

Pantheon Report

Generated at 2019-01-21 08:47:30 (UTC).

Data path: AWS Korea on `ens5` (*local*) → China on `eno1` (*remote*).

Repeated the test of 21 congestion control schemes 5 times.

Each test lasted for 30 seconds running 1 flow.

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

System info:

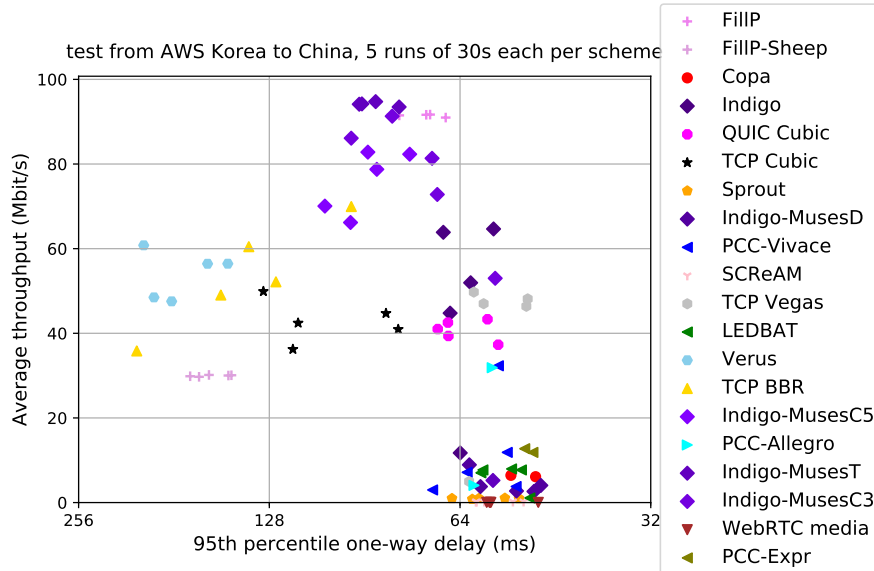
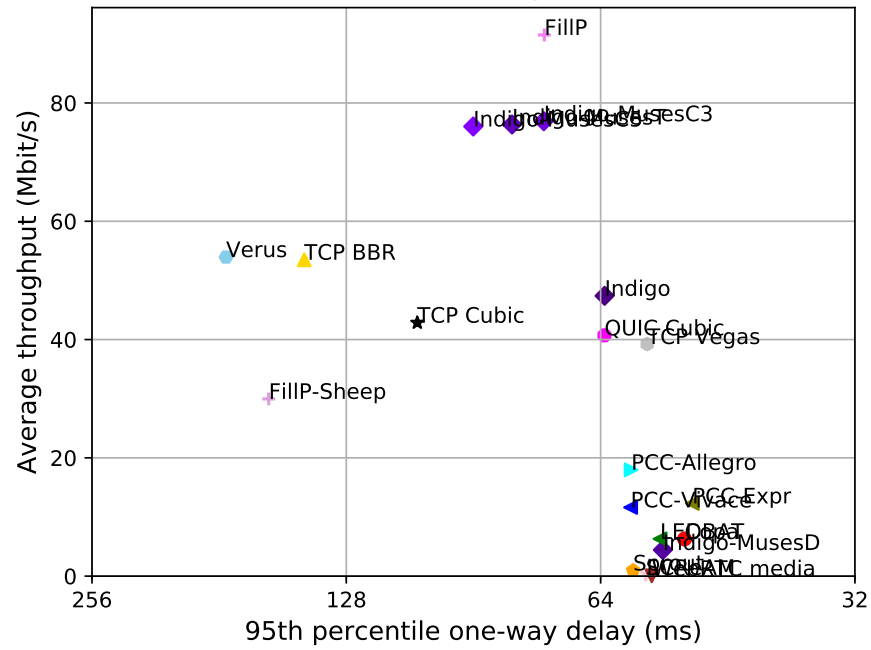
```
Linux 4.15.0-1031-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

```
branch: muses @ 89d24e57783e7fbfec537a619071de937b639e38
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 1ddcff131048c6962f123bcd22b4d166a422adde
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-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 Korea to China, 5 runs of 30s each per scheme
(mean of all runs by scheme)



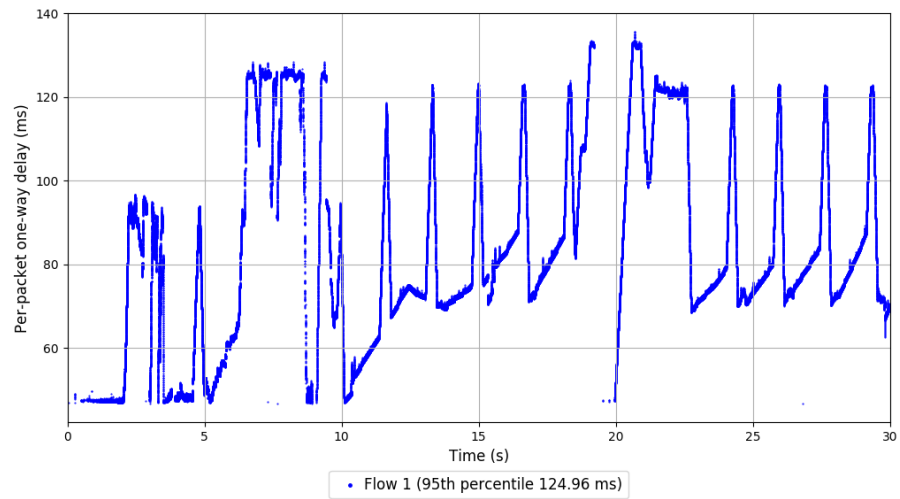
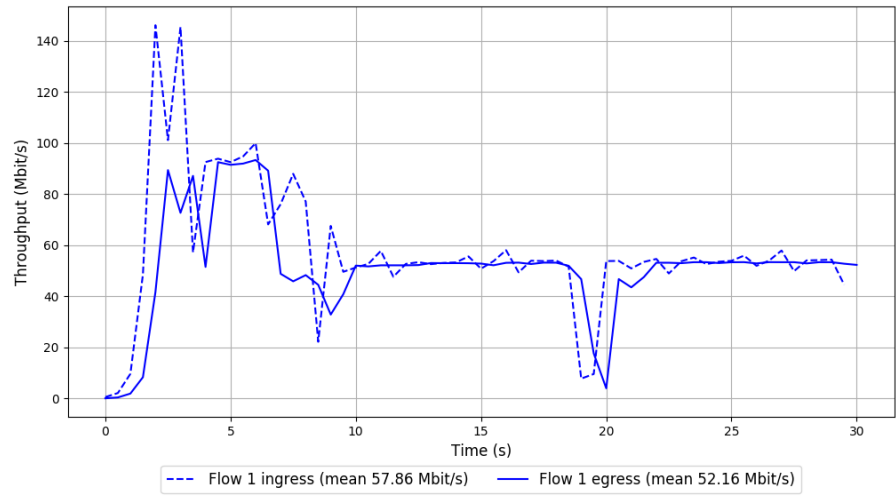
scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	53.49	143.56	15.69
Copa	2	6.28	50.92	0.51
TCP Cubic	5	42.84	105.49	0.94
FillP	5	91.50	74.61	1.61
FillP-Sheep	5	29.97	158.15	4.99
Indigo	5	47.39	63.31	0.32
Indigo-MusesC3	5	76.91	74.73	0.09
Indigo-MusesC5	5	76.02	90.56	0.00
Indigo-MusesD	5	4.43	54.01	0.00
Indigo-MusesT	5	76.36	81.47	3.10
LEDBAT	5	6.30	54.44	0.00
PCC-Allegro	2	17.96	58.88	0.13
PCC-Expr	2	12.29	49.85	22.49
QUIC Cubic	5	40.70	63.34	0.00
SCReAM	5	0.21	56.58	0.00
Sprout	5	0.96	58.58	0.00
TaoVA-100x	0	N/A	N/A	N/A
TCP Vegas	5	39.25	56.38	1.06
Verus	5	53.94	177.66	10.98
PCC-Vivace	5	11.62	58.98	0.00
WebRTC media	5	0.05	55.67	0.00

Run 1: Statistics of TCP BBR

Start at: 2019-01-21 05:15:59
End at: 2019-01-21 05:16:29
Local clock offset: -1.108 ms
Remote clock offset: 72.222 ms

Below is generated by plot.py at 2019-01-21 08:42:24
Datalink statistics
-- Total of 1 flow:
Average throughput: 52.16 Mbit/s
95th percentile per-packet one-way delay: 124.962 ms
Loss rate: 9.77%
-- Flow 1:
Average throughput: 52.16 Mbit/s
95th percentile per-packet one-way delay: 124.962 ms
Loss rate: 9.77%

Run 1: Report of TCP BBR — Data Link

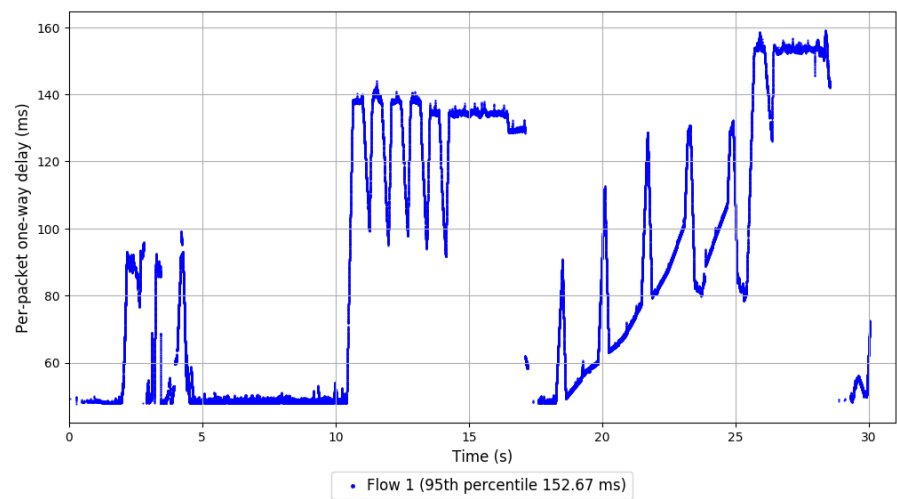
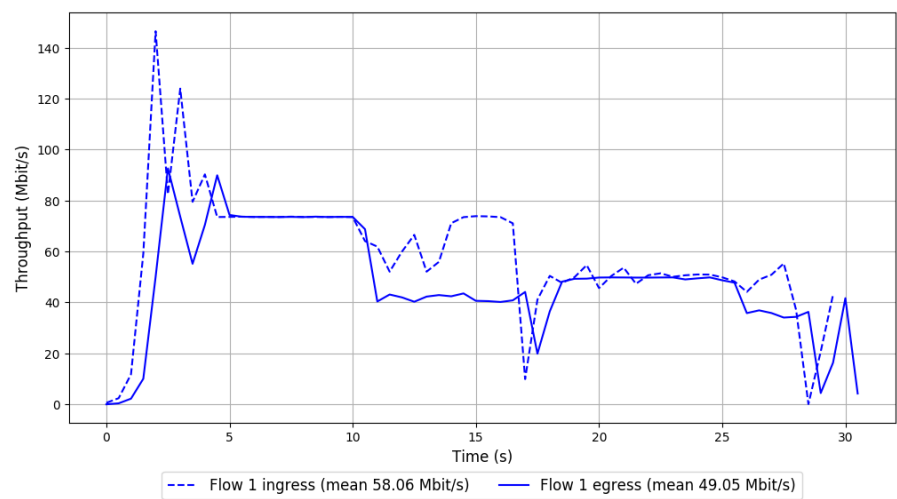


Run 2: Statistics of TCP BBR

Start at: 2019-01-21 06:12:10
End at: 2019-01-21 06:12:40
Local clock offset: 6.393 ms
Remote clock offset: 51.086 ms

Below is generated by plot.py at 2019-01-21 08:42:24
Datalink statistics
-- Total of 1 flow:
Average throughput: 49.05 Mbit/s
95th percentile per-packet one-way delay: 152.672 ms
Loss rate: 15.50%
-- Flow 1:
Average throughput: 49.05 Mbit/s
95th percentile per-packet one-way delay: 152.672 ms
Loss rate: 15.50%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2019-01-21 06:45:27

End at: 2019-01-21 06:45:57

Local clock offset: -5.358 ms

Remote clock offset: 48.0 ms

Below is generated by plot.py at 2019-01-21 08:42:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.47 Mbit/s

95th percentile per-packet one-way delay: 137.909 ms

Loss rate: 11.00%

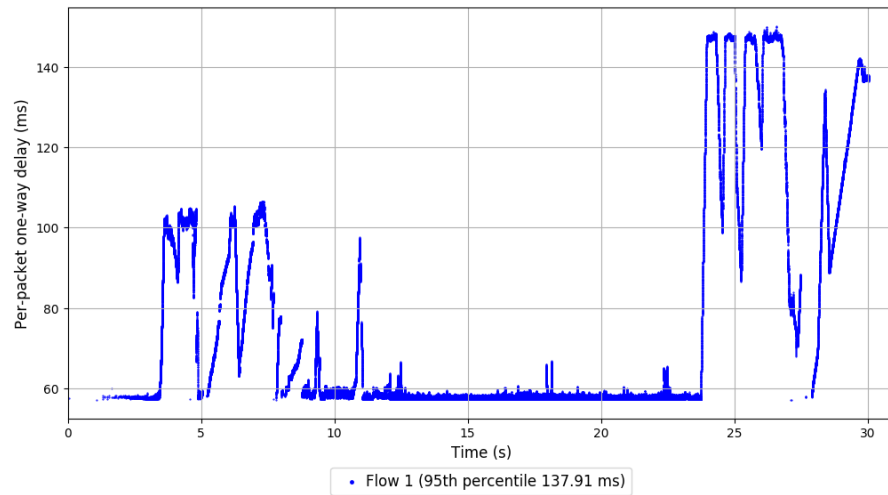
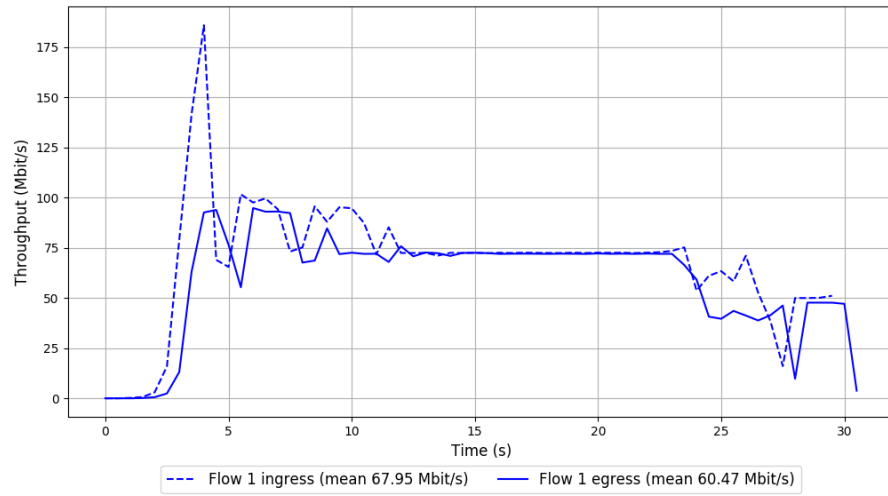
-- Flow 1:

Average throughput: 60.47 Mbit/s

95th percentile per-packet one-way delay: 137.909 ms

Loss rate: 11.00%

Run 3: Report of TCP BBR — Data Link

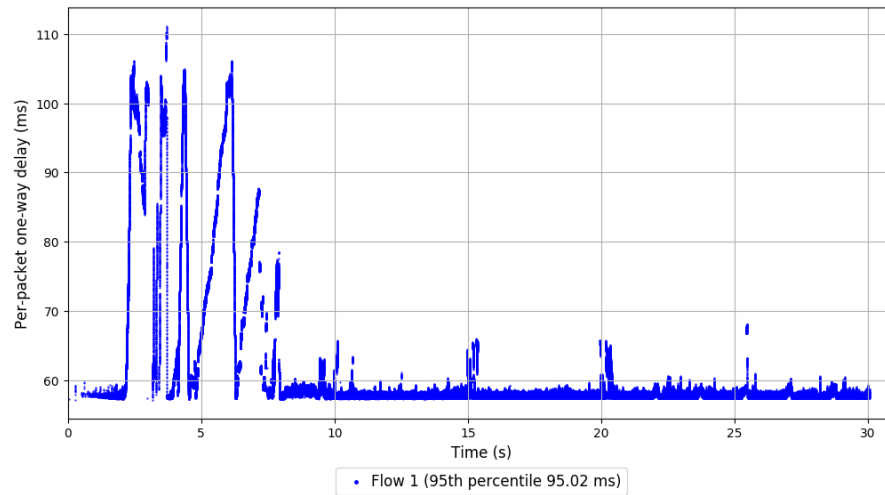
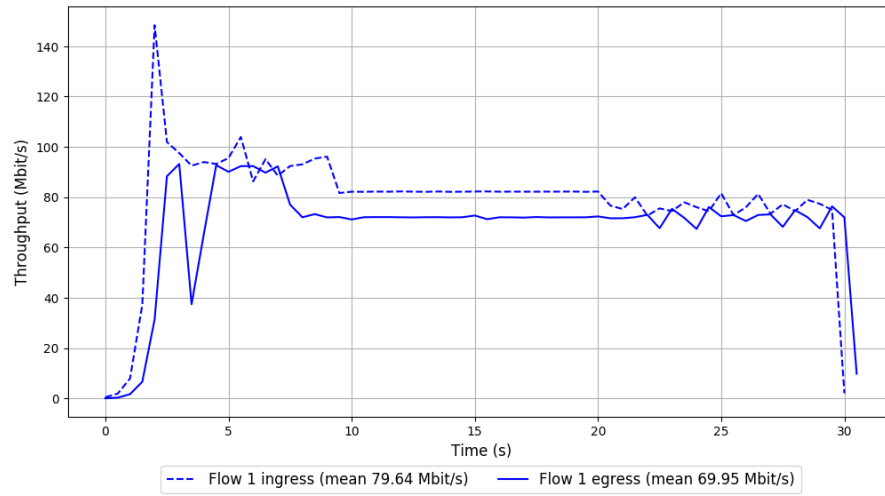


Run 4: Statistics of TCP BBR

Start at: 2019-01-21 07:26:24
End at: 2019-01-21 07:26:54
Local clock offset: -3.632 ms
Remote clock offset: 48.711 ms

Below is generated by plot.py at 2019-01-21 08:42:34
Datalink statistics
-- Total of 1 flow:
Average throughput: 69.95 Mbit/s
95th percentile per-packet one-way delay: 95.020 ms
Loss rate: 12.16%
-- Flow 1:
Average throughput: 69.95 Mbit/s
95th percentile per-packet one-way delay: 95.020 ms
Loss rate: 12.16%

Run 4: Report of TCP BBR — Data Link

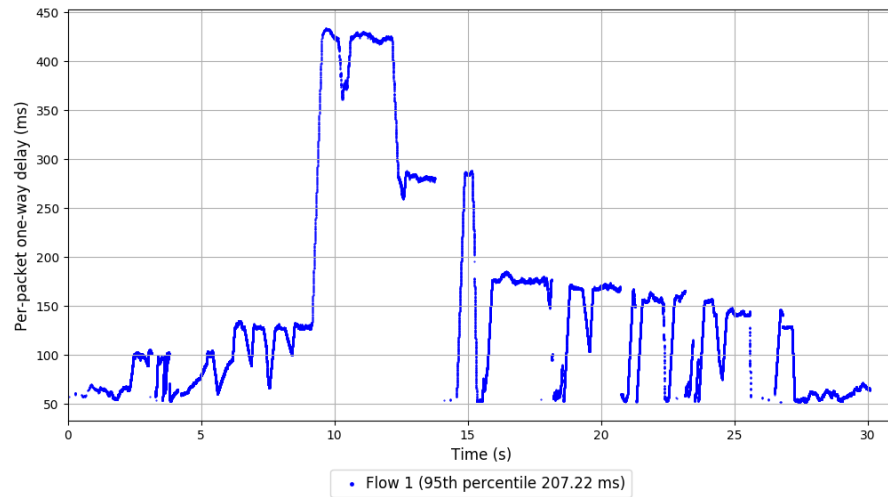
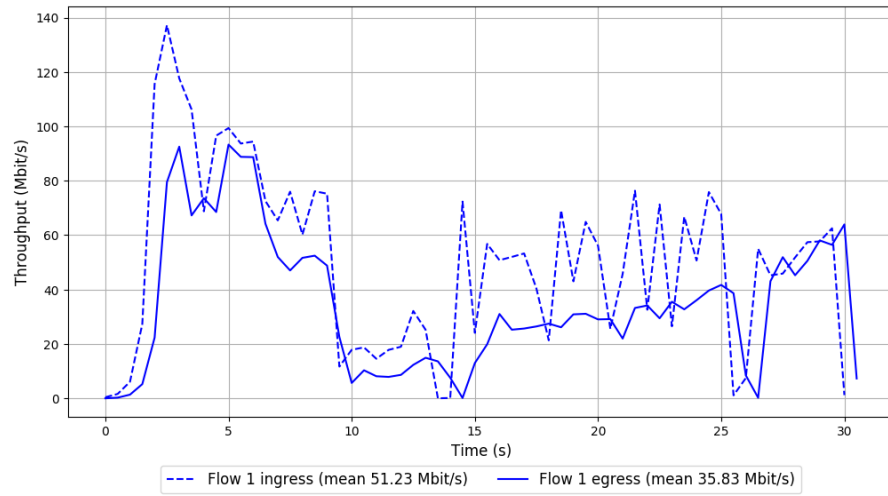


Run 5: Statistics of TCP BBR

Start at: 2019-01-21 08:18:26
End at: 2019-01-21 08:18:56
Local clock offset: 9.74 ms
Remote clock offset: 47.799 ms

Below is generated by plot.py at 2019-01-21 08:42:34
Datalink statistics
-- Total of 1 flow:
Average throughput: 35.83 Mbit/s
95th percentile per-packet one-way delay: 207.223 ms
Loss rate: 30.04%
-- Flow 1:
Average throughput: 35.83 Mbit/s
95th percentile per-packet one-way delay: 207.223 ms
Loss rate: 30.04%

Run 5: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

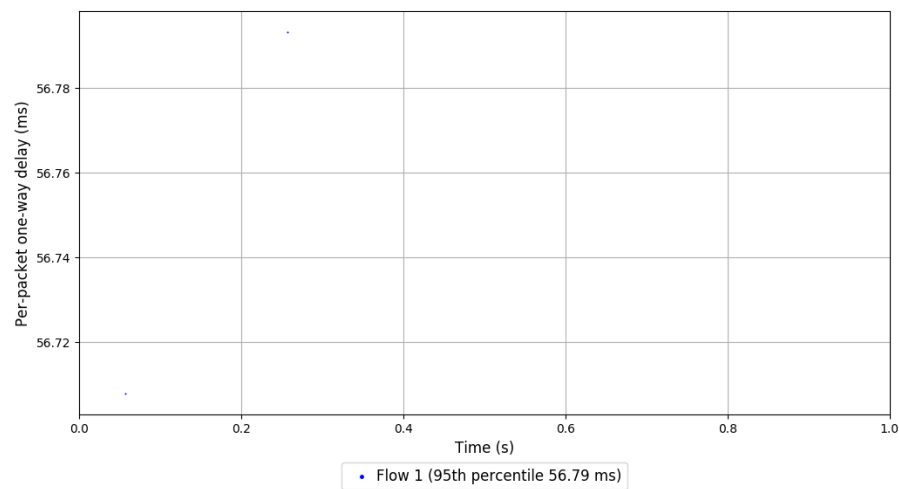
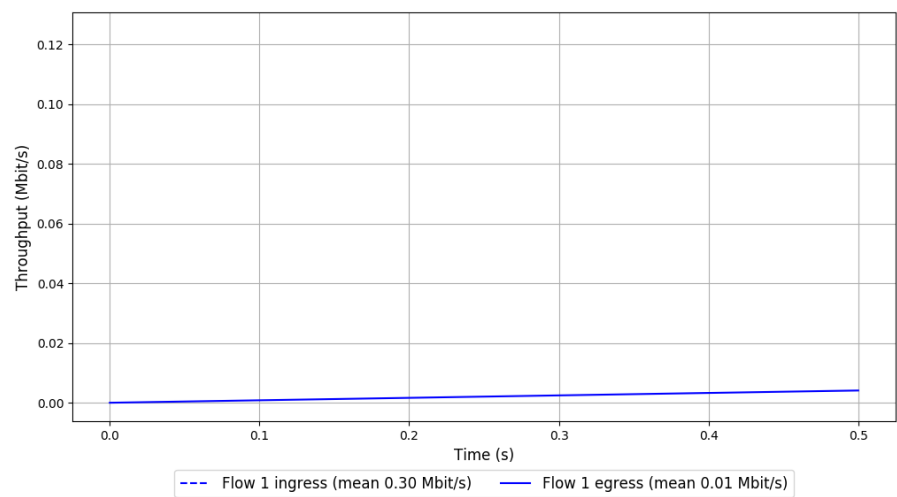
Start at: 2019-01-21 04:53:26

End at: 2019-01-21 04:53:56

Local clock offset: -2.487 ms

Remote clock offset: 54.493 ms

Run 1: Report of Copa — Data Link

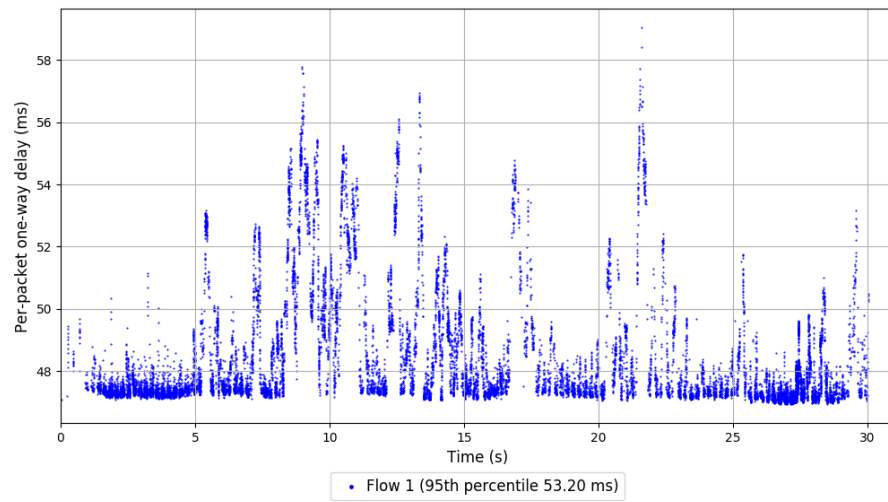
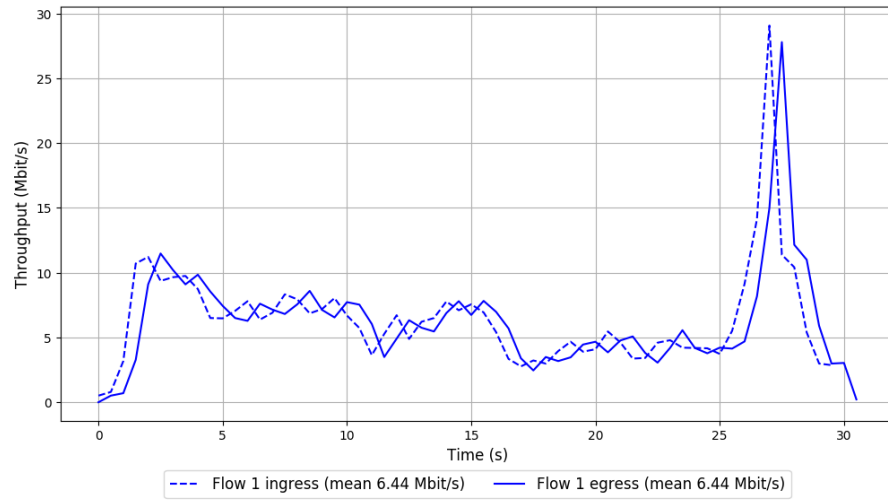


Run 2: Statistics of Copa

Start at: 2019-01-21 05:40:22
End at: 2019-01-21 05:40:52
Local clock offset: 4.775 ms
Remote clock offset: 85.301 ms

Below is generated by plot.py at 2019-01-21 08:42:34
Datalink statistics
-- Total of 1 flow:
Average throughput: 6.44 Mbit/s
95th percentile per-packet one-way delay: 53.197 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.44 Mbit/s
95th percentile per-packet one-way delay: 53.197 ms
Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

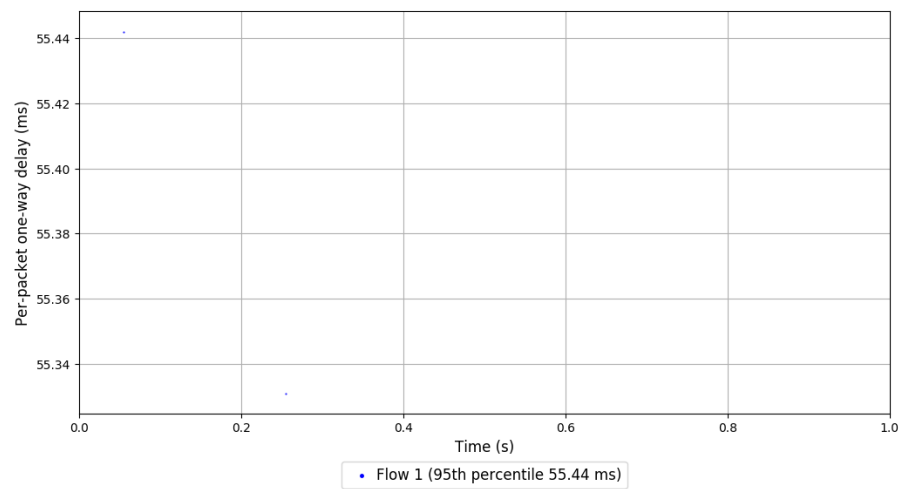
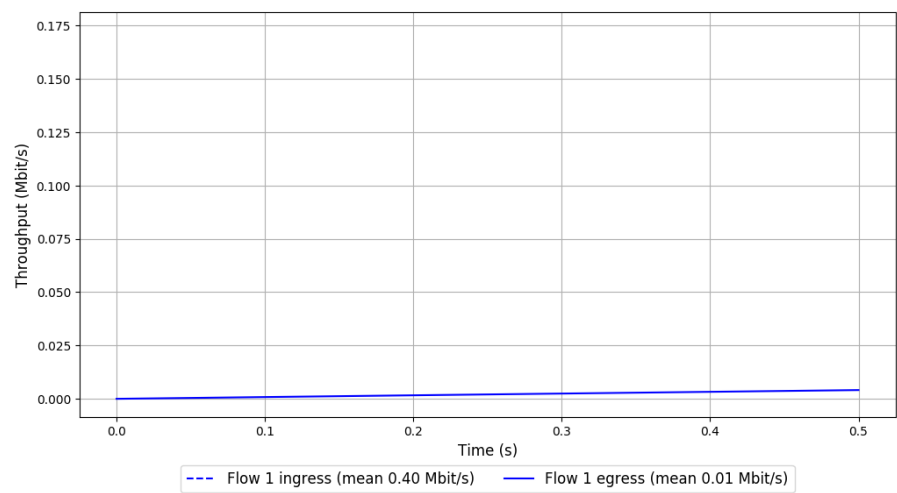
Start at: 2019-01-21 06:30:39

End at: 2019-01-21 06:31:09

Local clock offset: -2.313 ms

Remote clock offset: 47.051 ms

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

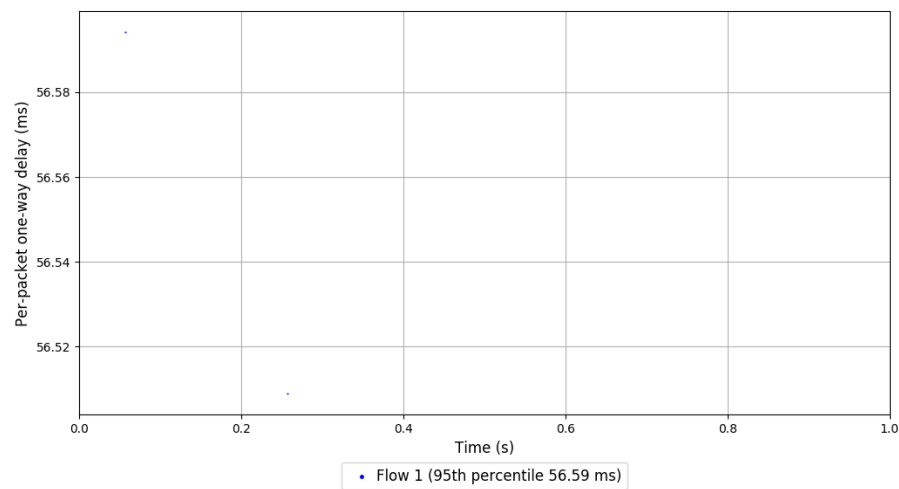
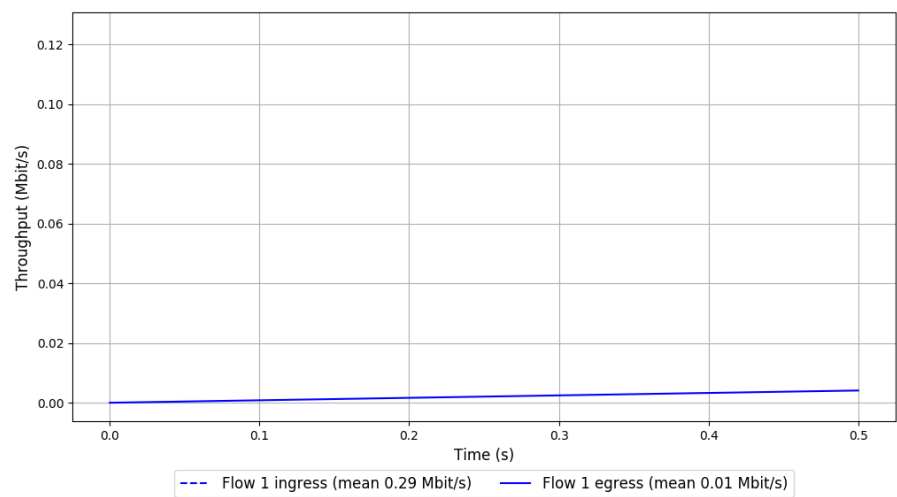
Start at: 2019-01-21 07:02:33

End at: 2019-01-21 07:03:03

Local clock offset: -6.812 ms

Remote clock offset: 47.344 ms

Run 4: Report of Copa — Data Link

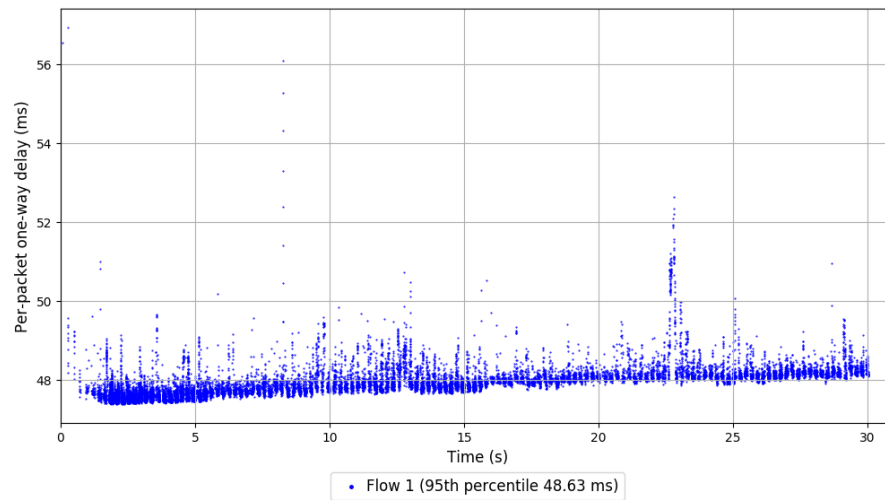
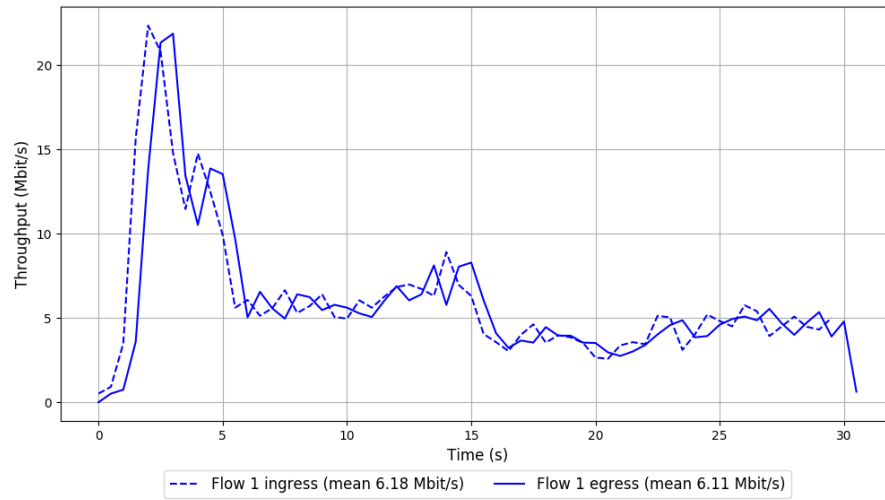


Run 5: Statistics of Copa

Start at: 2019-01-21 07:50:31
End at: 2019-01-21 07:51:01
Local clock offset: 2.965 ms
Remote clock offset: 33.407 ms

Below is generated by plot.py at 2019-01-21 08:42:34
Datalink statistics
-- Total of 1 flow:
Average throughput: 6.11 Mbit/s
95th percentile per-packet one-way delay: 48.635 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 6.11 Mbit/s
95th percentile per-packet one-way delay: 48.635 ms
Loss rate: 1.02%

Run 5: Report of Copa — Data Link

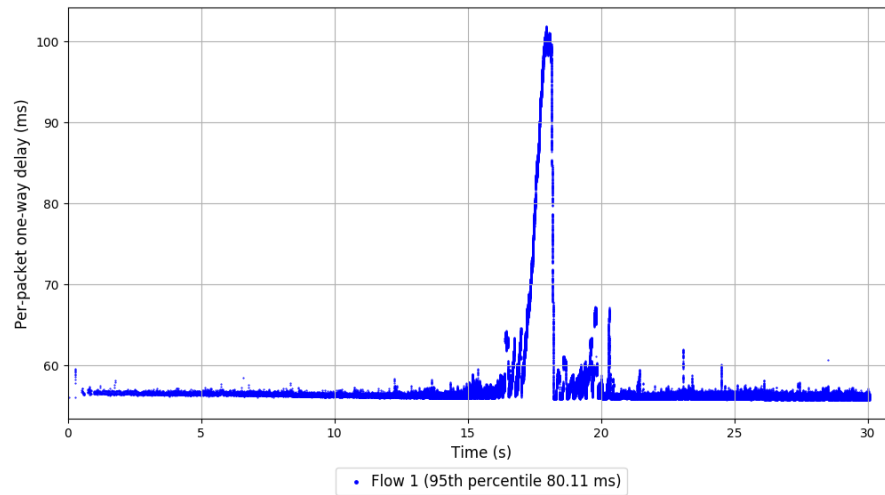
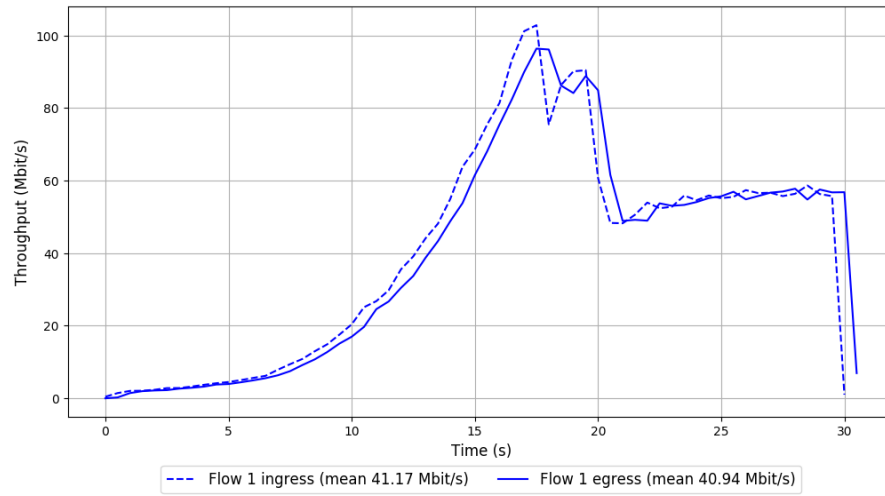


Run 1: Statistics of TCP Cubic

Start at: 2019-01-21 05:00:03
End at: 2019-01-21 05:00:33
Local clock offset: -1.739 ms
Remote clock offset: 61.217 ms

Below is generated by plot.py at 2019-01-21 08:42:34
Datalink statistics
-- Total of 1 flow:
Average throughput: 40.94 Mbit/s
95th percentile per-packet one-way delay: 80.113 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 40.94 Mbit/s
95th percentile per-packet one-way delay: 80.113 ms
Loss rate: 0.57%

Run 1: Report of TCP Cubic — Data Link

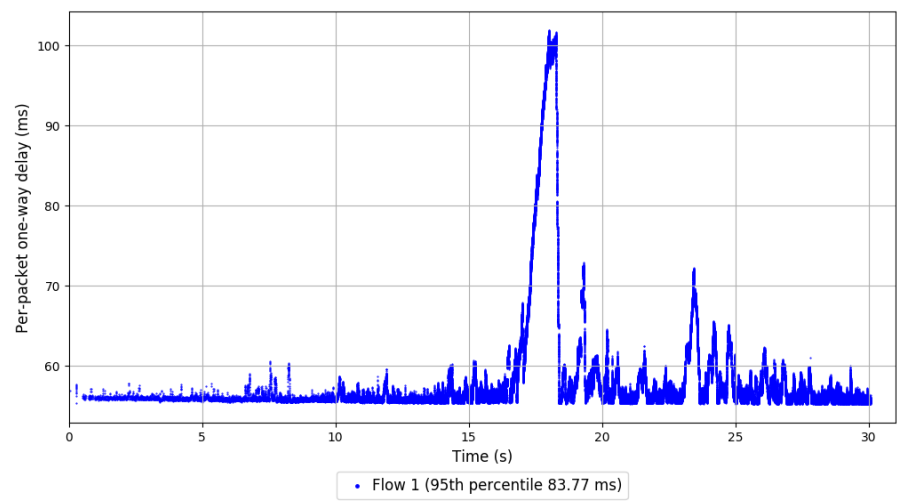
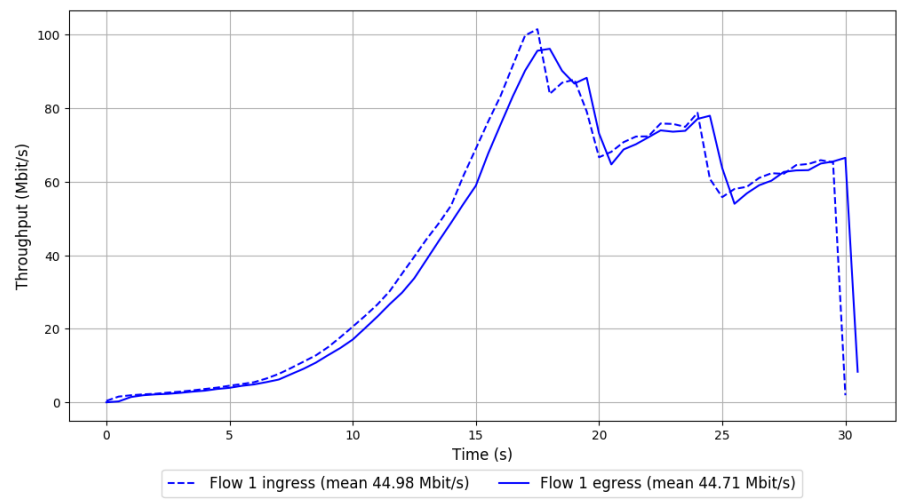


Run 2: Statistics of TCP Cubic

Start at: 2019-01-21 05:48:49
End at: 2019-01-21 05:49:19
Local clock offset: 5.39 ms
Remote clock offset: 88.683 ms

Below is generated by plot.py at 2019-01-21 08:42:34
Datalink statistics
-- Total of 1 flow:
Average throughput: 44.71 Mbit/s
95th percentile per-packet one-way delay: 83.766 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 44.71 Mbit/s
95th percentile per-packet one-way delay: 83.766 ms
Loss rate: 0.62%

Run 2: Report of TCP Cubic — Data Link

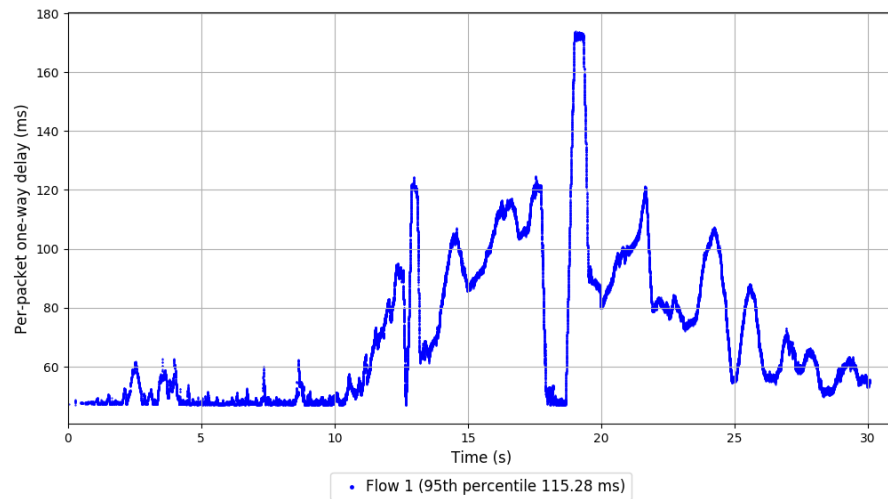
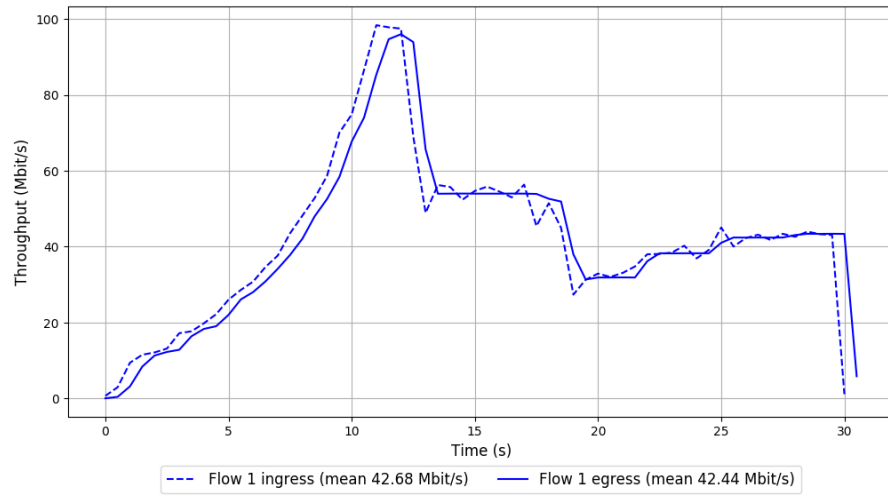


Run 3: Statistics of TCP Cubic

Start at: 2019-01-21 06:35:32
End at: 2019-01-21 06:36:02
Local clock offset: -3.889 ms
Remote clock offset: 47.306 ms

Below is generated by plot.py at 2019-01-21 08:42:34
Datalink statistics
-- Total of 1 flow:
Average throughput: 42.44 Mbit/s
95th percentile per-packet one-way delay: 115.282 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 42.44 Mbit/s
95th percentile per-packet one-way delay: 115.282 ms
Loss rate: 0.54%

Run 3: Report of TCP Cubic — Data Link

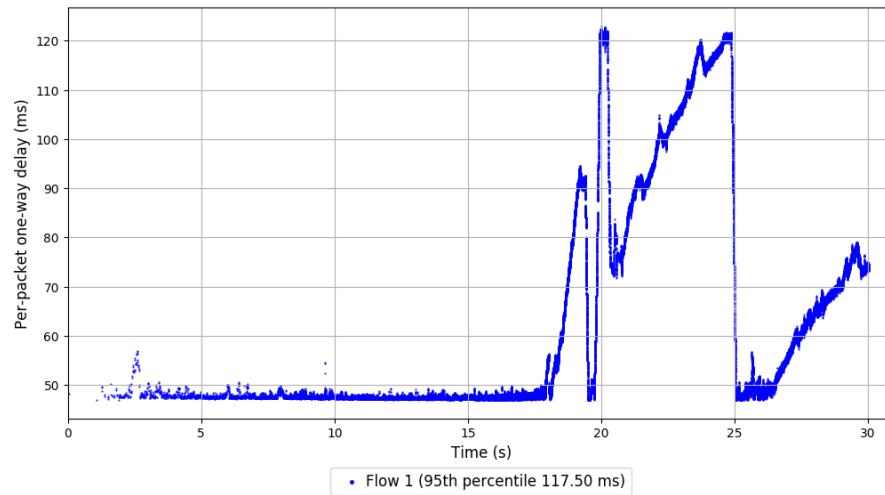
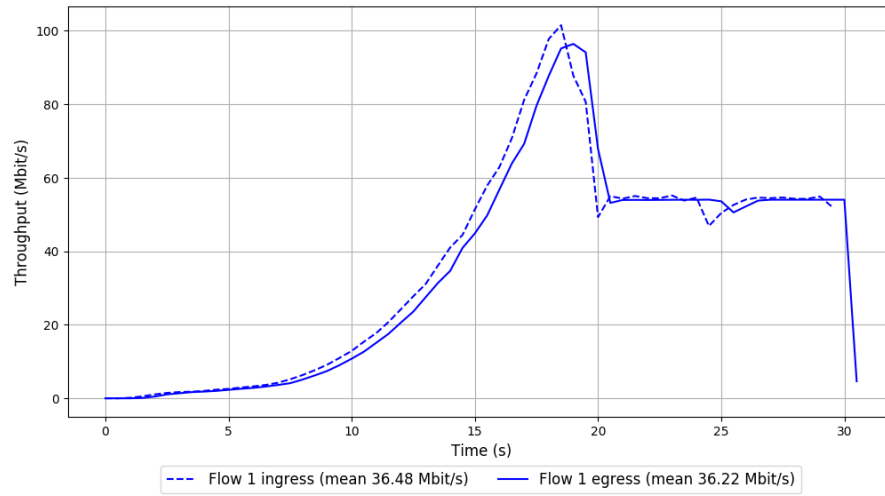


Run 4: Statistics of TCP Cubic

Start at: 2019-01-21 07:09:34
End at: 2019-01-21 07:10:04
Local clock offset: -7.545 ms
Remote clock offset: 47.982 ms

Below is generated by plot.py at 2019-01-21 08:42:36
Datalink statistics
-- Total of 1 flow:
Average throughput: 36.22 Mbit/s
95th percentile per-packet one-way delay: 117.501 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 36.22 Mbit/s
95th percentile per-packet one-way delay: 117.501 ms
Loss rate: 0.67%

Run 4: Report of TCP Cubic — Data Link

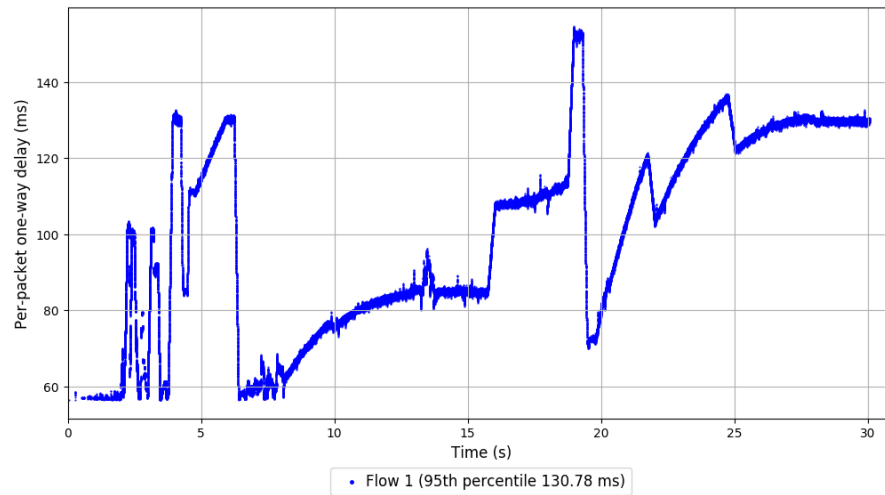
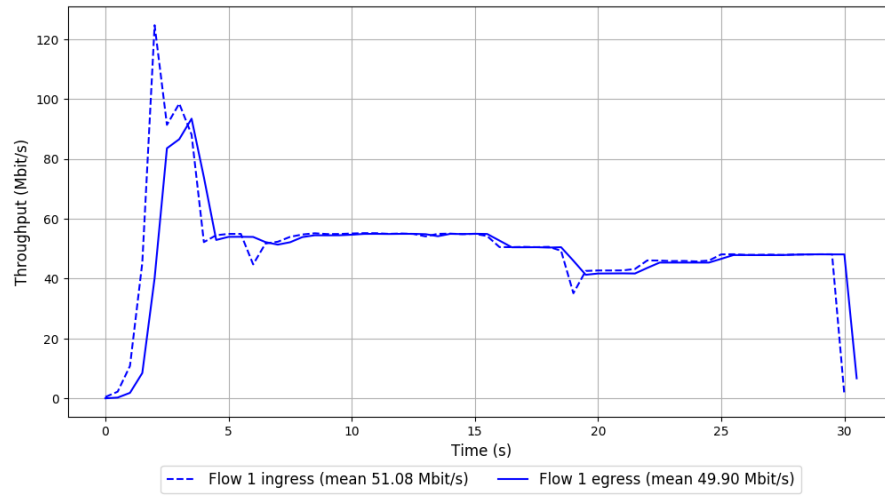


Run 5: Statistics of TCP Cubic

Start at: 2019-01-21 07:59:17
End at: 2019-01-21 07:59:47
Local clock offset: 8.088 ms
Remote clock offset: 30.226 ms

Below is generated by plot.py at 2019-01-21 08:42:44
Datalink statistics
-- Total of 1 flow:
Average throughput: 49.90 Mbit/s
95th percentile per-packet one-way delay: 130.783 ms
Loss rate: 2.31%
-- Flow 1:
Average throughput: 49.90 Mbit/s
95th percentile per-packet one-way delay: 130.783 ms
Loss rate: 2.31%

Run 5: Report of TCP Cubic — Data Link

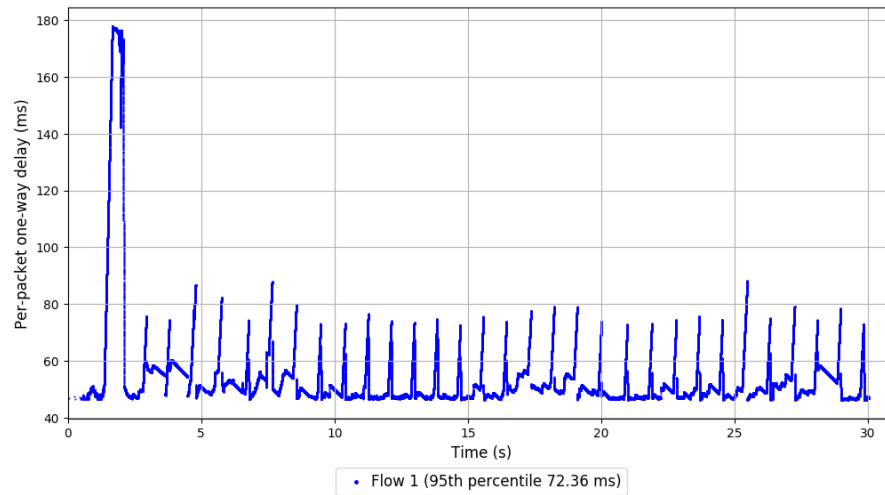
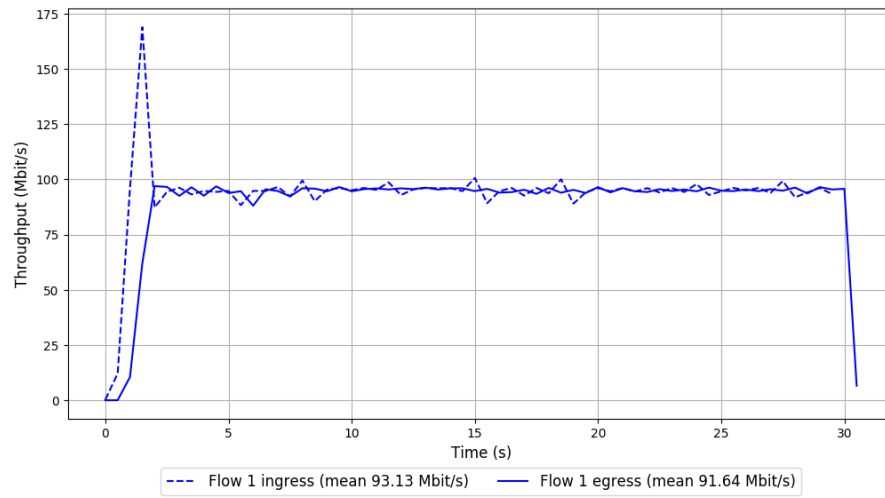


Run 1: Statistics of FillP

Start at: 2019-01-21 05:12:01
End at: 2019-01-21 05:12:31
Local clock offset: -1.164 ms
Remote clock offset: 70.058 ms

Below is generated by plot.py at 2019-01-21 08:43:37
Datalink statistics
-- Total of 1 flow:
Average throughput: 91.64 Mbit/s
95th percentile per-packet one-way delay: 72.360 ms
Loss rate: 1.60%
-- Flow 1:
Average throughput: 91.64 Mbit/s
95th percentile per-packet one-way delay: 72.360 ms
Loss rate: 1.60%

Run 1: Report of FillP — Data Link

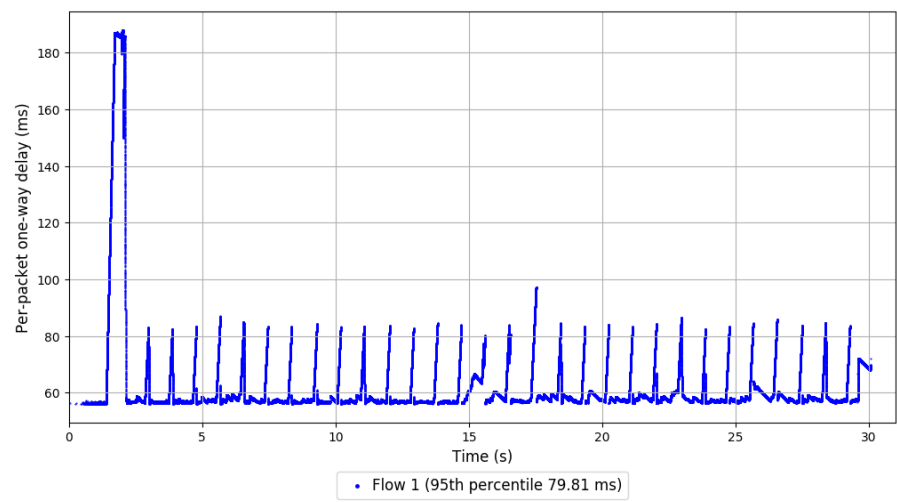
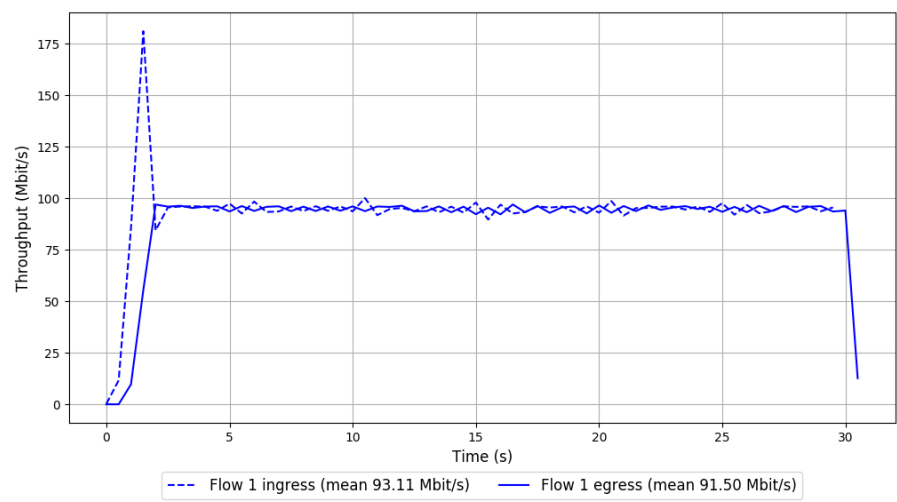


Run 2: Statistics of FillP

Start at: 2019-01-21 06:09:20
End at: 2019-01-21 06:09:50
Local clock offset: 6.19 ms
Remote clock offset: 52.064 ms

Below is generated by plot.py at 2019-01-21 08:43:38
Datalink statistics
-- Total of 1 flow:
Average throughput: 91.50 Mbit/s
95th percentile per-packet one-way delay: 79.810 ms
Loss rate: 1.68%
-- Flow 1:
Average throughput: 91.50 Mbit/s
95th percentile per-packet one-way delay: 79.810 ms
Loss rate: 1.68%

Run 2: Report of FillP — Data Link

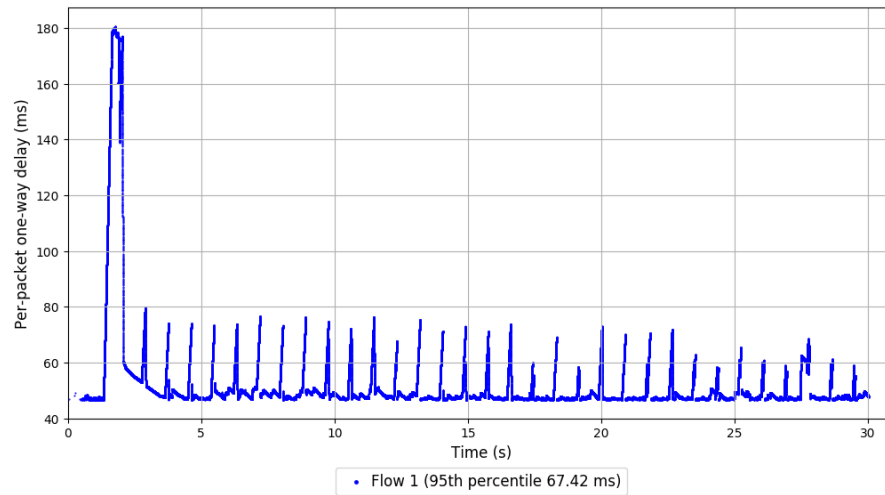
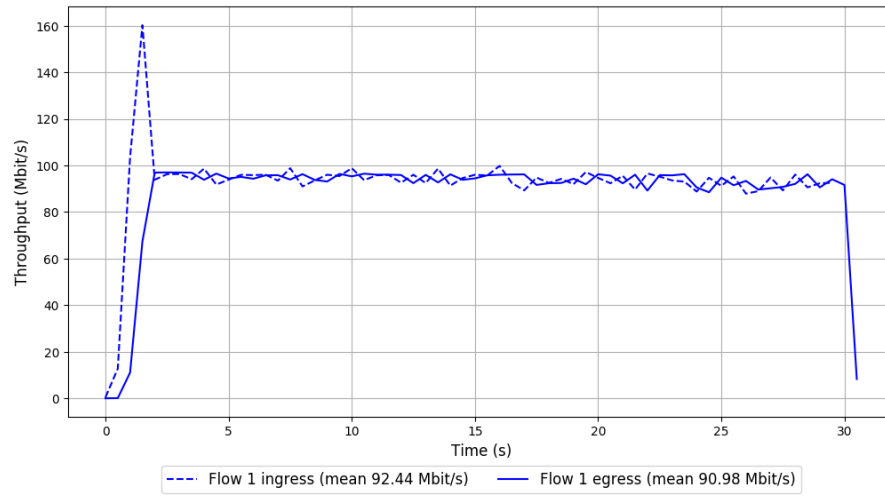


Run 3: Statistics of FillP

Start at: 2019-01-21 06:43:29
End at: 2019-01-21 06:43:59
Local clock offset: -4.903 ms
Remote clock offset: 47.269 ms

Below is generated by plot.py at 2019-01-21 08:43:38
Datalink statistics
-- Total of 1 flow:
Average throughput: 90.98 Mbit/s
95th percentile per-packet one-way delay: 67.424 ms
Loss rate: 1.58%
-- Flow 1:
Average throughput: 90.98 Mbit/s
95th percentile per-packet one-way delay: 67.424 ms
Loss rate: 1.58%

Run 3: Report of FillP — Data Link

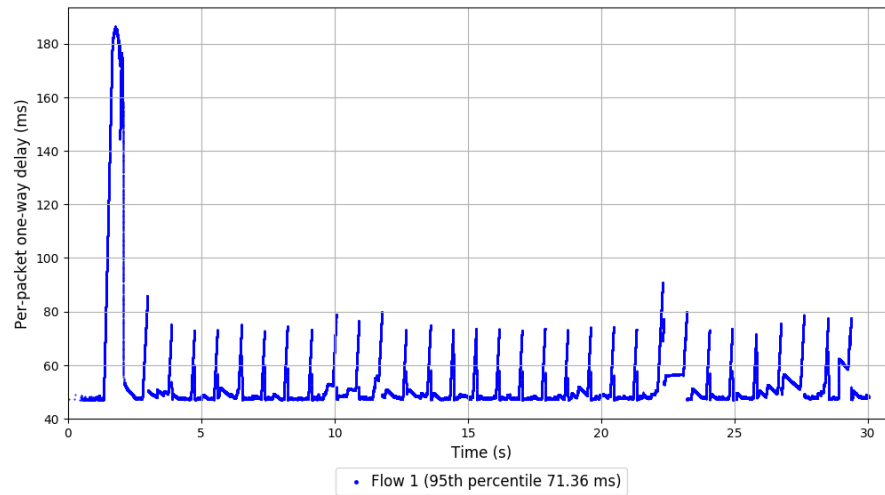
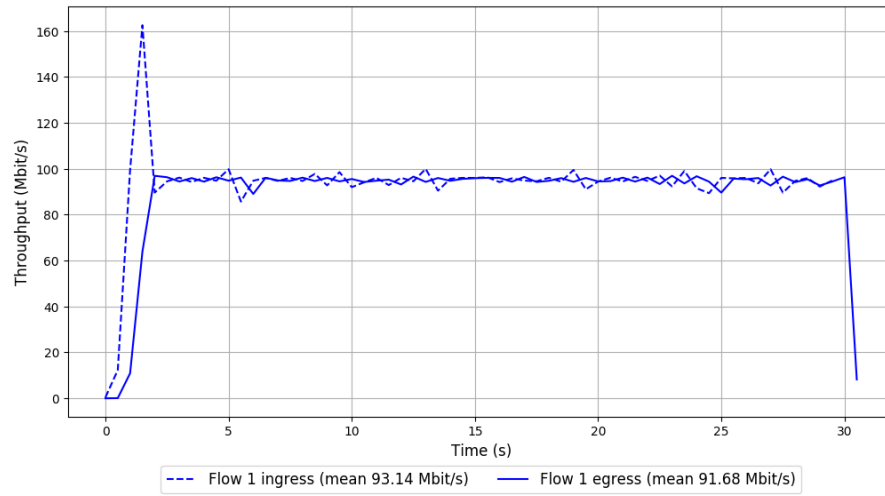


Run 4: Statistics of FillP

Start at: 2019-01-21 07:22:50
End at: 2019-01-21 07:23:20
Local clock offset: -4.5 ms
Remote clock offset: 48.229 ms

Below is generated by plot.py at 2019-01-21 08:43:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 91.68 Mbit/s
95th percentile per-packet one-way delay: 71.358 ms
Loss rate: 1.56%
-- Flow 1:
Average throughput: 91.68 Mbit/s
95th percentile per-packet one-way delay: 71.358 ms
Loss rate: 1.56%

Run 4: Report of FillP — Data Link

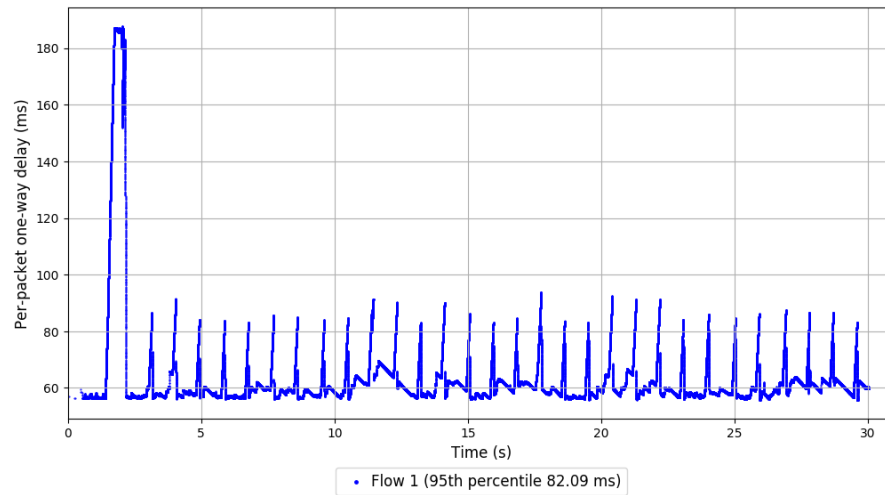
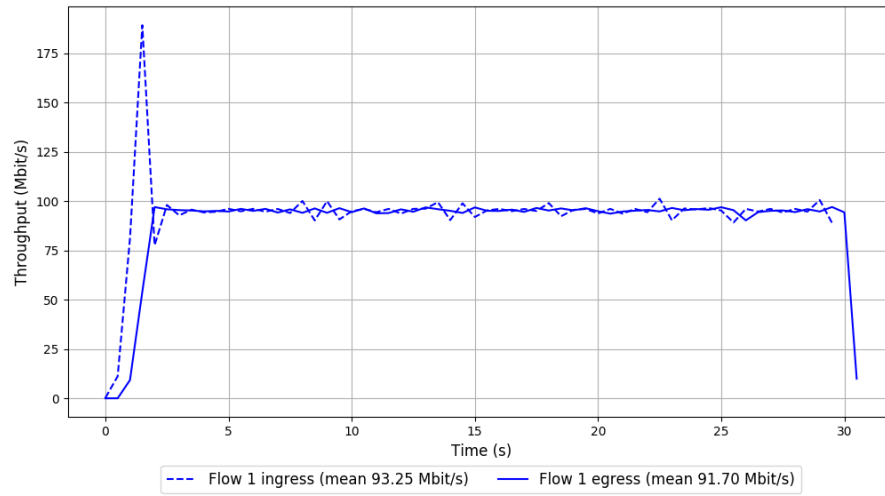


Run 5: Statistics of FillP

Start at: 2019-01-21 08:14:23
End at: 2019-01-21 08:14:53
Local clock offset: 12.314 ms
Remote clock offset: 45.927 ms

Below is generated by plot.py at 2019-01-21 08:43:47
Datalink statistics
-- Total of 1 flow:
Average throughput: 91.70 Mbit/s
95th percentile per-packet one-way delay: 82.090 ms
Loss rate: 1.65%
-- Flow 1:
Average throughput: 91.70 Mbit/s
95th percentile per-packet one-way delay: 82.090 ms
Loss rate: 1.65%

Run 5: Report of FillP — Data Link

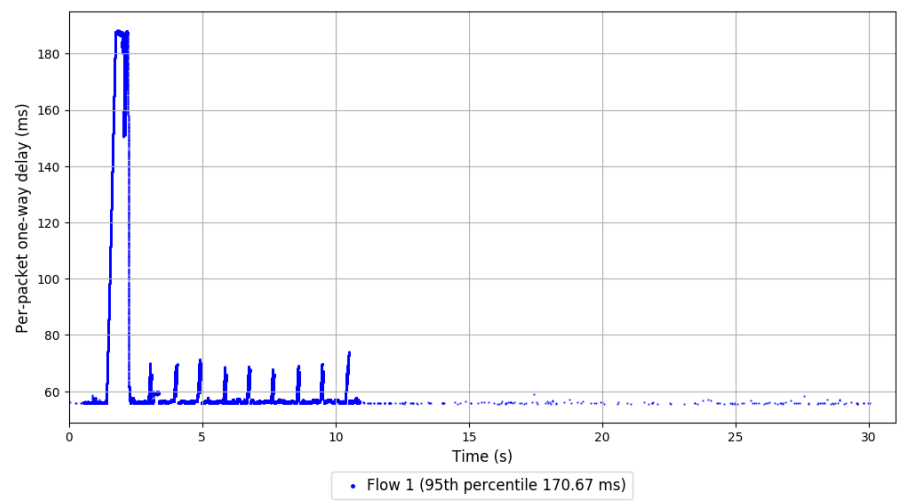
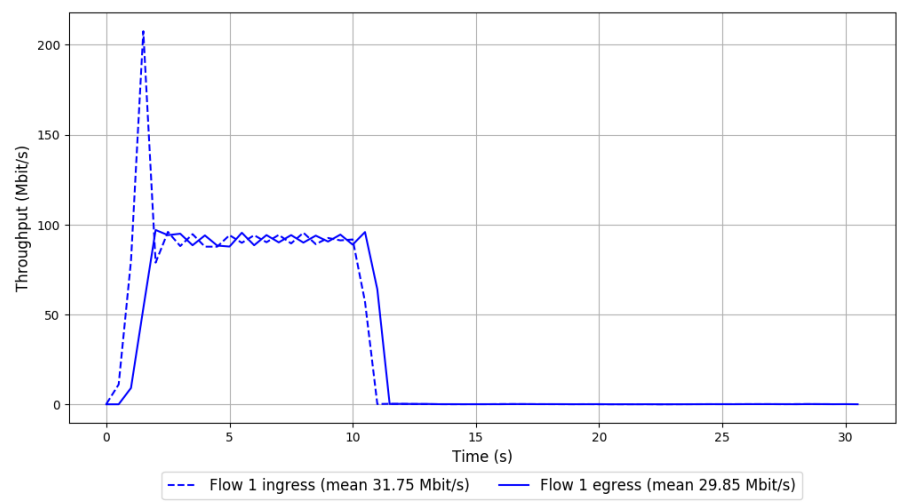


Run 1: Statistics of FillP-Sheep

Start at: 2019-01-21 05:10:02
End at: 2019-01-21 05:10:32
Local clock offset: -1.212 ms
Remote clock offset: 68.675 ms

Below is generated by plot.py at 2019-01-21 08:43:47
Datalink statistics
-- Total of 1 flow:
Average throughput: 29.85 Mbit/s
95th percentile per-packet one-way delay: 170.674 ms
Loss rate: 5.98%
-- Flow 1:
Average throughput: 29.85 Mbit/s
95th percentile per-packet one-way delay: 170.674 ms
Loss rate: 5.98%

Run 1: Report of FillP-Sheep — Data Link

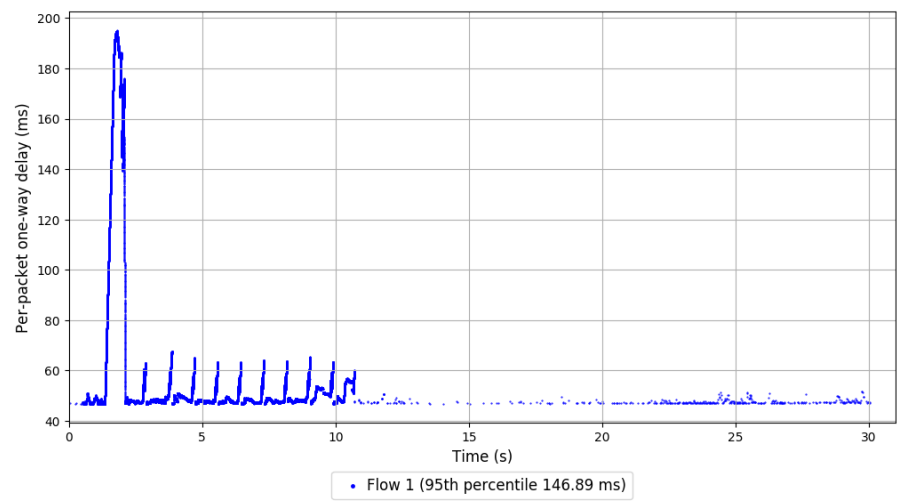
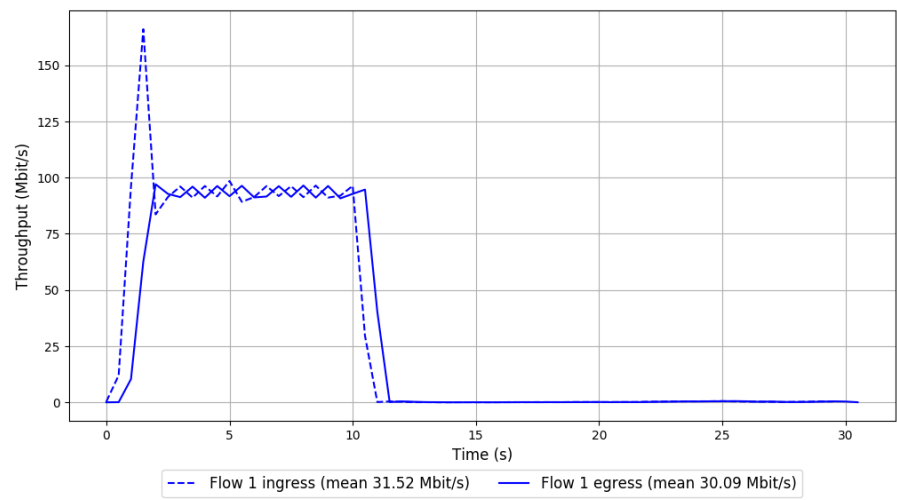


Run 2: Statistics of FillP-Sheep

Start at: 2019-01-21 06:07:30
End at: 2019-01-21 06:08:00
Local clock offset: 5.991 ms
Remote clock offset: 53.077 ms

Below is generated by plot.py at 2019-01-21 08:43:47
Datalink statistics
-- Total of 1 flow:
Average throughput: 30.09 Mbit/s
95th percentile per-packet one-way delay: 146.894 ms
Loss rate: 4.55%
-- Flow 1:
Average throughput: 30.09 Mbit/s
95th percentile per-packet one-way delay: 146.894 ms
Loss rate: 4.55%

Run 2: Report of FillP-Sheep — Data Link

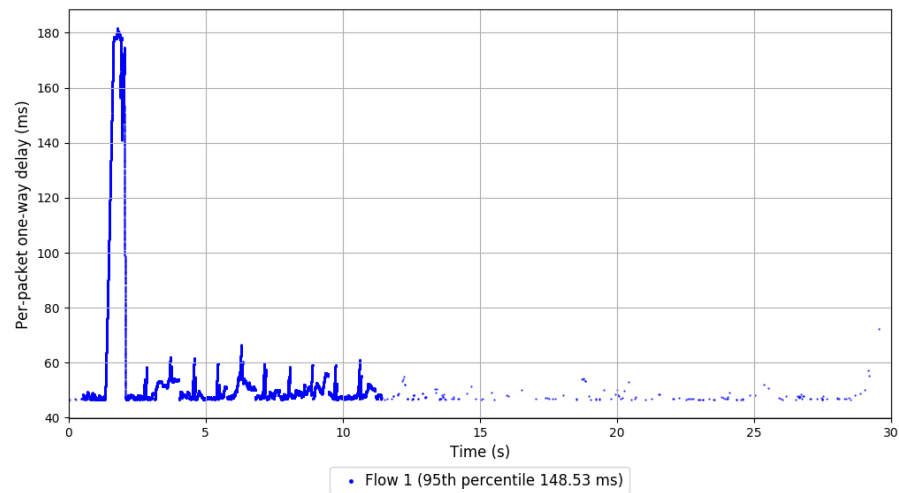
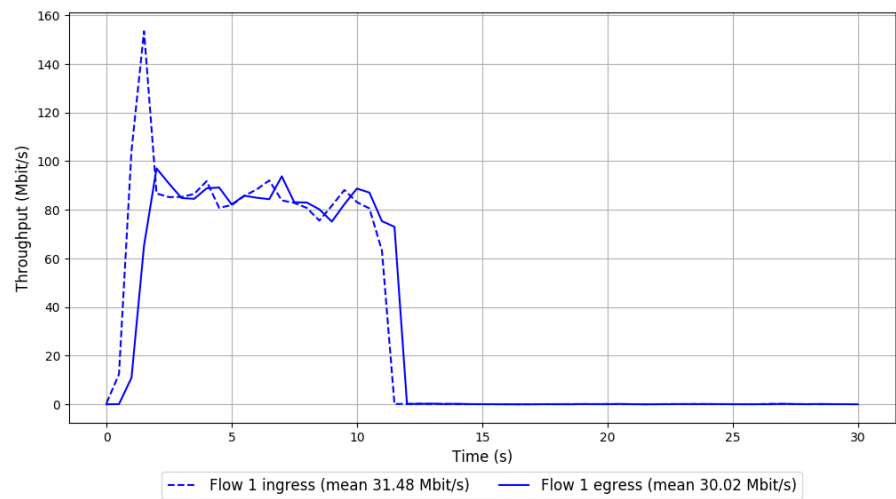


Run 3: Statistics of FillP-Sheep

Start at: 2019-01-21 06:42:03
End at: 2019-01-21 06:42:33
Local clock offset: -4.615 ms
Remote clock offset: 47.277 ms

Below is generated by plot.py at 2019-01-21 08:43:47
Datalink statistics
-- Total of 1 flow:
Average throughput: 30.02 Mbit/s
95th percentile per-packet one-way delay: 148.532 ms
Loss rate: 4.55%
-- Flow 1:
Average throughput: 30.02 Mbit/s
95th percentile per-packet one-way delay: 148.532 ms
Loss rate: 4.55%

Run 3: Report of FillP-Sheep — Data Link



Run 4: Statistics of FillP-Sheep

Start at: 2019-01-21 07:20:54

End at: 2019-01-21 07:21:24

Local clock offset: -5.331 ms

Remote clock offset: 47.93 ms

Below is generated by plot.py at 2019-01-21 08:43:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 29.72 Mbit/s

95th percentile per-packet one-way delay: 165.237 ms

Loss rate: 5.00%

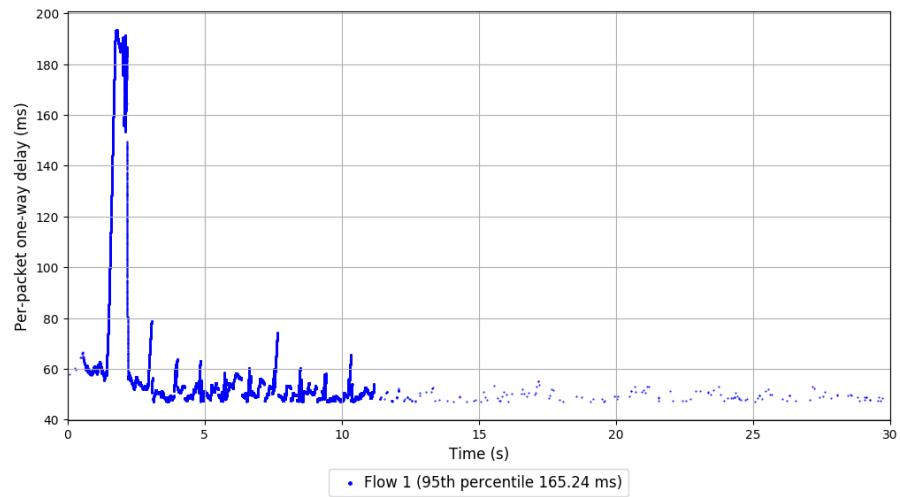
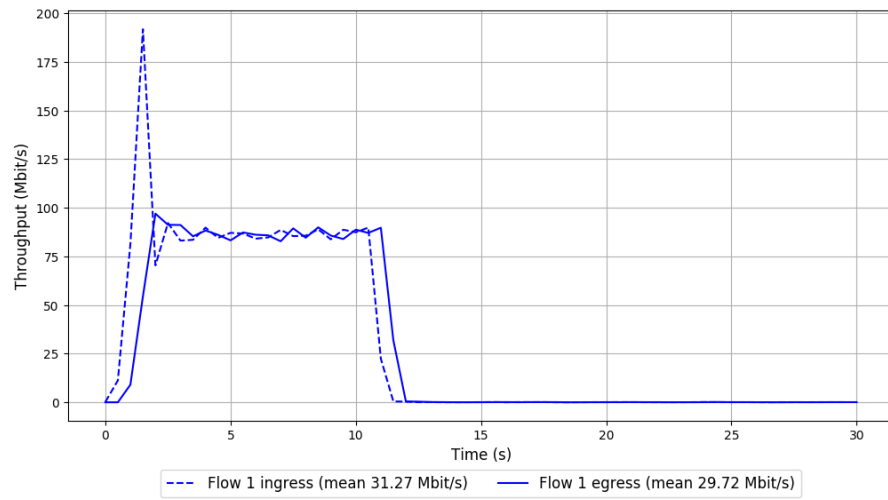
-- Flow 1:

Average throughput: 29.72 Mbit/s

95th percentile per-packet one-way delay: 165.237 ms

Loss rate: 5.00%

Run 4: Report of FillP-Sheep — Data Link

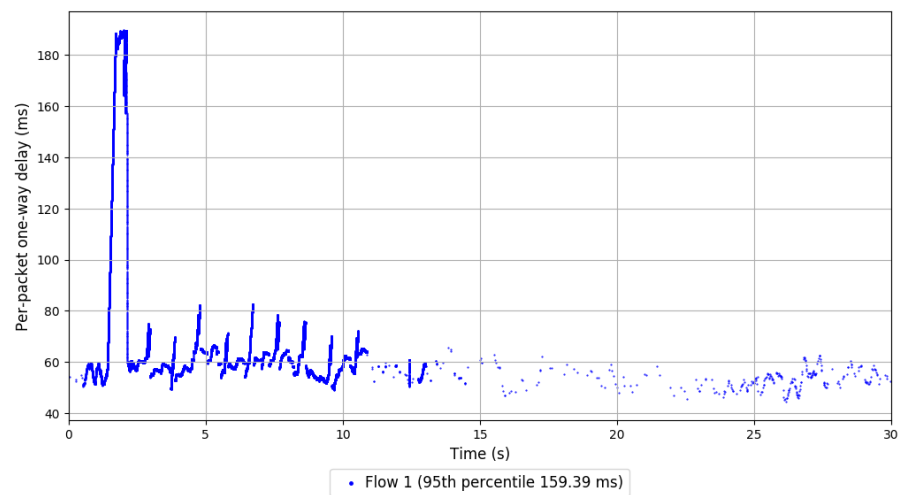
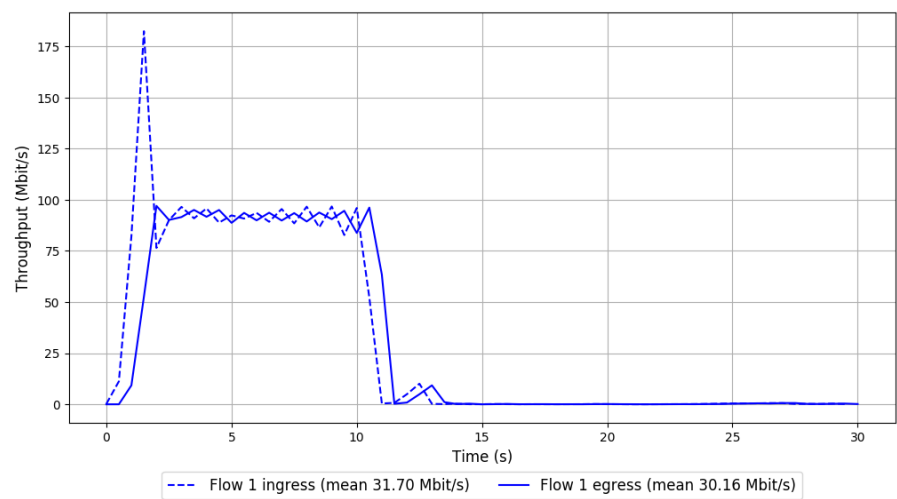


Run 5: Statistics of FillP-Sheep

Start at: 2019-01-21 08:12:18
End at: 2019-01-21 08:12:48
Local clock offset: 11.734 ms
Remote clock offset: 38.786 ms

Below is generated by plot.py at 2019-01-21 08:43:47
Datalink statistics
-- Total of 1 flow:
Average throughput: 30.16 Mbit/s
95th percentile per-packet one-way delay: 159.394 ms
Loss rate: 4.85%
-- Flow 1:
Average throughput: 30.16 Mbit/s
95th percentile per-packet one-way delay: 159.394 ms
Loss rate: 4.85%

Run 5: Report of FillP-Sheep — Data Link

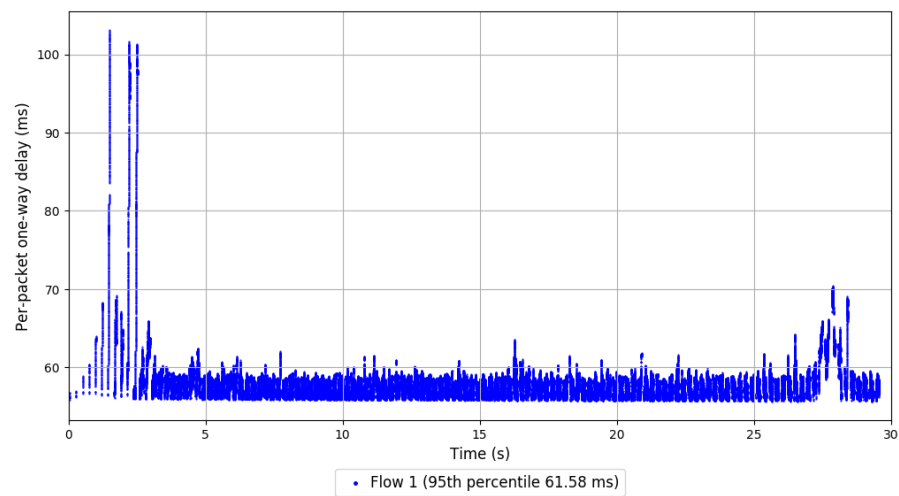
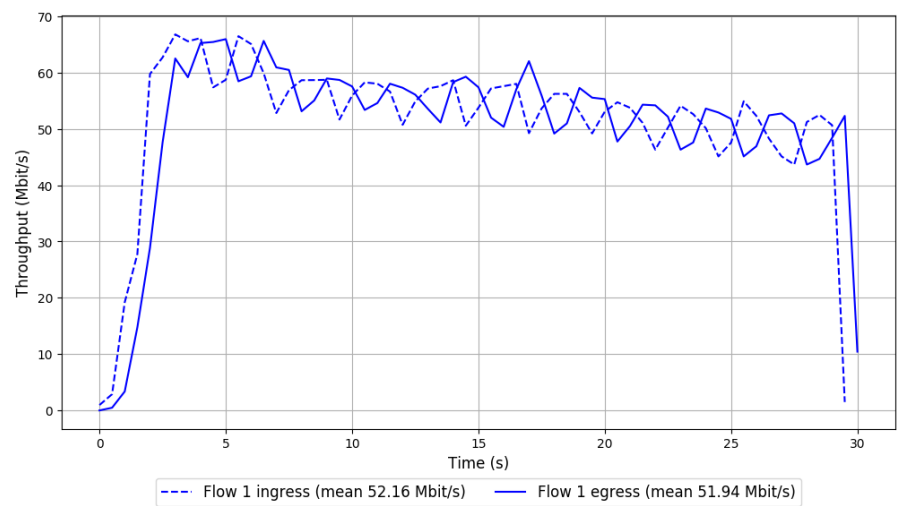


Run 1: Statistics of Indigo

Start at: 2019-01-21 05:07:27
End at: 2019-01-21 05:07:57
Local clock offset: -1.232 ms
Remote clock offset: 66.914 ms

Below is generated by plot.py at 2019-01-21 08:43:50
Datalink statistics
-- Total of 1 flow:
Average throughput: 51.94 Mbit/s
95th percentile per-packet one-way delay: 61.580 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 51.94 Mbit/s
95th percentile per-packet one-way delay: 61.580 ms
Loss rate: 0.41%

Run 1: Report of Indigo — Data Link

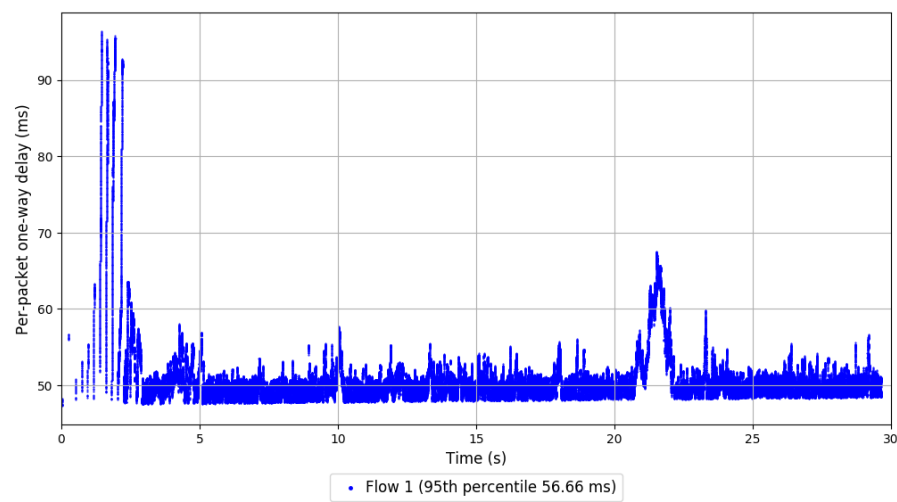
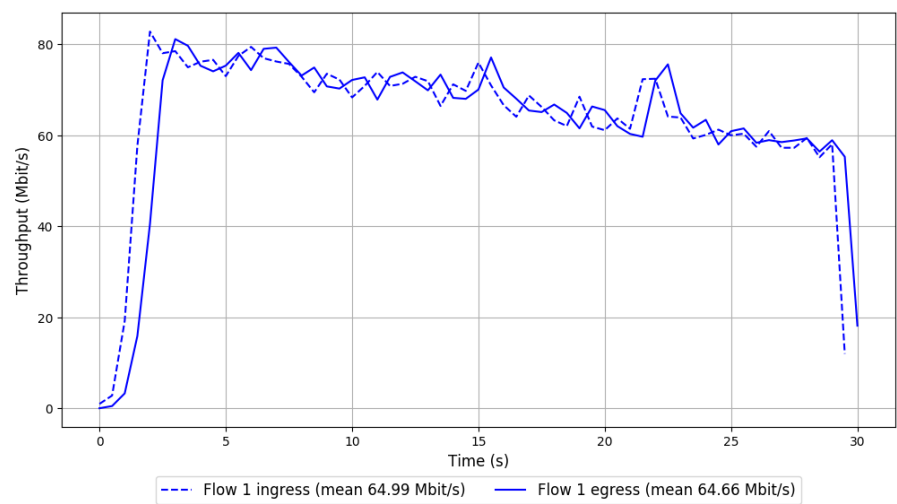


Run 2: Statistics of Indigo

Start at: 2019-01-21 05:57:50
End at: 2019-01-21 05:58:20
Local clock offset: 5.52 ms
Remote clock offset: 65.943 ms

Below is generated by plot.py at 2019-01-21 08:44:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 64.66 Mbit/s
95th percentile per-packet one-way delay: 56.662 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 64.66 Mbit/s
95th percentile per-packet one-way delay: 56.662 ms
Loss rate: 0.51%

Run 2: Report of Indigo — Data Link

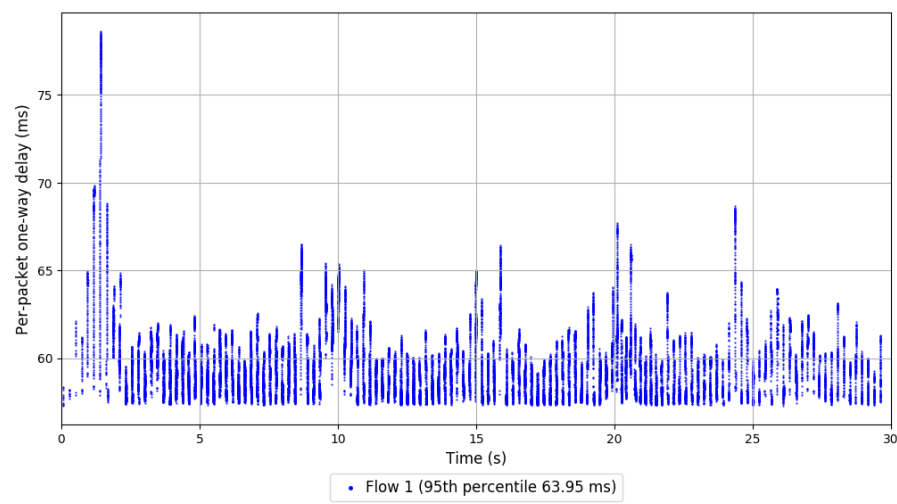
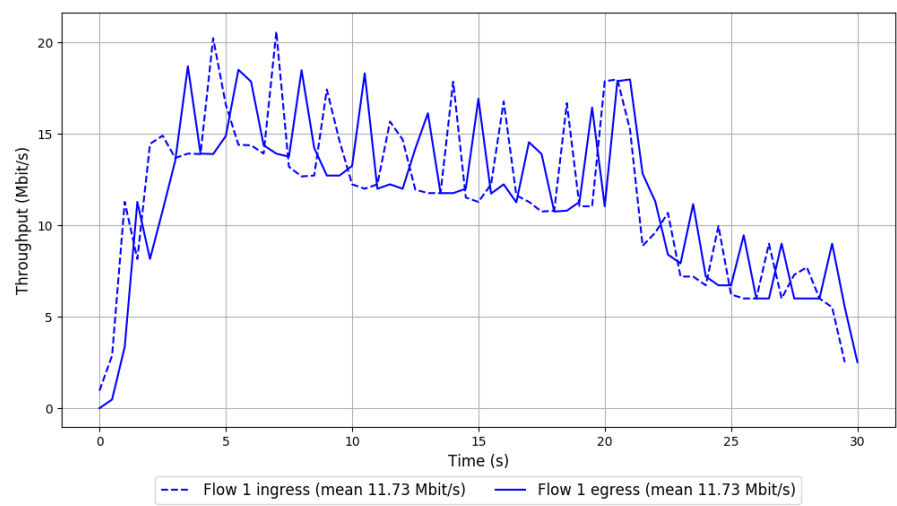


Run 3: Statistics of Indigo

Start at: 2019-01-21 06:40:39
End at: 2019-01-21 06:41:09
Local clock offset: -4.538 ms
Remote clock offset: 48.609 ms

Below is generated by plot.py at 2019-01-21 08:44:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 11.73 Mbit/s
95th percentile per-packet one-way delay: 63.955 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.73 Mbit/s
95th percentile per-packet one-way delay: 63.955 ms
Loss rate: 0.00%

Run 3: Report of Indigo — Data Link

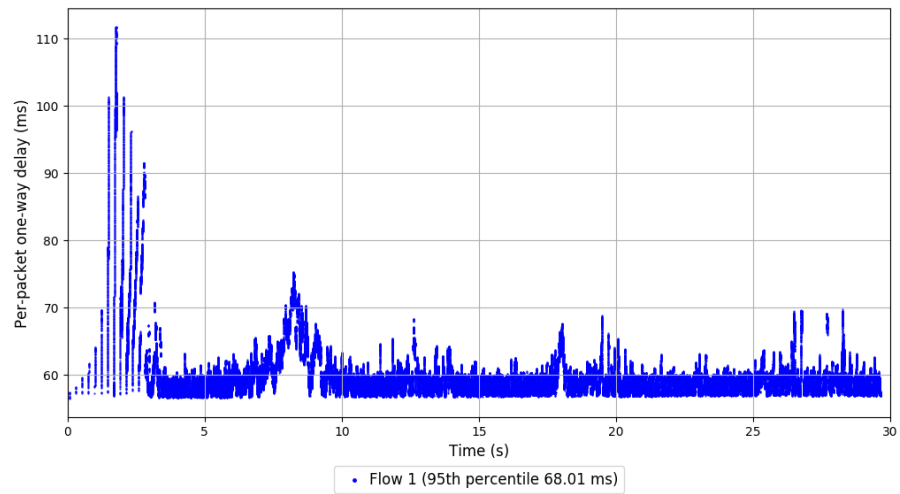
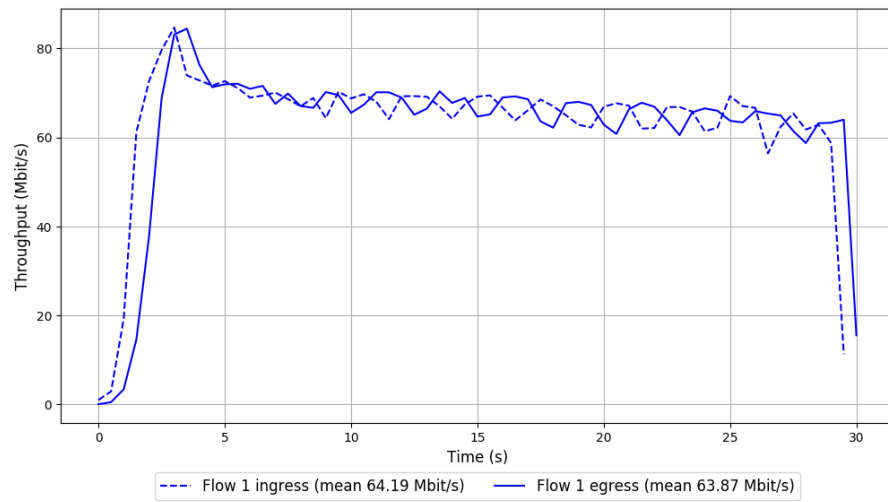


Run 4: Statistics of Indigo

Start at: 2019-01-21 07:17:41
End at: 2019-01-21 07:18:11
Local clock offset: -7.078 ms
Remote clock offset: 47.965 ms

Below is generated by plot.py at 2019-01-21 08:44:19
Datalink statistics
-- Total of 1 flow:
Average throughput: 63.87 Mbit/s
95th percentile per-packet one-way delay: 68.011 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 63.87 Mbit/s
95th percentile per-packet one-way delay: 68.011 ms
Loss rate: 0.50%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2019-01-21 08:08:40

End at: 2019-01-21 08:09:10

Local clock offset: 10.919 ms

Remote clock offset: 33.25 ms

Below is generated by plot.py at 2019-01-21 08:44:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.76 Mbit/s

95th percentile per-packet one-way delay: 66.346 ms

Loss rate: 0.19%

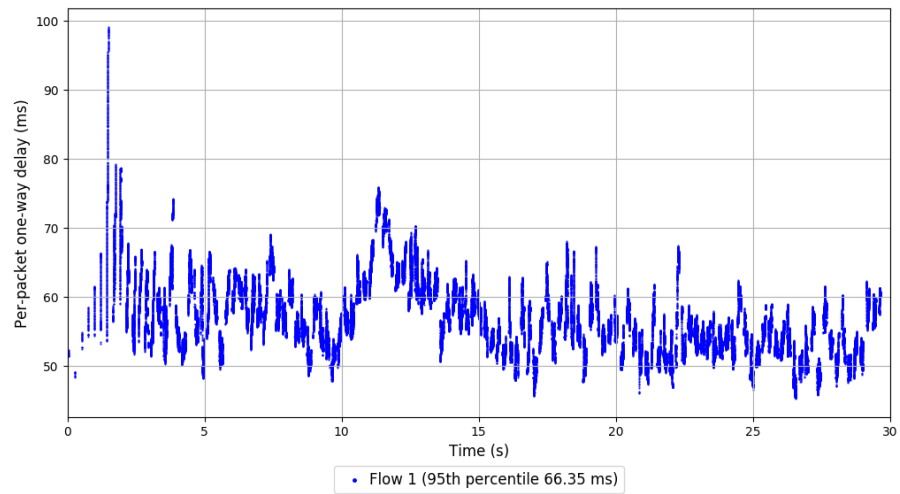
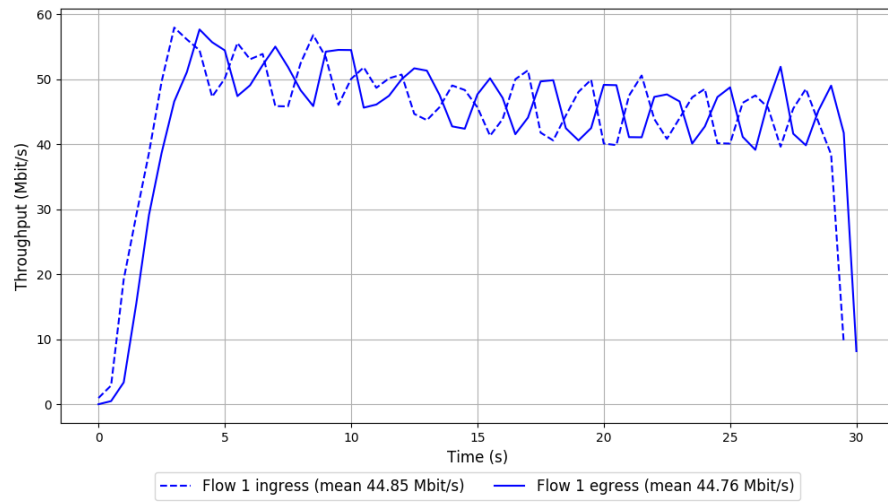
-- Flow 1:

Average throughput: 44.76 Mbit/s

95th percentile per-packet one-way delay: 66.346 ms

Loss rate: 0.19%

Run 5: Report of Indigo — Data Link

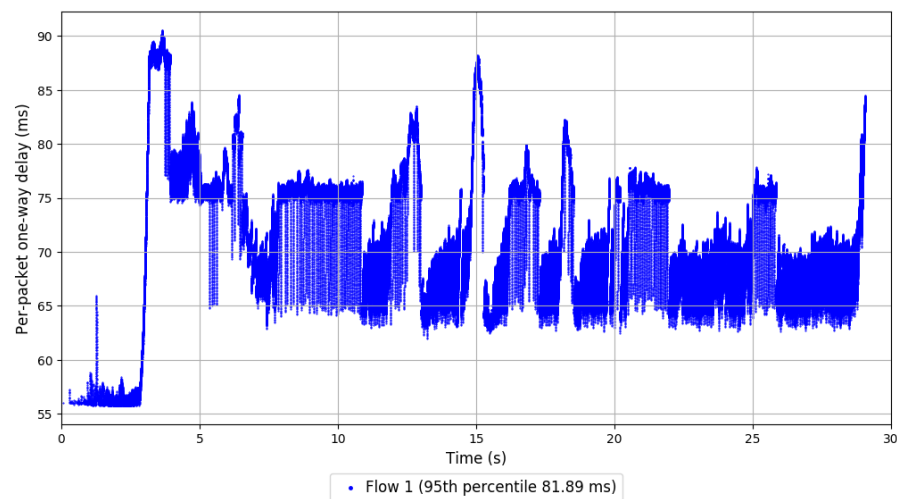
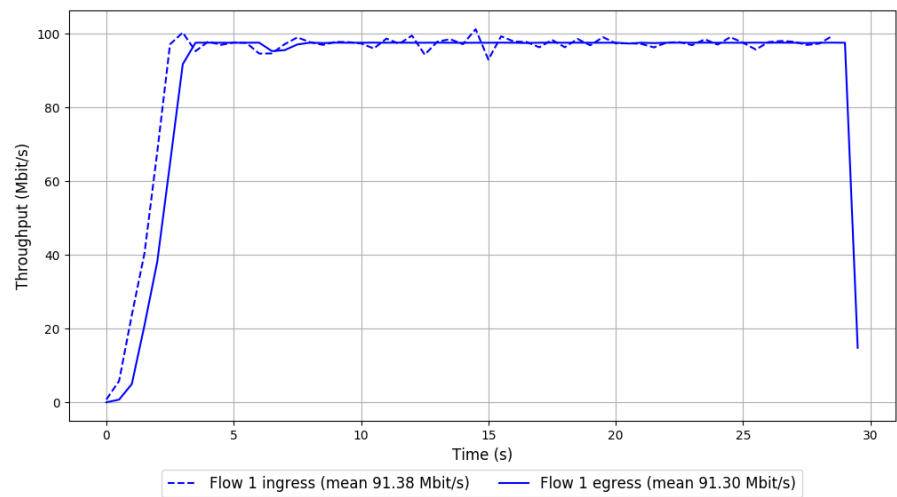


Run 1: Statistics of Indigo-MusesC3

Start at: 2019-01-21 05:32:29
End at: 2019-01-21 05:32:59
Local clock offset: 3.75 ms
Remote clock offset: 80.817 ms

Below is generated by plot.py at 2019-01-21 08:44:39
Datalink statistics
-- Total of 1 flow:
Average throughput: 91.30 Mbit/s
95th percentile per-packet one-way delay: 81.893 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 91.30 Mbit/s
95th percentile per-packet one-way delay: 81.893 ms
Loss rate: 0.00%

Run 1: Report of Indigo-MusesC3 — Data Link



Run 2: Statistics of Indigo-MusesC3

Start at: 2019-01-21 06:24:28

End at: 2019-01-21 06:24:58

Local clock offset: 0.012 ms

Remote clock offset: 45.95 ms

Below is generated by plot.py at 2019-01-21 08:44:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.11 Mbit/s

95th percentile per-packet one-way delay: 95.048 ms

Loss rate: 0.00%

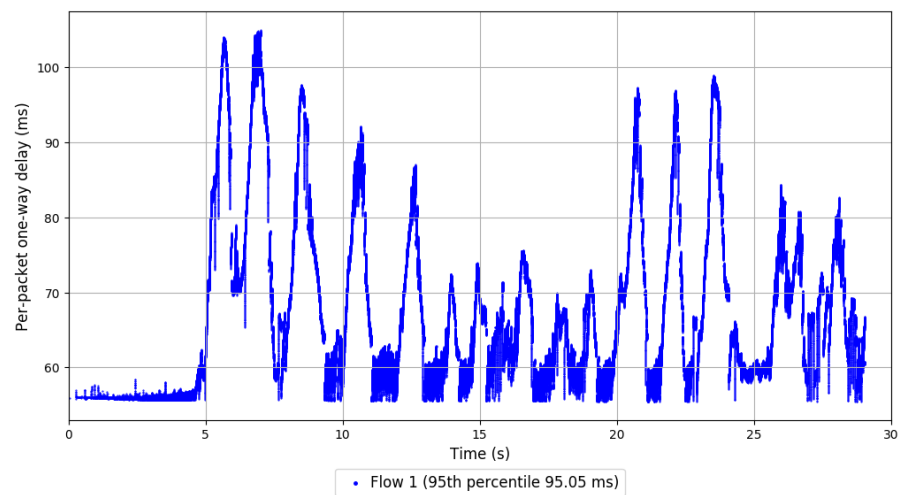
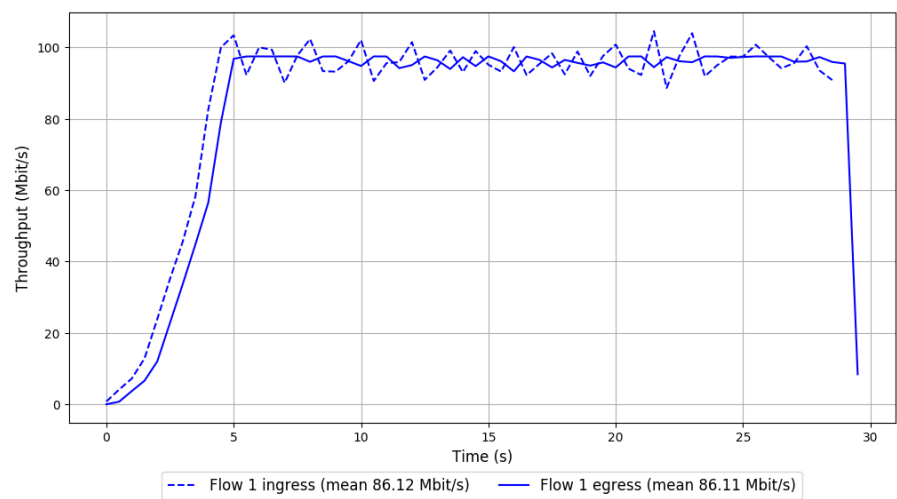
-- Flow 1:

Average throughput: 86.11 Mbit/s

95th percentile per-packet one-way delay: 95.048 ms

Loss rate: 0.00%

Run 2: Report of Indigo-MusesC3 — Data Link

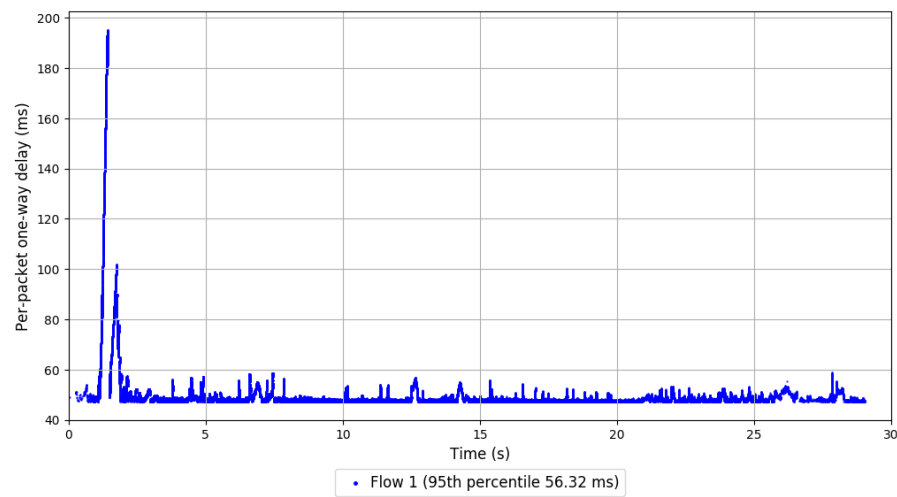
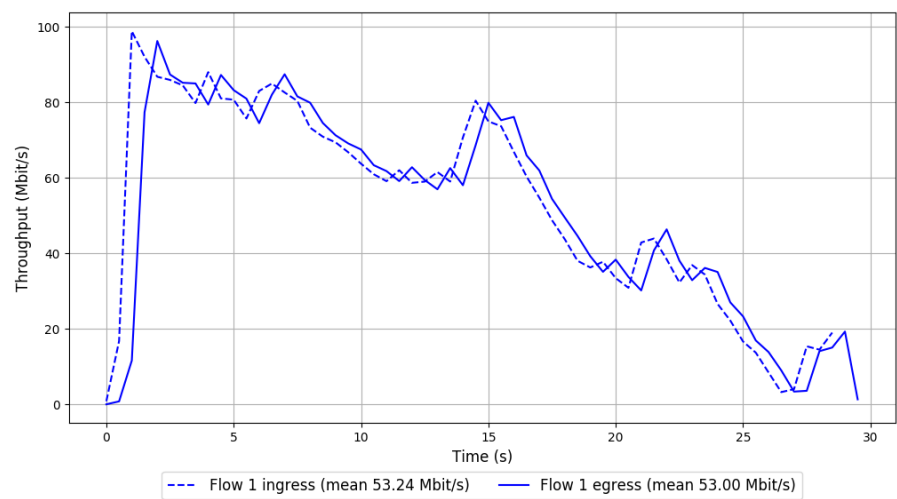


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-01-21 06:56:44
End at: 2019-01-21 06:57:14
Local clock offset: -6.325 ms
Remote clock offset: 46.611 ms

Below is generated by plot.py at 2019-01-21 08:44:39
Datalink statistics
-- Total of 1 flow:
Average throughput: 53.00 Mbit/s
95th percentile per-packet one-way delay: 56.324 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 53.00 Mbit/s
95th percentile per-packet one-way delay: 56.324 ms
Loss rate: 0.45%

Run 3: Report of Indigo-MusesC3 — Data Link

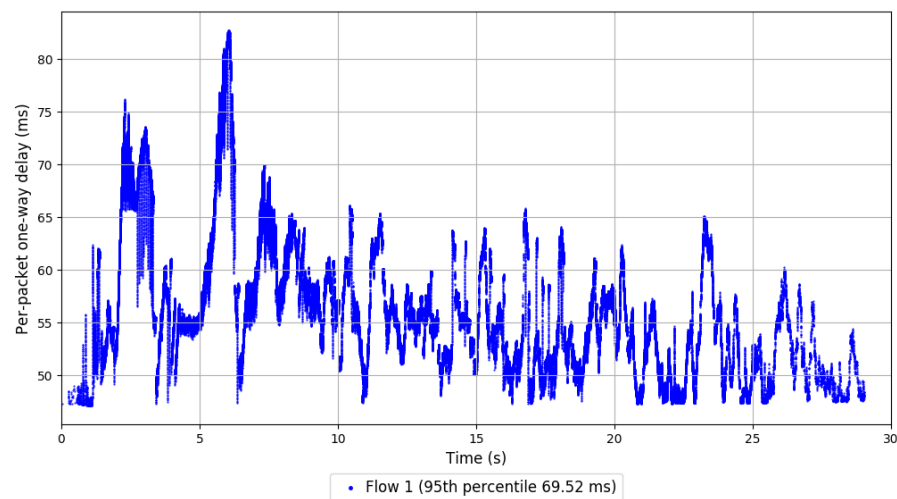
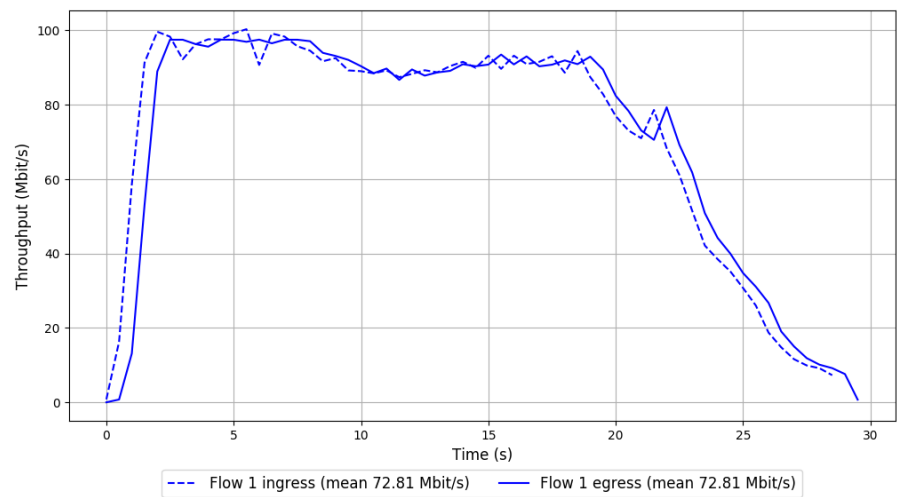


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-01-21 07:43:19
End at: 2019-01-21 07:43:50
Local clock offset: -1.252 ms
Remote clock offset: 37.376 ms

Below is generated by plot.py at 2019-01-21 08:44:39
Datalink statistics
-- Total of 1 flow:
Average throughput: 72.81 Mbit/s
95th percentile per-packet one-way delay: 69.515 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 72.81 Mbit/s
95th percentile per-packet one-way delay: 69.515 ms
Loss rate: 0.00%

Run 4: Report of Indigo-MusesC3 — Data Link

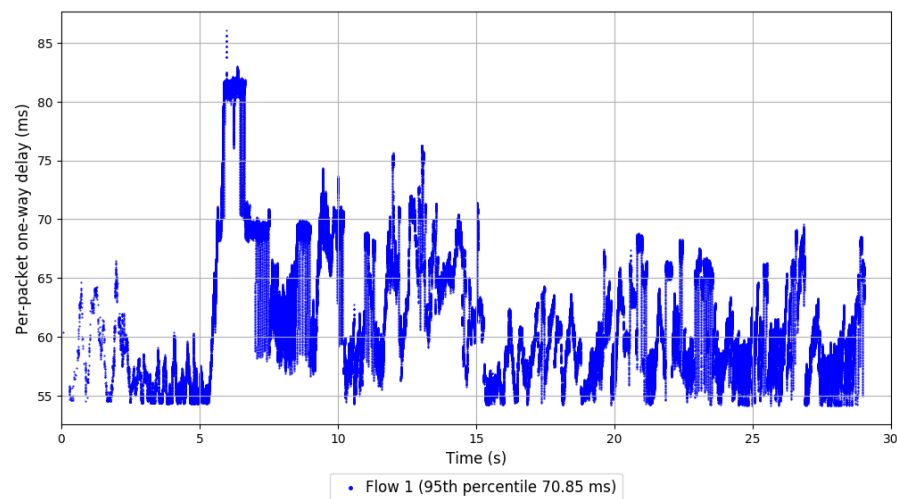
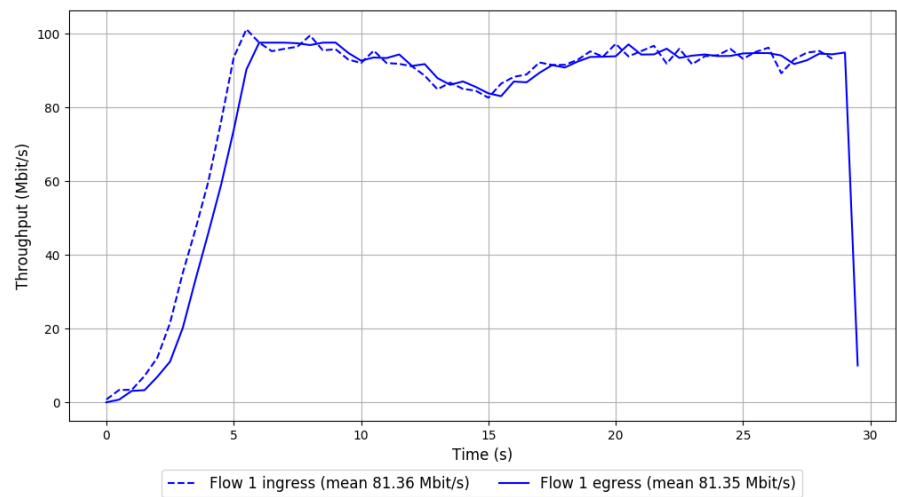


Run 5: Statistics of Indigo-MusesC3

Start at: 2019-01-21 08:33:36
End at: 2019-01-21 08:34:07
Local clock offset: 1.074 ms
Remote clock offset: 57.035 ms

Below is generated by plot.py at 2019-01-21 08:44:48
Datalink statistics
-- Total of 1 flow:
Average throughput: 81.35 Mbit/s
95th percentile per-packet one-way delay: 70.848 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 81.35 Mbit/s
95th percentile per-packet one-way delay: 70.848 ms
Loss rate: 0.00%

Run 5: Report of Indigo-MusesC3 — Data Link

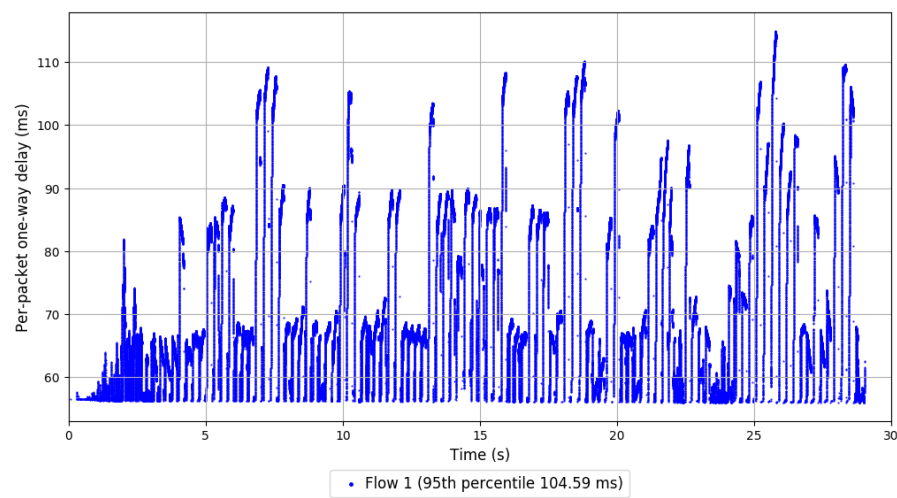
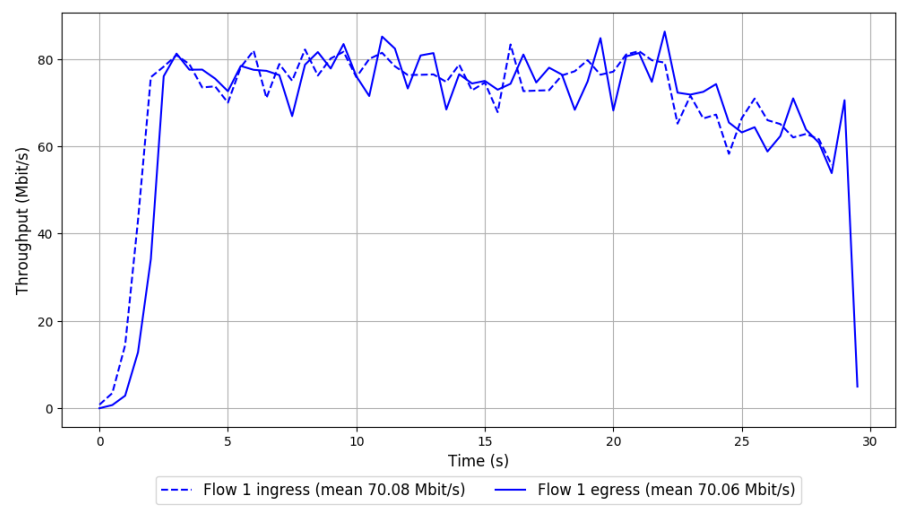


Run 1: Statistics of Indigo-MusesC5

Start at: 2019-01-21 05:04:32
End at: 2019-01-21 05:05:02
Local clock offset: -1.685 ms
Remote clock offset: 64.986 ms

Below is generated by plot.py at 2019-01-21 08:45:00
Datalink statistics
-- Total of 1 flow:
Average throughput: 70.06 Mbit/s
95th percentile per-packet one-way delay: 104.593 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 70.06 Mbit/s
95th percentile per-packet one-way delay: 104.593 ms
Loss rate: 0.01%

Run 1: Report of Indigo-MusesC5 — Data Link

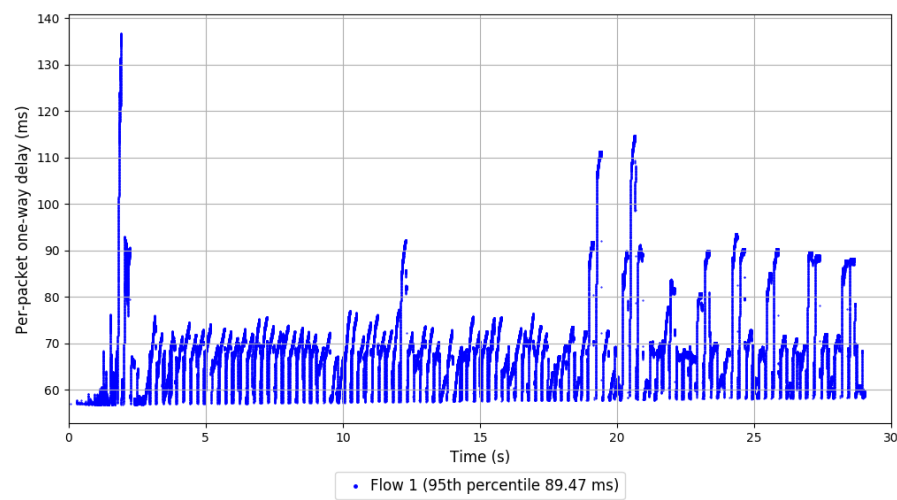
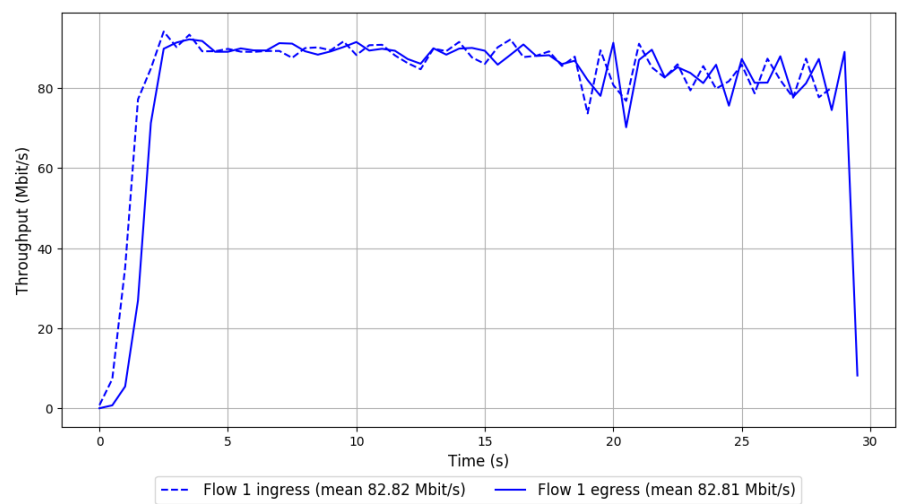


Run 2: Statistics of Indigo-MusesC5

Start at: 2019-01-21 05:53:26
End at: 2019-01-21 05:53:56
Local clock offset: 5.369 ms
Remote clock offset: 77.438 ms

Below is generated by plot.py at 2019-01-21 08:45:11
Datalink statistics
-- Total of 1 flow:
Average throughput: 82.81 Mbit/s
95th percentile per-packet one-way delay: 89.472 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 82.81 Mbit/s
95th percentile per-packet one-way delay: 89.472 ms
Loss rate: 0.00%

Run 2: Report of Indigo-MusesC5 — Data Link

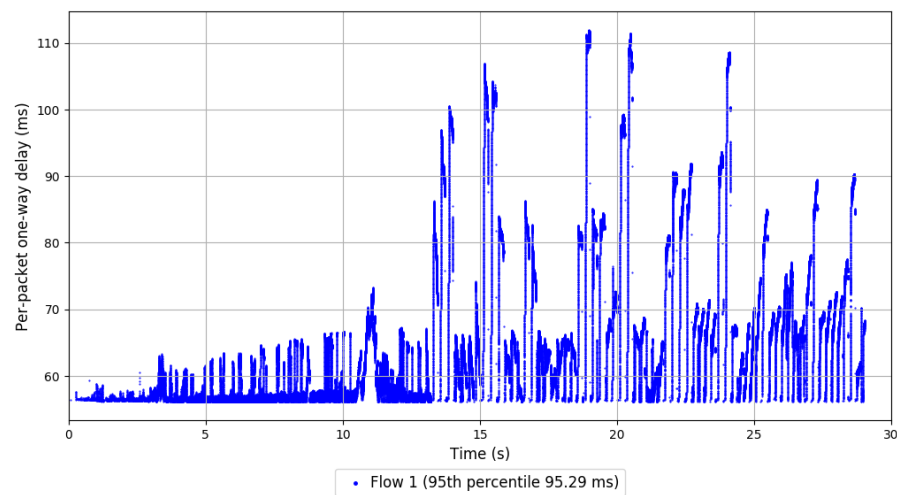
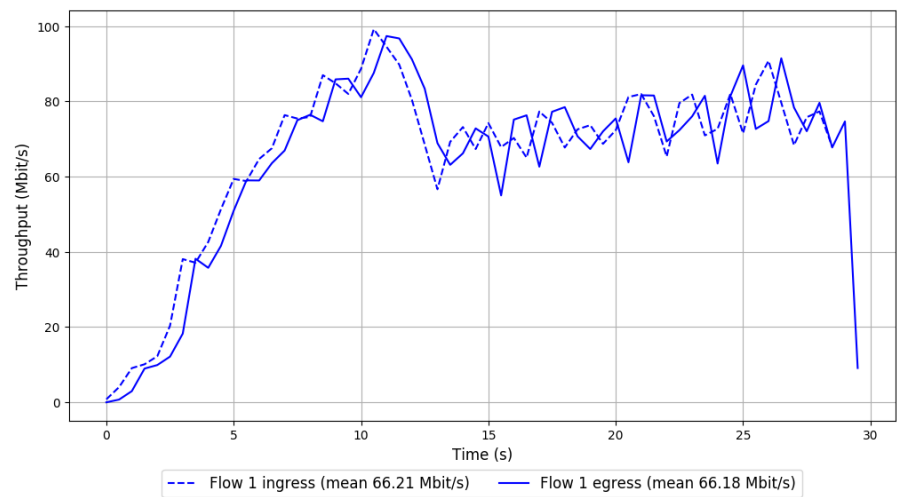


Run 3: Statistics of Indigo-MusesC5

Start at: 2019-01-21 06:38:43
End at: 2019-01-21 06:39:13
Local clock offset: -4.343 ms
Remote clock offset: 47.481 ms

Below is generated by plot.py at 2019-01-21 08:45:11
Datalink statistics
-- Total of 1 flow:
Average throughput: 66.18 Mbit/s
95th percentile per-packet one-way delay: 95.287 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 66.18 Mbit/s
95th percentile per-packet one-way delay: 95.287 ms
Loss rate: 0.00%

Run 3: Report of Indigo-MusesC5 — Data Link

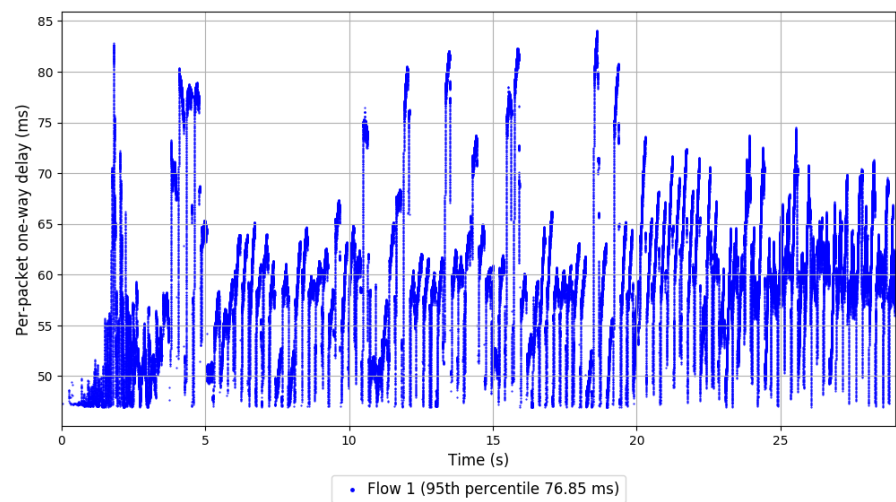
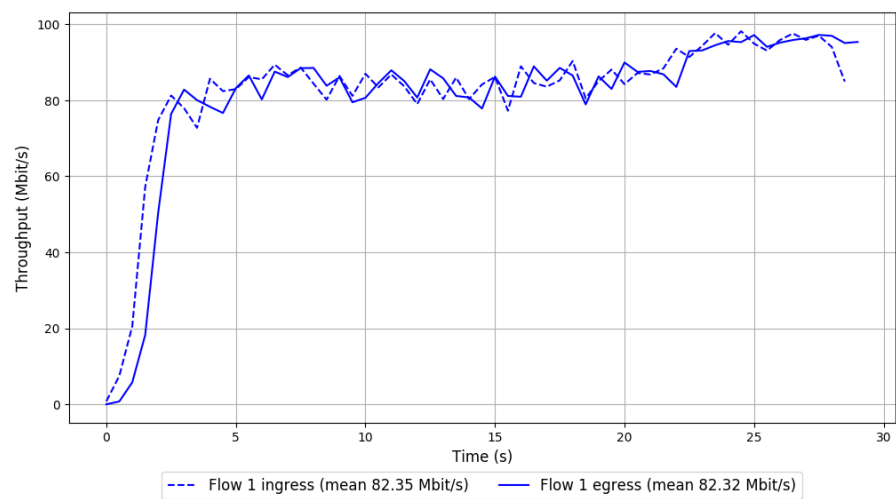


Run 4: Statistics of Indigo-MusesC5

Start at: 2019-01-21 07:13:37
End at: 2019-01-21 07:14:07
Local clock offset: -7.769 ms
Remote clock offset: 47.968 ms

Below is generated by plot.py at 2019-01-21 08:45:22
Datalink statistics
-- Total of 1 flow:
Average throughput: 82.32 Mbit/s
95th percentile per-packet one-way delay: 76.849 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 82.32 Mbit/s
95th percentile per-packet one-way delay: 76.849 ms
Loss rate: 0.00%

Run 4: Report of Indigo-MusesC5 — Data Link

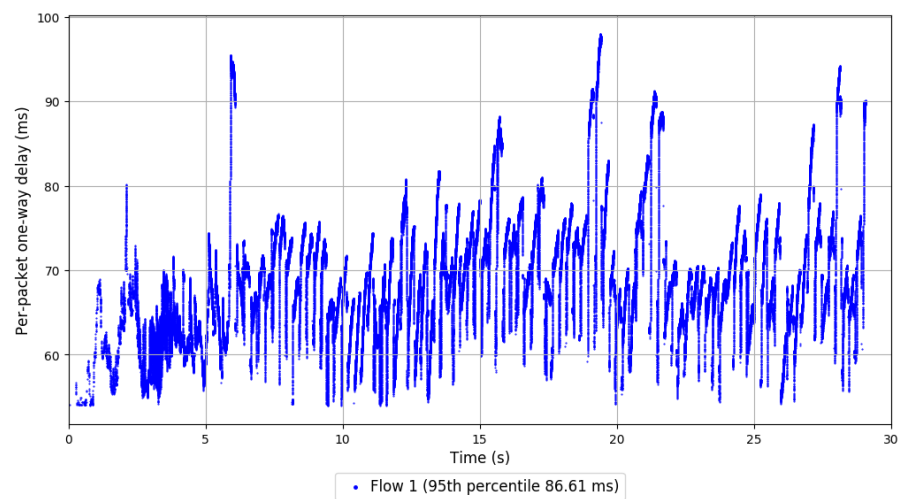
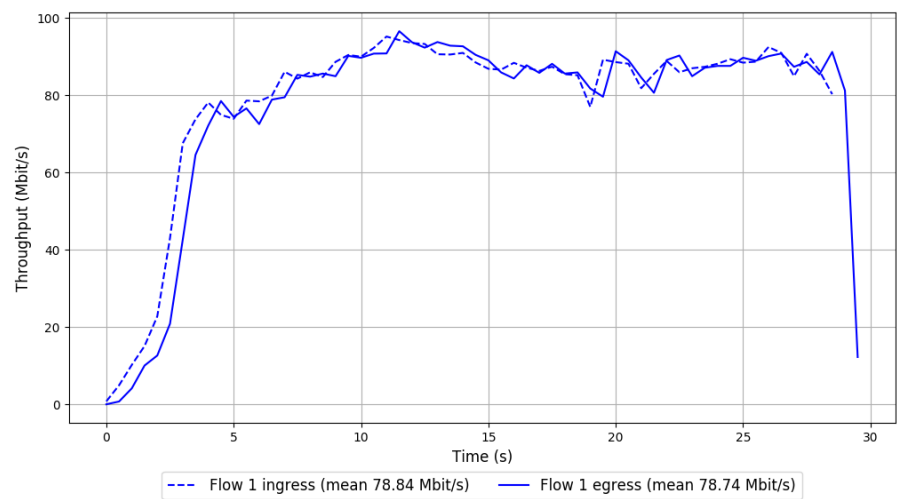


Run 5: Statistics of Indigo-MusesC5

Start at: 2019-01-21 08:04:42
End at: 2019-01-21 08:05:12
Local clock offset: 10.09 ms
Remote clock offset: 26.121 ms

Below is generated by plot.py at 2019-01-21 08:45:31
Datalink statistics
-- Total of 1 flow:
Average throughput: 78.74 Mbit/s
95th percentile per-packet one-way delay: 86.607 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 78.74 Mbit/s
95th percentile per-packet one-way delay: 86.607 ms
Loss rate: 0.00%

Run 5: Report of Indigo-MusesC5 — Data Link



Run 1: Statistics of Indigo-MusesD

Start at: 2019-01-21 04:57:33

End at: 2019-01-21 04:58:03

Local clock offset: -2.103 ms

Remote clock offset: 59.115 ms

Below is generated by plot.py at 2019-01-21 08:45:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.06 Mbit/s

95th percentile per-packet one-way delay: 47.716 ms

Loss rate: 0.00%

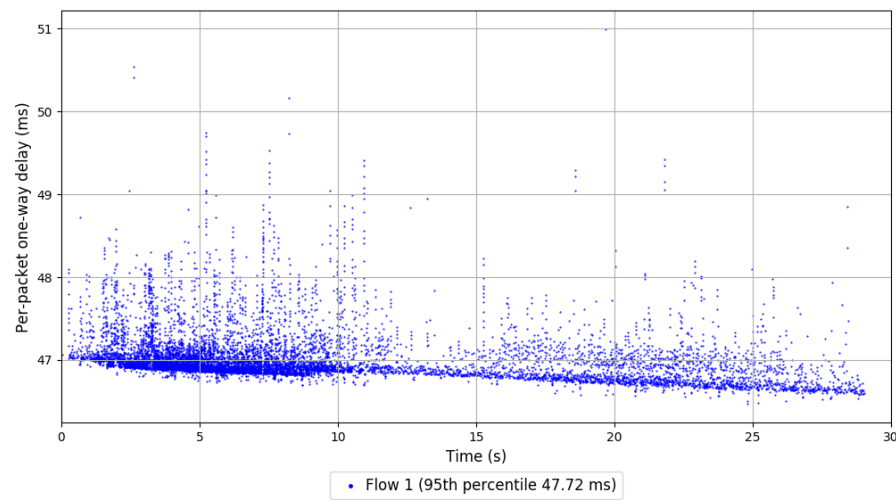
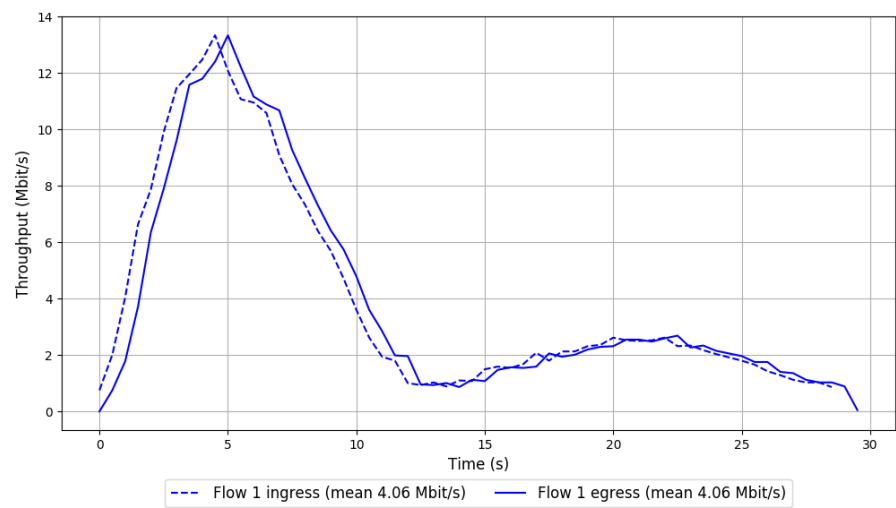
-- Flow 1:

Average throughput: 4.06 Mbit/s

95th percentile per-packet one-way delay: 47.716 ms

Loss rate: 0.00%

Run 1: Report of Indigo-MusesD — Data Link



Run 2: Statistics of Indigo-MusesD

Start at: 2019-01-21 05:46:17

End at: 2019-01-21 05:46:47

Local clock offset: 5.139 ms

Remote clock offset: 84.862 ms

Below is generated by plot.py at 2019-01-21 08:45:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.78 Mbit/s

95th percentile per-packet one-way delay: 59.425 ms

Loss rate: 0.00%

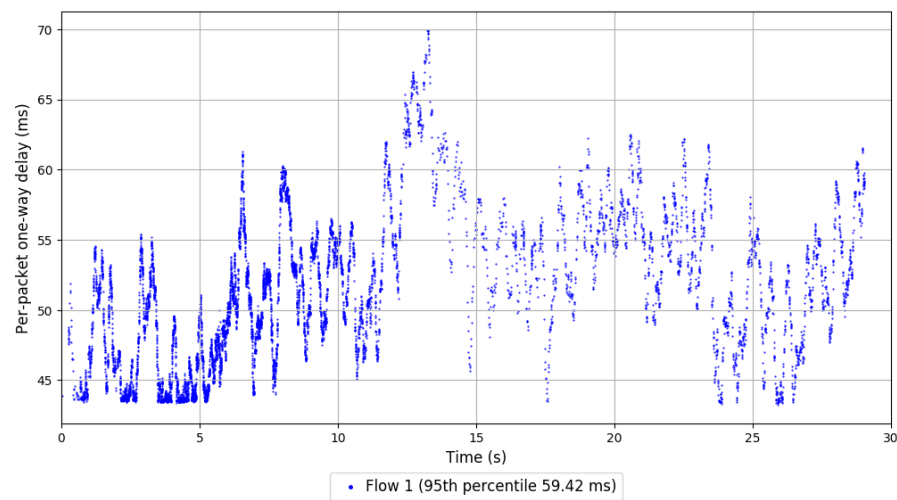
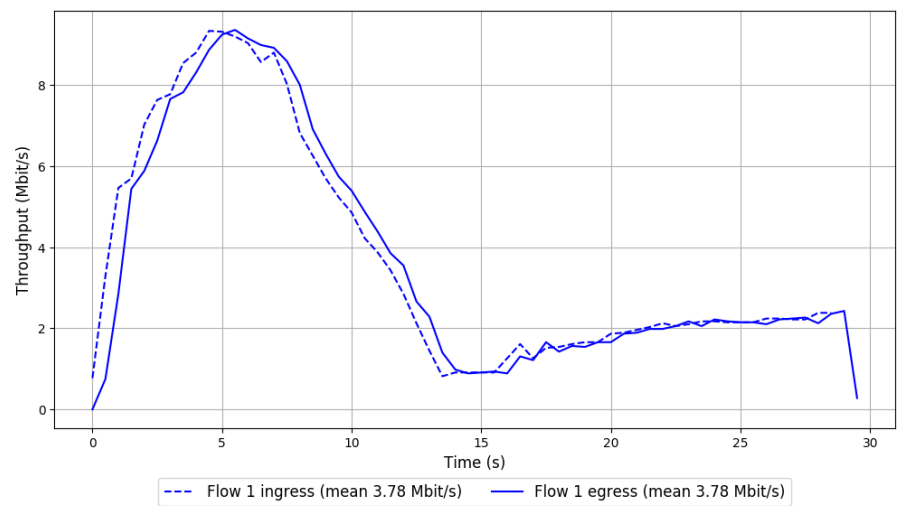
-- Flow 1:

Average throughput: 3.78 Mbit/s

95th percentile per-packet one-way delay: 59.425 ms

Loss rate: 0.00%

Run 2: Report of Indigo-MusesD — Data Link

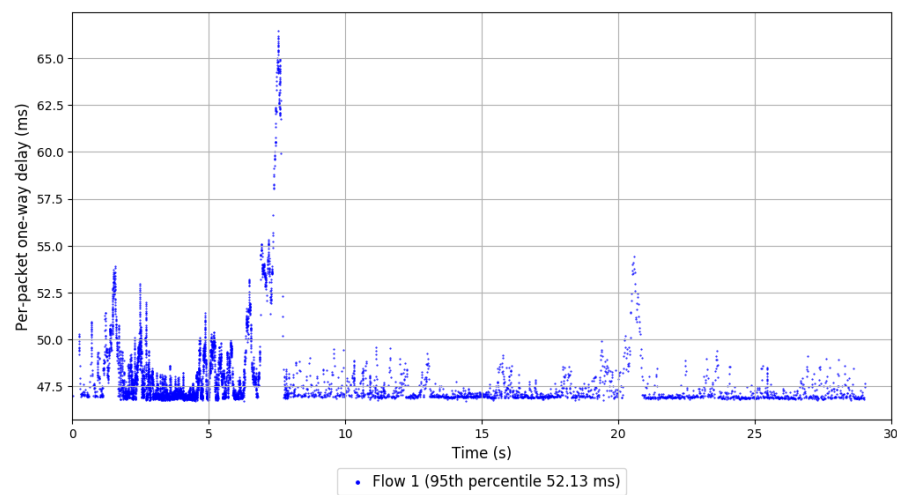
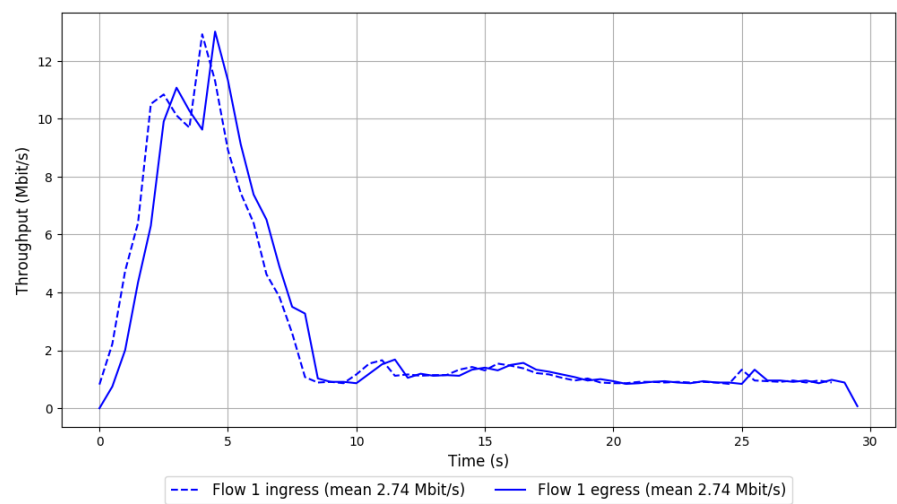


Run 3: Statistics of Indigo-MusesD

Start at: 2019-01-21 06:33:07
End at: 2019-01-21 06:33:37
Local clock offset: -3.203 ms
Remote clock offset: 47.446 ms

Below is generated by plot.py at 2019-01-21 08:45:31
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.74 Mbit/s
95th percentile per-packet one-way delay: 52.131 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.74 Mbit/s
95th percentile per-packet one-way delay: 52.131 ms
Loss rate: 0.00%

Run 3: Report of Indigo-MusesD — Data Link



Run 4: Statistics of Indigo-MusesD

Start at: 2019-01-21 07:07:06

End at: 2019-01-21 07:07:36

Local clock offset: -7.081 ms

Remote clock offset: 47.931 ms

Below is generated by plot.py at 2019-01-21 08:45:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.63 Mbit/s

95th percentile per-packet one-way delay: 48.924 ms

Loss rate: 0.00%

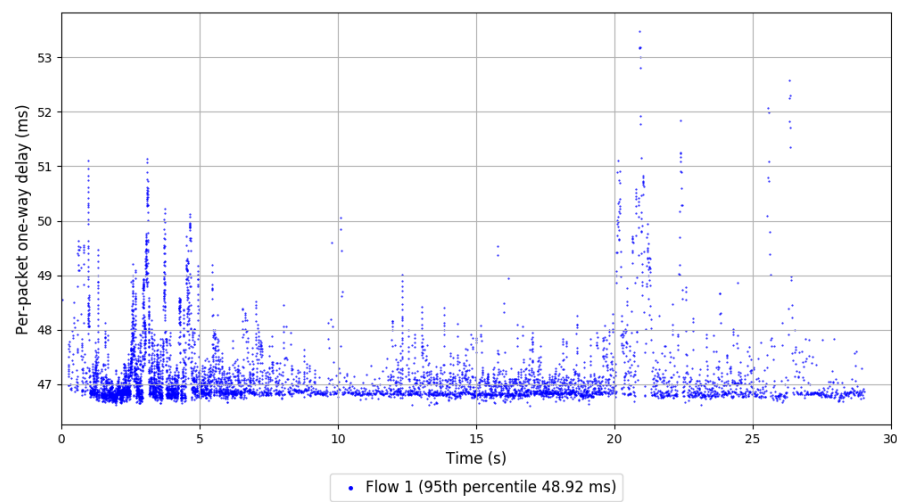
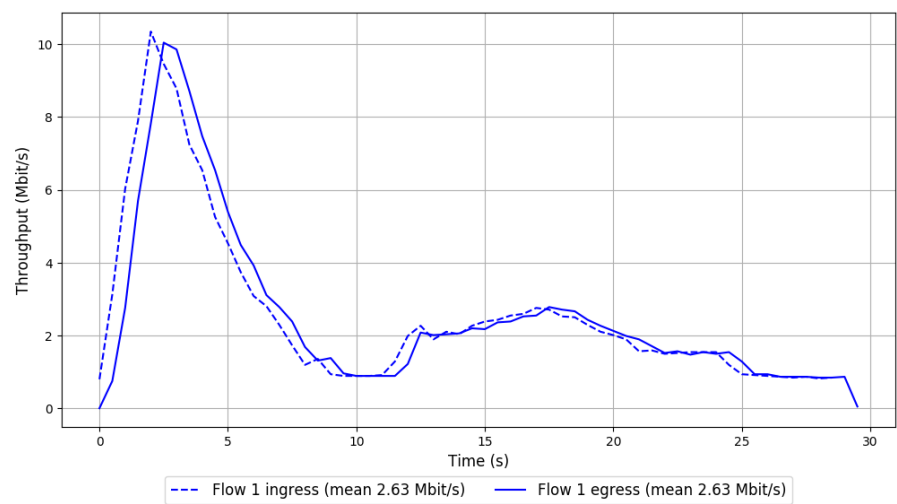
-- Flow 1:

Average throughput: 2.63 Mbit/s

95th percentile per-packet one-way delay: 48.924 ms

Loss rate: 0.00%

Run 4: Report of Indigo-MusesD — Data Link



Run 5: Statistics of Indigo-MusesD

Start at: 2019-01-21 07:56:36

End at: 2019-01-21 07:57:06

Local clock offset: 7.05 ms

Remote clock offset: 31.643 ms

Below is generated by plot.py at 2019-01-21 08:45:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.92 Mbit/s

95th percentile per-packet one-way delay: 61.869 ms

Loss rate: 0.00%

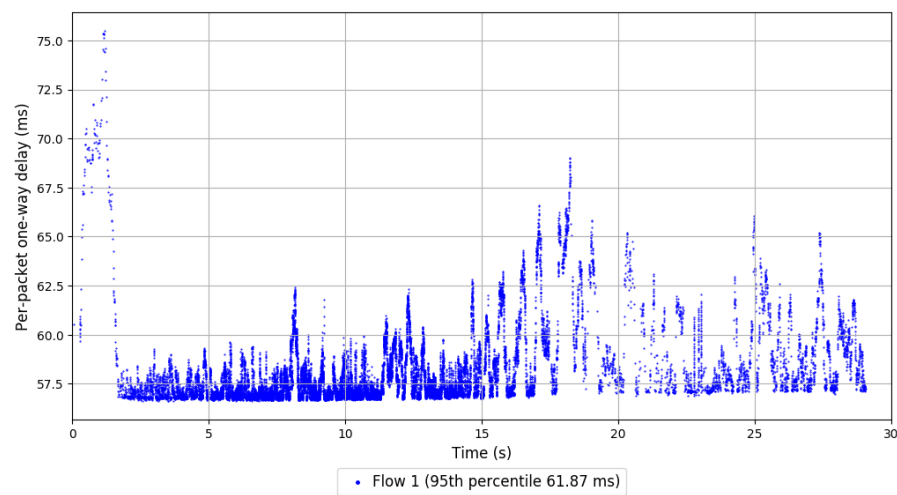
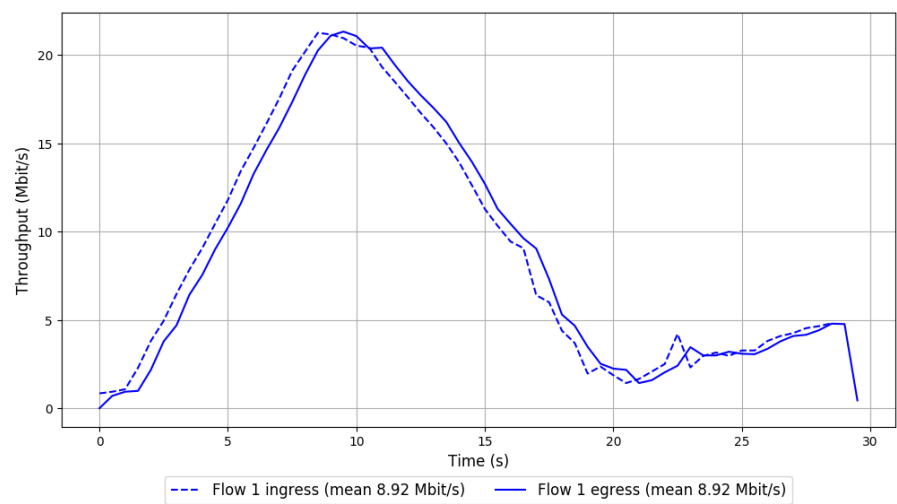
-- Flow 1:

Average throughput: 8.92 Mbit/s

95th percentile per-packet one-way delay: 61.869 ms

Loss rate: 0.00%

Run 5: Report of Indigo-MusesD — Data Link



Run 1: Statistics of Indigo-MusesT

Start at: 2019-01-21 04:54:36

End at: 2019-01-21 04:55:06

Local clock offset: -2.27 ms

Remote clock offset: 55.468 ms

Below is generated by plot.py at 2019-01-21 08:45:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.20 Mbit/s

95th percentile per-packet one-way delay: 91.427 ms

Loss rate: 0.91%

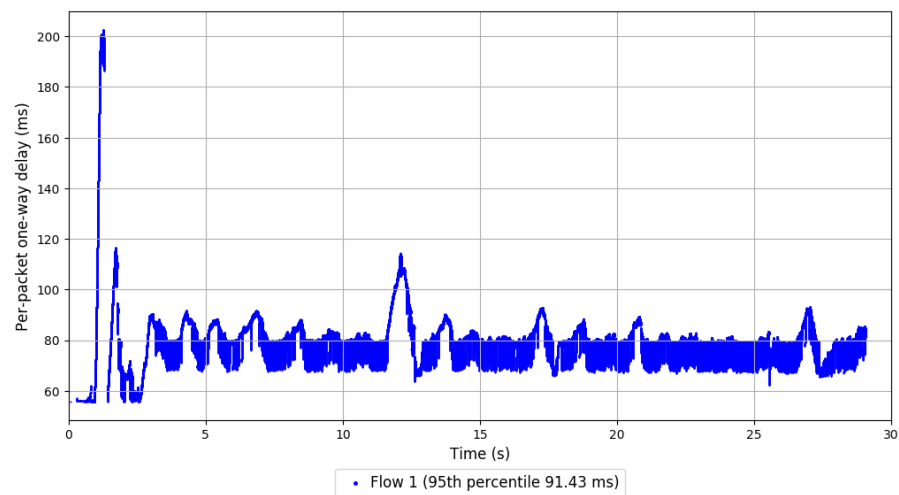
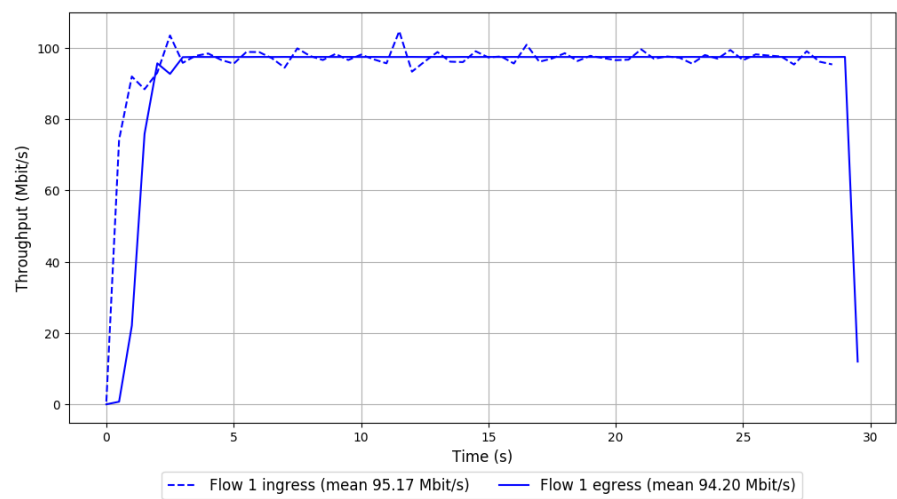
-- Flow 1:

Average throughput: 94.20 Mbit/s

95th percentile per-packet one-way delay: 91.427 ms

Loss rate: 0.91%

Run 1: Report of Indigo-MusesT — Data Link



Run 2: Statistics of Indigo-MusesT

Start at: 2019-01-21 05:41:42

End at: 2019-01-21 05:42:12

Local clock offset: 5.105 ms

Remote clock offset: 85.473 ms

Below is generated by plot.py at 2019-01-21 08:46:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.13 Mbit/s

95th percentile per-packet one-way delay: 92.318 ms

Loss rate: 0.00%

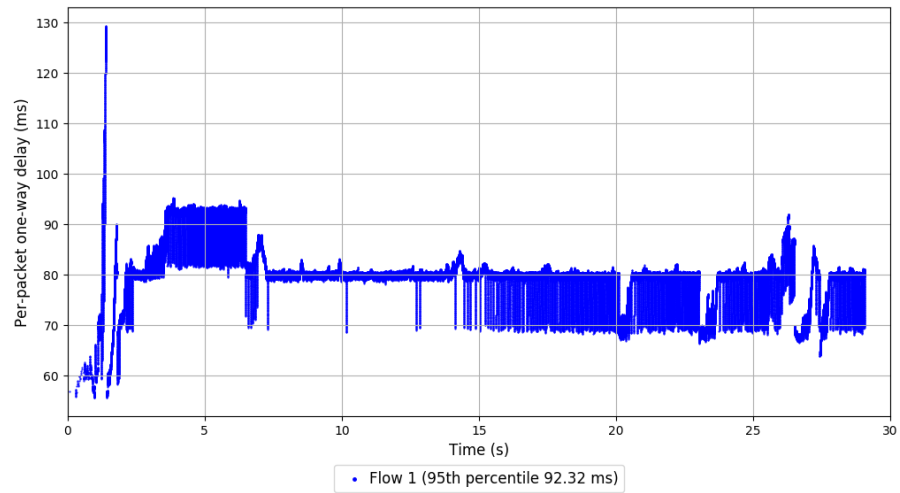
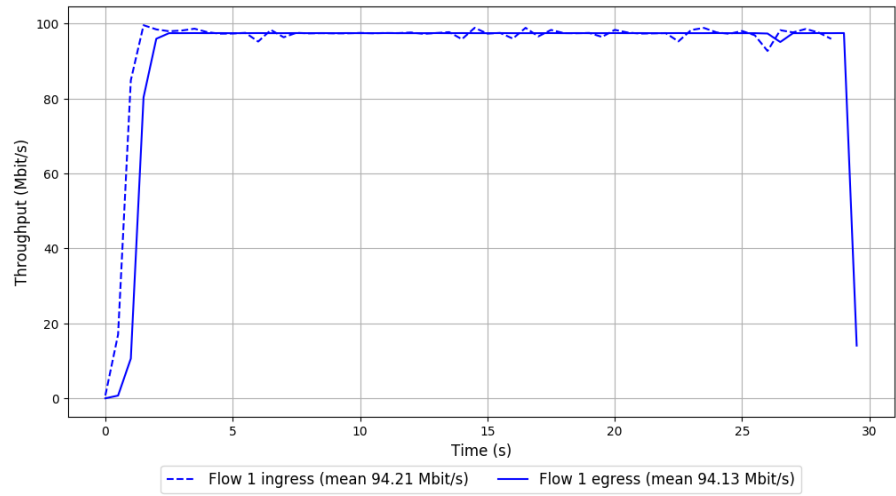
-- Flow 1:

Average throughput: 94.13 Mbit/s

95th percentile per-packet one-way delay: 92.318 ms

Loss rate: 0.00%

Run 2: Report of Indigo-MusesT — Data Link

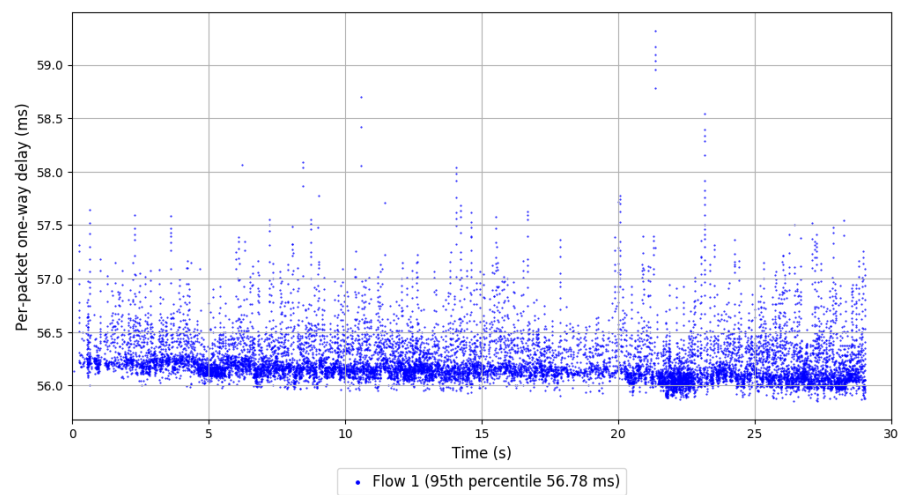
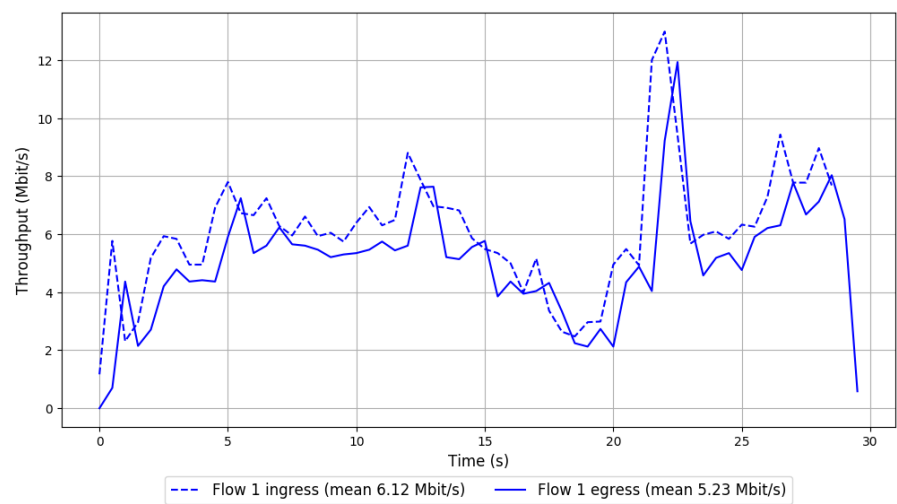


Run 3: Statistics of Indigo-MusesT

Start at: 2019-01-21 06:31:50
End at: 2019-01-21 06:32:20
Local clock offset: -3.063 ms
Remote clock offset: 47.245 ms

Below is generated by plot.py at 2019-01-21 08:46:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 5.23 Mbit/s
95th percentile per-packet one-way delay: 56.781 ms
Loss rate: 14.52%
-- Flow 1:
Average throughput: 5.23 Mbit/s
95th percentile per-packet one-way delay: 56.781 ms
Loss rate: 14.52%

Run 3: Report of Indigo-MusesT — Data Link



Run 4: Statistics of Indigo-MusesT

Start at: 2019-01-21 07:03:44

End at: 2019-01-21 07:04:14

Local clock offset: -6.899 ms

Remote clock offset: 47.416 ms

Below is generated by plot.py at 2019-01-21 08:46:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.48 Mbit/s

95th percentile per-packet one-way delay: 79.858 ms

Loss rate: 0.00%

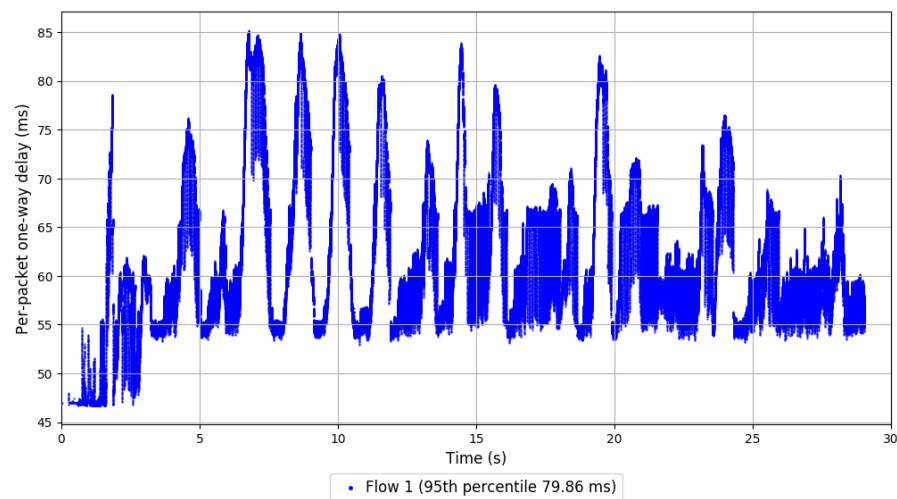
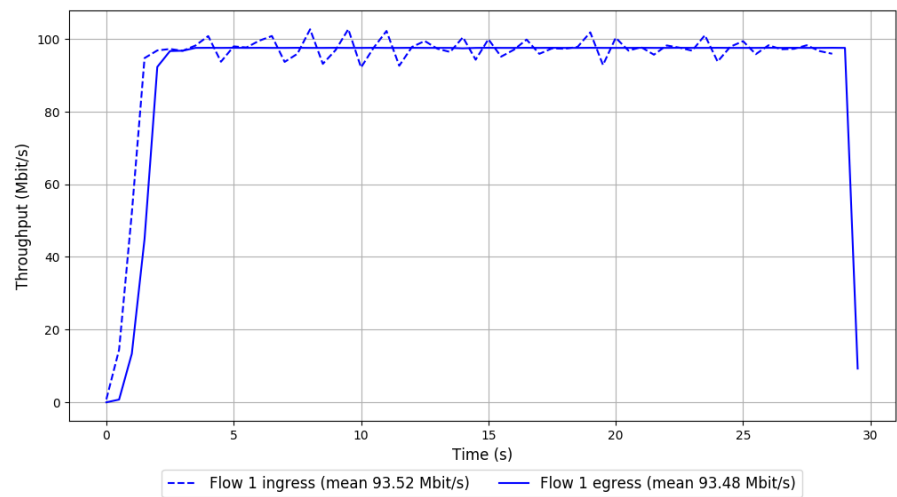
-- Flow 1:

Average throughput: 93.48 Mbit/s

95th percentile per-packet one-way delay: 79.858 ms

Loss rate: 0.00%

Run 4: Report of Indigo-MusesT — Data Link



Run 5: Statistics of Indigo-MusesT

Start at: 2019-01-21 07:51:55

End at: 2019-01-21 07:52:25

Local clock offset: 4.198 ms

Remote clock offset: 33.377 ms

Below is generated by plot.py at 2019-01-21 08:46:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.74 Mbit/s

95th percentile per-packet one-way delay: 86.969 ms

Loss rate: 0.05%

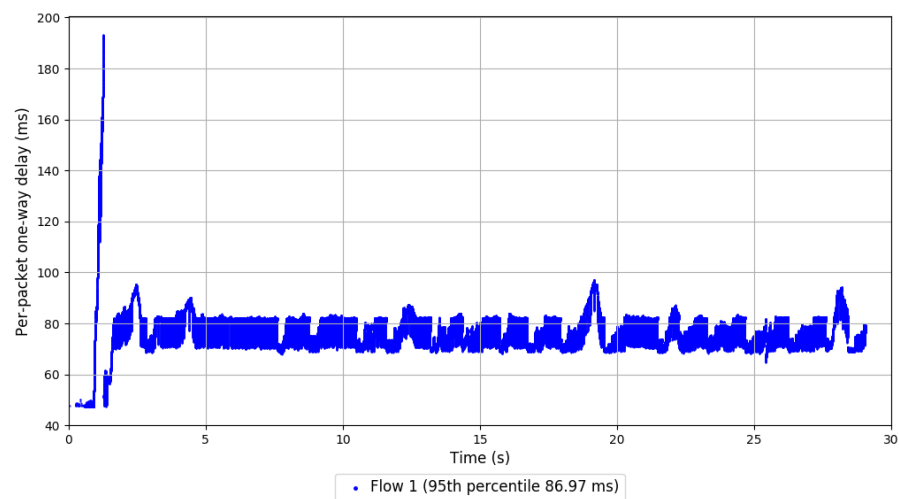
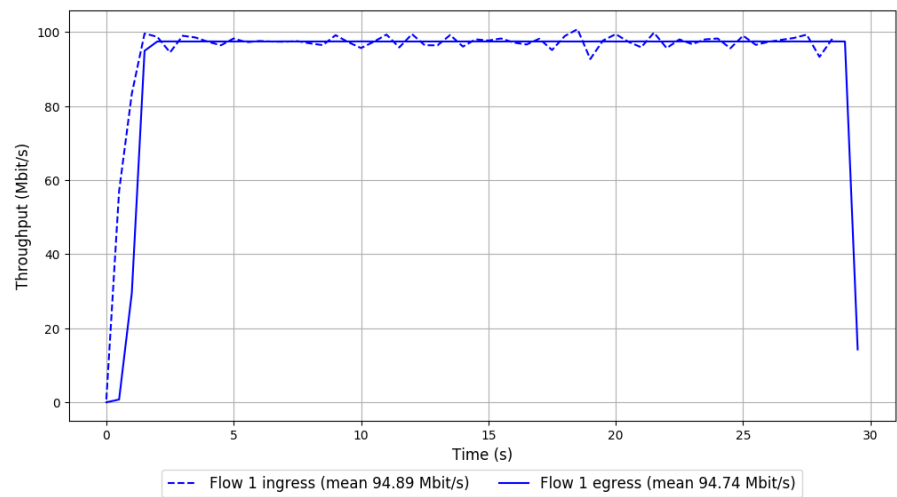
-- Flow 1:

Average throughput: 94.74 Mbit/s

95th percentile per-packet one-way delay: 86.969 ms

Loss rate: 0.05%

Run 5: Report of Indigo-MusesT — Data Link

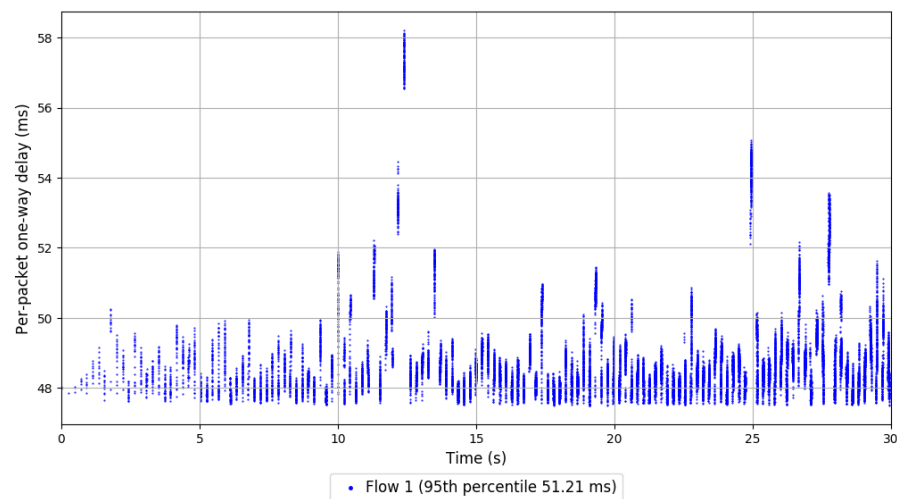
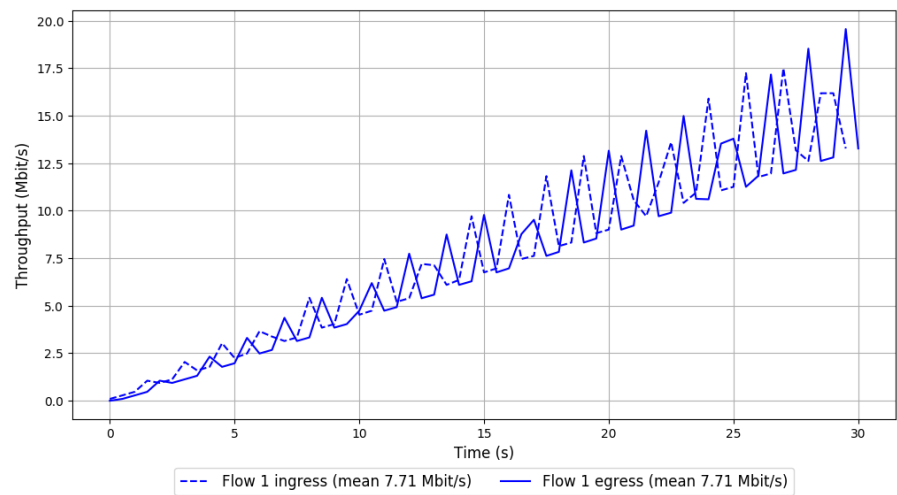


Run 1: Statistics of LEDBAT

Start at: 2019-01-21 05:20:46
End at: 2019-01-21 05:21:16
Local clock offset: 1.046 ms
Remote clock offset: 75.668 ms

Below is generated by plot.py at 2019-01-21 08:46:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 7.71 Mbit/s
95th percentile per-packet one-way delay: 51.207 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.71 Mbit/s
95th percentile per-packet one-way delay: 51.207 ms
Loss rate: 0.00%

Run 1: Report of LEDBAT — Data Link

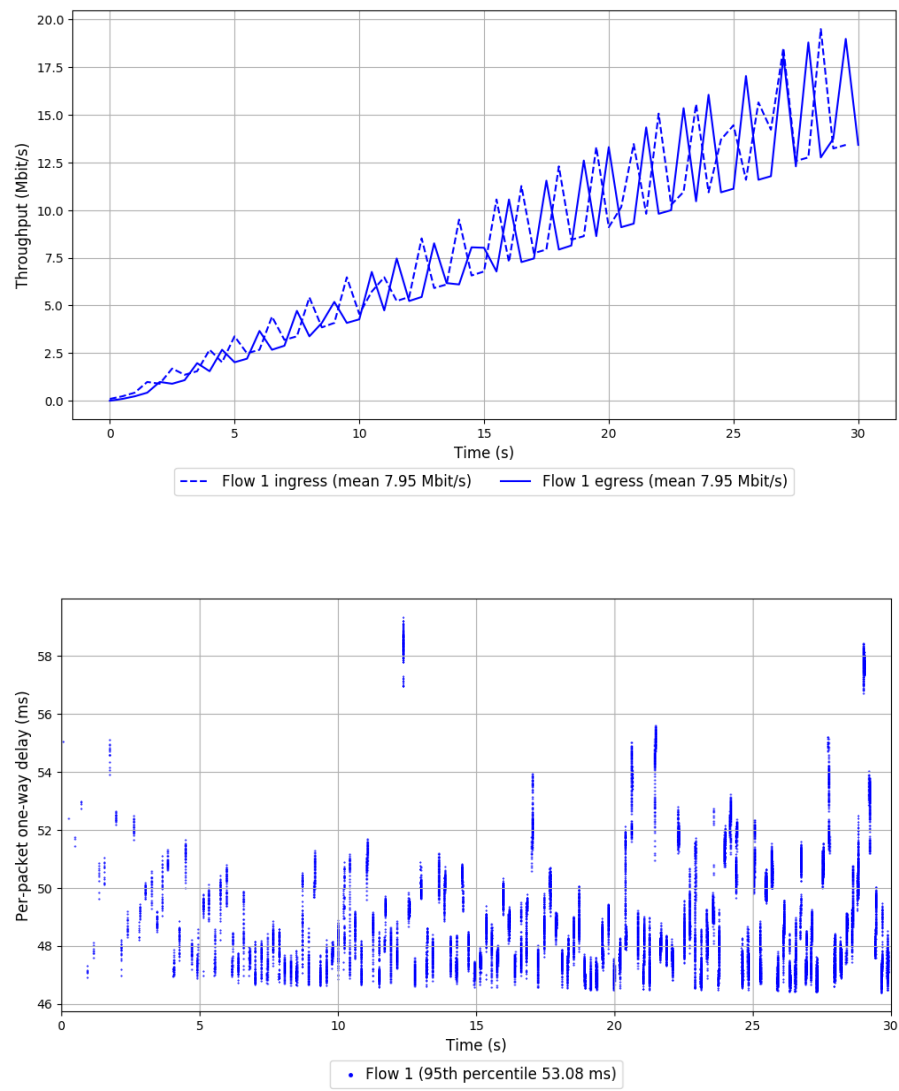


Run 2: Statistics of LEDBAT

Start at: 2019-01-21 06:15:47
End at: 2019-01-21 06:16:17
Local clock offset: 6.593 ms
Remote clock offset: 48.684 ms

Below is generated by plot.py at 2019-01-21 08:46:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 7.95 Mbit/s
95th percentile per-packet one-way delay: 53.079 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.95 Mbit/s
95th percentile per-packet one-way delay: 53.079 ms
Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2019-01-21 06:48:43

End at: 2019-01-21 06:49:13

Local clock offset: -5.538 ms

Remote clock offset: 47.2 ms

Below is generated by plot.py at 2019-01-21 08:46:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.71 Mbit/s

95th percentile per-packet one-way delay: 58.898 ms

Loss rate: 0.00%

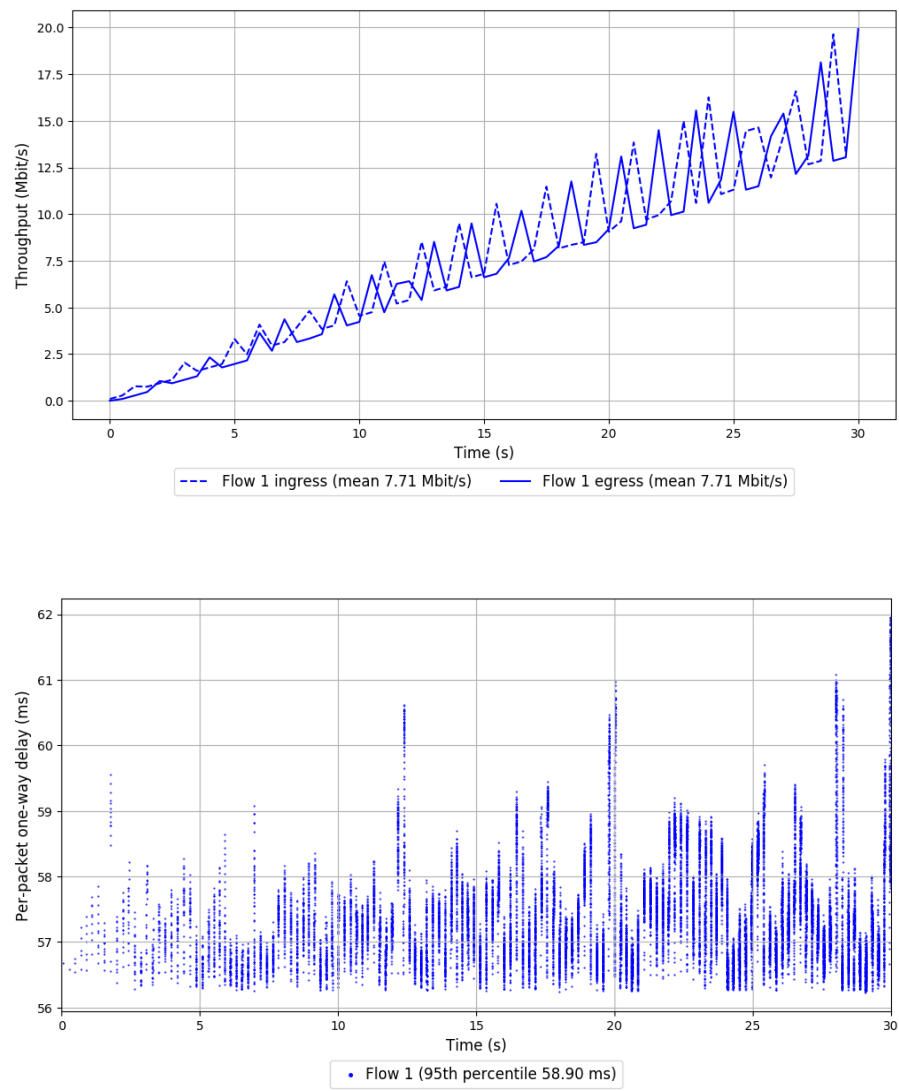
-- Flow 1:

Average throughput: 7.71 Mbit/s

95th percentile per-packet one-way delay: 58.898 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link

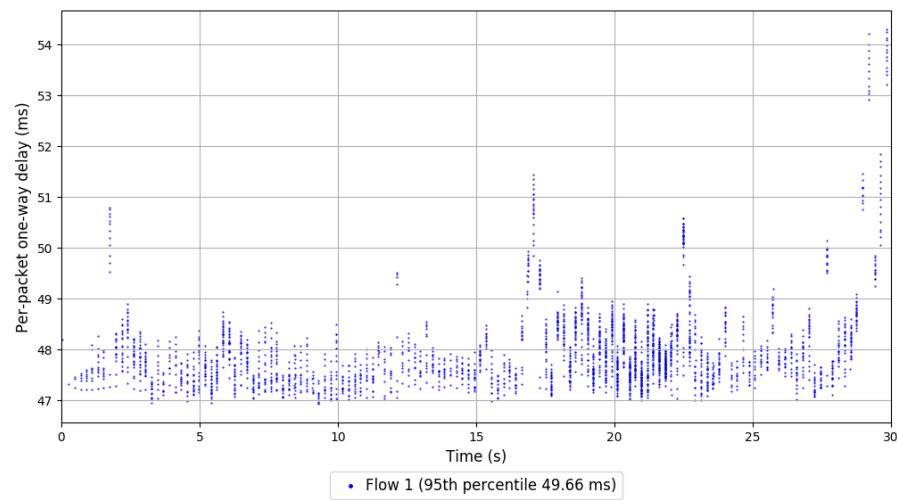
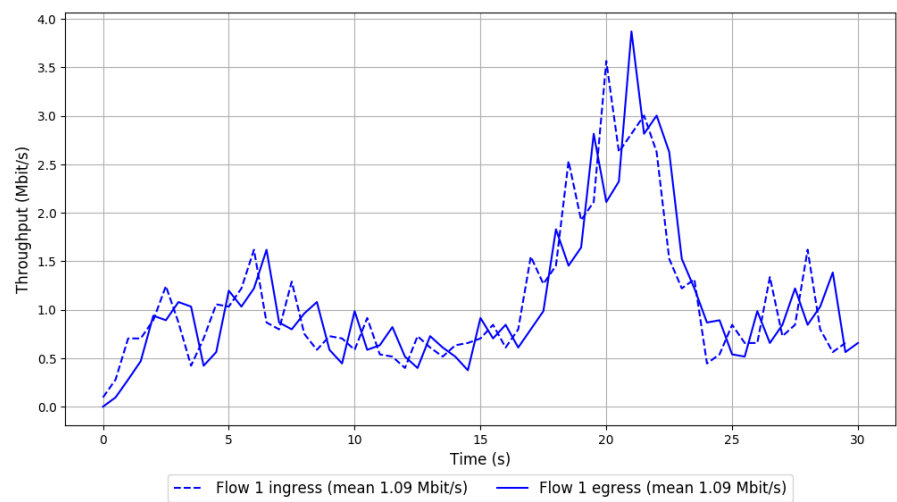


Run 4: Statistics of LEDBAT

Start at: 2019-01-21 07:31:50
End at: 2019-01-21 07:32:20
Local clock offset: -2.333 ms
Remote clock offset: 47.569 ms

Below is generated by plot.py at 2019-01-21 08:46:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.09 Mbit/s
95th percentile per-packet one-way delay: 49.661 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.09 Mbit/s
95th percentile per-packet one-way delay: 49.661 ms
Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link

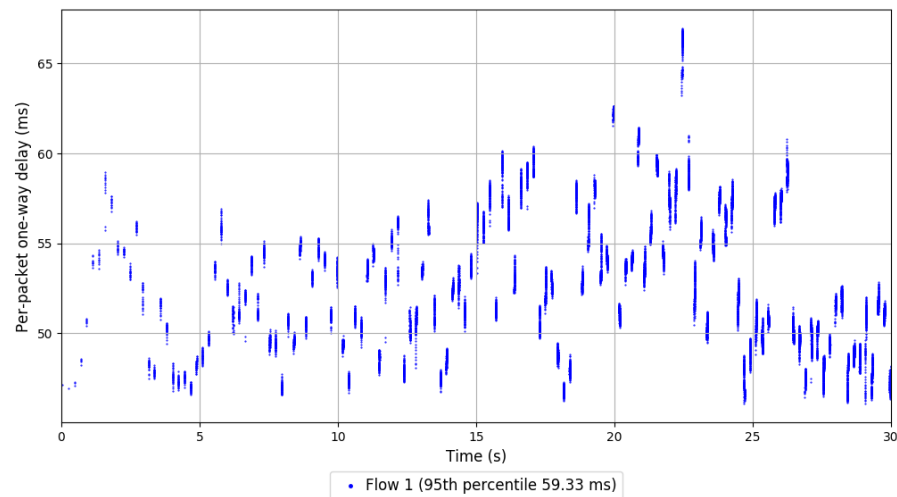
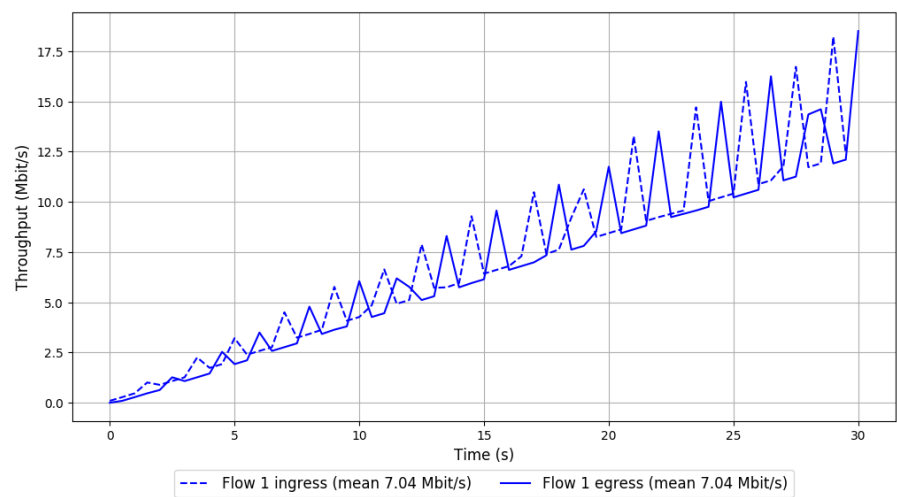


Run 5: Statistics of LEDBAT

Start at: 2019-01-21 08:22:41
End at: 2019-01-21 08:23:11
Local clock offset: 5.816 ms
Remote clock offset: 53.944 ms

Below is generated by plot.py at 2019-01-21 08:46:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 7.04 Mbit/s
95th percentile per-packet one-way delay: 59.332 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.04 Mbit/s
95th percentile per-packet one-way delay: 59.332 ms
Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

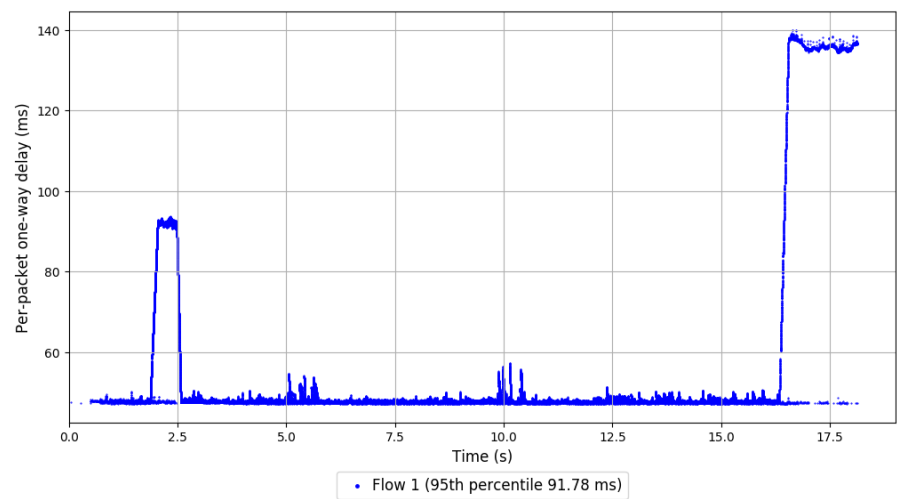
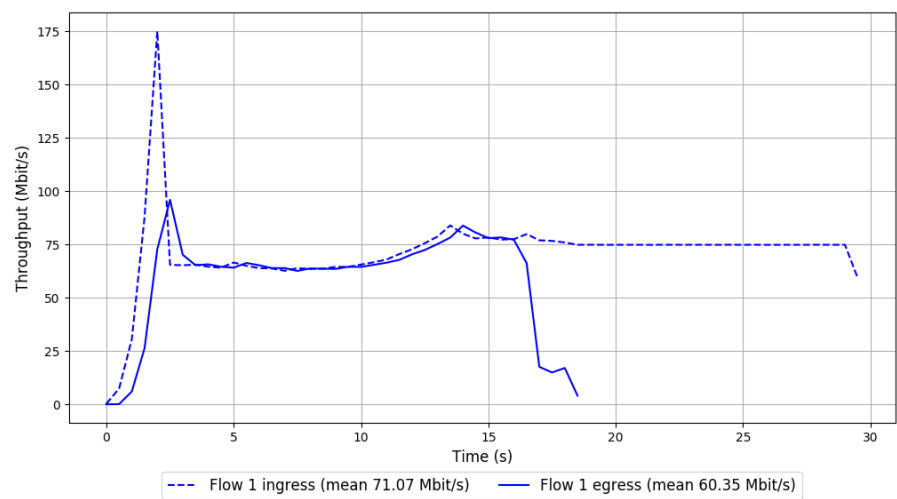
Start at: 2019-01-21 05:18:49

End at: 2019-01-21 05:19:19

Local clock offset: 0.092 ms

Remote clock offset: 74.176 ms

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

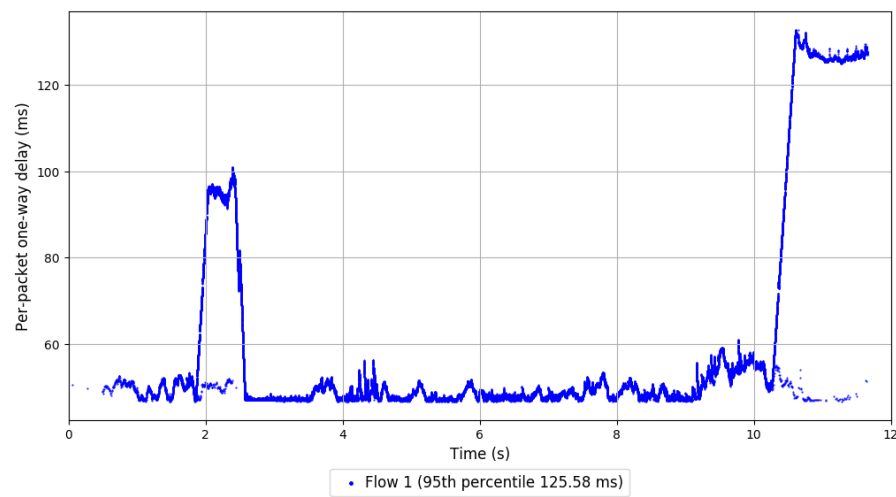
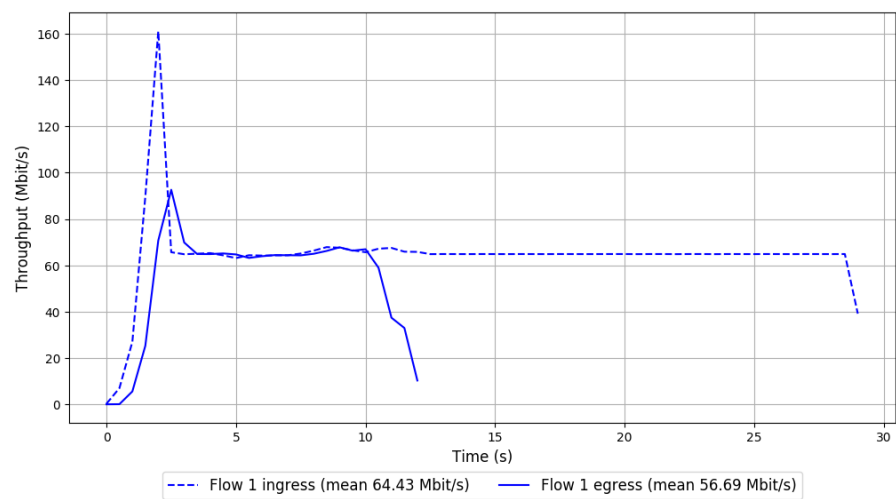
Start at: 2019-01-21 06:14:25

End at: 2019-01-21 06:14:55

Local clock offset: 6.364 ms

Remote clock offset: 49.274 ms

Run 2: Report of PCC-Allegro — Data Link

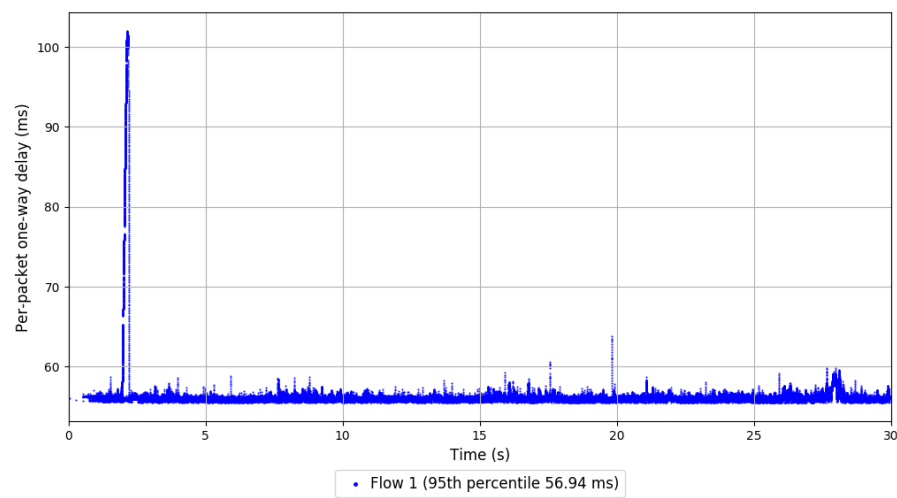
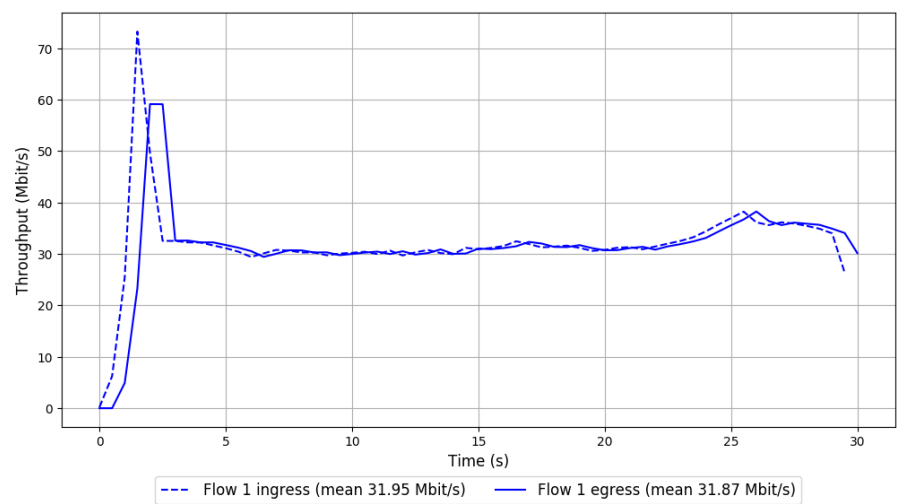


Run 3: Statistics of PCC-Allegro

Start at: 2019-01-21 06:47:20
End at: 2019-01-21 06:47:50
Local clock offset: -5.399 ms
Remote clock offset: 46.815 ms

Below is generated by plot.py at 2019-01-21 08:46:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 31.87 Mbit/s
95th percentile per-packet one-way delay: 56.937 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 31.87 Mbit/s
95th percentile per-packet one-way delay: 56.937 ms
Loss rate: 0.24%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

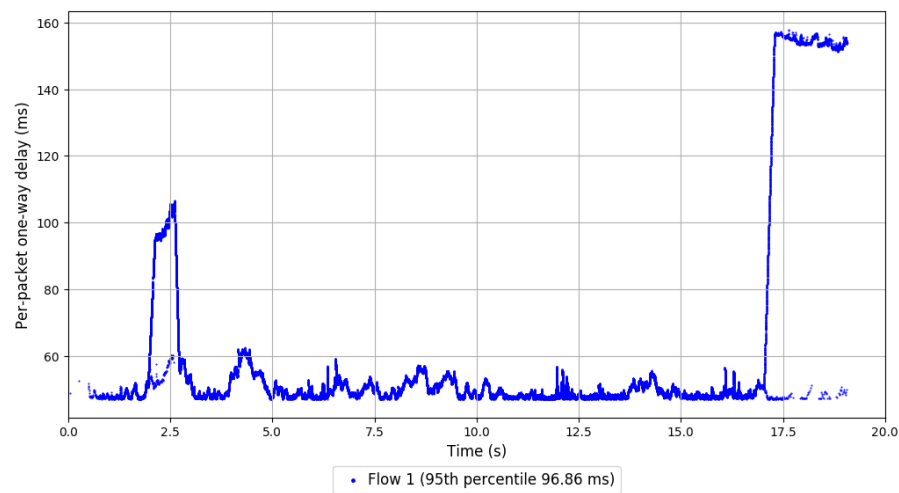
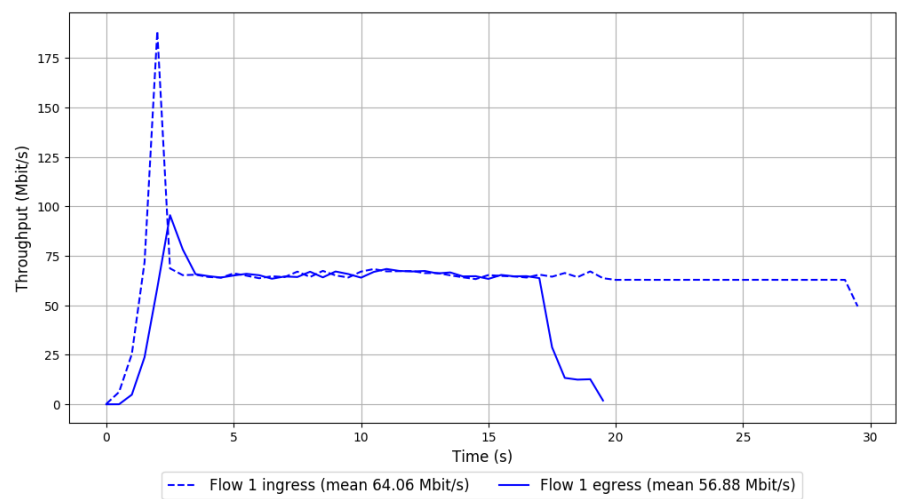
Start at: 2019-01-21 07:30:03

End at: 2019-01-21 07:30:33

Local clock offset: -2.719 ms

Remote clock offset: 47.929 ms

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2019-01-21 08:21:14

End at: 2019-01-21 08:21:44

Local clock offset: 6.969 ms

Remote clock offset: 52.717 ms

Below is generated by plot.py at 2019-01-21 08:46:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.06 Mbit/s

95th percentile per-packet one-way delay: 60.831 ms

Loss rate: 0.02%

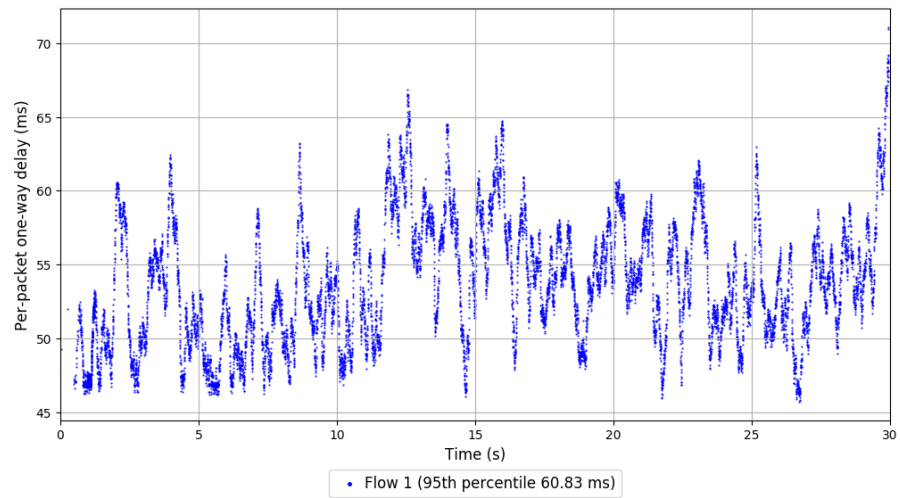
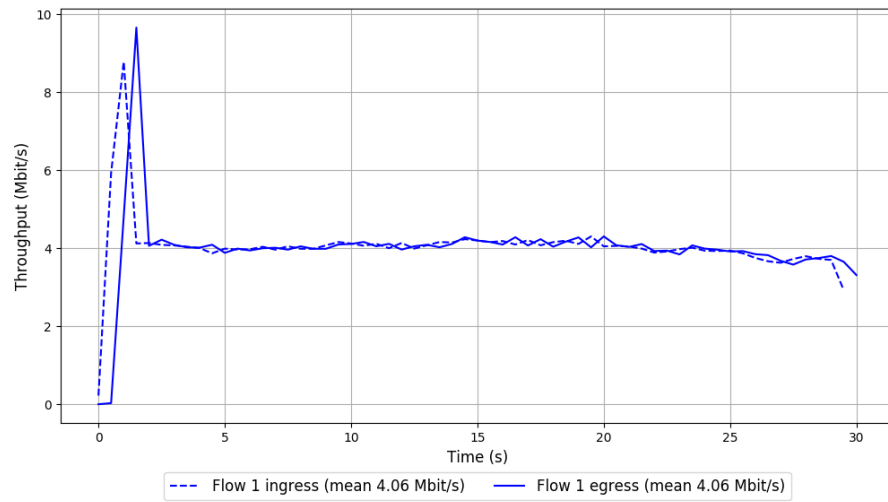
-- Flow 1:

Average throughput: 4.06 Mbit/s

95th percentile per-packet one-way delay: 60.831 ms

Loss rate: 0.02%

Run 5: Report of PCC-Allegro — Data Link



Run 1: Statistics of PCC-Expr

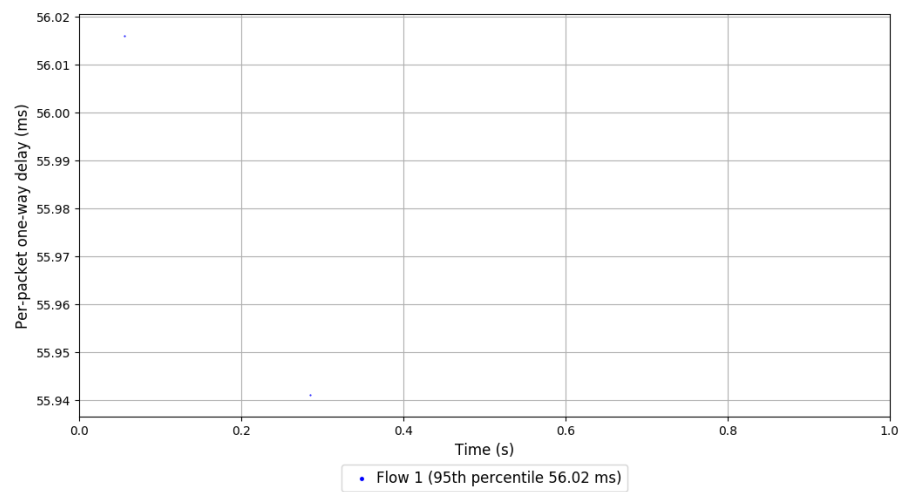
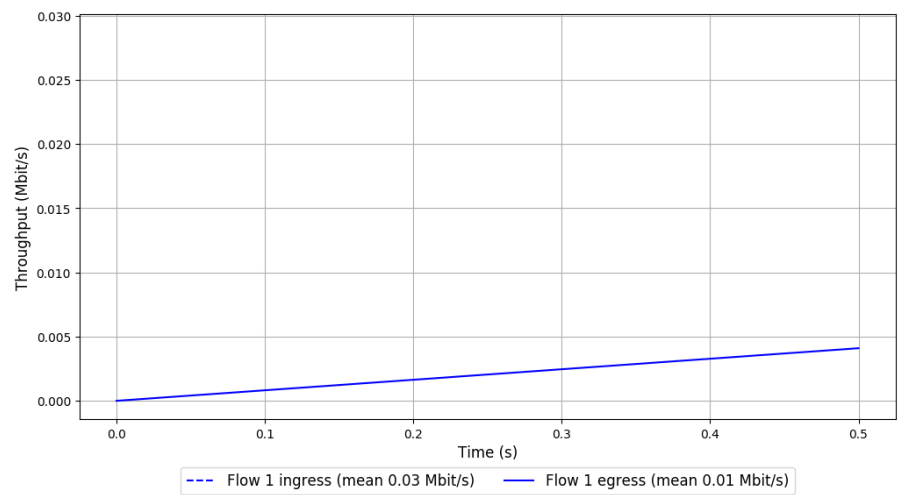
Start at: 2019-01-21 05:36:42

End at: 2019-01-21 05:37:12

Local clock offset: 4.512 ms

Remote clock offset: 82.91 ms

Run 1: Report of PCC-Expr — Data Link

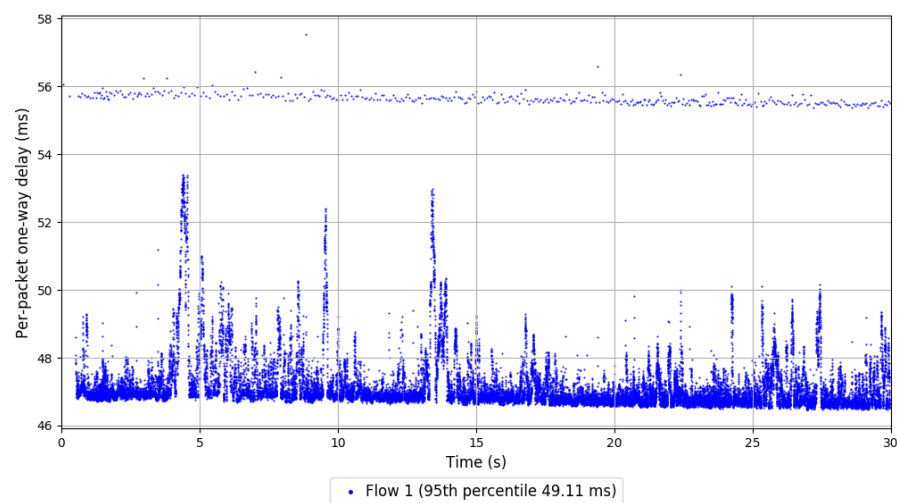
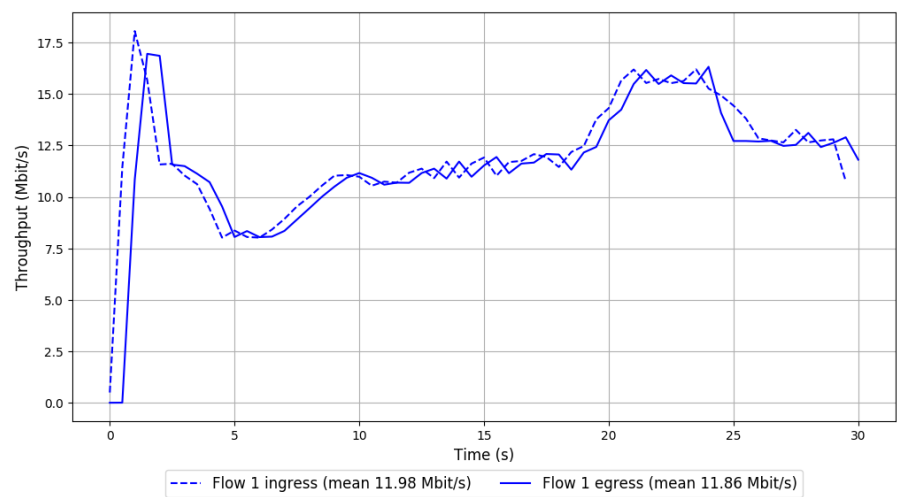


Run 2: Statistics of PCC-Expr

Start at: 2019-01-21 06:26:53
End at: 2019-01-21 06:27:23
Local clock offset: -1.296 ms
Remote clock offset: 46.457 ms

Below is generated by plot.py at 2019-01-21 08:46:17
Datalink statistics
-- Total of 1 flow:
Average throughput: 11.86 Mbit/s
95th percentile per-packet one-way delay: 49.111 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 11.86 Mbit/s
95th percentile per-packet one-way delay: 49.111 ms
Loss rate: 1.05%

Run 2: Report of PCC-Expr — Data Link

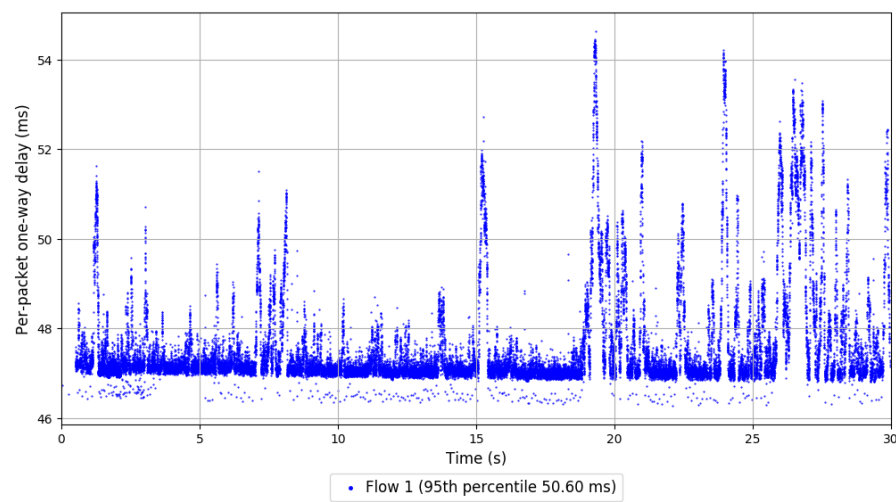
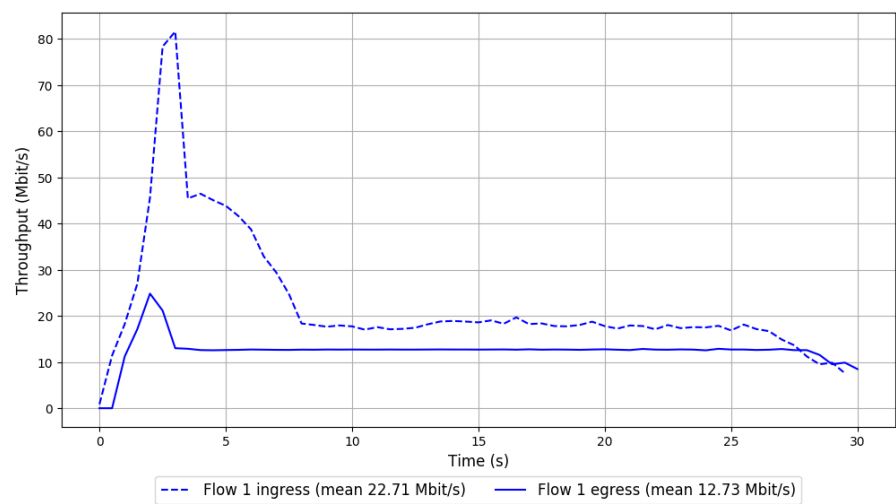


Run 3: Statistics of PCC-Expr

Start at: 2019-01-21 06:58:48
End at: 2019-01-21 06:59:18
Local clock offset: -6.627 ms
Remote clock offset: 46.074 ms

Below is generated by plot.py at 2019-01-21 08:46:17
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.73 Mbit/s
95th percentile per-packet one-way delay: 50.597 ms
Loss rate: 43.93%
-- Flow 1:
Average throughput: 12.73 Mbit/s
95th percentile per-packet one-way delay: 50.597 ms
Loss rate: 43.93%

Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

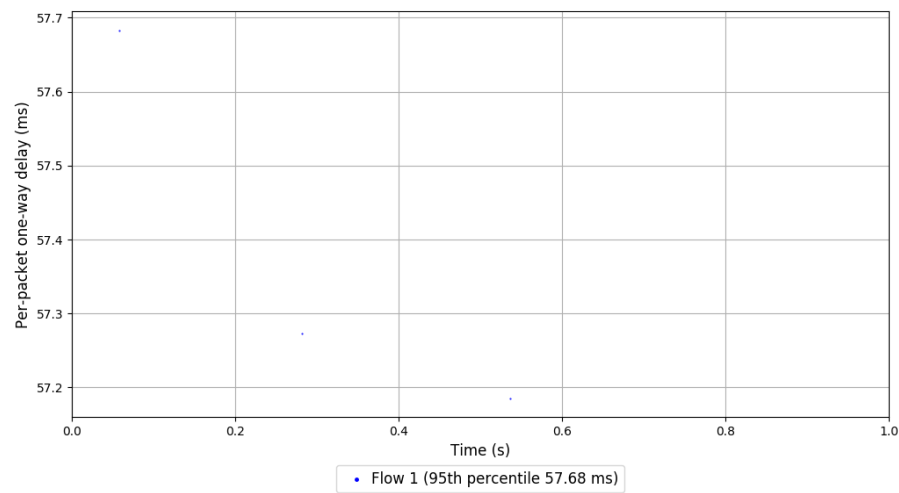
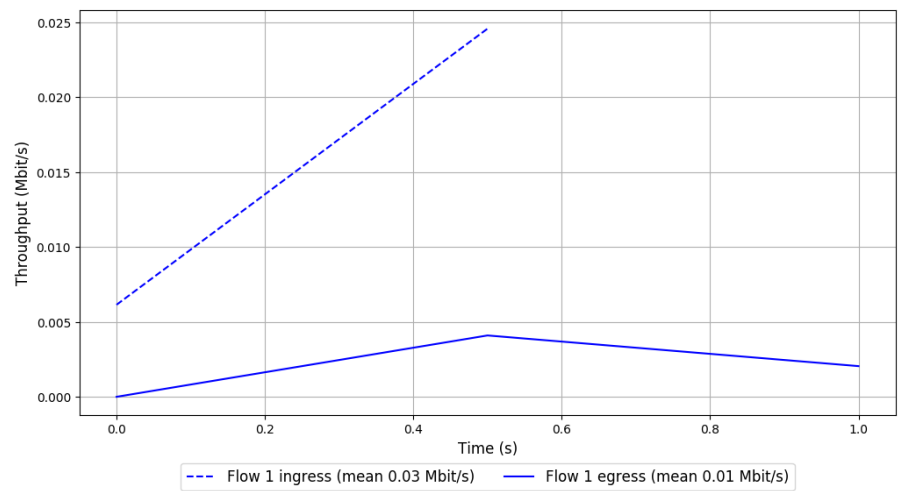
Start at: 2019-01-21 07:46:57

End at: 2019-01-21 07:47:27

Local clock offset: -0.406 ms

Remote clock offset: 35.743 ms

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

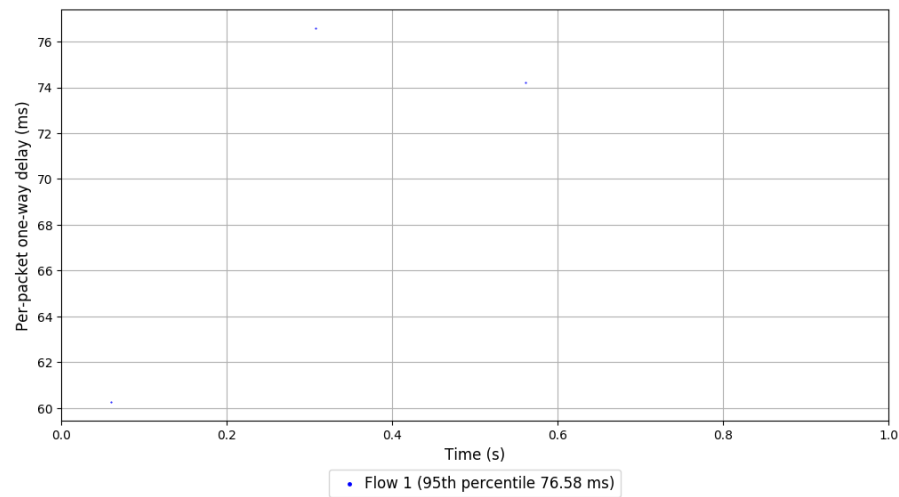
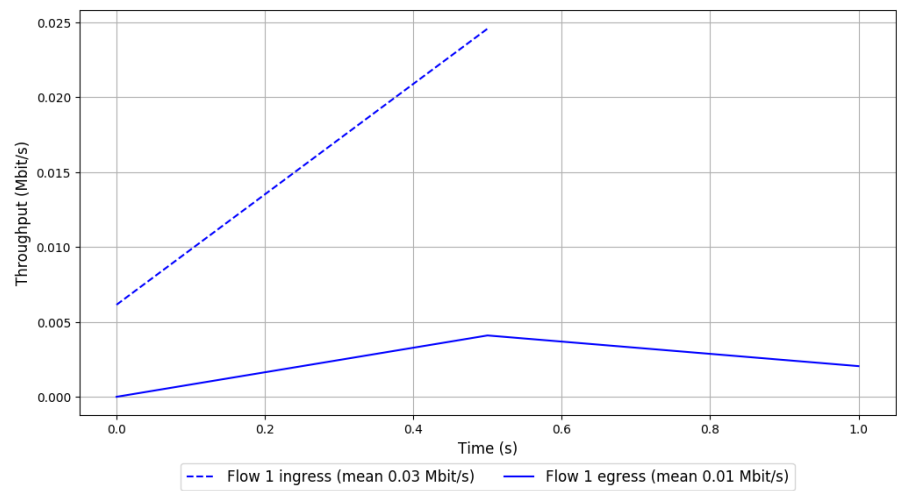
Start at: 2019-01-21 08:37:51

End at: 2019-01-21 08:38:21

Local clock offset: 0.362 ms

Remote clock offset: 58.674 ms

Run 5: Report of PCC-Expr — Data Link

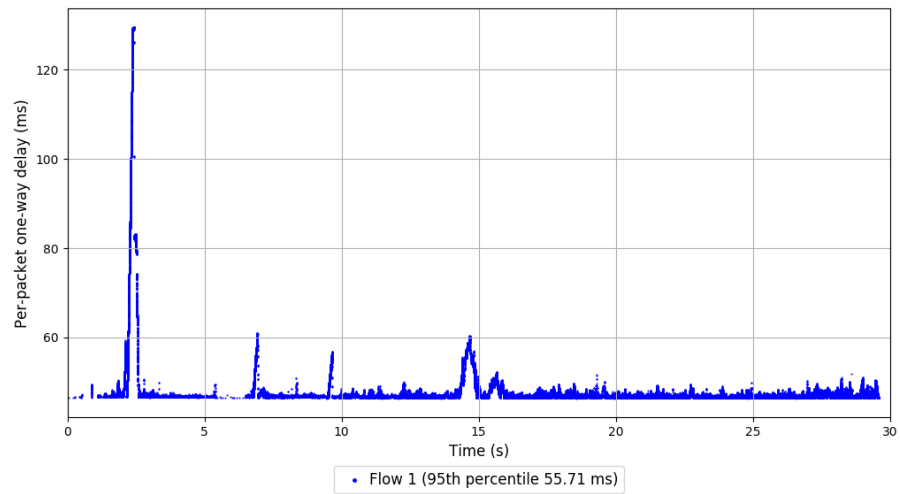
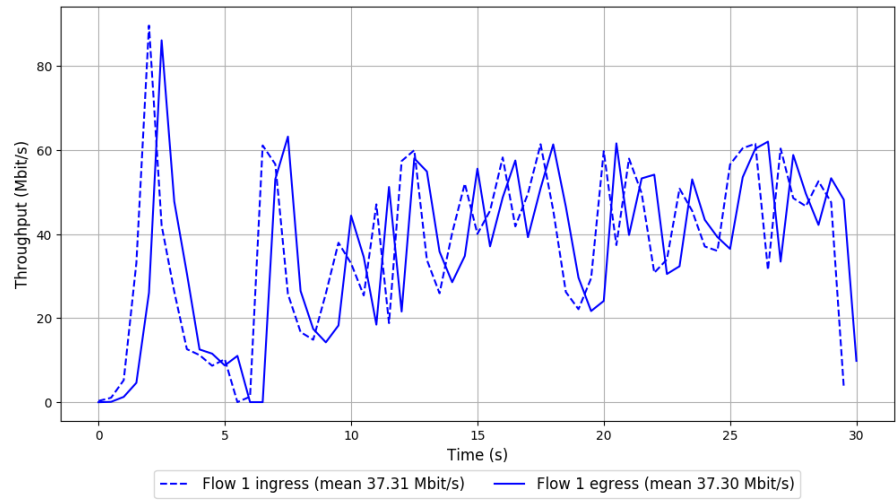


Run 1: Statistics of QUIC Cubic

Start at: 2019-01-21 05:30:03
End at: 2019-01-21 05:30:33
Local clock offset: 3.589 ms
Remote clock offset: 79.736 ms

Below is generated by plot.py at 2019-01-21 08:46:36
Datalink statistics
-- Total of 1 flow:
Average throughput: 37.30 Mbit/s
95th percentile per-packet one-way delay: 55.710 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 37.30 Mbit/s
95th percentile per-packet one-way delay: 55.710 ms
Loss rate: 0.00%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2019-01-21 06:22:36

End at: 2019-01-21 06:23:06

Local clock offset: 0.801 ms

Remote clock offset: 46.402 ms

Below is generated by plot.py at 2019-01-21 08:46:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.53 Mbit/s

95th percentile per-packet one-way delay: 66.880 ms

Loss rate: 0.00%

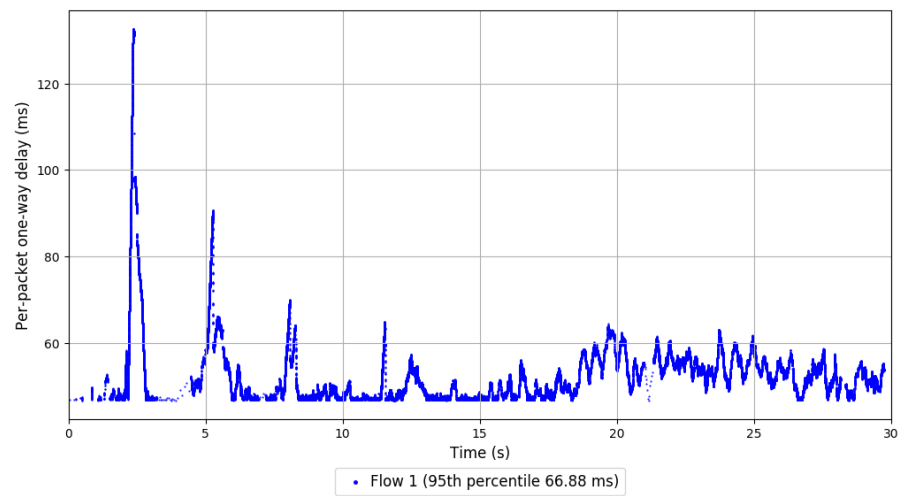
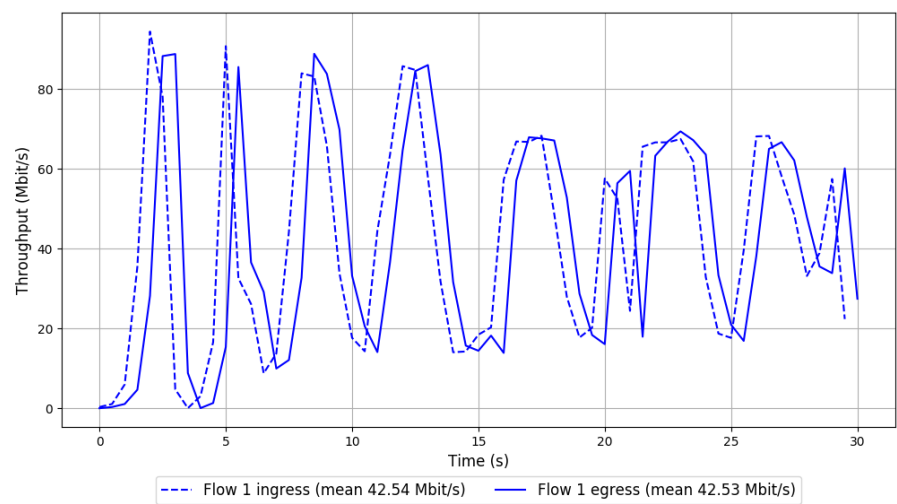
-- Flow 1:

Average throughput: 42.53 Mbit/s

95th percentile per-packet one-way delay: 66.880 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2019-01-21 06:55:04

End at: 2019-01-21 06:55:34

Local clock offset: -6.378 ms

Remote clock offset: 46.209 ms

Below is generated by plot.py at 2019-01-21 08:46:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.32 Mbit/s

95th percentile per-packet one-way delay: 57.922 ms

Loss rate: 0.00%

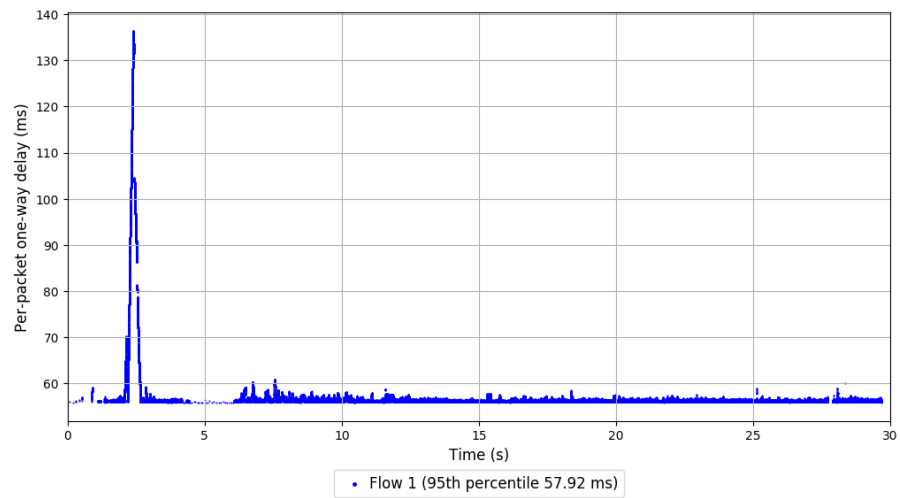
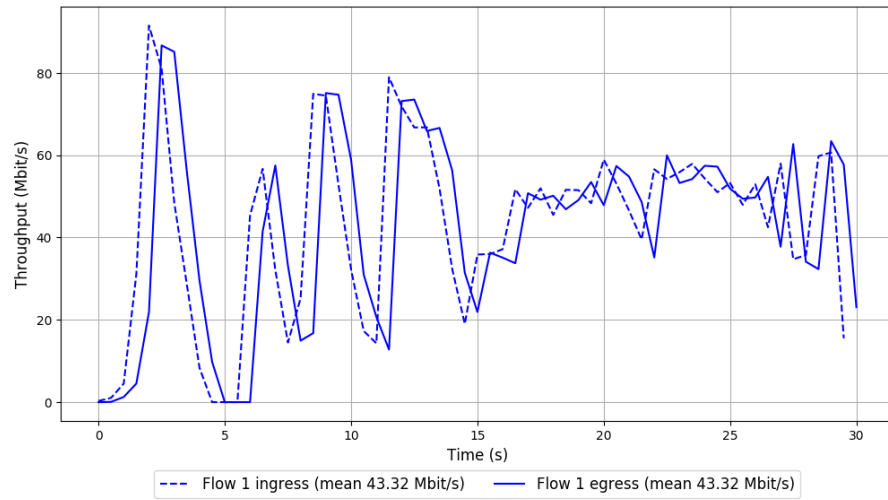
-- Flow 1:

Average throughput: 43.32 Mbit/s

95th percentile per-packet one-way delay: 57.922 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2019-01-21 07:40:44

End at: 2019-01-21 07:41:14

Local clock offset: -1.581 ms

Remote clock offset: 39.143 ms

Below is generated by plot.py at 2019-01-21 08:46:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.00 Mbit/s

95th percentile per-packet one-way delay: 69.406 ms

Loss rate: 0.00%

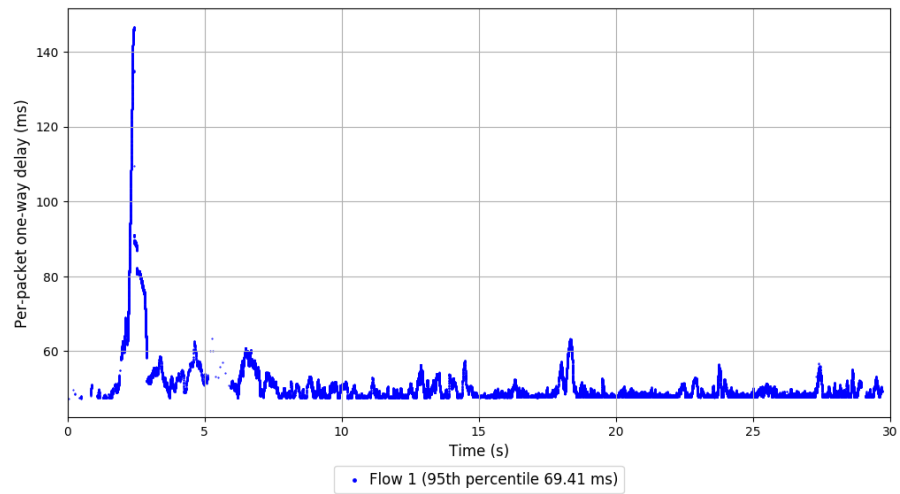
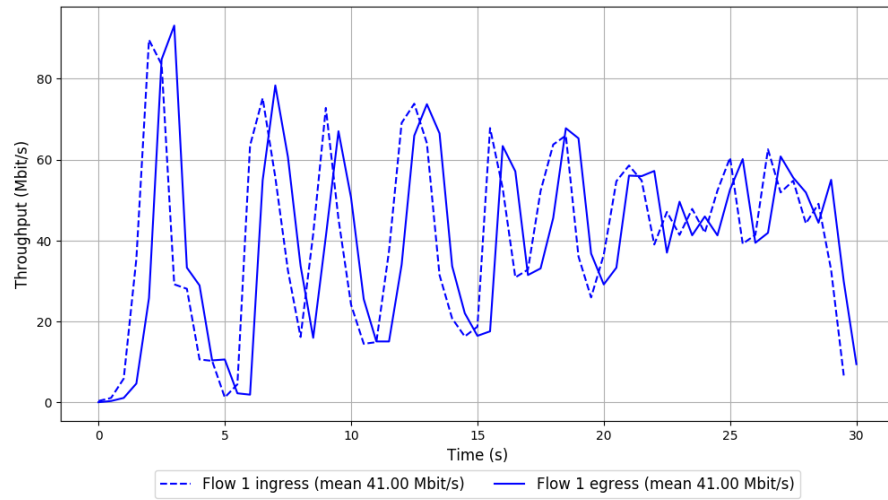
-- Flow 1:

Average throughput: 41.00 Mbit/s

95th percentile per-packet one-way delay: 69.406 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2019-01-21 08:30:38

End at: 2019-01-21 08:31:08

Local clock offset: 1.804 ms

Remote clock offset: 57.593 ms

Below is generated by plot.py at 2019-01-21 08:46:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.37 Mbit/s

95th percentile per-packet one-way delay: 66.762 ms

Loss rate: 0.00%

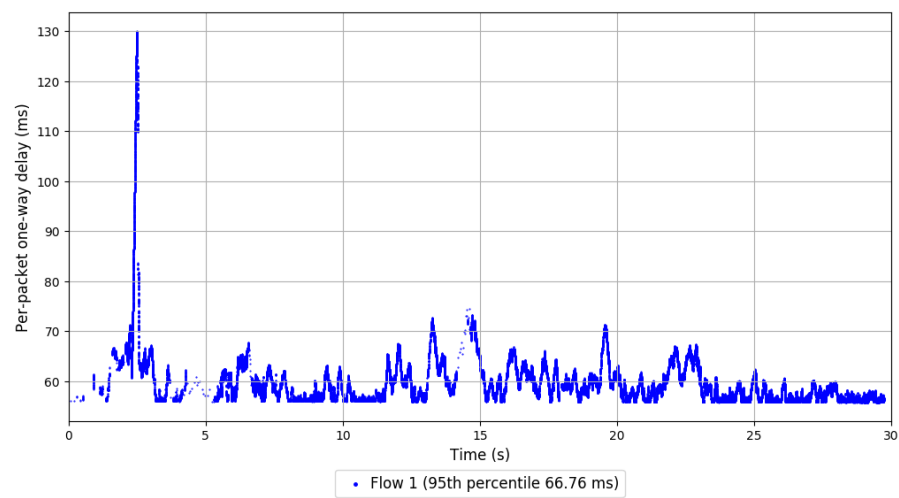
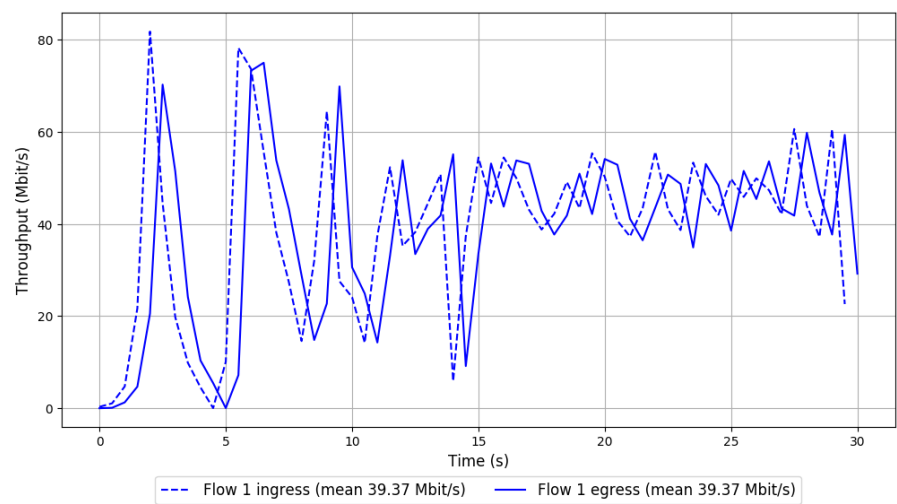
-- Flow 1:

Average throughput: 39.37 Mbit/s

95th percentile per-packet one-way delay: 66.762 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link

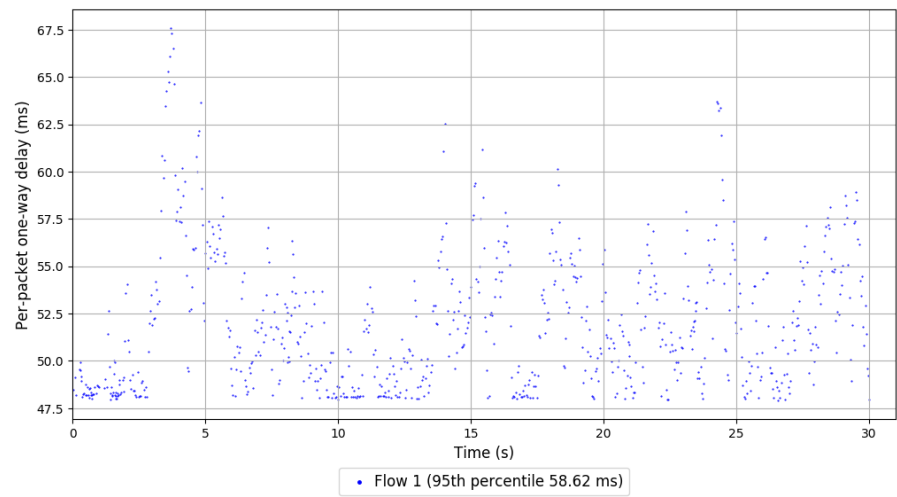
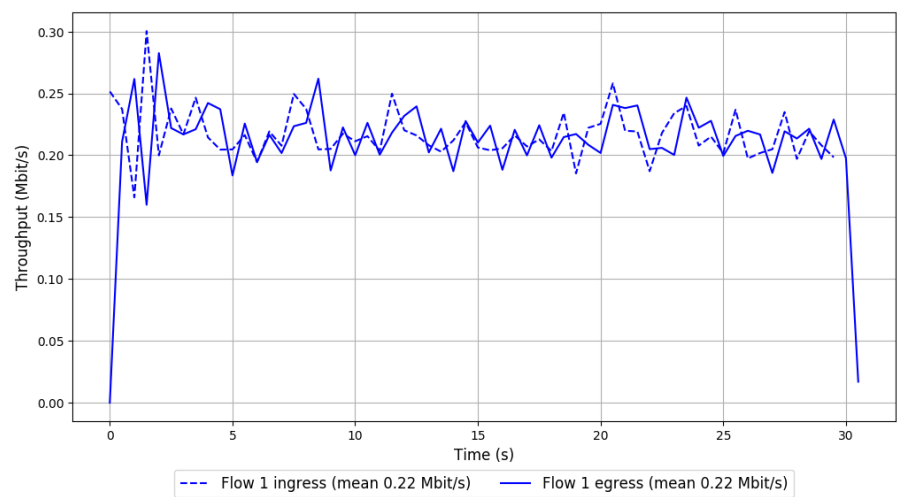


Run 1: Statistics of SCReAM

Start at: 2019-01-21 05:39:09
End at: 2019-01-21 05:39:39
Local clock offset: 4.778 ms
Remote clock offset: 85.691 ms

Below is generated by plot.py at 2019-01-21 08:46:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 58.619 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 58.619 ms
Loss rate: 0.00%

Run 1: Report of SReAM — Data Link

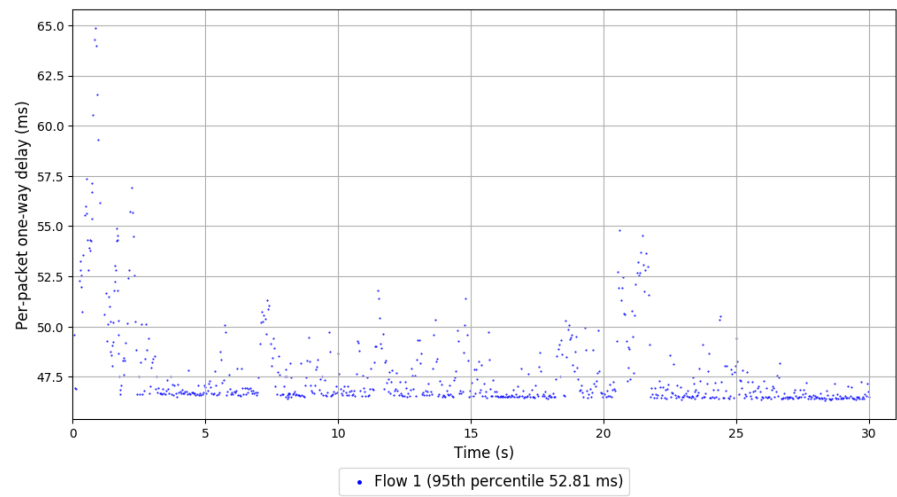
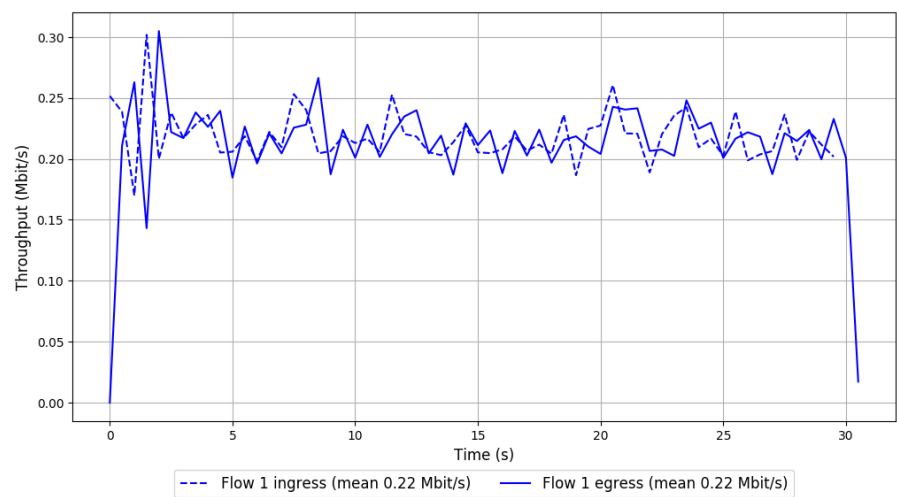


Run 2: Statistics of SCReAM

Start at: 2019-01-21 06:29:28
End at: 2019-01-21 06:29:58
Local clock offset: -2.087 ms
Remote clock offset: 47.002 ms

Below is generated by plot.py at 2019-01-21 08:46:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 52.809 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 52.809 ms
Loss rate: 0.00%

Run 2: Report of SReAM — Data Link

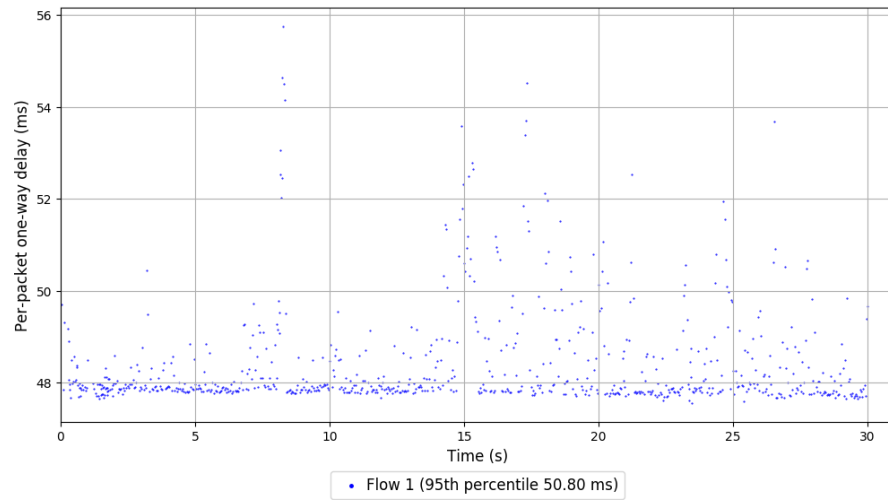
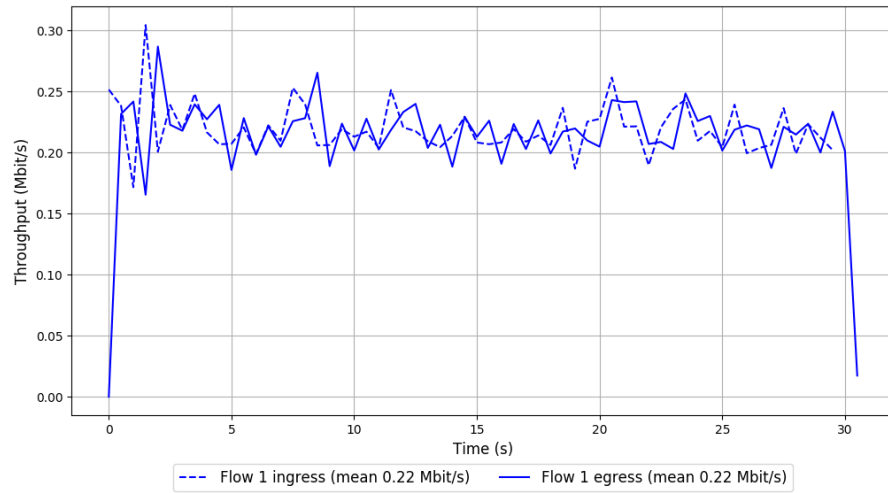


Run 3: Statistics of SCReAM

Start at: 2019-01-21 07:01:22
End at: 2019-01-21 07:01:52
Local clock offset: -6.687 ms
Remote clock offset: 47.816 ms

Below is generated by plot.py at 2019-01-21 08:46:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.803 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.803 ms
Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

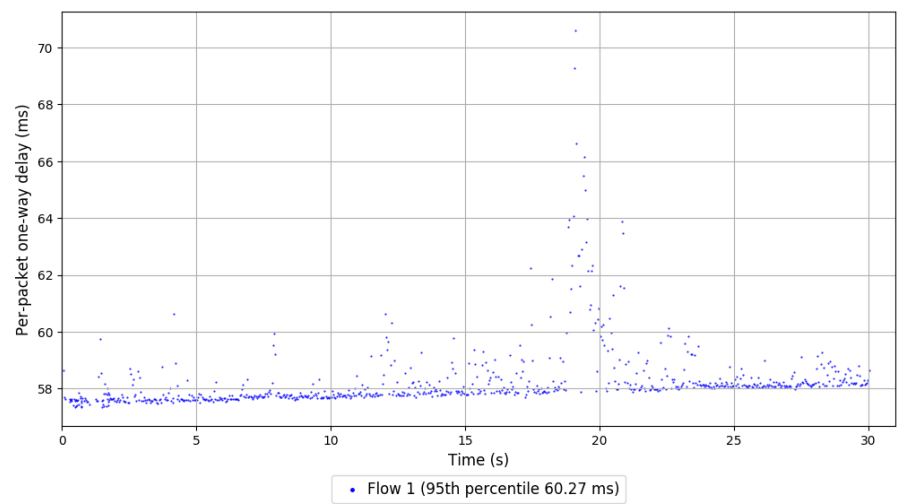
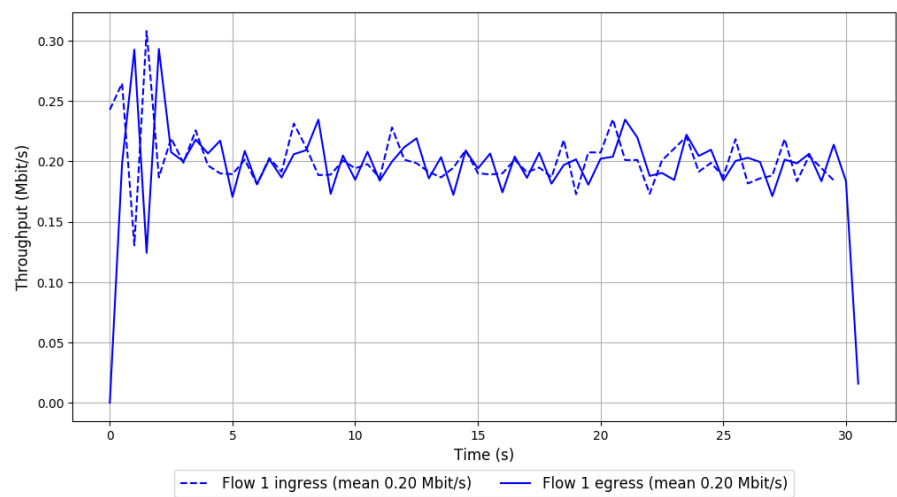


Run 4: Statistics of SCReAM

Start at: 2019-01-21 07:49:20
End at: 2019-01-21 07:49:50
Local clock offset: 1.951 ms
Remote clock offset: 34.736 ms

Below is generated by plot.py at 2019-01-21 08:46:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 60.267 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 60.267 ms
Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2019-01-21 08:40:18

End at: 2019-01-21 08:40:48

Local clock offset: 0.199 ms

Remote clock offset: 59.12 ms

Below is generated by plot.py at 2019-01-21 08:46:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 60.418 ms

Loss rate: 0.00%

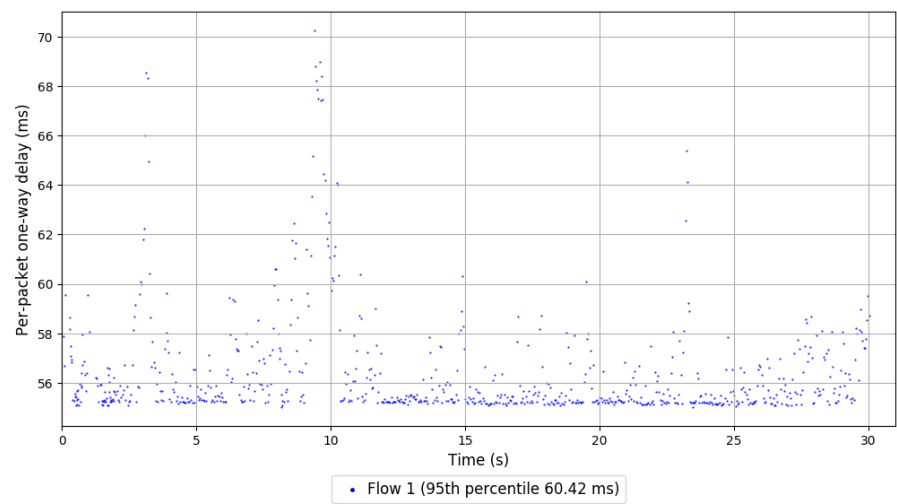
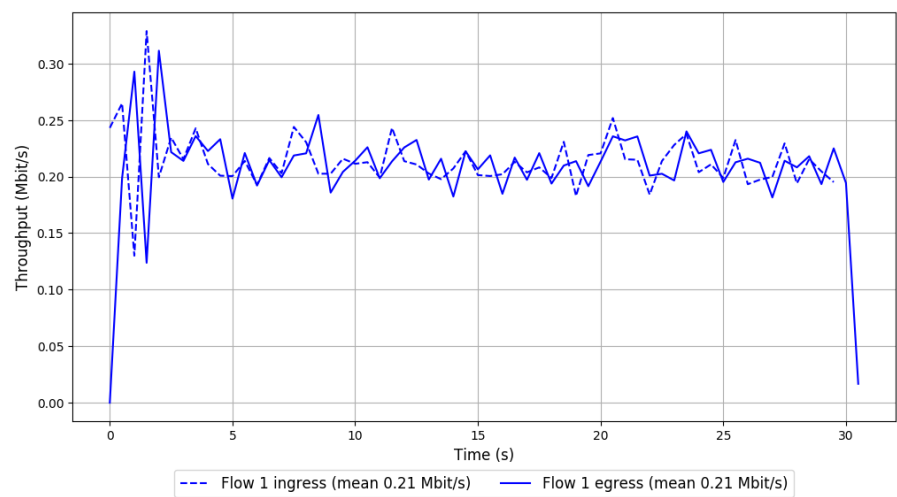
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 60.418 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2019-01-21 05:37:53

End at: 2019-01-21 05:38:23

Local clock offset: 4.48 ms

Remote clock offset: 83.86 ms

Below is generated by plot.py at 2019-01-21 08:46:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.81 Mbit/s

95th percentile per-packet one-way delay: 61.210 ms

Loss rate: 0.00%

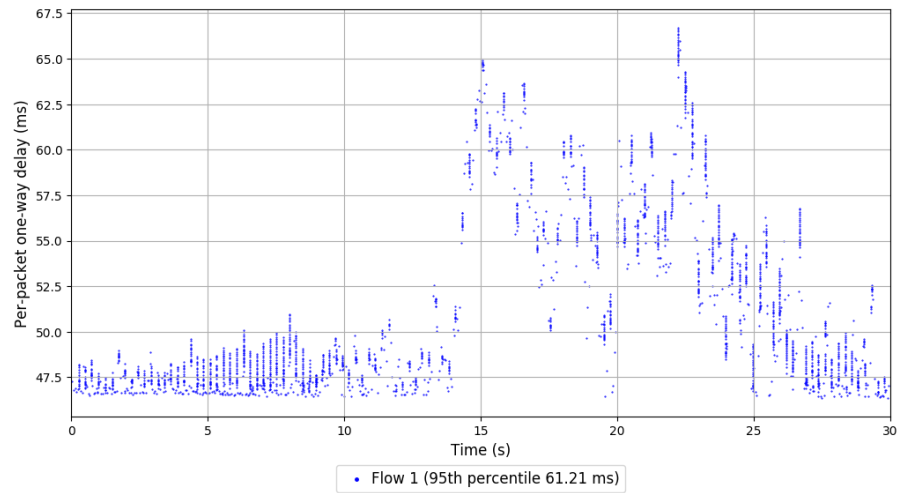
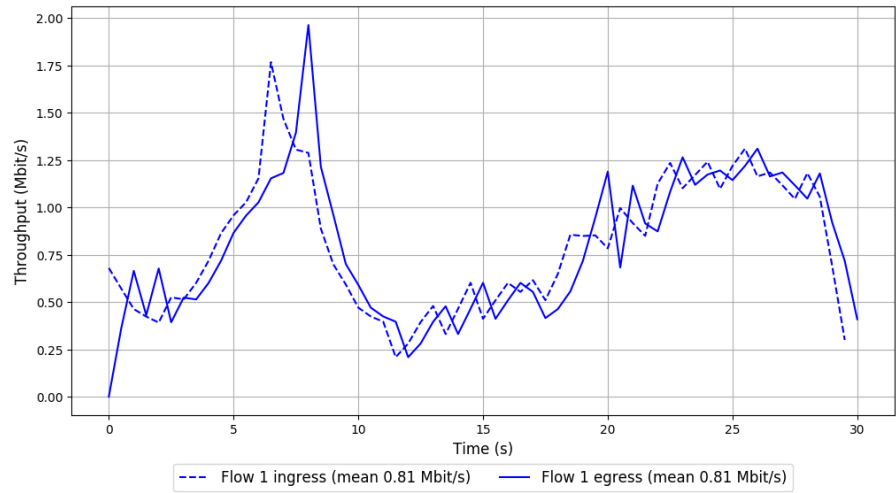
-- Flow 1:

Average throughput: 0.81 Mbit/s

95th percentile per-packet one-way delay: 61.210 ms

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link

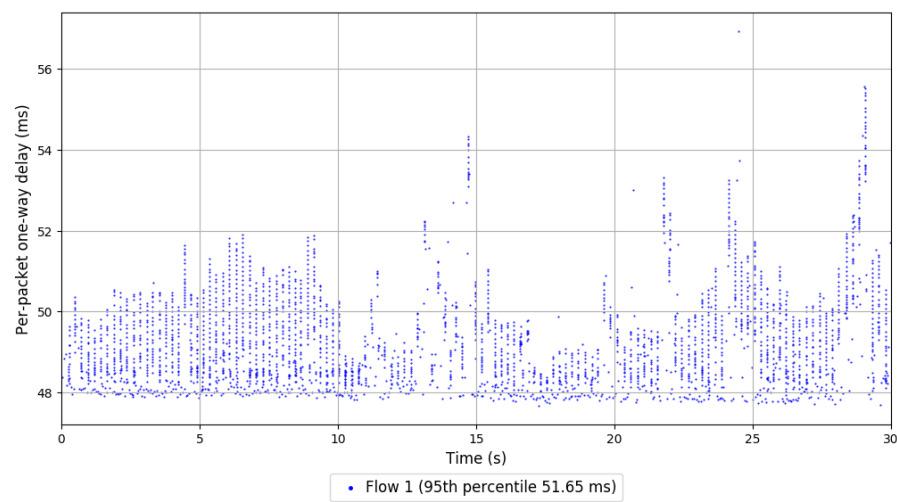
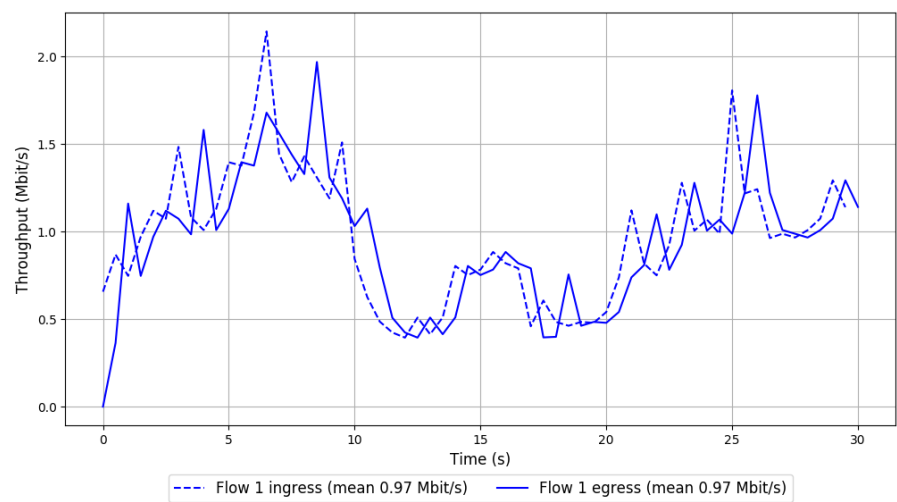


Run 2: Statistics of Sprout

Start at: 2019-01-21 06:28:17
End at: 2019-01-21 06:28:47
Local clock offset: -1.944 ms
Remote clock offset: 47.864 ms

Below is generated by plot.py at 2019-01-21 08:46:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 51.648 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 51.648 ms
Loss rate: 0.00%

Run 2: Report of Sprout — Data Link

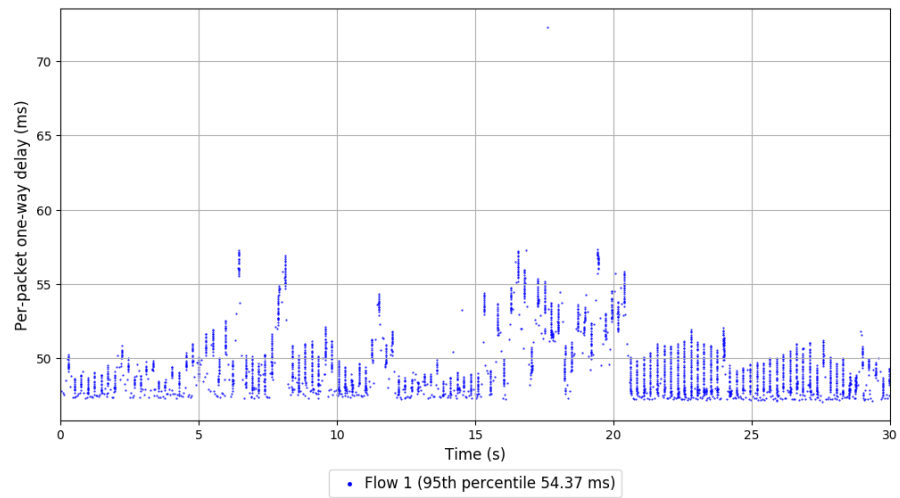
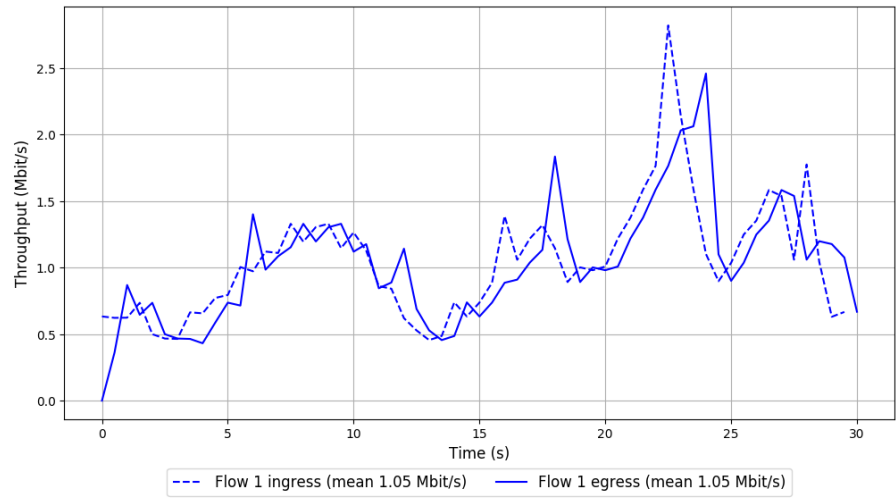


Run 3: Statistics of Sprout

Start at: 2019-01-21 07:00:11
End at: 2019-01-21 07:00:41
Local clock offset: -6.758 ms
Remote clock offset: 47.14 ms

Below is generated by plot.py at 2019-01-21 08:46:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.05 Mbit/s
95th percentile per-packet one-way delay: 54.371 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.05 Mbit/s
95th percentile per-packet one-way delay: 54.371 ms
Loss rate: 0.00%

Run 3: Report of Sprout — Data Link

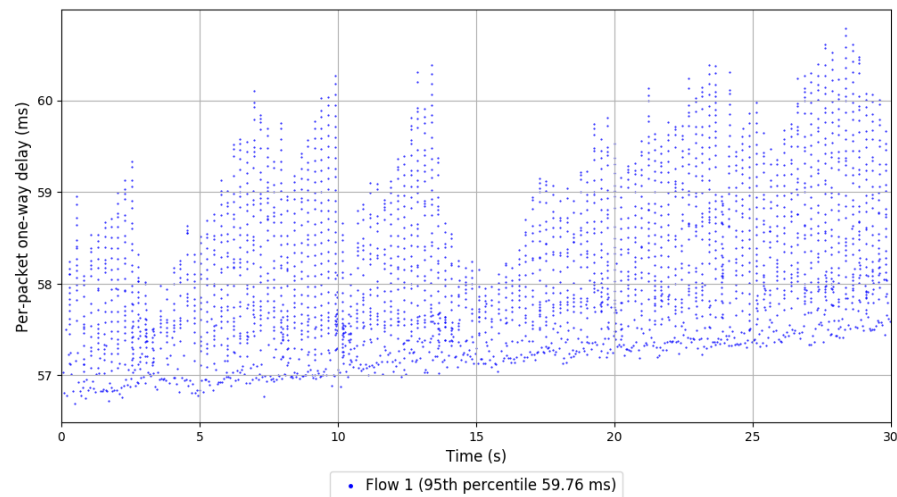
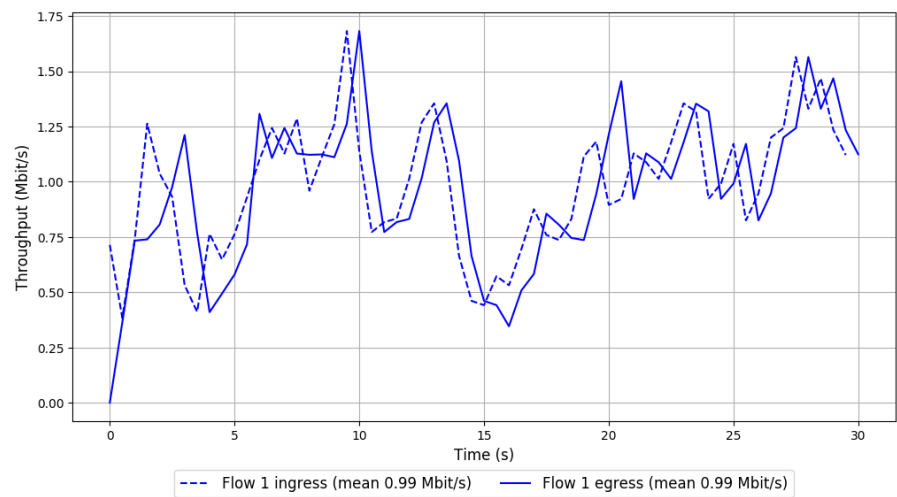


Run 4: Statistics of Sprout

Start at: 2019-01-21 07:48:07
End at: 2019-01-21 07:48:37
Local clock offset: 0.716 ms
Remote clock offset: 34.756 ms

Below is generated by plot.py at 2019-01-21 08:46:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.99 Mbit/s
95th percentile per-packet one-way delay: 59.764 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.99 Mbit/s
95th percentile per-packet one-way delay: 59.764 ms
Loss rate: 0.00%

Run 4: Report of Sprout — Data Link

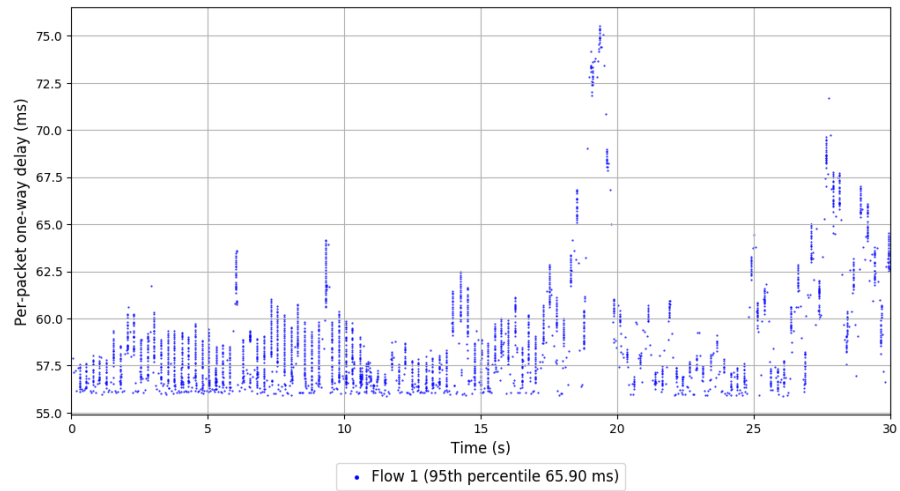
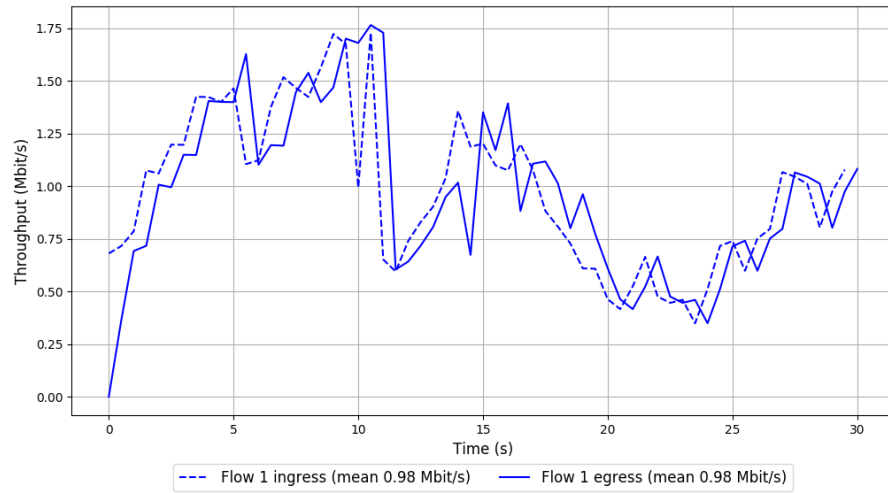


Run 5: Statistics of Sprout

Start at: 2019-01-21 08:39:03
End at: 2019-01-21 08:39:33
Local clock offset: 0.254 ms
Remote clock offset: 59.704 ms

Below is generated by plot.py at 2019-01-21 08:46:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.98 Mbit/s
95th percentile per-packet one-way delay: 65.903 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.98 Mbit/s
95th percentile per-packet one-way delay: 65.903 ms
Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

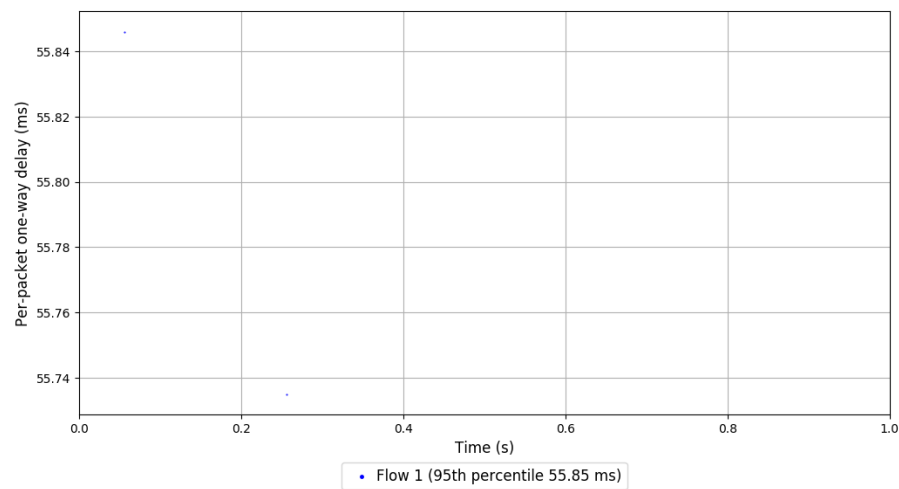
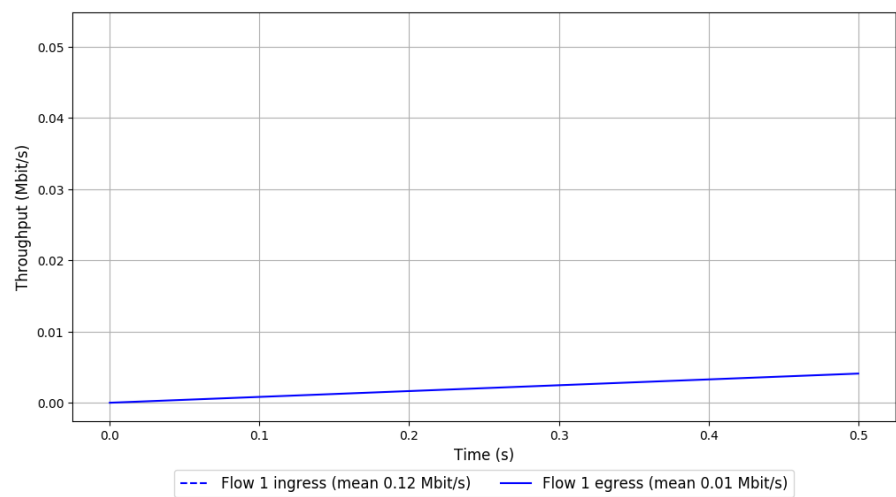
Start at: 2019-01-21 05:25:18

End at: 2019-01-21 05:25:48

Local clock offset: 2.582 ms

Remote clock offset: 76.971 ms

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



Run 2: Statistics of TaoVA-100x

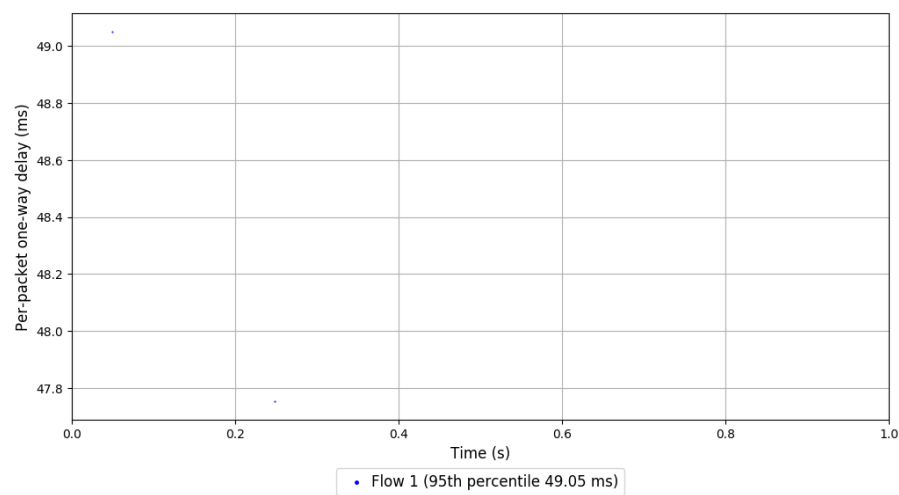
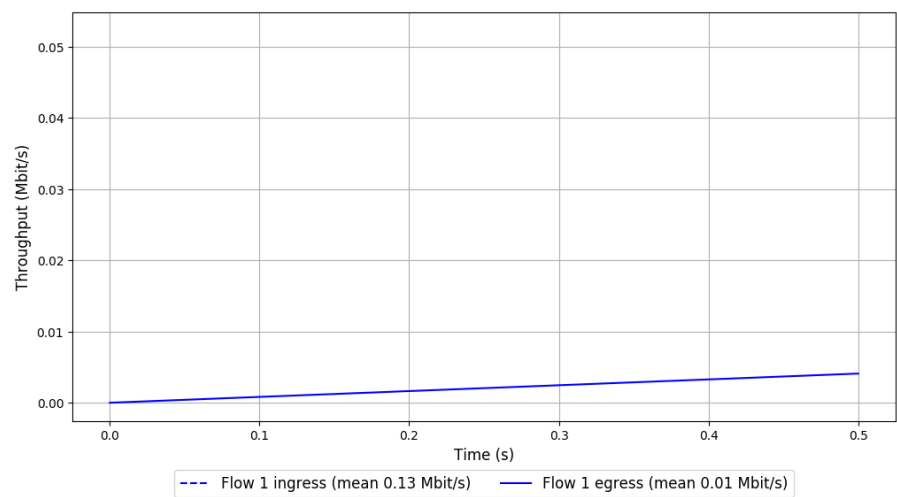
Start at: 2019-01-21 06:19:08

End at: 2019-01-21 06:19:38

Local clock offset: 3.612 ms

Remote clock offset: 47.487 ms

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



Run 3: Statistics of TaoVA-100x

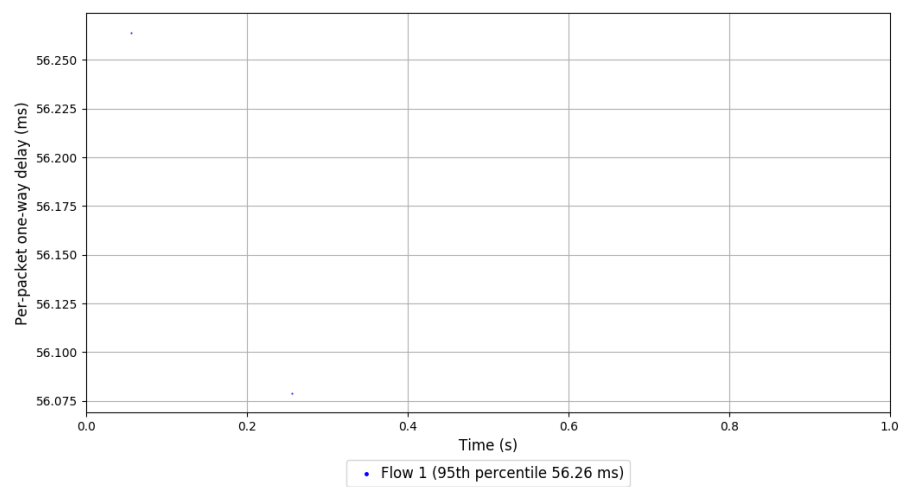
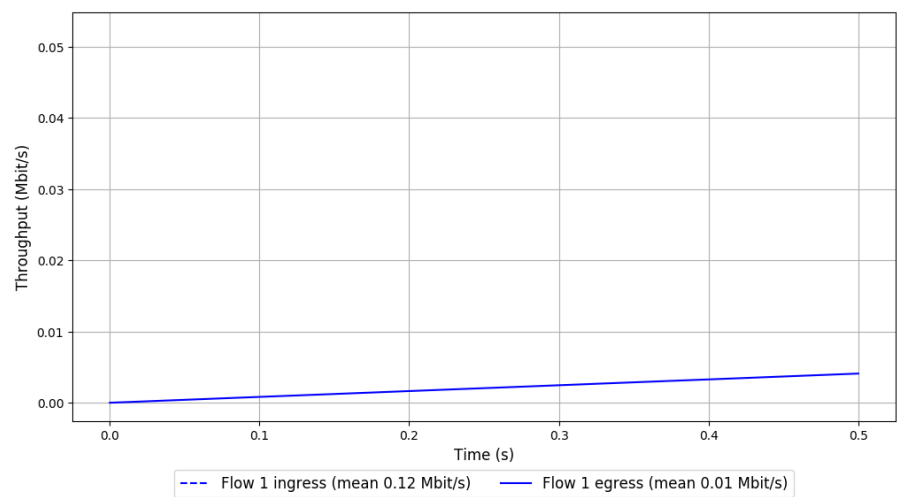
Start at: 2019-01-21 06:51:46

End at: 2019-01-21 06:52:16

Local clock offset: -5.695 ms

Remote clock offset: 46.609 ms

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



Run 4: Statistics of TaoVA-100x

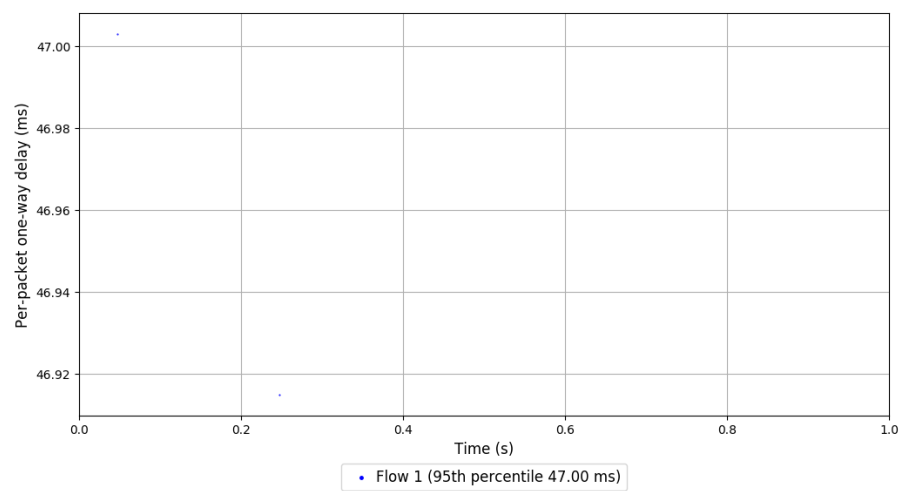
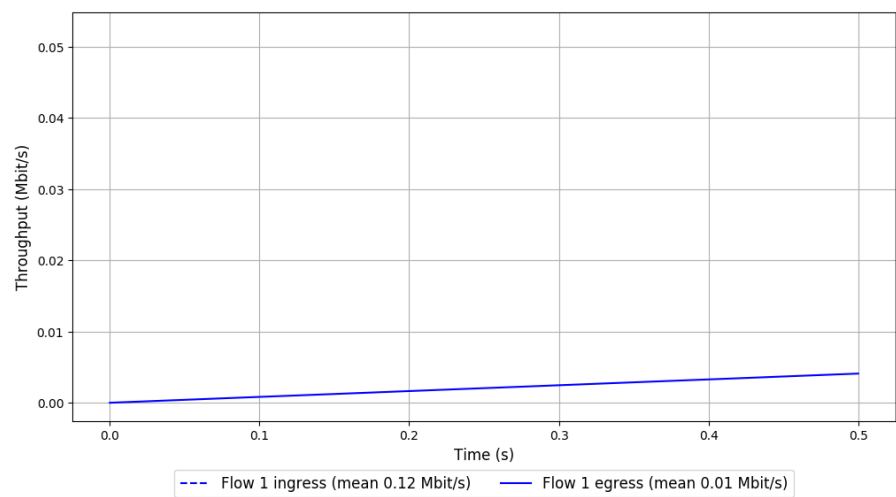
Start at: 2019-01-21 07:36:15

End at: 2019-01-21 07:36:45

Local clock offset: -1.712 ms

Remote clock offset: 42.997 ms

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



Run 5: Statistics of TaoVA-100x

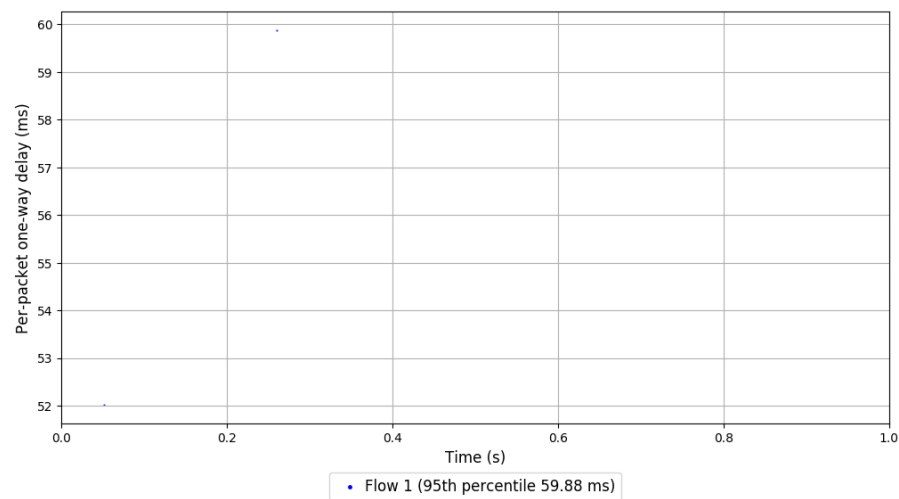
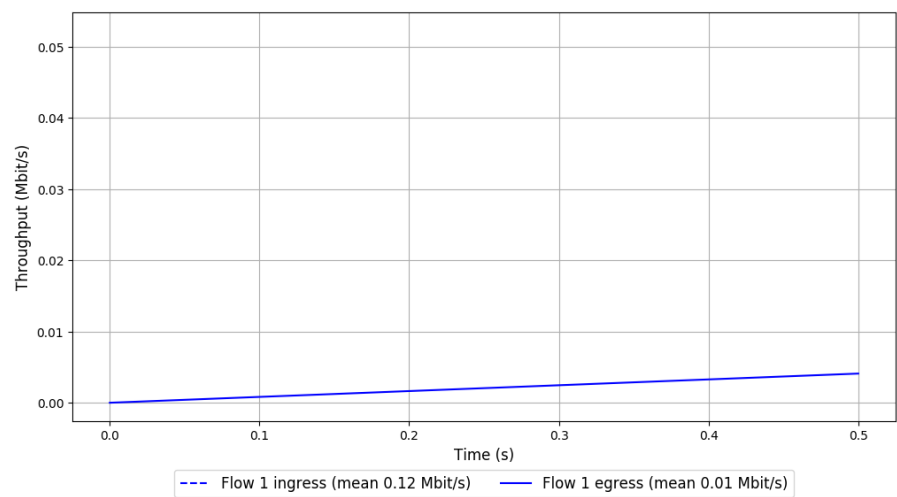
Start at: 2019-01-21 08:25:41

End at: 2019-01-21 08:26:11

Local clock offset: 3.802 ms

Remote clock offset: 54.275 ms

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

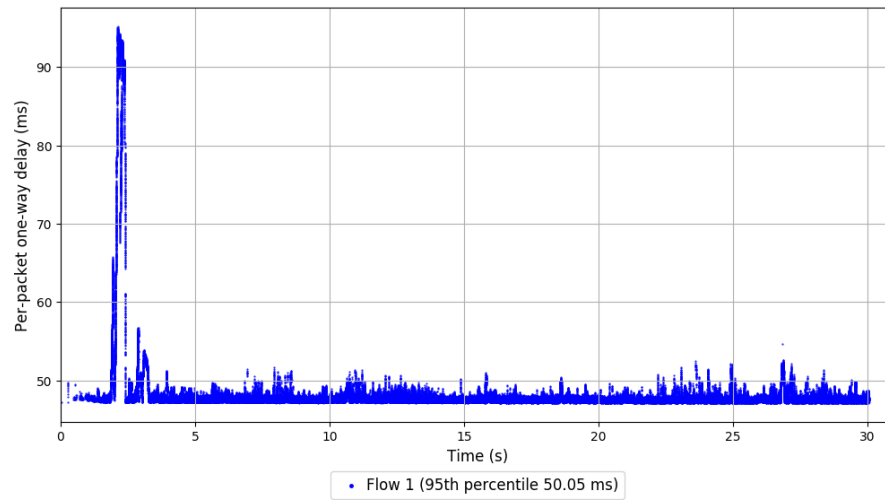
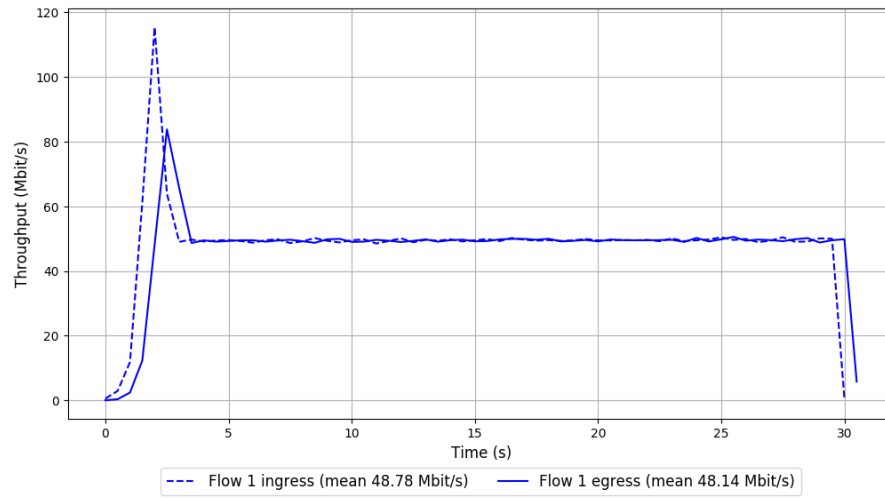


Run 1: Statistics of TCP Vegas

Start at: 2019-01-21 05:22:13
End at: 2019-01-21 05:22:43
Local clock offset: 1.529 ms
Remote clock offset: 75.713 ms

Below is generated by plot.py at 2019-01-21 08:46:56
Datalink statistics
-- Total of 1 flow:
Average throughput: 48.14 Mbit/s
95th percentile per-packet one-way delay: 50.050 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 48.14 Mbit/s
95th percentile per-packet one-way delay: 50.050 ms
Loss rate: 1.33%

Run 1: Report of TCP Vegas — Data Link

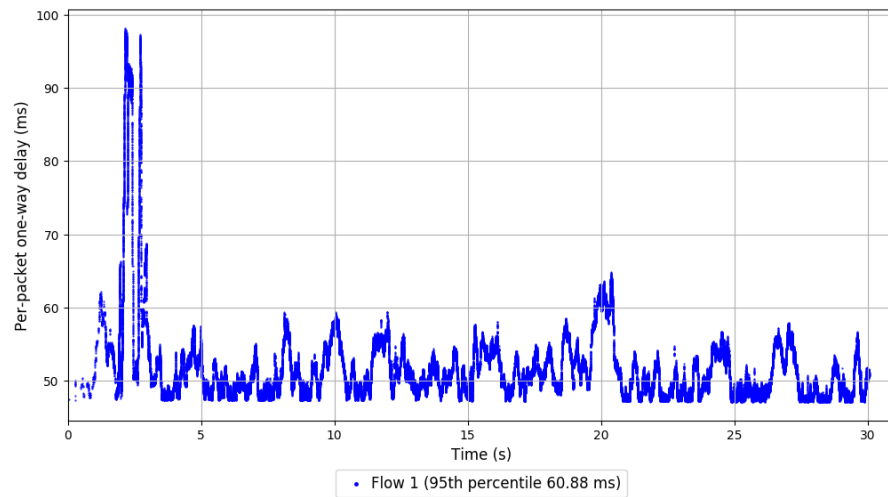
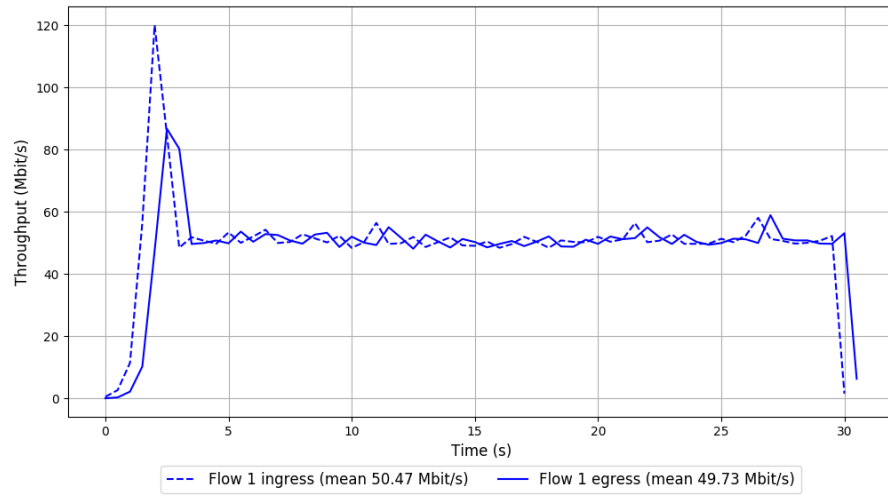


Run 2: Statistics of TCP Vegas

Start at: 2019-01-21 06:17:06
End at: 2019-01-21 06:17:36
Local clock offset: 5.495 ms
Remote clock offset: 48.681 ms

Below is generated by plot.py at 2019-01-21 08:46:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 49.73 Mbit/s
95th percentile per-packet one-way delay: 60.879 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 49.73 Mbit/s
95th percentile per-packet one-way delay: 60.879 ms
Loss rate: 1.44%

Run 2: Report of TCP Vegas — Data Link

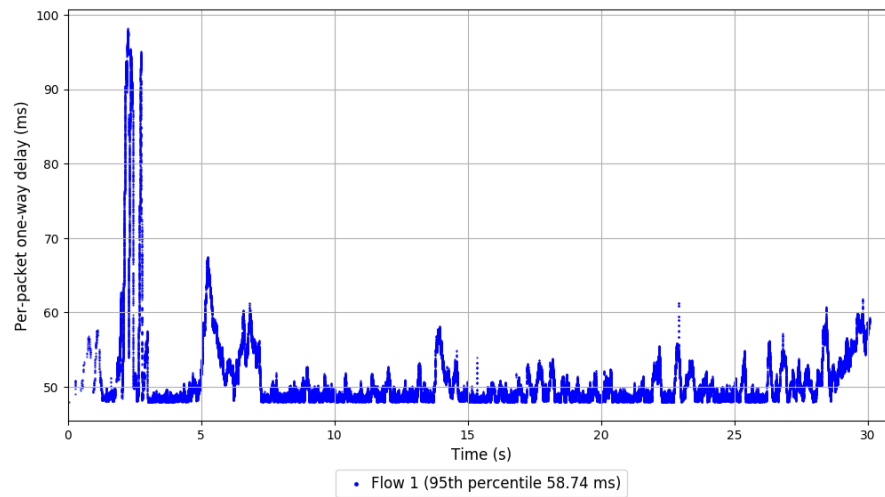
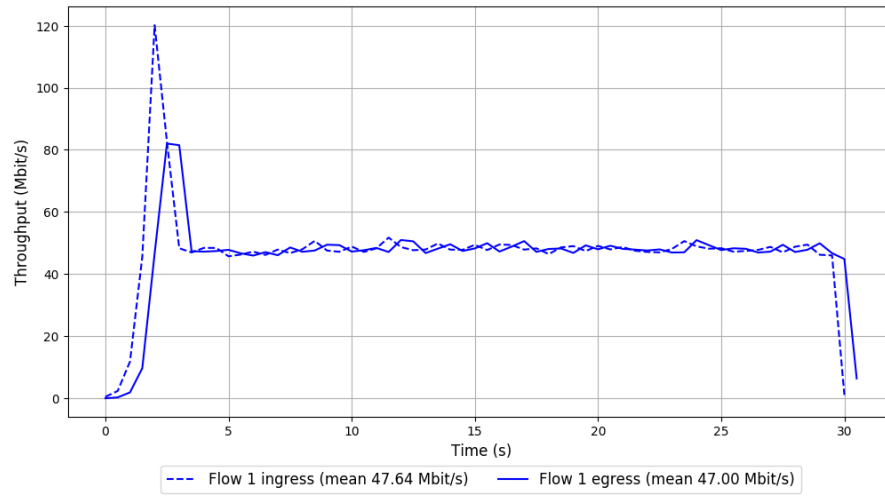


Run 3: Statistics of TCP Vegas

Start at: 2019-01-21 06:49:59
End at: 2019-01-21 06:50:29
Local clock offset: -5.762 ms
Remote clock offset: 47.514 ms

Below is generated by plot.py at 2019-01-21 08:46:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 47.00 Mbit/s
95th percentile per-packet one-way delay: 58.738 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 47.00 Mbit/s
95th percentile per-packet one-way delay: 58.738 ms
Loss rate: 1.32%

Run 3: Report of TCP Vegas — Data Link

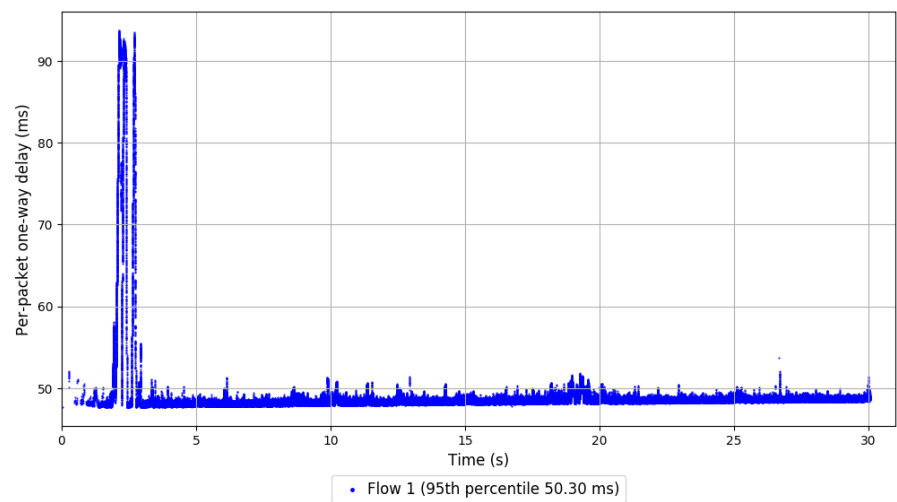
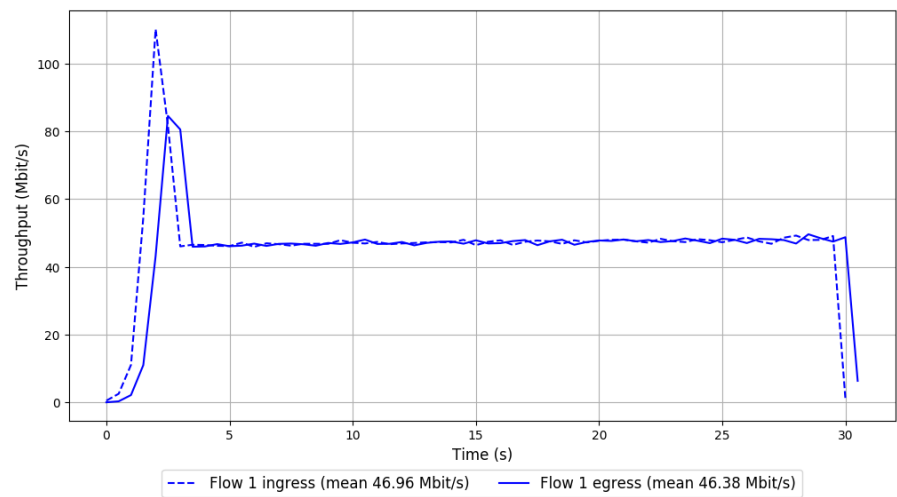


Run 4: Statistics of TCP Vegas

Start at: 2019-01-21 07:33:04
End at: 2019-01-21 07:33:34
Local clock offset: -2.198 ms
Remote clock offset: 47.102 ms

Below is generated by plot.py at 2019-01-21 08:47:08
Datalink statistics
-- Total of 1 flow:
Average throughput: 46.38 Mbit/s
95th percentile per-packet one-way delay: 50.295 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 46.38 Mbit/s
95th percentile per-packet one-way delay: 50.295 ms
Loss rate: 1.23%

Run 4: Report of TCP Vegas — Data Link

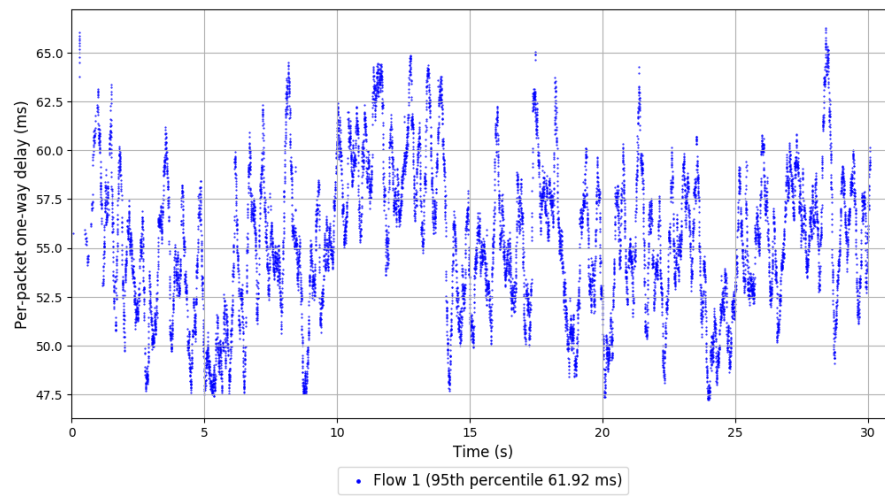
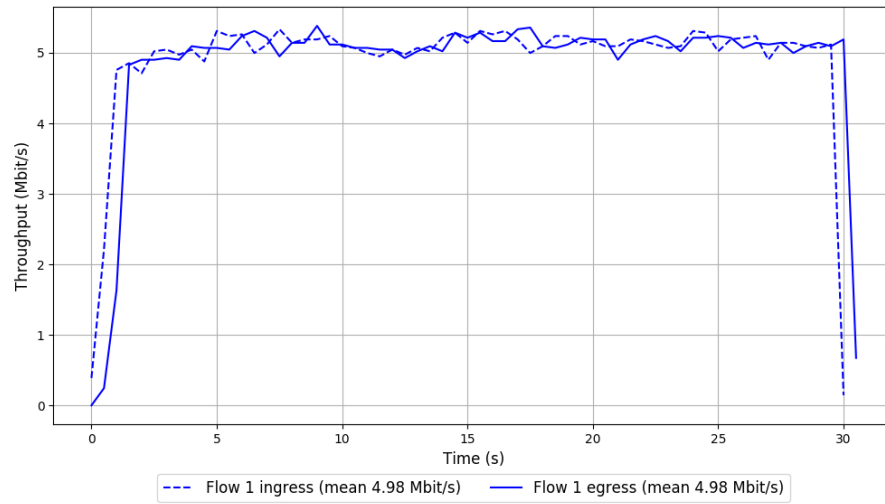


Run 5: Statistics of TCP Vegas

Start at: 2019-01-21 08:24:16
End at: 2019-01-21 08:24:46
Local clock offset: 4.603 ms
Remote clock offset: 55.273 ms

Below is generated by plot.py at 2019-01-21 08:47:08
Datalink statistics
-- Total of 1 flow:
Average throughput: 4.98 Mbit/s
95th percentile per-packet one-way delay: 61.922 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.98 Mbit/s
95th percentile per-packet one-way delay: 61.922 ms
Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link

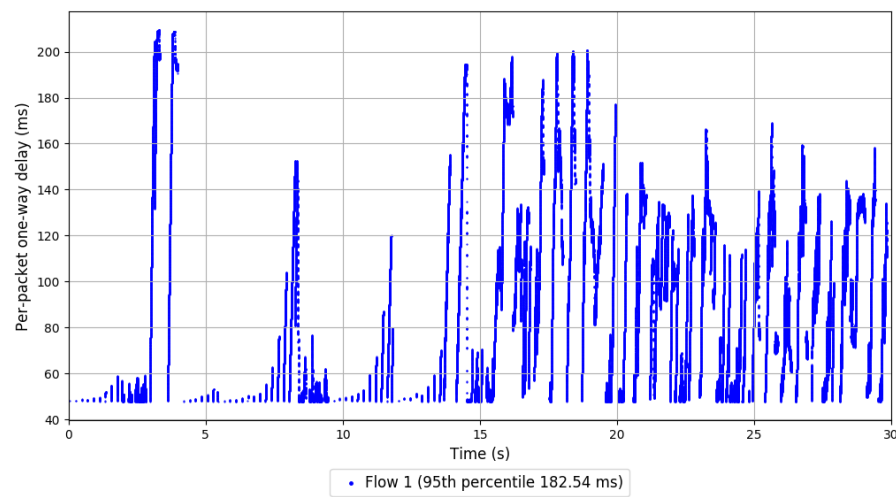
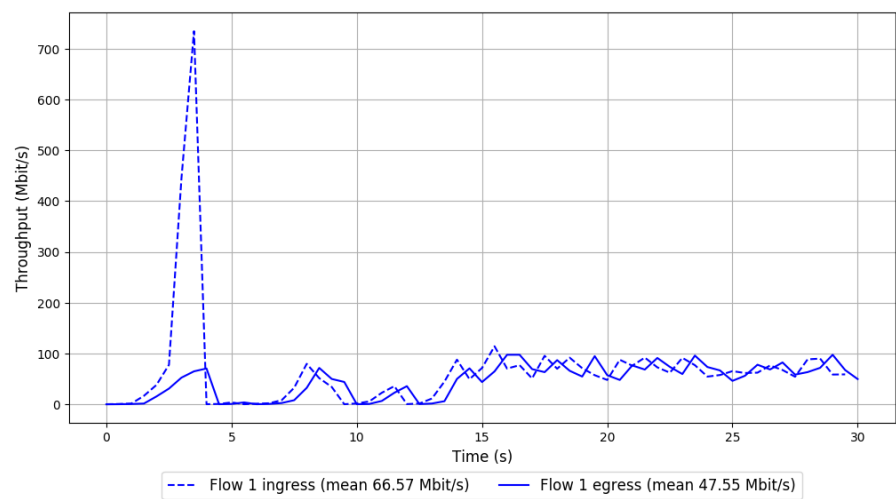


Run 1: Statistics of Verus

Start at: 2019-01-21 05:26:28
End at: 2019-01-21 05:26:58
Local clock offset: 2.685 ms
Remote clock offset: 78.845 ms

Below is generated by plot.py at 2019-01-21 08:47:24
Datalink statistics
-- Total of 1 flow:
Average throughput: 47.55 Mbit/s
95th percentile per-packet one-way delay: 182.539 ms
Loss rate: 28.47%
-- Flow 1:
Average throughput: 47.55 Mbit/s
95th percentile per-packet one-way delay: 182.539 ms
Loss rate: 28.47%

Run 1: Report of Verus — Data Link

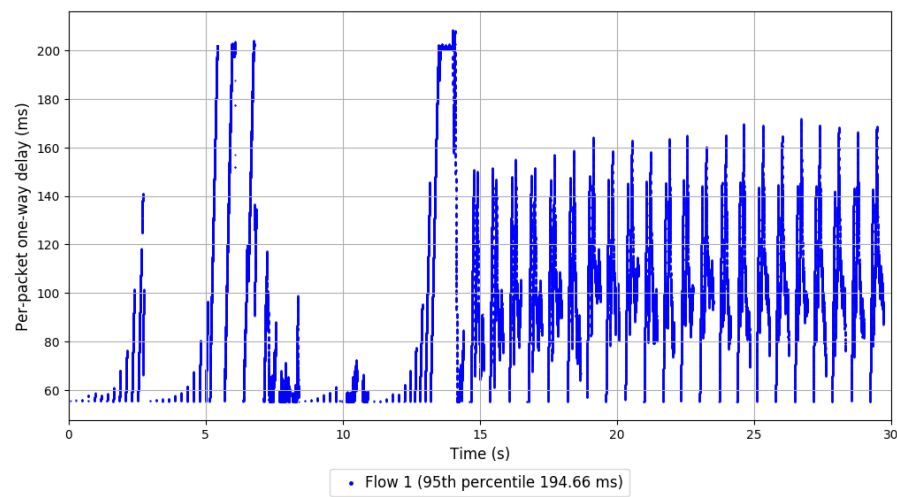
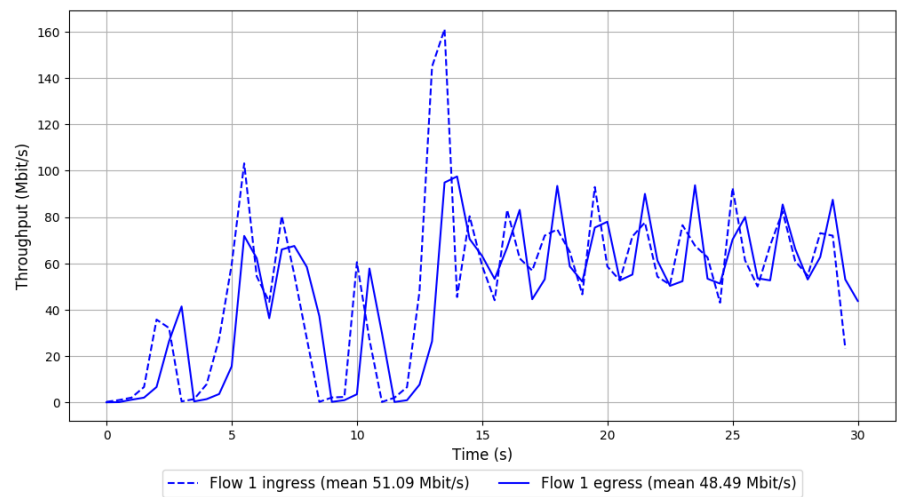


Run 2: Statistics of Verus

Start at: 2019-01-21 06:20:19
End at: 2019-01-21 06:20:49
Local clock offset: 2.631 ms
Remote clock offset: 46.855 ms

Below is generated by plot.py at 2019-01-21 08:47:24
Datalink statistics
-- Total of 1 flow:
Average throughput: 48.49 Mbit/s
95th percentile per-packet one-way delay: 194.655 ms
Loss rate: 4.97%
-- Flow 1:
Average throughput: 48.49 Mbit/s
95th percentile per-packet one-way delay: 194.655 ms
Loss rate: 4.97%

Run 2: Report of Verus — Data Link

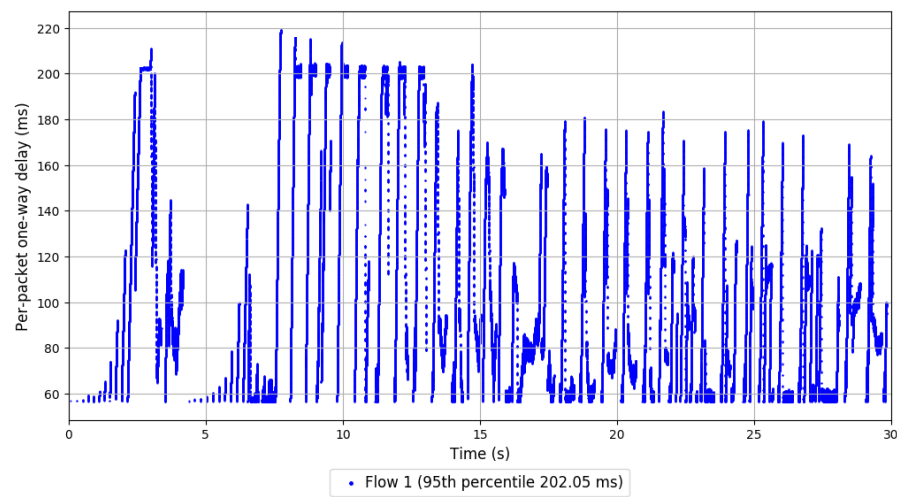
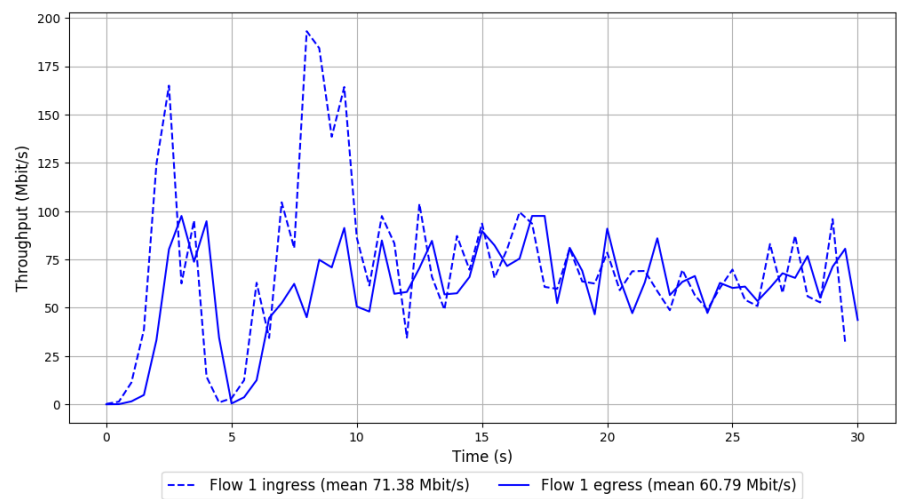


Run 3: Statistics of Verus

Start at: 2019-01-21 06:52:56
End at: 2019-01-21 06:53:26
Local clock offset: -6.028 ms
Remote clock offset: 46.652 ms

Below is generated by plot.py at 2019-01-21 08:47:28
Datalink statistics
-- Total of 1 flow:
Average throughput: 60.79 Mbit/s
95th percentile per-packet one-way delay: 202.049 ms
Loss rate: 14.77%
-- Flow 1:
Average throughput: 60.79 Mbit/s
95th percentile per-packet one-way delay: 202.049 ms
Loss rate: 14.77%

Run 3: Report of Verus — Data Link

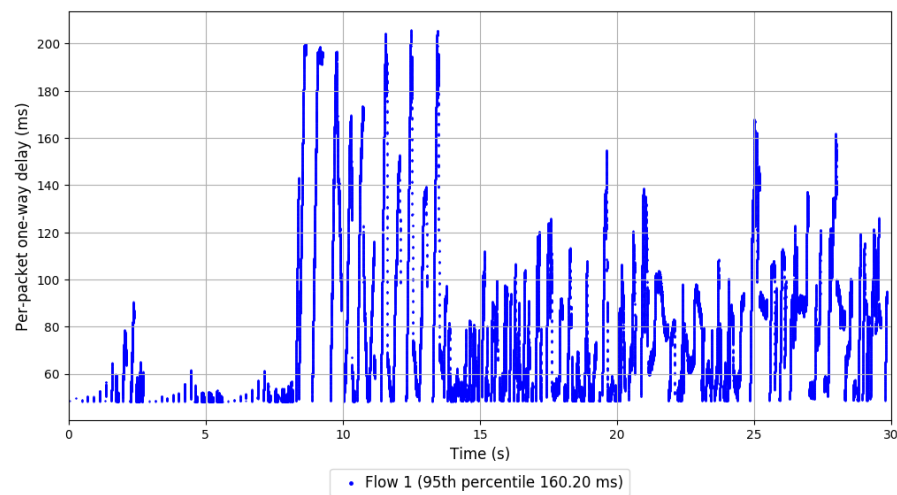
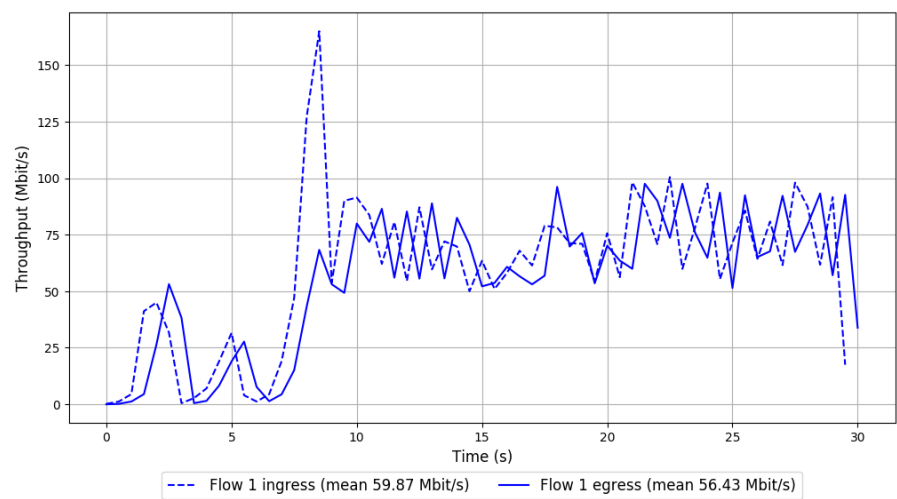


Run 4: Statistics of Verus

Start at: 2019-01-21 07:37:26
End at: 2019-01-21 07:37:56
Local clock offset: -1.719 ms
Remote clock offset: 42.916 ms

Below is generated by plot.py at 2019-01-21 08:47:28
Datalink statistics
-- Total of 1 flow:
Average throughput: 56.43 Mbit/s
95th percentile per-packet one-way delay: 160.197 ms
Loss rate: 5.59%
-- Flow 1:
Average throughput: 56.43 Mbit/s
95th percentile per-packet one-way delay: 160.197 ms
Loss rate: 5.59%

Run 4: Report of Verus — Data Link

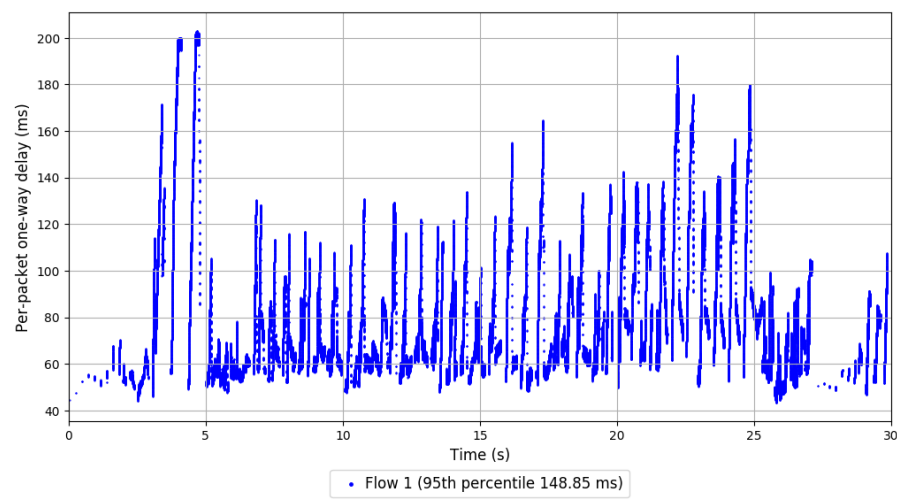
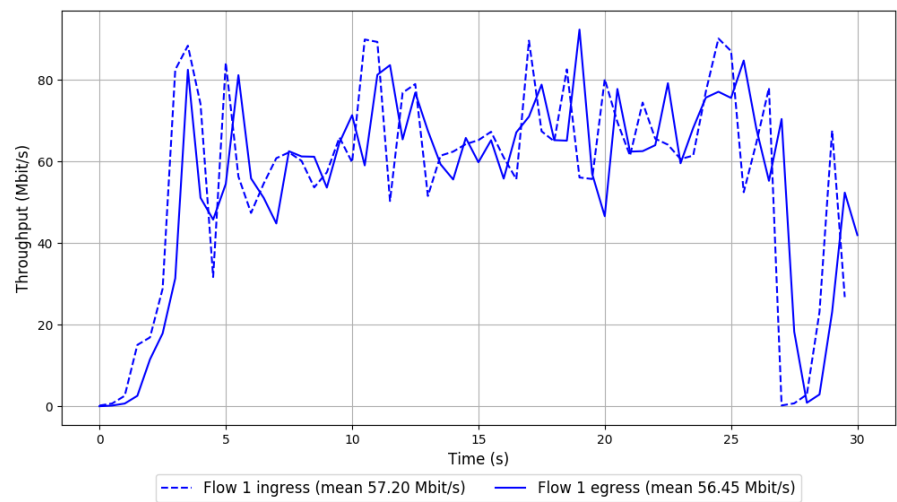


Run 5: Statistics of Verus

Start at: 2019-01-21 08:26:52
End at: 2019-01-21 08:27:22
Local clock offset: 3.094 ms
Remote clock offset: 52.757 ms

Below is generated by plot.py at 2019-01-21 08:47:28
Datalink statistics
-- Total of 1 flow:
Average throughput: 56.45 Mbit/s
95th percentile per-packet one-way delay: 148.851 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 56.45 Mbit/s
95th percentile per-packet one-way delay: 148.851 ms
Loss rate: 1.12%

Run 5: Report of Verus — Data Link

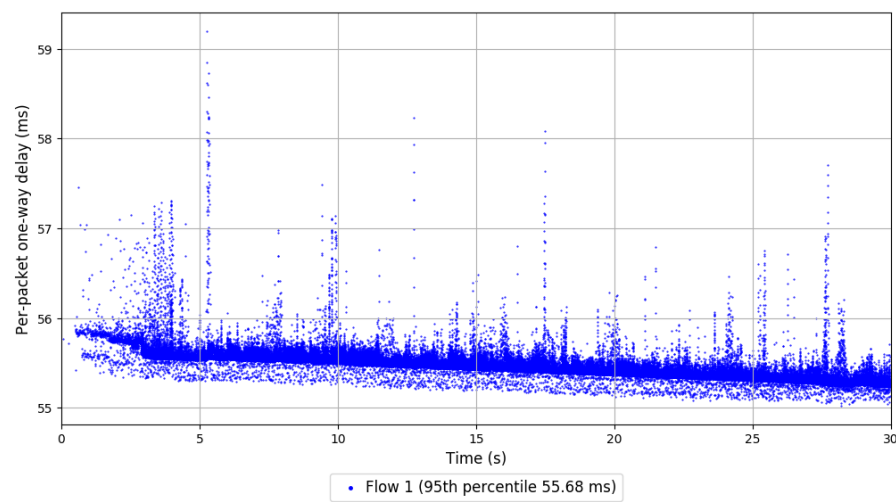
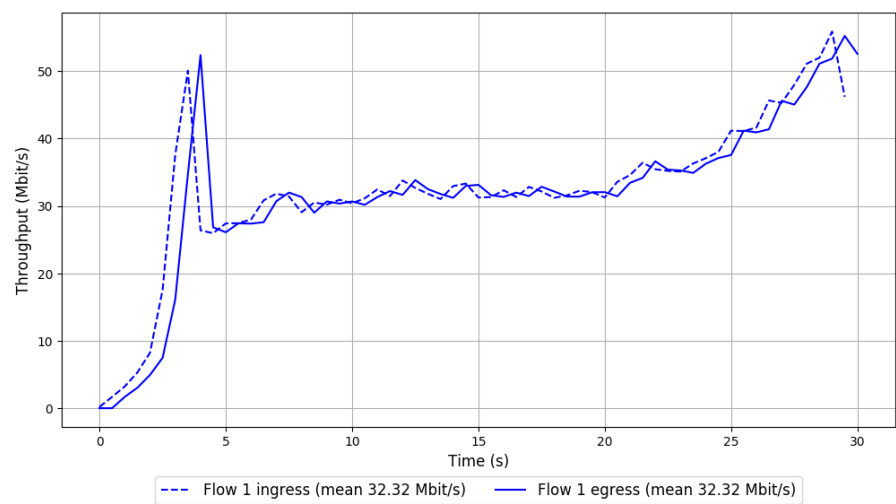


Run 1: Statistics of PCC-Vivace

Start at: 2019-01-21 05:02:27
End at: 2019-01-21 05:02:57
Local clock offset: -1.438 ms
Remote clock offset: 63.238 ms

Below is generated by plot.py at 2019-01-21 08:47:28
Datalink statistics
-- Total of 1 flow:
Average throughput: 32.32 Mbit/s
95th percentile per-packet one-way delay: 55.680 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 32.32 Mbit/s
95th percentile per-packet one-way delay: 55.680 ms
Loss rate: 0.00%

Run 1: Report of PCC-Vivace — Data Link

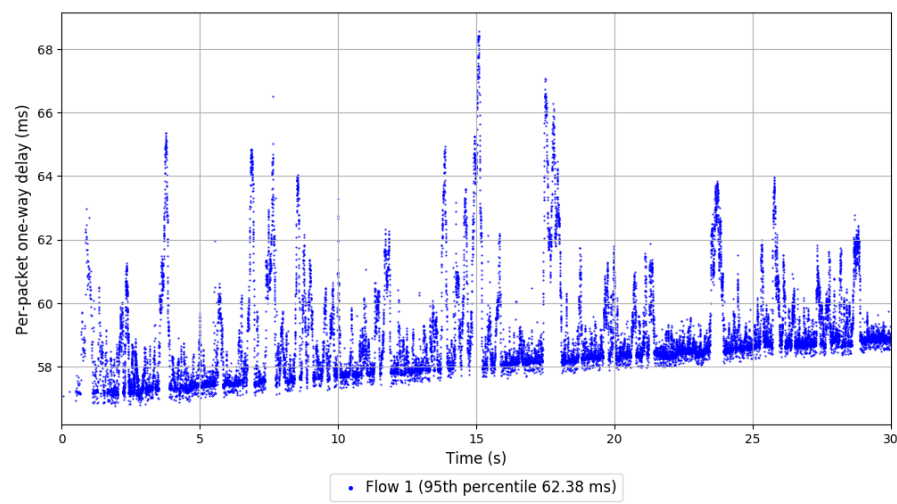
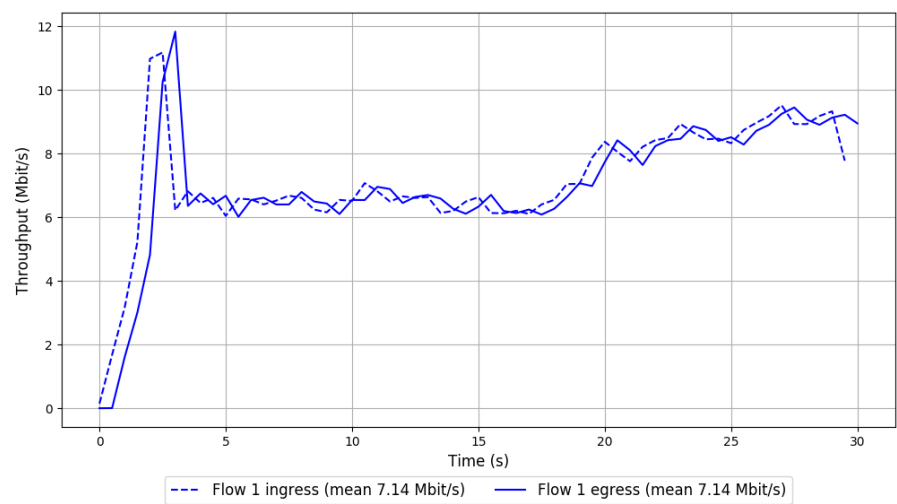


Run 2: Statistics of PCC-Vivace

Start at: 2019-01-21 05:51:56
End at: 2019-01-21 05:52:26
Local clock offset: 5.532 ms
Remote clock offset: 82.751 ms

Below is generated by plot.py at 2019-01-21 08:47:28
Datalink statistics
-- Total of 1 flow:
Average throughput: 7.14 Mbit/s
95th percentile per-packet one-way delay: 62.375 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.14 Mbit/s
95th percentile per-packet one-way delay: 62.375 ms
Loss rate: 0.00%

Run 2: Report of PCC-Vivace — Data Link

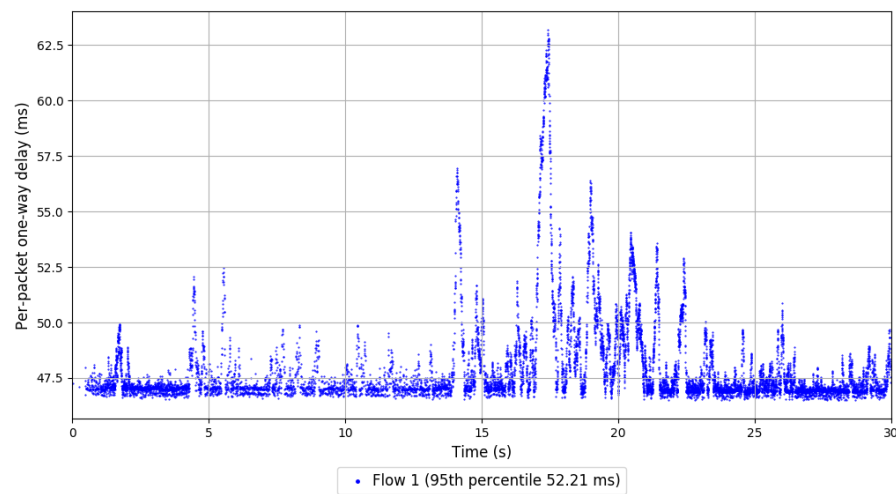
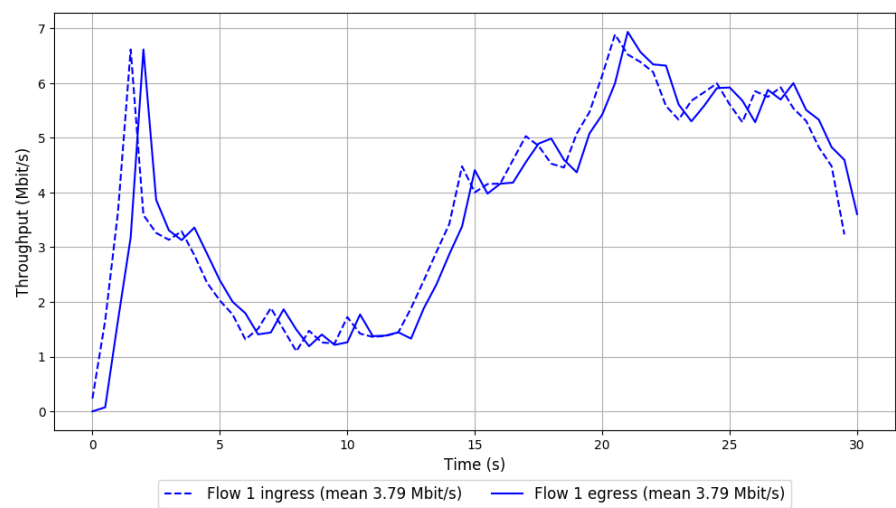


Run 3: Statistics of PCC-Vivace

Start at: 2019-01-21 06:37:28
End at: 2019-01-21 06:37:58
Local clock offset: -4.022 ms
Remote clock offset: 47.542 ms

Below is generated by plot.py at 2019-01-21 08:47:28
Datalink statistics
-- Total of 1 flow:
Average throughput: 3.79 Mbit/s
95th percentile per-packet one-way delay: 52.207 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.79 Mbit/s
95th percentile per-packet one-way delay: 52.207 ms
Loss rate: 0.00%

Run 3: Report of PCC-Vivace — Data Link

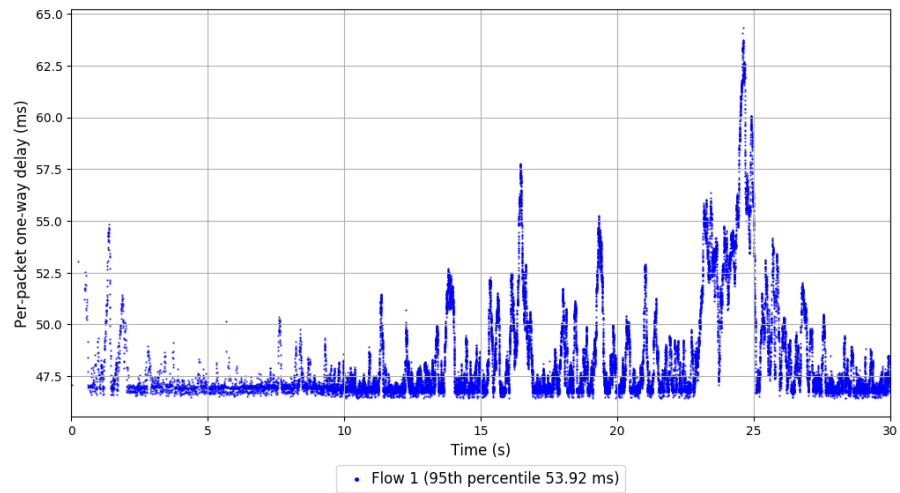
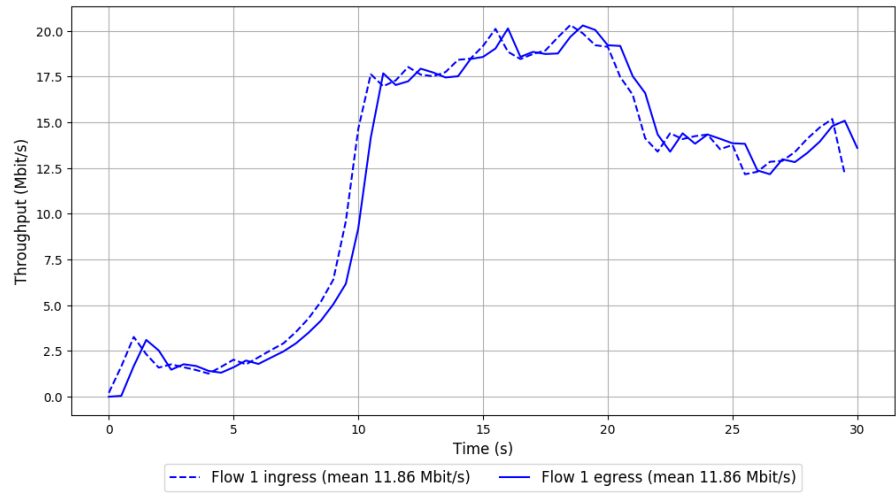


Run 4: Statistics of PCC-Vivace

Start at: 2019-01-21 07:11:58
End at: 2019-01-21 07:12:28
Local clock offset: -7.616 ms
Remote clock offset: 47.787 ms

Below is generated by plot.py at 2019-01-21 08:47:28
Datalink statistics
-- Total of 1 flow:
Average throughput: 11.86 Mbit/s
95th percentile per-packet one-way delay: 53.916 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.86 Mbit/s
95th percentile per-packet one-way delay: 53.916 ms
Loss rate: 0.00%

Run 4: Report of PCC-Vivace — Data Link

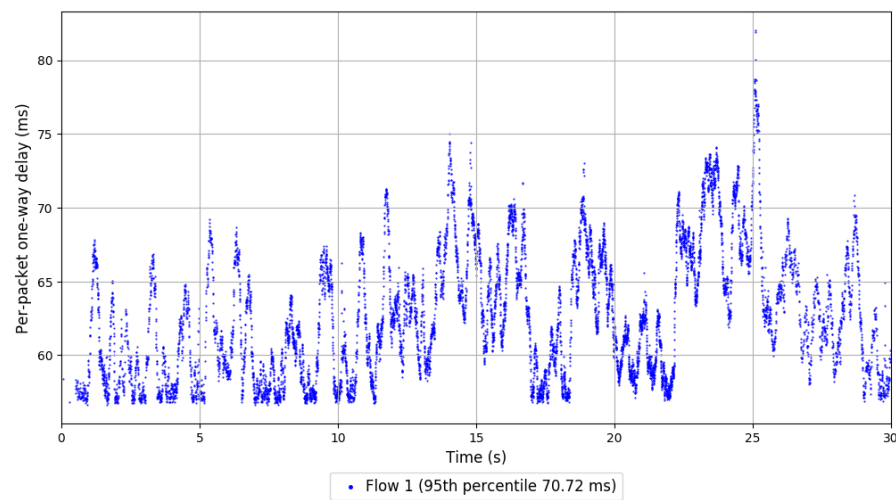
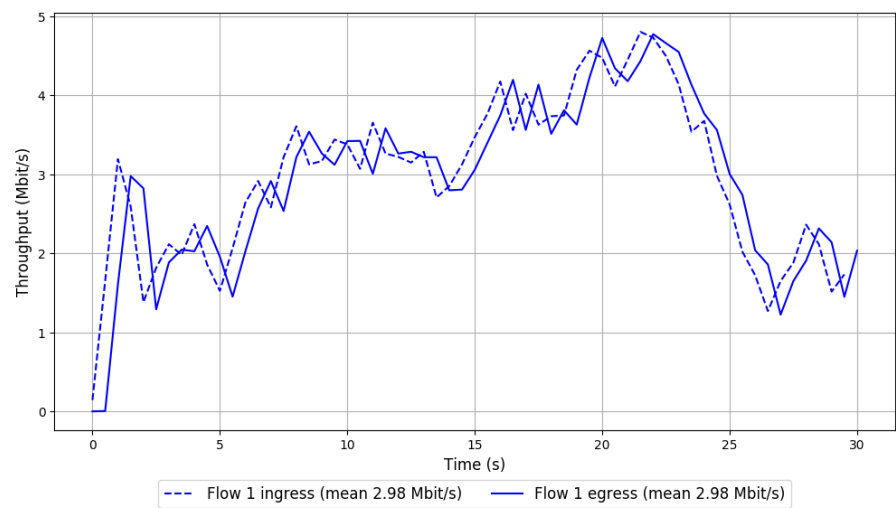


Run 5: Statistics of PCC-Vivace

Start at: 2019-01-21 08:03:18
End at: 2019-01-21 08:03:48
Local clock offset: 9.43 ms
Remote clock offset: 29.281 ms

Below is generated by plot.py at 2019-01-21 08:47:28
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.98 Mbit/s
95th percentile per-packet one-way delay: 70.716 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.98 Mbit/s
95th percentile per-packet one-way delay: 70.716 ms
Loss rate: 0.00%

Run 5: Report of PCC-Vivace — Data Link

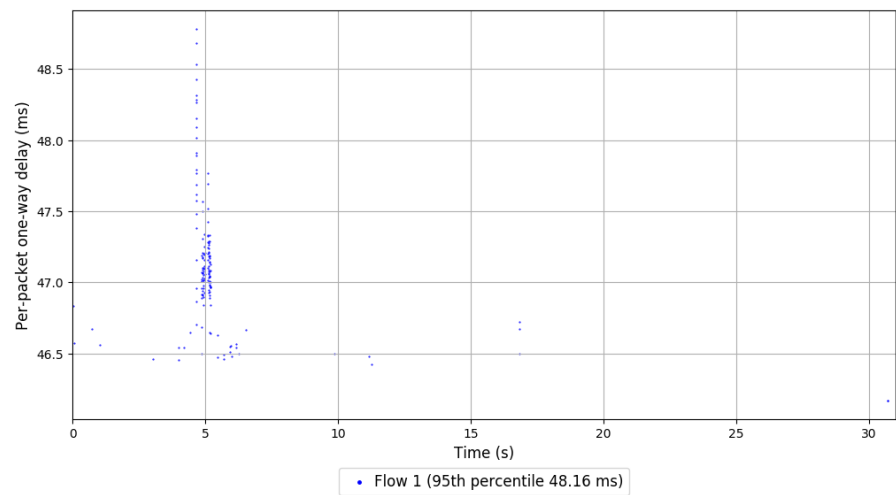
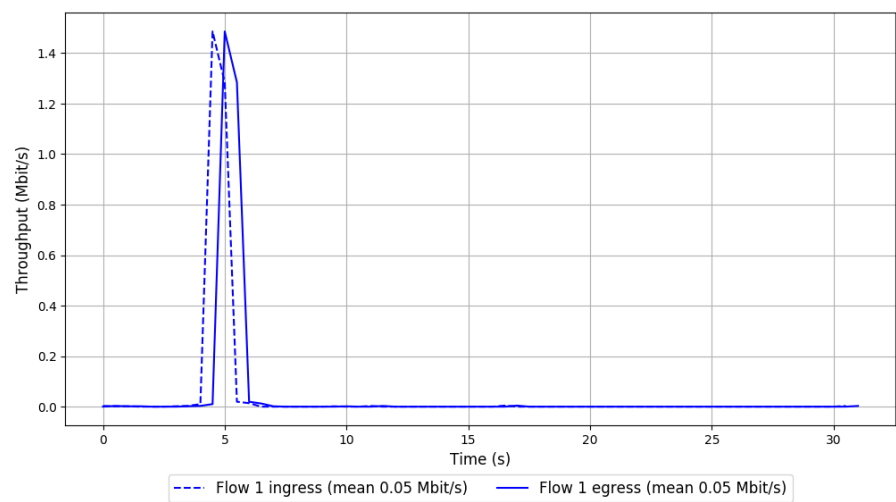


Run 1: Statistics of WebRTC media

Start at: 2019-01-21 04:58:53
End at: 2019-01-21 04:59:23
Local clock offset: -1.732 ms
Remote clock offset: 60.174 ms

Below is generated by plot.py at 2019-01-21 08:47:28
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 48.157 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 48.157 ms
Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link

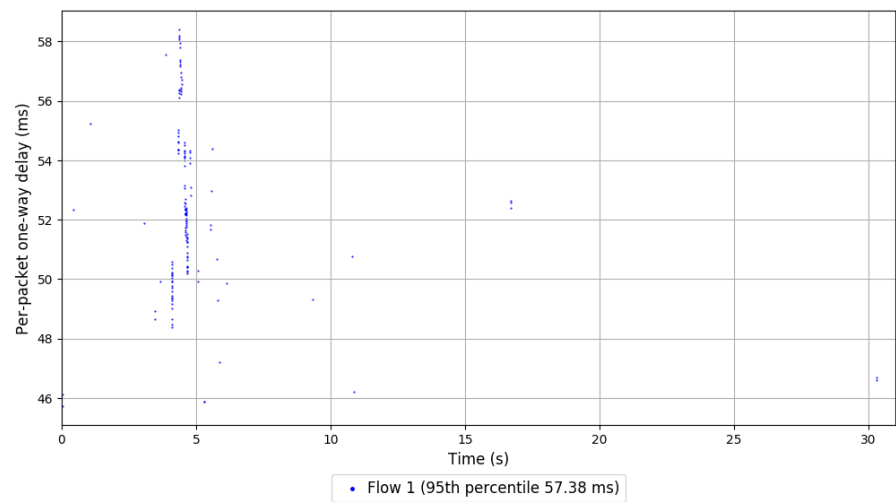
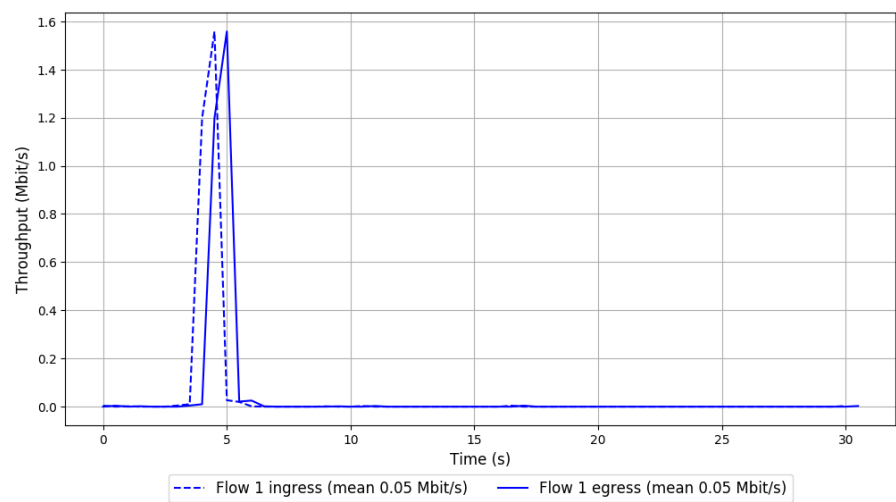


Run 2: Statistics of WebRTC media

Start at: 2019-01-21 05:47:38
End at: 2019-01-21 05:48:08
Local clock offset: 5.277 ms
Remote clock offset: 87.786 ms

Below is generated by plot.py at 2019-01-21 08:47:28
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.380 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.380 ms
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

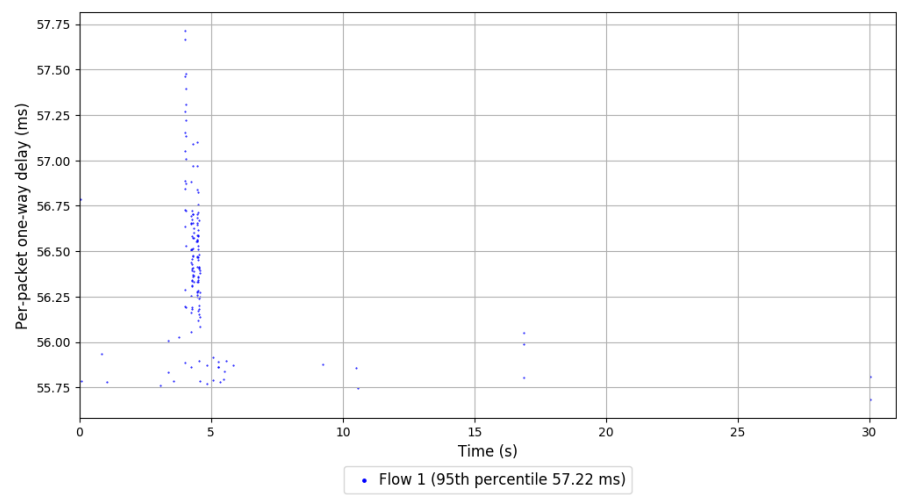
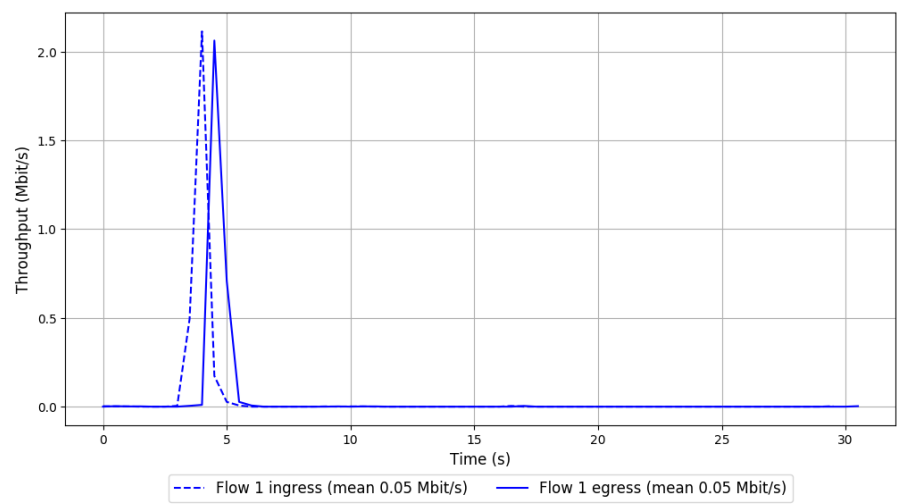


Run 3: Statistics of WebRTC media

Start at: 2019-01-21 06:34:22
End at: 2019-01-21 06:34:52
Local clock offset: -3.452 ms
Remote clock offset: 47.113 ms

Below is generated by plot.py at 2019-01-21 08:47:28
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.222 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.222 ms
Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

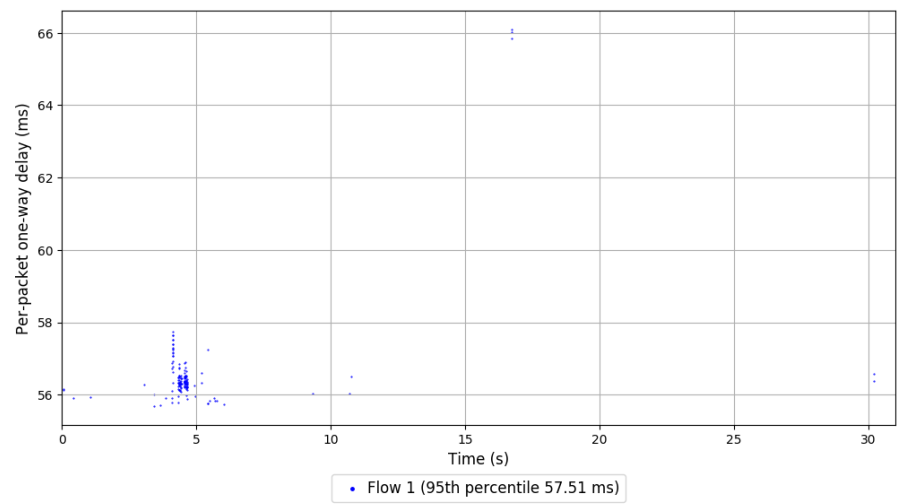
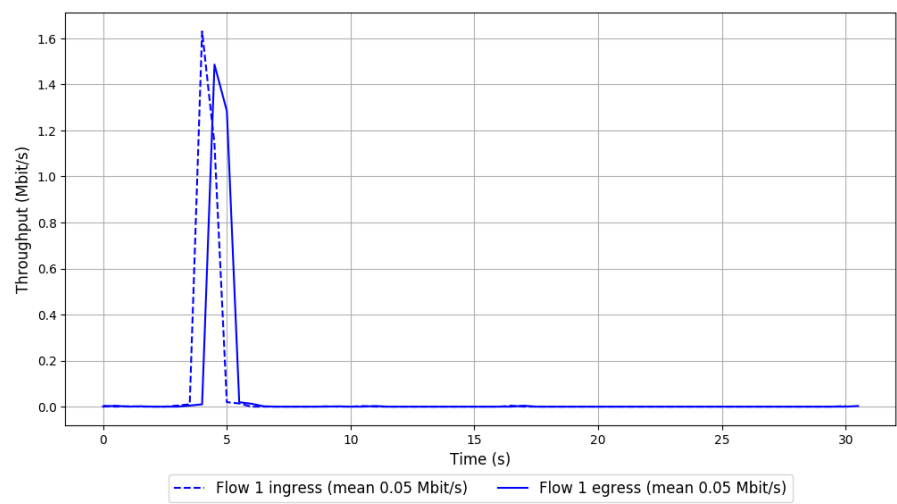


Run 4: Statistics of WebRTC media

Start at: 2019-01-21 07:08:24
End at: 2019-01-21 07:08:54
Local clock offset: -7.33 ms
Remote clock offset: 47.698 ms

Below is generated by plot.py at 2019-01-21 08:47:28
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.511 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.511 ms
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-01-21 07:58:06
End at: 2019-01-21 07:58:36
Local clock offset: 7.544 ms
Remote clock offset: 30.326 ms

Below is generated by plot.py at 2019-01-21 08:47:28
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 58.088 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 58.088 ms
Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

