s)

Flow 1 (95th percentile 1124.78 ms)   Flow 2 (95th percentile 778.71 ms)   Flow 3 (95th percentile 351.56 ms)
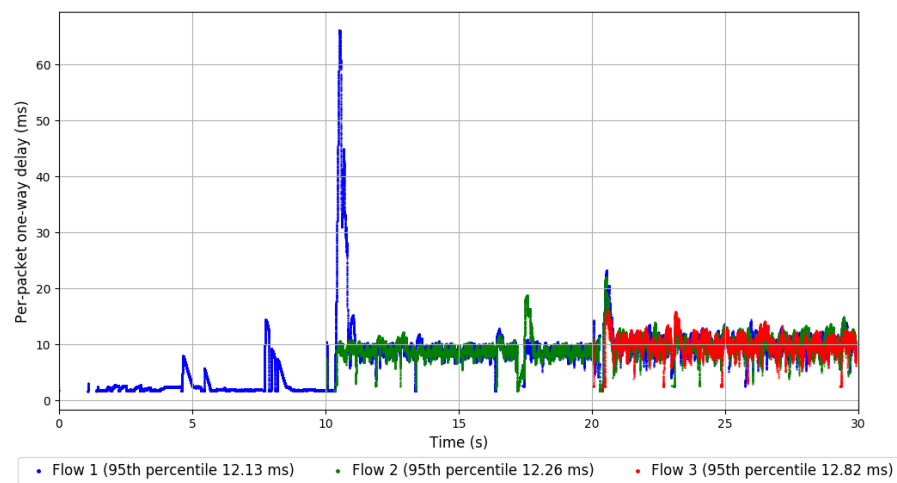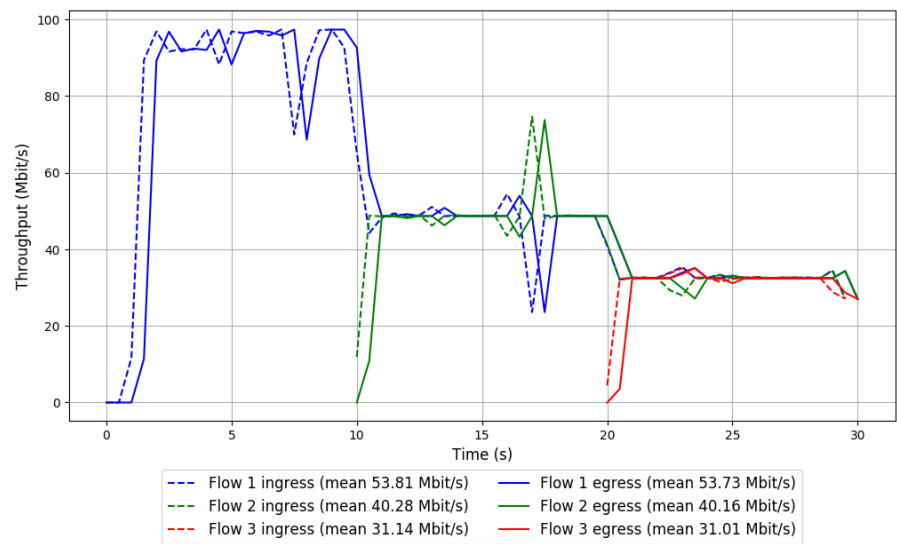
```
Run 1: Statistics of QUIC Cubic

Start at: 2019-02-12 04:08:42
End at: 2019-02-12 04:09:12
Local clock offset: -5.082 ms
Remote clock offset: -2.484 ms


# Below is generated by plot.py at 2019-02-12 06:20:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.80 Mbit/s
95th percentile per-packet one-way delay: 12.044 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 53.86 Mbit/s
95th percentile per-packet one-way delay: 11.689 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 40.16 Mbit/s
95th percentile per-packet one-way delay: 12.080 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 30.92 Mbit/s
95th percentile per-packet one-way delay: 12.609 ms
Loss rate: 0.40%
```

Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2019-02-12 04:32:56
End at: 2019-02-12 04:33:26
Local clock offset: -0.121 ms
Remote clock offset: -1.739 ms


# Below is generated by plot.py at 2019-02-12 06:20:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.72 Mbit/s
95th percentile per-packet one-way delay: 12.306 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 53.73 Mbit/s
95th percentile per-packet one-way delay: 12.130 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 40.16 Mbit/s
95th percentile per-packet one-way delay: 12.262 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 31.01 Mbit/s
95th percentile per-packet one-way delay: 12.822 ms
Loss rate: 0.45%
```
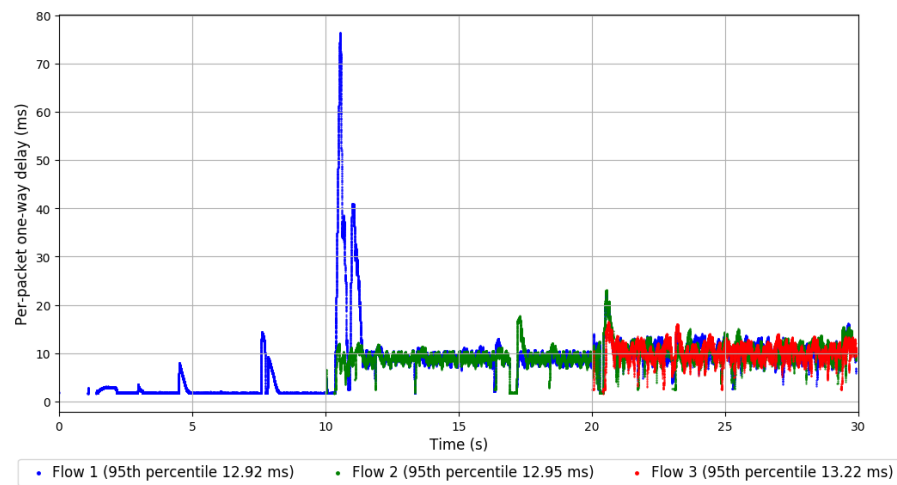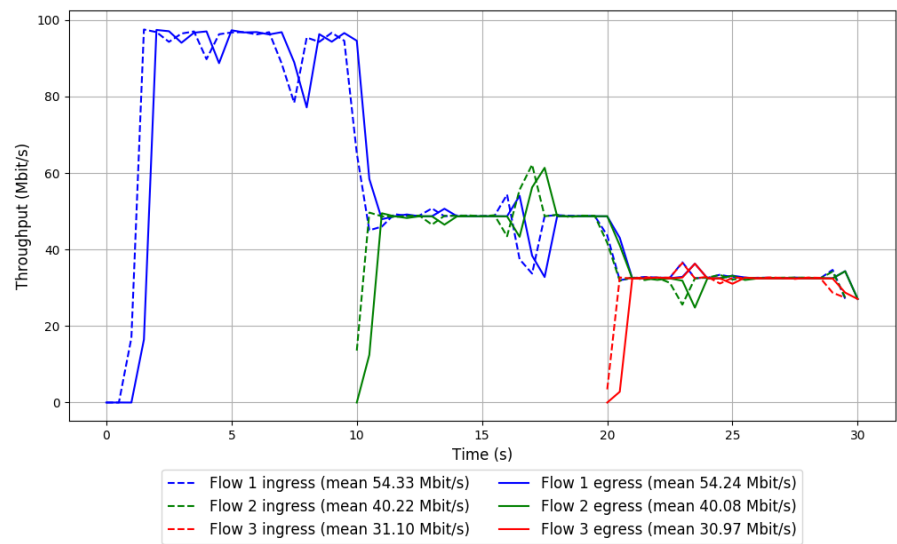
Run 2: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 53.81 Mbit/s) — Flow 1 egress (mean 53.73 Mbit/s)
Flow 2 ingress (mean 40.28 Mbit/s) — Flow 2 egress (mean 40.16 Mbit/s)
Flow 3 ingress (mean 31.14 Mbit/s) — Flow 3 egress (mean 31.01 Mbit/s)

Flow 1 (95th percentile 12.13 ms)   Flow 2 (95th percentile 12.26 ms)   Flow 3 (95th percentile 12.82 ms)

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```
Run 3: Statistics of QUIC Cubic

Start at: 2019-02-12 04:57:09
End at: 2019-02-12 04:57:39
Local clock offset: -1.915 ms
Remote clock offset: -0.82 ms


# Below is generated by plot.py at 2019-02-12 06:20:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.17 Mbit/s
95th percentile per-packet one-way delay: 13.001 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 54.24 Mbit/s
95th percentile per-packet one-way delay: 12.920 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 40.08 Mbit/s
95th percentile per-packet one-way delay: 12.950 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 30.97 Mbit/s
95th percentile per-packet one-way delay: 13.220 ms
Loss rate: 0.46%
```
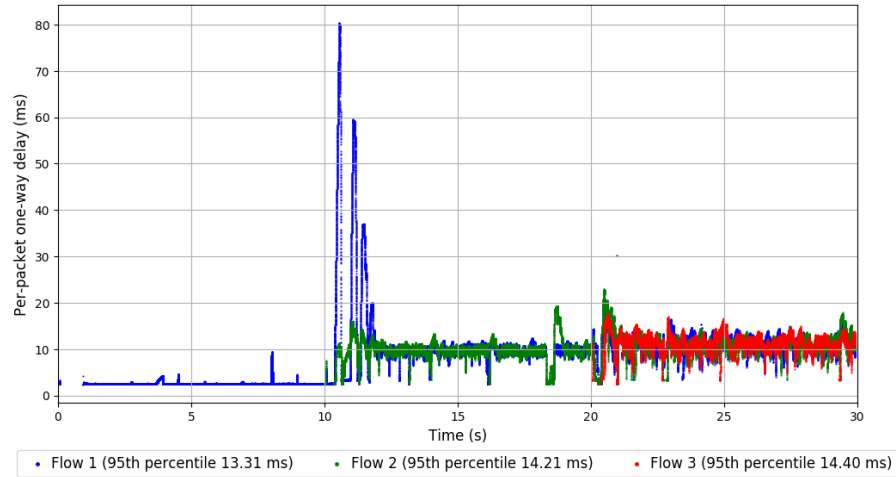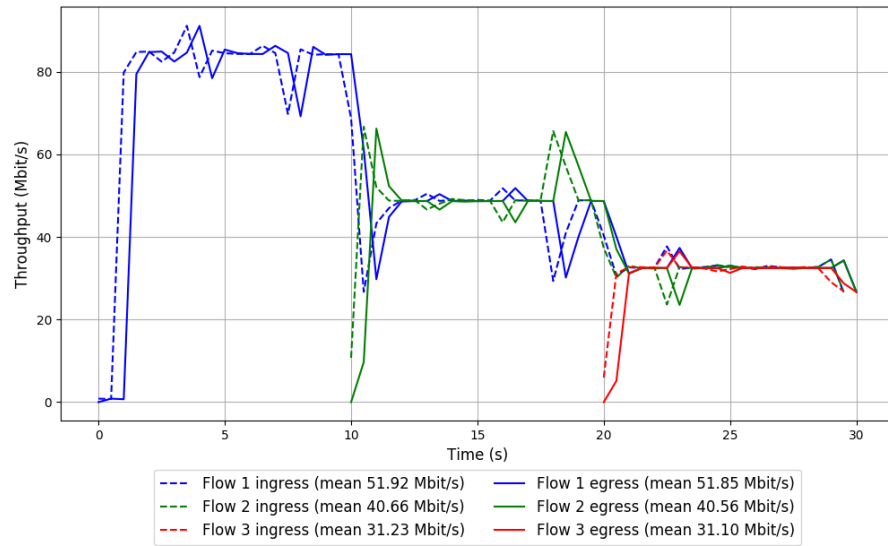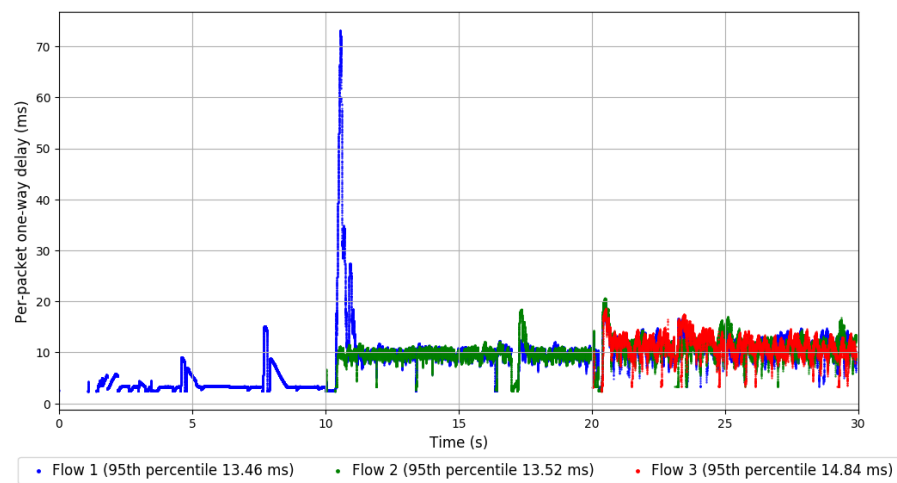
Run 3: Report of QUIC Cubic — Data Link

- - - - Flow 1 ingress (mean 54.33 Mbit/s)   —— Flow 1 egress (mean 54.24 Mbit/s)
- - - - Flow 2 ingress (mean 40.22 Mbit/s)   —— Flow 2 egress (mean 40.08 Mbit/s)
- - - - Flow 3 ingress (mean 31.10 Mbit/s)   —— Flow 3 egress (mean 30.97 Mbit/s)

- Flow 1 (95th percentile 12.92 ms)   • Flow 2 (95th percentile 12.95 ms)   • Flow 3 (95th percentile 13.22 ms)

Run 4: Statistics of QUIC Cubic

Start at: 2019-02-12 05:21:21
End at: 2019-02-12 05:21:51
Local clock offset: -6.364 ms
Remote clock offset: 0.056 ms

Below is generated by plot.py at 2019-02-12 06:20:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 89.09 Mbit/s
95th percentile per-packet one-way delay: 13.878 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 51.85 Mbit/s
95th percentile per-packet one-way delay: 13.314 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 40.56 Mbit/s
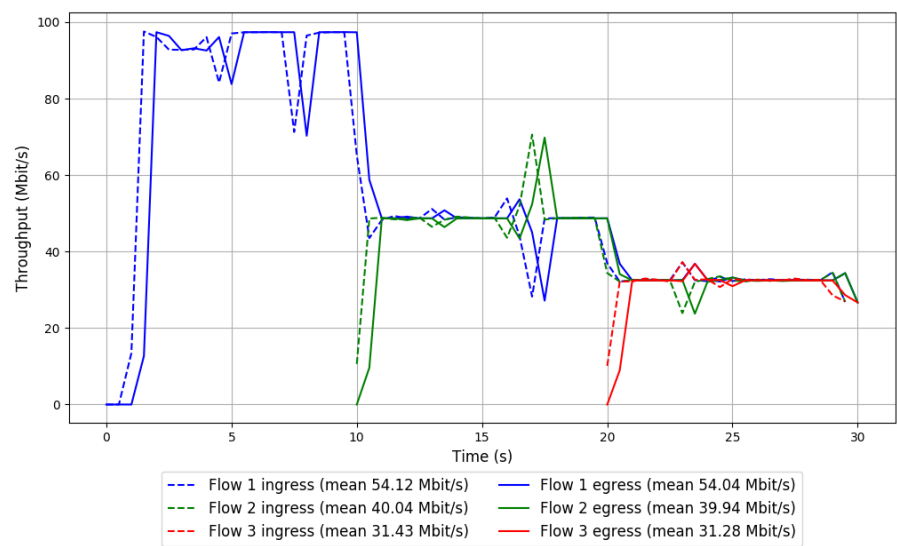95th percentile per-packet one-way delay: 14.208 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 31.10 Mbit/s
95th percentile per-packet one-way delay: 14.401 ms
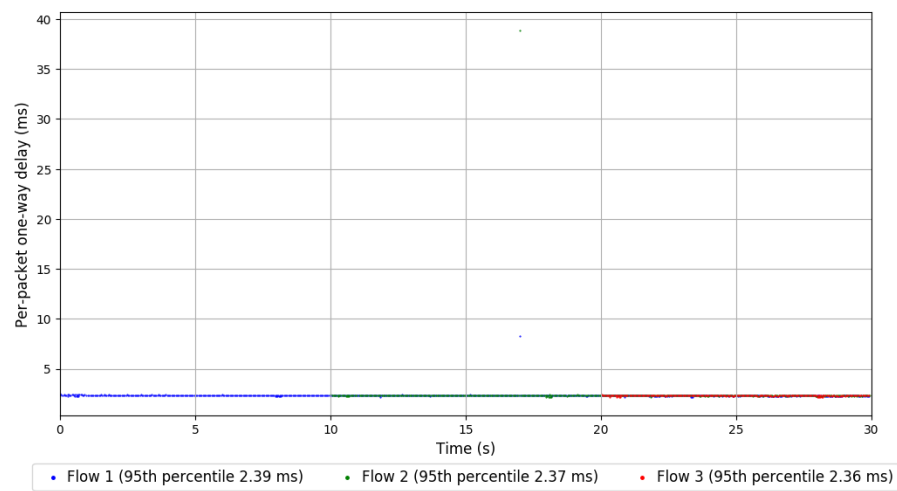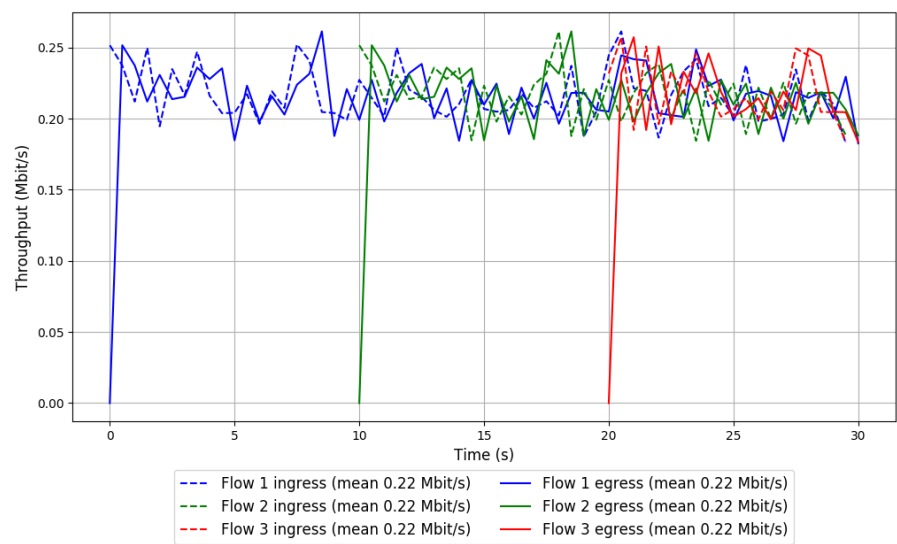Loss rate: 0.45%

Run 4: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 51.92 Mbit/s)   Flow 1 egress (mean 51.85 Mbit/s)
Flow 2 ingress (mean 40.66 Mbit/s)   Flow 2 egress (mean 40.56 Mbit/s)
Flow 3 ingress (mean 31.23 Mbit/s)   Flow 3 egress (mean 31.10 Mbit/s)

Flow 1 (95th percentile 13.31 ms)   Flow 2 (95th percentile 14.21 ms)   Flow 3 (95th percentile 14.40 ms)

```
Run 5: Statistics of QUIC Cubic

Start at: 2019-02-12 05:45:34
End at: 2019-02-12 05:46:04
Local clock offset: -7.206 ms
Remote clock offset: 0.411 ms


# Below is generated by plot.py at 2019-02-12 06:21:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.97 Mbit/s
95th percentile per-packet one-way delay: 13.840 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 54.04 Mbit/s
95th percentile per-packet one-way delay: 13.464 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 39.94 Mbit/s
95th percentile per-packet one-way delay: 13.521 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 31.28 Mbit/s
95th percentile per-packet one-way delay: 14.844 ms
Loss rate: 0.49%
```
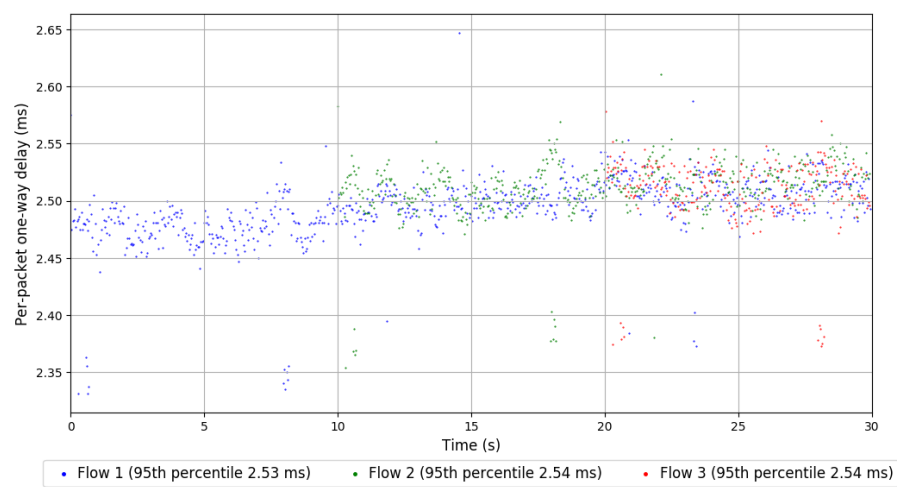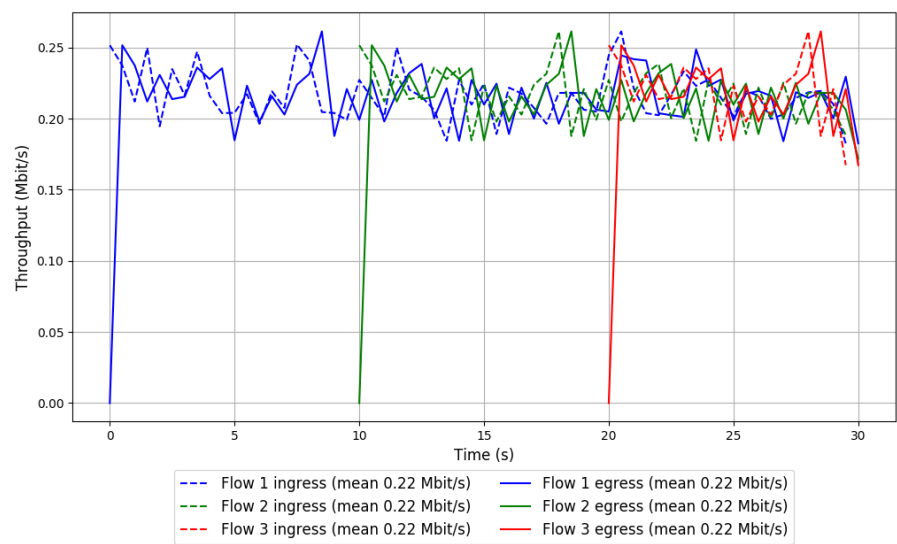
Run 5: Report of QUIC Cubic — Data Link

- - - Flow 1 ingress (mean 54.12 Mbit/s) —— Flow 1 egress (mean 54.04 Mbit/s)
- - - Flow 2 ingress (mean 40.04 Mbit/s) —— Flow 2 egress (mean 39.94 Mbit/s)
- - - Flow 3 ingress (mean 31.43 Mbit/s) —— Flow 3 egress (mean 31.28 Mbit/s)

· Flow 1 (95th percentile 13.46 ms)   · Flow 2 (95th percentile 13.52 ms)   · Flow 3 (95th percentile 14.84 ms)
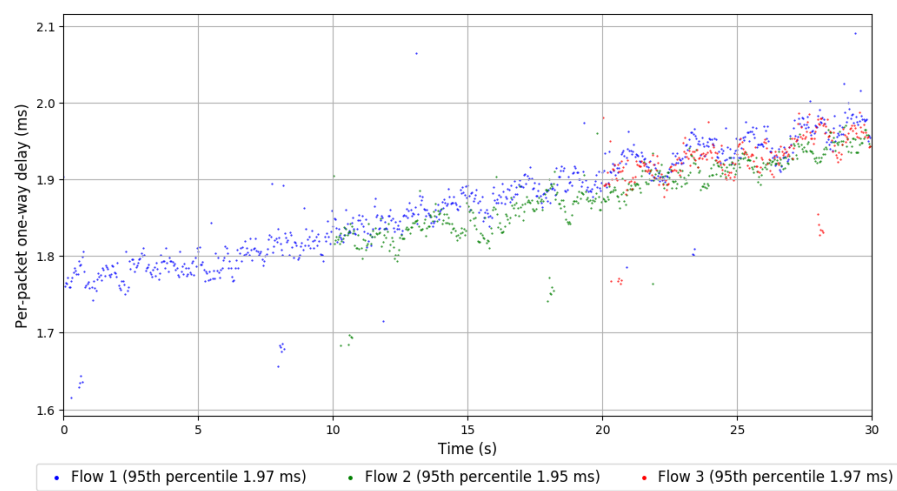
```
Run 1: Statistics of SCReAM

Start at: 2019-02-12 04:19:09
End at: 2019-02-12 04:19:39
Local clock offset: -1.111 ms
Remote clock offset: -2.2 ms


# Below is generated by plot.py at 2019-02-12 06:21:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 2.379 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.386 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.366 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.359 ms
Loss rate: 0.00%
```
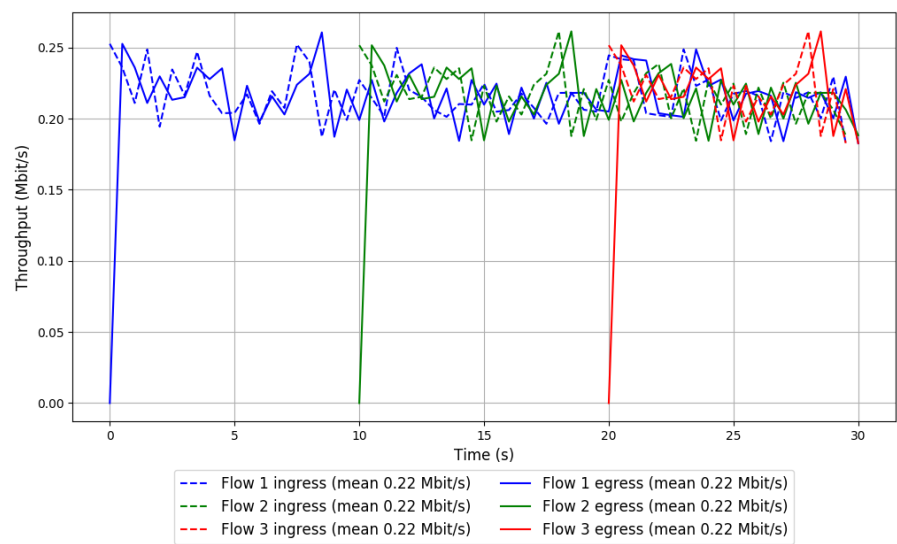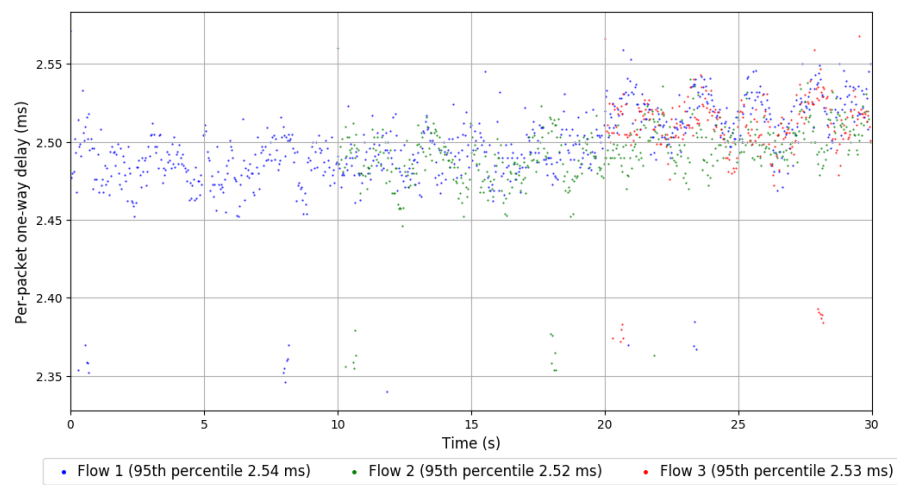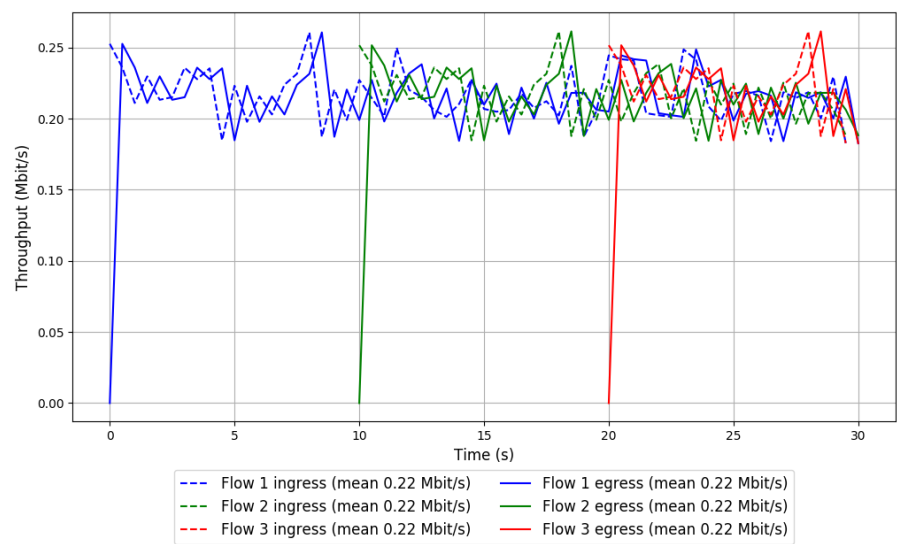
Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2019-02-12 04:43:23
End at: 2019-02-12 04:43:53
Local clock offset: -0.825 ms
Remote clock offset: -1.317 ms


# Below is generated by plot.py at 2019-02-12 06:21:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 2.537 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.527 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.543 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.537 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2019-02-12 05:07:37
End at: 2019-02-12 05:08:07
Local clock offset: -3.769 ms
Remote clock offset: -0.311 ms


# Below is generated by plot.py at 2019-02-12 06:21:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 1.967 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.973 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.949 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.972 ms
Loss rate: 0.00%
```
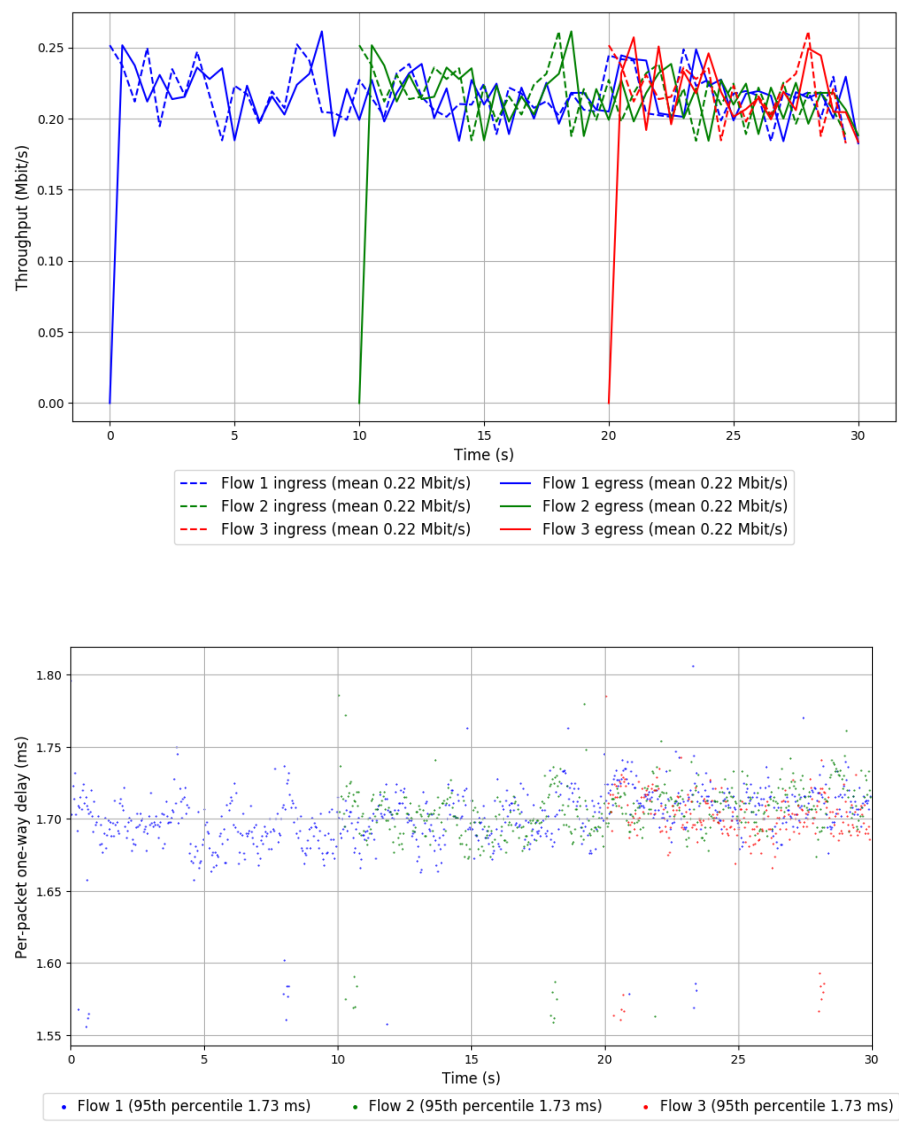
Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2019-02-12 05:31:50
End at: 2019-02-12 05:32:20
Local clock offset: -7.324 ms
Remote clock offset: 0.236 ms


# Below is generated by plot.py at 2019-02-12 06:21:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 2.532 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.535 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.519 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.534 ms
Loss rate: 0.00%
```
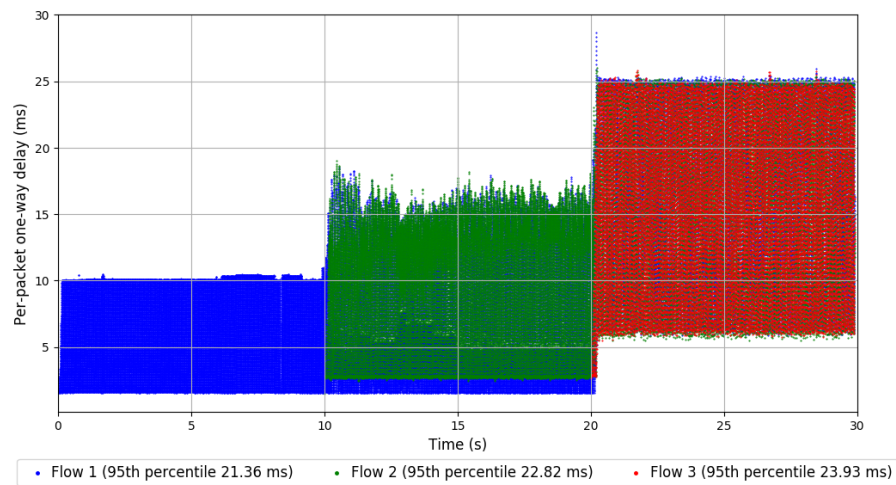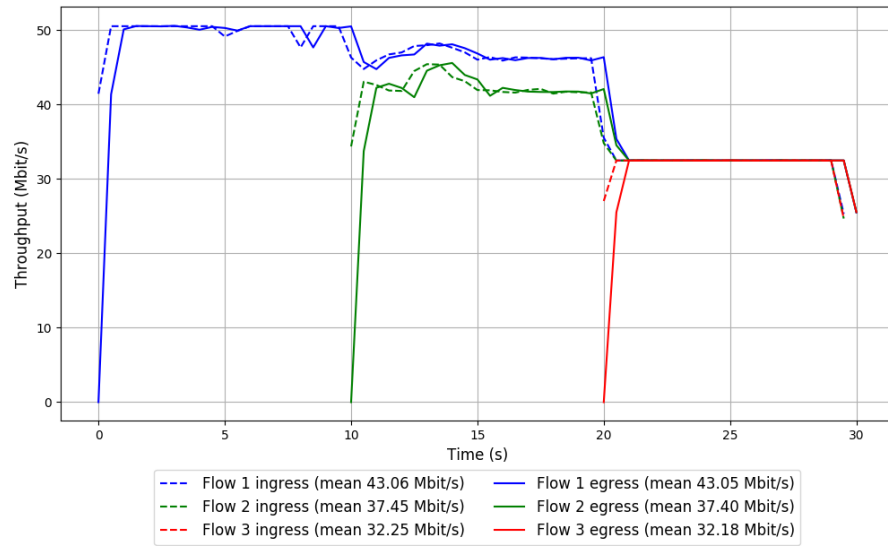
Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2019-02-12 05:56:02
End at: 2019-02-12 05:56:32
Local clock offset: -8.114 ms
Remote clock offset: 0.627 ms


# Below is generated by plot.py at 2019-02-12 06:21:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 1.730 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.730 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.733 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.726 ms
Loss rate: 0.35%
```
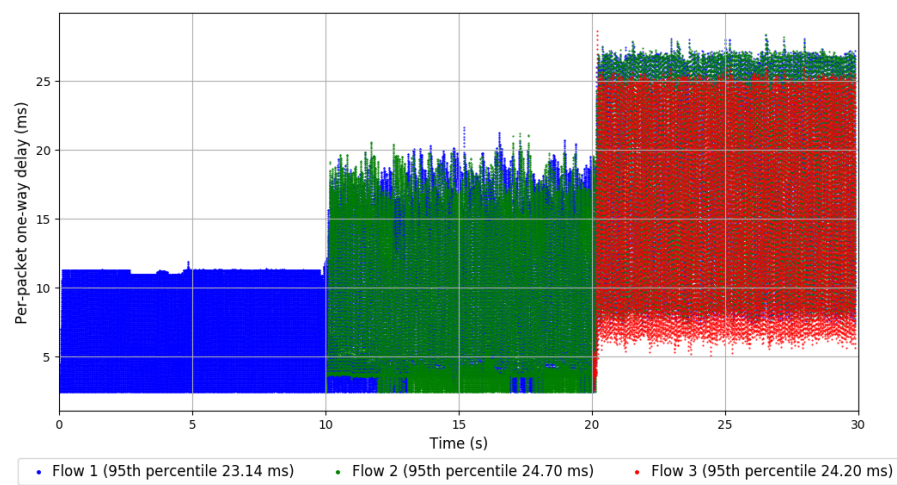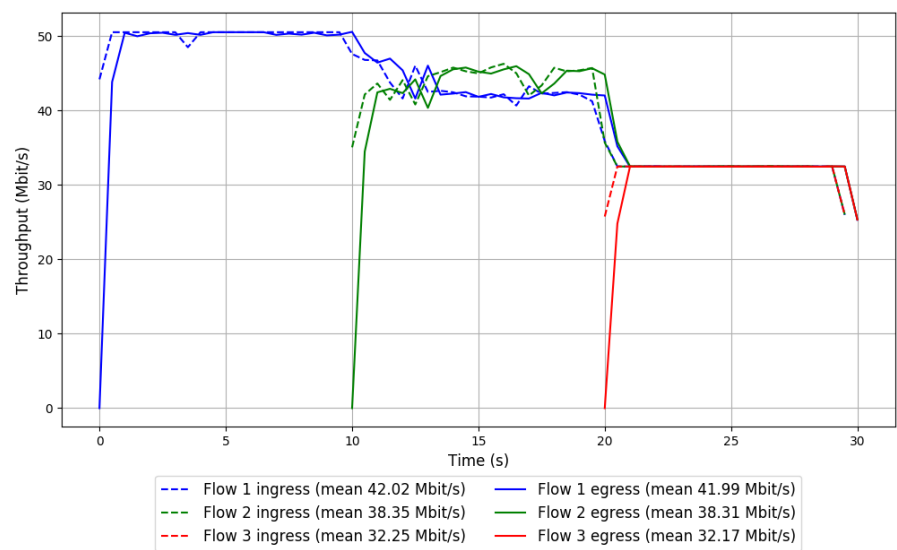
Run 5: Report of SCReAM — Data Link

```
Run 1: Statistics of Sprout

Start at: 2019-02-12 04:29:27
End at: 2019-02-12 04:29:57
Local clock offset: -0.477 ms
Remote clock offset: -1.739 ms


# Below is generated by plot.py at 2019-02-12 06:21:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.56 Mbit/s
95th percentile per-packet one-way delay: 22.710 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 43.05 Mbit/s
95th percentile per-packet one-way delay: 21.362 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 37.40 Mbit/s
95th percentile per-packet one-way delay: 22.824 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 32.18 Mbit/s
95th percentile per-packet one-way delay: 23.927 ms
Loss rate: 0.10%
```
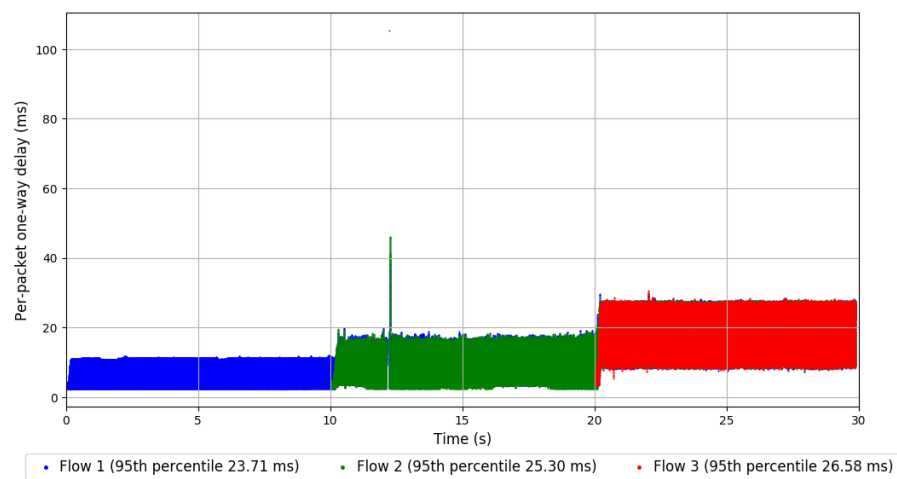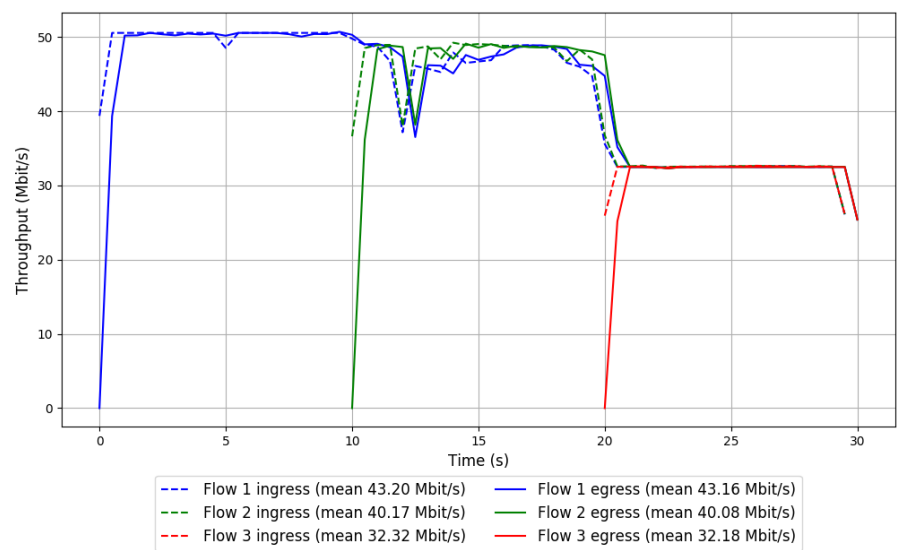
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2019-02-12 04:53:40
End at: 2019-02-12 04:54:10
Local clock offset: -1.165 ms
Remote clock offset: -0.864 ms


# Below is generated by plot.py at 2019-02-12 06:21:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.08 Mbit/s
95th percentile per-packet one-way delay: 24.000 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 41.99 Mbit/s
95th percentile per-packet one-way delay: 23.140 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 38.31 Mbit/s
95th percentile per-packet one-way delay: 24.701 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 32.17 Mbit/s
95th percentile per-packet one-way delay: 24.197 ms
Loss rate: 0.24%
```

Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2019-02-12 05:17:54
End at: 2019-02-12 05:18:24
Local clock offset: -5.853 ms
Remote clock offset: 0.013 ms


# Below is generated by plot.py at 2019-02-12 06:21:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.43 Mbit/s
95th percentile per-packet one-way delay: 25.197 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 43.16 Mbit/s
95th percentile per-packet one-way delay: 23.706 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 40.08 Mbit/s
95th percentile per-packet one-way delay: 25.302 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 32.18 Mbit/s
95th percentile per-packet one-way delay: 26.579 ms
Loss rate: 0.41%
```
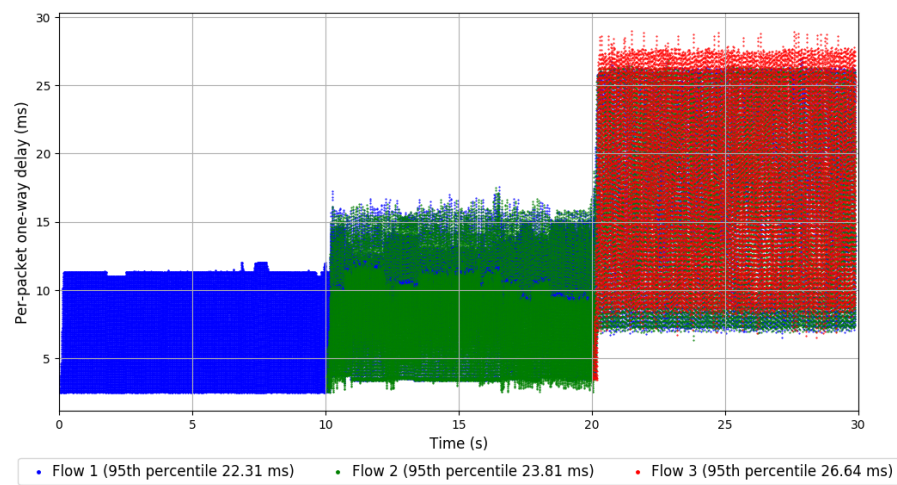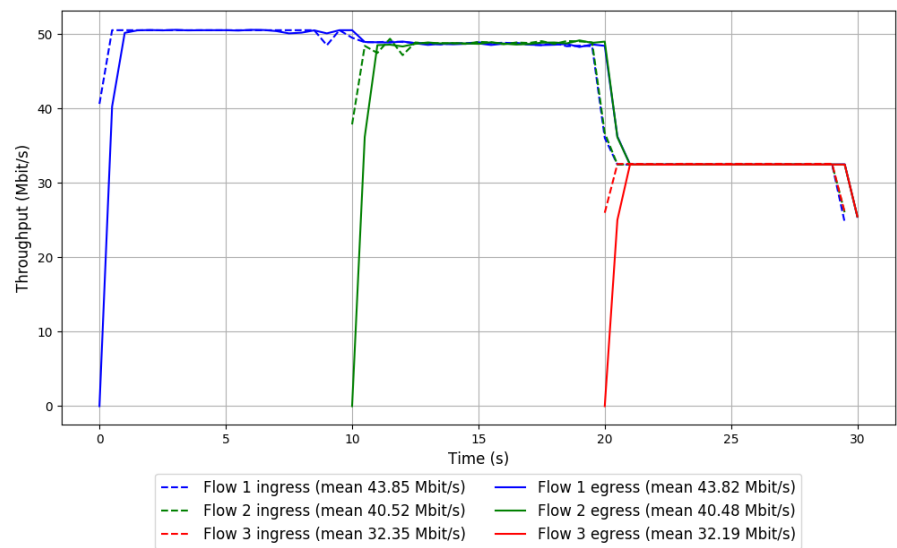
Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2019-02-12 05:42:07
End at: 2019-02-12 05:42:37
Local clock offset: -7.19 ms
Remote clock offset: 0.369 ms


# Below is generated by plot.py at 2019-02-12 06:21:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.37 Mbit/s
95th percentile per-packet one-way delay: 24.236 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 43.82 Mbit/s
95th percentile per-packet one-way delay: 22.308 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 40.48 Mbit/s
95th percentile per-packet one-way delay: 23.813 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 32.19 Mbit/s
95th percentile per-packet one-way delay: 26.642 ms
Loss rate: 0.47%
```
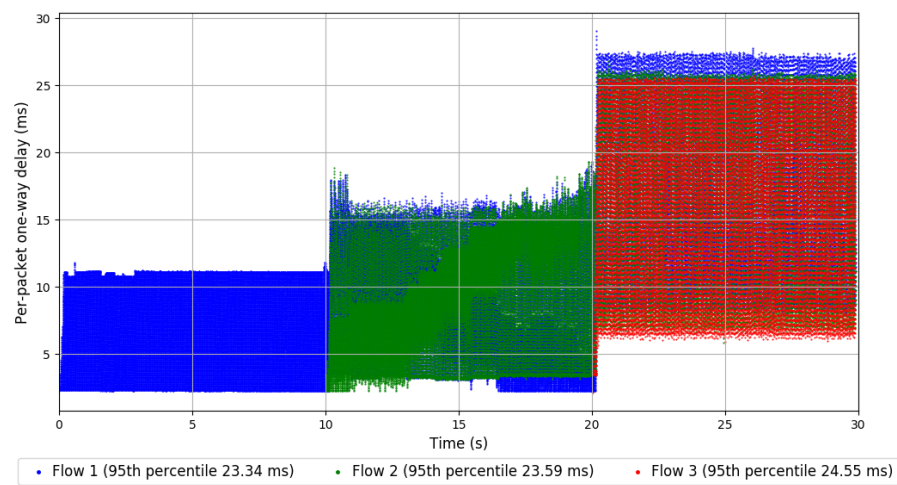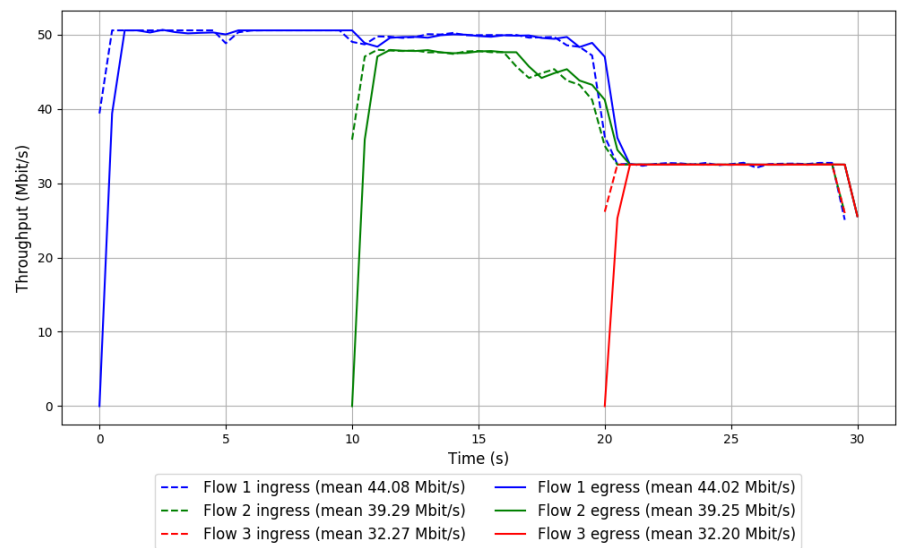
Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2019-02-12 06:06:17
End at: 2019-02-12 06:06:47
Local clock offset: -7.217 ms
Remote clock offset: 0.661 ms


# Below is generated by plot.py at 2019-02-12 06:21:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.76 Mbit/s
95th percentile per-packet one-way delay: 23.833 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 44.02 Mbit/s
95th percentile per-packet one-way delay: 23.343 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 39.25 Mbit/s
95th percentile per-packet one-way delay: 23.586 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 32.20 Mbit/s
95th percentile per-packet one-way delay: 24.552 ms
Loss rate: 0.20%
```

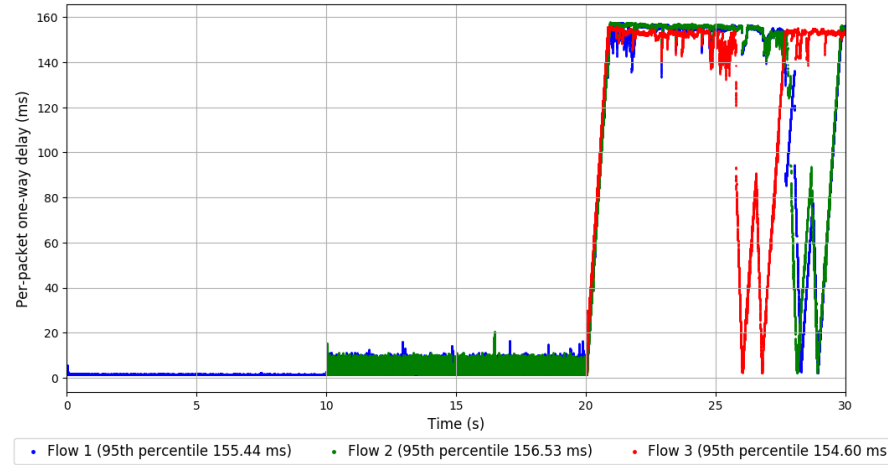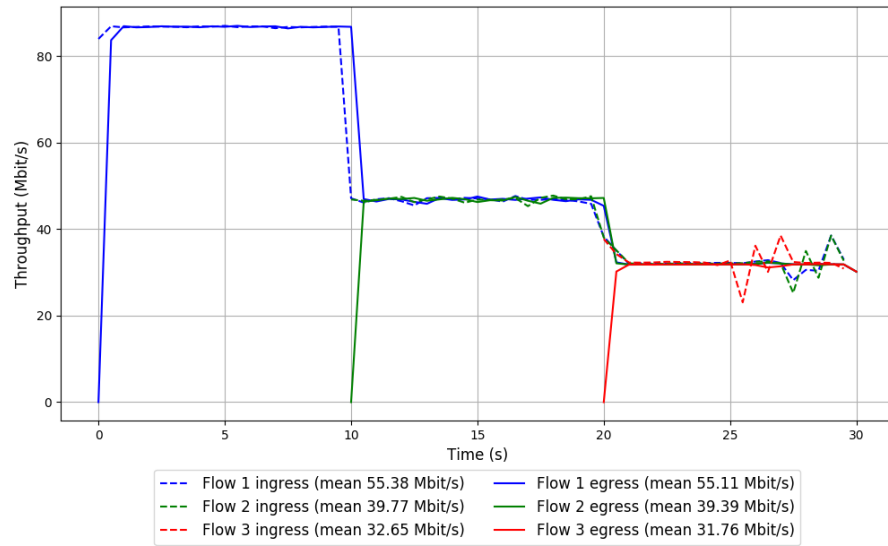## Run 5: Report of Sprout — Data Link

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

Start at: 2019-02-12 04:14:27
End at: 2019-02-12 04:14:57
Local clock offset: -2.932 ms
Remote clock offset: -2.468 ms


# Below is generated by plot.py at 2019-02-12 06:22:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.89 Mbit/s
95th percentile per-packet one-way delay: 155.993 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 55.11 Mbit/s
95th percentile per-packet one-way delay: 155.440 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 39.39 Mbit/s
95th percentile per-packet one-way delay: 156.530 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 31.76 Mbit/s
95th percentile per-packet one-way delay: 154.604 ms
Loss rate: 2.81%
```

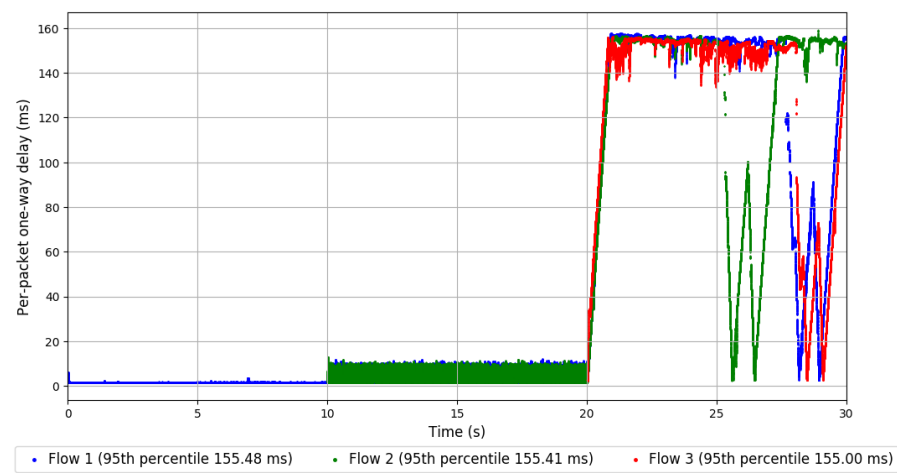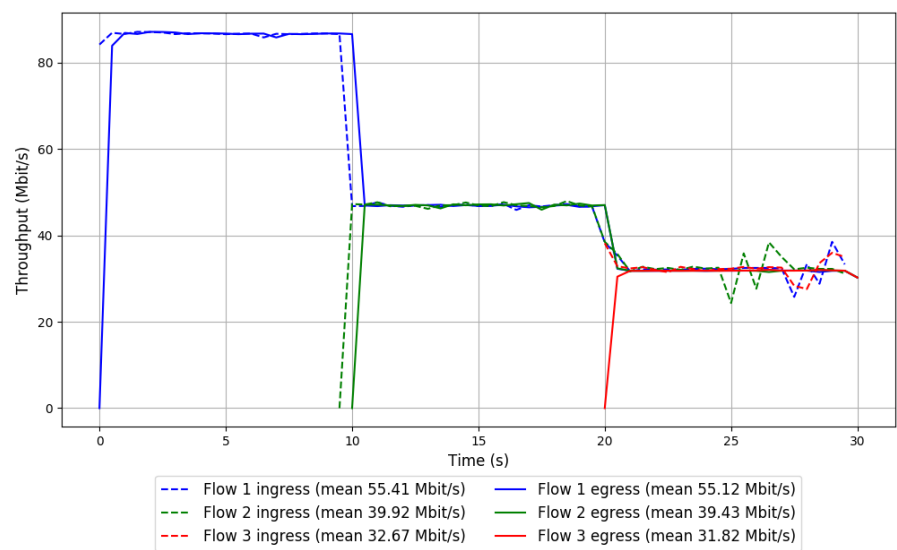# Run 1: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 55.38 Mbit/s) --- Flow 1 egress (mean 55.11 Mbit/s) ——
Flow 2 ingress (mean 39.77 Mbit/s) --- Flow 2 egress (mean 39.39 Mbit/s) ——
Flow 3 ingress (mean 32.65 Mbit/s) --- Flow 3 egress (mean 31.76 Mbit/s) ——

Flow 1 (95th percentile 155.44 ms)   Flow 2 (95th percentile 156.53 ms)   Flow 3 (95th percentile 154.60 ms)

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

Start at: 2019-02-12 04:38:41
End at: 2019-02-12 04:39:11
Local clock offset: -1.075 ms
Remote clock offset: -1.394 ms


# Below is generated by plot.py at 2019-02-12 06:22:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.97 Mbit/s
95th percentile per-packet one-way delay: 155.384 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 55.12 Mbit/s
95th percentile per-packet one-way delay: 155.476 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 39.43 Mbit/s
95th percentile per-packet one-way delay: 155.410 ms
Loss rate: 1.23%
-- Flow 3:
Average throughput: 31.82 Mbit/s
95th percentile per-packet one-way delay: 155.004 ms
Loss rate: 2.67%
```

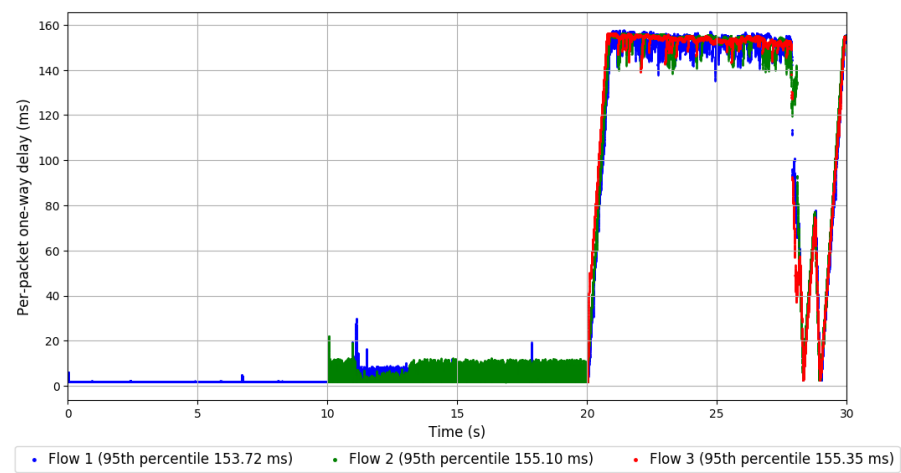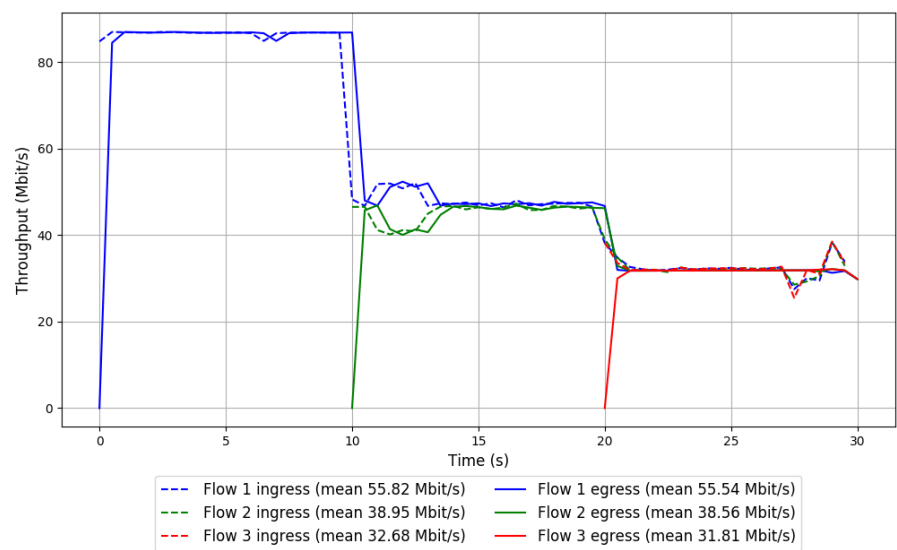Run 2: Report of TaoVA-100x — Data Link

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

Start at: 2019-02-12 05:02:54
End at: 2019-02-12 05:03:24
Local clock offset: -1.847 ms
Remote clock offset: -0.593 ms


# Below is generated by plot.py at 2019-02-12 06:23:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.79 Mbit/s
95th percentile per-packet one-way delay: 154.879 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 55.54 Mbit/s
95th percentile per-packet one-way delay: 153.715 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 38.56 Mbit/s
95th percentile per-packet one-way delay: 155.102 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 31.81 Mbit/s
95th percentile per-packet one-way delay: 155.353 ms
Loss rate: 2.73%
```
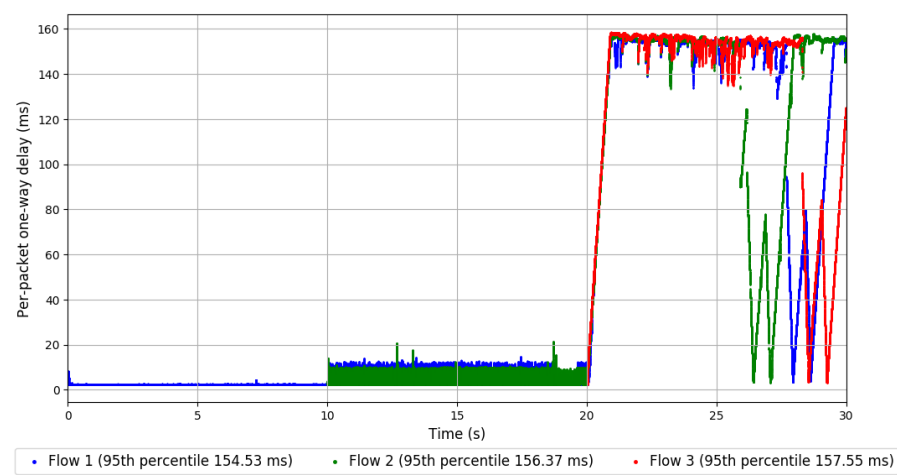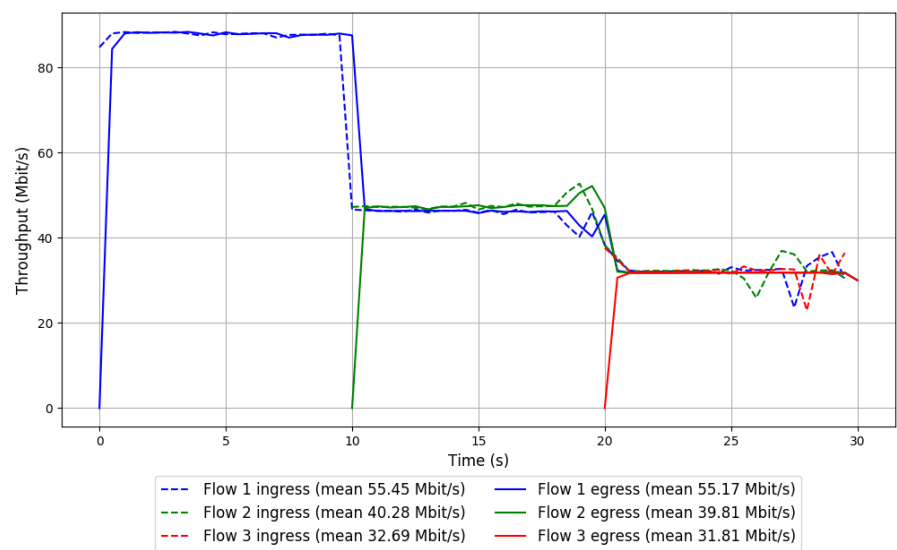
Run 3: Report of TaoVA-100x — Data Link

- - - - Flow 1 ingress (mean 55.82 Mbit/s) ——— Flow 1 egress (mean 55.54 Mbit/s)
- - - - Flow 2 ingress (mean 38.95 Mbit/s) ——— Flow 2 egress (mean 38.56 Mbit/s)
- - - - Flow 3 ingress (mean 32.68 Mbit/s) ——— Flow 3 egress (mean 31.81 Mbit/s)

- Flow 1 (95th percentile 153.72 ms)   • Flow 2 (95th percentile 155.10 ms)   • Flow 3 (95th percentile 155.35 ms)

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

Start at: 2019-02-12 05:27:07
End at: 2019-02-12 05:27:37
Local clock offset: -7.036 ms
Remote clock offset: 0.145 ms


# Below is generated by plot.py at 2019-02-12 06:23:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.26 Mbit/s
95th percentile per-packet one-way delay: 156.124 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 55.17 Mbit/s
95th percentile per-packet one-way delay: 154.529 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 39.81 Mbit/s
95th percentile per-packet one-way delay: 156.366 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 31.81 Mbit/s
95th percentile per-packet one-way delay: 157.551 ms
Loss rate: 2.74%
```
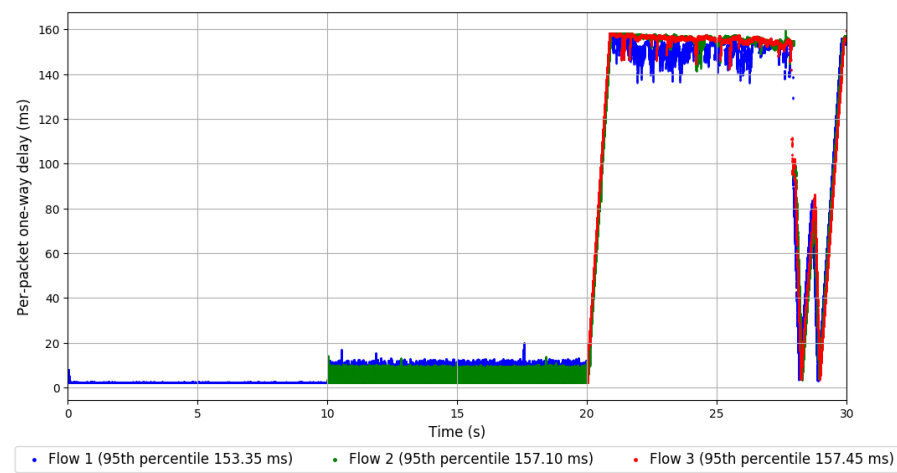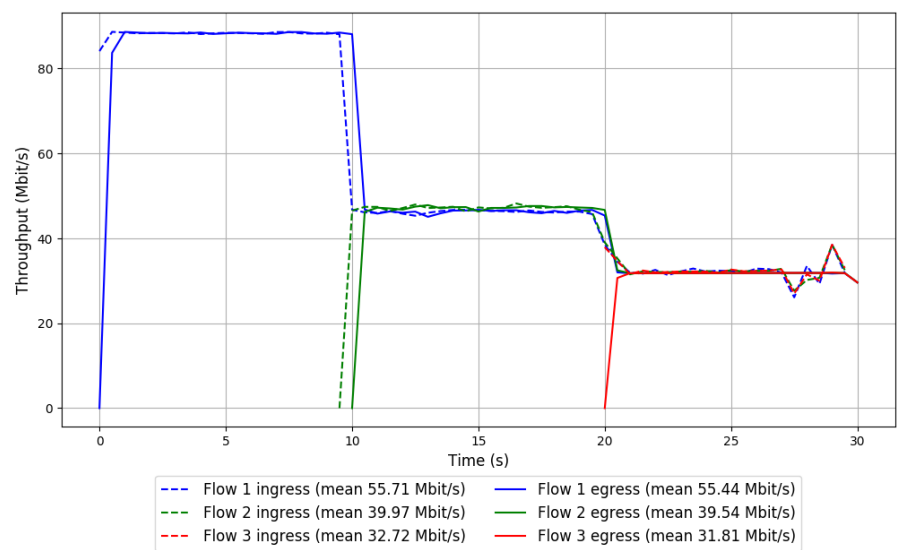
Run 4: Report of TaoVA-100x — Data Link

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

Start at: 2019-02-12 05:51:20
End at: 2019-02-12 05:51:50
Local clock offset: -7.275 ms
Remote clock offset: 0.591 ms

# Below is generated by plot.py at 2019-02-12 06:23:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.34 Mbit/s
95th percentile per-packet one-way delay: 156.526 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 55.44 Mbit/s
95th percentile per-packet one-way delay: 153.348 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 39.54 Mbit/s
95th percentile per-packet one-way delay: 157.099 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 31.81 Mbit/s
95th percentile per-packet one-way delay: 157.449 ms
Loss rate: 2.79%
```
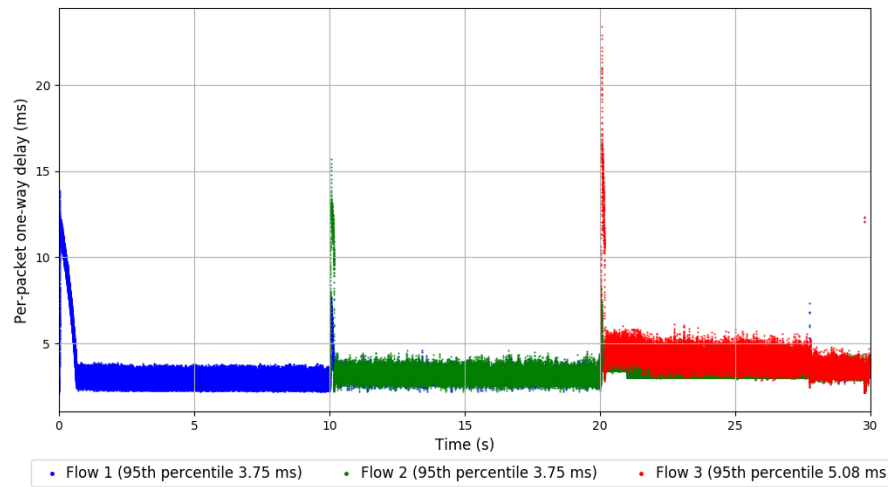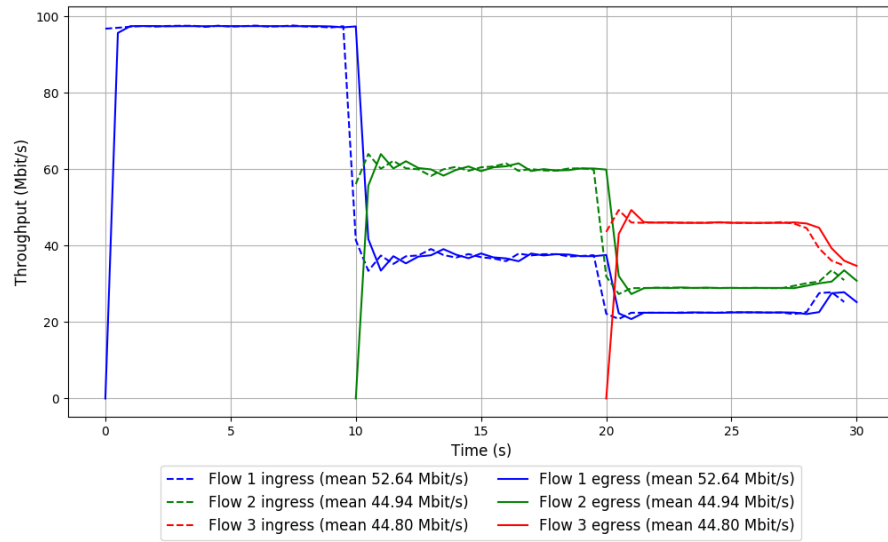
Run 5: Report of TaoVA-100x — Data Link

- - - Flow 1 ingress (mean 55.71 Mbit/s)   —— Flow 1 egress (mean 55.44 Mbit/s)
- - - Flow 2 ingress (mean 39.97 Mbit/s)   —— Flow 2 egress (mean 39.54 Mbit/s)
- - - Flow 3 ingress (mean 32.72 Mbit/s)   —— Flow 3 egress (mean 31.81 Mbit/s)

- Flow 1 (95th percentile 153.35 ms)   • Flow 2 (95th percentile 157.10 ms)   • Flow 3 (95th percentile 157.45 ms)
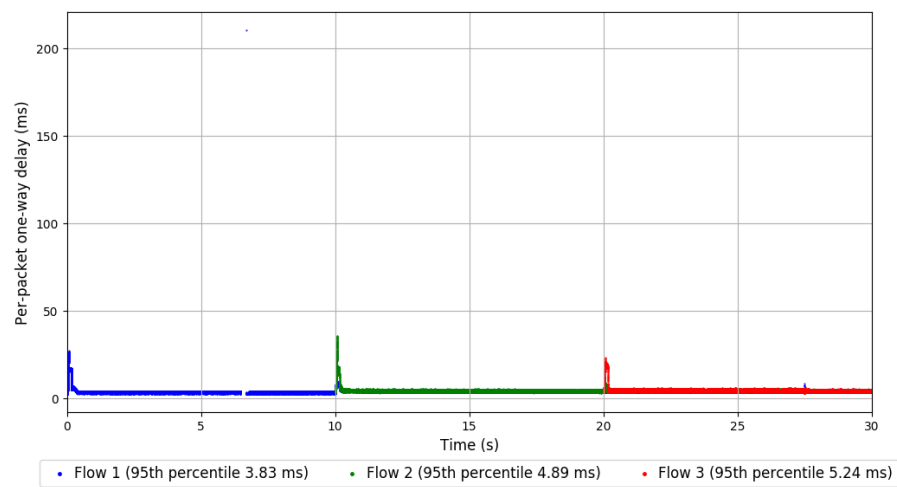
```
Run 1: Statistics of TCP Vegas

Start at: 2019-02-12 04:16:52
End at: 2019-02-12 04:17:22
Local clock offset: -1.676 ms
Remote clock offset: -2.29 ms


# Below is generated by plot.py at 2019-02-12 06:23:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.45 Mbit/s
95th percentile per-packet one-way delay: 4.684 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 52.64 Mbit/s
95th percentile per-packet one-way delay: 3.745 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 44.94 Mbit/s
95th percentile per-packet one-way delay: 3.755 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 44.80 Mbit/s
95th percentile per-packet one-way delay: 5.081 ms
Loss rate: 0.04%
```
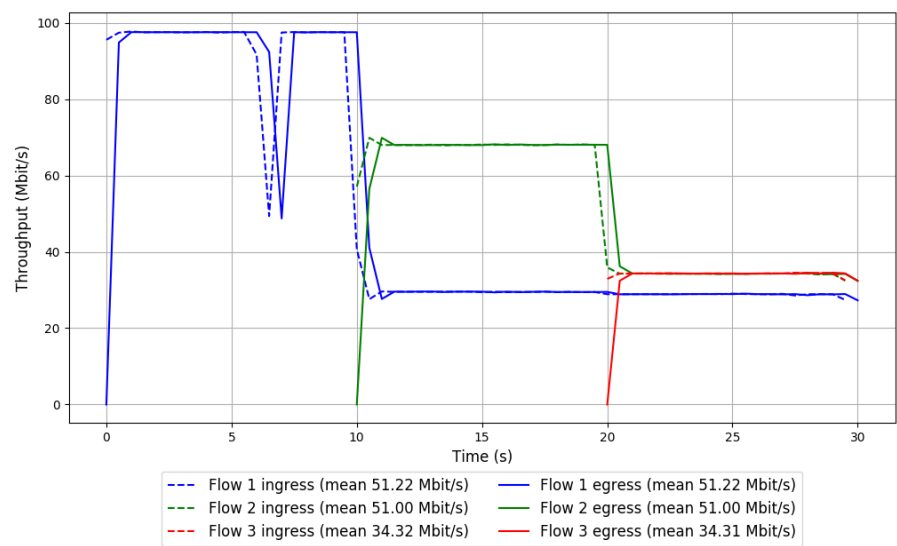
Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2019-02-12 04:41:06
End at: 2019-02-12 04:41:36
Local clock offset: -0.612 ms
Remote clock offset: -1.378 ms


# Below is generated by plot.py at 2019-02-12 06:23:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.58 Mbit/s
95th percentile per-packet one-way delay: 4.927 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 51.22 Mbit/s
95th percentile per-packet one-way delay: 3.830 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 51.00 Mbit/s
95th percentile per-packet one-way delay: 4.889 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 34.31 Mbit/s
95th percentile per-packet one-way delay: 5.243 ms
Loss rate: 0.08%
```

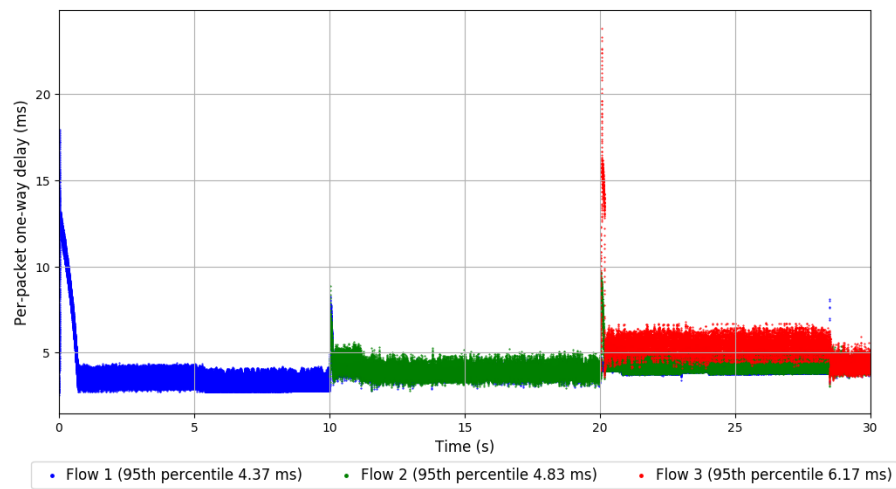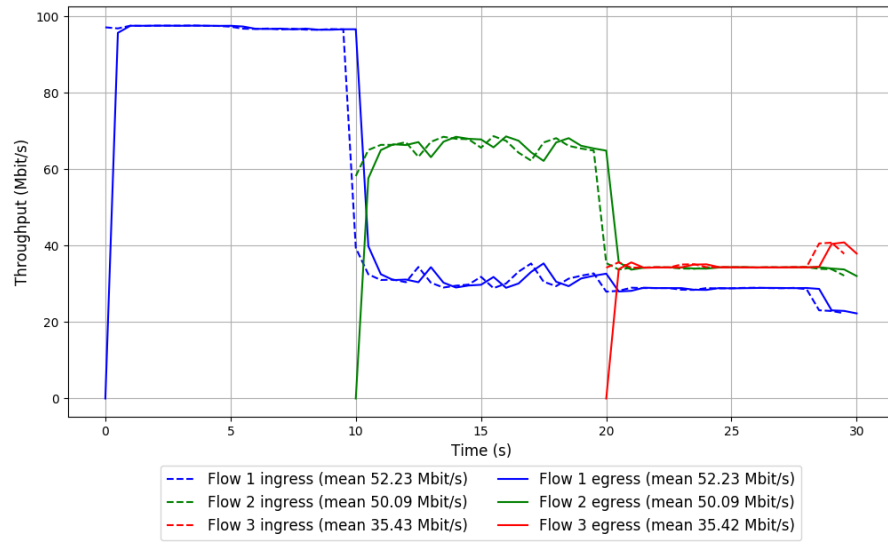Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2019-02-12 05:05:19
End at: 2019-02-12 05:05:49
Local clock offset: -1.804 ms
Remote clock offset: -0.464 ms


# Below is generated by plot.py at 2019-02-12 06:23:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.36 Mbit/s
95th percentile per-packet one-way delay: 5.711 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 52.23 Mbit/s
95th percentile per-packet one-way delay: 4.370 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 50.09 Mbit/s
95th percentile per-packet one-way delay: 4.825 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 35.42 Mbit/s
95th percentile per-packet one-way delay: 6.166 ms
Loss rate: 0.05%
```

Run 3: Report of TCP Vegas — Data Link

Run 4: Statistics of TCP Vegas

Start at: 2019-02-12 05:29:32
End at: 2019-02-12 05:30:02
Local clock offset: -7.173 ms
Remote clock offset: 0.18 ms

Below is generated by plot.py at 2019-02-12 06:23:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 97.06 Mbit/s
95th percentile per-packet one-way delay: 5.071 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 53.38 Mbit/s
95th percentile per-packet one-way delay: 4.826 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 48.05 Mbit/s
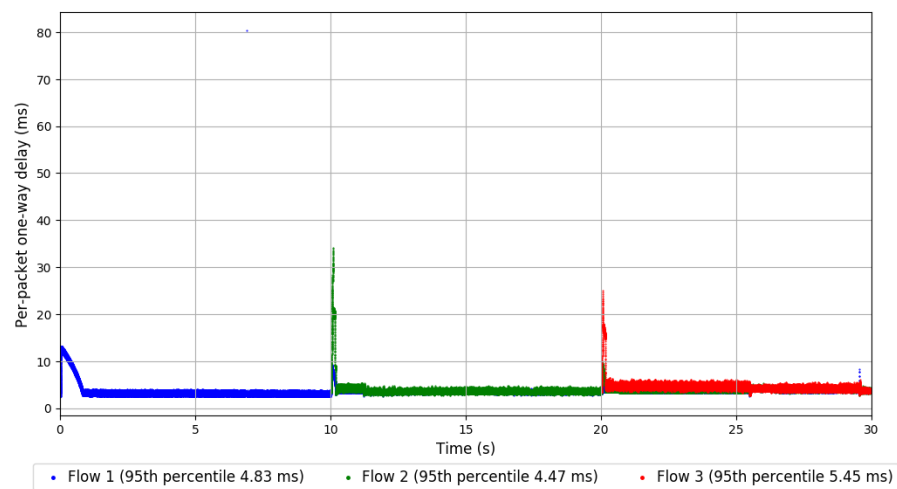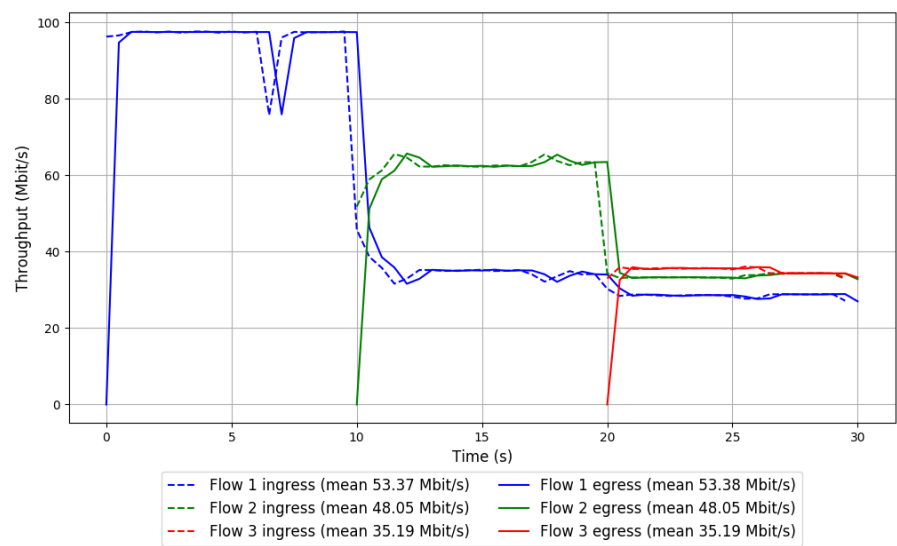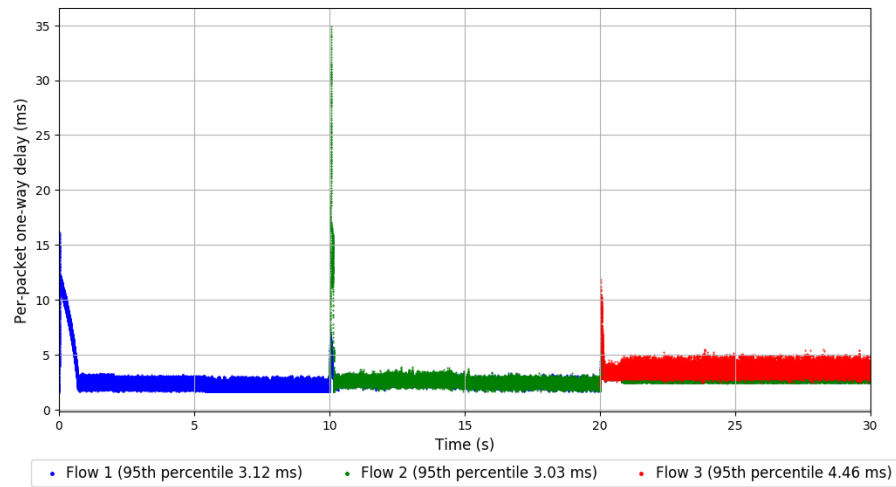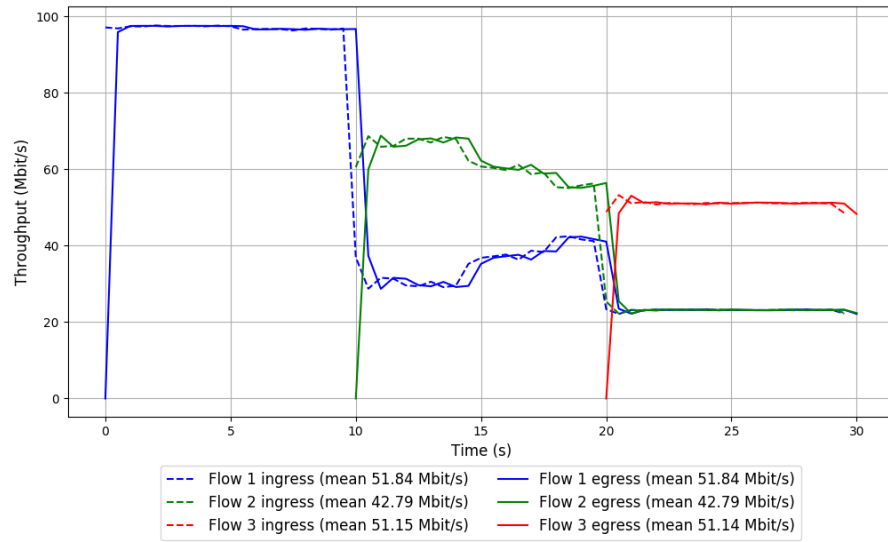95th percentile per-packet one-way delay: 4.469 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 35.19 Mbit/s
95th percentile per-packet one-way delay: 5.452 ms
Loss rate: 0.04%

Run 4: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 53.37 Mbit/s) — Flow 1 egress (mean 53.38 Mbit/s)
Flow 2 ingress (mean 48.05 Mbit/s) — Flow 2 egress (mean 48.05 Mbit/s)
Flow 3 ingress (mean 35.19 Mbit/s) — Flow 3 egress (mean 35.19 Mbit/s)

Flow 1 (95th percentile 4.83 ms) Flow 2 (95th percentile 4.47 ms) Flow 3 (95th percentile 5.45 ms)

```
Run 5: Statistics of TCP Vegas

Start at: 2019-02-12 05:53:45
End at: 2019-02-12 05:54:15
Local clock offset: -8.069 ms
Remote clock offset: 0.65 ms


# Below is generated by plot.py at 2019-02-12 06:23:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.35 Mbit/s
95th percentile per-packet one-way delay: 4.108 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 51.84 Mbit/s
95th percentile per-packet one-way delay: 3.122 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 42.79 Mbit/s
95th percentile per-packet one-way delay: 3.029 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 51.14 Mbit/s
95th percentile per-packet one-way delay: 4.460 ms
Loss rate: 0.06%
```
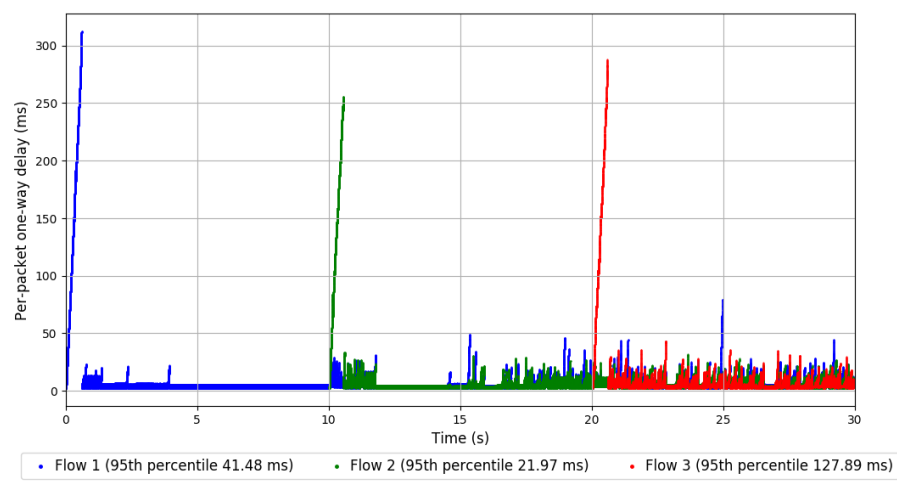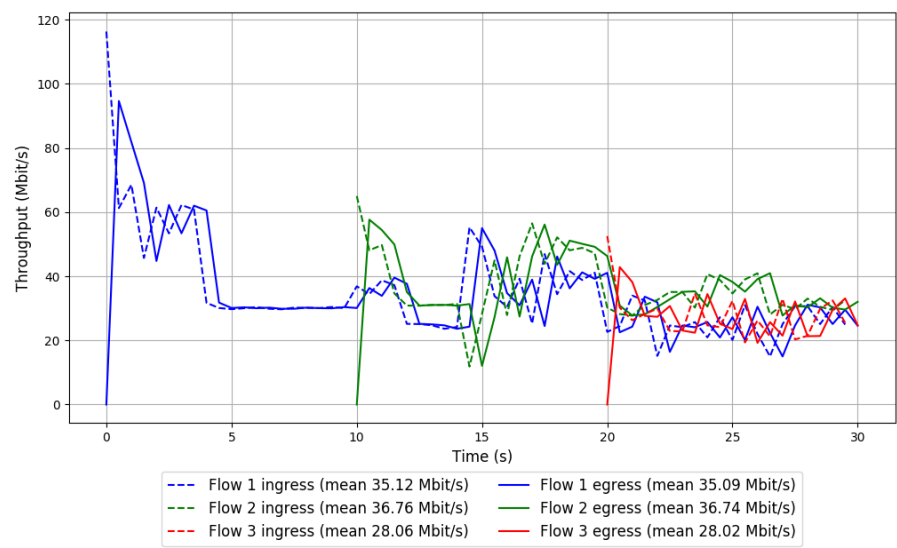
Run 5: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 51.84 Mbit/s) ——— Flow 1 egress (mean 51.84 Mbit/s)
Flow 2 ingress (mean 42.79 Mbit/s) ——— Flow 2 egress (mean 42.79 Mbit/s)
Flow 3 ingress (mean 51.15 Mbit/s) ——— Flow 3 egress (mean 51.14 Mbit/s)

• Flow 1 (95th percentile 3.12 ms)   • Flow 2 (95th percentile 3.03 ms)   • Flow 3 (95th percentile 4.46 ms)

```
Run 1: Statistics of Verus

Start at: 2019-02-12 04:21:22
End at: 2019-02-12 04:21:52
Local clock offset: -0.706 ms
Remote clock offset: -2.1 ms


# Below is generated by plot.py at 2019-02-12 06:23:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.85 Mbit/s
95th percentile per-packet one-way delay: 40.940 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 35.09 Mbit/s
95th percentile per-packet one-way delay: 41.479 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 36.74 Mbit/s
95th percentile per-packet one-way delay: 21.974 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 28.02 Mbit/s
95th percentile per-packet one-way delay: 127.891 ms
Loss rate: 0.17%
```
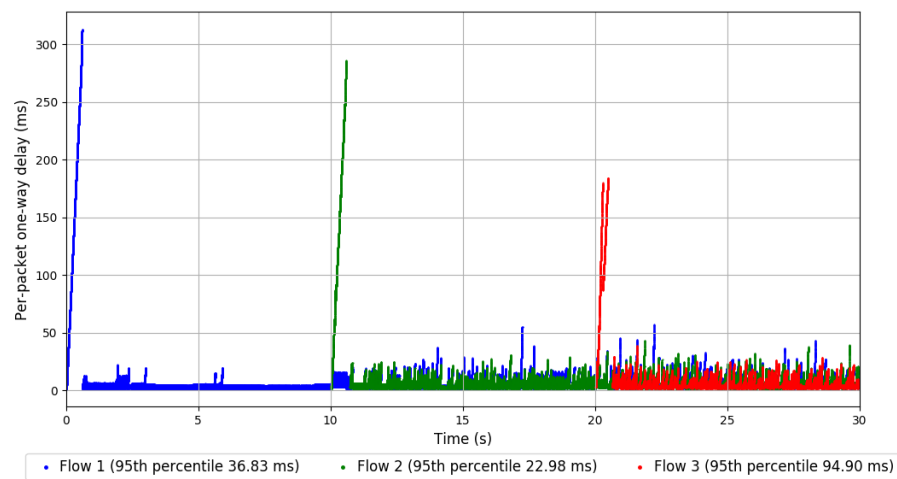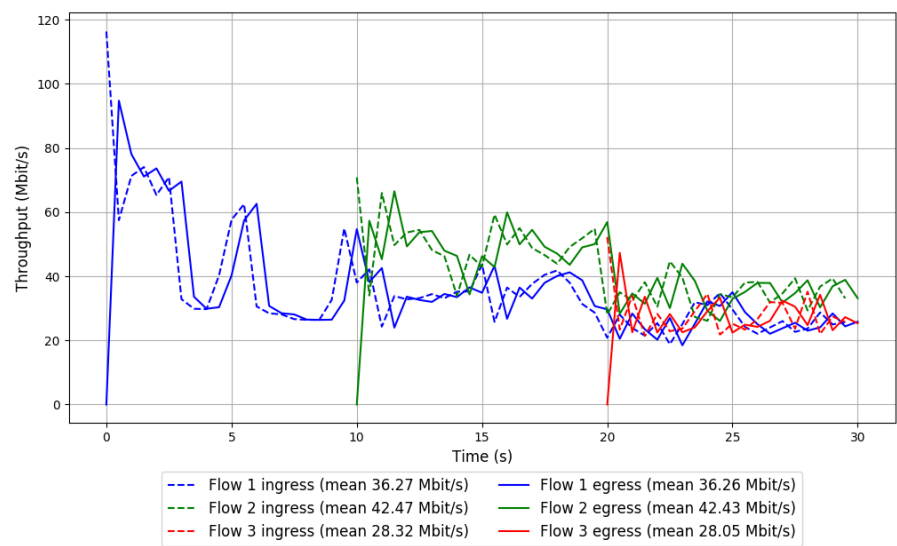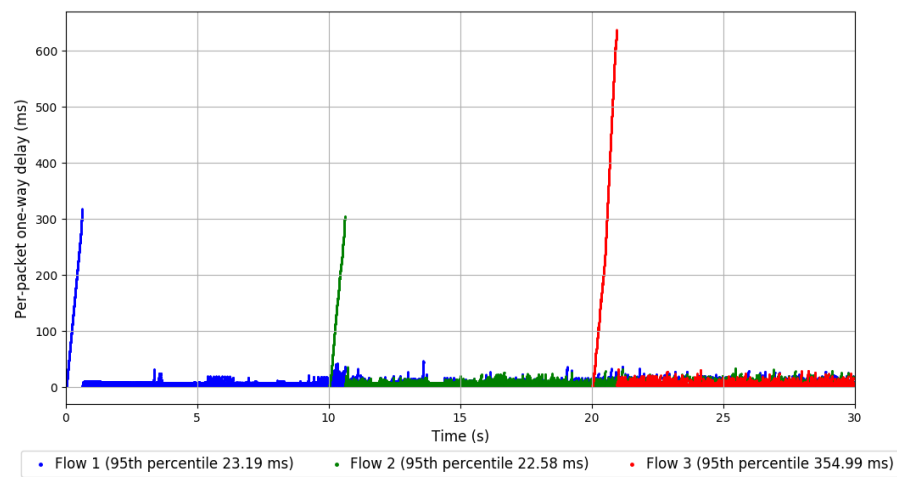
Run 1: Report of Verus — Data Link

- Flow 1 ingress (mean 35.12 Mbit/s)
- Flow 1 egress (mean 35.09 Mbit/s)
- Flow 2 ingress (mean 36.76 Mbit/s)
- Flow 2 egress (mean 36.74 Mbit/s)
- Flow 3 ingress (mean 28.06 Mbit/s)
- Flow 3 egress (mean 28.02 Mbit/s)

- Flow 1 (95th percentile 41.48 ms)
- Flow 2 (95th percentile 21.97 ms)
- Flow 3 (95th percentile 127.89 ms)

```
Run 2: Statistics of Verus

Start at: 2019-02-12 04:45:37
End at: 2019-02-12 04:46:07
Local clock offset: -1.727 ms
Remote clock offset: -1.195 ms


# Below is generated by plot.py at 2019-02-12 06:23:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.84 Mbit/s
95th percentile per-packet one-way delay: 31.880 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 36.26 Mbit/s
95th percentile per-packet one-way delay: 36.829 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 42.43 Mbit/s
95th percentile per-packet one-way delay: 22.981 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 28.05 Mbit/s
95th percentile per-packet one-way delay: 94.903 ms
Loss rate: 0.98%
```
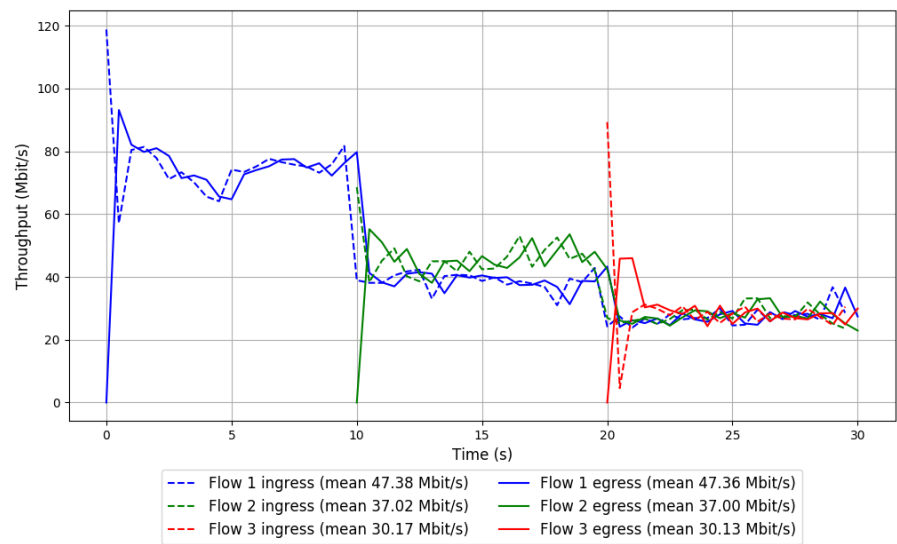
Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2019-02-12 05:09:50
End at: 2019-02-12 05:10:20
Local clock offset: -4.605 ms
Remote clock offset: -0.269 ms


# Below is generated by plot.py at 2019-02-12 06:23:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.01 Mbit/s
95th percentile per-packet one-way delay: 35.762 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 47.36 Mbit/s
95th percentile per-packet one-way delay: 23.189 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 37.00 Mbit/s
95th percentile per-packet one-way delay: 22.577 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 30.13 Mbit/s
95th percentile per-packet one-way delay: 354.993 ms
Loss rate: 0.18%
```

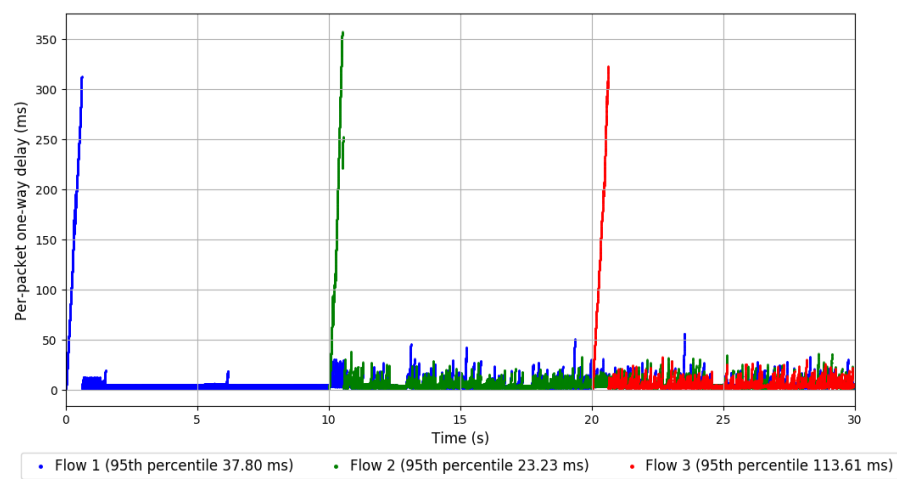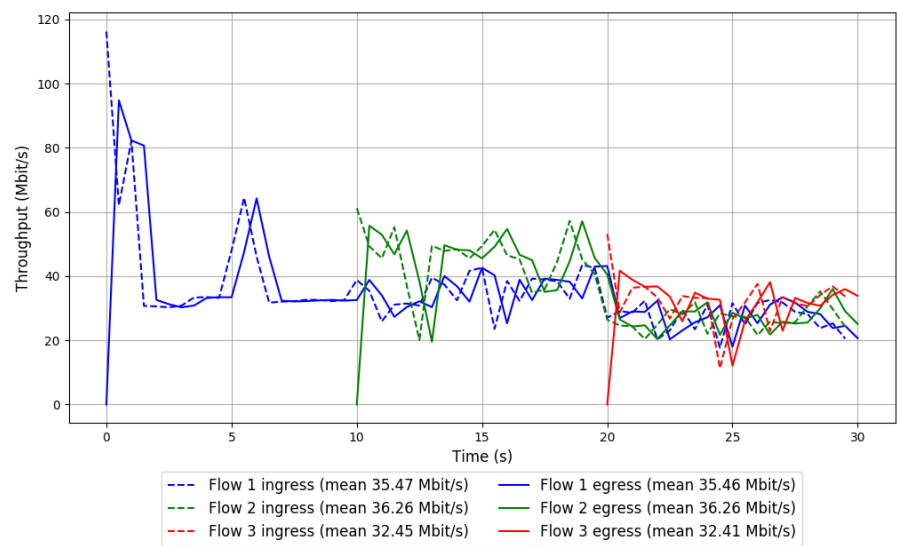Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2019-02-12 05:34:03
End at: 2019-02-12 05:34:33
Local clock offset: -8.233 ms
Remote clock offset: 0.313 ms


# Below is generated by plot.py at 2019-02-12 06:23:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.37 Mbit/s
95th percentile per-packet one-way delay: 33.958 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 35.46 Mbit/s
95th percentile per-packet one-way delay: 37.803 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 36.26 Mbit/s
95th percentile per-packet one-way delay: 23.229 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 32.41 Mbit/s
95th percentile per-packet one-way delay: 113.606 ms
Loss rate: 0.16%
```
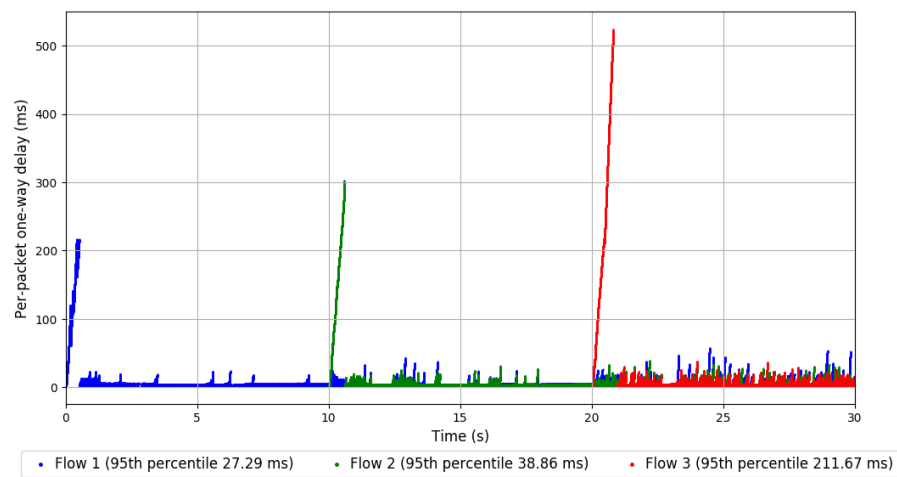
Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2019-02-12 05:58:15
End at: 2019-02-12 05:58:45
Local clock offset: -8.246 ms
Remote clock offset: 0.684 ms


# Below is generated by plot.py at 2019-02-12 06:23:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.71 Mbit/s
95th percentile per-packet one-way delay: 42.618 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 38.16 Mbit/s
95th percentile per-packet one-way delay: 27.291 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 29.55 Mbit/s
95th percentile per-packet one-way delay: 38.860 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 32.74 Mbit/s
95th percentile per-packet one-way delay: 211.670 ms
Loss rate: 0.26%
```
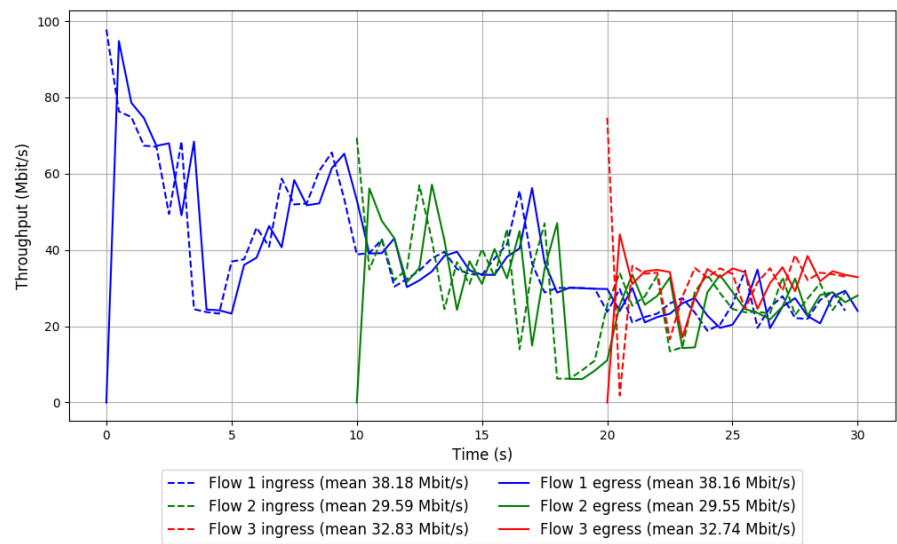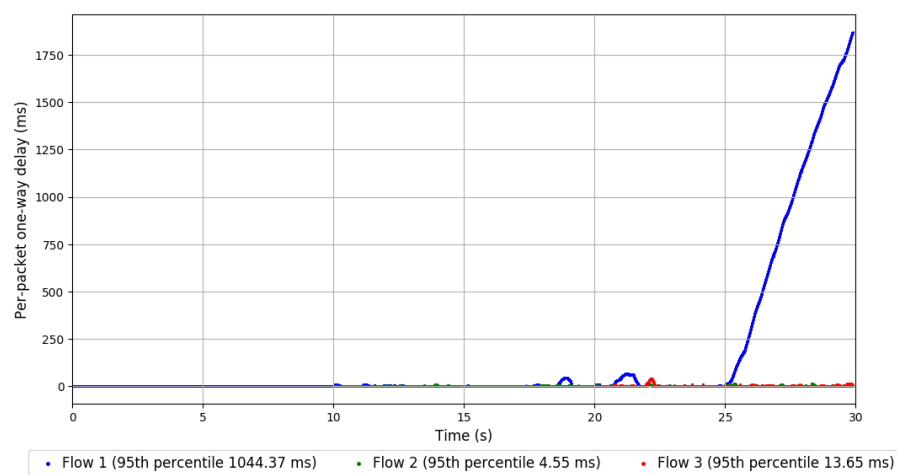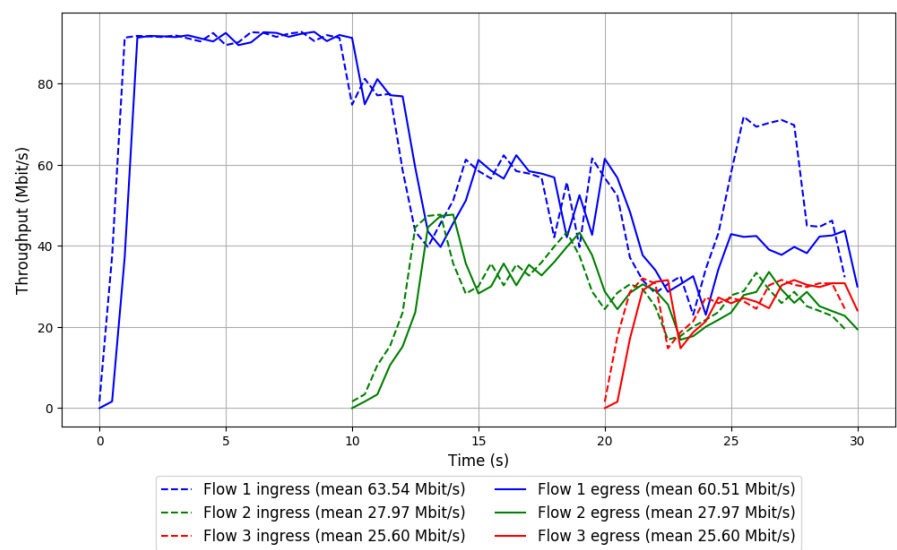
Run 5: Report of Verus — Data Link

Flow 1 ingress (mean 38.18 Mbit/s)   Flow 1 egress (mean 38.16 Mbit/s)
Flow 2 ingress (mean 29.59 Mbit/s)   Flow 2 egress (mean 29.55 Mbit/s)
Flow 3 ingress (mean 32.83 Mbit/s)   Flow 3 egress (mean 32.74 Mbit/s)

Flow 1 (95th percentile 27.29 ms)   Flow 2 (95th percentile 38.86 ms)   Flow 3 (95th percentile 211.67 ms)

```
Run 1: Statistics of PCC-Vivace

Start at: 2019-02-12 04:07:31
End at: 2019-02-12 04:08:01
Local clock offset: -5.603 ms
Remote clock offset: -2.423 ms


# Below is generated by plot.py at 2019-02-12 06:24:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.55 Mbit/s
95th percentile per-packet one-way delay: 580.813 ms
Loss rate: 3.37%
-- Flow 1:
Average throughput: 60.51 Mbit/s
95th percentile per-packet one-way delay: 1044.368 ms
Loss rate: 4.79%
-- Flow 2:
Average throughput: 27.97 Mbit/s
95th percentile per-packet one-way delay: 4.549 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 25.60 Mbit/s
95th percentile per-packet one-way delay: 13.648 ms
Loss rate: 0.12%
```

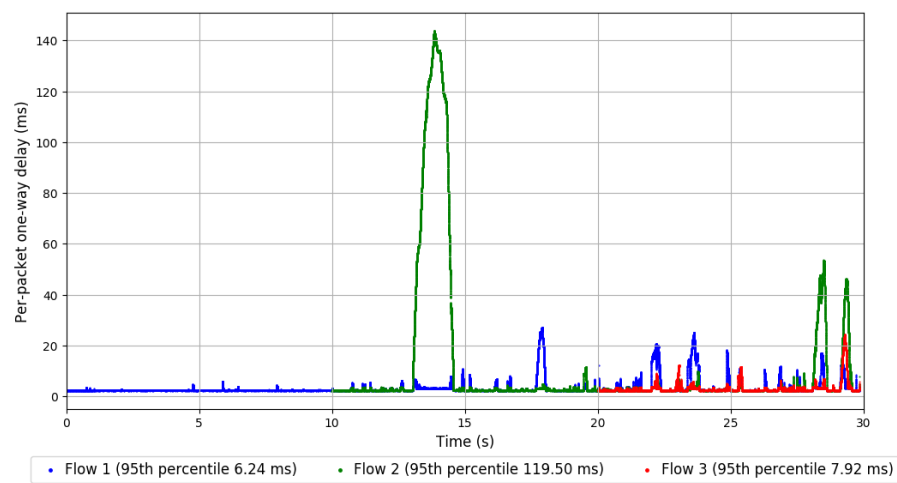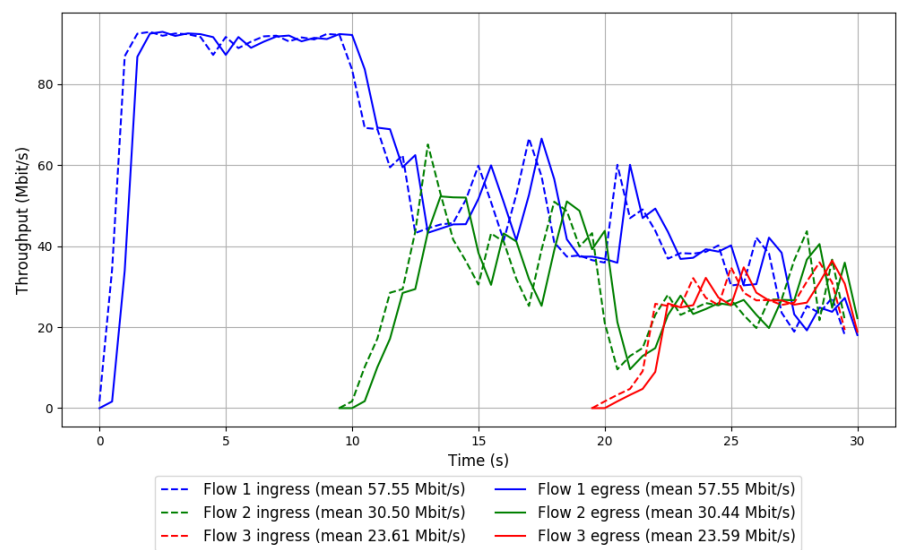Run 1: Report of PCC-Vivace — Data Link

```
Run 2: Statistics of PCC-Vivace

Start at: 2019-02-12 04:31:46
End at: 2019-02-12 04:32:16
Local clock offset: 0.512 ms
Remote clock offset: -1.733 ms


# Below is generated by plot.py at 2019-02-12 06:24:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.59 Mbit/s
95th percentile per-packet one-way delay: 17.469 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 57.55 Mbit/s
95th percentile per-packet one-way delay: 6.244 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 30.44 Mbit/s
95th percentile per-packet one-way delay: 119.495 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 23.59 Mbit/s
95th percentile per-packet one-way delay: 7.915 ms
Loss rate: 0.16%
```

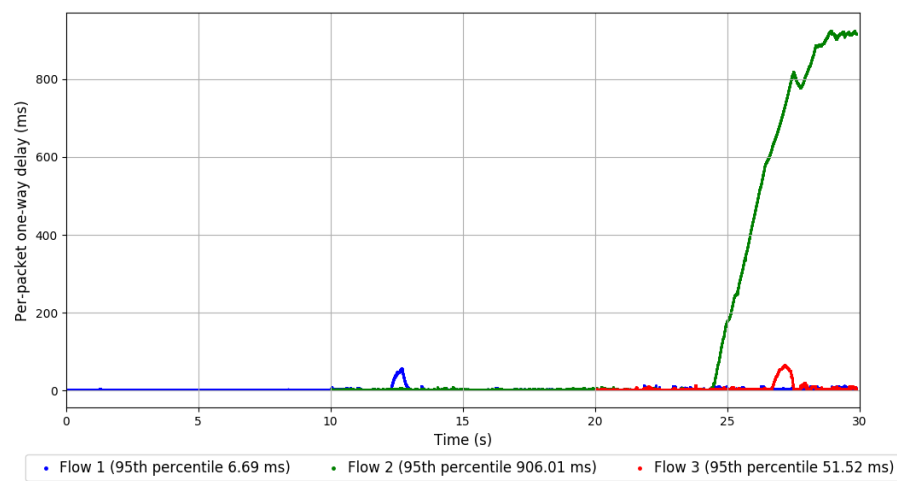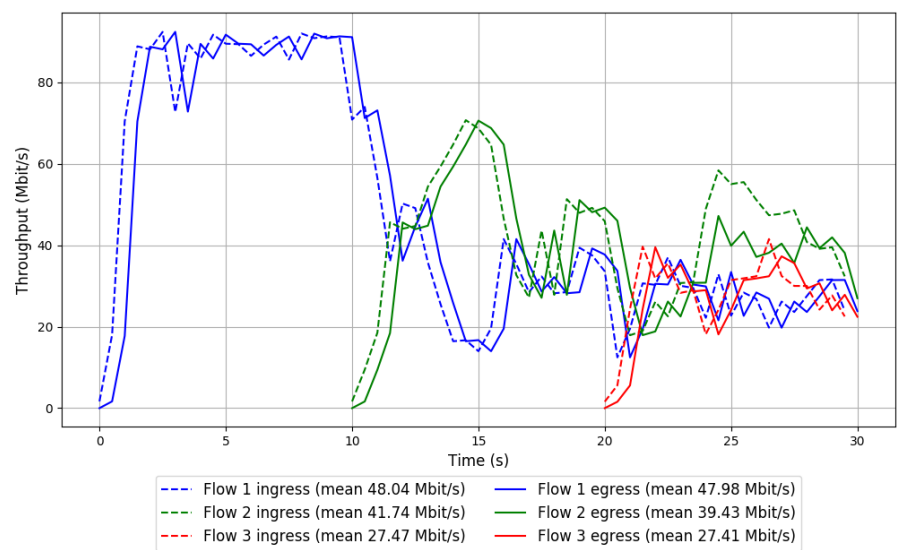Run 2: Report of PCC-Vivace — Data Link

```
Run 3: Statistics of PCC-Vivace

Start at: 2019-02-12 04:55:59
End at: 2019-02-12 04:56:29
Local clock offset: -1.242 ms
Remote clock offset: -0.809 ms


# Below is generated by plot.py at 2019-02-12 06:24:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.25 Mbit/s
95th percentile per-packet one-way delay: 608.784 ms
Loss rate: 1.91%
-- Flow 1:
Average throughput: 47.98 Mbit/s
95th percentile per-packet one-way delay: 6.688 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 39.43 Mbit/s
95th percentile per-packet one-way delay: 906.008 ms
Loss rate: 5.56%
-- Flow 3:
Average throughput: 27.41 Mbit/s
95th percentile per-packet one-way delay: 51.518 ms
Loss rate: 0.26%
```

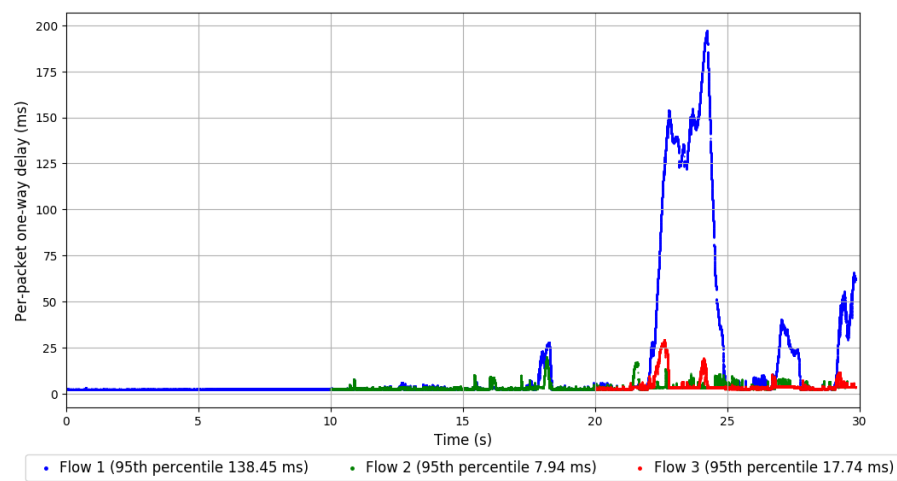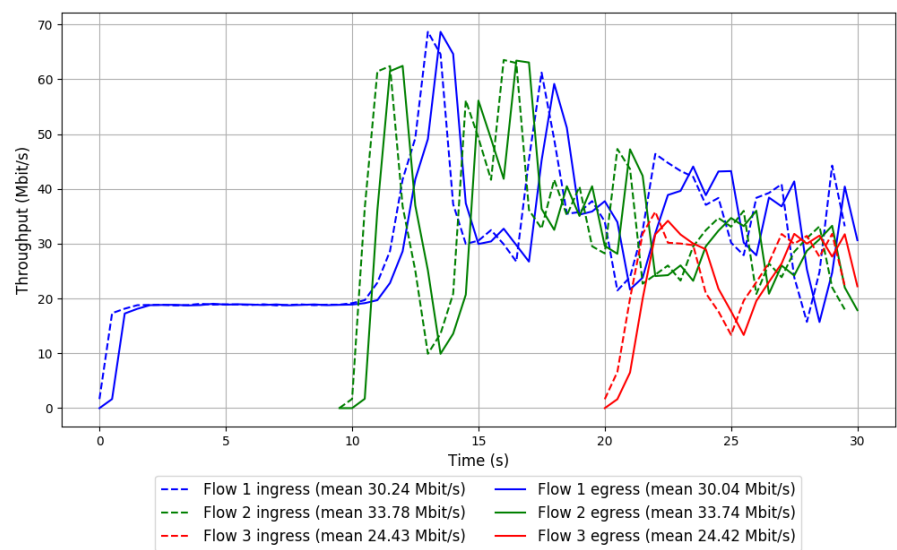Run 3: Report of PCC-Vivace — Data Link

```
Run 4: Statistics of PCC-Vivace

Start at: 2019-02-12 05:20:12
End at: 2019-02-12 05:20:42
Local clock offset: -6.256 ms
Remote clock offset: -0.047 ms


# Below is generated by plot.py at 2019-02-12 06:24:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.55 Mbit/s
95th percentile per-packet one-way delay: 62.435 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 30.04 Mbit/s
95th percentile per-packet one-way delay: 138.450 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 33.74 Mbit/s
95th percentile per-packet one-way delay: 7.937 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 24.42 Mbit/s
95th percentile per-packet one-way delay: 17.741 ms
Loss rate: 0.11%
```

Run 4: Report of PCC-Vivace — Data Link

```
Run 5: Statistics of PCC-Vivace

Start at: 2019-02-12 05:44:25
End at: 2019-02-12 05:44:55
Local clock offset: -7.193 ms
Remote clock offset: 0.422 ms


# Below is generated by plot.py at 2019-02-12 06:24:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.67 Mbit/s
95th percentile per-packet one-way delay: 26.043 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 33.68 Mbit/s
95th percentile per-packet one-way delay: 21.203 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 28.37 Mbit/s
95th percentile per-packet one-way delay: 7.271 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 30.66 Mbit/s
95th percentile per-packet one-way delay: 80.232 ms
Loss rate: 0.42%
```
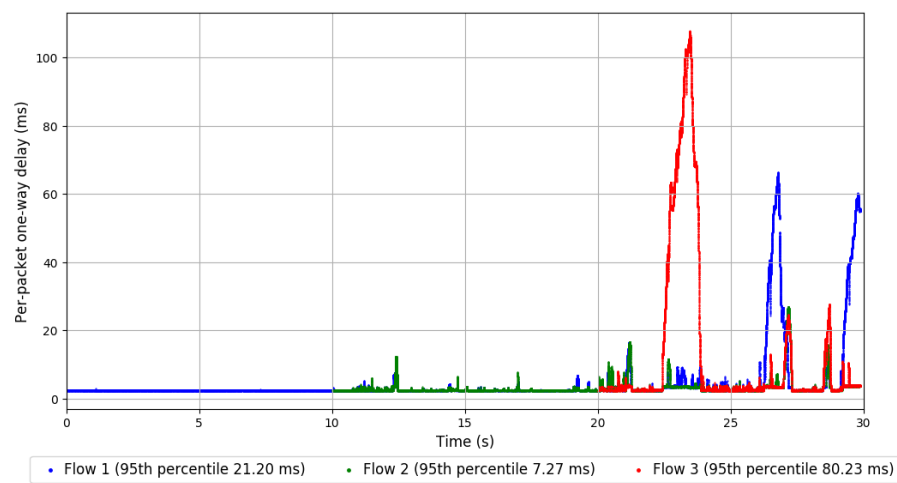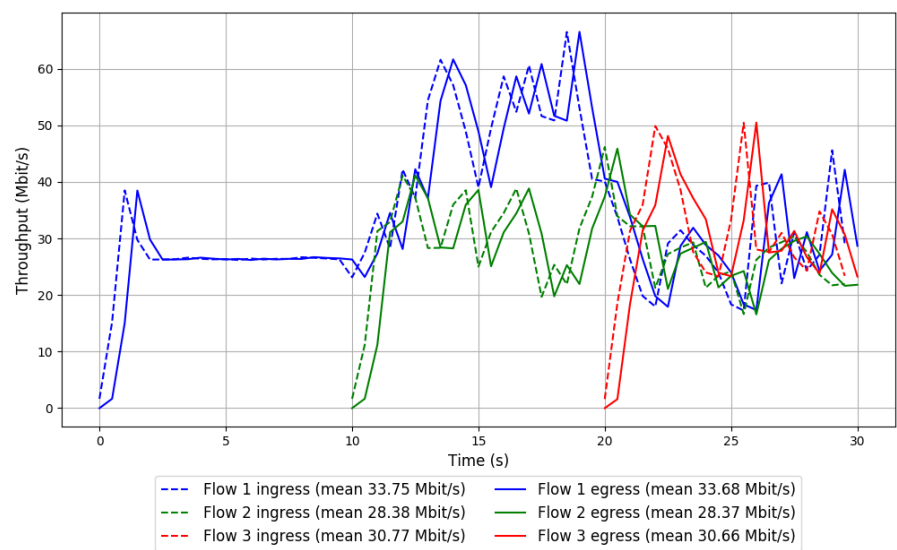
Run 5: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 33.75 Mbit/s) --- Flow 1 egress (mean 33.68 Mbit/s)
Flow 2 ingress (mean 28.38 Mbit/s) --- Flow 2 egress (mean 28.37 Mbit/s)
Flow 3 ingress (mean 30.77 Mbit/s) --- Flow 3 egress (mean 30.66 Mbit/s)

Flow 1 (95th percentile 21.20 ms)   Flow 2 (95th percentile 7.27 ms)   Flow 3 (95th percentile 80.23 ms)
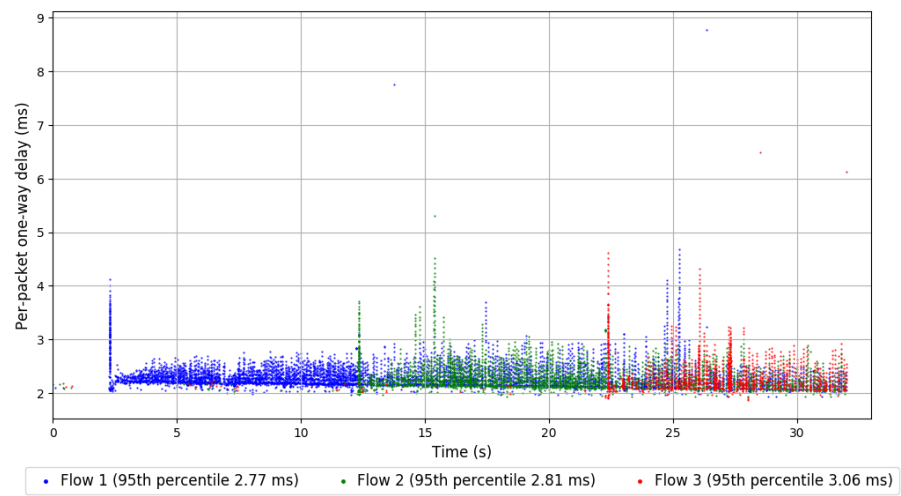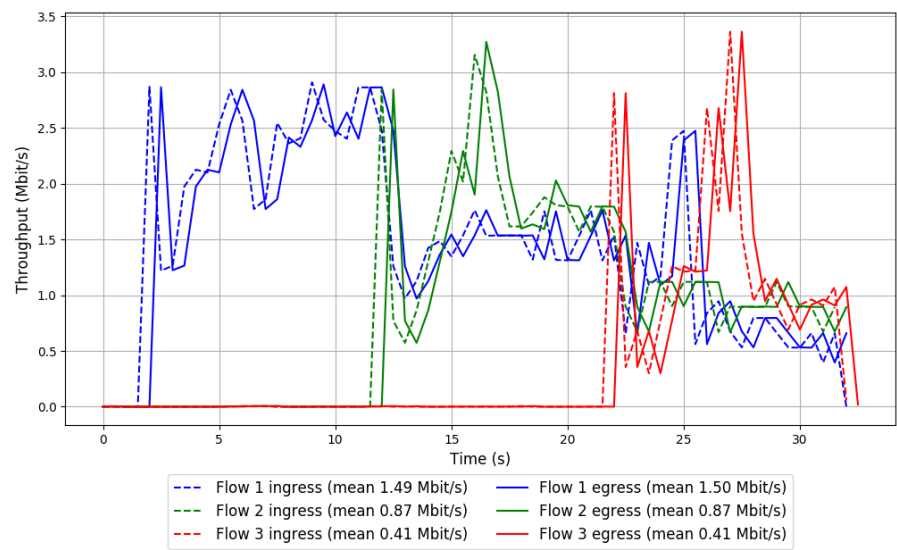
```
Run 1: Statistics of WebRTC media

Start at: 2019-02-12 04:11:05
End at: 2019-02-12 04:11:35
Local clock offset: -3.295 ms
Remote clock offset: -2.426 ms


# Below is generated by plot.py at 2019-02-12 06:24:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.76 Mbit/s
95th percentile per-packet one-way delay: 2.834 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 2.765 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.87 Mbit/s
95th percentile per-packet one-way delay: 2.814 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 3.064 ms
Loss rate: 0.15%
```

Run 1: Report of WebRTC media — Data Link

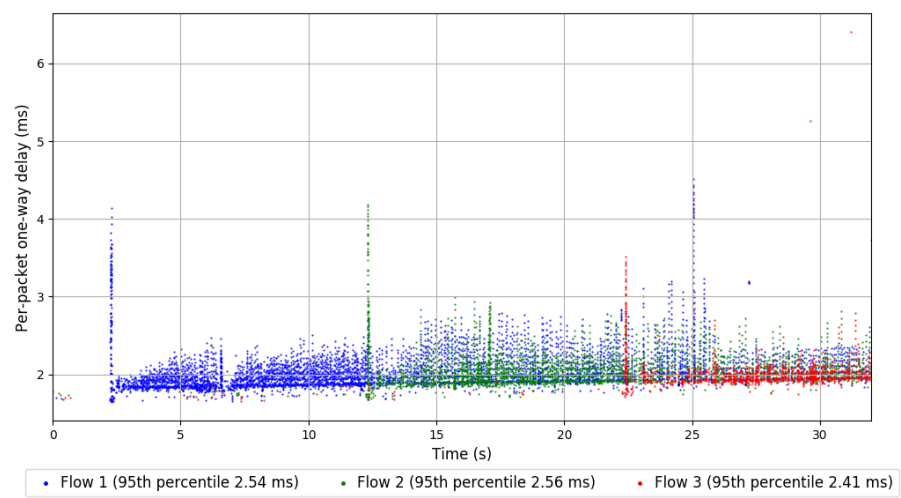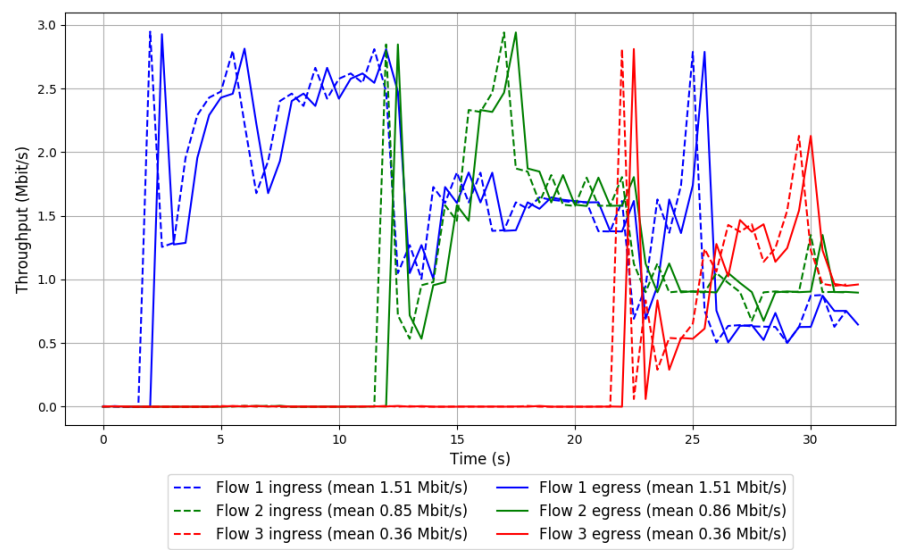Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2019-02-12 04:35:19
End at: 2019-02-12 04:35:49
Local clock offset: -0.28 ms
Remote clock offset: -1.563 ms


# Below is generated by plot.py at 2019-02-12 06:24:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.71 Mbit/s
95th percentile per-packet one-way delay: 2.542 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 1.51 Mbit/s
95th percentile per-packet one-way delay: 2.545 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 0.86 Mbit/s
95th percentile per-packet one-way delay: 2.557 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 2.411 ms
Loss rate: 0.00%
```

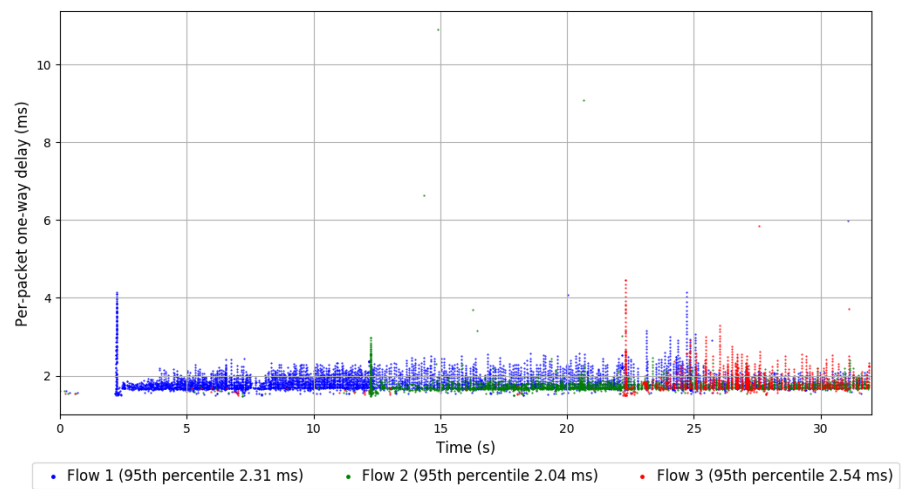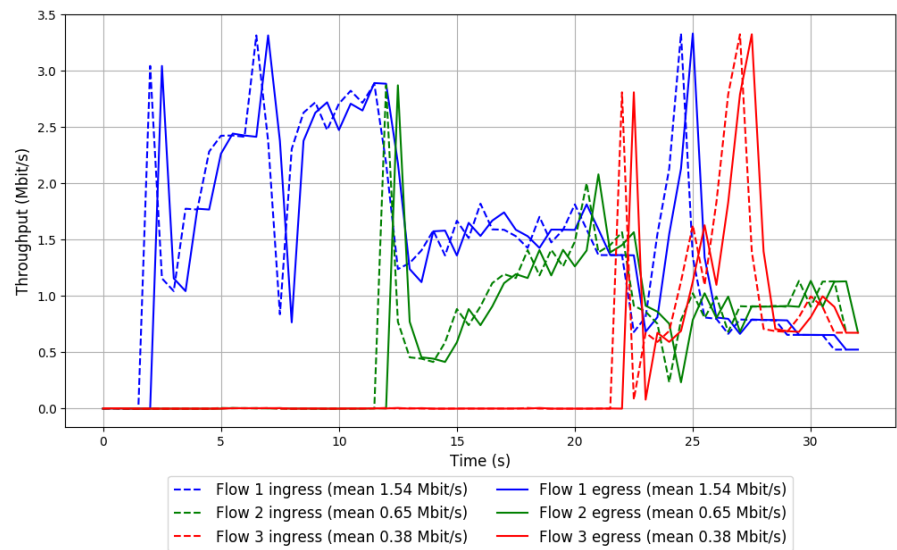Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2019-02-12 04:59:31
End at: 2019-02-12 05:00:01
Local clock offset: -1.904 ms
Remote clock offset: -0.661 ms


# Below is generated by plot.py at 2019-02-12 06:24:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.56 Mbit/s
95th percentile per-packet one-way delay: 2.316 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.54 Mbit/s
95th percentile per-packet one-way delay: 2.308 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 2.035 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 2.543 ms
Loss rate: 0.01%
```

Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2019-02-12 05:23:44
End at: 2019-02-12 05:24:14
Local clock offset: -7.376 ms
Remote clock offset: 0.028 ms


# Below is generated by plot.py at 2019-02-12 06:24:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.68 Mbit/s
95th percentile per-packet one-way delay: 2.549 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 2.509 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 2.560 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 2.826 ms
Loss rate: 0.00%
```
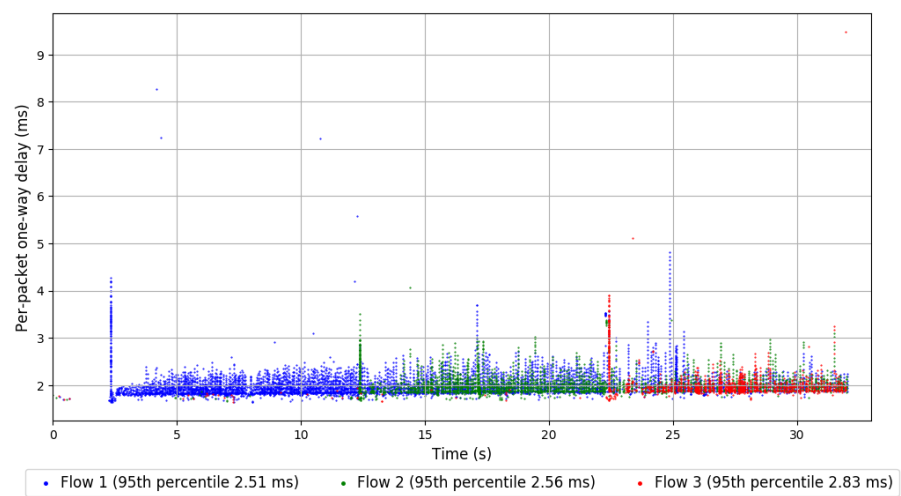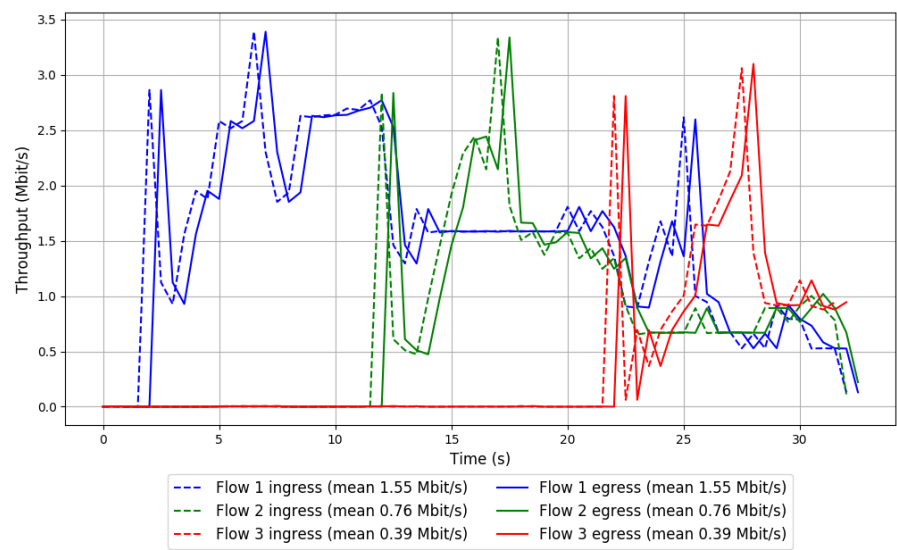
Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2019-02-12 05:47:57
End at: 2019-02-12 05:48:27
Local clock offset: -7.983 ms
Remote clock offset: 0.555 ms


# Below is generated by plot.py at 2019-02-12 06:24:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.73 Mbit/s
95th percentile per-packet one-way delay: 2.328 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 1.53 Mbit/s
95th percentile per-packet one-way delay: 2.228 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.79 Mbit/s
95th percentile per-packet one-way delay: 2.363 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 3.034 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

Flow 1 ingress (mean 1.53 Mbit/s)

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