Pantheon Report

Generated at 2018-01-10 06:36:21 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

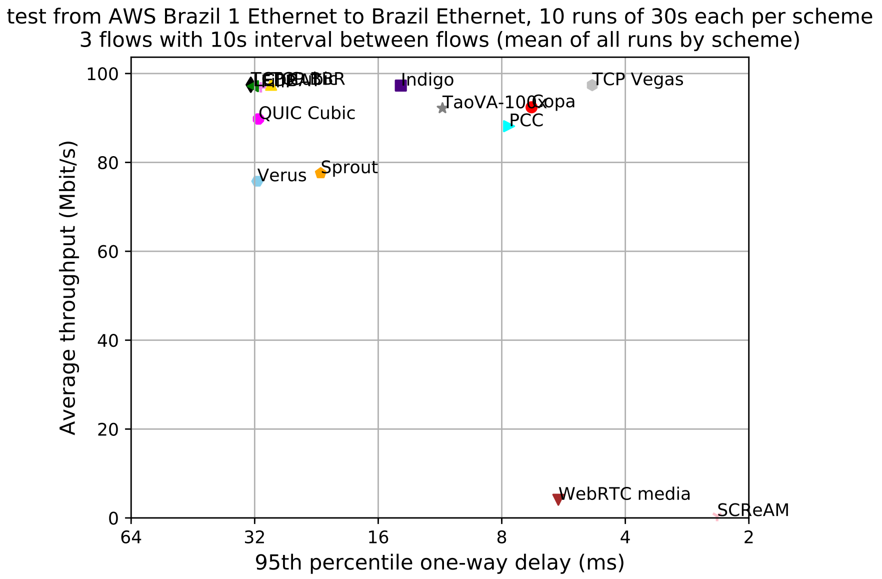
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.

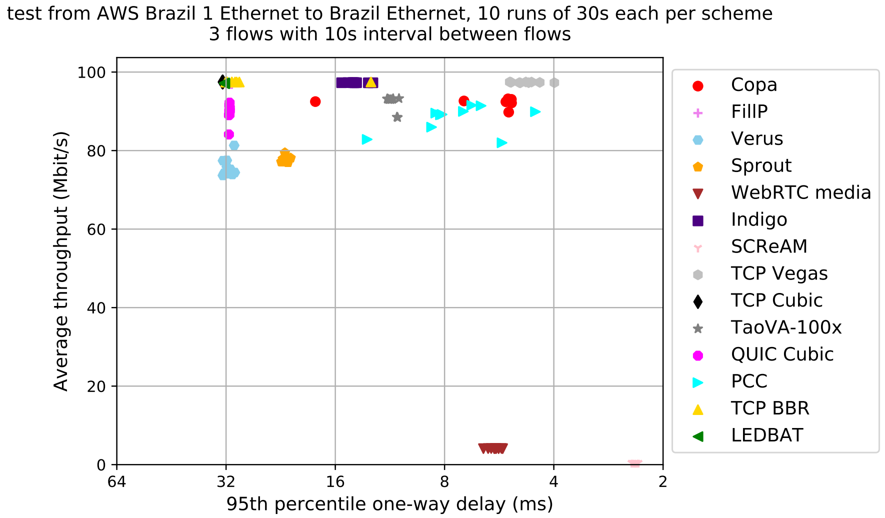
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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: master @ 56d1792c316a5efca3f2d21342905405fedffb48
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/fillp @ ec9585325218d5048c4d4152fa42240af54c6e67
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
 M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
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
```

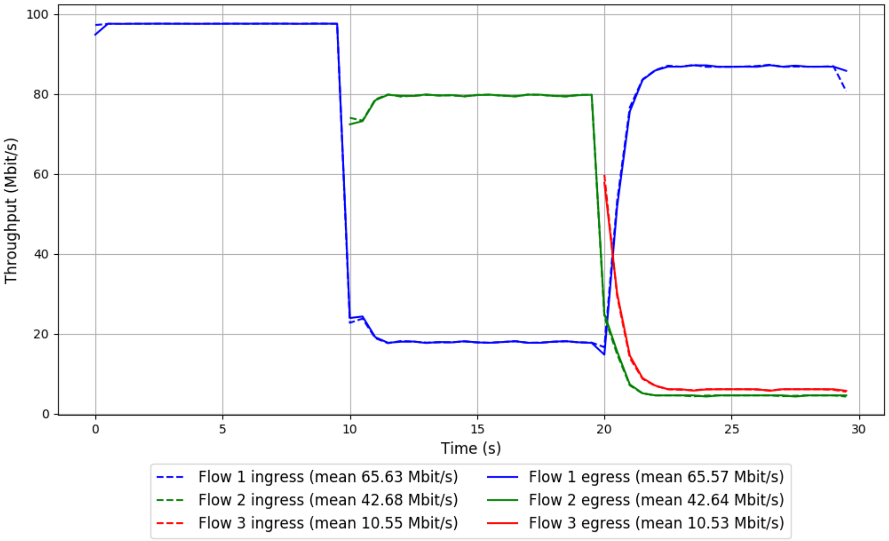

test from AWS Brazil 1 Ethernet to Brazil Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)

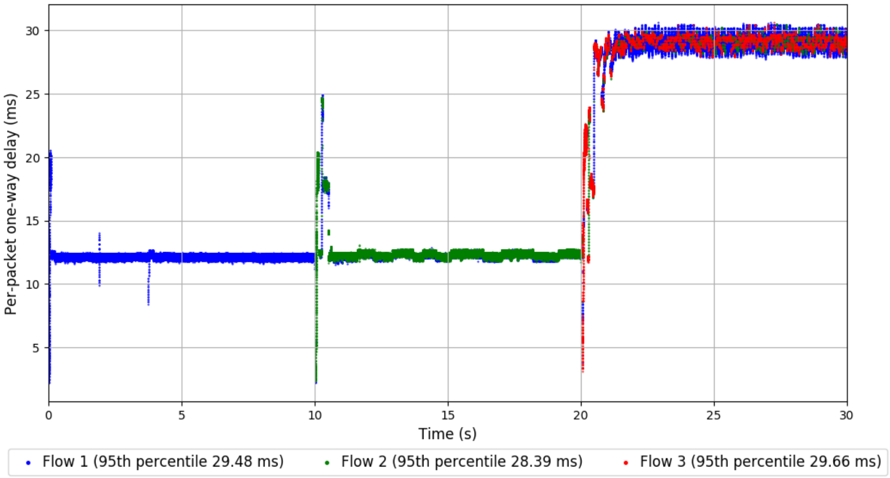

test from AWS Brazil 1 Ethernet to Brazil Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows

		mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
scheme	# runs	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	61.16	43.57	22.03	28.59	24.59	29.73	0.25	0.03	0.08
TCP Cubic	10	66.05	32.90	28.76	32.62	32.75	32.90	0.03	0.09	0.12
LEDBAT	10	62.81	37.96	27.57	32.20	32.41	32.43	0.03	0.06	0.10
PCC	10	69.78	23.33	8.67	6.72	10.96	12.67	0.01	0.01	0.00
QUIC Cubic	10	56.62	36.01	28.13	31.25	31.37	31.39	0.10	0.20	0.22
SCReAM	10	0.22	0.22	0.22	2.39	2.39	2.40	0.00	0.00	0.00
WebRTC media	10	2.31	1.43	0.35	5.47	5.90	7.43	0.00	0.00	0.00
Sprout	10	42.40	37.63	30.72	20.44	22.34	24.28	0.00	0.00	0.00
TaoVA-100x	10	57.70	35.76	40.73	10.53	11.75	13.39	0.01	0.07	0.17
TCP Vegas	10	45.91	48.00	58.75	6.49	4.66	4.82	0.00	0.00	0.00
Verus	10	46.29	30.82	27.48	28.70	31.92	32.78	6.76	11.27	17.67
Copa	10	58.66	38.95	30.89	7.37	7.05	5.95	0.00	0.00	0.00
FillP	10	59.47	39.41	33.89	30.90	30.93	30.95	17.42	23.99	29.30
Indigo	10	57.67	40.09	39.91	13.10	14.19	16.71	0.00	0.00	0.01

```
Run 1: Statistics of TCP BBR

Start at: 2018-01-10 02:29:18
End at: 2018-01-10 02:29:48
Local clock offset: -0.066 ms
Remote clock offset: 0.741 ms

# Below is generated by plot.py at 2018-01-10 05:54:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 29.424 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 65.57 Mbit/s
95th percentile per-packet one-way delay: 29.485 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.64 Mbit/s
95th percentile per-packet one-way delay: 28.387 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.53 Mbit/s
95th percentile per-packet one-way delay: 29.665 ms
Loss rate: 0.00%
```

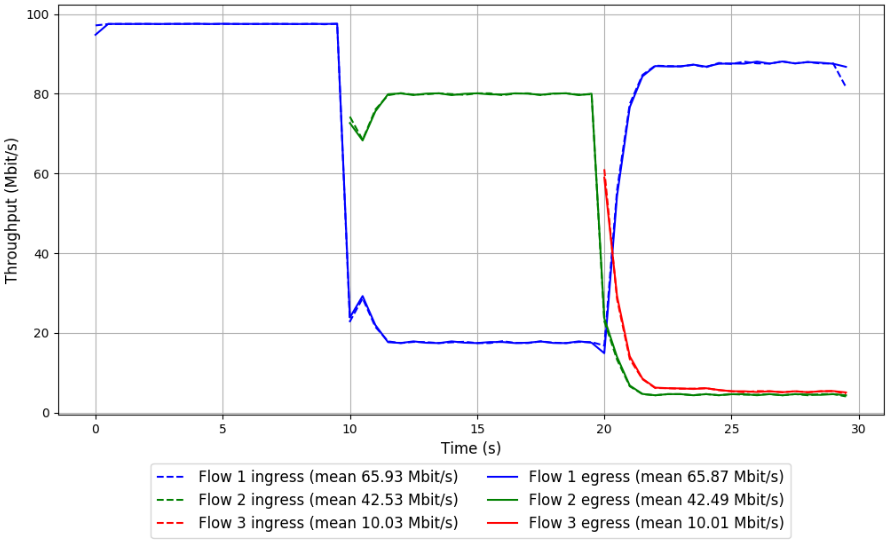
Run 1: Report of TCP BBR — Data Link

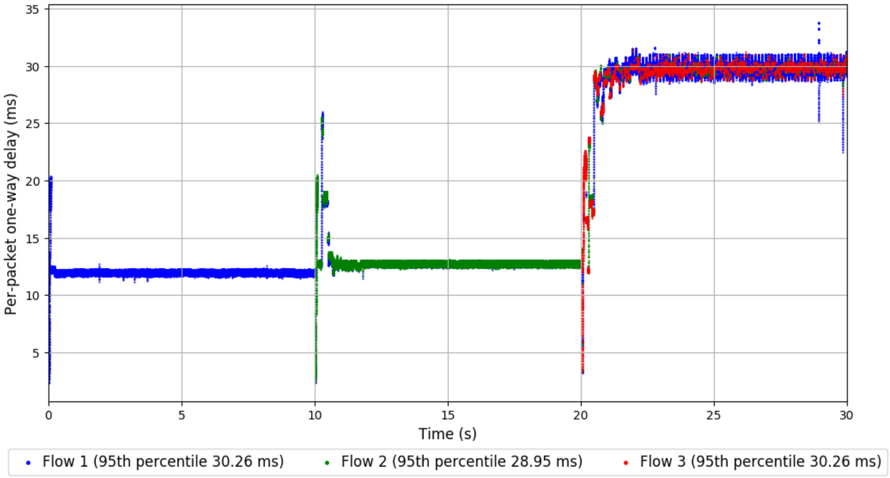




```
Run 2: Statistics of TCP BBR

Start at: 2018-01-10 02:46:26
End at: 2018-01-10 02:46:56
Local clock offset: -0.157 ms
Remote clock offset: 0.635 ms

# Below is generated by plot.py at 2018-01-10 05:54:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 30.228 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 65.87 Mbit/s
95th percentile per-packet one-way delay: 30.259 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.49 Mbit/s
95th percentile per-packet one-way delay: 28.946 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.01 Mbit/s
95th percentile per-packet one-way delay: 30.258 ms
Loss rate: 0.00%
```

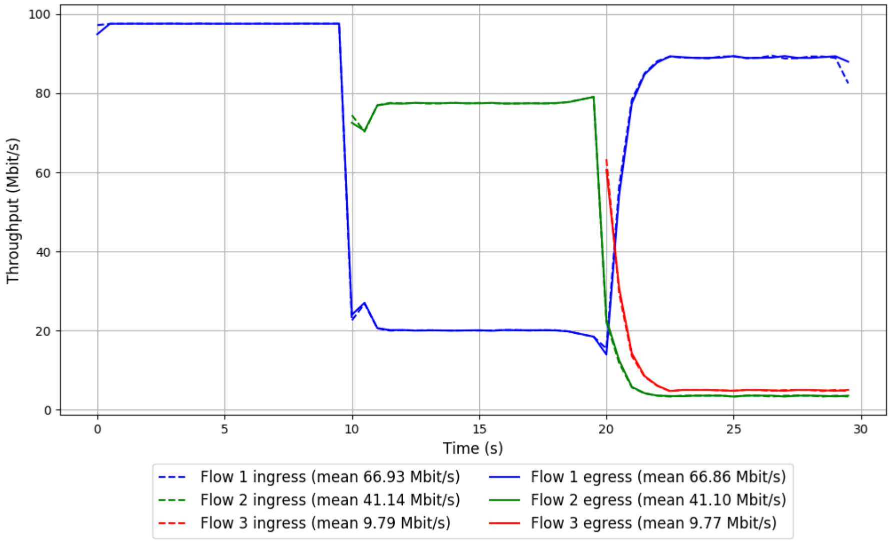
Run 2: Report of TCP BBR — Data Link

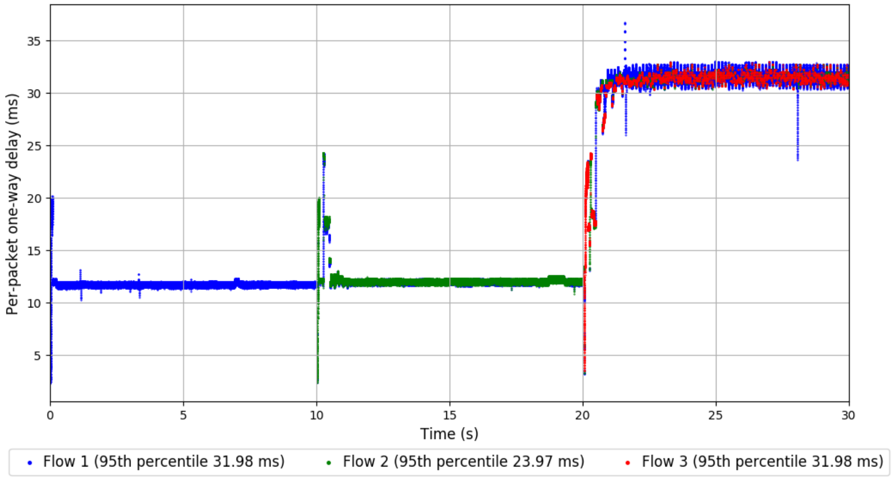




```
Run 3: Statistics of TCP BBR

Start at: 2018-01-10 03:03:34
End at: 2018-01-10 03:04:04
Local clock offset: -0.09 ms
Remote clock offset: 0.516 ms

# Below is generated by plot.py at 2018-01-10 05:54:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 31.953 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 66.86 Mbit/s
95th percentile per-packet one-way delay: 31.983 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 41.10 Mbit/s
95th percentile per-packet one-way delay: 23.971 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.77 Mbit/s
95th percentile per-packet one-way delay: 31.983 ms
Loss rate: 0.00%
```

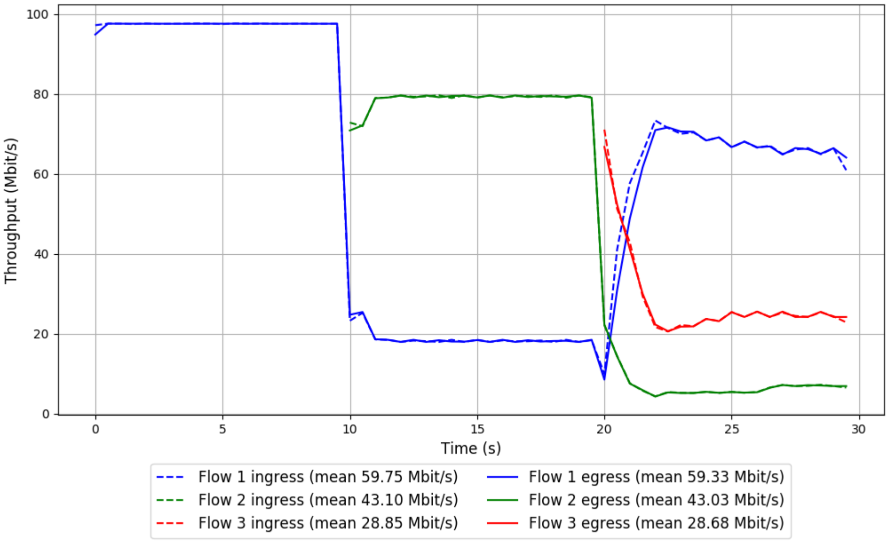
Run 3: Report of TCP BBR — Data Link

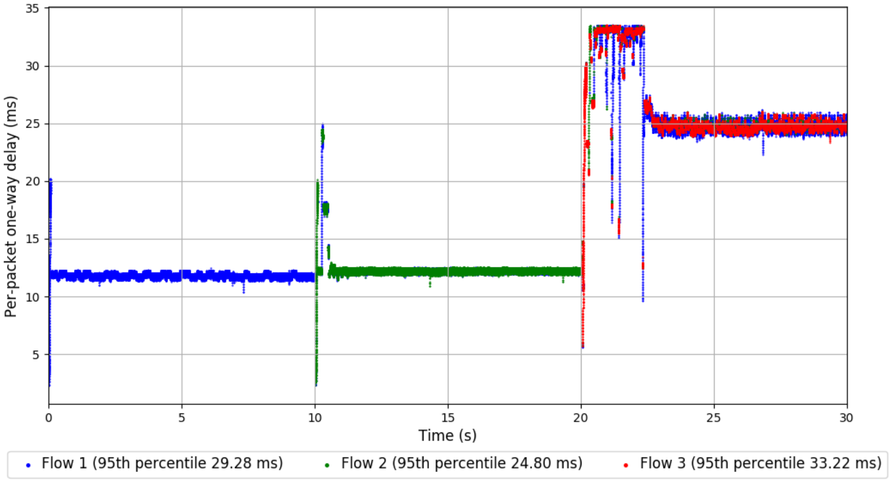




```
Run 4: Statistics of TCP BBR

Start at: 2018-01-10 03:20:42
End at: 2018-01-10 03:21:12
Local clock offset: -0.067 ms
Remote clock offset: 0.404 ms

# Below is generated by plot.py at 2018-01-10 05:54:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.46 Mbit/s
95th percentile per-packet one-way delay: 31.964 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 59.33 Mbit/s
95th percentile per-packet one-way delay: 29.280 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 43.03 Mbit/s
95th percentile per-packet one-way delay: 24.798 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 28.68 Mbit/s
95th percentile per-packet one-way delay: 33.221 ms
Loss rate: 0.48%
```

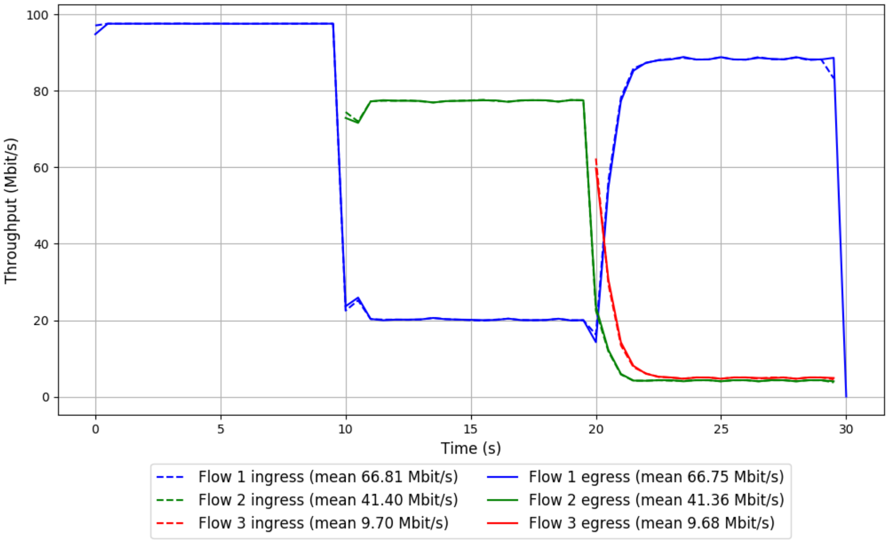
Run 4: Report of TCP BBR — Data Link

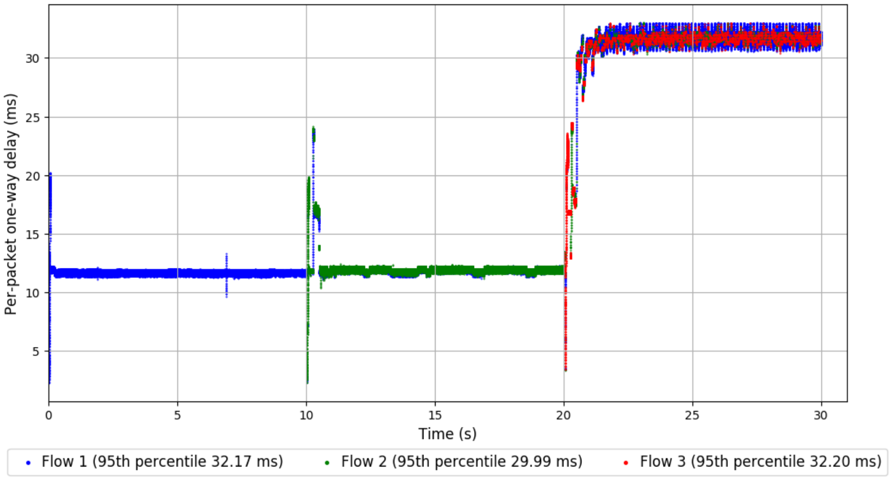




```
Run 5: Statistics of TCP BBR

Start at: 2018-01-10 03:37:51
End at: 2018-01-10 03:38:21
Local clock offset: -0.013 ms
Remote clock offset: 0.148 ms

# Below is generated by plot.py at 2018-01-10 05:54:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 32.078 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 66.75 Mbit/s
95th percentile per-packet one-way delay: 32.174 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 41.36 Mbit/s
95th percentile per-packet one-way delay: 29.988 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.68 Mbit/s
95th percentile per-packet one-way delay: 32.201 ms
Loss rate: 0.00%
```

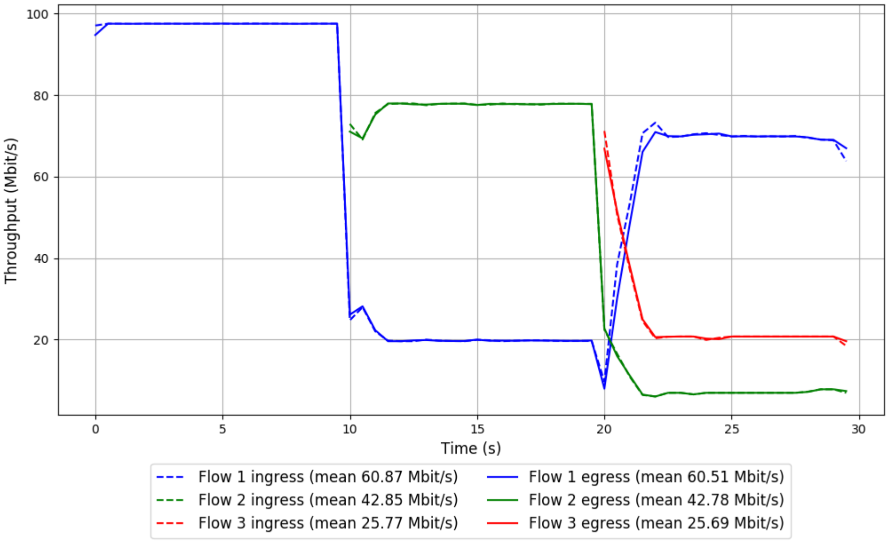
Run 5: Report of TCP BBR — Data Link

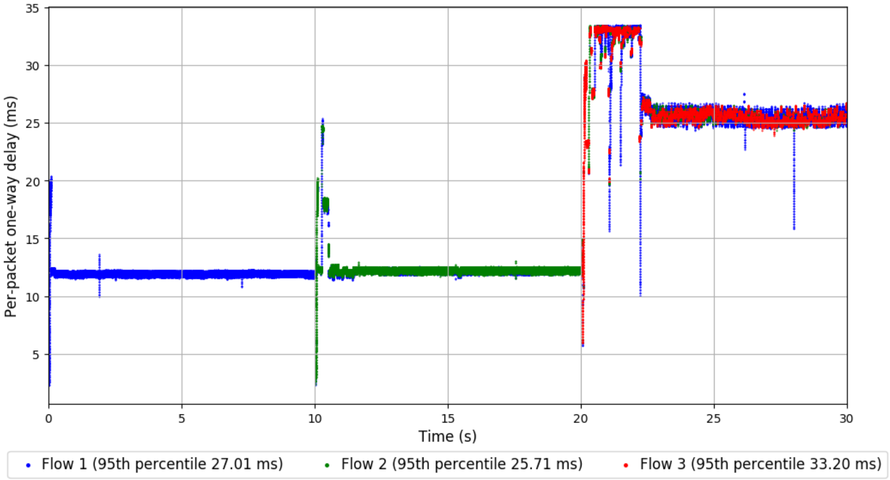




```
Run 6: Statistics of TCP BBR

Start at: 2018-01-10 03:54:59
End at: 2018-01-10 03:55:29
Local clock offset: 0.009 ms
Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2018-01-10 05:54:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 31.761 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 60.51 Mbit/s
95th percentile per-packet one-way delay: 27.007 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 42.78 Mbit/s
95th percentile per-packet one-way delay: 25.713 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 25.69 Mbit/s
95th percentile per-packet one-way delay: 33.201 ms
Loss rate: 0.15%
```

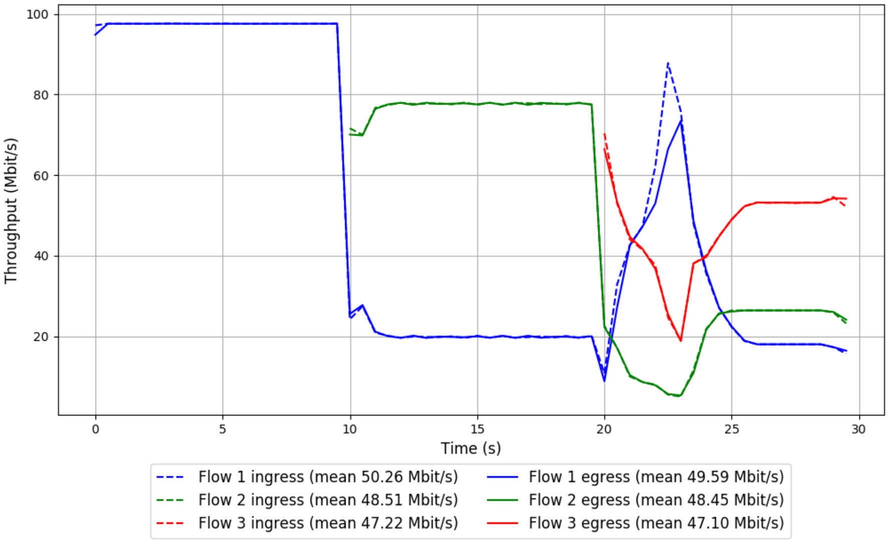
Run 6: Report of TCP BBR — Data Link

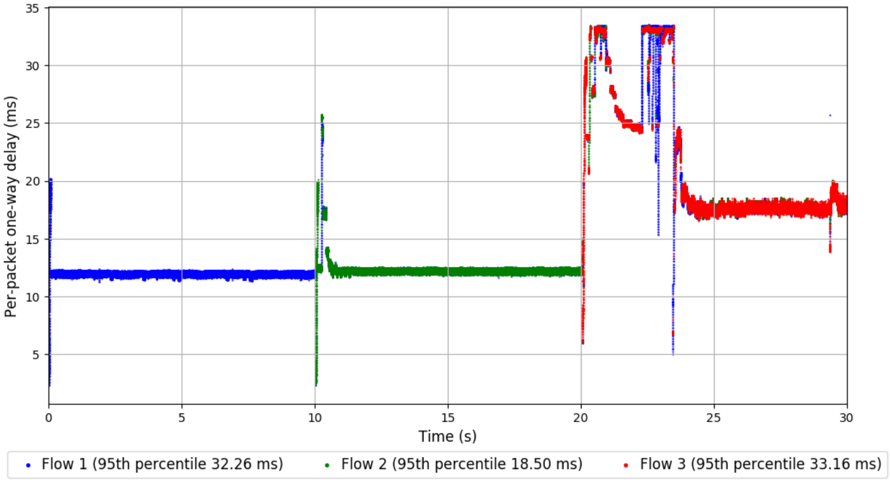




```
Run 7: Statistics of TCP BBR

Start at: 2018-01-10 04:12:07
End at: 2018-01-10 04:12:37
Local clock offset: 0.074 ms
Remote clock offset: -0.108 ms

# Below is generated by plot.py at 2018-01-10 05:54:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.46 Mbit/s
95th percentile per-packet one-way delay: 30.828 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 49.59 Mbit/s
95th percentile per-packet one-way delay: 32.261 ms
Loss rate: 1.29%
-- Flow 2:
Average throughput: 48.45 Mbit/s
95th percentile per-packet one-way delay: 18.500 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 47.10 Mbit/s
95th percentile per-packet one-way delay: 33.162 ms
Loss rate: 0.19%
```

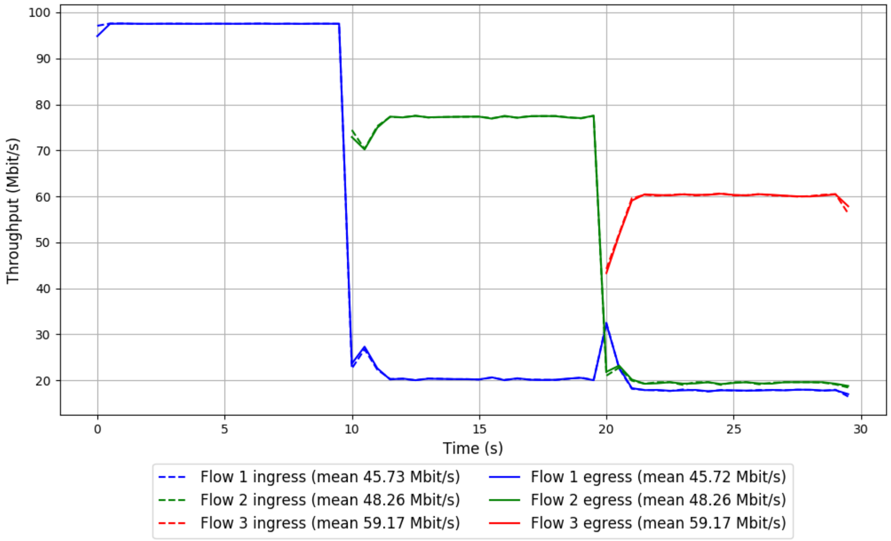
Run 7: Report of TCP BBR — Data Link

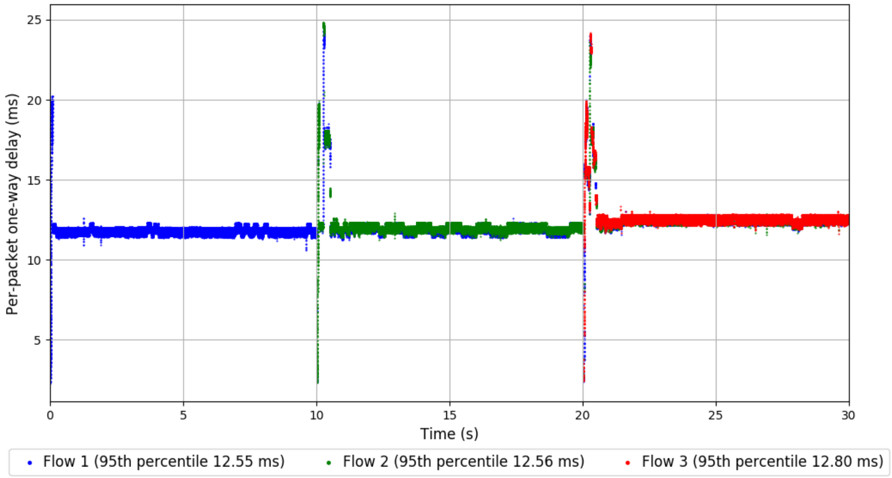




```
Run 8: Statistics of TCP BBR

Start at: 2018-01-10 04:29:16
End at: 2018-01-10 04:29:46
Local clock offset: 0.025 ms
Remote clock offset: -0.147 ms

# Below is generated by plot.py at 2018-01-10 05:54:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 12.761 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 45.72 Mbit/s
95th percentile per-packet one-way delay: 12.546 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 48.26 Mbit/s
95th percentile per-packet one-way delay: 12.564 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 59.17 Mbit/s
95th percentile per-packet one-way delay: 12.796 ms
Loss rate: 0.00%
```

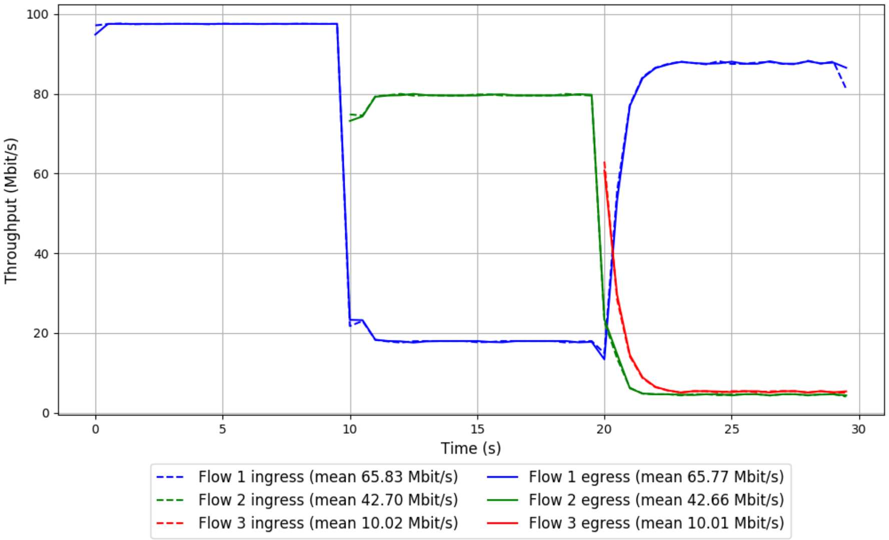
Run 8: Report of TCP BBR — Data Link

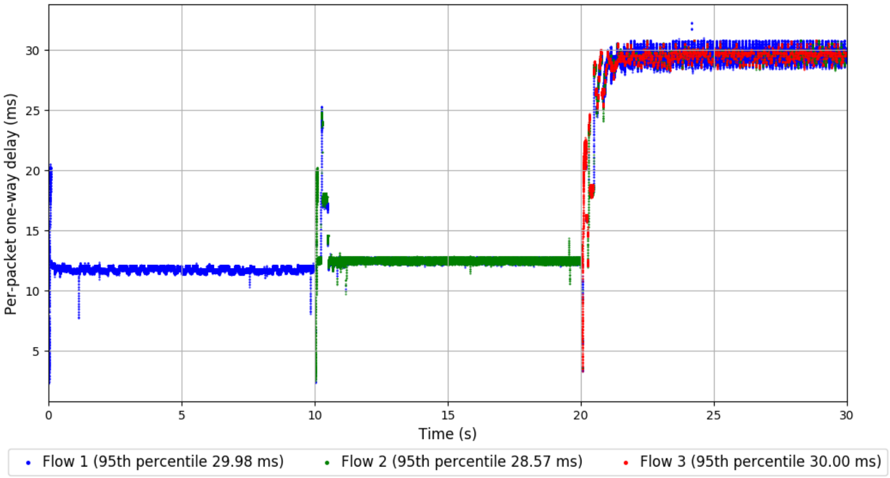




```
Run 9: Statistics of TCP BBR

Start at: 2018-01-10 04:46:25
End at: 2018-01-10 04:46:55
Local clock offset: 0.015 ms
Remote clock offset: -0.237 ms

# Below is generated by plot.py at 2018-01-10 05:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 29.921 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 65.77 Mbit/s
95th percentile per-packet one-way delay: 29.985 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.66 Mbit/s
95th percentile per-packet one-way delay: 28.570 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.01 Mbit/s
95th percentile per-packet one-way delay: 29.998 ms
Loss rate: 0.00%
```

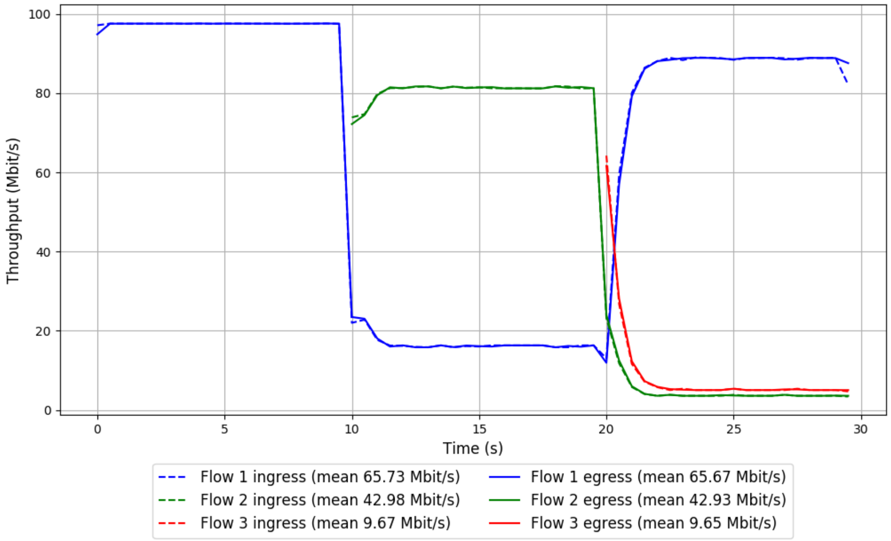
Run 9: Report of TCP BBR — Data Link

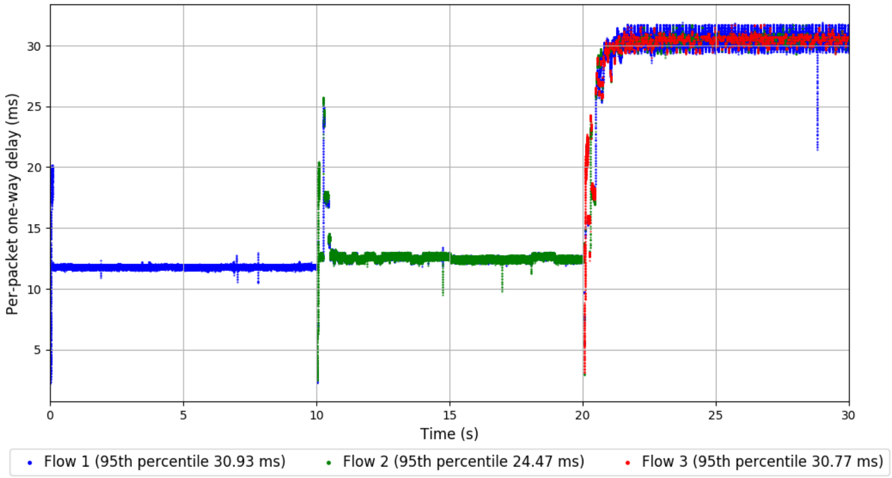




```
Run 10: Statistics of TCP BBR

Start at: 2018-01-10 05:03:33
End at: 2018-01-10 05:04:03
Local clock offset: 0.061 ms
Remote clock offset: -0.315 ms

# Below is generated by plot.py at 2018-01-10 05:57:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.45 Mbit/s
95th percentile per-packet one-way delay: 30.862 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 65.67 Mbit/s
95th percentile per-packet one-way delay: 30.927 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.93 Mbit/s
95th percentile per-packet one-way delay: 24.471 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.65 Mbit/s
95th percentile per-packet one-way delay: 30.767 ms
Loss rate: 0.00%
```

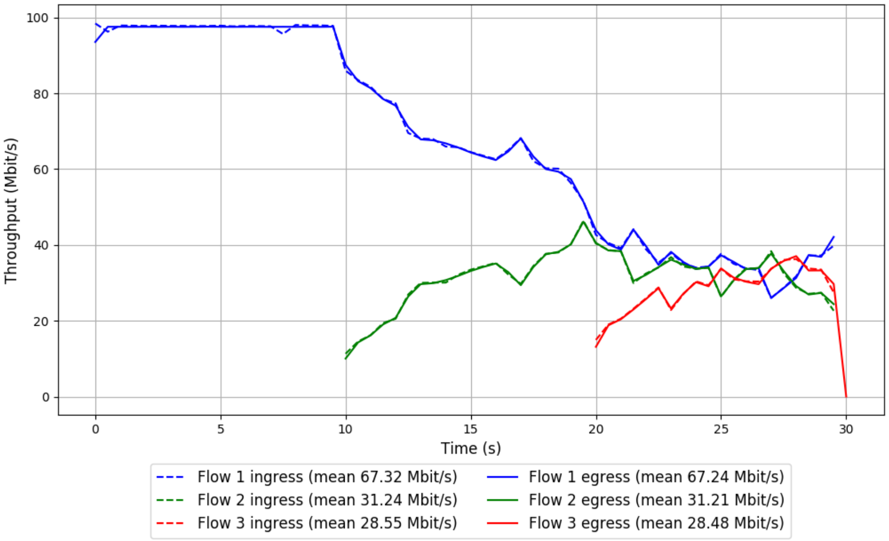
Run 10: Report of TCP BBR — Data Link

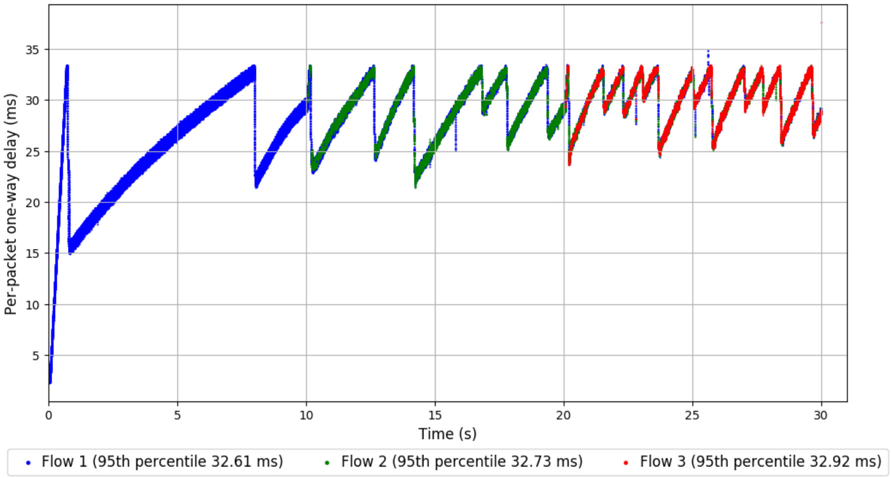




```
Run 1: Statistics of TCP Cubic

Start at: 2018-01-10 02:37:20
End at: 2018-01-10 02:37:50
Local clock offset: -0.082 ms
Remote clock offset: 0.736 ms

# Below is generated by plot.py at 2018-01-10 05:57:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.44 Mbit/s
95th percentile per-packet one-way delay: 32.682 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 67.24 Mbit/s
95th percentile per-packet one-way delay: 32.611 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 31.21 Mbit/s
95th percentile per-packet one-way delay: 32.733 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 28.48 Mbit/s
95th percentile per-packet one-way delay: 32.918 ms
Loss rate: 0.16%
```

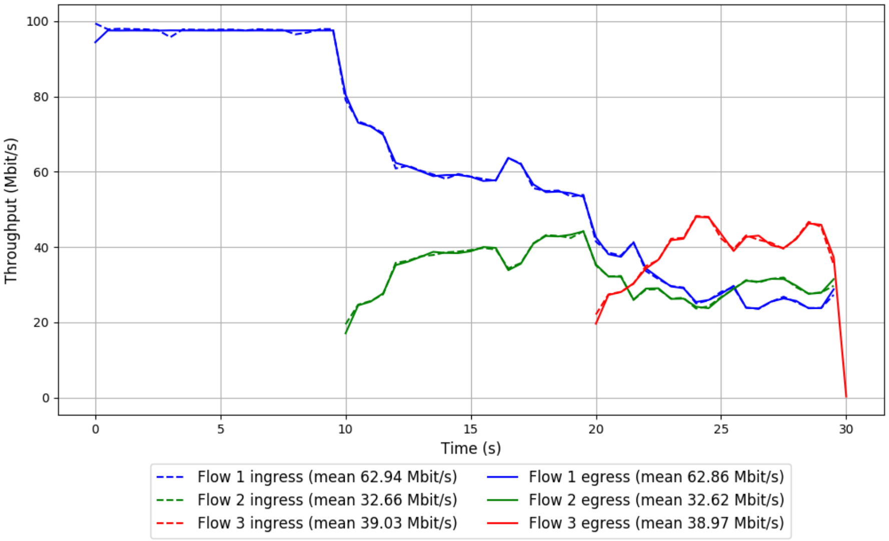
Run 1: Report of TCP Cubic — Data Link

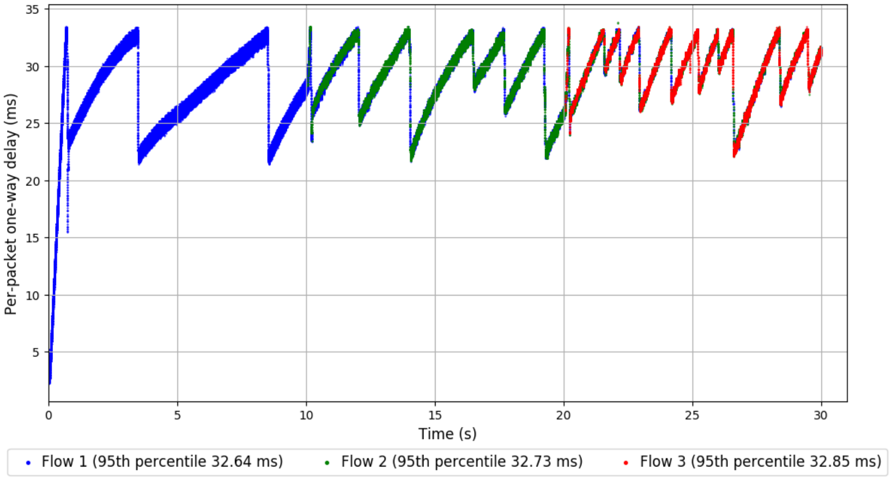




```
Run 2: Statistics of TCP Cubic

Start at: 2018-01-10 02:54:28
End at: 2018-01-10 02:54:58
Local clock offset: -0.082 ms
Remote clock offset: 0.563 ms

# Below is generated by plot.py at 2018-01-10 05:57:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 32.690 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 62.86 Mbit/s
95th percentile per-packet one-way delay: 32.640 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 32.62 Mbit/s
95th percentile per-packet one-way delay: 32.732 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 38.97 Mbit/s
95th percentile per-packet one-way delay: 32.852 ms
Loss rate: 0.12%
```

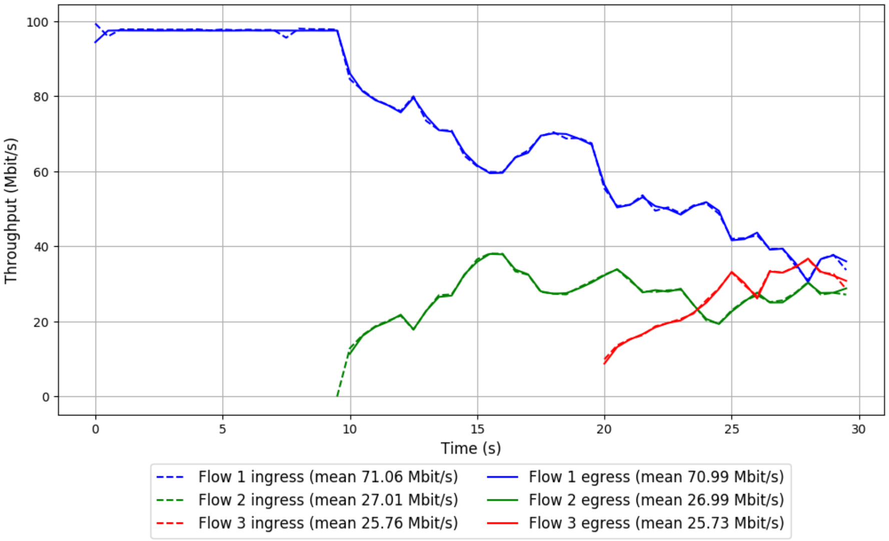
Run 2: Report of TCP Cubic — Data Link

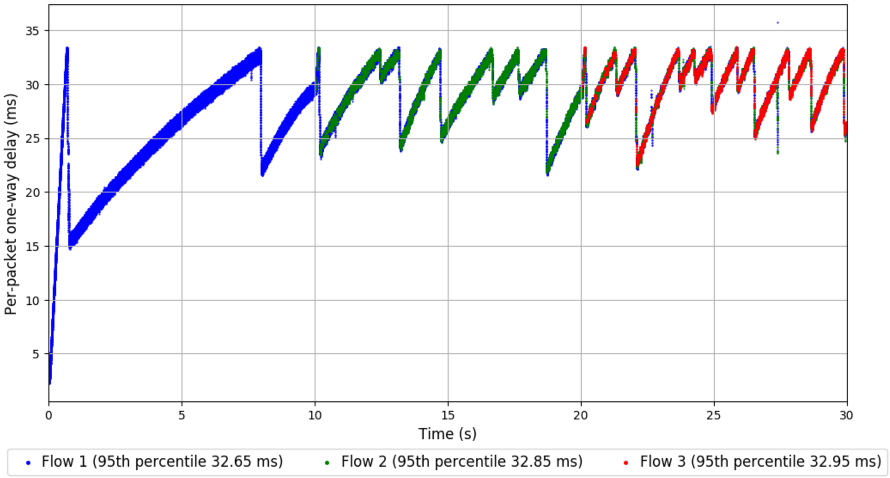




```
Run 3: Statistics of TCP Cubic

Start at: 2018-01-10 03:11:37
End at: 2018-01-10 03:12:07
Local clock offset: -0.068 ms
Remote clock offset: 0.468 ms

# Below is generated by plot.py at 2018-01-10 05:57:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 32.705 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 70.99 Mbit/s
95th percentile per-packet one-way delay: 32.653 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 26.99 Mbit/s
95th percentile per-packet one-way delay: 32.852 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 25.73 Mbit/s
95th percentile per-packet one-way delay: 32.953 ms
Loss rate: 0.15%
```

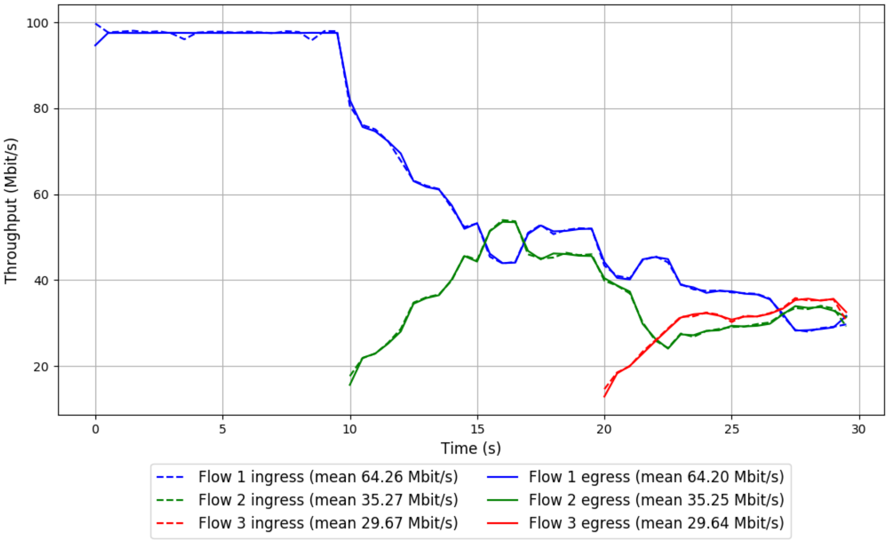
Run 3: Report of TCP Cubic — Data Link

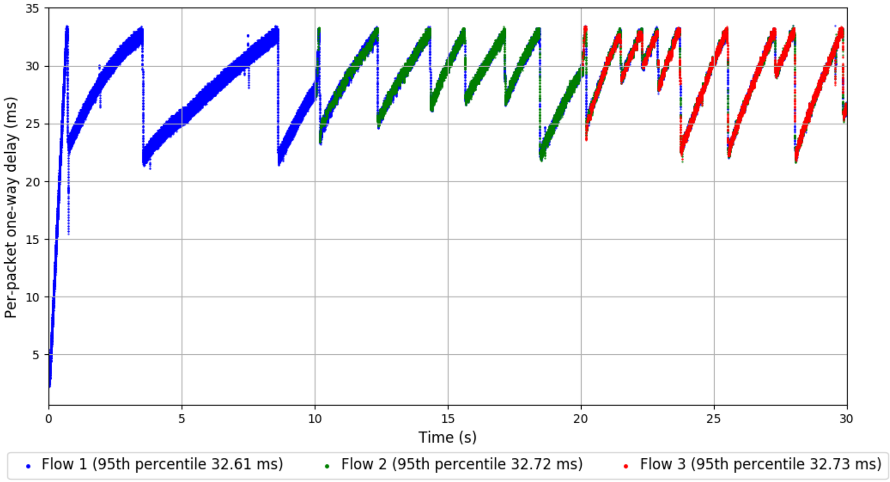




```
Run 4: Statistics of TCP Cubic

Start at: 2018-01-10 03:28:45
End at: 2018-01-10 03:29:15
Local clock offset: -0.027 ms
Remote clock offset: 0.272 ms

# Below is generated by plot.py at 2018-01-10 05:57:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.49 Mbit/s
95th percentile per-packet one-way delay: 32.684 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 64.20 Mbit/s
95th percentile per-packet one-way delay: 32.607 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 35.25 Mbit/s
95th percentile per-packet one-way delay: 32.723 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 29.64 Mbit/s
95th percentile per-packet one-way delay: 32.735 ms
Loss rate: 0.14%
```

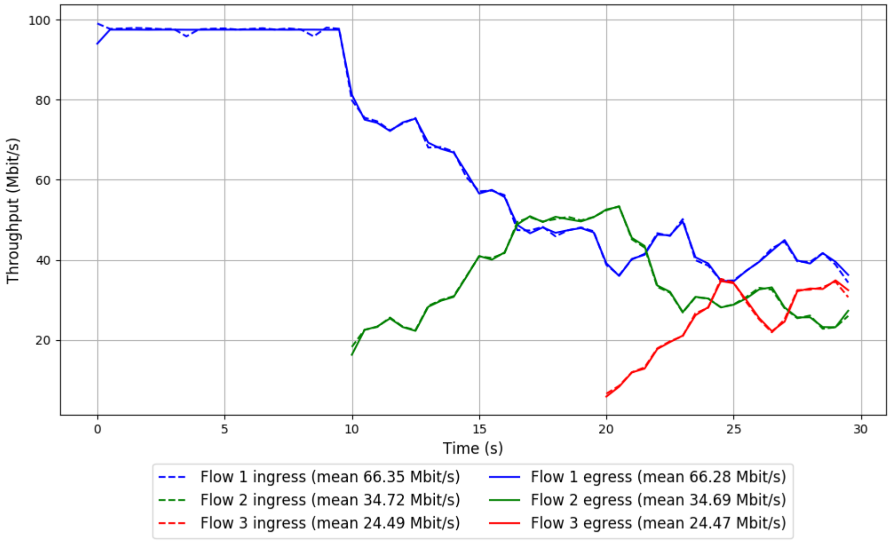
Run 4: Report of TCP Cubic — Data Link

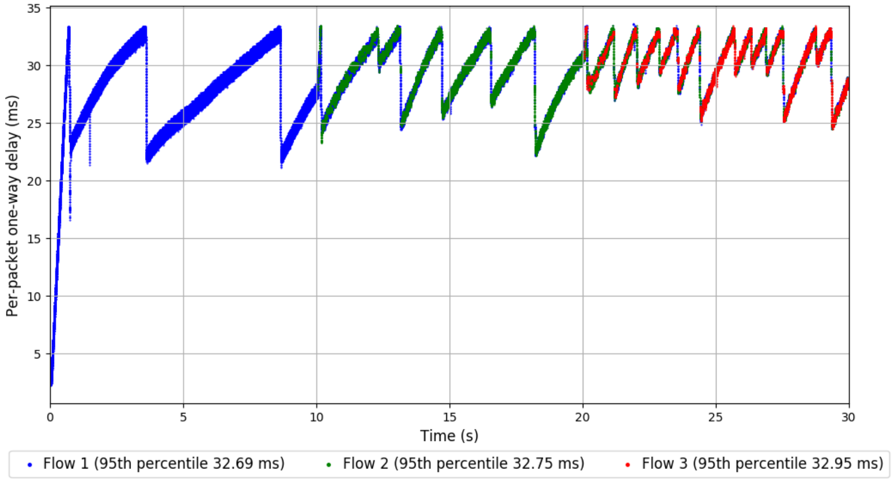




```
Run 5: Statistics of TCP Cubic

Start at: 2018-01-10 03:45:53
End at: 2018-01-10 03:46:23
Local clock offset: -0.012 ms
Remote clock offset: 0.056 ms

# Below is generated by plot.py at 2018-01-10 05:57:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 32.726 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 66.28 Mbit/s
95th percentile per-packet one-way delay: 32.691 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 34.69 Mbit/s
95th percentile per-packet one-way delay: 32.754 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 24.47 Mbit/s
95th percentile per-packet one-way delay: 32.947 ms
Loss rate: 0.08%
```

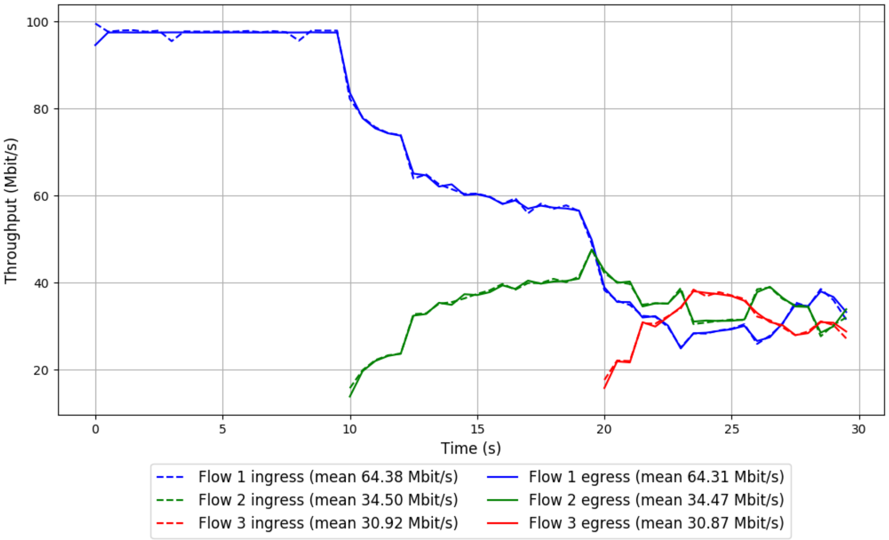
Run 5: Report of TCP Cubic — Data Link

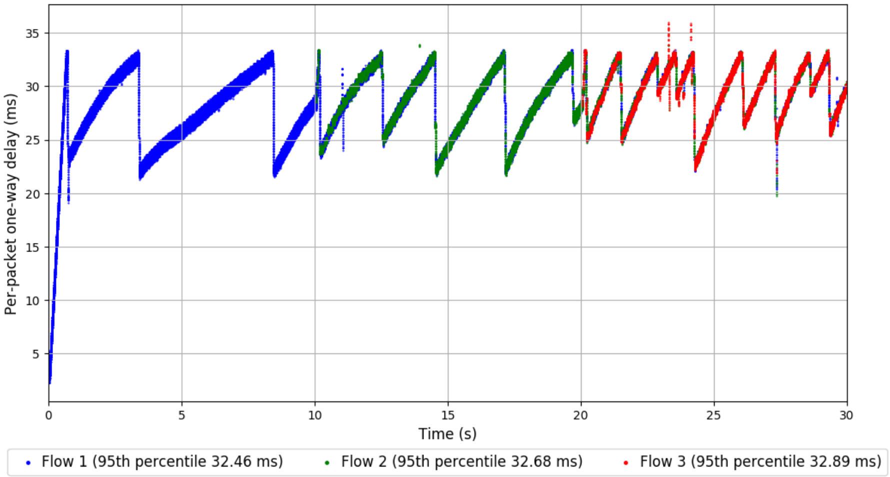




```
Run 6: Statistics of TCP Cubic

Start at: 2018-01-10 04:03:02
End at: 2018-01-10 04:03:32
Local clock offset: 0.001 ms
Remote clock offset: -0.14 ms

# Below is generated by plot.py at 2018-01-10 05:57:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 32.640 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 64.31 Mbit/s
95th percentile per-packet one-way delay: 32.458 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 34.47 Mbit/s
95th percentile per-packet one-way delay: 32.684 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 30.87 Mbit/s
95th percentile per-packet one-way delay: 32.889 ms
Loss rate: 0.13%
```

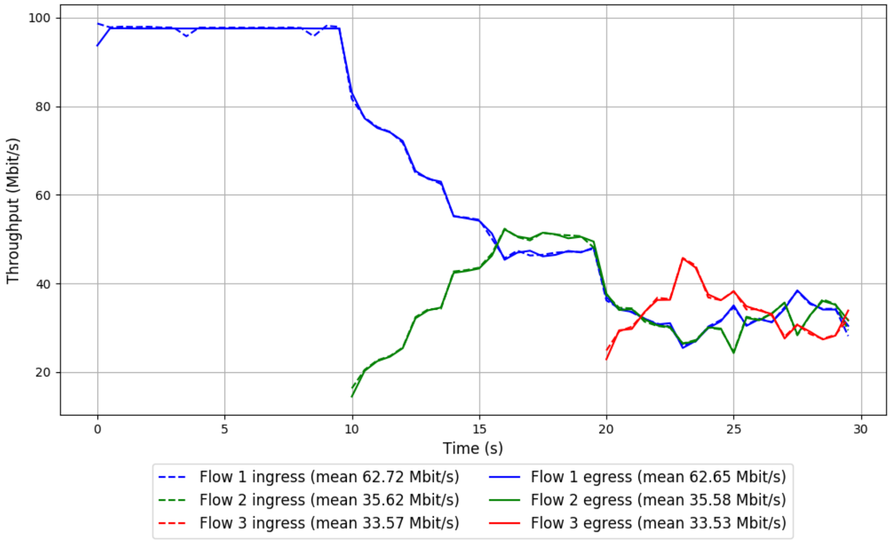
Run 6: Report of TCP Cubic — Data Link

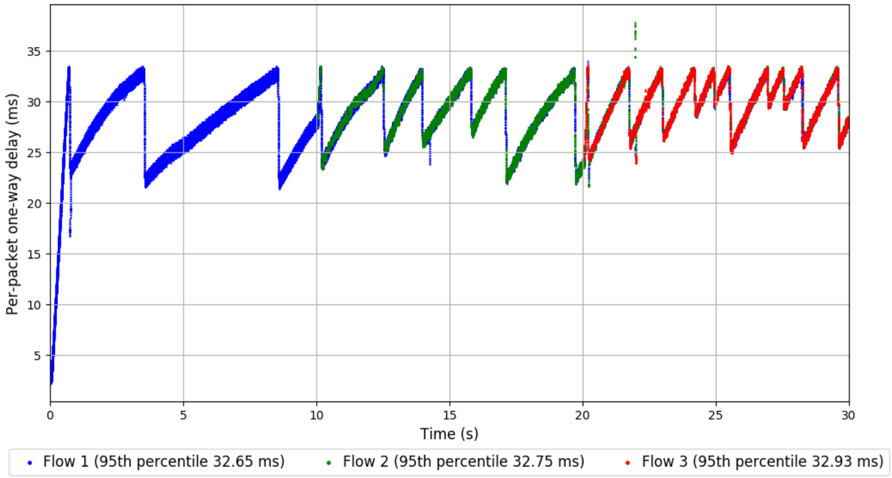




```
Run 7: Statistics of TCP Cubic

Start at: 2018-01-10 04:20:10
End at: 2018-01-10 04:20:40
Local clock offset: 0.098 ms
Remote clock offset: -0.092 ms

# Below is generated by plot.py at 2018-01-10 05:59:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.46 Mbit/s
95th percentile per-packet one-way delay: 32.711 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 62.65 Mbit/s
95th percentile per-packet one-way delay: 32.650 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 35.58 Mbit/s
95th percentile per-packet one-way delay: 32.752 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 33.53 Mbit/s
95th percentile per-packet one-way delay: 32.932 ms
Loss rate: 0.07%
```

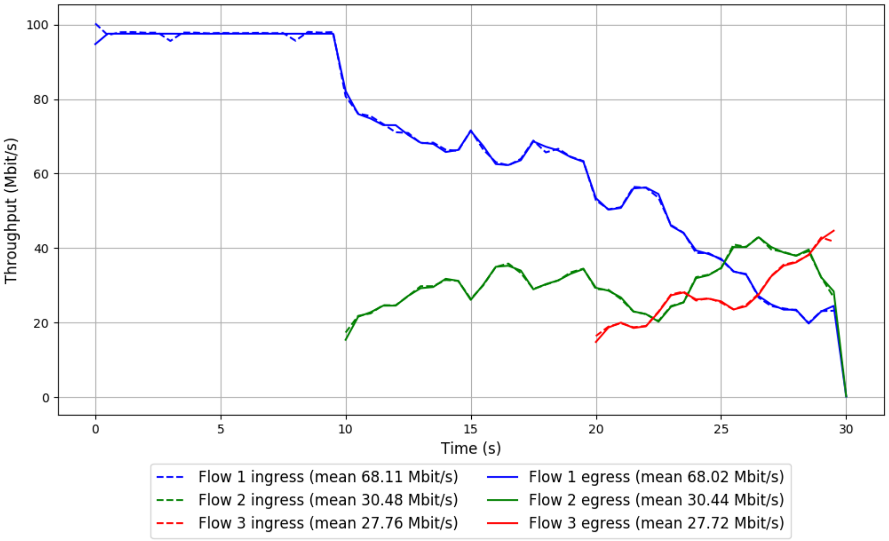
Run 7: Report of TCP Cubic — Data Link

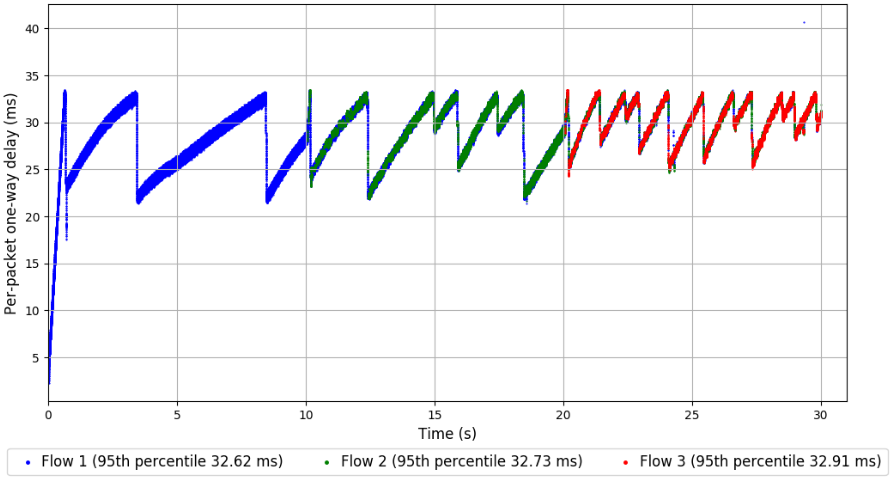




```
Run 8: Statistics of TCP Cubic

Start at: 2018-01-10 04:37:19
End at: 2018-01-10 04:37:49
Local clock offset: 0.084 ms
Remote clock offset: -0.185 ms

# Below is generated by plot.py at 2018-01-10 06:00:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.49 Mbit/s
95th percentile per-packet one-way delay: 32.682 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 68.02 Mbit/s
95th percentile per-packet one-way delay: 32.618 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 30.44 Mbit/s
95th percentile per-packet one-way delay: 32.732 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 27.72 Mbit/s
95th percentile per-packet one-way delay: 32.914 ms
Loss rate: 0.12%
```

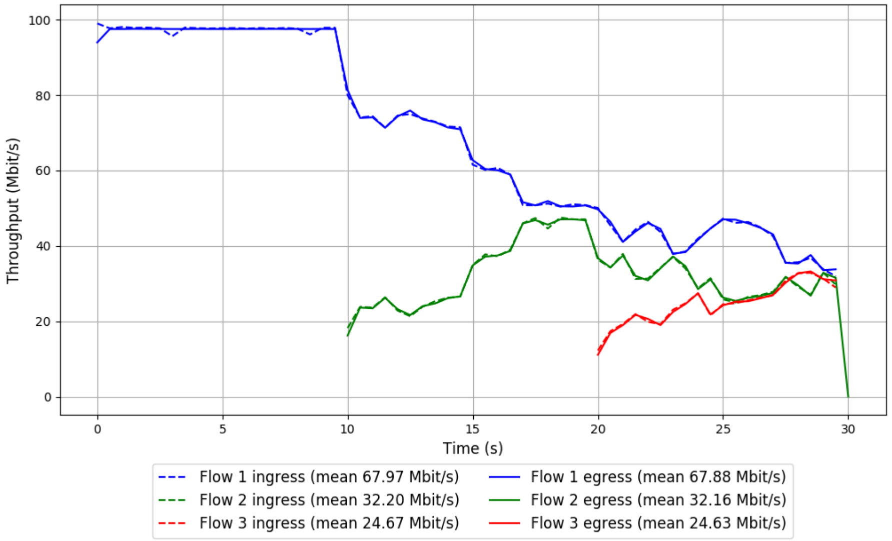
Run 8: Report of TCP Cubic — Data Link

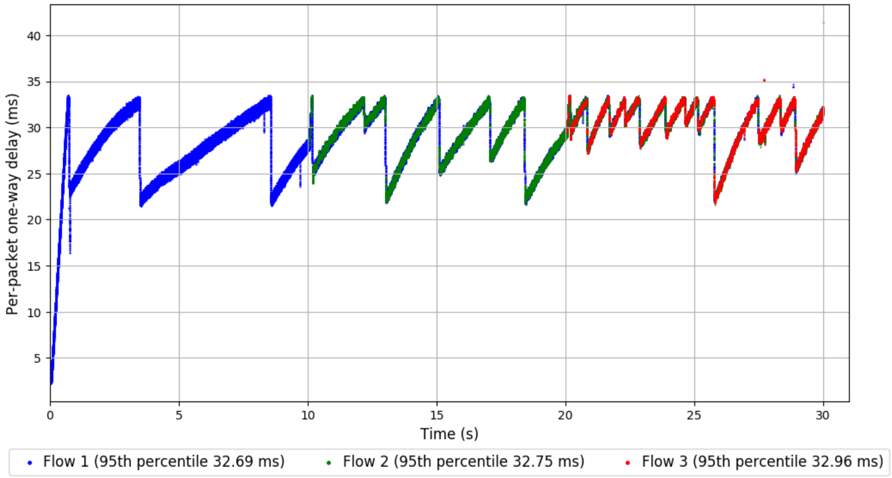




```
Run 9: Statistics of TCP Cubic

Start at: 2018-01-10 04:54:27
End at: 2018-01-10 04:54:57
Local clock offset: 0.05 ms
Remote clock offset: -0.261 ms

# Below is generated by plot.py at 2018-01-10 06:00:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.44 Mbit/s
95th percentile per-packet one-way delay: 32.727 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 67.88 Mbit/s
95th percentile per-packet one-way delay: 32.692 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 32.16 Mbit/s
95th percentile per-packet one-way delay: 32.754 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 24.63 Mbit/s
95th percentile per-packet one-way delay: 32.963 ms
Loss rate: 0.14%
```

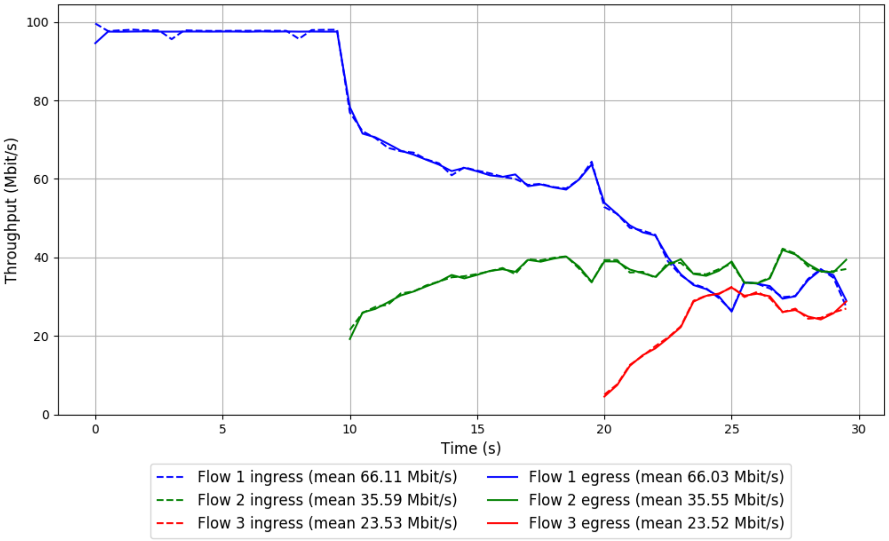
Run 9: Report of TCP Cubic — Data Link

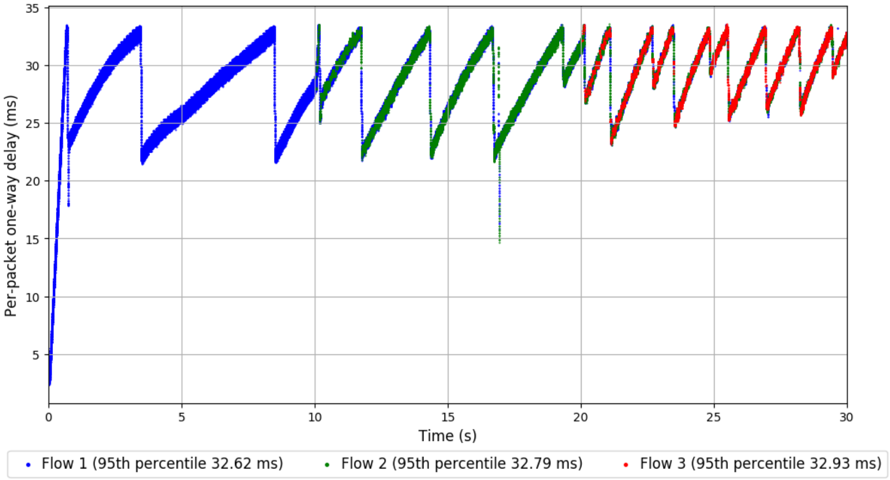




```
Run 10: Statistics of TCP Cubic

Start at: 2018-01-10 05:11:35
End at: 2018-01-10 05:12:05
Local clock offset: -0.044 ms
Remote clock offset: -0.354 ms

# Below is generated by plot.py at 2018-01-10 06:00:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 32.761 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 66.03 Mbit/s
95th percentile per-packet one-way delay: 32.622 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 35.55 Mbit/s
95th percentile per-packet one-way delay: 32.793 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 23.52 Mbit/s
95th percentile per-packet one-way delay: 32.933 ms
Loss rate: 0.05%
```

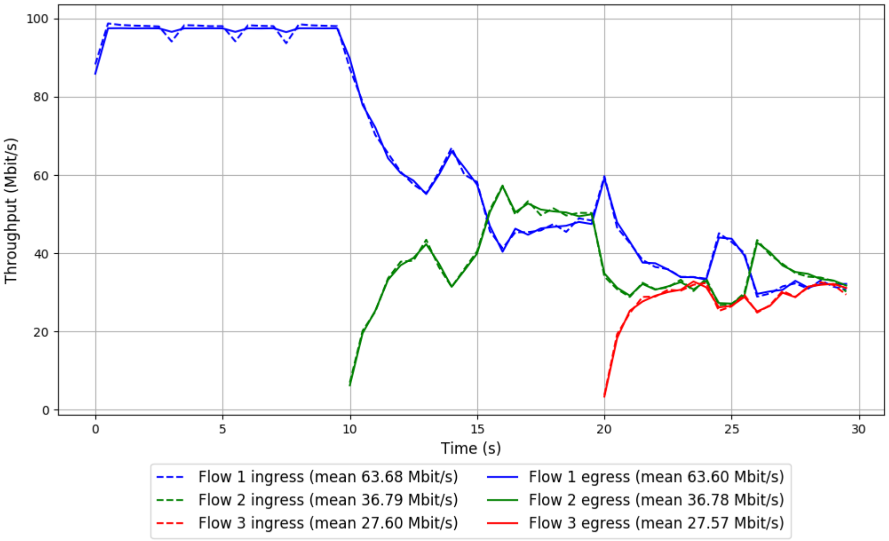
Run 10: Report of TCP Cubic — Data Link

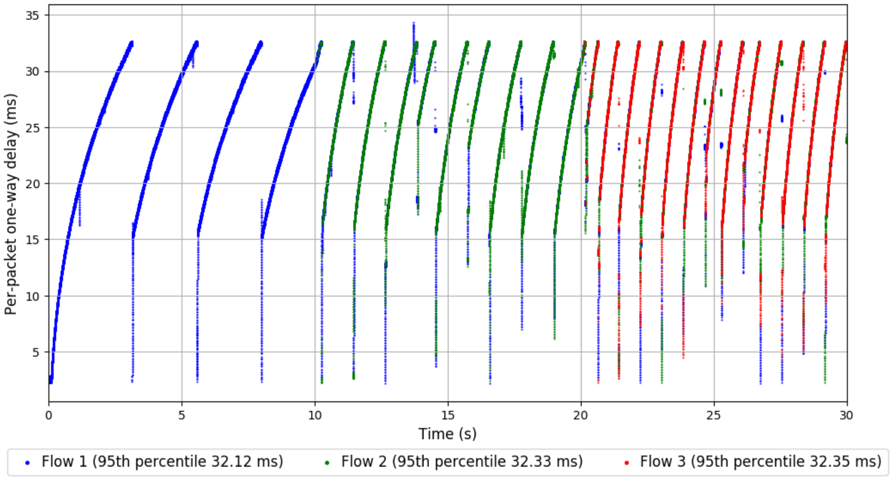




```
Run 1: Statistics of LEDBAT

Start at: 2018-01-10 02:31:36
End at: 2018-01-10 02:32:06
Local clock offset: -0.112 ms
Remote clock offset: 0.677 ms

# Below is generated by plot.py at 2018-01-10 06:00:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.18 Mbit/s
95th percentile per-packet one-way delay: 32.270 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 63.60 Mbit/s
95th percentile per-packet one-way delay: 32.121 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 36.78 Mbit/s
95th percentile per-packet one-way delay: 32.333 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 27.57 Mbit/s
95th percentile per-packet one-way delay: 32.348 ms
Loss rate: 0.12%
```

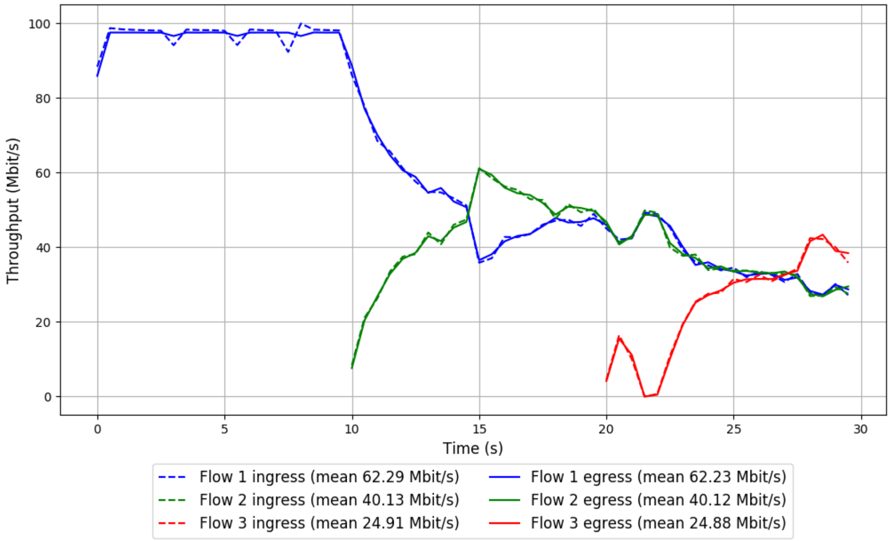
Run 1: Report of LEDBAT — Data Link

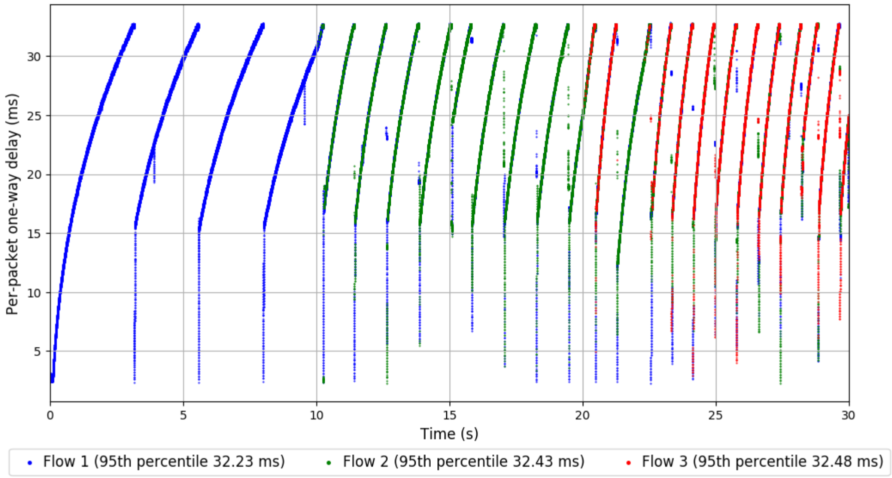




```
Run 2: Statistics of LEDBAT

Start at: 2018-01-10 02:48:44
End at: 2018-01-10 02:49:14
Local clock offset: -0.149 ms
Remote clock offset: 0.625 ms

# Below is generated by plot.py at 2018-01-10 06:00:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.16 Mbit/s
95th percentile per-packet one-way delay: 32.343 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 62.23 Mbit/s
95th percentile per-packet one-way delay: 32.227 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 40.12 Mbit/s
95th percentile per-packet one-way delay: 32.433 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 24.88 Mbit/s
95th percentile per-packet one-way delay: 32.481 ms
Loss rate: 0.13%
```

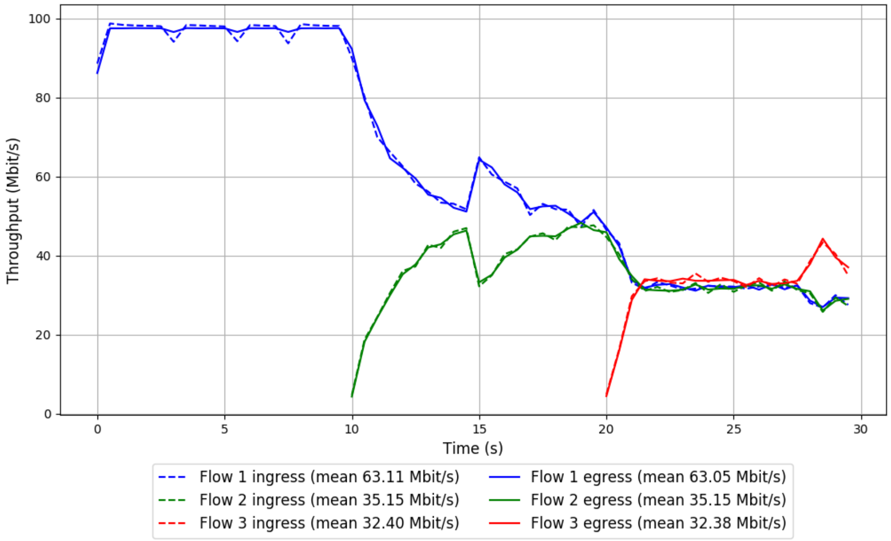
Run 2: Report of LEDBAT — Data Link

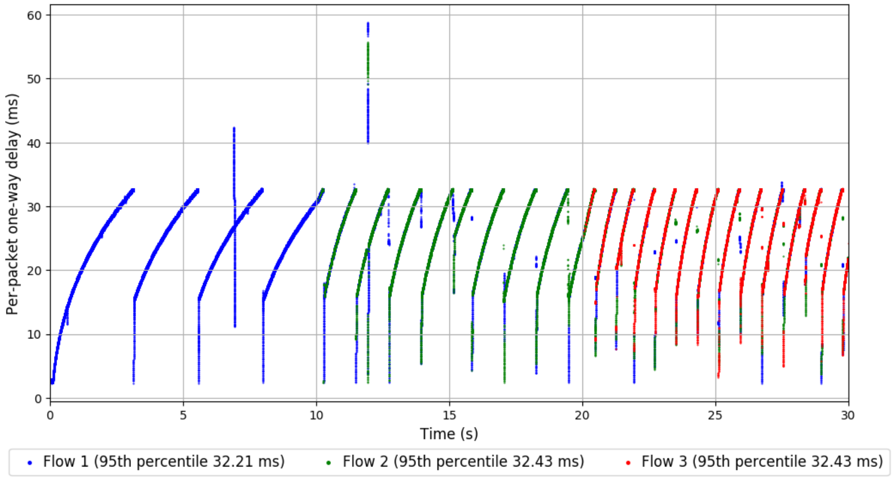




```
Run 3: Statistics of LEDBAT

Start at: 2018-01-10 03:05:52
End at: 2018-01-10 03:06:22
Local clock offset: -0.159 ms
Remote clock offset: 0.457 ms

# Below is generated by plot.py at 2018-01-10 06:00:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.13 Mbit/s
95th percentile per-packet one-way delay: 32.316 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 63.05 Mbit/s
95th percentile per-packet one-way delay: 32.208 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 35.15 Mbit/s
95th percentile per-packet one-way delay: 32.429 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 32.38 Mbit/s
95th percentile per-packet one-way delay: 32.432 ms
Loss rate: 0.08%
```

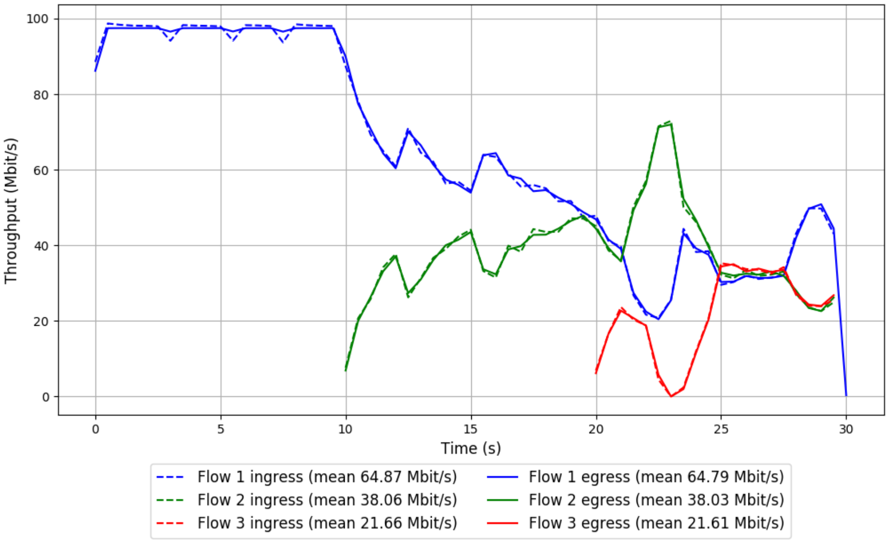
Run 3: Report of LEDBAT — Data Link

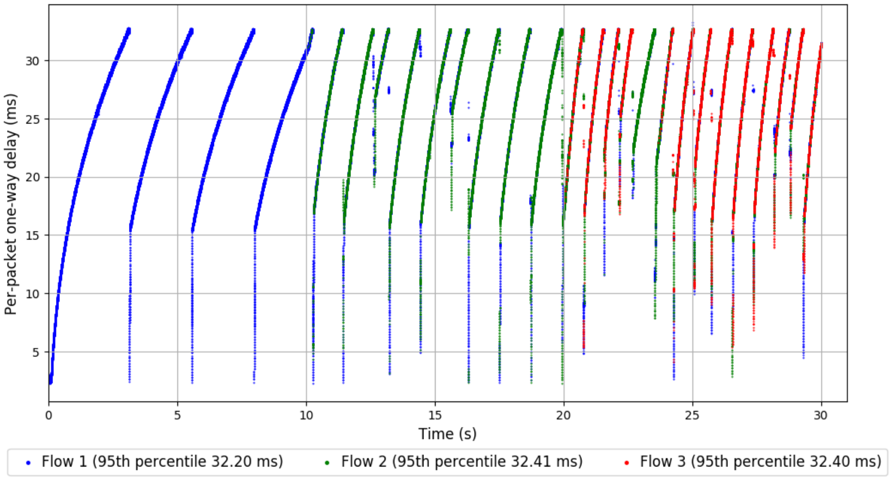




```
Run 4: Statistics of LEDBAT

Start at: 2018-01-10 03:23:00
End at: 2018-01-10 03:23:30
Local clock offset: -0.047 ms
Remote clock offset: 0.371 ms

# Below is generated by plot.py at 2018-01-10 06:00:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.19 Mbit/s
95th percentile per-packet one-way delay: 32.356 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 64.79 Mbit/s
95th percentile per-packet one-way delay: 32.205 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 38.03 Mbit/s
95th percentile per-packet one-way delay: 32.406 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 21.61 Mbit/s
95th percentile per-packet one-way delay: 32.398 ms
Loss rate: 0.10%
```

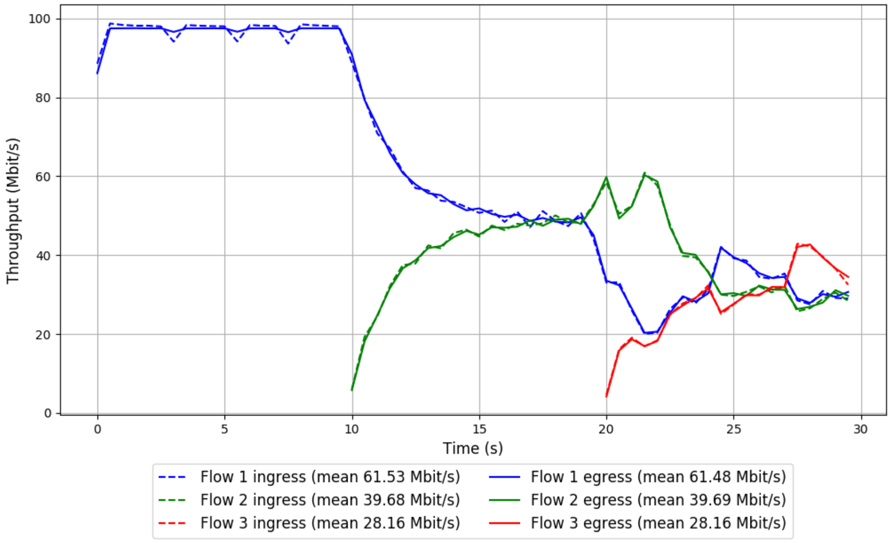
Run 4: Report of LEDBAT — Data Link

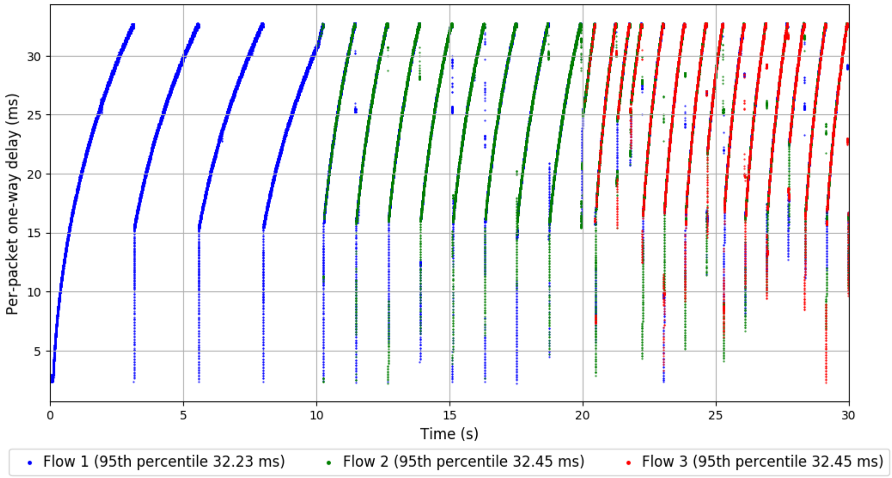




```
Run 5: Statistics of LEDBAT

Start at: 2018-01-10 03:40:09
End at: 2018-01-10 03:40:39
Local clock offset: -0.065 ms
Remote clock offset: 0.121 ms

# Below is generated by plot.py at 2018-01-10 06:02:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.18 Mbit/s
95th percentile per-packet one-way delay: 32.398 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 61.48 Mbit/s
95th percentile per-packet one-way delay: 32.230 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 39.69 Mbit/s
95th percentile per-packet one-way delay: 32.445 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 28.16 Mbit/s
95th percentile per-packet one-way delay: 32.453 ms
Loss rate: 0.08%
```

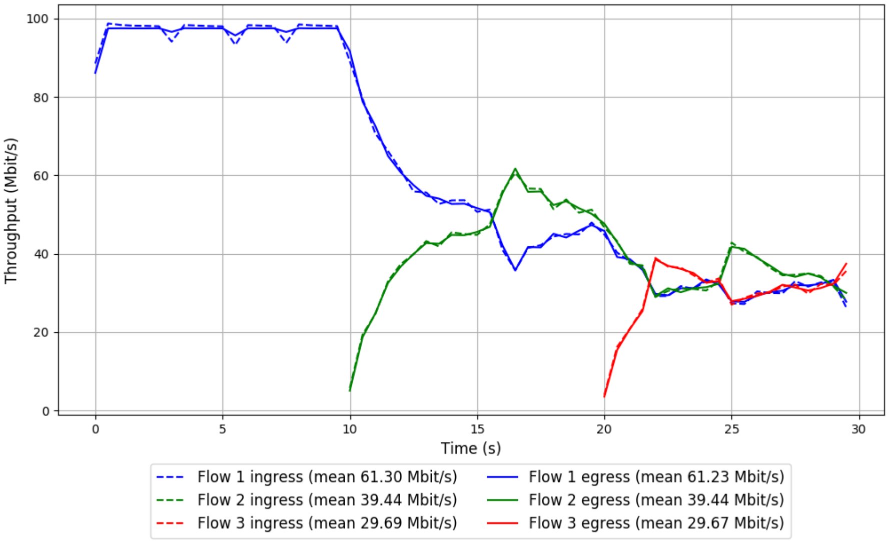
Run 5: Report of LEDBAT — Data Link

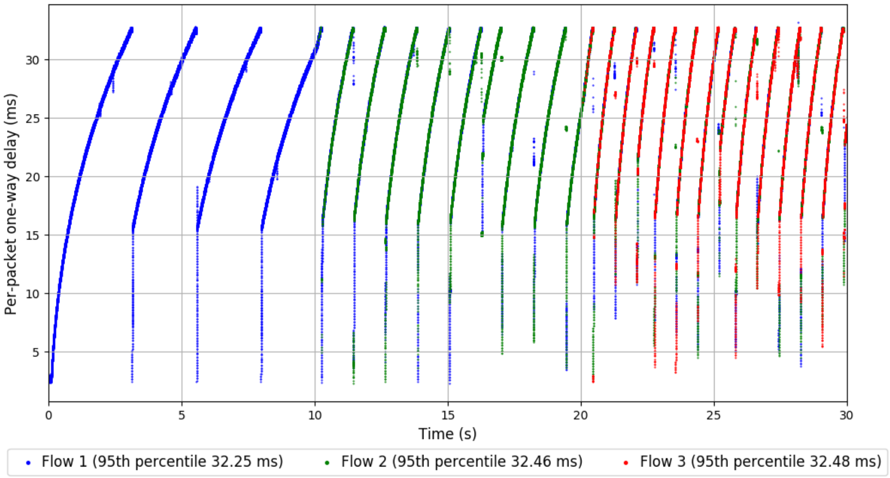




```
Run 6: Statistics of LEDBAT

Start at: 2018-01-10 03:57:17
End at: 2018-01-10 03:57:47
Local clock offset: -0.077 ms
Remote clock offset: -0.059 ms

# Below is generated by plot.py at 2018-01-10 06:02:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.18 Mbit/s
95th percentile per-packet one-way delay: 32.319 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 61.23 Mbit/s
95th percentile per-packet one-way delay: 32.251 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 39.44 Mbit/s
95th percentile per-packet one-way delay: 32.457 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 29.67 Mbit/s
95th percentile per-packet one-way delay: 32.476 ms
Loss rate: 0.08%
```

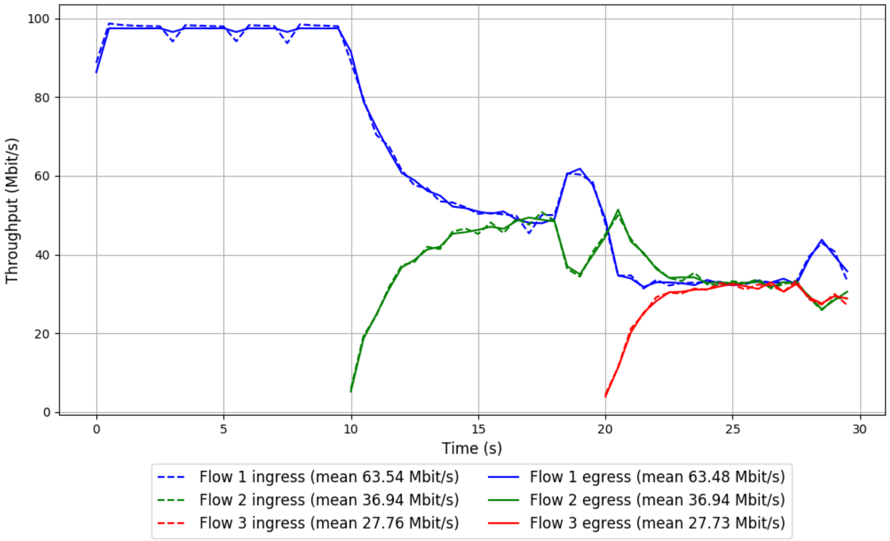
Run 6: Report of LEDBAT — Data Link

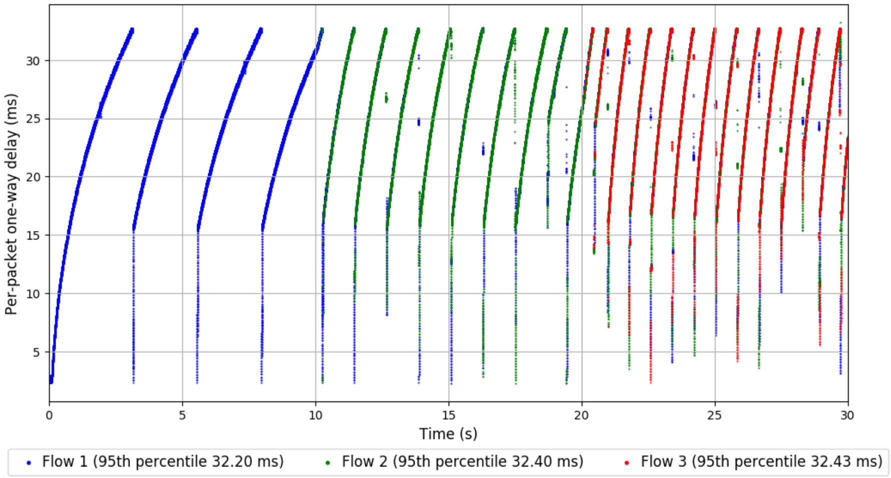




```
Run 7: Statistics of LEDBAT

Start at: 2018-01-10 04:14:26
End at: 2018-01-10 04:14:56
Local clock offset: 0.08 ms
Remote clock offset: -0.082 ms

# Below is generated by plot.py at 2018-01-10 06:03:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.19 Mbit/s
95th percentile per-packet one-way delay: 32.260 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 63.48 Mbit/s
95th percentile per-packet one-way delay: 32.199 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 36.94 Mbit/s
95th percentile per-packet one-way delay: 32.401 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 27.73 Mbit/s
95th percentile per-packet one-way delay: 32.434 ms
Loss rate: 0.11%
```

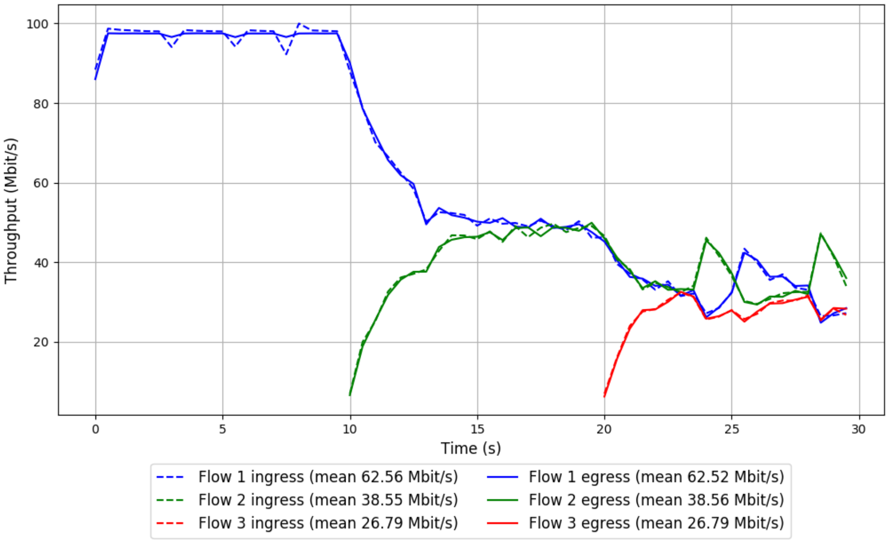
Run 7: Report of LEDBAT — Data Link

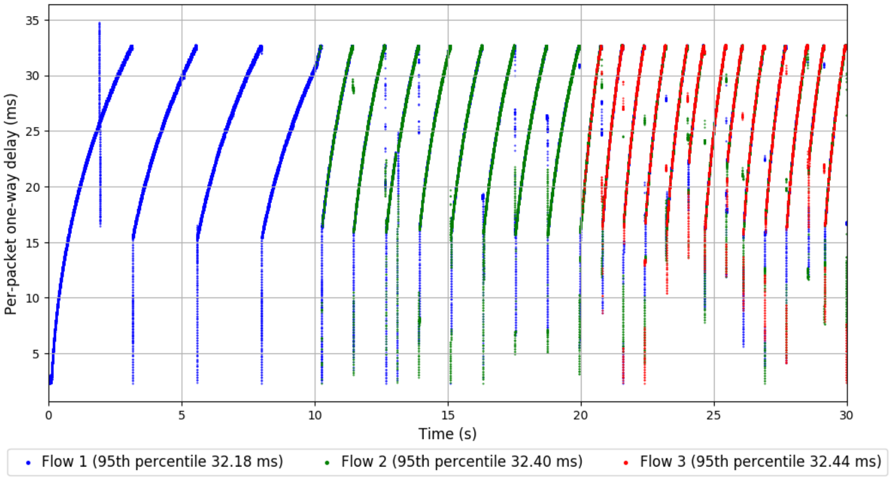




```
Run 8: Statistics of LEDBAT

Start at: 2018-01-10 04:31:34
End at: 2018-01-10 04:32:05
Local clock offset: 0.055 ms
Remote clock offset: -0.149 ms

# Below is generated by plot.py at 2018-01-10 06:03:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.01 Mbit/s
95th percentile per-packet one-way delay: 32.290 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 62.52 Mbit/s
95th percentile per-packet one-way delay: 32.182 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 38.56 Mbit/s
95th percentile per-packet one-way delay: 32.397 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 26.79 Mbit/s
95th percentile per-packet one-way delay: 32.444 ms
Loss rate: 0.11%
```

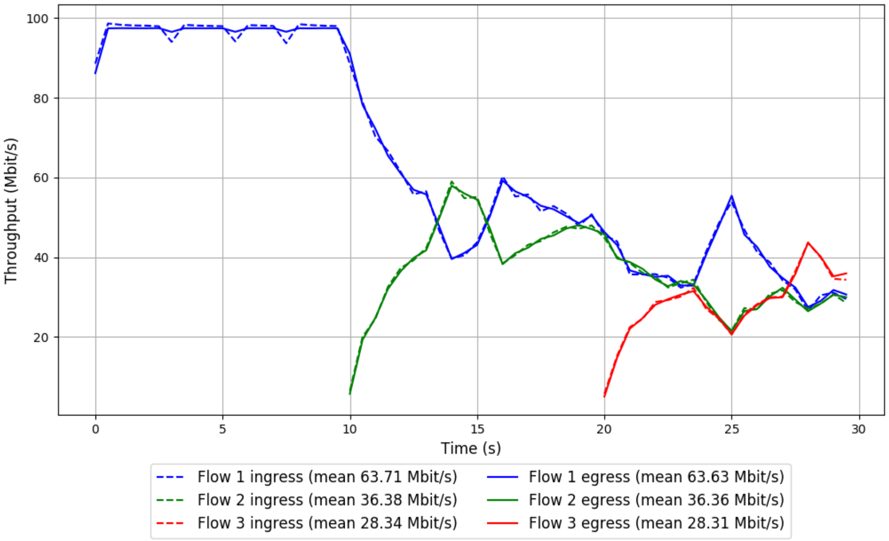
Run 8: Report of LEDBAT — Data Link

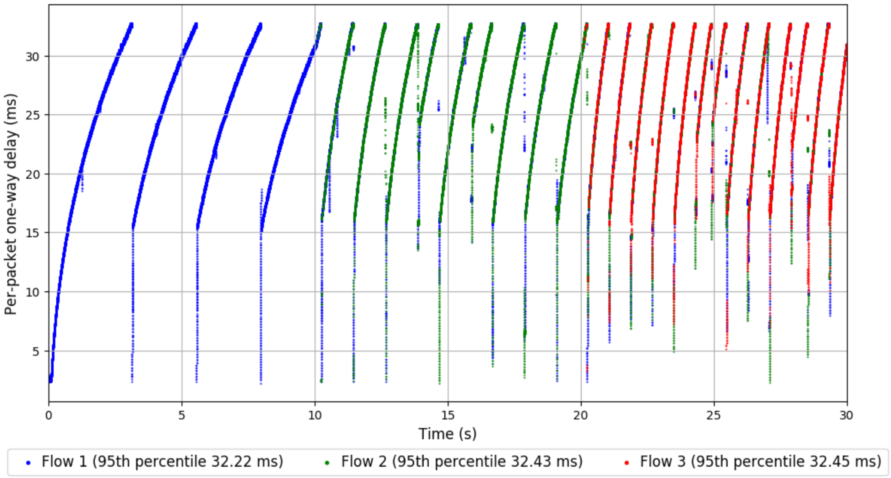




```
Run 9: Statistics of LEDBAT

Start at: 2018-01-10 04:48:43
End at: 2018-01-10 04:49:13
Local clock offset: -0.021 ms
Remote clock offset: -0.276 ms

# Below is generated by plot.py at 2018-01-10 06:03:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.17 Mbit/s
95th percentile per-packet one-way delay: 32.283 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 63.63 Mbit/s
95th percentile per-packet one-way delay: 32.217 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 36.36 Mbit/s
95th percentile per-packet one-way delay: 32.431 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 28.31 Mbit/s
95th percentile per-packet one-way delay: 32.448 ms
Loss rate: 0.10%
```

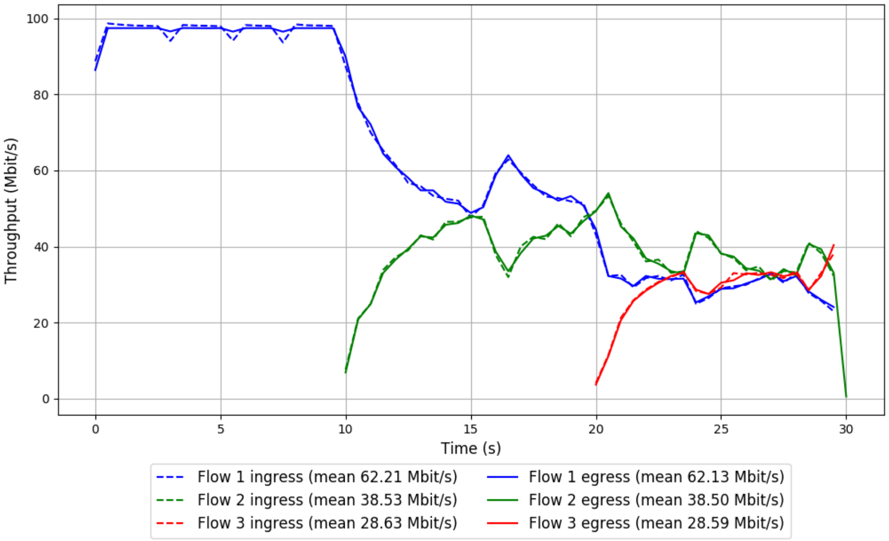
Run 9: Report of LEDBAT — Data Link

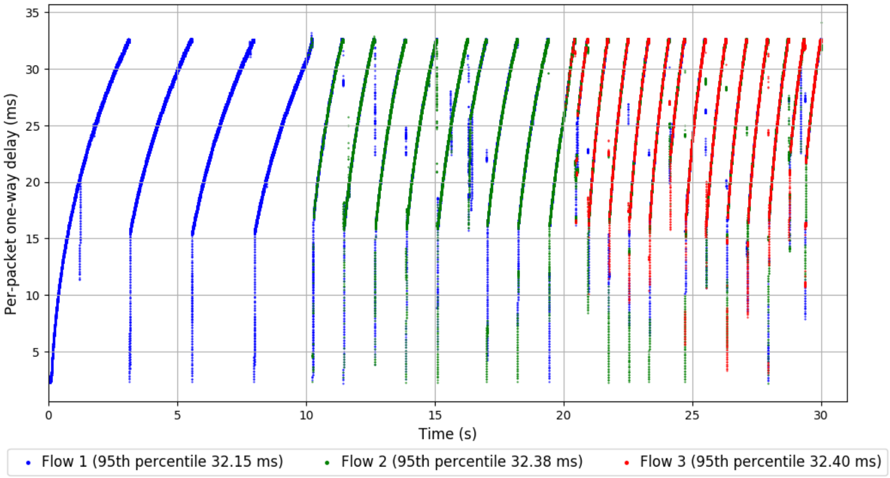




```
Run 10: Statistics of LEDBAT

Start at: 2018-01-10 05:05:51
End at: 2018-01-10 05:06:21
Local clock offset: 0.064 ms
Remote clock offset: -0.324 ms

# Below is generated by plot.py at 2018-01-10 06:03:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.16 Mbit/s
95th percentile per-packet one-way delay: 32.342 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 62.13 Mbit/s
95th percentile per-packet one-way delay: 32.152 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 38.50 Mbit/s
95th percentile per-packet one-way delay: 32.378 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 28.59 Mbit/s
95th percentile per-packet one-way delay: 32.397 ms
Loss rate: 0.09%
```

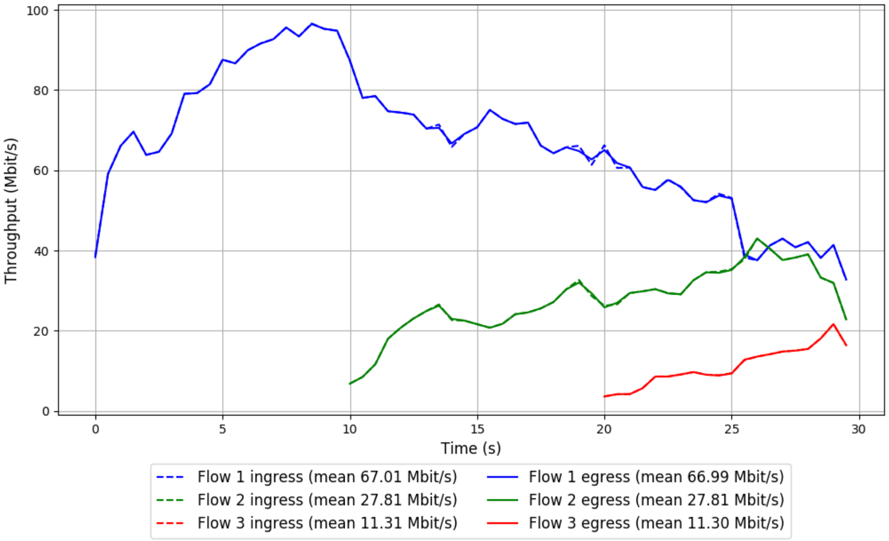
Run 10: Report of LEDBAT — Data Link

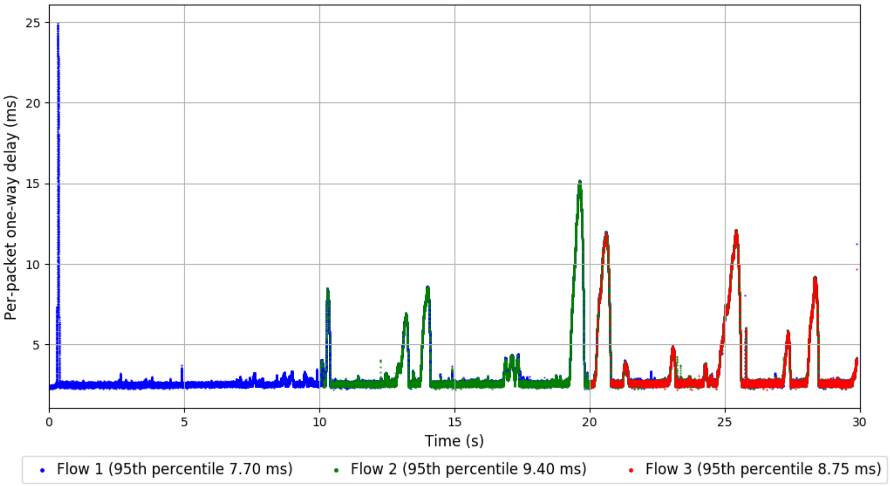




```
Run 1: Statistics of PCC

Start at: 2018-01-10 02:41:51
End at: 2018-01-10 02:42:21
Local clock offset: -0.136 ms
Remote clock offset: 0.703 ms

# Below is generated by plot.py at 2018-01-10 06:03:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.20 Mbit/s
95th percentile per-packet one-way delay: 8.126 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 66.99 Mbit/s
95th percentile per-packet one-way delay: 7.696 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 27.81 Mbit/s
95th percentile per-packet one-way delay: 9.396 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.30 Mbit/s
95th percentile per-packet one-way delay: 8.749 ms
Loss rate: 0.00%
```

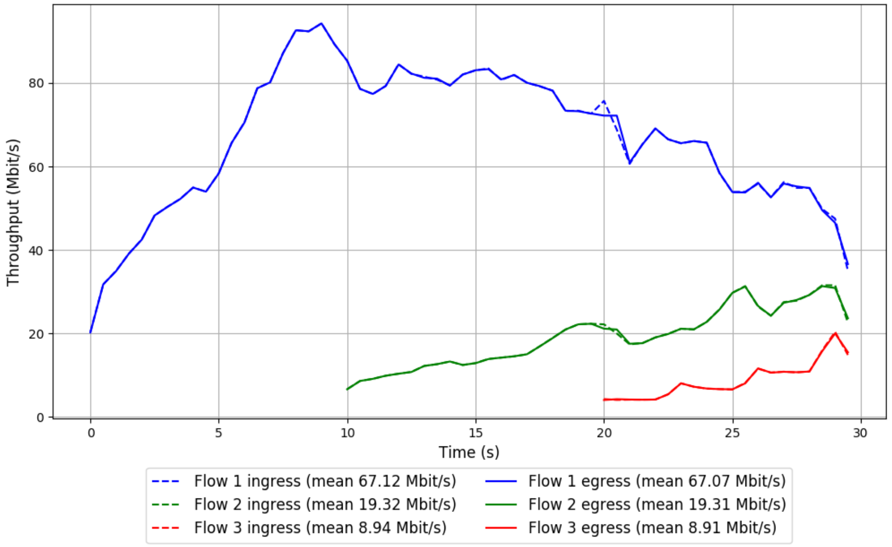
Run 1: Report of PCC — Data Link

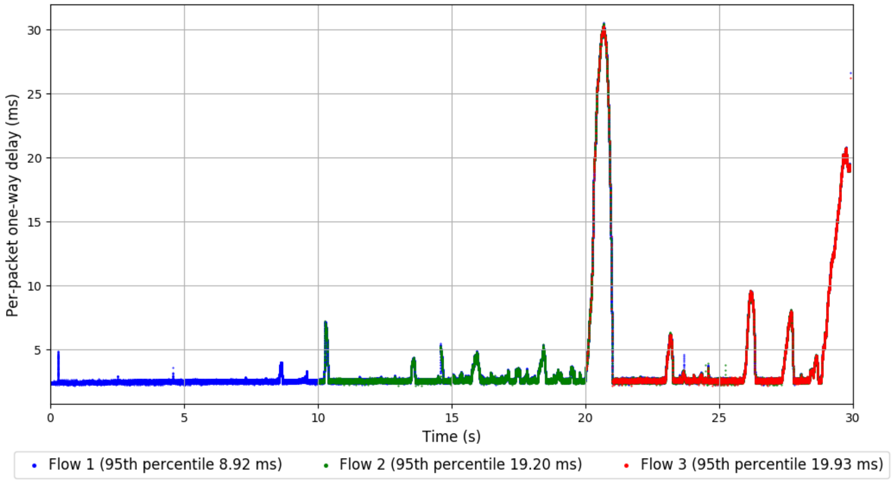




```
Run 2: Statistics of PCC

Start at: 2018-01-10 02:59:00
End at: 2018-01-10 02:59:30
Local clock offset: -0.14 ms
Remote clock offset: 0.531 ms

# Below is generated by plot.py at 2018-01-10 06:03:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.85 Mbit/s
95th percentile per-packet one-way delay: 13.070 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 67.07 Mbit/s
95th percentile per-packet one-way delay: 8.922 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 19.31 Mbit/s
95th percentile per-packet one-way delay: 19.203 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.91 Mbit/s
95th percentile per-packet one-way delay: 19.932 ms
Loss rate: 0.00%
```

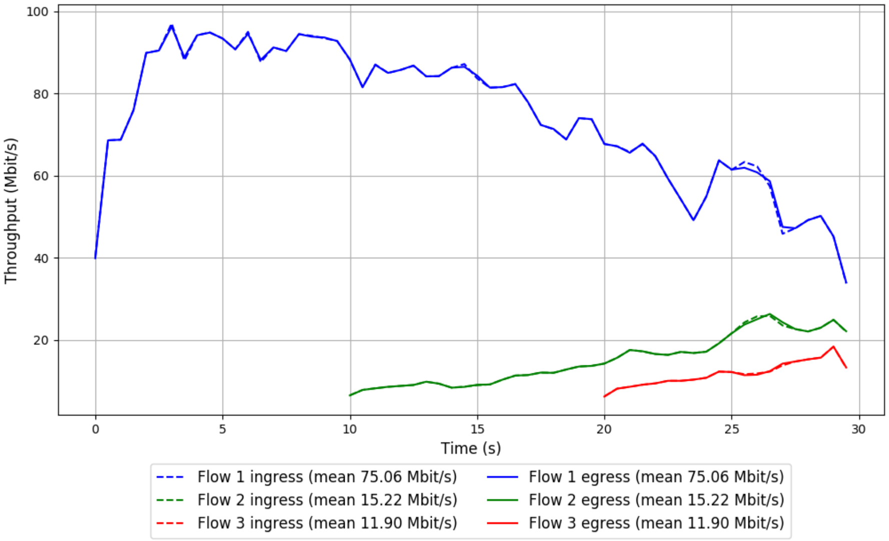
Run 2: Report of PCC — Data Link

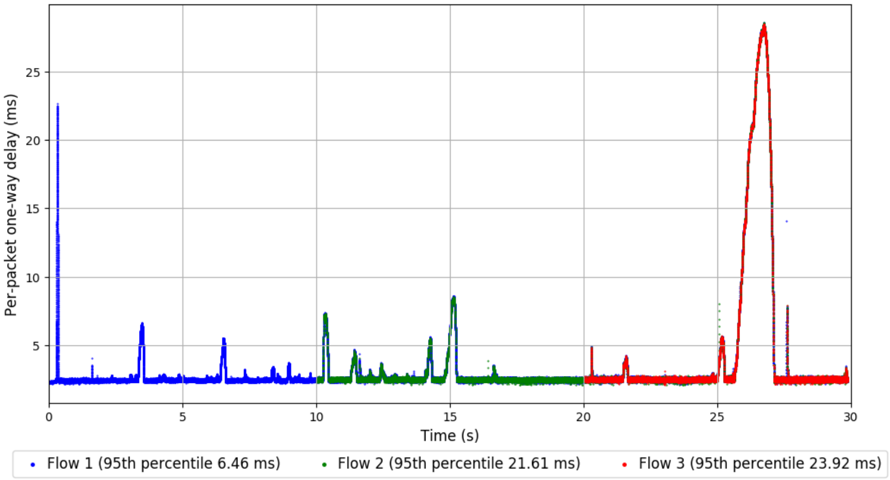




```
Run 3: Statistics of PCC

Start at: 2018-01-10 03:16:08
End at: 2018-01-10 03:16:38
Local clock offset: -0.084 ms
Remote clock offset: 0.417 ms

# Below is generated by plot.py at 2018-01-10 06:05:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.11 Mbit/s
95th percentile per-packet one-way delay: 8.214 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 75.06 Mbit/s
95th percentile per-packet one-way delay: 6.460 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 15.22 Mbit/s
95th percentile per-packet one-way delay: 21.615 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.90 Mbit/s
95th percentile per-packet one-way delay: 23.921 ms
Loss rate: 0.00%
```

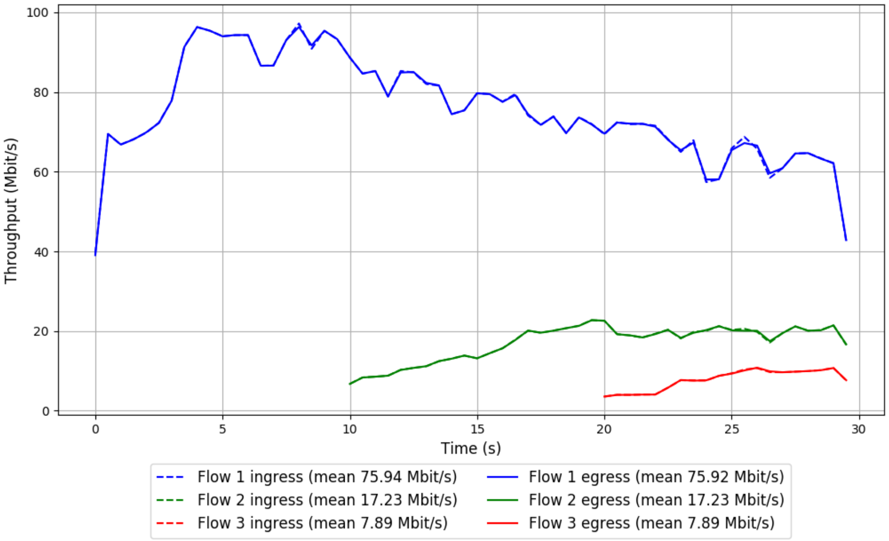
Run 3: Report of PCC — Data Link

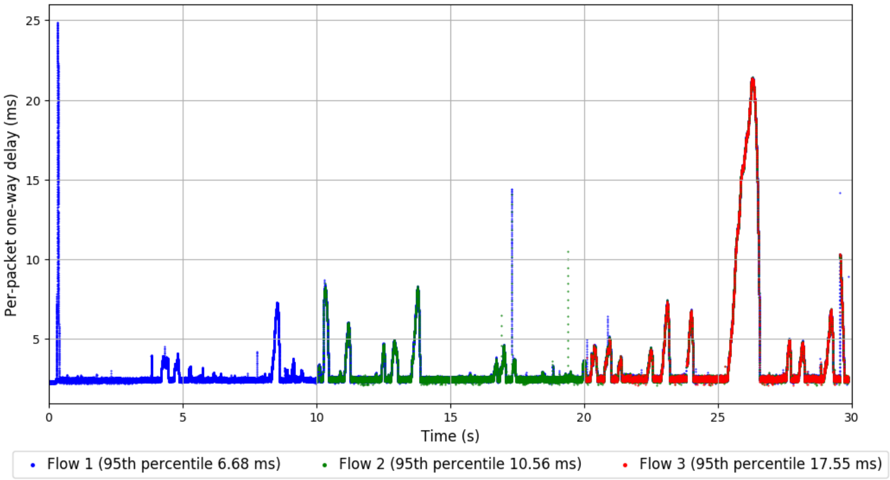




```
Run 4: Statistics of PCC

Start at: 2018-01-10 03:33:16
End at: 2018-01-10 03:33:46
Local clock offset: -0.013 ms
Remote clock offset: 0.211 ms

# Below is generated by plot.py at 2018-01-10 06:05:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.97 Mbit/s
95th percentile per-packet one-way delay: 7.100 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 75.92 Mbit/s
95th percentile per-packet one-way delay: 6.681 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 17.23 Mbit/s
95th percentile per-packet one-way delay: 10.561 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.89 Mbit/s
95th percentile per-packet one-way delay: 17.552 ms
Loss rate: 0.00%
```

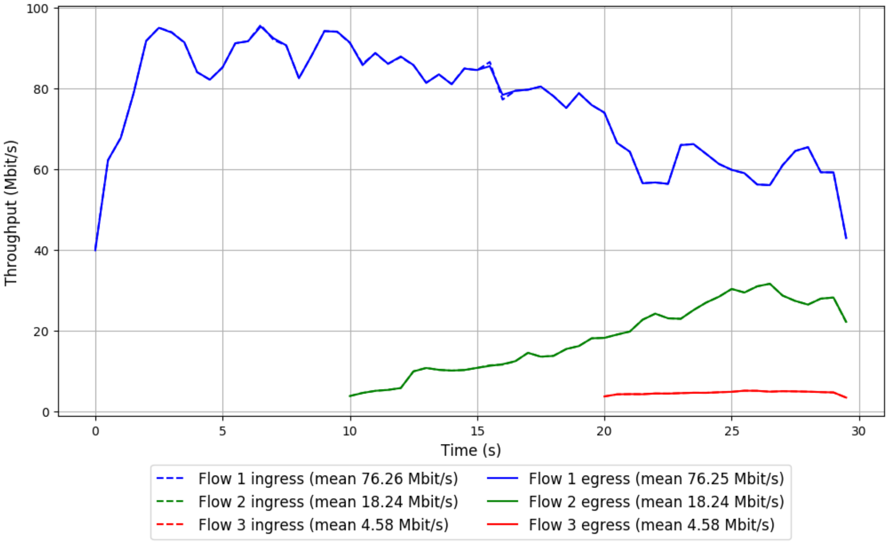
Run 4: Report of PCC — Data Link

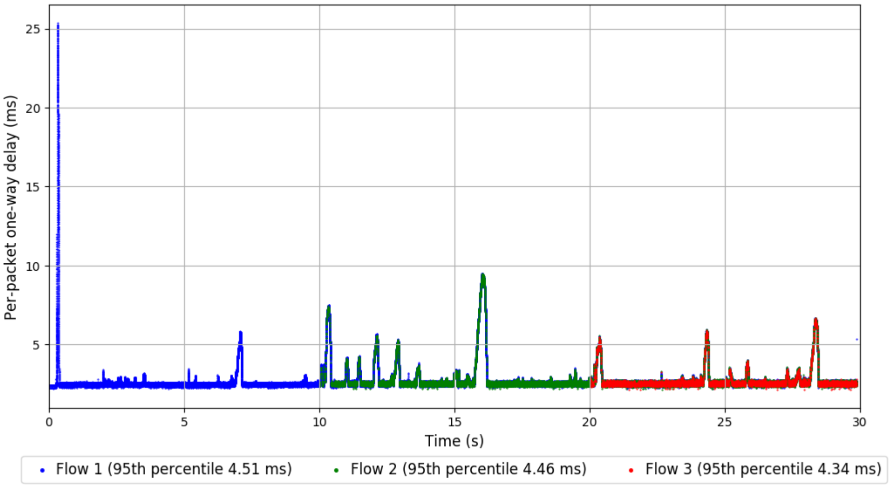




```
Run 5: Statistics of PCC

Start at: 2018-01-10 03:50:24
End at: 2018-01-10 03:50:54
Local clock offset: -0.007 ms
Remote clock offset: 0.014 ms

# Below is generated by plot.py at 2018-01-10 06:05:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.89 Mbit/s
95th percentile per-packet one-way delay: 4.495 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 76.25 Mbit/s
95th percentile per-packet one-way delay: 4.507 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 18.24 Mbit/s
95th percentile per-packet one-way delay: 4.459 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.58 Mbit/s
95th percentile per-packet one-way delay: 4.344 ms
Loss rate: 0.00%
```

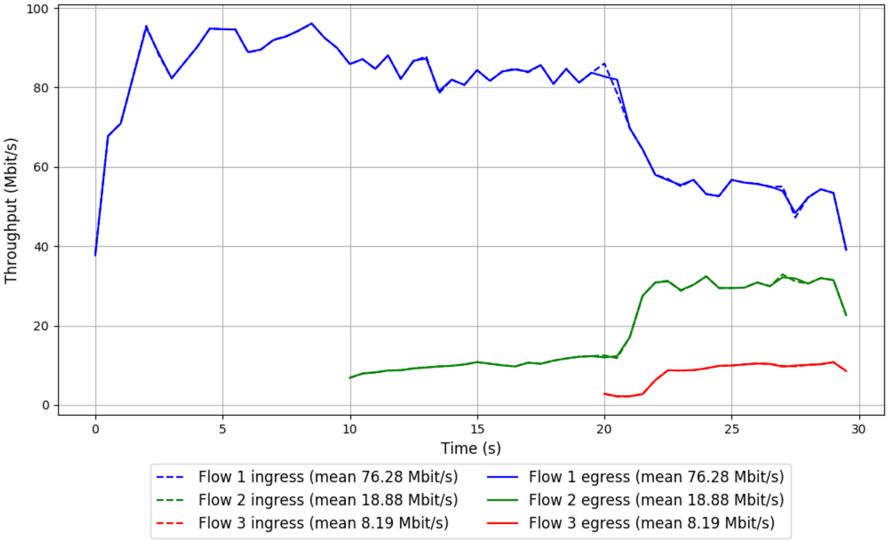
Run 5: Report of PCC — Data Link

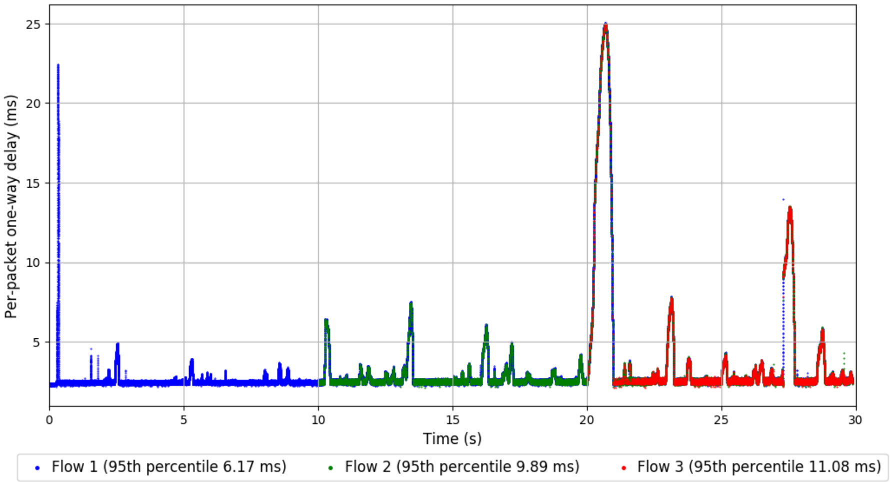




```
Run 6: Statistics of PCC

Start at: 2018-01-10 04:07:33
End at: 2018-01-10 04:08:03
Local clock offset: 0.058 ms
Remote clock offset: -0.089 ms

# Below is generated by plot.py at 2018-01-10 06:05:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.53 Mbit/s
95th percentile per-packet one-way delay: 6.731 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 76.28 Mbit/s
95th percentile per-packet one-way delay: 6.167 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 18.88 Mbit/s
95th percentile per-packet one-way delay: 9.887 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.19 Mbit/s
95th percentile per-packet one-way delay: 11.082 ms
Loss rate: 0.00%
```

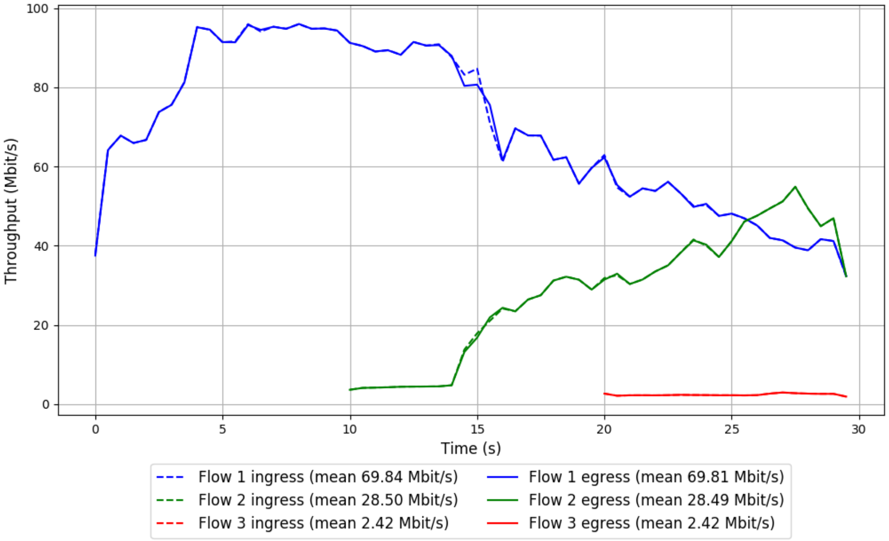
Run 6: Report of PCC — Data Link

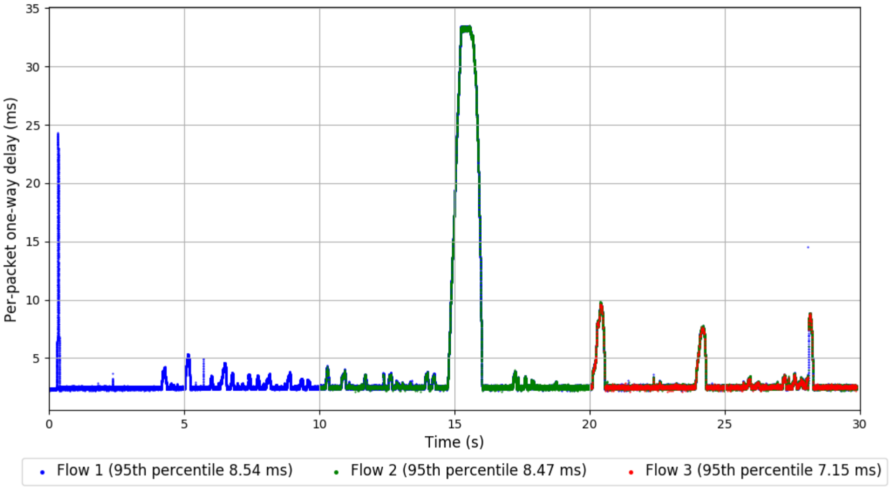




```
Run 7: Statistics of PCC

Start at: 2018-01-10 04:24:42
End at: 2018-01-10 04:25:12
Local clock offset: 0.009 ms
Remote clock offset: -0.192 ms

# Below is generated by plot.py at 2018-01-10 06:05:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.54 Mbit/s
95th percentile per-packet one-way delay: 8.460 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 69.81 Mbit/s
95th percentile per-packet one-way delay: 8.545 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 28.49 Mbit/s
95th percentile per-packet one-way delay: 8.467 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 7.153 ms
Loss rate: 0.00%
```

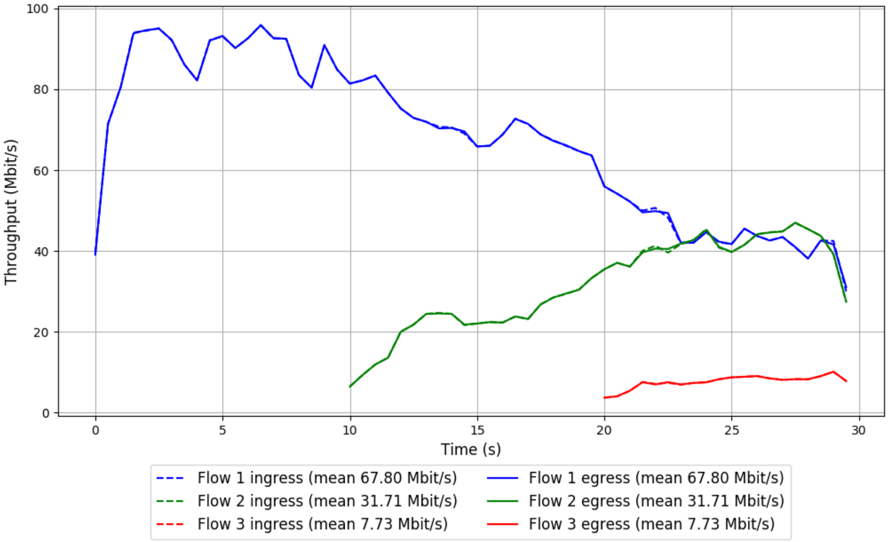
Run 7: Report of PCC — Data Link

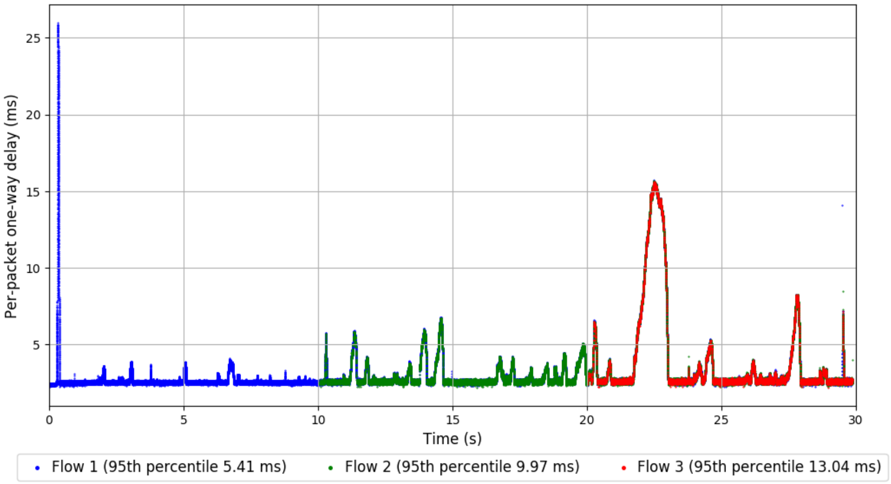




```
Run 8: Statistics of PCC

Start at: 2018-01-10 04:41:50
End at: 2018-01-10 04:42:20
Local clock offset: -0.027 ms
Remote clock offset: -0.207 ms

# Below is generated by plot.py at 2018-01-10 06:05:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.41 Mbit/s
95th percentile per-packet one-way delay: 6.345 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 67.80 Mbit/s
95th percentile per-packet one-way delay: 5.408 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 31.71 Mbit/s
95th percentile per-packet one-way delay: 9.975 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.73 Mbit/s
95th percentile per-packet one-way delay: 13.038 ms
Loss rate: 0.00%
```

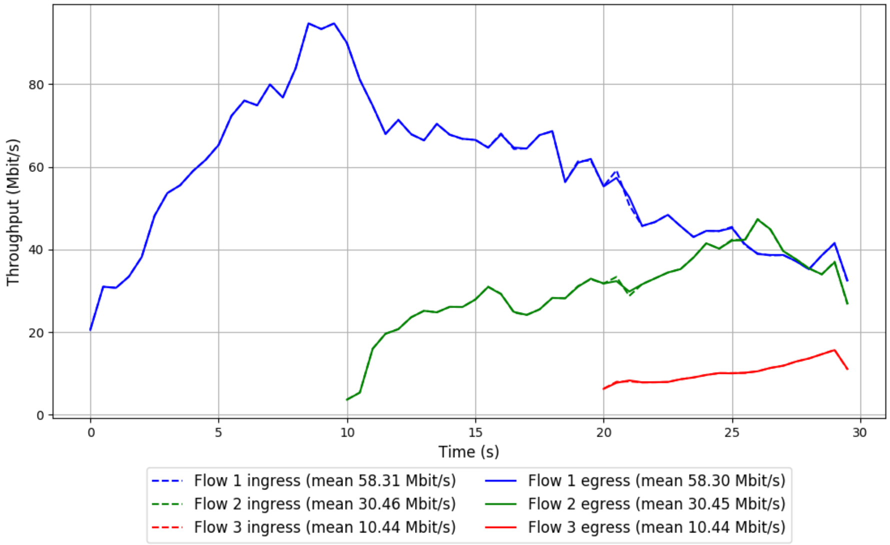
Run 8: Report of PCC — Data Link

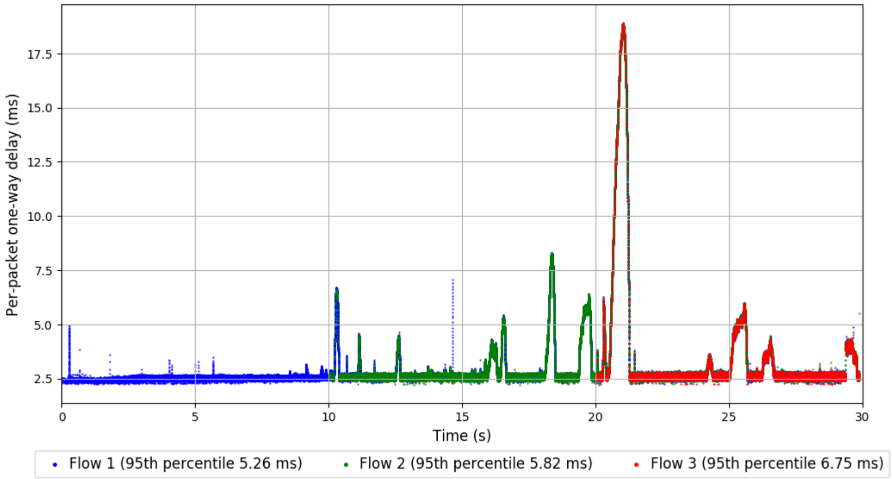




```
Run 9: Statistics of PCC

Start at: 2018-01-10 04:58:58
End at: 2018-01-10 04:59:28
Local clock offset: -0.019 ms
Remote clock offset: -0.277 ms

# Below is generated by plot.py at 2018-01-10 06:05:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.98 Mbit/s
95th percentile per-packet one-way delay: 5.555 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 58.30 Mbit/s
95th percentile per-packet one-way delay: 5.256 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 30.45 Mbit/s
95th percentile per-packet one-way delay: 5.819 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.44 Mbit/s
95th percentile per-packet one-way delay: 6.754 ms
Loss rate: 0.00%
```

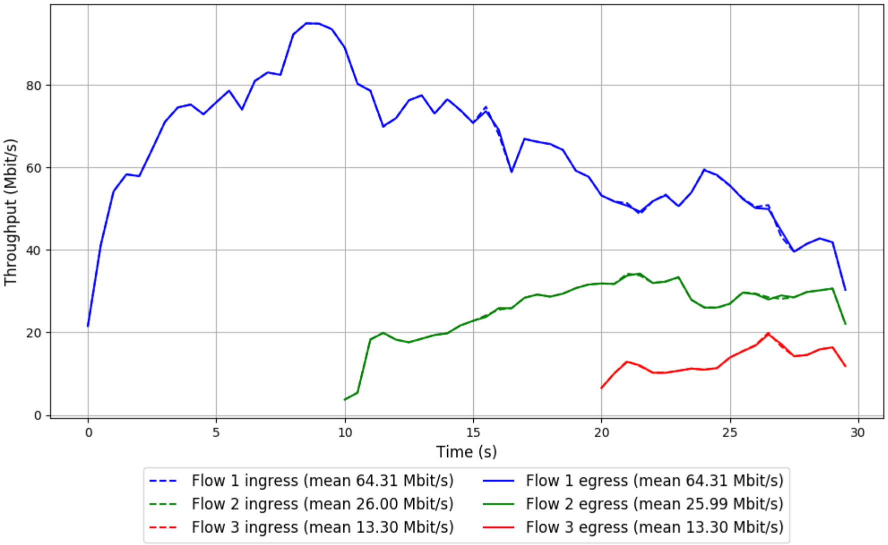
Run 9: Report of PCC — Data Link

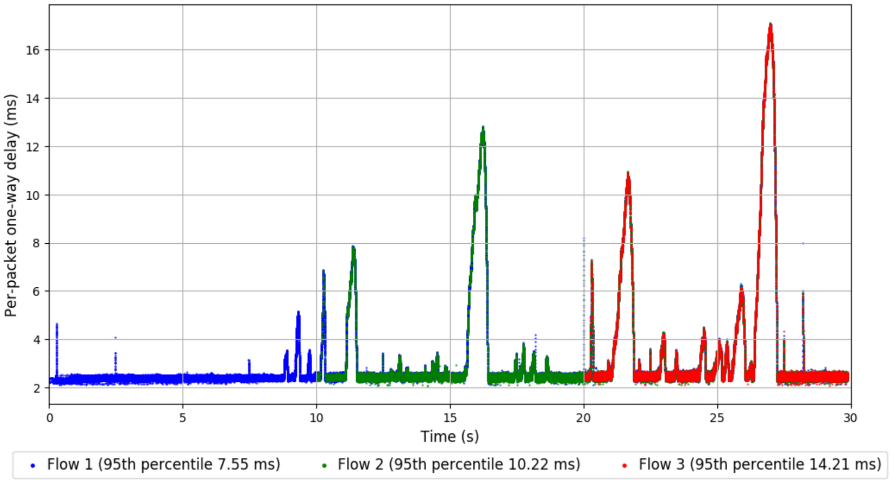




```
Run 10: Statistics of PCC

Start at: 2018-01-10 05:16:06
End at: 2018-01-10 05:16:36
Local clock offset: 0.009 ms
Remote clock offset: -0.404 ms

# Below is generated by plot.py at 2018-01-10 06:05:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.97 Mbit/s
95th percentile per-packet one-way delay: 8.686 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 64.31 Mbit/s
95th percentile per-packet one-way delay: 7.550 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 25.99 Mbit/s
95th percentile per-packet one-way delay: 10.220 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 13.30 Mbit/s
95th percentile per-packet one-way delay: 14.207 ms
Loss rate: 0.00%
```

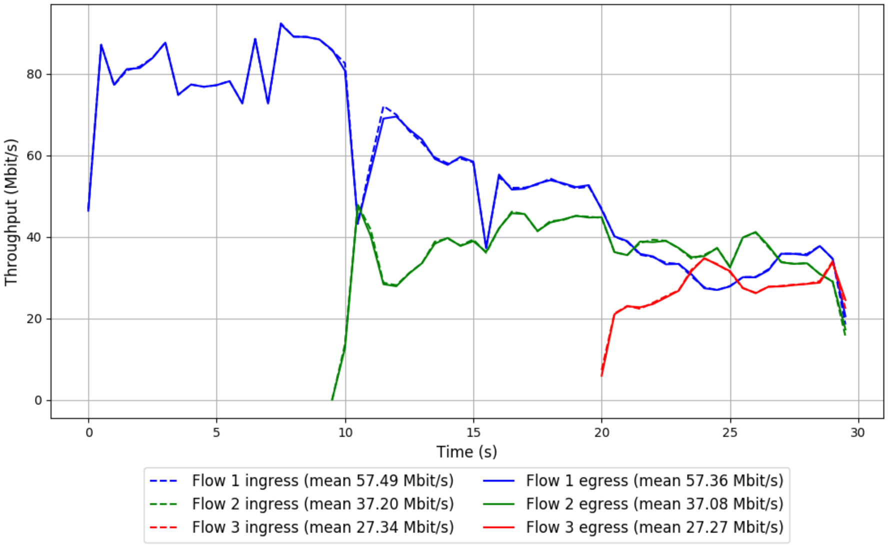
Run 10: Report of PCC — Data Link

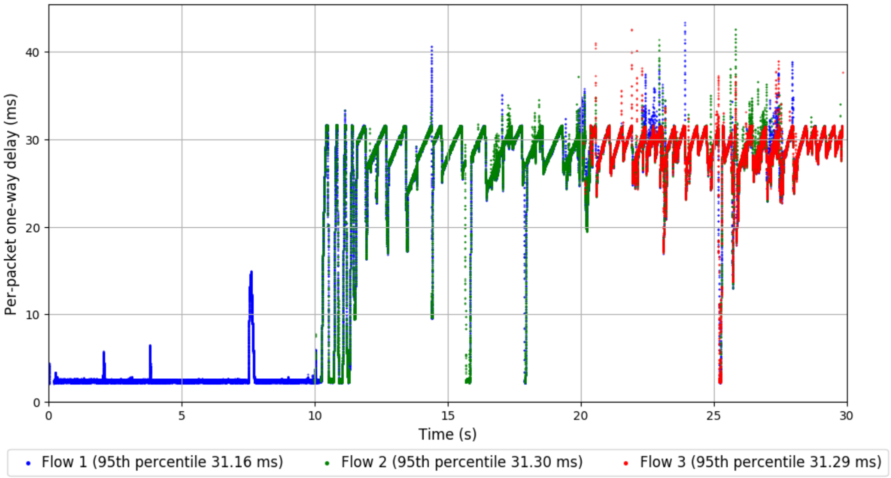




```
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-10 02:35:01
End at: 2018-01-10 02:35:31
Local clock offset: -0.086 ms
Remote clock offset: 0.691 ms

# Below is generated by plot.py at 2018-01-10 06:07:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.95 Mbit/s
95th percentile per-packet one-way delay: 31.241 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 57.36 Mbit/s
95th percentile per-packet one-way delay: 31.162 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 37.08 Mbit/s
95th percentile per-packet one-way delay: 31.304 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 27.27 Mbit/s
95th percentile per-packet one-way delay: 31.289 ms
Loss rate: 0.18%
```

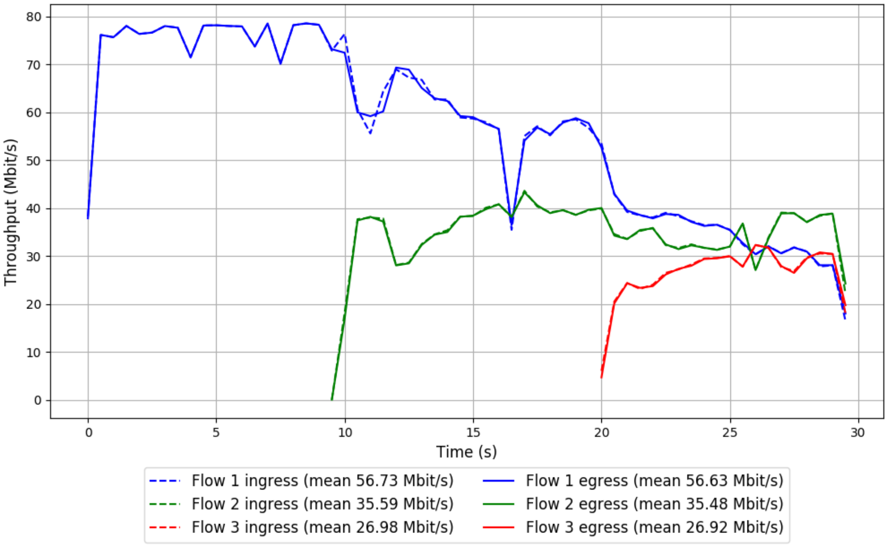
Run 1: Report of QUIC Cubic — Data Link

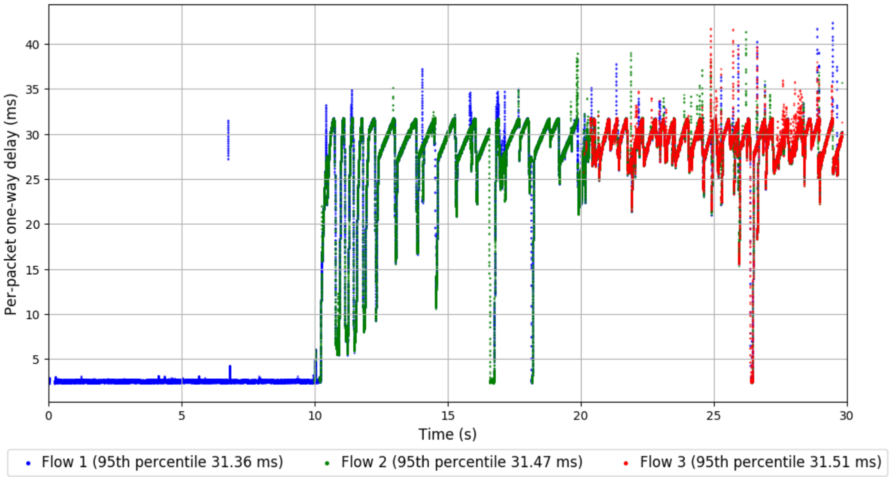




```
Run 2: Statistics of QUIC Cubic

Start at: 2018-01-10 02:52:10
End at: 2018-01-10 02:52:40
Local clock offset: -0.174 ms
Remote clock offset: 0.596 ms

# Below is generated by plot.py at 2018-01-10 06:07:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.01 Mbit/s
95th percentile per-packet one-way delay: 31.421 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 56.63 Mbit/s
95th percentile per-packet one-way delay: 31.358 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 35.48 Mbit/s
95th percentile per-packet one-way delay: 31.472 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 26.92 Mbit/s
95th percentile per-packet one-way delay: 31.508 ms
Loss rate: 0.19%
```

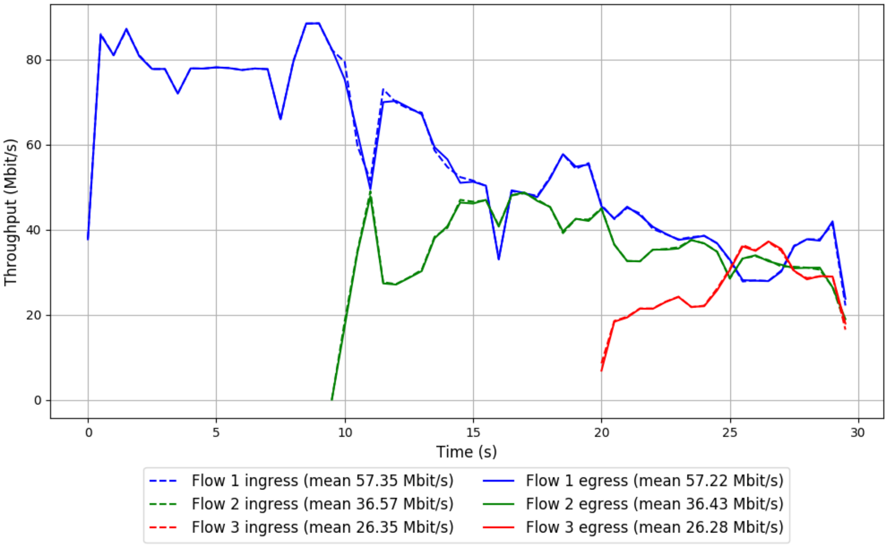
Run 2: Report of QUIC Cubic — Data Link

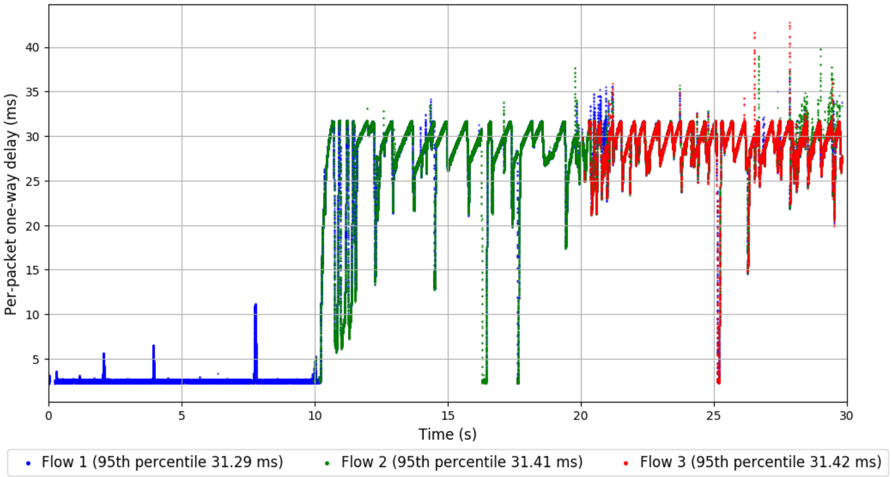




```
Run 3: Statistics of QUIC Cubic

Start at: 2018-01-10 03:09:18
End at: 2018-01-10 03:09:48
Local clock offset: -0.092 ms
Remote clock offset: 0.485 ms

# Below is generated by plot.py at 2018-01-10 06:08:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.08 Mbit/s
95th percentile per-packet one-way delay: 31.356 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 57.22 Mbit/s
95th percentile per-packet one-way delay: 31.289 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 36.43 Mbit/s
95th percentile per-packet one-way delay: 31.409 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 26.28 Mbit/s
95th percentile per-packet one-way delay: 31.423 ms
Loss rate: 0.30%
```

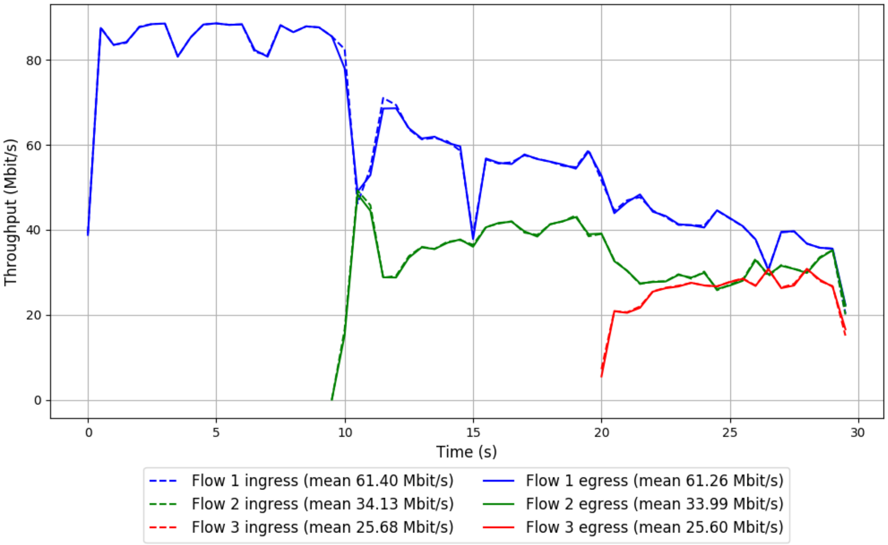
Run 3: Report of QUIC Cubic — Data Link

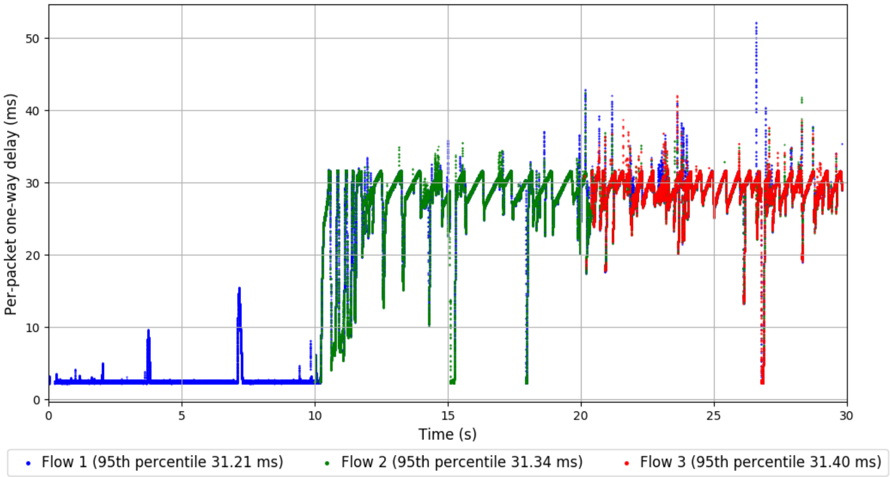




```
Run 4: Statistics of QUIC Cubic

Start at: 2018-01-10 03:26:26
End at: 2018-01-10 03:26:56
Local clock offset: -0.049 ms
Remote clock offset: 0.258 ms

# Below is generated by plot.py at 2018-01-10 06:08:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.20 Mbit/s
95th percentile per-packet one-way delay: 31.289 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 61.26 Mbit/s
95th percentile per-packet one-way delay: 31.214 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 33.99 Mbit/s
95th percentile per-packet one-way delay: 31.342 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 25.60 Mbit/s
95th percentile per-packet one-way delay: 31.401 ms
Loss rate: 0.31%
```

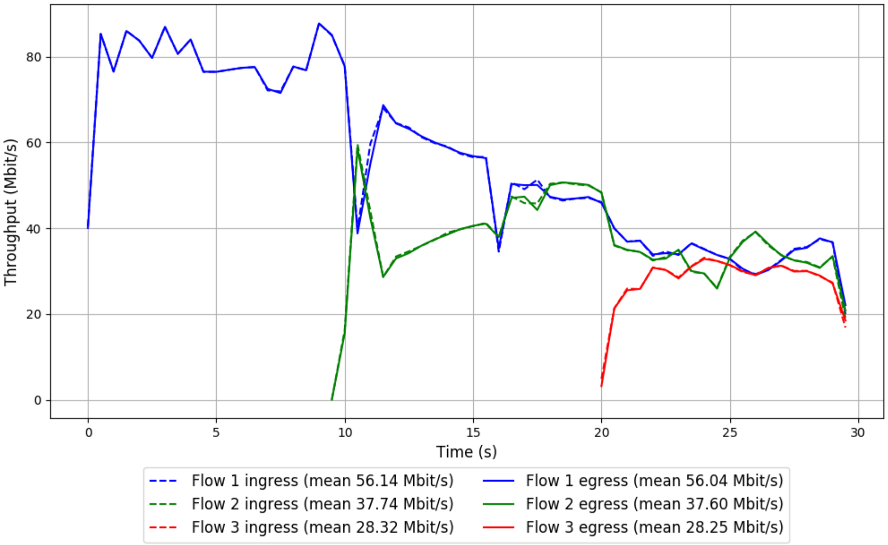
Run 4: Report of QUIC Cubic — Data Link

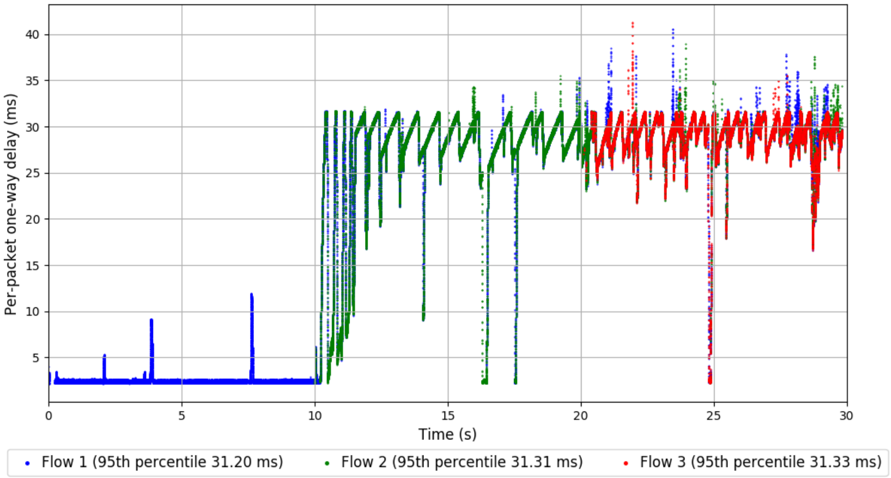




```
Run 5: Statistics of QUIC Cubic

Start at: 2018-01-10 03:43:35
End at: 2018-01-10 03:44:05
Local clock offset: -0.014 ms
Remote clock offset: 0.015 ms

# Below is generated by plot.py at 2018-01-10 06:08:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.25 Mbit/s
95th percentile per-packet one-way delay: 31.270 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 56.04 Mbit/s
95th percentile per-packet one-way delay: 31.204 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 37.60 Mbit/s
95th percentile per-packet one-way delay: 31.310 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 28.25 Mbit/s
95th percentile per-packet one-way delay: 31.333 ms
Loss rate: 0.22%
```

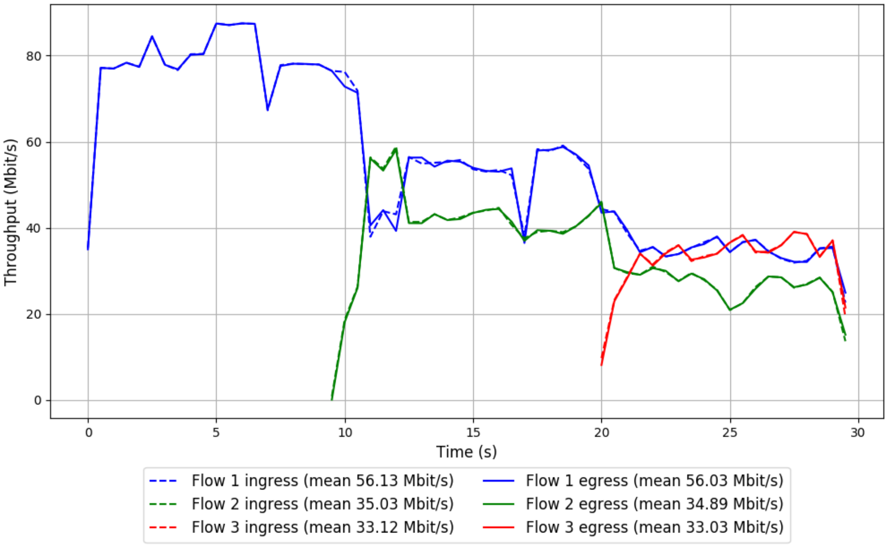
Run 5: Report of QUIC Cubic — Data Link

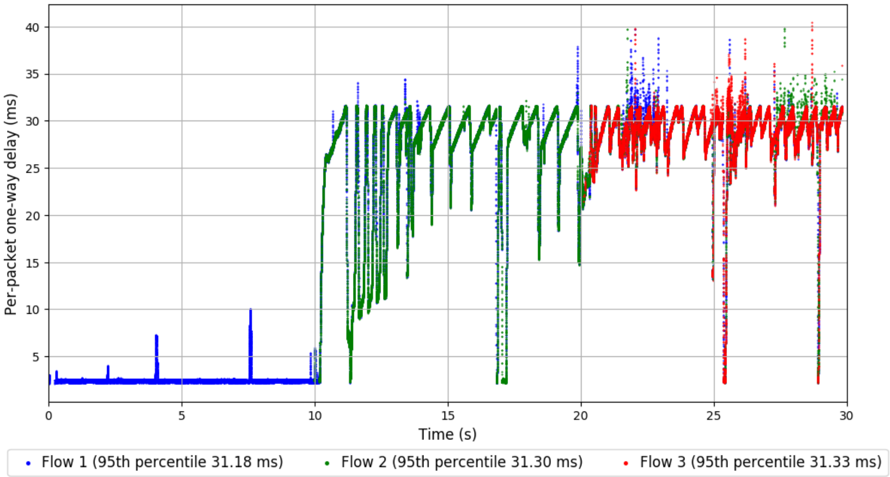




```
Run 6: Statistics of QUIC Cubic

Start at: 2018-01-10 04:00:43
End at: 2018-01-10 04:01:13
Local clock offset: 0.018 ms
Remote clock offset: -0.142 ms

# Below is generated by plot.py at 2018-01-10 06:08:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.04 Mbit/s
95th percentile per-packet one-way delay: 31.250 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 56.03 Mbit/s
95th percentile per-packet one-way delay: 31.182 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 34.89 Mbit/s
95th percentile per-packet one-way delay: 31.296 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 33.03 Mbit/s
95th percentile per-packet one-way delay: 31.331 ms
Loss rate: 0.14%
```

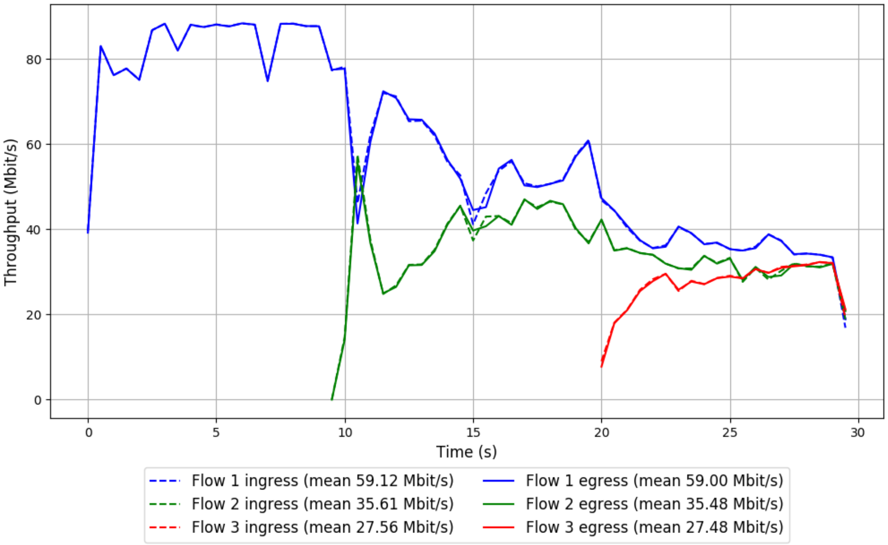
Run 6: Report of QUIC Cubic — Data Link

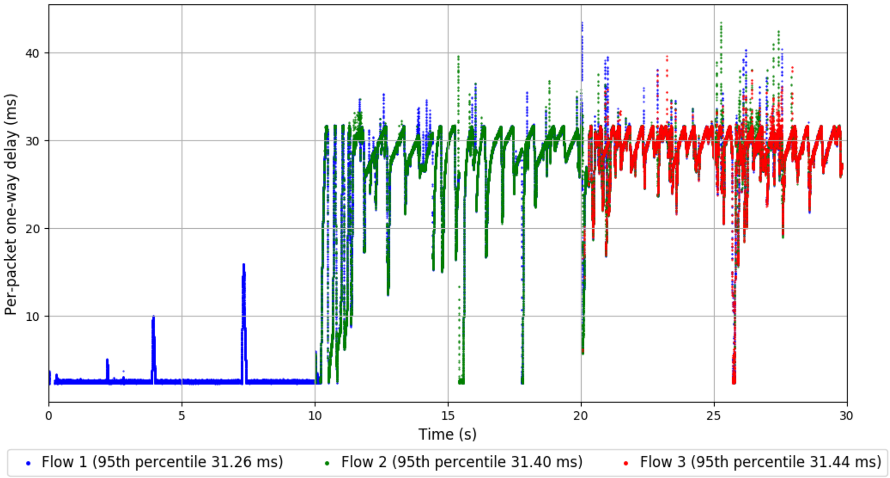




```
Run 7: Statistics of QUIC Cubic

Start at: 2018-01-10 04:17:52
End at: 2018-01-10 04:18:22
Local clock offset: 0.07 ms
Remote clock offset: -0.106 ms

# Below is generated by plot.py at 2018-01-10 06:08:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.58 Mbit/s
95th percentile per-packet one-way delay: 31.344 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 59.00 Mbit/s
95th percentile per-packet one-way delay: 31.259 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 35.48 Mbit/s
95th percentile per-packet one-way delay: 31.403 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 27.48 Mbit/s
95th percentile per-packet one-way delay: 31.441 ms
Loss rate: 0.19%
```

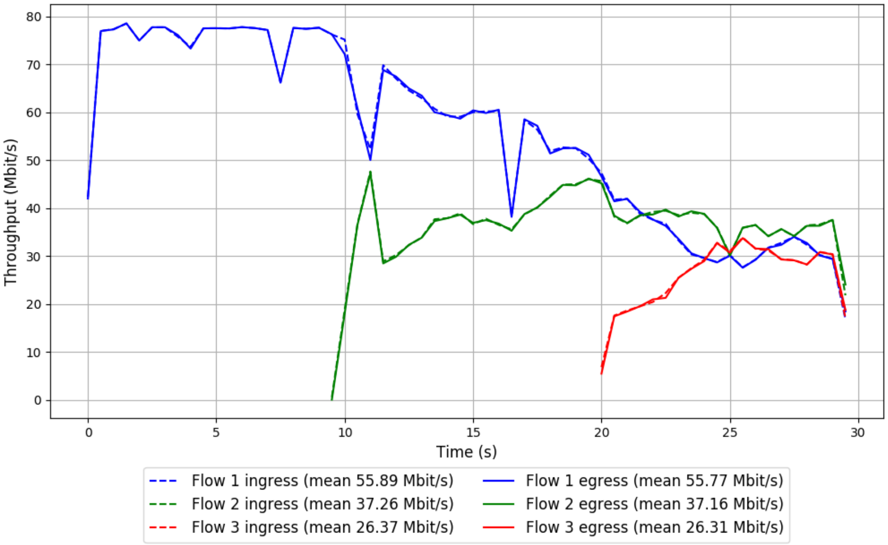
Run 7: Report of QUIC Cubic — Data Link

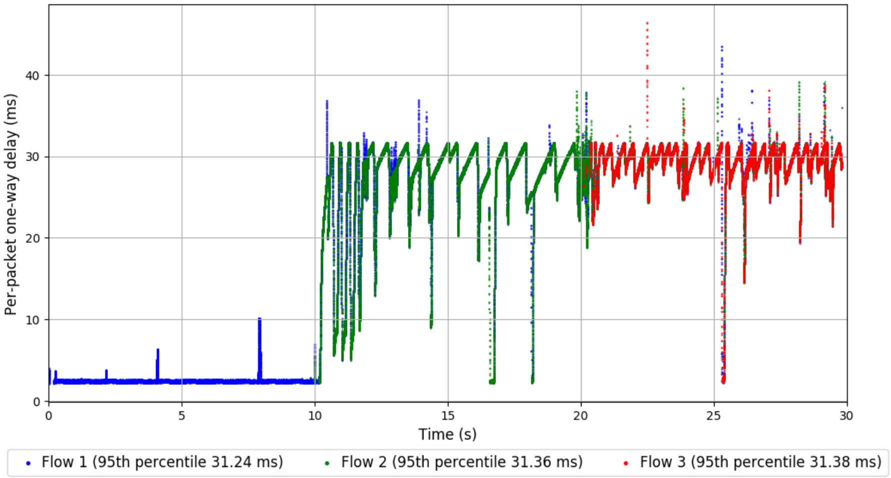




```
Run 8: Statistics of QUIC Cubic

Start at: 2018-01-10 04:35:00
End at: 2018-01-10 04:35:30
Local clock offset: 0.085 ms
Remote clock offset: -0.172 ms

# Below is generated by plot.py at 2018-01-10 06:08:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.10 Mbit/s
95th percentile per-packet one-way delay: 31.305 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 55.77 Mbit/s
95th percentile per-packet one-way delay: 31.241 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 37.16 Mbit/s
95th percentile per-packet one-way delay: 31.357 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 26.31 Mbit/s
95th percentile per-packet one-way delay: 31.378 ms
Loss rate: 0.23%
```

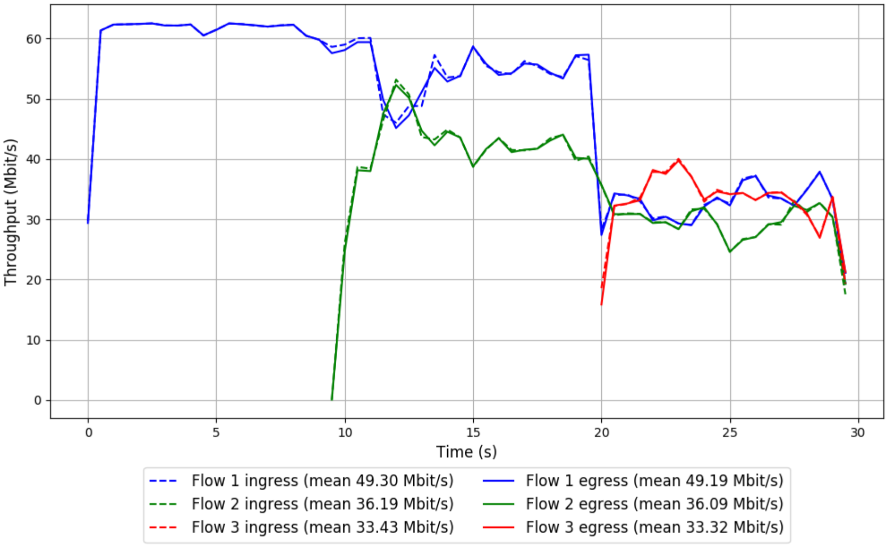
Run 8: Report of QUIC Cubic — Data Link

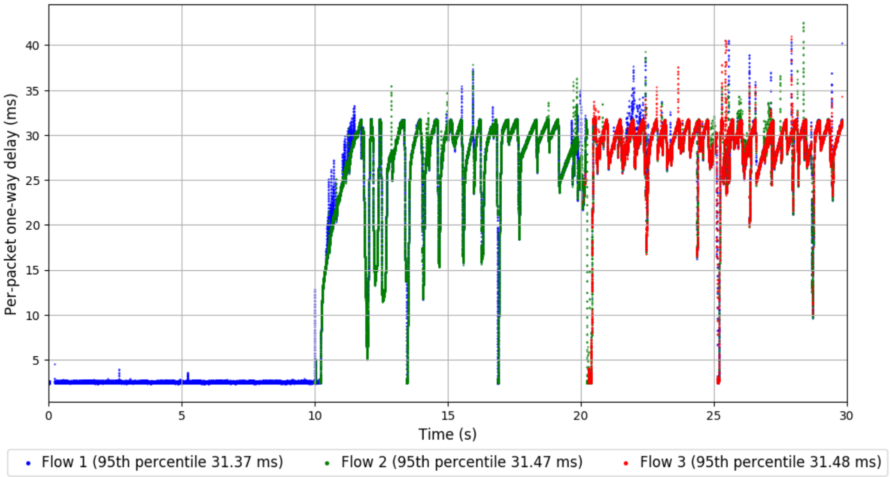




```
Run 9: Statistics of QUIC Cubic

Start at: 2018-01-10 04:52:08
End at: 2018-01-10 04:52:38
Local clock offset: -0.027 ms
Remote clock offset: -0.25 ms

# Below is generated by plot.py at 2018-01-10 06:10:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.11 Mbit/s
95th percentile per-packet one-way delay: 31.426 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 49.19 Mbit/s
95th percentile per-packet one-way delay: 31.367 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 36.09 Mbit/s
95th percentile per-packet one-way delay: 31.469 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 33.32 Mbit/s
95th percentile per-packet one-way delay: 31.478 ms
Loss rate: 0.23%
```

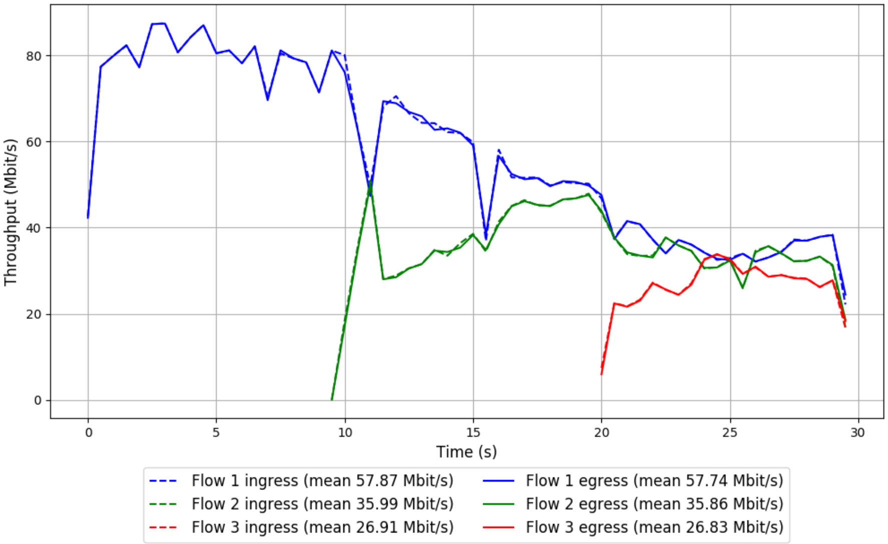
Run 9: Report of QUIC Cubic — Data Link

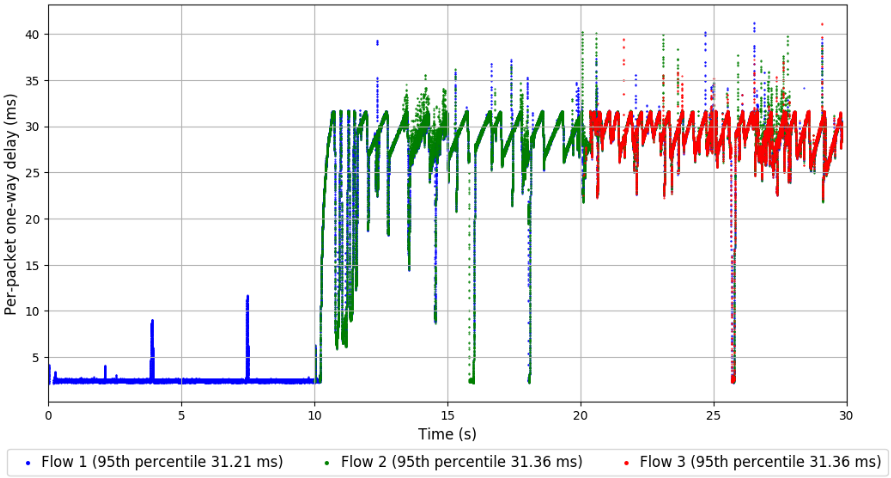




```
Run 10: Statistics of QUIC Cubic

Start at: 2018-01-10 05:09:16
End at: 2018-01-10 05:09:46
Local clock offset: 0.06 ms
Remote clock offset: -0.349 ms

# Below is generated by plot.py at 2018-01-10 06:10:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.36 Mbit/s
95th percentile per-packet one-way delay: 31.298 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 57.74 Mbit/s
95th percentile per-packet one-way delay: 31.214 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 35.86 Mbit/s
95th percentile per-packet one-way delay: 31.364 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 26.83 Mbit/s
95th percentile per-packet one-way delay: 31.359 ms
Loss rate: 0.20%
```

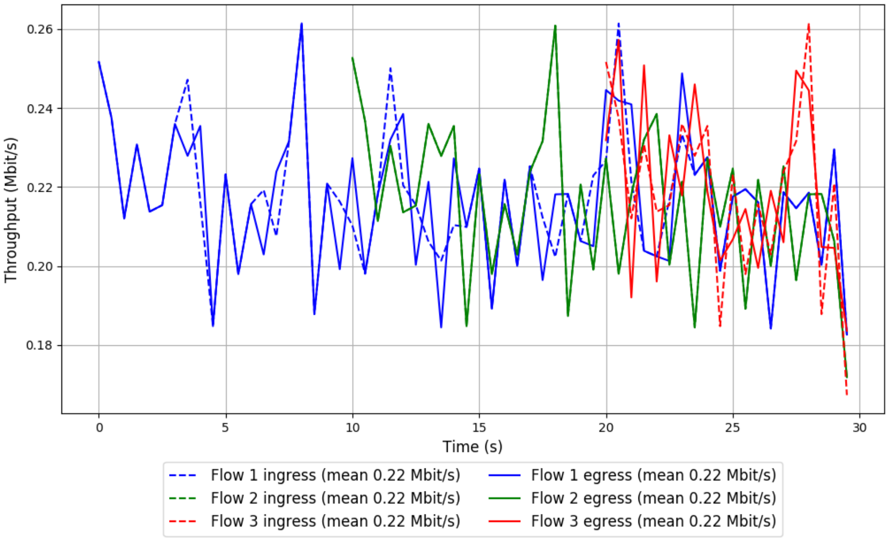
Run 10: Report of QUIC Cubic — Data Link

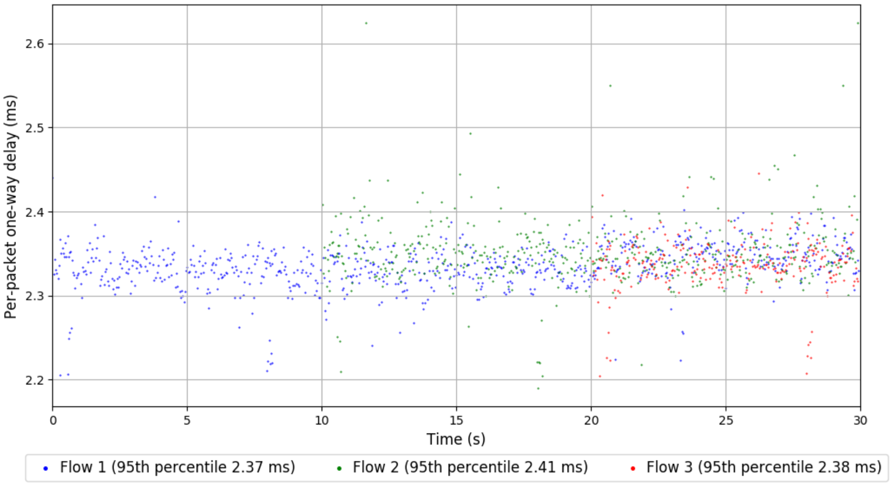




```
Run 1: Statistics of SCReAM

Start at: 2018-01-10 02:38:29
End at: 2018-01-10 02:38:59
Local clock offset: -0.07 ms
Remote clock offset: 0.74 ms

# Below is generated by plot.py at 2018-01-10 06:10:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 2.389 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.373 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.408 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.380 ms
Loss rate: 0.00%
```

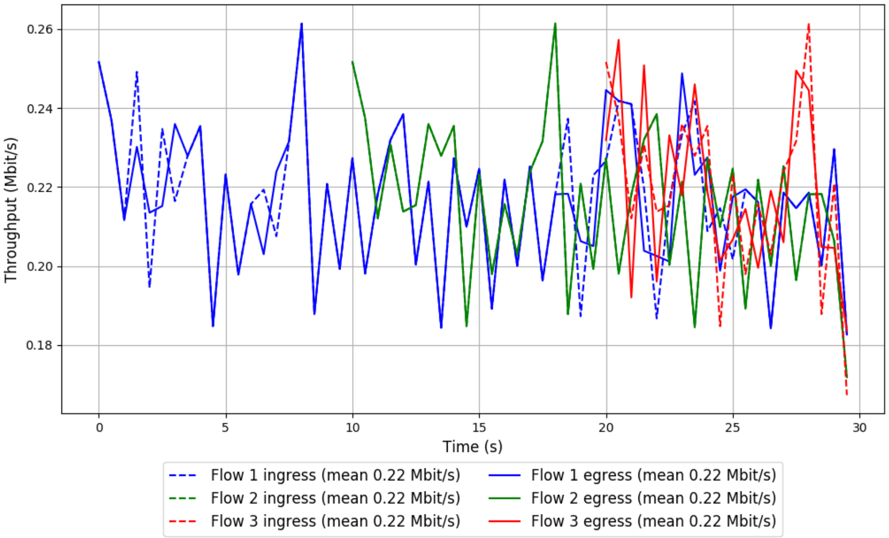
Run 1: Report of SCReAM — Data Link

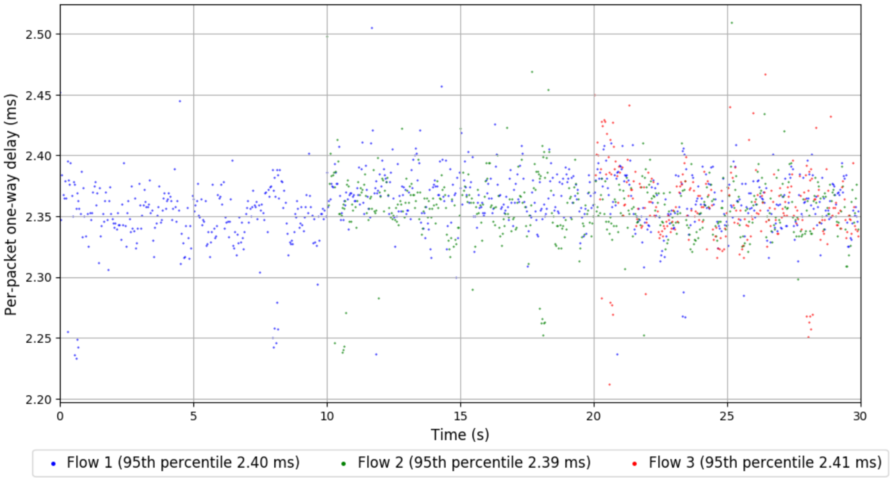




```
Run 2: Statistics of SCReAM

Start at: 2018-01-10 02:55:37
End at: 2018-01-10 02:56:07
Local clock offset: -0.093 ms
Remote clock offset: 0.56 ms

# Below is generated by plot.py at 2018-01-10 06:10:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 2.397 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.396 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.394 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.413 ms
Loss rate: 0.00%
```

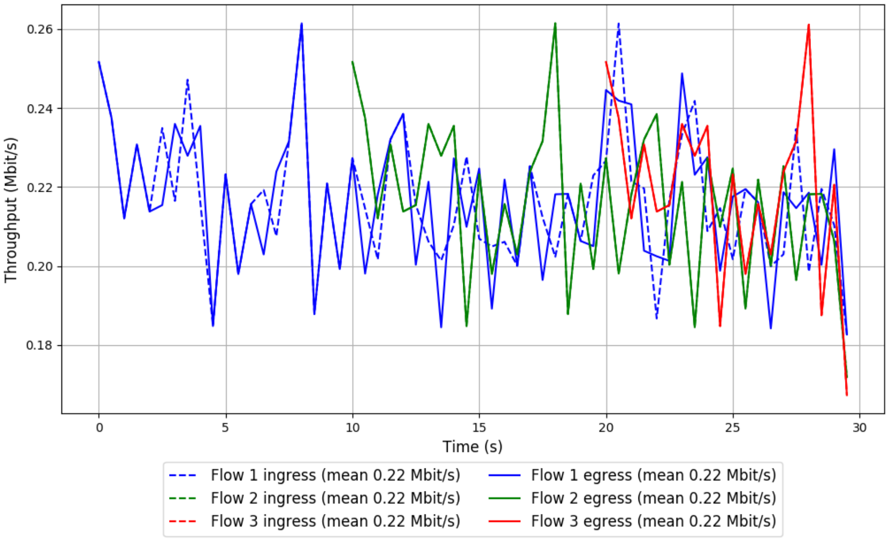
Run 2: Report of SCReAM — Data Link

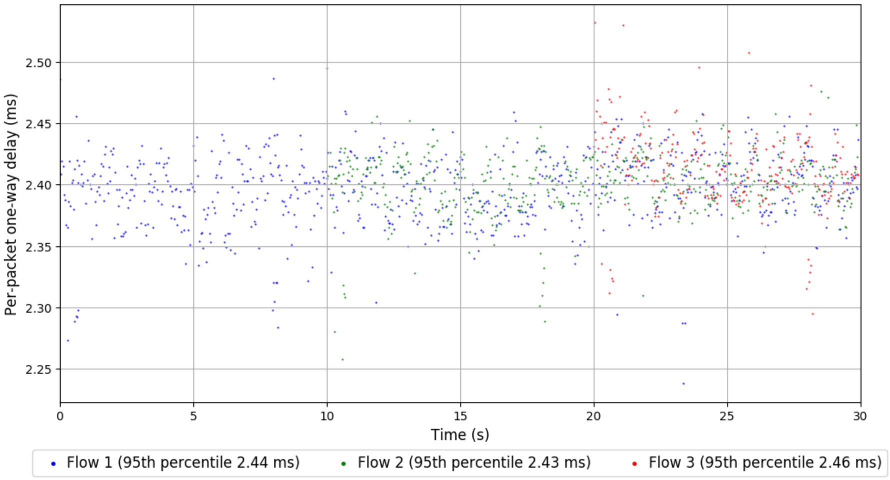




```
Run 3: Statistics of SCReAM

Start at: 2018-01-10 03:12:45
End at: 2018-01-10 03:13:15
Local clock offset: -0.151 ms
Remote clock offset: 0.443 ms

# Below is generated by plot.py at 2018-01-10 06:10:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 2.442 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.438 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.433 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.459 ms
Loss rate: 0.00%
```

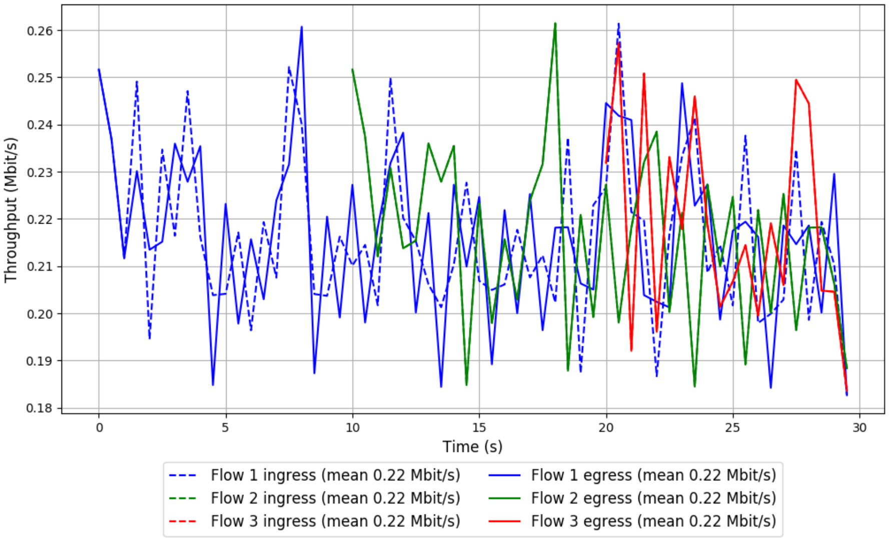
Run 3: Report of SCReAM — Data Link

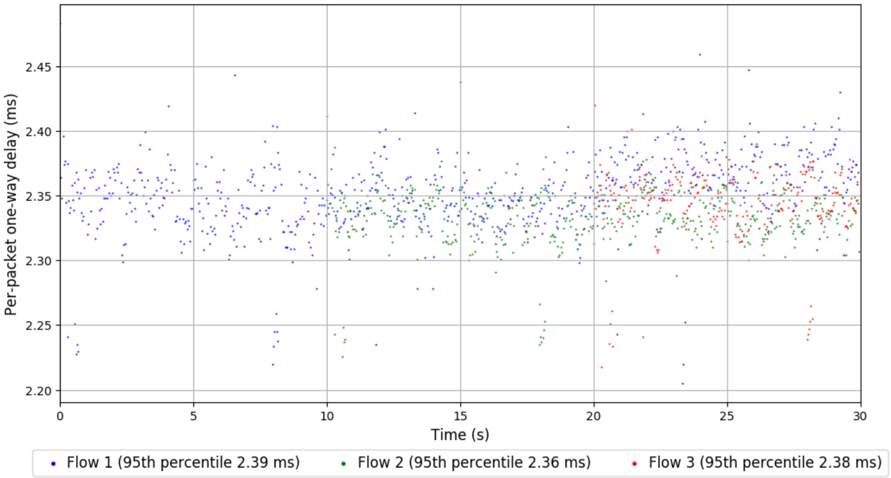




```
Run 4: Statistics of SCReAM

Start at: 2018-01-10 03:29:53
End at: 2018-01-10 03:30:23
Local clock offset: -0.032 ms
Remote clock offset: 0.258 ms

# Below is generated by plot.py at 2018-01-10 06:10:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 2.385 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.394 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.360 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.376 ms
Loss rate: 0.00%
```

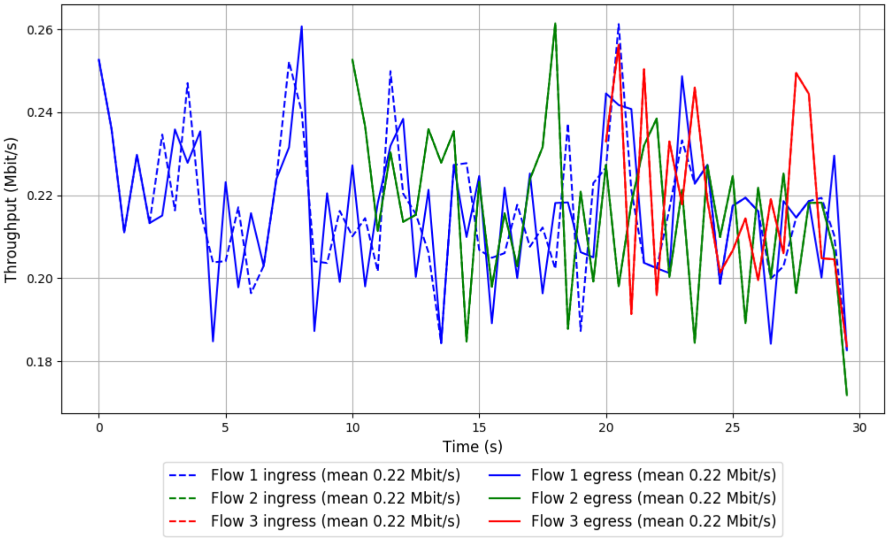
Run 4: Report of SCReAM — Data Link

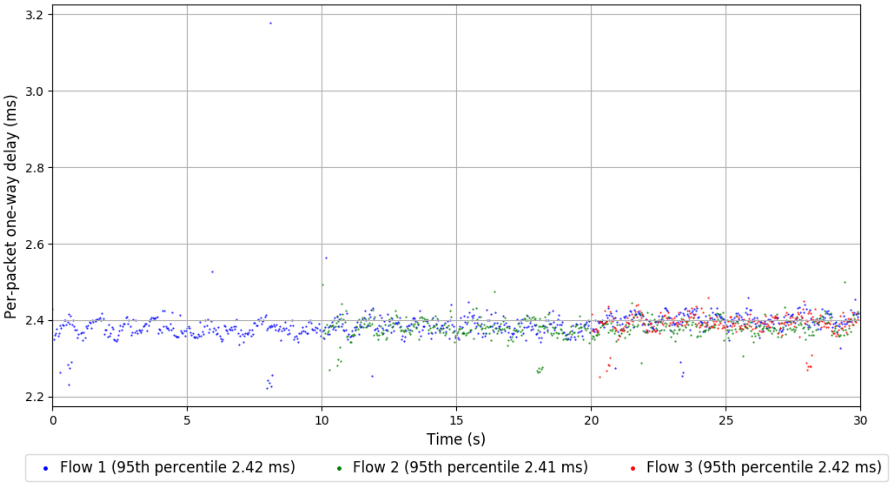




```
Run 5: Statistics of SCReAM

Start at: 2018-01-10 03:47:02
End at: 2018-01-10 03:47:32
Local clock offset: -0.035 ms
Remote clock offset: 0.051 ms

# Below is generated by plot.py at 2018-01-10 06:10:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 2.421 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.424 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.414 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.422 ms
Loss rate: 0.00%
```

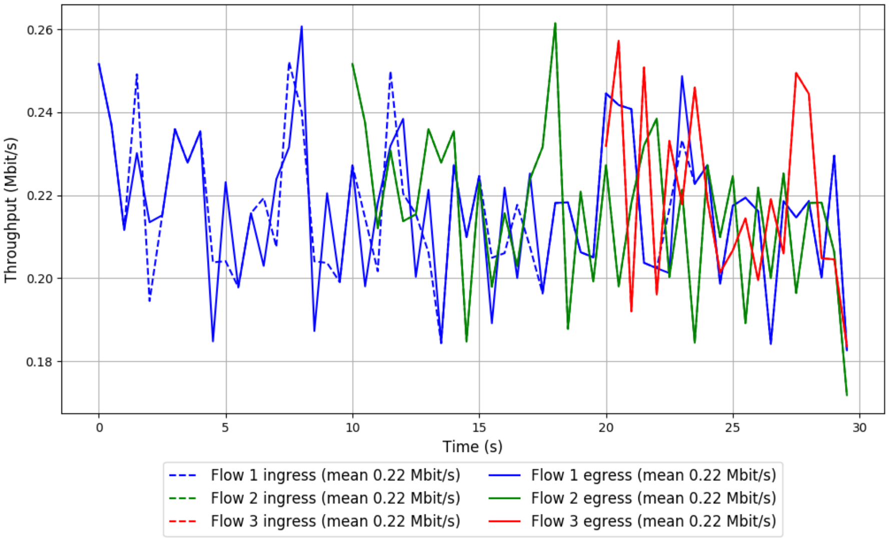
Run 5: Report of SCReAM — Data Link

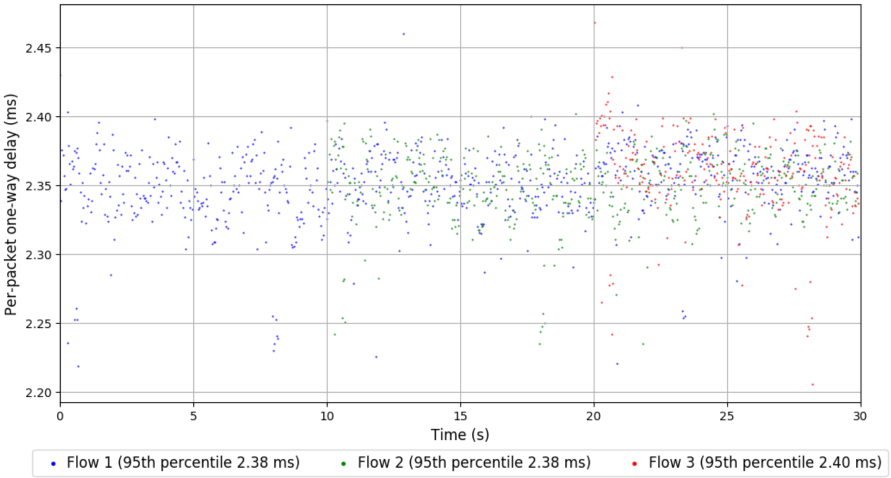




```
Run 6: Statistics of SCReAM

Start at: 2018-01-10 04:04:10
End at: 2018-01-10 04:04:40
Local clock offset: 0.03 ms
Remote clock offset: -0.074 ms

# Below is generated by plot.py at 2018-01-10 06:10:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 2.389 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.385 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.383 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.399 ms
Loss rate: 0.00%
```

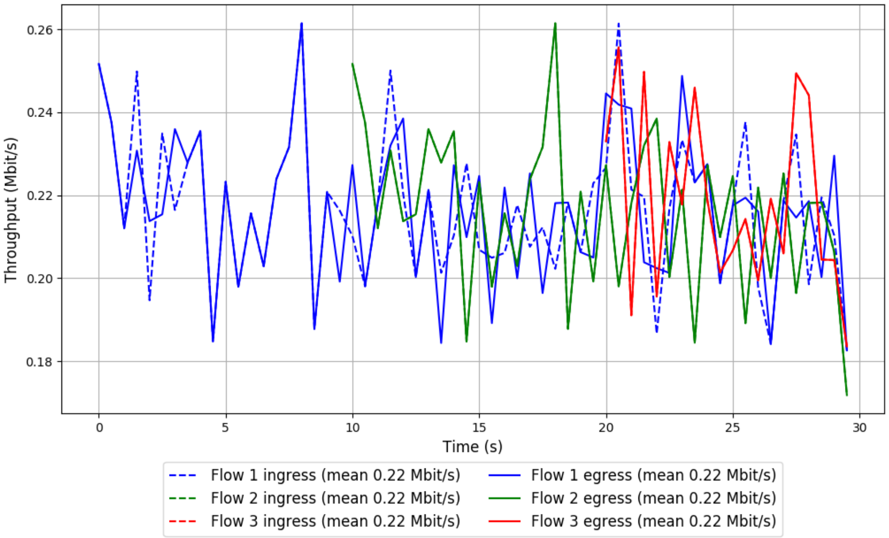
Run 6: Report of SCReAM — Data Link

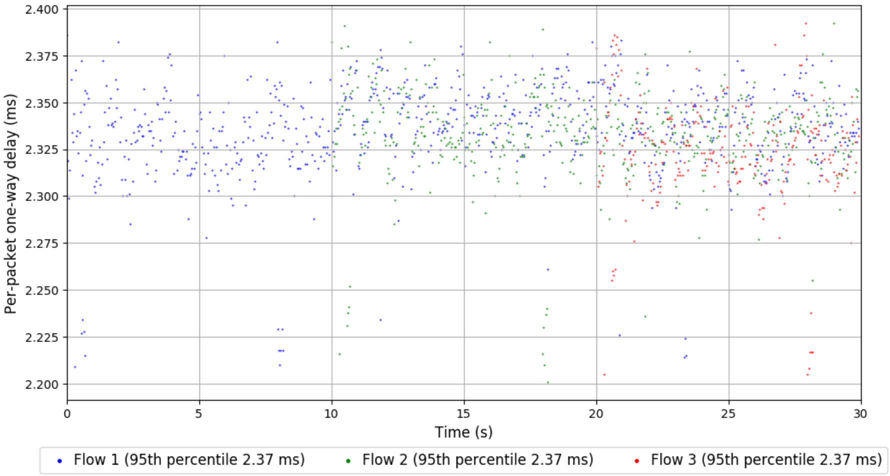




```
Run 7: Statistics of SCReAM

Start at: 2018-01-10 04:21:19
End at: 2018-01-10 04:21:49
Local clock offset: 0.082 ms
Remote clock offset: -0.125 ms

# Below is generated by plot.py at 2018-01-10 06:10:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 2.367 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.367 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.365 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.368 ms
Loss rate: 0.00%
```

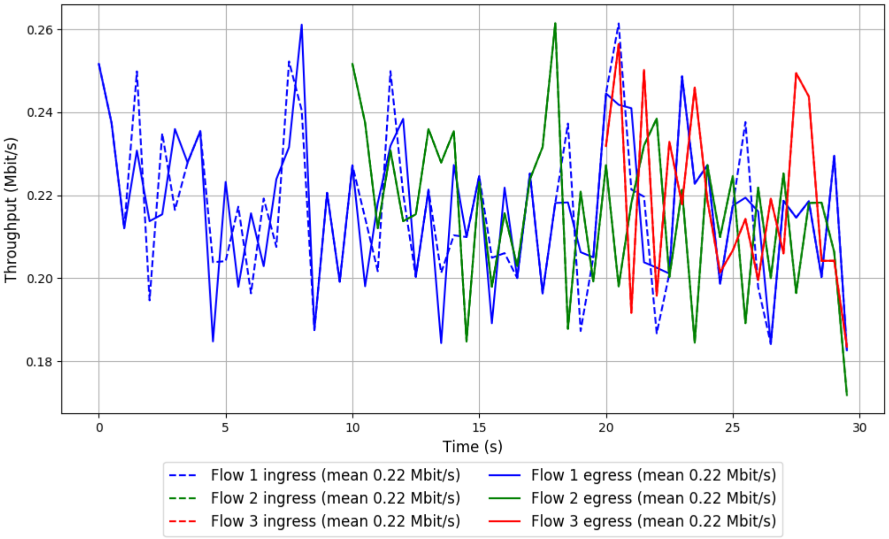
Run 7: Report of SCReAM — Data Link

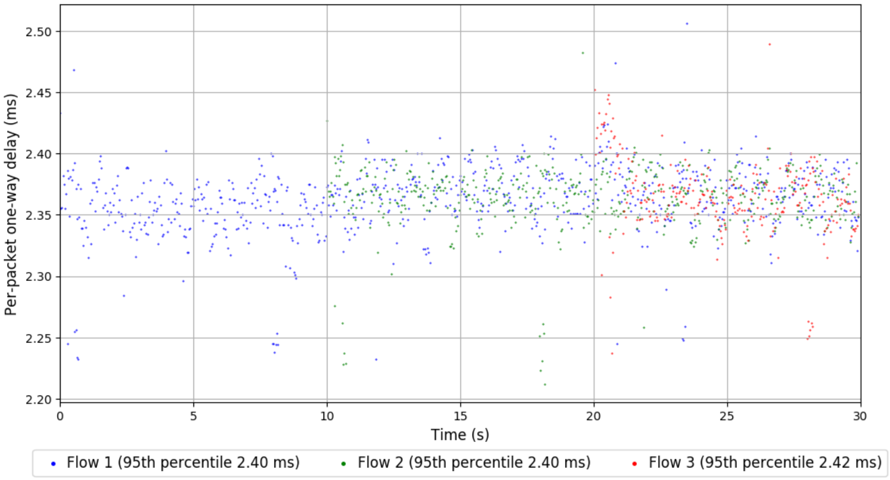




```
Run 8: Statistics of SCReAM

Start at: 2018-01-10 04:38:28
End at: 2018-01-10 04:38:58
Local clock offset: 0.047 ms
Remote clock offset: -0.189 ms

# Below is generated by plot.py at 2018-01-10 06:10:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 2.399 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.399 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.395 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.418 ms
Loss rate: 0.00%
```

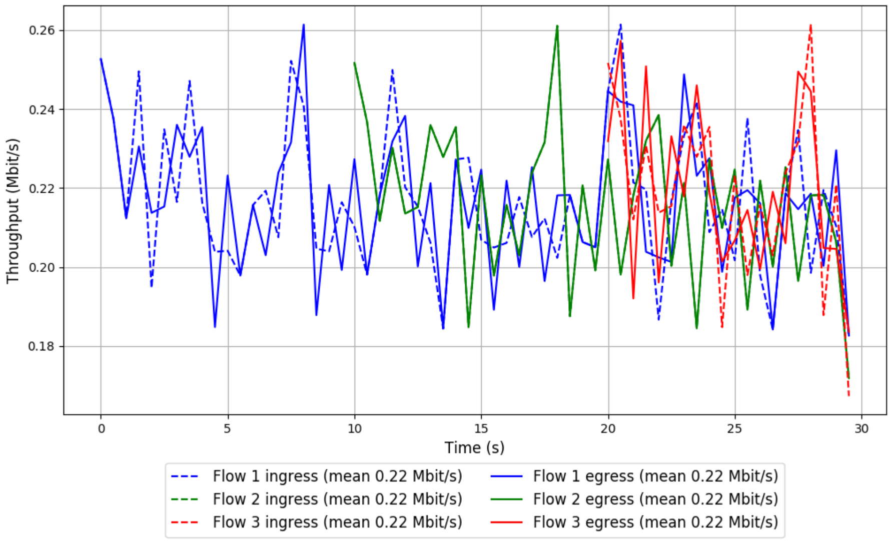
Run 8: Report of SCReAM — Data Link

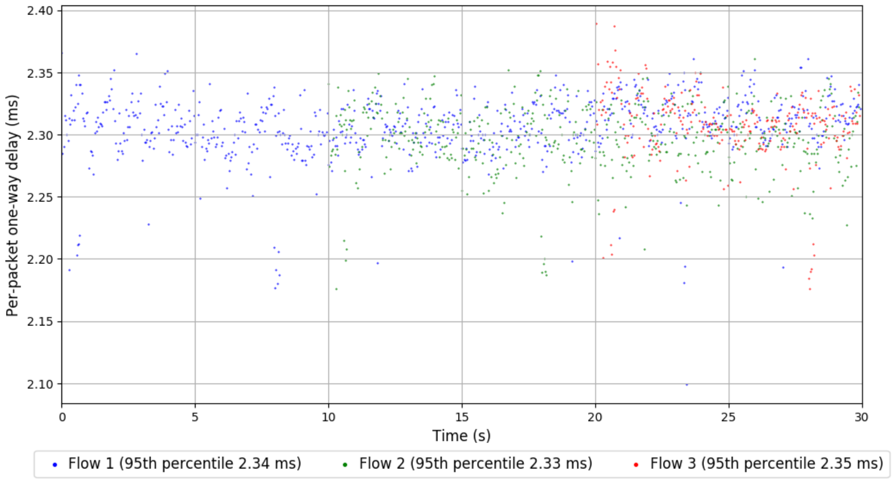




```
Run 9: Statistics of SCReAM

Start at: 2018-01-10 04:55:35
End at: 2018-01-10 04:56:05
Local clock offset: 0.01 ms
Remote clock offset: -0.354 ms

# Below is generated by plot.py at 2018-01-10 06:10:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 2.339 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.340 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.335 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.349 ms
Loss rate: 0.00%
```

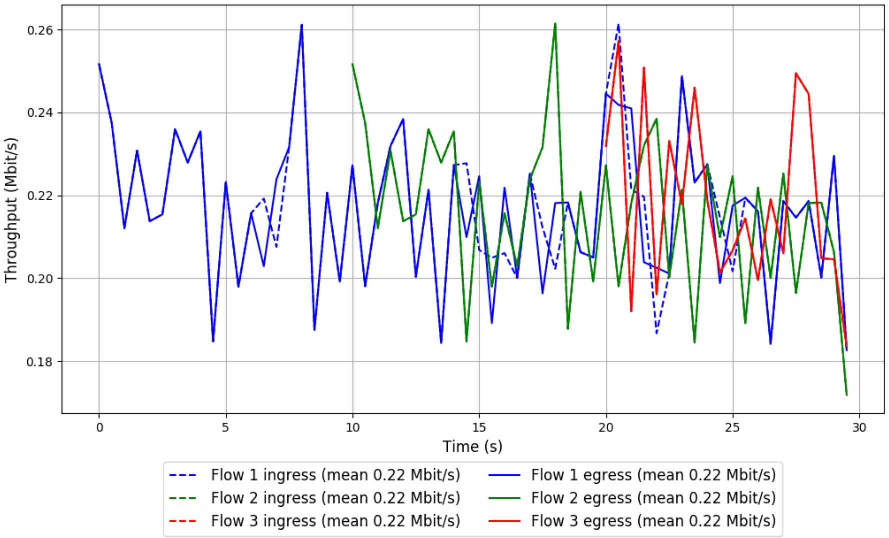
Run 9: Report of SCReAM — Data Link

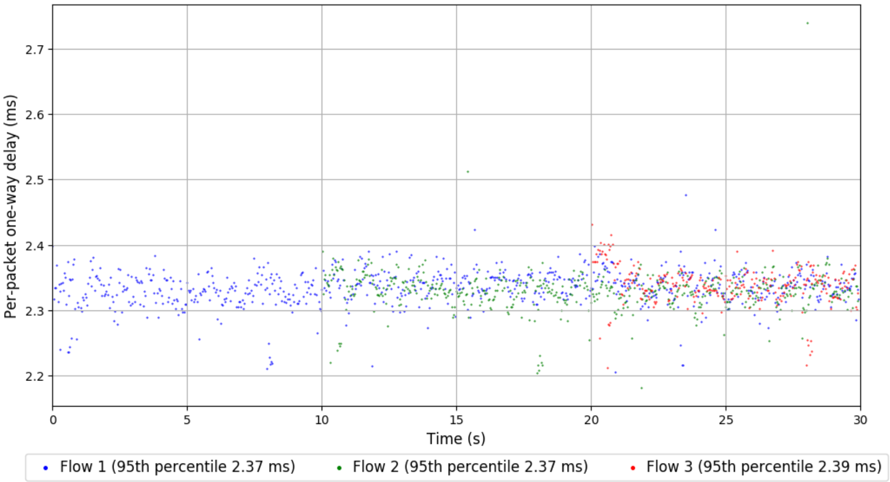




```
Run 10: Statistics of SCReAM

Start at: 2018-01-10 05:12:44
End at: 2018-01-10 05:13:14
Local clock offset: 0.035 ms
Remote clock offset: -0.349 ms

# Below is generated by plot.py at 2018-01-10 06:10:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 2.373 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.373 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.366 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.387 ms
Loss rate: 0.00%
```

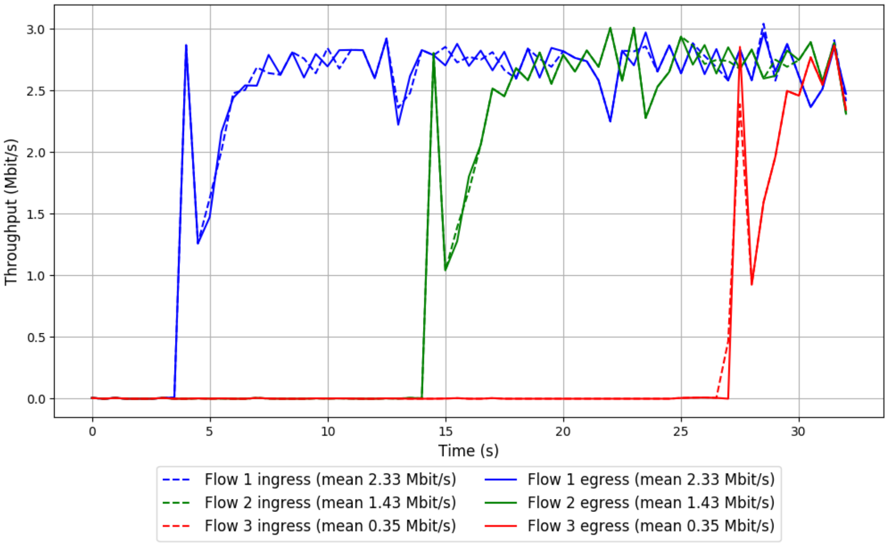
Run 10: Report of SCReAM — Data Link

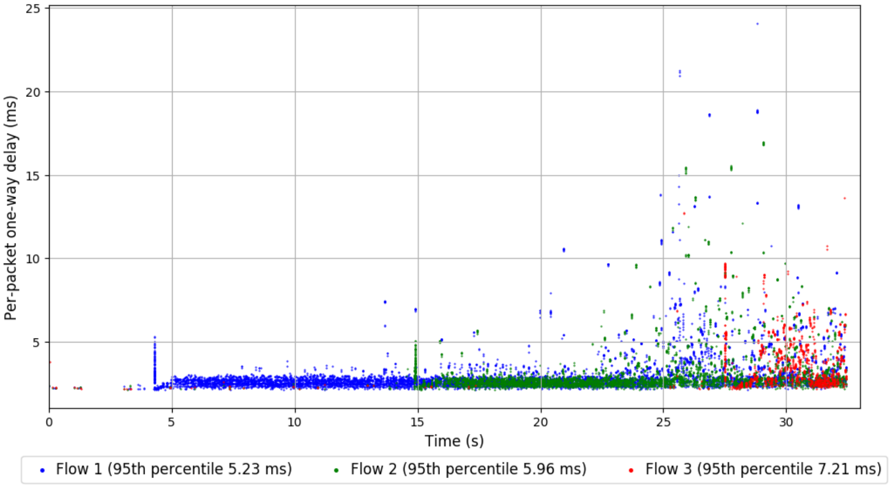




```
Run 1: Statistics of WebRTC media

Start at: 2018-01-10 02:27:02
End at: 2018-01-10 02:27:32
Local clock offset: -0.146 ms
Remote clock offset: 0.691 ms

# Below is generated by plot.py at 2018-01-10 06:10:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.11 Mbit/s
95th percentile per-packet one-way delay: 5.773 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 5.234 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 5.962 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 7.213 ms
Loss rate: 0.00%
```

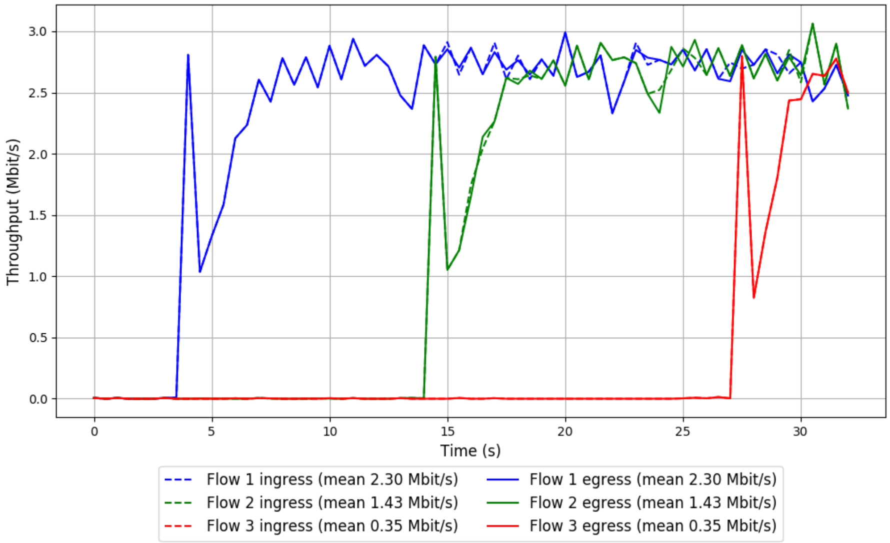
Run 1: Report of WebRTC media — Data Link

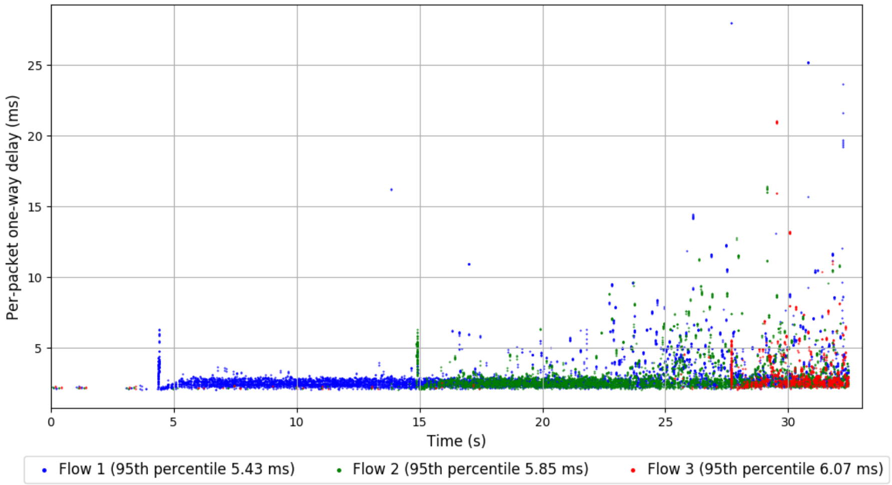




```
Run 2: Statistics of WebRTC media

Start at: 2018-01-10 02:44:10
End at: 2018-01-10 02:44:40
Local clock offset: -0.076 ms
Remote clock offset: 0.596 ms

# Below is generated by plot.py at 2018-01-10 06:10:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.06 Mbit/s
95th percentile per-packet one-way delay: 5.678 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 5.430 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 5.853 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 6.065 ms
Loss rate: 0.00%
```

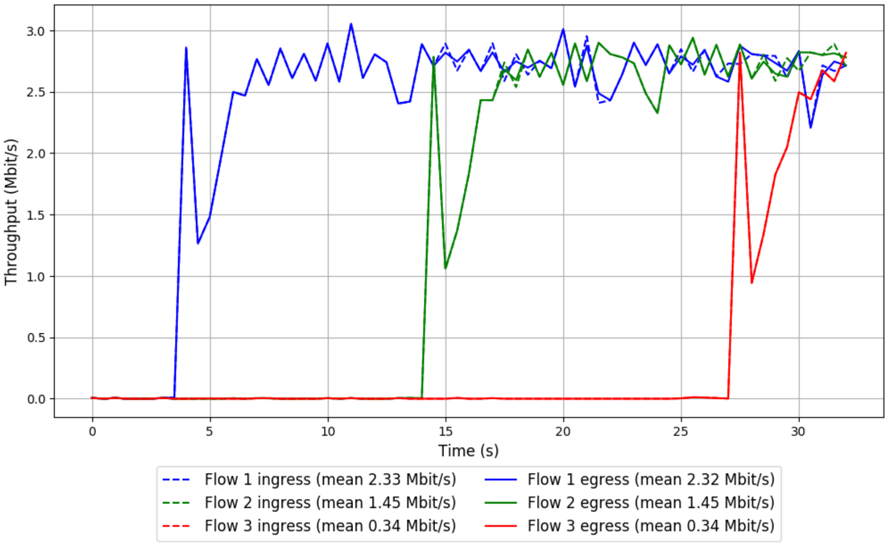
Run 2: Report of WebRTC media — Data Link

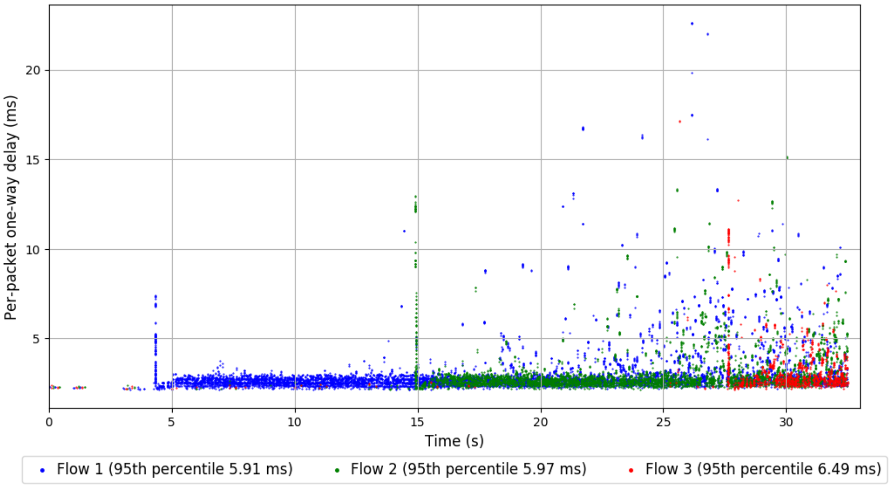




```
Run 3: Statistics of WebRTC media

Start at: 2018-01-10 03:01:19
End at: 2018-01-10 03:01:49
Local clock offset: -0.084 ms
Remote clock offset: 0.521 ms

# Below is generated by plot.py at 2018-01-10 06:10:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.11 Mbit/s
95th percentile per-packet one-way delay: 5.952 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 5.905 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 5.973 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 6.486 ms
Loss rate: 0.00%
```

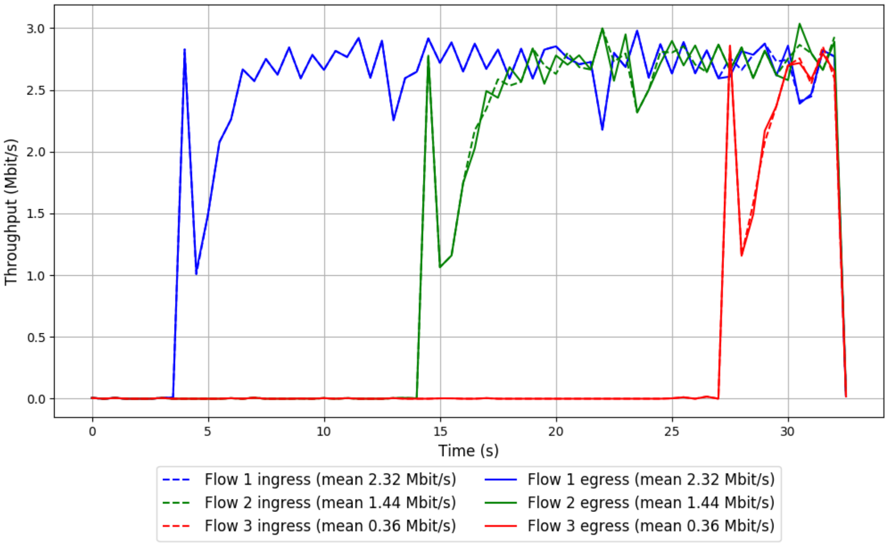
Run 3: Report of WebRTC media — Data Link

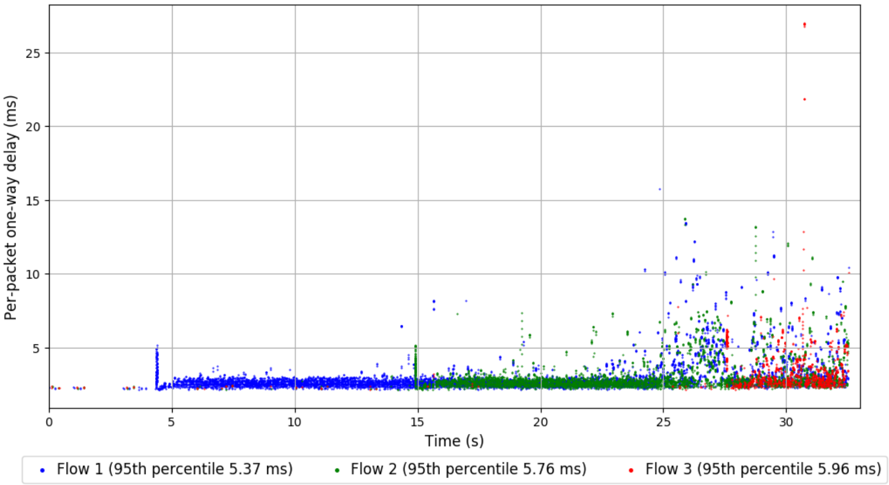




```
Run 4: Statistics of WebRTC media

Start at: 2018-01-10 03:18:27
End at: 2018-01-10 03:18:57
Local clock offset: -0.066 ms
Remote clock offset: 0.423 ms

# Below is generated by plot.py at 2018-01-10 06:10:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.11 Mbit/s
95th percentile per-packet one-way delay: 5.577 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 5.366 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 5.760 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 5.964 ms
Loss rate: 0.00%
```

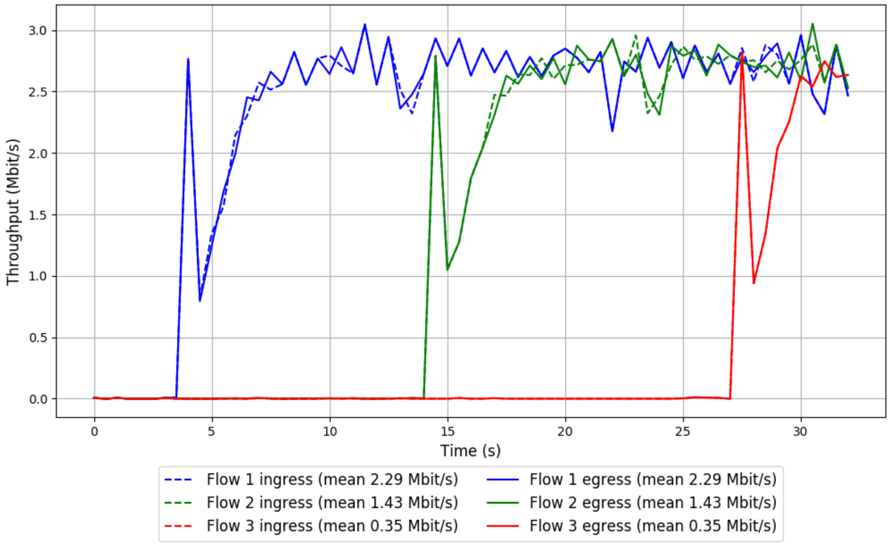
Run 4: Report of WebRTC media — Data Link

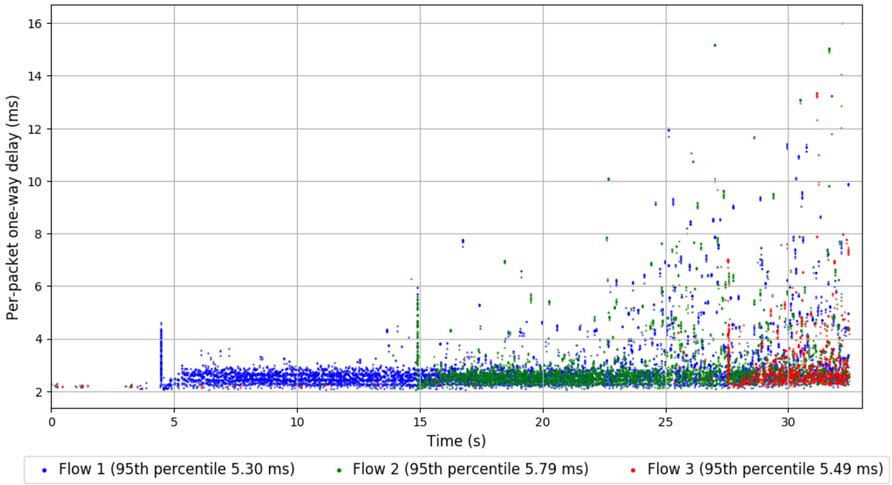




```
Run 5: Statistics of WebRTC media

Start at: 2018-01-10 03:35:35
End at: 2018-01-10 03:36:05
Local clock offset: -0.014 ms
Remote clock offset: 0.112 ms

# Below is generated by plot.py at 2018-01-10 06:10:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.07 Mbit/s
95th percentile per-packet one-way delay: 5.534 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 5.298 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 5.786 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 5.493 ms
Loss rate: 0.00%
```

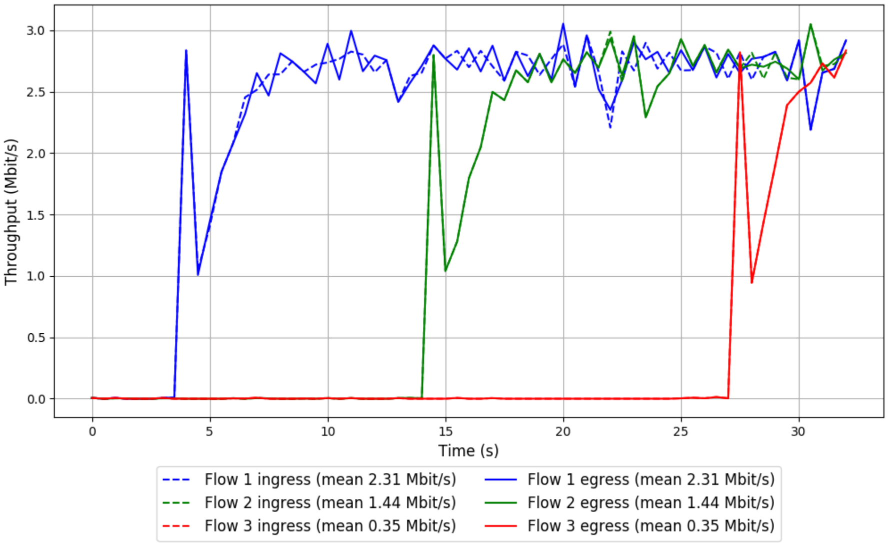
Run 5: Report of WebRTC media — Data Link

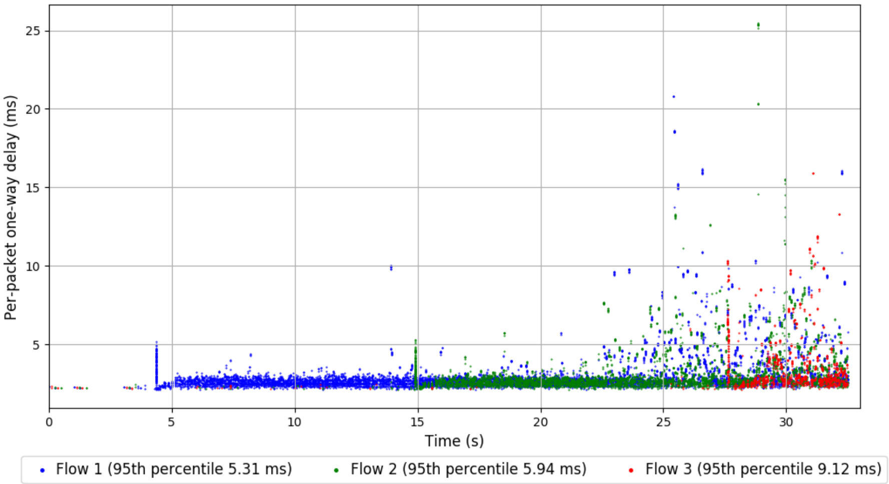




```
Run 6: Statistics of WebRTC media

Start at: 2018-01-10 03:52:43
End at: 2018-01-10 03:53:13
Local clock offset: -0.017 ms
Remote clock offset: -0.023 ms

# Below is generated by plot.py at 2018-01-10 06:10:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.09 Mbit/s
95th percentile per-packet one-way delay: 6.068 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 5.312 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 5.944 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 9.115 ms
Loss rate: 0.00%
```

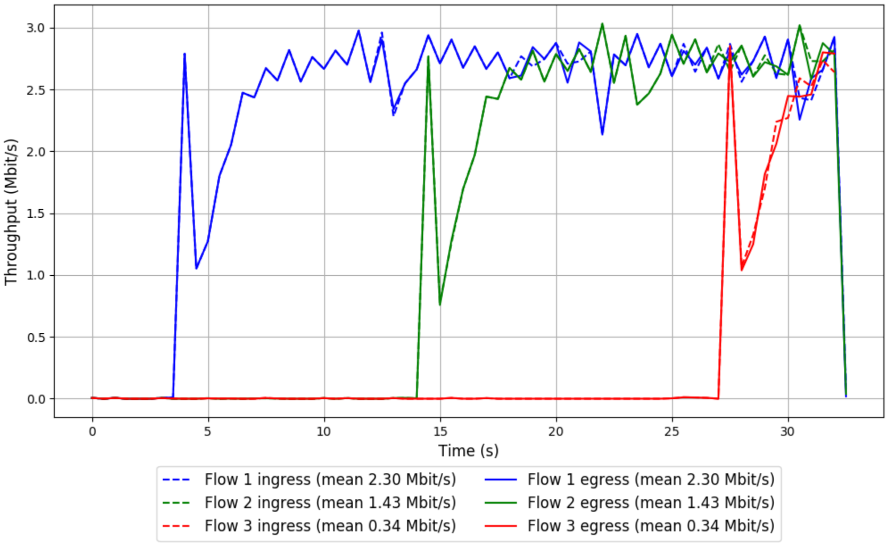
Run 6: Report of WebRTC media — Data Link

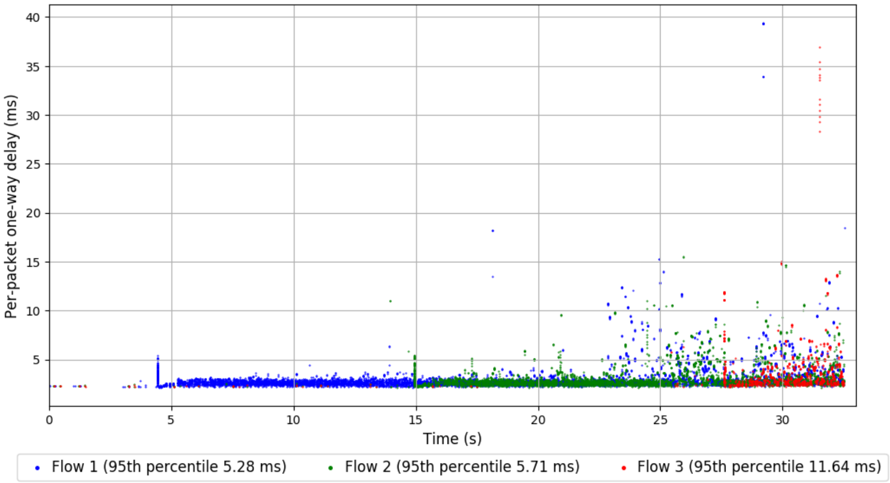




```
Run 7: Statistics of WebRTC media

Start at: 2018-01-10 04:09:52
End at: 2018-01-10 04:10:22
Local clock offset: 0.055 ms
Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2018-01-10 06:10:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.06 Mbit/s
95th percentile per-packet one-way delay: 5.838 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 5.283 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 5.714 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 11.640 ms
Loss rate: 0.00%
```

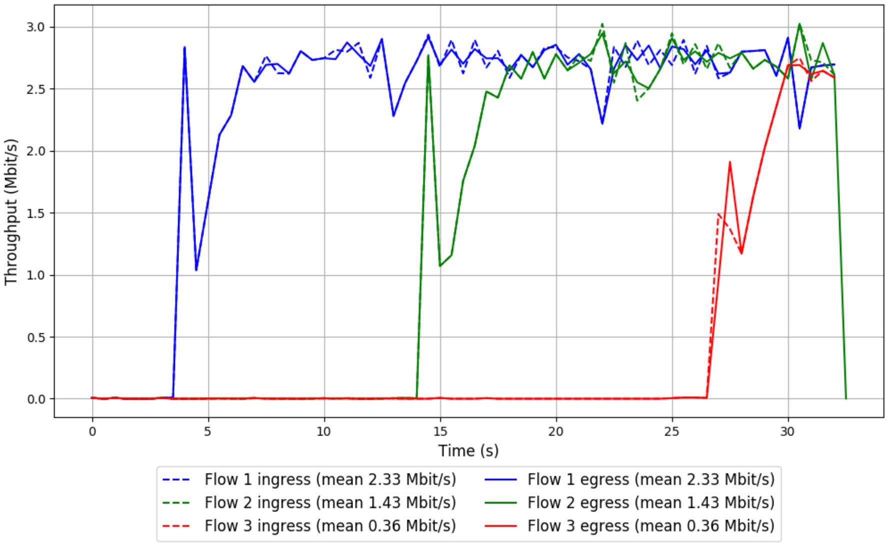
Run 7: Report of WebRTC media — Data Link

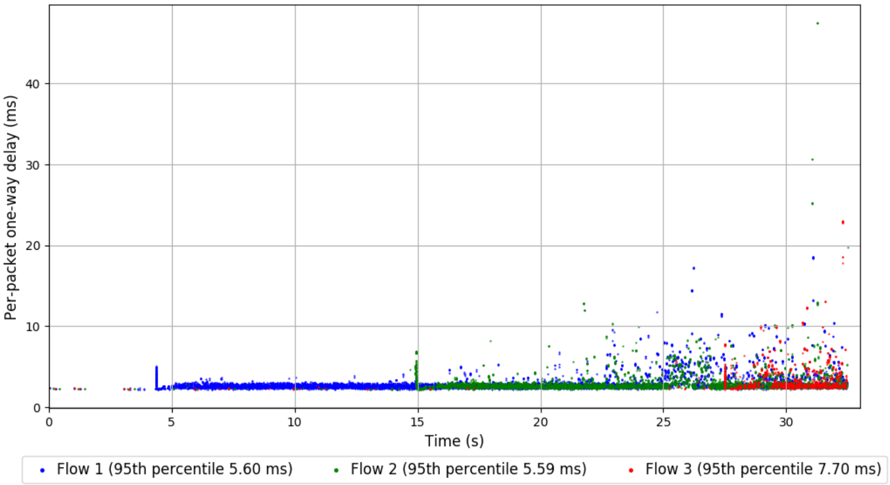




```
Run 8: Statistics of WebRTC media

Start at: 2018-01-10 04:27:01
End at: 2018-01-10 04:27:31
Local clock offset: 0.043 ms
Remote clock offset: -0.138 ms

# Below is generated by plot.py at 2018-01-10 06:10:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 5.802 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 5.604 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 5.595 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 7.701 ms
Loss rate: 0.00%
```

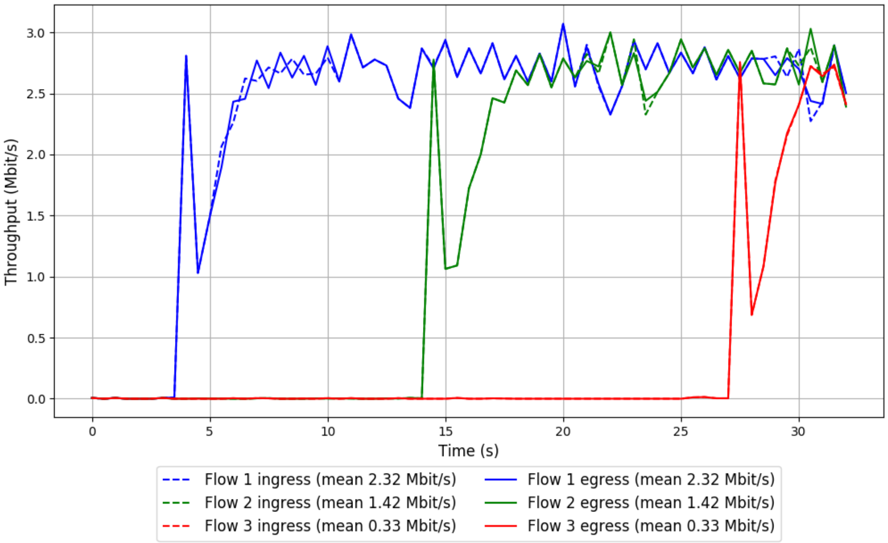
Run 8: Report of WebRTC media — Data Link

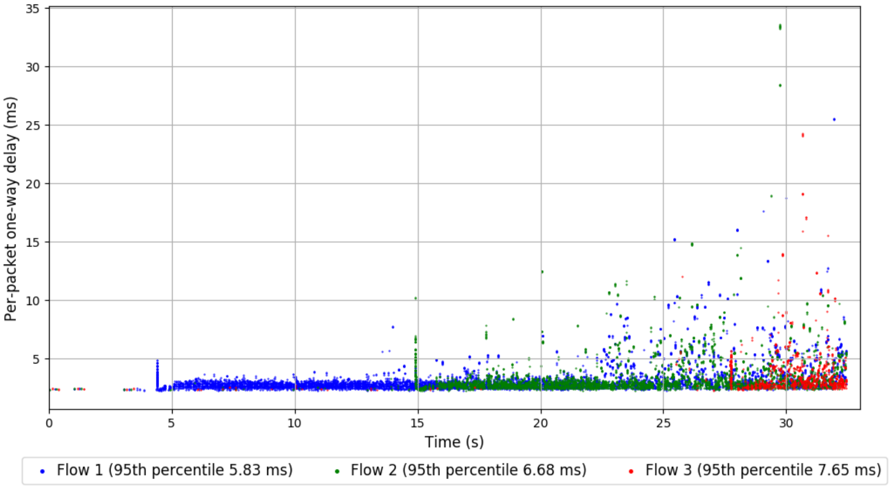




```
Run 9: Statistics of WebRTC media

Start at: 2018-01-10 04:44:09
End at: 2018-01-10 04:44:39
Local clock offset: -0.006 ms
Remote clock offset: -0.169 ms

# Below is generated by plot.py at 2018-01-10 06:10:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.07 Mbit/s
95th percentile per-packet one-way delay: 6.252 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 5.829 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 6.679 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 7.651 ms
Loss rate: 0.00%
```

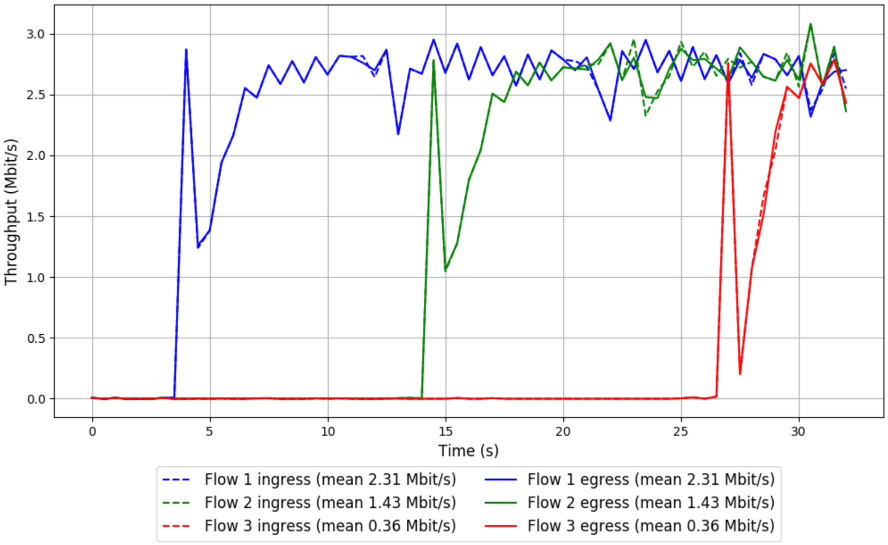
Run 9: Report of WebRTC media — Data Link

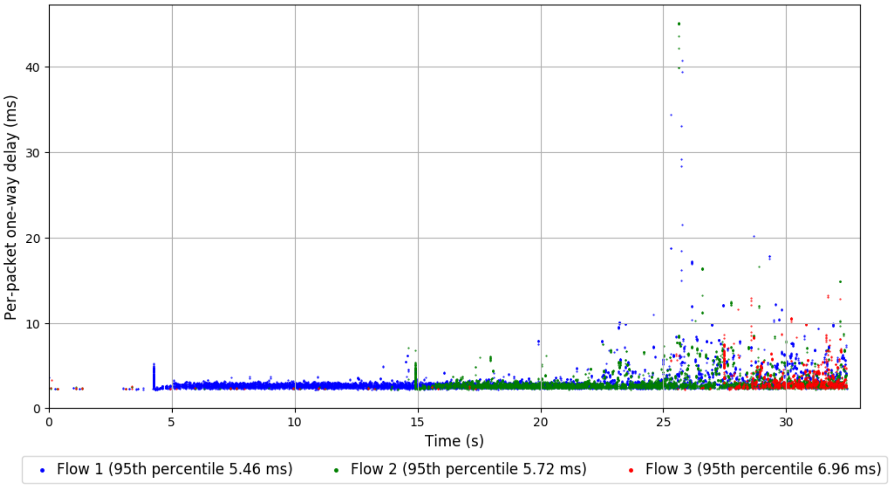




```
Run 10: Statistics of WebRTC media

Start at: 2018-01-10 05:01:17
End at: 2018-01-10 05:01:47
Local clock offset: -0.024 ms
Remote clock offset: -0.318 ms

# Below is generated by plot.py at 2018-01-10 06:10:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 5.766 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 5.463 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 5.722 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 6.962 ms
Loss rate: 0.00%
```

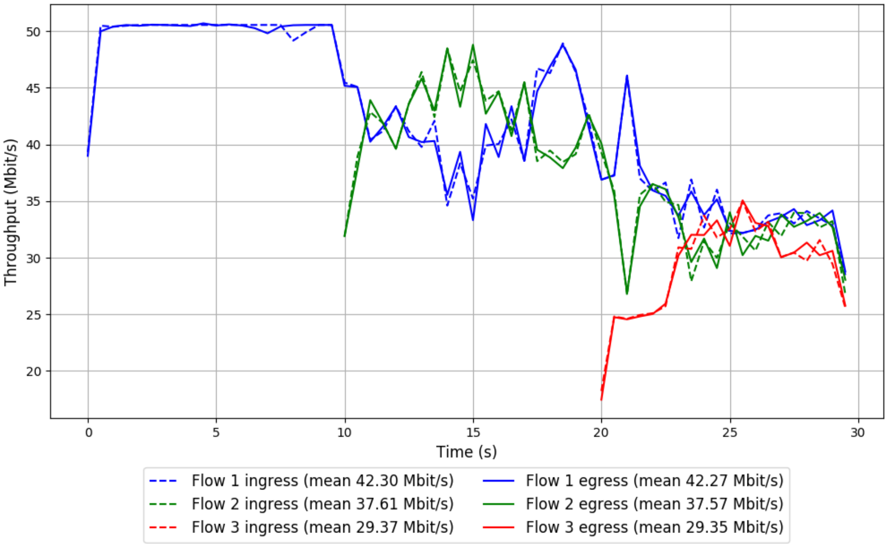
Run 10: Report of WebRTC media — Data Link

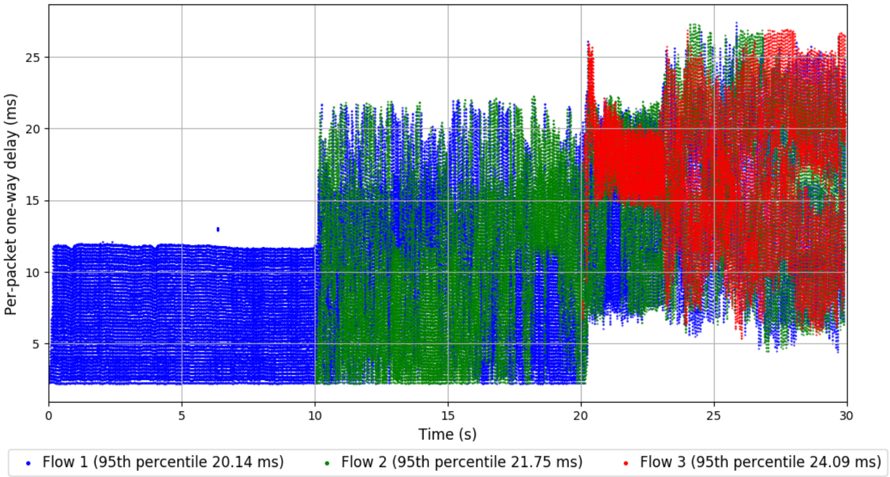




```
Run 1: Statistics of Sprout

Start at: 2018-01-10 02:32:46
End at: 2018-01-10 02:33:16
Local clock offset: -0.092 ms
Remote clock offset: 0.69 ms

# Below is generated by plot.py at 2018-01-10 06:10:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.96 Mbit/s
95th percentile per-packet one-way delay: 21.609 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 42.27 Mbit/s
95th percentile per-packet one-way delay: 20.145 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.57 Mbit/s
95th percentile per-packet one-way delay: 21.747 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.35 Mbit/s
95th percentile per-packet one-way delay: 24.085 ms
Loss rate: 0.00%
```

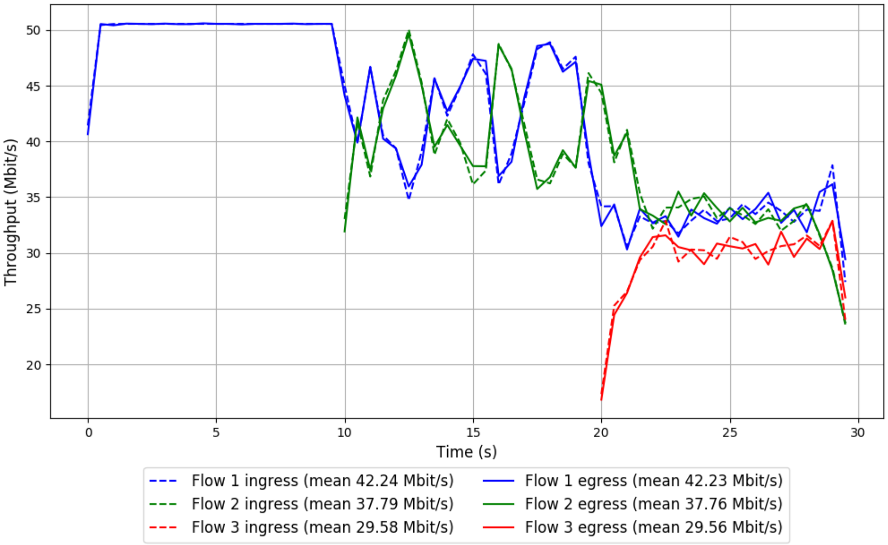
Run 1: Report of Sprout — Data Link

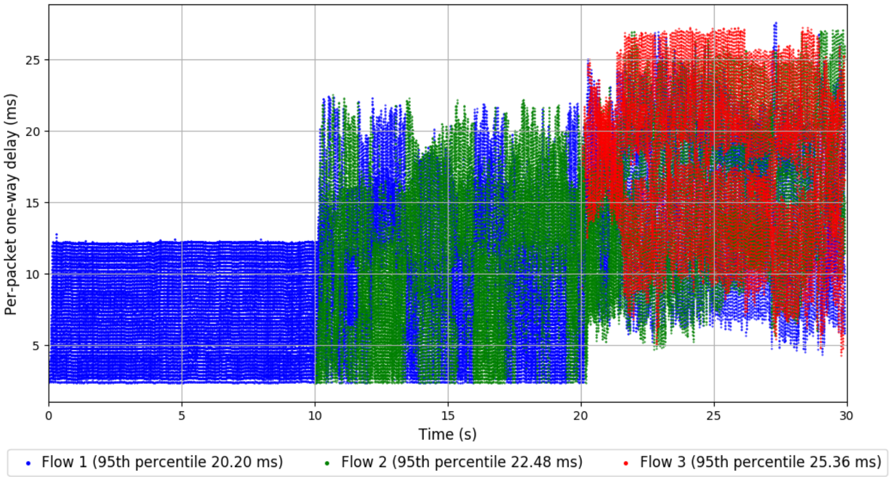




```
Run 2: Statistics of Sprout

Start at: 2018-01-10 02:49:55
End at: 2018-01-10 02:50:25
Local clock offset: -0.152 ms
Remote clock offset: 0.611 ms

# Below is generated by plot.py at 2018-01-10 06:10:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.11 Mbit/s
95th percentile per-packet one-way delay: 22.425 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 42.23 Mbit/s
95th percentile per-packet one-way delay: 20.201 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.76 Mbit/s
95th percentile per-packet one-way delay: 22.480 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.56 Mbit/s
95th percentile per-packet one-way delay: 25.364 ms
Loss rate: 0.00%
```

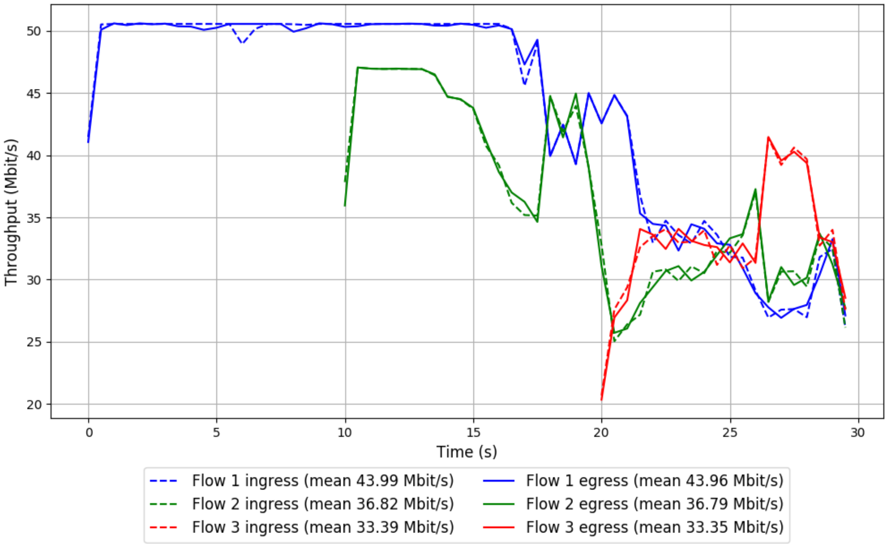
Run 2: Report of Sprout — Data Link

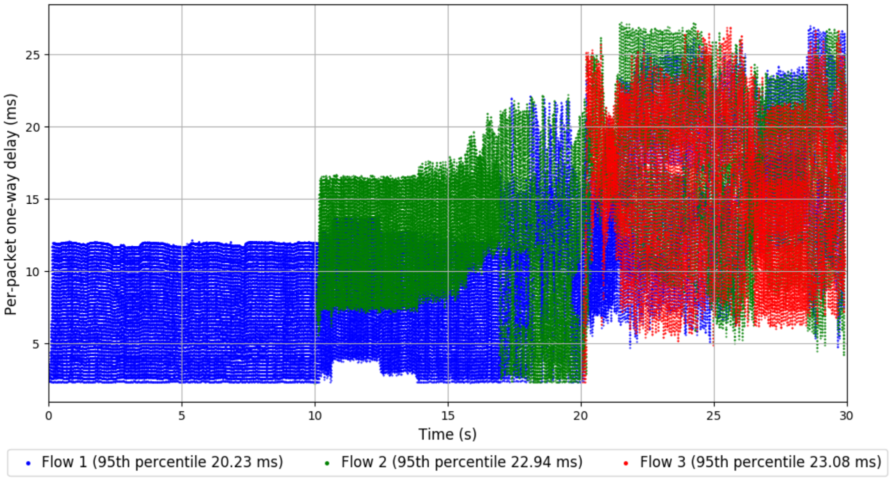




```
Run 3: Statistics of Sprout

Start at: 2018-01-10 03:07:03
End at: 2018-01-10 03:07:33
Local clock offset: -0.09 ms
Remote clock offset: 0.511 ms

# Below is generated by plot.py at 2018-01-10 06:11:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.45 Mbit/s
95th percentile per-packet one-way delay: 22.031 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.96 Mbit/s
95th percentile per-packet one-way delay: 20.227 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.79 Mbit/s
95th percentile per-packet one-way delay: 22.944 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 33.35 Mbit/s
95th percentile per-packet one-way delay: 23.080 ms
Loss rate: 0.00%
```

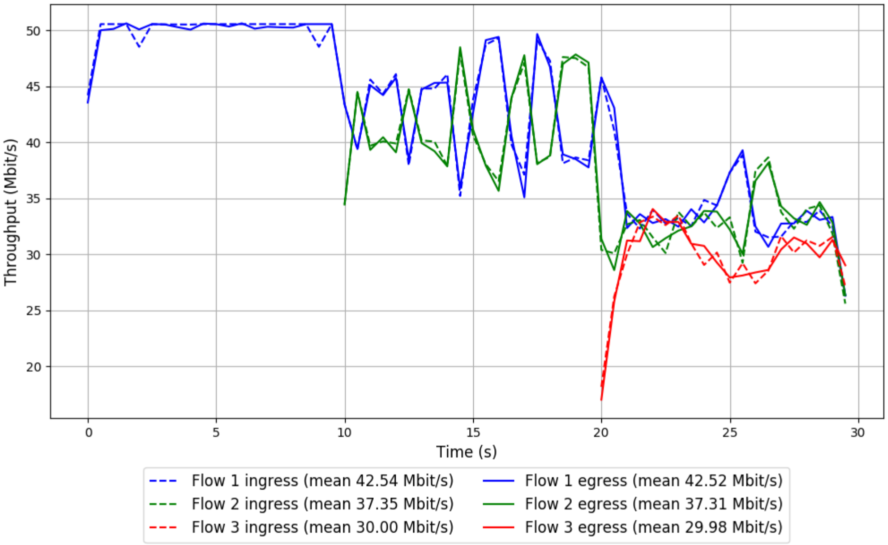
Run 3: Report of Sprout — Data Link

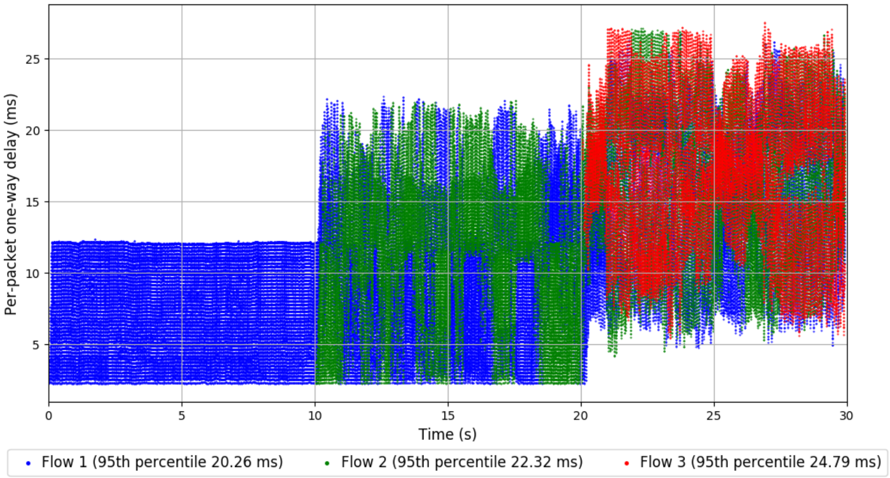




```
Run 4: Statistics of Sprout

Start at: 2018-01-10 03:24:11
End at: 2018-01-10 03:24:41
Local clock offset: -0.038 ms
Remote clock offset: 0.341 ms

# Below is generated by plot.py at 2018-01-10 06:11:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.21 Mbit/s
95th percentile per-packet one-way delay: 22.126 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 42.52 Mbit/s
95th percentile per-packet one-way delay: 20.258 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.31 Mbit/s
95th percentile per-packet one-way delay: 22.322 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.98 Mbit/s
95th percentile per-packet one-way delay: 24.789 ms
Loss rate: 0.00%
```

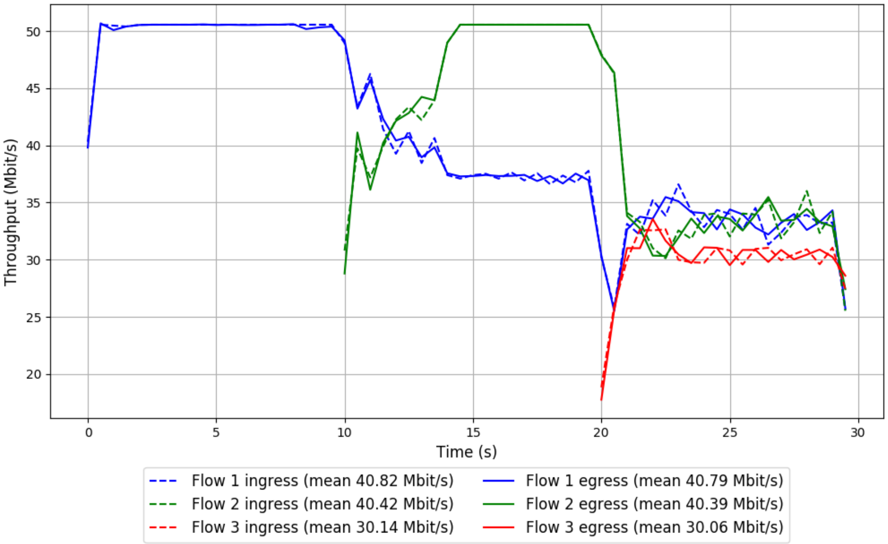
Run 4: Report of Sprout — Data Link

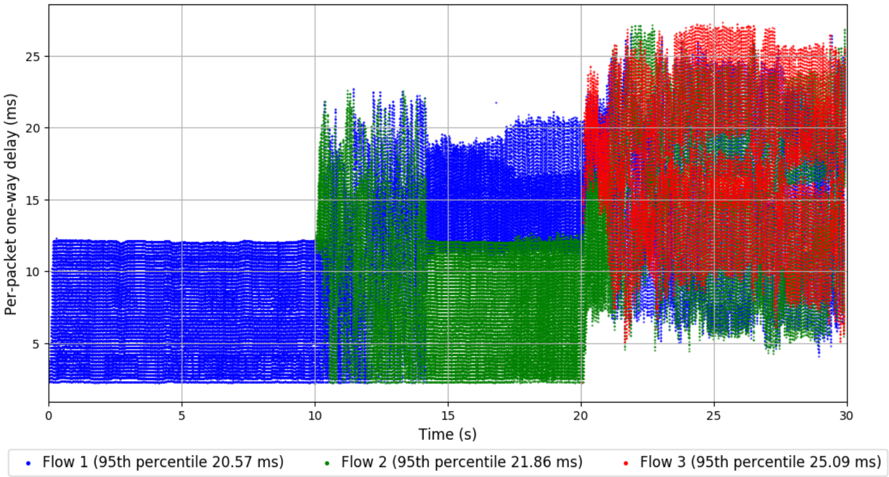




```
Run 5: Statistics of Sprout

Start at: 2018-01-10 03:41:19
End at: 2018-01-10 03:41:49
Local clock offset: 0.012 ms
Remote clock offset: 0.107 ms

# Below is generated by plot.py at 2018-01-10 06:11:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.60 Mbit/s
95th percentile per-packet one-way delay: 22.279 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.79 Mbit/s
95th percentile per-packet one-way delay: 20.567 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.39 Mbit/s
95th percentile per-packet one-way delay: 21.855 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.06 Mbit/s
95th percentile per-packet one-way delay: 25.088 ms
Loss rate: 0.00%
```

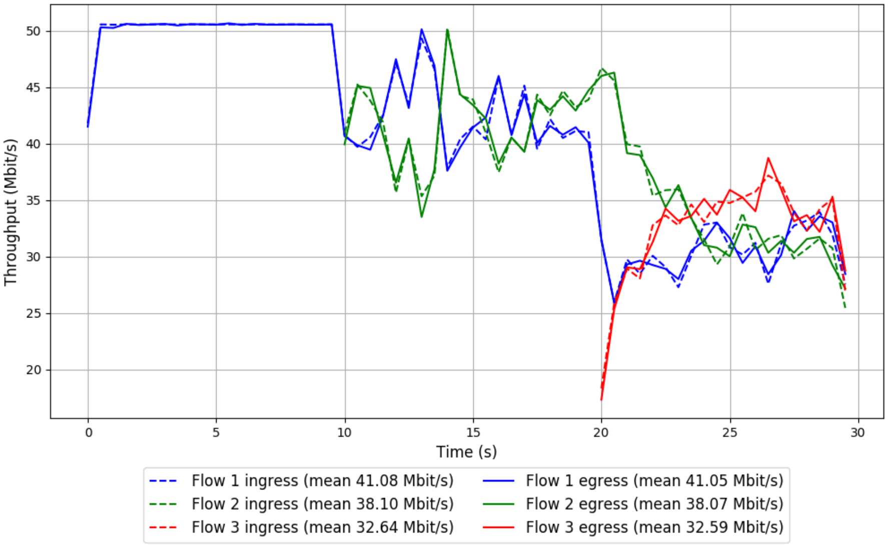
Run 5: Report of Sprout — Data Link

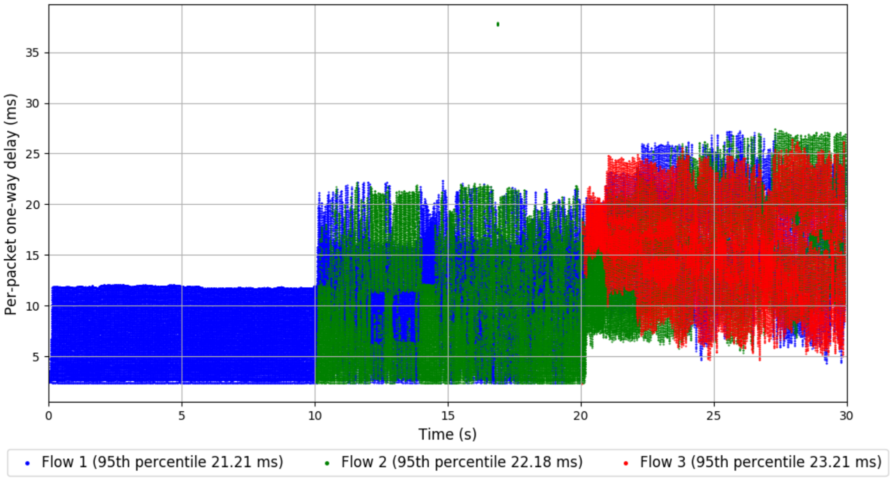




```
Run 6: Statistics of Sprout

Start at: 2018-01-10 03:58:28
End at: 2018-01-10 03:58:58
Local clock offset: -0.09 ms
Remote clock offset: -0.076 ms

# Below is generated by plot.py at 2018-01-10 06:11:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.12 Mbit/s
95th percentile per-packet one-way delay: 22.034 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.05 Mbit/s
95th percentile per-packet one-way delay: 21.213 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.07 Mbit/s
95th percentile per-packet one-way delay: 22.175 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 32.59 Mbit/s
95th percentile per-packet one-way delay: 23.208 ms
Loss rate: 0.00%
```

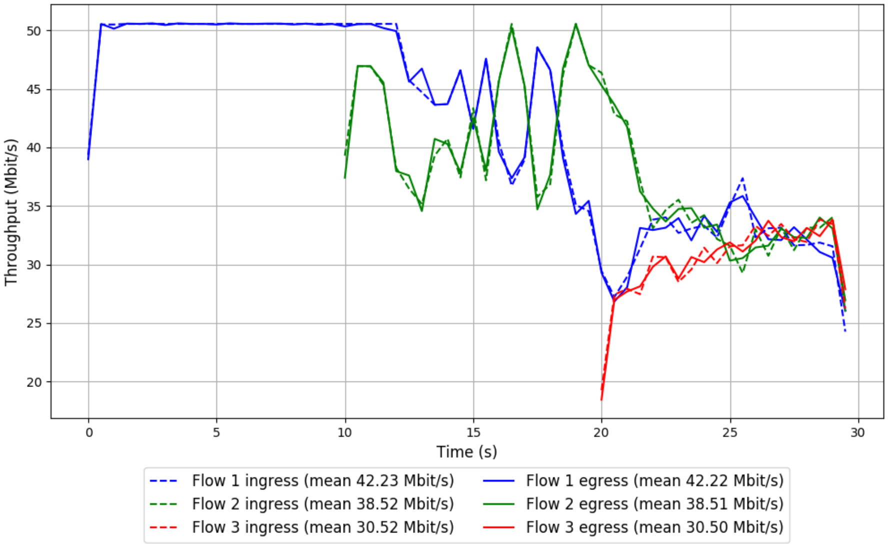
Run 6: Report of Sprout — Data Link

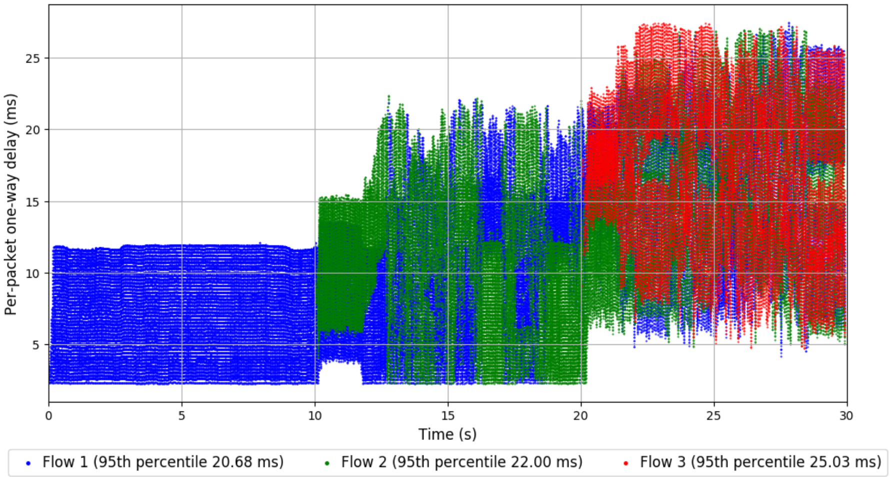




```
Run 7: Statistics of Sprout

Start at: 2018-01-10 04:15:36
End at: 2018-01-10 04:16:06
Local clock offset: 0.08 ms
Remote clock offset: -0.101 ms

# Below is generated by plot.py at 2018-01-10 06:12:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.87 Mbit/s
95th percentile per-packet one-way delay: 22.322 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 42.22 Mbit/s
95th percentile per-packet one-way delay: 20.675 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.51 Mbit/s
95th percentile per-packet one-way delay: 21.998 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.50 Mbit/s
95th percentile per-packet one-way delay: 25.031 ms
Loss rate: 0.00%
```

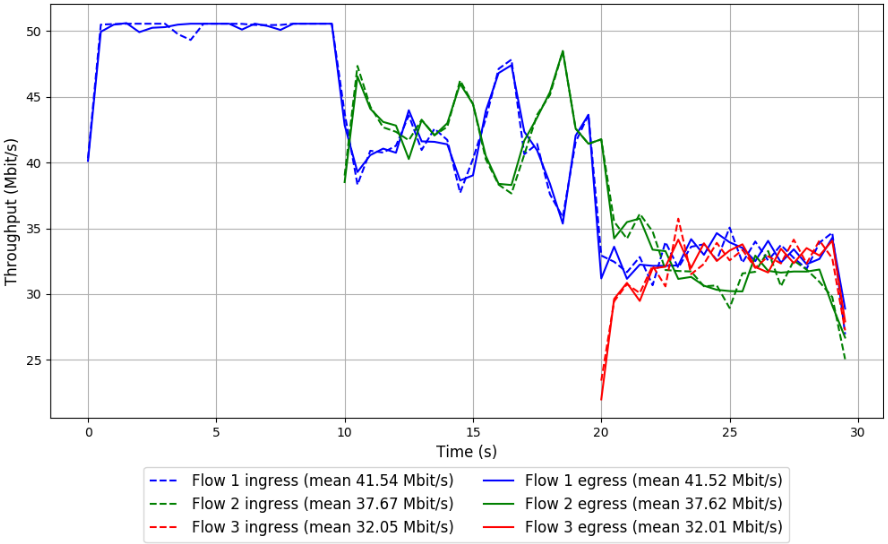
Run 7: Report of Sprout — Data Link

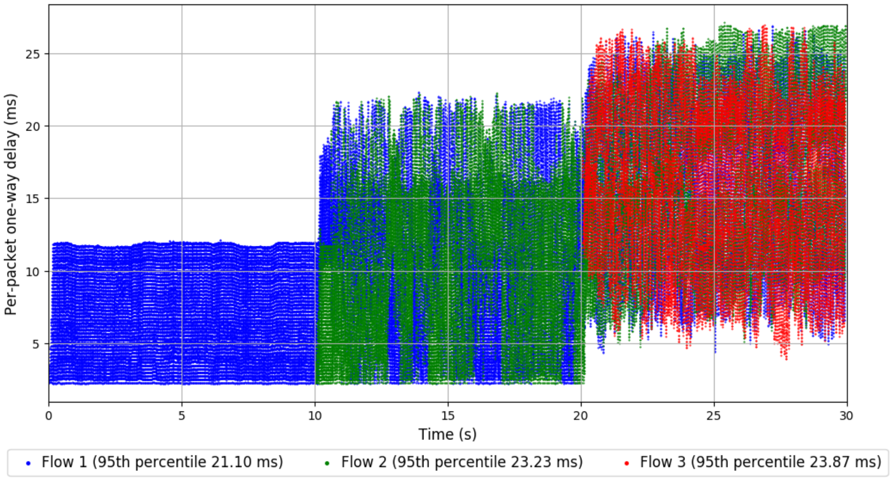




```
Run 8: Statistics of Sprout

Start at: 2018-01-10 04:32:45
End at: 2018-01-10 04:33:15
Local clock offset: 0.046 ms
Remote clock offset: -0.233 ms

# Below is generated by plot.py at 2018-01-10 06:12:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.13 Mbit/s
95th percentile per-packet one-way delay: 22.540 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.52 Mbit/s
95th percentile per-packet one-way delay: 21.103 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.62 Mbit/s
95th percentile per-packet one-way delay: 23.235 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 32.01 Mbit/s
95th percentile per-packet one-way delay: 23.871 ms
Loss rate: 0.00%
```

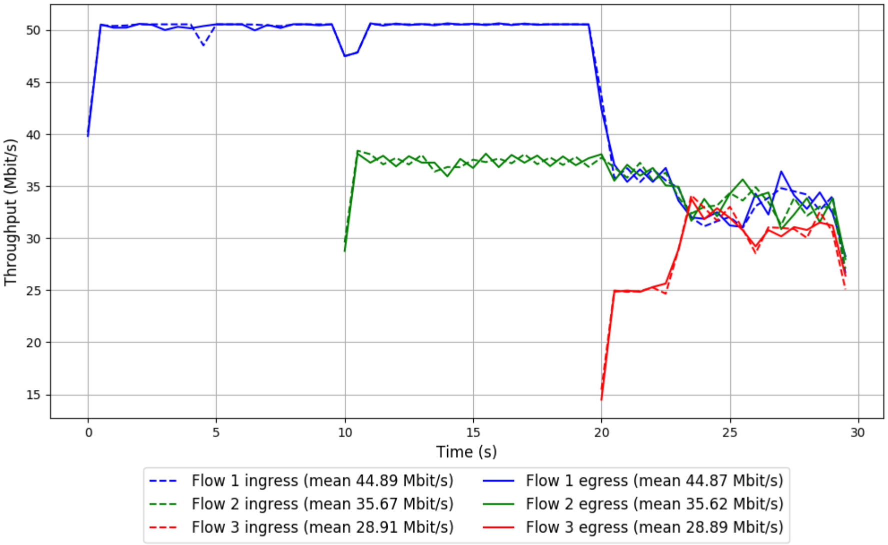
Run 8: Report of Sprout — Data Link

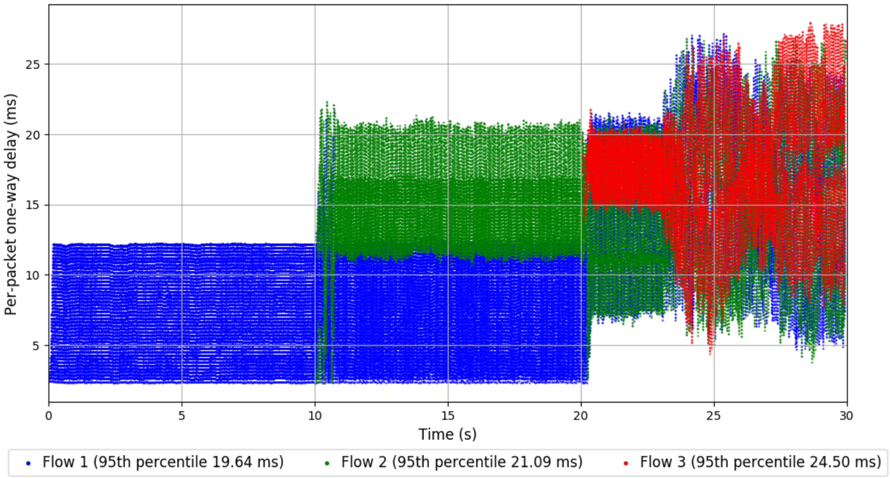




```
Run 9: Statistics of Sprout

Start at: 2018-01-10 04:49:53
End at: 2018-01-10 04:50:23
Local clock offset: -0.024 ms
Remote clock offset: -0.303 ms

# Below is generated by plot.py at 2018-01-10 06:13:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.10 Mbit/s
95th percentile per-packet one-way delay: 21.246 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 44.87 Mbit/s
95th percentile per-packet one-way delay: 19.644 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 35.62 Mbit/s
95th percentile per-packet one-way delay: 21.092 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 28.89 Mbit/s
95th percentile per-packet one-way delay: 24.498 ms
Loss rate: 0.00%
```

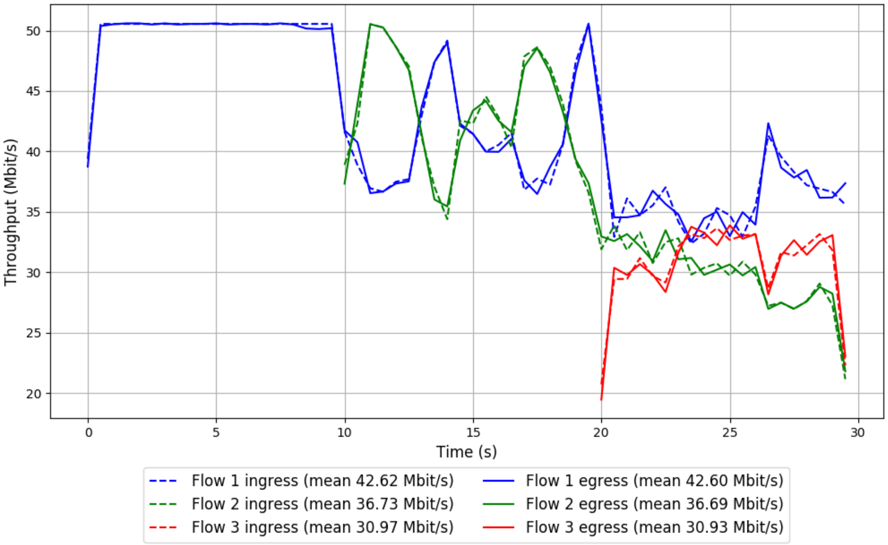
Run 9: Report of Sprout — Data Link

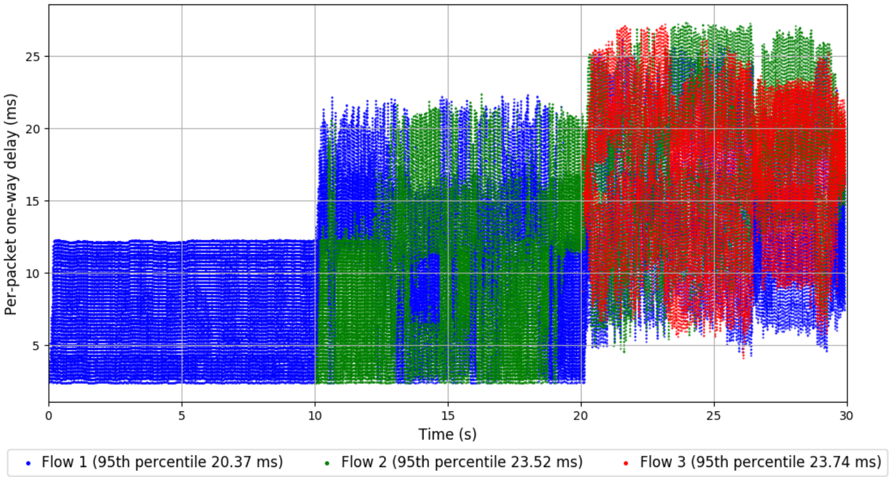




```
Run 10: Statistics of Sprout

Start at: 2018-01-10 05:07:01
End at: 2018-01-10 05:07:31
Local clock offset: -0.032 ms
Remote clock offset: -0.341 ms

# Below is generated by plot.py at 2018-01-10 06:13:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.21 Mbit/s
95th percentile per-packet one-way delay: 22.329 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 42.60 Mbit/s
95th percentile per-packet one-way delay: 20.371 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.69 Mbit/s
95th percentile per-packet one-way delay: 23.520 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.93 Mbit/s
95th percentile per-packet one-way delay: 23.742 ms
Loss rate: 0.00%
```

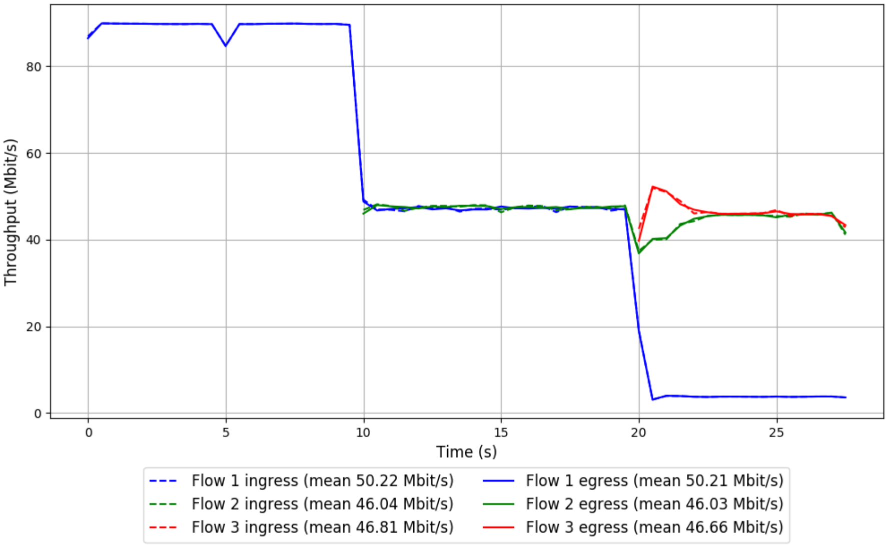
Run 10: Report of Sprout — Data Link

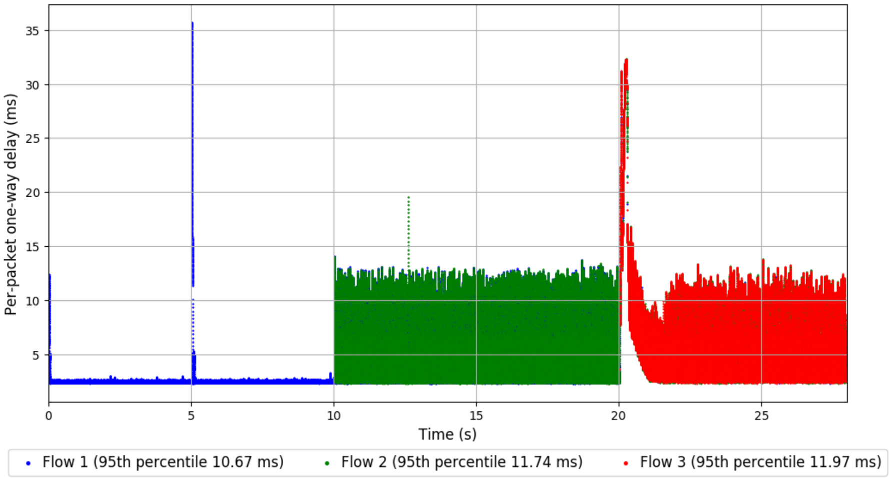




```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-10 02:28:06
End at: 2018-01-10 02:28:36
Local clock offset: -0.112 ms
Remote clock offset: 0.755 ms

# Below is generated by plot.py at 2018-01-10 06:15:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.01 Mbit/s
95th percentile per-packet one-way delay: 11.379 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 50.21 Mbit/s
95th percentile per-packet one-way delay: 10.672 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 46.03 Mbit/s
95th percentile per-packet one-way delay: 11.736 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 46.66 Mbit/s
95th percentile per-packet one-way delay: 11.972 ms
Loss rate: 0.25%
```

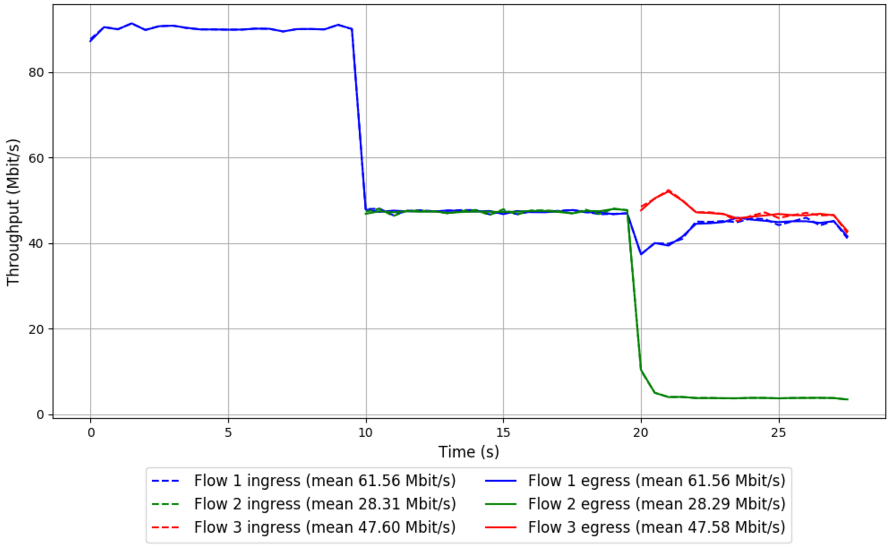
Run 1: Report of TaoVA-100x — Data Link

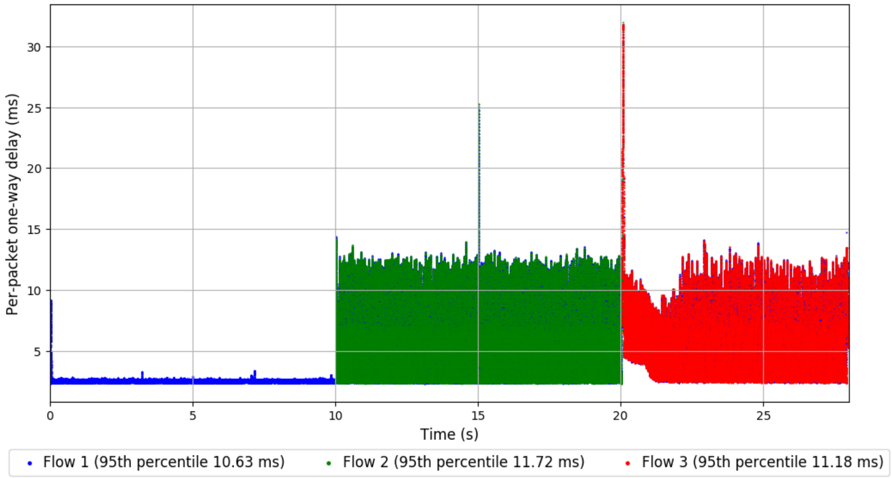




```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-10 02:45:14
End at: 2018-01-10 02:45:44
Local clock offset: -0.14 ms
Remote clock offset: 0.655 ms

# Below is generated by plot.py at 2018-01-10 06:15:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.23 Mbit/s
95th percentile per-packet one-way delay: 11.086 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 61.56 Mbit/s
95th percentile per-packet one-way delay: 10.626 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 28.29 Mbit/s
95th percentile per-packet one-way delay: 11.724 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 47.58 Mbit/s
95th percentile per-packet one-way delay: 11.178 ms
Loss rate: 0.06%
```

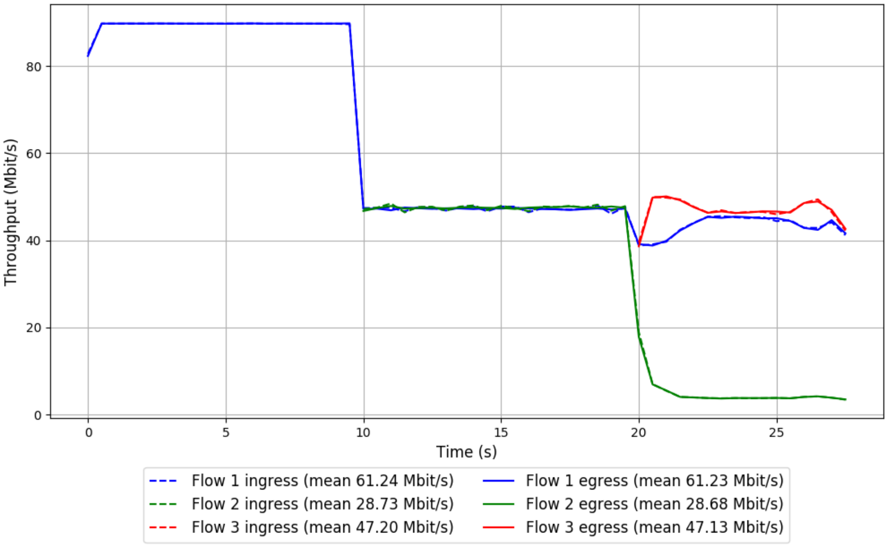
Run 2: Report of TaoVA-100x — Data Link

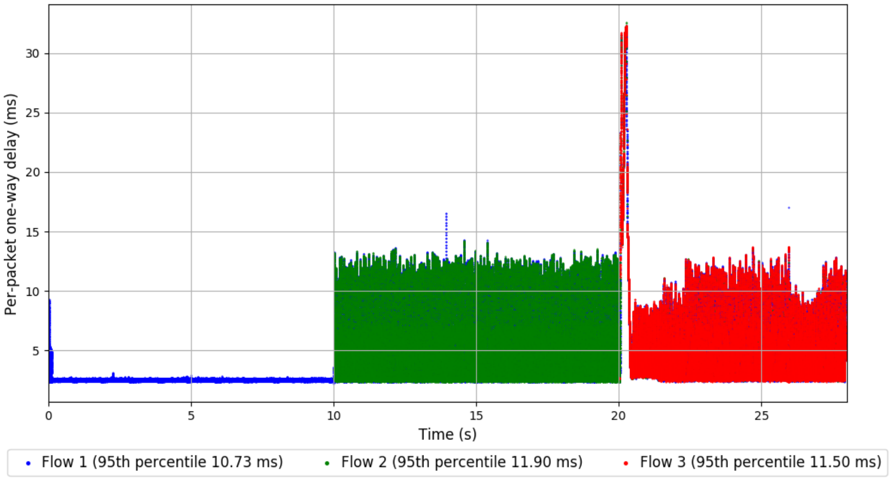




```
Run 3: Statistics of TaoVA-100x

Start at: 2018-01-10 03:02:23
End at: 2018-01-10 03:02:53
Local clock offset: -0.099 ms
Remote clock offset: 0.518 ms

# Below is generated by plot.py at 2018-01-10 06:15:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.01 Mbit/s
95th percentile per-packet one-way delay: 11.246 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 61.23 Mbit/s
95th percentile per-packet one-way delay: 10.729 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 28.68 Mbit/s
95th percentile per-packet one-way delay: 11.899 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 47.13 Mbit/s
95th percentile per-packet one-way delay: 11.503 ms
Loss rate: 0.06%
```

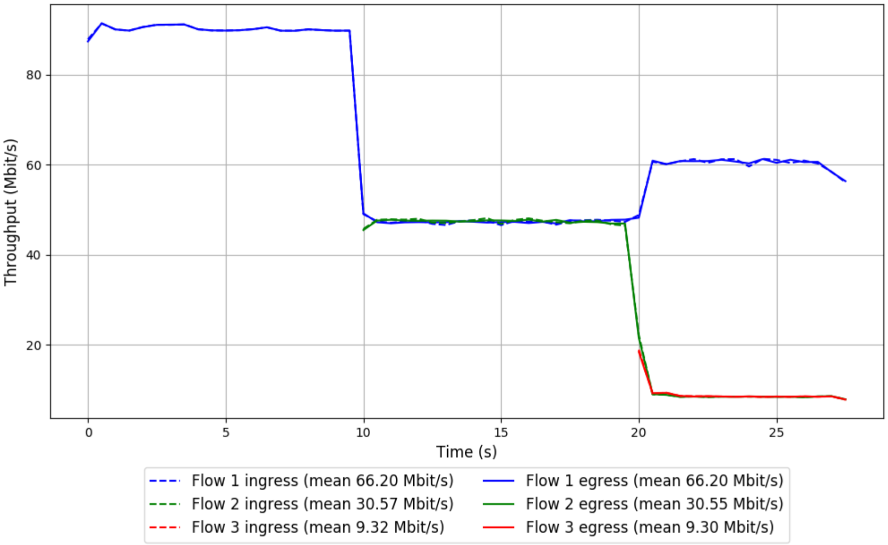
Run 3: Report of TaoVA-100x — Data Link

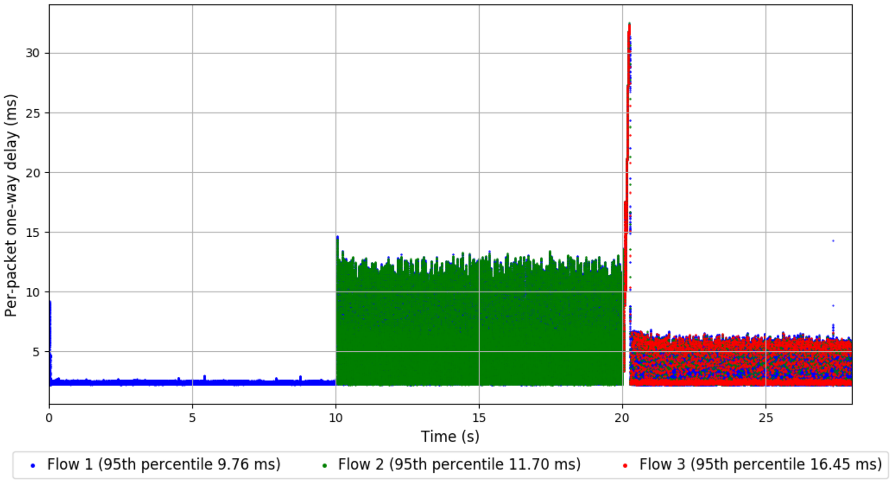




```
Run 4: Statistics of TaoVA-100x

Start at: 2018-01-10 03:19:31
End at: 2018-01-10 03:20:01
Local clock offset: -0.063 ms
Remote clock offset: 0.346 ms

# Below is generated by plot.py at 2018-01-10 06:15:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.43 Mbit/s
95th percentile per-packet one-way delay: 10.776 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 66.20 Mbit/s
95th percentile per-packet one-way delay: 9.755 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 30.55 Mbit/s
95th percentile per-packet one-way delay: 11.698 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 9.30 Mbit/s
95th percentile per-packet one-way delay: 16.447 ms
Loss rate: 0.28%
```

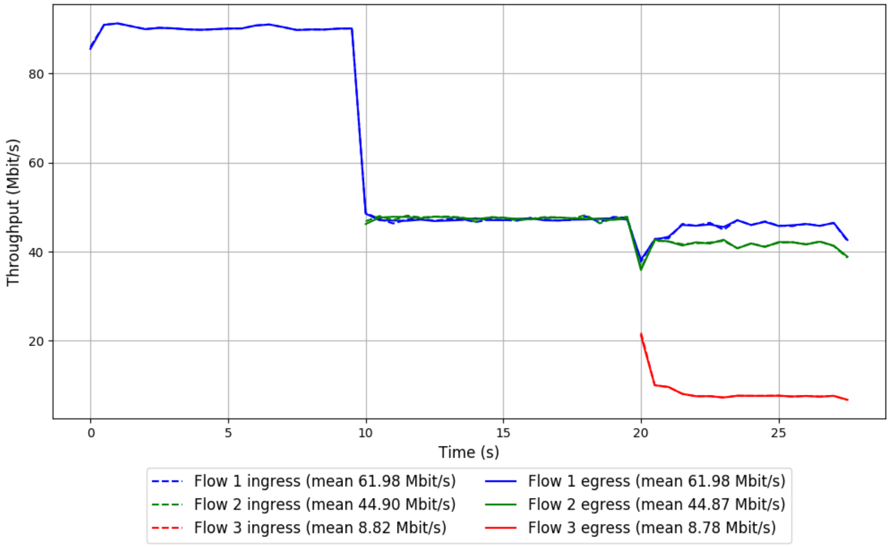
Run 4: Report of TaoVA-100x — Data Link

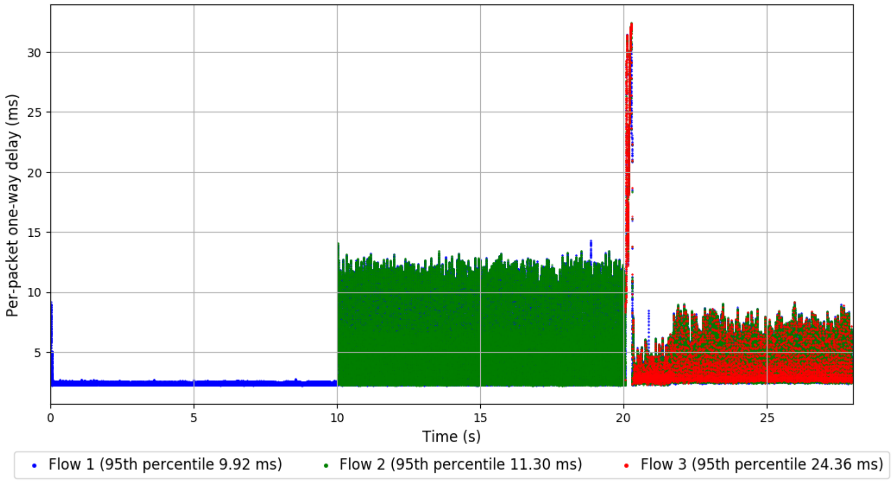




```
Run 5: Statistics of TaoVA-100x

Start at: 2018-01-10 03:36:39
End at: 2018-01-10 03:37:09
Local clock offset: -0.0 ms
Remote clock offset: 0.133 ms

# Below is generated by plot.py at 2018-01-10 06:16:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.27 Mbit/s
95th percentile per-packet one-way delay: 10.683 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 61.98 Mbit/s
95th percentile per-packet one-way delay: 9.921 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.87 Mbit/s
95th percentile per-packet one-way delay: 11.299 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 8.78 Mbit/s
95th percentile per-packet one-way delay: 24.361 ms
Loss rate: 0.40%
```

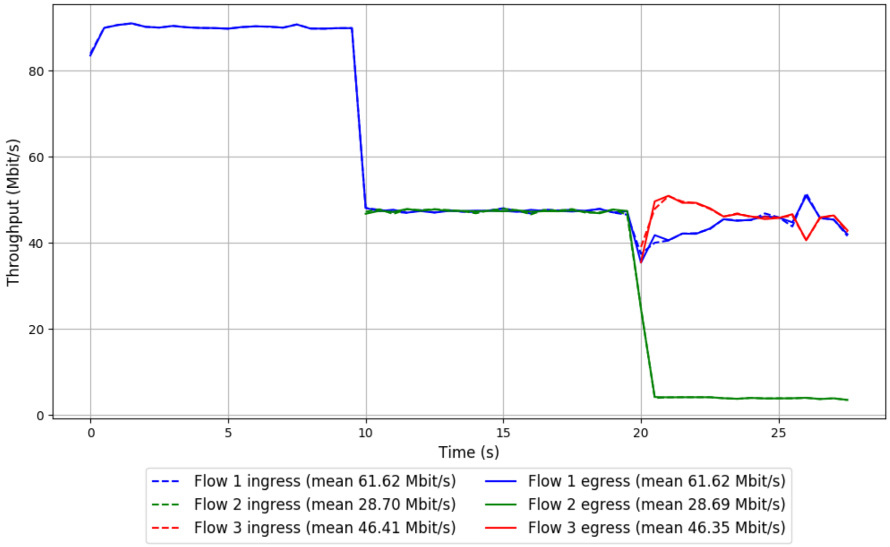
Run 5: Report of TaoVA-100x — Data Link

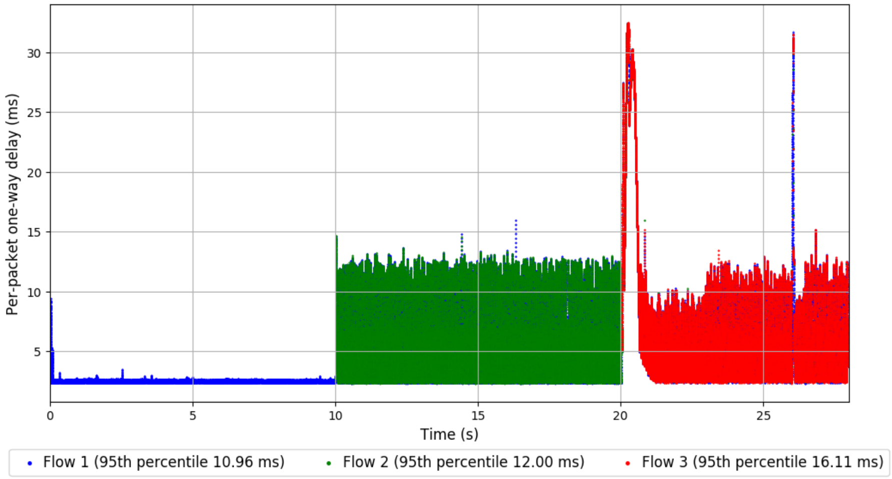




```
Run 6: Statistics of TaoVA-100x

Start at: 2018-01-10 03:53:47
End at: 2018-01-10 03:54:17
Local clock offset: -0.009 ms
Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2018-01-10 06:17:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.18 Mbit/s
95th percentile per-packet one-way delay: 11.515 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 61.62 Mbit/s
95th percentile per-packet one-way delay: 10.956 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 28.69 Mbit/s
95th percentile per-packet one-way delay: 12.000 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 46.35 Mbit/s
95th percentile per-packet one-way delay: 16.105 ms
Loss rate: 0.21%
```

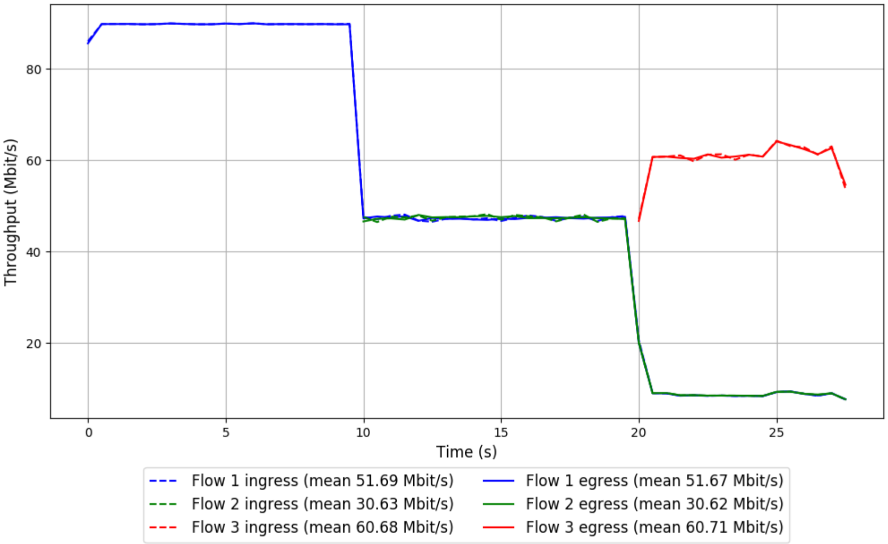
Run 6: Report of TaoVA-100x — Data Link

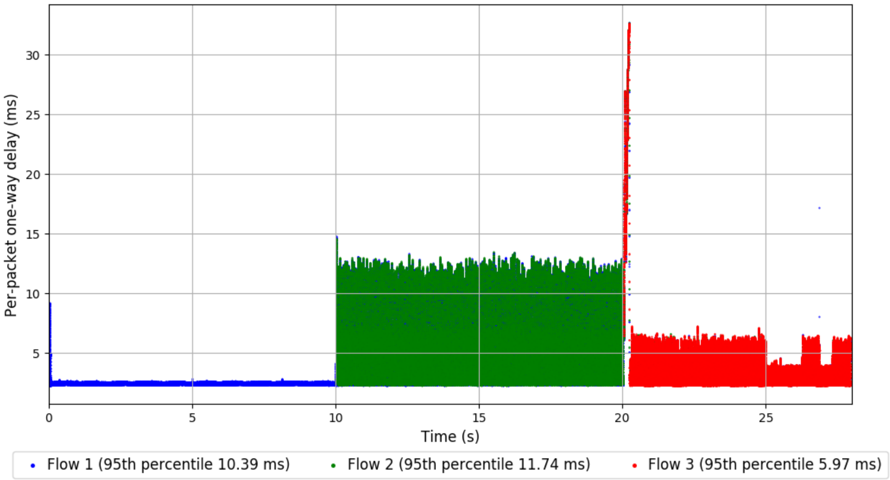




```
Run 7: Statistics of TaoVA-100x

Start at: 2018-01-10 04:10:56
End at: 2018-01-10 04:11:26
Local clock offset: 0.092 ms
Remote clock offset: -0.11 ms

# Below is generated by plot.py at 2018-01-10 06:17:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.54 Mbit/s
95th percentile per-packet one-way delay: 10.822 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 51.67 Mbit/s
95th percentile per-packet one-way delay: 10.391 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 30.62 Mbit/s
95th percentile per-packet one-way delay: 11.744 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 60.71 Mbit/s
95th percentile per-packet one-way delay: 5.969 ms
Loss rate: 0.02%
```

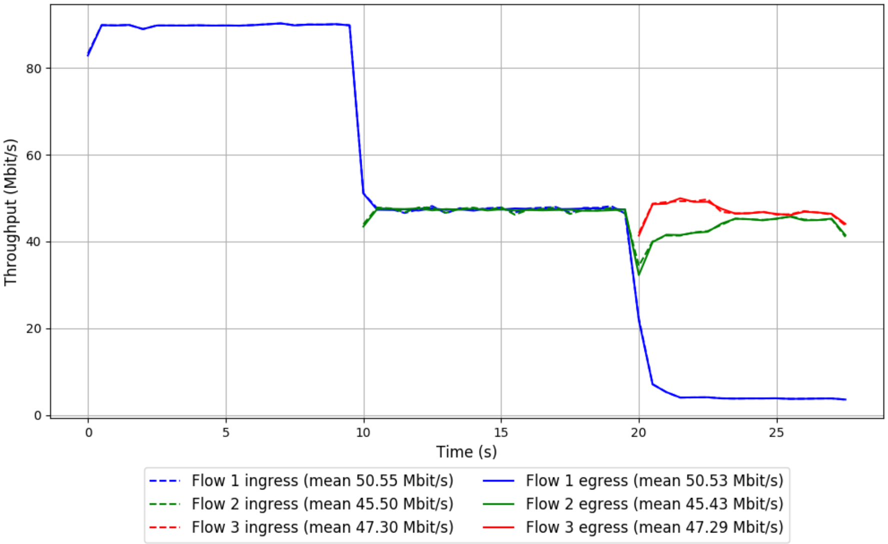
Run 7: Report of TaoVA-100x — Data Link

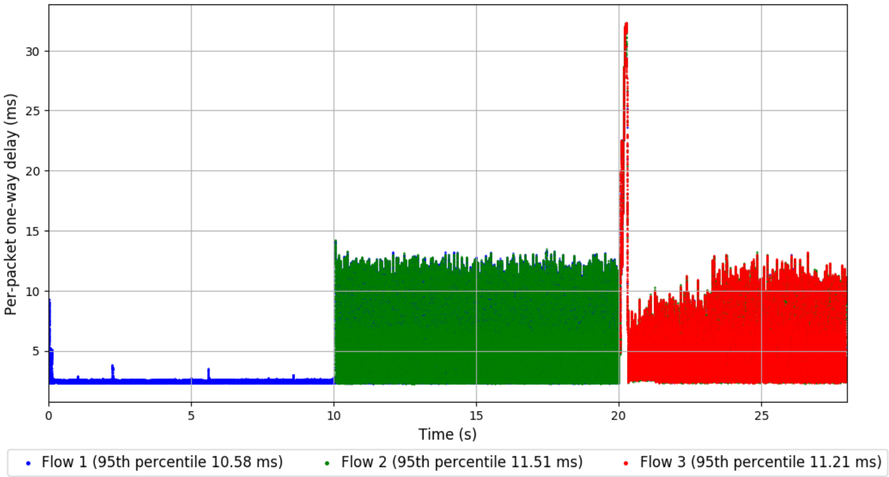




```
Run 8: Statistics of TaoVA-100x

Start at: 2018-01-10 04:28:05
End at: 2018-01-10 04:28:35
Local clock offset: 0.072 ms
Remote clock offset: -0.146 ms

# Below is generated by plot.py at 2018-01-10 06:17:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.06 Mbit/s
95th percentile per-packet one-way delay: 11.119 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 50.53 Mbit/s
95th percentile per-packet one-way delay: 10.581 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 45.43 Mbit/s
95th percentile per-packet one-way delay: 11.512 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 47.29 Mbit/s
95th percentile per-packet one-way delay: 11.208 ms
Loss rate: 0.02%
```

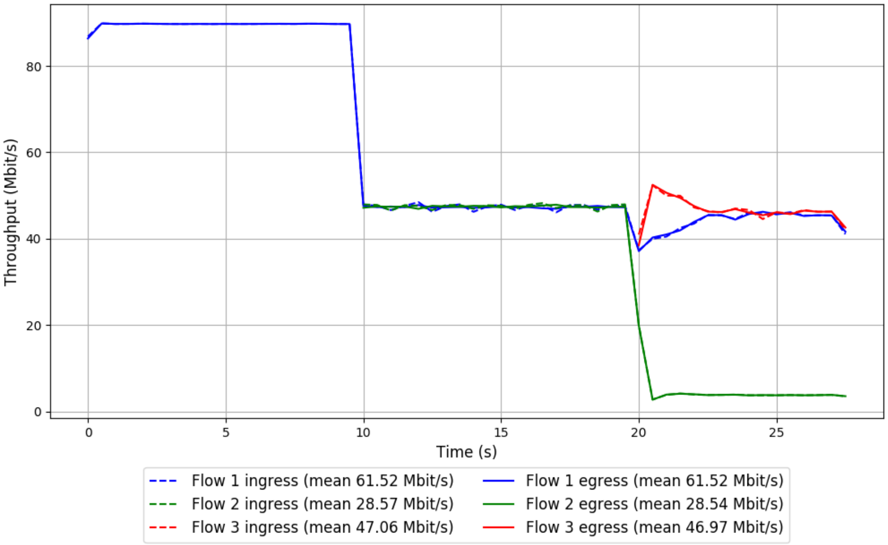
Run 8: Report of TaoVA-100x — Data Link

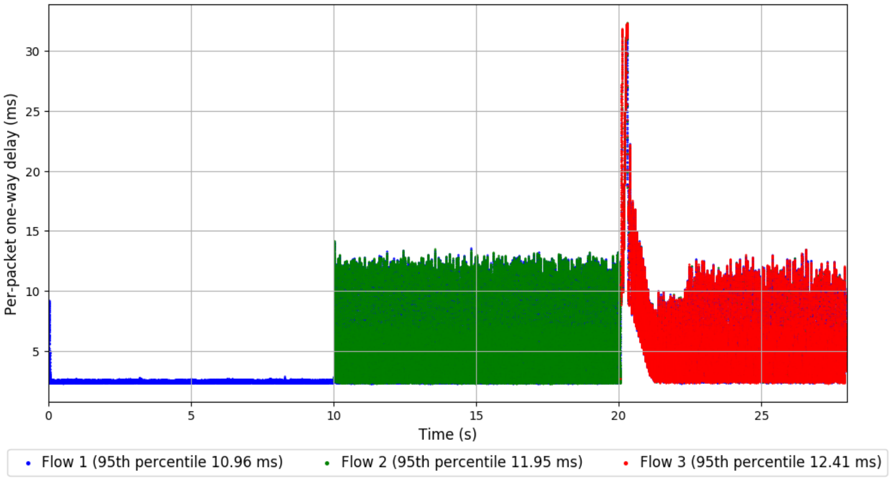




```
Run 9: Statistics of TaoVA-100x

Start at: 2018-01-10 04:45:13
End at: 2018-01-10 04:45:43
Local clock offset: 0.049 ms
Remote clock offset: -0.218 ms

# Below is generated by plot.py at 2018-01-10 06:19:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.13 Mbit/s
95th percentile per-packet one-way delay: 11.473 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 61.52 Mbit/s
95th percentile per-packet one-way delay: 10.956 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 28.54 Mbit/s
95th percentile per-packet one-way delay: 11.950 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 46.97 Mbit/s
95th percentile per-packet one-way delay: 12.414 ms
Loss rate: 0.19%
```

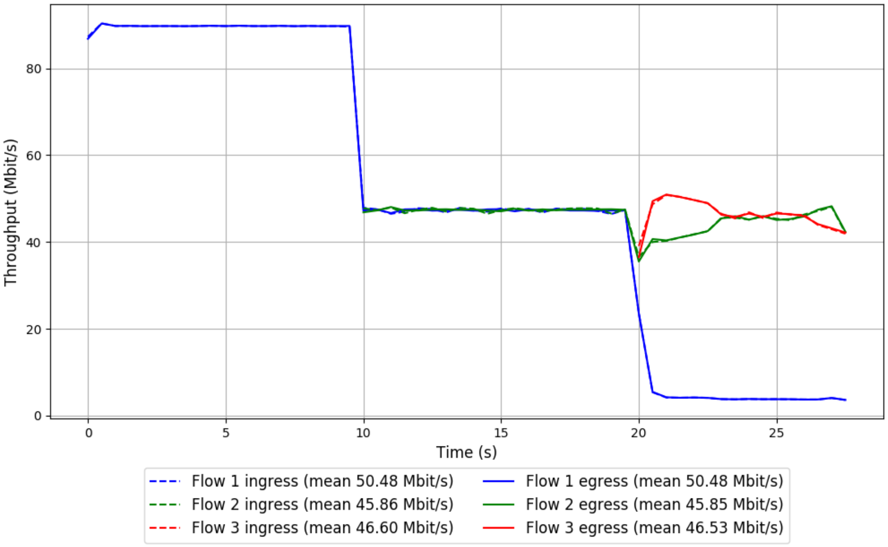
Run 9: Report of TaoVA-100x — Data Link

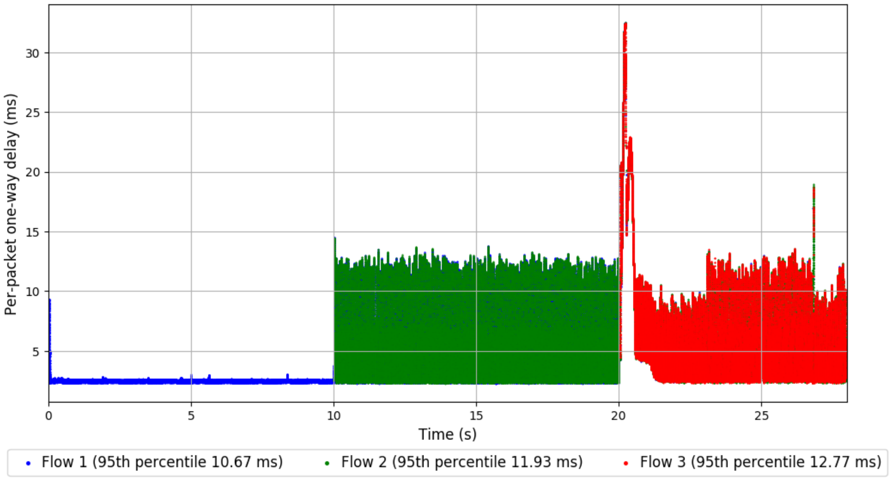




```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-10 05:02:21
End at: 2018-01-10 05:02:51
Local clock offset: 0.037 ms
Remote clock offset: -0.297 ms

# Below is generated by plot.py at 2018-01-10 06:20:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.13 Mbit/s
95th percentile per-packet one-way delay: 11.470 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 50.48 Mbit/s
95th percentile per-packet one-way delay: 10.672 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 45.85 Mbit/s
95th percentile per-packet one-way delay: 11.927 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 46.53 Mbit/s
95th percentile per-packet one-way delay: 12.772 ms
Loss rate: 0.18%
```

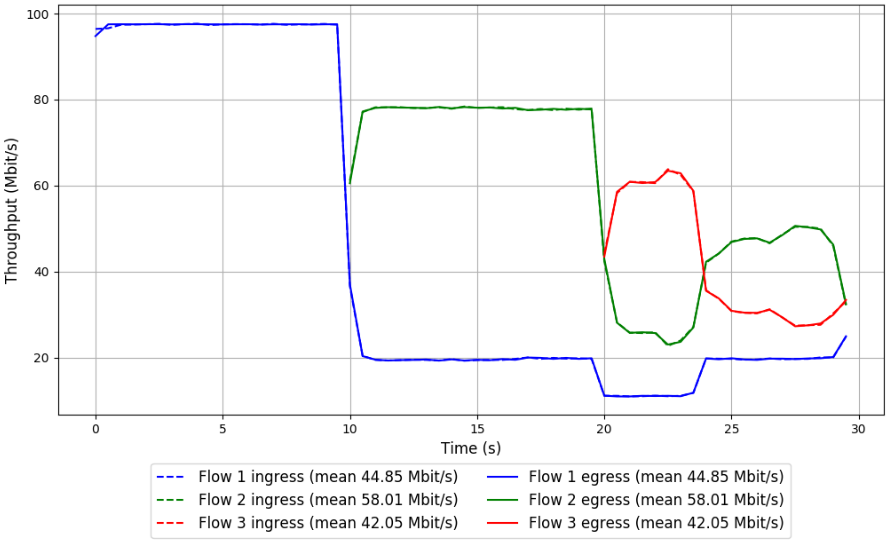
Run 10: Report of TaoVA-100x — Data Link

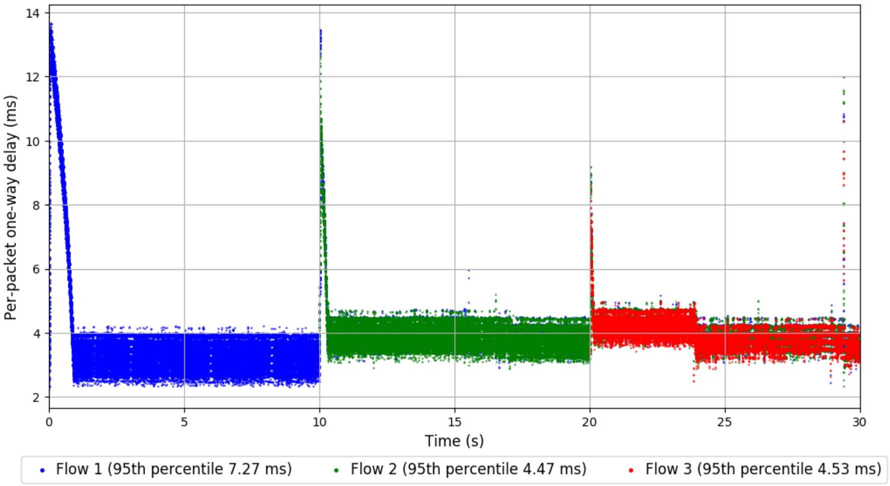




```
Run 1: Statistics of TCP Vegas

Start at: 2018-01-10 02:39:33
End at: 2018-01-10 02:40:03
Local clock offset: -0.141 ms
Remote clock offset: 0.665 ms

# Below is generated by plot.py at 2018-01-10 06:20:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.46 Mbit/s
95th percentile per-packet one-way delay: 4.608 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 44.85 Mbit/s
95th percentile per-packet one-way delay: 7.272 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 58.01 Mbit/s
95th percentile per-packet one-way delay: 4.466 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 42.05 Mbit/s
95th percentile per-packet one-way delay: 4.526 ms
Loss rate: 0.00%
```

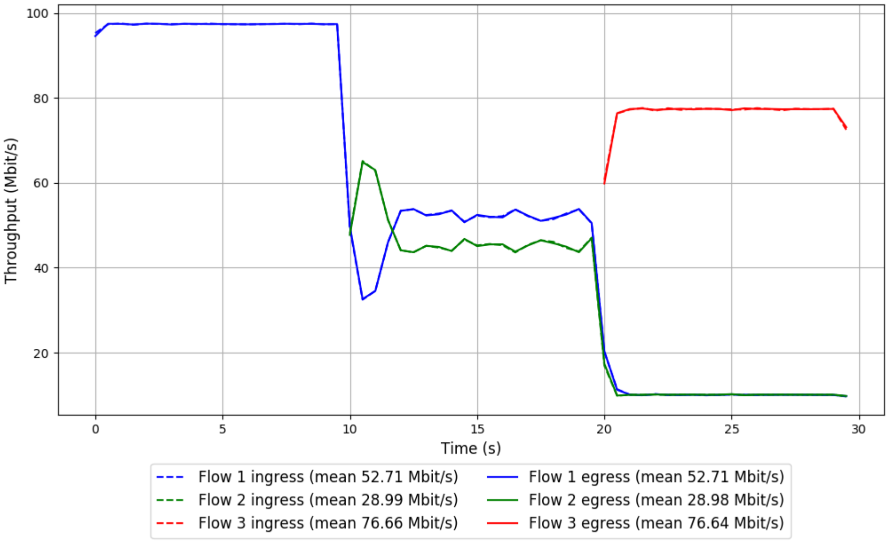
Run 1: Report of TCP Vegas — Data Link

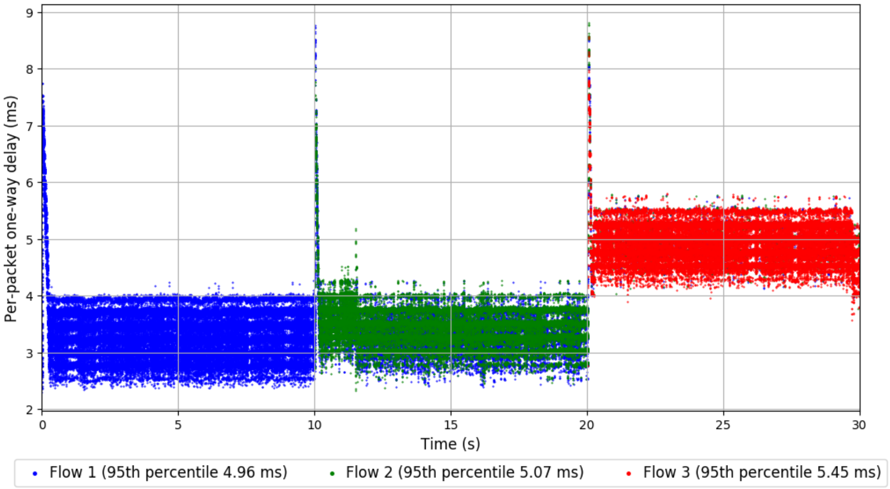




```
Run 2: Statistics of TCP Vegas

Start at: 2018-01-10 02:56:41
End at: 2018-01-10 02:57:11
Local clock offset: -0.101 ms
Remote clock offset: 0.581 ms

# Below is generated by plot.py at 2018-01-10 06:20:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.45 Mbit/s
95th percentile per-packet one-way delay: 5.264 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.71 Mbit/s
95th percentile per-packet one-way delay: 4.957 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 28.98 Mbit/s
95th percentile per-packet one-way delay: 5.071 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 76.64 Mbit/s
95th percentile per-packet one-way delay: 5.447 ms
Loss rate: 0.01%
```

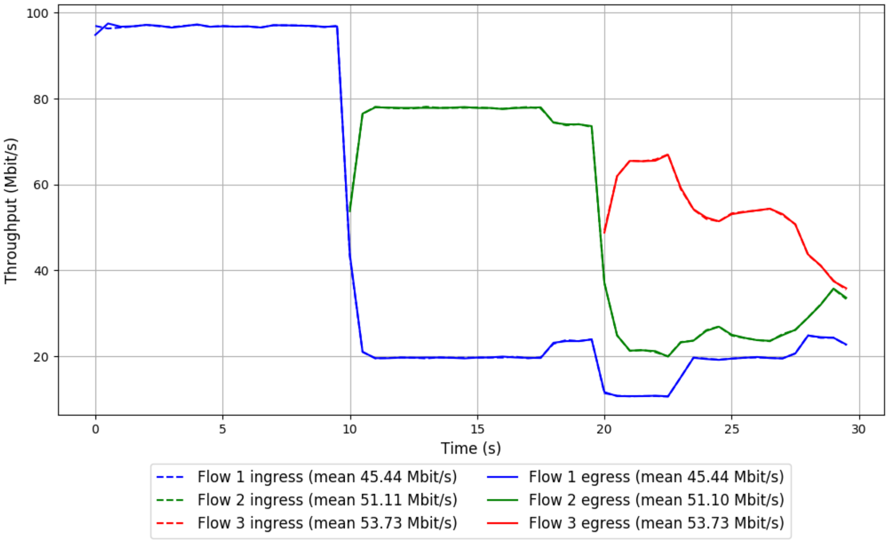
Run 2: Report of TCP Vegas — Data Link

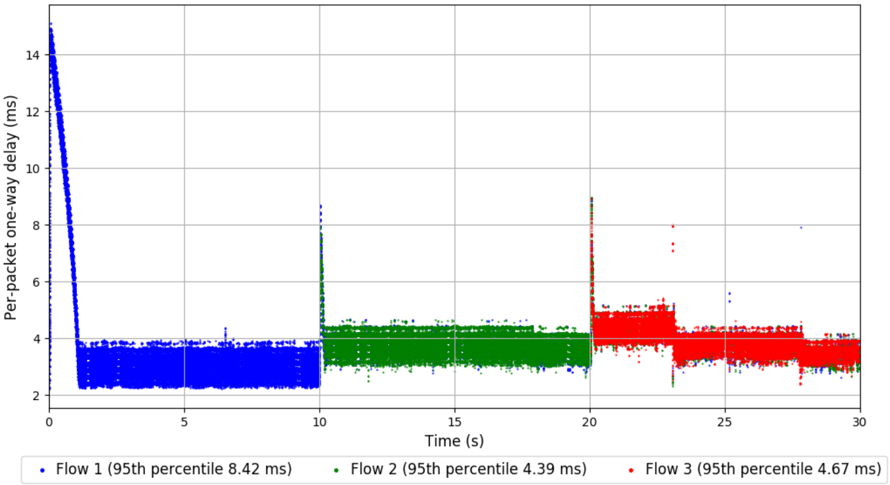




```
Run 3: Statistics of TCP Vegas

Start at: 2018-01-10 03:13:49
End at: 2018-01-10 03:14:19
Local clock offset: -0.079 ms
Remote clock offset: 0.378 ms

# Below is generated by plot.py at 2018-01-10 06:20:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.30 Mbit/s
95th percentile per-packet one-way delay: 4.693 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 45.44 Mbit/s
95th percentile per-packet one-way delay: 8.421 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 51.10 Mbit/s
95th percentile per-packet one-way delay: 4.394 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 53.73 Mbit/s
95th percentile per-packet one-way delay: 4.673 ms
Loss rate: 0.00%
```

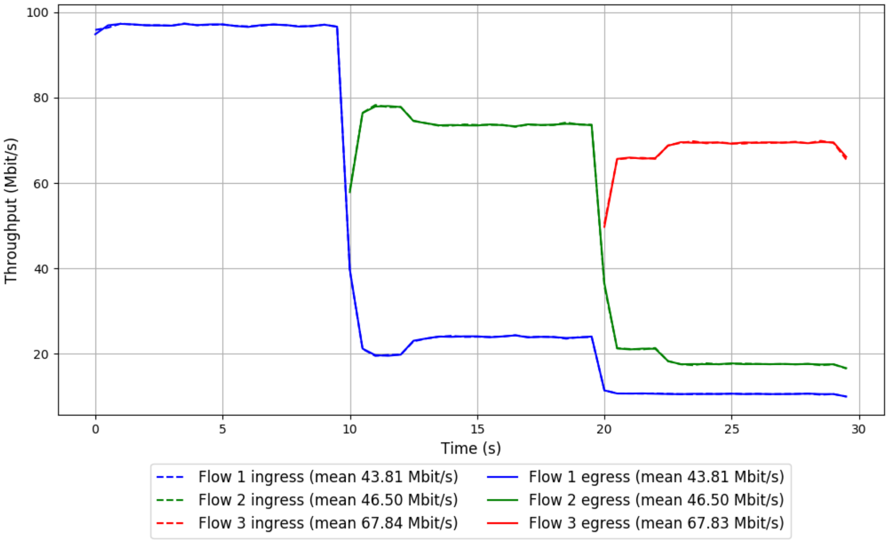
Run 3: Report of TCP Vegas — Data Link

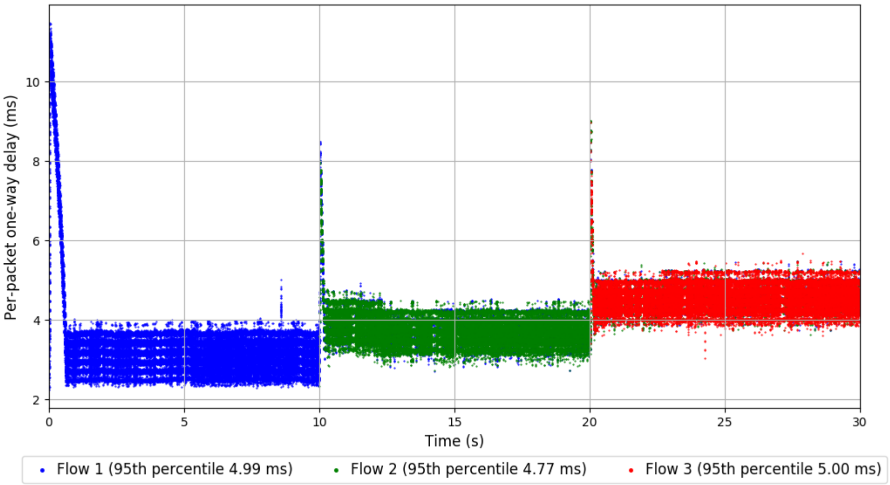




```
Run 4: Statistics of TCP Vegas

Start at: 2018-01-10 03:30:57
End at: 2018-01-10 03:31:27
Local clock offset: -0.041 ms
Remote clock offset: 0.244 ms

# Below is generated by plot.py at 2018-01-10 06:20:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.31 Mbit/s
95th percentile per-packet one-way delay: 4.978 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.81 Mbit/s
95th percentile per-packet one-way delay: 4.986 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 46.50 Mbit/s
95th percentile per-packet one-way delay: 4.774 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 67.83 Mbit/s
95th percentile per-packet one-way delay: 4.996 ms
Loss rate: 0.01%
```

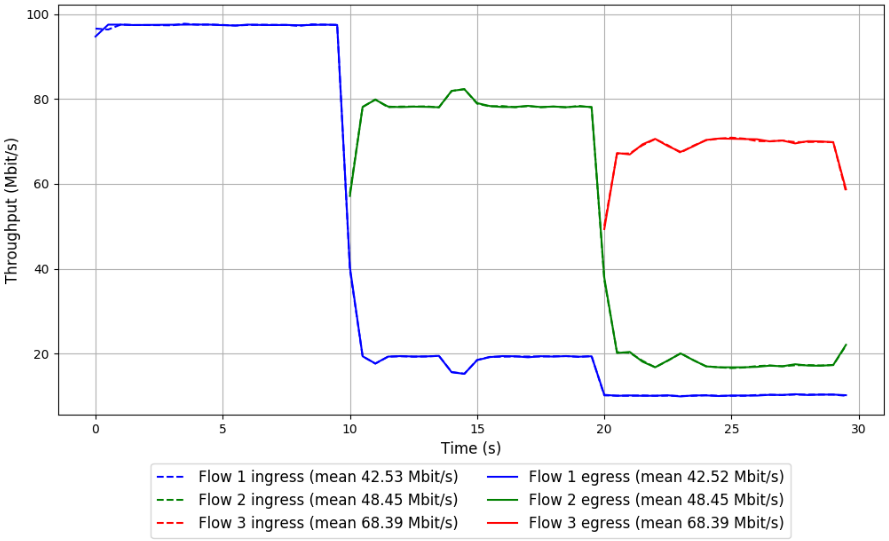
Run 4: Report of TCP Vegas — Data Link

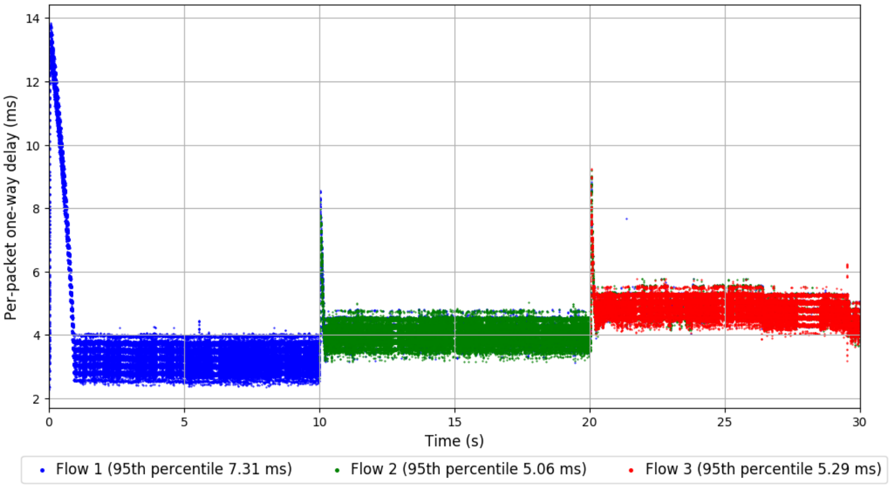




```
Run 5: Statistics of TCP Vegas

Start at: 2018-01-10 03:48:06
End at: 2018-01-10 03:48:36
Local clock offset: -0.065 ms
Remote clock offset: 0.031 ms

# Below is generated by plot.py at 2018-01-10 06:20:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 5.292 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 42.52 Mbit/s
95th percentile per-packet one-way delay: 7.310 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 48.45 Mbit/s
95th percentile per-packet one-way delay: 5.059 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 68.39 Mbit/s
95th percentile per-packet one-way delay: 5.291 ms
Loss rate: 0.00%
```

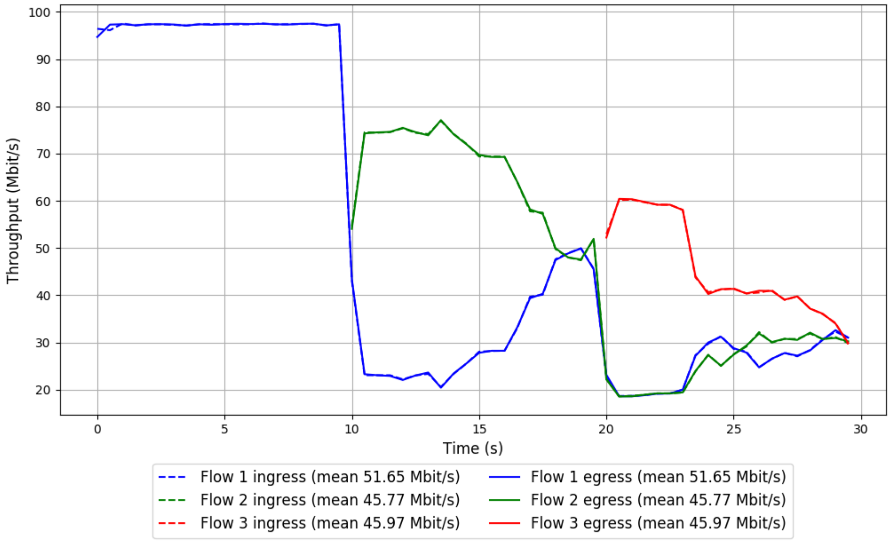
Run 5: Report of TCP Vegas — Data Link

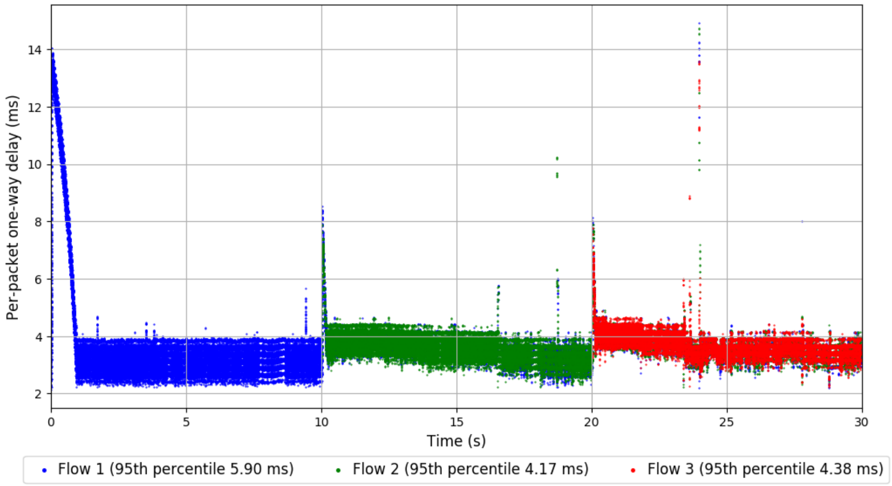




```
Run 6: Statistics of TCP Vegas

Start at: 2018-01-10 04:05:14
End at: 2018-01-10 04:05:44
Local clock offset: 0.04 ms
Remote clock offset: -0.158 ms

# Below is generated by plot.py at 2018-01-10 06:20:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.36 Mbit/s
95th percentile per-packet one-way delay: 4.373 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 51.65 Mbit/s
95th percentile per-packet one-way delay: 5.901 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 45.77 Mbit/s
95th percentile per-packet one-way delay: 4.170 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 45.97 Mbit/s
95th percentile per-packet one-way delay: 4.376 ms
Loss rate: 0.00%
```

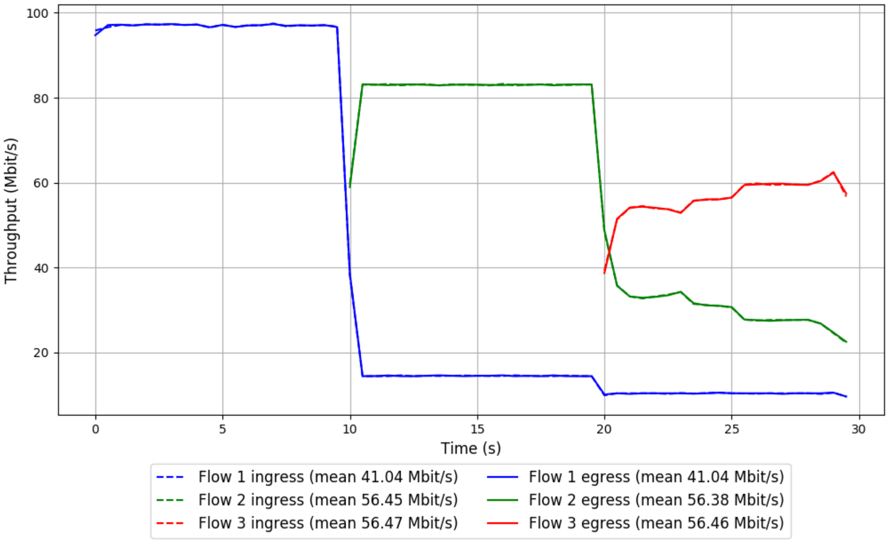
Run 6: Report of TCP Vegas — Data Link

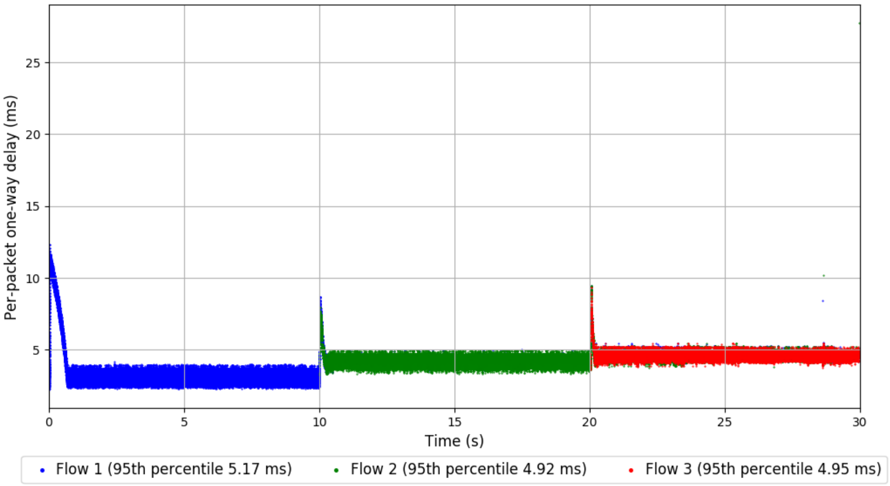




```
Run 7: Statistics of TCP Vegas

Start at: 2018-01-10 04:22:23
End at: 2018-01-10 04:22:53
Local clock offset: 0.085 ms
Remote clock offset: -0.153 ms

# Below is generated by plot.py at 2018-01-10 06:20:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.26 Mbit/s
95th percentile per-packet one-way delay: 4.947 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.04 Mbit/s
95th percentile per-packet one-way delay: 5.174 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 56.38 Mbit/s
95th percentile per-packet one-way delay: 4.923 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 56.46 Mbit/s
95th percentile per-packet one-way delay: 4.954 ms
Loss rate: 0.00%
```

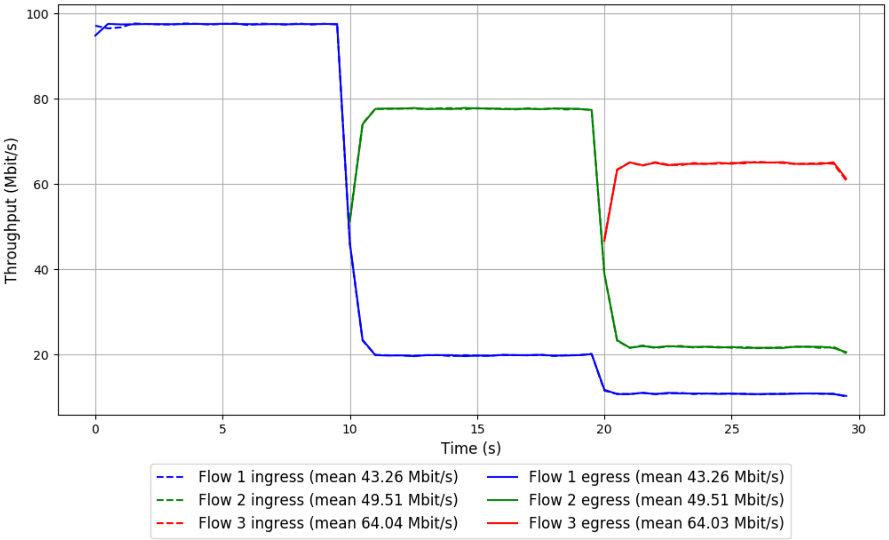
Run 7: Report of TCP Vegas — Data Link

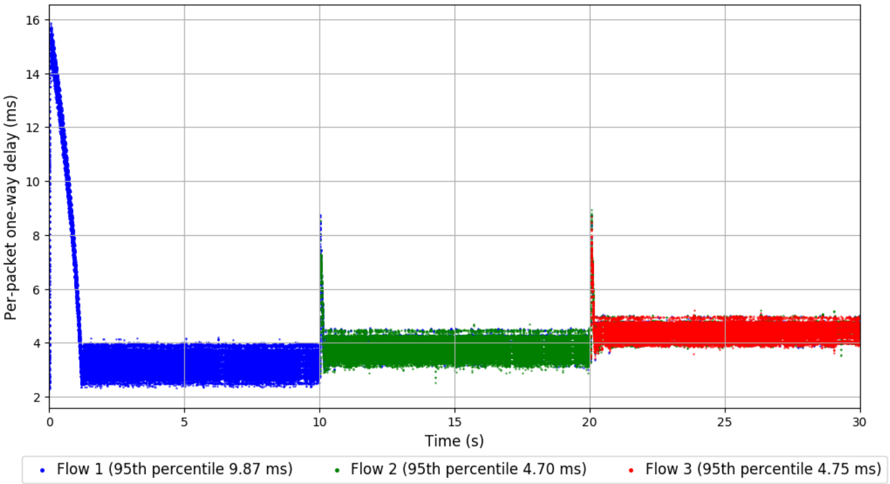




```
Run 8: Statistics of TCP Vegas

Start at: 2018-01-10 04:39:32
End at: 2018-01-10 04:40:02
Local clock offset: 0.055 ms
Remote clock offset: -0.191 ms

# Below is generated by plot.py at 2018-01-10 06:20:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 4.777 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.26 Mbit/s
95th percentile per-packet one-way delay: 9.866 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 49.51 Mbit/s
95th percentile per-packet one-way delay: 4.704 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 64.03 Mbit/s
95th percentile per-packet one-way delay: 4.745 ms
Loss rate: 0.00%
```

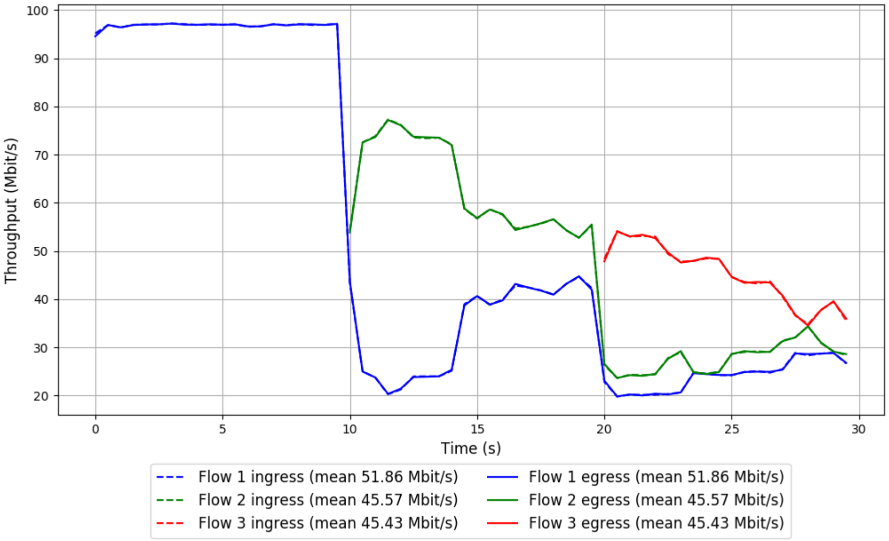
Run 8: Report of TCP Vegas — Data Link

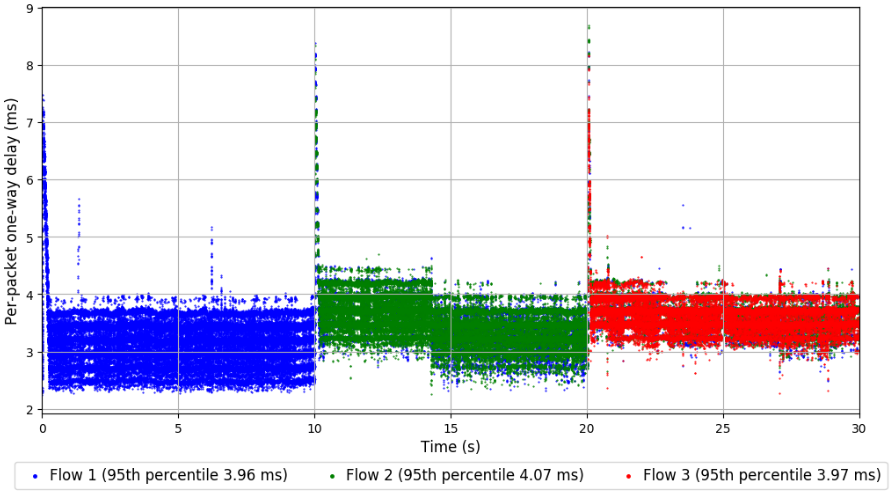




```
Run 9: Statistics of TCP Vegas

Start at: 2018-01-10 04:56:39
End at: 2018-01-10 04:57:09
Local clock offset: -0.006 ms
Remote clock offset: -0.349 ms

# Below is generated by plot.py at 2018-01-10 06:22:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.29 Mbit/s
95th percentile per-packet one-way delay: 3.986 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 51.86 Mbit/s
95th percentile per-packet one-way delay: 3.962 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 45.57 Mbit/s
95th percentile per-packet one-way delay: 4.071 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 45.43 Mbit/s
95th percentile per-packet one-way delay: 3.972 ms
Loss rate: 0.00%
```

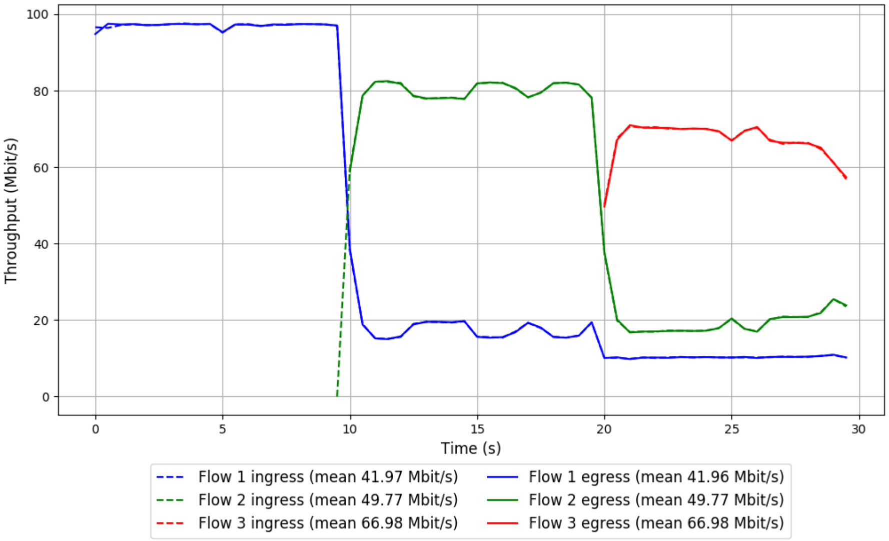
Run 9: Report of TCP Vegas — Data Link

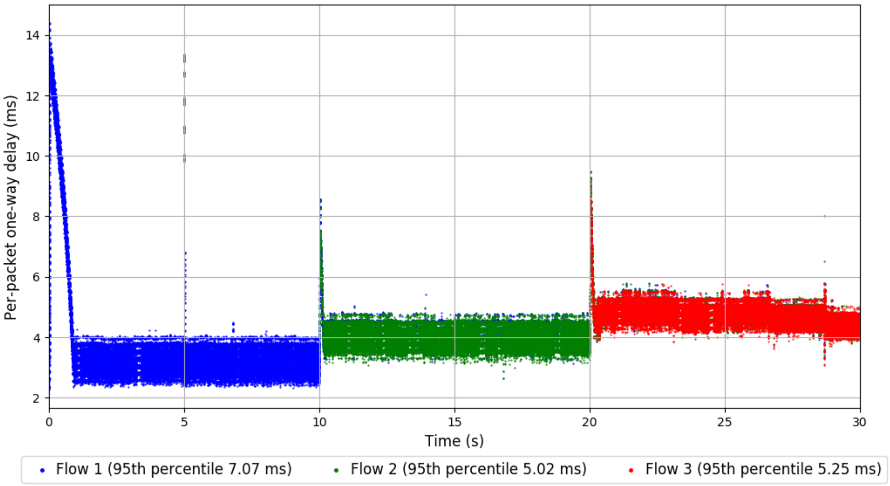




```
Run 10: Statistics of TCP Vegas

Start at: 2018-01-10 05:13:48
End at: 2018-01-10 05:14:18
Local clock offset: 0.04 ms
Remote clock offset: -0.3 ms

# Below is generated by plot.py at 2018-01-10 06:22:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.38 Mbit/s
95th percentile per-packet one-way delay: 5.247 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.96 Mbit/s
95th percentile per-packet one-way delay: 7.068 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 49.77 Mbit/s
95th percentile per-packet one-way delay: 5.018 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 66.98 Mbit/s
95th percentile per-packet one-way delay: 5.250 ms
Loss rate: 0.00%
```

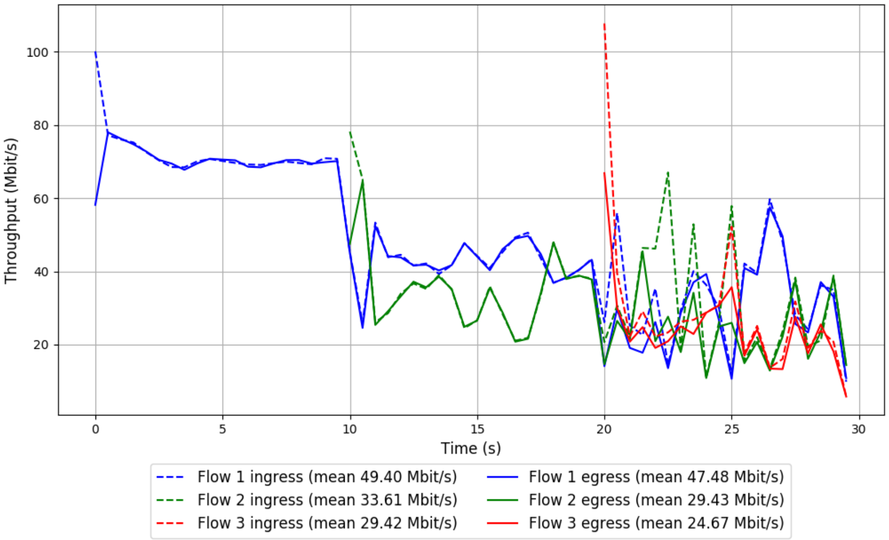
Run 10: Report of TCP Vegas — Data Link

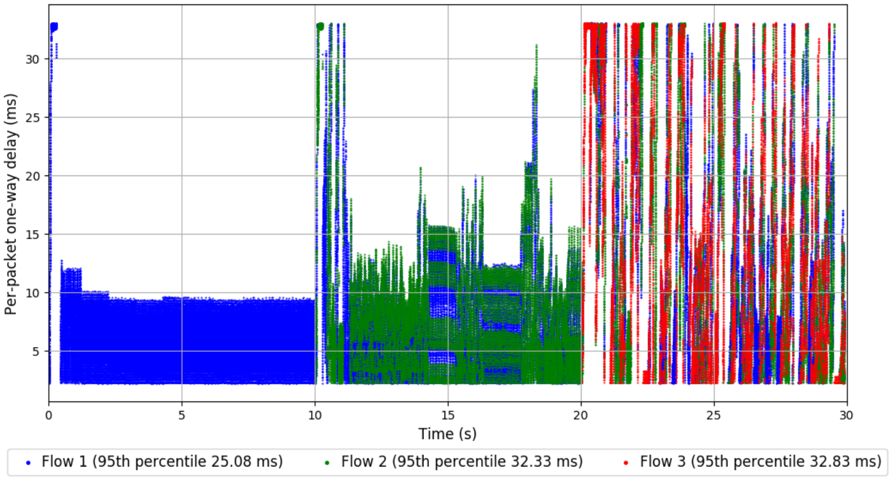




```
Run 1: Statistics of Verus

Start at: 2018-01-10 02:33:52
End at: 2018-01-10 02:34:22
Local clock offset: -0.066 ms
Remote clock offset: 0.764 ms

# Below is generated by plot.py at 2018-01-10 06:22:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.22 Mbit/s
95th percentile per-packet one-way delay: 31.100 ms
Loss rate: 7.71%
-- Flow 1:
Average throughput: 47.48 Mbit/s
95th percentile per-packet one-way delay: 25.080 ms
Loss rate: 3.88%
-- Flow 2:
Average throughput: 29.43 Mbit/s
95th percentile per-packet one-way delay: 32.334 ms
Loss rate: 12.45%
-- Flow 3:
Average throughput: 24.67 Mbit/s
95th percentile per-packet one-way delay: 32.833 ms
Loss rate: 16.23%
```

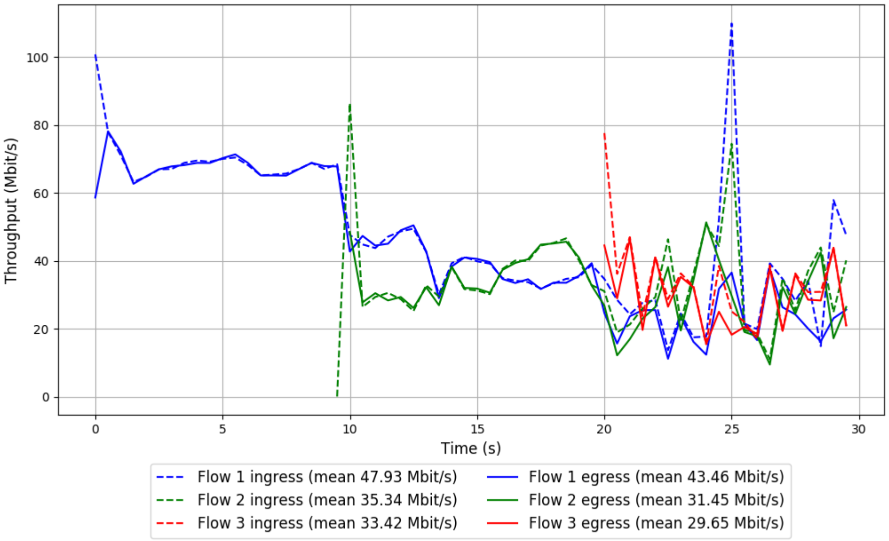
Run 1: Report of Verus — Data Link

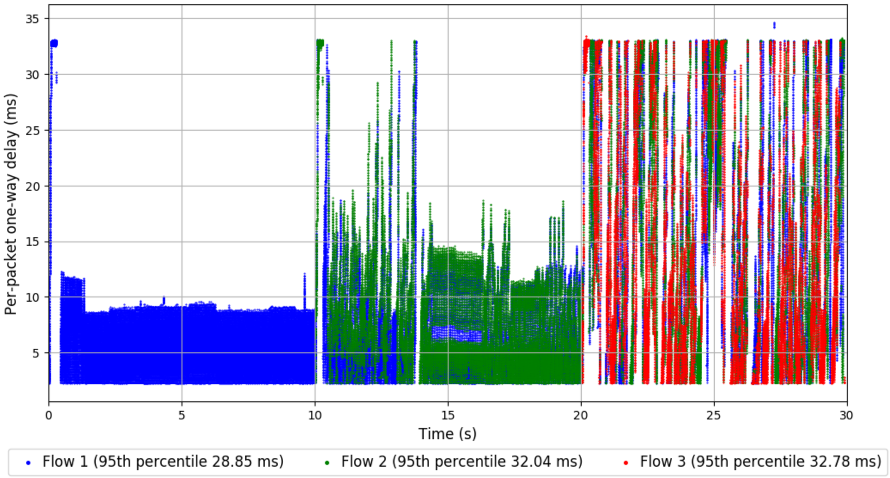




```
Run 2: Statistics of Verus

Start at: 2018-01-10 02:51:01
End at: 2018-01-10 02:51:31
Local clock offset: -0.089 ms
Remote clock offset: 0.592 ms

# Below is generated by plot.py at 2018-01-10 06:22:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.09 Mbit/s
95th percentile per-packet one-way delay: 31.395 ms
Loss rate: 9.98%
-- Flow 1:
Average throughput: 43.46 Mbit/s
95th percentile per-packet one-way delay: 28.849 ms
Loss rate: 9.22%
-- Flow 2:
Average throughput: 31.45 Mbit/s
95th percentile per-packet one-way delay: 32.036 ms
Loss rate: 10.90%
-- Flow 3:
Average throughput: 29.65 Mbit/s
95th percentile per-packet one-way delay: 32.778 ms
Loss rate: 11.29%
```

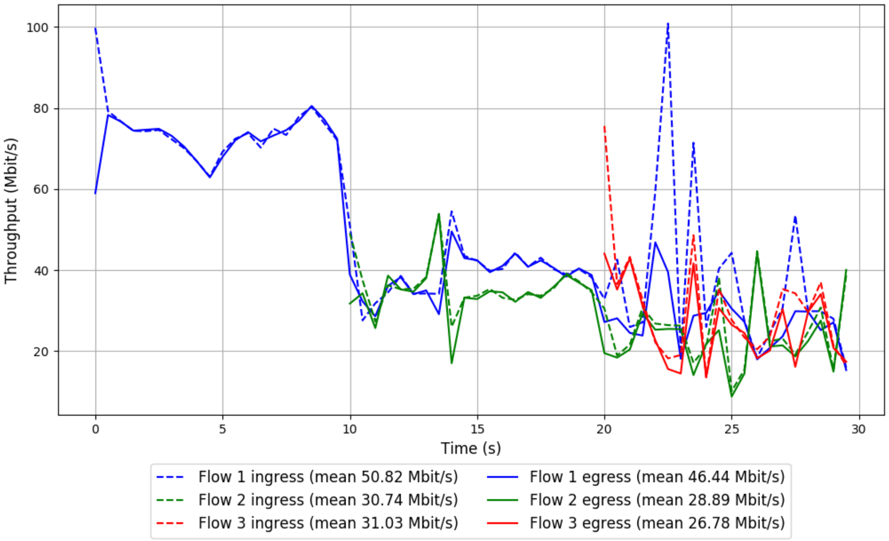
Run 2: Report of Verus — Data Link

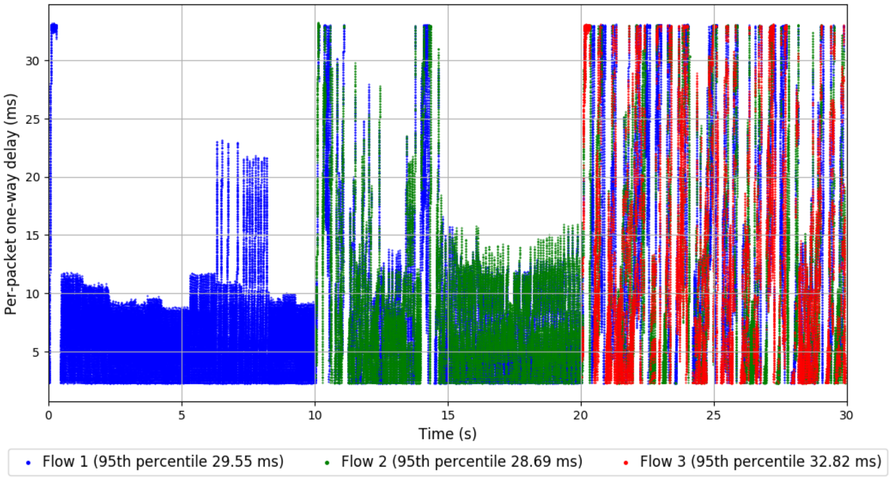




```
Run 3: Statistics of Verus

Start at: 2018-01-10 03:08:09
End at: 2018-01-10 03:08:39
Local clock offset: -0.1 ms
Remote clock offset: 0.464 ms

# Below is generated by plot.py at 2018-01-10 06:22:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.41 Mbit/s
95th percentile per-packet one-way delay: 30.272 ms
Loss rate: 8.56%
-- Flow 1:
Average throughput: 46.44 Mbit/s
95th percentile per-packet one-way delay: 29.551 ms
Loss rate: 8.52%
-- Flow 2:
Average throughput: 28.89 Mbit/s
95th percentile per-packet one-way delay: 28.691 ms
Loss rate: 6.03%
-- Flow 3:
Average throughput: 26.78 Mbit/s
95th percentile per-packet one-way delay: 32.816 ms
Loss rate: 13.75%
```

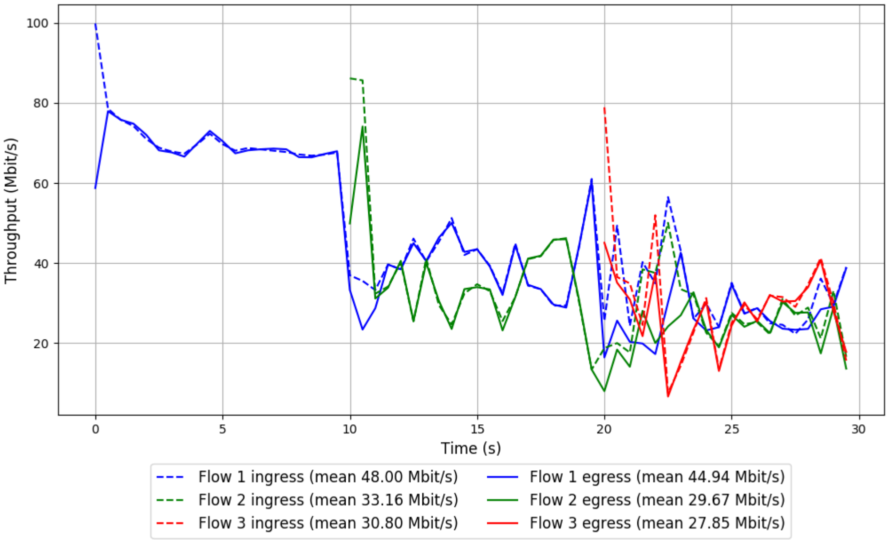
Run 3: Report of Verus — Data Link

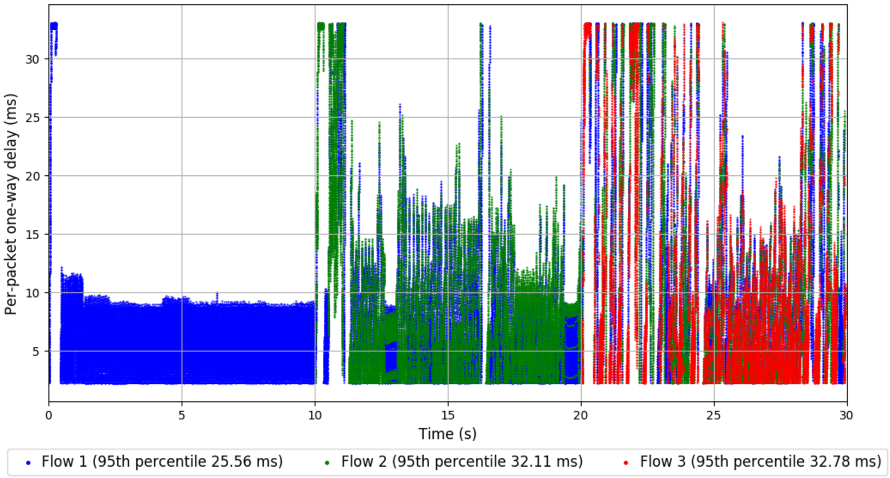




```
Run 4: Statistics of Verus

Start at: 2018-01-10 03:25:17
End at: 2018-01-10 03:25:47
Local clock offset: -0.039 ms
Remote clock offset: 0.324 ms

# Below is generated by plot.py at 2018-01-10 06:22:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.90 Mbit/s
95th percentile per-packet one-way delay: 30.741 ms
Loss rate: 7.89%
-- Flow 1:
Average throughput: 44.94 Mbit/s
95th percentile per-packet one-way delay: 25.558 ms
Loss rate: 6.34%
-- Flow 2:
Average throughput: 29.67 Mbit/s
95th percentile per-packet one-way delay: 32.114 ms
Loss rate: 10.50%
-- Flow 3:
Average throughput: 27.85 Mbit/s
95th percentile per-packet one-way delay: 32.777 ms
Loss rate: 9.52%
```

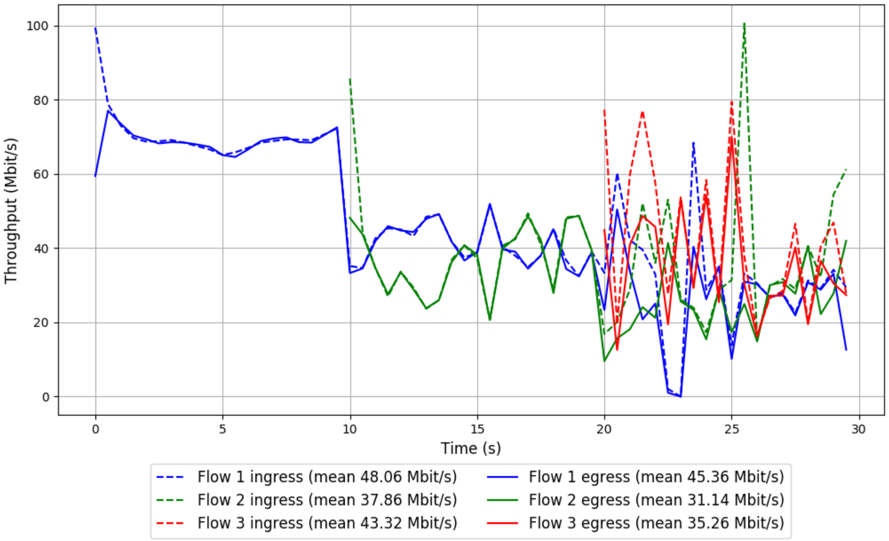
Run 4: Report of Verus — Data Link

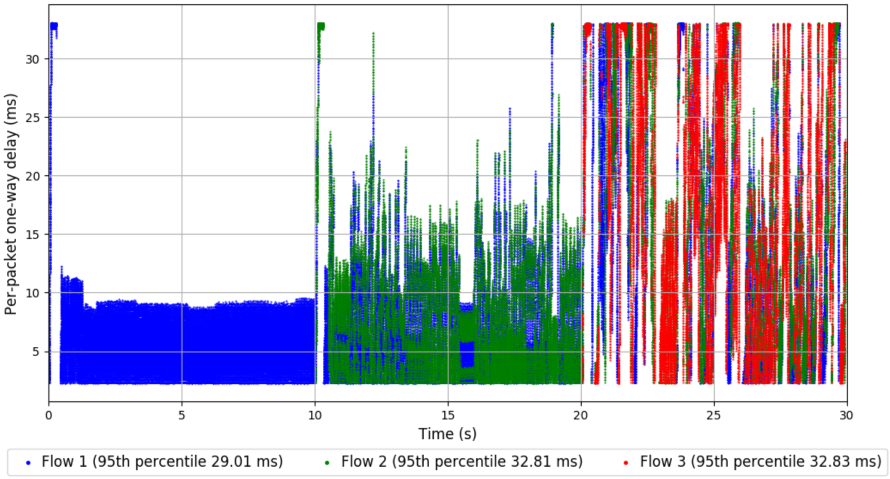




```
Run 5: Statistics of Verus

Start at: 2018-01-10 03:42:26
End at: 2018-01-10 03:42:56
Local clock offset: -0.005 ms
Remote clock offset: 0.09 ms

# Below is generated by plot.py at 2018-01-10 06:23:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.43 Mbit/s
95th percentile per-packet one-way delay: 32.628 ms
Loss rate: 11.16%
-- Flow 1:
Average throughput: 45.36 Mbit/s
95th percentile per-packet one-way delay: 29.009 ms
Loss rate: 5.52%
-- Flow 2:
Average throughput: 31.14 Mbit/s
95th percentile per-packet one-way delay: 32.810 ms
Loss rate: 17.68%
-- Flow 3:
Average throughput: 35.26 Mbit/s
95th percentile per-packet one-way delay: 32.834 ms
Loss rate: 18.44%
```

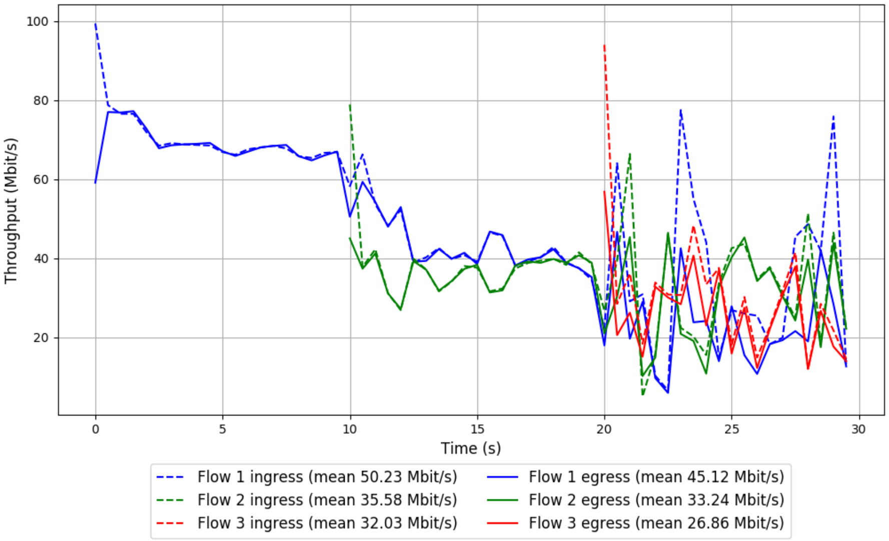
Run 5: Report of Verus — Data Link

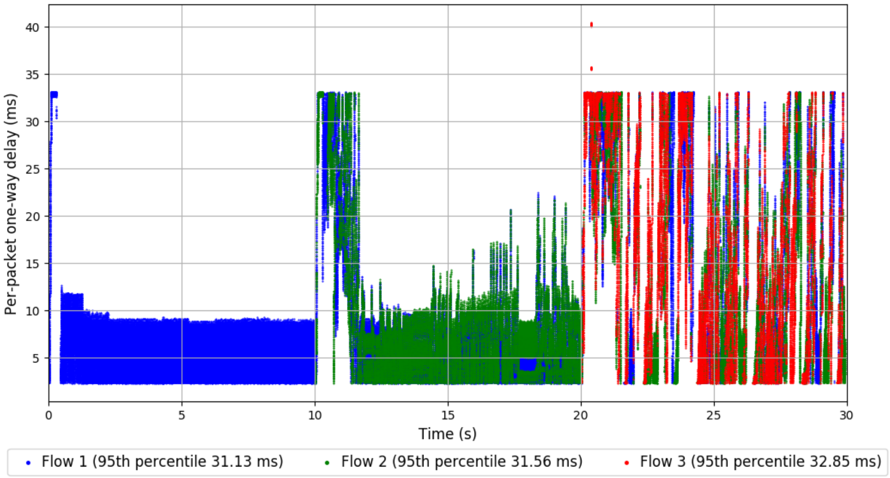




```
Run 6: Statistics of Verus

Start at: 2018-01-10 03:59:34
End at: 2018-01-10 04:00:04
Local clock offset: 0.007 ms
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2018-01-10 06:23:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.91 Mbit/s
95th percentile per-packet one-way delay: 31.851 ms
Loss rate: 9.82%
-- Flow 1:
Average throughput: 45.12 Mbit/s
95th percentile per-packet one-way delay: 31.128 ms
Loss rate: 10.08%
-- Flow 2:
Average throughput: 33.24 Mbit/s
95th percentile per-packet one-way delay: 31.562 ms
Loss rate: 6.56%
-- Flow 3:
Average throughput: 26.86 Mbit/s
95th percentile per-packet one-way delay: 32.846 ms
Loss rate: 15.92%
```

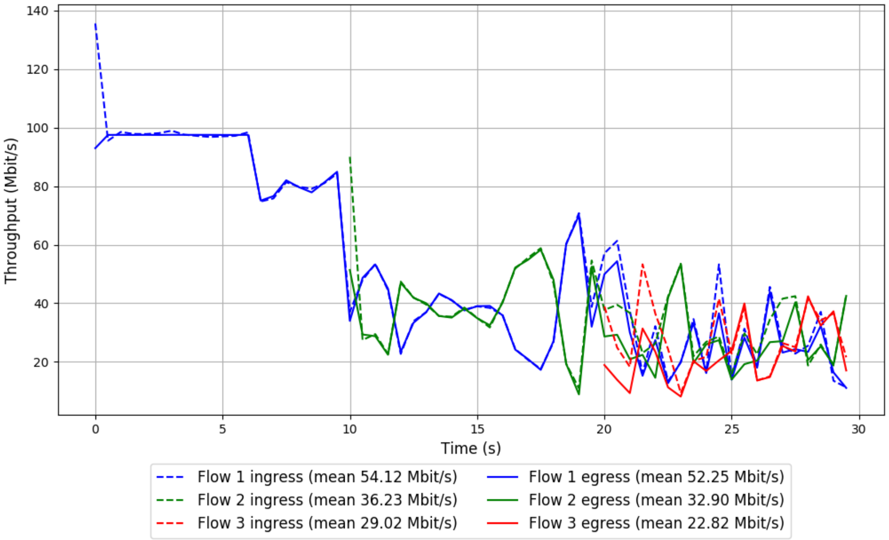
Run 6: Report of Verus — Data Link

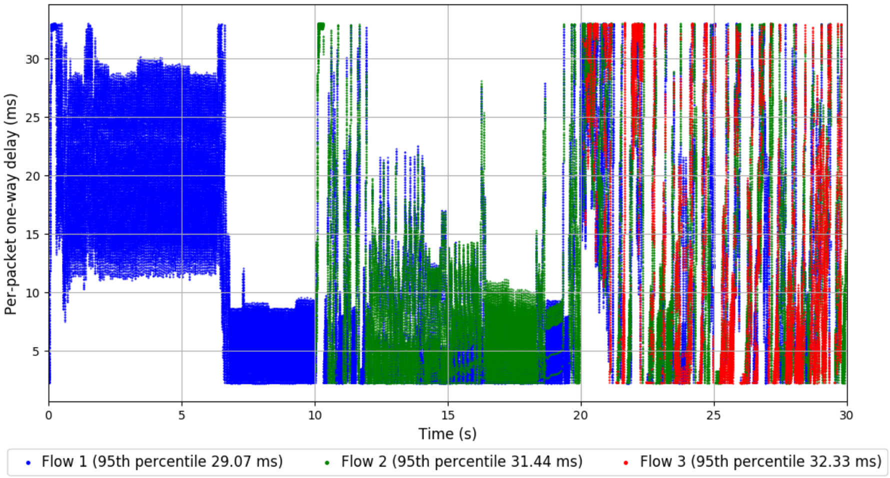




```
Run 7: Statistics of Verus

Start at: 2018-01-10 04:16:42
End at: 2018-01-10 04:17:12
Local clock offset: 0.099 ms
Remote clock offset: -0.12 ms

# Below is generated by plot.py at 2018-01-10 06:24:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.31 Mbit/s
95th percentile per-packet one-way delay: 30.396 ms
Loss rate: 6.90%
-- Flow 1:
Average throughput: 52.25 Mbit/s
95th percentile per-packet one-way delay: 29.066 ms
Loss rate: 3.36%
-- Flow 2:
Average throughput: 32.90 Mbit/s
95th percentile per-packet one-way delay: 31.438 ms
Loss rate: 9.16%
-- Flow 3:
Average throughput: 22.82 Mbit/s
95th percentile per-packet one-way delay: 32.328 ms
Loss rate: 21.29%
```

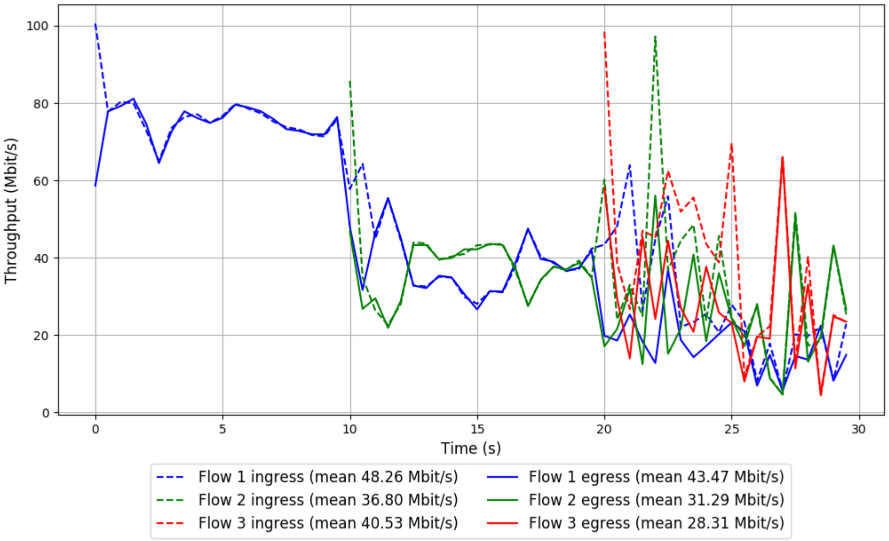
Run 7: Report of Verus — Data Link

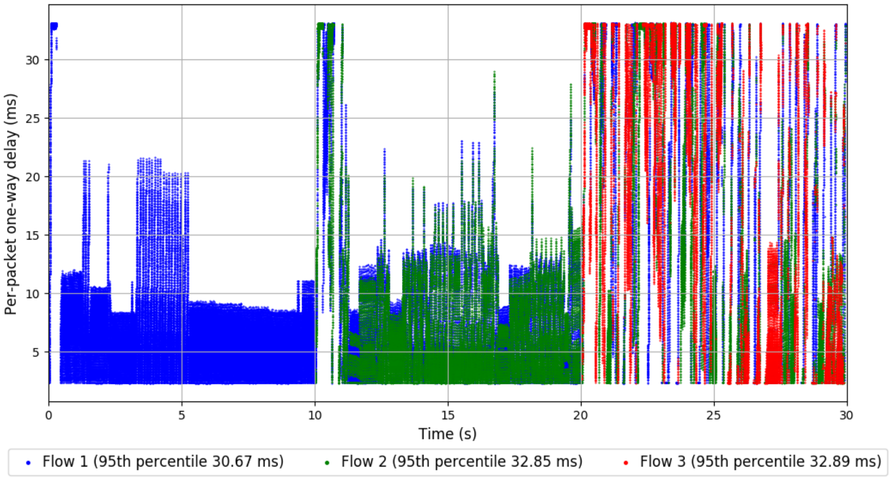




```
Run 8: Statistics of Verus

Start at: 2018-01-10 04:33:52
End at: 2018-01-10 04:34:22
Local clock offset: 0.018 ms
Remote clock offset: -0.171 ms

# Below is generated by plot.py at 2018-01-10 06:24:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.66 Mbit/s
95th percentile per-packet one-way delay: 32.649 ms
Loss rate: 14.40%
-- Flow 1:
Average throughput: 43.47 Mbit/s
95th percentile per-packet one-way delay: 30.669 ms
Loss rate: 9.82%
-- Flow 2:
Average throughput: 31.29 Mbit/s
95th percentile per-packet one-way delay: 32.855 ms
Loss rate: 14.84%
-- Flow 3:
Average throughput: 28.31 Mbit/s
95th percentile per-packet one-way delay: 32.892 ms
Loss rate: 30.06%
```

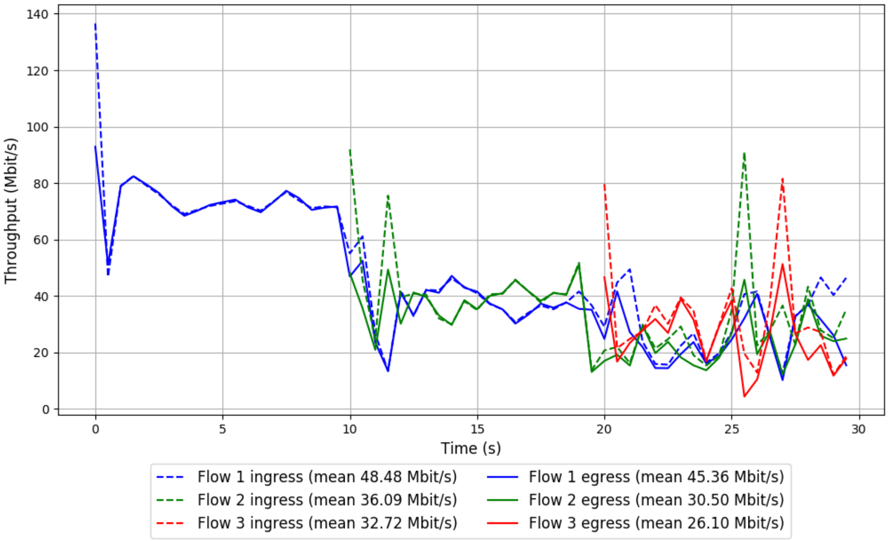
Run 8: Report of Verus — Data Link

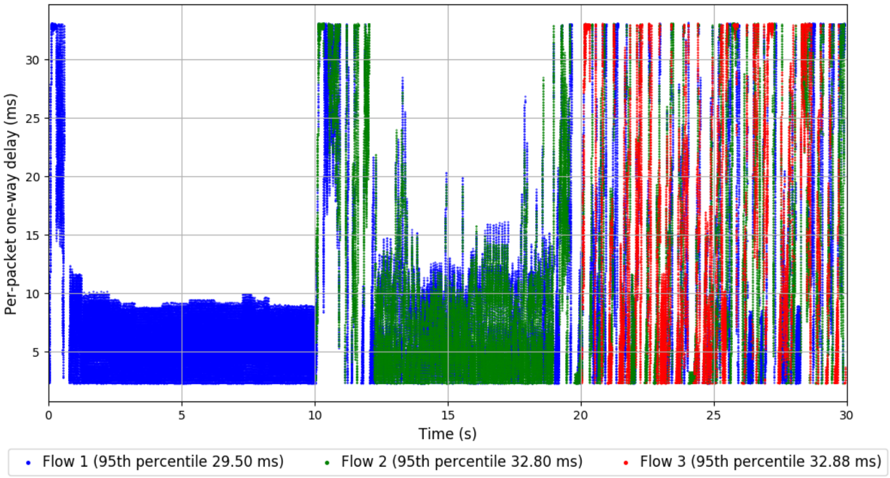




```
Run 9: Statistics of Verus

Start at: 2018-01-10 04:50:59
End at: 2018-01-10 04:51:30
Local clock offset: 0.038 ms
Remote clock offset: -0.255 ms

# Below is generated by plot.py at 2018-01-10 06:24:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.20 Mbit/s
95th percentile per-packet one-way delay: 32.419 ms
Loss rate: 10.74%
-- Flow 1:
Average throughput: 45.36 Mbit/s
95th percentile per-packet one-way delay: 29.504 ms
Loss rate: 6.35%
-- Flow 2:
Average throughput: 30.50 Mbit/s
95th percentile per-packet one-way delay: 32.799 ms
Loss rate: 15.34%
-- Flow 3:
Average throughput: 26.10 Mbit/s
95th percentile per-packet one-way delay: 32.882 ms
Loss rate: 20.22%
```

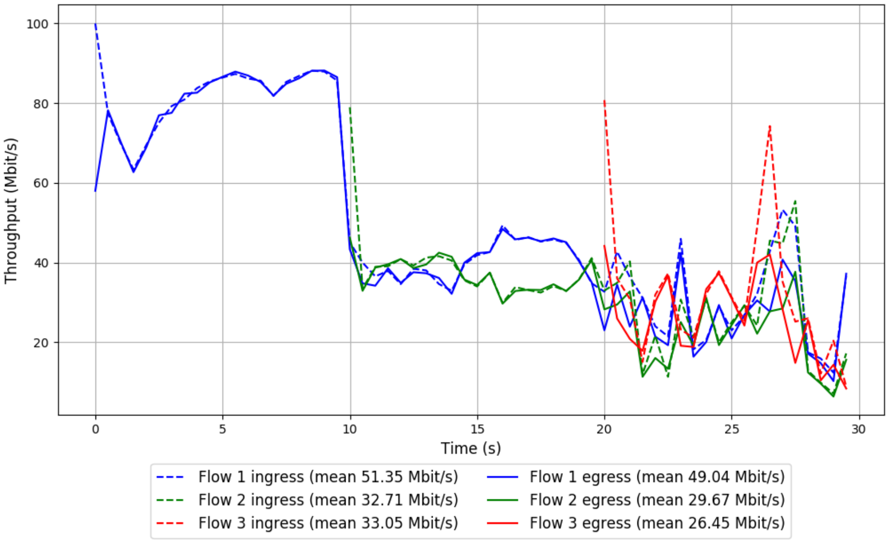
Run 9: Report of Verus — Data Link

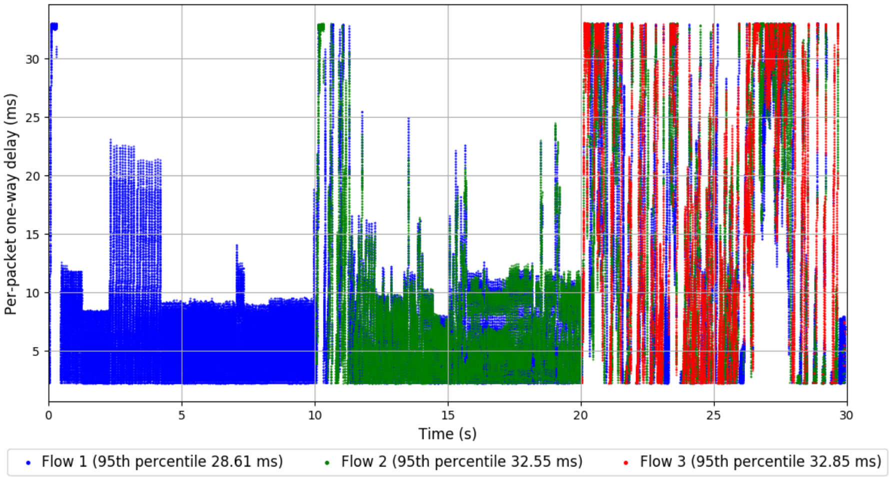




```
Run 10: Statistics of Verus

Start at: 2018-01-10 05:08:07
End at: 2018-01-10 05:08:37
Local clock offset: -0.009 ms
Remote clock offset: -0.403 ms

# Below is generated by plot.py at 2018-01-10 06:24:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.51 Mbit/s
95th percentile per-packet one-way delay: 31.853 ms
Loss rate: 7.73%
-- Flow 1:
Average throughput: 49.04 Mbit/s
95th percentile per-packet one-way delay: 28.609 ms
Loss rate: 4.48%
-- Flow 2:
Average throughput: 29.67 Mbit/s
95th percentile per-packet one-way delay: 32.554 ms
Loss rate: 9.28%
-- Flow 3:
Average throughput: 26.45 Mbit/s
95th percentile per-packet one-way delay: 32.849 ms
Loss rate: 19.94%
```

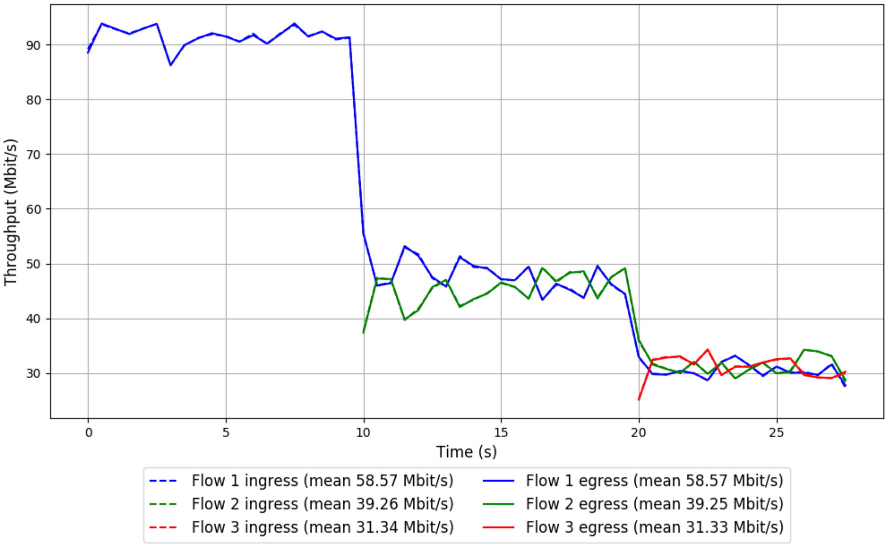
Run 10: Report of Verus — Data Link

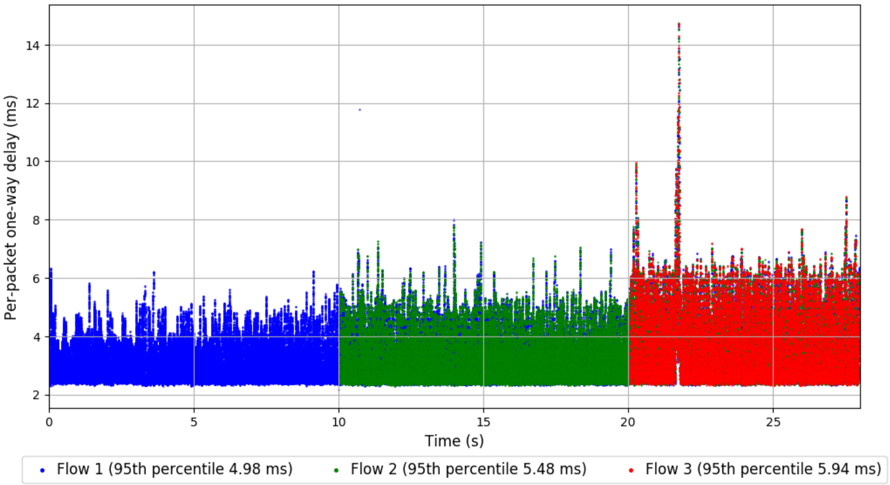




```
Run 1: Statistics of Copa

Start at: 2018-01-10 02:42:59
End at: 2018-01-10 02:43:29
Local clock offset: -0.105 ms
Remote clock offset: 0.692 ms

# Below is generated by plot.py at 2018-01-10 06:26:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.64 Mbit/s
95th percentile per-packet one-way delay: 5.324 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 58.57 Mbit/s
95th percentile per-packet one-way delay: 4.983 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.25 Mbit/s
95th percentile per-packet one-way delay: 5.483 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 31.33 Mbit/s
95th percentile per-packet one-way delay: 5.940 ms
Loss rate: 0.00%
```

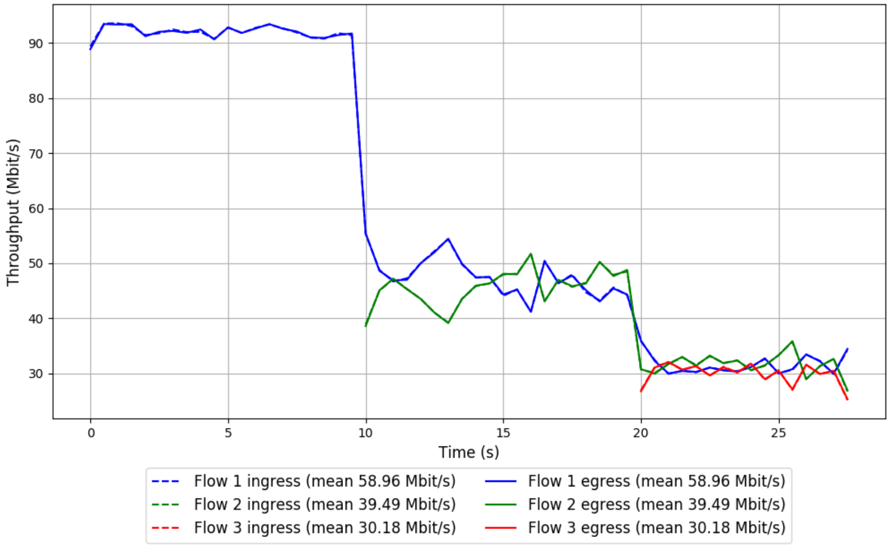
Run 1: Report of Copa — Data Link

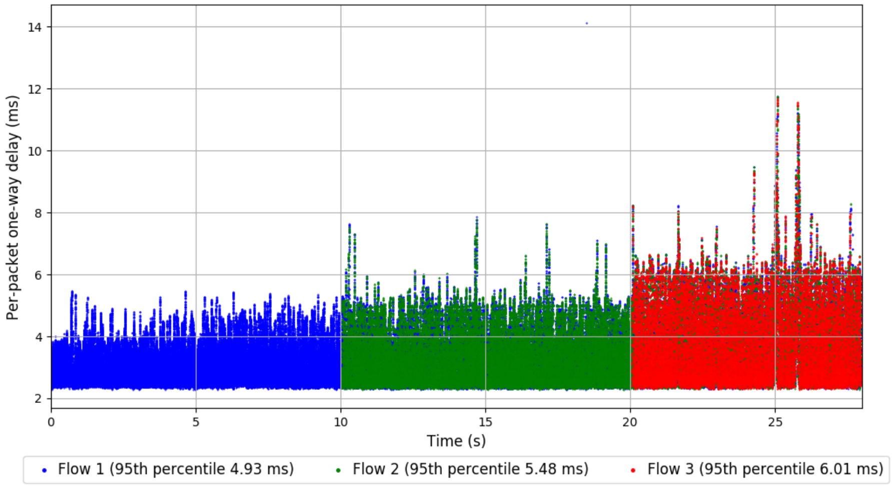




```
Run 2: Statistics of Copa

Start at: 2018-01-10 03:00:07
End at: 2018-01-10 03:00:37
Local clock offset: -0.099 ms
Remote clock offset: 0.522 ms

# Below is generated by plot.py at 2018-01-10 06:26:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.85 Mbit/s
95th percentile per-packet one-way delay: 5.296 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 58.96 Mbit/s
95th percentile per-packet one-way delay: 4.929 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.49 Mbit/s
95th percentile per-packet one-way delay: 5.479 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.18 Mbit/s
95th percentile per-packet one-way delay: 6.007 ms
Loss rate: 0.00%
```

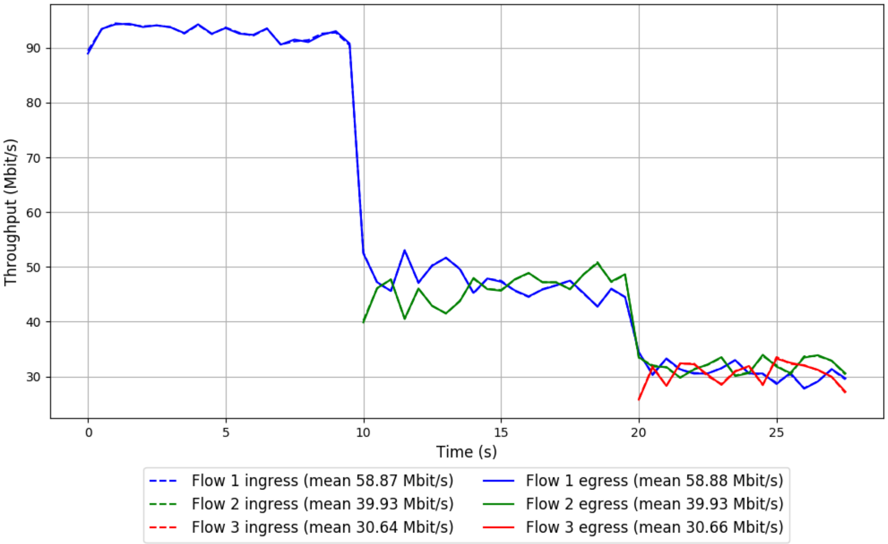
Run 2: Report of Copa — Data Link

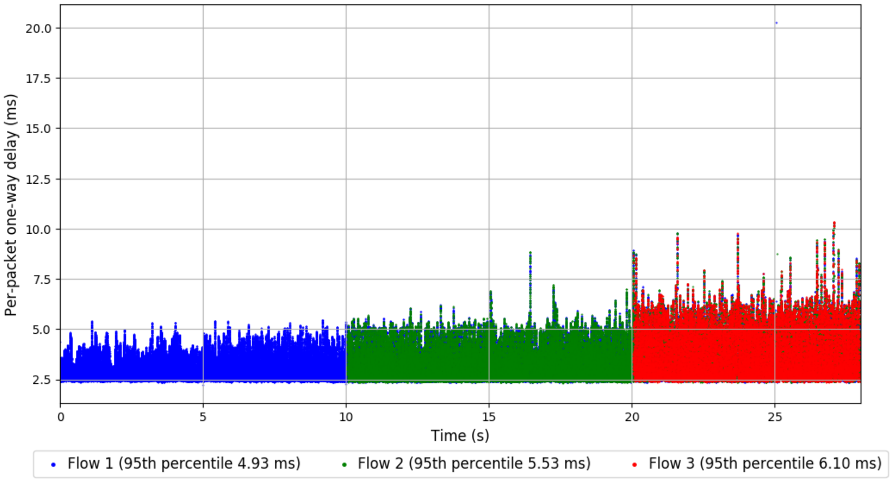




```
Run 3: Statistics of Copa

Start at: 2018-01-10 03:17:15
End at: 2018-01-10 03:17:45
Local clock offset: -0.148 ms
Remote clock offset: 0.427 ms

# Below is generated by plot.py at 2018-01-10 06:27:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.18 Mbit/s
95th percentile per-packet one-way delay: 5.348 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 58.88 Mbit/s
95th percentile per-packet one-way delay: 4.935 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.93 Mbit/s
95th percentile per-packet one-way delay: 5.525 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.66 Mbit/s
95th percentile per-packet one-way delay: 6.096 ms
Loss rate: 0.00%
```

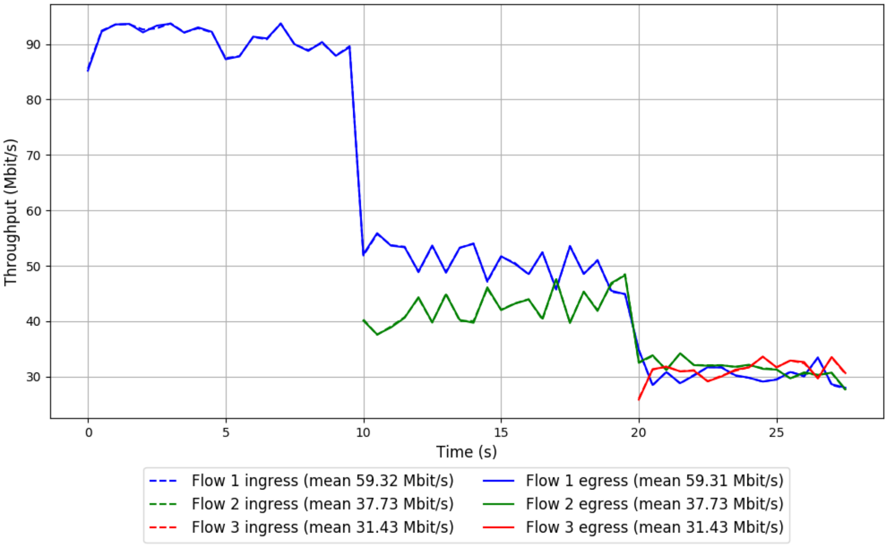
Run 3: Report of Copa — Data Link

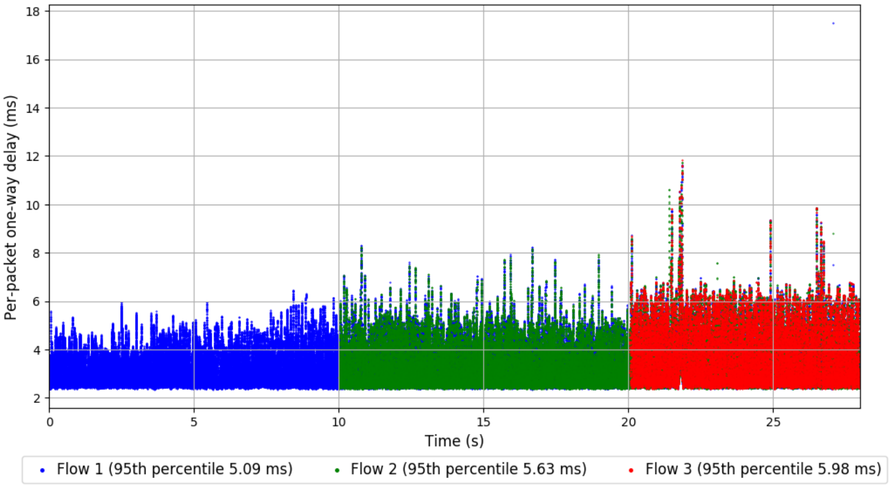




```
Run 4: Statistics of Copa

Start at: 2018-01-10 03:34:23
End at: 2018-01-10 03:34:53
Local clock offset: -0.114 ms
Remote clock offset: 0.196 ms

# Below is generated by plot.py at 2018-01-10 06:27:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.43 Mbit/s
95th percentile per-packet one-way delay: 5.422 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 59.31 Mbit/s
95th percentile per-packet one-way delay: 5.090 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.73 Mbit/s
95th percentile per-packet one-way delay: 5.635 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 31.43 Mbit/s
95th percentile per-packet one-way delay: 5.977 ms
Loss rate: 0.00%
```

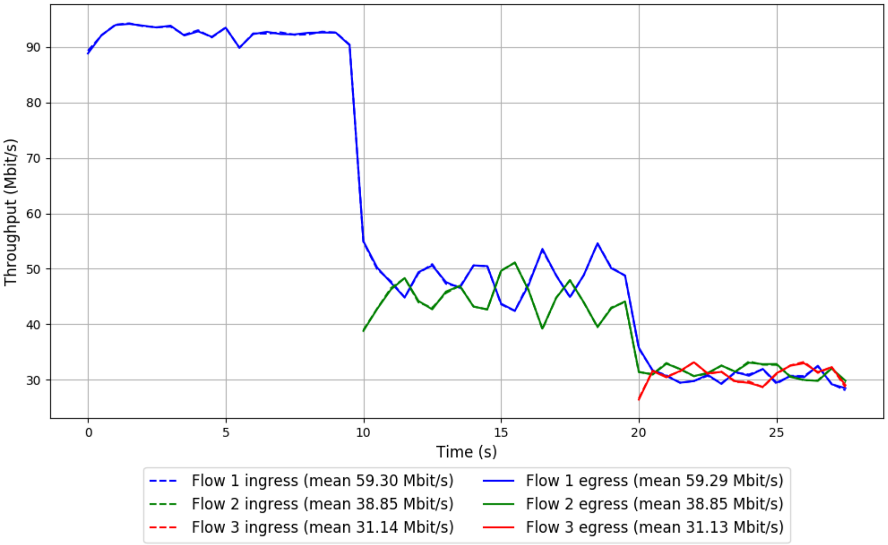
Run 4: Report of Copa — Data Link

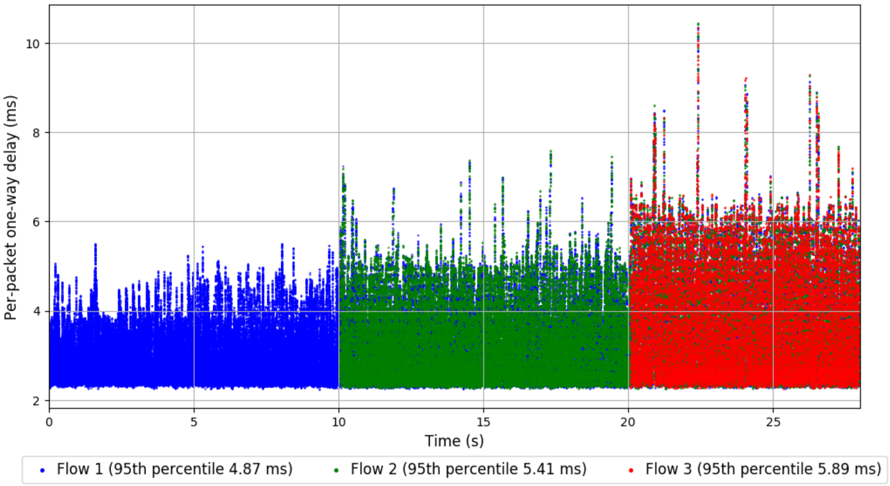




```
Run 5: Statistics of Copa

Start at: 2018-01-10 03:51:32
End at: 2018-01-10 03:52:02
Local clock offset: 0.004 ms
Remote clock offset: -0.017 ms

# Below is generated by plot.py at 2018-01-10 06:28:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.05 Mbit/s
95th percentile per-packet one-way delay: 5.236 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 59.29 Mbit/s
95th percentile per-packet one-way delay: 4.872 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.85 Mbit/s
95th percentile per-packet one-way delay: 5.411 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 31.13 Mbit/s
95th percentile per-packet one-way delay: 5.892 ms
Loss rate: 0.00%
```

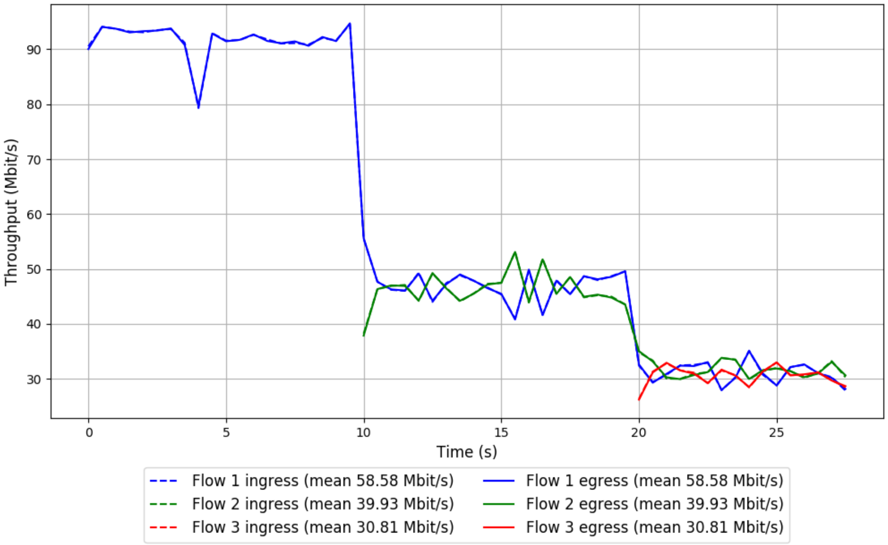
Run 5: Report of Copa — Data Link

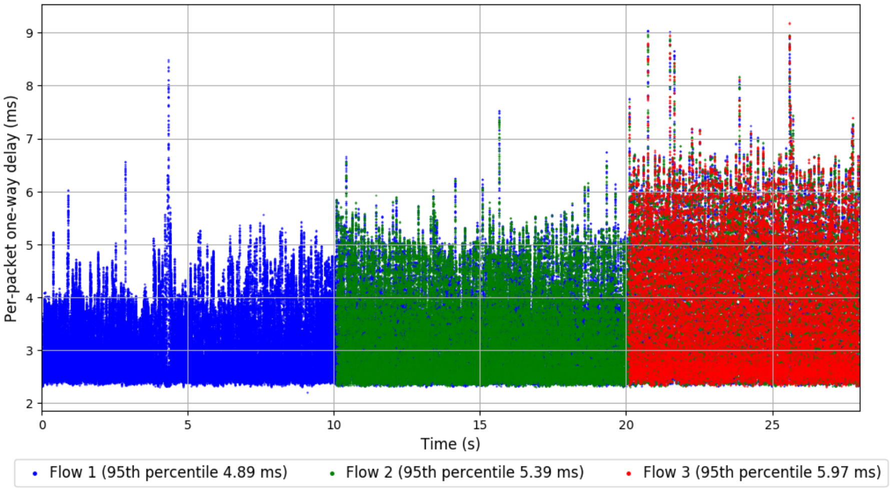




```
Run 6: Statistics of Copa

Start at: 2018-01-10 04:08:40
End at: 2018-01-10 04:09:10
Local clock offset: -0.003 ms
Remote clock offset: -0.116 ms

# Below is generated by plot.py at 2018-01-10 06:28:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.88 Mbit/s
95th percentile per-packet one-way delay: 5.273 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 58.58 Mbit/s
95th percentile per-packet one-way delay: 4.895 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.93 Mbit/s
95th percentile per-packet one-way delay: 5.390 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.81 Mbit/s
95th percentile per-packet one-way delay: 5.971 ms
Loss rate: 0.00%
```

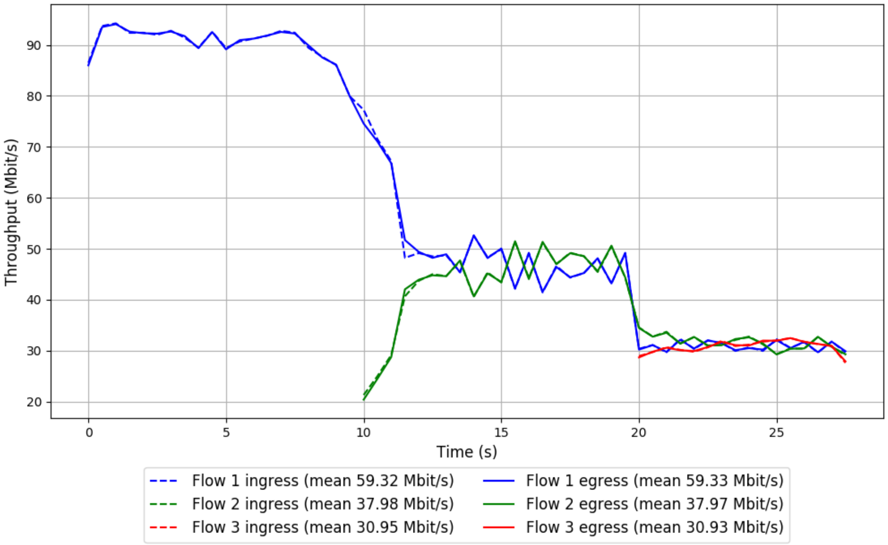
Run 6: Report of Copa — Data Link

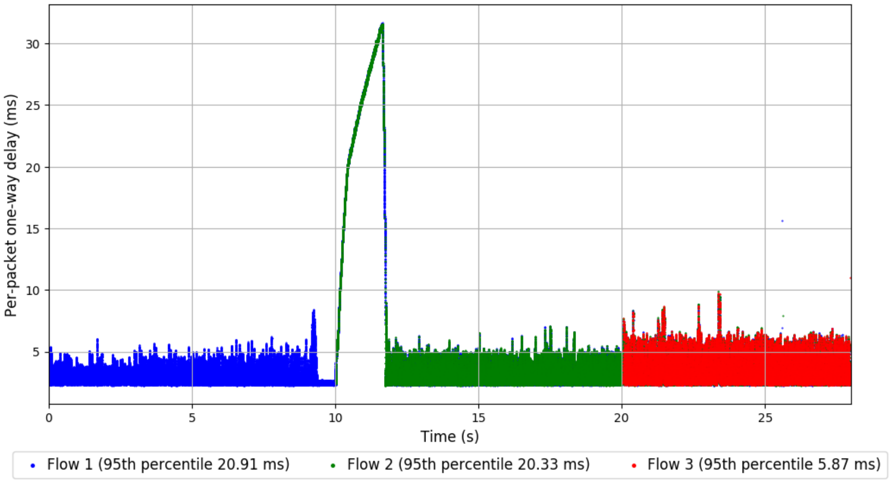




```
Run 7: Statistics of Copa

Start at: 2018-01-10 04:25:49
End at: 2018-01-10 04:26:19
Local clock offset: 0.087 ms
Remote clock offset: -0.141 ms

# Below is generated by plot.py at 2018-01-10 06:28:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.48 Mbit/s
95th percentile per-packet one-way delay: 18.156 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 59.33 Mbit/s
95th percentile per-packet one-way delay: 20.908 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.97 Mbit/s
95th percentile per-packet one-way delay: 20.327 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.93 Mbit/s
95th percentile per-packet one-way delay: 5.865 ms
Loss rate: 0.00%
```

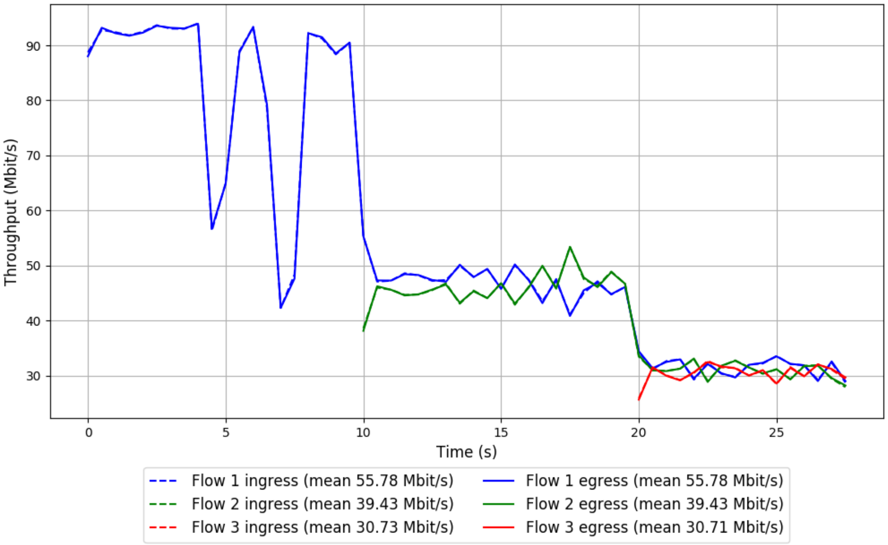
Run 7: Report of Copa — Data Link

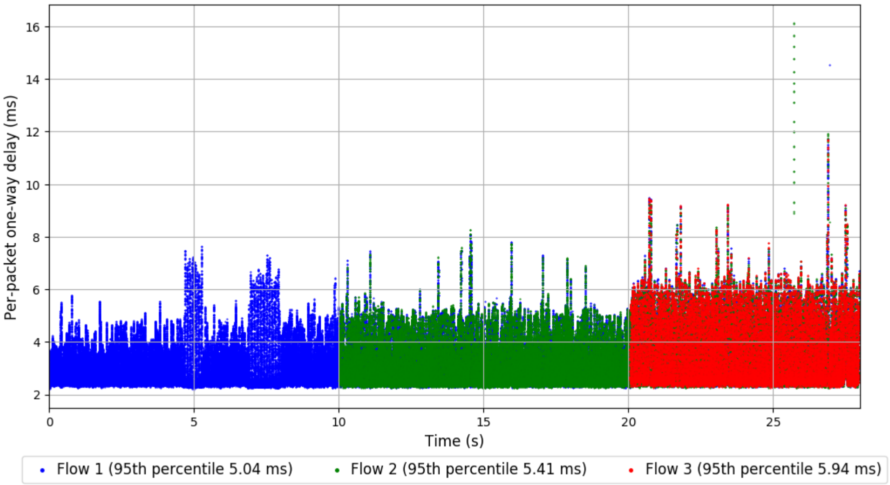




```
Run 8: Statistics of Copa

Start at: 2018-01-10 04:42:57
End at: 2018-01-10 04:43:27
Local clock offset: 0.08 ms
Remote clock offset: -0.204 ms

# Below is generated by plot.py at 2018-01-10 06:28:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.78 Mbit/s
95th percentile per-packet one-way delay: 5.326 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.78 Mbit/s
95th percentile per-packet one-way delay: 5.035 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.43 Mbit/s
95th percentile per-packet one-way delay: 5.405 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.71 Mbit/s
95th percentile per-packet one-way delay: 5.936 ms
Loss rate: 0.00%
```

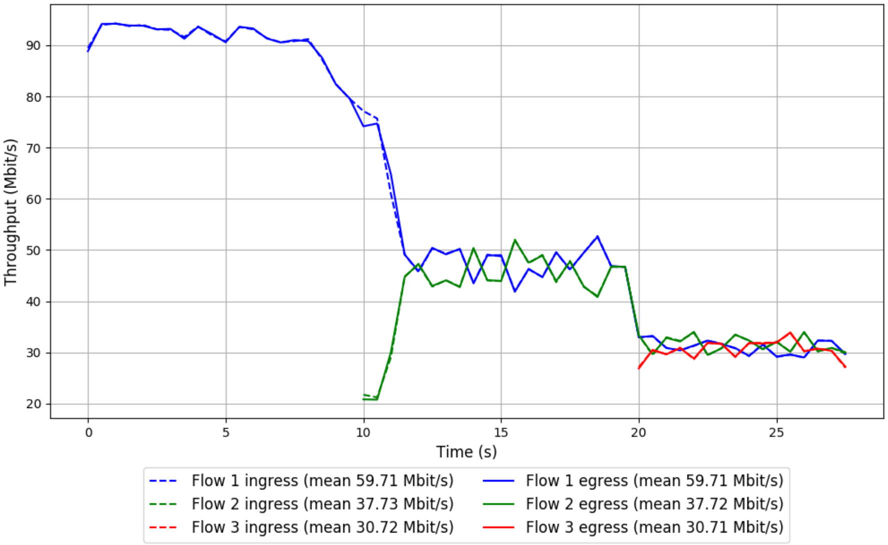
Run 8: Report of Copa — Data Link

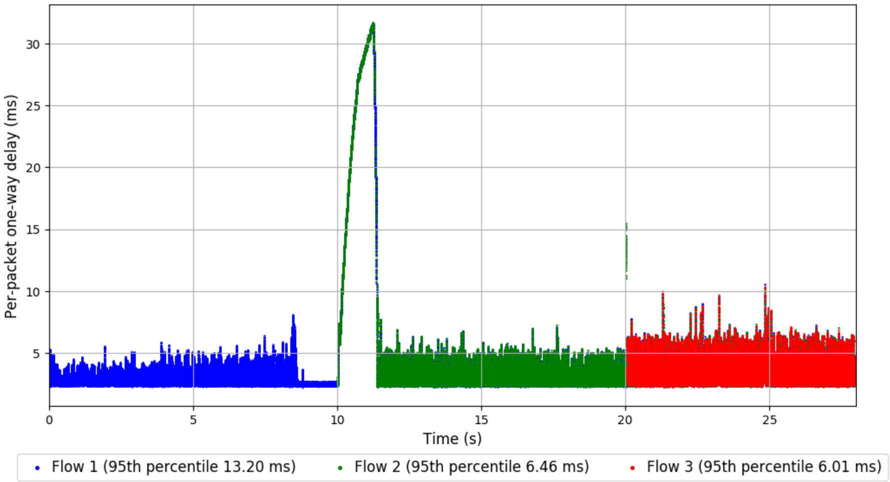




```
Run 9: Statistics of Copa

Start at: 2018-01-10 05:00:05
End at: 2018-01-10 05:00:35
Local clock offset: 0.062 ms
Remote clock offset: -0.294 ms

# Below is generated by plot.py at 2018-01-10 06:31:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.64 Mbit/s
95th percentile per-packet one-way delay: 7.073 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 59.71 Mbit/s
95th percentile per-packet one-way delay: 13.197 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.72 Mbit/s
95th percentile per-packet one-way delay: 6.457 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.71 Mbit/s
95th percentile per-packet one-way delay: 6.014 ms
Loss rate: 0.00%
```

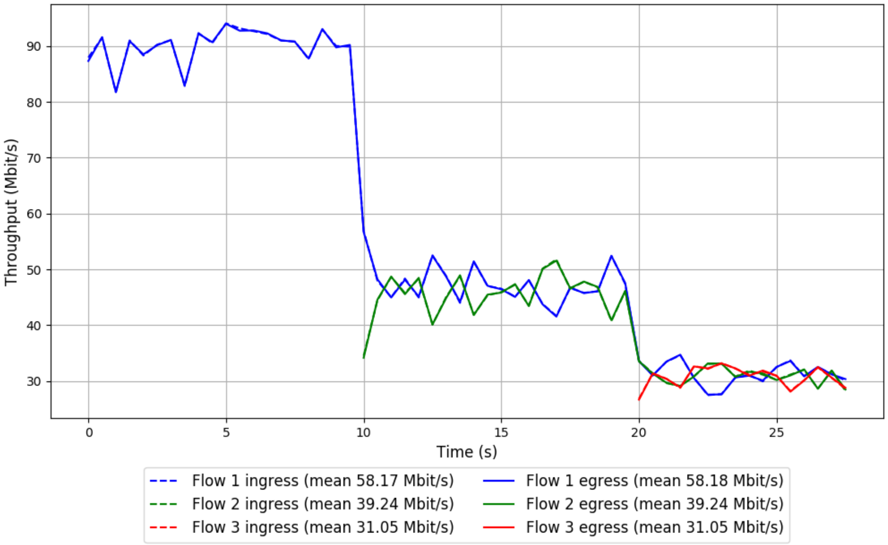
Run 9: Report of Copa — Data Link

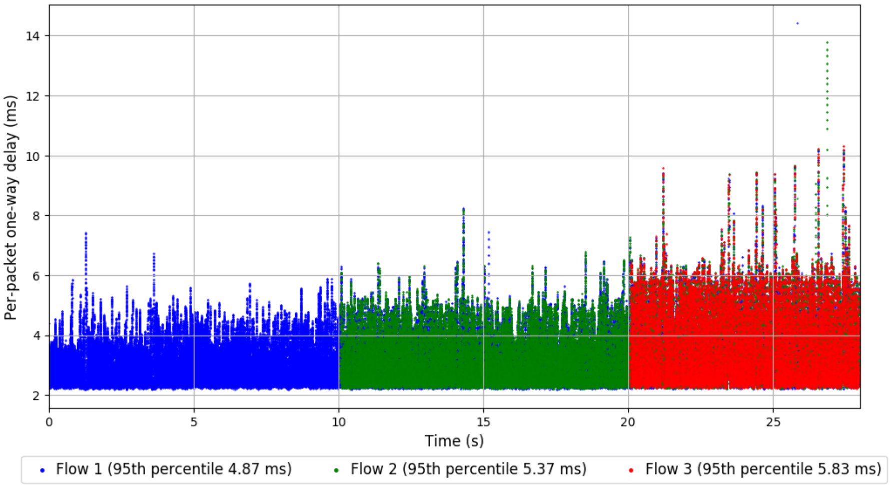




```
Run 10: Statistics of Copa

Start at: 2018-01-10 05:17:13
End at: 2018-01-10 05:17:43
Local clock offset: 0.036 ms
Remote clock offset: -0.398 ms

# Below is generated by plot.py at 2018-01-10 06:31:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.13 Mbit/s
95th percentile per-packet one-way delay: 5.230 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 58.18 Mbit/s
95th percentile per-packet one-way delay: 4.874 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.24 Mbit/s
95th percentile per-packet one-way delay: 5.368 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 31.05 Mbit/s
95th percentile per-packet one-way delay: 5.832 ms
Loss rate: 0.00%
```

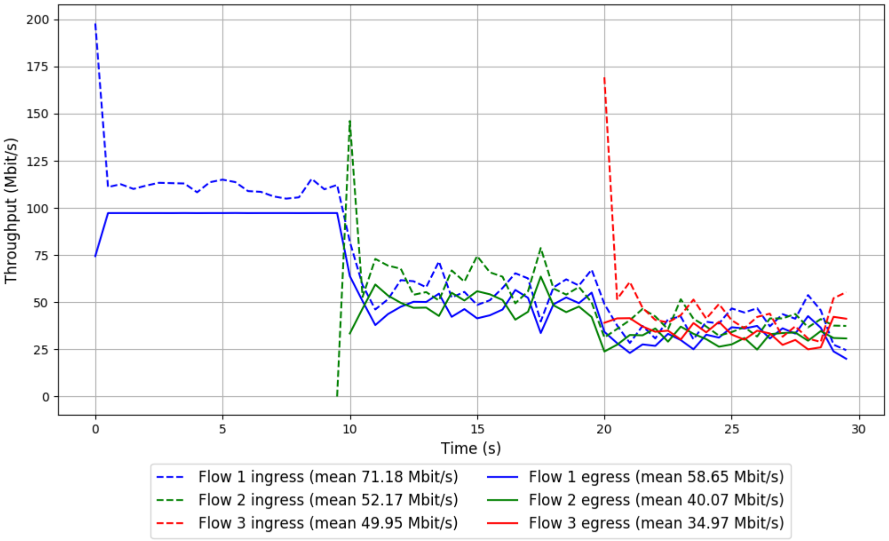
Run 10: Report of Copa — Data Link

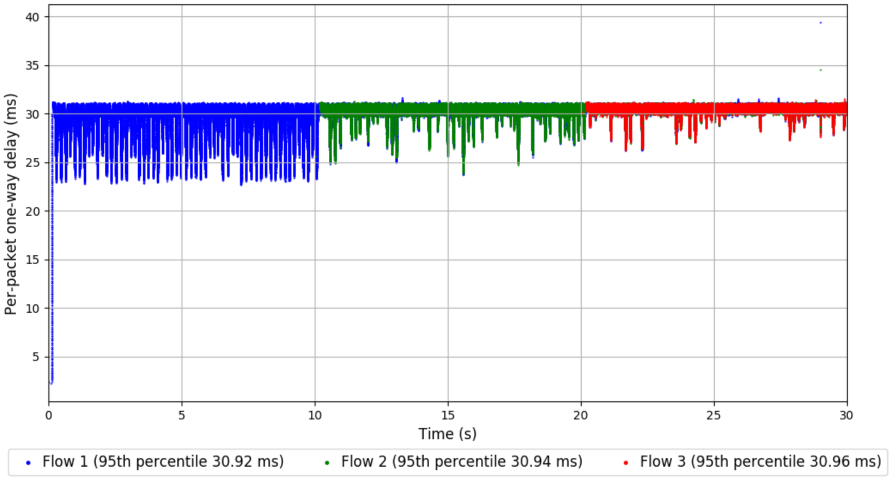




```
Run 1: Statistics of FillP

Start at: 2018-01-10 02:30:26
End at: 2018-01-10 02:30:56
Local clock offset: -0.097 ms
Remote clock offset: 0.764 ms

# Below is generated by plot.py at 2018-01-10 06:31:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.90 Mbit/s
95th percentile per-packet one-way delay: 30.931 ms
Loss rate: 20.82%
-- Flow 1:
Average throughput: 58.65 Mbit/s
95th percentile per-packet one-way delay: 30.919 ms
Loss rate: 17.53%
-- Flow 2:
Average throughput: 40.07 Mbit/s
95th percentile per-packet one-way delay: 30.936 ms
Loss rate: 23.19%
-- Flow 3:
Average throughput: 34.97 Mbit/s
95th percentile per-packet one-way delay: 30.957 ms
Loss rate: 29.99%
```

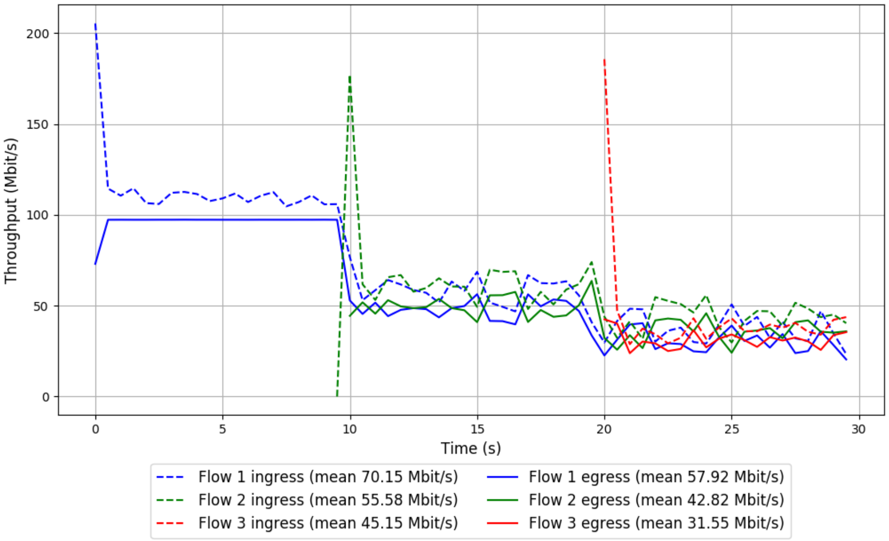
Run 1: Report of FillP — Data Link

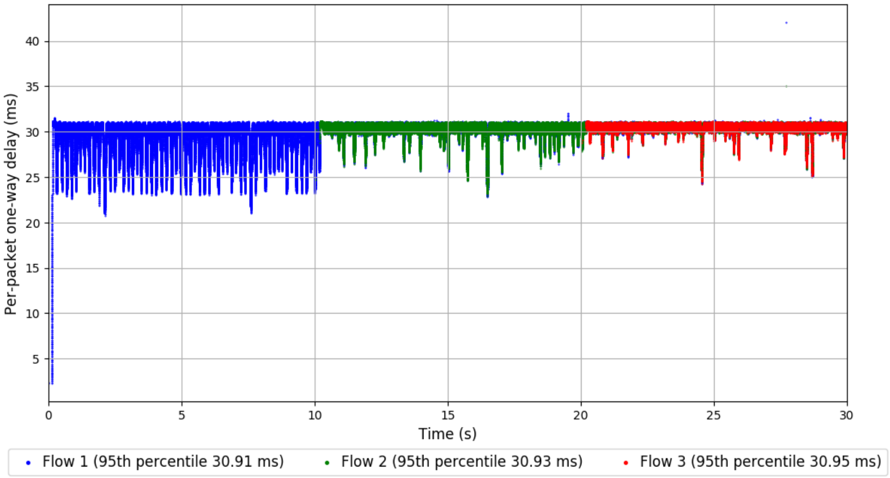




```
Run 2: Statistics of FillP

Start at: 2018-01-10 02:47:35
End at: 2018-01-10 02:48:05
Local clock offset: -0.1 ms
Remote clock offset: 0.628 ms

# Below is generated by plot.py at 2018-01-10 06:31:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.87 Mbit/s
95th percentile per-packet one-way delay: 30.927 ms
Loss rate: 20.61%
-- Flow 1:
Average throughput: 57.92 Mbit/s
95th percentile per-packet one-way delay: 30.915 ms
Loss rate: 17.36%
-- Flow 2:
Average throughput: 42.82 Mbit/s
95th percentile per-packet one-way delay: 30.935 ms
Loss rate: 22.93%
-- Flow 3:
Average throughput: 31.55 Mbit/s
95th percentile per-packet one-way delay: 30.955 ms
Loss rate: 30.12%
```

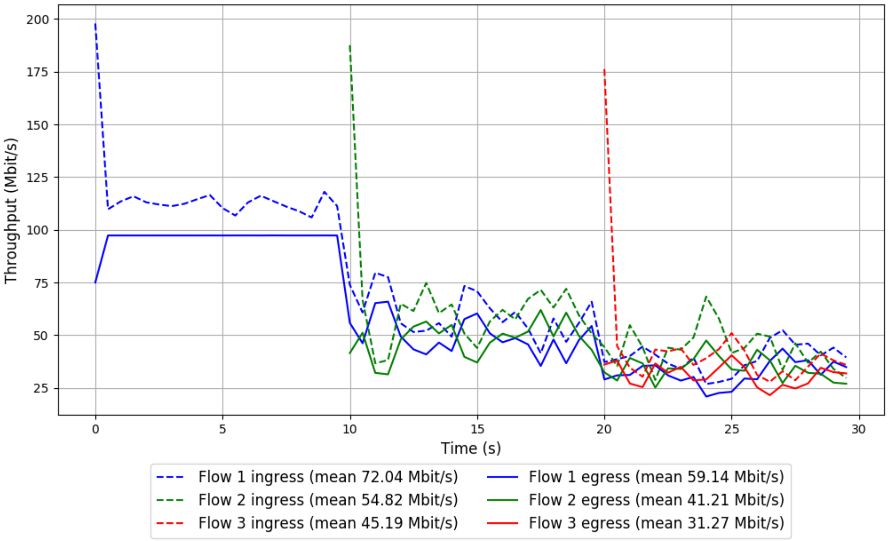
Run 2: Report of FillP — Data Link

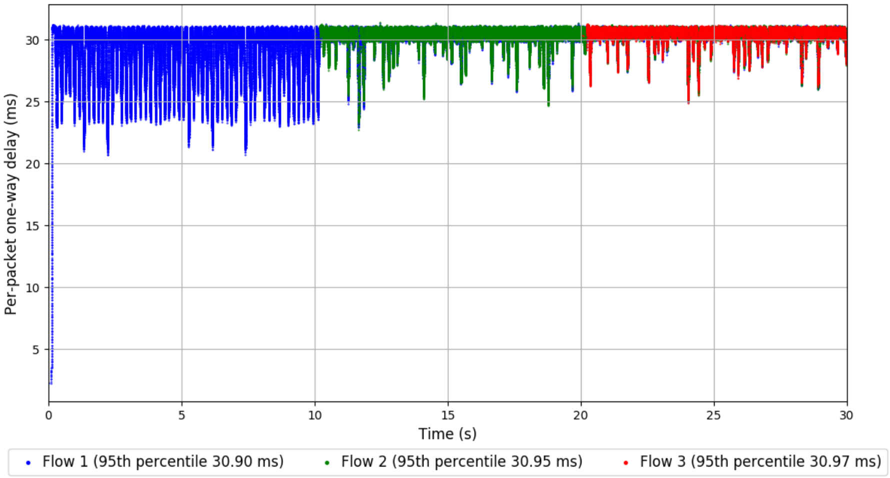




```
Run 3: Statistics of FillP

Start at: 2018-01-10 03:04:43
End at: 2018-01-10 03:05:13
Local clock offset: -0.097 ms
Remote clock offset: 0.501 ms

# Below is generated by plot.py at 2018-01-10 06:31:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.91 Mbit/s
95th percentile per-packet one-way delay: 30.927 ms
Loss rate: 21.48%
-- Flow 1:
Average throughput: 59.14 Mbit/s
95th percentile per-packet one-way delay: 30.903 ms
Loss rate: 17.83%
-- Flow 2:
Average throughput: 41.21 Mbit/s
95th percentile per-packet one-way delay: 30.947 ms
Loss rate: 24.84%
-- Flow 3:
Average throughput: 31.27 Mbit/s
95th percentile per-packet one-way delay: 30.967 ms
Loss rate: 30.81%
```

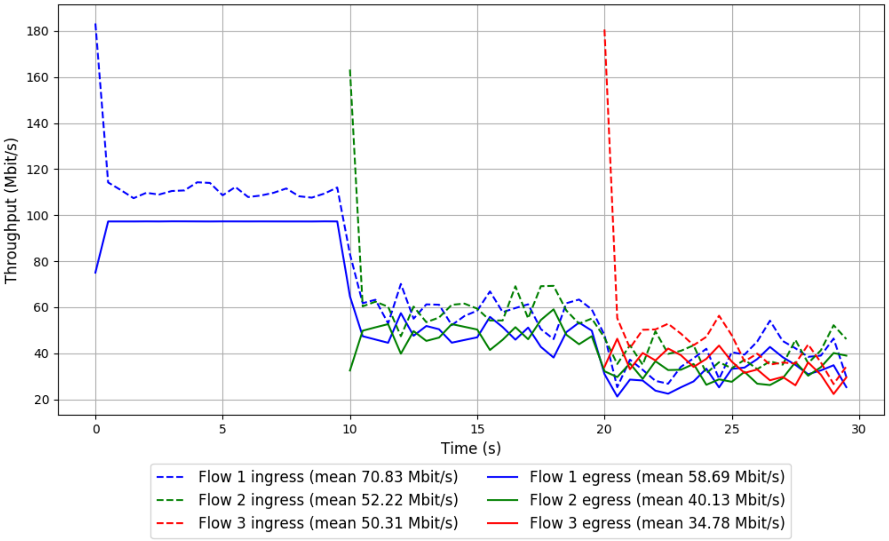
Run 3: Report of FillP — Data Link

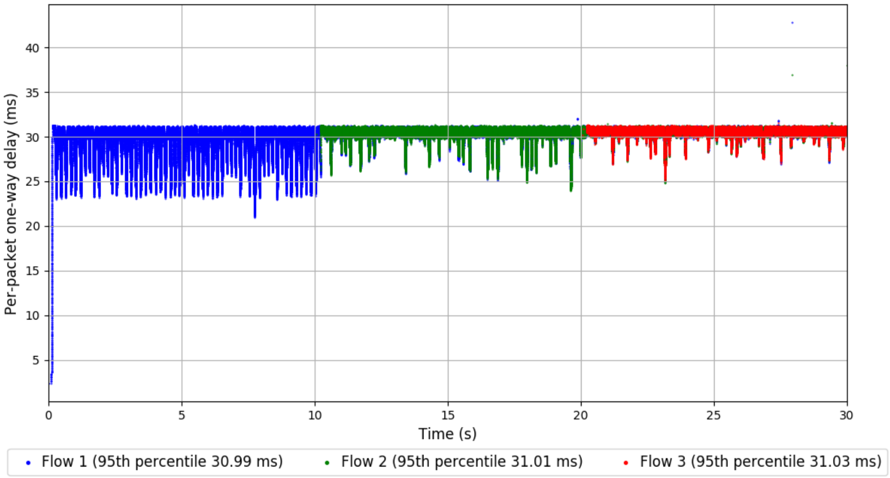




```
Run 4: Statistics of FillP

Start at: 2018-01-10 03:21:51
End at: 2018-01-10 03:22:21
Local clock offset: -0.156 ms
Remote clock offset: 0.372 ms

# Below is generated by plot.py at 2018-01-10 06:31:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.88 Mbit/s
95th percentile per-packet one-way delay: 31.003 ms
Loss rate: 20.66%
-- Flow 1:
Average throughput: 58.69 Mbit/s
95th percentile per-packet one-way delay: 30.989 ms
Loss rate: 17.06%
-- Flow 2:
Average throughput: 40.13 Mbit/s
95th percentile per-packet one-way delay: 31.014 ms
Loss rate: 23.10%
-- Flow 3:
Average throughput: 34.78 Mbit/s
95th percentile per-packet one-way delay: 31.033 ms
Loss rate: 30.86%
```

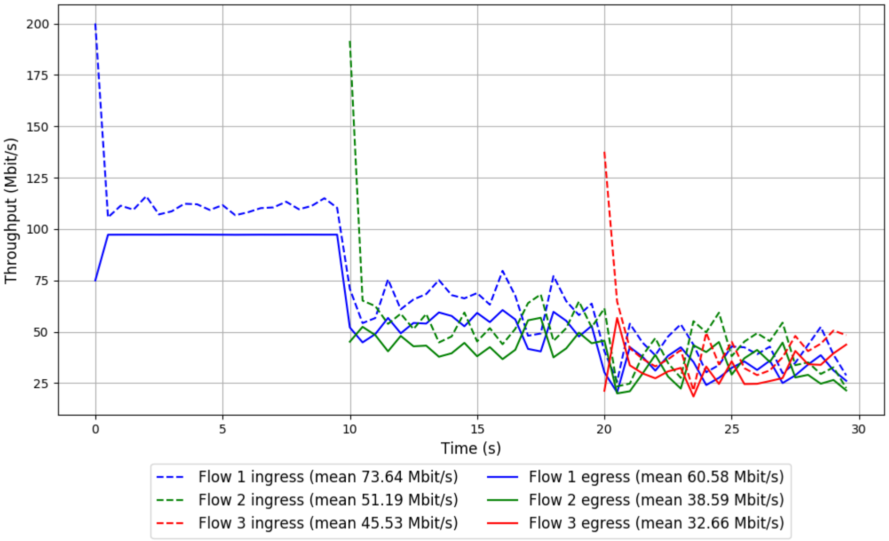
Run 4: Report of FillP — Data Link

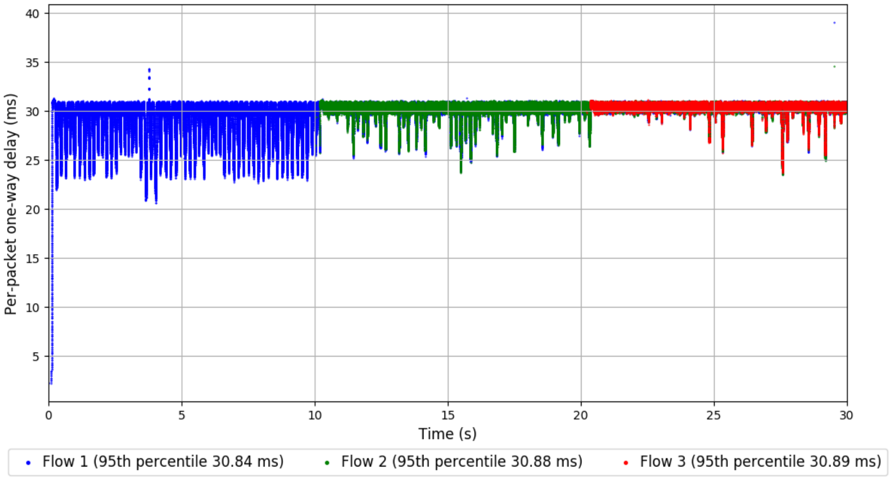




```
Run 5: Statistics of FillP

Start at: 2018-01-10 03:38:59
End at: 2018-01-10 03:39:29
Local clock offset: -0.044 ms
Remote clock offset: 0.057 ms

# Below is generated by plot.py at 2018-01-10 06:31:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.91 Mbit/s
95th percentile per-packet one-way delay: 30.861 ms
Loss rate: 21.02%
-- Flow 1:
Average throughput: 60.58 Mbit/s
95th percentile per-packet one-way delay: 30.840 ms
Loss rate: 17.66%
-- Flow 2:
Average throughput: 38.59 Mbit/s
95th percentile per-packet one-way delay: 30.879 ms
Loss rate: 24.60%
-- Flow 3:
Average throughput: 32.66 Mbit/s
95th percentile per-packet one-way delay: 30.894 ms
Loss rate: 29.37%
```

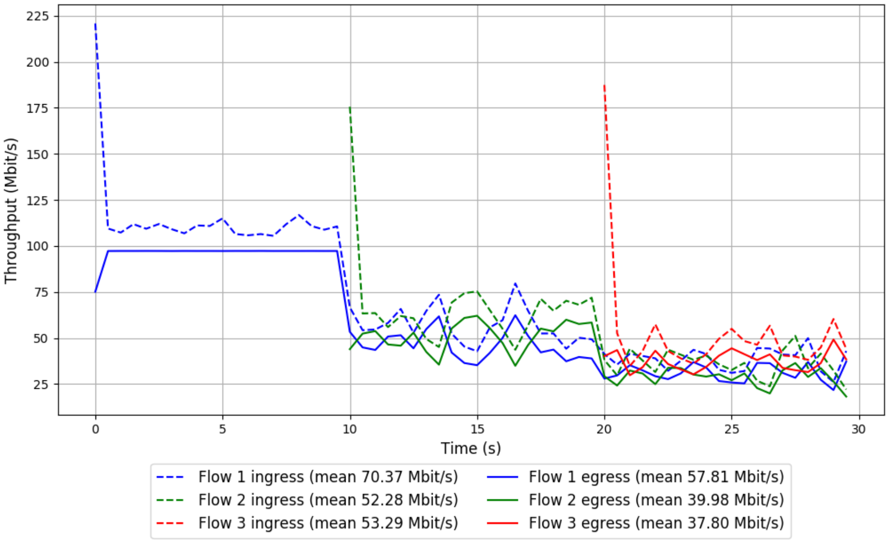
Run 5: Report of FillP — Data Link

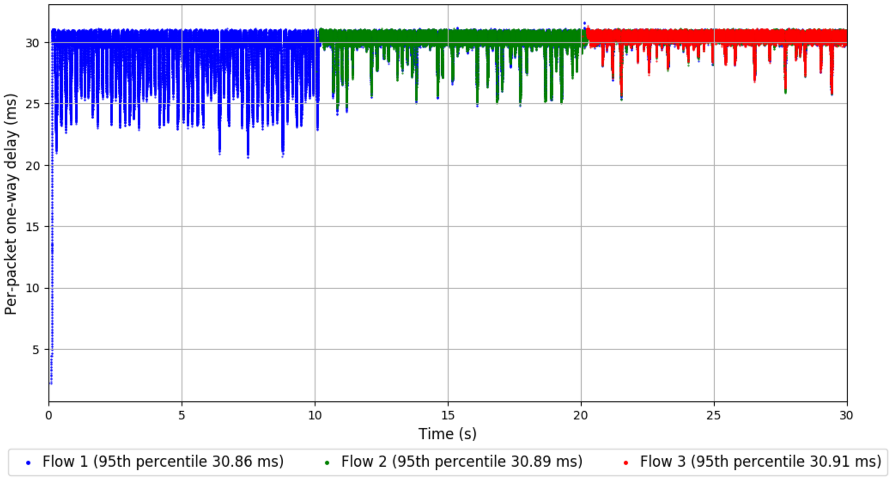




```
Run 6: Statistics of FillP

Start at: 2018-01-10 03:56:08
End at: 2018-01-10 03:56:38
Local clock offset: -0.043 ms
Remote clock offset: -0.115 ms

# Below is generated by plot.py at 2018-01-10 06:31:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.91 Mbit/s
95th percentile per-packet one-way delay: 30.875 ms
Loss rate: 21.03%
-- Flow 1:
Average throughput: 57.81 Mbit/s
95th percentile per-packet one-way delay: 30.858 ms
Loss rate: 17.77%
-- Flow 2:
Average throughput: 39.98 Mbit/s
95th percentile per-packet one-way delay: 30.886 ms
Loss rate: 23.53%
-- Flow 3:
Average throughput: 37.80 Mbit/s
95th percentile per-packet one-way delay: 30.908 ms
Loss rate: 29.06%
```

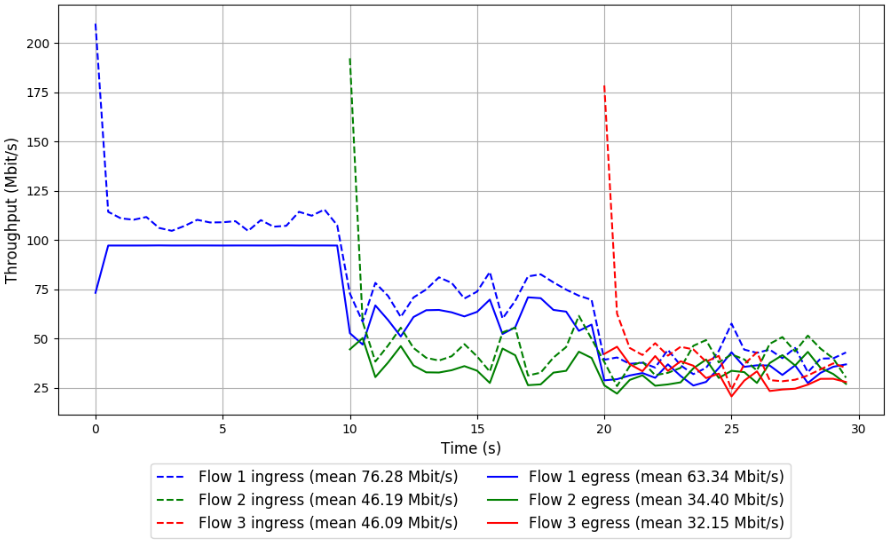
Run 6: Report of FillP — Data Link

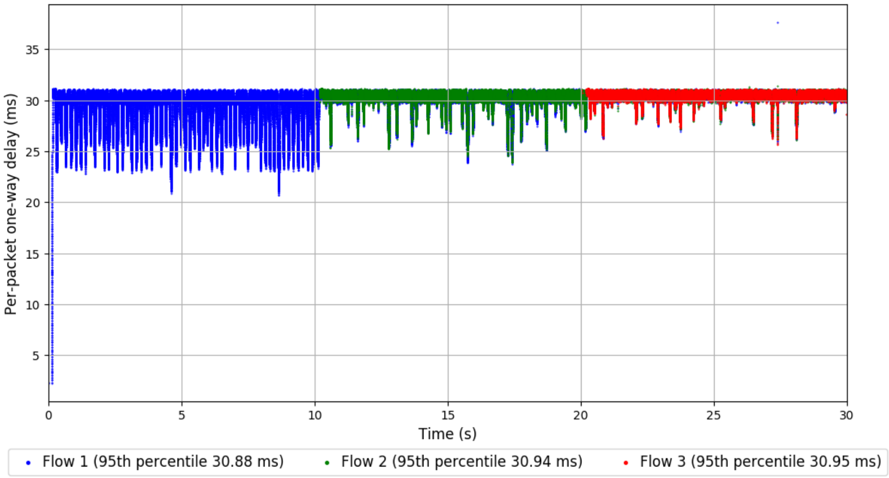




```
Run 7: Statistics of FillP

Start at: 2018-01-10 04:13:16
End at: 2018-01-10 04:13:46
Local clock offset: 0.075 ms
Remote clock offset: -0.103 ms

# Below is generated by plot.py at 2018-01-10 06:33:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.88 Mbit/s
95th percentile per-packet one-way delay: 30.910 ms
Loss rate: 20.73%
-- Flow 1:
Average throughput: 63.34 Mbit/s
95th percentile per-packet one-way delay: 30.884 ms
Loss rate: 16.89%
-- Flow 2:
Average throughput: 34.40 Mbit/s
95th percentile per-packet one-way delay: 30.940 ms
Loss rate: 25.52%
-- Flow 3:
Average throughput: 32.15 Mbit/s
95th percentile per-packet one-way delay: 30.951 ms
Loss rate: 30.27%
```

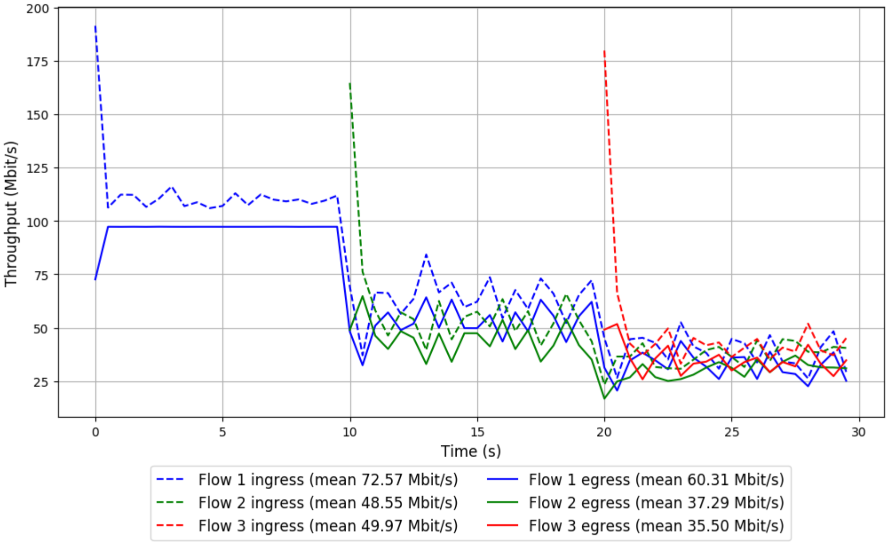
Run 7: Report of FillP — Data Link

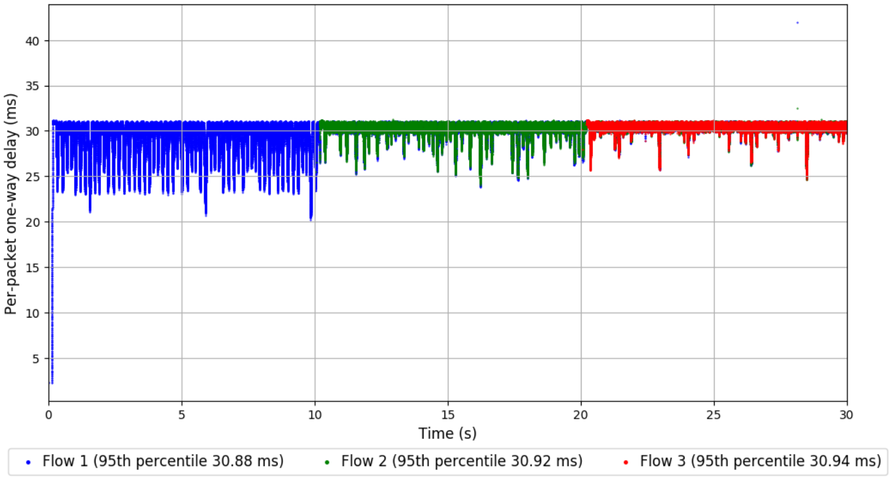




```
Run 8: Statistics of FillP

Start at: 2018-01-10 04:30:25
End at: 2018-01-10 04:30:55
Local clock offset: 0.063 ms
Remote clock offset: -0.163 ms

# Below is generated by plot.py at 2018-01-10 06:33:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.87 Mbit/s
95th percentile per-packet one-way delay: 30.904 ms
Loss rate: 20.17%
-- Flow 1:
Average throughput: 60.31 Mbit/s
95th percentile per-packet one-way delay: 30.884 ms
Loss rate: 16.82%
-- Flow 2:
Average throughput: 37.29 Mbit/s
95th percentile per-packet one-way delay: 30.924 ms
Loss rate: 23.18%
-- Flow 3:
Average throughput: 35.50 Mbit/s
95th percentile per-packet one-way delay: 30.944 ms
Loss rate: 28.94%
```

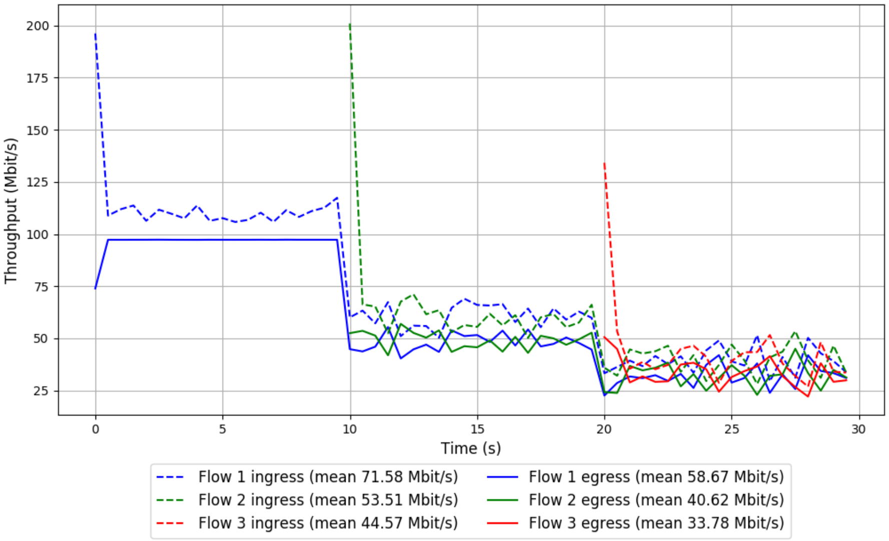
Run 8: Report of FillP — Data Link

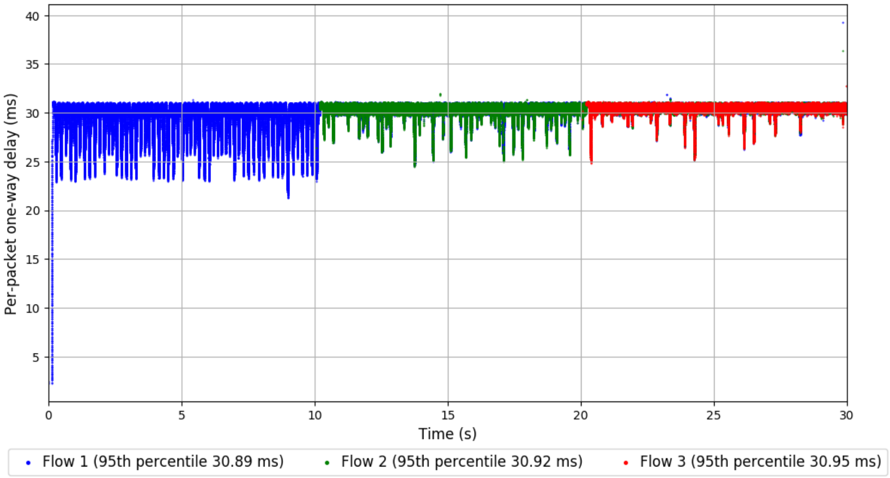




```
Run 9: Statistics of FillP

Start at: 2018-01-10 04:47:33
End at: 2018-01-10 04:48:03
Local clock offset: 0.081 ms
Remote clock offset: -0.215 ms

# Below is generated by plot.py at 2018-01-10 06:34:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.88 Mbit/s
95th percentile per-packet one-way delay: 30.908 ms
Loss rate: 20.50%
-- Flow 1:
Average throughput: 58.67 Mbit/s
95th percentile per-packet one-way delay: 30.892 ms
Loss rate: 17.96%
-- Flow 2:
Average throughput: 40.62 Mbit/s
95th percentile per-packet one-way delay: 30.920 ms
Loss rate: 24.10%
-- Flow 3:
Average throughput: 33.78 Mbit/s
95th percentile per-packet one-way delay: 30.946 ms
Loss rate: 24.18%
```

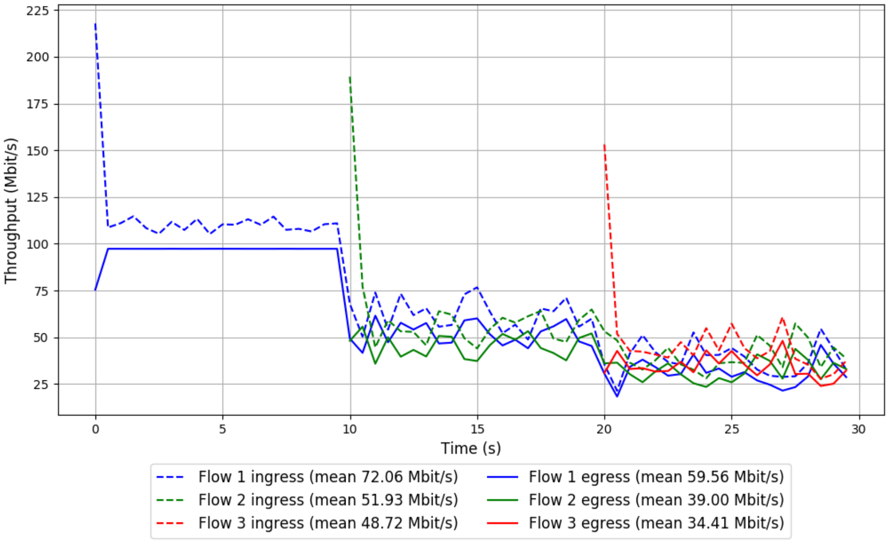
Run 9: Report of FillP — Data Link

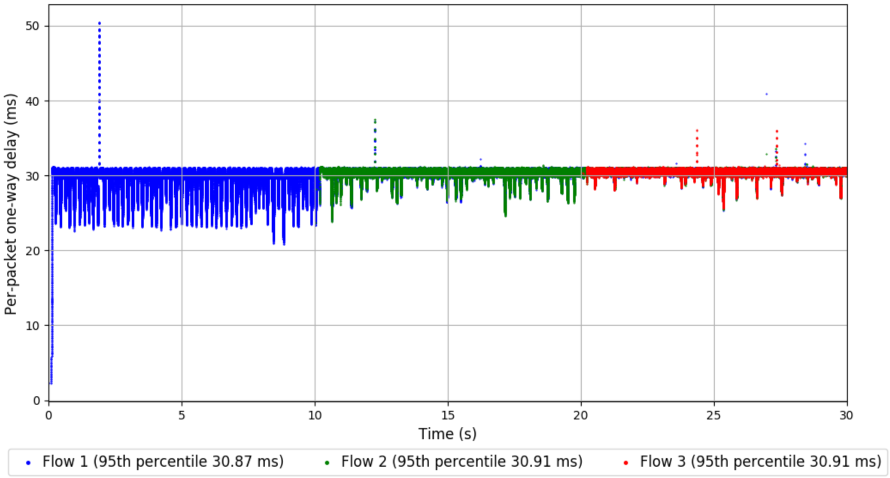




```
Run 10: Statistics of FillP

Start at: 2018-01-10 05:04:41
End at: 2018-01-10 05:05:11
Local clock offset: 0.052 ms
Remote clock offset: -0.326 ms

# Below is generated by plot.py at 2018-01-10 06:34:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.90 Mbit/s
95th percentile per-packet one-way delay: 30.892 ms
Loss rate: 21.00%
-- Flow 1:
Average throughput: 59.56 Mbit/s
95th percentile per-packet one-way delay: 30.874 ms
Loss rate: 17.27%
-- Flow 2:
Average throughput: 39.00 Mbit/s
95th percentile per-packet one-way delay: 30.912 ms
Loss rate: 24.87%
-- Flow 3:
Average throughput: 34.41 Mbit/s
95th percentile per-packet one-way delay: 30.910 ms
Loss rate: 29.37%
```

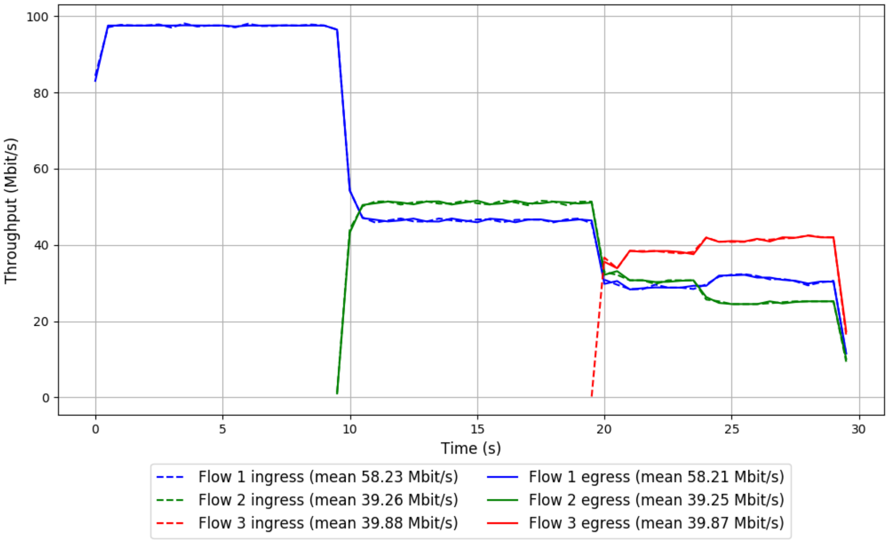
Run 10: Report of FillP — Data Link

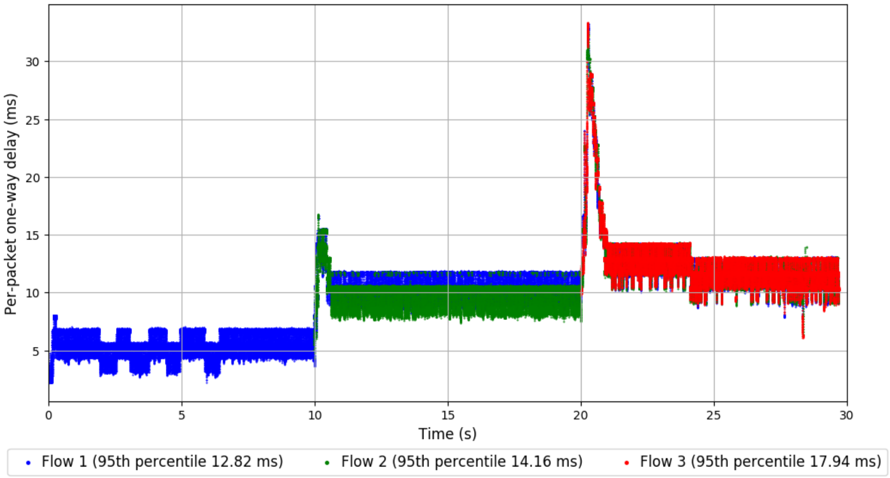




```
Run 1: Statistics of Indigo

Start at: 2018-01-10 02:36:10
End at: 2018-01-10 02:36:40
Local clock offset: -0.096 ms
Remote clock offset: 0.688 ms

# Below is generated by plot.py at 2018-01-10 06:34:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.29 Mbit/s
95th percentile per-packet one-way delay: 13.980 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 58.21 Mbit/s
95th percentile per-packet one-way delay: 12.824 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 39.25 Mbit/s
95th percentile per-packet one-way delay: 14.161 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 39.87 Mbit/s
95th percentile per-packet one-way delay: 17.944 ms
Loss rate: 0.03%
```

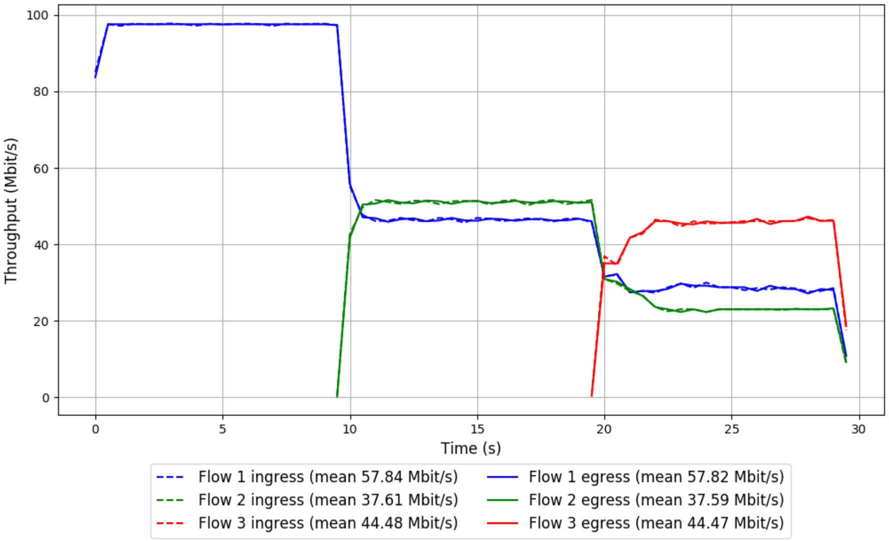
Run 1: Report of Indigo — Data Link

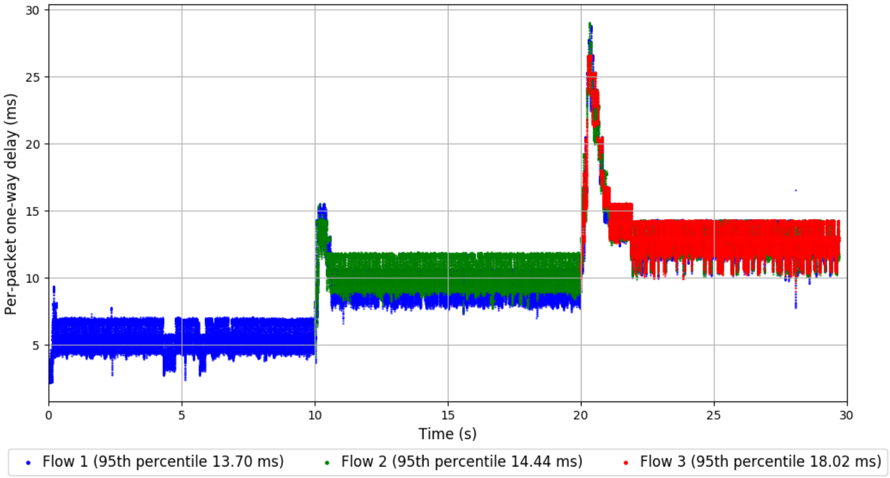




```
Run 2: Statistics of Indigo

Start at: 2018-01-10 02:53:18
End at: 2018-01-10 02:53:48
Local clock offset: -0.087 ms
Remote clock offset: 0.512 ms

# Below is generated by plot.py at 2018-01-10 06:34:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.29 Mbit/s
95th percentile per-packet one-way delay: 14.246 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 57.82 Mbit/s
95th percentile per-packet one-way delay: 13.702 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.59 Mbit/s
95th percentile per-packet one-way delay: 14.441 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 44.47 Mbit/s
95th percentile per-packet one-way delay: 18.020 ms
Loss rate: 0.00%
```

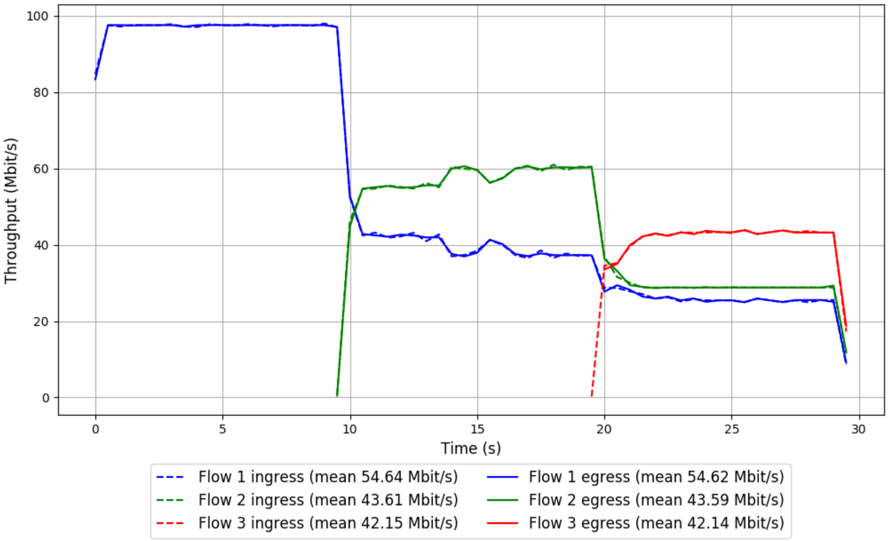
Run 2: Report of Indigo — Data Link

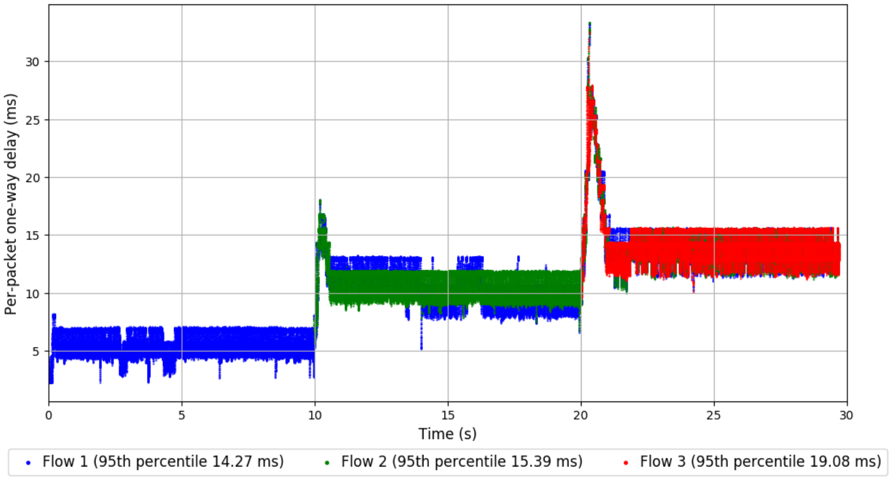




```
Run 3: Statistics of Indigo

Start at: 2018-01-10 03:10:27
End at: 2018-01-10 03:10:57
Local clock offset: -0.08 ms
Remote clock offset: 0.461 ms

# Below is generated by plot.py at 2018-01-10 06:34:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.29 Mbit/s
95th percentile per-packet one-way delay: 15.370 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.62 Mbit/s
95th percentile per-packet one-way delay: 14.270 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 43.59 Mbit/s
95th percentile per-packet one-way delay: 15.393 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 42.14 Mbit/s
95th percentile per-packet one-way delay: 19.081 ms
Loss rate: 0.00%
```

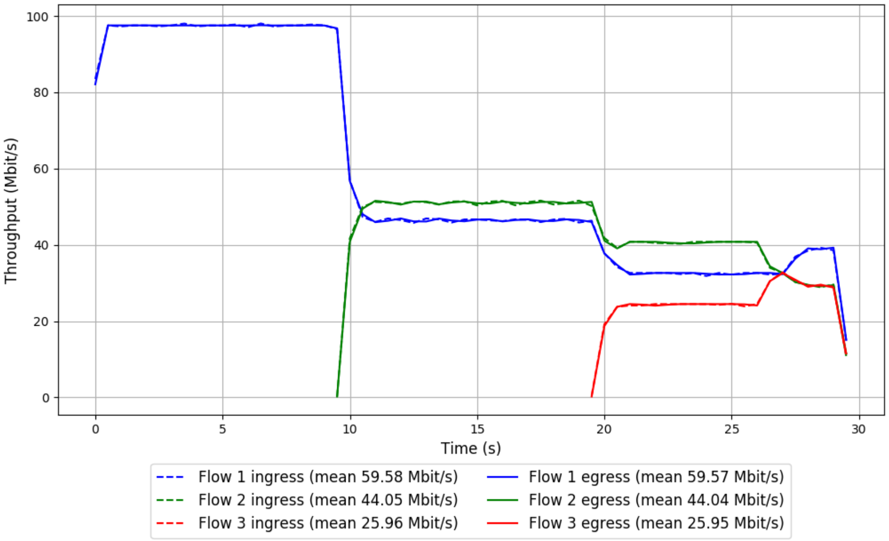
Run 3: Report of Indigo — Data Link

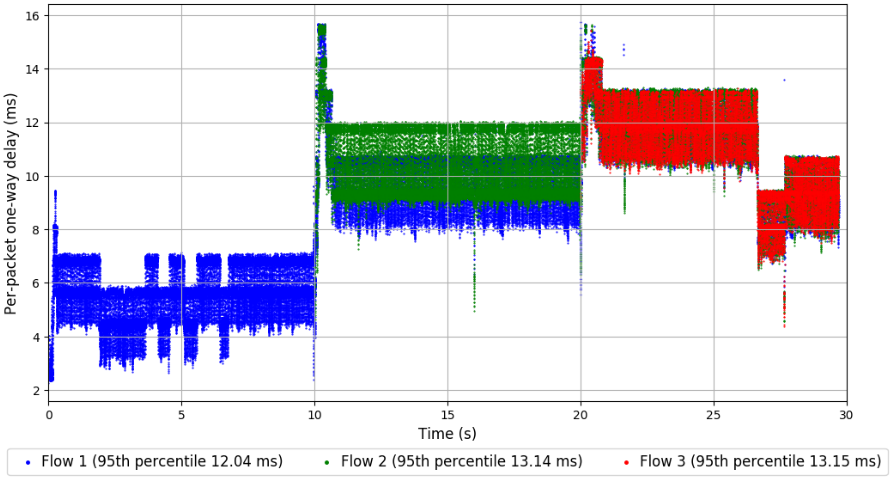




```
Run 4: Statistics of Indigo

Start at: 2018-01-10 03:27:35
End at: 2018-01-10 03:28:05
Local clock offset: -0.123 ms
Remote clock offset: 0.284 ms

# Below is generated by plot.py at 2018-01-10 06:34:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.26 Mbit/s
95th percentile per-packet one-way delay: 12.976 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 59.57 Mbit/s
95th percentile per-packet one-way delay: 12.039 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.04 Mbit/s
95th percentile per-packet one-way delay: 13.139 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 25.95 Mbit/s
95th percentile per-packet one-way delay: 13.146 ms
Loss rate: 0.00%
```

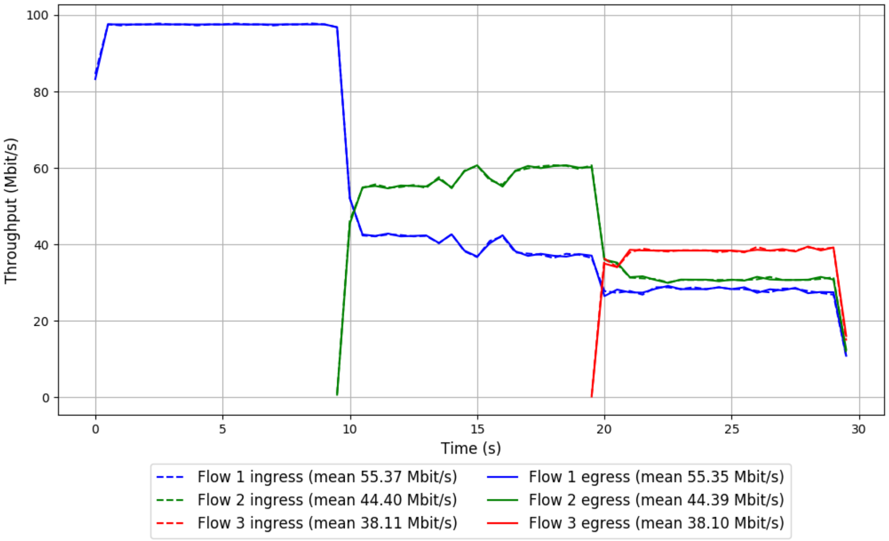
Run 4: Report of Indigo — Data Link

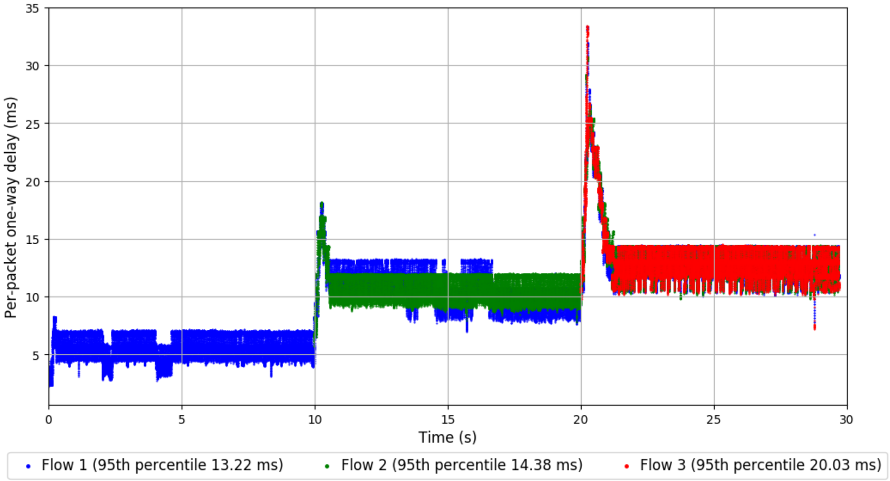




```
Run 5: Statistics of Indigo

Start at: 2018-01-10 03:44:43
End at: 2018-01-10 03:45:13
Local clock offset: -0.054 ms
Remote clock offset: 0.062 ms

# Below is generated by plot.py at 2018-01-10 06:36:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.29 Mbit/s
95th percentile per-packet one-way delay: 14.319 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.35 Mbit/s
95th percentile per-packet one-way delay: 13.216 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.39 Mbit/s
95th percentile per-packet one-way delay: 14.376 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 38.10 Mbit/s
95th percentile per-packet one-way delay: 20.032 ms
Loss rate: 0.02%
```

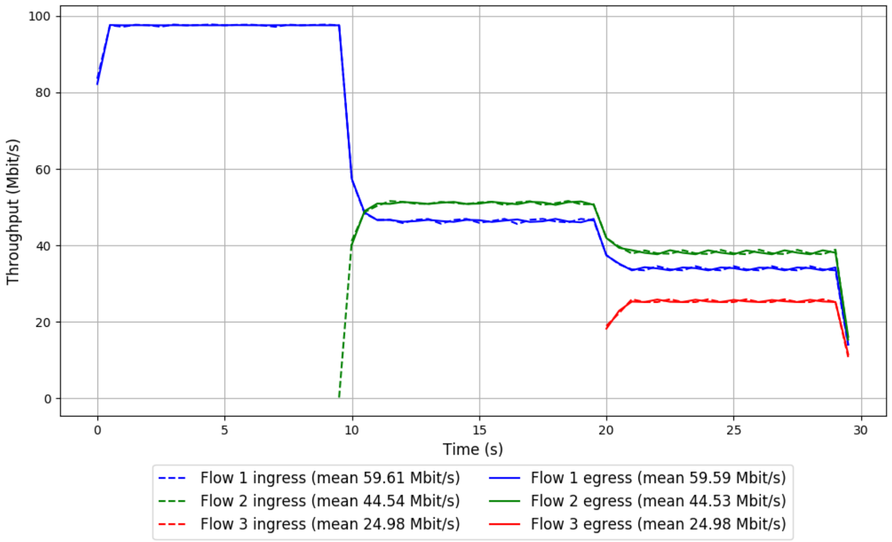
Run 5: Report of Indigo — Data Link

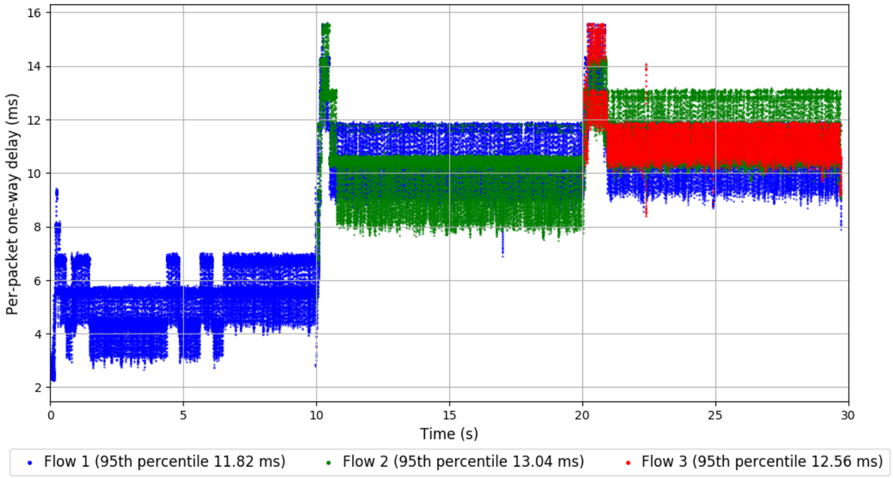




```
Run 6: Statistics of Indigo

Start at: 2018-01-10 04:01:52
End at: 2018-01-10 04:02:22
Local clock offset: -0.014 ms
Remote clock offset: -0.118 ms

# Below is generated by plot.py at 2018-01-10 06:36:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.27 Mbit/s
95th percentile per-packet one-way delay: 12.607 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 59.59 Mbit/s
95th percentile per-packet one-way delay: 11.817 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.53 Mbit/s
95th percentile per-packet one-way delay: 13.039 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.98 Mbit/s
95th percentile per-packet one-way delay: 12.556 ms
Loss rate: 0.00%
```

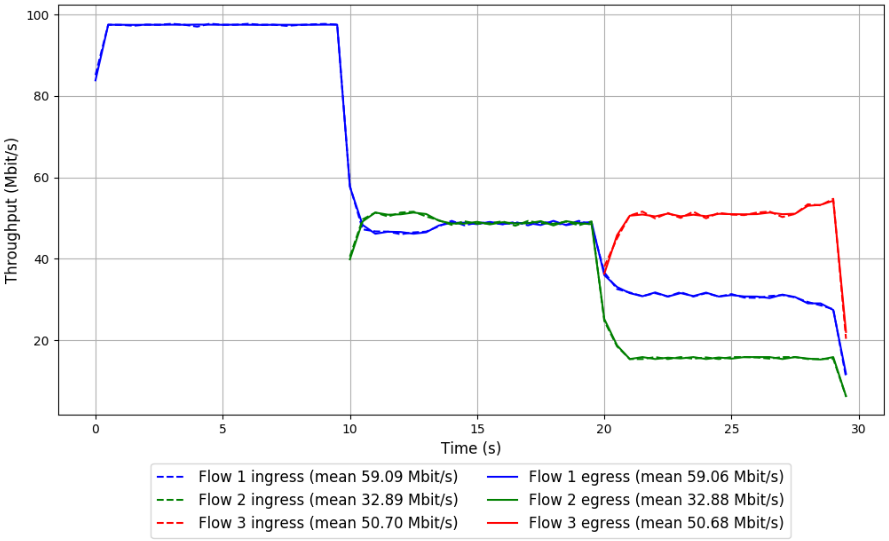
Run 6: Report of Indigo — Data Link

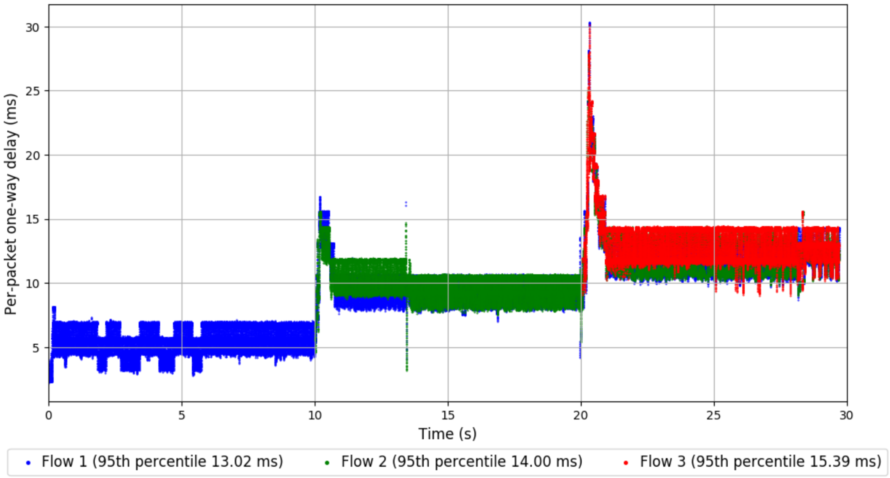




```
Run 7: Statistics of Indigo

Start at: 2018-01-10 04:19:00
End at: 2018-01-10 04:19:30
Local clock offset: 0.084 ms
Remote clock offset: -0.106 ms

# Below is generated by plot.py at 2018-01-10 06:36:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.30 Mbit/s
95th percentile per-packet one-way delay: 14.162 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 59.06 Mbit/s
95th percentile per-packet one-way delay: 13.016 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.88 Mbit/s
95th percentile per-packet one-way delay: 13.997 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 50.68 Mbit/s
95th percentile per-packet one-way delay: 15.389 ms
Loss rate: 0.00%
```

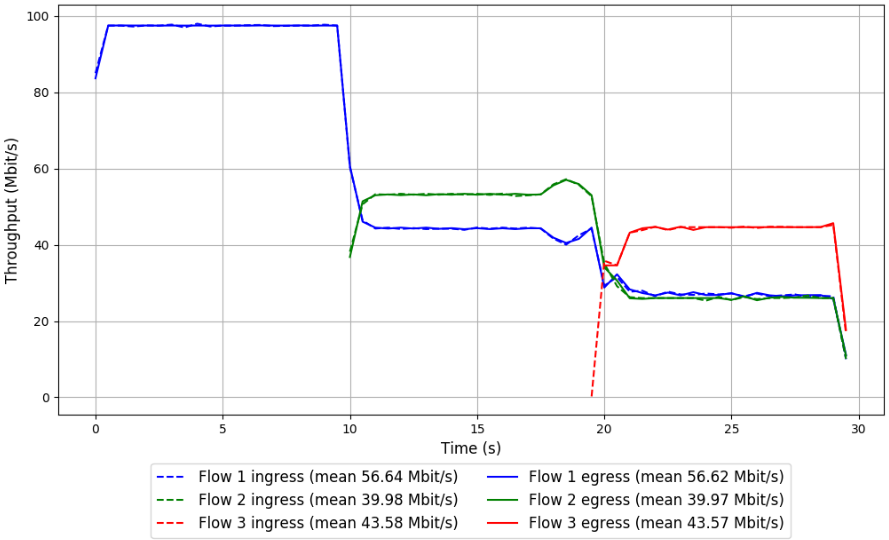
Run 7: Report of Indigo — Data Link

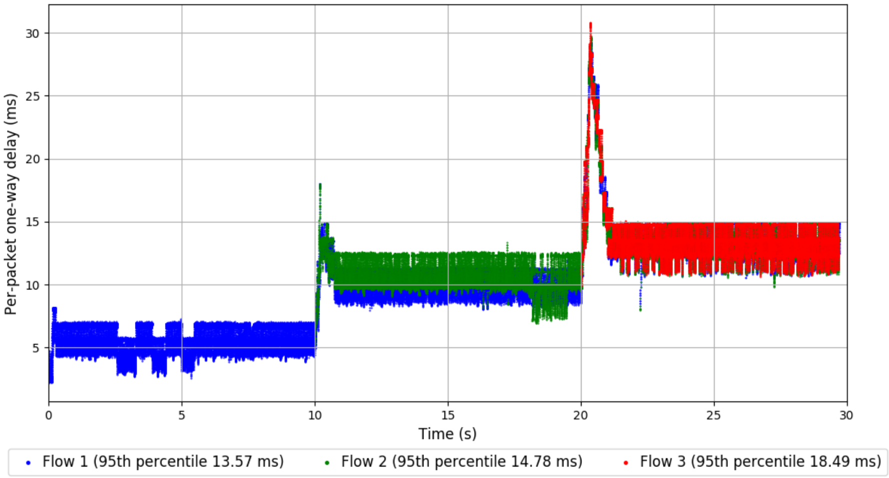




```
Run 8: Statistics of Indigo

Start at: 2018-01-10 04:36:09
End at: 2018-01-10 04:36:39
Local clock offset: 0.071 ms
Remote clock offset: -0.231 ms

# Below is generated by plot.py at 2018-01-10 06:36:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.30 Mbit/s
95th percentile per-packet one-way delay: 14.770 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 56.62 Mbit/s
95th percentile per-packet one-way delay: 13.574 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.97 Mbit/s
95th percentile per-packet one-way delay: 14.778 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 43.57 Mbit/s
95th percentile per-packet one-way delay: 18.493 ms
Loss rate: 0.00%
```

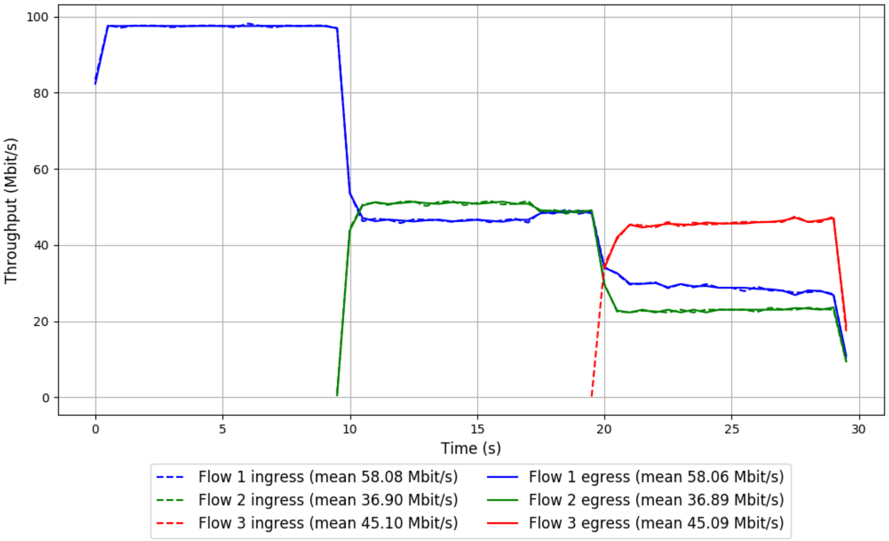
Run 8: Report of Indigo — Data Link

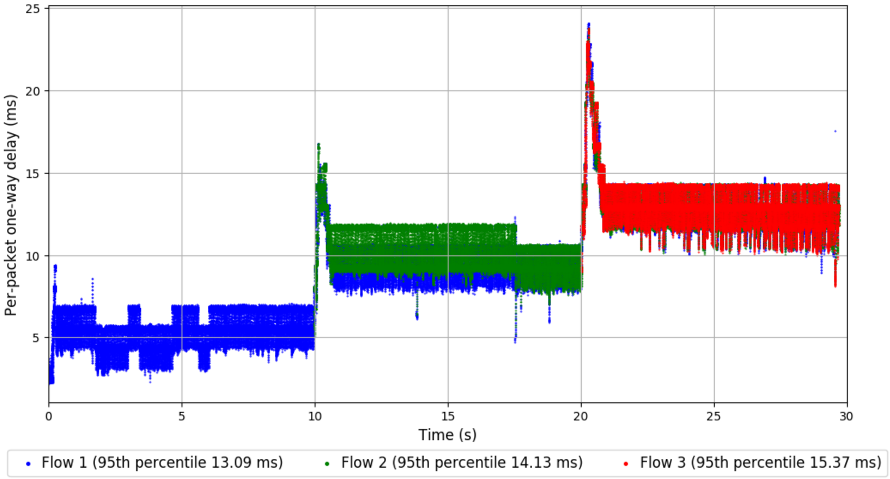




```
Run 9: Statistics of Indigo

Start at: 2018-01-10 04:53:17
End at: 2018-01-10 04:53:47
Local clock offset: 0.019 ms
Remote clock offset: -0.338 ms

# Below is generated by plot.py at 2018-01-10 06:36:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.28 Mbit/s
95th percentile per-packet one-way delay: 14.144 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 58.06 Mbit/s
95th percentile per-packet one-way delay: 13.094 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.89 Mbit/s
95th percentile per-packet one-way delay: 14.131 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 45.09 Mbit/s
95th percentile per-packet one-way delay: 15.368 ms
Loss rate: 0.00%
```

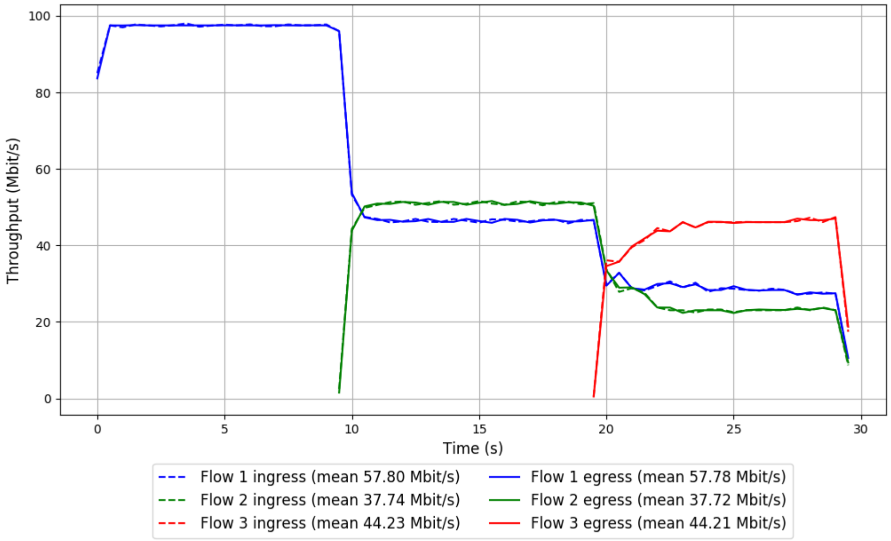
Run 9: Report of Indigo — Data Link



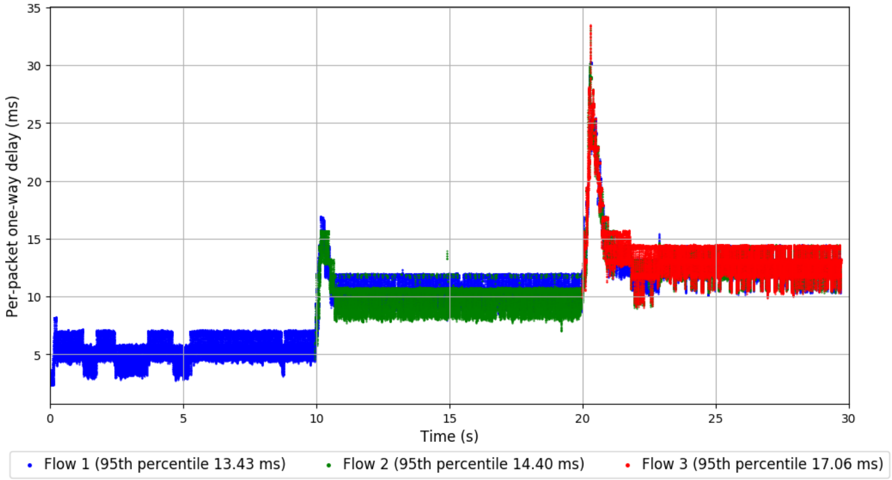


```
Run 10: Statistics of Indigo

Start at: 2018-01-10 05:10:25
End at: 2018-01-10 05:10:55
Local clock offset: -0.04 ms
Remote clock offset: -0.346 ms

# Below is generated by plot.py at 2018-01-10 06:36:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.30 Mbit/s
95th percentile per-packet one-way delay: 14.353 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 57.78 Mbit/s
95th percentile per-packet one-way delay: 13.425 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.72 Mbit/s
95th percentile per-packet one-way delay: 14.401 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 44.21 Mbit/s
95th percentile per-packet one-way delay: 17.060 ms
Loss rate: 0.01%
```

Run 10: Report of Indigo — Data Link



Throughput (Mbit/s)
100
80
60
40
20
0
0
5
10
15
20
25
30
Time (s)
Flow 1 ingress (mean 57.80 Mbit/s)
Flow 1 egress (mean 57.78 Mbit/s)
Flow 2 ingress (mean 37.74 Mbit/s)
Flow 2 egress (mean 37.72 Mbit/s)
Flow 3 ingress (mean 44.23 Mbit/s)
Flow 3 egress (mean 44.21 Mbit/s)



Per-packet one-way delay (ms)
35
30
25
20
15
10
5
0
5
10
15
20
25
30
Time (s)
Flow 1 (95th percentile 13.43 ms)
Flow 2 (95th percentile 14.40 ms)
Flow 3 (95th percentile 17.06 ms)