Pantheon Report

Generated at 2017-09-22 05:28:13 (UTC).

Data path: AWS Brazil 1 Ethernet (*local*) →Brazil Ethernet (*remote*).

Repeated the test of 14 congestion control schemes 10 times.

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

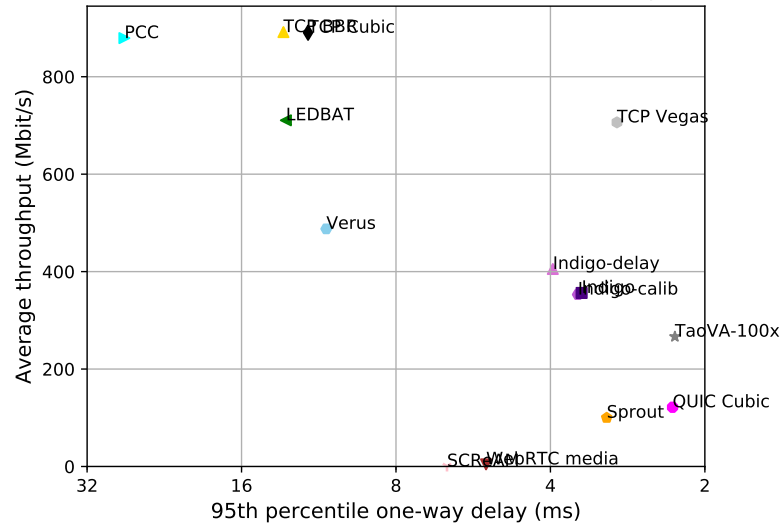Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

Tested BBR with qdisc of Fair Queuing (`fq`), and other schemes with the default Linux qdisc (`pfifo_fast`).

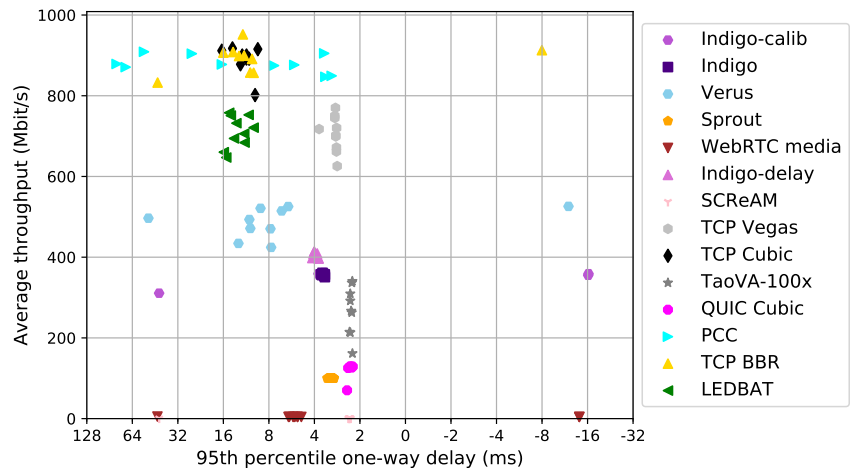NTP offsets were measured against `gps.ntp.br` and have been applied to correct the timestamps in logs.

```
Git summary:
branch: indigos @ 46c7c812d4acb71eea4f5fb0b03b3657cea3062f
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fabb936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
 M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
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/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
 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/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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

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

scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	535.99	375.02	326.60	12.37	10.16	4.60	11.93	22.94	28.72
TCP Cubic	10	576.56	298.67	345.73	17.11	13.05	5.12	0.02	1.19	0.03
LEDBAT	10	416.23	317.46	251.56	14.27	13.98	8.85	0.04	0.73	0.68
PCC	10	674.61	270.55	75.30	31.48	1.40	5.65	0.24	0.03	0.69
QUIC Cubic	9	62.31	61.85	55.26	2.28	2.32	3.02	0.00	0.00	0.00
SCReAM	10	0.22	0.22	0.21	2.35	2.34	6.41	0.00	0.00	0.70
WebRTC media	10	2.36	1.55	0.39	1.11	5.68	3.21	0.00	0.66	0.00
Sprout	10	50.24	50.15	49.91	3.07	3.12	3.16	0.00	0.00	0.00
TaoVA-100x	9	130.86	134.34	173.79	2.30	2.28	2.29	0.00	0.00	0.00
TCP Vegas	10	382.04	344.37	285.72	3.10	2.91	6.90	0.00	0.00	0.66
Verus	10	281.38	209.11	196.67	6.77	5.91	18.01	1.26	1.90	2.70
Indigo	10	186.71	176.33	161.47	3.10	3.63	4.08	0.00	0.00	0.00
Indigo-calib	10	185.47	169.92	167.86	-0.86	3.63	0.34	0.00	0.61	0.00
Indigo-delay	10	222.56	197.05	161.03	3.47	4.25	4.52	0.00	0.00	0.01

```
Run 1: Statistics of TCP BBR

Start at: 2017-09-21 22:42:13
End at: 2017-09-21 22:42:43
Local clock offset: -0.105 ms
Remote clock offset: 0.192 ms


# Below is generated by plot.py at 2017-09-22 03:50:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 906.86 Mbit/s
95th percentile per-packet one-way delay: 16.003 ms
Loss rate: 17.33%
-- Flow 1:
Average throughput: 549.62 Mbit/s
95th percentile per-packet one-way delay: 17.764 ms
Loss rate: 12.28%
-- Flow 2:
Average throughput: 394.88 Mbit/s
95th percentile per-packet one-way delay: 7.895 ms
Loss rate: 22.20%
-- Flow 3:
Average throughput: 285.70 Mbit/s
95th percentile per-packet one-way delay: 6.690 ms
Loss rate: 28.79%
```
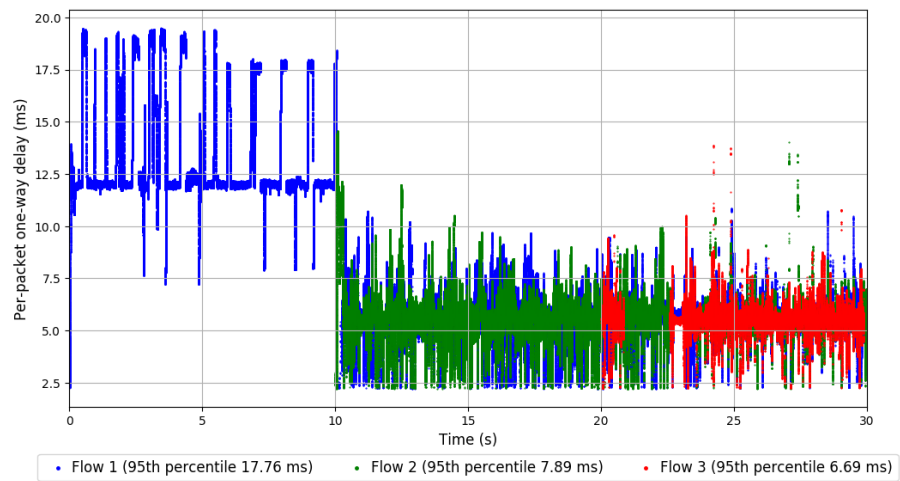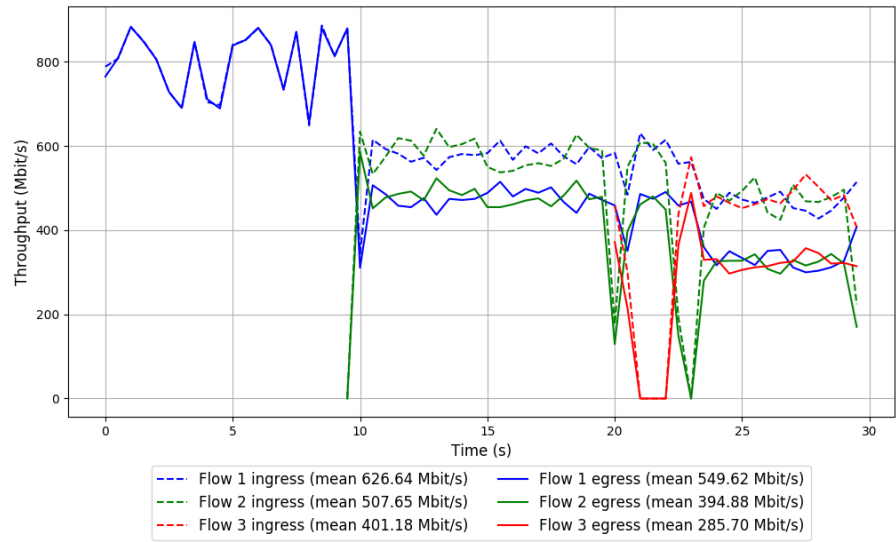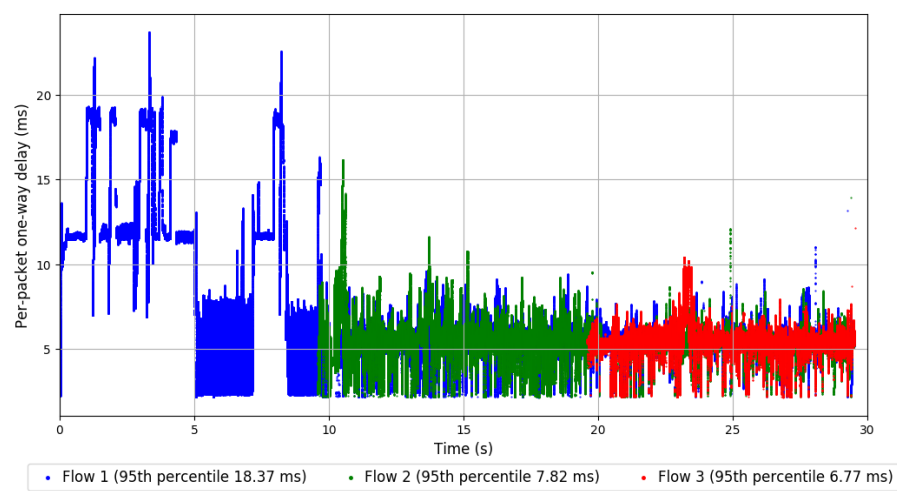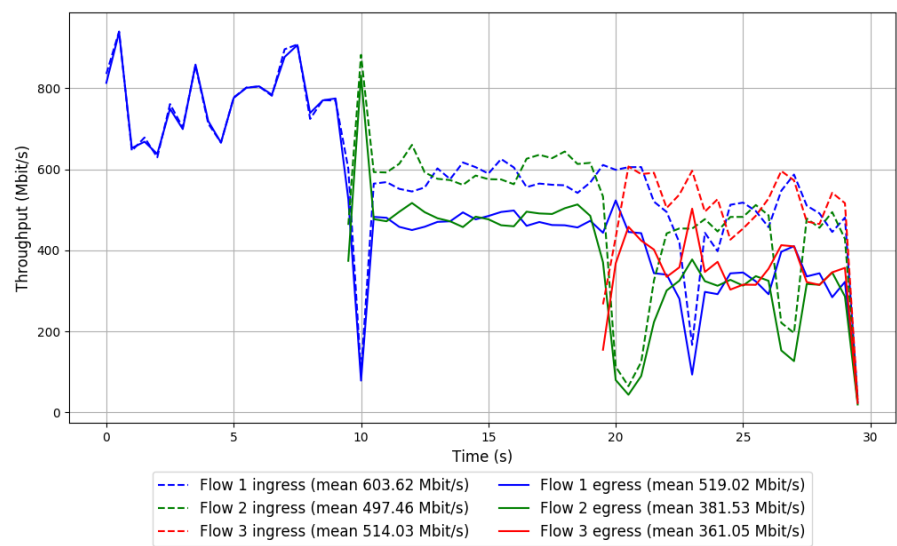
Run 1: Report of TCP BBR — Data Link

Flow 1 ingress (mean 626.64 Mbit/s) --- Flow 1 egress (mean 549.62 Mbit/s)
Flow 2 ingress (mean 507.65 Mbit/s) --- Flow 2 egress (mean 394.88 Mbit/s)
Flow 3 ingress (mean 401.18 Mbit/s) --- Flow 3 egress (mean 285.70 Mbit/s)

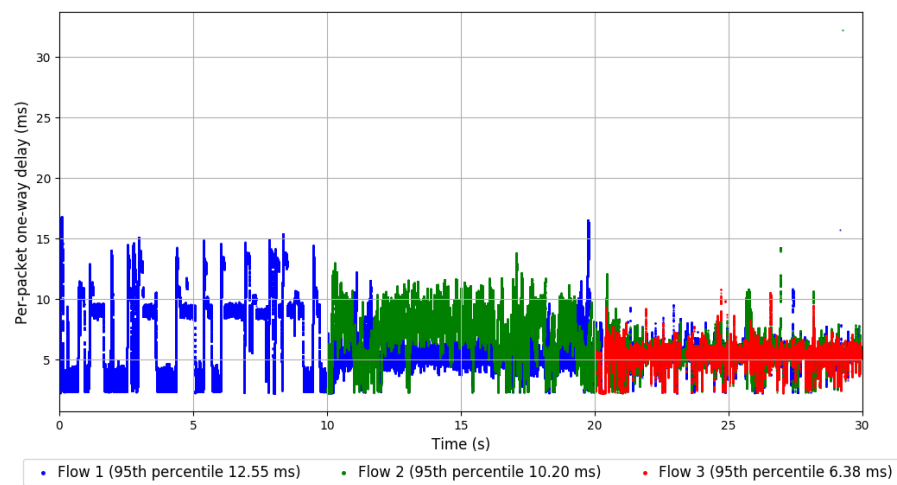Flow 1 (95th percentile 17.76 ms)   Flow 2 (95th percentile 7.89 ms)   Flow 3 (95th percentile 6.69 ms)

```
Run 2: Statistics of TCP BBR

Start at: 2017-09-21 23:02:04
End at: 2017-09-21 23:02:34
Local clock offset: -0.097 ms
Remote clock offset: -0.061 ms

# Below is generated by plot.py at 2017-09-22 03:50:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 898.45 Mbit/s
95th percentile per-packet one-way delay: 12.600 ms
Loss rate: 19.25%
-- Flow 1:
Average throughput: 519.02 Mbit/s
95th percentile per-packet one-way delay: 18.369 ms
Loss rate: 14.00%
-- Flow 2:
Average throughput: 381.53 Mbit/s
95th percentile per-packet one-way delay: 7.815 ms
Loss rate: 23.29%
-- Flow 3:
Average throughput: 361.05 Mbit/s
95th percentile per-packet one-way delay: 6.774 ms
Loss rate: 29.71%
```
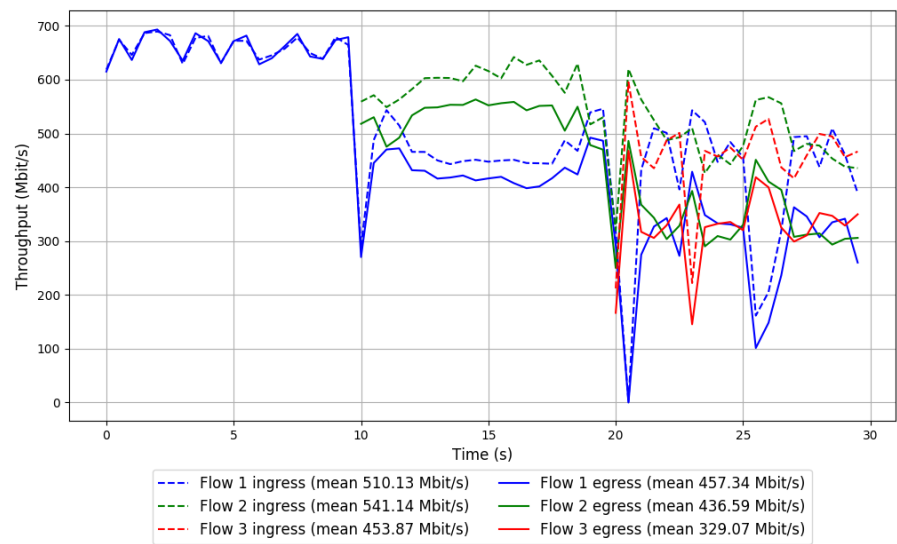
Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2017-09-21 23:21:58
End at: 2017-09-21 23:22:28
Local clock offset: -0.176 ms
Remote clock offset: -0.185 ms


# Below is generated by plot.py at 2017-09-22 03:50:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 857.40 Mbit/s
95th percentile per-packet one-way delay: 10.628 ms
Loss rate: 16.04%
-- Flow 1:
Average throughput: 457.34 Mbit/s
95th percentile per-packet one-way delay: 12.546 ms
Loss rate: 10.34%
-- Flow 2:
Average throughput: 436.59 Mbit/s
95th percentile per-packet one-way delay: 10.200 ms
Loss rate: 19.31%
-- Flow 3:
Average throughput: 329.07 Mbit/s
95th percentile per-packet one-way delay: 6.377 ms
Loss rate: 27.50%
```
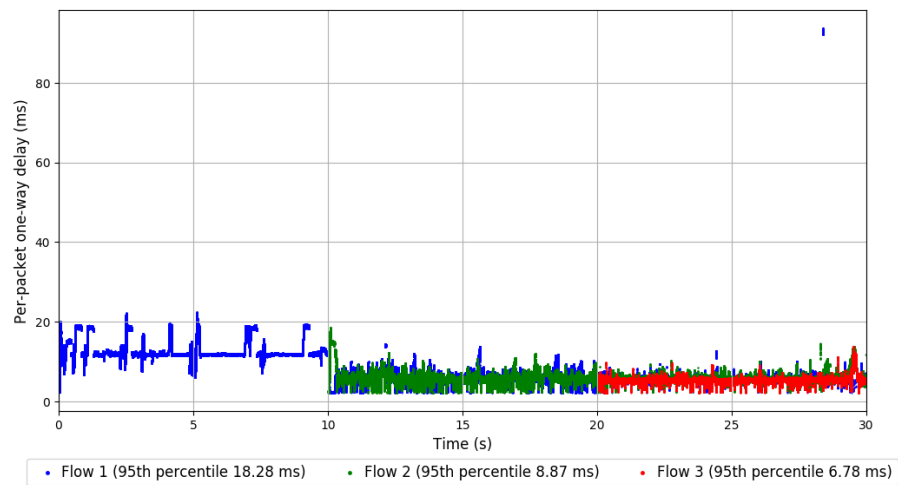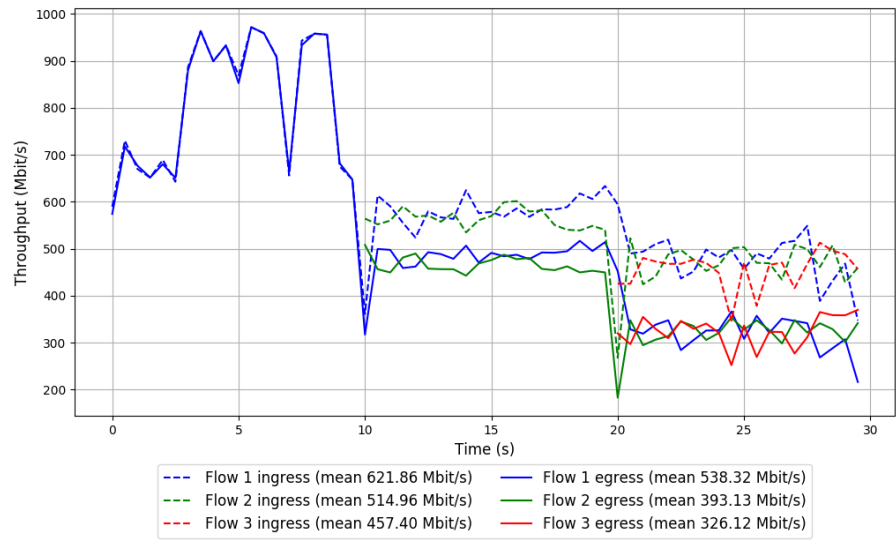
Run 3: Report of TCP BBR — Data Link

```
Run 4: Statistics of TCP BBR

Start at: 2017-09-21 23:41:42
End at: 2017-09-21 23:42:12
Local clock offset: -0.138 ms
Remote clock offset: -0.244 ms


# Below is generated by plot.py at 2017-09-22 03:50:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 908.35 Mbit/s
95th percentile per-packet one-way delay: 13.795 ms
Loss rate: 18.63%
-- Flow 1:
Average throughput: 538.32 Mbit/s
95th percentile per-packet one-way delay: 18.281 ms
Loss rate: 13.42%
-- Flow 2:
Average throughput: 393.13 Mbit/s
95th percentile per-packet one-way delay: 8.874 ms
Loss rate: 23.62%
-- Flow 3:
Average throughput: 326.12 Mbit/s
95th percentile per-packet one-way delay: 6.779 ms
Loss rate: 28.70%
```
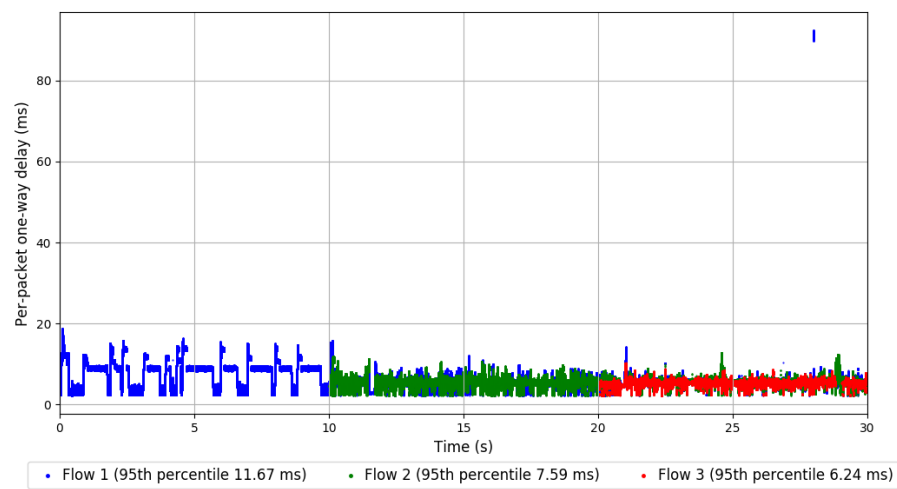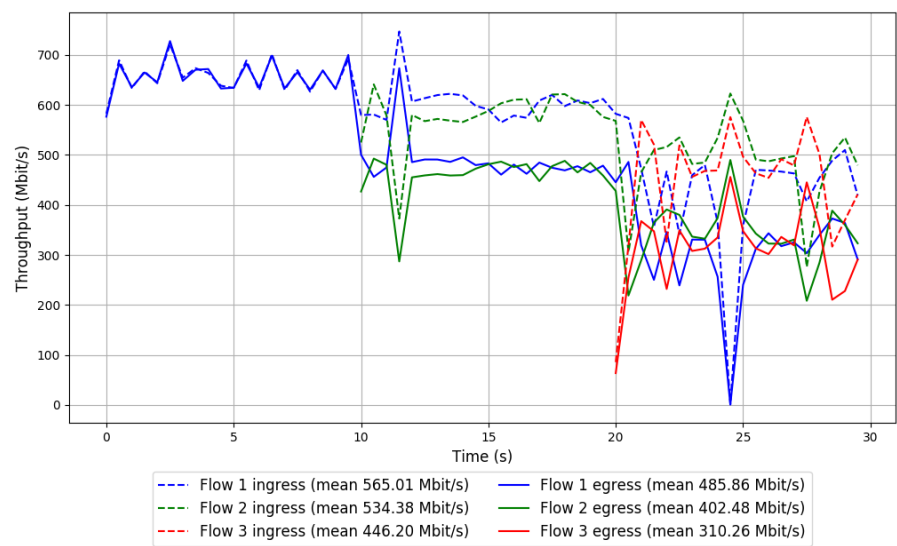
Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 621.86 Mbit/s) --- Flow 1 egress (mean 538.32 Mbit/s)
Flow 2 ingress (mean 514.96 Mbit/s) --- Flow 2 egress (mean 393.13 Mbit/s)
Flow 3 ingress (mean 457.40 Mbit/s) --- Flow 3 egress (mean 326.12 Mbit/s)

Flow 1 (95th percentile 18.28 ms) Flow 2 (95th percentile 8.87 ms) Flow 3 (95th percentile 6.78 ms)
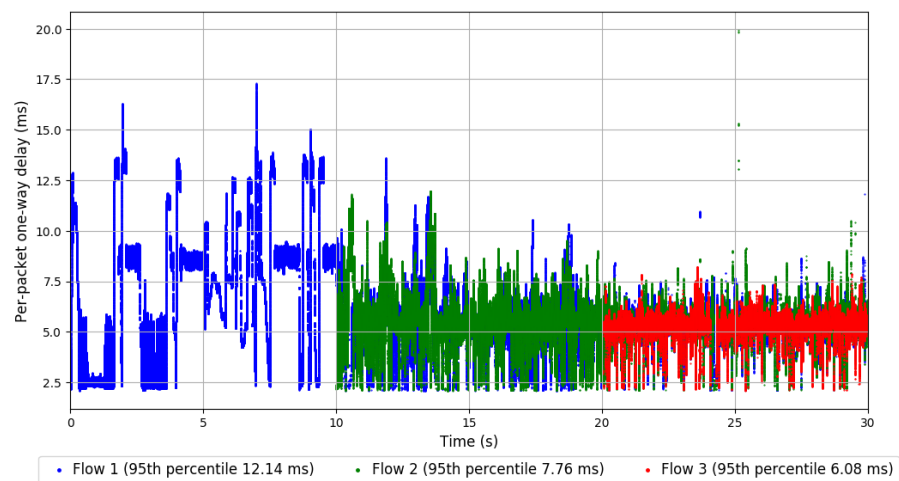
```
Run 5: Statistics of TCP BBR

Start at: 2017-09-22 00:01:42
End at: 2017-09-22 00:02:12
Local clock offset: -0.09 ms
Remote clock offset: -0.065 ms


# Below is generated by plot.py at 2017-09-22 03:50:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 856.89 Mbit/s
95th percentile per-packet one-way delay: 10.093 ms
Loss rate: 19.84%
-- Flow 1:
Average throughput: 485.86 Mbit/s
95th percentile per-packet one-way delay: 11.671 ms
Loss rate: 14.01%
-- Flow 2:
Average throughput: 402.48 Mbit/s
95th percentile per-packet one-way delay: 7.589 ms
Loss rate: 24.68%
-- Flow 3:
Average throughput: 310.26 Mbit/s
95th percentile per-packet one-way delay: 6.238 ms
Loss rate: 30.48%
```
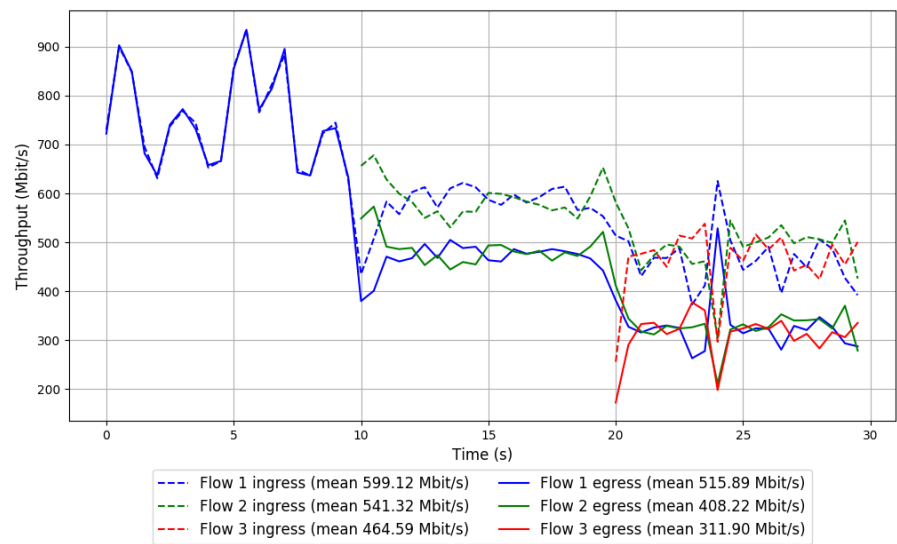
Run 5: Report of TCP BBR — Data Link

```
Run 6: Statistics of TCP BBR

Start at: 2017-09-22 00:21:19
End at: 2017-09-22 00:21:49
Local clock offset: -0.078 ms
Remote clock offset: -0.079 ms


# Below is generated by plot.py at 2017-09-22 03:50:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 891.21 Mbit/s
95th percentile per-packet one-way delay: 10.334 ms
Loss rate: 19.97%
-- Flow 1:
Average throughput: 515.89 Mbit/s
95th percentile per-packet one-way delay: 12.136 ms
Loss rate: 13.88%
-- Flow 2:
Average throughput: 408.22 Mbit/s
95th percentile per-packet one-way delay: 7.759 ms
Loss rate: 24.58%
-- Flow 3:
Average throughput: 311.90 Mbit/s
95th percentile per-packet one-way delay: 6.079 ms
Loss rate: 32.86%
```
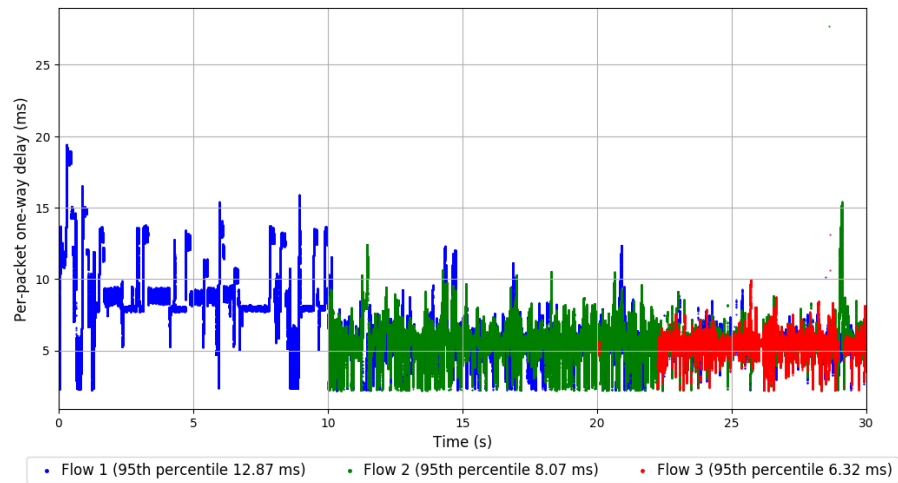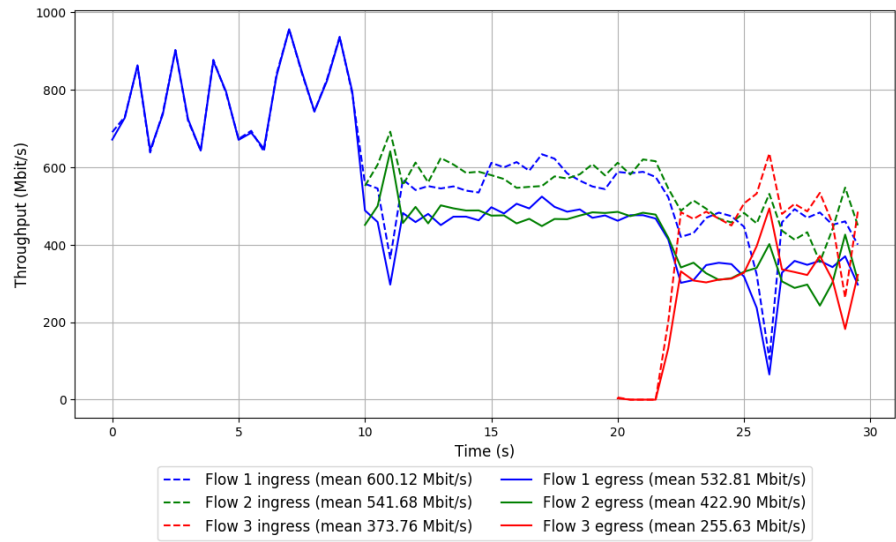
Run 6: Report of TCP BBR — Data Link

Flow 1 ingress (mean 599.12 Mbit/s) --- Flow 1 egress (mean 515.89 Mbit/s)
Flow 2 ingress (mean 541.32 Mbit/s) --- Flow 2 egress (mean 408.22 Mbit/s)
Flow 3 ingress (mean 464.59 Mbit/s) --- Flow 3 egress (mean 311.90 Mbit/s)

Flow 1 (95th percentile 12.14 ms)   Flow 2 (95th percentile 7.76 ms)   Flow 3 (95th percentile 6.08 ms)

```
Run 7: Statistics of TCP BBR

Start at: 2017-09-22 00:41:07
End at: 2017-09-22 00:41:37
Local clock offset: -0.114 ms
Remote clock offset: 0.028 ms


# Below is generated by plot.py at 2017-09-22 03:50:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 899.42 Mbit/s
95th percentile per-packet one-way delay: 11.661 ms
Loss rate: 17.10%
-- Flow 1:
Average throughput: 532.81 Mbit/s
95th percentile per-packet one-way delay: 12.865 ms
Loss rate: 11.21%
-- Flow 2:
Average throughput: 422.90 Mbit/s
95th percentile per-packet one-way delay: 8.073 ms
Loss rate: 21.91%
-- Flow 3:
Average throughput: 255.63 Mbit/s
95th percentile per-packet one-way delay: 6.324 ms
Loss rate: 31.60%
```
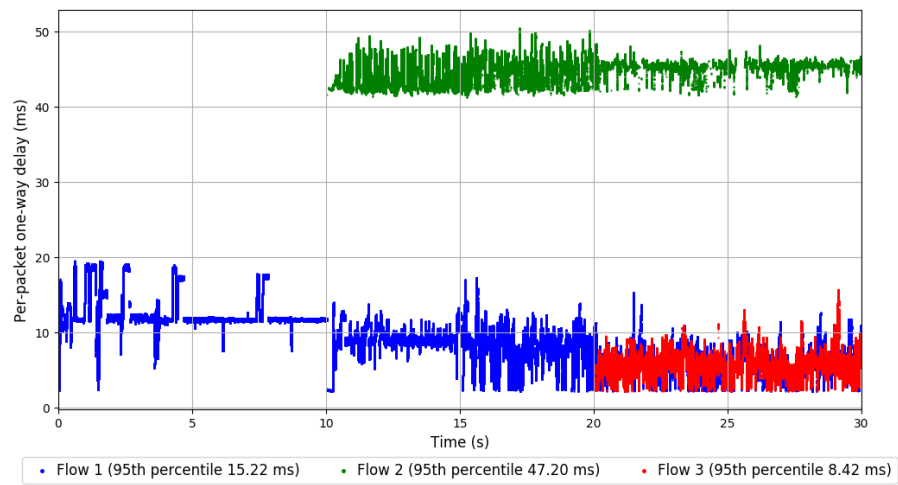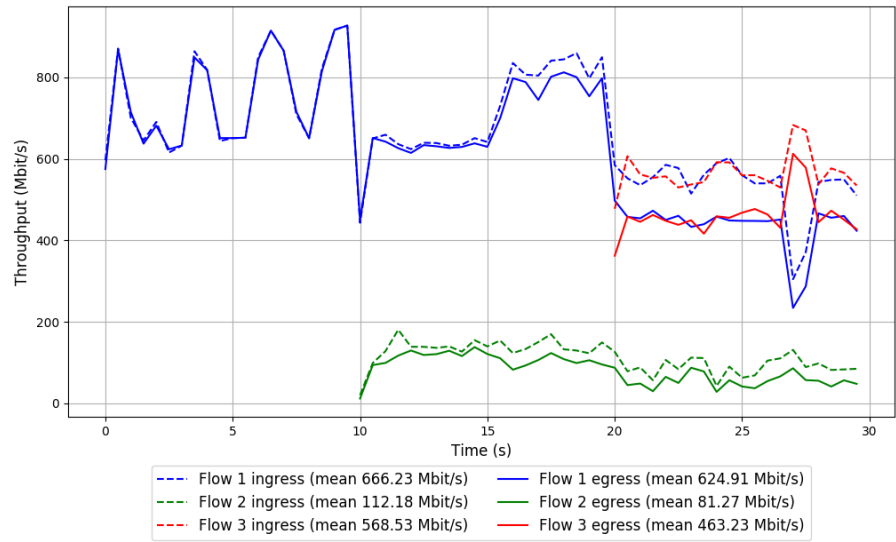
Run 7: Report of TCP BBR — Data Link

Flow 1 ingress (mean 600.12 Mbit/s) --- Flow 1 egress (mean 532.81 Mbit/s)
Flow 2 ingress (mean 541.68 Mbit/s) --- Flow 2 egress (mean 422.90 Mbit/s)
Flow 3 ingress (mean 373.76 Mbit/s) --- Flow 3 egress (mean 255.63 Mbit/s)

Flow 1 (95th percentile 12.87 ms)   Flow 2 (95th percentile 8.07 ms)   Flow 3 (95th percentile 6.32 ms)
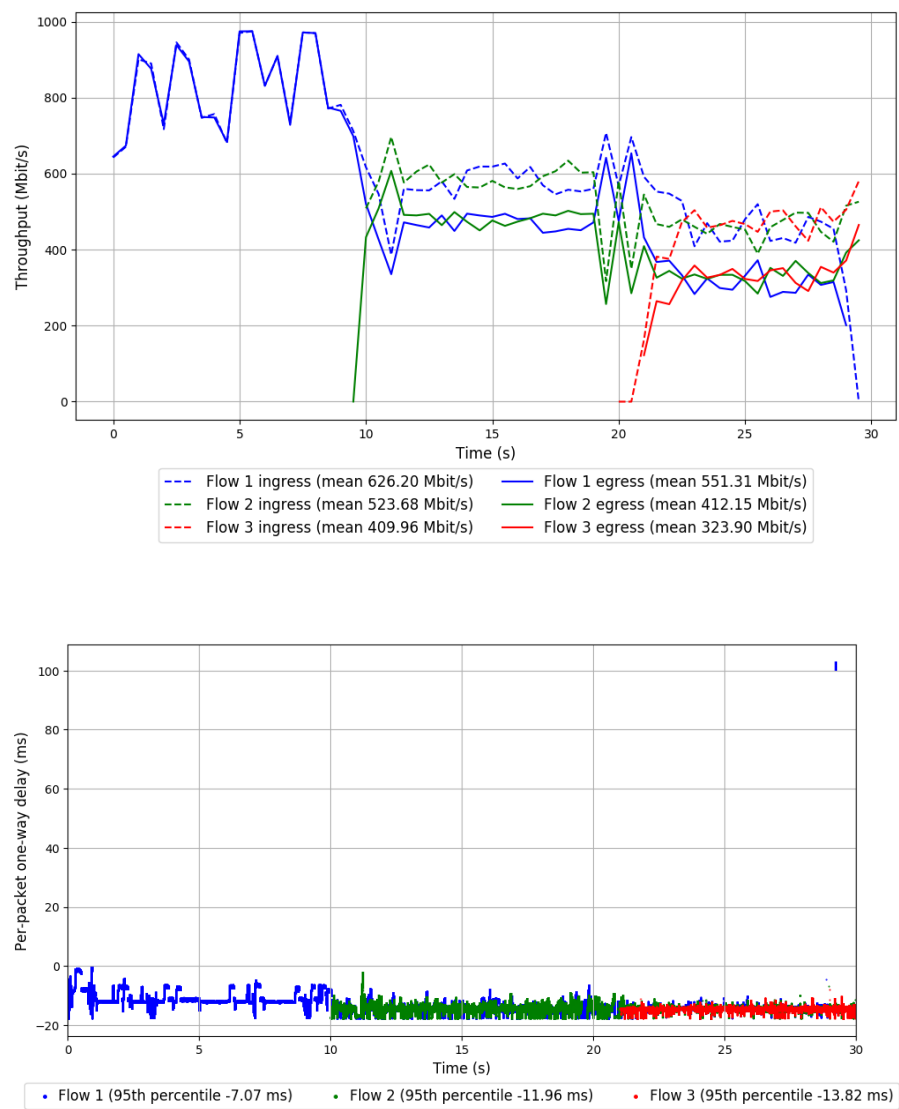
```
Run 8: Statistics of TCP BBR

Start at: 2017-09-22 01:00:55
End at: 2017-09-22 01:01:25
Local clock offset: -0.13 ms
Remote clock offset: 0.097 ms


# Below is generated by plot.py at 2017-09-22 03:50:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 832.71 Mbit/s
95th percentile per-packet one-way delay: 43.553 ms
Loss rate: 10.42%
-- Flow 1:
Average throughput: 624.91 Mbit/s
95th percentile per-packet one-way delay: 15.220 ms
Loss rate: 6.19%
-- Flow 2:
Average throughput: 81.27 Mbit/s
95th percentile per-packet one-way delay: 47.199 ms
Loss rate: 27.70%
-- Flow 3:
Average throughput: 463.23 Mbit/s
95th percentile per-packet one-way delay: 8.416 ms
Loss rate: 18.50%
```
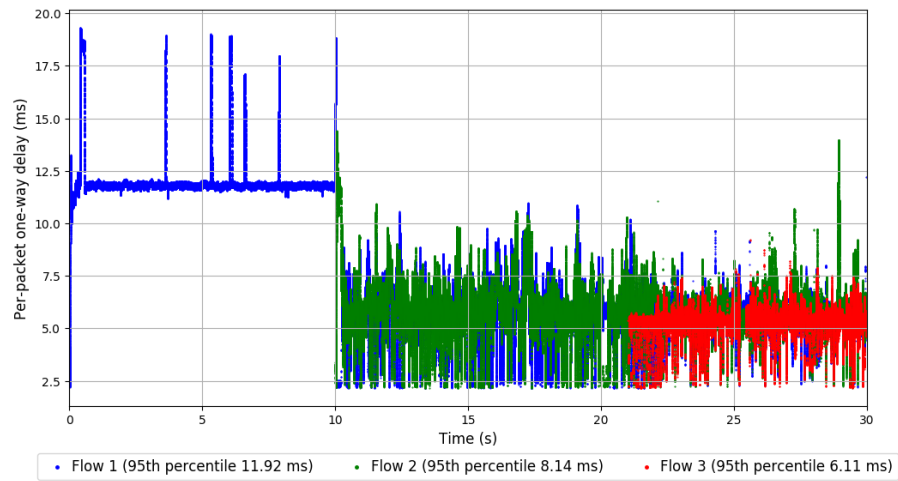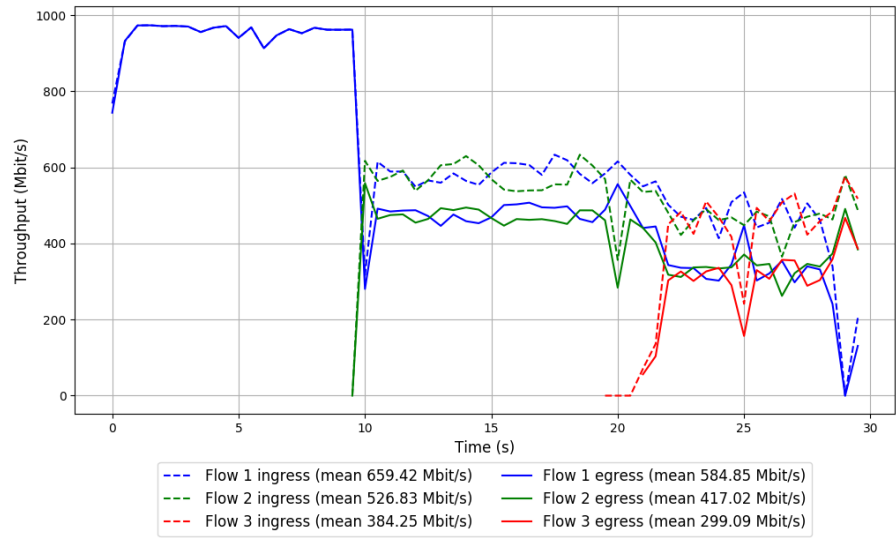
Run 8: Report of TCP BBR — Data Link

Flow 1 ingress (mean 666.23 Mbit/s) --- Flow 1 egress (mean 624.91 Mbit/s)
Flow 2 ingress (mean 112.18 Mbit/s) --- Flow 2 egress (mean 81.27 Mbit/s)
Flow 3 ingress (mean 568.53 Mbit/s) --- Flow 3 egress (mean 463.23 Mbit/s)

Flow 1 (95th percentile 15.22 ms)   Flow 2 (95th percentile 47.20 ms)   Flow 3 (95th percentile 8.42 ms)

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```
Run 9: Statistics of TCP BBR

Start at: 2017-09-22 01:20:40
End at: 2017-09-22 01:21:10
Local clock offset: -0.223 ms
Remote clock offset: -19.74 ms


# Below is generated by plot.py at 2017-09-22 04:02:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 912.91 Mbit/s
95th percentile per-packet one-way delay: -7.982 ms
Loss rate: 17.40%
-- Flow 1:
Average throughput: 551.31 Mbit/s
95th percentile per-packet one-way delay: -7.068 ms
Loss rate: 12.68%
-- Flow 2:
Average throughput: 412.15 Mbit/s
95th percentile per-packet one-way delay: -11.964 ms
Loss rate: 21.27%
-- Flow 3:
Average throughput: 323.90 Mbit/s
95th percentile per-packet one-way delay: -13.823 ms
Loss rate: 28.97%
```
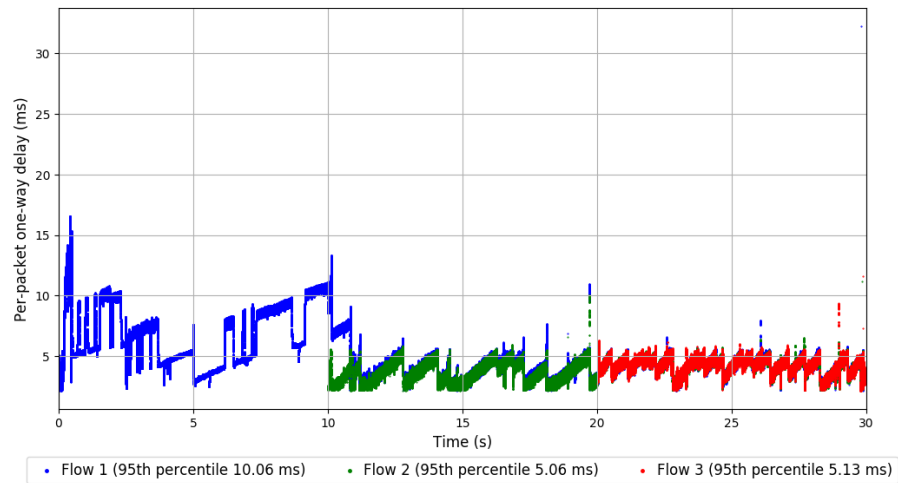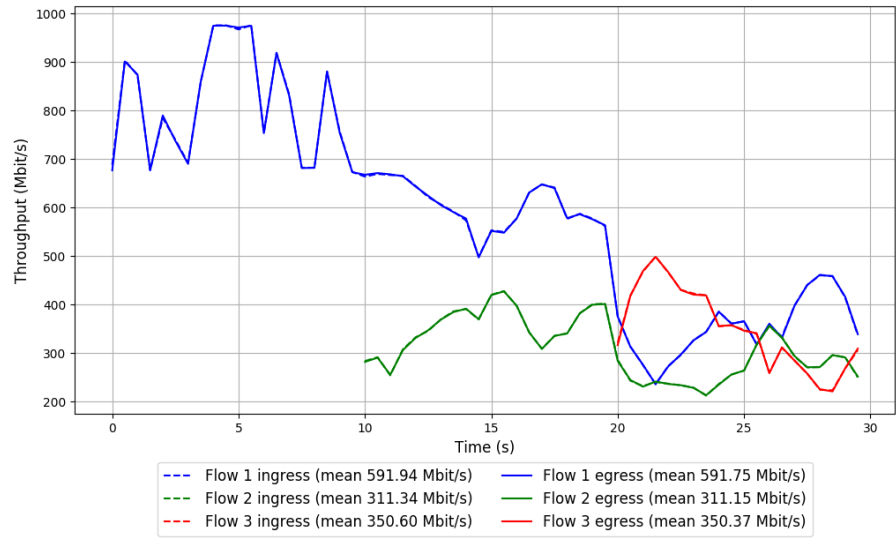
Run 9: Report of TCP BBR — Data Link

Flow 1 ingress (mean 626.20 Mbit/s) --- Flow 1 egress (mean 551.31 Mbit/s)
Flow 2 ingress (mean 523.68 Mbit/s) --- Flow 2 egress (mean 412.15 Mbit/s)
Flow 3 ingress (mean 409.96 Mbit/s) --- Flow 3 egress (mean 323.90 Mbit/s)

Flow 1 (95th percentile -7.07 ms) Flow 2 (95th percentile -11.96 ms) Flow 3 (95th percentile -13.82 ms)

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```
Run 10: Statistics of TCP BBR

Start at: 2017-09-22 01:40:21
End at: 2017-09-22 01:40:51
Local clock offset: -0.162 ms
Remote clock offset: 0.204 ms


# Below is generated by plot.py at 2017-09-22 04:03:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 952.01 Mbit/s
95th percentile per-packet one-way delay: 11.889 ms
Loss rate: 16.33%
-- Flow 1:
Average throughput: 584.85 Mbit/s
95th percentile per-packet one-way delay: 11.918 ms
Loss rate: 11.28%
-- Flow 2:
Average throughput: 417.02 Mbit/s
95th percentile per-packet one-way delay: 8.139 ms
Loss rate: 20.83%
-- Flow 3:
Average throughput: 299.09 Mbit/s
95th percentile per-packet one-way delay: 6.109 ms
Loss rate: 30.04%
```
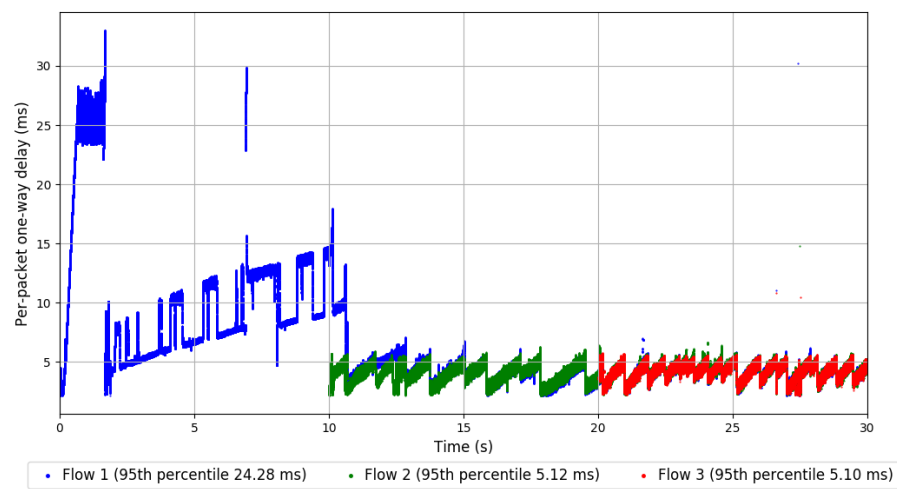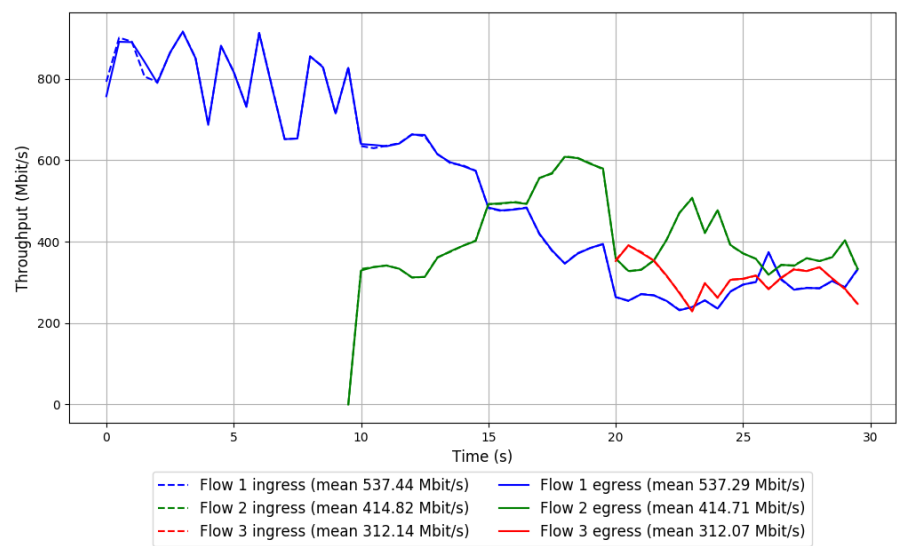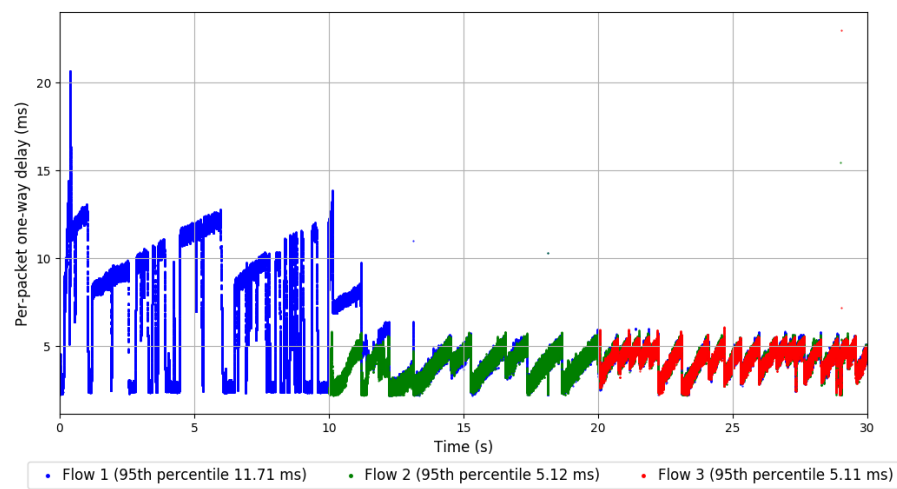
Run 10: Report of TCP BBR — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2017-09-21 22:45:36
End at: 2017-09-21 22:46:06
Local clock offset: -0.06 ms
Remote clock offset: 0.122 ms

# Below is generated by plot.py at 2017-09-22 04:03:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 915.38 Mbit/s
95th percentile per-packet one-way delay: 9.469 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 591.75 Mbit/s
95th percentile per-packet one-way delay: 10.064 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 311.15 Mbit/s
95th percentile per-packet one-way delay: 5.063 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 350.37 Mbit/s
95th percentile per-packet one-way delay: 5.128 ms
Loss rate: 0.06%
```
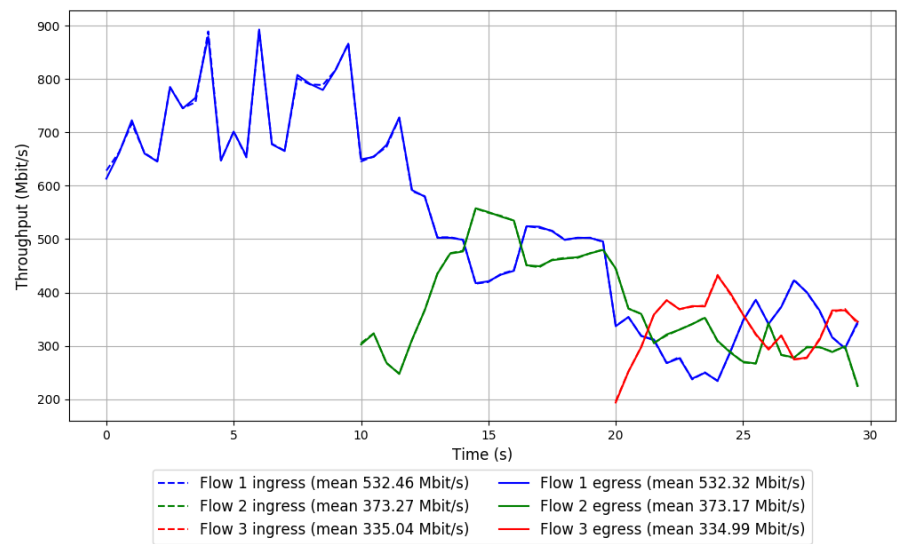
Run 1: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 591.94 Mbit/s) ---- Flow 1 egress (mean 591.75 Mbit/s)
Flow 2 ingress (mean 311.34 Mbit/s) ---- Flow 2 egress (mean 311.15 Mbit/s)
Flow 3 ingress (mean 350.60 Mbit/s) ---- Flow 3 egress (mean 350.37 Mbit/s)

Flow 1 (95th percentile 10.06 ms)   Flow 2 (95th percentile 5.06 ms)   Flow 3 (95th percentile 5.13 ms)
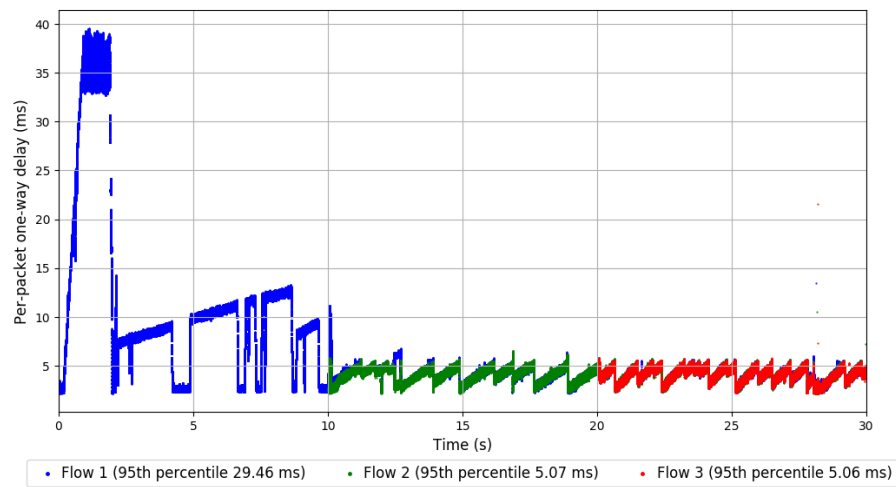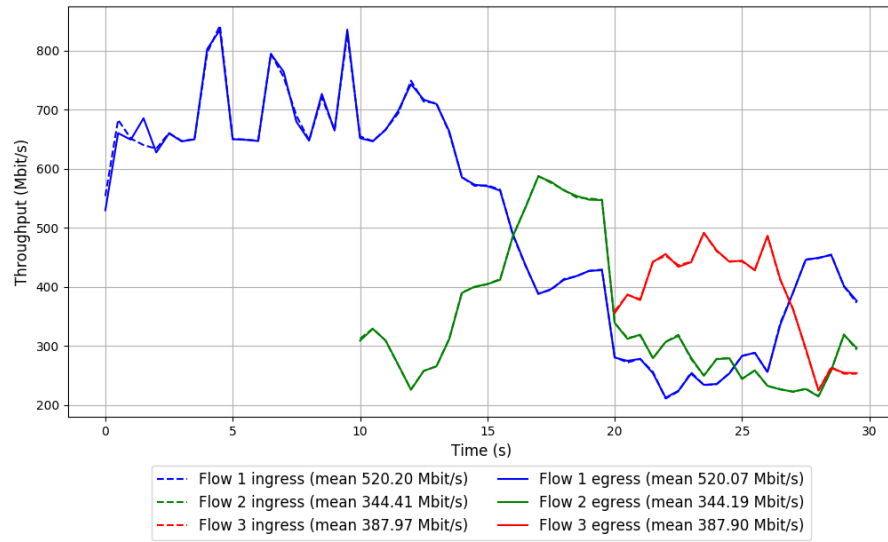
```
Run 2: Statistics of TCP Cubic

Start at: 2017-09-21 23:05:23
End at: 2017-09-21 23:05:53
Local clock offset: -0.087 ms
Remote clock offset: -0.094 ms


# Below is generated by plot.py at 2017-09-22 04:03:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 917.34 Mbit/s
95th percentile per-packet one-way delay: 13.931 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 537.29 Mbit/s
95th percentile per-packet one-way delay: 24.279 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 414.71 Mbit/s
95th percentile per-packet one-way delay: 5.117 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 312.07 Mbit/s
95th percentile per-packet one-way delay: 5.099 ms
Loss rate: 0.01%
```
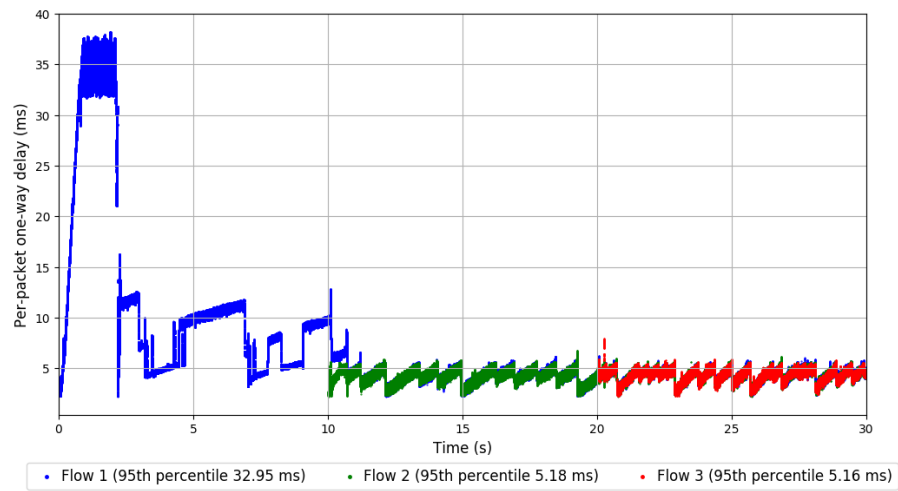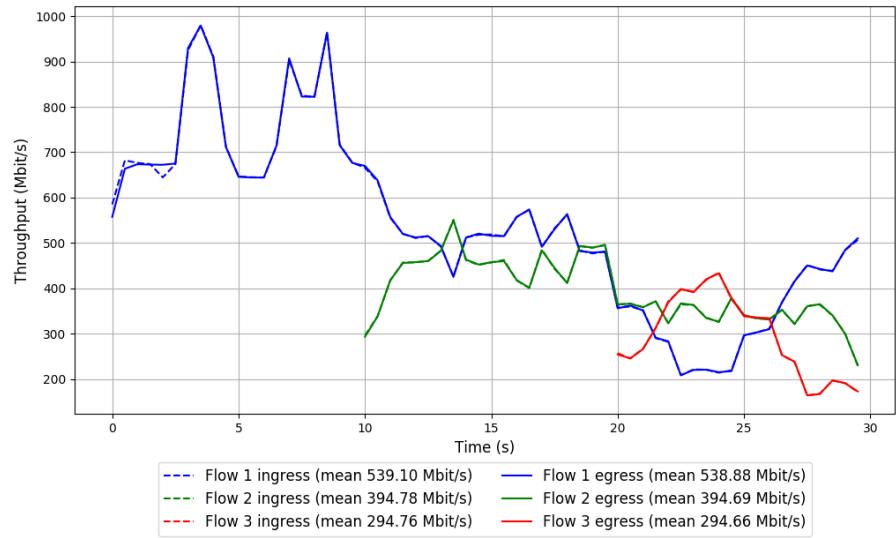
Run 2: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 537.44 Mbit/s) — Flow 1 egress (mean 537.29 Mbit/s)
Flow 2 ingress (mean 414.82 Mbit/s) — Flow 2 egress (mean 414.71 Mbit/s)
Flow 3 ingress (mean 312.14 Mbit/s) — Flow 3 egress (mean 312.07 Mbit/s)

Flow 1 (95th percentile 24.28 ms)   Flow 2 (95th percentile 5.12 ms)   Flow 3 (95th percentile 5.10 ms)

27

```
Run 3: Statistics of TCP Cubic

Start at: 2017-09-21 23:25:20
End at: 2017-09-21 23:25:50
Local clock offset: -0.097 ms
Remote clock offset: -0.176 ms


# Below is generated by plot.py at 2017-09-22 04:03:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 892.13 Mbit/s
95th percentile per-packet one-way delay: 11.258 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 532.32 Mbit/s
95th percentile per-packet one-way delay: 11.713 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 373.17 Mbit/s
95th percentile per-packet one-way delay: 5.121 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 334.99 Mbit/s
95th percentile per-packet one-way delay: 5.113 ms
Loss rate: 0.01%
```

Run 3: Report of TCP Cubic — Data Link

```
Run 4: Statistics of TCP Cubic

Start at: 2017-09-21 23:45:08
End at: 2017-09-21 23:45:38
Local clock offset: -0.181 ms
Remote clock offset: -0.285 ms


# Below is generated by plot.py at 2017-09-22 04:03:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 877.97 Mbit/s
95th percentile per-packet one-way delay: 12.331 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 520.07 Mbit/s
95th percentile per-packet one-way delay: 29.459 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 344.19 Mbit/s
95th percentile per-packet one-way delay: 5.069 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 387.90 Mbit/s
95th percentile per-packet one-way delay: 5.056 ms
Loss rate: 0.02%
```
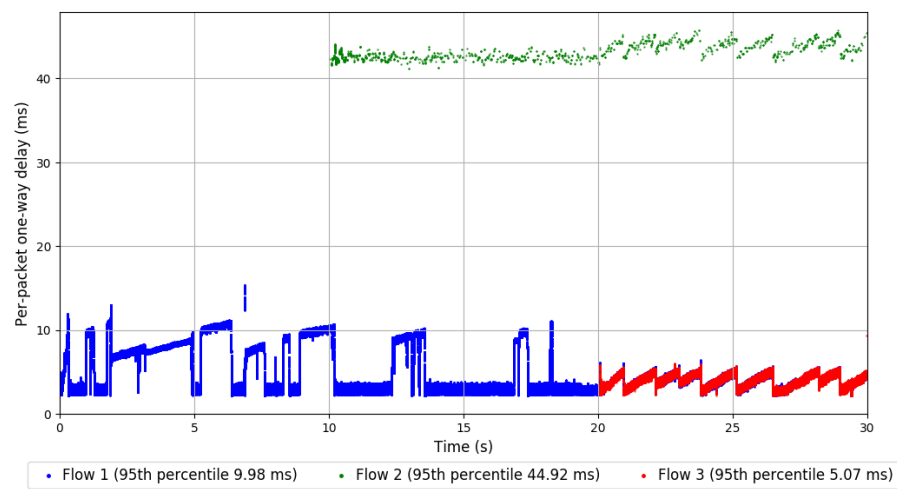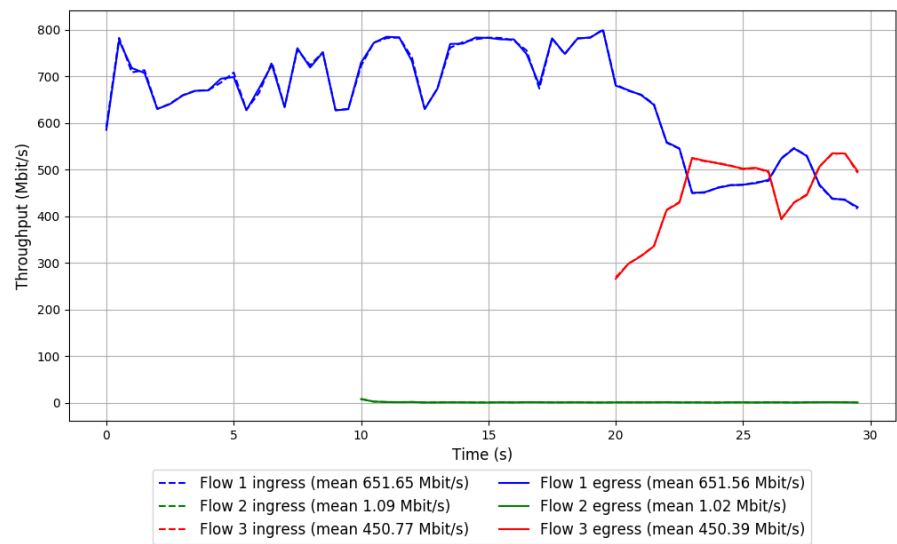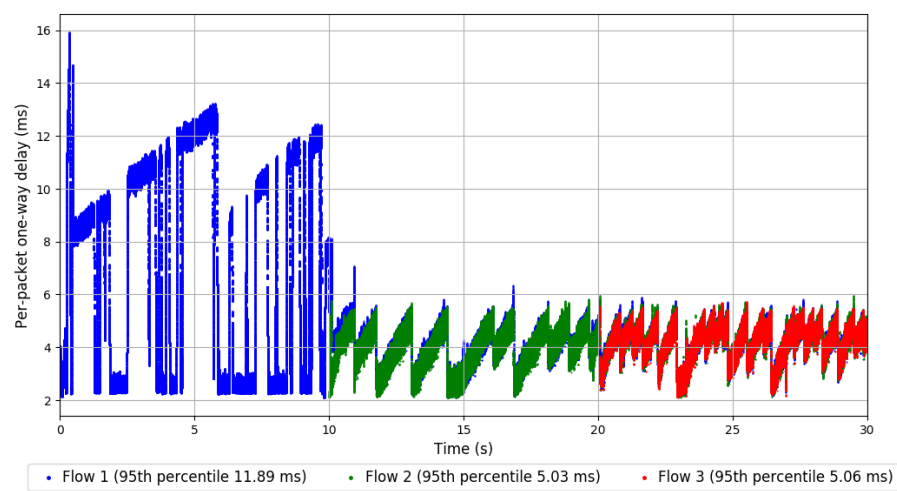
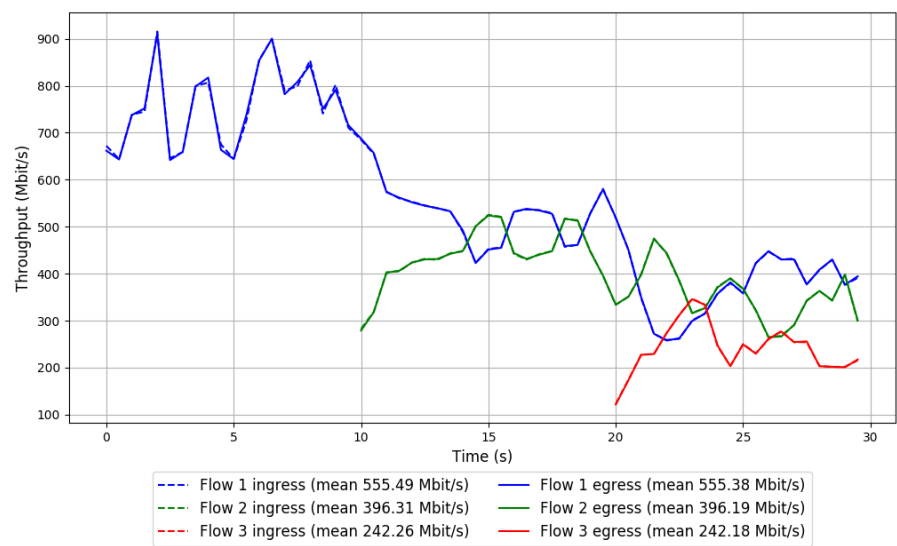Run 4: Report of TCP Cubic — Data Link

```
Run 5: Statistics of TCP Cubic

Start at: 2017-09-22 00:05:04
End at: 2017-09-22 00:05:34
Local clock offset: -0.159 ms
Remote clock offset: -0.073 ms


# Below is generated by plot.py at 2017-09-22 04:03:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 899.61 Mbit/s
95th percentile per-packet one-way delay: 11.998 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 538.88 Mbit/s
95th percentile per-packet one-way delay: 32.948 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 394.69 Mbit/s
95th percentile per-packet one-way delay: 5.178 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 294.66 Mbit/s
95th percentile per-packet one-way delay: 5.160 ms
Loss rate: 0.03%
```

Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 539.10 Mbit/s)   Flow 1 egress (mean 538.88 Mbit/s)
Flow 2 ingress (mean 394.78 Mbit/s)   Flow 2 egress (mean 394.69 Mbit/s)
Flow 3 ingress (mean 294.76 Mbit/s)   Flow 3 egress (mean 294.66 Mbit/s)

Flow 1 (95th percentile 32.95 ms)   Flow 2 (95th percentile 5.18 ms)   Flow 3 (95th percentile 5.16 ms)

```
Run 6: Statistics of TCP Cubic

Start at: 2017-09-22 00:24:40
End at: 2017-09-22 00:25:10
Local clock offset: -0.112 ms
Remote clock offset: 0.001 ms


# Below is generated by plot.py at 2017-09-22 04:03:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 801.70 Mbit/s
95th percentile per-packet one-way delay: 9.871 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 651.56 Mbit/s
95th percentile per-packet one-way delay: 9.981 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 1.02 Mbit/s
95th percentile per-packet one-way delay: 44.916 ms
Loss rate: 5.88%
-- Flow 3:
Average throughput: 450.39 Mbit/s
95th percentile per-packet one-way delay: 5.072 ms
Loss rate: 0.02%
```
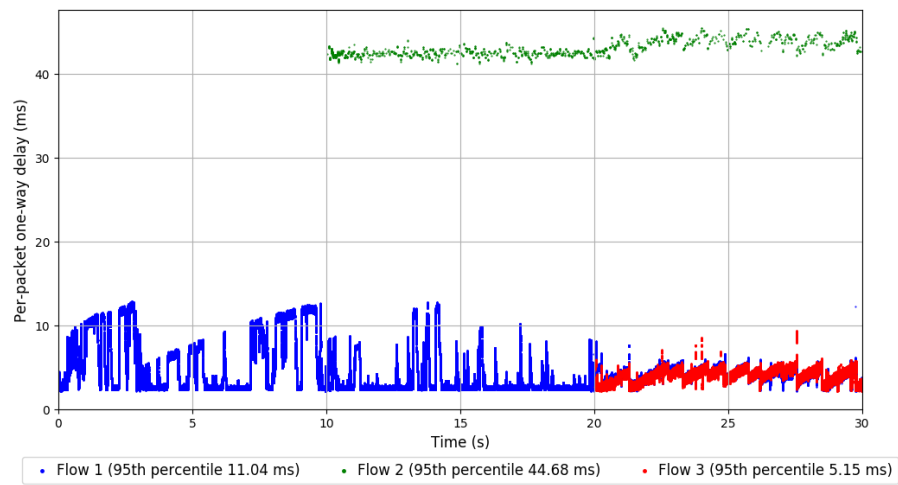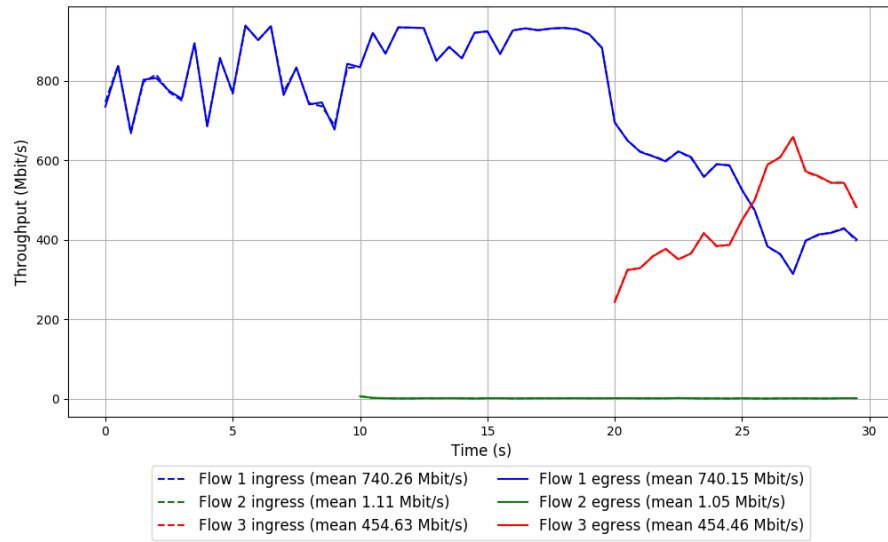
Run 6: Report of TCP Cubic — Data Link

- - - Flow 1 ingress (mean 651.65 Mbit/s) —— Flow 1 egress (mean 651.56 Mbit/s)
- - - Flow 2 ingress (mean 1.09 Mbit/s) —— Flow 2 egress (mean 1.02 Mbit/s)
- - - Flow 3 ingress (mean 450.77 Mbit/s) —— Flow 3 egress (mean 450.39 Mbit/s)

- Flow 1 (95th percentile 9.98 ms)   • Flow 2 (95th percentile 44.92 ms)   • Flow 3 (95th percentile 5.07 ms)

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```
Run 7: Statistics of TCP Cubic

Start at: 2017-09-22 00:44:31
End at: 2017-09-22 00:45:01
Local clock offset: -0.082 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2017-09-22 04:13:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 899.67 Mbit/s
95th percentile per-packet one-way delay: 11.249 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 555.38 Mbit/s
95th percentile per-packet one-way delay: 11.887 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 396.19 Mbit/s
95th percentile per-packet one-way delay: 5.026 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 242.18 Mbit/s
95th percentile per-packet one-way delay: 5.056 ms
Loss rate: 0.03%
```
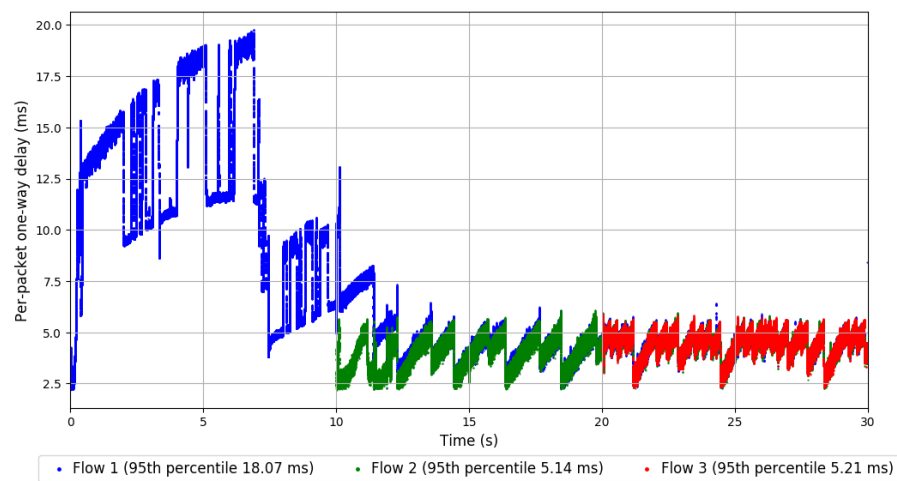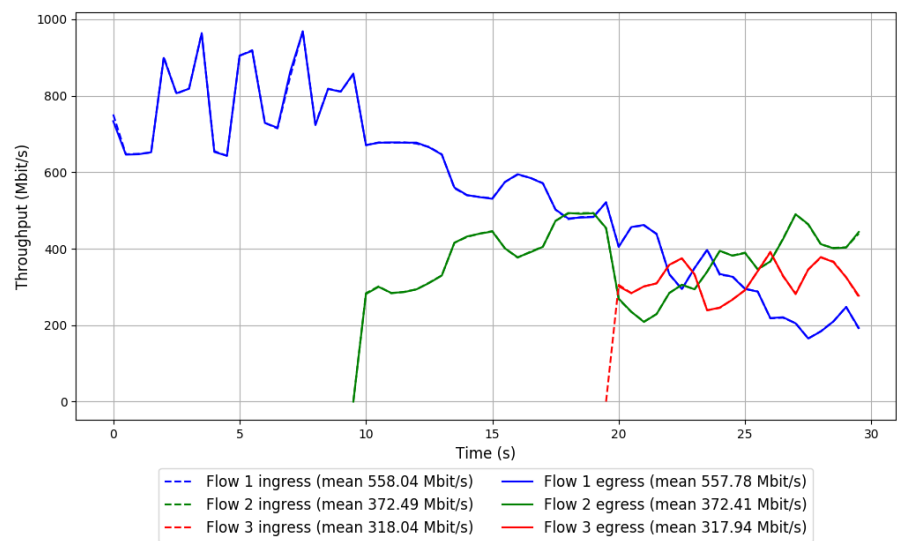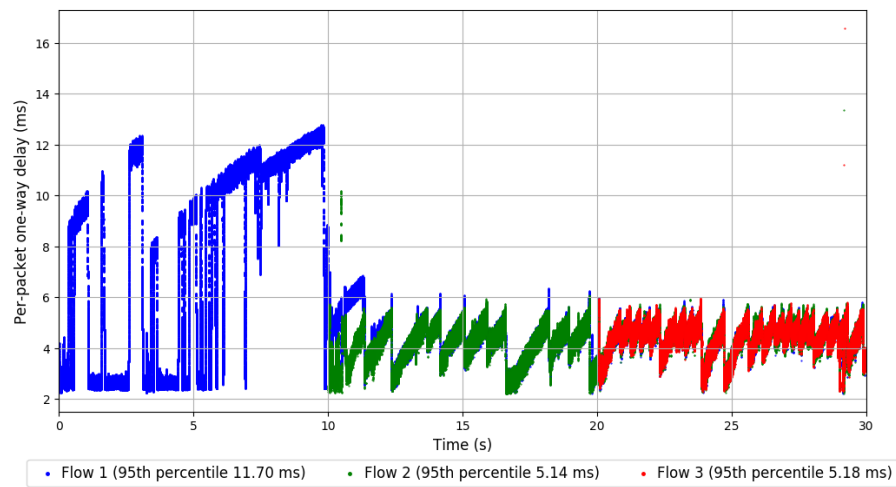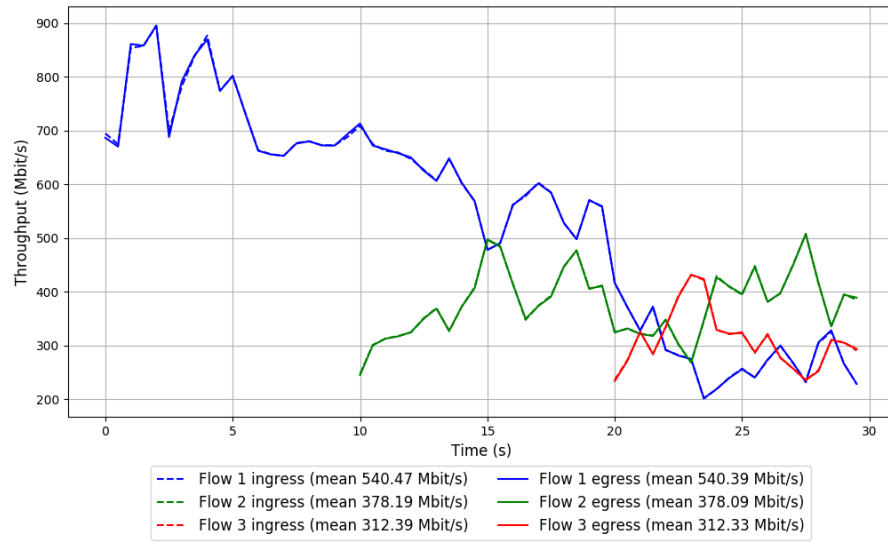
Run 7: Report of TCP Cubic — Data Link

- - - Flow 1 ingress (mean 555.49 Mbit/s) —— Flow 1 egress (mean 555.38 Mbit/s)
- - - Flow 2 ingress (mean 396.31 Mbit/s) —— Flow 2 egress (mean 396.19 Mbit/s)
- - - Flow 3 ingress (mean 242.26 Mbit/s) —— Flow 3 egress (mean 242.18 Mbit/s)

• Flow 1 (95th percentile 11.89 ms)   • Flow 2 (95th percentile 5.03 ms)   • Flow 3 (95th percentile 5.06 ms)

37

```
Run 8: Statistics of TCP Cubic

Start at: 2017-09-22 01:04:08
End at: 2017-09-22 01:04:38
Local clock offset: -0.185 ms
Remote clock offset: 0.05 ms


# Below is generated by plot.py at 2017-09-22 04:14:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 891.74 Mbit/s
95th percentile per-packet one-way delay: 10.816 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 740.15 Mbit/s
95th percentile per-packet one-way delay: 11.040 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 1.05 Mbit/s
95th percentile per-packet one-way delay: 44.678 ms
Loss rate: 5.84%
-- Flow 3:
Average throughput: 454.46 Mbit/s
95th percentile per-packet one-way delay: 5.150 ms
Loss rate: 0.03%
```
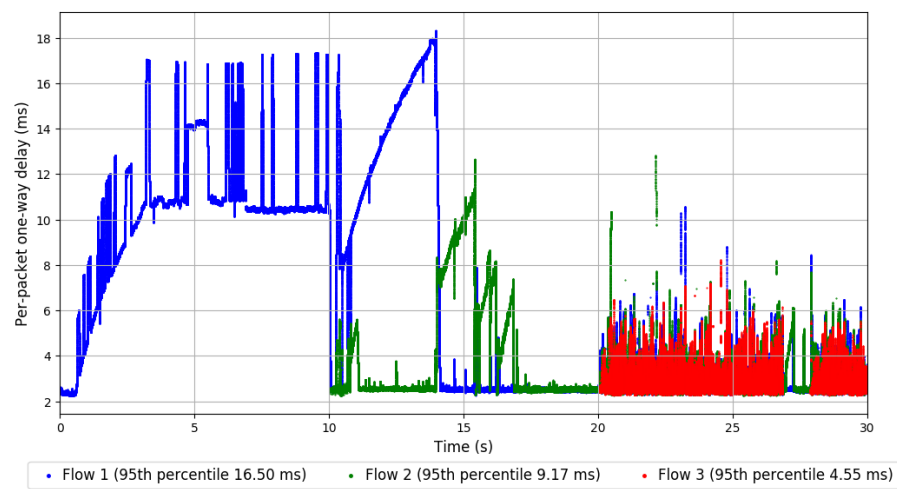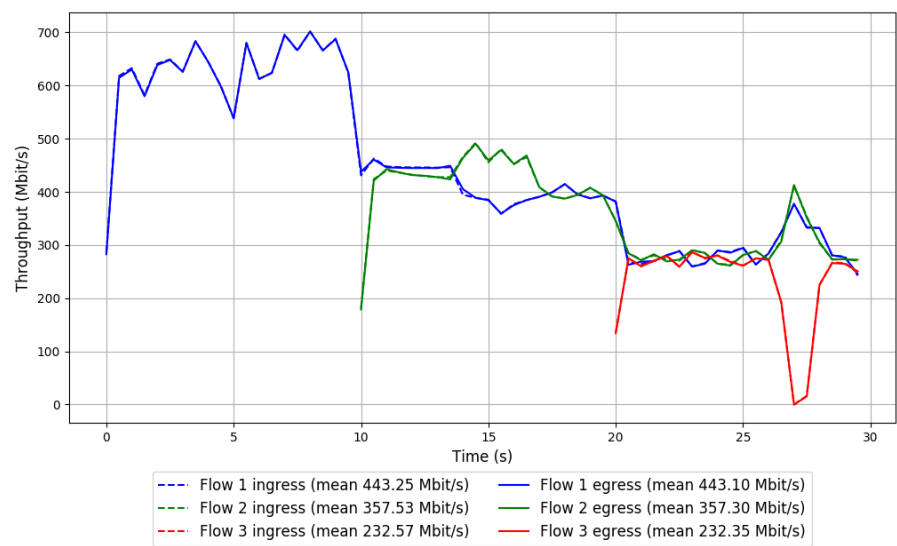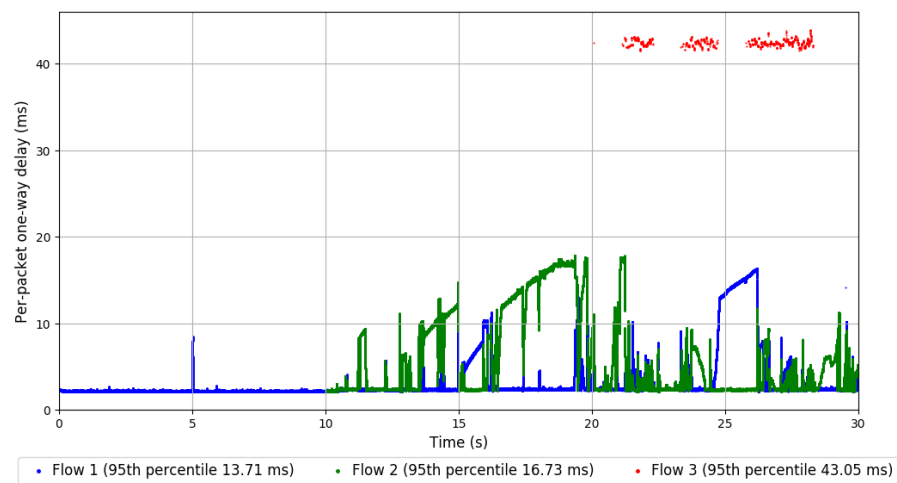
Run 8: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 740.26 Mbit/s) --- Flow 1 egress (mean 740.15 Mbit/s)
Flow 2 ingress (mean 1.11 Mbit/s) --- Flow 2 egress (mean 1.05 Mbit/s)
Flow 3 ingress (mean 454.63 Mbit/s) --- Flow 3 egress (mean 454.46 Mbit/s)

Flow 1 (95th percentile 11.04 ms)   Flow 2 (95th percentile 44.68 ms)   Flow 3 (95th percentile 5.15 ms)

```
Run 9: Statistics of TCP Cubic

Start at: 2017-09-22 01:24:00
End at: 2017-09-22 01:24:30
Local clock offset: -0.16 ms
Remote clock offset: 0.207 ms


# Below is generated by plot.py at 2017-09-22 04:14:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 911.66 Mbit/s
95th percentile per-packet one-way delay: 16.392 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 557.78 Mbit/s
95th percentile per-packet one-way delay: 18.074 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 372.41 Mbit/s
95th percentile per-packet one-way delay: 5.142 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 317.94 Mbit/s
95th percentile per-packet one-way delay: 5.209 ms
Loss rate: 0.03%
```
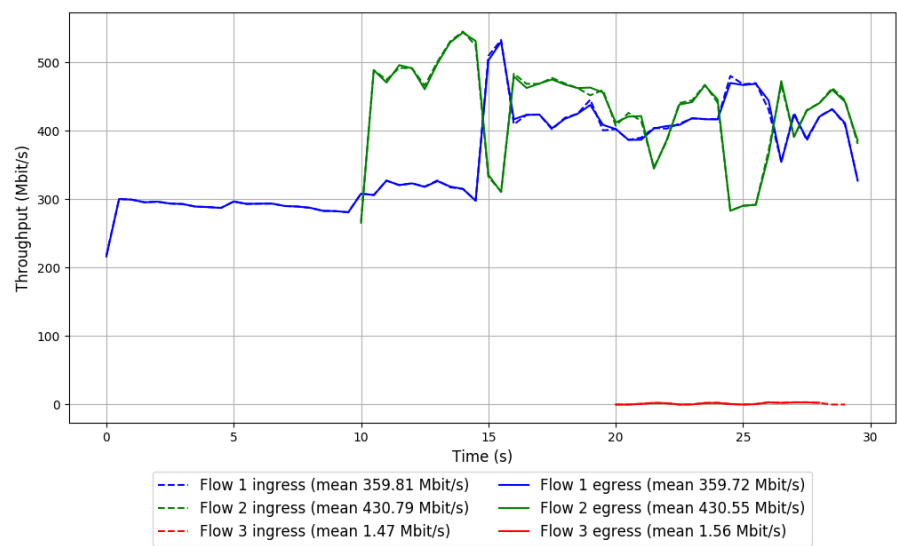
Run 9: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 558.04 Mbit/s)
Flow 2 ingress (mean 372.49 Mbit/s)
Flow 3 ingress (mean 318.04 Mbit/s)
Flow 1 egress (mean 557.78 Mbit/s)
Flow 2 egress (mean 372.41 Mbit/s)
Flow 3 egress (mean 317.94 Mbit/s)

Flow 1 (95th percentile 18.07 ms)   Flow 2 (95th percentile 5.14 ms)   Flow 3 (95th percentile 5.21 ms)

```
Run 10: Statistics of TCP Cubic

Start at: 2017-09-22 01:43:44
End at: 2017-09-22 01:44:14
Local clock offset: -0.172 ms
Remote clock offset: 0.243 ms


# Below is generated by plot.py at 2017-09-22 04:14:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 895.94 Mbit/s
95th percentile per-packet one-way delay: 11.388 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 540.39 Mbit/s
95th percentile per-packet one-way delay: 11.697 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 378.09 Mbit/s
95th percentile per-packet one-way delay: 5.145 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 312.33 Mbit/s
95th percentile per-packet one-way delay: 5.185 ms
Loss rate: 0.02%
```
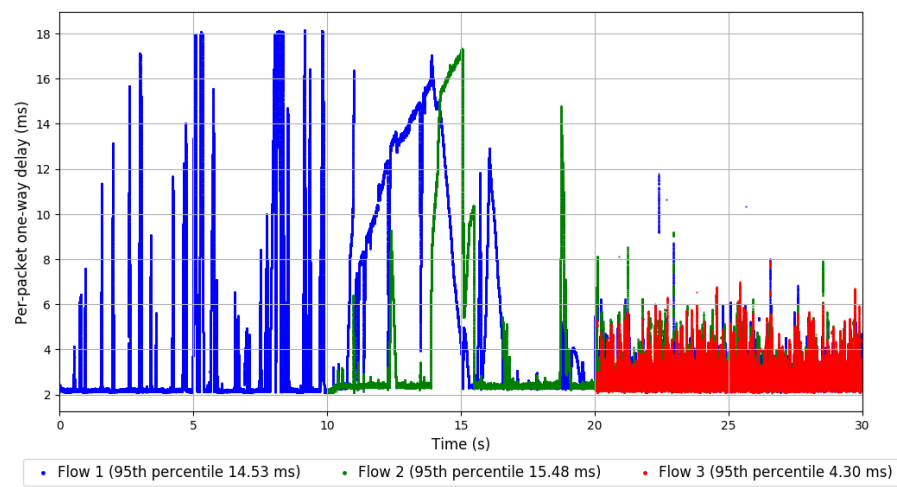
Run 10: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 540.47 Mbit/s) Flow 1 egress (mean 540.39 Mbit/s)
Flow 2 ingress (mean 378.19 Mbit/s) Flow 2 egress (mean 378.09 Mbit/s)
Flow 3 ingress (mean 312.39 Mbit/s) Flow 3 egress (mean 312.33 Mbit/s)

Flow 1 (95th percentile 11.70 ms)   Flow 2 (95th percentile 5.14 ms)   Flow 3 (95th percentile 5.18 ms)
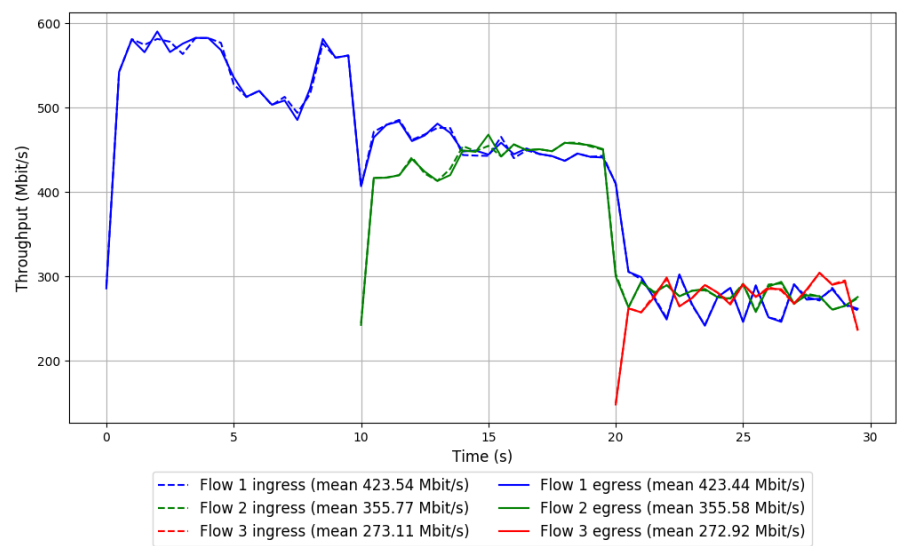
43

```
Run 1: Statistics of LEDBAT

Start at: 2017-09-21 22:47:18
End at: 2017-09-21 22:47:48
Local clock offset: -0.189 ms
Remote clock offset: 0.082 ms

# Below is generated by plot.py at 2017-09-22 04:14:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 757.82 Mbit/s
95th percentile per-packet one-way delay: 14.646 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 443.10 Mbit/s
95th percentile per-packet one-way delay: 16.504 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 357.30 Mbit/s
95th percentile per-packet one-way delay: 9.173 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 232.35 Mbit/s
95th percentile per-packet one-way delay: 4.553 ms
Loss rate: 0.09%
```

Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2017-09-21 23:07:05
End at: 2017-09-21 23:07:35
Local clock offset: -0.126 ms
Remote clock offset: -0.157 ms

# Below is generated by plot.py at 2017-09-22 04:14:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 646.93 Mbit/s
95th percentile per-packet one-way delay: 15.316 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 359.72 Mbit/s
95th percentile per-packet one-way delay: 13.710 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 430.55 Mbit/s
95th percentile per-packet one-way delay: 16.730 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 43.050 ms
Loss rate: 5.89%
```
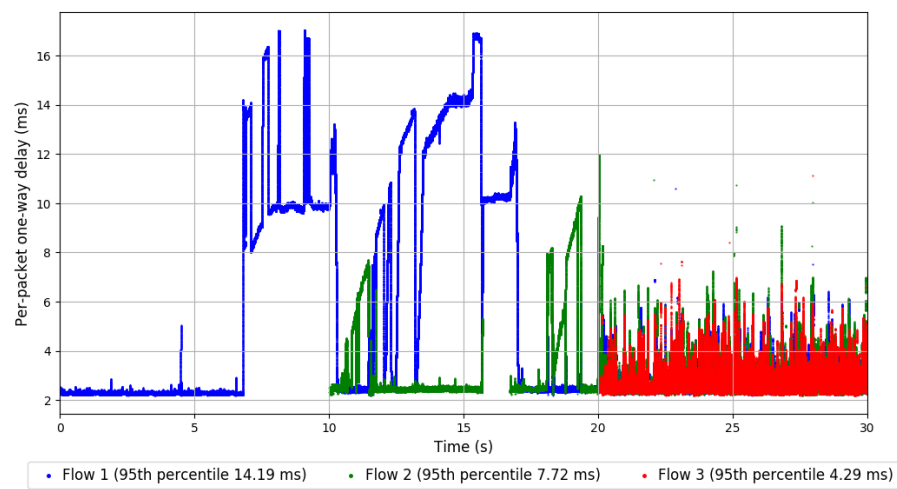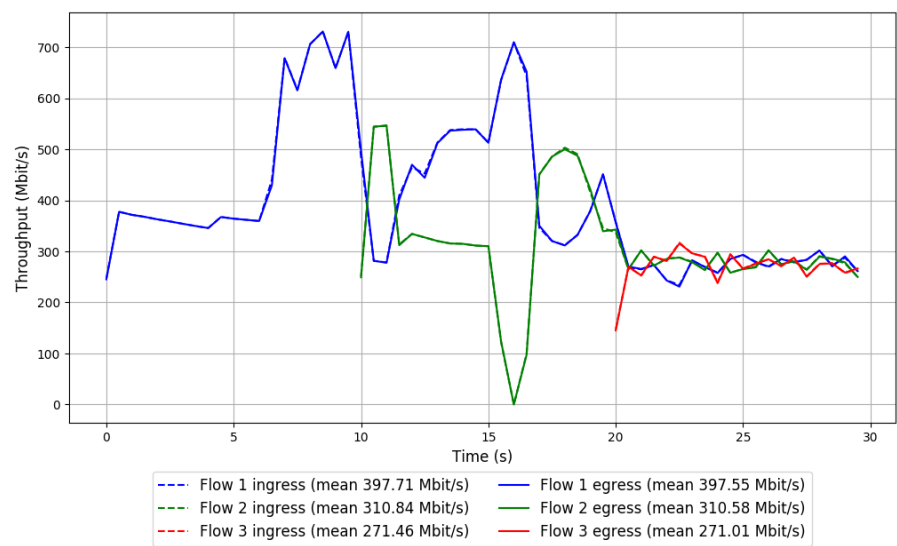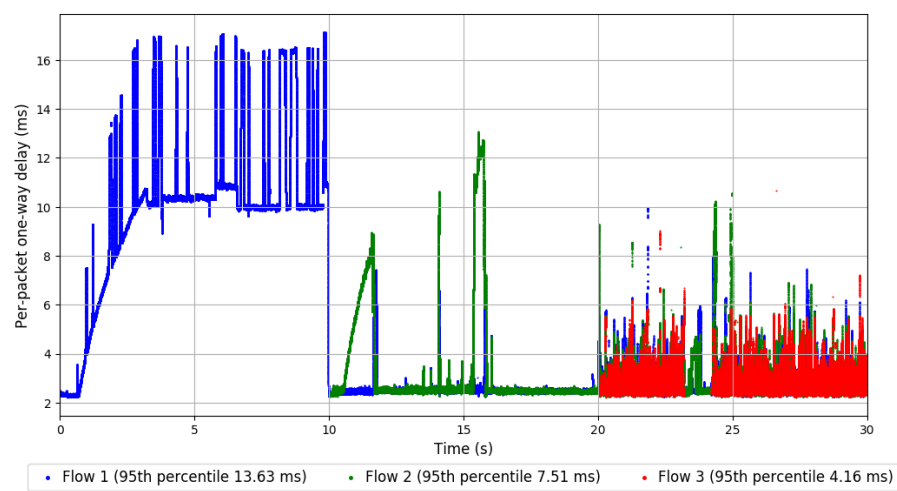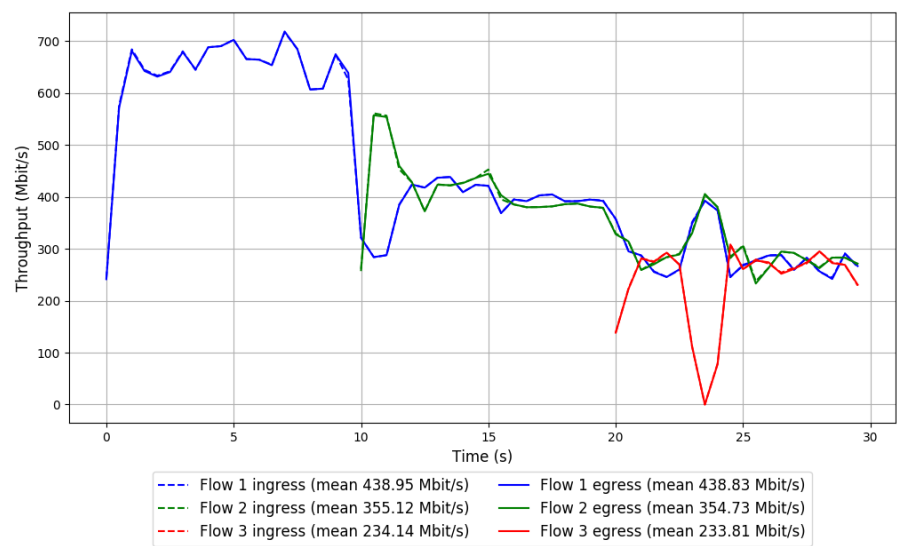
Run 2: Report of LEDBAT — Data Link

---- Flow 1 ingress (mean 359.81 Mbit/s) ——— Flow 1 egress (mean 359.72 Mbit/s)
---- Flow 2 ingress (mean 430.79 Mbit/s) ——— Flow 2 egress (mean 430.55 Mbit/s)
---- Flow 3 ingress (mean 1.47 Mbit/s) ——— Flow 3 egress (mean 1.56 Mbit/s)

• Flow 1 (95th percentile 13.71 ms)   • Flow 2 (95th percentile 16.73 ms)   • Flow 3 (95th percentile 43.05 ms)

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```
Run 3: Statistics of LEDBAT

Start at: 2017-09-21 23:27:01
End at: 2017-09-21 23:27:31
Local clock offset: -0.099 ms
Remote clock offset: -0.271 ms

# Below is generated by plot.py at 2017-09-22 04:14:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 660.12 Mbit/s
95th percentile per-packet one-way delay: 15.905 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 515.76 Mbit/s
95th percentile per-packet one-way delay: 16.504 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 43.089 ms
Loss rate: 6.62%
-- Flow 3:
Average throughput: 432.69 Mbit/s
95th percentile per-packet one-way delay: 10.577 ms
Loss rate: 0.09%
```

Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2017-09-21 23:46:48
End at: 2017-09-21 23:47:18
Local clock offset: -0.121 ms
Remote clock offset: -0.268 ms


# Below is generated by plot.py at 2017-09-22 04:14:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 750.82 Mbit/s
95th percentile per-packet one-way delay: 14.287 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 423.44 Mbit/s
95th percentile per-packet one-way delay: 14.528 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 355.58 Mbit/s
95th percentile per-packet one-way delay: 15.483 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 272.92 Mbit/s
95th percentile per-packet one-way delay: 4.300 ms
Loss rate: 0.07%
```
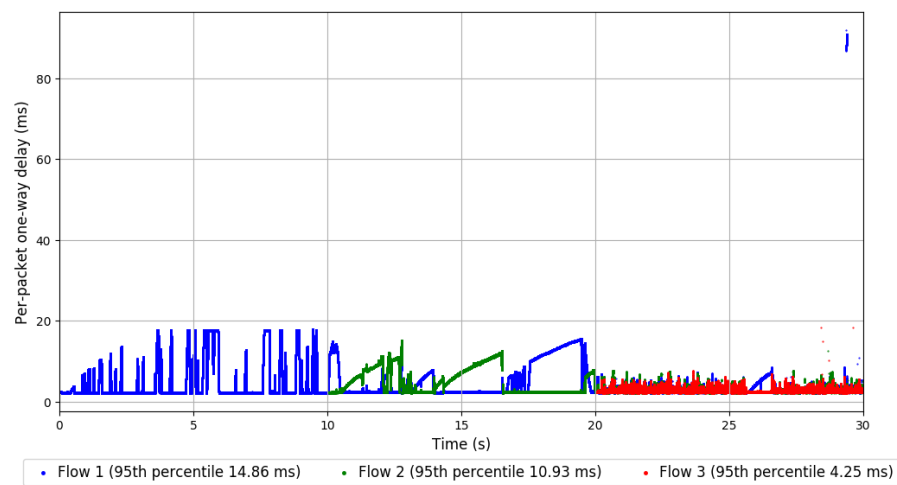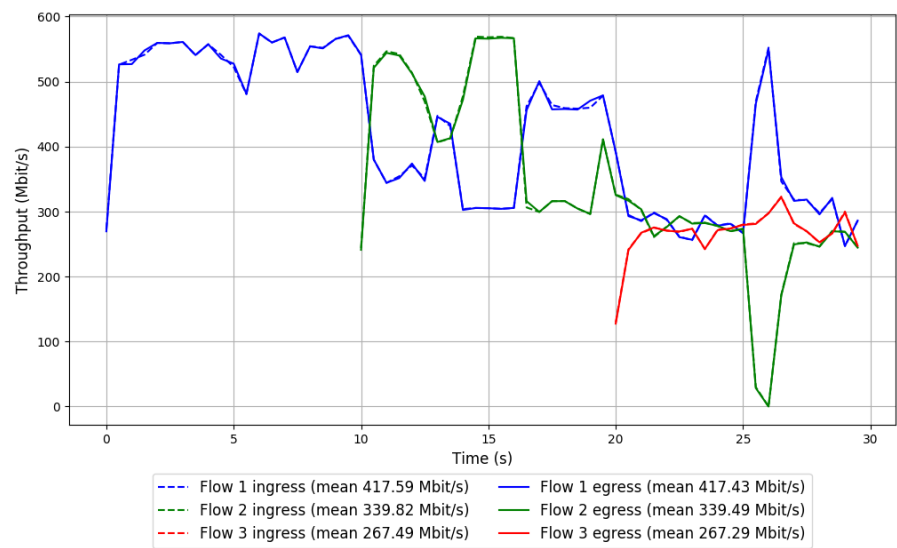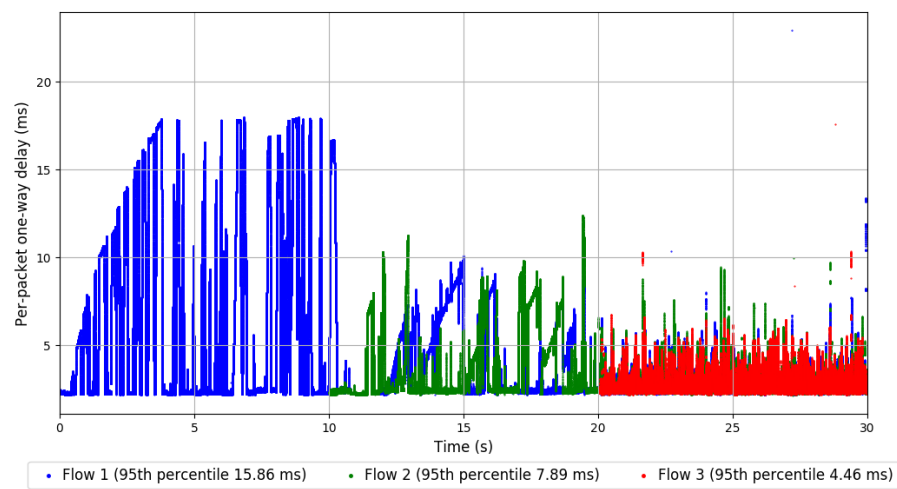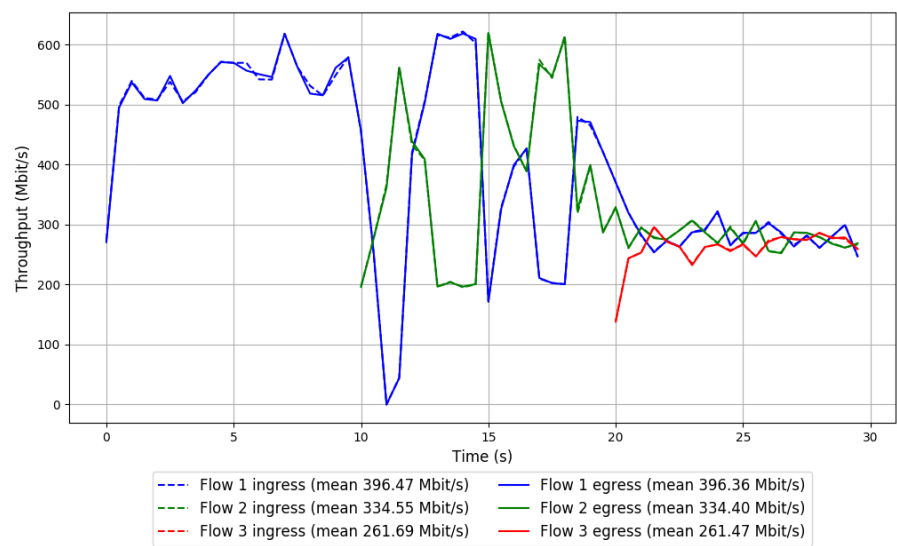
Run 4: Report of LEDBAT — Data Link

- - - Flow 1 ingress (mean 423.54 Mbit/s) —— Flow 1 egress (mean 423.44 Mbit/s)
- - - Flow 2 ingress (mean 355.77 Mbit/s) —— Flow 2 egress (mean 355.58 Mbit/s)
- - - Flow 3 ingress (mean 273.11 Mbit/s) —— Flow 3 egress (mean 272.92 Mbit/s)

• Flow 1 (95th percentile 14.53 ms)   • Flow 2 (95th percentile 15.48 ms)   • Flow 3 (95th percentile 4.30 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2017-09-22 00:06:45
End at: 2017-09-22 00:07:15
Local clock offset: -0.155 ms
Remote clock offset: -0.07 ms

# Below is generated by plot.py at 2017-09-22 04:20:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 694.19 Mbit/s
95th percentile per-packet one-way delay: 13.621 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 397.55 Mbit/s
95th percentile per-packet one-way delay: 14.187 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 310.58 Mbit/s
95th percentile per-packet one-way delay: 7.724 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 271.01 Mbit/s
95th percentile per-packet one-way delay: 4.289 ms
Loss rate: 0.12%
```
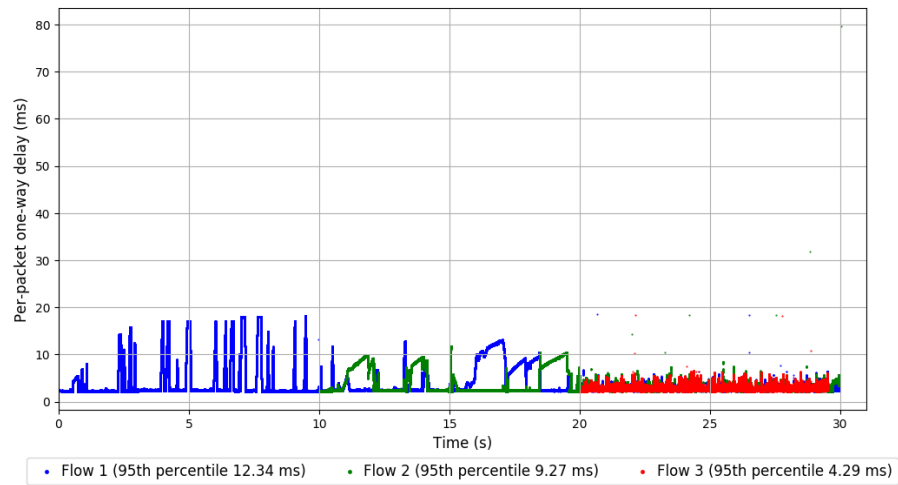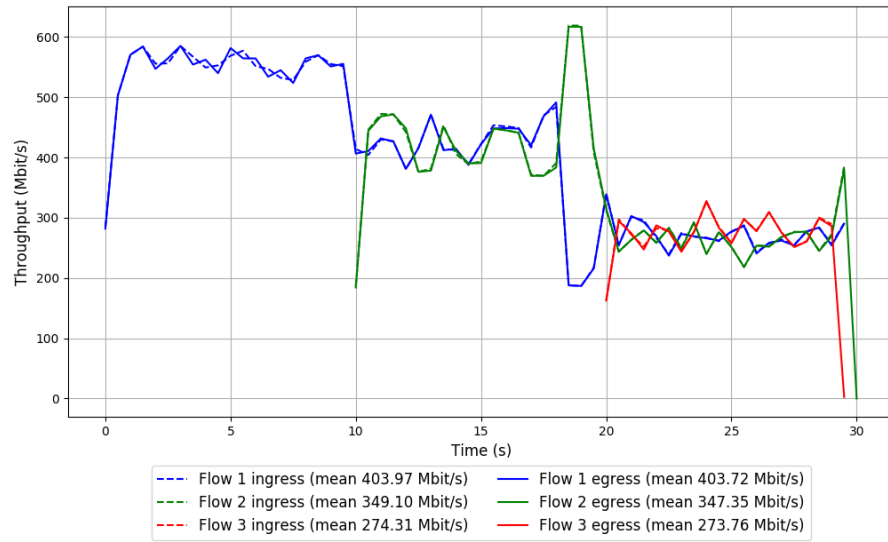
Run 5: Report of LEDBAT — Data Link

Flow 1 ingress (mean 397.71 Mbit/s)   Flow 1 egress (mean 397.55 Mbit/s)
Flow 2 ingress (mean 310.84 Mbit/s)   Flow 2 egress (mean 310.58 Mbit/s)
Flow 3 ingress (mean 271.46 Mbit/s)   Flow 3 egress (mean 271.01 Mbit/s)

Flow 1 (95th percentile 14.19 ms)   Flow 2 (95th percentile 7.72 ms)   Flow 3 (95th percentile 4.29 ms)

```
Run 6: Statistics of LEDBAT

Start at: 2017-09-22 00:26:17
End at: 2017-09-22 00:26:47
Local clock offset: -0.155 ms
Remote clock offset: -0.009 ms

# Below is generated by plot.py at 2017-09-22 04:21:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 752.60 Mbit/s
95th percentile per-packet one-way delay: 10.898 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 438.83 Mbit/s
95th percentile per-packet one-way delay: 13.628 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 354.73 Mbit/s
95th percentile per-packet one-way delay: 7.509 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 233.81 Mbit/s
95th percentile per-packet one-way delay: 4.161 ms
Loss rate: 0.14%
```
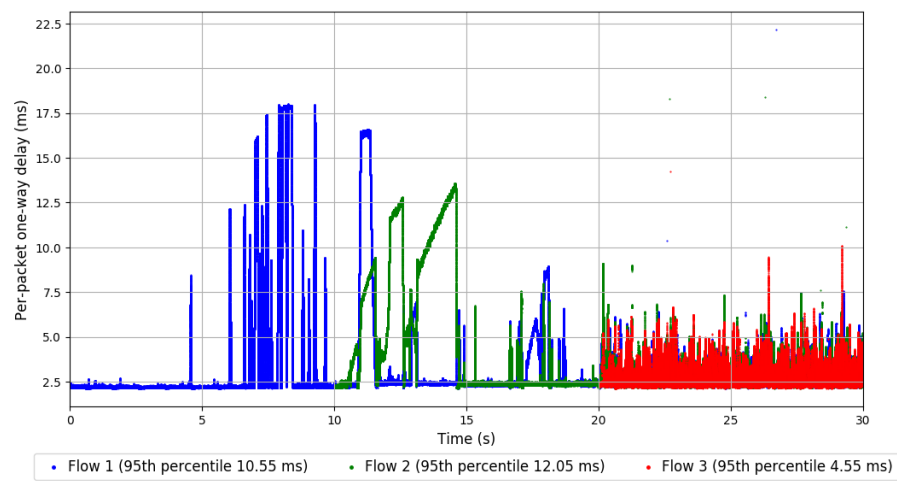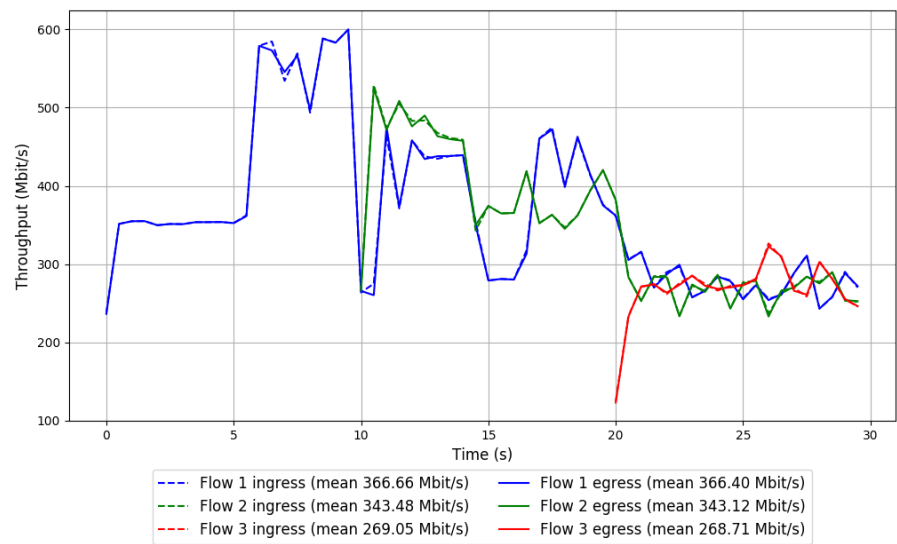
Run 6: Report of LEDBAT — Data Link

Flow 1 ingress (mean 438.95 Mbit/s) — Flow 1 egress (mean 438.83 Mbit/s)
Flow 2 ingress (mean 355.12 Mbit/s) — Flow 2 egress (mean 354.73 Mbit/s)
Flow 3 ingress (mean 234.14 Mbit/s) — Flow 3 egress (mean 233.81 Mbit/s)

Flow 1 (95th percentile 13.63 ms)   Flow 2 (95th percentile 7.51 ms)   Flow 3 (95th percentile 4.16 ms)

```
Run 7: Statistics of LEDBAT

Start at: 2017-09-22 00:46:12
End at: 2017-09-22 00:46:42
Local clock offset: -0.094 ms
Remote clock offset: 0.053 ms


# Below is generated by plot.py at 2017-09-22 04:22:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 731.98 Mbit/s
95th percentile per-packet one-way delay: 13.130 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 417.43 Mbit/s
95th percentile per-packet one-way delay: 14.864 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 339.49 Mbit/s
95th percentile per-packet one-way delay: 10.925 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 267.29 Mbit/s
95th percentile per-packet one-way delay: 4.249 ms
Loss rate: 0.07%
```
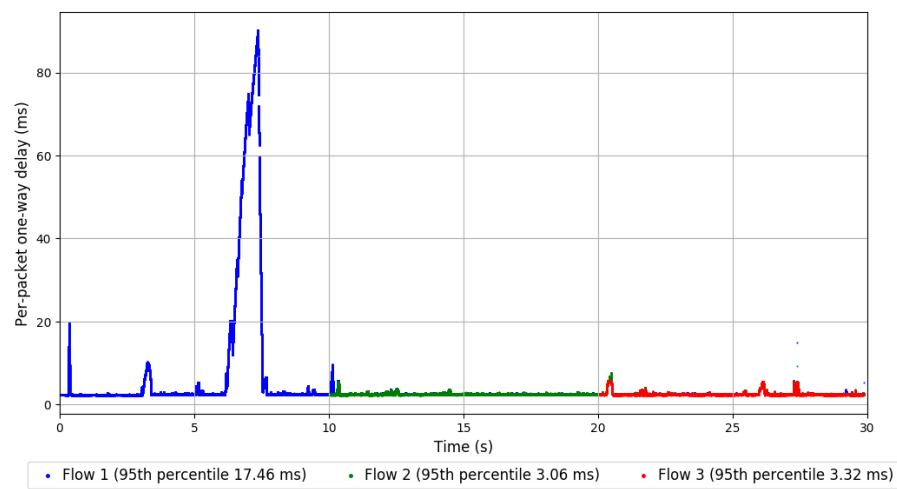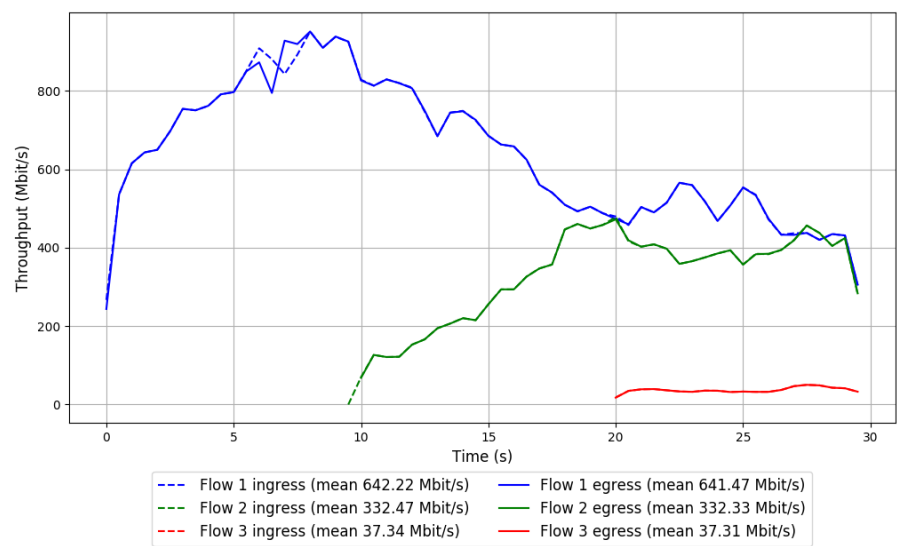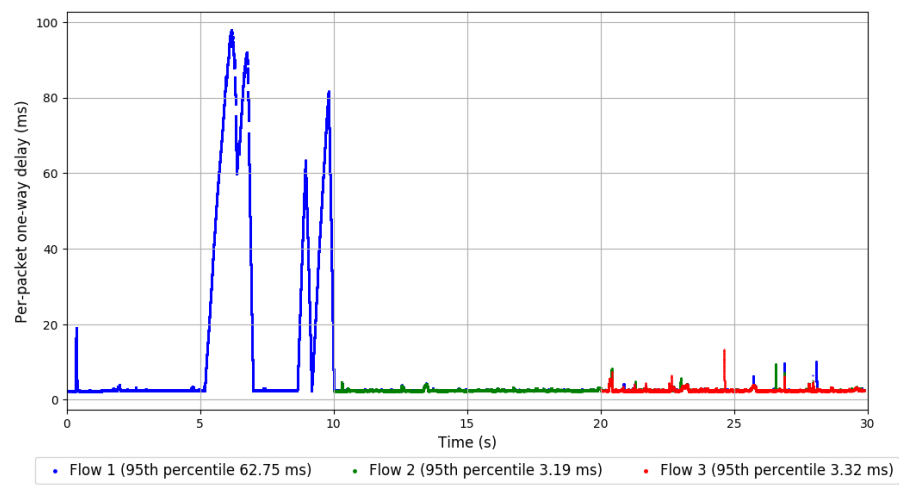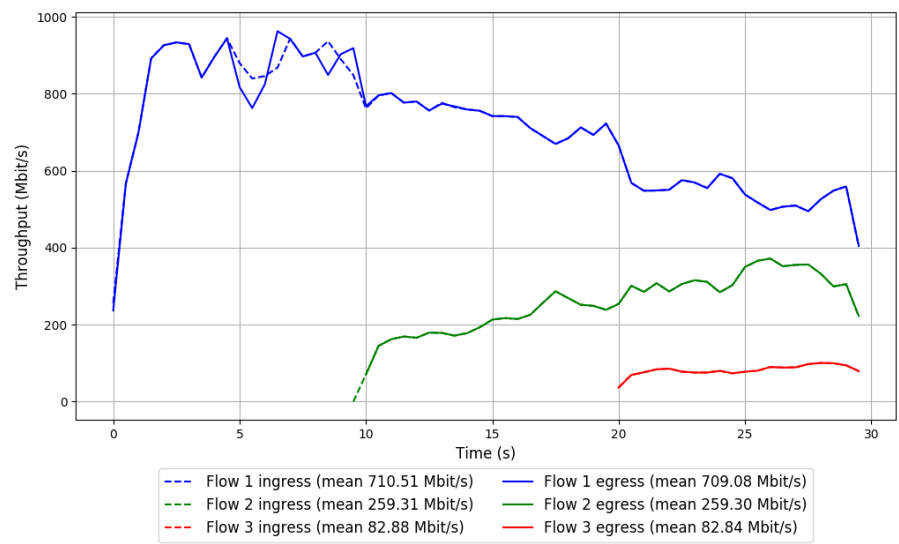
Run 7: Report of LEDBAT — Data Link

Flow 1 ingress (mean 417.59 Mbit/s) — Flow 1 egress (mean 417.43 Mbit/s)
Flow 2 ingress (mean 339.82 Mbit/s) — Flow 2 egress (mean 339.49 Mbit/s)
Flow 3 ingress (mean 267.49 Mbit/s) — Flow 3 egress (mean 267.29 Mbit/s)

Flow 1 (95th percentile 14.86 ms)   Flow 2 (95th percentile 10.93 ms)   Flow 3 (95th percentile 4.25 ms)

```
Run 8: Statistics of LEDBAT

Start at: 2017-09-22 01:05:49
End at: 2017-09-22 01:06:19
Local clock offset: -0.144 ms
Remote clock offset: 0.099 ms

# Below is generated by plot.py at 2017-09-22 04:23:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 705.95 Mbit/s
95th percentile per-packet one-way delay: 11.656 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 396.36 Mbit/s
95th percentile per-packet one-way delay: 15.862 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 334.40 Mbit/s
95th percentile per-packet one-way delay: 7.889 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 261.47 Mbit/s
95th percentile per-packet one-way delay: 4.463 ms
Loss rate: 0.09%
```
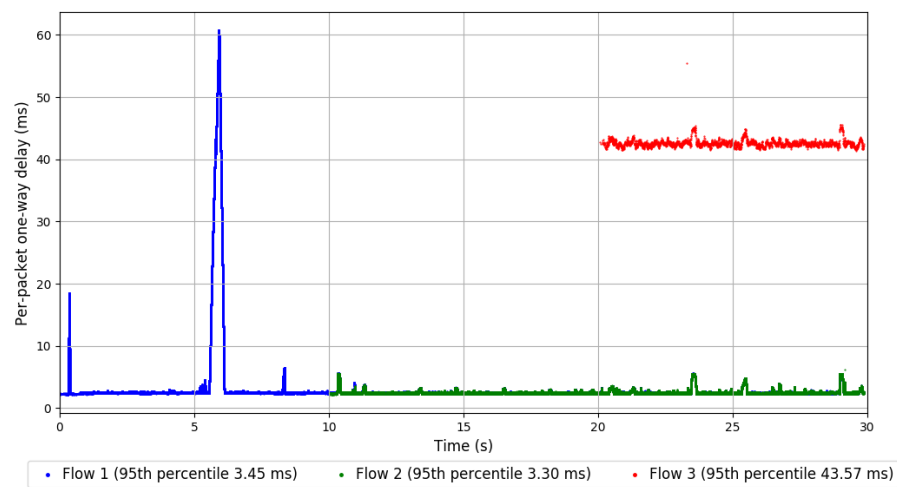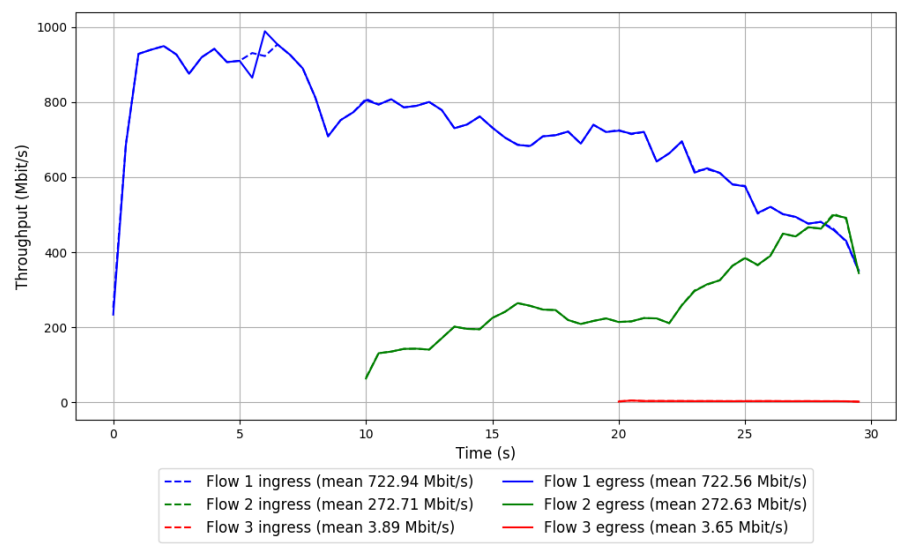
Run 8: Report of LEDBAT — Data Link

```
Run 9: Statistics of LEDBAT

Start at: 2017-09-22 01:25:41
End at: 2017-09-22 01:26:11
Local clock offset: -0.133 ms
Remote clock offset: 0.191 ms


# Below is generated by plot.py at 2017-09-22 04:23:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 720.92 Mbit/s
95th percentile per-packet one-way delay: 10.095 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 403.72 Mbit/s
95th percentile per-packet one-way delay: 12.338 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 347.35 Mbit/s
95th percentile per-packet one-way delay: 9.269 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 273.76 Mbit/s
95th percentile per-packet one-way delay: 4.294 ms
Loss rate: 0.17%
```

Run 9: Report of LEDBAT — Data Link

Flow 1 ingress (mean 403.97 Mbit/s)   Flow 1 egress (mean 403.72 Mbit/s)
Flow 2 ingress (mean 349.10 Mbit/s)   Flow 2 egress (mean 347.35 Mbit/s)
Flow 3 ingress (mean 274.31 Mbit/s)   Flow 3 egress (mean 273.76 Mbit/s)

Flow 1 (95th percentile 12.34 ms)   Flow 2 (95th percentile 9.27 ms)   Flow 3 (95th percentile 4.29 ms)

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```
Run 10: Statistics of LEDBAT

Start at: 2017-09-22 01:45:25
End at: 2017-09-22 01:45:55
Local clock offset: -0.162 ms
Remote clock offset: 0.194 ms

# Below is generated by plot.py at 2017-09-22 04:23:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 683.93 Mbit/s
95th percentile per-packet one-way delay: 11.592 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 366.40 Mbit/s
95th percentile per-packet one-way delay: 10.547 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 343.12 Mbit/s
95th percentile per-packet one-way delay: 12.049 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 268.71 Mbit/s
95th percentile per-packet one-way delay: 4.551 ms
Loss rate: 0.12%
```
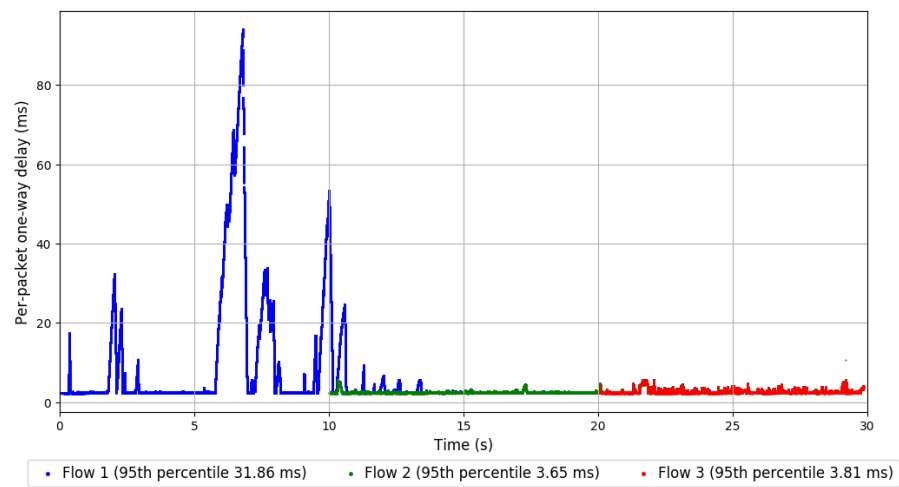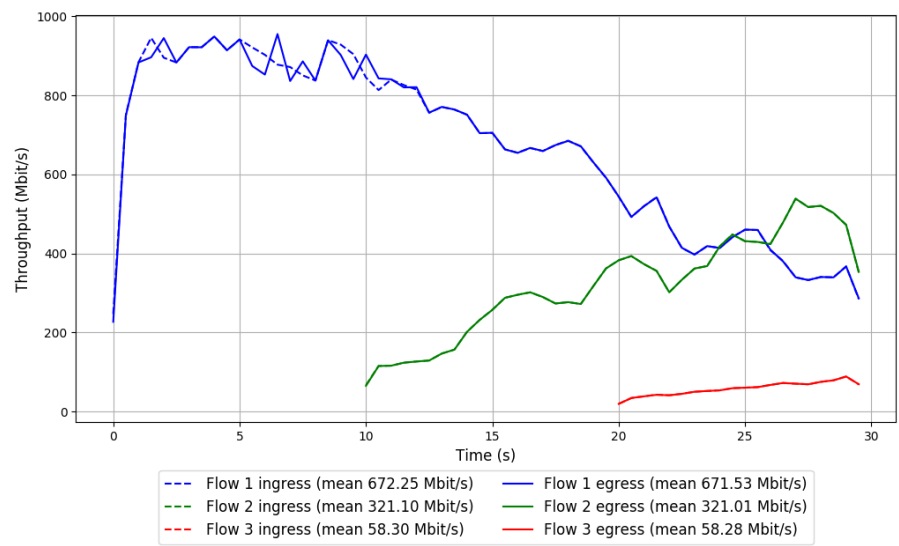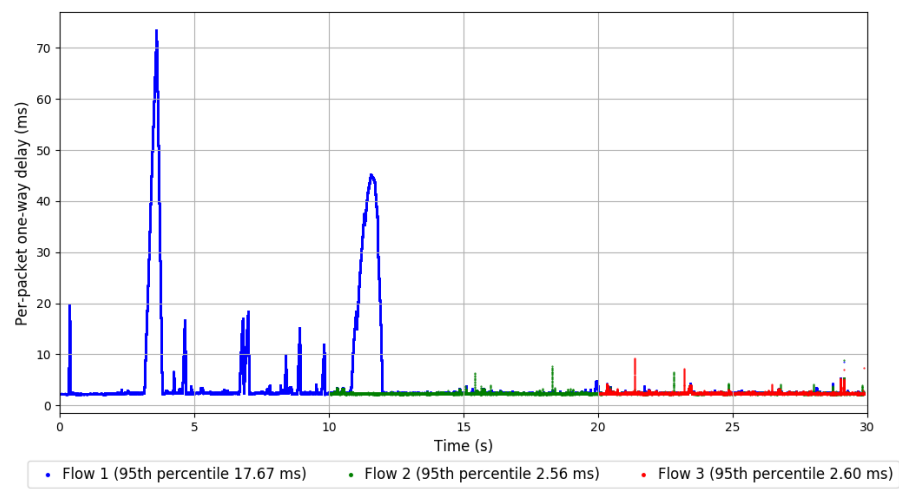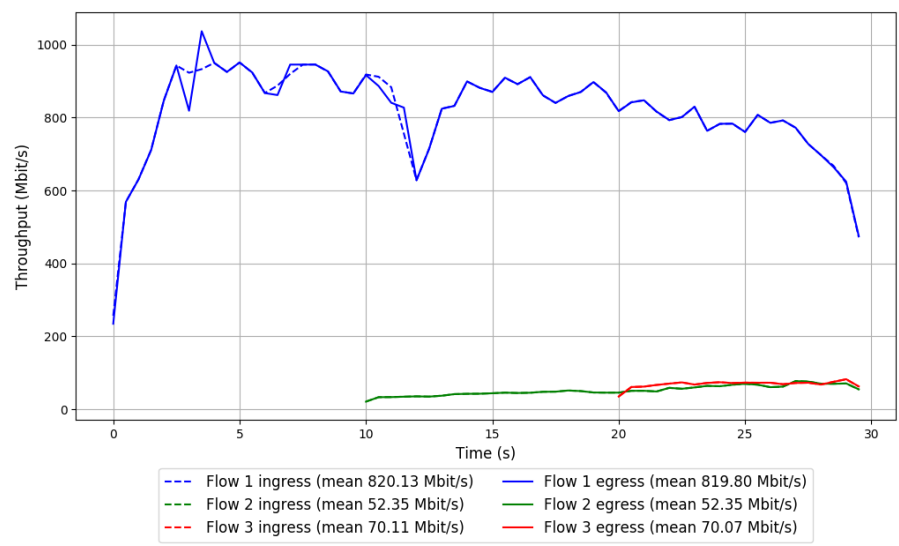
Run 10: Report of LEDBAT — Data Link

Flow 1 ingress (mean 366.66 Mbit/s)   Flow 1 egress (mean 366.40 Mbit/s)
Flow 2 ingress (mean 343.48 Mbit/s)   Flow 2 egress (mean 343.12 Mbit/s)
Flow 3 ingress (mean 269.05 Mbit/s)   Flow 3 egress (mean 268.71 Mbit/s)

Flow 1 (95th percentile 10.55 ms)   Flow 2 (95th percentile 12.05 ms)   Flow 3 (95th percentile 4.55 ms)

```
Run 1: Statistics of PCC

Start at: 2017-09-21 22:32:50
End at: 2017-09-21 22:33:20
Local clock offset: -0.012 ms
Remote clock offset: 0.418 ms


# Below is generated by plot.py at 2017-09-22 04:26:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 874.75 Mbit/s
95th percentile per-packet one-way delay: 7.396 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 641.47 Mbit/s
95th percentile per-packet one-way delay: 17.457 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 332.33 Mbit/s
95th percentile per-packet one-way delay: 3.060 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 37.31 Mbit/s
95th percentile per-packet one-way delay: 3.322 ms
Loss rate: 0.09%
```
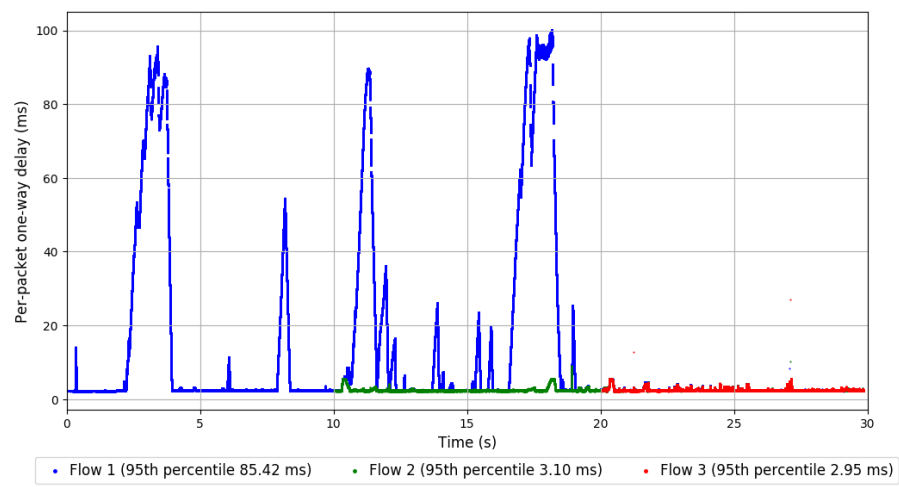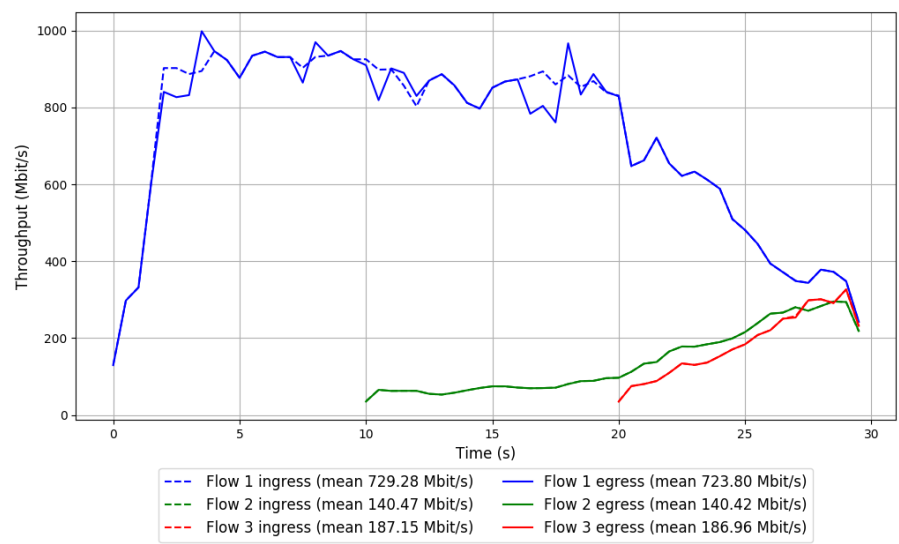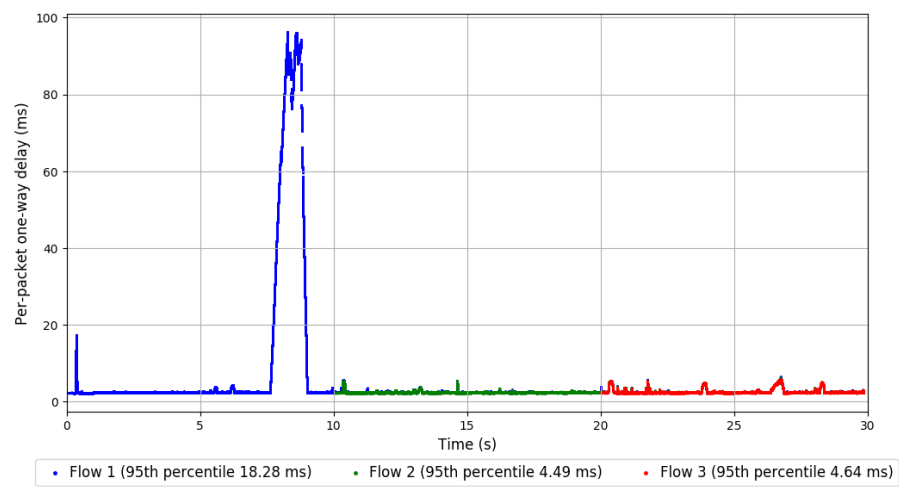
Run 1: Report of PCC — Data Link

- - - - Flow 1 ingress (mean 642.22 Mbit/s) ——— Flow 1 egress (mean 641.47 Mbit/s)
- - - - Flow 2 ingress (mean 332.47 Mbit/s) ——— Flow 2 egress (mean 332.33 Mbit/s)
- - - - Flow 3 ingress (mean 37.34 Mbit/s) ——— Flow 3 egress (mean 37.31 Mbit/s)

• Flow 1 (95th percentile 17.46 ms)   • Flow 2 (95th percentile 3.06 ms)   • Flow 3 (95th percentile 3.32 ms)

```
Run 2: Statistics of PCC

Start at: 2017-09-21 22:52:39
End at: 2017-09-21 22:53:09
Local clock offset: -0.138 ms
Remote clock offset: -0.012 ms


# Below is generated by plot.py at 2017-09-22 04:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 908.90 Mbit/s
95th percentile per-packet one-way delay: 53.577 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 709.08 Mbit/s
95th percentile per-packet one-way delay: 62.752 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 259.30 Mbit/s
95th percentile per-packet one-way delay: 3.190 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 82.84 Mbit/s
95th percentile per-packet one-way delay: 3.320 ms
Loss rate: 0.06%
```
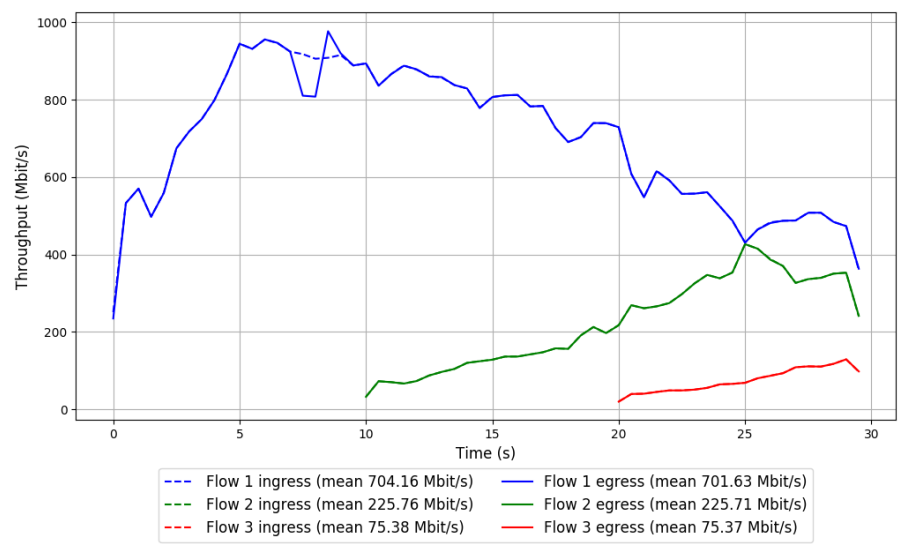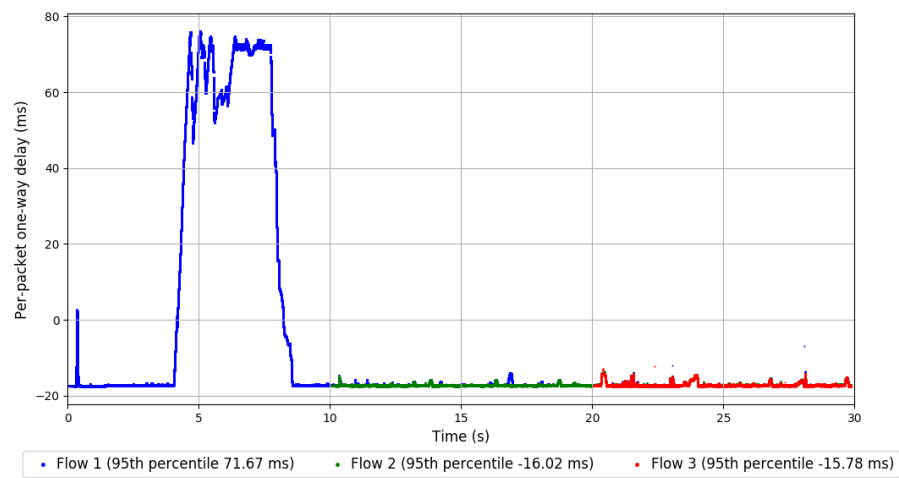
Run 2: Report of PCC — Data Link

```
Run 3: Statistics of PCC

Start at: 2017-09-21 23:12:30
End at: 2017-09-21 23:13:00
Local clock offset: -0.129 ms
Remote clock offset: -0.135 ms


# Below is generated by plot.py at 2017-09-22 04:33:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 904.96 Mbit/s
95th percentile per-packet one-way delay: 3.445 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 722.56 Mbit/s
95th percentile per-packet one-way delay: 3.447 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 272.63 Mbit/s
95th percentile per-packet one-way delay: 3.302 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 3.65 Mbit/s
95th percentile per-packet one-way delay: 43.567 ms
Loss rate: 6.45%
```
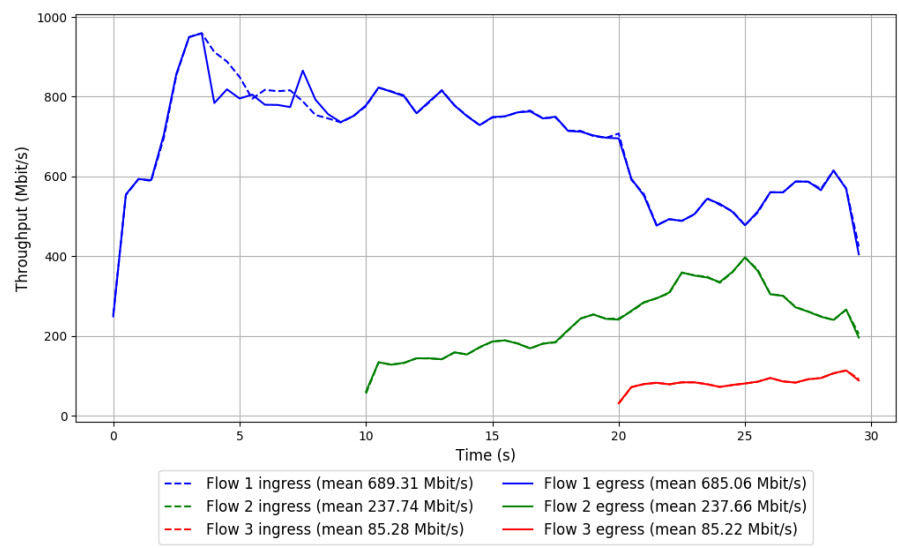
Run 3: Report of PCC — Data Link

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```
Run 4: Statistics of PCC

Start at: 2017-09-21 23:32:17
End at: 2017-09-21 23:32:47
Local clock offset: -0.143 ms
Remote clock offset: -0.27 ms

# Below is generated by plot.py at 2017-09-22 04:34:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 904.24 Mbit/s
95th percentile per-packet one-way delay: 25.853 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 671.53 Mbit/s
95th percentile per-packet one-way delay: 31.858 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 321.01 Mbit/s
95th percentile per-packet one-way delay: 3.653 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 58.28 Mbit/s
95th percentile per-packet one-way delay: 3.811 ms
Loss rate: 0.02%
```
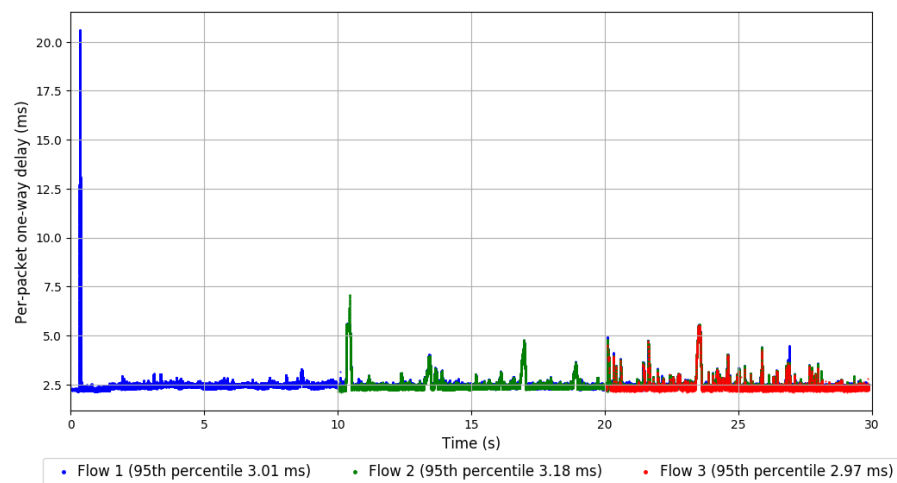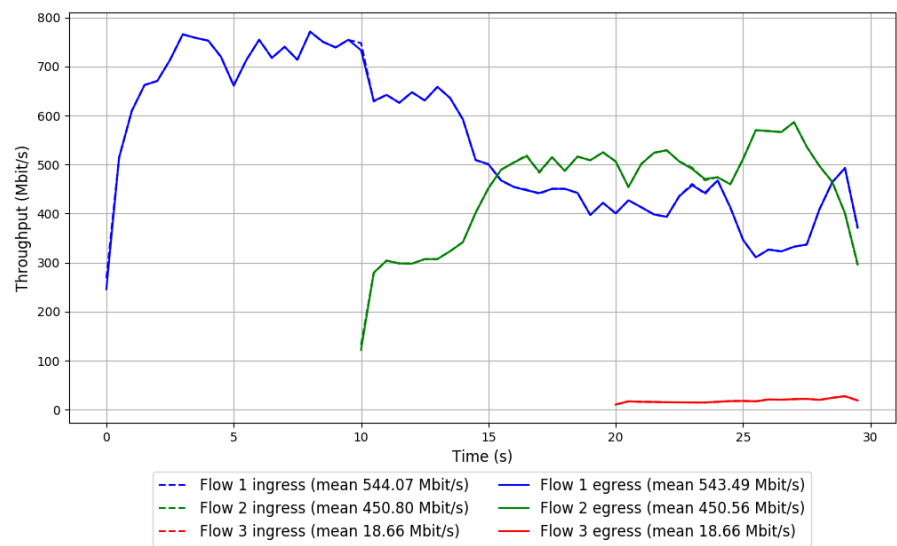
Run 4: Report of PCC — Data Link

Flow 1 ingress (mean 672.25 Mbit/s) --- Flow 1 egress (mean 671.53 Mbit/s)
Flow 2 ingress (mean 321.10 Mbit/s) --- Flow 2 egress (mean 321.01 Mbit/s)
Flow 3 ingress (mean 58.30 Mbit/s) --- Flow 3 egress (mean 58.28 Mbit/s)

Flow 1 (95th percentile 31.86 ms)   Flow 2 (95th percentile 3.65 ms)   Flow 3 (95th percentile 3.81 ms)

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```
Run 5: Statistics of PCC

Start at: 2017-09-21 23:52:15
End at: 2017-09-21 23:52:45
Local clock offset: -0.133 ms
Remote clock offset: -0.161 ms


# Below is generated by plot.py at 2017-09-22 04:34:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 877.58 Mbit/s
95th percentile per-packet one-way delay: 16.367 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 819.80 Mbit/s
95th percentile per-packet one-way delay: 17.671 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 52.35 Mbit/s
95th percentile per-packet one-way delay: 2.558 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 70.07 Mbit/s
95th percentile per-packet one-way delay: 2.603 ms
Loss rate: 0.00%
```
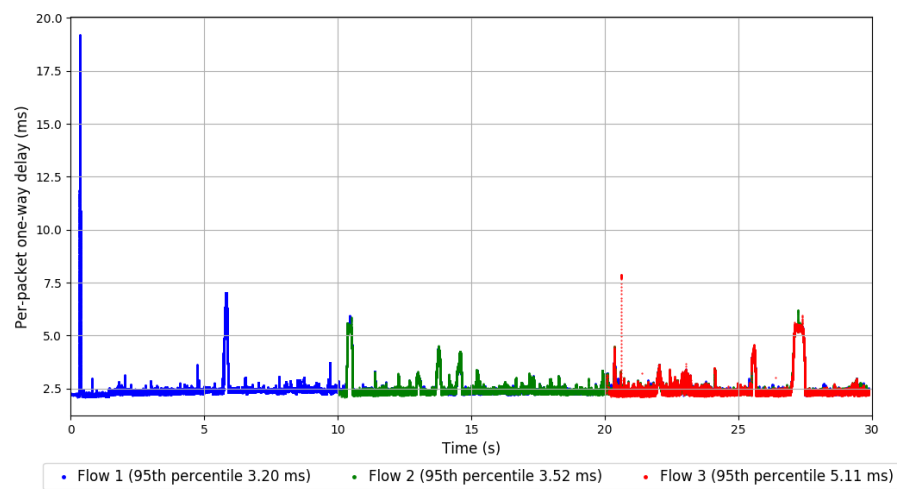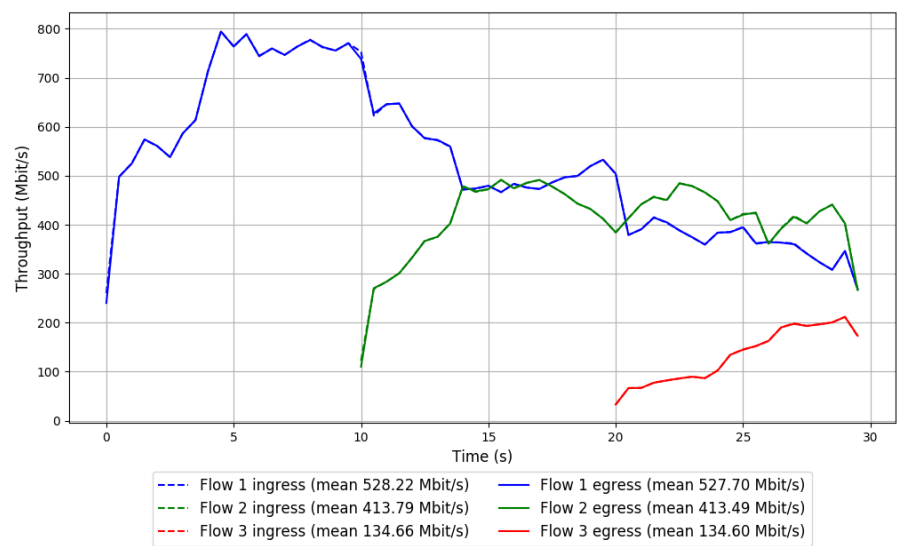
Run 5: Report of PCC — Data Link

- - - Flow 1 ingress (mean 820.13 Mbit/s)   —— Flow 1 egress (mean 819.80 Mbit/s)
- - - Flow 2 ingress (mean 52.35 Mbit/s)   —— Flow 2 egress (mean 52.35 Mbit/s)
- - - Flow 3 ingress (mean 70.11 Mbit/s)   —— Flow 3 egress (mean 70.07 Mbit/s)

- Flow 1 (95th percentile 17.67 ms)   • Flow 2 (95th percentile 2.56 ms)   • Flow 3 (95th percentile 2.60 ms)

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```
Run 6: Statistics of PCC

Start at: 2017-09-22 00:11:54
End at: 2017-09-22 00:12:24
Local clock offset: -0.066 ms
Remote clock offset: -0.047 ms


# Below is generated by plot.py at 2017-09-22 04:35:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 878.74 Mbit/s
95th percentile per-packet one-way delay: 81.316 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 723.80 Mbit/s
95th percentile per-packet one-way delay: 85.421 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 140.42 Mbit/s
95th percentile per-packet one-way delay: 3.099 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 186.96 Mbit/s
95th percentile per-packet one-way delay: 2.951 ms
Loss rate: 0.10%
```
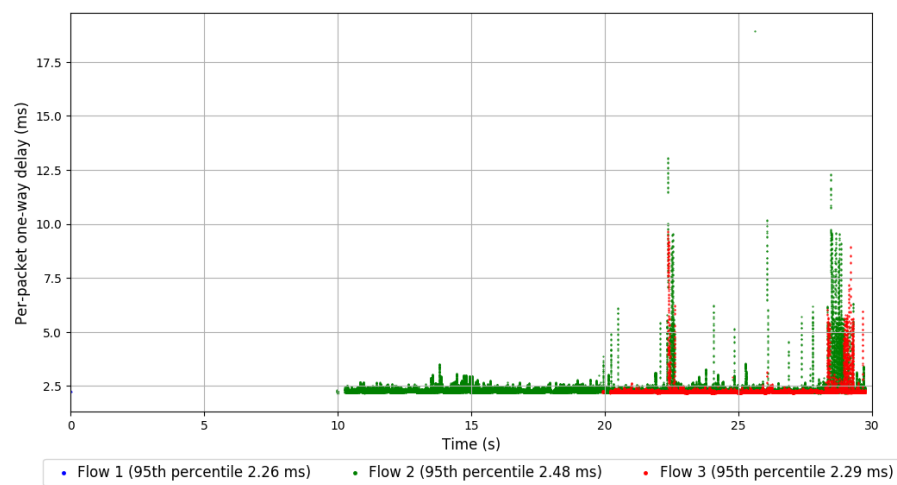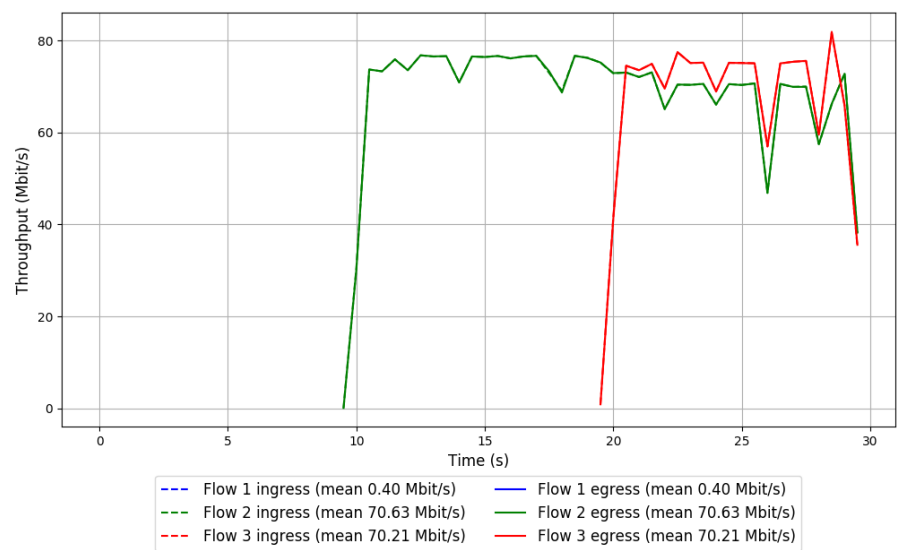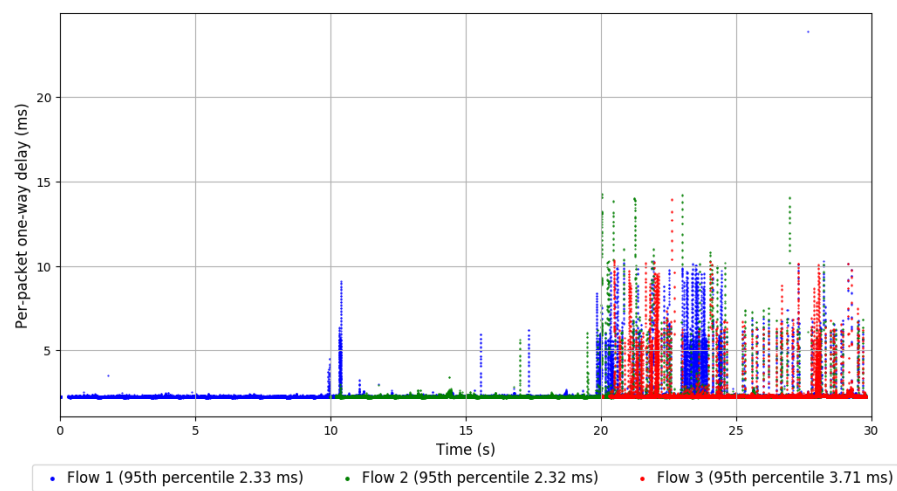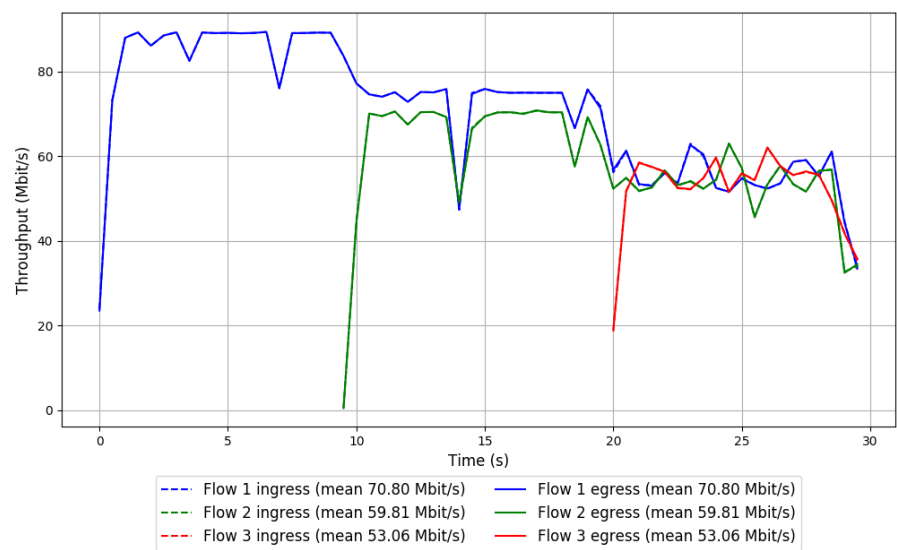
Run 6: Report of PCC — Data Link

```
Run 7: Statistics of PCC

Start at: 2017-09-22 00:31:43
End at: 2017-09-22 00:32:13
Local clock offset: -0.089 ms
Remote clock offset: -0.009 ms


# Below is generated by plot.py at 2017-09-22 04:36:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 876.37 Mbit/s
95th percentile per-packet one-way delay: 5.435 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 701.63 Mbit/s
95th percentile per-packet one-way delay: 18.278 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 225.71 Mbit/s
95th percentile per-packet one-way delay: 4.487 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 75.37 Mbit/s
95th percentile per-packet one-way delay: 4.640 ms
Loss rate: 0.02%
```
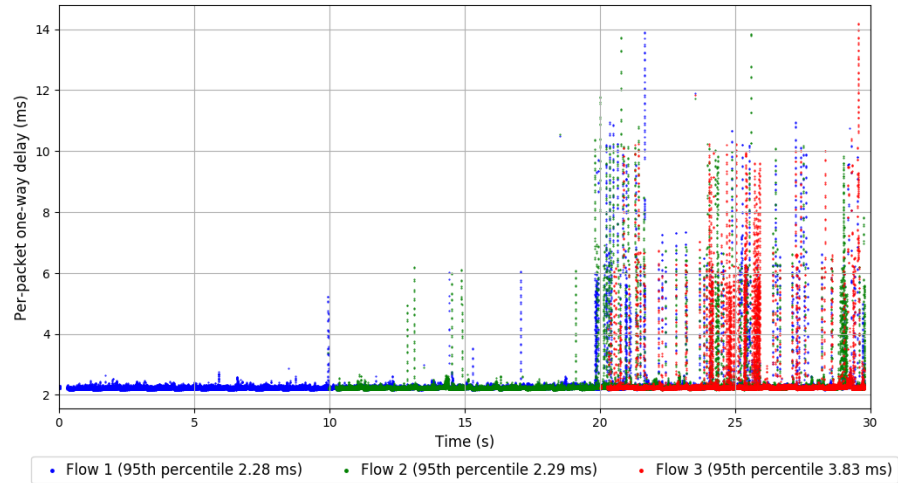
Run 7: Report of PCC — Data Link

```
Run 8: Statistics of PCC

Start at: 2017-09-22 00:51:31
End at: 2017-09-22 00:52:01
Local clock offset: -0.054 ms
Remote clock offset: -19.657 ms

# Below is generated by plot.py at 2017-09-22 04:36:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 870.90 Mbit/s
95th percentile per-packet one-way delay: 70.790 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 685.06 Mbit/s
95th percentile per-packet one-way delay: 71.669 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 237.66 Mbit/s
95th percentile per-packet one-way delay: -16.023 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 85.22 Mbit/s
95th percentile per-packet one-way delay: -15.783 ms
Loss rate: 0.07%
```
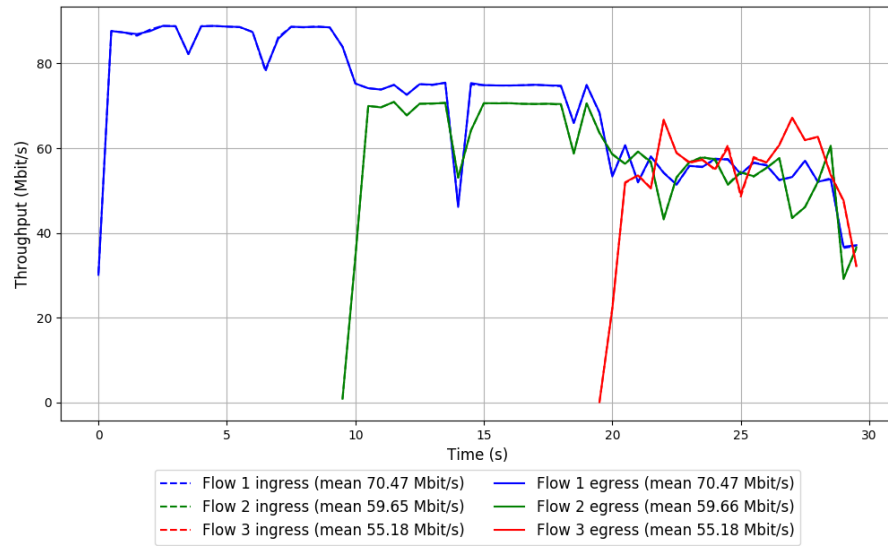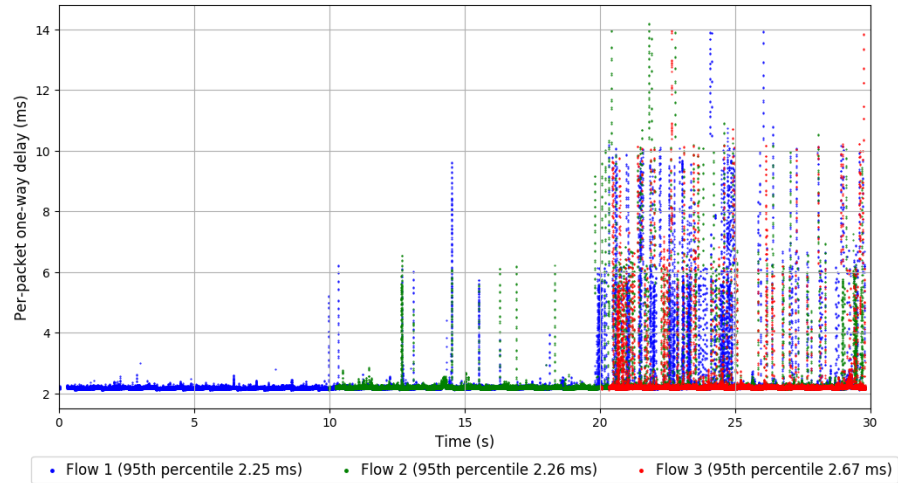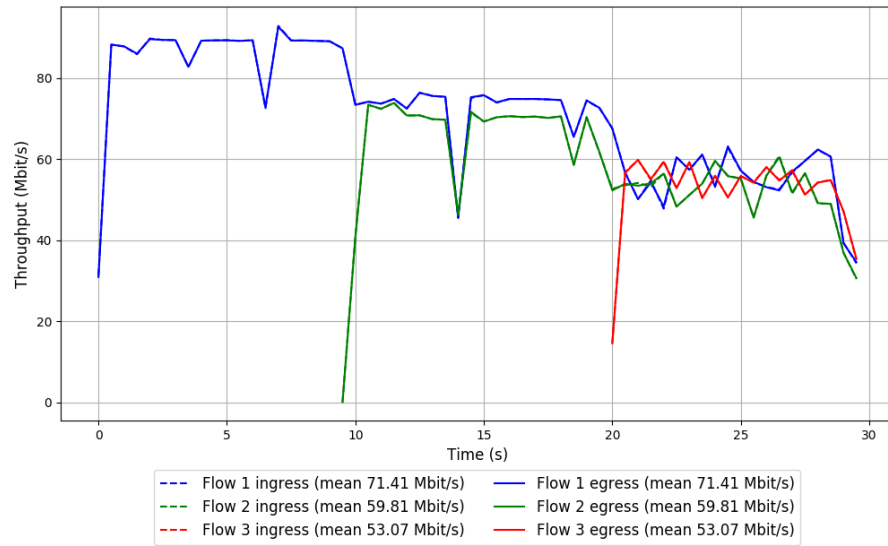
Run 8: Report of PCC — Data Link

- - - - Flow 1 ingress (mean 689.31 Mbit/s) —— Flow 1 egress (mean 685.06 Mbit/s)
- - - - Flow 2 ingress (mean 237.74 Mbit/s) —— Flow 2 egress (mean 237.66 Mbit/s)
- - - - Flow 3 ingress (mean 85.28 Mbit/s) —— Flow 3 egress (mean 85.22 Mbit/s)

- Flow 1 (95th percentile 71.67 ms)   - Flow 2 (95th percentile -16.02 ms)   - Flow 3 (95th percentile -15.78 ms)

```
Run 9: Statistics of PCC

Start at: 2017-09-22 01:11:15
End at: 2017-09-22 01:11:45
Local clock offset: -0.127 ms
Remote clock offset: 0.124 ms


# Below is generated by plot.py at 2017-09-22 04:39:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 849.23 Mbit/s
95th percentile per-packet one-way delay: 3.075 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 543.49 Mbit/s
95th percentile per-packet one-way delay: 3.013 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 450.56 Mbit/s
95th percentile per-packet one-way delay: 3.176 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 18.66 Mbit/s
95th percentile per-packet one-way delay: 2.971 ms
Loss rate: 0.01%
```

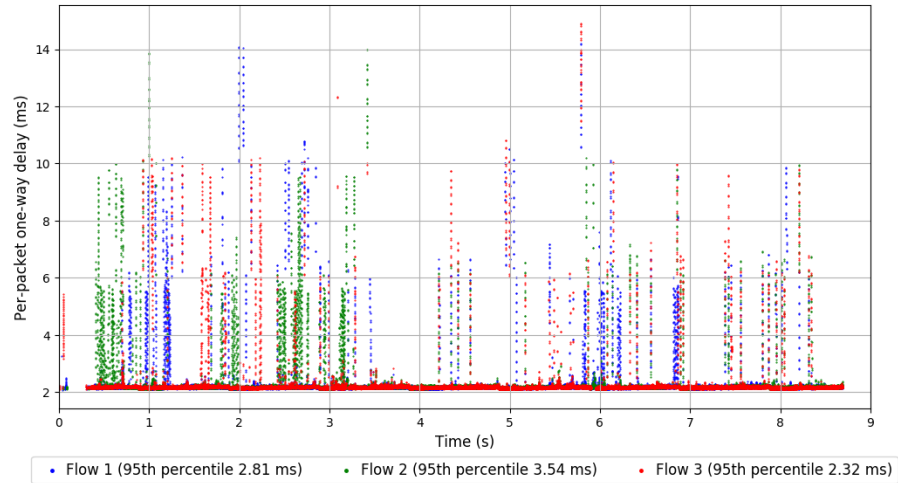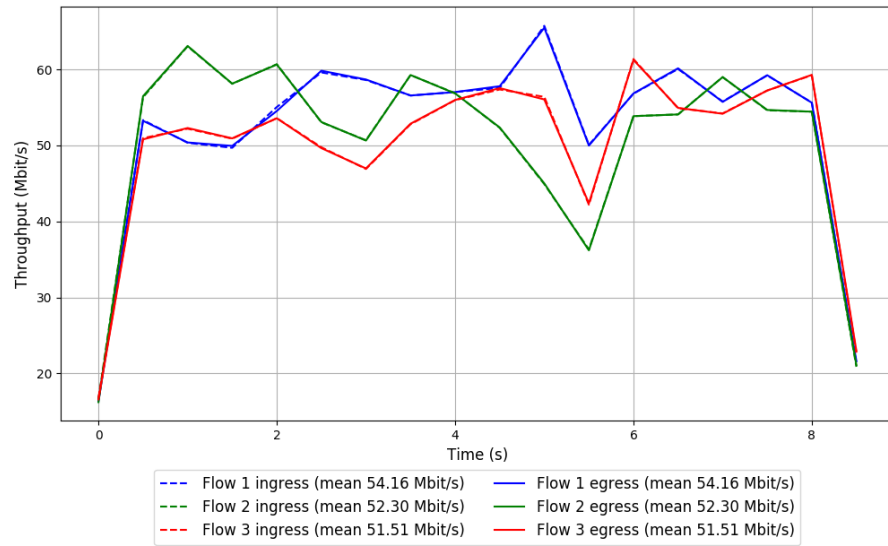Run 9: Report of PCC — Data Link

```
Run 10: Statistics of PCC

Start at: 2017-09-22 01:31:04
End at: 2017-09-22 01:31:34
Local clock offset: -0.166 ms
Remote clock offset: 0.117 ms

# Below is generated by plot.py at 2017-09-22 04:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 846.91 Mbit/s
95th percentile per-packet one-way delay: 3.385 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 527.70 Mbit/s
95th percentile per-packet one-way delay: 3.201 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 413.49 Mbit/s
95th percentile per-packet one-way delay: 3.518 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 134.60 Mbit/s
95th percentile per-packet one-way delay: 5.108 ms
Loss rate: 0.04%
```

Run 10: Report of PCC — Data Link

```
Run 1: Statistics of QUIC Cubic

Start at: 2017-09-21 22:50:09
End at: 2017-09-21 22:50:39
Local clock offset: -0.108 ms
Remote clock offset: 0.029 ms


# Below is generated by plot.py at 2017-09-22 04:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.21 Mbit/s
95th percentile per-packet one-way delay: 2.433 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 2.259 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 70.63 Mbit/s
95th percentile per-packet one-way delay: 2.482 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 70.21 Mbit/s
95th percentile per-packet one-way delay: 2.285 ms
Loss rate: 0.00%
```
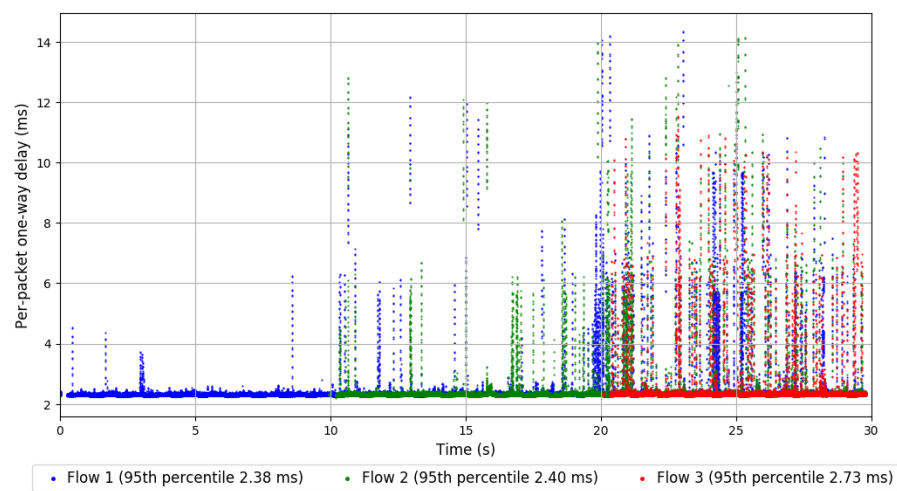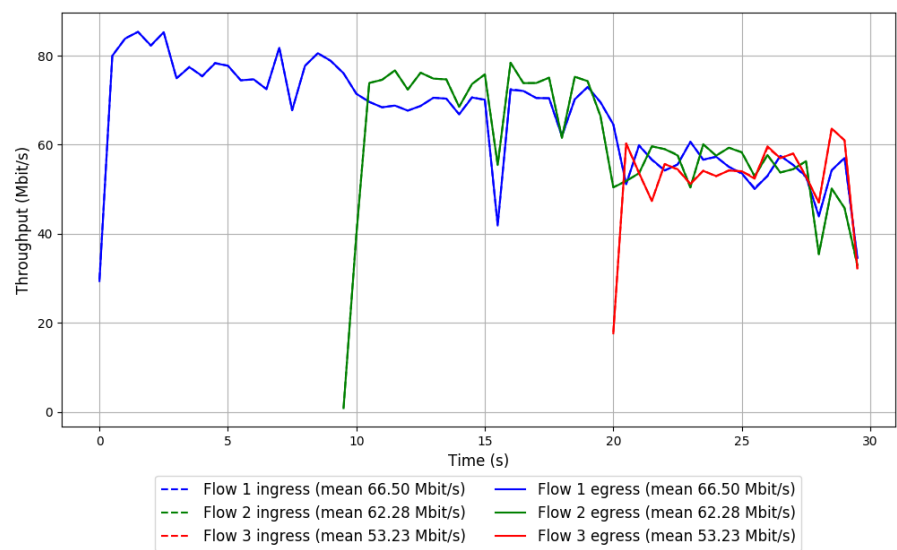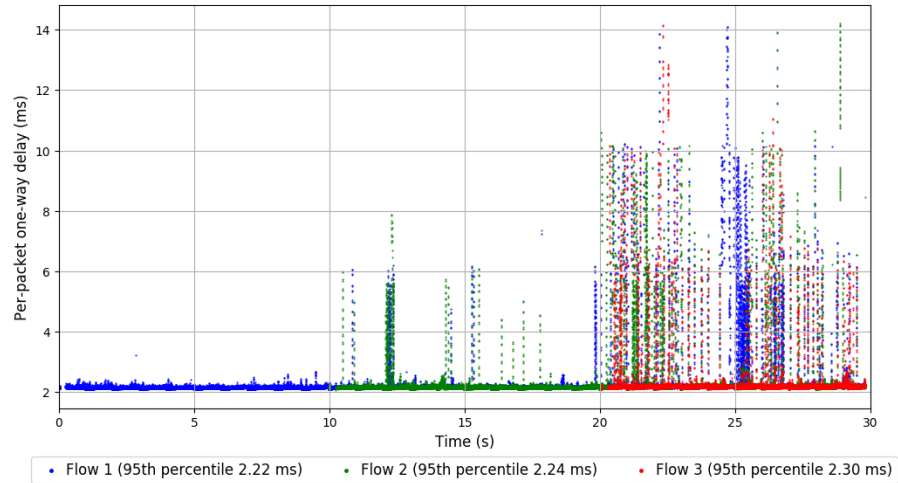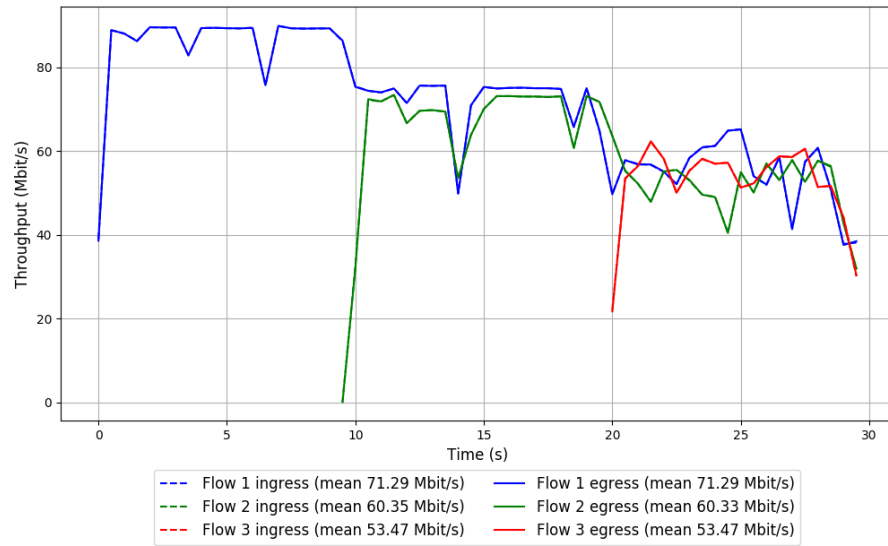
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2017-09-21 23:09:52
End at: 2017-09-21 23:10:22
Local clock offset: -0.162 ms
Remote clock offset: -0.107 ms


# Below is generated by plot.py at 2017-09-22 04:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 128.04 Mbit/s
95th percentile per-packet one-way delay: 2.339 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 70.80 Mbit/s
95th percentile per-packet one-way delay: 2.332 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.81 Mbit/s
95th percentile per-packet one-way delay: 2.321 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 53.06 Mbit/s
95th percentile per-packet one-way delay: 3.709 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2017-09-21 23:29:48
End at: 2017-09-21 23:30:18
Local clock offset: -0.104 ms
Remote clock offset: -0.216 ms


# Below is generated by plot.py at 2017-09-22 04:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 128.36 Mbit/s
95th percentile per-packet one-way delay: 2.296 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 70.47 Mbit/s
95th percentile per-packet one-way delay: 2.283 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.66 Mbit/s
95th percentile per-packet one-way delay: 2.295 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 55.18 Mbit/s
95th percentile per-packet one-way delay: 3.825 ms
Loss rate: 0.00%
```
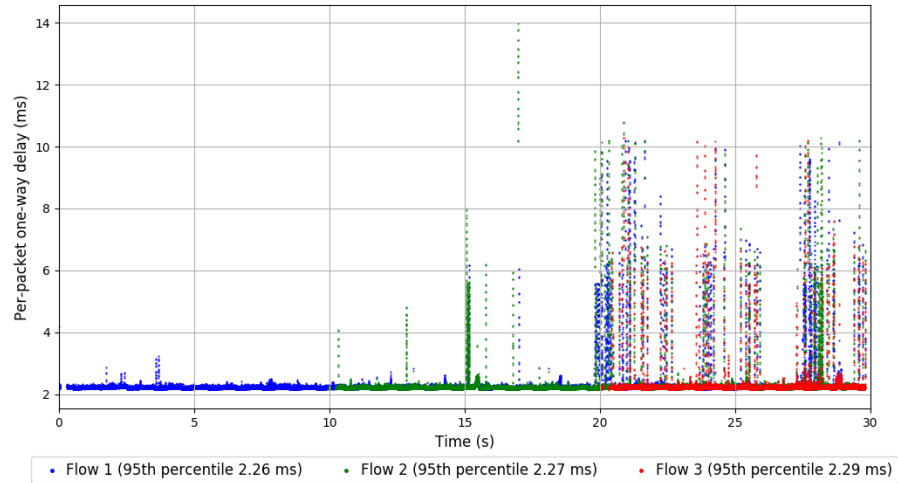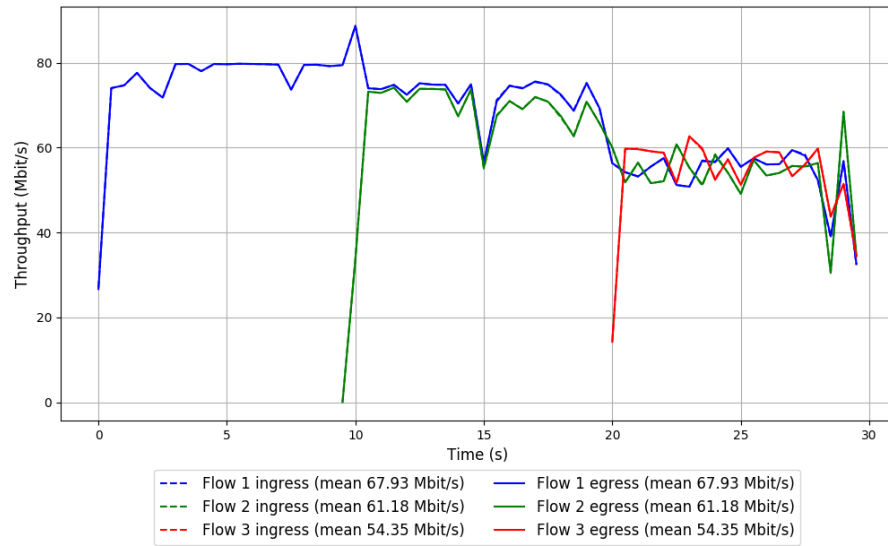
Run 3: Report of QUIC Cubic — Data Link

```
Run 4: Statistics of QUIC Cubic

Start at: 2017-09-21 23:49:39
End at: 2017-09-21 23:50:09
Local clock offset: -0.166 ms
Remote clock offset: -0.244 ms


# Below is generated by plot.py at 2017-09-22 04:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 128.61 Mbit/s
95th percentile per-packet one-way delay: 2.267 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 71.41 Mbit/s
95th percentile per-packet one-way delay: 2.252 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.81 Mbit/s
95th percentile per-packet one-way delay: 2.264 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 53.07 Mbit/s
95th percentile per-packet one-way delay: 2.673 ms
Loss rate: 0.00%
```
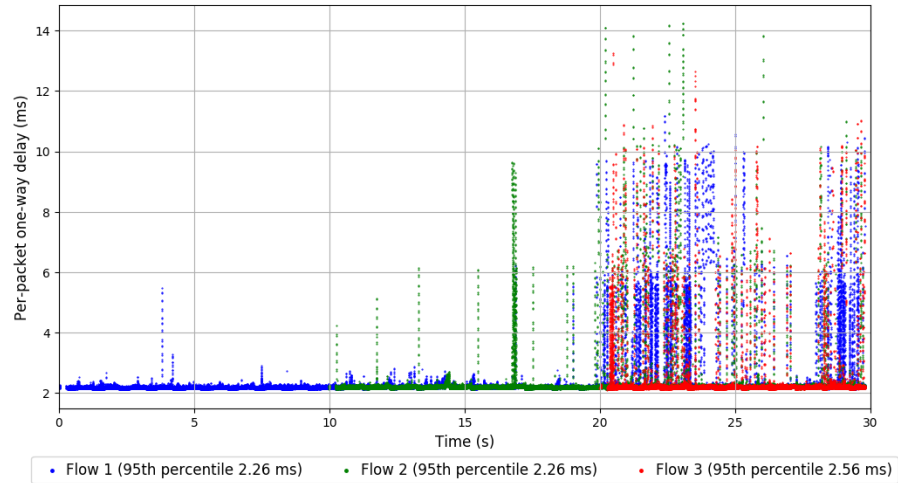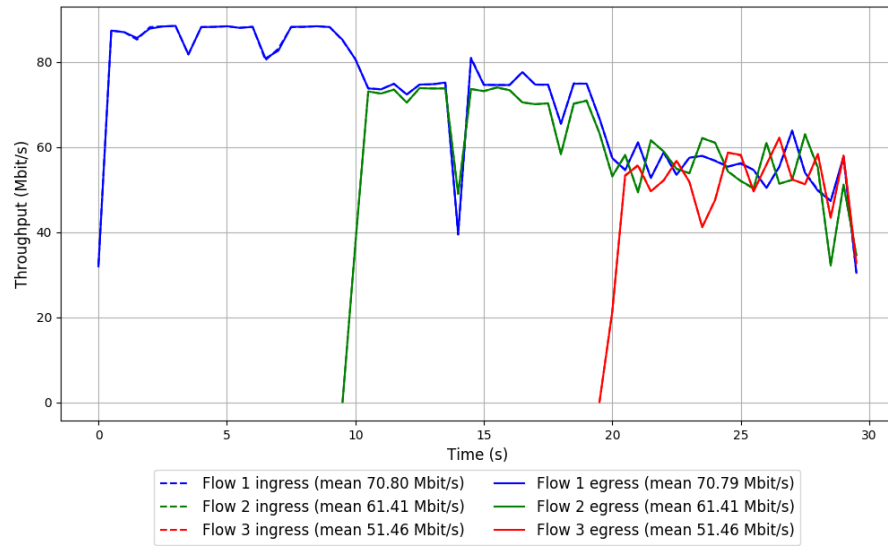
Run 4: Report of QUIC Cubic — Data Link

Run 5: Statistics of QUIC Cubic

Start at: 2017-09-22 00:09:33
End at: 2017-09-22 00:10:03
Local clock offset: -0.033 ms
Remote clock offset: -0.02 ms

Run 5: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 54.16 Mbit/s) --- Flow 1 egress (mean 54.16 Mbit/s)
Flow 2 ingress (mean 52.30 Mbit/s) --- Flow 2 egress (mean 52.30 Mbit/s)
Flow 3 ingress (mean 51.51 Mbit/s) --- Flow 3 egress (mean 51.51 Mbit/s)

Flow 1 (95th percentile 2.81 ms) • Flow 2 (95th percentile 3.54 ms) • Flow 3 (95th percentile 2.32 ms)

```
Run 6: Statistics of QUIC Cubic

Start at: 2017-09-22 00:29:09
End at: 2017-09-22 00:29:39
Local clock offset: -0.164 ms
Remote clock offset: 0.005 ms


# Below is generated by plot.py at 2017-09-22 04:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 125.43 Mbit/s
95th percentile per-packet one-way delay: 2.394 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 66.50 Mbit/s
95th percentile per-packet one-way delay: 2.381 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 62.28 Mbit/s
95th percentile per-packet one-way delay: 2.399 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 53.23 Mbit/s
95th percentile per-packet one-way delay: 2.730 ms
Loss rate: 0.00%
```
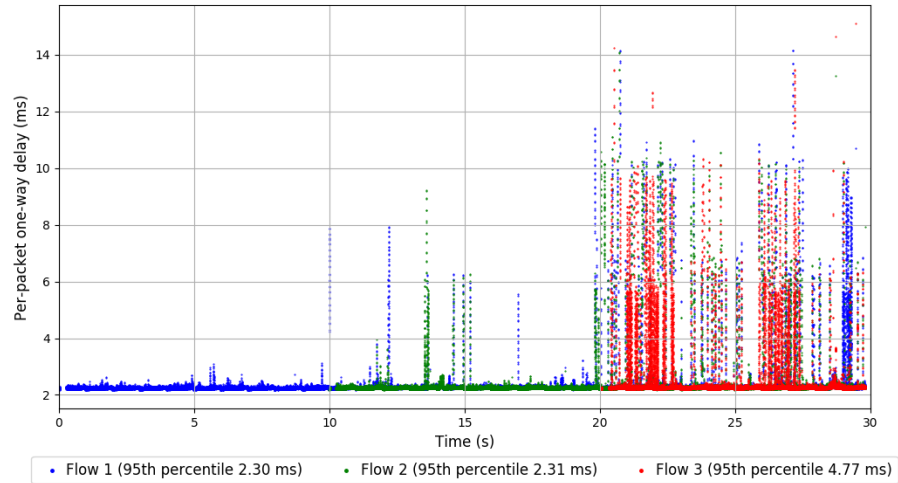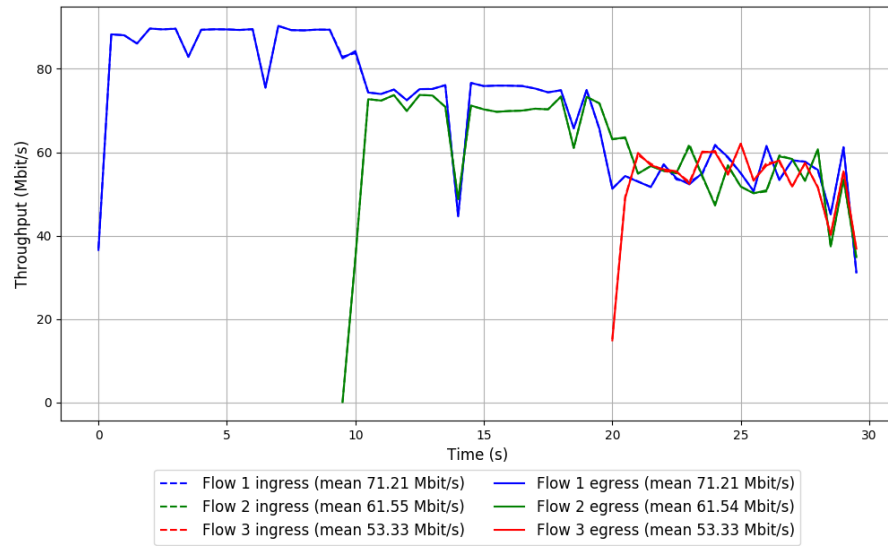
Run 6: Report of QUIC Cubic — Data Link

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```
Run 7: Statistics of QUIC Cubic

Start at: 2017-09-22 00:49:02
End at: 2017-09-22 00:49:32
Local clock offset: -0.104 ms
Remote clock offset: -0.003 ms


# Below is generated by plot.py at 2017-09-22 04:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 128.96 Mbit/s
95th percentile per-packet one-way delay: 2.230 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 71.29 Mbit/s
95th percentile per-packet one-way delay: 2.218 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 60.33 Mbit/s
95th percentile per-packet one-way delay: 2.239 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 53.47 Mbit/s
95th percentile per-packet one-way delay: 2.298 ms
Loss rate: 0.00%
```
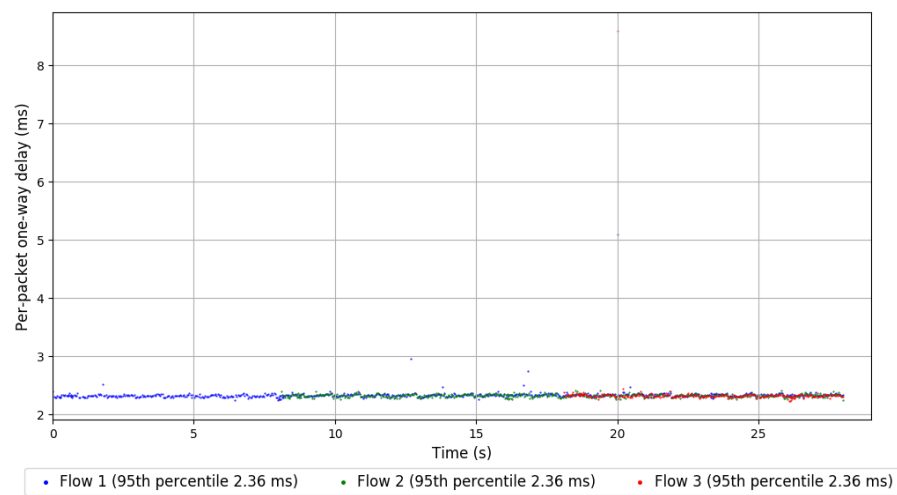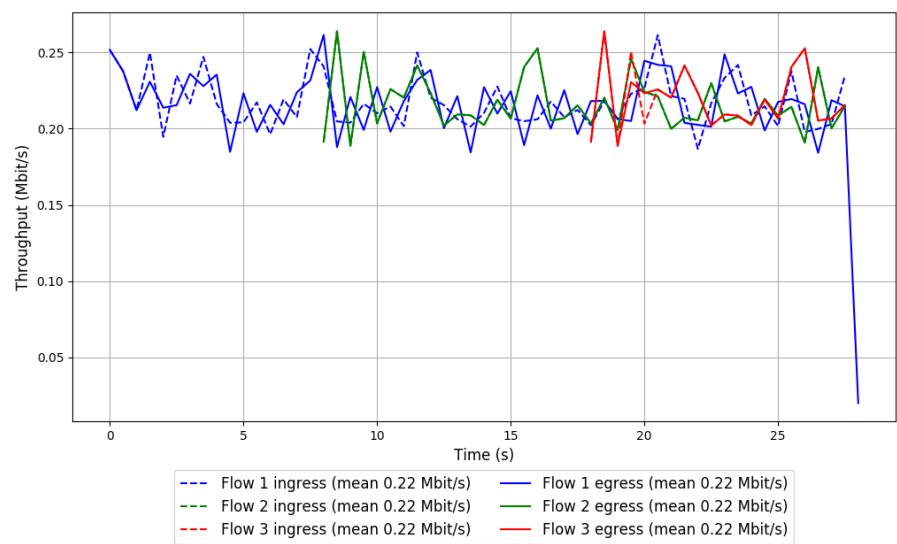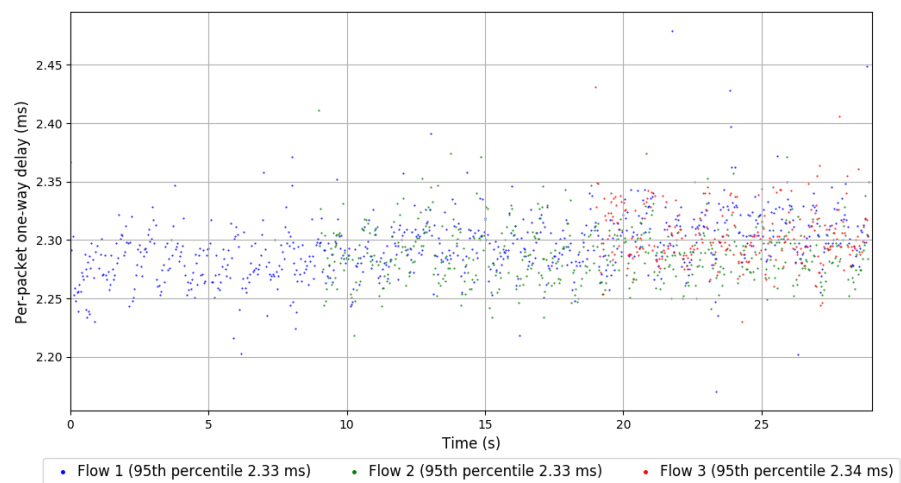
Run 7: Report of QUIC Cubic — Data Link
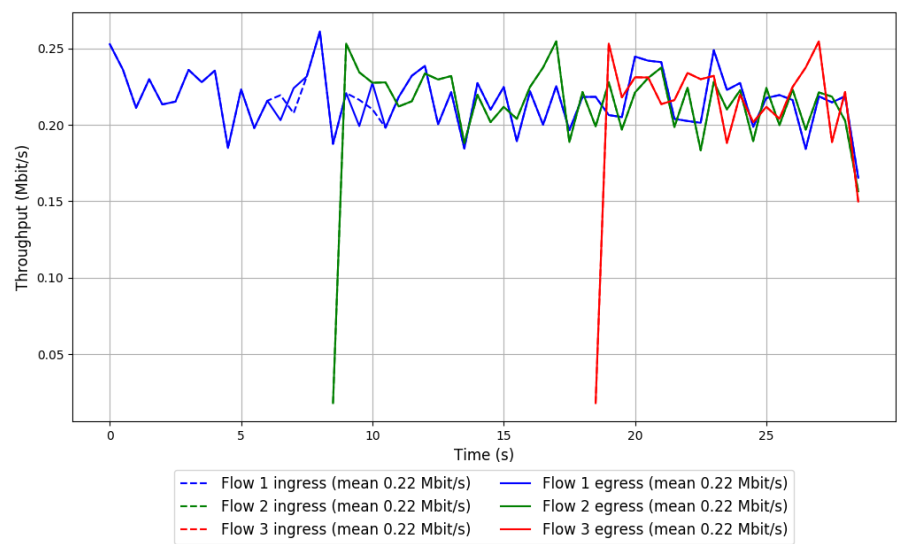
```
Run 8: Statistics of QUIC Cubic

Start at: 2017-09-22 01:08:37
End at: 2017-09-22 01:09:07
Local clock offset: -0.113 ms
Remote clock offset: 0.137 ms


# Below is generated by plot.py at 2017-09-22 04:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 126.45 Mbit/s
95th percentile per-packet one-way delay: 2.267 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 67.93 Mbit/s
95th percentile per-packet one-way delay: 2.261 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.18 Mbit/s
95th percentile per-packet one-way delay: 2.272 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 54.35 Mbit/s
95th percentile per-packet one-way delay: 2.286 ms
Loss rate: 0.00%
```

Run 8: Report of QUIC Cubic — Data Link
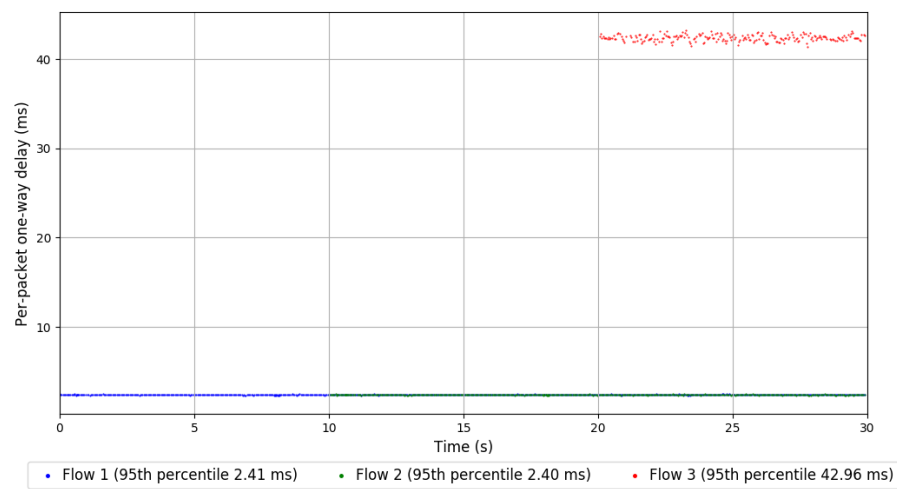
```
Run 9: Statistics of QUIC Cubic

Start at: 2017-09-22 01:28:31
End at: 2017-09-22 01:29:01
Local clock offset: -0.194 ms
Remote clock offset: 0.11 ms


# Below is generated by plot.py at 2017-09-22 04:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 128.59 Mbit/s
95th percentile per-packet one-way delay: 2.260 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 70.79 Mbit/s
95th percentile per-packet one-way delay: 2.256 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.41 Mbit/s
95th percentile per-packet one-way delay: 2.257 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 51.46 Mbit/s
95th percentile per-packet one-way delay: 2.558 ms
Loss rate: 0.00%
```
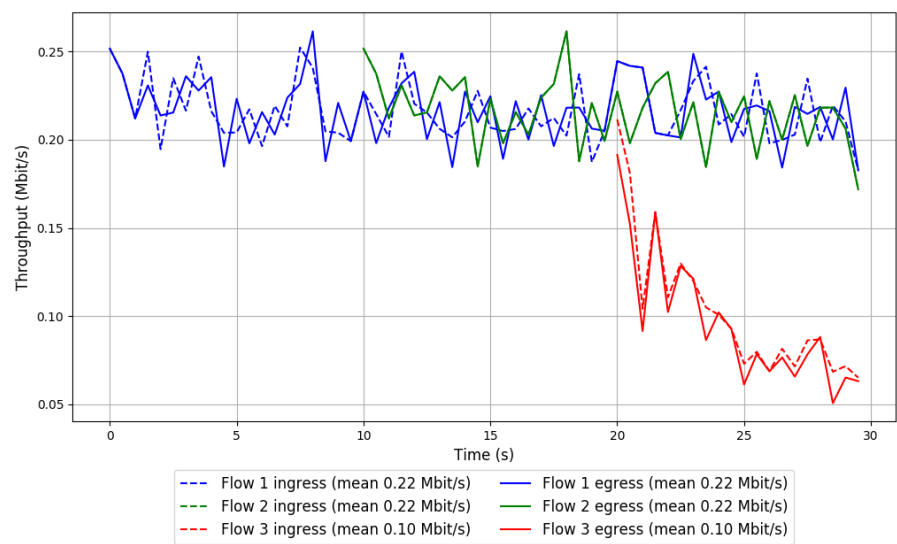
Run 9: Report of QUIC Cubic — Data Link

- - - Flow 1 ingress (mean 70.80 Mbit/s)   —— Flow 1 egress (mean 70.79 Mbit/s)
- - - Flow 2 ingress (mean 61.41 Mbit/s)   —— Flow 2 egress (mean 61.41 Mbit/s)
- - - Flow 3 ingress (mean 51.46 Mbit/s)   —— Flow 3 egress (mean 51.46 Mbit/s)

- Flow 1 (95th percentile 2.26 ms)   • Flow 2 (95th percentile 2.26 ms)   • Flow 3 (95th percentile 2.56 ms)

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```
Run 10: Statistics of QUIC Cubic

Start at: 2017-09-22 01:48:12
End at: 2017-09-22 01:48:42
Local clock offset: -0.27 ms
Remote clock offset: 0.152 ms


# Below is generated by plot.py at 2017-09-22 04:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 129.62 Mbit/s
95th percentile per-packet one-way delay: 2.323 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 71.21 Mbit/s
95th percentile per-packet one-way delay: 2.304 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.54 Mbit/s
95th percentile per-packet one-way delay: 2.309 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 53.33 Mbit/s
95th percentile per-packet one-way delay: 4.773 ms
Loss rate: 0.00%
```
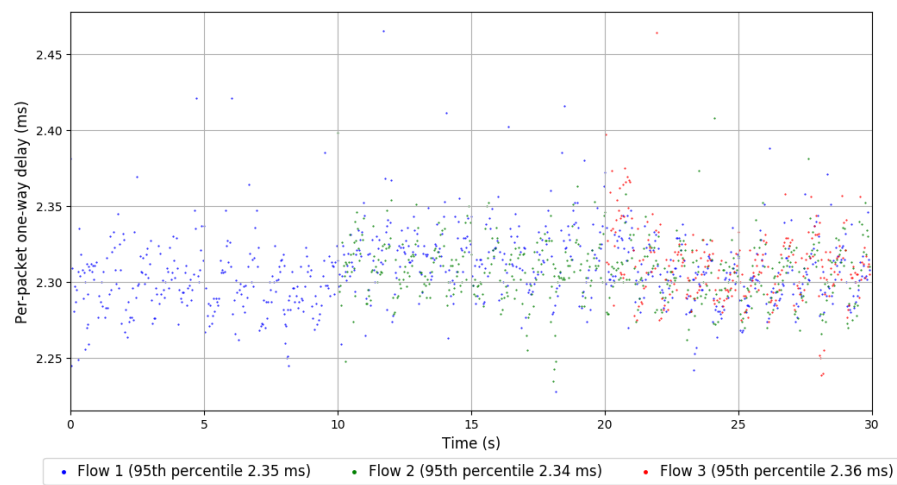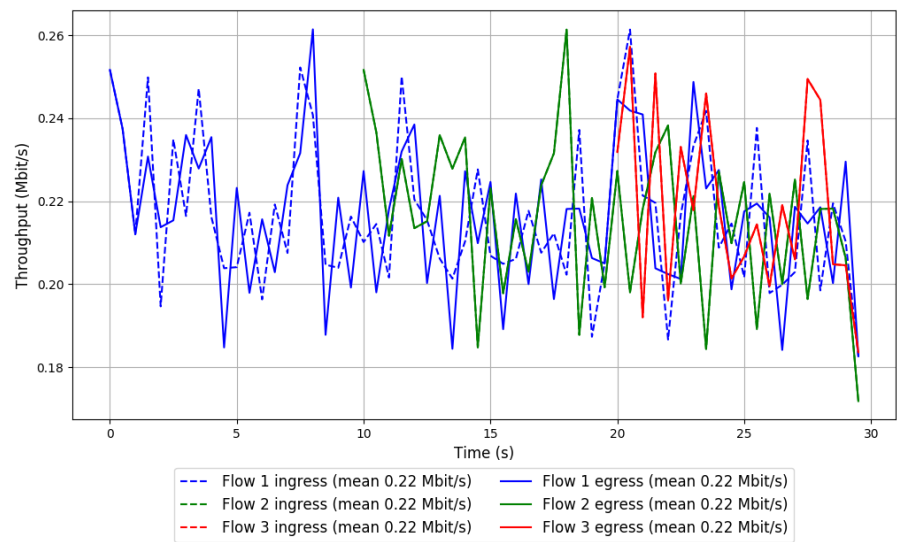
Run 10: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 71.21 Mbit/s)   Flow 1 egress (mean 71.21 Mbit/s)
Flow 2 ingress (mean 61.55 Mbit/s)   Flow 2 egress (mean 61.54 Mbit/s)
Flow 3 ingress (mean 53.33 Mbit/s)   Flow 3 egress (mean 53.33 Mbit/s)

Flow 1 (95th percentile 2.30 ms)   Flow 2 (95th percentile 2.31 ms)   Flow 3 (95th percentile 4.77 ms)

```
Run 1: Statistics of SCReAM

Start at: 2017-09-21 22:41:09
End at: 2017-09-21 22:41:39
Local clock offset: -0.057 ms
Remote clock offset: 0.237 ms


# Below is generated by plot.py at 2017-09-22 04:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 2.362 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.362 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.363 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.357 ms
Loss rate: 0.00%
```
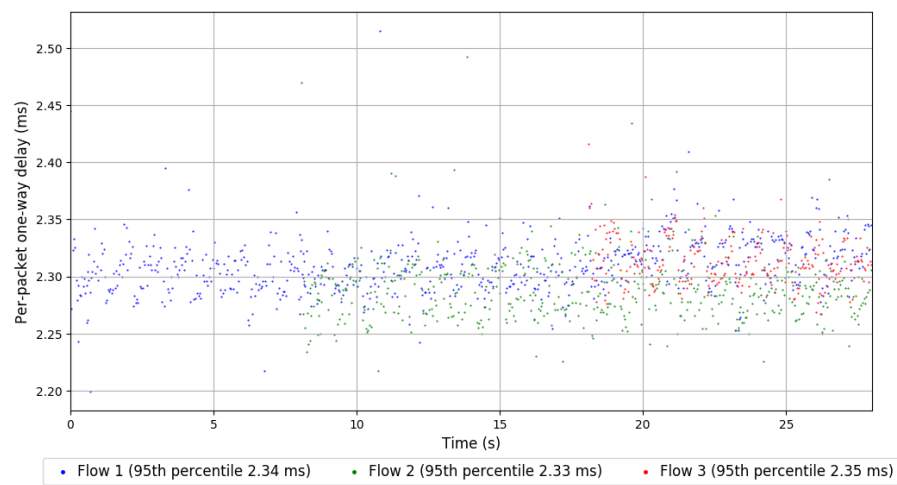
Run 1: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 2.36 ms)   Flow 2 (95th percentile 2.36 ms)   Flow 3 (95th percentile 2.36 ms)

```
Run 2: Statistics of SCReAM

Start at: 2017-09-21 23:01:00
End at: 2017-09-21 23:01:30
Local clock offset: -0.058 ms
Remote clock offset: -0.019 ms


# Below is generated by plot.py at 2017-09-22 04:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 2.337 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.335 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.329 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.343 ms
Loss rate: 0.00%
```
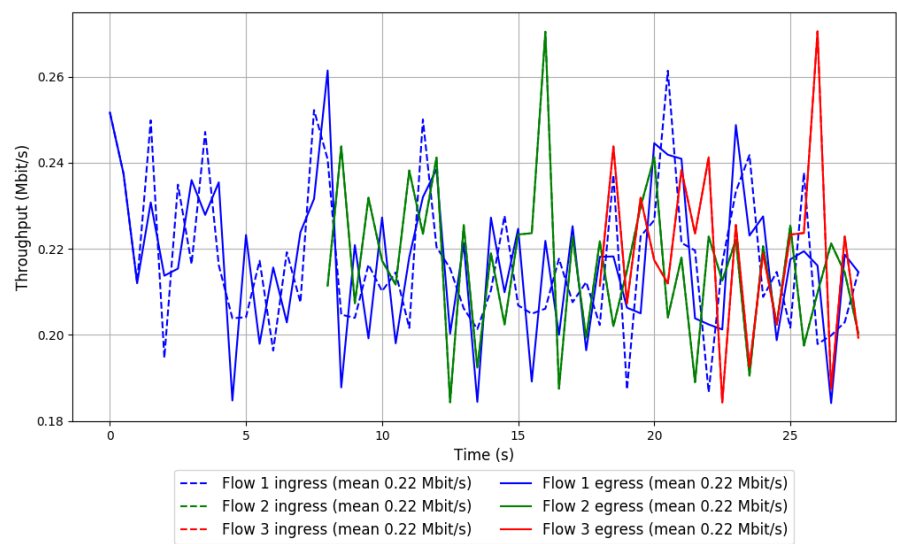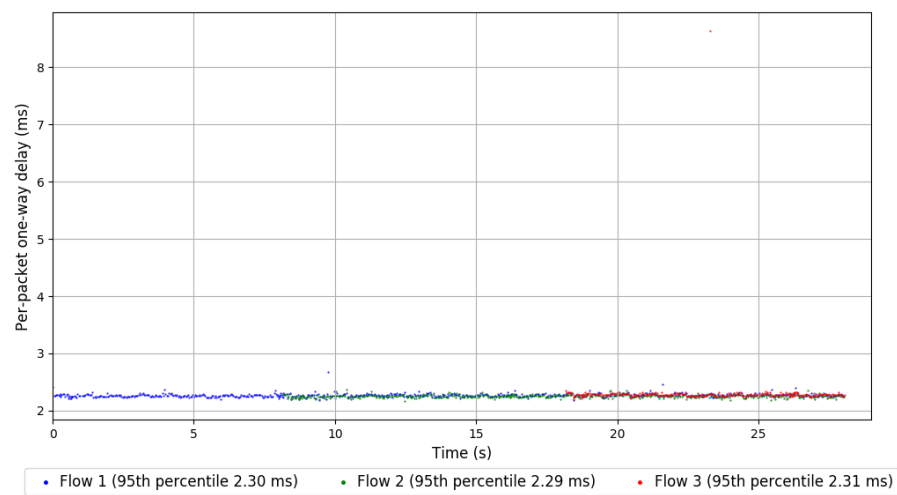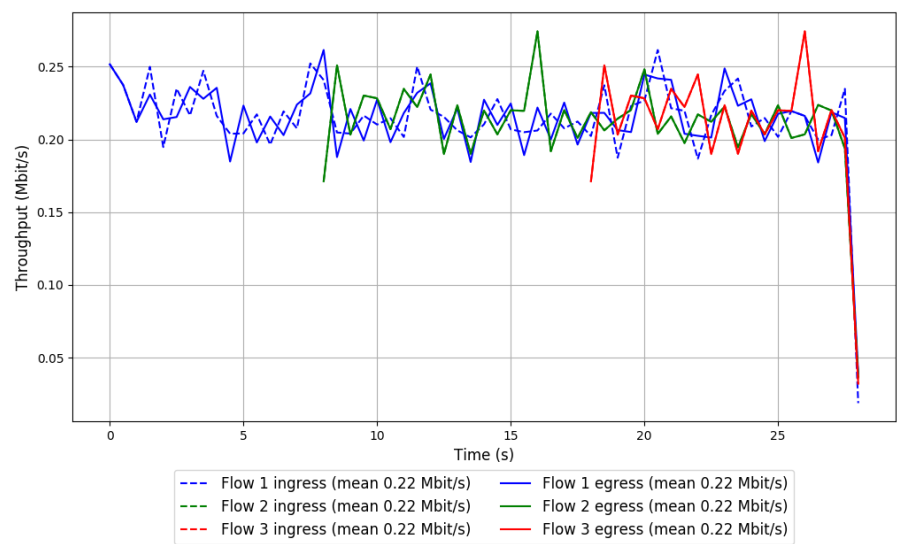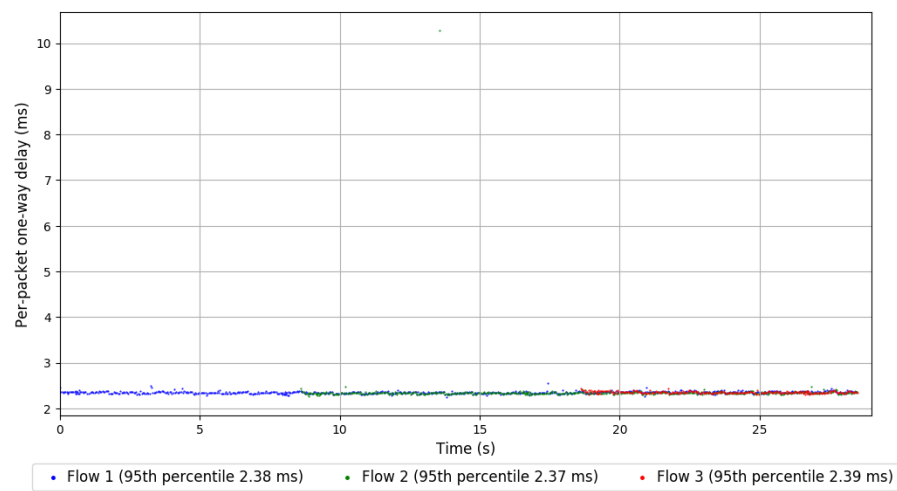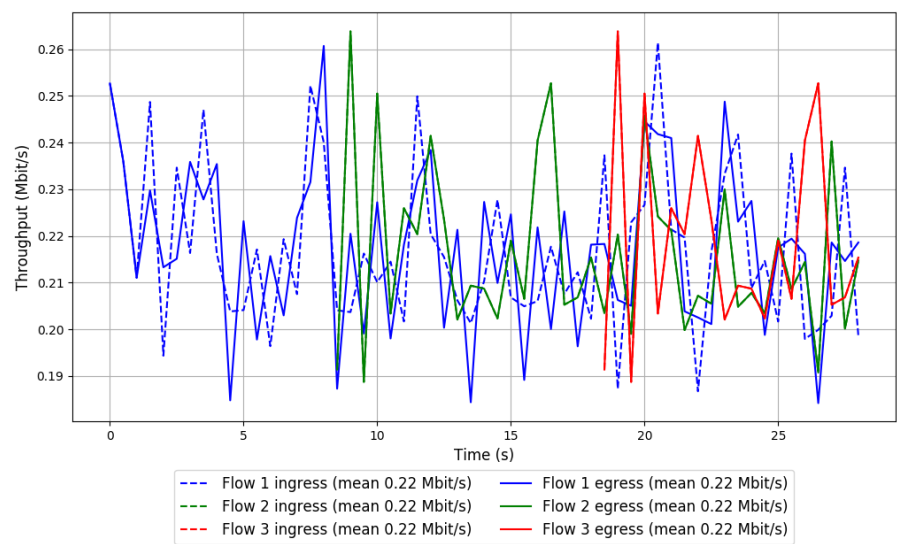
Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2017-09-21 23:20:54
End at: 2017-09-21 23:21:24
Local clock offset: -0.232 ms
Remote clock offset: -0.23 ms


# Below is generated by plot.py at 2017-09-22 04:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 42.531 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.407 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.398 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 42.957 ms
Loss rate: 6.95%
```

Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2017-09-21 23:40:38
End at: 2017-09-21 23:41:08
Local clock offset: -0.142 ms
Remote clock offset: -0.256 ms


# Below is generated by plot.py at 2017-09-22 04:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 2.353 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.356 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.340 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.359 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2017-09-22 00:00:38
End at: 2017-09-22 00:01:08
Local clock offset: -0.141 ms
Remote clock offset: -0.103 ms

# Below is generated by plot.py at 2017-09-22 04:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 2.345 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.345 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.340 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.356 ms
Loss rate: 0.00%
```
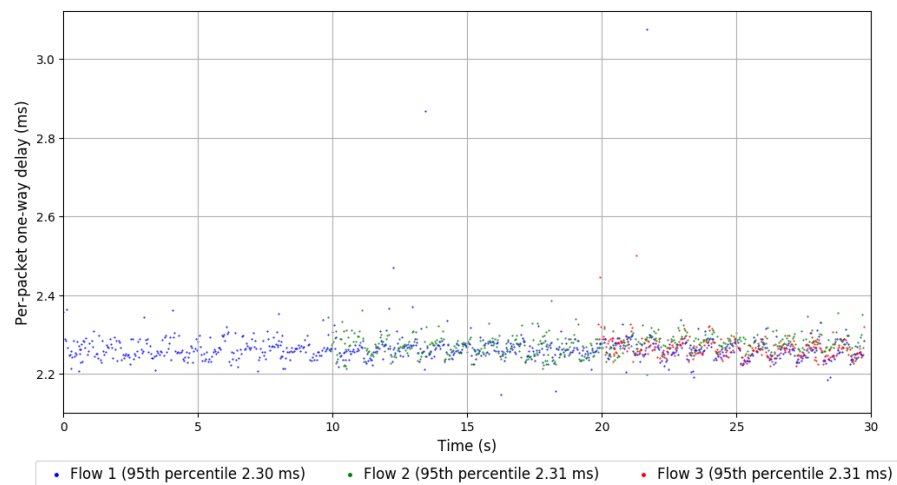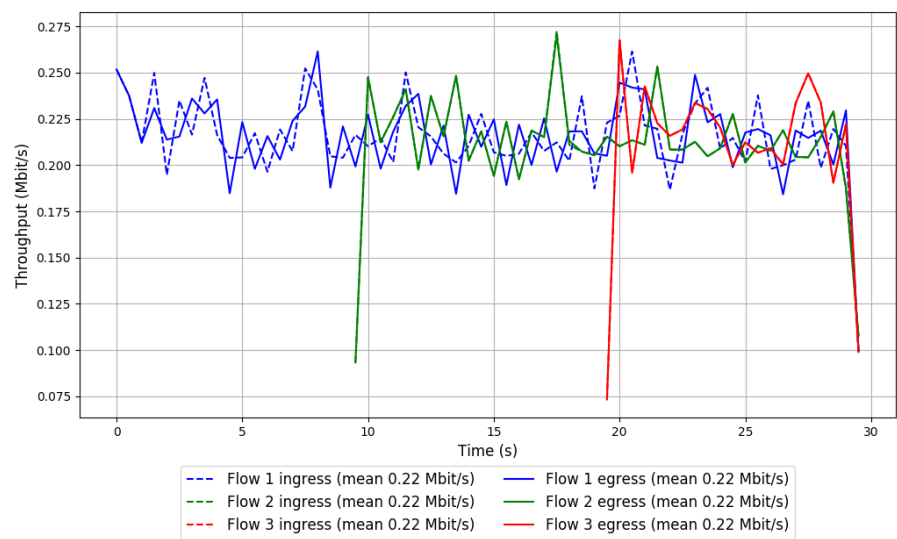
Run 5: Report of SCReAM — Data Link

```
Run 6: Statistics of SCReAM

Start at: 2017-09-22 00:20:15
End at: 2017-09-22 00:20:45
Local clock offset: -0.079 ms
Remote clock offset: 0.011 ms

# Below is generated by plot.py at 2017-09-22 04:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 2.342 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.344 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.330 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.347 ms
Loss rate: 0.00%
```
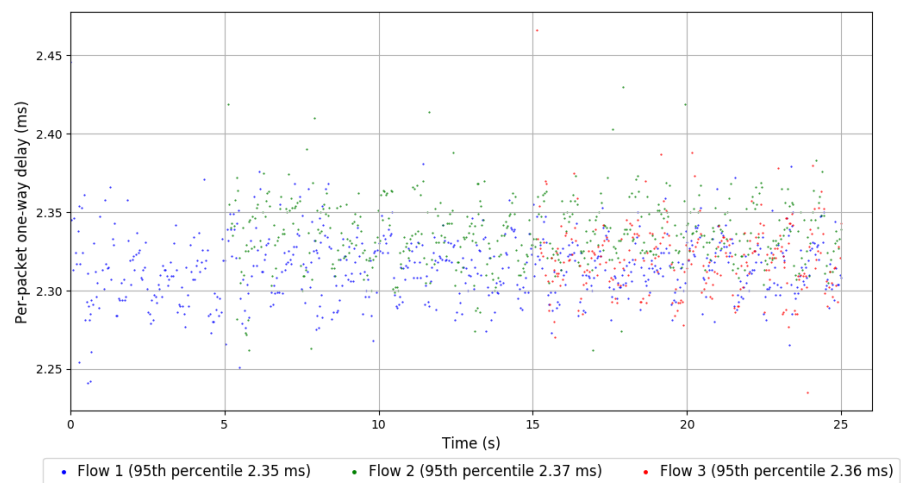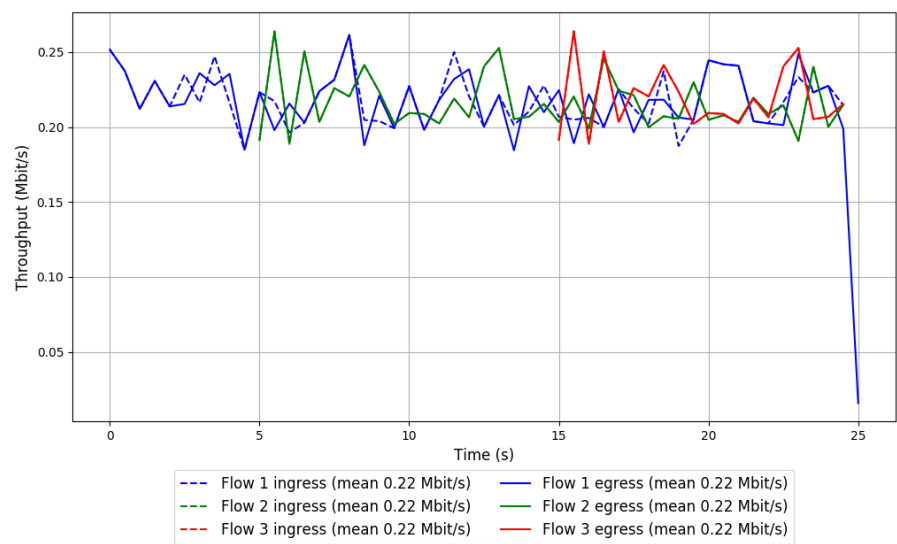
Run 6: Report of SCReAM — Data Link

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```
Run 7: Statistics of SCReAM

Start at: 2017-09-22 00:40:03
End at: 2017-09-22 00:40:33
Local clock offset: -0.11 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2017-09-22 04:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 2.304 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.304 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.289 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.313 ms
Loss rate: 0.00%
```
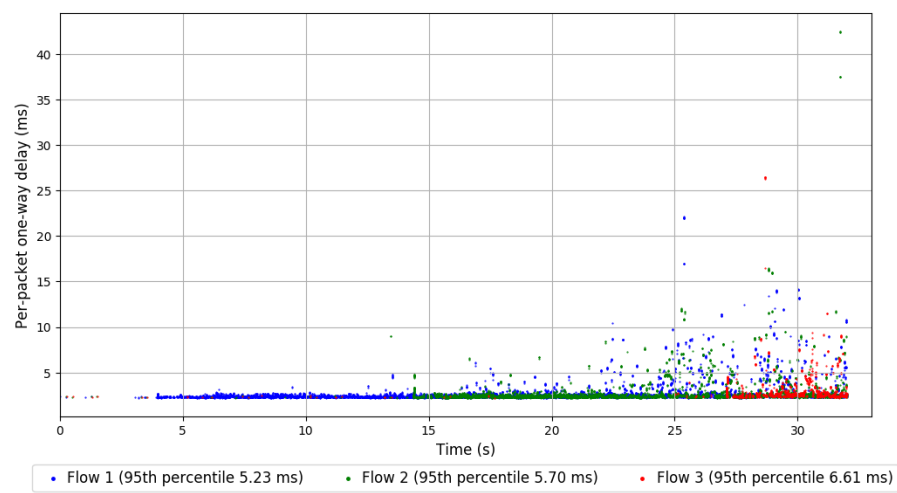
Run 7: Report of SCReAM — Data Link

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```
Run 8: Statistics of SCReAM

Start at: 2017-09-22 00:59:51
End at: 2017-09-22 01:00:21
Local clock offset: -0.223 ms
Remote clock offset: 0.052 ms


# Below is generated by plot.py at 2017-09-22 04:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 2.384 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.384 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.372 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.389 ms
Loss rate: 0.00%
```
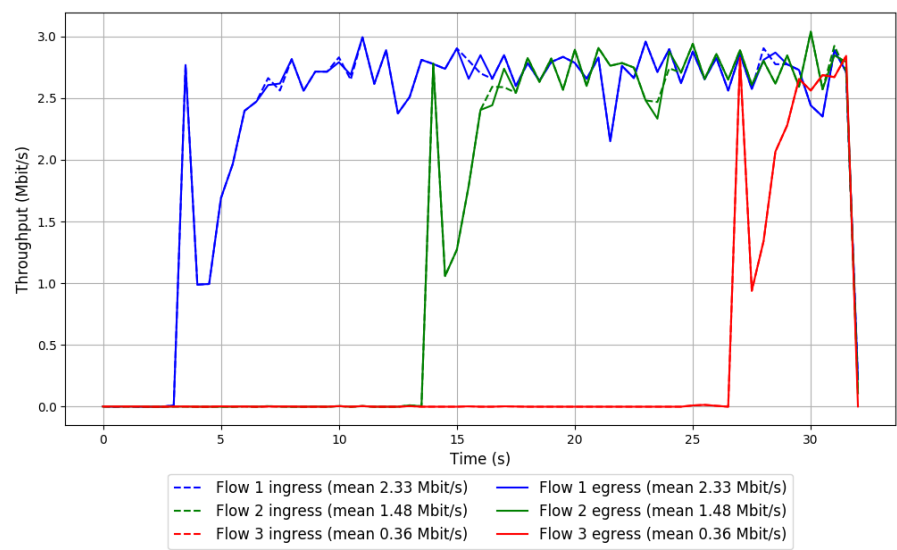
Run 8: Report of SCReAM — Data Link

```
Run 9: Statistics of SCReAM

Start at: 2017-09-22 01:19:36
End at: 2017-09-22 01:20:06
Local clock offset: -0.172 ms
Remote clock offset: 0.123 ms


# Below is generated by plot.py at 2017-09-22 04:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 2.309 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.303 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.312 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.307 ms
Loss rate: 0.00%
```
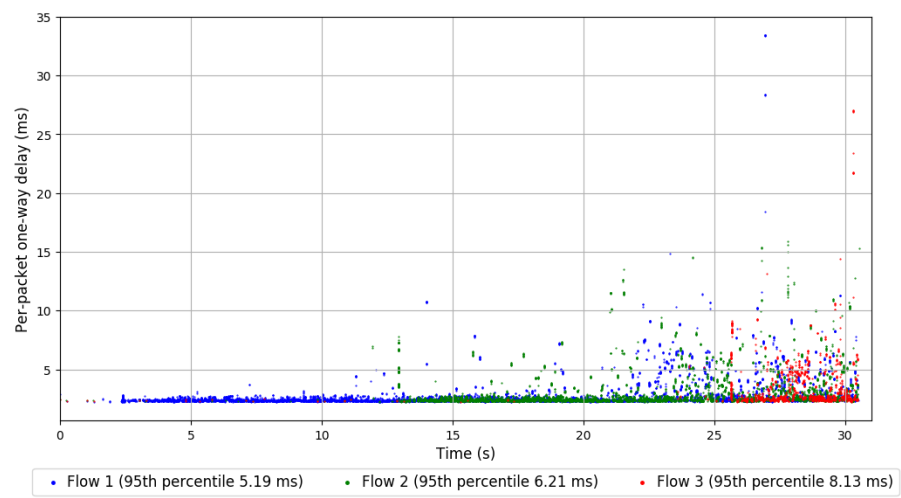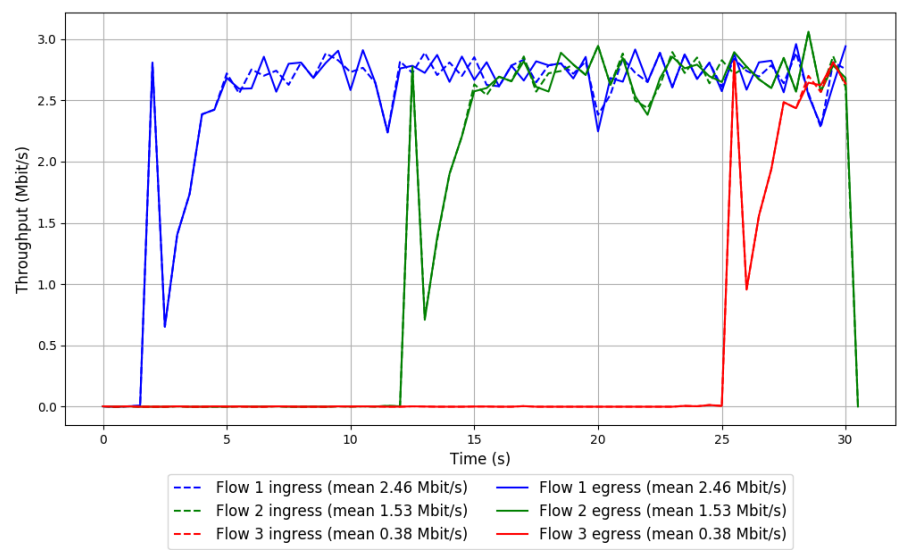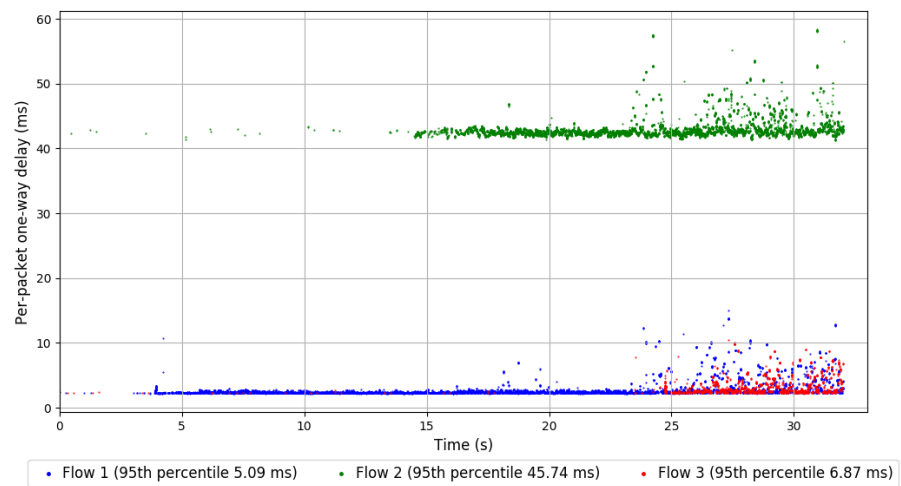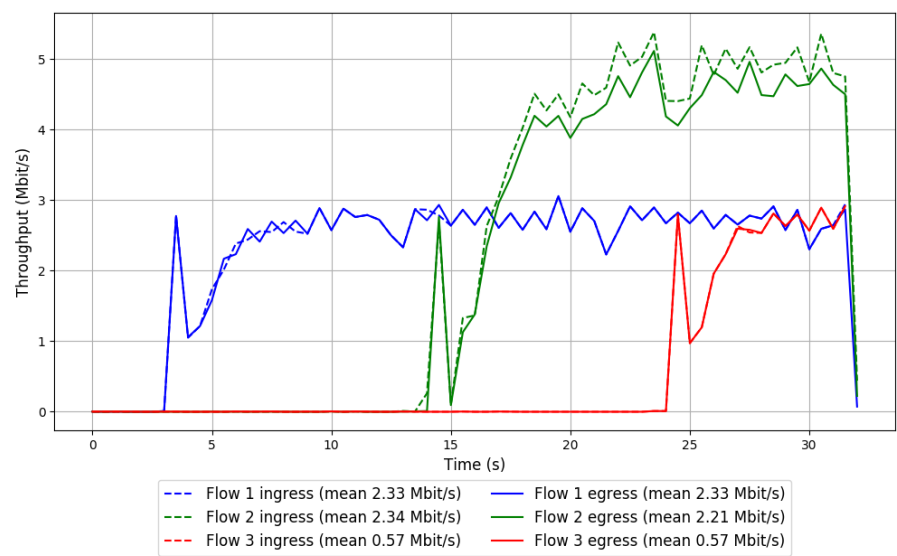
Run 9: Report of SCReAM — Data Link

```
Run 10: Statistics of SCReAM

Start at: 2017-09-22 01:39:17
End at: 2017-09-22 01:39:47
Local clock offset: -0.188 ms
Remote clock offset: 0.205 ms

# Below is generated by plot.py at 2017-09-22 04:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 2.362 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.350 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.367 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.357 ms
Loss rate: 0.00%
```
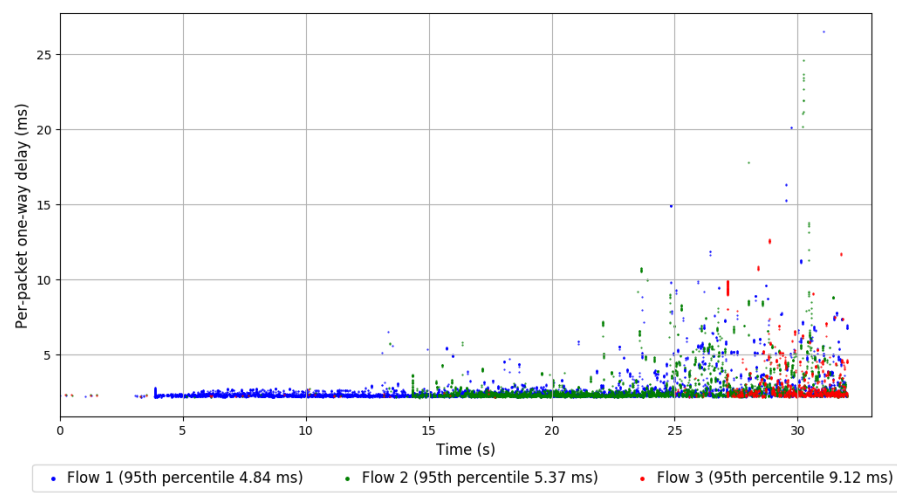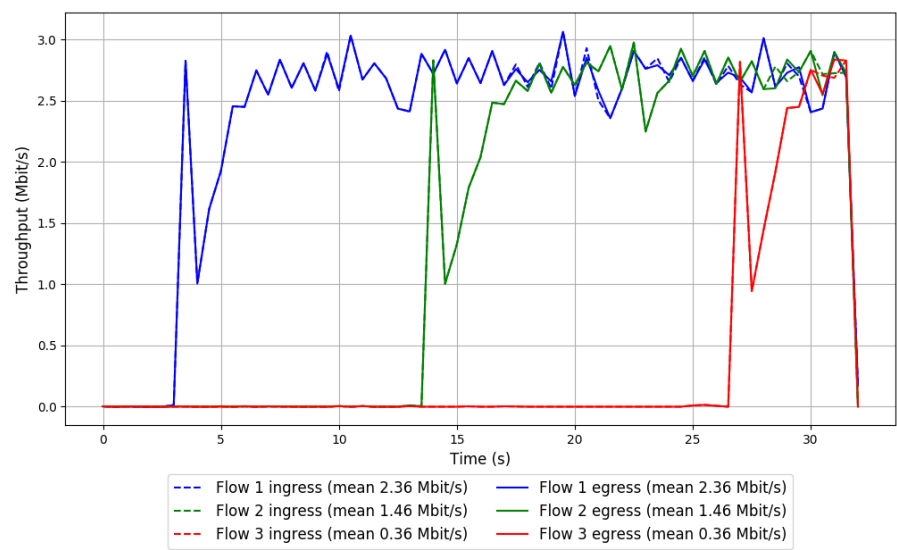
Run 10: Report of SCReAM — Data Link

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```
Run 1: Statistics of WebRTC media

Start at: 2017-09-21 22:38:33
End at: 2017-09-21 22:39:03
Local clock offset: 0.011 ms
Remote clock offset: 0.383 ms

# Below is generated by plot.py at 2017-09-22 04:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.15 Mbit/s
95th percentile per-packet one-way delay: 5.531 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 5.226 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 5.697 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 6.608 ms
Loss rate: 0.00%
```
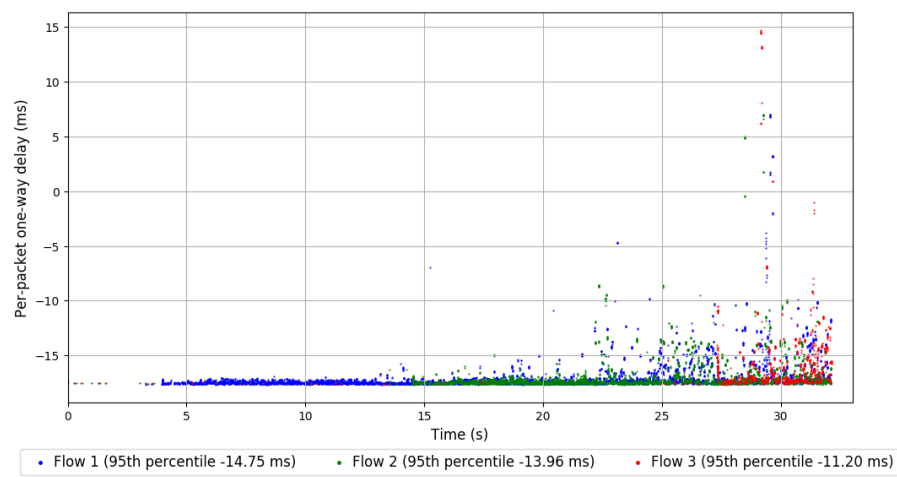
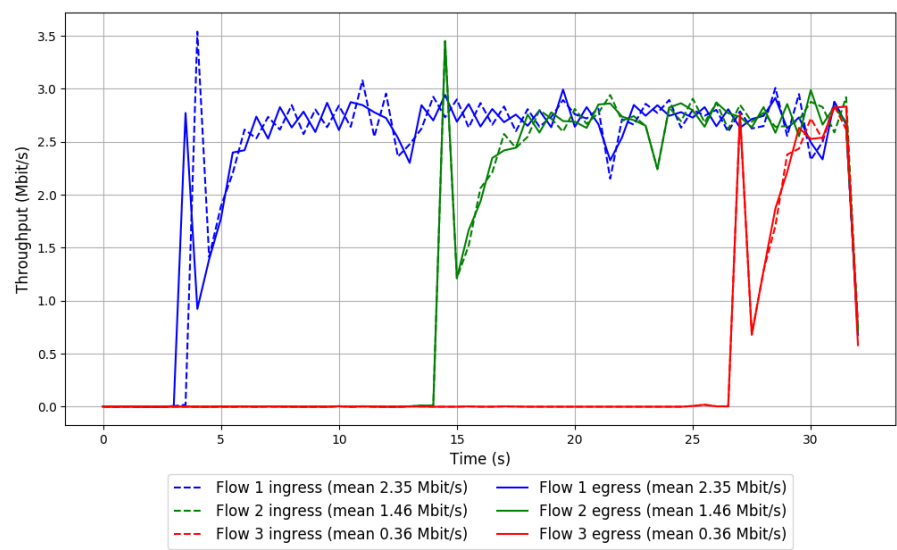Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2017-09-21 22:58:23
End at: 2017-09-21 22:58:53
Local clock offset: -0.165 ms
Remote clock offset: -0.04 ms


# Below is generated by plot.py at 2017-09-22 04:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.35 Mbit/s
95th percentile per-packet one-way delay: 5.863 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.46 Mbit/s
95th percentile per-packet one-way delay: 5.191 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.53 Mbit/s
95th percentile per-packet one-way delay: 6.205 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 8.135 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2017-09-21 23:18:14
End at: 2017-09-21 23:18:44
Local clock offset: -0.174 ms
Remote clock offset: -0.208 ms

# Below is generated by plot.py at 2017-09-22 04:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.06 Mbit/s
95th percentile per-packet one-way delay: 43.665 ms
Loss rate: 2.94%
-- Flow 1:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 5.095 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 45.740 ms
Loss rate: 6.59%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 6.867 ms
Loss rate: 0.00%
```
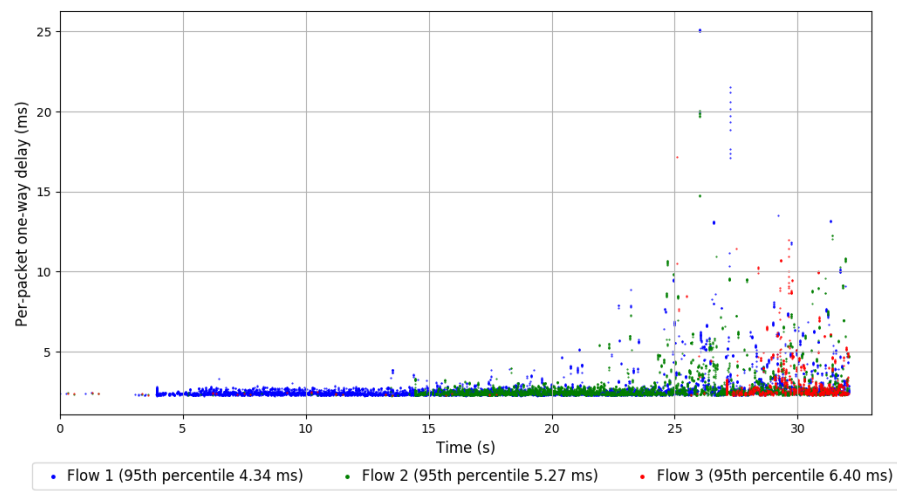
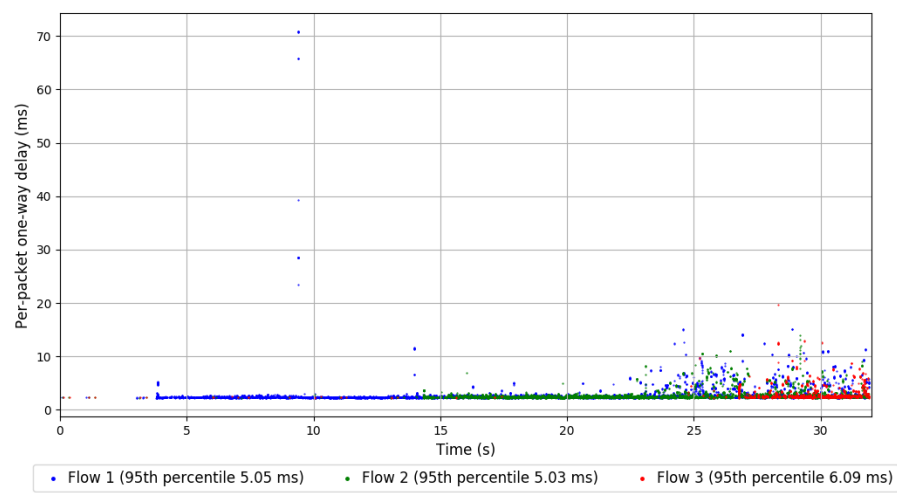Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2017-09-21 23:38:01
End at: 2017-09-21 23:38:31
Local clock offset: -0.161 ms
Remote clock offset: -0.323 ms

# Below is generated by plot.py at 2017-09-22 04:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.17 Mbit/s
95th percentile per-packet one-way delay: 5.168 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 4.839 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 5.370 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 9.115 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2017-09-21 23:57:58
End at: 2017-09-21 23:58:28
Local clock offset: -0.129 ms
Remote clock offset: -19.93 ms


# Below is generated by plot.py at 2017-09-22 04:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.14 Mbit/s
95th percentile per-packet one-way delay: -14.099 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: -14.746 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: -13.963 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: -11.195 ms
Loss rate: 0.00%
```
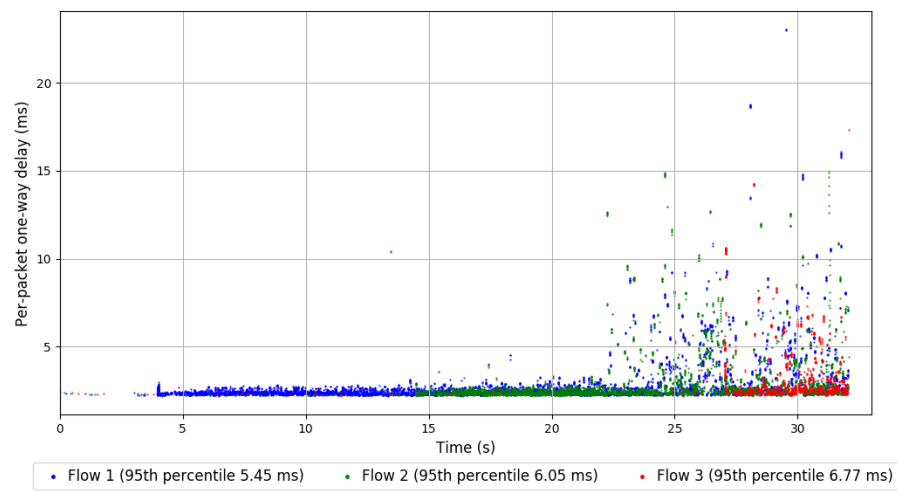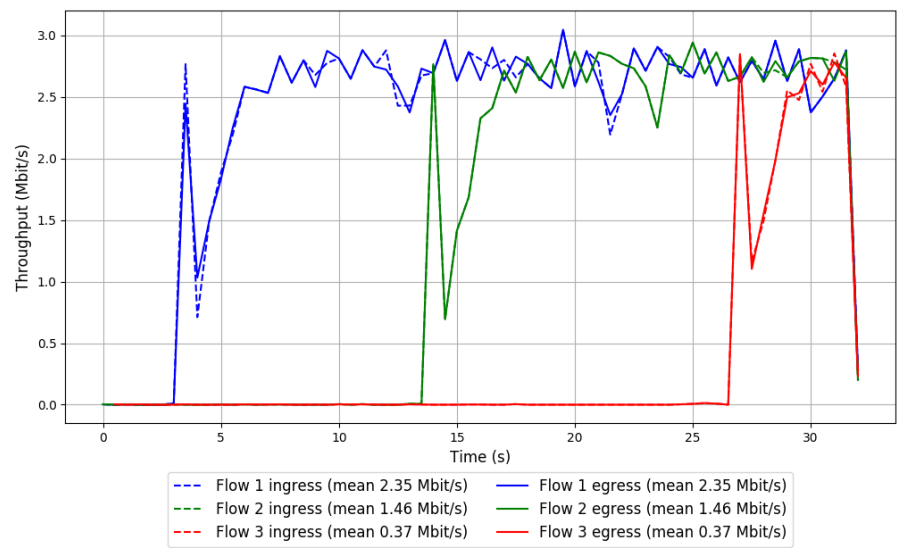
Run 5: Report of WebRTC media — Data Link

```
Run 6: Statistics of WebRTC media

Start at: 2017-09-22 00:17:38
End at: 2017-09-22 00:18:08
Local clock offset: -0.186 ms
Remote clock offset: 0.0 ms

# Below is generated by plot.py at 2017-09-22 04:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.18 Mbit/s
95th percentile per-packet one-way delay: 4.882 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 4.343 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 5.274 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 6.403 ms
Loss rate: 0.00%
```
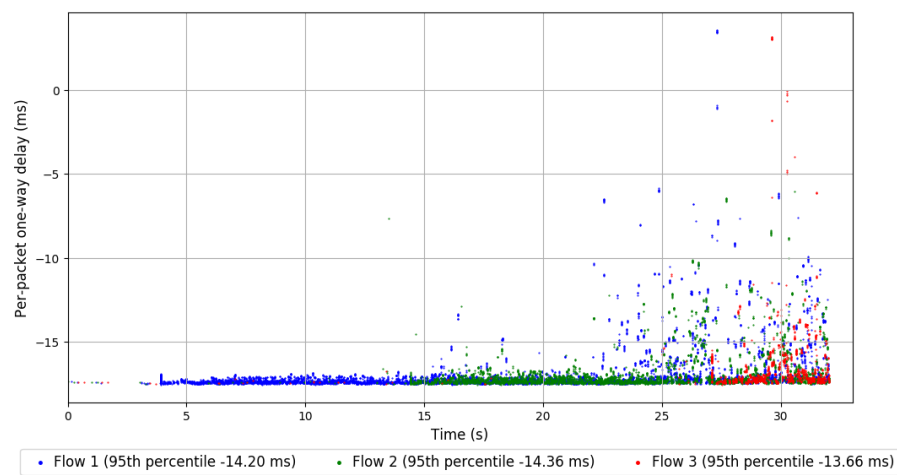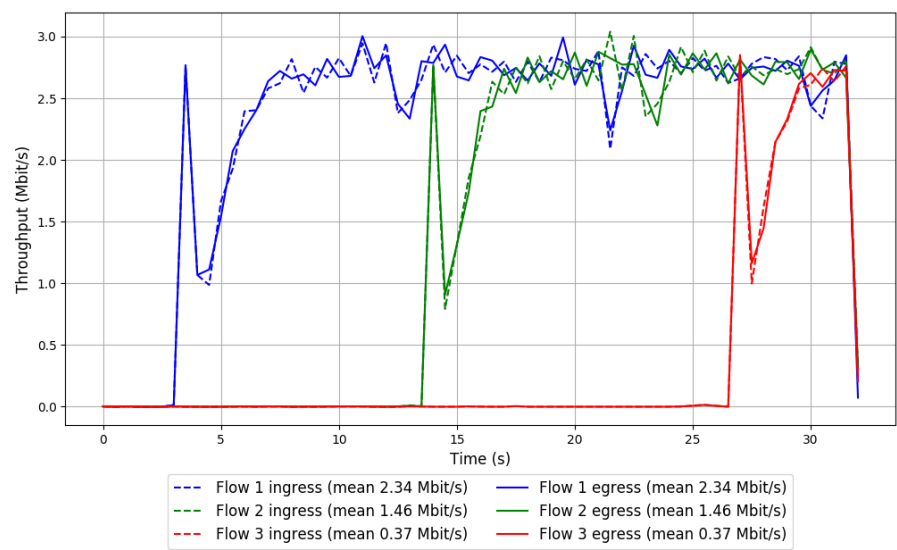
Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2017-09-22 00:37:26
End at: 2017-09-22 00:37:56
Local clock offset: -0.09 ms
Remote clock offset: -0.048 ms


# Below is generated by plot.py at 2017-09-22 04:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.18 Mbit/s
95th percentile per-packet one-way delay: 5.179 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 5.055 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 5.028 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 6.090 ms
Loss rate: 0.00%
```

Run 7: Report of WebRTC media — Data Link

```
Run 8: Statistics of WebRTC media

Start at: 2017-09-22 00:57:14
End at: 2017-09-22 00:57:44
Local clock offset: -0.188 ms
Remote clock offset: 0.08 ms


# Below is generated by plot.py at 2017-09-22 04:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.16 Mbit/s
95th percentile per-packet one-way delay: 5.934 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 5.449 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 6.050 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 6.769 ms
Loss rate: 0.00%
```
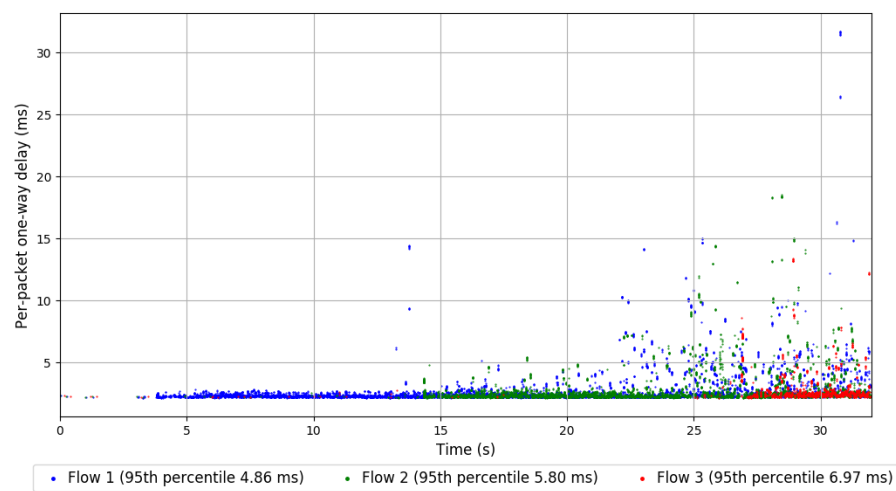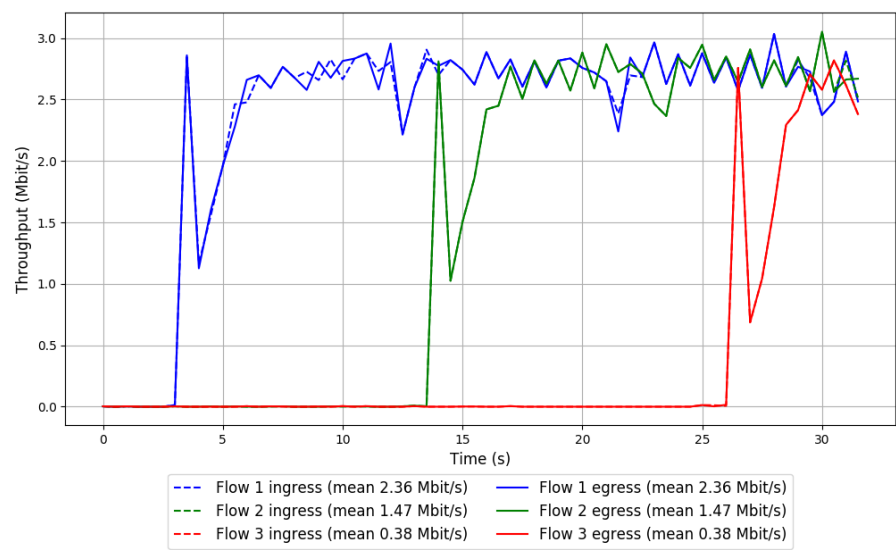
Run 8: Report of WebRTC media — Data Link

```
Run 9: Statistics of WebRTC media

Start at: 2017-09-22 01:16:57
End at: 2017-09-22 01:17:27
Local clock offset: -0.206 ms
Remote clock offset: -19.594 ms


# Below is generated by plot.py at 2017-09-22 04:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.16 Mbit/s
95th percentile per-packet one-way delay: -14.121 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.34 Mbit/s
95th percentile per-packet one-way delay: -14.204 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: -14.364 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: -13.660 ms
Loss rate: 0.00%
```
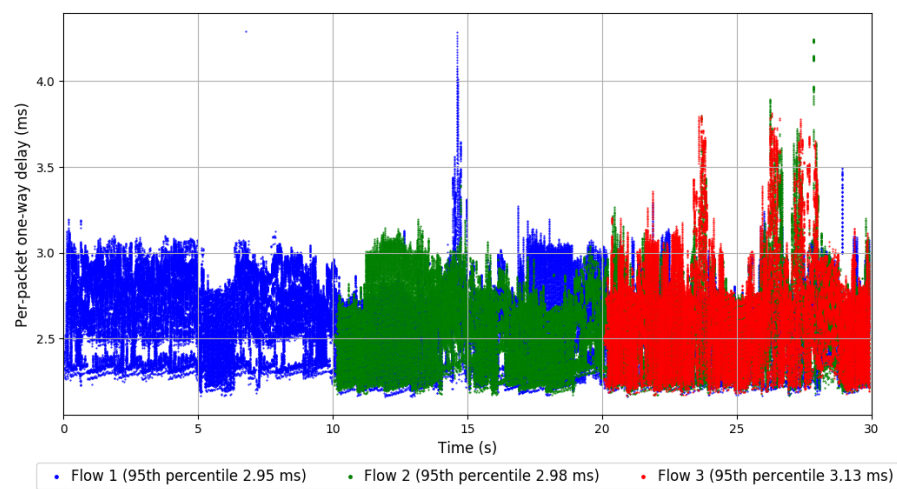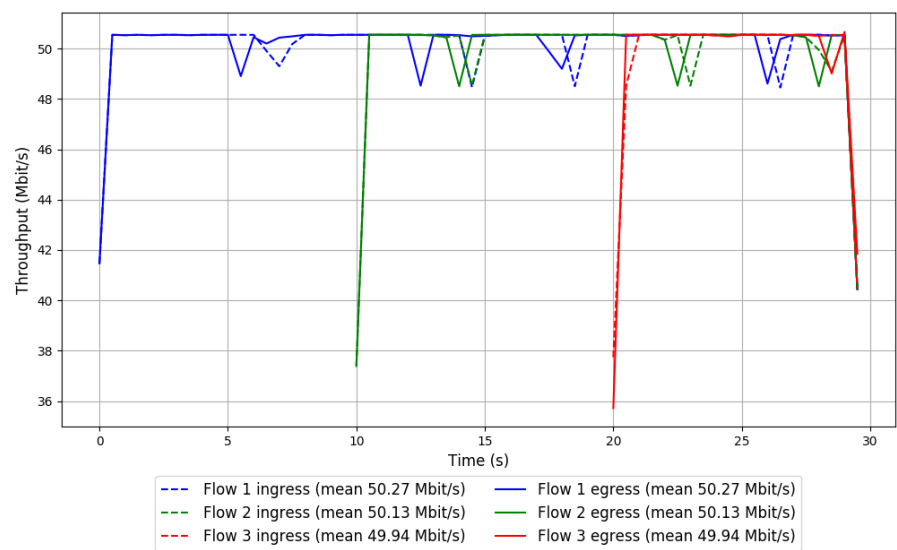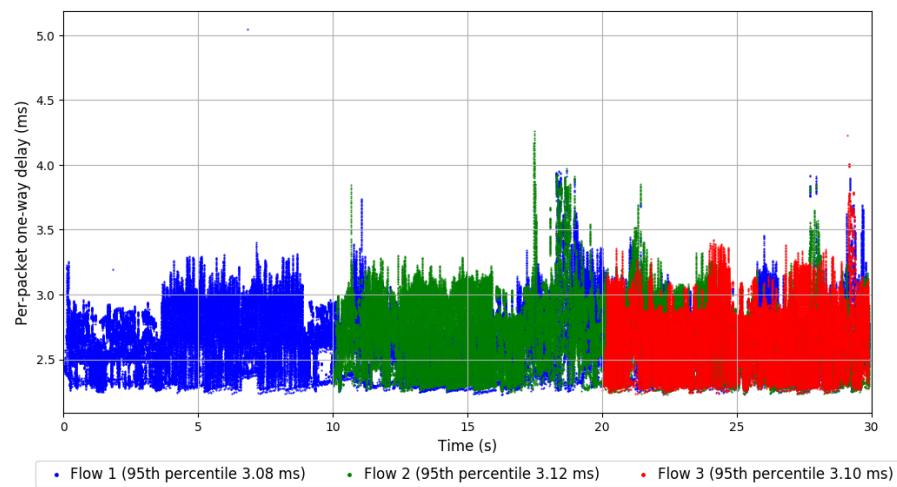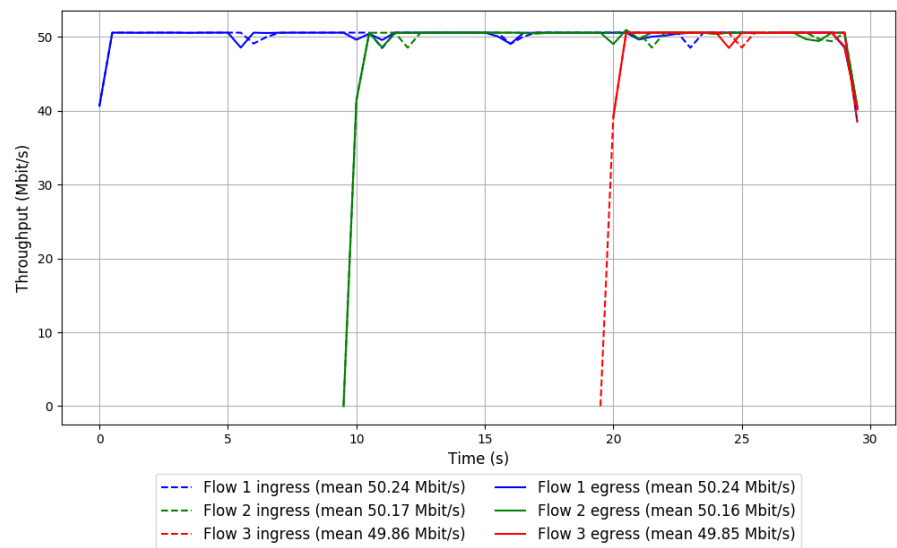
Run 9: Report of WebRTC media — Data Link

```
Run 10: Statistics of WebRTC media

Start at: 2017-09-22 01:36:43
End at: 2017-09-22 01:37:13
Local clock offset: -0.107 ms
Remote clock offset: 0.244 ms


# Below is generated by plot.py at 2017-09-22 04:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.20 Mbit/s
95th percentile per-packet one-way delay: 5.394 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 4.859 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 5.801 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 6.971 ms
Loss rate: 0.00%
```
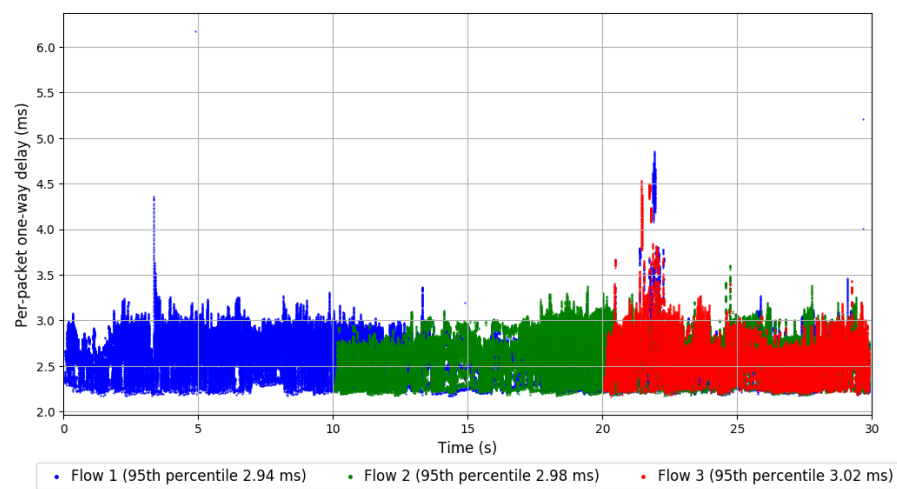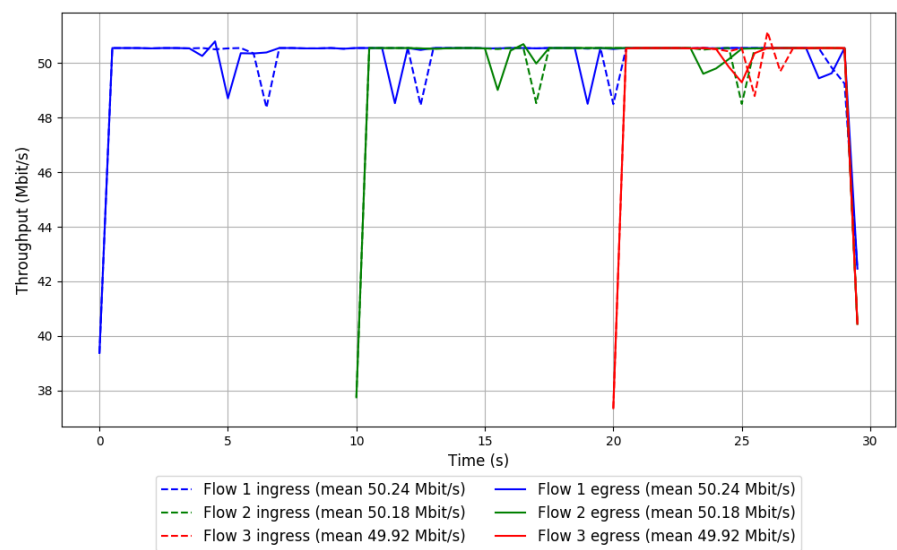
Run 10: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.36 Mbit/s) — — — Flow 1 egress (mean 2.36 Mbit/s)
Flow 2 ingress (mean 1.47 Mbit/s) — — — Flow 2 egress (mean 1.47 Mbit/s)
Flow 3 ingress (mean 0.38 Mbit/s) — — — Flow 3 egress (mean 0.38 Mbit/s)

Flow 1 (95th percentile 4.86 ms)   Flow 2 (95th percentile 5.80 ms)   Flow 3 (95th percentile 6.97 ms)

```
Run 1: Statistics of Sprout

Start at: 2017-09-21 22:49:02
End at: 2017-09-21 22:49:32
Local clock offset: -0.053 ms
Remote clock offset: 0.088 ms


# Below is generated by plot.py at 2017-09-22 04:40:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.05 Mbit/s
95th percentile per-packet one-way delay: 2.977 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.27 Mbit/s
95th percentile per-packet one-way delay: 2.949 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.13 Mbit/s
95th percentile per-packet one-way delay: 2.983 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.94 Mbit/s
95th percentile per-packet one-way delay: 3.128 ms
Loss rate: 0.00%
```
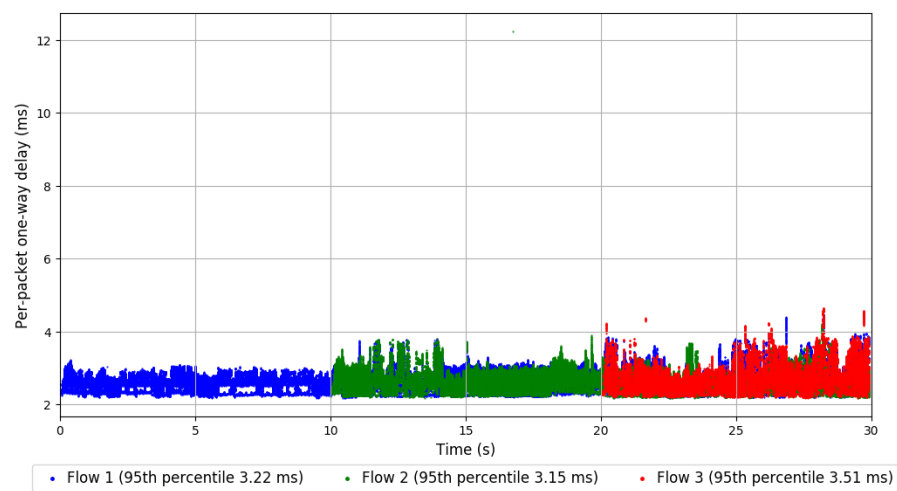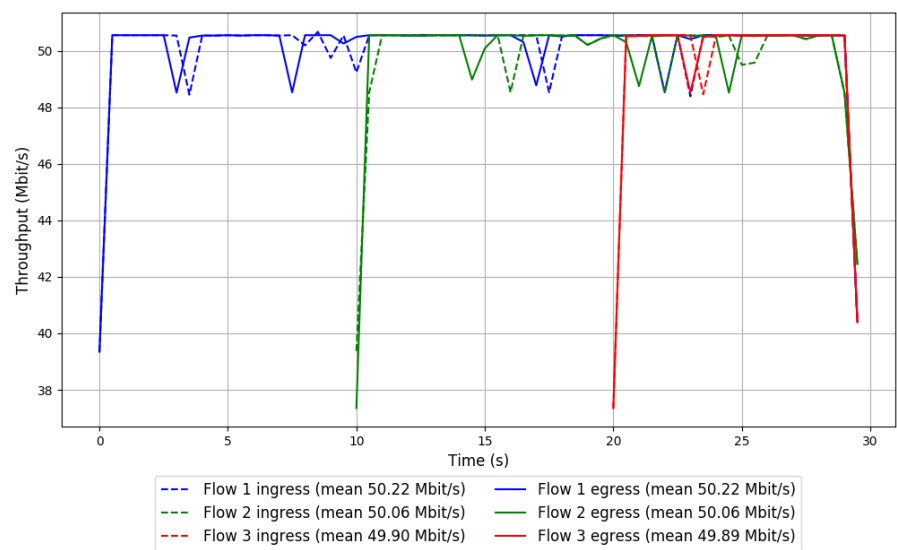
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2017-09-21 23:08:45
End at: 2017-09-21 23:09:15
Local clock offset: -0.131 ms
Remote clock offset: -0.061 ms


# Below is generated by plot.py at 2017-09-22 04:40:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.11 Mbit/s
95th percentile per-packet one-way delay: 3.095 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.24 Mbit/s
95th percentile per-packet one-way delay: 3.079 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.16 Mbit/s
95th percentile per-packet one-way delay: 3.115 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.85 Mbit/s
95th percentile per-packet one-way delay: 3.097 ms
Loss rate: 0.00%
```
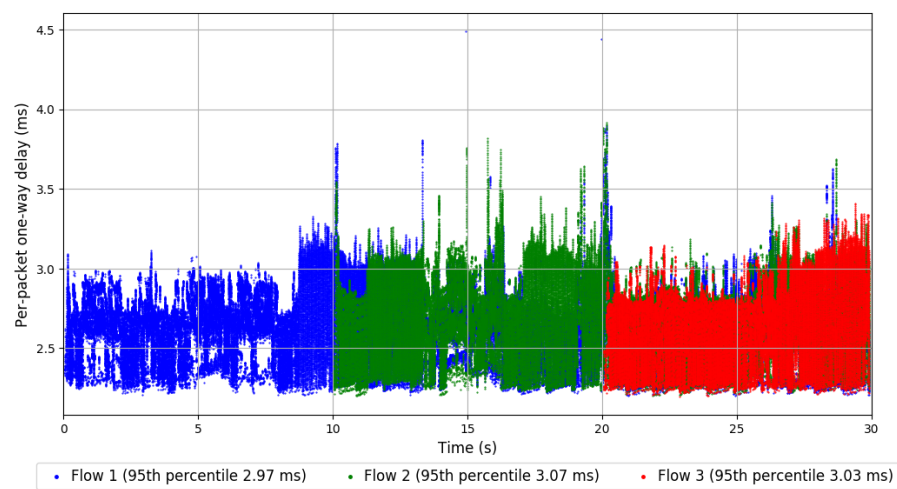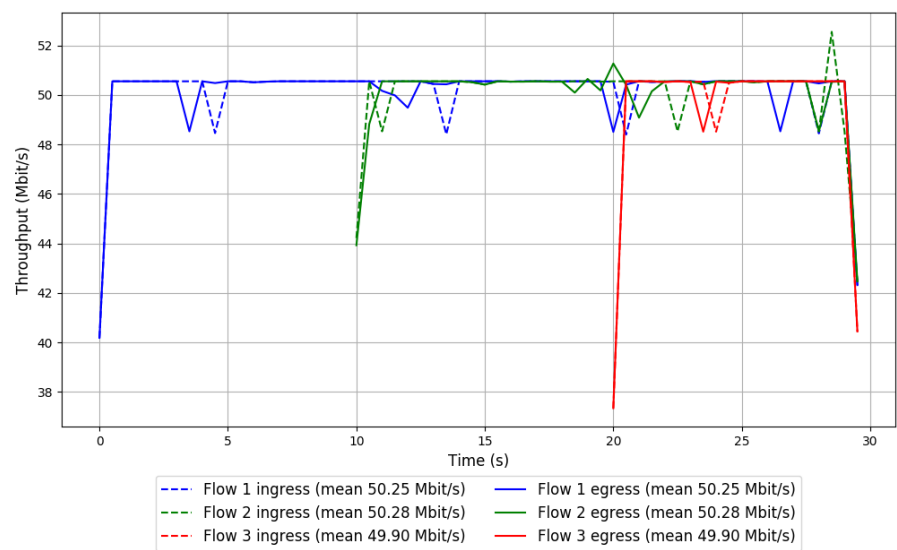
Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2017-09-21 23:28:41
End at: 2017-09-21 23:29:11
Local clock offset: -0.112 ms
Remote clock offset: -0.221 ms


# Below is generated by plot.py at 2017-09-22 04:40:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.07 Mbit/s
95th percentile per-packet one-way delay: 2.967 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.24 Mbit/s
95th percentile per-packet one-way delay: 2.941 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.18 Mbit/s
95th percentile per-packet one-way delay: 2.978 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.92 Mbit/s
95th percentile per-packet one-way delay: 3.024 ms
Loss rate: 0.00%
```
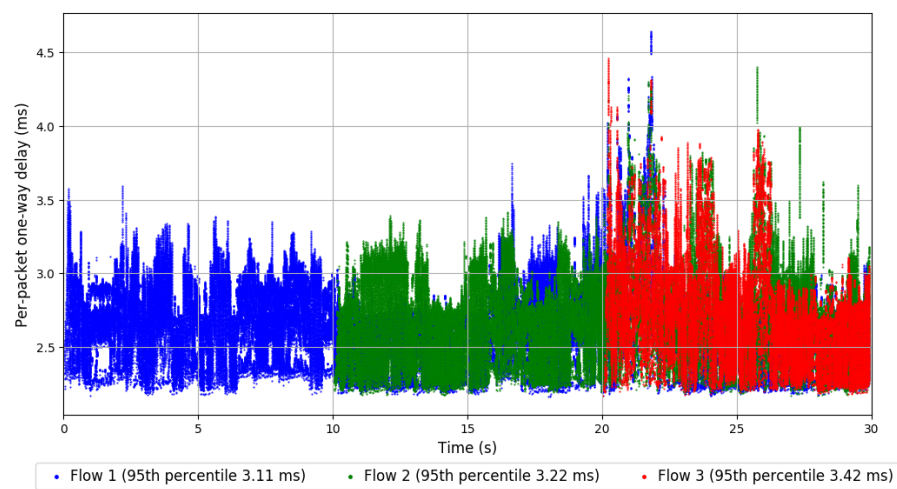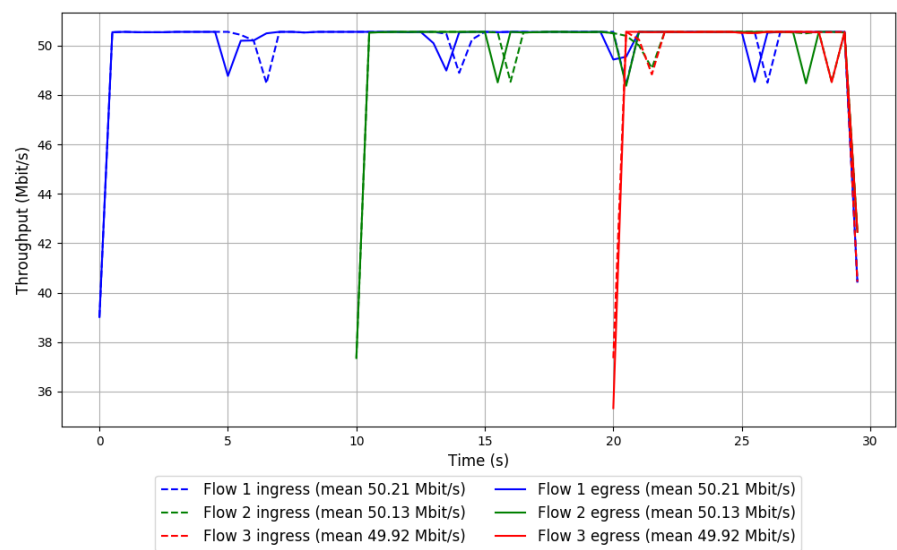
Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2017-09-21 23:48:32
End at: 2017-09-21 23:49:02
Local clock offset: -0.157 ms
Remote clock offset: -0.208 ms

# Below is generated by plot.py at 2017-09-22 04:40:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.99 Mbit/s
95th percentile per-packet one-way delay: 3.262 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.22 Mbit/s
95th percentile per-packet one-way delay: 3.220 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.06 Mbit/s
95th percentile per-packet one-way delay: 3.154 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.89 Mbit/s
95th percentile per-packet one-way delay: 3.510 ms
Loss rate: 0.00%
```
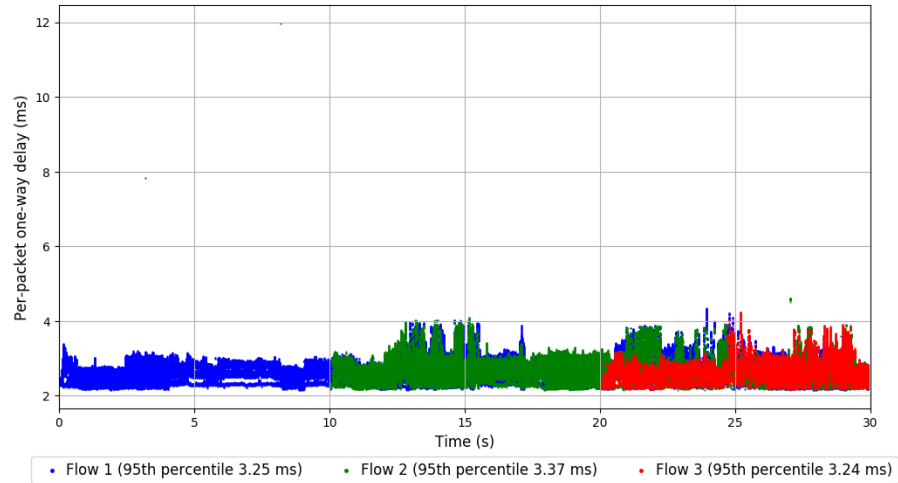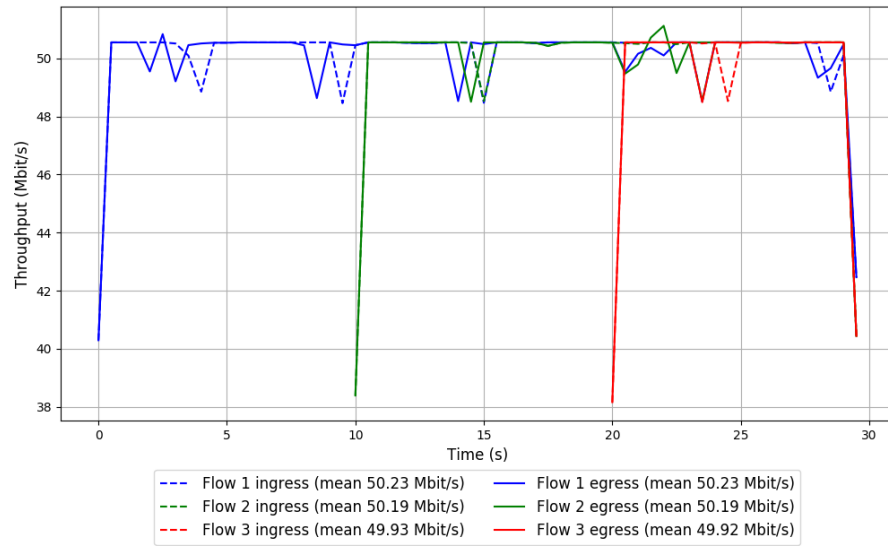
Run 4: Report of Sprout — Data Link

Flow 1 ingress (mean 50.22 Mbit/s) — Flow 1 egress (mean 50.22 Mbit/s)
Flow 2 ingress (mean 50.06 Mbit/s) — Flow 2 egress (mean 50.06 Mbit/s)
Flow 3 ingress (mean 49.90 Mbit/s) — Flow 3 egress (mean 49.89 Mbit/s)

Flow 1 (95th percentile 3.22 ms)   Flow 2 (95th percentile 3.15 ms)   Flow 3 (95th percentile 3.51 ms)

```
Run 5: Statistics of Sprout

Start at: 2017-09-22 00:08:26
End at: 2017-09-22 00:08:56
Local clock offset: -0.131 ms
Remote clock offset: -0.029 ms


# Below is generated by plot.py at 2017-09-22 04:40:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.19 Mbit/s
95th percentile per-packet one-way delay: 3.023 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.25 Mbit/s
95th percentile per-packet one-way delay: 2.972 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.28 Mbit/s
95th percentile per-packet one-way delay: 3.069 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.90 Mbit/s
95th percentile per-packet one-way delay: 3.030 ms
Loss rate: 0.00%
```
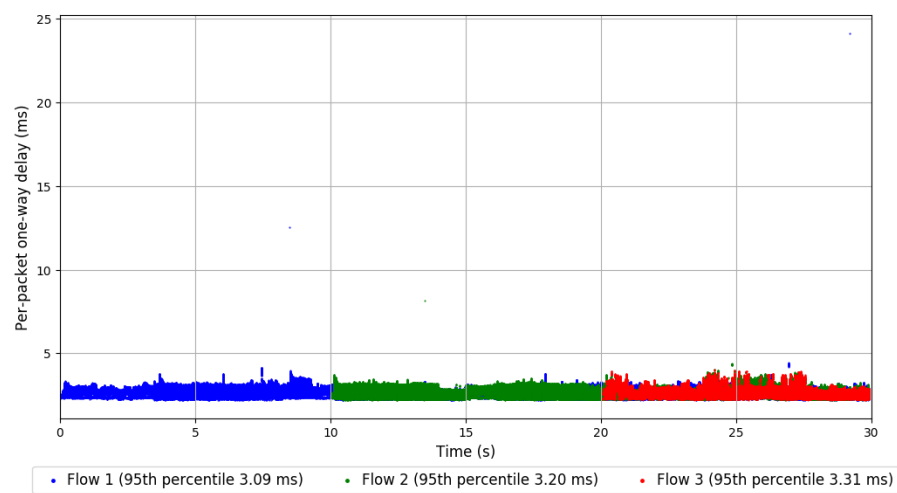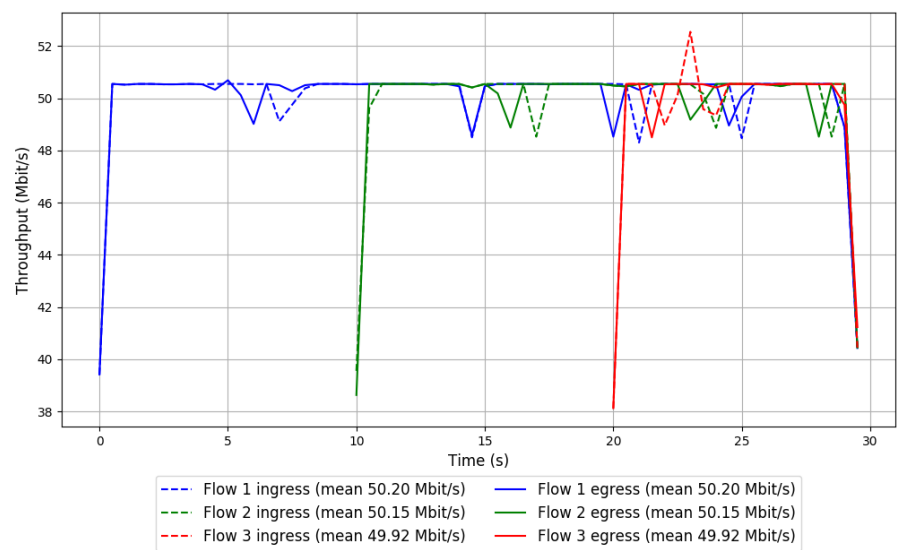
Run 5: Report of Sprout — Data Link

```
Run 6: Statistics of Sprout

Start at: 2017-09-22 00:28:02
End at: 2017-09-22 00:28:32
Local clock offset: -0.094 ms
Remote clock offset: -0.013 ms


# Below is generated by plot.py at 2017-09-22 04:40:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.01 Mbit/s
95th percentile per-packet one-way delay: 3.210 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.21 Mbit/s
95th percentile per-packet one-way delay: 3.106 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.13 Mbit/s
95th percentile per-packet one-way delay: 3.218 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.92 Mbit/s
95th percentile per-packet one-way delay: 3.424 ms
Loss rate: 0.00%
```
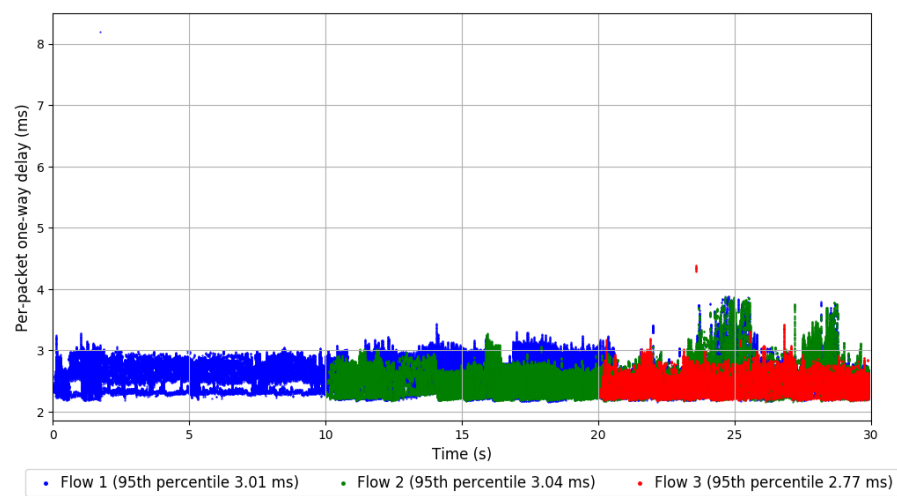
Run 6: Report of Sprout — Data Link

```
Run 7: Statistics of Sprout

Start at: 2017-09-22 00:47:55
End at: 2017-09-22 00:48:25
Local clock offset: -0.069 ms
Remote clock offset: 0.058 ms


# Below is generated by plot.py at 2017-09-22 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.08 Mbit/s
95th percentile per-packet one-way delay: 3.290 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.23 Mbit/s
95th percentile per-packet one-way delay: 3.254 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.19 Mbit/s
95th percentile per-packet one-way delay: 3.371 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.92 Mbit/s
95th percentile per-packet one-way delay: 3.241 ms
Loss rate: 0.00%
```
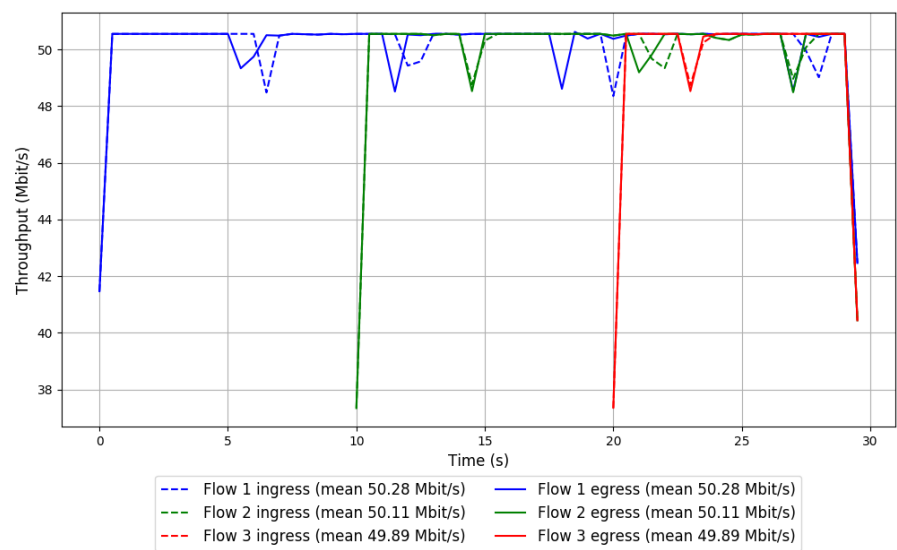
Run 7: Report of Sprout — Data Link

```
Run 8: Statistics of Sprout

Start at: 2017-09-22 01:07:31
End at: 2017-09-22 01:08:01
Local clock offset: -0.177 ms
Remote clock offset: 0.122 ms


# Below is generated by plot.py at 2017-09-22 04:41:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.01 Mbit/s
95th percentile per-packet one-way delay: 3.161 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.20 Mbit/s
95th percentile per-packet one-way delay: 3.091 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.15 Mbit/s
95th percentile per-packet one-way delay: 3.204 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.92 Mbit/s
95th percentile per-packet one-way delay: 3.315 ms
Loss rate: 0.00%
```
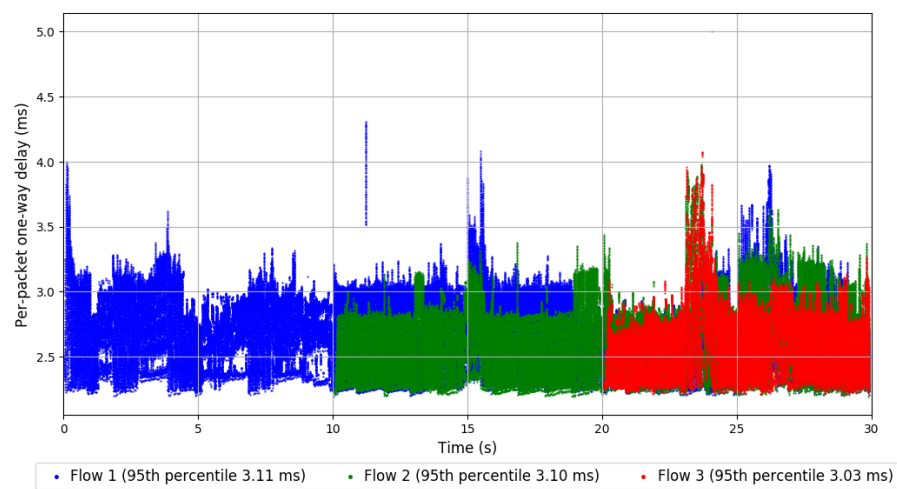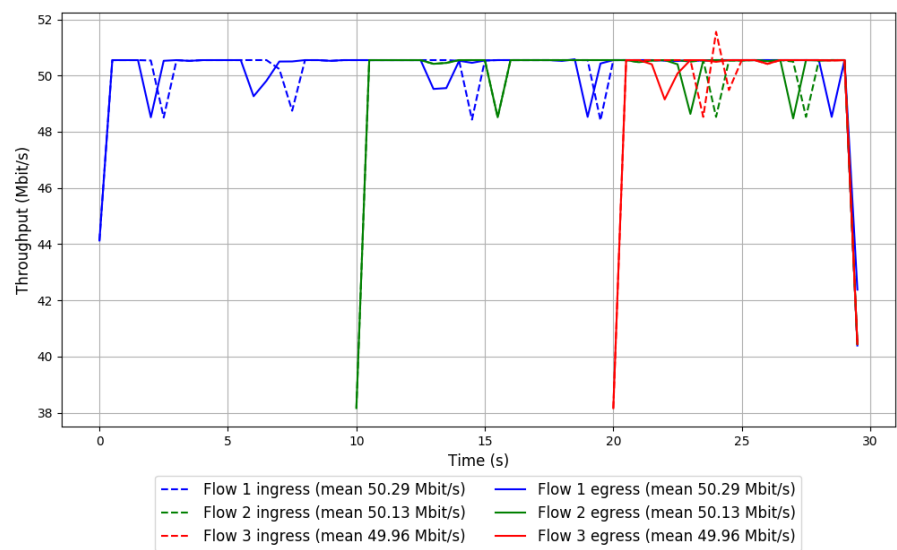
Run 8: Report of Sprout — Data Link

```
Run 9: Statistics of Sprout

Start at: 2017-09-22 01:27:24
End at: 2017-09-22 01:27:54
Local clock offset: -0.151 ms
Remote clock offset: 0.177 ms

# Below is generated by plot.py at 2017-09-22 04:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.06 Mbit/s
95th percentile per-packet one-way delay: 2.989 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.28 Mbit/s
95th percentile per-packet one-way delay: 3.007 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.11 Mbit/s
95th percentile per-packet one-way delay: 3.036 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.89 Mbit/s
95th percentile per-packet one-way delay: 2.774 ms
Loss rate: 0.00%
```

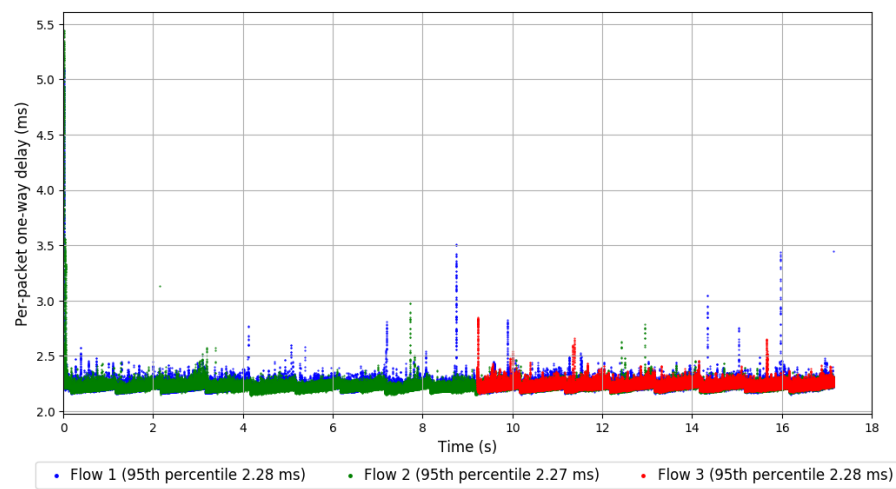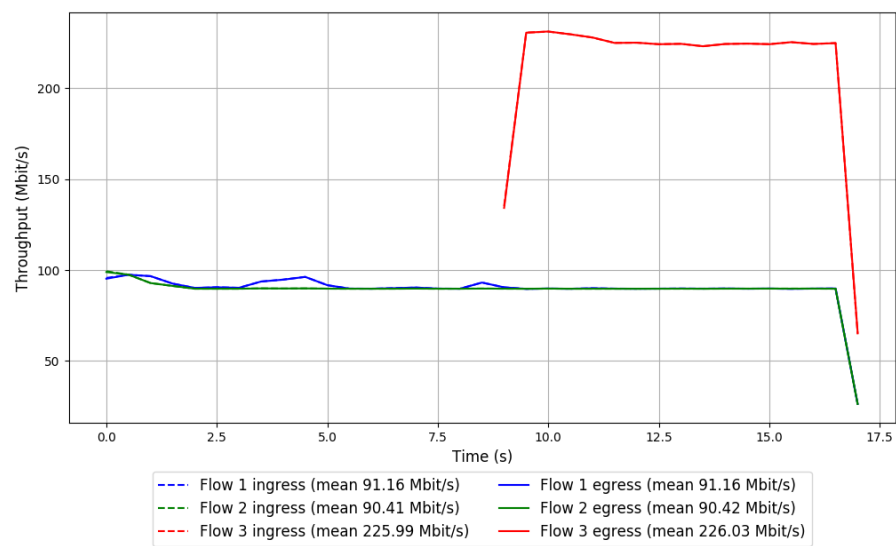Run 9: Report of Sprout — Data Link

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```
Run 10: Statistics of Sprout

Start at: 2017-09-22 01:47:05
End at: 2017-09-22 01:47:35
Local clock offset: -0.225 ms
Remote clock offset: 0.201 ms


# Below is generated by plot.py at 2017-09-22 04:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.11 Mbit/s
95th percentile per-packet one-way delay: 3.100 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.29 Mbit/s
95th percentile per-packet one-way delay: 3.109 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.13 Mbit/s
95th percentile per-packet one-way delay: 3.104 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.96 Mbit/s
95th percentile per-packet one-way delay: 3.033 ms
Loss rate: 0.00%
```

Run 10: Report of Sprout — Data Link

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

Start at: 2017-09-21 22:31:33
End at: 2017-09-21 22:32:03
Local clock offset: 0.005 ms
Remote clock offset: 0.438 ms
```
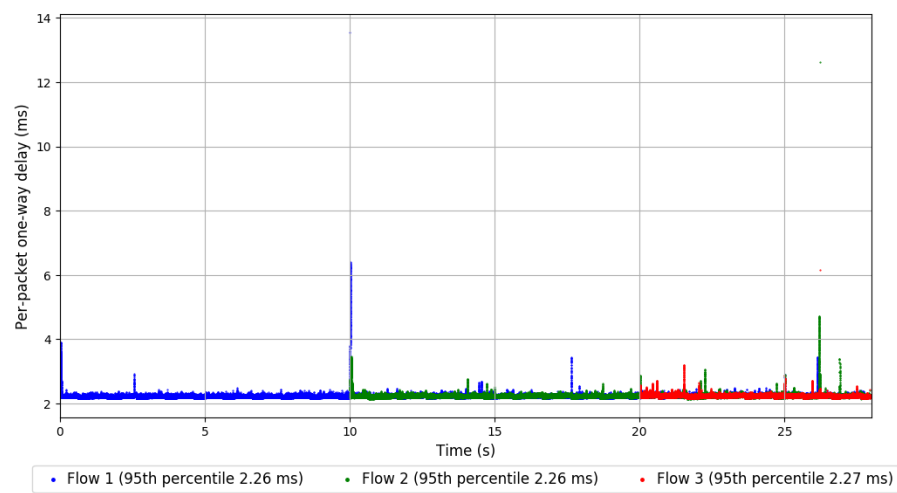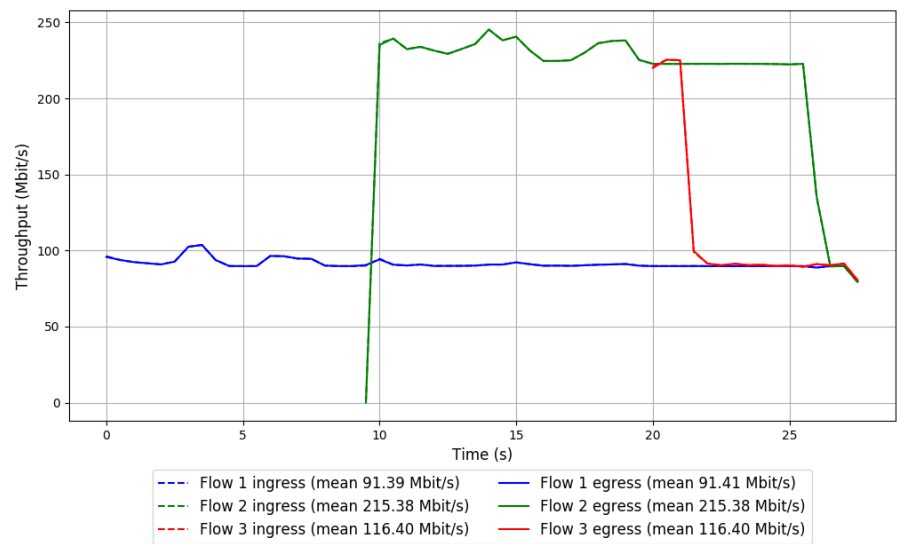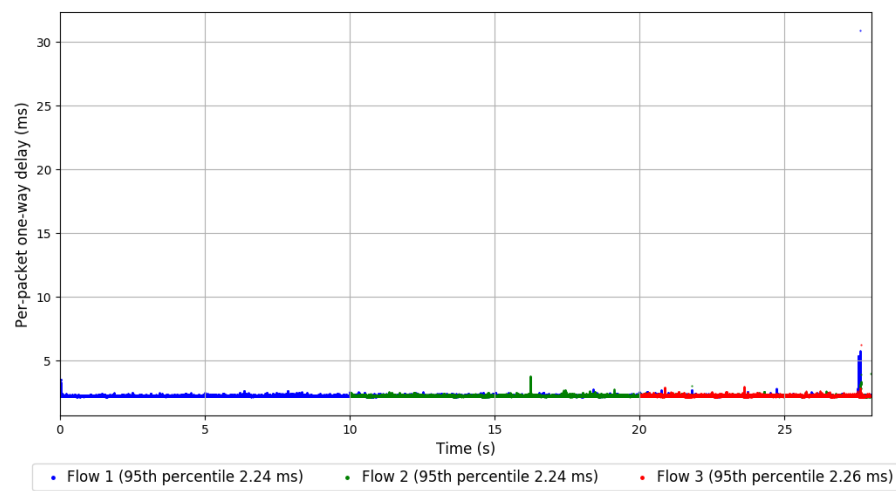
Run 1: Report of TaoVA-100x — Data Link

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

Start at: 2017-09-21 22:51:16
End at: 2017-09-21 22:51:47
Local clock offset: -0.148 ms
Remote clock offset: -0.034 ms


# Below is generated by plot.py at 2017-09-22 04:46:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 262.89 Mbit/s
95th percentile per-packet one-way delay: 2.266 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 91.41 Mbit/s
95th percentile per-packet one-way delay: 2.263 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 215.38 Mbit/s
95th percentile per-packet one-way delay: 2.264 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 116.40 Mbit/s
95th percentile per-packet one-way delay: 2.275 ms
Loss rate: 0.00%
```

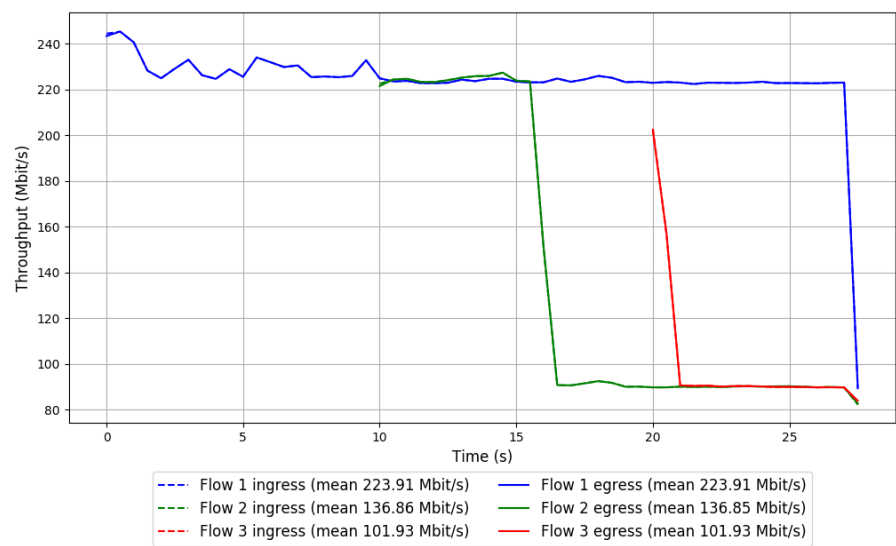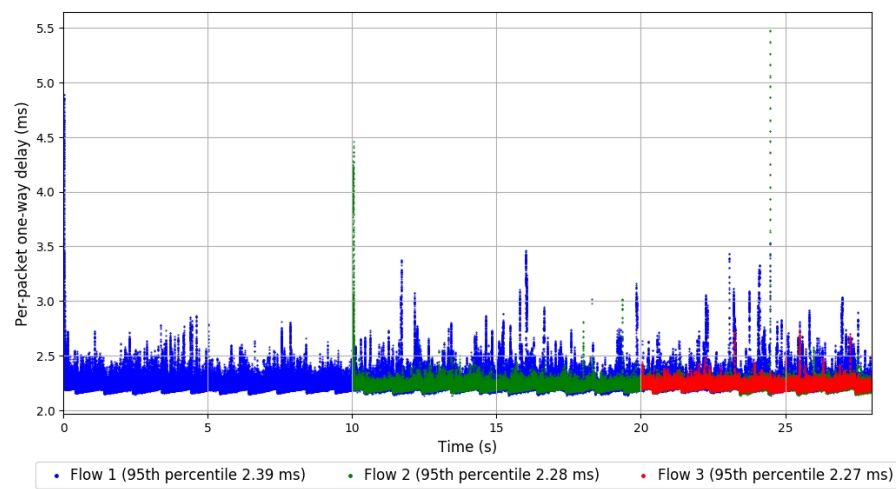Run 2: Report of TaoVA-100x — Data Link

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

Start at: 2017-09-21 23:11:02
End at: 2017-09-21 23:11:32
Local clock offset: -0.135 ms
Remote clock offset: -0.169 ms


# Below is generated by plot.py at 2017-09-22 04:48:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 340.62 Mbit/s
95th percentile per-packet one-way delay: 2.245 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 223.91 Mbit/s
95th percentile per-packet one-way delay: 2.244 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 136.85 Mbit/s
95th percentile per-packet one-way delay: 2.243 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 101.93 Mbit/s
95th percentile per-packet one-way delay: 2.256 ms
Loss rate: 0.00%
```
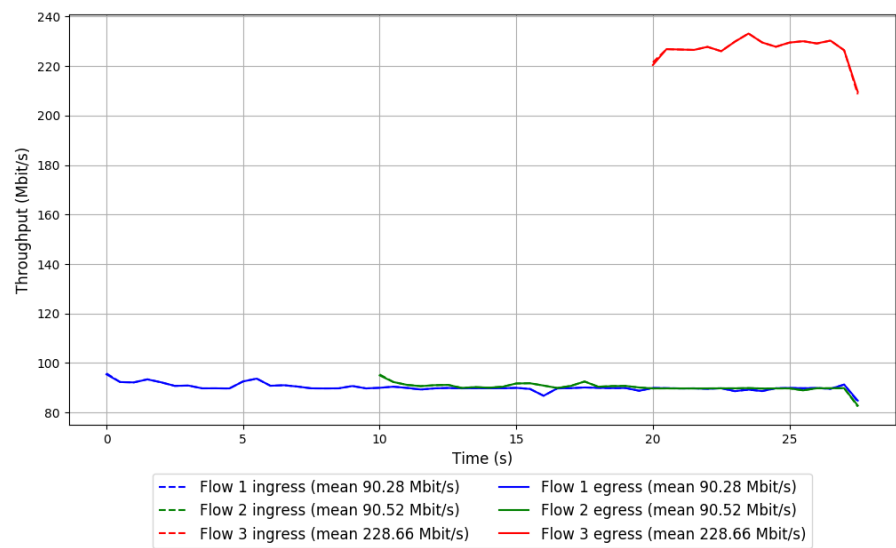
Run 3: Report of TaoVA-100x — Data Link

- - - - Flow 1 ingress (mean 223.91 Mbit/s) ——— Flow 1 egress (mean 223.91 Mbit/s)
- - - - Flow 2 ingress (mean 136.86 Mbit/s) ——— Flow 2 egress (mean 136.85 Mbit/s)
- - - - Flow 3 ingress (mean 101.93 Mbit/s) ——— Flow 3 egress (mean 101.93 Mbit/s)

- Flow 1 (95th percentile 2.24 ms)   • Flow 2 (95th percentile 2.24 ms)   • Flow 3 (95th percentile 2.26 ms)
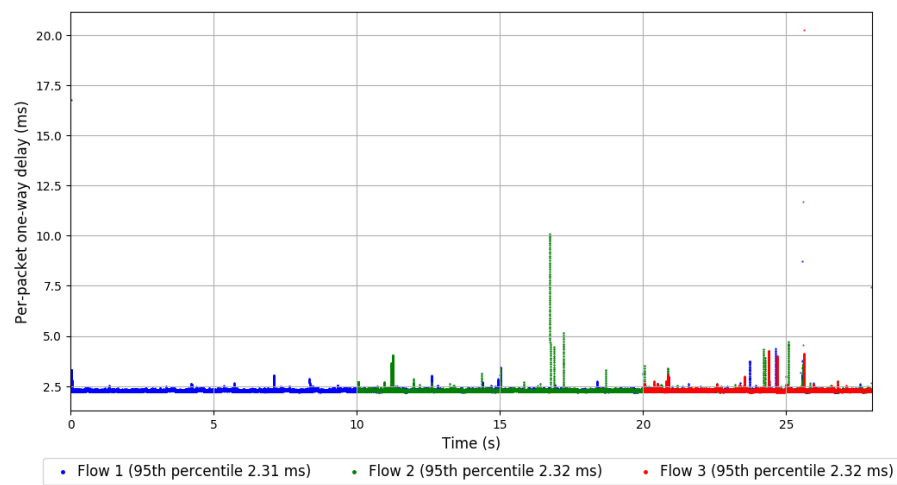
```
Run 4: Statistics of TaoVA-100x

Start at: 2017-09-21 23:30:58
End at: 2017-09-21 23:31:28
Local clock offset: -0.143 ms
Remote clock offset: -0.263 ms


# Below is generated by plot.py at 2017-09-22 04:48:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 213.31 Mbit/s
95th percentile per-packet one-way delay: 2.315 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 90.28 Mbit/s
95th percentile per-packet one-way delay: 2.387 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 90.52 Mbit/s
95th percentile per-packet one-way delay: 2.277 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 228.66 Mbit/s
95th percentile per-packet one-way delay: 2.270 ms
Loss rate: 0.00%
```

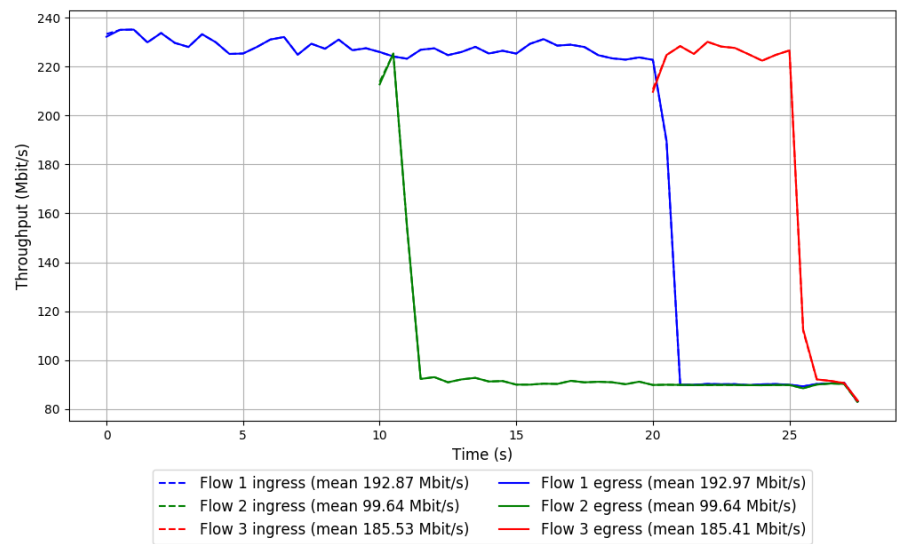# Run 4: Report of TaoVA-100x — Data Link

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

Start at: 2017-09-21 23:50:49
End at: 2017-09-21 23:51:19
Local clock offset: -0.186 ms
Remote clock offset: -0.179 ms


# Below is generated by plot.py at 2017-09-22 04:48:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 309.50 Mbit/s
95th percentile per-packet one-way delay: 2.317 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 192.97 Mbit/s
95th percentile per-packet one-way delay: 2.314 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 99.64 Mbit/s
95th percentile per-packet one-way delay: 2.321 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 185.41 Mbit/s
95th percentile per-packet one-way delay: 2.321 ms
Loss rate: 0.00%
```
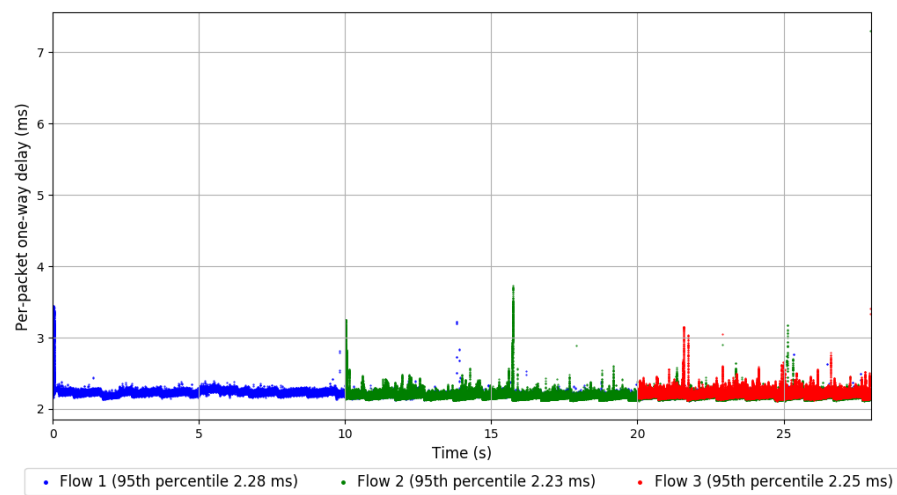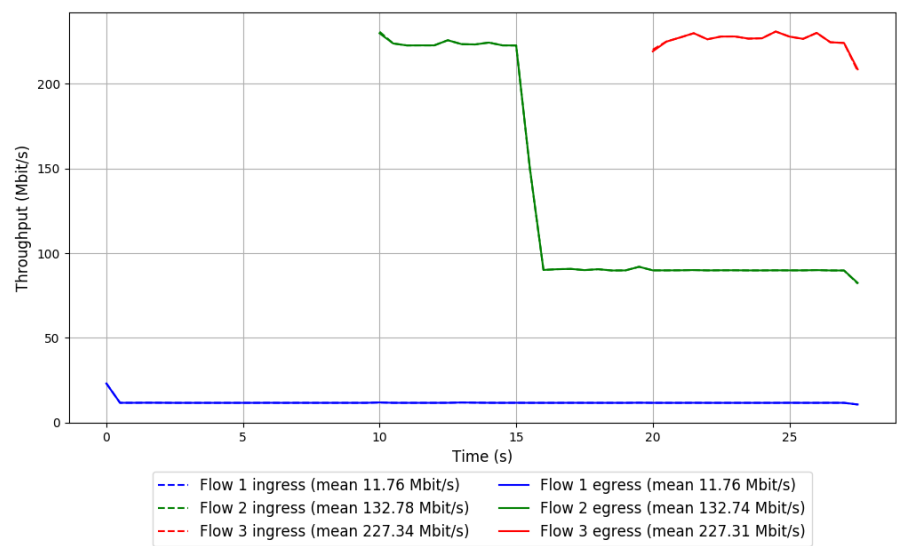
Run 5: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 192.87 Mbit/s) --- Flow 1 egress (mean 192.97 Mbit/s)
Flow 2 ingress (mean 99.64 Mbit/s) --- Flow 2 egress (mean 99.64 Mbit/s)
Flow 3 ingress (mean 185.53 Mbit/s) --- Flow 3 egress (mean 185.41 Mbit/s)

Flow 1 (95th percentile 2.31 ms) • Flow 2 (95th percentile 2.32 ms) • Flow 3 (95th percentile 2.32 ms)

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

Start at: 2017-09-22 00:10:39
End at: 2017-09-22 00:11:09
Local clock offset: -0.006 ms
Remote clock offset: 0.03 ms


# Below is generated by plot.py at 2017-09-22 04:48:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 161.58 Mbit/s
95th percentile per-packet one-way delay: 2.242 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.76 Mbit/s
95th percentile per-packet one-way delay: 2.280 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 132.74 Mbit/s
95th percentile per-packet one-way delay: 2.227 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 227.31 Mbit/s
95th percentile per-packet one-way delay: 2.246 ms
Loss rate: 0.00%
```
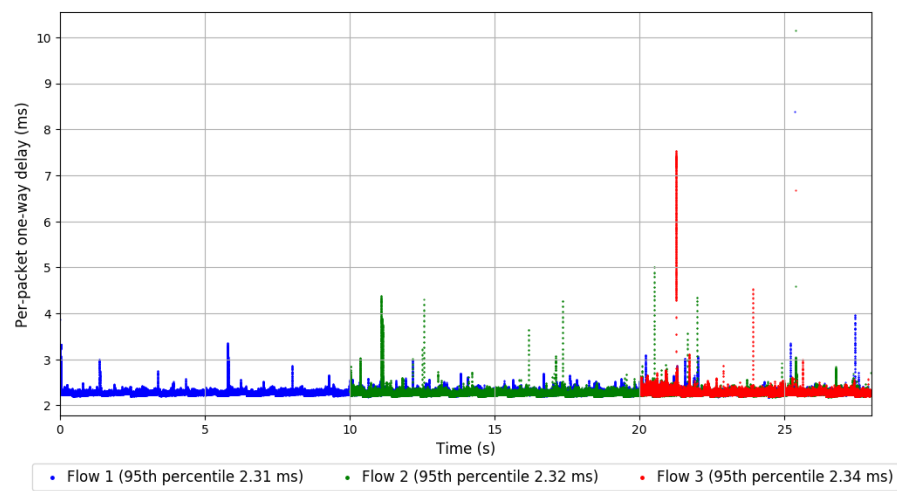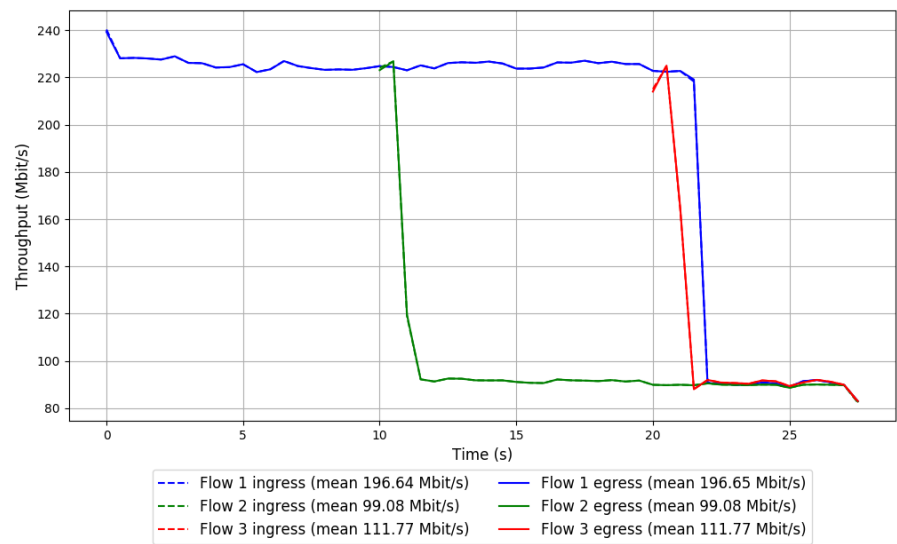
Run 6: Report of TaoVA-100x — Data Link

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

Start at: 2017-09-22 00:30:18
End at: 2017-09-22 00:30:48
Local clock offset: -0.117 ms
Remote clock offset: 0.001 ms


# Below is generated by plot.py at 2017-09-22 04:48:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 292.01 Mbit/s
95th percentile per-packet one-way delay: 2.317 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 196.65 Mbit/s
95th percentile per-packet one-way delay: 2.313 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 99.08 Mbit/s
95th percentile per-packet one-way delay: 2.319 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 111.77 Mbit/s
95th percentile per-packet one-way delay: 2.342 ms
Loss rate: 0.00%
```
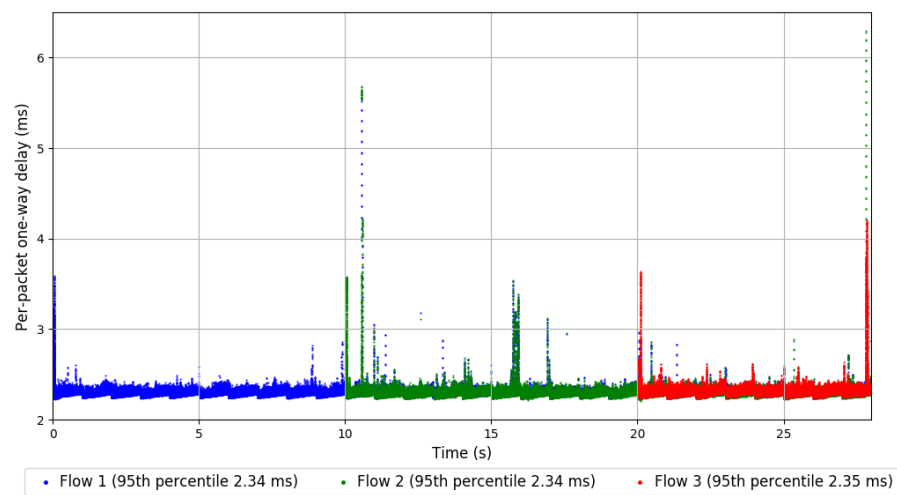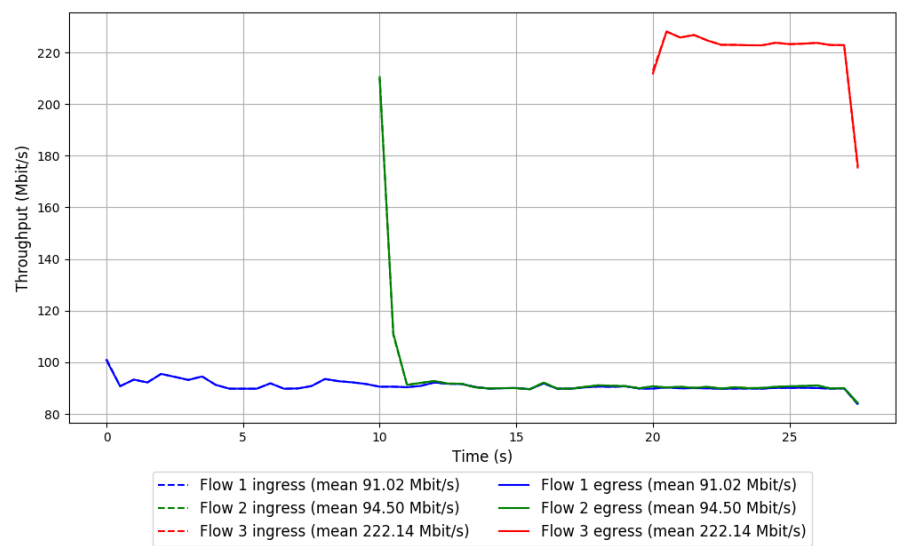
Run 7: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 196.64 Mbit/s) --- Flow 1 egress (mean 196.65 Mbit/s)
Flow 2 ingress (mean 99.08 Mbit/s) --- Flow 2 egress (mean 99.08 Mbit/s)
Flow 3 ingress (mean 111.77 Mbit/s) --- Flow 3 egress (mean 111.77 Mbit/s)

• Flow 1 (95th percentile 2.31 ms)   • Flow 2 (95th percentile 2.32 ms)   • Flow 3 (95th percentile 2.34 ms)

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

Start at: 2017-09-22 00:50:12
End at: 2017-09-22 00:50:42
Local clock offset: -0.162 ms
Remote clock offset: 0.069 ms


# Below is generated by plot.py at 2017-09-22 04:48:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 214.70 Mbit/s
95th percentile per-packet one-way delay: 2.344 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 91.02 Mbit/s
95th percentile per-packet one-way delay: 2.342 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 94.50 Mbit/s
95th percentile per-packet one-way delay: 2.340 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 222.14 Mbit/s
95th percentile per-packet one-way delay: 2.350 ms
Loss rate: 0.00%
```
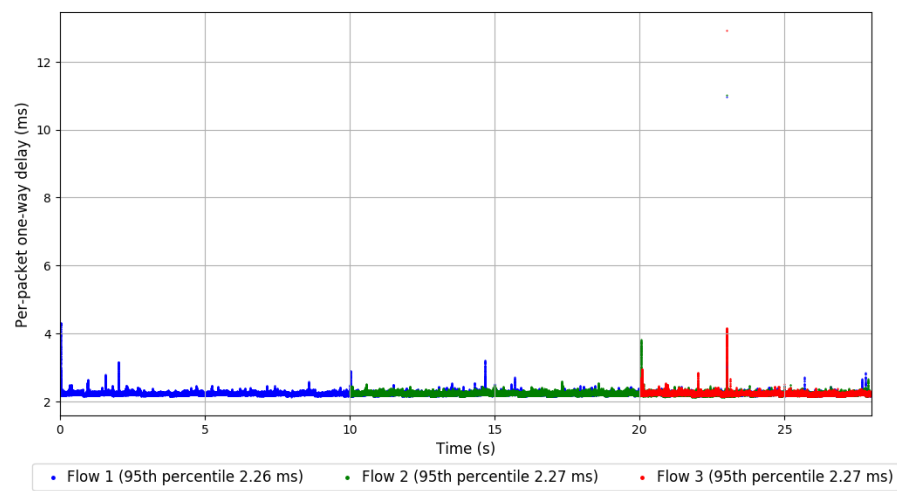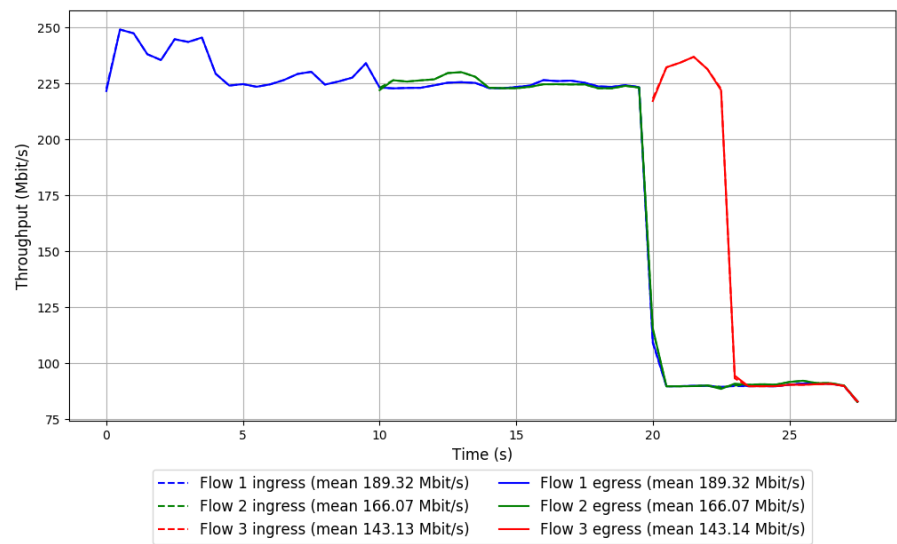
Run 8: Report of TaoVA-100x — Data Link

Legend:
- Flow 1 ingress (mean 91.02 Mbit/s)
- Flow 1 egress (mean 91.02 Mbit/s)
- Flow 2 ingress (mean 94.50 Mbit/s)
- Flow 2 egress (mean 94.50 Mbit/s)
- Flow 3 ingress (mean 222.14 Mbit/s)
- Flow 3 egress (mean 222.14 Mbit/s)

Legend:
- Flow 1 (95th percentile 2.34 ms)
- Flow 2 (95th percentile 2.34 ms)
- Flow 3 (95th percentile 2.35 ms)

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

Start at: 2017-09-22 01:09:47
End at: 2017-09-22 01:10:17
Local clock offset: -0.123 ms
Remote clock offset: 0.142 ms

# Below is generated by plot.py at 2017-09-22 04:51:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 336.61 Mbit/s
95th percentile per-packet one-way delay: 2.262 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 189.32 Mbit/s
95th percentile per-packet one-way delay: 2.258 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 166.07 Mbit/s
95th percentile per-packet one-way delay: 2.266 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 143.14 Mbit/s
95th percentile per-packet one-way delay: 2.268 ms
Loss rate: 0.00%
```
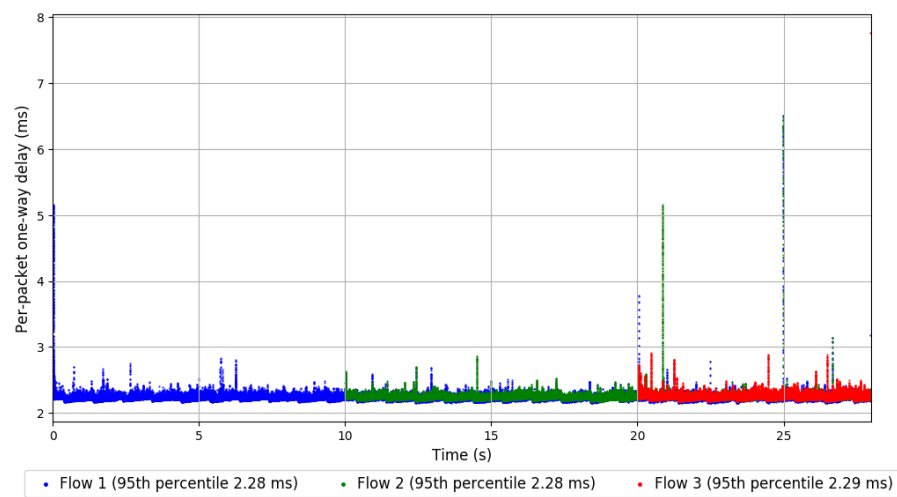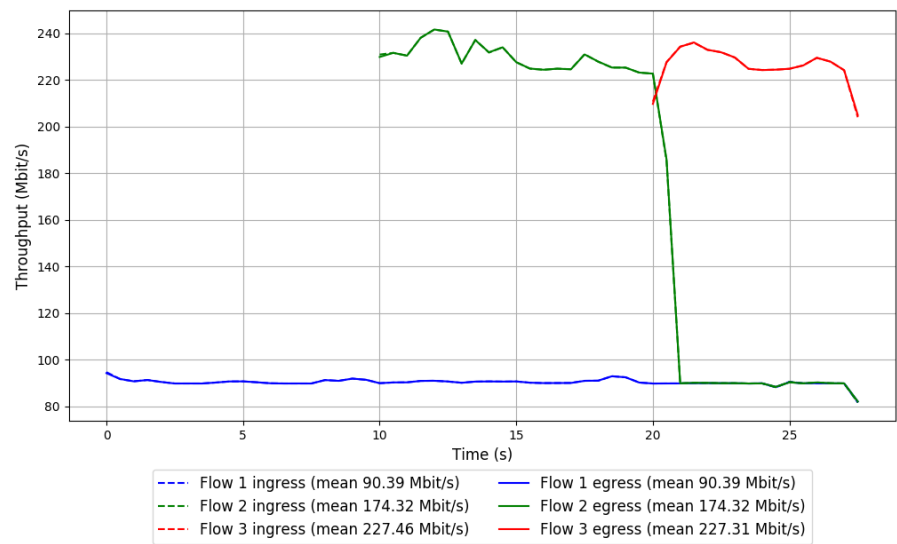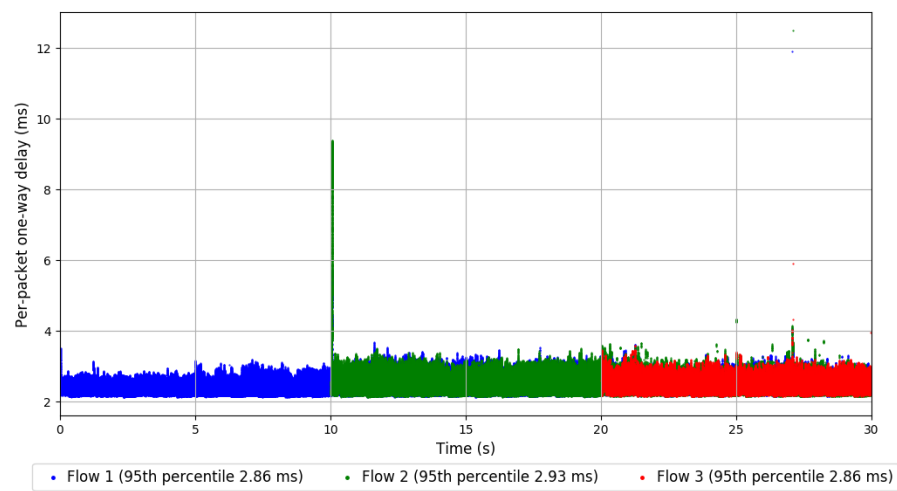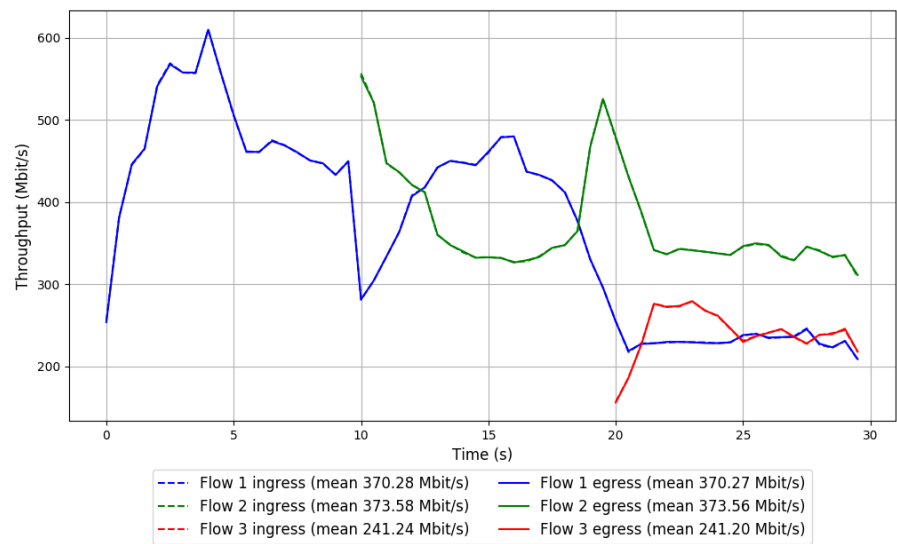
Run 9: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 189.32 Mbit/s)   Flow 1 egress (mean 189.32 Mbit/s)
Flow 2 ingress (mean 166.07 Mbit/s)   Flow 2 egress (mean 166.07 Mbit/s)
Flow 3 ingress (mean 143.13 Mbit/s)   Flow 3 egress (mean 143.14 Mbit/s)

Flow 1 (95th percentile 2.26 ms)   Flow 2 (95th percentile 2.27 ms)   Flow 3 (95th percentile 2.27 ms)

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```
Run 10: Statistics of TaoVA-100x

Start at: 2017-09-22 01:29:41
End at: 2017-09-22 01:30:11
Local clock offset: -0.172 ms
Remote clock offset: 0.183 ms

# Below is generated by plot.py at 2017-09-22 04:51:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 266.92 Mbit/s
95th percentile per-packet one-way delay: 2.286 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 90.39 Mbit/s
95th percentile per-packet one-way delay: 2.283 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 174.32 Mbit/s
95th percentile per-packet one-way delay: 2.284 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 227.31 Mbit/s
95th percentile per-packet one-way delay: 2.291 ms
Loss rate: 0.00%
```
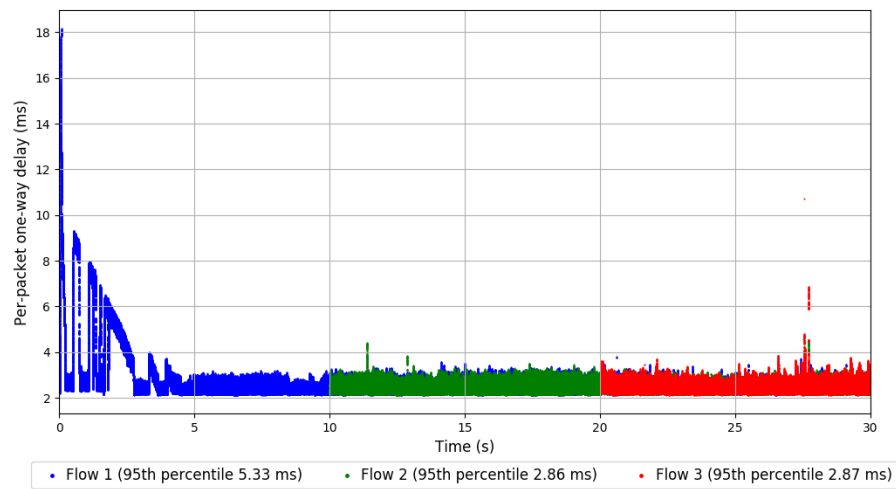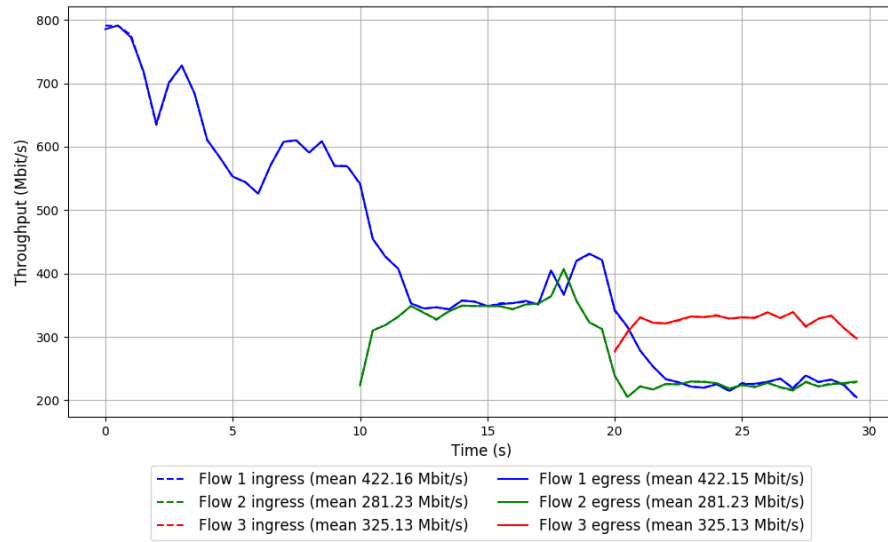
Run 10: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 90.39 Mbit/s) — Flow 1 egress (mean 90.39 Mbit/s)
Flow 2 ingress (mean 174.32 Mbit/s) — Flow 2 egress (mean 174.32 Mbit/s)
Flow 3 ingress (mean 227.46 Mbit/s) — Flow 3 egress (mean 227.31 Mbit/s)

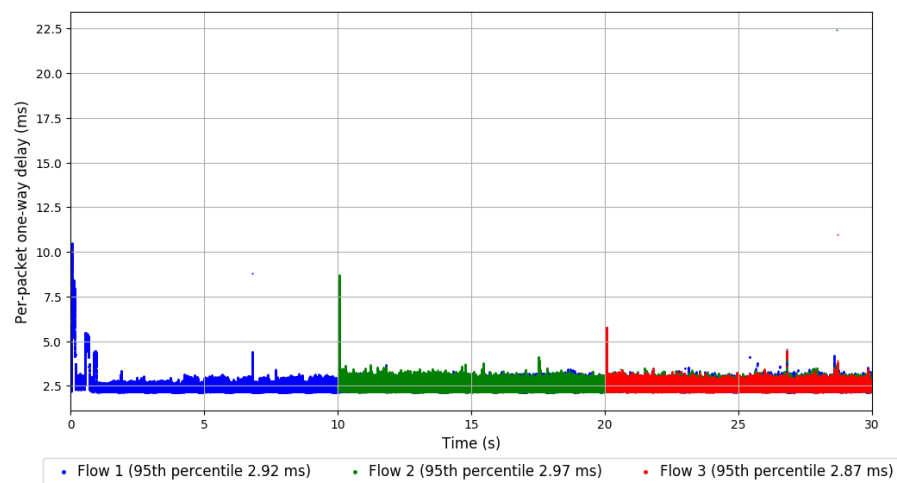Flow 1 (95th percentile 2.28 ms) Flow 2 (95th percentile 2.28 ms) Flow 3 (95th percentile 2.29 ms)

```
Run 1: Statistics of TCP Vegas

Start at: 2017-09-21 22:39:37
End at: 2017-09-21 22:40:07
Local clock offset: -0.012 ms
Remote clock offset: 0.264 ms


# Below is generated by plot.py at 2017-09-22 04:54:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 699.14 Mbit/s
95th percentile per-packet one-way delay: 2.891 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 370.27 Mbit/s
95th percentile per-packet one-way delay: 2.861 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 373.56 Mbit/s
95th percentile per-packet one-way delay: 2.931 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 241.20 Mbit/s
95th percentile per-packet one-way delay: 2.864 ms
Loss rate: 0.00%
```
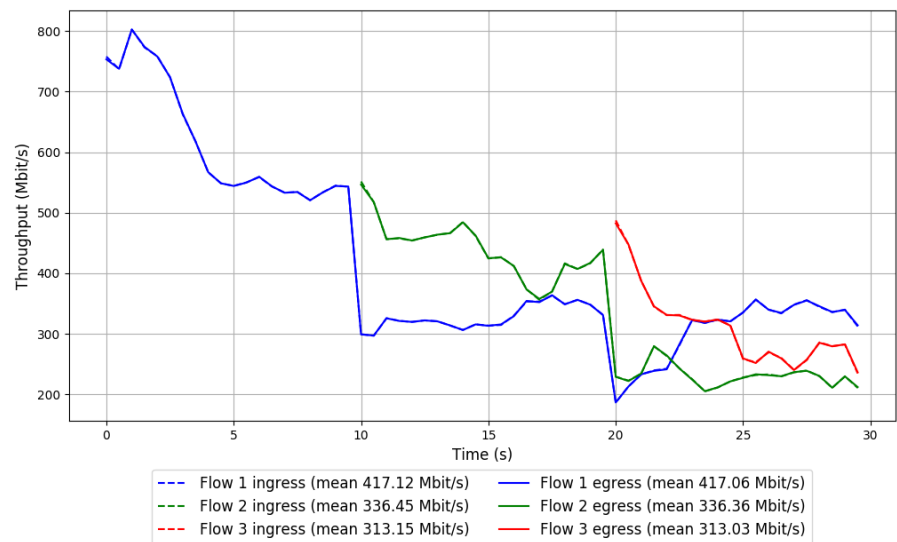
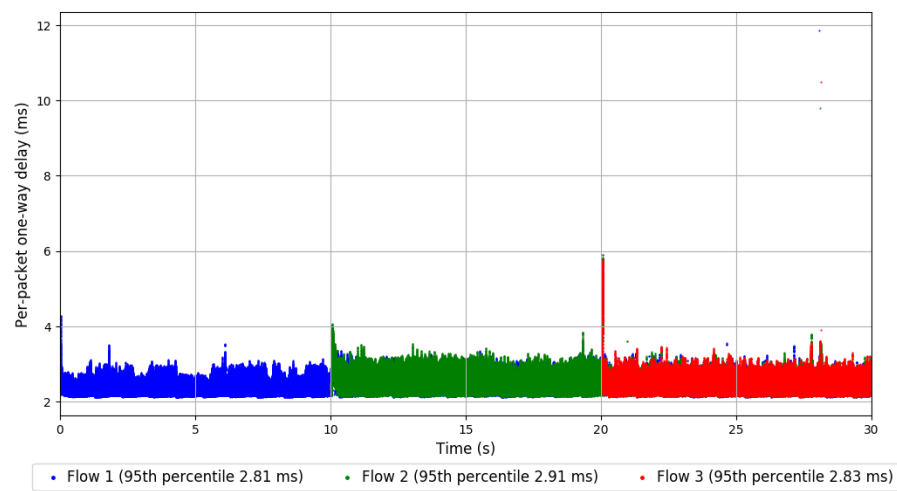Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2017-09-21 22:59:27
End at: 2017-09-21 22:59:57
Local clock offset: -0.036 ms
Remote clock offset: -0.028 ms


# Below is generated by plot.py at 2017-09-22 04:55:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 717.44 Mbit/s
95th percentile per-packet one-way delay: 3.724 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 422.15 Mbit/s
95th percentile per-packet one-way delay: 5.329 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 281.23 Mbit/s
95th percentile per-packet one-way delay: 2.864 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 325.13 Mbit/s
95th percentile per-packet one-way delay: 2.865 ms
Loss rate: 0.00%
```
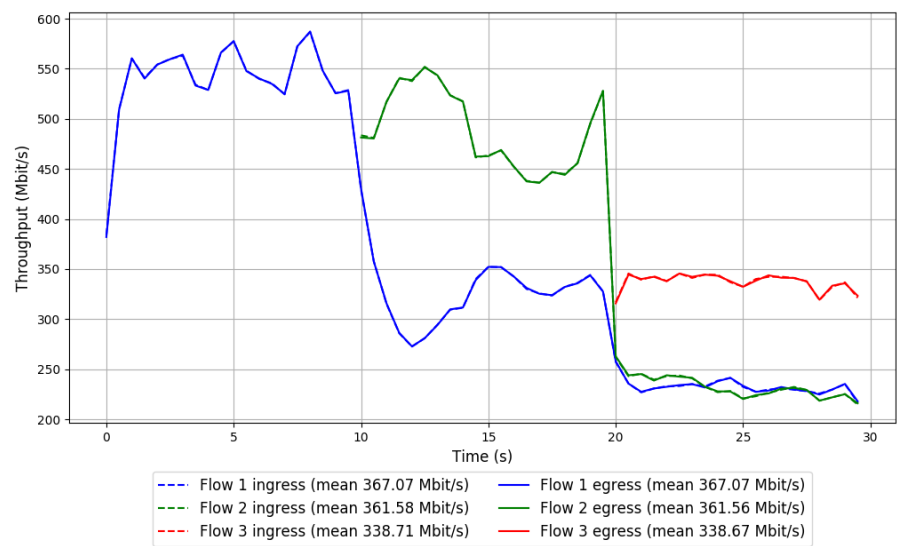
Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2017-09-21 23:19:19
End at: 2017-09-21 23:19:49
Local clock offset: -0.152 ms
Remote clock offset: -0.235 ms


# Below is generated by plot.py at 2017-09-22 04:56:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 745.04 Mbit/s
95th percentile per-packet one-way delay: 2.933 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 417.06 Mbit/s
95th percentile per-packet one-way delay: 2.916 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 336.36 Mbit/s
95th percentile per-packet one-way delay: 2.969 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 313.03 Mbit/s
95th percentile per-packet one-way delay: 2.871 ms
Loss rate: 0.03%
```
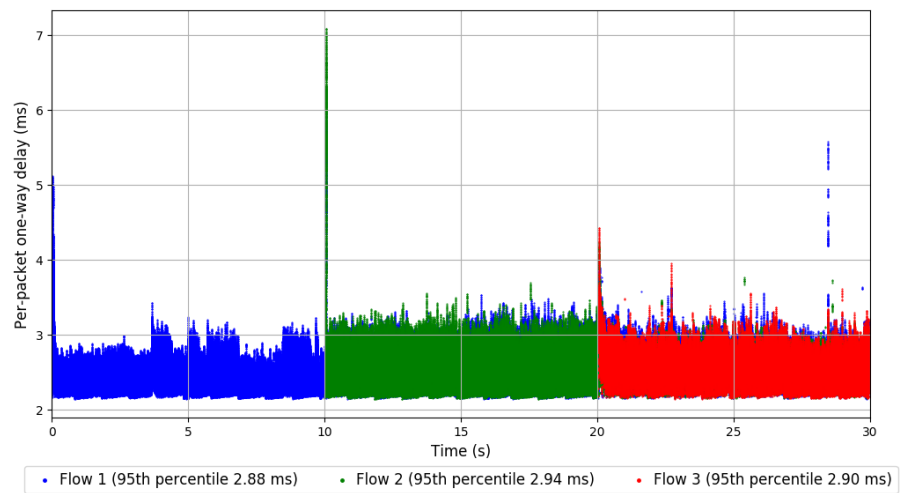
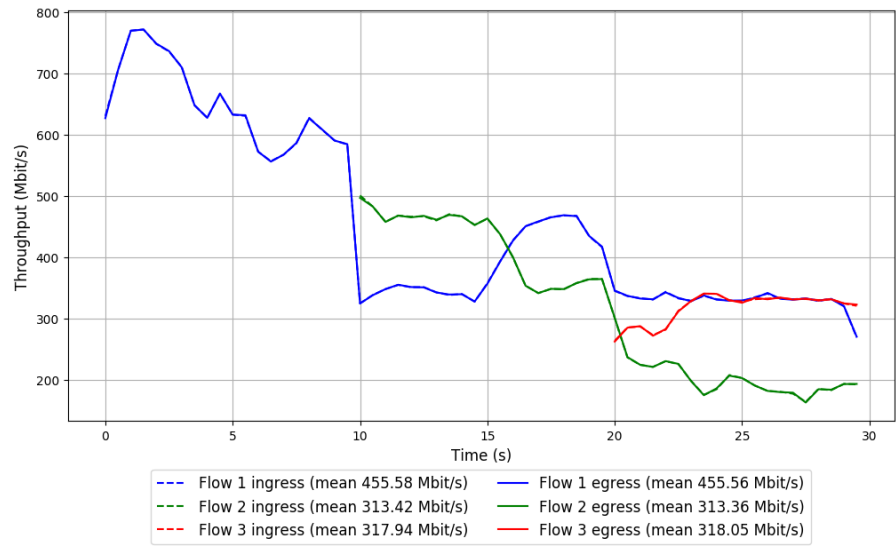Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2017-09-21 23:39:05
End at: 2017-09-21 23:39:35
Local clock offset: -0.159 ms
Remote clock offset: -0.348 ms


# Below is generated by plot.py at 2017-09-22 04:57:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 720.32 Mbit/s
95th percentile per-packet one-way delay: 2.853 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 367.07 Mbit/s
95th percentile per-packet one-way delay: 2.808 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 361.56 Mbit/s
95th percentile per-packet one-way delay: 2.910 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 338.67 Mbit/s
95th percentile per-packet one-way delay: 2.827 ms
Loss rate: 0.00%
```
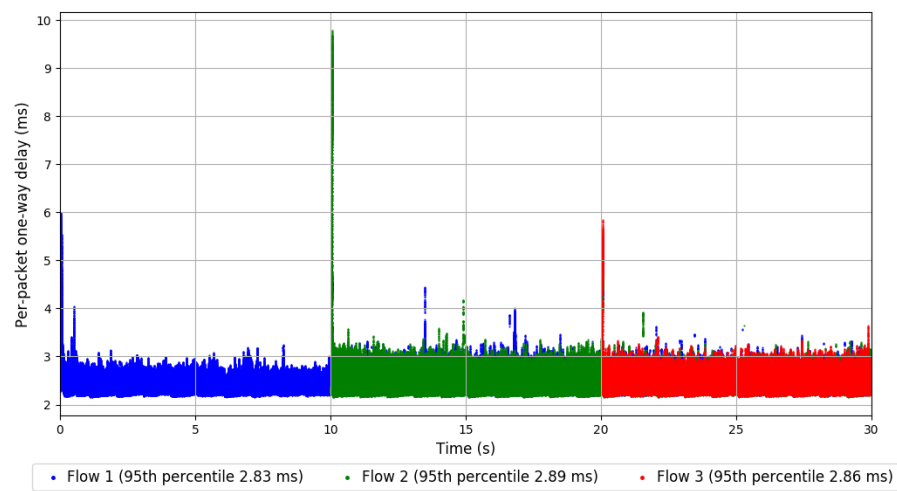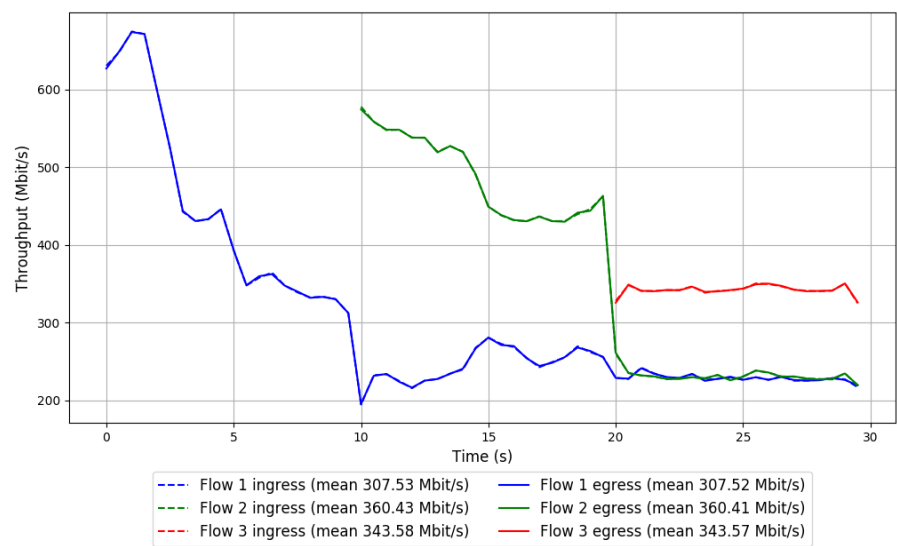
Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2017-09-21 23:59:02
End at: 2017-09-21 23:59:32
Local clock offset: -0.139 ms
Remote clock offset: -0.133 ms


# Below is generated by plot.py at 2017-09-22 04:58:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 769.96 Mbit/s
95th percentile per-packet one-way delay: 2.904 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 455.56 Mbit/s
95th percentile per-packet one-way delay: 2.882 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 313.36 Mbit/s
95th percentile per-packet one-way delay: 2.943 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 318.05 Mbit/s
95th percentile per-packet one-way delay: 2.895 ms
Loss rate: 0.00%
```
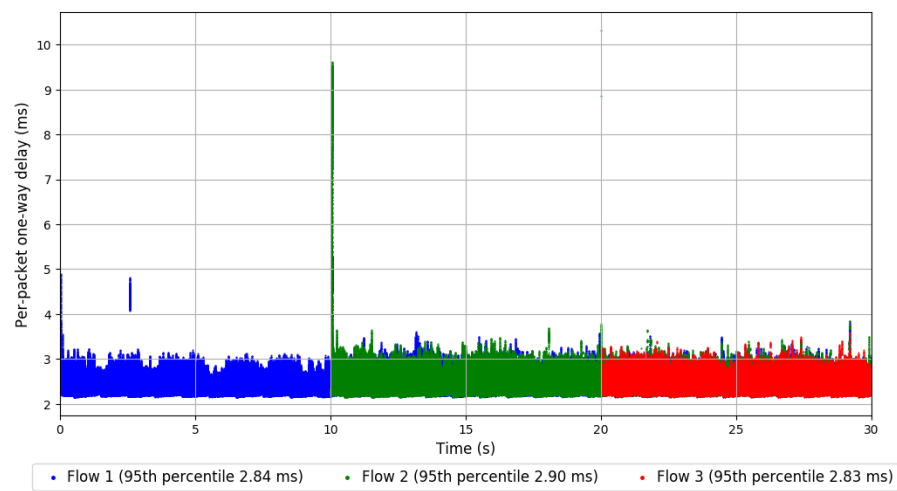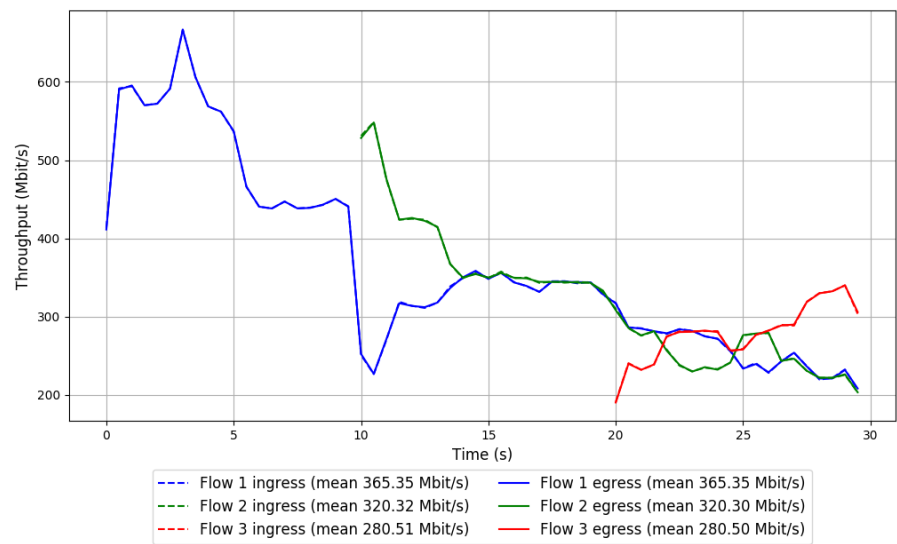
Run 5: Report of TCP Vegas — Data Link

```
Run 6: Statistics of TCP Vegas

Start at: 2017-09-22 00:18:43
End at: 2017-09-22 00:19:13
Local clock offset: -0.084 ms
Remote clock offset: -0.006 ms


# Below is generated by plot.py at 2017-09-22 04:58:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 661.70 Mbit/s
95th percentile per-packet one-way delay: 2.861 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 307.52 Mbit/s
95th percentile per-packet one-way delay: 2.833 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 360.41 Mbit/s
95th percentile per-packet one-way delay: 2.889 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 343.57 Mbit/s
95th percentile per-packet one-way delay: 2.856 ms
Loss rate: 0.00%
```

Run 6: Report of TCP Vegas — Data Link

```
Run 7: Statistics of TCP Vegas

Start at: 2017-09-22 00:38:30
End at: 2017-09-22 00:39:00
Local clock offset: -0.115 ms
Remote clock offset: -0.026 ms


# Below is generated by plot.py at 2017-09-22 05:00:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 671.76 Mbit/s
95th percentile per-packet one-way delay: 2.860 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 365.35 Mbit/s
95th percentile per-packet one-way delay: 2.841 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 320.30 Mbit/s
95th percentile per-packet one-way delay: 2.899 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 280.50 Mbit/s
95th percentile per-packet one-way delay: 2.834 ms
Loss rate: 0.00%
```
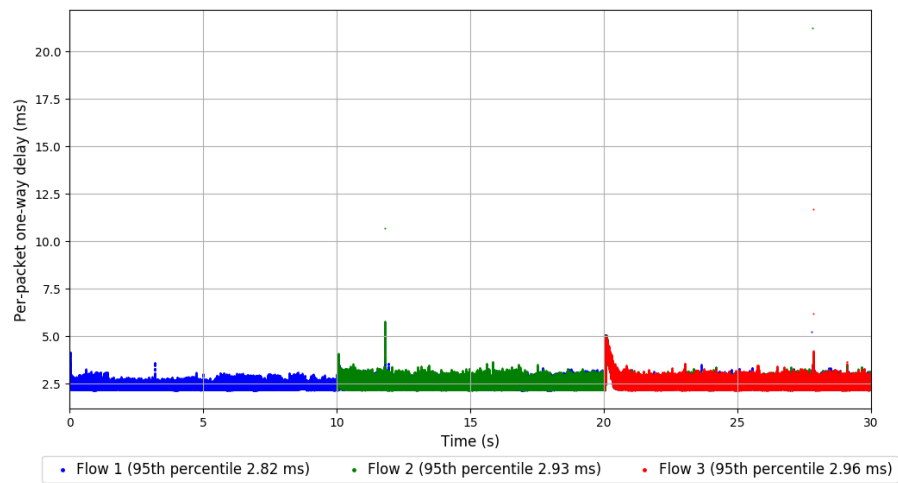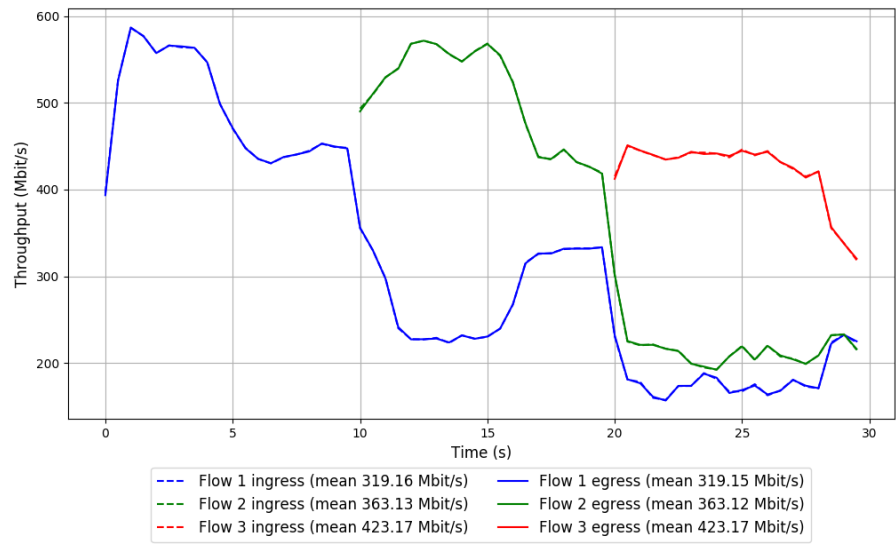
Run 7: Report of TCP Vegas — Data Link

```
Run 8: Statistics of TCP Vegas

Start at: 2017-09-22 00:58:18
End at: 2017-09-22 00:58:48
Local clock offset: -0.106 ms
Remote clock offset: 0.088 ms


# Below is generated by plot.py at 2017-09-22 05:01:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 701.46 Mbit/s
95th percentile per-packet one-way delay: 2.889 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 319.15 Mbit/s
95th percentile per-packet one-way delay: 2.824 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 363.12 Mbit/s
95th percentile per-packet one-way delay: 2.927 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 423.17 Mbit/s
95th percentile per-packet one-way delay: 2.955 ms
Loss rate: 0.00%
```

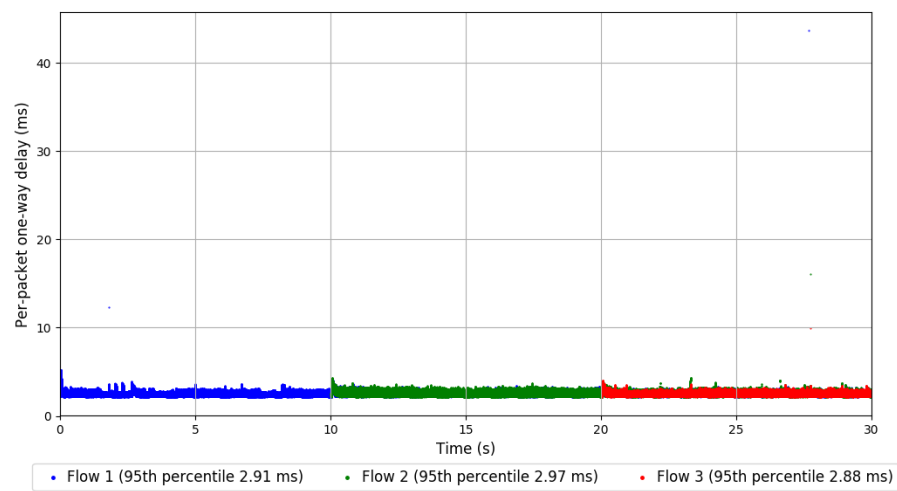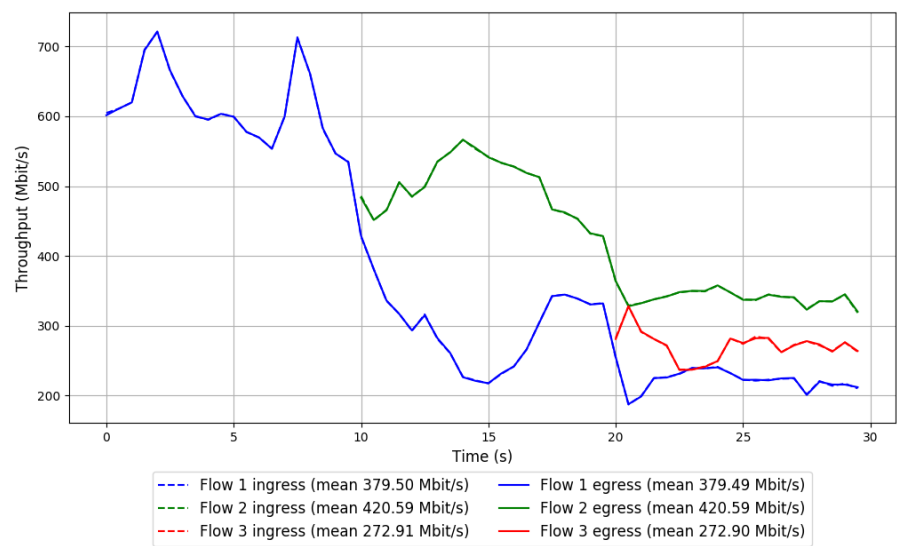Run 8: Report of TCP Vegas — Data Link

```
Run 9: Statistics of TCP Vegas

Start at: 2017-09-22 01:18:01
End at: 2017-09-22 01:18:31
Local clock offset: -0.127 ms
Remote clock offset: 0.178 ms


# Below is generated by plot.py at 2017-09-22 05:05:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 750.13 Mbit/s
95th percentile per-packet one-way delay: 2.933 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 379.49 Mbit/s
95th percentile per-packet one-way delay: 2.910 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 420.59 Mbit/s
95th percentile per-packet one-way delay: 2.967 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 272.90 Mbit/s
95th percentile per-packet one-way delay: 2.876 ms
Loss rate: 0.00%
```
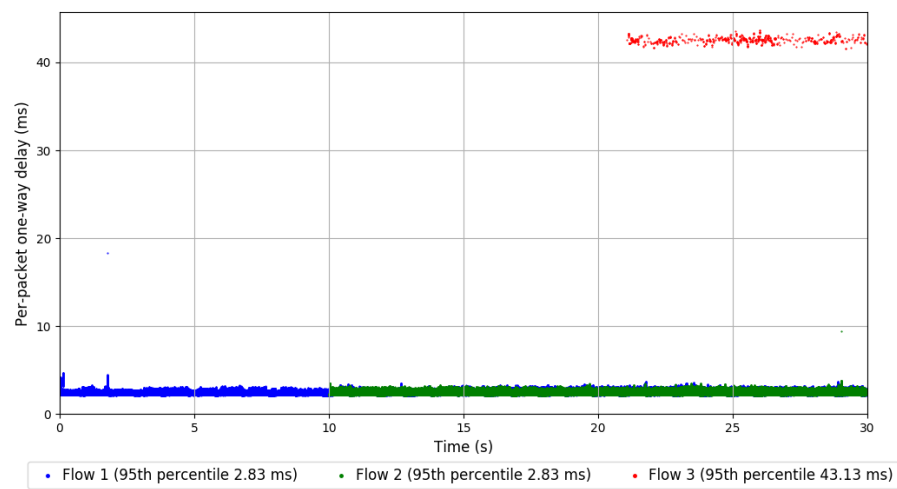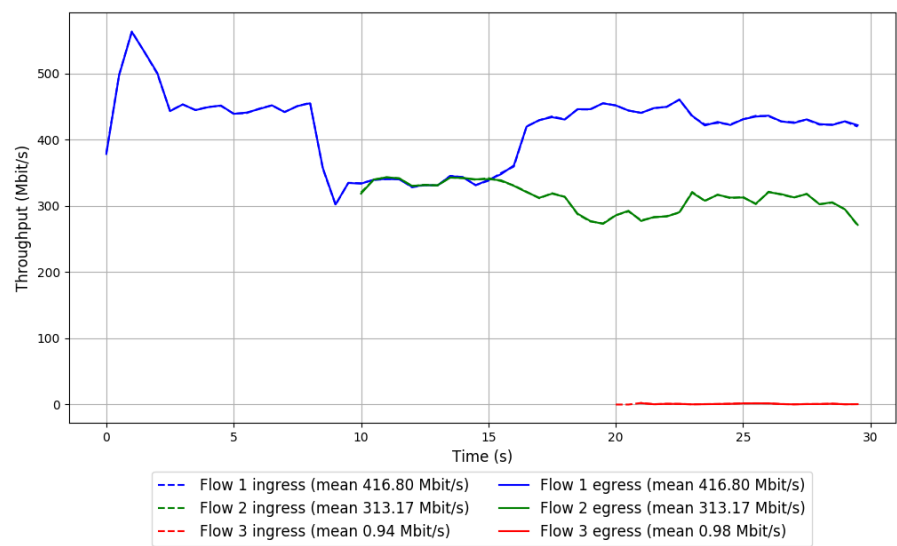
Run 9: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 379.50 Mbit/s) --- Flow 1 egress (mean 379.49 Mbit/s)
Flow 2 ingress (mean 420.59 Mbit/s) --- Flow 2 egress (mean 420.59 Mbit/s)
Flow 3 ingress (mean 272.91 Mbit/s) --- Flow 3 egress (mean 272.90 Mbit/s)

Flow 1 (95th percentile 2.91 ms)   Flow 2 (95th percentile 2.97 ms)   Flow 3 (95th percentile 2.88 ms)

```
Run 10: Statistics of TCP Vegas

Start at: 2017-09-22 01:37:47
End at: 2017-09-22 01:38:17
Local clock offset: -0.106 ms
Remote clock offset: 0.225 ms


# Below is generated by plot.py at 2017-09-22 05:05:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 625.64 Mbit/s
95th percentile per-packet one-way delay: 2.828 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 416.80 Mbit/s
95th percentile per-packet one-way delay: 2.827 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 313.17 Mbit/s
95th percentile per-packet one-way delay: 2.828 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.98 Mbit/s
95th percentile per-packet one-way delay: 43.131 ms
Loss rate: 6.56%
```
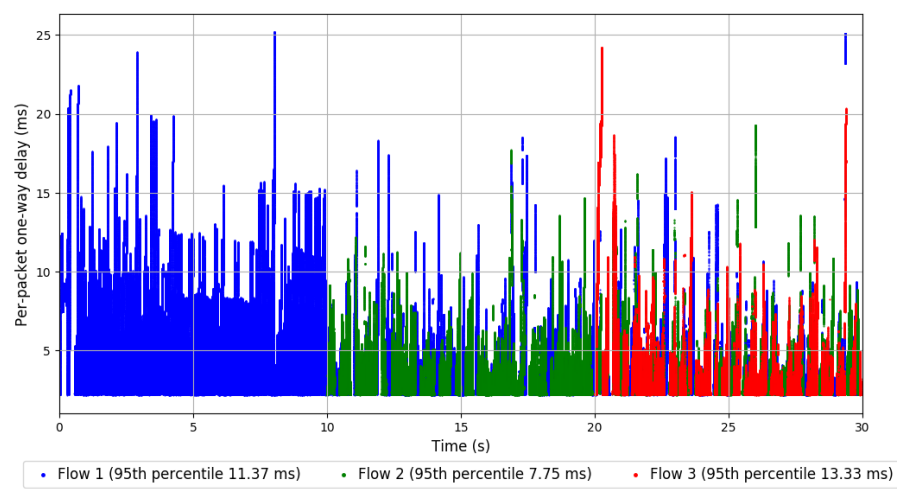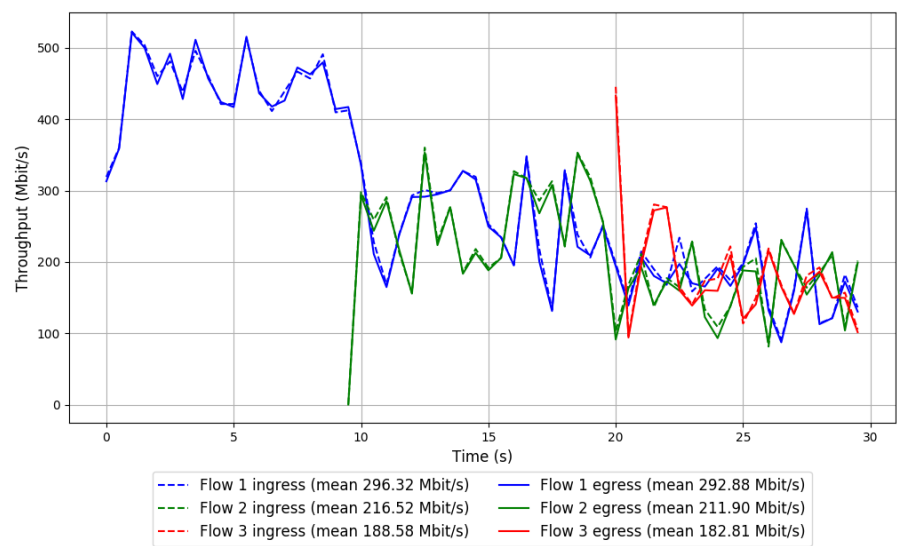
Run 10: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: 2017-09-21 22:44:05
End at: 2017-09-21 22:44:35
Local clock offset: -0.055 ms
Remote clock offset: 0.165 ms


# Below is generated by plot.py at 2017-09-22 05:05:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 493.36 Mbit/s
95th percentile per-packet one-way delay: 10.768 ms
Loss rate: 1.67%
-- Flow 1:
Average throughput: 292.88 Mbit/s
95th percentile per-packet one-way delay: 11.369 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 211.90 Mbit/s
95th percentile per-packet one-way delay: 7.749 ms
Loss rate: 2.12%
-- Flow 3:
Average throughput: 182.81 Mbit/s
95th percentile per-packet one-way delay: 13.327 ms
Loss rate: 3.05%
```

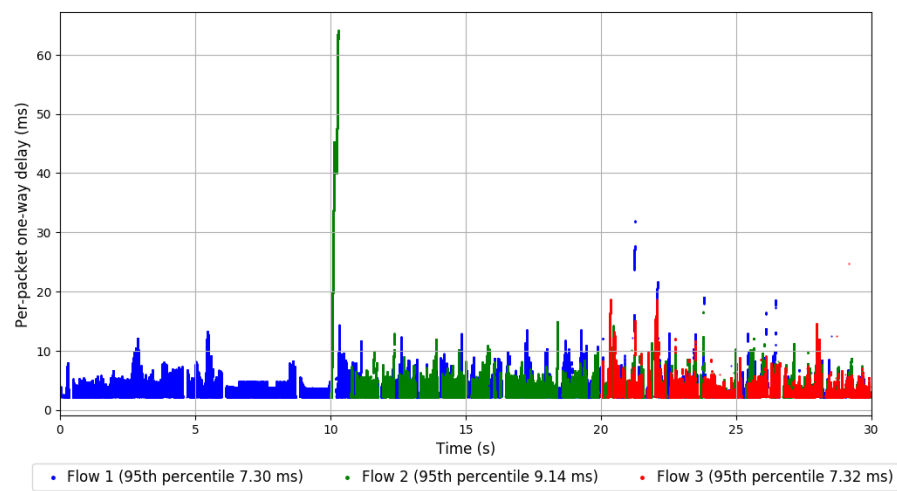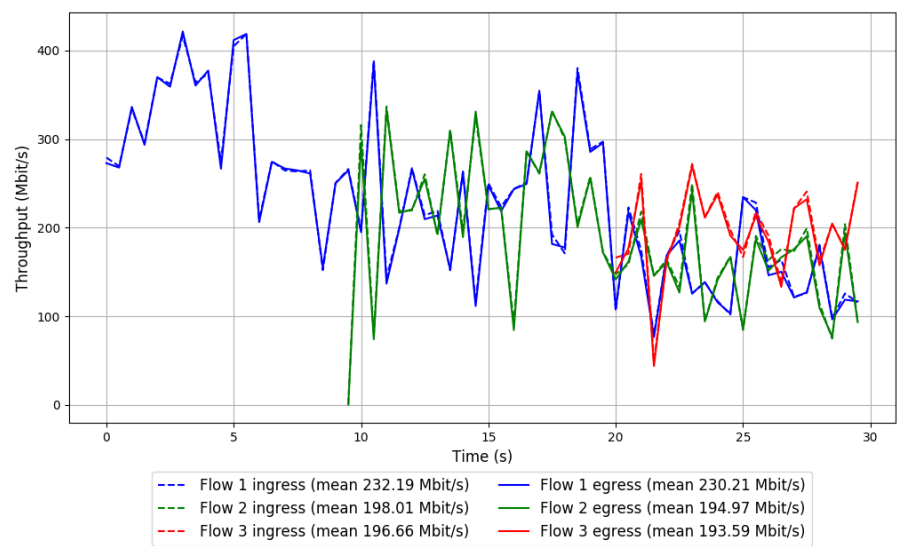Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2017-09-21 23:03:56
End at: 2017-09-21 23:04:26
Local clock offset: -0.123 ms
Remote clock offset: -0.093 ms


# Below is generated by plot.py at 2017-09-22 05:05:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 424.31 Mbit/s
95th percentile per-packet one-way delay: 7.730 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 230.21 Mbit/s
95th percentile per-packet one-way delay: 7.305 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 194.97 Mbit/s
95th percentile per-packet one-way delay: 9.139 ms
Loss rate: 1.53%
-- Flow 3:
Average throughput: 193.59 Mbit/s
95th percentile per-packet one-way delay: 7.316 ms
Loss rate: 1.55%
```
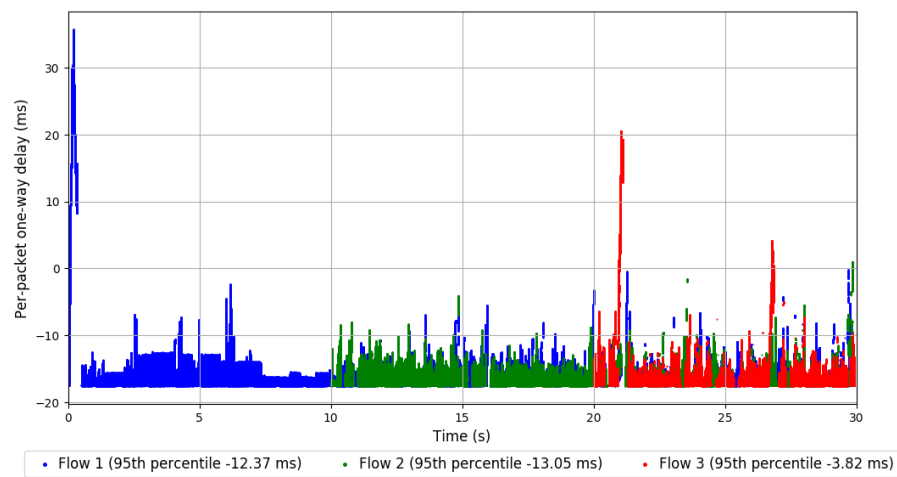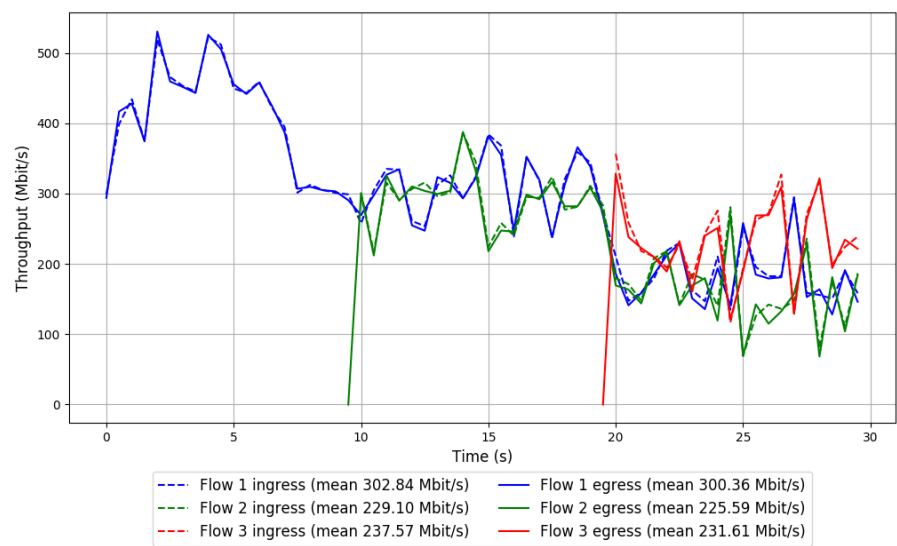
Run 2: Report of Verus — Data Link

Flow 1 ingress (mean 232.19 Mbit/s) --- Flow 1 egress (mean 230.21 Mbit/s)
Flow 2 ingress (mean 198.01 Mbit/s) --- Flow 2 egress (mean 194.97 Mbit/s)
Flow 3 ingress (mean 196.66 Mbit/s) --- Flow 3 egress (mean 193.59 Mbit/s)

Flow 1 (95th percentile 7.30 ms) • Flow 2 (95th percentile 9.14 ms) • Flow 3 (95th percentile 7.32 ms)

```
Run 3: Statistics of Verus

Start at: 2017-09-21 23:23:47
End at: 2017-09-21 23:24:17
Local clock offset: -0.099 ms
Remote clock offset: -19.946 ms


# Below is generated by plot.py at 2017-09-22 05:05:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 525.91 Mbit/s
95th percentile per-packet one-way delay: -11.972 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 300.36 Mbit/s
95th percentile per-packet one-way delay: -12.372 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 225.59 Mbit/s
95th percentile per-packet one-way delay: -13.054 ms
Loss rate: 1.53%
-- Flow 3:
Average throughput: 231.61 Mbit/s
95th percentile per-packet one-way delay: -3.819 ms
Loss rate: 2.50%
```

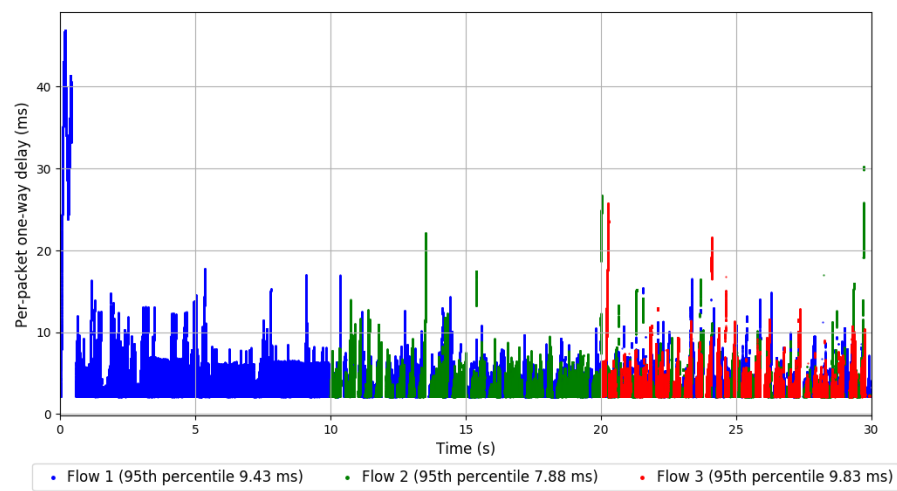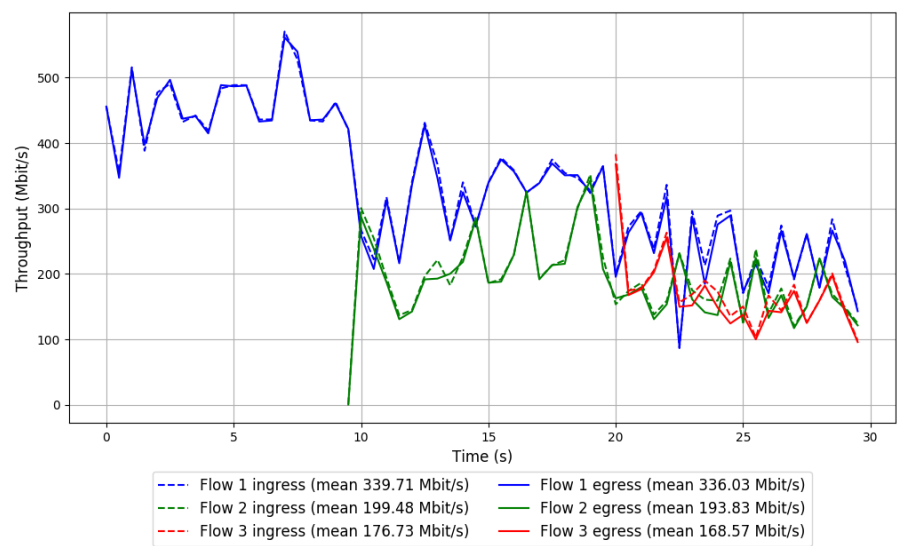Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2017-09-21 23:43:34
End at: 2017-09-21 23:44:04
Local clock offset: -0.131 ms
Remote clock offset: -0.308 ms


# Below is generated by plot.py at 2017-09-22 05:06:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 521.05 Mbit/s
95th percentile per-packet one-way delay: 9.087 ms
Loss rate: 1.91%
-- Flow 1:
Average throughput: 336.03 Mbit/s
95th percentile per-packet one-way delay: 9.430 ms
Loss rate: 1.08%
-- Flow 2:
Average throughput: 193.83 Mbit/s
95th percentile per-packet one-way delay: 7.879 ms
Loss rate: 2.83%
-- Flow 3:
Average throughput: 168.57 Mbit/s
95th percentile per-packet one-way delay: 9.832 ms
Loss rate: 4.61%
```
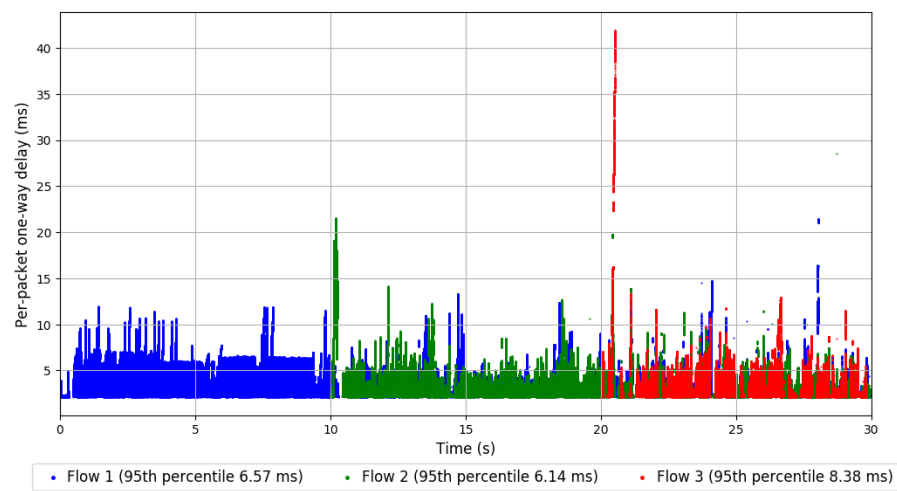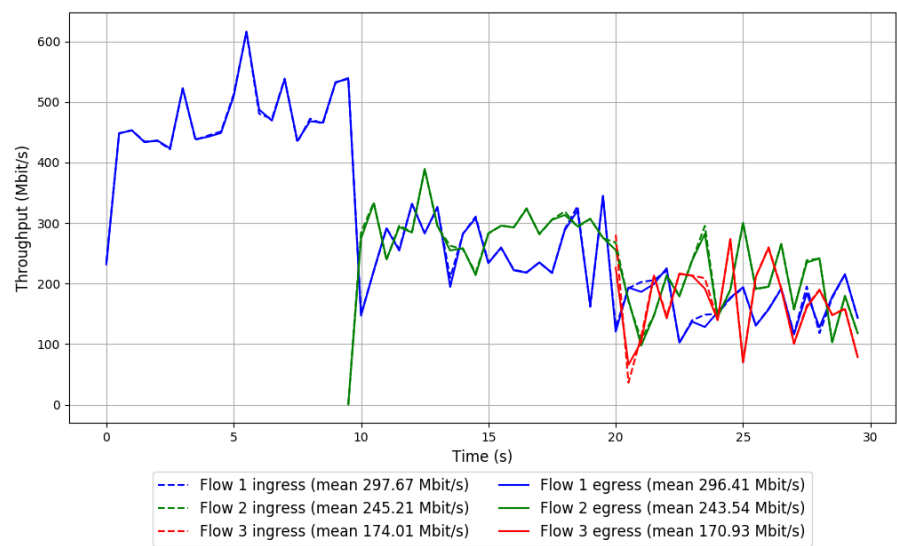
Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2017-09-22 00:03:32
End at: 2017-09-22 00:04:02
Local clock offset: -0.148 ms
Remote clock offset: -0.159 ms


# Below is generated by plot.py at 2017-09-22 05:07:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 514.63 Mbit/s
95th percentile per-packet one-way delay: 6.583 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 296.41 Mbit/s
95th percentile per-packet one-way delay: 6.571 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 243.54 Mbit/s
95th percentile per-packet one-way delay: 6.138 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 170.93 Mbit/s
95th percentile per-packet one-way delay: 8.375 ms
Loss rate: 1.77%
```
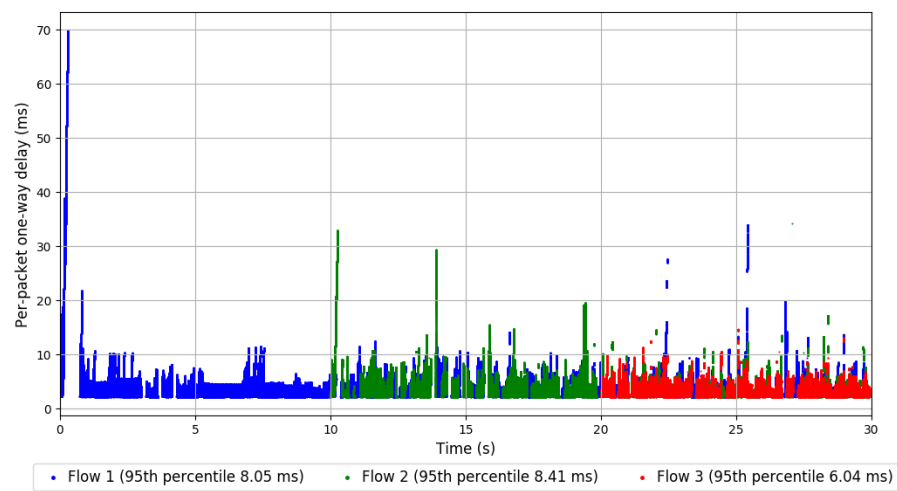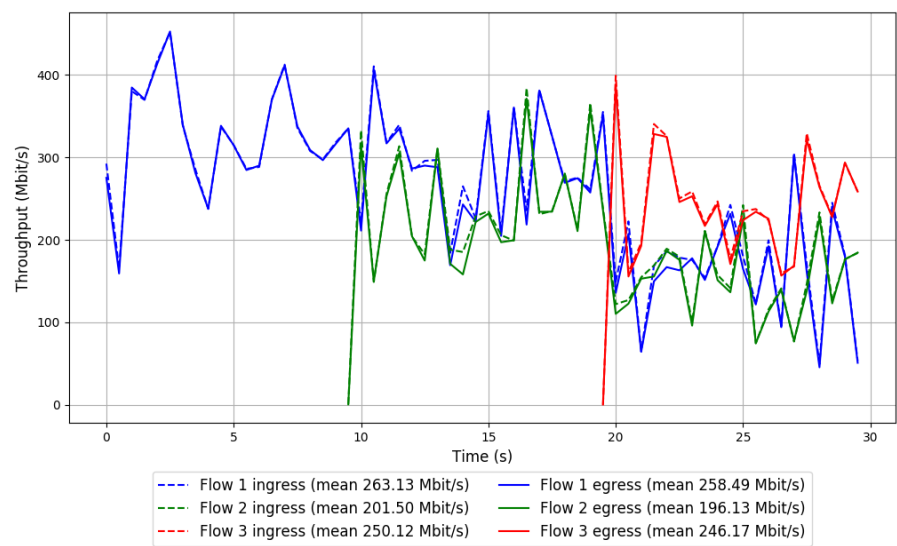
Run 5: Report of Verus — Data Link

```
Run 6: Statistics of Verus

Start at: 2017-09-22 00:23:10
End at: 2017-09-22 00:23:40
Local clock offset: -0.091 ms
Remote clock offset: -0.007 ms

# Below is generated by plot.py at 2017-09-22 05:08:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 470.39 Mbit/s
95th percentile per-packet one-way delay: 7.811 ms
Loss rate: 1.98%
-- Flow 1:
Average throughput: 258.49 Mbit/s
95th percentile per-packet one-way delay: 8.046 ms
Loss rate: 1.76%
-- Flow 2:
Average throughput: 196.13 Mbit/s
95th percentile per-packet one-way delay: 8.412 ms
Loss rate: 2.66%
-- Flow 3:
Average throughput: 246.17 Mbit/s
95th percentile per-packet one-way delay: 6.039 ms
Loss rate: 1.58%
```
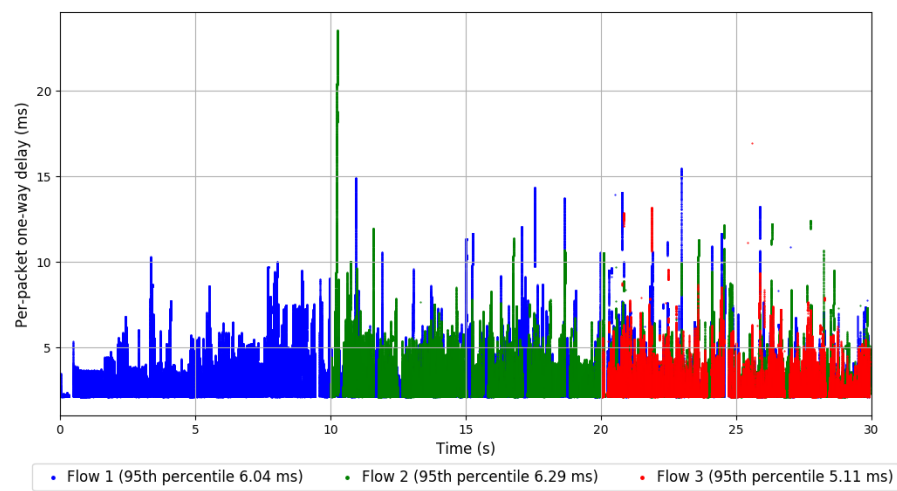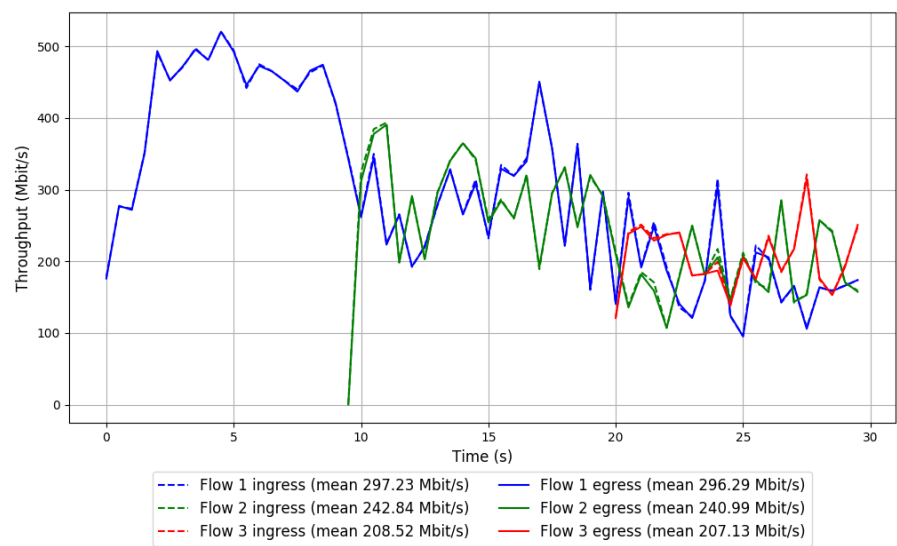
Run 6: Report of Verus — Data Link

```
Run 7: Statistics of Verus

Start at: 2017-09-22 00:42:58
End at: 2017-09-22 00:43:28
Local clock offset: -0.101 ms
Remote clock offset: -0.045 ms


# Below is generated by plot.py at 2017-09-22 05:11:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 525.47 Mbit/s
95th percentile per-packet one-way delay: 5.960 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 296.29 Mbit/s
95th percentile per-packet one-way delay: 6.045 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 240.99 Mbit/s
95th percentile per-packet one-way delay: 6.286 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 207.13 Mbit/s
95th percentile per-packet one-way delay: 5.110 ms
Loss rate: 0.66%
```

Run 7: Report of Verus — Data Link

```
Run 8: Statistics of Verus

Start at: 2017-09-22 01:02:39
End at: 2017-09-22 01:03:09
Local clock offset: -0.128 ms
Remote clock offset: 0.105 ms


# Below is generated by plot.py at 2017-09-22 05:11:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 496.63 Mbit/s
95th percentile per-packet one-way delay: 50.089 ms
Loss rate: 2.08%
-- Flow 1:
Average throughput: 250.64 Mbit/s
95th percentile per-packet one-way delay: 6.285 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 200.58 Mbit/s
95th percentile per-packet one-way delay: 8.685 ms
Loss rate: 2.47%
-- Flow 3:
Average throughput: 272.13 Mbit/s
95th percentile per-packet one-way delay: 104.489 ms
Loss rate: 4.65%
```
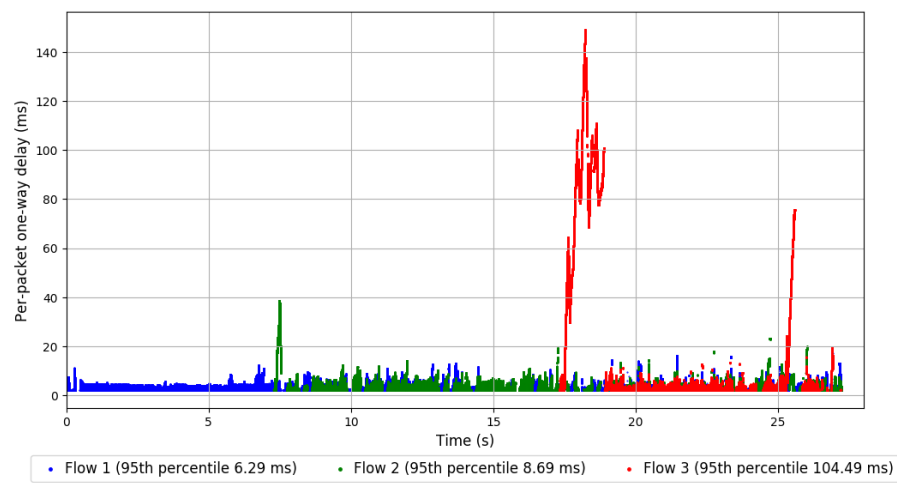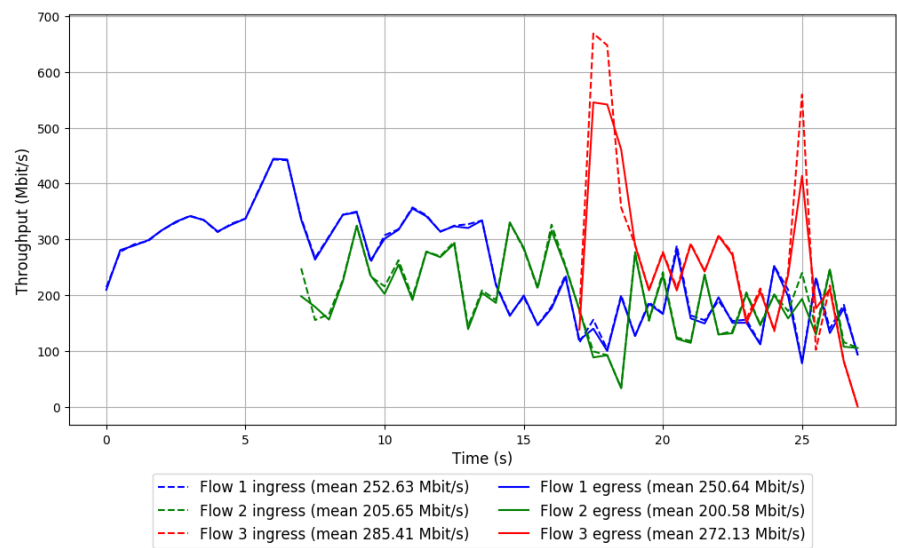
Run 8: Report of Verus — Data Link

```
Run 9: Statistics of Verus

Start at: 2017-09-22 01:22:32
End at: 2017-09-22 01:23:02
Local clock offset: -0.154 ms
Remote clock offset: 0.191 ms


# Below is generated by plot.py at 2017-09-22 05:11:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 434.19 Mbit/s
95th percentile per-packet one-way delay: 12.715 ms
Loss rate: 2.37%
-- Flow 1:
Average throughput: 247.88 Mbit/s
95th percentile per-packet one-way delay: 13.938 ms
Loss rate: 2.86%
-- Flow 2:
Average throughput: 183.78 Mbit/s
95th percentile per-packet one-way delay: 8.668 ms
Loss rate: 2.23%
-- Flow 3:
Average throughput: 192.43 Mbit/s
95th percentile per-packet one-way delay: 15.523 ms
Loss rate: 0.70%
```
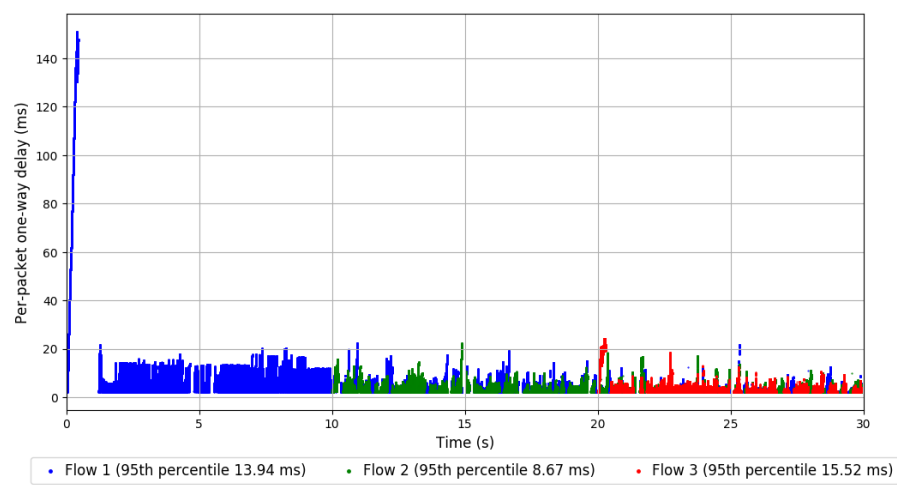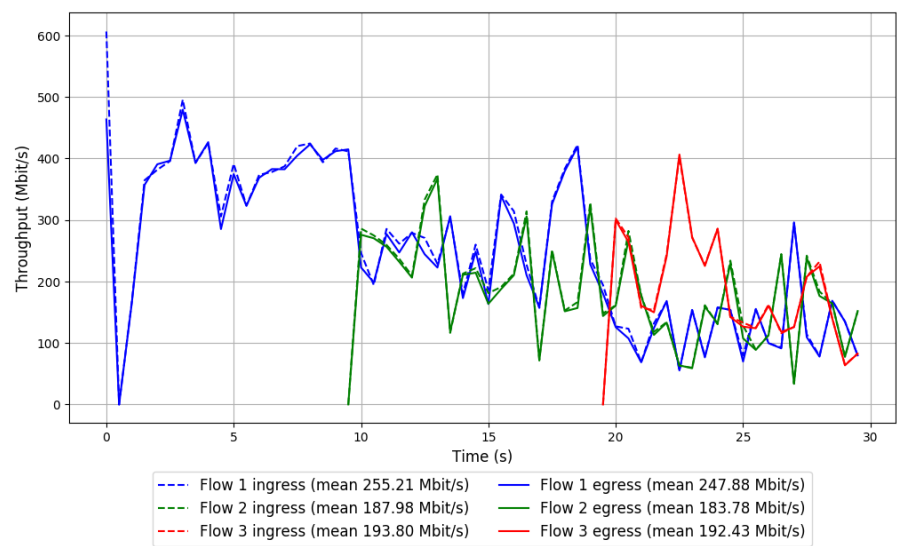
Run 9: Report of Verus — Data Link

```
Run 10: Statistics of Verus

Start at: 2017-09-22 01:42:14
End at: 2017-09-22 01:42:44
Local clock offset: -0.178 ms
Remote clock offset: 0.23 ms

# Below is generated by plot.py at 2017-09-22 05:11:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 471.27 Mbit/s
95th percentile per-packet one-way delay: 10.612 ms
Loss rate: 2.71%
-- Flow 1:
Average throughput: 304.59 Mbit/s
95th percentile per-packet one-way delay: 11.060 ms
Loss rate: 2.58%
-- Flow 2:
Average throughput: 199.74 Mbit/s
95th percentile per-packet one-way delay: 9.170 ms
Loss rate: 2.14%
-- Flow 3:
Average throughput: 101.34 Mbit/s
95th percentile per-packet one-way delay: 13.925 ms
Loss rate: 5.93%
```
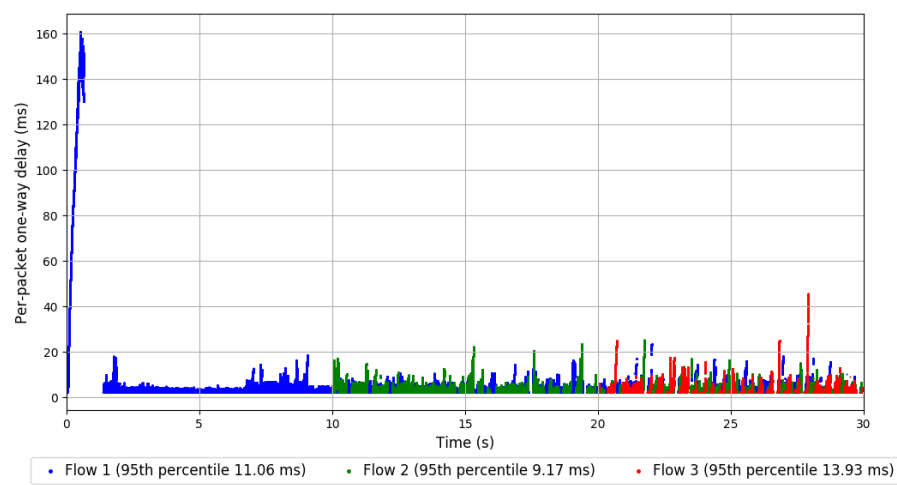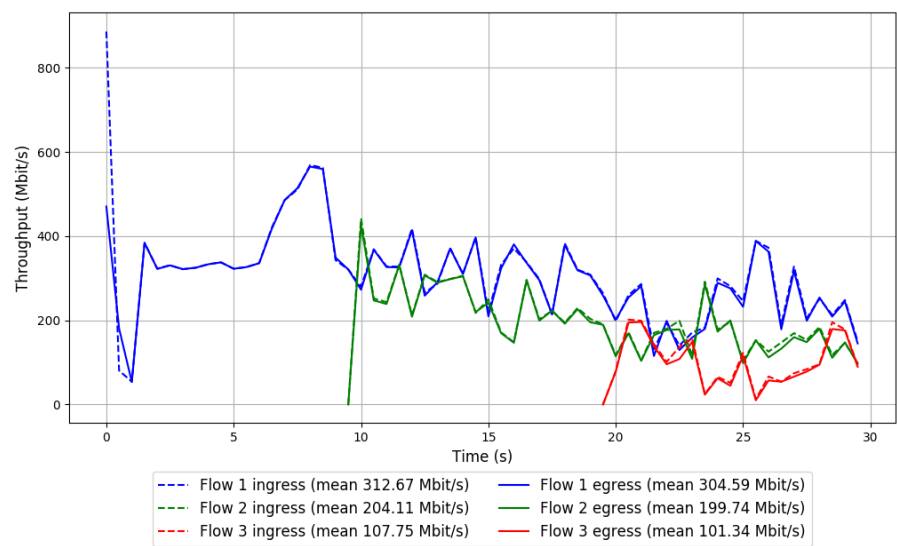
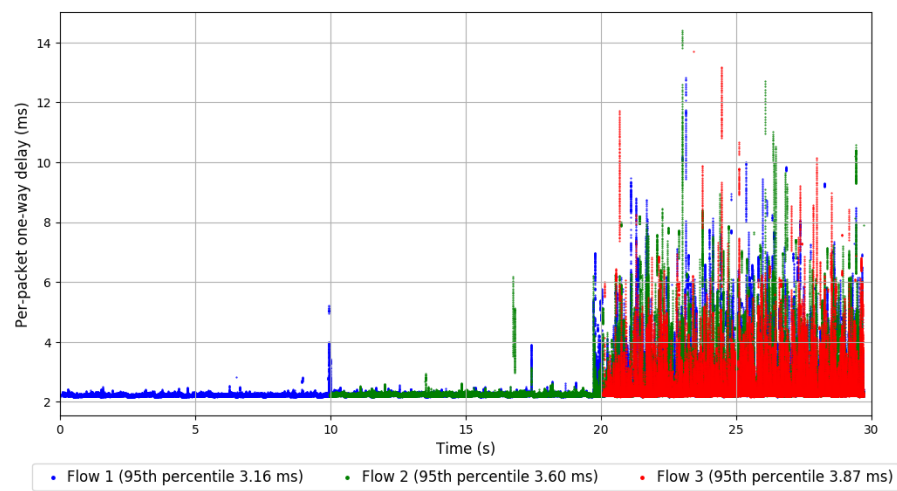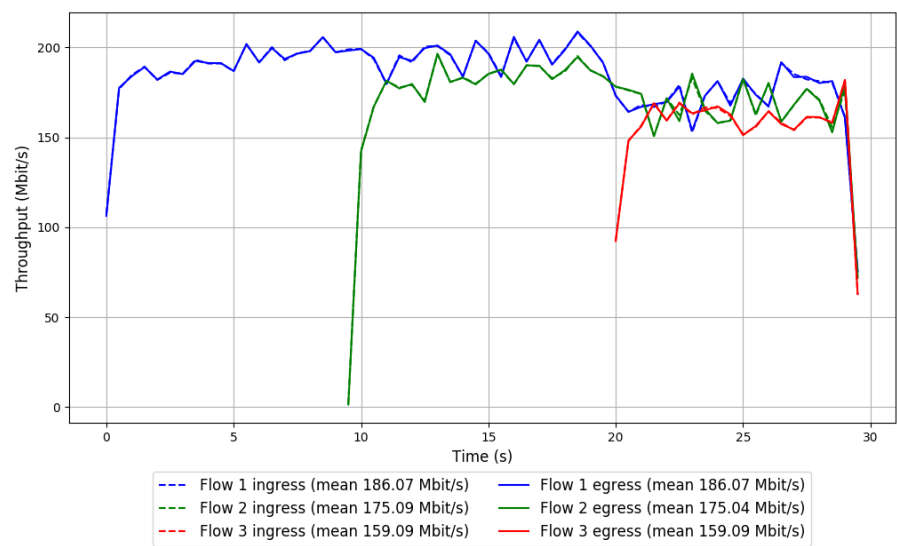Run 10: Report of Verus — Data Link

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```
Run 1: Statistics of Indigo

Start at: 2017-09-21 22:34:20
End at: 2017-09-21 22:34:50
Local clock offset: 0.126 ms
Remote clock offset: 0.523 ms


# Below is generated by plot.py at 2017-09-22 05:11:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 353.88 Mbit/s
95th percentile per-packet one-way delay: 3.447 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 186.07 Mbit/s
95th percentile per-packet one-way delay: 3.157 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 175.04 Mbit/s
95th percentile per-packet one-way delay: 3.605 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 159.09 Mbit/s
95th percentile per-packet one-way delay: 3.871 ms
Loss rate: 0.00%
```
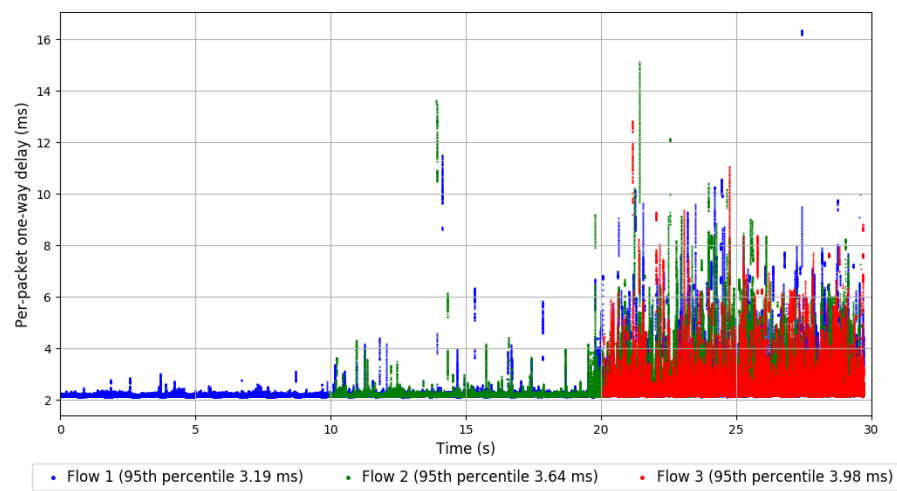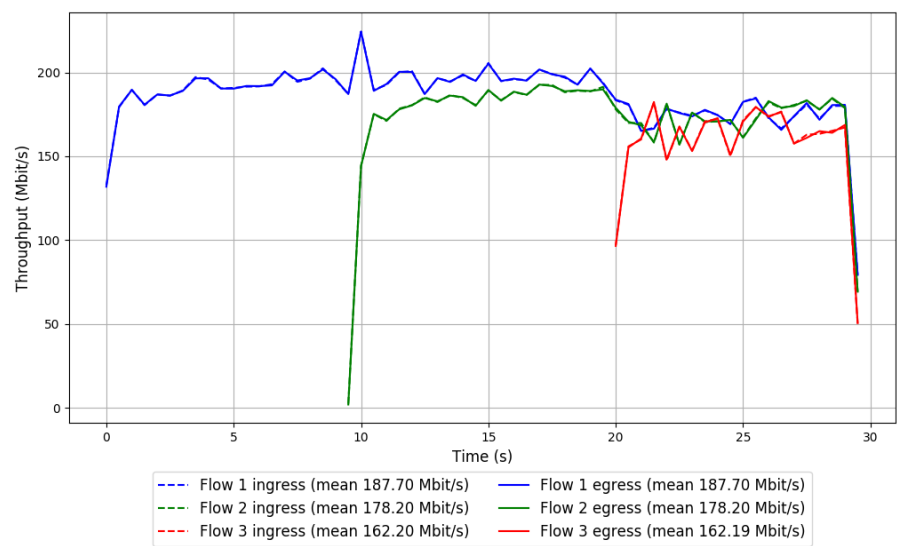
Run 1: Report of Indigo — Data Link

Run 2: Statistics of Indigo

Start at: 2017-09-21 22:54:10
End at: 2017-09-21 22:54:40
Local clock offset: -0.134 ms
Remote clock offset: -0.094 ms

Below is generated by plot.py at 2017-09-22 05:11:57
Datalink statistics
-- Total of 3 flows:
Average throughput: 358.73 Mbit/s
95th percentile per-packet one-way delay: 3.489 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 187.70 Mbit/s
95th percentile per-packet one-way delay: 3.195 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 178.20 Mbit/s
95th percentile per-packet one-way delay: 3.637 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 162.19 Mbit/s
95th percentile per-packet one-way delay: 3.985 ms
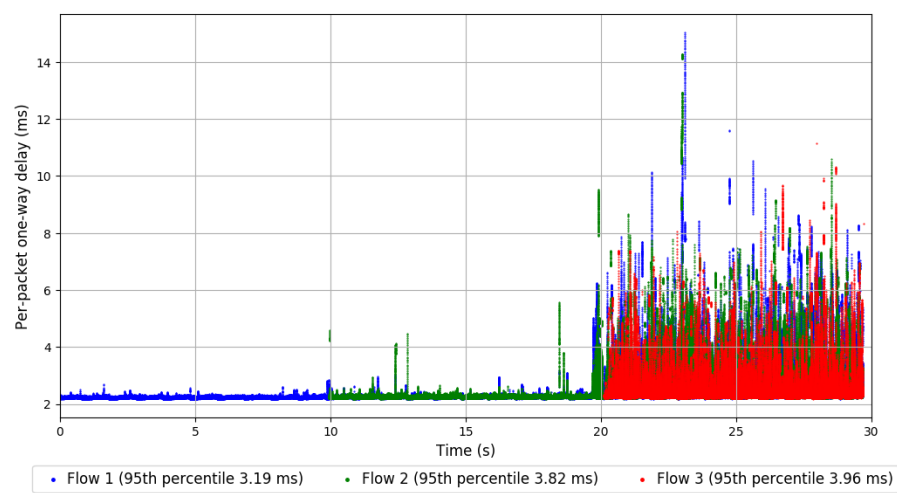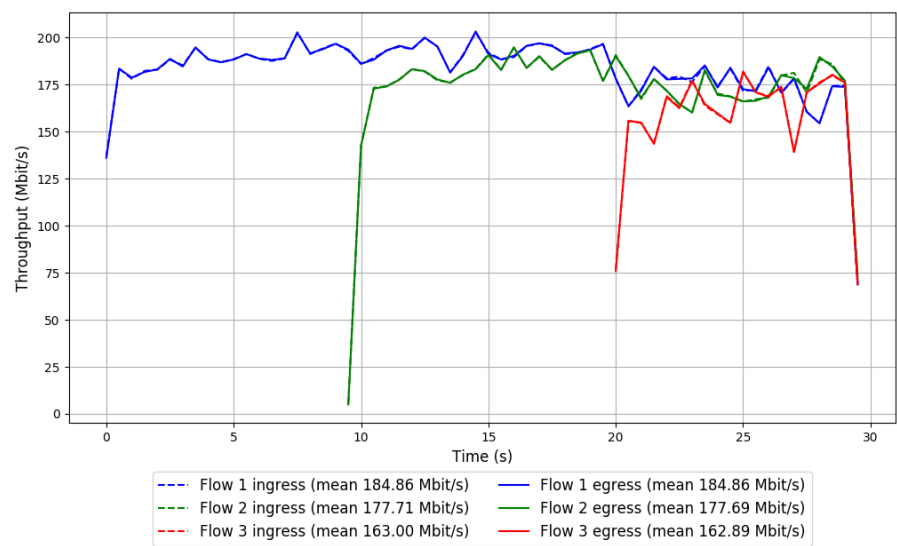Loss rate: 0.00%

Run 2: Report of Indigo — Data Link

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```
Run 3: Statistics of Indigo

Start at: 2017-09-21 23:14:01
End at: 2017-09-21 23:14:31
Local clock offset: -0.14 ms
Remote clock offset: -0.153 ms

# Below is generated by plot.py at 2017-09-22 05:12:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 355.61 Mbit/s
95th percentile per-packet one-way delay: 3.565 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 184.86 Mbit/s
95th percentile per-packet one-way delay: 3.194 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 177.69 Mbit/s
95th percentile per-packet one-way delay: 3.820 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 162.89 Mbit/s
95th percentile per-packet one-way delay: 3.961 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo — Data Link

Flow 1 ingress (mean 184.86 Mbit/s) --- Flow 1 egress (mean 184.86 Mbit/s)
Flow 2 ingress (mean 177.71 Mbit/s) --- Flow 2 egress (mean 177.69 Mbit/s)
Flow 3 ingress (mean 163.00 Mbit/s) --- Flow 3 egress (mean 162.89 Mbit/s)

Flow 1 (95th percentile 3.19 ms)   Flow 2 (95th percentile 3.82 ms)   Flow 3 (95th percentile 3.96 ms)
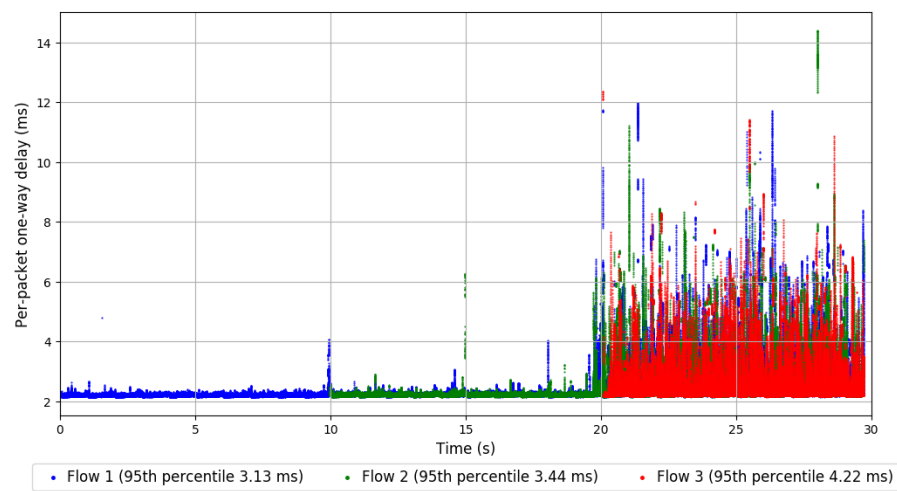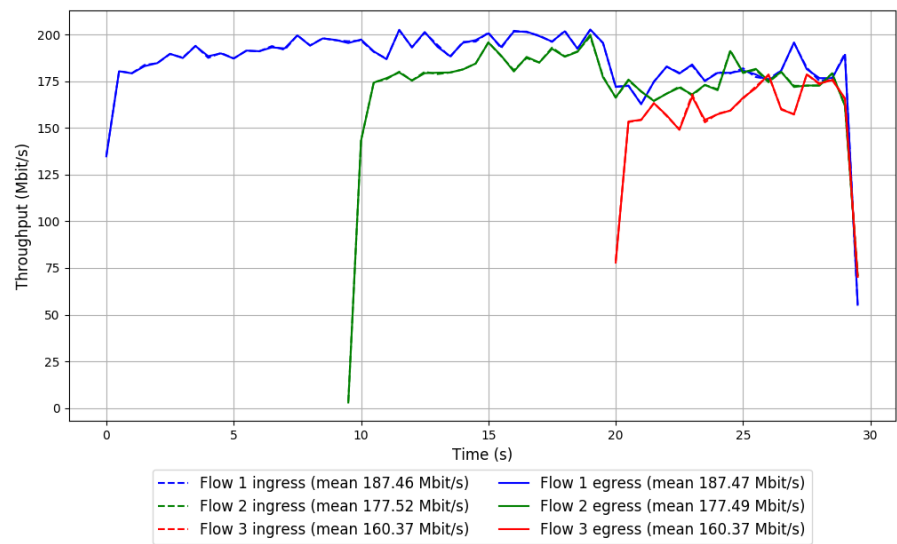
Run 4: Statistics of Indigo

Start at: 2017-09-21 23:33:48
End at: 2017-09-21 23:34:18
Local clock offset: -0.11 ms
Remote clock offset: -0.258 ms

Below is generated by plot.py at 2017-09-22 05:13:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 357.44 Mbit/s
95th percentile per-packet one-way delay: 3.449 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 187.47 Mbit/s
95th percentile per-packet one-way delay: 3.134 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 177.49 Mbit/s
95th percentile per-packet one-way delay: 3.444 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 160.37 Mbit/s
95th percentile per-packet one-way delay: 4.218 ms
Loss rate: 0.00%

Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2017-09-21 23:53:45
End at: 2017-09-21 23:54:15
Local clock offset: -0.205 ms
Remote clock offset: -0.15 ms

# Below is generated by plot.py at 2017-09-22 05:14:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 350.58 Mbit/s
95th percentile per-packet one-way delay: 3.411 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 183.38 Mbit/s
95th percentile per-packet one-way delay: 3.148 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 174.83 Mbit/s
95th percentile per-packet one-way delay: 3.526 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 157.98 Mbit/s
95th percentile per-packet one-way delay: 3.863 ms
Loss rate: 0.00%
```
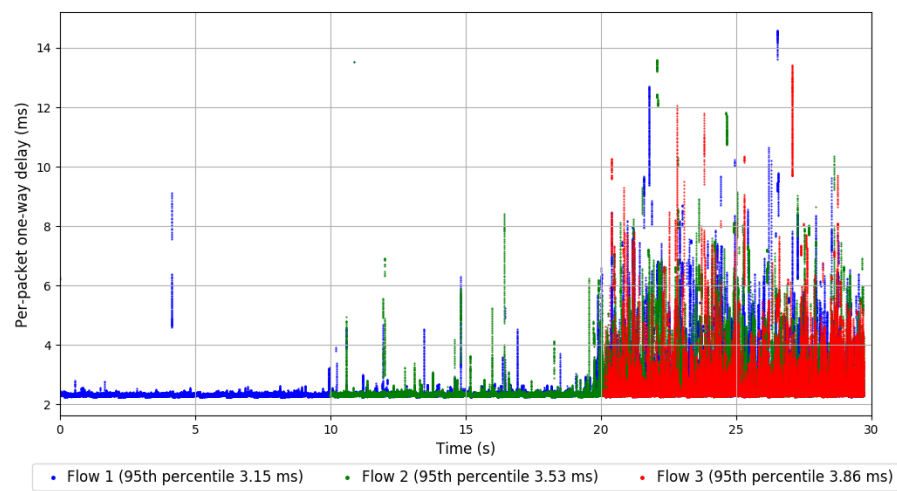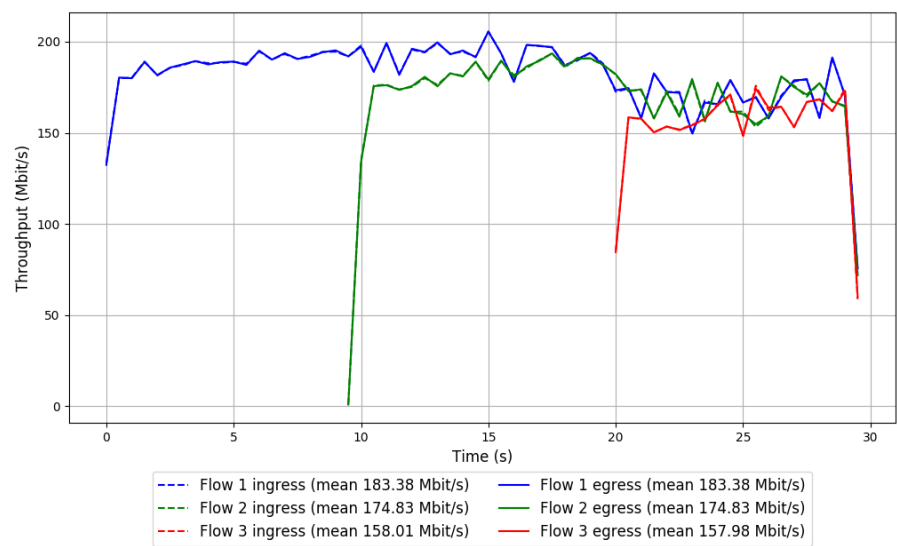
Run 5: Report of Indigo — Data Link

```
Run 6: Statistics of Indigo

Start at: 2017-09-22 00:13:25
End at: 2017-09-22 00:13:55
Local clock offset: -0.021 ms
Remote clock offset: 0.036 ms


# Below is generated by plot.py at 2017-09-22 05:15:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 357.21 Mbit/s
95th percentile per-packet one-way delay: 3.416 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 187.23 Mbit/s
95th percentile per-packet one-way delay: 3.068 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 177.18 Mbit/s
95th percentile per-packet one-way delay: 3.476 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 161.80 Mbit/s
95th percentile per-packet one-way delay: 4.164 ms
Loss rate: 0.00%
```
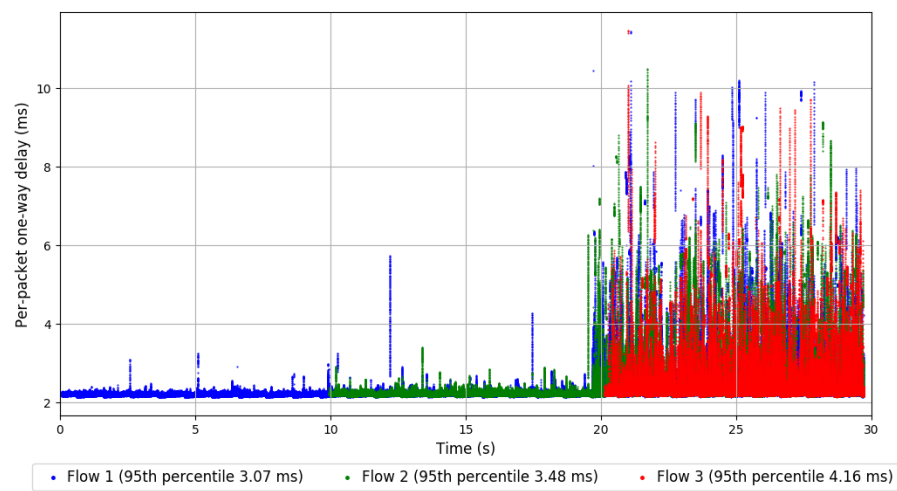
Run 6: Report of Indigo — Data Link

Flow 1 ingress (mean 187.24 Mbit/s)   Flow 1 egress (mean 187.23 Mbit/s)
Flow 2 ingress (mean 177.18 Mbit/s)   Flow 2 egress (mean 177.18 Mbit/s)
Flow 3 ingress (mean 161.80 Mbit/s)   Flow 3 egress (mean 161.80 Mbit/s)

• Flow 1 (95th percentile 3.07 ms)   • Flow 2 (95th percentile 3.48 ms)   • Flow 3 (95th percentile 4.16 ms)

```
Run 7: Statistics of Indigo

Start at: 2017-09-22 00:33:14
End at: 2017-09-22 00:33:44
Local clock offset: -0.086 ms
Remote clock offset: -0.031 ms


# Below is generated by plot.py at 2017-09-22 05:16:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 361.19 Mbit/s
95th percentile per-packet one-way delay: 3.536 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 188.49 Mbit/s
95th percentile per-packet one-way delay: 3.367 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 177.55 Mbit/s
95th percentile per-packet one-way delay: 3.663 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 169.21 Mbit/s
95th percentile per-packet one-way delay: 3.715 ms
Loss rate: 0.00%
```
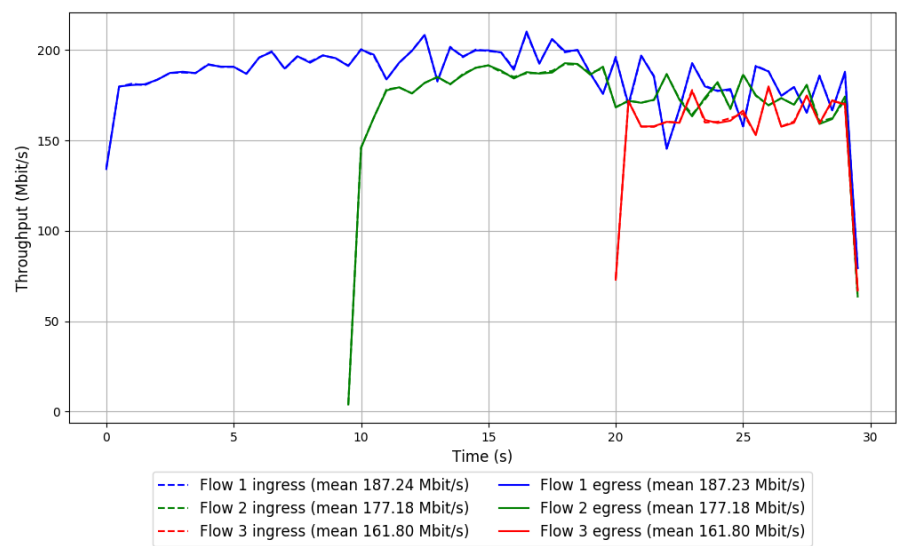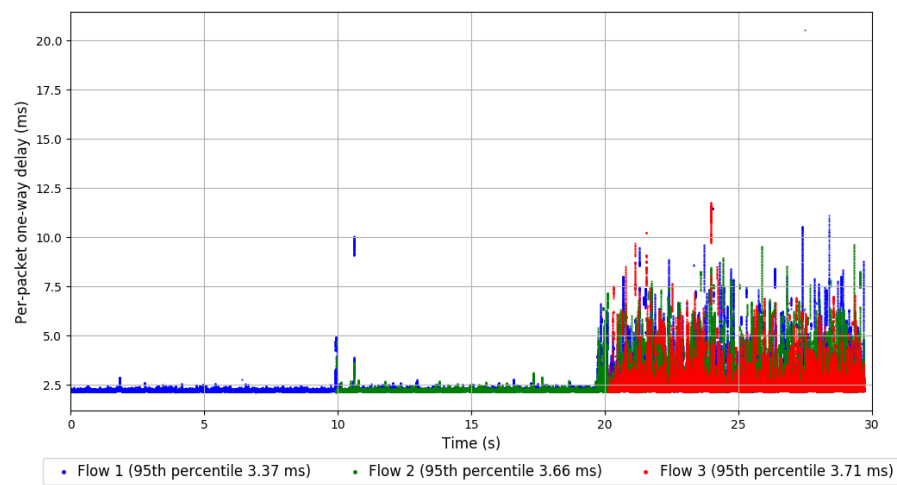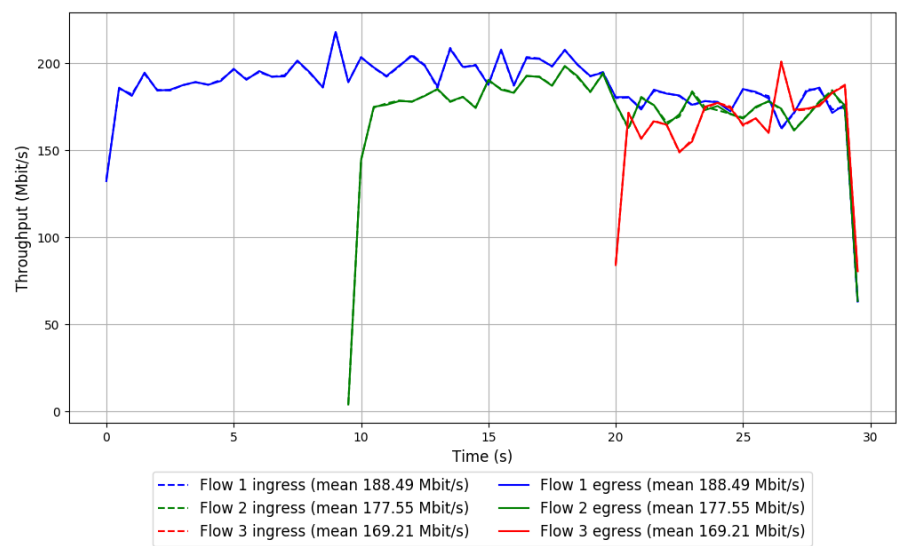
Run 7: Report of Indigo — Data Link

Flow 1 ingress (mean 188.49 Mbit/s)   Flow 1 egress (mean 188.49 Mbit/s)
Flow 2 ingress (mean 177.55 Mbit/s)   Flow 2 egress (mean 177.55 Mbit/s)
Flow 3 ingress (mean 169.21 Mbit/s)   Flow 3 egress (mean 169.21 Mbit/s)

Flow 1 (95th percentile 3.37 ms)   Flow 2 (95th percentile 3.66 ms)   Flow 3 (95th percentile 3.71 ms)

```
Run 8: Statistics of Indigo

Start at: 2017-09-22 00:53:01
End at: 2017-09-22 00:53:31
Local clock offset: -0.095 ms
Remote clock offset: 0.064 ms


# Below is generated by plot.py at 2017-09-22 05:16:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 354.71 Mbit/s
95th percentile per-packet one-way delay: 3.419 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 186.61 Mbit/s
95th percentile per-packet one-way delay: 2.804 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 175.20 Mbit/s
95th percentile per-packet one-way delay: 3.673 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 159.27 Mbit/s
95th percentile per-packet one-way delay: 4.249 ms
Loss rate: 0.00%
```
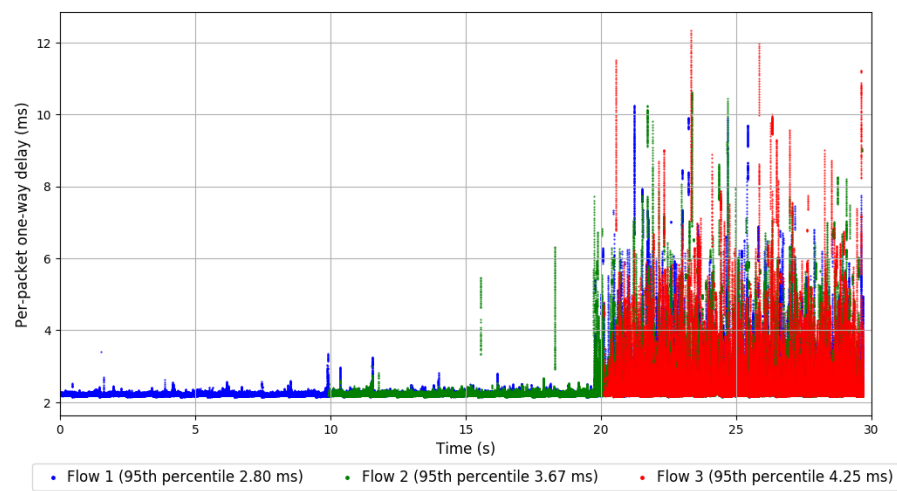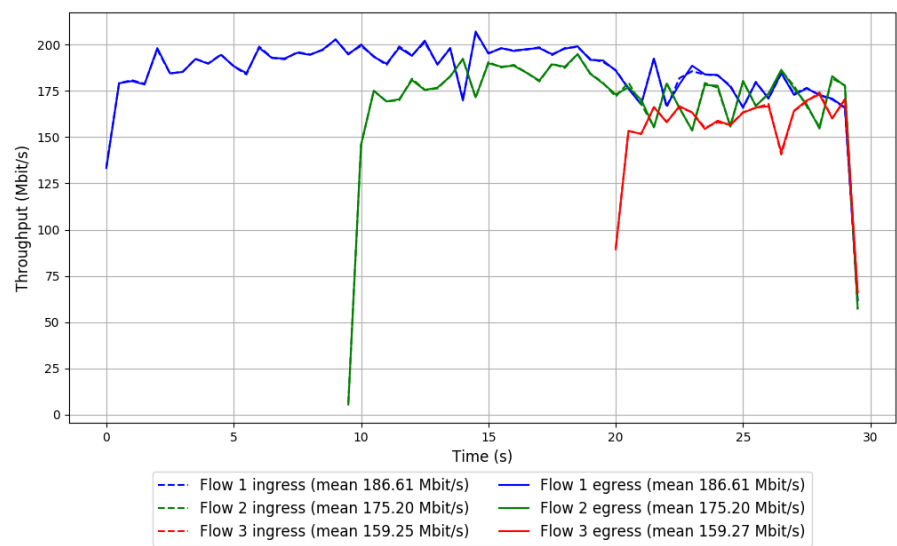
Run 8: Report of Indigo — Data Link

- - - Flow 1 ingress (mean 186.61 Mbit/s)   —— Flow 1 egress (mean 186.61 Mbit/s)
- - - Flow 2 ingress (mean 175.20 Mbit/s)   —— Flow 2 egress (mean 175.20 Mbit/s)
- - - Flow 3 ingress (mean 159.25 Mbit/s)   —— Flow 3 egress (mean 159.27 Mbit/s)

• Flow 1 (95th percentile 2.80 ms)   • Flow 2 (95th percentile 3.67 ms)   • Flow 3 (95th percentile 4.25 ms)

```
Run 9: Statistics of Indigo

Start at: 2017-09-22 01:12:45
End at: 2017-09-22 01:13:15
Local clock offset: -0.211 ms
Remote clock offset: 0.075 ms


# Below is generated by plot.py at 2017-09-22 05:16:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 355.30 Mbit/s
95th percentile per-packet one-way delay: 3.422 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 187.88 Mbit/s
95th percentile per-packet one-way delay: 2.723 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 174.25 Mbit/s
95th percentile per-packet one-way delay: 3.748 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 158.90 Mbit/s
95th percentile per-packet one-way delay: 4.469 ms
Loss rate: 0.00%
```
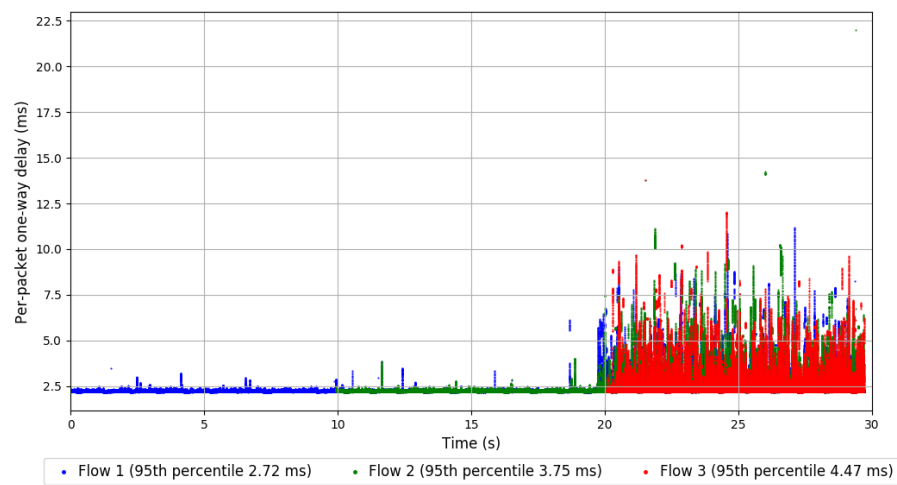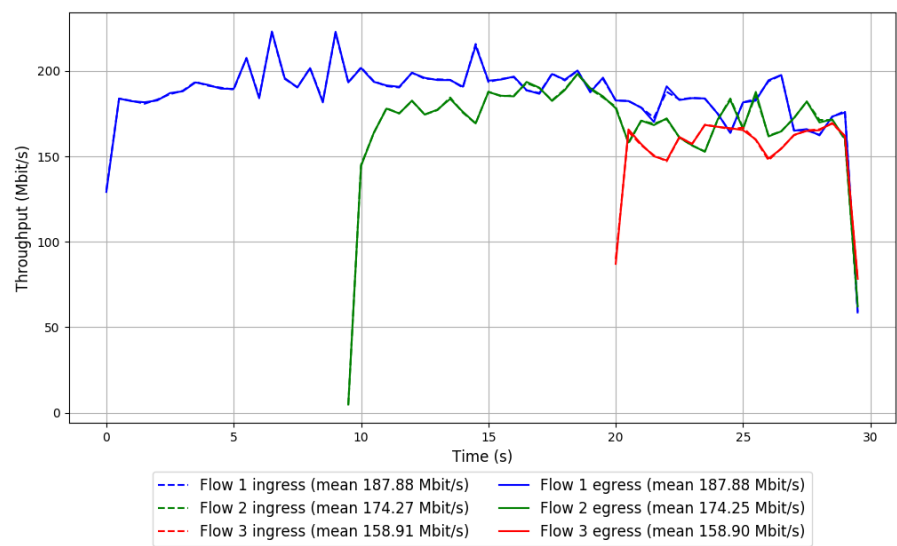
Run 9: Report of Indigo — Data Link

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```
Run 10: Statistics of Indigo

Start at: 2017-09-22 01:32:33
End at: 2017-09-22 01:33:03
Local clock offset: -0.131 ms
Remote clock offset: 0.21 ms


# Below is generated by plot.py at 2017-09-22 05:16:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 357.45 Mbit/s
95th percentile per-packet one-way delay: 3.620 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 187.43 Mbit/s
95th percentile per-packet one-way delay: 3.226 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 175.90 Mbit/s
95th percentile per-packet one-way delay: 3.724 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 163.04 Mbit/s
95th percentile per-packet one-way delay: 4.261 ms
Loss rate: 0.01%
```
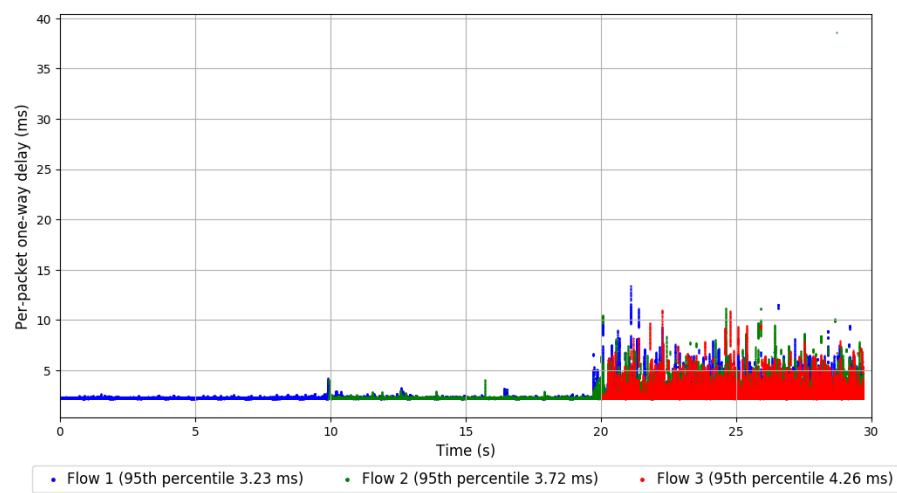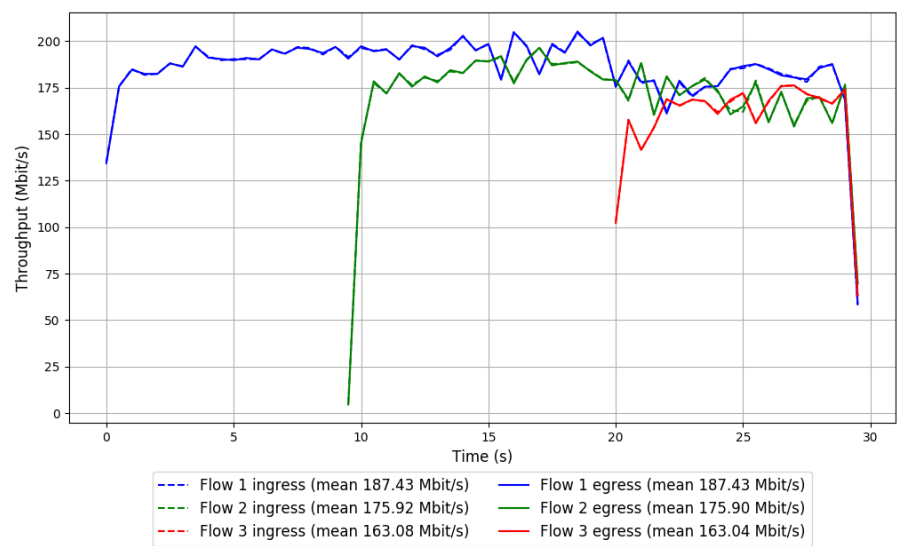
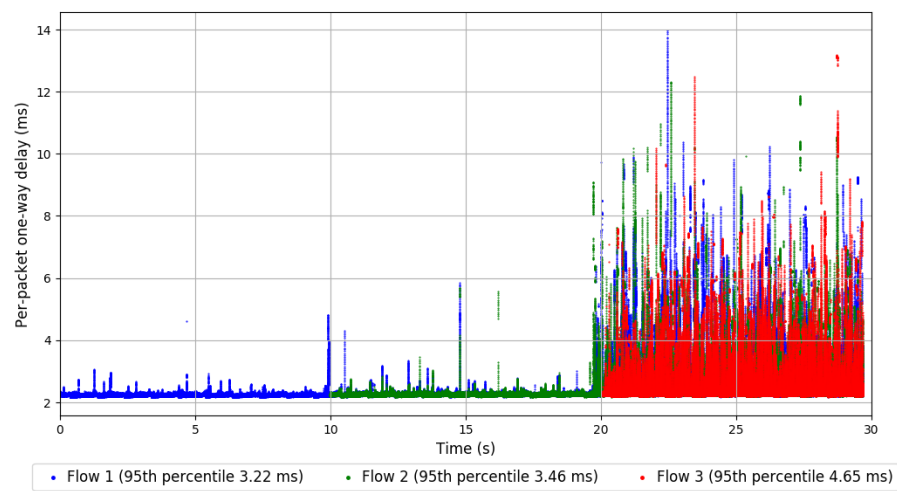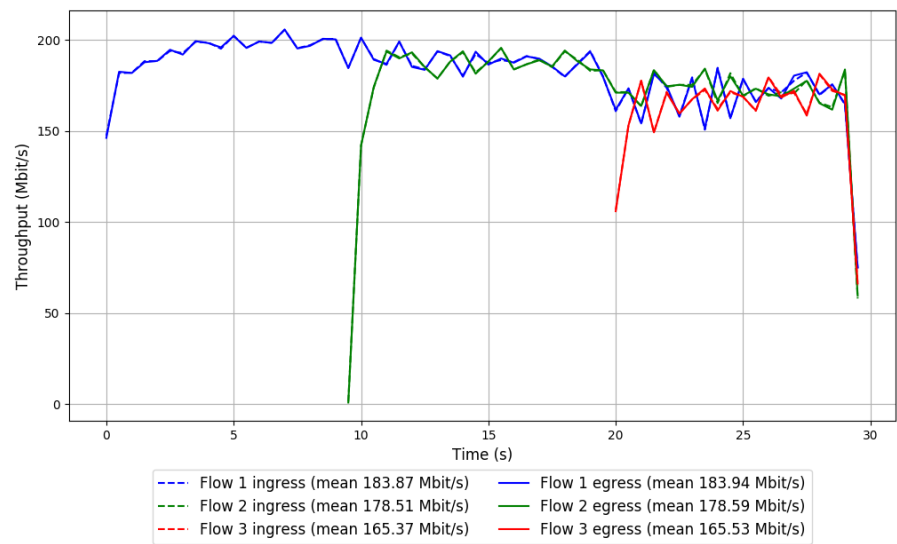## Run 10: Report of Indigo — Data Link

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```
Run 1: Statistics of Indigo-calib

Start at: 2017-09-21 22:37:09
End at: 2017-09-21 22:37:39
Local clock offset: 0.053 ms
Remote clock offset: 0.431 ms


# Below is generated by plot.py at 2017-09-22 05:17:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 356.20 Mbit/s
95th percentile per-packet one-way delay: 3.661 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 183.94 Mbit/s
95th percentile per-packet one-way delay: 3.216 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 178.59 Mbit/s
95th percentile per-packet one-way delay: 3.465 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 165.53 Mbit/s
95th percentile per-packet one-way delay: 4.649 ms
Loss rate: 0.00%
```

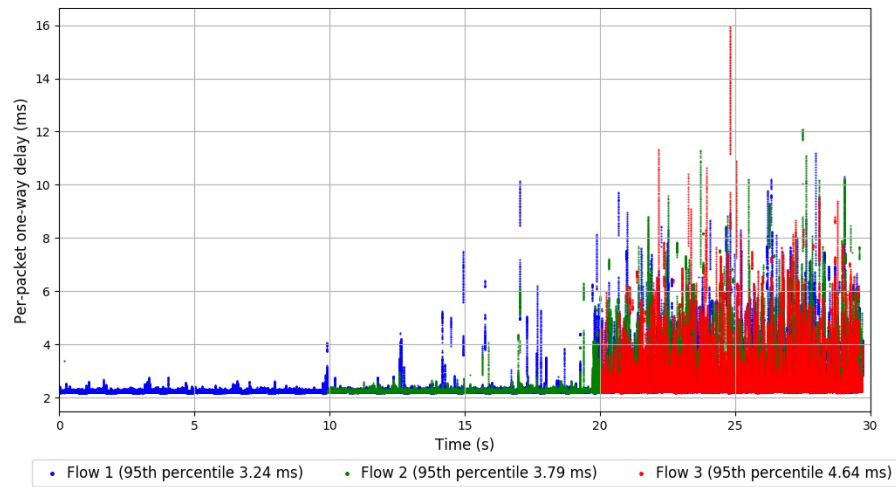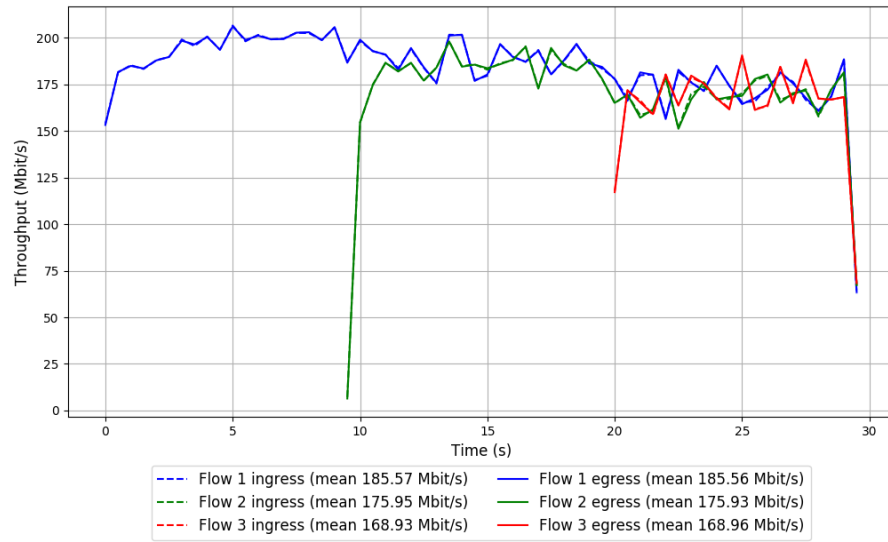Run 1: Report of Indigo-calib — Data Link

```
Run 2: Statistics of Indigo-calib

Start at: 2017-09-21 22:56:59
End at: 2017-09-21 22:57:29
Local clock offset: -0.129 ms
Remote clock offset: -0.049 ms


# Below is generated by plot.py at 2017-09-22 05:18:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 357.65 Mbit/s
95th percentile per-packet one-way delay: 3.723 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 185.56 Mbit/s
95th percentile per-packet one-way delay: 3.237 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 175.93 Mbit/s
95th percentile per-packet one-way delay: 3.787 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 168.96 Mbit/s
95th percentile per-packet one-way delay: 4.642 ms
Loss rate: 0.00%
```

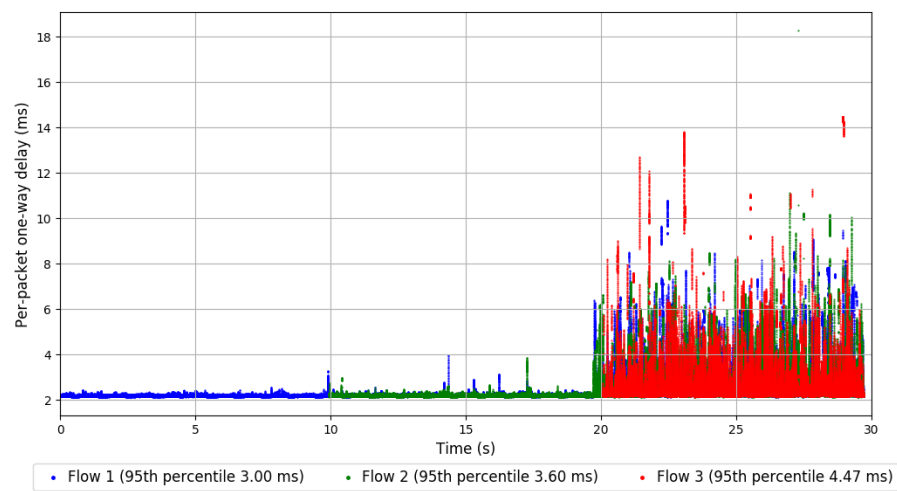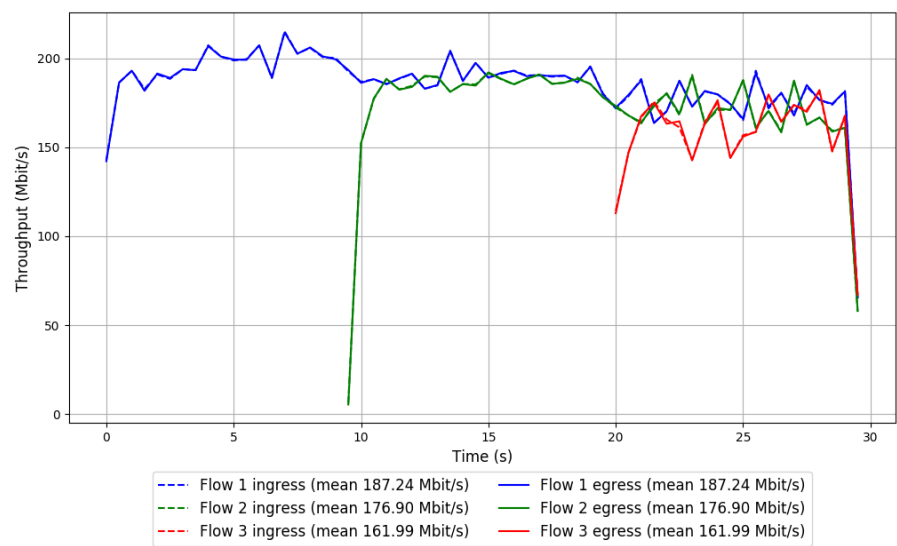Run 2: Report of Indigo-calib — Data Link

```
Run 3: Statistics of Indigo-calib

Start at: 2017-09-21 23:16:51
End at: 2017-09-21 23:17:21
Local clock offset: -0.156 ms
Remote clock offset: -0.222 ms


# Below is generated by plot.py at 2017-09-22 05:19:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 357.56 Mbit/s
95th percentile per-packet one-way delay: 3.494 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 187.24 Mbit/s
95th percentile per-packet one-way delay: 3.005 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 176.90 Mbit/s
95th percentile per-packet one-way delay: 3.604 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 161.99 Mbit/s
95th percentile per-packet one-way delay: 4.474 ms
Loss rate: 0.00%
```

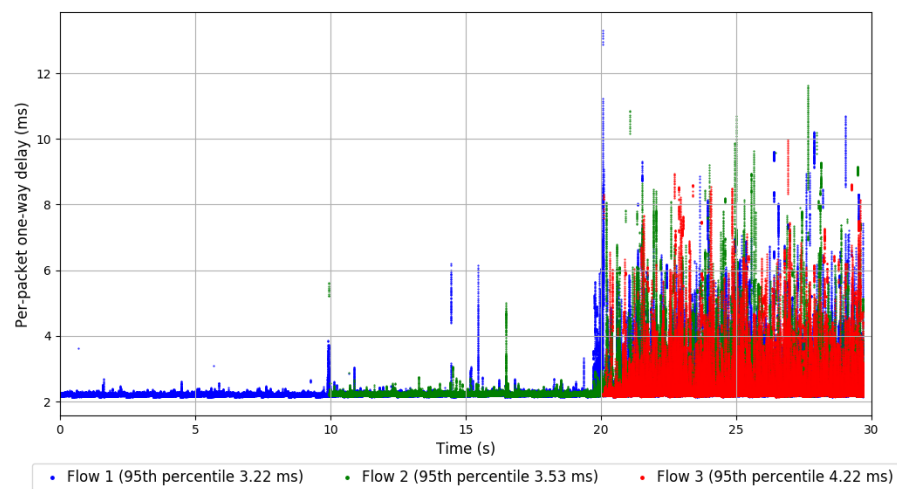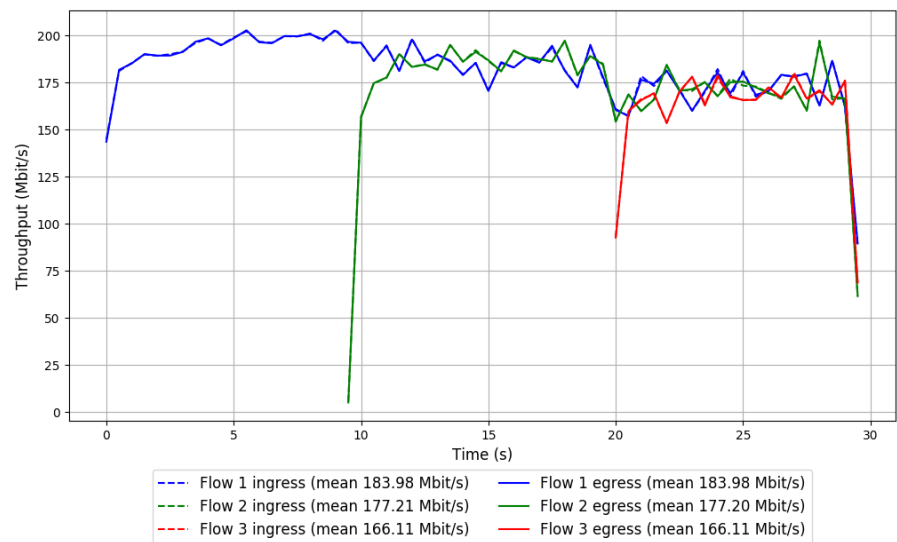# Run 3: Report of Indigo-calib — Data Link

```
Run 4: Statistics of Indigo-calib

Start at: 2017-09-21 23:36:38
End at: 2017-09-21 23:37:08
Local clock offset: -0.159 ms
Remote clock offset: -0.329 ms


# Below is generated by plot.py at 2017-09-22 05:20:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 355.62 Mbit/s
95th percentile per-packet one-way delay: 3.531 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 183.98 Mbit/s
95th percentile per-packet one-way delay: 3.219 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 177.20 Mbit/s
95th percentile per-packet one-way delay: 3.526 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 166.11 Mbit/s
95th percentile per-packet one-way delay: 4.217 ms
Loss rate: 0.00%
```

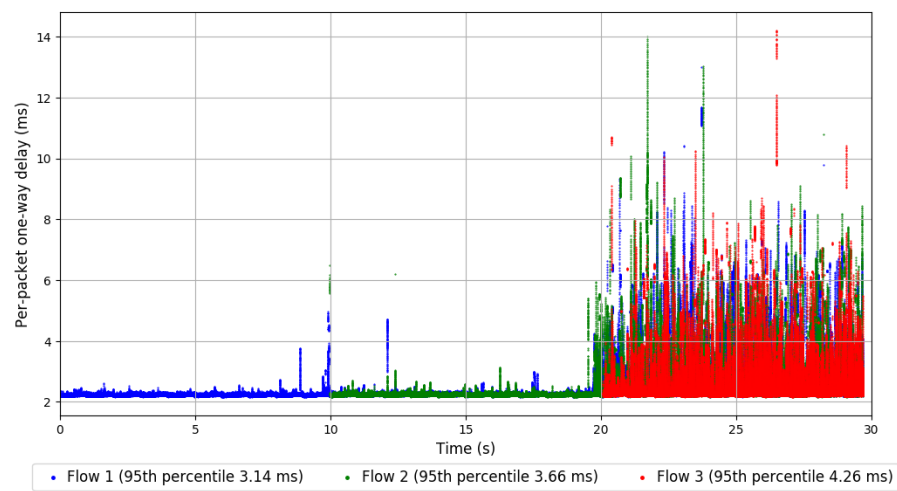Run 4: Report of Indigo-calib — Data Link

```
Run 5: Statistics of Indigo-calib

Start at: 2017-09-21 23:56:34
End at: 2017-09-21 23:57:04
Local clock offset: -0.153 ms
Remote clock offset: -0.152 ms


# Below is generated by plot.py at 2017-09-22 05:20:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 355.54 Mbit/s
95th percentile per-packet one-way delay: 3.557 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 184.42 Mbit/s
95th percentile per-packet one-way delay: 3.136 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 175.83 Mbit/s
95th percentile per-packet one-way delay: 3.659 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 167.47 Mbit/s
95th percentile per-packet one-way delay: 4.260 ms
Loss rate: 0.00%
```
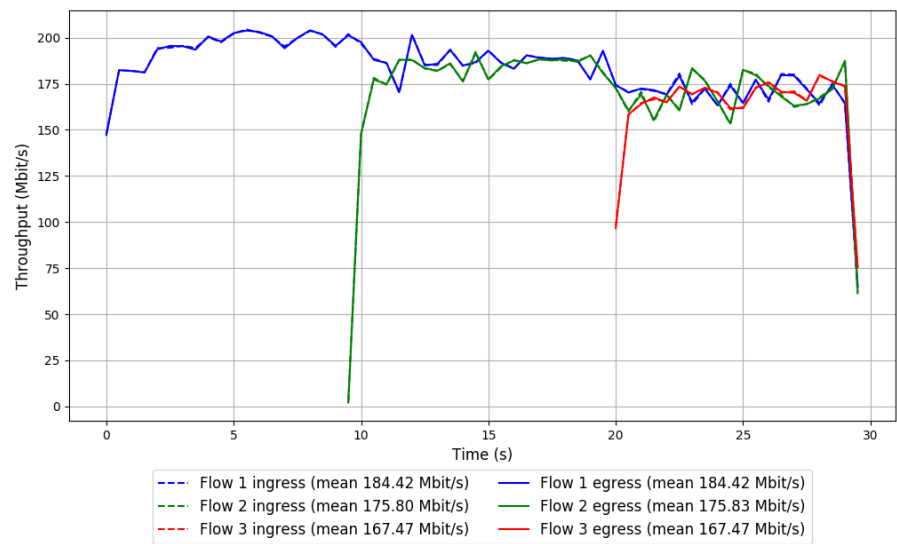
Run 5: Report of Indigo-calib — Data Link

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```
Run 6: Statistics of Indigo-calib

Start at: 2017-09-22 00:16:15
End at: 2017-09-22 00:16:45
Local clock offset: -0.084 ms
Remote clock offset: -0.022 ms

# Below is generated by plot.py at 2017-09-22 05:21:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 362.14 Mbit/s
95th percentile per-packet one-way delay: 3.481 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 186.93 Mbit/s
95th percentile per-packet one-way delay: 3.008 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 180.68 Mbit/s
95th percentile per-packet one-way delay: 3.549 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 169.63 Mbit/s
95th percentile per-packet one-way delay: 4.375 ms
Loss rate: 0.00%
```
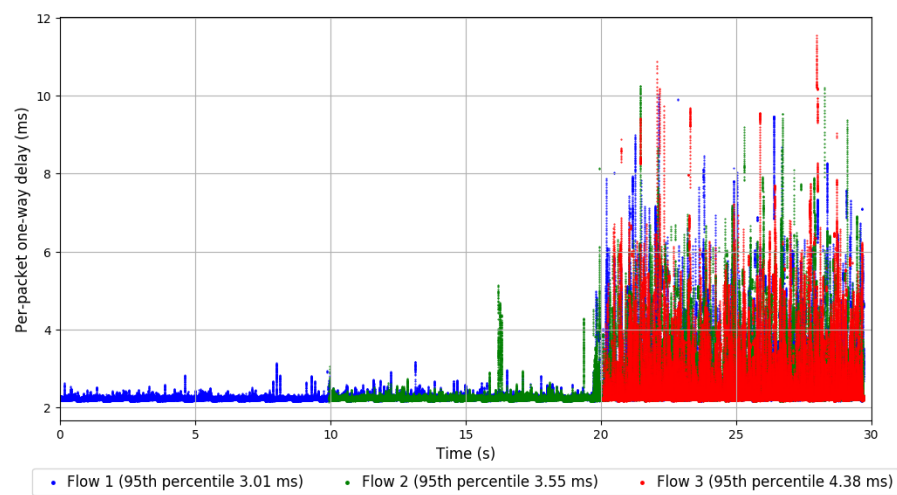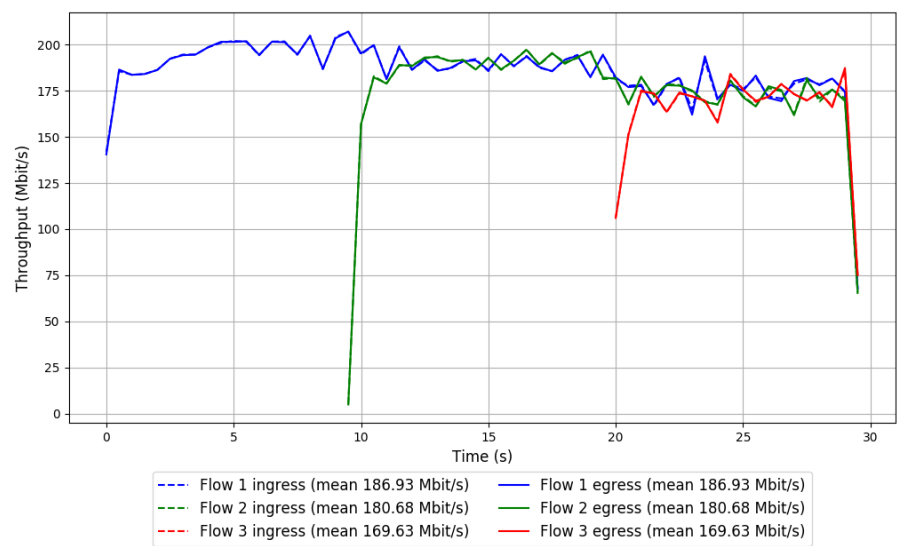
Run 6: Report of Indigo-calib — Data Link

```
Run 7: Statistics of Indigo-calib

Start at: 2017-09-22 00:36:03
End at: 2017-09-22 00:36:33
Local clock offset: -0.145 ms
Remote clock offset: 0.025 ms


# Below is generated by plot.py at 2017-09-22 05:21:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 359.08 Mbit/s
95th percentile per-packet one-way delay: 3.764 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 185.51 Mbit/s
95th percentile per-packet one-way delay: 3.518 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 177.20 Mbit/s
95th percentile per-packet one-way delay: 4.056 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 171.83 Mbit/s
95th percentile per-packet one-way delay: 3.822 ms
Loss rate: 0.00%
```

Run 7: Report of Indigo-calib — Data Link

- - - - Flow 1 ingress (mean 185.51 Mbit/s)   —— Flow 1 egress (mean 185.51 Mbit/s)
- - - - Flow 2 ingress (mean 177.16 Mbit/s)   —— Flow 2 egress (mean 177.20 Mbit/s)
- - - - Flow 3 ingress (mean 171.91 Mbit/s)   —— Flow 3 egress (mean 171.83 Mbit/s)

• Flow 1 (95th percentile 3.52 ms)   • Flow 2 (95th percentile 4.06 ms)   • Flow 3 (95th percentile 3.82 ms)

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```
Run 8: Statistics of Indigo-calib

Start at: 2017-09-22 00:55:51
End at: 2017-09-22 00:56:21
Local clock offset: -0.157 ms
Remote clock offset: -19.731 ms


# Below is generated by plot.py at 2017-09-22 05:21:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 359.08 Mbit/s
95th percentile per-packet one-way delay: -16.236 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 185.64 Mbit/s
95th percentile per-packet one-way delay: -16.815 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 179.52 Mbit/s
95th percentile per-packet one-way delay: -16.231 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 166.87 Mbit/s
95th percentile per-packet one-way delay: -15.065 ms
Loss rate: 0.00%
```
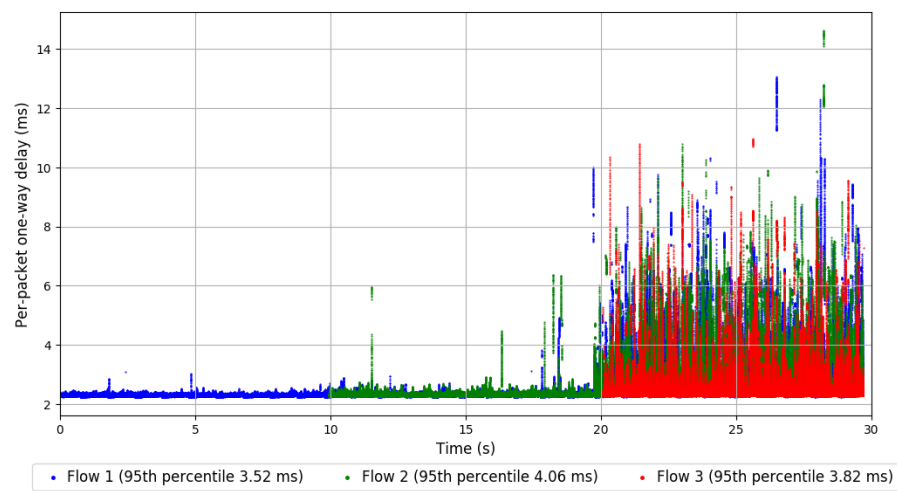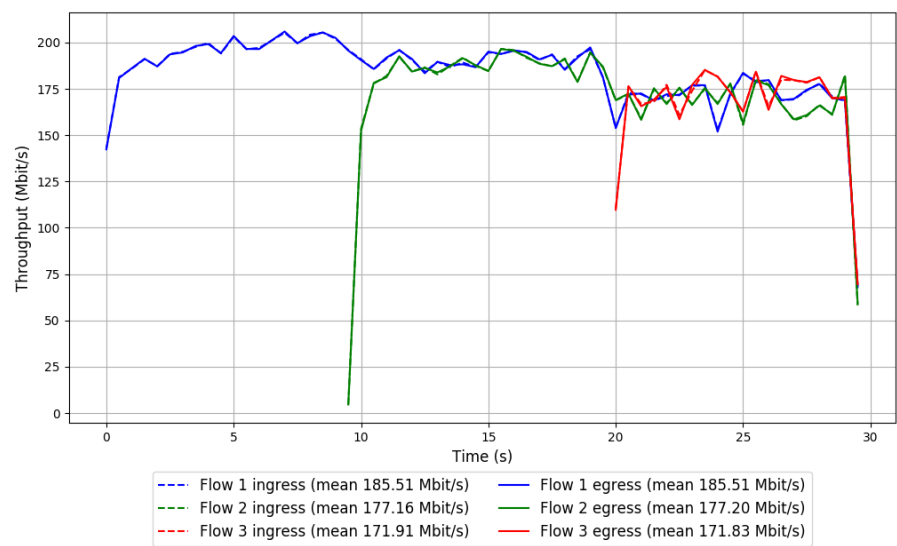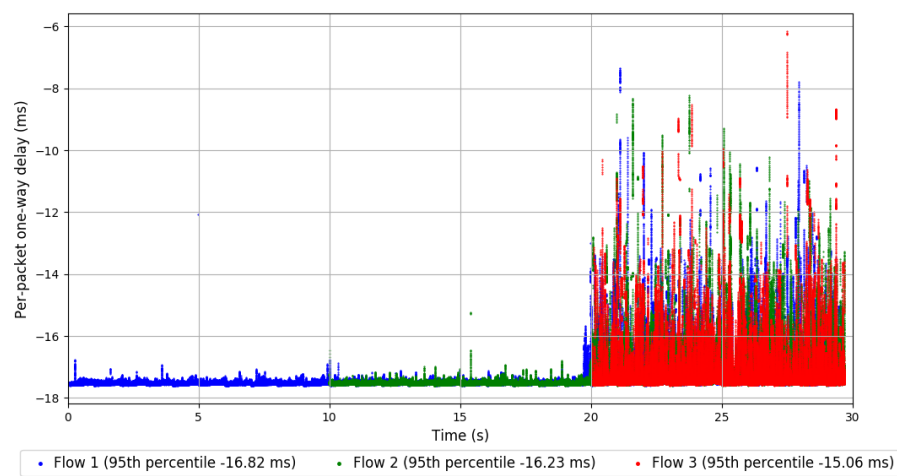
Run 8: Report of Indigo-calib — Data Link

Flow 1 ingress (mean 185.64 Mbit/s)   Flow 1 egress (mean 185.64 Mbit/s)
Flow 2 ingress (mean 179.53 Mbit/s)   Flow 2 egress (mean 179.52 Mbit/s)
Flow 3 ingress (mean 166.87 Mbit/s)   Flow 3 egress (mean 166.87 Mbit/s)

Flow 1 (95th percentile -16.82 ms)   Flow 2 (95th percentile -16.23 ms)   Flow 3 (95th percentile -15.06 ms)
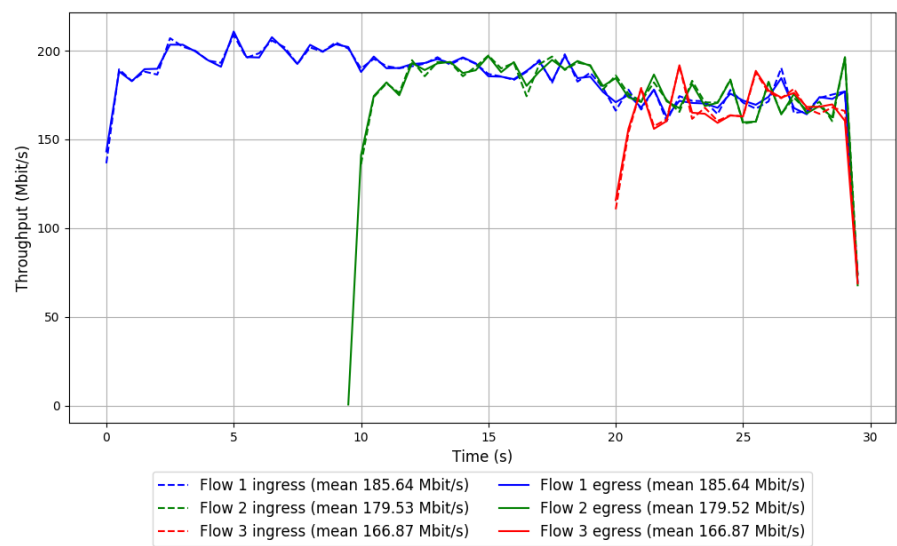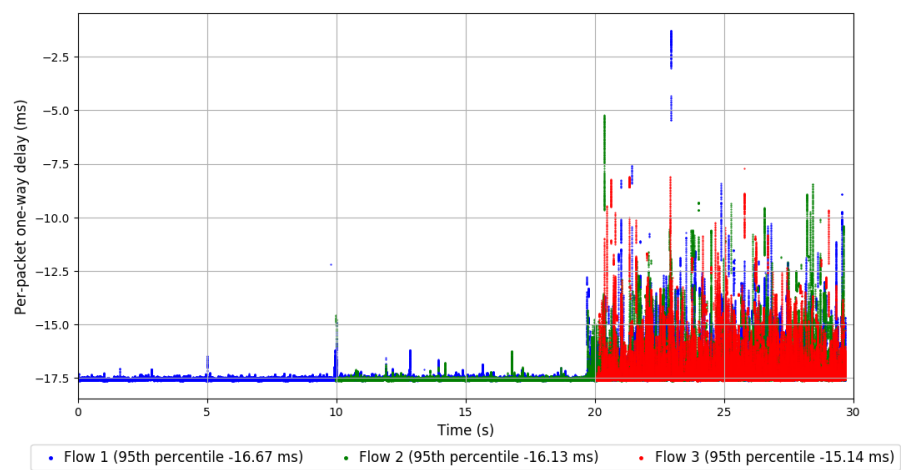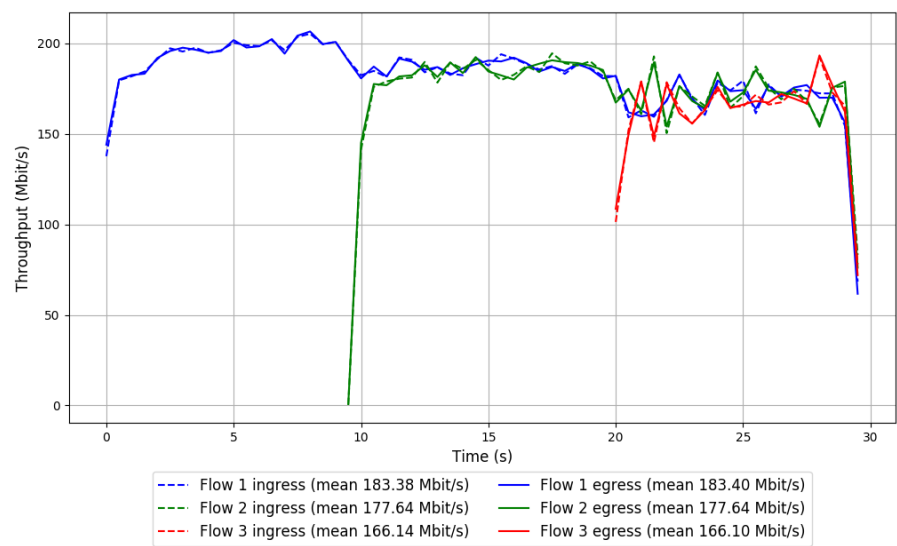
259

```
Run 9: Statistics of Indigo-calib

Start at: 2017-09-22 01:15:34
End at: 2017-09-22 01:16:04
Local clock offset: -0.154 ms
Remote clock offset: -19.657 ms


# Below is generated by plot.py at 2017-09-22 05:22:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 355.20 Mbit/s
95th percentile per-packet one-way delay: -16.162 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 183.40 Mbit/s
95th percentile per-packet one-way delay: -16.670 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 177.64 Mbit/s
95th percentile per-packet one-way delay: -16.134 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 166.10 Mbit/s
95th percentile per-packet one-way delay: -15.139 ms
Loss rate: 0.01%
```

Run 9: Report of Indigo-calib — Data Link

Flow 1 ingress (mean 183.38 Mbit/s)   Flow 1 egress (mean 183.40 Mbit/s)
Flow 2 ingress (mean 177.64 Mbit/s)   Flow 2 egress (mean 177.64 Mbit/s)
Flow 3 ingress (mean 166.14 Mbit/s)   Flow 3 egress (mean 166.10 Mbit/s)

Flow 1 (95th percentile -16.67 ms)   Flow 2 (95th percentile -16.13 ms)   Flow 3 (95th percentile -15.14 ms)

```
Run 10: Statistics of Indigo-calib

Start at: 2017-09-22 01:35:22
End at: 2017-09-22 01:35:52
Local clock offset: -0.128 ms
Remote clock offset: 0.158 ms


# Below is generated by plot.py at 2017-09-22 05:22:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 310.81 Mbit/s
95th percentile per-packet one-way delay: 42.557 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 188.12 Mbit/s
95th percentile per-packet one-way delay: 2.544 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 99.72 Mbit/s
95th percentile per-packet one-way delay: 42.996 ms
Loss rate: 6.10%
-- Flow 3:
Average throughput: 174.12 Mbit/s
95th percentile per-packet one-way delay: 3.159 ms
Loss rate: 0.00%
```
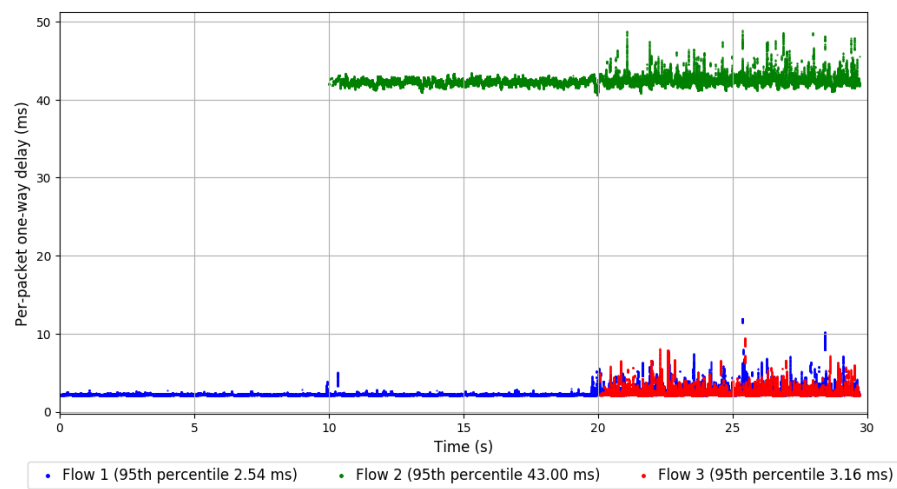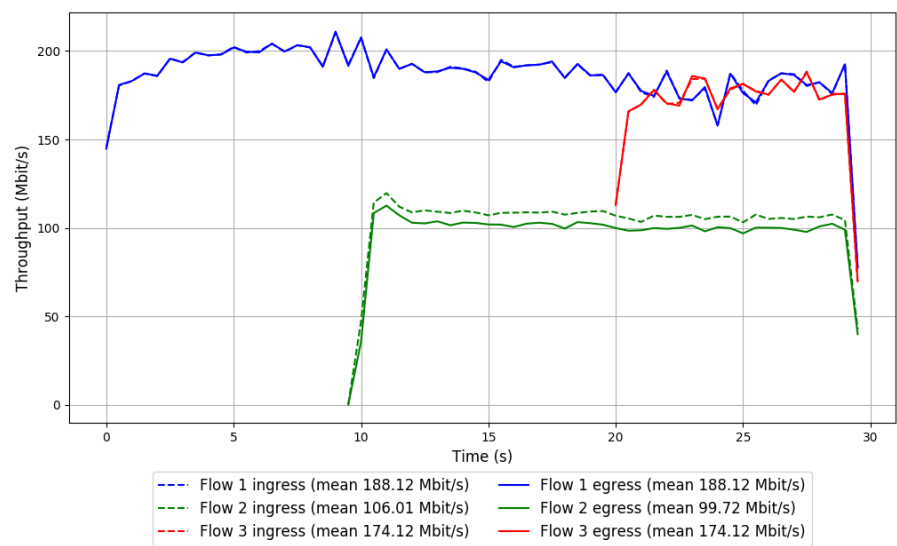
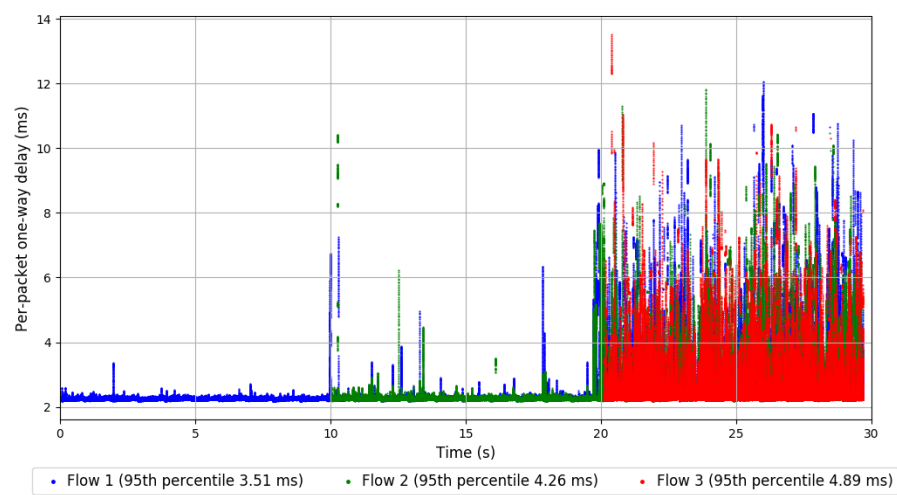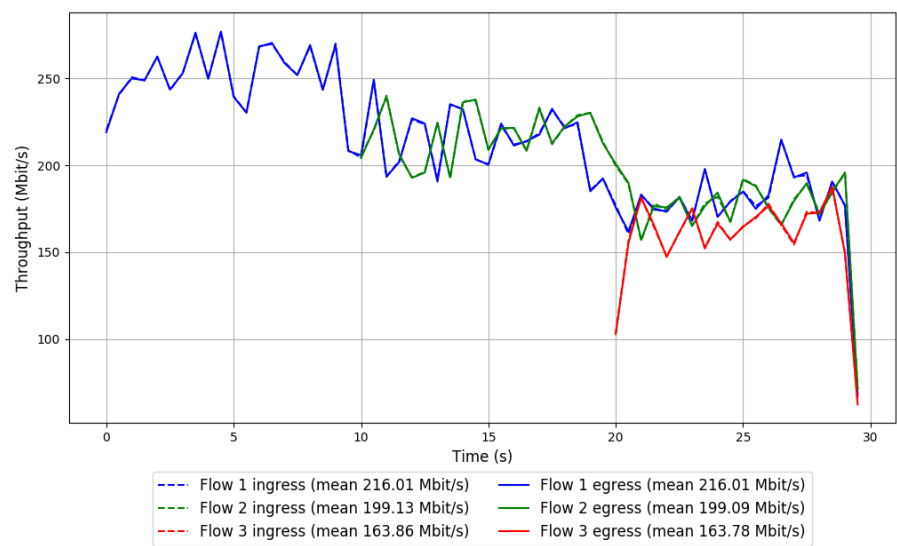Run 10: Report of Indigo-calib — Data Link

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```
Run 1: Statistics of Indigo-delay

Start at: 2017-09-21 22:35:44
End at: 2017-09-21 22:36:14
Local clock offset: 0.097 ms
Remote clock offset: 0.504 ms


# Below is generated by plot.py at 2017-09-22 05:25:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 400.88 Mbit/s
95th percentile per-packet one-way delay: 4.064 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 216.01 Mbit/s
95th percentile per-packet one-way delay: 3.510 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 199.09 Mbit/s
95th percentile per-packet one-way delay: 4.258 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 163.78 Mbit/s
95th percentile per-packet one-way delay: 4.895 ms
Loss rate: 0.04%
```

Run 1: Report of Indigo-delay — Data Link

Flow 1 ingress (mean 216.01 Mbit/s)   Flow 1 egress (mean 216.01 Mbit/s)
Flow 2 ingress (mean 199.13 Mbit/s)   Flow 2 egress (mean 199.09 Mbit/s)
Flow 3 ingress (mean 163.86 Mbit/s)   Flow 3 egress (mean 163.78 Mbit/s)

Flow 1 (95th percentile 3.51 ms)   Flow 2 (95th percentile 4.26 ms)   Flow 3 (95th percentile 4.89 ms)
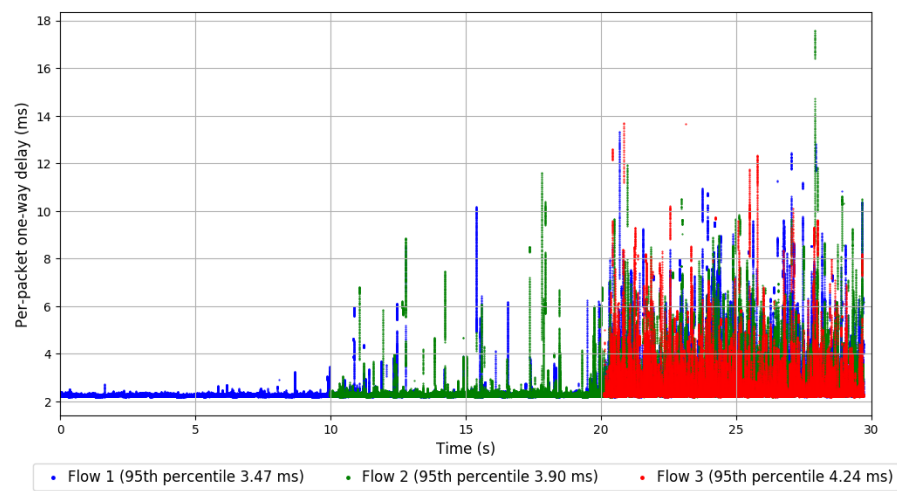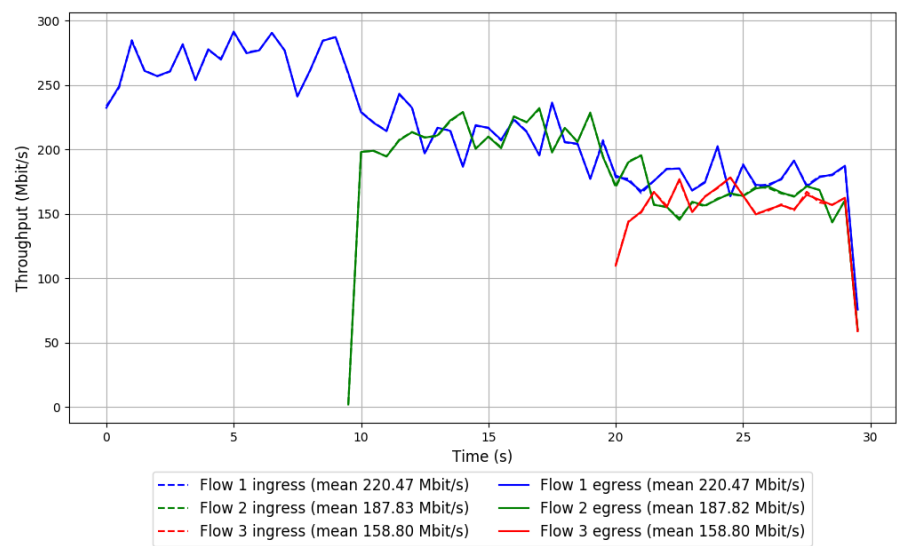
265

```
Run 2: Statistics of Indigo-delay

Start at: 2017-09-21 22:55:34
End at: 2017-09-21 22:56:04
Local clock offset: -0.135 ms
Remote clock offset: -0.038 ms


# Below is generated by plot.py at 2017-09-22 05:25:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 396.55 Mbit/s
95th percentile per-packet one-way delay: 3.747 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 220.47 Mbit/s
95th percentile per-packet one-way delay: 3.470 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 187.82 Mbit/s
95th percentile per-packet one-way delay: 3.897 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 158.80 Mbit/s
95th percentile per-packet one-way delay: 4.235 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-delay — Data Link

Flow 1 ingress (mean 220.47 Mbit/s) --- Flow 1 egress (mean 220.47 Mbit/s)
Flow 2 ingress (mean 187.83 Mbit/s) --- Flow 2 egress (mean 187.82 Mbit/s)
Flow 3 ingress (mean 158.80 Mbit/s) --- Flow 3 egress (mean 158.80 Mbit/s)

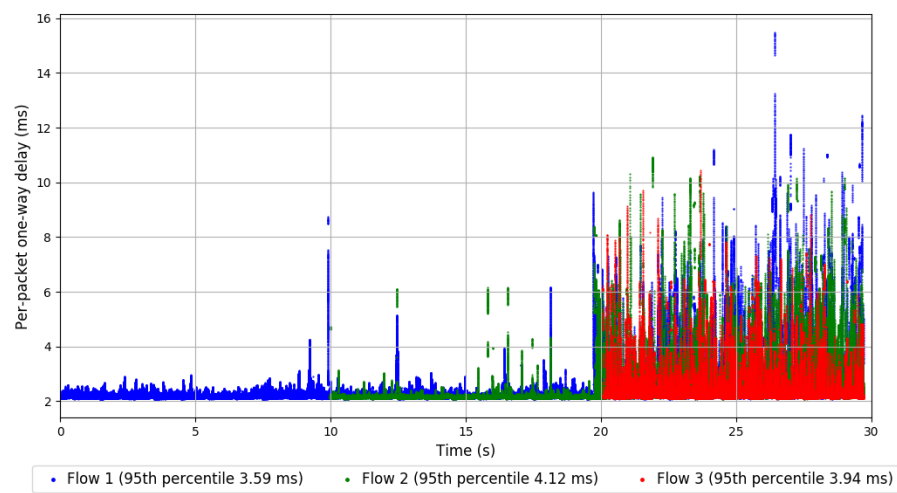Flow 1 (95th percentile 3.47 ms) Flow 2 (95th percentile 3.90 ms) Flow 3 (95th percentile 4.24 ms)
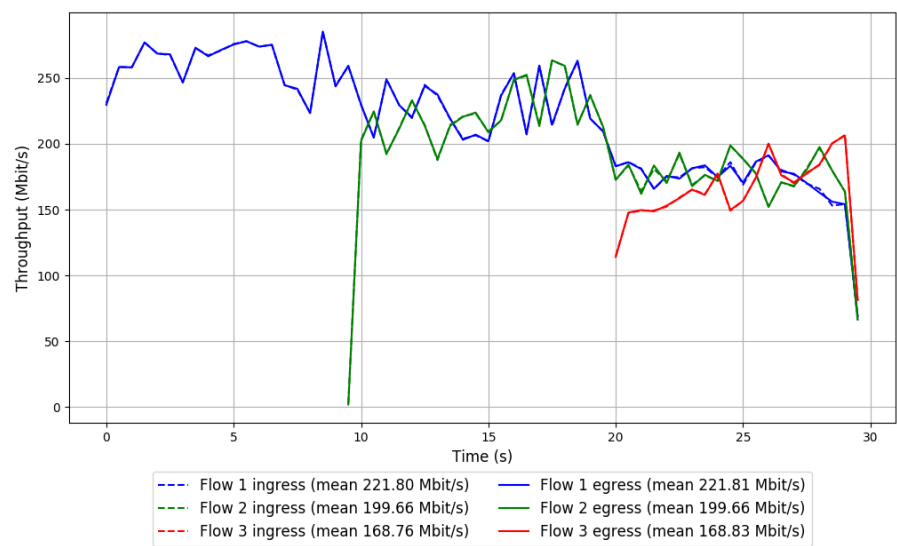
Run 3: Statistics of Indigo-delay

Start at: 2017-09-21 23:15:25
End at: 2017-09-21 23:15:55
Local clock offset: -0.132 ms
Remote clock offset: -0.254 ms

Below is generated by plot.py at 2017-09-22 05:26:38
Datalink statistics
-- Total of 3 flows:
Average throughput: 409.29 Mbit/s
95th percentile per-packet one-way delay: 3.836 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 221.81 Mbit/s
95th percentile per-packet one-way delay: 3.586 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 199.66 Mbit/s
95th percentile per-packet one-way delay: 4.120 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 168.83 Mbit/s
95th percentile per-packet one-way delay: 3.939 ms
Loss rate: 0.00%

Run 3: Report of Indigo-delay — Data Link

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```
Run 4: Statistics of Indigo-delay

Start at: 2017-09-21 23:35:11
End at: 2017-09-21 23:35:41
Local clock offset: -0.13 ms
Remote clock offset: -0.32 ms

# Below is generated by plot.py at 2017-09-22 05:26:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 412.76 Mbit/s
95th percentile per-packet one-way delay: 4.022 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 227.55 Mbit/s
95th percentile per-packet one-way delay: 3.526 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 202.29 Mbit/s
95th percentile per-packet one-way delay: 4.268 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 156.83 Mbit/s
95th percentile per-packet one-way delay: 4.738 ms
Loss rate: 0.01%
```
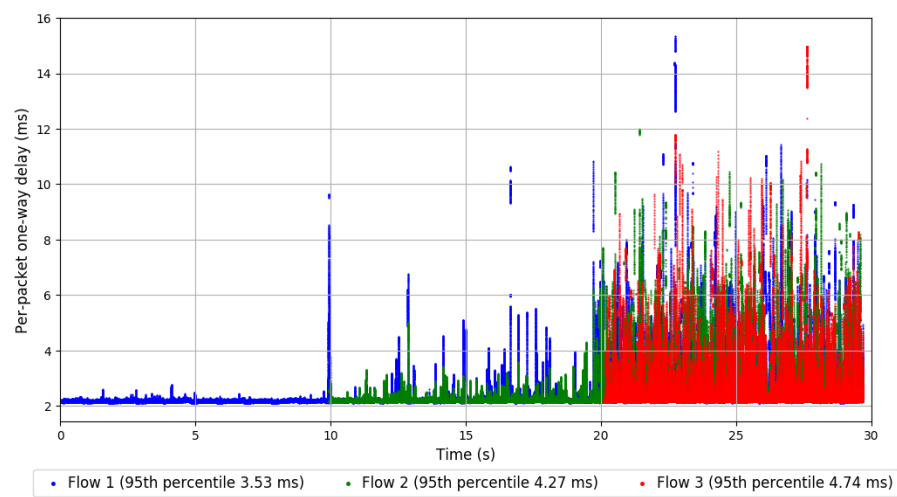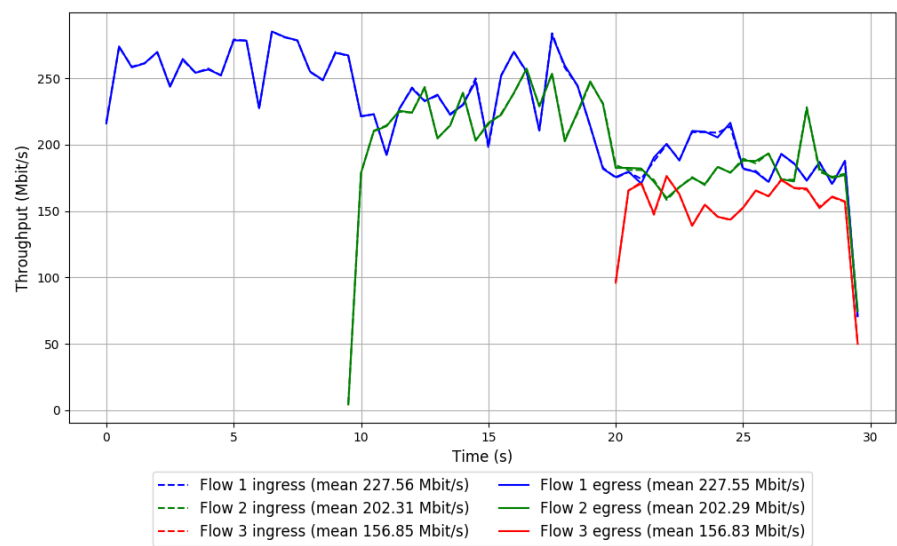
Run 4: Report of Indigo-delay — Data Link

- - - - Flow 1 ingress (mean 227.56 Mbit/s) ——— Flow 1 egress (mean 227.55 Mbit/s)
- - - - Flow 2 ingress (mean 202.31 Mbit/s) ——— Flow 2 egress (mean 202.29 Mbit/s)
- - - - Flow 3 ingress (mean 156.85 Mbit/s) ——— Flow 3 egress (mean 156.83 Mbit/s)

• Flow 1 (95th percentile 3.53 ms) • Flow 2 (95th percentile 4.27 ms) • Flow 3 (95th percentile 4.74 ms)
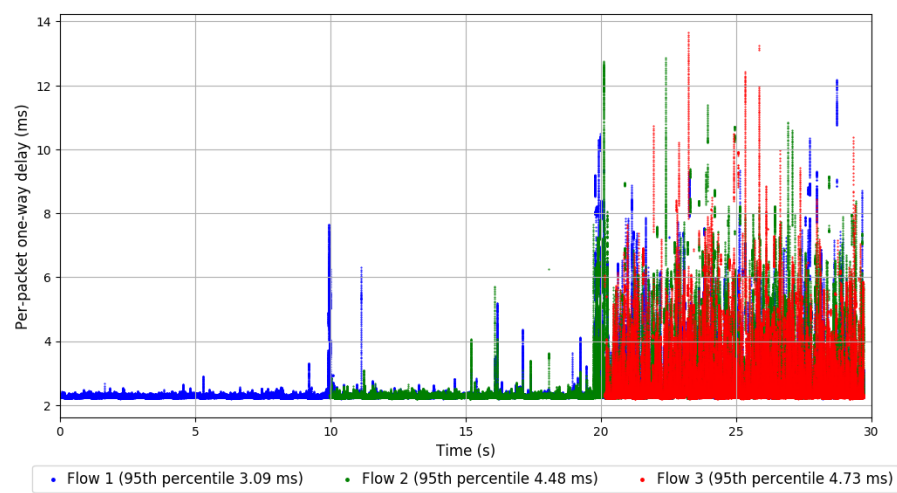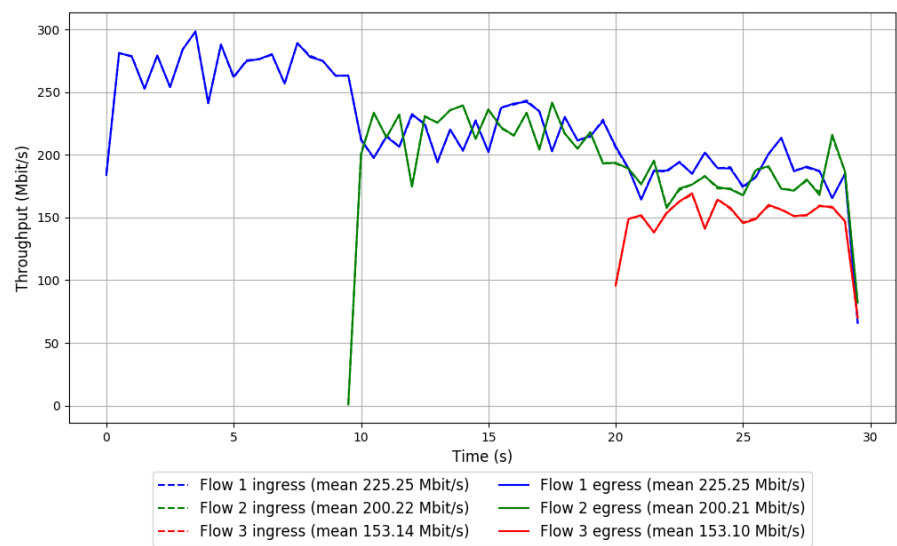
```
Run 5: Statistics of Indigo-delay

Start at: 2017-09-21 23:55:08
End at: 2017-09-21 23:55:38
Local clock offset: -0.172 ms
Remote clock offset: -0.149 ms


# Below is generated by plot.py at 2017-09-22 05:26:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 407.56 Mbit/s
95th percentile per-packet one-way delay: 3.951 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 225.25 Mbit/s
95th percentile per-packet one-way delay: 3.087 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 200.21 Mbit/s
95th percentile per-packet one-way delay: 4.477 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 153.10 Mbit/s
95th percentile per-packet one-way delay: 4.730 ms
Loss rate: 0.03%
```

Run 5: Report of Indigo-delay — Data Link

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```
Run 6: Statistics of Indigo-delay

Start at: 2017-09-22 00:14:48
End at: 2017-09-22 00:15:18
Local clock offset: -0.156 ms
Remote clock offset: 0.001 ms


# Below is generated by plot.py at 2017-09-22 05:27:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 413.85 Mbit/s
95th percentile per-packet one-way delay: 4.006 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 234.24 Mbit/s
95th percentile per-packet one-way delay: 2.980 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 190.56 Mbit/s
95th percentile per-packet one-way delay: 4.466 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 163.80 Mbit/s
95th percentile per-packet one-way delay: 5.225 ms
Loss rate: 0.00%
```
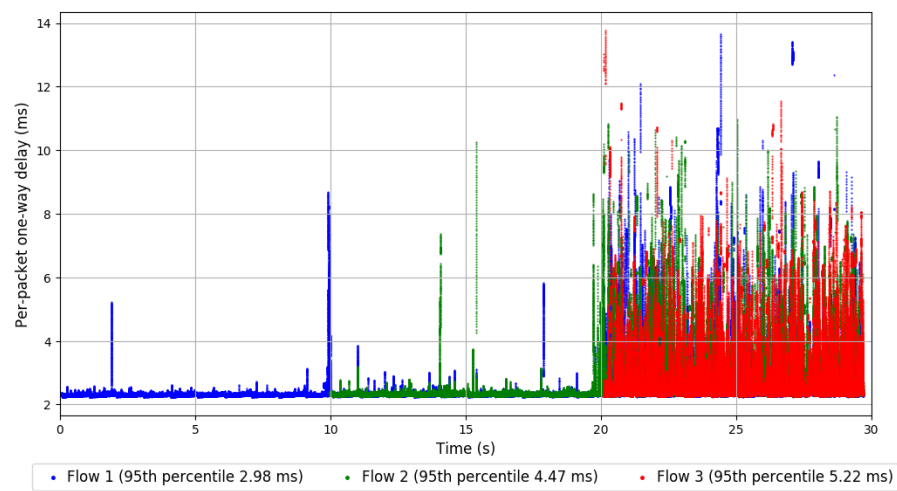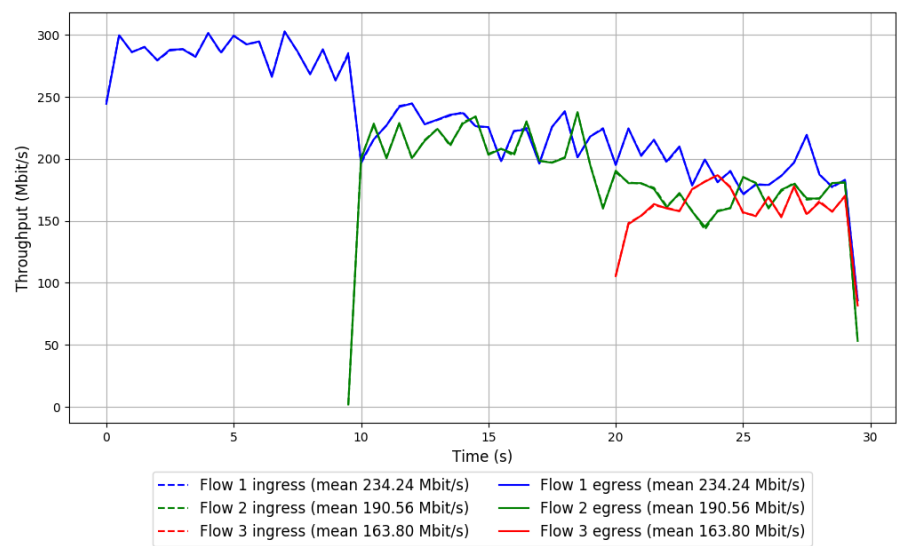
Run 6: Report of Indigo-delay — Data Link

- - - - Flow 1 ingress (mean 234.24 Mbit/s) ——— Flow 1 egress (mean 234.24 Mbit/s)
- - - - Flow 2 ingress (mean 190.56 Mbit/s) ——— Flow 2 egress (mean 190.56 Mbit/s)
- - - - Flow 3 ingress (mean 163.80 Mbit/s) ——— Flow 3 egress (mean 163.80 Mbit/s)

• Flow 1 (95th percentile 2.98 ms)　　• Flow 2 (95th percentile 4.47 ms)　　• Flow 3 (95th percentile 5.22 ms)

```
Run 7: Statistics of Indigo-delay

Start at: 2017-09-22 00:34:37
End at: 2017-09-22 00:35:07
Local clock offset: -0.119 ms
Remote clock offset: 0.053 ms


# Below is generated by plot.py at 2017-09-22 05:27:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 397.88 Mbit/s
95th percentile per-packet one-way delay: 4.129 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 213.63 Mbit/s
95th percentile per-packet one-way delay: 3.912 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 197.37 Mbit/s
95th percentile per-packet one-way delay: 4.367 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 164.61 Mbit/s
95th percentile per-packet one-way delay: 4.264 ms
Loss rate: 0.00%
```
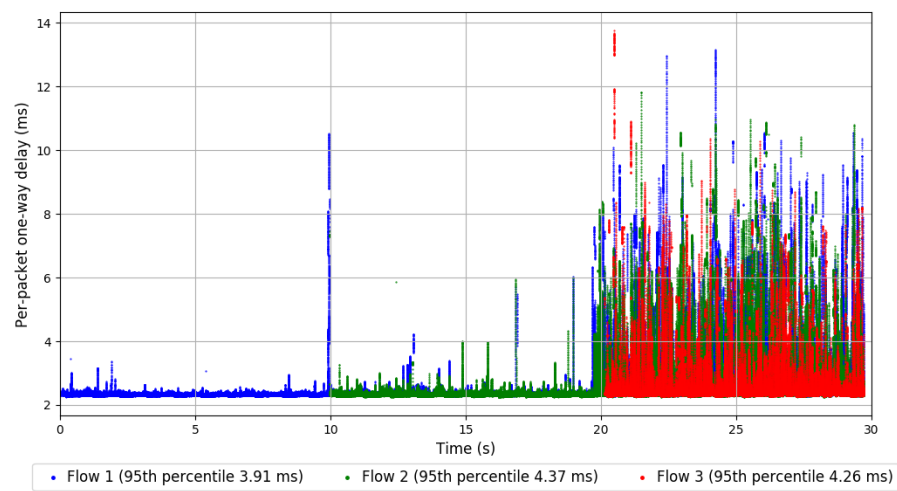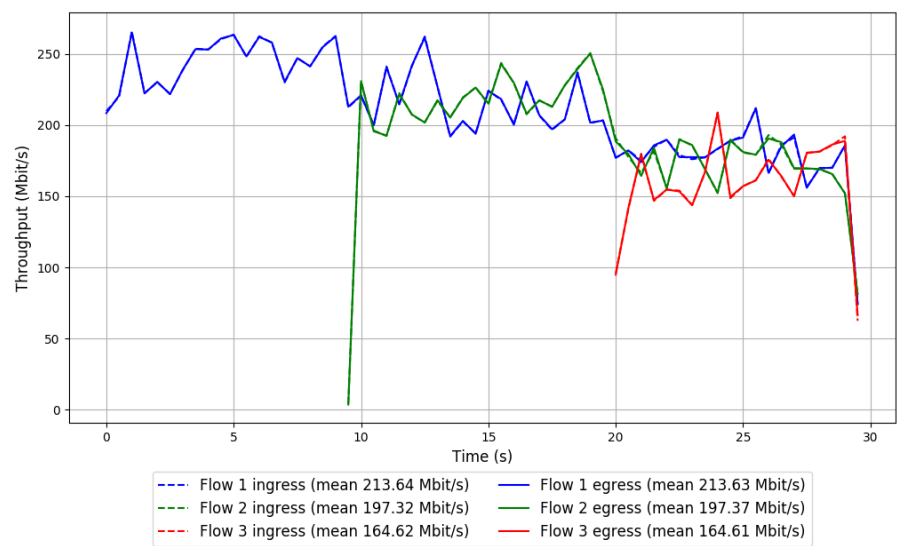
Run 7: Report of Indigo-delay — Data Link

```
Run 8: Statistics of Indigo-delay

Start at: 2017-09-22 00:54:24
End at: 2017-09-22 00:54:54
Local clock offset: -0.227 ms
Remote clock offset: 0.048 ms


# Below is generated by plot.py at 2017-09-22 05:27:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 407.95 Mbit/s
95th percentile per-packet one-way delay: 4.055 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 221.93 Mbit/s
95th percentile per-packet one-way delay: 3.698 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 198.74 Mbit/s
95th percentile per-packet one-way delay: 4.463 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 167.04 Mbit/s
95th percentile per-packet one-way delay: 4.136 ms
Loss rate: 0.00%
```
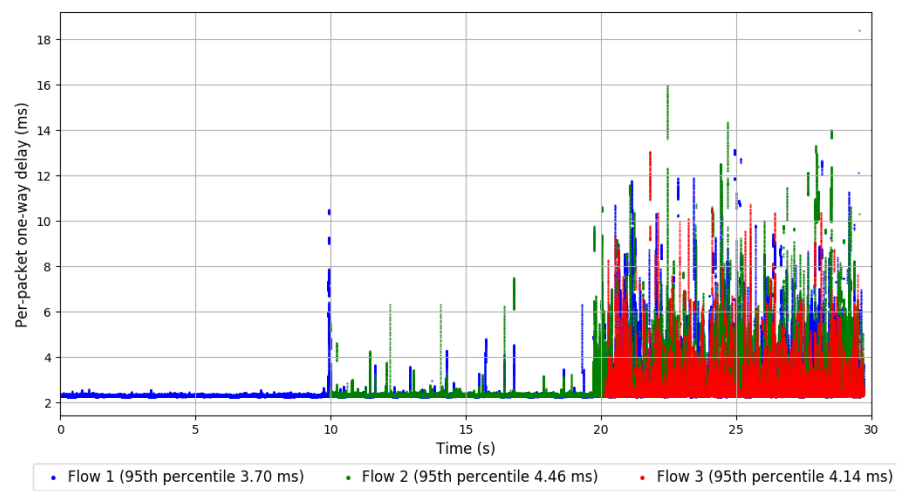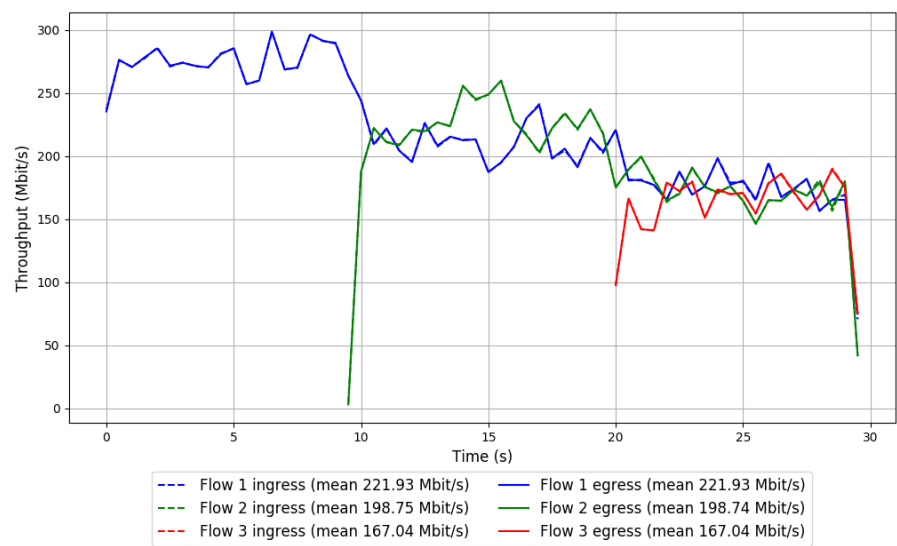
Run 8: Report of Indigo-delay — Data Link

```
Run 9: Statistics of Indigo-delay

Start at: 2017-09-22 01:14:08
End at: 2017-09-22 01:14:38
Local clock offset: -0.154 ms
Remote clock offset: 0.158 ms

# Below is generated by plot.py at 2017-09-22 05:28:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 406.36 Mbit/s
95th percentile per-packet one-way delay: 3.952 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 223.56 Mbit/s
95th percentile per-packet one-way delay: 3.536 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 201.09 Mbit/s
95th percentile per-packet one-way delay: 4.283 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 154.34 Mbit/s
95th percentile per-packet one-way delay: 4.306 ms
Loss rate: 0.00%
```
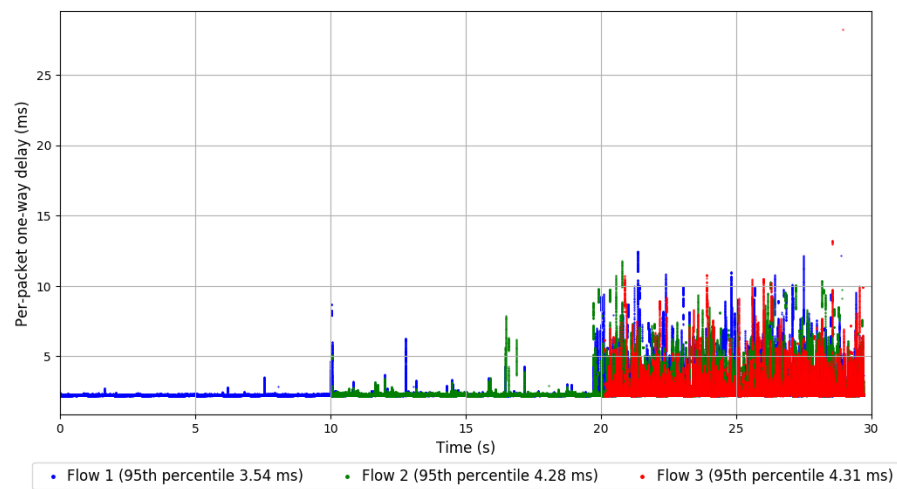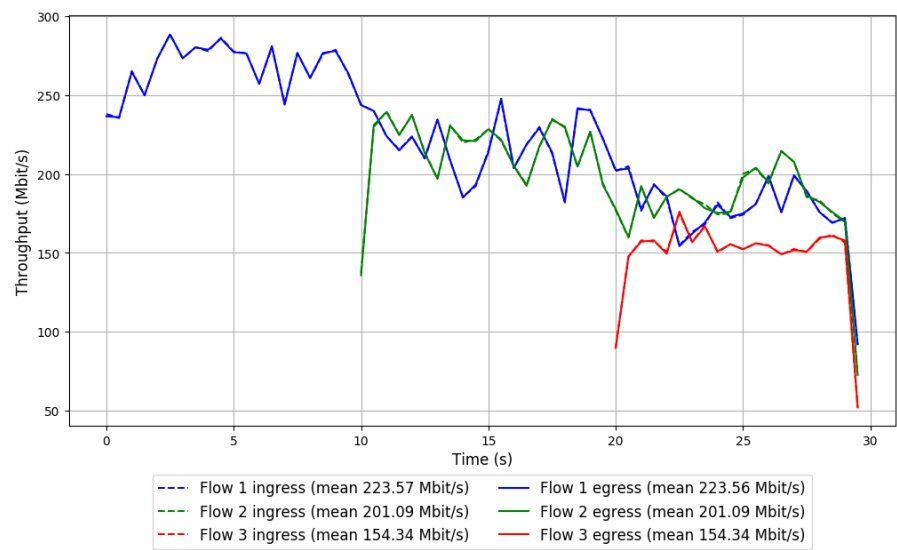
Run 9: Report of Indigo-delay — Data Link

```
Run 10: Statistics of Indigo-delay

Start at: 2017-09-22 01:33:56
End at: 2017-09-22 01:34:26
Local clock offset: -0.14 ms
Remote clock offset: 0.223 ms


# Below is generated by plot.py at 2017-09-22 05:28:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 401.31 Mbit/s
95th percentile per-packet one-way delay: 3.814 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 221.19 Mbit/s
95th percentile per-packet one-way delay: 3.379 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 193.67 Mbit/s
95th percentile per-packet one-way delay: 3.867 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 159.12 Mbit/s
95th percentile per-packet one-way delay: 4.683 ms
Loss rate: 0.00%
```

Run 10: Report of Indigo-delay — Data Link