Pantheon Report

Generated at 2019-06-27 09:54:00 (UTC).

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

Repeated the test of 22 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.
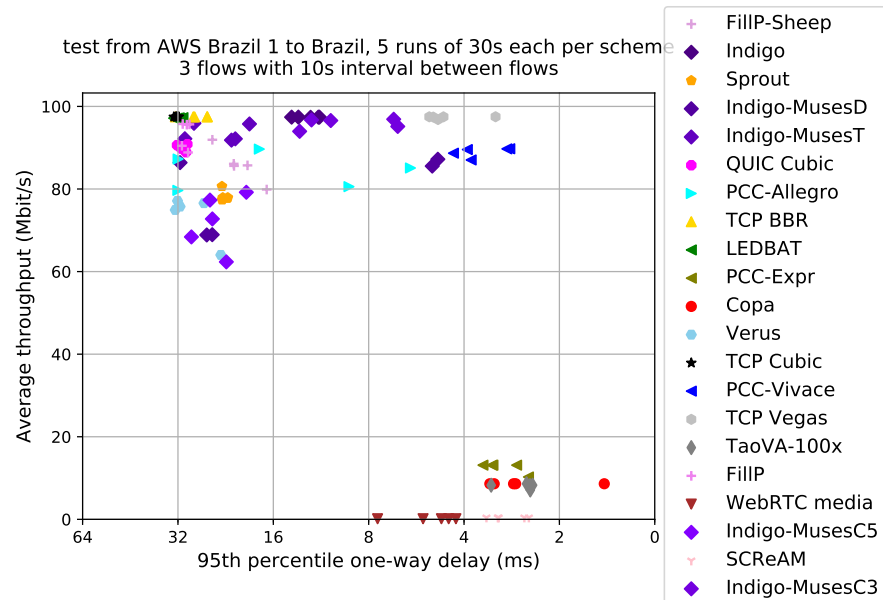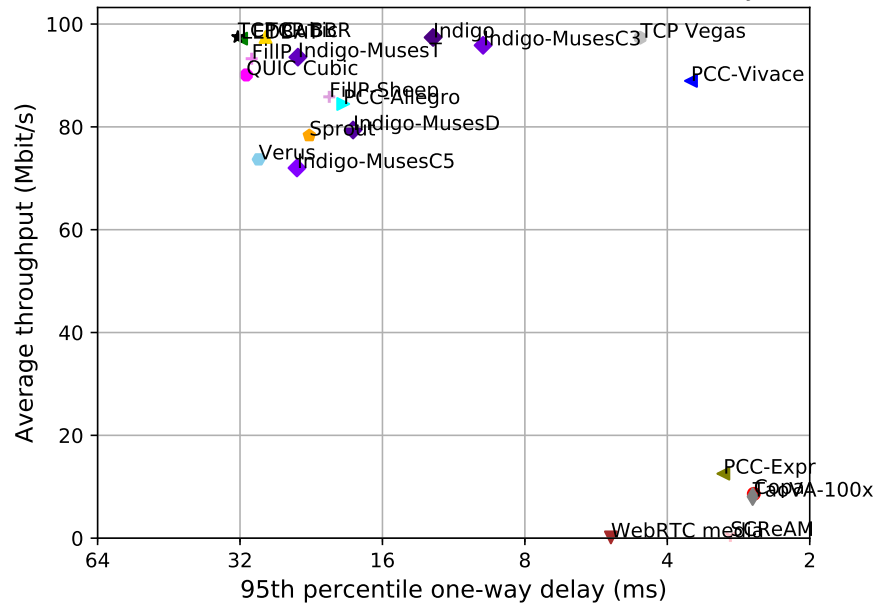
```
System info:
Linux 4.15.0-1039-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ c3953d08f32ec7ebbdede2d2f0cbdeed262571ef
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/muses_dtree @ 11c9498ecb1596b02ccd896791a02d03172af7ed
 M helpers/__init__.pyc
 M helpers/context.pyc
 M helpers/utils.pyc
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 AWS Brazil 1 to Brazil, 5 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)

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

3

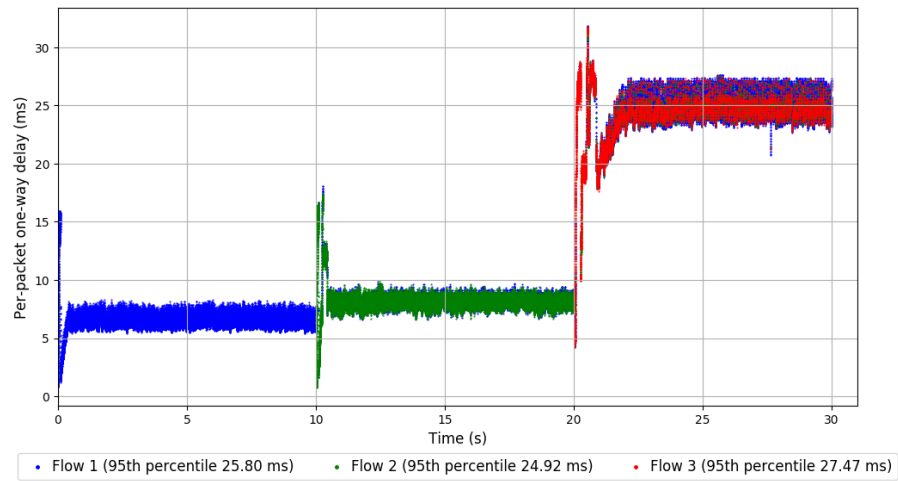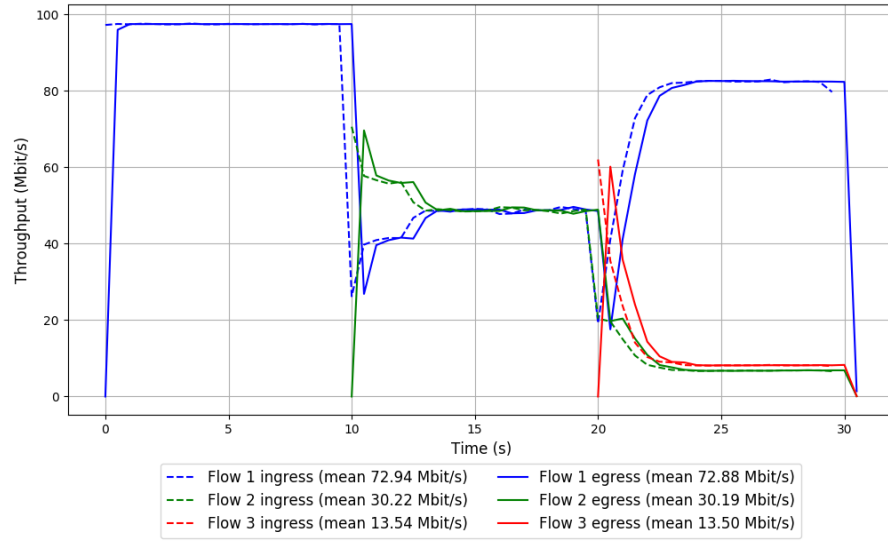| scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	73.14	28.87	15.35	28.19	27.31	30.30	0.05	0.06	0.48
Copa	5	0.00	10.88	4.45	1.92	2.74	2.59	97.91	66.42	82.88
TCP Cubic	5	63.63	37.48	26.72	32.01	32.13	31.92	0.04	0.04	0.06
FillP	5	49.39	51.11	29.68	29.23	29.94	29.62	10.32	17.47	35.90
FillP-Sheep	5	50.64	34.28	37.42	17.13	21.84	23.95	0.87	1.33	2.45
Indigo	5	45.40	43.47	71.30	10.59	12.25	13.24	0.00	0.00	0.00
Indigo-MusesC3	5	58.61	39.12	39.55	9.58	9.51	9.06	0.00	0.00	0.00
Indigo-MusesC5	5	37.12	38.44	32.47	22.86	24.59	25.90	0.01	0.00	0.00
Indigo-MusesD	5	48.95	34.30	27.07	17.87	18.35	19.99	0.15	0.56	2.22
Indigo-MusesT	5	56.66	44.84	25.70	22.23	24.70	26.63	0.16	0.21	0.44
LEDBAT	5	65.69	40.40	14.78	31.76	32.14	32.21	0.03	0.08	0.55
Muses_DecisionTree	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCC-Allegro	5	61.38	30.69	8.09	18.00	23.54	19.64	0.08	0.18	0.68
PCC-Expr	5	7.29	5.70	4.44	3.00	2.76	2.47	29.64	26.05	26.97
QUIC Cubic	5	56.60	36.35	28.39	30.61	31.04	31.90	0.16	0.18	0.23
SCReAM	5	0.22	0.22	0.22	2.35	2.04	2.64	0.00	0.00	0.00
Sprout	5	42.38	38.60	31.07	21.42	22.33	24.97	0.00	0.00	0.00
TaoVA-100x	5	0.00	9.85	4.59	2.08	2.35	2.03	95.92	81.55	95.42
TCP Vegas	5	45.97	48.63	57.10	6.07	4.12	4.27	0.00	0.00	0.00
Verus	5	44.77	29.71	28.15	27.03	29.84	32.76	9.07	18.22	17.82
PCC-Vivace	5	58.47	32.17	27.49	3.39	3.27	6.11	0.00	0.00	0.00
WebRTC media	5	0.05	0.05	0.05	5.90	4.27	5.57	0.00	0.00	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2019-06-27 07:57:34
End at: 2019-06-27 07:58:04
Local clock offset: -6.139 ms
Remote clock offset: -0.051 ms


# Below is generated by plot.py at 2019-06-27 09:43:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.49 Mbit/s
95th percentile per-packet one-way delay: 25.854 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 72.88 Mbit/s
95th percentile per-packet one-way delay: 25.795 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 30.19 Mbit/s
95th percentile per-packet one-way delay: 24.918 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 13.50 Mbit/s
95th percentile per-packet one-way delay: 27.469 ms
Loss rate: 0.12%
```
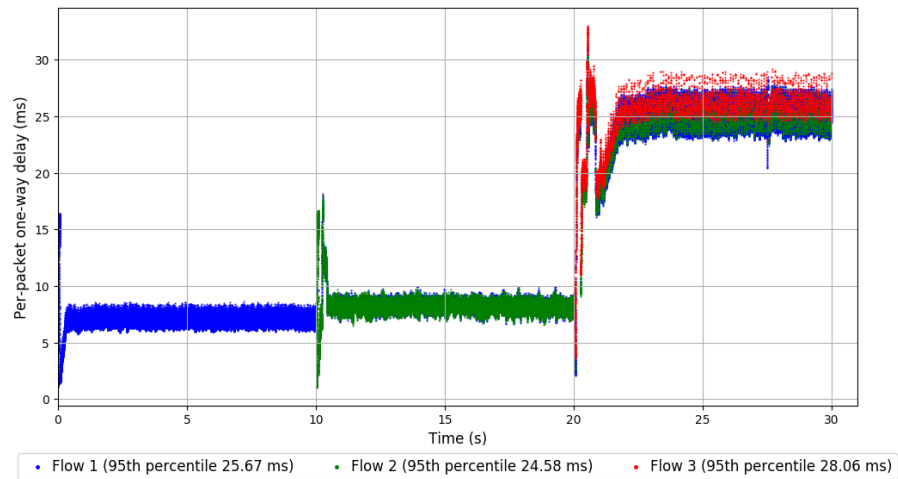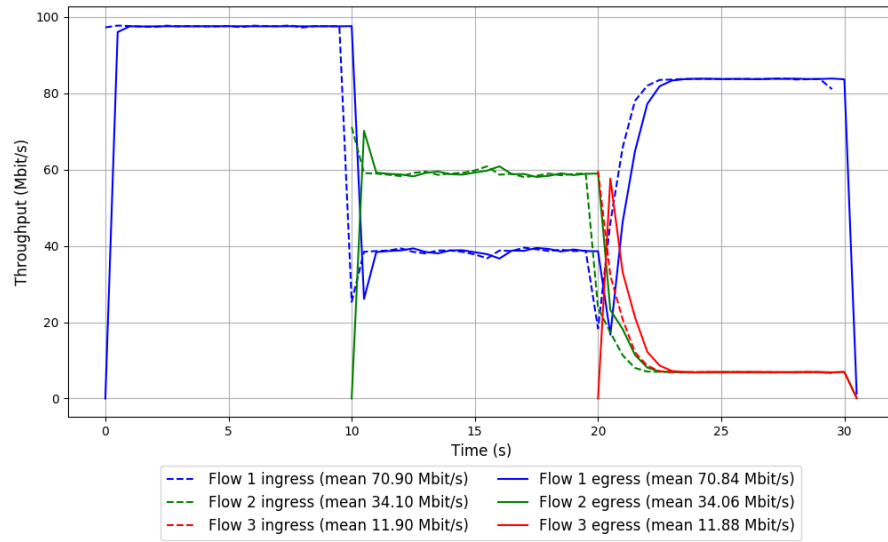
Run 1: Report of TCP BBR — Data Link

- - - Flow 1 ingress (mean 72.94 Mbit/s) ——— Flow 1 egress (mean 72.88 Mbit/s)
- - - Flow 2 ingress (mean 30.22 Mbit/s) ——— Flow 2 egress (mean 30.19 Mbit/s)
- - - Flow 3 ingress (mean 13.54 Mbit/s) ——— Flow 3 egress (mean 13.50 Mbit/s)

• Flow 1 (95th percentile 25.80 ms)   • Flow 2 (95th percentile 24.92 ms)   • Flow 3 (95th percentile 27.47 ms)

```
Run 2: Statistics of TCP BBR

Start at: 2019-06-27 08:22:37
End at: 2019-06-27 08:23:07
Local clock offset: -6.787 ms
Remote clock offset: 0.145 ms


# Below is generated by plot.py at 2019-06-27 09:43:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 25.882 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 70.84 Mbit/s
95th percentile per-packet one-way delay: 25.673 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 34.06 Mbit/s
95th percentile per-packet one-way delay: 24.584 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.88 Mbit/s
95th percentile per-packet one-way delay: 28.064 ms
Loss rate: 0.00%
```
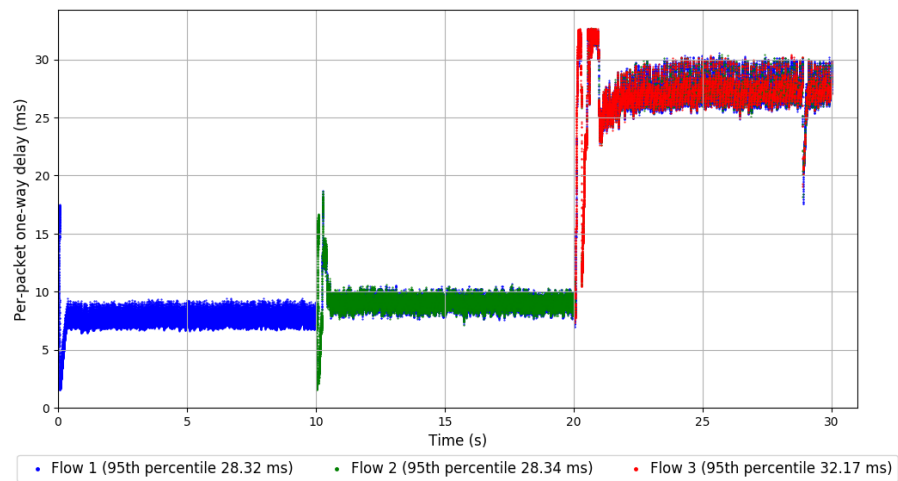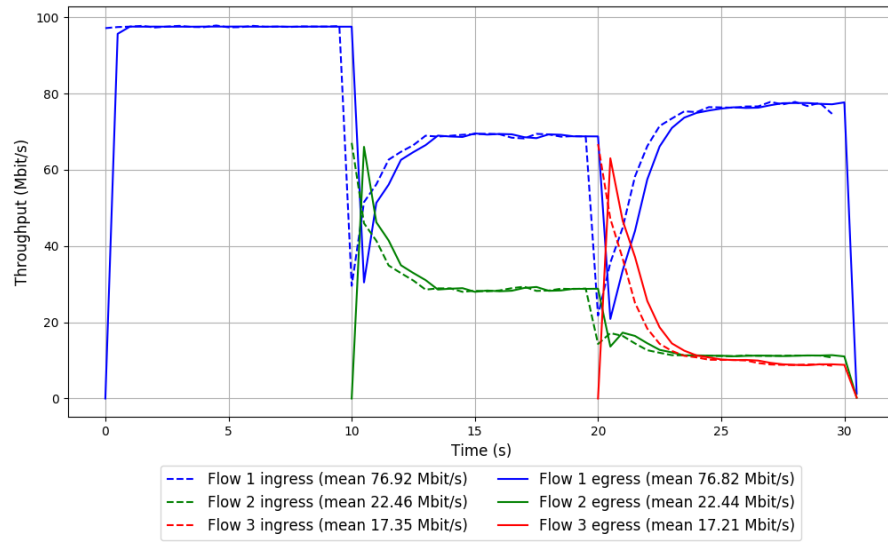
Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2019-06-27 08:47:40
End at: 2019-06-27 08:48:10
Local clock offset: -7.293 ms
Remote clock offset: 0.291 ms


# Below is generated by plot.py at 2019-06-27 09:43:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 28.606 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 76.82 Mbit/s
95th percentile per-packet one-way delay: 28.319 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 22.44 Mbit/s
95th percentile per-packet one-way delay: 28.338 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 17.21 Mbit/s
95th percentile per-packet one-way delay: 32.169 ms
Loss rate: 0.62%
```
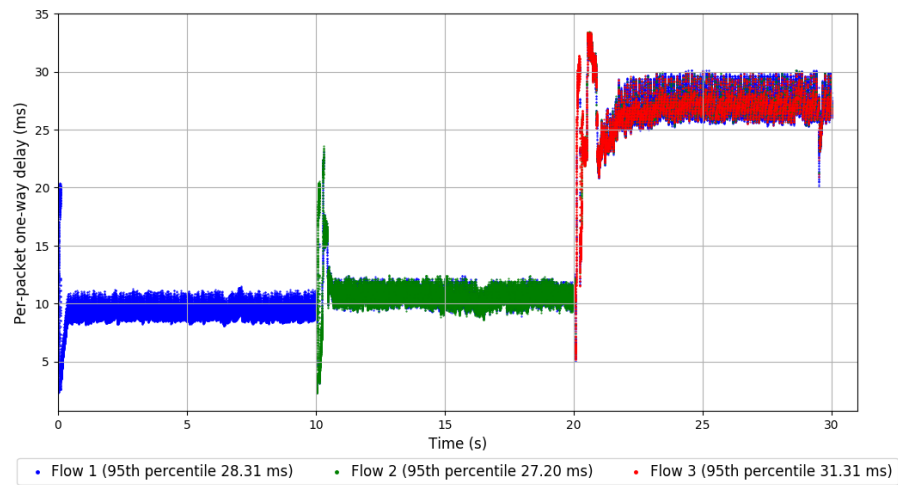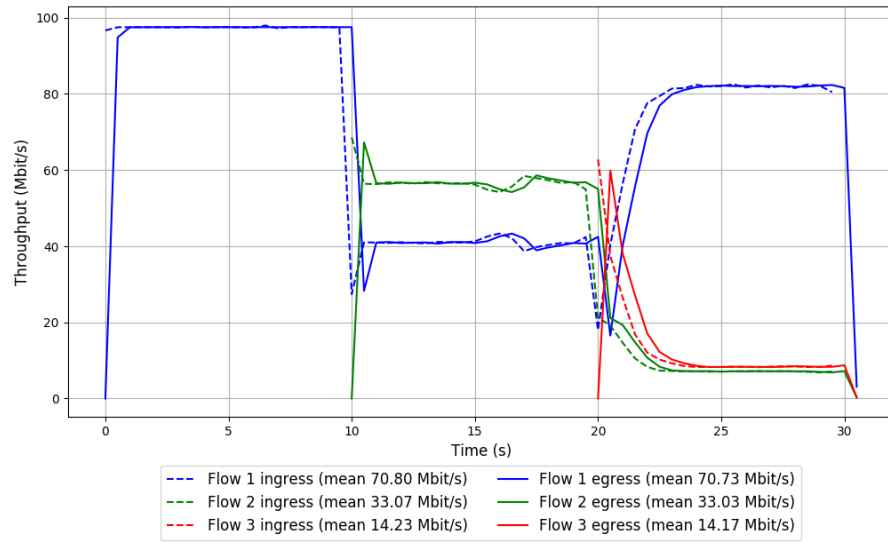
Run 3: Report of TCP BBR — Data Link

```
Run 4: Statistics of TCP BBR

Start at: 2019-06-27 09:12:44
End at: 2019-06-27 09:13:14
Local clock offset: -7.109 ms
Remote clock offset: 0.41 ms


# Below is generated by plot.py at 2019-06-27 09:43:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.46 Mbit/s
95th percentile per-packet one-way delay: 28.361 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 70.73 Mbit/s
95th percentile per-packet one-way delay: 28.306 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 33.03 Mbit/s
95th percentile per-packet one-way delay: 27.197 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 14.17 Mbit/s
95th percentile per-packet one-way delay: 31.313 ms
Loss rate: 0.26%
```
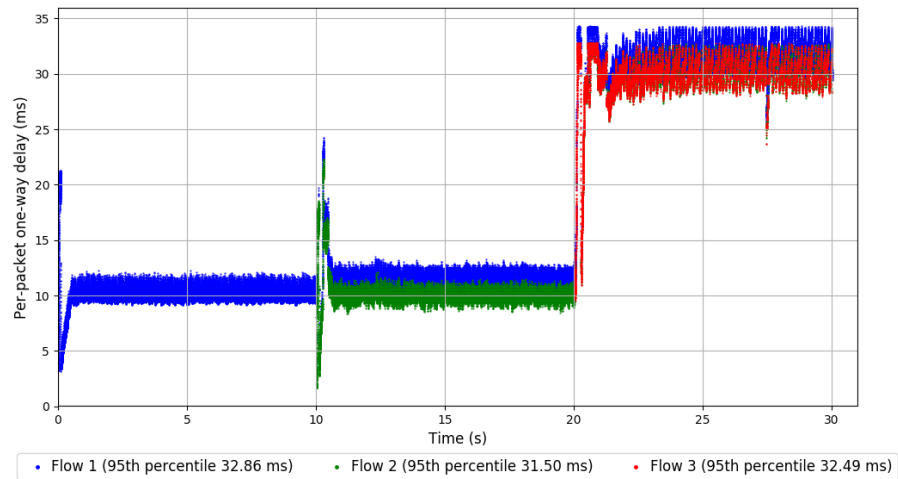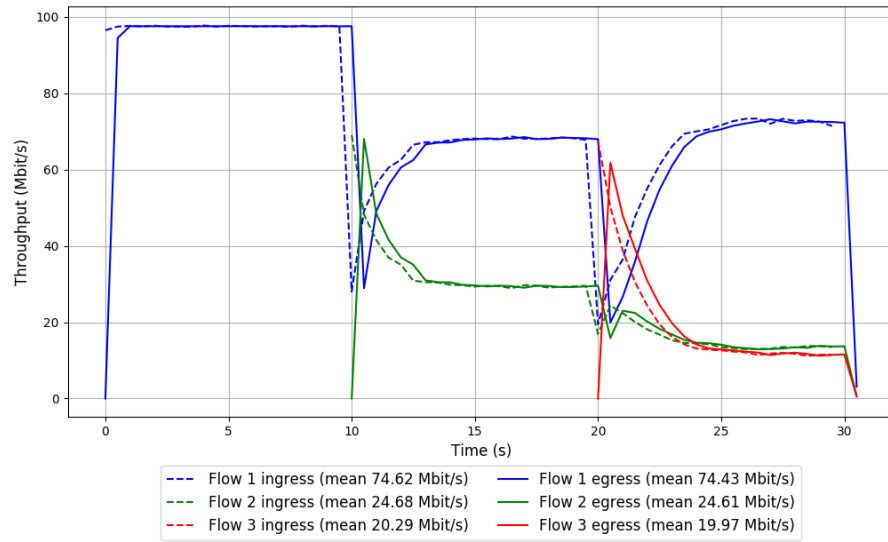
Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 70.80 Mbit/s) --- Flow 1 egress (mean 70.73 Mbit/s)
Flow 2 ingress (mean 33.07 Mbit/s) --- Flow 2 egress (mean 33.03 Mbit/s)
Flow 3 ingress (mean 14.23 Mbit/s) --- Flow 3 egress (mean 14.17 Mbit/s)

• Flow 1 (95th percentile 28.31 ms)   • Flow 2 (95th percentile 27.20 ms)   • Flow 3 (95th percentile 31.31 ms)

```
Run 5: Statistics of TCP BBR

Start at: 2019-06-27 09:37:46
End at: 2019-06-27 09:38:16
Local clock offset: -7.926 ms
Remote clock offset: 0.438 ms


# Below is generated by plot.py at 2019-06-27 09:43:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 32.613 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 74.43 Mbit/s
95th percentile per-packet one-way delay: 32.856 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 24.61 Mbit/s
95th percentile per-packet one-way delay: 31.505 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 19.97 Mbit/s
95th percentile per-packet one-way delay: 32.490 ms
Loss rate: 1.42%
```
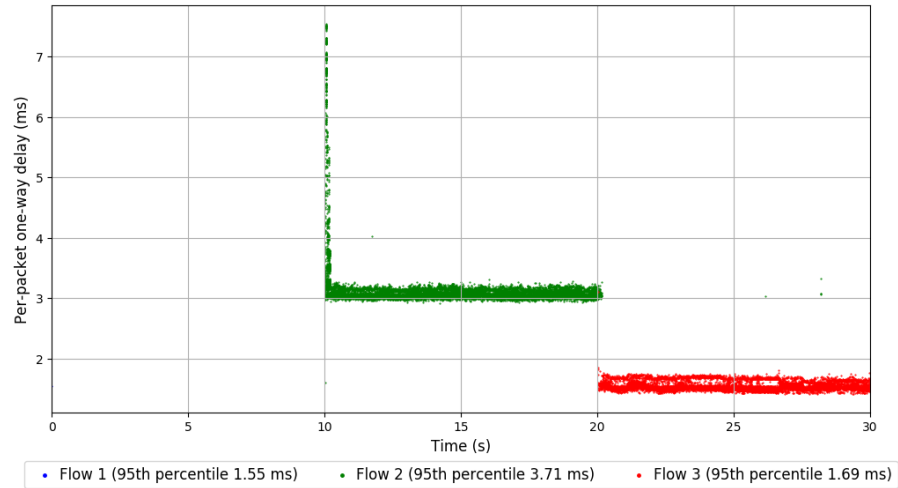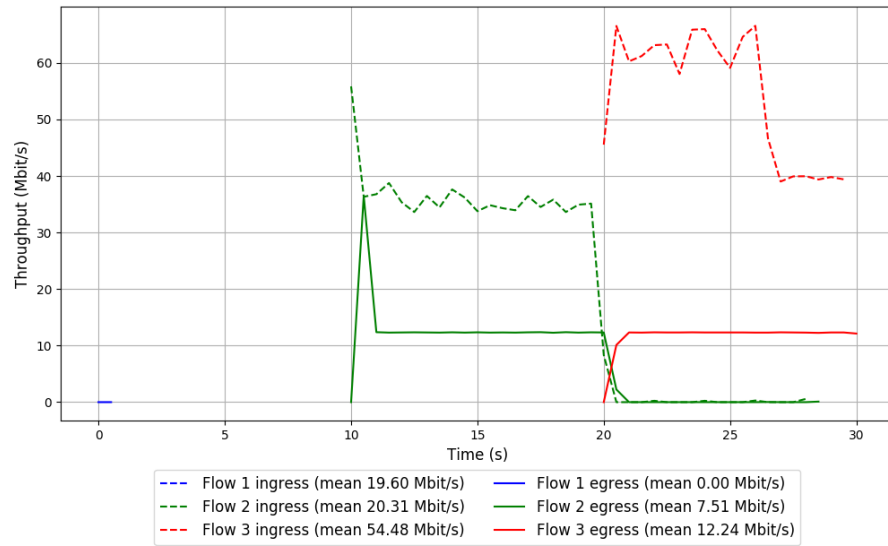
Run 5: Report of TCP BBR — Data Link

```
Run 1: Statistics of Copa

Start at: 2019-06-27 07:49:43
End at: 2019-06-27 07:50:13
Local clock offset: -6.525 ms
Remote clock offset: -0.2 ms


# Below is generated by plot.py at 2019-06-27 09:43:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.62 Mbit/s
95th percentile per-packet one-way delay: 3.213 ms
Loss rate: 71.67%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 1.551 ms
Loss rate: 98.80%
-- Flow 2:
Average throughput: 7.51 Mbit/s
95th percentile per-packet one-way delay: 3.715 ms
Loss rate: 63.02%
-- Flow 3:
Average throughput: 12.24 Mbit/s
95th percentile per-packet one-way delay: 1.692 ms
Loss rate: 77.54%
```
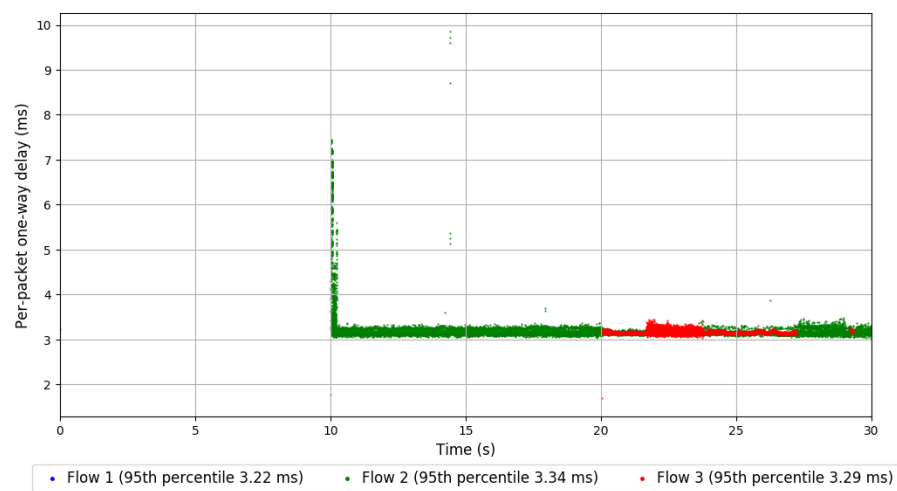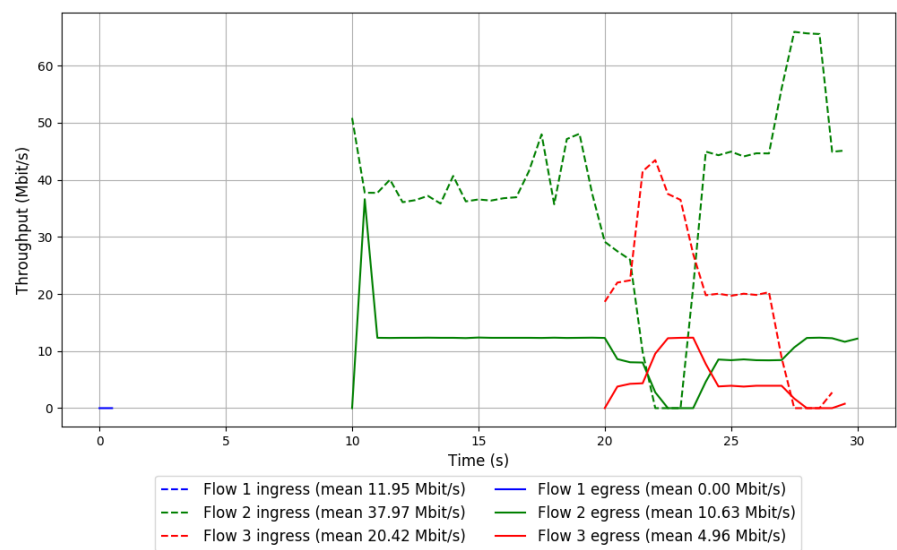
Run 1: Report of Copa — Data Link

- - - Flow 1 ingress (mean 19.60 Mbit/s)
———— Flow 1 egress (mean 0.00 Mbit/s)
- - - Flow 2 ingress (mean 20.31 Mbit/s)
———— Flow 2 egress (mean 7.51 Mbit/s)
- - - Flow 3 ingress (mean 54.48 Mbit/s)
———— Flow 3 egress (mean 12.24 Mbit/s)

- Flow 1 (95th percentile 1.55 ms)   • Flow 2 (95th percentile 3.71 ms)   • Flow 3 (95th percentile 1.69 ms)

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```
Run 2: Statistics of Copa

Start at: 2019-06-27 08:14:46
End at: 2019-06-27 08:15:16
Local clock offset: -7.344 ms
Remote clock offset: 0.097 ms


# Below is generated by plot.py at 2019-06-27 09:43:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.62 Mbit/s
95th percentile per-packet one-way delay: 3.316 ms
Loss rate: 72.76%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 3.221 ms
Loss rate: 98.60%
-- Flow 2:
Average throughput: 10.63 Mbit/s
95th percentile per-packet one-way delay: 3.343 ms
Loss rate: 72.01%
-- Flow 3:
Average throughput: 4.96 Mbit/s
95th percentile per-packet one-way delay: 3.285 ms
Loss rate: 75.72%
```
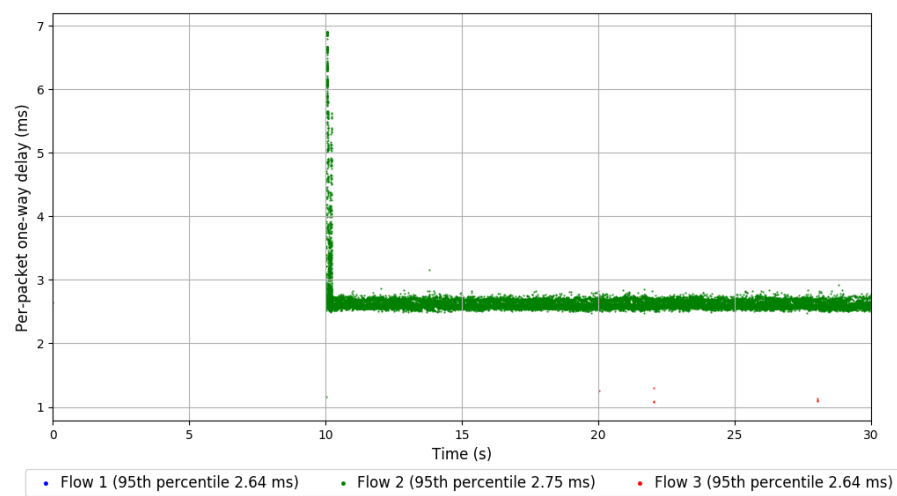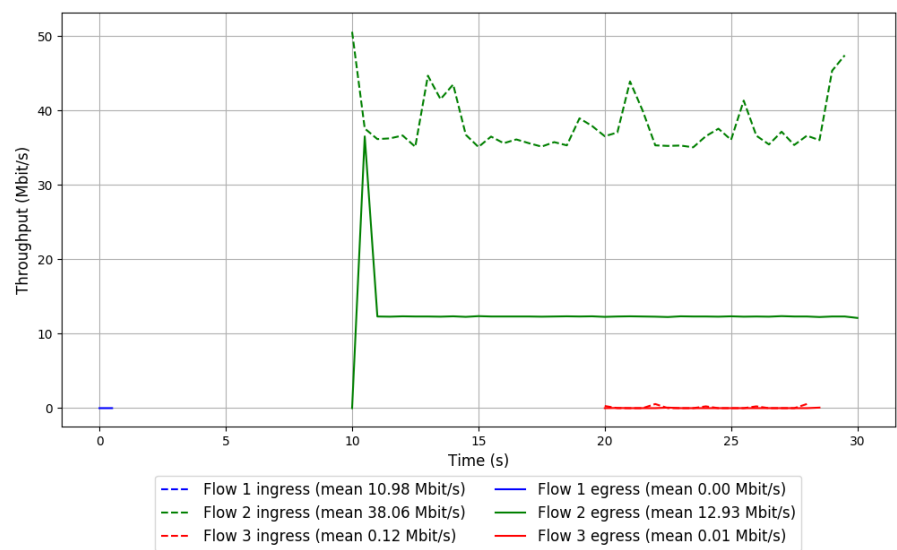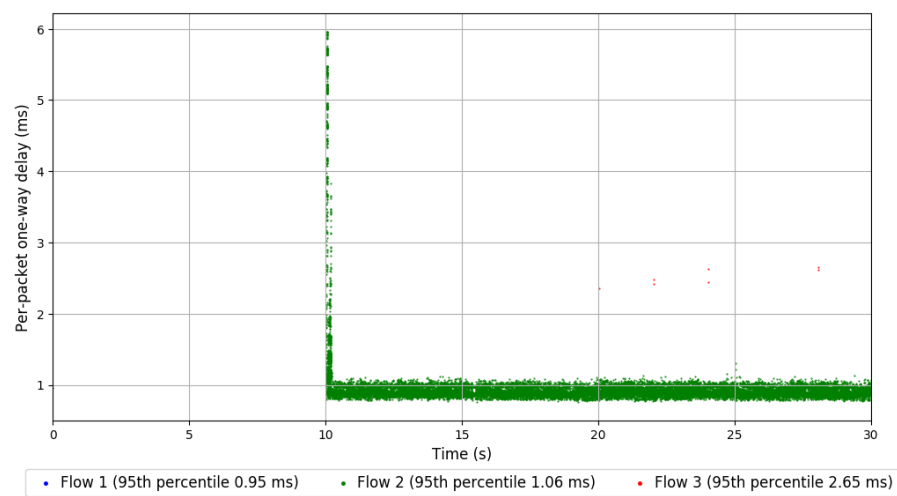
Run 2: Report of Copa — Data Link

Flow 1 ingress (mean 11.95 Mbit/s) --- Flow 1 egress (mean 0.00 Mbit/s)
Flow 2 ingress (mean 37.97 Mbit/s) --- Flow 2 egress (mean 10.63 Mbit/s)
Flow 3 ingress (mean 20.42 Mbit/s) --- Flow 3 egress (mean 4.96 Mbit/s)

• Flow 1 (95th percentile 3.22 ms)   • Flow 2 (95th percentile 3.34 ms)   • Flow 3 (95th percentile 3.29 ms)

```
Run 3: Statistics of Copa

Start at: 2019-06-27 08:39:49
End at: 2019-06-27 08:40:19
Local clock offset: -6.712 ms
Remote clock offset: 0.261 ms


# Below is generated by plot.py at 2019-06-27 09:43:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.62 Mbit/s
95th percentile per-packet one-way delay: 2.749 ms
Loss rate: 66.06%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 2.639 ms
Loss rate: 98.33%
-- Flow 2:
Average throughput: 12.93 Mbit/s
95th percentile per-packet one-way delay: 2.749 ms
Loss rate: 66.03%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 2.638 ms
Loss rate: 90.93%
```
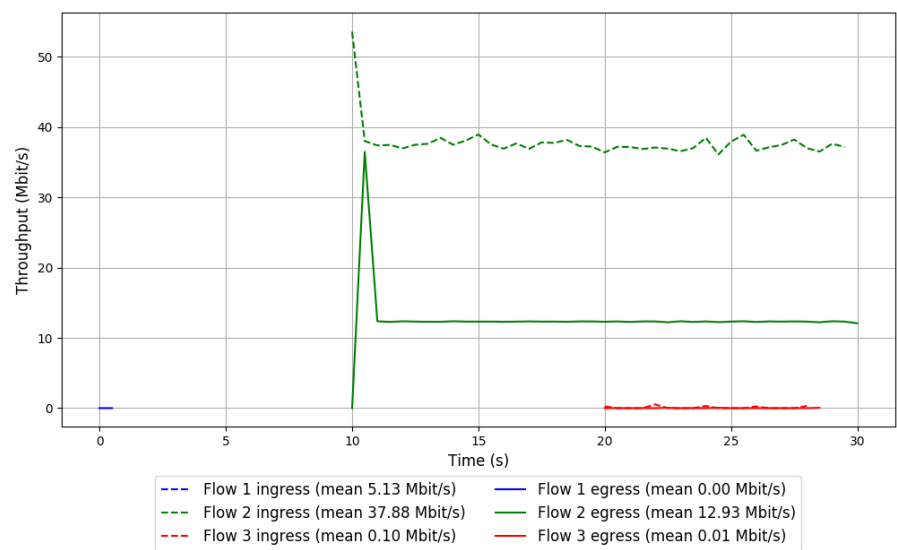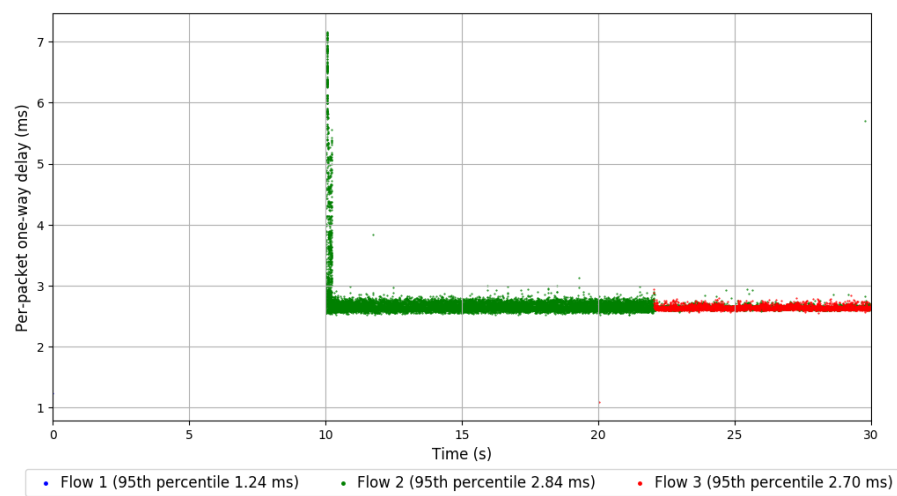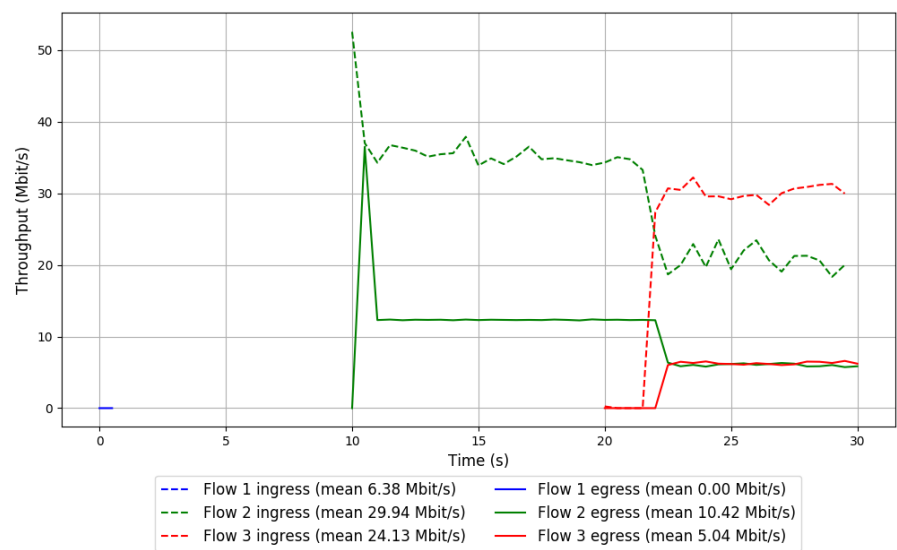
Run 3: Report of Copa — Data Link

Flow 1 ingress (mean 10.98 Mbit/s) --- Flow 1 egress (mean 0.00 Mbit/s)
Flow 2 ingress (mean 38.06 Mbit/s) --- Flow 2 egress (mean 12.93 Mbit/s)
Flow 3 ingress (mean 0.12 Mbit/s) --- Flow 3 egress (mean 0.01 Mbit/s)

Flow 1 (95th percentile 2.64 ms) • Flow 2 (95th percentile 2.75 ms) • Flow 3 (95th percentile 2.64 ms)

```
Run 4: Statistics of Copa

Start at: 2019-06-27 09:04:53
End at: 2019-06-27 09:05:23
Local clock offset: -7.057 ms
Remote clock offset: 0.362 ms


# Below is generated by plot.py at 2019-06-27 09:43:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.62 Mbit/s
95th percentile per-packet one-way delay: 1.059 ms
Loss rate: 65.89%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 0.955 ms
Loss rate: 97.92%
-- Flow 2:
Average throughput: 12.93 Mbit/s
95th percentile per-packet one-way delay: 1.059 ms
Loss rate: 65.86%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 2.650 ms
Loss rate: 91.06%
```
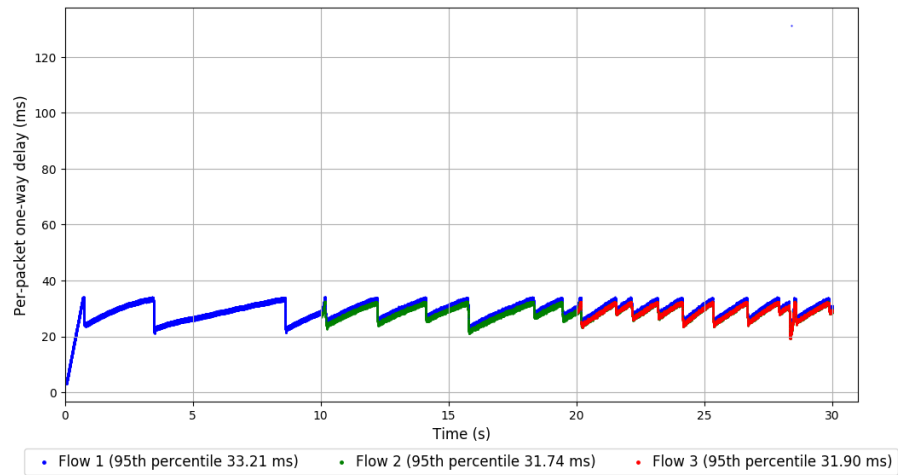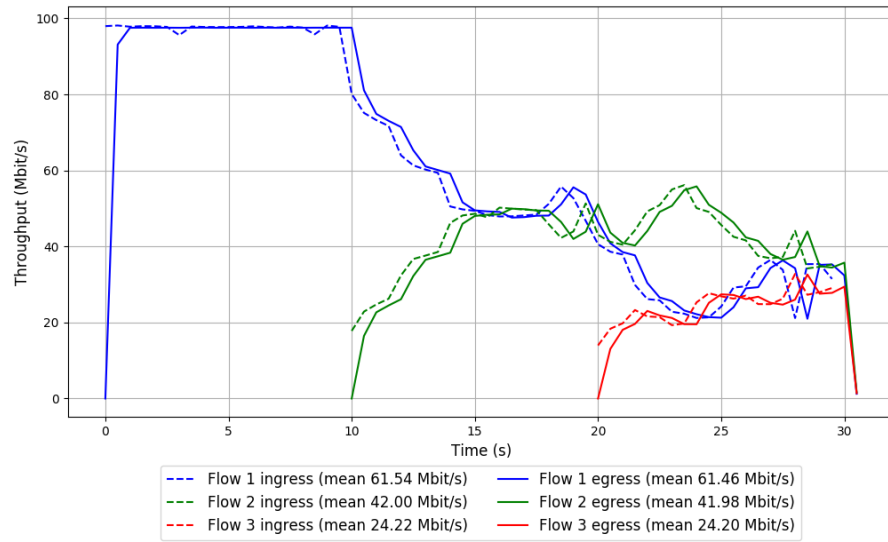
Run 4: Report of Copa — Data Link

Legend:
- Flow 1 ingress (mean 5.13 Mbit/s)
- Flow 1 egress (mean 0.00 Mbit/s)
- Flow 2 ingress (mean 37.88 Mbit/s)
- Flow 2 egress (mean 12.93 Mbit/s)
- Flow 3 ingress (mean 0.10 Mbit/s)
- Flow 3 egress (mean 0.01 Mbit/s)

Legend:
- Flow 1 (95th percentile 0.95 ms)
- Flow 2 (95th percentile 1.06 ms)
- Flow 3 (95th percentile 2.65 ms)

```
Run 5: Statistics of Copa

Start at: 2019-06-27 09:29:55
End at: 2019-06-27 09:30:25
Local clock offset: -7.353 ms
Remote clock offset: 0.397 ms


# Below is generated by plot.py at 2019-06-27 09:43:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.62 Mbit/s
95th percentile per-packet one-way delay: 2.791 ms
Loss rate: 69.19%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 1.235 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 10.42 Mbit/s
95th percentile per-packet one-way delay: 2.839 ms
Loss rate: 65.19%
-- Flow 3:
Average throughput: 5.04 Mbit/s
95th percentile per-packet one-way delay: 2.704 ms
Loss rate: 79.13%
```
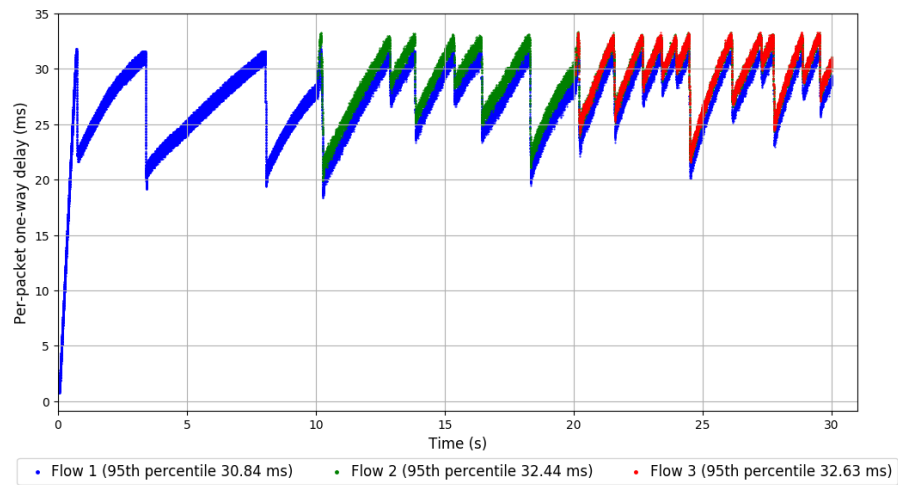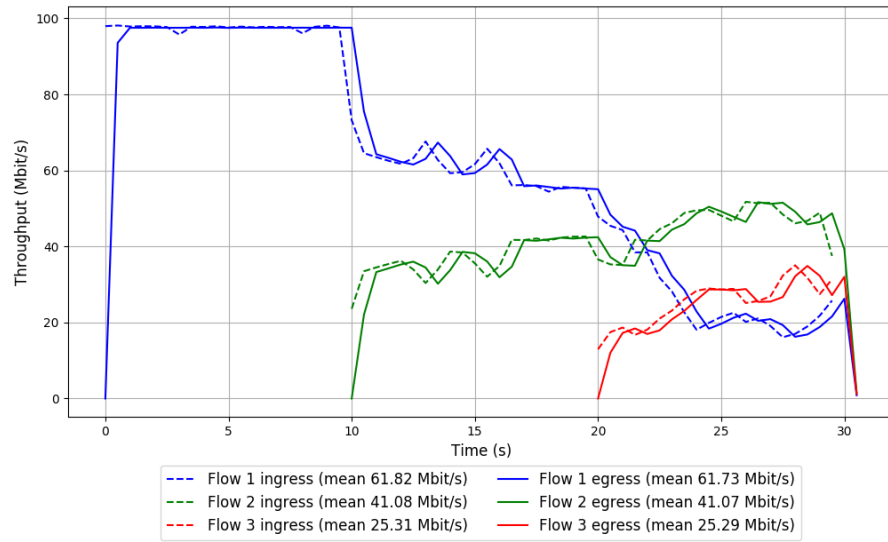
Run 5: Report of Copa — Data Link

Flow 1 ingress (mean 6.38 Mbit/s) --- Flow 1 egress (mean 0.00 Mbit/s) ---
Flow 2 ingress (mean 29.94 Mbit/s) --- Flow 2 egress (mean 10.42 Mbit/s) ---
Flow 3 ingress (mean 24.13 Mbit/s) --- Flow 3 egress (mean 5.04 Mbit/s) ---

• Flow 1 (95th percentile 1.24 ms) • Flow 2 (95th percentile 2.84 ms) • Flow 3 (95th percentile 2.70 ms)

```
Run 1: Statistics of TCP Cubic

Start at: 2019-06-27 07:38:17
End at: 2019-06-27 07:38:47
Local clock offset: -6.413 ms
Remote clock offset: -0.235 ms


# Below is generated by plot.py at 2019-06-27 09:43:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.46 Mbit/s
95th percentile per-packet one-way delay: 32.968 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 61.46 Mbit/s
95th percentile per-packet one-way delay: 33.214 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 41.98 Mbit/s
95th percentile per-packet one-way delay: 31.738 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 24.20 Mbit/s
95th percentile per-packet one-way delay: 31.900 ms
Loss rate: 0.06%
```
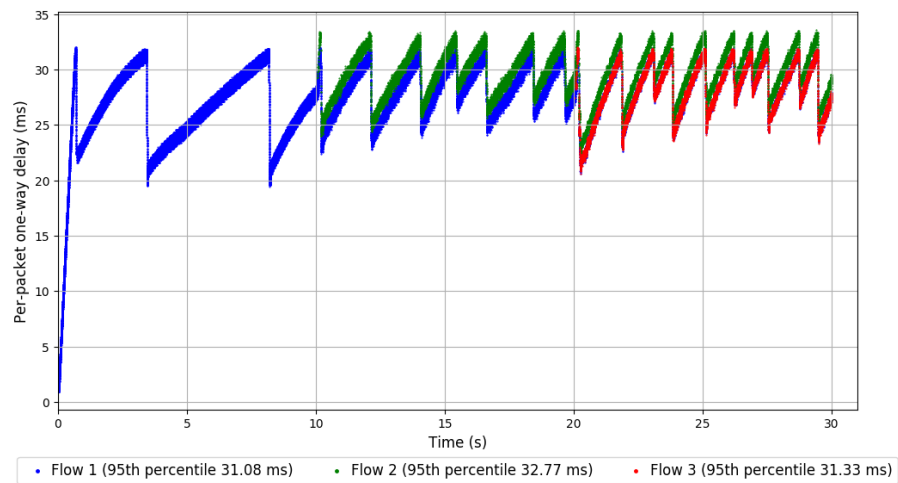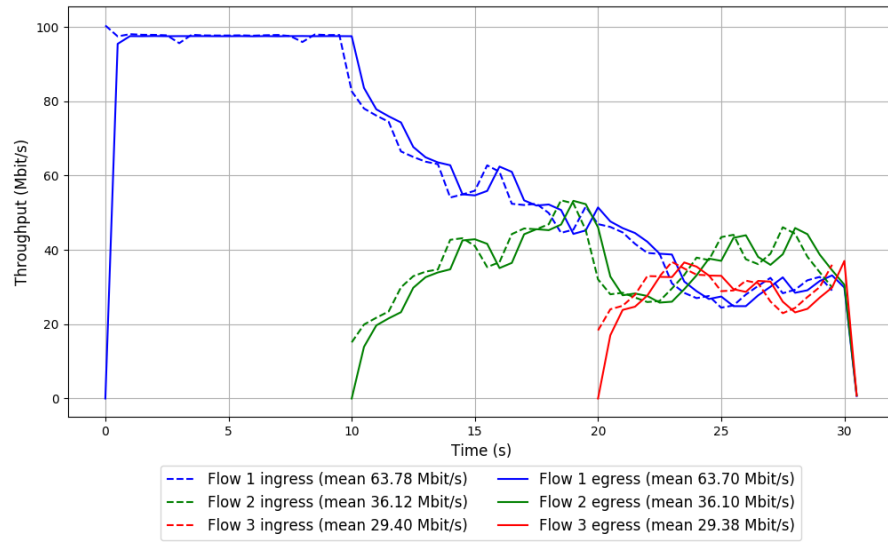
Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2019-06-27 08:03:19
End at: 2019-06-27 08:03:49
Local clock offset: -6.348 ms
Remote clock offset: -0.071 ms


# Below is generated by plot.py at 2019-06-27 09:43:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.46 Mbit/s
95th percentile per-packet one-way delay: 32.075 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 61.73 Mbit/s
95th percentile per-packet one-way delay: 30.845 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 41.07 Mbit/s
95th percentile per-packet one-way delay: 32.443 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 25.29 Mbit/s
95th percentile per-packet one-way delay: 32.633 ms
Loss rate: 0.05%
```
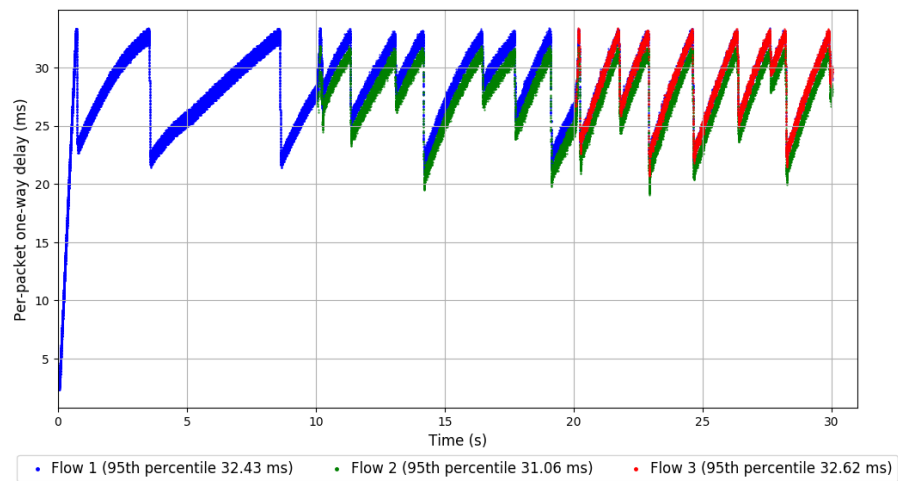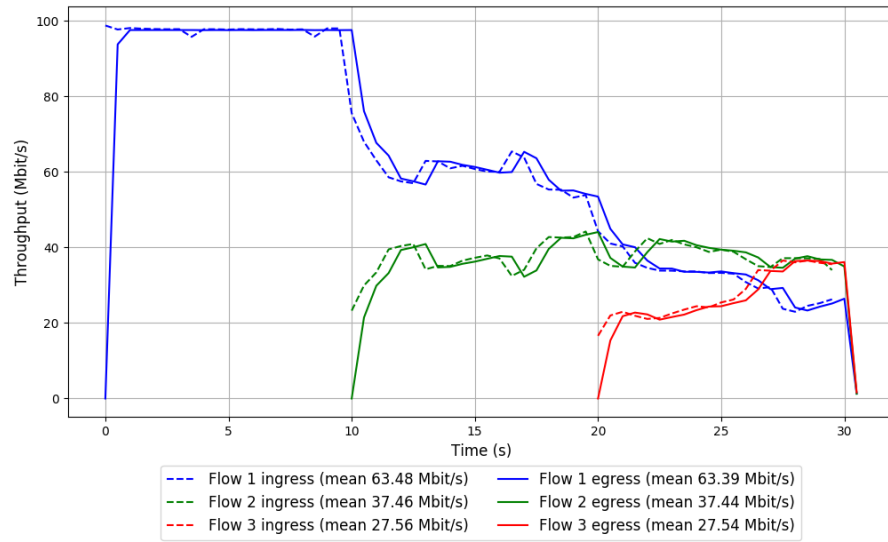
Run 2: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 61.82 Mbit/s)   Flow 1 egress (mean 61.73 Mbit/s)
Flow 2 ingress (mean 41.08 Mbit/s)   Flow 2 egress (mean 41.07 Mbit/s)
Flow 3 ingress (mean 25.31 Mbit/s)   Flow 3 egress (mean 25.29 Mbit/s)

Flow 1 (95th percentile 30.84 ms)   Flow 2 (95th percentile 32.44 ms)   Flow 3 (95th percentile 32.63 ms)

28

```
Run 3: Statistics of TCP Cubic

Start at: 2019-06-27 08:28:22
End at: 2019-06-27 08:28:52
Local clock offset: -6.681 ms
Remote clock offset: 0.096 ms


# Below is generated by plot.py at 2019-06-27 09:43:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.50 Mbit/s
95th percentile per-packet one-way delay: 31.823 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 63.70 Mbit/s
95th percentile per-packet one-way delay: 31.083 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 36.10 Mbit/s
95th percentile per-packet one-way delay: 32.767 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 29.38 Mbit/s
95th percentile per-packet one-way delay: 31.326 ms
Loss rate: 0.06%
```
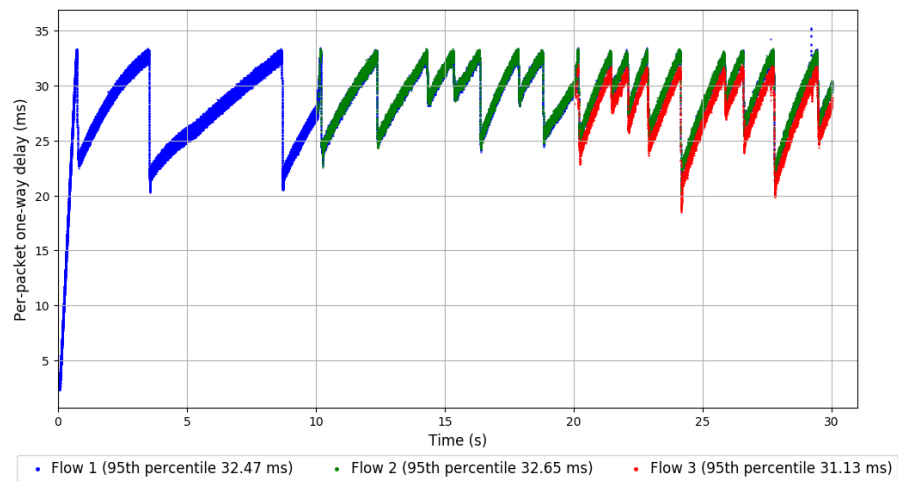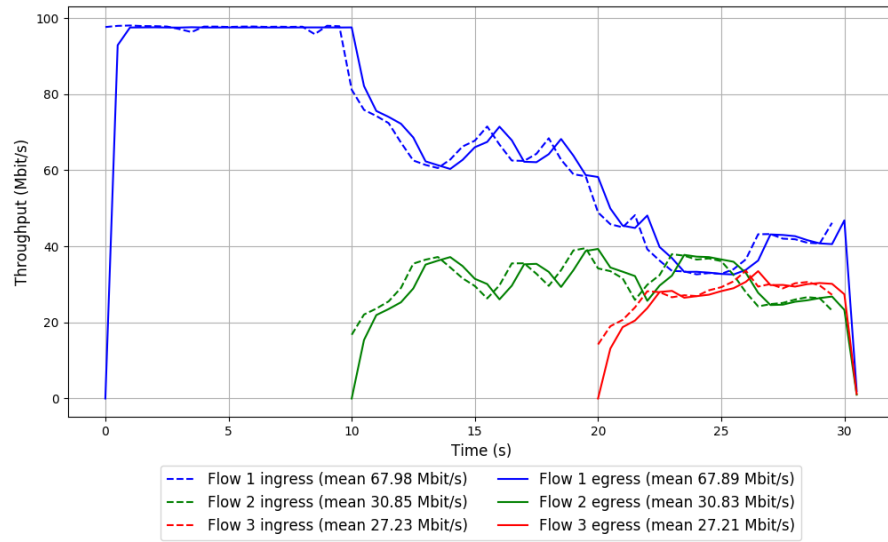
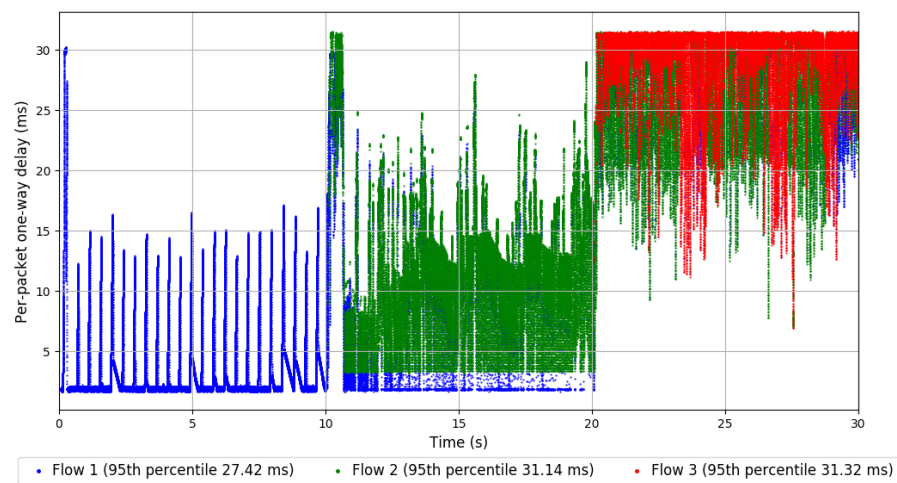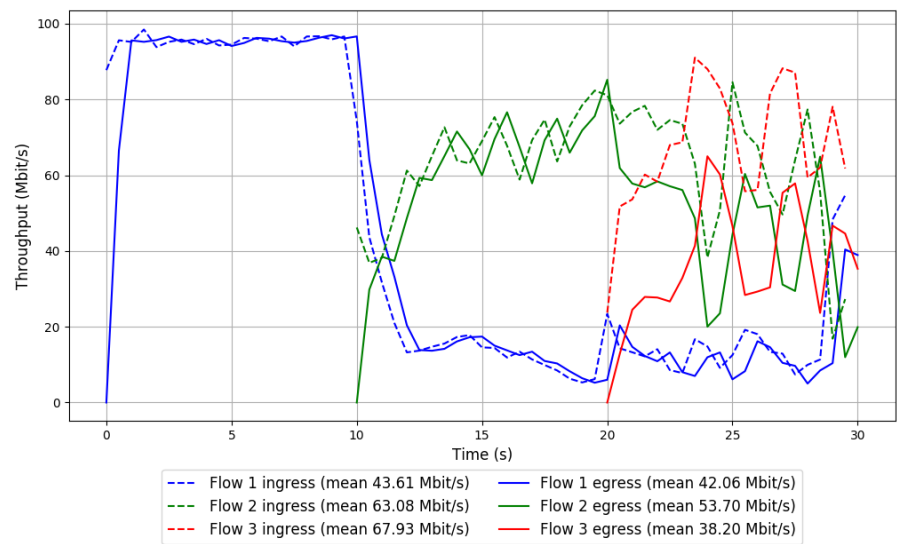Run 3: Report of TCP Cubic — Data Link

```
Run 4: Statistics of TCP Cubic

Start at: 2019-06-27 08:53:26
End at: 2019-06-27 08:53:56
Local clock offset: -6.736 ms
Remote clock offset: 0.351 ms


# Below is generated by plot.py at 2019-06-27 09:44:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 32.379 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 63.39 Mbit/s
95th percentile per-packet one-way delay: 32.432 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 37.44 Mbit/s
95th percentile per-packet one-way delay: 31.057 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 27.54 Mbit/s
95th percentile per-packet one-way delay: 32.615 ms
Loss rate: 0.05%
```

Run 4: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 63.48 Mbit/s) Flow 1 egress (mean 63.39 Mbit/s)
Flow 2 ingress (mean 37.46 Mbit/s) Flow 2 egress (mean 37.44 Mbit/s)
Flow 3 ingress (mean 27.56 Mbit/s) Flow 3 egress (mean 27.54 Mbit/s)

Flow 1 (95th percentile 32.43 ms) Flow 2 (95th percentile 31.06 ms) Flow 3 (95th percentile 32.62 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2019-06-27 09:18:29
End at: 2019-06-27 09:18:59
Local clock offset: -7.197 ms
Remote clock offset: 0.391 ms


# Below is generated by plot.py at 2019-06-27 09:44:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.46 Mbit/s
95th percentile per-packet one-way delay: 32.470 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 67.89 Mbit/s
95th percentile per-packet one-way delay: 32.472 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 30.83 Mbit/s
95th percentile per-packet one-way delay: 32.649 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 27.21 Mbit/s
95th percentile per-packet one-way delay: 31.132 ms
Loss rate: 0.06%
```

Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 67.98 Mbit/s) --- Flow 1 egress (mean 67.89 Mbit/s)
Flow 2 ingress (mean 30.85 Mbit/s) --- Flow 2 egress (mean 30.83 Mbit/s)
Flow 3 ingress (mean 27.23 Mbit/s) --- Flow 3 egress (mean 27.21 Mbit/s)

Flow 1 (95th percentile 32.47 ms)   Flow 2 (95th percentile 32.65 ms)   Flow 3 (95th percentile 31.13 ms)

```
Run 1: Statistics of FillP

Start at: 2019-06-27 07:37:08
End at: 2019-06-27 07:37:38
Local clock offset: -6.632 ms
Remote clock offset: -0.225 ms

# Below is generated by plot.py at 2019-06-27 09:44:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.47 Mbit/s
95th percentile per-packet one-way delay: 31.089 ms
Loss rate: 16.27%
-- Flow 1:
Average throughput: 42.06 Mbit/s
95th percentile per-packet one-way delay: 27.416 ms
Loss rate: 3.50%
-- Flow 2:
Average throughput: 53.70 Mbit/s
95th percentile per-packet one-way delay: 31.137 ms
Loss rate: 14.80%
-- Flow 3:
Average throughput: 38.20 Mbit/s
95th percentile per-packet one-way delay: 31.322 ms
Loss rate: 43.72%
```
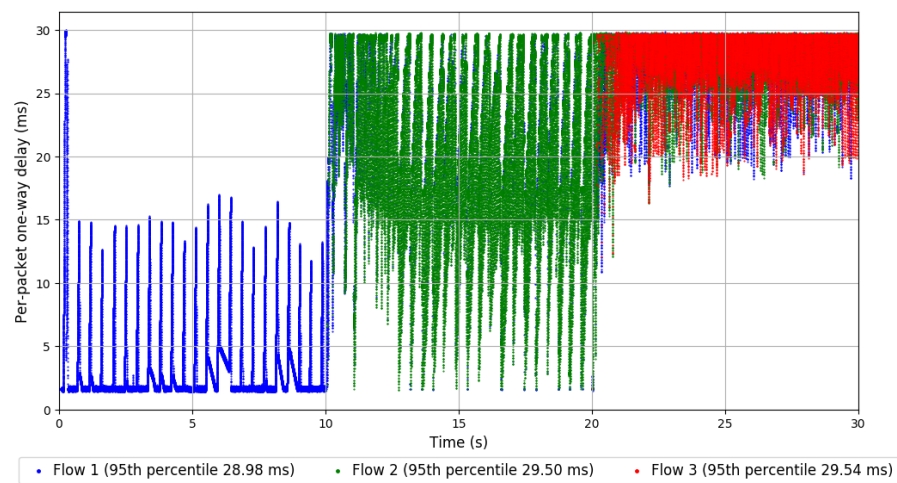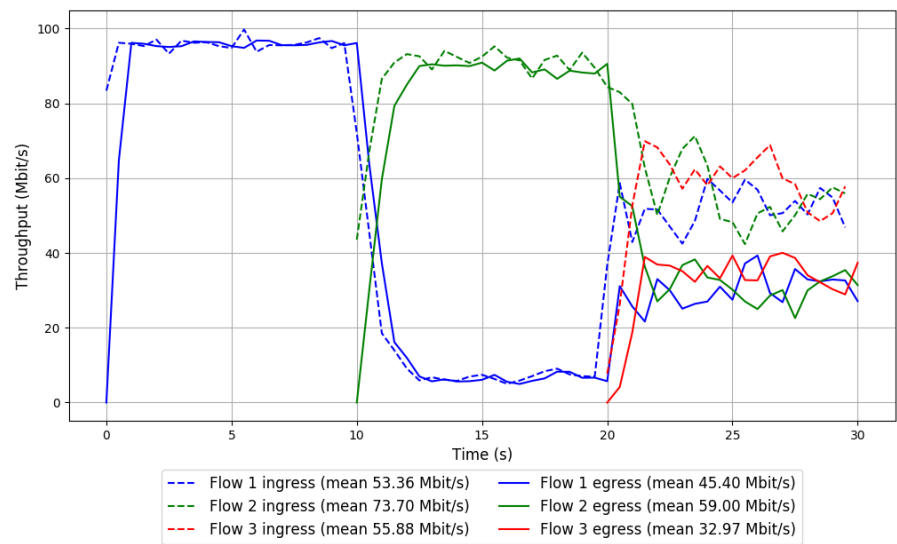
Run 1: Report of FillP — Data Link

```
Run 2: Statistics of FillP

Start at: 2019-06-27 08:02:10
End at: 2019-06-27 08:02:40
Local clock offset: -6.304 ms
Remote clock offset: -0.069 ms

# Below is generated by plot.py at 2019-06-27 09:44:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.85 Mbit/s
95th percentile per-packet one-way delay: 29.735 ms
Loss rate: 8.48%
-- Flow 1:
Average throughput: 67.61 Mbit/s
95th percentile per-packet one-way delay: 29.953 ms
Loss rate: 6.49%
-- Flow 2:
Average throughput: 24.81 Mbit/s
95th percentile per-packet one-way delay: 28.324 ms
Loss rate: 15.59%
-- Flow 3:
Average throughput: 14.23 Mbit/s
95th percentile per-packet one-way delay: 27.832 ms
Loss rate: 9.49%
```
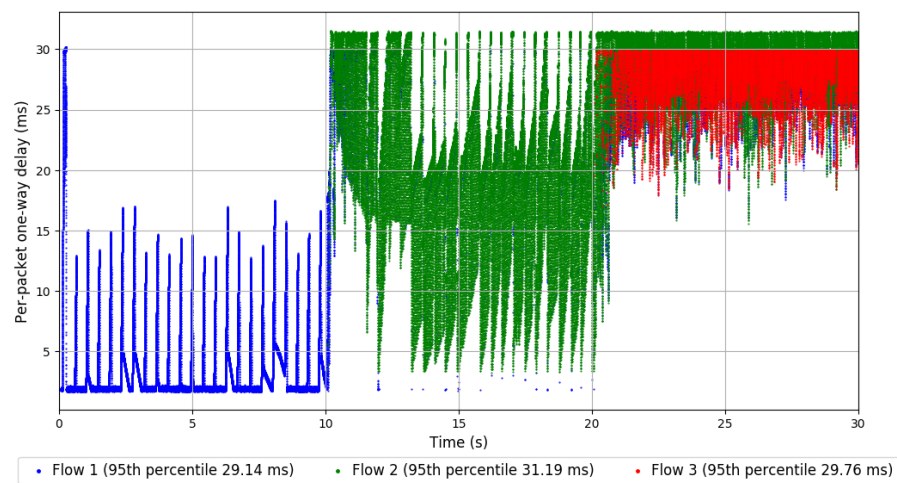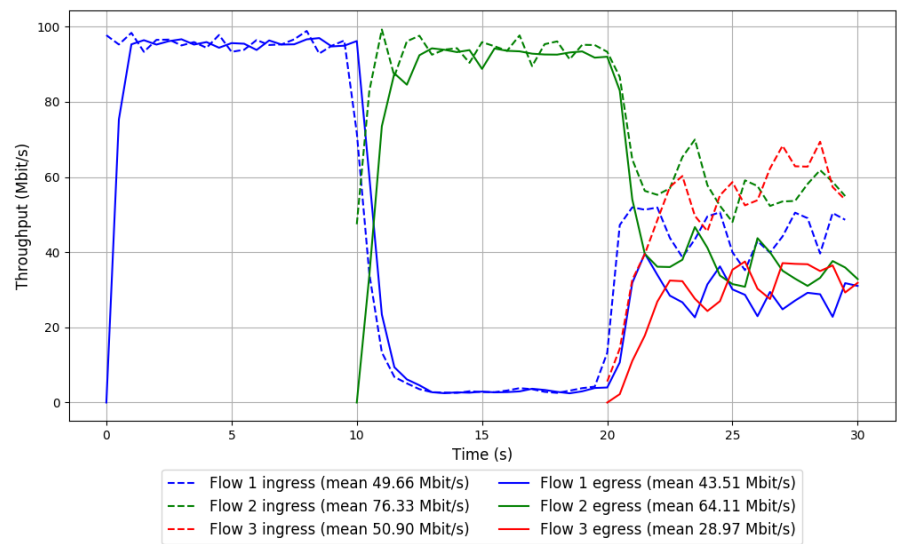
Run 2: Report of FillP — Data Link

```
Run 3: Statistics of FillP

Start at: 2019-06-27 08:27:13
End at: 2019-06-27 08:27:43
Local clock offset: -7.232 ms
Remote clock offset: 0.188 ms


# Below is generated by plot.py at 2019-06-27 09:45:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.65 Mbit/s
95th percentile per-packet one-way delay: 29.433 ms
Loss rate: 20.86%
-- Flow 1:
Average throughput: 45.40 Mbit/s
95th percentile per-packet one-way delay: 28.982 ms
Loss rate: 14.84%
-- Flow 2:
Average throughput: 59.00 Mbit/s
95th percentile per-packet one-way delay: 29.497 ms
Loss rate: 19.84%
-- Flow 3:
Average throughput: 32.97 Mbit/s
95th percentile per-packet one-way delay: 29.540 ms
Loss rate: 40.83%
```
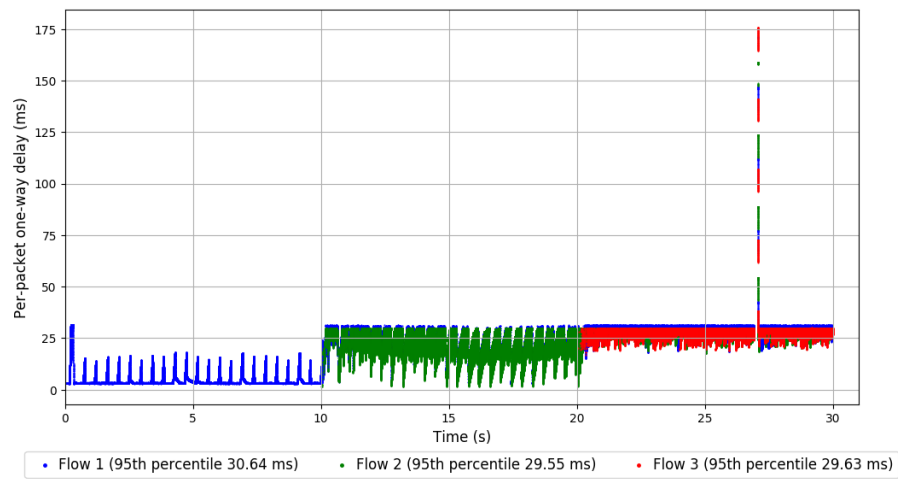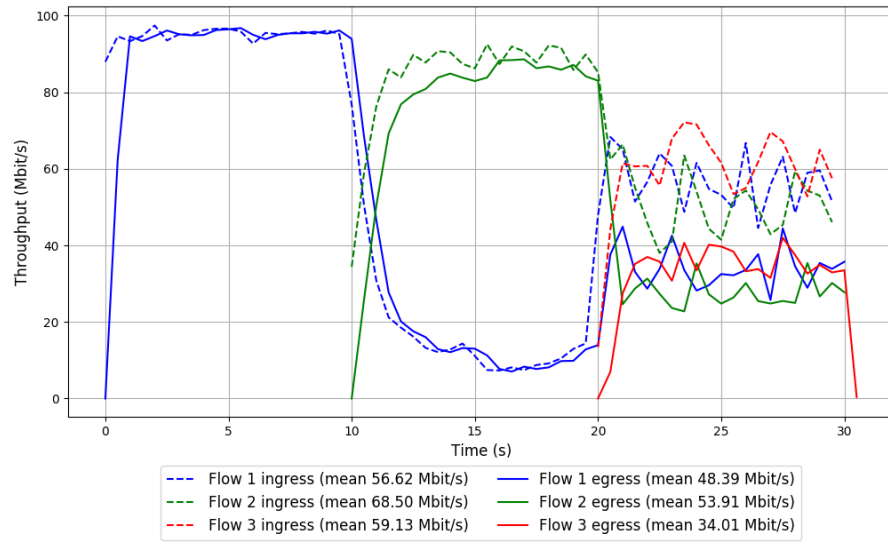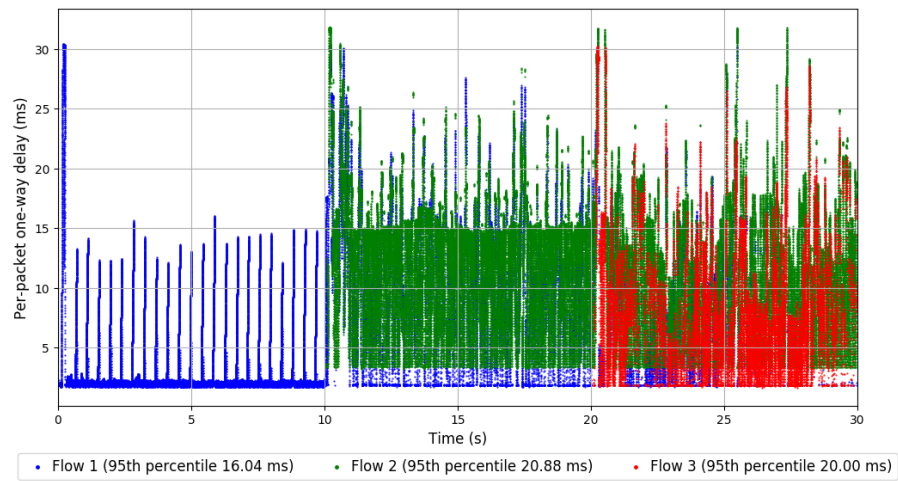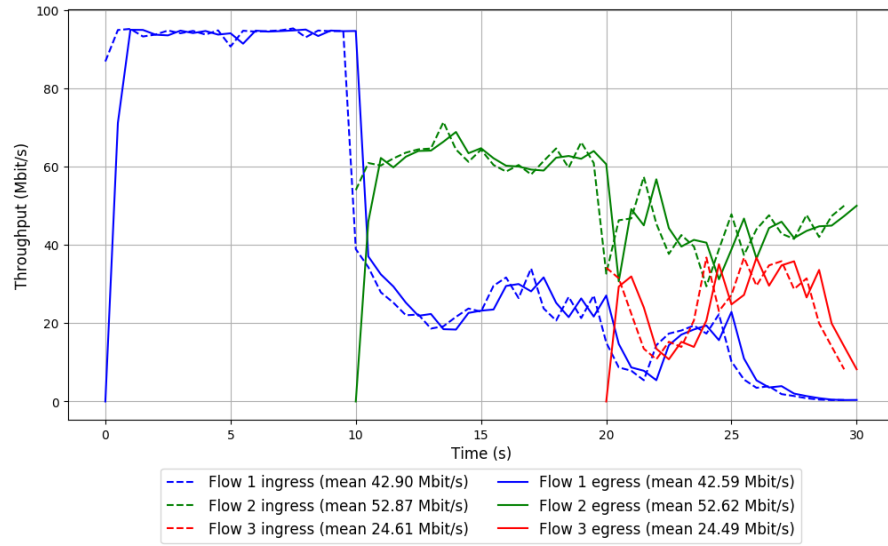
Run 3: Report of FillP — Data Link

Flow 1 ingress (mean 53.36 Mbit/s)   Flow 1 egress (mean 45.40 Mbit/s)
Flow 2 ingress (mean 73.70 Mbit/s)   Flow 2 egress (mean 59.00 Mbit/s)
Flow 3 ingress (mean 55.88 Mbit/s)   Flow 3 egress (mean 32.97 Mbit/s)

Flow 1 (95th percentile 28.98 ms)   Flow 2 (95th percentile 29.50 ms)   Flow 3 (95th percentile 29.54 ms)

40

```
Run 4: Statistics of FillP

Start at: 2019-06-27 08:52:16
End at: 2019-06-27 08:52:46
Local clock offset: -7.686 ms
Remote clock offset: 0.366 ms

# Below is generated by plot.py at 2019-06-27 09:45:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.74 Mbit/s
95th percentile per-packet one-way delay: 30.913 ms
Loss rate: 18.28%
-- Flow 1:
Average throughput: 43.51 Mbit/s
95th percentile per-packet one-way delay: 29.139 ms
Loss rate: 12.30%
-- Flow 2:
Average throughput: 64.11 Mbit/s
95th percentile per-packet one-way delay: 31.191 ms
Loss rate: 15.90%
-- Flow 3:
Average throughput: 28.97 Mbit/s
95th percentile per-packet one-way delay: 29.760 ms
Loss rate: 43.03%
```

Run 4: Report of FillP — Data Link

Flow 1 ingress (mean 49.66 Mbit/s) --- Flow 1 egress (mean 43.51 Mbit/s) ——
Flow 2 ingress (mean 76.33 Mbit/s) --- Flow 2 egress (mean 64.11 Mbit/s) ——
Flow 3 ingress (mean 50.90 Mbit/s) --- Flow 3 egress (mean 28.97 Mbit/s) ——

• Flow 1 (95th percentile 29.14 ms)   • Flow 2 (95th percentile 31.19 ms)   • Flow 3 (95th percentile 29.76 ms)

```
Run 5: Statistics of FillP

Start at: 2019-06-27 09:17:20
End at: 2019-06-27 09:17:50
Local clock offset: -8.024 ms
Remote clock offset: 0.383 ms


# Below is generated by plot.py at 2019-06-27 09:45:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.58 Mbit/s
95th percentile per-packet one-way delay: 30.010 ms
Loss rate: 21.50%
-- Flow 1:
Average throughput: 48.39 Mbit/s
95th percentile per-packet one-way delay: 30.644 ms
Loss rate: 14.46%
-- Flow 2:
Average throughput: 53.91 Mbit/s
95th percentile per-packet one-way delay: 29.547 ms
Loss rate: 21.23%
-- Flow 3:
Average throughput: 34.01 Mbit/s
95th percentile per-packet one-way delay: 29.626 ms
Loss rate: 42.44%
```
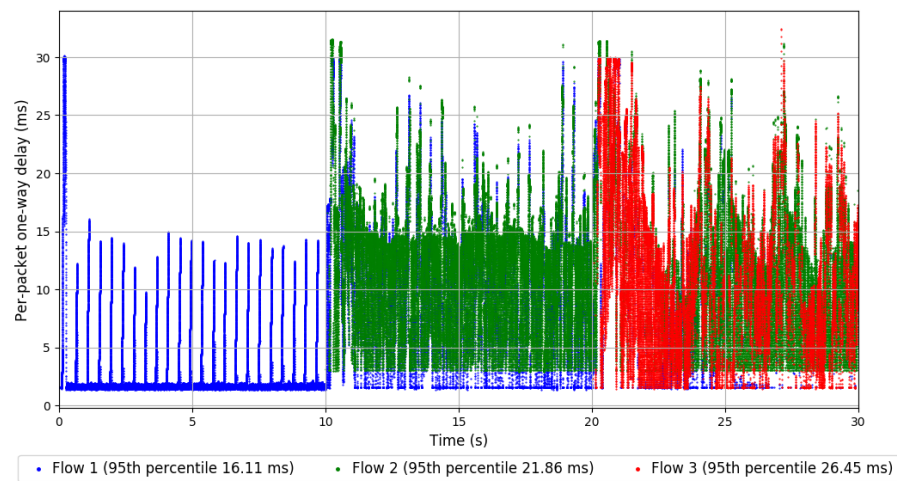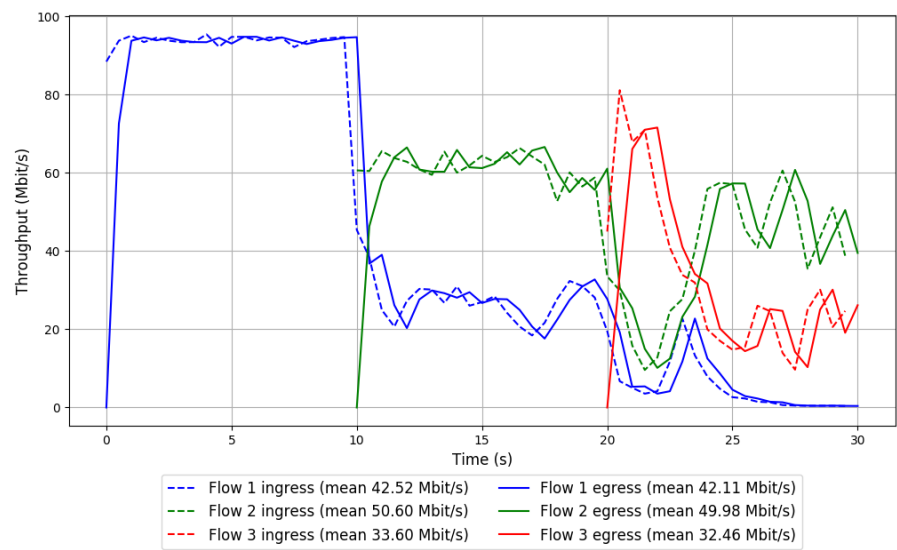
Run 5: Report of FillP — Data Link

Flow 1 ingress (mean 56.62 Mbit/s) --- Flow 1 egress (mean 48.39 Mbit/s)
Flow 2 ingress (mean 68.50 Mbit/s) --- Flow 2 egress (mean 53.91 Mbit/s)
Flow 3 ingress (mean 59.13 Mbit/s) --- Flow 3 egress (mean 34.01 Mbit/s)

Flow 1 (95th percentile 30.64 ms) • Flow 2 (95th percentile 29.55 ms) • Flow 3 (95th percentile 29.63 ms)

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```
Run 1: Statistics of FillP-Sheep

Start at: 2019-06-27 07:48:35
End at: 2019-06-27 07:49:05
Local clock offset: -6.731 ms
Remote clock offset: -0.099 ms


# Below is generated by plot.py at 2019-06-27 09:45:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.72 Mbit/s
95th percentile per-packet one-way delay: 19.301 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 42.59 Mbit/s
95th percentile per-packet one-way delay: 16.040 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 52.62 Mbit/s
95th percentile per-packet one-way delay: 20.881 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 24.49 Mbit/s
95th percentile per-packet one-way delay: 20.001 ms
Loss rate: 0.56%
```
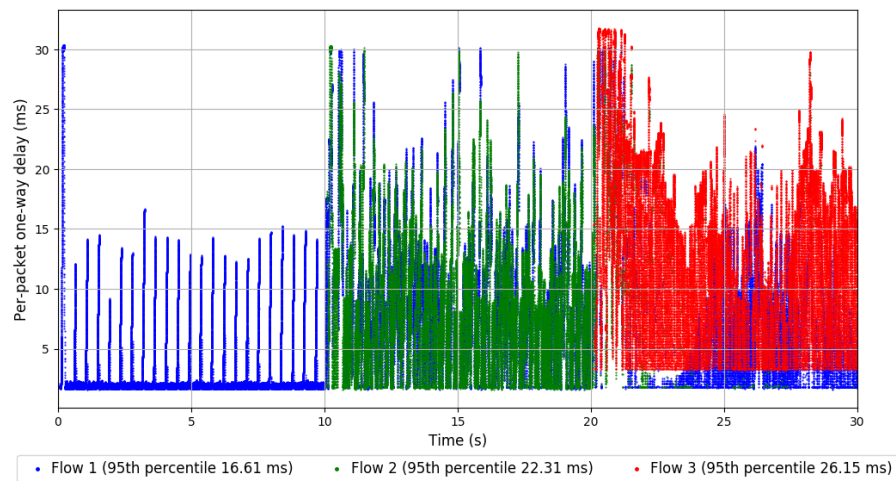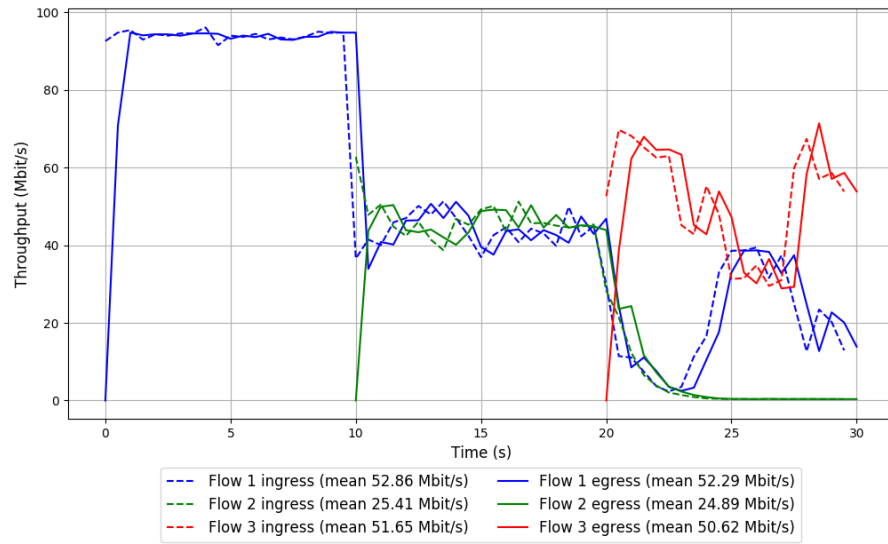
Run 1: Report of FillP-Sheep — Data Link

```
Run 2: Statistics of FillP-Sheep

Start at: 2019-06-27 08:13:38
End at: 2019-06-27 08:14:08
Local clock offset: -7.323 ms
Remote clock offset: 0.049 ms


# Below is generated by plot.py at 2019-06-27 09:45:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.10 Mbit/s
95th percentile per-packet one-way delay: 21.330 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 42.11 Mbit/s
95th percentile per-packet one-way delay: 16.114 ms
Loss rate: 0.96%
-- Flow 2:
Average throughput: 49.98 Mbit/s
95th percentile per-packet one-way delay: 21.865 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 32.46 Mbit/s
95th percentile per-packet one-way delay: 26.455 ms
Loss rate: 3.31%
```
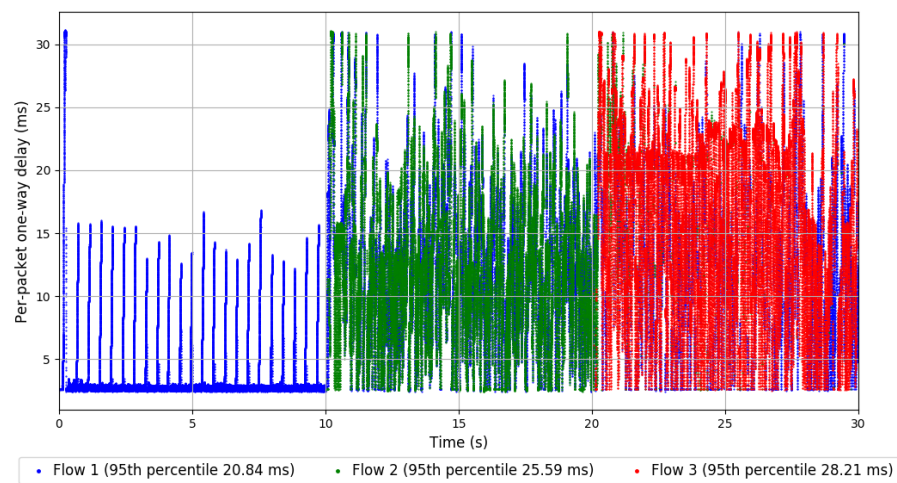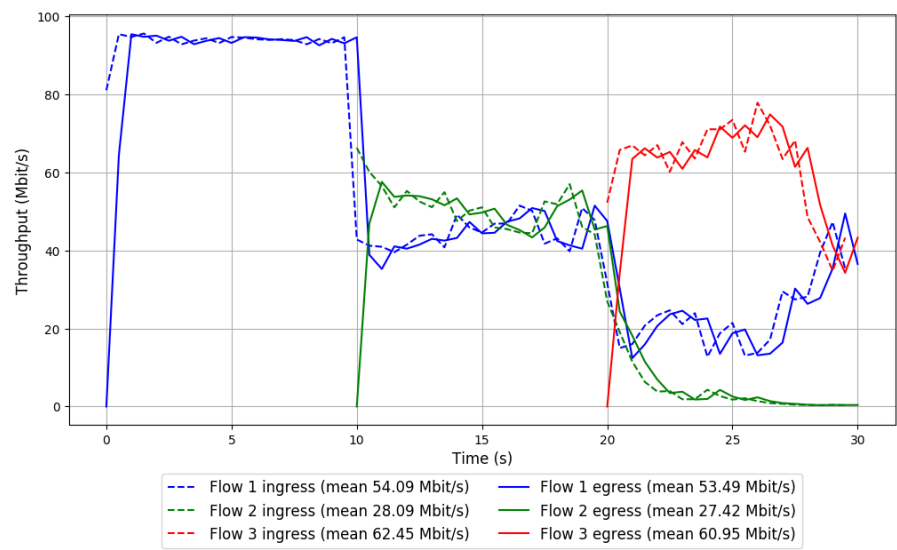
Run 2: Report of FillP-Sheep — Data Link

```
Run 3: Statistics of FillP-Sheep

Start at: 2019-06-27 08:38:40
End at: 2019-06-27 08:39:10
Local clock offset: -7.467 ms
Remote clock offset: 0.266 ms

# Below is generated by plot.py at 2019-06-27 09:45:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.60 Mbit/s
95th percentile per-packet one-way delay: 21.289 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 52.29 Mbit/s
95th percentile per-packet one-way delay: 16.605 ms
Loss rate: 1.08%
-- Flow 2:
Average throughput: 24.89 Mbit/s
95th percentile per-packet one-way delay: 22.310 ms
Loss rate: 2.01%
-- Flow 3:
Average throughput: 50.62 Mbit/s
95th percentile per-packet one-way delay: 26.147 ms
Loss rate: 1.95%
```
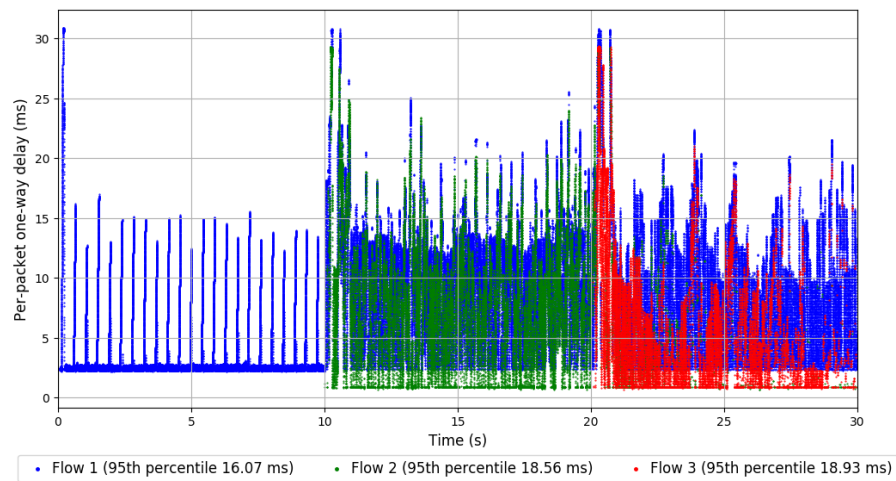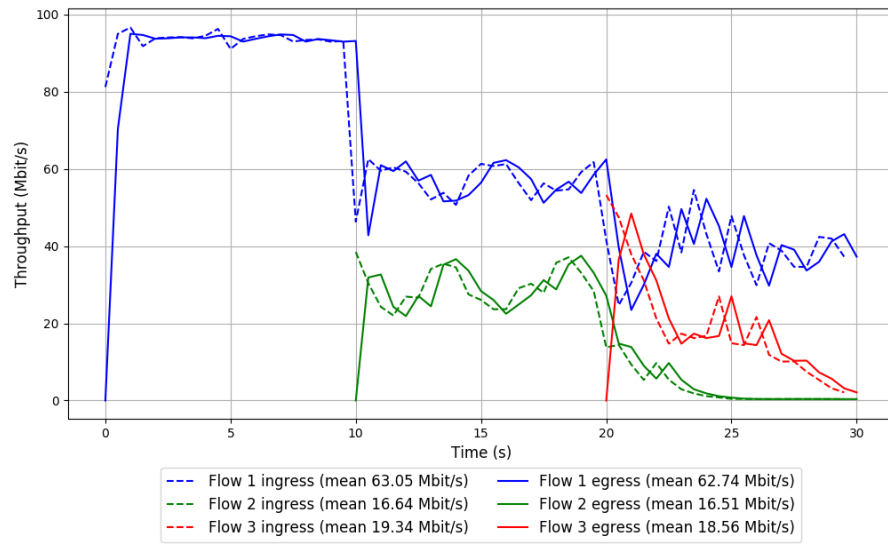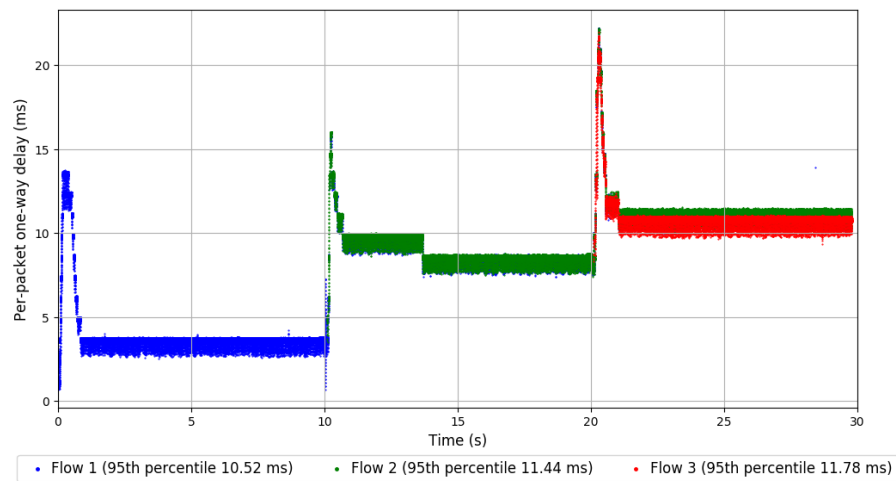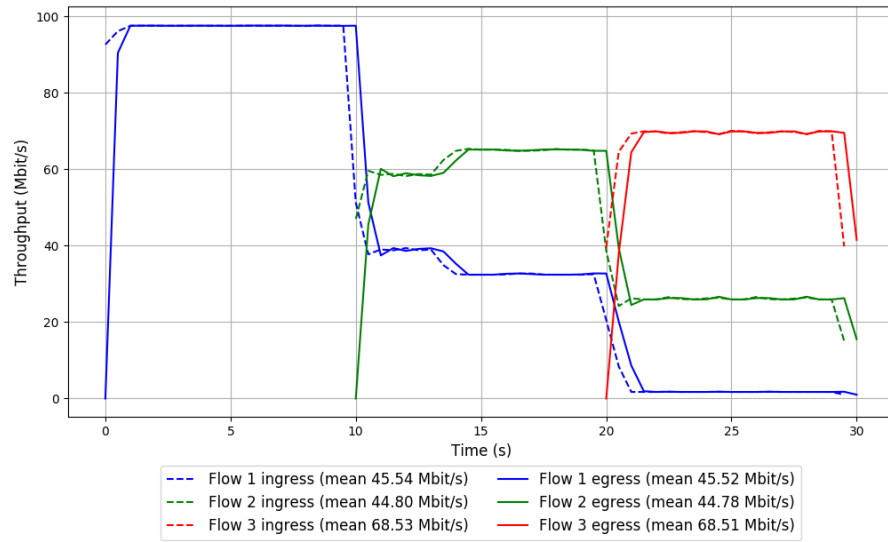
Run 3: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 52.86 Mbit/s) --- Flow 1 egress (mean 52.29 Mbit/s)
Flow 2 ingress (mean 25.41 Mbit/s) --- Flow 2 egress (mean 24.89 Mbit/s)
Flow 3 ingress (mean 51.65 Mbit/s) --- Flow 3 egress (mean 50.62 Mbit/s)

Flow 1 (95th percentile 16.61 ms)   Flow 2 (95th percentile 22.31 ms)   Flow 3 (95th percentile 26.15 ms)

```
Run 4: Statistics of FillP-Sheep

Start at: 2019-06-27 09:03:44
End at: 2019-06-27 09:04:14
Local clock offset: -7.185 ms
Remote clock offset: 0.432 ms


# Below is generated by plot.py at 2019-06-27 09:46:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.92 Mbit/s
95th percentile per-packet one-way delay: 24.920 ms
Loss rate: 1.61%
-- Flow 1:
Average throughput: 53.49 Mbit/s
95th percentile per-packet one-way delay: 20.835 ms
Loss rate: 1.09%
-- Flow 2:
Average throughput: 27.42 Mbit/s
95th percentile per-packet one-way delay: 25.594 ms
Loss rate: 2.30%
-- Flow 3:
Average throughput: 60.95 Mbit/s
95th percentile per-packet one-way delay: 28.207 ms
Loss rate: 2.35%
```

Run 4: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 54.09 Mbit/s)   Flow 1 egress (mean 53.49 Mbit/s)
Flow 2 ingress (mean 28.09 Mbit/s)   Flow 2 egress (mean 27.42 Mbit/s)
Flow 3 ingress (mean 62.45 Mbit/s)   Flow 3 egress (mean 60.95 Mbit/s)

Flow 1 (95th percentile 20.84 ms)   Flow 2 (95th percentile 25.59 ms)   Flow 3 (95th percentile 28.21 ms)

```
Run 5: Statistics of FillP-Sheep

Start at: 2019-06-27 09:28:46
End at: 2019-06-27 09:29:17
Local clock offset: -7.067 ms
Remote clock offset: 0.492 ms


# Below is generated by plot.py at 2019-06-27 09:46:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.87 Mbit/s
95th percentile per-packet one-way delay: 16.789 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 62.74 Mbit/s
95th percentile per-packet one-way delay: 16.075 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 16.51 Mbit/s
95th percentile per-packet one-way delay: 18.563 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 18.56 Mbit/s
95th percentile per-packet one-way delay: 18.930 ms
Loss rate: 4.09%
```
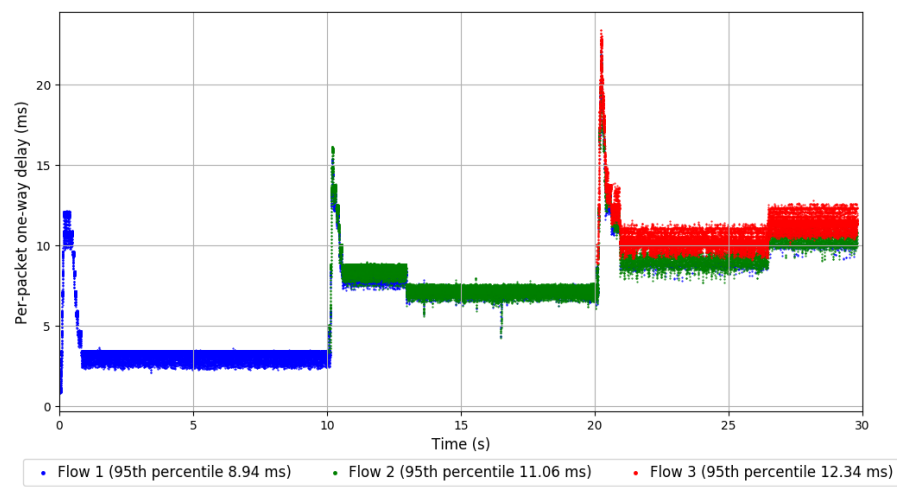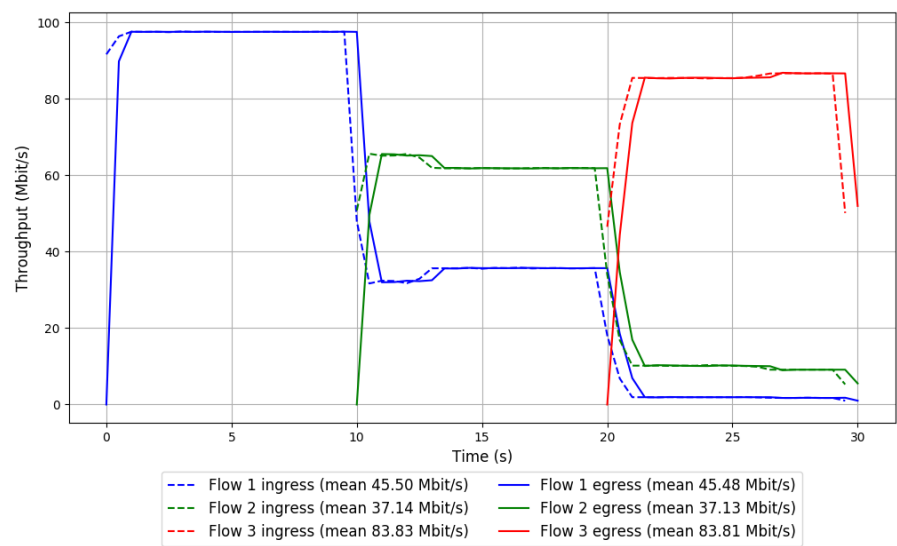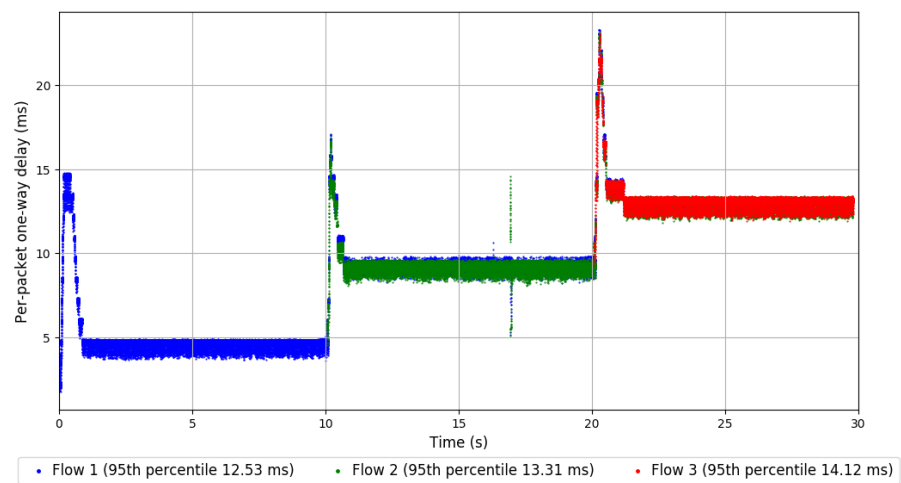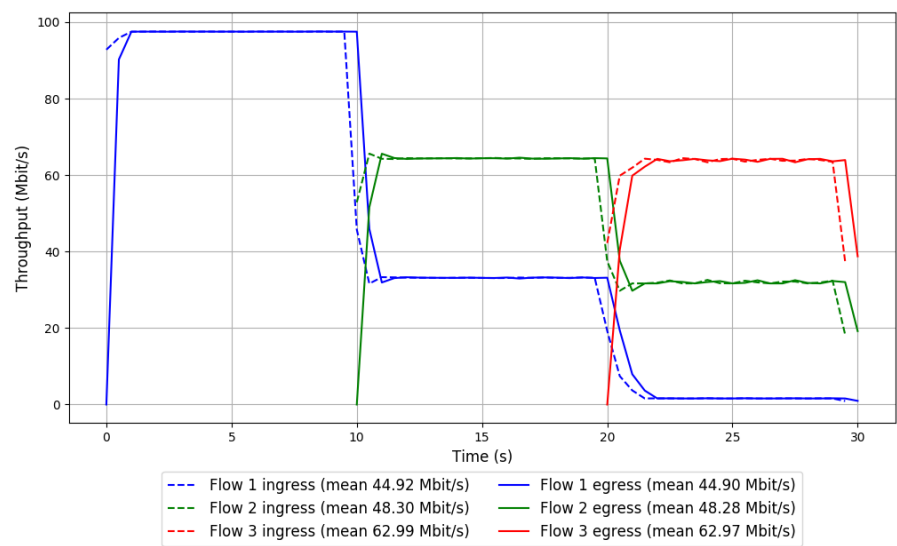
Run 5: Report of FillP-Sheep — Data Link

- - - - Flow 1 ingress (mean 63.05 Mbit/s) —— Flow 1 egress (mean 62.74 Mbit/s)
- - - - Flow 2 ingress (mean 16.64 Mbit/s) —— Flow 2 egress (mean 16.51 Mbit/s)
- - - - Flow 3 ingress (mean 19.34 Mbit/s) —— Flow 3 egress (mean 18.56 Mbit/s)

• Flow 1 (95th percentile 16.07 ms)   • Flow 2 (95th percentile 18.56 ms)   • Flow 3 (95th percentile 18.93 ms)

```
Run 1: Statistics of Indigo

Start at: 2019-06-27 07:47:24
End at: 2019-06-27 07:47:54
Local clock offset: -5.616 ms
Remote clock offset: -0.236 ms


# Below is generated by plot.py at 2019-06-27 09:46:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.40 Mbit/s
95th percentile per-packet one-way delay: 11.448 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 45.52 Mbit/s
95th percentile per-packet one-way delay: 10.522 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.78 Mbit/s
95th percentile per-packet one-way delay: 11.440 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 68.51 Mbit/s
95th percentile per-packet one-way delay: 11.776 ms
Loss rate: 0.00%
```
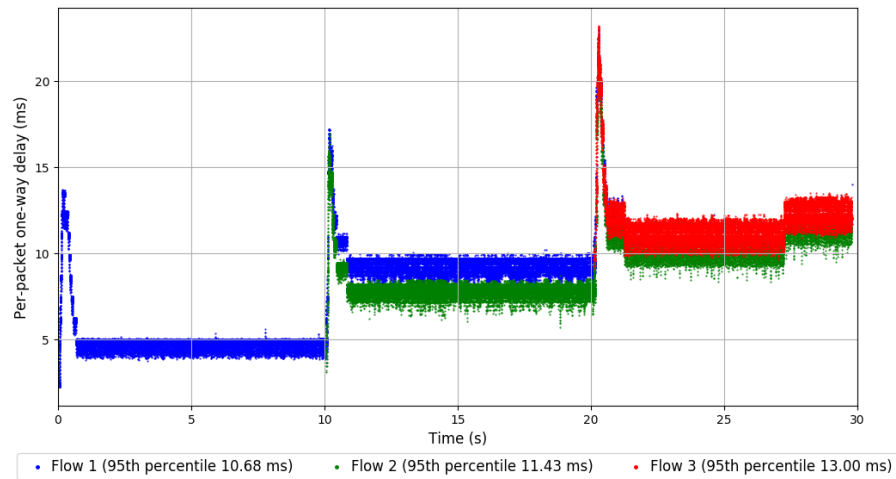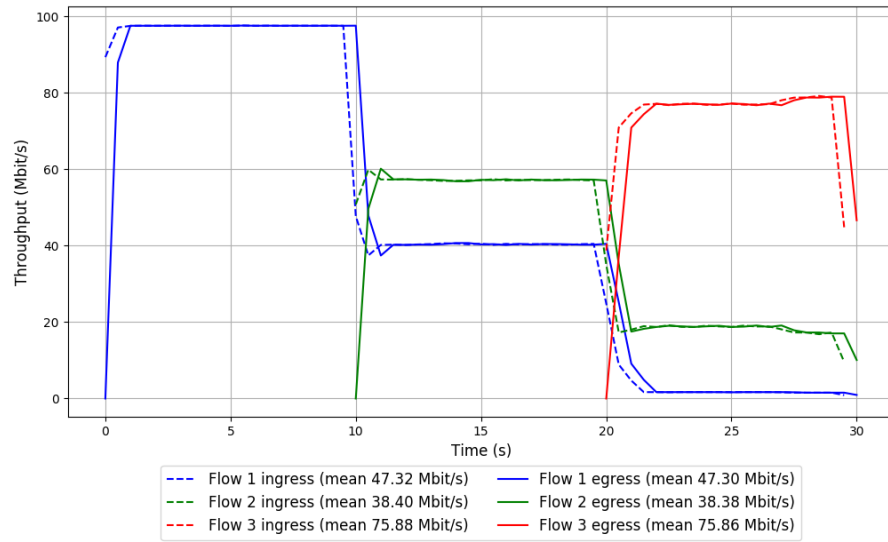
Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2019-06-27 08:12:27
End at: 2019-06-27 08:12:57
Local clock offset: -6.506 ms
Remote clock offset: 0.131 ms


# Below is generated by plot.py at 2019-06-27 09:46:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.40 Mbit/s
95th percentile per-packet one-way delay: 11.534 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 45.48 Mbit/s
95th percentile per-packet one-way delay: 8.940 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.13 Mbit/s
95th percentile per-packet one-way delay: 11.056 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 83.81 Mbit/s
95th percentile per-packet one-way delay: 12.343 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2019-06-27 08:37:30
End at: 2019-06-27 08:38:00
Local clock offset: -7.478 ms
Remote clock offset: 0.242 ms


# Below is generated by plot.py at 2019-06-27 09:46:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.41 Mbit/s
95th percentile per-packet one-way delay: 13.334 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 44.90 Mbit/s
95th percentile per-packet one-way delay: 12.528 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 48.28 Mbit/s
95th percentile per-packet one-way delay: 13.309 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 62.97 Mbit/s
95th percentile per-packet one-way delay: 14.120 ms
Loss rate: 0.00%
```
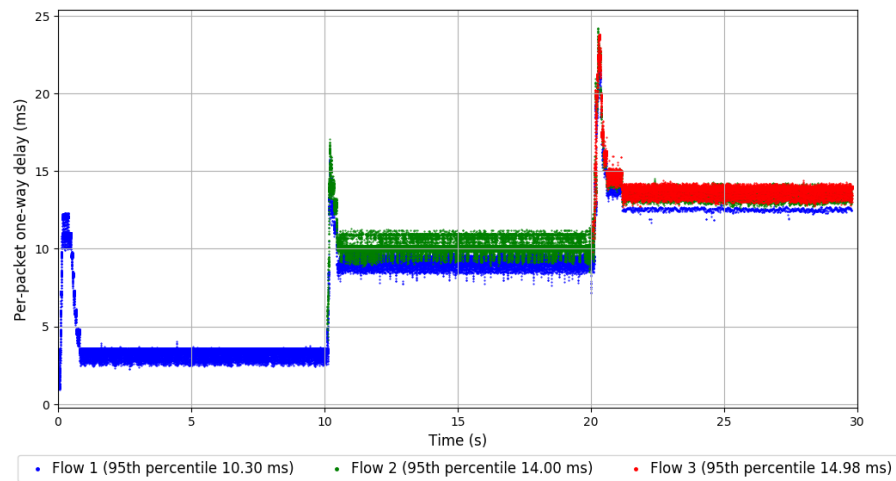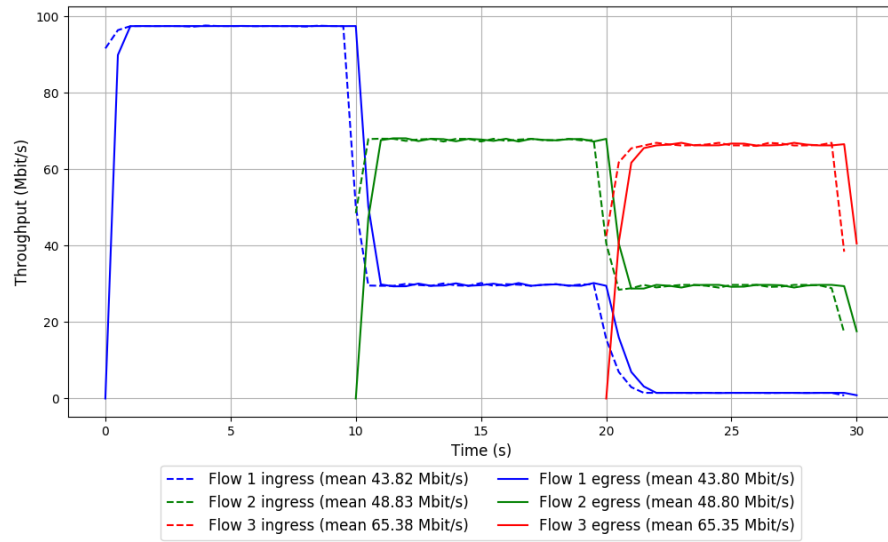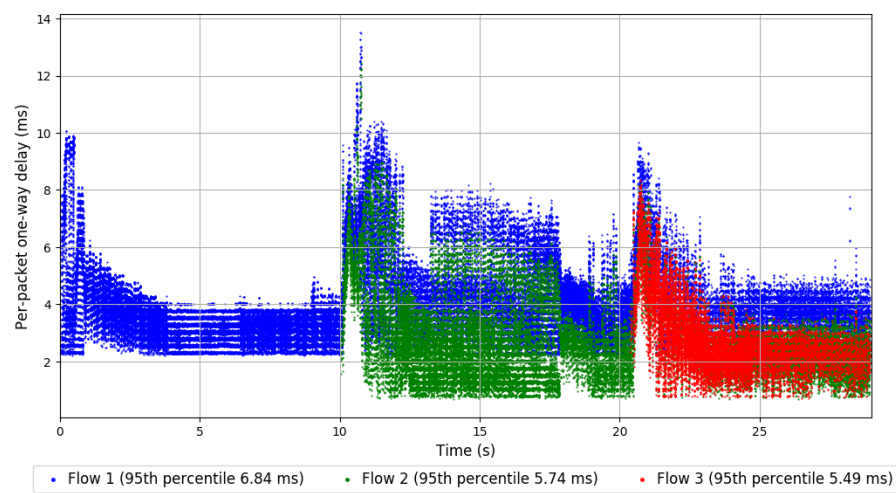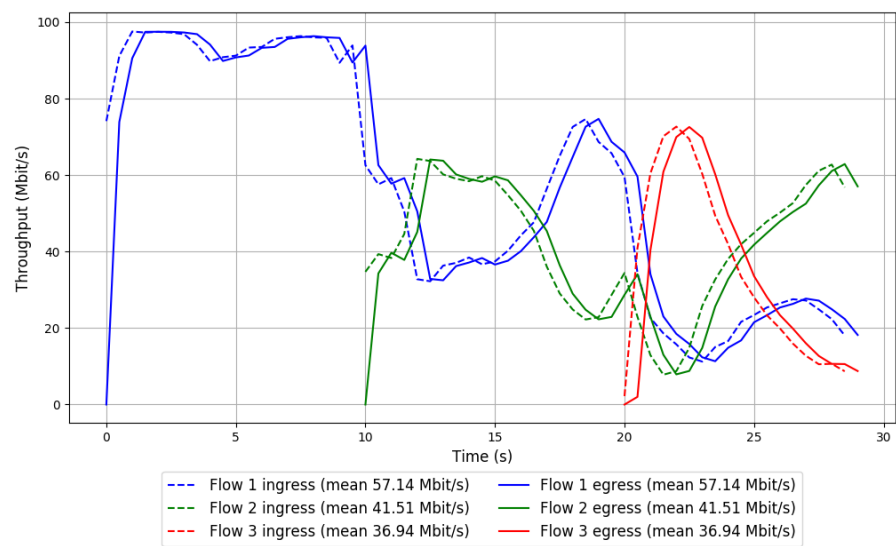
Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2019-06-27 09:02:33
End at: 2019-06-27 09:03:03
Local clock offset: -6.94 ms
Remote clock offset: 0.316 ms


# Below is generated by plot.py at 2019-06-27 09:46:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.36 Mbit/s
95th percentile per-packet one-way delay: 12.204 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 47.30 Mbit/s
95th percentile per-packet one-way delay: 10.676 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.38 Mbit/s
95th percentile per-packet one-way delay: 11.433 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 75.86 Mbit/s
95th percentile per-packet one-way delay: 12.999 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo — Data Link

- - - Flow 1 ingress (mean 47.32 Mbit/s) —— Flow 1 egress (mean 47.30 Mbit/s)
- - - Flow 2 ingress (mean 38.40 Mbit/s) —— Flow 2 egress (mean 38.38 Mbit/s)
- - - Flow 3 ingress (mean 75.88 Mbit/s) —— Flow 3 egress (mean 75.86 Mbit/s)

• Flow 1 (95th percentile 10.68 ms)   • Flow 2 (95th percentile 11.43 ms)   • Flow 3 (95th percentile 13.00 ms)

```
Run 5: Statistics of Indigo

Start at: 2019-06-27 09:27:36
End at: 2019-06-27 09:28:06
Local clock offset: -7.286 ms
Remote clock offset: 0.359 ms


# Below is generated by plot.py at 2019-06-27 09:46:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.40 Mbit/s
95th percentile per-packet one-way delay: 14.008 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.80 Mbit/s
95th percentile per-packet one-way delay: 10.297 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 48.80 Mbit/s
95th percentile per-packet one-way delay: 14.001 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 65.35 Mbit/s
95th percentile per-packet one-way delay: 14.979 ms
Loss rate: 0.00%
```
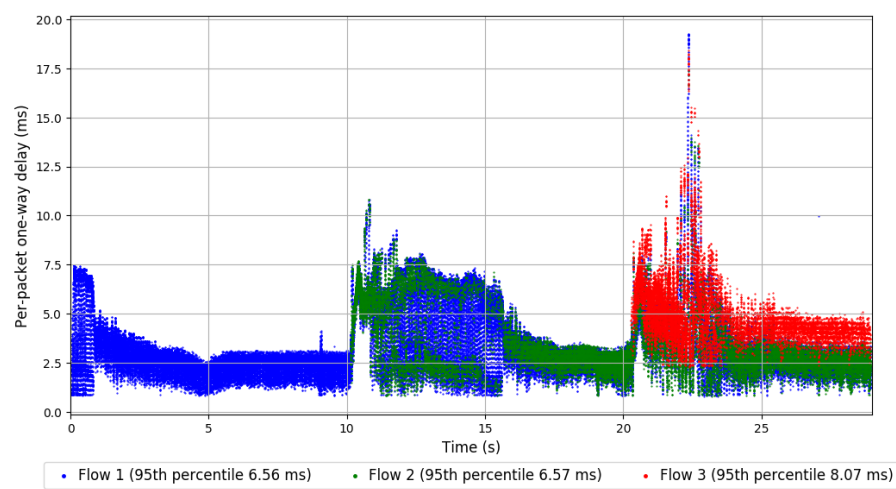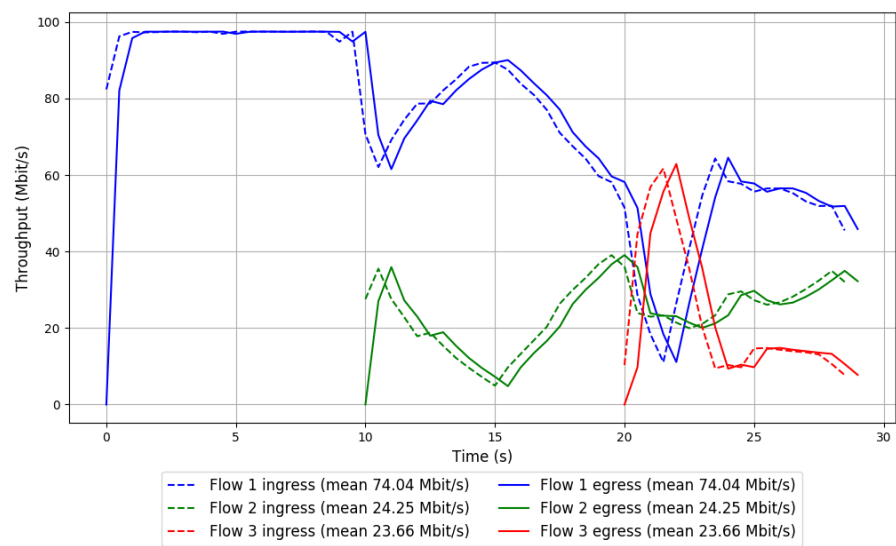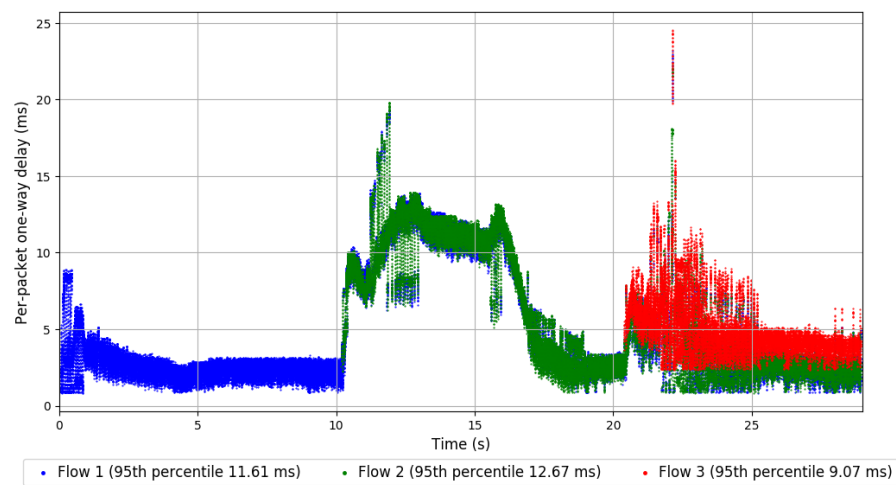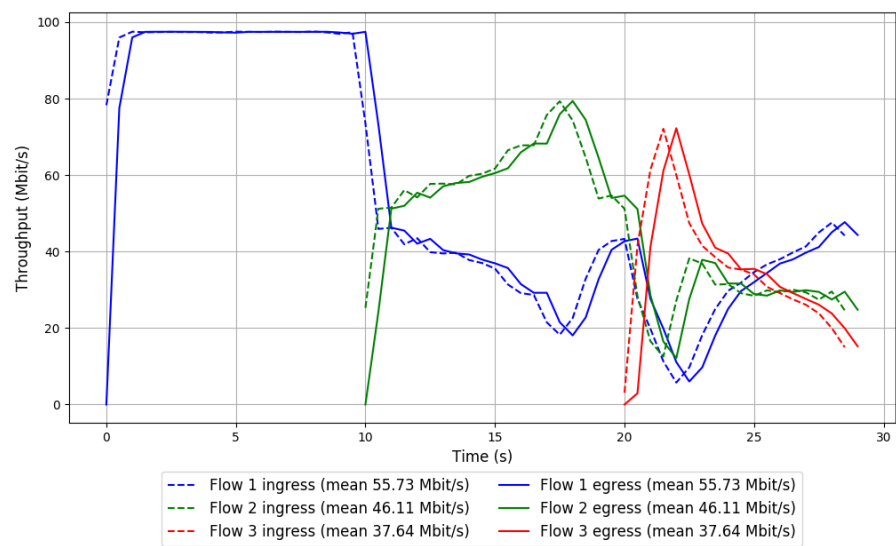
Run 5: Report of Indigo — Data Link

- - - Flow 1 ingress (mean 43.82 Mbit/s)   —— Flow 1 egress (mean 43.80 Mbit/s)
- - - Flow 2 ingress (mean 48.83 Mbit/s)   —— Flow 2 egress (mean 48.80 Mbit/s)
- - - Flow 3 ingress (mean 65.38 Mbit/s)   —— Flow 3 egress (mean 65.35 Mbit/s)

- Flow 1 (95th percentile 10.30 ms)   • Flow 2 (95th percentile 14.00 ms)   • Flow 3 (95th percentile 14.98 ms)

```
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-06-27 07:43:57
End at: 2019-06-27 07:44:27
Local clock offset: -5.624 ms
Remote clock offset: -0.226 ms


# Below is generated by plot.py at 2019-06-27 09:46:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.15 Mbit/s
95th percentile per-packet one-way delay: 6.476 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 57.14 Mbit/s
95th percentile per-packet one-way delay: 6.839 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 41.51 Mbit/s
95th percentile per-packet one-way delay: 5.739 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 36.94 Mbit/s
95th percentile per-packet one-way delay: 5.492 ms
Loss rate: 0.00%
```
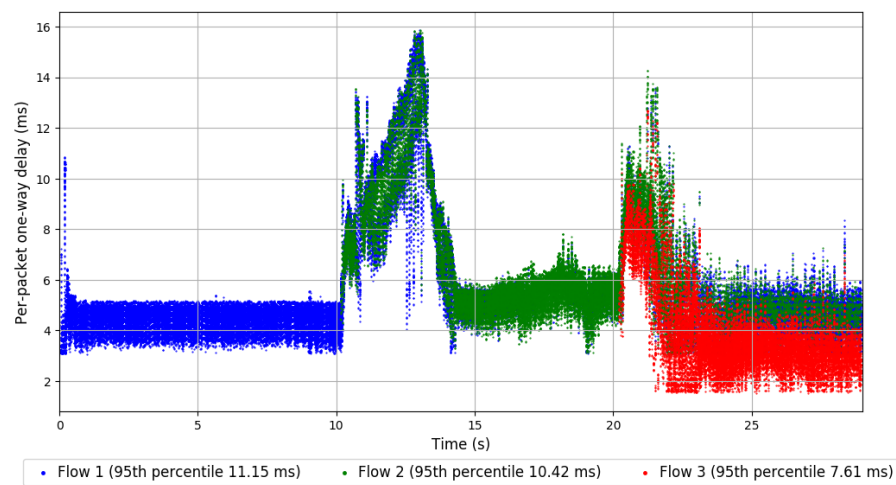
Run 1: Report of Indigo-MusesC3 — Data Link

```
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-06-27 08:09:00
End at: 2019-06-27 08:09:30
Local clock offset: -6.449 ms
Remote clock offset: 0.111 ms


# Below is generated by plot.py at 2019-06-27 09:47:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.89 Mbit/s
95th percentile per-packet one-way delay: 6.670 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 74.04 Mbit/s
95th percentile per-packet one-way delay: 6.563 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.25 Mbit/s
95th percentile per-packet one-way delay: 6.571 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 23.66 Mbit/s
95th percentile per-packet one-way delay: 8.071 ms
Loss rate: 0.00%
```
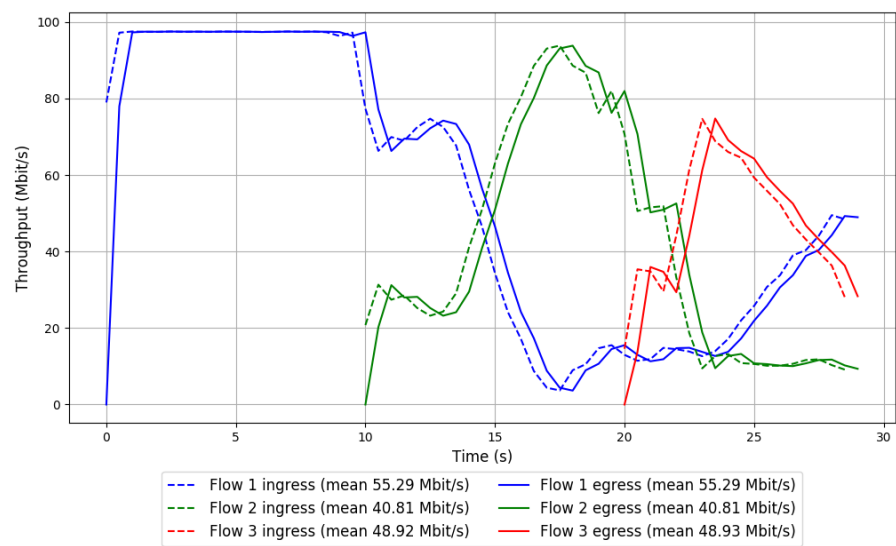
Run 2: Report of Indigo-MusesC3 — Data Link

```
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-06-27 08:34:03
End at: 2019-06-27 08:34:33
Local clock offset: -6.508 ms
Remote clock offset: 0.271 ms


# Below is generated by plot.py at 2019-06-27 09:47:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.72 Mbit/s
95th percentile per-packet one-way delay: 12.124 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.73 Mbit/s
95th percentile per-packet one-way delay: 11.613 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 46.11 Mbit/s
95th percentile per-packet one-way delay: 12.667 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 37.64 Mbit/s
95th percentile per-packet one-way delay: 9.068 ms
Loss rate: 0.00%
```
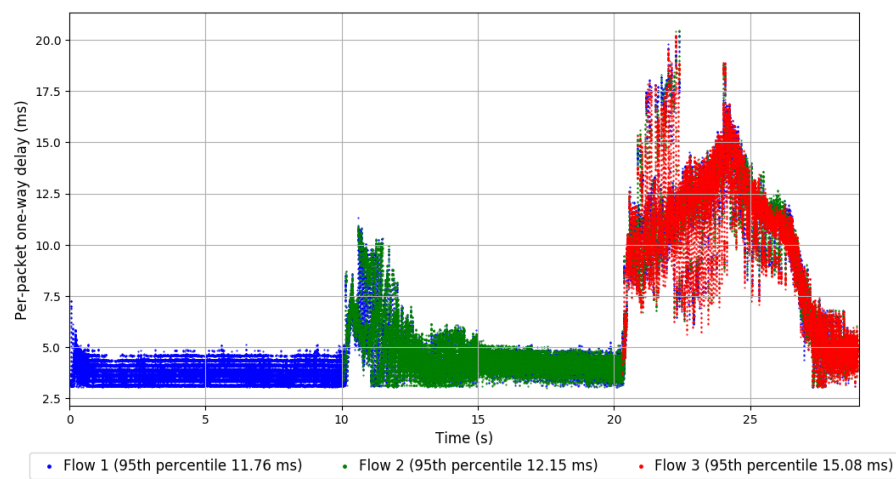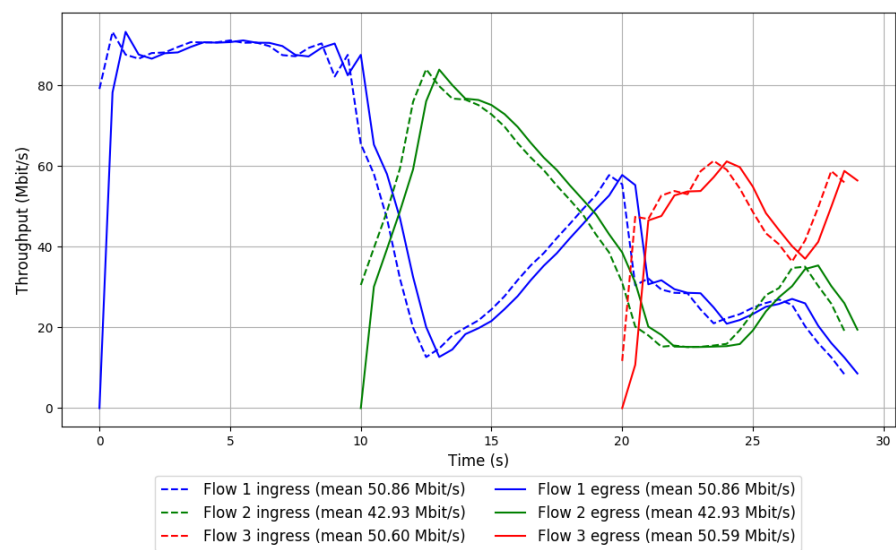
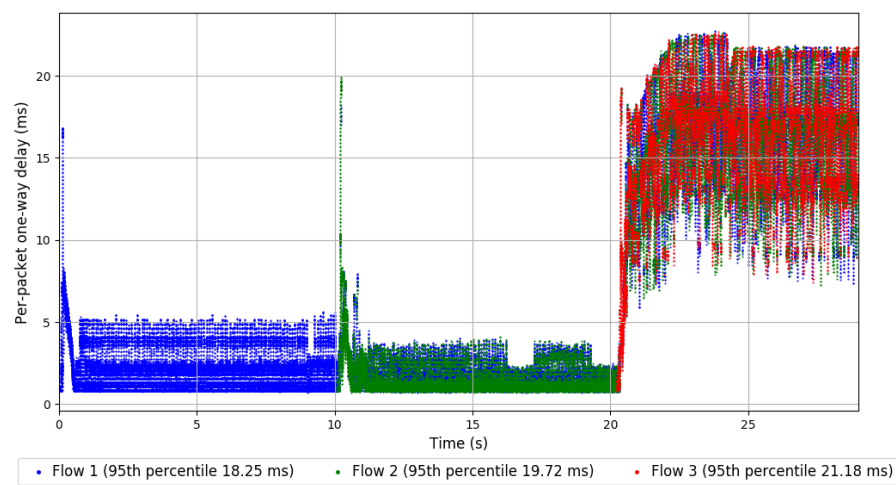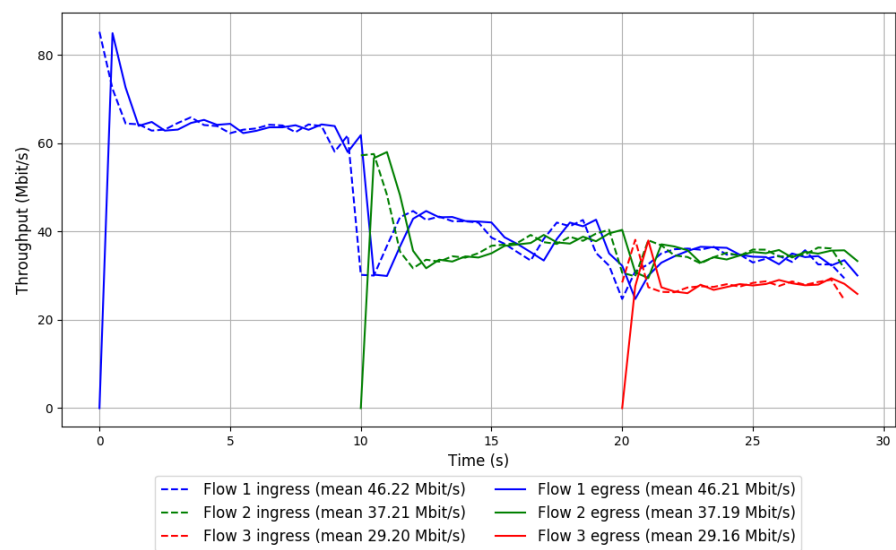Run 3: Report of Indigo-MusesC3 — Data Link

```
Run 4: Statistics of Indigo-MusesC3

Start at: 2019-06-27 08:59:07
End at: 2019-06-27 08:59:37
Local clock offset: -7.648 ms
Remote clock offset: 0.396 ms


# Below is generated by plot.py at 2019-06-27 09:47:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.58 Mbit/s
95th percentile per-packet one-way delay: 10.538 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.29 Mbit/s
95th percentile per-packet one-way delay: 11.152 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.81 Mbit/s
95th percentile per-packet one-way delay: 10.424 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 48.93 Mbit/s
95th percentile per-packet one-way delay: 7.605 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 55.29 Mbit/s) --- Flow 1 egress (mean 55.29 Mbit/s)
Flow 2 ingress (mean 40.81 Mbit/s) --- Flow 2 egress (mean 40.81 Mbit/s)
Flow 3 ingress (mean 48.92 Mbit/s) --- Flow 3 egress (mean 48.93 Mbit/s)

Flow 1 (95th percentile 11.15 ms) • Flow 2 (95th percentile 10.42 ms) • Flow 3 (95th percentile 7.61 ms)

```
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-06-27 09:24:10
End at: 2019-06-27 09:24:40
Local clock offset: -7.894 ms
Remote clock offset: 0.394 ms


# Below is generated by plot.py at 2019-06-27 09:47:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.96 Mbit/s
95th percentile per-packet one-way delay: 13.213 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.86 Mbit/s
95th percentile per-packet one-way delay: 11.758 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.93 Mbit/s
95th percentile per-packet one-way delay: 12.147 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 50.59 Mbit/s
95th percentile per-packet one-way delay: 15.081 ms
Loss rate: 0.00%
```
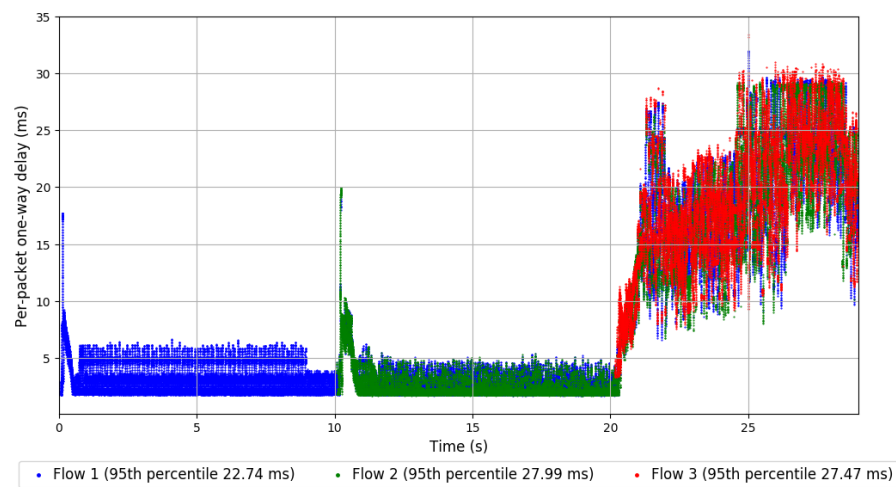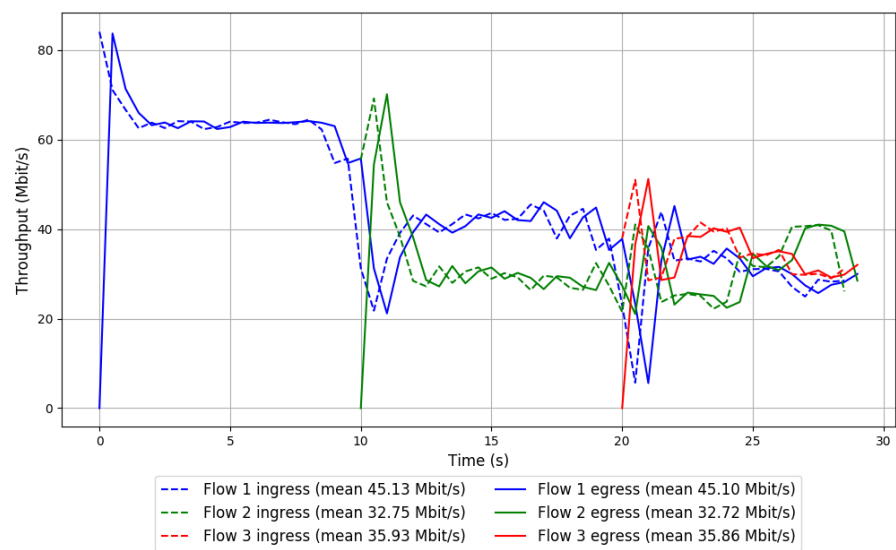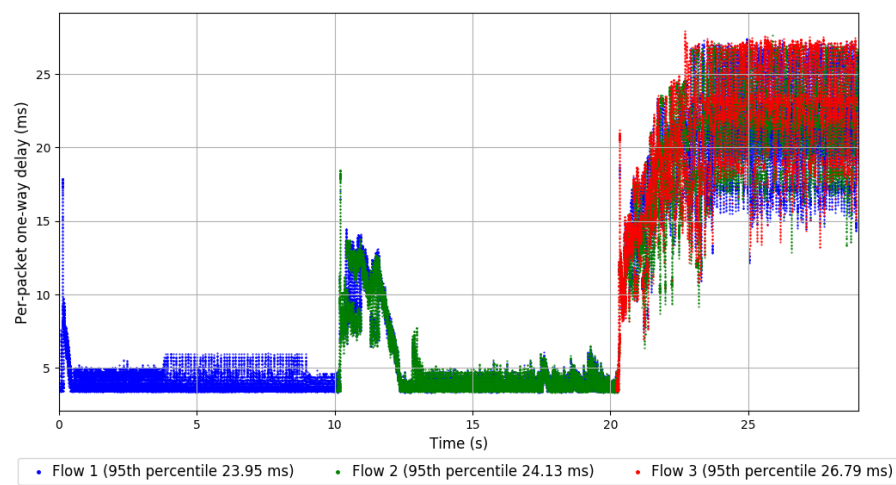
Run 5: Report of Indigo-MusesC3 — Data Link

- - - Flow 1 ingress (mean 50.86 Mbit/s) ——— Flow 1 egress (mean 50.86 Mbit/s)
- - - Flow 2 ingress (mean 42.93 Mbit/s) ——— Flow 2 egress (mean 42.93 Mbit/s)
- - - Flow 3 ingress (mean 50.60 Mbit/s) ——— Flow 3 egress (mean 50.59 Mbit/s)

- Flow 1 (95th percentile 11.76 ms)   - Flow 2 (95th percentile 12.15 ms)   - Flow 3 (95th percentile 15.08 ms)

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```
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-06-27 07:46:16
End at: 2019-06-27 07:46:46
Local clock offset: -5.619 ms
Remote clock offset: -0.173 ms


# Below is generated by plot.py at 2019-06-27 09:47:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.21 Mbit/s
95th percentile per-packet one-way delay: 19.468 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.21 Mbit/s
95th percentile per-packet one-way delay: 18.245 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.19 Mbit/s
95th percentile per-packet one-way delay: 19.718 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.16 Mbit/s
95th percentile per-packet one-way delay: 21.184 ms
Loss rate: 0.00%
```
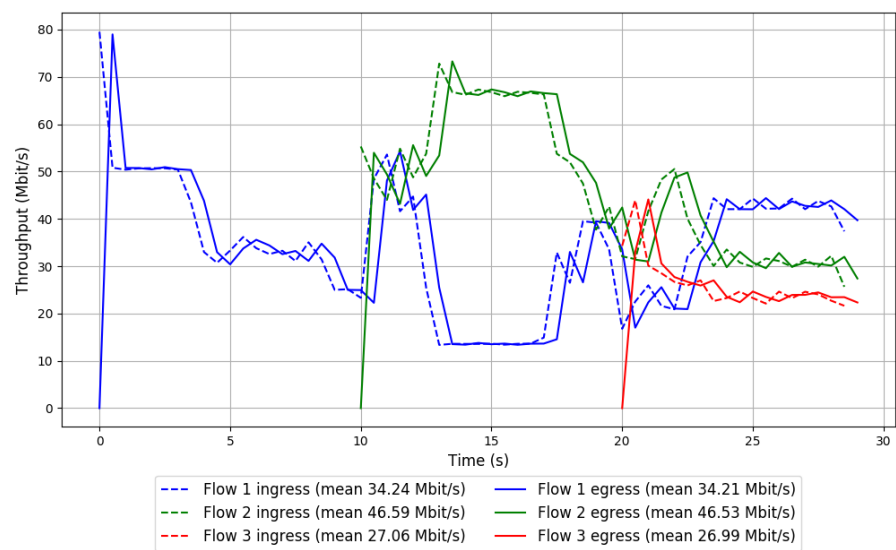
Run 1: Report of Indigo-MusesC5 — Data Link

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```
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-06-27 08:11:19
End at: 2019-06-27 08:11:49
Local clock offset: -7.503 ms
Remote clock offset: 0.045 ms


# Below is generated by plot.py at 2019-06-27 09:47:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.32 Mbit/s
95th percentile per-packet one-way delay: 25.357 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 45.10 Mbit/s
95th percentile per-packet one-way delay: 22.743 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 32.72 Mbit/s
95th percentile per-packet one-way delay: 27.986 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 35.86 Mbit/s
95th percentile per-packet one-way delay: 27.467 ms
Loss rate: 0.01%
```
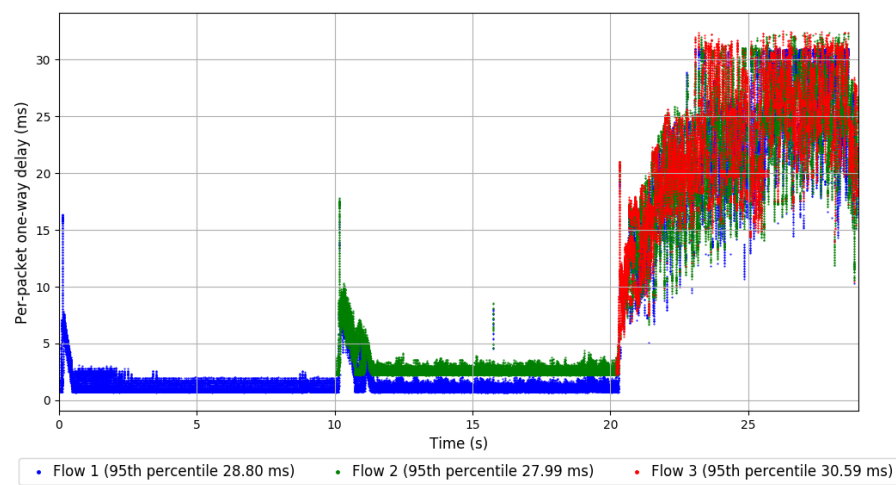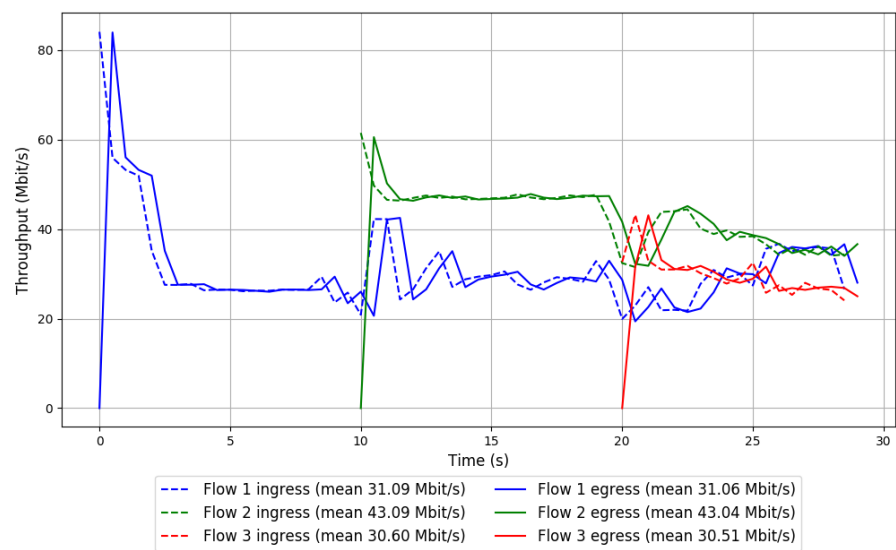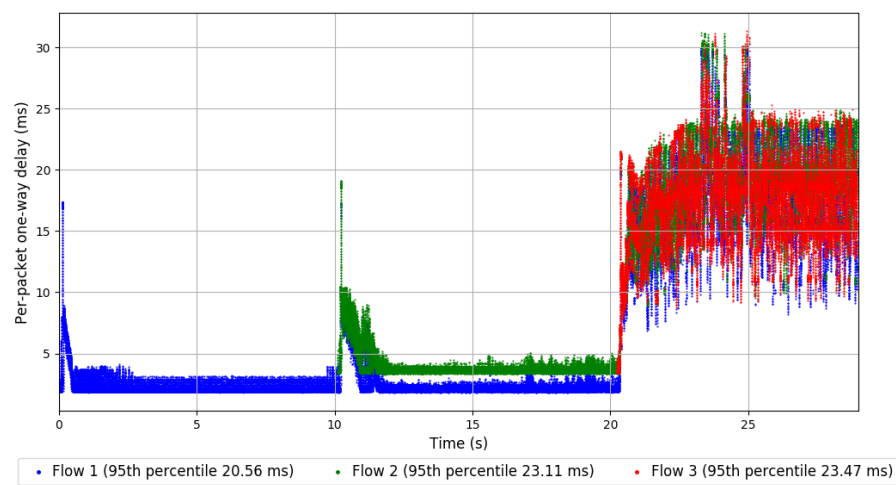
Run 2: Report of Indigo-MusesC5 — Data Link

- - - Flow 1 ingress (mean 45.13 Mbit/s) ——— Flow 1 egress (mean 45.10 Mbit/s)
- - - Flow 2 ingress (mean 32.75 Mbit/s) ——— Flow 2 egress (mean 32.72 Mbit/s)
- - - Flow 3 ingress (mean 35.93 Mbit/s) ——— Flow 3 egress (mean 35.86 Mbit/s)

- Flow 1 (95th percentile 22.74 ms)   • Flow 2 (95th percentile 27.99 ms)   • Flow 3 (95th percentile 27.47 ms)

```
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-06-27 08:36:21
End at: 2019-06-27 08:36:51
Local clock offset: -7.48 ms
Remote clock offset: 0.311 ms


# Below is generated by plot.py at 2019-06-27 09:47:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.75 Mbit/s
95th percentile per-packet one-way delay: 24.919 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 34.21 Mbit/s
95th percentile per-packet one-way delay: 23.946 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 46.53 Mbit/s
95th percentile per-packet one-way delay: 24.129 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 26.99 Mbit/s
95th percentile per-packet one-way delay: 26.788 ms
Loss rate: 0.00%
```
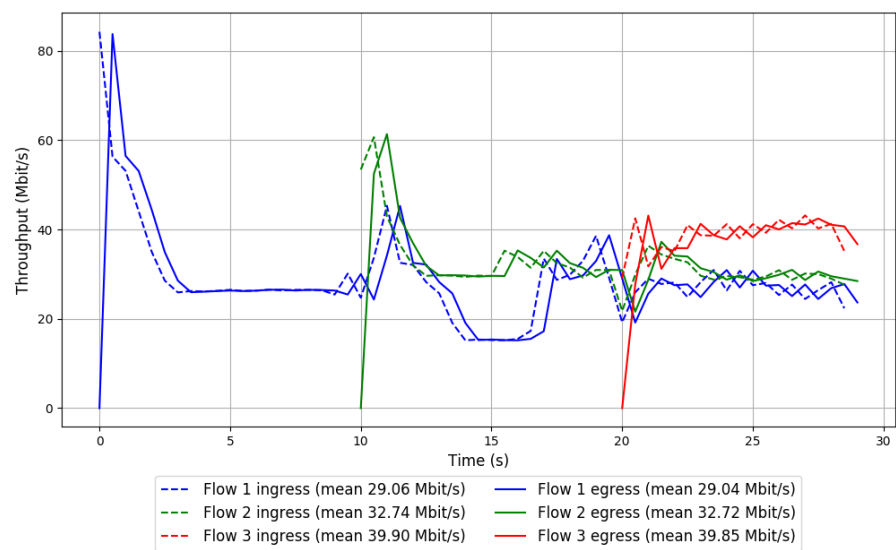
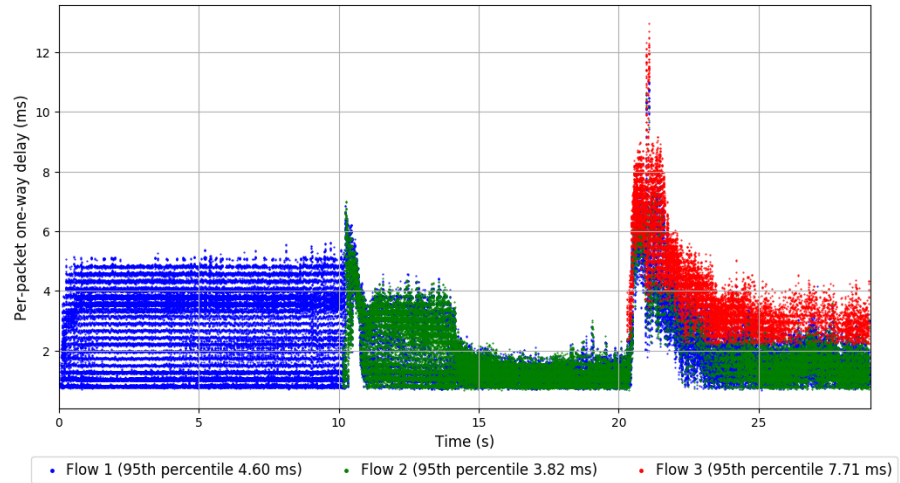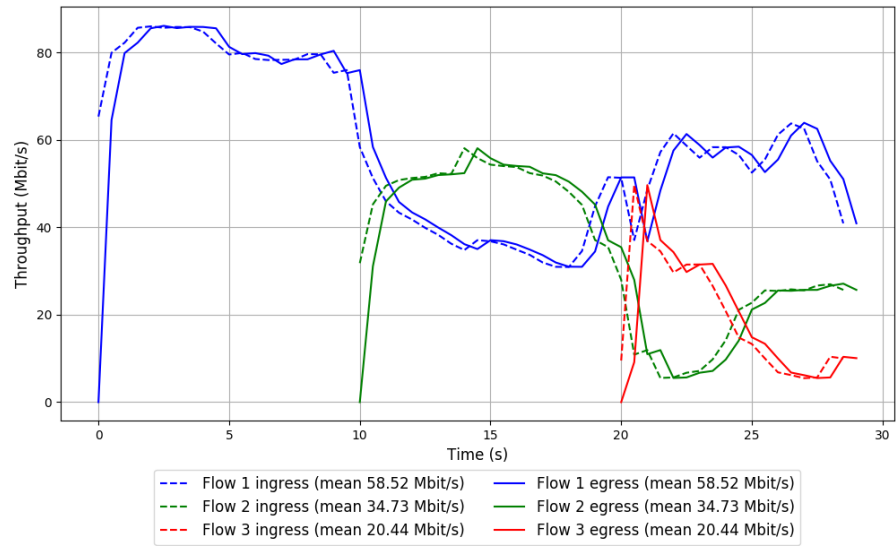Run 3: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 34.24 Mbit/s)   Flow 1 egress (mean 34.21 Mbit/s)
Flow 2 ingress (mean 46.59 Mbit/s)   Flow 2 egress (mean 46.53 Mbit/s)
Flow 3 ingress (mean 27.06 Mbit/s)   Flow 3 egress (mean 26.99 Mbit/s)

Flow 1 (95th percentile 23.95 ms)   Flow 2 (95th percentile 24.13 ms)   Flow 3 (95th percentile 26.79 ms)

```
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-06-27 09:01:25
End at: 2019-06-27 09:01:55
Local clock offset: -6.89 ms
Remote clock offset: 0.351 ms


# Below is generated by plot.py at 2019-06-27 09:47:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.39 Mbit/s
95th percentile per-packet one-way delay: 29.018 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 31.06 Mbit/s
95th percentile per-packet one-way delay: 28.798 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 43.04 Mbit/s
95th percentile per-packet one-way delay: 27.990 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.51 Mbit/s
95th percentile per-packet one-way delay: 30.591 ms
Loss rate: 0.01%
```
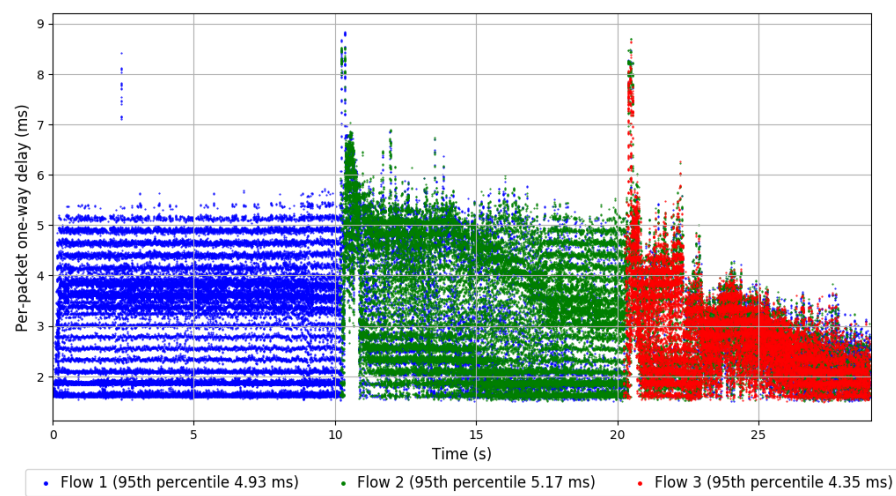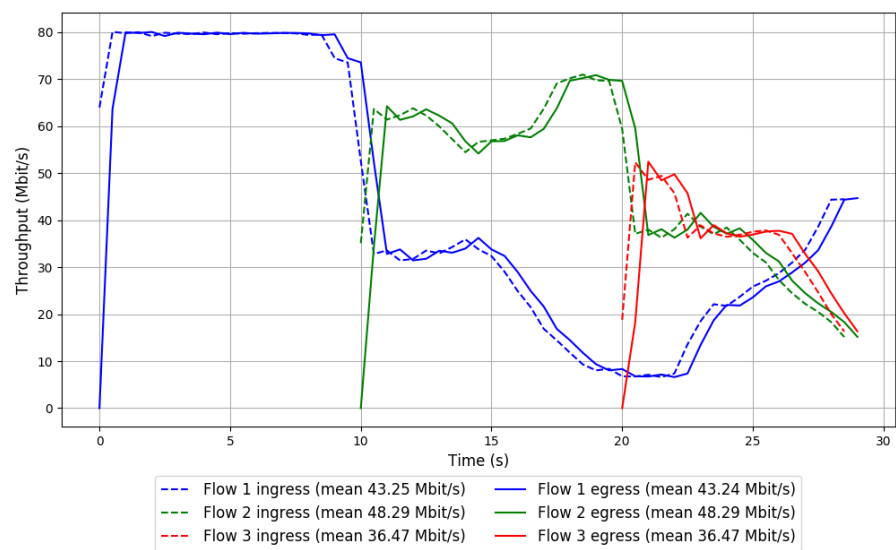
Run 4: Report of Indigo-MusesC5 — Data Link

```
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-06-27 09:26:28
End at: 2019-06-27 09:26:58
Local clock offset: -8.102 ms
Remote clock offset: 0.468 ms


# Below is generated by plot.py at 2019-06-27 09:47:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.35 Mbit/s
95th percentile per-packet one-way delay: 22.513 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 29.04 Mbit/s
95th percentile per-packet one-way delay: 20.557 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.72 Mbit/s
95th percentile per-packet one-way delay: 23.110 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 39.85 Mbit/s
95th percentile per-packet one-way delay: 23.469 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesC5 — Data Link

```
Run 1: Statistics of Indigo-MusesD

Start at: 2019-06-27 07:42:48
End at: 2019-06-27 07:43:18
Local clock offset: -5.618 ms
Remote clock offset: -0.217 ms


# Below is generated by plot.py at 2019-06-27 09:48:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.21 Mbit/s
95th percentile per-packet one-way delay: 4.839 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 58.52 Mbit/s
95th percentile per-packet one-way delay: 4.600 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 34.73 Mbit/s
95th percentile per-packet one-way delay: 3.824 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 20.44 Mbit/s
95th percentile per-packet one-way delay: 7.713 ms
Loss rate: 0.00%
```
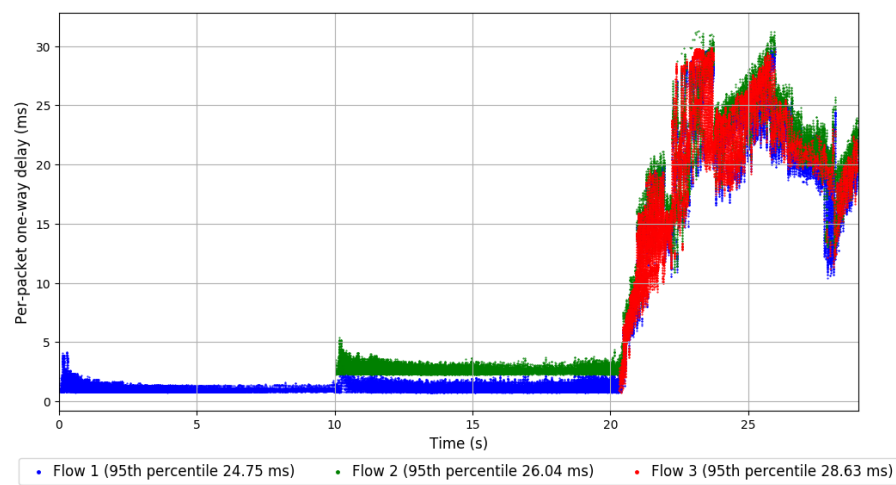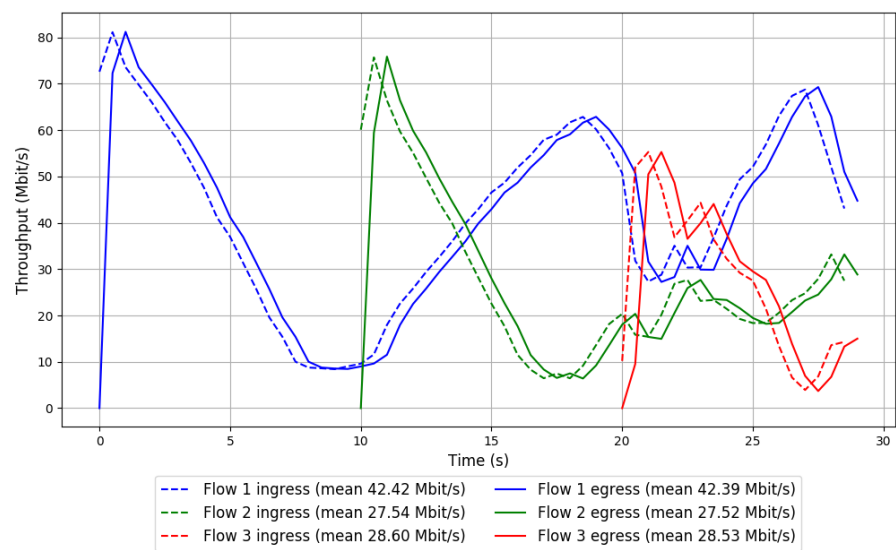
Run 1: Report of Indigo-MusesD — Data Link

```
Run 2: Statistics of Indigo-MusesD

Start at: 2019-06-27 08:07:51
End at: 2019-06-27 08:08:21
Local clock offset: -7.228 ms
Remote clock offset: 0.033 ms


# Below is generated by plot.py at 2019-06-27 09:48:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.55 Mbit/s
95th percentile per-packet one-way delay: 5.040 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.24 Mbit/s
95th percentile per-packet one-way delay: 4.927 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 48.29 Mbit/s
95th percentile per-packet one-way delay: 5.175 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 36.47 Mbit/s
95th percentile per-packet one-way delay: 4.349 ms
Loss rate: 0.00%
```
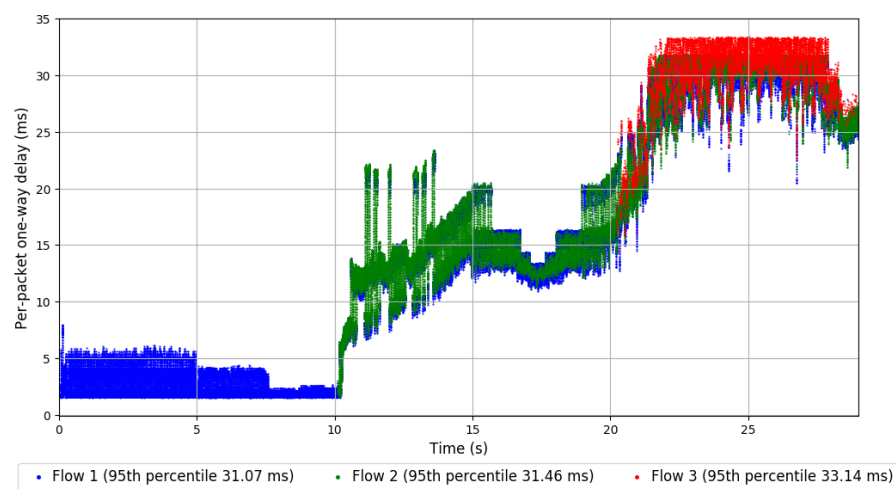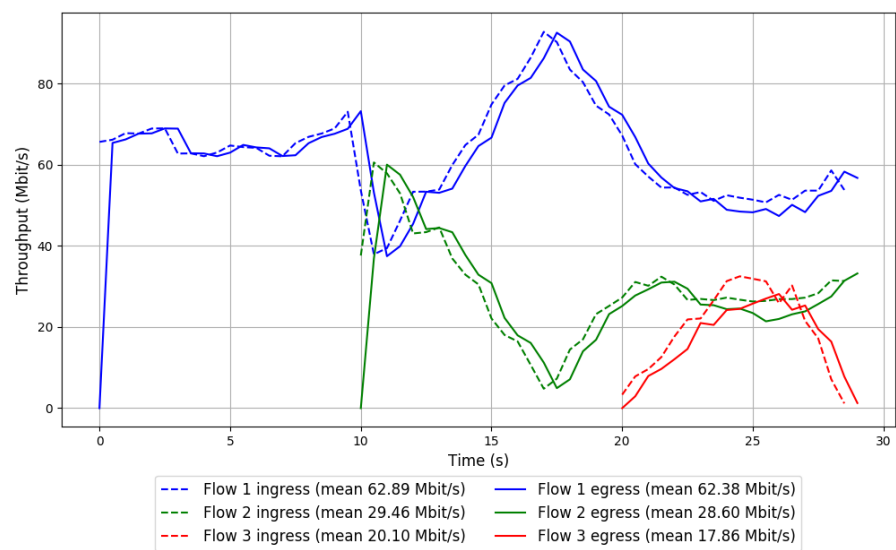
Run 2: Report of Indigo-MusesD — Data Link

```
Run 3: Statistics of Indigo-MusesD

Start at: 2019-06-27 08:32:55
End at: 2019-06-27 08:33:25
Local clock offset: -6.469 ms
Remote clock offset: 0.224 ms


# Below is generated by plot.py at 2019-06-27 09:48:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.87 Mbit/s
95th percentile per-packet one-way delay: 25.959 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 42.39 Mbit/s
95th percentile per-packet one-way delay: 24.745 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 27.52 Mbit/s
95th percentile per-packet one-way delay: 26.040 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 28.53 Mbit/s
95th percentile per-packet one-way delay: 28.632 ms
Loss rate: 0.00%
```
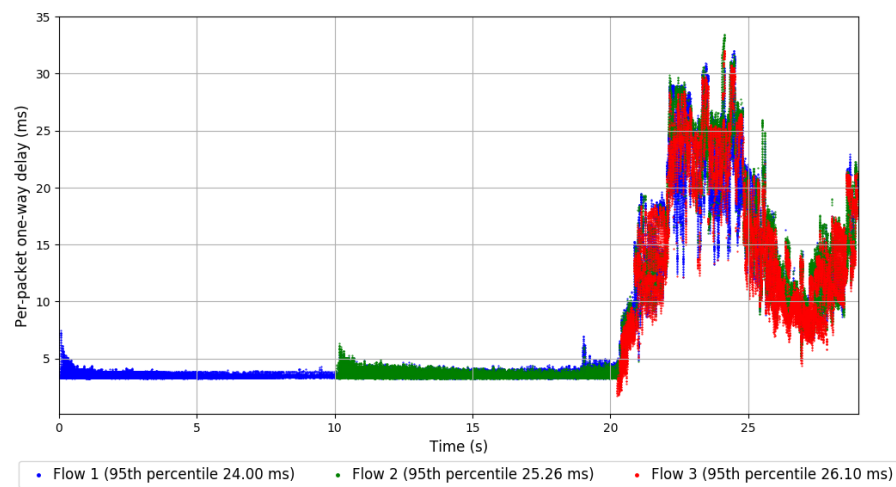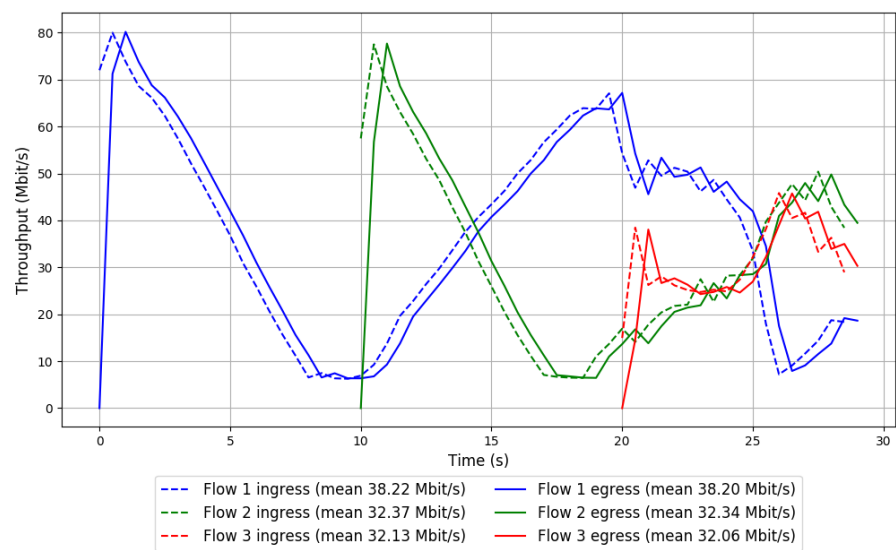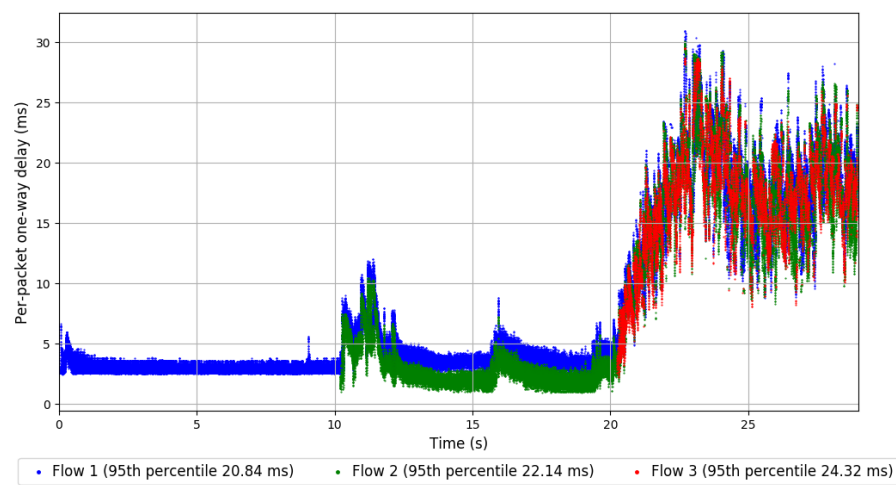
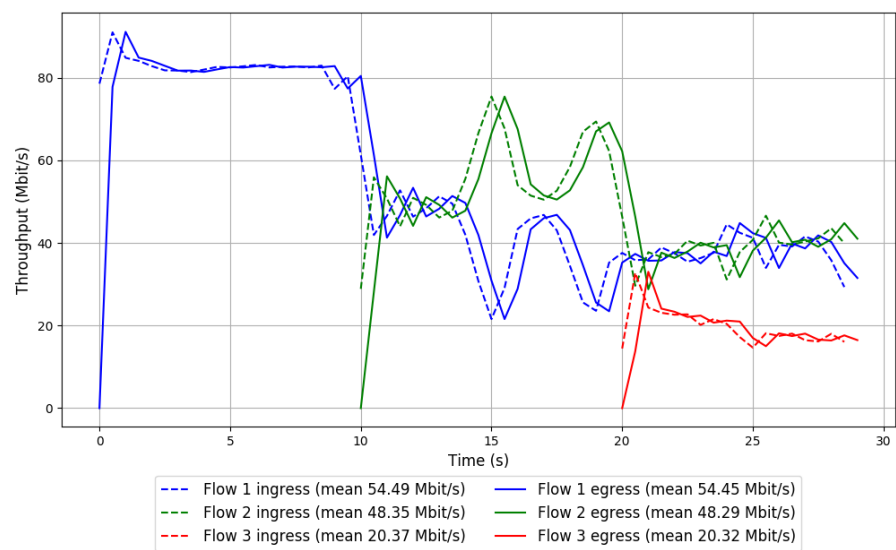Run 3: Report of Indigo-MusesD — Data Link

```
Run 4: Statistics of Indigo-MusesD

Start at: 2019-06-27 08:57:58
End at: 2019-06-27 08:58:28
Local clock offset: -7.613 ms
Remote clock offset: 0.385 ms


# Below is generated by plot.py at 2019-06-27 09:48:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.39 Mbit/s
95th percentile per-packet one-way delay: 31.510 ms
Loss rate: 1.90%
-- Flow 1:
Average throughput: 62.38 Mbit/s
95th percentile per-packet one-way delay: 31.068 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 28.60 Mbit/s
95th percentile per-packet one-way delay: 31.464 ms
Loss rate: 2.81%
-- Flow 3:
Average throughput: 17.86 Mbit/s
95th percentile per-packet one-way delay: 33.142 ms
Loss rate: 11.07%
```

Run 4: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 62.89 Mbit/s) --- Flow 1 egress (mean 62.38 Mbit/s)
Flow 2 ingress (mean 29.46 Mbit/s) --- Flow 2 egress (mean 28.60 Mbit/s)
Flow 3 ingress (mean 20.10 Mbit/s) --- Flow 3 egress (mean 17.86 Mbit/s)

Flow 1 (95th percentile 31.07 ms) • Flow 2 (95th percentile 31.46 ms) • Flow 3 (95th percentile 33.14 ms)

```
Run 5: Statistics of Indigo-MusesD

Start at: 2019-06-27 09:23:01
End at: 2019-06-27 09:23:31
Local clock offset: -8.126 ms
Remote clock offset: 0.366 ms


# Below is generated by plot.py at 2019-06-27 09:48:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.94 Mbit/s
95th percentile per-packet one-way delay: 24.941 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 38.20 Mbit/s
95th percentile per-packet one-way delay: 24.005 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.34 Mbit/s
95th percentile per-packet one-way delay: 25.258 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 32.06 Mbit/s
95th percentile per-packet one-way delay: 26.096 ms
Loss rate: 0.02%
```
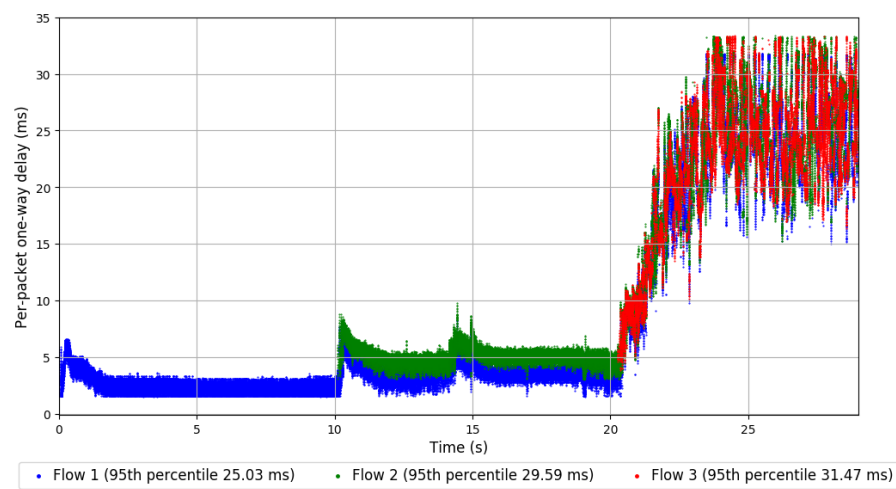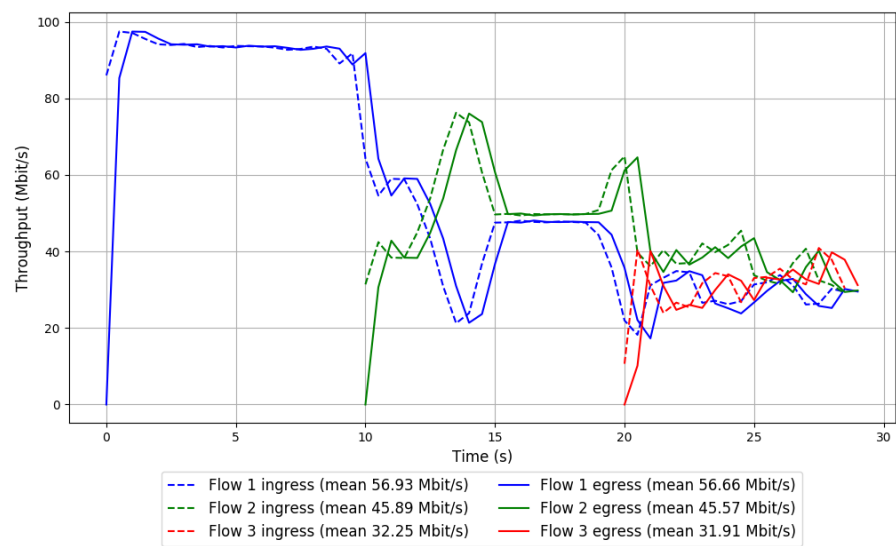
Run 5: Report of Indigo-MusesD — Data Link

```
Run 1: Statistics of Indigo-MusesT

Start at: 2019-06-27 07:45:07
End at: 2019-06-27 07:45:37
Local clock offset: -5.845 ms
Remote clock offset: -0.167 ms


# Below is generated by plot.py at 2019-06-27 09:48:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.84 Mbit/s
95th percentile per-packet one-way delay: 21.688 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.45 Mbit/s
95th percentile per-packet one-way delay: 20.843 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 48.29 Mbit/s
95th percentile per-packet one-way delay: 22.143 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 20.32 Mbit/s
95th percentile per-packet one-way delay: 24.325 ms
Loss rate: 0.00%
```
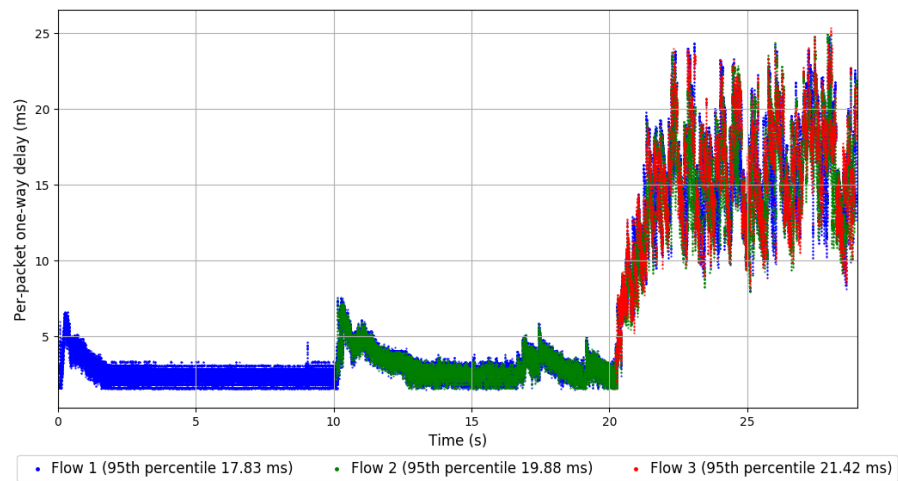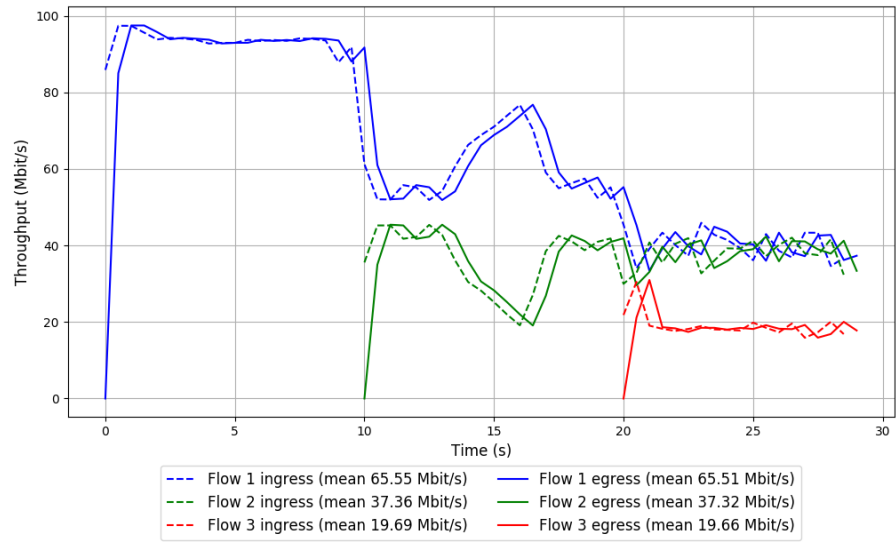
Run 1: Report of Indigo-MusesT — Data Link

```
Run 2: Statistics of Indigo-MusesT

Start at: 2019-06-27 08:10:09
End at: 2019-06-27 08:10:39
Local clock offset: -7.264 ms
Remote clock offset: 0.033 ms


# Below is generated by plot.py at 2019-06-27 09:48:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.91 Mbit/s
95th percentile per-packet one-way delay: 28.489 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 56.66 Mbit/s
95th percentile per-packet one-way delay: 25.033 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 45.57 Mbit/s
95th percentile per-packet one-way delay: 29.585 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 31.91 Mbit/s
95th percentile per-packet one-way delay: 31.466 ms
Loss rate: 0.81%
```
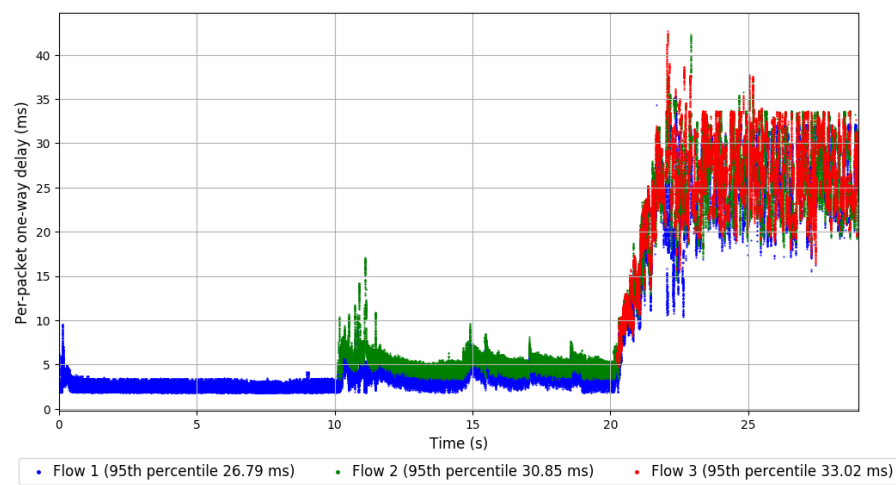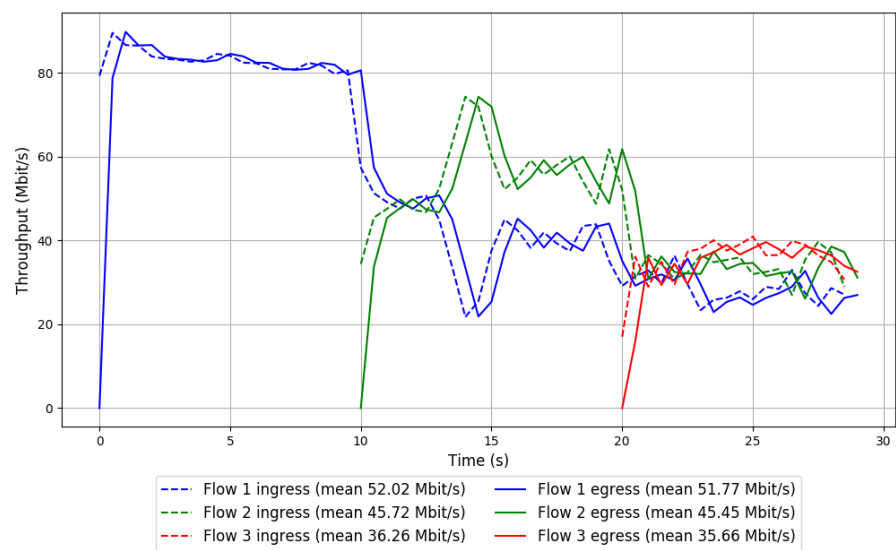
Run 2: Report of Indigo-MusesT — Data Link

```
Run 3: Statistics of Indigo-MusesT

Start at: 2019-06-27 08:35:12
End at: 2019-06-27 08:35:42
Local clock offset: -7.295 ms
Remote clock offset: 0.18 ms


# Below is generated by plot.py at 2019-06-27 09:48:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.75 Mbit/s
95th percentile per-packet one-way delay: 19.029 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 65.51 Mbit/s
95th percentile per-packet one-way delay: 17.826 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.32 Mbit/s
95th percentile per-packet one-way delay: 19.879 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.66 Mbit/s
95th percentile per-packet one-way delay: 21.423 ms
Loss rate: 0.00%
```
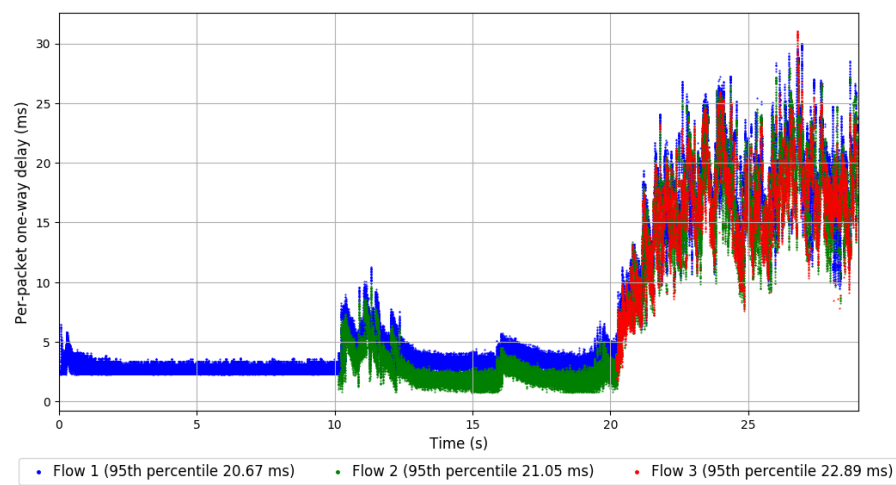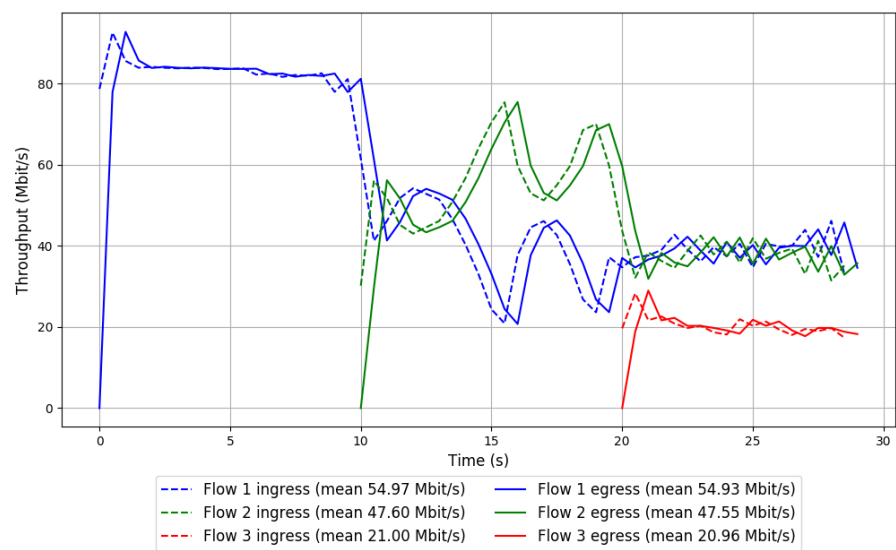
Run 3: Report of Indigo-MusesT — Data Link

```
Run 4: Statistics of Indigo-MusesT

Start at: 2019-06-27 09:00:16
End at: 2019-06-27 09:00:46
Local clock offset: -7.901 ms
Remote clock offset: 0.446 ms


# Below is generated by plot.py at 2019-06-27 09:49:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.17 Mbit/s
95th percentile per-packet one-way delay: 30.436 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 51.77 Mbit/s
95th percentile per-packet one-way delay: 26.789 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 45.45 Mbit/s
95th percentile per-packet one-way delay: 30.848 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 35.66 Mbit/s
95th percentile per-packet one-way delay: 33.022 ms
Loss rate: 1.39%
```

Run 4: Report of Indigo-MusesT — Data Link

```
Run 5: Statistics of Indigo-MusesT

Start at: 2019-06-27 09:25:19
End at: 2019-06-27 09:25:49
Local clock offset: -7.147 ms
Remote clock offset: 0.362 ms


# Below is generated by plot.py at 2019-06-27 09:49:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.15 Mbit/s
95th percentile per-packet one-way delay: 21.088 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.93 Mbit/s
95th percentile per-packet one-way delay: 20.666 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 47.55 Mbit/s
95th percentile per-packet one-way delay: 21.051 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 20.96 Mbit/s
95th percentile per-packet one-way delay: 22.893 ms
Loss rate: 0.01%
```
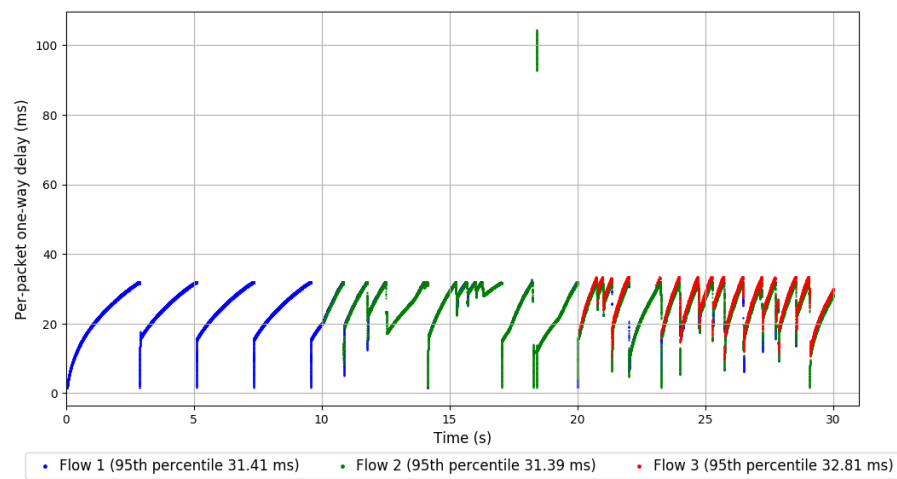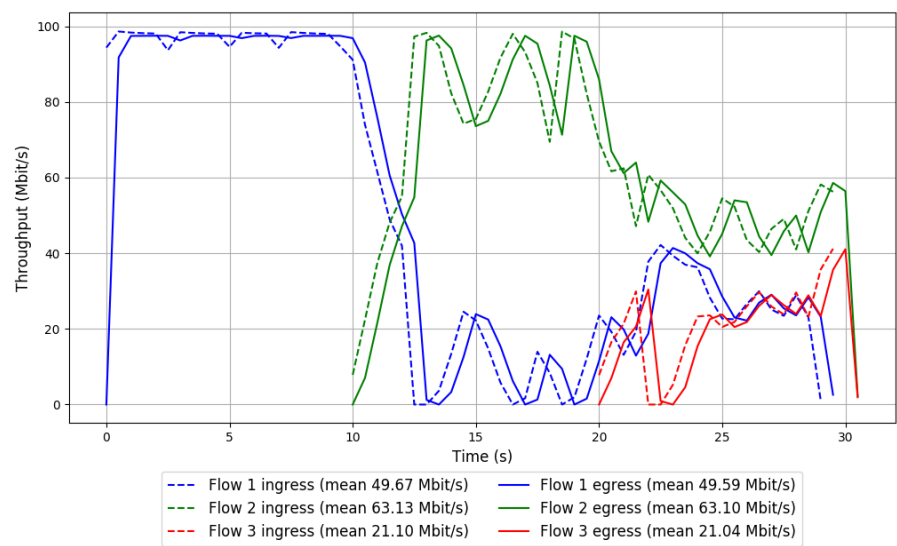
Run 5: Report of Indigo-MusesT — Data Link

```
Run 1: Statistics of LEDBAT

Start at: 2019-06-27 07:59:53
End at: 2019-06-27 08:00:23
Local clock offset: -7.077 ms
Remote clock offset: -0.12 ms

# Below is generated by plot.py at 2019-06-27 09:49:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.01 Mbit/s
95th percentile per-packet one-way delay: 31.425 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 49.59 Mbit/s
95th percentile per-packet one-way delay: 31.411 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 63.10 Mbit/s
95th percentile per-packet one-way delay: 31.394 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 21.04 Mbit/s
95th percentile per-packet one-way delay: 32.811 ms
Loss rate: 0.14%
```
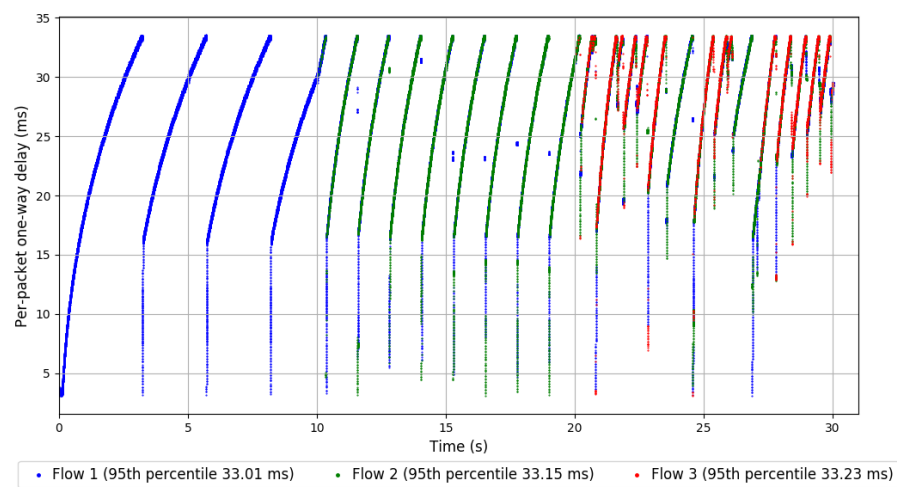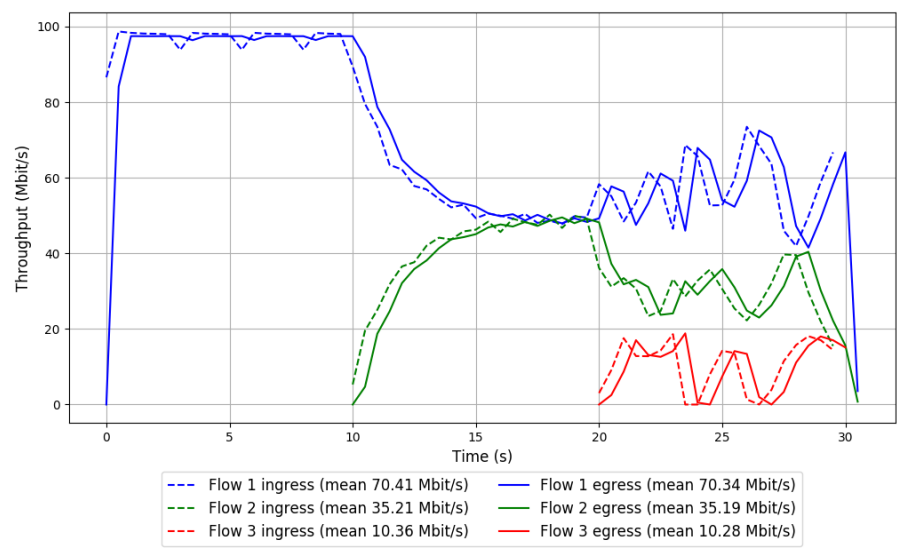
Run 1: Report of LEDBAT — Data Link

Flow 1 ingress (mean 49.67 Mbit/s)   Flow 1 egress (mean 49.59 Mbit/s)
Flow 2 ingress (mean 63.13 Mbit/s)   Flow 2 egress (mean 63.10 Mbit/s)
Flow 3 ingress (mean 21.10 Mbit/s)   Flow 3 egress (mean 21.04 Mbit/s)

Flow 1 (95th percentile 31.41 ms)   Flow 2 (95th percentile 31.39 ms)   Flow 3 (95th percentile 32.81 ms)

```
Run 2: Statistics of LEDBAT

Start at: 2019-06-27 08:24:56
End at: 2019-06-27 08:25:26
Local clock offset: -7.292 ms
Remote clock offset: 0.174 ms

# Below is generated by plot.py at 2019-06-27 09:49:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.15 Mbit/s
95th percentile per-packet one-way delay: 33.033 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 70.34 Mbit/s
95th percentile per-packet one-way delay: 33.012 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 35.19 Mbit/s
95th percentile per-packet one-way delay: 33.152 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 10.28 Mbit/s
95th percentile per-packet one-way delay: 33.225 ms
Loss rate: 0.76%
```
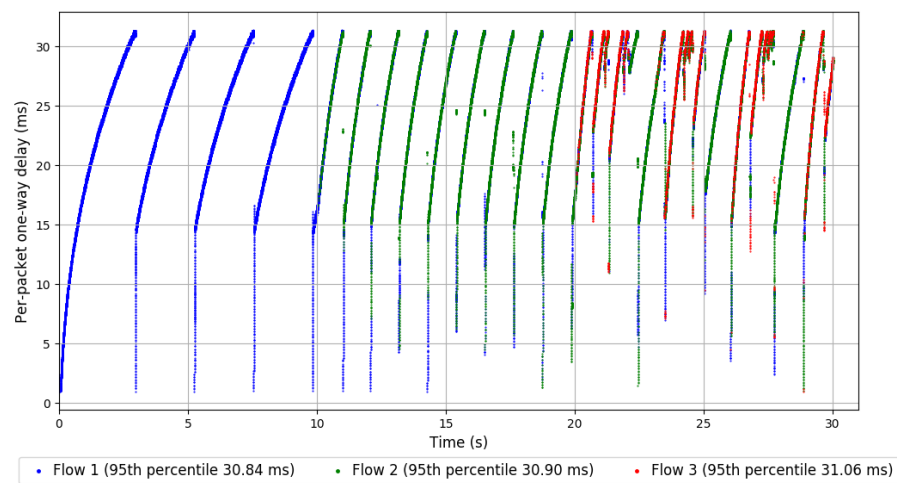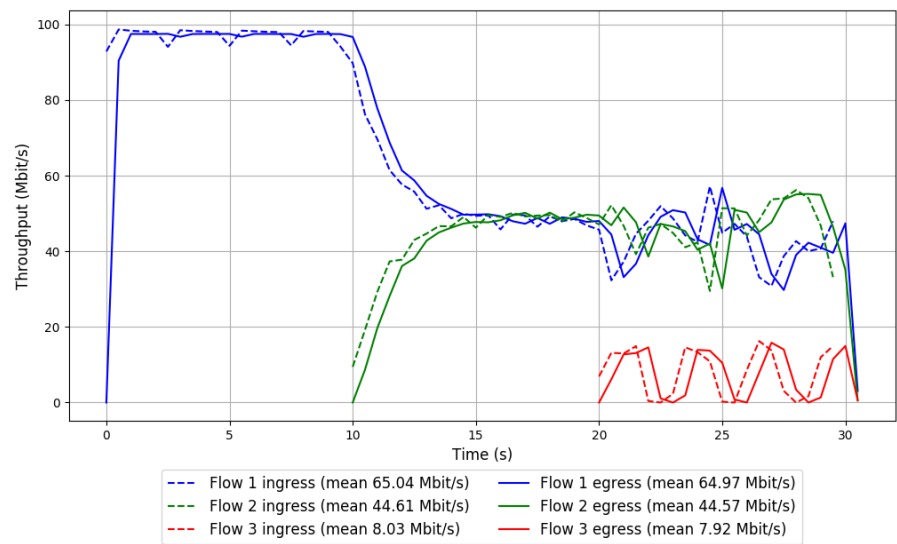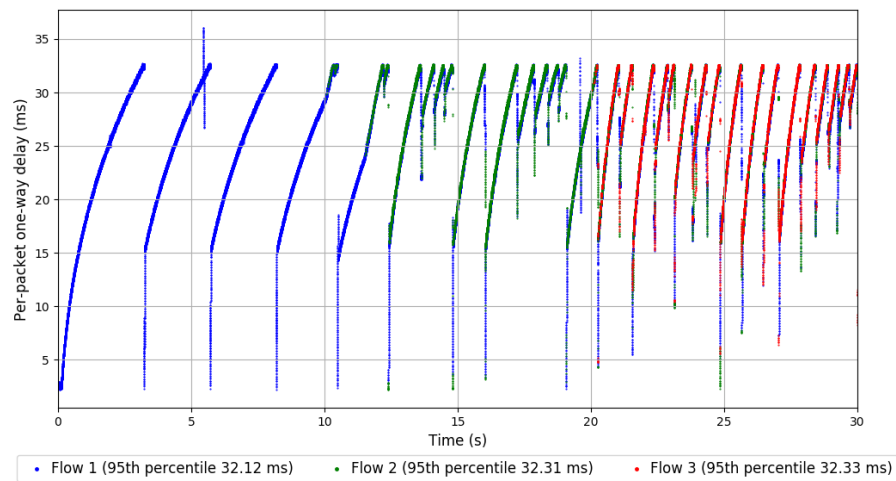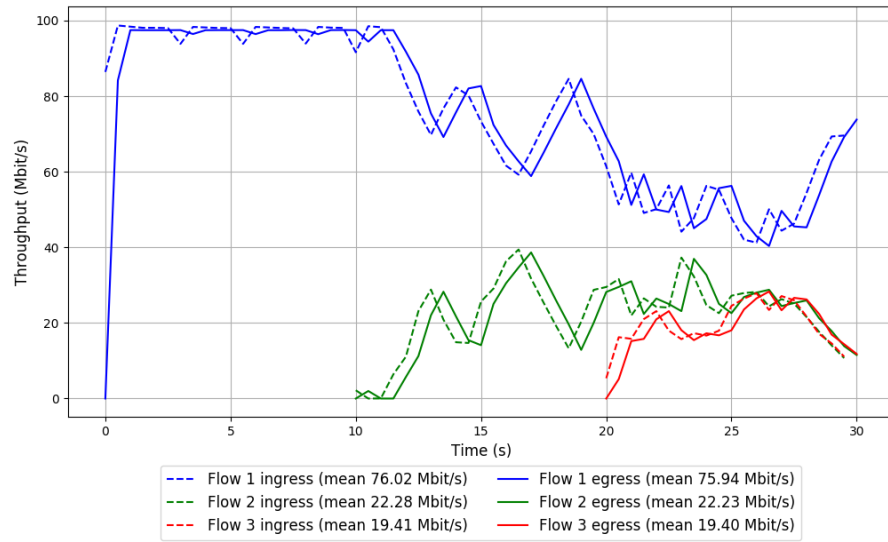
Run 2: Report of LEDBAT — Data Link

Flow 1 ingress (mean 70.41 Mbit/s) --- Flow 1 egress (mean 70.34 Mbit/s)
Flow 2 ingress (mean 35.21 Mbit/s) --- Flow 2 egress (mean 35.19 Mbit/s)
Flow 3 ingress (mean 10.36 Mbit/s) --- Flow 3 egress (mean 10.28 Mbit/s)

Flow 1 (95th percentile 33.01 ms) • Flow 2 (95th percentile 33.15 ms) • Flow 3 (95th percentile 33.23 ms)

```
Run 3: Statistics of LEDBAT

Start at: 2019-06-27 08:49:58
End at: 2019-06-27 08:50:28
Local clock offset: -6.814 ms
Remote clock offset: 0.306 ms


# Below is generated by plot.py at 2019-06-27 09:49:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.28 Mbit/s
95th percentile per-packet one-way delay: 30.865 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 64.97 Mbit/s
95th percentile per-packet one-way delay: 30.841 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 44.57 Mbit/s
95th percentile per-packet one-way delay: 30.900 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 7.92 Mbit/s
95th percentile per-packet one-way delay: 31.061 ms
Loss rate: 1.19%
```
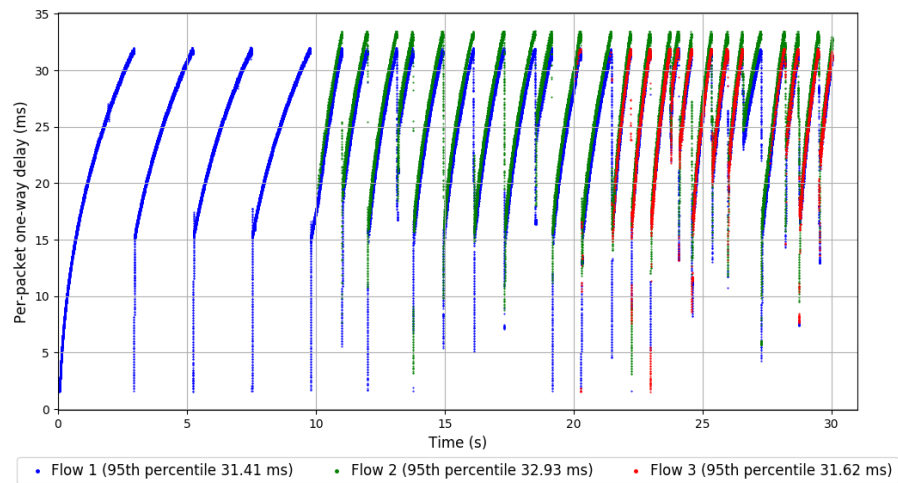
Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2019-06-27 09:15:02
End at: 2019-06-27 09:15:32
Local clock offset: -7.162 ms
Remote clock offset: 0.348 ms


# Below is generated by plot.py at 2019-06-27 09:50:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.15 Mbit/s
95th percentile per-packet one-way delay: 32.138 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 75.94 Mbit/s
95th percentile per-packet one-way delay: 32.117 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 22.23 Mbit/s
95th percentile per-packet one-way delay: 32.312 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 19.40 Mbit/s
95th percentile per-packet one-way delay: 32.325 ms
Loss rate: 0.28%
```
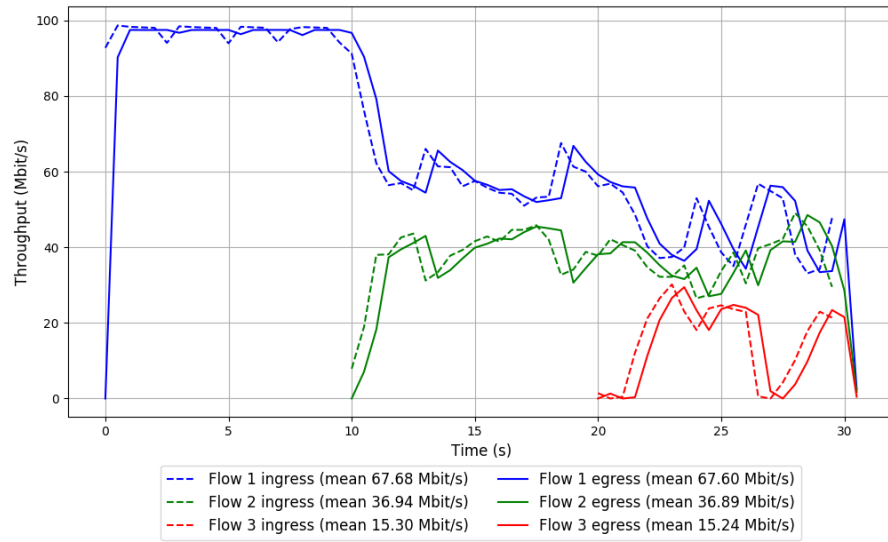
Run 4: Report of LEDBAT — Data Link

Flow 1 ingress (mean 76.02 Mbit/s) --- Flow 1 egress (mean 75.94 Mbit/s)
Flow 2 ingress (mean 22.28 Mbit/s) --- Flow 2 egress (mean 22.23 Mbit/s)
Flow 3 ingress (mean 19.41 Mbit/s) --- Flow 3 egress (mean 19.40 Mbit/s)

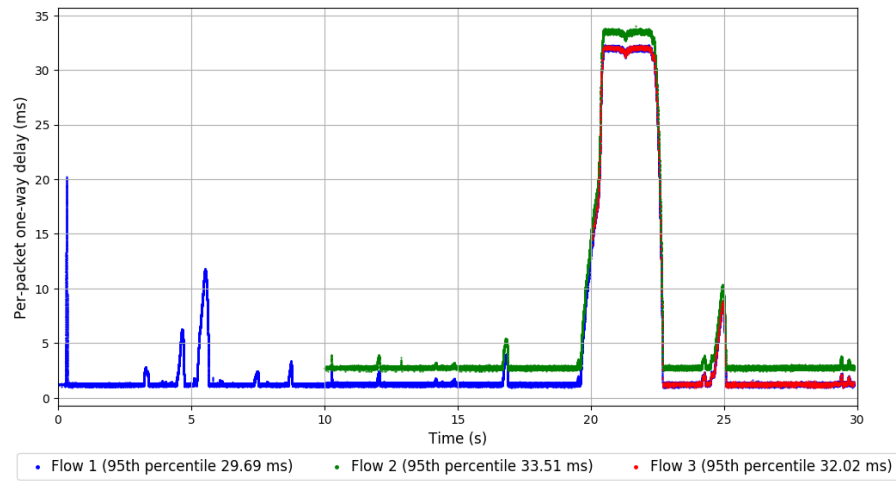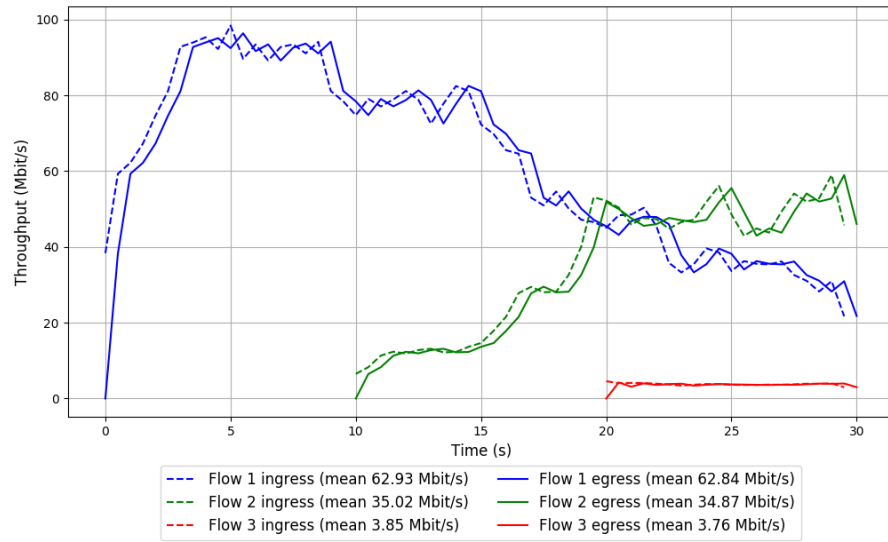Flow 1 (95th percentile 32.12 ms)   Flow 2 (95th percentile 32.31 ms)   Flow 3 (95th percentile 32.33 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2019-06-27 09:40:04
End at: 2019-06-27 09:40:34
Local clock offset: -7.855 ms
Remote clock offset: 0.412 ms

# Below is generated by plot.py at 2019-06-27 09:50:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.24 Mbit/s
95th percentile per-packet one-way delay: 31.707 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 67.60 Mbit/s
95th percentile per-packet one-way delay: 31.407 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 36.89 Mbit/s
95th percentile per-packet one-way delay: 32.930 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 15.24 Mbit/s
95th percentile per-packet one-way delay: 31.616 ms
Loss rate: 0.37%
```

Run 5: Report of LEDBAT — Data Link

Flow 1 ingress (mean 67.68 Mbit/s) --- Flow 1 egress (mean 67.60 Mbit/s)
Flow 2 ingress (mean 36.94 Mbit/s) --- Flow 2 egress (mean 36.89 Mbit/s)
Flow 3 ingress (mean 15.30 Mbit/s) --- Flow 3 egress (mean 15.24 Mbit/s)

Flow 1 (95th percentile 31.41 ms)   Flow 2 (95th percentile 32.93 ms)   Flow 3 (95th percentile 31.62 ms)

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Run 1: Statistics of Muses_DecisionTree

Start at: 2019-06-27 07:55:18
End at: 2019-06-27 07:55:48
Local clock offset: -7.074 ms
Remote clock offset: -0.087 ms

Run 1: Report of Muses_DecisionTree — Data Link

Figure is missing

Figure is missing

Run 2: Statistics of Muses_DecisionTree

Start at: 2019-06-27 08:20:22
End at: 2019-06-27 08:20:52
Local clock offset: -6.843 ms
Remote clock offset: 0.21 ms

Run 2: Report of Muses_DecisionTree — Data Link

Figure is missing

Figure is missing

```
Run 3: Statistics of Muses\_DecisionTree

Start at: 2019-06-27 08:45:24
End at: 2019-06-27 08:45:54
Local clock offset: -6.506 ms
Remote clock offset: 0.265 ms
```

Run 3: Report of Muses_DecisionTree — Data Link

Figure is missing

Figure is missing

Run 4: Statistics of Muses_DecisionTree

Start at: 2019-06-27 09:10:28
End at: 2019-06-27 09:10:58
Local clock offset: -7.07 ms
Remote clock offset: 0.422 ms

Run 4: Report of Muses_DecisionTree — Data Link

Figure is missing

Figure is missing

Run 5: Statistics of Muses_DecisionTree

Start at: 2019-06-27 09:35:30
End at: 2019-06-27 09:36:00
Local clock offset: -7.11 ms
Remote clock offset: 0.417 ms

Run 5: Report of Muses_DecisionTree — Data Link

Figure is missing

Figure is missing

```
Run 1: Statistics of PCC-Allegro

Start at: 2019-06-27 07:54:10
End at: 2019-06-27 07:54:40
Local clock offset: -6.311 ms
Remote clock offset: -0.056 ms


# Below is generated by plot.py at 2019-06-27 09:50:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.26 Mbit/s
95th percentile per-packet one-way delay: 31.961 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 62.84 Mbit/s
95th percentile per-packet one-way delay: 29.691 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 34.87 Mbit/s
95th percentile per-packet one-way delay: 33.509 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 3.76 Mbit/s
95th percentile per-packet one-way delay: 32.019 ms
Loss rate: 2.38%
```
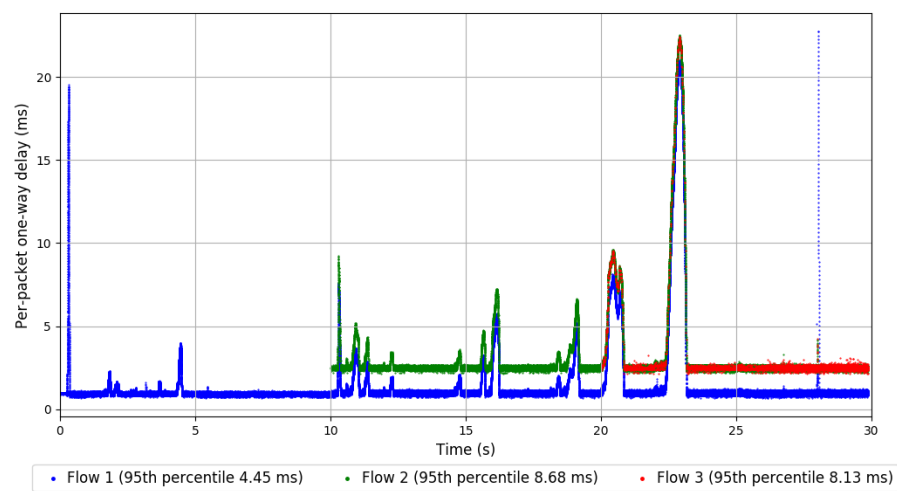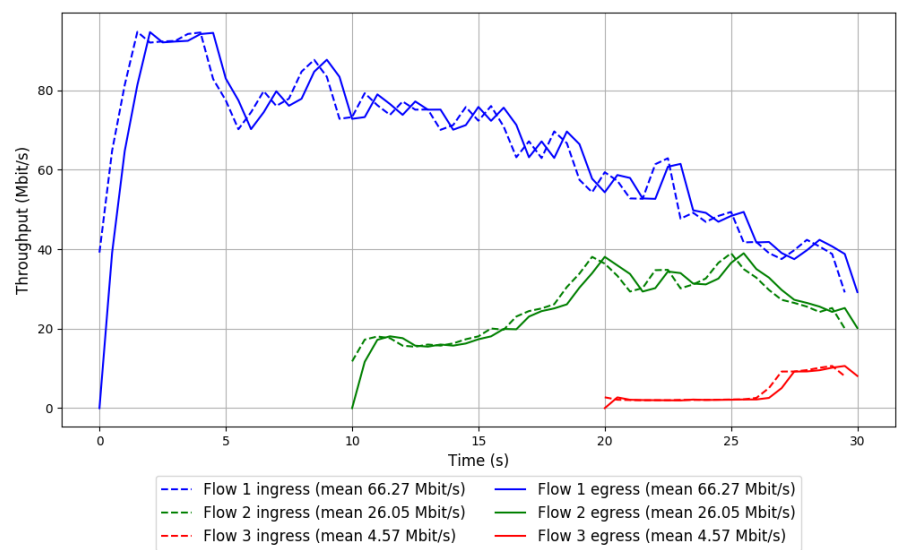
Run 1: Report of PCC-Allegro — Data Link

```
Run 2: Statistics of PCC-Allegro

Start at: 2019-06-27 08:19:13
End at: 2019-06-27 08:19:43
Local clock offset: -7.35 ms
Remote clock offset: 0.078 ms


# Below is generated by plot.py at 2019-06-27 09:50:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.66 Mbit/s
95th percentile per-packet one-way delay: 17.712 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 70.63 Mbit/s
95th percentile per-packet one-way delay: 15.300 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 23.69 Mbit/s
95th percentile per-packet one-way delay: 32.182 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 9.97 Mbit/s
95th percentile per-packet one-way delay: 15.802 ms
Loss rate: 0.47%
```
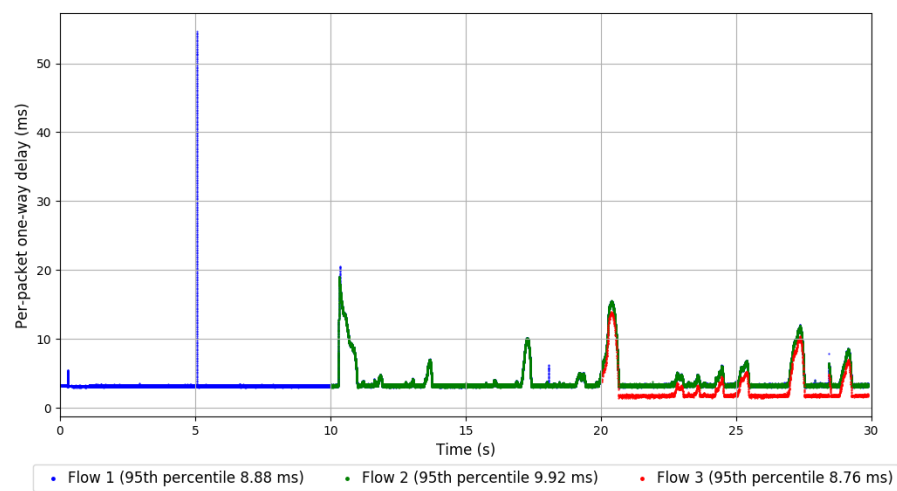
Run 2: Report of PCC-Allegro — Data Link

```
Run 3: Statistics of PCC-Allegro

Start at: 2019-06-27 08:44:16
End at: 2019-06-27 08:44:46
Local clock offset: -6.5 ms
Remote clock offset: 0.342 ms


# Below is generated by plot.py at 2019-06-27 09:50:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.09 Mbit/s
95th percentile per-packet one-way delay: 5.905 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 66.27 Mbit/s
95th percentile per-packet one-way delay: 4.452 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 26.05 Mbit/s
95th percentile per-packet one-way delay: 8.683 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.57 Mbit/s
95th percentile per-packet one-way delay: 8.130 ms
Loss rate: 0.00%
```
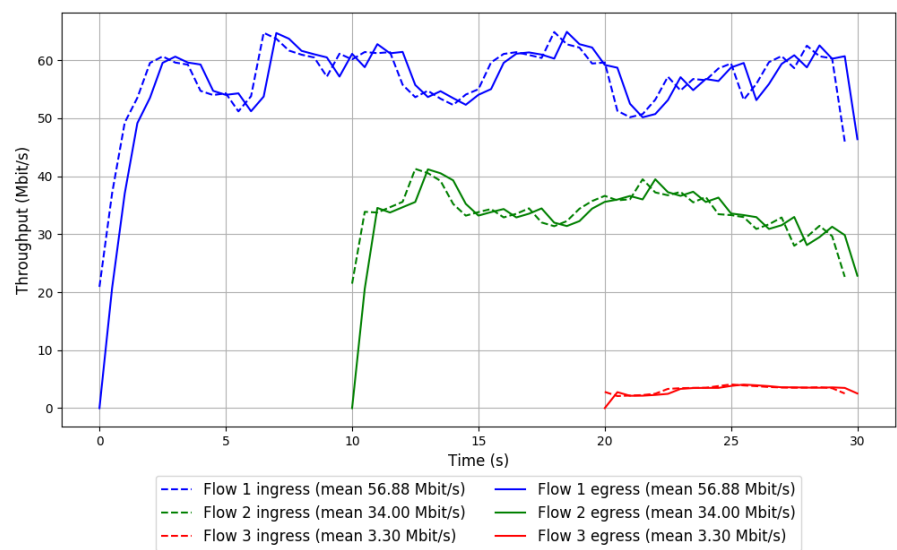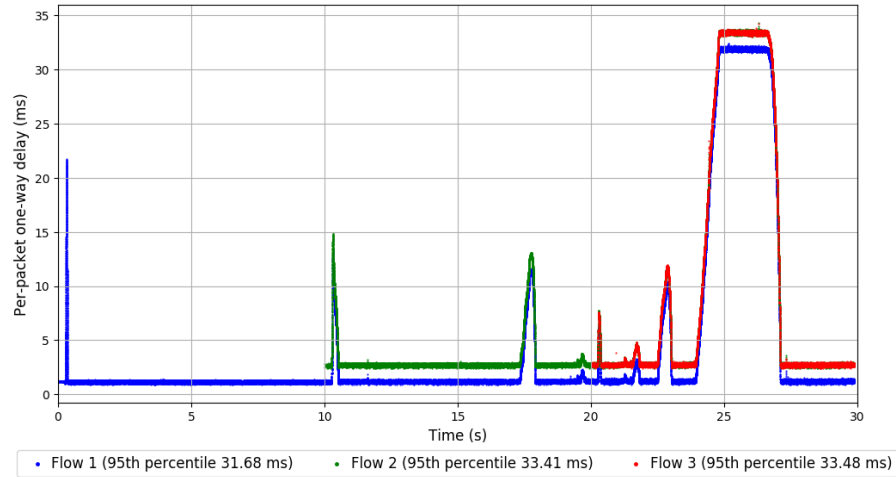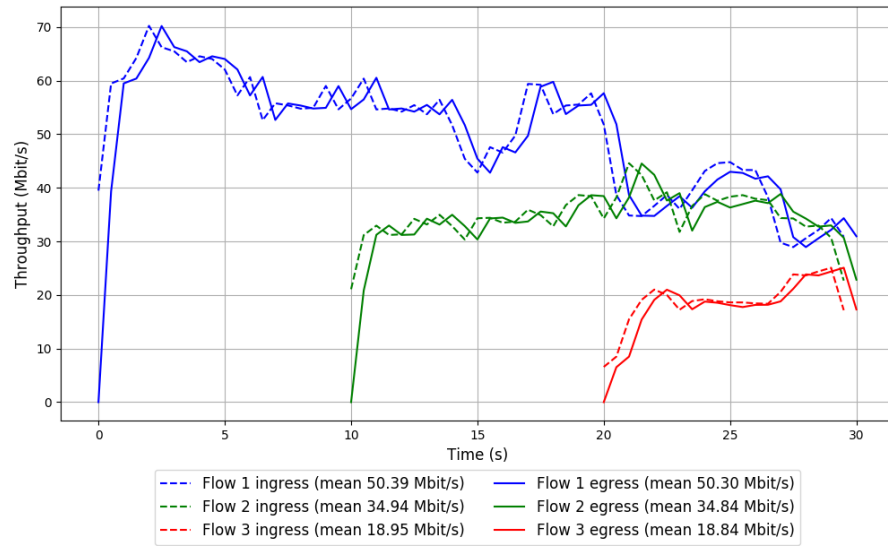
Run 3: Report of PCC-Allegro — Data Link

- - - Flow 1 ingress (mean 66.27 Mbit/s) ——— Flow 1 egress (mean 66.27 Mbit/s)
- - - Flow 2 ingress (mean 26.05 Mbit/s) ——— Flow 2 egress (mean 26.05 Mbit/s)
- - - Flow 3 ingress (mean 4.57 Mbit/s) ——— Flow 3 egress (mean 4.57 Mbit/s)

• Flow 1 (95th percentile 4.45 ms)   • Flow 2 (95th percentile 8.68 ms)   • Flow 3 (95th percentile 8.13 ms)

```
Run 4: Statistics of PCC-Allegro

Start at: 2019-06-27 09:09:20
End at: 2019-06-27 09:09:50
Local clock offset: -7.906 ms
Remote clock offset: 0.365 ms


# Below is generated by plot.py at 2019-06-27 09:50:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.57 Mbit/s
95th percentile per-packet one-way delay: 9.230 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 56.88 Mbit/s
95th percentile per-packet one-way delay: 8.876 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 34.00 Mbit/s
95th percentile per-packet one-way delay: 9.923 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.30 Mbit/s
95th percentile per-packet one-way delay: 8.758 ms
Loss rate: 0.00%
```
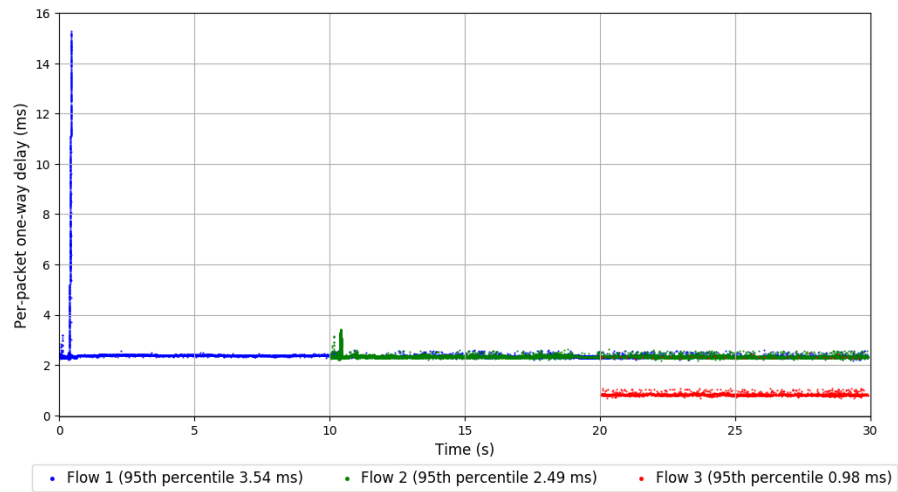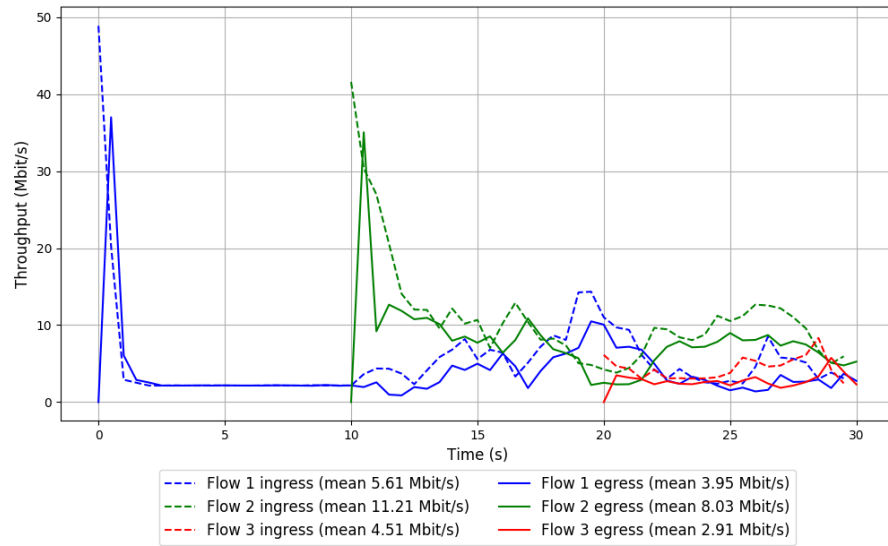
Run 4: Report of PCC-Allegro — Data Link

```
Run 5: Statistics of PCC-Allegro

Start at: 2019-06-27 09:34:22
End at: 2019-06-27 09:34:52
Local clock offset: -7.349 ms
Remote clock offset: 0.409 ms


# Below is generated by plot.py at 2019-06-27 09:50:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.68 Mbit/s
95th percentile per-packet one-way delay: 32.013 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 50.30 Mbit/s
95th percentile per-packet one-way delay: 31.682 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 34.84 Mbit/s
95th percentile per-packet one-way delay: 33.408 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 18.84 Mbit/s
95th percentile per-packet one-way delay: 33.477 ms
Loss rate: 0.54%
```
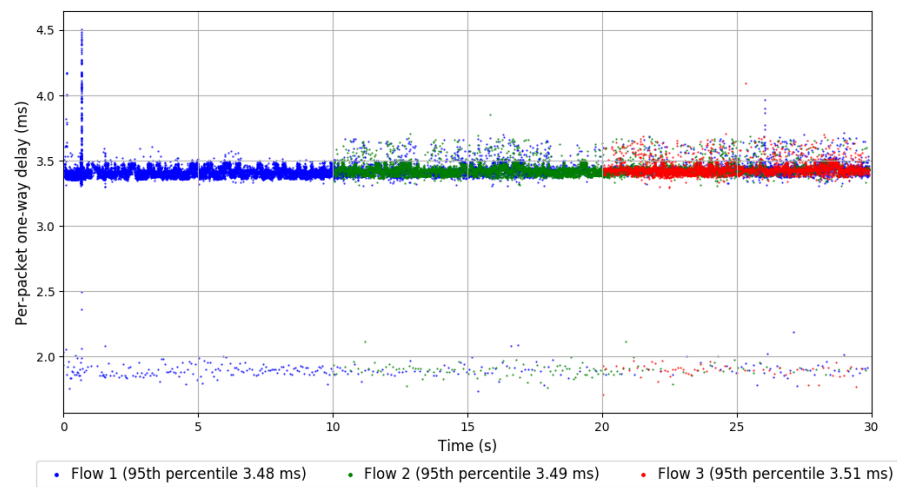
Run 5: Report of PCC-Allegro — Data Link

```
Run 1: Statistics of PCC-Expr

Start at: 2019-06-27 07:53:04
End at: 2019-06-27 07:53:34
Local clock offset: -5.927 ms
Remote clock offset: -0.101 ms


# Below is generated by plot.py at 2019-06-27 09:50:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.26 Mbit/s
95th percentile per-packet one-way delay: 2.505 ms
Loss rate: 29.53%
-- Flow 1:
Average throughput: 3.95 Mbit/s
95th percentile per-packet one-way delay: 3.539 ms
Loss rate: 29.47%
-- Flow 2:
Average throughput: 8.03 Mbit/s
95th percentile per-packet one-way delay: 2.489 ms
Loss rate: 28.38%
-- Flow 3:
Average throughput: 2.91 Mbit/s
95th percentile per-packet one-way delay: 0.980 ms
Loss rate: 35.50%
```
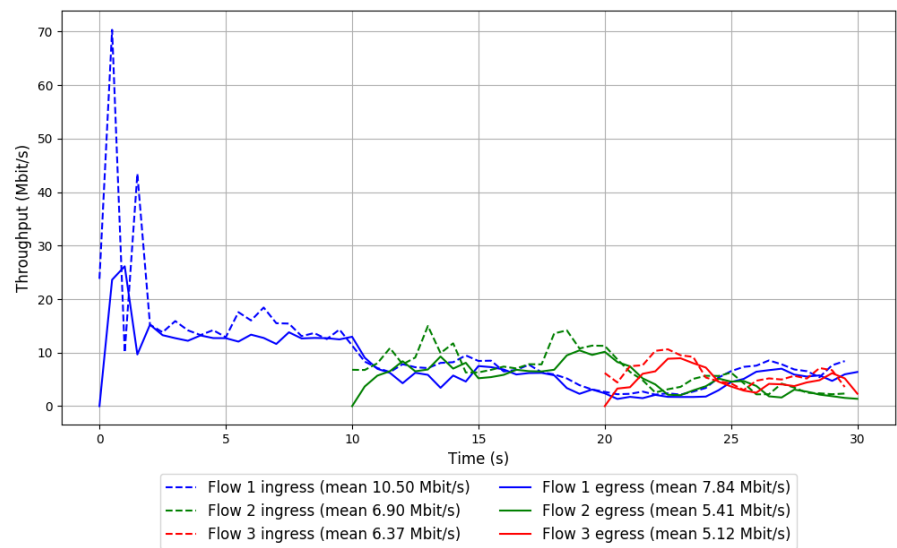
Run 1: Report of PCC-Expr — Data Link

```
Run 2: Statistics of PCC-Expr

Start at: 2019-06-27 08:18:07
End at: 2019-06-27 08:18:37
Local clock offset: -7.675 ms
Remote clock offset: 0.089 ms


# Below is generated by plot.py at 2019-06-27 09:50:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.12 Mbit/s
95th percentile per-packet one-way delay: 3.487 ms
Loss rate: 23.70%
-- Flow 1:
Average throughput: 7.84 Mbit/s
95th percentile per-packet one-way delay: 3.483 ms
Loss rate: 25.40%
-- Flow 2:
Average throughput: 5.41 Mbit/s
95th percentile per-packet one-way delay: 3.491 ms
Loss rate: 21.66%
-- Flow 3:
Average throughput: 5.12 Mbit/s
95th percentile per-packet one-way delay: 3.510 ms
Loss rate: 19.65%
```
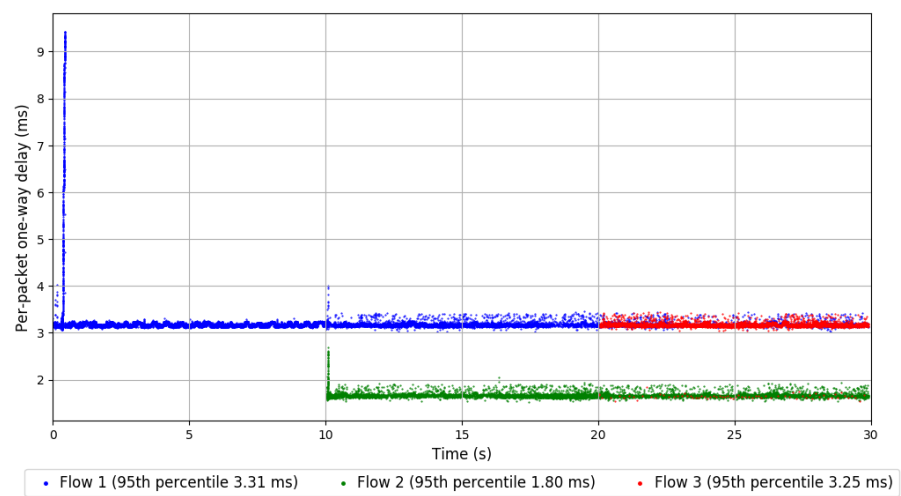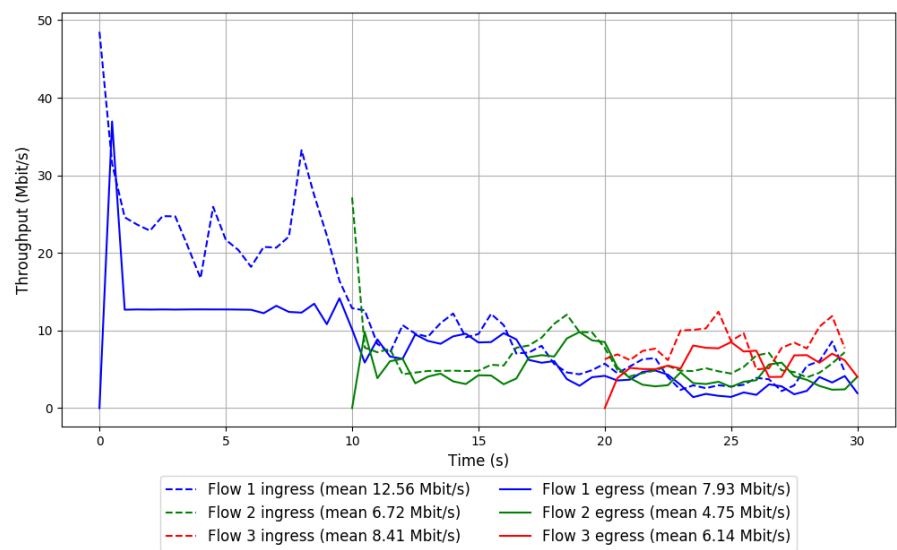
Run 2: Report of PCC-Expr — Data Link

```
Run 3: Statistics of PCC-Expr

Start at: 2019-06-27 08:43:10
End at: 2019-06-27 08:43:40
Local clock offset: -7.343 ms
Remote clock offset: 0.23 ms


# Below is generated by plot.py at 2019-06-27 09:50:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.12 Mbit/s
95th percentile per-packet one-way delay: 3.243 ms
Loss rate: 33.74%
-- Flow 1:
Average throughput: 7.93 Mbit/s
95th percentile per-packet one-way delay: 3.305 ms
Loss rate: 36.81%
-- Flow 2:
Average throughput: 4.75 Mbit/s
95th percentile per-packet one-way delay: 1.799 ms
Loss rate: 29.33%
-- Flow 3:
Average throughput: 6.14 Mbit/s
95th percentile per-packet one-way delay: 3.251 ms
Loss rate: 26.94%
```
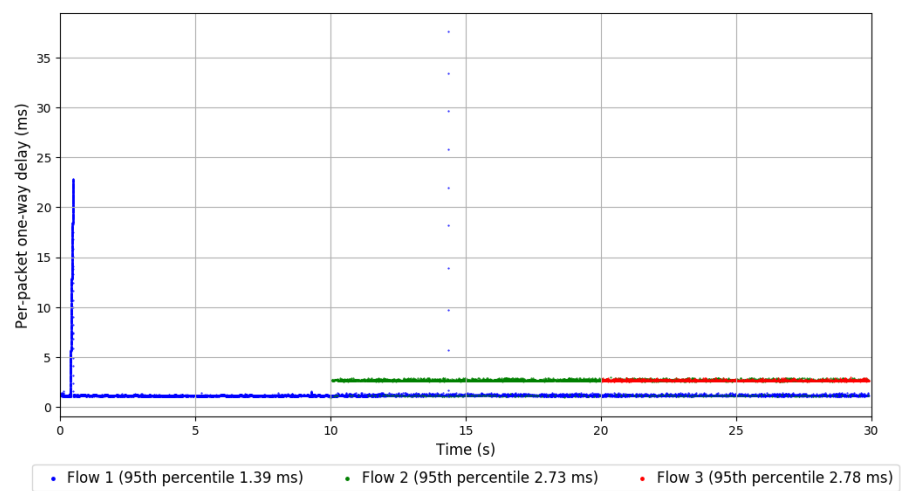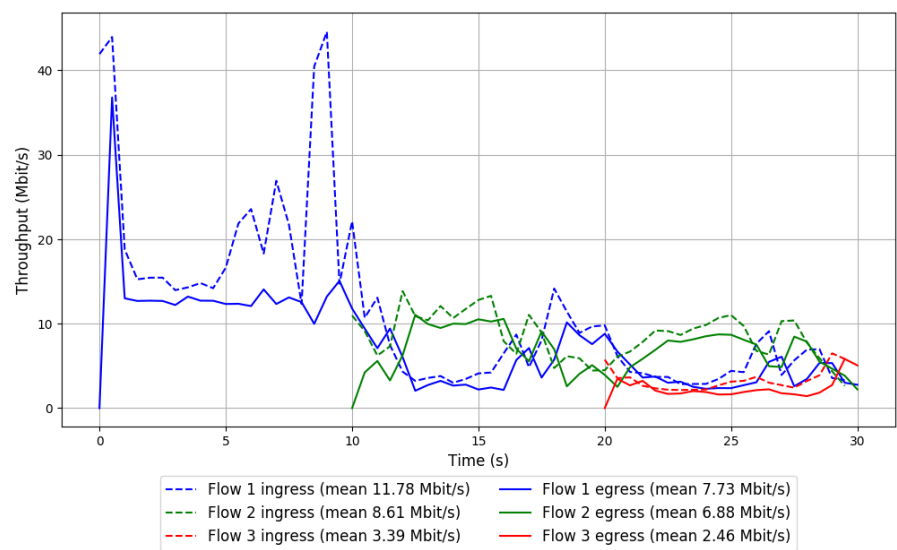
Run 3: Report of PCC-Expr — Data Link

```
Run 4: Statistics of PCC-Expr

Start at: 2019-06-27 09:08:14
End at: 2019-06-27 09:08:44
Local clock offset: -7.317 ms
Remote clock offset: 0.408 ms


# Below is generated by plot.py at 2019-06-27 09:50:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.12 Mbit/s
95th percentile per-packet one-way delay: 2.730 ms
Loss rate: 29.56%
-- Flow 1:
Average throughput: 7.73 Mbit/s
95th percentile per-packet one-way delay: 1.390 ms
Loss rate: 34.38%
-- Flow 2:
Average throughput: 6.88 Mbit/s
95th percentile per-packet one-way delay: 2.731 ms
Loss rate: 20.07%
-- Flow 3:
Average throughput: 2.46 Mbit/s
95th percentile per-packet one-way delay: 2.783 ms
Loss rate: 27.40%
```
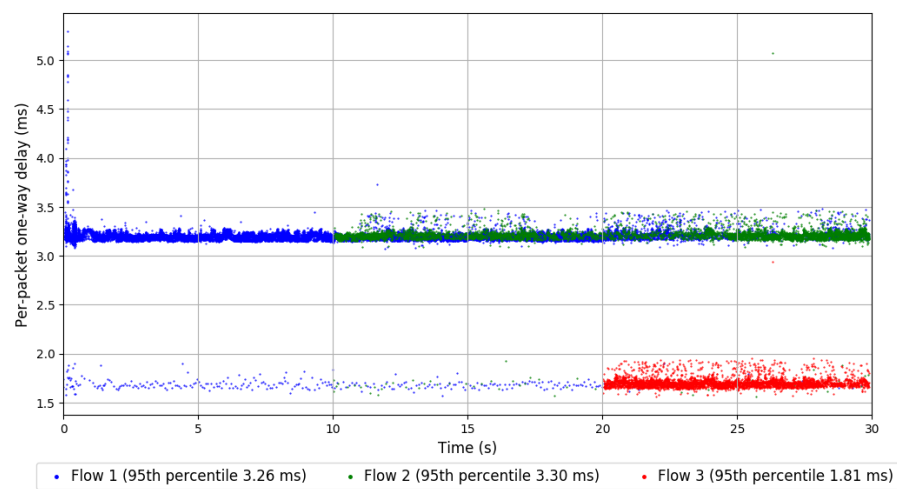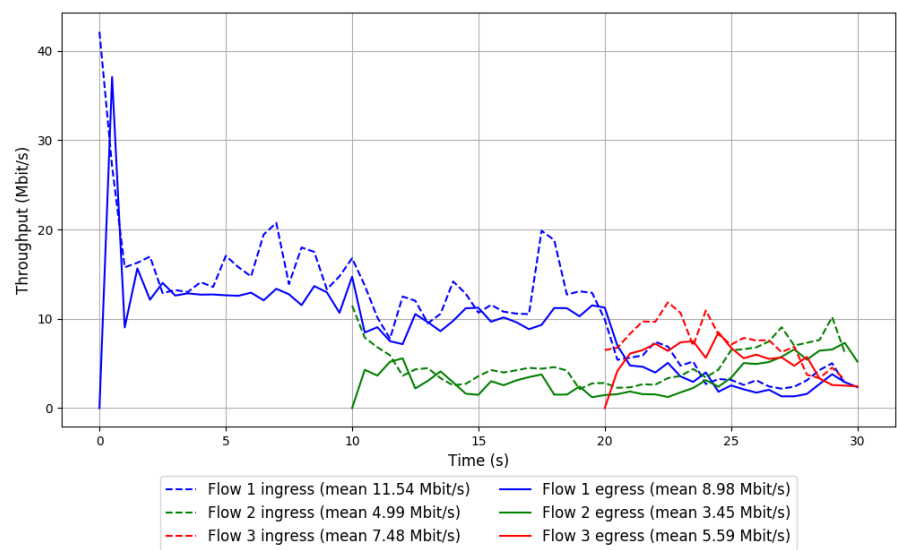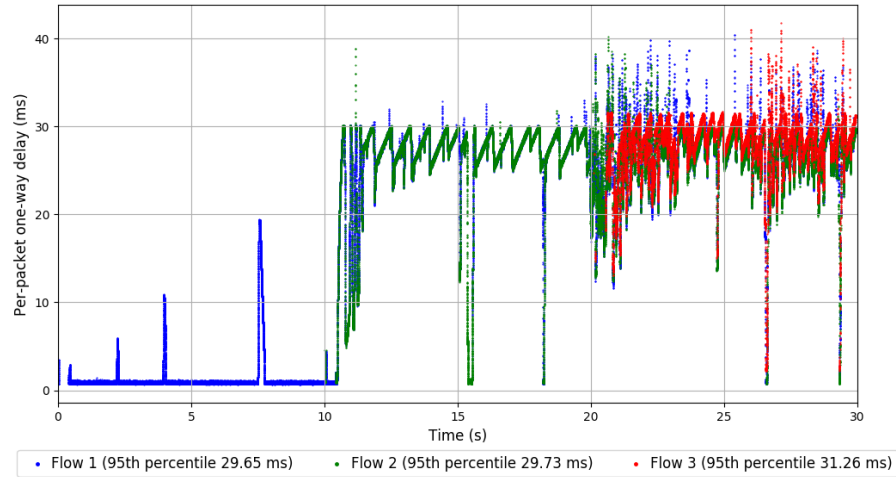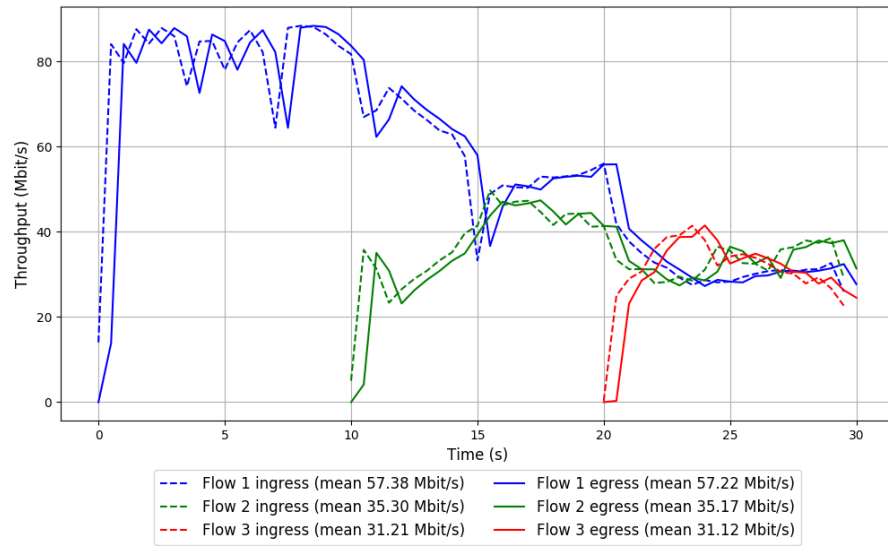
Run 4: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 11.78 Mbit/s)   Flow 1 egress (mean 7.73 Mbit/s)
Flow 2 ingress (mean 8.61 Mbit/s)   Flow 2 egress (mean 6.88 Mbit/s)
Flow 3 ingress (mean 3.39 Mbit/s)   Flow 3 egress (mean 2.46 Mbit/s)

Flow 1 (95th percentile 1.39 ms)   Flow 2 (95th percentile 2.73 ms)   Flow 3 (95th percentile 2.78 ms)

```
Run 5: Statistics of PCC-Expr

Start at: 2019-06-27 09:33:16
End at: 2019-06-27 09:33:46
Local clock offset: -7.934 ms
Remote clock offset: 0.369 ms


# Below is generated by plot.py at 2019-06-27 09:50:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.12 Mbit/s
95th percentile per-packet one-way delay: 3.262 ms
Loss rate: 24.27%
-- Flow 1:
Average throughput: 8.98 Mbit/s
95th percentile per-packet one-way delay: 3.261 ms
Loss rate: 22.15%
-- Flow 2:
Average throughput: 3.45 Mbit/s
95th percentile per-packet one-way delay: 3.303 ms
Loss rate: 30.81%
-- Flow 3:
Average throughput: 5.59 Mbit/s
95th percentile per-packet one-way delay: 1.815 ms
Loss rate: 25.36%
```

Run 5: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 11.54 Mbit/s) — Flow 1 egress (mean 8.98 Mbit/s)
Flow 2 ingress (mean 4.99 Mbit/s) — Flow 2 egress (mean 3.45 Mbit/s)
Flow 3 ingress (mean 7.48 Mbit/s) — Flow 3 egress (mean 5.59 Mbit/s)

Flow 1 (95th percentile 3.26 ms)   Flow 2 (95th percentile 3.30 ms)   Flow 3 (95th percentile 1.81 ms)

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```
Run 1: Statistics of QUIC Cubic

Start at: 2019-06-27 07:58:44
End at: 2019-06-27 07:59:14
Local clock offset: -6.195 ms
Remote clock offset: -0.074 ms


# Below is generated by plot.py at 2019-06-27 09:51:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.85 Mbit/s
95th percentile per-packet one-way delay: 29.896 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 57.22 Mbit/s
95th percentile per-packet one-way delay: 29.651 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 35.17 Mbit/s
95th percentile per-packet one-way delay: 29.734 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 31.12 Mbit/s
95th percentile per-packet one-way delay: 31.261 ms
Loss rate: 0.24%
```
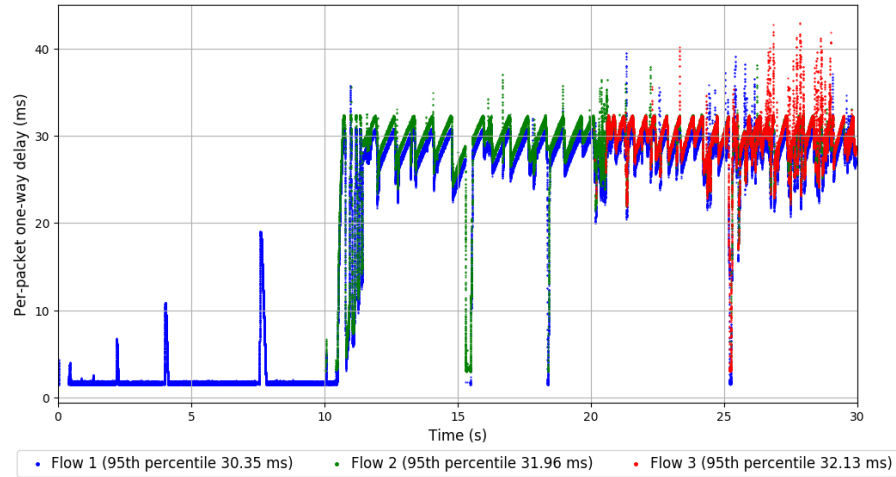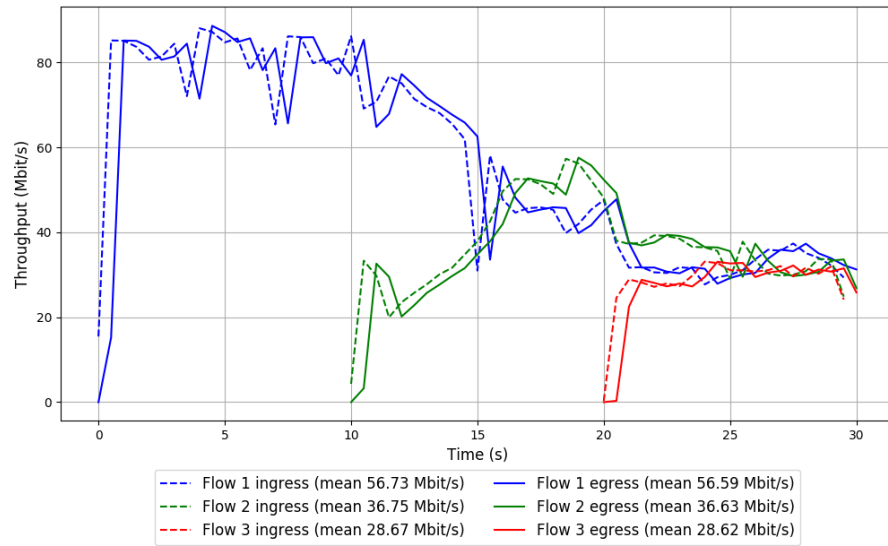
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2019-06-27 08:23:47
End at: 2019-06-27 08:24:17
Local clock offset: -7.287 ms
Remote clock offset: 0.12 ms


# Below is generated by plot.py at 2019-06-27 09:51:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.36 Mbit/s
95th percentile per-packet one-way delay: 31.689 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 56.59 Mbit/s
95th percentile per-packet one-way delay: 30.353 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 36.63 Mbit/s
95th percentile per-packet one-way delay: 31.962 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 28.62 Mbit/s
95th percentile per-packet one-way delay: 32.133 ms
Loss rate: 0.20%
```
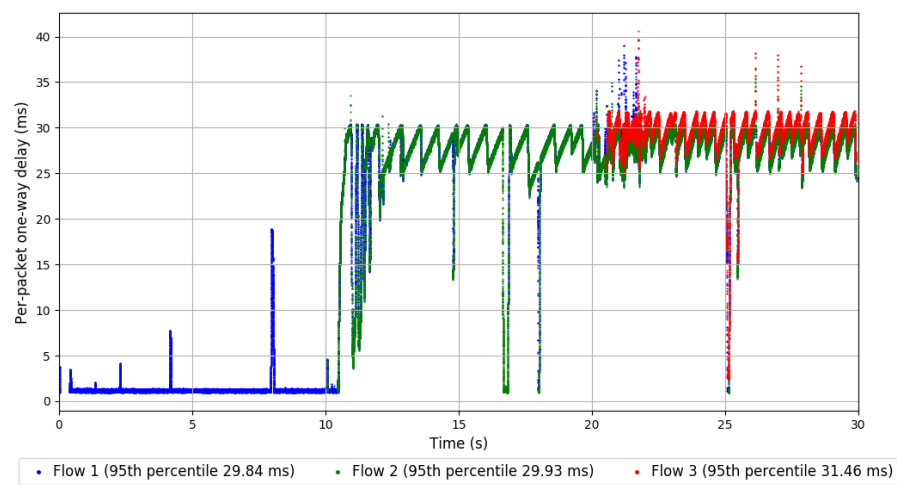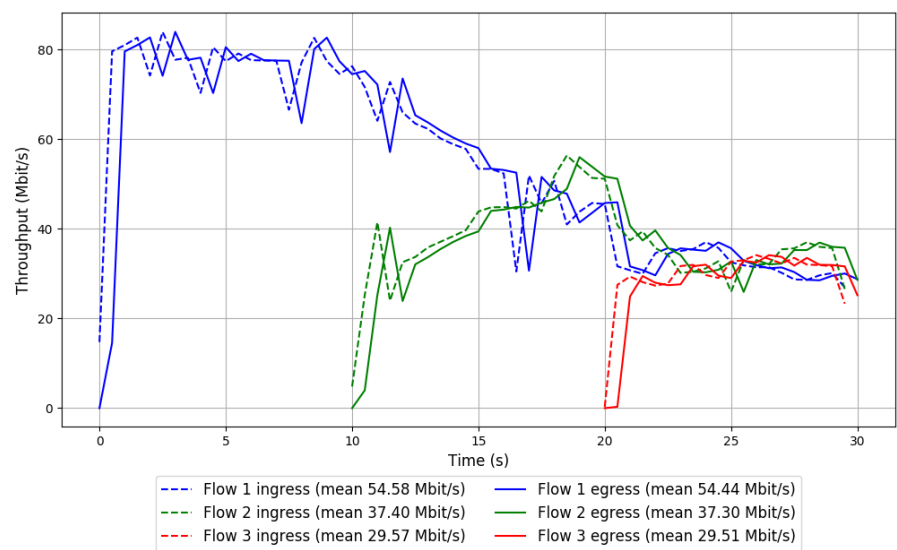
Run 2: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 56.73 Mbit/s) --- Flow 1 egress (mean 56.59 Mbit/s)
Flow 2 ingress (mean 36.75 Mbit/s) --- Flow 2 egress (mean 36.63 Mbit/s)
Flow 3 ingress (mean 28.67 Mbit/s) --- Flow 3 egress (mean 28.62 Mbit/s)

Flow 1 (95th percentile 30.35 ms)   Flow 2 (95th percentile 31.96 ms)   Flow 3 (95th percentile 32.13 ms)

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```
Run 3: Statistics of QUIC Cubic

Start at: 2019-06-27 08:48:49
End at: 2019-06-27 08:49:19
Local clock offset: -6.771 ms
Remote clock offset: 0.327 ms


# Below is generated by plot.py at 2019-06-27 09:51:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.91 Mbit/s
95th percentile per-packet one-way delay: 30.180 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 54.44 Mbit/s
95th percentile per-packet one-way delay: 29.839 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 37.30 Mbit/s
95th percentile per-packet one-way delay: 29.928 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 29.51 Mbit/s
95th percentile per-packet one-way delay: 31.463 ms
Loss rate: 0.24%
```
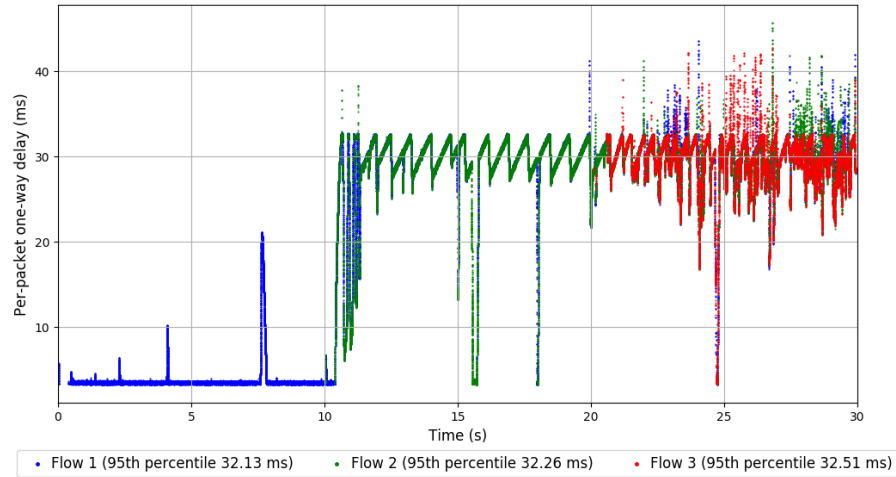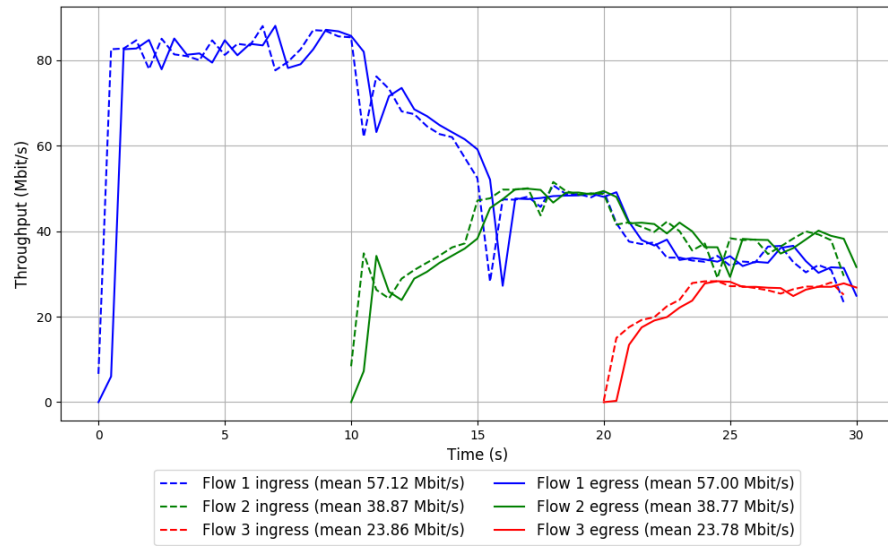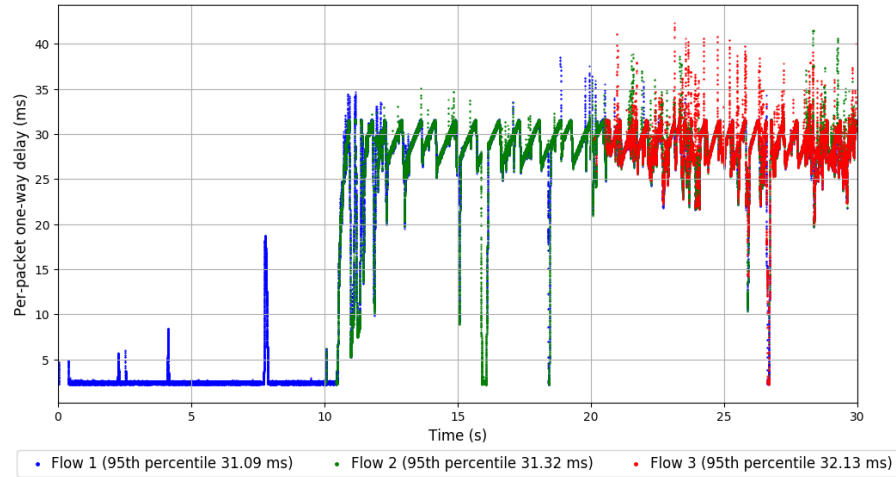
Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 54.58 Mbit/s)   Flow 1 egress (mean 54.44 Mbit/s)
Flow 2 ingress (mean 37.40 Mbit/s)   Flow 2 egress (mean 37.30 Mbit/s)
Flow 3 ingress (mean 29.57 Mbit/s)   Flow 3 egress (mean 29.51 Mbit/s)

Flow 1 (95th percentile 29.84 ms)   Flow 2 (95th percentile 29.93 ms)   Flow 3 (95th percentile 31.46 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2019-06-27 09:13:53
End at: 2019-06-27 09:14:23
Local clock offset: -8.119 ms
Remote clock offset: 0.41 ms


# Below is generated by plot.py at 2019-06-27 09:51:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.61 Mbit/s
95th percentile per-packet one-way delay: 32.216 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 57.00 Mbit/s
95th percentile per-packet one-way delay: 32.129 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 38.77 Mbit/s
95th percentile per-packet one-way delay: 32.255 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 23.78 Mbit/s
95th percentile per-packet one-way delay: 32.510 ms
Loss rate: 0.31%
```
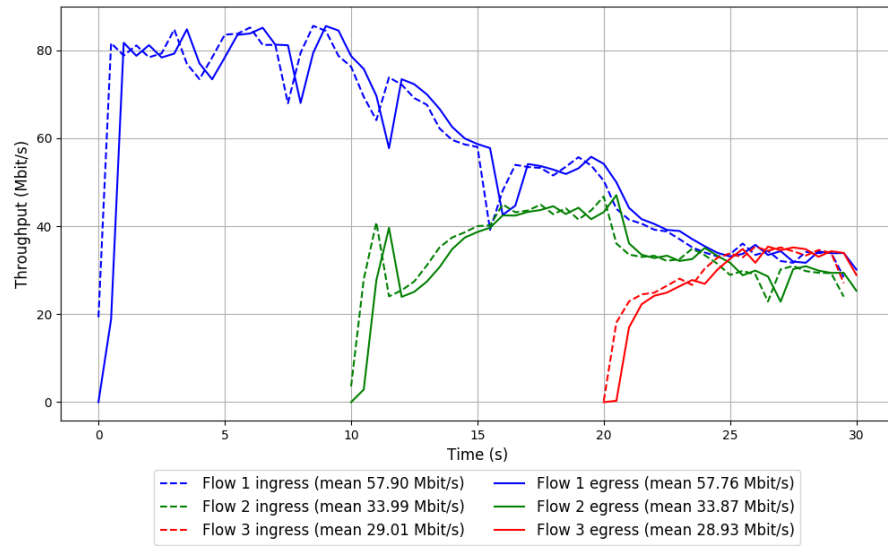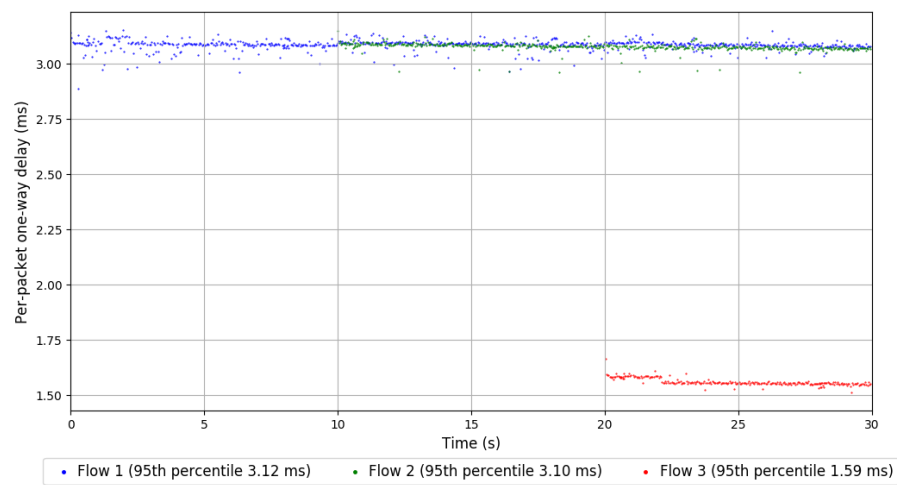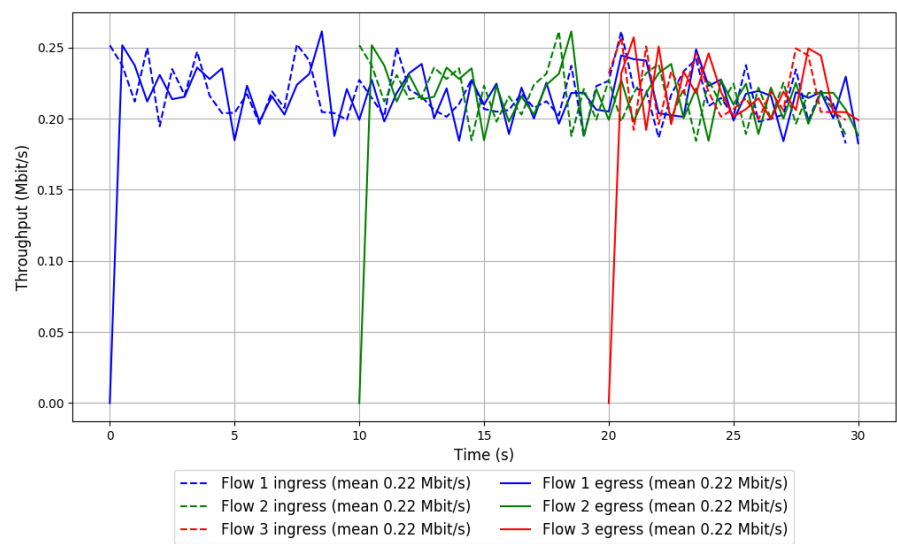
Run 4: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 57.12 Mbit/s)   Flow 1 egress (mean 57.00 Mbit/s)
Flow 2 ingress (mean 38.87 Mbit/s)   Flow 2 egress (mean 38.77 Mbit/s)
Flow 3 ingress (mean 23.86 Mbit/s)   Flow 3 egress (mean 23.78 Mbit/s)

Flow 1 (95th percentile 32.13 ms)   Flow 2 (95th percentile 32.26 ms)   Flow 3 (95th percentile 32.51 ms)
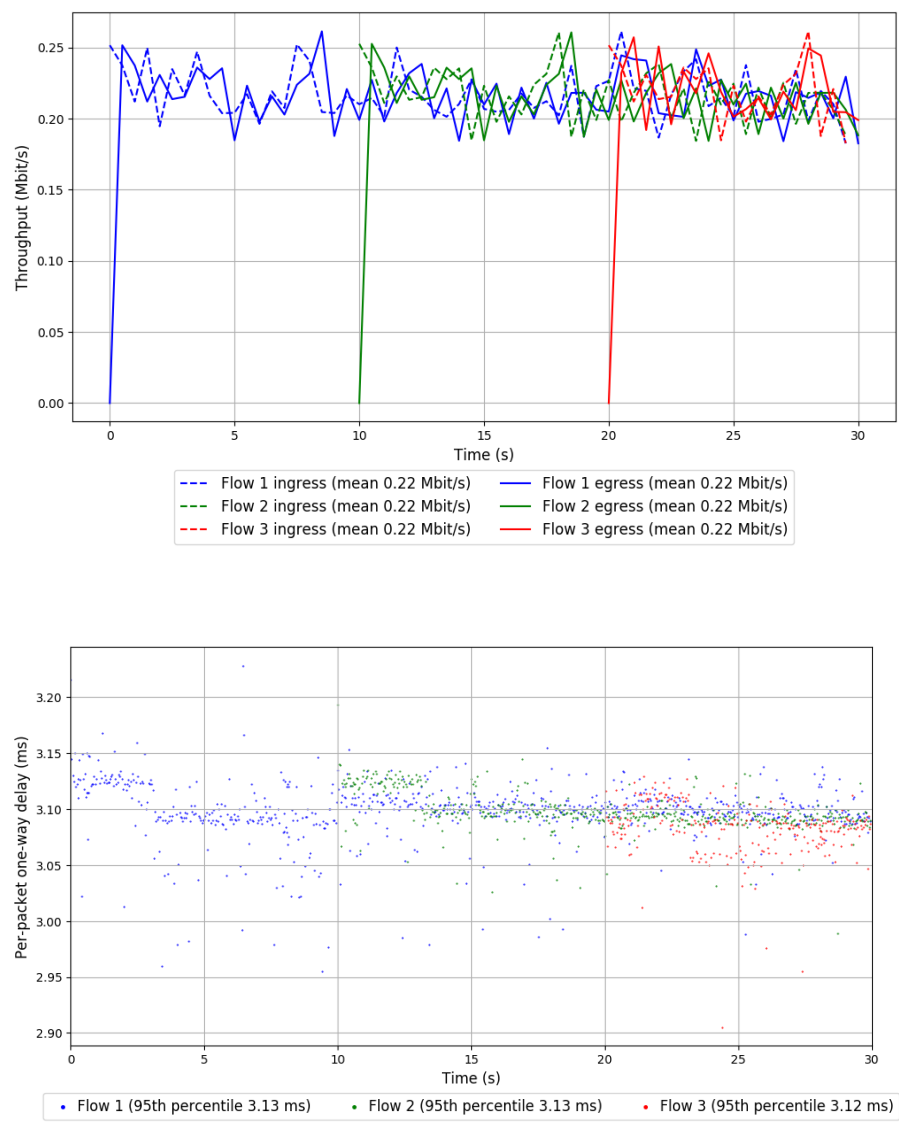
```
Run 5: Statistics of QUIC Cubic

Start at: 2019-06-27 09:38:55
End at: 2019-06-27 09:39:25
Local clock offset: -7.055 ms
Remote clock offset: 0.419 ms


# Below is generated by plot.py at 2019-06-27 09:51:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.77 Mbit/s
95th percentile per-packet one-way delay: 31.202 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 57.76 Mbit/s
95th percentile per-packet one-way delay: 31.092 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 33.87 Mbit/s
95th percentile per-packet one-way delay: 31.319 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 28.93 Mbit/s
95th percentile per-packet one-way delay: 32.135 ms
Loss rate: 0.18%
```

Run 5: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of SCReAM

Start at: 2019-06-27 07:50:49
End at: 2019-06-27 07:51:19
Local clock offset: -6.595 ms
Remote clock offset: -0.19 ms


# Below is generated by plot.py at 2019-06-27 09:51:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 3.110 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.118 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.096 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.586 ms
Loss rate: 0.00%
```
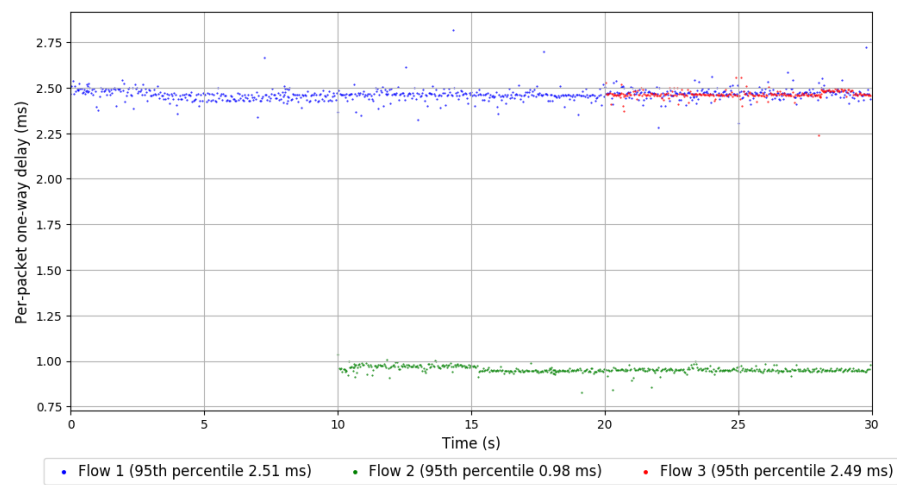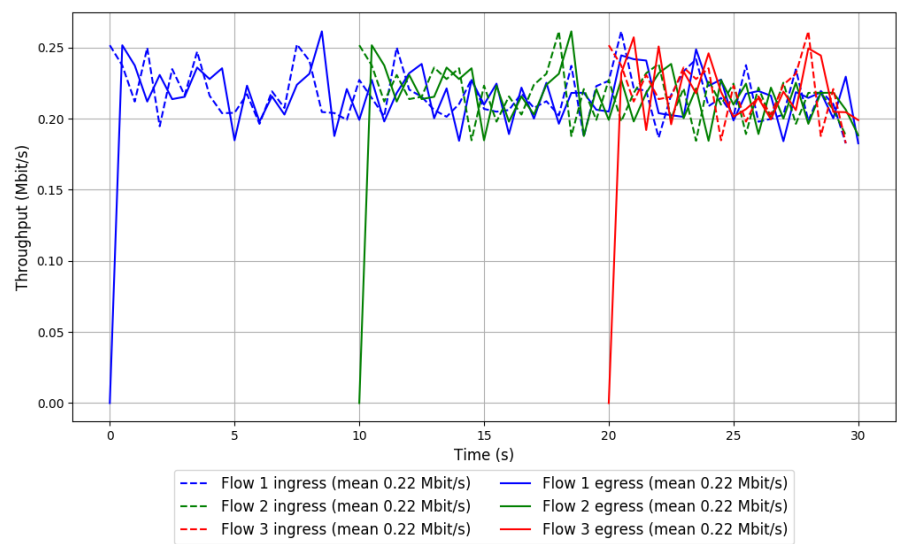
Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2019-06-27 08:15:52
End at: 2019-06-27 08:16:22
Local clock offset: -7.335 ms
Remote clock offset: 0.046 ms


# Below is generated by plot.py at 2019-06-27 09:51:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 3.128 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.132 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.128 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.115 ms
Loss rate: 0.00%
```
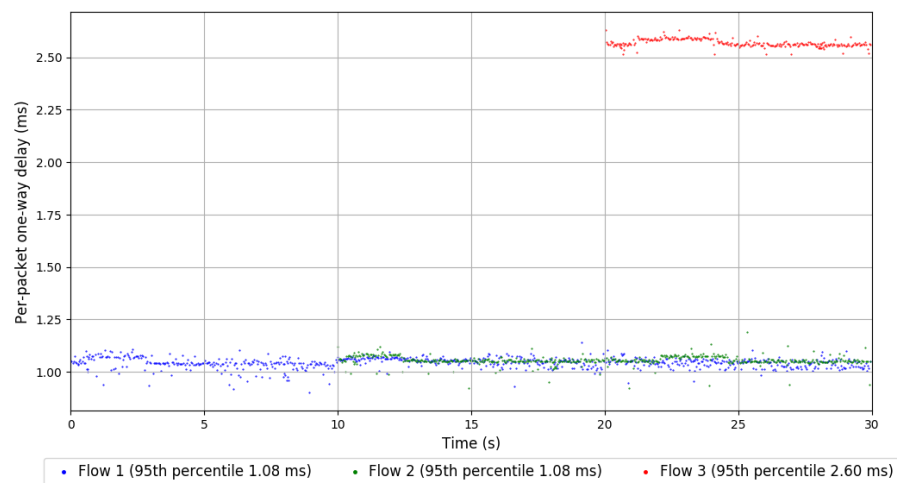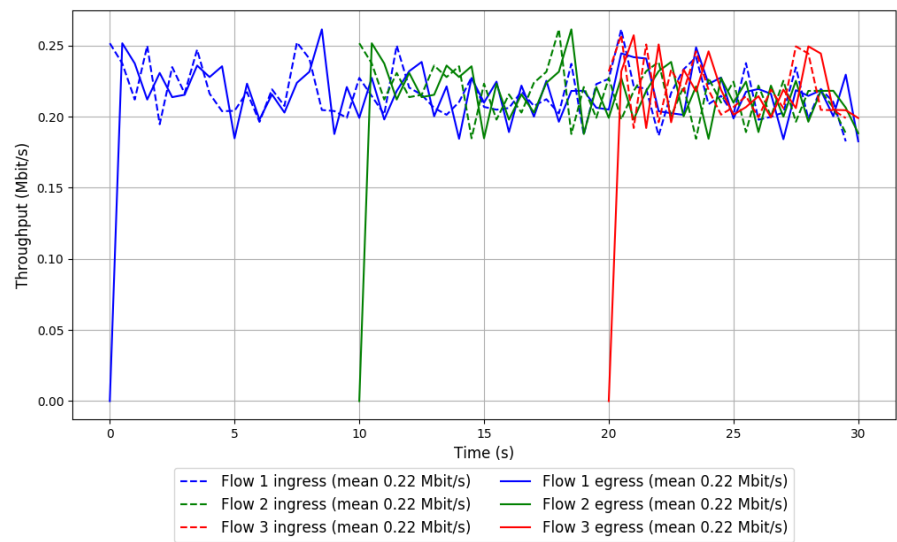
Run 2: Report of SCReAM — Data Link

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```
Run 3: Statistics of SCReAM

Start at: 2019-06-27 08:40:55
End at: 2019-06-27 08:41:25
Local clock offset: -6.493 ms
Remote clock offset: 0.319 ms


# Below is generated by plot.py at 2019-06-27 09:51:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 2.497 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.508 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 0.981 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.492 ms
Loss rate: 0.00%
```
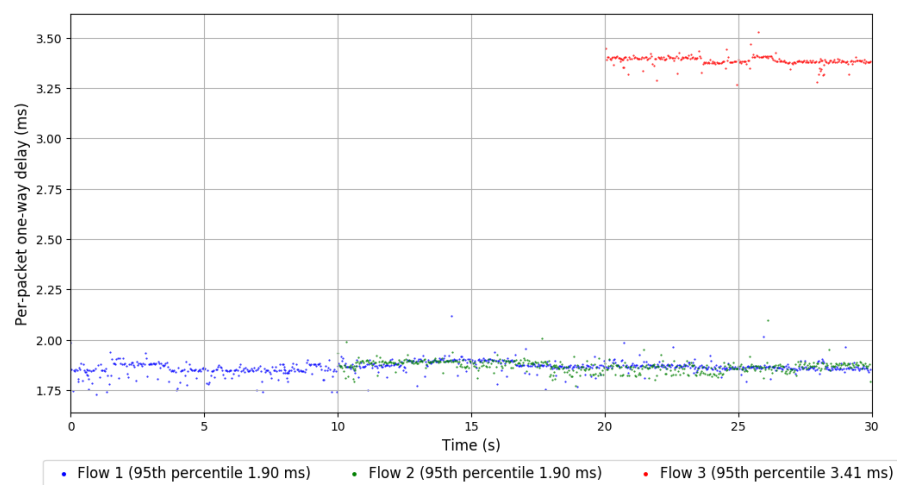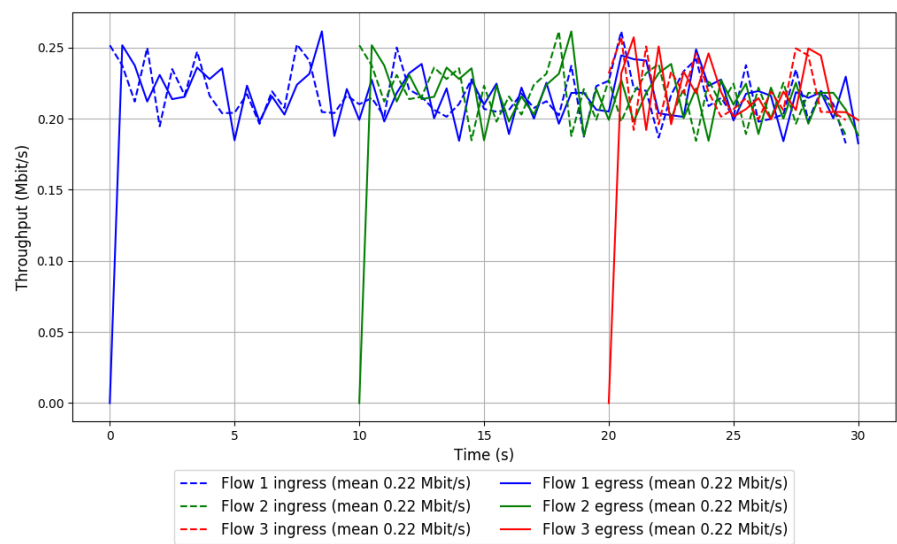
Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2019-06-27 09:05:59
End at: 2019-06-27 09:06:29
Local clock offset: -7.207 ms
Remote clock offset: 0.36 ms


# Below is generated by plot.py at 2019-06-27 09:51:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 2.580 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.078 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.084 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.595 ms
Loss rate: 0.00%
```
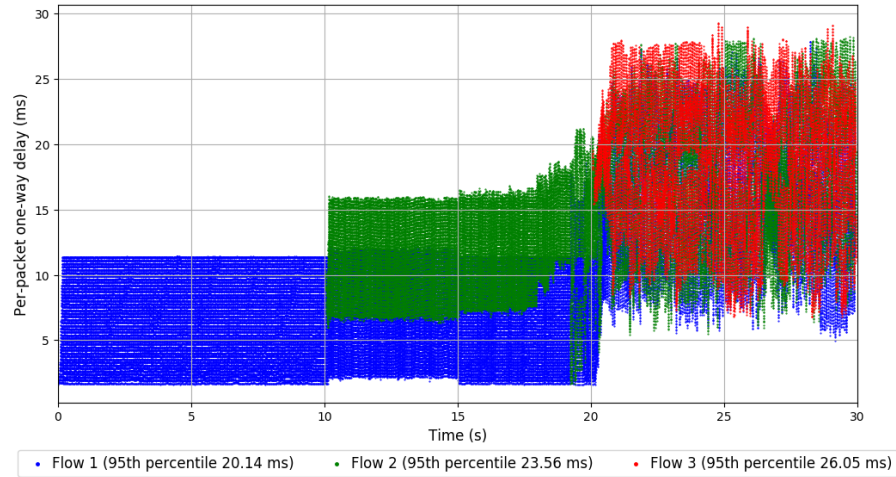
Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2019-06-27 09:31:01
End at: 2019-06-27 09:31:31
Local clock offset: -8.076 ms
Remote clock offset: 0.368 ms


# Below is generated by plot.py at 2019-06-27 09:51:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 3.399 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.903 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.901 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.412 ms
Loss rate: 0.00%
```
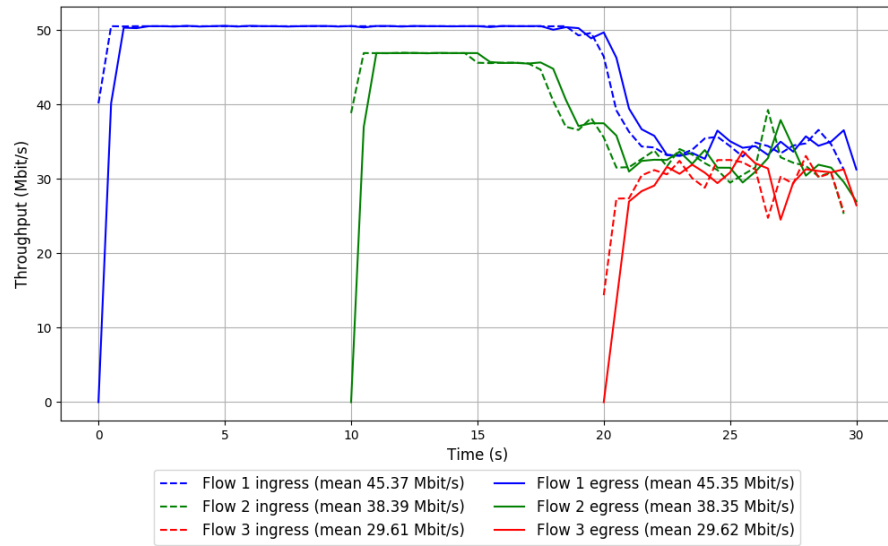
Run 5: Report of SCReAM — Data Link

```
Run 1: Statistics of Sprout

Start at: 2019-06-27 07:40:32
End at: 2019-06-27 07:41:02
Local clock offset: -6.412 ms
Remote clock offset: -0.152 ms


# Below is generated by plot.py at 2019-06-27 09:51:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.64 Mbit/s
95th percentile per-packet one-way delay: 23.242 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 45.35 Mbit/s
95th percentile per-packet one-way delay: 20.138 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.35 Mbit/s
95th percentile per-packet one-way delay: 23.559 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.62 Mbit/s
95th percentile per-packet one-way delay: 26.051 ms
Loss rate: 0.00%
```
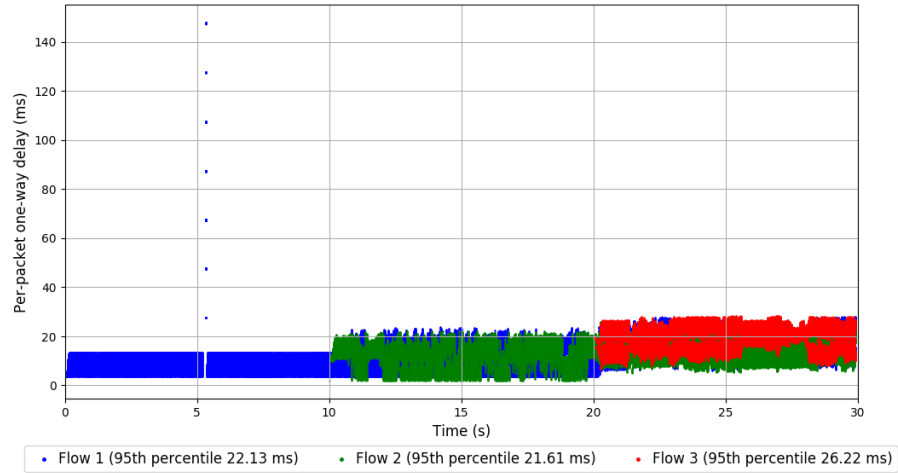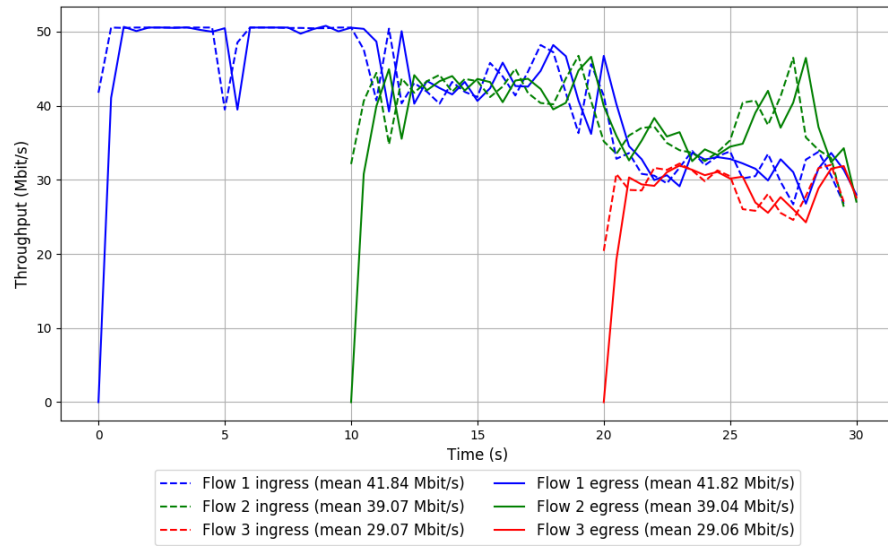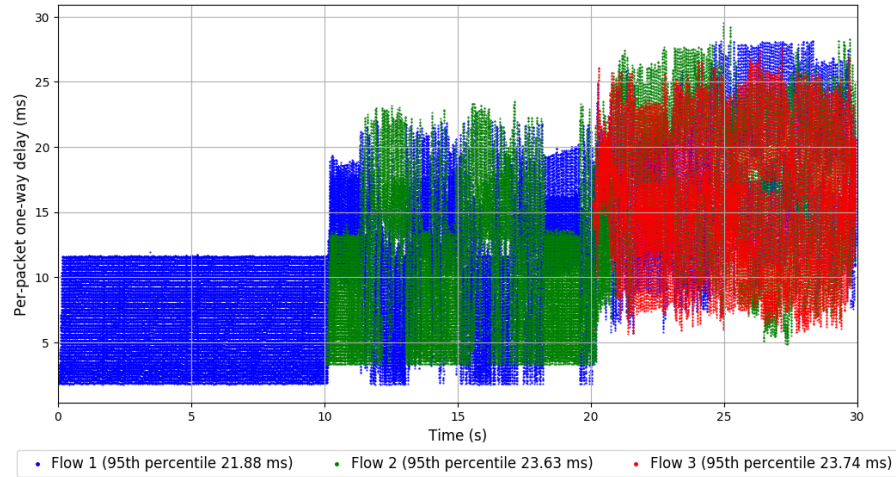
Run 1: Report of Sprout — Data Link

Flow 1 ingress (mean 45.37 Mbit/s) --- Flow 1 egress (mean 45.35 Mbit/s)
Flow 2 ingress (mean 38.39 Mbit/s) --- Flow 2 egress (mean 38.35 Mbit/s)
Flow 3 ingress (mean 29.61 Mbit/s) --- Flow 3 egress (mean 29.62 Mbit/s)

Flow 1 (95th percentile 20.14 ms)   Flow 2 (95th percentile 23.56 ms)   Flow 3 (95th percentile 26.05 ms)

```
Run 2: Statistics of Sprout

Start at: 2019-06-27 08:05:34
End at: 2019-06-27 08:06:04
Local clock offset: -7.446 ms
Remote clock offset: 0.062 ms


# Below is generated by plot.py at 2019-06-27 09:51:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.39 Mbit/s
95th percentile per-packet one-way delay: 23.211 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.82 Mbit/s
95th percentile per-packet one-way delay: 22.134 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.04 Mbit/s
95th percentile per-packet one-way delay: 21.607 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.06 Mbit/s
95th percentile per-packet one-way delay: 26.220 ms
Loss rate: 0.00%
```
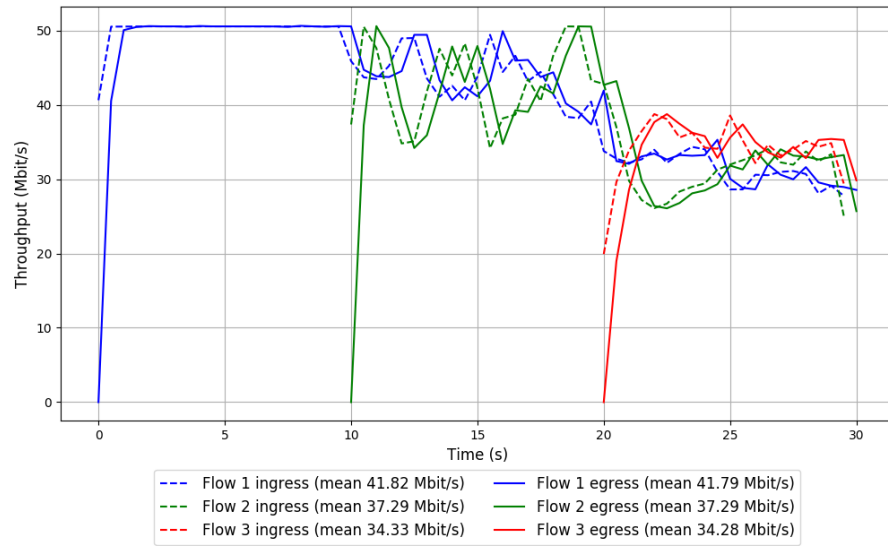
Run 2: Report of Sprout — Data Link

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```
Run 3: Statistics of Sprout

Start at: 2019-06-27 08:30:37
End at: 2019-06-27 08:31:07
Local clock offset: -7.444 ms
Remote clock offset: 0.202 ms


# Below is generated by plot.py at 2019-06-27 09:51:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.91 Mbit/s
95th percentile per-packet one-way delay: 23.098 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.79 Mbit/s
95th percentile per-packet one-way delay: 21.881 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.29 Mbit/s
95th percentile per-packet one-way delay: 23.628 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 34.28 Mbit/s
95th percentile per-packet one-way delay: 23.741 ms
Loss rate: 0.00%
```

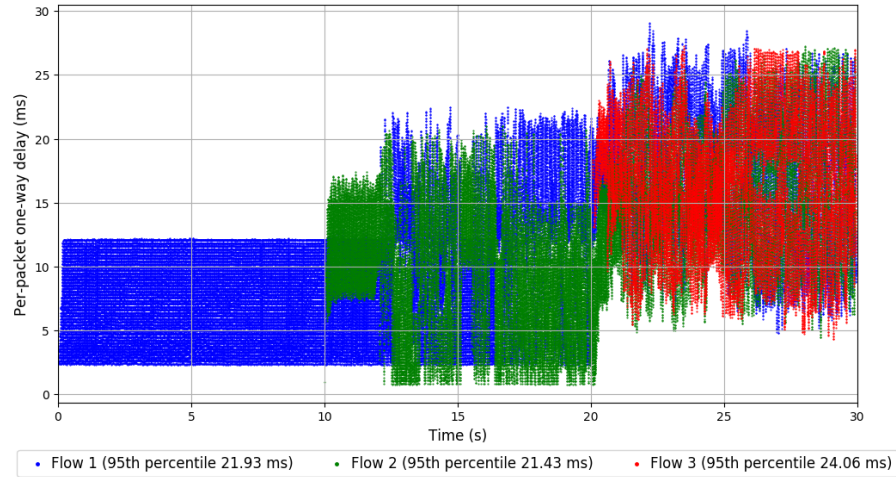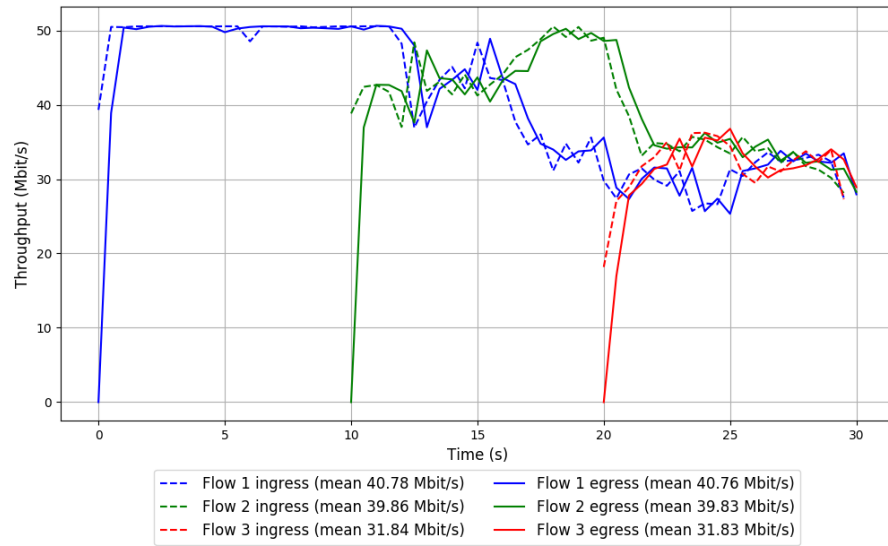Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2019-06-27 08:55:41
End at: 2019-06-27 08:56:11
Local clock offset: -6.852 ms
Remote clock offset: 0.322 ms


# Below is generated by plot.py at 2019-06-27 09:52:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.77 Mbit/s
95th percentile per-packet one-way delay: 22.388 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.76 Mbit/s
95th percentile per-packet one-way delay: 21.926 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.83 Mbit/s
95th percentile per-packet one-way delay: 21.425 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 31.83 Mbit/s
95th percentile per-packet one-way delay: 24.059 ms
Loss rate: 0.00%
```
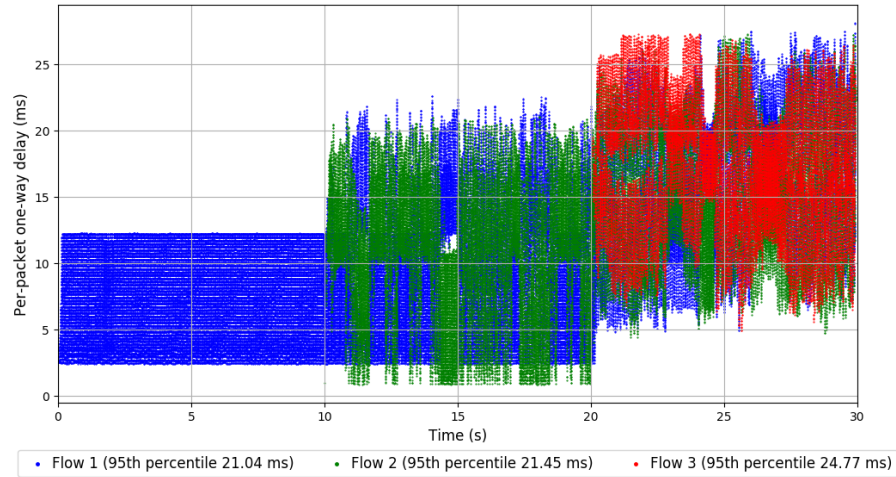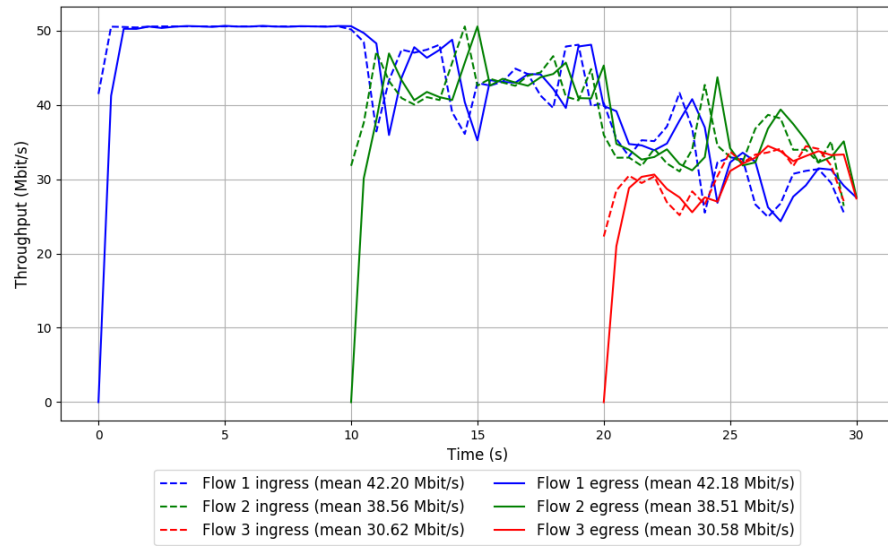
Run 4: Report of Sprout — Data Link

Flow 1 ingress (mean 40.78 Mbit/s) — Flow 1 egress (mean 40.76 Mbit/s)
Flow 2 ingress (mean 39.86 Mbit/s) — Flow 2 egress (mean 39.83 Mbit/s)
Flow 3 ingress (mean 31.84 Mbit/s) — Flow 3 egress (mean 31.83 Mbit/s)

Flow 1 (95th percentile 21.93 ms) • Flow 2 (95th percentile 21.43 ms) • Flow 3 (95th percentile 24.06 ms)

```
Run 5: Statistics of Sprout

Start at: 2019-06-27 09:20:44
End at: 2019-06-27 09:21:14
Local clock offset: -7.201 ms
Remote clock offset: 0.403 ms


# Below is generated by plot.py at 2019-06-27 09:52:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.90 Mbit/s
95th percentile per-packet one-way delay: 22.267 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 42.18 Mbit/s
95th percentile per-packet one-way delay: 21.036 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.51 Mbit/s
95th percentile per-packet one-way delay: 21.451 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.58 Mbit/s
95th percentile per-packet one-way delay: 24.767 ms
Loss rate: 0.00%
```
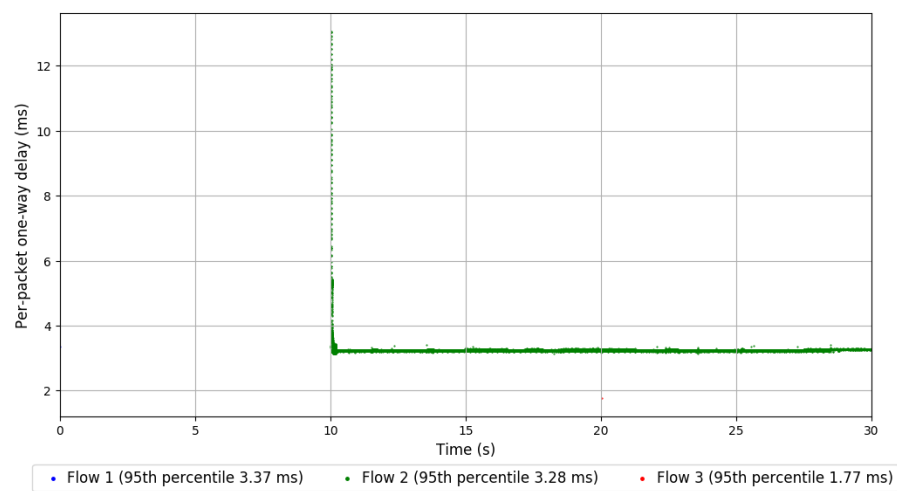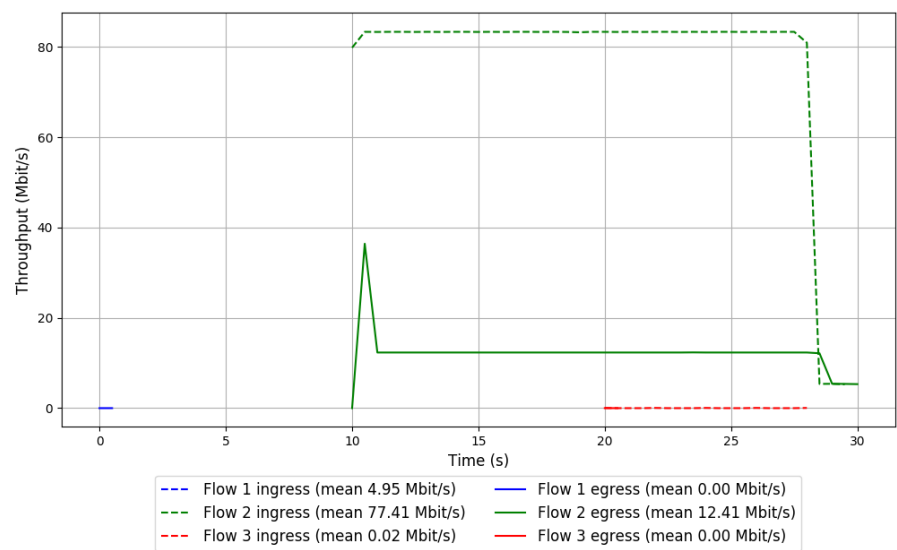
Run 5: Report of Sprout — Data Link

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

Start at: 2019-06-27 07:36:01
End at: 2019-06-27 07:36:32
Local clock offset: -6.483 ms
Remote clock offset: -0.213 ms


# Below is generated by plot.py at 2019-06-27 09:52:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.27 Mbit/s
95th percentile per-packet one-way delay: 3.284 ms
Loss rate: 83.97%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 3.366 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 12.41 Mbit/s
95th percentile per-packet one-way delay: 3.284 ms
Loss rate: 83.97%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 1.774 ms
Loss rate: 99.16%
```
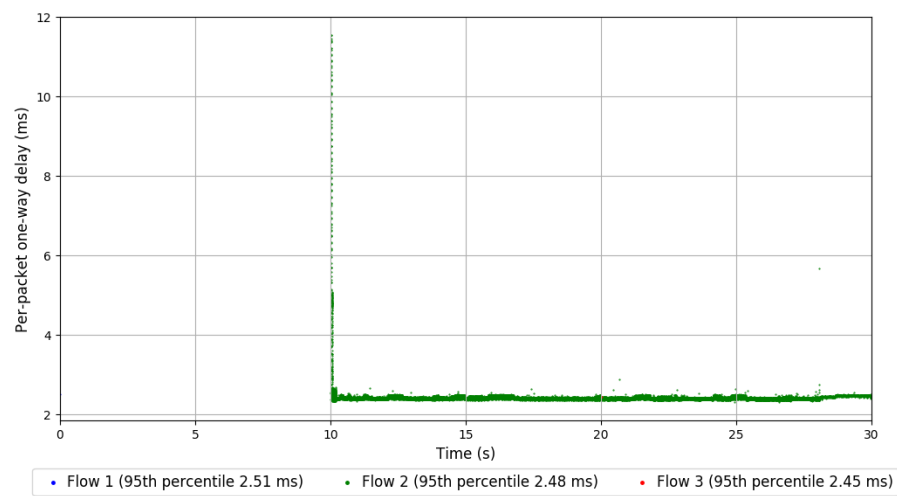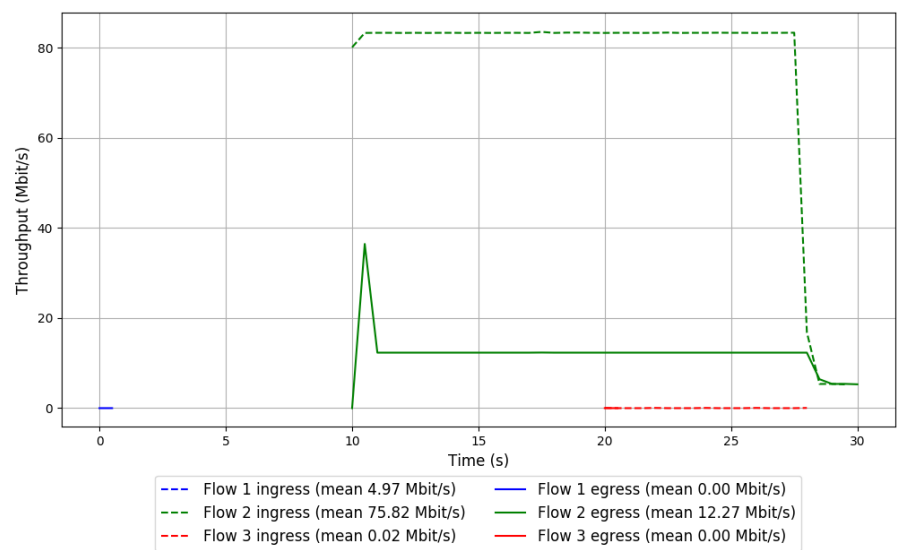
Run 1: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 4.95 Mbit/s)   Flow 1 egress (mean 0.00 Mbit/s)
Flow 2 ingress (mean 77.41 Mbit/s)   Flow 2 egress (mean 12.41 Mbit/s)
Flow 3 ingress (mean 0.02 Mbit/s)   Flow 3 egress (mean 0.00 Mbit/s)

Flow 1 (95th percentile 3.37 ms)   Flow 2 (95th percentile 3.28 ms)   Flow 3 (95th percentile 1.77 ms)

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

Start at: 2019-06-27 08:01:04
End at: 2019-06-27 08:01:34
Local clock offset: -6.264 ms
Remote clock offset: 0.029 ms


# Below is generated by plot.py at 2019-06-27 09:52:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.17 Mbit/s
95th percentile per-packet one-way delay: 2.477 ms
Loss rate: 83.82%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 2.511 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 12.27 Mbit/s
95th percentile per-packet one-way delay: 2.477 ms
Loss rate: 83.82%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 2.446 ms
Loss rate: 99.16%
```
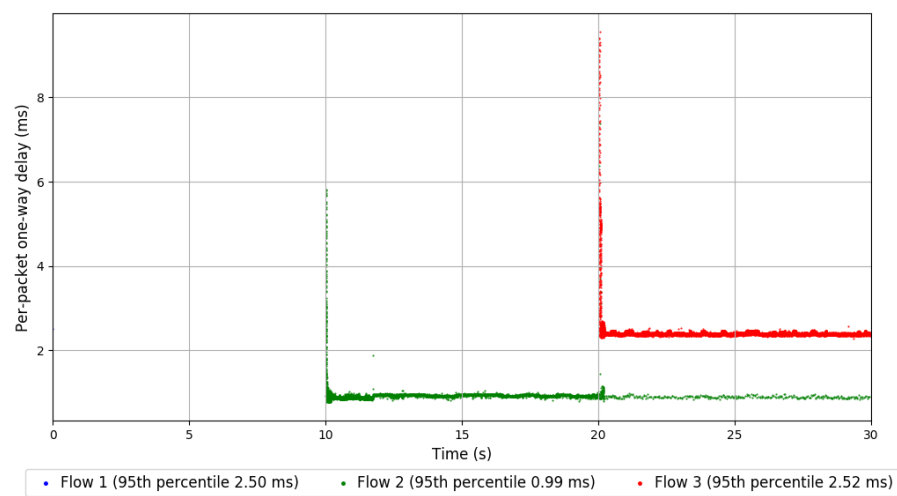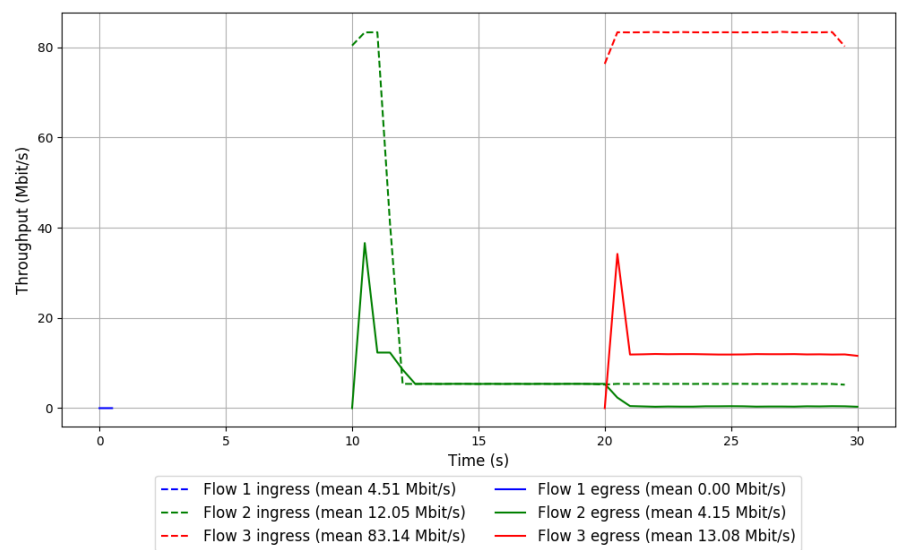
Run 2: Report of TaoVA-100x — Data Link

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

Start at: 2019-06-27 08:26:07
End at: 2019-06-27 08:26:37
Local clock offset: -6.463 ms
Remote clock offset: 0.203 ms


# Below is generated by plot.py at 2019-06-27 09:52:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.11 Mbit/s
95th percentile per-packet one-way delay: 2.471 ms
Loss rate: 80.07%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 2.505 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 4.15 Mbit/s
95th percentile per-packet one-way delay: 0.987 ms
Loss rate: 65.63%
-- Flow 3:
Average throughput: 13.08 Mbit/s
95th percentile per-packet one-way delay: 2.517 ms
Loss rate: 84.26%
```
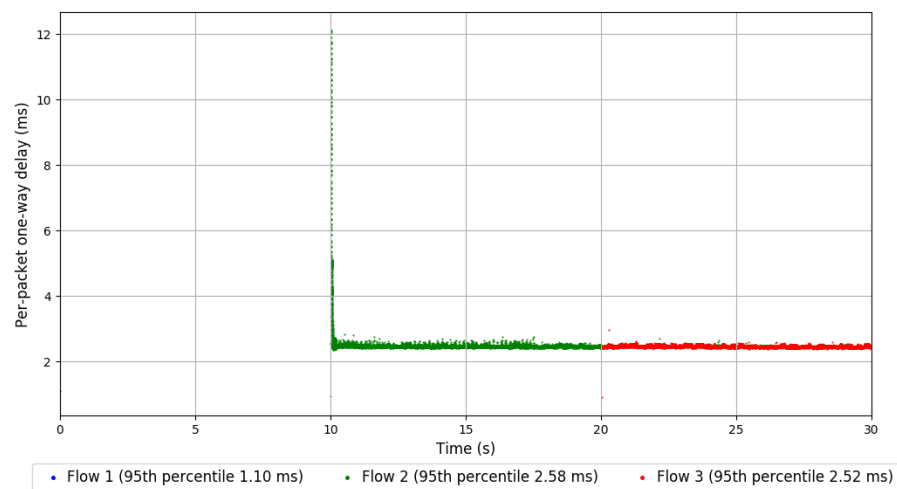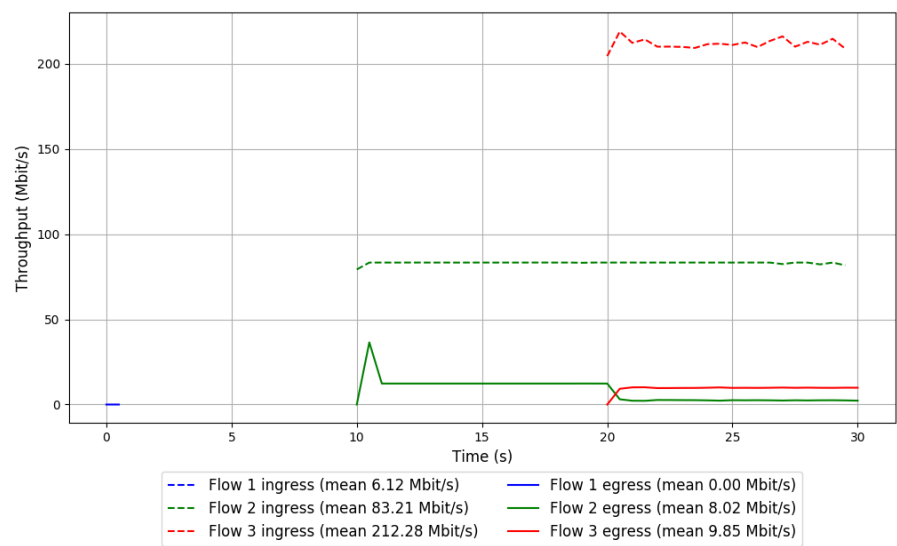
Run 3: Report of TaoVA-100x — Data Link

--- Flow 1 ingress (mean 4.51 Mbit/s)   —— Flow 1 egress (mean 0.00 Mbit/s)
--- Flow 2 ingress (mean 12.05 Mbit/s)   —— Flow 2 egress (mean 4.15 Mbit/s)
--- Flow 3 ingress (mean 83.14 Mbit/s)   —— Flow 3 egress (mean 13.08 Mbit/s)

• Flow 1 (95th percentile 2.50 ms)   • Flow 2 (95th percentile 0.99 ms)   • Flow 3 (95th percentile 2.52 ms)

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

Start at: 2019-06-27 08:51:09
End at: 2019-06-27 08:51:39
Local clock offset: -6.715 ms
Remote clock offset: 0.38 ms


# Below is generated by plot.py at 2019-06-27 09:52:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.62 Mbit/s
95th percentile per-packet one-way delay: 2.539 ms
Loss rate: 93.16%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 1.103 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 8.02 Mbit/s
95th percentile per-packet one-way delay: 2.576 ms
Loss rate: 90.36%
-- Flow 3:
Average throughput: 9.85 Mbit/s
95th percentile per-packet one-way delay: 2.521 ms
Loss rate: 95.36%
```
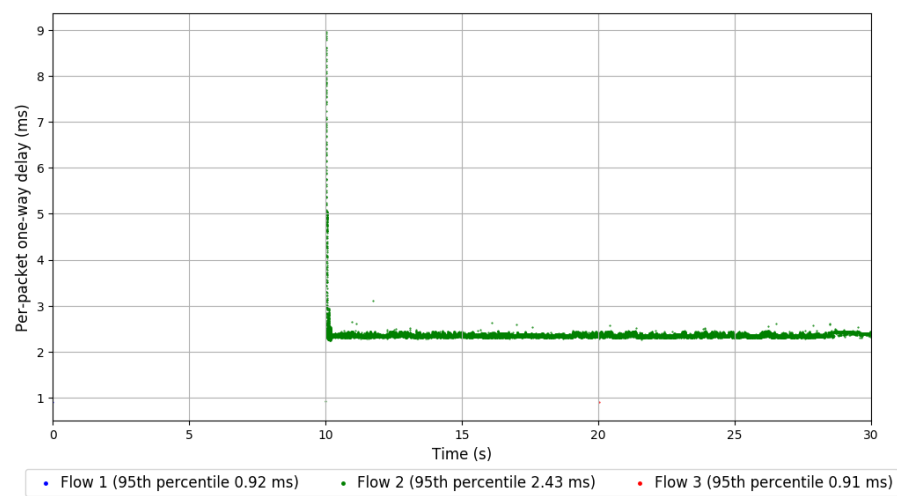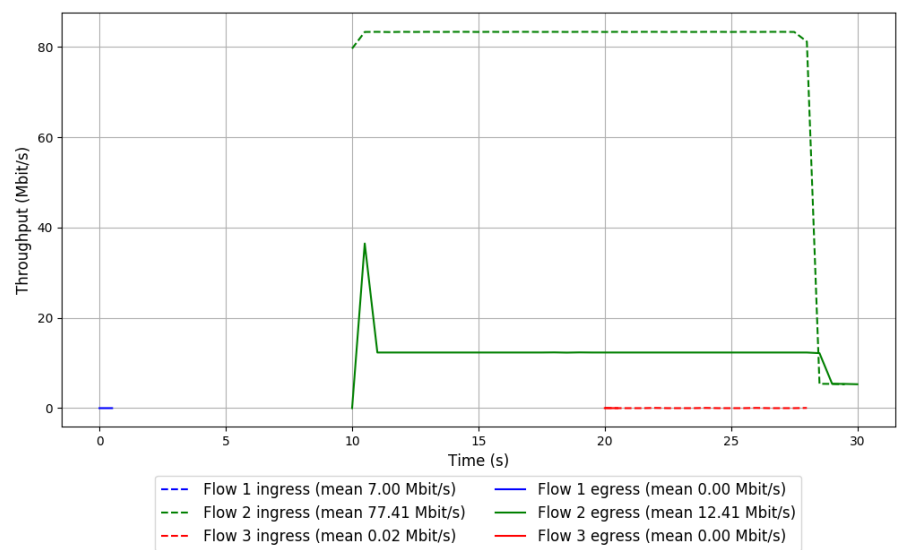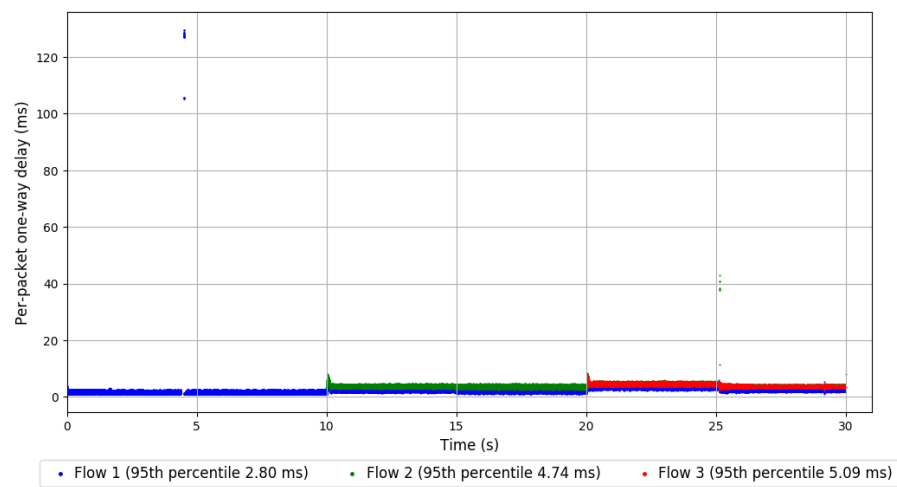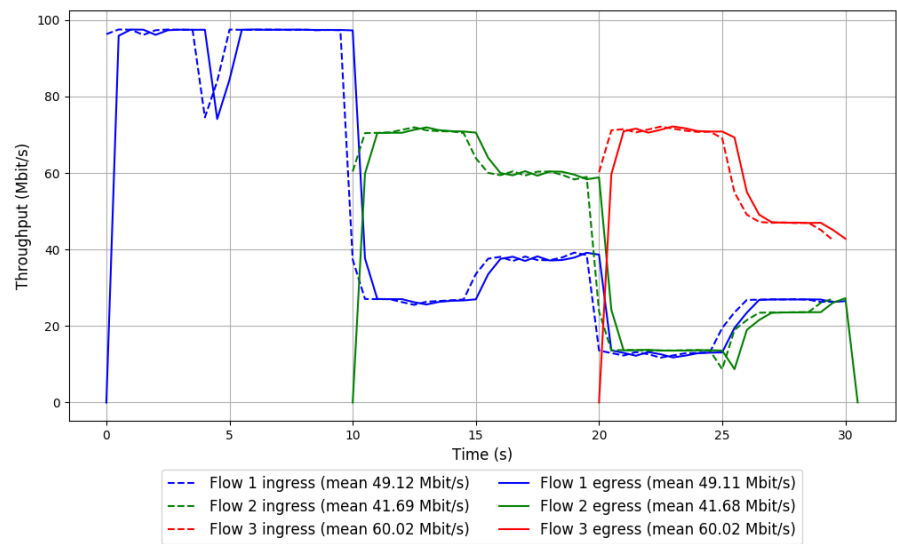
Run 4: Report of TaoVA-100x — Data Link

- - - Flow 1 ingress (mean 6.12 Mbit/s) — — Flow 1 egress (mean 0.00 Mbit/s)
- - - Flow 2 ingress (mean 83.21 Mbit/s) — — Flow 2 egress (mean 8.02 Mbit/s)
- - - Flow 3 ingress (mean 212.28 Mbit/s) — — Flow 3 egress (mean 9.85 Mbit/s)

- Flow 1 (95th percentile 1.10 ms)   • Flow 2 (95th percentile 2.58 ms)   • Flow 3 (95th percentile 2.52 ms)

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

Start at: 2019-06-27 09:16:13
End at: 2019-06-27 09:16:43
Local clock offset: -7.16 ms
Remote clock offset: 0.412 ms


# Below is generated by plot.py at 2019-06-27 09:52:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.27 Mbit/s
95th percentile per-packet one-way delay: 2.430 ms
Loss rate: 83.97%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 0.916 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 12.41 Mbit/s
95th percentile per-packet one-way delay: 2.430 ms
Loss rate: 83.97%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 0.911 ms
Loss rate: 99.16%
```

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

```
Run 1: Statistics of TCP Vegas

Start at: 2019-06-27 07:51:55
End at: 2019-06-27 07:52:25
Local clock offset: -6.093 ms
Remote clock offset: -0.112 ms


# Below is generated by plot.py at 2019-06-27 09:52:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.83 Mbit/s
95th percentile per-packet one-way delay: 4.833 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 49.11 Mbit/s
95th percentile per-packet one-way delay: 2.801 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 41.68 Mbit/s
95th percentile per-packet one-way delay: 4.743 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 60.02 Mbit/s
95th percentile per-packet one-way delay: 5.093 ms
Loss rate: 0.00%
```
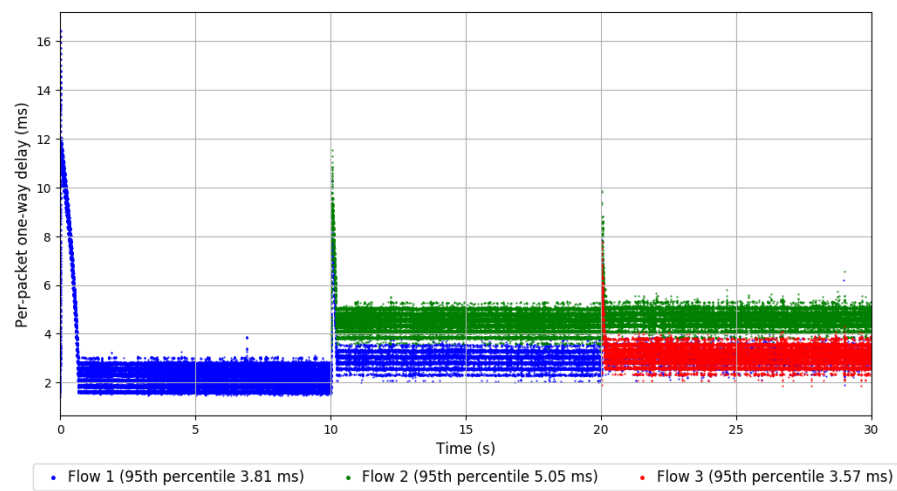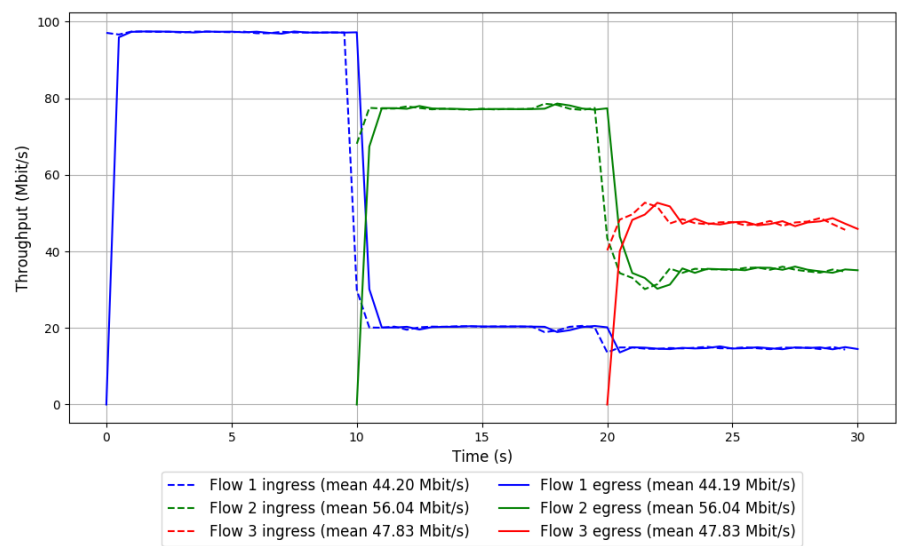
Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2019-06-27 08:16:58
End at: 2019-06-27 08:17:28
Local clock offset: -7.363 ms
Remote clock offset: 0.019 ms


# Below is generated by plot.py at 2019-06-27 09:52:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.42 Mbit/s
95th percentile per-packet one-way delay: 5.002 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 44.19 Mbit/s
95th percentile per-packet one-way delay: 3.809 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 56.04 Mbit/s
95th percentile per-packet one-way delay: 5.048 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 47.83 Mbit/s
95th percentile per-packet one-way delay: 3.568 ms
Loss rate: 0.00%
```
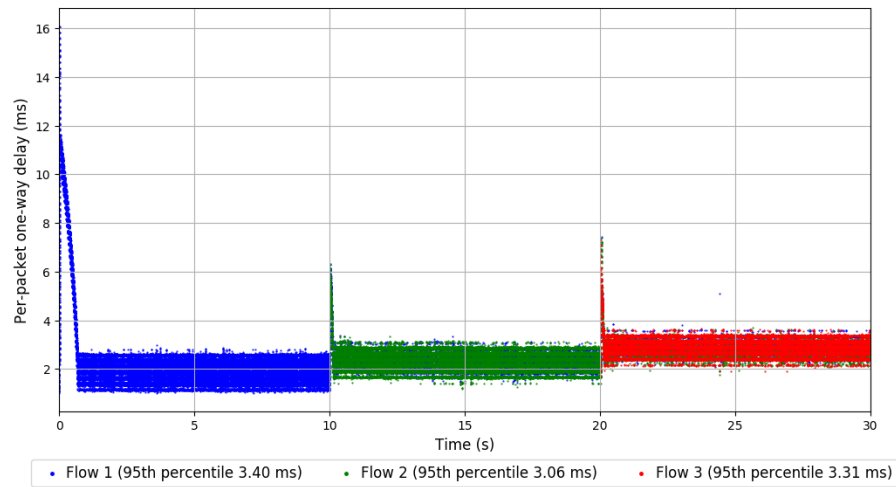
Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2019-06-27 08:42:00
End at: 2019-06-27 08:42:30
Local clock offset: -6.706 ms
Remote clock offset: 0.256 ms


# Below is generated by plot.py at 2019-06-27 09:52:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.50 Mbit/s
95th percentile per-packet one-way delay: 3.181 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 44.04 Mbit/s
95th percentile per-packet one-way delay: 3.405 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 49.56 Mbit/s
95th percentile per-packet one-way delay: 3.063 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 61.52 Mbit/s
95th percentile per-packet one-way delay: 3.307 ms
Loss rate: 0.00%
```
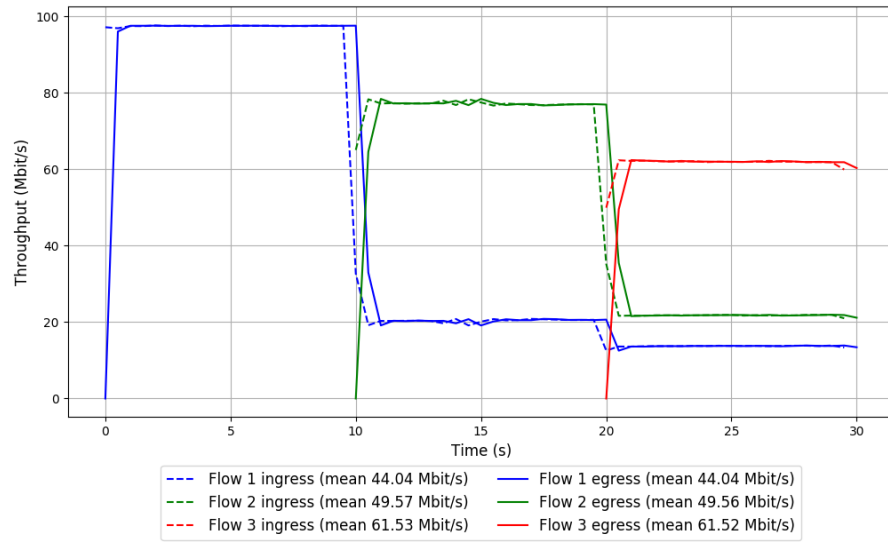
Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2019-06-27 09:07:04
End at: 2019-06-27 09:07:34
Local clock offset: -7.254 ms
Remote clock offset: 0.416 ms


# Below is generated by plot.py at 2019-06-27 09:52:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 4.645 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 49.19 Mbit/s
95th percentile per-packet one-way delay: 11.221 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 49.65 Mbit/s
95th percentile per-packet one-way delay: 4.384 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 45.76 Mbit/s
95th percentile per-packet one-way delay: 4.219 ms
Loss rate: 0.00%
```
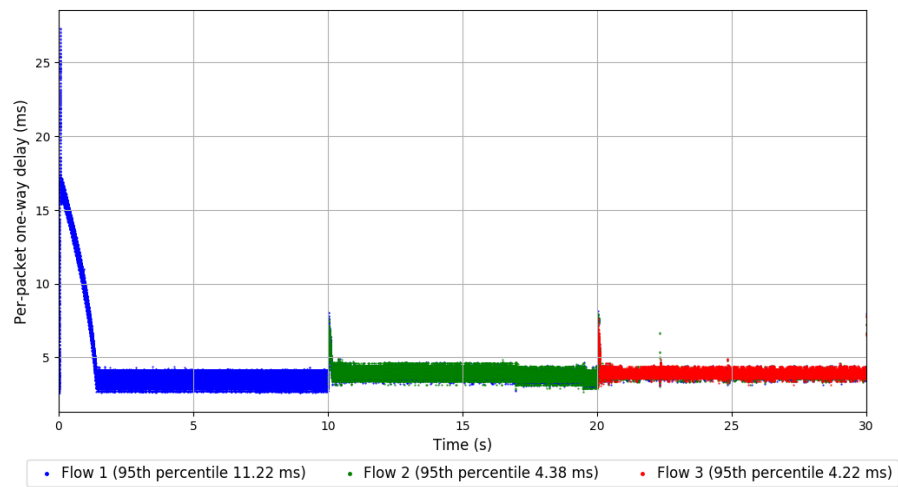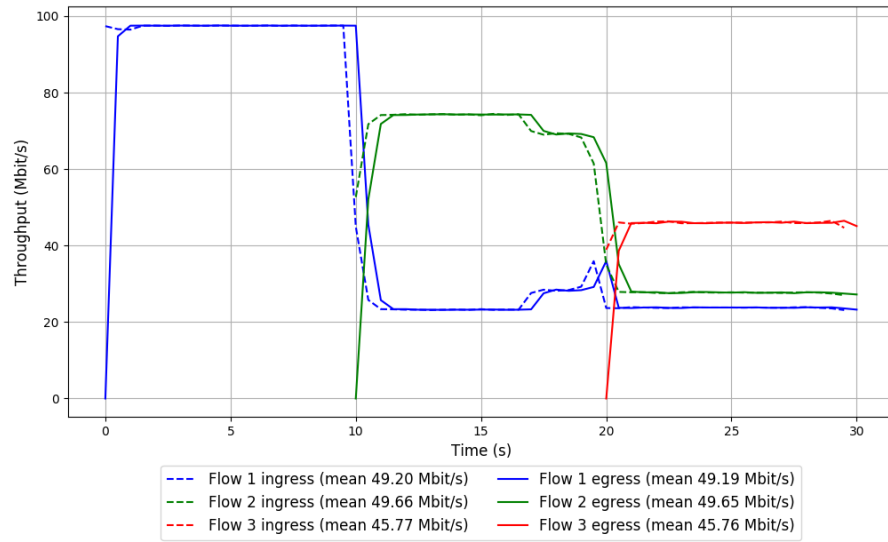
Run 4: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 49.20 Mbit/s) --- Flow 1 egress (mean 49.19 Mbit/s)
Flow 2 ingress (mean 49.66 Mbit/s) --- Flow 2 egress (mean 49.65 Mbit/s)
Flow 3 ingress (mean 45.77 Mbit/s) --- Flow 3 egress (mean 45.76 Mbit/s)

Flow 1 (95th percentile 11.22 ms) • Flow 2 (95th percentile 4.38 ms) • Flow 3 (95th percentile 4.22 ms)

Run 5: Statistics of TCP Vegas

Start at: 2019-06-27 09:32:06
End at: 2019-06-27 09:32:36
Local clock offset: -7.073 ms
Remote clock offset: 0.336 ms

Below is generated by plot.py at 2019-06-27 09:52:53
Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 5.149 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.30 Mbit/s
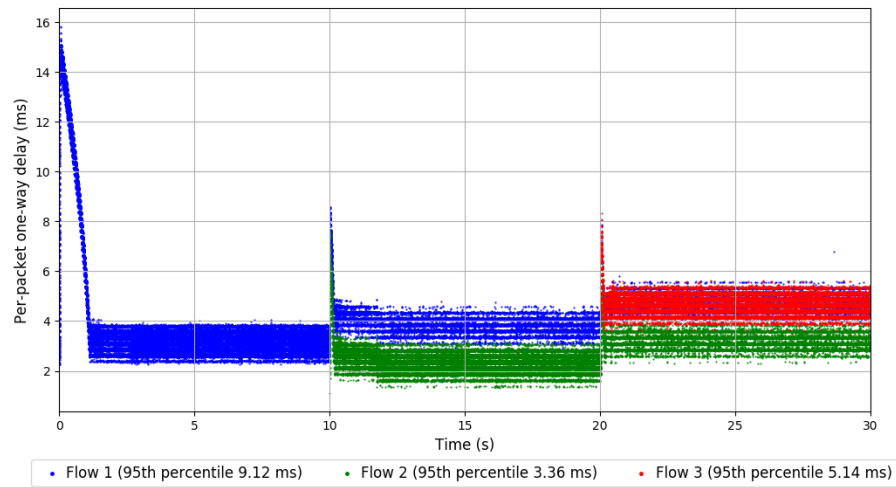95th percentile per-packet one-way delay: 9.123 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 46.23 Mbit/s
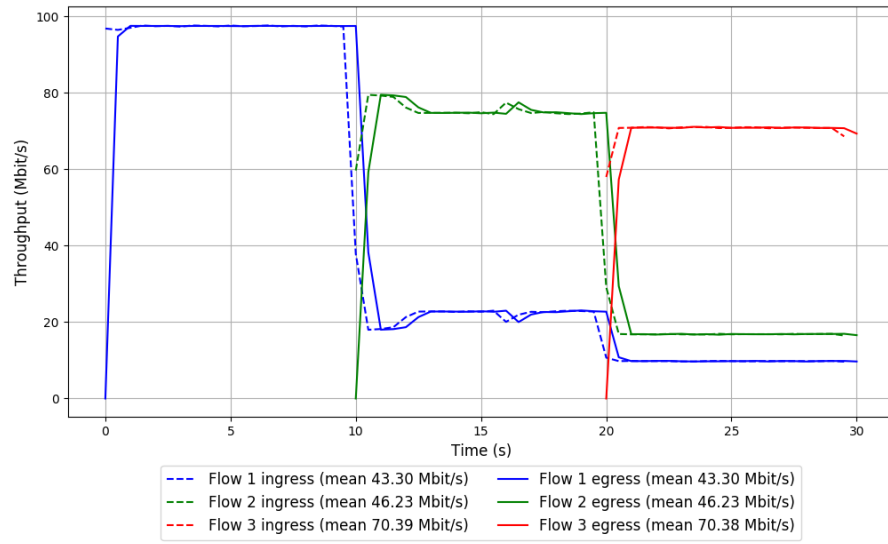95th percentile per-packet one-way delay: 3.363 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 70.38 Mbit/s
95th percentile per-packet one-way delay: 5.139 ms
Loss rate: 0.00%
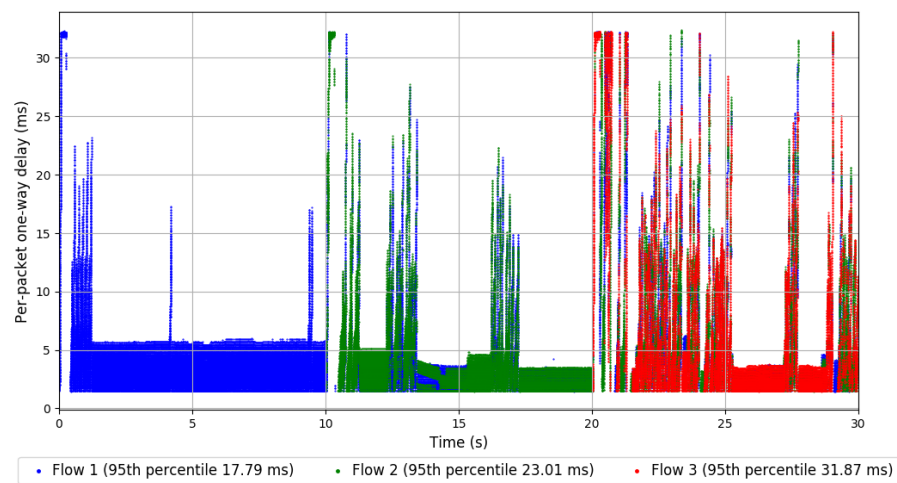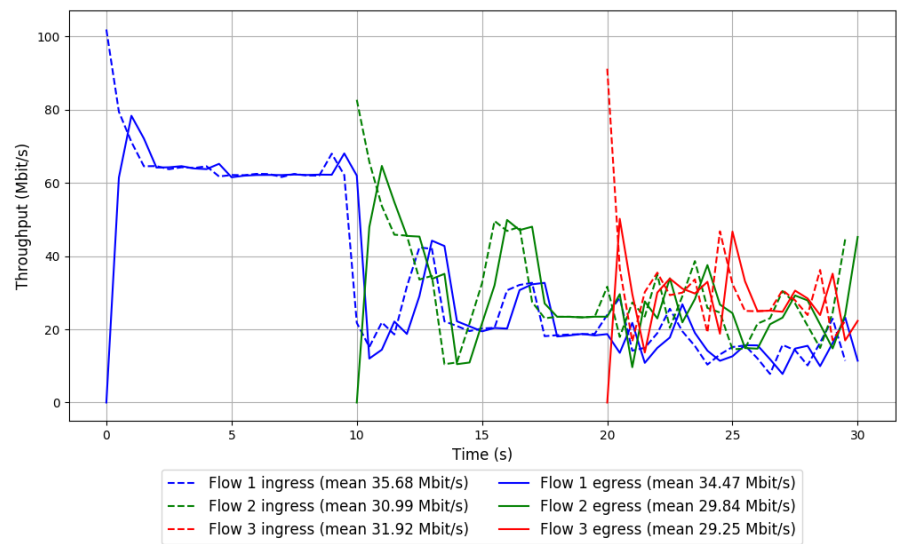
Run 5: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 43.30 Mbit/s)   Flow 1 egress (mean 43.30 Mbit/s)
Flow 2 ingress (mean 46.23 Mbit/s)   Flow 2 egress (mean 46.23 Mbit/s)
Flow 3 ingress (mean 70.39 Mbit/s)   Flow 3 egress (mean 70.38 Mbit/s)

Flow 1 (95th percentile 9.12 ms)   Flow 2 (95th percentile 3.36 ms)   Flow 3 (95th percentile 5.14 ms)

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```
Run 1: Statistics of Verus

Start at: 2019-06-27 07:41:39
End at: 2019-06-27 07:42:09
Local clock offset: -6.421 ms
Remote clock offset: -0.266 ms


# Below is generated by plot.py at 2019-06-27 09:52:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.03 Mbit/s
95th percentile per-packet one-way delay: 23.433 ms
Loss rate: 4.25%
-- Flow 1:
Average throughput: 34.47 Mbit/s
95th percentile per-packet one-way delay: 17.787 ms
Loss rate: 3.38%
-- Flow 2:
Average throughput: 29.84 Mbit/s
95th percentile per-packet one-way delay: 23.011 ms
Loss rate: 3.69%
-- Flow 3:
Average throughput: 29.25 Mbit/s
95th percentile per-packet one-way delay: 31.871 ms
Loss rate: 8.27%
```
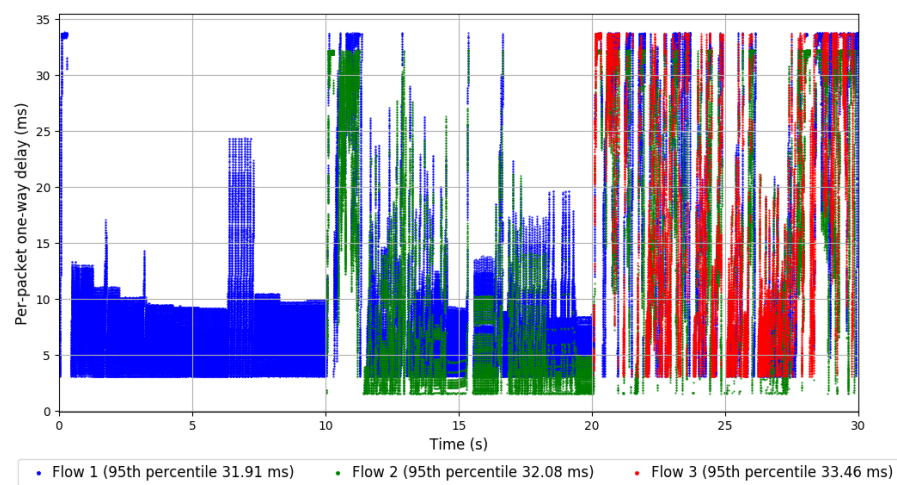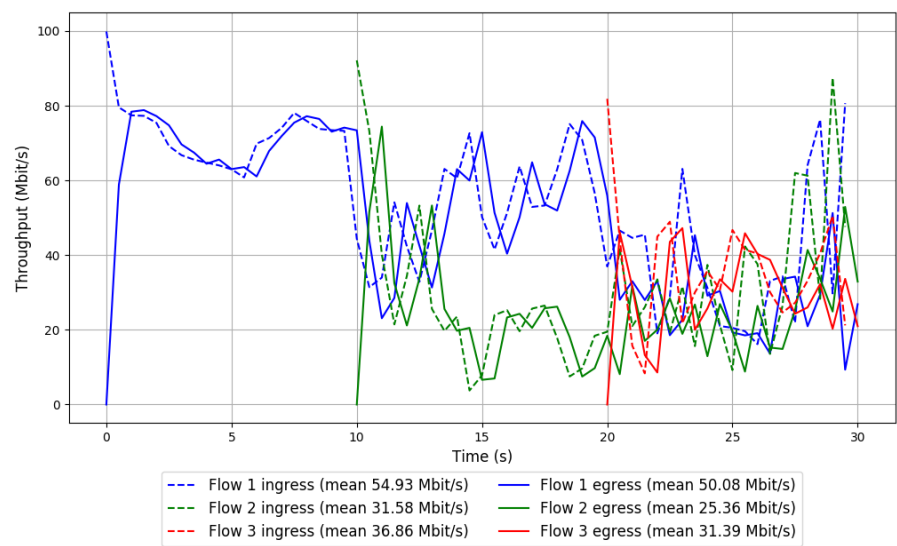
Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2019-06-27 08:06:41
End at: 2019-06-27 08:07:11
Local clock offset: -7.199 ms
Remote clock offset: 0.016 ms


# Below is generated by plot.py at 2019-06-27 09:53:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.12 Mbit/s
95th percentile per-packet one-way delay: 32.104 ms
Loss rate: 12.12%
-- Flow 1:
Average throughput: 50.08 Mbit/s
95th percentile per-packet one-way delay: 31.906 ms
Loss rate: 8.74%
-- Flow 2:
Average throughput: 25.36 Mbit/s
95th percentile per-packet one-way delay: 32.079 ms
Loss rate: 19.58%
-- Flow 3:
Average throughput: 31.39 Mbit/s
95th percentile per-packet one-way delay: 33.461 ms
Loss rate: 14.58%
```

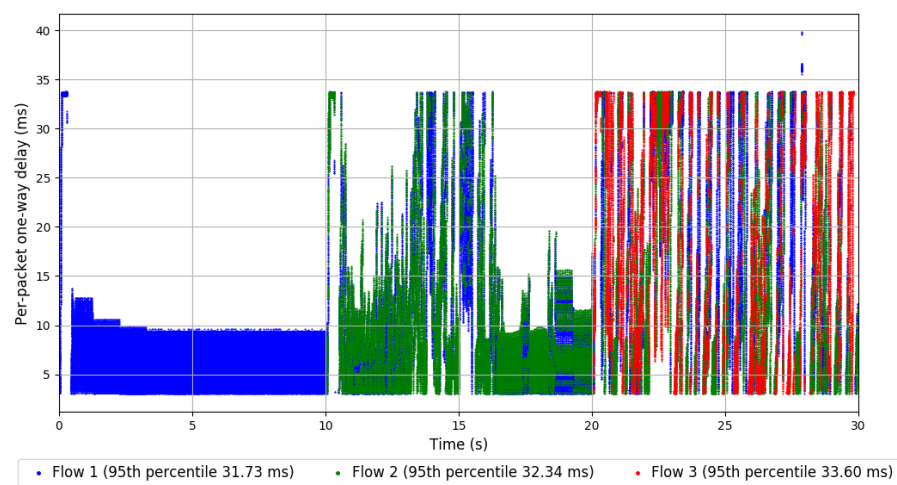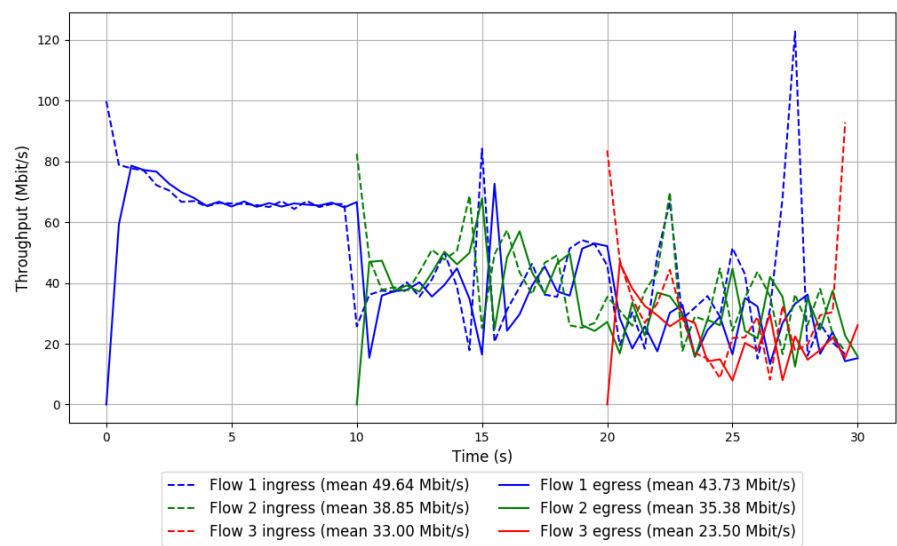Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2019-06-27 08:31:45
End at: 2019-06-27 08:32:15
Local clock offset: -7.236 ms
Remote clock offset: 0.218 ms

# Below is generated by plot.py at 2019-06-27 09:53:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.92 Mbit/s
95th percentile per-packet one-way delay: 32.629 ms
Loss rate: 13.07%
-- Flow 1:
Average throughput: 43.73 Mbit/s
95th percentile per-packet one-way delay: 31.726 ms
Loss rate: 11.88%
-- Flow 2:
Average throughput: 35.38 Mbit/s
95th percentile per-packet one-way delay: 32.338 ms
Loss rate: 8.92%
-- Flow 3:
Average throughput: 23.50 Mbit/s
95th percentile per-packet one-way delay: 33.604 ms
Loss rate: 28.60%
```
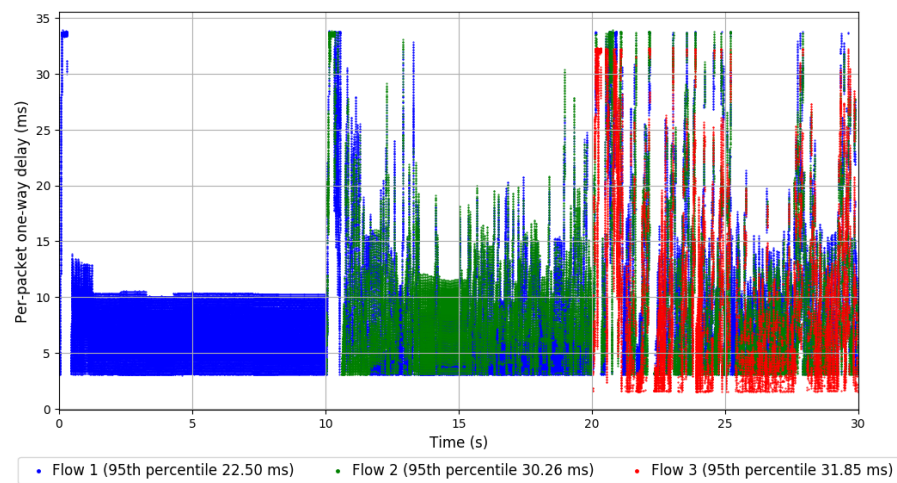
Run 3: Report of Verus — Data Link

Flow 1 ingress (mean 49.64 Mbit/s)   Flow 1 egress (mean 43.73 Mbit/s)
Flow 2 ingress (mean 38.85 Mbit/s)   Flow 2 egress (mean 35.38 Mbit/s)
Flow 3 ingress (mean 33.00 Mbit/s)   Flow 3 egress (mean 23.50 Mbit/s)

Flow 1 (95th percentile 31.73 ms)   Flow 2 (95th percentile 32.34 ms)   Flow 3 (95th percentile 33.60 ms)

200

```
Run 4: Statistics of Verus

Start at: 2019-06-27 08:56:48
End at: 2019-06-27 08:57:18
Local clock offset: -7.668 ms
Remote clock offset: 0.357 ms


# Below is generated by plot.py at 2019-06-27 09:53:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.57 Mbit/s
95th percentile per-packet one-way delay: 26.483 ms
Loss rate: 3.75%
-- Flow 1:
Average throughput: 48.60 Mbit/s
95th percentile per-packet one-way delay: 22.502 ms
Loss rate: 2.66%
-- Flow 2:
Average throughput: 30.90 Mbit/s
95th percentile per-packet one-way delay: 30.260 ms
Loss rate: 4.32%
-- Flow 3:
Average throughput: 22.33 Mbit/s
95th percentile per-packet one-way delay: 31.846 ms
Loss rate: 8.91%
```
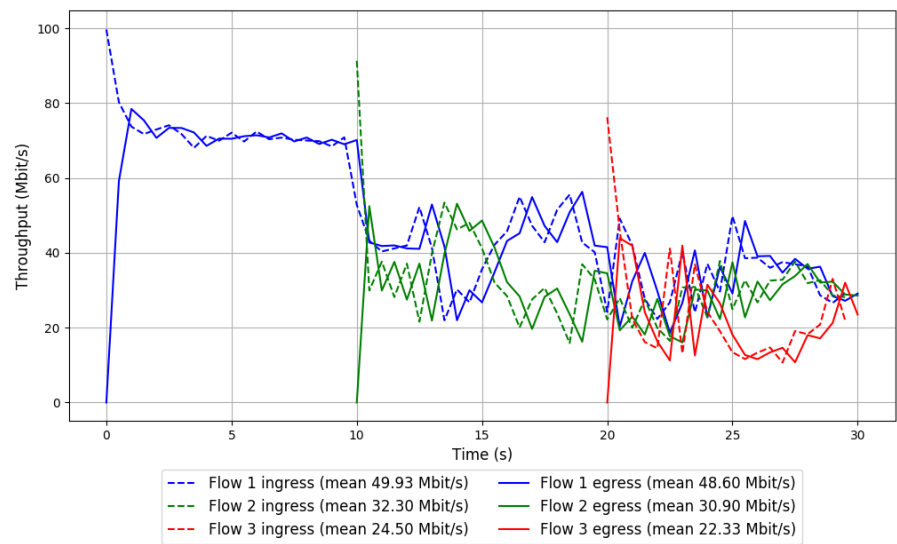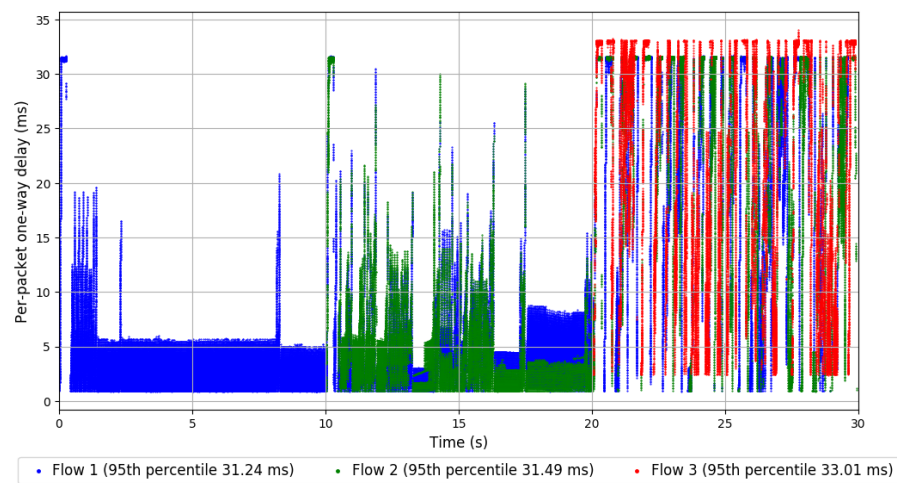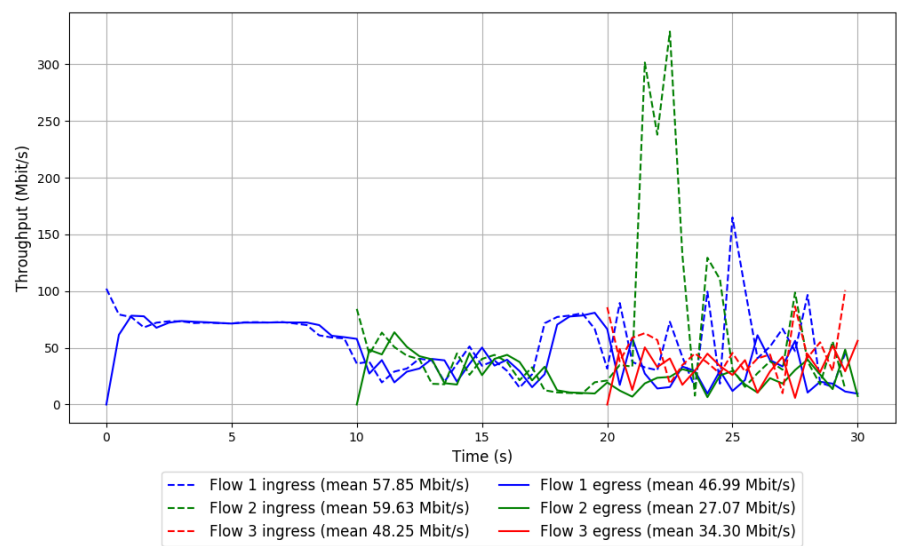
Run 4: Report of Verus — Data Link

Flow 1 ingress (mean 49.93 Mbit/s) --- Flow 1 egress (mean 48.60 Mbit/s)
Flow 2 ingress (mean 32.30 Mbit/s) --- Flow 2 egress (mean 30.90 Mbit/s)
Flow 3 ingress (mean 24.50 Mbit/s) --- Flow 3 egress (mean 22.33 Mbit/s)

Flow 1 (95th percentile 22.50 ms) Flow 2 (95th percentile 30.26 ms) Flow 3 (95th percentile 31.85 ms)

```
Run 5: Statistics of Verus

Start at: 2019-06-27 09:21:51
End at: 2019-06-27 09:22:21
Local clock offset: -7.199 ms
Remote clock offset: 0.476 ms


# Below is generated by plot.py at 2019-06-27 09:53:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.75 Mbit/s
95th percentile per-packet one-way delay: 31.514 ms
Loss rate: 32.75%
-- Flow 1:
Average throughput: 46.99 Mbit/s
95th percentile per-packet one-way delay: 31.242 ms
Loss rate: 18.68%
-- Flow 2:
Average throughput: 27.07 Mbit/s
95th percentile per-packet one-way delay: 31.487 ms
Loss rate: 54.60%
-- Flow 3:
Average throughput: 34.30 Mbit/s
95th percentile per-packet one-way delay: 33.008 ms
Loss rate: 28.74%
```

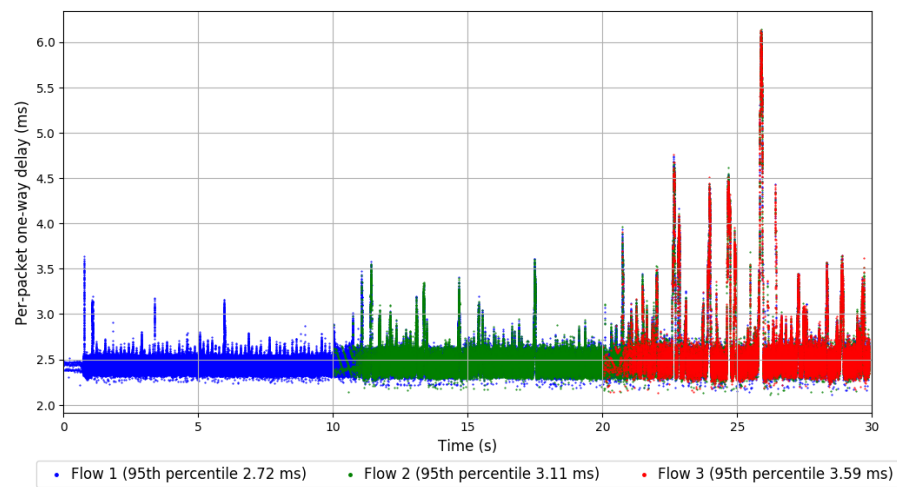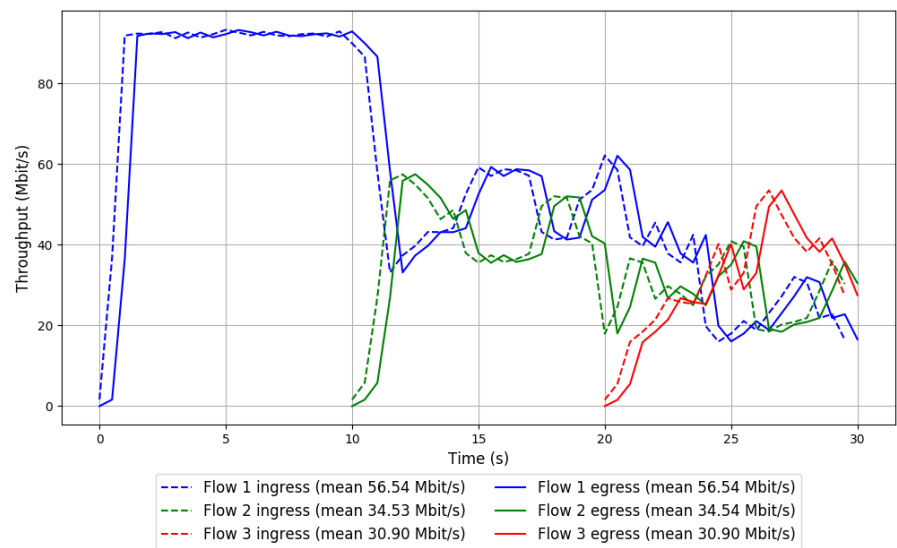## Run 5: Report of Verus — Data Link

```
Run 1: Statistics of PCC-Vivace

Start at: 2019-06-27 07:56:24
End at: 2019-06-27 07:56:54
Local clock offset: -6.159 ms
Remote clock offset: -0.073 ms


# Below is generated by plot.py at 2019-06-27 09:53:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.72 Mbit/s
95th percentile per-packet one-way delay: 2.931 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 56.54 Mbit/s
95th percentile per-packet one-way delay: 2.718 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 34.54 Mbit/s
95th percentile per-packet one-way delay: 3.106 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.90 Mbit/s
95th percentile per-packet one-way delay: 3.593 ms
Loss rate: 0.00%
```
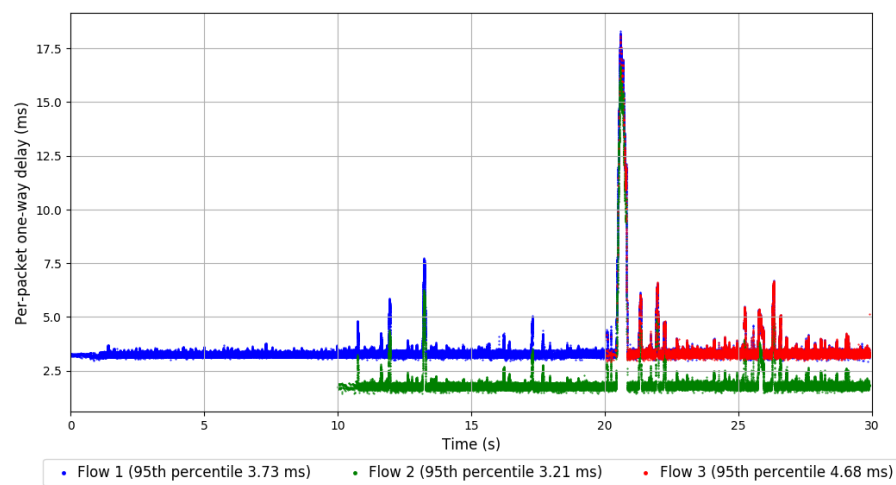
Run 1: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 56.54 Mbit/s) --- Flow 1 egress (mean 56.54 Mbit/s)
Flow 2 ingress (mean 34.53 Mbit/s) --- Flow 2 egress (mean 34.54 Mbit/s)
Flow 3 ingress (mean 30.90 Mbit/s) --- Flow 3 egress (mean 30.90 Mbit/s)

Flow 1 (95th percentile 2.72 ms)   Flow 2 (95th percentile 3.11 ms)   Flow 3 (95th percentile 3.59 ms)

```
Run 2: Statistics of PCC-Vivace

Start at: 2019-06-27 08:21:27
End at: 2019-06-27 08:21:57
Local clock offset: -7.309 ms
Remote clock offset: 0.214 ms


# Below is generated by plot.py at 2019-06-27 09:53:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.03 Mbit/s
95th percentile per-packet one-way delay: 3.799 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 58.57 Mbit/s
95th percentile per-packet one-way delay: 3.725 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 27.94 Mbit/s
95th percentile per-packet one-way delay: 3.205 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.93 Mbit/s
95th percentile per-packet one-way delay: 4.683 ms
Loss rate: 0.00%
```
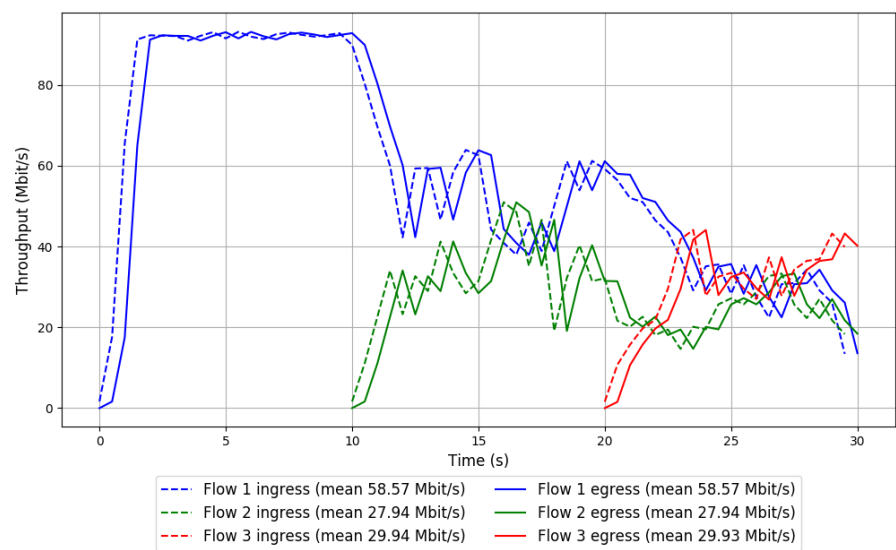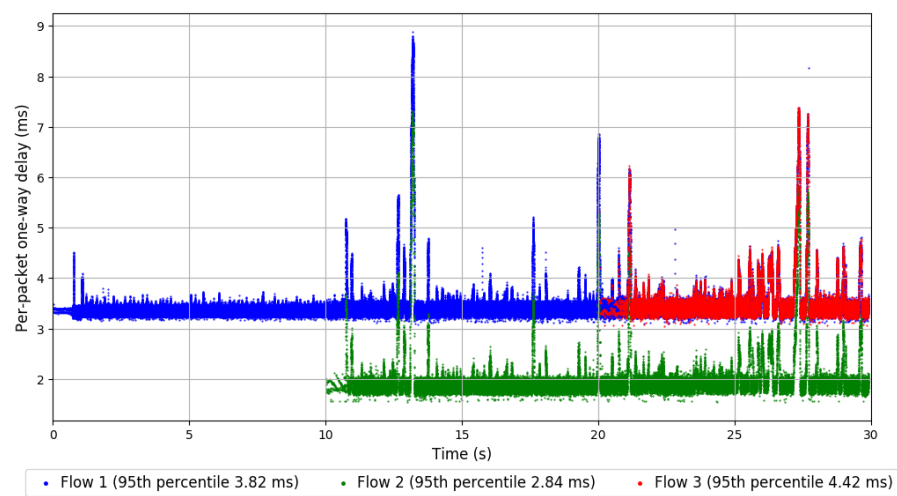
Run 2: Report of PCC-Vivace — Data Link

```
Run 3: Statistics of PCC-Vivace

Start at: 2019-06-27 08:46:29
End at: 2019-06-27 08:46:59
Local clock offset: -7.513 ms
Remote clock offset: 0.256 ms


# Below is generated by plot.py at 2019-06-27 09:53:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.55 Mbit/s
95th percentile per-packet one-way delay: 3.907 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 63.17 Mbit/s
95th percentile per-packet one-way delay: 3.817 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 25.71 Mbit/s
95th percentile per-packet one-way delay: 2.837 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 28.12 Mbit/s
95th percentile per-packet one-way delay: 4.423 ms
Loss rate: 0.00%
```
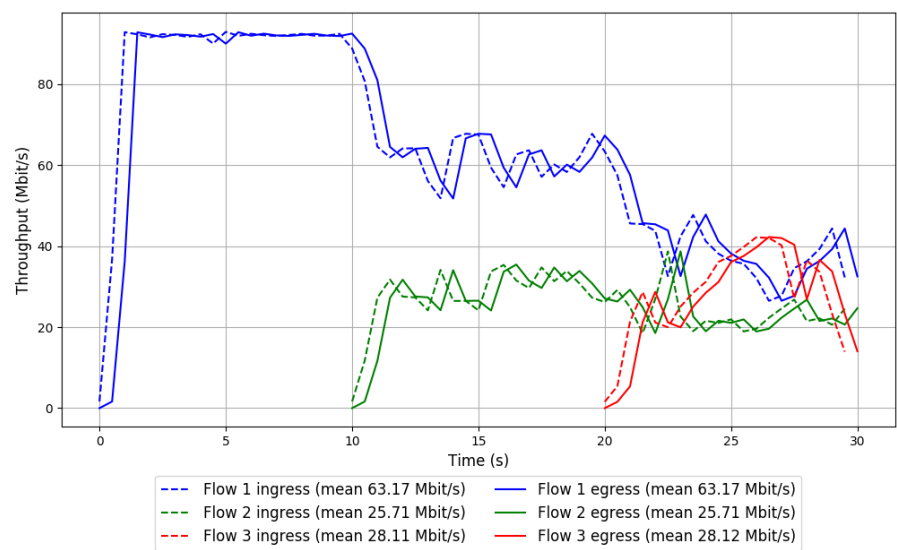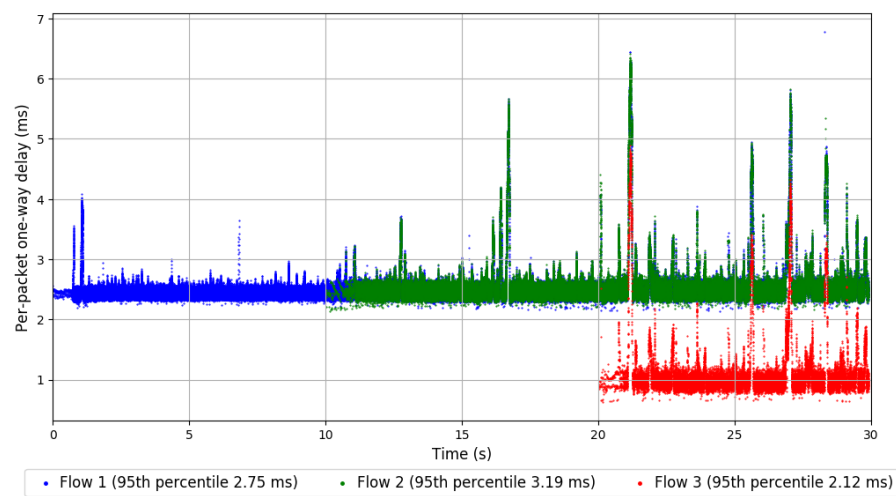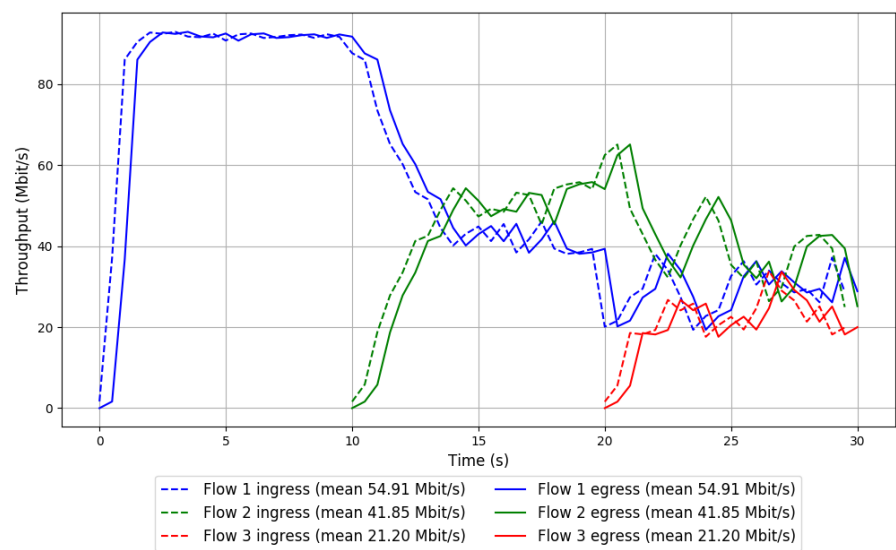
Run 3: Report of PCC-Vivace — Data Link

- - - Flow 1 ingress (mean 63.17 Mbit/s) ——— Flow 1 egress (mean 63.17 Mbit/s)
- - - Flow 2 ingress (mean 25.71 Mbit/s) ——— Flow 2 egress (mean 25.71 Mbit/s)
- - - Flow 3 ingress (mean 28.11 Mbit/s) ——— Flow 3 egress (mean 28.12 Mbit/s)

- Flow 1 (95th percentile 3.82 ms) • Flow 2 (95th percentile 2.84 ms) • Flow 3 (95th percentile 4.42 ms)

```
Run 4: Statistics of PCC-Vivace

Start at: 2019-06-27 09:11:33
End at: 2019-06-27 09:12:03
Local clock offset: -7.085 ms
Remote clock offset: 0.46 ms


# Below is generated by plot.py at 2019-06-27 09:53:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.75 Mbit/s
95th percentile per-packet one-way delay: 2.869 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.91 Mbit/s
95th percentile per-packet one-way delay: 2.748 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 41.85 Mbit/s
95th percentile per-packet one-way delay: 3.186 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 21.20 Mbit/s
95th percentile per-packet one-way delay: 2.123 ms
Loss rate: 0.00%
```
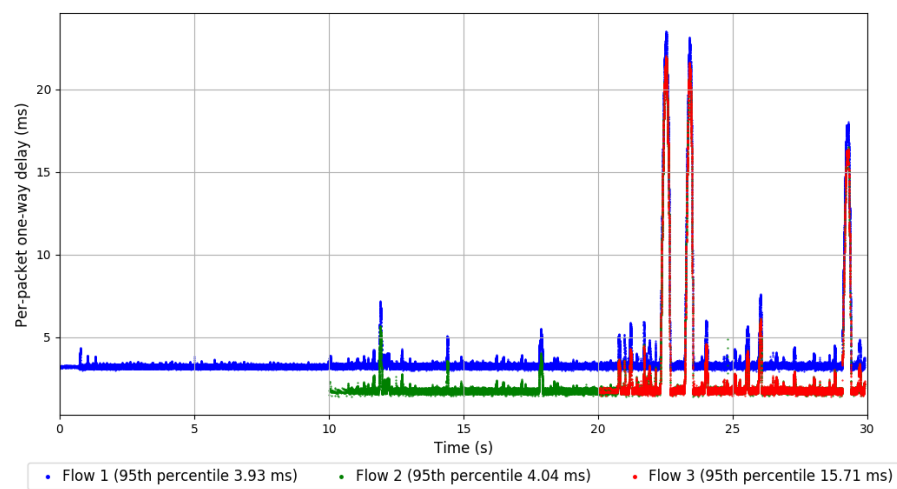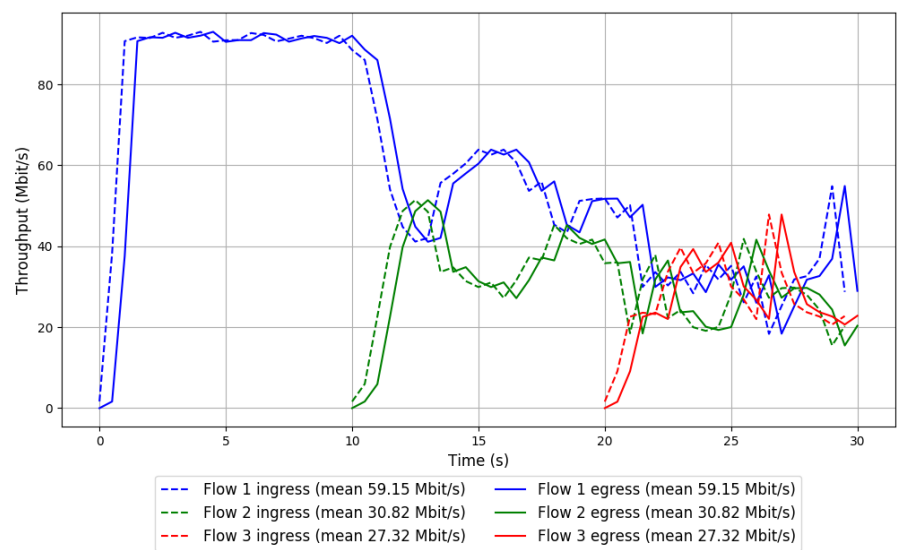
Run 4: Report of PCC-Vivace — Data Link

```
Run 5: Statistics of PCC-Vivace

Start at: 2019-06-27 09:36:35
End at: 2019-06-27 09:37:05
Local clock offset: -7.87 ms
Remote clock offset: 0.428 ms


# Below is generated by plot.py at 2019-06-27 09:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.67 Mbit/s
95th percentile per-packet one-way delay: 4.321 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 59.15 Mbit/s
95th percentile per-packet one-way delay: 3.931 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 30.82 Mbit/s
95th percentile per-packet one-way delay: 4.038 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 27.32 Mbit/s
95th percentile per-packet one-way delay: 15.705 ms
Loss rate: 0.00%
```

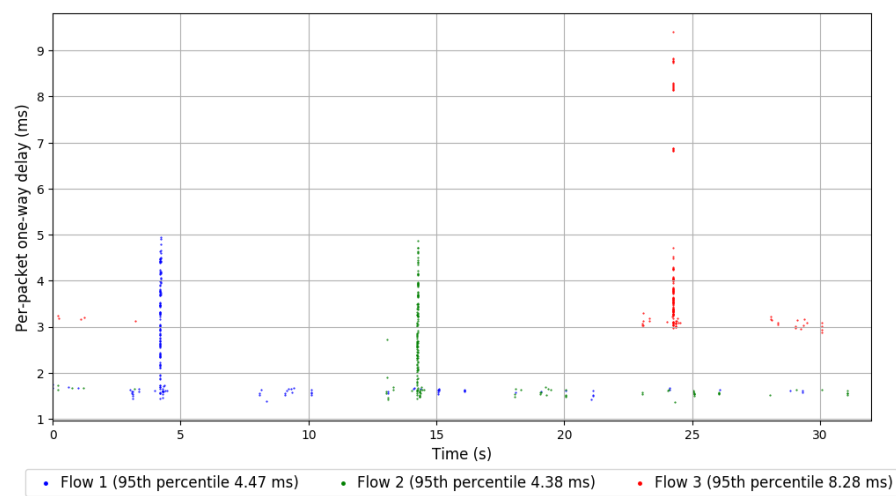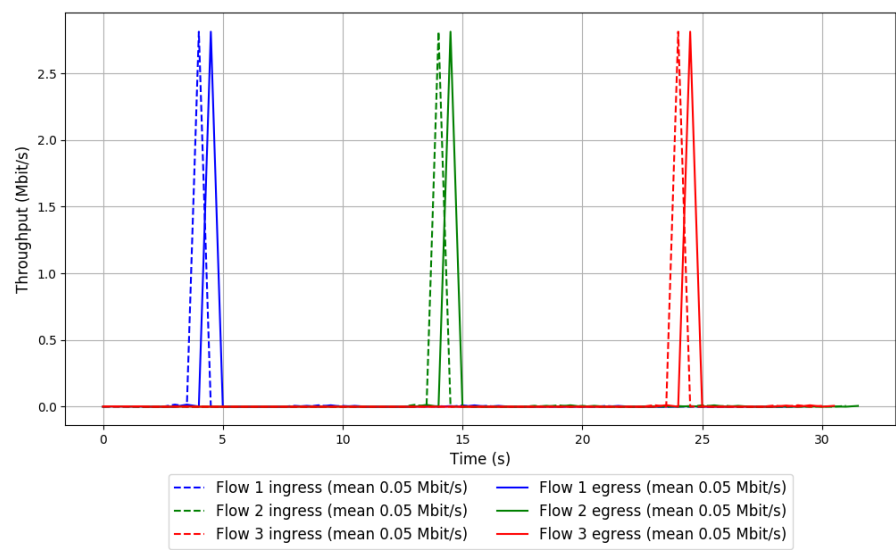## Run 5: Report of PCC-Vivace — Data Link

```
Run 1: Statistics of WebRTC media

Start at: 2019-06-27 07:39:26
End at: 2019-06-27 07:39:56
Local clock offset: -6.416 ms
Remote clock offset: -0.254 ms


# Below is generated by plot.py at 2019-06-27 09:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 4.715 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.466 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.382 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 8.276 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2019-06-27 08:04:28
End at: 2019-06-27 08:04:58
Local clock offset: -7.36 ms
Remote clock offset: 0.063 ms


# Below is generated by plot.py at 2019-06-27 09:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 4.473 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.453 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 3.989 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.739 ms
Loss rate: 0.00%
```
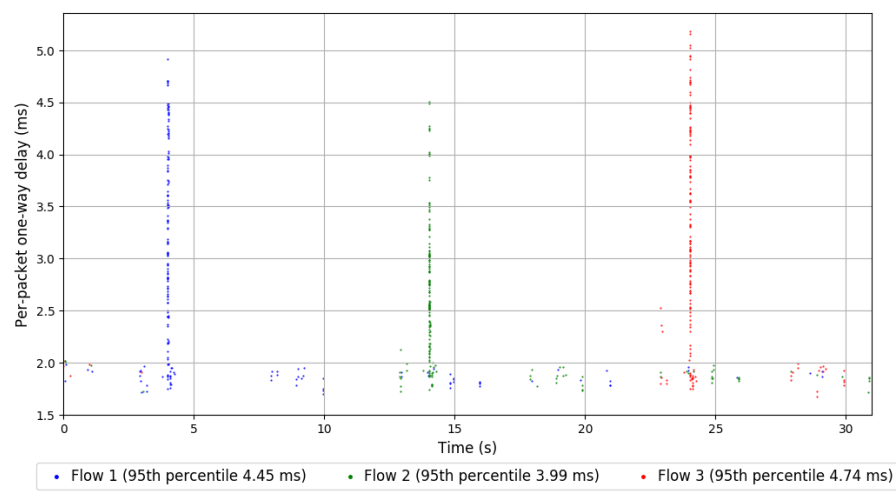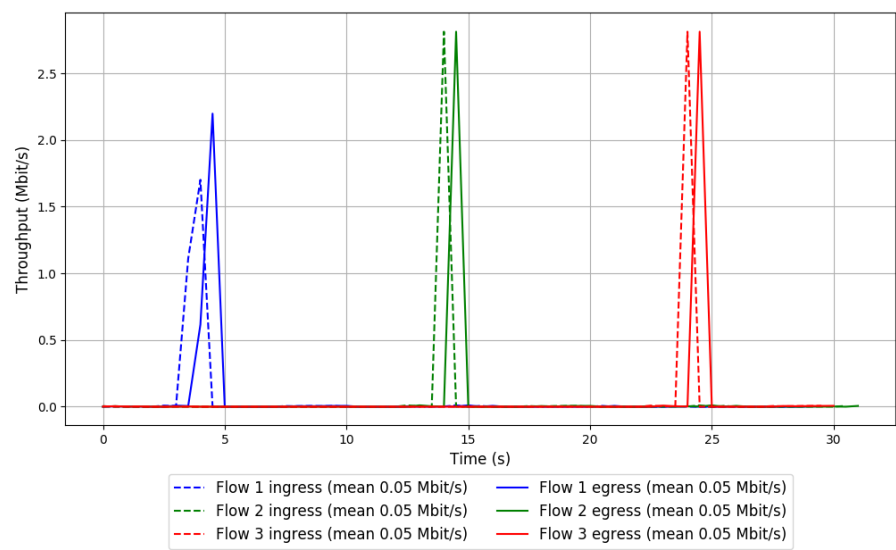
Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2019-06-27 08:29:32
End at: 2019-06-27 08:30:02
Local clock offset: -7.227 ms
Remote clock offset: 0.173 ms


# Below is generated by plot.py at 2019-06-27 09:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 4.244 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.215 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.245 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.370 ms
Loss rate: 0.00%
```
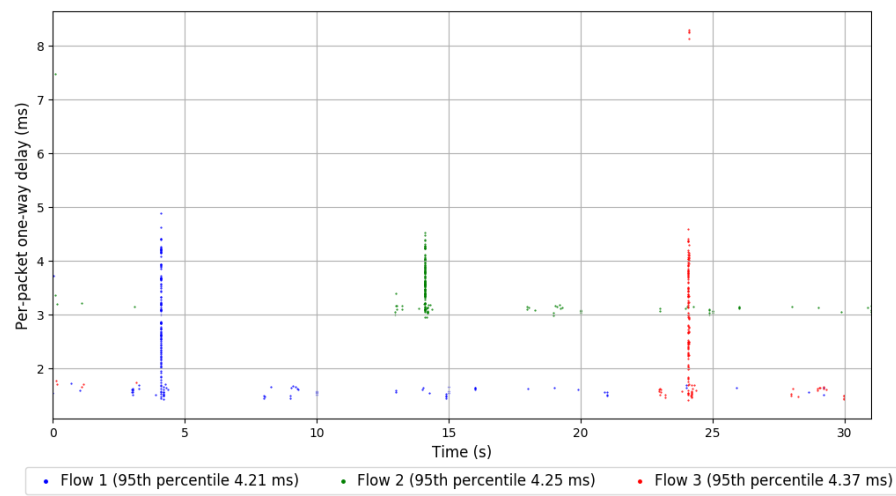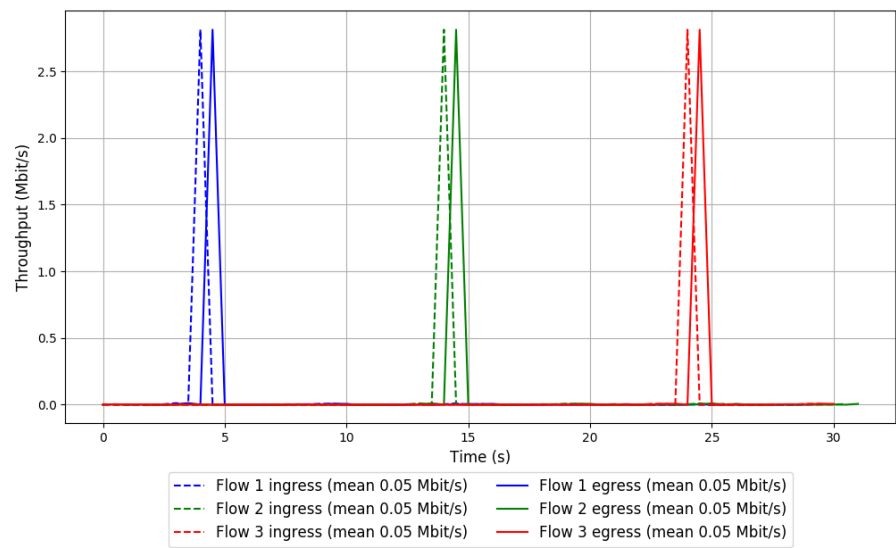
Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2019-06-27 08:54:35
End at: 2019-06-27 08:55:05
Local clock offset: -7.528 ms
Remote clock offset: 0.359 ms


# Below is generated by plot.py at 2019-06-27 09:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 5.387 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 7.271 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.585 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.573 ms
Loss rate: 0.00%
```
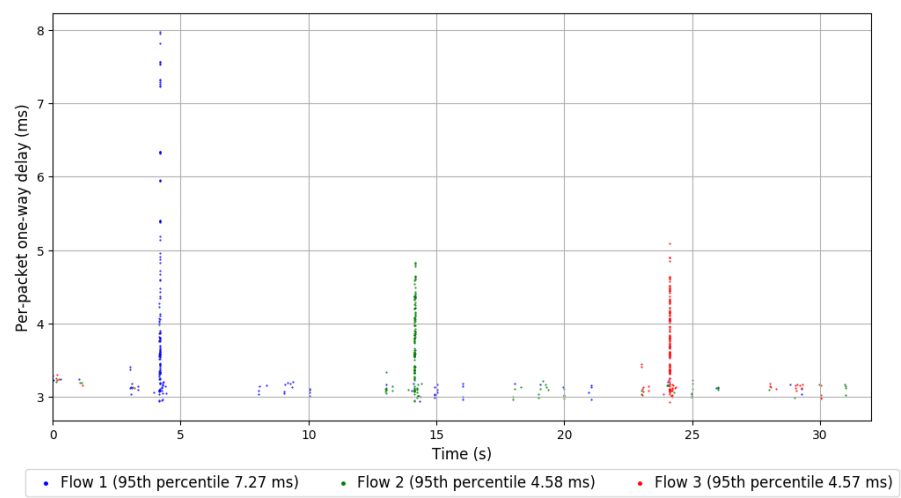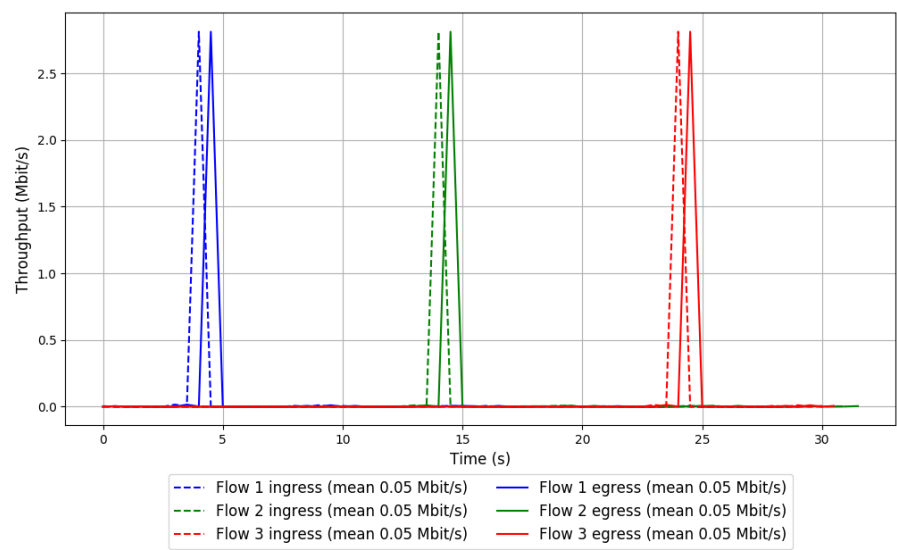
Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2019-06-27 09:19:38
End at: 2019-06-27 09:20:08
Local clock offset: -8.224 ms
Remote clock offset: 0.431 ms


# Below is generated by plot.py at 2019-06-27 09:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 7.499 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 9.081 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.143 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 5.888 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link