Pantheon Report

Generated at 2019-02-05 11:30:02 (UTC).

Data path: GCE Tokyo on `ens4` (*local*) →GCE London on `ens4` (*remote*).

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 `time.google.com` and have been applied to correct the timestamps in logs.
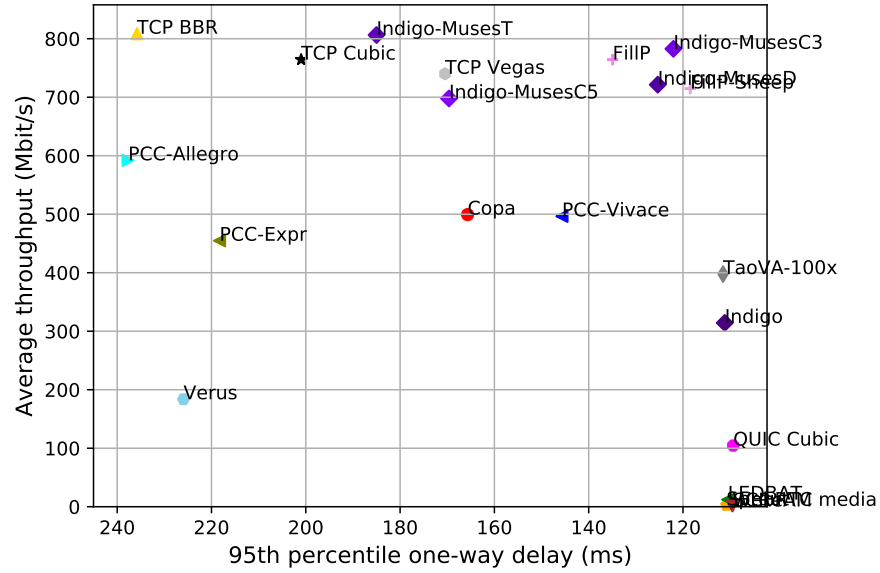
```
System info:
Linux 4.15.0-1026-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
 M receiver/src/buffer.h
 M receiver/src/core.cpp
 M sender/src/buffer.h
 M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
 M src/ScreamClient
 M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
 M src/examples/cellsim.cc
 M src/examples/sproutbt2.cc
 M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
```
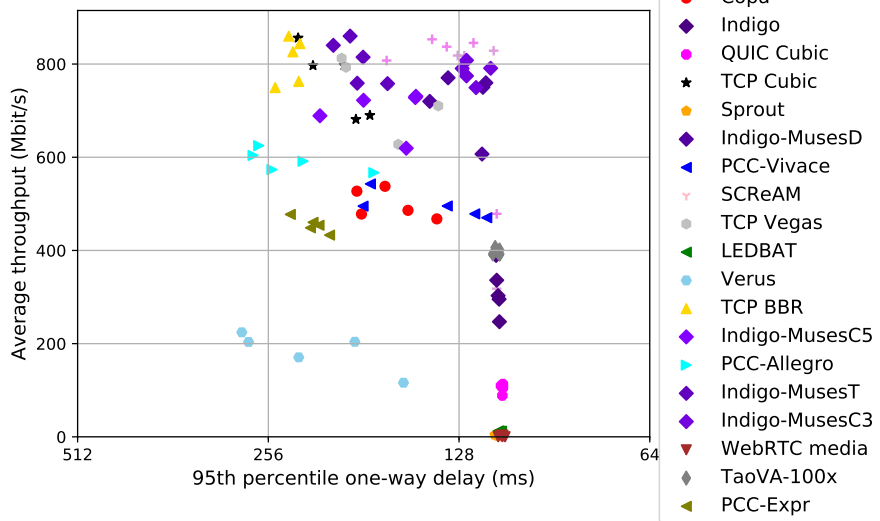
```
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

test from GCE Tokyo to GCE London, 5 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)

test from GCE Tokyo to GCE London, 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	455.47	379.16	302.22	230.03	232.61	227.18	2.16	2.32	1.78
Copa	5	267.26	252.99	191.36	150.80	165.24	175.62	0.06	0.02	0.00
TCP Cubic	5	403.82	395.20	292.43	176.28	179.18	226.21	0.16	0.14	0.92
FillP	5	451.09	346.58	249.91	140.83	116.73	118.43	0.77	0.00	0.03
FillP-Sheep	5	428.71	313.40	235.02	121.05	112.76	111.87	0.05	0.00	0.01
Indigo	5	164.37	165.25	126.47	110.95	111.46	111.81	0.00	0.01	0.01
Indigo-MusesC3	5	460.60	377.50	289.31	125.17	119.13	116.10	0.00	0.00	0.01
Indigo-MusesC5	5	442.94	340.67	135.69	163.91	158.56	110.57	0.08	0.34	0.05
Indigo-MusesD	5	438.02	367.42	169.79	127.86	120.73	115.09	0.02	0.03	0.00
Indigo-MusesT	5	492.81	424.33	152.76	192.17	152.59	112.90	0.35	0.01	0.01
LEDBAT	5	7.85	5.21	2.55	110.42	110.49	110.04	0.00	0.00	0.00
PCC-Allegro	5	325.78	287.12	228.94	233.18	193.32	253.50	6.58	5.08	4.47
PCC-Expr	5	268.90	199.21	161.20	224.33	175.46	177.12	3.67	0.57	0.19
QUIC Cubic	5	56.53	49.72	46.16	109.14	109.18	109.16	0.00	0.00	0.00
SCReAM	5	0.22	0.22	0.22	109.15	108.97	109.30	0.00	0.00	0.00
Sprout	5	1.60	1.01	0.56	110.27	110.25	109.75	0.00	0.00	0.00
TaoVA-100x	5	203.95	196.17	189.47	111.26	110.93	112.53	0.01	0.00	0.00
TCP Vegas	5	377.76	382.90	322.37	155.74	168.56	184.03	0.01	0.12	0.94
Verus	5	107.58	92.52	46.28	223.11	186.73	171.17	2.07	3.33	0.49
PCC-Vivace	5	317.09	206.24	127.67	145.93	131.50	152.33	0.36	0.05	1.54
WebRTC media	5	0.81	0.51	0.19	109.05	109.41	109.42	0.00	0.00	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2019-02-05 06:16:39
End at: 2019-02-05 06:17:09
Local clock offset: 0.132 ms
Remote clock offset: 0.092 ms


# Below is generated by plot.py at 2019-02-05 09:24:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 843.98 Mbit/s
95th percentile per-packet one-way delay: 228.260 ms
Loss rate: 1.84%
-- Flow 1:
Average throughput: 467.40 Mbit/s
95th percentile per-packet one-way delay: 225.283 ms
Loss rate: 1.75%
-- Flow 2:
Average throughput: 392.29 Mbit/s
95th percentile per-packet one-way delay: 244.530 ms
Loss rate: 2.56%
-- Flow 3:
Average throughput: 346.82 Mbit/s
95th percentile per-packet one-way delay: 225.102 ms
Loss rate: 0.58%
```
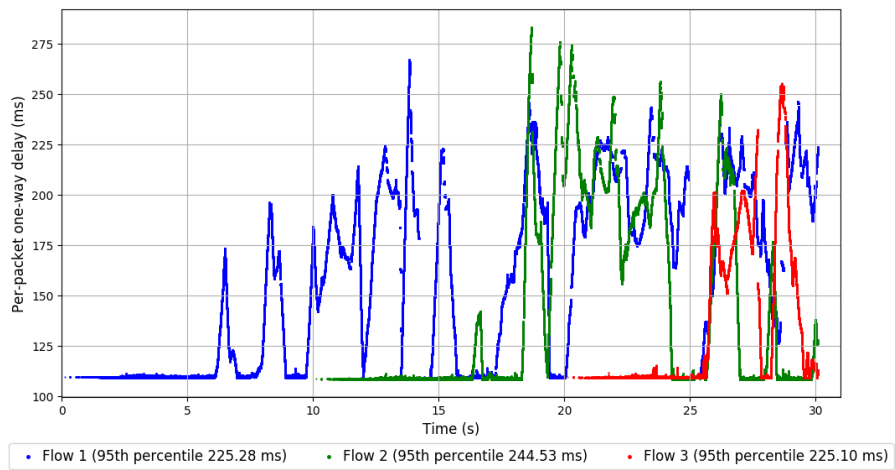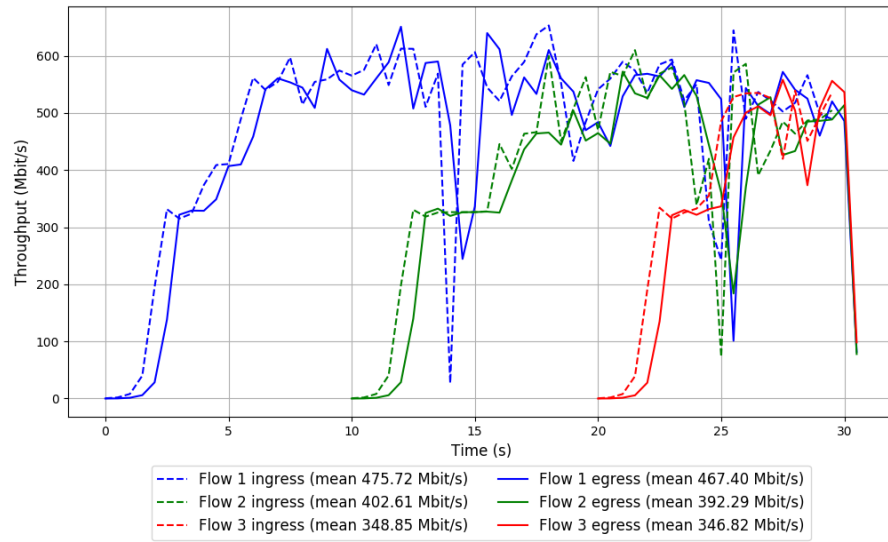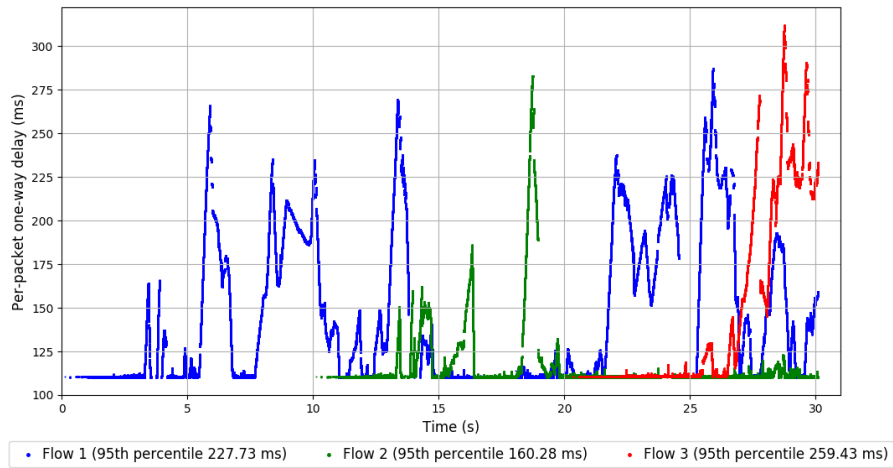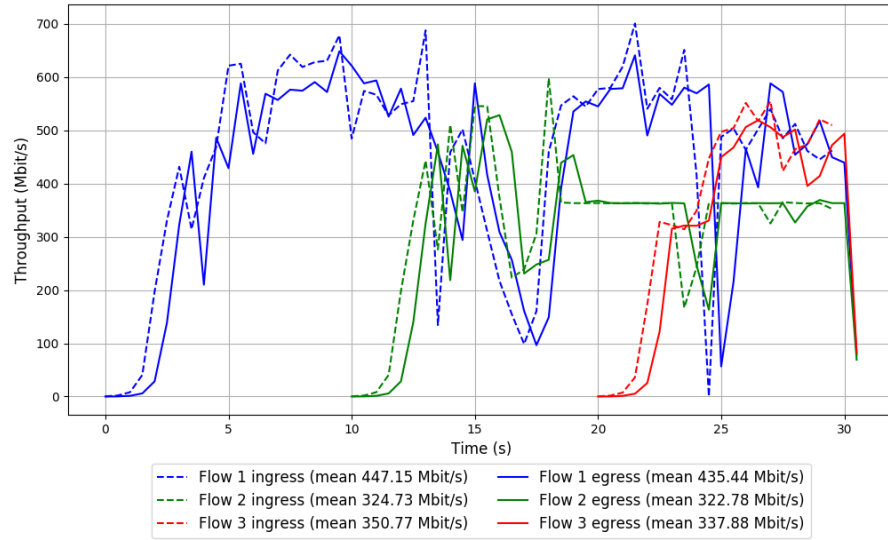
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2019-02-05 06:54:36
End at: 2019-02-05 06:55:06
Local clock offset: -0.879 ms
Remote clock offset: 0.037 ms


# Below is generated by plot.py at 2019-02-05 09:24:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 762.79 Mbit/s
95th percentile per-packet one-way delay: 229.224 ms
Loss rate: 2.22%
-- Flow 1:
Average throughput: 435.44 Mbit/s
95th percentile per-packet one-way delay: 227.726 ms
Loss rate: 2.62%
-- Flow 2:
Average throughput: 322.78 Mbit/s
95th percentile per-packet one-way delay: 160.284 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 337.88 Mbit/s
95th percentile per-packet one-way delay: 259.428 ms
Loss rate: 3.67%
```

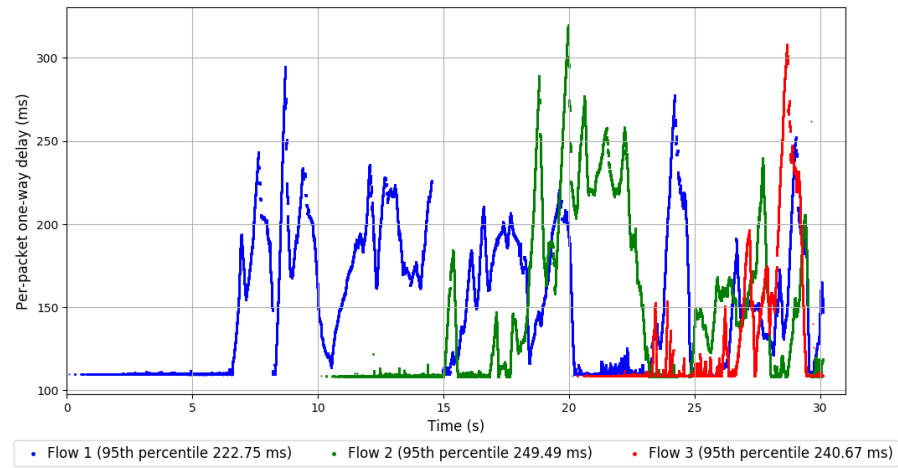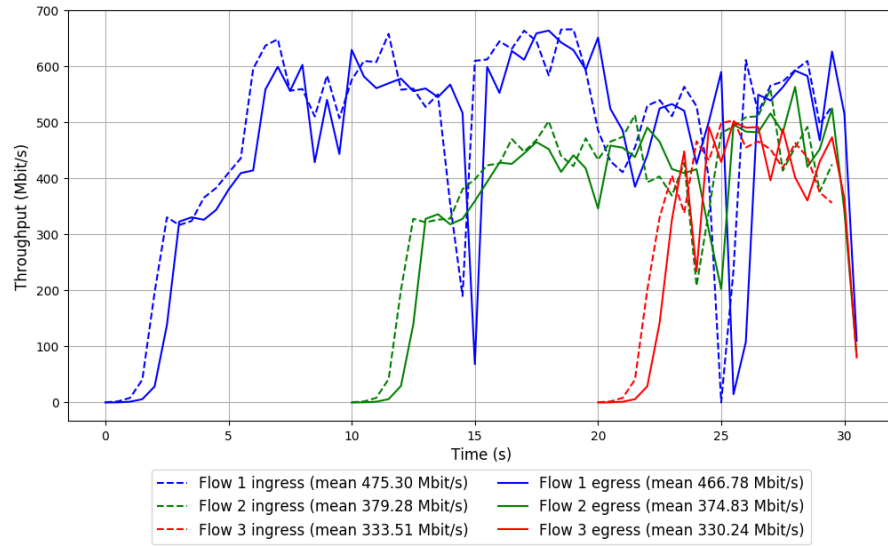Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2019-02-05 07:32:42
End at: 2019-02-05 07:33:12
Local clock offset: 0.084 ms
Remote clock offset: -0.033 ms


# Below is generated by plot.py at 2019-02-05 09:24:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 826.28 Mbit/s
95th percentile per-packet one-way delay: 234.140 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 466.78 Mbit/s
95th percentile per-packet one-way delay: 222.747 ms
Loss rate: 1.79%
-- Flow 2:
Average throughput: 374.83 Mbit/s
95th percentile per-packet one-way delay: 249.494 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 330.24 Mbit/s
95th percentile per-packet one-way delay: 240.673 ms
Loss rate: 0.98%
```

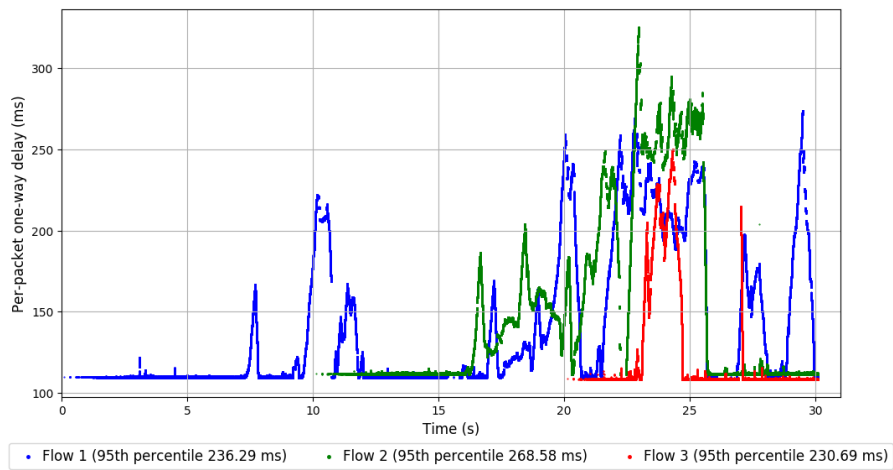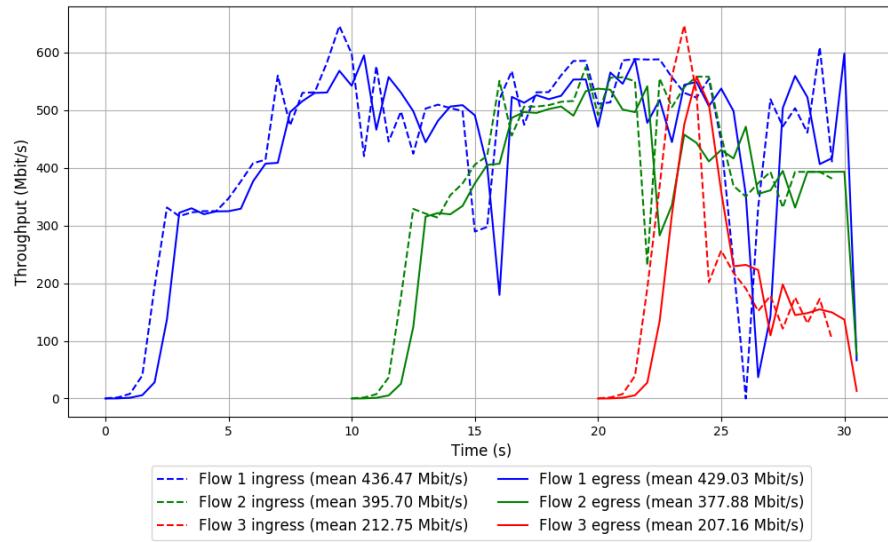Run 3: Report of TCP BBR — Data Link

Flow 1 ingress (mean 475.30 Mbit/s) --- Flow 1 egress (mean 466.78 Mbit/s)
Flow 2 ingress (mean 379.28 Mbit/s) --- Flow 2 egress (mean 374.83 Mbit/s)
Flow 3 ingress (mean 333.51 Mbit/s) --- Flow 3 egress (mean 330.24 Mbit/s)

Flow 1 (95th percentile 222.75 ms)   Flow 2 (95th percentile 249.49 ms)   Flow 3 (95th percentile 240.67 ms)

```
Run 4: Statistics of TCP BBR

Start at: 2019-02-05 08:11:00
End at: 2019-02-05 08:11:30
Local clock offset: -0.202 ms
Remote clock offset: -0.035 ms

# Below is generated by plot.py at 2019-02-05 09:24:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 749.53 Mbit/s
95th percentile per-packet one-way delay: 249.696 ms
Loss rate: 2.75%
-- Flow 1:
Average throughput: 429.03 Mbit/s
95th percentile per-packet one-way delay: 236.293 ms
Loss rate: 1.71%
-- Flow 2:
Average throughput: 377.88 Mbit/s
95th percentile per-packet one-way delay: 268.581 ms
Loss rate: 4.51%
-- Flow 3:
Average throughput: 207.16 Mbit/s
95th percentile per-packet one-way delay: 230.688 ms
Loss rate: 2.63%
```
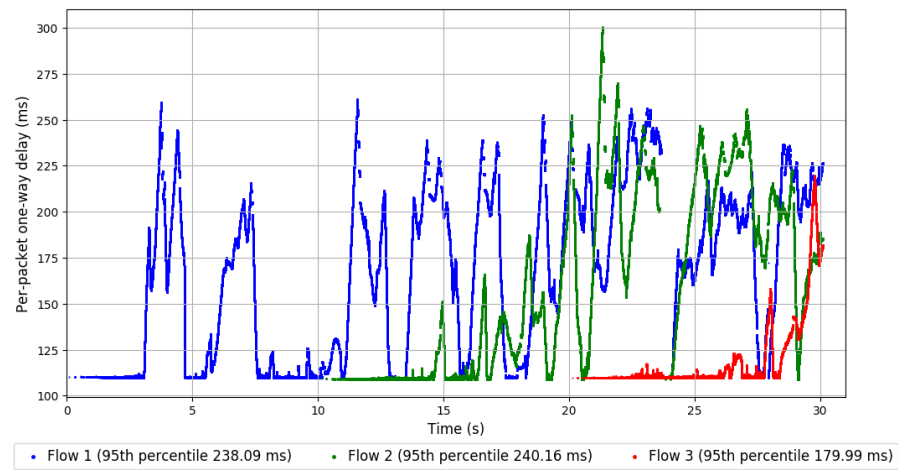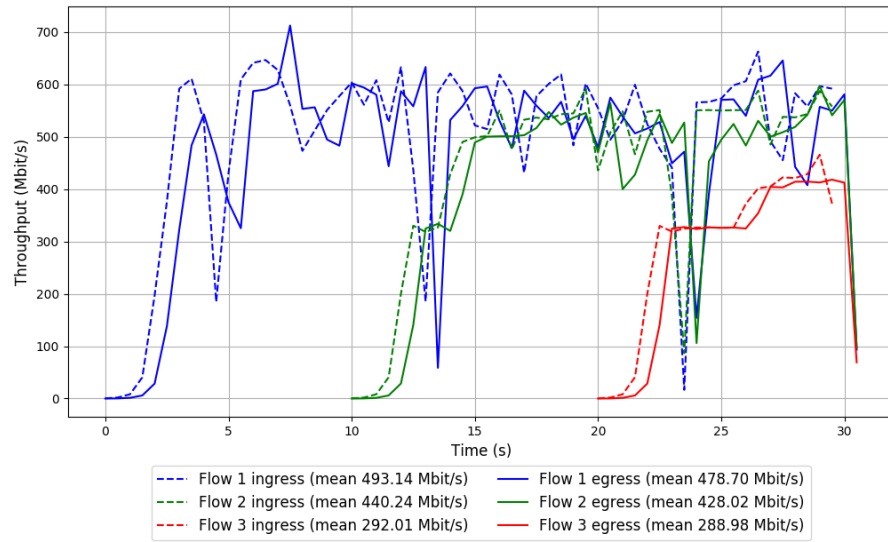
Run 4: Report of TCP BBR — Data Link

```
Run 5: Statistics of TCP BBR

Start at: 2019-02-05 08:48:53
End at: 2019-02-05 08:49:23
Local clock offset: -0.721 ms
Remote clock offset: 0.042 ms


# Below is generated by plot.py at 2019-02-05 09:24:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 859.90 Mbit/s
95th percentile per-packet one-way delay: 237.696 ms
Loss rate: 2.66%
-- Flow 1:
Average throughput: 478.70 Mbit/s
95th percentile per-packet one-way delay: 238.085 ms
Loss rate: 2.93%
-- Flow 2:
Average throughput: 428.02 Mbit/s
95th percentile per-packet one-way delay: 240.164 ms
Loss rate: 2.77%
-- Flow 3:
Average throughput: 288.98 Mbit/s
95th percentile per-packet one-way delay: 179.988 ms
Loss rate: 1.03%
```
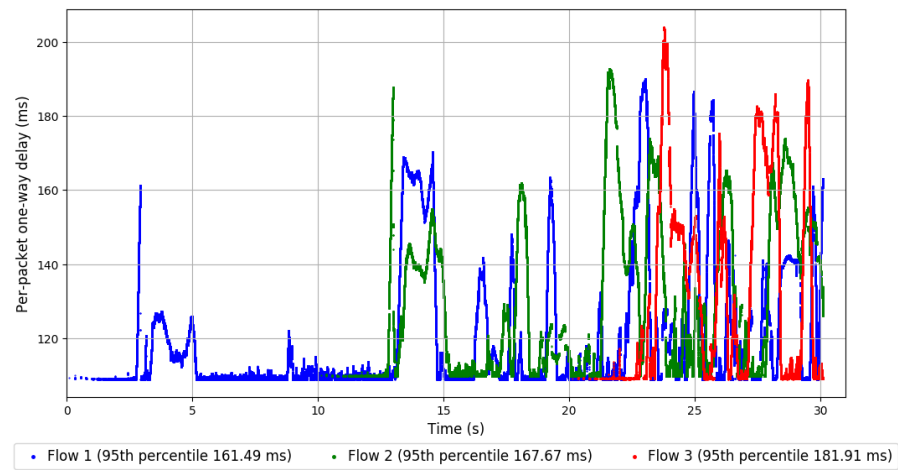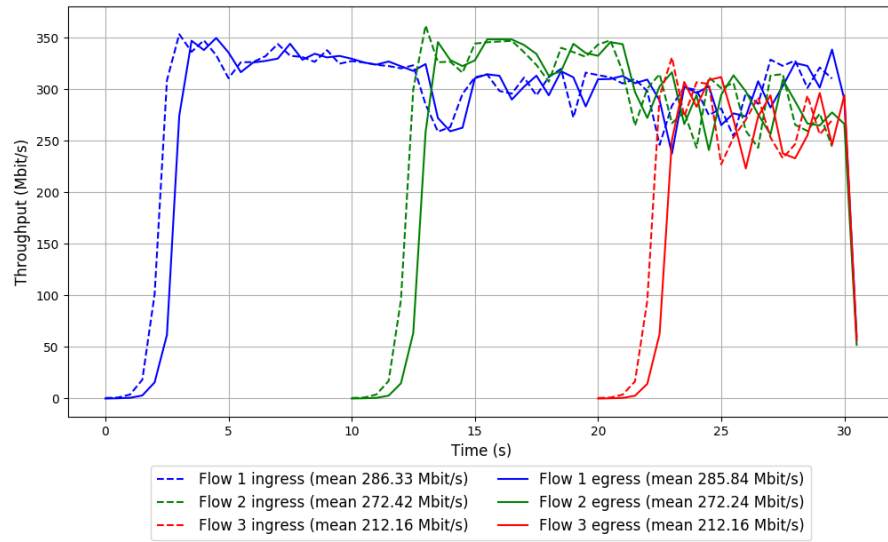
Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 493.14 Mbit/s) --- Flow 1 egress (mean 478.70 Mbit/s)
Flow 2 ingress (mean 440.24 Mbit/s) --- Flow 2 egress (mean 428.02 Mbit/s)
Flow 3 ingress (mean 292.01 Mbit/s) --- Flow 3 egress (mean 288.98 Mbit/s)

Flow 1 (95th percentile 238.09 ms) Flow 2 (95th percentile 240.16 ms) Flow 3 (95th percentile 179.99 ms)

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```
Run 1: Statistics of Copa

Start at: 2019-02-05 06:12:29
End at: 2019-02-05 06:12:59
Local clock offset: -0.649 ms
Remote clock offset: 0.101 ms


# Below is generated by plot.py at 2019-02-05 09:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 537.67 Mbit/s
95th percentile per-packet one-way delay: 167.514 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 285.84 Mbit/s
95th percentile per-packet one-way delay: 161.485 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 272.24 Mbit/s
95th percentile per-packet one-way delay: 167.666 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 212.16 Mbit/s
95th percentile per-packet one-way delay: 181.909 ms
Loss rate: 0.00%
```
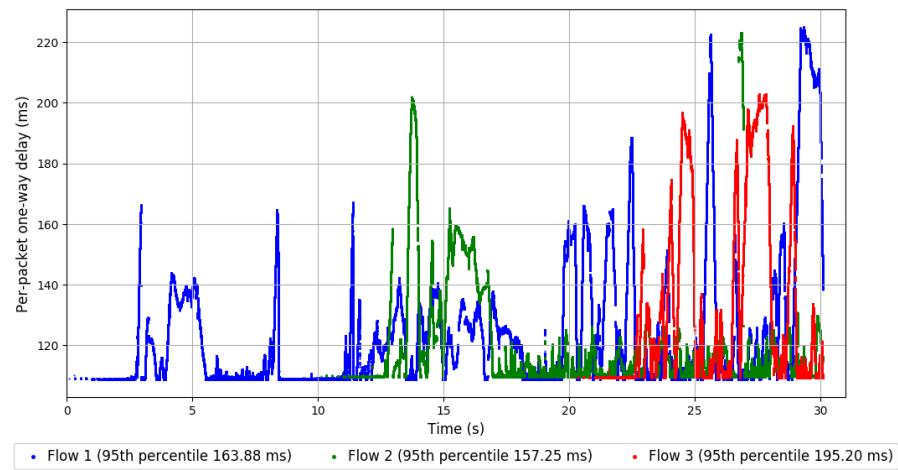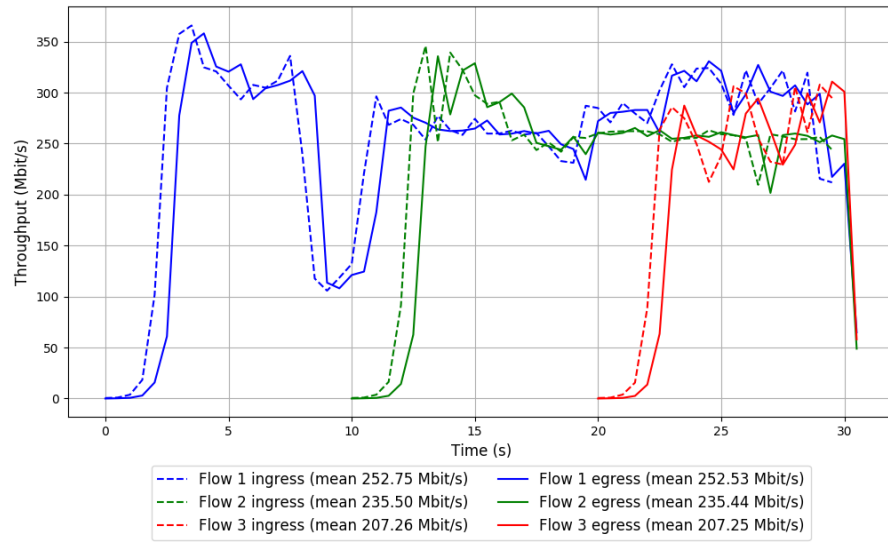
Run 1: Report of Copa — Data Link

Flow 1 ingress (mean 286.33 Mbit/s) --- Flow 1 egress (mean 285.84 Mbit/s)
Flow 2 ingress (mean 272.42 Mbit/s) --- Flow 2 egress (mean 272.24 Mbit/s)
Flow 3 ingress (mean 212.16 Mbit/s) --- Flow 3 egress (mean 212.16 Mbit/s)

Flow 1 (95th percentile 161.49 ms)   Flow 2 (95th percentile 167.67 ms)   Flow 3 (95th percentile 181.91 ms)

```
Run 2: Statistics of Copa

Start at: 2019-02-05 06:50:33
End at: 2019-02-05 06:51:03
Local clock offset: 0.0 ms
Remote clock offset: 0.346 ms


# Below is generated by plot.py at 2019-02-05 09:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 478.16 Mbit/s
95th percentile per-packet one-way delay: 182.484 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 252.53 Mbit/s
95th percentile per-packet one-way delay: 163.875 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 235.44 Mbit/s
95th percentile per-packet one-way delay: 157.248 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 207.25 Mbit/s
95th percentile per-packet one-way delay: 195.204 ms
Loss rate: 0.00%
```
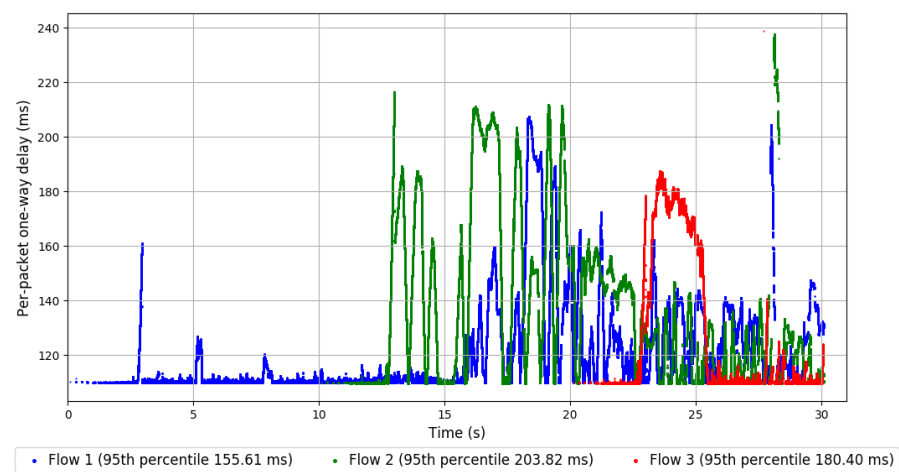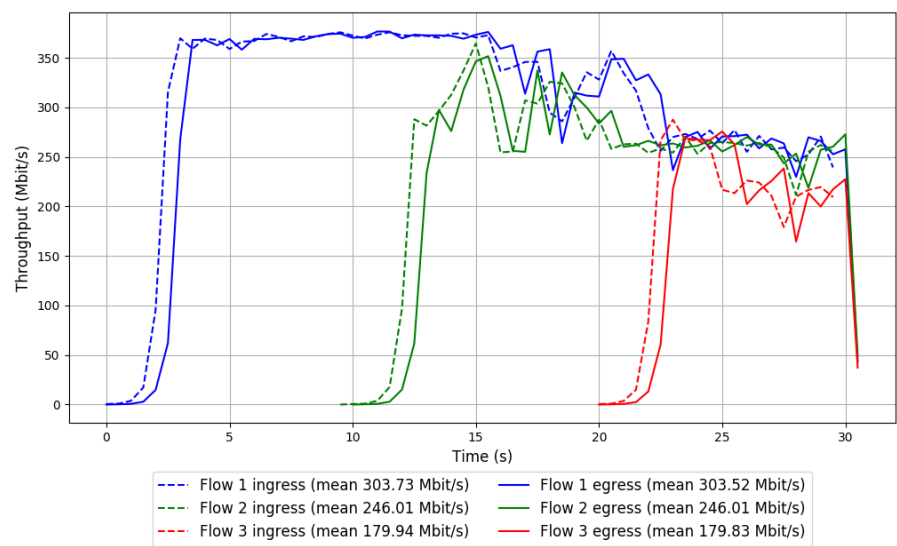
Run 2: Report of Copa — Data Link

Flow 1 ingress (mean 252.75 Mbit/s) ---- Flow 1 egress (mean 252.53 Mbit/s)
Flow 2 ingress (mean 235.50 Mbit/s) ---- Flow 2 egress (mean 235.44 Mbit/s)
Flow 3 ingress (mean 207.26 Mbit/s) ---- Flow 3 egress (mean 207.25 Mbit/s)

Flow 1 (95th percentile 163.88 ms)   Flow 2 (95th percentile 157.25 ms)   Flow 3 (95th percentile 195.20 ms)

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```
Run 3: Statistics of Copa

Start at: 2019-02-05 07:28:39
End at: 2019-02-05 07:29:09
Local clock offset: -0.776 ms
Remote clock offset: -0.04 ms


# Below is generated by plot.py at 2019-02-05 09:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 527.16 Mbit/s
95th percentile per-packet one-way delay: 185.558 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 303.52 Mbit/s
95th percentile per-packet one-way delay: 155.612 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 246.01 Mbit/s
95th percentile per-packet one-way delay: 203.817 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 179.83 Mbit/s
95th percentile per-packet one-way delay: 180.397 ms
Loss rate: 0.00%
```
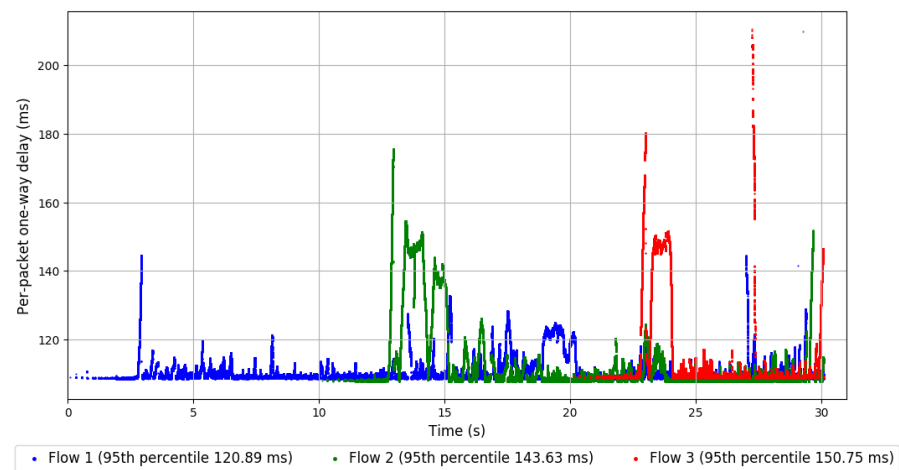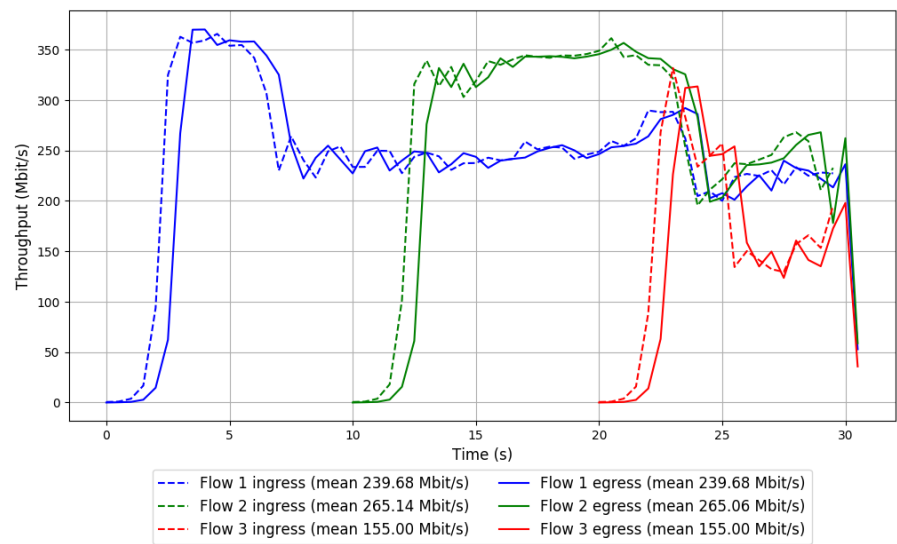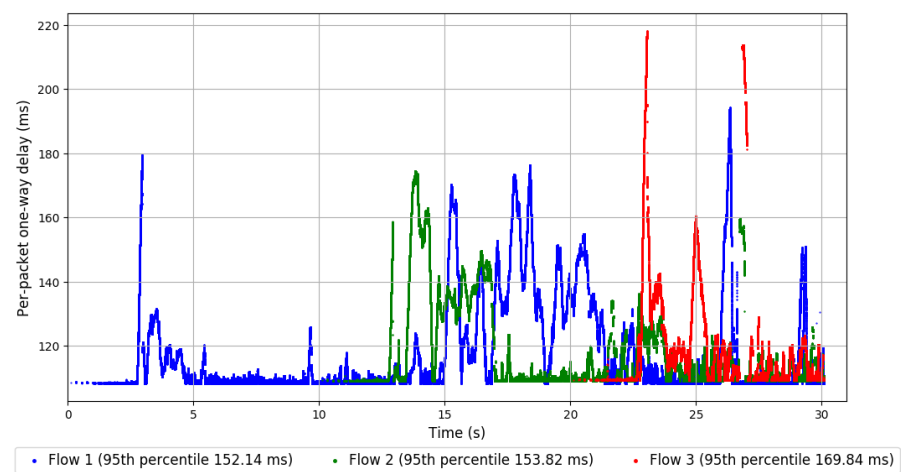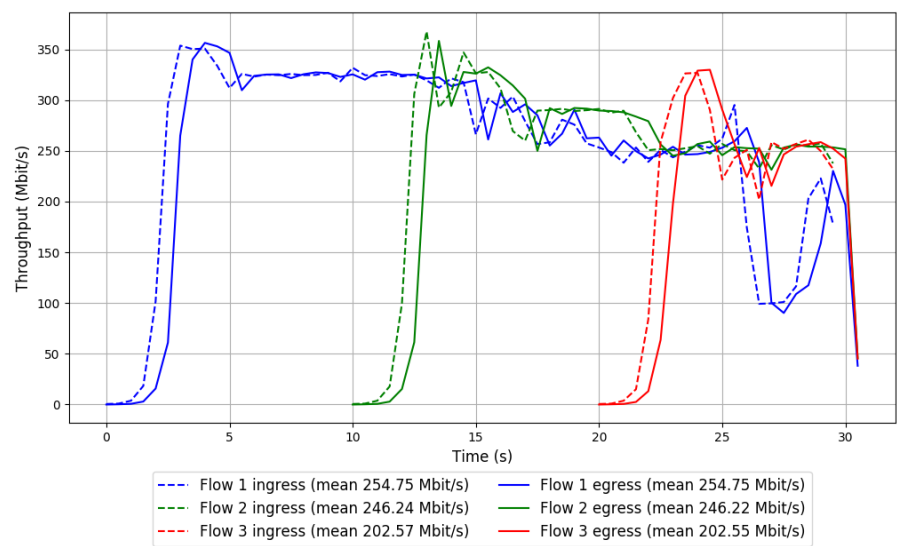
Run 3: Report of Copa — Data Link

Flow 1 ingress (mean 303.73 Mbit/s)   Flow 1 egress (mean 303.52 Mbit/s)
Flow 2 ingress (mean 246.01 Mbit/s)   Flow 2 egress (mean 246.01 Mbit/s)
Flow 3 ingress (mean 179.94 Mbit/s)   Flow 3 egress (mean 179.83 Mbit/s)

Flow 1 (95th percentile 155.61 ms)   Flow 2 (95th percentile 203.82 ms)   Flow 3 (95th percentile 180.40 ms)

```
Run 4: Statistics of Copa

Start at: 2019-02-05 08:06:59
End at: 2019-02-05 08:07:29
Local clock offset: 0.684 ms
Remote clock offset: 0.37 ms


# Below is generated by plot.py at 2019-02-05 09:38:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 467.75 Mbit/s
95th percentile per-packet one-way delay: 138.755 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 239.68 Mbit/s
95th percentile per-packet one-way delay: 120.889 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 265.06 Mbit/s
95th percentile per-packet one-way delay: 143.629 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 155.00 Mbit/s
95th percentile per-packet one-way delay: 150.753 ms
Loss rate: 0.00%
```

Run 4: Report of Copa — Data Link

```
Run 5: Statistics of Copa

Start at: 2019-02-05 08:44:47
End at: 2019-02-05 08:45:17
Local clock offset: -0.112 ms
Remote clock offset: -0.128 ms


# Below is generated by plot.py at 2019-02-05 09:39:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 486.07 Mbit/s
95th percentile per-packet one-way delay: 154.096 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 254.75 Mbit/s
95th percentile per-packet one-way delay: 152.144 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 246.22 Mbit/s
95th percentile per-packet one-way delay: 153.824 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 202.55 Mbit/s
95th percentile per-packet one-way delay: 169.843 ms
Loss rate: 0.00%
```
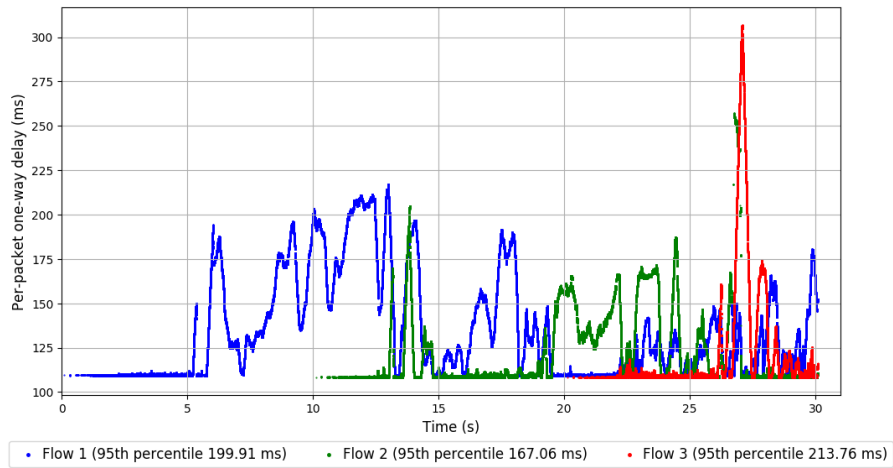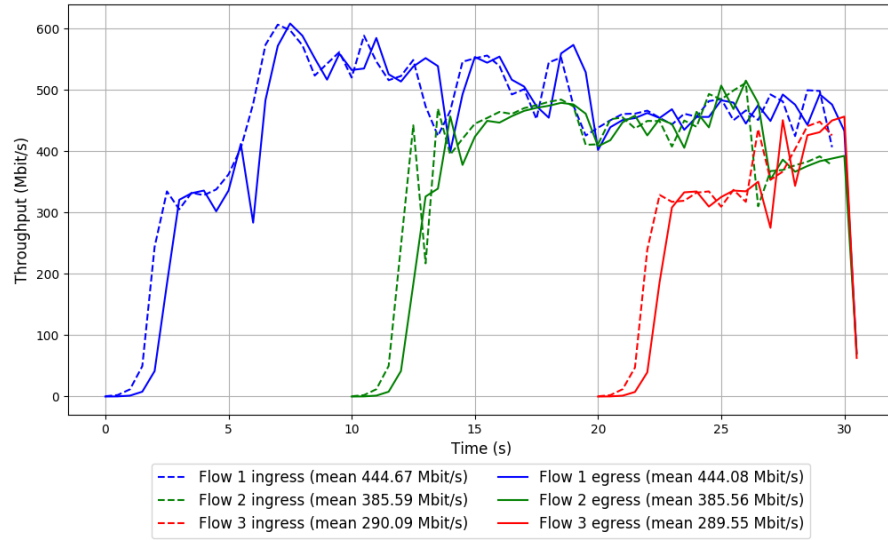
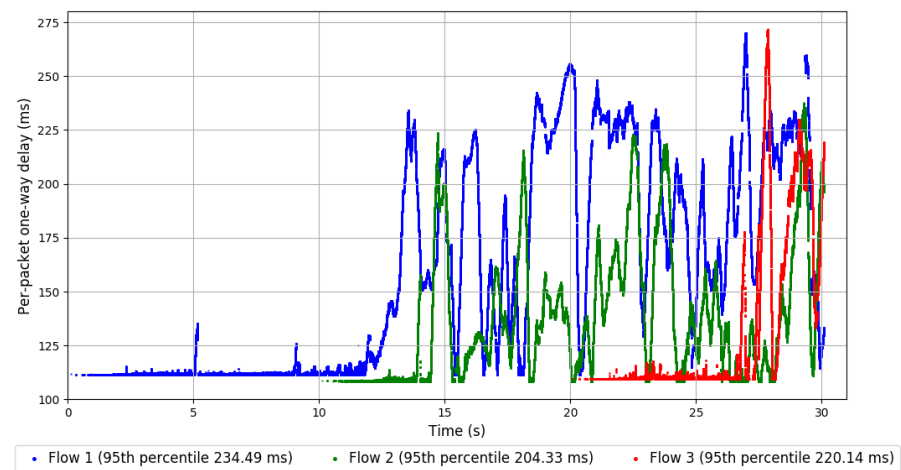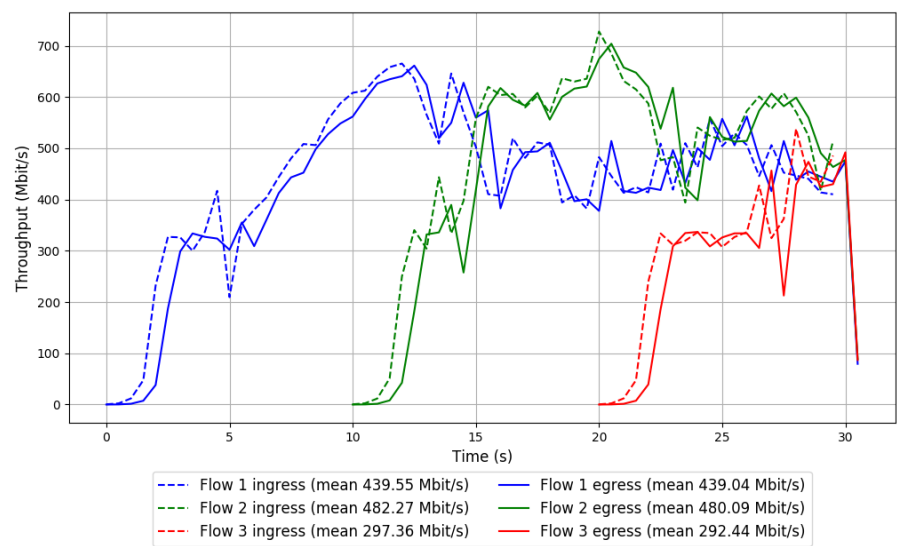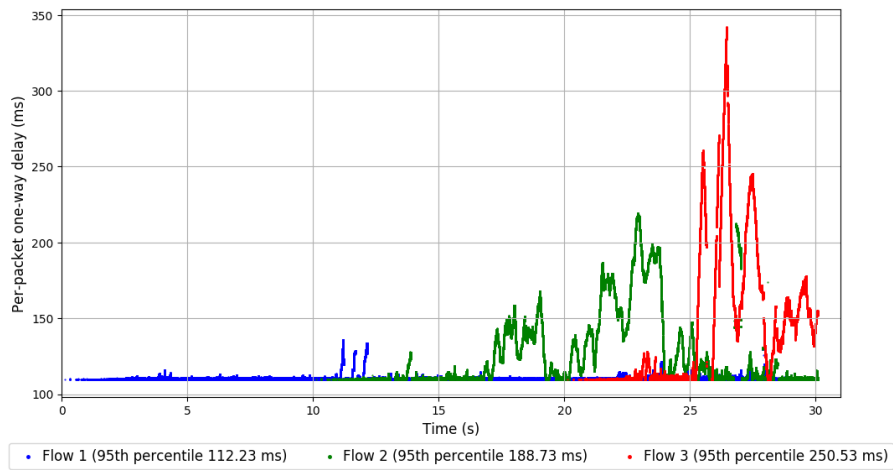Run 5: Report of Copa — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2019-02-05 05:59:03
End at: 2019-02-05 05:59:33
Local clock offset: -0.065 ms
Remote clock offset: 0.099 ms


# Below is generated by plot.py at 2019-02-05 09:39:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 797.08 Mbit/s
95th percentile per-packet one-way delay: 194.396 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 444.08 Mbit/s
95th percentile per-packet one-way delay: 199.907 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 385.56 Mbit/s
95th percentile per-packet one-way delay: 167.065 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 289.55 Mbit/s
95th percentile per-packet one-way delay: 213.757 ms
Loss rate: 0.17%
```
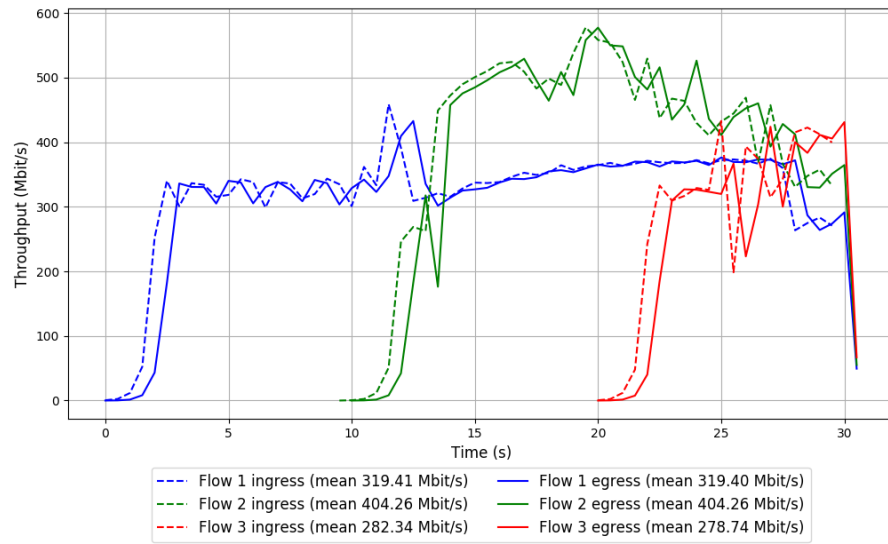
Run 1: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 444.67 Mbit/s) — Flow 1 egress (mean 444.08 Mbit/s)
Flow 2 ingress (mean 385.59 Mbit/s) — Flow 2 egress (mean 385.56 Mbit/s)
Flow 3 ingress (mean 290.09 Mbit/s) — Flow 3 egress (mean 289.55 Mbit/s)

Flow 1 (95th percentile 199.91 ms)   Flow 2 (95th percentile 167.06 ms)   Flow 3 (95th percentile 213.76 ms)

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```
Run 2: Statistics of TCP Cubic

Start at: 2019-02-05 06:37:04
End at: 2019-02-05 06:37:34
Local clock offset: 0.181 ms
Remote clock offset: 0.046 ms


# Below is generated by plot.py at 2019-02-05 09:39:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 856.07 Mbit/s
95th percentile per-packet one-way delay: 229.717 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 439.04 Mbit/s
95th percentile per-packet one-way delay: 234.488 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 480.09 Mbit/s
95th percentile per-packet one-way delay: 204.332 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 292.44 Mbit/s
95th percentile per-packet one-way delay: 220.143 ms
Loss rate: 1.65%
```

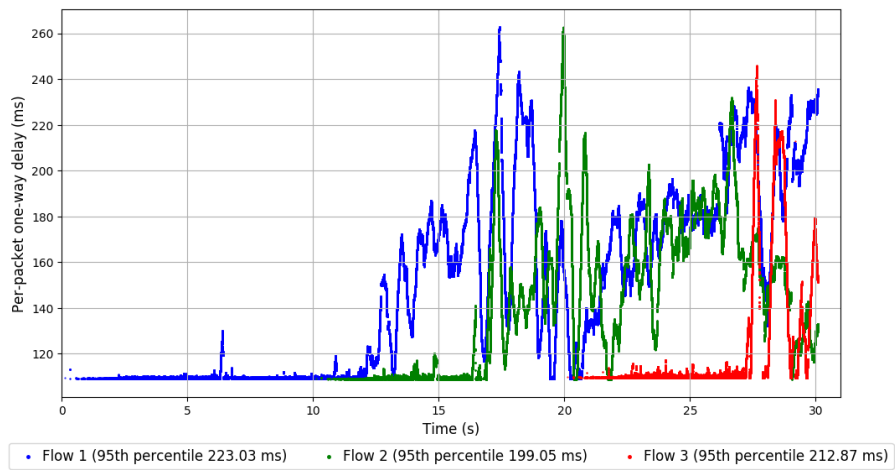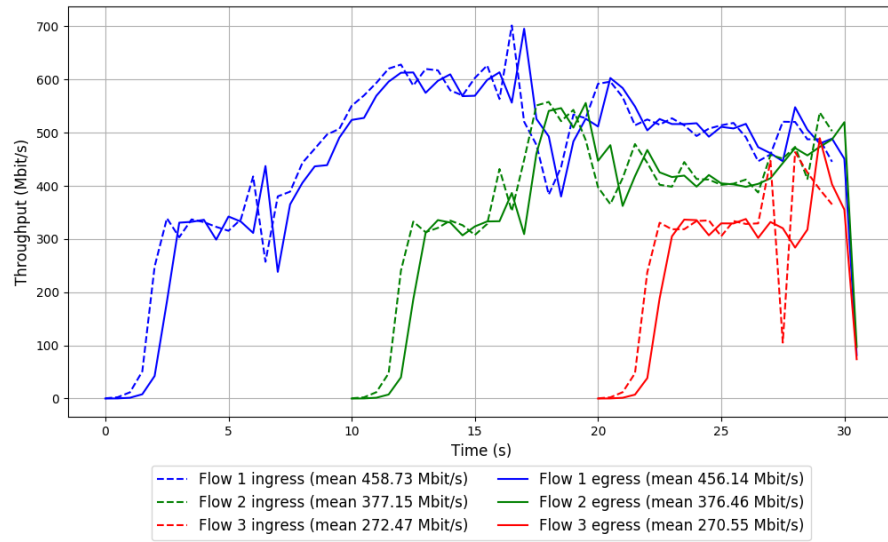Run 2: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 439.55 Mbit/s) --- Flow 1 egress (mean 439.04 Mbit/s)
Flow 2 ingress (mean 482.27 Mbit/s) --- Flow 2 egress (mean 480.09 Mbit/s)
Flow 3 ingress (mean 297.36 Mbit/s) --- Flow 3 egress (mean 292.44 Mbit/s)

Flow 1 (95th percentile 234.49 ms)　Flow 2 (95th percentile 204.33 ms)　Flow 3 (95th percentile 220.14 ms)

```
Run 3: Statistics of TCP Cubic

Start at: 2019-02-05 07:14:49
End at: 2019-02-05 07:15:19
Local clock offset: -0.639 ms
Remote clock offset: -0.017 ms


# Below is generated by plot.py at 2019-02-05 09:39:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 681.43 Mbit/s
95th percentile per-packet one-way delay: 186.197 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 319.40 Mbit/s
95th percentile per-packet one-way delay: 112.234 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 404.26 Mbit/s
95th percentile per-packet one-way delay: 188.727 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 278.74 Mbit/s
95th percentile per-packet one-way delay: 250.534 ms
Loss rate: 1.23%
```

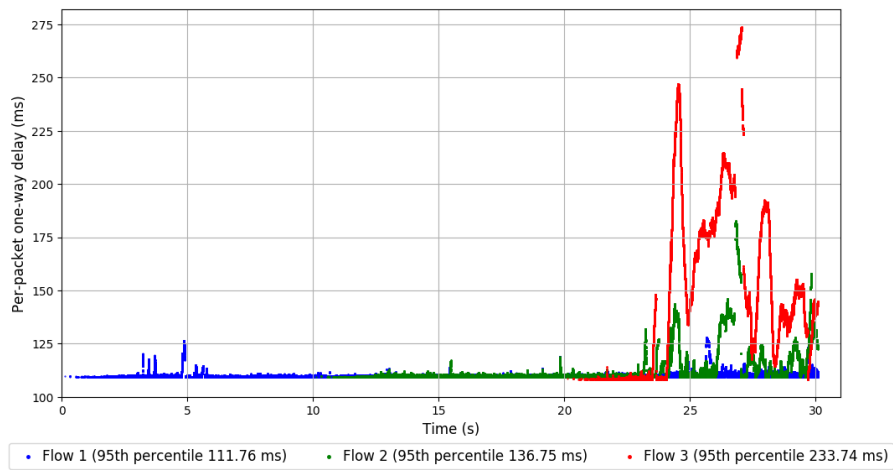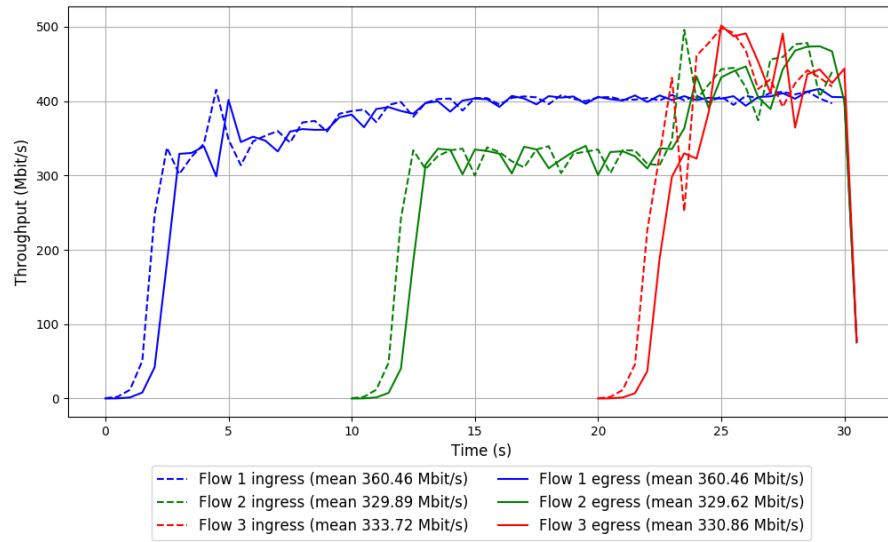Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 319.41 Mbit/s) --- Flow 1 egress (mean 319.40 Mbit/s) ---
Flow 2 ingress (mean 404.26 Mbit/s) --- Flow 2 egress (mean 404.26 Mbit/s) ---
Flow 3 ingress (mean 282.34 Mbit/s) --- Flow 3 egress (mean 278.74 Mbit/s) ---

Flow 1 (95th percentile 112.23 ms) · Flow 2 (95th percentile 188.73 ms) · Flow 3 (95th percentile 250.53 ms)

```
Run 4: Statistics of TCP Cubic

Start at: 2019-02-05 07:53:27
End at: 2019-02-05 07:53:57
Local clock offset: -0.76 ms
Remote clock offset: -0.003 ms


# Below is generated by plot.py at 2019-02-05 09:39:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 796.84 Mbit/s
95th percentile per-packet one-way delay: 217.647 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 456.14 Mbit/s
95th percentile per-packet one-way delay: 223.031 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 376.46 Mbit/s
95th percentile per-packet one-way delay: 199.052 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 270.55 Mbit/s
95th percentile per-packet one-way delay: 212.866 ms
Loss rate: 0.70%
```
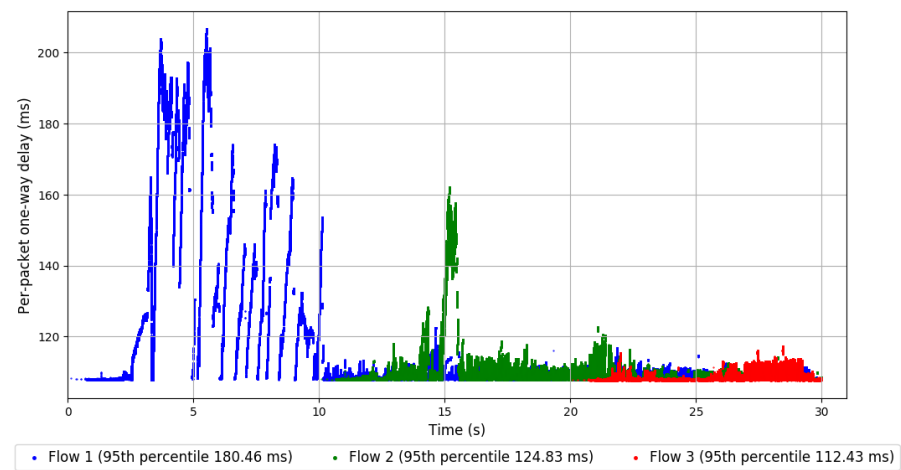
Run 4: Report of TCP Cubic — Data Link

```
Run 5: Statistics of TCP Cubic

Start at: 2019-02-05 08:31:36
End at: 2019-02-05 08:32:06
Local clock offset: 0.01 ms
Remote clock offset: -0.134 ms


# Below is generated by plot.py at 2019-02-05 09:39:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 689.99 Mbit/s
95th percentile per-packet one-way delay: 176.995 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 360.46 Mbit/s
95th percentile per-packet one-way delay: 111.757 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 329.62 Mbit/s
95th percentile per-packet one-way delay: 136.745 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 330.86 Mbit/s
95th percentile per-packet one-way delay: 233.743 ms
Loss rate: 0.84%
```
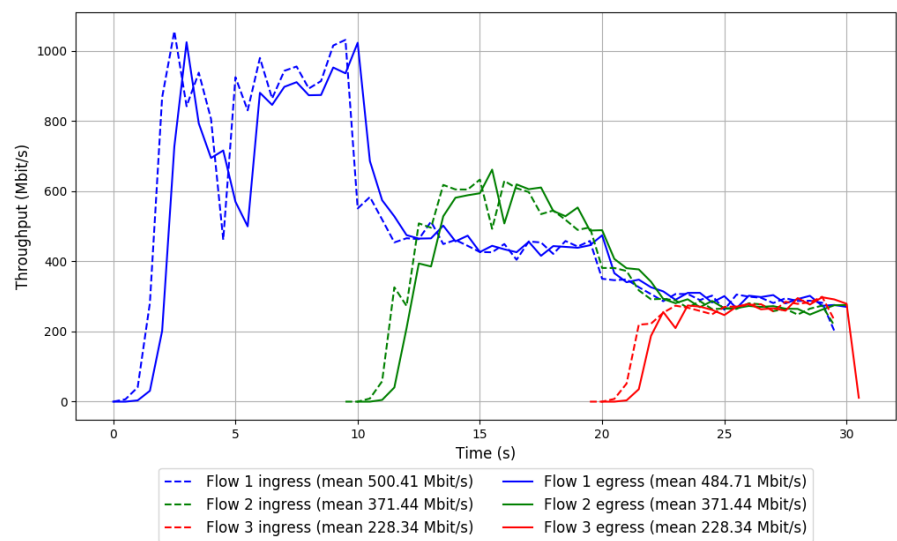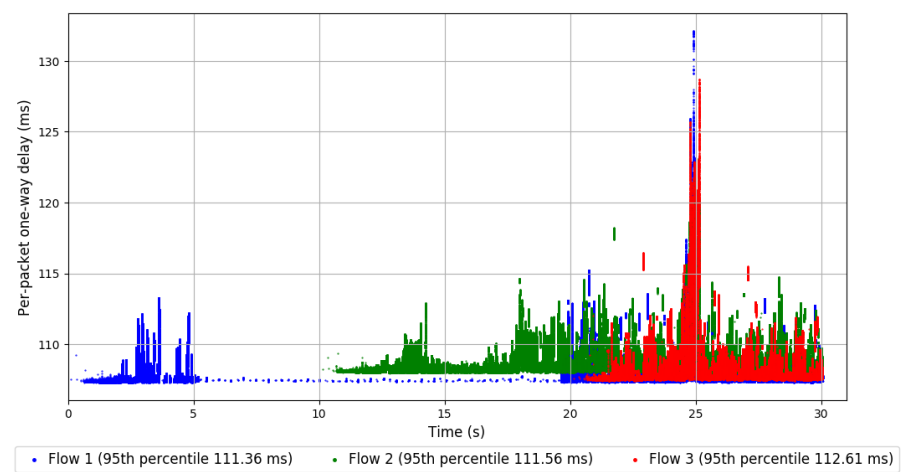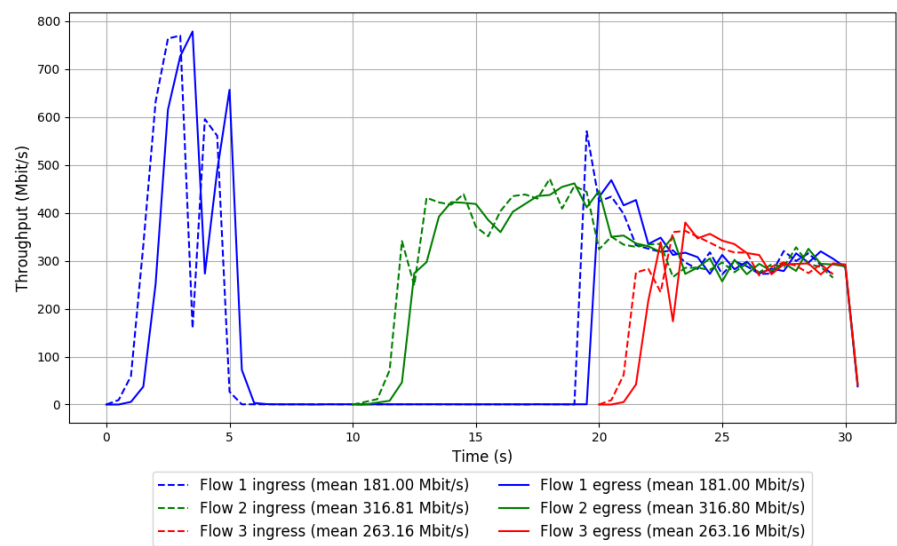
Run 5: Report of TCP Cubic — Data Link

- - - - Flow 1 ingress (mean 360.46 Mbit/s) ——— Flow 1 egress (mean 360.46 Mbit/s)
- - - - Flow 2 ingress (mean 329.89 Mbit/s) ——— Flow 2 egress (mean 329.62 Mbit/s)
- - - - Flow 3 ingress (mean 333.72 Mbit/s) ——— Flow 3 egress (mean 330.86 Mbit/s)

• Flow 1 (95th percentile 111.76 ms)   • Flow 2 (95th percentile 136.75 ms)   • Flow 3 (95th percentile 233.74 ms)

```
Run 1: Statistics of FillP

Start at: 2019-02-05 05:46:28
End at: 2019-02-05 05:46:58
Local clock offset: 1.36 ms
Remote clock offset: 0.161 ms


# Below is generated by plot.py at 2019-02-05 09:43:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 807.52 Mbit/s
95th percentile per-packet one-way delay: 166.519 ms
Loss rate: 1.91%
-- Flow 1:
Average throughput: 484.71 Mbit/s
95th percentile per-packet one-way delay: 180.464 ms
Loss rate: 3.14%
-- Flow 2:
Average throughput: 371.44 Mbit/s
95th percentile per-packet one-way delay: 124.825 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 228.34 Mbit/s
95th percentile per-packet one-way delay: 112.430 ms
Loss rate: 0.00%
```
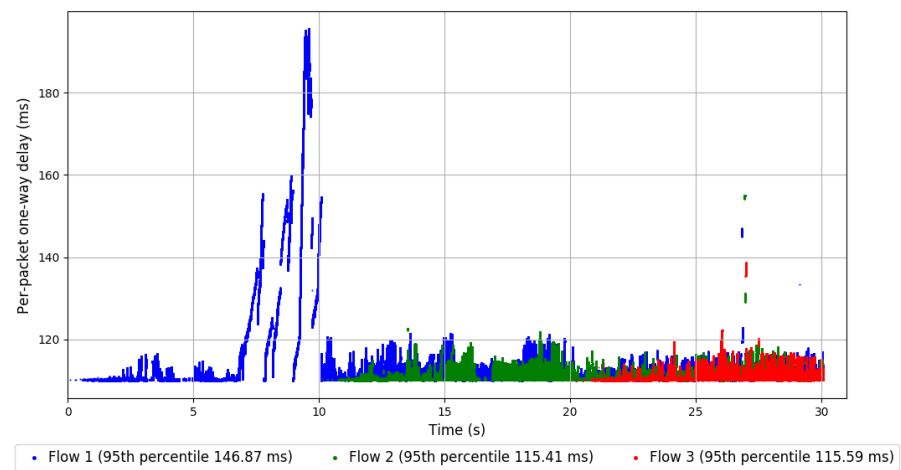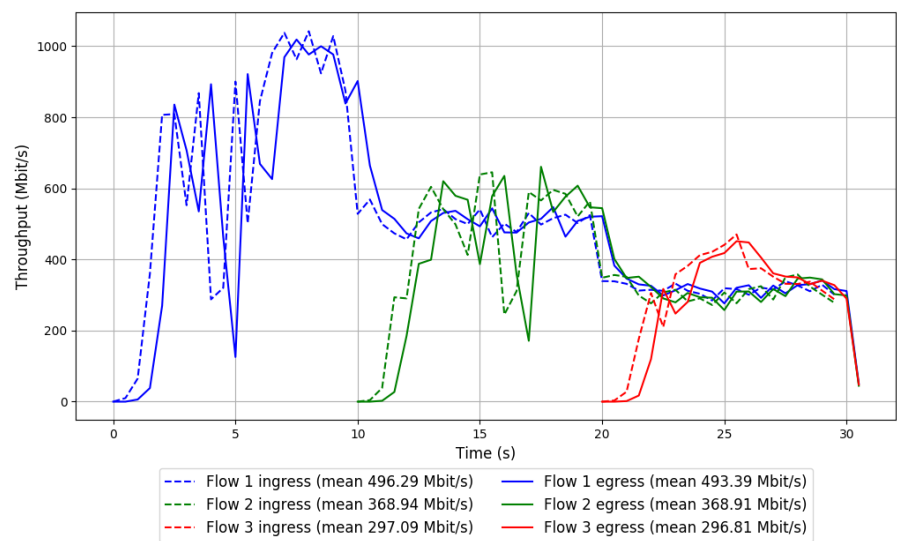
Run 1: Report of FillP — Data Link

```
Run 2: Statistics of FillP

Start at: 2019-02-05 06:24:43
End at: 2019-02-05 06:25:13
Local clock offset: 1.115 ms
Remote clock offset: 0.136 ms


# Below is generated by plot.py at 2019-02-05 09:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 478.59 Mbit/s
95th percentile per-packet one-way delay: 111.629 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 181.00 Mbit/s
95th percentile per-packet one-way delay: 111.356 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 316.80 Mbit/s
95th percentile per-packet one-way delay: 111.555 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 263.16 Mbit/s
95th percentile per-packet one-way delay: 112.606 ms
Loss rate: 0.00%
```
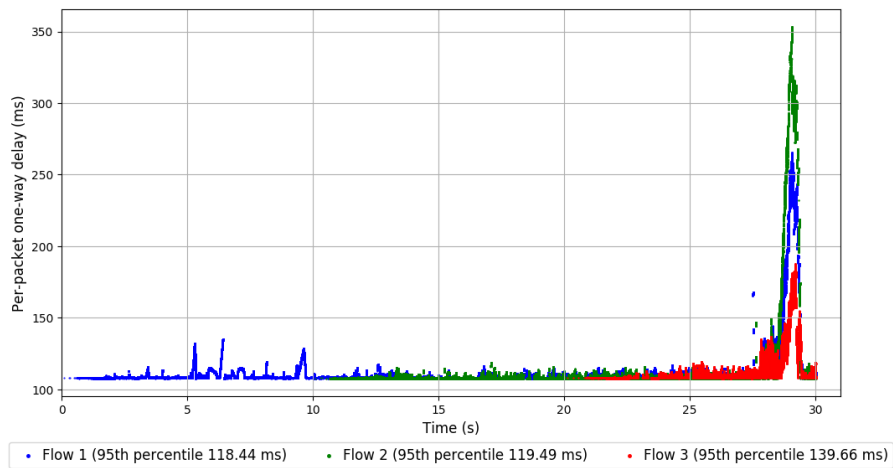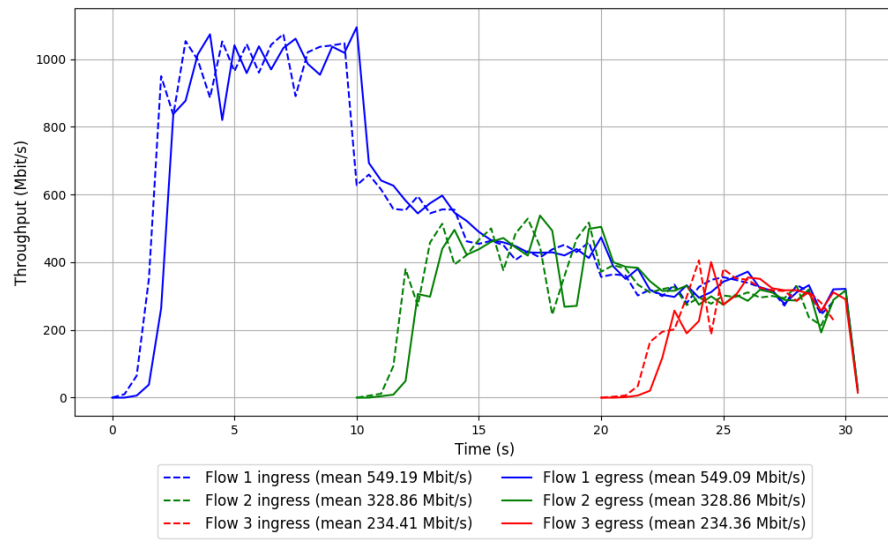
Run 2: Report of FillP — Data Link

```
Run 3: Statistics of FillP

Start at: 2019-02-05 07:02:06
End at: 2019-02-05 07:02:36
Local clock offset: -0.733 ms
Remote clock offset: 0.022 ms


# Below is generated by plot.py at 2019-02-05 09:56:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 837.21 Mbit/s
95th percentile per-packet one-way delay: 133.864 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 493.39 Mbit/s
95th percentile per-packet one-way delay: 146.866 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 368.91 Mbit/s
95th percentile per-packet one-way delay: 115.408 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 296.81 Mbit/s
95th percentile per-packet one-way delay: 115.594 ms
Loss rate: 0.08%
```
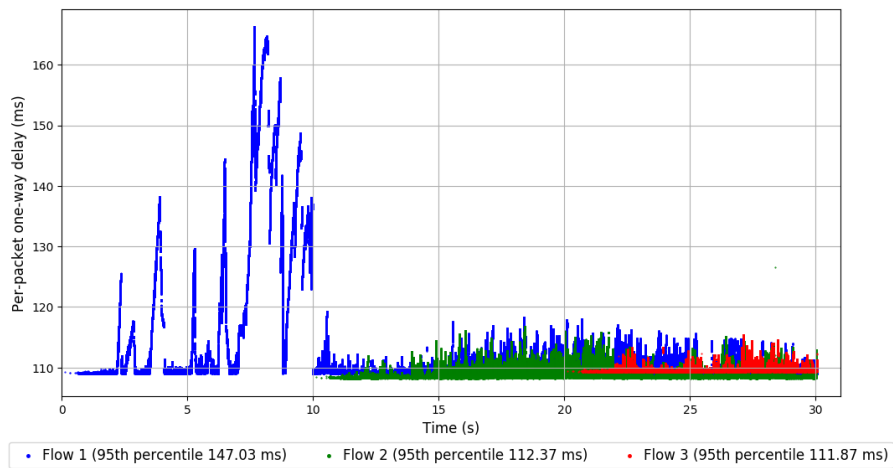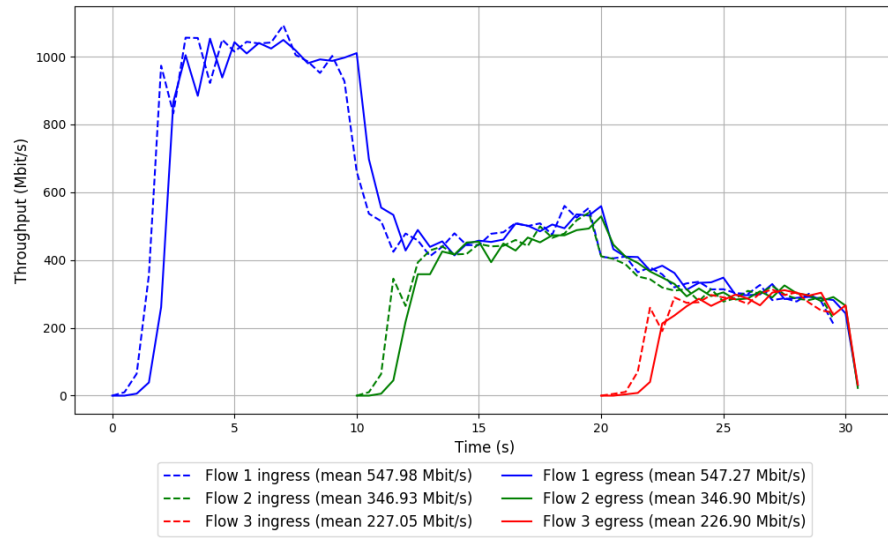
Run 3: Report of FillP — Data Link

Flow 1 ingress (mean 496.29 Mbit/s) --- Flow 1 egress (mean 493.39 Mbit/s)
Flow 2 ingress (mean 368.94 Mbit/s) --- Flow 2 egress (mean 368.91 Mbit/s)
Flow 3 ingress (mean 297.09 Mbit/s) --- Flow 3 egress (mean 296.81 Mbit/s)

Flow 1 (95th percentile 146.87 ms) • Flow 2 (95th percentile 115.41 ms) • Flow 3 (95th percentile 115.59 ms)

```
Run 4: Statistics of FillP

Start at: 2019-02-05 07:40:40
End at: 2019-02-05 07:41:10
Local clock offset: 1.417 ms
Remote clock offset: 0.002 ms


# Below is generated by plot.py at 2019-02-05 09:56:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 845.35 Mbit/s
95th percentile per-packet one-way delay: 121.456 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 549.09 Mbit/s
95th percentile per-packet one-way delay: 118.435 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 328.86 Mbit/s
95th percentile per-packet one-way delay: 119.488 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 234.36 Mbit/s
95th percentile per-packet one-way delay: 139.662 ms
Loss rate: 0.01%
```
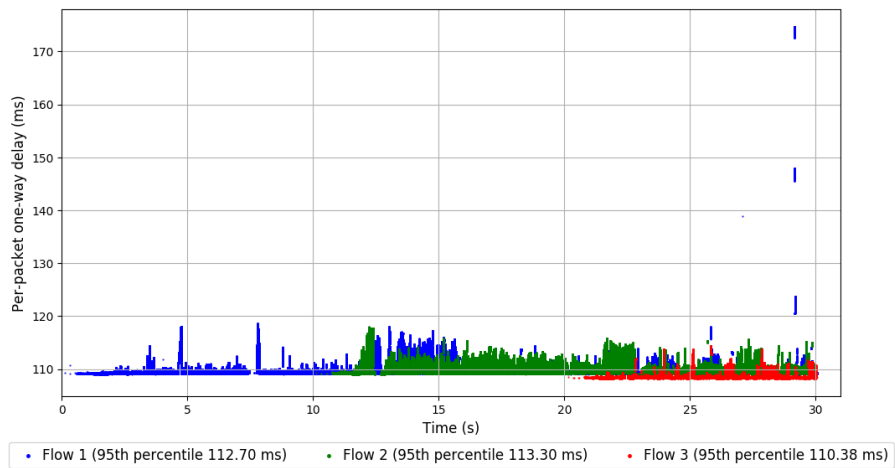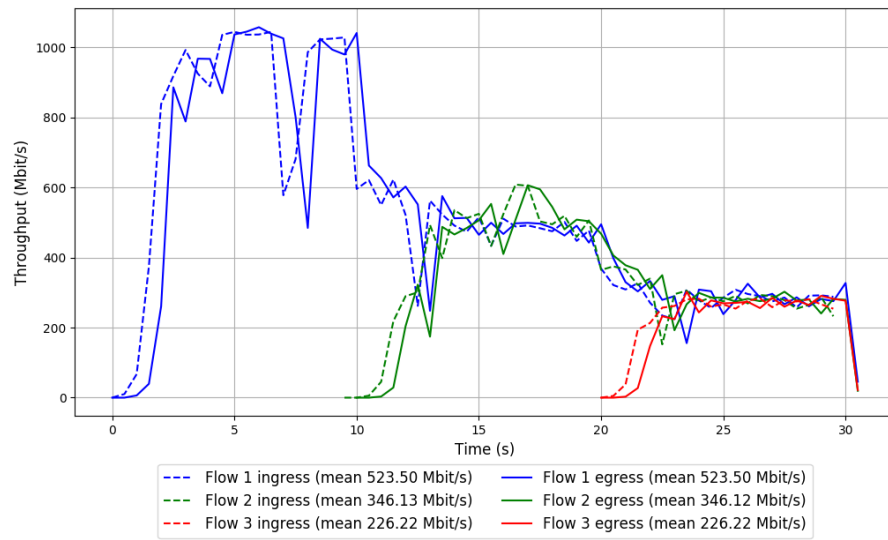
Run 4: Report of FillP — Data Link

Flow 1 ingress (mean 549.19 Mbit/s) — Flow 1 egress (mean 549.09 Mbit/s)
Flow 2 ingress (mean 328.86 Mbit/s) — Flow 2 egress (mean 328.86 Mbit/s)
Flow 3 ingress (mean 234.41 Mbit/s) — Flow 3 egress (mean 234.36 Mbit/s)

Flow 1 (95th percentile 118.44 ms) • Flow 2 (95th percentile 119.49 ms) • Flow 3 (95th percentile 139.66 ms)

```
Run 5: Statistics of FillP

Start at: 2019-02-05 08:18:57
End at: 2019-02-05 08:19:27
Local clock offset: -0.043 ms
Remote clock offset: -0.098 ms


# Below is generated by plot.py at 2019-02-05 09:57:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 853.07 Mbit/s
95th percentile per-packet one-way delay: 141.174 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 547.27 Mbit/s
95th percentile per-packet one-way delay: 147.026 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 346.90 Mbit/s
95th percentile per-packet one-way delay: 112.369 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 226.90 Mbit/s
95th percentile per-packet one-way delay: 111.871 ms
Loss rate: 0.05%
```
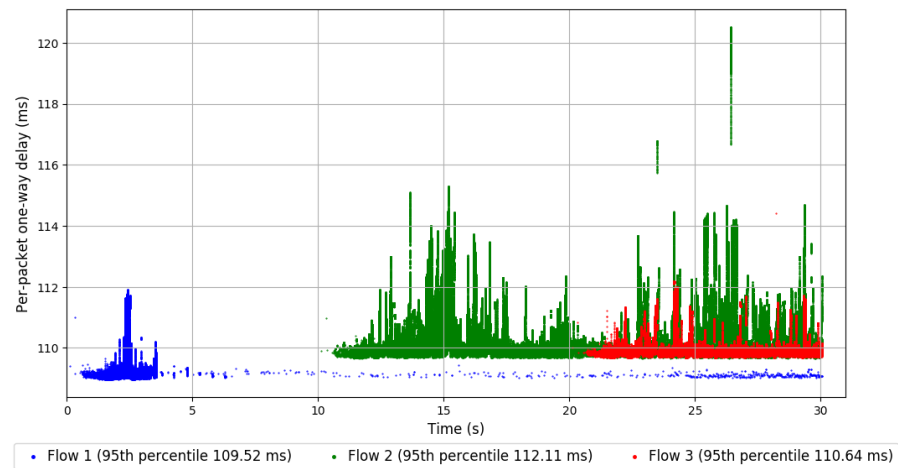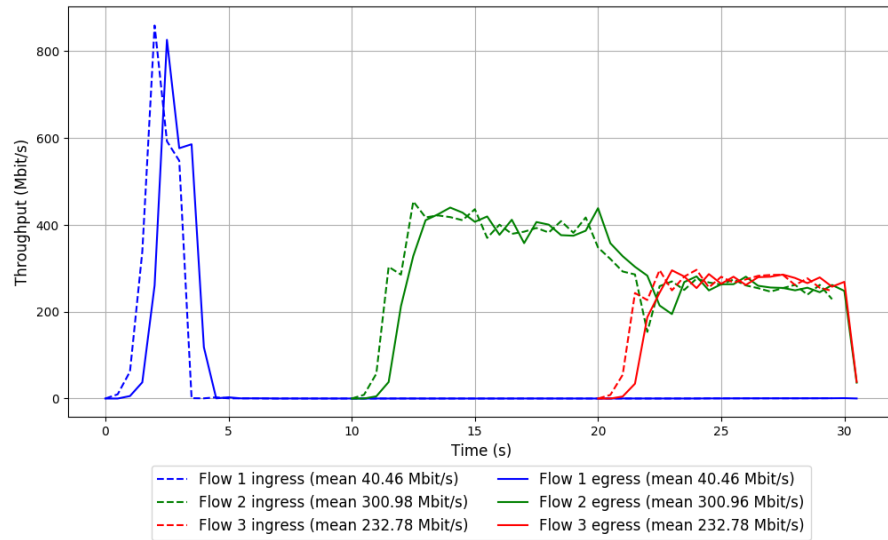
Run 5: Report of FillP — Data Link

- - - - Flow 1 ingress (mean 547.98 Mbit/s) —— Flow 1 egress (mean 547.27 Mbit/s)
- - - - Flow 2 ingress (mean 346.93 Mbit/s) —— Flow 2 egress (mean 346.90 Mbit/s)
- - - - Flow 3 ingress (mean 227.05 Mbit/s) —— Flow 3 egress (mean 226.90 Mbit/s)

- Flow 1 (95th percentile 147.03 ms)   • Flow 2 (95th percentile 112.37 ms)   • Flow 3 (95th percentile 111.87 ms)
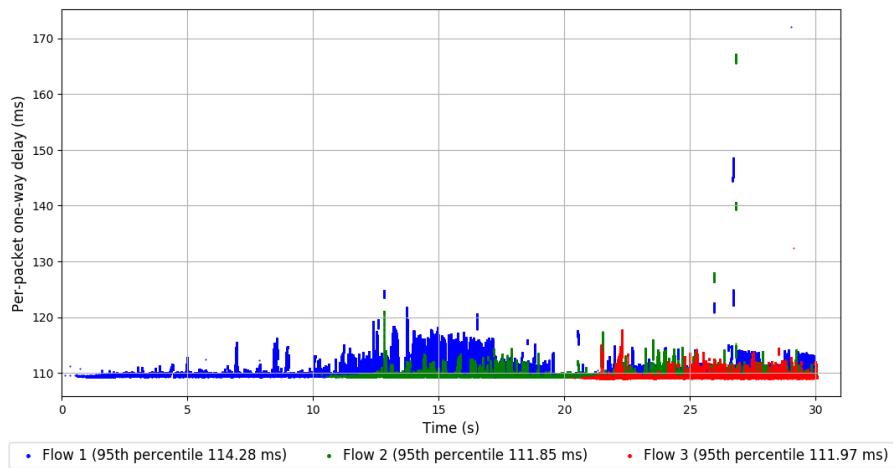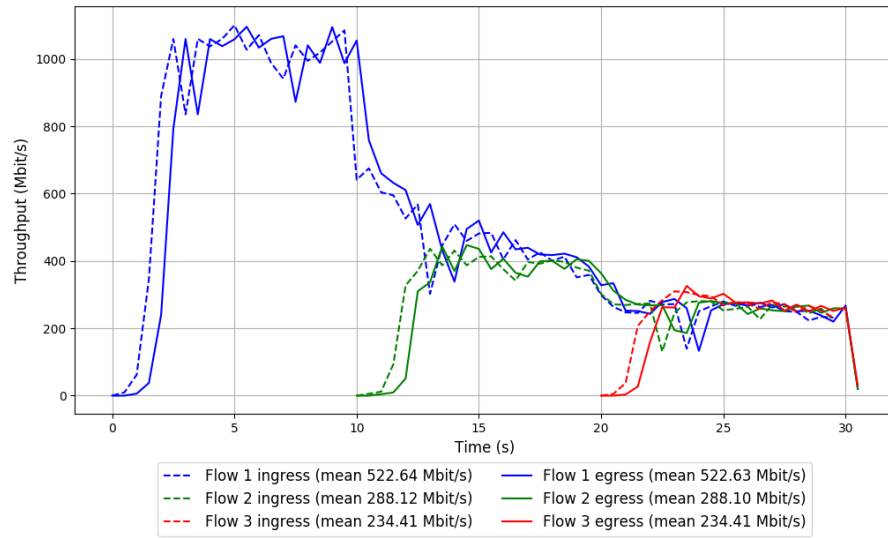
44

```
Run 1: Statistics of FillP-Sheep

Start at: 2019-02-05 06:18:49
End at: 2019-02-05 06:19:19
Local clock offset: 0.064 ms
Remote clock offset: 0.156 ms


# Below is generated by plot.py at 2019-02-05 09:57:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 828.63 Mbit/s
95th percentile per-packet one-way delay: 112.863 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 523.50 Mbit/s
95th percentile per-packet one-way delay: 112.699 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 346.12 Mbit/s
95th percentile per-packet one-way delay: 113.299 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 226.22 Mbit/s
95th percentile per-packet one-way delay: 110.376 ms
Loss rate: 0.00%
```
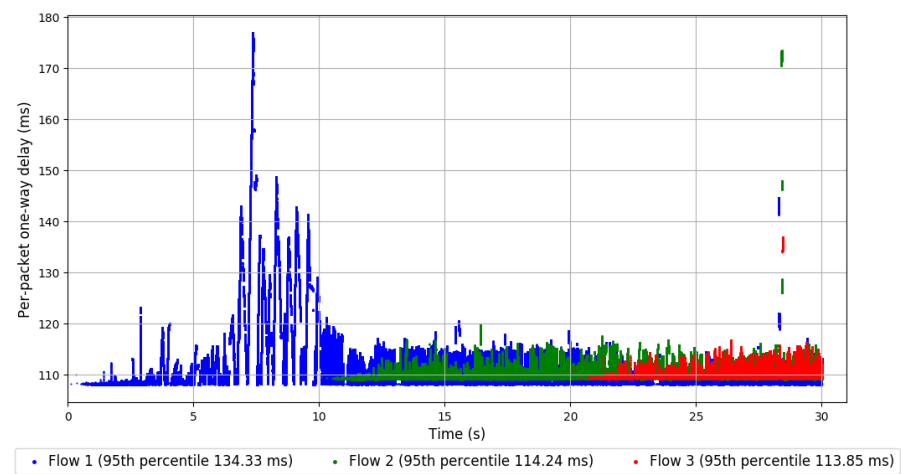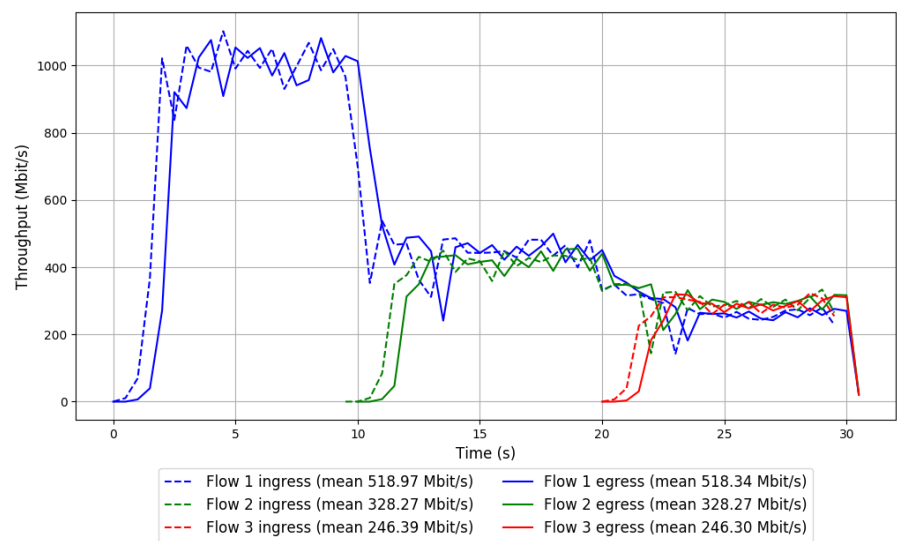
Run 1: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 523.50 Mbit/s) --- Flow 1 egress (mean 523.50 Mbit/s)
Flow 2 ingress (mean 346.13 Mbit/s) --- Flow 2 egress (mean 346.12 Mbit/s)
Flow 3 ingress (mean 226.22 Mbit/s) --- Flow 3 egress (mean 226.22 Mbit/s)

Flow 1 (95th percentile 112.70 ms)   Flow 2 (95th percentile 113.30 ms)   Flow 3 (95th percentile 110.38 ms)

46

```
Run 2: Statistics of FillP-Sheep

Start at: 2019-02-05 06:56:46
End at: 2019-02-05 06:57:16
Local clock offset: -0.767 ms
Remote clock offset: -0.035 ms


# Below is generated by plot.py at 2019-02-05 09:57:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 317.92 Mbit/s
95th percentile per-packet one-way delay: 111.672 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.46 Mbit/s
95th percentile per-packet one-way delay: 109.521 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 300.96 Mbit/s
95th percentile per-packet one-way delay: 112.115 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 232.78 Mbit/s
95th percentile per-packet one-way delay: 110.643 ms
Loss rate: 0.00%
```

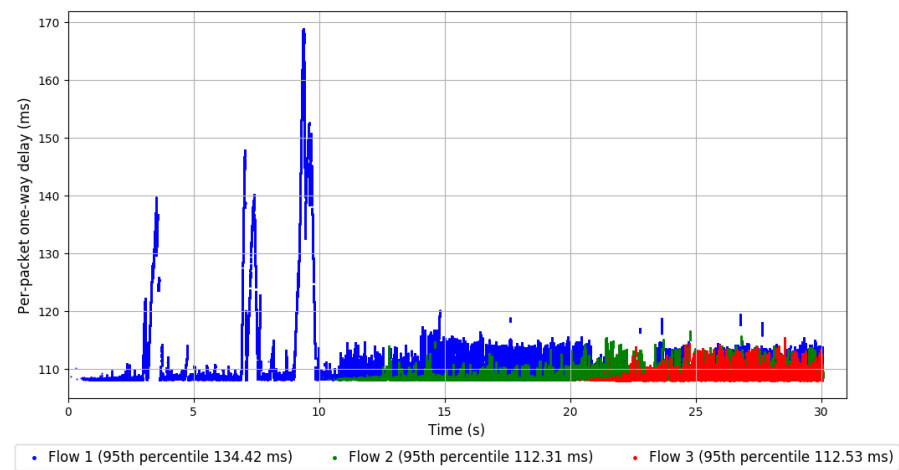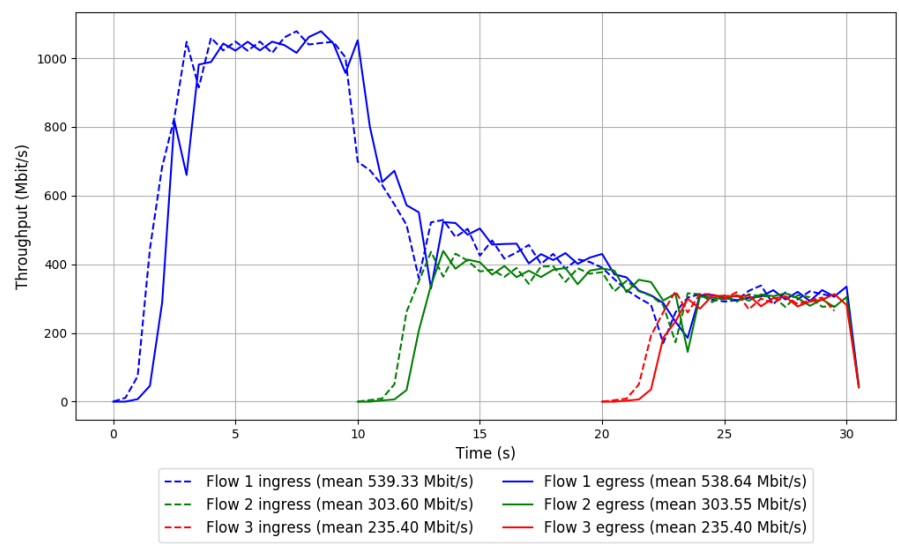Run 2: Report of FillP-Sheep — Data Link

```
Run 3: Statistics of FillP-Sheep

Start at: 2019-02-05 07:34:53
End at: 2019-02-05 07:35:23
Local clock offset: 0.034 ms
Remote clock offset: -0.026 ms


# Below is generated by plot.py at 2019-02-05 09:57:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 791.29 Mbit/s
95th percentile per-packet one-way delay: 113.590 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 522.63 Mbit/s
95th percentile per-packet one-way delay: 114.279 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 288.10 Mbit/s
95th percentile per-packet one-way delay: 111.849 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 234.41 Mbit/s
95th percentile per-packet one-way delay: 111.969 ms
Loss rate: 0.00%
```
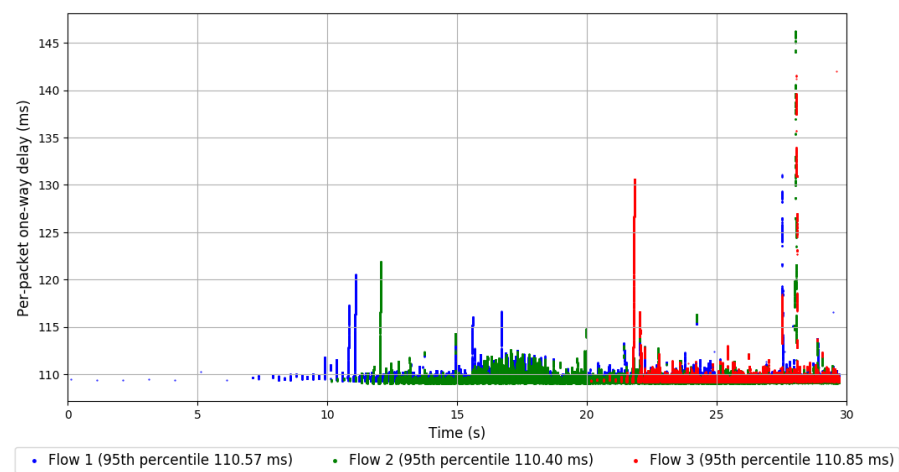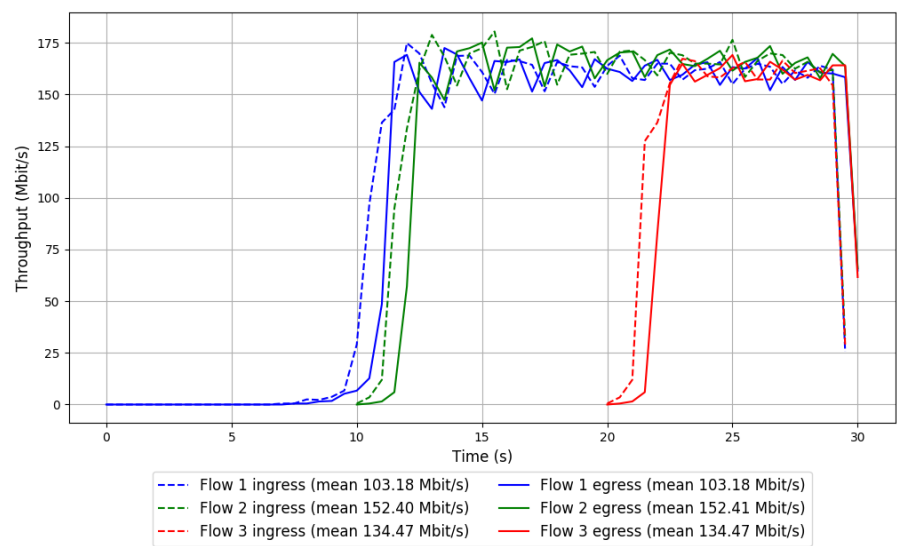
Run 3: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 522.64 Mbit/s) --- Flow 1 egress (mean 522.63 Mbit/s)
Flow 2 ingress (mean 288.12 Mbit/s) --- Flow 2 egress (mean 288.10 Mbit/s)
Flow 3 ingress (mean 234.41 Mbit/s) --- Flow 3 egress (mean 234.41 Mbit/s)

Flow 1 (95th percentile 114.28 ms)   Flow 2 (95th percentile 111.85 ms)   Flow 3 (95th percentile 111.97 ms)

```
Run 4: Statistics of FillP-Sheep

Start at: 2019-02-05 08:13:07
End at: 2019-02-05 08:13:37
Local clock offset: 0.097 ms
Remote clock offset: -0.006 ms


# Below is generated by plot.py at 2019-02-05 10:01:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 818.32 Mbit/s
95th percentile per-packet one-way delay: 128.641 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 518.34 Mbit/s
95th percentile per-packet one-way delay: 134.334 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 328.27 Mbit/s
95th percentile per-packet one-way delay: 114.237 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 246.30 Mbit/s
95th percentile per-packet one-way delay: 113.852 ms
Loss rate: 0.04%
```
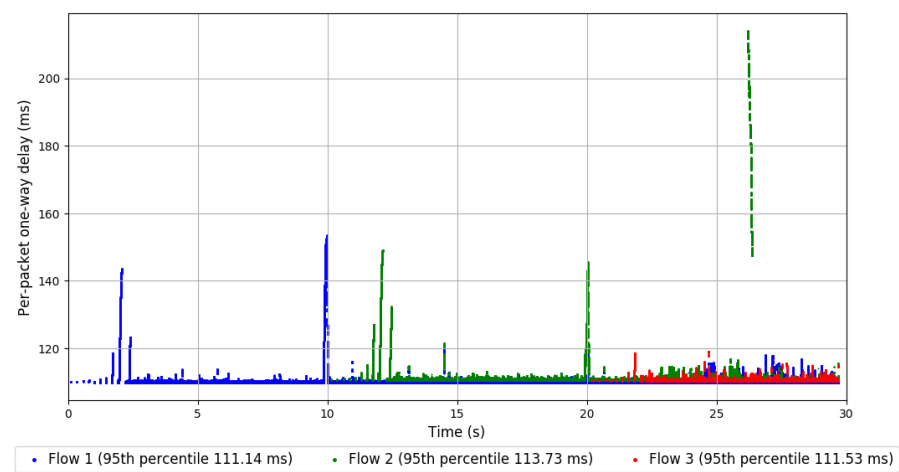
Run 4: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 518.97 Mbit/s)   Flow 1 egress (mean 518.34 Mbit/s)
Flow 2 ingress (mean 328.27 Mbit/s)   Flow 2 egress (mean 328.27 Mbit/s)
Flow 3 ingress (mean 246.39 Mbit/s)   Flow 3 egress (mean 246.30 Mbit/s)

Flow 1 (95th percentile 134.33 ms)   Flow 2 (95th percentile 114.24 ms)   Flow 3 (95th percentile 113.85 ms)

```
Run 5: Statistics of FillP-Sheep

Start at: 2019-02-05 08:51:05
End at: 2019-02-05 08:51:35
Local clock offset: 0.657 ms
Remote clock offset: -0.362 ms


# Below is generated by plot.py at 2019-02-05 10:02:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 817.78 Mbit/s
95th percentile per-packet one-way delay: 125.565 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 538.64 Mbit/s
95th percentile per-packet one-way delay: 134.417 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 303.55 Mbit/s
95th percentile per-packet one-way delay: 112.312 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 235.40 Mbit/s
95th percentile per-packet one-way delay: 112.526 ms
Loss rate: 0.00%
```
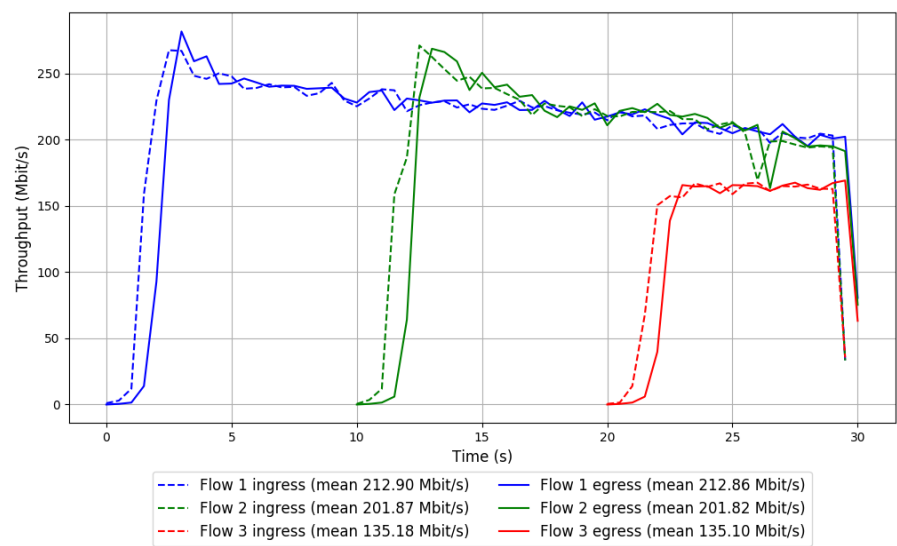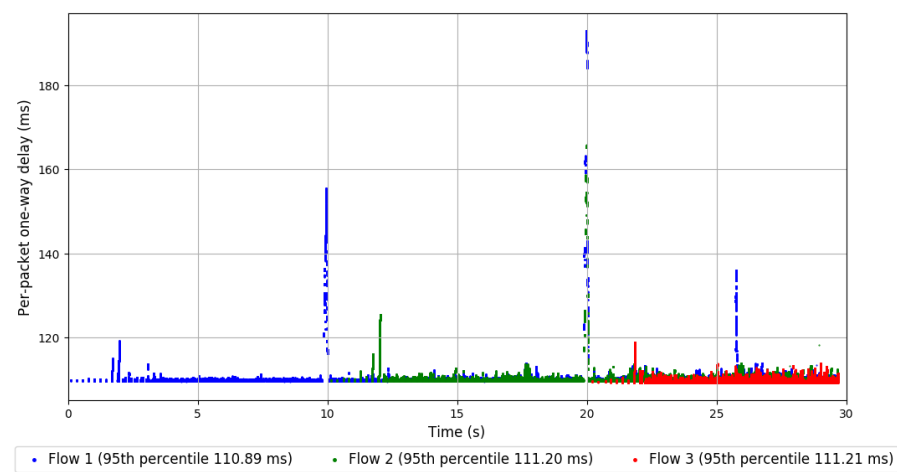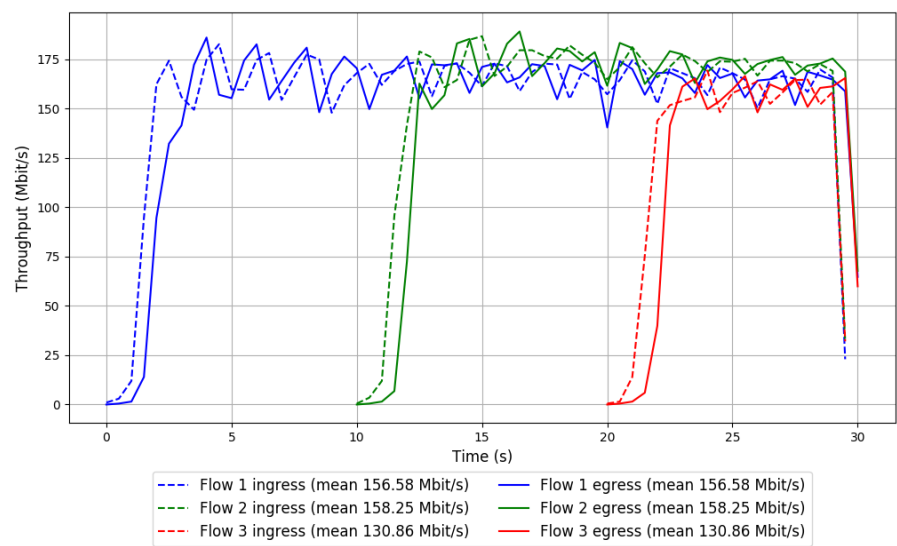
Run 5: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 539.33 Mbit/s)   Flow 1 egress (mean 538.64 Mbit/s)
Flow 2 ingress (mean 303.60 Mbit/s)   Flow 2 egress (mean 303.55 Mbit/s)
Flow 3 ingress (mean 235.40 Mbit/s)   Flow 3 egress (mean 235.40 Mbit/s)

Flow 1 (95th percentile 134.42 ms)   Flow 2 (95th percentile 112.31 ms)   Flow 3 (95th percentile 112.53 ms)

```
Run 1: Statistics of Indigo

Start at: 2019-02-05 05:42:46
End at: 2019-02-05 05:43:16
Local clock offset: 0.006 ms
Remote clock offset: 0.151 ms


# Below is generated by plot.py at 2019-02-05 10:02:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 247.08 Mbit/s
95th percentile per-packet one-way delay: 110.530 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 103.18 Mbit/s
95th percentile per-packet one-way delay: 110.573 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 152.41 Mbit/s
95th percentile per-packet one-way delay: 110.399 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 134.47 Mbit/s
95th percentile per-packet one-way delay: 110.847 ms
Loss rate: 0.00%
```
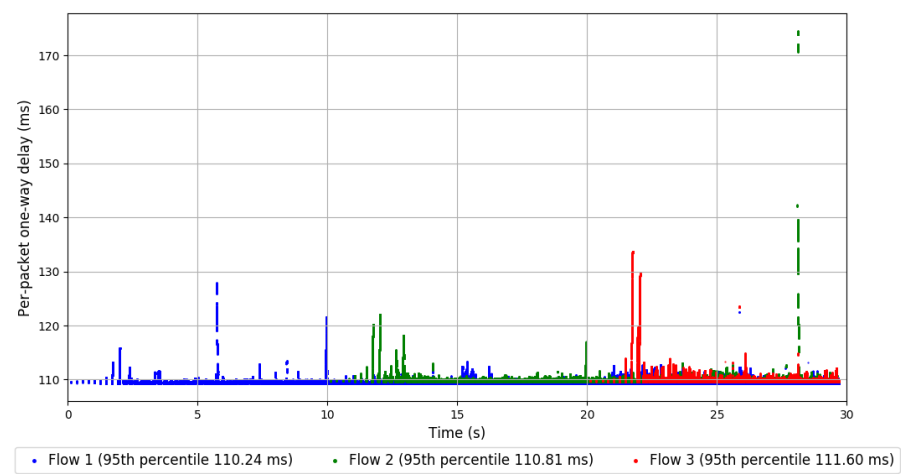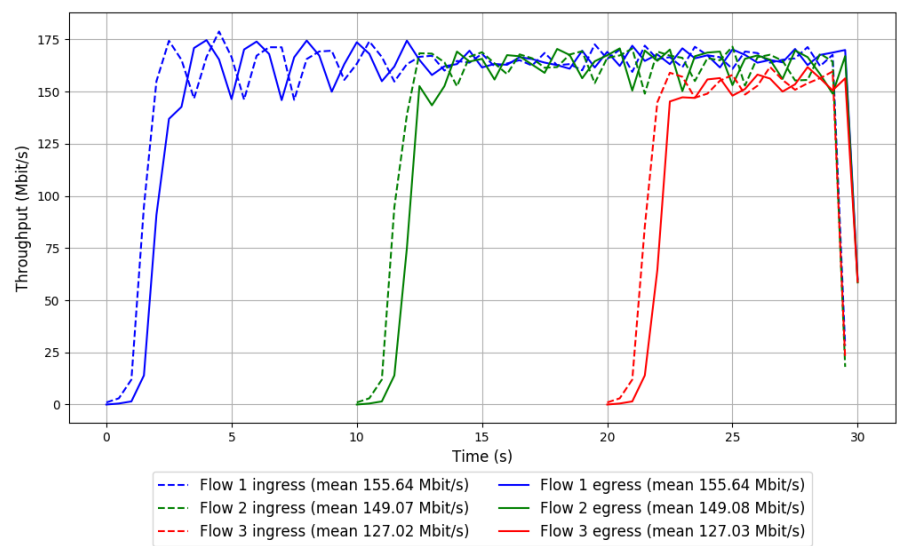
Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2019-02-05 06:20:45
End at: 2019-02-05 06:21:15
Local clock offset: -1.293 ms
Remote clock offset: 0.111 ms


# Below is generated by plot.py at 2019-02-05 10:08:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 389.41 Mbit/s
95th percentile per-packet one-way delay: 111.871 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 212.86 Mbit/s
95th percentile per-packet one-way delay: 111.139 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 201.82 Mbit/s
95th percentile per-packet one-way delay: 113.729 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 135.10 Mbit/s
95th percentile per-packet one-way delay: 111.535 ms
Loss rate: 0.04%
```
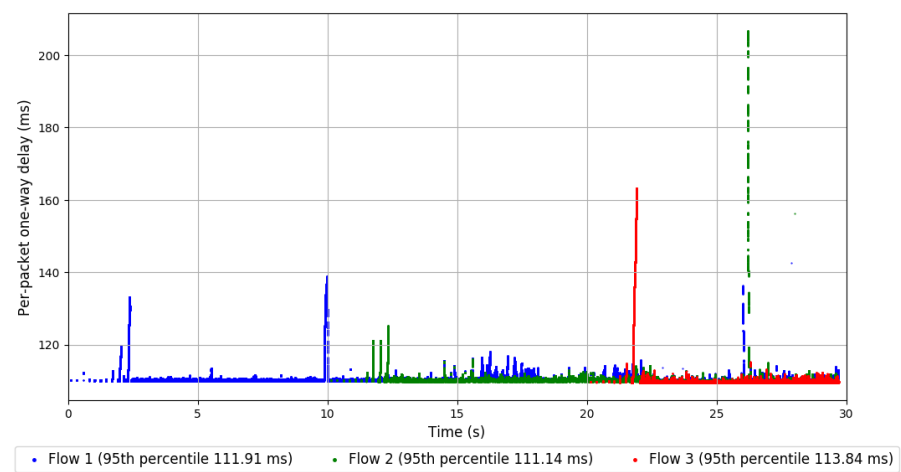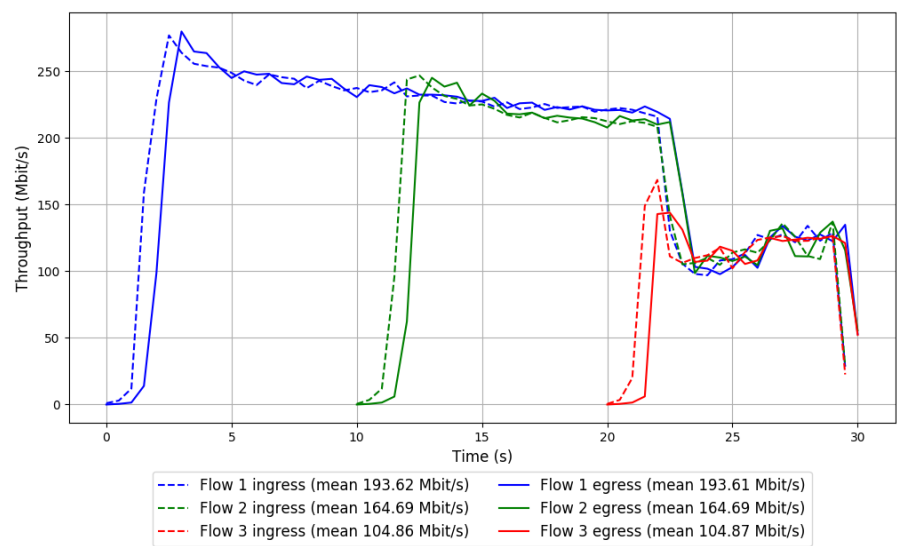
Run 2: Report of Indigo — Data Link

Flow 1 ingress (mean 212.90 Mbit/s) --- Flow 1 egress (mean 212.86 Mbit/s)
Flow 2 ingress (mean 201.87 Mbit/s) --- Flow 2 egress (mean 201.82 Mbit/s)
Flow 3 ingress (mean 135.18 Mbit/s) --- Flow 3 egress (mean 135.10 Mbit/s)

Flow 1 (95th percentile 111.14 ms) • Flow 2 (95th percentile 113.73 ms) • Flow 3 (95th percentile 111.53 ms)

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```
Run 3: Statistics of Indigo

Start at: 2019-02-05 06:58:18
End at: 2019-02-05 06:58:48
Local clock offset: -0.516 ms
Remote clock offset: -0.04 ms


# Below is generated by plot.py at 2019-02-05 10:08:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 302.99 Mbit/s
95th percentile per-packet one-way delay: 111.064 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 156.58 Mbit/s
95th percentile per-packet one-way delay: 110.894 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 158.25 Mbit/s
95th percentile per-packet one-way delay: 111.200 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 130.86 Mbit/s
95th percentile per-packet one-way delay: 111.207 ms
Loss rate: 0.00%
```
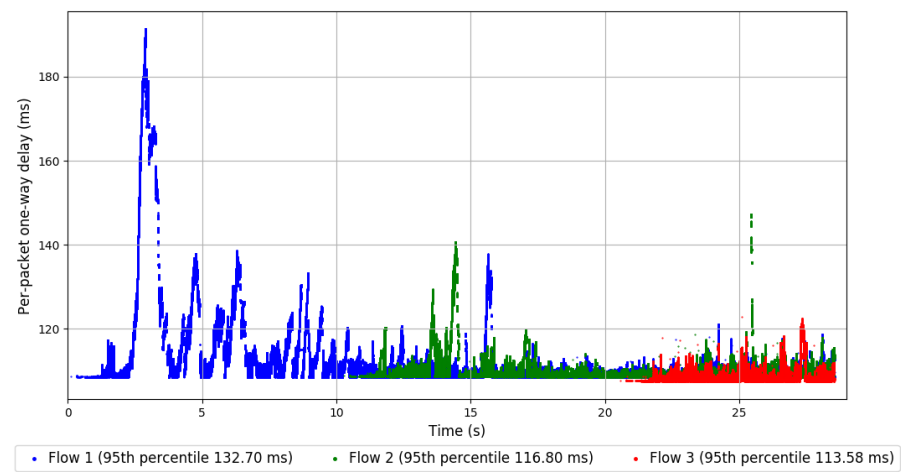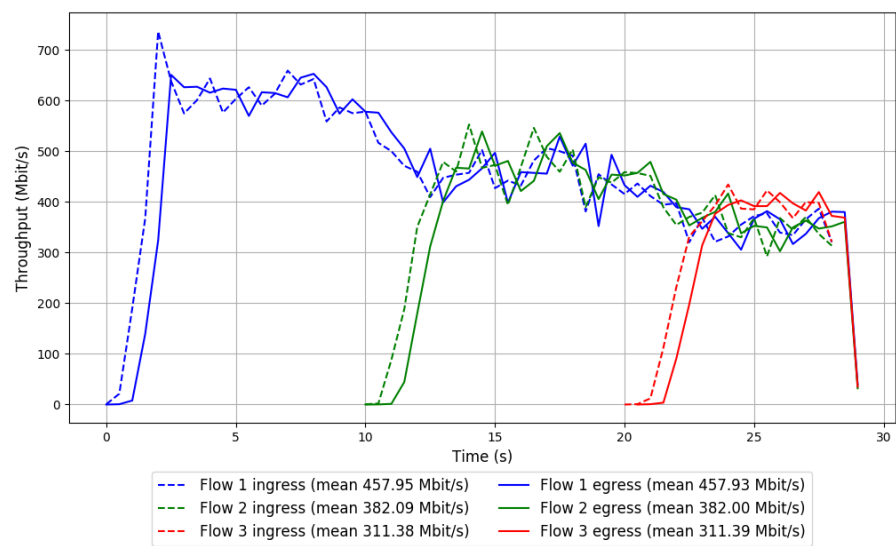
Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2019-02-05 07:36:47
End at: 2019-02-05 07:37:17
Local clock offset: 0.026 ms
Remote clock offset: 0.33 ms


# Below is generated by plot.py at 2019-02-05 10:08:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 295.39 Mbit/s
95th percentile per-packet one-way delay: 110.657 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 155.64 Mbit/s
95th percentile per-packet one-way delay: 110.238 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 149.08 Mbit/s
95th percentile per-packet one-way delay: 110.814 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 127.03 Mbit/s
95th percentile per-packet one-way delay: 111.604 ms
Loss rate: 0.00%
```
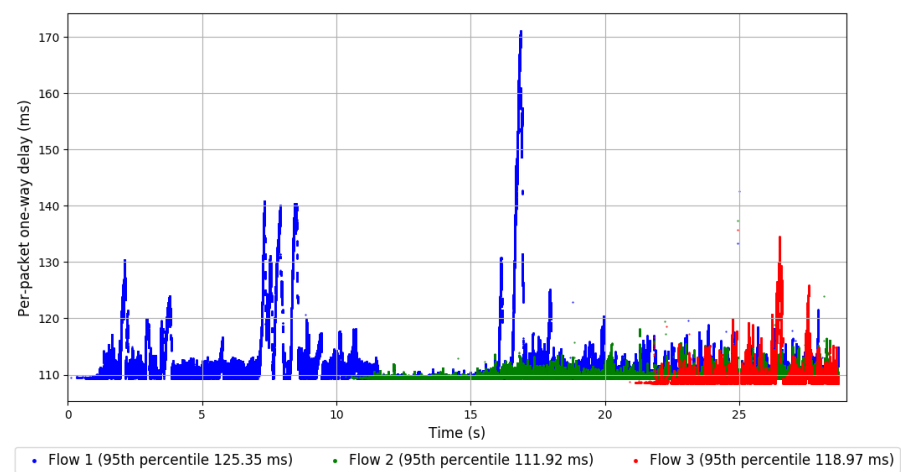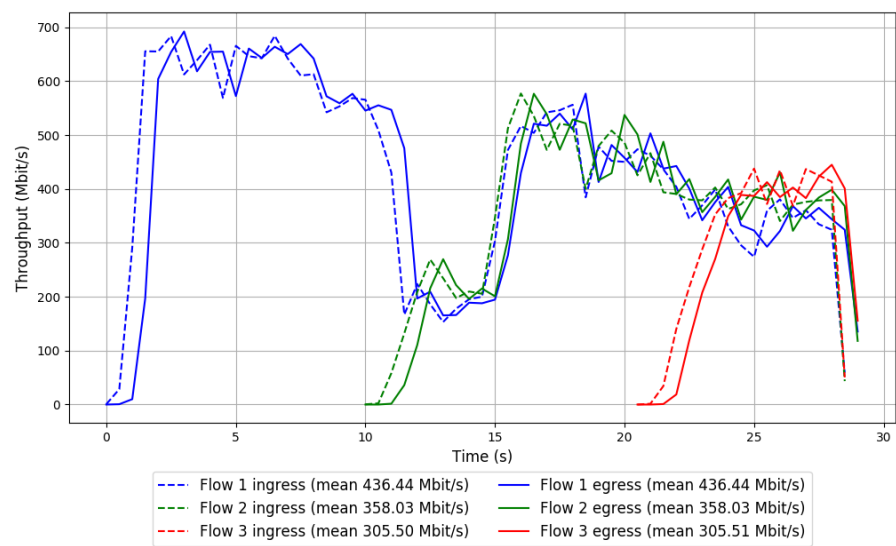
Run 4: Report of Indigo — Data Link

- - - - Flow 1 ingress (mean 155.64 Mbit/s) ——— Flow 1 egress (mean 155.64 Mbit/s)
- - - - Flow 2 ingress (mean 149.07 Mbit/s) ——— Flow 2 egress (mean 149.08 Mbit/s)
- - - - Flow 3 ingress (mean 127.02 Mbit/s) ——— Flow 3 egress (mean 127.03 Mbit/s)

• Flow 1 (95th percentile 110.24 ms)   • Flow 2 (95th percentile 110.81 ms)   • Flow 3 (95th percentile 111.60 ms)

```
Run 5: Statistics of Indigo

Start at: 2019-02-05 08:15:03
End at: 2019-02-05 08:15:33
Local clock offset: -0.641 ms
Remote clock offset: -0.077 ms


# Below is generated by plot.py at 2019-02-05 10:08:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 336.12 Mbit/s
95th percentile per-packet one-way delay: 111.622 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 193.61 Mbit/s
95th percentile per-packet one-way delay: 111.914 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 164.69 Mbit/s
95th percentile per-packet one-way delay: 111.145 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 104.87 Mbit/s
95th percentile per-packet one-way delay: 113.841 ms
Loss rate: 0.00%
```
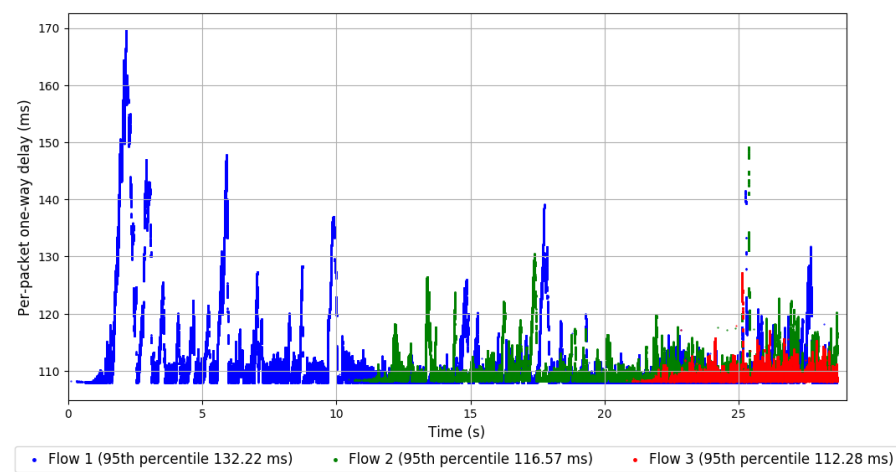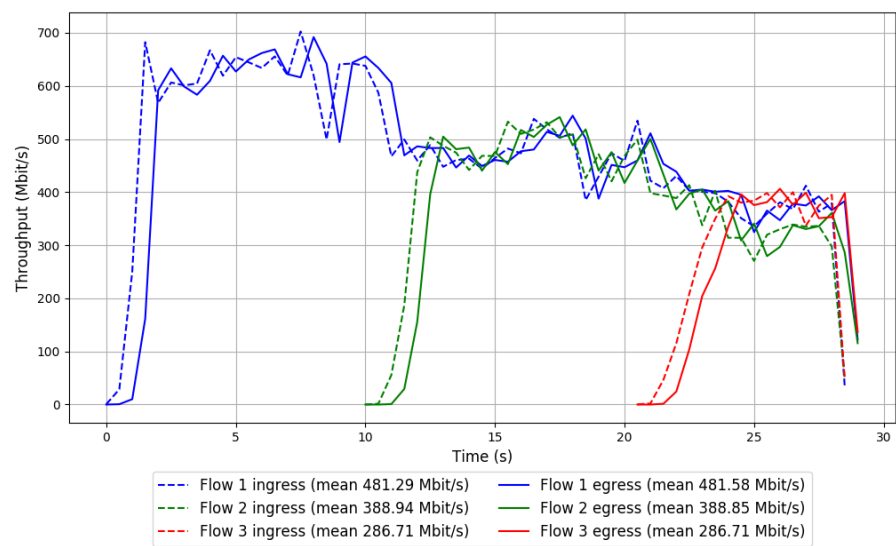
Run 5: Report of Indigo — Data Link

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```
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-02-05 06:08:31
End at: 2019-02-05 06:09:01
Local clock offset: 0.804 ms
Remote clock offset: 0.094 ms

# Below is generated by plot.py at 2019-02-05 10:10:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 790.52 Mbit/s
95th percentile per-packet one-way delay: 126.543 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 457.93 Mbit/s
95th percentile per-packet one-way delay: 132.704 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 382.00 Mbit/s
95th percentile per-packet one-way delay: 116.799 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 311.39 Mbit/s
95th percentile per-packet one-way delay: 113.576 ms
Loss rate: 0.00%
```
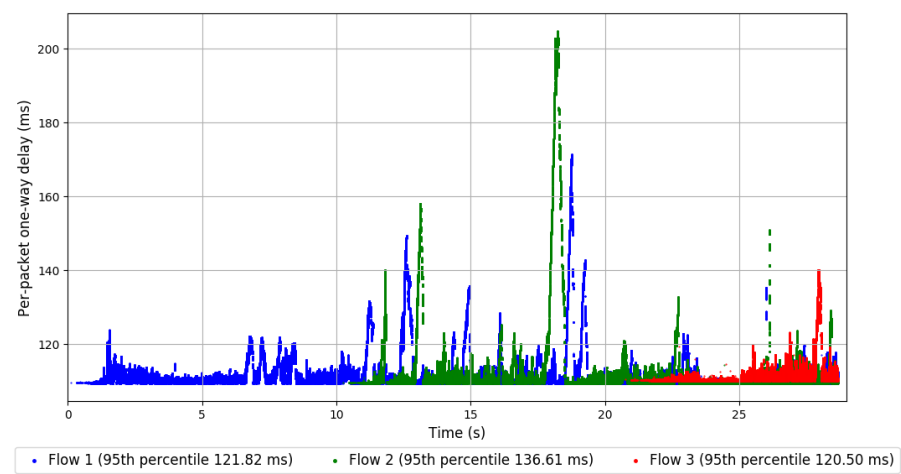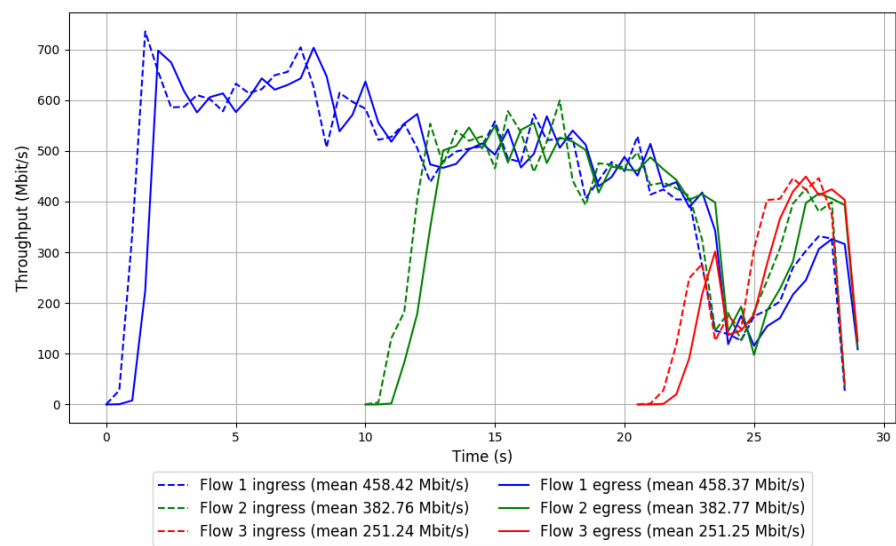
Run 1: Report of Indigo-MusesC3 — Data Link

- - - Flow 1 ingress (mean 457.95 Mbit/s) —— Flow 1 egress (mean 457.93 Mbit/s)
- - - Flow 2 ingress (mean 382.09 Mbit/s) —— Flow 2 egress (mean 382.00 Mbit/s)
- - - Flow 3 ingress (mean 311.38 Mbit/s) —— Flow 3 egress (mean 311.39 Mbit/s)

- Flow 1 (95th percentile 132.70 ms)   - Flow 2 (95th percentile 116.80 ms)   - Flow 3 (95th percentile 113.58 ms)
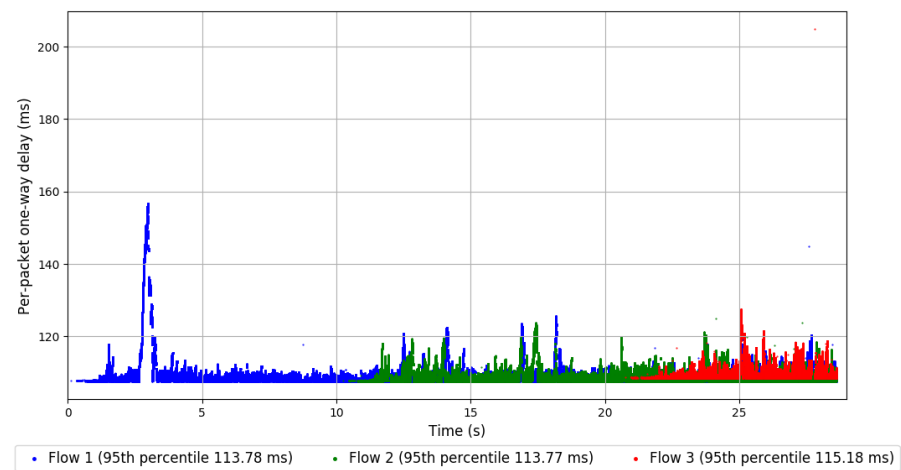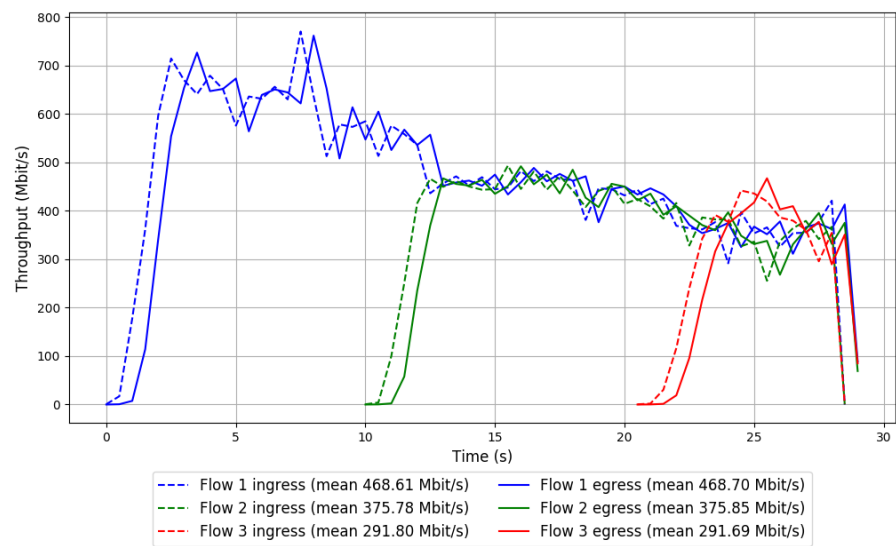
```
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-02-05 06:46:34
End at: 2019-02-05 06:47:04
Local clock offset: -0.156 ms
Remote clock offset: -0.008 ms


# Below is generated by plot.py at 2019-02-05 10:10:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 749.49 Mbit/s
95th percentile per-packet one-way delay: 120.341 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 436.44 Mbit/s
95th percentile per-packet one-way delay: 125.346 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 358.03 Mbit/s
95th percentile per-packet one-way delay: 111.920 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 305.51 Mbit/s
95th percentile per-packet one-way delay: 118.965 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesC3 — Data Link

```
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-02-05 07:24:35
End at: 2019-02-05 07:25:05
Local clock offset: 1.054 ms
Remote clock offset: -0.03 ms


# Below is generated by plot.py at 2019-02-05 10:15:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 807.98 Mbit/s
95th percentile per-packet one-way delay: 124.569 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 481.58 Mbit/s
95th percentile per-packet one-way delay: 132.220 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 388.85 Mbit/s
95th percentile per-packet one-way delay: 116.571 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 286.71 Mbit/s
95th percentile per-packet one-way delay: 112.277 ms
Loss rate: 0.00%
```
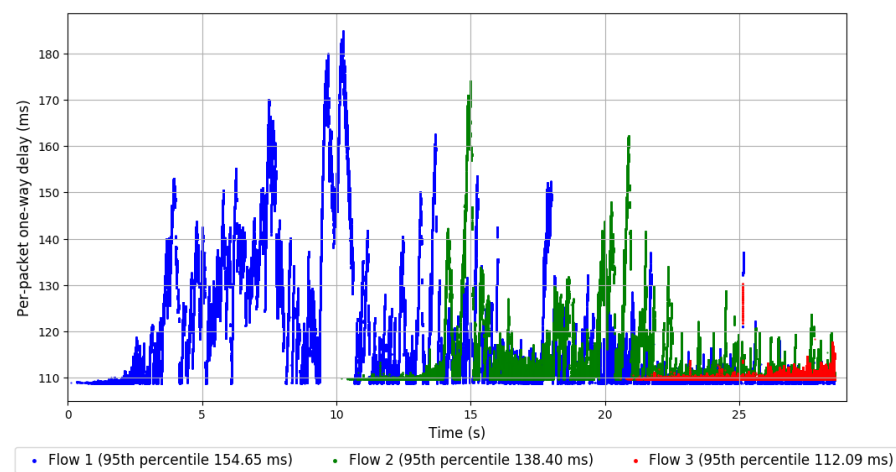
Run 3: Report of Indigo-MusesC3 — Data Link

```
Run 4: Statistics of Indigo-MusesC3

Start at: 2019-02-05 08:02:57
End at: 2019-02-05 08:03:27
Local clock offset: -0.925 ms
Remote clock offset: 0.015 ms


# Below is generated by plot.py at 2019-02-05 10:17:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 774.53 Mbit/s
95th percentile per-packet one-way delay: 124.581 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 458.37 Mbit/s
95th percentile per-packet one-way delay: 121.818 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 382.77 Mbit/s
95th percentile per-packet one-way delay: 136.612 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 251.25 Mbit/s
95th percentile per-packet one-way delay: 120.503 ms
Loss rate: 0.00%
```
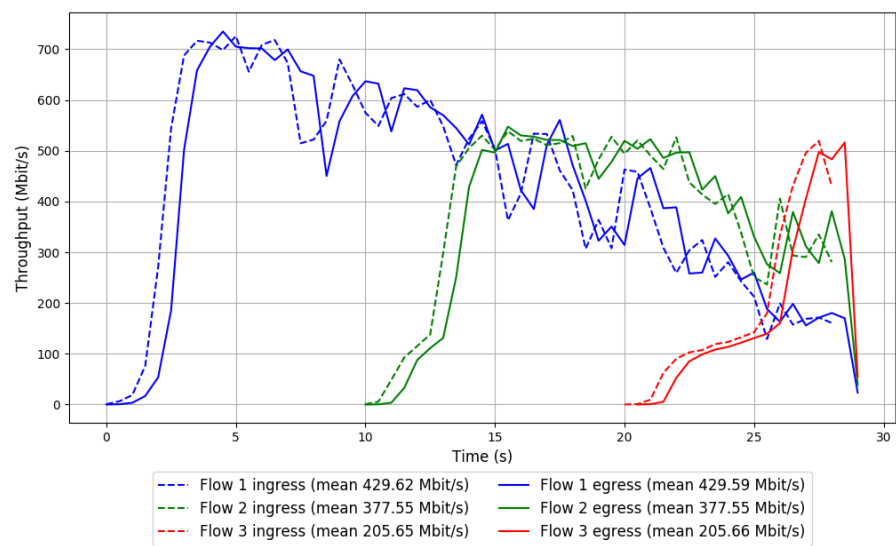
Run 4: Report of Indigo-MusesC3 — Data Link

```
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-02-05 08:40:43
End at: 2019-02-05 08:41:13
Local clock offset: 0.59 ms
Remote clock offset: -0.159 ms


# Below is generated by plot.py at 2019-02-05 10:21:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 790.97 Mbit/s
95th percentile per-packet one-way delay: 114.113 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 468.70 Mbit/s
95th percentile per-packet one-way delay: 113.785 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 375.85 Mbit/s
95th percentile per-packet one-way delay: 113.765 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 291.69 Mbit/s
95th percentile per-packet one-way delay: 115.178 ms
Loss rate: 0.04%
```
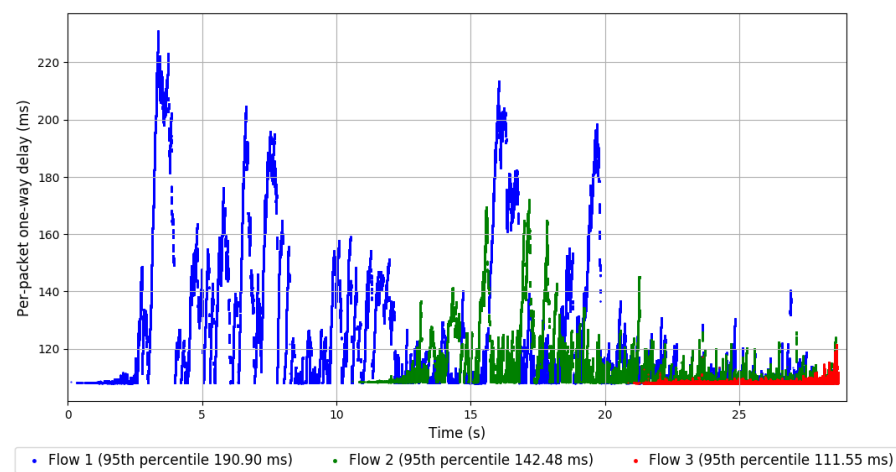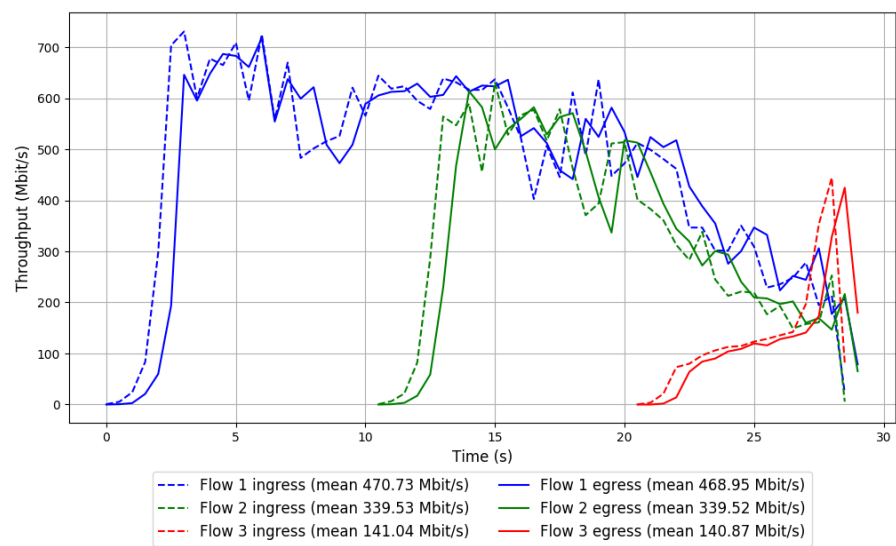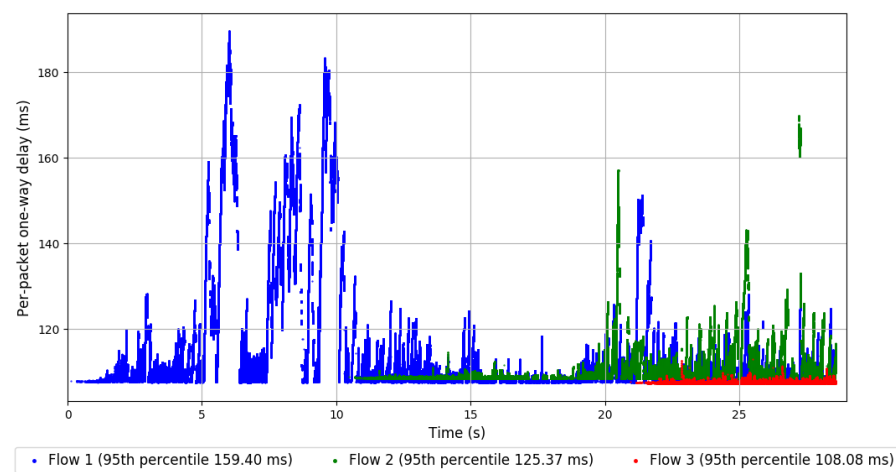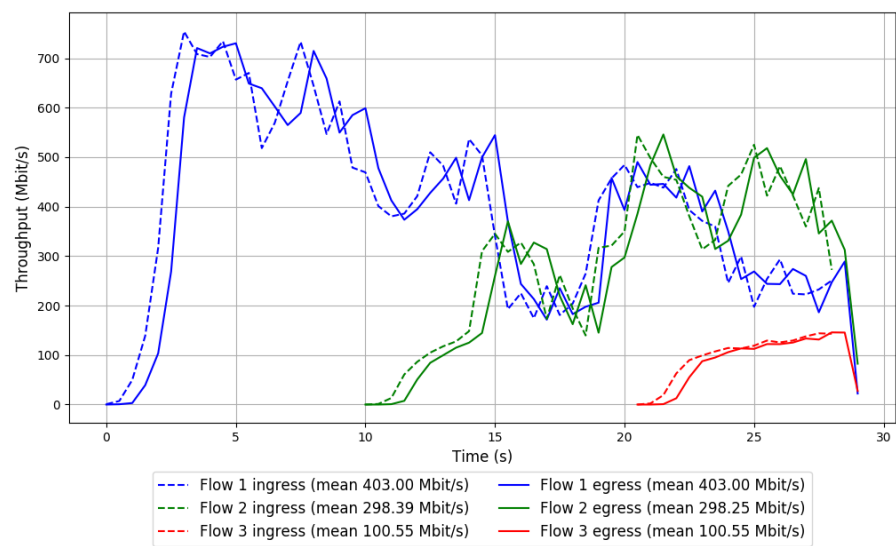
Run 5: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 468.61 Mbit/s)   Flow 1 egress (mean 468.70 Mbit/s)
Flow 2 ingress (mean 375.78 Mbit/s)   Flow 2 egress (mean 375.85 Mbit/s)
Flow 3 ingress (mean 291.80 Mbit/s)   Flow 3 egress (mean 291.69 Mbit/s)

Flow 1 (95th percentile 113.78 ms)   Flow 2 (95th percentile 113.77 ms)   Flow 3 (95th percentile 115.18 ms)

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```
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-02-05 06:14:43
End at: 2019-02-05 06:15:13
Local clock offset: -0.475 ms
Remote clock offset: 0.1 ms


# Below is generated by plot.py at 2019-02-05 10:21:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 730.80 Mbit/s
95th percentile per-packet one-way delay: 149.726 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 429.59 Mbit/s
95th percentile per-packet one-way delay: 154.652 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 377.55 Mbit/s
95th percentile per-packet one-way delay: 138.395 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 205.66 Mbit/s
95th percentile per-packet one-way delay: 112.087 ms
Loss rate: 0.00%
```
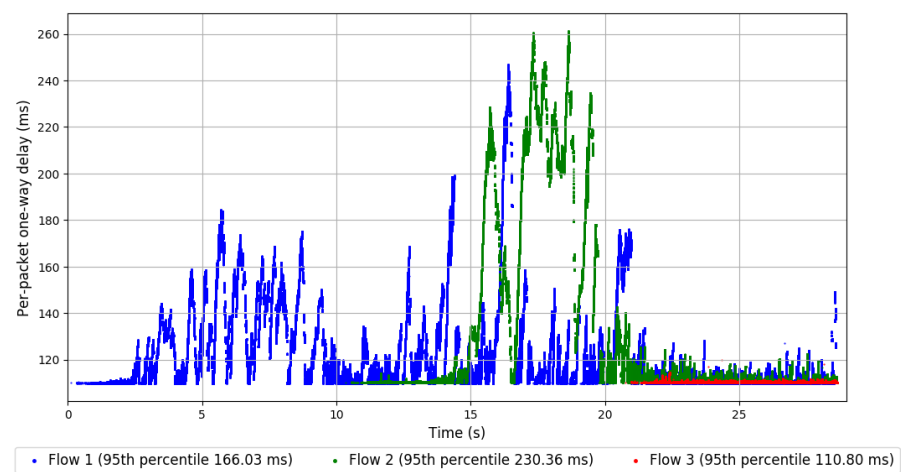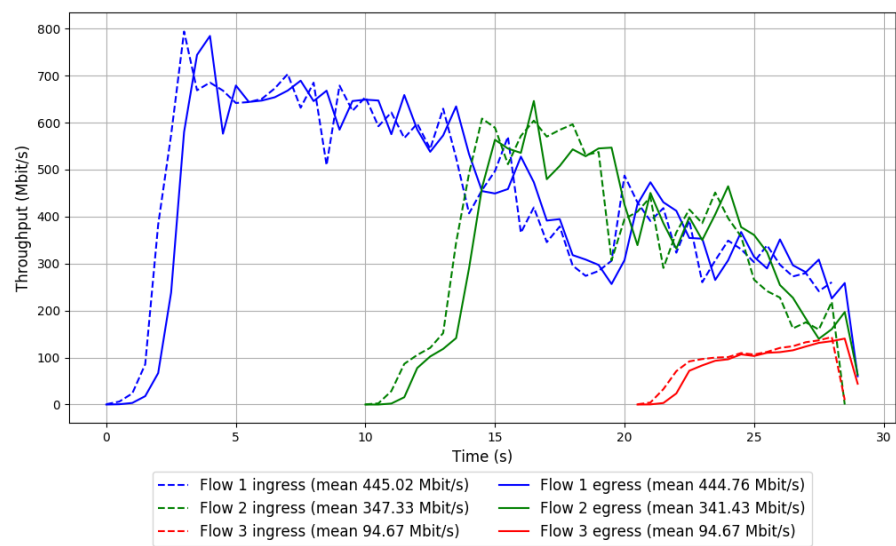
Run 1: Report of Indigo-MusesC5 — Data Link

```
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-02-05 06:52:40
End at: 2019-02-05 06:53:10
Local clock offset: 1.012 ms
Remote clock offset: 0.019 ms

# Below is generated by plot.py at 2019-02-05 10:21:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 722.26 Mbit/s
95th percentile per-packet one-way delay: 181.113 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 468.95 Mbit/s
95th percentile per-packet one-way delay: 190.897 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 339.52 Mbit/s
95th percentile per-packet one-way delay: 142.483 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 140.87 Mbit/s
95th percentile per-packet one-way delay: 111.552 ms
Loss rate: 0.11%
```
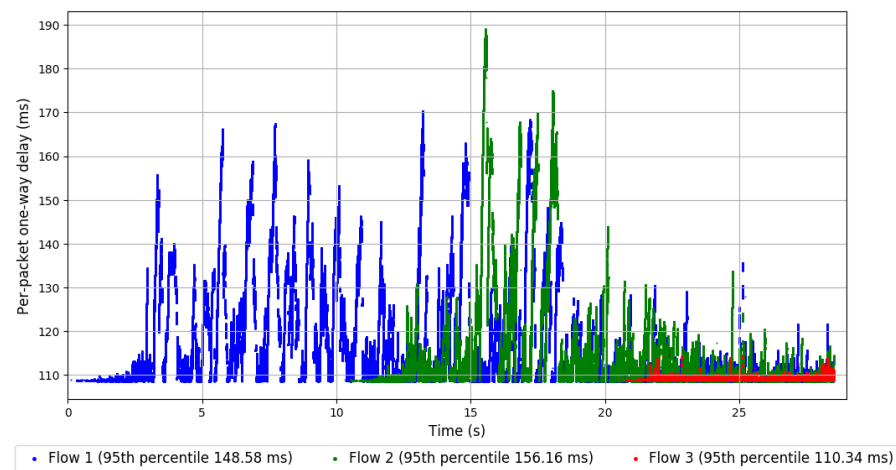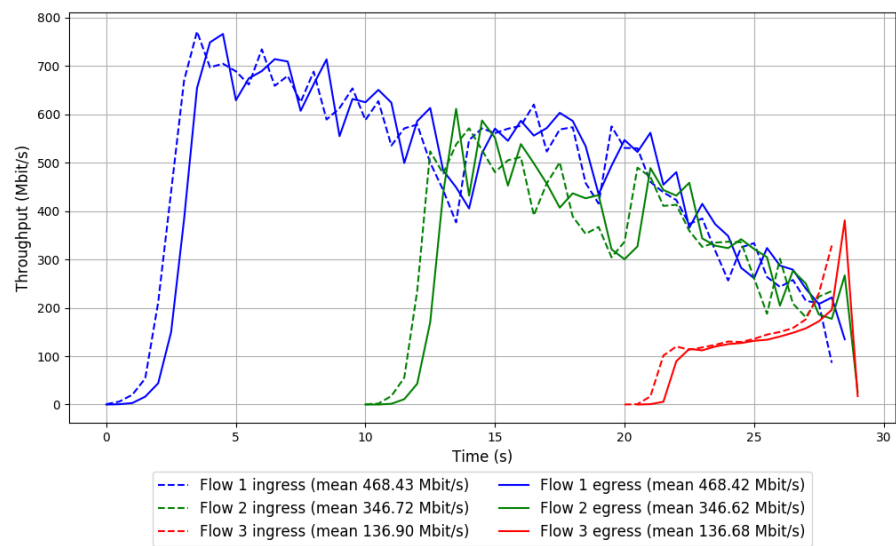
Run 2: Report of Indigo-MusesC5 — Data Link

```
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-02-05 07:30:52
End at: 2019-02-05 07:31:22
Local clock offset: 0.592 ms
Remote clock offset: -0.383 ms


# Below is generated by plot.py at 2019-02-05 10:21:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 619.38 Mbit/s
95th percentile per-packet one-way delay: 155.078 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 403.00 Mbit/s
95th percentile per-packet one-way delay: 159.399 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 298.25 Mbit/s
95th percentile per-packet one-way delay: 125.374 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 100.55 Mbit/s
95th percentile per-packet one-way delay: 108.080 ms
Loss rate: 0.00%
```
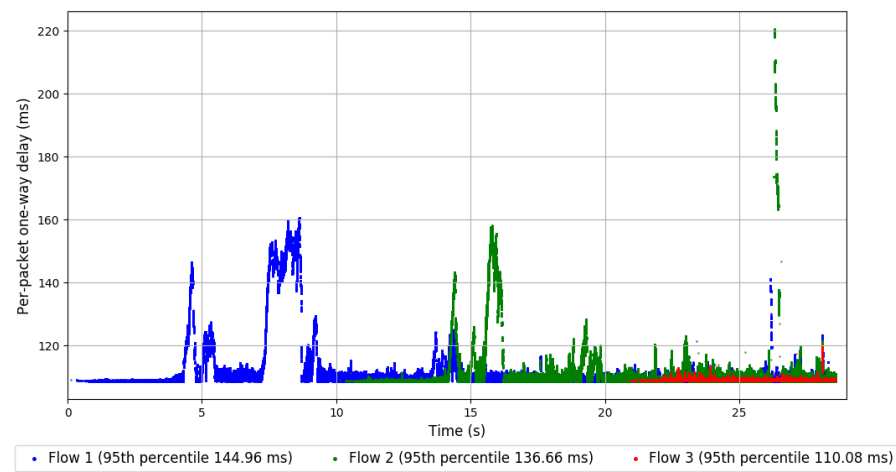
Run 3: Report of Indigo-MusesC5 — Data Link

- - - - Flow 1 ingress (mean 403.00 Mbit/s) ——— Flow 1 egress (mean 403.00 Mbit/s)
- - - - Flow 2 ingress (mean 298.39 Mbit/s) ——— Flow 2 egress (mean 298.25 Mbit/s)
- - - - Flow 3 ingress (mean 100.55 Mbit/s) ——— Flow 3 egress (mean 100.55 Mbit/s)

- Flow 1 (95th percentile 159.40 ms)   • Flow 2 (95th percentile 125.37 ms)   • Flow 3 (95th percentile 108.08 ms)

```
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-02-05 08:09:05
End at: 2019-02-05 08:09:35
Local clock offset: -0.763 ms
Remote clock offset: 0.022 ms


# Below is generated by plot.py at 2019-02-05 10:23:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 688.99 Mbit/s
95th percentile per-packet one-way delay: 212.201 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 444.76 Mbit/s
95th percentile per-packet one-way delay: 166.032 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 341.43 Mbit/s
95th percentile per-packet one-way delay: 230.364 ms
Loss rate: 1.70%
-- Flow 3:
Average throughput: 94.67 Mbit/s
95th percentile per-packet one-way delay: 110.797 ms
Loss rate: 0.00%
```
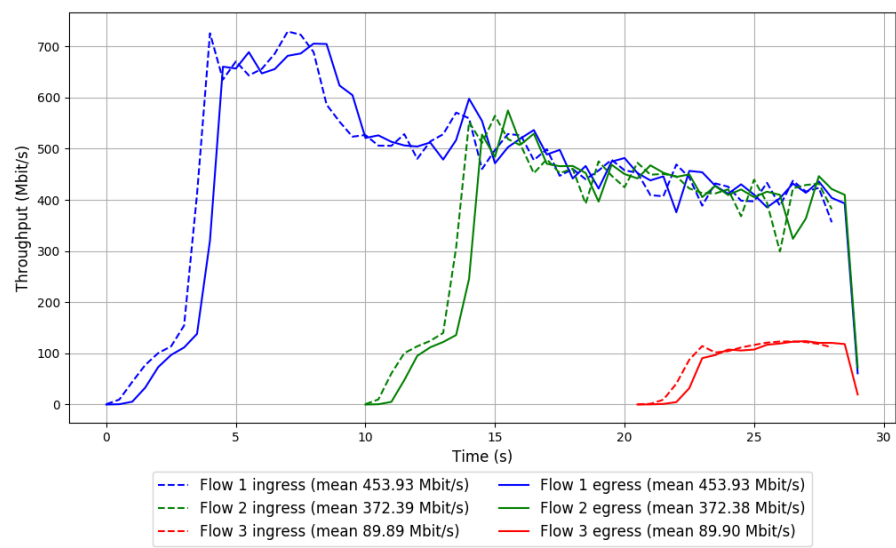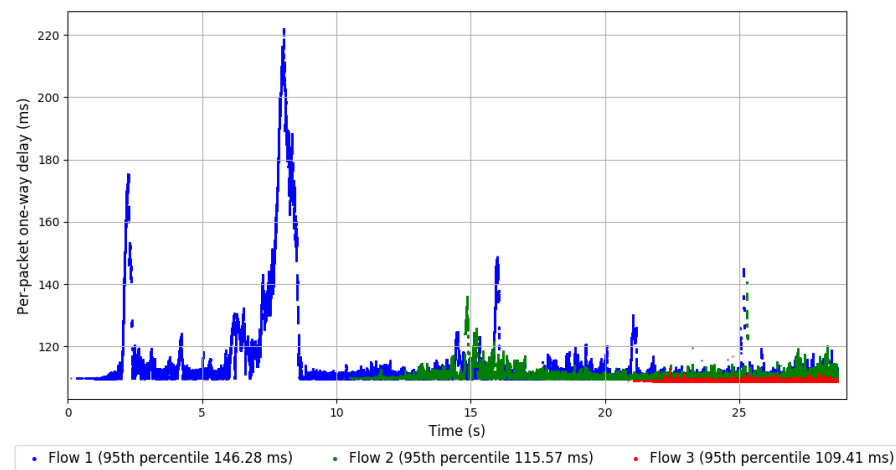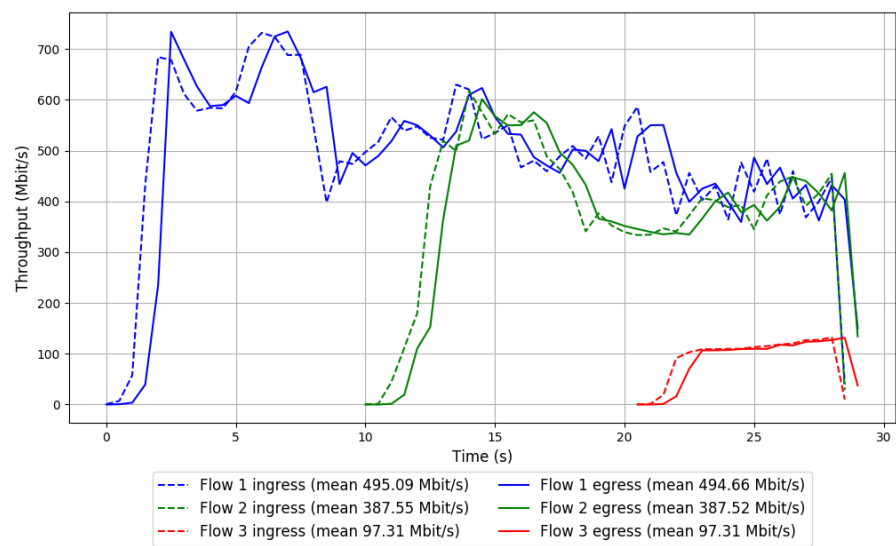
Run 4: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 445.02 Mbit/s)   Flow 1 egress (mean 444.76 Mbit/s)
Flow 2 ingress (mean 347.33 Mbit/s)   Flow 2 egress (mean 341.43 Mbit/s)
Flow 3 ingress (mean 94.67 Mbit/s)   Flow 3 egress (mean 94.67 Mbit/s)

Flow 1 (95th percentile 166.03 ms)   Flow 2 (95th percentile 230.36 ms)   Flow 3 (95th percentile 110.80 ms)
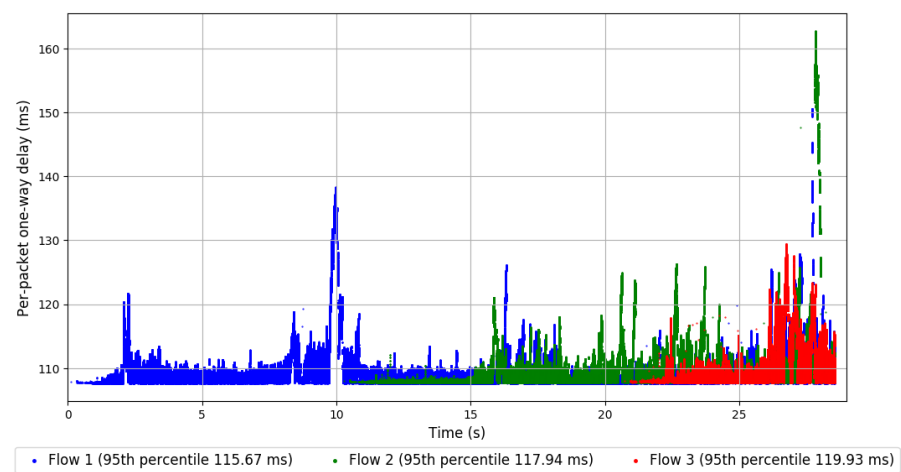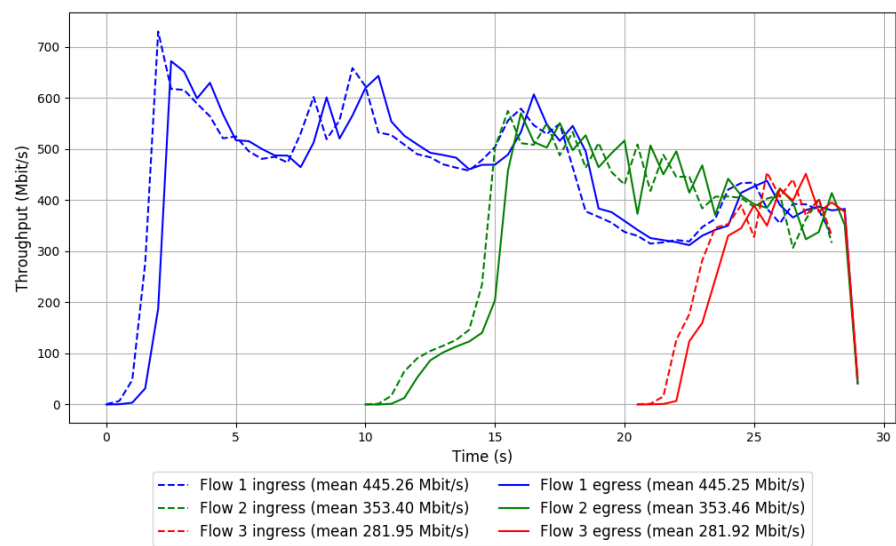
```
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-02-05 08:46:56
End at: 2019-02-05 08:47:26
Local clock offset: 0.343 ms
Remote clock offset: -0.042 ms


# Below is generated by plot.py at 2019-02-05 10:23:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 728.09 Mbit/s
95th percentile per-packet one-way delay: 150.019 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 468.42 Mbit/s
95th percentile per-packet one-way delay: 148.577 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 346.62 Mbit/s
95th percentile per-packet one-way delay: 156.165 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 136.68 Mbit/s
95th percentile per-packet one-way delay: 110.336 ms
Loss rate: 0.16%
```

Run 5: Report of Indigo-MusesC5 — Data Link

- --- Flow 1 ingress (mean 468.43 Mbit/s)   — Flow 1 egress (mean 468.42 Mbit/s)
- --- Flow 2 ingress (mean 346.72 Mbit/s)   — Flow 2 egress (mean 346.62 Mbit/s)
- --- Flow 3 ingress (mean 136.90 Mbit/s)   — Flow 3 egress (mean 136.68 Mbit/s)

- Flow 1 (95th percentile 148.58 ms)   • Flow 2 (95th percentile 156.16 ms)   • Flow 3 (95th percentile 110.34 ms)

```
Run 1: Statistics of Indigo-MusesD

Start at: 2019-02-05 06:04:01
End at: 2019-02-05 06:04:31
Local clock offset: 0.399 ms
Remote clock offset: 0.126 ms


# Below is generated by plot.py at 2019-02-05 10:28:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 719.92 Mbit/s
95th percentile per-packet one-way delay: 142.372 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 453.93 Mbit/s
95th percentile per-packet one-way delay: 144.956 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 372.38 Mbit/s
95th percentile per-packet one-way delay: 136.655 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 89.90 Mbit/s
95th percentile per-packet one-way delay: 110.078 ms
Loss rate: 0.00%
```
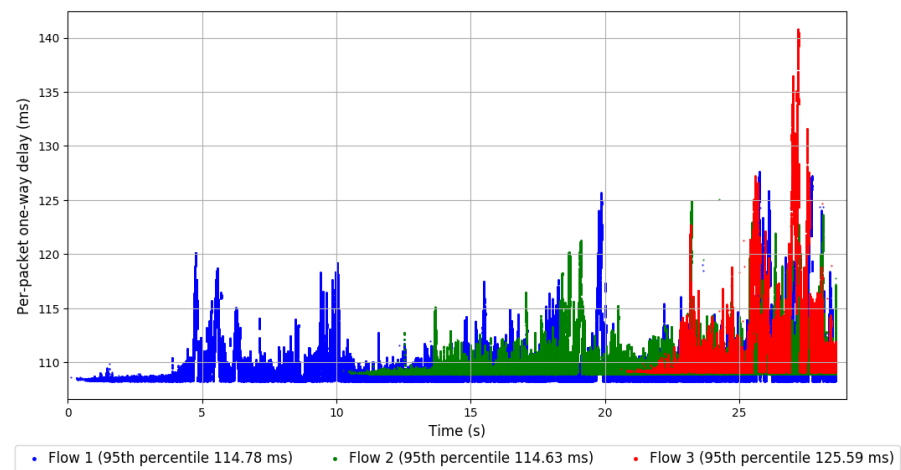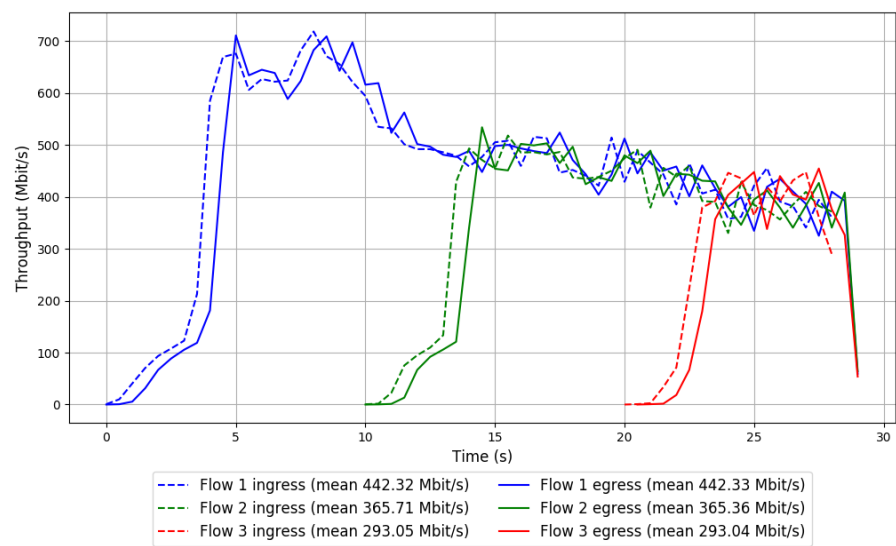
Run 1: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 453.93 Mbit/s) --- Flow 1 egress (mean 453.93 Mbit/s)
Flow 2 ingress (mean 372.39 Mbit/s) --- Flow 2 egress (mean 372.38 Mbit/s)
Flow 3 ingress (mean 89.89 Mbit/s) --- Flow 3 egress (mean 89.90 Mbit/s)

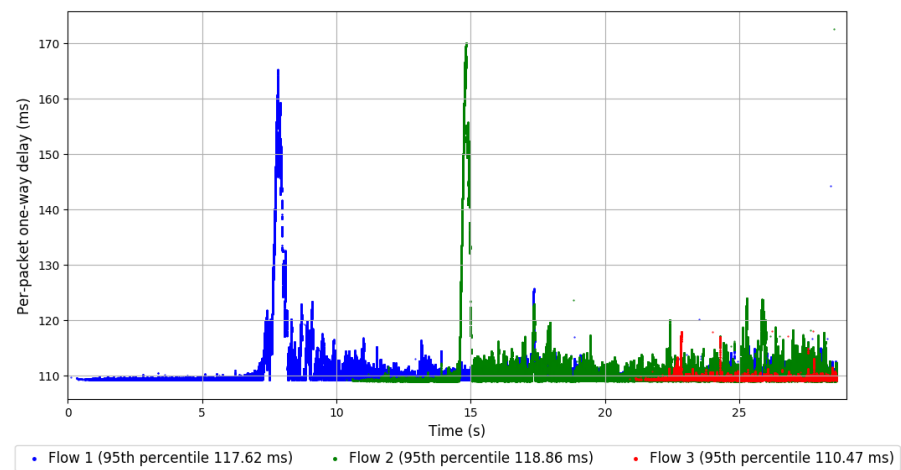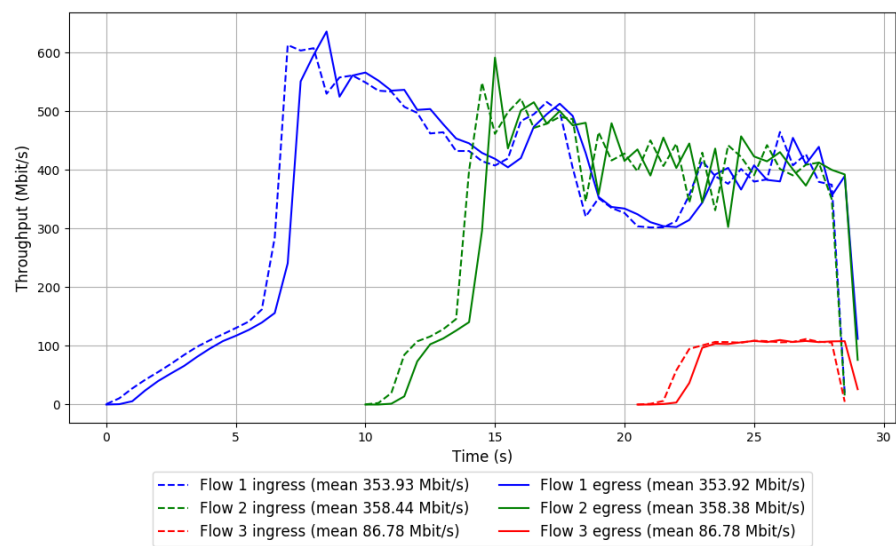Flow 1 (95th percentile 144.96 ms) • Flow 2 (95th percentile 136.66 ms) • Flow 3 (95th percentile 110.08 ms)

```
Run 2: Statistics of Indigo-MusesD

Start at: 2019-02-05 06:42:02
End at: 2019-02-05 06:42:32
Local clock offset: -0.06 ms
Remote clock offset: 0.358 ms


# Below is generated by plot.py at 2019-02-05 10:31:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 770.50 Mbit/s
95th percentile per-packet one-way delay: 133.197 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 494.66 Mbit/s
95th percentile per-packet one-way delay: 146.280 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 387.52 Mbit/s
95th percentile per-packet one-way delay: 115.569 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 97.31 Mbit/s
95th percentile per-packet one-way delay: 109.409 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesD — Data Link

```
Run 3: Statistics of Indigo-MusesD

Start at: 2019-02-05 07:20:04
End at: 2019-02-05 07:20:34
Local clock offset: 1.414 ms
Remote clock offset: -0.008 ms


# Below is generated by plot.py at 2019-02-05 10:33:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 750.12 Mbit/s
95th percentile per-packet one-way delay: 117.368 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 445.25 Mbit/s
95th percentile per-packet one-way delay: 115.673 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 353.46 Mbit/s
95th percentile per-packet one-way delay: 117.935 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 281.92 Mbit/s
95th percentile per-packet one-way delay: 119.930 ms
Loss rate: 0.00%
```
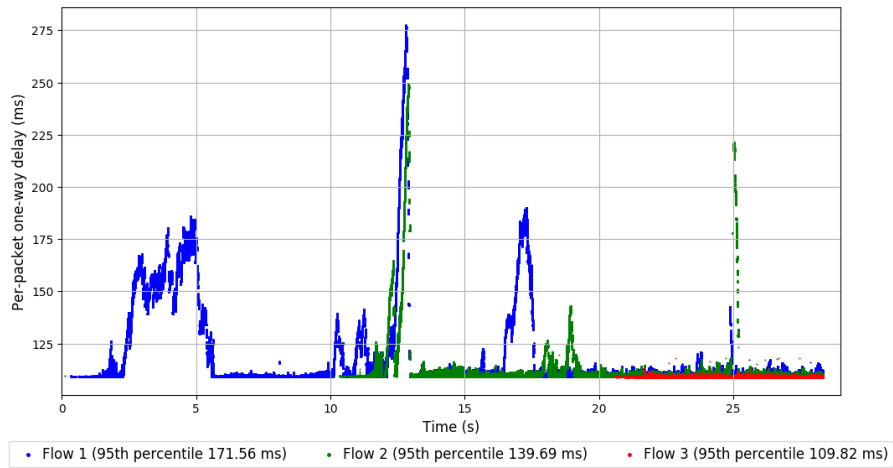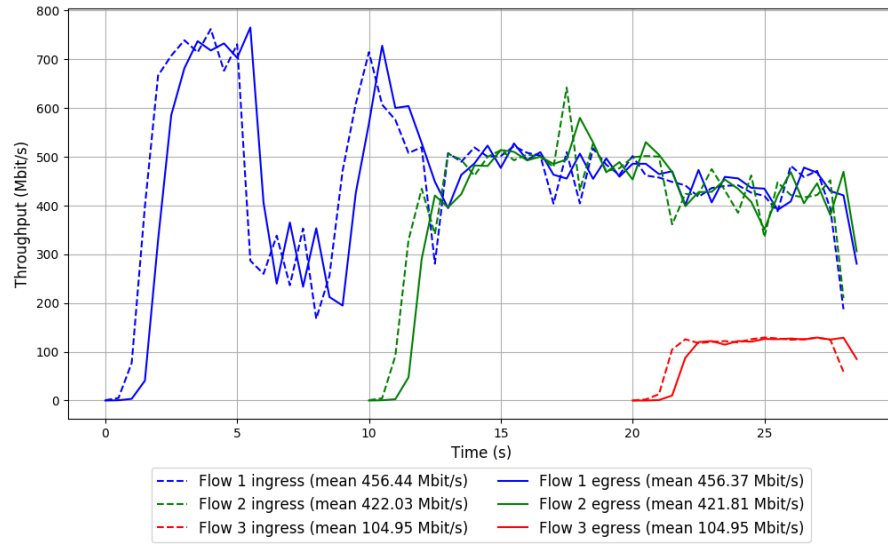
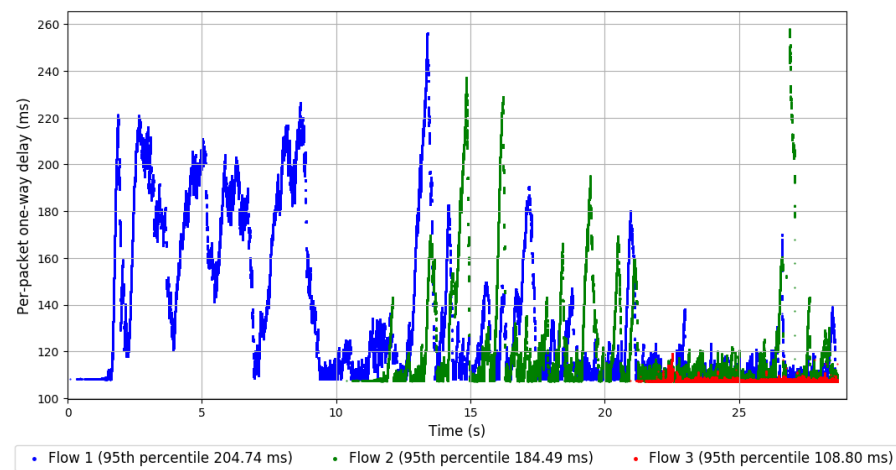Run 3: Report of Indigo-MusesD — Data Link

```
Run 4: Statistics of Indigo-MusesD

Start at: 2019-02-05 07:58:26
End at: 2019-02-05 07:58:56
Local clock offset: 0.004 ms
Remote clock offset: 0.006 ms


# Below is generated by plot.py at 2019-02-05 10:33:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 759.78 Mbit/s
95th percentile per-packet one-way delay: 116.109 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 442.33 Mbit/s
95th percentile per-packet one-way delay: 114.780 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 365.36 Mbit/s
95th percentile per-packet one-way delay: 114.629 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 293.04 Mbit/s
95th percentile per-packet one-way delay: 125.589 ms
Loss rate: 0.00%
```
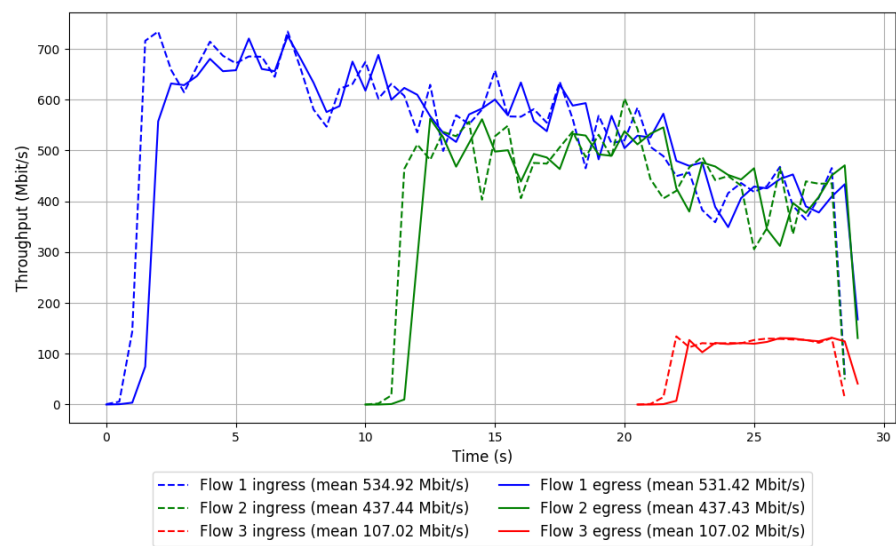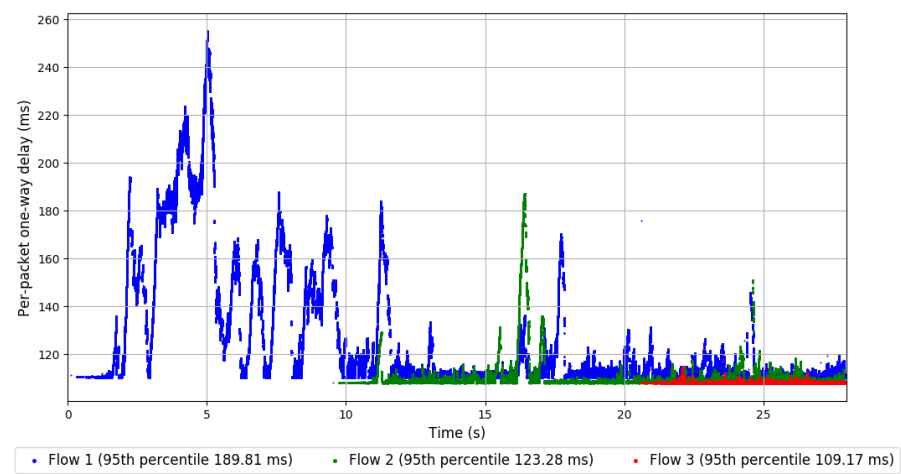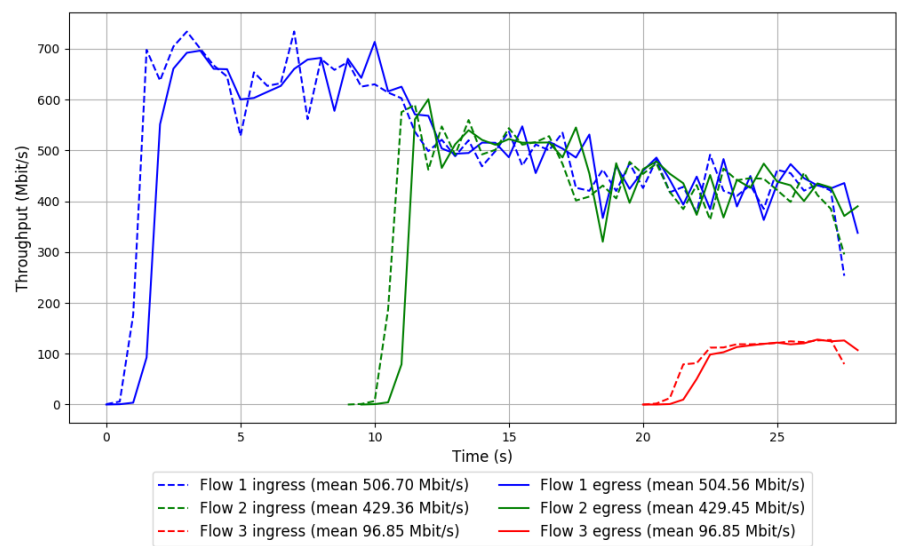
Run 4: Report of Indigo-MusesD — Data Link

```
Run 5: Statistics of Indigo-MusesD

Start at: 2019-02-05 08:36:19
End at: 2019-02-05 08:36:49
Local clock offset: -0.067 ms
Remote clock offset: -0.158 ms


# Below is generated by plot.py at 2019-02-05 10:33:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 606.87 Mbit/s
95th percentile per-packet one-way delay: 117.735 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 353.92 Mbit/s
95th percentile per-packet one-way delay: 117.624 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 358.38 Mbit/s
95th percentile per-packet one-way delay: 118.856 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 86.78 Mbit/s
95th percentile per-packet one-way delay: 110.465 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesD — Data Link

- - - - Flow 1 ingress (mean 353.93 Mbit/s) ——— Flow 1 egress (mean 353.92 Mbit/s)
- - - - Flow 2 ingress (mean 358.44 Mbit/s) ——— Flow 2 egress (mean 358.38 Mbit/s)
- - - - Flow 3 ingress (mean 86.78 Mbit/s) ——— Flow 3 egress (mean 86.78 Mbit/s)

• Flow 1 (95th percentile 117.62 ms)   • Flow 2 (95th percentile 118.86 ms)   • Flow 3 (95th percentile 110.47 ms)

```
Run 1: Statistics of Indigo-MusesT

Start at: 2019-02-05 05:54:26
End at: 2019-02-05 05:54:56
Local clock offset: 0.178 ms
Remote clock offset: 0.184 ms

# Below is generated by plot.py at 2019-02-05 10:35:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 758.00 Mbit/s
95th percentile per-packet one-way delay: 165.985 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 456.37 Mbit/s
95th percentile per-packet one-way delay: 171.559 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 421.81 Mbit/s
95th percentile per-packet one-way delay: 139.689 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 104.95 Mbit/s
95th percentile per-packet one-way delay: 109.823 ms
Loss rate: 0.00%
```
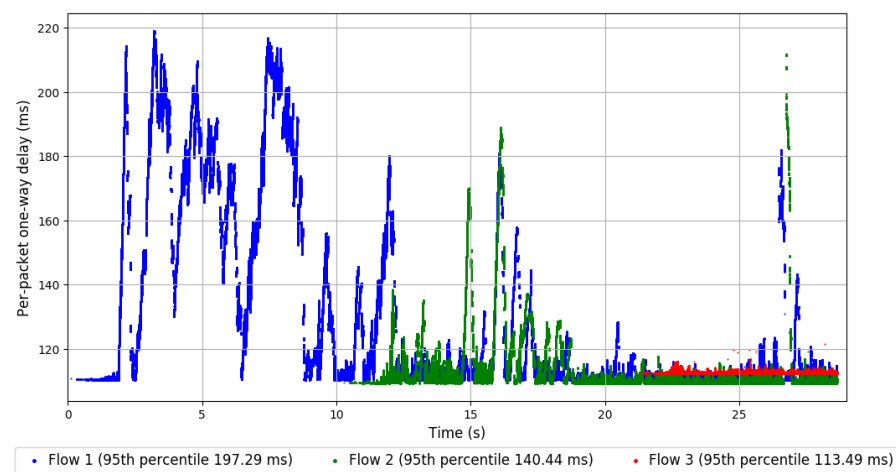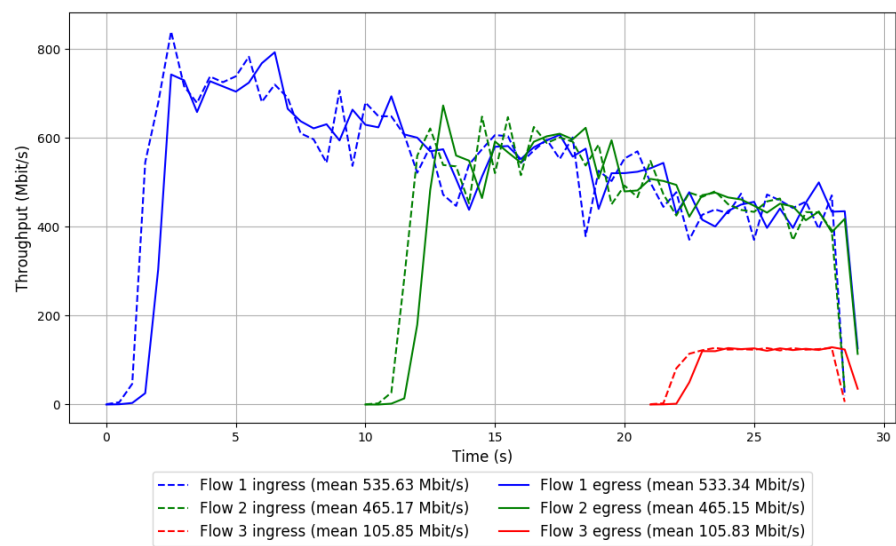
Run 1: Report of Indigo-MusesT — Data Link

```
Run 2: Statistics of Indigo-MusesT

Start at: 2019-02-05 06:32:18
End at: 2019-02-05 06:32:48
Local clock offset: 0.697 ms
Remote clock offset: -0.298 ms


# Below is generated by plot.py at 2019-02-05 10:38:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 840.17 Mbit/s
95th percentile per-packet one-way delay: 202.130 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 531.42 Mbit/s
95th percentile per-packet one-way delay: 204.737 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 437.43 Mbit/s
95th percentile per-packet one-way delay: 184.494 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 107.02 Mbit/s
95th percentile per-packet one-way delay: 108.795 ms
Loss rate: 0.00%
```
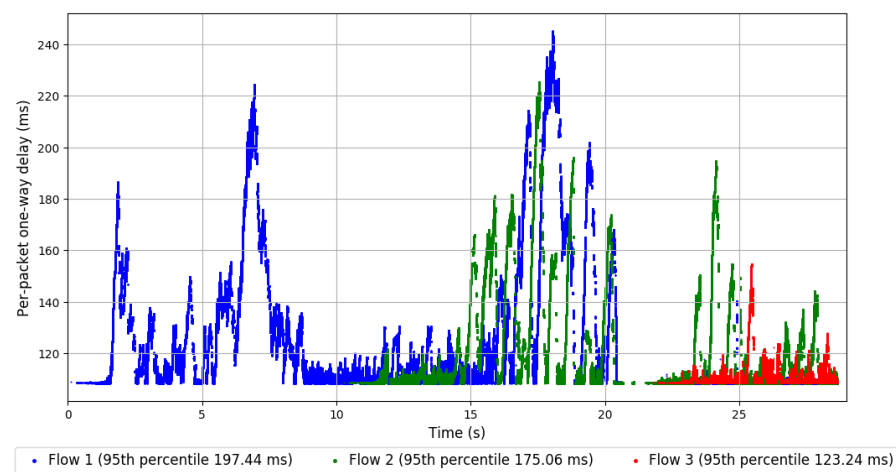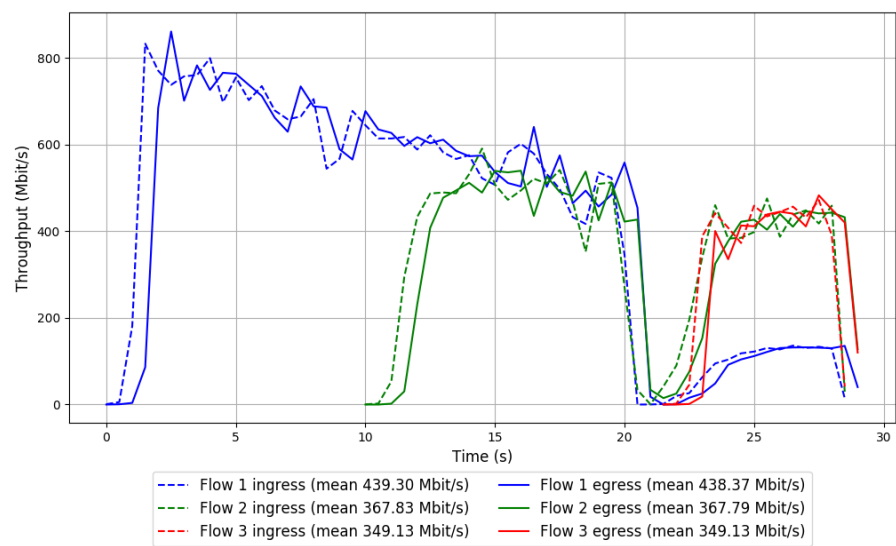
Run 2: Report of Indigo-MusesT — Data Link

```
Run 3: Statistics of Indigo-MusesT

Start at: 2019-02-05 07:10:06
End at: 2019-02-05 07:10:36
Local clock offset: 1.067 ms
Remote clock offset: -0.041 ms


# Below is generated by plot.py at 2019-02-05 10:38:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 814.76 Mbit/s
95th percentile per-packet one-way delay: 181.410 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 504.56 Mbit/s
95th percentile per-packet one-way delay: 189.808 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 429.45 Mbit/s
95th percentile per-packet one-way delay: 123.282 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 96.85 Mbit/s
95th percentile per-packet one-way delay: 109.165 ms
Loss rate: 0.00%
```

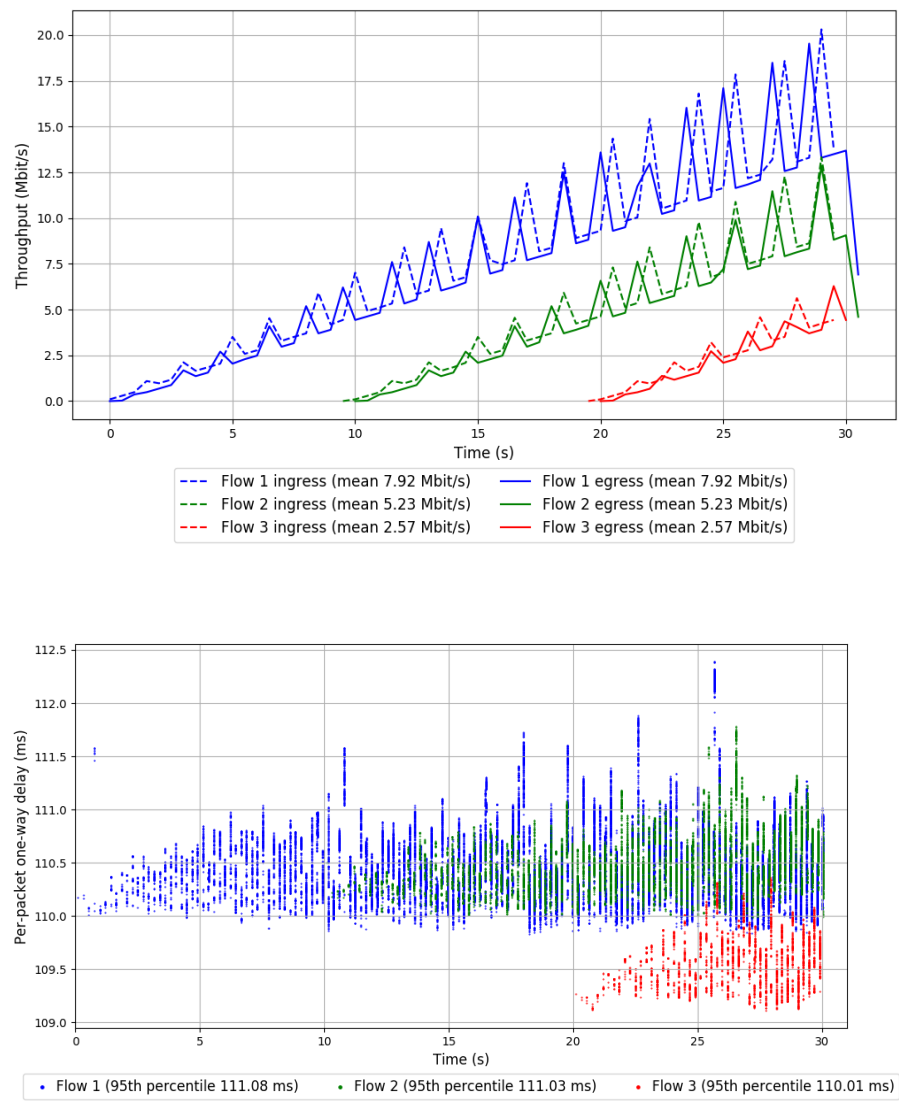Run 3: Report of Indigo-MusesT — Data Link

Flow 1 ingress (mean 506.70 Mbit/s) Flow 1 egress (mean 504.56 Mbit/s)
Flow 2 ingress (mean 429.36 Mbit/s) Flow 2 egress (mean 429.45 Mbit/s)
Flow 3 ingress (mean 96.85 Mbit/s)   Flow 3 egress (mean 96.85 Mbit/s)

Flow 1 (95th percentile 189.81 ms)   Flow 2 (95th percentile 123.28 ms)   Flow 3 (95th percentile 109.17 ms)

```
Run 4: Statistics of Indigo-MusesT

Start at: 2019-02-05 07:48:43
End at: 2019-02-05 07:49:13
Local clock offset: -0.659 ms
Remote clock offset: 0.394 ms


# Below is generated by plot.py at 2019-02-05 10:43:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 859.97 Mbit/s
95th percentile per-packet one-way delay: 190.157 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 533.34 Mbit/s
95th percentile per-packet one-way delay: 197.292 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 465.15 Mbit/s
95th percentile per-packet one-way delay: 140.445 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 105.83 Mbit/s
95th percentile per-packet one-way delay: 113.490 ms
Loss rate: 0.03%
```
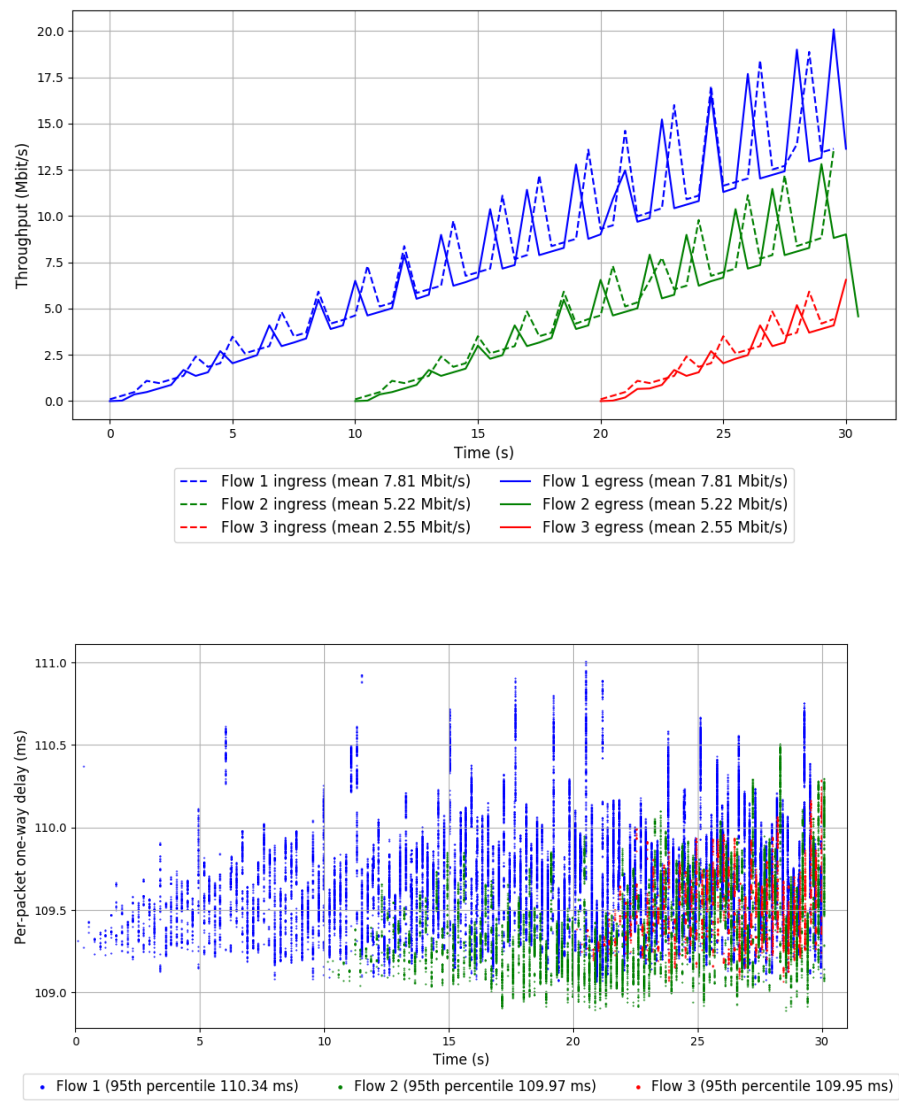
Run 4: Report of Indigo-MusesT — Data Link

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```
Run 5: Statistics of Indigo-MusesT

Start at: 2019-02-05 08:26:55
End at: 2019-02-05 08:27:25
Local clock offset: -0.198 ms
Remote clock offset: -0.114 ms


# Below is generated by plot.py at 2019-02-05 10:43:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 758.90 Mbit/s
95th percentile per-packet one-way delay: 185.312 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 438.37 Mbit/s
95th percentile per-packet one-way delay: 197.435 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 367.79 Mbit/s
95th percentile per-packet one-way delay: 175.058 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 349.13 Mbit/s
95th percentile per-packet one-way delay: 123.240 ms
Loss rate: 0.00%
```
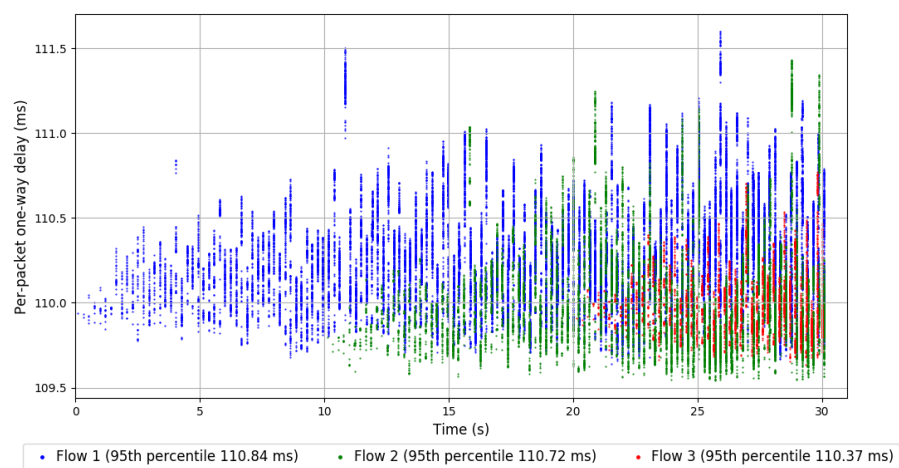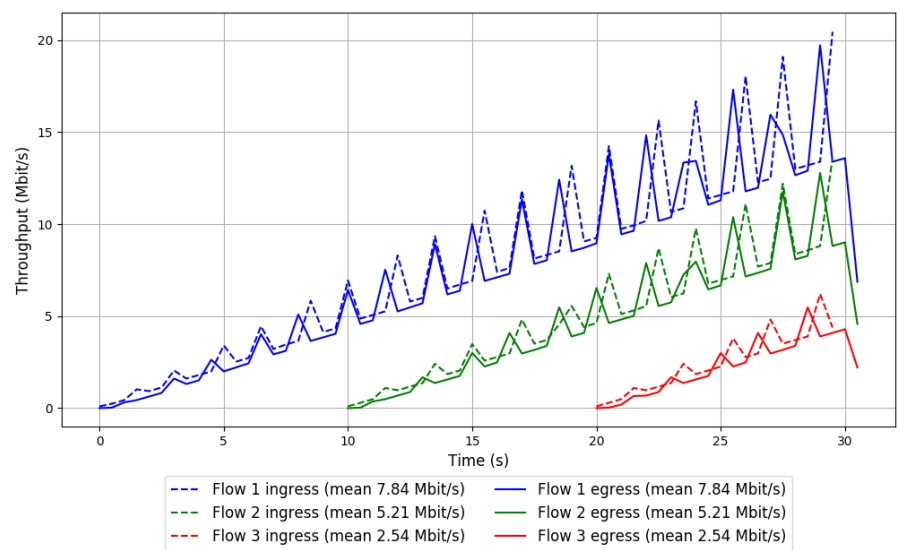
Run 5: Report of Indigo-MusesT — Data Link

Flow 1 ingress (mean 439.30 Mbit/s) Flow 1 egress (mean 438.37 Mbit/s)
Flow 2 ingress (mean 367.83 Mbit/s) Flow 2 egress (mean 367.79 Mbit/s)
Flow 3 ingress (mean 349.13 Mbit/s) Flow 3 egress (mean 349.13 Mbit/s)

Flow 1 (95th percentile 197.44 ms)   Flow 2 (95th percentile 175.06 ms)   Flow 3 (95th percentile 123.24 ms)

```
Run 1: Statistics of LEDBAT

Start at: 2019-02-05 05:56:22
End at: 2019-02-05 05:56:52
Local clock offset: -0.691 ms
Remote clock offset: 0.149 ms


# Below is generated by plot.py at 2019-02-05 10:43:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.24 Mbit/s
95th percentile per-packet one-way delay: 111.040 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.92 Mbit/s
95th percentile per-packet one-way delay: 111.078 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 5.23 Mbit/s
95th percentile per-packet one-way delay: 111.026 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.57 Mbit/s
95th percentile per-packet one-way delay: 110.012 ms
Loss rate: 0.00%
```
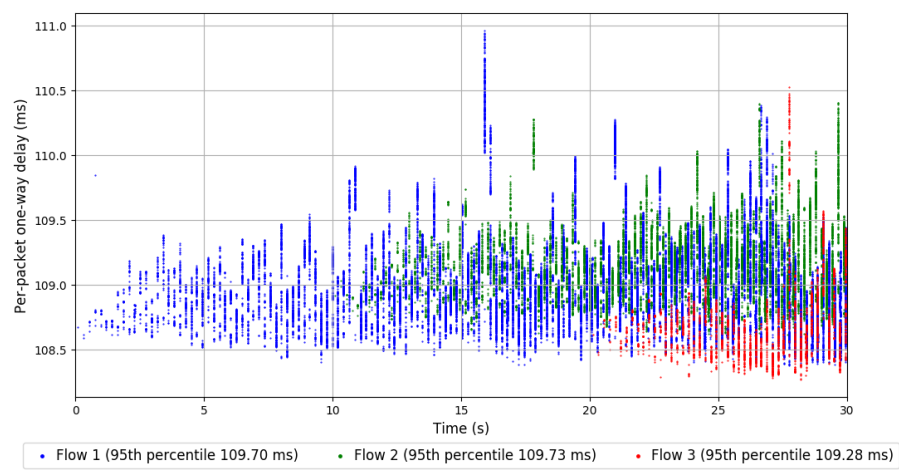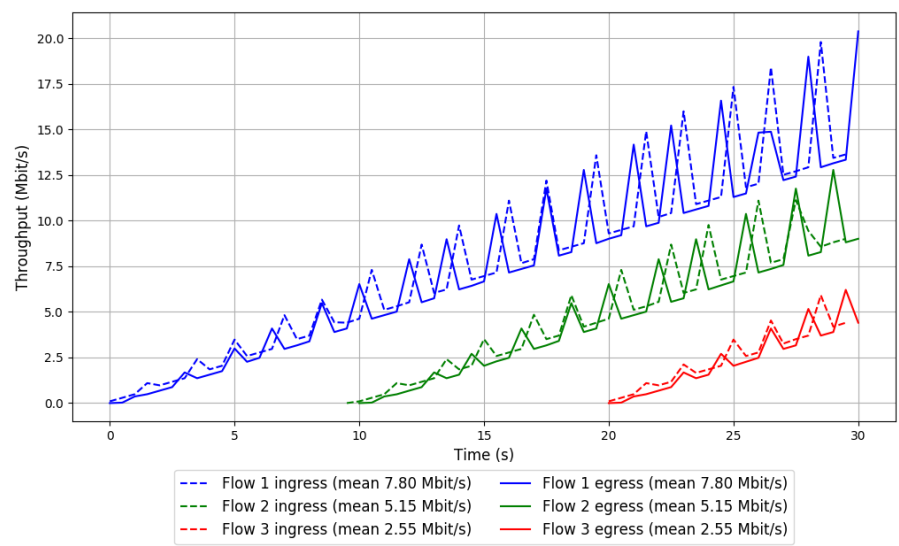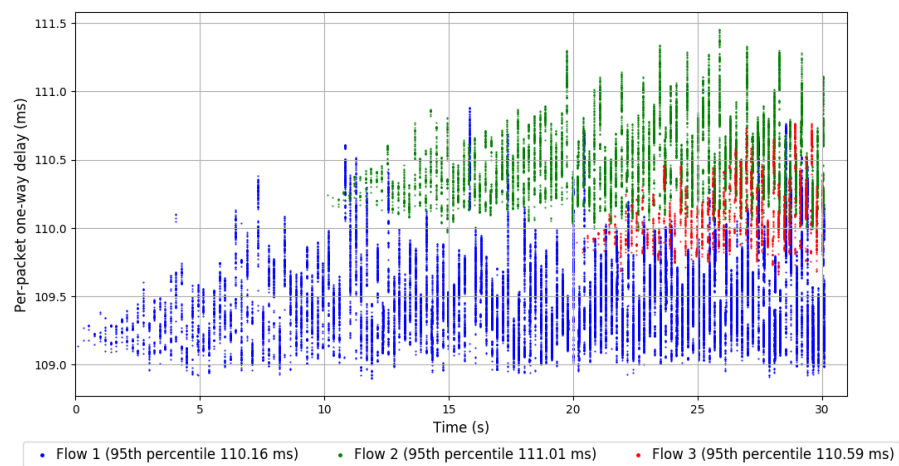
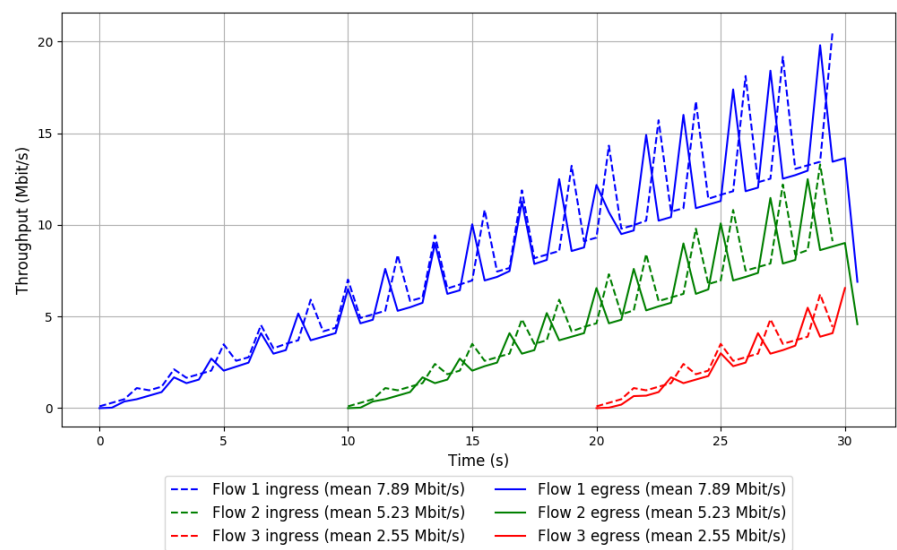# Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2019-02-05 06:34:22
End at: 2019-02-05 06:34:52
Local clock offset: 0.087 ms
Remote clock offset: 0.05 ms


# Below is generated by plot.py at 2019-02-05 10:43:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.09 Mbit/s
95th percentile per-packet one-way delay: 110.228 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.81 Mbit/s
95th percentile per-packet one-way delay: 110.345 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 5.22 Mbit/s
95th percentile per-packet one-way delay: 109.970 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.55 Mbit/s
95th percentile per-packet one-way delay: 109.949 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2019-02-05 07:12:06
End at: 2019-02-05 07:12:36
Local clock offset: -0.333 ms
Remote clock offset: 0.031 ms

# Below is generated by plot.py at 2019-02-05 10:43:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.14 Mbit/s
95th percentile per-packet one-way delay: 110.809 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.84 Mbit/s
95th percentile per-packet one-way delay: 110.843 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 5.21 Mbit/s
95th percentile per-packet one-way delay: 110.718 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.54 Mbit/s
95th percentile per-packet one-way delay: 110.374 ms
Loss rate: 0.00%
```
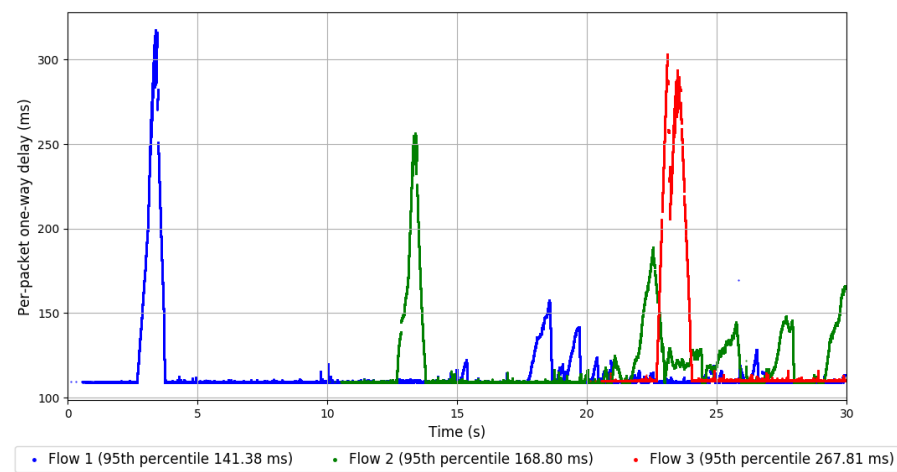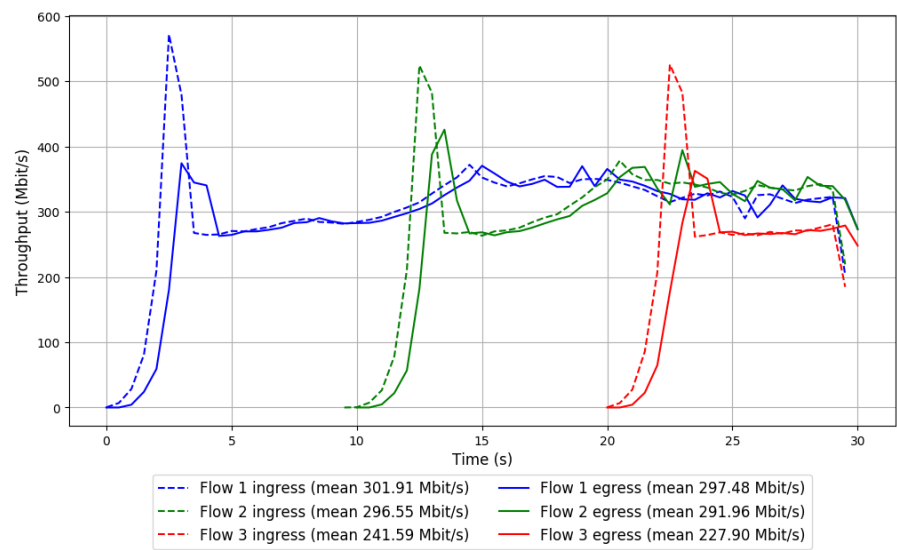
Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2019-02-05 07:50:46
End at: 2019-02-05 07:51:16
Local clock offset: 0.68 ms
Remote clock offset: 0.037 ms


# Below is generated by plot.py at 2019-02-05 10:43:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.05 Mbit/s
95th percentile per-packet one-way delay: 109.704 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.80 Mbit/s
95th percentile per-packet one-way delay: 109.701 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 5.15 Mbit/s
95th percentile per-packet one-way delay: 109.733 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.55 Mbit/s
95th percentile per-packet one-way delay: 109.285 ms
Loss rate: 0.00%
```

Run 4: Report of LEDBAT — Data Link

```
Run 5: Statistics of LEDBAT

Start at: 2019-02-05 08:28:54
End at: 2019-02-05 08:29:24
Local clock offset: -0.779 ms
Remote clock offset: -0.151 ms


# Below is generated by plot.py at 2019-02-05 10:43:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.20 Mbit/s
95th percentile per-packet one-way delay: 110.751 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.89 Mbit/s
95th percentile per-packet one-way delay: 110.157 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 5.23 Mbit/s
95th percentile per-packet one-way delay: 111.014 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.55 Mbit/s
95th percentile per-packet one-way delay: 110.586 ms
Loss rate: 0.00%
```
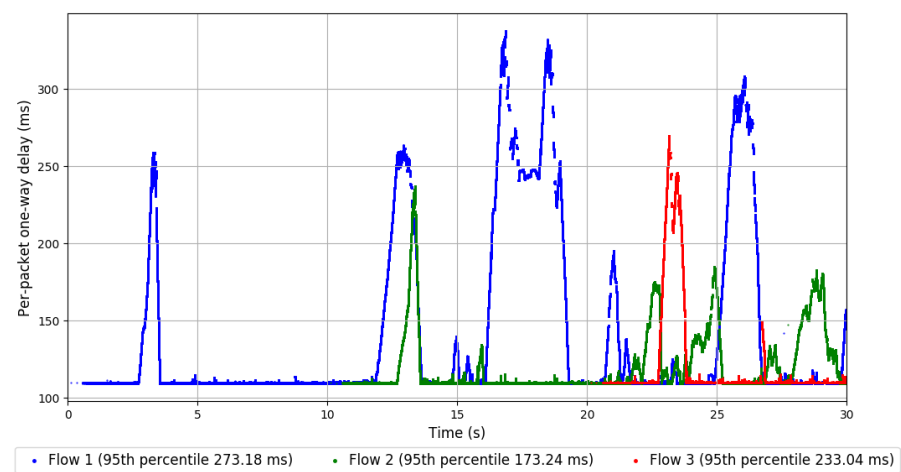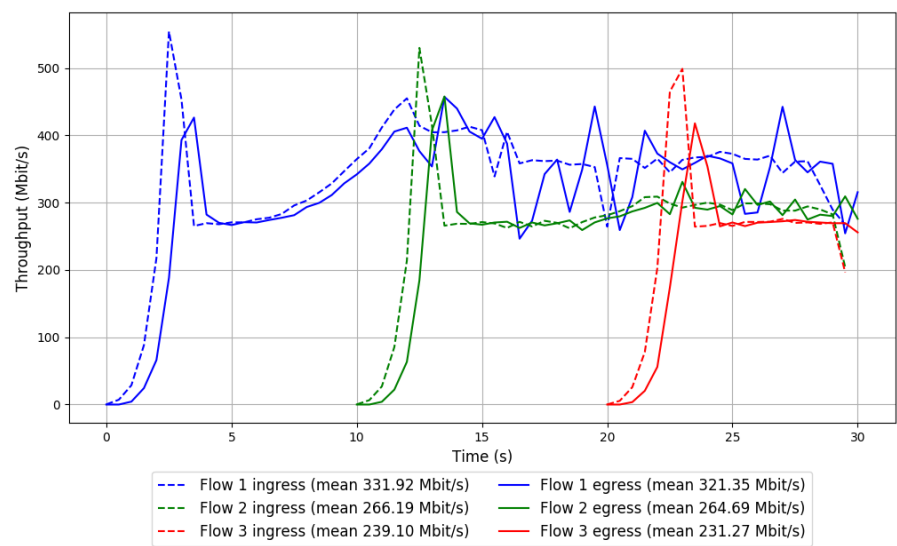
Run 5: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC-Allegro

Start at: 2019-02-05 06:10:30
End at: 2019-02-05 06:11:00
Local clock offset: -0.667 ms
Remote clock offset: 0.123 ms


# Below is generated by plot.py at 2019-02-05 10:52:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 566.87 Mbit/s
95th percentile per-packet one-way delay: 174.447 ms
Loss rate: 2.07%
-- Flow 1:
Average throughput: 297.48 Mbit/s
95th percentile per-packet one-way delay: 141.379 ms
Loss rate: 1.46%
-- Flow 2:
Average throughput: 291.96 Mbit/s
95th percentile per-packet one-way delay: 168.798 ms
Loss rate: 1.54%
-- Flow 3:
Average throughput: 227.90 Mbit/s
95th percentile per-packet one-way delay: 267.812 ms
Loss rate: 5.67%
```
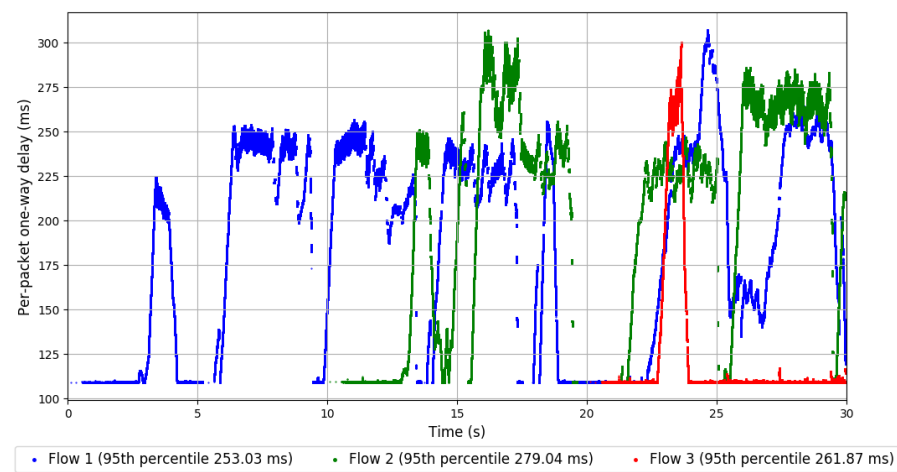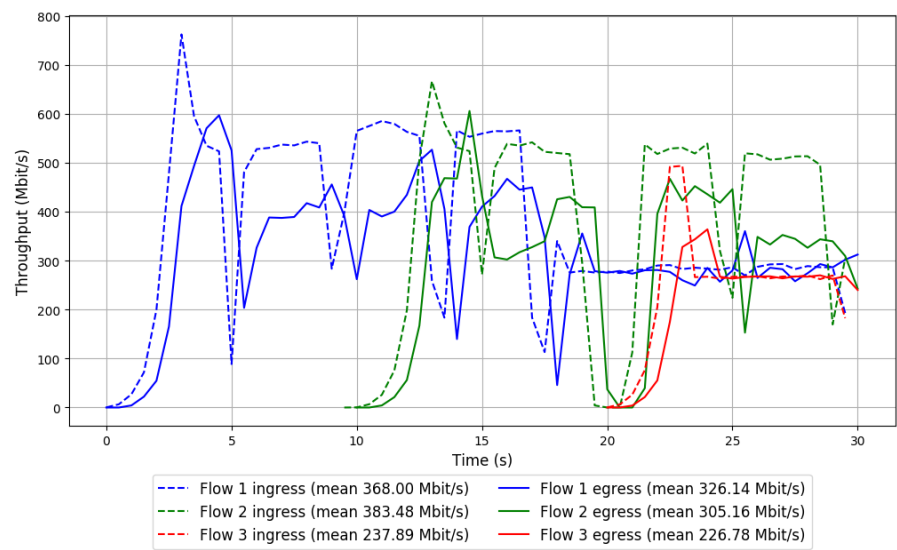
Run 1: Report of PCC-Allegro — Data Link

```
Run 2: Statistics of PCC-Allegro

Start at: 2019-02-05 06:48:32
End at: 2019-02-05 06:49:02
Local clock offset: -0.615 ms
Remote clock offset: 0.023 ms


# Below is generated by plot.py at 2019-02-05 10:53:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 573.49 Mbit/s
95th percentile per-packet one-way delay: 252.620 ms
Loss rate: 2.41%
-- Flow 1:
Average throughput: 321.35 Mbit/s
95th percentile per-packet one-way delay: 273.180 ms
Loss rate: 3.18%
-- Flow 2:
Average throughput: 264.69 Mbit/s
95th percentile per-packet one-way delay: 173.240 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 231.27 Mbit/s
95th percentile per-packet one-way delay: 233.039 ms
Loss rate: 3.28%
```
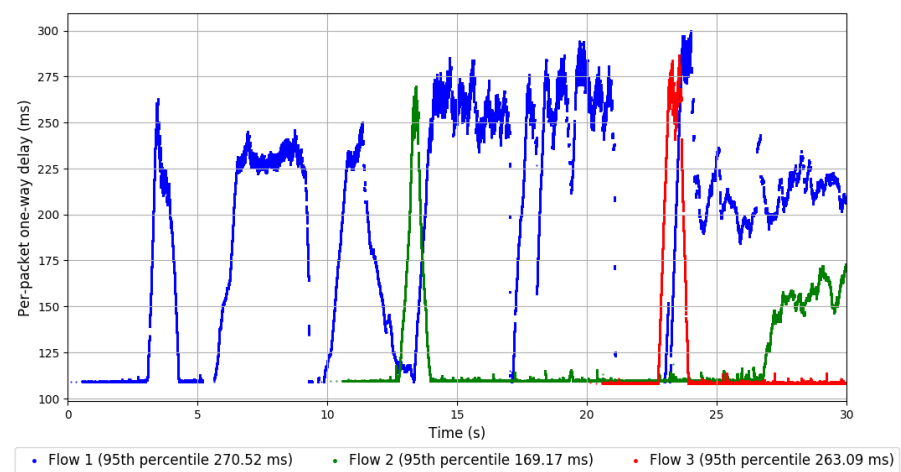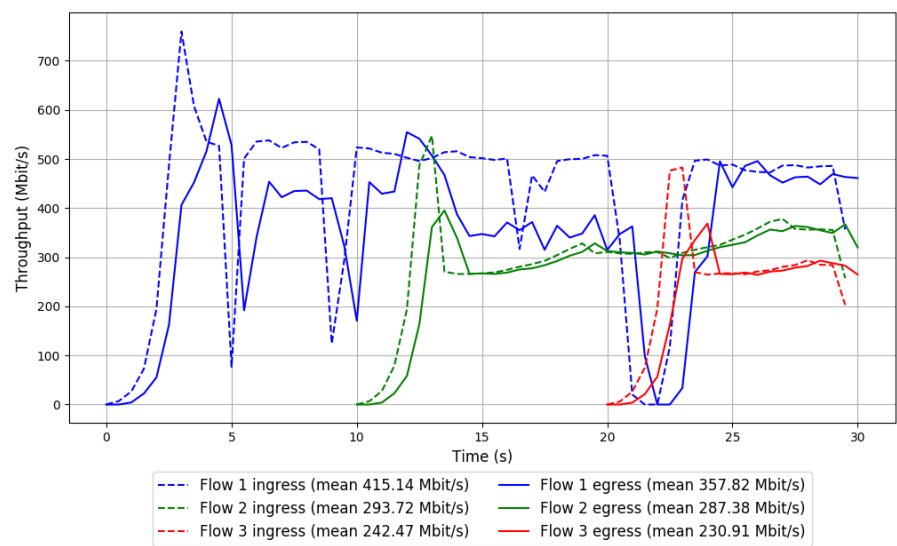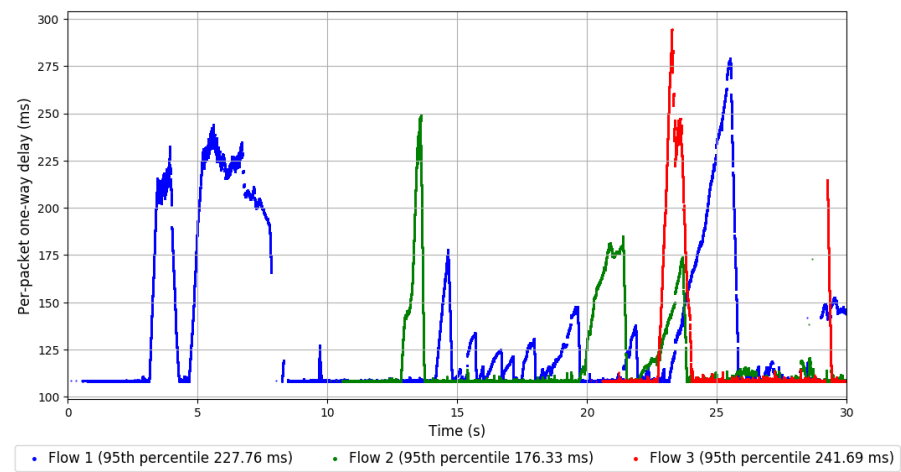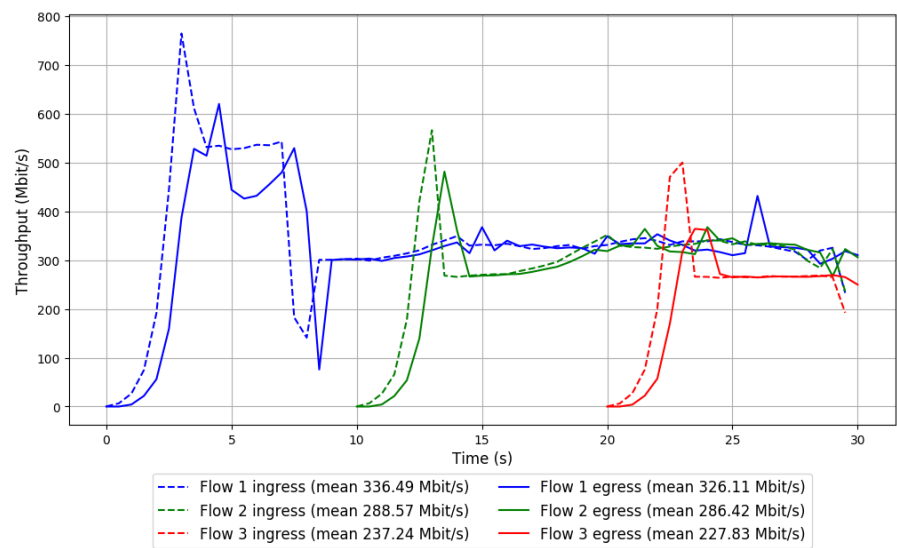
Run 2: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 331.92 Mbit/s)   Flow 1 egress (mean 321.35 Mbit/s)
Flow 2 ingress (mean 266.19 Mbit/s)   Flow 2 egress (mean 264.69 Mbit/s)
Flow 3 ingress (mean 239.10 Mbit/s)   Flow 3 egress (mean 231.27 Mbit/s)

Flow 1 (95th percentile 273.18 ms)   Flow 2 (95th percentile 173.24 ms)   Flow 3 (95th percentile 233.04 ms)

```
Run 3: Statistics of PCC-Allegro

Start at: 2019-02-05 07:26:36
End at: 2019-02-05 07:27:06
Local clock offset: 0.566 ms
Remote clock offset: 0.355 ms


# Below is generated by plot.py at 2019-02-05 10:55:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 603.93 Mbit/s
95th percentile per-packet one-way delay: 270.595 ms
Loss rate: 13.91%
-- Flow 1:
Average throughput: 326.14 Mbit/s
95th percentile per-packet one-way delay: 253.035 ms
Loss rate: 11.37%
-- Flow 2:
Average throughput: 305.16 Mbit/s
95th percentile per-packet one-way delay: 279.040 ms
Loss rate: 20.42%
-- Flow 3:
Average throughput: 226.78 Mbit/s
95th percentile per-packet one-way delay: 261.865 ms
Loss rate: 4.66%
```
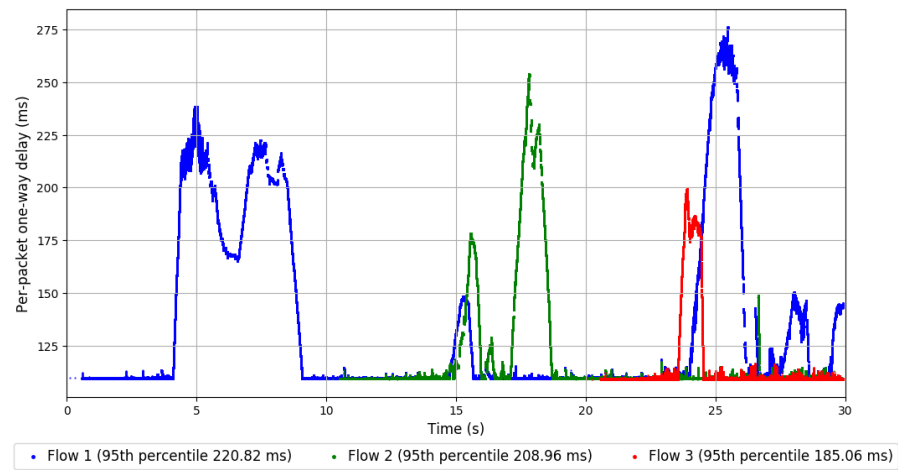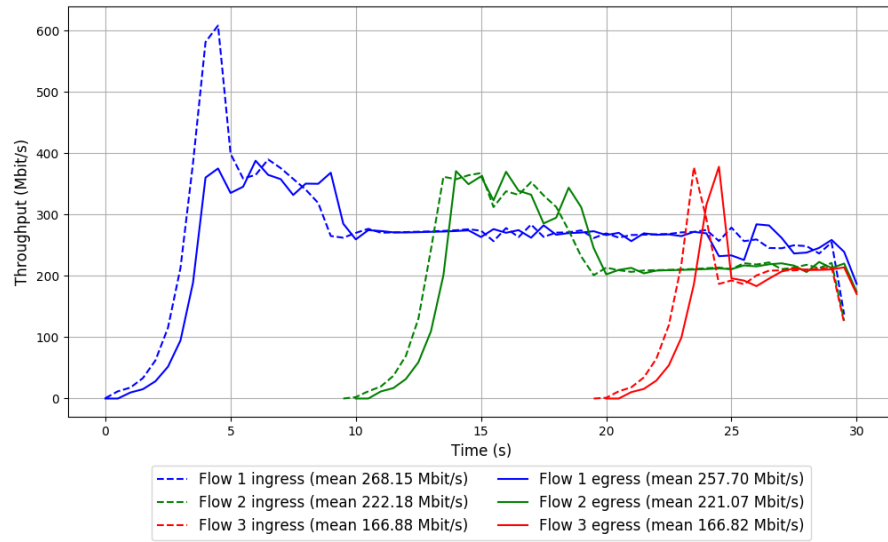
Run 3: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 368.00 Mbit/s) --- Flow 1 egress (mean 326.14 Mbit/s)
Flow 2 ingress (mean 383.48 Mbit/s) --- Flow 2 egress (mean 305.16 Mbit/s)
Flow 3 ingress (mean 237.89 Mbit/s) --- Flow 3 egress (mean 226.78 Mbit/s)

Flow 1 (95th percentile 253.03 ms) · Flow 2 (95th percentile 279.04 ms) · Flow 3 (95th percentile 261.87 ms)

```
Run 4: Statistics of PCC-Allegro

Start at: 2019-02-05 08:04:55
End at: 2019-02-05 08:05:25
Local clock offset: -0.08 ms
Remote clock offset: 0.002 ms


# Below is generated by plot.py at 2019-02-05 10:57:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 624.83 Mbit/s
95th percentile per-packet one-way delay: 265.074 ms
Loss rate: 9.46%
-- Flow 1:
Average throughput: 357.82 Mbit/s
95th percentile per-packet one-way delay: 270.519 ms
Loss rate: 13.80%
-- Flow 2:
Average throughput: 287.38 Mbit/s
95th percentile per-packet one-way delay: 169.173 ms
Loss rate: 2.15%
-- Flow 3:
Average throughput: 230.91 Mbit/s
95th percentile per-packet one-way delay: 263.091 ms
Loss rate: 4.77%
```
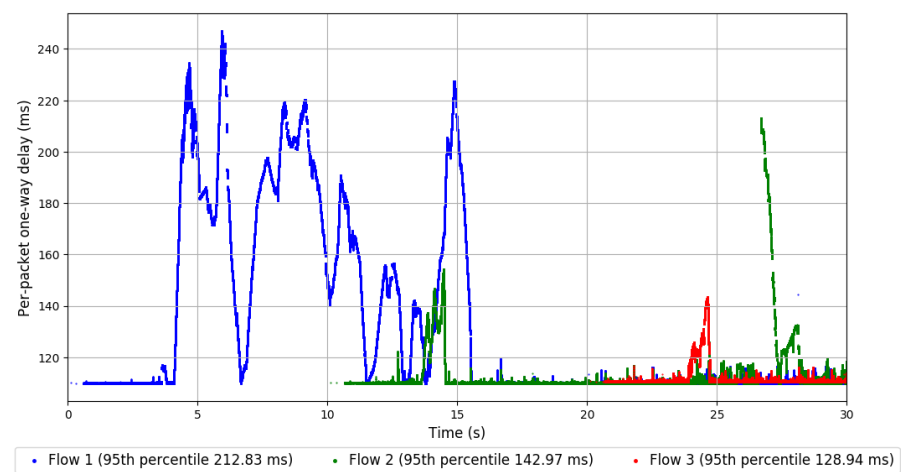
Run 4: Report of PCC-Allegro — Data Link

```
Run 5: Statistics of PCC-Allegro

Start at: 2019-02-05 08:42:43
End at: 2019-02-05 08:43:13
Local clock offset: 0.626 ms
Remote clock offset: -0.168 ms


# Below is generated by plot.py at 2019-02-05 10:59:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 591.46 Mbit/s
95th percentile per-packet one-way delay: 225.646 ms
Loss rate: 2.46%
-- Flow 1:
Average throughput: 326.11 Mbit/s
95th percentile per-packet one-way delay: 227.762 ms
Loss rate: 3.08%
-- Flow 2:
Average throughput: 286.42 Mbit/s
95th percentile per-packet one-way delay: 176.327 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 227.83 Mbit/s
95th percentile per-packet one-way delay: 241.690 ms
Loss rate: 3.97%
```
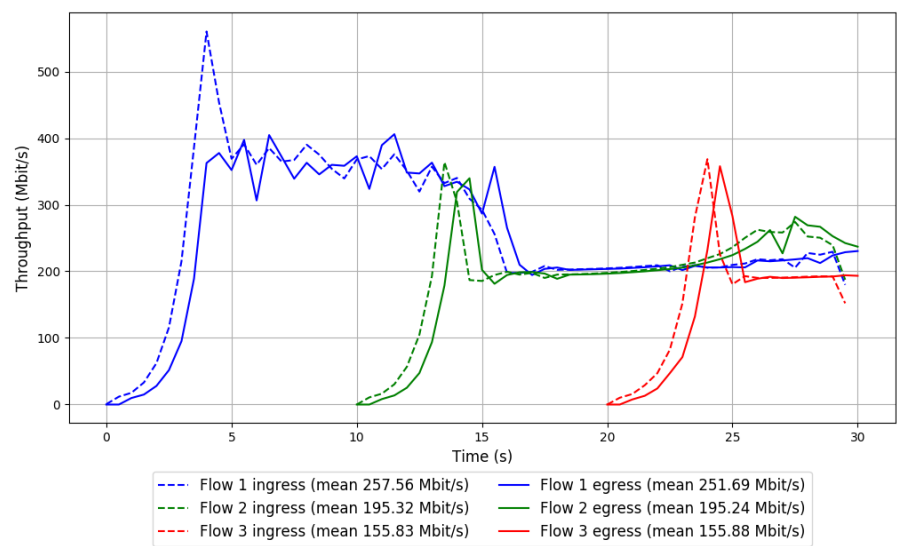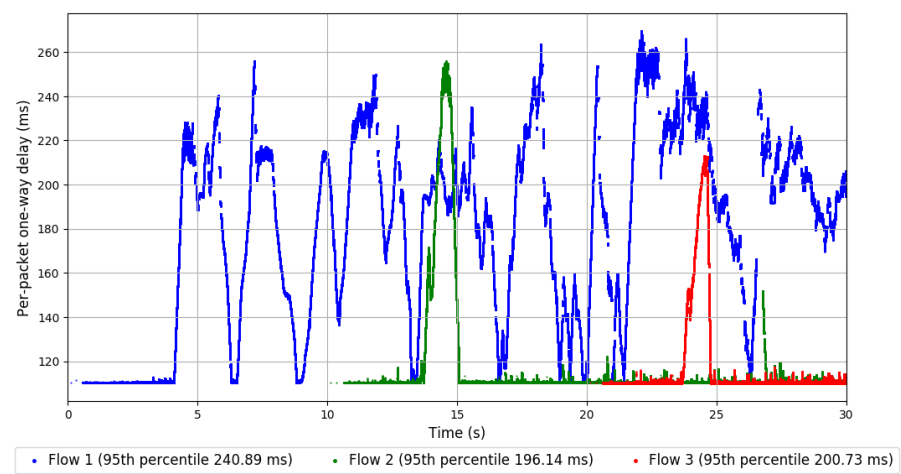
Run 5: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 336.49 Mbit/s)   Flow 1 egress (mean 326.11 Mbit/s)
Flow 2 ingress (mean 288.57 Mbit/s)   Flow 2 egress (mean 286.42 Mbit/s)
Flow 3 ingress (mean 237.24 Mbit/s)   Flow 3 egress (mean 227.83 Mbit/s)

Flow 1 (95th percentile 227.76 ms)   Flow 2 (95th percentile 176.33 ms)   Flow 3 (95th percentile 241.69 ms)

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```
Run 1: Statistics of PCC-Expr

Start at: 2019-02-05 05:48:23
End at: 2019-02-05 05:48:53
Local clock offset: -0.13 ms
Remote clock offset: 0.141 ms


# Below is generated by plot.py at 2019-02-05 10:59:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 460.38 Mbit/s
95th percentile per-packet one-way delay: 217.608 ms
Loss rate: 2.38%
-- Flow 1:
Average throughput: 257.70 Mbit/s
95th percentile per-packet one-way delay: 220.824 ms
Loss rate: 3.90%
-- Flow 2:
Average throughput: 221.07 Mbit/s
95th percentile per-packet one-way delay: 208.962 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 166.82 Mbit/s
95th percentile per-packet one-way delay: 185.056 ms
Loss rate: 0.04%
```
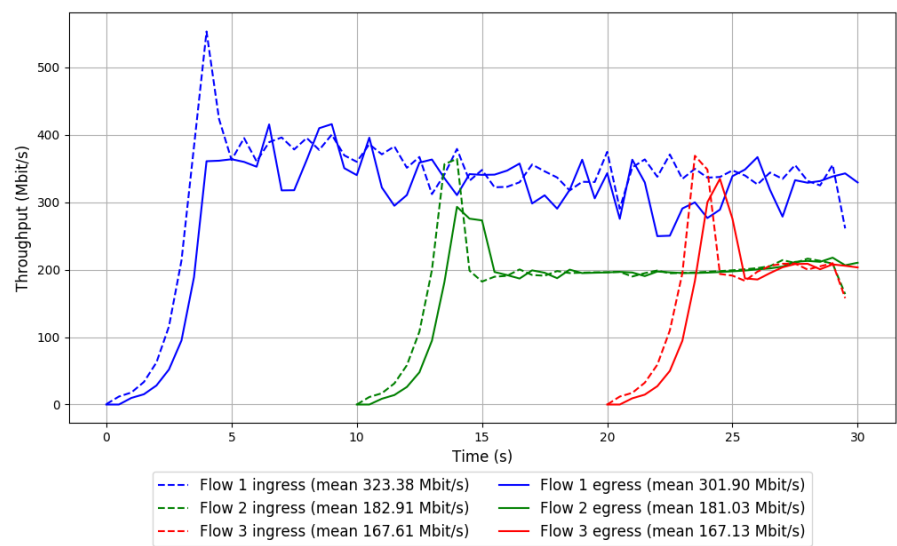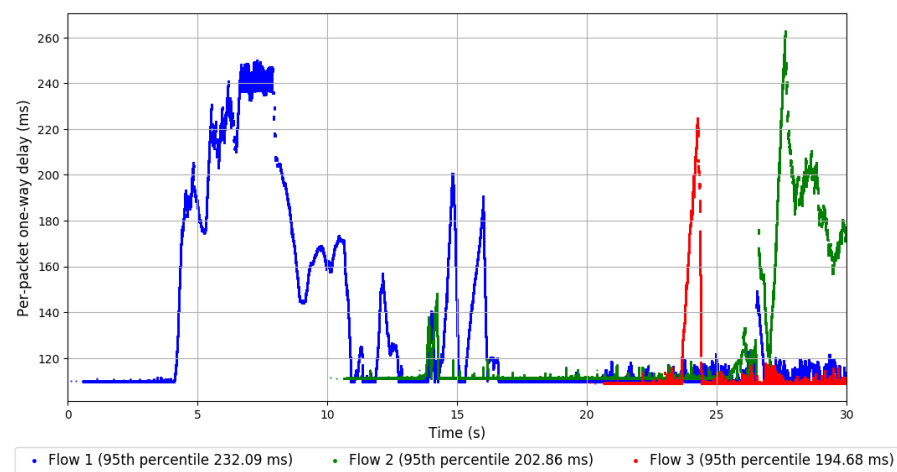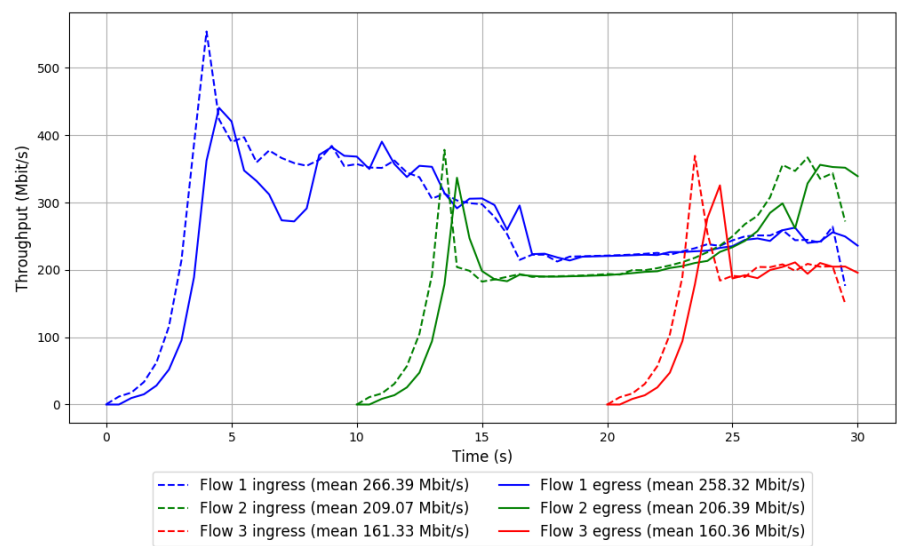
Run 1: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 268.15 Mbit/s) --- Flow 1 egress (mean 257.70 Mbit/s)
Flow 2 ingress (mean 222.18 Mbit/s) --- Flow 2 egress (mean 221.07 Mbit/s)
Flow 3 ingress (mean 166.88 Mbit/s) --- Flow 3 egress (mean 166.82 Mbit/s)

Flow 1 (95th percentile 220.82 ms) · Flow 2 (95th percentile 208.96 ms) · Flow 3 (95th percentile 185.06 ms)
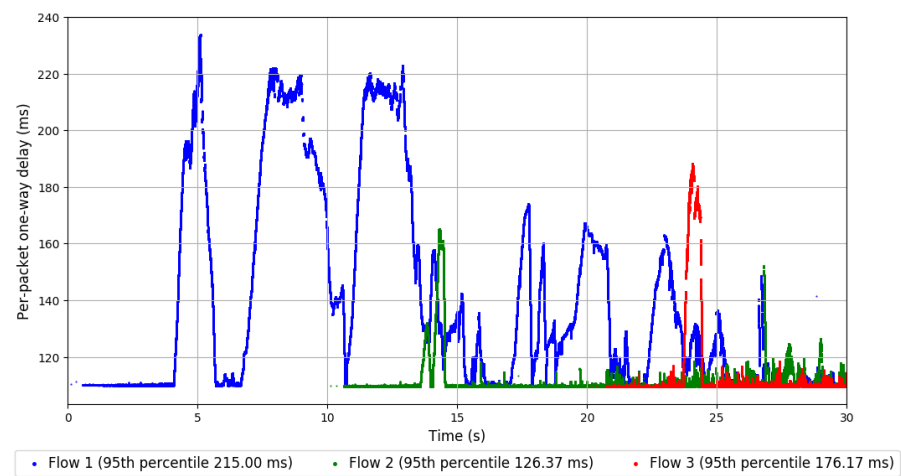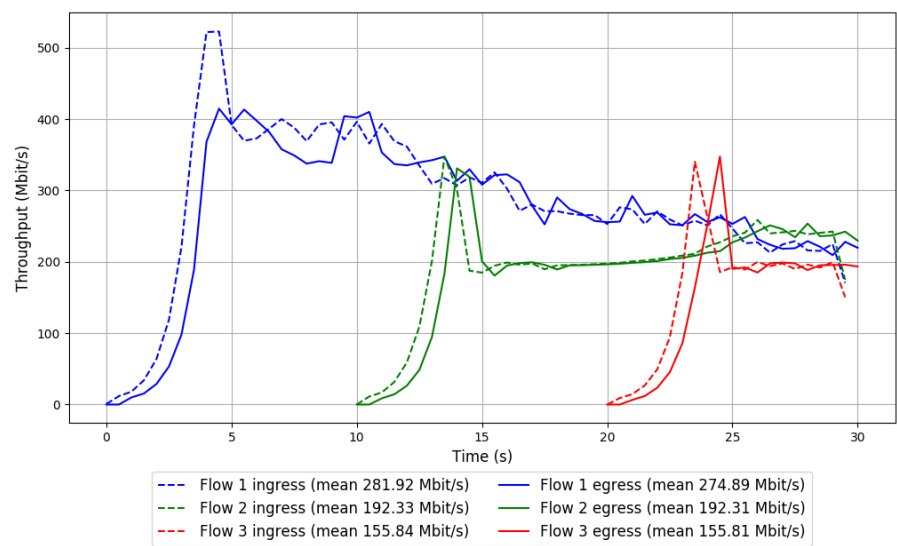
```
Run 2: Statistics of PCC-Expr

Start at: 2019-02-05 06:26:24
End at: 2019-02-05 06:26:54
Local clock offset: -1.305 ms
Remote clock offset: 0.155 ms


# Below is generated by plot.py at 2019-02-05 10:59:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 432.90 Mbit/s
95th percentile per-packet one-way delay: 204.921 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 251.69 Mbit/s
95th percentile per-packet one-way delay: 212.832 ms
Loss rate: 2.29%
-- Flow 2:
Average throughput: 195.24 Mbit/s
95th percentile per-packet one-way delay: 142.969 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 155.88 Mbit/s
95th percentile per-packet one-way delay: 128.942 ms
Loss rate: 0.00%
```

Run 2: Report of PCC-Expr — Data Link

- - - - Flow 1 ingress (mean 257.56 Mbit/s) —— Flow 1 egress (mean 251.69 Mbit/s)
- - - - Flow 2 ingress (mean 195.32 Mbit/s) —— Flow 2 egress (mean 195.24 Mbit/s)
- - - - Flow 3 ingress (mean 155.83 Mbit/s) —— Flow 3 egress (mean 155.88 Mbit/s)

- Flow 1 (95th percentile 212.83 ms) • Flow 2 (95th percentile 142.97 ms) • Flow 3 (95th percentile 128.94 ms)

```
Run 3: Statistics of PCC-Expr

Start at: 2019-02-05 07:04:02
End at: 2019-02-05 07:04:32
Local clock offset: -0.909 ms
Remote clock offset: 0.001 ms


# Below is generated by plot.py at 2019-02-05 11:01:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 477.34 Mbit/s
95th percentile per-packet one-way delay: 236.354 ms
Loss rate: 4.57%
-- Flow 1:
Average throughput: 301.90 Mbit/s
95th percentile per-packet one-way delay: 240.890 ms
Loss rate: 6.64%
-- Flow 2:
Average throughput: 181.03 Mbit/s
95th percentile per-packet one-way delay: 196.143 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 167.13 Mbit/s
95th percentile per-packet one-way delay: 200.734 ms
Loss rate: 0.29%
```
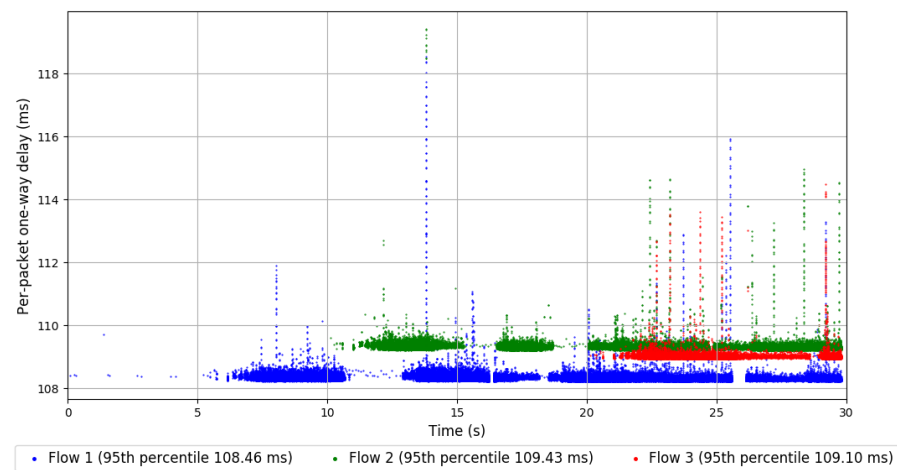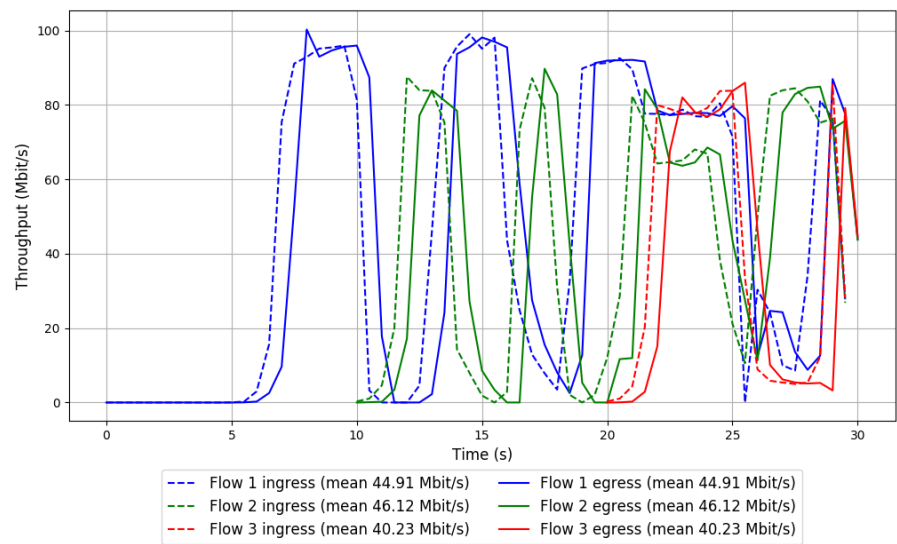
Run 3: Report of PCC-Expr — Data Link

- Flow 1 ingress (mean 323.38 Mbit/s)
- Flow 1 egress (mean 301.90 Mbit/s)
- Flow 2 ingress (mean 182.91 Mbit/s)
- Flow 2 egress (mean 181.03 Mbit/s)
- Flow 3 ingress (mean 167.61 Mbit/s)
- Flow 3 egress (mean 167.13 Mbit/s)

- Flow 1 (95th percentile 240.89 ms)
- Flow 2 (95th percentile 196.14 ms)
- Flow 3 (95th percentile 200.73 ms)

```
Run 4: Statistics of PCC-Expr

Start at: 2019-02-05 07:42:38
End at: 2019-02-05 07:43:08
Local clock offset: -0.708 ms
Remote clock offset: 0.031 ms


# Below is generated by plot.py at 2019-02-05 11:07:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 448.50 Mbit/s
95th percentile per-packet one-way delay: 219.677 ms
Loss rate: 2.22%
-- Flow 1:
Average throughput: 258.32 Mbit/s
95th percentile per-packet one-way delay: 232.088 ms
Loss rate: 3.03%
-- Flow 2:
Average throughput: 206.39 Mbit/s
95th percentile per-packet one-way delay: 202.858 ms
Loss rate: 1.28%
-- Flow 3:
Average throughput: 160.36 Mbit/s
95th percentile per-packet one-way delay: 194.684 ms
Loss rate: 0.60%
```
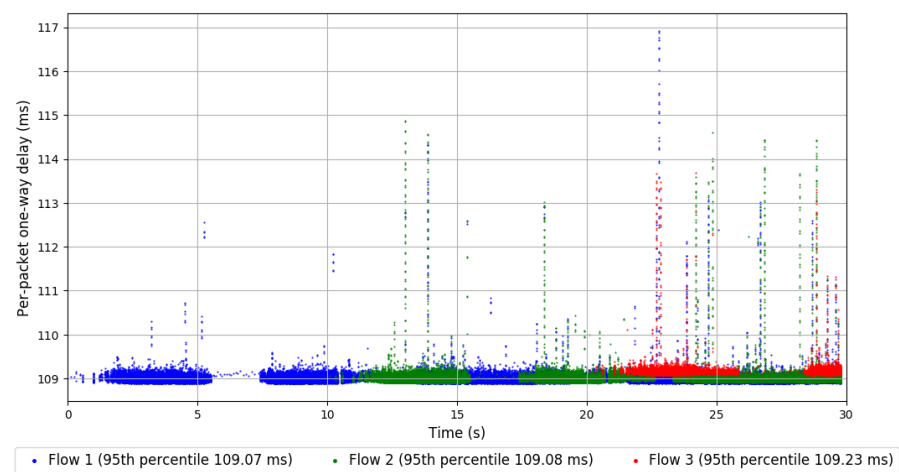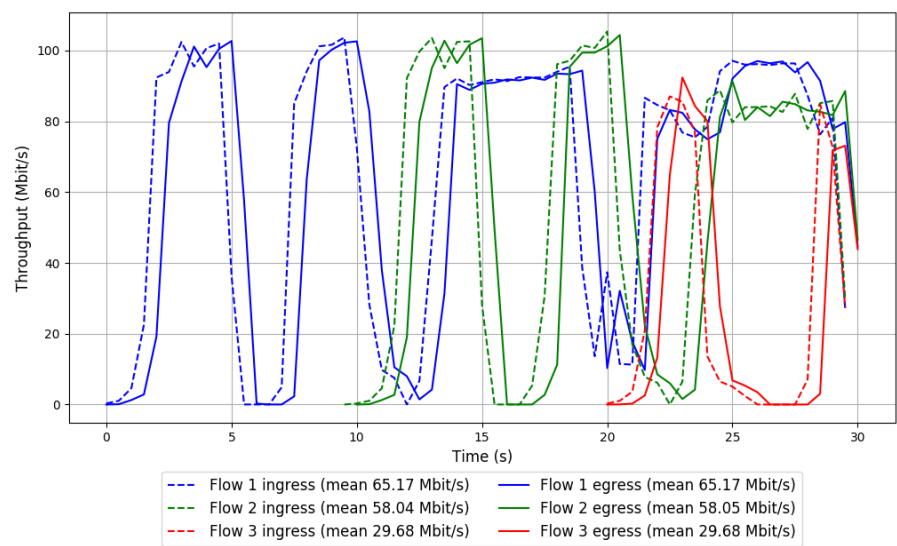
Run 4: Report of PCC-Expr — Data Link

```
Run 5: Statistics of PCC-Expr

Start at: 2019-02-05 08:20:56
End at: 2019-02-05 08:21:26
Local clock offset: -0.772 ms
Remote clock offset: -0.135 ms


# Below is generated by plot.py at 2019-02-05 11:08:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 454.10 Mbit/s
95th percentile per-packet one-way delay: 212.922 ms
Loss rate: 1.53%
-- Flow 1:
Average throughput: 274.89 Mbit/s
95th percentile per-packet one-way delay: 214.995 ms
Loss rate: 2.49%
-- Flow 2:
Average throughput: 192.31 Mbit/s
95th percentile per-packet one-way delay: 126.366 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 155.81 Mbit/s
95th percentile per-packet one-way delay: 176.168 ms
Loss rate: 0.01%
```
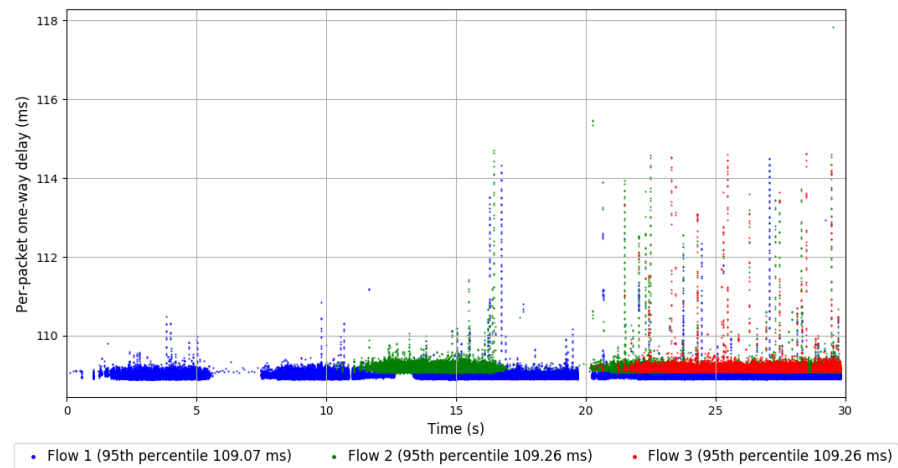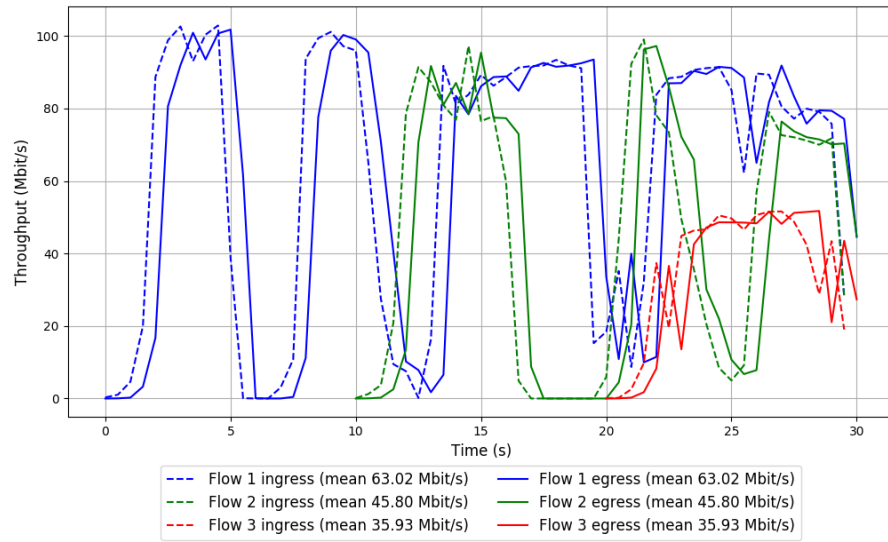
Run 5: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 281.92 Mbit/s) — Flow 1 egress (mean 274.89 Mbit/s)
Flow 2 ingress (mean 192.33 Mbit/s) — Flow 2 egress (mean 192.31 Mbit/s)
Flow 3 ingress (mean 155.84 Mbit/s) — Flow 3 egress (mean 155.81 Mbit/s)

Flow 1 (95th percentile 215.00 ms) • Flow 2 (95th percentile 126.37 ms) • Flow 3 (95th percentile 176.17 ms)

```
Run 1: Statistics of QUIC Cubic

Start at: 2019-02-05 05:57:40
End at: 2019-02-05 05:58:10
Local clock offset: 0.077 ms
Remote clock offset: 0.151 ms


# Below is generated by plot.py at 2019-02-05 11:08:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.57 Mbit/s
95th percentile per-packet one-way delay: 109.359 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 44.91 Mbit/s
95th percentile per-packet one-way delay: 108.460 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 46.12 Mbit/s
95th percentile per-packet one-way delay: 109.426 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 40.23 Mbit/s
95th percentile per-packet one-way delay: 109.100 ms
Loss rate: 0.00%
```
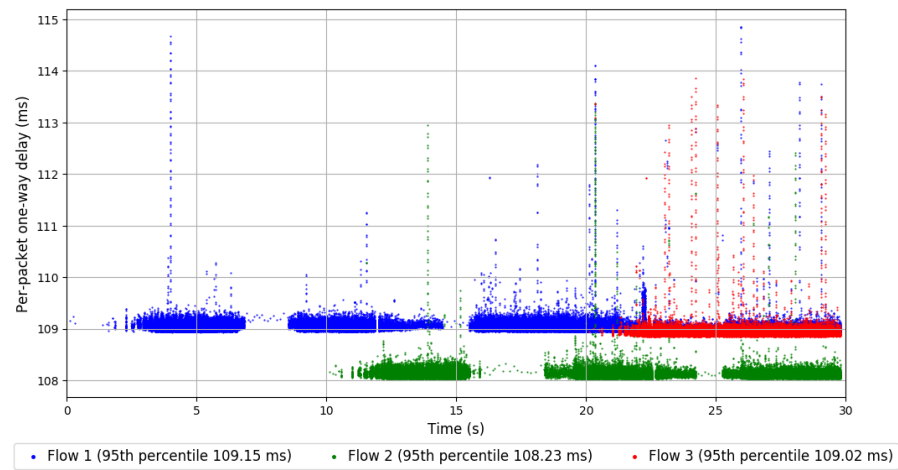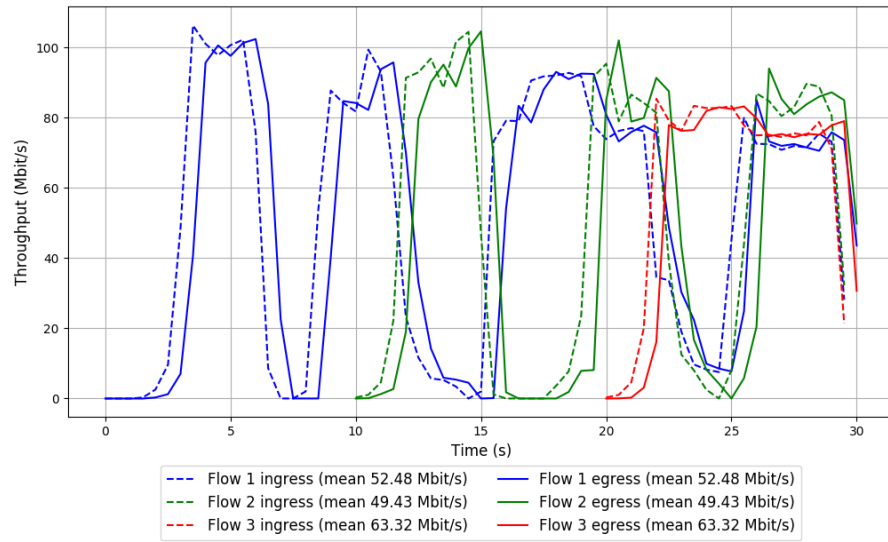
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2019-02-05 06:35:40
End at: 2019-02-05 06:36:10
Local clock offset: 0.078 ms
Remote clock offset: 0.066 ms


# Below is generated by plot.py at 2019-02-05 11:08:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 113.31 Mbit/s
95th percentile per-packet one-way delay: 109.142 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 65.17 Mbit/s
95th percentile per-packet one-way delay: 109.074 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 58.05 Mbit/s
95th percentile per-packet one-way delay: 109.076 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.68 Mbit/s
95th percentile per-packet one-way delay: 109.226 ms
Loss rate: 0.00%
```
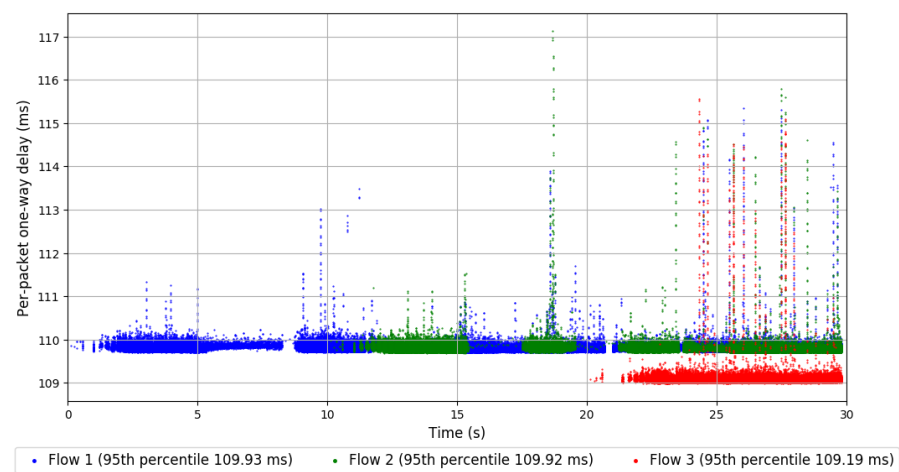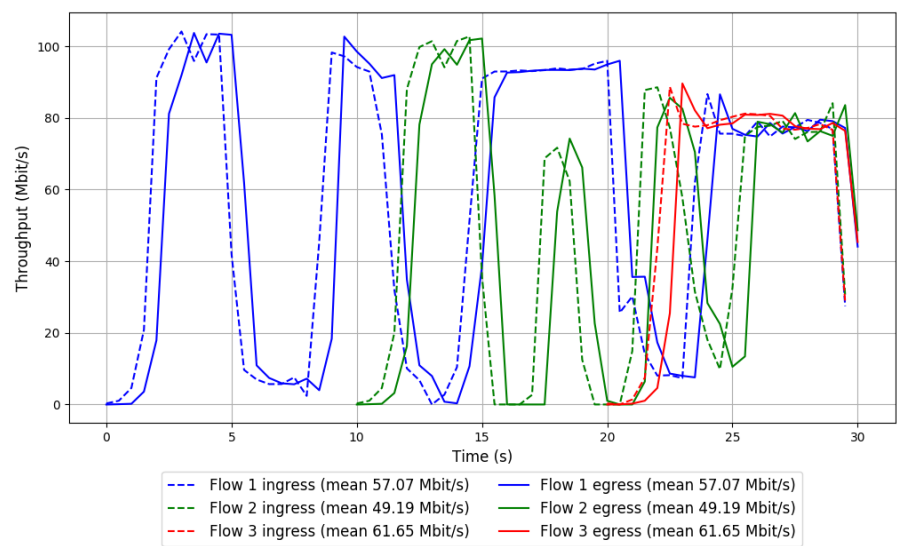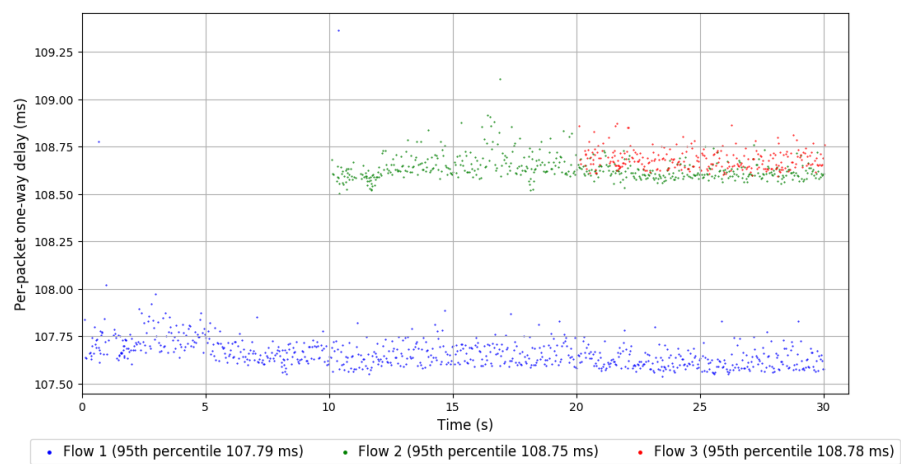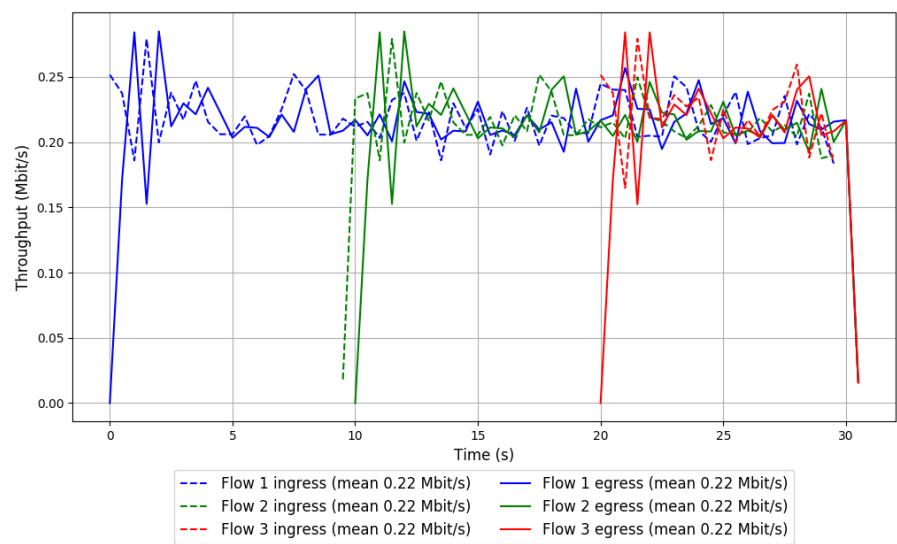
Run 2: Report of QUIC Cubic — Data Link

Legend:
- Flow 1 ingress (mean 65.17 Mbit/s)
- Flow 1 egress (mean 65.17 Mbit/s)
- Flow 2 ingress (mean 58.04 Mbit/s)
- Flow 2 egress (mean 58.05 Mbit/s)
- Flow 3 ingress (mean 29.68 Mbit/s)
- Flow 3 egress (mean 29.68 Mbit/s)

Legend:
- Flow 1 (95th percentile 109.07 ms)
- Flow 2 (95th percentile 109.08 ms)
- Flow 3 (95th percentile 109.23 ms)

```
Run 3: Statistics of QUIC Cubic

Start at: 2019-02-05 07:13:24
End at: 2019-02-05 07:13:54
Local clock offset: 0.124 ms
Remote clock offset: 0.073 ms


# Below is generated by plot.py at 2019-02-05 11:08:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 104.97 Mbit/s
95th percentile per-packet one-way delay: 109.215 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 63.02 Mbit/s
95th percentile per-packet one-way delay: 109.071 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 45.80 Mbit/s
95th percentile per-packet one-way delay: 109.262 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 35.93 Mbit/s
95th percentile per-packet one-way delay: 109.264 ms
Loss rate: 0.00%
```
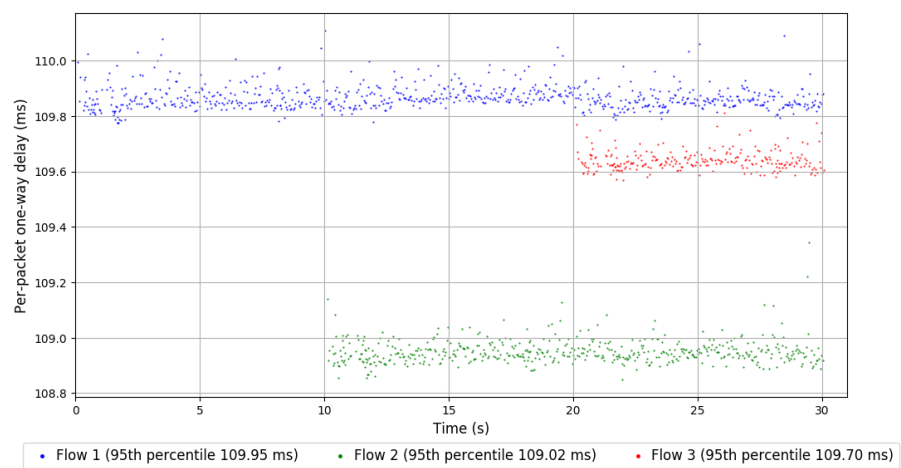
Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 63.02 Mbit/s) --- Flow 1 egress (mean 63.02 Mbit/s)
Flow 2 ingress (mean 45.80 Mbit/s) --- Flow 2 egress (mean 45.80 Mbit/s)
Flow 3 ingress (mean 35.93 Mbit/s) --- Flow 3 egress (mean 35.93 Mbit/s)

Flow 1 (95th percentile 109.07 ms) · Flow 2 (95th percentile 109.26 ms) · Flow 3 (95th percentile 109.26 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2019-02-05 07:52:04
End at: 2019-02-05 07:52:34
Local clock offset: 0.081 ms
Remote clock offset: 0.001 ms


# Below is generated by plot.py at 2019-02-05 11:08:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 105.86 Mbit/s
95th percentile per-packet one-way delay: 109.117 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.48 Mbit/s
95th percentile per-packet one-way delay: 109.154 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 49.43 Mbit/s
95th percentile per-packet one-way delay: 108.229 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 63.32 Mbit/s
95th percentile per-packet one-way delay: 109.020 ms
Loss rate: 0.00%
```
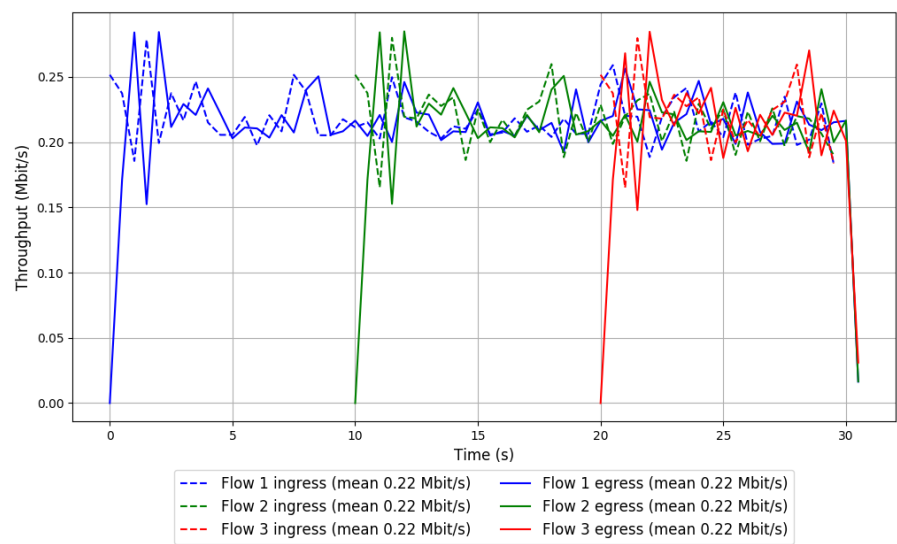
Run 4: Report of QUIC Cubic — Data Link

```
Run 5: Statistics of QUIC Cubic

Start at: 2019-02-05 08:30:12
End at: 2019-02-05 08:30:42
Local clock offset: -0.828 ms
Remote clock offset: -0.13 ms


# Below is generated by plot.py at 2019-02-05 11:08:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 109.76 Mbit/s
95th percentile per-packet one-way delay: 109.915 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 57.07 Mbit/s
95th percentile per-packet one-way delay: 109.927 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 49.19 Mbit/s
95th percentile per-packet one-way delay: 109.923 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 61.65 Mbit/s
95th percentile per-packet one-way delay: 109.187 ms
Loss rate: 0.00%
```
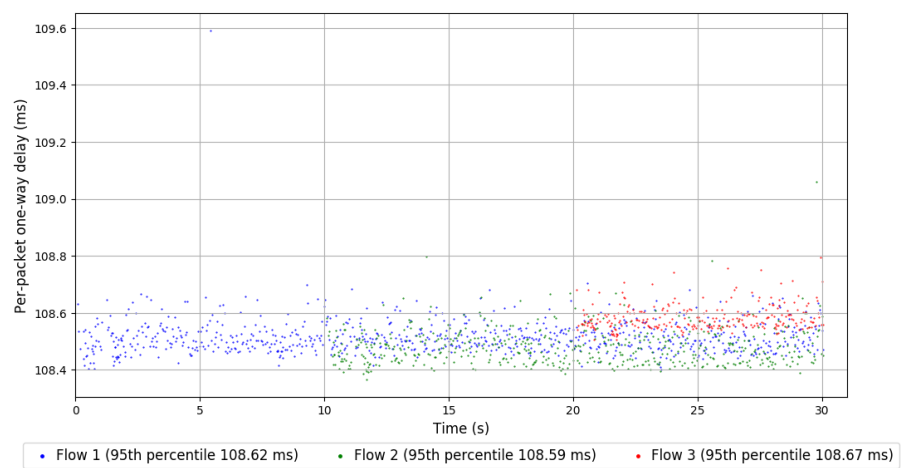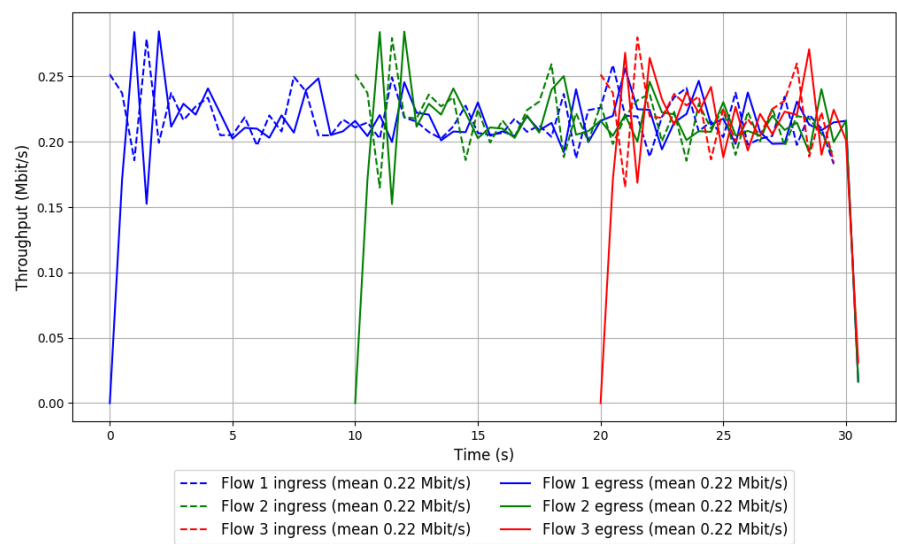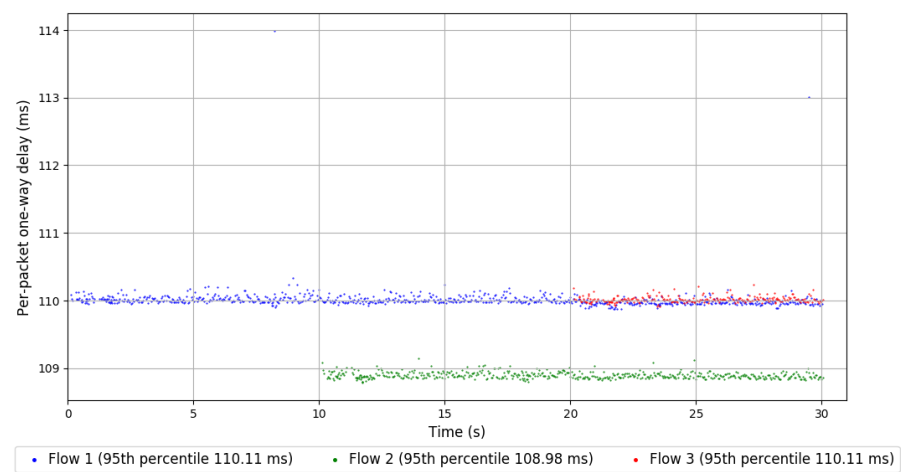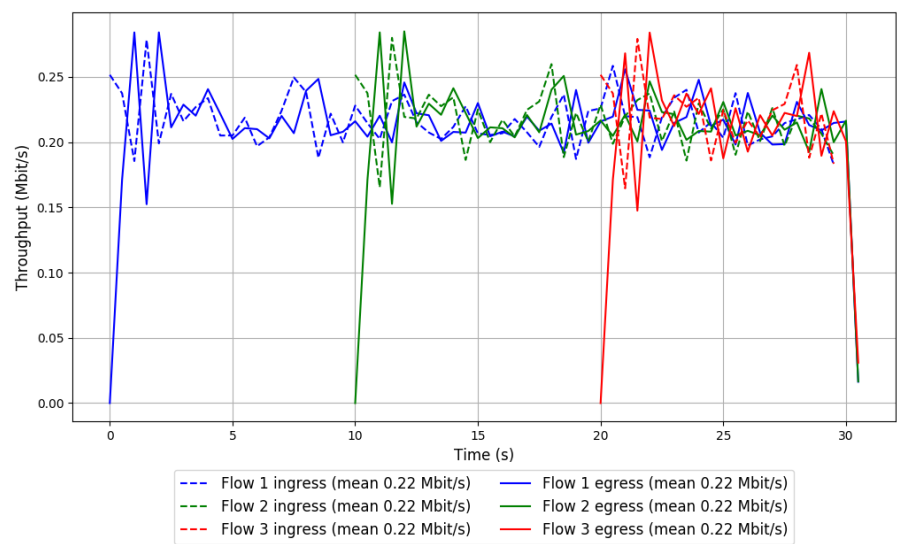
Run 5: Report of QUIC Cubic — Data Link

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```
Run 1: Statistics of SCReAM

Start at: 2019-02-05 06:02:45
End at: 2019-02-05 06:03:15
Local clock offset: 0.88 ms
Remote clock offset: 0.093 ms

# Below is generated by plot.py at 2019-02-05 11:08:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 108.730 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 107.791 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 108.755 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 108.781 ms
Loss rate: 0.00%
```
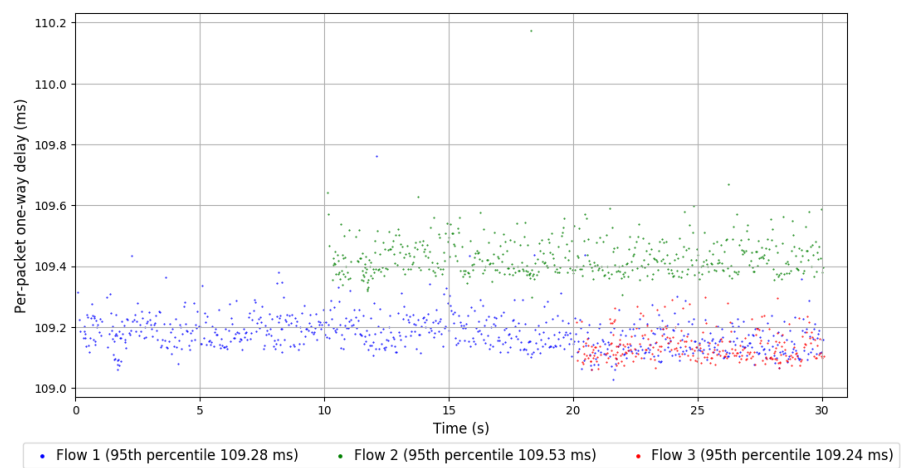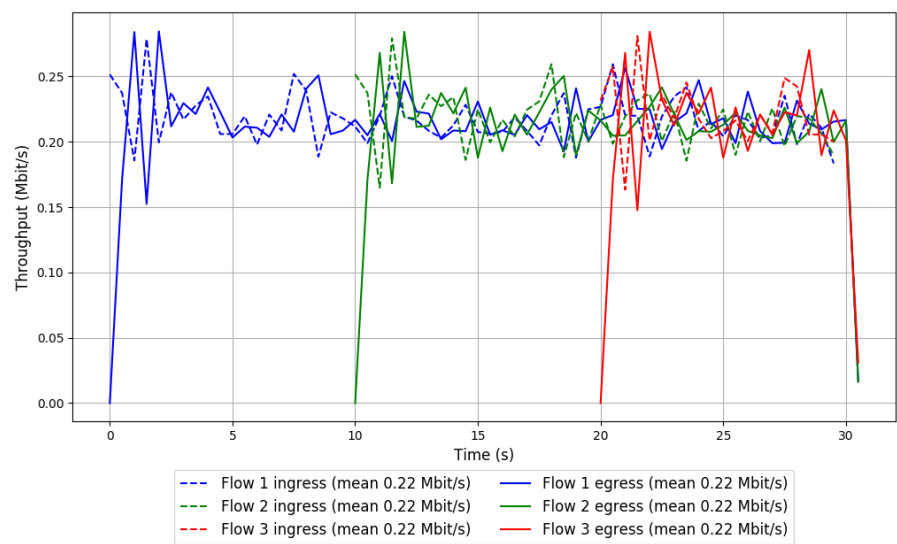
Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2019-02-05 06:40:46
End at: 2019-02-05 06:41:16
Local clock offset: -0.349 ms
Remote clock offset: 0.141 ms


# Below is generated by plot.py at 2019-02-05 11:08:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 109.916 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.948 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.021 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.704 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2019-02-05 07:18:48
End at: 2019-02-05 07:19:18
Local clock offset: 0.708 ms
Remote clock offset: 0.001 ms


# Below is generated by plot.py at 2019-02-05 11:08:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 108.630 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 108.619 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 108.587 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 108.673 ms
Loss rate: 0.00%
```
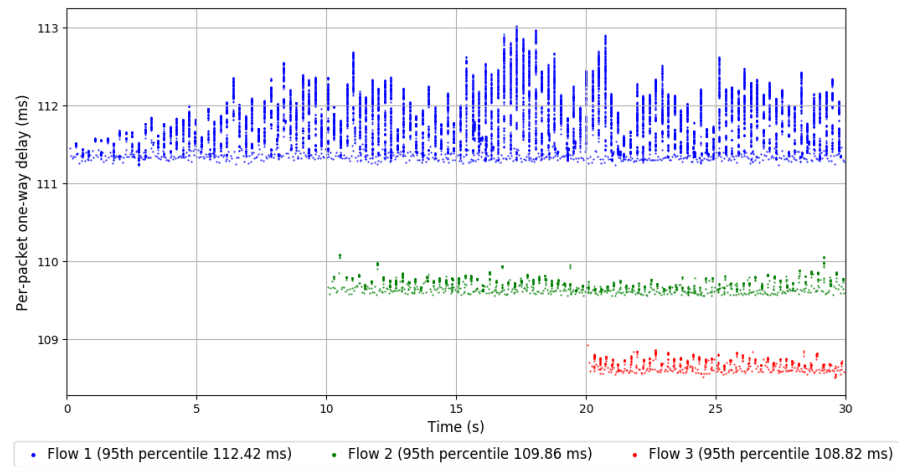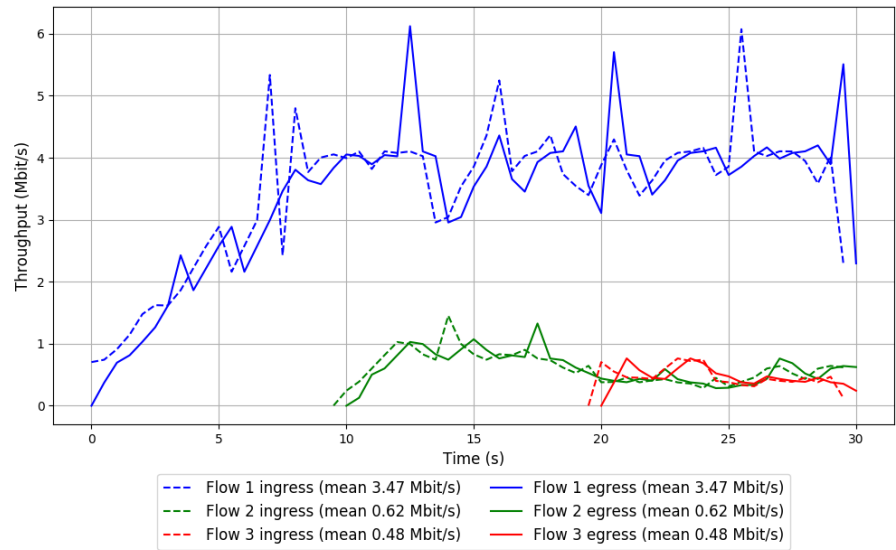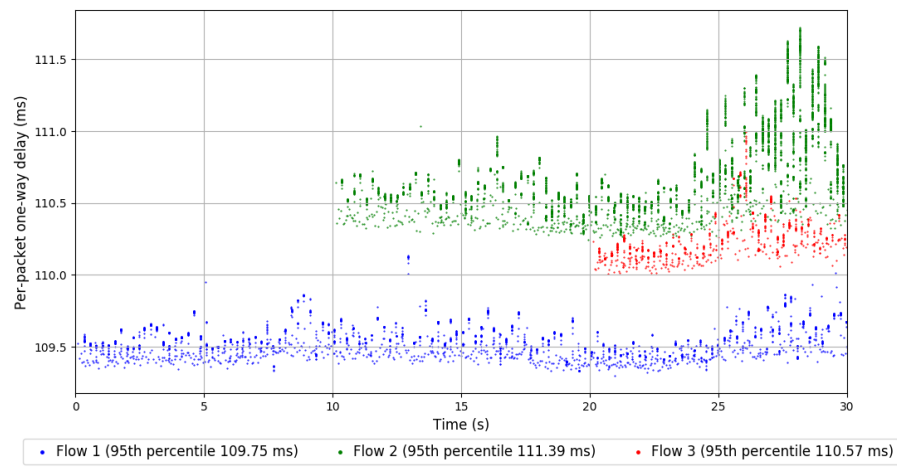
Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2019-02-05 07:57:10
End at: 2019-02-05 07:57:40
Local clock offset: -0.546 ms
Remote clock offset: 0.011 ms


# Below is generated by plot.py at 2019-02-05 11:08:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 110.095 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.115 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 108.977 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.106 ms
Loss rate: 0.00%
```
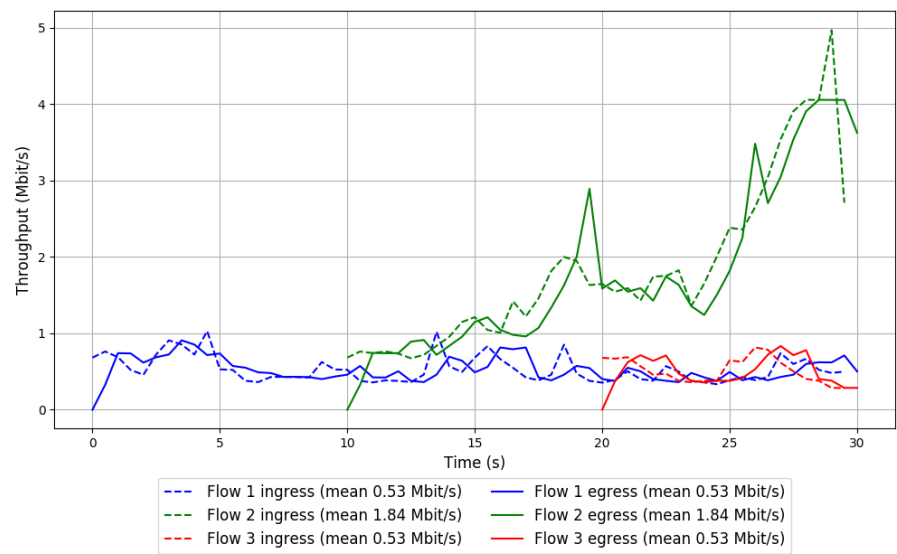
Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2019-02-05 08:35:03
End at: 2019-02-05 08:35:33
Local clock offset: -0.087 ms
Remote clock offset: -0.159 ms


# Below is generated by plot.py at 2019-02-05 11:08:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 109.487 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.278 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.535 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.236 ms
Loss rate: 0.00%
```
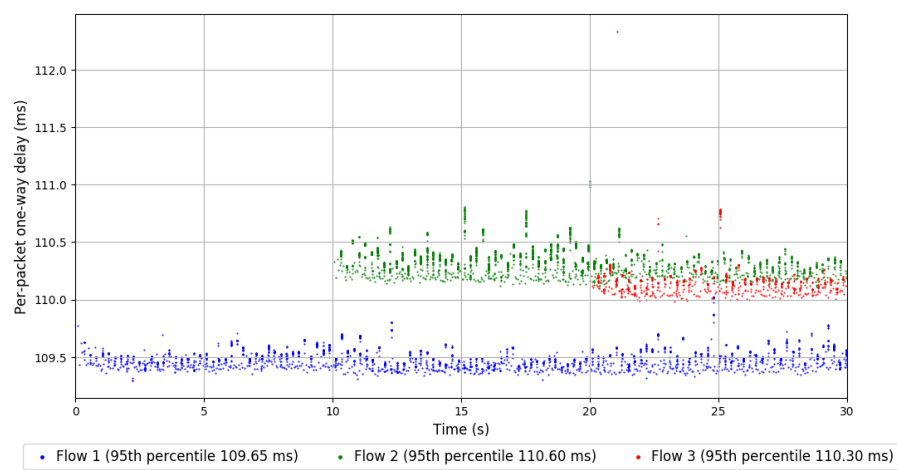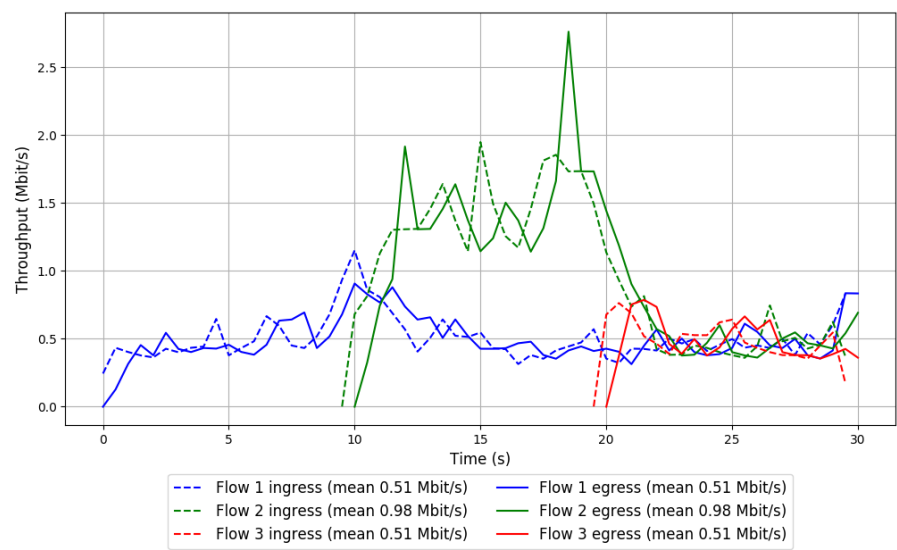
Run 5: Report of SCReAM — Data Link

```
Run 1: Statistics of Sprout

Start at: 2019-02-05 06:05:57
End at: 2019-02-05 06:06:27
Local clock offset: -0.12 ms
Remote clock offset: 0.106 ms


# Below is generated by plot.py at 2019-02-05 11:08:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.05 Mbit/s
95th percentile per-packet one-way delay: 112.379 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.47 Mbit/s
95th percentile per-packet one-way delay: 112.416 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 109.859 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 108.819 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2019-02-05 06:44:01
End at: 2019-02-05 06:44:31
Local clock offset: -0.598 ms
Remote clock offset: 0.395 ms


# Below is generated by plot.py at 2019-02-05 11:08:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 111.267 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 109.745 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.84 Mbit/s
95th percentile per-packet one-way delay: 111.389 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 110.566 ms
Loss rate: 0.00%
```
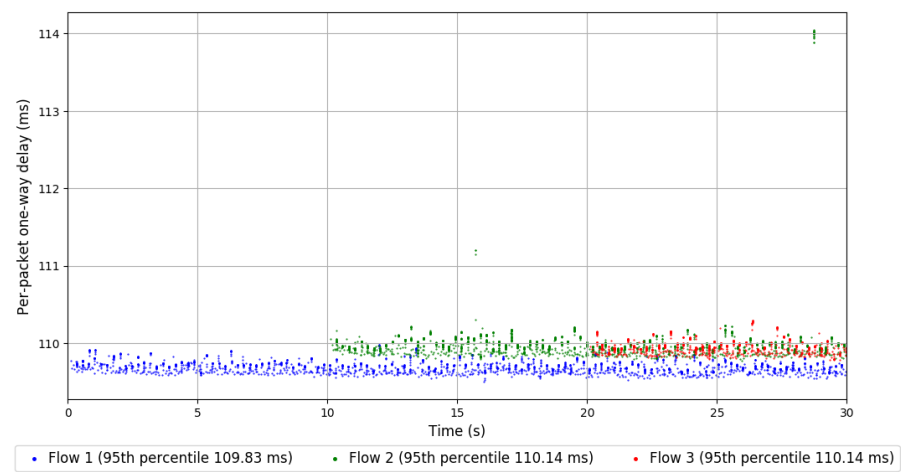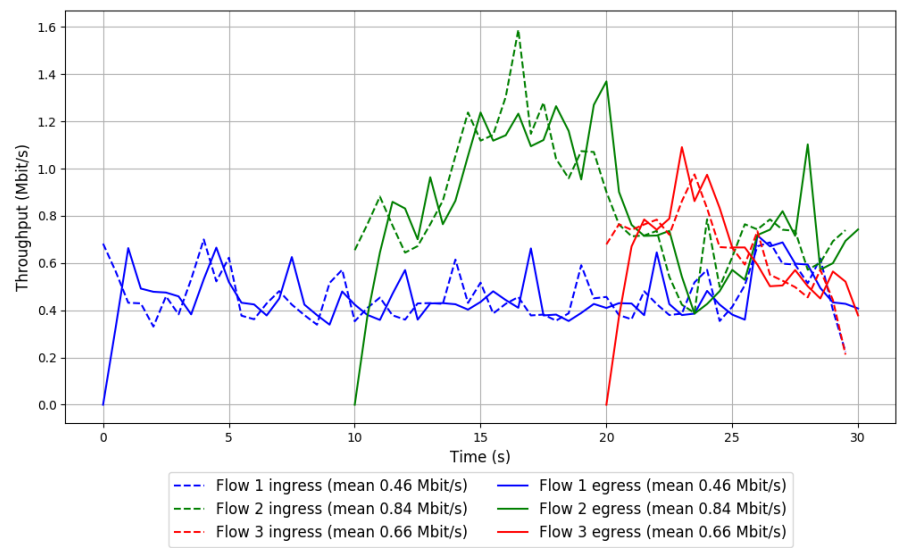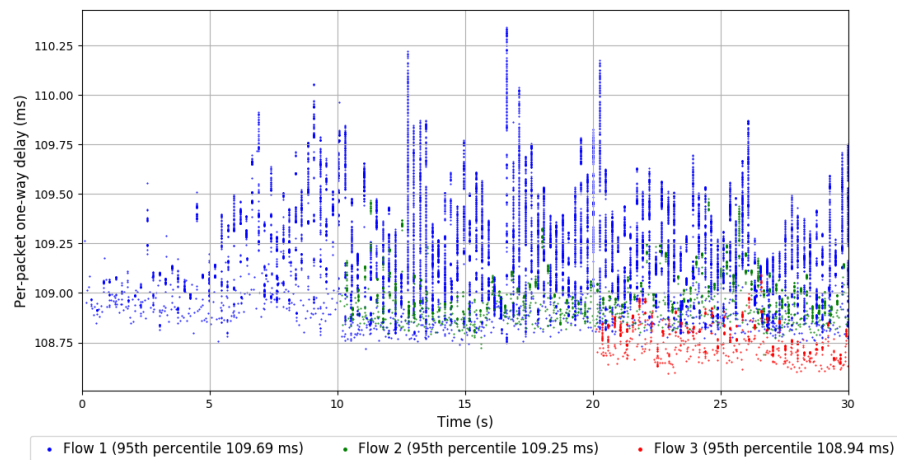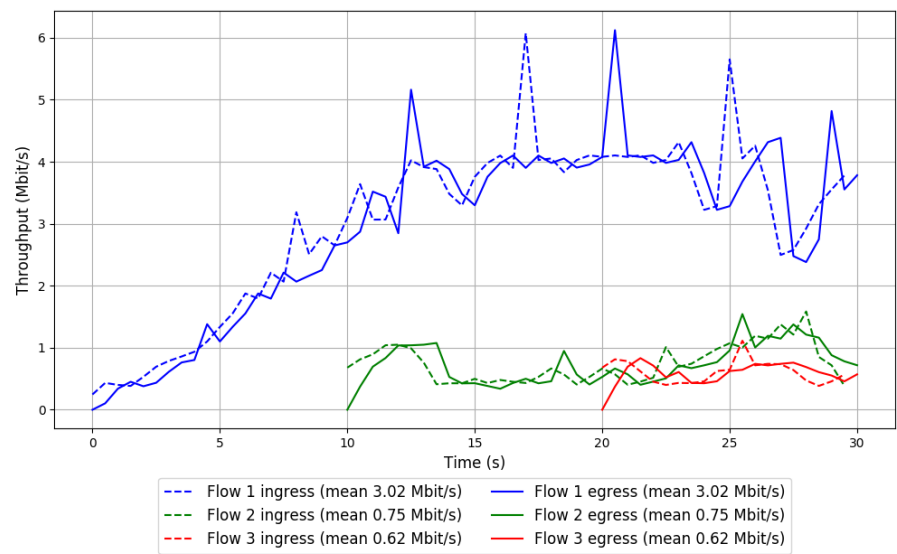
Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2019-02-05 07:22:01
End at: 2019-02-05 07:22:31
Local clock offset: -0.605 ms
Remote clock offset: 0.334 ms


# Below is generated by plot.py at 2019-02-05 11:08:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.33 Mbit/s
95th percentile per-packet one-way delay: 110.494 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 109.647 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.98 Mbit/s
95th percentile per-packet one-way delay: 110.597 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 110.299 ms
Loss rate: 0.00%
```

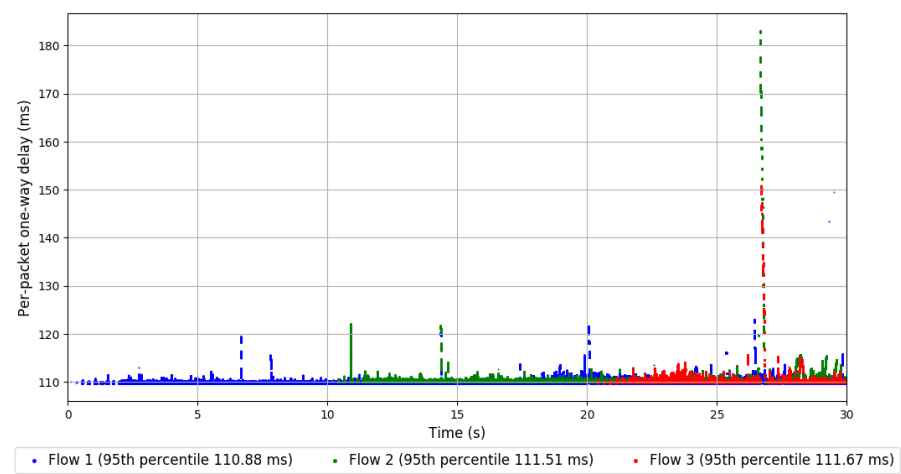## Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2019-02-05 08:00:24
End at: 2019-02-05 08:00:54
Local clock offset: -0.62 ms
Remote clock offset: 0.032 ms

# Below is generated by plot.py at 2019-02-05 11:08:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.24 Mbit/s
95th percentile per-packet one-way delay: 110.099 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 109.835 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.84 Mbit/s
95th percentile per-packet one-way delay: 110.137 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 110.140 ms
Loss rate: 0.00%
```
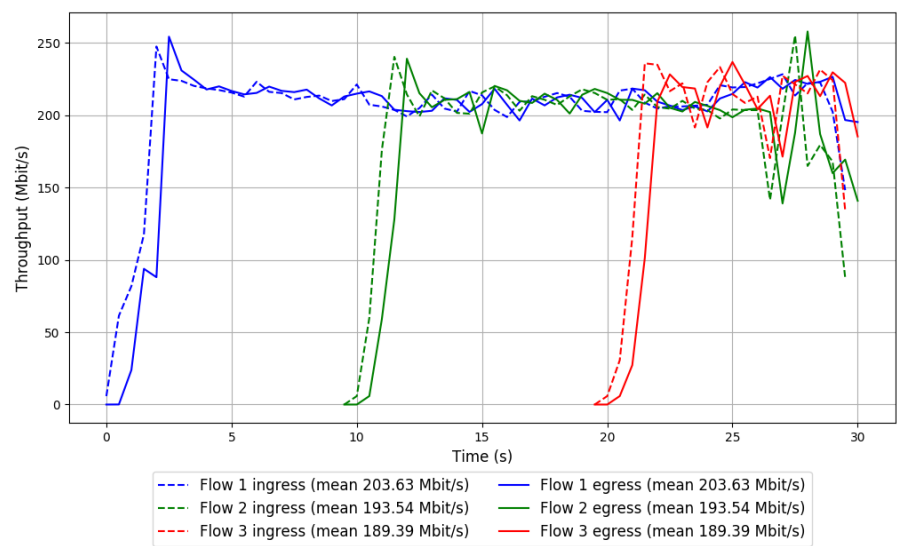
Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2019-02-05 08:38:10
End at: 2019-02-05 08:38:40
Local clock offset: 0.465 ms
Remote clock offset: -0.065 ms


# Below is generated by plot.py at 2019-02-05 11:08:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.72 Mbit/s
95th percentile per-packet one-way delay: 109.656 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.02 Mbit/s
95th percentile per-packet one-way delay: 109.692 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.75 Mbit/s
95th percentile per-packet one-way delay: 109.246 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 108.938 ms
Loss rate: 0.00%
```
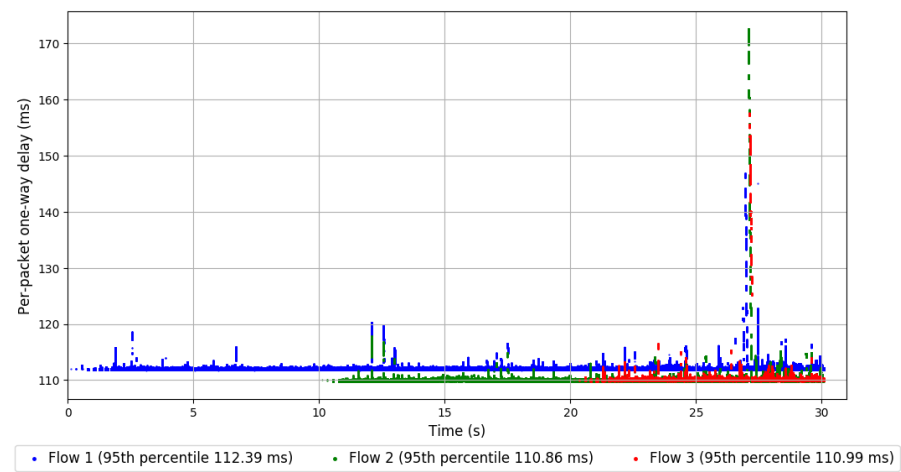
Run 5: Report of Sprout — Data Link

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

Start at: 2019-02-05 05:44:30
End at: 2019-02-05 05:45:00
Local clock offset: -0.712 ms
Remote clock offset: 0.147 ms


# Below is generated by plot.py at 2019-02-05 11:12:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 396.48 Mbit/s
95th percentile per-packet one-way delay: 111.141 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 203.63 Mbit/s
95th percentile per-packet one-way delay: 110.880 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 193.54 Mbit/s
95th percentile per-packet one-way delay: 111.510 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 189.39 Mbit/s
95th percentile per-packet one-way delay: 111.667 ms
Loss rate: 0.00%
```
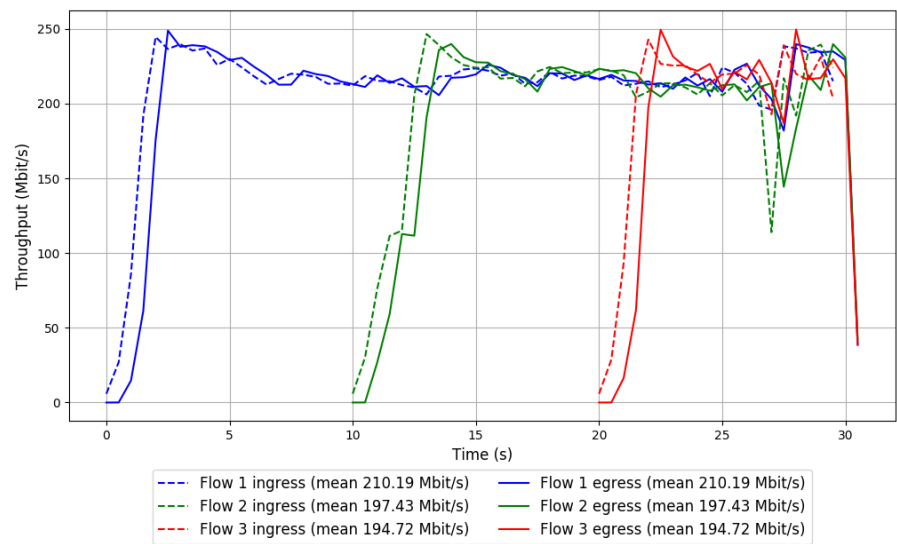
Run 1: Report of TaoVA-100x — Data Link

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

Start at: 2019-02-05 06:22:43
End at: 2019-02-05 06:23:13
Local clock offset: -0.508 ms
Remote clock offset: 0.186 ms


# Below is generated by plot.py at 2019-02-05 11:13:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 406.33 Mbit/s
95th percentile per-packet one-way delay: 112.247 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 210.19 Mbit/s
95th percentile per-packet one-way delay: 112.388 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 197.43 Mbit/s
95th percentile per-packet one-way delay: 110.860 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 194.72 Mbit/s
95th percentile per-packet one-way delay: 110.988 ms
Loss rate: 0.00%
```
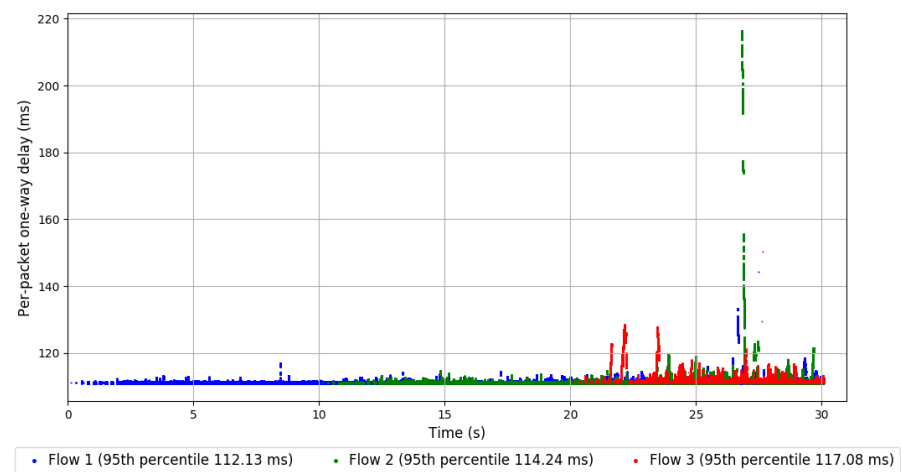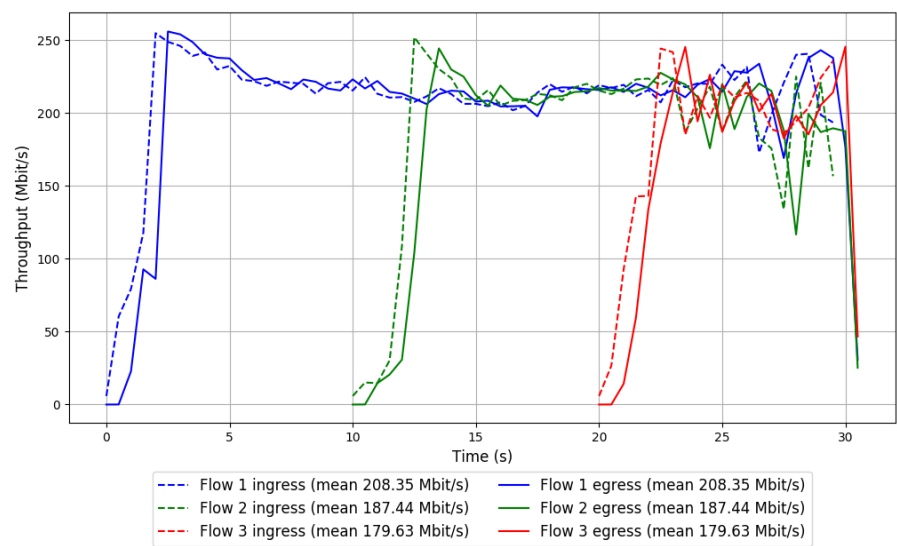
Run 2: Report of TaoVA-100x — Data Link

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

Start at: 2019-02-05 07:00:08
End at: 2019-02-05 07:00:38
Local clock offset: -1.464 ms
Remote clock offset: 0.505 ms


# Below is generated by plot.py at 2019-02-05 11:13:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 392.54 Mbit/s
95th percentile per-packet one-way delay: 113.218 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 208.35 Mbit/s
95th percentile per-packet one-way delay: 112.126 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 187.44 Mbit/s
95th percentile per-packet one-way delay: 114.243 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 179.63 Mbit/s
95th percentile per-packet one-way delay: 117.077 ms
Loss rate: 0.00%
```
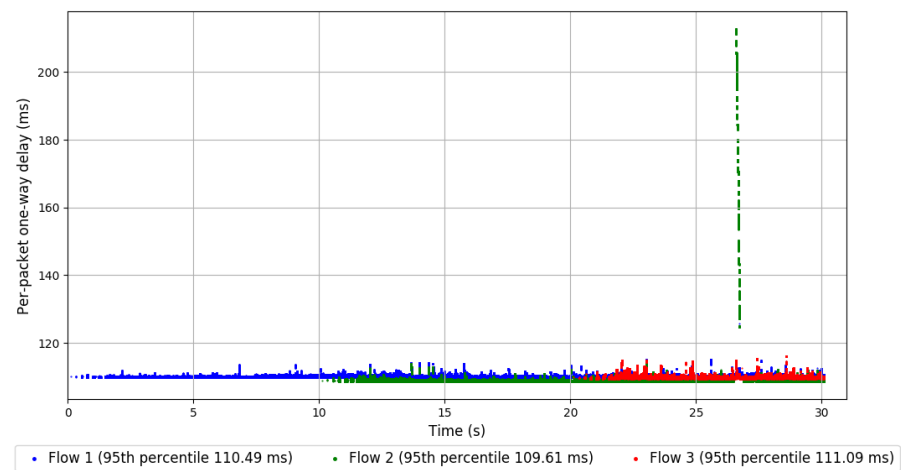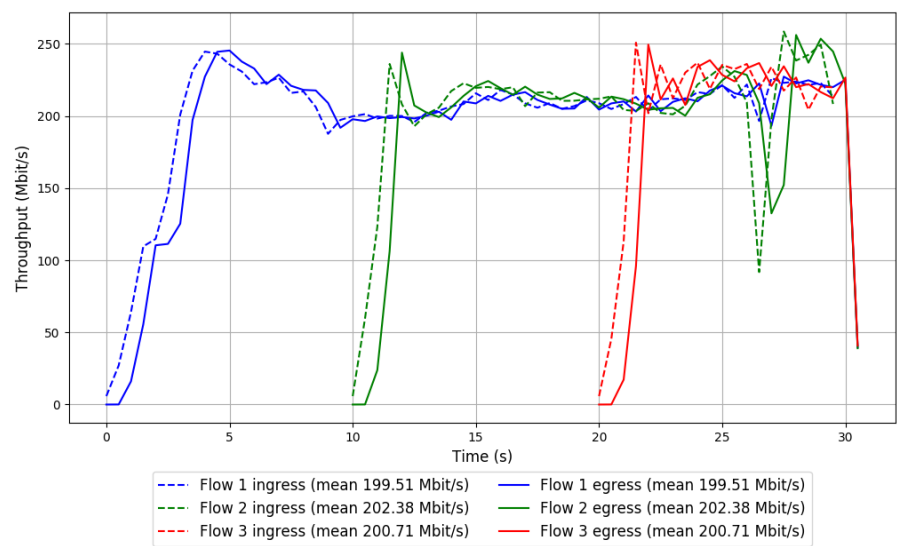
Run 3: Report of TaoVA-100x — Data Link

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

Start at: 2019-02-05 07:38:38
End at: 2019-02-05 07:39:08
Local clock offset: -0.292 ms
Remote clock offset: 0.045 ms


# Below is generated by plot.py at 2019-02-05 11:13:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 400.99 Mbit/s
95th percentile per-packet one-way delay: 110.491 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 199.51 Mbit/s
95th percentile per-packet one-way delay: 110.494 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 202.38 Mbit/s
95th percentile per-packet one-way delay: 109.607 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 200.71 Mbit/s
95th percentile per-packet one-way delay: 111.088 ms
Loss rate: 0.00%
```
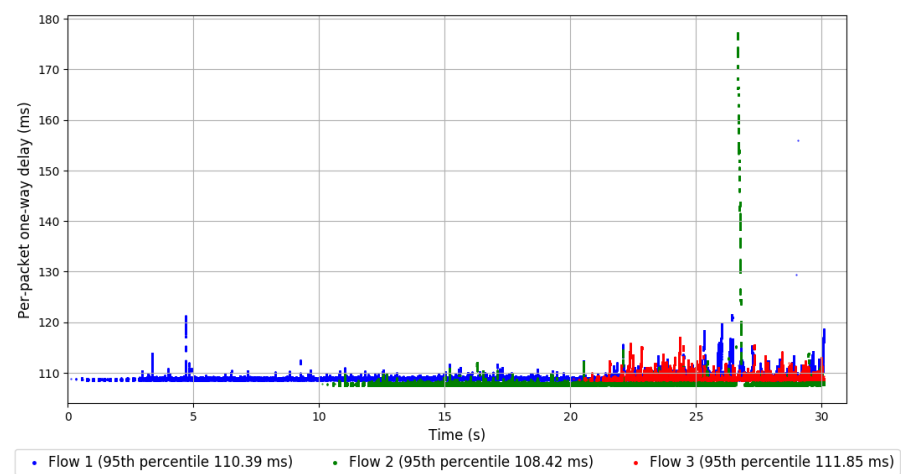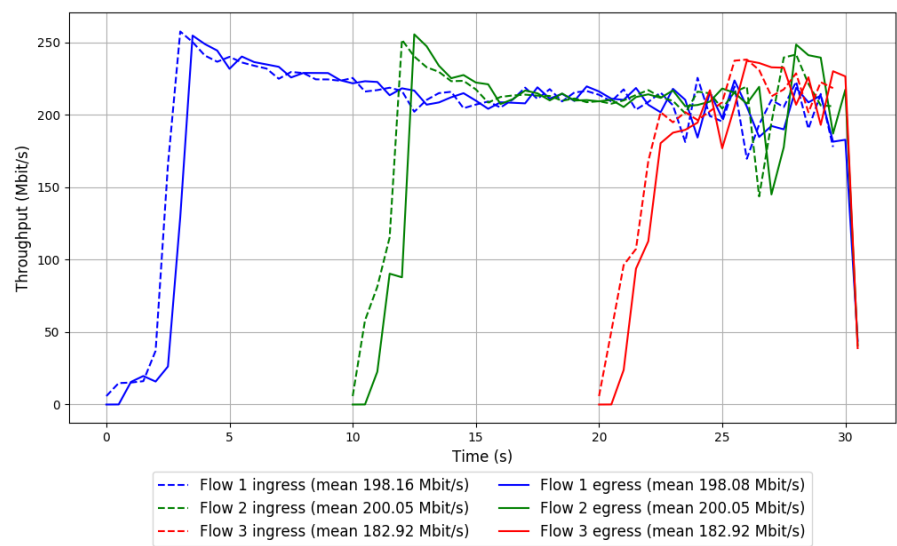
Run 4: Report of TaoVA-100x — Data Link

- Flow 1 ingress (mean 199.51 Mbit/s)
- Flow 1 egress (mean 199.51 Mbit/s)
- Flow 2 ingress (mean 202.38 Mbit/s)
- Flow 2 egress (mean 202.38 Mbit/s)
- Flow 3 ingress (mean 200.71 Mbit/s)
- Flow 3 egress (mean 200.71 Mbit/s)

- Flow 1 (95th percentile 110.49 ms)
- Flow 2 (95th percentile 109.61 ms)
- Flow 3 (95th percentile 111.09 ms)

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

Start at: 2019-02-05 08:16:57
End at: 2019-02-05 08:17:27
Local clock offset: 0.686 ms
Remote clock offset: -0.05 ms


# Below is generated by plot.py at 2019-02-05 11:14:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 392.08 Mbit/s
95th percentile per-packet one-way delay: 110.410 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 198.08 Mbit/s
95th percentile per-packet one-way delay: 110.394 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 200.05 Mbit/s
95th percentile per-packet one-way delay: 108.423 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 182.92 Mbit/s
95th percentile per-packet one-way delay: 111.846 ms
Loss rate: 0.00%
```
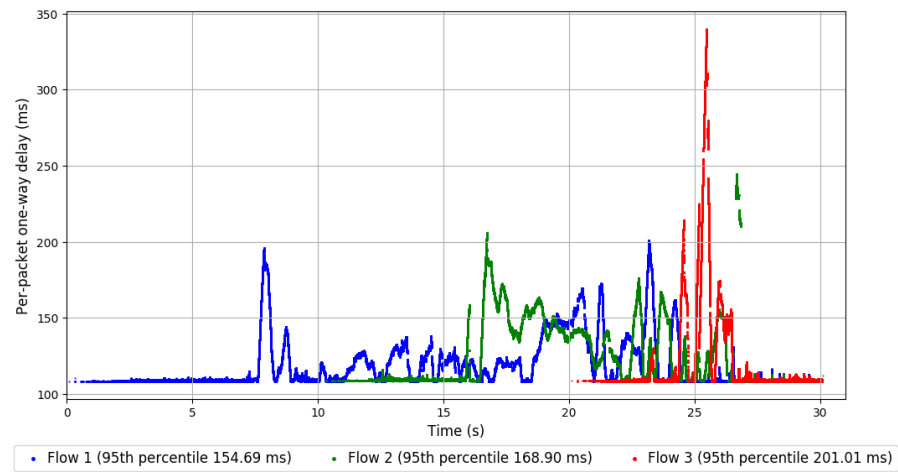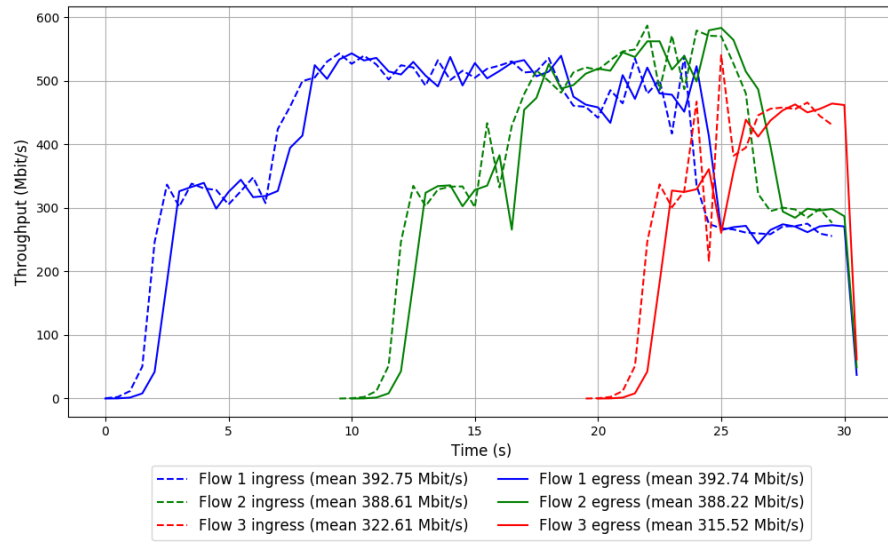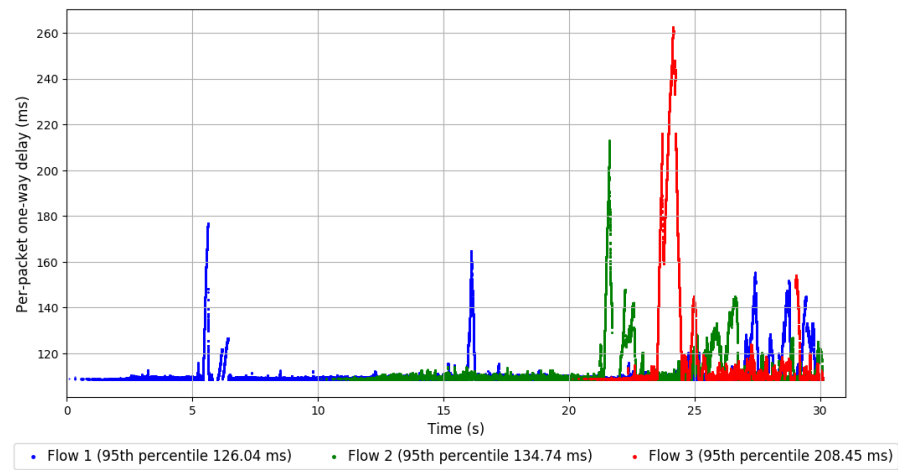
Run 5: Report of TaoVA-100x — Data Link

- Flow 1 ingress (mean 198.16 Mbit/s)
- Flow 1 egress (mean 198.08 Mbit/s)
- Flow 2 ingress (mean 200.05 Mbit/s)
- Flow 2 egress (mean 200.05 Mbit/s)
- Flow 3 ingress (mean 182.92 Mbit/s)
- Flow 3 egress (mean 182.92 Mbit/s)

- Flow 1 (95th percentile 110.39 ms)
- Flow 2 (95th percentile 108.42 ms)
- Flow 3 (95th percentile 111.85 ms)

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```
Run 1: Statistics of TCP Vegas

Start at: 2019-02-05 05:50:27
End at: 2019-02-05 05:50:57
Local clock offset: 0.693 ms
Remote clock offset: 0.161 ms


# Below is generated by plot.py at 2019-02-05 11:15:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 756.44 Mbit/s
95th percentile per-packet one-way delay: 165.504 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 392.74 Mbit/s
95th percentile per-packet one-way delay: 154.693 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 388.22 Mbit/s
95th percentile per-packet one-way delay: 168.901 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 315.52 Mbit/s
95th percentile per-packet one-way delay: 201.011 ms
Loss rate: 2.19%
```
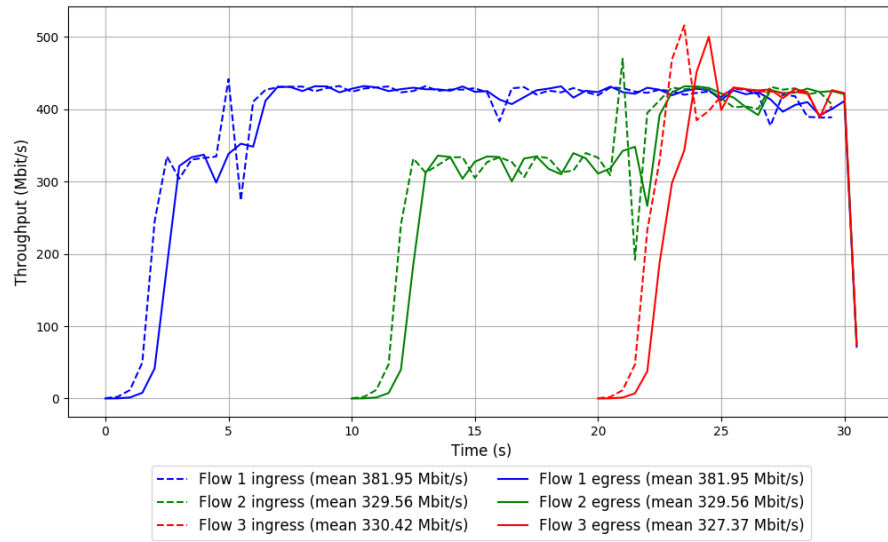
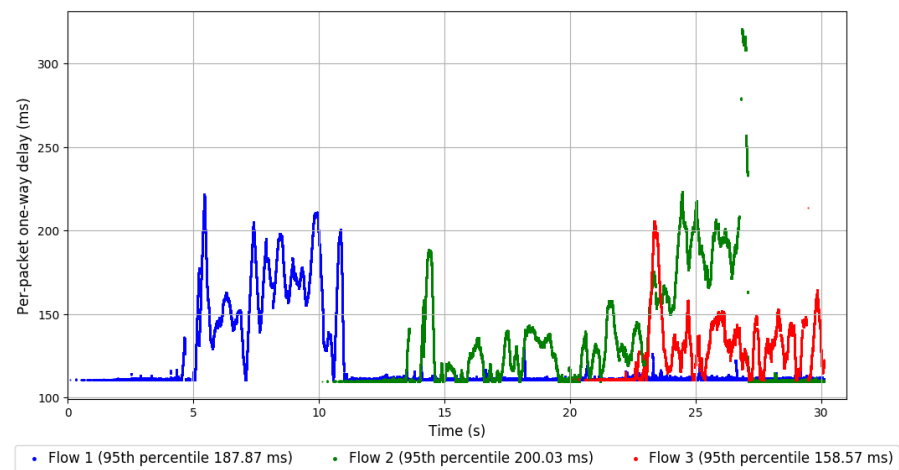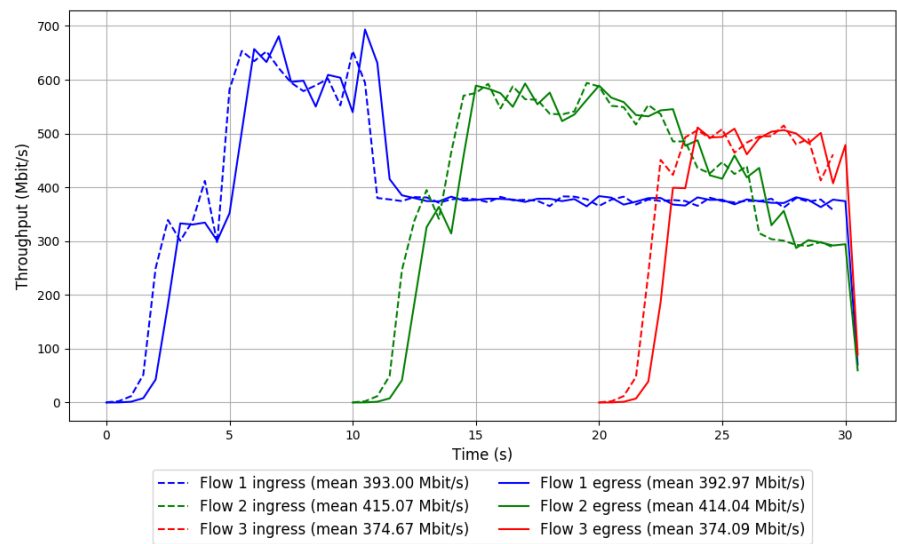Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2019-02-05 06:28:26
End at: 2019-02-05 06:28:56
Local clock offset: 0.529 ms
Remote clock offset: 0.096 ms


# Below is generated by plot.py at 2019-02-05 11:22:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 710.18 Mbit/s
95th percentile per-packet one-way delay: 138.038 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 381.95 Mbit/s
95th percentile per-packet one-way delay: 126.040 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 329.56 Mbit/s
95th percentile per-packet one-way delay: 134.735 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 327.37 Mbit/s
95th percentile per-packet one-way delay: 208.454 ms
Loss rate: 0.92%
```

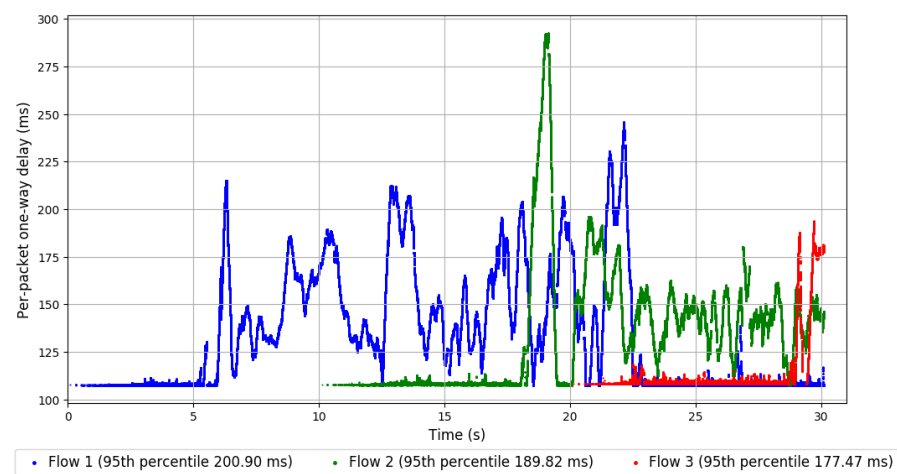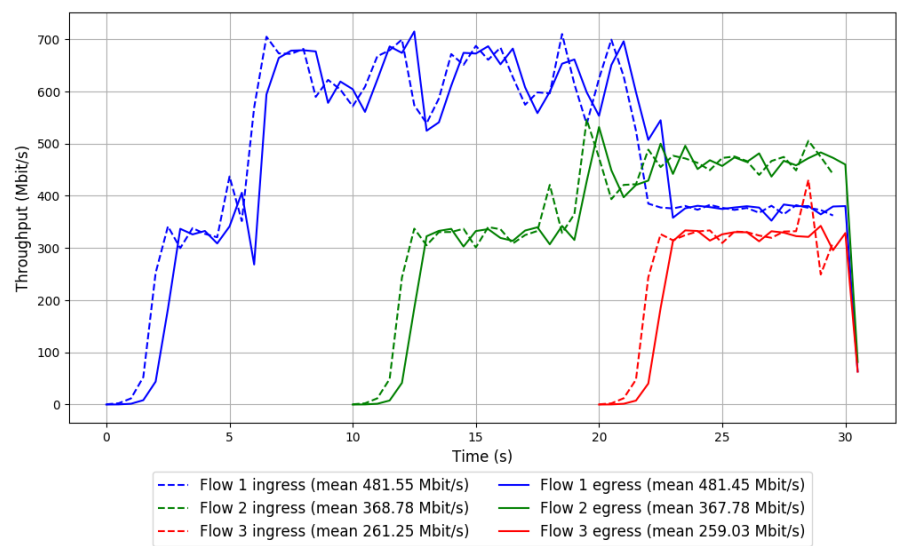Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2019-02-05 07:06:10
End at: 2019-02-05 07:06:40
Local clock offset: -1.317 ms
Remote clock offset: -0.019 ms


# Below is generated by plot.py at 2019-02-05 11:24:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 793.13 Mbit/s
95th percentile per-packet one-way delay: 193.023 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 392.97 Mbit/s
95th percentile per-packet one-way delay: 187.872 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 414.04 Mbit/s
95th percentile per-packet one-way delay: 200.029 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 374.09 Mbit/s
95th percentile per-packet one-way delay: 158.566 ms
Loss rate: 0.15%
```
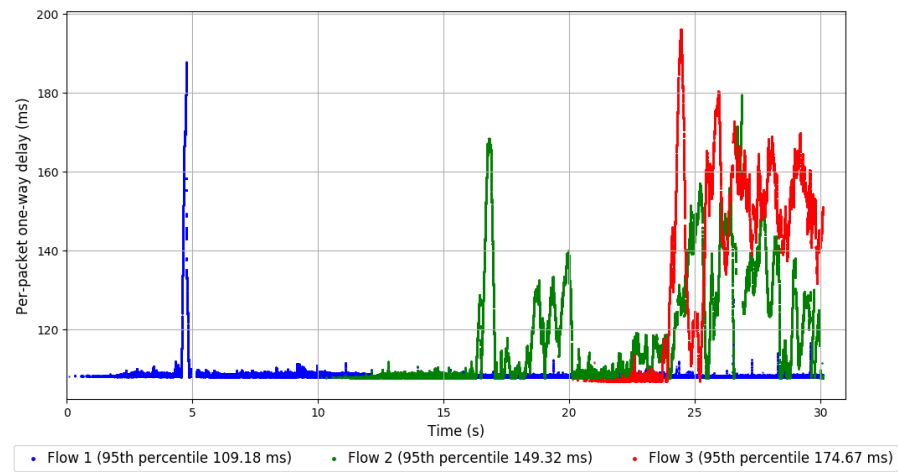
Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2019-02-05 07:44:43
End at: 2019-02-05 07:45:13
Local clock offset: 0.724 ms
Remote clock offset: -0.028 ms


# Below is generated by plot.py at 2019-02-05 11:26:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 812.53 Mbit/s
95th percentile per-packet one-way delay: 196.098 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 481.45 Mbit/s
95th percentile per-packet one-way delay: 200.901 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 367.78 Mbit/s
95th percentile per-packet one-way delay: 189.822 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 259.03 Mbit/s
95th percentile per-packet one-way delay: 177.473 ms
Loss rate: 0.84%
```

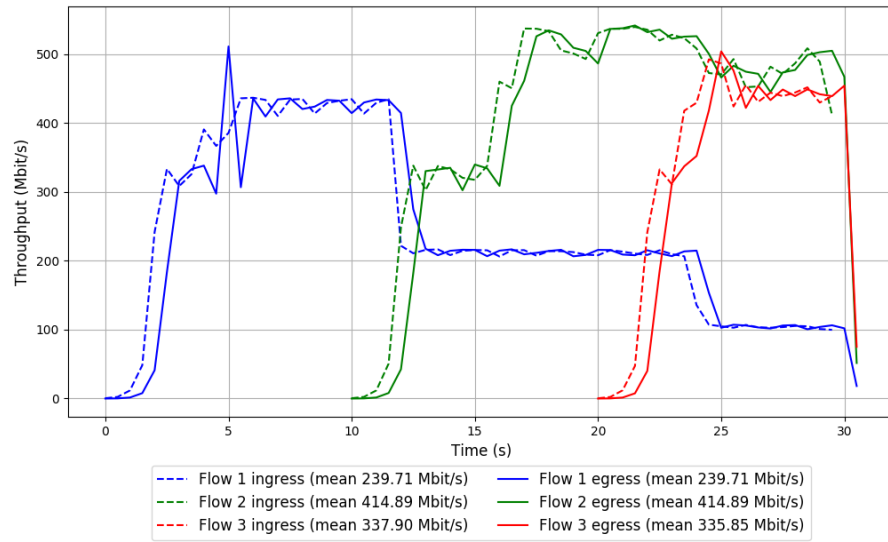# Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2019-02-05 08:23:00
End at: 2019-02-05 08:23:30
Local clock offset: 1.359 ms
Remote clock offset: -0.076 ms


# Below is generated by plot.py at 2019-02-05 11:26:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 627.74 Mbit/s
95th percentile per-packet one-way delay: 159.625 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 239.71 Mbit/s
95th percentile per-packet one-way delay: 109.176 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 414.89 Mbit/s
95th percentile per-packet one-way delay: 149.321 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 335.85 Mbit/s
95th percentile per-packet one-way delay: 174.669 ms
Loss rate: 0.59%
```
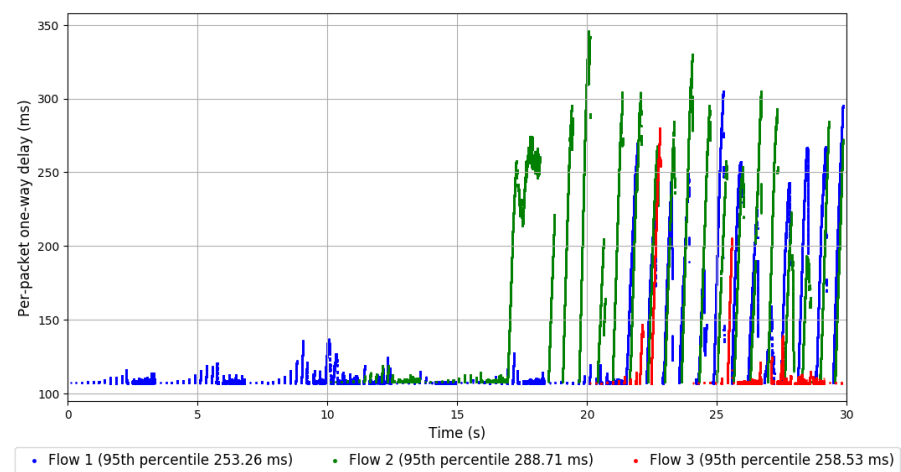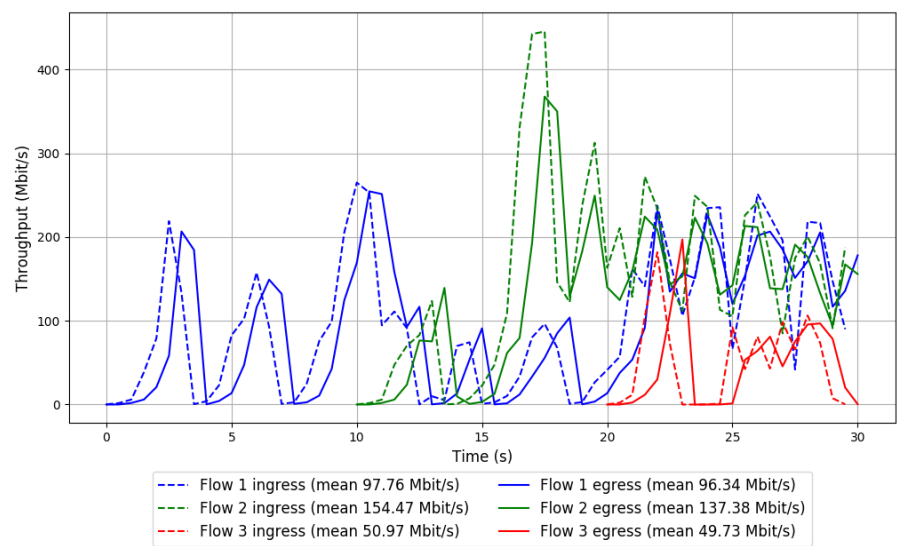
Run 5: Report of TCP Vegas — Data Link

- - - Flow 1 ingress (mean 239.71 Mbit/s) —— Flow 1 egress (mean 239.71 Mbit/s)
- - - Flow 2 ingress (mean 414.89 Mbit/s) —— Flow 2 egress (mean 414.89 Mbit/s)
- - - Flow 3 ingress (mean 337.90 Mbit/s) —— Flow 3 egress (mean 335.85 Mbit/s)

• Flow 1 (95th percentile 109.18 ms)   • Flow 2 (95th percentile 149.32 ms)   • Flow 3 (95th percentile 174.67 ms)
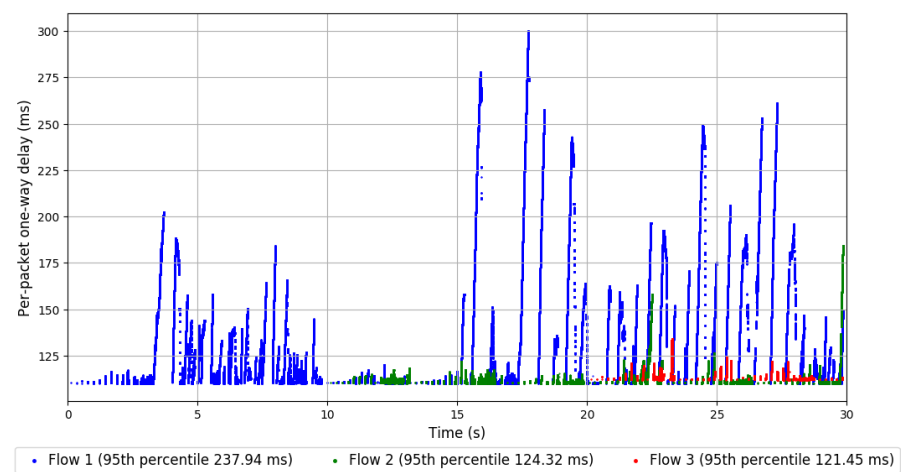
```
Run 1: Statistics of Verus

Start at: 2019-02-05 06:01:06
End at: 2019-02-05 06:01:36
Local clock offset: 1.405 ms
Remote clock offset: 0.143 ms


# Below is generated by plot.py at 2019-02-05 11:26:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 203.68 Mbit/s
95th percentile per-packet one-way delay: 275.051 ms
Loss rate: 5.75%
-- Flow 1:
Average throughput: 96.34 Mbit/s
95th percentile per-packet one-way delay: 253.256 ms
Loss rate: 1.02%
-- Flow 2:
Average throughput: 137.38 Mbit/s
95th percentile per-packet one-way delay: 288.708 ms
Loss rate: 10.79%
-- Flow 3:
Average throughput: 49.73 Mbit/s
95th percentile per-packet one-way delay: 258.527 ms
Loss rate: 2.43%
```

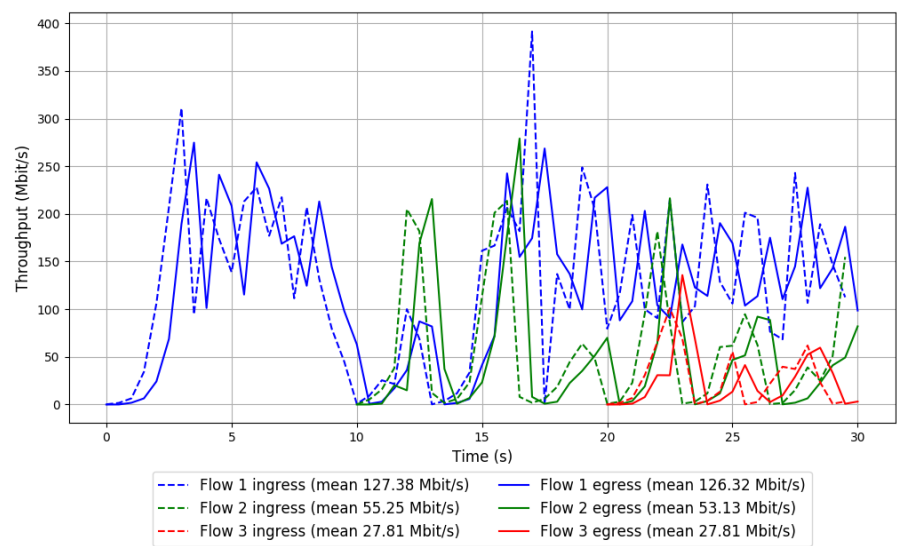Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2019-02-05 06:39:10
End at: 2019-02-05 06:39:40
Local clock offset: -0.604 ms
Remote clock offset: 0.343 ms


# Below is generated by plot.py at 2019-02-05 11:26:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 170.63 Mbit/s
95th percentile per-packet one-way delay: 229.189 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 126.32 Mbit/s
95th percentile per-packet one-way delay: 237.936 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 53.13 Mbit/s
95th percentile per-packet one-way delay: 124.317 ms
Loss rate: 3.82%
-- Flow 3:
Average throughput: 27.81 Mbit/s
95th percentile per-packet one-way delay: 121.455 ms
Loss rate: 0.00%
```
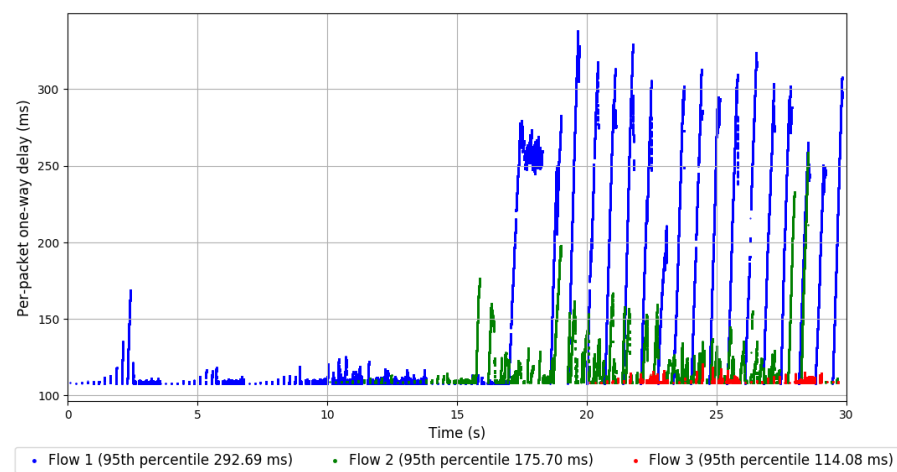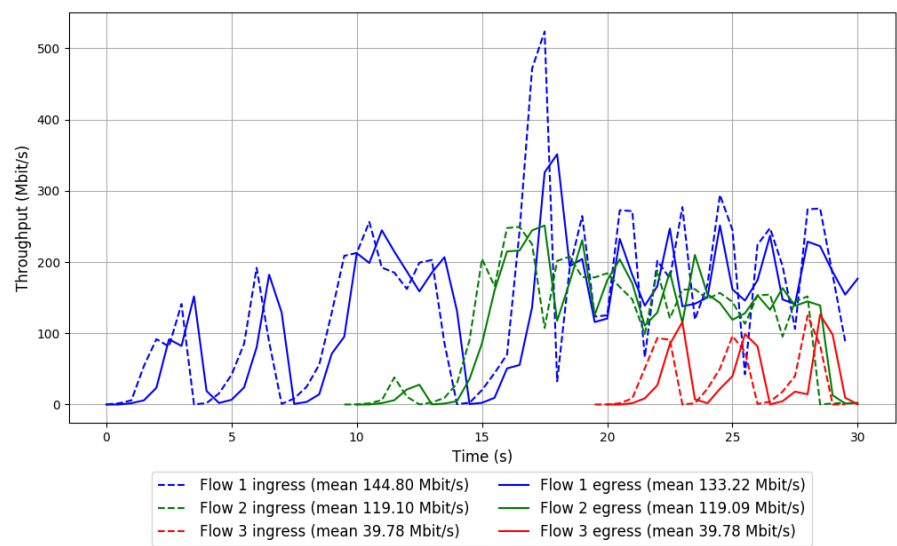
Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2019-02-05 07:17:05
End at: 2019-02-05 07:17:35
Local clock offset: 0.704 ms
Remote clock offset: 0.012 ms


# Below is generated by plot.py at 2019-02-05 11:26:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 224.30 Mbit/s
95th percentile per-packet one-way delay: 281.882 ms
Loss rate: 4.67%
-- Flow 1:
Average throughput: 133.22 Mbit/s
95th percentile per-packet one-way delay: 292.693 ms
Loss rate: 7.62%
-- Flow 2:
Average throughput: 119.09 Mbit/s
95th percentile per-packet one-way delay: 175.702 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 39.78 Mbit/s
95th percentile per-packet one-way delay: 114.081 ms
Loss rate: 0.00%
```
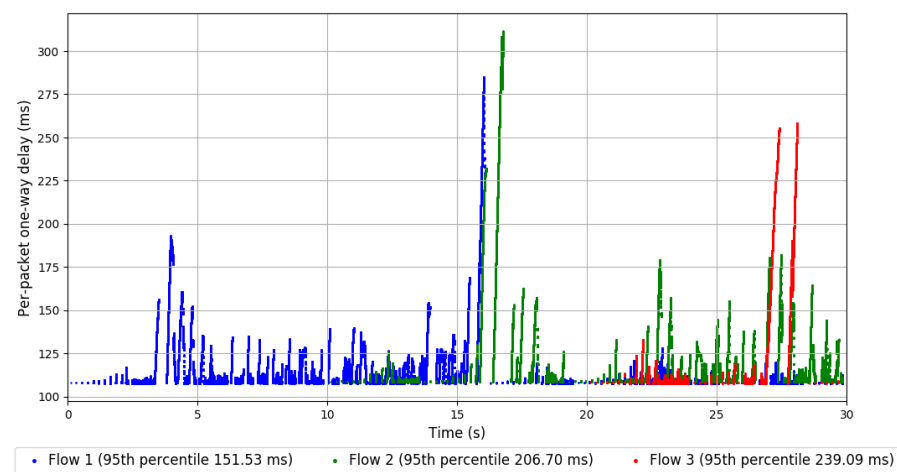
Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2019-02-05 07:55:30
End at: 2019-02-05 07:56:00
Local clock offset: 0.669 ms
Remote clock offset: 0.05 ms


# Below is generated by plot.py at 2019-02-05 11:26:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 204.07 Mbit/s
95th percentile per-packet one-way delay: 186.956 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 116.49 Mbit/s
95th percentile per-packet one-way delay: 151.527 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 98.62 Mbit/s
95th percentile per-packet one-way delay: 206.700 ms
Loss rate: 2.05%
-- Flow 3:
Average throughput: 68.99 Mbit/s
95th percentile per-packet one-way delay: 239.093 ms
Loss rate: 0.00%
```
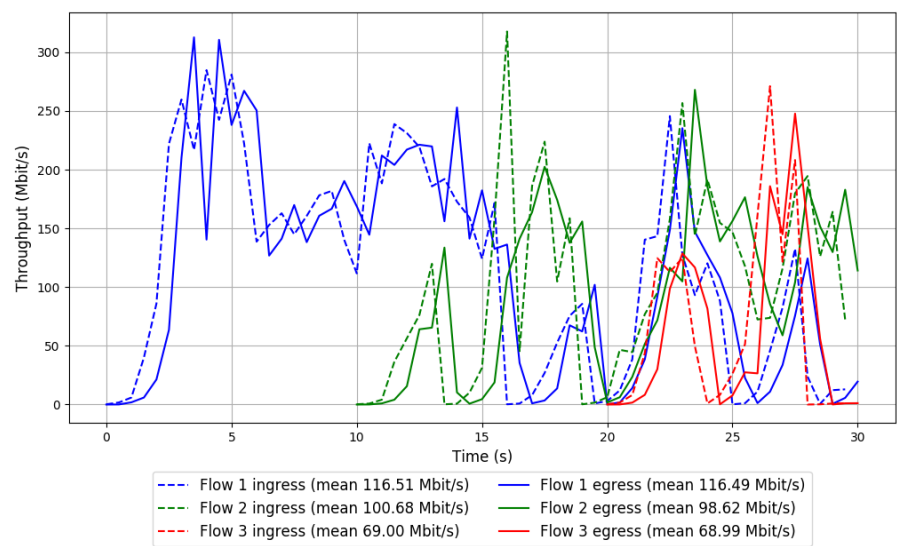
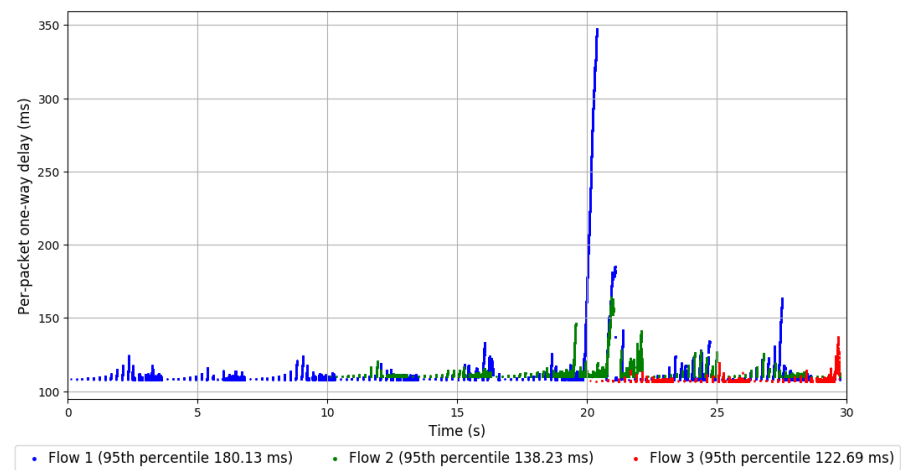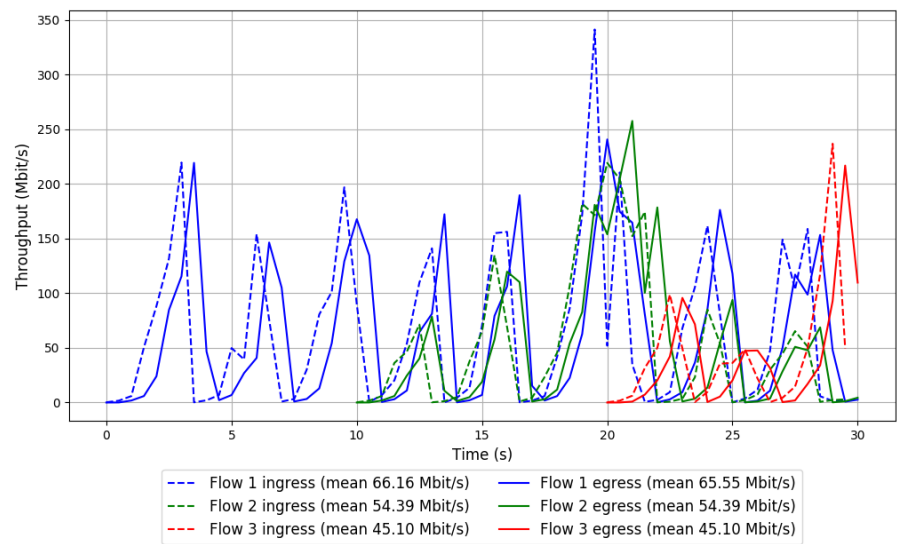Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2019-02-05 08:33:33
End at: 2019-02-05 08:34:03
Local clock offset: 1.285 ms
Remote clock offset: -0.069 ms


# Below is generated by plot.py at 2019-02-05 11:26:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 116.13 Mbit/s
95th percentile per-packet one-way delay: 156.637 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 65.55 Mbit/s
95th percentile per-packet one-way delay: 180.134 ms
Loss rate: 0.92%
-- Flow 2:
Average throughput: 54.39 Mbit/s
95th percentile per-packet one-way delay: 138.230 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 45.10 Mbit/s
95th percentile per-packet one-way delay: 122.688 ms
Loss rate: 0.00%
```

Run 5: Report of Verus — Data Link

```
Run 1: Statistics of PCC-Vivace

Start at: 2019-02-05 05:52:27
End at: 2019-02-05 05:52:57
Local clock offset: 0.522 ms
Remote clock offset: 0.198 ms


# Below is generated by plot.py at 2019-02-05 11:29:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 542.73 Mbit/s
95th percentile per-packet one-way delay: 176.659 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 306.04 Mbit/s
95th percentile per-packet one-way delay: 157.669 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 286.58 Mbit/s
95th percentile per-packet one-way delay: 201.362 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 139.10 Mbit/s
95th percentile per-packet one-way delay: 115.384 ms
Loss rate: 0.00%
```
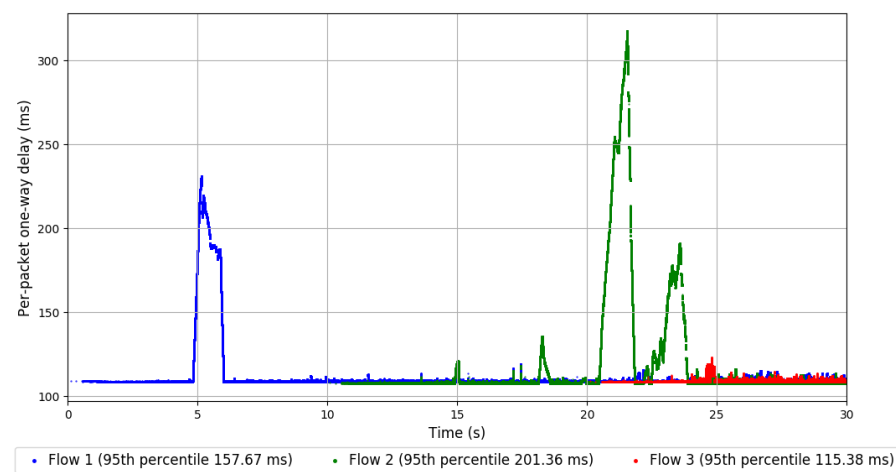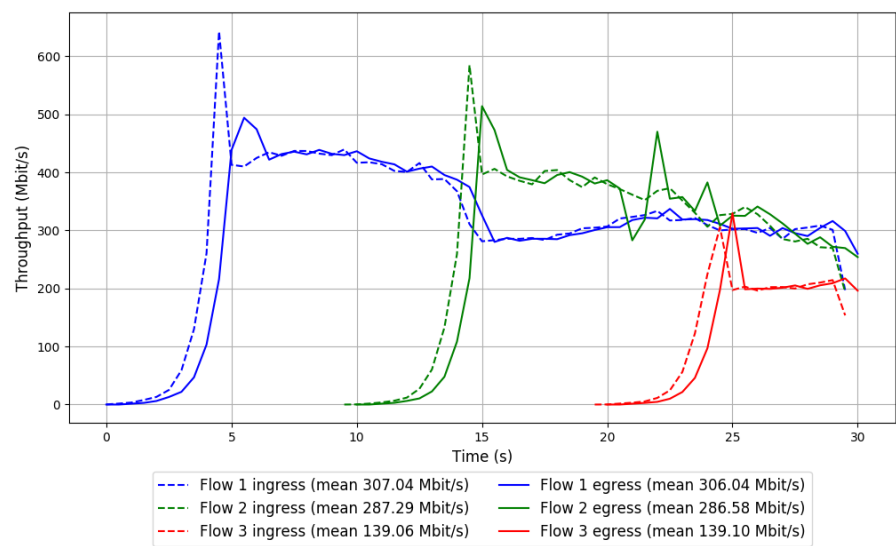
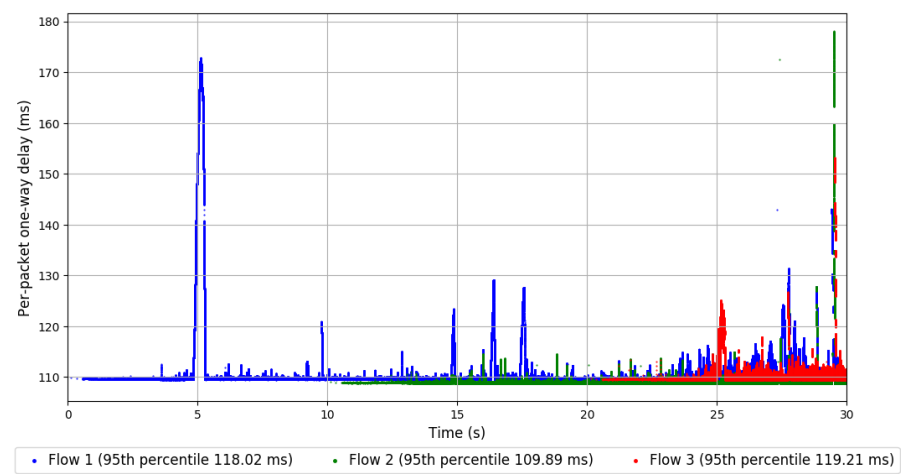## Run 1: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 307.04 Mbit/s) — — — Flow 1 egress (mean 306.04 Mbit/s)
Flow 2 ingress (mean 287.29 Mbit/s) — — — Flow 2 egress (mean 286.58 Mbit/s)
Flow 3 ingress (mean 139.06 Mbit/s) — — — Flow 3 egress (mean 139.10 Mbit/s)

Flow 1 (95th percentile 157.67 ms) • Flow 2 (95th percentile 201.36 ms) • Flow 3 (95th percentile 115.38 ms)
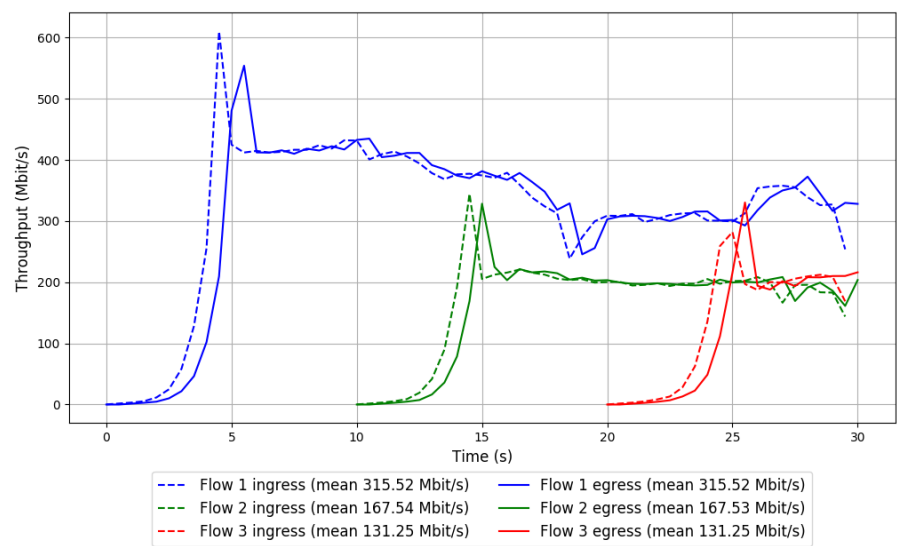
```
Run 2: Statistics of PCC-Vivace

Start at: 2019-02-05 06:30:23
End at: 2019-02-05 06:30:53
Local clock offset: -0.665 ms
Remote clock offset: -0.271 ms


# Below is generated by plot.py at 2019-02-05 11:29:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 470.27 Mbit/s
95th percentile per-packet one-way delay: 115.751 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 315.52 Mbit/s
95th percentile per-packet one-way delay: 118.024 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 167.53 Mbit/s
95th percentile per-packet one-way delay: 109.887 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 131.25 Mbit/s
95th percentile per-packet one-way delay: 119.214 ms
Loss rate: 0.00%
```

Run 2: Report of PCC-Vivace — Data Link

```
Run 3: Statistics of PCC-Vivace

Start at: 2019-02-05 07:08:12
End at: 2019-02-05 07:08:42
Local clock offset: -0.738 ms
Remote clock offset: 0.098 ms


# Below is generated by plot.py at 2019-02-05 11:29:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 478.46 Mbit/s
95th percentile per-packet one-way delay: 120.897 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 315.28 Mbit/s
95th percentile per-packet one-way delay: 124.983 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 182.60 Mbit/s
95th percentile per-packet one-way delay: 112.065 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 127.21 Mbit/s
95th percentile per-packet one-way delay: 123.042 ms
Loss rate: 0.00%
```
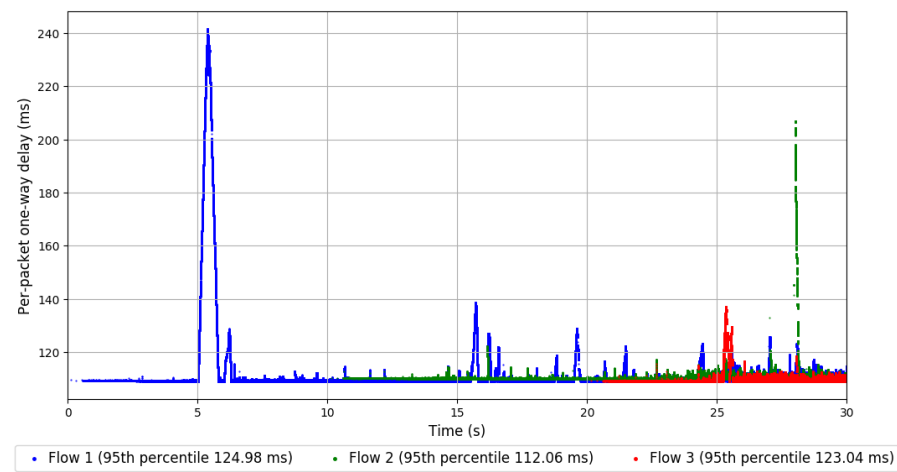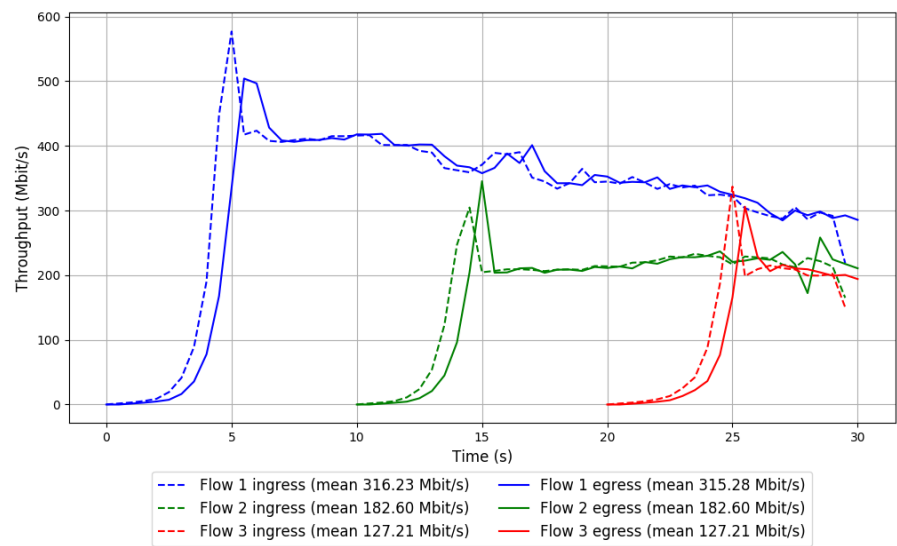
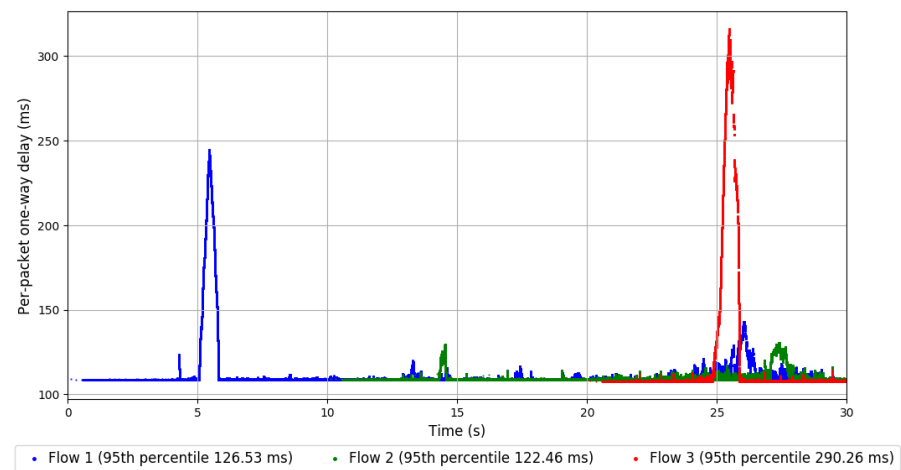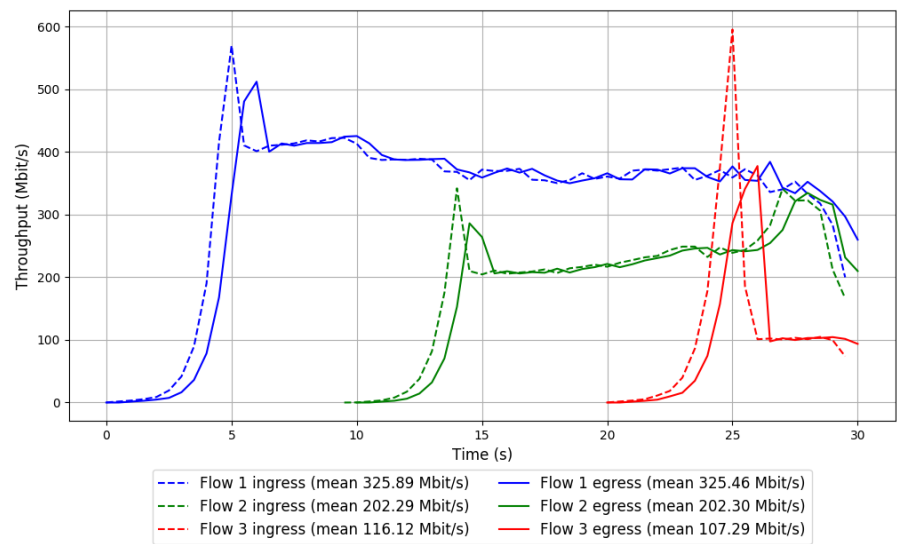# Run 3: Report of PCC-Vivace — Data Link

```
Run 4: Statistics of PCC-Vivace

Start at: 2019-02-05 07:46:47
End at: 2019-02-05 07:47:17
Local clock offset: 0.63 ms
Remote clock offset: -0.001 ms


# Below is generated by plot.py at 2019-02-05 11:29:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 495.41 Mbit/s
95th percentile per-packet one-way delay: 133.609 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 325.46 Mbit/s
95th percentile per-packet one-way delay: 126.529 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 202.30 Mbit/s
95th percentile per-packet one-way delay: 122.462 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 107.29 Mbit/s
95th percentile per-packet one-way delay: 290.262 ms
Loss rate: 7.68%
```

Run 4: Report of PCC-Vivace — Data Link

- - - - Flow 1 ingress (mean 325.89 Mbit/s) ——— Flow 1 egress (mean 325.46 Mbit/s)
- - - - Flow 2 ingress (mean 202.29 Mbit/s) ——— Flow 2 egress (mean 202.30 Mbit/s)
- - - - Flow 3 ingress (mean 116.12 Mbit/s) ——— Flow 3 egress (mean 107.29 Mbit/s)

- Flow 1 (95th percentile 126.53 ms)   - Flow 2 (95th percentile 122.46 ms)   - Flow 3 (95th percentile 290.26 ms)

```
Run 5: Statistics of PCC-Vivace

Start at: 2019-02-05 08:24:59
End at: 2019-02-05 08:25:29
Local clock offset: 0.057 ms
Remote clock offset: 0.262 ms


# Below is generated by plot.py at 2019-02-05 11:30:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 495.06 Mbit/s
95th percentile per-packet one-way delay: 181.436 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 323.16 Mbit/s
95th percentile per-packet one-way delay: 202.458 ms
Loss rate: 1.03%
-- Flow 2:
Average throughput: 192.18 Mbit/s
95th percentile per-packet one-way delay: 111.738 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 133.49 Mbit/s
95th percentile per-packet one-way delay: 113.758 ms
Loss rate: 0.00%
```
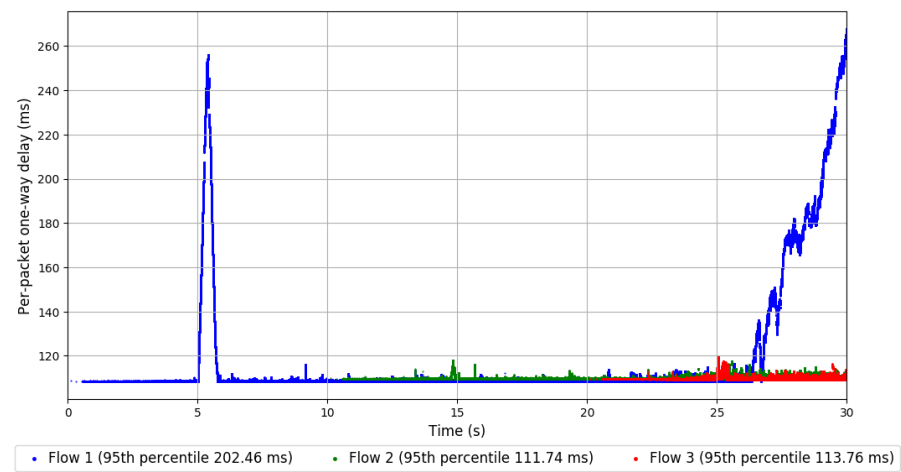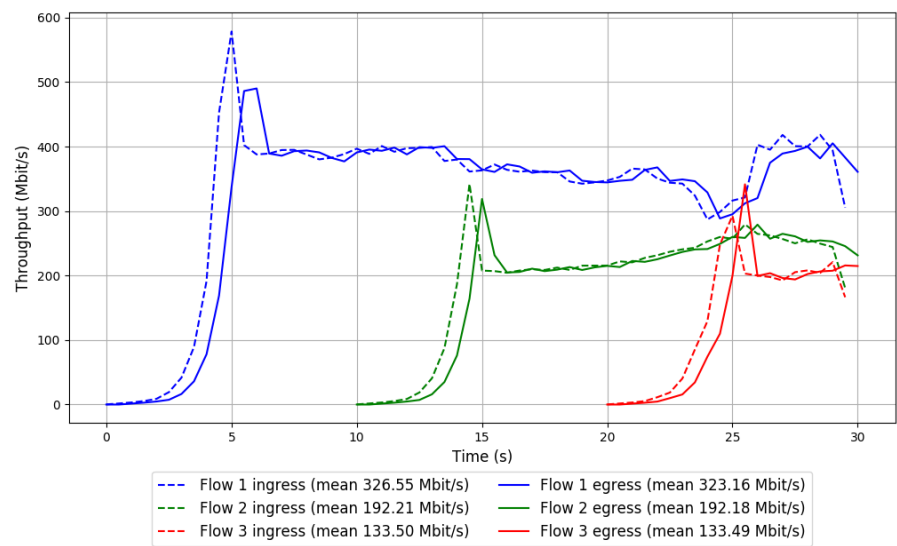
Run 5: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 326.55 Mbit/s) --- Flow 1 egress (mean 323.16 Mbit/s)
Flow 2 ingress (mean 192.21 Mbit/s) --- Flow 2 egress (mean 192.18 Mbit/s)
Flow 3 ingress (mean 133.50 Mbit/s) --- Flow 3 egress (mean 133.49 Mbit/s)

Flow 1 (95th percentile 202.46 ms)   Flow 2 (95th percentile 111.74 ms)   Flow 3 (95th percentile 113.76 ms)

```
Run 1: Statistics of WebRTC media

Start at: 2019-02-05 06:07:14
End at: 2019-02-05 06:07:44
Local clock offset: 0.182 ms
Remote clock offset: 0.133 ms


# Below is generated by plot.py at 2019-02-05 11:30:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.67 Mbit/s
95th percentile per-packet one-way delay: 109.109 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 108.399 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.27 Mbit/s
95th percentile per-packet one-way delay: 108.703 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 109.246 ms
Loss rate: 0.00%
```
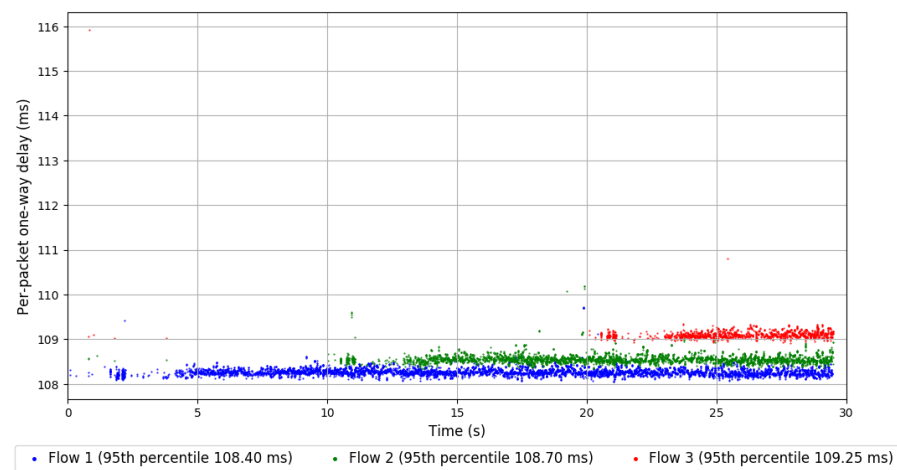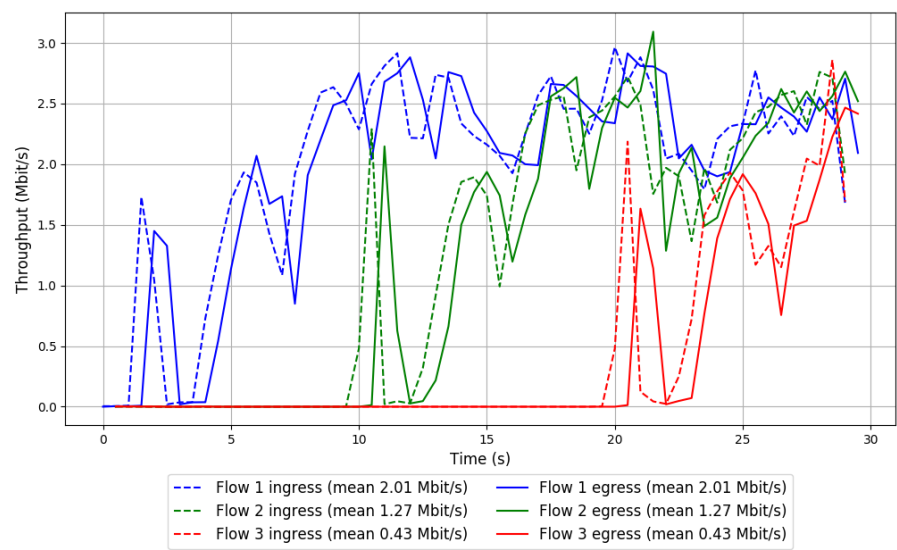
Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2019-02-05 06:45:18
End at: 2019-02-05 06:45:49
Local clock offset: -1.432 ms
Remote clock offset: 0.144 ms


# Below is generated by plot.py at 2019-02-05 11:30:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 111.012 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 110.146 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 111.022 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 111.032 ms
Loss rate: 0.00%
```
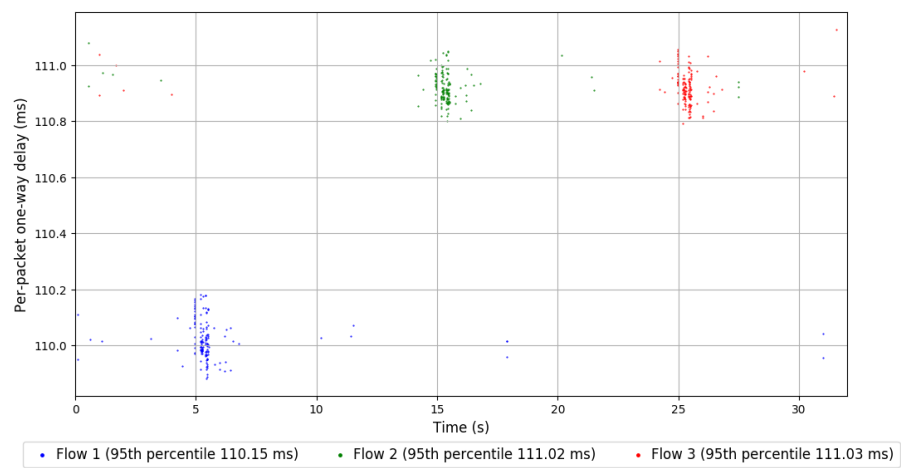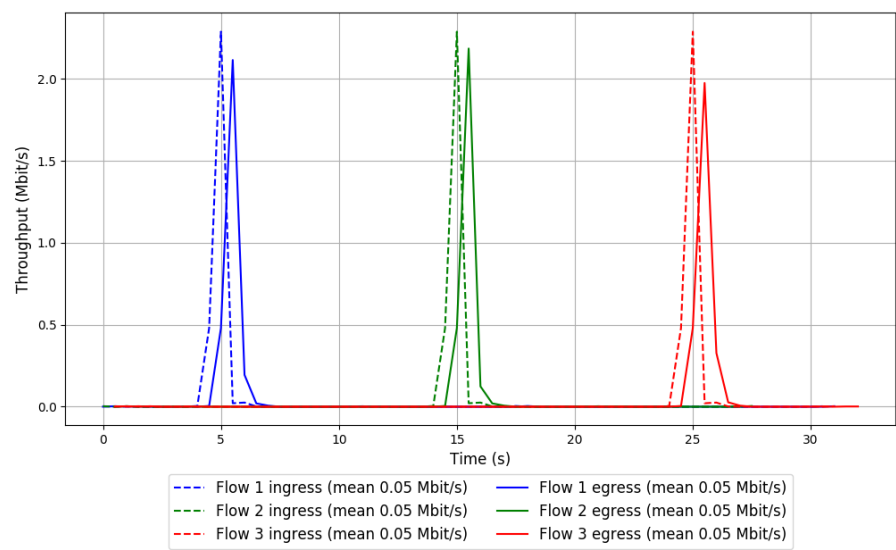
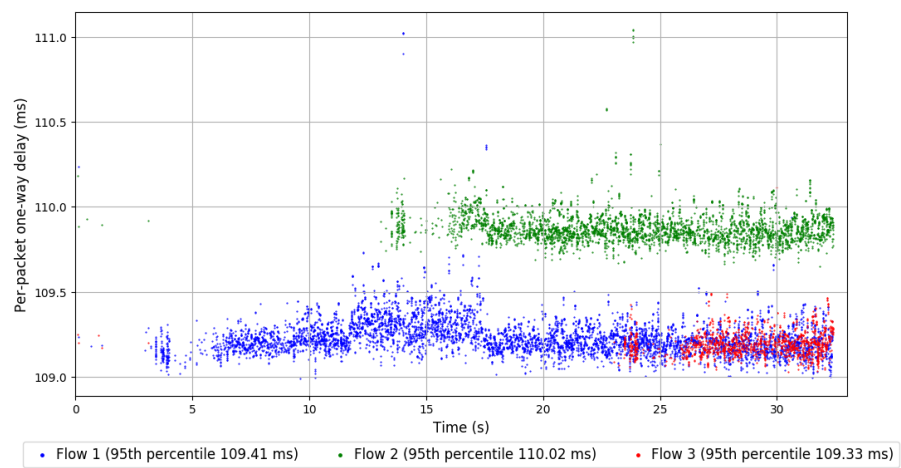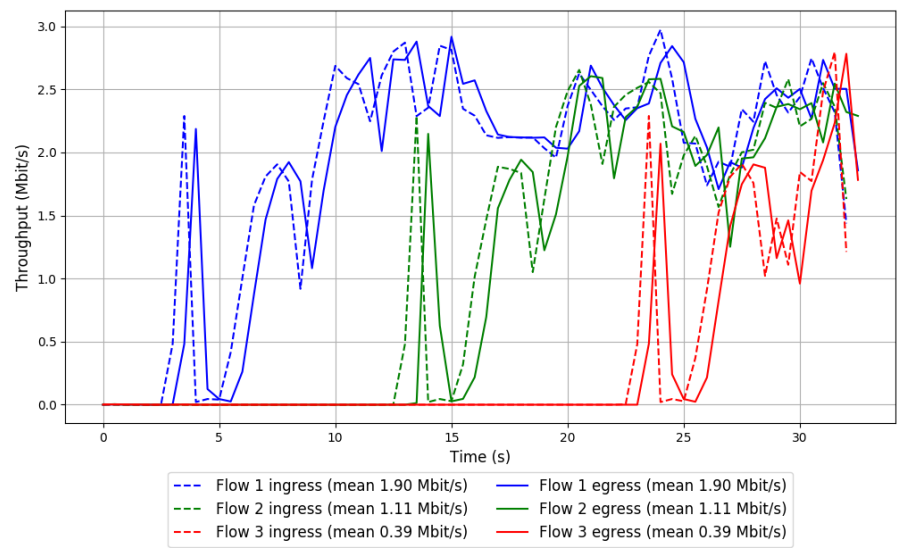Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2019-02-05 07:23:18
End at: 2019-02-05 07:23:48
Local clock offset: -0.701 ms
Remote clock offset: -0.032 ms


# Below is generated by plot.py at 2019-02-05 11:30:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.39 Mbit/s
95th percentile per-packet one-way delay: 109.949 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 109.407 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 110.024 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 109.329 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2019-02-05 08:01:41
End at: 2019-02-05 08:02:11
Local clock offset: 1.402 ms
Remote clock offset: 0.034 ms


# Below is generated by plot.py at 2019-02-05 11:30:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 108.264 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 107.995 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 107.933 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 108.323 ms
Loss rate: 0.00%
```
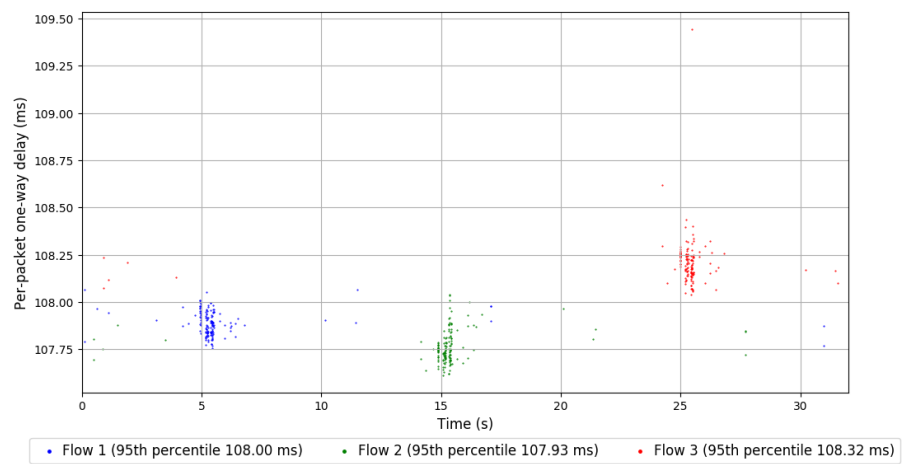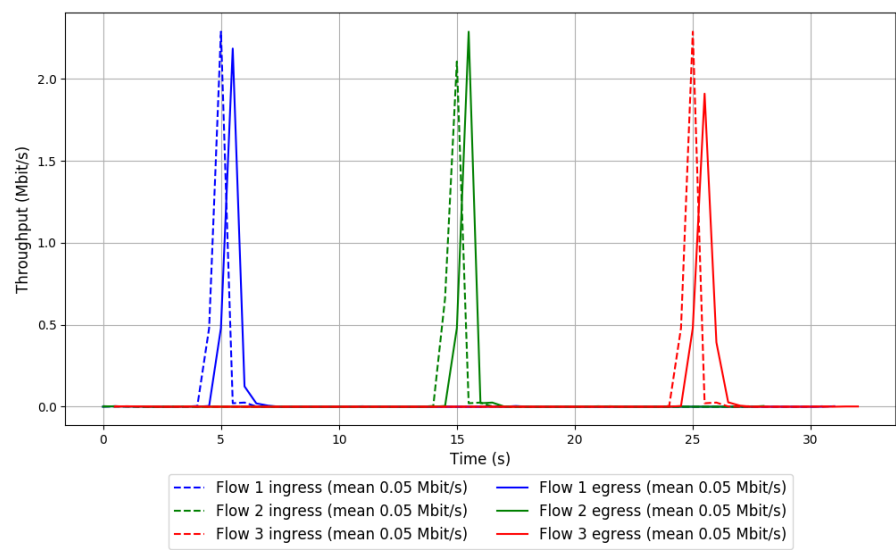
Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2019-02-05 08:39:27
End at: 2019-02-05 08:39:57
Local clock offset: 0.04 ms
Remote clock offset: -0.124 ms


# Below is generated by plot.py at 2019-02-05 11:30:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 109.328 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 109.312 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 109.350 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 109.194 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link