

Pantheon Report

Generated at 2018-09-25 06:36:42 (UTC).

Data path: AWS India 1 on `ens5` (*local*) → India on `em1` (*remote*).

Repeated the test of 19 congestion control schemes 5 times.

Each test lasted for 30 seconds running 1 flow.

NTP offsets were measured against `nets.org.sg` and have been applied to correct the timestamps in logs.

System info:

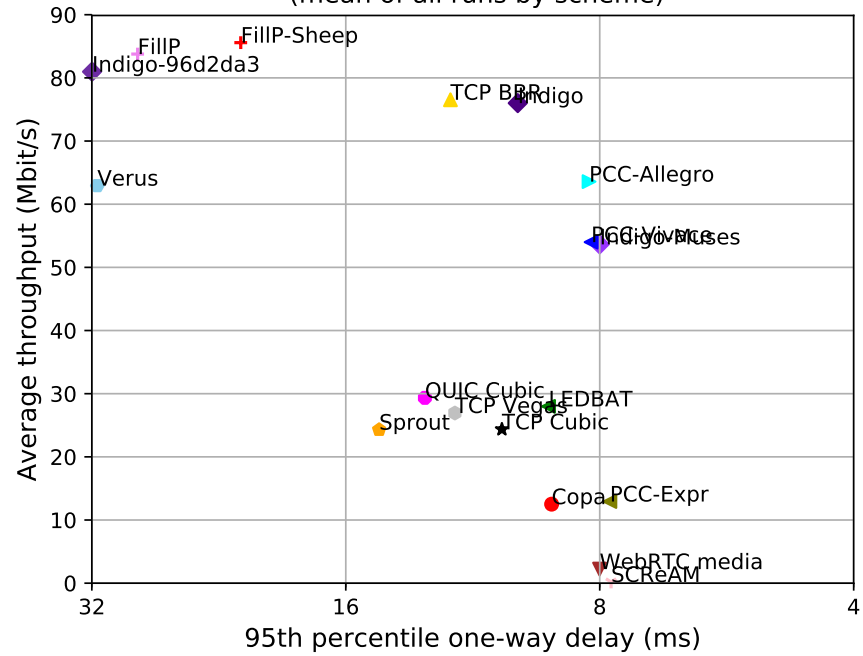
```
Linux 4.15.0-1021-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
net.ipv4.tcp_mem = 184101 245469 368202
```

Git summary:

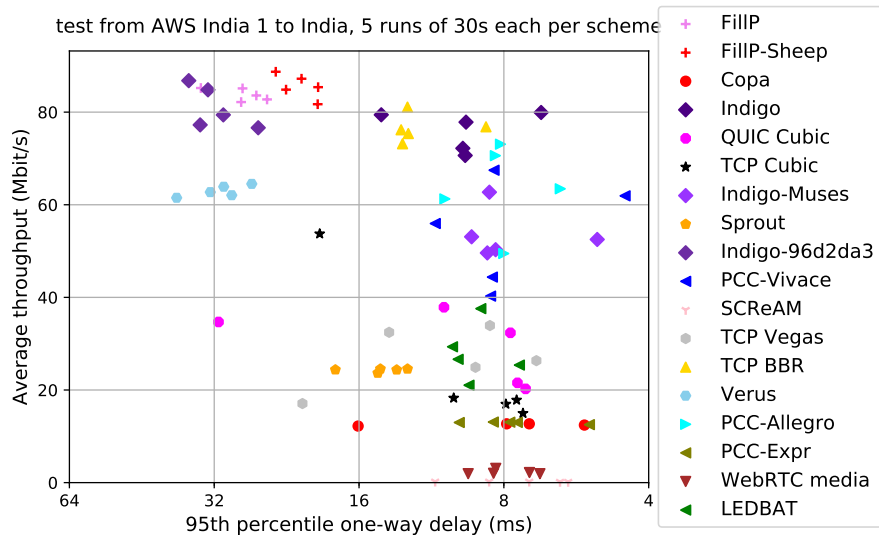
```
branch: muses @ 90192f6b64ce1a1191dcca0e9ff9ee24950674d7
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/fillp-sheep @ daed0c84f98531712514b2231f43ec6901114ffe
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf5e58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-96d2da3 @ 8413272d46f8aa0bcb967ed7048b6a8f994abb95
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 65ac1b19bbefed0c6349ae986009b4fa8643c40a
third_party/pantheon-tunnel @ cbfce6db5ff5740dafe1771f813cd646339e1952
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
```

```
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

test from AWS India 1 to India, 5 runs of 30s each per scheme
(mean of all runs by scheme)



test from AWS India 1 to India, 5 runs of 30s each per scheme



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	76.53	12.02	10.17
Copa	4	12.51	9.12	63.92
TCP Cubic	5	24.35	10.45	0.21
FillP	5	83.77	28.24	13.09
FillP-Sheep	5	85.58	21.31	12.63
Indigo	5	76.00	10.01	8.83
Indigo-96d2da3	5	80.98	31.98	36.27
LEDBAT	5	27.99	9.20	0.24
Indigo-Muses	5	53.64	8.00	5.82
PCC-Allegro	5	63.57	8.24	8.02
PCC-Expr	5	12.93	7.78	35.44
QUIC Cubic	5	29.34	12.89	1.39
SCReAM	5	0.19	7.76	0.22
Sprout	5	24.30	14.61	0.55
TaoVA-100x	0	N/A	N/A	N/A
TCP Vegas	5	26.94	11.88	1.14
Verus	5	62.94	31.53	9.95
PCC-Vivace	5	54.00	8.19	5.27
WebRTC media	5	2.23	8.00	0.49

Run 1: Statistics of TCP BBR

Start at: 2018-09-25 04:45:49

End at: 2018-09-25 04:46:19

Local clock offset: 2.372 ms

Remote clock offset: -4.159 ms

Below is generated by plot.py at 2018-09-25 06:30:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.84 Mbit/s

95th percentile per-packet one-way delay: 8.715 ms

Loss rate: 10.52%

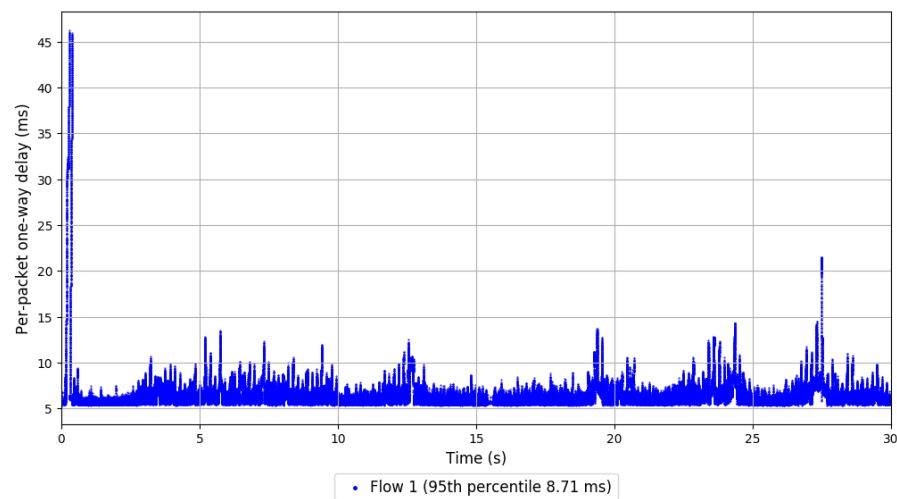
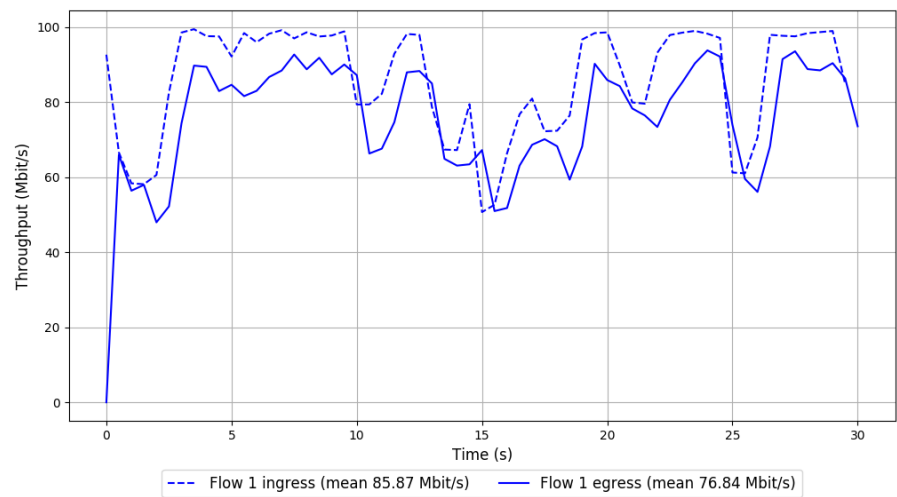
-- Flow 1:

Average throughput: 76.84 Mbit/s

95th percentile per-packet one-way delay: 8.715 ms

Loss rate: 10.52%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-09-25 05:07:36

End at: 2018-09-25 05:08:06

Local clock offset: 1.301 ms

Remote clock offset: -4.237 ms

Below is generated by plot.py at 2018-09-25 06:30:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.38 Mbit/s

95th percentile per-packet one-way delay: 12.639 ms

Loss rate: 10.45%

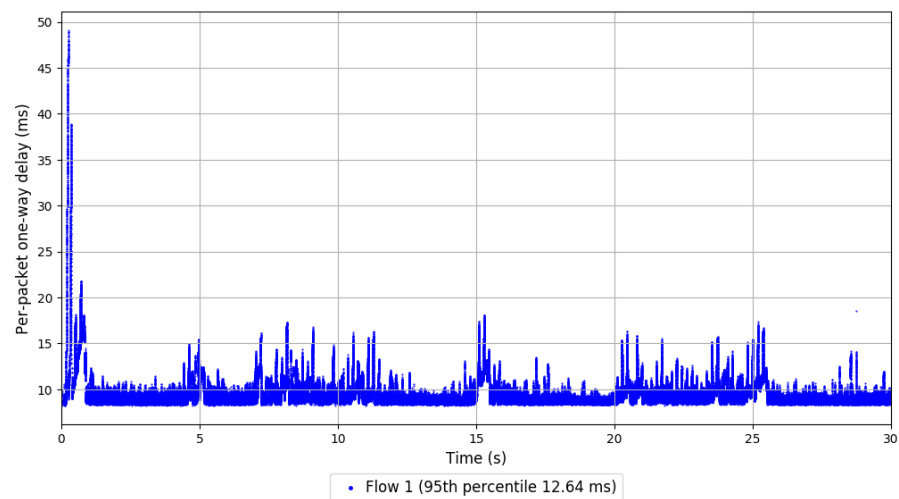
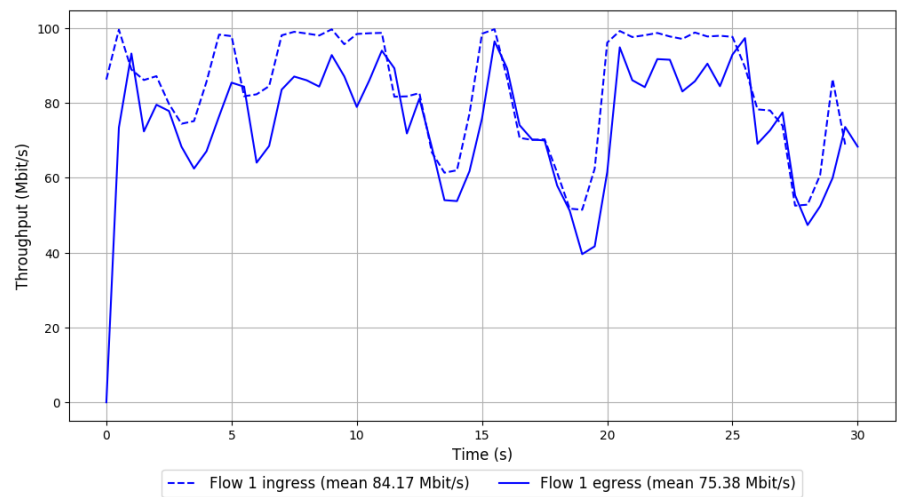
-- Flow 1:

Average throughput: 75.38 Mbit/s

95th percentile per-packet one-way delay: 12.639 ms

Loss rate: 10.45%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-09-25 05:29:08

End at: 2018-09-25 05:29:38

Local clock offset: 4.113 ms

Remote clock offset: -4.676 ms

Below is generated by plot.py at 2018-09-25 06:30:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.09 Mbit/s

95th percentile per-packet one-way delay: 12.689 ms

Loss rate: 8.11%

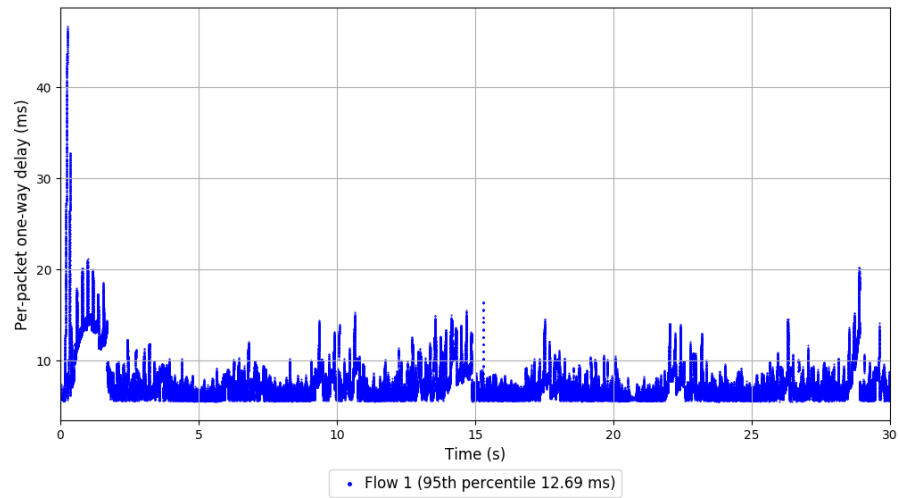
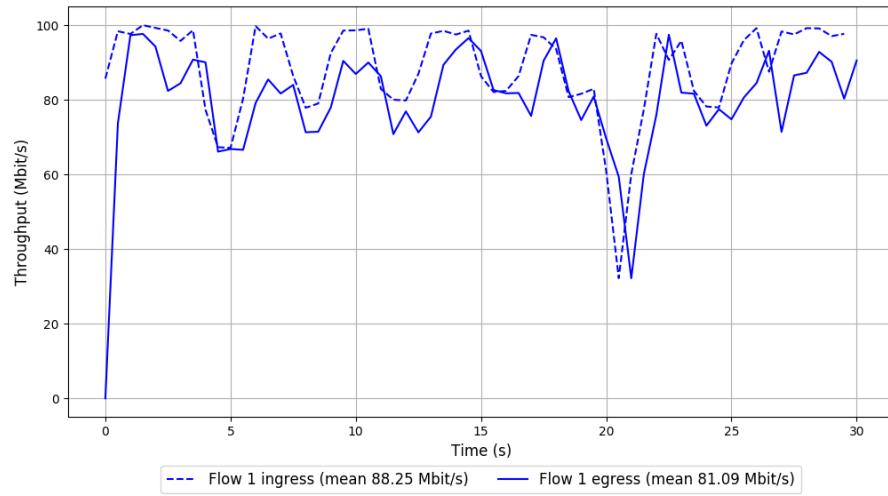
-- Flow 1:

Average throughput: 81.09 Mbit/s

95th percentile per-packet one-way delay: 12.689 ms

Loss rate: 8.11%

Run 3: Report of TCP BBR — Data Link

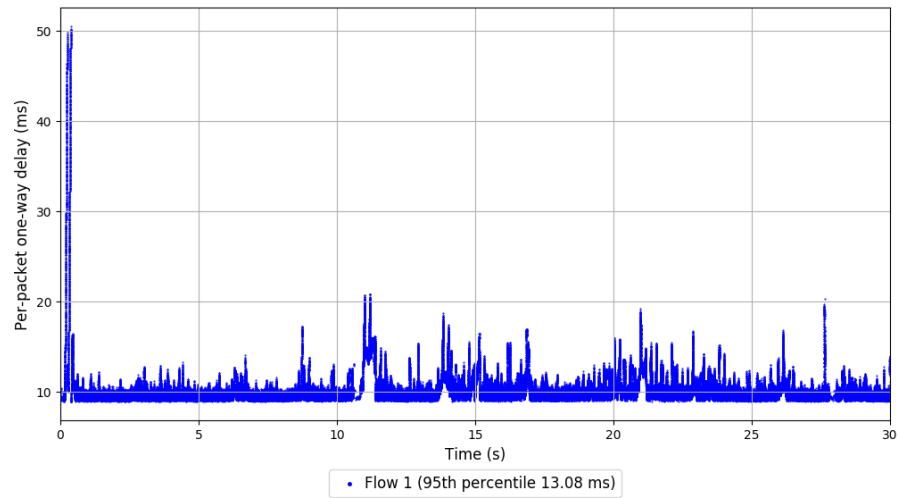
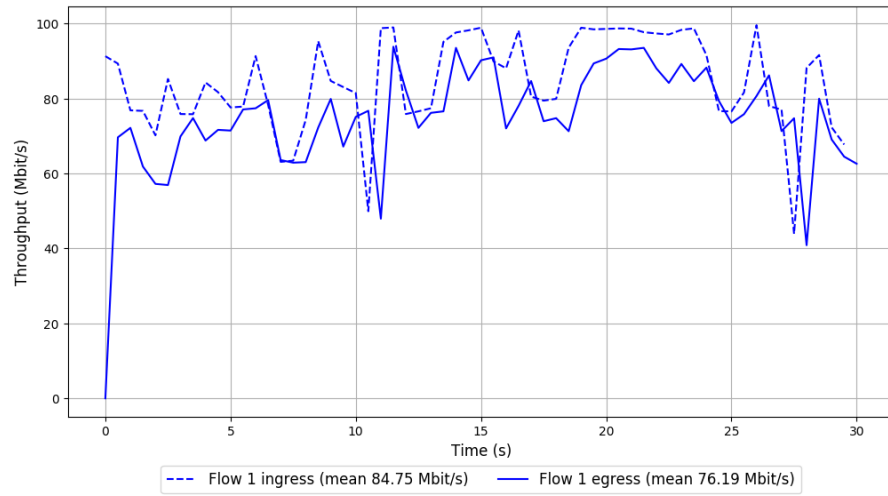


Run 4: Statistics of TCP BBR

Start at: 2018-09-25 05:50:32
End at: 2018-09-25 05:51:02
Local clock offset: 1.811 ms
Remote clock offset: -3.605 ms

Below is generated by plot.py at 2018-09-25 06:30:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 76.19 Mbit/s
95th percentile per-packet one-way delay: 13.083 ms
Loss rate: 10.10%
-- Flow 1:
Average throughput: 76.19 Mbit/s
95th percentile per-packet one-way delay: 13.083 ms
Loss rate: 10.10%

Run 4: Report of TCP BBR — Data Link

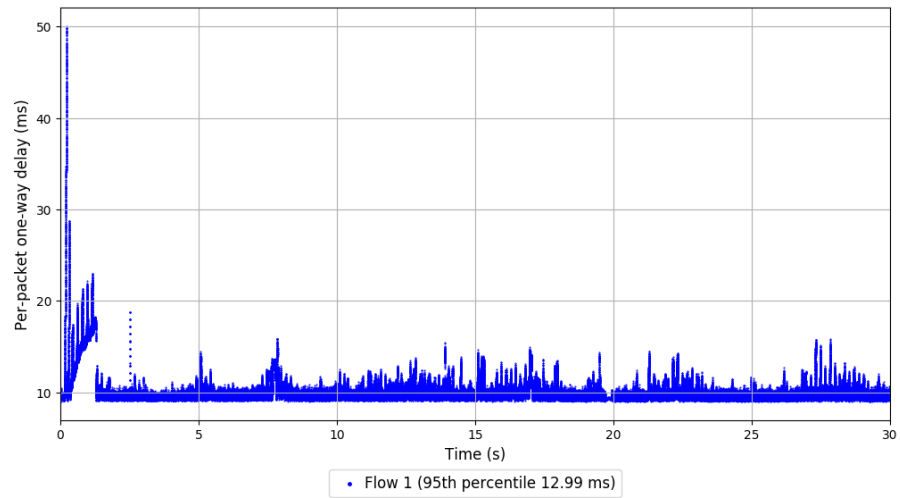
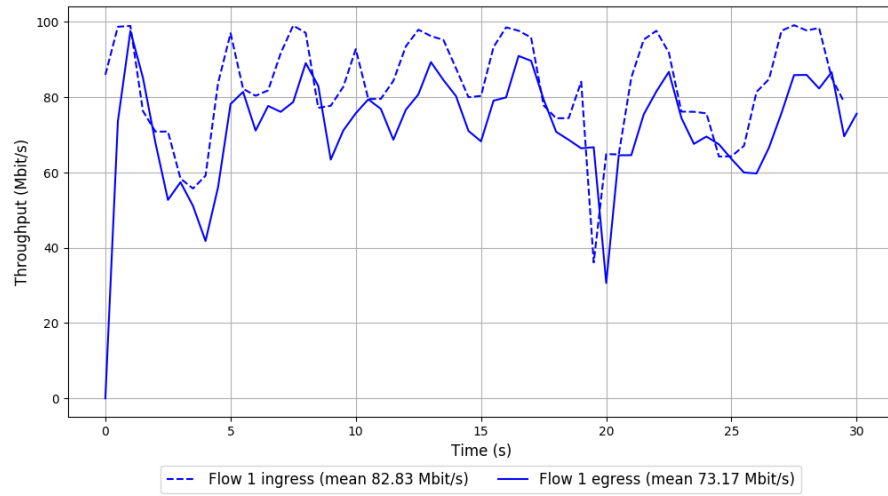


Run 5: Statistics of TCP BBR

Start at: 2018-09-25 06:12:09
End at: 2018-09-25 06:12:39
Local clock offset: 1.212 ms
Remote clock offset: -3.116 ms

Below is generated by plot.py at 2018-09-25 06:30:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 73.17 Mbit/s
95th percentile per-packet one-way delay: 12.993 ms
Loss rate: 11.67%
-- Flow 1:
Average throughput: 73.17 Mbit/s
95th percentile per-packet one-way delay: 12.993 ms
Loss rate: 11.67%

Run 5: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

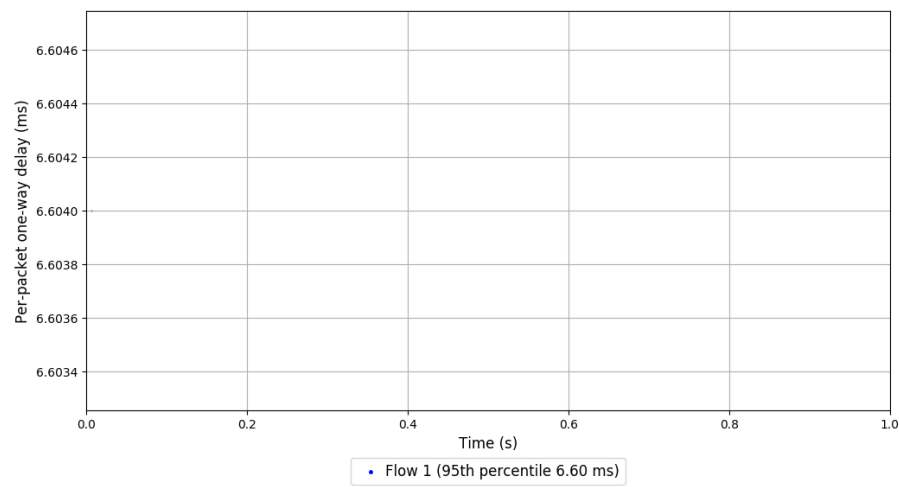
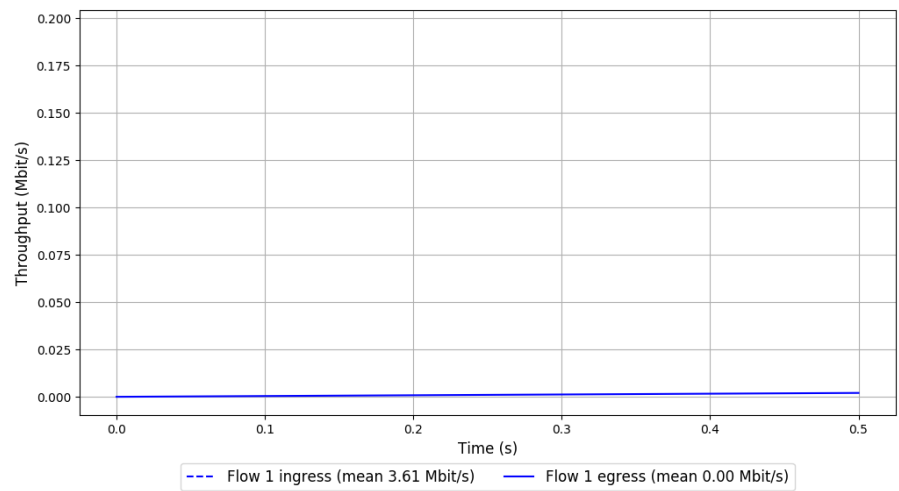
Start at: 2018-09-25 04:42:31

End at: 2018-09-25 04:43:01

Local clock offset: 3.096 ms

Remote clock offset: -4.099 ms

Run 1: Report of Copa — Data Link

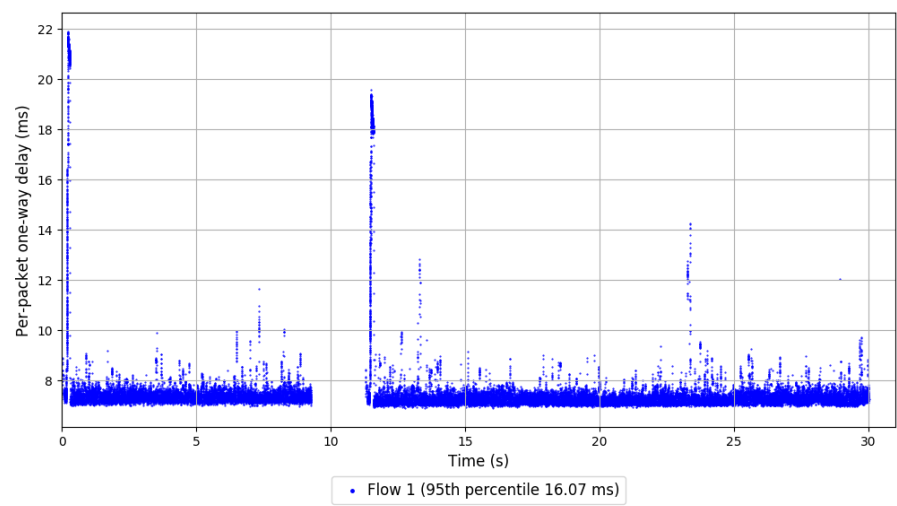
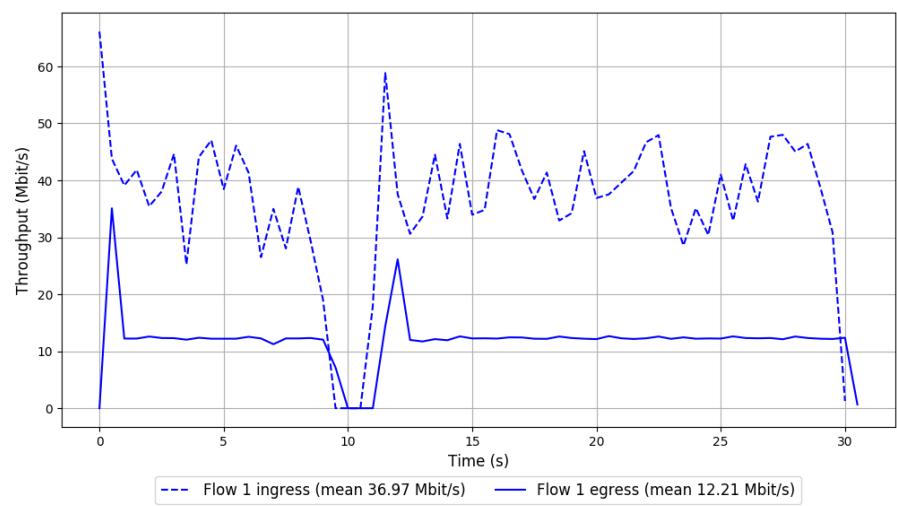


Run 2: Statistics of Copa

Start at: 2018-09-25 05:04:13
End at: 2018-09-25 05:04:43
Local clock offset: 1.168 ms
Remote clock offset: -4.652 ms

Below is generated by plot.py at 2018-09-25 06:30:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.21 Mbit/s
95th percentile per-packet one-way delay: 16.072 ms
Loss rate: 66.97%
-- Flow 1:
Average throughput: 12.21 Mbit/s
95th percentile per-packet one-way delay: 16.072 ms
Loss rate: 66.97%

Run 2: Report of Copa — Data Link

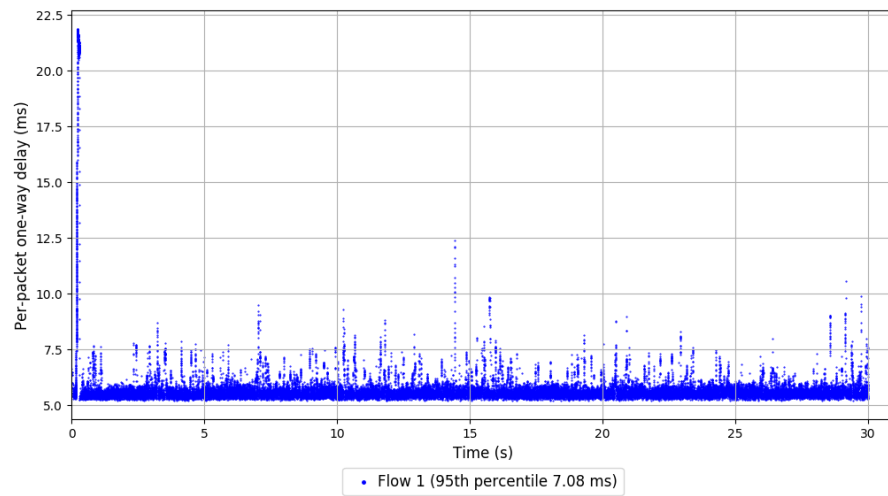
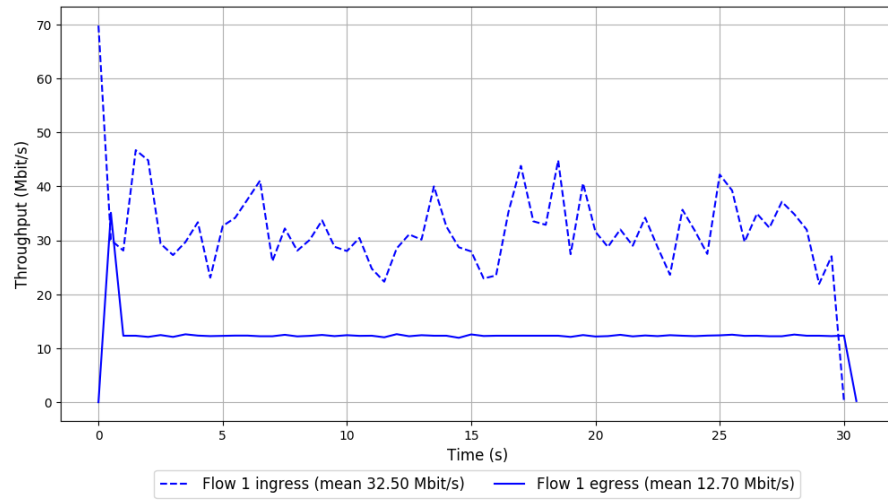


Run 3: Statistics of Copa

Start at: 2018-09-25 05:25:48
End at: 2018-09-25 05:26:18
Local clock offset: 4.301 ms
Remote clock offset: -3.666 ms

Below is generated by plot.py at 2018-09-25 06:30:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.70 Mbit/s
95th percentile per-packet one-way delay: 7.084 ms
Loss rate: 60.93%
-- Flow 1:
Average throughput: 12.70 Mbit/s
95th percentile per-packet one-way delay: 7.084 ms
Loss rate: 60.93%

Run 3: Report of Copa — Data Link

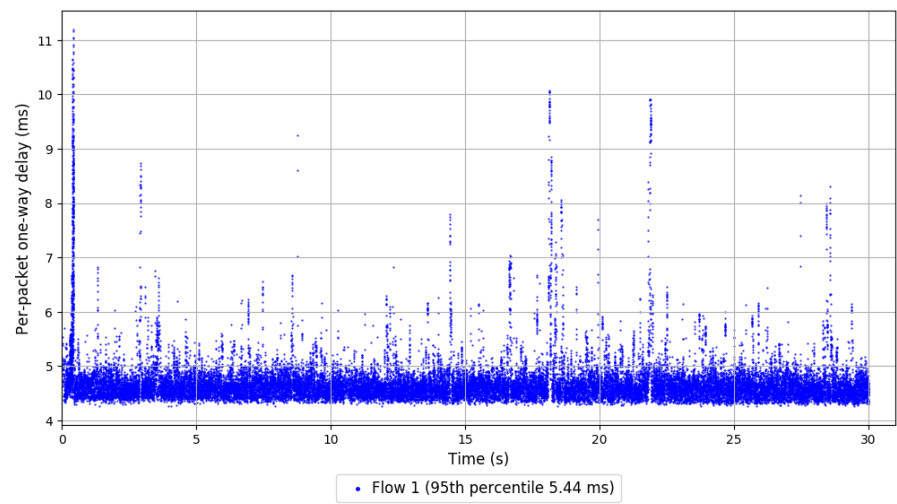
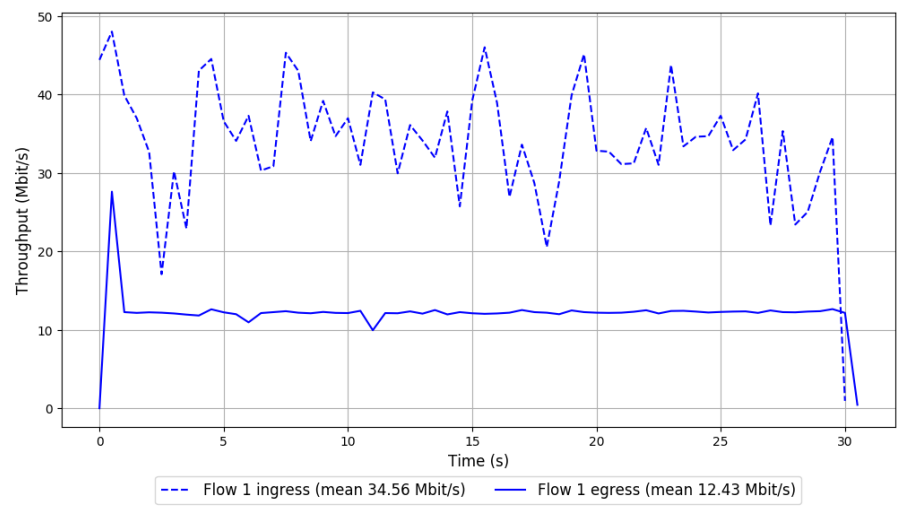


Run 4: Statistics of Copa

Start at: 2018-09-25 05:47:13
End at: 2018-09-25 05:47:43
Local clock offset: 4.997 ms
Remote clock offset: -4.172 ms

Below is generated by plot.py at 2018-09-25 06:30:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.43 Mbit/s
95th percentile per-packet one-way delay: 5.441 ms
Loss rate: 64.04%
-- Flow 1:
Average throughput: 12.43 Mbit/s
95th percentile per-packet one-way delay: 5.441 ms
Loss rate: 64.04%

Run 4: Report of Copa — Data Link

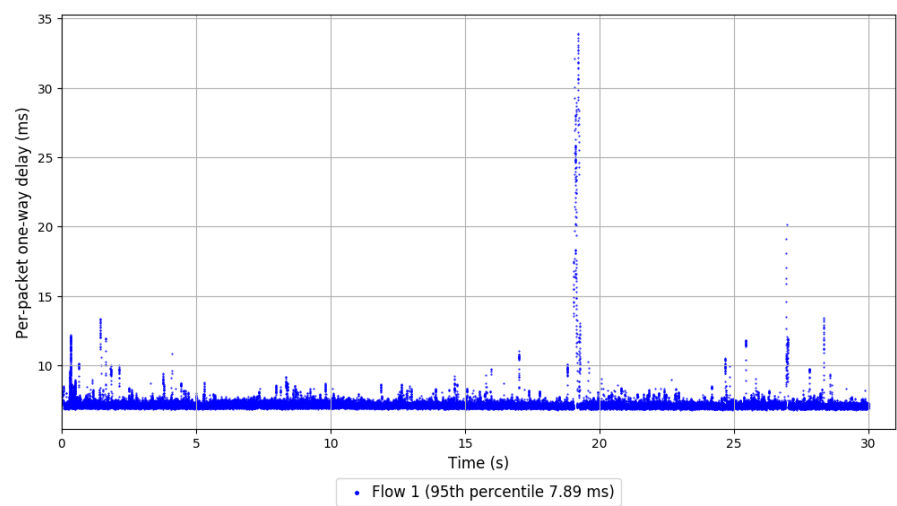
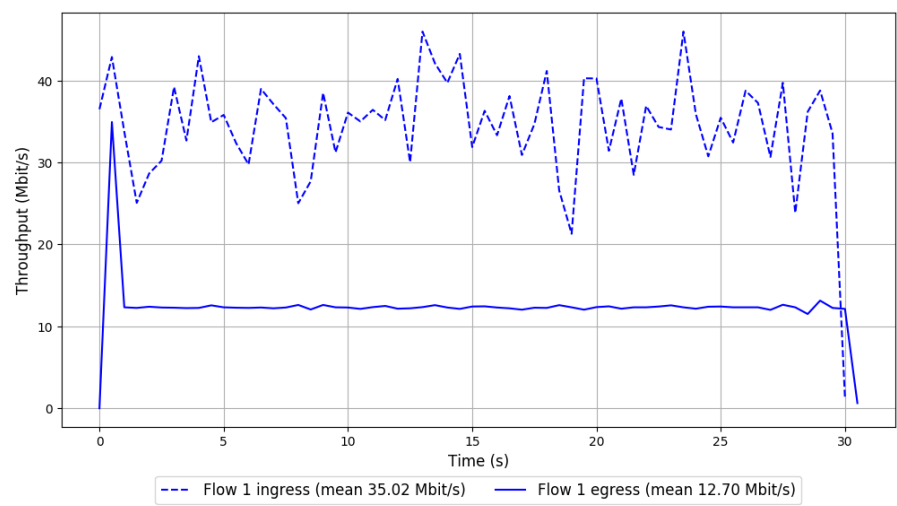


Run 5: Statistics of Copa

Start at: 2018-09-25 06:08:51
End at: 2018-09-25 06:09:21
Local clock offset: 3.509 ms
Remote clock offset: -3.477 ms

Below is generated by plot.py at 2018-09-25 06:30:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.70 Mbit/s
95th percentile per-packet one-way delay: 7.894 ms
Loss rate: 63.74%
-- Flow 1:
Average throughput: 12.70 Mbit/s
95th percentile per-packet one-way delay: 7.894 ms
Loss rate: 63.74%

Run 5: Report of Copa — Data Link

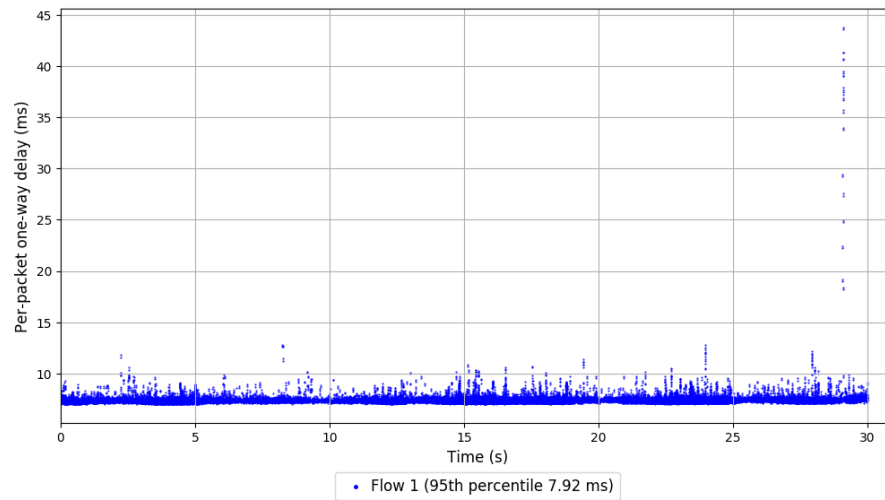
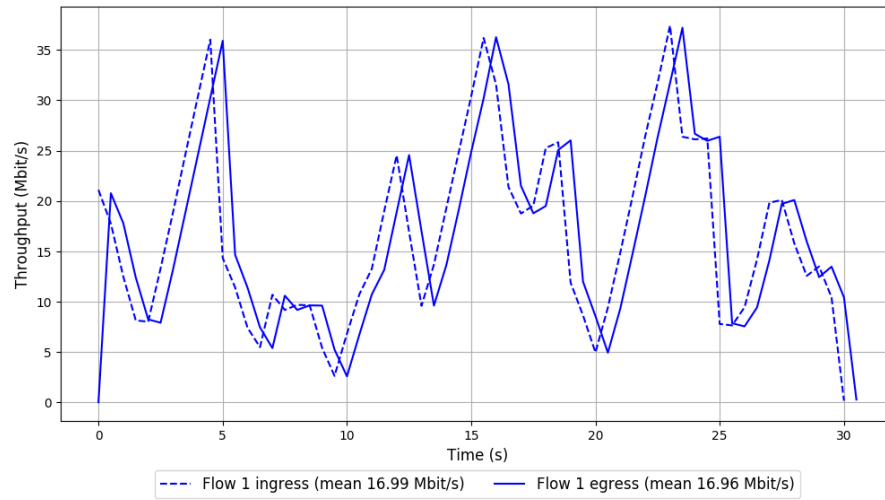


Run 1: Statistics of TCP Cubic

Start at: 2018-09-25 04:49:19
End at: 2018-09-25 04:49:49
Local clock offset: 1.618 ms
Remote clock offset: -3.846 ms

Below is generated by plot.py at 2018-09-25 06:30:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 16.96 Mbit/s
95th percentile per-packet one-way delay: 7.925 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 16.96 Mbit/s
95th percentile per-packet one-way delay: 7.925 ms
Loss rate: 0.17%

Run 1: Report of TCP Cubic — Data Link

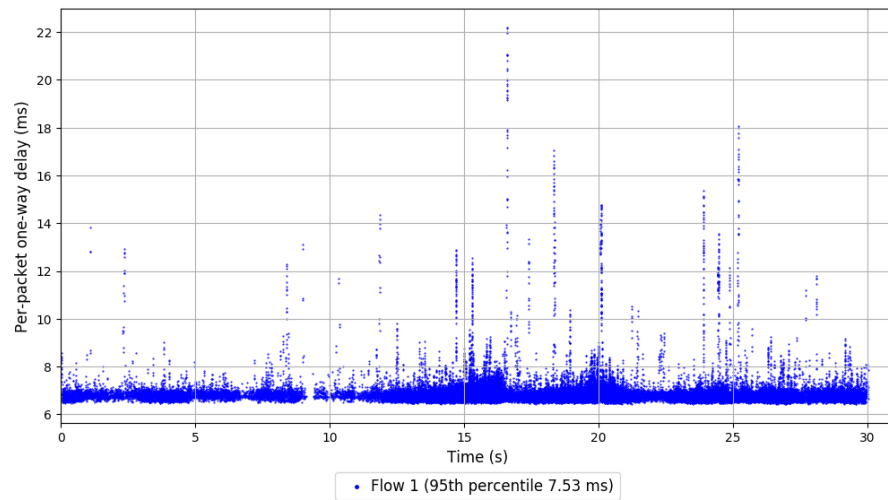
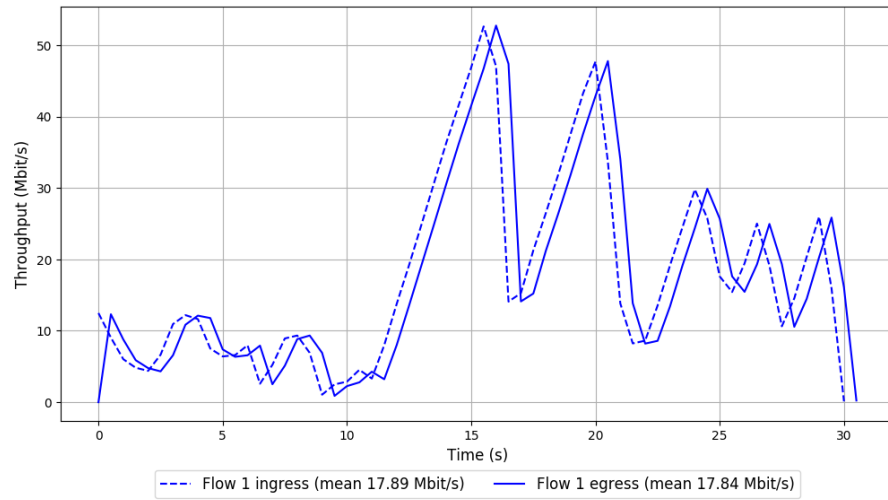


Run 2: Statistics of TCP Cubic

Start at: 2018-09-25 05:11:08
End at: 2018-09-25 05:11:38
Local clock offset: 2.45 ms
Remote clock offset: -3.932 ms

Below is generated by plot.py at 2018-09-25 06:30:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 17.84 Mbit/s
95th percentile per-packet one-way delay: 7.527 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 17.84 Mbit/s
95th percentile per-packet one-way delay: 7.527 ms
Loss rate: 0.26%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-09-25 05:32:35

End at: 2018-09-25 05:33:05

Local clock offset: 3.223 ms

Remote clock offset: -5.12 ms

Below is generated by plot.py at 2018-09-25 06:30:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 14.97 Mbit/s

95th percentile per-packet one-way delay: 7.301 ms

Loss rate: 0.19%

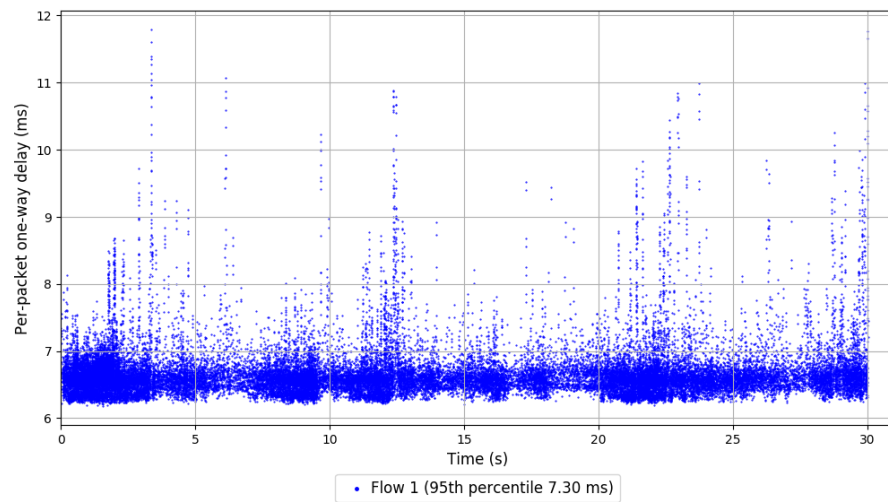
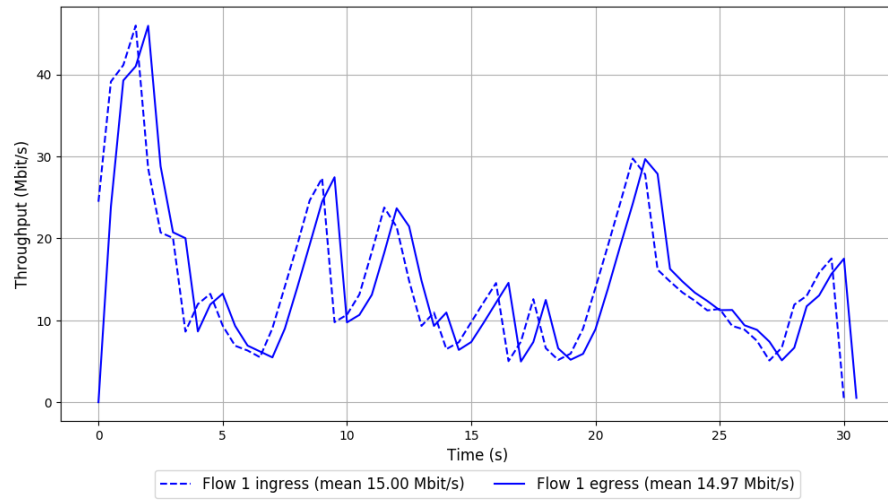
-- Flow 1:

Average throughput: 14.97 Mbit/s

95th percentile per-packet one-way delay: 7.301 ms

Loss rate: 0.19%

Run 3: Report of TCP Cubic — Data Link

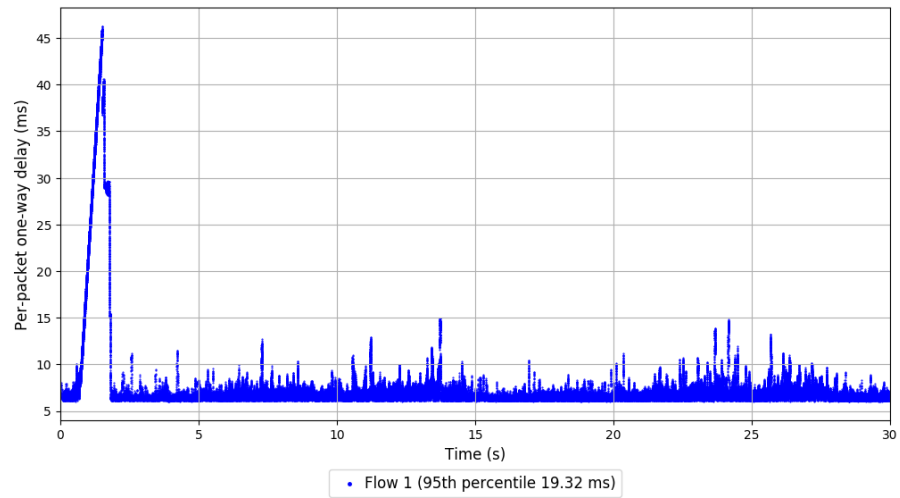
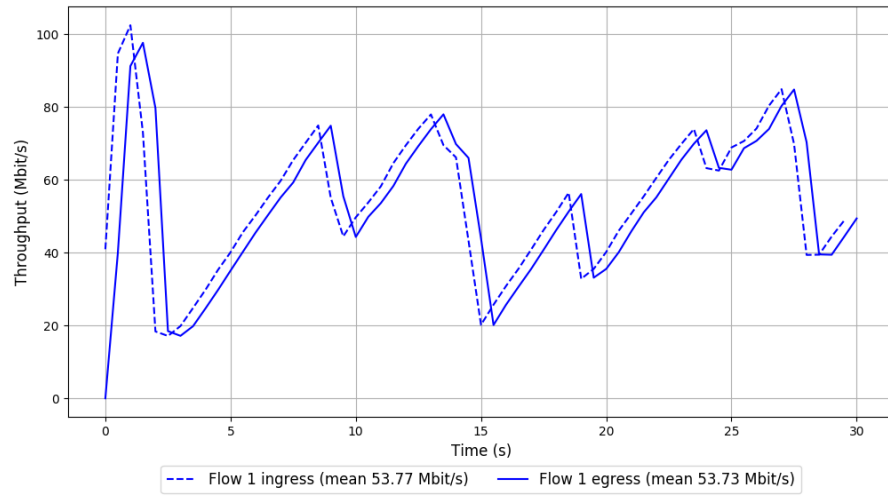


Run 4: Statistics of TCP Cubic

Start at: 2018-09-25 05:54:03
End at: 2018-09-25 05:54:33
Local clock offset: 4.714 ms
Remote clock offset: -3.598 ms

Below is generated by plot.py at 2018-09-25 06:30:50
Datalink statistics
-- Total of 1 flow:
Average throughput: 53.73 Mbit/s
95th percentile per-packet one-way delay: 19.316 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 53.73 Mbit/s
95th percentile per-packet one-way delay: 19.316 ms
Loss rate: 0.08%

Run 4: Report of TCP Cubic — Data Link

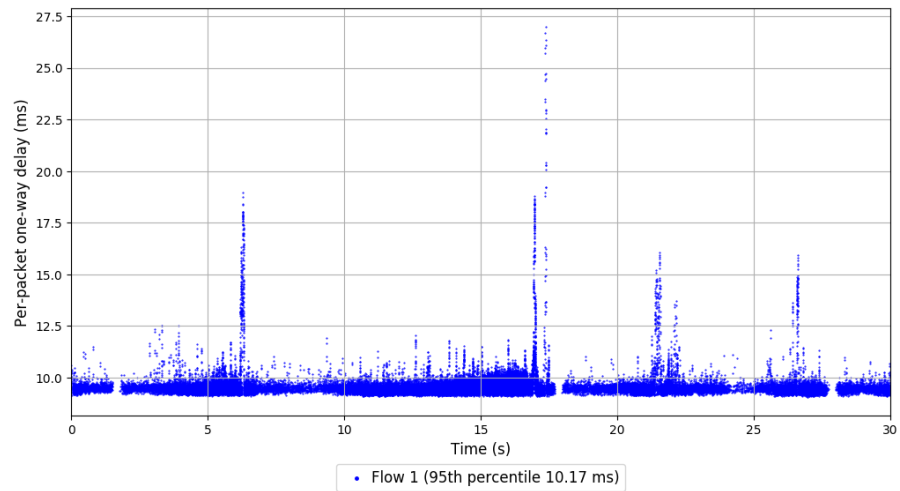
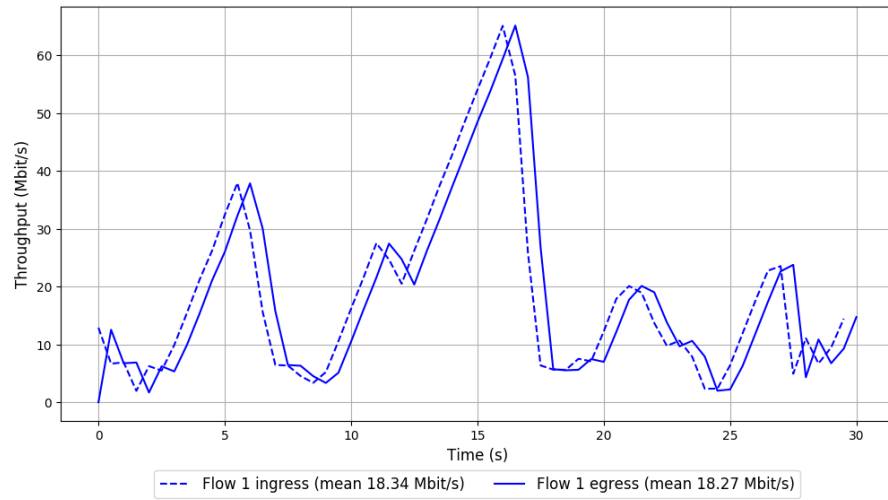


Run 5: Statistics of TCP Cubic

Start at: 2018-09-25 06:15:42
End at: 2018-09-25 06:16:12
Local clock offset: 0.087 ms
Remote clock offset: -3.885 ms

Below is generated by plot.py at 2018-09-25 06:30:50
Datalink statistics
-- Total of 1 flow:
Average throughput: 18.27 Mbit/s
95th percentile per-packet one-way delay: 10.172 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 18.27 Mbit/s
95th percentile per-packet one-way delay: 10.172 ms
Loss rate: 0.35%

Run 5: Report of TCP Cubic — Data Link

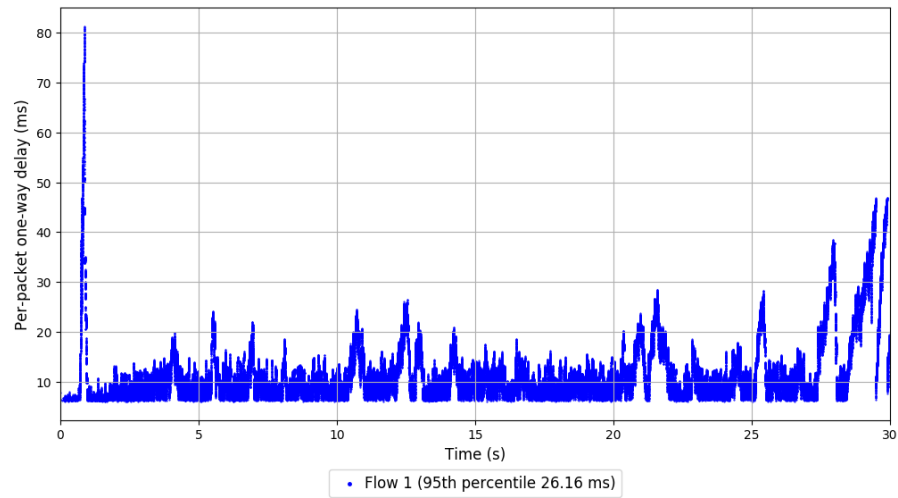
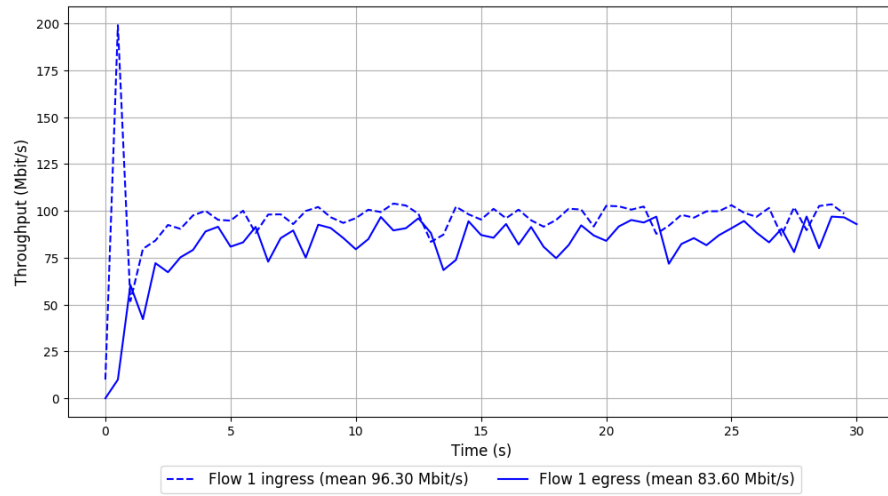


Run 1: Statistics of FillP

Start at: 2018-09-25 04:46:59
End at: 2018-09-25 04:47:29
Local clock offset: 1.356 ms
Remote clock offset: -4.273 ms

Below is generated by plot.py at 2018-09-25 06:31:40
Datalink statistics
-- Total of 1 flow:
Average throughput: 83.60 Mbit/s
95th percentile per-packet one-way delay: 26.159 ms
Loss rate: 13.16%
-- Flow 1:
Average throughput: 83.60 Mbit/s
95th percentile per-packet one-way delay: 26.159 ms
Loss rate: 13.16%

Run 1: Report of FillP — Data Link

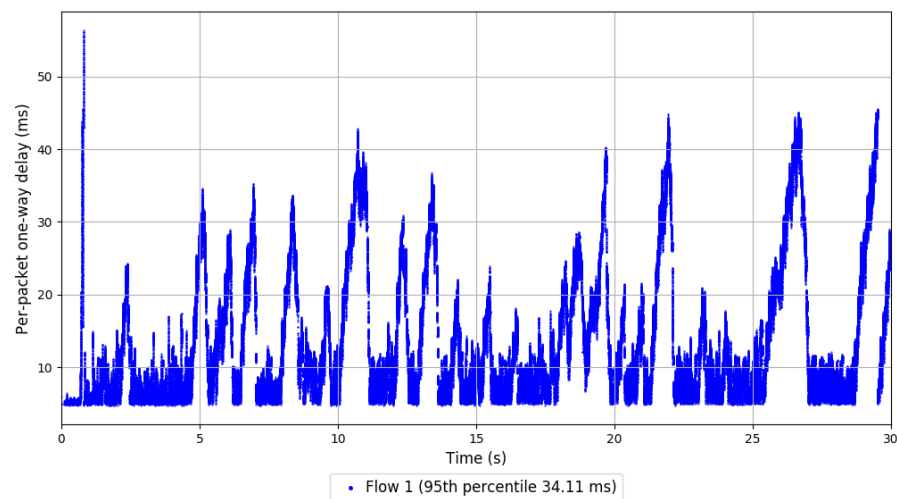
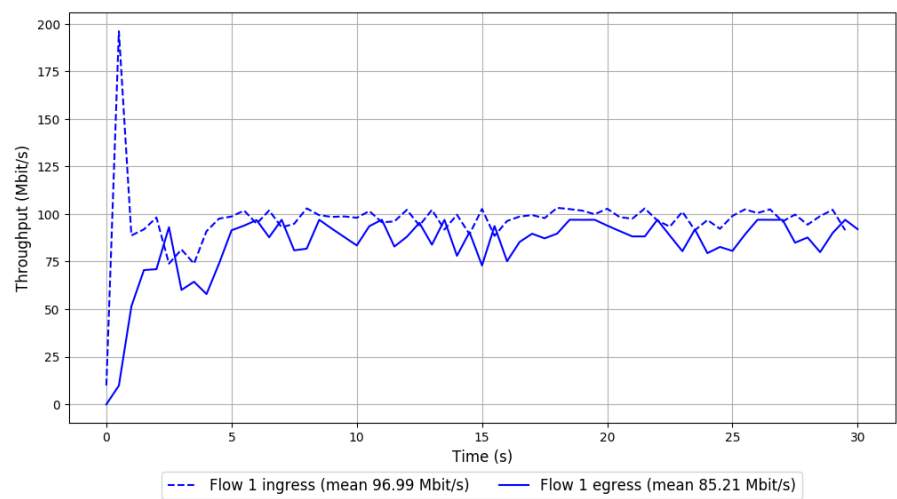


Run 2: Statistics of FillP

Start at: 2018-09-25 05:08:46
End at: 2018-09-25 05:09:16
Local clock offset: 4.207 ms
Remote clock offset: -4.717 ms

Below is generated by plot.py at 2018-09-25 06:31:46
Datalink statistics
-- Total of 1 flow:
Average throughput: 85.21 Mbit/s
95th percentile per-packet one-way delay: 34.113 ms
Loss rate: 12.09%
-- Flow 1:
Average throughput: 85.21 Mbit/s
95th percentile per-packet one-way delay: 34.113 ms
Loss rate: 12.09%

Run 2: Report of FillP — Data Link

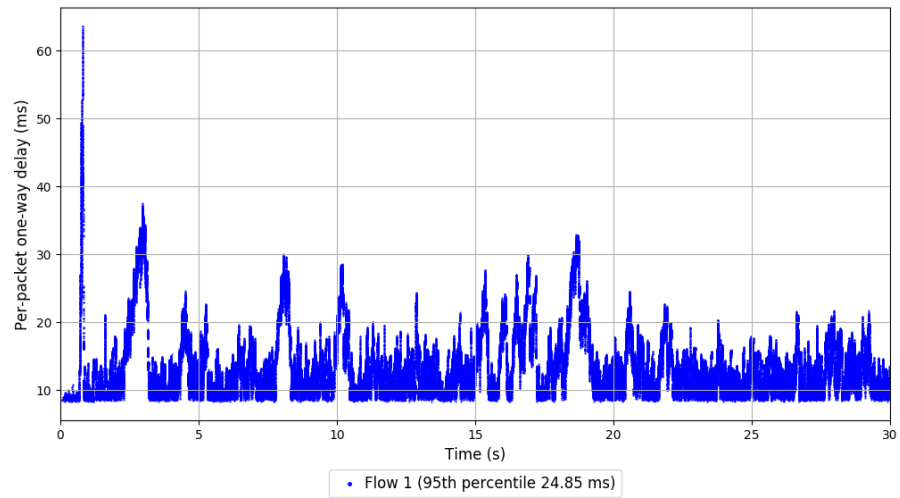
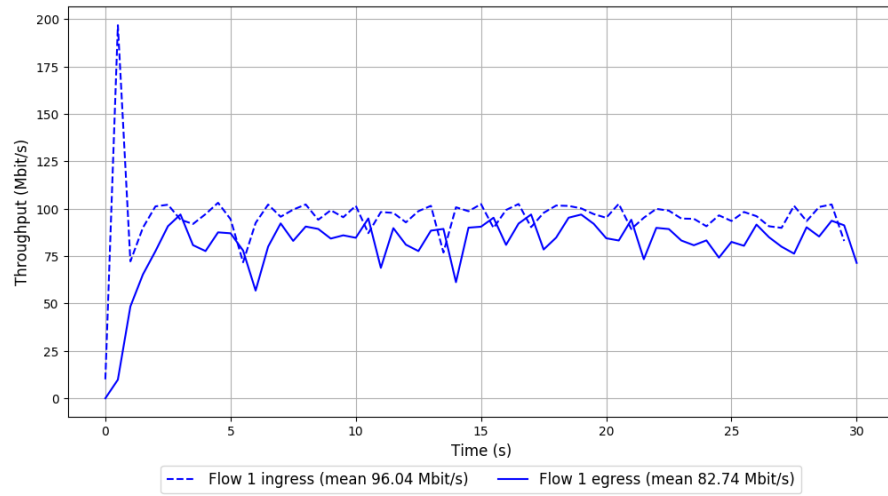


Run 3: Statistics of FillP

Start at: 2018-09-25 05:30:21
End at: 2018-09-25 05:30:51
Local clock offset: 1.128 ms
Remote clock offset: -3.823 ms

Below is generated by plot.py at 2018-09-25 06:31:55
Datalink statistics
-- Total of 1 flow:
Average throughput: 82.74 Mbit/s
95th percentile per-packet one-way delay: 24.850 ms
Loss rate: 13.84%
-- Flow 1:
Average throughput: 82.74 Mbit/s
95th percentile per-packet one-way delay: 24.850 ms
Loss rate: 13.84%

Run 3: Report of FillP — Data Link

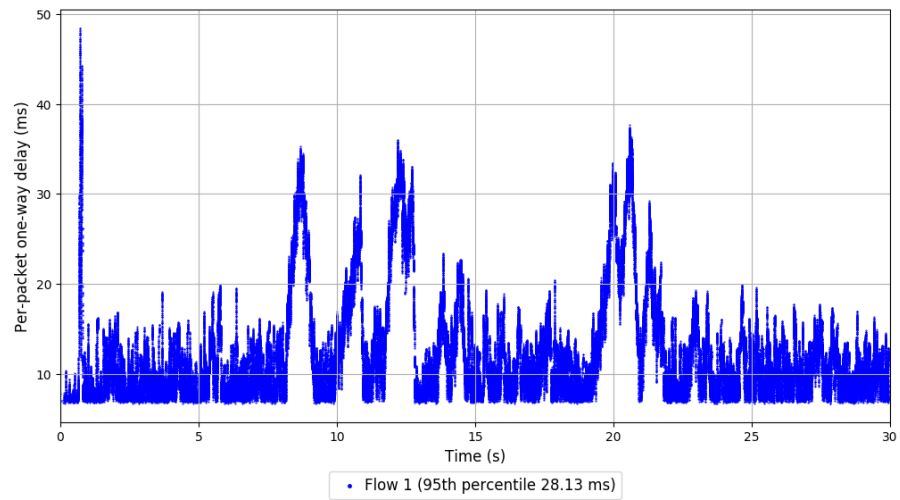
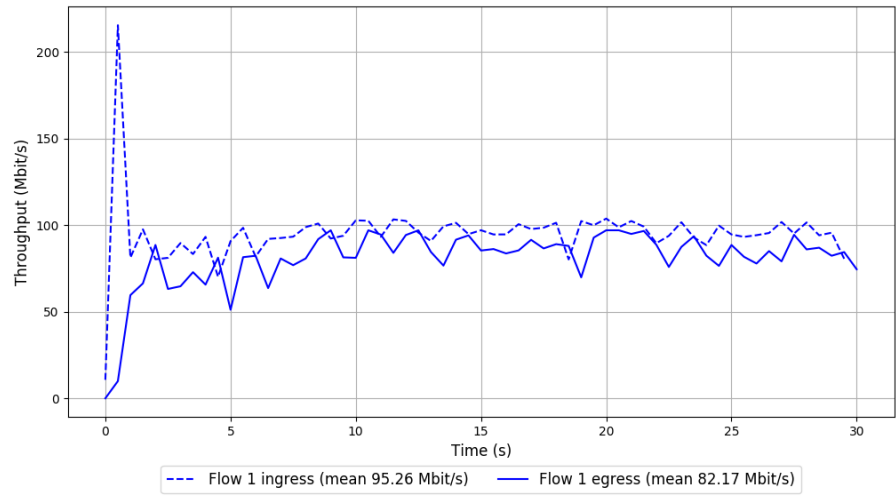


Run 4: Statistics of FillP

Start at: 2018-09-25 05:51:45
End at: 2018-09-25 05:52:15
Local clock offset: 4.131 ms
Remote clock offset: -3.312 ms

Below is generated by plot.py at 2018-09-25 06:31:55
Datalink statistics
-- Total of 1 flow:
Average throughput: 82.17 Mbit/s
95th percentile per-packet one-way delay: 28.131 ms
Loss rate: 13.74%
-- Flow 1:
Average throughput: 82.17 Mbit/s
95th percentile per-packet one-way delay: 28.131 ms
Loss rate: 13.74%

Run 4: Report of FillP — Data Link

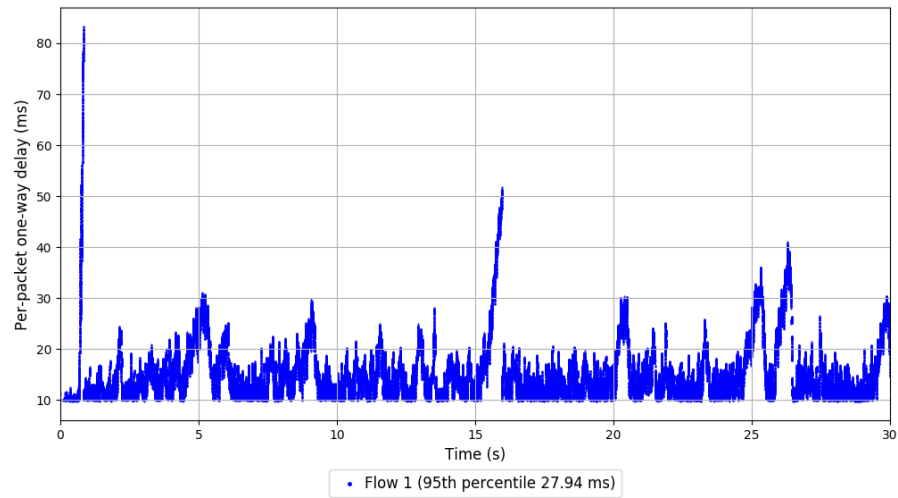
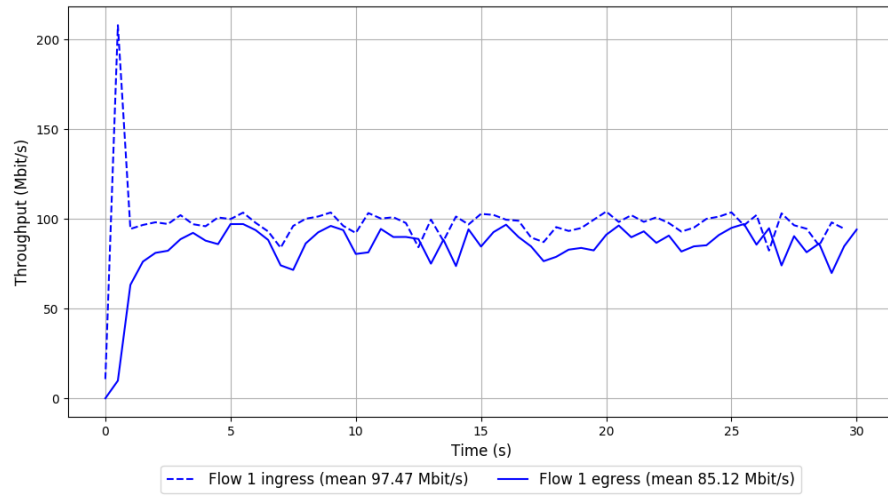


Run 5: Statistics of FillP

Start at: 2018-09-25 06:13:23
End at: 2018-09-25 06:13:53
Local clock offset: 0.261 ms
Remote clock offset: -3.062 ms

Below is generated by plot.py at 2018-09-25 06:31:58
Datalink statistics
-- Total of 1 flow:
Average throughput: 85.12 Mbit/s
95th percentile per-packet one-way delay: 27.943 ms
Loss rate: 12.64%
-- Flow 1:
Average throughput: 85.12 Mbit/s
95th percentile per-packet one-way delay: 27.943 ms
Loss rate: 12.64%

Run 5: Report of FillP — Data Link



Run 1: Statistics of FillP-Sheep

Start at: 2018-09-25 04:53:44

End at: 2018-09-25 04:54:14

Local clock offset: 2.172 ms

Remote clock offset: -3.491 ms

Below is generated by plot.py at 2018-09-25 06:32:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.72 Mbit/s

95th percentile per-packet one-way delay: 23.836 ms

Loss rate: 9.37%

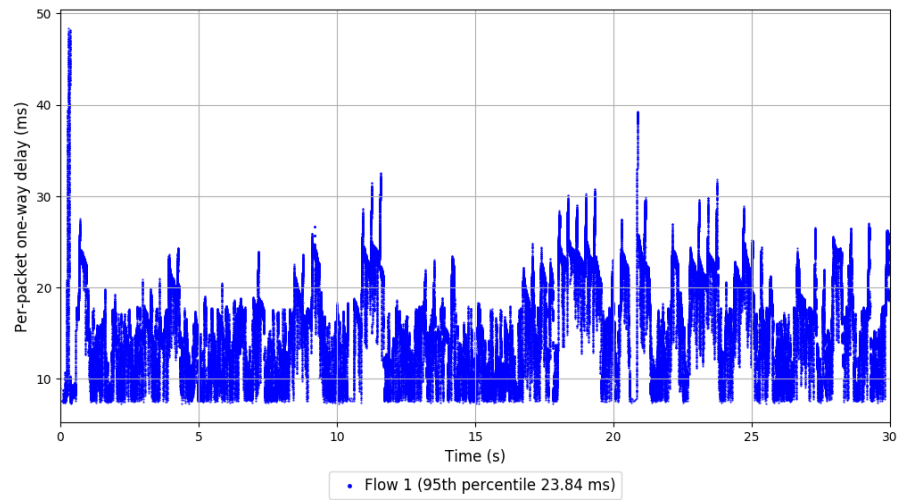
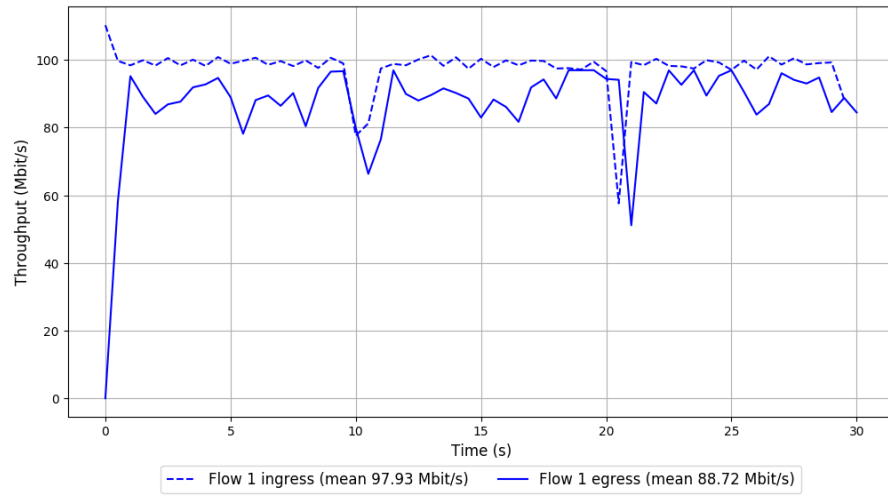
-- Flow 1:

Average throughput: 88.72 Mbit/s

95th percentile per-packet one-way delay: 23.836 ms

Loss rate: 9.37%

Run 1: Report of FillP-Sheep — Data Link

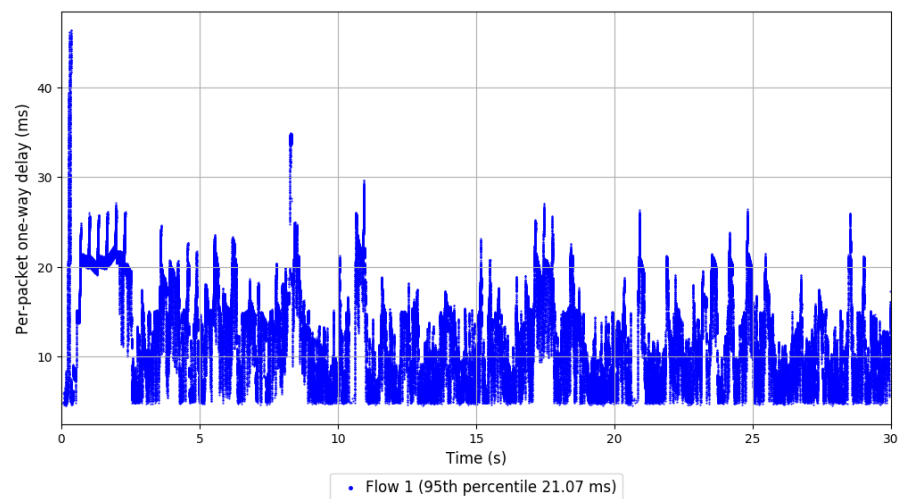
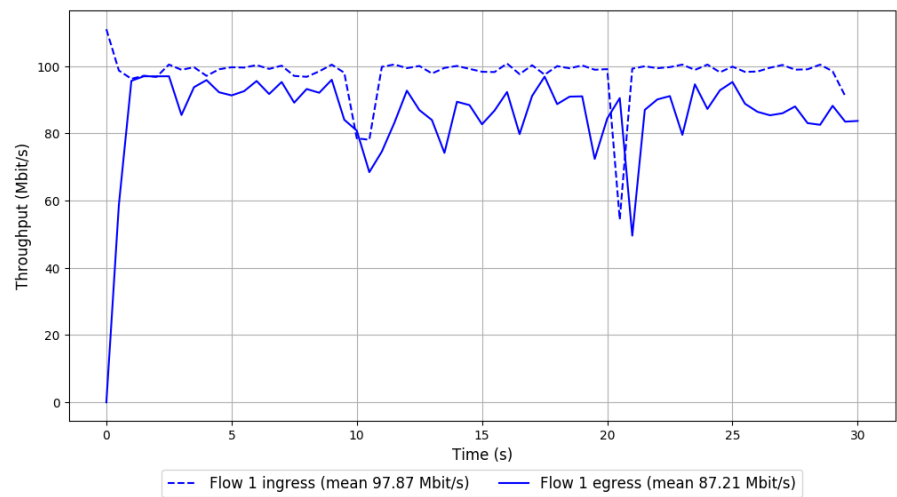


Run 2: Statistics of FillP-Sheep

Start at: 2018-09-25 05:15:34
End at: 2018-09-25 05:16:04
Local clock offset: 3.879 ms
Remote clock offset: -4.179 ms

Below is generated by plot.py at 2018-09-25 06:32:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 87.21 Mbit/s
95th percentile per-packet one-way delay: 21.071 ms
Loss rate: 10.86%
-- Flow 1:
Average throughput: 87.21 Mbit/s
95th percentile per-packet one-way delay: 21.071 ms
Loss rate: 10.86%

Run 2: Report of FillP-Sheep — Data Link

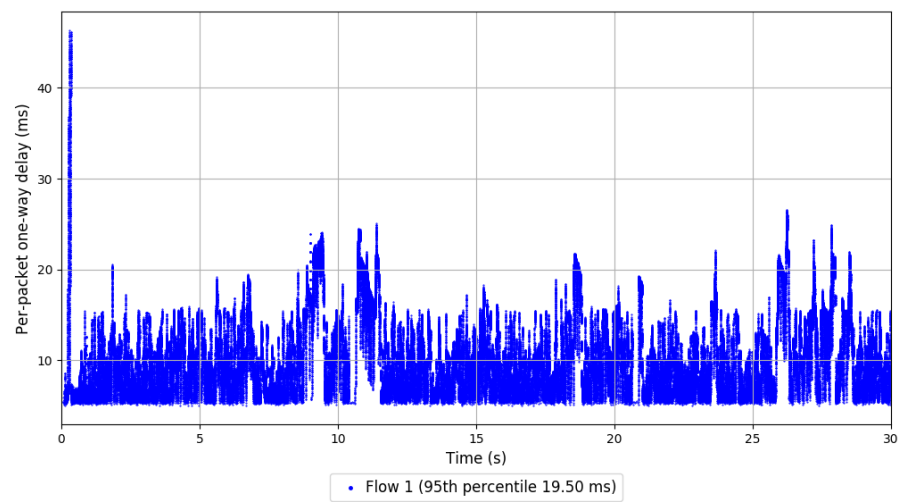
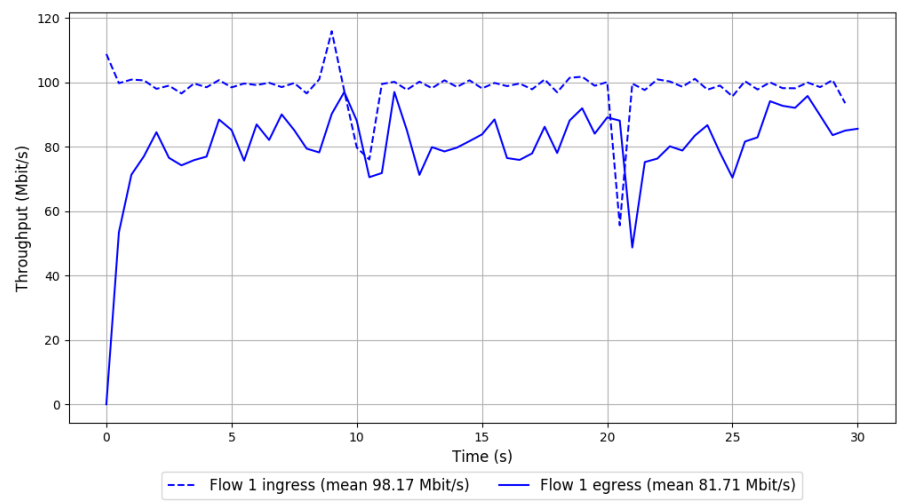


Run 3: Statistics of FillP-Sheep

Start at: 2018-09-25 05:37:03
End at: 2018-09-25 05:37:33
Local clock offset: 4.556 ms
Remote clock offset: -4.056 ms

Below is generated by plot.py at 2018-09-25 06:32:05
Datalink statistics
-- Total of 1 flow:
Average throughput: 81.71 Mbit/s
95th percentile per-packet one-way delay: 19.501 ms
Loss rate: 16.75%
-- Flow 1:
Average throughput: 81.71 Mbit/s
95th percentile per-packet one-way delay: 19.501 ms
Loss rate: 16.75%

Run 3: Report of FillP-Sheep — Data Link

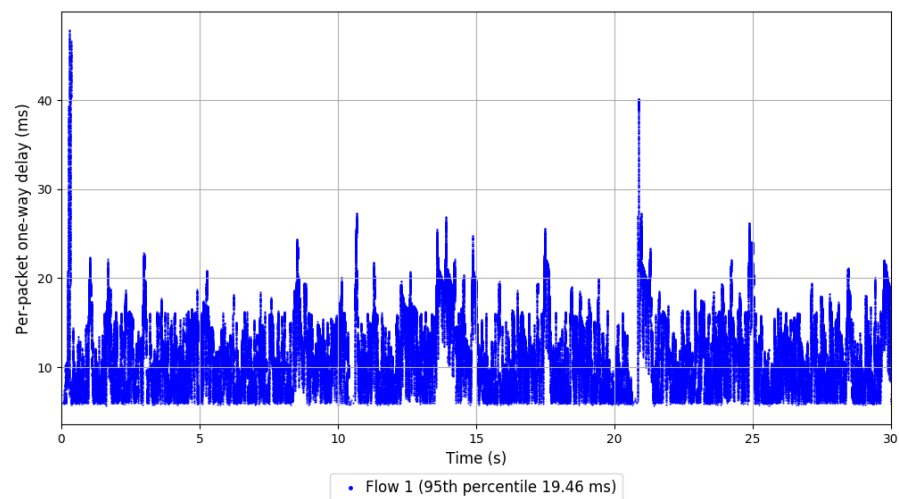
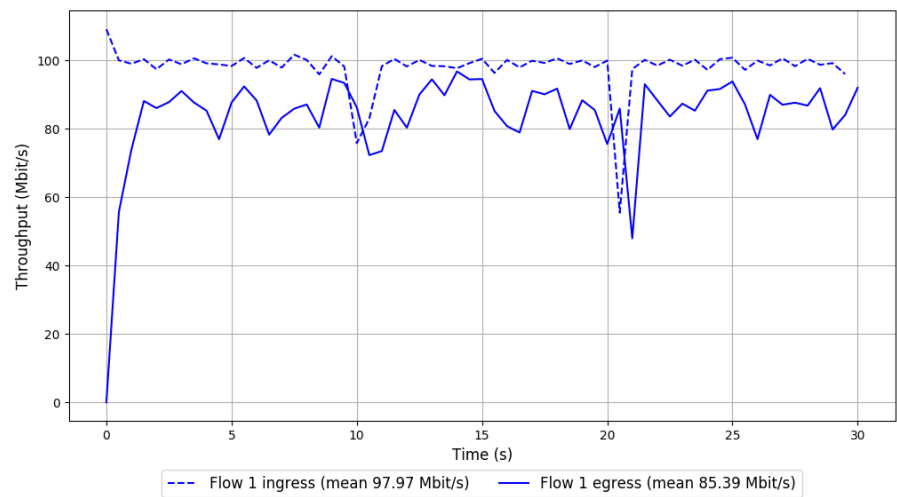


Run 4: Statistics of FillP-Sheep

Start at: 2018-09-25 05:58:30
End at: 2018-09-25 05:59:00
Local clock offset: 4.864 ms
Remote clock offset: -3.644 ms

Below is generated by plot.py at 2018-09-25 06:32:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 85.39 Mbit/s
95th percentile per-packet one-way delay: 19.462 ms
Loss rate: 12.85%
-- Flow 1:
Average throughput: 85.39 Mbit/s
95th percentile per-packet one-way delay: 19.462 ms
Loss rate: 12.85%

Run 4: Report of FillP-Sheep — Data Link

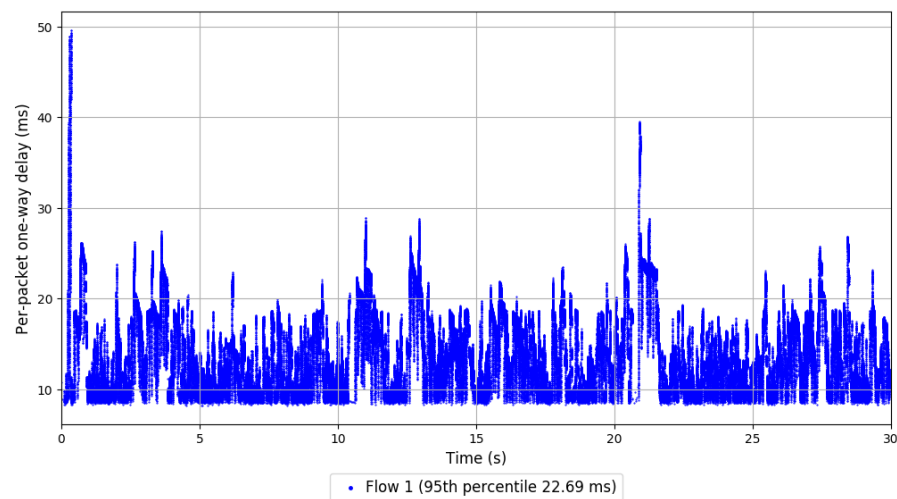
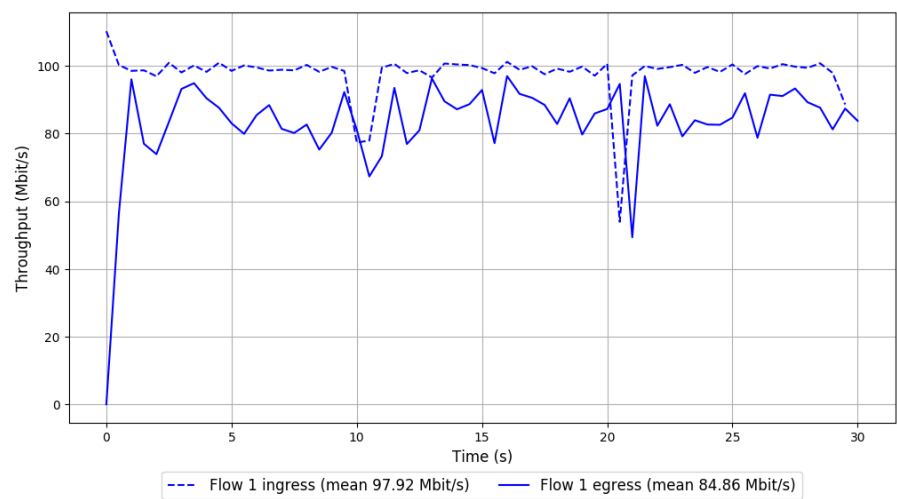


Run 5: Statistics of FillP-Sheep

Start at: 2018-09-25 06:20:11
End at: 2018-09-25 06:20:41
Local clock offset: 0.208 ms
Remote clock offset: -4.191 ms

Below is generated by plot.py at 2018-09-25 06:33:00
Datalink statistics
-- Total of 1 flow:
Average throughput: 84.86 Mbit/s
95th percentile per-packet one-way delay: 22.690 ms
Loss rate: 13.34%
-- Flow 1:
Average throughput: 84.86 Mbit/s
95th percentile per-packet one-way delay: 22.690 ms
Loss rate: 13.34%

Run 5: Report of FillP-Sheep — Data Link

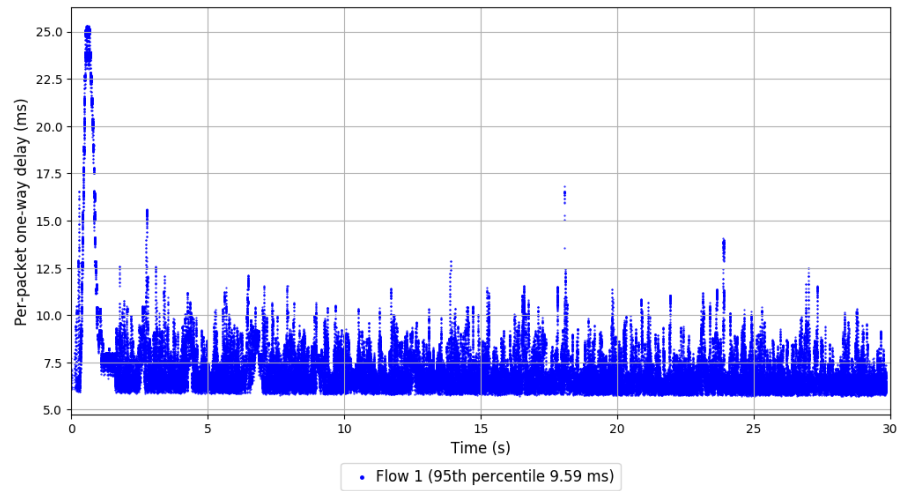
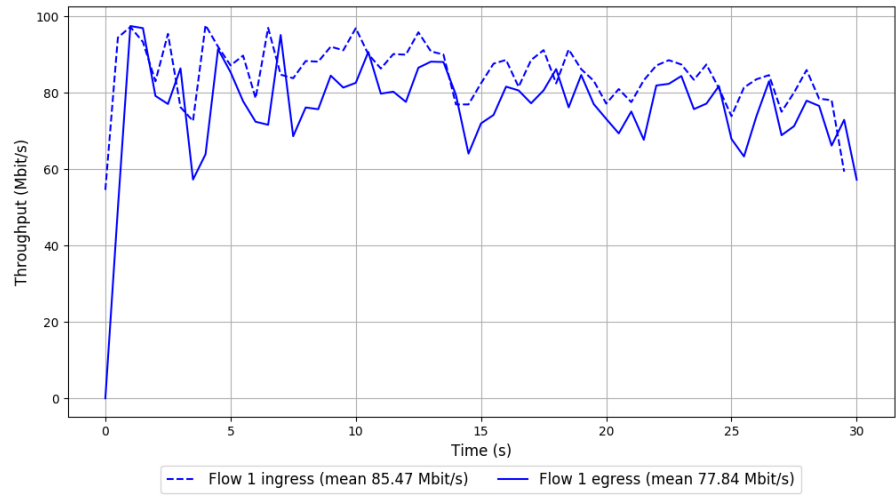


Run 1: Statistics of Indigo

Start at: 2018-09-25 04:41:21
End at: 2018-09-25 04:41:51
Local clock offset: 3.623 ms
Remote clock offset: -4.113 ms

Below is generated by plot.py at 2018-09-25 06:33:00
Datalink statistics
-- Total of 1 flow:
Average throughput: 77.84 Mbit/s
95th percentile per-packet one-way delay: 9.589 ms
Loss rate: 8.93%
-- Flow 1:
Average throughput: 77.84 Mbit/s
95th percentile per-packet one-way delay: 9.589 ms
Loss rate: 8.93%

Run 1: Report of Indigo — Data Link

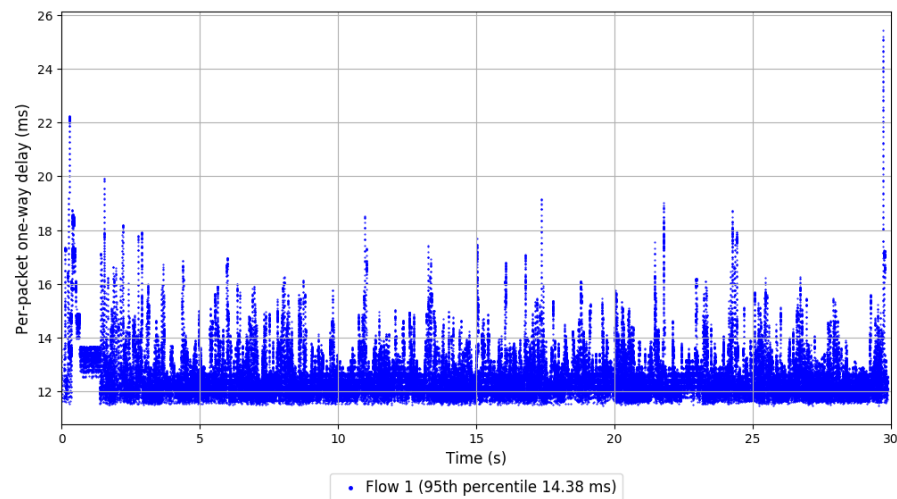
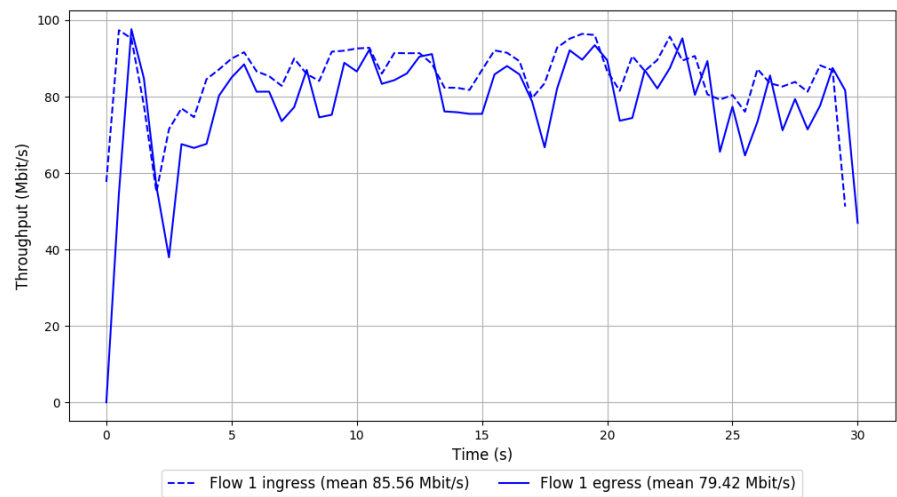


Run 2: Statistics of Indigo

Start at: 2018-09-25 05:03:00
End at: 2018-09-25 05:03:30
Local clock offset: -2.682 ms
Remote clock offset: -4.946 ms

Below is generated by plot.py at 2018-09-25 06:33:00
Datalink statistics
-- Total of 1 flow:
Average throughput: 79.42 Mbit/s
95th percentile per-packet one-way delay: 14.385 ms
Loss rate: 7.17%
-- Flow 1:
Average throughput: 79.42 Mbit/s
95th percentile per-packet one-way delay: 14.385 ms
Loss rate: 7.17%

Run 2: Report of Indigo — Data Link

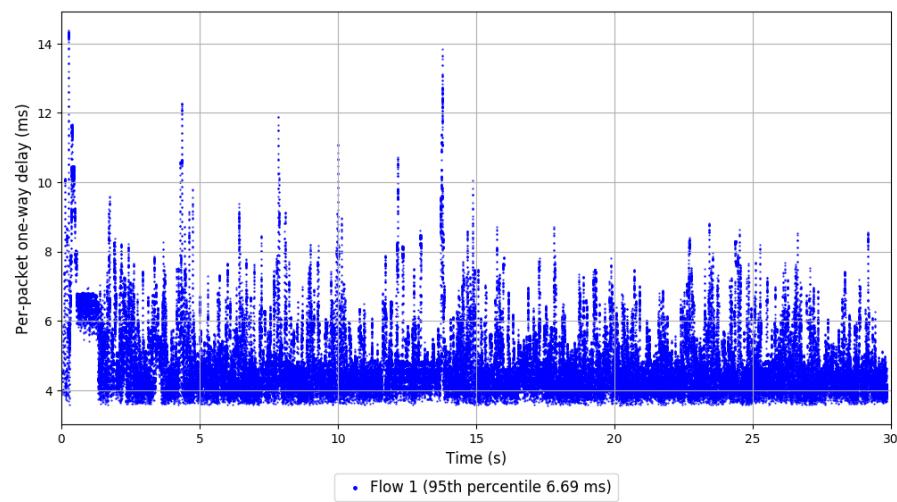
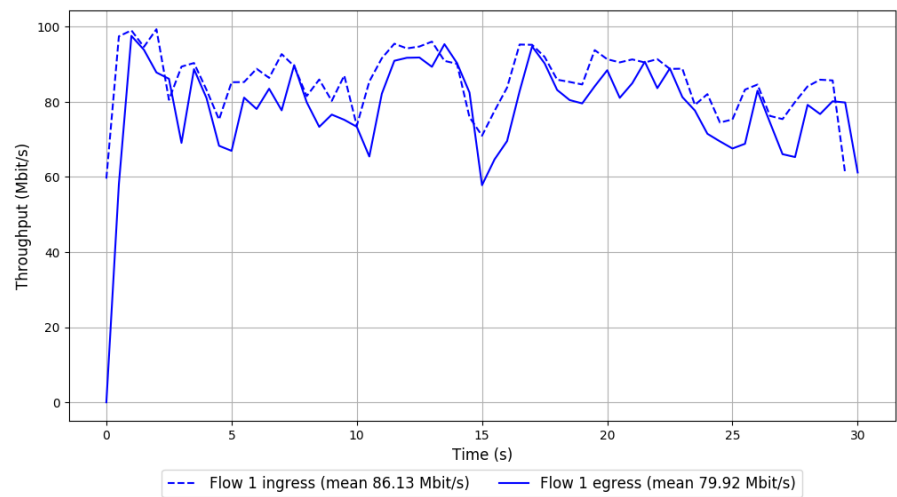


Run 3: Statistics of Indigo

Start at: 2018-09-25 05:24:38
End at: 2018-09-25 05:25:08
Local clock offset: 4.983 ms
Remote clock offset: -4.542 ms

Below is generated by plot.py at 2018-09-25 06:33:00
Datalink statistics
-- Total of 1 flow:
Average throughput: 79.92 Mbit/s
95th percentile per-packet one-way delay: 6.693 ms
Loss rate: 7.21%
-- Flow 1:
Average throughput: 79.92 Mbit/s
95th percentile per-packet one-way delay: 6.693 ms
Loss rate: 7.21%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-09-25 05:46:01

End at: 2018-09-25 05:46:31

Local clock offset: 3.609 ms

Remote clock offset: -4.0 ms

Below is generated by plot.py at 2018-09-25 06:33:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.19 Mbit/s

95th percentile per-packet one-way delay: 9.736 ms

Loss rate: 10.79%

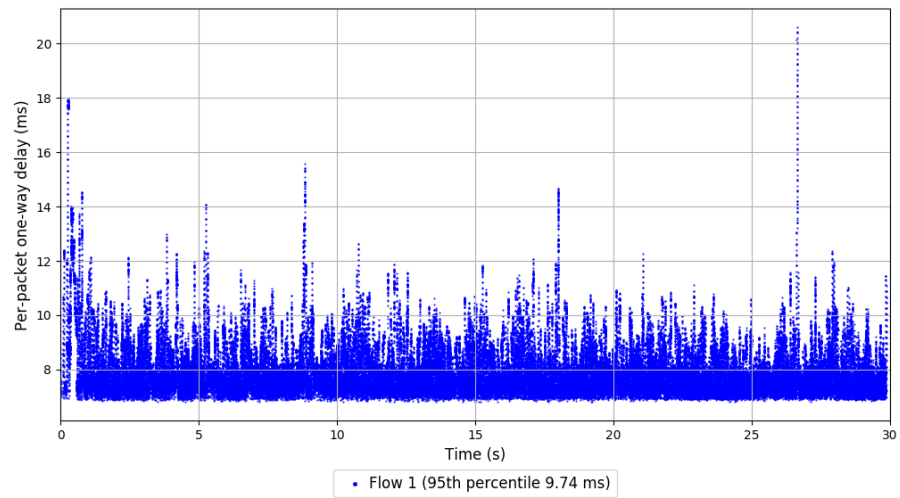
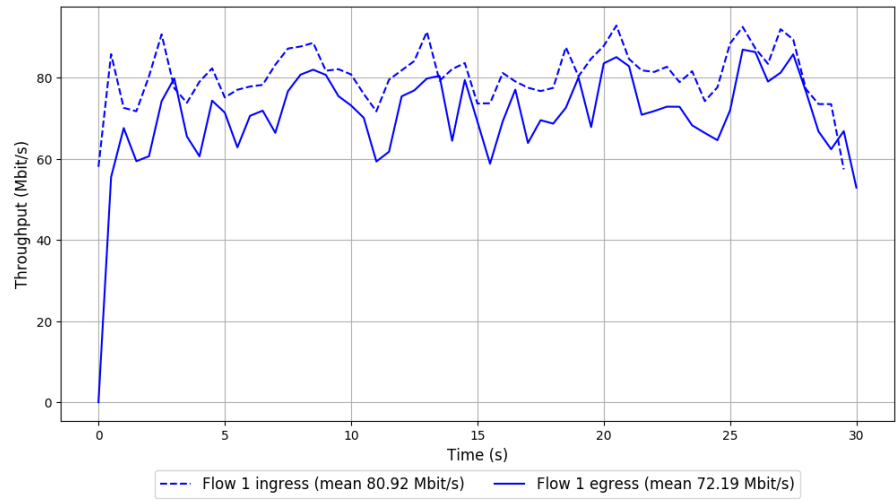
-- Flow 1:

Average throughput: 72.19 Mbit/s

95th percentile per-packet one-way delay: 9.736 ms

Loss rate: 10.79%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-09-25 06:07:40

End at: 2018-09-25 06:08:10

Local clock offset: 4.998 ms

Remote clock offset: -3.713 ms

Below is generated by plot.py at 2018-09-25 06:33:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.64 Mbit/s

95th percentile per-packet one-way delay: 9.627 ms

Loss rate: 10.03%

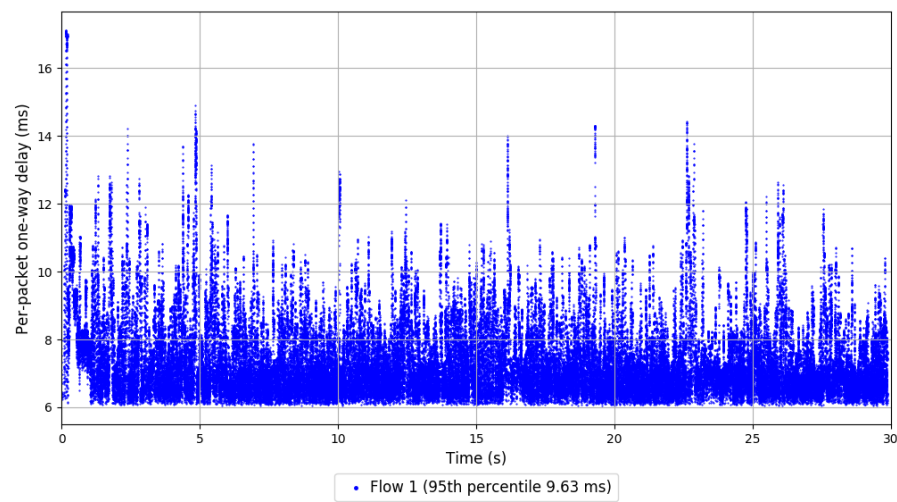
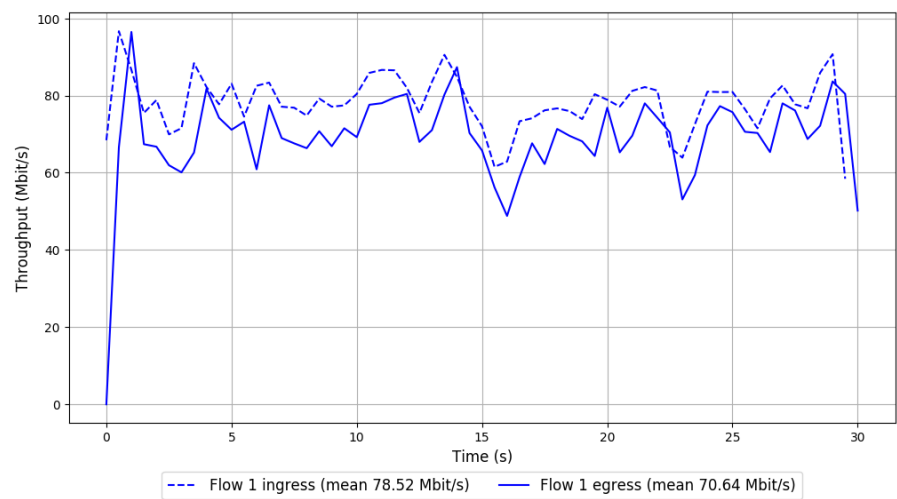
-- Flow 1:

Average throughput: 70.64 Mbit/s

95th percentile per-packet one-way delay: 9.627 ms

Loss rate: 10.03%

Run 5: Report of Indigo — Data Link



Run 1: Statistics of Indigo-96d2da3

Start at: 2018-09-25 04:58:20

End at: 2018-09-25 04:58:50

Local clock offset: 1.768 ms

Remote clock offset: -3.334 ms

Below is generated by plot.py at 2018-09-25 06:33:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.80 Mbit/s

95th percentile per-packet one-way delay: 36.148 ms

Loss rate: 34.42%

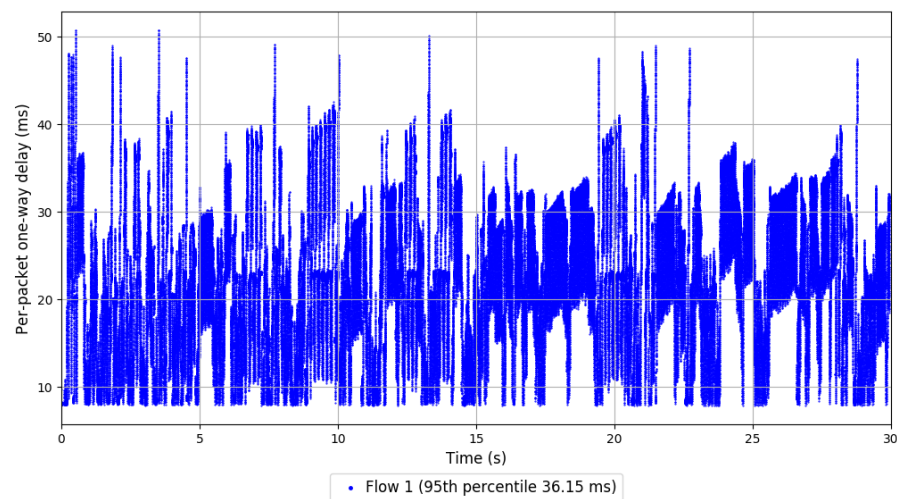
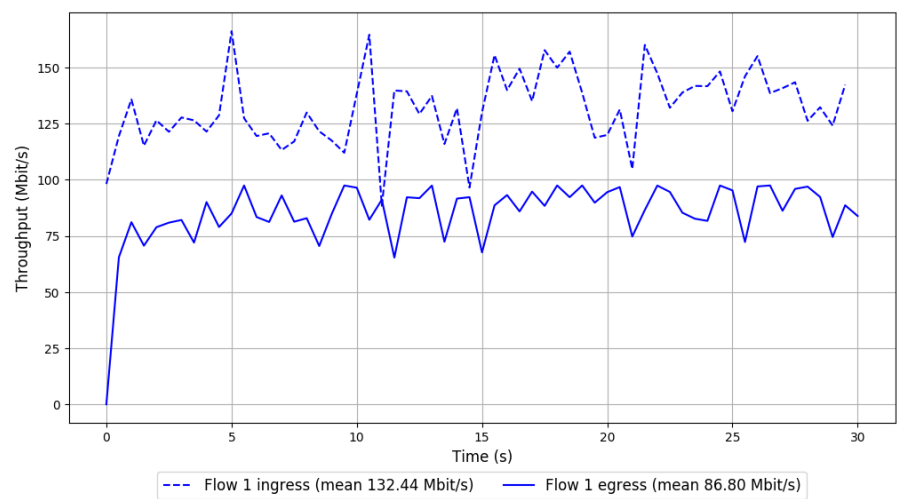
-- Flow 1:

Average throughput: 86.80 Mbit/s

95th percentile per-packet one-way delay: 36.148 ms

Loss rate: 34.42%

Run 1: Report of Indigo-96d2da3 — Data Link



Run 2: Statistics of Indigo-96d2da3

Start at: 2018-09-25 05:20:02

End at: 2018-09-25 05:20:32

Local clock offset: 5.041 ms

Remote clock offset: -3.56 ms

Below is generated by plot.py at 2018-09-25 06:34:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.82 Mbit/s

95th percentile per-packet one-way delay: 32.973 ms

Loss rate: 36.07%

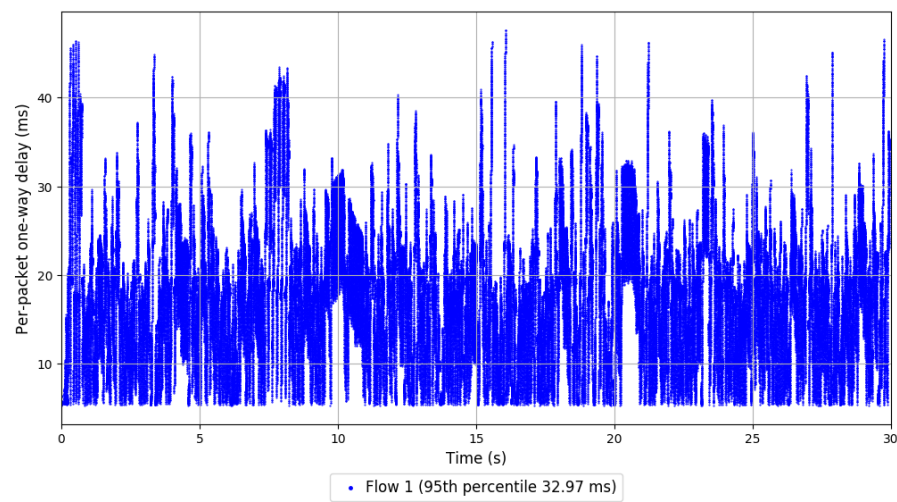
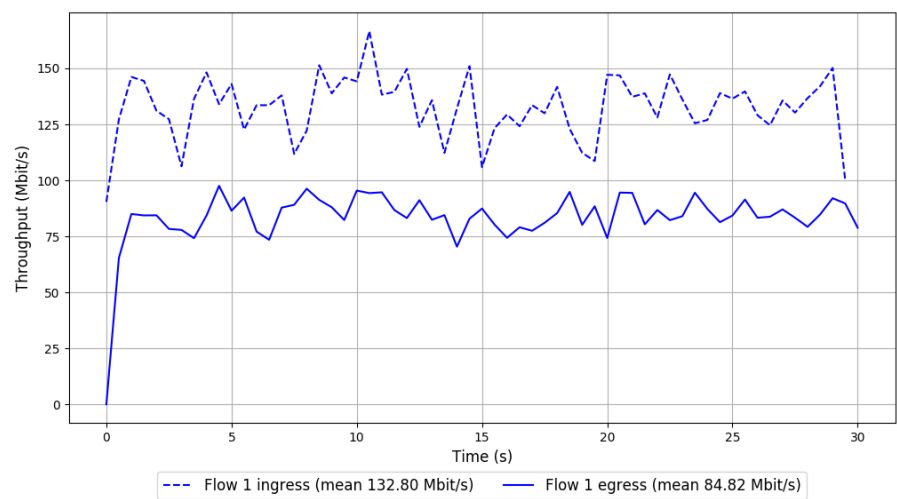
-- Flow 1:

Average throughput: 84.82 Mbit/s

95th percentile per-packet one-way delay: 32.973 ms

Loss rate: 36.07%

Run 2: Report of Indigo-96d2da3 — Data Link

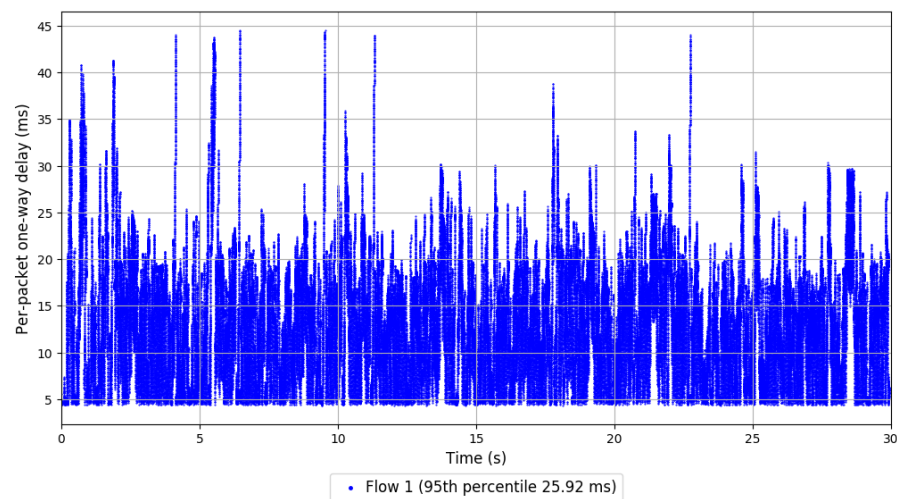
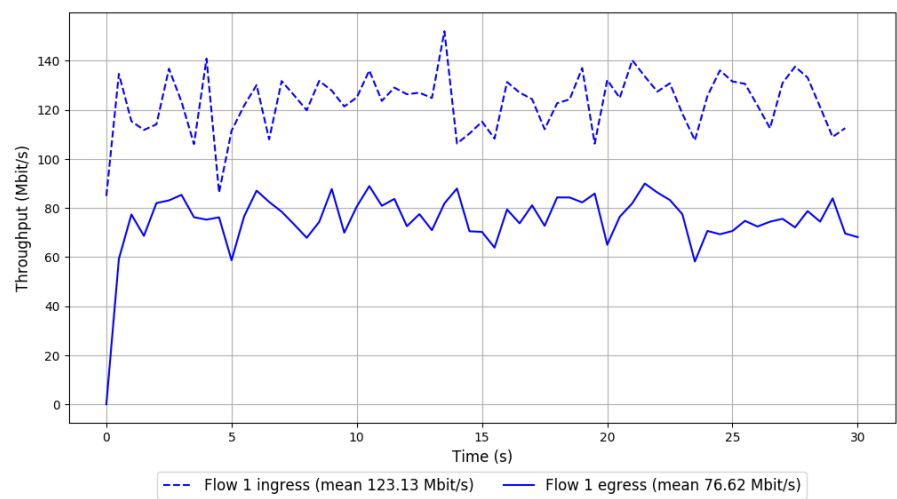


Run 3: Statistics of Indigo-96d2da3

Start at: 2018-09-25 05:41:32
End at: 2018-09-25 05:42:02
Local clock offset: 5.142 ms
Remote clock offset: -4.208 ms

Below is generated by plot.py at 2018-09-25 06:34:04
Datalink statistics
-- Total of 1 flow:
Average throughput: 76.62 Mbit/s
95th percentile per-packet one-way delay: 25.924 ms
Loss rate: 37.77%
-- Flow 1:
Average throughput: 76.62 Mbit/s
95th percentile per-packet one-way delay: 25.924 ms
Loss rate: 37.77%

Run 3: Report of Indigo-96d2da3 — Data Link

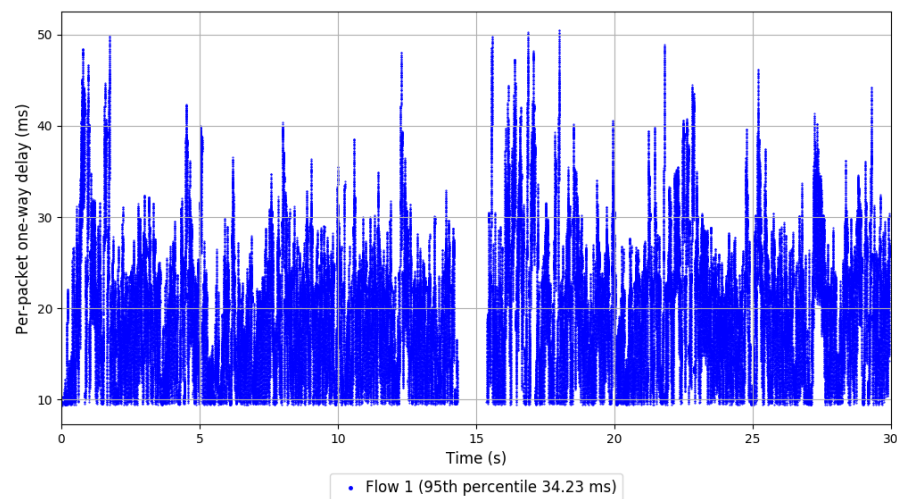
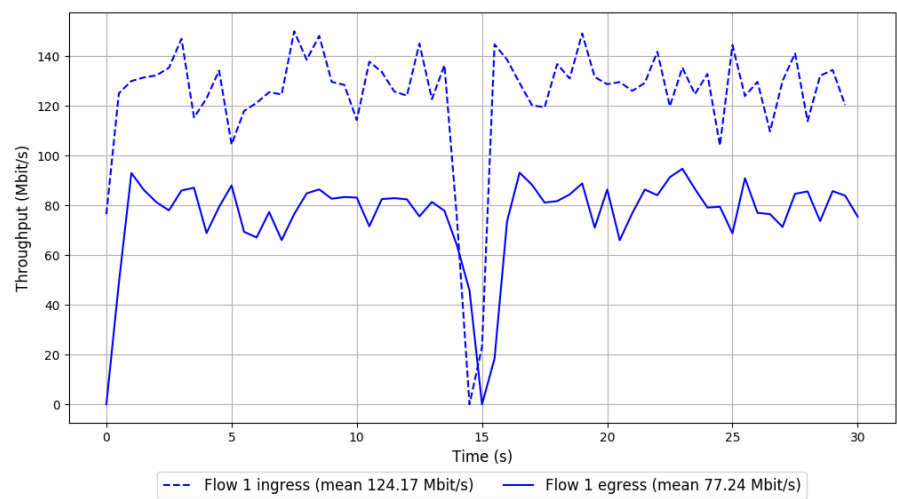


Run 4: Statistics of Indigo-96d2da3

Start at: 2018-09-25 06:03:01
End at: 2018-09-25 06:03:31
Local clock offset: 1.412 ms
Remote clock offset: -3.815 ms

Below is generated by plot.py at 2018-09-25 06:34:04
Datalink statistics
-- Total of 1 flow:
Average throughput: 77.24 Mbit/s
95th percentile per-packet one-way delay: 34.226 ms
Loss rate: 37.78%
-- Flow 1:
Average throughput: 77.24 Mbit/s
95th percentile per-packet one-way delay: 34.226 ms
Loss rate: 37.78%

Run 4: Report of Indigo-96d2da3 — Data Link



Run 5: Statistics of Indigo-96d2da3

Start at: 2018-09-25 06:24:43

End at: 2018-09-25 06:25:13

Local clock offset: 1.971 ms

Remote clock offset: -4.853 ms

Below is generated by plot.py at 2018-09-25 06:34:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.41 Mbit/s

95th percentile per-packet one-way delay: 30.637 ms

Loss rate: 35.29%

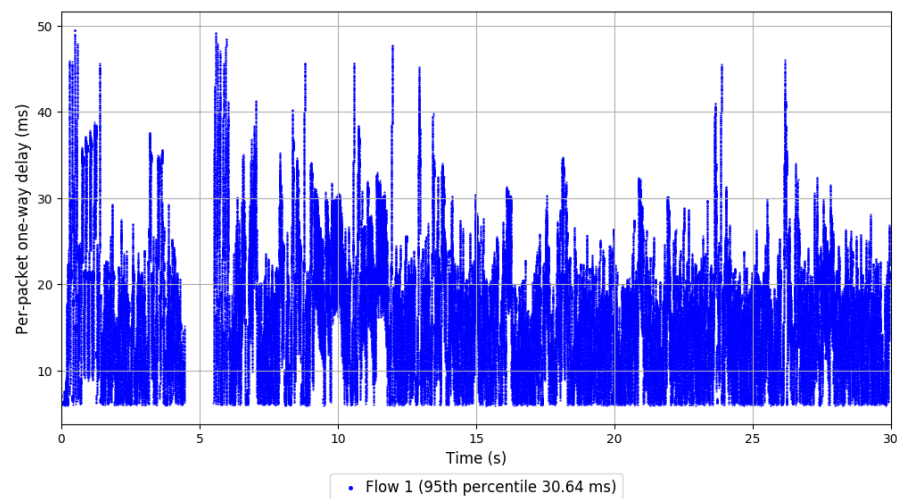
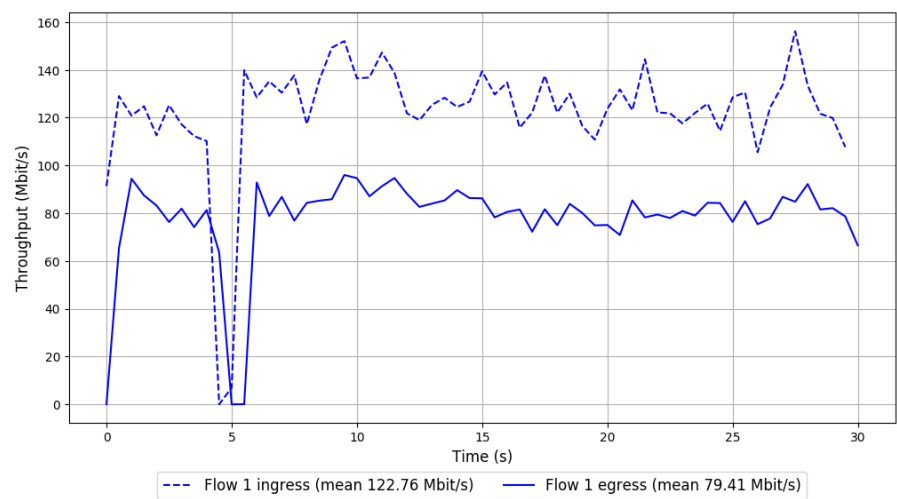
-- Flow 1:

Average throughput: 79.41 Mbit/s

95th percentile per-packet one-way delay: 30.637 ms

Loss rate: 35.29%

Run 5: Report of Indigo-96d2da3 — Data Link

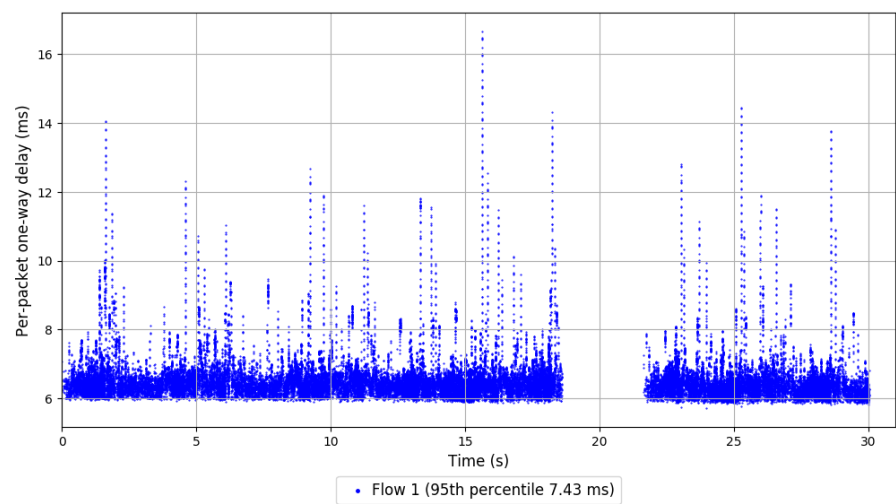
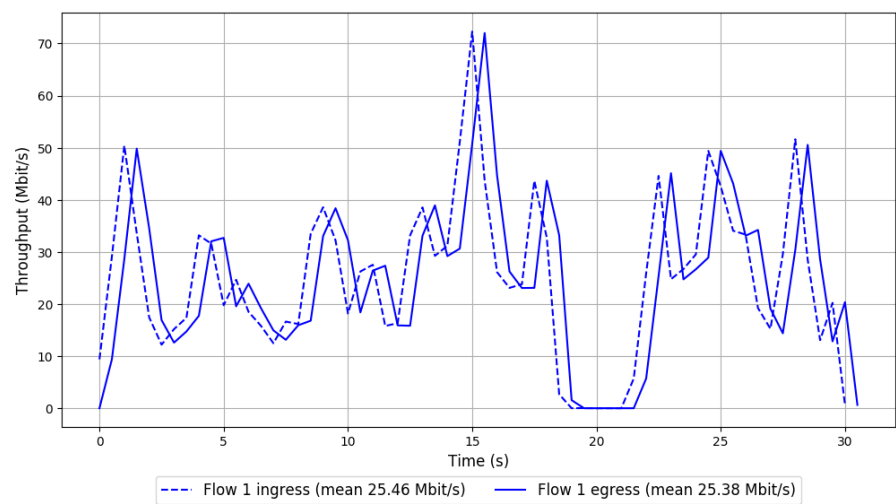


Run 1: Statistics of LEDBAT

Start at: 2018-09-25 04:57:12
End at: 2018-09-25 04:57:42
Local clock offset: 4.294 ms
Remote clock offset: -3.967 ms

Below is generated by plot.py at 2018-09-25 06:34:05
Datalink statistics
-- Total of 1 flow:
Average throughput: 25.38 Mbit/s
95th percentile per-packet one-way delay: 7.428 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 25.38 Mbit/s
95th percentile per-packet one-way delay: 7.428 ms
Loss rate: 0.29%

Run 1: Report of LEDBAT — Data Link

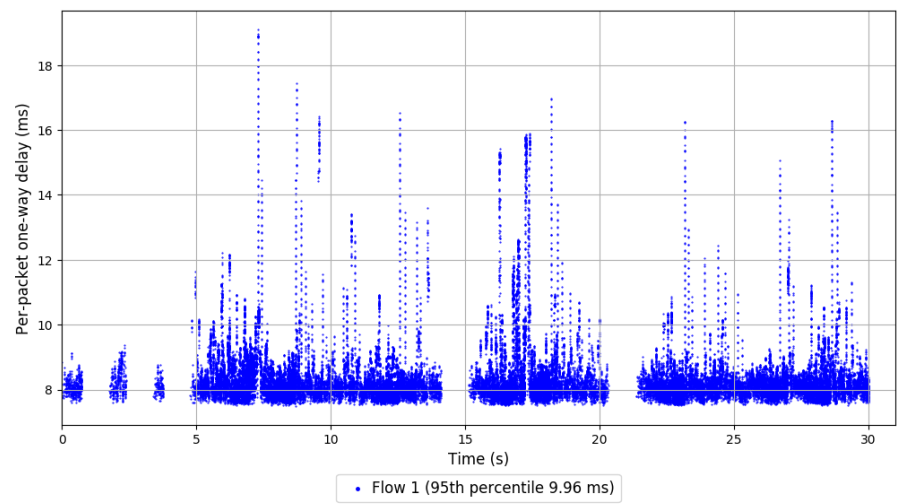
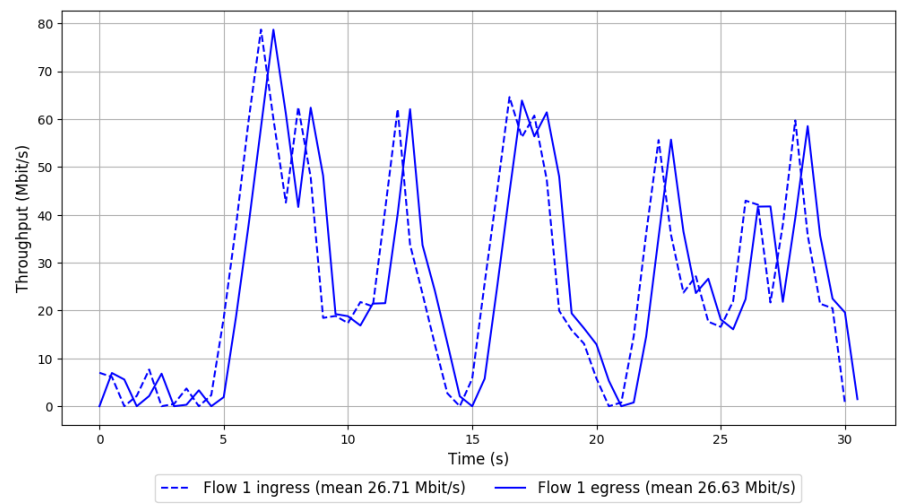


Run 2: Statistics of LEDBAT

Start at: 2018-09-25 05:18:55
End at: 2018-09-25 05:19:25
Local clock offset: 2.485 ms
Remote clock offset: -3.881 ms

Below is generated by plot.py at 2018-09-25 06:34:05
Datalink statistics
-- Total of 1 flow:
Average throughput: 26.63 Mbit/s
95th percentile per-packet one-way delay: 9.959 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 26.63 Mbit/s
95th percentile per-packet one-way delay: 9.959 ms
Loss rate: 0.31%

Run 2: Report of LEDBAT — Data Link

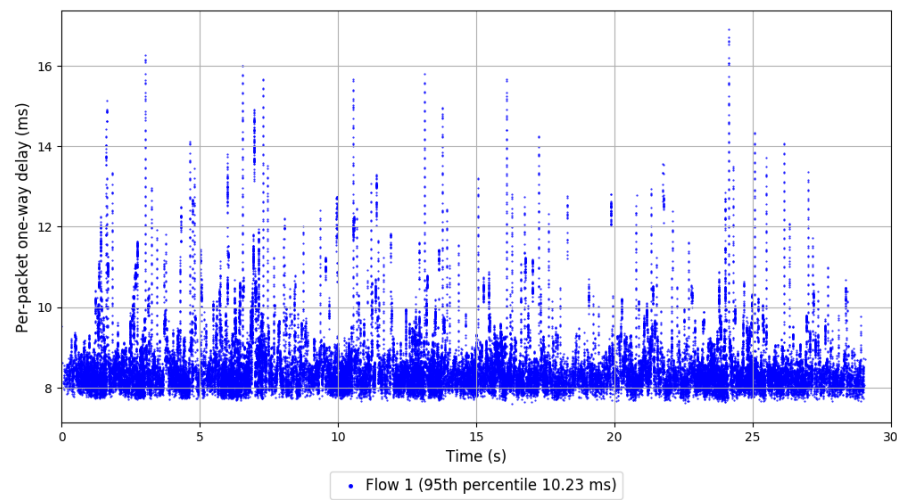
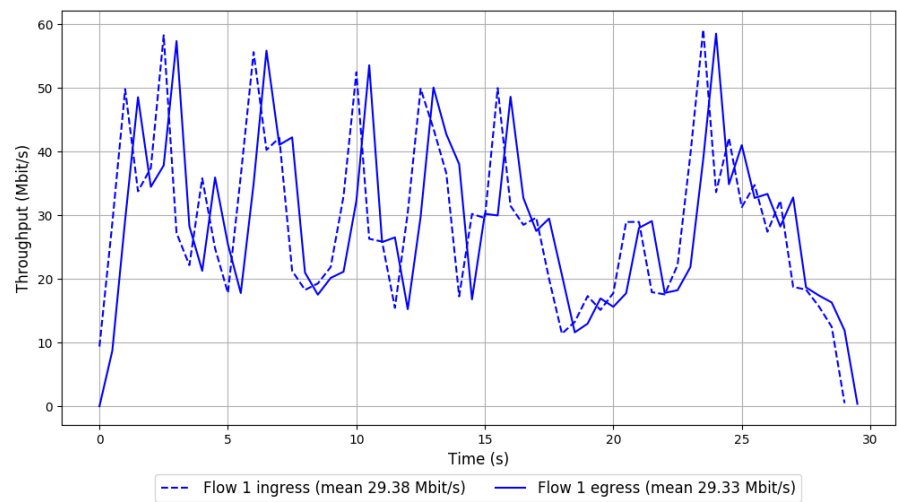


Run 3: Statistics of LEDBAT

Start at: 2018-09-25 05:40:25
End at: 2018-09-25 05:40:55
Local clock offset: 2.911 ms
Remote clock offset: -4.194 ms

Below is generated by plot.py at 2018-09-25 06:34:05
Datalink statistics
-- Total of 1 flow:
Average throughput: 29.33 Mbit/s
95th percentile per-packet one-way delay: 10.231 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 29.33 Mbit/s
95th percentile per-packet one-way delay: 10.231 ms
Loss rate: 0.18%

Run 3: Report of LEDBAT — Data Link

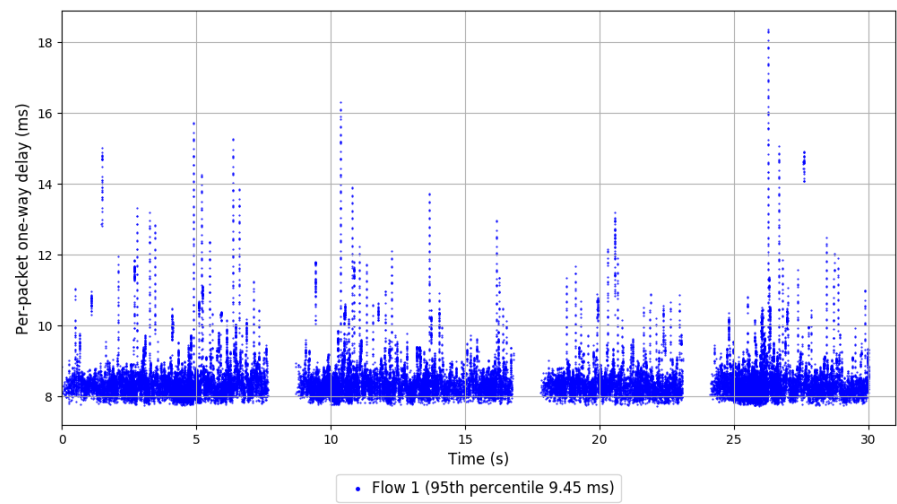
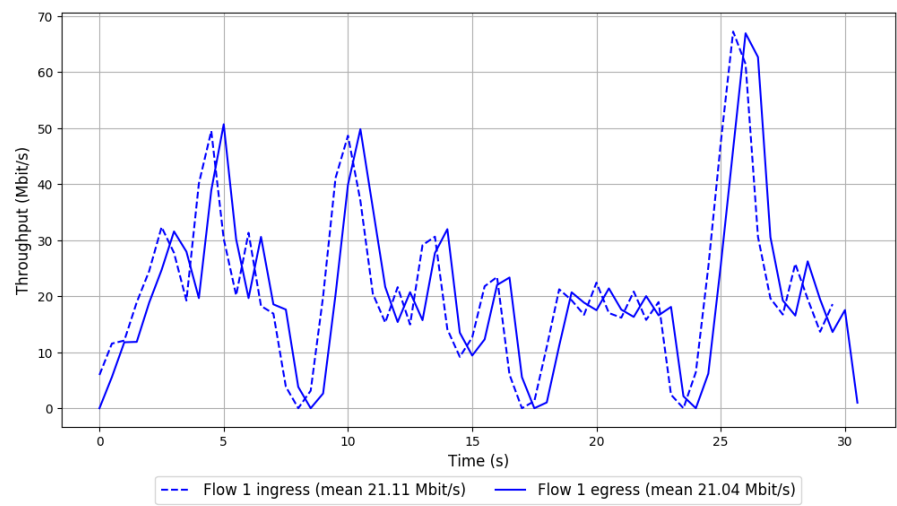


Run 4: Statistics of LEDBAT

Start at: 2018-09-25 06:01:52
End at: 2018-09-25 06:02:22
Local clock offset: 2.661 ms
Remote clock offset: -4.139 ms

Below is generated by plot.py at 2018-09-25 06:34:05
Datalink statistics
-- Total of 1 flow:
Average throughput: 21.04 Mbit/s
95th percentile per-packet one-way delay: 9.454 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 21.04 Mbit/s
95th percentile per-packet one-way delay: 9.454 ms
Loss rate: 0.34%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-09-25 06:23:34

End at: 2018-09-25 06:24:04

Local clock offset: 1.752 ms

Remote clock offset: -4.606 ms

Below is generated by plot.py at 2018-09-25 06:34:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 37.57 Mbit/s

95th percentile per-packet one-way delay: 8.934 ms

Loss rate: 0.10%

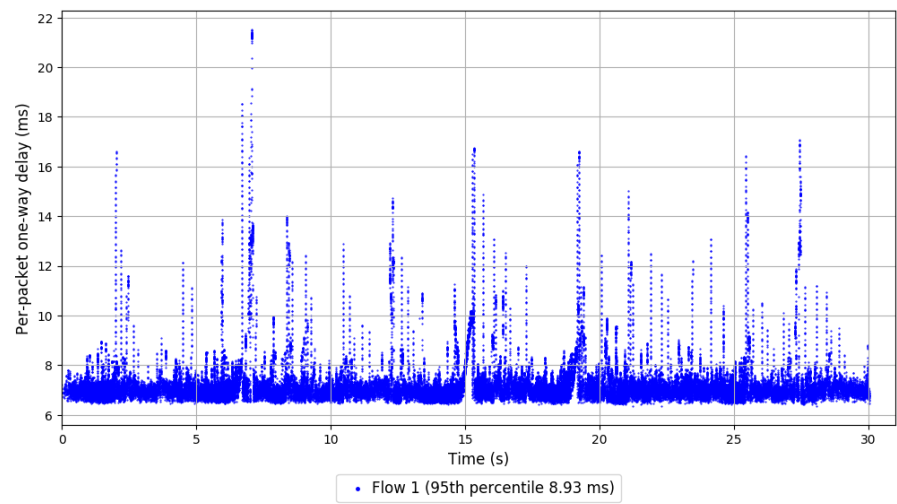
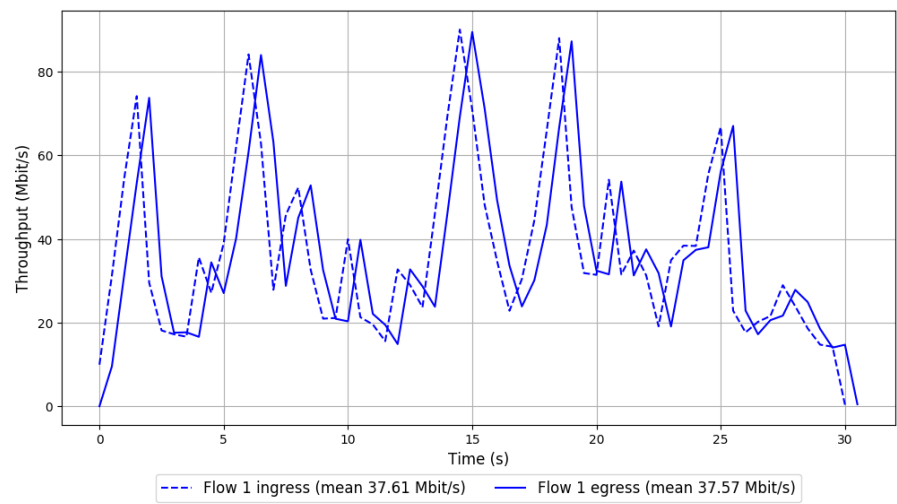
-- Flow 1:

Average throughput: 37.57 Mbit/s

95th percentile per-packet one-way delay: 8.934 ms

Loss rate: 0.10%

Run 5: Report of LEDBAT — Data Link



Run 1: Statistics of Indigo-Muses

Start at: 2018-09-25 05:01:51

End at: 2018-09-25 05:02:21

Local clock offset: 0.036 ms

Remote clock offset: -6.5 ms

Below is generated by plot.py at 2018-09-25 06:34:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.71 Mbit/s

95th percentile per-packet one-way delay: 8.573 ms

Loss rate: 5.12%

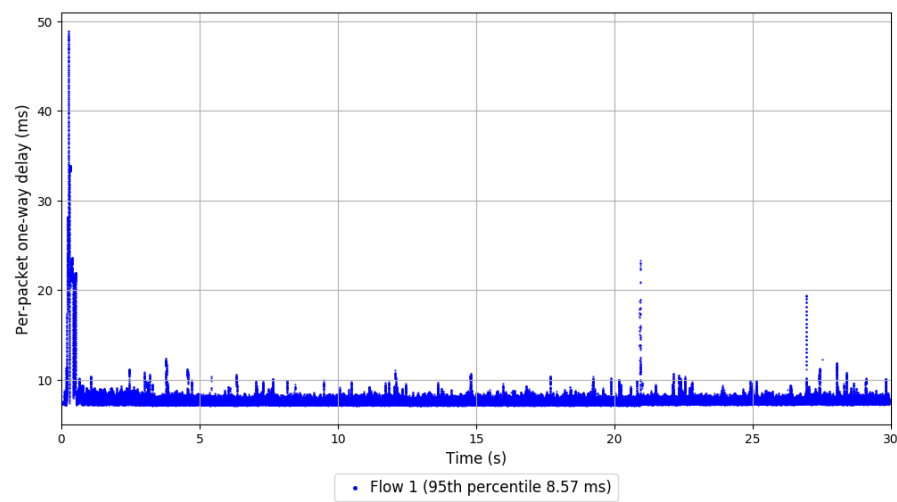
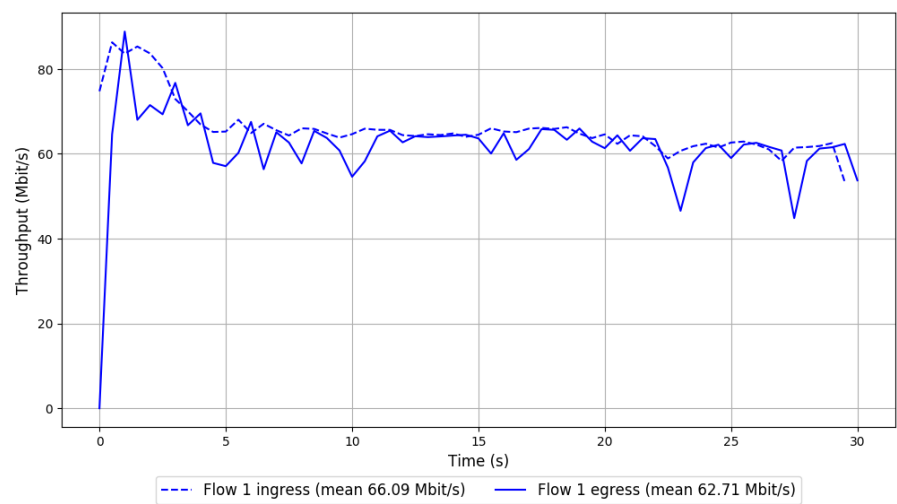
-- Flow 1:

Average throughput: 62.71 Mbit/s

95th percentile per-packet one-way delay: 8.573 ms

Loss rate: 5.12%

Run 1: Report of Indigo-Muses — Data Link

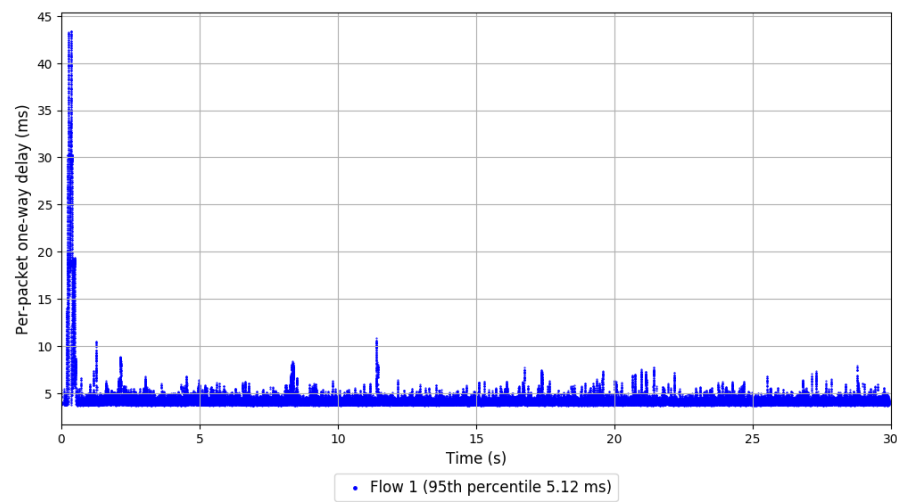
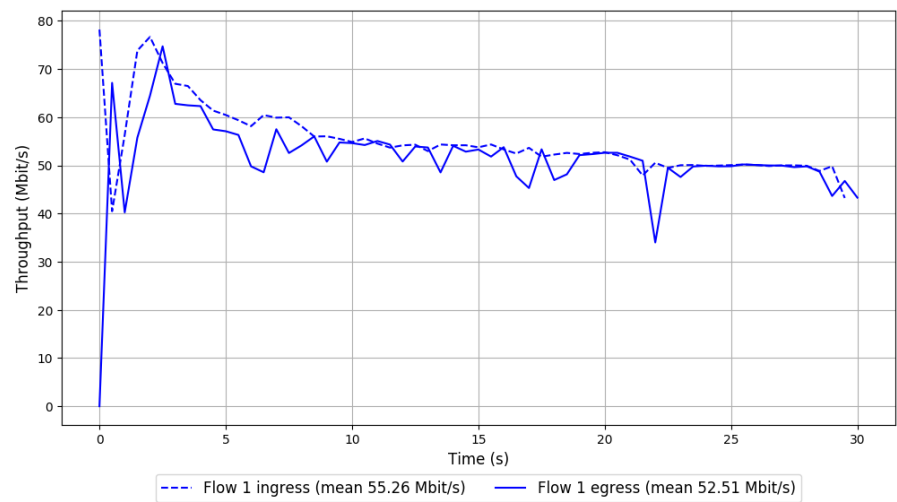


Run 2: Statistics of Indigo-Muses

Start at: 2018-09-25 05:23:30
End at: 2018-09-25 05:24:00
Local clock offset: 4.449 ms
Remote clock offset: -4.918 ms

Below is generated by plot.py at 2018-09-25 06:34:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 52.51 Mbit/s
95th percentile per-packet one-way delay: 5.117 ms
Loss rate: 4.98%
-- Flow 1:
Average throughput: 52.51 Mbit/s
95th percentile per-packet one-way delay: 5.117 ms
Loss rate: 4.98%

Run 2: Report of Indigo-Muses — Data Link

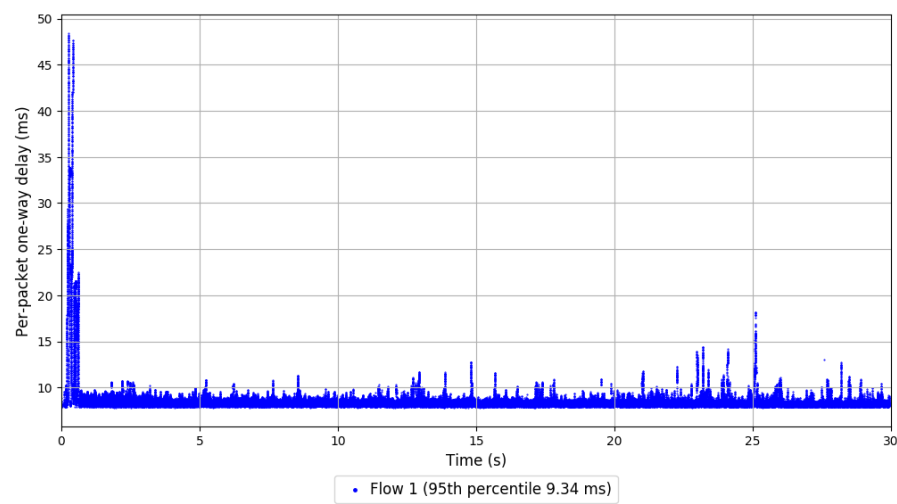
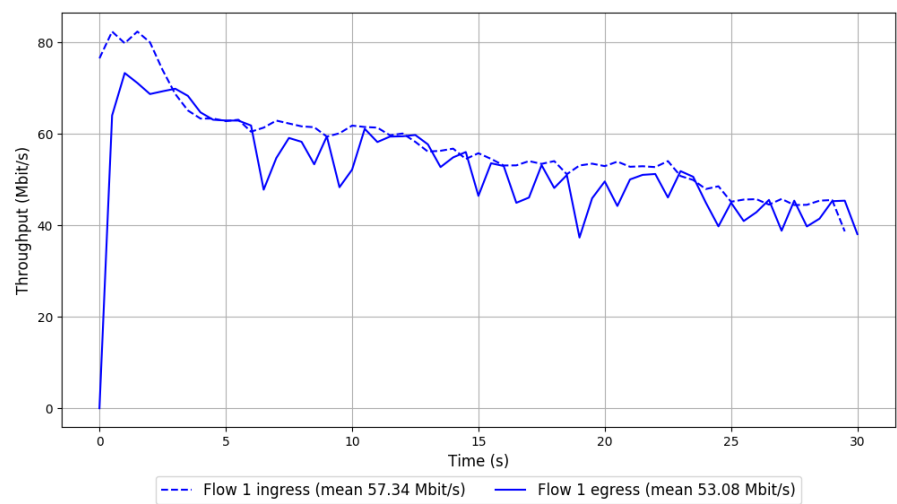


Run 3: Statistics of Indigo-Muses

Start at: 2018-09-25 05:44:54
End at: 2018-09-25 05:45:24
Local clock offset: 1.231 ms
Remote clock offset: -4.406 ms

Below is generated by plot.py at 2018-09-25 06:34:11
Datalink statistics
-- Total of 1 flow:
Average throughput: 53.08 Mbit/s
95th percentile per-packet one-way delay: 9.336 ms
Loss rate: 7.43%
-- Flow 1:
Average throughput: 53.08 Mbit/s
95th percentile per-packet one-way delay: 9.336 ms
Loss rate: 7.43%

Run 3: Report of Indigo-Muses — Data Link

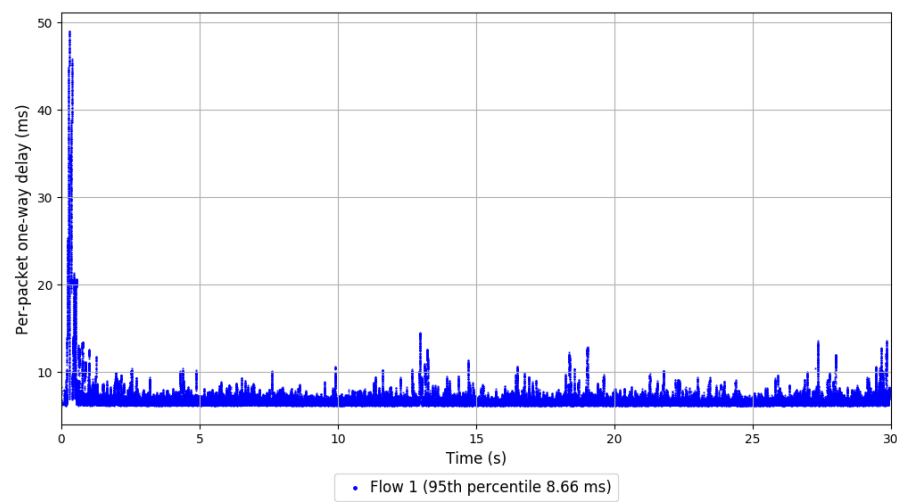
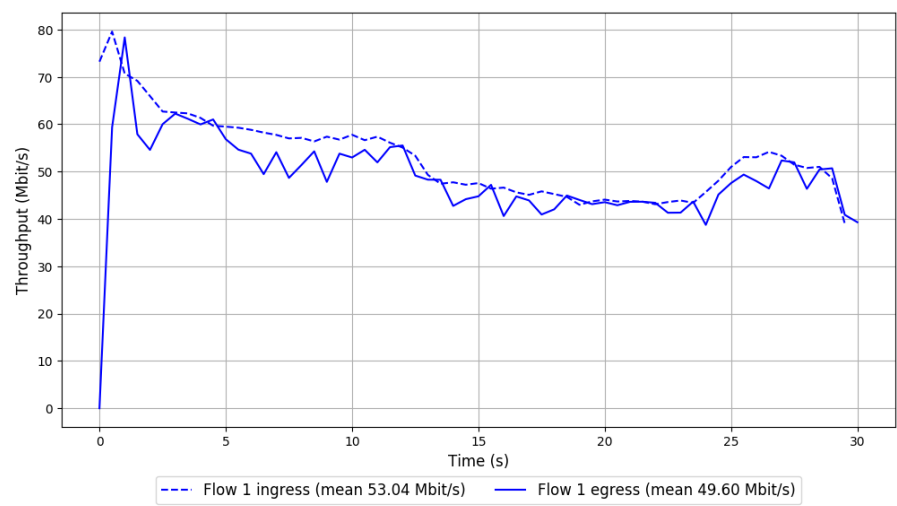


Run 4: Statistics of Indigo-Muses

Start at: 2018-09-25 06:06:31
End at: 2018-09-25 06:07:01
Local clock offset: 4.09 ms
Remote clock offset: -4.436 ms

Below is generated by plot.py at 2018-09-25 06:34:22
Datalink statistics
-- Total of 1 flow:
Average throughput: 49.60 Mbit/s
95th percentile per-packet one-way delay: 8.659 ms
Loss rate: 6.50%
-- Flow 1:
Average throughput: 49.60 Mbit/s
95th percentile per-packet one-way delay: 8.659 ms
Loss rate: 6.50%

Run 4: Report of Indigo-Muses — Data Link

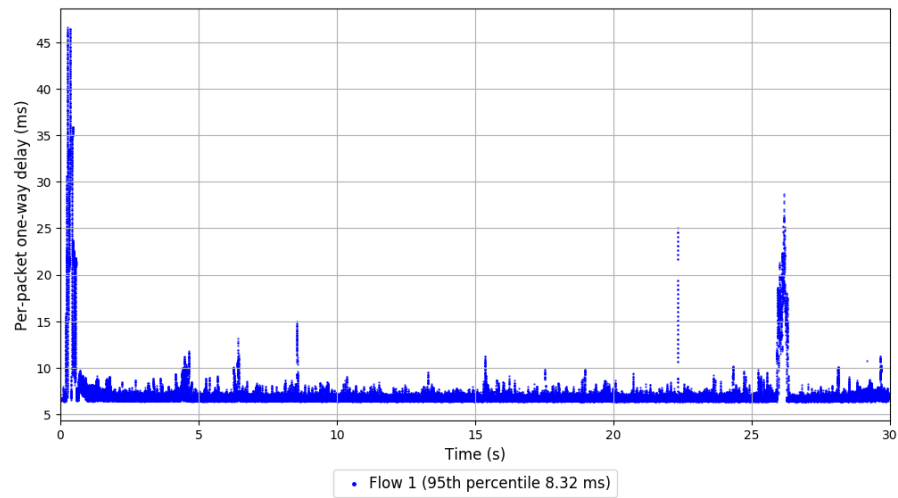
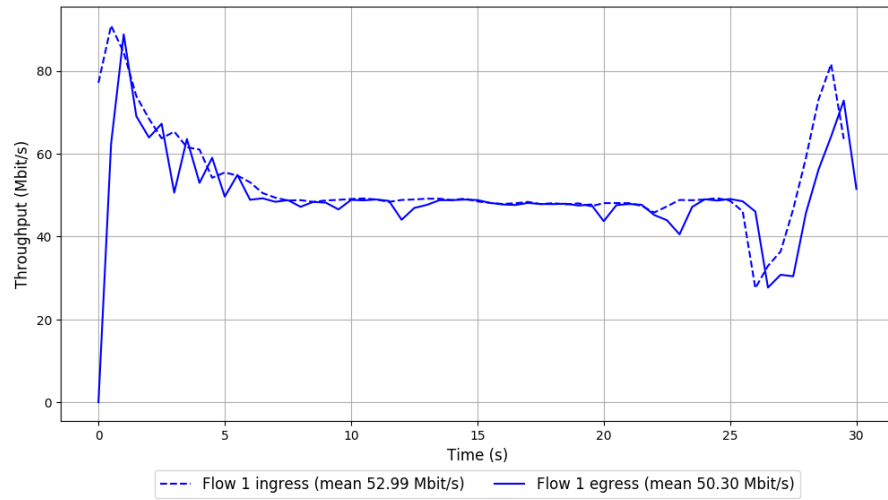


Run 5: Statistics of Indigo-Muses

Start at: 2018-09-25 06:28:10
End at: 2018-09-25 06:28:40
Local clock offset: 1.583 ms
Remote clock offset: -4.777 ms

Below is generated by plot.py at 2018-09-25 06:34:38
Datalink statistics
-- Total of 1 flow:
Average throughput: 50.30 Mbit/s
95th percentile per-packet one-way delay: 8.322 ms
Loss rate: 5.09%
-- Flow 1:
Average throughput: 50.30 Mbit/s
95th percentile per-packet one-way delay: 8.322 ms
Loss rate: 5.09%

Run 5: Report of Indigo-Muses — Data Link

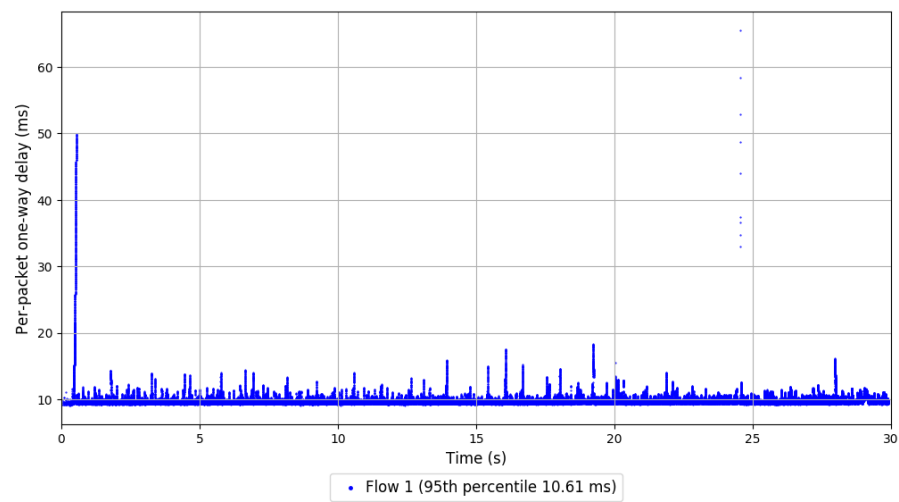
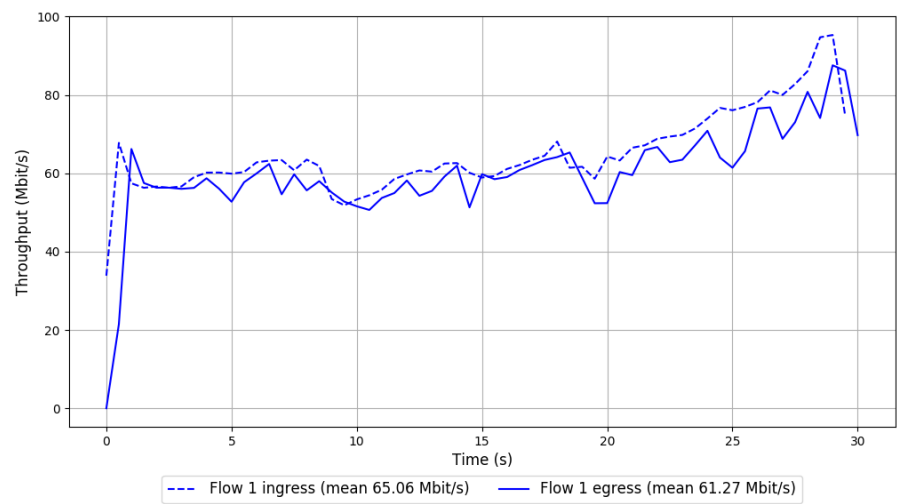


```
Run 1: Statistics of PCC-Allegro

Start at: 2018-09-25 04:54:54
End at: 2018-09-25 04:55:24
Local clock offset: 0.49 ms
Remote clock offset: -3.628 ms

# Below is generated by plot.py at 2018-09-25 06:34:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.27 Mbit/s
95th percentile per-packet one-way delay: 10.608 ms
Loss rate: 5.84%
-- Flow 1:
Average throughput: 61.27 Mbit/s
95th percentile per-packet one-way delay: 10.608 ms
Loss rate: 5.84%
```

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2018-09-25 05:16:44

End at: 2018-09-25 05:17:14

Local clock offset: 1.359 ms

Remote clock offset: -4.644 ms

Below is generated by plot.py at 2018-09-25 06:34:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.47 Mbit/s

95th percentile per-packet one-way delay: 8.003 ms

Loss rate: 9.26%

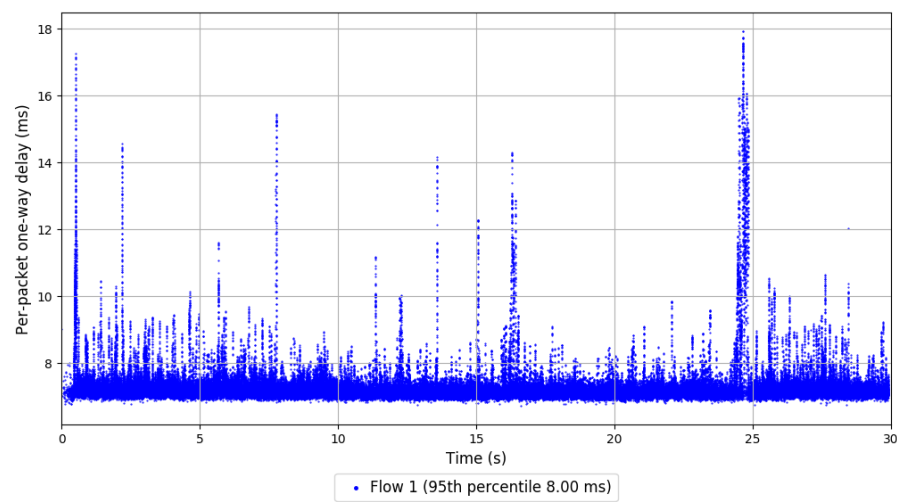
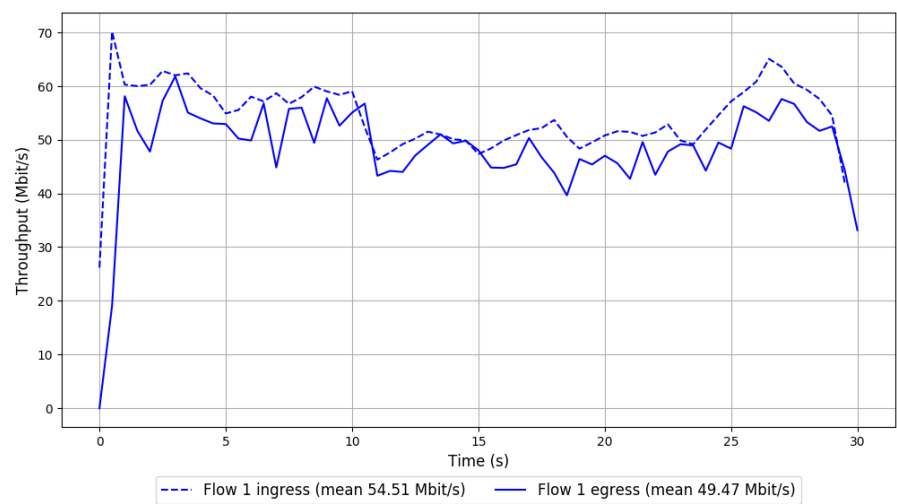
-- Flow 1:

Average throughput: 49.47 Mbit/s

95th percentile per-packet one-way delay: 8.003 ms

Loss rate: 9.26%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2018-09-25 05:38:12

End at: 2018-09-25 05:38:42

Local clock offset: 4.717 ms

Remote clock offset: -4.499 ms

Below is generated by plot.py at 2018-09-25 06:34:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.45 Mbit/s

95th percentile per-packet one-way delay: 6.107 ms

Loss rate: 11.41%

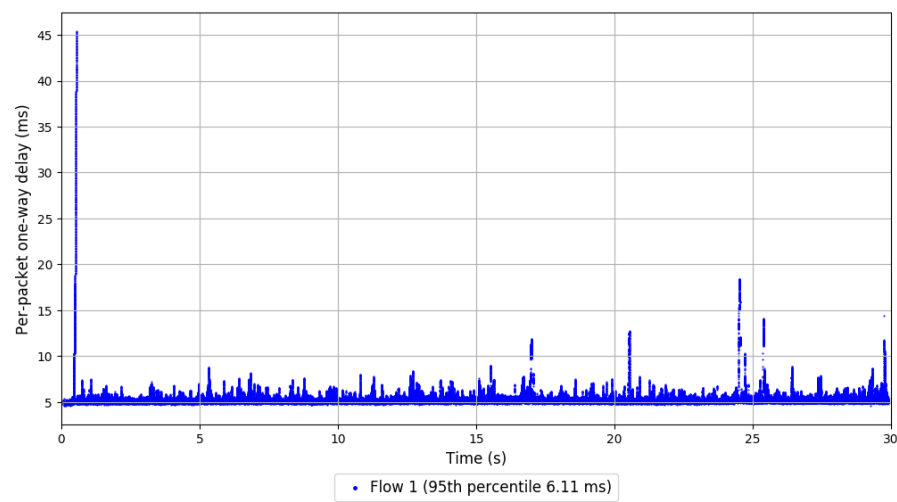
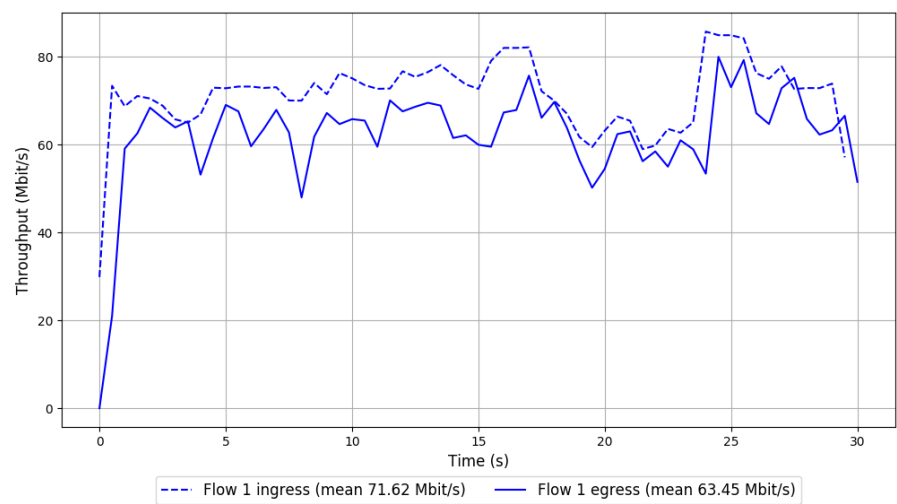
-- Flow 1:

Average throughput: 63.45 Mbit/s

95th percentile per-packet one-way delay: 6.107 ms

Loss rate: 11.41%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2018-09-25 05:59:39

End at: 2018-09-25 06:00:10

Local clock offset: 1.991 ms

Remote clock offset: -4.73 ms

Below is generated by plot.py at 2018-09-25 06:35:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.08 Mbit/s

95th percentile per-packet one-way delay: 8.130 ms

Loss rate: 8.22%

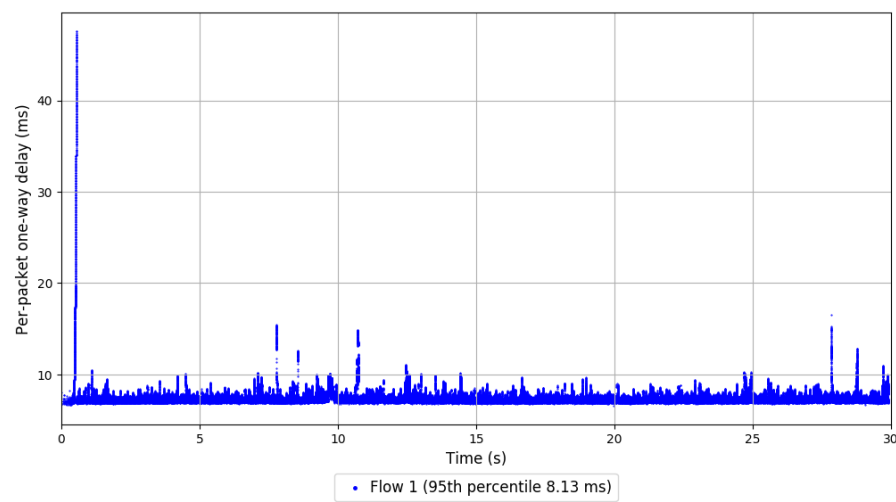
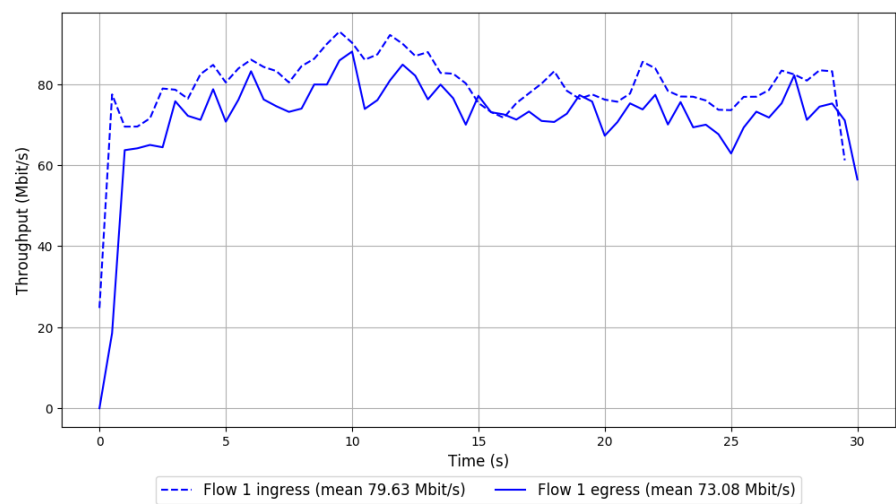
-- Flow 1:

Average throughput: 73.08 Mbit/s

95th percentile per-packet one-way delay: 8.130 ms

Loss rate: 8.22%

Run 4: Report of PCC-Allegro — Data Link

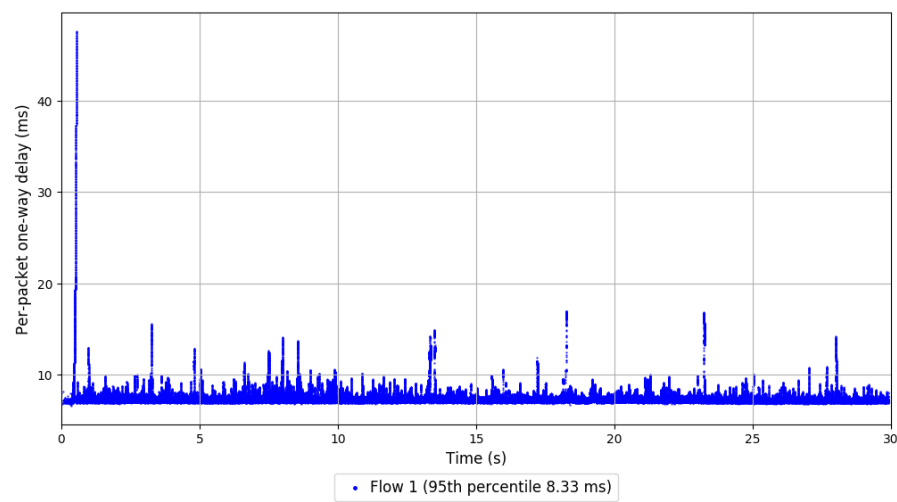
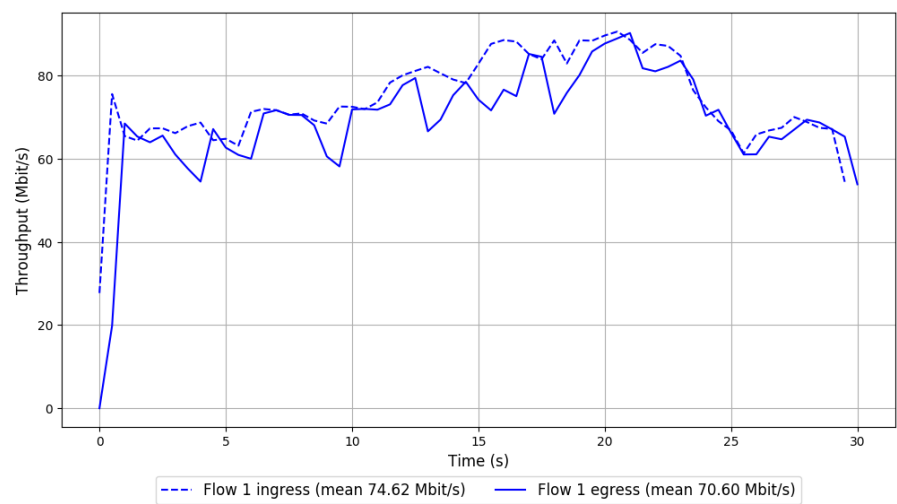


Run 5: Statistics of PCC-Allegro

Start at: 2018-09-25 06:21:21
End at: 2018-09-25 06:21:51
Local clock offset: 1.201 ms
Remote clock offset: -4.824 ms

Below is generated by plot.py at 2018-09-25 06:35:09
Datalink statistics
-- Total of 1 flow:
Average throughput: 70.60 Mbit/s
95th percentile per-packet one-way delay: 8.332 ms
Loss rate: 5.38%
-- Flow 1:
Average throughput: 70.60 Mbit/s
95th percentile per-packet one-way delay: 8.332 ms
Loss rate: 5.38%

Run 5: Report of PCC-Allegro — Data Link

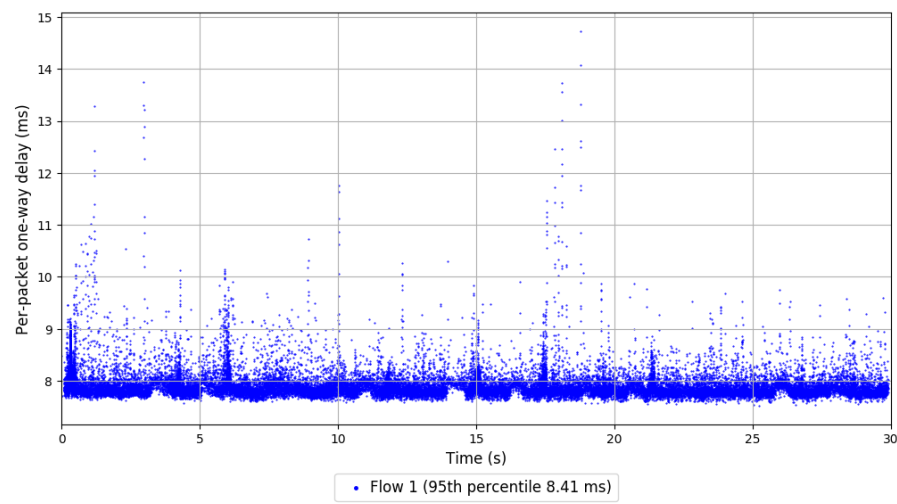
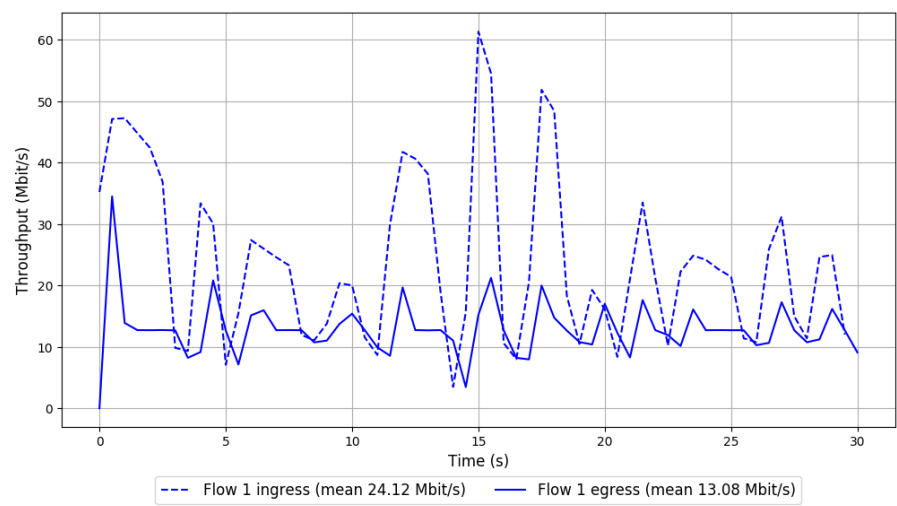


```
Run 1: Statistics of PCC-Expr

Start at: 2018-09-25 04:59:32
End at: 2018-09-25 05:00:02
Local clock offset: 1.027 ms
Remote clock offset: -4.266 ms

# Below is generated by plot.py at 2018-09-25 06:35:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.08 Mbit/s
95th percentile per-packet one-way delay: 8.415 ms
Loss rate: 45.76%
-- Flow 1:
Average throughput: 13.08 Mbit/s
95th percentile per-packet one-way delay: 8.415 ms
Loss rate: 45.76%
```

Run 1: Report of PCC-Expr — Data Link

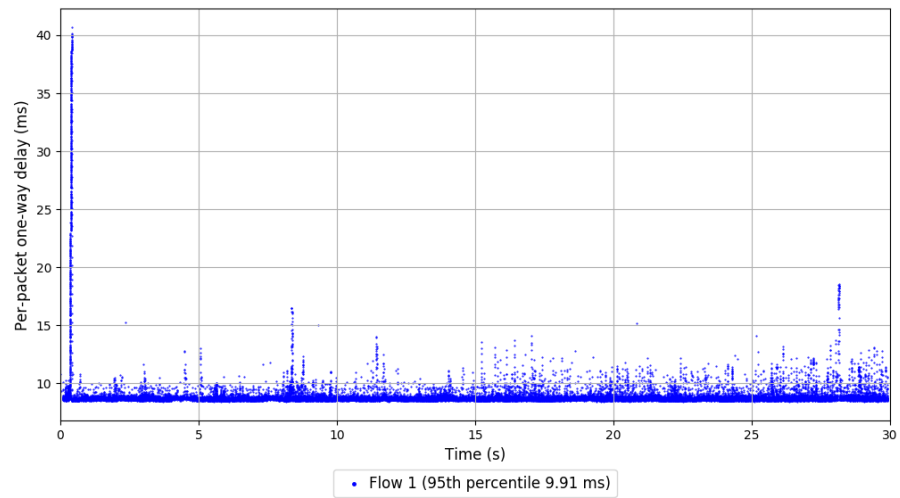
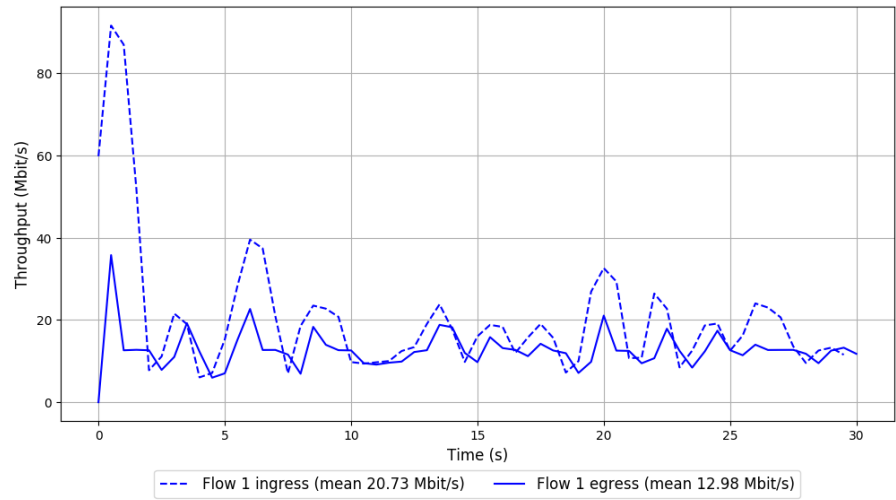


Run 2: Statistics of PCC-Expr

Start at: 2018-09-25 05:21:15
End at: 2018-09-25 05:21:45
Local clock offset: 0.433 ms
Remote clock offset: -4.122 ms

Below is generated by plot.py at 2018-09-25 06:35:09
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.98 Mbit/s
95th percentile per-packet one-way delay: 9.906 ms
Loss rate: 37.37%
-- Flow 1:
Average throughput: 12.98 Mbit/s
95th percentile per-packet one-way delay: 9.906 ms
Loss rate: 37.37%

Run 2: Report of PCC-Expr — Data Link

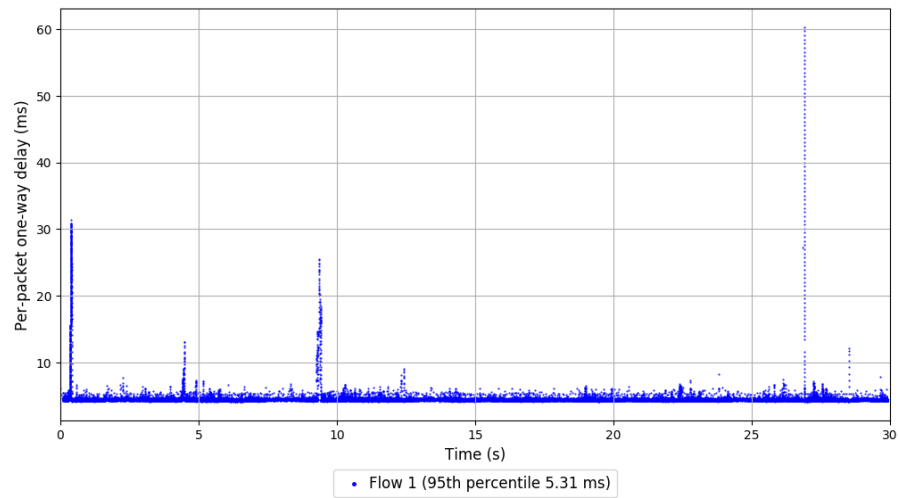
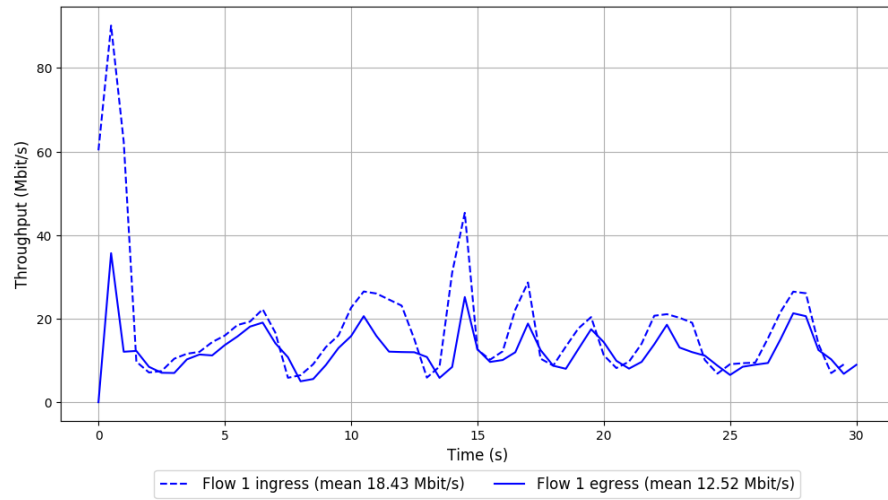


Run 3: Statistics of PCC-Expr

Start at: 2018-09-25 05:42:41
End at: 2018-09-25 05:43:11
Local clock offset: 4.783 ms
Remote clock offset: -4.679 ms

Below is generated by plot.py at 2018-09-25 06:35:09
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.52 Mbit/s
95th percentile per-packet one-way delay: 5.313 ms
Loss rate: 32.06%
-- Flow 1:
Average throughput: 12.52 Mbit/s
95th percentile per-packet one-way delay: 5.313 ms
Loss rate: 32.06%

Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2018-09-25 06:04:12

End at: 2018-09-25 06:04:42

Local clock offset: 3.943 ms

Remote clock offset: -3.984 ms

Below is generated by plot.py at 2018-09-25 06:35:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.05 Mbit/s

95th percentile per-packet one-way delay: 7.775 ms

Loss rate: 26.29%

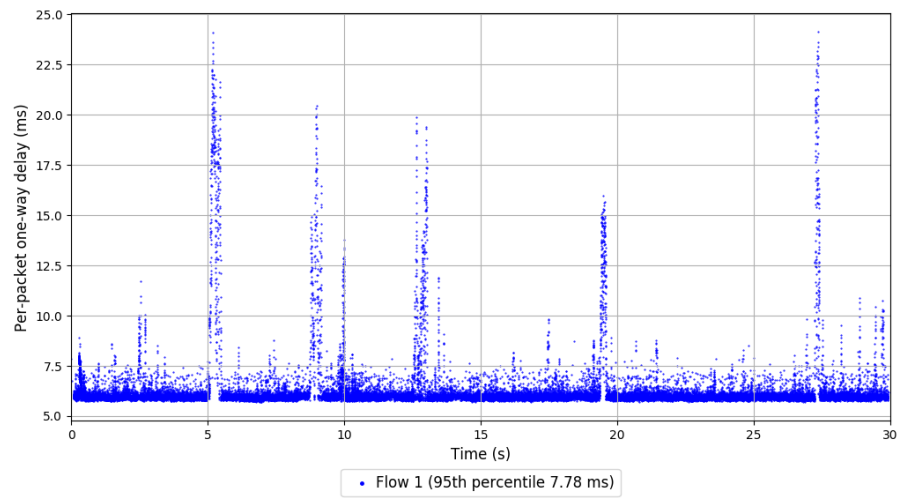
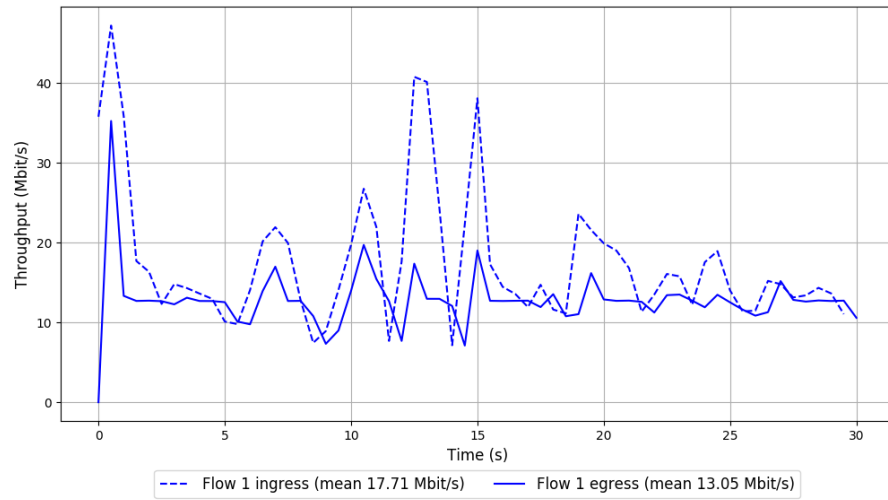
-- Flow 1:

Average throughput: 13.05 Mbit/s

95th percentile per-packet one-way delay: 7.775 ms

Loss rate: 26.29%

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2018-09-25 06:25:54

End at: 2018-09-25 06:26:24

Local clock offset: 1.318 ms

Remote clock offset: -5.086 ms

Below is generated by plot.py at 2018-09-25 06:35:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.00 Mbit/s

95th percentile per-packet one-way delay: 7.502 ms

Loss rate: 35.74%

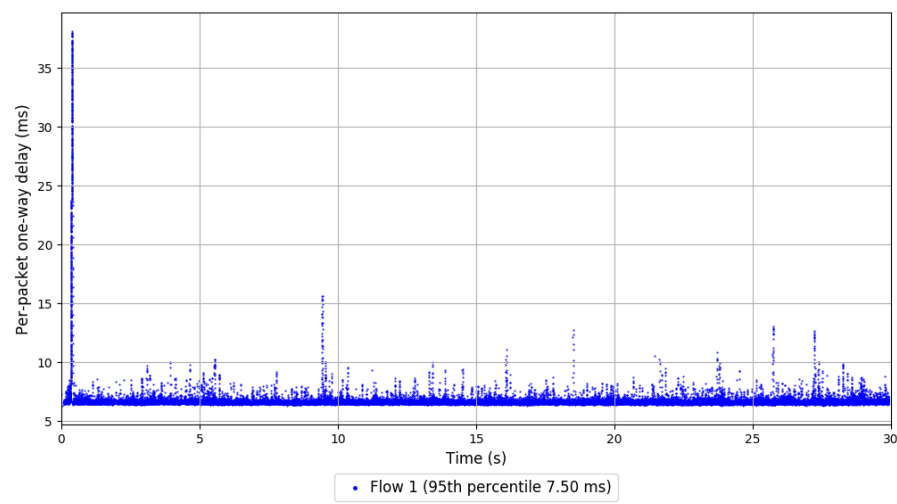
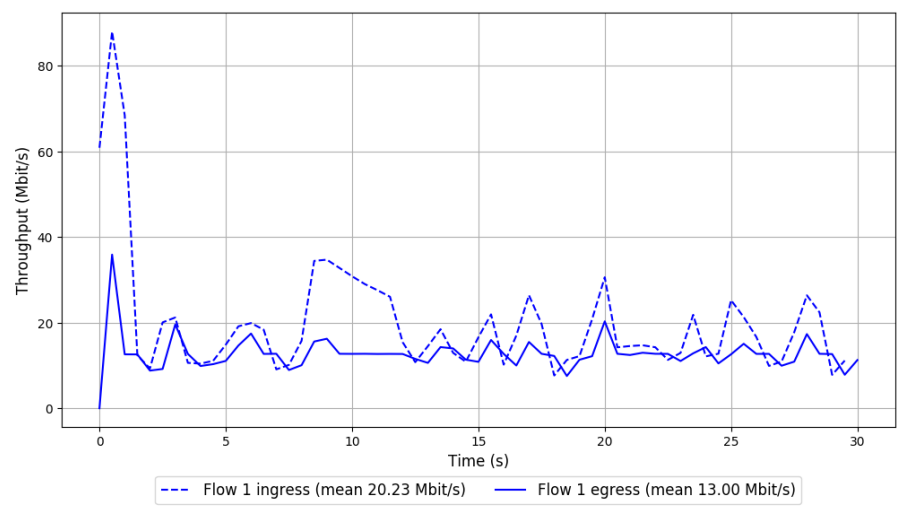
-- Flow 1:

Average throughput: 13.00 Mbit/s

95th percentile per-packet one-way delay: 7.502 ms

Loss rate: 35.74%

Run 5: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-09-25 04:44:42

End at: 2018-09-25 04:45:12

Local clock offset: 3.24 ms

Remote clock offset: -4.238 ms

Below is generated by plot.py at 2018-09-25 06:35:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 34.69 Mbit/s

95th percentile per-packet one-way delay: 31.349 ms

Loss rate: 1.07%

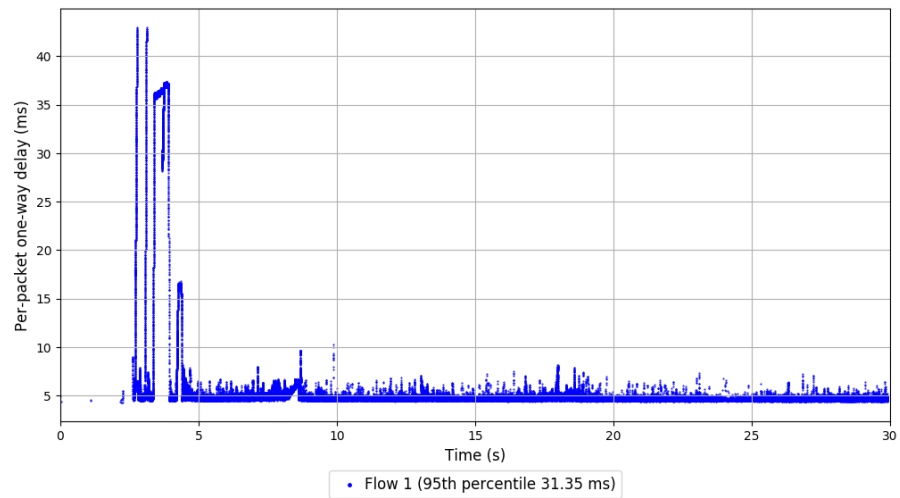
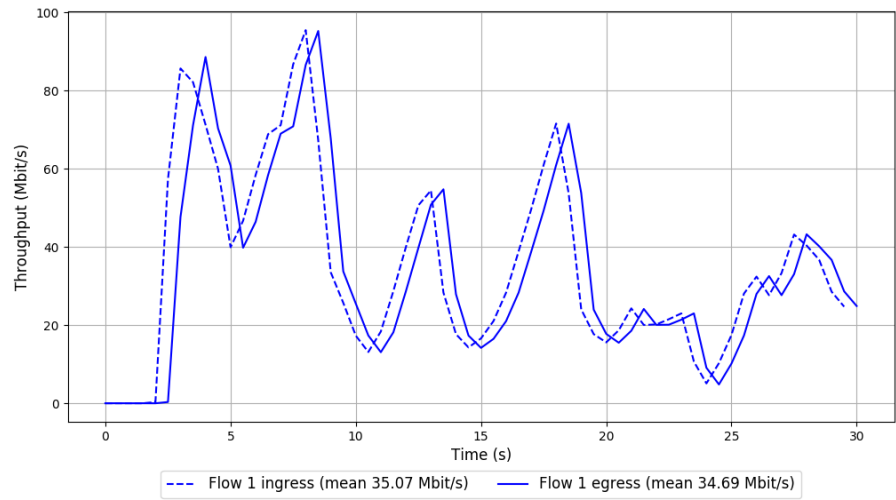
-- Flow 1:

Average throughput: 34.69 Mbit/s

95th percentile per-packet one-way delay: 31.349 ms

Loss rate: 1.07%

Run 1: Report of QUIC Cubic — Data Link

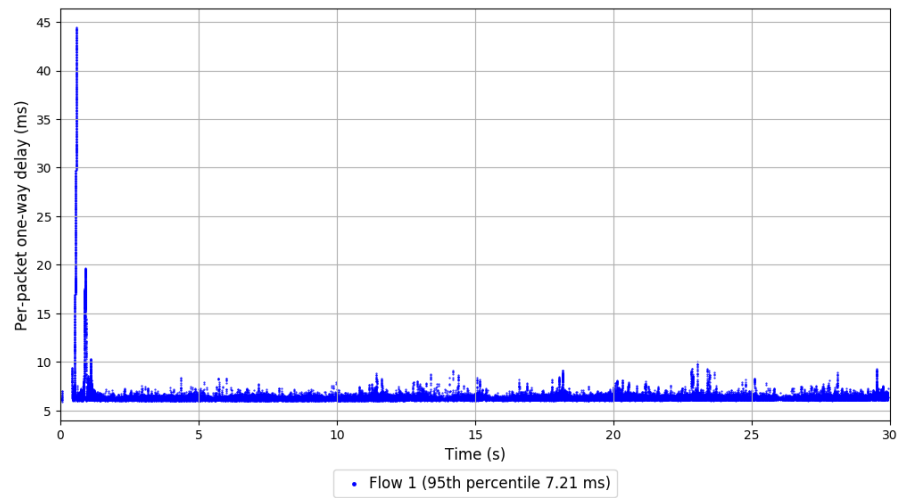
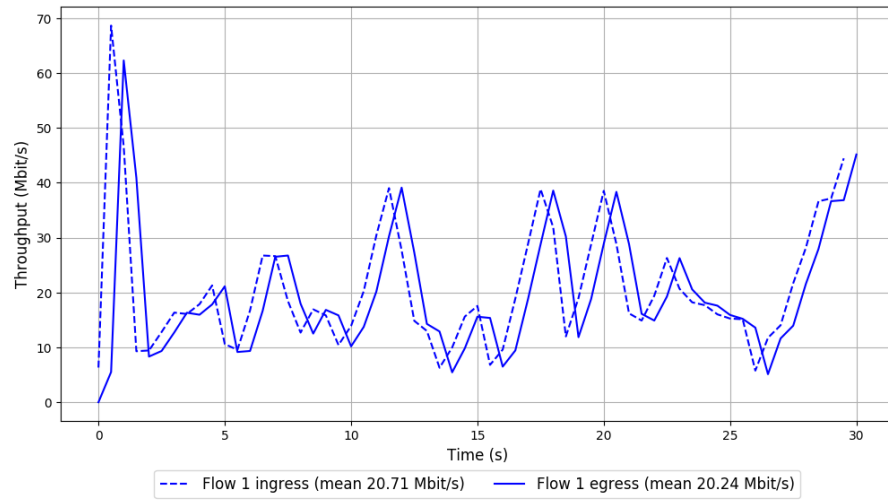


Run 2: Statistics of QUIC Cubic

Start at: 2018-09-25 05:06:30
End at: 2018-09-25 05:07:00
Local clock offset: 3.283 ms
Remote clock offset: -4.424 ms

Below is generated by plot.py at 2018-09-25 06:35:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 20.24 Mbit/s
95th percentile per-packet one-way delay: 7.210 ms
Loss rate: 2.24%
-- Flow 1:
Average throughput: 20.24 Mbit/s
95th percentile per-packet one-way delay: 7.210 ms
Loss rate: 2.24%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-09-25 05:28:01

End at: 2018-09-25 05:28:31

Local clock offset: 3.887 ms

Remote clock offset: -4.16 ms

Below is generated by plot.py at 2018-09-25 06:35:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 37.87 Mbit/s

95th percentile per-packet one-way delay: 10.656 ms

Loss rate: 0.89%

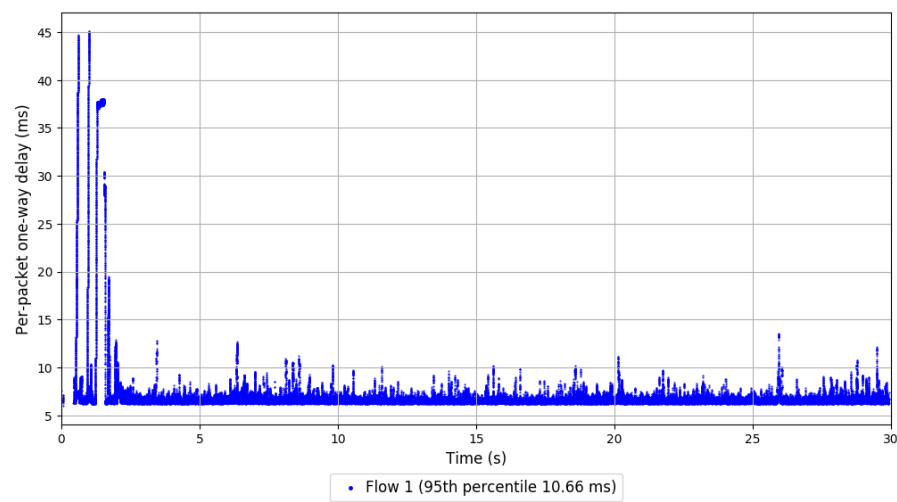
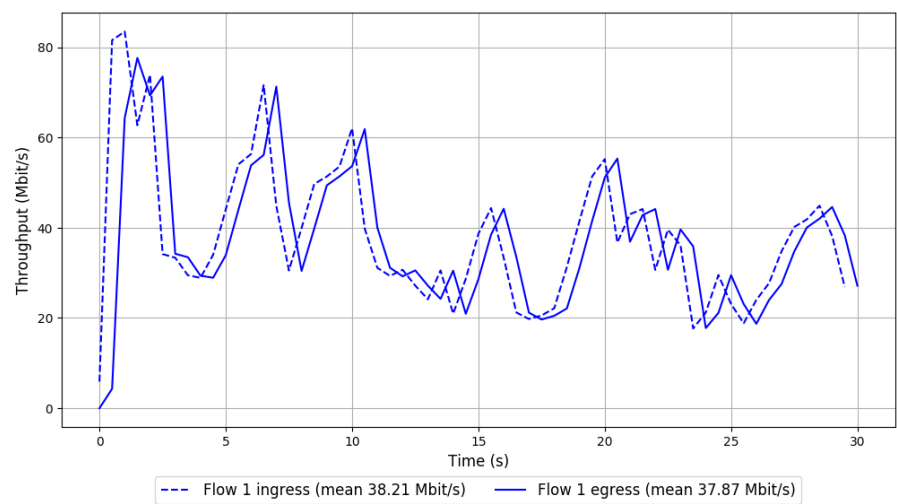
-- Flow 1:

Average throughput: 37.87 Mbit/s

95th percentile per-packet one-way delay: 10.656 ms

Loss rate: 0.89%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-09-25 05:49:25

End at: 2018-09-25 05:49:55

Local clock offset: 4.531 ms

Remote clock offset: -3.898 ms

Below is generated by plot.py at 2018-09-25 06:35:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 32.35 Mbit/s

95th percentile per-packet one-way delay: 7.753 ms

Loss rate: 1.15%

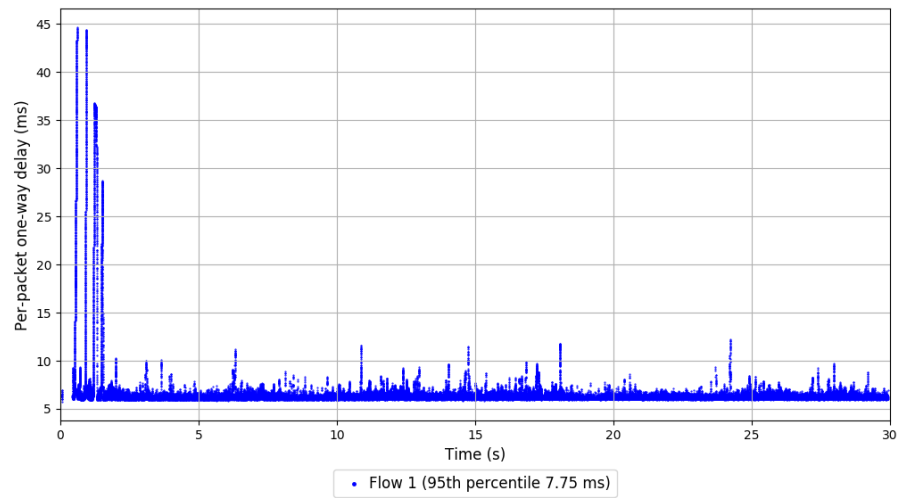
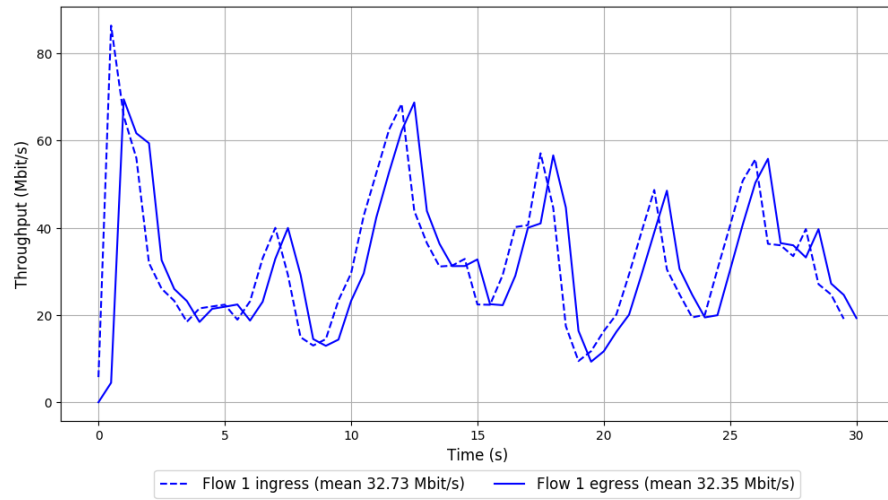
-- Flow 1:

Average throughput: 32.35 Mbit/s

95th percentile per-packet one-way delay: 7.753 ms

Loss rate: 1.15%

Run 4: Report of QUIC Cubic — Data Link

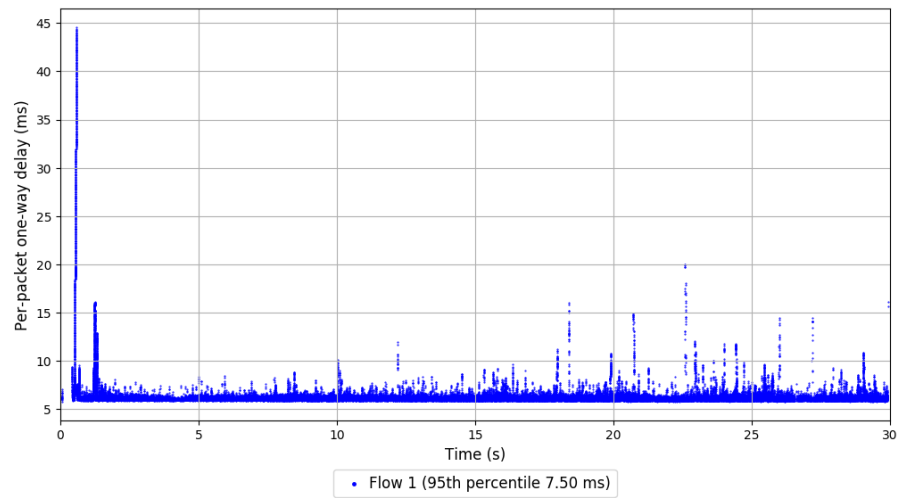
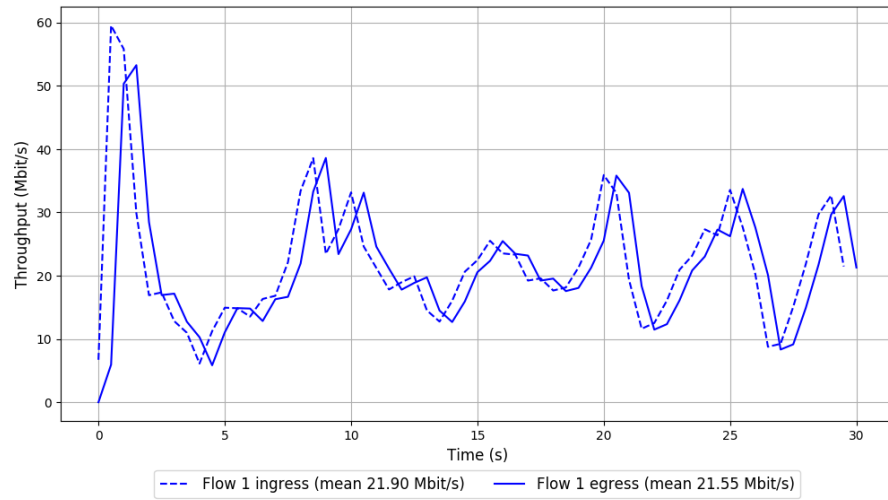


Run 5: Statistics of QUIC Cubic

Start at: 2018-09-25 06:11:03
End at: 2018-09-25 06:11:33
Local clock offset: 3.921 ms
Remote clock offset: -3.715 ms

Below is generated by plot.py at 2018-09-25 06:35:25
Datalink statistics
-- Total of 1 flow:
Average throughput: 21.55 Mbit/s
95th percentile per-packet one-way delay: 7.496 ms
Loss rate: 1.61%
-- Flow 1:
Average throughput: 21.55 Mbit/s
95th percentile per-packet one-way delay: 7.496 ms
Loss rate: 1.61%

Run 5: Report of QUIC Cubic — Data Link

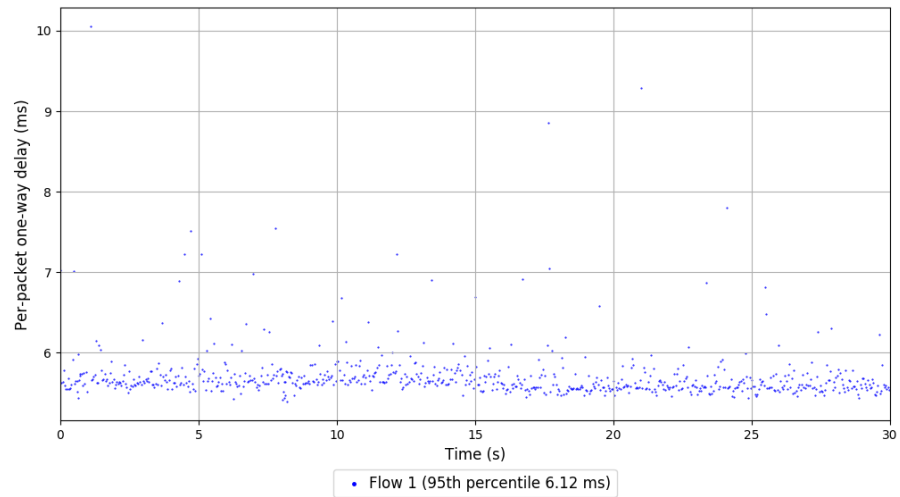
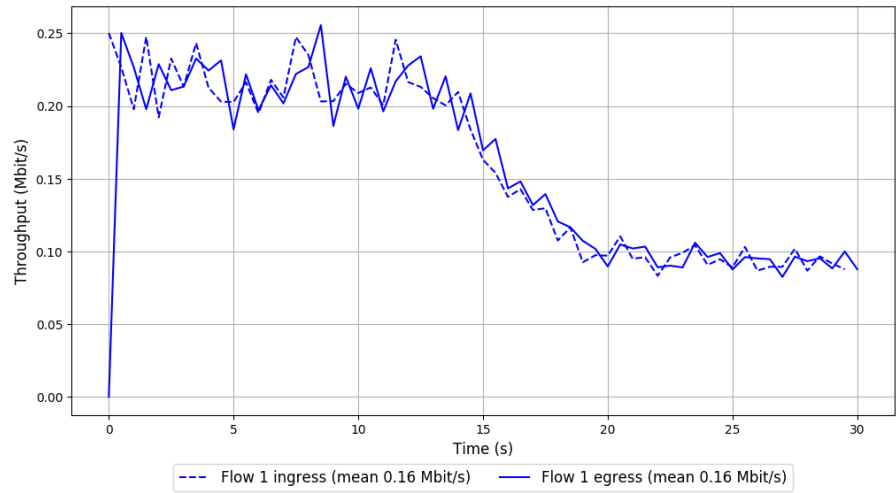


Run 1: Statistics of SCReAM

Start at: 2018-09-25 04:50:25
End at: 2018-09-25 04:50:55
Local clock offset: 3.519 ms
Remote clock offset: -3.758 ms

Below is generated by plot.py at 2018-09-25 06:35:25
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 6.115 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 6.115 ms
Loss rate: 0.19%

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2018-09-25 05:12:13

End at: 2018-09-25 05:12:43

Local clock offset: 3.81 ms

Remote clock offset: -4.68 ms

Below is generated by plot.py at 2018-09-25 06:35:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 5.881 ms

Loss rate: 0.89%

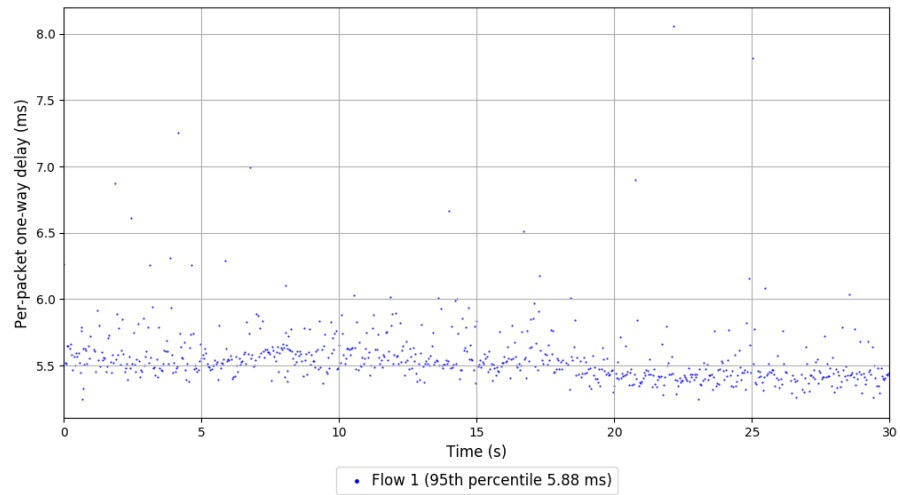
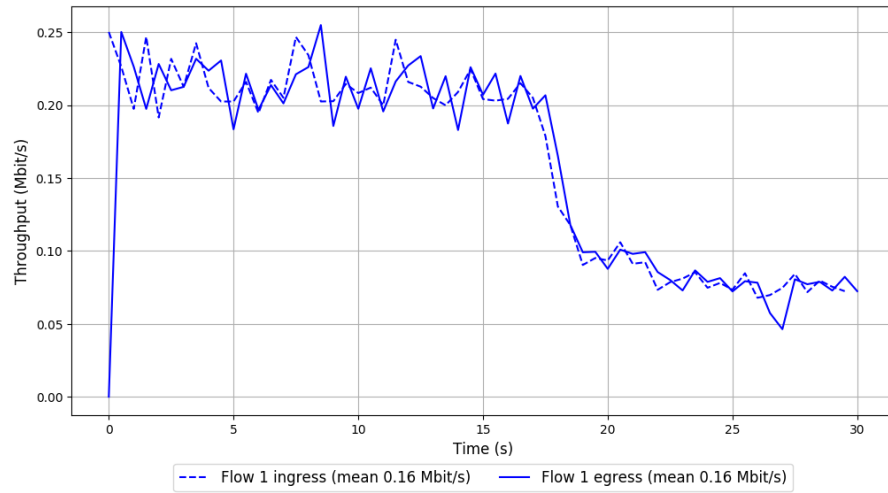
-- Flow 1:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 5.881 ms

Loss rate: 0.89%

Run 2: Report of SReAM — Data Link

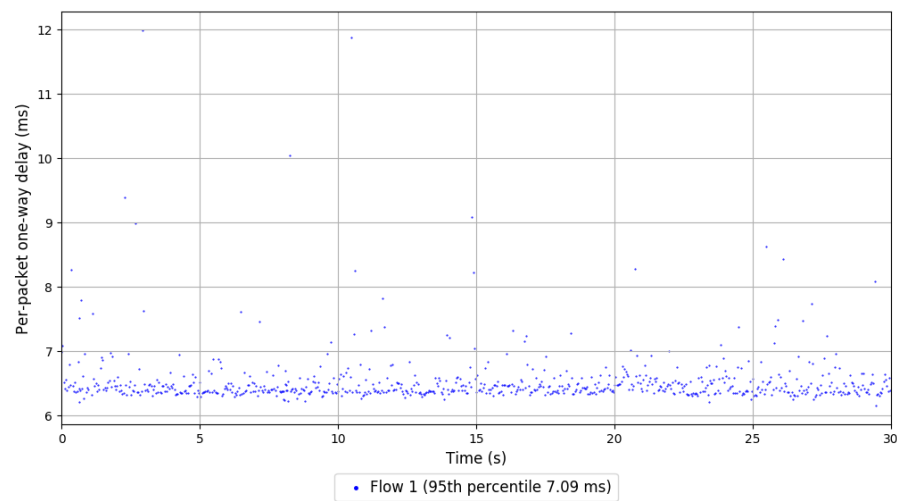
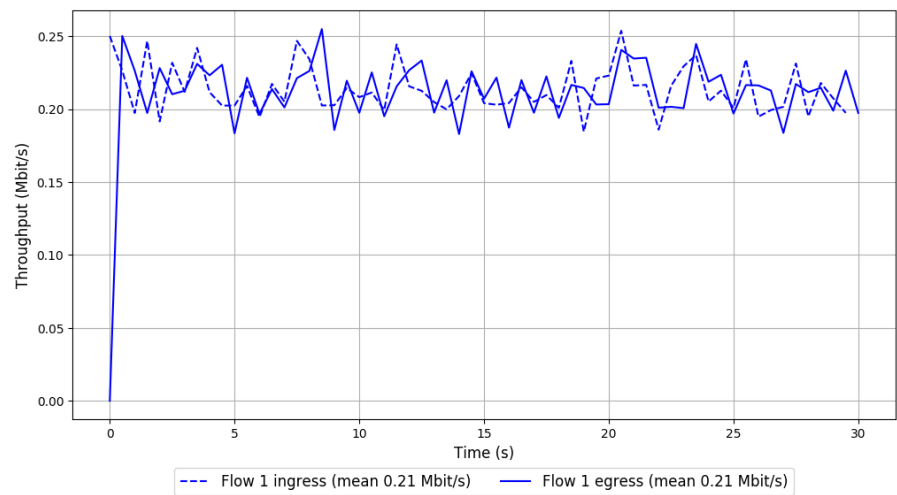


Run 3: Statistics of SCReAM

Start at: 2018-09-25 05:33:41
End at: 2018-09-25 05:34:11
Local clock offset: 3.702 ms
Remote clock offset: -4.758 ms

Below is generated by plot.py at 2018-09-25 06:35:25
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 7.086 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 7.086 ms
Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

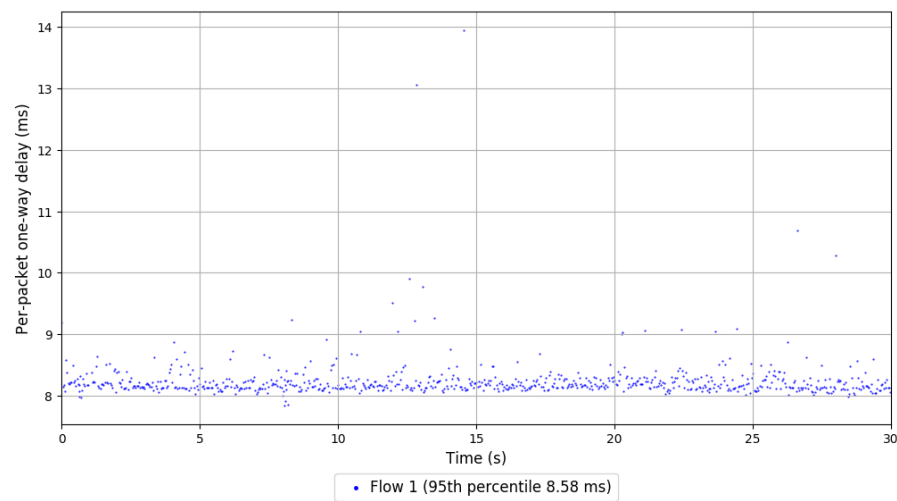
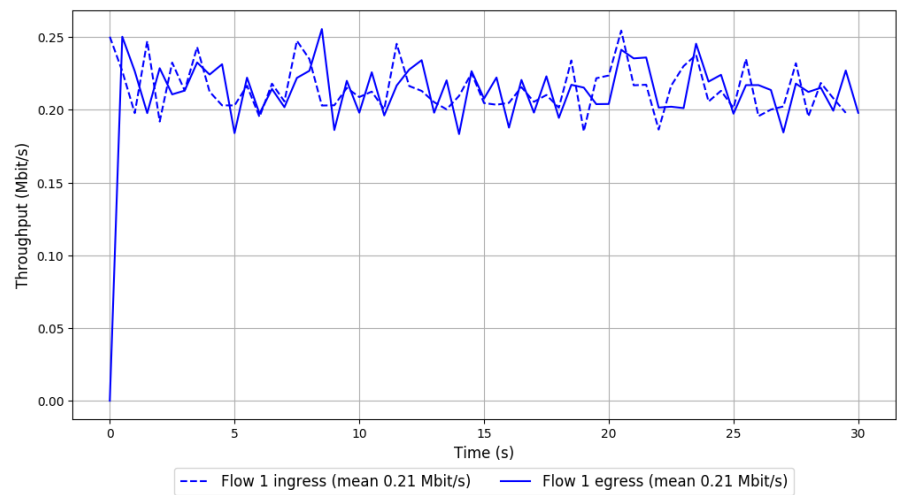


Run 4: Statistics of SCReAM

Start at: 2018-09-25 05:55:11
End at: 2018-09-25 05:55:41
Local clock offset: 1.779 ms
Remote clock offset: -3.677 ms

Below is generated by plot.py at 2018-09-25 06:35:25
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 8.584 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 8.584 ms
Loss rate: 0.00%

Run 4: Report of SReAM — Data Link

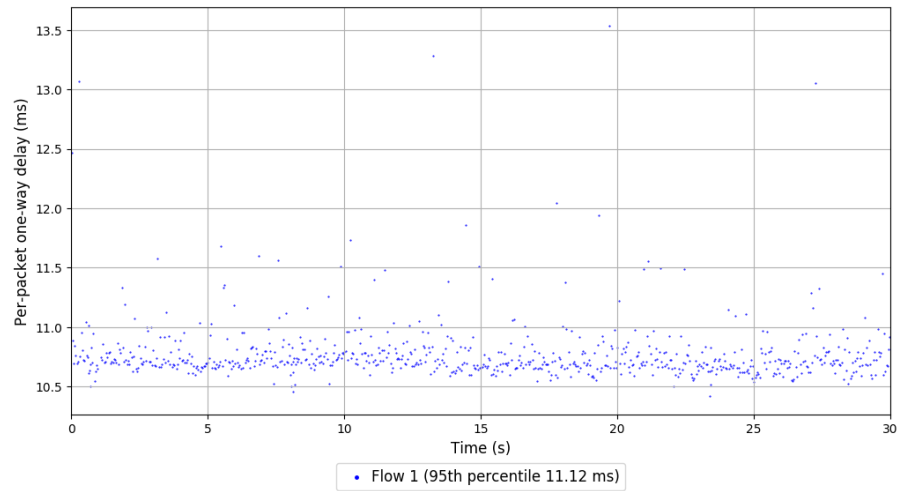
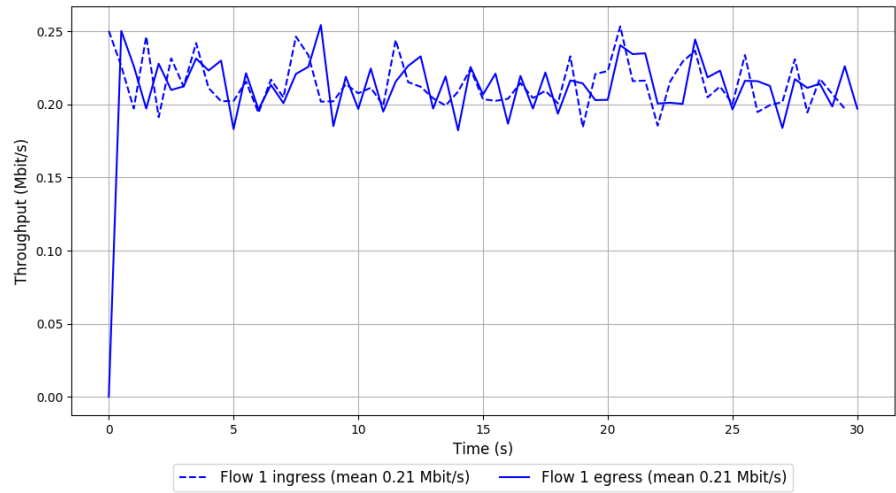


Run 5: Statistics of SCReAM

Start at: 2018-09-25 06:16:49
End at: 2018-09-25 06:17:19
Local clock offset: -4.585 ms
Remote clock offset: -8.113 ms

Below is generated by plot.py at 2018-09-25 06:35:25
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 11.115 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 11.115 ms
Loss rate: 0.00%

Run 5: Report of SReAM — Data Link

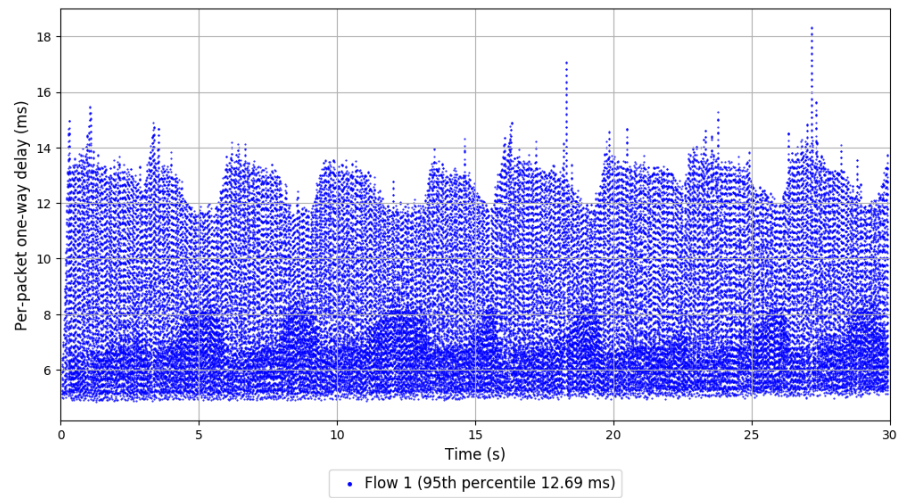
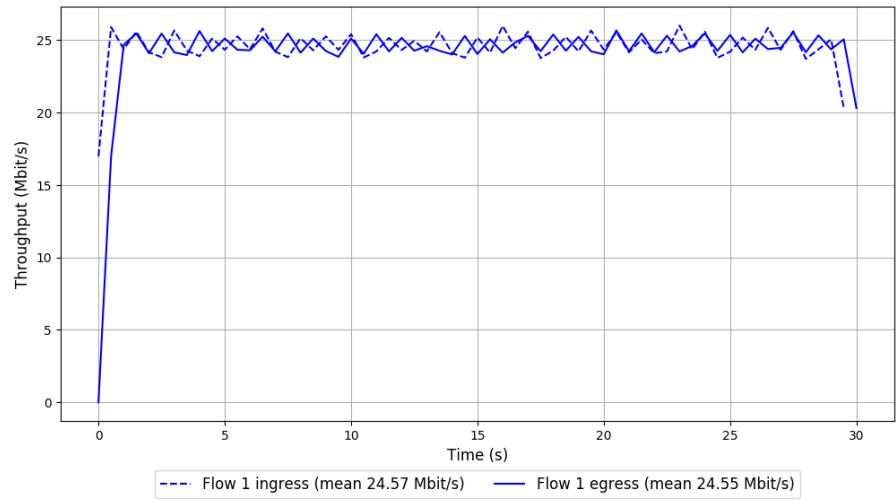


Run 1: Statistics of Sprout

Start at: 2018-09-25 04:48:12
End at: 2018-09-25 04:48:42
Local clock offset: 3.392 ms
Remote clock offset: -3.919 ms

Below is generated by plot.py at 2018-09-25 06:35:25
Datalink statistics
-- Total of 1 flow:
Average throughput: 24.55 Mbit/s
95th percentile per-packet one-way delay: 12.687 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 24.55 Mbit/s
95th percentile per-packet one-way delay: 12.687 ms
Loss rate: 0.09%

Run 1: Report of Sprout — Data Link

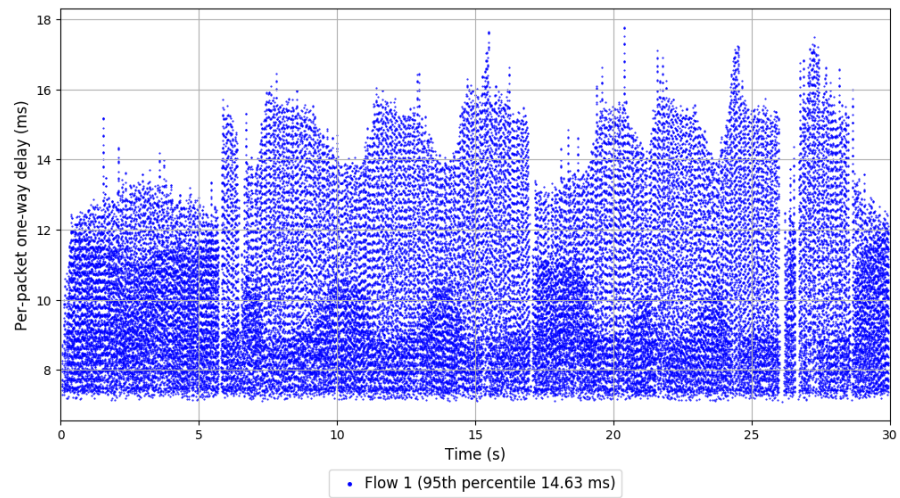
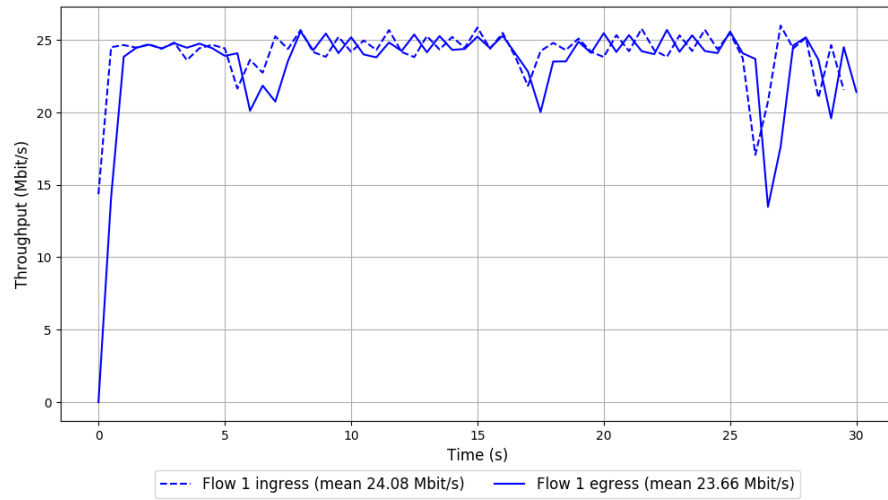


Run 2: Statistics of Sprout

Start at: 2018-09-25 05:09:57
End at: 2018-09-25 05:10:27
Local clock offset: 2.065 ms
Remote clock offset: -3.699 ms

Below is generated by plot.py at 2018-09-25 06:35:26
Datalink statistics
-- Total of 1 flow:
Average throughput: 23.66 Mbit/s
95th percentile per-packet one-way delay: 14.626 ms
Loss rate: 1.77%
-- Flow 1:
Average throughput: 23.66 Mbit/s
95th percentile per-packet one-way delay: 14.626 ms
Loss rate: 1.77%

Run 2: Report of Sprout — Data Link

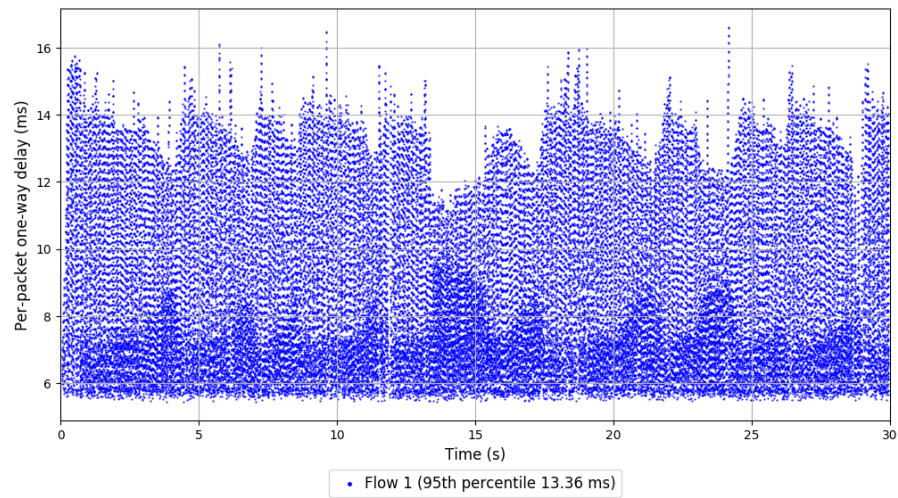
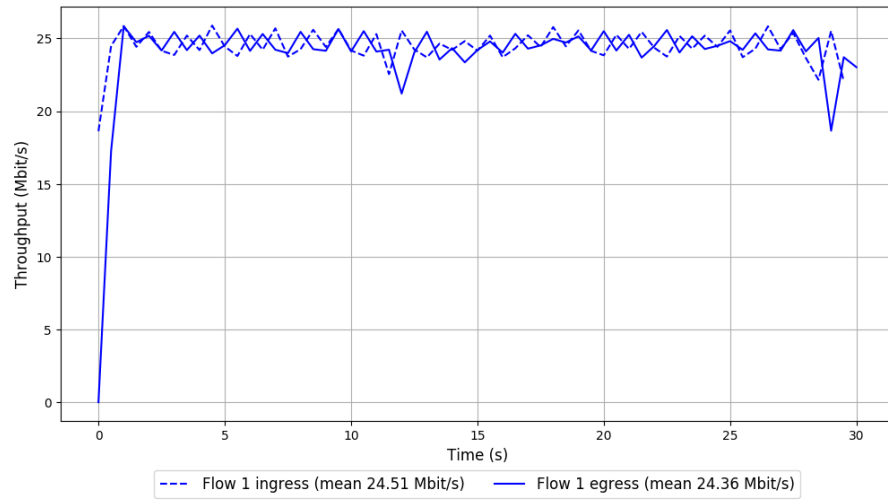


Run 3: Statistics of Sprout

Start at: 2018-09-25 05:31:29
End at: 2018-09-25 05:31:59
Local clock offset: 4.742 ms
Remote clock offset: -4.326 ms

Below is generated by plot.py at 2018-09-25 06:35:29
Datalink statistics
-- Total of 1 flow:
Average throughput: 24.36 Mbit/s
95th percentile per-packet one-way delay: 13.362 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 24.36 Mbit/s
95th percentile per-packet one-way delay: 13.362 ms
Loss rate: 0.59%

Run 3: Report of Sprout — Data Link

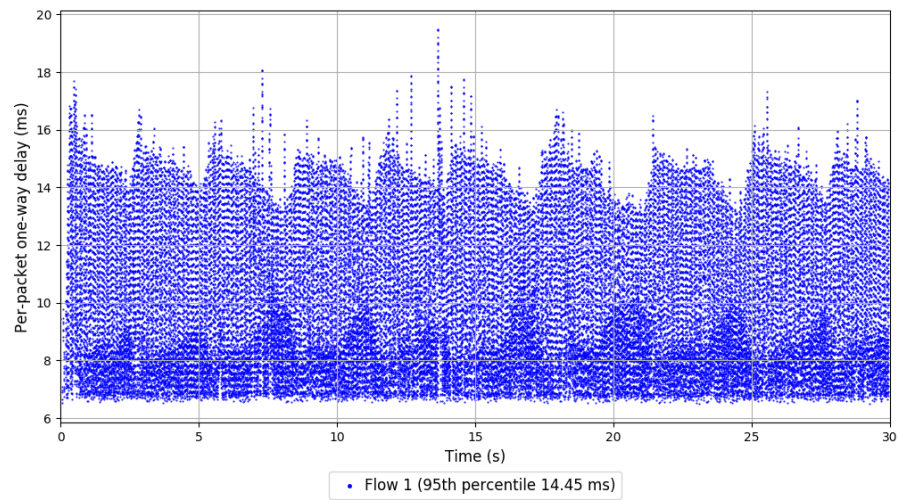
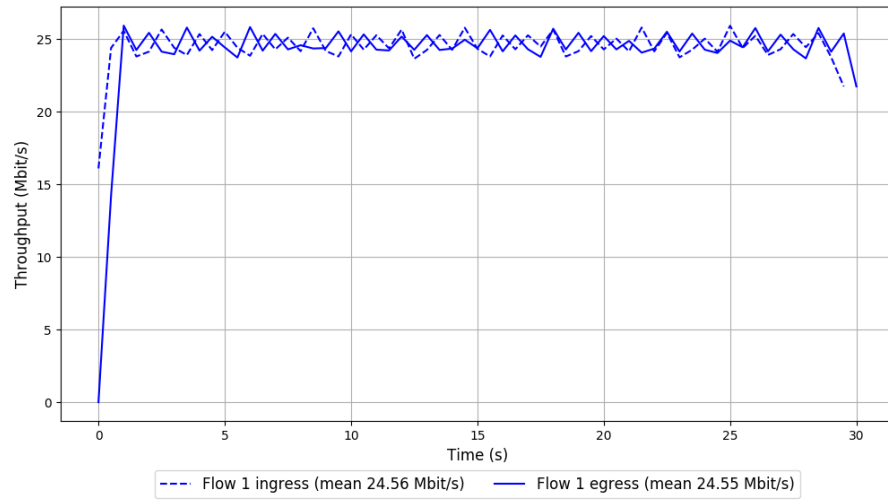


Run 4: Statistics of Sprout

Start at: 2018-09-25 05:52:57
End at: 2018-09-25 05:53:27
Local clock offset: 3.98 ms
Remote clock offset: -3.897 ms

Below is generated by plot.py at 2018-09-25 06:35:33
Datalink statistics
-- Total of 1 flow:
Average throughput: 24.55 Mbit/s
95th percentile per-packet one-way delay: 14.445 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.55 Mbit/s
95th percentile per-packet one-way delay: 14.445 ms
Loss rate: 0.00%

Run 4: Report of Sprout — Data Link

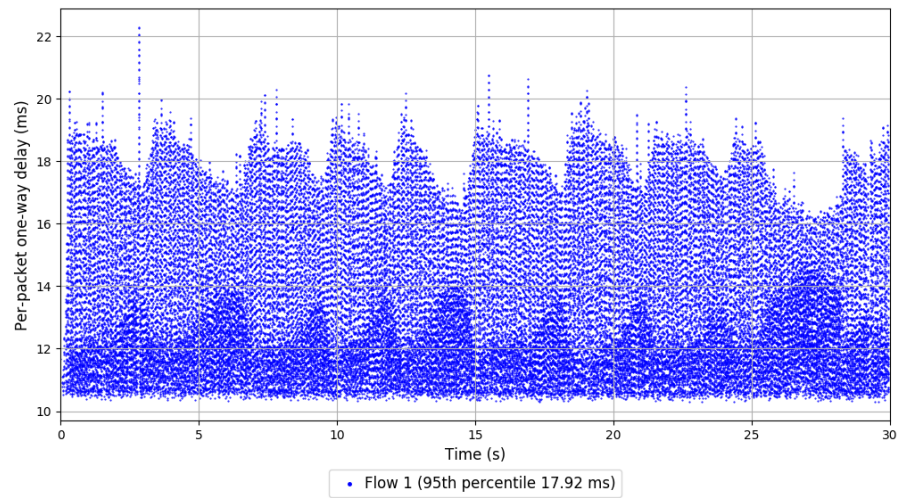
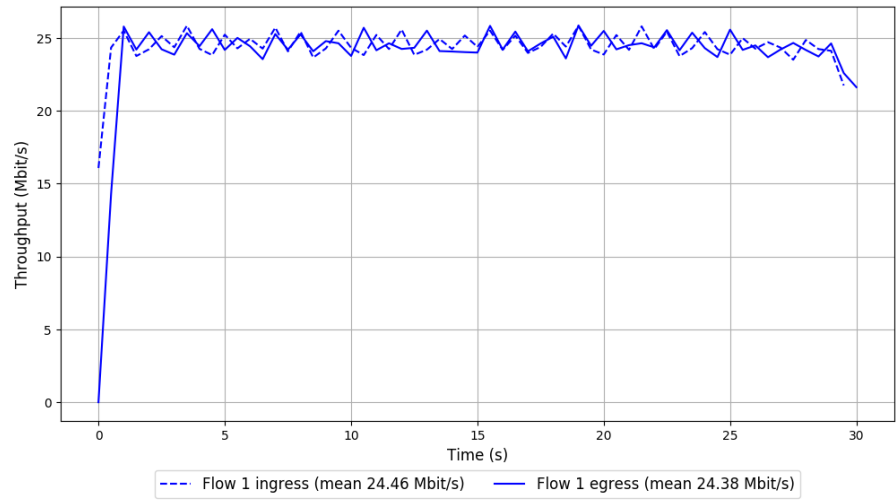


Run 5: Statistics of Sprout

Start at: 2018-09-25 06:14:36
End at: 2018-09-25 06:15:06
Local clock offset: 0.156 ms
Remote clock offset: -3.701 ms

Below is generated by plot.py at 2018-09-25 06:35:35
Datalink statistics
-- Total of 1 flow:
Average throughput: 24.38 Mbit/s
95th percentile per-packet one-way delay: 17.918 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 24.38 Mbit/s
95th percentile per-packet one-way delay: 17.918 ms
Loss rate: 0.32%

Run 5: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

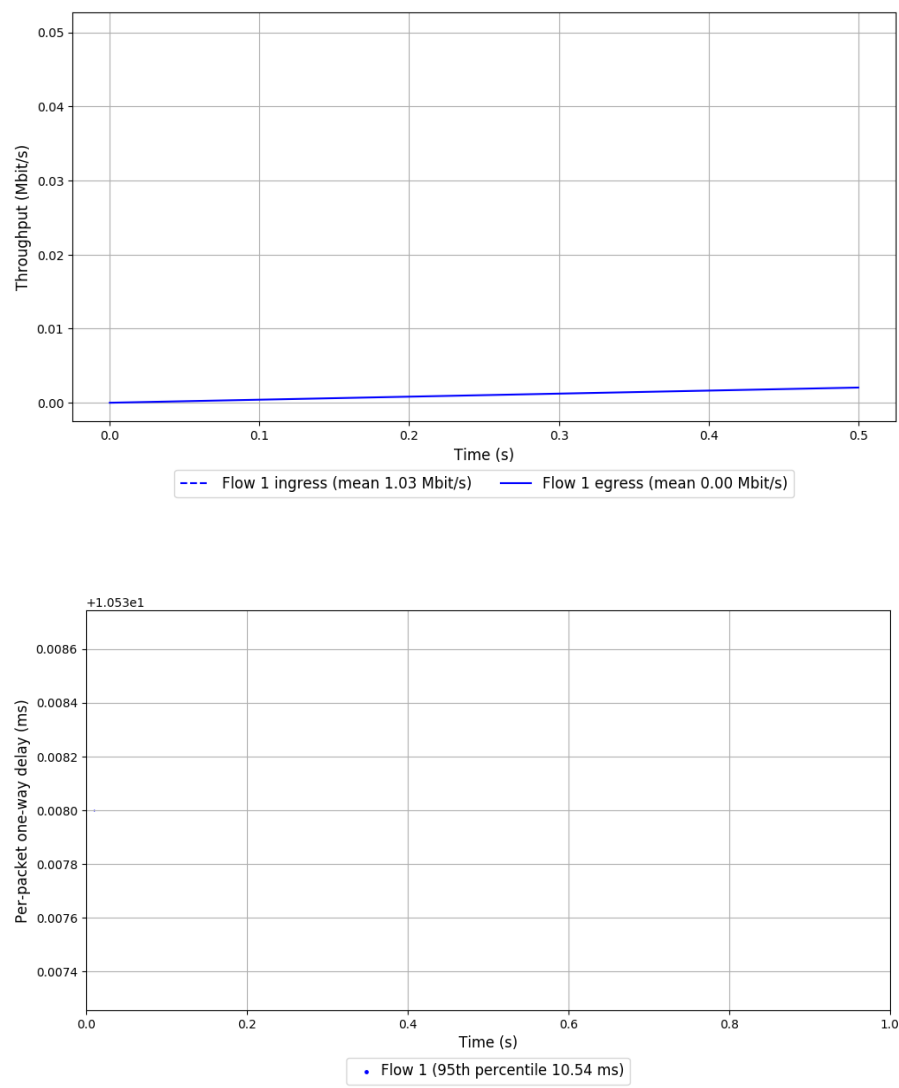
Start at: 2018-09-25 04:56:07

End at: 2018-09-25 04:56:37

Local clock offset: 0.532 ms

Remote clock offset: -3.538 ms

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



Run 2: Statistics of TaoVA-100x

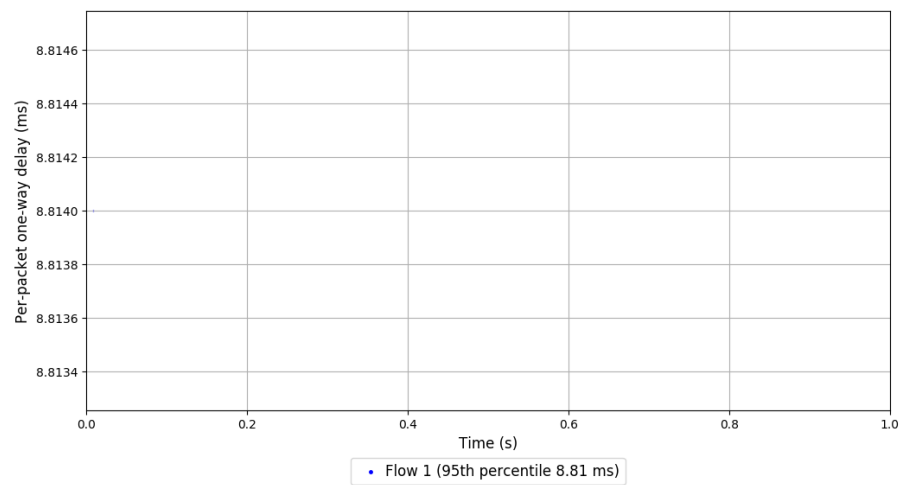
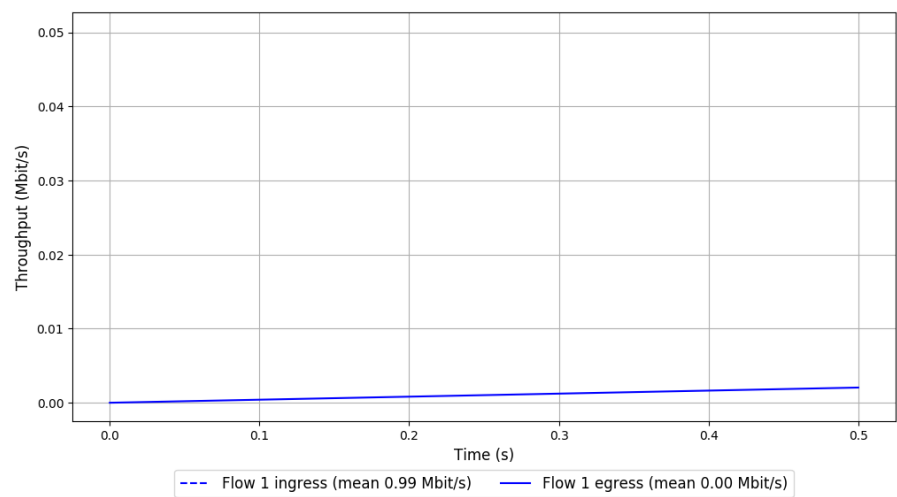
Start at: 2018-09-25 05:17:51

End at: 2018-09-25 05:18:21

Local clock offset: 1.746 ms

Remote clock offset: -4.476 ms

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



Run 3: Statistics of TaoVA-100x

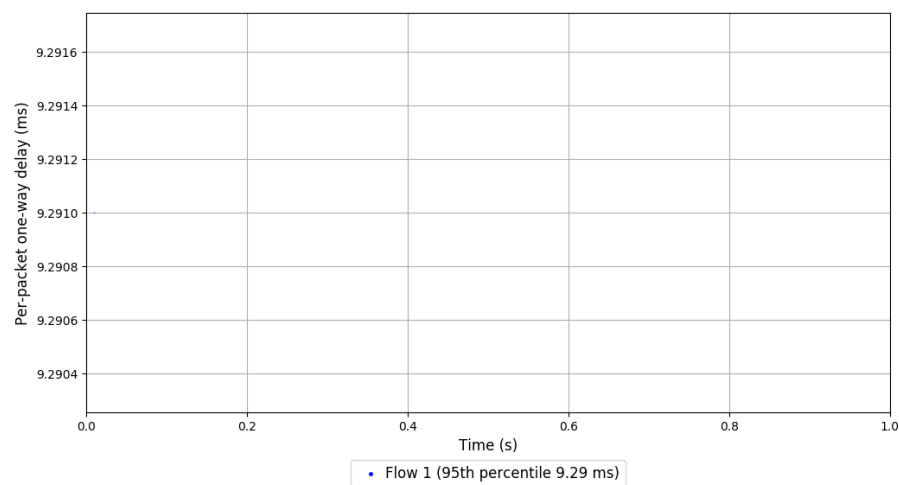
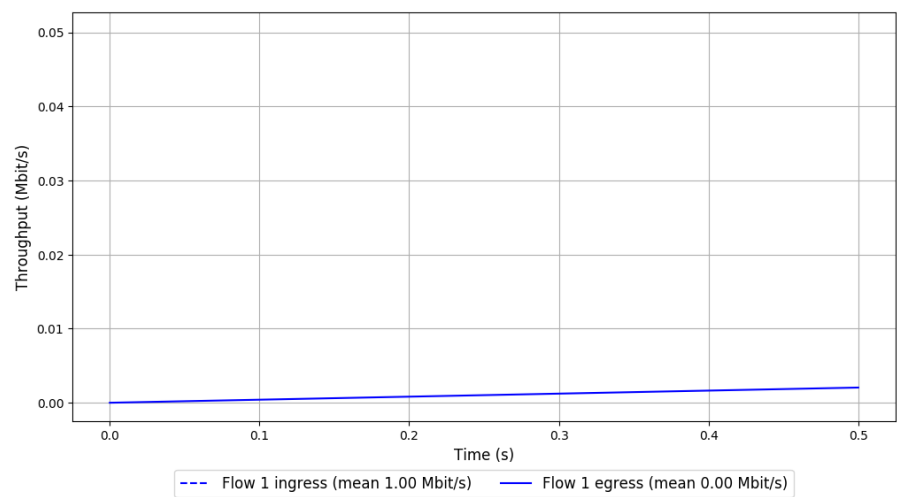
Start at: 2018-09-25 05:39:20

End at: 2018-09-25 05:39:50

Local clock offset: 2.803 ms

Remote clock offset: -3.69 ms

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



Run 4: Statistics of TaoVA-100x

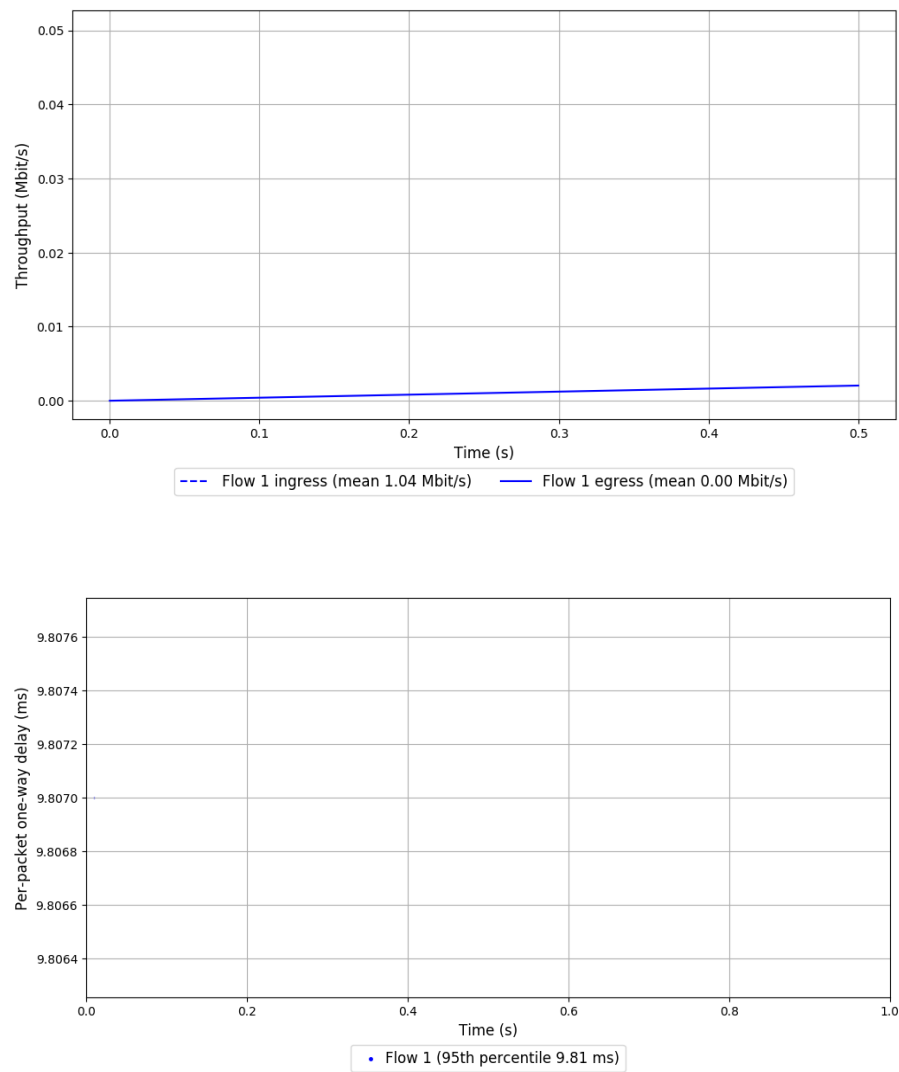
Start at: 2018-09-25 06:00:48

End at: 2018-09-25 06:01:18

Local clock offset: 1.061 ms

Remote clock offset: -3.616 ms

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



Run 5: Statistics of TaoVA-100x

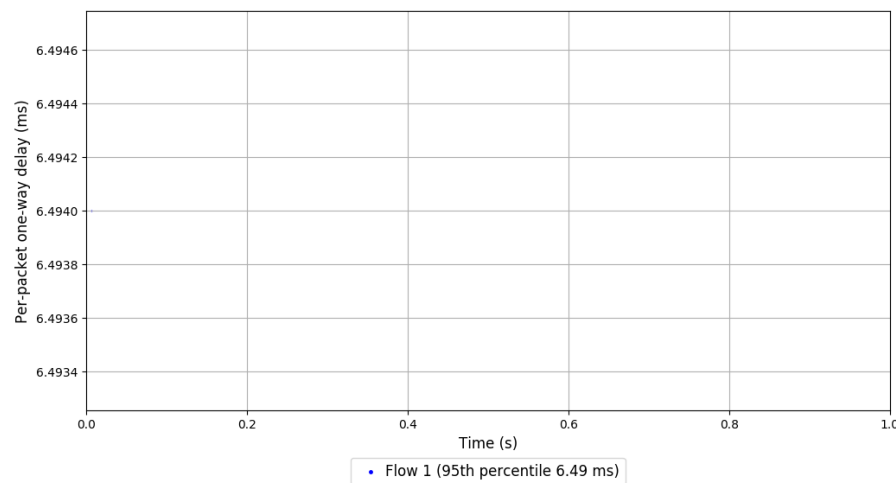
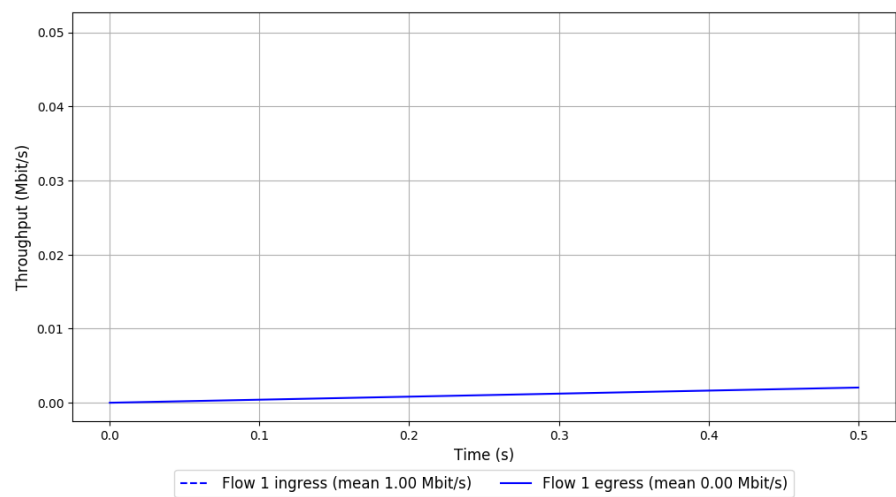
Start at: 2018-09-25 06:22:29

End at: 2018-09-25 06:22:59

Local clock offset: 3.296 ms

Remote clock offset: -4.992 ms

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



Run 1: Statistics of TCP Vegas

Start at: 2018-09-25 04:43:35

End at: 2018-09-25 04:44:06

Local clock offset: 3.541 ms

Remote clock offset: -3.35 ms

Below is generated by plot.py at 2018-09-25 06:35:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 32.46 Mbit/s

95th percentile per-packet one-way delay: 13.854 ms

Loss rate: 1.27%

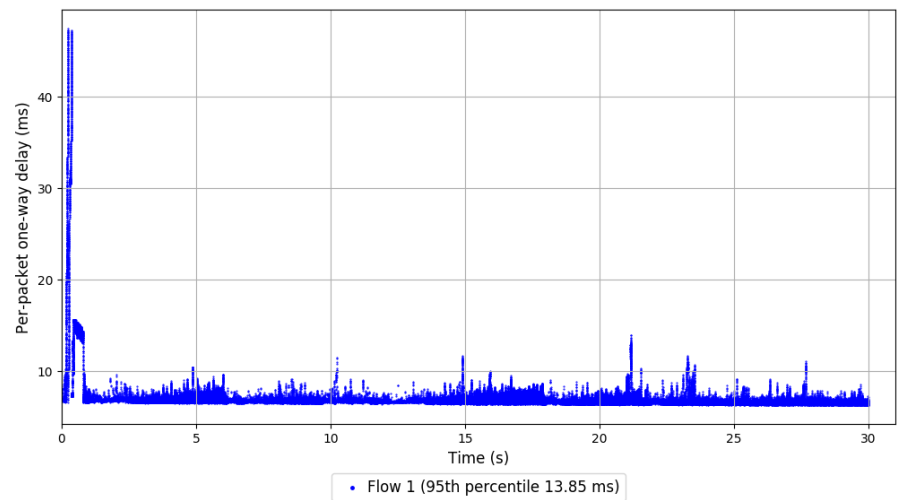
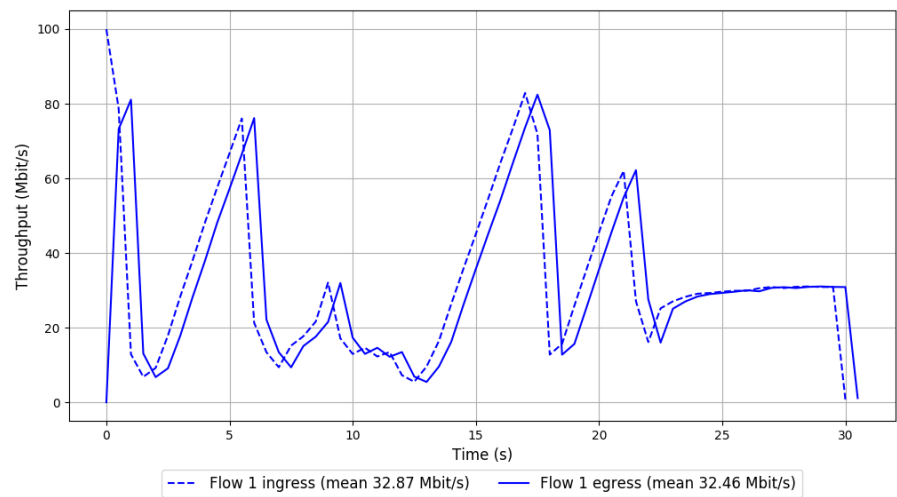
-- Flow 1:

Average throughput: 32.46 Mbit/s

95th percentile per-packet one-way delay: 13.854 ms

Loss rate: 1.27%

Run 1: Report of TCP Vegas — Data Link

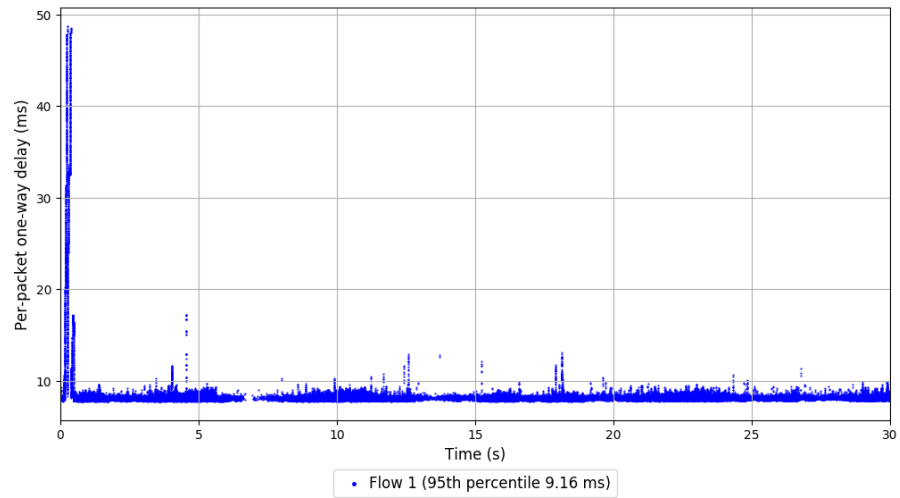
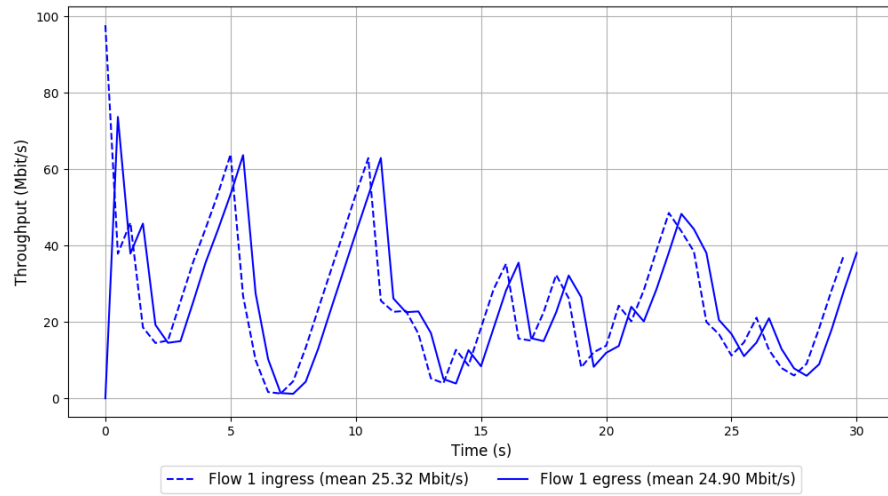


Run 2: Statistics of TCP Vegas

Start at: 2018-09-25 05:05:23
End at: 2018-09-25 05:05:53
Local clock offset: 1.46 ms
Remote clock offset: -4.516 ms

Below is generated by plot.py at 2018-09-25 06:35:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 24.90 Mbit/s
95th percentile per-packet one-way delay: 9.164 ms
Loss rate: 1.67%
-- Flow 1:
Average throughput: 24.90 Mbit/s
95th percentile per-packet one-way delay: 9.164 ms
Loss rate: 1.67%

Run 2: Report of TCP Vegas — Data Link

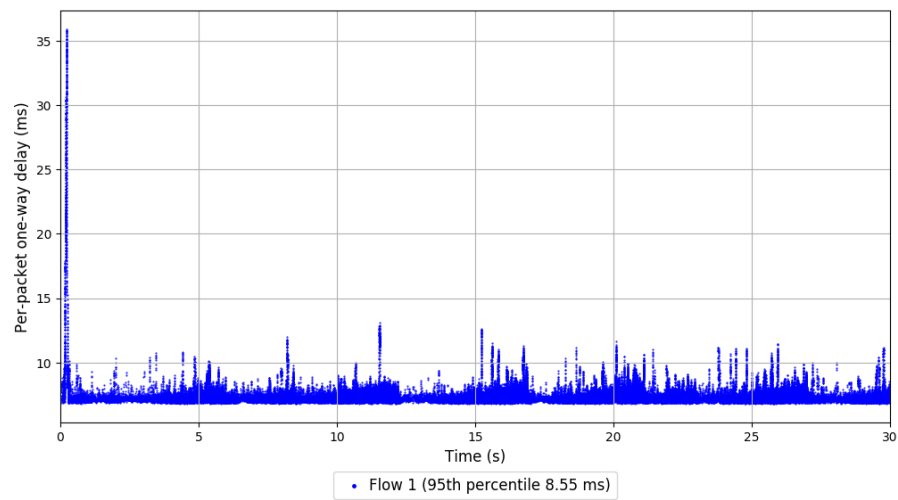
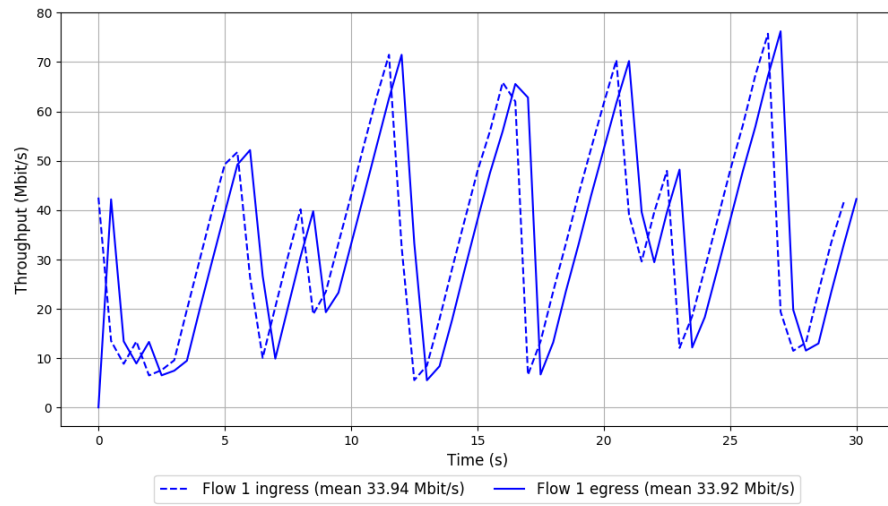


Run 3: Statistics of TCP Vegas

Start at: 2018-09-25 05:26:54
End at: 2018-09-25 05:27:24
Local clock offset: 2.972 ms
Remote clock offset: -4.411 ms

Below is generated by plot.py at 2018-09-25 06:35:50
Datalink statistics
-- Total of 1 flow:
Average throughput: 33.92 Mbit/s
95th percentile per-packet one-way delay: 8.552 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 33.92 Mbit/s
95th percentile per-packet one-way delay: 8.552 ms
Loss rate: 0.06%

Run 3: Report of TCP Vegas — Data Link

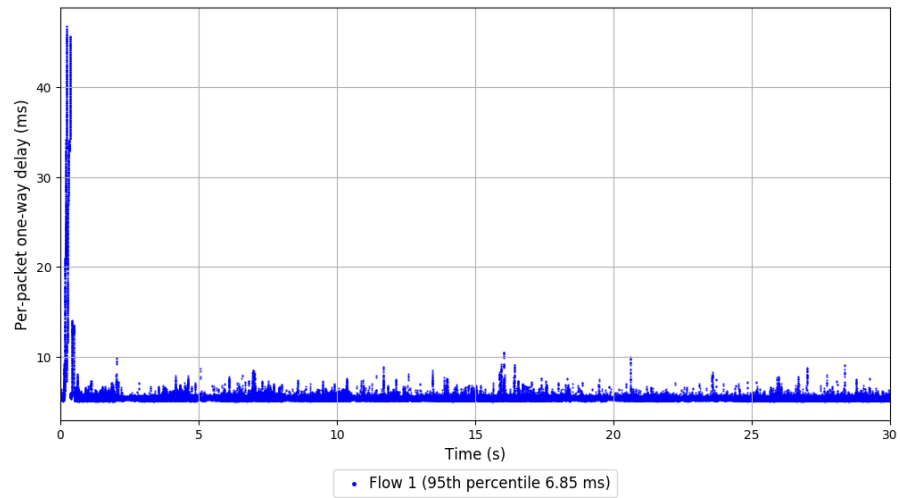
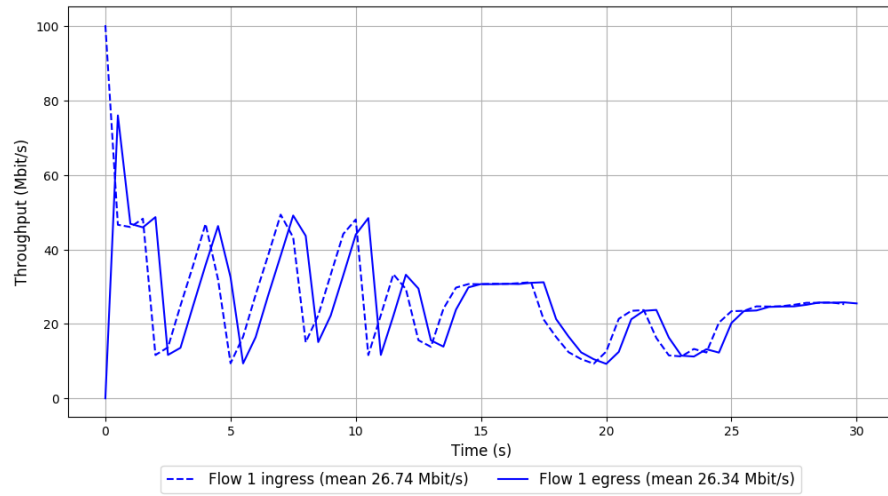


Run 4: Statistics of TCP Vegas

Start at: 2018-09-25 05:48:18
End at: 2018-09-25 05:48:48
Local clock offset: 3.886 ms
Remote clock offset: -4.416 ms

Below is generated by plot.py at 2018-09-25 06:35:50
Datalink statistics
-- Total of 1 flow:
Average throughput: 26.34 Mbit/s
95th percentile per-packet one-way delay: 6.847 ms
Loss rate: 1.51%
-- Flow 1:
Average throughput: 26.34 Mbit/s
95th percentile per-packet one-way delay: 6.847 ms
Loss rate: 1.51%

Run 4: Report of TCP Vegas — Data Link

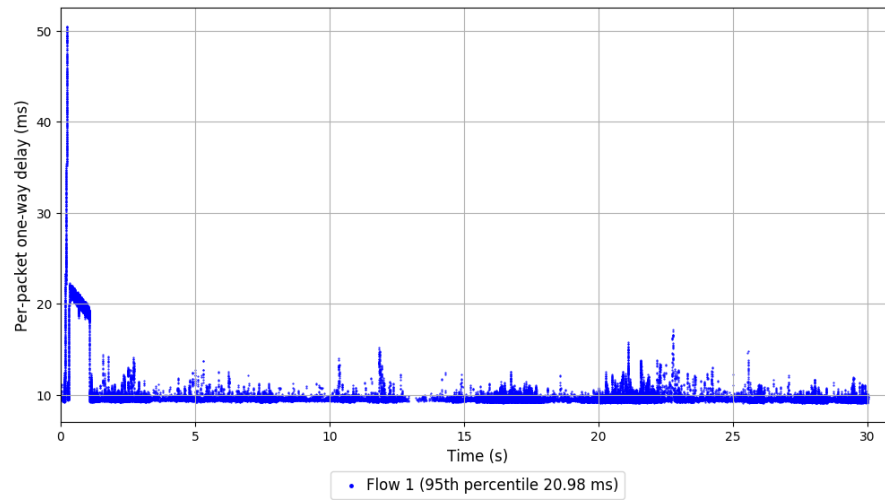
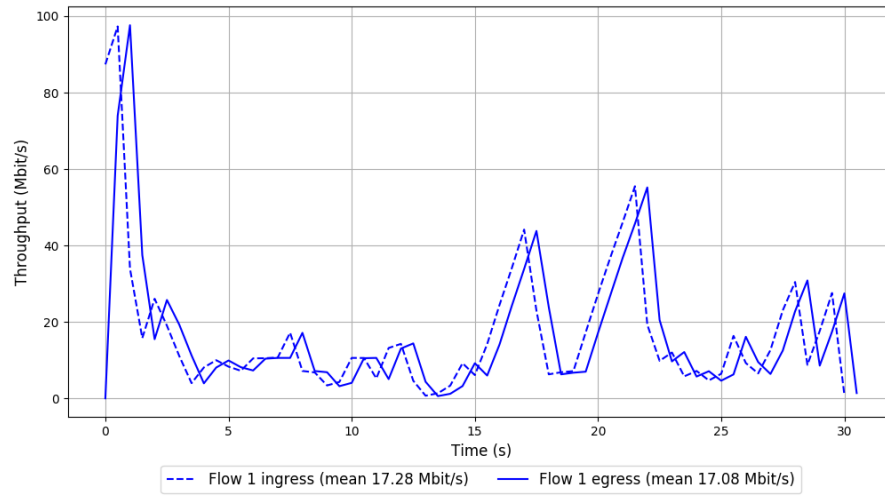


Run 5: Statistics of TCP Vegas

Start at: 2018-09-25 06:09:57
End at: 2018-09-25 06:10:27
Local clock offset: 2.232 ms
Remote clock offset: -3.246 ms

Below is generated by plot.py at 2018-09-25 06:35:50
Datalink statistics
-- Total of 1 flow:
Average throughput: 17.08 Mbit/s
95th percentile per-packet one-way delay: 20.978 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 17.08 Mbit/s
95th percentile per-packet one-way delay: 20.978 ms
Loss rate: 1.18%

Run 5: Report of TCP Vegas — Data Link

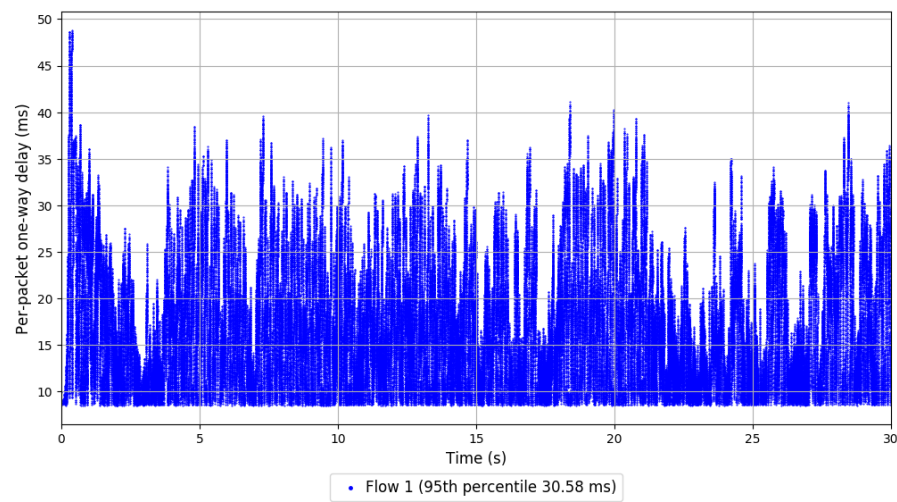
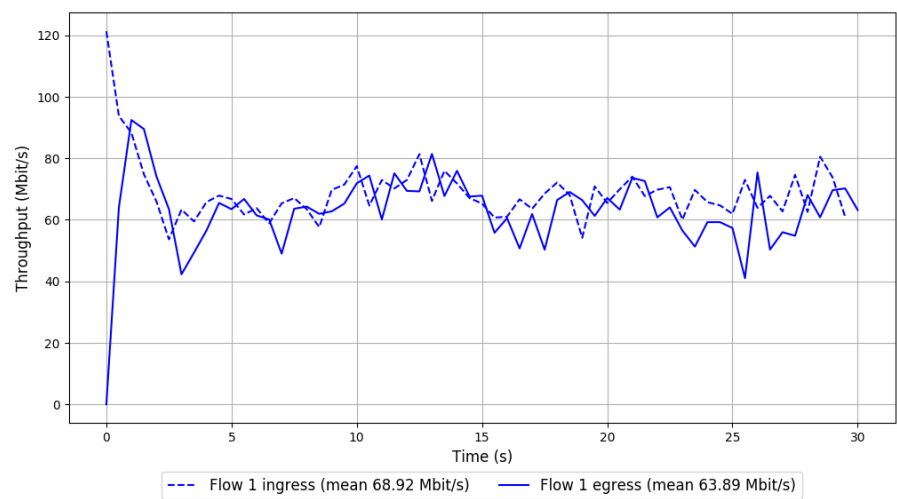


Run 1: Statistics of Verus

Start at: 2018-09-25 04:52:34
End at: 2018-09-25 04:53:04
Local clock offset: 2.03 ms
Remote clock offset: -3.502 ms

Below is generated by plot.py at 2018-09-25 06:36:19
Datalink statistics
-- Total of 1 flow:
Average throughput: 63.89 Mbit/s
95th percentile per-packet one-way delay: 30.576 ms
Loss rate: 7.21%
-- Flow 1:
Average throughput: 63.89 Mbit/s
95th percentile per-packet one-way delay: 30.576 ms
Loss rate: 7.21%

Run 1: Report of Verus — Data Link

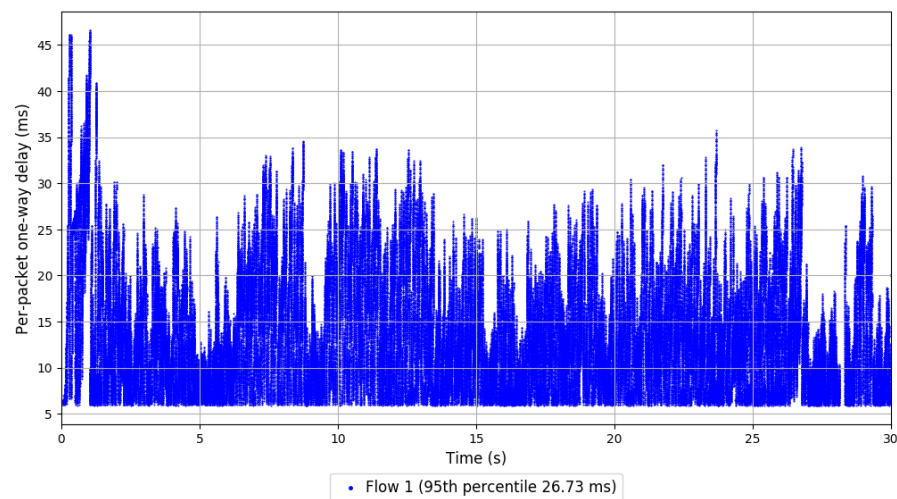
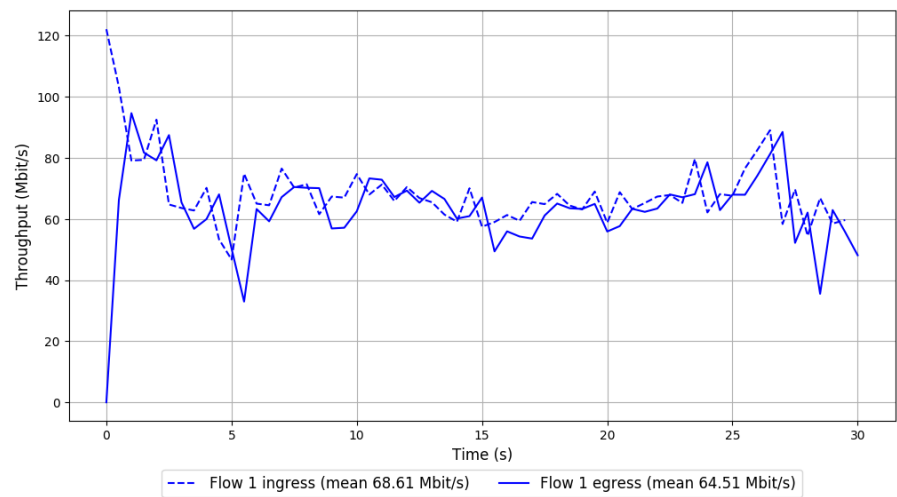


Run 2: Statistics of Verus

Start at: 2018-09-25 05:14:24
End at: 2018-09-25 05:14:54
Local clock offset: 2.402 ms
Remote clock offset: -4.504 ms

Below is generated by plot.py at 2018-09-25 06:36:25
Datalink statistics
-- Total of 1 flow:
Average throughput: 64.51 Mbit/s
95th percentile per-packet one-way delay: 26.735 ms
Loss rate: 5.96%
-- Flow 1:
Average throughput: 64.51 Mbit/s
95th percentile per-packet one-way delay: 26.735 ms
Loss rate: 5.96%

Run 2: Report of Verus — Data Link

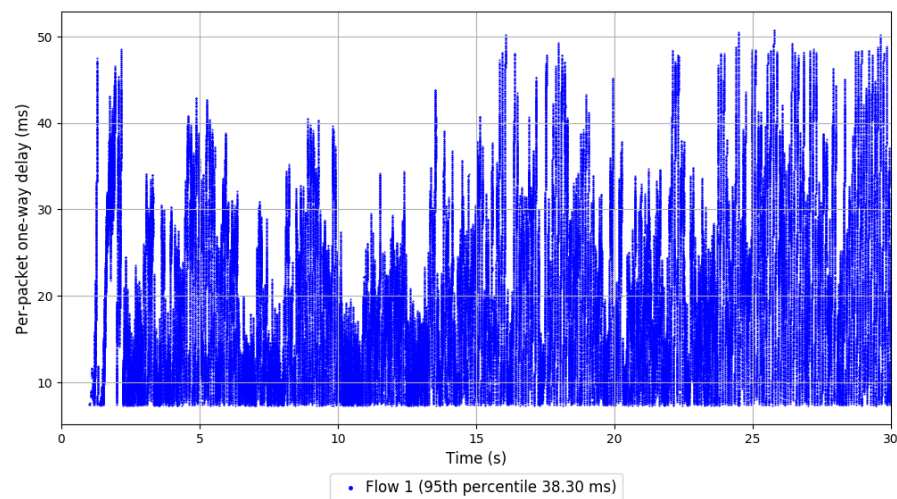
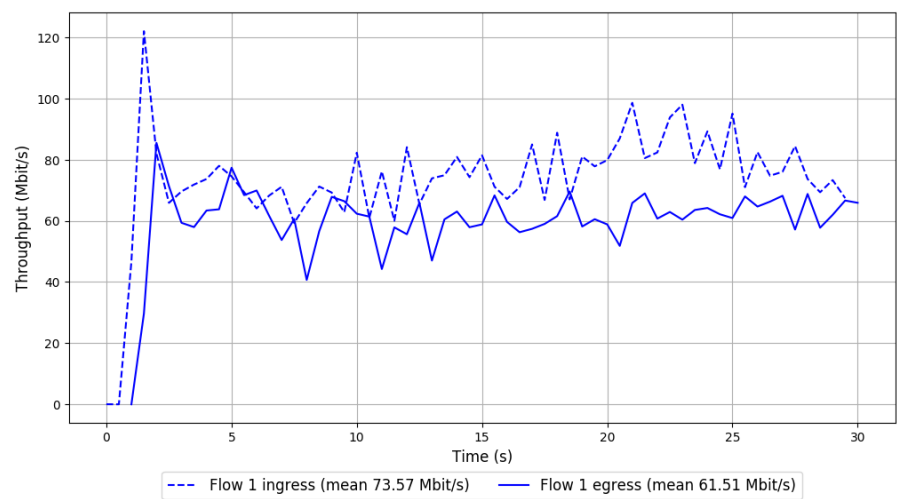


Run 3: Statistics of Verus

Start at: 2018-09-25 05:35:50
End at: 2018-09-25 05:36:20
Local clock offset: 3.124 ms
Remote clock offset: -4.377 ms

Below is generated by plot.py at 2018-09-25 06:36:25
Datalink statistics
-- Total of 1 flow:
Average throughput: 61.51 Mbit/s
95th percentile per-packet one-way delay: 38.303 ms
Loss rate: 19.13%
-- Flow 1:
Average throughput: 61.51 Mbit/s
95th percentile per-packet one-way delay: 38.303 ms
Loss rate: 19.13%

Run 3: Report of Verus — Data Link

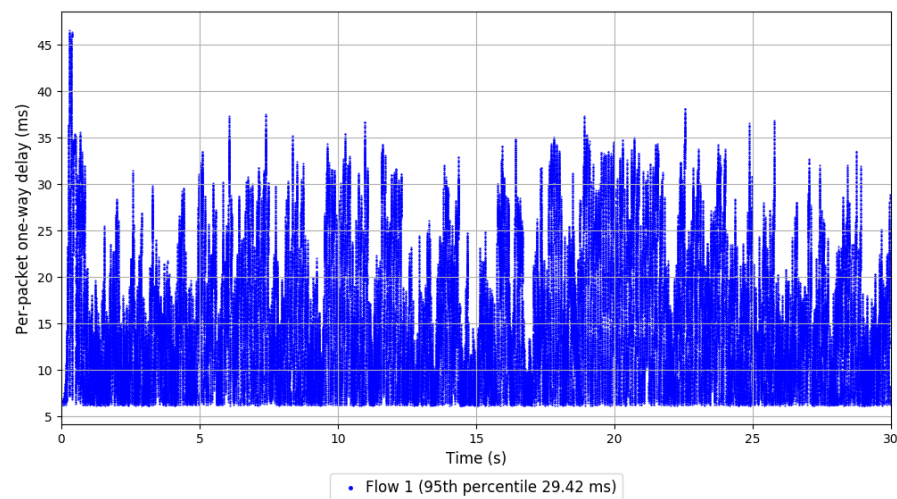
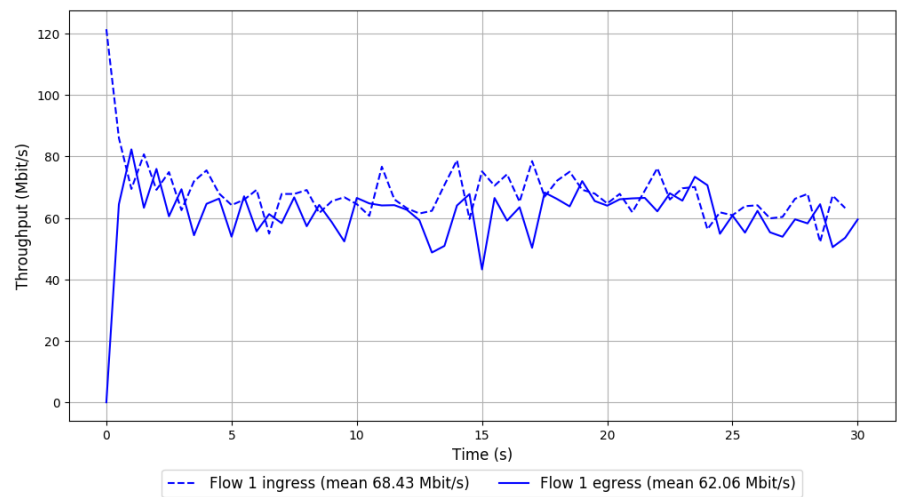


Run 4: Statistics of Verus

Start at: 2018-09-25 05:57:21
End at: 2018-09-25 05:57:51
Local clock offset: 4.209 ms
Remote clock offset: -3.991 ms

Below is generated by plot.py at 2018-09-25 06:36:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 62.06 Mbit/s
95th percentile per-packet one-way delay: 29.423 ms
Loss rate: 9.31%
-- Flow 1:
Average throughput: 62.06 Mbit/s
95th percentile per-packet one-way delay: 29.423 ms
Loss rate: 9.31%

Run 4: Report of Verus — Data Link

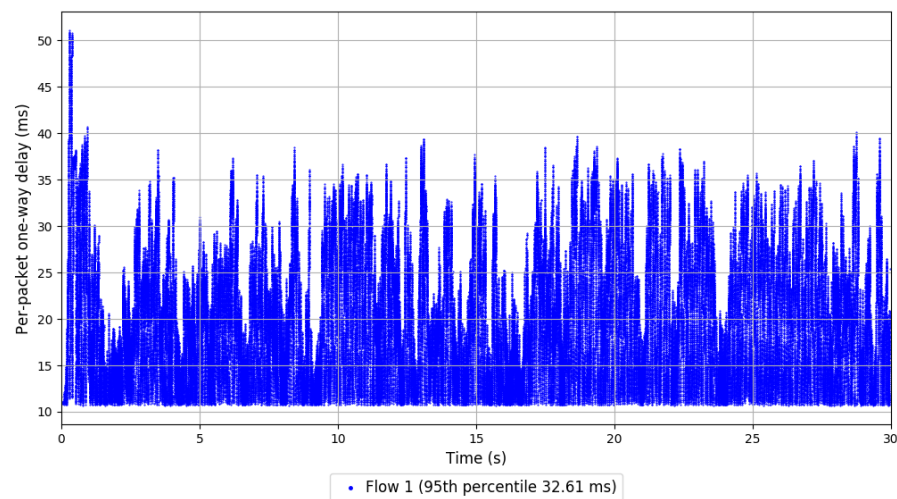
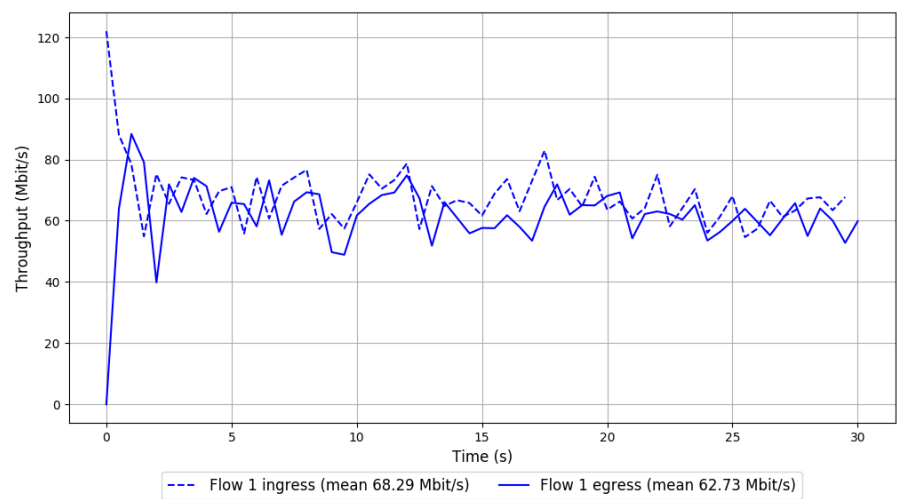


Run 5: Statistics of Verus

Start at: 2018-09-25 06:18:59
End at: 2018-09-25 06:19:29
Local clock offset: -0.39 ms
Remote clock offset: -3.629 ms

Below is generated by plot.py at 2018-09-25 06:36:33
Datalink statistics
-- Total of 1 flow:
Average throughput: 62.73 Mbit/s
95th percentile per-packet one-way delay: 32.607 ms
Loss rate: 8.12%
-- Flow 1:
Average throughput: 62.73 Mbit/s
95th percentile per-packet one-way delay: 32.607 ms
Loss rate: 8.12%

Run 5: Report of Verus — Data Link

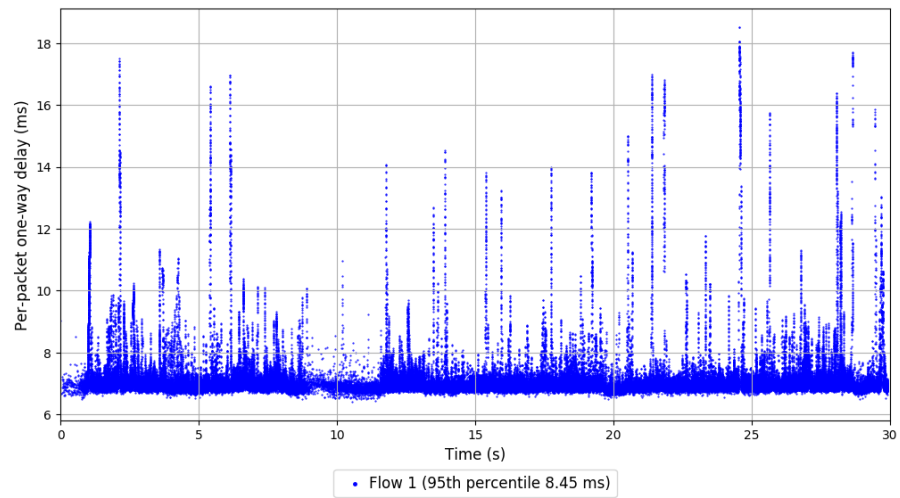
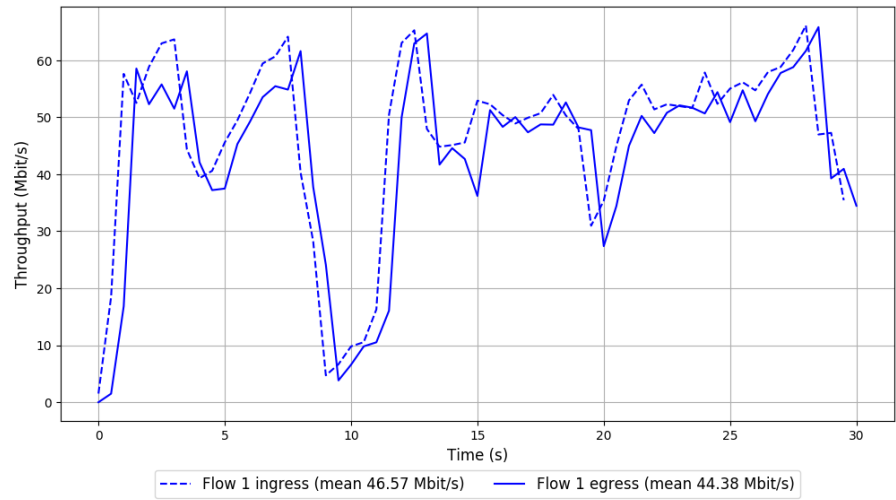


Run 1: Statistics of PCC-Vivace

Start at: 2018-09-25 05:00:40
End at: 2018-09-25 05:01:10
Local clock offset: 1.682 ms
Remote clock offset: -4.492 ms

Below is generated by plot.py at 2018-09-25 06:36:33
Datalink statistics
-- Total of 1 flow:
Average throughput: 44.38 Mbit/s
95th percentile per-packet one-way delay: 8.453 ms
Loss rate: 4.72%
-- Flow 1:
Average throughput: 44.38 Mbit/s
95th percentile per-packet one-way delay: 8.453 ms
Loss rate: 4.72%

Run 1: Report of PCC-Vivace — Data Link

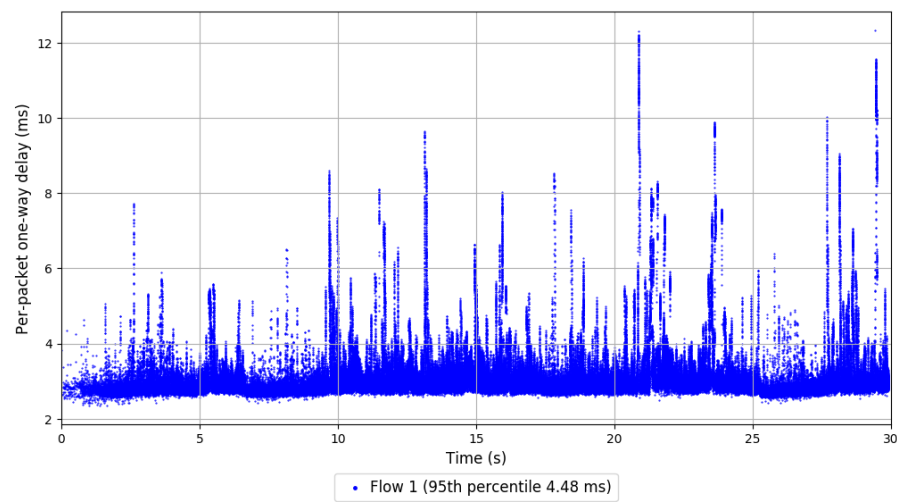
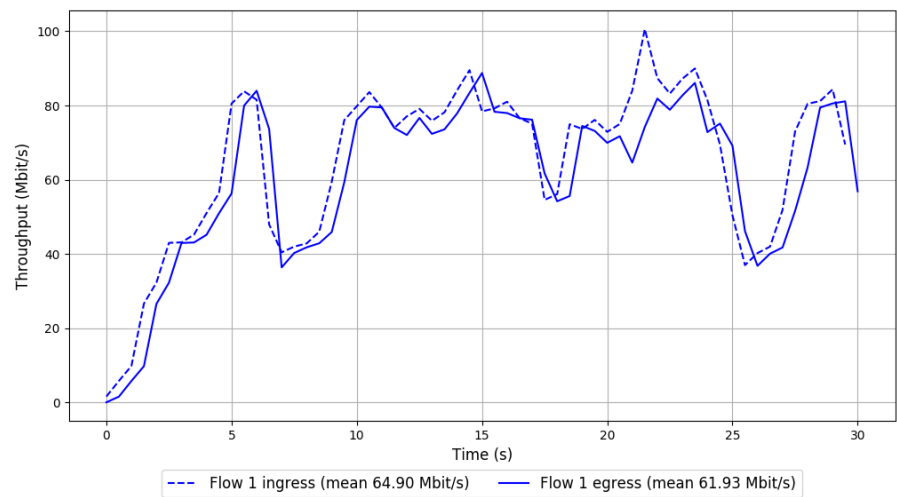


Run 2: Statistics of PCC-Vivace

Start at: 2018-09-25 05:22:20
End at: 2018-09-25 05:22:50
Local clock offset: 5.013 ms
Remote clock offset: -5.405 ms

Below is generated by plot.py at 2018-09-25 06:36:34
Datalink statistics
-- Total of 1 flow:
Average throughput: 61.93 Mbit/s
95th percentile per-packet one-way delay: 4.479 ms
Loss rate: 4.58%
-- Flow 1:
Average throughput: 61.93 Mbit/s
95th percentile per-packet one-way delay: 4.479 ms
Loss rate: 4.58%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2018-09-25 05:43:47

End at: 2018-09-25 05:44:17

Local clock offset: 1.926 ms

Remote clock offset: -3.981 ms

Below is generated by plot.py at 2018-09-25 06:36:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.27 Mbit/s

95th percentile per-packet one-way delay: 8.526 ms

Loss rate: 7.52%

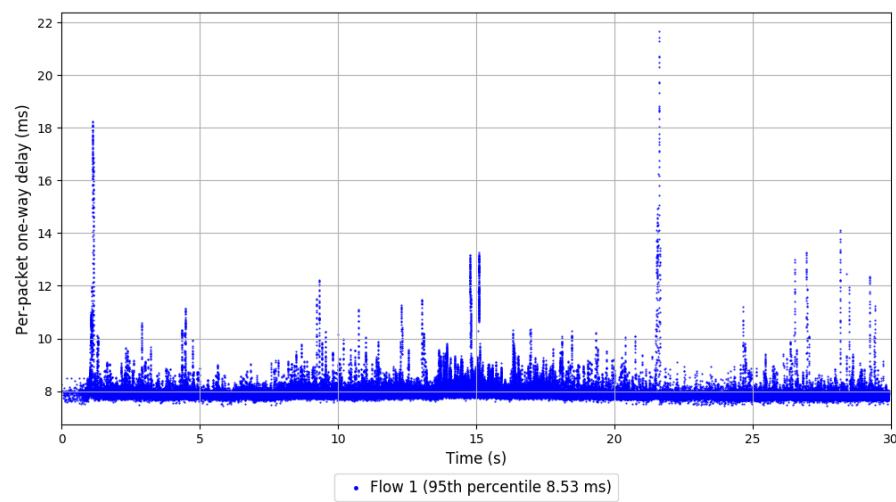
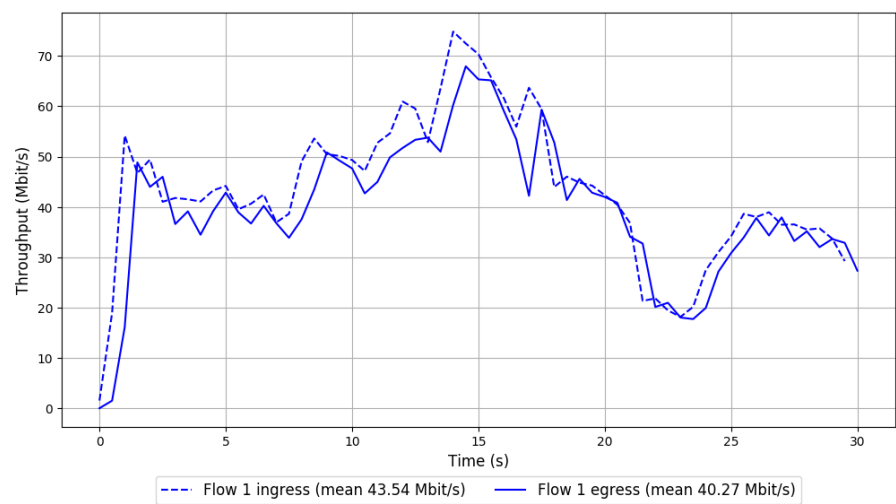
-- Flow 1:

Average throughput: 40.27 Mbit/s

95th percentile per-packet one-way delay: 8.526 ms

Loss rate: 7.52%

Run 3: Report of PCC-Vivace — Data Link

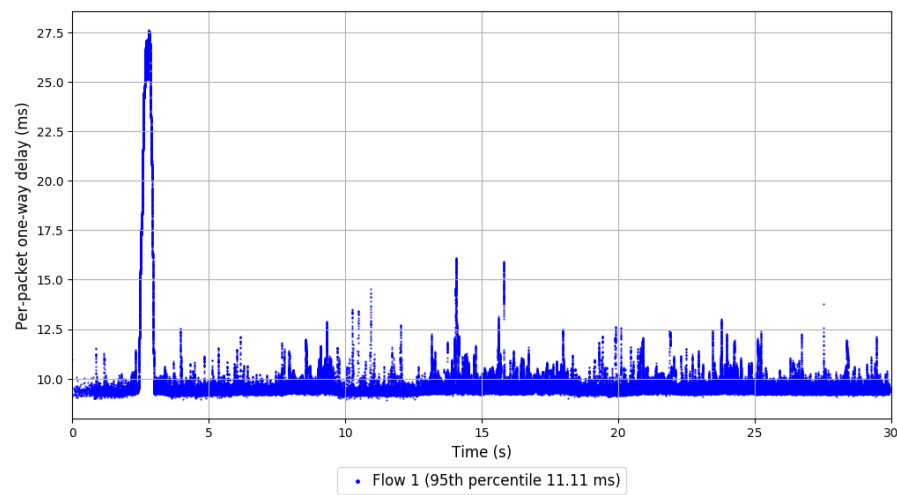
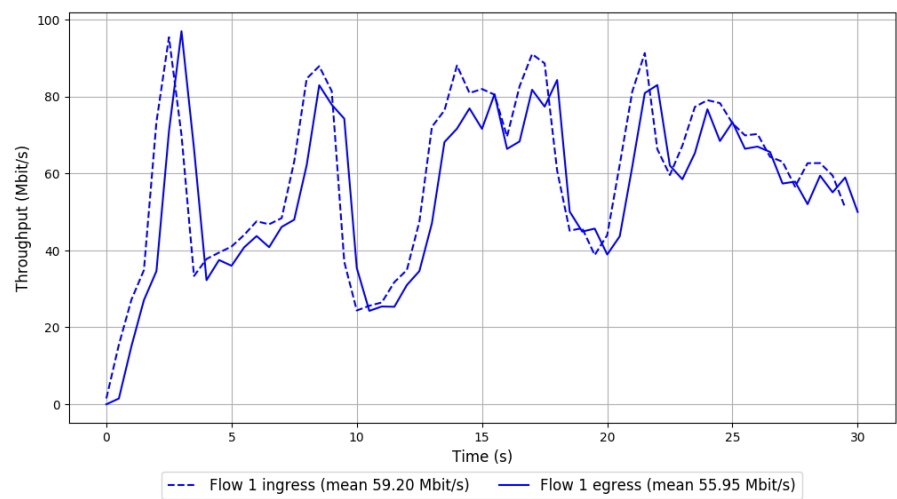


Run 4: Statistics of PCC-Vivace

Start at: 2018-09-25 06:05:19
End at: 2018-09-25 06:05:49
Local clock offset: 2.328 ms
Remote clock offset: -3.173 ms

Below is generated by plot.py at 2018-09-25 06:36:38
Datalink statistics
-- Total of 1 flow:
Average throughput: 55.95 Mbit/s
95th percentile per-packet one-way delay: 11.111 ms
Loss rate: 5.49%
-- Flow 1:
Average throughput: 55.95 Mbit/s
95th percentile per-packet one-way delay: 11.111 ms
Loss rate: 5.49%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2018-09-25 06:27:00

End at: 2018-09-25 06:27:30

Local clock offset: 2.291 ms

Remote clock offset: -4.404 ms

Below is generated by plot.py at 2018-09-25 06:36:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.46 Mbit/s

95th percentile per-packet one-way delay: 8.386 ms

Loss rate: 4.05%

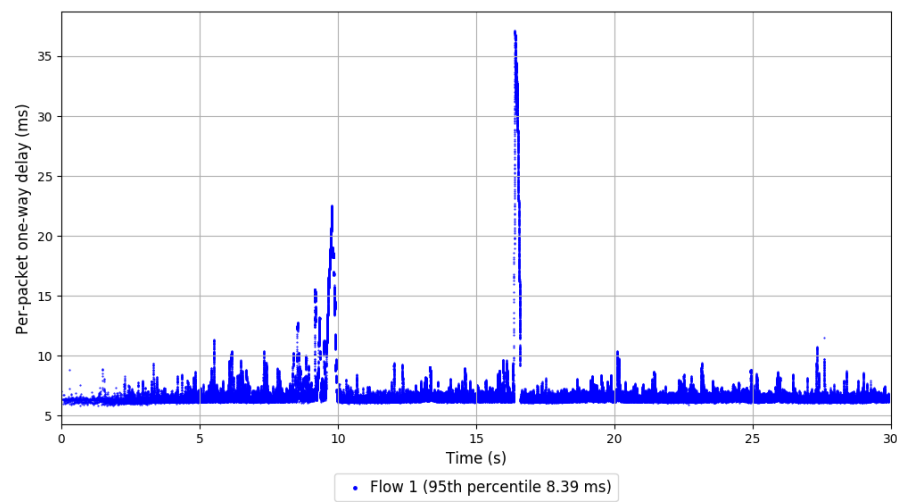
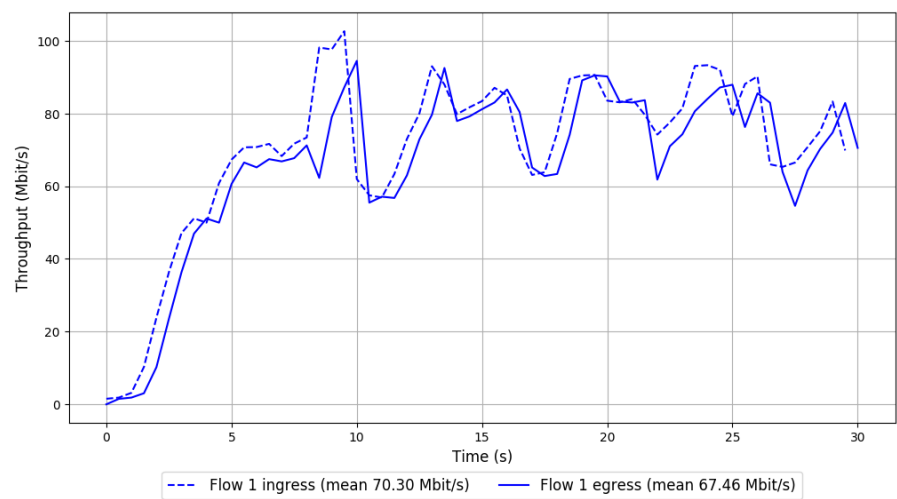
-- Flow 1:

Average throughput: 67.46 Mbit/s

95th percentile per-packet one-way delay: 8.386 ms

Loss rate: 4.05%

Run 5: Report of PCC-Vivace — Data Link

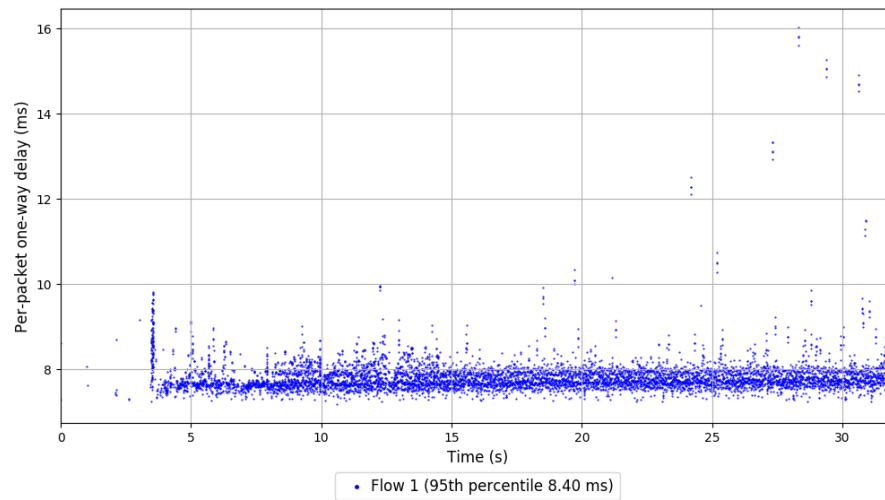
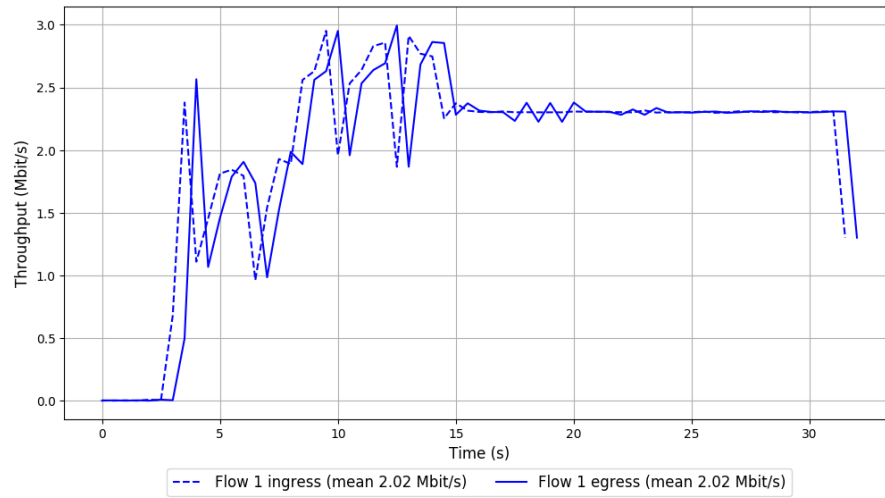


Run 1: Statistics of WebRTC media

Start at: 2018-09-25 04:51:29
End at: 2018-09-25 04:51:59
Local clock offset: 1.716 ms
Remote clock offset: -3.741 ms

Below is generated by plot.py at 2018-09-25 06:36:40
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 8.405 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 8.405 ms
Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link

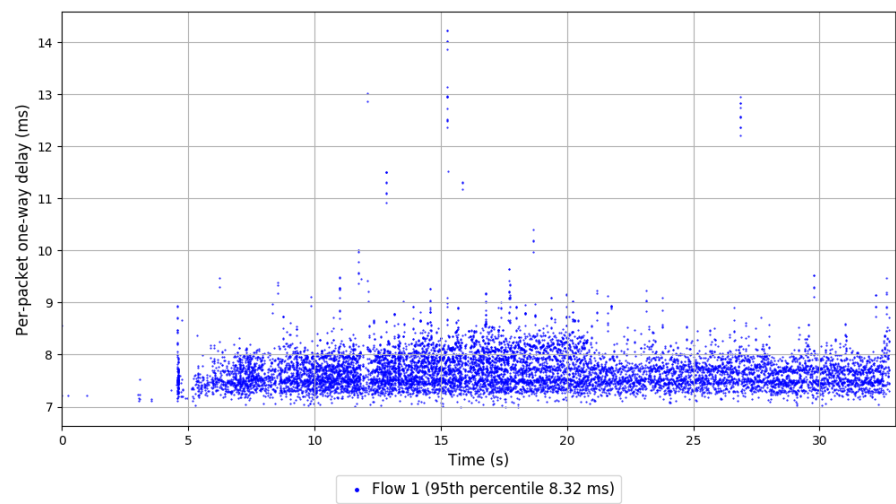
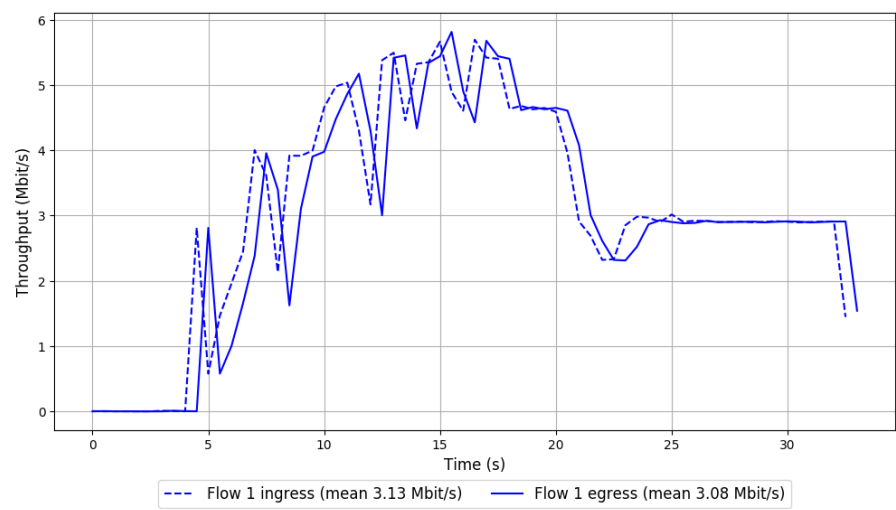


Run 2: Statistics of WebRTC media

Start at: 2018-09-25 05:13:19
End at: 2018-09-25 05:13:49
Local clock offset: 2.299 ms
Remote clock offset: -4.287 ms

Below is generated by plot.py at 2018-09-25 06:36:40
Datalink statistics
-- Total of 1 flow:
Average throughput: 3.08 Mbit/s
95th percentile per-packet one-way delay: 8.317 ms
Loss rate: 1.60%
-- Flow 1:
Average throughput: 3.08 Mbit/s
95th percentile per-packet one-way delay: 8.317 ms
Loss rate: 1.60%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-09-25 05:34:45

End at: 2018-09-25 05:35:15

Local clock offset: 5.067 ms

Remote clock offset: -3.79 ms

Below is generated by plot.py at 2018-09-25 06:36:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 7.077 ms

Loss rate: 0.82%

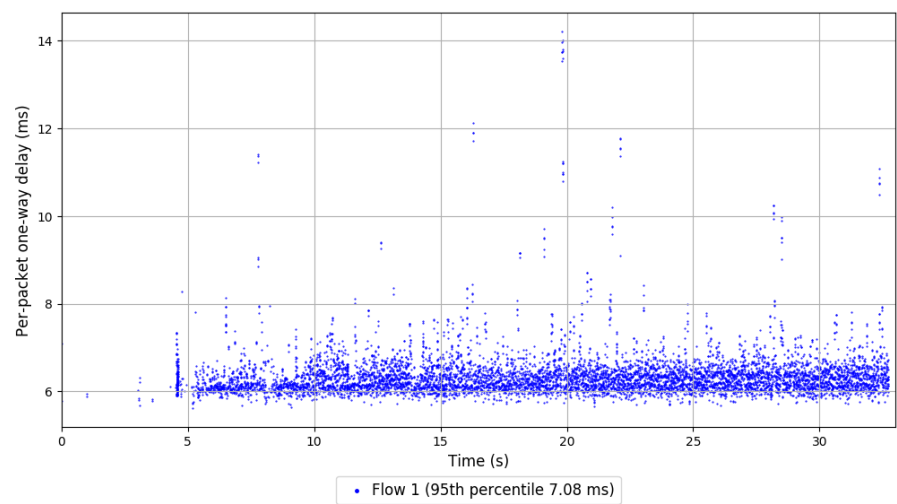
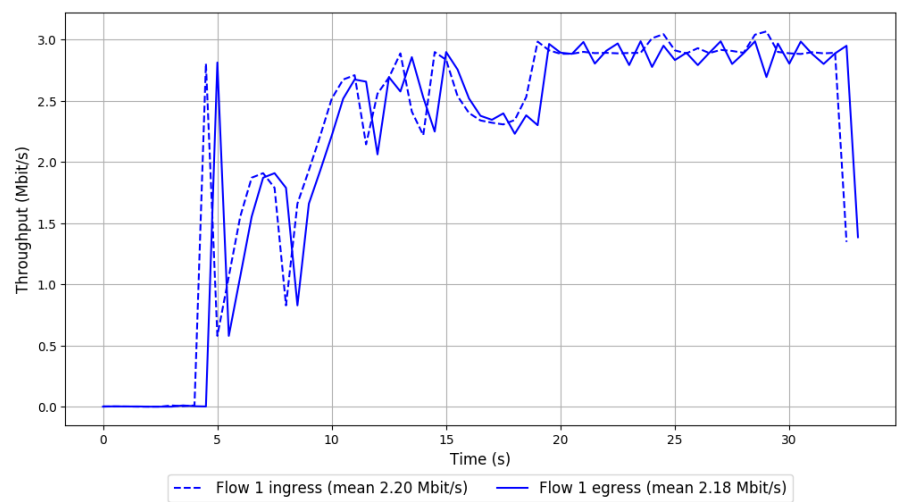
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 7.077 ms

Loss rate: 0.82%

Run 3: Report of WebRTC media — Data Link

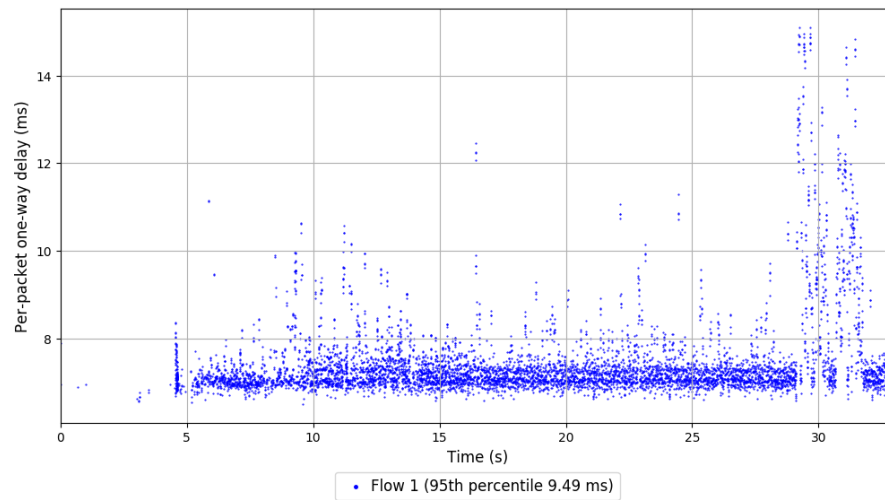
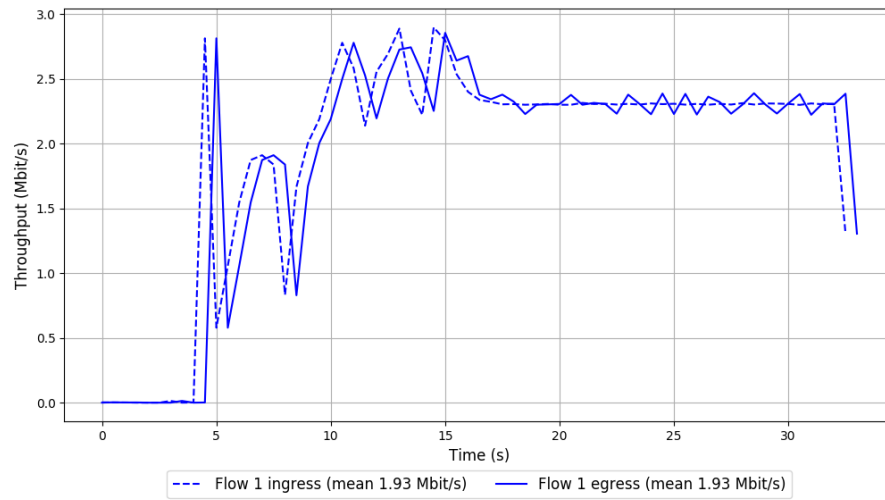


Run 4: Statistics of WebRTC media

Start at: 2018-09-25 05:56:16
End at: 2018-09-25 05:56:46
Local clock offset: 3.711 ms
Remote clock offset: -3.919 ms

Below is generated by plot.py at 2018-09-25 06:36:40
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 9.489 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 9.489 ms
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-09-25 06:17:54
End at: 2018-09-25 06:18:24
Local clock offset: 3.513 ms
Remote clock offset: -3.613 ms

Below is generated by plot.py at 2018-09-25 06:36:40
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 6.732 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 6.732 ms
Loss rate: 0.02%

Run 5: Report of WebRTC media — Data Link

