Pantheon Report

Generated at 2019-01-22 04:57:22 (UTC).

Data path: Colombia on p4p1 (*remote*) →AWS Brazil 2 on ens5 (*local*).

Repeated the test of 21 congestion control schemes 5 times.

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

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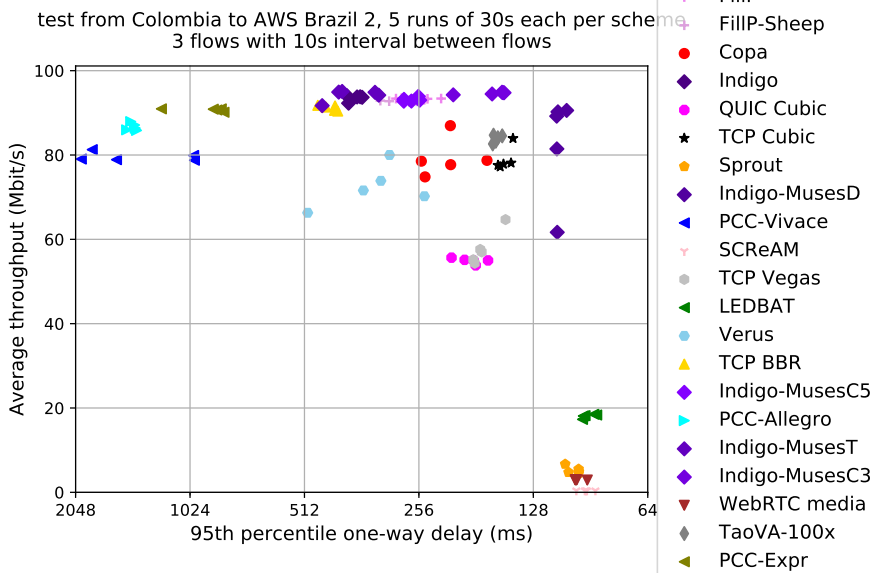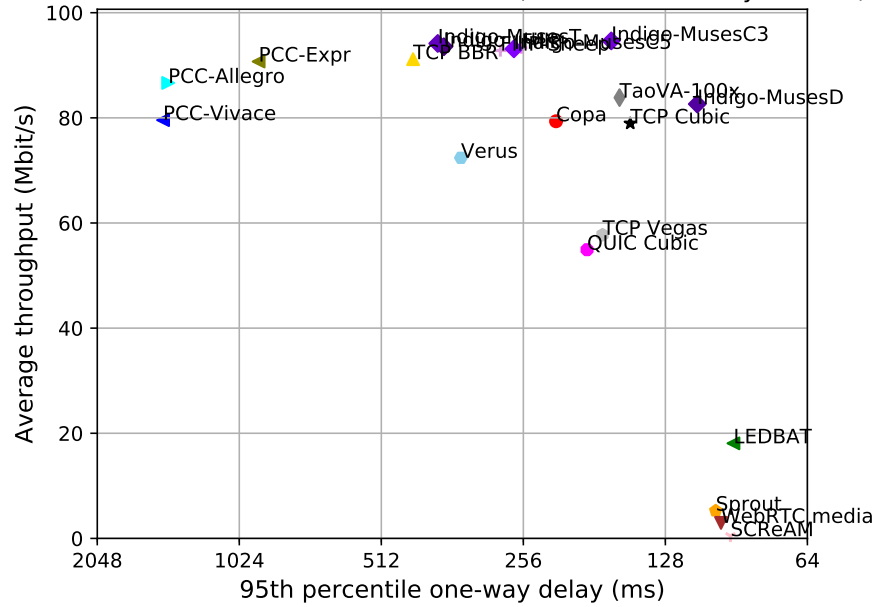
```
System info:
Linux 4.15.0-1031-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ 89d24e57783e7fbfec537a619071de937b639e38
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 1ddcff131048c6962f123bcd22b4d166a422adde
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 Colombia to AWS Brazil 2, 5 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)

test from Colombia to AWS Brazil 2, 5 runs of 30s each per scheme
3 flows with 10s interval between flows

scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	55.54	38.89	30.14	415.30	451.48	485.88	2.65	5.48	6.88
Copa	5	48.35	34.96	23.67	201.65	175.83	198.71	0.54	0.84	2.75
TCP Cubic	5	43.89	35.25	35.43	176.68	148.52	137.45	0.38	0.78	2.08
FillP	5	58.31	39.85	26.14	278.79	244.15	238.32	1.07	4.12	6.07
FillP-Sheep	5	56.98	39.09	30.01	298.33	247.79	297.16	0.96	1.95	3.05
Indigo	5	58.48	38.77	28.73	412.97	145.33	140.62	7.96	1.40	2.95
Indigo-MusesC3	5	60.53	40.11	29.32	148.90	200.27	189.06	2.62	2.86	3.35
Indigo-MusesC5	5	58.68	40.63	28.77	258.96	273.39	274.14	2.47	4.03	5.77
Indigo-MusesD	5	55.66	32.39	21.61	107.48	116.88	98.09	0.54	1.07	3.06
Indigo-MusesT	5	59.58	40.34	30.10	367.99	341.69	476.58	5.88	6.78	11.92
LEDBAT	5	11.74	7.70	3.80	91.25	90.89	88.88	1.16	1.77	3.54
PCC-Allegro	5	54.76	33.60	29.47	1410.06	1127.68	1566.19	24.27	11.47	21.32
PCC-Expr	5	56.41	38.96	25.90	950.04	866.23	241.89	24.17	6.68	3.31
QUIC Cubic	5	35.03	22.21	15.77	138.43	223.43	325.59	0.59	1.41	5.11
SCReAM	5	0.22	0.22	0.22	90.68	93.05	89.42	0.54	0.99	1.77
Sprout	5	2.77	2.60	2.39	96.78	98.14	98.14	0.96	1.24	2.12
TaoVA-100x	5	49.41	37.23	29.53	156.24	168.67	152.38	0.43	0.84	2.16
TCP Vegas	5	33.60	26.41	20.17	190.39	157.87	164.20	0.48	0.86	2.04
Verus	5	44.01	31.84	22.19	405.70	287.23	413.21	0.72	1.66	1.96
PCC-Vivace	5	50.67	32.46	22.57	1370.59	1127.84	308.06	5.00	8.37	3.68
WebRTC media	5	1.69	0.92	0.36	95.13	96.53	96.42	0.34	0.76	1.52

```
Run 1: Statistics of TCP BBR

Start at: 2019-01-22 02:37:20
End at: 2019-01-22 02:37:50
Local clock offset: -1.745 ms
Remote clock offset: 7.059 ms


# Below is generated by plot.py at 2019-01-22 04:45:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.60 Mbit/s
95th percentile per-packet one-way delay: 426.754 ms
Loss rate: 4.48%
-- Flow 1:
Average throughput: 54.63 Mbit/s
95th percentile per-packet one-way delay: 405.641 ms
Loss rate: 3.39%
-- Flow 2:
Average throughput: 38.35 Mbit/s
95th percentile per-packet one-way delay: 481.477 ms
Loss rate: 5.45%
-- Flow 3:
Average throughput: 32.00 Mbit/s
95th percentile per-packet one-way delay: 438.996 ms
Loss rate: 7.58%
```
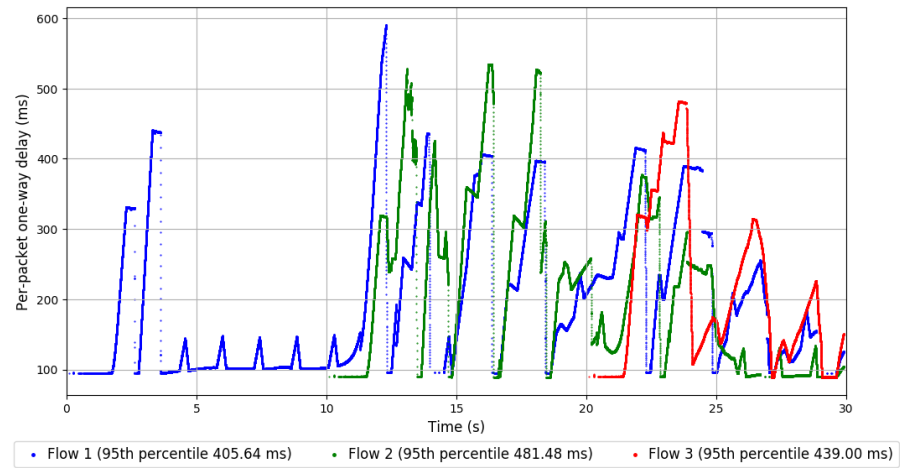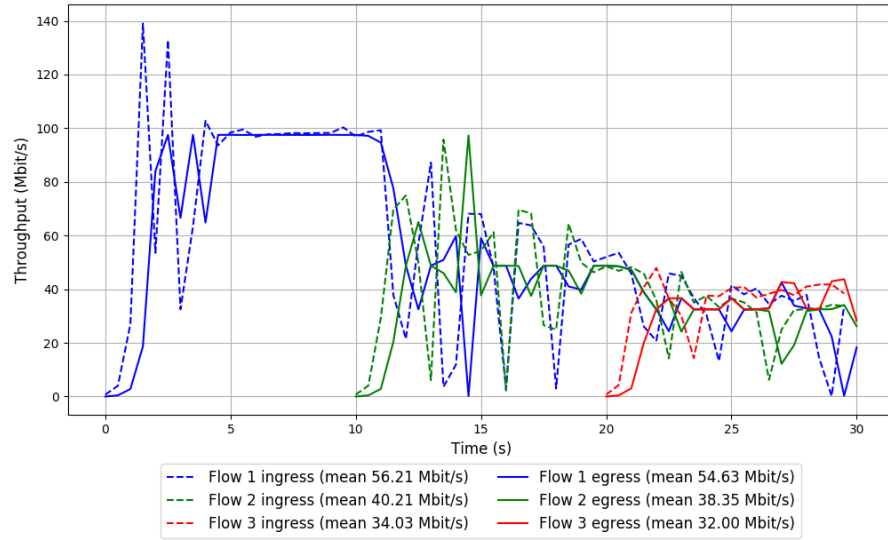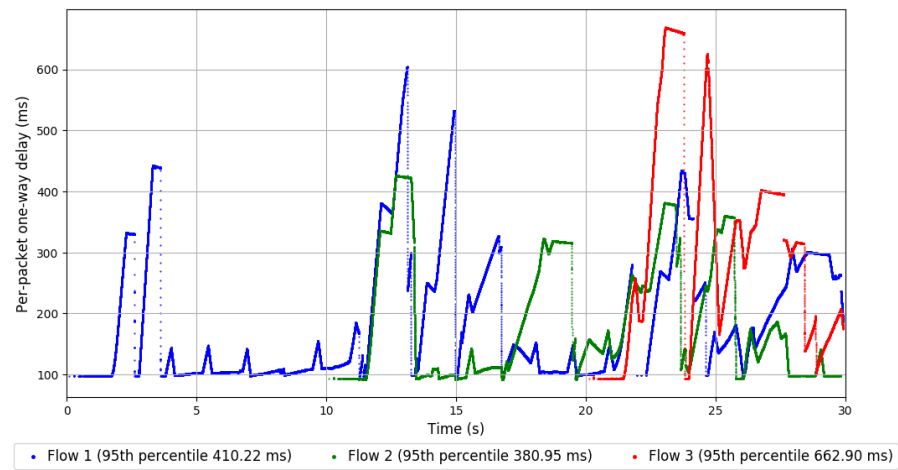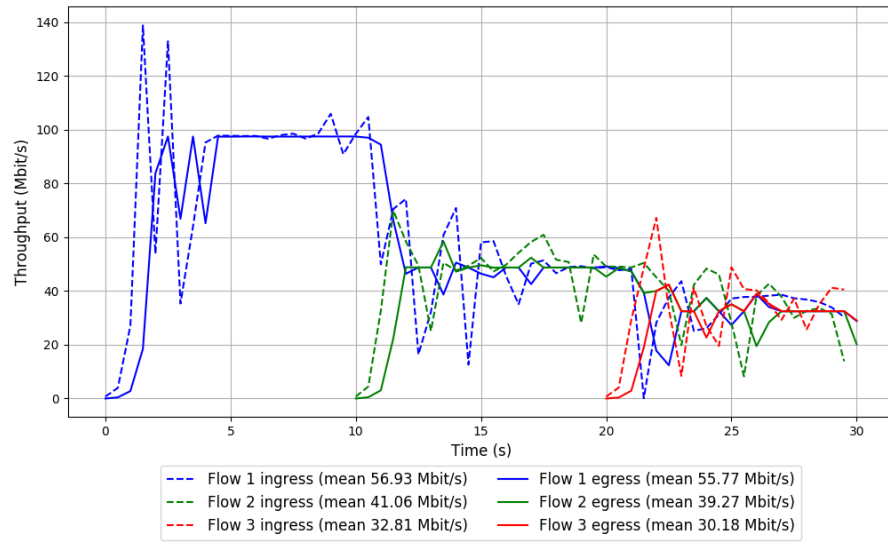
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2019-01-22 03:04:20
End at: 2019-01-22 03:04:50
Local clock offset: -2.588 ms
Remote clock offset: 3.08 ms


# Below is generated by plot.py at 2019-01-22 04:45:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.65 Mbit/s
95th percentile per-packet one-way delay: 425.398 ms
Loss rate: 4.16%
-- Flow 1:
Average throughput: 55.77 Mbit/s
95th percentile per-packet one-way delay: 410.217 ms
Loss rate: 2.62%
-- Flow 2:
Average throughput: 39.27 Mbit/s
95th percentile per-packet one-way delay: 380.953 ms
Loss rate: 5.19%
-- Flow 3:
Average throughput: 30.18 Mbit/s
95th percentile per-packet one-way delay: 662.897 ms
Loss rate: 9.63%
```
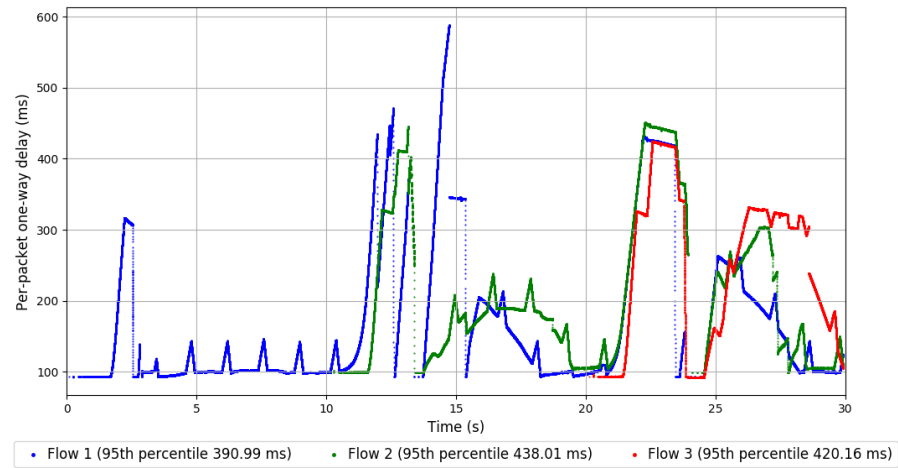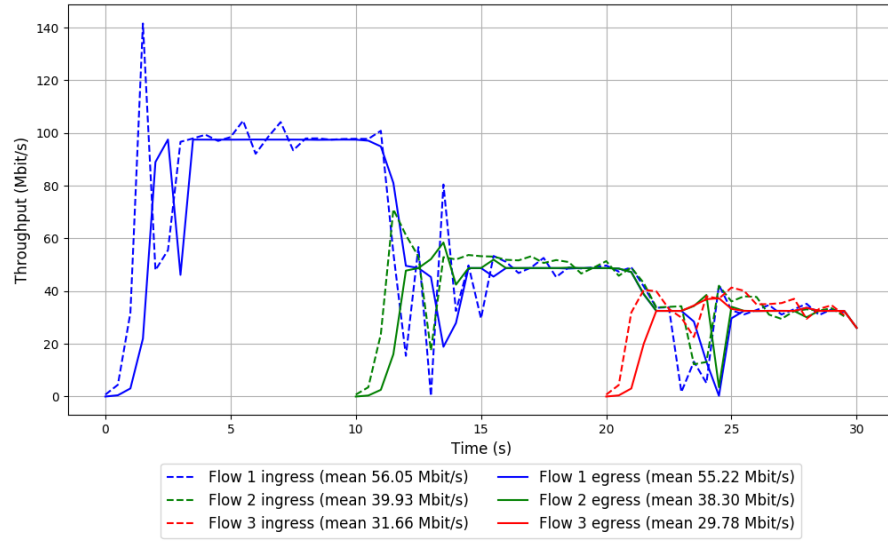
Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2019-01-22 03:31:21
End at: 2019-01-22 03:31:51
Local clock offset: -6.838 ms
Remote clock offset: 1.396 ms


# Below is generated by plot.py at 2019-01-22 04:45:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.42 Mbit/s
95th percentile per-packet one-way delay: 418.582 ms
Loss rate: 3.51%
-- Flow 1:
Average throughput: 55.22 Mbit/s
95th percentile per-packet one-way delay: 390.991 ms
Loss rate: 2.06%
-- Flow 2:
Average throughput: 38.30 Mbit/s
95th percentile per-packet one-way delay: 438.013 ms
Loss rate: 4.96%
-- Flow 3:
Average throughput: 29.78 Mbit/s
95th percentile per-packet one-way delay: 420.163 ms
Loss rate: 7.60%
```
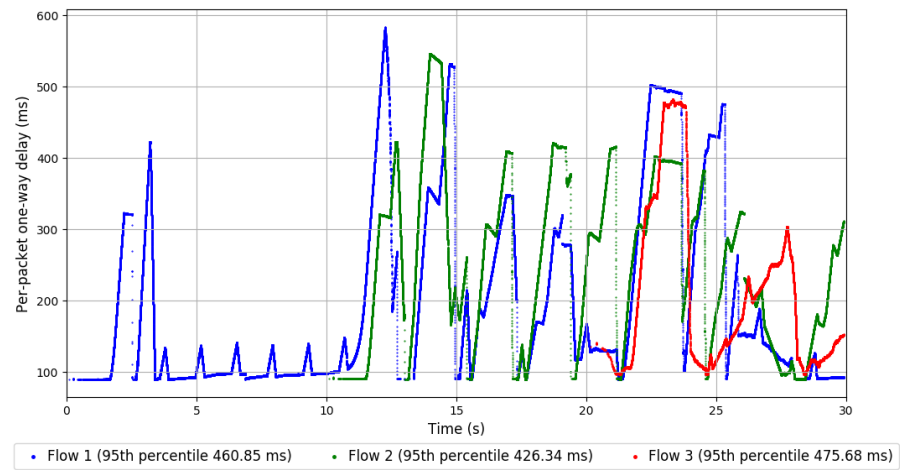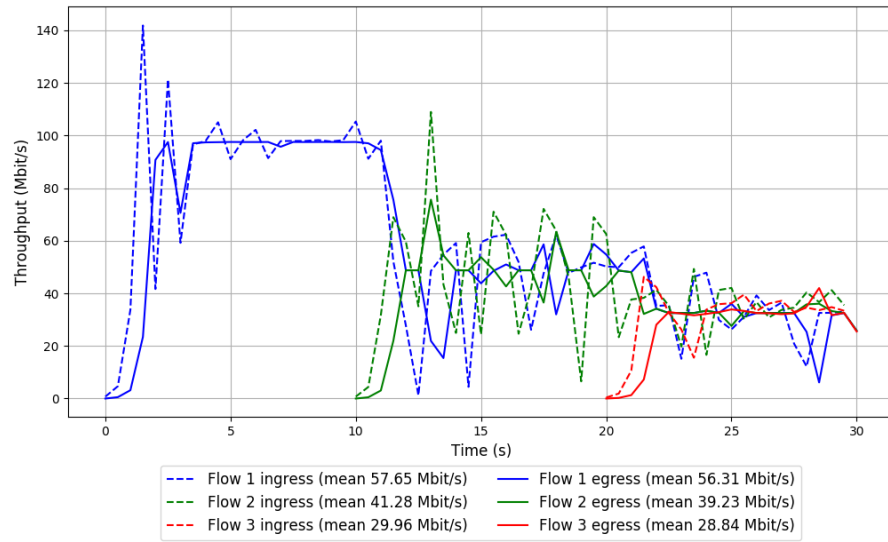
Run 3: Report of TCP BBR — Data Link

Flow 1 ingress (mean 56.05 Mbit/s) — Flow 1 egress (mean 55.22 Mbit/s)
Flow 2 ingress (mean 39.93 Mbit/s) — Flow 2 egress (mean 38.30 Mbit/s)
Flow 3 ingress (mean 31.66 Mbit/s) — Flow 3 egress (mean 29.78 Mbit/s)

Flow 1 (95th percentile 390.99 ms)   Flow 2 (95th percentile 438.01 ms)   Flow 3 (95th percentile 420.16 ms)

```
Run 4: Statistics of TCP BBR

Start at: 2019-01-22 03:58:21
End at: 2019-01-22 03:58:51
Local clock offset: -7.381 ms
Remote clock offset: 2.259 ms


# Below is generated by plot.py at 2019-01-22 04:45:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.79 Mbit/s
95th percentile per-packet one-way delay: 472.207 ms
Loss rate: 4.05%
-- Flow 1:
Average throughput: 56.31 Mbit/s
95th percentile per-packet one-way delay: 460.848 ms
Loss rate: 2.90%
-- Flow 2:
Average throughput: 39.23 Mbit/s
95th percentile per-packet one-way delay: 426.338 ms
Loss rate: 5.80%
-- Flow 3:
Average throughput: 28.84 Mbit/s
95th percentile per-packet one-way delay: 475.679 ms
Loss rate: 5.89%
```
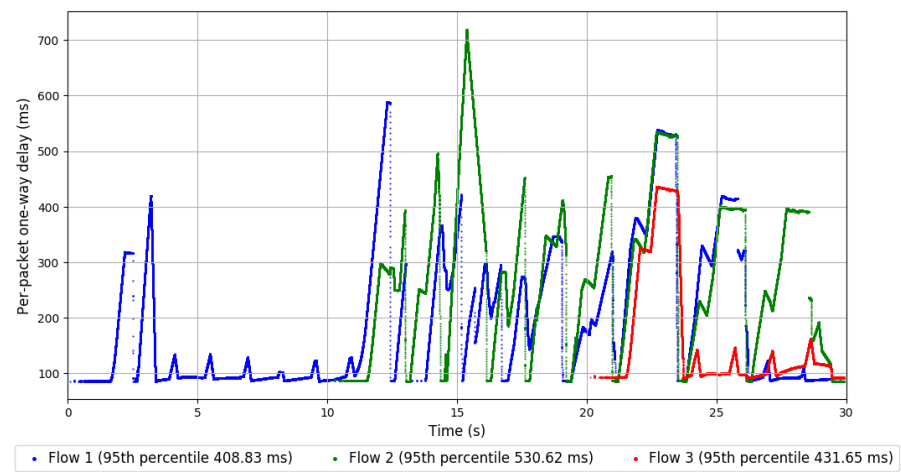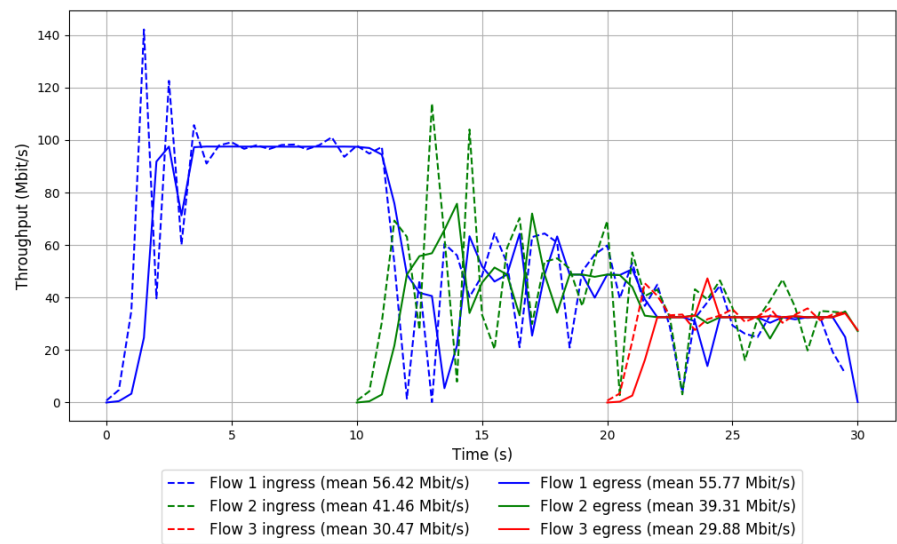
Run 4: Report of TCP BBR — Data Link

```
Run 5: Statistics of TCP BBR

Start at: 2019-01-22 04:25:21
End at: 2019-01-22 04:25:51
Local clock offset: -7.12 ms
Remote clock offset: 7.221 ms


# Below is generated by plot.py at 2019-01-22 04:45:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.38 Mbit/s
95th percentile per-packet one-way delay: 449.552 ms
Loss rate: 3.52%
-- Flow 1:
Average throughput: 55.77 Mbit/s
95th percentile per-packet one-way delay: 408.828 ms
Loss rate: 2.26%
-- Flow 2:
Average throughput: 39.31 Mbit/s
95th percentile per-packet one-way delay: 530.621 ms
Loss rate: 6.01%
-- Flow 3:
Average throughput: 29.88 Mbit/s
95th percentile per-packet one-way delay: 431.648 ms
Loss rate: 3.69%
```
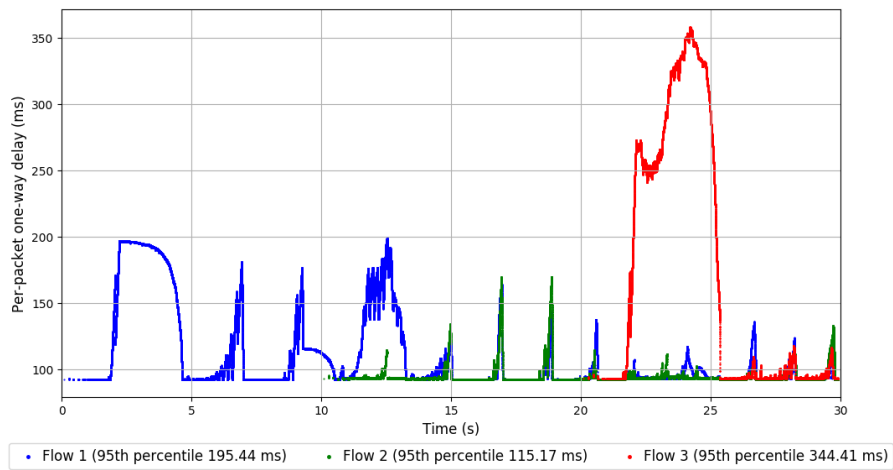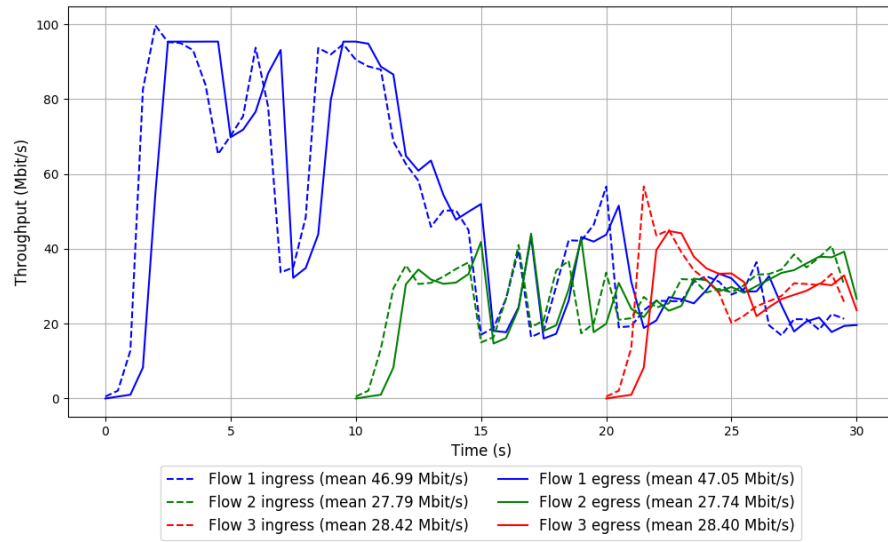
Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 56.42 Mbit/s) --- Flow 1 egress (mean 55.77 Mbit/s)
Flow 2 ingress (mean 41.46 Mbit/s) --- Flow 2 egress (mean 39.31 Mbit/s)
Flow 3 ingress (mean 30.47 Mbit/s) --- Flow 3 egress (mean 29.88 Mbit/s)

Flow 1 (95th percentile 408.83 ms) · Flow 2 (95th percentile 530.62 ms) · Flow 3 (95th percentile 431.65 ms)

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```
Run 1: Statistics of Copa

Start at: 2019-01-22 02:36:00
End at: 2019-01-22 02:36:30
Local clock offset: -1.68 ms
Remote clock offset: 3.161 ms


# Below is generated by plot.py at 2019-01-22 04:46:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.81 Mbit/s
95th percentile per-packet one-way delay: 246.672 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 47.05 Mbit/s
95th percentile per-packet one-way delay: 195.445 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 27.74 Mbit/s
95th percentile per-packet one-way delay: 115.165 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 28.40 Mbit/s
95th percentile per-packet one-way delay: 344.411 ms
Loss rate: 1.77%
```
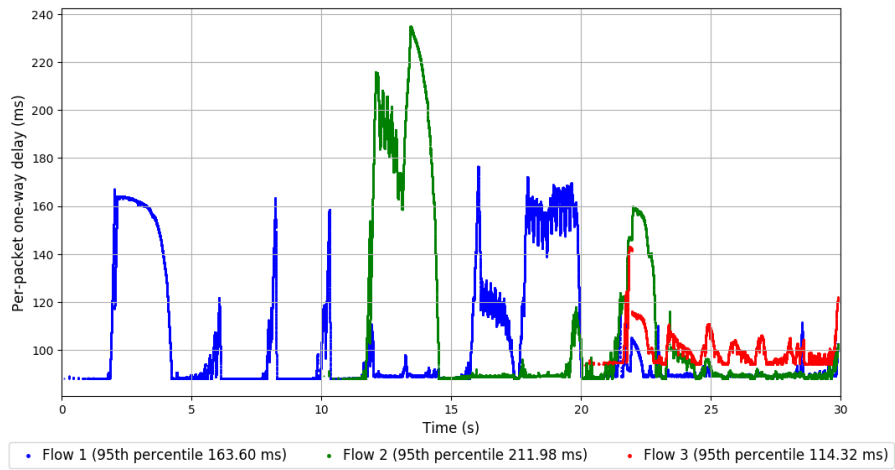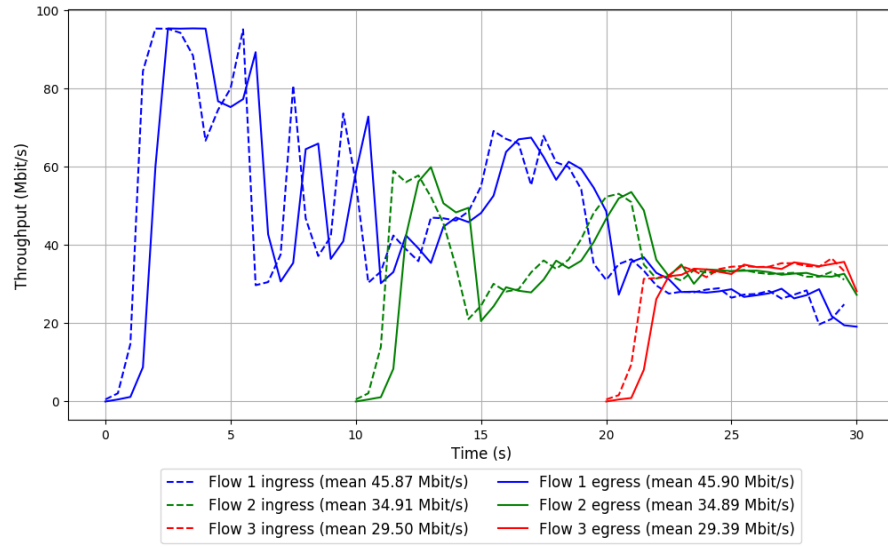
Run 1: Report of Copa — Data Link

- Flow 1 ingress (mean 46.99 Mbit/s)
- Flow 1 egress (mean 47.05 Mbit/s)
- Flow 2 ingress (mean 27.79 Mbit/s)
- Flow 2 egress (mean 27.74 Mbit/s)
- Flow 3 ingress (mean 28.42 Mbit/s)
- Flow 3 egress (mean 28.40 Mbit/s)

- Flow 1 (95th percentile 195.44 ms)
- Flow 2 (95th percentile 115.17 ms)
- Flow 3 (95th percentile 344.41 ms)

```
Run 2: Statistics of Copa

Start at: 2019-01-22 03:03:00
End at: 2019-01-22 03:03:30
Local clock offset: -2.596 ms
Remote clock offset: 6.897 ms


# Below is generated by plot.py at 2019-01-22 04:46:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.74 Mbit/s
95th percentile per-packet one-way delay: 169.493 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 45.90 Mbit/s
95th percentile per-packet one-way delay: 163.603 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 34.89 Mbit/s
95th percentile per-packet one-way delay: 211.976 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 29.39 Mbit/s
95th percentile per-packet one-way delay: 114.319 ms
Loss rate: 2.17%
```
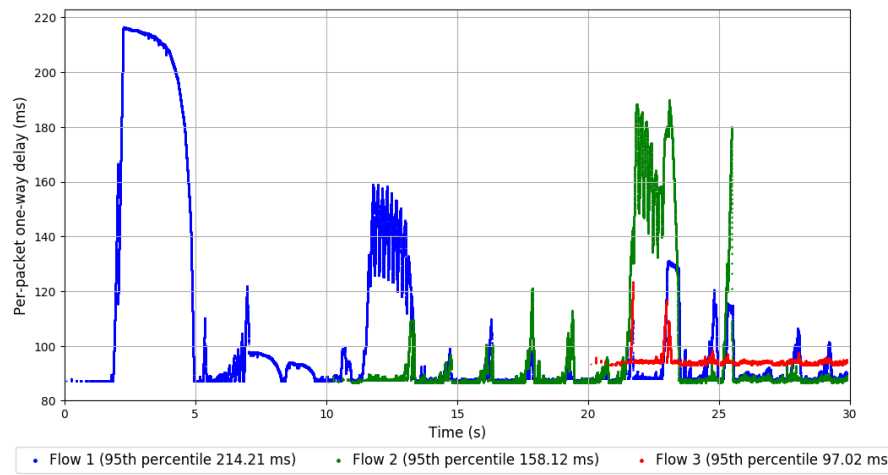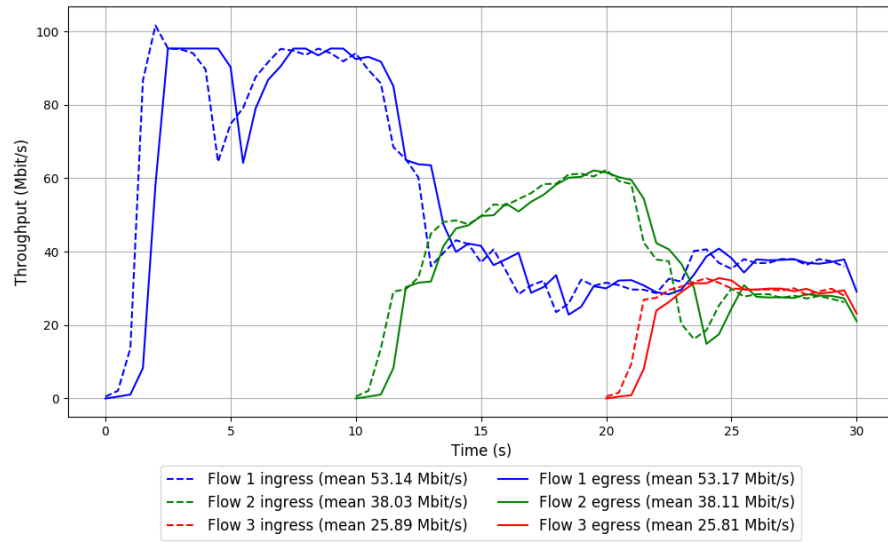
Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2019-01-22 03:30:01
End at: 2019-01-22 03:30:31
Local clock offset: -7.352 ms
Remote clock offset: 6.288 ms


# Below is generated by plot.py at 2019-01-22 04:46:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.96 Mbit/s
95th percentile per-packet one-way delay: 211.564 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 53.17 Mbit/s
95th percentile per-packet one-way delay: 214.207 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 38.11 Mbit/s
95th percentile per-packet one-way delay: 158.125 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 25.81 Mbit/s
95th percentile per-packet one-way delay: 97.016 ms
Loss rate: 2.11%
```
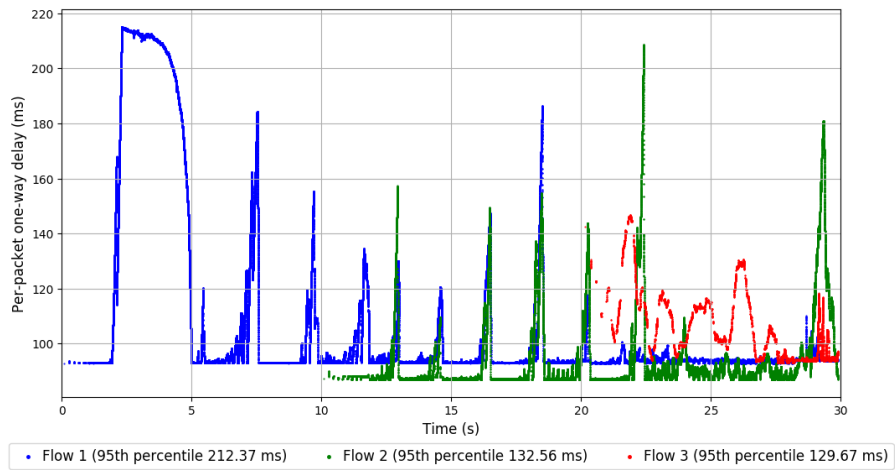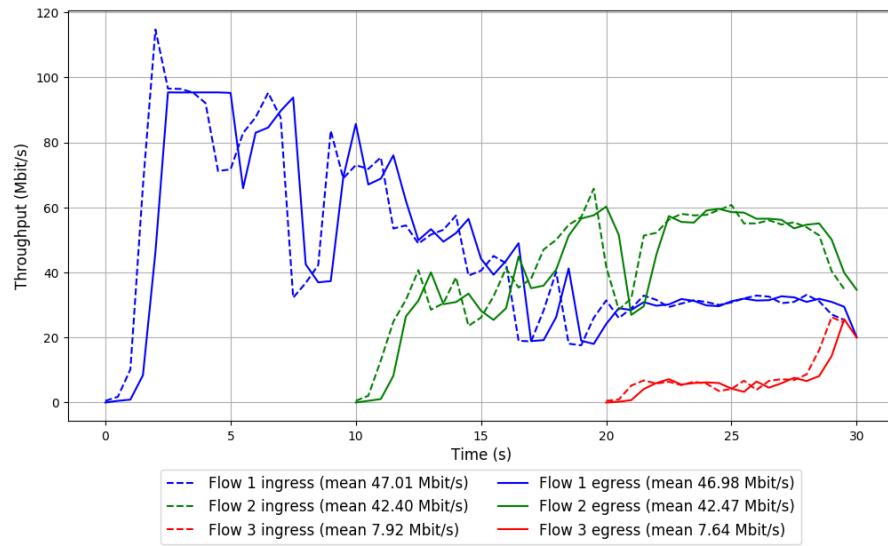
Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2019-01-22 03:57:01
End at: 2019-01-22 03:57:31
Local clock offset: -7.449 ms
Remote clock offset: 5.926 ms


# Below is generated by plot.py at 2019-01-22 04:47:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.71 Mbit/s
95th percentile per-packet one-way delay: 211.173 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 46.98 Mbit/s
95th percentile per-packet one-way delay: 212.369 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 42.47 Mbit/s
95th percentile per-packet one-way delay: 132.561 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 7.64 Mbit/s
95th percentile per-packet one-way delay: 129.674 ms
Loss rate: 5.74%
```
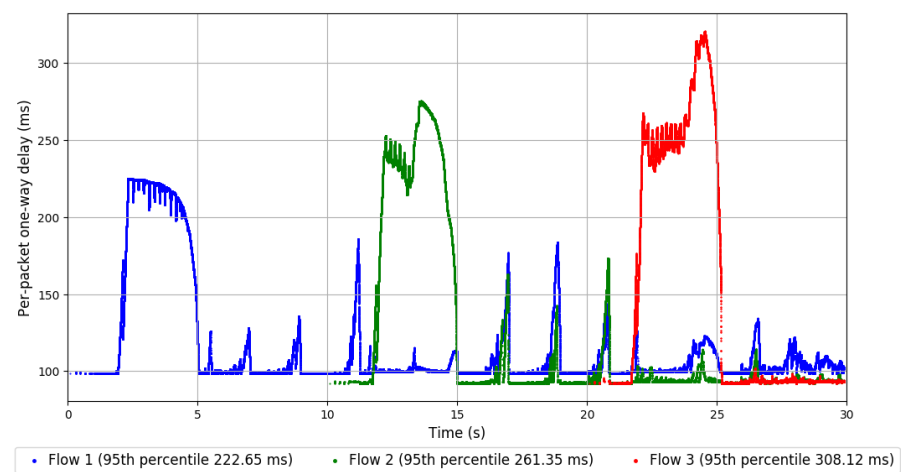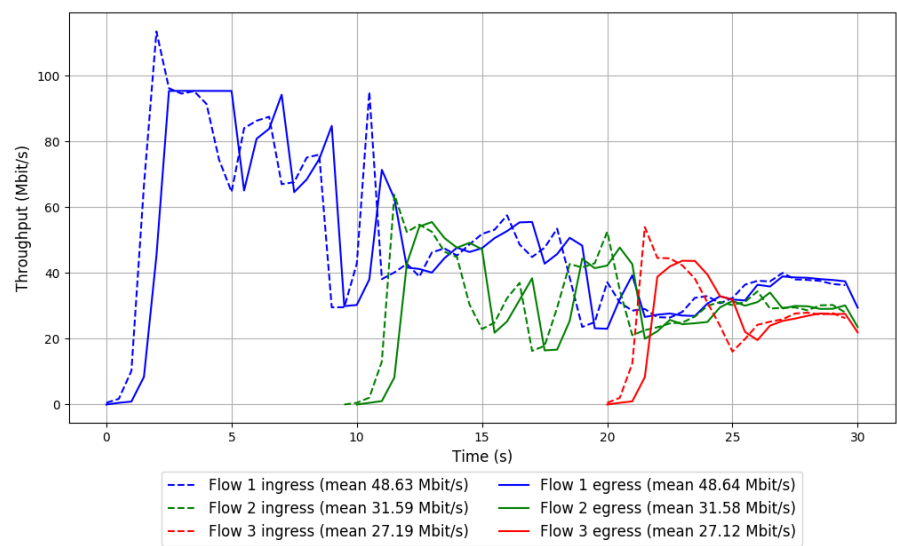
Run 4: Report of Copa — Data Link

Flow 1 ingress (mean 47.01 Mbit/s) --- Flow 1 egress (mean 46.98 Mbit/s)
Flow 2 ingress (mean 42.40 Mbit/s) --- Flow 2 egress (mean 42.47 Mbit/s)
Flow 3 ingress (mean 7.92 Mbit/s) --- Flow 3 egress (mean 7.64 Mbit/s)

Flow 1 (95th percentile 212.37 ms)   Flow 2 (95th percentile 132.56 ms)   Flow 3 (95th percentile 129.67 ms)

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```
Run 5: Statistics of Copa

Start at: 2019-01-22 04:24:01
End at: 2019-01-22 04:24:31
Local clock offset: -6.369 ms
Remote clock offset: 1.052 ms


# Below is generated by plot.py at 2019-01-22 04:47:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.54 Mbit/s
95th percentile per-packet one-way delay: 252.246 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 48.64 Mbit/s
95th percentile per-packet one-way delay: 222.650 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 31.58 Mbit/s
95th percentile per-packet one-way delay: 261.346 ms
Loss rate: 0.89%
-- Flow 3:
Average throughput: 27.12 Mbit/s
95th percentile per-packet one-way delay: 308.119 ms
Loss rate: 1.96%
```
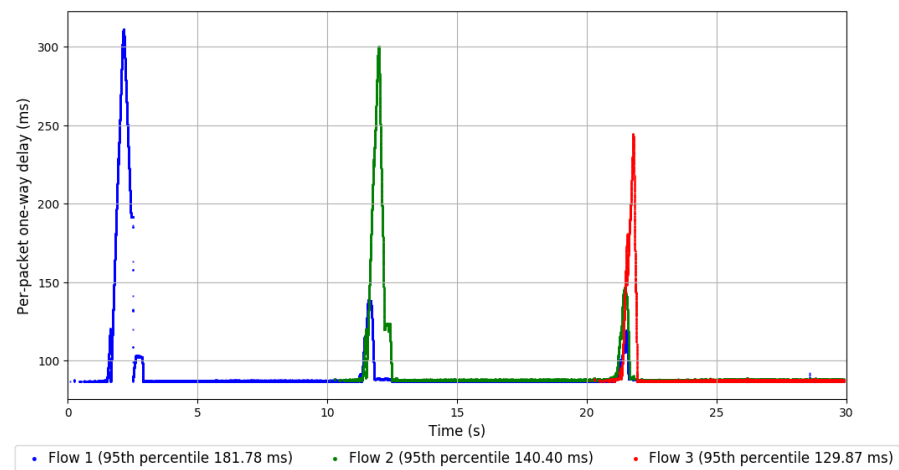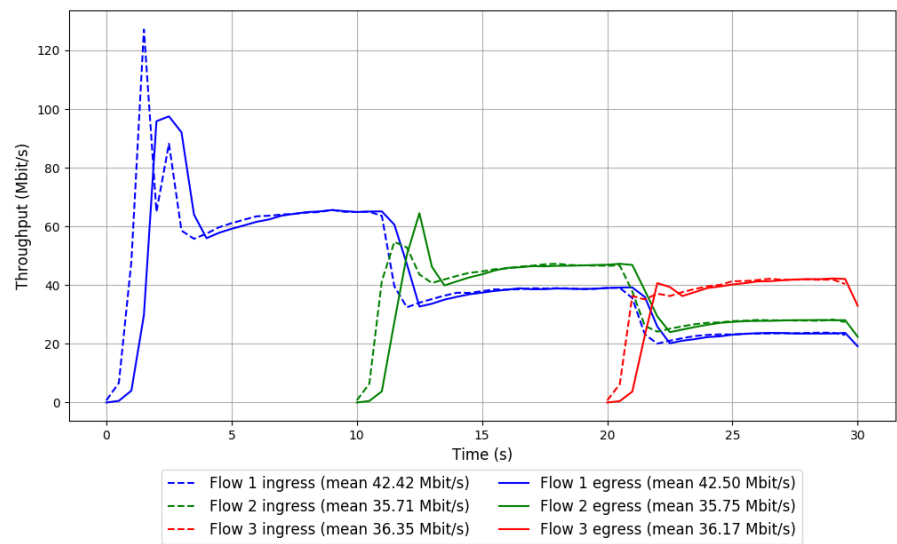
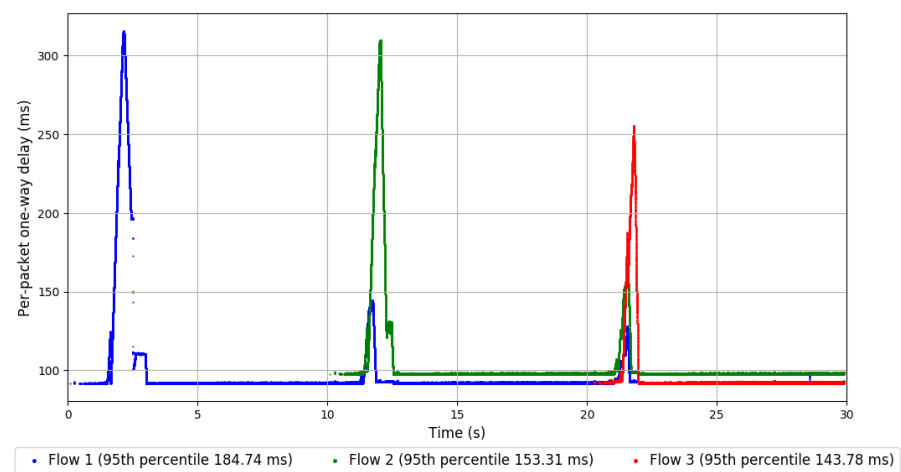Run 5: Report of Copa — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2019-01-22 02:30:55
End at: 2019-01-22 02:31:25
Local clock offset: -2.474 ms
Remote clock offset: 7.951 ms


# Below is generated by plot.py at 2019-01-22 04:47:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.12 Mbit/s
95th percentile per-packet one-way delay: 146.499 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 42.50 Mbit/s
95th percentile per-packet one-way delay: 181.775 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 35.75 Mbit/s
95th percentile per-packet one-way delay: 140.395 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 36.17 Mbit/s
95th percentile per-packet one-way delay: 129.865 ms
Loss rate: 2.22%
```

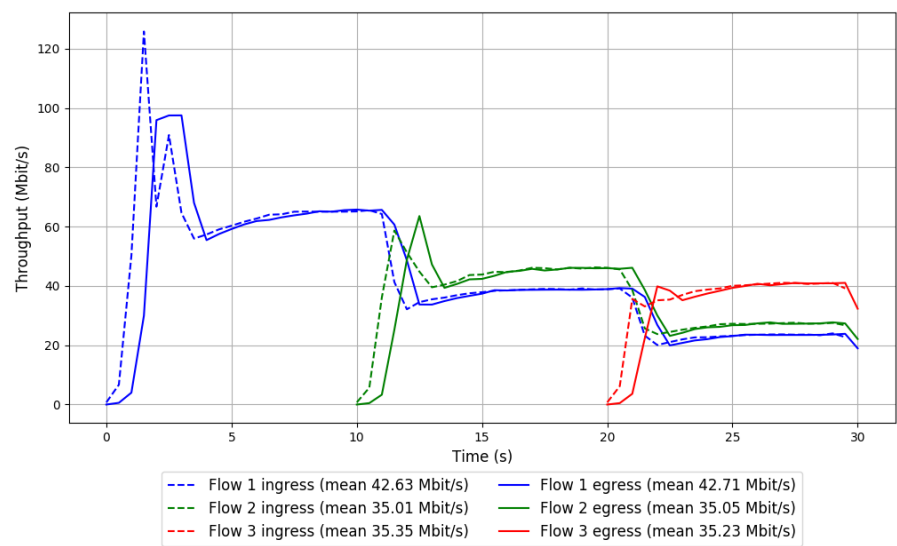Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2019-01-22 02:57:54
End at: 2019-01-22 02:58:24
Local clock offset: -1.845 ms
Remote clock offset: 4.185 ms


# Below is generated by plot.py at 2019-01-22 04:47:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.58 Mbit/s
95th percentile per-packet one-way delay: 158.533 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 42.71 Mbit/s
95th percentile per-packet one-way delay: 184.742 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 35.05 Mbit/s
95th percentile per-packet one-way delay: 153.309 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 35.23 Mbit/s
95th percentile per-packet one-way delay: 143.785 ms
Loss rate: 2.07%
```
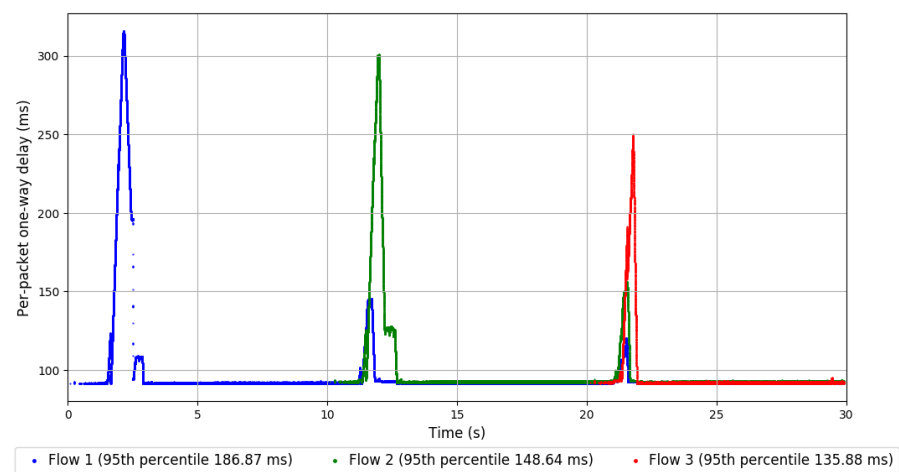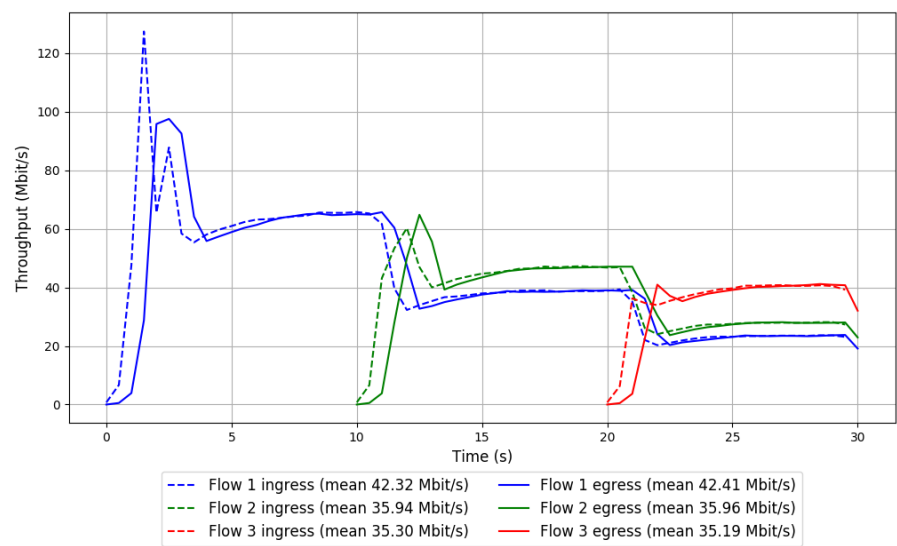
Run 2: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 42.63 Mbit/s)   Flow 1 egress (mean 42.71 Mbit/s)
Flow 2 ingress (mean 35.01 Mbit/s)   Flow 2 egress (mean 35.05 Mbit/s)
Flow 3 ingress (mean 35.35 Mbit/s)   Flow 3 egress (mean 35.23 Mbit/s)

Flow 1 (95th percentile 184.74 ms)   Flow 2 (95th percentile 153.31 ms)   Flow 3 (95th percentile 143.78 ms)

```
Run 3: Statistics of TCP Cubic

Start at: 2019-01-22 03:24:55
End at: 2019-01-22 03:25:25
Local clock offset: -6.22 ms
Remote clock offset: 1.68 ms


# Below is generated by plot.py at 2019-01-22 04:47:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.84 Mbit/s
95th percentile per-packet one-way delay: 153.379 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 42.41 Mbit/s
95th percentile per-packet one-way delay: 186.874 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 35.96 Mbit/s
95th percentile per-packet one-way delay: 148.641 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 35.19 Mbit/s
95th percentile per-packet one-way delay: 135.875 ms
Loss rate: 2.02%
```
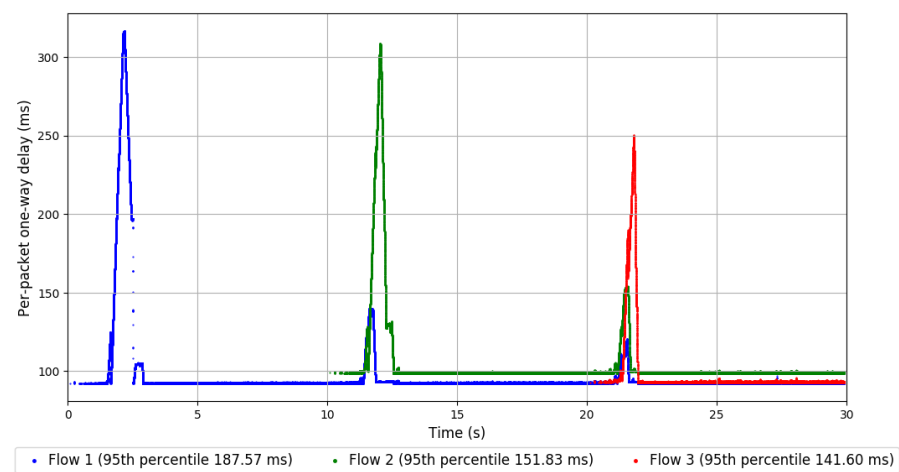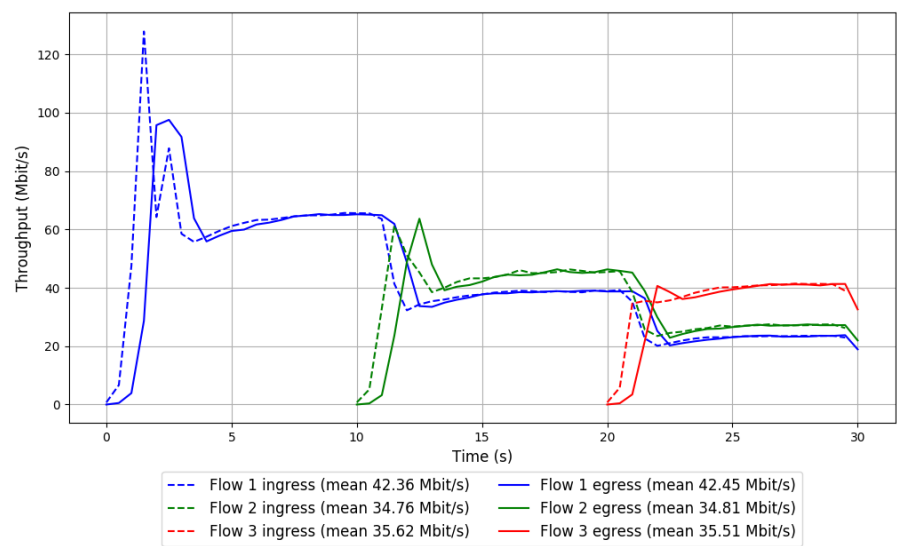
Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 42.32 Mbit/s) --- Flow 1 egress (mean 42.41 Mbit/s)
Flow 2 ingress (mean 35.94 Mbit/s) --- Flow 2 egress (mean 35.96 Mbit/s)
Flow 3 ingress (mean 35.30 Mbit/s) --- Flow 3 egress (mean 35.19 Mbit/s)

Flow 1 (95th percentile 186.87 ms)   Flow 2 (95th percentile 148.64 ms)   Flow 3 (95th percentile 135.88 ms)
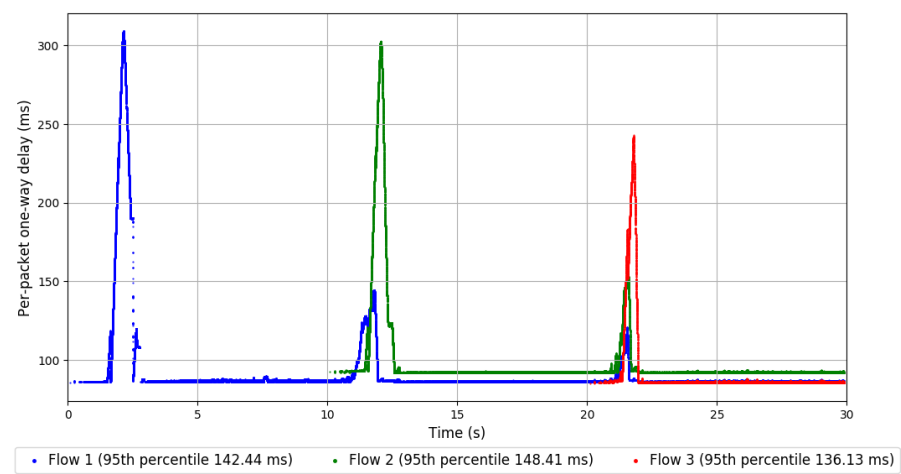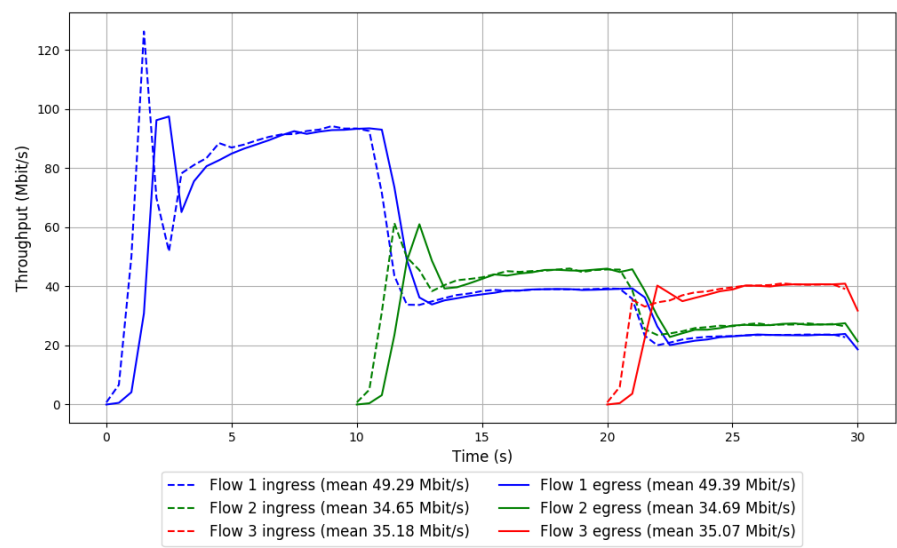
30

```
Run 4: Statistics of TCP Cubic

Start at: 2019-01-22 03:51:54
End at: 2019-01-22 03:52:24
Local clock offset: -7.167 ms
Remote clock offset: 1.128 ms


# Below is generated by plot.py at 2019-01-22 04:47:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.21 Mbit/s
95th percentile per-packet one-way delay: 156.492 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 42.45 Mbit/s
95th percentile per-packet one-way delay: 187.575 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 34.81 Mbit/s
95th percentile per-packet one-way delay: 151.832 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 35.51 Mbit/s
95th percentile per-packet one-way delay: 141.605 ms
Loss rate: 2.06%
```
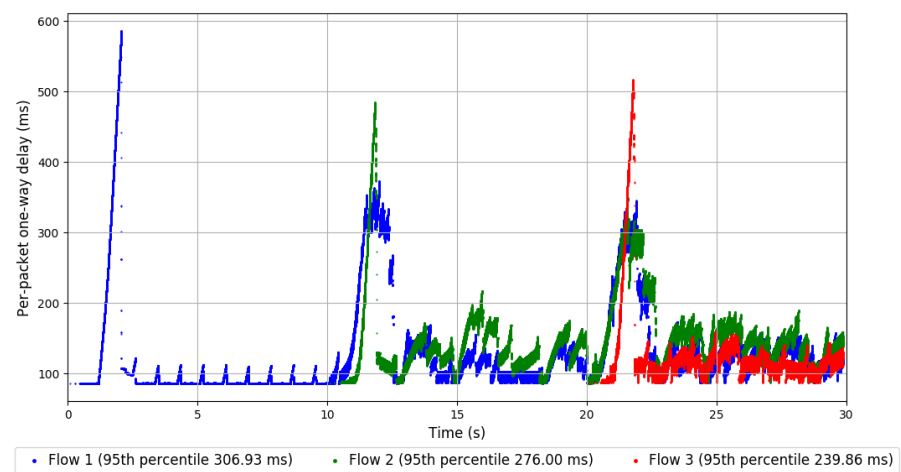
Run 4: Report of TCP Cubic — Data Link

- - - - Flow 1 ingress (mean 42.36 Mbit/s) —— Flow 1 egress (mean 42.45 Mbit/s)
- - - - Flow 2 ingress (mean 34.76 Mbit/s) —— Flow 2 egress (mean 34.81 Mbit/s)
- - - - Flow 3 ingress (mean 35.62 Mbit/s) —— Flow 3 egress (mean 35.51 Mbit/s)

• Flow 1 (95th percentile 187.57 ms)　　• Flow 2 (95th percentile 151.83 ms)　　• Flow 3 (95th percentile 141.60 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2019-01-22 04:18:54
End at: 2019-01-22 04:19:24
Local clock offset: -7.215 ms
Remote clock offset: 6.881 ms


# Below is generated by plot.py at 2019-01-22 04:47:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.94 Mbit/s
95th percentile per-packet one-way delay: 144.787 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 49.39 Mbit/s
95th percentile per-packet one-way delay: 142.435 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 34.69 Mbit/s
95th percentile per-packet one-way delay: 148.406 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 35.07 Mbit/s
95th percentile per-packet one-way delay: 136.126 ms
Loss rate: 2.05%
```
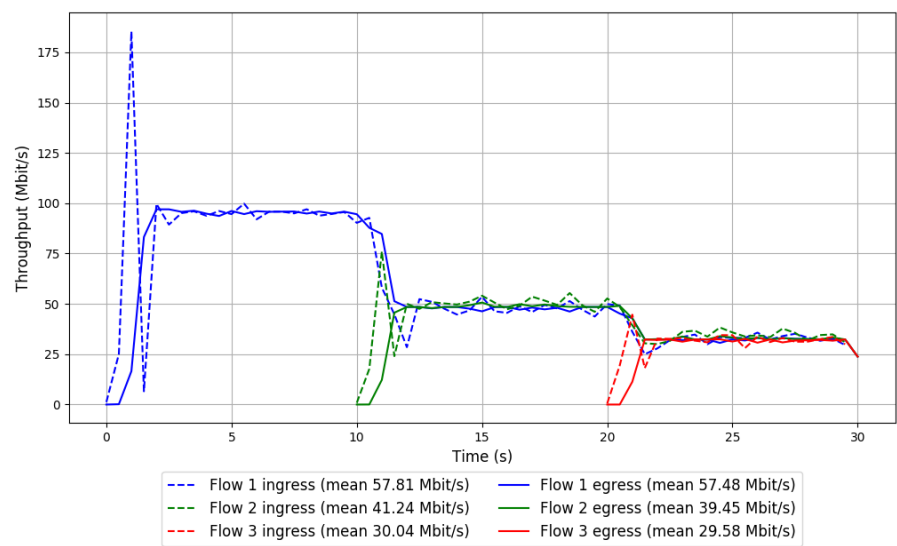
Run 5: Report of TCP Cubic — Data Link

```
Run 1: Statistics of FillP

Start at: 2019-01-22 02:42:32
End at: 2019-01-22 02:43:02
Local clock offset: -1.642 ms
Remote clock offset: 9.019 ms

# Below is generated by plot.py at 2019-01-22 04:47:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.38 Mbit/s
95th percentile per-packet one-way delay: 294.089 ms
Loss rate: 2.47%
-- Flow 1:
Average throughput: 57.48 Mbit/s
95th percentile per-packet one-way delay: 306.930 ms
Loss rate: 1.08%
-- Flow 2:
Average throughput: 39.45 Mbit/s
95th percentile per-packet one-way delay: 276.002 ms
Loss rate: 5.13%
-- Flow 3:
Average throughput: 29.58 Mbit/s
95th percentile per-packet one-way delay: 239.857 ms
Loss rate: 3.23%
```
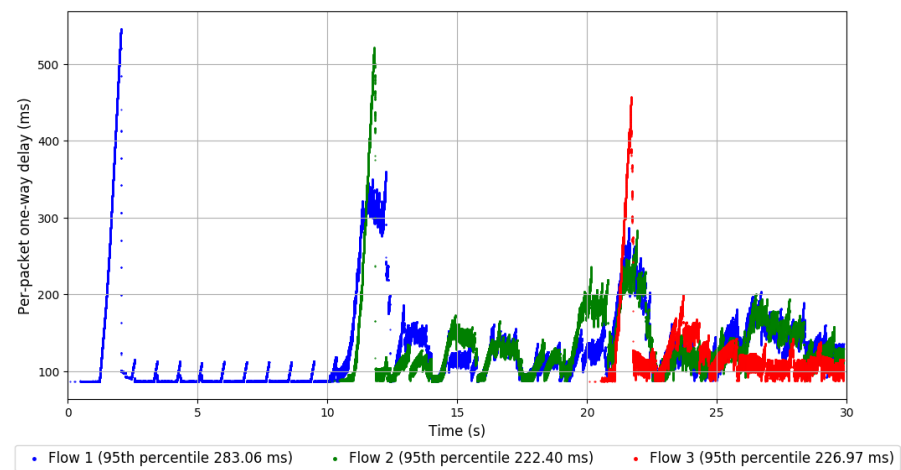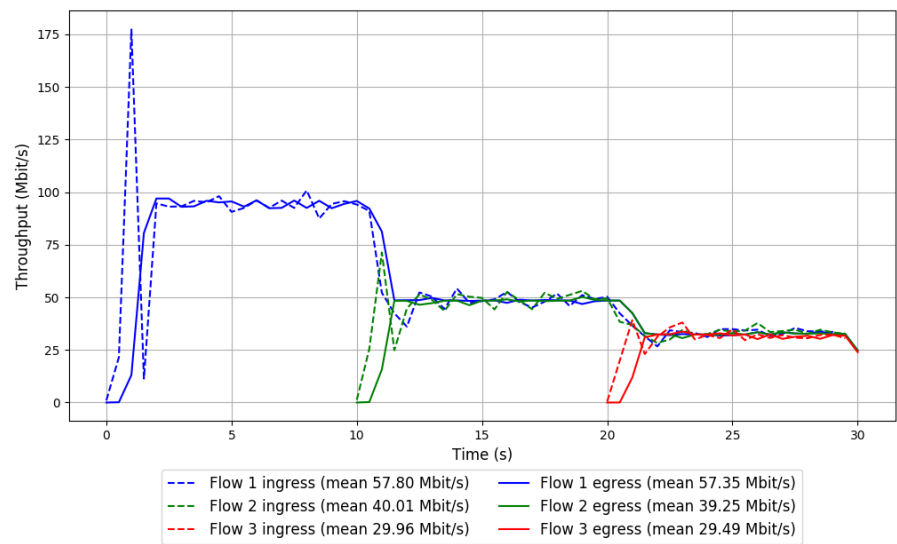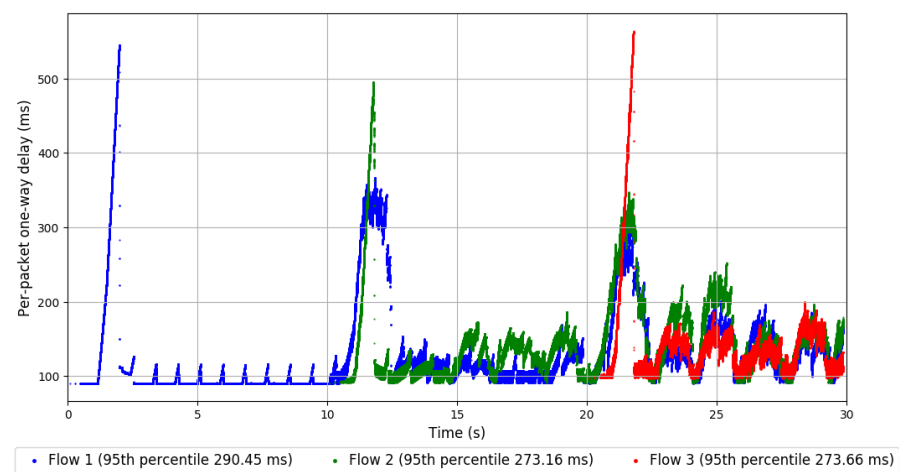
Run 1: Report of FillP — Data Link

Flow 1 ingress (mean 57.81 Mbit/s) — — — Flow 1 egress (mean 57.48 Mbit/s)
Flow 2 ingress (mean 41.24 Mbit/s) — — — Flow 2 egress (mean 39.45 Mbit/s)
Flow 3 ingress (mean 30.04 Mbit/s) — — — Flow 3 egress (mean 29.58 Mbit/s)

Flow 1 (95th percentile 306.93 ms)   Flow 2 (95th percentile 276.00 ms)   Flow 3 (95th percentile 239.86 ms)

```
Run 2: Statistics of FillP

Start at: 2019-01-22 03:09:32
End at: 2019-01-22 03:10:02
Local clock offset: -2.61 ms
Remote clock offset: 8.057 ms

# Below is generated by plot.py at 2019-01-22 04:47:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.09 Mbit/s
95th percentile per-packet one-way delay: 247.782 ms
Loss rate: 1.95%
-- Flow 1:
Average throughput: 57.35 Mbit/s
95th percentile per-packet one-way delay: 283.057 ms
Loss rate: 1.35%
-- Flow 2:
Average throughput: 39.25 Mbit/s
95th percentile per-packet one-way delay: 222.401 ms
Loss rate: 2.76%
-- Flow 3:
Average throughput: 29.49 Mbit/s
95th percentile per-packet one-way delay: 226.968 ms
Loss rate: 3.24%
```
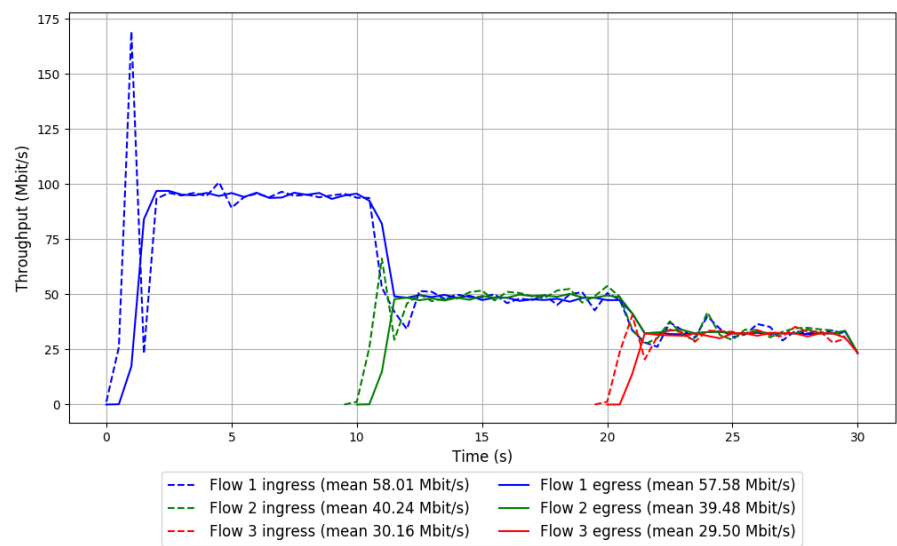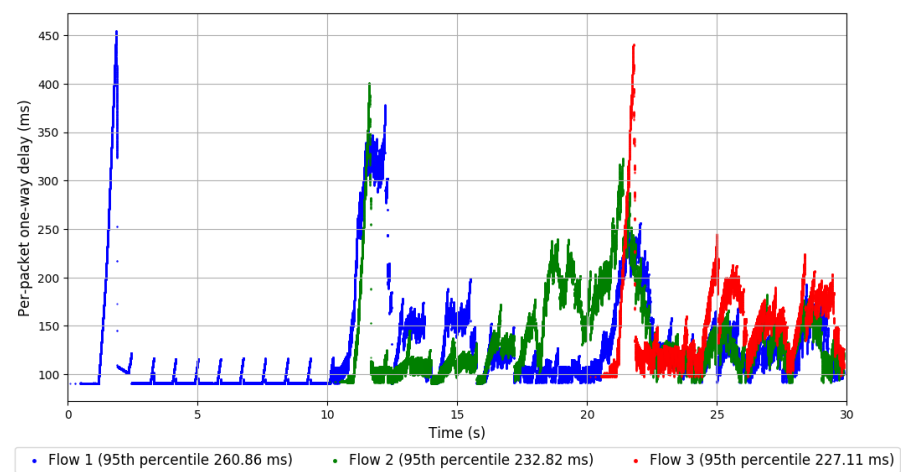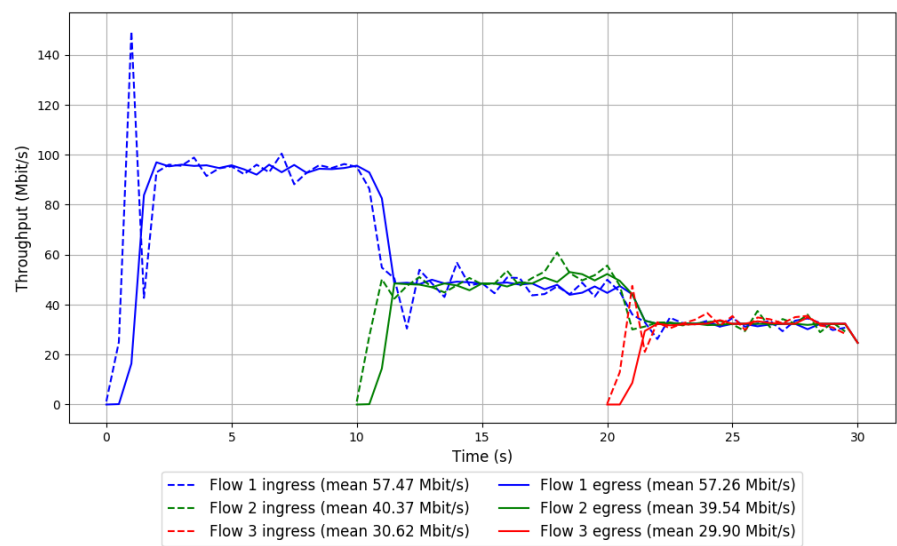
Run 2: Report of FillP — Data Link

Flow 1 ingress (mean 57.80 Mbit/s)   Flow 1 egress (mean 57.35 Mbit/s)
Flow 2 ingress (mean 40.01 Mbit/s)   Flow 2 egress (mean 39.25 Mbit/s)
Flow 3 ingress (mean 29.96 Mbit/s)   Flow 3 egress (mean 29.49 Mbit/s)

Flow 1 (95th percentile 283.06 ms)   Flow 2 (95th percentile 222.40 ms)   Flow 3 (95th percentile 226.97 ms)

```
Run 3: Statistics of FillP

Start at: 2019-01-22 03:36:33
End at: 2019-01-22 03:37:03
Local clock offset: -8.214 ms
Remote clock offset: 2.335 ms


# Below is generated by plot.py at 2019-01-22 04:47:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.48 Mbit/s
95th percentile per-packet one-way delay: 284.039 ms
Loss rate: 1.98%
-- Flow 1:
Average throughput: 57.58 Mbit/s
95th percentile per-packet one-way delay: 290.453 ms
Loss rate: 1.33%
-- Flow 2:
Average throughput: 39.48 Mbit/s
95th percentile per-packet one-way delay: 273.161 ms
Loss rate: 2.70%
-- Flow 3:
Average throughput: 29.50 Mbit/s
95th percentile per-packet one-way delay: 273.660 ms
Loss rate: 3.84%
```
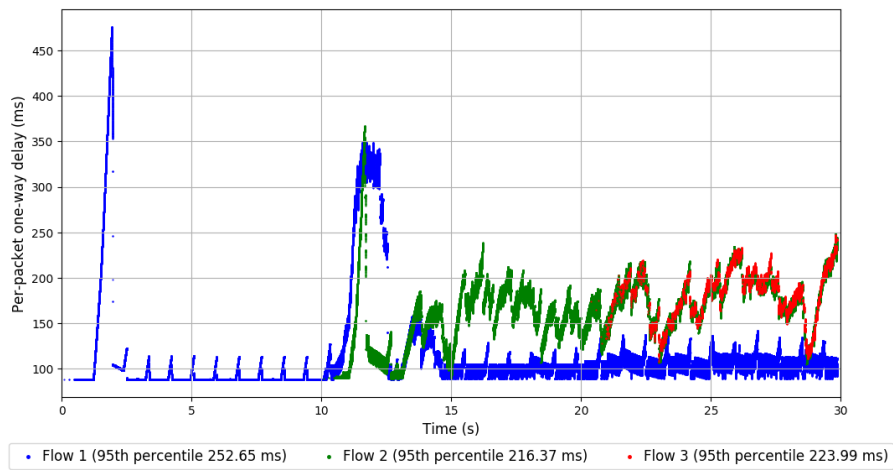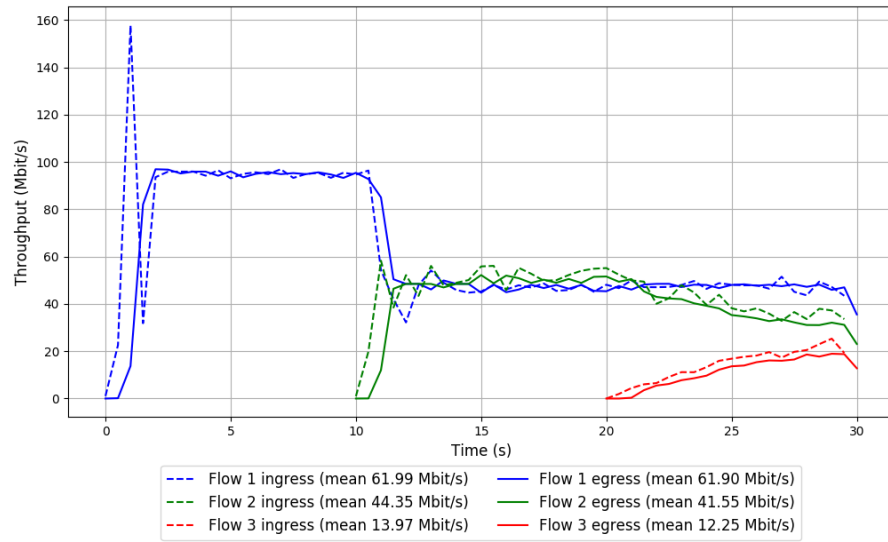
Run 3: Report of FillP — Data Link

```
Run 4: Statistics of FillP

Start at: 2019-01-22 04:03:32
End at: 2019-01-22 04:04:02
Local clock offset: -7.273 ms
Remote clock offset: 2.035 ms


# Below is generated by plot.py at 2019-01-22 04:47:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.33 Mbit/s
95th percentile per-packet one-way delay: 243.009 ms
Loss rate: 1.79%
-- Flow 1:
Average throughput: 57.26 Mbit/s
95th percentile per-packet one-way delay: 260.856 ms
Loss rate: 0.92%
-- Flow 2:
Average throughput: 39.54 Mbit/s
95th percentile per-packet one-way delay: 232.825 ms
Loss rate: 2.85%
-- Flow 3:
Average throughput: 29.90 Mbit/s
95th percentile per-packet one-way delay: 227.106 ms
Loss rate: 3.88%
```
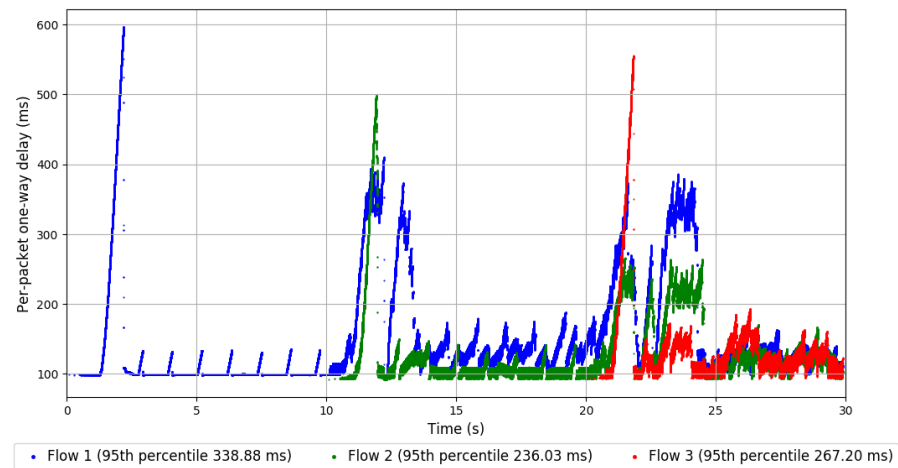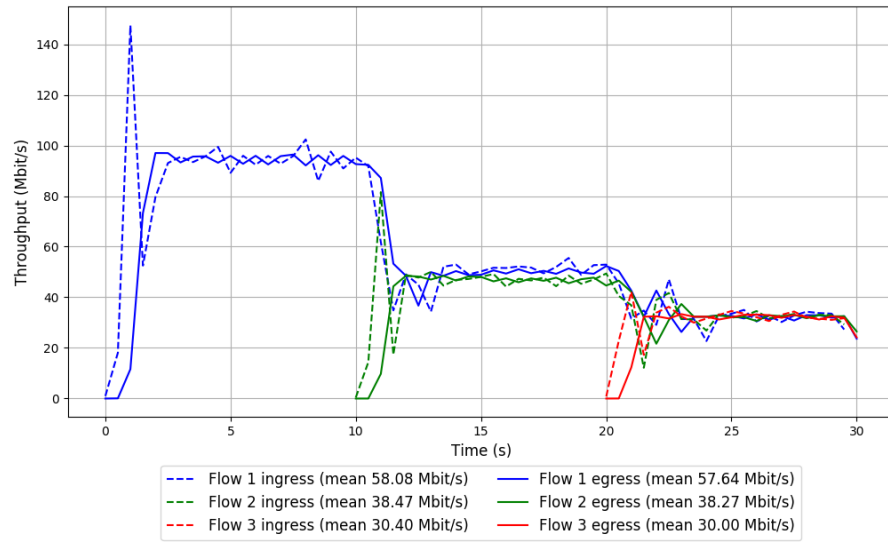
Run 4: Report of FillP — Data Link

```
Run 5: Statistics of FillP

Start at: 2019-01-22 04:30:32
End at: 2019-01-22 04:31:02
Local clock offset: -6.296 ms
Remote clock offset: 5.051 ms


# Below is generated by plot.py at 2019-01-22 04:48:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.39 Mbit/s
95th percentile per-packet one-way delay: 223.755 ms
Loss rate: 3.41%
-- Flow 1:
Average throughput: 61.90 Mbit/s
95th percentile per-packet one-way delay: 252.645 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 41.55 Mbit/s
95th percentile per-packet one-way delay: 216.372 ms
Loss rate: 7.15%
-- Flow 3:
Average throughput: 12.25 Mbit/s
95th percentile per-packet one-way delay: 223.990 ms
Loss rate: 16.18%
```
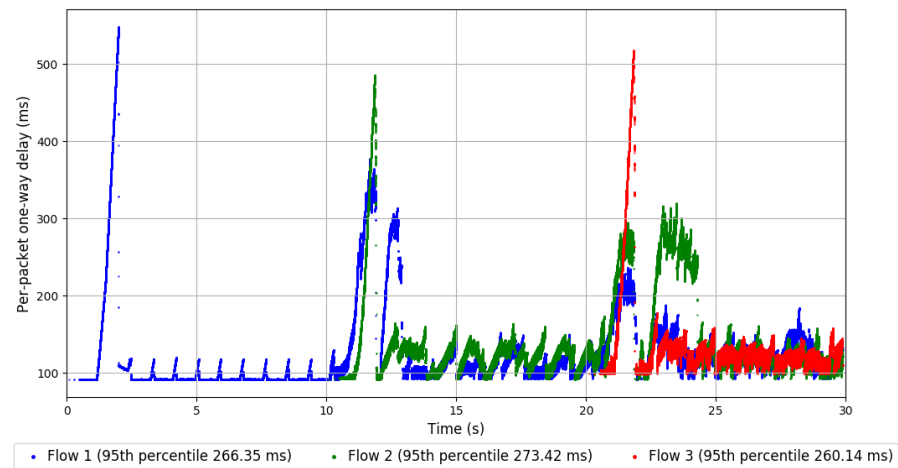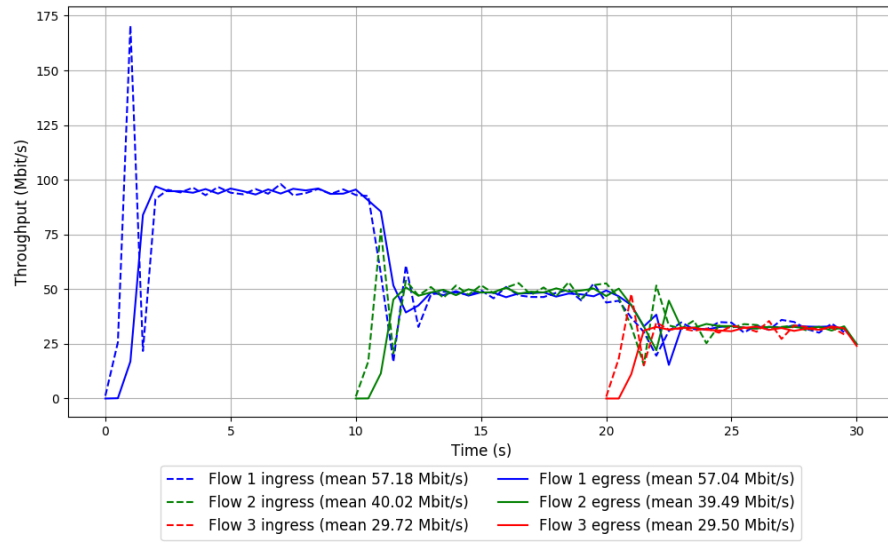
Run 5: Report of FillP — Data Link

Flow 1 ingress (mean 61.99 Mbit/s) — Flow 1 egress (mean 61.90 Mbit/s)
Flow 2 ingress (mean 44.35 Mbit/s) — Flow 2 egress (mean 41.55 Mbit/s)
Flow 3 ingress (mean 13.97 Mbit/s) — Flow 3 egress (mean 12.25 Mbit/s)

Flow 1 (95th percentile 252.65 ms)   Flow 2 (95th percentile 216.37 ms)   Flow 3 (95th percentile 223.99 ms)

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```
Run 1: Statistics of FillP-Sheep

Start at: 2019-01-22 02:29:38
End at: 2019-01-22 02:30:08
Local clock offset: -1.765 ms
Remote clock offset: 3.293 ms


# Below is generated by plot.py at 2019-01-22 04:48:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.90 Mbit/s
95th percentile per-packet one-way delay: 323.401 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 57.64 Mbit/s
95th percentile per-packet one-way delay: 338.877 ms
Loss rate: 1.30%
-- Flow 2:
Average throughput: 38.27 Mbit/s
95th percentile per-packet one-way delay: 236.026 ms
Loss rate: 1.30%
-- Flow 3:
Average throughput: 30.00 Mbit/s
95th percentile per-packet one-way delay: 267.196 ms
Loss rate: 3.06%
```
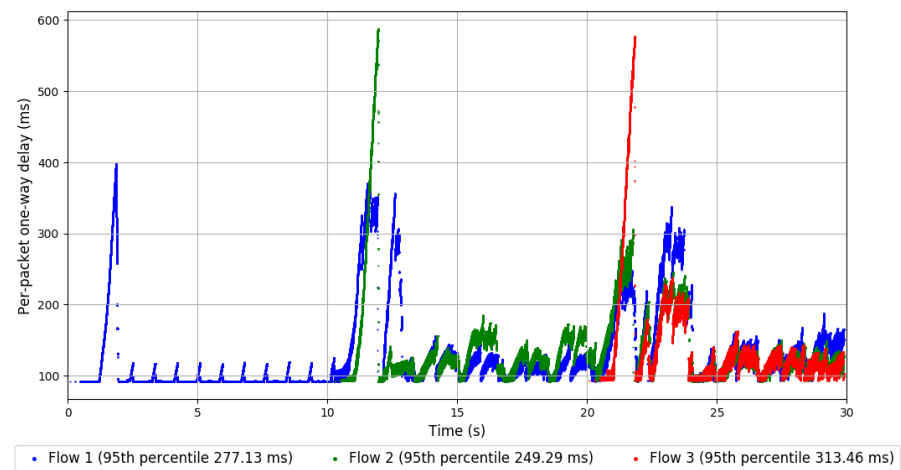
Run 1: Report of FillP-Sheep — Data Link

```
Run 2: Statistics of FillP-Sheep

Start at: 2019-01-22 02:56:37
End at: 2019-01-22 02:57:07
Local clock offset: -2.59 ms
Remote clock offset: 3.051 ms


# Below is generated by plot.py at 2019-01-22 04:48:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.95 Mbit/s
95th percentile per-packet one-way delay: 271.285 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 57.04 Mbit/s
95th percentile per-packet one-way delay: 266.345 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 39.49 Mbit/s
95th percentile per-packet one-way delay: 273.420 ms
Loss rate: 2.13%
-- Flow 3:
Average throughput: 29.50 Mbit/s
95th percentile per-packet one-way delay: 260.143 ms
Loss rate: 2.55%
```
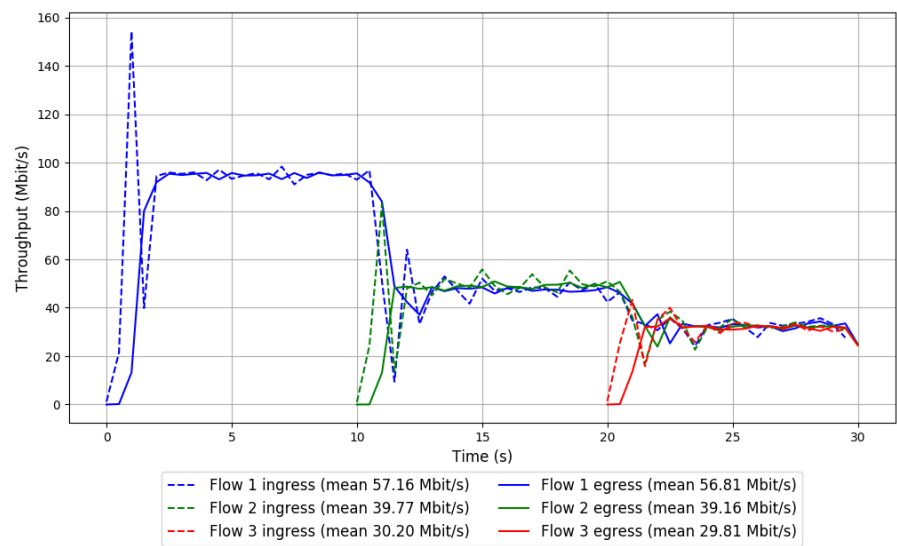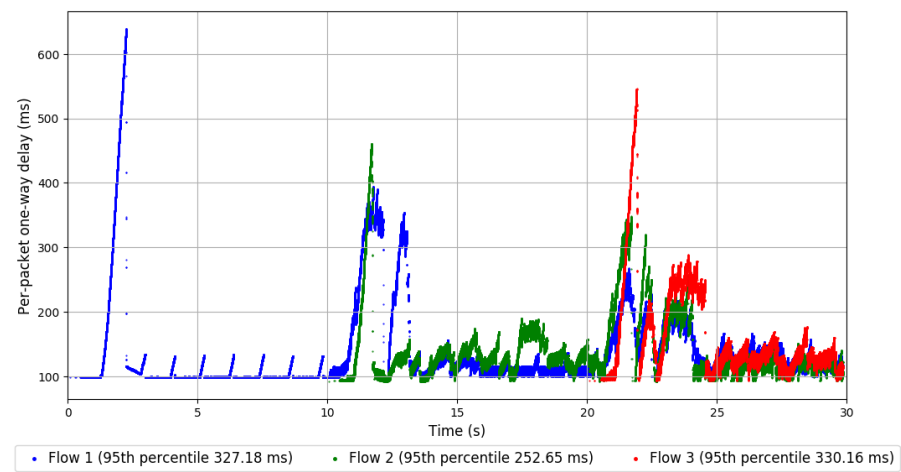
Run 2: Report of FillP-Sheep — Data Link

```
Run 3: Statistics of FillP-Sheep

Start at: 2019-01-22 03:23:38
End at: 2019-01-22 03:24:08
Local clock offset: -5.105 ms
Remote clock offset: 1.734 ms


# Below is generated by plot.py at 2019-01-22 04:48:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.60 Mbit/s
95th percentile per-packet one-way delay: 271.495 ms
Loss rate: 1.68%
-- Flow 1:
Average throughput: 56.81 Mbit/s
95th percentile per-packet one-way delay: 277.134 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 39.16 Mbit/s
95th percentile per-packet one-way delay: 249.290 ms
Loss rate: 2.39%
-- Flow 3:
Average throughput: 29.81 Mbit/s
95th percentile per-packet one-way delay: 313.464 ms
Loss rate: 2.89%
```
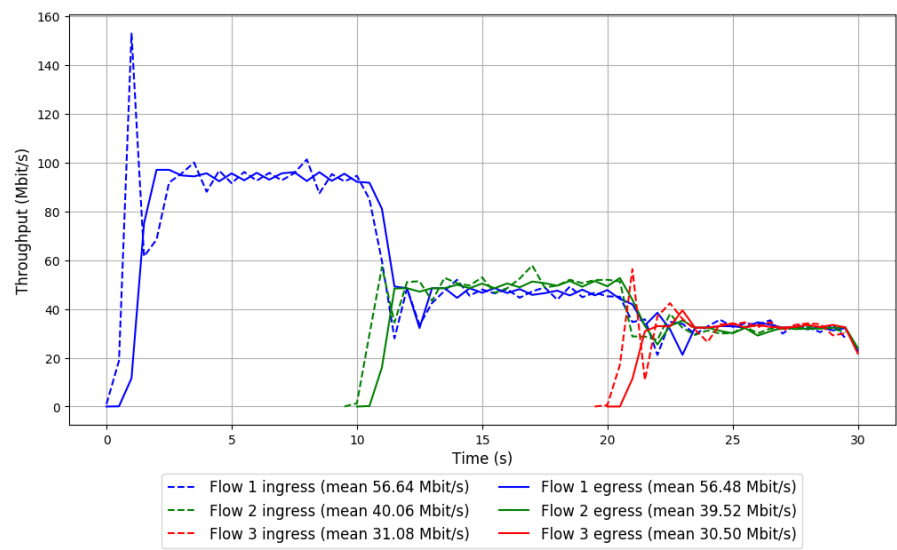
Run 3: Report of FillP-Sheep — Data Link

```
Run 4: Statistics of FillP-Sheep

Start at: 2019-01-22 03:50:38
End at: 2019-01-22 03:51:08
Local clock offset: -7.346 ms
Remote clock offset: 1.07 ms


# Below is generated by plot.py at 2019-01-22 04:49:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.77 Mbit/s
95th percentile per-packet one-way delay: 306.525 ms
Loss rate: 1.53%
-- Flow 1:
Average throughput: 56.48 Mbit/s
95th percentile per-packet one-way delay: 327.182 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 39.52 Mbit/s
95th percentile per-packet one-way delay: 252.646 ms
Loss rate: 2.10%
-- Flow 3:
Average throughput: 30.50 Mbit/s
95th percentile per-packet one-way delay: 330.164 ms
Loss rate: 3.61%
```
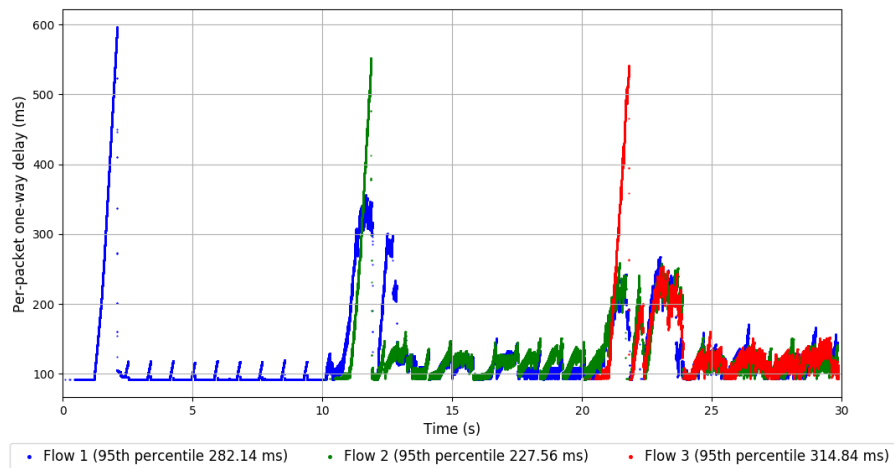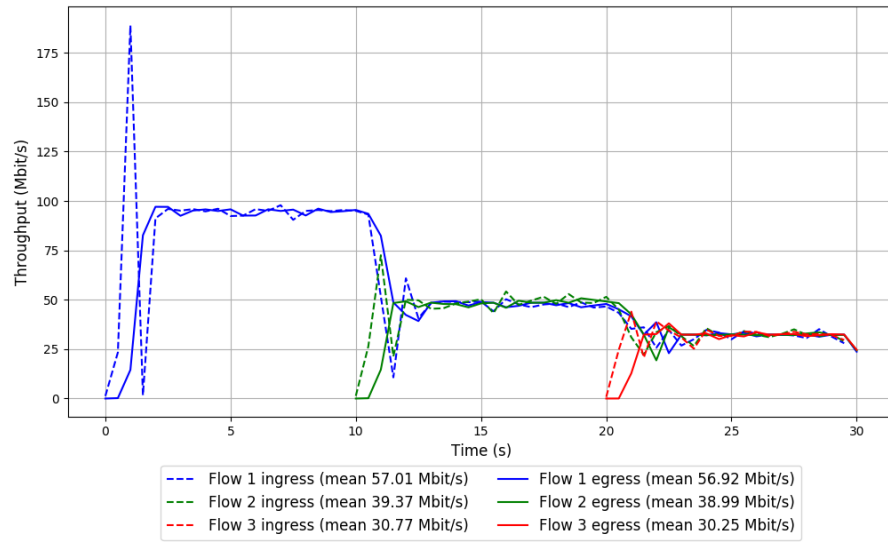
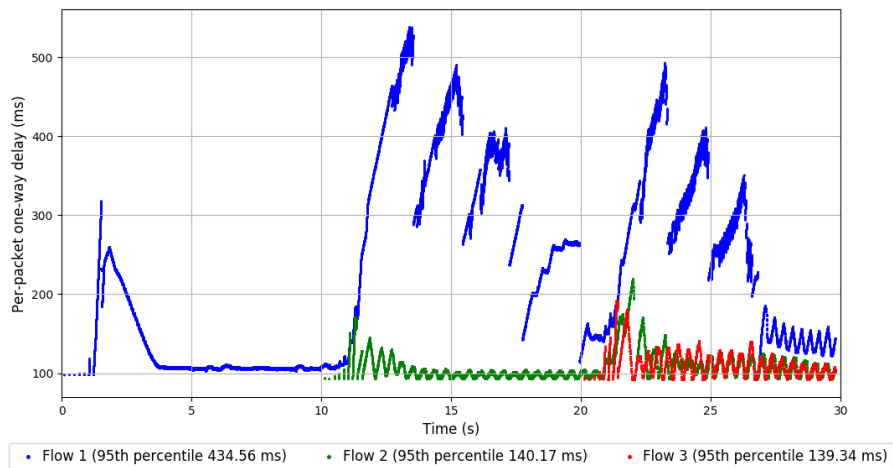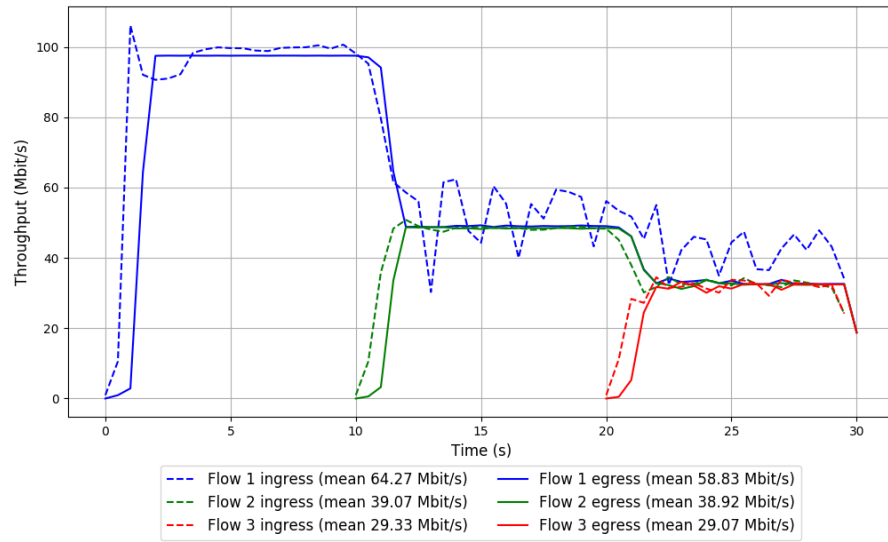Run 4: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 56.64 Mbit/s)   Flow 1 egress (mean 56.48 Mbit/s)
Flow 2 ingress (mean 40.06 Mbit/s)   Flow 2 egress (mean 39.52 Mbit/s)
Flow 3 ingress (mean 31.08 Mbit/s)   Flow 3 egress (mean 30.50 Mbit/s)

Flow 1 (95th percentile 327.18 ms)   Flow 2 (95th percentile 252.65 ms)   Flow 3 (95th percentile 330.16 ms)

```
Run 5: Statistics of FillP-Sheep

Start at: 2019-01-22 04:17:38
End at: 2019-01-22 04:18:08
Local clock offset: -7.245 ms
Remote clock offset: 0.824 ms


# Below is generated by plot.py at 2019-01-22 04:49:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.73 Mbit/s
95th percentile per-packet one-way delay: 259.429 ms
Loss rate: 1.27%
-- Flow 1:
Average throughput: 56.92 Mbit/s
95th percentile per-packet one-way delay: 282.137 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 38.99 Mbit/s
95th percentile per-packet one-way delay: 227.556 ms
Loss rate: 1.83%
-- Flow 3:
Average throughput: 30.25 Mbit/s
95th percentile per-packet one-way delay: 314.843 ms
Loss rate: 3.13%
```

Run 5: Report of FillP-Sheep — Data Link

```
Run 1: Statistics of Indigo

Start at: 2019-01-22 02:43:49
End at: 2019-01-22 02:44:19
Local clock offset: -2.324 ms
Remote clock offset: 2.99 ms


# Below is generated by plot.py at 2019-01-22 04:49:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.07 Mbit/s
95th percentile per-packet one-way delay: 396.051 ms
Loss rate: 6.38%
-- Flow 1:
Average throughput: 58.83 Mbit/s
95th percentile per-packet one-way delay: 434.557 ms
Loss rate: 9.02%
-- Flow 2:
Average throughput: 38.92 Mbit/s
95th percentile per-packet one-way delay: 140.171 ms
Loss rate: 1.24%
-- Flow 3:
Average throughput: 29.07 Mbit/s
95th percentile per-packet one-way delay: 139.342 ms
Loss rate: 2.61%
```
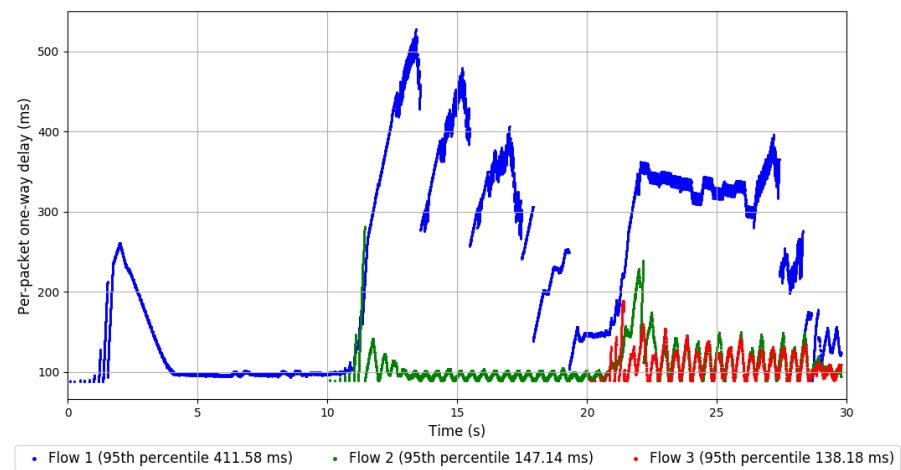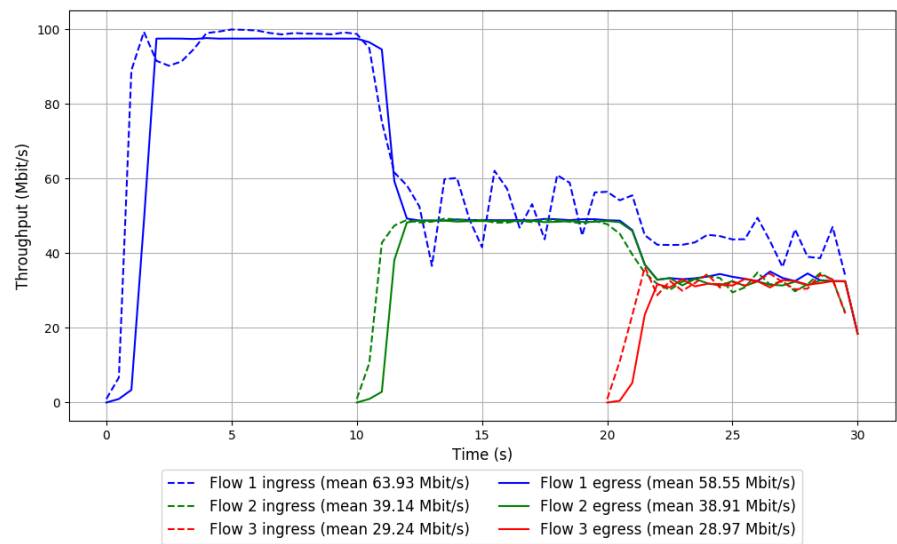
Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2019-01-22 03:10:49
End at: 2019-01-22 03:11:19
Local clock offset: -1.757 ms
Remote clock offset: 7.89 ms


# Below is generated by plot.py at 2019-01-22 04:49:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.77 Mbit/s
95th percentile per-packet one-way delay: 372.186 ms
Loss rate: 6.38%
-- Flow 1:
Average throughput: 58.55 Mbit/s
95th percentile per-packet one-way delay: 411.580 ms
Loss rate: 8.94%
-- Flow 2:
Average throughput: 38.91 Mbit/s
95th percentile per-packet one-way delay: 147.144 ms
Loss rate: 1.46%
-- Flow 3:
Average throughput: 28.97 Mbit/s
95th percentile per-packet one-way delay: 138.181 ms
Loss rate: 2.69%
```
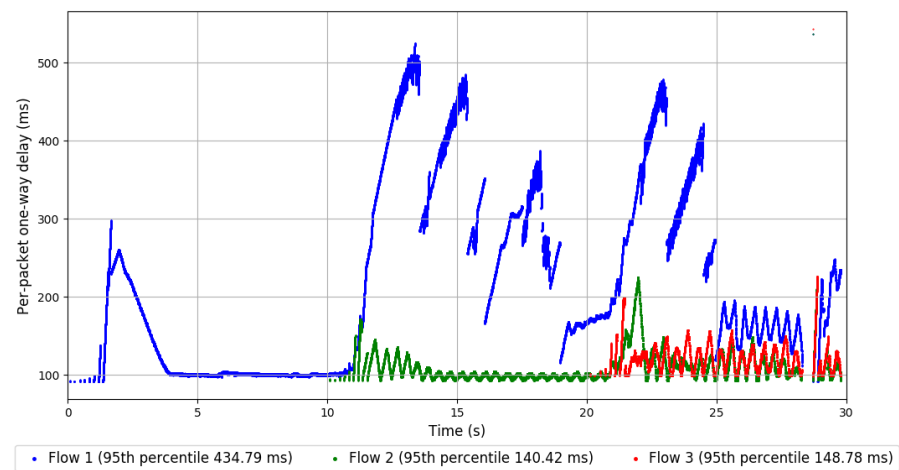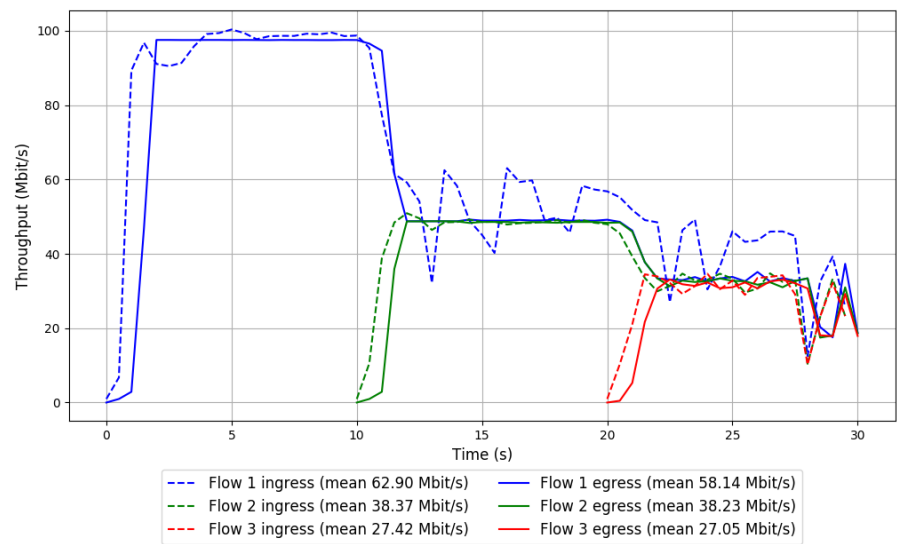
Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2019-01-22 03:37:50
End at: 2019-01-22 03:38:20
Local clock offset: -8.334 ms
Remote clock offset: 1.171 ms


# Below is generated by plot.py at 2019-01-22 04:49:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.29 Mbit/s
95th percentile per-packet one-way delay: 391.928 ms
Loss rate: 5.84%
-- Flow 1:
Average throughput: 58.14 Mbit/s
95th percentile per-packet one-way delay: 434.790 ms
Loss rate: 8.10%
-- Flow 2:
Average throughput: 38.23 Mbit/s
95th percentile per-packet one-way delay: 140.422 ms
Loss rate: 1.22%
-- Flow 3:
Average throughput: 27.05 Mbit/s
95th percentile per-packet one-way delay: 148.776 ms
Loss rate: 3.13%
```
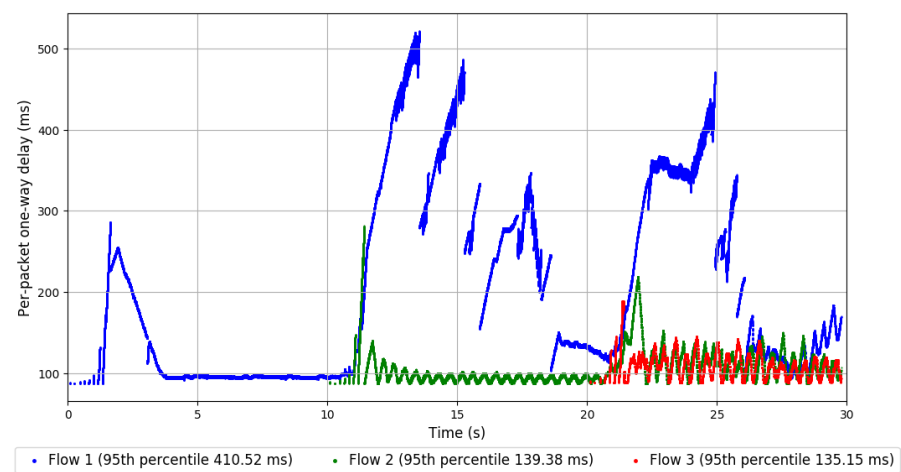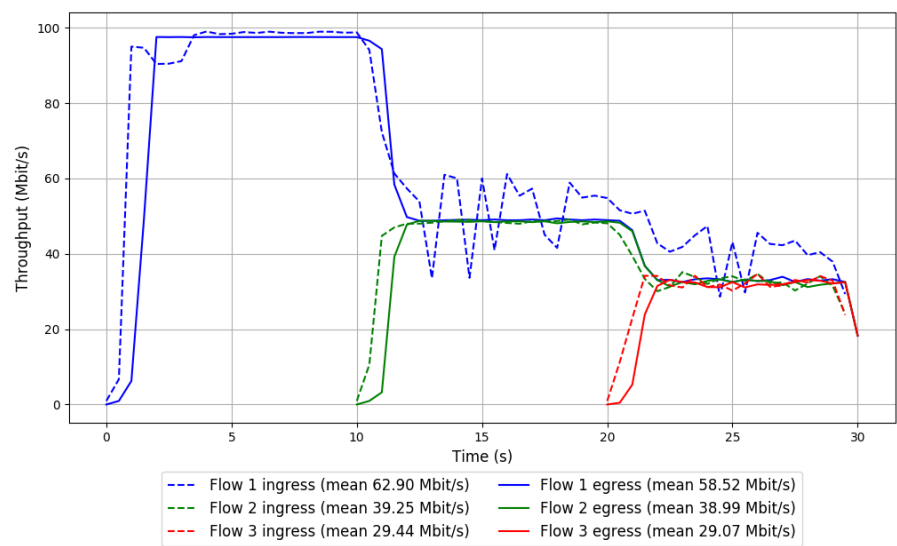
Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2019-01-22 04:04:49
End at: 2019-01-22 04:05:19
Local clock offset: -7.194 ms
Remote clock offset: 5.782 ms


# Below is generated by plot.py at 2019-01-22 04:49:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.82 Mbit/s
95th percentile per-packet one-way delay: 365.356 ms
Loss rate: 5.48%
-- Flow 1:
Average throughput: 58.52 Mbit/s
95th percentile per-packet one-way delay: 410.520 ms
Loss rate: 7.50%
-- Flow 2:
Average throughput: 38.99 Mbit/s
95th percentile per-packet one-way delay: 139.378 ms
Loss rate: 1.52%
-- Flow 3:
Average throughput: 29.07 Mbit/s
95th percentile per-packet one-way delay: 135.145 ms
Loss rate: 3.02%
```
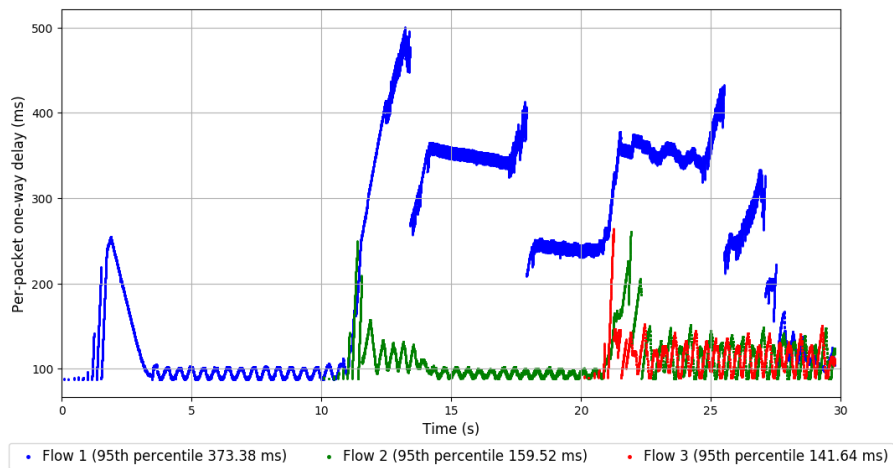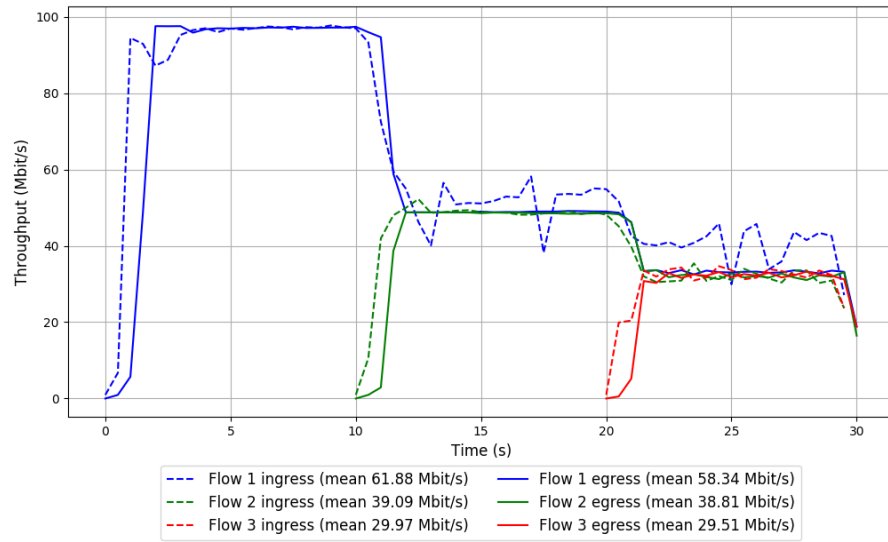
Run 4: Report of Indigo — Data Link

Flow 1 ingress (mean 62.90 Mbit/s) — — —   Flow 1 egress (mean 58.52 Mbit/s) ———
Flow 2 ingress (mean 39.25 Mbit/s) — — —   Flow 2 egress (mean 38.99 Mbit/s) ———
Flow 3 ingress (mean 29.44 Mbit/s) — — —   Flow 3 egress (mean 29.07 Mbit/s) ———

Flow 1 (95th percentile 410.52 ms)   Flow 2 (95th percentile 139.38 ms)   Flow 3 (95th percentile 135.15 ms)

```
Run 5: Statistics of Indigo

Start at: 2019-01-22 04:31:49
End at: 2019-01-22 04:32:19
Local clock offset: -7.069 ms
Remote clock offset: 5.108 ms


# Below is generated by plot.py at 2019-01-22 04:49:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.68 Mbit/s
95th percentile per-packet one-way delay: 360.950 ms
Loss rate: 4.71%
-- Flow 1:
Average throughput: 58.34 Mbit/s
95th percentile per-packet one-way delay: 373.385 ms
Loss rate: 6.26%
-- Flow 2:
Average throughput: 38.81 Mbit/s
95th percentile per-packet one-way delay: 159.516 ms
Loss rate: 1.57%
-- Flow 3:
Average throughput: 29.51 Mbit/s
95th percentile per-packet one-way delay: 141.637 ms
Loss rate: 3.28%
```
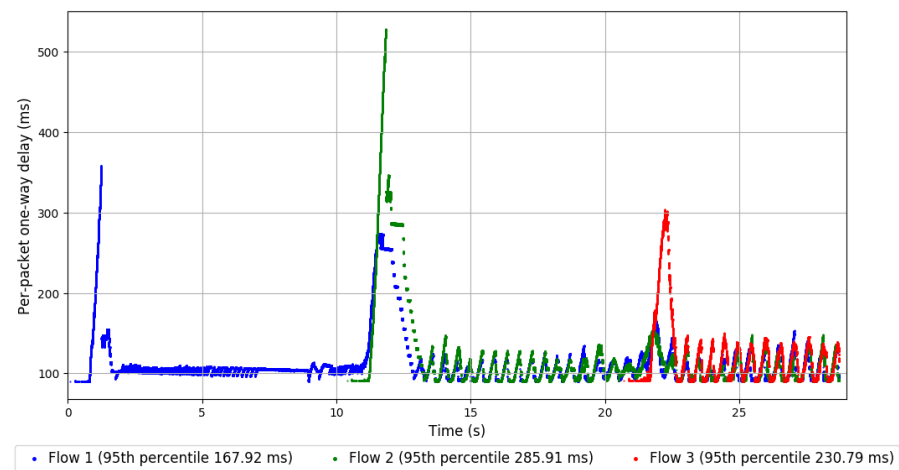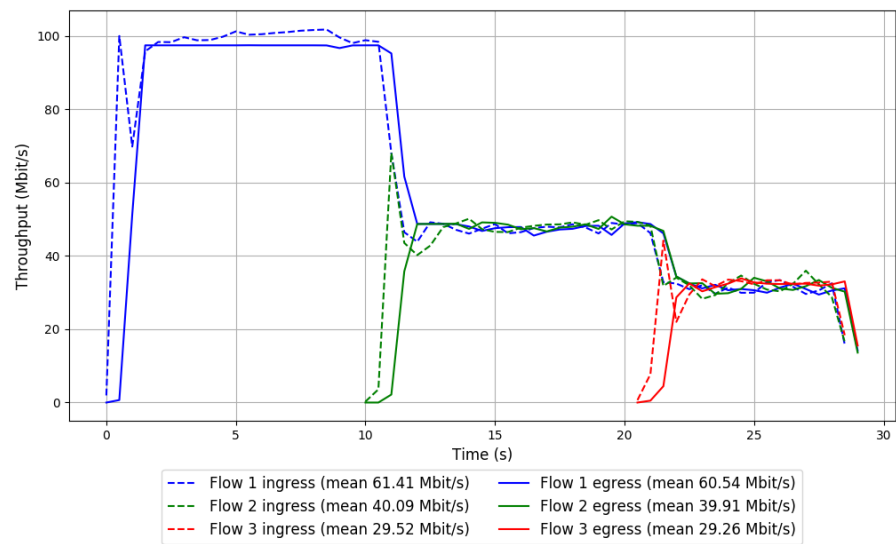
Run 5: Report of Indigo — Data Link

```
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-01-22 02:47:41
End at: 2019-01-22 02:48:11
Local clock offset: -2.425 ms
Remote clock offset: 4.131 ms


# Below is generated by plot.py at 2019-01-22 04:49:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.27 Mbit/s
95th percentile per-packet one-way delay: 207.899 ms
Loss rate: 1.92%
-- Flow 1:
Average throughput: 60.54 Mbit/s
95th percentile per-packet one-way delay: 167.919 ms
Loss rate: 2.00%
-- Flow 2:
Average throughput: 39.91 Mbit/s
95th percentile per-packet one-way delay: 285.911 ms
Loss rate: 1.38%
-- Flow 3:
Average throughput: 29.26 Mbit/s
95th percentile per-packet one-way delay: 230.789 ms
Loss rate: 3.00%
```
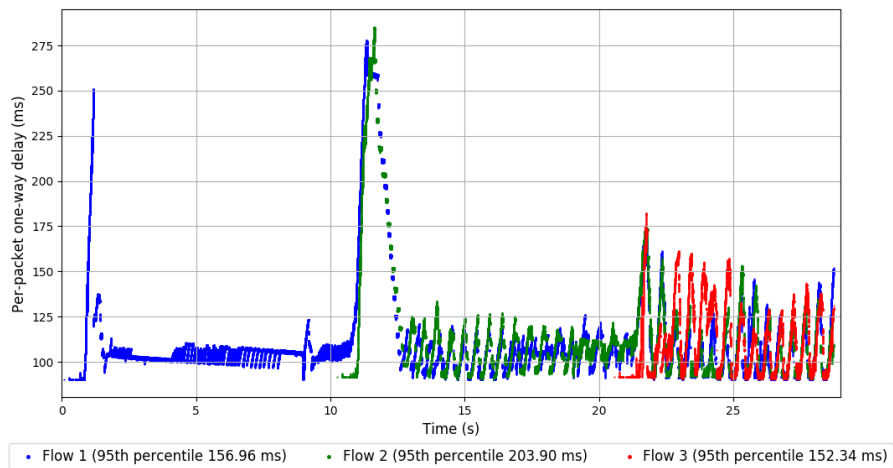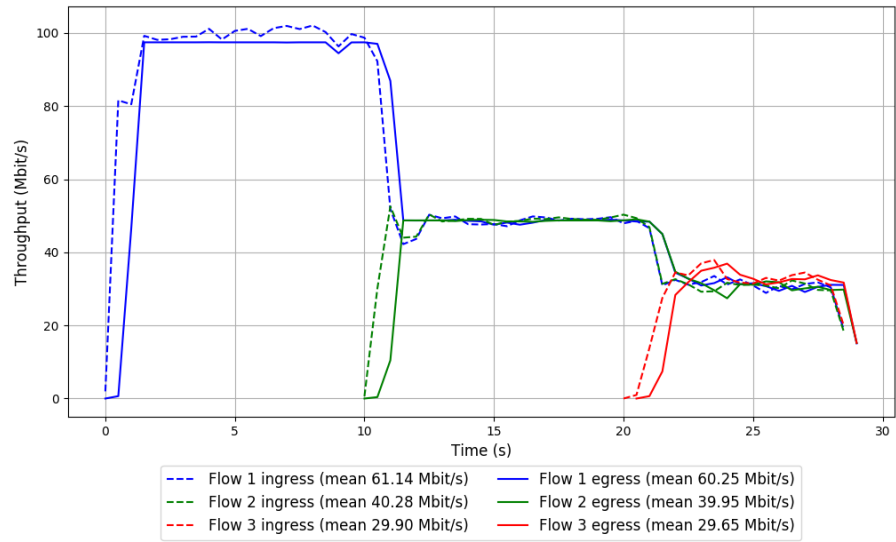
Run 1: Report of Indigo-MusesC3 — Data Link

```
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-01-22 03:14:41
End at: 2019-01-22 03:15:11
Local clock offset: -2.479 ms
Remote clock offset: 3.505 ms


# Below is generated by plot.py at 2019-01-22 04:50:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.48 Mbit/s
95th percentile per-packet one-way delay: 164.289 ms
Loss rate: 2.02%
-- Flow 1:
Average throughput: 60.25 Mbit/s
95th percentile per-packet one-way delay: 156.959 ms
Loss rate: 2.02%
-- Flow 2:
Average throughput: 39.95 Mbit/s
95th percentile per-packet one-way delay: 203.901 ms
Loss rate: 1.75%
-- Flow 3:
Average throughput: 29.65 Mbit/s
95th percentile per-packet one-way delay: 152.335 ms
Loss rate: 2.88%
```
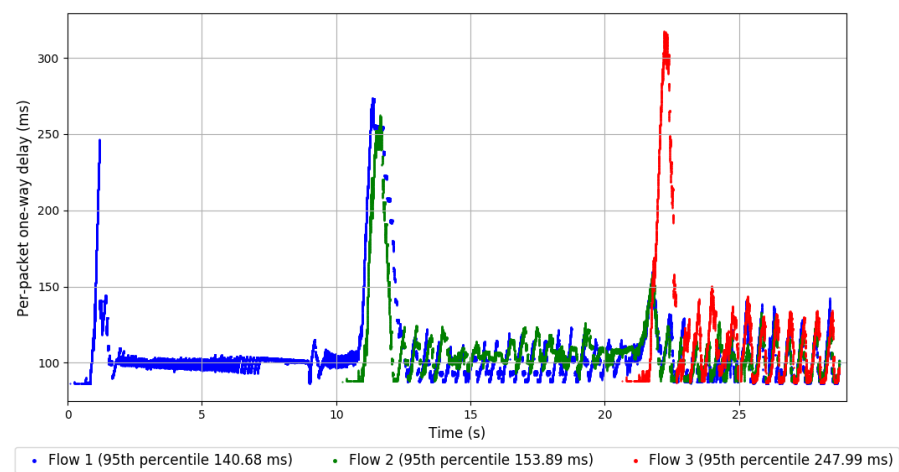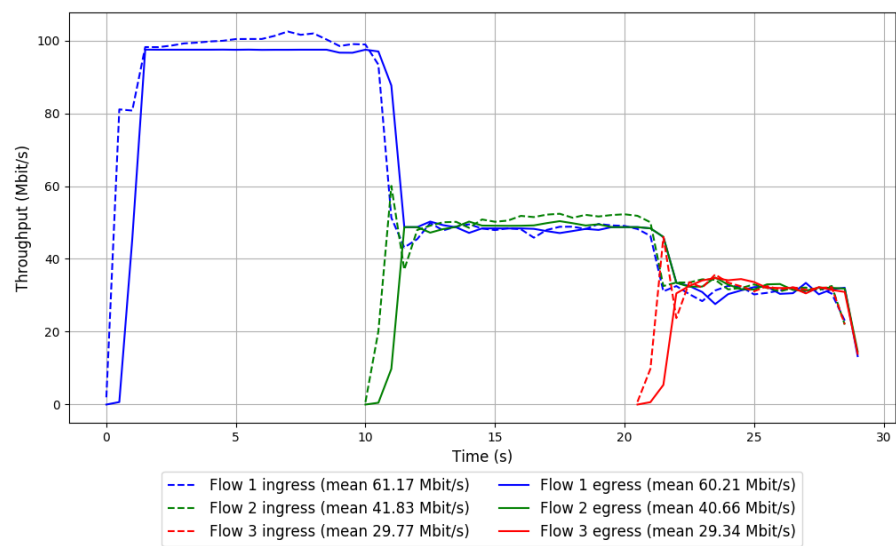
Run 2: Report of Indigo-MusesC3 — Data Link

- - - Flow 1 ingress (mean 61.14 Mbit/s)   —— Flow 1 egress (mean 60.25 Mbit/s)
- - - Flow 2 ingress (mean 40.28 Mbit/s)   —— Flow 2 egress (mean 39.95 Mbit/s)
- - - Flow 3 ingress (mean 29.90 Mbit/s)   —— Flow 3 egress (mean 29.65 Mbit/s)

• Flow 1 (95th percentile 156.96 ms)   • Flow 2 (95th percentile 203.90 ms)   • Flow 3 (95th percentile 152.34 ms)

```
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-01-22 03:41:41
End at: 2019-01-22 03:42:11
Local clock offset: -8.704 ms
Remote clock offset: 6.059 ms


# Below is generated by plot.py at 2019-01-22 04:50:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.79 Mbit/s
95th percentile per-packet one-way delay: 153.790 ms
Loss rate: 2.69%
-- Flow 1:
Average throughput: 60.21 Mbit/s
95th percentile per-packet one-way delay: 140.677 ms
Loss rate: 2.15%
-- Flow 2:
Average throughput: 40.66 Mbit/s
95th percentile per-packet one-way delay: 153.887 ms
Loss rate: 3.62%
-- Flow 3:
Average throughput: 29.34 Mbit/s
95th percentile per-packet one-way delay: 247.988 ms
Loss rate: 3.54%
```
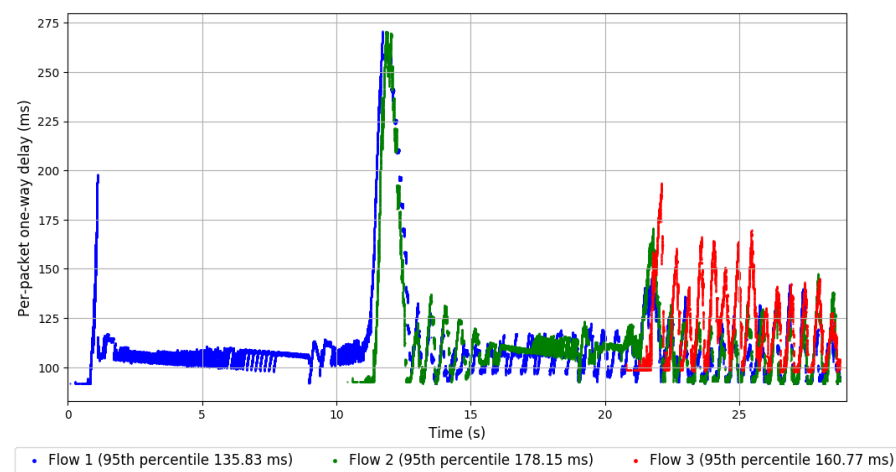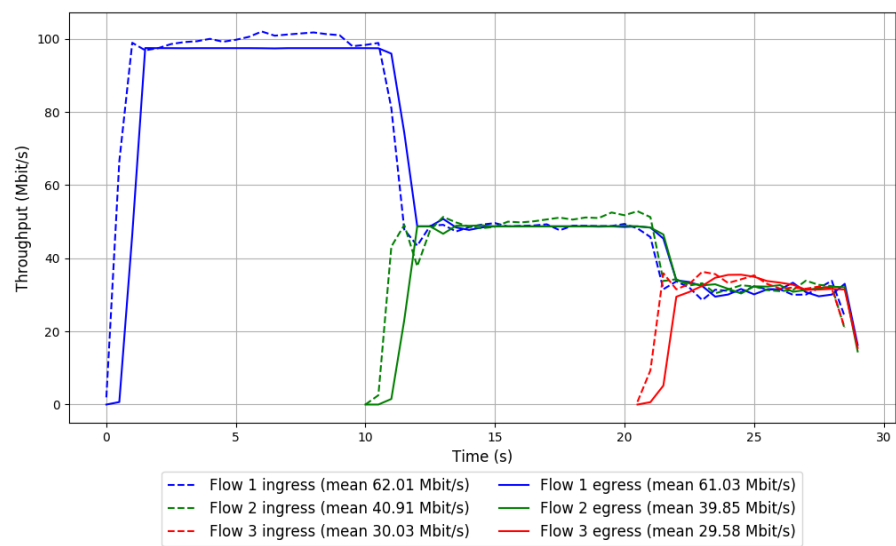
Run 3: Report of Indigo-MusesC3 — Data Link

- - - Flow 1 ingress (mean 61.17 Mbit/s) —— Flow 1 egress (mean 60.21 Mbit/s)
- - - Flow 2 ingress (mean 41.83 Mbit/s) —— Flow 2 egress (mean 40.66 Mbit/s)
- - - Flow 3 ingress (mean 29.77 Mbit/s) —— Flow 3 egress (mean 29.34 Mbit/s)

• Flow 1 (95th percentile 140.68 ms)   • Flow 2 (95th percentile 153.89 ms)   • Flow 3 (95th percentile 247.99 ms)

```
Run 4: Statistics of Indigo-MusesC3

Start at: 2019-01-22 04:08:41
End at: 2019-01-22 04:09:11
Local clock offset: -6.417 ms
Remote clock offset: 1.786 ms


# Below is generated by plot.py at 2019-01-22 04:50:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.89 Mbit/s
95th percentile per-packet one-way delay: 154.693 ms
Loss rate: 2.66%
-- Flow 1:
Average throughput: 61.03 Mbit/s
95th percentile per-packet one-way delay: 135.826 ms
Loss rate: 2.16%
-- Flow 2:
Average throughput: 39.85 Mbit/s
95th percentile per-packet one-way delay: 178.147 ms
Loss rate: 3.52%
-- Flow 3:
Average throughput: 29.58 Mbit/s
95th percentile per-packet one-way delay: 160.772 ms
Loss rate: 3.65%
```
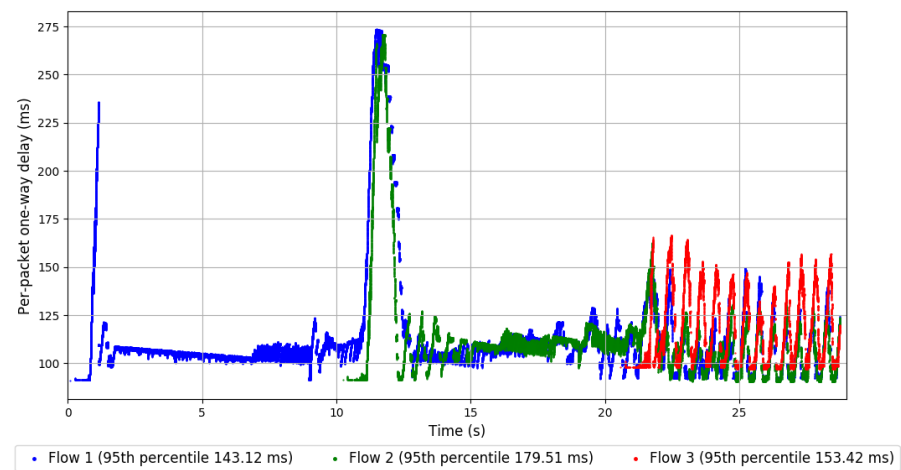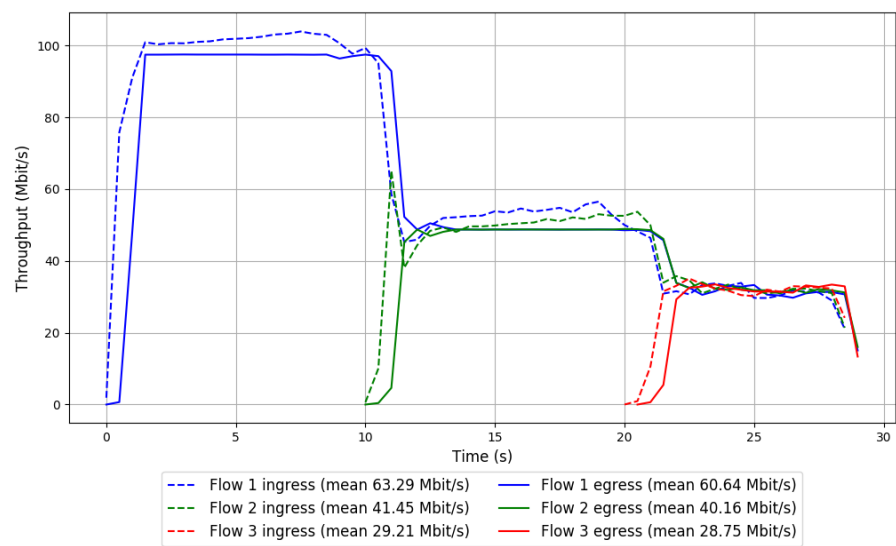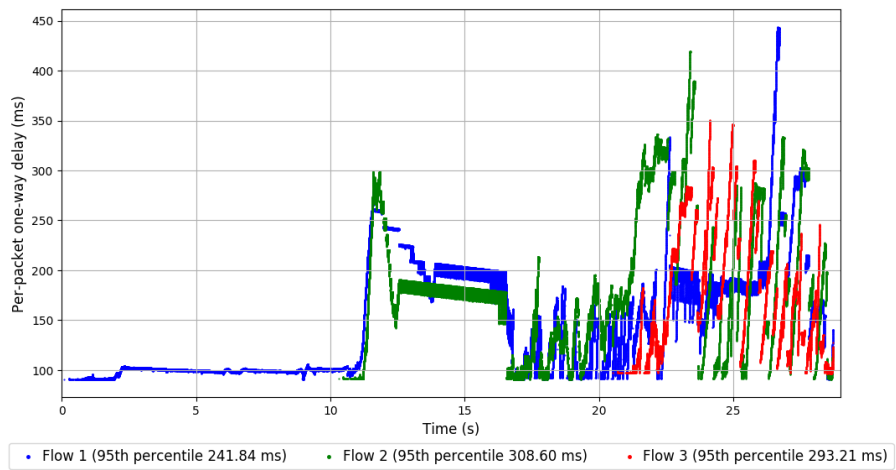
Run 4: Report of Indigo-MusesC3 — Data Link

- - - Flow 1 ingress (mean 62.01 Mbit/s) —— Flow 1 egress (mean 61.03 Mbit/s)
- - - Flow 2 ingress (mean 40.91 Mbit/s) —— Flow 2 egress (mean 39.85 Mbit/s)
- - - Flow 3 ingress (mean 30.03 Mbit/s) —— Flow 3 egress (mean 29.58 Mbit/s)

• Flow 1 (95th percentile 135.83 ms)　　• Flow 2 (95th percentile 178.15 ms)　　• Flow 3 (95th percentile 160.77 ms)

```
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-01-22 04:35:41
End at: 2019-01-22 04:36:11
Local clock offset: -7.11 ms
Remote clock offset: 2.203 ms


# Below is generated by plot.py at 2019-01-22 04:50:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.77 Mbit/s
95th percentile per-packet one-way delay: 152.831 ms
Loss rate: 4.46%
-- Flow 1:
Average throughput: 60.64 Mbit/s
95th percentile per-packet one-way delay: 143.121 ms
Loss rate: 4.76%
-- Flow 2:
Average throughput: 40.16 Mbit/s
95th percentile per-packet one-way delay: 179.512 ms
Loss rate: 4.01%
-- Flow 3:
Average throughput: 28.75 Mbit/s
95th percentile per-packet one-way delay: 153.418 ms
Loss rate: 3.66%
```
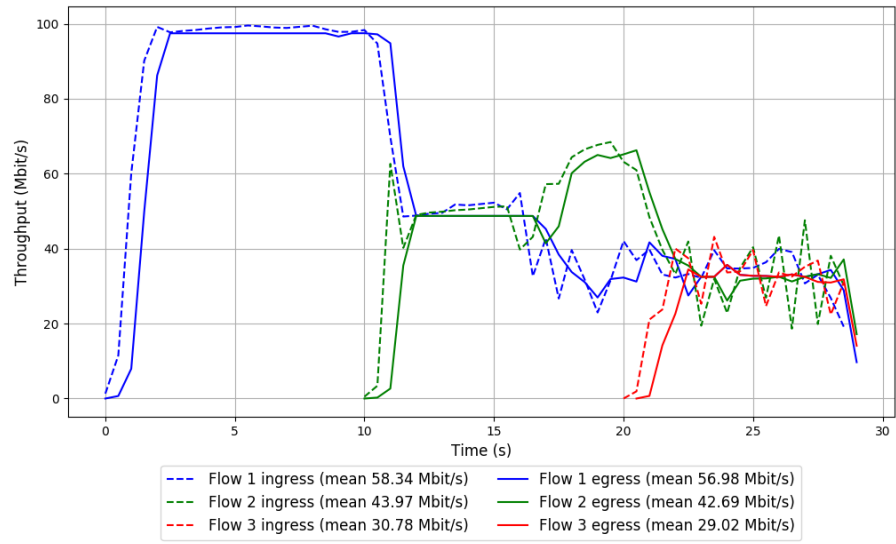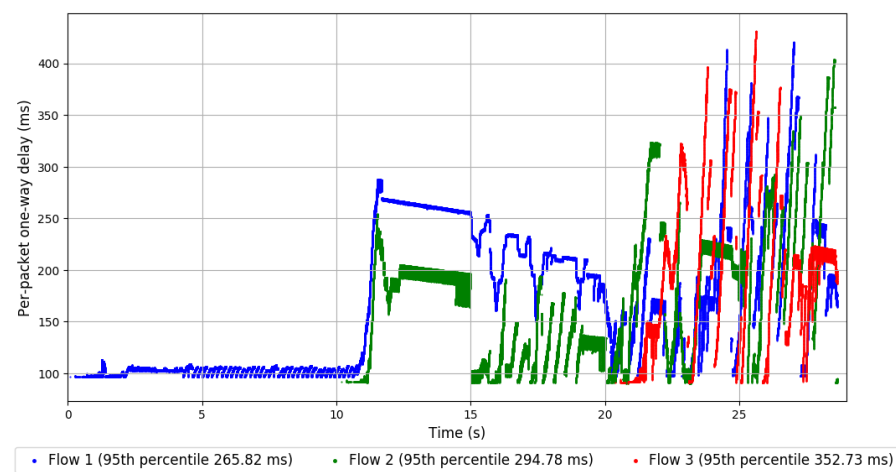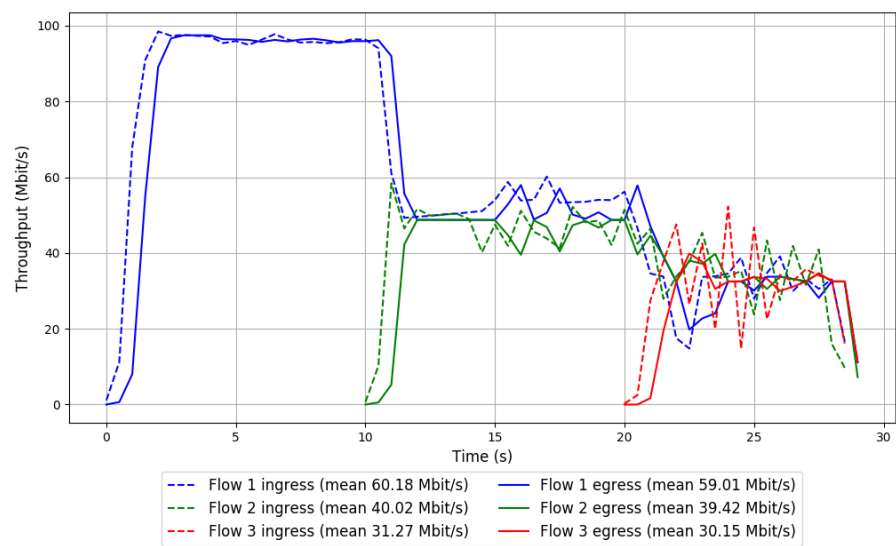
Run 5: Report of Indigo-MusesC3 — Data Link

- - - Flow 1 ingress (mean 63.29 Mbit/s) ——— Flow 1 egress (mean 60.64 Mbit/s)
- - - Flow 2 ingress (mean 41.45 Mbit/s) ——— Flow 2 egress (mean 40.16 Mbit/s)
- - - Flow 3 ingress (mean 29.21 Mbit/s) ——— Flow 3 egress (mean 28.75 Mbit/s)

· Flow 1 (95th percentile 143.12 ms)   · Flow 2 (95th percentile 179.51 ms)   · Flow 3 (95th percentile 153.42 ms)

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```
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-01-22 02:39:55
End at: 2019-01-22 02:40:25
Local clock offset: -2.393 ms
Remote clock offset: 4.332 ms


# Below is generated by plot.py at 2019-01-22 04:50:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.76 Mbit/s
95th percentile per-packet one-way delay: 280.504 ms
Loss rate: 3.62%
-- Flow 1:
Average throughput: 56.98 Mbit/s
95th percentile per-packet one-way delay: 241.844 ms
Loss rate: 2.92%
-- Flow 2:
Average throughput: 42.69 Mbit/s
95th percentile per-packet one-way delay: 308.596 ms
Loss rate: 3.83%
-- Flow 3:
Average throughput: 29.02 Mbit/s
95th percentile per-packet one-way delay: 293.211 ms
Loss rate: 7.55%
```
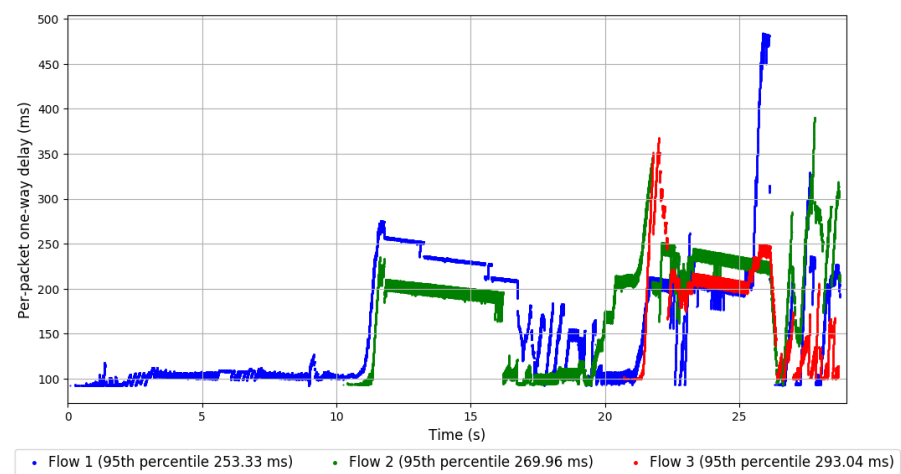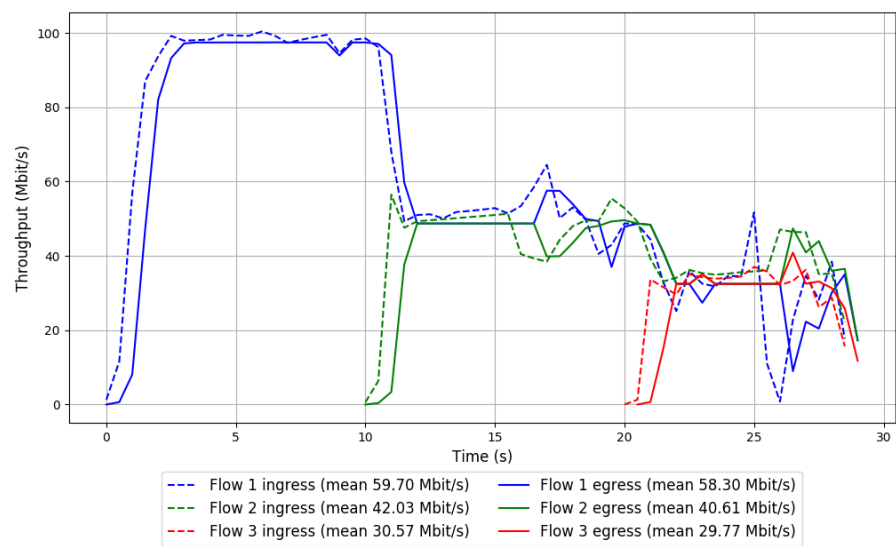
Run 1: Report of Indigo-MusesC5 — Data Link

```
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-01-22 03:06:55
End at: 2019-01-22 03:07:25
Local clock offset: -2.563 ms
Remote clock offset: 4.17 ms


# Below is generated by plot.py at 2019-01-22 04:50:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.20 Mbit/s
95th percentile per-packet one-way delay: 280.180 ms
Loss rate: 2.74%
-- Flow 1:
Average throughput: 59.01 Mbit/s
95th percentile per-packet one-way delay: 265.817 ms
Loss rate: 2.47%
-- Flow 2:
Average throughput: 39.42 Mbit/s
95th percentile per-packet one-way delay: 294.781 ms
Loss rate: 2.42%
-- Flow 3:
Average throughput: 30.15 Mbit/s
95th percentile per-packet one-way delay: 352.727 ms
Loss rate: 5.43%
```
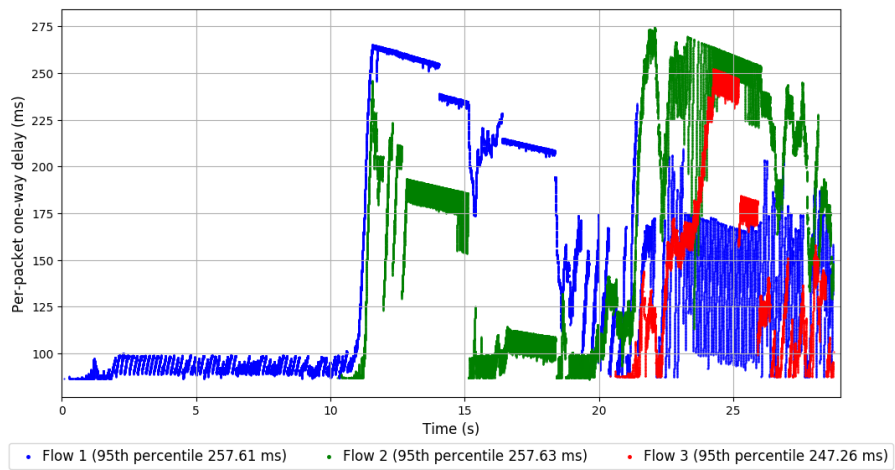
Run 2: Report of Indigo-MusesC5 — Data Link

```
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-01-22 03:33:56
End at: 2019-01-22 03:34:26
Local clock offset: -7.115 ms
Remote clock offset: 1.101 ms

# Below is generated by plot.py at 2019-01-22 04:50:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.00 Mbit/s
95th percentile per-packet one-way delay: 254.746 ms
Loss rate: 3.53%
-- Flow 1:
Average throughput: 58.30 Mbit/s
95th percentile per-packet one-way delay: 253.326 ms
Loss rate: 2.93%
-- Flow 2:
Average throughput: 40.61 Mbit/s
95th percentile per-packet one-way delay: 269.960 ms
Loss rate: 4.29%
-- Flow 3:
Average throughput: 29.77 Mbit/s
95th percentile per-packet one-way delay: 293.037 ms
Loss rate: 5.24%
```
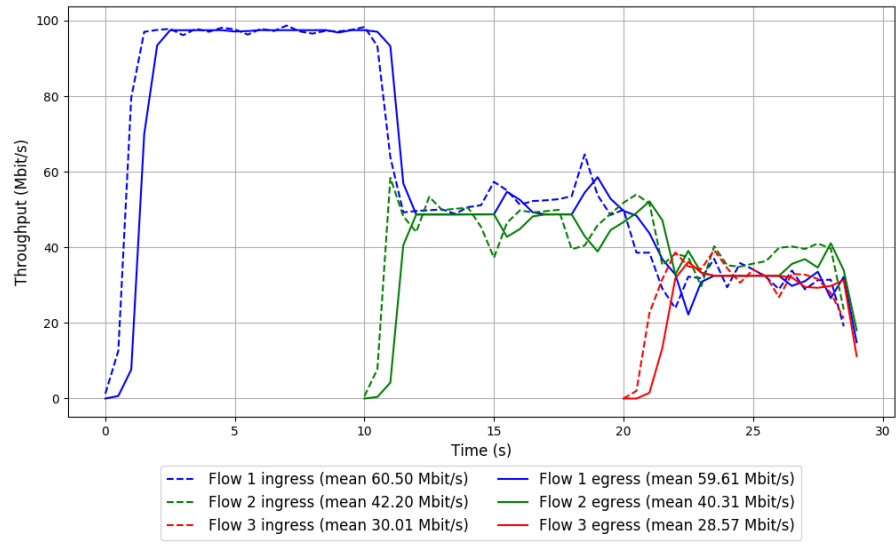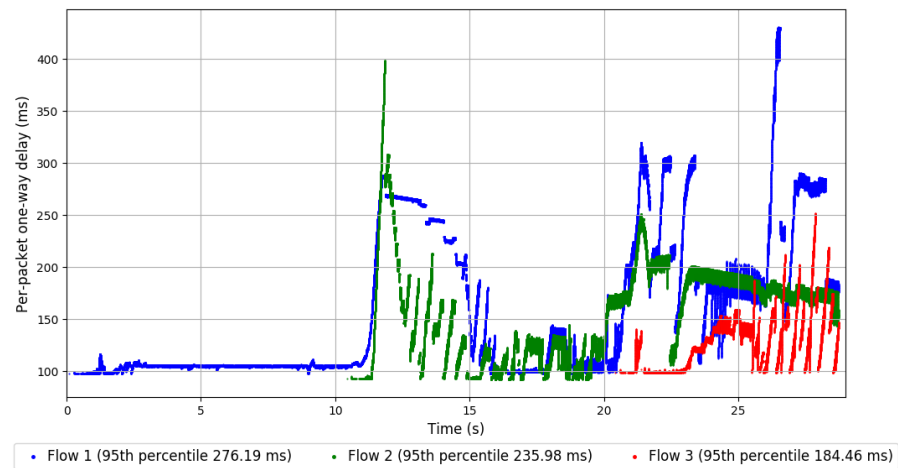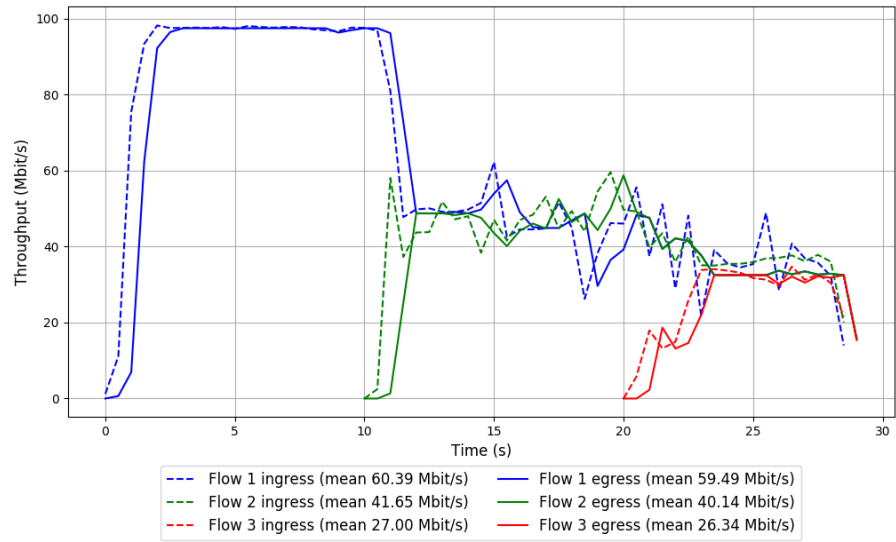
Run 3: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 59.70 Mbit/s) --- Flow 1 egress (mean 58.30 Mbit/s)
Flow 2 ingress (mean 42.03 Mbit/s) --- Flow 2 egress (mean 40.61 Mbit/s)
Flow 3 ingress (mean 30.57 Mbit/s) --- Flow 3 egress (mean 29.77 Mbit/s)

Flow 1 (95th percentile 253.33 ms)   Flow 2 (95th percentile 269.96 ms)   Flow 3 (95th percentile 293.04 ms)

```
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-01-22 04:00:55
End at: 2019-01-22 04:01:25
Local clock offset: -7.294 ms
Remote clock offset: 6.178 ms


# Below is generated by plot.py at 2019-01-22 04:50:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.88 Mbit/s
95th percentile per-packet one-way delay: 256.944 ms
Loss rate: 3.25%
-- Flow 1:
Average throughput: 59.61 Mbit/s
95th percentile per-packet one-way delay: 257.610 ms
Loss rate: 1.92%
-- Flow 2:
Average throughput: 40.31 Mbit/s
95th percentile per-packet one-way delay: 257.627 ms
Loss rate: 5.08%
-- Flow 3:
Average throughput: 28.57 Mbit/s
95th percentile per-packet one-way delay: 247.260 ms
Loss rate: 6.72%
```
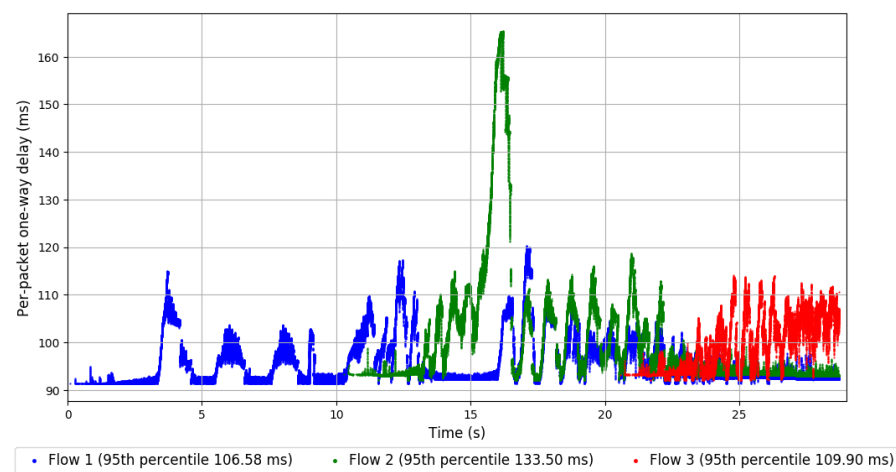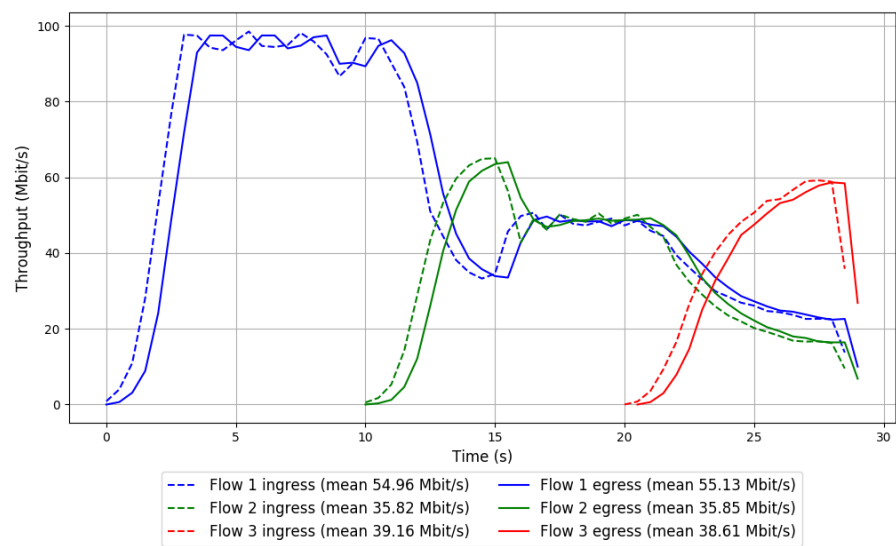
Run 4: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 60.50 Mbit/s) --- Flow 1 egress (mean 59.61 Mbit/s)
Flow 2 ingress (mean 42.20 Mbit/s) --- Flow 2 egress (mean 40.31 Mbit/s)
Flow 3 ingress (mean 30.01 Mbit/s) --- Flow 3 egress (mean 28.57 Mbit/s)

Flow 1 (95th percentile 257.61 ms)   Flow 2 (95th percentile 257.63 ms)   Flow 3 (95th percentile 247.26 ms)

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```
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-01-22 04:27:56
End at: 2019-01-22 04:28:26
Local clock offset: -6.297 ms
Remote clock offset: 2.285 ms


# Below is generated by plot.py at 2019-01-22 04:51:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.79 Mbit/s
95th percentile per-packet one-way delay: 267.909 ms
Loss rate: 2.93%
-- Flow 1:
Average throughput: 59.49 Mbit/s
95th percentile per-packet one-way delay: 276.189 ms
Loss rate: 2.10%
-- Flow 2:
Average throughput: 40.14 Mbit/s
95th percentile per-packet one-way delay: 235.983 ms
Loss rate: 4.52%
-- Flow 3:
Average throughput: 26.34 Mbit/s
95th percentile per-packet one-way delay: 184.463 ms
Loss rate: 3.91%
```
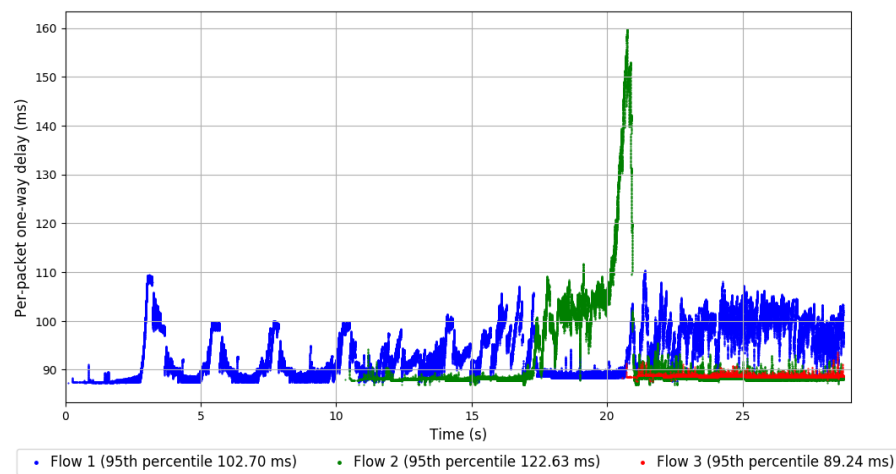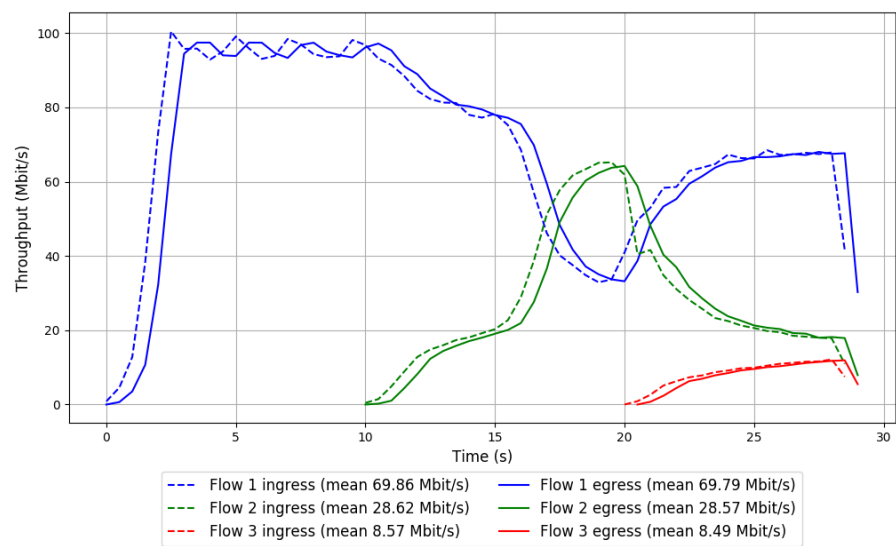
Run 5: Report of Indigo-MusesC5 — Data Link

- - - Flow 1 ingress (mean 60.39 Mbit/s) —— Flow 1 egress (mean 59.49 Mbit/s)
- - - Flow 2 ingress (mean 41.65 Mbit/s) —— Flow 2 egress (mean 40.14 Mbit/s)
- - - Flow 3 ingress (mean 27.00 Mbit/s) —— Flow 3 egress (mean 26.34 Mbit/s)

• Flow 1 (95th percentile 276.19 ms) • Flow 2 (95th percentile 235.98 ms) • Flow 3 (95th percentile 184.46 ms)
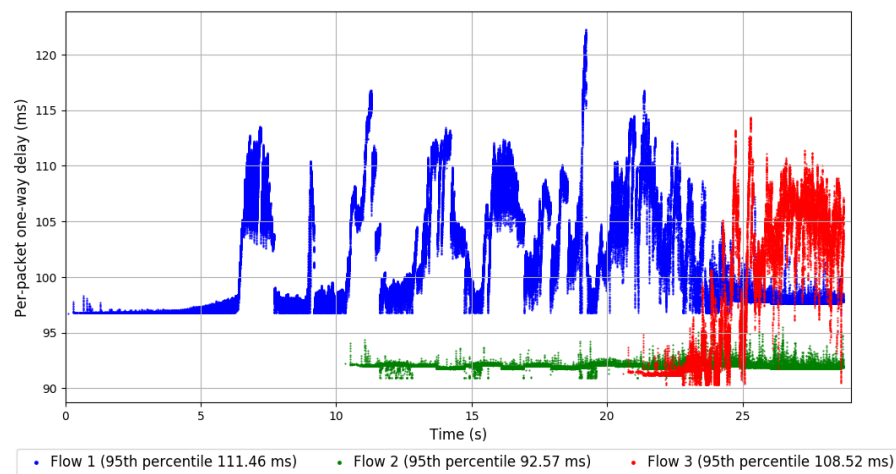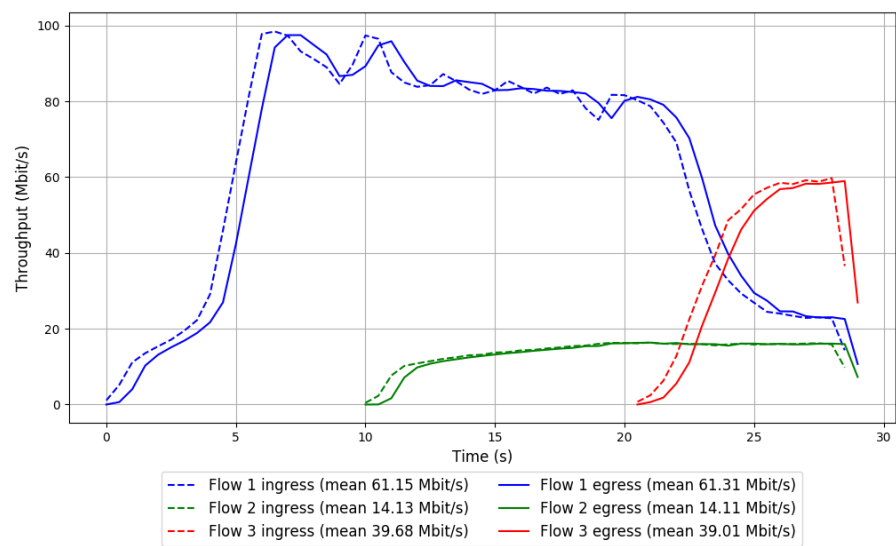
```
Run 1: Statistics of Indigo-MusesD

Start at: 2019-01-22 02:50:12
End at: 2019-01-22 02:50:42
Local clock offset: -2.546 ms
Remote clock offset: 2.861 ms


# Below is generated by plot.py at 2019-01-22 04:51:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.21 Mbit/s
95th percentile per-packet one-way delay: 111.108 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 55.13 Mbit/s
95th percentile per-packet one-way delay: 106.582 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 35.85 Mbit/s
95th percentile per-packet one-way delay: 133.499 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 38.61 Mbit/s
95th percentile per-packet one-way delay: 109.900 ms
Loss rate: 3.43%
```
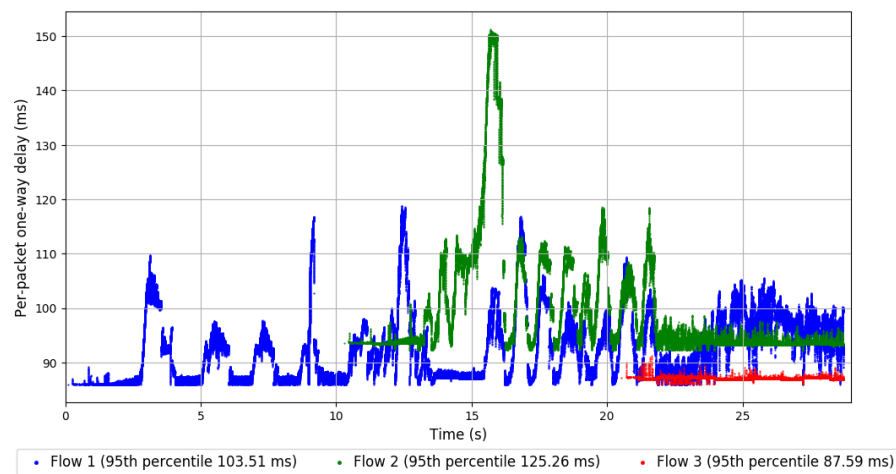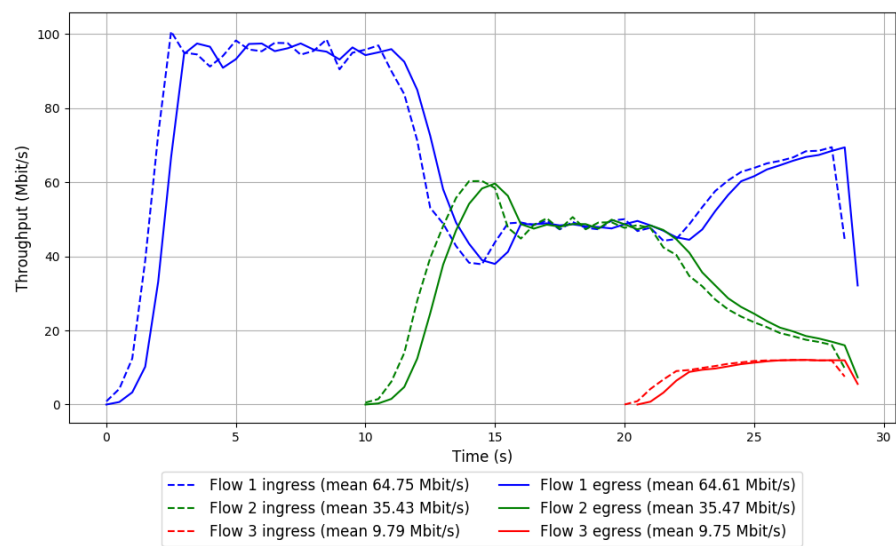
Run 1: Report of Indigo-MusesD — Data Link

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```
Run 2: Statistics of Indigo-MusesD

Start at: 2019-01-22 03:17:12
End at: 2019-01-22 03:17:42
Local clock offset: -3.19 ms
Remote clock offset: 7.035 ms


# Below is generated by plot.py at 2019-01-22 04:51:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.57 Mbit/s
95th percentile per-packet one-way delay: 104.608 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 69.79 Mbit/s
95th percentile per-packet one-way delay: 102.704 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 28.57 Mbit/s
95th percentile per-packet one-way delay: 122.634 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 8.49 Mbit/s
95th percentile per-packet one-way delay: 89.244 ms
Loss rate: 2.94%
```

Run 2: Report of Indigo-MusesD — Data Link

```
Run 3: Statistics of Indigo-MusesD

Start at: 2019-01-22 03:44:12
End at: 2019-01-22 03:44:42
Local clock offset: -8.907 ms
Remote clock offset: 2.218 ms


# Below is generated by plot.py at 2019-01-22 04:51:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.45 Mbit/s
95th percentile per-packet one-way delay: 110.991 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 61.31 Mbit/s
95th percentile per-packet one-way delay: 111.460 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 14.11 Mbit/s
95th percentile per-packet one-way delay: 92.568 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 39.01 Mbit/s
95th percentile per-packet one-way delay: 108.521 ms
Loss rate: 3.77%
```
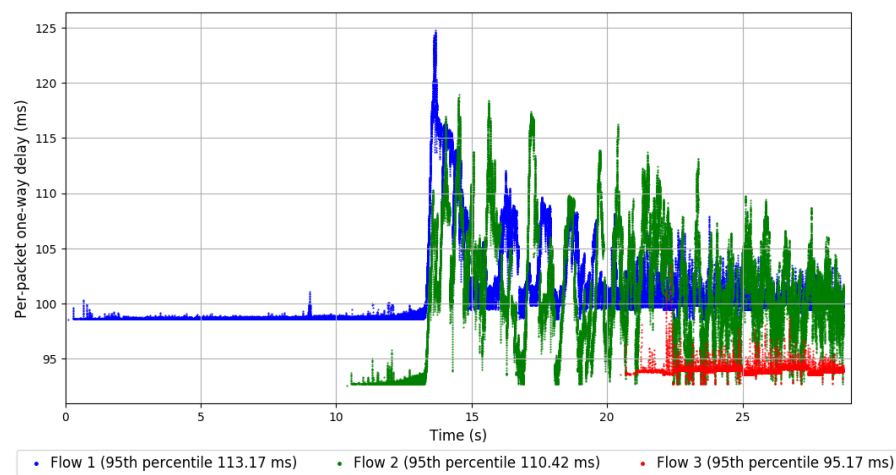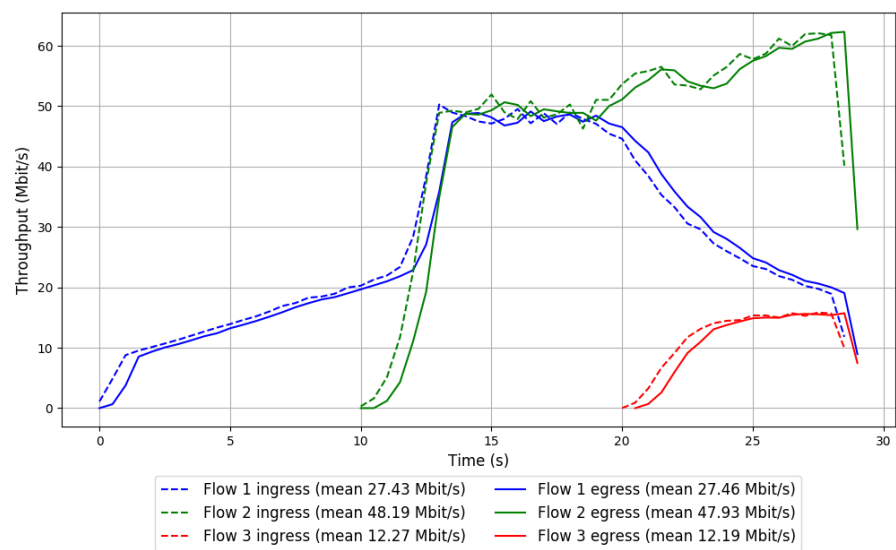
Run 3: Report of Indigo-MusesD — Data Link

```
Run 4: Statistics of Indigo-MusesD

Start at: 2019-01-22 04:11:11
End at: 2019-01-22 04:11:41
Local clock offset: -6.429 ms
Remote clock offset: 7.086 ms


# Below is generated by plot.py at 2019-01-22 04:51:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.24 Mbit/s
95th percentile per-packet one-way delay: 110.278 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 64.61 Mbit/s
95th percentile per-packet one-way delay: 103.506 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 35.47 Mbit/s
95th percentile per-packet one-way delay: 125.257 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 9.75 Mbit/s
95th percentile per-packet one-way delay: 87.588 ms
Loss rate: 2.45%
```
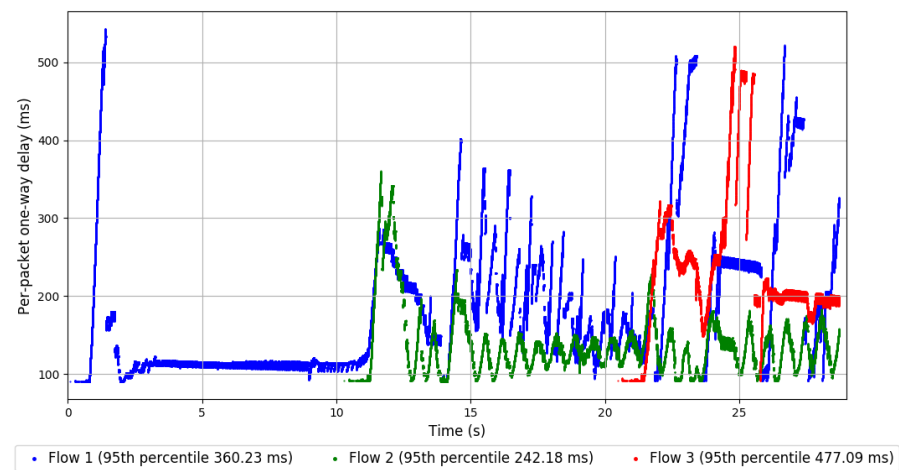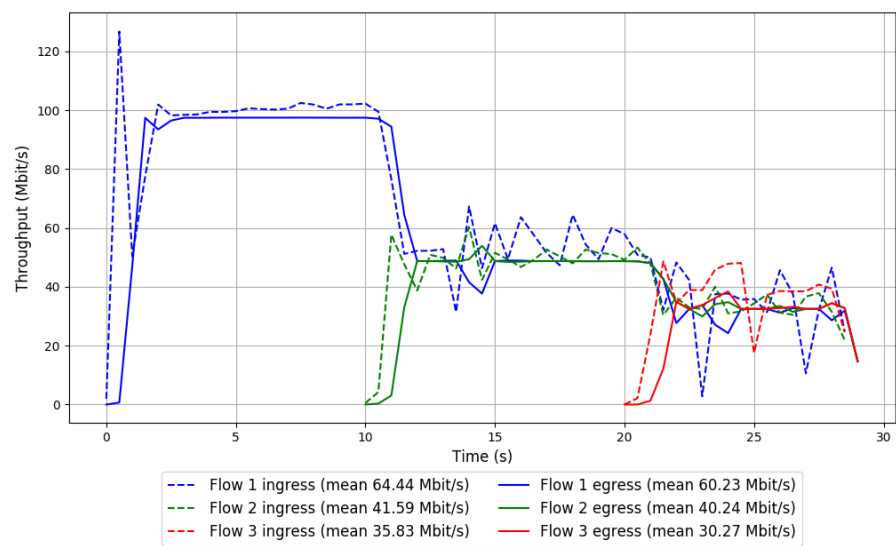
Run 4: Report of Indigo-MusesD — Data Link

```
Run 5: Statistics of Indigo-MusesD

Start at: 2019-01-22 04:38:12
End at: 2019-01-22 04:38:42
Local clock offset: -6.429 ms
Remote clock offset: 1.353 ms


# Below is generated by plot.py at 2019-01-22 04:51:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.67 Mbit/s
95th percentile per-packet one-way delay: 110.741 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 27.46 Mbit/s
95th percentile per-packet one-way delay: 113.168 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 47.93 Mbit/s
95th percentile per-packet one-way delay: 110.425 ms
Loss rate: 1.48%
-- Flow 3:
Average throughput: 12.19 Mbit/s
95th percentile per-packet one-way delay: 95.172 ms
Loss rate: 2.69%
```

Run 5: Report of Indigo-MusesD — Data Link

```
Run 1: Statistics of Indigo-MusesT

Start at: 2019-01-22 02:52:50
End at: 2019-01-22 02:53:20
Local clock offset: -2.542 ms
Remote clock offset: 4.105 ms


# Below is generated by plot.py at 2019-01-22 04:51:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.87 Mbit/s
95th percentile per-packet one-way delay: 333.990 ms
Loss rate: 7.35%
-- Flow 1:
Average throughput: 60.23 Mbit/s
95th percentile per-packet one-way delay: 360.231 ms
Loss rate: 7.09%
-- Flow 2:
Average throughput: 40.24 Mbit/s
95th percentile per-packet one-way delay: 242.181 ms
Loss rate: 4.09%
-- Flow 3:
Average throughput: 30.27 Mbit/s
95th percentile per-packet one-way delay: 477.087 ms
Loss rate: 17.27%
```
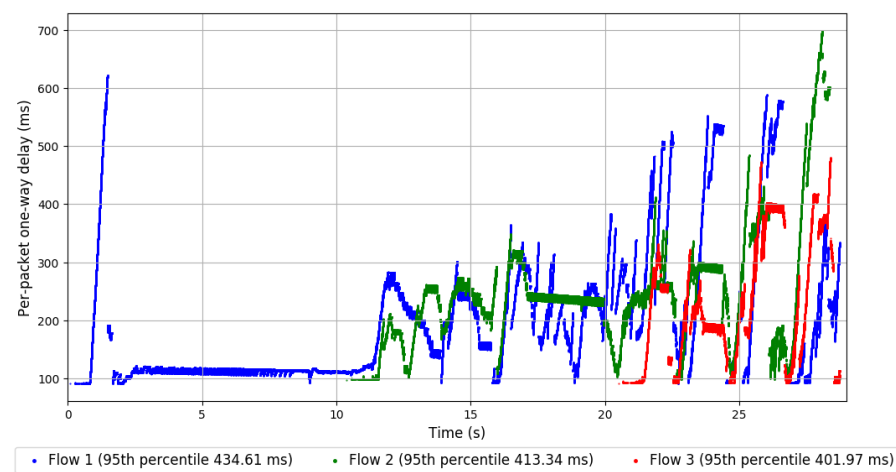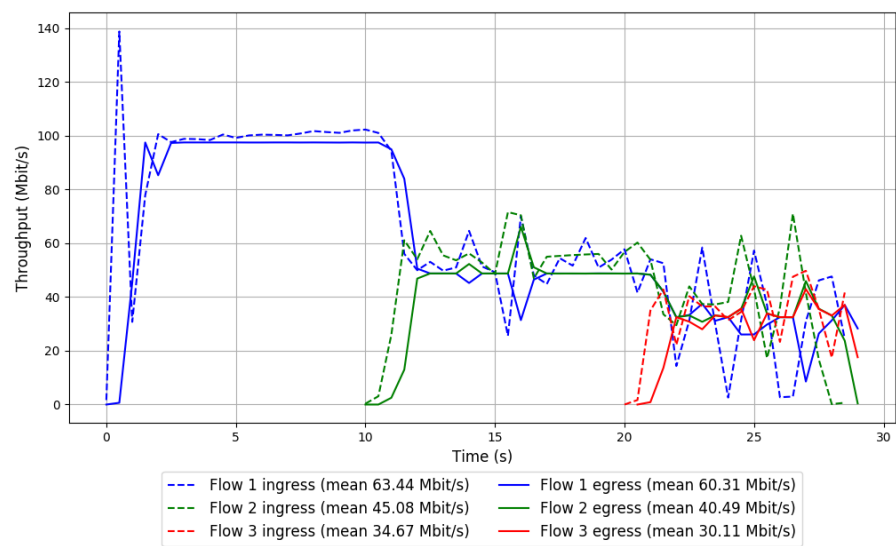
Run 1: Report of Indigo-MusesT — Data Link

```
Run 2: Statistics of Indigo-MusesT

Start at: 2019-01-22 03:19:50
End at: 2019-01-22 03:20:20
Local clock offset: -4.515 ms
Remote clock offset: 2.895 ms


# Below is generated by plot.py at 2019-01-22 04:51:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.92 Mbit/s
95th percentile per-packet one-way delay: 416.105 ms
Loss rate: 8.00%
-- Flow 1:
Average throughput: 60.31 Mbit/s
95th percentile per-packet one-way delay: 434.609 ms
Loss rate: 5.51%
-- Flow 2:
Average throughput: 40.49 Mbit/s
95th percentile per-packet one-way delay: 413.343 ms
Loss rate: 11.06%
-- Flow 3:
Average throughput: 30.11 Mbit/s
95th percentile per-packet one-way delay: 401.966 ms
Loss rate: 14.84%
```
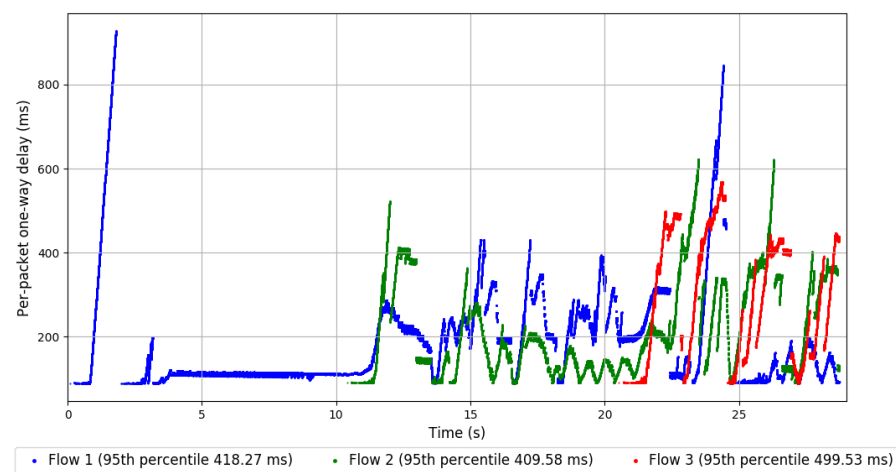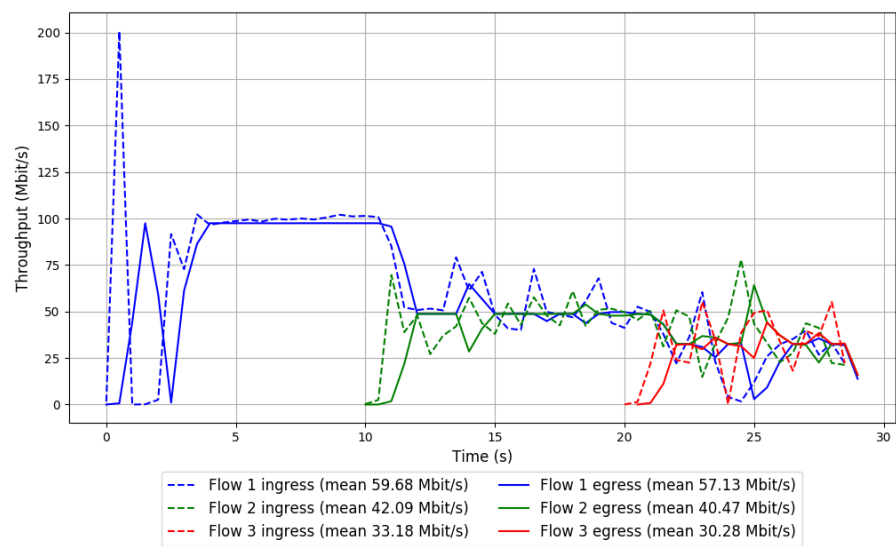
Run 2: Report of Indigo-MusesT — Data Link

```
Run 3: Statistics of Indigo-MusesT

Start at: 2019-01-22 03:46:50
End at: 2019-01-22 03:47:20
Local clock offset: -8.094 ms
Remote clock offset: 4.826 ms


# Below is generated by plot.py at 2019-01-22 04:52:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.71 Mbit/s
95th percentile per-packet one-way delay: 459.880 ms
Loss rate: 5.37%
-- Flow 1:
Average throughput: 57.13 Mbit/s
95th percentile per-packet one-way delay: 418.273 ms
Loss rate: 4.84%
-- Flow 2:
Average throughput: 40.47 Mbit/s
95th percentile per-packet one-way delay: 409.578 ms
Loss rate: 4.73%
-- Flow 3:
Average throughput: 30.28 Mbit/s
95th percentile per-packet one-way delay: 499.531 ms
Loss rate: 10.44%
```
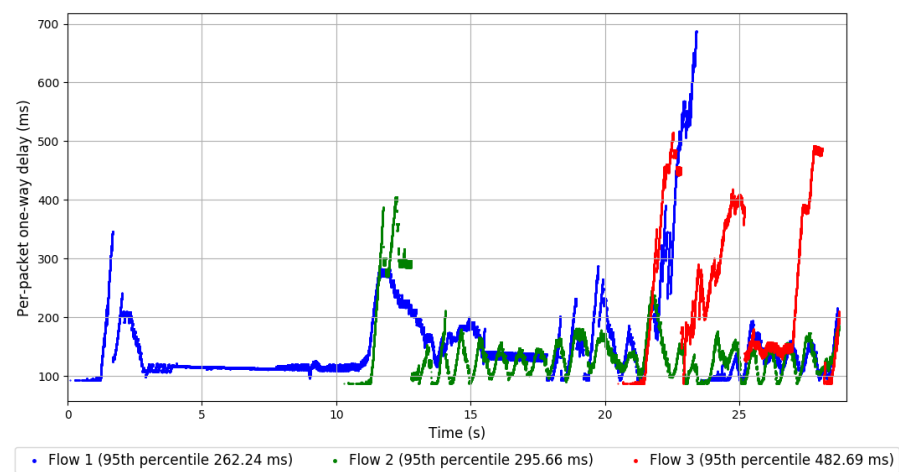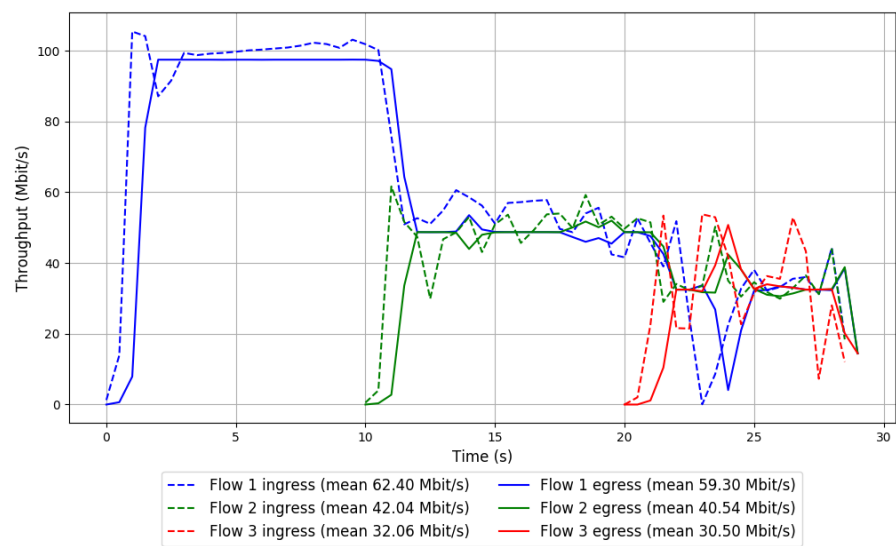
Run 3: Report of Indigo-MusesT — Data Link

Flow 1 ingress (mean 59.68 Mbit/s) — Flow 1 egress (mean 57.13 Mbit/s)
Flow 2 ingress (mean 42.09 Mbit/s) — Flow 2 egress (mean 40.47 Mbit/s)
Flow 3 ingress (mean 33.18 Mbit/s) — Flow 3 egress (mean 30.28 Mbit/s)

Flow 1 (95th percentile 418.27 ms) • Flow 2 (95th percentile 409.58 ms) • Flow 3 (95th percentile 499.53 ms)

```
Run 4: Statistics of Indigo-MusesT

Start at: 2019-01-22 04:13:49
End at: 2019-01-22 04:14:19
Local clock offset: -6.504 ms
Remote clock offset: 6.72 ms


# Below is generated by plot.py at 2019-01-22 04:52:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.19 Mbit/s
95th percentile per-packet one-way delay: 326.456 ms
Loss rate: 5.34%
-- Flow 1:
Average throughput: 59.30 Mbit/s
95th percentile per-packet one-way delay: 262.236 ms
Loss rate: 5.52%
-- Flow 2:
Average throughput: 40.54 Mbit/s
95th percentile per-packet one-way delay: 295.663 ms
Loss rate: 4.39%
-- Flow 3:
Average throughput: 30.50 Mbit/s
95th percentile per-packet one-way delay: 482.685 ms
Loss rate: 6.86%
```
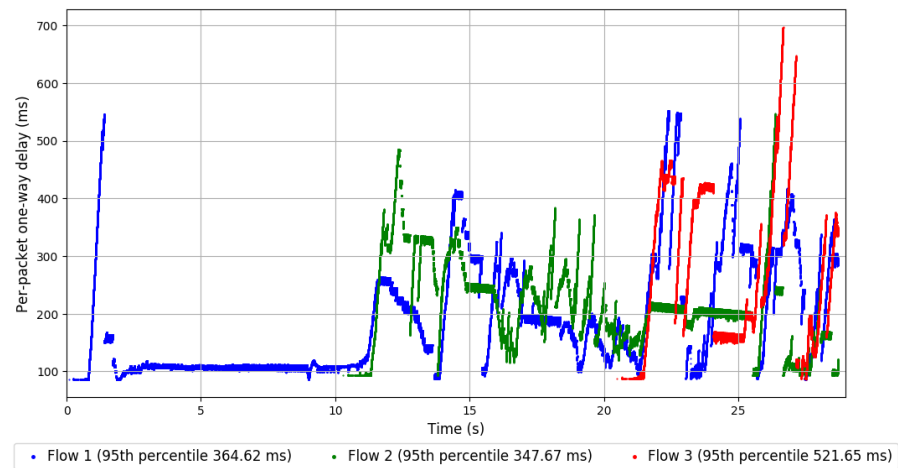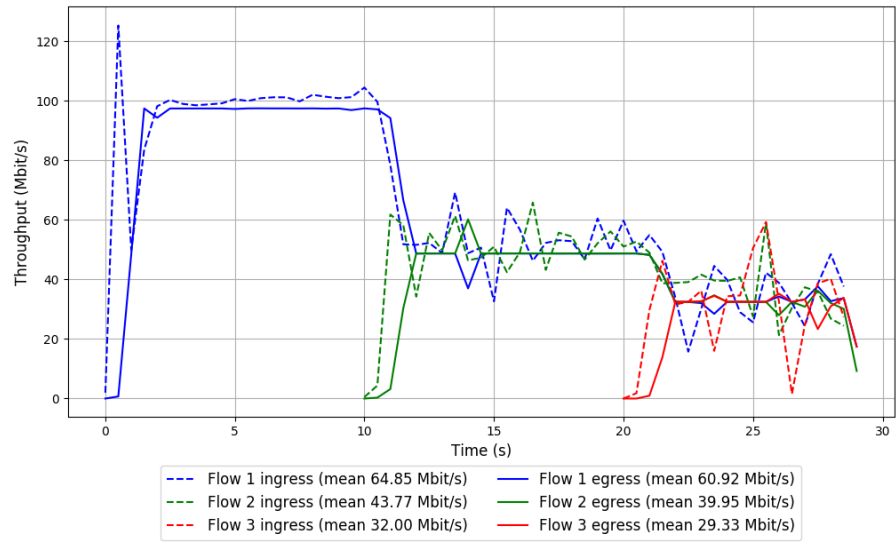
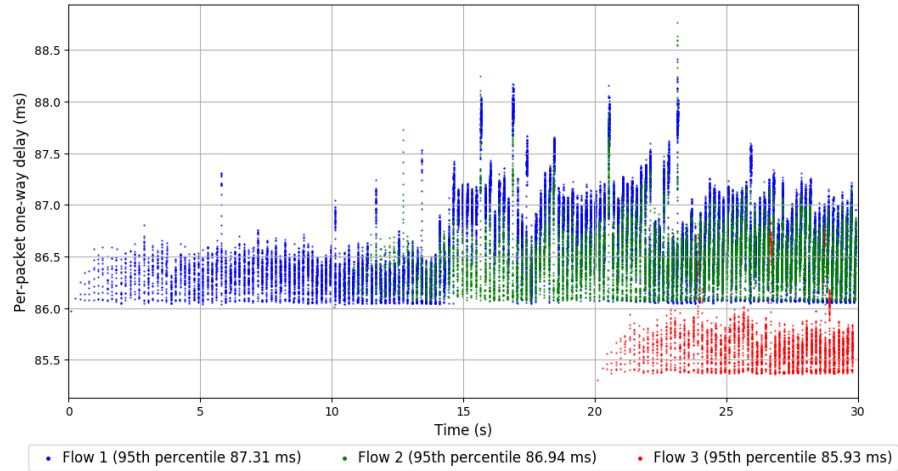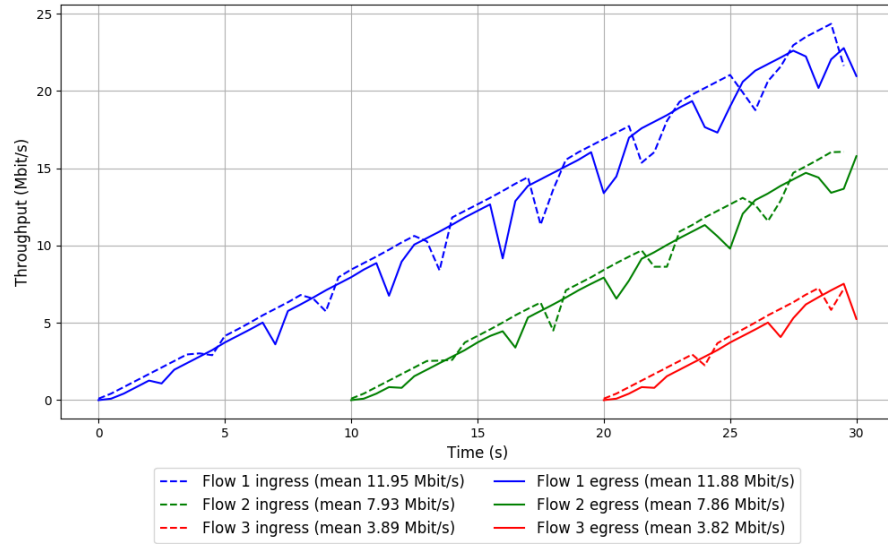Run 4: Report of Indigo-MusesT — Data Link

```
Run 5: Statistics of Indigo-MusesT

Start at: 2019-01-22 04:40:49
End at: 2019-01-22 04:41:19
Local clock offset: -7.164 ms
Remote clock offset: 7.421 ms


# Below is generated by plot.py at 2019-01-22 04:52:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.08 Mbit/s
95th percentile per-packet one-way delay: 407.520 ms
Loss rate: 7.65%
-- Flow 1:
Average throughput: 60.92 Mbit/s
95th percentile per-packet one-way delay: 364.623 ms
Loss rate: 6.43%
-- Flow 2:
Average throughput: 39.95 Mbit/s
95th percentile per-packet one-way delay: 347.667 ms
Loss rate: 9.61%
-- Flow 3:
Average throughput: 29.33 Mbit/s
95th percentile per-packet one-way delay: 521.646 ms
Loss rate: 10.17%
```

Run 5: Report of Indigo-MusesT — Data Link

- - - - Flow 1 ingress (mean 64.85 Mbit/s)   —— Flow 1 egress (mean 60.92 Mbit/s)
- - - - Flow 2 ingress (mean 43.77 Mbit/s)   —— Flow 2 egress (mean 39.95 Mbit/s)
- - - - Flow 3 ingress (mean 32.00 Mbit/s)   —— Flow 3 egress (mean 29.33 Mbit/s)

- Flow 1 (95th percentile 364.62 ms)   - Flow 2 (95th percentile 347.67 ms)   - Flow 3 (95th percentile 521.65 ms)

```
Run 1: Statistics of LEDBAT

Start at: 2019-01-22 02:34:46
End at: 2019-01-22 02:35:16
Local clock offset: -2.466 ms
Remote clock offset: 9.338 ms

# Below is generated by plot.py at 2019-01-22 04:52:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.34 Mbit/s
95th percentile per-packet one-way delay: 87.202 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 11.88 Mbit/s
95th percentile per-packet one-way delay: 87.306 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 7.86 Mbit/s
95th percentile per-packet one-way delay: 86.935 ms
Loss rate: 1.75%
-- Flow 3:
Average throughput: 3.82 Mbit/s
95th percentile per-packet one-way delay: 85.929 ms
Loss rate: 3.56%
```
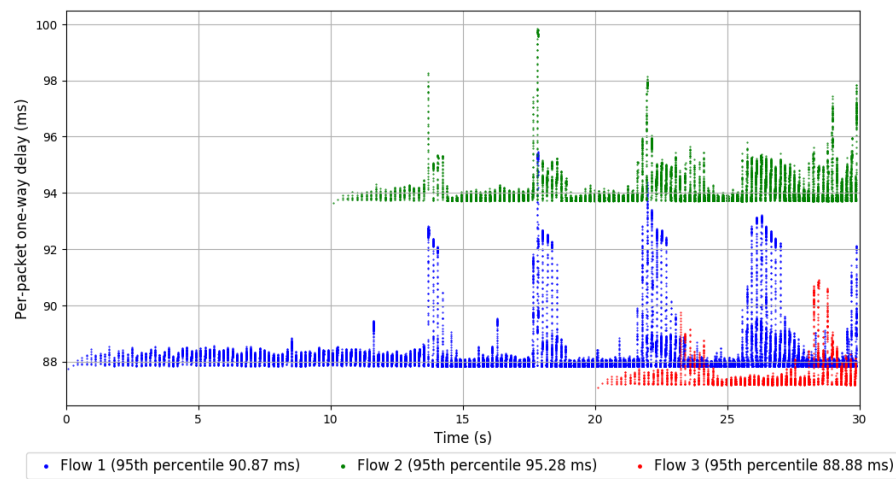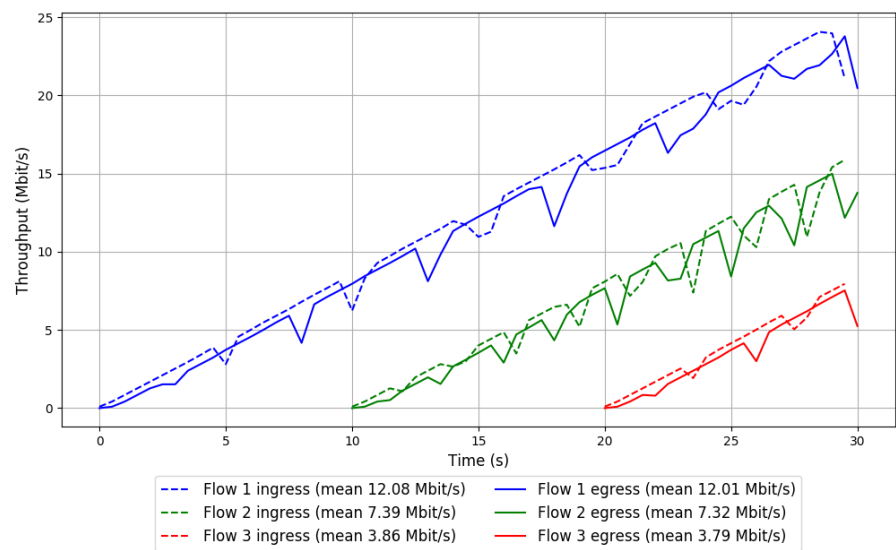
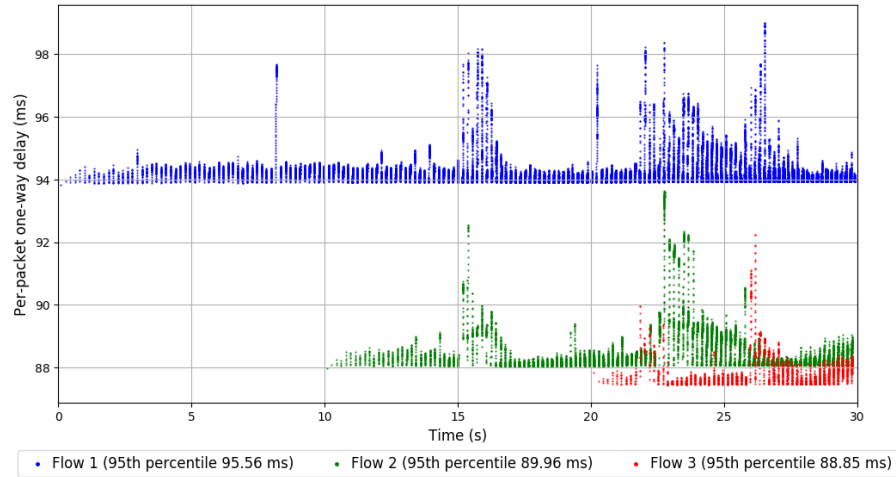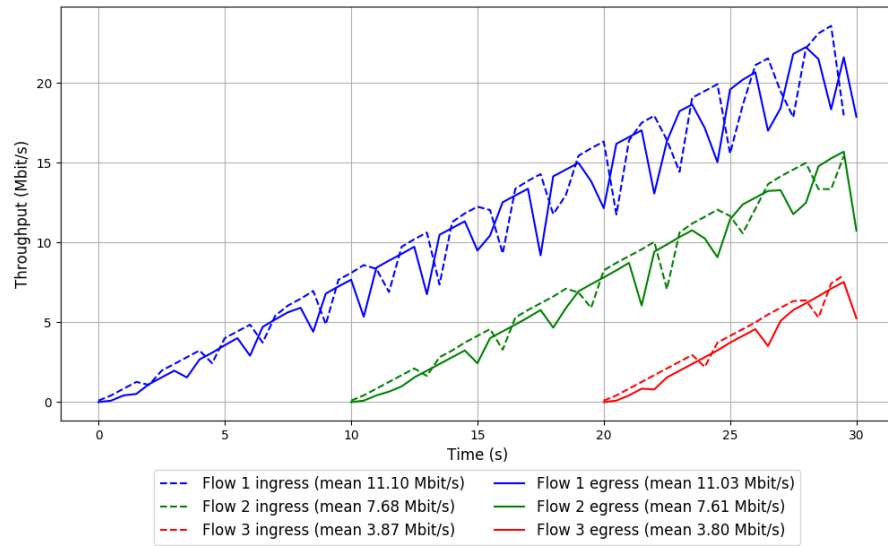Run 1: Report of LEDBAT — Data Link

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```
Run 2: Statistics of LEDBAT

Start at: 2019-01-22 03:01:46
End at: 2019-01-22 03:02:16
Local clock offset: -1.851 ms
Remote clock offset: 8.022 ms


# Below is generated by plot.py at 2019-01-22 04:52:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.11 Mbit/s
95th percentile per-packet one-way delay: 94.563 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 12.01 Mbit/s
95th percentile per-packet one-way delay: 90.870 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 7.32 Mbit/s
95th percentile per-packet one-way delay: 95.278 ms
Loss rate: 1.81%
-- Flow 3:
Average throughput: 3.79 Mbit/s
95th percentile per-packet one-way delay: 88.884 ms
Loss rate: 3.53%
```

Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2019-01-22 03:28:46
End at: 2019-01-22 03:29:16
Local clock offset: -6.287 ms
Remote clock offset: 6.41 ms


# Below is generated by plot.py at 2019-01-22 04:52:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.30 Mbit/s
95th percentile per-packet one-way delay: 95.033 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 11.03 Mbit/s
95th percentile per-packet one-way delay: 95.565 ms
Loss rate: 1.20%
-- Flow 2:
Average throughput: 7.61 Mbit/s
95th percentile per-packet one-way delay: 89.957 ms
Loss rate: 1.78%
-- Flow 3:
Average throughput: 3.80 Mbit/s
95th percentile per-packet one-way delay: 88.854 ms
Loss rate: 3.53%
```
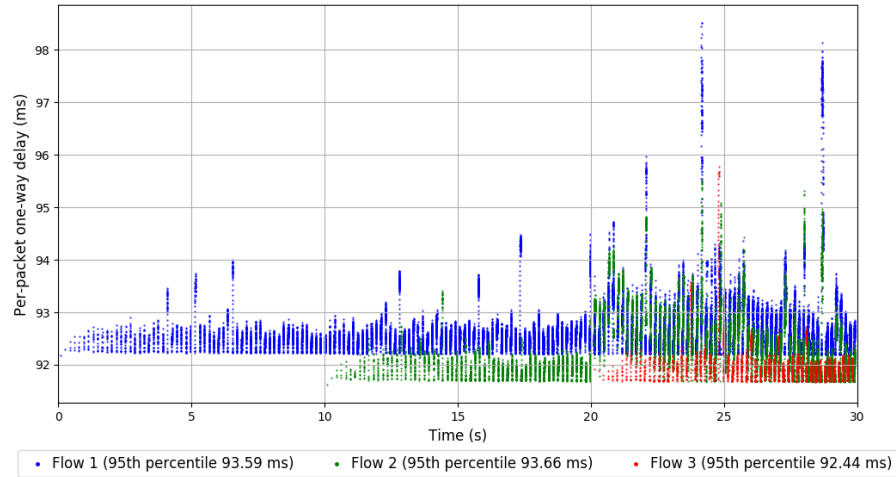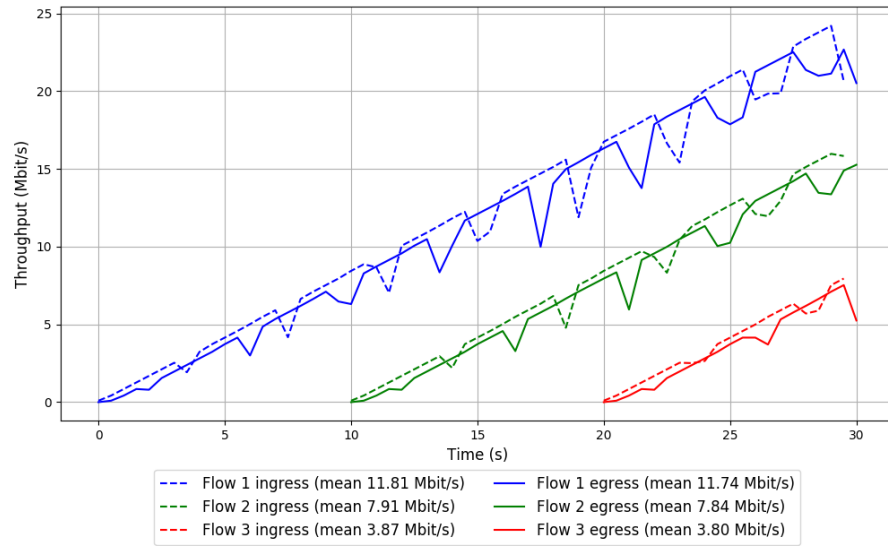
Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2019-01-22 03:55:46
End at: 2019-01-22 03:56:16
Local clock offset: -7.561 ms
Remote clock offset: 0.828 ms


# Below is generated by plot.py at 2019-01-22 04:52:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.18 Mbit/s
95th percentile per-packet one-way delay: 93.585 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 11.74 Mbit/s
95th percentile per-packet one-way delay: 93.595 ms
Loss rate: 1.16%
-- Flow 2:
Average throughput: 7.84 Mbit/s
95th percentile per-packet one-way delay: 93.663 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 3.80 Mbit/s
95th percentile per-packet one-way delay: 92.438 ms
Loss rate: 3.53%
```
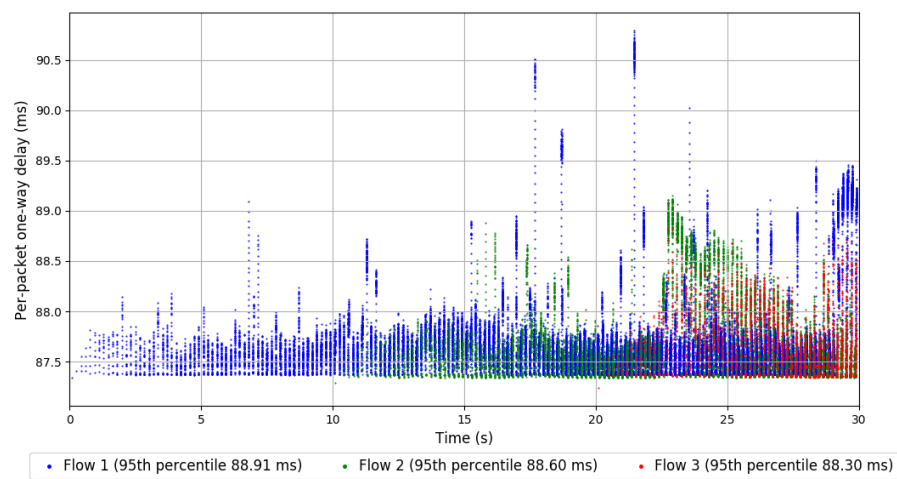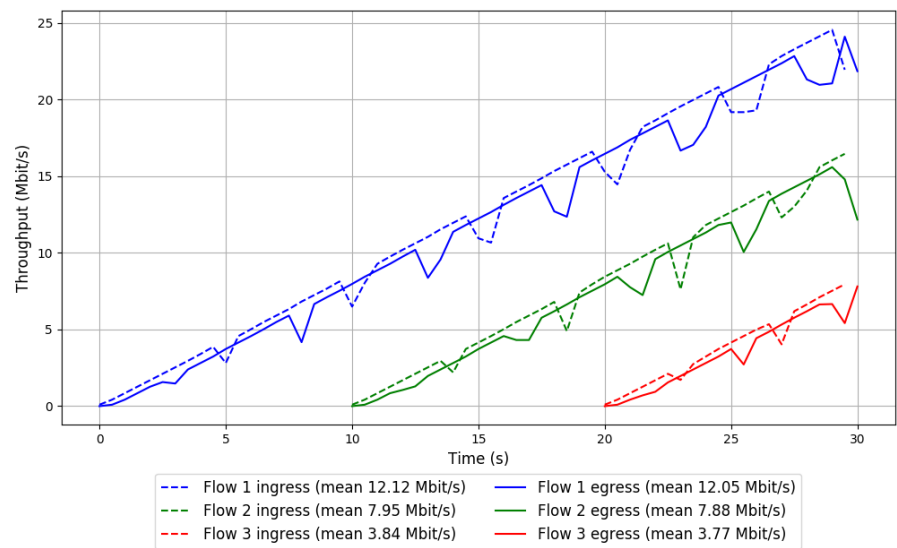
Run 4: Report of LEDBAT — Data Link

```
Run 5: Statistics of LEDBAT

Start at: 2019-01-22 04:22:46
End at: 2019-01-22 04:23:16
Local clock offset: -7.078 ms
Remote clock offset: 5.778 ms

# Below is generated by plot.py at 2019-01-22 04:52:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.51 Mbit/s
95th percentile per-packet one-way delay: 88.730 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 12.05 Mbit/s
95th percentile per-packet one-way delay: 88.913 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 7.88 Mbit/s
95th percentile per-packet one-way delay: 88.604 ms
Loss rate: 1.75%
-- Flow 3:
Average throughput: 3.77 Mbit/s
95th percentile per-packet one-way delay: 88.302 ms
Loss rate: 3.53%
```
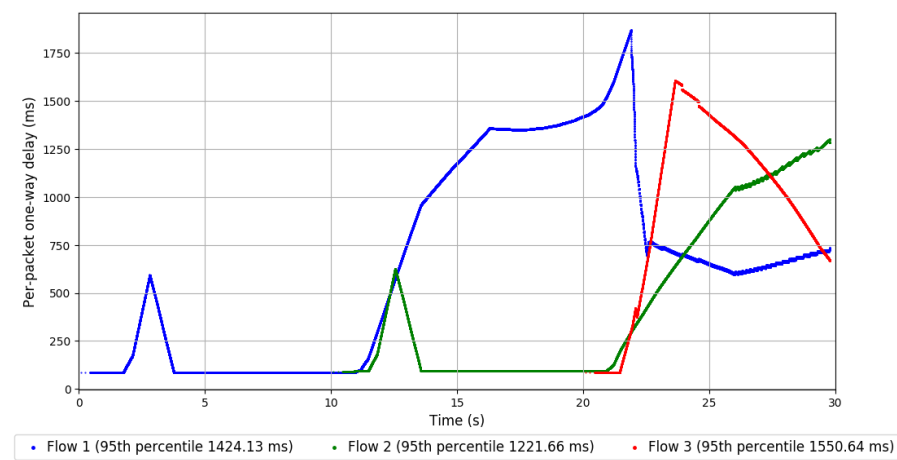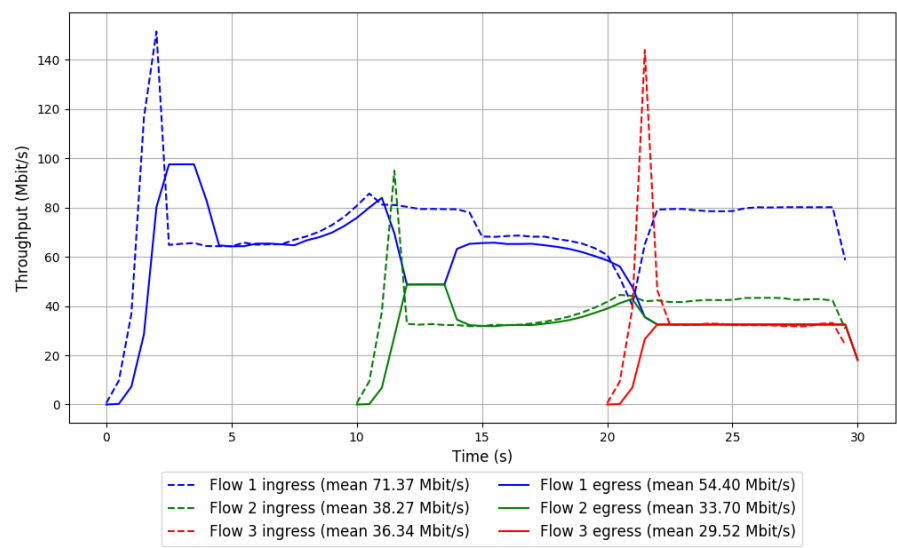
Run 5: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC-Allegro

Start at: 2019-01-22 02:46:24
End at: 2019-01-22 02:46:54
Local clock offset: -2.291 ms
Remote clock offset: 8.991 ms


# Below is generated by plot.py at 2019-01-22 04:52:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.37 Mbit/s
95th percentile per-packet one-way delay: 1426.789 ms
Loss rate: 21.08%
-- Flow 1:
Average throughput: 54.40 Mbit/s
95th percentile per-packet one-way delay: 1424.129 ms
Loss rate: 24.21%
-- Flow 2:
Average throughput: 33.70 Mbit/s
95th percentile per-packet one-way delay: 1221.660 ms
Loss rate: 12.73%
-- Flow 3:
Average throughput: 29.52 Mbit/s
95th percentile per-packet one-way delay: 1550.643 ms
Loss rate: 20.19%
```
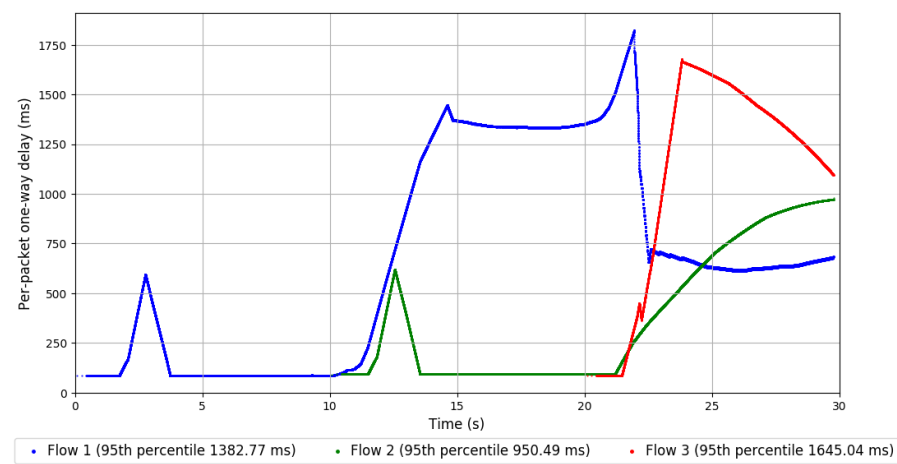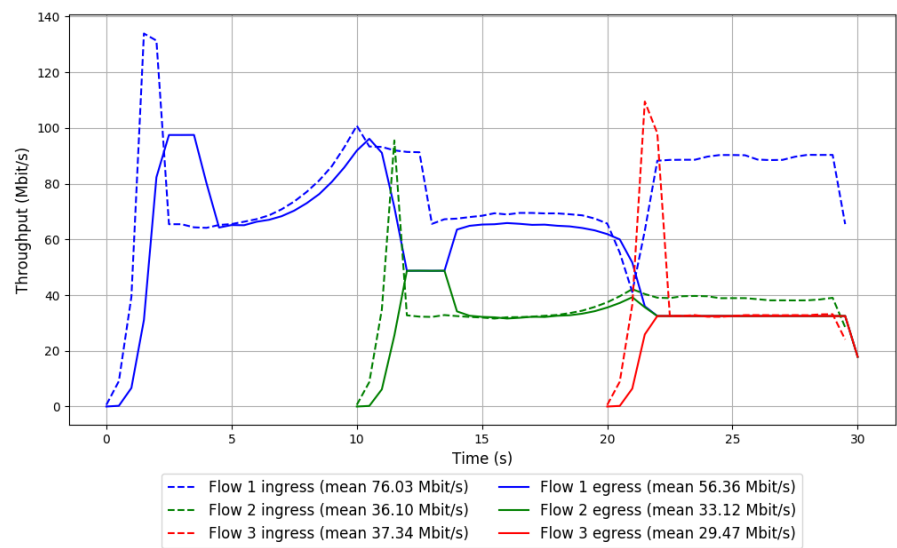
Run 1: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 71.37 Mbit/s) — Flow 1 egress (mean 54.40 Mbit/s)
Flow 2 ingress (mean 38.27 Mbit/s) — Flow 2 egress (mean 33.70 Mbit/s)
Flow 3 ingress (mean 36.34 Mbit/s) — Flow 3 egress (mean 29.52 Mbit/s)

Flow 1 (95th percentile 1424.13 ms)   Flow 2 (95th percentile 1221.66 ms)   Flow 3 (95th percentile 1550.64 ms)

```
Run 2: Statistics of PCC-Allegro

Start at: 2019-01-22 03:13:24
End at: 2019-01-22 03:13:54
Local clock offset: -2.567 ms
Remote clock offset: 8.618 ms


# Below is generated by plot.py at 2019-01-22 04:52:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.92 Mbit/s
95th percentile per-packet one-way delay: 1466.357 ms
Loss rate: 22.19%
-- Flow 1:
Average throughput: 56.36 Mbit/s
95th percentile per-packet one-way delay: 1382.768 ms
Loss rate: 26.30%
-- Flow 2:
Average throughput: 33.12 Mbit/s
95th percentile per-packet one-way delay: 950.486 ms
Loss rate: 9.05%
-- Flow 3:
Average throughput: 29.47 Mbit/s
95th percentile per-packet one-way delay: 1645.042 ms
Loss rate: 22.47%
```
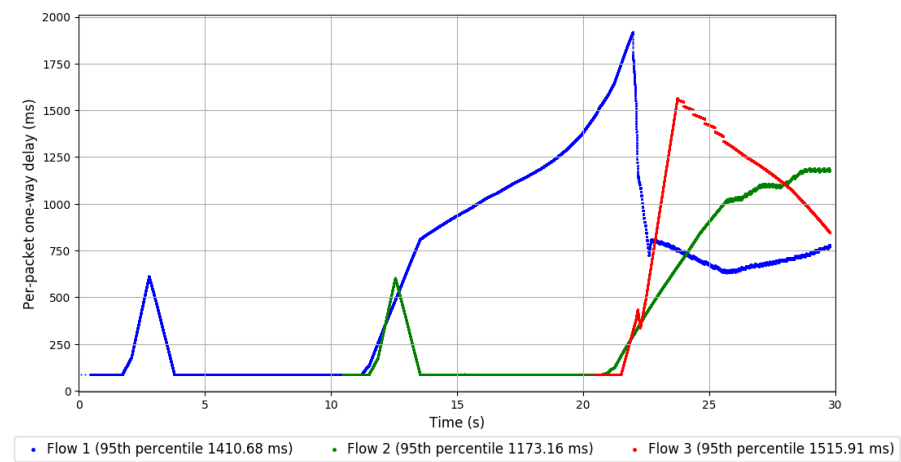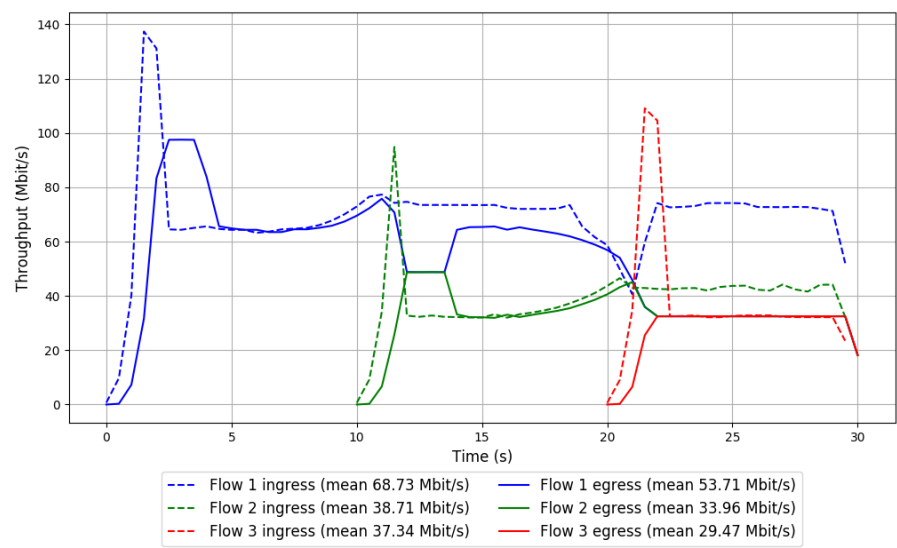
Run 2: Report of PCC-Allegro — Data Link

- - - Flow 1 ingress (mean 76.03 Mbit/s) —— Flow 1 egress (mean 56.36 Mbit/s)
- - - Flow 2 ingress (mean 36.10 Mbit/s) —— Flow 2 egress (mean 33.12 Mbit/s)
- - - Flow 3 ingress (mean 37.34 Mbit/s) —— Flow 3 egress (mean 29.47 Mbit/s)

• Flow 1 (95th percentile 1382.77 ms)   • Flow 2 (95th percentile 950.49 ms)   • Flow 3 (95th percentile 1645.04 ms)

```
Run 3: Statistics of PCC-Allegro

Start at: 2019-01-22 03:40:25
End at: 2019-01-22 03:40:55
Local clock offset: -7.83 ms
Remote clock offset: 5.807 ms


# Below is generated by plot.py at 2019-01-22 04:52:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.84 Mbit/s
95th percentile per-packet one-way delay: 1415.894 ms
Loss rate: 20.09%
-- Flow 1:
Average throughput: 53.71 Mbit/s
95th percentile per-packet one-way delay: 1410.679 ms
Loss rate: 22.31%
-- Flow 2:
Average throughput: 33.96 Mbit/s
95th percentile per-packet one-way delay: 1173.162 ms
Loss rate: 13.02%
-- Flow 3:
Average throughput: 29.47 Mbit/s
95th percentile per-packet one-way delay: 1515.912 ms
Loss rate: 22.47%
```
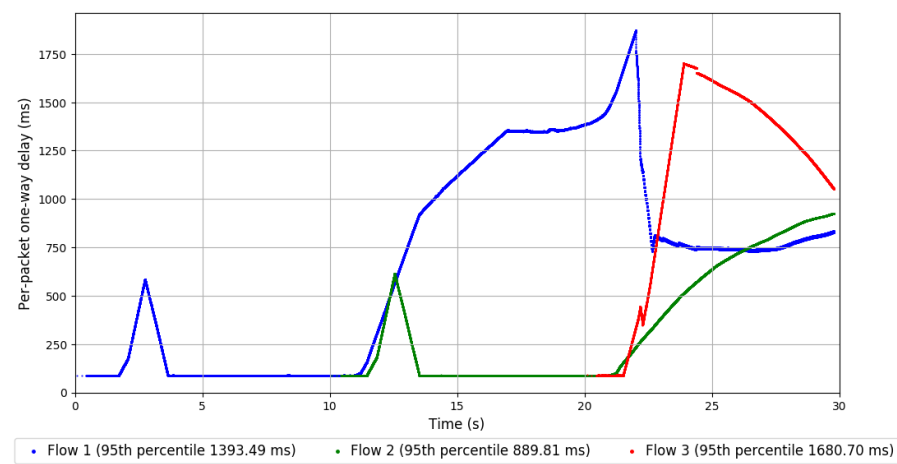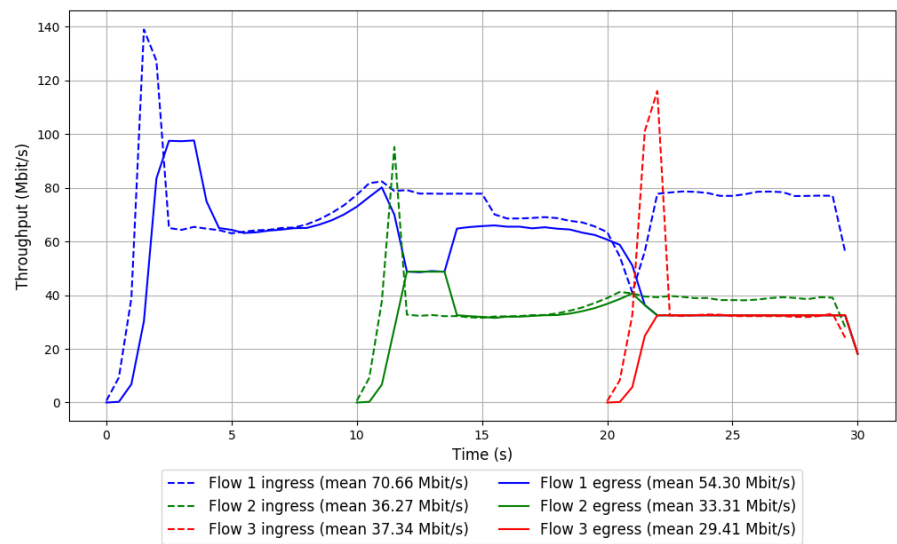
Run 3: Report of PCC-Allegro — Data Link

- - - Flow 1 ingress (mean 68.73 Mbit/s) —— Flow 1 egress (mean 53.71 Mbit/s)
- - - Flow 2 ingress (mean 38.71 Mbit/s) —— Flow 2 egress (mean 33.96 Mbit/s)
- - - Flow 3 ingress (mean 37.34 Mbit/s) —— Flow 3 egress (mean 29.47 Mbit/s)

• Flow 1 (95th percentile 1410.68 ms)   • Flow 2 (95th percentile 1173.16 ms)   • Flow 3 (95th percentile 1515.91 ms)

```
Run 4: Statistics of PCC-Allegro

Start at: 2019-01-22 04:07:24
End at: 2019-01-22 04:07:54
Local clock offset: -6.415 ms
Remote clock offset: 4.716 ms


# Below is generated by plot.py at 2019-01-22 04:53:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.97 Mbit/s
95th percentile per-packet one-way delay: 1503.103 ms
Loss rate: 20.20%
-- Flow 1:
Average throughput: 54.30 Mbit/s
95th percentile per-packet one-way delay: 1393.493 ms
Loss rate: 23.61%
-- Flow 2:
Average throughput: 33.31 Mbit/s
95th percentile per-packet one-way delay: 889.806 ms
Loss rate: 8.95%
-- Flow 3:
Average throughput: 29.41 Mbit/s
95th percentile per-packet one-way delay: 1680.703 ms
Loss rate: 22.65%
```
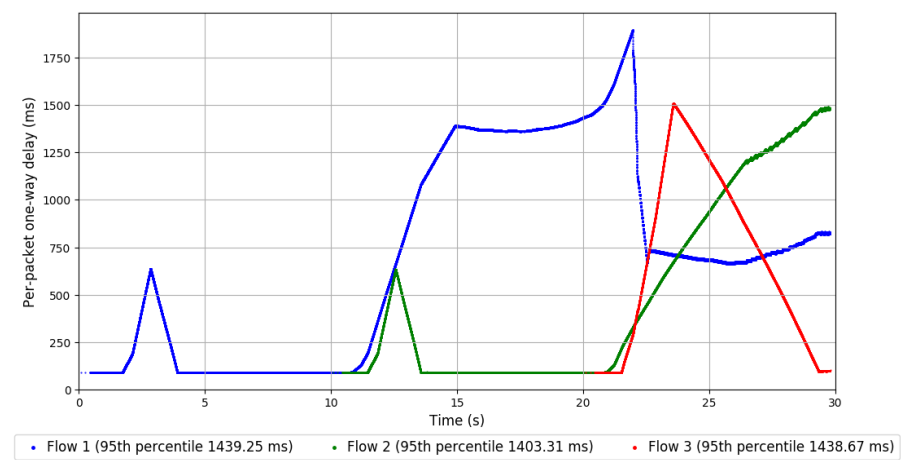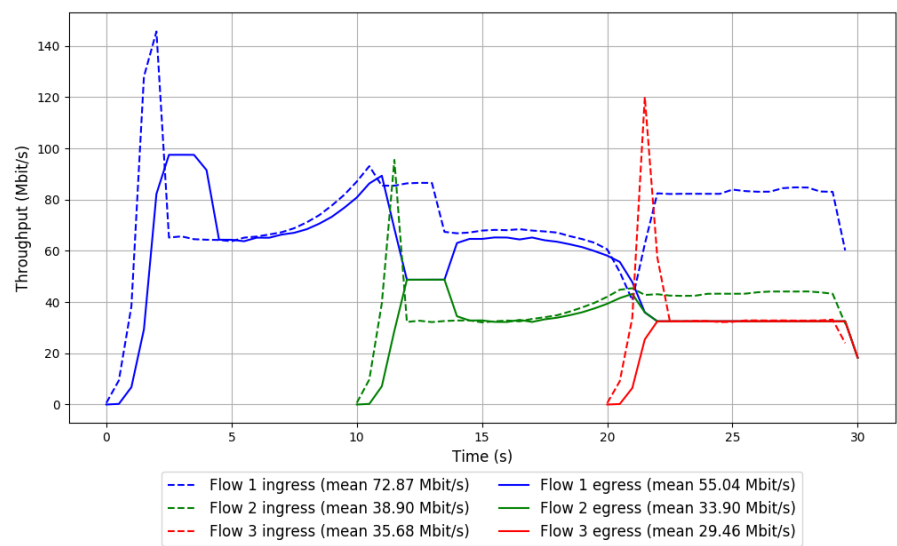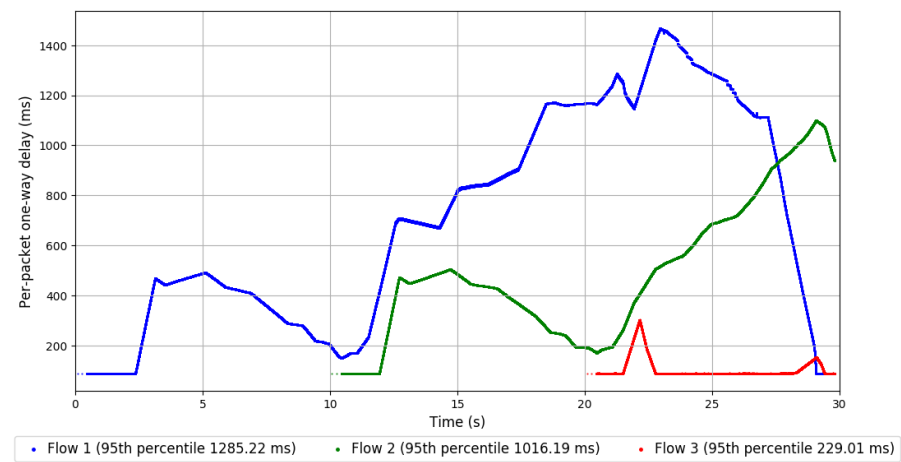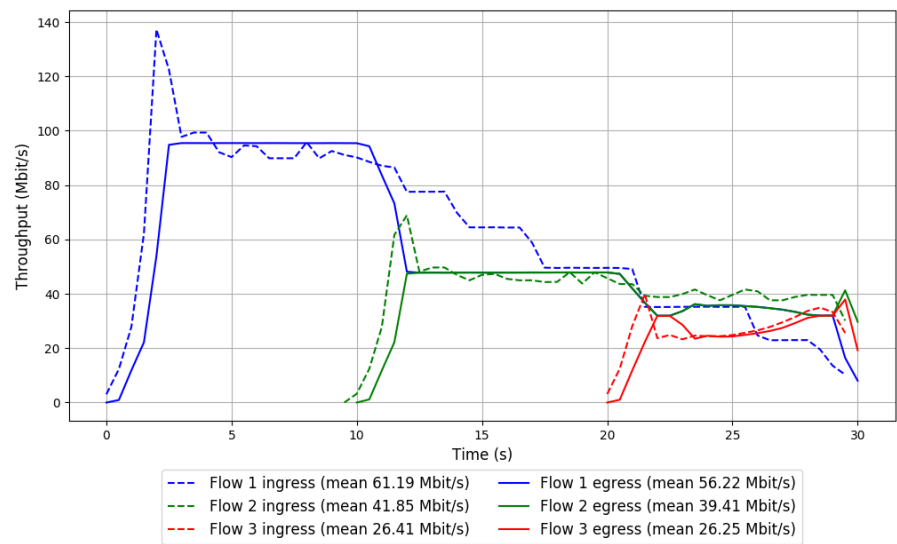
Run 4: Report of PCC-Allegro — Data Link

```
Run 5: Statistics of PCC-Allegro

Start at: 2019-01-22 04:34:25
End at: 2019-01-22 04:34:55
Local clock offset: -6.324 ms
Remote clock offset: 1.1 ms


# Below is generated by plot.py at 2019-01-22 04:53:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.11 Mbit/s
95th percentile per-packet one-way delay: 1433.021 ms
Loss rate: 21.61%
-- Flow 1:
Average throughput: 55.04 Mbit/s
95th percentile per-packet one-way delay: 1439.250 ms
Loss rate: 24.90%
-- Flow 2:
Average throughput: 33.90 Mbit/s
95th percentile per-packet one-way delay: 1403.311 ms
Loss rate: 13.58%
-- Flow 3:
Average throughput: 29.46 Mbit/s
95th percentile per-packet one-way delay: 1438.668 ms
Loss rate: 18.83%
```

Run 5: Report of PCC-Allegro — Data Link

```
Run 1: Statistics of PCC-Expr

Start at: 2019-01-22 02:33:25
End at: 2019-01-22 02:33:55
Local clock offset: -1.699 ms
Remote clock offset: 8.145 ms


# Below is generated by plot.py at 2019-01-22 04:54:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.95 Mbit/s
95th percentile per-packet one-way delay: 1218.169 ms
Loss rate: 7.53%
-- Flow 1:
Average throughput: 56.22 Mbit/s
95th percentile per-packet one-way delay: 1285.219 ms
Loss rate: 8.66%
-- Flow 2:
Average throughput: 39.41 Mbit/s
95th percentile per-packet one-way delay: 1016.189 ms
Loss rate: 6.67%
-- Flow 3:
Average throughput: 26.25 Mbit/s
95th percentile per-packet one-way delay: 229.007 ms
Loss rate: 2.36%
```
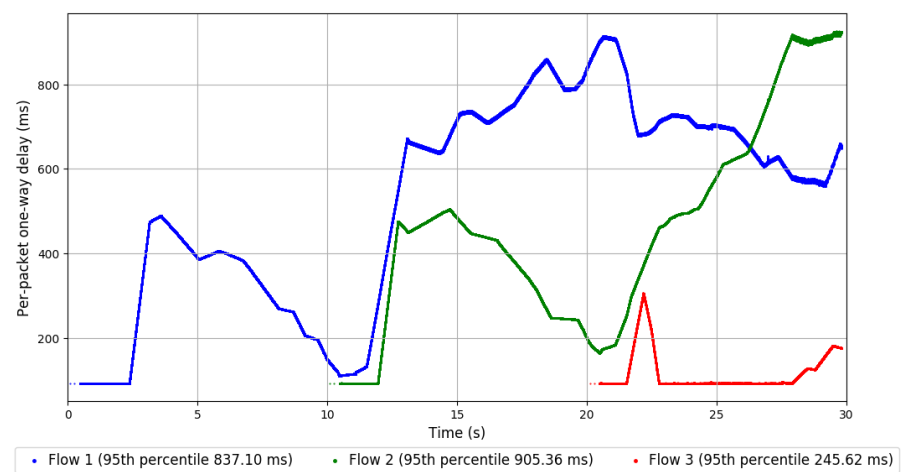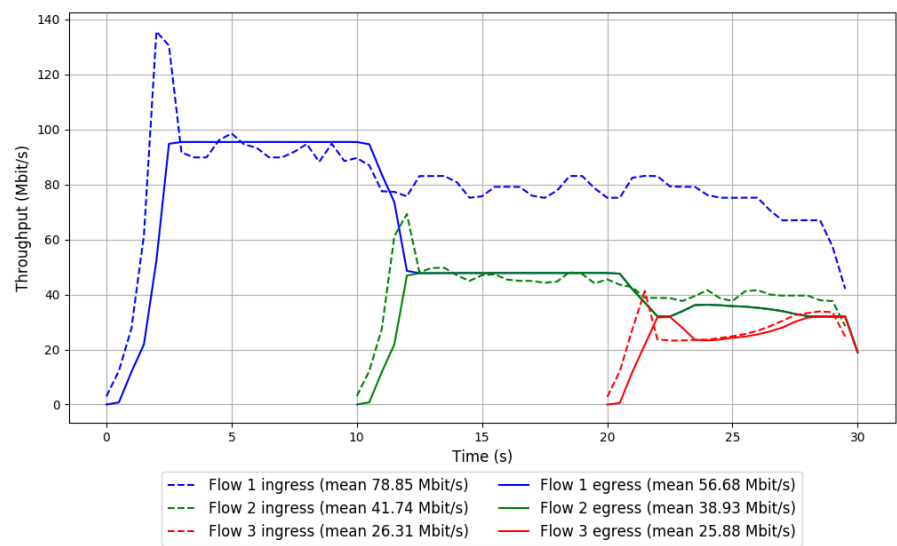
Run 1: Report of PCC-Expr — Data Link

```
Run 2: Statistics of PCC-Expr

Start at: 2019-01-22 03:00:24
End at: 2019-01-22 03:00:54
Local clock offset: -2.613 ms
Remote clock offset: 2.926 ms


# Below is generated by plot.py at 2019-01-22 04:54:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.94 Mbit/s
95th percentile per-packet one-way delay: 847.687 ms
Loss rate: 21.59%
-- Flow 1:
Average throughput: 56.68 Mbit/s
95th percentile per-packet one-way delay: 837.100 ms
Loss rate: 28.53%
-- Flow 2:
Average throughput: 38.93 Mbit/s
95th percentile per-packet one-way delay: 905.355 ms
Loss rate: 7.56%
-- Flow 3:
Average throughput: 25.88 Mbit/s
95th percentile per-packet one-way delay: 245.617 ms
Loss rate: 3.39%
```
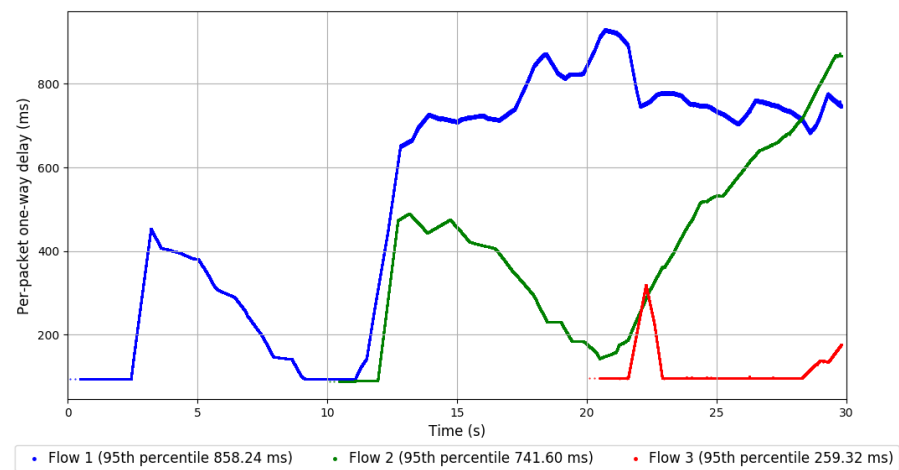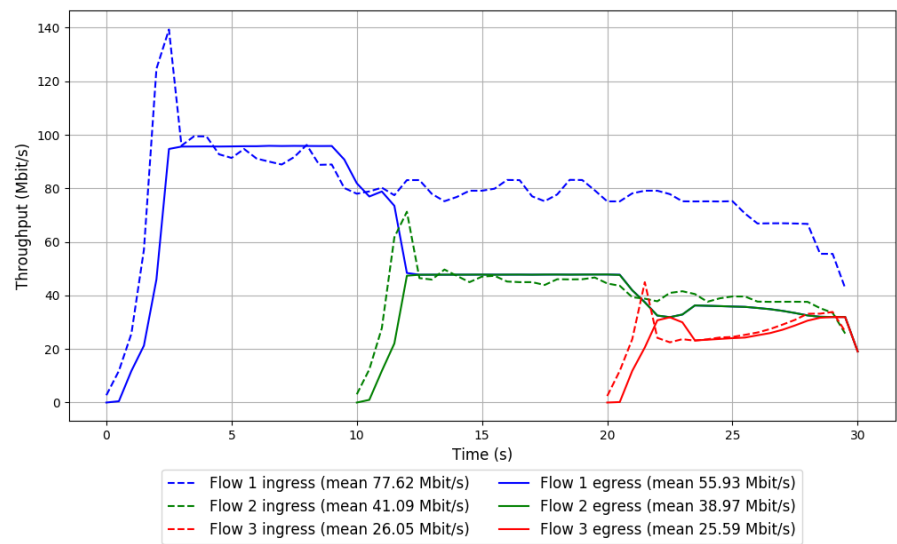
Run 2: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 78.85 Mbit/s) --- Flow 1 egress (mean 56.68 Mbit/s)
Flow 2 ingress (mean 41.74 Mbit/s) --- Flow 2 egress (mean 38.93 Mbit/s)
Flow 3 ingress (mean 26.31 Mbit/s) --- Flow 3 egress (mean 25.88 Mbit/s)

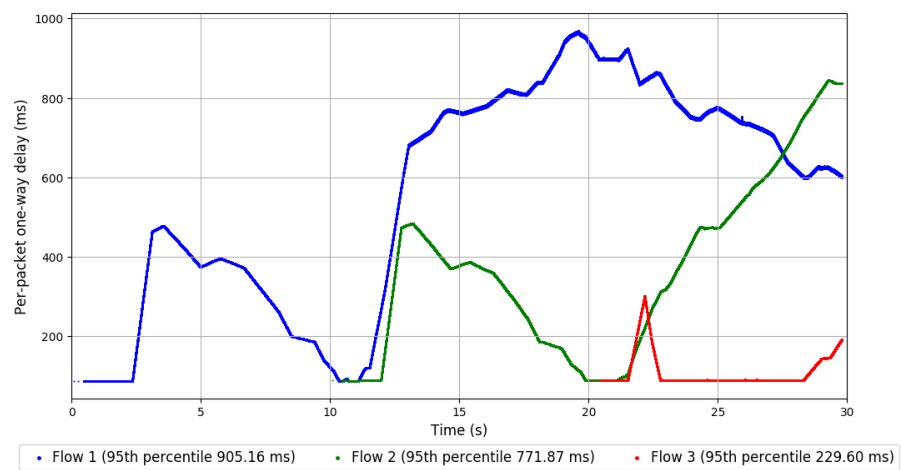Flow 1 (95th percentile 837.10 ms) • Flow 2 (95th percentile 905.36 ms) • Flow 3 (95th percentile 245.62 ms)

```
Run 3: Statistics of PCC-Expr

Start at: 2019-01-22 03:27:25
End at: 2019-01-22 03:27:55
Local clock offset: -6.014 ms
Remote clock offset: 6.431 ms


# Below is generated by plot.py at 2019-01-22 04:54:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.14 Mbit/s
95th percentile per-packet one-way delay: 833.666 ms
Loss rate: 21.10%
-- Flow 1:
Average throughput: 55.93 Mbit/s
95th percentile per-packet one-way delay: 858.240 ms
Loss rate: 28.37%
-- Flow 2:
Average throughput: 38.97 Mbit/s
95th percentile per-packet one-way delay: 741.599 ms
Loss rate: 6.00%
-- Flow 3:
Average throughput: 25.59 Mbit/s
95th percentile per-packet one-way delay: 259.323 ms
Loss rate: 3.57%
```
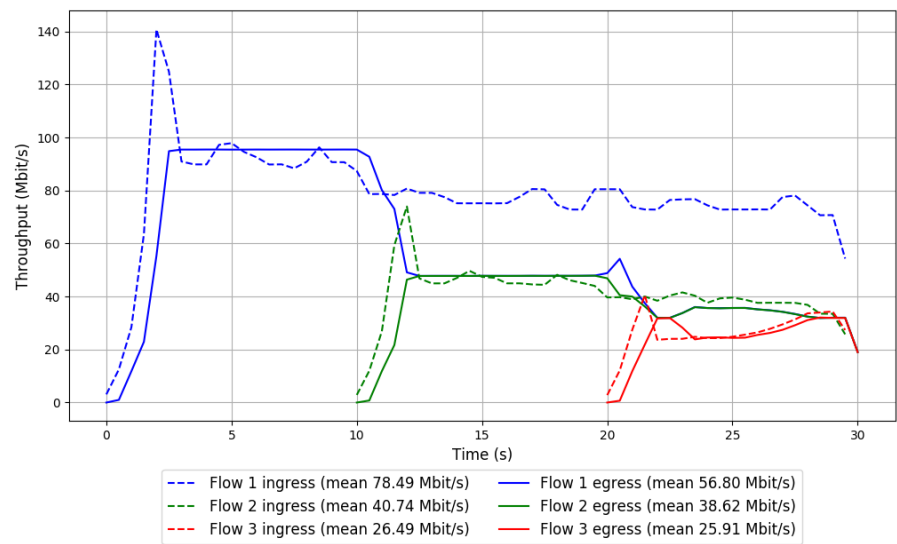
Run 3: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 77.62 Mbit/s) --- Flow 1 egress (mean 55.93 Mbit/s)
Flow 2 ingress (mean 41.09 Mbit/s) --- Flow 2 egress (mean 38.97 Mbit/s)
Flow 3 ingress (mean 26.05 Mbit/s) --- Flow 3 egress (mean 25.59 Mbit/s)

Flow 1 (95th percentile 858.24 ms)   Flow 2 (95th percentile 741.60 ms)   Flow 3 (95th percentile 259.32 ms)

```
Run 4: Statistics of PCC-Expr

Start at: 2019-01-22 03:54:24
End at: 2019-01-22 03:54:54
Local clock offset: -6.907 ms
Remote clock offset: 5.927 ms


# Below is generated by plot.py at 2019-01-22 04:54:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.87 Mbit/s
95th percentile per-packet one-way delay: 889.724 ms
Loss rate: 20.98%
-- Flow 1:
Average throughput: 56.80 Mbit/s
95th percentile per-packet one-way delay: 905.164 ms
Loss rate: 28.05%
-- Flow 2:
Average throughput: 38.62 Mbit/s
95th percentile per-packet one-way delay: 771.865 ms
Loss rate: 6.04%
-- Flow 3:
Average throughput: 25.91 Mbit/s
95th percentile per-packet one-way delay: 229.604 ms
Loss rate: 3.90%
```
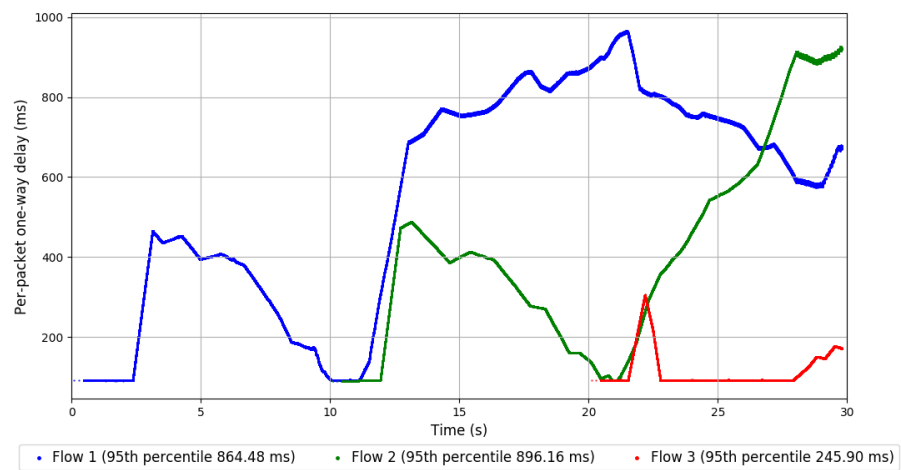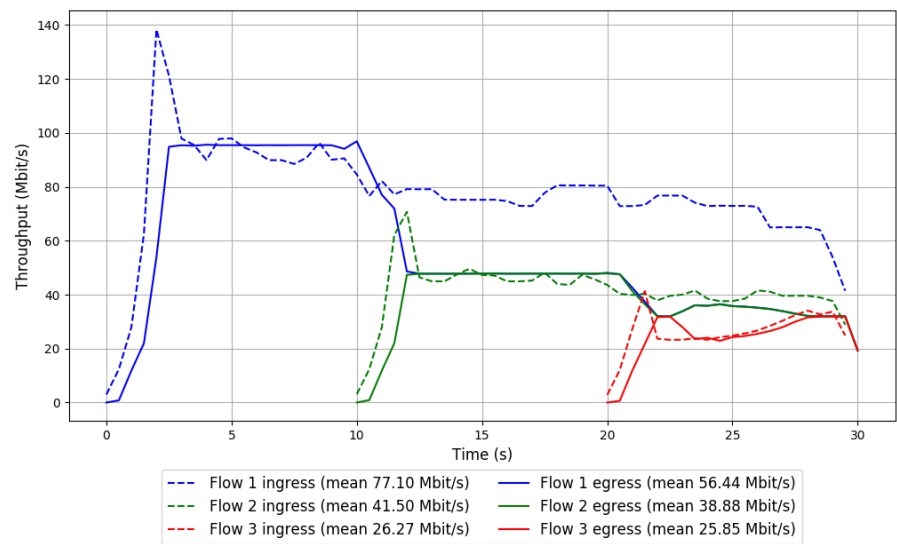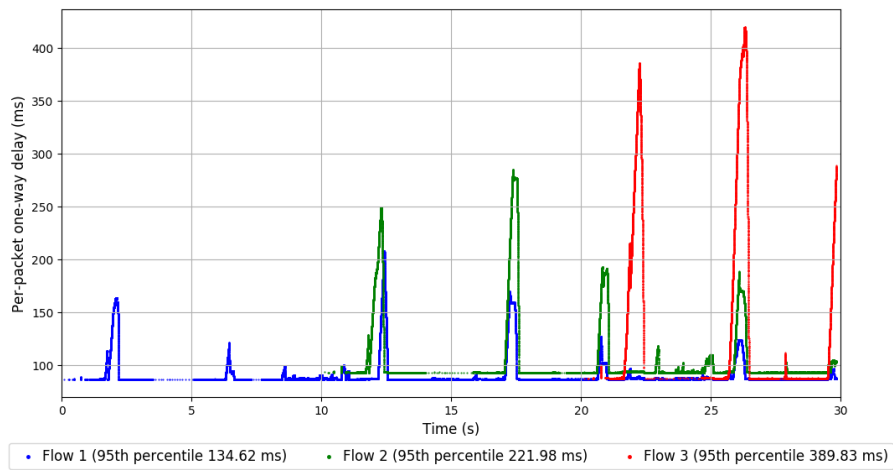
Run 4: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 78.49 Mbit/s) --- Flow 1 egress (mean 56.80 Mbit/s)
Flow 2 ingress (mean 40.74 Mbit/s) --- Flow 2 egress (mean 38.62 Mbit/s)
Flow 3 ingress (mean 26.49 Mbit/s) --- Flow 3 egress (mean 25.91 Mbit/s)

Flow 1 (95th percentile 905.16 ms)   Flow 2 (95th percentile 771.87 ms)   Flow 3 (95th percentile 229.60 ms)

```
Run 5: Statistics of PCC-Expr

Start at: 2019-01-22 04:21:25
End at: 2019-01-22 04:21:55
Local clock offset: -7.097 ms
Remote clock offset: 1.917 ms


# Below is generated by plot.py at 2019-01-22 04:55:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.67 Mbit/s
95th percentile per-packet one-way delay: 870.385 ms
Loss rate: 20.50%
-- Flow 1:
Average throughput: 56.44 Mbit/s
95th percentile per-packet one-way delay: 864.475 ms
Loss rate: 27.23%
-- Flow 2:
Average throughput: 38.88 Mbit/s
95th percentile per-packet one-way delay: 896.164 ms
Loss rate: 7.12%
-- Flow 3:
Average throughput: 25.85 Mbit/s
95th percentile per-packet one-way delay: 245.900 ms
Loss rate: 3.31%
```
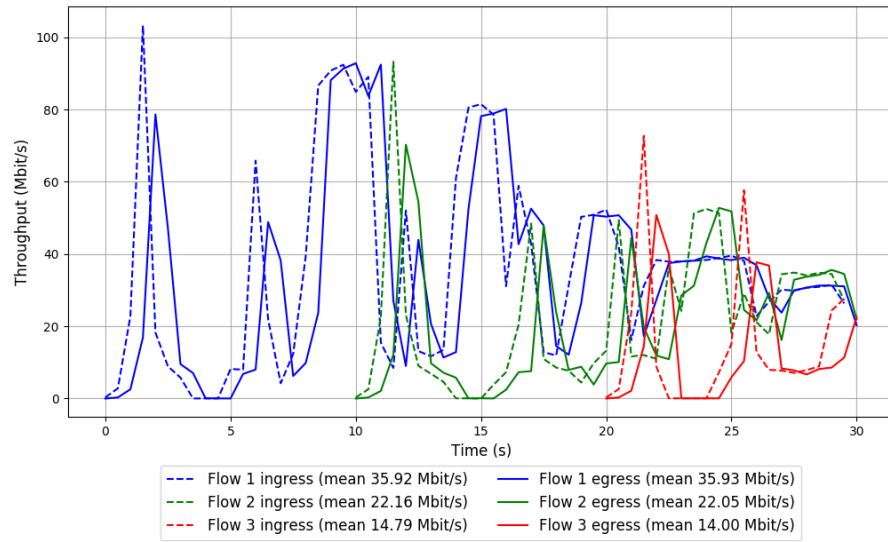
Run 5: Report of PCC-Expr — Data Link

```
Run 1: Statistics of QUIC Cubic

Start at: 2019-01-22 02:38:39
End at: 2019-01-22 02:39:09
Local clock offset: -2.49 ms
Remote clock offset: 8.022 ms


# Below is generated by plot.py at 2019-01-22 04:55:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 55.14 Mbit/s
95th percentile per-packet one-way delay: 194.039 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 35.93 Mbit/s
95th percentile per-packet one-way delay: 134.621 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 22.05 Mbit/s
95th percentile per-packet one-way delay: 221.979 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 14.00 Mbit/s
95th percentile per-packet one-way delay: 389.832 ms
Loss rate: 7.01%
```
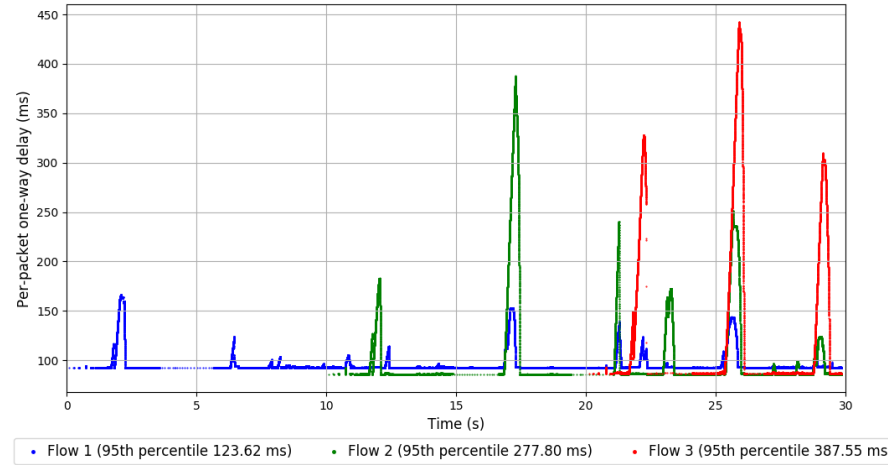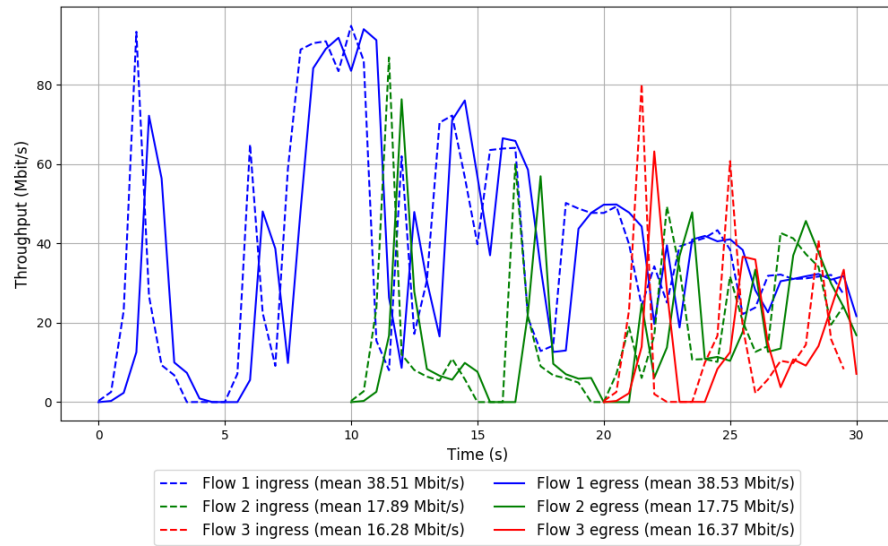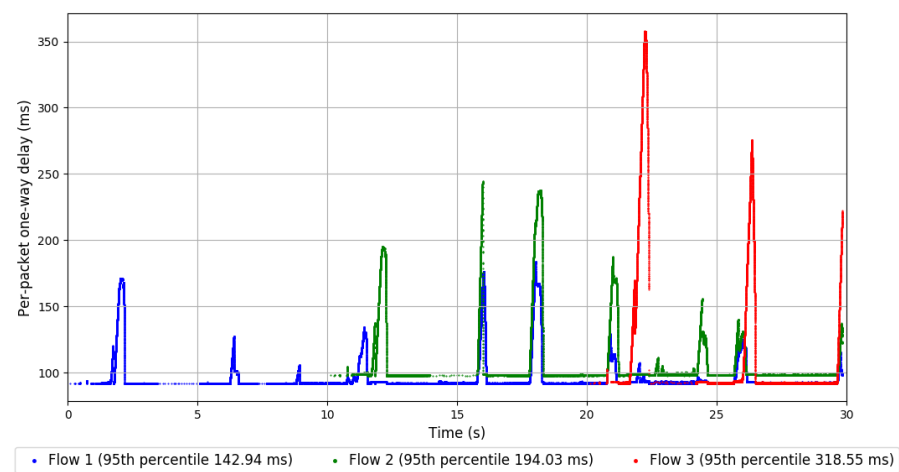
Run 1: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 35.92 Mbit/s)   Flow 1 egress (mean 35.93 Mbit/s)
Flow 2 ingress (mean 22.16 Mbit/s)   Flow 2 egress (mean 22.05 Mbit/s)
Flow 3 ingress (mean 14.79 Mbit/s)   Flow 3 egress (mean 14.00 Mbit/s)

Flow 1 (95th percentile 134.62 ms)   Flow 2 (95th percentile 221.98 ms)   Flow 3 (95th percentile 389.83 ms)

```
Run 2: Statistics of QUIC Cubic

Start at: 2019-01-22 03:05:39
End at: 2019-01-22 03:06:09
Local clock offset: -1.838 ms
Remote clock offset: 9.153 ms


# Below is generated by plot.py at 2019-01-22 04:55:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 55.66 Mbit/s
95th percentile per-packet one-way delay: 210.091 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 38.53 Mbit/s
95th percentile per-packet one-way delay: 123.625 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 17.75 Mbit/s
95th percentile per-packet one-way delay: 277.796 ms
Loss rate: 1.62%
-- Flow 3:
Average throughput: 16.37 Mbit/s
95th percentile per-packet one-way delay: 387.546 ms
Loss rate: 1.21%
```
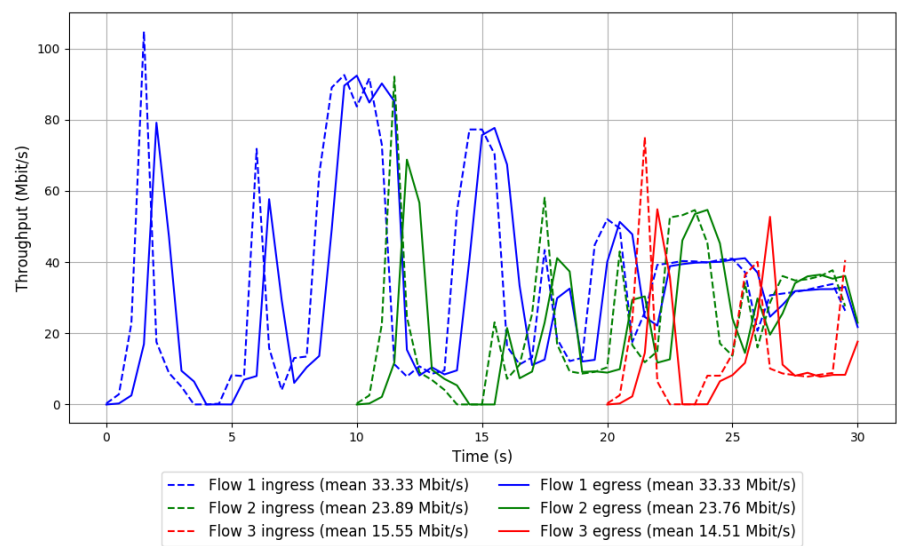
Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2019-01-22 03:32:40
End at: 2019-01-22 03:33:10
Local clock offset: -6.97 ms
Remote clock offset: 2.34 ms


# Below is generated by plot.py at 2019-01-22 04:55:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 53.83 Mbit/s
95th percentile per-packet one-way delay: 181.457 ms
Loss rate: 1.57%
-- Flow 1:
Average throughput: 33.33 Mbit/s
95th percentile per-packet one-way delay: 142.942 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 23.76 Mbit/s
95th percentile per-packet one-way delay: 194.032 ms
Loss rate: 1.44%
-- Flow 3:
Average throughput: 14.51 Mbit/s
95th percentile per-packet one-way delay: 318.548 ms
Loss rate: 8.30%
```
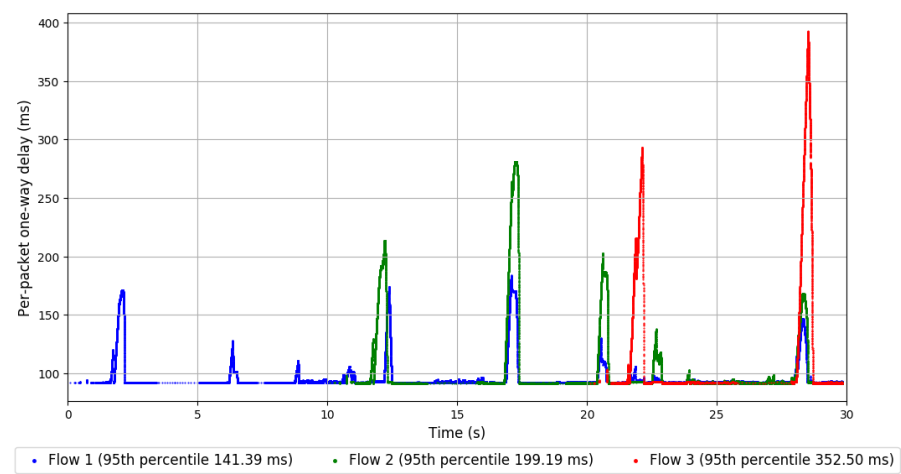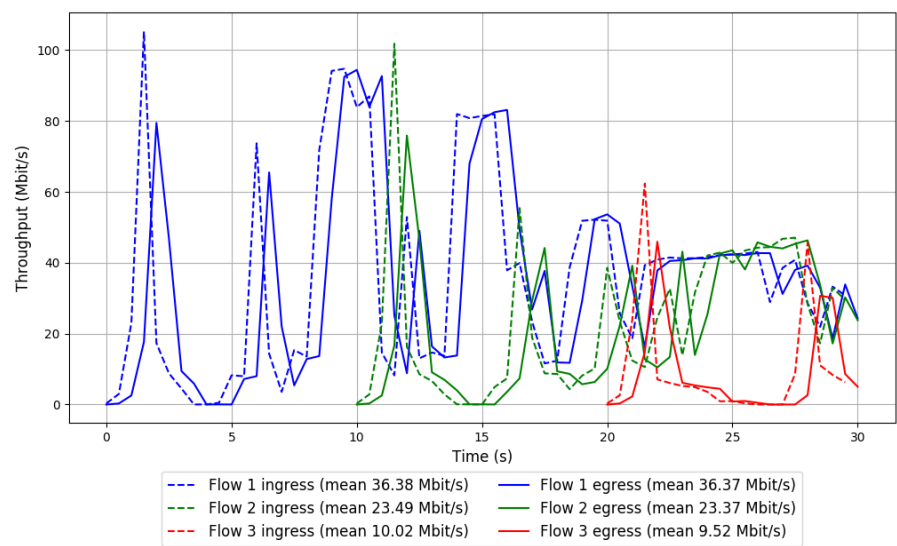
Run 3: Report of QUIC Cubic — Data Link

```
Run 4: Statistics of QUIC Cubic

Start at: 2019-01-22 03:59:39
End at: 2019-01-22 04:00:10
Local clock offset: -7.33 ms
Remote clock offset: 0.826 ms


# Below is generated by plot.py at 2019-01-22 04:55:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.99 Mbit/s
95th percentile per-packet one-way delay: 183.878 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 36.37 Mbit/s
95th percentile per-packet one-way delay: 141.392 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 23.37 Mbit/s
95th percentile per-packet one-way delay: 199.192 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 9.52 Mbit/s
95th percentile per-packet one-way delay: 352.495 ms
Loss rate: 6.64%
```
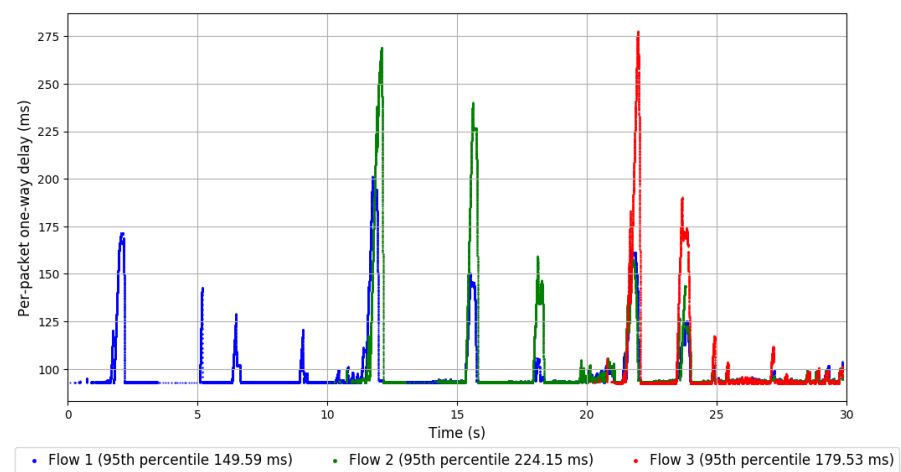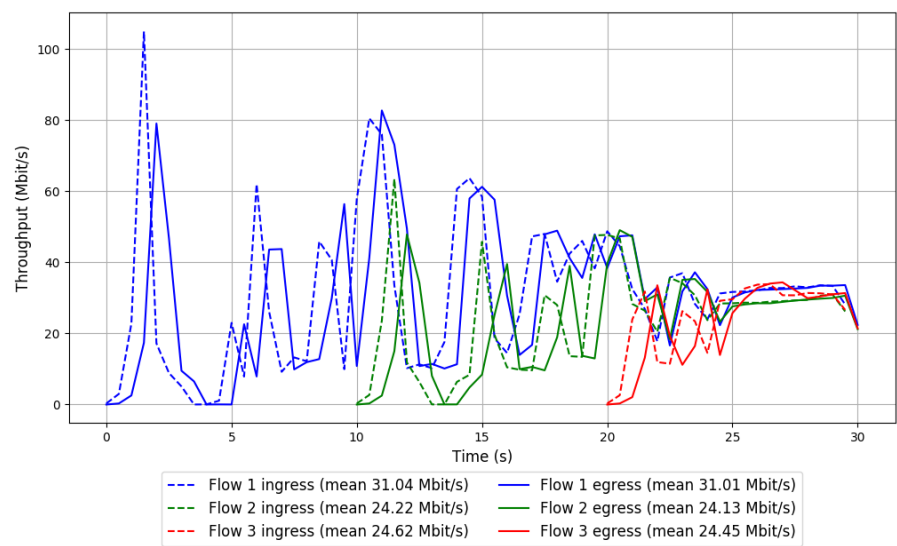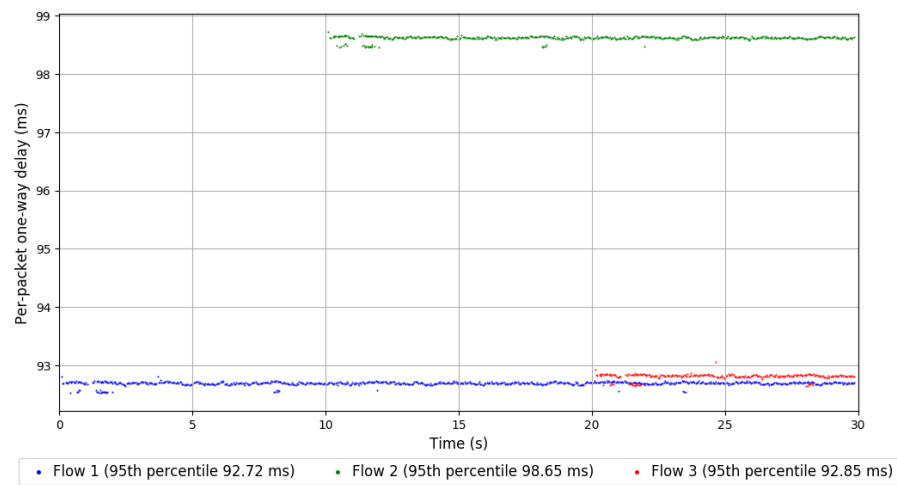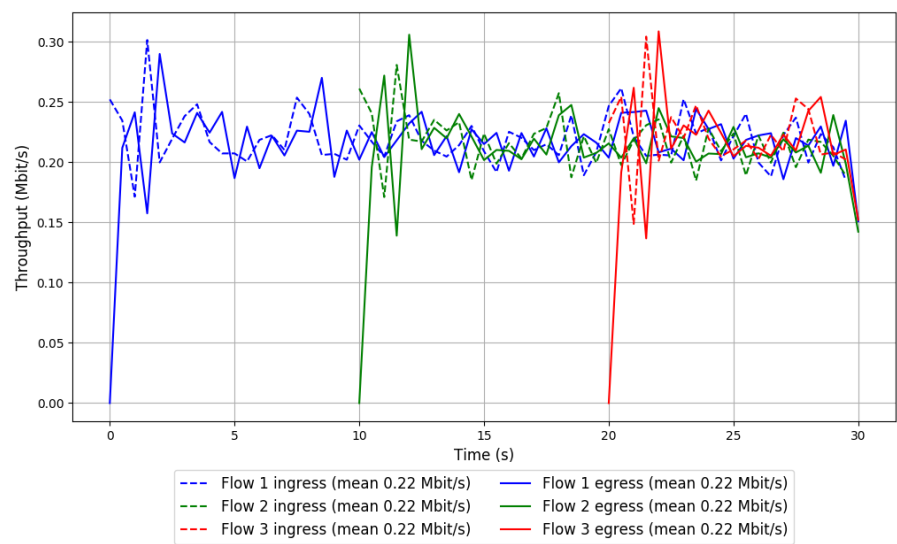
Run 4: Report of QUIC Cubic — Data Link

- Flow 1 ingress (mean 36.38 Mbit/s)
- Flow 1 egress (mean 36.37 Mbit/s)
- Flow 2 ingress (mean 23.49 Mbit/s)
- Flow 2 egress (mean 23.37 Mbit/s)
- Flow 3 ingress (mean 10.02 Mbit/s)
- Flow 3 egress (mean 9.52 Mbit/s)

- Flow 1 (95th percentile 141.39 ms)
- Flow 2 (95th percentile 199.19 ms)
- Flow 3 (95th percentile 352.50 ms)

```
Run 5: Statistics of QUIC Cubic

Start at: 2019-01-22 04:26:40
End at: 2019-01-22 04:27:10
Local clock offset: -6.314 ms
Remote clock offset: 0.995 ms


# Below is generated by plot.py at 2019-01-22 04:55:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 55.00 Mbit/s
95th percentile per-packet one-way delay: 168.407 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 31.01 Mbit/s
95th percentile per-packet one-way delay: 149.590 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 24.13 Mbit/s
95th percentile per-packet one-way delay: 224.147 ms
Loss rate: 1.22%
-- Flow 3:
Average throughput: 24.45 Mbit/s
95th percentile per-packet one-way delay: 179.525 ms
Loss rate: 2.41%
```

Run 5: Report of QUIC Cubic — Data Link
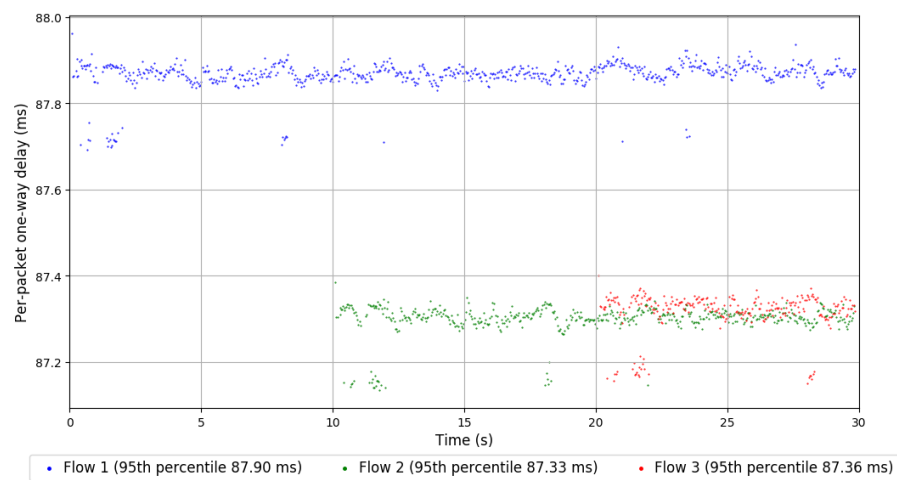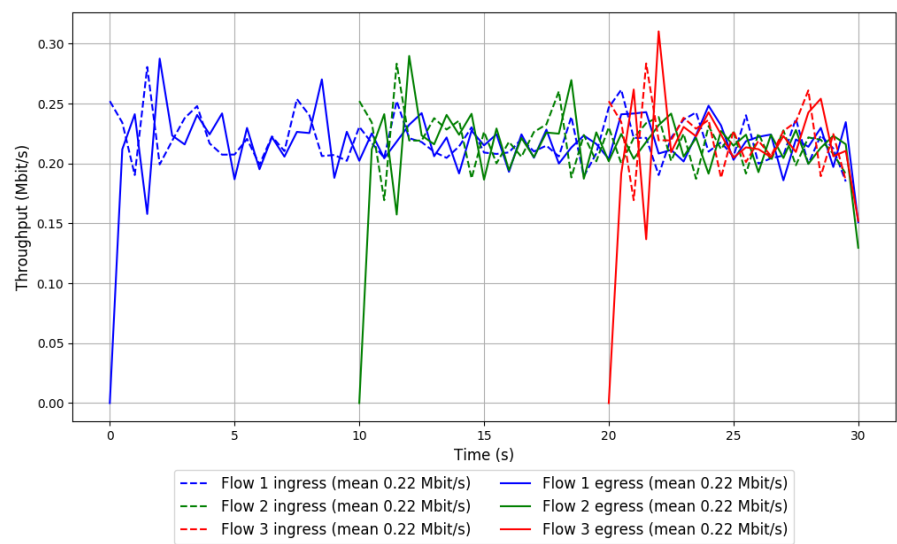

Flow 1 ingress (mean 31.04 Mbit/s)   Flow 1 egress (mean 31.01 Mbit/s)
Flow 2 ingress (mean 24.22 Mbit/s)   Flow 2 egress (mean 24.13 Mbit/s)
Flow 3 ingress (mean 24.62 Mbit/s)   Flow 3 egress (mean 24.45 Mbit/s)

Flow 1 (95th percentile 149.59 ms)   Flow 2 (95th percentile 224.15 ms)   Flow 3 (95th percentile 179.53 ms)

```
Run 1: Statistics of SCReAM

Start at: 2019-01-22 02:28:25
End at: 2019-01-22 02:28:55
Local clock offset: -1.679 ms
Remote clock offset: 3.292 ms

# Below is generated by plot.py at 2019-01-22 04:55:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 98.642 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 92.725 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 98.651 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 92.849 ms
Loss rate: 1.85%
```
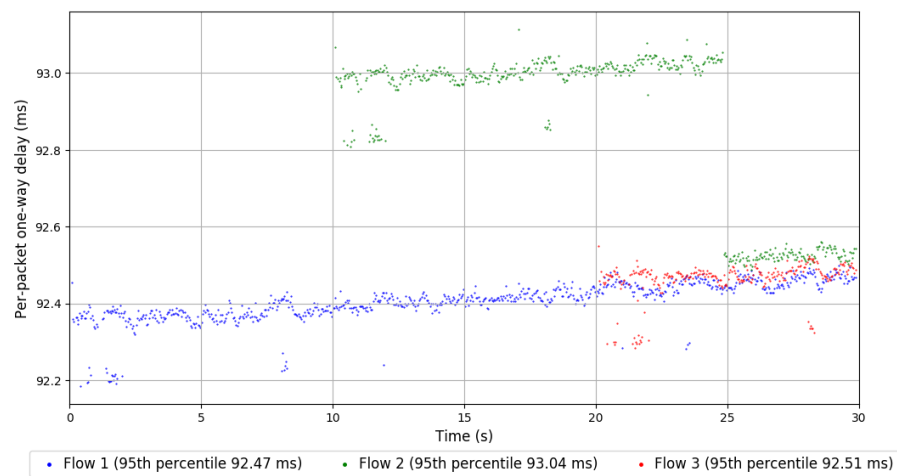
Run 1: Report of SCReAM — Data Link

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```
Run 2: Statistics of SCReAM

Start at: 2019-01-22 02:55:25
End at: 2019-01-22 02:55:55
Local clock offset: -1.829 ms
Remote clock offset: 7.948 ms


# Below is generated by plot.py at 2019-01-22 04:55:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 87.891 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.898 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.333 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.355 ms
Loss rate: 1.85%
```
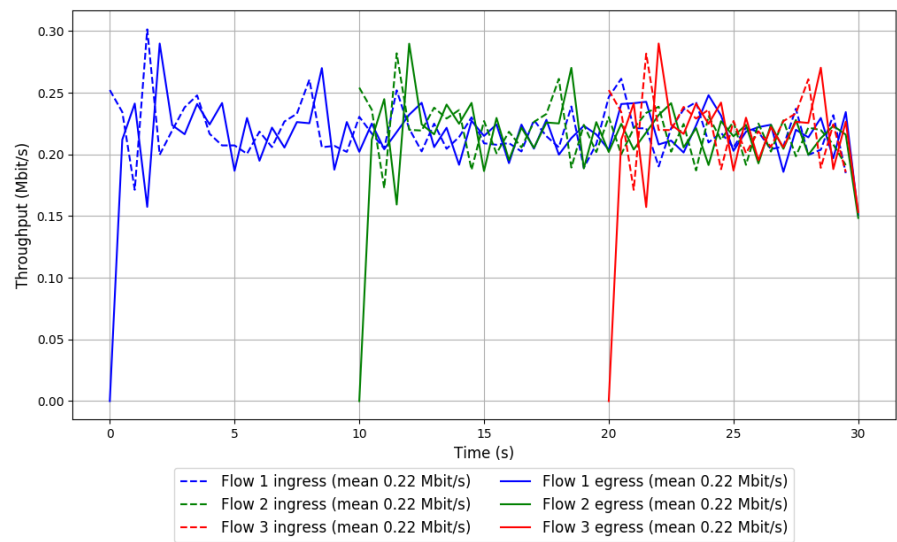
Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2019-01-22 03:22:26
End at: 2019-01-22 03:22:56
Local clock offset: -4.652 ms
Remote clock offset: 1.892 ms


# Below is generated by plot.py at 2019-01-22 04:55:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 93.025 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 92.472 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 93.040 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 92.507 ms
Loss rate: 1.46%
```
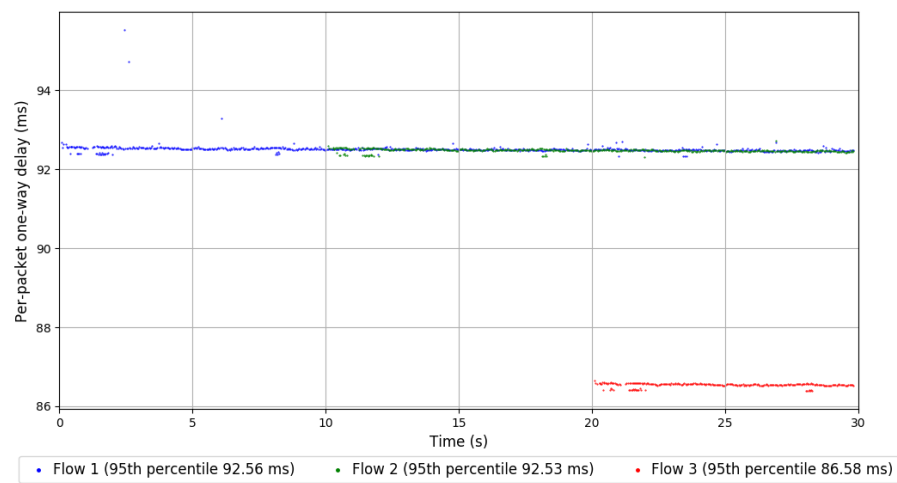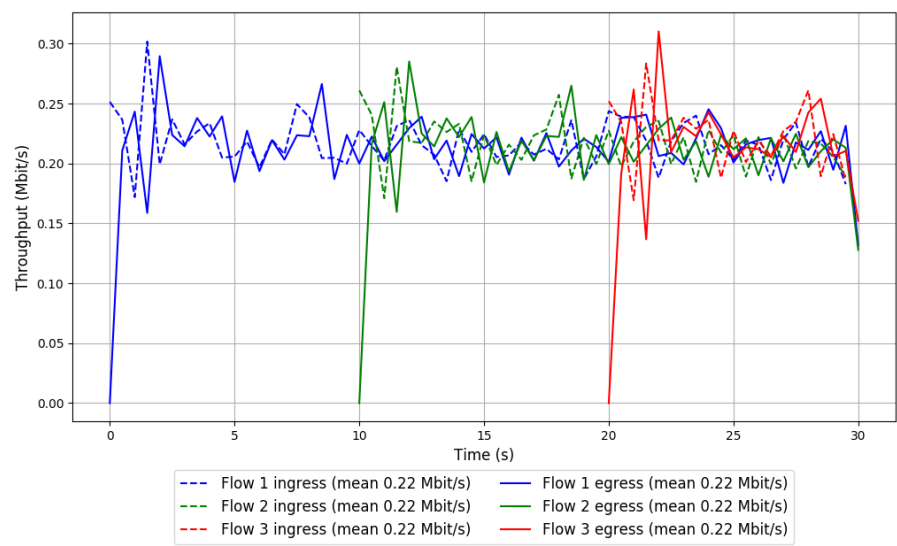
Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2019-01-22 03:49:25
End at: 2019-01-22 03:49:55
Local clock offset: -7.517 ms
Remote clock offset: 7.201 ms

# Below is generated by plot.py at 2019-01-22 04:55:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 92.543 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 92.557 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 92.525 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.582 ms
Loss rate: 1.85%
```
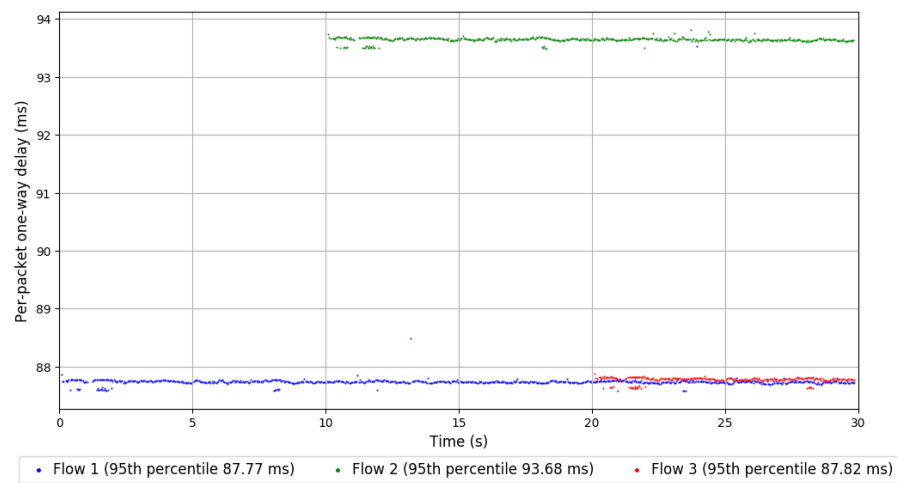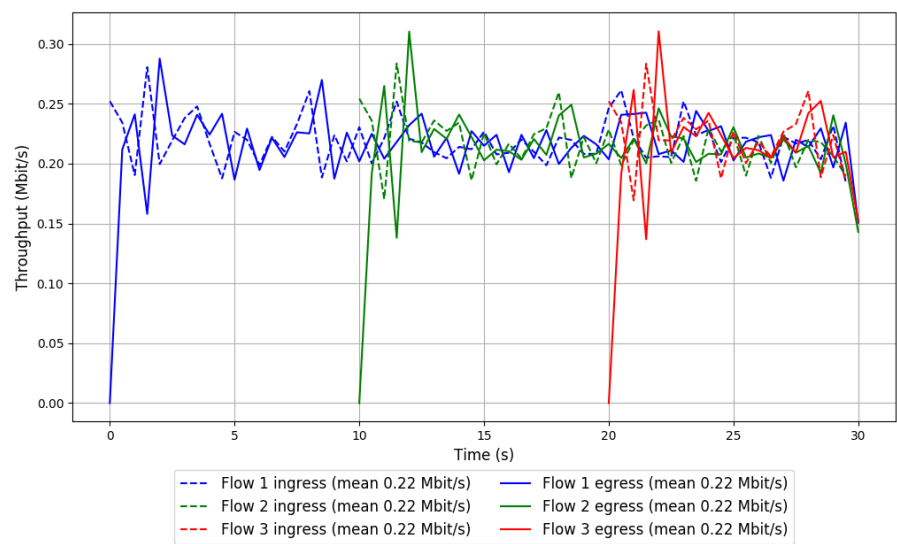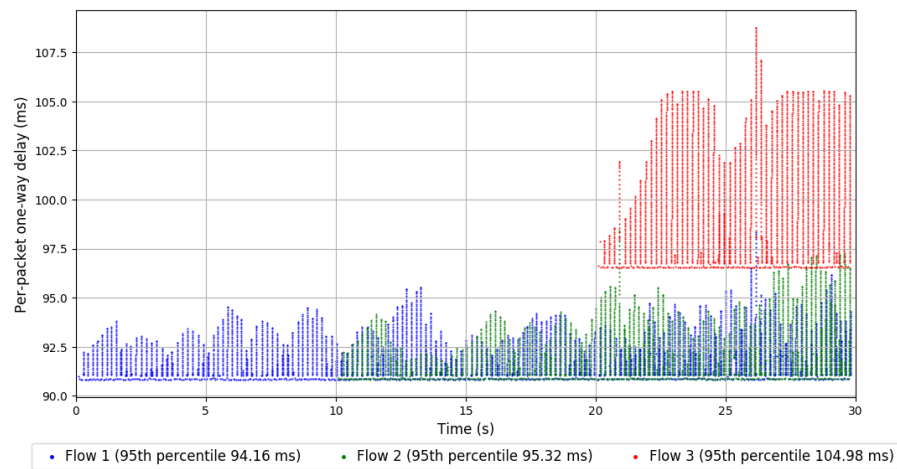
Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2019-01-22 04:16:25
End at: 2019-01-22 04:16:55
Local clock offset: -6.457 ms
Remote clock offset: 5.822 ms


# Below is generated by plot.py at 2019-01-22 04:55:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 93.672 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.772 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 93.684 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.818 ms
Loss rate: 1.85%
```
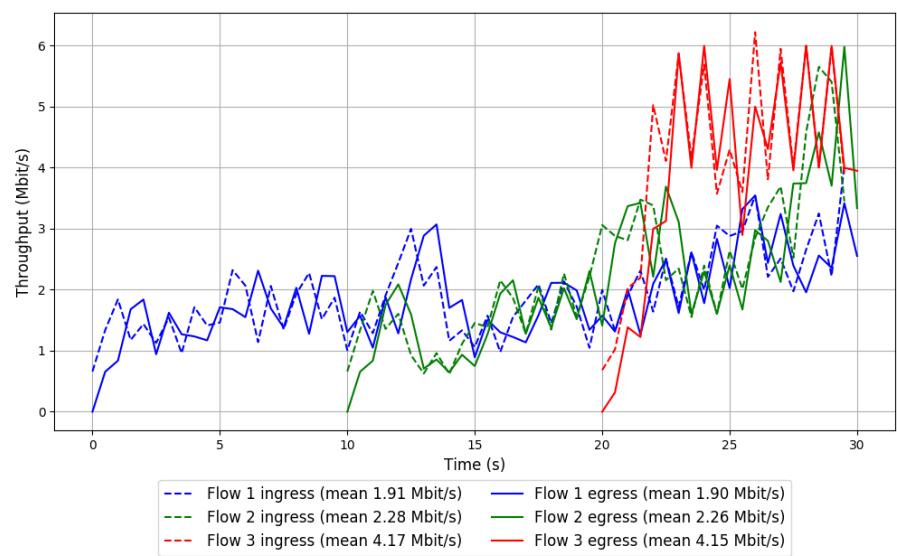
Run 5: Report of SCReAM — Data Link

```
Run 1: Statistics of Sprout

Start at: 2019-01-22 02:32:11
End at: 2019-01-22 02:32:42
Local clock offset: -2.523 ms
Remote clock offset: 4.291 ms


# Below is generated by plot.py at 2019-01-22 04:55:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.74 Mbit/s
95th percentile per-packet one-way delay: 103.388 ms
Loss rate: 1.71%
-- Flow 1:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 94.157 ms
Loss rate: 1.30%
-- Flow 2:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 95.319 ms
Loss rate: 1.64%
-- Flow 3:
Average throughput: 4.15 Mbit/s
95th percentile per-packet one-way delay: 104.985 ms
Loss rate: 2.36%
```
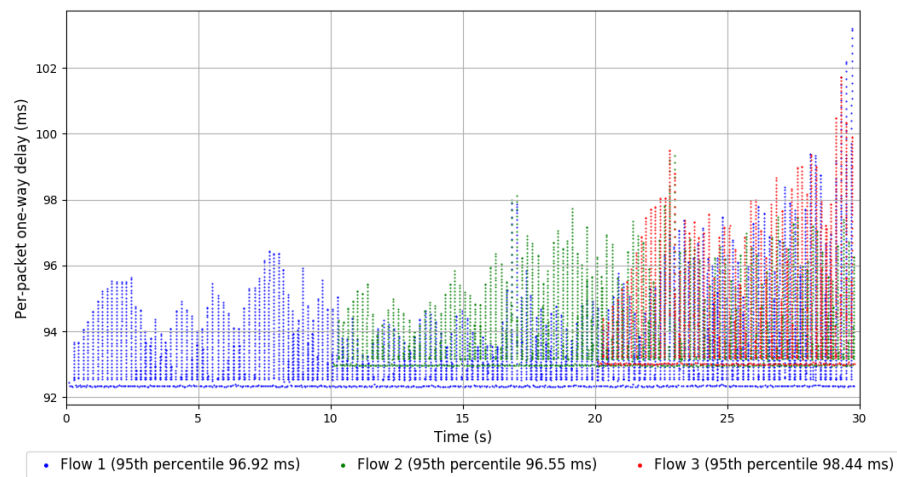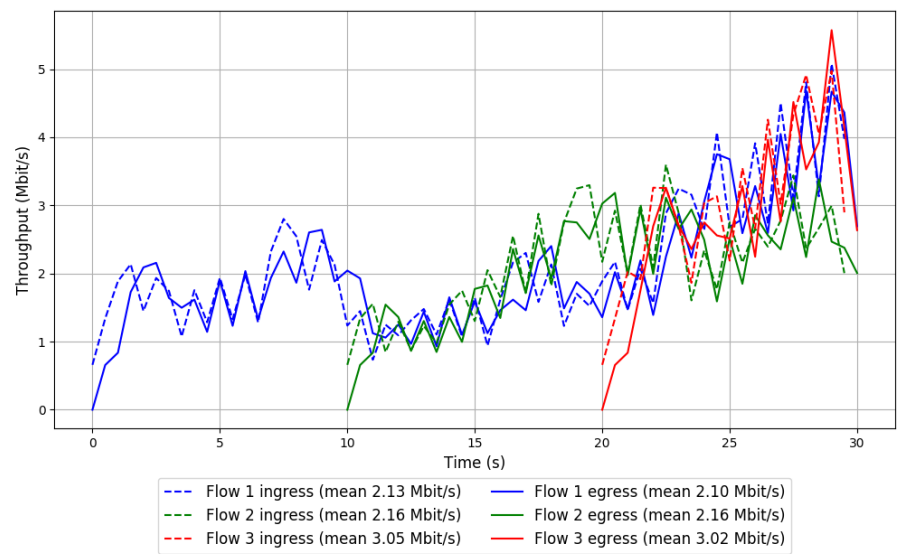
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2019-01-22 02:59:11
End at: 2019-01-22 02:59:41
Local clock offset: -1.86 ms
Remote clock offset: 2.781 ms


# Below is generated by plot.py at 2019-01-22 04:55:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.52 Mbit/s
95th percentile per-packet one-way delay: 97.261 ms
Loss rate: 1.60%
-- Flow 1:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 96.922 ms
Loss rate: 1.57%
-- Flow 2:
Average throughput: 2.16 Mbit/s
95th percentile per-packet one-way delay: 96.547 ms
Loss rate: 1.16%
-- Flow 3:
Average throughput: 3.02 Mbit/s
95th percentile per-packet one-way delay: 98.441 ms
Loss rate: 2.28%
```
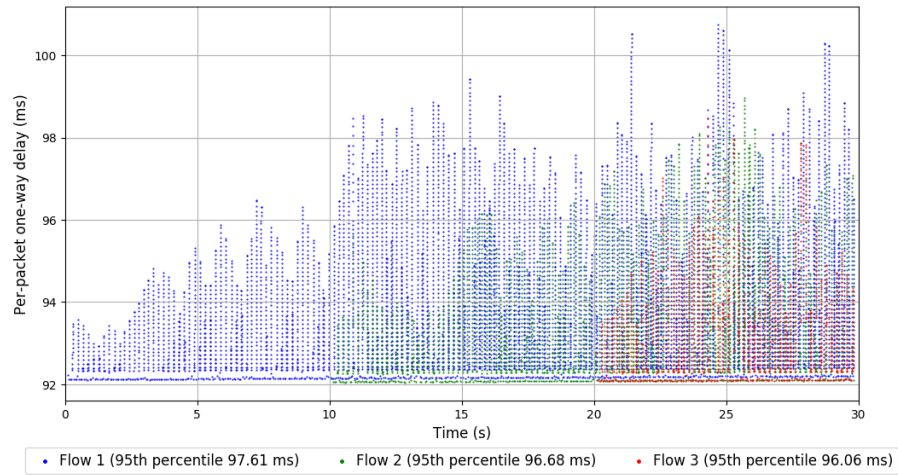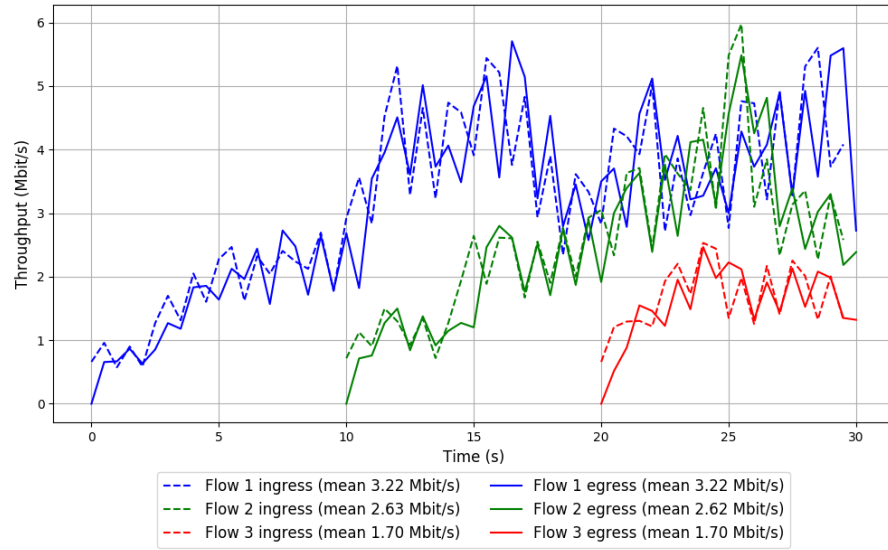
Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2019-01-22 03:26:12
End at: 2019-01-22 03:26:42
Local clock offset: -6.516 ms
Remote clock offset: 1.54 ms


# Below is generated by plot.py at 2019-01-22 04:55:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.51 Mbit/s
95th percentile per-packet one-way delay: 97.292 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 3.22 Mbit/s
95th percentile per-packet one-way delay: 97.613 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 2.62 Mbit/s
95th percentile per-packet one-way delay: 96.678 ms
Loss rate: 1.24%
-- Flow 3:
Average throughput: 1.70 Mbit/s
95th percentile per-packet one-way delay: 96.058 ms
Loss rate: 1.97%
```
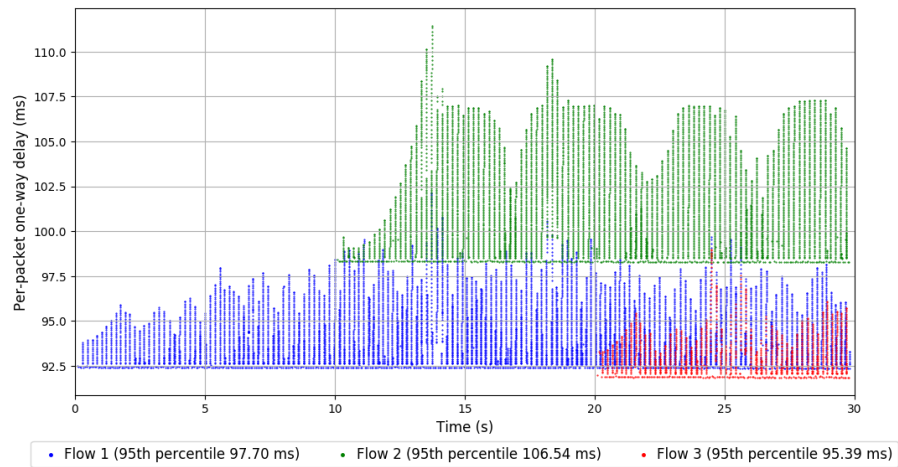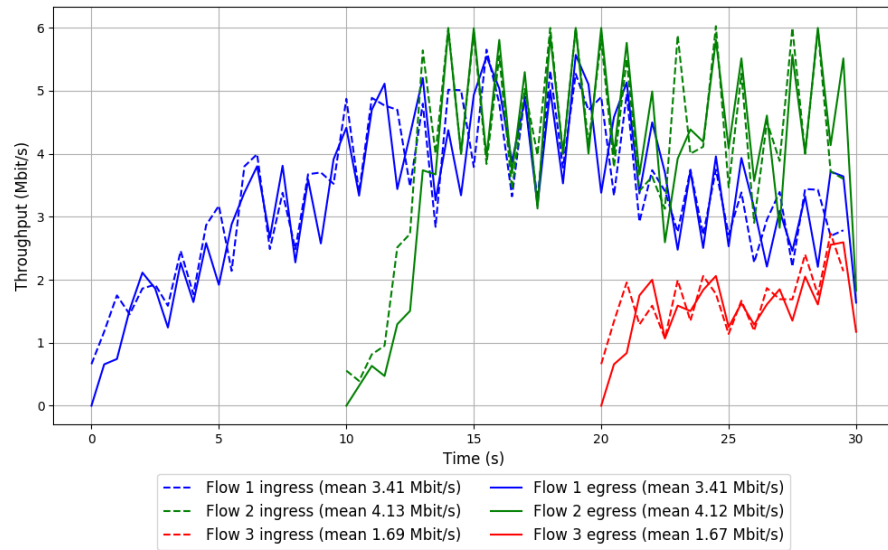
Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2019-01-22 03:53:11
End at: 2019-01-22 03:53:41
Local clock offset: -7.026 ms
Remote clock offset: 1.21 ms


# Below is generated by plot.py at 2019-01-22 04:55:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.68 Mbit/s
95th percentile per-packet one-way delay: 105.524 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 3.41 Mbit/s
95th percentile per-packet one-way delay: 97.699 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 4.12 Mbit/s
95th percentile per-packet one-way delay: 106.541 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 1.67 Mbit/s
95th percentile per-packet one-way delay: 95.390 ms
Loss rate: 3.30%
```
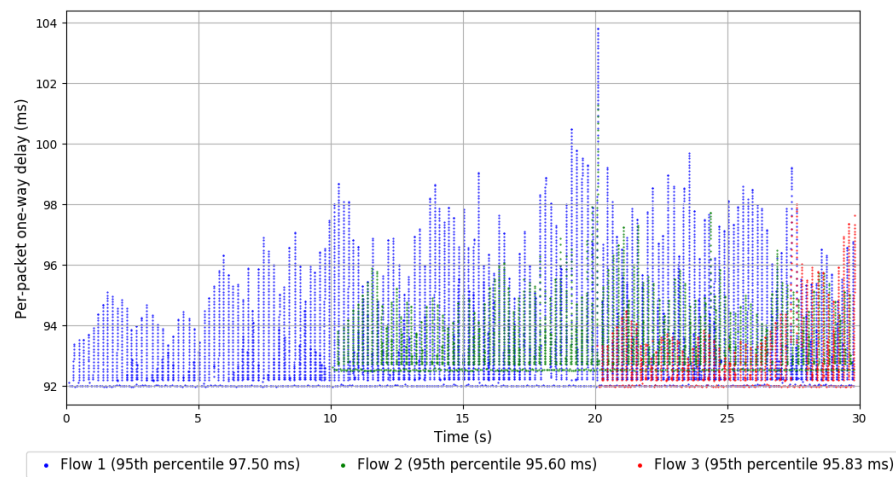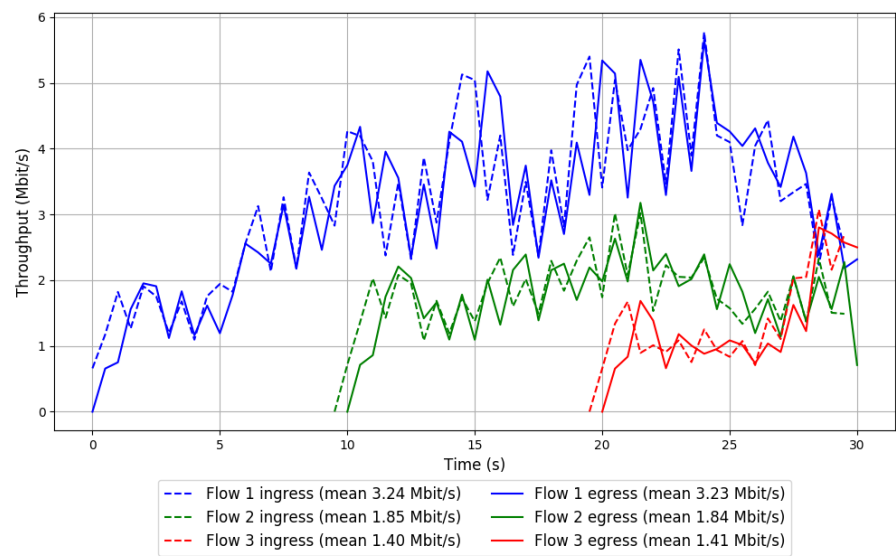
Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2019-01-22 04:20:12
End at: 2019-01-22 04:20:42
Local clock offset: -6.426 ms
Remote clock offset: 0.934 ms


# Below is generated by plot.py at 2019-01-22 04:55:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.91 Mbit/s
95th percentile per-packet one-way delay: 97.124 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 3.23 Mbit/s
95th percentile per-packet one-way delay: 97.502 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 1.84 Mbit/s
95th percentile per-packet one-way delay: 95.601 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 95.829 ms
Loss rate: 0.71%
```
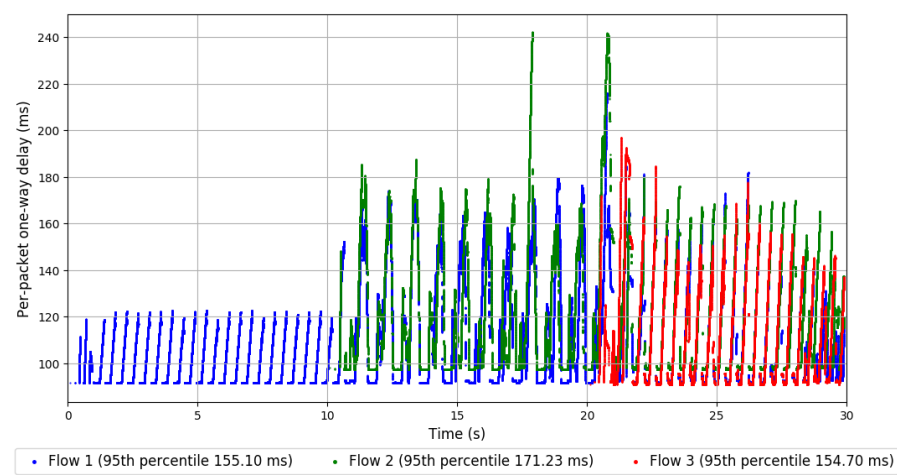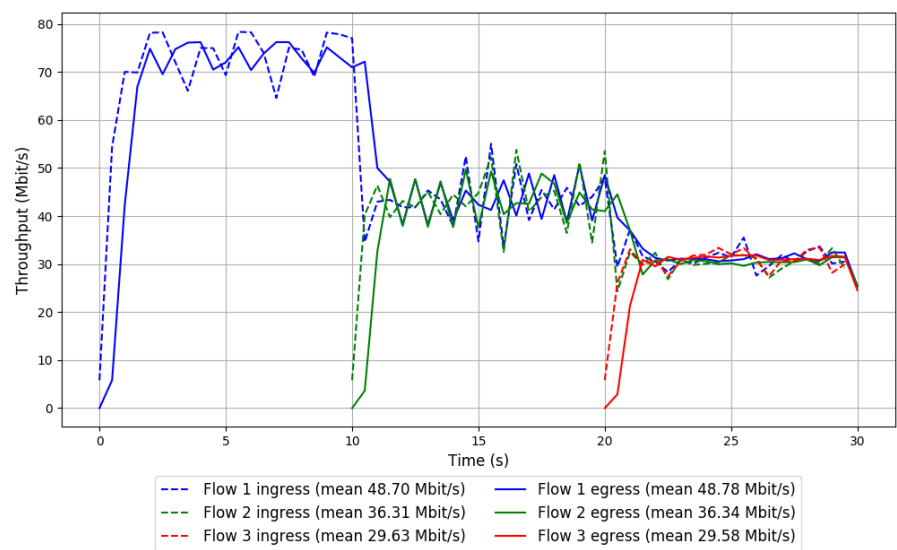
Run 5: Report of Sprout — Data Link

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

Start at: 2019-01-22 02:51:29
End at: 2019-01-22 02:51:59
Local clock offset: -1.748 ms
Remote clock offset: 4.173 ms


# Below is generated by plot.py at 2019-01-22 04:55:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.63 Mbit/s
95th percentile per-packet one-way delay: 163.713 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 48.78 Mbit/s
95th percentile per-packet one-way delay: 155.103 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 36.34 Mbit/s
95th percentile per-packet one-way delay: 171.230 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 29.58 Mbit/s
95th percentile per-packet one-way delay: 154.701 ms
Loss rate: 1.91%
```

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

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

Start at: 2019-01-22 03:18:29
End at: 2019-01-22 03:18:59
Local clock offset: -3.874 ms
Remote clock offset: 8.087 ms


# Below is generated by plot.py at 2019-01-22 04:55:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.54 Mbit/s
95th percentile per-packet one-way delay: 154.512 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 49.76 Mbit/s
95th percentile per-packet one-way delay: 153.579 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 37.75 Mbit/s
95th percentile per-packet one-way delay: 161.103 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 29.55 Mbit/s
95th percentile per-packet one-way delay: 148.644 ms
Loss rate: 1.92%
```
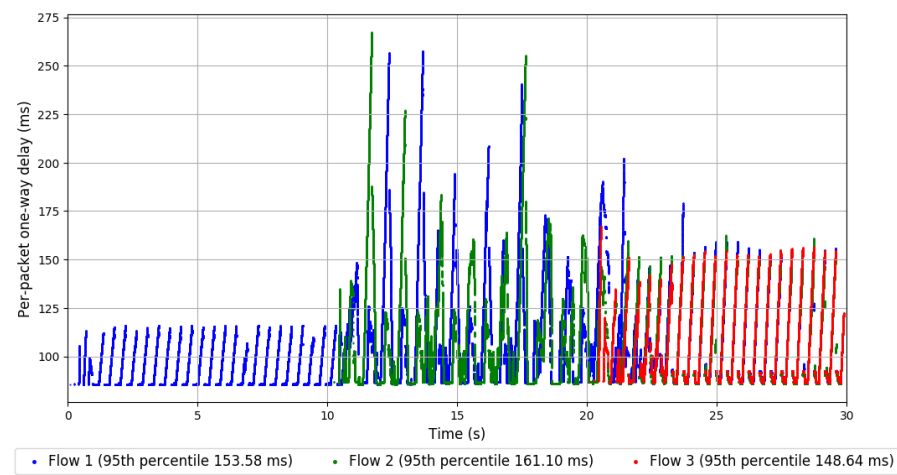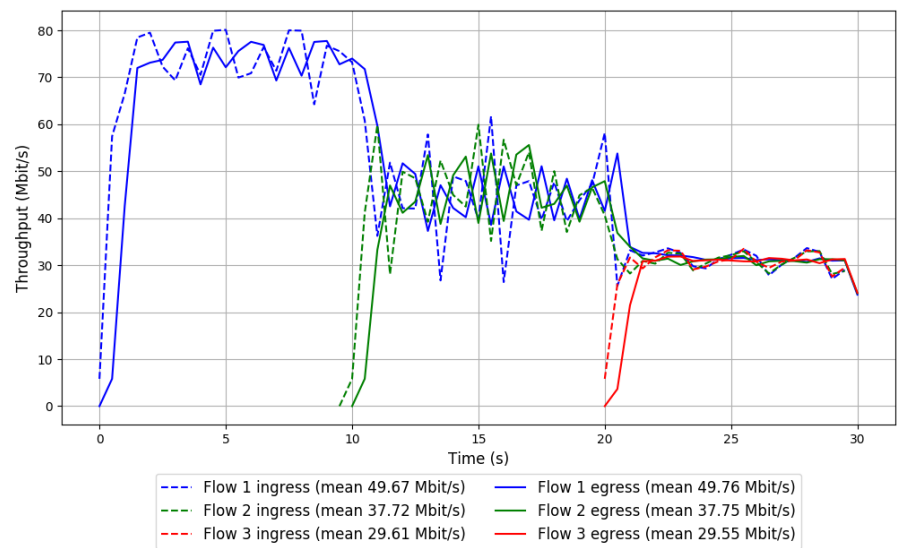
Run 2: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 49.67 Mbit/s) --- Flow 1 egress (mean 49.76 Mbit/s)
Flow 2 ingress (mean 37.72 Mbit/s) --- Flow 2 egress (mean 37.75 Mbit/s)
Flow 3 ingress (mean 29.61 Mbit/s) --- Flow 3 egress (mean 29.55 Mbit/s)

Flow 1 (95th percentile 153.58 ms) · Flow 2 (95th percentile 161.10 ms) · Flow 3 (95th percentile 148.64 ms)

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

Start at: 2019-01-22 03:45:29
End at: 2019-01-22 03:45:59
Local clock offset: -9.001 ms
Remote clock offset: 2.225 ms


# Below is generated by plot.py at 2019-01-22 04:56:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.09 Mbit/s
95th percentile per-packet one-way delay: 158.714 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 49.70 Mbit/s
95th percentile per-packet one-way delay: 155.317 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 36.97 Mbit/s
95th percentile per-packet one-way delay: 168.915 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 29.90 Mbit/s
95th percentile per-packet one-way delay: 150.693 ms
Loss rate: 2.57%
```
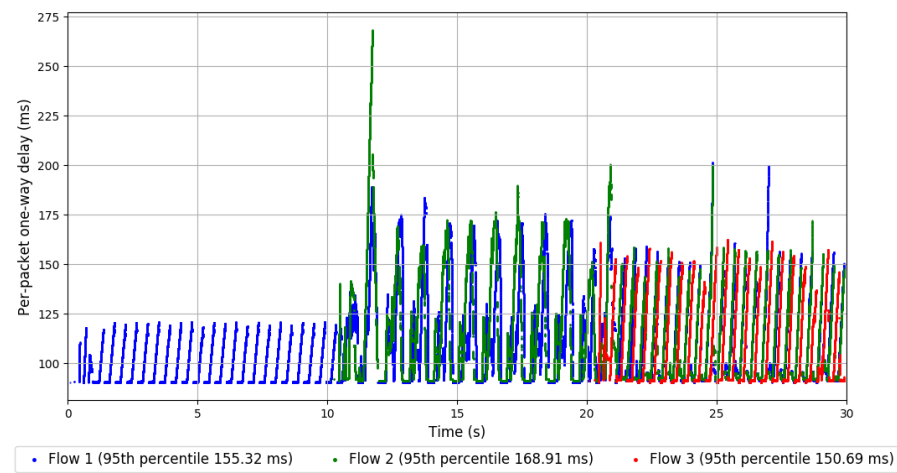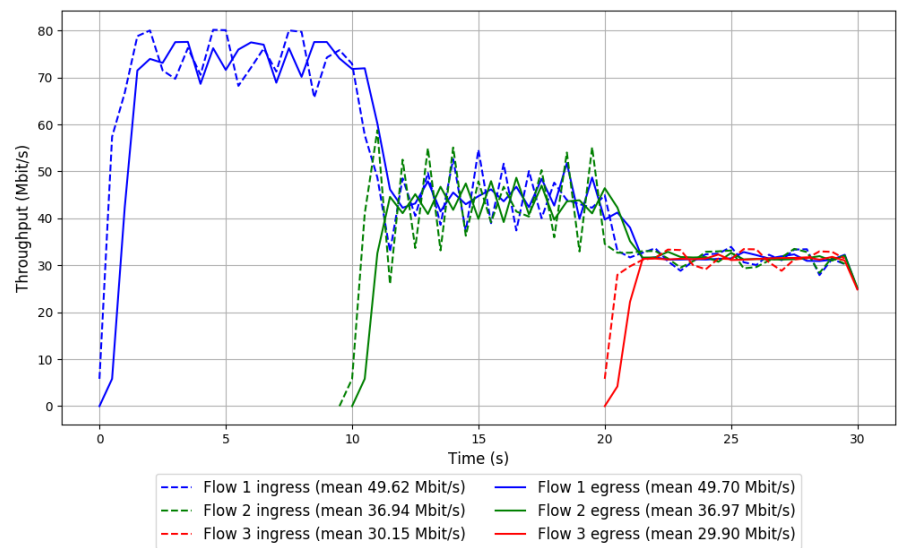
Run 3: Report of TaoVA-100x — Data Link

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

Start at: 2019-01-22 04:12:28
End at: 2019-01-22 04:12:58
Local clock offset: -6.433 ms
Remote clock offset: 0.817 ms


# Below is generated by plot.py at 2019-01-22 04:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.27 Mbit/s
95th percentile per-packet one-way delay: 160.677 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 49.07 Mbit/s
95th percentile per-packet one-way delay: 157.969 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 37.19 Mbit/s
95th percentile per-packet one-way delay: 167.397 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 28.89 Mbit/s
95th percentile per-packet one-way delay: 155.129 ms
Loss rate: 2.61%
```
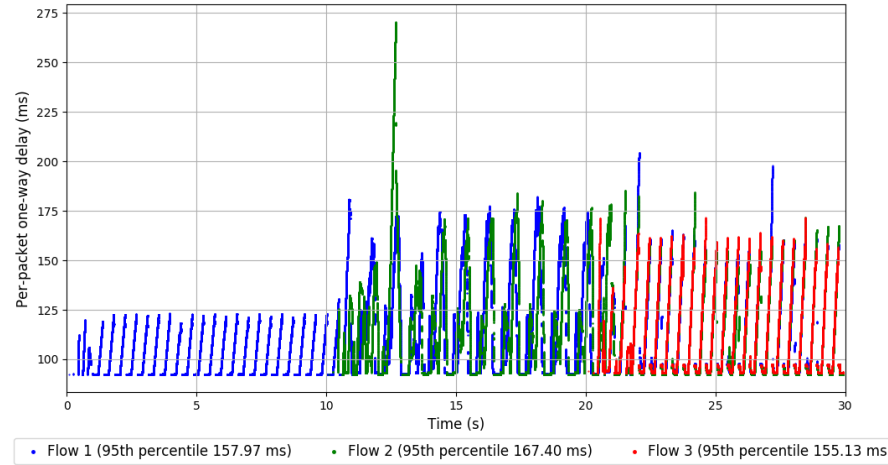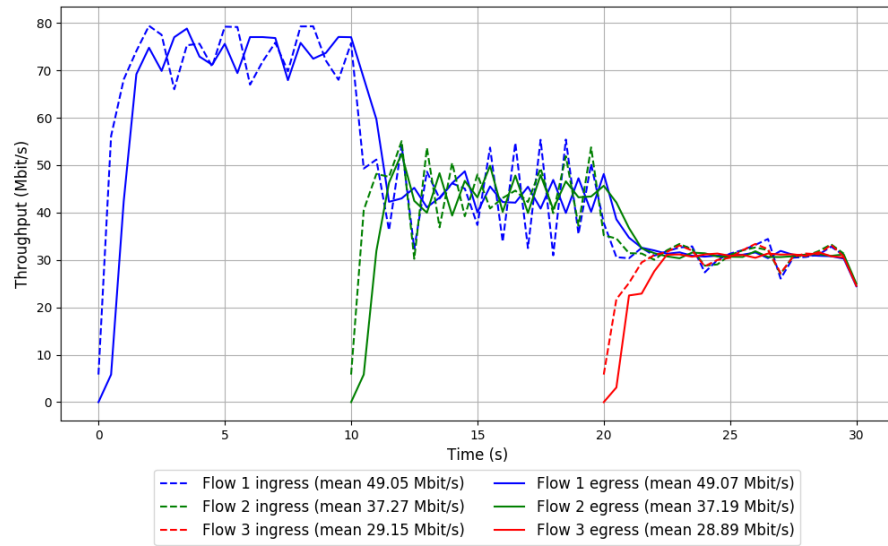
Run 4: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 49.05 Mbit/s) — — —   Flow 1 egress (mean 49.07 Mbit/s)
Flow 2 ingress (mean 37.27 Mbit/s) — — —   Flow 2 egress (mean 37.19 Mbit/s)
Flow 3 ingress (mean 29.15 Mbit/s) — — —   Flow 3 egress (mean 28.89 Mbit/s)

Flow 1 (95th percentile 157.97 ms)   Flow 2 (95th percentile 167.40 ms)   Flow 3 (95th percentile 155.13 ms)

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

Start at: 2019-01-22 04:39:28
End at: 2019-01-22 04:39:58
Local clock offset: -7.152 ms
Remote clock offset: 2.508 ms


# Below is generated by plot.py at 2019-01-22 04:56:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.70 Mbit/s
95th percentile per-packet one-way delay: 162.923 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 49.75 Mbit/s
95th percentile per-packet one-way delay: 159.209 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 37.90 Mbit/s
95th percentile per-packet one-way delay: 174.686 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 29.73 Mbit/s
95th percentile per-packet one-way delay: 152.723 ms
Loss rate: 1.80%
```
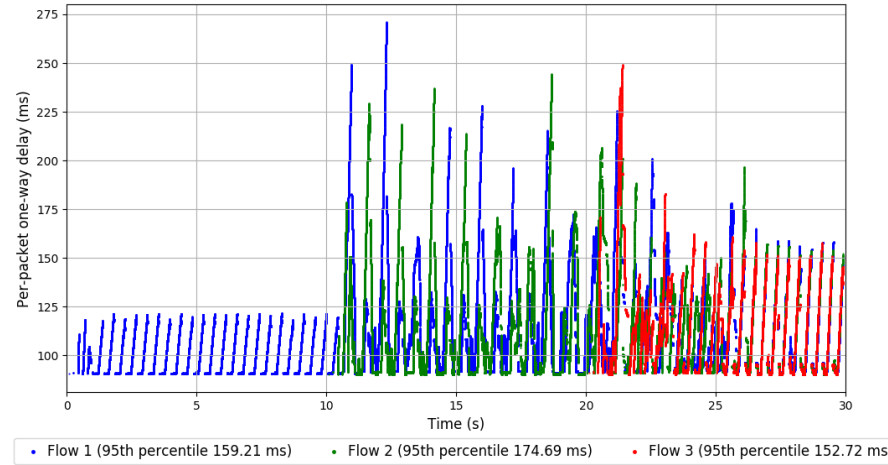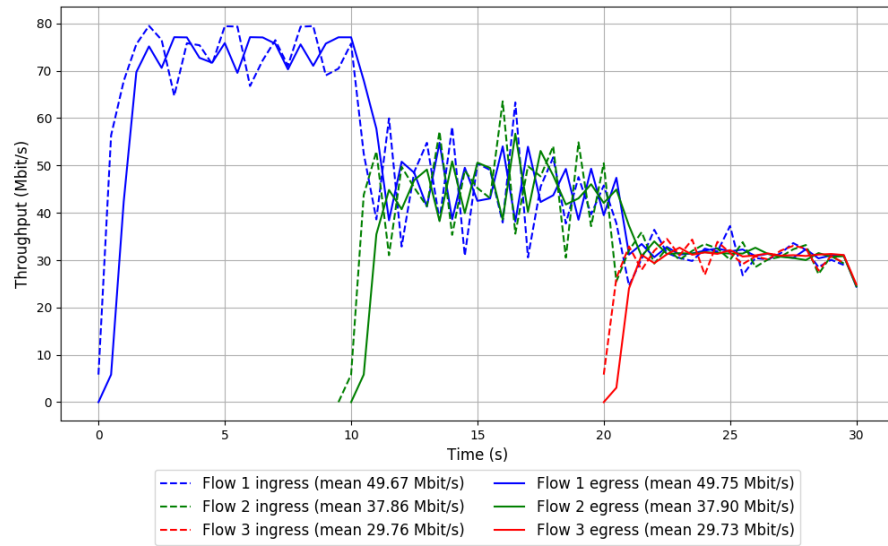
Run 5: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 49.67 Mbit/s)   Flow 1 egress (mean 49.75 Mbit/s)
Flow 2 ingress (mean 37.86 Mbit/s)   Flow 2 egress (mean 37.90 Mbit/s)
Flow 3 ingress (mean 29.76 Mbit/s)   Flow 3 egress (mean 29.73 Mbit/s)

Flow 1 (95th percentile 159.21 ms)   Flow 2 (95th percentile 174.69 ms)   Flow 3 (95th percentile 152.72 ms)

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```
Run 1: Statistics of TCP Vegas

Start at: 2019-01-22 02:45:08
End at: 2019-01-22 02:45:38
Local clock offset: -1.526 ms
Remote clock offset: 3.025 ms


# Below is generated by plot.py at 2019-01-22 04:56:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.33 Mbit/s
95th percentile per-packet one-way delay: 182.557 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 32.38 Mbit/s
95th percentile per-packet one-way delay: 198.153 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 22.63 Mbit/s
95th percentile per-packet one-way delay: 184.687 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 21.05 Mbit/s
95th percentile per-packet one-way delay: 150.680 ms
Loss rate: 2.34%
```
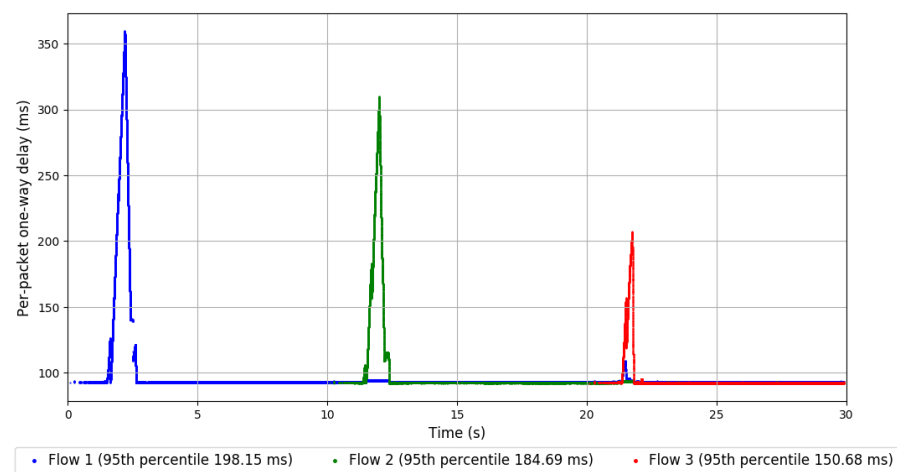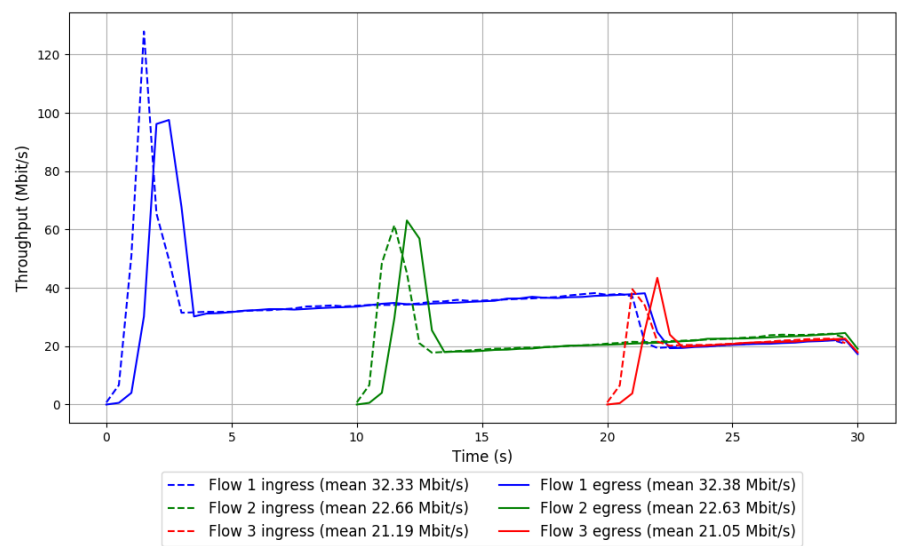
Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2019-01-22 03:12:08
End at: 2019-01-22 03:12:38
Local clock offset: -1.755 ms
Remote clock offset: 2.856 ms


# Below is generated by plot.py at 2019-01-22 04:56:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 57.00 Mbit/s
95th percentile per-packet one-way delay: 174.995 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 31.95 Mbit/s
95th percentile per-packet one-way delay: 199.191 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 28.58 Mbit/s
95th percentile per-packet one-way delay: 153.184 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 18.49 Mbit/s
95th percentile per-packet one-way delay: 166.189 ms
Loss rate: 1.93%
```
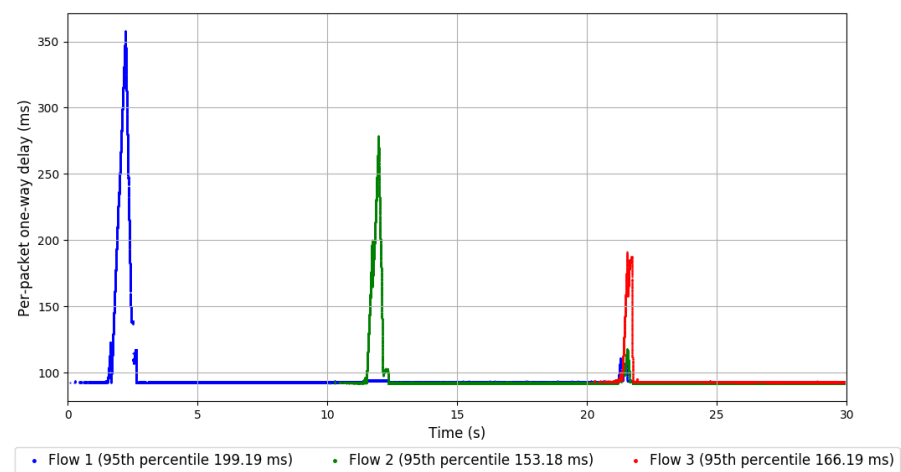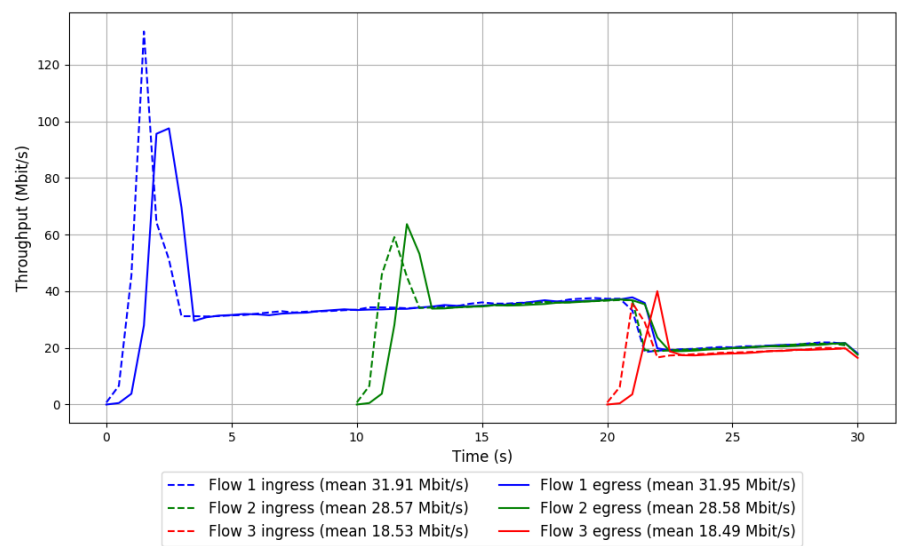
Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2019-01-22 03:39:09
End at: 2019-01-22 03:39:39
Local clock offset: -8.535 ms
Remote clock offset: 6.059 ms


# Below is generated by plot.py at 2019-01-22 04:56:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 57.61 Mbit/s
95th percentile per-packet one-way delay: 176.553 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 35.85 Mbit/s
95th percentile per-packet one-way delay: 178.525 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 22.20 Mbit/s
95th percentile per-packet one-way delay: 175.585 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 21.34 Mbit/s
95th percentile per-packet one-way delay: 174.670 ms
Loss rate: 1.96%
```
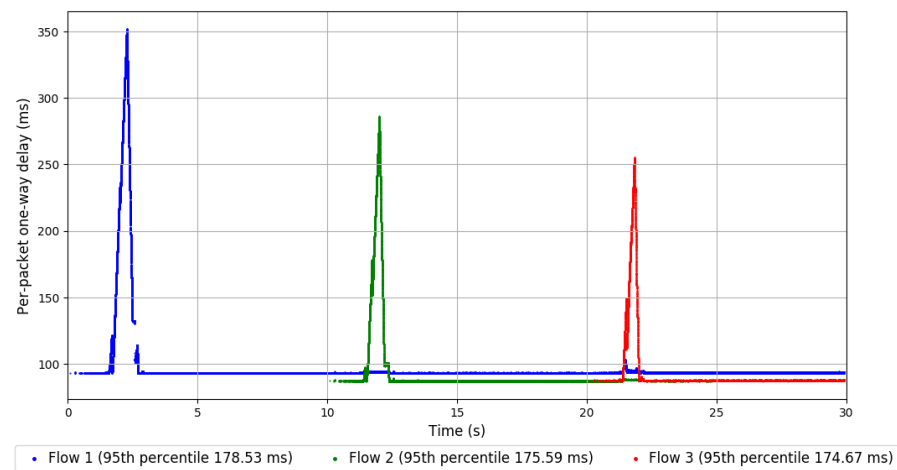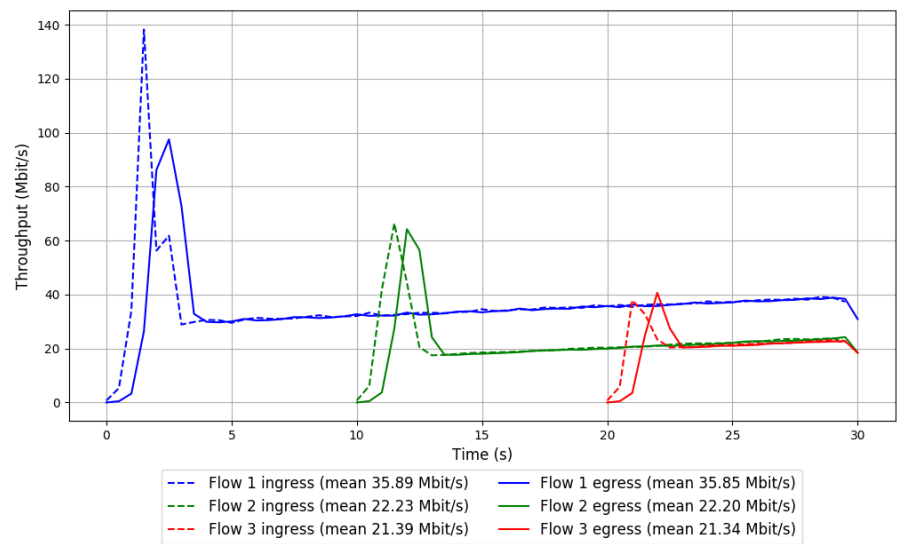
Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2019-01-22 04:06:08
End at: 2019-01-22 04:06:38
Local clock offset: -7.195 ms
Remote clock offset: 1.963 ms


# Below is generated by plot.py at 2019-01-22 04:56:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 55.17 Mbit/s
95th percentile per-packet one-way delay: 184.154 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 32.21 Mbit/s
95th percentile per-packet one-way delay: 196.374 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 25.45 Mbit/s
95th percentile per-packet one-way delay: 173.927 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 18.46 Mbit/s
95th percentile per-packet one-way delay: 178.464 ms
Loss rate: 1.97%
```
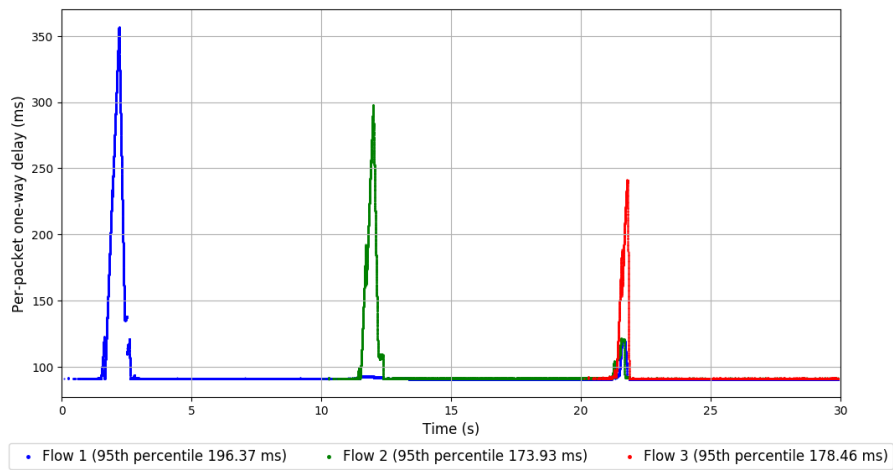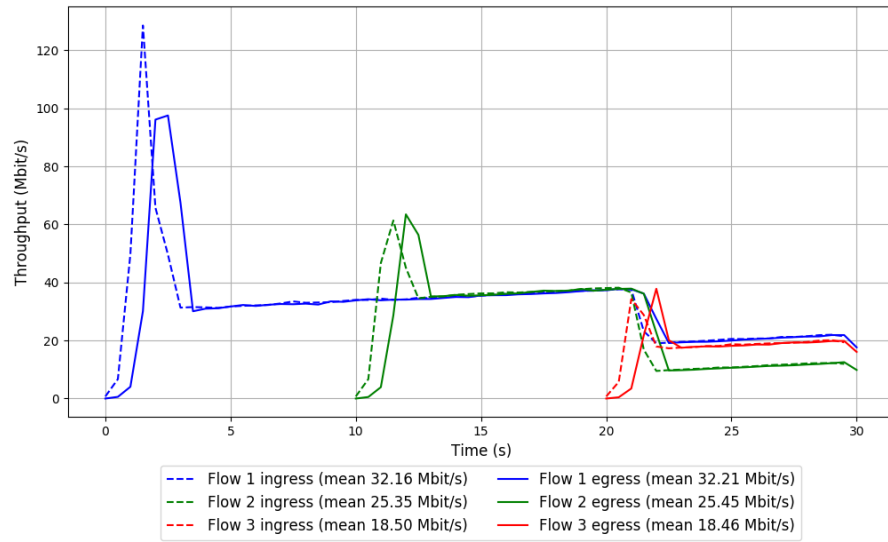
Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2019-01-22 04:33:08
End at: 2019-01-22 04:33:38
Local clock offset: -6.32 ms
Remote clock offset: 7.611 ms


# Below is generated by plot.py at 2019-01-22 04:56:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.68 Mbit/s
95th percentile per-packet one-way delay: 151.480 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 35.59 Mbit/s
95th percentile per-packet one-way delay: 179.693 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 33.19 Mbit/s
95th percentile per-packet one-way delay: 101.956 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 21.50 Mbit/s
95th percentile per-packet one-way delay: 151.009 ms
Loss rate: 1.98%
```
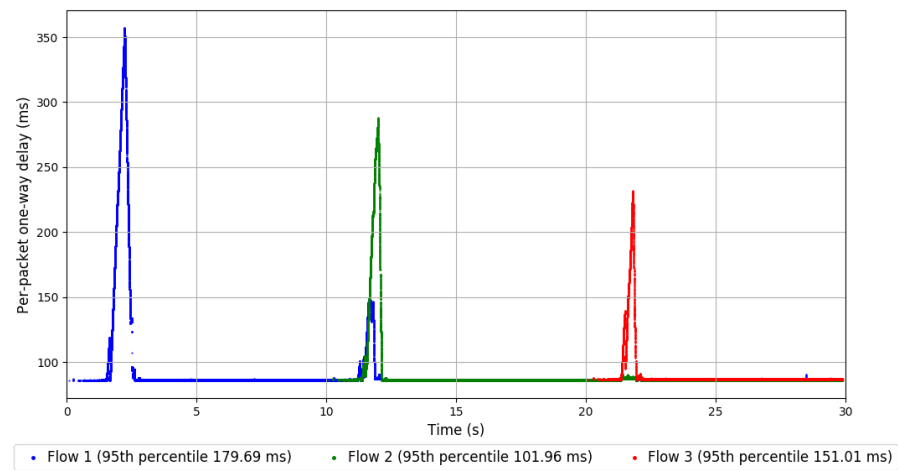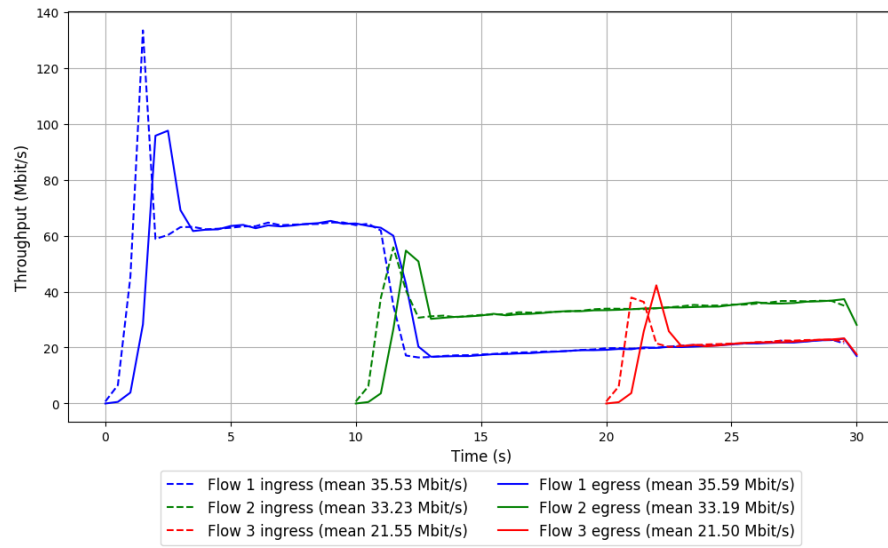
Run 5: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: 2019-01-22 02:54:07
End at: 2019-01-22 02:54:37
Local clock offset: -1.819 ms
Remote clock offset: 6.802 ms


# Below is generated by plot.py at 2019-01-22 04:56:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.88 Mbit/s
95th percentile per-packet one-way delay: 322.332 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 45.91 Mbit/s
95th percentile per-packet one-way delay: 234.590 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 28.88 Mbit/s
95th percentile per-packet one-way delay: 404.329 ms
Loss rate: 1.72%
-- Flow 3:
Average throughput: 26.76 Mbit/s
95th percentile per-packet one-way delay: 548.674 ms
Loss rate: 0.96%
```
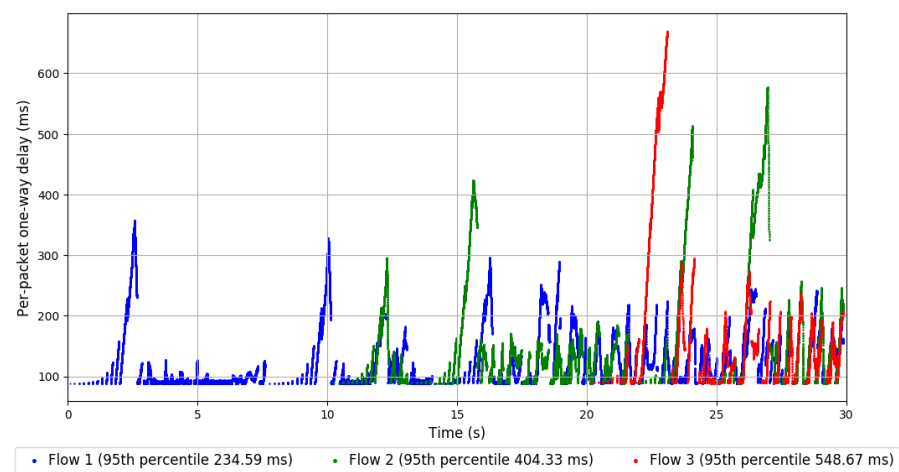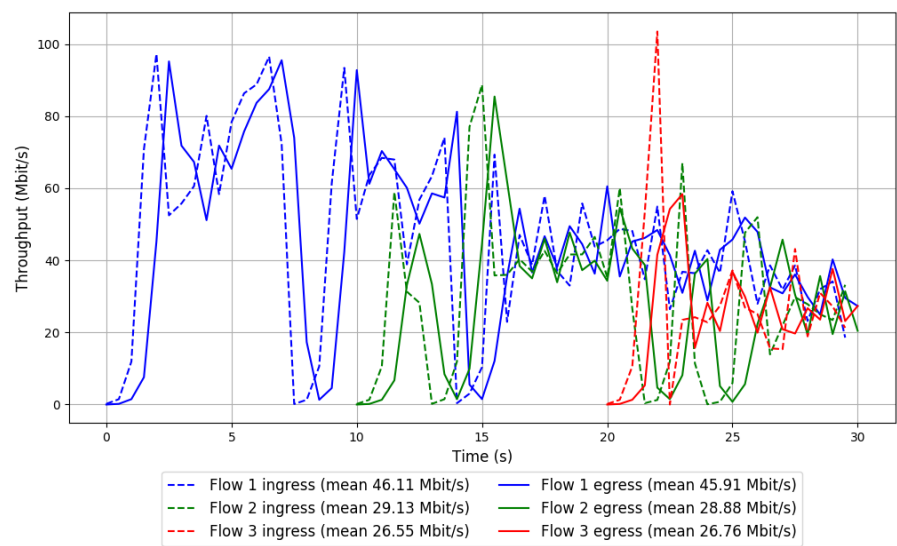
Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2019-01-22 03:21:08
End at: 2019-01-22 03:21:38
Local clock offset: -4.232 ms
Remote clock offset: 6.744 ms


# Below is generated by plot.py at 2019-01-22 04:56:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.30 Mbit/s
95th percentile per-packet one-way delay: 502.085 ms
Loss rate: 1.65%
-- Flow 1:
Average throughput: 39.96 Mbit/s
95th percentile per-packet one-way delay: 733.380 ms
Loss rate: 1.60%
-- Flow 2:
Average throughput: 26.80 Mbit/s
95th percentile per-packet one-way delay: 250.328 ms
Loss rate: 1.86%
-- Flow 3:
Average throughput: 26.04 Mbit/s
95th percentile per-packet one-way delay: 509.280 ms
Loss rate: 1.45%
```
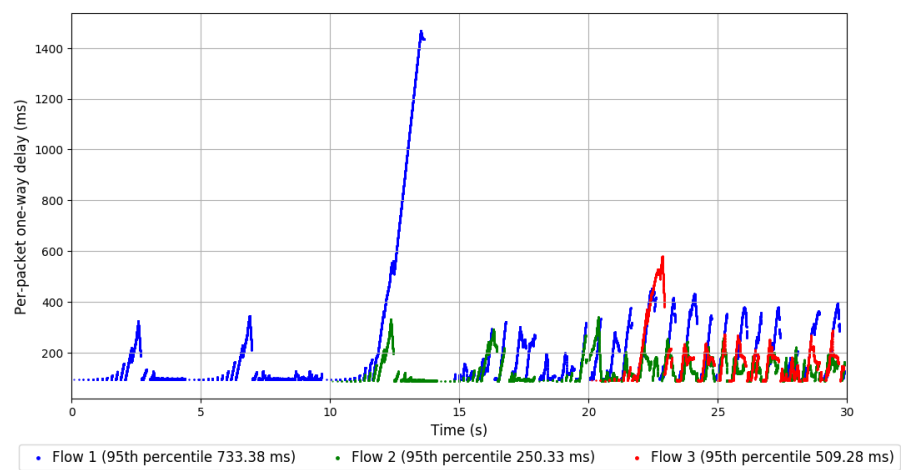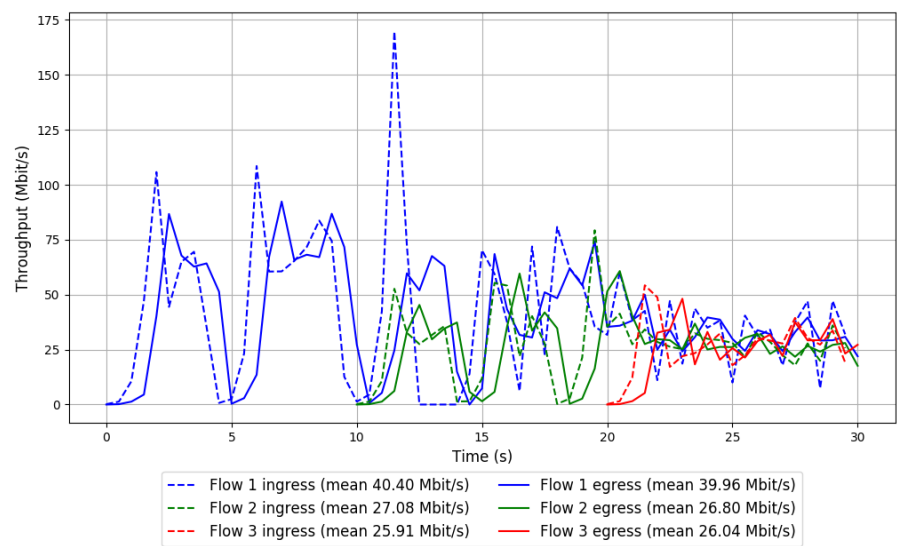
Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2019-01-22 03:48:08
End at: 2019-01-22 03:48:38
Local clock offset: -7.818 ms
Remote clock offset: 2.127 ms


# Below is generated by plot.py at 2019-01-22 04:56:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.22 Mbit/s
95th percentile per-packet one-way delay: 247.584 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 41.70 Mbit/s
95th percentile per-packet one-way delay: 252.636 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 34.13 Mbit/s
95th percentile per-packet one-way delay: 233.817 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 17.82 Mbit/s
95th percentile per-packet one-way delay: 232.736 ms
Loss rate: 2.87%
```
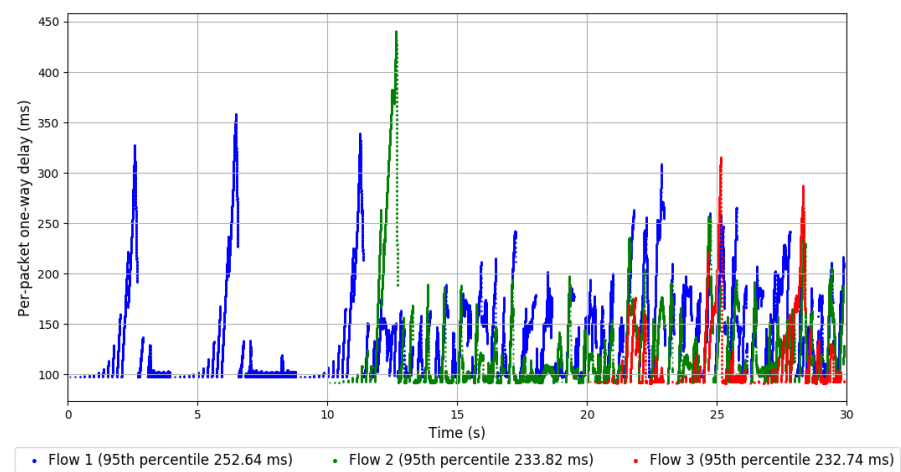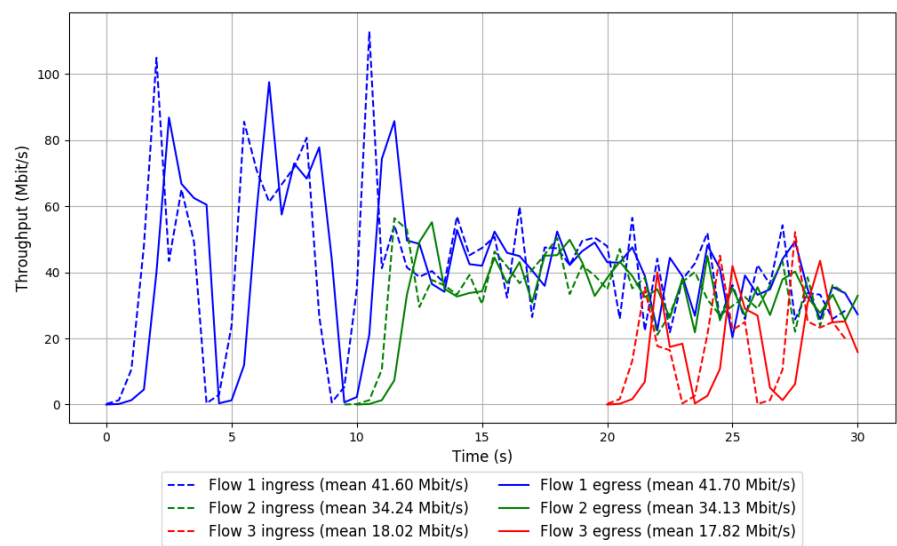
Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2019-01-22 04:15:07
End at: 2019-01-22 04:15:37
Local clock offset: -6.463 ms
Remote clock offset: 6.897 ms


# Below is generated by plot.py at 2019-01-22 04:56:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.01 Mbit/s
95th percentile per-packet one-way delay: 305.761 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 52.68 Mbit/s
95th percentile per-packet one-way delay: 308.457 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 32.92 Mbit/s
95th percentile per-packet one-way delay: 267.897 ms
Loss rate: 1.83%
-- Flow 3:
Average throughput: 17.18 Mbit/s
95th percentile per-packet one-way delay: 329.609 ms
Loss rate: 0.88%
```
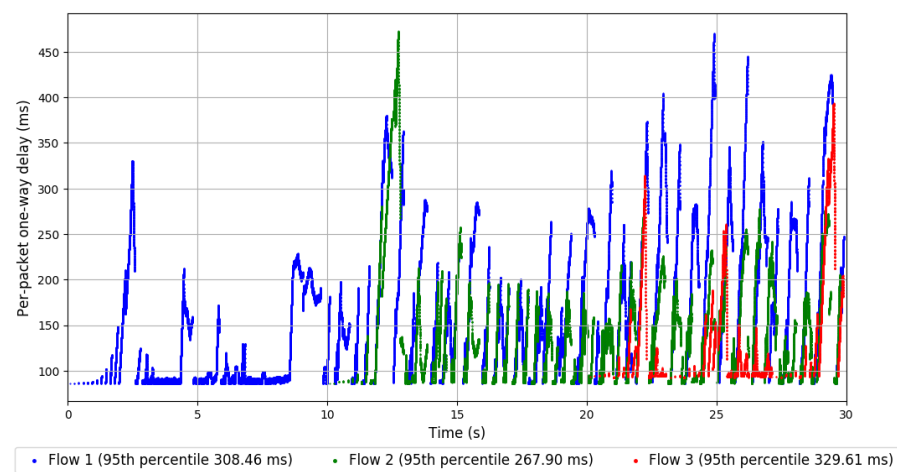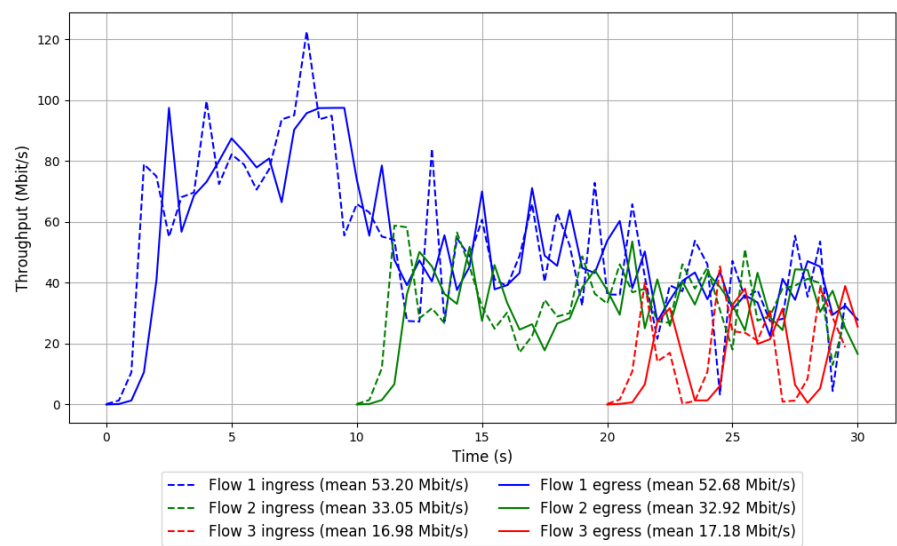
Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2019-01-22 04:42:07
End at: 2019-01-22 04:42:37
Local clock offset: -7.23 ms
Remote clock offset: 1.398 ms


# Below is generated by plot.py at 2019-01-22 04:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.59 Mbit/s
95th percentile per-packet one-way delay: 358.352 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 39.82 Mbit/s
95th percentile per-packet one-way delay: 499.460 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 36.48 Mbit/s
95th percentile per-packet one-way delay: 279.787 ms
Loss rate: 1.71%
-- Flow 3:
Average throughput: 23.14 Mbit/s
95th percentile per-packet one-way delay: 445.762 ms
Loss rate: 3.64%
```

Run 5: Report of Verus — Data Link

- - - Flow 1 ingress (mean 39.97 Mbit/s) —— Flow 1 egress (mean 39.82 Mbit/s)
- - - Flow 2 ingress (mean 36.80 Mbit/s) —— Flow 2 egress (mean 36.48 Mbit/s)
- - - Flow 3 ingress (mean 23.48 Mbit/s) —— Flow 3 egress (mean 23.14 Mbit/s)

- Flow 1 (95th percentile 499.46 ms)   - Flow 2 (95th percentile 279.79 ms)   - Flow 3 (95th percentile 445.76 ms)

```
Run 1: Statistics of PCC-Vivace

Start at: 2019-01-22 02:41:13
End at: 2019-01-22 02:41:43
Local clock offset: -1.638 ms
Remote clock offset: 2.993 ms


# Below is generated by plot.py at 2019-01-22 04:57:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.27 Mbit/s
95th percentile per-packet one-way delay: 1851.934 ms
Loss rate: 8.52%
-- Flow 1:
Average throughput: 52.33 Mbit/s
95th percentile per-packet one-way delay: 1878.529 ms
Loss rate: 5.90%
-- Flow 2:
Average throughput: 32.20 Mbit/s
95th percentile per-packet one-way delay: 1839.628 ms
Loss rate: 15.06%
-- Flow 3:
Average throughput: 23.26 Mbit/s
95th percentile per-packet one-way delay: 148.136 ms
Loss rate: 6.19%
```
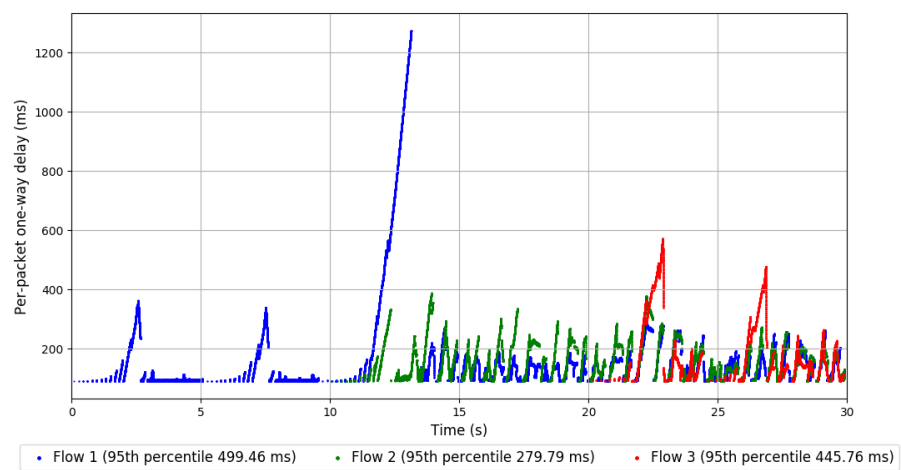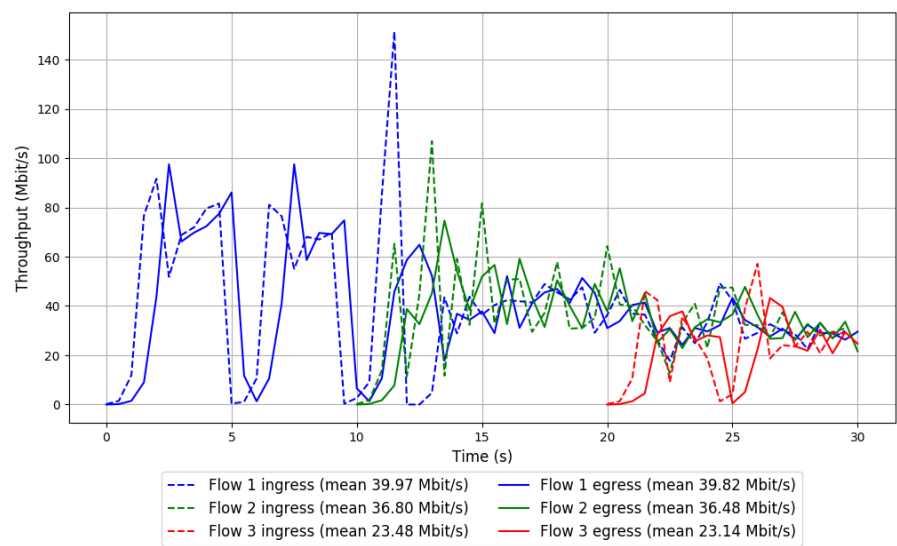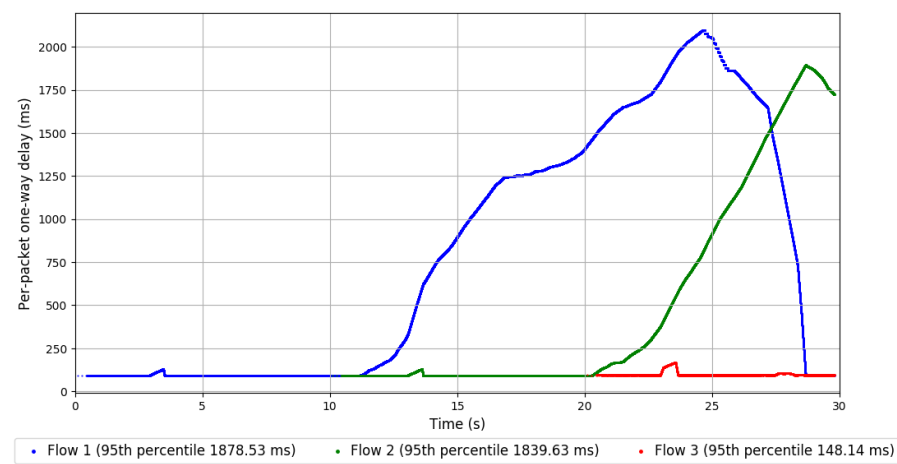
Run 1: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 55.29 Mbit/s) — Flow 1 egress (mean 52.33 Mbit/s)
Flow 2 ingress (mean 37.58 Mbit/s) — Flow 2 egress (mean 32.20 Mbit/s)
Flow 3 ingress (mean 24.36 Mbit/s) — Flow 3 egress (mean 23.26 Mbit/s)

Flow 1 (95th percentile 1878.53 ms)   Flow 2 (95th percentile 1839.63 ms)   Flow 3 (95th percentile 148.14 ms)

```
Run 2: Statistics of PCC-Vivace

Start at: 2019-01-22 03:08:13
End at: 2019-01-22 03:08:43
Local clock offset: -1.868 ms
Remote clock offset: 9.155 ms


# Below is generated by plot.py at 2019-01-22 04:57:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.90 Mbit/s
95th percentile per-packet one-way delay: 1598.940 ms
Loss rate: 4.42%
-- Flow 1:
Average throughput: 50.70 Mbit/s
95th percentile per-packet one-way delay: 1657.277 ms
Loss rate: 4.93%
-- Flow 2:
Average throughput: 31.56 Mbit/s
95th percentile per-packet one-way delay: 797.116 ms
Loss rate: 3.64%
-- Flow 3:
Average throughput: 22.27 Mbit/s
95th percentile per-packet one-way delay: 349.127 ms
Loss rate: 2.99%
```
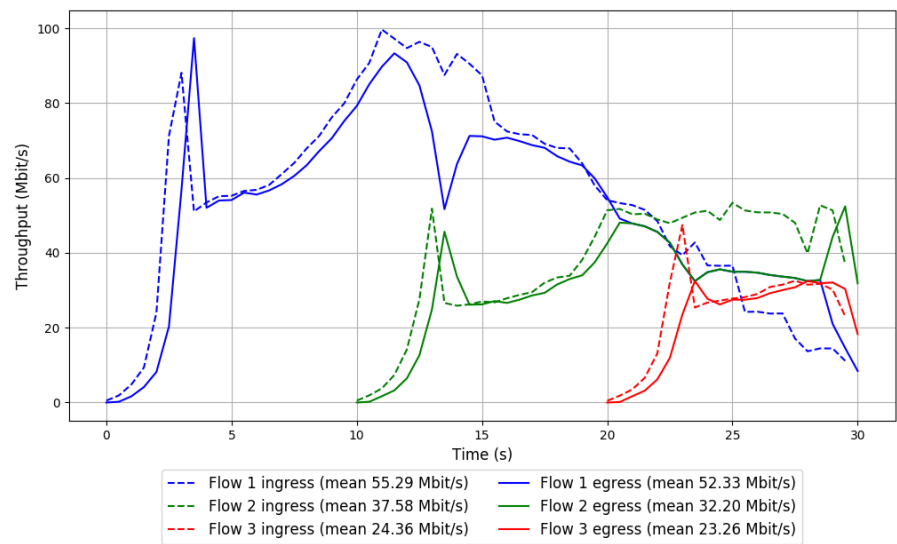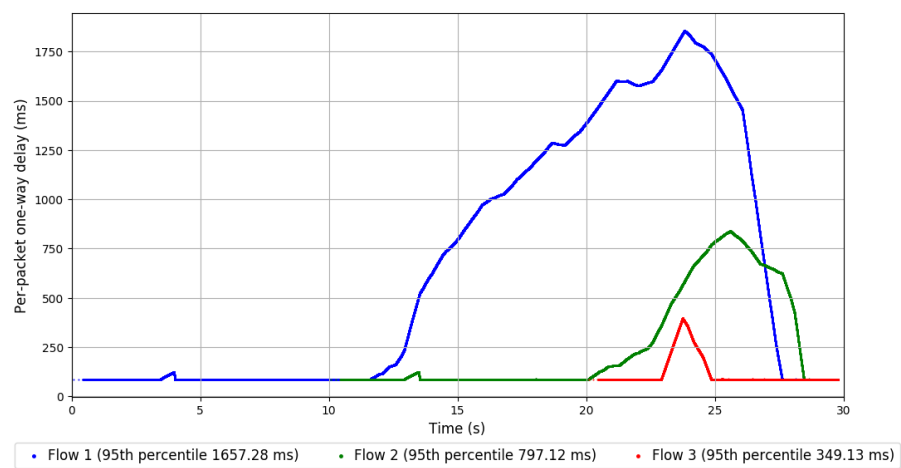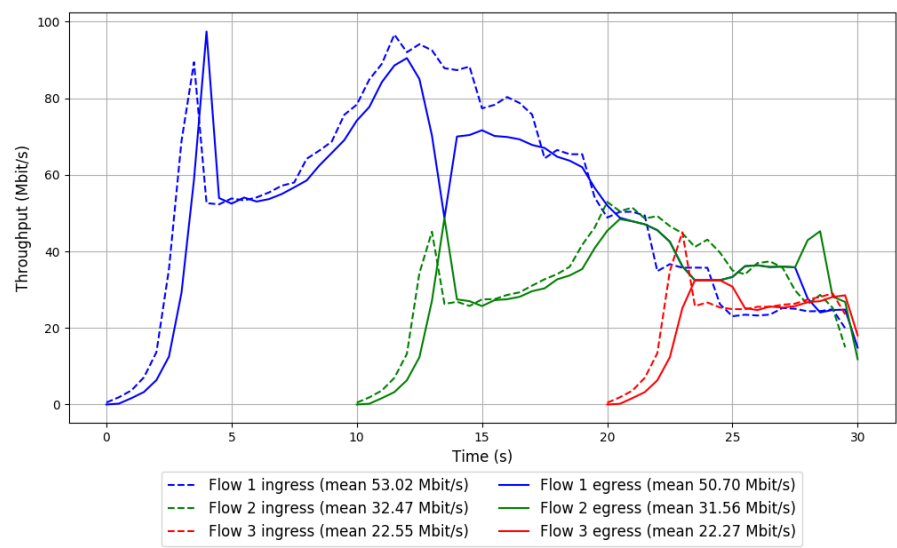
Run 2: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 53.02 Mbit/s) — Flow 1 egress (mean 50.70 Mbit/s)
Flow 2 ingress (mean 32.47 Mbit/s) — Flow 2 egress (mean 31.56 Mbit/s)
Flow 3 ingress (mean 22.55 Mbit/s) — Flow 3 egress (mean 22.27 Mbit/s)

Flow 1 (95th percentile 1657.28 ms) • Flow 2 (95th percentile 797.12 ms) • Flow 3 (95th percentile 349.13 ms)

```
Run 3: Statistics of PCC-Vivace

Start at: 2019-01-22 03:35:14
End at: 2019-01-22 03:35:44
Local clock offset: -7.294 ms
Remote clock offset: 2.39 ms


# Below is generated by plot.py at 2019-01-22 04:57:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.04 Mbit/s
95th percentile per-packet one-way delay: 1978.672 ms
Loss rate: 8.29%
-- Flow 1:
Average throughput: 50.31 Mbit/s
95th percentile per-packet one-way delay: 2069.090 ms
Loss rate: 9.66%
-- Flow 2:
Average throughput: 32.30 Mbit/s
95th percentile per-packet one-way delay: 598.840 ms
Loss rate: 6.66%
-- Flow 3:
Average throughput: 22.33 Mbit/s
95th percentile per-packet one-way delay: 345.253 ms
Loss rate: 3.08%
```
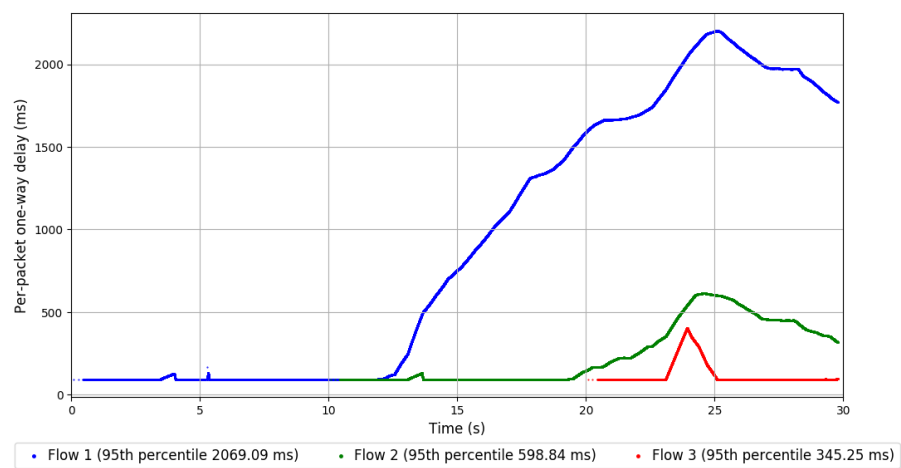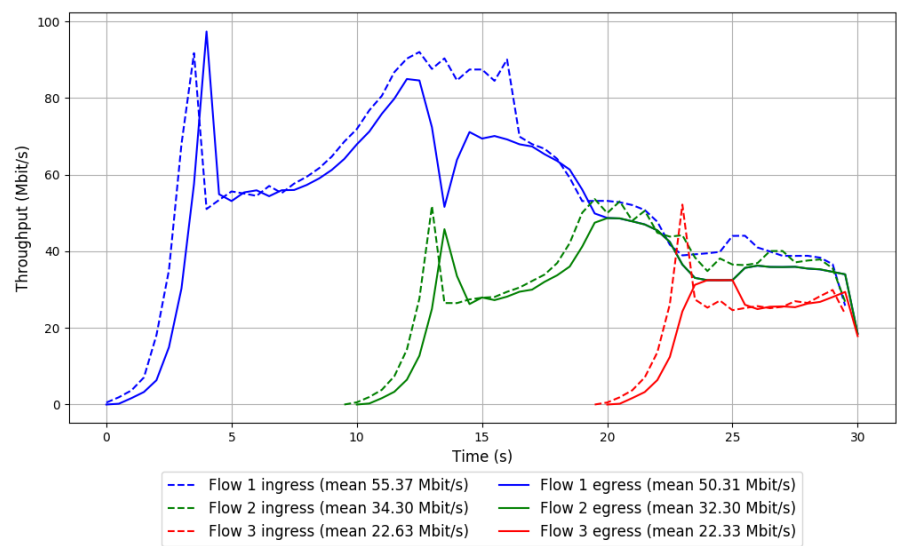
Run 3: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 55.37 Mbit/s)   Flow 1 egress (mean 50.31 Mbit/s)
Flow 2 ingress (mean 34.30 Mbit/s)   Flow 2 egress (mean 32.30 Mbit/s)
Flow 3 ingress (mean 22.63 Mbit/s)   Flow 3 egress (mean 22.33 Mbit/s)

Flow 1 (95th percentile 2069.09 ms)   Flow 2 (95th percentile 598.84 ms)   Flow 3 (95th percentile 345.25 ms)

```
Run 4: Statistics of PCC-Vivace

Start at: 2019-01-22 04:02:13
End at: 2019-01-22 04:02:43
Local clock offset: -7.241 ms
Remote clock offset: 6.75 ms


# Below is generated by plot.py at 2019-01-22 04:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.89 Mbit/s
95th percentile per-packet one-way delay: 1001.926 ms
Loss rate: 3.87%
-- Flow 1:
Average throughput: 51.67 Mbit/s
95th percentile per-packet one-way delay: 679.841 ms
Loss rate: 2.80%
-- Flow 2:
Average throughput: 31.52 Mbit/s
95th percentile per-packet one-way delay: 1156.033 ms
Loss rate: 6.71%
-- Flow 3:
Average throughput: 22.39 Mbit/s
95th percentile per-packet one-way delay: 352.564 ms
Loss rate: 3.00%
```
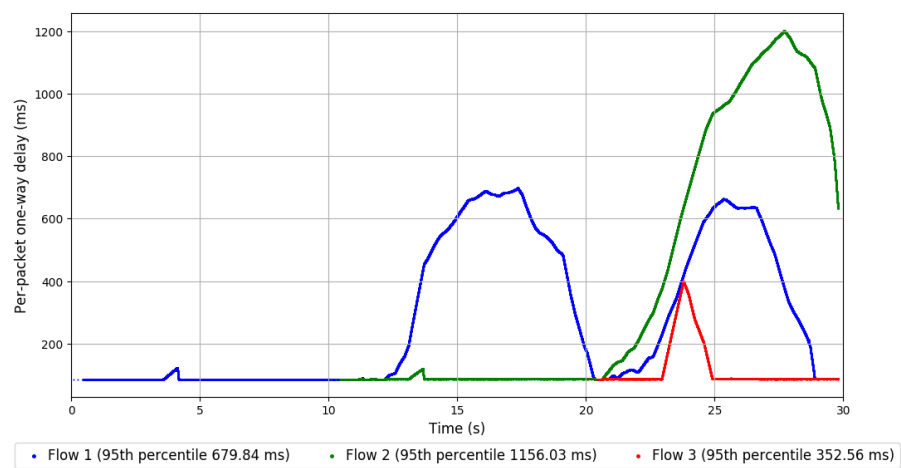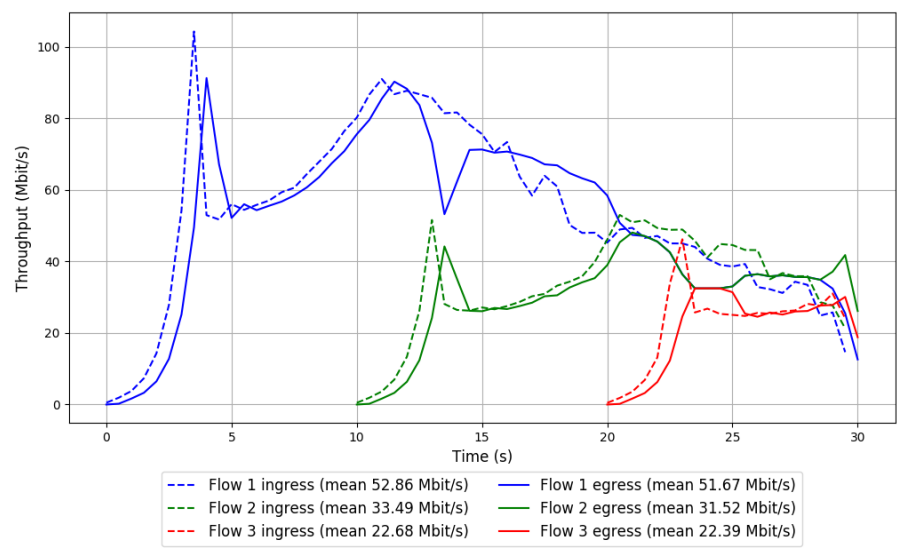
Run 4: Report of PCC-Vivace — Data Link

- Flow 1 ingress (mean 52.86 Mbit/s)
- Flow 1 egress (mean 51.67 Mbit/s)
- Flow 2 ingress (mean 33.49 Mbit/s)
- Flow 2 egress (mean 31.52 Mbit/s)
- Flow 3 ingress (mean 22.68 Mbit/s)
- Flow 3 egress (mean 22.39 Mbit/s)

- Flow 1 (95th percentile 679.84 ms)
- Flow 2 (95th percentile 1156.03 ms)
- Flow 3 (95th percentile 352.56 ms)

```
Run 5: Statistics of PCC-Vivace

Start at: 2019-01-22 04:29:14
End at: 2019-01-22 04:29:44
Local clock offset: -6.299 ms
Remote clock offset: 4.948 ms


# Below is generated by plot.py at 2019-01-22 04:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.76 Mbit/s
95th percentile per-packet one-way delay: 997.297 ms
Loss rate: 4.35%
-- Flow 1:
Average throughput: 48.36 Mbit/s
95th percentile per-packet one-way delay: 568.226 ms
Loss rate: 1.72%
-- Flow 2:
Average throughput: 34.70 Mbit/s
95th percentile per-packet one-way delay: 1247.577 ms
Loss rate: 9.79%
-- Flow 3:
Average throughput: 22.58 Mbit/s
95th percentile per-packet one-way delay: 345.221 ms
Loss rate: 3.12%
```
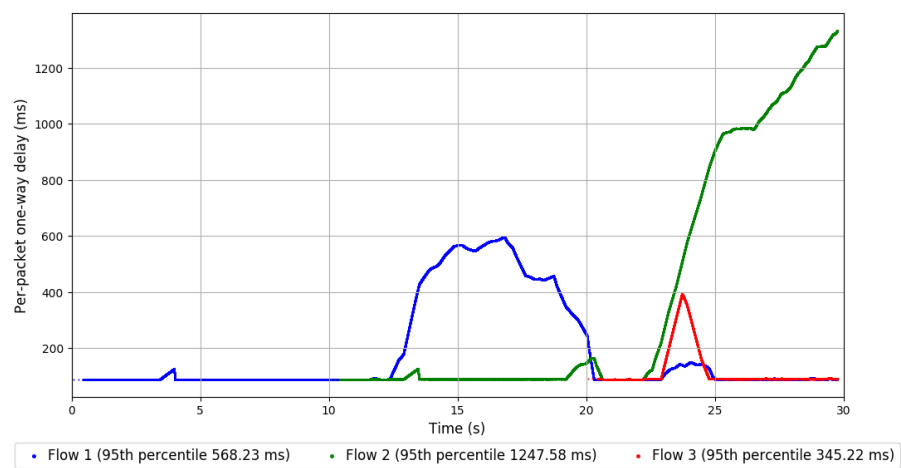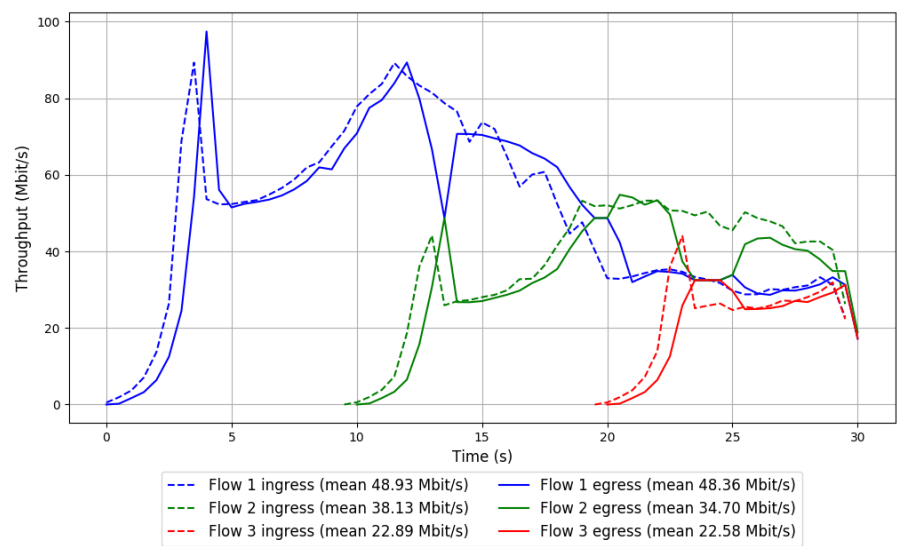
Run 5: Report of PCC-Vivace — Data Link

- - - Flow 1 ingress (mean 48.93 Mbit/s) —— Flow 1 egress (mean 48.36 Mbit/s)
- - - Flow 2 ingress (mean 38.13 Mbit/s) —— Flow 2 egress (mean 34.70 Mbit/s)
- - - Flow 3 ingress (mean 22.89 Mbit/s) —— Flow 3 egress (mean 22.58 Mbit/s)

• Flow 1 (95th percentile 568.23 ms)   • Flow 2 (95th percentile 1247.58 ms)   • Flow 3 (95th percentile 345.22 ms)

```
Run 1: Statistics of WebRTC media

Start at: 2019-01-22 02:48:59
End at: 2019-01-22 02:49:29
Local clock offset: -1.679 ms
Remote clock offset: 2.893 ms


# Below is generated by plot.py at 2019-01-22 04:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.97 Mbit/s
95th percentile per-packet one-way delay: 99.334 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 1.69 Mbit/s
95th percentile per-packet one-way delay: 99.281 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 0.93 Mbit/s
95th percentile per-packet one-way delay: 99.379 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 99.394 ms
Loss rate: 1.89%
```
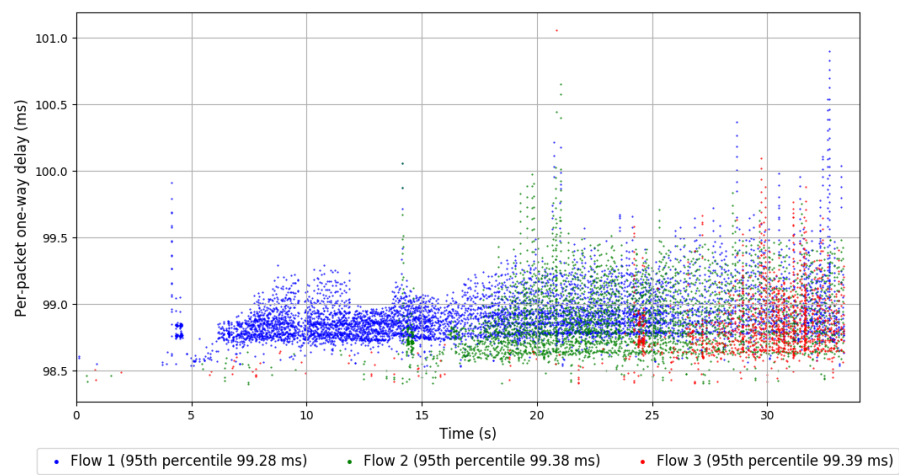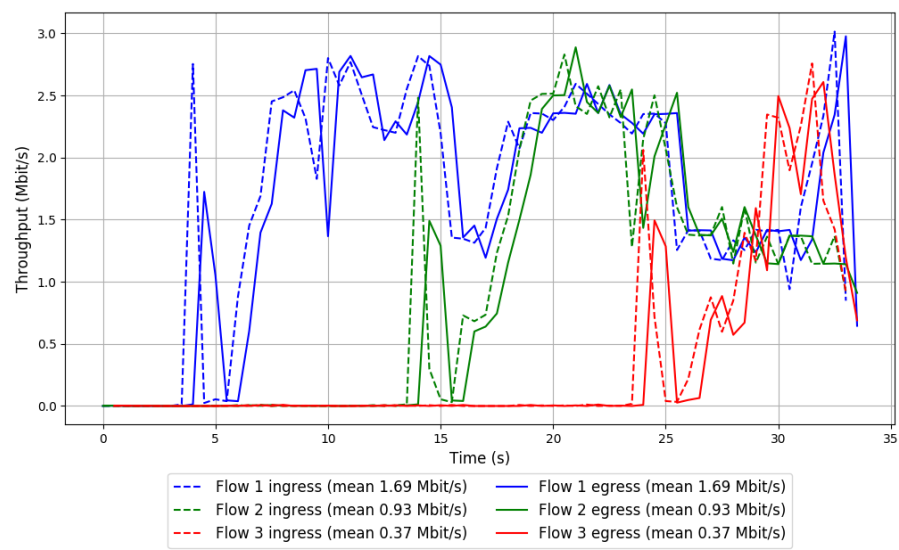
Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2019-01-22 03:15:59
End at: 2019-01-22 03:16:29
Local clock offset: -2.461 ms
Remote clock offset: 2.35 ms


# Below is generated by plot.py at 2019-01-22 04:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.94 Mbit/s
95th percentile per-packet one-way delay: 98.725 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 1.67 Mbit/s
95th percentile per-packet one-way delay: 92.889 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.92 Mbit/s
95th percentile per-packet one-way delay: 98.793 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 99.207 ms
Loss rate: 0.94%
```
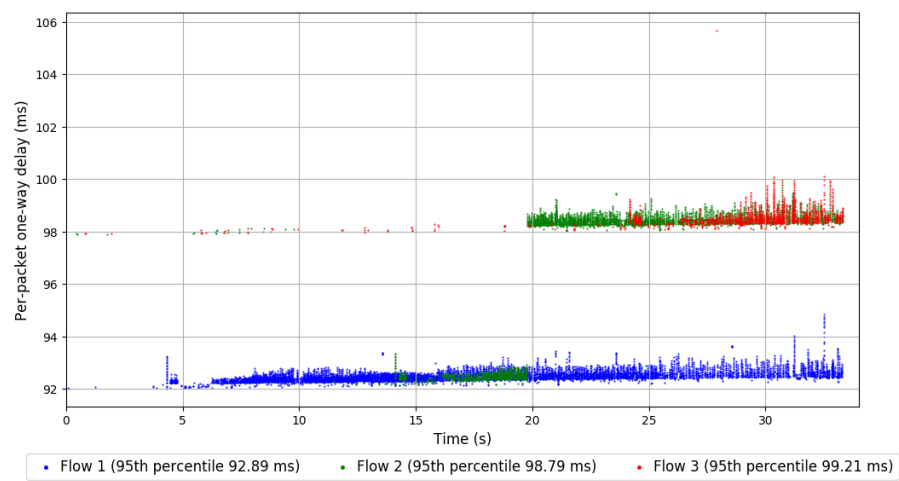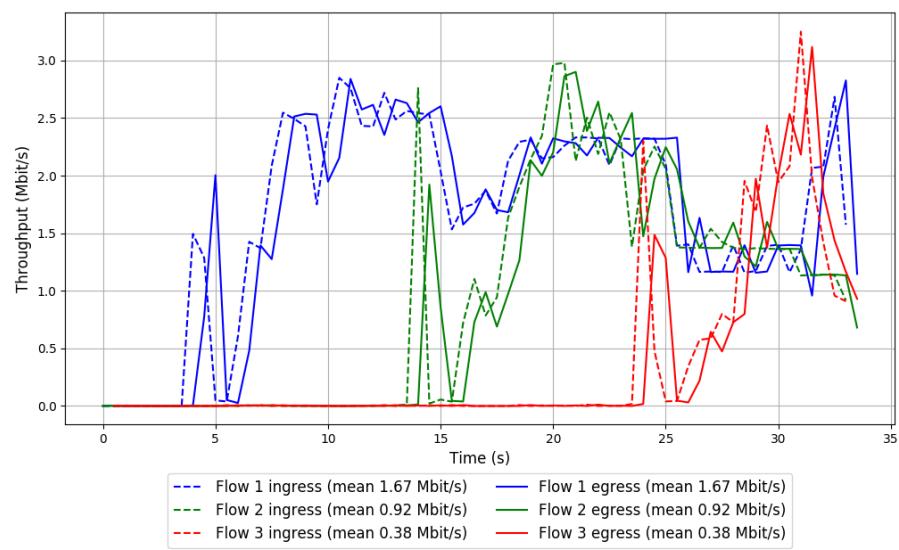
Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2019-01-22 03:42:59
End at: 2019-01-22 03:43:29
Local clock offset: -8.799 ms
Remote clock offset: 1.073 ms


# Below is generated by plot.py at 2019-01-22 04:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.98 Mbit/s
95th percentile per-packet one-way delay: 98.396 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 1.70 Mbit/s
95th percentile per-packet one-way delay: 92.630 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.92 Mbit/s
95th percentile per-packet one-way delay: 98.577 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 98.421 ms
Loss rate: 1.92%
```
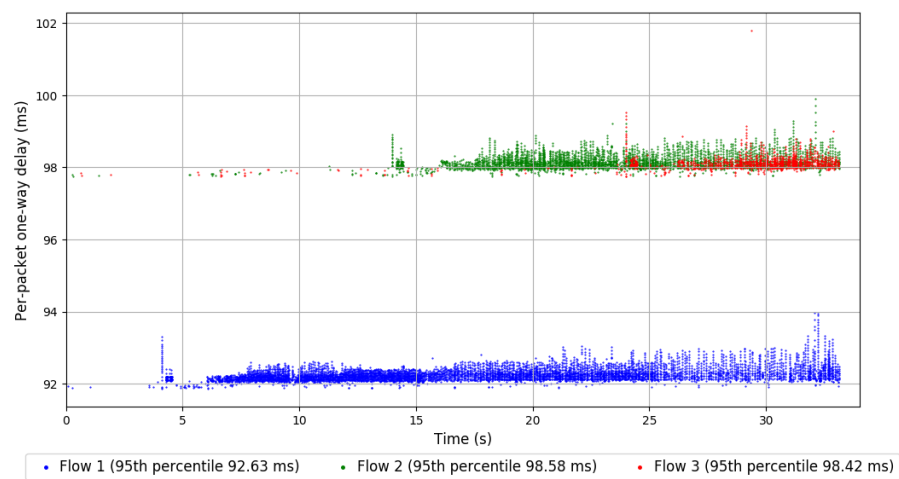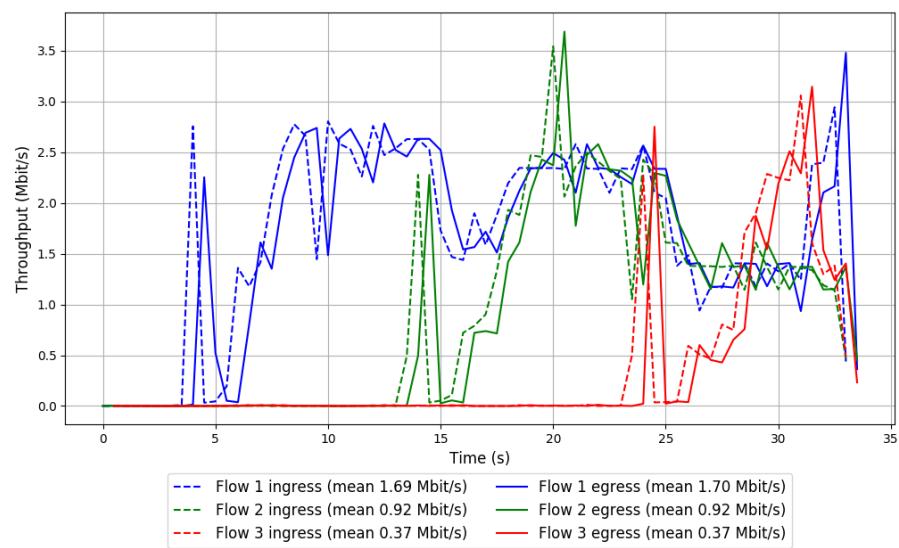
Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2019-01-22 04:09:58
End at: 2019-01-22 04:10:28
Local clock offset: -6.417 ms
Remote clock offset: 0.892 ms


# Below is generated by plot.py at 2019-01-22 04:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.97 Mbit/s
95th percentile per-packet one-way delay: 99.105 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 1.69 Mbit/s
95th percentile per-packet one-way delay: 99.199 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 0.91 Mbit/s
95th percentile per-packet one-way delay: 93.386 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 93.582 ms
Loss rate: 0.91%
```
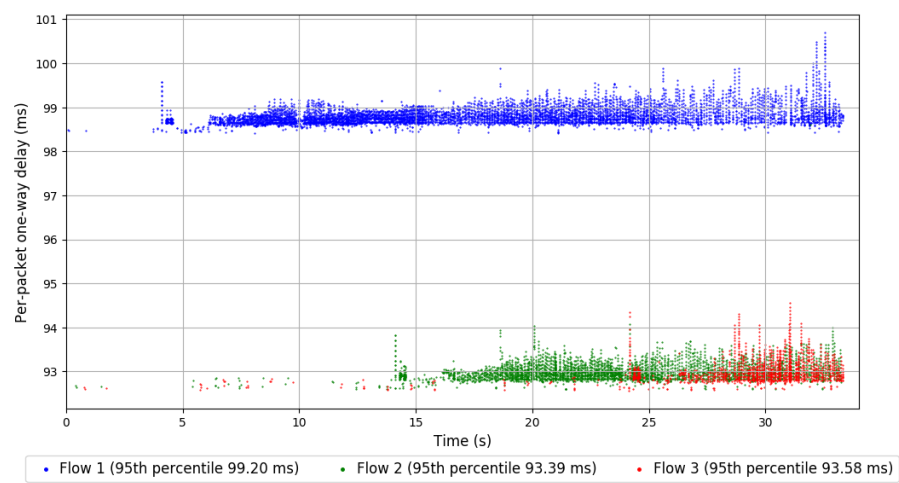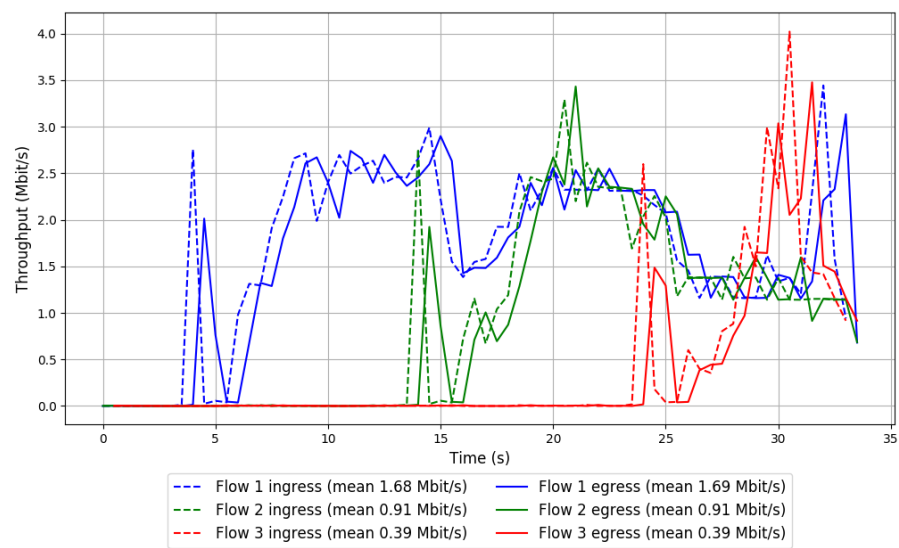
Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2019-01-22 04:36:59
End at: 2019-01-22 04:37:29
Local clock offset: -6.367 ms
Remote clock offset: 2.449 ms


# Below is generated by plot.py at 2019-01-22 04:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.91 Mbit/s
95th percentile per-packet one-way delay: 92.307 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 1.69 Mbit/s
95th percentile per-packet one-way delay: 91.646 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 0.93 Mbit/s
95th percentile per-packet one-way delay: 92.503 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 91.501 ms
Loss rate: 1.92%
```

Run 5: Report of WebRTC media — Data Link