

Pantheon Report

Generated at 2018-07-24 06:30:09 (UTC).

Data path: AWS Brazil 2 Ethernet (*local*) → Colombia ppp0 ppp0 (*remote*).

Repeated the test of 17 congestion control schemes 3 times.

Each test lasted for 30 seconds running 1 flow.

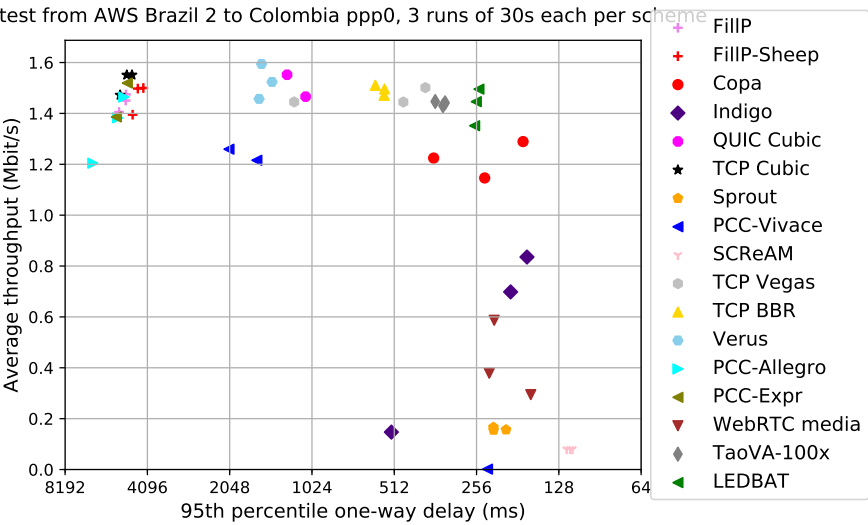
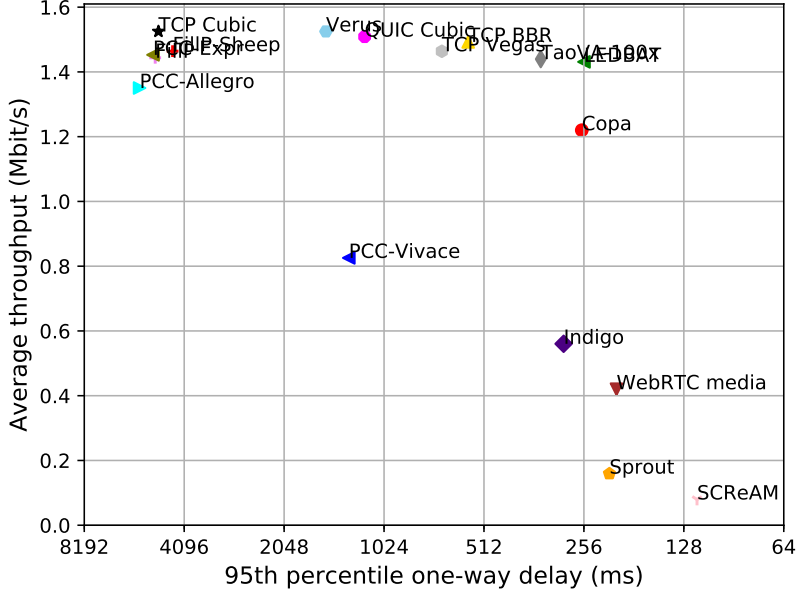
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

Git summary:

```
branch: master @ 640164b5b17c7c6561fff57729b3b5935d8596ce
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/fillp-sheep @ daed0c84f98531712514b2231f43ec6901114ffe
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf5e58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
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
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

test from AWS Brazil 2 to Colombia ppp0, 3 runs of 30s each per scheme
(mean of all runs by scheme)



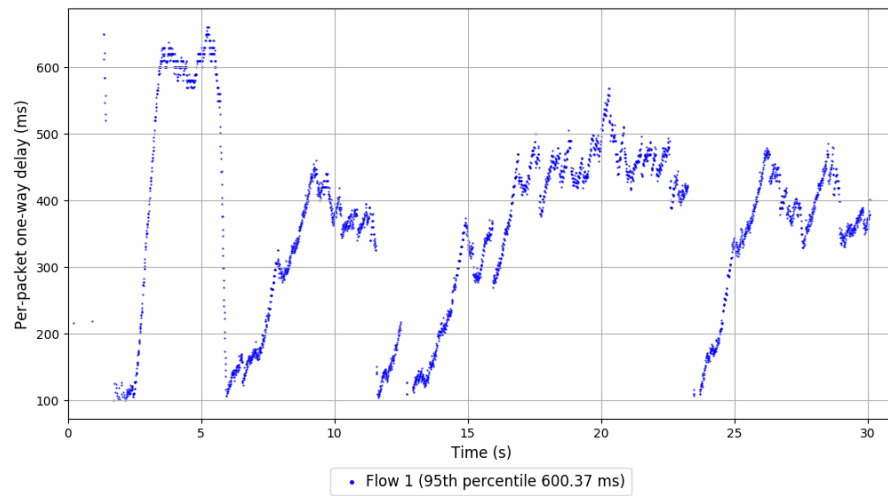
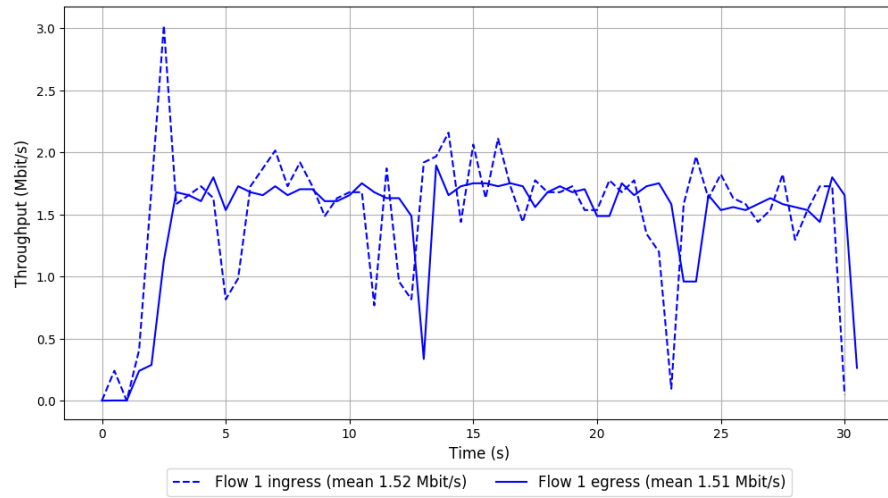
scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	3	1.49	571.27	1.09
Copa	3	1.22	259.82	0.26
TCP Cubic	3	1.52	4896.65	20.37
FillP	3	1.44	5007.85	90.46
FillP-Sheep	3	1.46	4438.63	5.91
Indigo	3	0.56	294.70	0.14
LEDBAT	3	1.43	255.93	0.60
PCC-Allegro	3	1.35	5580.74	34.03
PCC-Expr	2	1.46	5085.98	76.09
QUIC Cubic	2	1.51	1171.59	3.22
SCReAM	3	0.08	116.82	0.22
Sprout	3	0.16	214.50	0.15
TaoVA-100x	3	1.44	345.32	0.36
TCP Vegas	3	1.46	685.76	1.01
Verus	3	1.52	1532.56	4.15
PCC-Vivace	3	0.83	1307.80	0.17
WebRTC media	3	0.42	204.23	0.17

Run 1: Statistics of TCP BBR

Start at: 2018-07-24 05:39:29
End at: 2018-07-24 05:39:59
Local clock offset: -15.428 ms
Remote clock offset: 4.654 ms

Below is generated by plot.py at 2018-07-24 06:29:37
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.51 Mbit/s
95th percentile per-packet one-way delay: 600.368 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 1.51 Mbit/s
95th percentile per-packet one-way delay: 600.368 ms
Loss rate: 1.16%

Run 1: Report of TCP BBR — Data Link

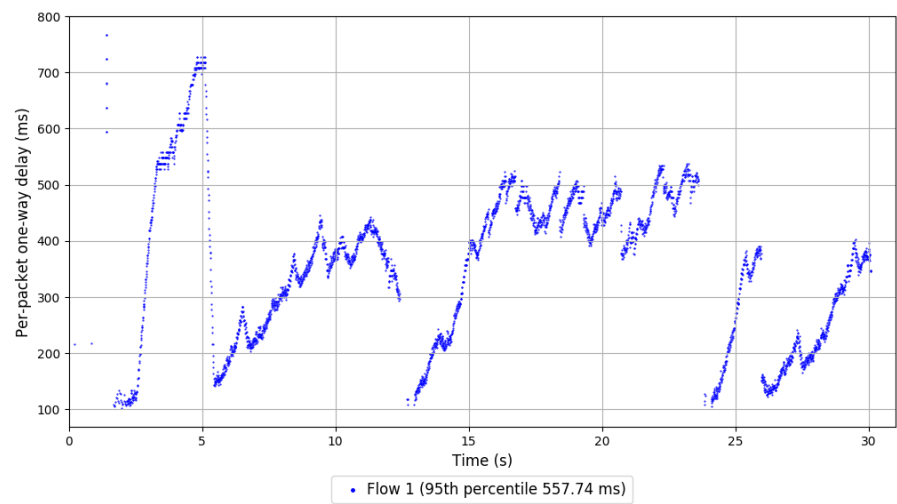
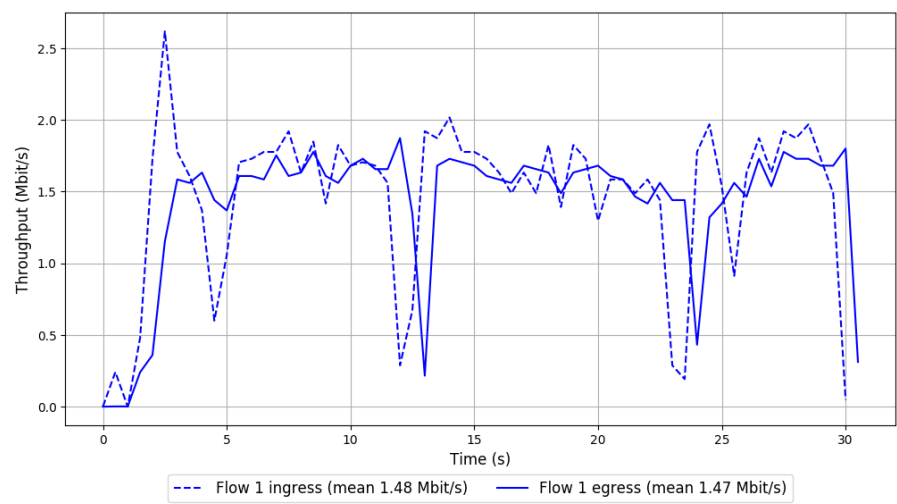


Run 2: Statistics of TCP BBR

Start at: 2018-07-24 05:58:36
End at: 2018-07-24 05:59:06
Local clock offset: -14.862 ms
Remote clock offset: 3.417 ms

Below is generated by plot.py at 2018-07-24 06:29:37
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 557.738 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 557.738 ms
Loss rate: 0.81%

Run 2: Report of TCP BBR — Data Link

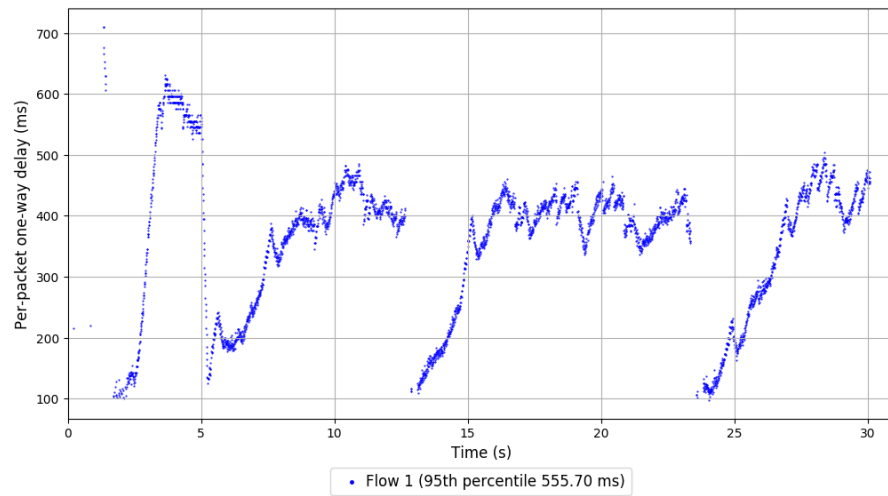
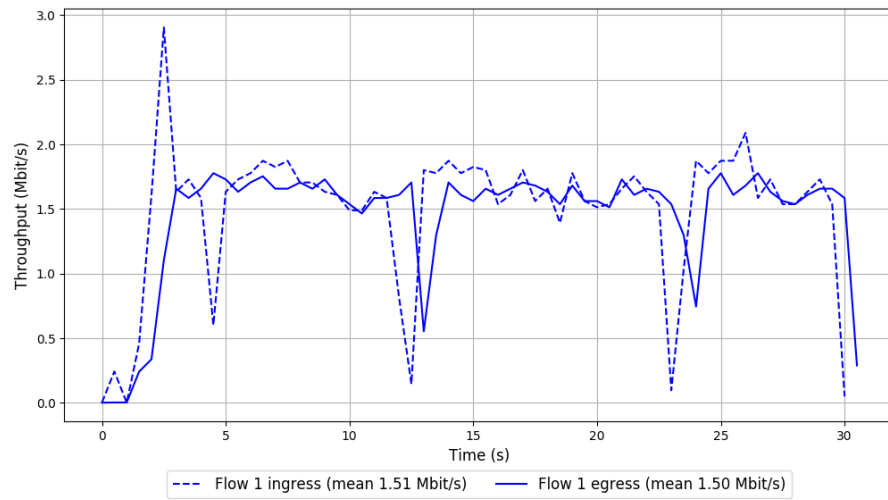


Run 3: Statistics of TCP BBR

Start at: 2018-07-24 06:17:41
End at: 2018-07-24 06:18:11
Local clock offset: -21.108 ms
Remote clock offset: 2.437 ms

Below is generated by plot.py at 2018-07-24 06:29:37
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 555.698 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 555.698 ms
Loss rate: 1.30%

Run 3: Report of TCP BBR — Data Link

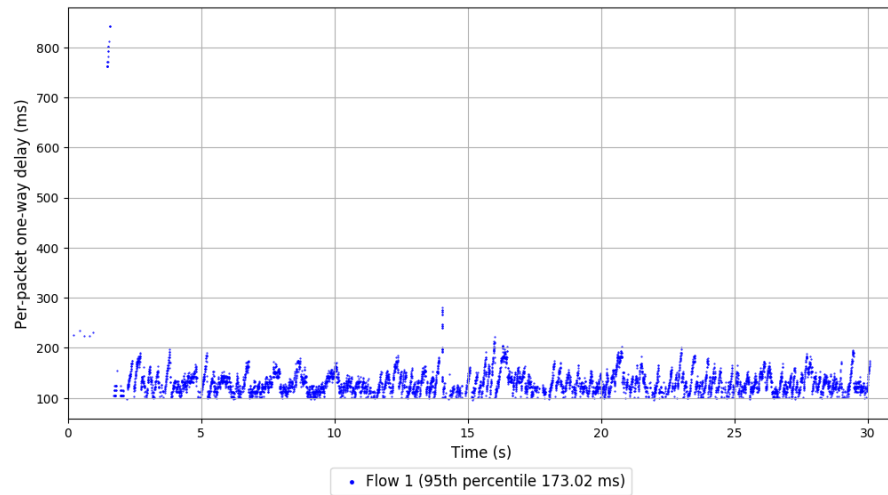
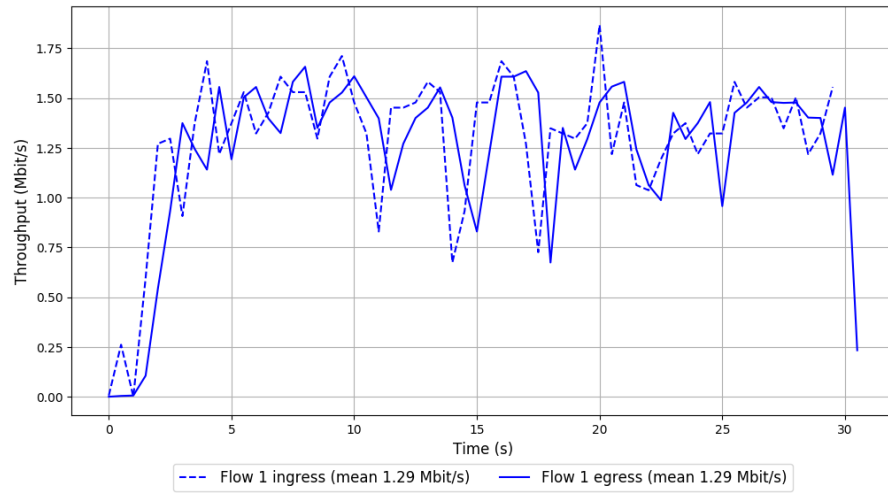


Run 1: Statistics of Copa

Start at: 2018-07-24 05:47:21
End at: 2018-07-24 05:47:51
Local clock offset: -13.824 ms
Remote clock offset: 4.914 ms

Below is generated by plot.py at 2018-07-24 06:29:38
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 173.022 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 173.022 ms
Loss rate: 0.37%

Run 1: Report of Copa — Data Link

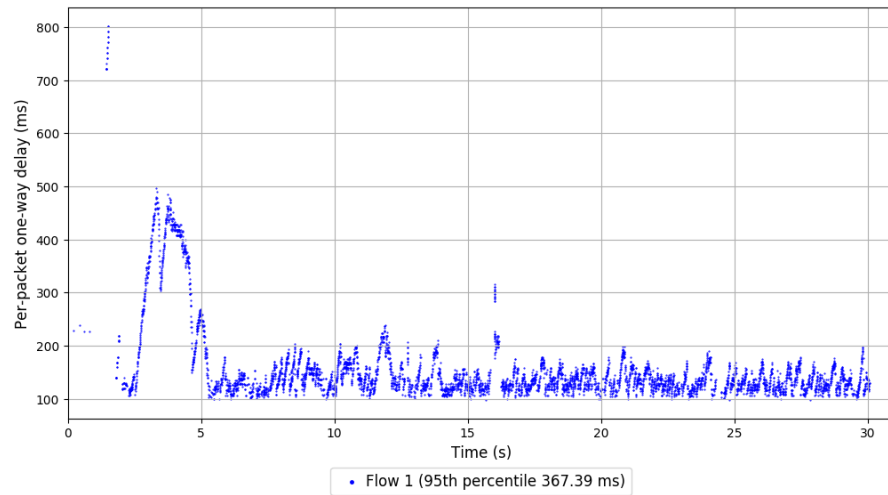
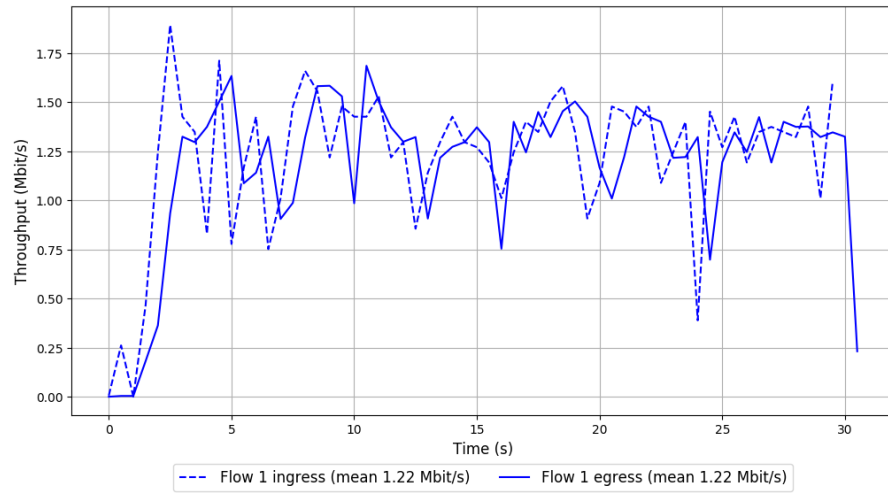


Run 2: Statistics of Copa

Start at: 2018-07-24 06:06:27
End at: 2018-07-24 06:06:57
Local clock offset: -16.285 ms
Remote clock offset: 6.744 ms

Below is generated by plot.py at 2018-07-24 06:29:38
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 367.388 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 367.388 ms
Loss rate: 0.21%

Run 2: Report of Copa — Data Link

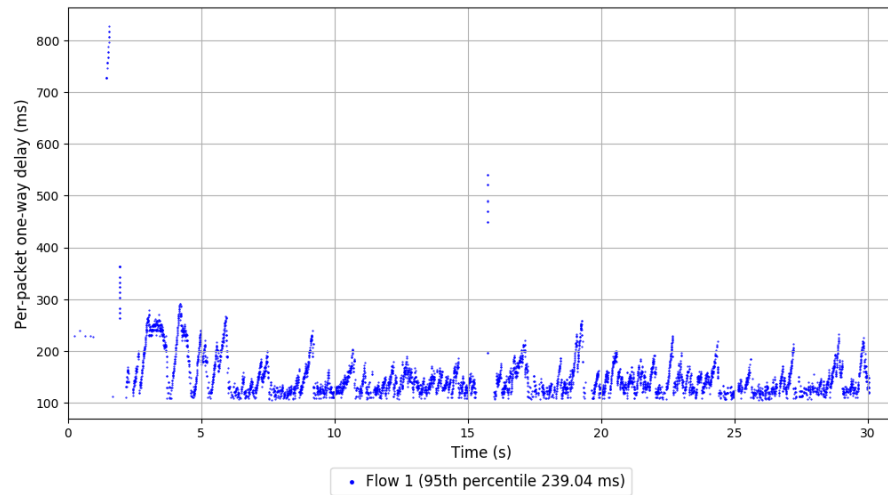
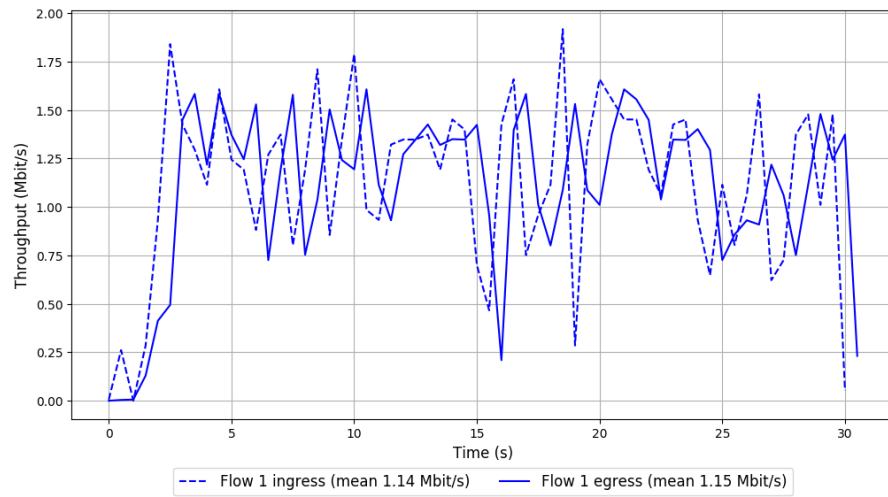


Run 3: Statistics of Copa

Start at: 2018-07-24 06:25:34
End at: 2018-07-24 06:26:04
Local clock offset: -27.721 ms
Remote clock offset: 8.327 ms

Below is generated by plot.py at 2018-07-24 06:29:38
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.15 Mbit/s
95th percentile per-packet one-way delay: 239.039 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 1.15 Mbit/s
95th percentile per-packet one-way delay: 239.039 ms
Loss rate: 0.19%

Run 3: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-07-24 05:34:59

End at: 2018-07-24 05:35:29

Local clock offset: -9.169 ms

Remote clock offset: 9.511 ms

Below is generated by plot.py at 2018-07-24 06:29:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.55 Mbit/s

95th percentile per-packet one-way delay: 4663.656 ms

Loss rate: 21.03%

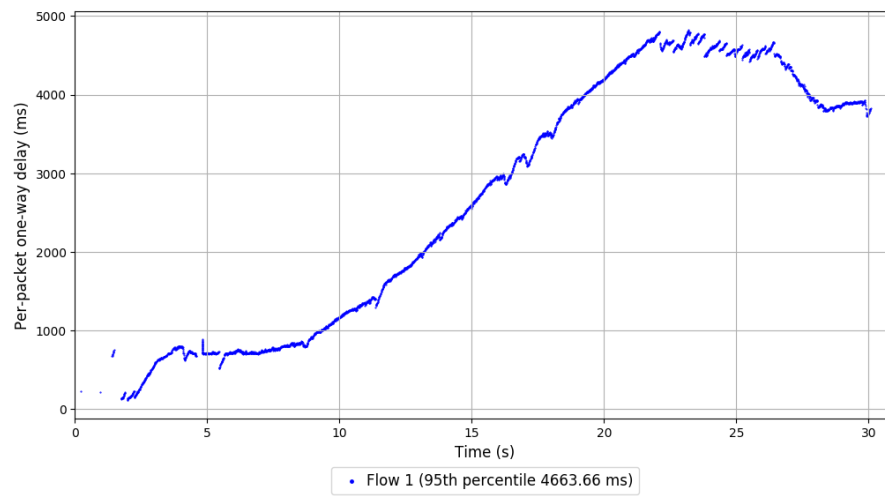
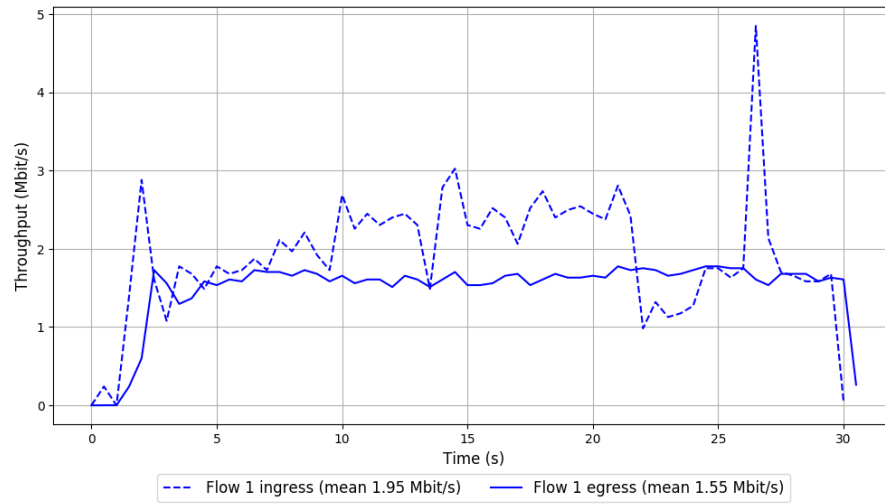
-- Flow 1:

Average throughput: 1.55 Mbit/s

95th percentile per-packet one-way delay: 4663.656 ms

Loss rate: 21.03%

Run 1: Report of TCP Cubic — Data Link

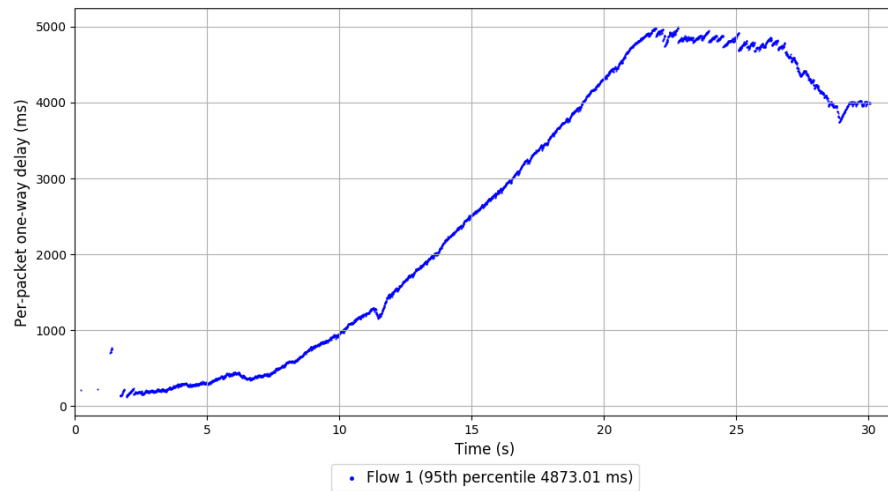
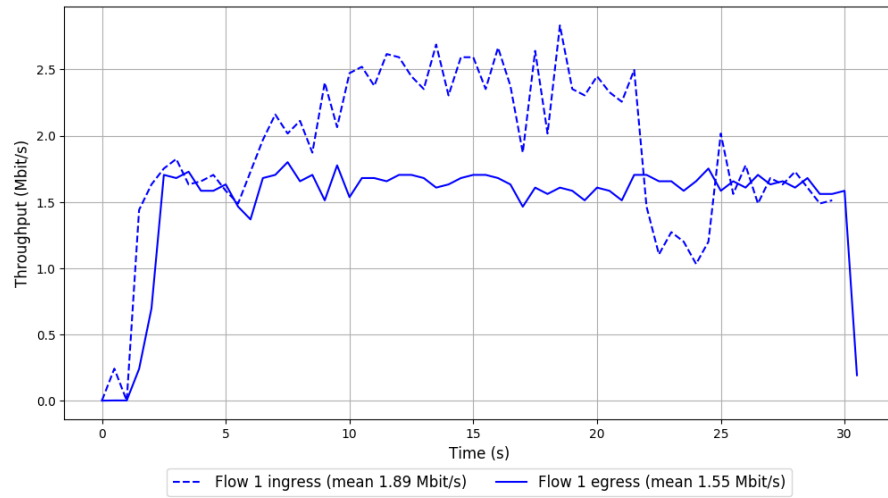


Run 2: Statistics of TCP Cubic

Start at: 2018-07-24 05:54:06
End at: 2018-07-24 05:54:36
Local clock offset: -12.289 ms
Remote clock offset: 8.808 ms

Below is generated by plot.py at 2018-07-24 06:29:38
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 4873.014 ms
Loss rate: 18.46%
-- Flow 1:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 4873.014 ms
Loss rate: 18.46%

Run 2: Report of TCP Cubic — Data Link

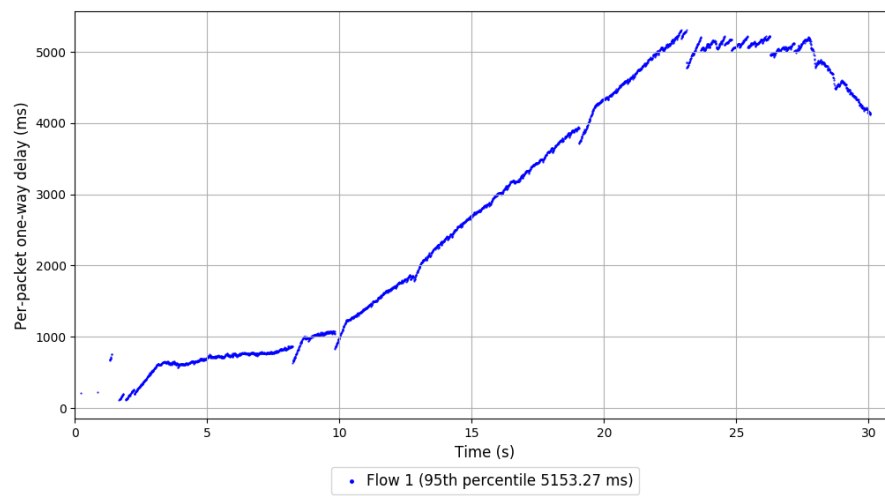
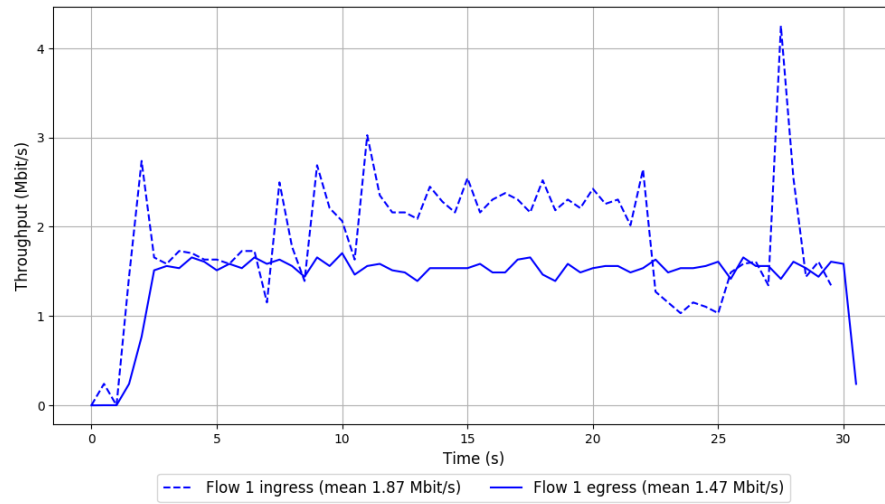


Run 3: Statistics of TCP Cubic

Start at: 2018-07-24 06:13:11
End at: 2018-07-24 06:13:41
Local clock offset: -18.132 ms
Remote clock offset: 3.694 ms

Below is generated by plot.py at 2018-07-24 06:29:40
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 5153.268 ms
Loss rate: 21.62%
-- Flow 1:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 5153.268 ms
Loss rate: 21.62%

Run 3: Report of TCP Cubic — Data Link

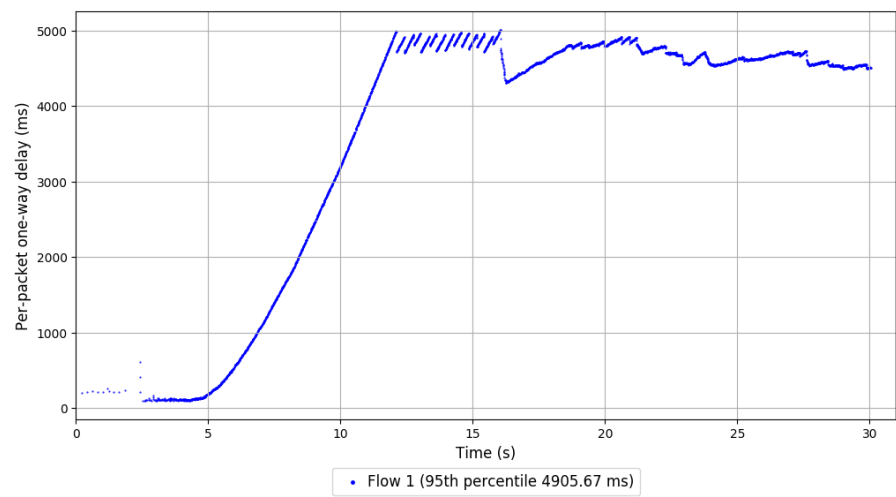
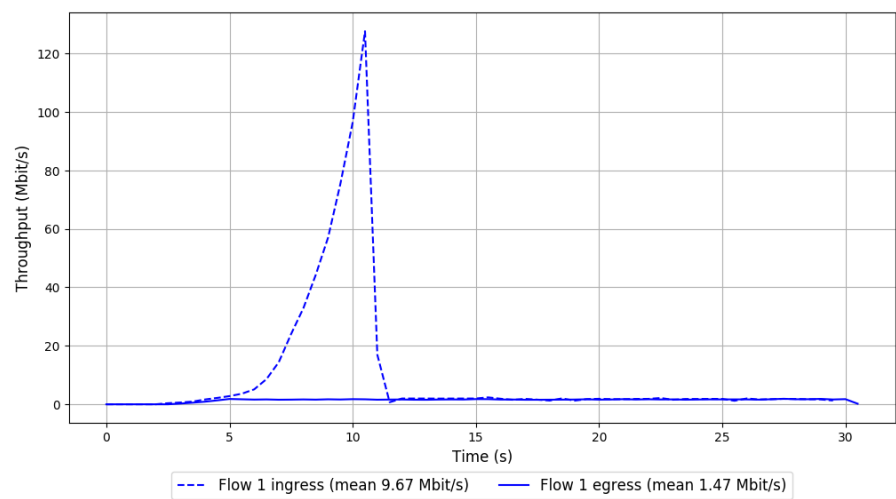


Run 1: Statistics of FillP

Start at: 2018-07-24 05:42:51
End at: 2018-07-24 05:43:21
Local clock offset: -10.841 ms
Remote clock offset: 3.622 ms

Below is generated by plot.py at 2018-07-24 06:29:47
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 4905.672 ms
Loss rate: 84.82%
-- Flow 1:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 4905.672 ms
Loss rate: 84.82%

Run 1: Report of FillP — Data Link

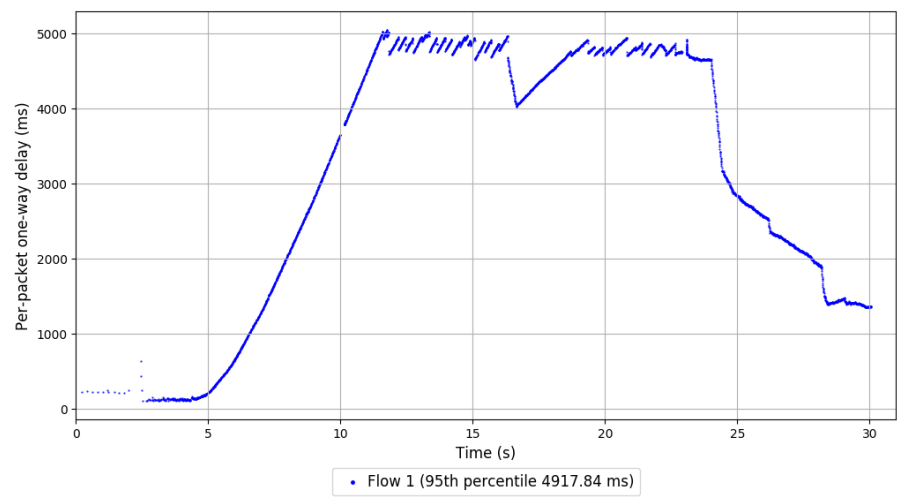
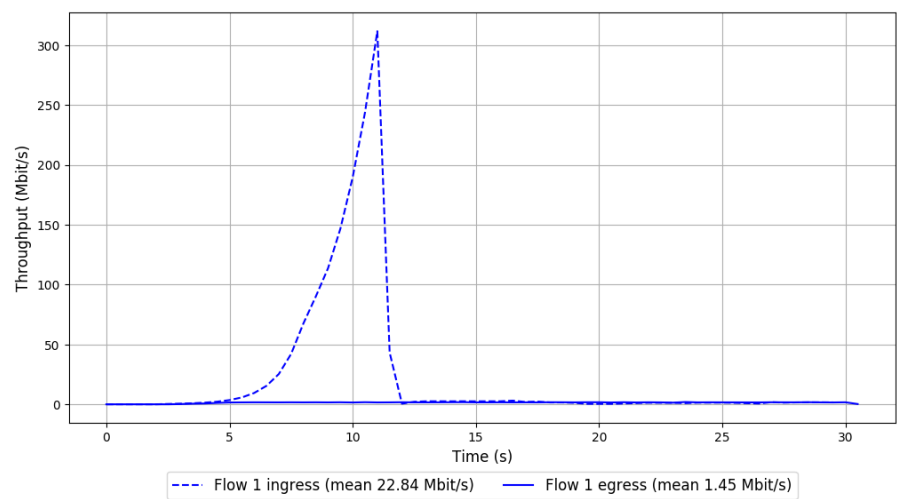


Run 2: Statistics of FillP

Start at: 2018-07-24 06:01:57
End at: 2018-07-24 06:02:27
Local clock offset: -17.827 ms
Remote clock offset: 8.118 ms

Below is generated by plot.py at 2018-07-24 06:29:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 4917.835 ms
Loss rate: 93.68%
-- Flow 1:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 4917.835 ms
Loss rate: 93.68%

Run 2: Report of FillP — Data Link

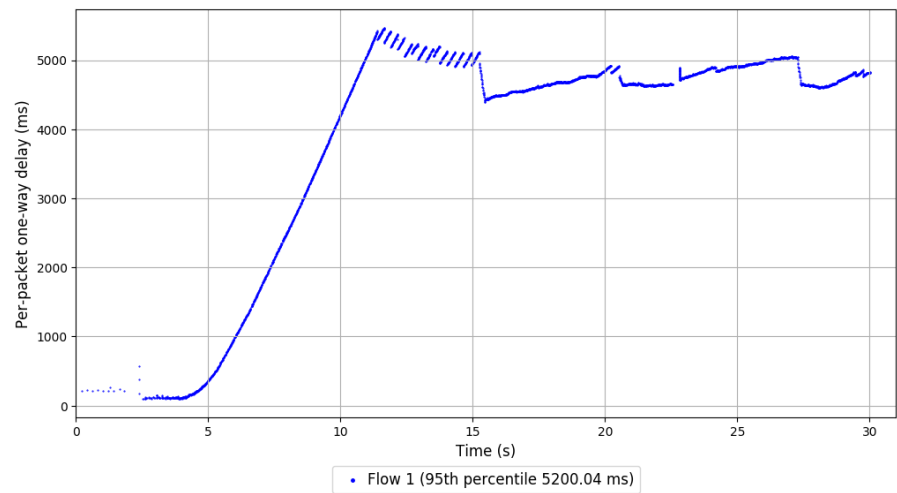
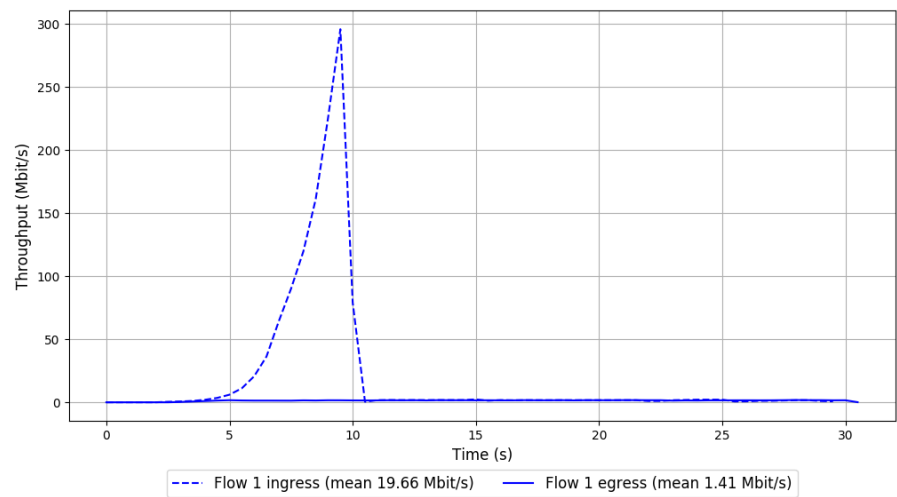


Run 3: Statistics of FillP

Start at: 2018-07-24 06:21:03
End at: 2018-07-24 06:21:33
Local clock offset: -23.741 ms
Remote clock offset: 2.266 ms

Below is generated by plot.py at 2018-07-24 06:29:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 5200.041 ms
Loss rate: 92.88%
-- Flow 1:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 5200.041 ms
Loss rate: 92.88%

Run 3: Report of FillP — Data Link

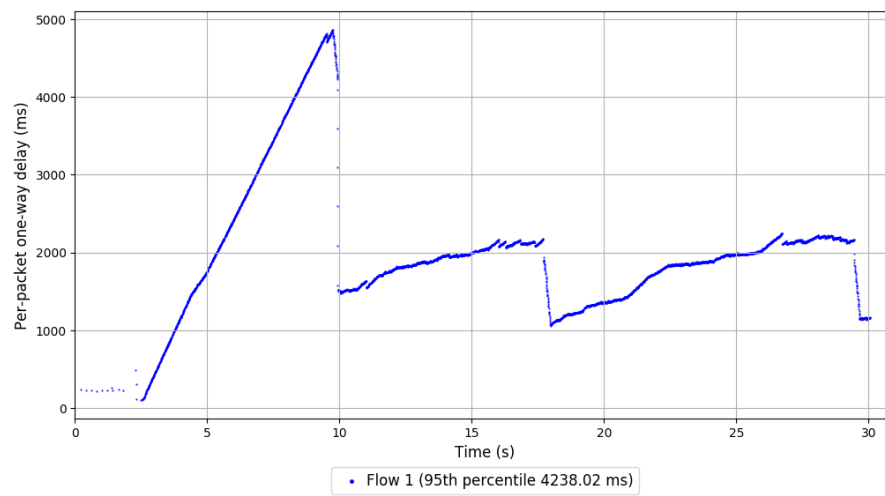
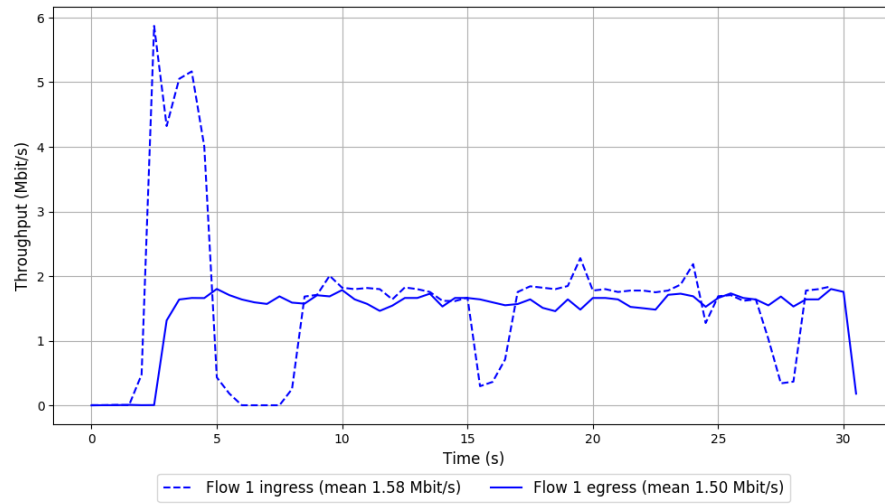


Run 1: Statistics of FillP-Sheep

Start at: 2018-07-24 05:48:29
End at: 2018-07-24 05:48:59
Local clock offset: -15.123 ms
Remote clock offset: 7.654 ms

Below is generated by plot.py at 2018-07-24 06:29:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 4238.021 ms
Loss rate: 5.46%
-- Flow 1:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 4238.021 ms
Loss rate: 5.46%

Run 1: Report of FillP-Sheep — Data Link

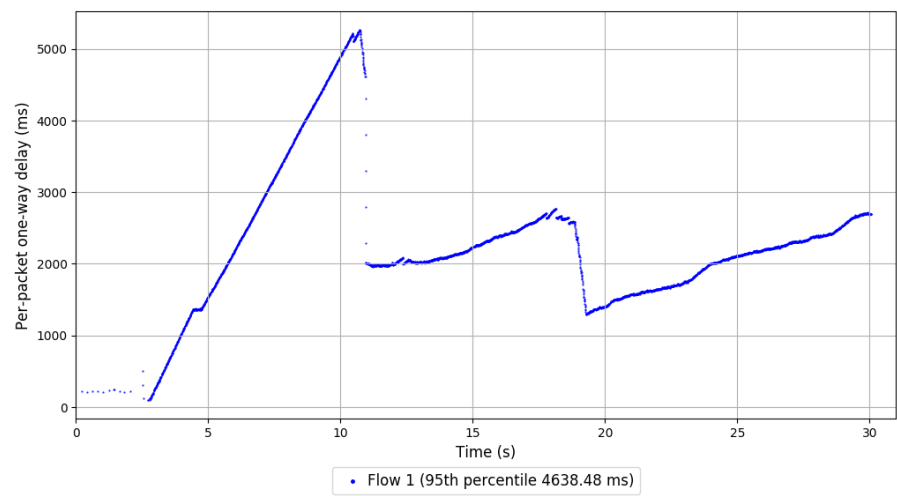
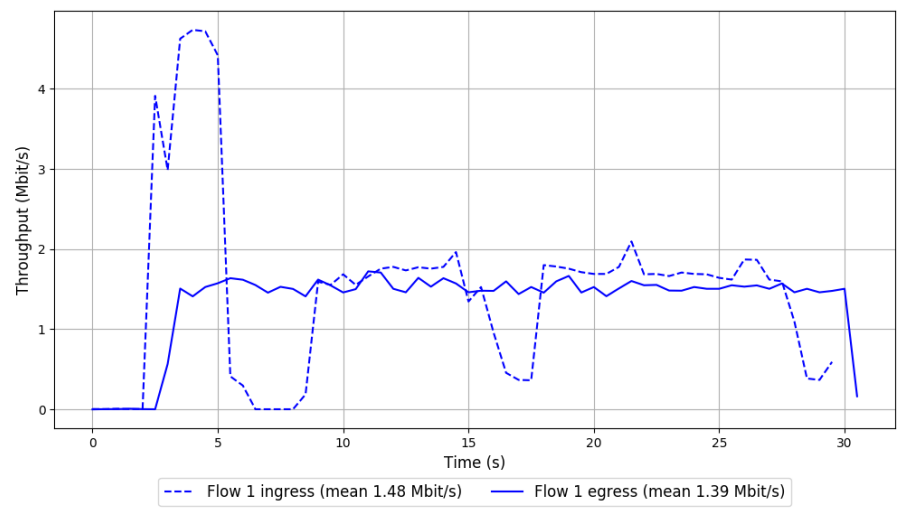


Run 2: Statistics of FillP-Sheep

Start at: 2018-07-24 06:07:35
End at: 2018-07-24 06:08:05
Local clock offset: -16.358 ms
Remote clock offset: 2.806 ms

Below is generated by plot.py at 2018-07-24 06:29:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.39 Mbit/s
95th percentile per-packet one-way delay: 4638.476 ms
Loss rate: 6.41%
-- Flow 1:
Average throughput: 1.39 Mbit/s
95th percentile per-packet one-way delay: 4638.476 ms
Loss rate: 6.41%

Run 2: Report of FillP-Sheep — Data Link

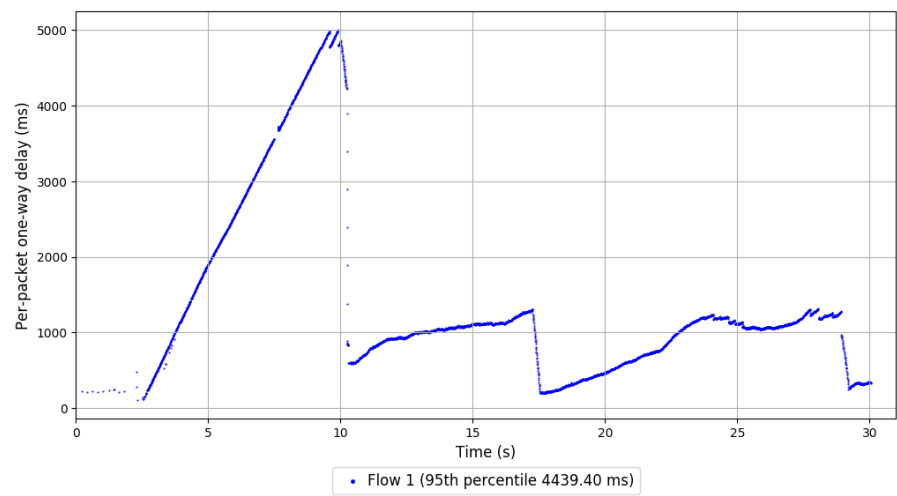
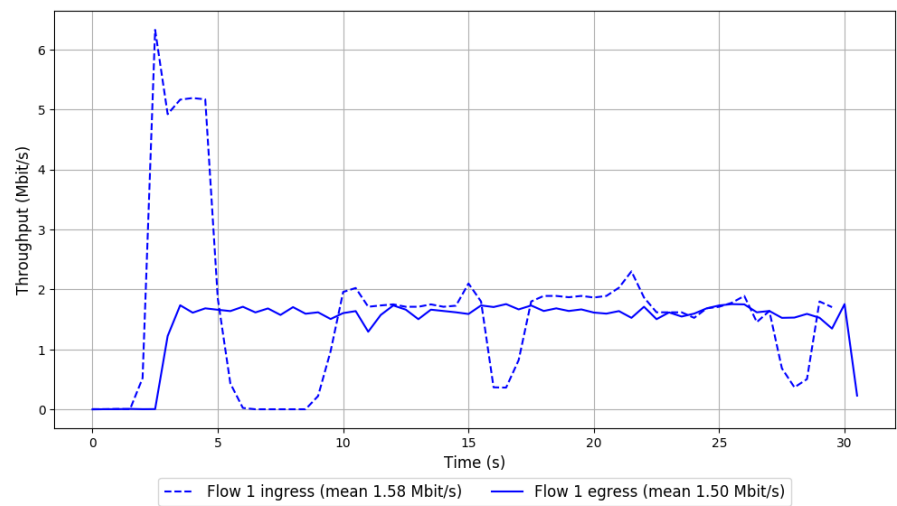


Run 3: Statistics of FillP-Sheep

Start at: 2018-07-24 06:26:42
End at: 2018-07-24 06:27:12
Local clock offset: -28.681 ms
Remote clock offset: 6.057 ms

Below is generated by plot.py at 2018-07-24 06:29:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 4439.402 ms
Loss rate: 5.87%
-- Flow 1:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 4439.402 ms
Loss rate: 5.87%

Run 3: Report of FillP-Sheep — Data Link

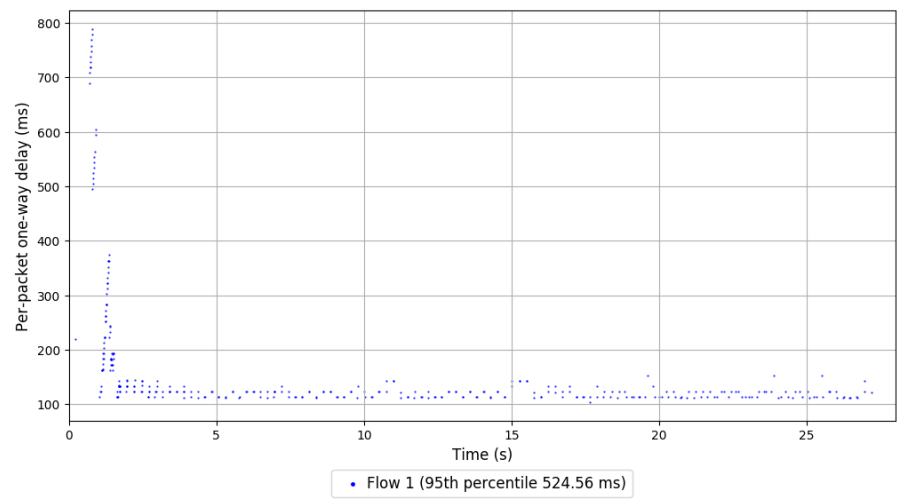
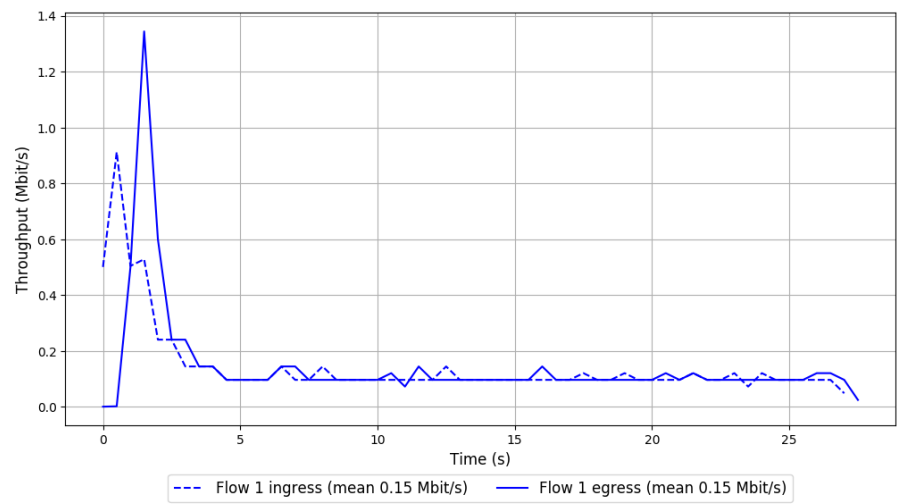


Run 1: Statistics of Indigo

Start at: 2018-07-24 05:37:15
End at: 2018-07-24 05:37:45
Local clock offset: -11.917 ms
Remote clock offset: 8.524 ms

Below is generated by plot.py at 2018-07-24 06:29:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 524.559 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 524.559 ms
Loss rate: 0.30%

Run 1: Report of Indigo — Data Link

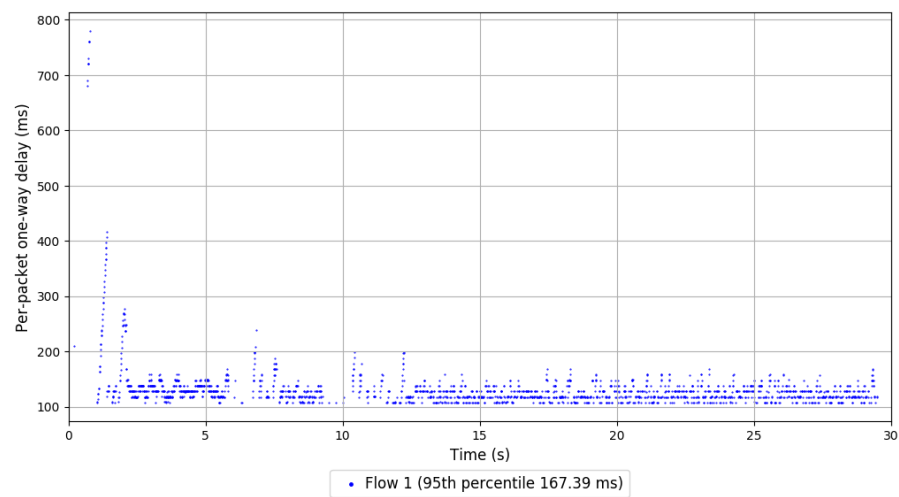
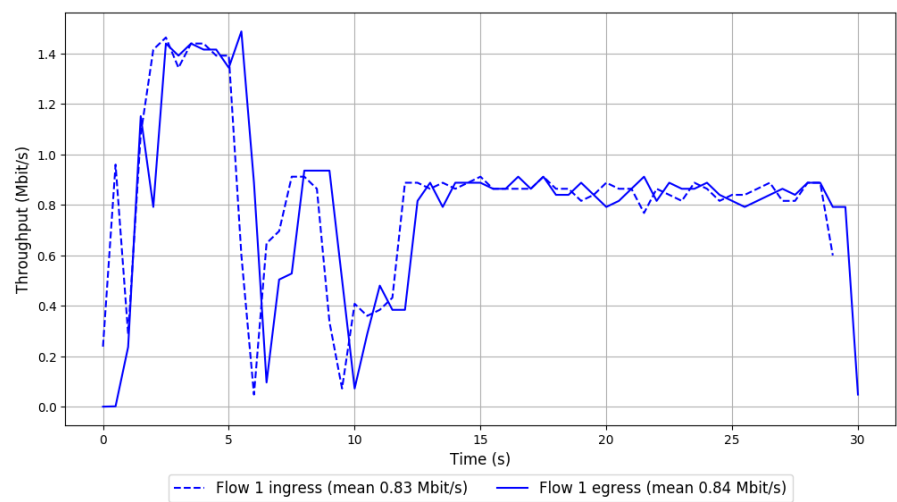


Run 2: Statistics of Indigo

Start at: 2018-07-24 05:56:21
End at: 2018-07-24 05:56:51
Local clock offset: -13.238 ms
Remote clock offset: 8.578 ms

Below is generated by plot.py at 2018-07-24 06:29:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.84 Mbit/s
95th percentile per-packet one-way delay: 167.392 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 0.84 Mbit/s
95th percentile per-packet one-way delay: 167.392 ms
Loss rate: 0.05%

Run 2: Report of Indigo — Data Link

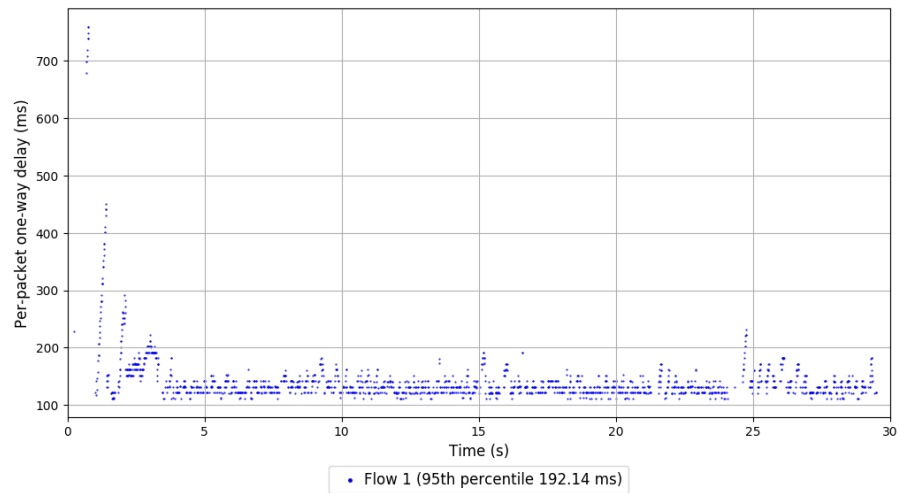
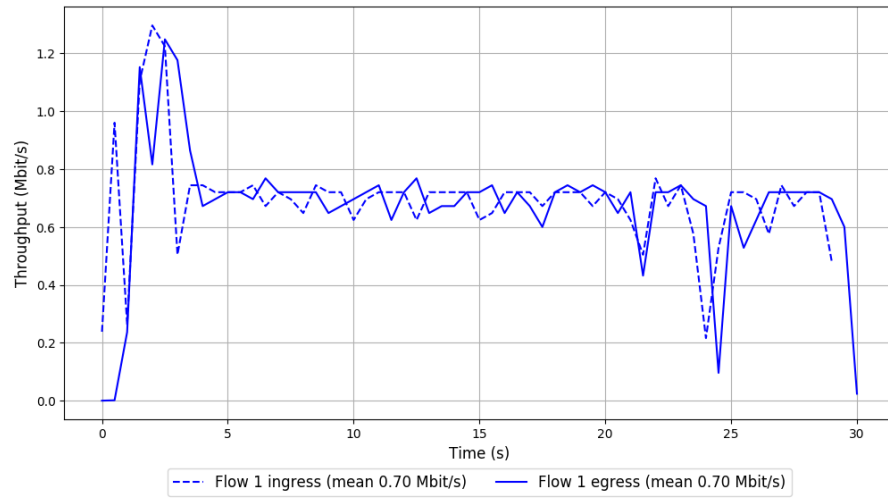


Run 3: Statistics of Indigo

Start at: 2018-07-24 06:15:27
End at: 2018-07-24 06:15:57
Local clock offset: -19.628 ms
Remote clock offset: 7.601 ms

Below is generated by plot.py at 2018-07-24 06:29:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.70 Mbit/s
95th percentile per-packet one-way delay: 192.143 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.70 Mbit/s
95th percentile per-packet one-way delay: 192.143 ms
Loss rate: 0.06%

Run 3: Report of Indigo — Data Link

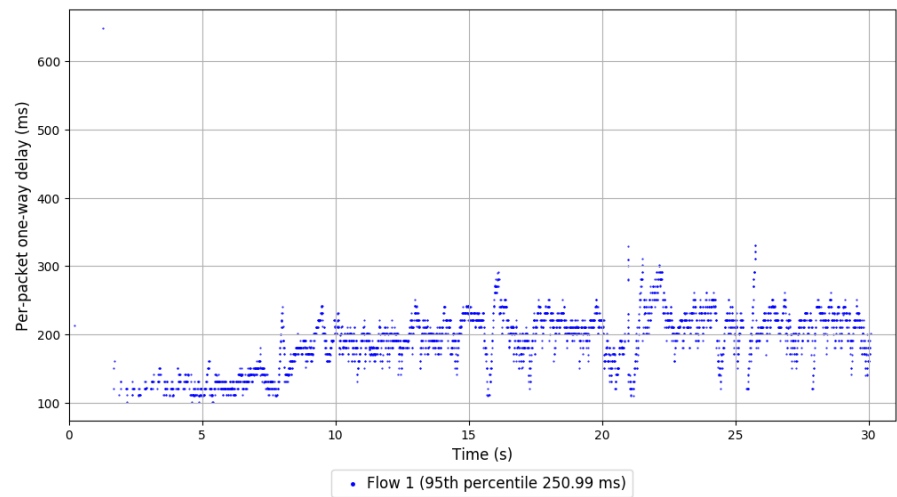
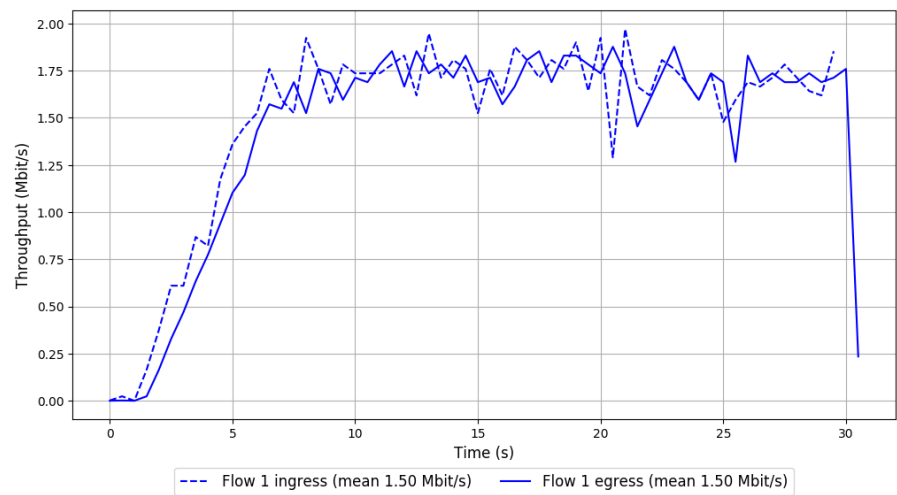


```
Run 1: Statistics of LEDBAT

Start at: 2018-07-24 05:43:59
End at: 2018-07-24 05:44:29
Local clock offset: -10.567 ms
Remote clock offset: 3.715 ms

# Below is generated by plot.py at 2018-07-24 06:29:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 250.988 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 250.988 ms
Loss rate: 0.55%
```

Run 1: Report of LEDBAT — Data Link

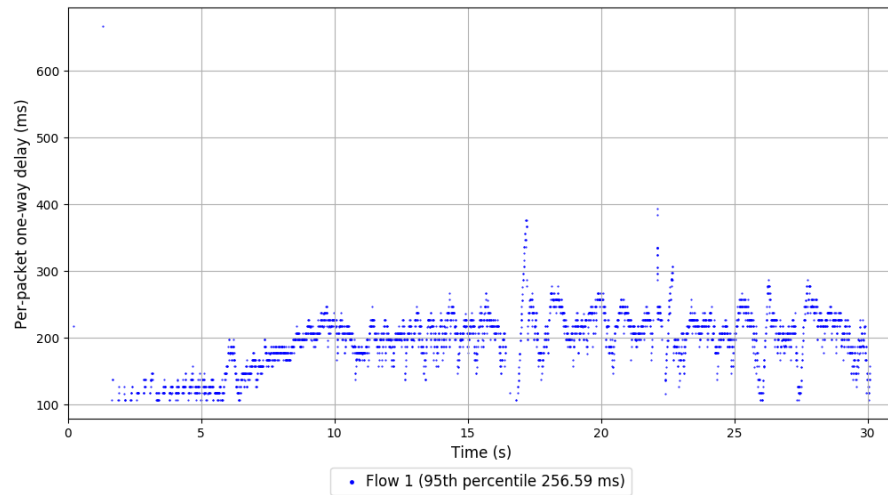
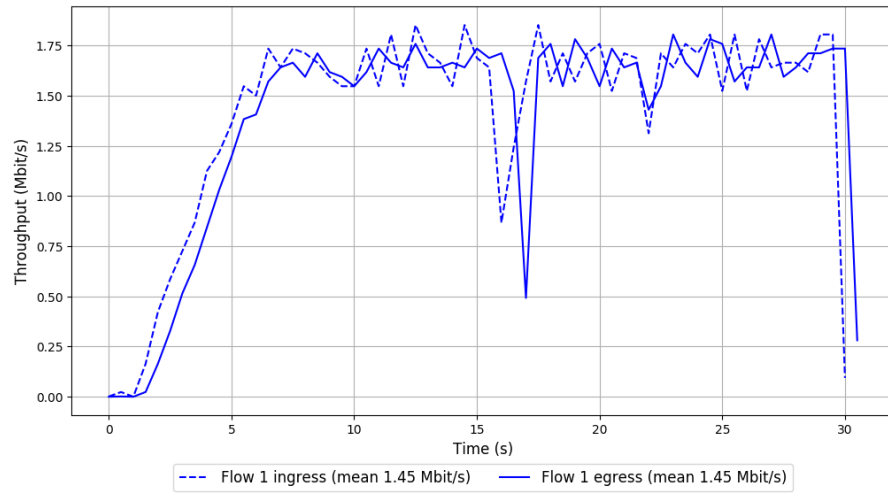


Run 2: Statistics of LEDBAT

Start at: 2018-07-24 06:03:05
End at: 2018-07-24 06:03:35
Local clock offset: -17.161 ms
Remote clock offset: 4.036 ms

Below is generated by plot.py at 2018-07-24 06:29:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 256.594 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 256.594 ms
Loss rate: 0.70%

Run 2: Report of LEDBAT — Data Link

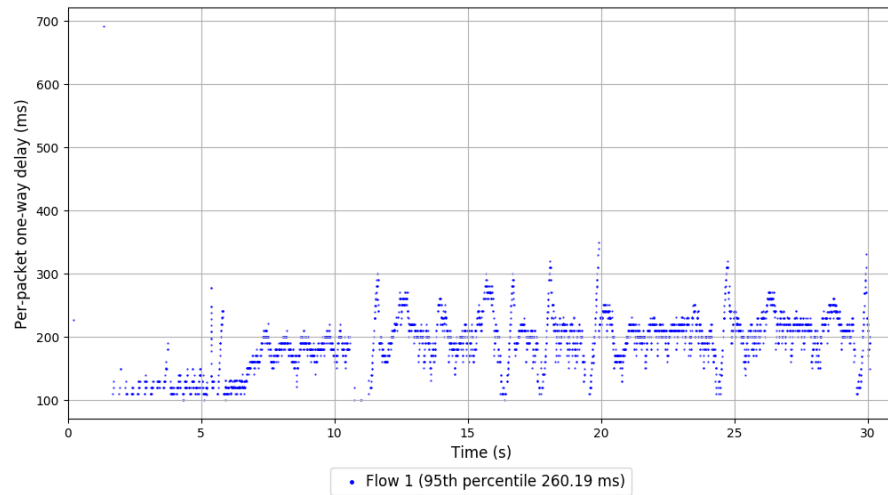
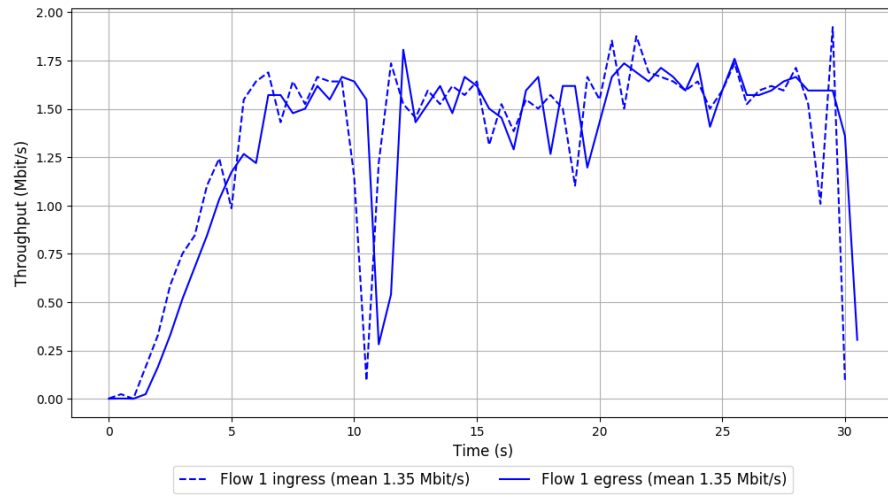


Run 3: Statistics of LEDBAT

Start at: 2018-07-24 06:22:11
End at: 2018-07-24 06:22:41
Local clock offset: -24.757 ms
Remote clock offset: 3.406 ms

Below is generated by plot.py at 2018-07-24 06:29:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.35 Mbit/s
95th percentile per-packet one-way delay: 260.194 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 1.35 Mbit/s
95th percentile per-packet one-way delay: 260.194 ms
Loss rate: 0.55%

Run 3: Report of LEDBAT — Data Link

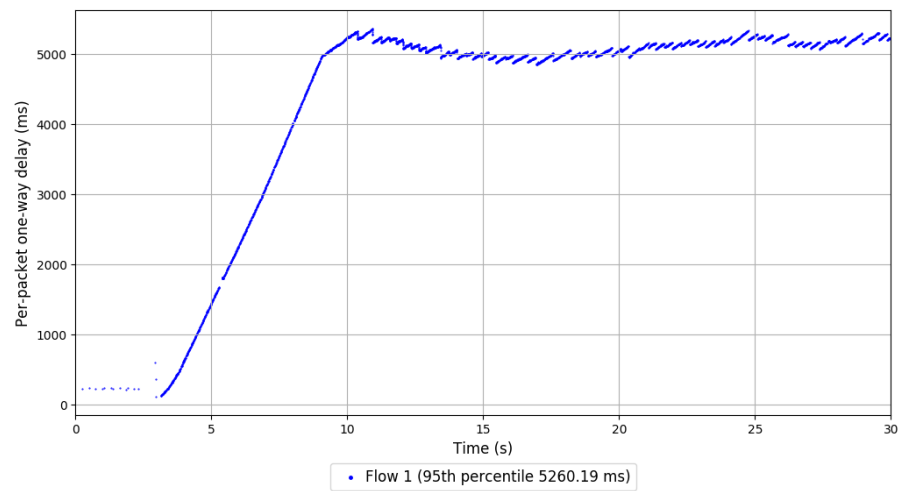
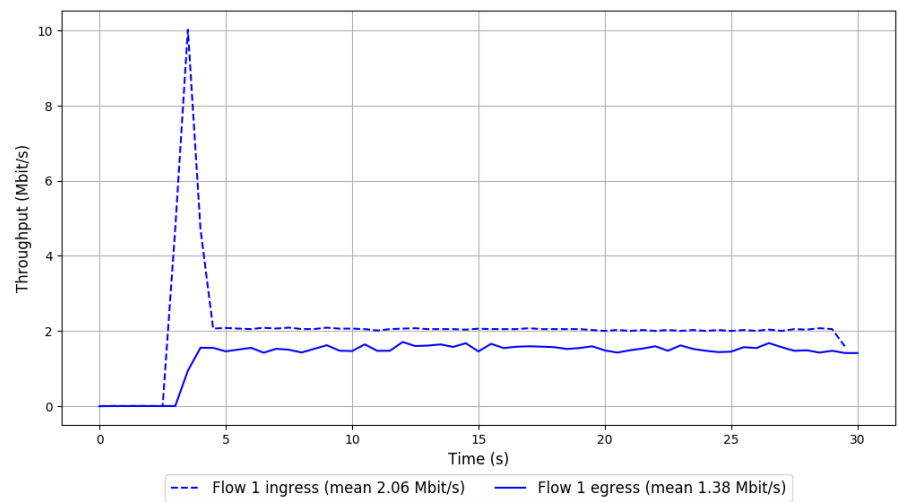


Run 1: Statistics of PCC-Allegro

Start at: 2018-07-24 05:50:43
End at: 2018-07-24 05:51:13
Local clock offset: -13.304 ms
Remote clock offset: 9.914 ms

Below is generated by plot.py at 2018-07-24 06:29:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.38 Mbit/s
95th percentile per-packet one-way delay: 5260.185 ms
Loss rate: 33.32%
-- Flow 1:
Average throughput: 1.38 Mbit/s
95th percentile per-packet one-way delay: 5260.185 ms
Loss rate: 33.32%

Run 1: Report of PCC-Allegro — Data Link

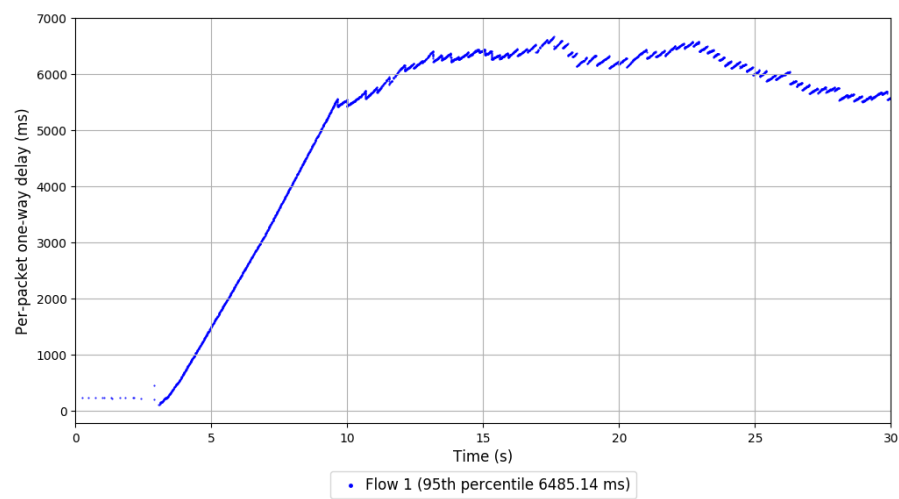
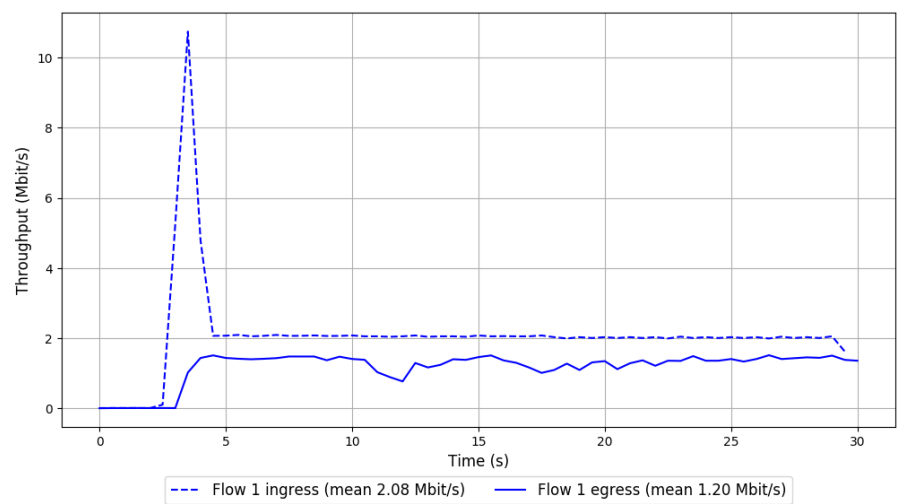


Run 2: Statistics of PCC-Allegro

Start at: 2018-07-24 06:09:49
End at: 2018-07-24 06:10:19
Local clock offset: -16.763 ms
Remote clock offset: 3.713 ms

Below is generated by plot.py at 2018-07-24 06:29:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.20 Mbit/s
95th percentile per-packet one-way delay: 6485.143 ms
Loss rate: 42.48%
-- Flow 1:
Average throughput: 1.20 Mbit/s
95th percentile per-packet one-way delay: 6485.143 ms
Loss rate: 42.48%

Run 2: Report of PCC-Allegro — Data Link

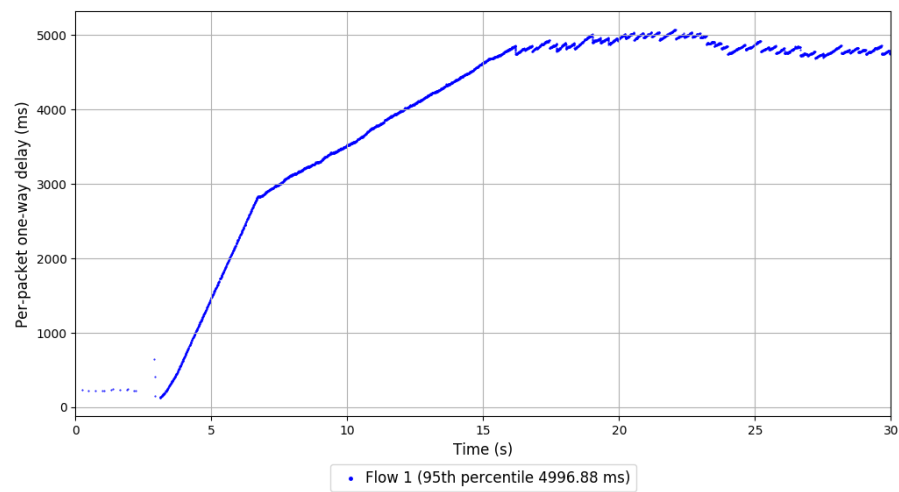
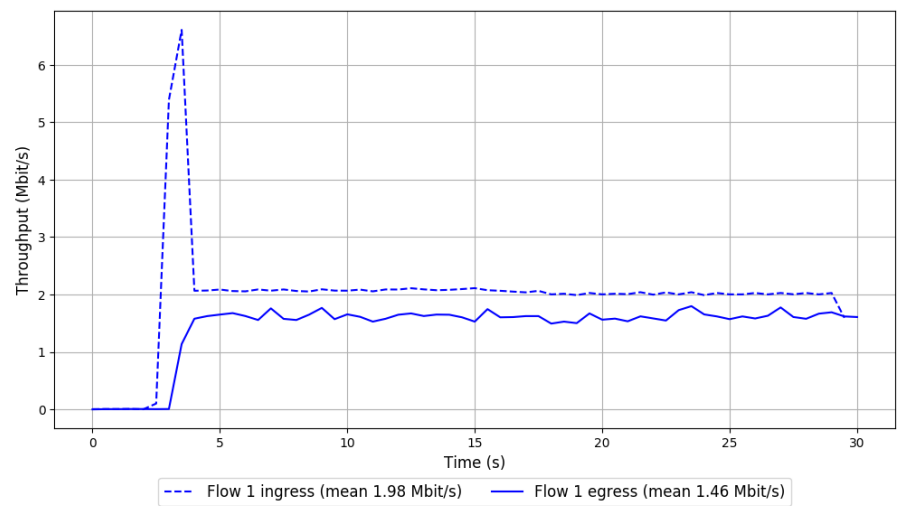


Run 3: Statistics of PCC-Allegro

Start at: 2018-07-24 06:28:57
End at: 2018-07-24 06:29:27
Local clock offset: -30.822 ms
Remote clock offset: 2.673 ms

Below is generated by plot.py at 2018-07-24 06:29:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 4996.879 ms
Loss rate: 26.28%
-- Flow 1:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 4996.879 ms
Loss rate: 26.28%

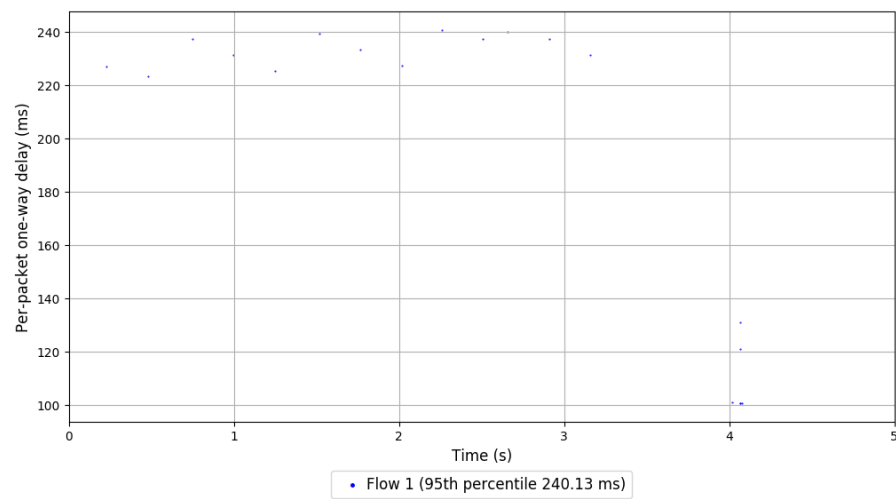
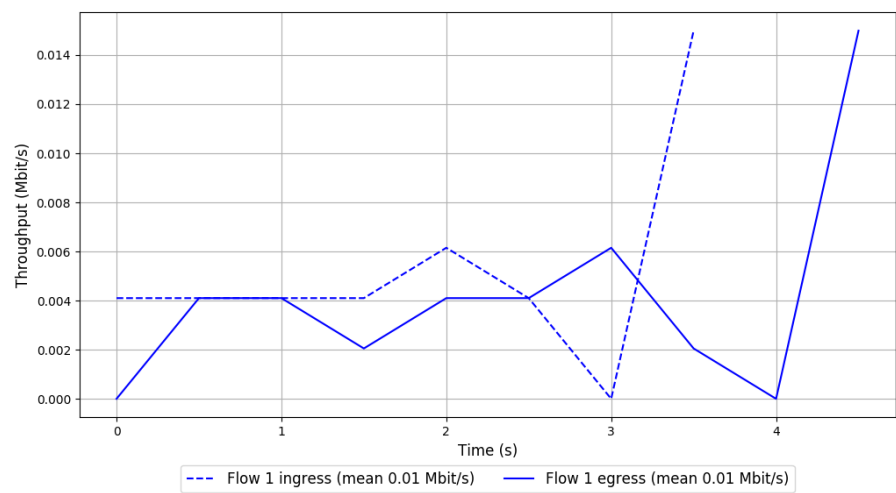
Run 3: Report of PCC-Allegro — Data Link



Run 1: Statistics of PCC-Expr

Start at: 2018-07-24 05:38:22
End at: 2018-07-24 05:38:52
Local clock offset: -12.752 ms
Remote clock offset: 8.541 ms

Run 1: Report of PCC-Expr — Data Link

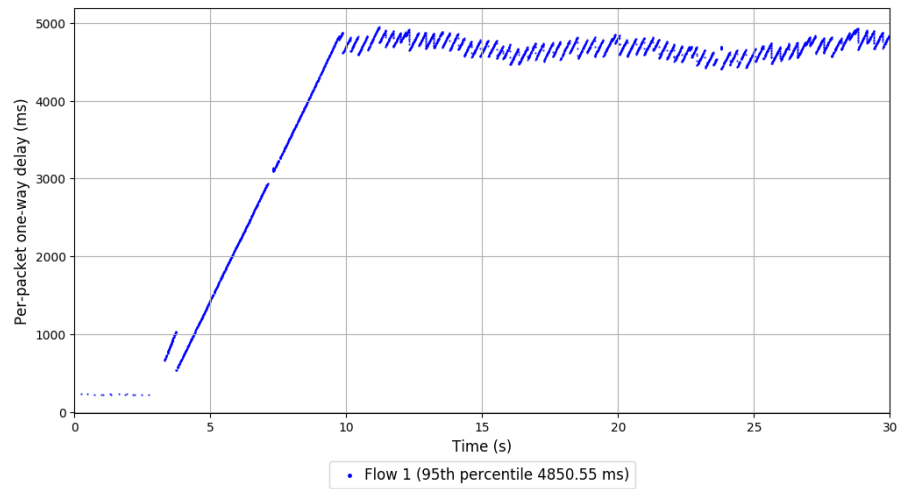
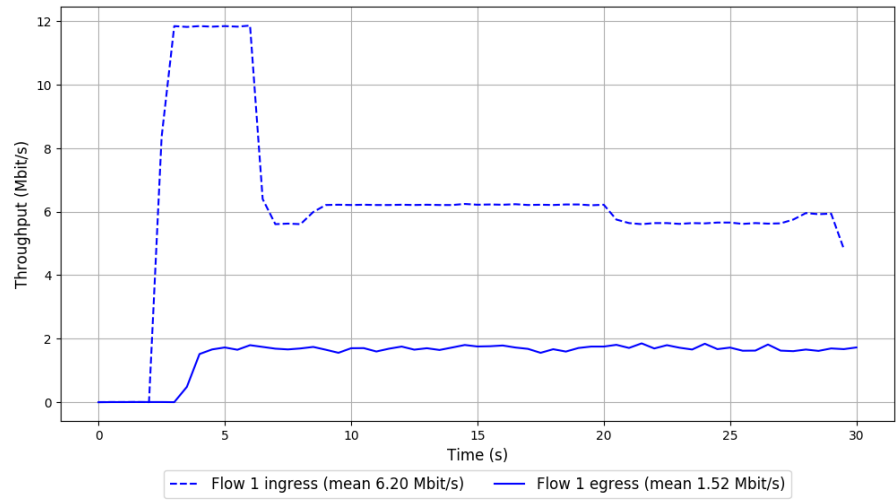


Run 2: Statistics of PCC-Expr

Start at: 2018-07-24 05:57:28
End at: 2018-07-24 05:57:58
Local clock offset: -13.907 ms
Remote clock offset: 9.675 ms

Below is generated by plot.py at 2018-07-24 06:29:58
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.52 Mbit/s
95th percentile per-packet one-way delay: 4850.548 ms
Loss rate: 75.61%
-- Flow 1:
Average throughput: 1.52 Mbit/s
95th percentile per-packet one-way delay: 4850.548 ms
Loss rate: 75.61%

Run 2: Report of PCC-Expr — Data Link

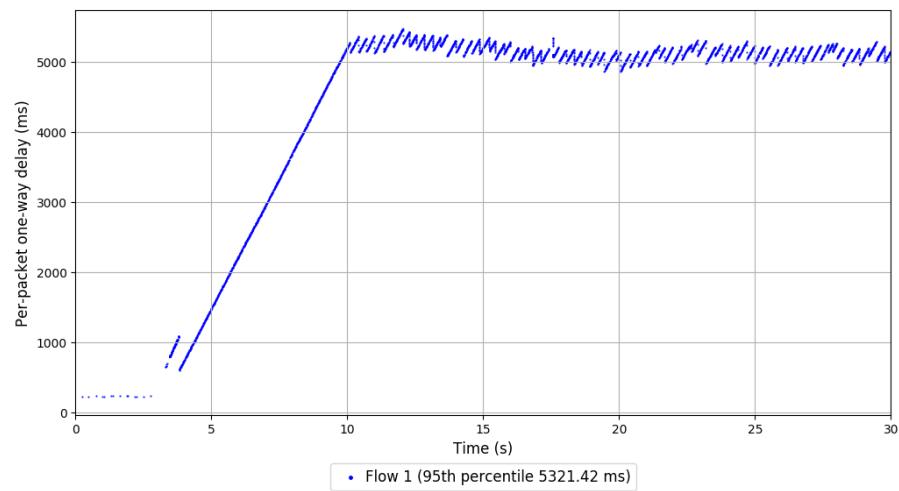
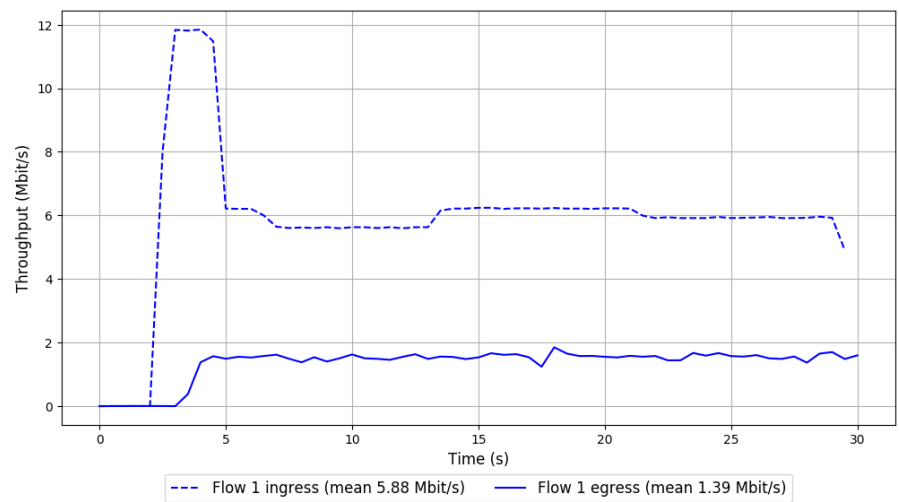


Run 3: Statistics of PCC-Expr

Start at: 2018-07-24 06:16:34
End at: 2018-07-24 06:17:04
Local clock offset: -20.312 ms
Remote clock offset: 6.396 ms

Below is generated by plot.py at 2018-07-24 06:29:58
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.39 Mbit/s
95th percentile per-packet one-way delay: 5321.416 ms
Loss rate: 76.57%
-- Flow 1:
Average throughput: 1.39 Mbit/s
95th percentile per-packet one-way delay: 5321.416 ms
Loss rate: 76.57%

Run 3: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

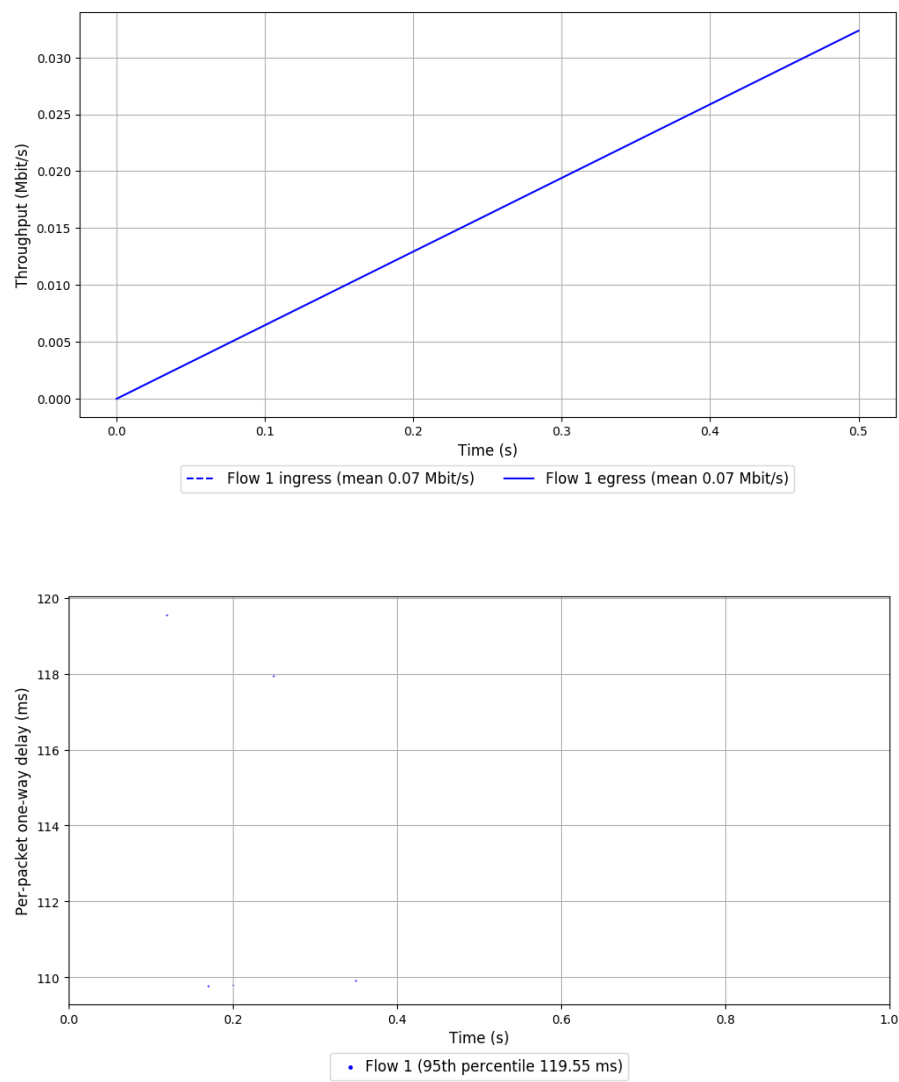
Start at: 2018-07-24 05:49:36

End at: 2018-07-24 05:50:06

Local clock offset: -14.722 ms

Remote clock offset: 3.816 ms

Run 1: Report of QUIC Cubic — Data Link

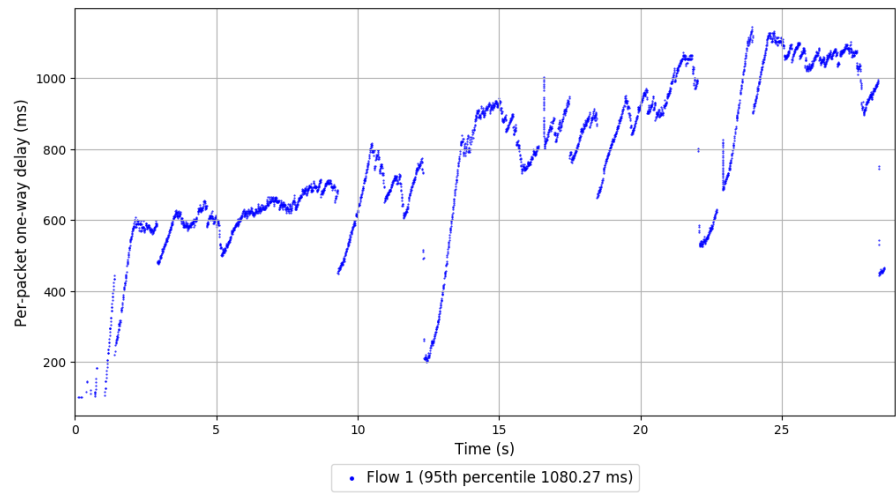
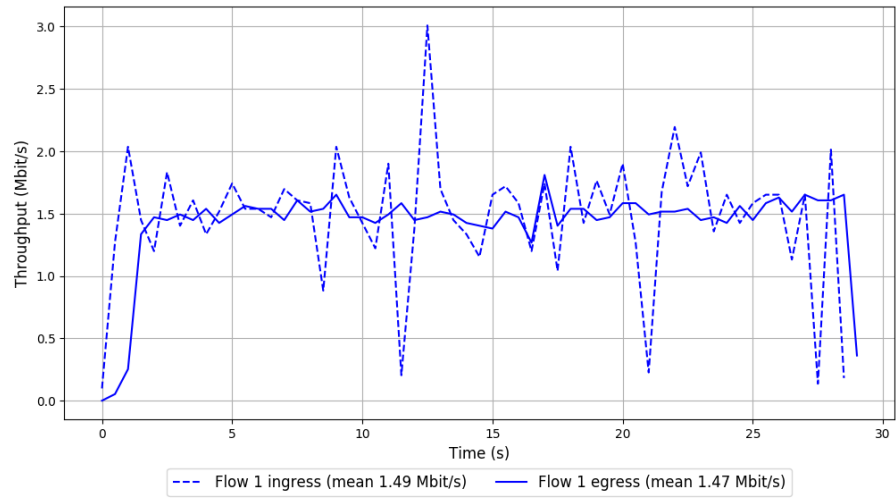


Run 2: Statistics of QUIC Cubic

Start at: 2018-07-24 06:08:42
End at: 2018-07-24 06:09:12
Local clock offset: -16.447 ms
Remote clock offset: 3.816 ms

Below is generated by plot.py at 2018-07-24 06:29:58
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 1080.270 ms
Loss rate: 2.02%
-- Flow 1:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 1080.270 ms
Loss rate: 2.02%

Run 2: Report of QUIC Cubic — Data Link

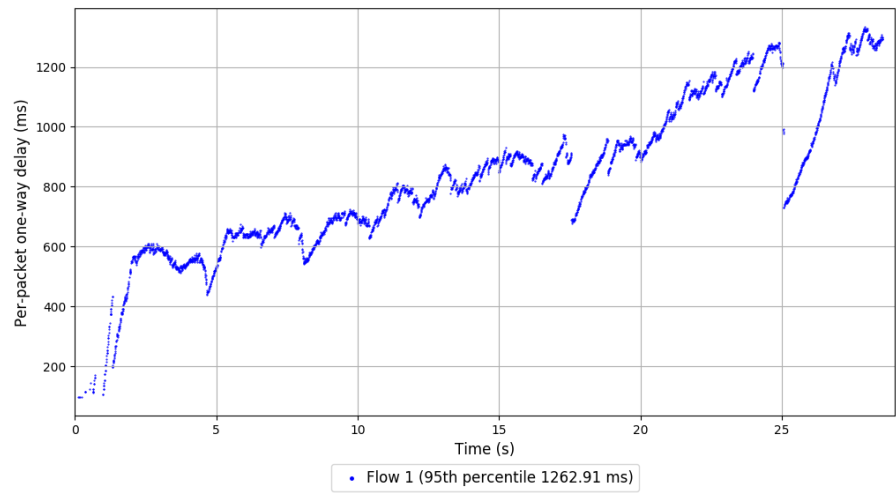
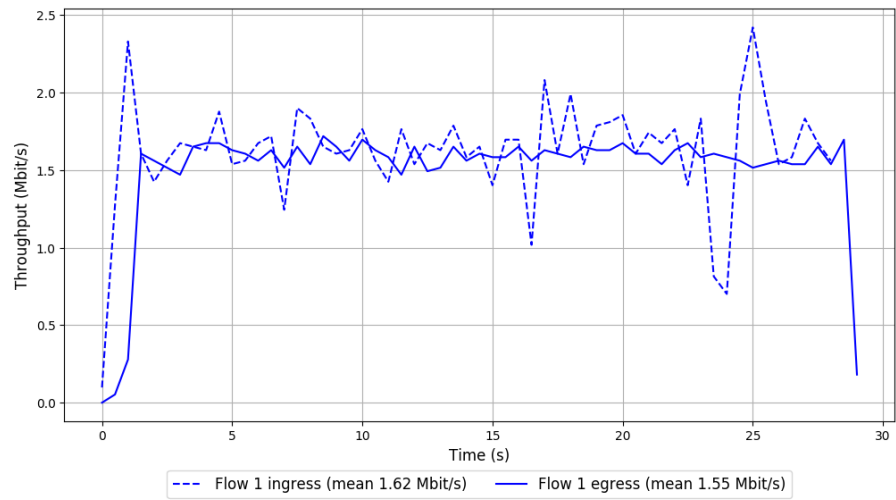


Run 3: Statistics of QUIC Cubic

Start at: 2018-07-24 06:27:49
End at: 2018-07-24 06:28:19
Local clock offset: -29.547 ms
Remote clock offset: 3.184 ms

Below is generated by plot.py at 2018-07-24 06:29:58
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 1262.915 ms
Loss rate: 4.43%
-- Flow 1:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 1262.915 ms
Loss rate: 4.43%

Run 3: Report of QUIC Cubic — Data Link

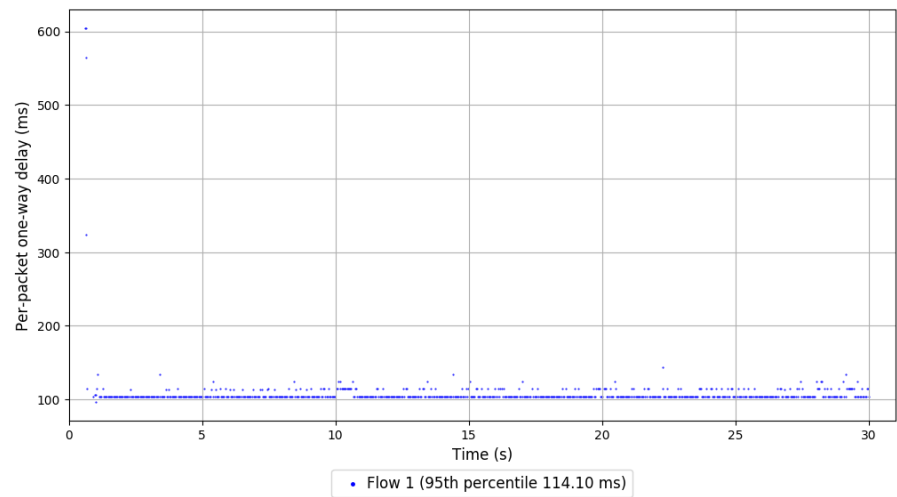
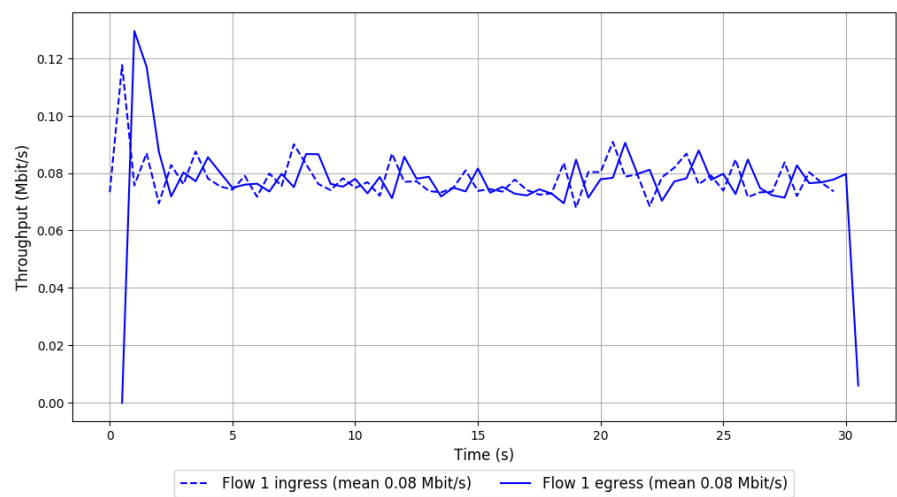


Run 1: Statistics of SCReAM

Start at: 2018-07-24 05:46:14
End at: 2018-07-24 05:46:44
Local clock offset: -12.254 ms
Remote clock offset: 7.603 ms

Below is generated by plot.py at 2018-07-24 06:29:58
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 114.100 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 114.100 ms
Loss rate: 0.27%

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2018-07-24 06:05:20

End at: 2018-07-24 06:05:50

Local clock offset: -16.38 ms

Remote clock offset: 7.933 ms

Below is generated by plot.py at 2018-07-24 06:29:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 119.875 ms

Loss rate: 0.25%

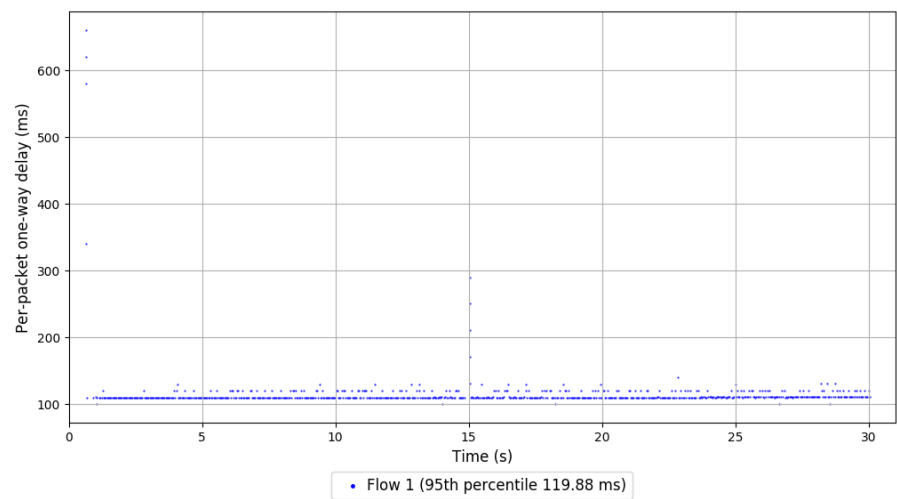
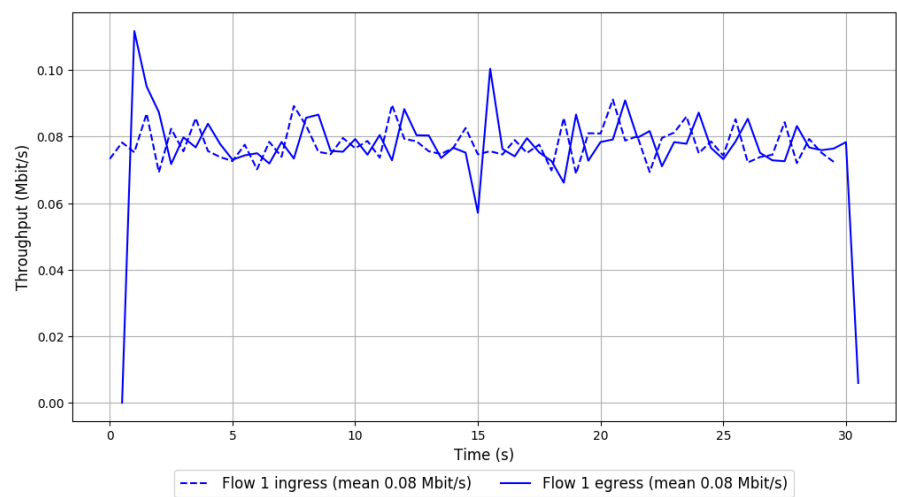
-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 119.875 ms

Loss rate: 0.25%

Run 2: Report of SReAM — Data Link

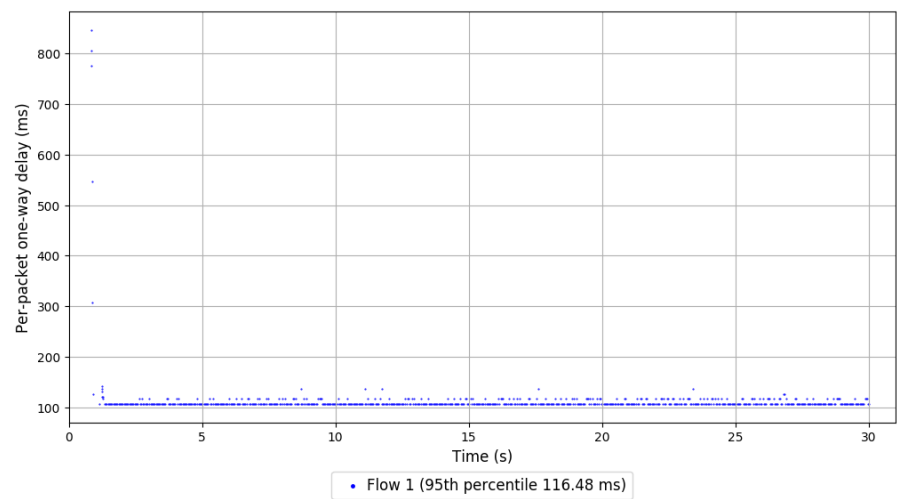
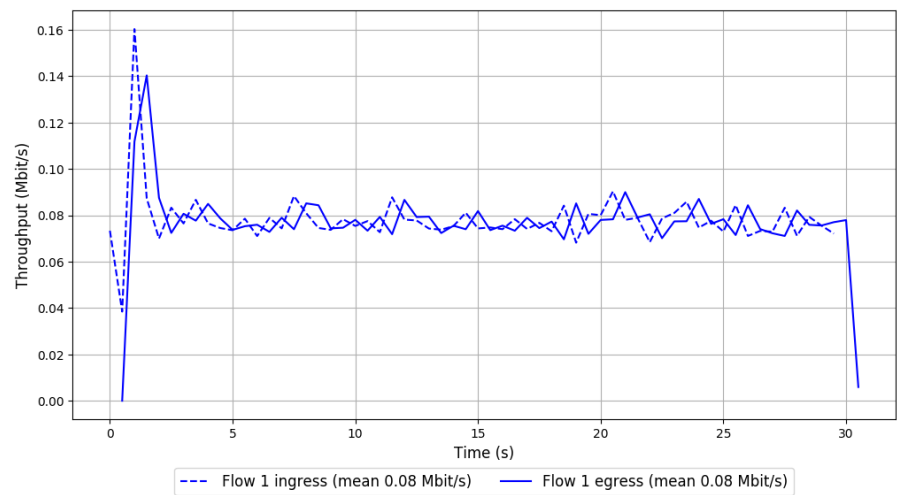


Run 3: Statistics of SCReAM

Start at: 2018-07-24 06:24:27
End at: 2018-07-24 06:24:57
Local clock offset: -26.587 ms
Remote clock offset: 3.34 ms

Below is generated by plot.py at 2018-07-24 06:29:58
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 116.478 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 116.478 ms
Loss rate: 0.13%

Run 3: Report of SReAM — Data Link

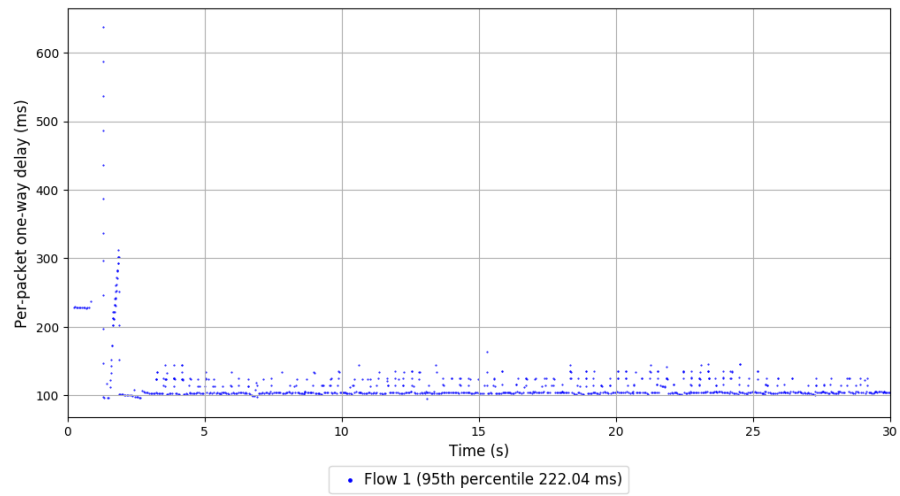
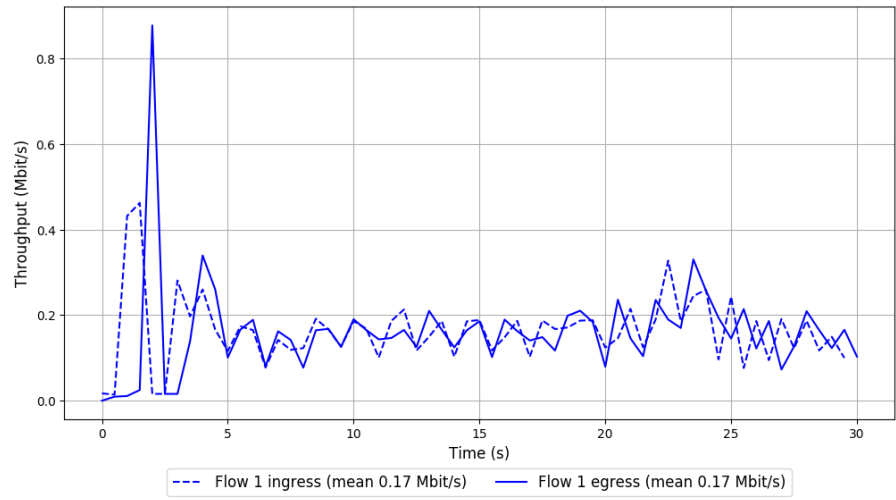


Run 1: Statistics of Sprout

Start at: 2018-07-24 05:40:37
End at: 2018-07-24 05:41:07
Local clock offset: -16.557 ms
Remote clock offset: 3.695 ms

Below is generated by plot.py at 2018-07-24 06:29:58
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 222.036 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 222.036 ms
Loss rate: 0.00%

Run 1: Report of Sprout — Data Link

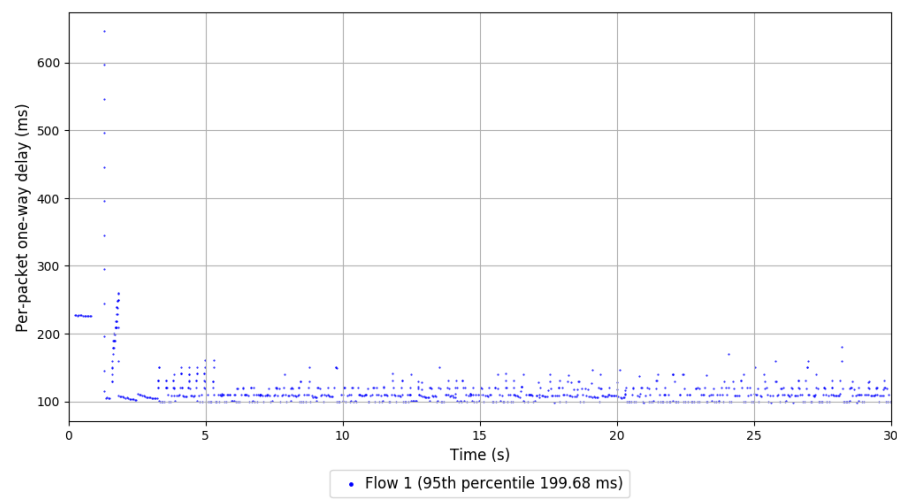
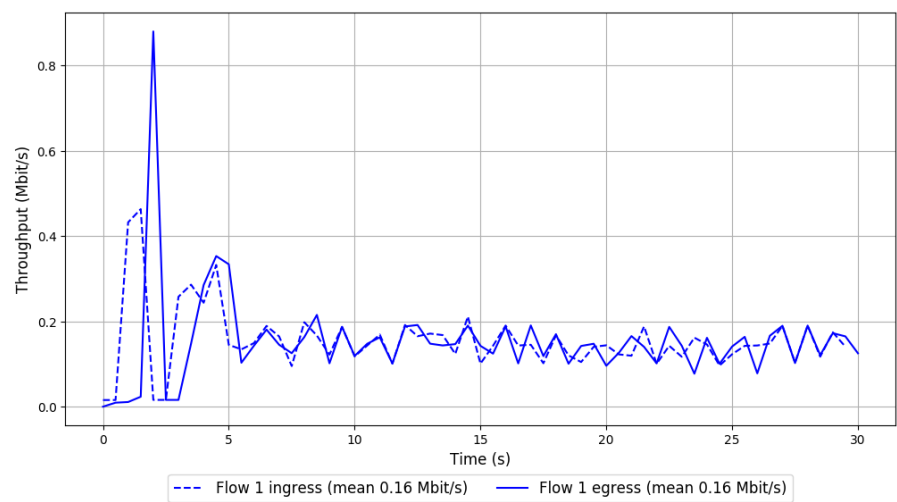


Run 2: Statistics of Sprout

Start at: 2018-07-24 05:59:43
End at: 2018-07-24 06:00:13
Local clock offset: -15.991 ms
Remote clock offset: 8.307 ms

Below is generated by plot.py at 2018-07-24 06:29:58
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 199.683 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 199.683 ms
Loss rate: 0.45%

Run 2: Report of Sprout — Data Link

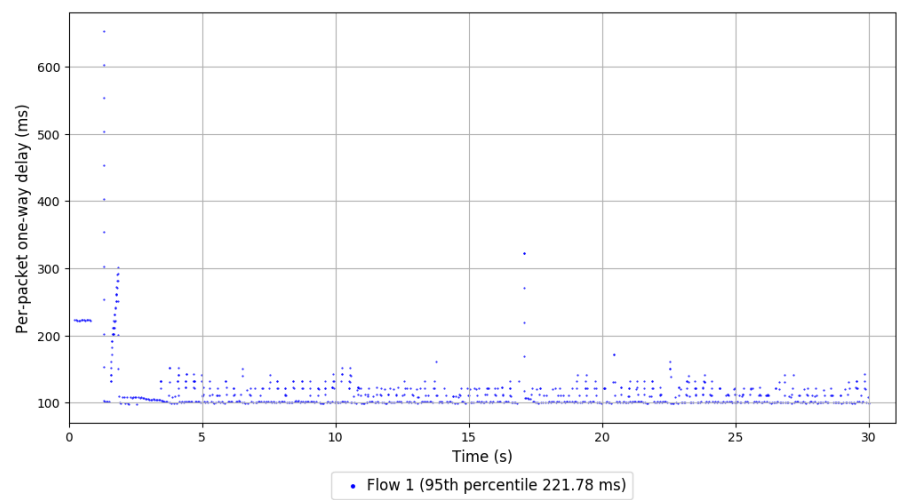
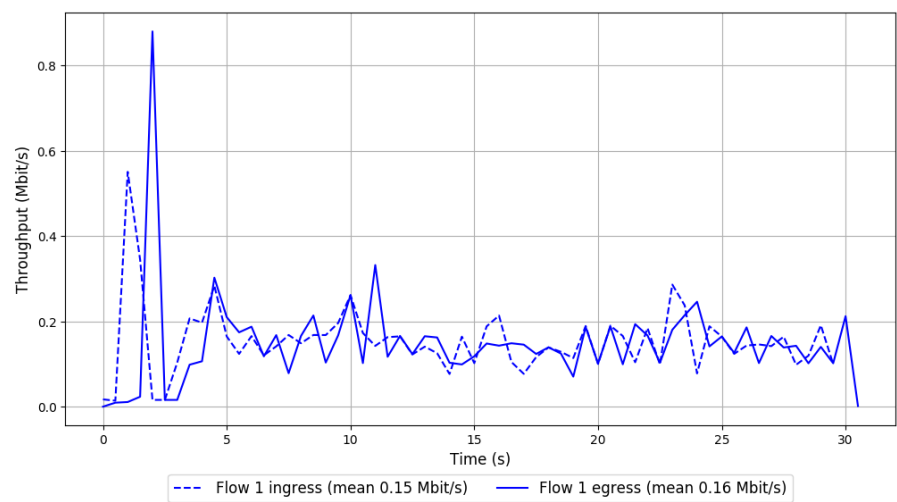


Run 3: Statistics of Sprout

Start at: 2018-07-24 06:18:49
End at: 2018-07-24 06:19:19
Local clock offset: -21.815 ms
Remote clock offset: 3.41 ms

Below is generated by plot.py at 2018-07-24 06:29:58
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 221.781 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 221.781 ms
Loss rate: 0.00%

Run 3: Report of Sprout — Data Link

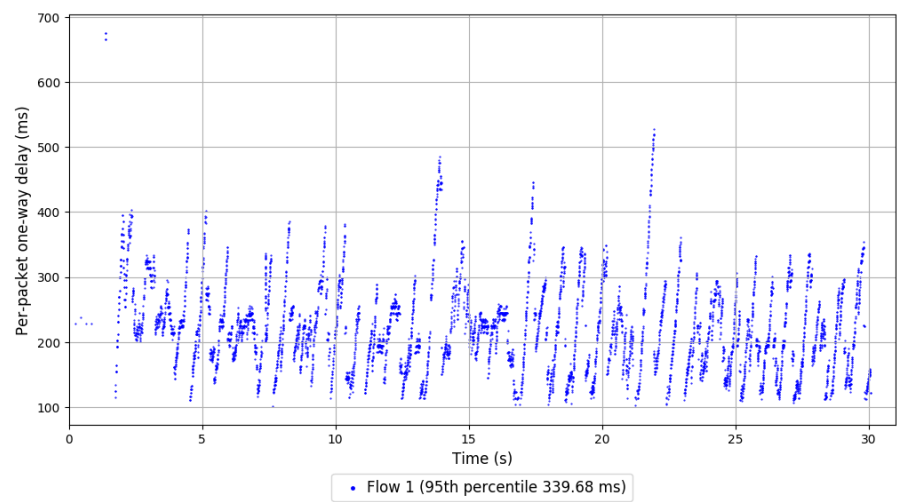
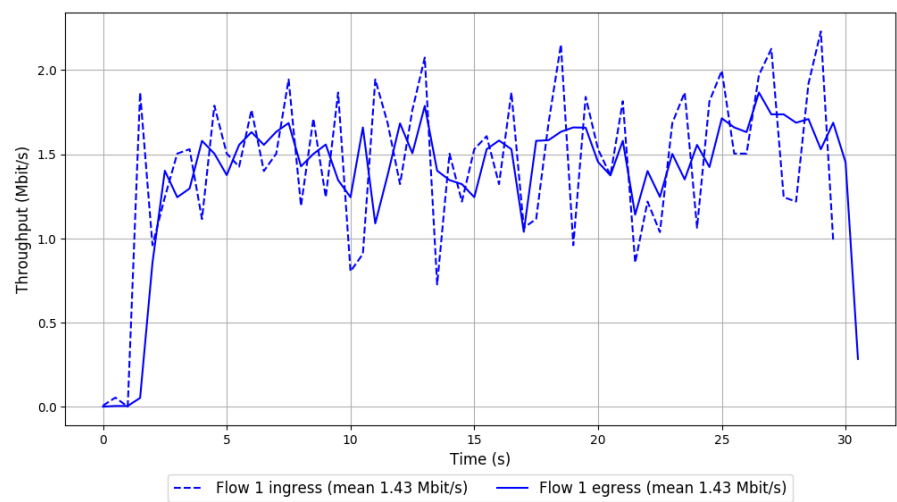


Run 1: Statistics of TaoVA-100x

Start at: 2018-07-24 05:36:07
End at: 2018-07-24 05:36:37
Local clock offset: -13.355 ms
Remote clock offset: 9.527 ms

Below is generated by plot.py at 2018-07-24 06:30:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 339.683 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 339.683 ms
Loss rate: 0.33%

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

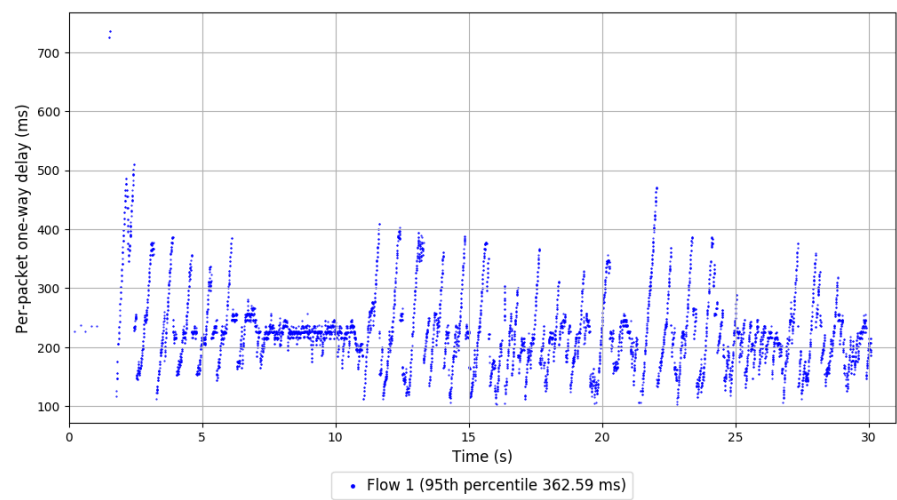
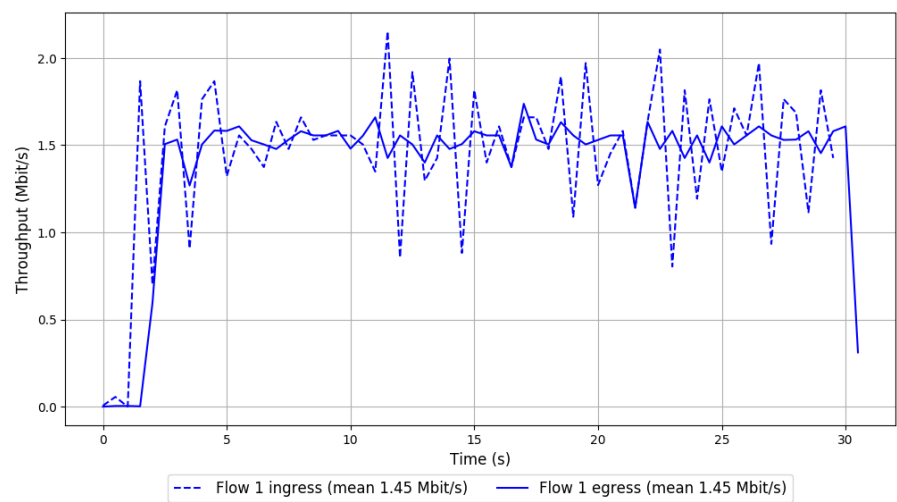


Run 2: Statistics of TaoVA-100x

Start at: 2018-07-24 05:55:13
End at: 2018-07-24 05:55:43
Local clock offset: -12.613 ms
Remote clock offset: 8.779 ms

Below is generated by plot.py at 2018-07-24 06:30:03
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 362.587 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 362.587 ms
Loss rate: 0.24%

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

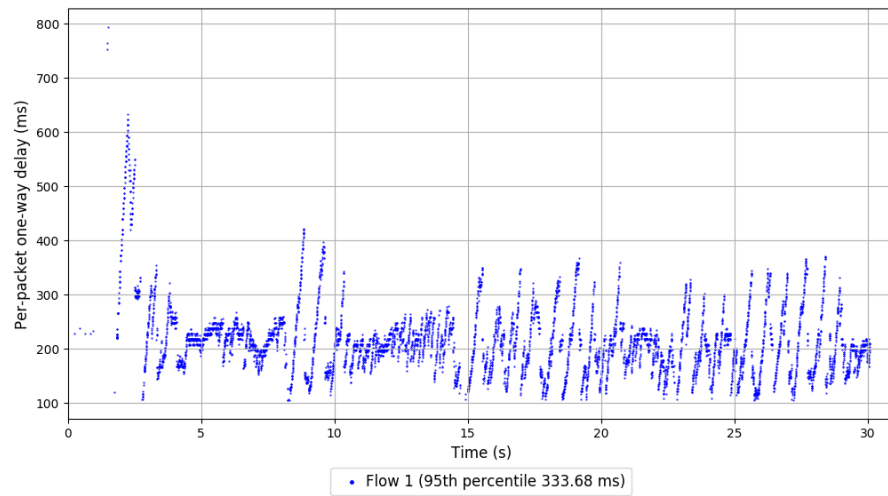
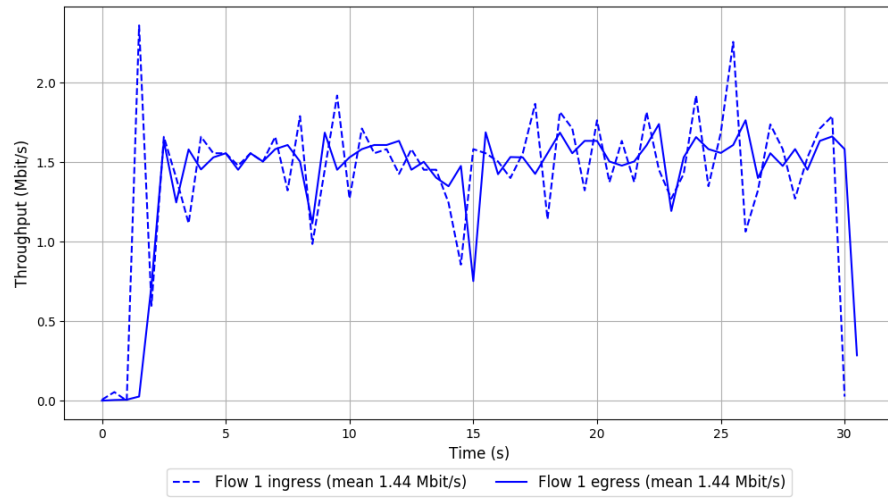


Run 3: Statistics of TaoVA-100x

Start at: 2018-07-24 06:14:19
End at: 2018-07-24 06:14:49
Local clock offset: -18.934 ms
Remote clock offset: 7.503 ms

Below is generated by plot.py at 2018-07-24 06:30:03
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 333.680 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 333.680 ms
Loss rate: 0.51%

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

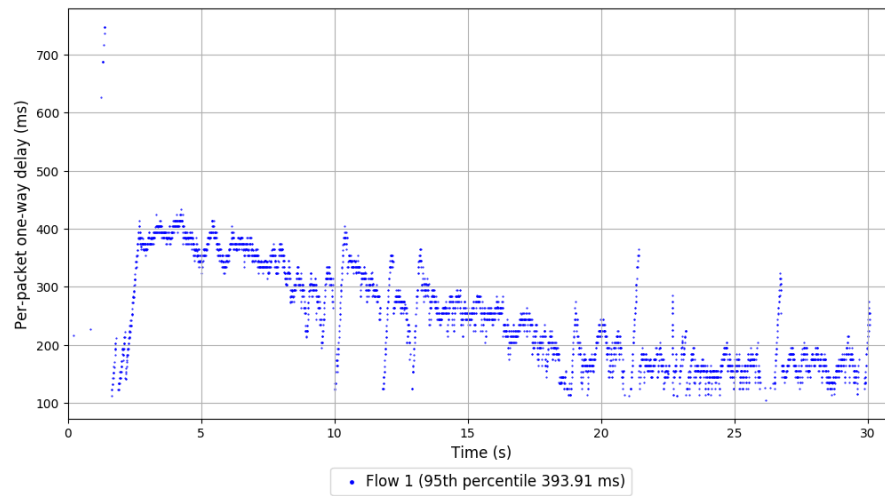
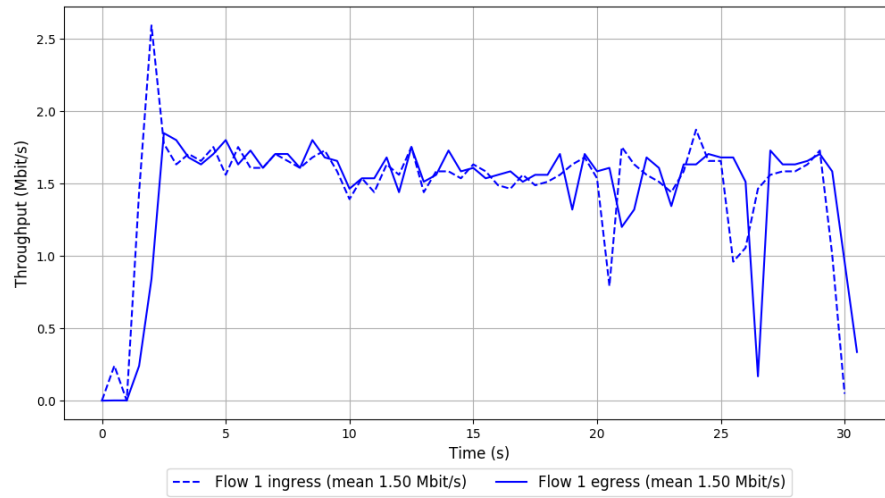


Run 1: Statistics of TCP Vegas

Start at: 2018-07-24 05:41:44
End at: 2018-07-24 05:42:14
Local clock offset: -12.137 ms
Remote clock offset: 4.738 ms

Below is generated by plot.py at 2018-07-24 06:30:03
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 393.911 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 393.911 ms
Loss rate: 0.29%

Run 1: Report of TCP Vegas — Data Link

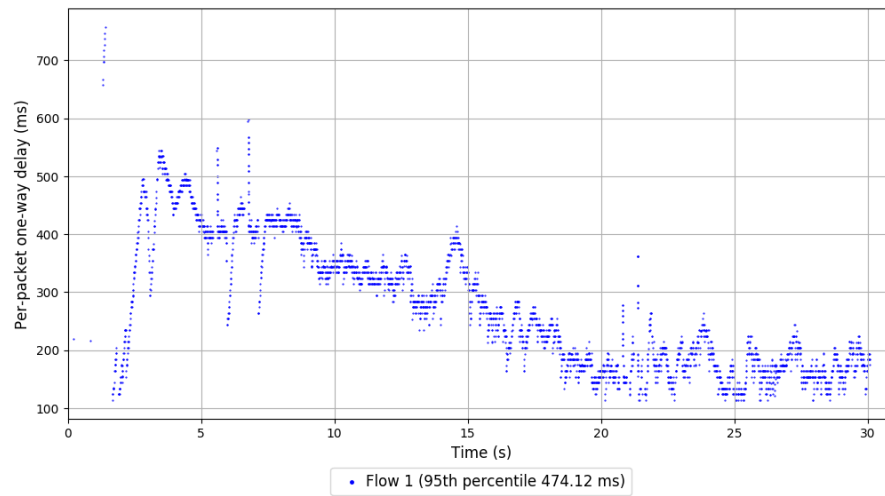
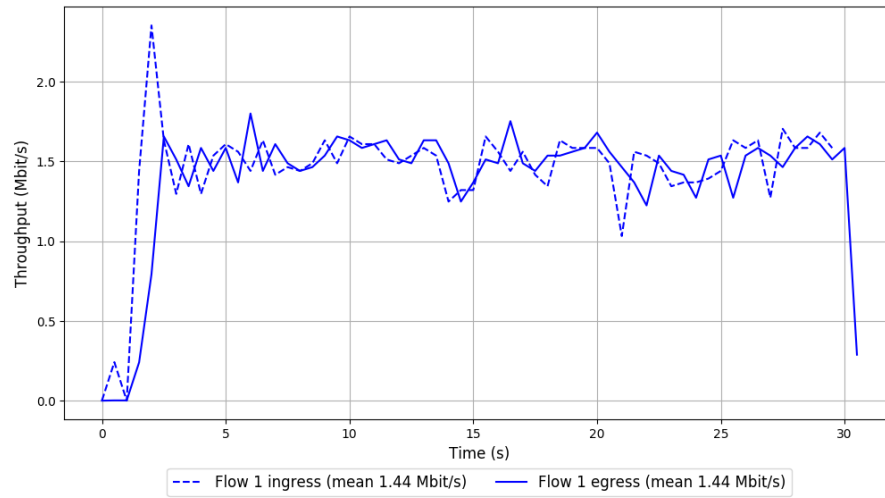


Run 2: Statistics of TCP Vegas

Start at: 2018-07-24 06:00:50
End at: 2018-07-24 06:01:20
Local clock offset: -16.988 ms
Remote clock offset: 7.078 ms

Below is generated by plot.py at 2018-07-24 06:30:03
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 474.119 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 474.119 ms
Loss rate: 0.36%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-07-24 06:19:56

End at: 2018-07-24 06:20:26

Local clock offset: -22.76 ms

Remote clock offset: 3.418 ms

Below is generated by plot.py at 2018-07-24 06:30:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.45 Mbit/s

95th percentile per-packet one-way delay: 1189.243 ms

Loss rate: 2.39%

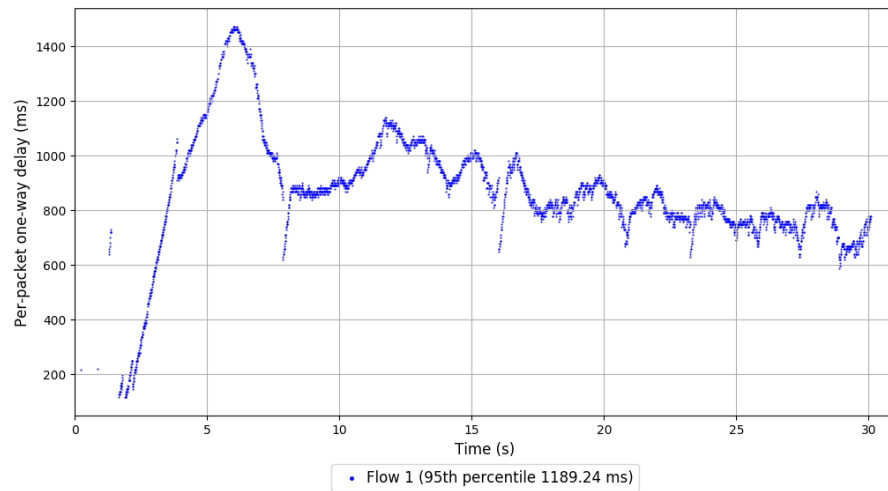
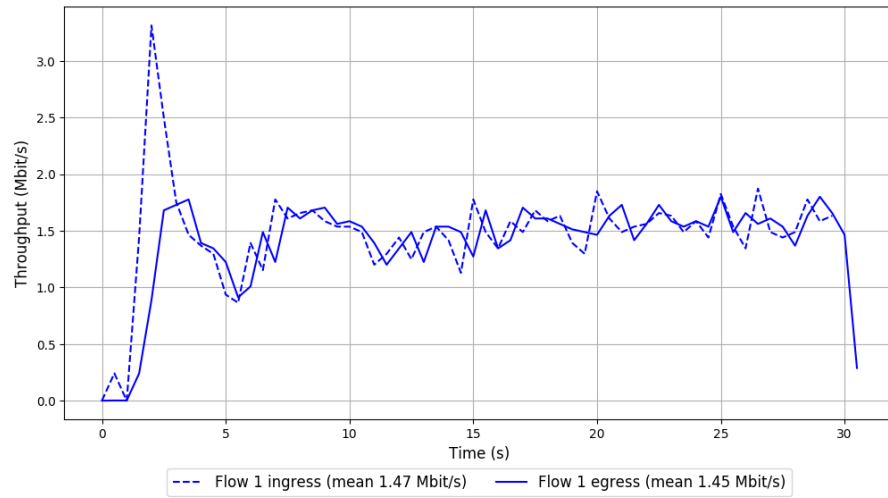
-- Flow 1:

Average throughput: 1.45 Mbit/s

95th percentile per-packet one-way delay: 1189.243 ms

Loss rate: 2.39%

Run 3: Report of TCP Vegas — Data Link

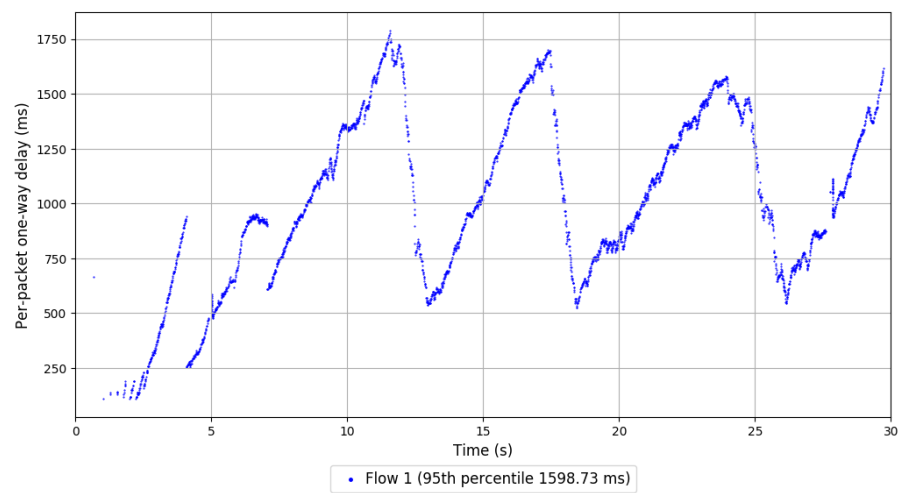
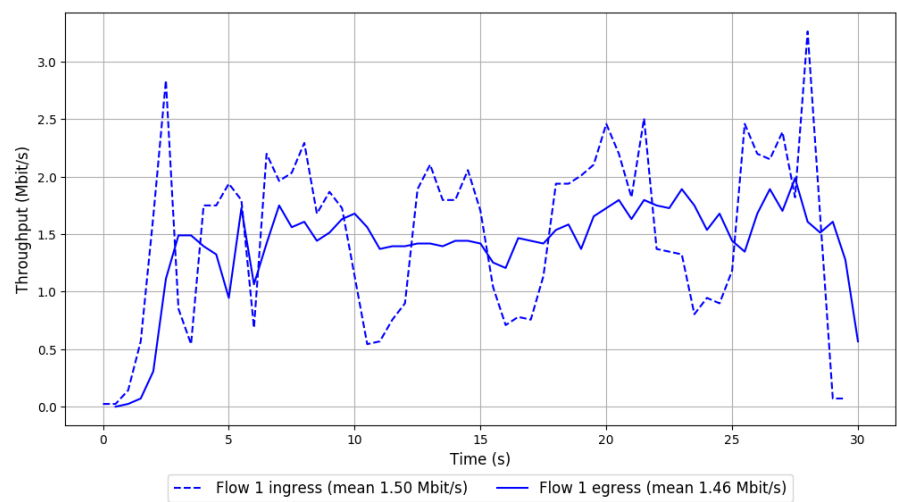


Run 1: Statistics of Verus

Start at: 2018-07-24 05:45:06
End at: 2018-07-24 05:45:37
Local clock offset: -11.108 ms
Remote clock offset: 7.638 ms

Below is generated by plot.py at 2018-07-24 06:30:04
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 1598.730 ms
Loss rate: 4.81%
-- Flow 1:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 1598.730 ms
Loss rate: 4.81%

Run 1: Report of Verus — Data Link

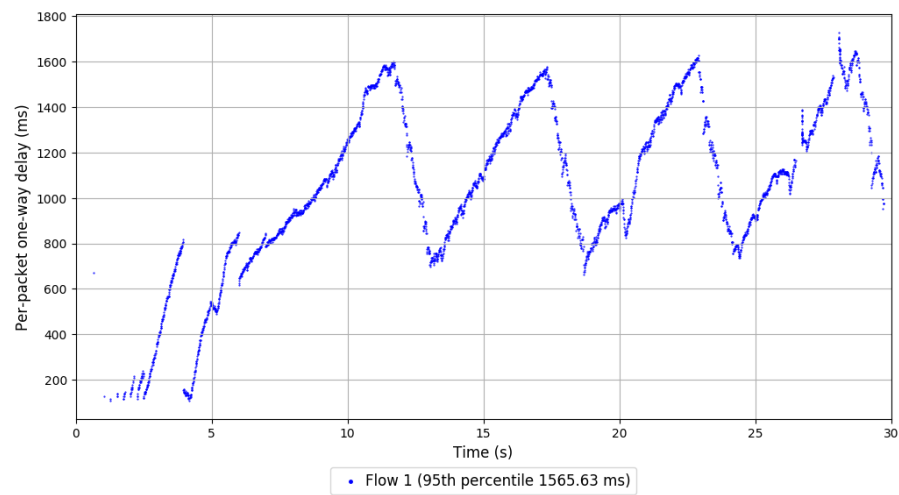
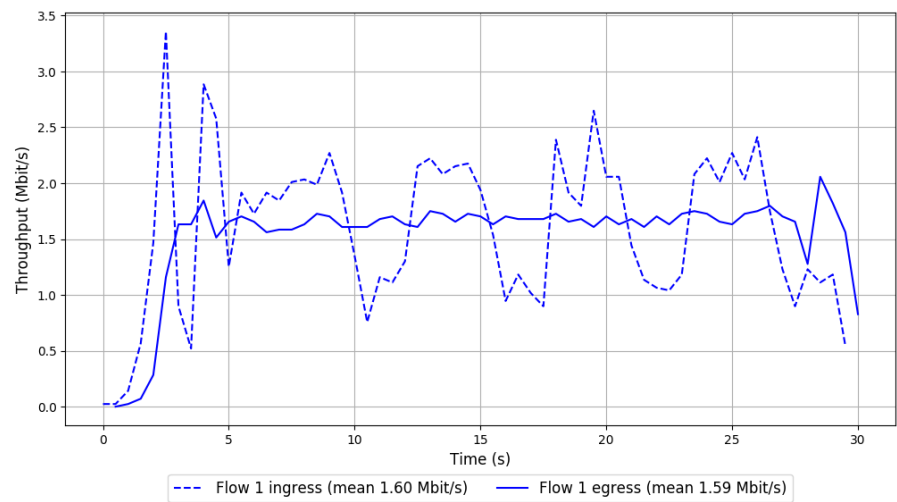


Run 2: Statistics of Verus

Start at: 2018-07-24 06:04:13
End at: 2018-07-24 06:04:43
Local clock offset: -16.674 ms
Remote clock offset: 6.872 ms

Below is generated by plot.py at 2018-07-24 06:30:04
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 1565.632 ms
Loss rate: 2.51%
-- Flow 1:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 1565.632 ms
Loss rate: 2.51%

Run 2: Report of Verus — Data Link

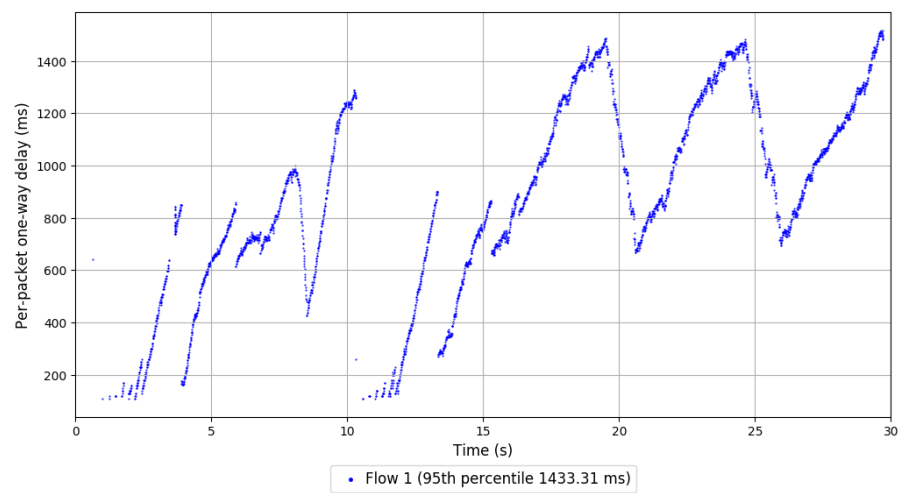
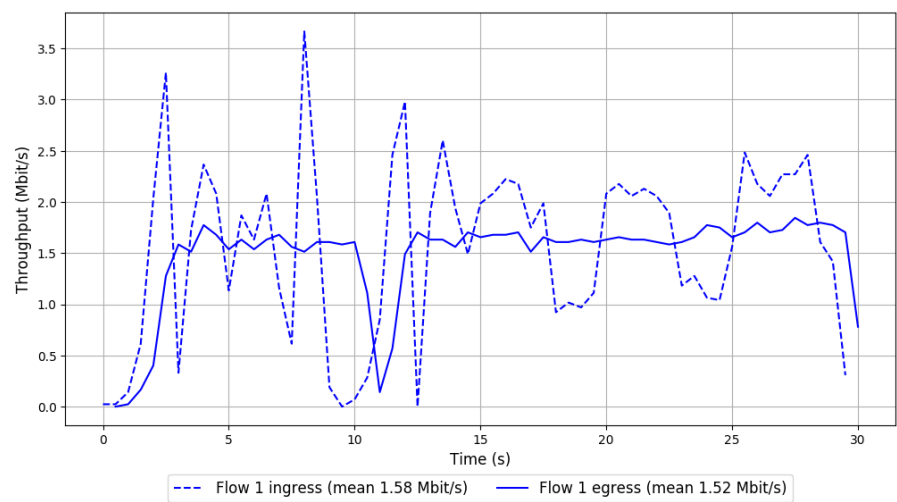


Run 3: Statistics of Verus

Start at: 2018-07-24 06:23:19
End at: 2018-07-24 06:23:49
Local clock offset: -25.651 ms
Remote clock offset: 3.34 ms

Below is generated by plot.py at 2018-07-24 06:30:06
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.52 Mbit/s
95th percentile per-packet one-way delay: 1433.308 ms
Loss rate: 5.12%
-- Flow 1:
Average throughput: 1.52 Mbit/s
95th percentile per-packet one-way delay: 1433.308 ms
Loss rate: 5.12%

Run 3: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2018-07-24 05:33:44

End at: 2018-07-24 05:34:14

Local clock offset: -5.334 ms

Remote clock offset: 3.128 ms

Below is generated by plot.py at 2018-07-24 06:30:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 233.447 ms

Loss rate: 0.00%

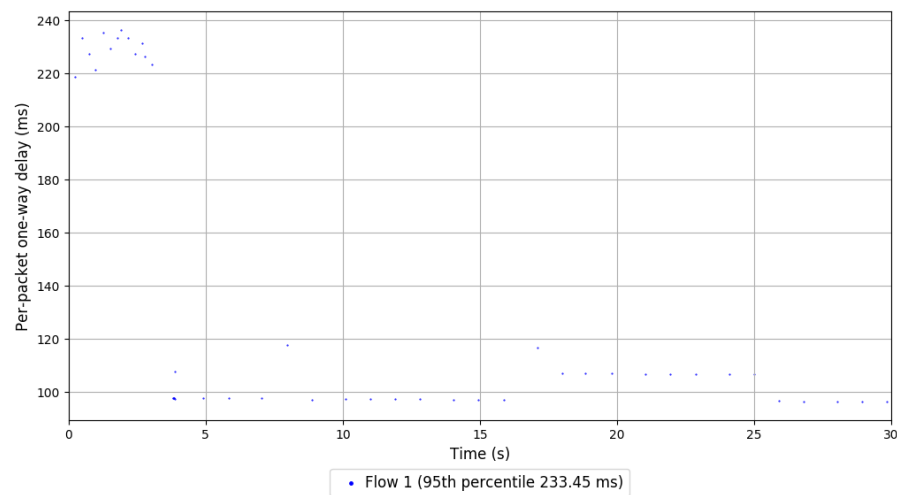
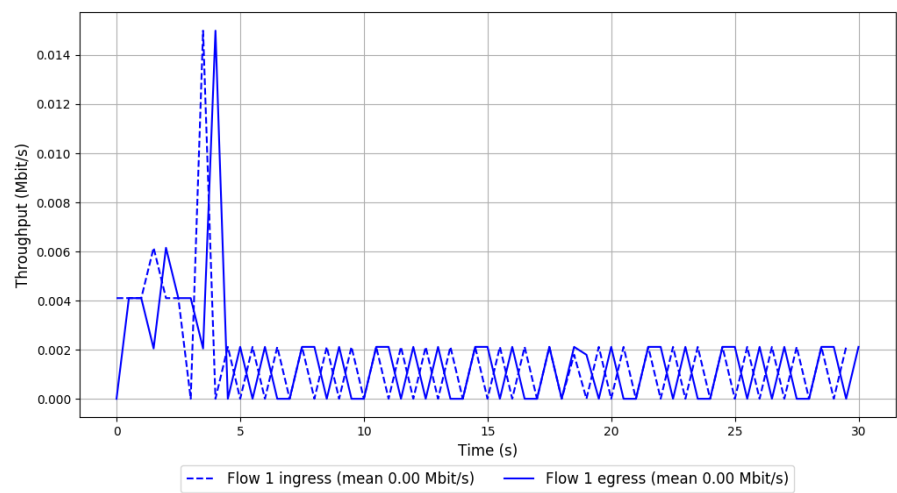
-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 233.447 ms

Loss rate: 0.00%

Run 1: Report of PCC-Vivace — Data Link

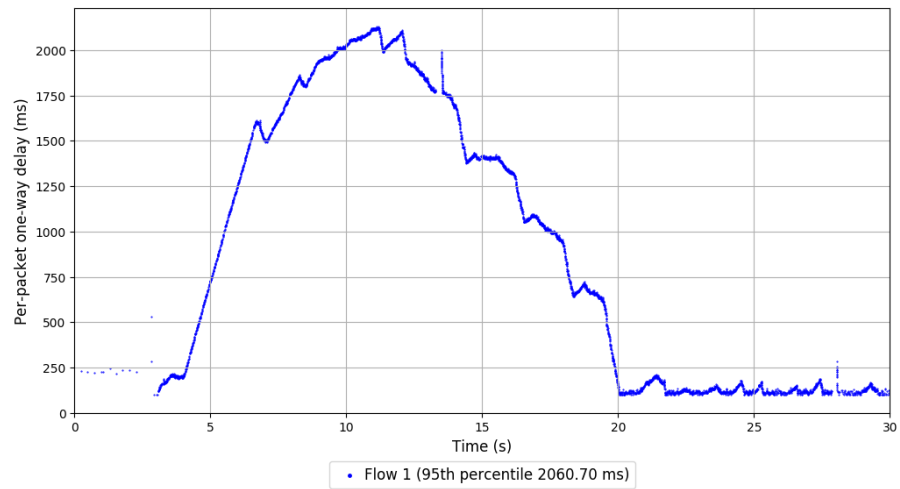
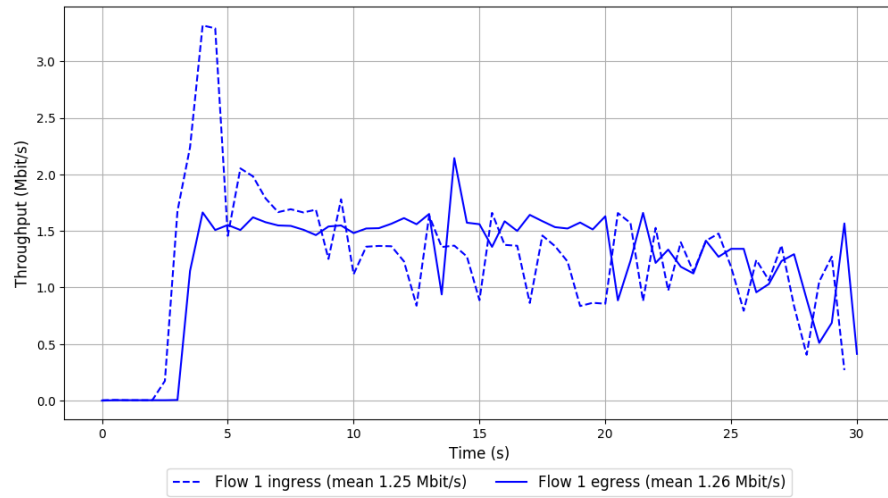


Run 2: Statistics of PCC-Vivace

Start at: 2018-07-24 05:52:58
End at: 2018-07-24 05:53:28
Local clock offset: -12.241 ms
Remote clock offset: 9.874 ms

Below is generated by plot.py at 2018-07-24 06:30:07
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.26 Mbit/s
95th percentile per-packet one-way delay: 2060.702 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 1.26 Mbit/s
95th percentile per-packet one-way delay: 2060.702 ms
Loss rate: 0.03%

Run 2: Report of PCC-Vivace — Data Link

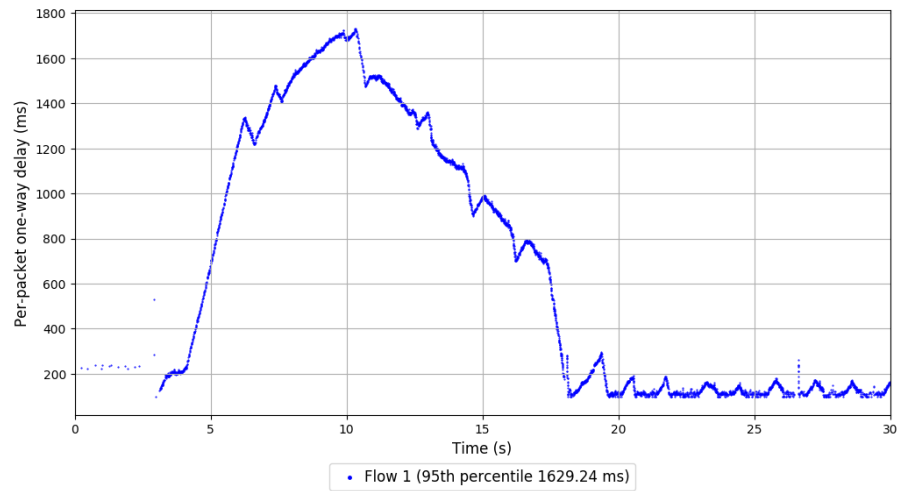
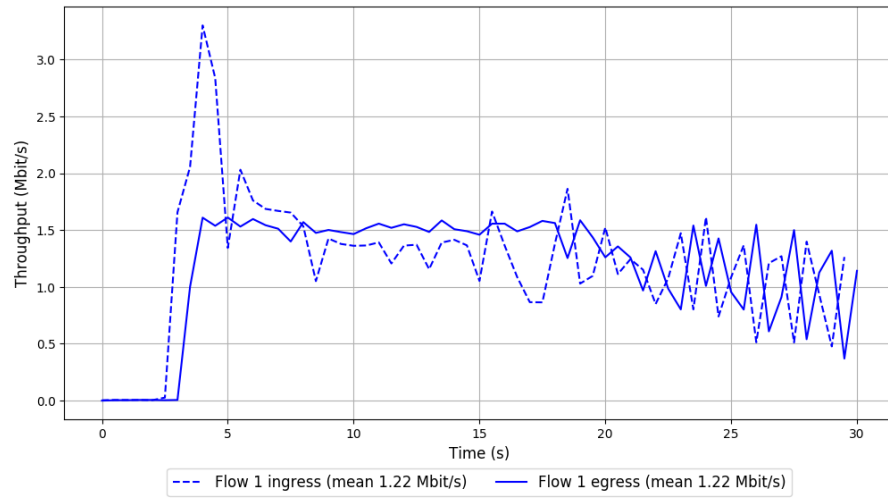


Run 3: Statistics of PCC-Vivace

Start at: 2018-07-24 06:12:04
End at: 2018-07-24 06:12:34
Local clock offset: -17.577 ms
Remote clock offset: 2.632 ms

Below is generated by plot.py at 2018-07-24 06:30:07
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 1629.242 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 1629.242 ms
Loss rate: 0.48%

Run 3: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2018-07-24 05:32:37

End at: 2018-07-24 05:33:07

Local clock offset: 50.422 ms

Remote clock offset: 9.177 ms

Below is generated by plot.py at 2018-07-24 06:30:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 162.126 ms

Loss rate: 0.08%

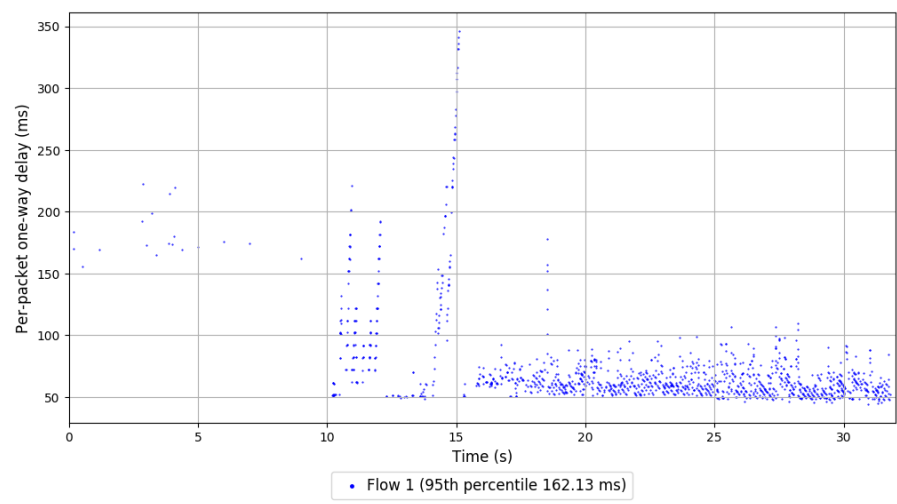
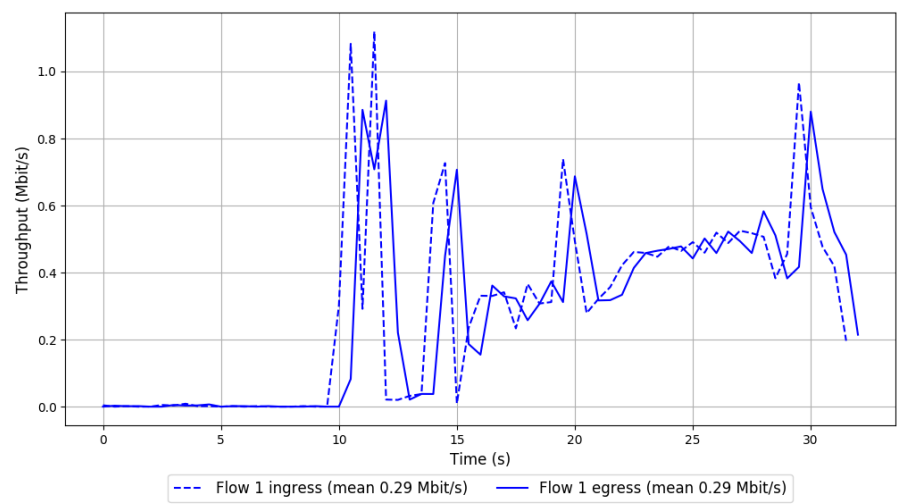
-- Flow 1:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 162.126 ms

Loss rate: 0.08%

Run 1: Report of WebRTC media — Data Link

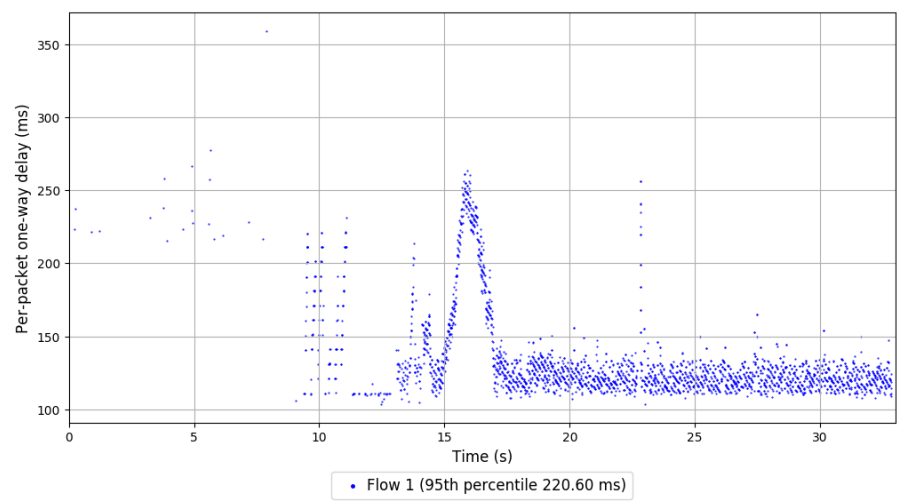
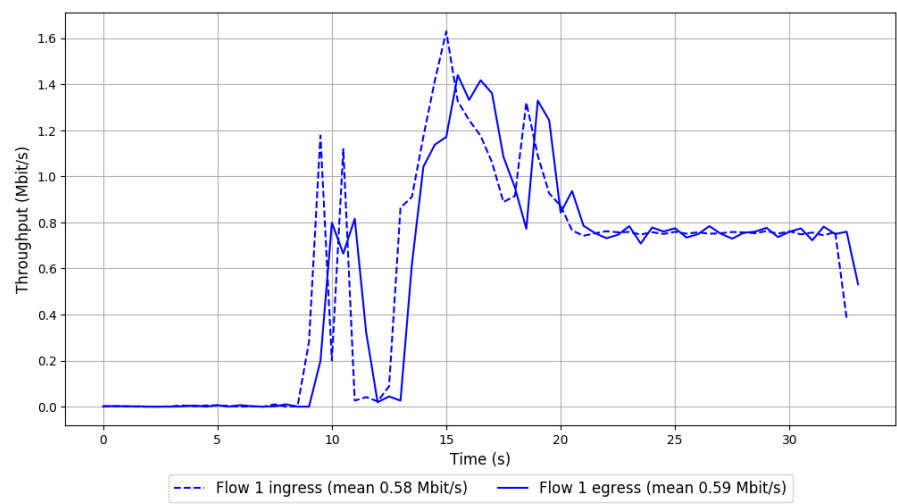


Run 2: Statistics of WebRTC media

Start at: 2018-07-24 05:51:51
End at: 2018-07-24 05:52:21
Local clock offset: -12.549 ms
Remote clock offset: 8.79 ms

Below is generated by plot.py at 2018-07-24 06:30:07
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 220.598 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 220.598 ms
Loss rate: 0.06%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-07-24 06:10:57
End at: 2018-07-24 06:11:27
Local clock offset: -17.166 ms
Remote clock offset: 7.621 ms

Below is generated by plot.py at 2018-07-24 06:30:07
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 229.954 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 229.954 ms
Loss rate: 0.36%

Run 3: Report of WebRTC media — Data Link

